CITY OF HOUSTON

HOUSTON PUBLIC WORKS

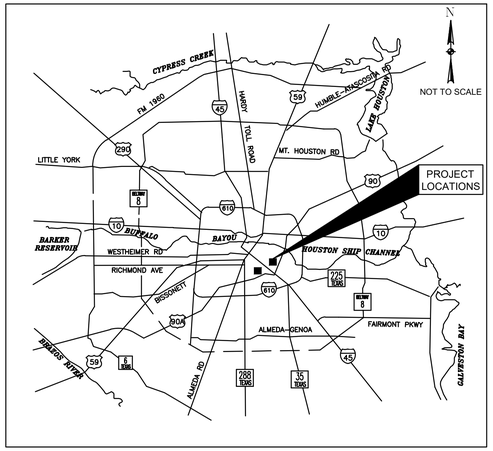
CAPITAL PROJECTS

CRMP PACKAGE 4A - EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY

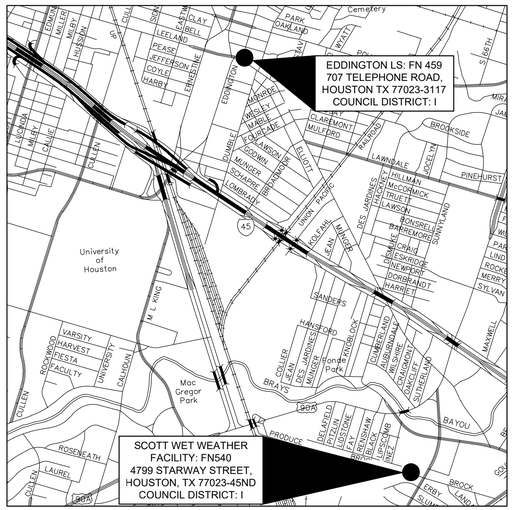
STORAGE TANK NO. 1

WBS NO. WBS R-001000-0035-4

60% SUBMITTAL - JANUARY 21, 2026



LOCATION MAP



VICINITY MAP

KEY MAP NO 534-G & 494-X

GIMS MAP NO 5555C & 5456B

TDLR EABPR _____

MAYOR

JOHN WHITMIRE

CONTROLLER

CHRIS HOLLINS

DISTRICT COUNCIL MEMBERS

AMY PECK — DISTRICT A
TARSHA JACKSON — DISTRICT B
ABBIE KAMIN — DISTRICT C
CAROLYN EVANS-SHABAZZ — DISTRICT D
FRED FLICKINGER — DISTRICT E
TIFFANY D. THOMAS — DISTRICT F
MARY NAN HUFFMAN — DISTRICT G
MARIO CASTILLO — DISTRICT H
JOAQUIN MARTINEZ — DISTRICT I
EDWARD POLLARD — DISTRICT J
MARTHA CASTEX-TATUM — DISTRICT K

COUNCIL MEMBERS AT-LARGE

JULIAN RAMIREZ — POSITION 1
WILLIE DAVIS — POSITION 2
TWILA CARTER — POSITION 3
LETITIA PLUMMER — POSITION 4
SALLIE ALCORN — POSITION 5

NO.	DATE	REVISION	APP.

DESIGN ENGINEER NAME

ARDURRA

3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

PARKS-FORESTRY DEPT.

METRO

HOUSTON WATER

TRANSPORTATION & DRAINAGE OPERATIONS

CAPITAL PROJECTS — SURVEY

CITY ENGINEER — DATE

DIRECTOR OF HOUSTON PUBLIC WORKS — DATE

SHEET NO XX OF XX SHEETS

FOR CITY OF HOUSTON USE ONLY

DRAWING INDEX

SHEET NO.	SHEET	DESCRIPTION
GENERAL		
1.	G–1	COVER SHEET
2.	G–2	DRAWING INDEX
3.	G–3	LEGENDS & ABBREVIATIONS I
4.	G–4	LEGENDS & ABBREVIATIONS II
5.	G–5	LEGENDS & ABBREVIATIONS III
6.	G–7	DRAINAGE AND SWPPP GENERAL CONSTRUCTION NOTES
PROCESS		
7.	P–1	PROCESS FLOW DIAGRAM I
8.	P–2	PROCESS FLOW DIAGRAM II
9.	P–3	HYDRAULIC PROFILE–EDDINGTON LIFT STATION TO DRY WEATHER FORCE MAIN
10.	P–4	HYDRAULIC PROFILE–EDDINGTON LIFT STATION TO SCOTT STREET WET WEATHER FACILITY
11.	P–5	HYDRAULIC PROFILE–WET WEATHER FORCE MAIN TO SCOTT STREET STORAGE TANK NO. 1–SHEET 1
12.	P–6	HYDRAULIC PROFILE–WET WEATHER FORCE MAIN TO SCOTT STREET STORAGE TANK NO. 1–SHEET 2
CIVIL		
13.	C–1	SITE SURVEY MAP FOR 24–INCH FM – SHEET 1
14.	C–2	SITE SURVEY MAP FOR 24–INCH FM – SHEET 2
15.	C–3	SITE SURVEY MAP FOR 24–INCH FM – SHEET 3
16.	C–4	SITE SURVEY MAP FOR 24–INCH FM – SHEET 4
17.	C–5	SITE SURVEY MAP FOR 24–INCH FM – SHEET 5
18.	C–6	SITE SURVEY MAP FOR 24–INCH FM – SHEET 6
19.	C–7	SITE SURVEY MAP FOR 24–INCH FM – SHEET 7
20.	C–8	SITE SURVEY MAP FOR 24–INCH FM – SHEET 8
21.	C–9	SITE SURVEY MAP FOR 24–INCH FM – SHEET 9
22.	C–10	EDDINGTON LS 24–INCH FM LAYOUT SHEET 1 OF 3
23.	C–11	EDDINGTON LS 24–INCH FM LAYOUT SHEET 2 OF 3
24.	C–12	EDDINGTON LS 24–INCH FM LAYOUT SHEET 3 OF 3
25.	C–13	EDDINGTON 24–INCH WET WEATHER FM – SHEET 1 OF 16
26.	C–14	EDDINGTON 24–INCH WET WEATHER FM – SHEET 2 OF 16
27.	C–15	EDDINGTON 24–INCH WET WEATHER FM – SHEET 3 OF 16
28.	C–16	EDDINGTON 24–INCH WET WEATHER FM – SHEET 4 OF 16
29.	C–17	EDDINGTON 24–INCH WET WEATHER FM – SHEET 5 OF 16
30.	C–18	EDDINGTON 24–INCH WET WEATHER FM – SHEET 6 OF 16
31.	C–19	EDDINGTON 24–INCH WET WEATHER FM – SHEET 7 OF 16
32.	C–20	EDDINGTON 24–INCH WET WEATHER FM – SHEET 8 OF 16
33.	C–21	EDDINGTON 24–INCH WET WEATHER FM – SHEET 9 OF 16
34.	C–22	EDDINGTON 24–INCH WET WEATHER FM – SHEET 10 OF 16
35.	C–23	EDDINGTON 24–INCH WET WEATHER FM – SHEET 11 OF 16
36.	C–24	EDDINGTON 24–INCH WET WEATHER FM – SHEET 12 OF 16
37.	C–25	EDDINGTON 24–INCH WET WEATHER FM – SHEET 13 OF 16
38.	C–26	EDDINGTON 24–INCH WET WEATHER FM – SHEET 14 OF 16
39.	C–27	EDDINGTON 24–INCH WET WEATHER FM – SHEET 15 OF 16
40.	C–28	EDDINGTON 24–INCH WET WEATHER FM – SHEET 16 OF 16
41.	C–29	TRAFFIC CONTROL PLAN SHEET 1 OF 8
42.	C–30	TRAFFIC CONTROL PLAN SHEET 2 OF 8
43.	C–31	TRAFFIC CONTROL PLAN SHEET 3 OF 8
44.	C–32	TRAFFIC CONTROL PLAN SHEET 4 OF 8
45.	C–33	TRAFFIC CONTROL PLAN SHEET 5 OF 8
46.	C–34	TRAFFIC CONTROL PLAN SHEET 6 OF 8
47.	C–35	TRAFFIC CONTROL PLAN SHEET 7 OF 8
48.	C–36	TRAFFIC CONTROL PLAN SHEET 8 OF 8
49.	C–37	TRAFFIC CONTROL PLAN DETAILS I
50.	C–38	TRAFFIC CONTROL PLAN DETAILS II
SITE CIVIL		
51.	SC1–1	EDDINGTON LS SITE SURVEY – TOPOGRAPHICAL SURVEY
52.	SC1–4	EXISTING EDDINGTON LIFT STATION SITE PLAN
53.	SC1–5	EDDINGTON LIFT STATION SITE EXISTING SITE DRAINAGE MAP AND CALCULATIONS
54.	SC1–6	EDDINGTON LIFT STATION SITE PROPOSED SITE DRAINAGE AND GRADING
55.	SC1–7	PROPOSED EDDINGTON LS YARD PIPING PLAN
56.	SC1–8	EDDINGTON LS STORMWATER POLLUTION PREVENTION PLAN
57.	SC1–9	STORM WATER POLLUTION PREVENTION PLAN DETAIL – 1
58.	SC1–10	STORM WATER POLLUTION PREVENTION PLAN DETAIL – 2
59.	SC2–1	SCOTT STREET WWF TOPOGRAPHICAL AND BOUNDARY SURVEY 1
60.	SC2–2	SCOTT STREET WWF TOPOGRAPHICAL AND BOUNDARY SURVEY 2
61.	SC2–3	SCOTT STREET WWF TOPOGRAPHICAL AND BOUNDARY SURVEY 3
62.	SC2–4	SCOTT STREET WWF TOPOGRAPHICAL AND BOUNDARY SURVEY 4
63.	SC2–5	SCOTT STREET WWF EXISTING OVERALL SITE PLAN
64.	SC2–6	SCOTT STREET WWF EXISTING SITE PLAN (SHEET 1 OF 2)
65.	SC2–7	SCOTT STREET WWF EXISTING SITE PLAN (SHEET 2 OF 2)
66.	SC2–8	SCOTT STREET WWF PROPOSED OVERALL SITE PLAN
67.	SC2–9	SCOTT STREET WWF PROPOSED SITE PLAN – SHEET 1
68.	SC2–10	SCOTT STREET WWF PROPOSED SITE PLAN – SHEET 2
69.	SC2–12	SCOTT STREET WWF PROPOSED OVERALL YARD PIPING PLAN
70.	SC2–13	SCOTT STREET WWF PROPOSED YARD PIPING PLAN (SHEET 1 OF 2)
71.	SC2–14	SCOTT STREET WWF PROPOSED YARD PIPING PLAN (SHEET 2 OF 2)
72.	SC2–15	SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 1
73.	SC2–16	SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 2
74.	SC2–17	SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 3
DEMOLITION		
75.	D–1	EDDINGTON LIFT STATION DEMOLITION PLAN
76.	D–2	DEMOLITION PHOTOS I
77.	D–3	EXISTING LIFT STATION LIFT STATION DEMOLITION PLANS AND SECTIONS
78.	D–4	ODOR CONTROL BULK STORAGE AND CHEMICAL FEED DEMOLITION PLAN AND SECTIONS
79.	D–5	ELECTRICAL CONTROL BUILDING DEMOLITION PLAN AND SECTION
80.	D–6	CONSTRUCTION SEQUENCING AND TEMPORARY PIPING MODIFICATIONS
81.	D–7	PHASE 1 CONSTRUCTION SEQUENCE BYPASS PUMPING & PIPING PLAN
PROCESS MECHANICAL		
82.	M–1	JUNCTION BOX UPPER AND LOWER PLANS
83.	M–2	JUNCTION BOX TYPICAL SECTION
84.	M–3	LIFT STATION UPPER PLAN
85.	M–4	LIFT STATION LOWER PLAN
86.	M–5	LIFT STATION SECTION SHEET 1
87.	M–6	LIFT STATION SECTION SHEET 2
88.	M–7	LIFT STATION PUMP CURVES AND OPERATION TABLES
89.	M–8	WWFM DRAIN VALVE MANHOLE PLAN
90.	M–9	WWFM DRAIN VALVE MANHOLE SECTION
91.	M–10	ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING PLAN
92.	M–11	ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING SECTION SHEET 1
93.	M–12	ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING DETAILS
94.	M–13	PIPE TRENCH DETAILS SHEET 1
95.	M–14	PIPE TRENCH DETAILS SHEET 2
96.	M–15	STORAGE TANK VALVE VAULT UPPER AND LOWER PLAN
97.	M–16	STORAGE TANK VALVE VAULT SECTIONS
98.	M–17	12.5 MG STORAGE TANK NO. 1 – UPPER PLAN
99.	M–18	12.5 MG STORAGE TANK NO. 1 – INTERMEDIATE PLAN
100.	M–19	12.5 MG STORAGE TANK NO. 1 – LOWER PLAN
101.	M–20	12.5 MG STORAGE TANK NO. 1 – SECTIONS SHEET 1
102.	M–21	12.5 MG STORAGE TANK NO. 1 – SECTIONS SHEET 2
103.	M–22	12.5 MG STORAGE TANK NO. 1 – SECTIONS SHEET 3
104.	M–23	12.5 MG STORAGE TANK NO. 1 – DETAILS SHEET 1
105.	M–24	12.5 MG STORAGE TANK NO. 1 – DETAILS SHEET 2
106.	M–25	12.5 MG STORAGE TANK NO. 1 – DETAILS SHEET 3
107.	M–28	STORAGE TANK ODOR CONTROL PLAN AND SECTION
108.	M–29	STORAGE TANK ODOR CONTROL DETAILS
109.	M–32	STORAGE TANK NO. 1 ELECTRICAL BUILDING PLAN – MECHANICAL ROOM PLAN AND SECTION
110.	M–33	EXISTING DRAIN LIFT STATION IMPROVEMENT PLANS
111.	M–34	EXISTING DRAIN LIFT STATION IMPROVEMENT SECTIONS
112.	M–36	EXISTING WASHWATER PUMP STATION IMPROVEMENT PLAN
113.	MZ–1	STANDARD MECHANICAL DETAILS I
114.	MZ–2	STANDARD MECHANICAL DETAILS II
115.	MZ–3	STANDARD MECHANICAL DETAILS III
116.	MZ–4	STANDARD MECHANICAL DETAILS IV
117.	MZ–5	STANDARD MECHANICAL DETAILS V
STRUCTURAL		
118.	S–1	GENERAL NOTES & DESIGN CRITERIA – 1
119.	S–2	GENERAL NOTES & DESIGN CRITERIA – 2
120.	S–3	SCHEDULE OF SPECIAL INSPECTIONS
121.	S–4	JUNCTION BOX LOWER AND UPPER PLAN
122.	S–5	JUNCTION BOX SECTION
123.	S–6	LIFT STATION LOWER LEVEL PLAN
124.	S–7	LIFT STATION UPPER LEVEL PLAN
125.	S–8	LIFT STATION SECTION
126.	S–9	LIFT STATION STEEL FRAMING PLAN & SECTIONS
127.	S–10	CHEMICAL STORAGE AND FEED BUILDING LOWER PLAN
128.	S–11	CHEMICAL STORAGE AND FEED BUILDING UPPER AND STEEL FRAMING PLAN
129.	S–12	CHEMICAL STORAGE AND FEED BUILDING EXTERIOR ELEVATIONS
130.	S–13	CHEMICAL STORAGE AND FEED BUILDING SECTIONS
131.	S–14	CHEMICAL STORAGE AND FEED BUILDING SECTIONS & DETAILS
132.	S–15	ELECTRICAL BUILDING FOUNDATION PLAN, SECTIONS & DETAILS
133.	S–16	ELECTRICAL BUILDING FOUNDATION PLAN EXTERIOR ELEVATIONS
134.	S–17	GENERATOR AND MAINTENANCE PAD PLAN
135.	S–18	GENERATOR AND MAINTENANCE PAD FRAMING PLAN
136.	S–19	GENERATOR AND MAINTENANCE PAD SECTIONS & DETAIL
137.	S–20	TRANSFORMER FOUNDATION PLAN
138.	S–21	VALVE VAULT PLANS
139.	S–22	VALVE VAULT SECTIONS
140.	S–23	STORAGE TANK NO. 1 ELECTRICAL BUILDING FOUNDATION
141.	S–24	STORAGE TANK NO. 1 ELECTRICAL BUILDING EXTERIOR ELEVATIONS
142.	S–25	STAIR TOWER FOUNDATION PLAN & SECTION
143.	S–26	STAIR TOWER FOUNDATION DETAILS
144.	S–27	STAIR TOWER STEEL FRAMING PLANS I
145.	S–28	STAIR TOWER STEEL FRAMING PLANS II
146.	S–29	STAIR TOWER STEEL FRAMING ELEVATIONS I
147.	S–30	STAIR TOWER STEEL FRAMING ELEVATIONS II
148.	S–31	STAIR TOWER STAIR SECTIONS
149.	S–32	STAIR TOWER STEEL DETAILS I
150.	S–33	STAIR TOWER STEEL DETAILS II
151.	S–34	ODOR CONTROL UNIT AND UTILITY TRUSS FOUNDATION PLAN
152.	S–35	UTILITY TRUSS STEEL FRAMING PLAN, SECTIONS & DETAILS
153.	S–36	INTERCEPTOR BOX PLANS
154.	S–37	INTERCEPTOR BOX SECTION
155.	S–38	MIXING RECIRCULATION PUMPS 1 & 2
156.	S–39	GENERATOR PAD PLAN & SECTIONS
157.	S–40	WASHWATER PUMP STATION BUILDING FOUNDATION
158.	S–41	WASHWATER PUMP STATION BUILDING EXTERIOR ELEVATIONS
159.	S–42	WIND PRESSURE FOR COMPONENTS AND CLADDING I
160.	S–43	WIND PRESSURE FOR COMPONENTS AND CLADDING II
HVAC / PLUMBING		
161.	H–1	HVAC SYMBOLS, LEGENDS, AND ABBREVIATIONS
162.	H–2	HVAC GENERAL NOTES
163.	H–3	EDDINGTON ELECTRICAL BUILDING HVAC PLAN
164.	H–4	EDDINGTON CHEMICAL BUILDING HVAC PLAN
165.	H–5	EDDINGTON CHEMICAL BUILDING HVAC SCHEMATIC
166.	H–6	SCOTT STREET CHEMICAL BUILDING HVAC PLAN
167.	H–7	HVAC SCHEDULES
168.	H–8	HVAC DETAILS
169.	P–2	EDDINGTON CHEMICAL BUILDING PLUMBING PLAN
170.	P–3	PLUMBING SCHEDULES
ELECTRICAL		
171.	GE–1	ELECTRICAL LEGENDS AND SYMBOLS – I
172.	GE–2	ELECTRICAL LEGENDS AND SYMBOLS – II
173.	GE–3	ELECTRICAL LIGHTING FIXTURE SCHEDULE
174.	GE–4	ELECTRICAL GENERAL NOTES
175.	DE–1	EDDINGTON LIFT STATION DEMOLITION SITE PLAN
176.	DE–2	EDDINGTON LIFT STATION EXIST. MCC ONE–LINE DIAGRAM
177.	E–1	EDDINGTON LIFT STATION PROPOSED SITE PLAN
178.	E–2	EDDINGTON LIFT STATION ENLARGED SITE PLAN
179.	E–3	EDDINGTON LIFT STATION MCC–1 ONE–LINE DIAGRAM
180.	E–4	EDDINGTON LIFT STATION MCC–1 ELEVATION DETAIL
181.	E–5	EDDINGTON LIFT STATION ESB–1 ONE–LINE DIAGRAM
182.	E–6	EDDINGTON LIFT STATION GROUNDING BUILDING PLAN
183.	E–7	EDDINGTON LIFT STATION LIGHTING BUILDING PLAN
184.	E–8	EDDINGTON LIFT STATION POWER BUILDING PLAN
185.	E–9	EDDINGTON LIFT STATION CHEMICAL BUILDING GROUNDING PLAN
186.	E–10	EDDINGTON LIFT STATION CHEMICAL BUILDING LIGHTING & POWER PLAN
187.	E–11	EDDINGTON LIFT STATION CONDUIT SCHEDULE
188.	E–12	EDDINGTON LIFT STATION TYPICAL JUNCTION BOX DETAILS
189.	E–13	SCOTT STREET WWF PROPOSED ELECTRICAL SITE PLAN
190.	E–14	SCOTT STREET WWF SWITCHBOARD NO. 1 ONE–LINE DIAGRAM
191.	E–15	SCOTT STREET WWF ESB–1 ONE–LINE DIAGRAM
192.	E–16	SCOTT STREET WWF MCC–ST1 ONE–LINE DIAGRAM
193.	E–17	SCOTT STREET WWF MCC–WWPS ONE–LINE DIAGRAM
194.	E–18	SCOTT STREET WWF STORAGE TANK BUILDING GROUNDING PLAN
195.	E–19	SCOTT STREET WWF STORAGE TANK BUILDING LIGHTING PLAN
196.	E–20	SCOTT STREET WWF STORAGE TANK BUIDLING POWER PLAN
197.	E–21	SCOTT WWF CONDUIT SCHEDULE
INSTRUMENTATION & CONTROL		
198.	I–1	INSTRUMENTATION LEGENDS AND SYMBOLS – I
199.	I–2	INSTRUMENTATION LEGENDS AND SYMBOLS – II
200.	I–3	EDDINGTON LIFT STATION PROCESS & INSTRUMENTATION DIAGRAM – I
201.	I–4	EDDINGTON LIFT STATION PROCESS & INSTRUMENTATION DIAGRAM – II
202.	I–5	EDDINGTON LIFT STATION PROCESS & INSTRUMENTATION DIAGRAM – III
203.	I–6	EDDINGTON LIFT STATION COMMUNICATIONS DIAGRAM
204.	I–7	EDDINGTON LIFT STATION CONTROL CABINET EQUIPMENT LAYOUT & SCHEDULE
205.	I–8	EDDINGTON LIFT STATION CONTROL CABINET BACK DOOR ELEVATION
206.	I–9	EDDINGTON LIFT STATION CONTROL CABINET EQUIPMENT LAYOUT
207.	I–10	EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM – I
208.	I–11	EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM – II
209.	I–12	EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM – III
210.	I–13	EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM – IV
211.	I–14	EDDINGTON LIFT STATION CONTROL DRY PUMP NO.D1 CONTROL WIRING DIAGRAM
212.	I–15	EDDINGTON LIFT STATION CONTROL DRY PUMP NO.D2 CONTROL WIRING DIAGRAM
213.	I–16	EDDINGTON LIFT STATION CONTROL WET PUMP NO.1 CONTROL WIRING DIAGRAM
214.	I–17	EDDINGTON LIFT STATION CONTROL WET PUMP NO.2 CONTROL WIRING DIAGRAM
215.	I–18	EDDINGTON LIFT STATION CONTROL WET PUMP NO.W3 CONTROL WIRING DIAGRAM
216.	I–19	EDDINGTON LIFT STATION CONTROL WET PUMP NO.W4 CONTROL WIRING DIAGRAM
217.	I–20	EDDINGTON LIFT STATION DRY WEATHER CHEMICAL FEED PUMPS P&ID DIAGRAM
218.	I–21	EDDINGTON LIFT STATION WET WEATHER CHEMICAL FEED PUMPS P&ID DIAGRAM
219.	I–22	EDDINGTON LIFT STATION CHEMICAL FEED PUMPS NO. 1 & NO. 2 P&ID WIRING DIAGRAM
220.	I–23	EDDINGTON LIFT STATION WET WEATHER CHEMICAL FEED PUMPS WIRING DIAGRAM
221.	I–24	EDDINGTON LIFT STATION CHEMICAL FEED PUMPS CONTROL PANEL
222.	I–25	SCOTT WWF EXISTING OVERALL NETWORK DIAGRAM
223.	I–26	SCOTT WWF PROPOSED OVERALL NETWORK DIAGRAM
224.	I–27	SCOTT WWF MCC–WWPS PLC CONTROL PANEL LAYOUT AND ELEVATION
225.	I–28	SCOTT WWF MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA. – I
226.	I–29	SCOTT WWF MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA. – II
227.	I–30	SCOTT WWF MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA. – III
228.	I–31	SCOTT WWF MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA. – IV
229.	I–32	SCOTT WWF MCC–ST1 PLC CNTL. PNL. LYT. AND ELEV.
230.	I–33	SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA. – I
231.	I–34	SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA. – II
232.	I–35	SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA. – II
233.	I–36	SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA. – III
234.	ZE–1	ELECTRICAL SERVICE DETAILS
235.	ZE–2	ELECTRICAL YARD LIGHT / COMMUNICATION POLE DETAILS
236.	ZE–3	ELECTRICAL DETAILS
237.	ZE–4	RADAR LEVEL TRANSMITTER GAUGING SYSTEM INSTALLATION & DETAILS – I
238.	ZE–5	RADAR LEVEL TRANSMITTER GAUGING SYSTEM INSTALLATION & DETAILS – II

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

DRAWING INDEX

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
G–2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/20/2026 9:24 AM
FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024–1427\project Files\03–Prod\03–Dwgs\G–CNL.dwg

DRAWING INDEX

SHEET NO.	SHEET	DESCRIPTION
GENERAL		
1.	G–1	COVER SHEET
2.	G–2	DRAWING INDEX
3.	G–3	LEGENDS & ABBREVIATIONS I
4.	G–4	LEGENDS & ABBREVIATIONS II
5.	G–5	LEGENDS & ABBREVIATIONS III
6.	G–7	DRAINAGE AND SWPPP GENERAL CONSTRUCTION NOTES
PROCESS		
7.	P–1	PROCESS FLOW DIAGRAM I
8.	P–2	PROCESS FLOW DIAGRAM II
9.	P–3	HYDRAULIC PROFILE–EDDINGTON LIFT STATION TO DRY WEATHER FORCE MAIN
10.	P–4	HYDRAULIC PROFILE–EDDINGTON LIFT STATION TO SCOTT STREET WET WEATHER FACILITY
11.	P–5	HYDRAULIC PROFILE–WET WEATHER FORCE MAIN TO SCOTT STREET STORAGE TANK NO. 1–SHEET 1
12.	P–6	HYDRAULIC PROFILE–WET WEATHER FORCE MAIN TO SCOTT STREET STORAGE TANK NO. 1–SHEET 2
CIVIL		
13.	GF–1	GENERAL NOTES
14.	C–1	SURVEY CONTROL MAP (1 OF 5)
15.	C–2	SURVEY CONTROL MAP (2 OF 5)
16.	C–3	SURVEY CONTROL MAP (3 OF 5)
17.	C–4	SURVEY CONTROL MAP (4 OF 5)
18.	C–5	SURVEY CONTROL MAP (5 OF 5)
19.	C–6	EDDINGTON LS 24–INCH FM LAYOUT SHEET 1 OF 3
20.	C–7	EDDINGTON LS 24–INCH FM LAYOUT SHEET 2 OF 3
21.	C–8	EDDINGTON LS 24–INCH FM LAYOUT SHEET 3 OF 3
22.	C–9	PLAN & PROFILE – STARWAY ST (N–S) – STA 100+50 TO STA 105+74
23.	C–10	PLAN & PROFILE – STARWAY ST (E–W) – STA 200+00 TO STA 204+87
24.	C–11	PLAN & PROFILE – CANADA DRY ST – STA 300+00 TO STA 303+50
25.	C–12	PLAN & PROFILE – CANADA DRY ST – STA 303+50 TO STA 306+56
26.	C–13	PLAN & PROFILE – VAUGHN ST – STA 400+00 TO STA 404+15
27.	C–14	PLAN & PROFILE – ELEANOR TINSLEY WAY – STA 500+00 TO STA 503+50
28.	C–15	PLAN & PROFILE – ELEANOR TINSLEY WAY – STA 503+50 TO STA 507+00
29.	C–16	PLAN & PROFILE – ELEANOR TINSLEY WAY – STA 507+00 TO STA 512+00
30.	C–17	PLAN & PROFILE – DUMBLE ST – STA 512+00 TO STA 516+50
31.	C–18	PLAN & PROFILE – DUMBLE ST – STA 516+50 TO STA 520+50
32.	C–19	PLAN & PROFILE – DUMBLE ST – STA 520+50 TO STA 525+50
33.	C–20	PLAN & PROFILE – DUMBLE ST – STA 525+50 TO STA 530+50
34.	C–21	PLAN – DUMBLE ST – STA 530+50 TO STA 535+00
35.	C–22	PROFILE – DUMBLE ST – STA 530+50 TO STA 535+00
36.	C–23	PLAN – DUMBLE ST – STA 535+00 TO STA 538+75
37.	C–24	PROFILE – DUMBLE ST – STA 535+00 TO STA 538+75
38.	C–25	PLAN – DUMBLE ST – STA 538+75 TO STA 543+00
39.	C–26	PROFILE – DUMBLE ST – STA 538+75 TO STA 543+00
40.	C–27	PLAN – TELEPHONE RD – STA 600+00 TO STA 605+00
41.	C–28	PROFILE – TELEPHONE RD – STA 600+00 TO STA 605+00
42.	C–29	PLAN & PROFILE – EDDINGTON – STA 700+00 TO STA 702+76
43.	C–30	TRAFFIC CONTROL PLAN GENERAL NOTES
44.	C–31	TRAFFIC CONTROL PLAN CONSTRUCTION NARRATIVE
45.	C–32	TRAFFIC CONTROL PLAN OVERALL LAYOUT
46.	C–33	TCP (STARWAY ST)
47.	C–34	TCP (VAUGHN ST, CANADA DRY ST & ELEANOR TINSLEY WY)
48.	C–35	TCP (DUMBLE ST – PHASE 1A)
49.	C–36	TCP (DUMBLE ST – PHASE 1B SHEET 1 OF 2)
50.	C–37	TCP (DUMBLE ST – PHASE B SHEET 2 OF 2)
51.	C–38	TCP (TELEPHONE RD)
52.	C–39	TCP TYPICAL (TCP–01)
53.	C–40	TCP TYPICAL (TCP–02)
54.	C–41	TCP ELEANOR TINSLEY WAY DETOUR–01
55.	C–42	TCP IH–45 NB FRONTAGE ROAD AT DUMBLE STREET DETOUR–02
56.	C–43	TCP DUMBLE STREET DETOUR–03
57.	C–44	TCP STANDARD DETAILS (SHEET 1 OF 16)
58.	C–45	TCP STANDARD DETAILS (SHEET 2 OF 16)
59.	C–46	TCP STANDARD DETAILS (SHEET 3 OF 16)
60.	C–47	TCP STANDARD DETAILS (SHEET 4 OF 16)
61.	C–48	TCP STANDARD DETAILS (SHEET 5 OF 16)
62.	C–49	TCP STANDARD DETAILS (SHEET 6 OF 16)
63.	C–50	TCP STANDARD DETAILS (SHEET 7 OF 16)
64.	C–51	TCP STANDARD DETAILS (SHEET 8 OF 16)
65.	C–52	TCP STANDARD DETAILS (SHEET 9 OF 16)
66.	C–53	TCP STANDARD DETAILS (SHEET 10 OF 16)
67.	C–54	TCP STANDARD DETAILS (SHEET 11 OF 16)
68.	C–55	TCP STANDARD DETAILS (SHEET 12 OF 16)
69.	C–56	TCP STANDARD DETAILS (SHEET 13 OF 16)
70.	C–57	TCP STANDARD DETAILS (SHEET 14 OF 16)
71.	C–58	TCP STANDARD DETAILS (SHEET 15 OF 16)
72.	C–59	TCP STANDARD DETAILS (SHEET 16 OF 16)
73.	C–60	SWPPP SHEET 1 OF 4
74.	C–61	SWPPP SHEET 2 OF 4
75.	C–62	SWPPP SHEET 3 OF 4
76.	C–63	SWPPP SHEET 4 OF 4
77.	C–64	SANITARY DETAILS SHEET 1 OF 3
78.	C–65	SANITARY DETAILS SHEET 2 OF 3
79.	C–66	SANITARY DETAILS SHEET 3 OF 3
80.	C–67	ROADWAY DETAILS SHEET 1 OF 4
81.	C–68	ROADWAY DETAILS SHEET 2 OF 4
82.	C–69	ROADWAY DETAILS SHEET 3 OF 4
83.	C–70	ROADWAY DETAILS SHEET 4 OF 4
SITE CIVIL		
84.	SC1–1	EDDINGTON LS SITE SURVEY – TOPOGRAPHICAL SURVEY
85.	SC1–4	EXISTING EDDINGTON LIFT STATION SITE PLAN
86.	SC1–5	EDDINGTON LIFT STATION SITE EXISTING SITE DRAINAGE MAP AND CALCULATIONS
87.	SC1–6	EDDINGTON LIFT STATION SITE PROPOSED SITE DRAINAGE AND GRADING
88.	SC1–7	PROPOSED EDDINGTON LS YARD PIPING PLAN
89.	SC1–8	EDDINGTON LS STORMWATER POLLUTION PREVENTION PLAN
90.	SC1–9	STORM WATER POLLUTION PREVENTION PLAN DETAIL – 1
91.	SC1–10	STORM WATER POLLUTION PREVENTION PLAN DETAIL – 2
92.	SC2–1	SCOTT STREET WWF TOPOGRAPHICAL AND BOUNDARY SURVEY 1
93.	SC2–2	SCOTT STREET WWF TOPOGRAPHICAL AND BOUNDARY SURVEY 2
94.	SC2–3	SCOTT STREET WWF TOPOGRAPHICAL AND BOUNDARY SURVEY 3
95.	SC2–4	SCOTT STREET WWF TOPOGRAPHICAL AND BOUNDARY SURVEY 4
96.	SC2–5	SCOTT STREET WWF EXISTING OVERALL SITE PLAN
97.	SC2–6	SCOTT STREET WWF EXISTING SITE PLAN (SHEET 1 OF 2)
98.	SC2–7	SCOTT STREET WWF EXISTING SITE PLAN (SHEET 2 OF 2)
99.	SC2–8	SCOTT STREET WWF PROPOSED OVERALL SITE PLAN
100.	SC2–9	SCOTT STREET WWF PROPOSED SITE PLAN – SHEET 1
101.	SC2–10	SCOTT STREET WWF PROPOSED SITE PLAN – SHEET 2
102.	SC2–12	SCOTT STREET WWF PROPOSED OVERALL YARD PIPING PLAN
103.	SC2–13	SCOTT STREET WWF PROPOSED YARD PIPING PLAN (SHEET 1 OF 2)
104.	SC2–14	SCOTT STREET WWF PROPOSED YARD PIPING PLAN (SHEET 2 OF 2)
105.	SC2–15	SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 1
106.	SC2–16	SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 2
107.	SC2–17	SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 3
DEMOLITION		
108.	D–1	EDDINGTON LIFT STATION DEMOLITION PLAN
109.	D–2	DEMOLITION PHOTOS I
110.	D–3	EXISTING LIFT STATION LIFT STATION DEMOLITION PLANS AND SECTIONS
111.	D–4	ODOR CONTROL BULK STORAGE AND CHEMICAL FEED DEMOLITION PLAN AND SECTIONS
112.	D–5	ELECTRICAL CONTROL BUILDING DEMOLITION PLAN AND SECTION
113.	D–6	CONSTRUCTION SEQUENCING AND TEMPORARY PIPING MODIFICATIONS
114.	D–7	PHASE 1 CONSTRUCTION SEQUENCE BYPASS PUMPING & PIPING PLAN
115.	D–8	NPW BOOSTER PUMP STATION DEMOLITION PLAN AND SECTION
PROCESS MECHANICAL		
116.	M–1	JUNCTION BOX UPPER AND LOWER PLANS
117.	M–2	JUNCTION BOX TYPICAL SECTION
118.	M–3	LIFT STATION UPPER PLAN
119.	M–4	LIFT STATION LOWER PLAN
120.	M–5	LIFT STATION SECTION SHEET 1
121.	M–6	LIFT STATION SECTION SHEET 2
122.	M–7	LIFT STATION PUMP CURVES AND OPERATION TABLES
123.	M–8	WWFM DRAIN VALVE MANHOLE PLAN
124.	M–9	WWFM DRAIN VALVE MANHOLE SECTION
125.	M–10	ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING PLAN
126.	M–11	ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING SECTION SHEET 1
127.	M–12	ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING DETAILS
128.	M–13	PIPE TRENCH DETAILS SHEET 1
129.	M–14	PIPE TRENCH DETAILS SHEET 2
130.	M–15	STORAGE TANK VALVE VAULT UPPER AND LOWER PLAN
131.	M–16	STORAGE TANK VALVE VAULT SECTIONS
132.	M–17	12.5 MG STORAGE TANK NO. 1 – UPPER PLAN
133.	M–18	12.5 MG STORAGE TANK NO. 1 – INTERMEDIATE PLAN
134.	M–19	12.5 MG STORAGE TANK NO. 1 – LOWER PLAN
135.	M–20	12.5 MG STORAGE TANK NO. 1 – SECTIONS SHEET 1
136.	M–21	12.5 MG STORAGE TANK NO. 1 – SECTIONS SHEET 2
137.	M–22	12.5 MG STORAGE TANK NO. 1 – JET AERATION SYSTEM PLAN & SECTIONS
138.	M–23	12.5 MG STORAGE TANK NO. 1 – JET AERATION SYSTEM SECTIONS & DETAILS
139.	M–24	12.5 MG STORAGE TANK NO. 1 – ODOR CONTROL PLAN AND SECTION
140.	M–25	12.5 MG STORAGE TANK NO. 1 – ODOR CONTROL DUCTWORK DETAILS
141.	M–26	12.5 MG STORAGE TANK NO. 1 – TANK CLEANING MACHINE AND PIPING DETAILS
142.	M–27	12.5 MG STORAGE TANK NO. 1 – ROOF DETAILS
143.	M–28	12.5 MG STORAGE TANK NO. 1 – MISCELLANEOUS DETAILS
144.	M–32	STORAGE TANK NO. 1 ELECTRICAL BUILDING PLAN – MECHANICAL ROOM PLAN AND SECTION
145.	M–33	EXISTING DRAIN LIFT STATION IMPROVEMENT PLANS
146.	M–34	EXISTING DRAIN LIFT STATION IMPROVEMENT SECTIONS
147.	M–36	WASHWATER PUMP STATION PLAN
148.	M–37	WASHWATER PUMP STATION SECTIONS
149.	M–38	HYDRO–TANK PLAN, SECTION, AND DETAILS
150.	MZ–1	STANDARD MECHANICAL DETAILS I
151.	MZ–2	STANDARD MECHANICAL DETAILS II
152.	MZ–3	STANDARD MECHANICAL DETAILS III
153.	MZ–4	STANDARD MECHANICAL DETAILS IV
154.	MZ–5	STANDARD MECHANICAL DETAILS V
STRUCTURAL		
155.	S–1	GENERAL NOTES & DESIGN CRITERIA – 1
156.	S–2	GENERAL NOTES & DESIGN CRITERIA – 2
157.	S–3	SCHEDULE OF SPECIAL INSPECTIONS
158.	S–4	JUNCTION BOX LOWER AND UPPER PLAN
159.	S–5	JUNCTION BOX SECTION
160.	S–6	LIFT STATION LOWER LEVEL PLAN
161.	S–7	LIFT STATION UPPER LEVEL PLAN
162.	S–8	LIFT STATION SECTION
163.	S–9	LIFT STATION STEEL FRAMING PLAN & SECTIONS
164.	S–10	CHEMICAL STORAGE AND FEED BUILDING LOWER PLAN
165.	S–11	CHEMICAL STORAGE AND FEED BUILDING UPPER AND STEEL FRAMING PLAN
166.	S–12	CHEMICAL STORAGE AND FEED BUILDING EXTERIOR ELEVATIONS
167.	S–13	CHEMICAL STORAGE AND FEED BUILDING SECTIONS
168.	S–14	CHEMICAL STORAGE AND FEED BUILDING SECTIONS & DETAILS
169.	S–15	ELECTRICAL BUILDING FOUNDATION PLAN, SECTIONS & DETAILS
170.	S–16	ELECTRICAL BUILDING FOUNDATION PLAN EXTERIOR ELEVATIONS
171.	S–17	GENERATOR AND MAINTENANCE PAD PLAN
172.	S–18	GENERATOR AND MAINTENANCE PAD FRAMING PLAN
173.	S–19	GENERATOR AND MAINTENANCE PAD SECTIONS & DETAIL
174.	S–20	TRANSFORMER FOUNDATION PLAN
175.	S–21	VALVE VAULT PLANS
176.	S–22	VALVE VAULT SECTIONS
177.	S–23	STORAGE TANK NO. 1 ELECTRICAL BUILDING FOUNDATION
178.	S–24	STORAGE TANK NO. 1 ELECTRICAL BUILDING EXTERIOR ELEVATIONS
179.	S–25	STAIR TOWER FOUNDATION PLAN & SECTION
180.	S–26	STAIR TOWER FOUNDATION DETAILS
181.	S–27	STAIR TOWER STEEL FRAMING PLANS I
182.	S–28	STAIR TOWER STEEL FRAMING PLANS II
183.	S–29	STAIR TOWER STEEL FRAMING ELEVATIONS I
184.	S–30	STAIR TOWER STEEL FRAMING ELEVATIONS II
185.	S–31	STAIR TOWER STAIR SECTIONS
186.	S–32	STAIR TOWER STEEL DETAILS I
187.	S–33	STAIR TOWER STEEL DETAILS II
188.	S–34	ODOR CONTROL UNIT AND UTILITY TRUSS FOUNDATION PLAN
189.	S–35	UTILITY TRUSS STEEL FRAMING PLAN, SECTIONS & DETAILS
190.	S–36	INTERCEPTOR BOX PLANS
191.	S–37	INTERCEPTOR BOX SECTION
192.	S–38	MIXING RECIRCULATION PUMPS 1 & 2
193.	S–39	GENERATOR PAD PLAN & SECTIONS
194.	S–40	WASHWATER PUMP STATION BUILDING FOUNDATION
195.	S–41	WASHWATER PUMP STATION BUILDING EXTERIOR ELEVATIONS
196.	S–42	WIND PRESSURE FOR COMPONENTS AND CLADDING I
197.	S–43	WIND PRESSURE FOR COMPONENTS AND CLADDING II
HVAC / PLUMBING		
198.	H–1	HVAC SYMBOLS, LEGENDS, AND ABBREVIATIONS
199.	H–2	HVAC GENERAL NOTES
200.	H–3	EDDINGTON ELECTRICAL BUILDING HVAC PLAN
201.	H–4	EDDINGTON CHEMICAL BUILDING HVAC PLAN
202.	H–5	EDDINGTON CHEMICAL BUILDING HVAC SCHEMATIC
203.	H–6	SCOTT STREET CHEMICAL BUILDING HVAC PLAN
204.	H–7	HVAC SCHEDULES
205.	H–8	HVAC DETAILS
206.	P–2	EDDINGTON CHEMICAL BUILDING PLUMBING PLAN
207.	P–3	PLUMBING SCHEDULES
ELECTRICAL		
208.	GE–1	ELECTRICAL LEGENDS AND SYMBOLS – I
209.	GE–2	ELECTRICAL LEGENDS AND SYMBOLS – II
210.	GE–3	ELECTRICAL LIGHTING FIXTURE SCHEDULE
211.	GE–4	ELECTRICAL GENERAL NOTES
212.	DE–1	EDDINGTON LIFT STATION DEMOLITION SITE PLAN
213.	DE–2	EDDINGTON LIFT STATION EXIST. MCC ONE–LINE DIAGRAM
214.	E–1	EDDINGTON LIFT STATION PROPOSED SITE PLAN
215.	E–2	EDDINGTON LIFT STATION ENLARGED SITE PLAN
216.	E–3	EDDINGTON LIFT STATION MCC–1 ONE–LINE DIAGRAM
217.	E–4	EDDINGTON LIFT STATION MCC–1 ELEVATION DETAIL
218.	E–5	EDDINGTON LIFT STATION ESB–1 ONE–LINE DIAGRAM
219.	E–6	EDDINGTON LIFT STATION GROUNDING BUILDING PLAN
220.	E–7	EDDINGTON LIFT STATION LIGHTING BUILDING PLAN
221.	E–8	EDDINGTON LIFT STATION POWER BUILDING PLAN
222.	E–9	EDDINGTON LIFT STATION CHEMICAL BUILDING GROUNDING PLAN
223.	E–10	EDDINGTON LIFT STATION CHEMICAL BUILDING LIGHTING & POWER PLAN
224.	E–11	EDDINGTON LIFT STATION CONDUIT SCHEDULE
225.	E–12	EDDINGTON LIFT STATION TYPICAL JUNCTION BOX DETAILS
226.	E–13	SCOTT STREET WWF PROPOSED ELECTRICAL SITE PLAN
227.	E–14	SCOTT STREET WWF SWITCHBOARD NO. 1 ONE–LINE DIAGRAM
228.	E–15	SCOTT STREET WWF ESB–1 ONE–LINE DIAGRAM
229.	E–16	SCOTT STREET WWF MCC–ST1 ONE–LINE DIAGRAM
230.	E–17	SCOTT STREET WWF MCC–WWPS ONE–LINE DIAGRAM
231.	E–18	SCOTT STREET WWF STORAGE TANK BUILDING GROUNDING PLAN
232.	E–19	SCOTT STREET WWF STORAGE TANK BUILDING LIGHTING PLAN
233.	E–20	SCOTT STREET WWF STORAGE TANK BUIDLING POWER PLAN
234.	E–21	SCOTT WWF CONDUIT SCHEDULE
INSTRUMENTATION & CONTROL		
235.	I–1	INSTRUMENTATION LEGENDS AND SYMBOLS – I
236.	I–2	INSTRUMENTATION LEGENDS AND SYMBOLS – II
237.	I–3	EDDINGTON LIFT STATION JUNCTION BOX – P&ID I
238.	I–4	EDDINGTON LIFT STATION – P&ID I
239.	I–5	EDDINGTON LIFT STATION – P&ID II
240.	I–6	EDDINGTON LIFT STATION – P&ID II
241.	I–7	EDDINGTON LIFT STATION CHEMICAL BULK STORAGE – P&ID
242.	I–8	EDDINGTON LIFT STATION CHEMICAL FEED PUMPS – P&ID I
243.	I–9	EDDINGTON LIFT STATION CHEMICAL FEED PUMPS – P&ID II
244.	I–10	EDDINGTON LIFT STATION STANDBY GENERATOR SETS – P&ID
245.	I–11	SCOTT STREET WWF STORAGE TANK NO. 1 VALVE VAULT – P&ID
246.	I–12	SCOTT STREET WWF STORAGE TANK NO. 1 – P&ID
247.	I–13	SCOTT STREET WWF STORAGE TANK NO. 1 JET AERATION SYSTEM – P&ID I
248.	I–14	SCOTT STREET WWF STORAGE TANK NO. 1 JET AERATION SYSTEM – P&ID II
249.	I–15	SCOTT STREET WWF STORAGE TANK NO. 1 ODOR CONTROL SYSTEM
250.	I–16	SCOTT STREET WWF STORAGE TANK NO. 1 TANK CLEANING
251.	I–17	SCOTT STREET WWF NPW PUMP STATION – P&ID I
252.	I–18	SCOTT STREET WWF NPW PUMP STATION – P&ID II
253.	I–19	SCOTT STREET WWF WASHWATER PUMP STATION – P&ID
254.	I–20	SCOTT STREET WWF STANDBY GENERATOR SETS – P&ID
CONTROL PANEL		
255.	CP–1	EDDINGTON LIFT STATION COMMUNICATIONS DIAGRAM
256.	CP–2	EDDINGTON LIFT STATION CONTROL CABINET EQUIPMENT LAYOUT & SCHEDULE
257.	CP–3	EDDINGTON LIFT STATION CONTROL CABINET BACK DOOR ELEVATION
258.	CP–4	EDDINGTON LIFT STATION CONTROL CABINET EQUIPMENT LAYOUT
259.	CP–5	EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM – I
260.	CP–6	EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM – II
261.	CP–7	EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM – III
262.	CP–8	EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM – IV
263.	CP–9	EDDINGTON LIFT STATION CONTROL DRY PUMP NO.D1 CONTROL WIRING DIAGRAM
264.	CP–10	EDDINGTON LIFT STATION CONTROL DRY PUMP NO.D2 CONTROL WIRING DIAGRAM
265.	CP–11	EDDINGTON LIFT STATION CONTROL WET PUMP NO.1 CONTROL WIRING DIAGRAM
266.	CP–12	EDDINGTON LIFT STATION CONTROL WET PUMP NO.2 CONTROL WIRING DIAGRAM
267.	CP–13	EDDINGTON LIFT STATION CONTROL WET PUMP NO.W3 CONTROL WIRING DIAGRAM
268.	CP–14	EDDINGTON LIFT STATION CONTROL WET PUMP NO.W4 CONTROL WIRING DIAGRAM
269.	CP–15	EDDINGTON LIFT STATION DRY WEATHER CHEMICAL FEED PUMPS P&ID DIAGRAM
270.	CP–16	EDDINGTON LIFT STATION WET WEATHER CHEMICAL FEED PUMPS P&ID DIAGRAM
271.	CP–17	EDDINGTON LIFT STATION CHEMICAL FEED PUMPS NO. 1 & NO. 2 P&ID WIRING DIAGRAM
272.	CP–18	EDDINGTON LIFT STATION WET WEATHER CHEMICAL FEED PUMPS WIRING DIAGRAM
273.	CP–19	EDDINGTON LIFT STATION CHEMICAL FEED PUMPS CONTROL PANEL
274.	CP–20	SCOTT WWF EXISTING OVERALL NETWORK DIAGRAM
275.	CP–21	SCOTT WWF PROPOSED OVERALL NETWORK DIAGRAM
276.	CP–22	SCOTT WWF MCC–WWPS PLC CONTROL PANEL LAYOUT AND ELEVATION
277.	CP–23	SCOTT WWF MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA. – I
278.	CP–24	SCOTT WWF MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA. – II
279.	CP–25	SCOTT WWF MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA. – III
280.	CP–26	SCOTT WWF MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA. – IV
281.	CP–27	SCOTT WWF MCC–ST1 PLC CNTL. PNL. LYT. AND ELEV.
282.	CP–28	SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA. – I
283.	CP–29	SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA. – II
284.	CP–30	SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA. – II
285.	CP–31	SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA. – III
286.	ZE–1	ELECTRICAL SERVICE DETAILS
287.	ZE–2	ELECTRICAL YARD LIGHT / COMMUNICATION POLE DETAILS
288.	ZE–3	ELECTRICAL DETAILS
289.	ZE–4	RADAR LEVEL TRANSMITTER GAUGING SYSTEM INSTALLATION & DETAILS – I
290.	ZE–5	RADAR LEVEL TRANSMITTER GAUGING SYSTEM INSTALLATION & DETAILS – II

NO.	REVISION	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: X/XX/2026

DESIGNED BY: T. REESER	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4~~A~~ – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

DRAWING INDEX

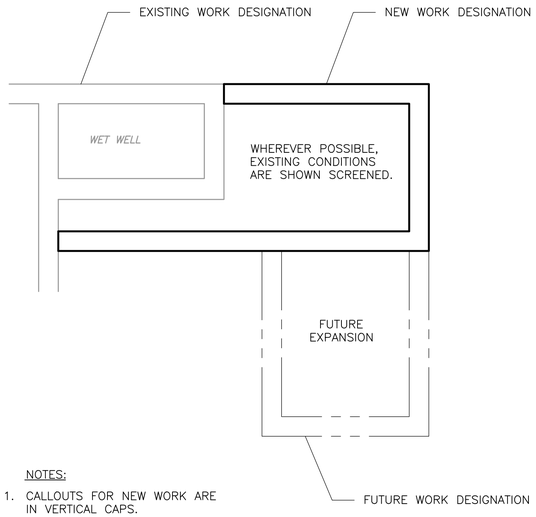
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
G–2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 2/11/2026 1:22 PM
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024–1427\Project Files\03–Prod\03–Dwgs\G–CNL.dwg

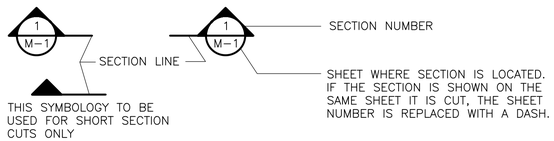
EXISTING OR FUTURE CONDITION DESIGNATION



NOTES:

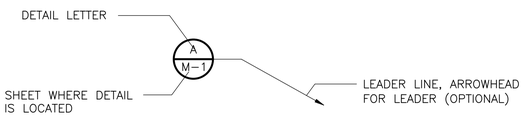
1. CALLOUTS FOR NEW WORK ARE IN VERTICAL CAPS.
2. FUTURE LINE WORK IS SHOWN IN A PHANTOM LINE AND LABELED 'FUTURE'.

SECTION CUT SYMBOLS



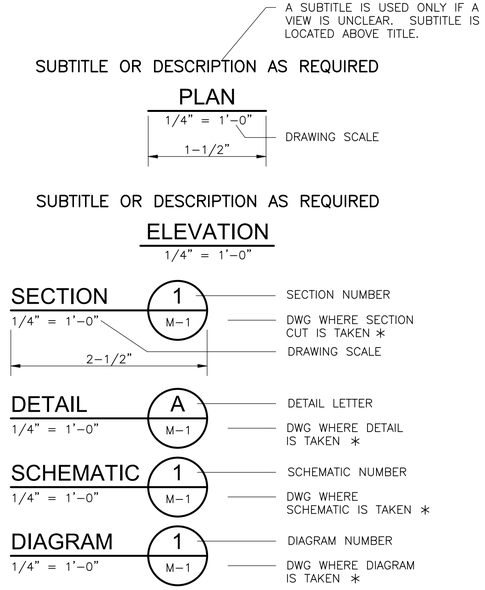
WHEN REFERENCING A SECTION IN A NOTE, USE 1/CF1–M–4 FORMAT INSTEAD OF THE BUBBLE

DETAIL CALL OUT SYMBOLS



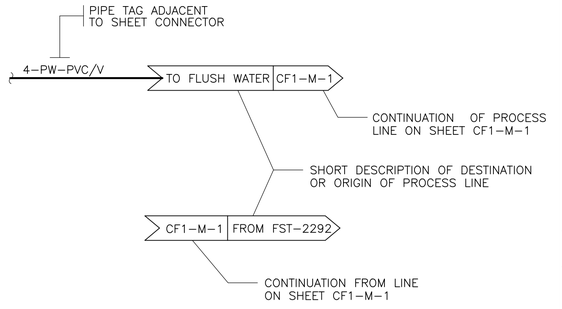
WHERE A NOTE IS REQUIRED FOR CLARITY, A/CF1–M–4 FORMAT IS USED IN THE NOTE INSTEAD OF BUBBLE. IF MULTIPLE DETAILS REFER TO THE SAME AREA OF THE DRAWING, THE BUBBLES ARE STACKED SIDE BY SIDE.

DRAWING, SECTION AND DETAIL TITLES



* IF SECTION, DETAIL, SCHEMATIC OR DIAGRAM IS DRAWN ON THE SAME SHEET THAT IT IS TAKEN FROM, REPLACE THE SHEET NUMBER WITH A HYPHEN. IF THE SECTION IS REFERENCED ON MULTIPLE SHEETS, THE SHEET NUMBER INDICATES THE FIRST SHEET THE SECTION IS TAKEN FROM.

FLOW DIAGRAM SHEET CONNECTIONS



DESIGN DISCIPLINE DESIGNATIONS

G	GENERAL	H	BUILDING MECHANICAL (HVAC)
P	PROCESS	PL	PLUMBING
C	CIVIL	F	FIRE
SC	SITE CIVIL	FA	FIRE ALARM
YP	YARD PIPING	FP	FIRE PROTECTION
D	DEMOLITION	E	ELECTRICAL
A	ARCHITECTURAL	I	INSTRUMENTATION AND CONTROL
S	STRUCTURAL	Z	STANDARD DETAILS
M	PROCESS MECHANICAL		

NOTES:

1. NOT ALL ABBREVIATIONS MAY BE USED IN A PARTICULAR PROJECT.
2. SOMETIMES A PROJECT MAY USE A SIMPLER ABBREVIATION SUCH AS C FOR ALL CIVIL RELATED ITEMS OF F FOR ALL FIRE RELATED ITEMS.
3. ON LARGER PROJECTS MAY ALSO HAVE A PROCESS AREA OR UNIT DESIGNATION AHEAD OF THE DISCIPLINE ABBREVIATION.

GENERAL LINETYPES

F F F	WATER LINE (FIRE)
WM WM	WATER LINE (DOMESTIC)
SAN SAN	SANITARY LINE
STM STM	STORM LINE
	PROPERTY LINE
	WETLANDS

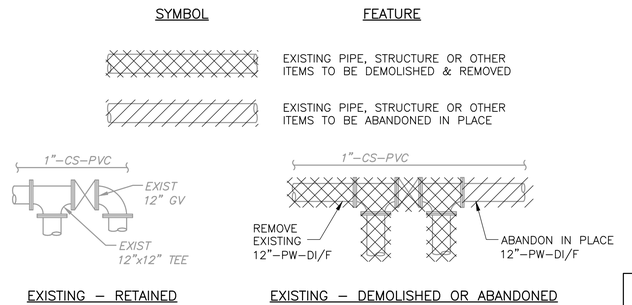
NOTES:

1. AREA ELECTRICAL CLASSIFICATIONS ARE SHOWN ON THE ELECTRICAL DRAWINGS. ALL PROCESS MECHANICAL EQUIPMENT, INSTALLATION AND CONNECTIONS ARE TO BE RATED FOR THE CLASSIFICATION OF THE AREA THEY ARE LOCATED IN.

EQUIPMENT / VALVE DESIGNATION

AB	AERATION BLOWER	LCP	LOCAL CONTROL PANEL	ST	STRAINER
AC	AIR COMPRESSOR	LE	LEVEL ELEMENT	STP	SLUDGE TRANSFER PUMP
ACU	AIR CONDITIONING UNIT	LI	LEVEL INDICATOR	SUP	SUBMERSIBLE PUMP
AE	ANALOG ELEMENT	LIT	LEVEL INDICATOR TRANSMITTER	SV	SOLENOID VALVE
AHU	AIR HANDLING UNIT	LPNL	LIGHTING PANEL	SWBD	SWITCH BOARD
AIT	ANALYTICAL INDICATING TRANSMITTER	LS	LEVEL SWITCH	SWC	SCREENINGS WASHING COMPACTOR
AR	AIR RECEIVER	LSH	LEVEL SWITCH HIGH	SWC	SCREENINGS WASHER COMPACTOR
ARV	AIR RELIEF VALVE	LSHH	LEVEL SWITCH HIGH HIGH	SWGR	SWITCH GEAR
ATS	AUTOMATIC TRANSFER SWITCH	LSL	LEVEL SWITCH LOW		
AVS	AUTOMATIC VACUUM SWITCHOVER	LSLL	LEVEL SWITCH LOW LOW	TE	TEMPERATURE ELEMENT
BAFP	BACKFLOW PREVENTER	LSP	LIFT STATION PUMP	TI	TEMPERATURE GAUGE
BC	BELT CONVEYOR	LT	LEVEL TRANSMITTER	TIT	TEMPERATURE INDICATING TRANSMITTER
BCV	BALL CHECK VALVE			TNK	TANK
BFP	BELT FILTER PRESS	MCC	MOTOR CONTROL CENTER	TS	TEMPERATURE SWITCH
BFV	BUTTERFLY VALVE	MBS	MECHANICAL BAR SCREEN	TSH	TEMPERATURE SWITCH HIGH
BLR	BLOWER	MFS	MECHANICAL FINE SCREEN	TSL	TEMPERATURE SWITCH LOW
BP	BELT PRESS UNIT	MV	MUD VALVE	TV	TELESCOPING VALVE
BPFP	BELT PRESS FEED PUMP	MXR	MIXER		
BS	BAR SCREEN			UH	UNIT HEATER
BV	BALL VALVE	NPW	NON–POTABLE WATER PUMP		
BWP	BACKWASH PUMP	NPWT	NON–POTABLE WATER TRANSFER PUMP	VCP	VALVE CONTROL PANEL
				VFD	VARIABLE FREQUENCY DRIVE
CF	COALESCING FILTER	OC	OIL COOLER	VI	VACUUM GAUGE
CHL	CHLORINATOR			VP	VACUUM PUMPS
CLI	CHLORINE INJECTOR	PCV	PRESSURE CONTROL VALVE	VRV	VACUUM RELIEF VALVE
CLLD	CHLORINE LEAK DETECTOR	PF	PARSHALL FLUME	VTP	VERTICAL TURBINE PUMP
CLSC	CHLORINE SCRUBBER	PI	PRESSURE INDICATOR	VV	VALVE VAULT
CNV	CONVEYOR	PIN	PRESSURE INJECTOR		
CP	CONTROL PANEL	PIT	PRESSURE INDICATING TRANSMITTER	WE	WEIGHT ELEMENT
CU	CONDENSING UNIT	PLC	PROGRAMMABLE LOGIC CONTROLLER	WG	WEIR GATE
CV	CHECK VALVE	PM	POWER METER	WIT	WEIGHT INDICATING TRANSMITTER
CYL	CHLORINE CYLINDER SCALE	PMP	POLYMER FEED PUMP	WASP	WASTE SLUDGE PUMP
		PNL	PANEL		
DB	DIGESTER BLOWER	PP	POWER PANEL	XE	UNDEFINED SENSOR
DCT	DECANTER	PRLV	PRESSURE RELIEF VALVE	XFMR	TRANSFORMER
DDCV	DUAL–DISK CHECK VALVE	PRV	PRESSURE REDUCING VALVE	XIT	UNDEFINED TRANSMITTER
DFLT	DISK FILTER	PS	PRESSURE SWITCH	XS	UNDEFINED SWITCH
DH	DUCT HEATER	PSH	PRESSURE SWITCH HIGH		
DNP	DRAIN PUMP	PSHH	PRESSURE SWITCH HIGH HIGH		
DPIT	DIFFERENTIAL PRESS INDICATOR TRANSMITTER	PSL	PRESSURE SWITCH LOW		
DPR	DAMPER	PSLL	PRESSURE SWITCH LOW LOW		
DS	DRUM SCALE	PV	PLUG VALVE		
DST	DIESEL STORAGE TANK	PWP	PLANT WATER PUMP		
DV	DIAPHRAGM VALVE				
		RP	RECIRCULATION PUMP		
EF	EXHAUST FAN	RD	REFRIGERATED DRYER		
		RIO	REMOTE I/O PANEL		
FE	FLOW ELEMENT	RM	ROTAMETER		
FIT	FLOW INDICATING TRANSMITTER	RTU	REMOTE TERMINAL UNIT		
FS	FLOW SWITCH	RV	RECIRCULATION VALVE		
		SAP	SAMPLE PUMP		
GC	GRIT CLASSIFIER	SBSP	SODIUM BISULFITE FEED PUMP		
GEN	ELECTRIC GENERATOR	SC	SLUDGE COLLECTOR		
GLV	GLOBE VALVE	SCV	SWING CHECK VALVE		
GP	GRIT PUMP	SD	SULFONATOR		
GR	GRINDER	SDI	SULFUR DIOXIDE INJECTOR		
GRU	GRIT REMOVAL UNIT	SDLD	SULFUR DIOXIDE DETECTOR		
GSU	GRIT CAPTURE UNIT	SDS	SULFUR DIOXIDE CYLINDER SCALE		
GCU	GRIT CONCENTRATOR UNIT	SEC	SECURITY EQUIPMENT		
GV	GATE VALVE	SF	SUPPLY FAN		
		SG	SLIDE GATE		
HPU	BELT TENSION AND STEERING HYDRAULIC PUMP	SHFP	SODIUM HYPOCHLORITE FEED PUMP		
		SLG	SLUICE GATE		
INFP	INFLUENT PUMP	SLH	SLUDGE HOPPER		
		SP	SUMP PUMP		
JB	JUNCTION BOX	SS	SOLID STATE REDUCED VOLTAGE STARTER		
KGV	KNIFE GATE VALVE				

DEMOLITION/ABANDONMENT LEGEND



EXISTING – RETAINED

EXISTING – DEMOLISHED OR ABANDONED

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
G–3

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

LEGENDS AND ABBREVIATIONS I

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:06 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024–1427\project Files\03–Prod\03–Dwgs\G–CNL.dwg

PIPE AND FITTING SYMBOLS

DOUBLE LINE PIPING	SINGLE LINE PIPING	FEATURE
		PROCESS PIPING
		EXISTING PROCESS PIPING
		FUTURE PROCESS PIPING
		WELDED JOINT
		DIRECTION OF FLOW
		SCREWED OR THREADED JOINT (SEE NOTE 1)
		FLANGED JOINT (SEE NOTE 1)
F	R	COUPLING FOR GROOVED END JOINTS: (F) FLEXIBLE OR (R) RIGID
		MECHANICAL JOINT (SEE NOTE 1)
		PUSH ON JOINT OR CAULKED BELL & SPIGOT JOINT (SEE NOTE 1)
		FLANGE x PLAIN END PIPE COUPLING (FLANGE ADAPTOR)
		FLANGE x PLAIN END PIPE COUPLING, RESTRAINED (FLANGE ADAPTOR, RESTRAINED)
		PIPE COUPLING (SLEEVE–TYPE)
		PIPE COUPLING, RESTRAINED (AWWA–11)
		FLEXIBLE COUPLING OR EXPANSION JOINT (SLEEVE TYPE)
		UNION
		FLEXIBLE COUPLING OR EXPANSION JOINT (BELLOWS TYPE)
		FLANGE GUARD
		PLUG
		PIPE TURNED 90° TOWARD
		PIPE TURNED 90° AWAY
		TEE IN PIPE RUN WITH BRANCH DOWN

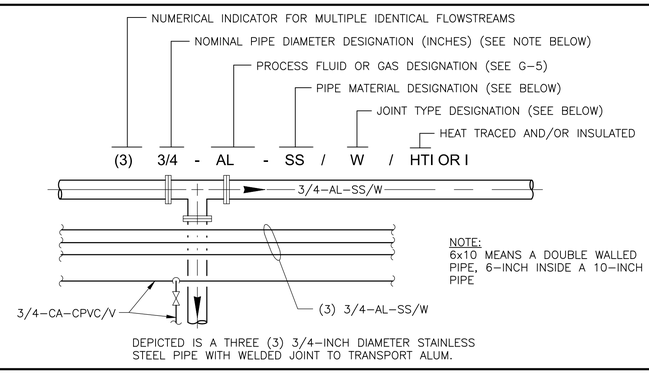
PIPE AND FITTING SYMBOLS (CONT.)

DOUBLE LINE PIPING	SINGLE LINE PIPING	FEATURE
		TEE IN PIPE RUN WITH BRANCH UP
		PITCH PIPE TO LOW POINT
		MECHANICAL JOINT – RESTRAINED
		BALL JOINT
		QUICK CONNECT COUPLING
		HOSE COUPLING
		HOSE COUPLING w/CAP
		BLIND FLANGE
		DRAIN
		LIQUID QUICK DISCONNECT
		AIR QUICK DISCONNECT
		DIAPHRAM SEAL STANDARD
		FLEXIBLE HOSE CONNECTION

PIPE AND FITTING SYMBOLS NOTES:

1. GENERIC JOINT SYMBOL IS USED FOR ALL SINGLE LINE PIPING SHOWN ON THE INTERIOR AND EXTERIOR PIPING DRAWINGS.
2. UNLESS MODIFIED BY THE GENERAL PROJECT NOTES OR DETAILED ON THE LAYOUT AND SCHEMATIC DRAWINGS, PIPE AND FITTING JOINT REQUIREMENTS FOR THE VARIOUS PIPE MATERIALS ARE DEFINED IN THE SPECIFICATIONS AND ARE INDICATED ON THE PROCESS PIPE SCHEDULES

PIPE IDENTIFICATION SYSTEM



NOTE:
6x10 MEANS A DOUBLE WALLED PIPE, 6–INCH INSIDE A 10–INCH PIPE

DEPICTED IS A THREE (3) 3/4–INCH DIAMETER STAINLESS STEEL PIPE WITH WELDED JOINT TO TRANSPORT ALUM.

PIPE MATERIALS LEGEND

DESIGNATION	PIPE MATERIALS
ABS	ACRYLONITRILE – BUTADIENE – STYRENE
BS	BLACK STEEL
CI	CAST IRON
CIS	CAST IRON – SOIL
CM	CORRUGATED METAL
CPVC	CHLORINATED POLYVINYL CHLORIDE
CS	CARBON STEEL
CU	COPPER
DI	DUCTILE IRON
FRP	FIBER REINFORCED PLASTIC
GCS	GALVANIZED CARBON STEEL
PE	POLYETHLENE
PP	POLYPROPYLENE
PVC	POLYVINYL CHLORIDE
PVCI	POLYVINYL CHLORIDE (DOUBLED WALLED PIPE)
RBH	RUBBER HOSE
RC	REINFORCED CONCRETE
RCC	REINFORCED CONCRETE CYLINDER
SS	STAINLESS STEEL
STL	STEEL (CARBON)
VC	VITRIFIED CLAY

PIPE JOINT LEGEND

DESIGNATION	JOINT TYPE
BSM	BELL & SPIGOT – MORTAR JOINT
BSO	BELL & SPIGOT – RUBBER O RING
C	COMPRESSION (TUBE FITTINGS)
F	FLANGED
G	GROOVED
H	HEAT FUSION
MJ	MECHANICAL JOINT
PE	PLAIN END
PO	PUSH ON
POR	PUSH ON RESTRAINED
RMJ	RESTRAINED MECHANICAL JOINT
S	SOLDERED
SW	SOCKET WELDED
T	THREADED
V	SOLVENT CEMENTED
W	BUTT WELDED
QD	QUICK DISCONNECT COUPLING

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

LEGENDS AND ABBREVIATIONS II

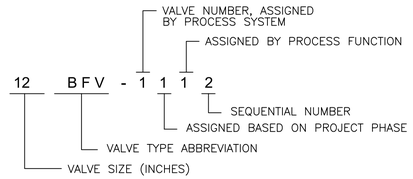
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
G–4

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:06 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024–1427\project Files\03–Prod\03–Dwgs\G–CNL.dwg

VALVE TAGS



NOTE:
ALL CONTROL VALVES, ALL ELECTRICALLY ACTUATED VALVES AND ALL VALVES WILL BE GIVEN INDIVIDUAL EQUIPMENT NUMBERS.

VALVE ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
ARV	AIR RELEASE VALVE
AV	ANGLE VALVE
AVRV	AIR/VACUUM RELEASE VALVE
BCV	BALL CHECK VALVE
BFV	BUTTERFLY VALVE
BPRV	BACK PRESSURE REGULATING VALVE
BV	BALL VALVE
CV	CONE VALVE
CSCV	AIR OR OIL CUSHIONED SWING CHECK VALVE
DV	DIAPHRAGM VALVE
FCV	FLOW CONTROL VALVE
FG	FLAP GATE
FLV	FLOAT VALVE
FLPV	FLAP VALVE
GOV	GLOBE VALVE
GV	GATE VALVE
ICV	INLINE CHECK VALVE
KGV	KNIFE GATE VALVE
MV	MUD VALVE
NV	NEEDLE VALVE
PCV	PRESSURE CONTROL VALVE
PNV	PINCH VALVE
PRV	PRESSURE RELIEF VALVE
PVCV	PRESSURE REDUCING CHECK VALVE
PV	PLUG VALVE
PRCV	PRESSURE VACUUM RELIEF VALVE
SCV	SWING CHECK VALVE
SCRV	SELF-CONTAINED REGULATING VALVE
SDCV	SPLIT DISC CHECK VALVE
SG	SLIDE GATE
SOLV	SOLENOID VALVE
SRV	SURGE RELIEF VALVE
TDCV	TILTING DISC CHECK VALVE
TSV	TELESCOPING VALVE
VRV	VACUUM RELIEF VALVE

ACTUATOR SYMBOLS

DESIG.	PROCESS FLOW
	DIAPHRAGM – SPRING CLOSED
P	DIAPHRAGM – SPRING CLOSED W/ POSITIONER
	DIAPHRAGM – DOUBLE ACTING OR PRESSURE BALANCED
M	ELECTRIC MOTOR (CONSTANT SPEED)
M	ELECTRIC MOTOR (VARIABLE SPEED)
S	SOLENOID
	HAND
	AIR
	HYDRAULIC CYLINDER
E/H	ELECTRO-HYDRAULIC

VALVE SYMBOLS

SYMBOL	TYPE	SYMBOL	TYPE
	KNIFE GATE VALVE		SELF-CONTAINED REGULATING VALVE
	PINCH VALVE		PRESSURE RELIEF VALVE
	BALL VALVE		VACUUM RELIEF VALVE
	DIAPHRAGM VALVE		AIR RELIEF/VACUUM BREAKER
	BUTTERFLY VALVE		
	GATE VALVE		EXTERNAL TAP REGULATING VALVE
	CONE VALVE		
	PLUG VALVE		THREE-WAY BALL VALVE
	SWING CHECK VALVE		FOUR-WAY VALVE
	BALL CHECK VALVE		FLAP VALVE (GATE)
	GLOBE VALVE		SHEAR GATE
	FLOAT ACTUATED VALVE		NEEDLE VALVE
	MUD VALVE		RUPTURE DISK FOR VACUUM RELIEF
	BACKFLOW PREVENTER		RUPTURE DISK FOR PRESSURE RELIEF
	TILTING DISC CHECK VALVE		ANGLE VALVE
	SPLIT DISC CHECK VALVE		
	SLEEVE VALVE		
S	SOLENOID VALVE	PCV	PRESSURE CONTROL REGULATOR (SELF CONTAINED)
M	MOTOR OPERERATED VALVE		
	VALVE WITH CAP	CV	CONTROL VALVE
M	TELESCOPING VALVE (MOTORIZED)	FCV	FLOW CONTROL VALVE
	QUICK DISCONNECT		
	AIR QUICK DISCONNECT		
	DIAPHRAM SEAL STANDARD		
	ROTAMETER		
	Y-STRAINER		
	PUMP CALIBRATION CYLINDER		

PROCESS FLOW STREAM ABBREVIATIONS

CODE	SERVICE	WORKING PRESSURE	TEST PRESSURE
DR	DRAIN	80 PSIG	125 PSIG
FS	FERRIC SULFATE (ODOR CONTROL)	40 PSIG	100 PSIG
HPW	HIGH PRESSURE WATER	150 PSIG	250 PSIG
IA	INSTRUMENT AIR	15–100 PSIG	25–150 PSIG
OF	OVERFLOW	10–40 PSIG	20–60 PSIG
PA	PLANT AIR	100–150 PSIG	150 PSIG
PW	POTABLE WATER	95 PSIG	150 PSIG
PPW	PROTECTED POTABLE WATER	75 PSIG	150 PSIG
RS	RAW SEWAGE	100 PSIG	150 PSIG
SPD	SUMP PUMP DISCHARGE	10 PSIG	40 PSIG
SS	STORM SEWER	–	5 PSIG
SSG	SANITARY SEWER – GRAVITY	5 PSIG	15 PSIG
SSF	SANITARY SEWER – FORCE MAIN (DRY WEATHER)	55 PSIG	75 PSIG
SSF	SANITARY SEWER – FORCE MAIN (WET WEATHER)	100 PSIG	150 PSIG
TW	TEPID WATER	75 PSIG	150 PSIG
V	VENT	ATM (1)	

NOTES:

1. WHEN TESTING GRAVITY DRAIN LINE, CONTRACTOR SHALL PROTECT ITEMS SUCH AS FLEXIBLE CONNECTORS, FLOOR DRAINS, AND EQUIPMENT NOT RATED FOR FULL TEST PRESSURE.
2. COMPLY WITH PIPE TESTING REQUIREMENTS OUTLINED IN SPECIFICATION 15050.
3. GRAVITY SANITARY SEWER AND PROCESS GRAVITY SEWERS SHALL BE TESTED IN ACCORDANCE WITH SECTION 02533 – ACCEPTANCE TESTING FOR SANITARY SEWERS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

LEGENDS AND ABBREVIATIONS III

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
G-5

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:06 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\G-CNL.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 3:16 PM

GENERAL NOTES

1. EXISTING UTILITIES ARE SHOWN ON THE PLAN IN A GENERAL MANNER FROM INFORMATION SUPPLIED BY THE SURVEYOR, EXISTING PLANS, AND / OR INFORMATION PROVIDED BY UTILITY OWNERS. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICT.
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
3. ALL STORM SEWER PIPE FOR THE PROJECT SHALL BE REINFORCED CONCRETE PIPE (OR AN APPROVED EQUAL) UNLESS OTHERWISE NOTED ON THE PLANS.
4. CONTRACTOR TO COORDINATE WITH THE SURVEYOR TO CHECK AND / OR RESET THE BENCHMARK AND THE PROPERTY CORNERS.
5. WHERE ANY EXISTING WATERLINE CONFLICTS WITH THE PROPOSED CONSTRUCTION OF STORM SEWERS AND / OR SANITARY SEWERS, THE WATERLINE SHALL BE ADJUSTED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS PRESCRIBED BY THE UTILITY OWNER.
6. ALL WORK INDICATED ON THE DRAWINGS IS NEW AND SHALL BE PERFORMED AND PROVIDED BY THE CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE AS NOT IN CONTRACT (NIC). SUB-CONTRACTORS ARE TO PROPERLY CONNECT AND COORDINATE THEIR WORK WITH THE WORK OF OTHERS AS SHOWN ON THE DRAWINGS AND AS INDICATED IN THE SPECIFICATIONS (IF APPLICABLE).
7. CONTRACTOR SHALL COORDINATE THE WORK OF VARIOUS TRADES TO AVOID POSSIBLE INTERFERENCES, DUPLICATION OF WORK, OR UNFINISHED GAPS BETWEEN OPERATIONS. ANY DELAYS OR CHANGES RESULTING FROM CONFLICTS BETWEEN TRADES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE GENERAL CONDITIONS OF THE CONTRACT SHALL BE THOSE AGREED UPON BY AND BETWEEN THE OWNER AND THE GENERAL CONTRACTOR.
8. ALL MATERIALS USED FOR THE COMPLETION OF THE WORK ELEMENTS NOTED HEREIN SHALL BE NEW, FIRST QUALITY CONDITION AND DELIVERED TO THE JOB SITE IN UNDAMAGED CONDITION.
9. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT INSTALLATION METHODS CONFORM TO ALL BUILDING CODE REQUIREMENTS. THE MATERIALS SPECIFIED HEREIN ARE INTENDED TO MEET CODE REQUIREMENTS; ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND CODE REQUIREMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ENGINEERS ATTENTION PRIOR TO PROCEEDING WITH WORK ELEMENTS SPECIFIED.
10. THE CONTRACTOR IS RESPONSIBLE THAT ALL ACCESSIBILITY CODES ARE MET TO THE FULLEST EXTENT. REQUIRED DIMENSIONS AND TOLERANCES SHALL BE MET AS REQUIRED AND ANY WORKMANSHIP ERRORS OR CORRECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER OR ENGINEER.
11. THESE DRAWINGS AND WRITTEN SPECIFICATIONS ARE COMPLEMENTARY AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL.
12. NO SUBSTITUTIONS OF SPECIFIED MATERIALS SHALL BE ALLOWED UNLESS FIRST SUBMITTING SPECIFICATIONS, SAMPLES, COST AND TIME SCHEDULE IMPACT DATE TO ENGINEER FOR APPROVAL IN WRITING. NO CHANGES ARE TO BE MADE TO THE DESIGN INTENT, MATERIALS OR LAYOUT OF THE PROJECT UNLESS APPROVED IN WRITING, BY THE ENGINEER, PRIOR TO CHANGED BEING MADE.
13. ALL CONTRACTORS SHALL MAINTAIN THE PREMISES CLEAN AND FREE OF ALL TRASH AND DEBRIS, AND SHALL PROTECT ALL ADJACENT WORK FROM DAMAGE SPOILING.
14. IF APPLICABLE, THE CONSTRUCTION SHALL NOT RESTRICT A FIVE FOOT CLEAR AND UNOBSTRUCTED ACCESS TO ANY WATER OR POWER DISTRIBUTION FACILITIES (POWER POLES, PULL BOXES, TRANSFORMERS, VAULTS, PUMPS, VALVES, METERS, APPURTENANCES, ETC.) OR TO THE LOCATION OF THE HOOK-UP. THE CONSTRUCTION SHALL NOT BE WITHIN TEN FEET OF ANY POWER LINES WHETHER OR NOT THE LINES ARE LOCATED ON THE PROPERTY. FAILURE TO COMPLY MAY CAUSE CONSTRUCTION DELAYS AND/OR ADDITIONAL EXPENSES.

GRADING NOTES

1. PRIOR TO BEGINNING THE WORK, NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THE PLANS OR FIELD CONFLICTS.
2. BEFORE PERFORMING ANY EARTHWORK, THE CONTRACTOR SHALL REMOVE ALL TOPSOIL, TREES, ROOTS, AND OTHER UNSUITABLE MATERIALS FROM THE CUT AND / OR FILL AREAS.
3. THE DEVELOPMENT OF THIS TRACT SHALL NOT ADVERSELY AFFECT THE DRAINAGE OF THE NEIGHBORING PROPERTY AT ANY TIME FOR ANY REASON.
4. NO EARTHEN SLOPE ON THIS PROJECT SHALL EXCEED 4:1 UNLESS OTHERWISE NOTED ON THE PLANS.
5. ALL EXISTING MANHOLE RIMS, VALVE COVERS, METER BOXES, ETC. SHALL BE RAISED OR LOWERED TO THE PROPOSED GRADE AS REQUIRED. THIS WORK SHALL MEET THE REQUIREMENTS OF THE UTILITY OWNER.
6. ALL PAVING AND FLATWORK SHALL MEET OR EXCEED THE RECOMMENDATIONS OUTLINED IN A SITE SPECIFIC GEOTECHNICAL REPORT PREPARED BY AN ENGINEER LICENSED TO PRACTICE IN THE STATE OF TEXAS.
7. FILL SHALL BE PLACED IN 8–INCH LOOSE LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY UNLESS A HIGHER STANDARD IS REQUIRED BY THE GEOTECHNICAL ENGINEER.
8. ALL EARTH WORK FOR THIS PROJECT SHALL BE IN CONFORMANCE WITH THE SWPPP.
9. PRIOR TO THE CONCLUSION OF THE PROJECT, THE CONTRACTOR SHALL ESTABLISH TURF COVER ON ALL DISTURBED AREAS. THE MINIMUM RATE OF GERMINATION SHALL BE 90%. THE CONTRACTOR'S BID PRICE SHALL COVER REAPPLICATION AS REQUIRED TO MEET THIS REQUIREMENT. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL THIS REQUIREMENT IS SATISFIED.
10. ANY ADJUSTMENT TO FINISH FLOOR GRADES SHALL BE APPROVED BY THE ENGINEER.

DETENTION NOTES

1. **THE DETENTION POND SHALL BE CONSTRUCTED BEFORE ANY BUILDINGS OR PAVING TO ENSURE THAT STORM WATER RUNOFF FROM THIS SITE DOES NOT INCREASE AT ANY TIME FOR ANY REASON.**
2. **THE CONTRACTOR SHALL PROMPTLY REPAIR ANY WASHOUTS, RILLS, OR SLOPE FAILURES. THESE REPAIRS (IF ANY) SHALL BE INCLUDED IN THE BID PRICE.**
3. **SEE SITE GRADING AND SWPPP NOTES IN THESE PLANS FOR ADDITIONAL REQUIREMENTS.**
4. **THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE DETENTION POND UNTIL THE CONCLUSION OF CONSTRUCTION. MAINTENANCE SHALL INCLUDE DEBRIS CLEANUP, SEDIMENT REMOVAL, MOWING, AND IRRIGATION AND SHALL BE INCLUDED IN THE BID PRICE.**
5. **ADEQUATE DRAINAGE OF THE SITE SHALL BE MAINTAINED AT ALL TIMES. ANY DRAINAGE FACILITY DISTURBED OR DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER.**
6. **AT THE CONCLUSION OF CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED AND GIVEN THE OPPORTUNITY TO INSPECT THE POND. THE ENGINEER RESERVES THE RIGHT TO REQUEST AS-BUILT SURVEY OF THE POND AT NO ADDITIONAL COST TO THE OWNER. THE OWNER SHALL ASSUME ALL RESPONSIBILITY FOR THE CONTINUED MAINTENANCE OF THE DETENTION POND AFTER THIS INSPECTION.**
7. **POND SHALL BE SEEDED AND WATERED TO ESTABLISH 90% GERMINATION. CONTRACTOR SHALL MONITOR WEATHER AND IS RESPONSIBLE FOR RESEEDING COSTS IF SEEDING IS WASHED OUT DUE TO RAIN.**

SWPPP NOTES

1. **THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND FOR INSTALLING, MAINTAINING, AND ADJUSTING ALL REQUIRED BMPs PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AND THROUGH FINAL STABILIZATION, IN ACCORDANCE WITH THE TCEQ TPDES CONSTRUCTION GENERAL PERMIT (TXR150000) AND CITY OF HOUSTON SPECIFICATIONS.**
2. **THE CONTRACTOR SHALL COMPLETE AND SIGN THE T.C.E.Q. "CONSTRUCTION SITE NOTICE" (ATTACHMENT #2 OF THE TPDES GENERAL PERMIT TXR150000).**
3. **THE CONTRACTOR SHALL POST A SIGNED COPY OF THE "CONSTRUCTION SITE NOTICE" WHERE IT IS READILY AVAILABLE FOR VIEWING BY THE GENERAL PUBLIC, AND LOCAL, STATE, AND FEDERAL AUTHORITIES PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES AND SHALL MAINTAIN THIS NOTICE UNTIL COMPLETION OF THE WORK.**
4. **THE CONTRACTOR SHALL PROVIDE A COPY OF THE SIGNED "CONSTRUCTION SITE NOTICE" TO THE OPERATOR OF ANY MUNICIPAL STORM SEWER SYSTEM RECEIVING STORM WATER DISCHARGE FROM THE SITE AT LEAST TWO (2) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.**
5. **THE PROPERTY OWNER OR THE CONTRACTOR SHALL CONTACT THE CITY AND/OR COUNTY AS REQUIRED FOR A PRE-CONSTRUCTION INSPECTION PRIOR TO COMMENCING ANY CLEARING OR CONSTRUCTION ACTIVITIES ON THE SITE.**
6. **PERIMETER CONTROLS (RFB, IPB, ETC.) SHALL BE INSTALLED PRIOR TO CLEARING, GRUBBING, OR EARTHWORK AND SHALL REMAIN IN PLACE UNTIL PERMANENT STABILIZATION IS ACHIEVED.**
7. **BMPs SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN TWENTY-FOUR (24) HOURS AFTER EACH 0.5-INCH OR GREATER RAINFALL EVENT. DAMAGED BMPs SHALL BE REPAIRED OR REPLACED PROMPTLY. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES FIFTY PERCENT (50%) OF THE EFFECTIVE HEIGHT.**
8. **DISTURBED AREAS THAT WILL REMAIN INACTIVE FOR MORE THAN FOURTEEN (14) DAYS SHALL BE TEMPORARILY STABILIZED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.**
9. **STOCKPILES SHALL BE LOCATED WITHIN THE LIMITS OF DISTURBANCE, OUTSIDE DRAINAGE SWALES, AND SURROUNDED BY PERIMETER CONTROLS.**
10. **CONCRETE TRUCK WASHOUT SHALL BE PROVIDED ONLY AT DESIGNATED AREAS SHOWN ON THE PLANS OR AS APPROVED BY THE ENGINEER. DISPOSAL OF HARDENED CONCRETE AND WASH WATER SHALL BE IN ACCORDANCE WITH REGULATIONS.**
11. **ALL CONSTRUCTION VEHICLES SHALL USE THE STABILIZED CONSTRUCTION ENTRANCE. ANY MUD, SOIL, OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY, AT A MINIMUM, OR MORE FREQUENTLY AS NEEDED, USING NON-DESTRUCTIVE METHODS (E.G., MECHANICAL SWEEPING OR VACUUM SWEEPING). FLUSHING OR WASHING INTO STORM DRAINS IS PROHIBITED.**
12. **PRIOR TO PROJECT CLOSEOUT, THE CONTRACTOR SHALL ESTABLISH TURF COVER ON ALL DISTURBED AREAS. THE MINIMUM RATE OF GERMINATION SHALL BE NINETY PERCENT (90%). CONTRACTOR SHALL RESEED AS NECESSARY TO MEET THIS REQUIREMENT AT NO ADDITIONAL COST TO THE OWNER. UPON ACHIEVEMENT OF FINAL STABILIZATION, CONTRACTOR SHALL REMOVE ALL TEMPORARY STORM WATER QUALITY CONTROL MEASURES NOT REQUIRED TO REMAIN..**

NO.	DATE	REVISION	APP.

TRILOGY ENGINEERING SERVICES

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699

TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 1/15/2026

DESIGNED BY: MS	SURVEYED BY:
DRAWN BY: MS	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: NS	FB NO. 340S1
REVIEWED BY: NS	
APPROVED BY: NS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

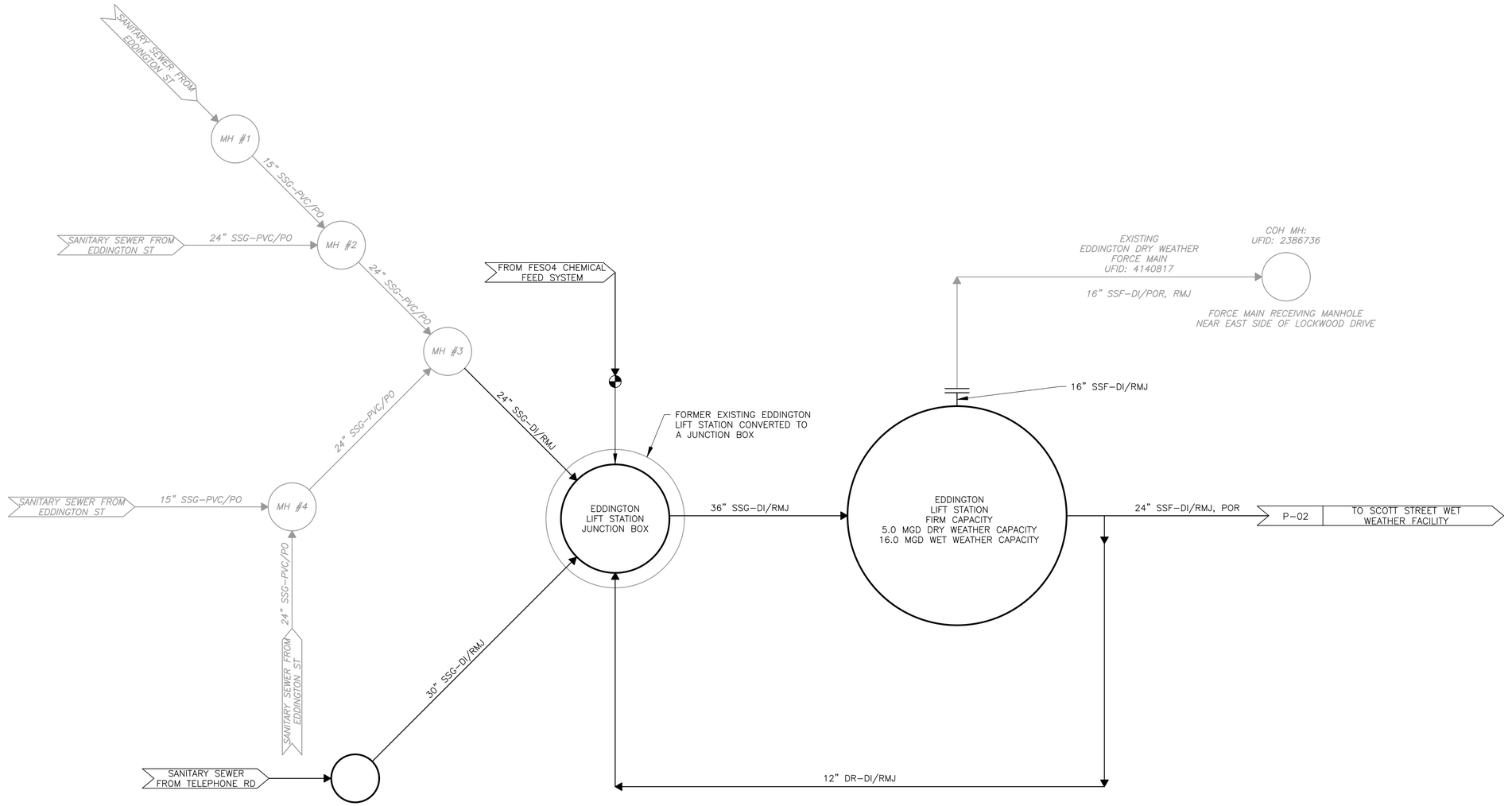
DRAINAGE & SWPPP GENERAL CONSTRUCTION NOTES

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
G–7

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 39 OF 266	

FILE PATH: D:\Eddington LS\Design\C–DRAINAGE–EDD.dwg



NOTES

1. THE PROCESS FLOW BLOCK DIAGRAM REPRESENTED HERE ILLUSTRATES A GENERAL REPRESENTATION OF THE IMPROVEMENTS AT THE EDDINGTON LIFT STATION AND ASSOCIATED 24-INCH WET WEATHER FORCE MAIN. REFER TO THE P&ID DRAWINGS AND DETAILED DESIGN DRAWINGS FOR ADDITIONAL DETAILS.
2. THESE DESIGN IMPROVEMENTS ARE BASED ON AN ADMINISTRATIVE ORDER TO CAPTURE THE 5-YEAR 6-HOUR STORM EVENT.
3. REFER TO THE DEMOLITION SERIES DRAWINGS FOR PROPOSED CONSTRUCTION SEQUENCING AND BYPASS PUMPING OPERATIONS.
4. MANHOLES #1 THROUGH #4 ARE POTENTIAL LOCATIONS WHERE BYPASS PUMPING OPERATIONS CAN BE SET UP. REFER TO THE DEMOLITION D SERIES DRAWINGS AND SPECIFICATIONS SECTIONS 01114 SEQUENCE OF CONSTRUCTION AND 11500 TEMPORARY BYPASS PUMPING.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

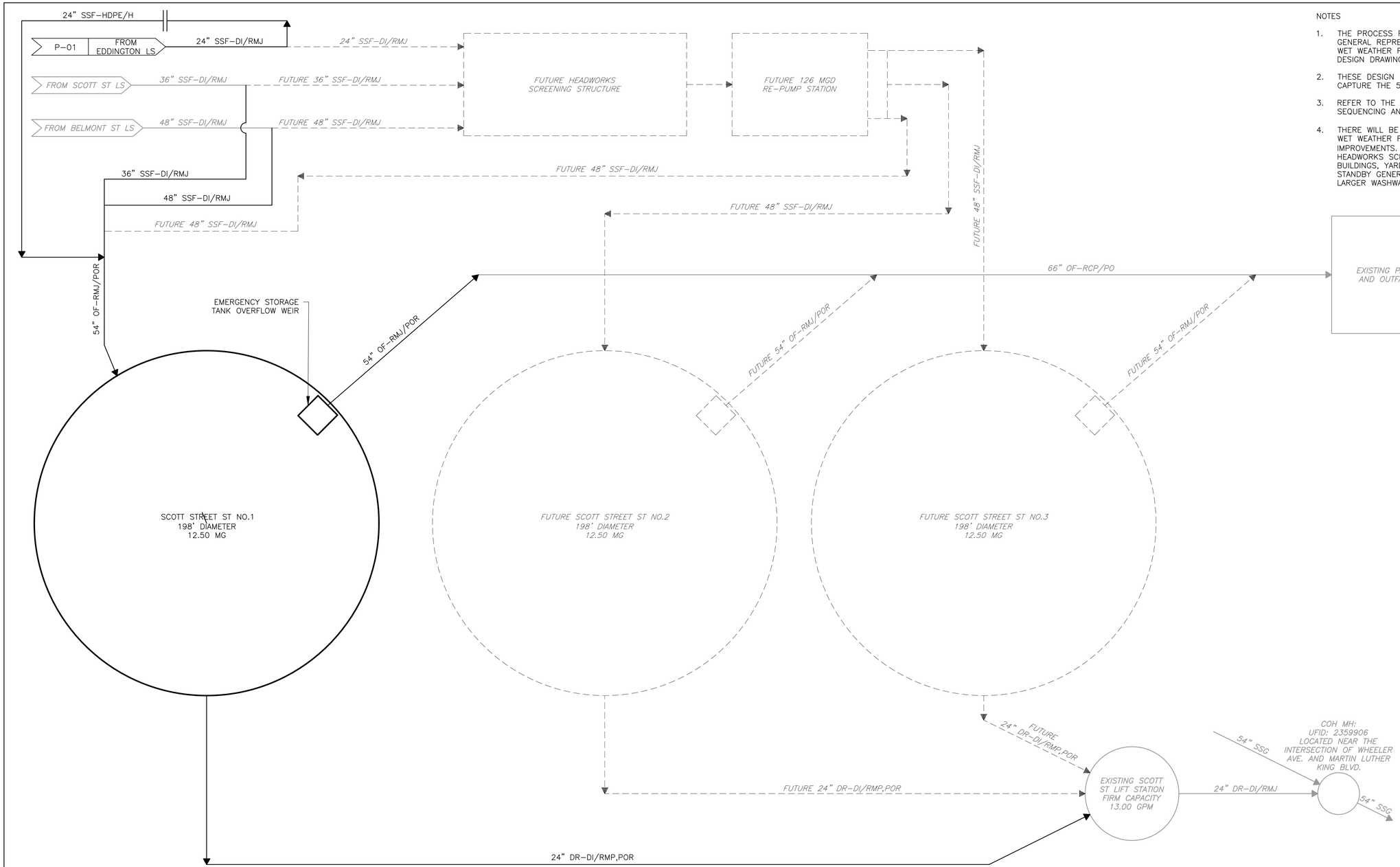
PROCESS FLOW DIAGRAM I

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
P-1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:06 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\P-PFDI.dwg



NOTES

1. THE PROCESS FLOW BLOCK DIAGRAM REPRESENTED HERE ILLUSTRATES A GENERAL REPRESENTATION OF THE IMPROVEMENTS AT THE SCOTT STREET WET WEATHER FACILITY. REFER TO THE P&ID DRAWINGS AND DETAILED DESIGN DRAWINGS FOR ADDITIONAL DETAILS.
2. THESE DESIGN IMPROVEMENTS ARE BASED ON AN ADMINISTRATIVE ORDER TO CAPTURE THE 5-YEAR 6-HOUR STORM EVENT.
3. REFER TO THE DEMOLITION SERIES DRAWINGS FOR PROPOSED CONSTRUCTION SEQUENCING AND BYPASS OPERATIONS.
4. THERE WILL BE A FUTURE PROJECT; "CRMP PACKAGE 4B – SCOTT STREET WET WEATHER FACILITY STORAGE TANKS NO. 2 AND 3 AND RELATED IMPROVEMENTS. WBS NO.: R-001001-0035-4", THAT WILL ADD A HEADWORKS SCREENING FACILITY, RE-PUMP STATION AND ELECTRICAL BUILDINGS, YARD PIPING, VALVING, STORAGE TANKS NO. 2 & NO. 3, STANDBY GENERATOR SETS, NEW REPLACEMENT OPERATIONS BUILDING, A LARGER WASHWATER STORAGE TANK AND OTHER RELATED IMPROVEMENTS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PROCESS FLOW DIAGRAM II

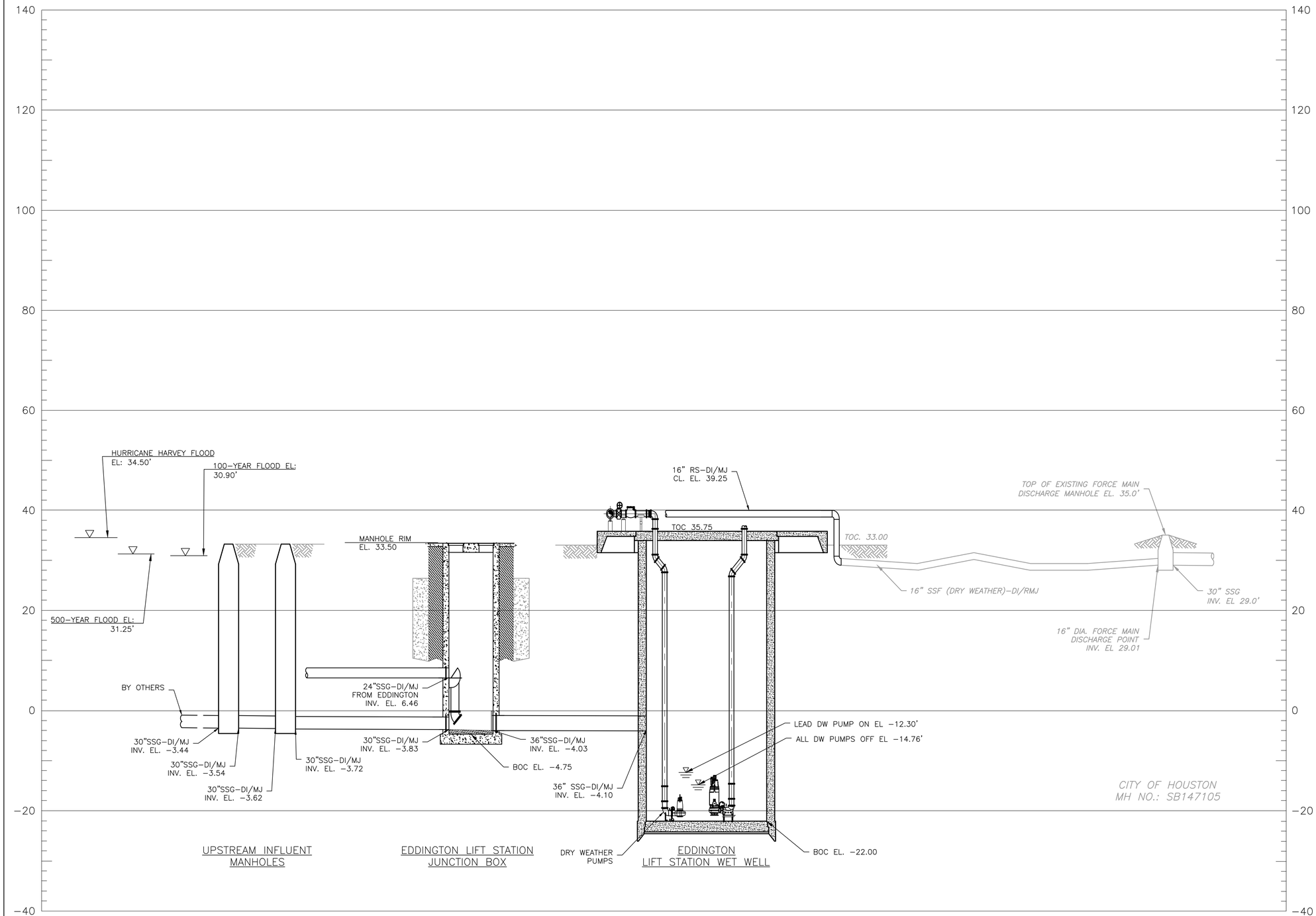
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
P-2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:06 PM

FILE PATH: C:\Users\Jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\P-PFDI.dwg



NOTES:

1. THE PROJECT LIES ON FEMA FIRM PANEL MAP NUMBER 48201C0880M PANEL 880 OF 1150, EFFECTIVE DATE JANUARY 6, 2017. ZONE AE AND BFE 31.3' AND THE 500−YEAR FLOOD ELEVATION IS 34.50'.
2. THIS PROJECT REPLACES AN EXISTING OLDER LIFT STATION CONSTRUCTED IN 1995 AND REPLACES WITH A LARGER CAPACITY LIFT STATION WHICH INCLUDES DRY WEATHER PUMPS AND WET WEATHER PUMPS. A NEW 24−INCH WET WEATHER FORCE MAIN WILL CONVEY WET WETHER PUMPED FLOW TO THE SCOTT STREET WET WEATHER FACILITY FOR TEMPORARY OFF LINE STORAGE UNTIL THE DESIGN 5 YEAR, 6 HOUR STORM HAS PASSED AND TRUNK SEWER LEVELS SUBSIDE TO DRAIN STORED FLOW BACK INTO THE COLLECTION SYSTEM.
3. BY OTHERS INDICATES WORK ON THE NEW COLECTION SYSTEM UNDER THE AMANI ENGINEERING PROJECT WBS NO. R−01000−0036−3. THE CONTRACTOR SHALL COORDINATE THE ROUTING OF THE ON−SITE SEWER LINE TO THIS MANHOLE.
4. EXISTING 16−INCH FORCE MAIN INFORMATION OBTAINED FROM RECORD DRAWING NO. SET 31543.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A − EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

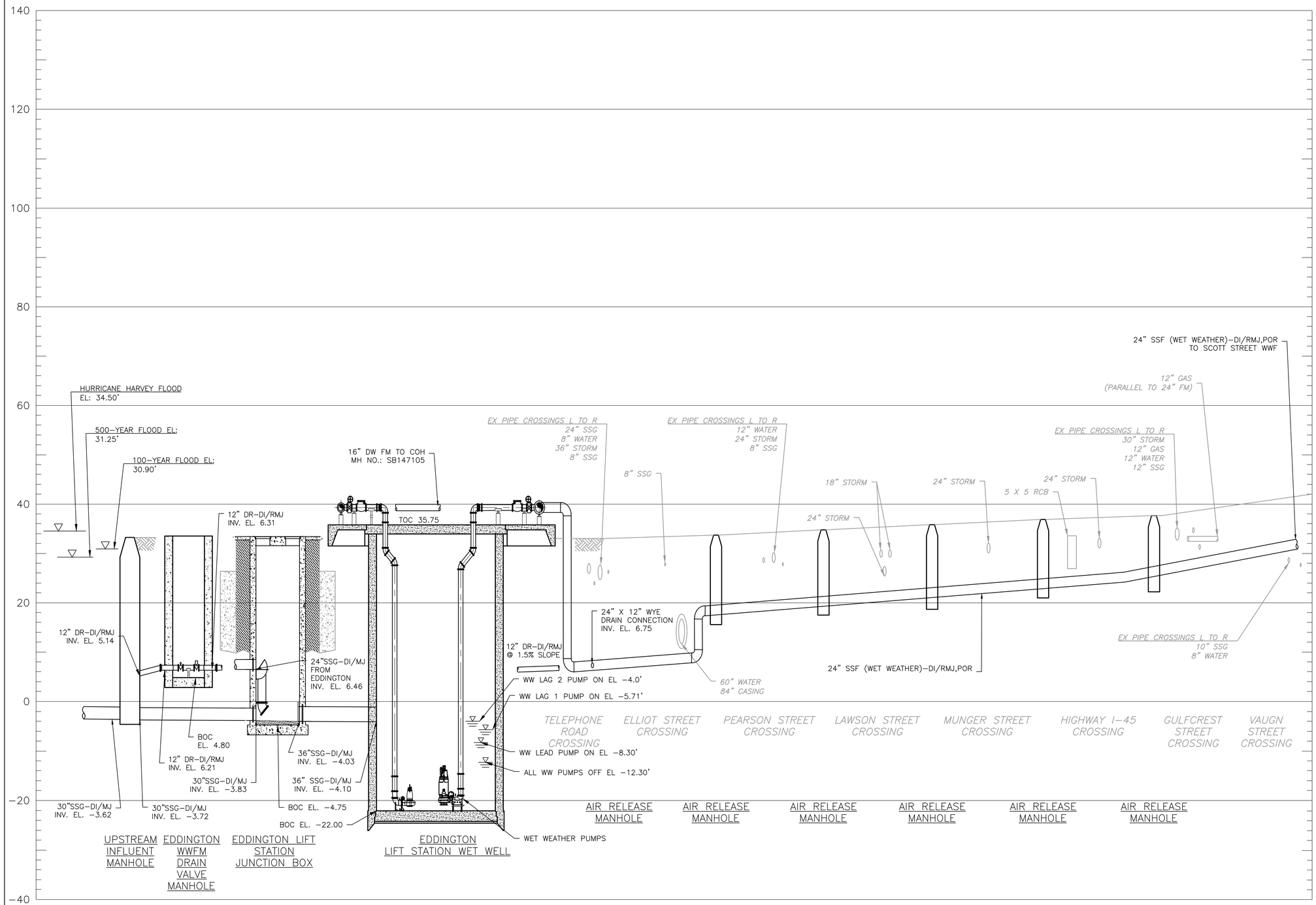
HYDRAULIC PROFILE EDDINGTON LS TO DRY WEATHER FM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
P−3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R−001000−0035−4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:07 PM
FILE PATH: C:\Users\vglbson\DC\ACCDocs\ardurra, inc\2024−1427\project Files\03−Prod\03−Dwgs\P−HYPR.dwg



NOTES:

1. THE PROJECT LIES ON FEMA FIRM PANEL MAP NUMBER 48201C0880M PANEL 880 OF 1150, EFFECTIVE DATE JANUARY 6, 2017. ZONE AE AND BFE 31.3' AND THE 500−YEAR FLOOD ELEVATION IS 34.50'.
2. THIS PROJECT REPLACES AN EXISTING OLDER LIFT STATION CONSTRUCTED IN 1995 AND REPLACES WITH A LARGER CAPACITY LIFT STATION WHICH INCLUDES DRY WEATHER PUMPS AND WET WEATHER PUMPS. A NEW 24−INCH WET WEATHER FORCE MAIN WILL CONVEY WET WETHER PUMPED FLOW TO THE SCOTT STREET WET WEATHER FACILITY FOR TEMPORARY OFF LINE STORAGE UNTIL THE DESIGN 5 YEAR, 6 HOUR STORM HAS PASSED AND TRUNK SEWER LEVELS SUBSIDE TO DRAIN STORED FLOW BACK INTO THE COLLECTION SYSTEM

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A − EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

HYDRAULIC PROFILE EDDINGTON LS TO SCOTT STREET WWF

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

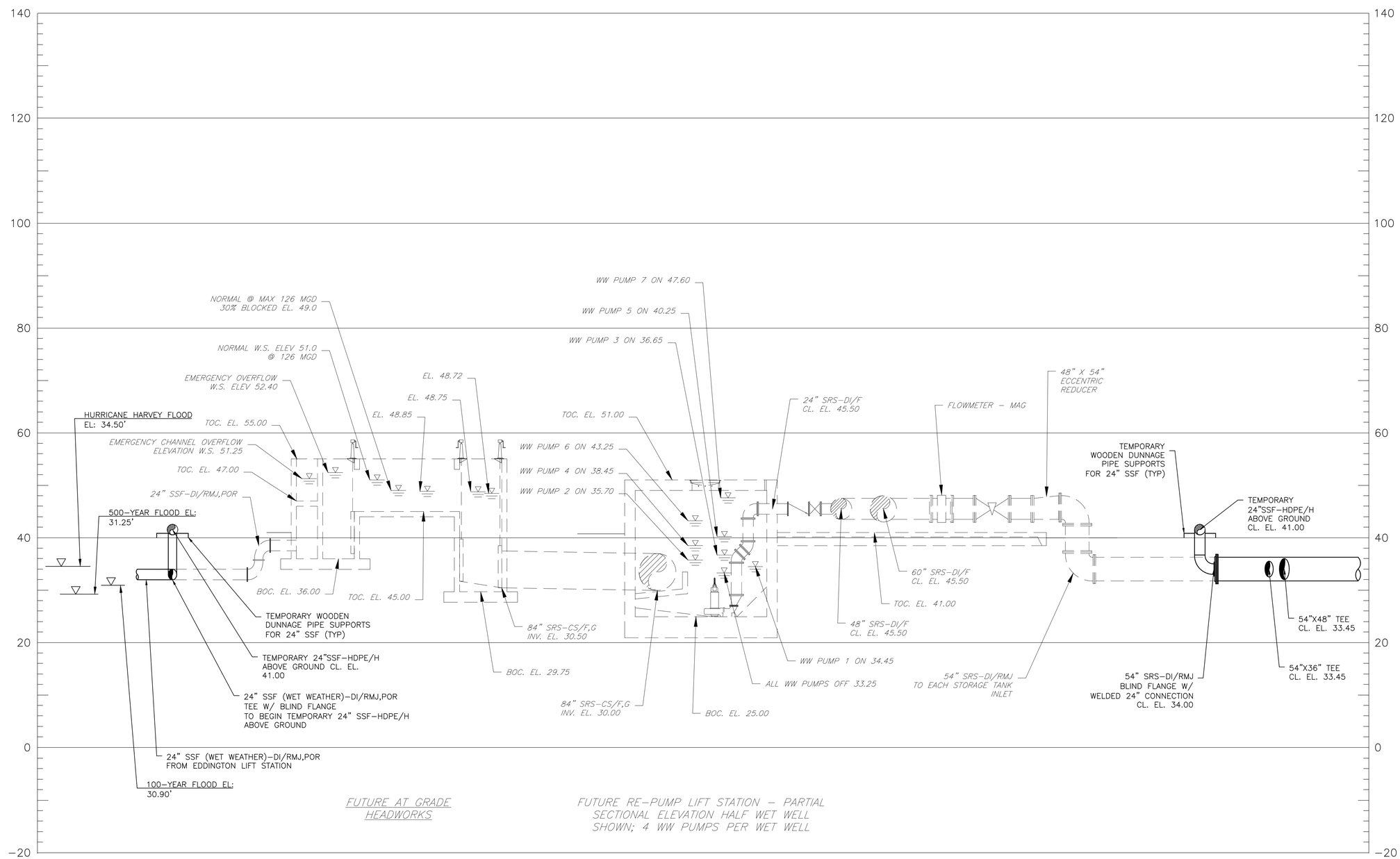
DWG NO
P−4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R−001000−0035−4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 12:38 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024−1427\project Files\03−Prod\03−Dwgs\P−HYPR.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:07 PM

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\P-HYPR.dwg



NOTES:

1. THE PROJECT LIES ON FEMA FIRM PANEL XXXXXXXXXXXXXXXX, EFFECTIVE DATE AUGUST 15, 2019. ZONE AE AND BFE 31.3' AND THE 500-YEAR FLOOD ELEVATION IS 34.50'.
2. THIS PROJECT REPLACES AN EXISTING OLDER LIFT STATION CONSTRUCTED IN 1995 AND REPLACES WITH A LARGER CAPACITY LIFT STATION WHICH INCLUDES DRY WEATHER PUMPS AND WET WEATHER PUMPS. A NEW 24-INCH WET WEATHER FORCE MAIN WILL CONVEY WET WETHER PUMPED FLOW TO THE SCOTT STREET WET WEATHER FACILITY FOR TEMPORARY OFF LINE STORAGE UNTIL THE DESIGN 5 YEAR, 6 HOUR STORM HAS PASSED AND TRUNK SEWER LEVELS SUBSIDE TO DRAIN STORED FLOW BACK INTO THE COLLECTION SYSTEM

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

HYDRAULIC PROFILE EDDINGTON LS TO SCOTT ST. SSO TANK SHEET 1

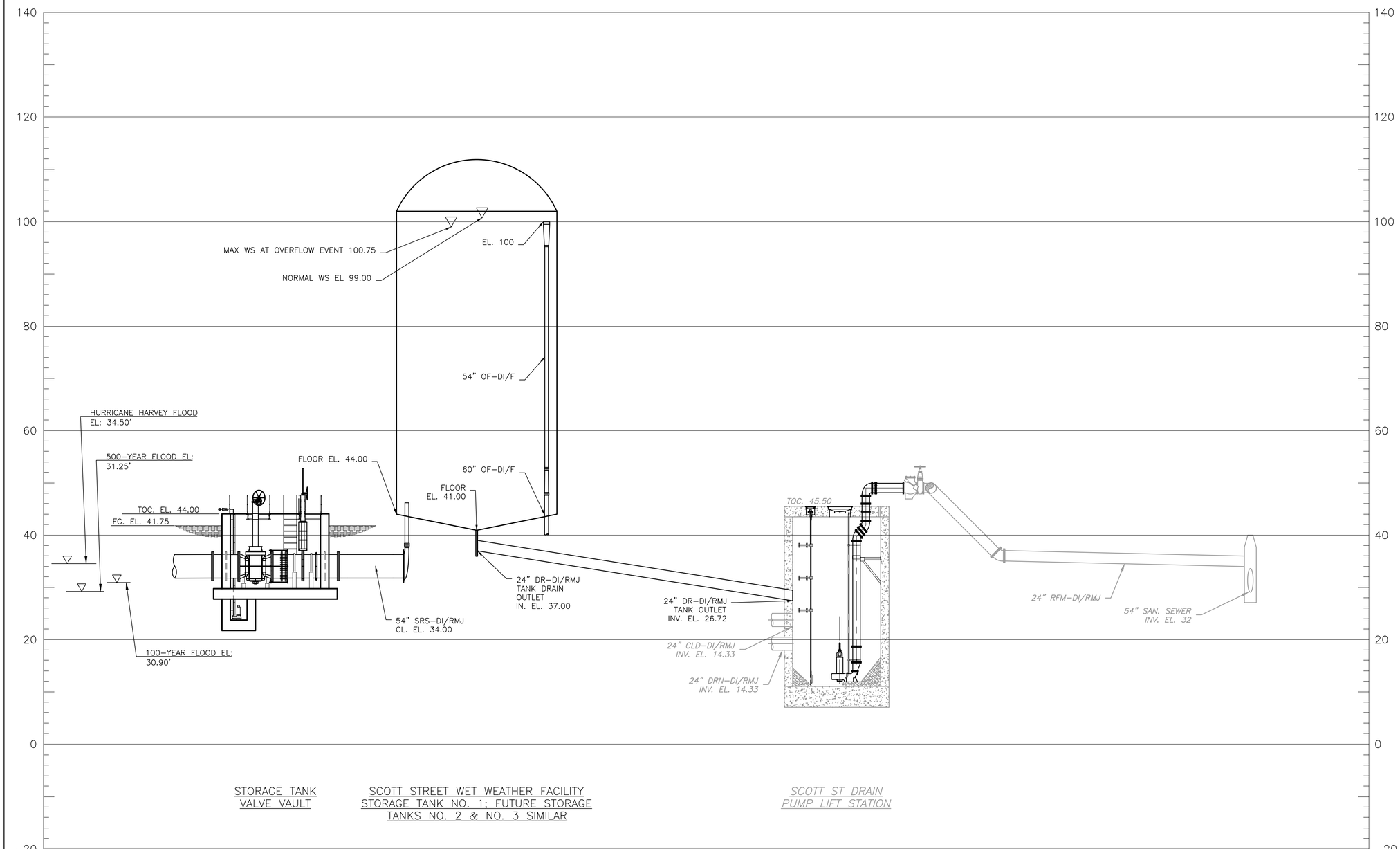
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
P-5

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:07 PM

FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\P-HYPR.dwg



NOTES:

1. THE PROJECT LIES ON FEMA FIRM PANEL MAP NUMBER 48201C0880M PANEL 880 OF 1150, EFFECTIVE DATE JANUARY 6, 2017. ZONE AE AND BFE 31.3' AND THE 500-YEAR FLOOD ELEVATION IS 34.50'.
2. THIS PROJECT REPLACES AN EXISTING OLDER LIFT STATION CONSTRUCTED IN 1995 AND REPLACES WITH A LARGER CAPACITY LIFT STATION WHICH INCLUDES DRY WEATHER PUMPS AND WET WEATHER PUMPS. A NEW 24-INCH WET WEATHER FORCE MAIN WILL CONVEY WET WETHER PUMPED FLOW TO THE SCOTT STREET WET WEATHER FACILITY FOR TEMPORARY OFF LINE STORAGE UNTIL THE DESIGN 5 YEAR, 6 HOUR STORM HAS PASSED AND TRUNK SEWER LEVELS SUBSIDE TO DRAIN STORED FLOW BACK INTO THE COLLECTION SYSTEM

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

HYDRAULIC PROFILE EDDINGTON LS TO SCOTT ST. SSO TANK SHEET 2

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
P-6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

HOUSTON PUBLIC WORKS GENERAL NOTES – INSIDE CITY LIMITS

1. UNLESS OTHERWISE NOTED AND APPROVED ON DRAWINGS, CONSTRUCT CIVIL INFRASTRUCTURE IN ACCORDANCE WITH THE EFFECTIVE EDITION OF THE HOUSTON PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, STANDARD CONSTRUCTION DETAILS, AND SUPPLEMENTS, ADDENDA AND AMENDMENTS THERETO. THE LATEST EDITION OF THE ABOVE PUBLICATIONS CAN BE FOUND AT: HTTP://WWW.HOUSTONPERMITTINGCENTER.ORG/OFFICE-CITY-ENGINEER/DESIGN-AND-CONSTRUCTION-STANDARDS.
2. THE DESIGN MUST BE CONSISTENT WITH THE EFFECTIVE EDITION OF HOUSTON PUBLIC WORKS INFRASTRUCTURE DESIGN MANUAL AND TCEQ (TEXAS COMMISSION ON ENVIRONMENTAL QUALITY) REQUIREMENTS.
3. THE GEOTECHNICAL INVESTIGATION FOR THIS PROJECT WAS CONDUCTED IN ACCORDANCE WITH CHAPTER 11 OF THE LATEST EDITION OF THE PUBLICATION INFRASTRUCTURE DESIGN MANUAL, PUBLISHED BY HOUSTON PUBLIC WORKS. SOILS REPORT WAS PREPARED BY [GEOTECHNICAL ENGINEERING FIRM] REPORT NO. [NO. OF REPORT], DATED [DATE OF REPORT].
4. UTILITIES PRESENTED ON THESE DRAWINGS ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS IN THE FIELD PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL NOTIFY TEXAS ONE CALL AT 713-223-4567/811 OR 800-344-8377 AND LONE STAR NOTIFICATION CENTER AT 800-669-8344 AT LEAST 48 HOURS BEFORE PROCEEDING WITH ANY EXCAVATION. UTILITIES MARKED WITHIN THE PUBLIC RIGHT OF WAY OR IN EASEMENTS SHALL COMPLY WITH TAC TITLE 16, PART 1, CHAPTER 18, RULE §18.6 AND THE AMERICAN PUBLIC WORKS ADMINISTRATION (APWA) UNIFORM COLOR CODE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGES TO EXISTING WATER, WASTEWATER, STORM WATER LINES AND TRAFFIC CONTROL DEVICES. DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE EFFECTIVE EDITION OF HOUSTON PUBLIC WORKS, STANDARD CONSTRUCTION SPECIFICATIONS FOR WASTEWATER COLLECTION SYSTEM, WATER LINES, STORM DRAINAGE, STREET PAVING, AND TRAFFIC AND STANDARD CONSTRUCTION DETAILS FOR WASTEWATER COLLECTION SYSTEMS, WATER LINES, STORM DRAINAGE, STREET PAVING, AND TRAFFIC, REFERENCED ABOVE AND SUPPLEMENTS, ADDENDA AND AMENDMENTS THERETO, AT NO ADDITIONAL COST TO THE CITY OF HOUSTON.
6. CONTRACTOR SHALL NOTIFY THE OFFICE OF THE CITY ENGINEER, HOUSTON PUBLIC WORKS @ 832-394-9098 OR VIA FAX AT 832-395-4424 FOR INSPECTION AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
7. ADEQUATE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION AND ANY DRAINAGE DITCH OR STRUCTURE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITIONS OR BETTER AND TO THE SATISFACTION OF THE OWNING AUTHORITY.
8. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT ROOT SYSTEMS OF SHRUBS, PLANTS AND TREES ALONG THE AREA OF EXCAVATION.
9. CONTRACTOR SHALL COMPLY WITH LATEST EDITION OF OSHA REGULATIONS AND THE STATE OF TEXAS LAWS CONCERNING EXCAVATION.
10. CONTRACTOR SHALL MAINTAIN A SET OF REDLINE DRAWINGS AND RECORD AS-BUILT CONDITIONS DURING CONSTRUCTION. THESE AS-BUILT DRAWINGS WILL BE SUBMITTED TO THE DESIGN CONSULTANT WHO WILL MAKE THE CHANGES ON THE ORIGINAL TRACINGS, LABEL EACH SHEET IN THE SET AS "RECORD DRAWINGS", AND RETURN IT TO THE OFFICE OF THE CITY ENGINEER.

HOUSTON PUBLIC WORKS – SANITARY SEWER CONSTRUCTION NOTES

1. ALL SEWERS SHALL BE SUBJECT TO A STANDARD EXFILTRATION TEST. TESTS ARE TO BE PERFORMED ON THE TOTAL FOOTAGE OF SEWER LINE INCLUDED IN THE PROJECT. REQUIREMENTS OF TEXAS ADMINISTRATIVE CODE, TITLE 30 CHAPTER 217, 'DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS' SHALL GOVERN WHERE CONFLICTS EXIST EXCEPT WHERE CITY REQUIREMENTS ARE MORE STRINGENT.
2. ALL MANHOLES ARE TO BE PER CITY OF HOUSTON STANDARD DETAILS DRAWING NUMBERS 02082-01, 02082-02, 02082N-02, 02082-03, AND 02082N-03 UNLESS OTHERWISE NOTED. USE THE LATEST VERSION AS APPLICABLE.
3. SANITARY SEWER MANHOLES WILL HAVE BEDDING AND BACKFILL PER CITY OF HOUSTON STANDARD DETAILS DRAWING NO. 02317-08 UNLESS OTHERWISE NOTED.
4. THE SANITARY SEWER PVC PIPE SHALL BE ASTM D 3034 TYPE PSM SDR 26 GRAVITY SEWER PIPE, ASTM D2241 SDR 26 PRESSURE RATED SEWER PIPE OR AWWA C-900 DR-18 GREEN PVC PRESSURE RATED SEWER PIPE BASED ON CONSTRUCTION CONDITION REQUIREMENT AND CONFORMING TO ASTM D1784 AND CITY OF HOUSTON STANDARD SPECIFICATION SECTION 02506 POLYVINYL CHLORIDE PIPE.
5. WHEN SS PRESSURE RATED PVC PIPE IS USED ON WATERLINE (WL) CROSSING UNDER CONDITION 1 OF COH IDM TABLE 7.3, THE SAME TYPE OF D2241 SDR 26 PVC PIPE OR C-900 GREEN DR-18 PVC GREEN PRESSURED TO BE UTILIZING IN-BETWEEN TWO SS MH'S. OR TO UTILIZE A DI TRANSITION ADAPTER FOR THE CONNECTING OF ASTM D-3034 PVC GRAVITY PIPE TO DI-OD AWWA C-900 PVC PIPE CENTERED AT WL WHEN CONNECTING TWO DIFFERENT TYPES OF PVC PIPES FOR SEWER CONSTRUCTION.
6. AWWA C-900 DR-18 PVC PIPE USES EITHER AWWA C900 DR-18 PVC FITTINGS OR DIP FITTINGS.
7. ALL SANITARY SEWER LINES UNDER PROPOSED OR FUTURE PAVEMENT AND TO A POINT ONE (1) FOOT BACK OF ALL PROPOSED OR FUTURE CURBS SHALL HAVE BEDDING PER CITY OF HOUSTON STANDARD DETAILS DRAWING NUMBERS 02317-01, 02317-02, OR 02317-03 AS APPLICABLE, WITH 1 ½ SACK CEMENT/CY STABILIZED SAND BACKFILL UP TO THE BOTTOM OF THE PAVEMENT SUBGRADE. 100 PSI PERFORMANCE RESULTS ARE STILL REQUIRED.
8. ALL NEW SANITARY SEWERS CROSSING WATER LINES WITH A CLEARANCE BETWEEN 12 INCHES AND 9 FEET SHALL HAVE A MINIMUM OF ONE 18' JOINT OF DUCTILE IRON OR (GREEN) C900 PVC PIPE MEETING ASTM SPECIFICATION D2241 CENTERED ON WATER LINE. WHEN WATER LINE IS BELOW SANITARY SEWER, PROVIDE MINIMUM 2 FOOT SEPARATION.
9. CONTRACTOR SHALL PROVIDE A MINIMUM HORIZONTAL CLEARANCE OF 9' FEET BETWEEN WATER LINES AND SANITARY SEWER MANHOLES AND LINES.
10. SANITARY SEWER MANHOLE RIMS OUTSIDE OF PROPOSED PAVING WILL BE SET 3" – 6" ABOVE THE SURROUNDING LEVEL FINISHED GRADE AFTER PAVING WITH SLOPED BACKFILL ADDED FOR STORM WATER TO DRAIN AWAY FROM MANHOLE RIM.
11. IN WET STABLE TRENCH AREAS USE BEDDING PER CITY OF HOUSTON STANDARD DETAILS DRAWING NUMBER 02317-02.
12. DEFLECTION TEST: DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE AND SEMI-RIGID SEWER PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5% IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED AS PER 30 TAC 217.57 LATEST AMENDMENT AND WITHOUT MECHANICAL PULLING DEVICES. NO BALL-TYPE MANDREL IS ALLOWED.
13. INFILTRATION, EXFILTRATION OR LOW-PRESSURE AIR TEST: EITHER OF THE FOLLOWING TESTS SHALL BE PERFORMED AS PER TAC, TITLE 30 217.57 WITHIN THE SPECIFIED TOLERANCES ON ALL GRAVITY SEWERS.
    A. INFILTRATION OR EXFILTRATION TEST: TOTAL LEAKAGE AS DETERMINED BY A HYDROSTATIC HEAD TEST SHALL NOT EXCEED 50 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF TWO (2) FEET.
    B. LOW-PRESSURE AIR TEST: PERFORM TEST ACCORDING TO UNI-B-6-90 OR OTHER APPROPRIATE PROCEDURES. FOR SECTIONS OF PIPE LESS THAN 36" (INCH) AVERAGE INSIDE DIAMETER, THE MINIMUM ALLOWABLE TIME FOR PRESSURE DROP FROM 3.5 P.S.I.G. TO 2.5 P.S.I.G. SHALL BE AS FOLLOWS:

        6" 340 SECONDS OR 0.855(L) FOR TEST LENGTHS GREATER THAN 398'
        8" 454 SECONDS OR 1.520(L) FOR TEST LENGTHS GREATER THAN 298'
        10" 567 SECONDS OR 2.374(L) FOR TEST LENGTHS GREATER THAN 239'
        12" 680 SECONDS OR 3.419(L) FOR TEST LENGTHS GREATER THAN 199'
        15" 850 SECONDS OR 5.342(L) FOR TEST LENGTHS GREATER THAN 159'
        18" 1020 SECONDS OR 7.693(L) FOR TEST LENGTHS GREATER THAN 133'

        WHERE L = LENGTH OF LINE OF SAME PIPE SIZE IN FEET.

14. "SAN. S. E." INDICATES "SANITARY SEWER EASEMENT"
15. FOR SANITARY MANHOLE (MH) RIMS SET INSIDE OF OR @ CURB & GUTTER PAVEMENT AND/OR BELOW T.C., MH RIMS WILL BE SET FLUSHED WITH AN ABUTTING PAVED SURFACE. THE (VALCUN, NEENAH OR EQUAL) HEAVY DUTY BOLTED SOLID MH COVER SHALL BE PROPERLY (AND SECURELY) ATTACHED AND SEALED TO ITS COMPATIBLE GASKETED FRAME BY USING BOTH A NEOPRENE GASKET AND (AT LEAST) 4 COUNTER-SUNK HEX-HEAD COARSE THREADED ½"-13 UNC STAINLESS STEEL BOLTS. THE HEAVY DUTY FRAME MH COVER SHALL BE SOLID (NO AIR HOLES). SAID FRAME SHALL BE BOTH EMBEDDED INTO THE MH'S TOP ALSO SECURELY ANCHORED TO THE UNDERLYING MH STRUCTURE WITH EITHER SECURELY ATTACHED EMBEDDED ANCHOR BOLTS OR THE CONCRETE MH'S EXPOSED REBARS WELDED TO THE FRAME OR OTHER EQUALLY SECURED METHODS TO PREVENT MH COVER/FRAME BLOW-OFFS/EJECTIONS.

HOUSTON PUBLIC WORKS – TRAFFIC NOTES

CONTRACTOR OR OWNER SHALL SUBMIT TRAFFIC CONTROL PLANS WITH THE MOBILITY PERMIT APPLICATION. THE PLANS SHALL BE DRAWN TO SCALE AND SEALED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS.

THE GENERAL NOTES THAT SHALL BE INCLUDED ON THE TRAFFIC CONTROL PLAN CAN BE FOUND IN CHAPTER 15 (15.12 TRAFFIC CONTROL PLAN) OF THE CITY OF HOUSTON'S (CITY) INFRASTRUCTURE DESIGN MANUAL (IDM). BELOW ARE SEVERAL KEY NOTES FROM THE IDM TO BE AWARE OF:

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) LATEST EDITION WITH REVISIONS DURING THE ENTIRE CONSTRUCTION PERIOD.
2. NO WORK SHALL BE PERFORMED IN RESIDENTIAL AREAS FROM 7:00PM TO 7:00AM.
3. CONTRACTOR SHALL MAINTAIN APPROVED NUMBER OF LANES OF TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION WORKING HOURS. TRAFFIC CONTROL PLANS SHALL INCLUDE ONE-WAY AND/OR DETOUR PLANS. CONTRACTOR SHALL MAINTAIN ADA COMPLAINT PEDESTRIAN ACCESS TO BUS STOPS AND ADEQUATE BUS ACCESS TO THE BUS STOP.
4. CONTRACTOR SHALL COVER OPEN PAVEMENT EXCAVATIONS FOR MINOR UTILITY WORK WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, OPEN LANES FOR NORMAL TRAFFIC FLOW WHEN FEASIBLE.
5. CONTRACTOR SHALL SECURE ROADWAY/SIDEWALK/STREET/BICYCLE FACILITY PERMITS AS DESCRIBED IN CITY OF HOUSTON ORDINANCE, CHAPTER 40 – STREETS & SIDEWALKS, SECTION 40-361 FROM HOUSTON PERMITTING CENTER (MOBILITY PERMIT SECTION AT HTTPS://GEOHUB.HOUSTONTX.GOV) BEFORE IMPLEMENTING THE TRAFFIC CONTROL PLAN. THE APPLICATION MUST BE SUBMITTED AT LEAST TEN BUSINESS DAYS PRIOR TO THE IMPLEMENTATION OF THE TRAFFIC CONTROL PLAN AND/OR BEGINNING CONSTRUCTION WORK. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS, CONSTRUCTION SEQUENCING, AND CONSTRUCTION SCHEDULE WITH THE APPLICATION.
6. CONTRACTOR SHALL HAVE APPROVED TRAFFIC CONTROL PLAN AND PERMIT AT THE JOB SITE FOR INSPECTION AT ALL TIMES
7. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL CONES AND/OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAY, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE CITY OF HOUSTON.
8. ADDITIONAL OFF DUTY POLICE OFFICERS/FLAGGERS MAY BE REQUESTED TO DIRECT TRAFFIC WHEN LANES ARE BLOCKED AT THE DIRECTION OF THE CITY EVEN IF THEY ARE NOT SPECIFICALLY IDENTIFIED ON THE PROJECT PLANS.

HOUSTON PUBLIC WORKS – SWPPP NOTES

1. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
2. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENTS OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
3. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FORM THE EXCAVATED AREA.
4. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
5. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
    - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
    - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
    - STRUCTURAL CONTROL MEASURES.
    - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
6. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

TxDOT SPECIAL PROVISIONS

1. THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) IS NOT A MEMBER OF 811. AT LEAST 72 HOURS BEFORE STARTING WORK, MAKE ARRANGEMENTS FOR LOCATING EXISTING TXDOT-OWNED ABOVE GROUND AND UNDERGROUND FIBER OPTIC, COMMUNICATIONS, POWER, ILLUMINATION, AND TRAFFIC SIGNAL CABLING AND CONDUIT. DO THIS BY CALLING TXDOT'S HOUSTON DISTRICT TRAFFIC SIGNAL OPERATIONS AT 713-802-5662 TO SCHEDULE MARKING OF UNDERGROUND LINES ON THE GROUND. USE CAUTION IF WORKING IN THESE AREAS TO AVOID DAMAGING OR INTERFERING WITH EXISTING FACILITIES.
2. NO DISCHARGES, SUCH AS EFFLUENT, PRODUCED GROUNDWATER, OR CHLORINATED FLUSH WATER, MAY BE DRAINED INTO STATE HIGHWAY STORM SEWER INFRASTRUCTURE, WITHOUT THE APPROVAL OF A SEPARATE AGREEMENT. CONTACT THE TXDOT HOUSTON DISTRICT PERMITS OFFICE AT (713) 805-5553, -5512, OR -5575 FOR ADDITIONAL INFORMATION. IN ADDITION, THE GRANTEE CERTIFIES THAT ITS STORM WATER RUNOFF TO THE STATE'S RIGHT-OF-WAY SHALL NOT BE CONTAMINATED BY ANY INDUSTRIAL PROCESSES OR SIGNIFICANT POLLUTANTS, AND THE STATE SHALL NOT BE HELD LIABLE FOR ANY POLLUTANTS ENTERING STATE RIGHT-OF-WAY THROUGH STORM WATER CONNECTIONS.
3. ALL EXCAVATIONS WITHIN THE RIGHT-OF-WAY SHALL BE BACKFILLED ACCORDING TO THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES, ITEM 400, AS CURRENTLY AMENDED. ALL BACKFILL SHALL BE COMPACTED TO DENSITIES EQUAL TO THAT OF SURROUNDING SOIL. ALL SURPLUS MATERIAL SHALL BE REMOVED FROM THE RIGHT-OF-WAY, AND THE EXCAVATION FINISHED FLUSH WITH SURROUNDING NATURAL GROUND. ALL EXPOSED DIRT SURFACES SHALL BE SODDED, UNLESS OTHERWISE APPROVED BY THE TXDOT AREA ENGINEER. A SLOPE OF 4:1, OR FLATTER, SHALL BE REQUIRED ON THE DITCH FRONT SLOPE.
4. ENCASEMENT SHALL BE STEEL AND SHALL EXTEND PAST THE TOP OF BACK SLOPE OF THE OUTERMOST DITCHES, OR FIVE FEET BEYOND THE BACK OF CURB.
5. HIGHWAY CROSSINGS SHALL BE BORED OR TUNNELED. ANNULAR VOIDS BETWEEN THE BORE HOLD OR TUNNEL, AND THE CARRIER LINE OR ENCASEMENT, SHALL BE FILLED WITH A SLURRY GROUT OR FLOW-ABLE FILL, TO PREVENT SETTLEMENT OF ANY PART OF THE HIGHWAY.
6. FLUIDS USED IN CONNECTION WITH BORING OPERATIONS SHALL ONLY BE ALLOWED IN SUFFICIENT QUANTITY TO LUBRICATE BORING PITS, OR TO PROVIDE A SMOOTH FLOW OF CUTTINGS. JETTING WILL NOT BE ALLOWED.
7. ALL MANHOLE COVERS SHALL BE INSTALLED FLUSH WITH GROUND LEVEL.
8. THE CONTRACTOR OR SUB-CONTRACTOR IS REQUIRED TO CONTACT THE TXDOT MAINTENANCE SUPERVISOR A MINIMUM OF 72 HOURS PRIOR TO COMMENCING ANY WORK.

TXDOT MAINTENANCE SUPERVISORS	OFFICE PHONE
HARRIS COUNTY, WEST	(713) 934-5900
TRAFFIC SIGNAL OPERATIONS	(713) 866-7101

PRIVATE UTILITY NOTES:

AT&T TEXAS/SWBT FACILITIES:

1. THE LOCATIONS OF AT&T TEXAS/SWBT FACILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL CALL 1-800-344-8377 (TEXAS 811) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE UNDERGROUND LINES FIELD LOCATED.
3. WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF AT&T TEXAS/SWBT FACILITIES, ALL EXCAVATIONS MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES. WHEN BORING, THE CONTRACTOR SHALL EXPOSE THE AT&T TEXAS/SWBT FACILITIES.
4. WHEN AT&T TEXAS/SWBT FACILITIES ARE EXPOSED, THE CONTRACTOR WILL PROVIDE SUPPORT TO PREVENT DAMAGE TO THE CONDUIT DUCTS OR CABLES. WHEN EXCAVATING NEAR TELEPHONE POLES THE CONTRACTOR SHALL BRACE THE POLE FOR SUPPORT.
5. THE PRESENCE OR ABSENCE OF AT&T TEXAS/SWBT UNDERGROUND CONDUIT FACILITIES OR BURIED CABLE FACILITIES SHOWN ON THESE PLANS DOES NOT MEAN THAT THERE ARE NO DIRECT BURIED CABLES OR OTHER CABLES IN CONDUIT IN THE AREA.
6. PLEASE CONTACT THE AT&T TEXAS DAMAGE PREVENTION MANAGER KEVIN RAY AT (713) 614-1983 OR EMAIL HIM AT KR7896@ATT.COM, IF CABLE LOCATE REQUESTS ARE NOT COMPLETED FOR OUR AT&T TEXAS/SWBT FACILITIES.

CENTERPOINT ENERGY NOTES:

CAUTION: UNDERGROUND GAS FACILITIES

THE CONTRACTOR SHALL CONTACT THE UTILITY COORDINATING COMMITTEE AT 1-800-545-6005 OR 811 A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION TO HAVE MAIN AND SERVICE LINES FIELD LOCATED.

- WHEN CENTERPOINT ENERGY PIPE LINE MARKINGS ARE NOT VISIBLE, CALL (713) 207-5463 OR (713) 945-8038 (7:00 AM TO 4:30 PM) FOR STATUS OF LINE LOCATION REQUEST BEFORE EXCAVATION BEGINS.
- WHEN EXCAVATING WITHIN EIGHTEEN INCHES (18") OF THE INDICATED LOCATION OF CENTERPOINT ENERGY FACILITIES, ALL EXCAVATION MUST BE ACCOMPLISHED USING NON-MECHANIZED EXCAVATION PROCEDURES.
- WHEN CENTERPOINT ENERGY FACILITIES ARE EXPOSED, SUFFICIENT SUPPORT MUST BE PROVIDED TO THE FACILITIES TO PREVENT EXCESSIVE STRESS ON THE PIPING.
- FOR EMERGENCIES REGARDING GAS LINES CALL (713) 659-2111 OR (713) 207-4200.

THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE THESE UNDERGROUND FACILITIES.

WARNING: OVERHEAD ELECTRICAL LINES:

OVERHEAD LINES MAY EXIST ON THE PROPERTY. THE LOCATION OF OVERHEAD LINES HAS NOT BEEN SHOWN ON THESE DRAWINGS AS THE LINES ARE CLEARLY VISIBLE, BUT YOU SHOULD LOCATE THEM PRIOR TO BEGINNING ANY CONSTRUCTION. TEXAS LAW, SECTION 752, HEALTH & SAFETY CODE FORBIDS ACTIVITIES THAT OCCUR IN CLOSE PROXIMITY TO HIGH VOLTAGE LINES, SPECIFICALLY:

- ANY ACTIVITY WHERE PERSONS OR THINGS MAY COME WITHIN SIX (6) FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES; AND
- OPERATING A CRANE, DERRICK, POWER SHOVEL, DRILLING RIG, PILE DRIVER, HOISTING EQUIPMENT, OR SIMILAR APPARATUS WITHIN 10 FEET OF LIVE OVERHEAD HIGH VOLTAGE LINES.

PARTIES RESPONSIBLE FOR THE WORK, INCLUDING CONTRACTORS, ARE LEGALLY RESPONSIBLE FOR THE SAFETY OF CONSTRUCTION WORKERS UNDER THIS LAW. THIS LAW CARRIES BOTH CRIMINAL AND CIVIL LIABILITY. TO ARRANGE FOR LINES TO BE TURNED OFF OR REMOVED CALL CENTERPOINT ENERGY AT (713) 207-2222.

ACTIVITIES ON/OR ACROSS CENTERPOINT ENERGY FEE OR EASEMENT PROPERTY

1. NO APPROVAL TO USE, CROSS, OR OCCUPY NO CENTERPOINT FEE OR EASEMENT PROPERTY IS GIVEN. IF YOU NEED TO USE CENTERPOINT PROPERTY, PLEASE CONTACT OUR SURVEYING AND RIGHT OF WAY DIVISION AT (713) 207-6348 OR (713) 207-5769.

SCALE: N/A

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10313

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/11/26

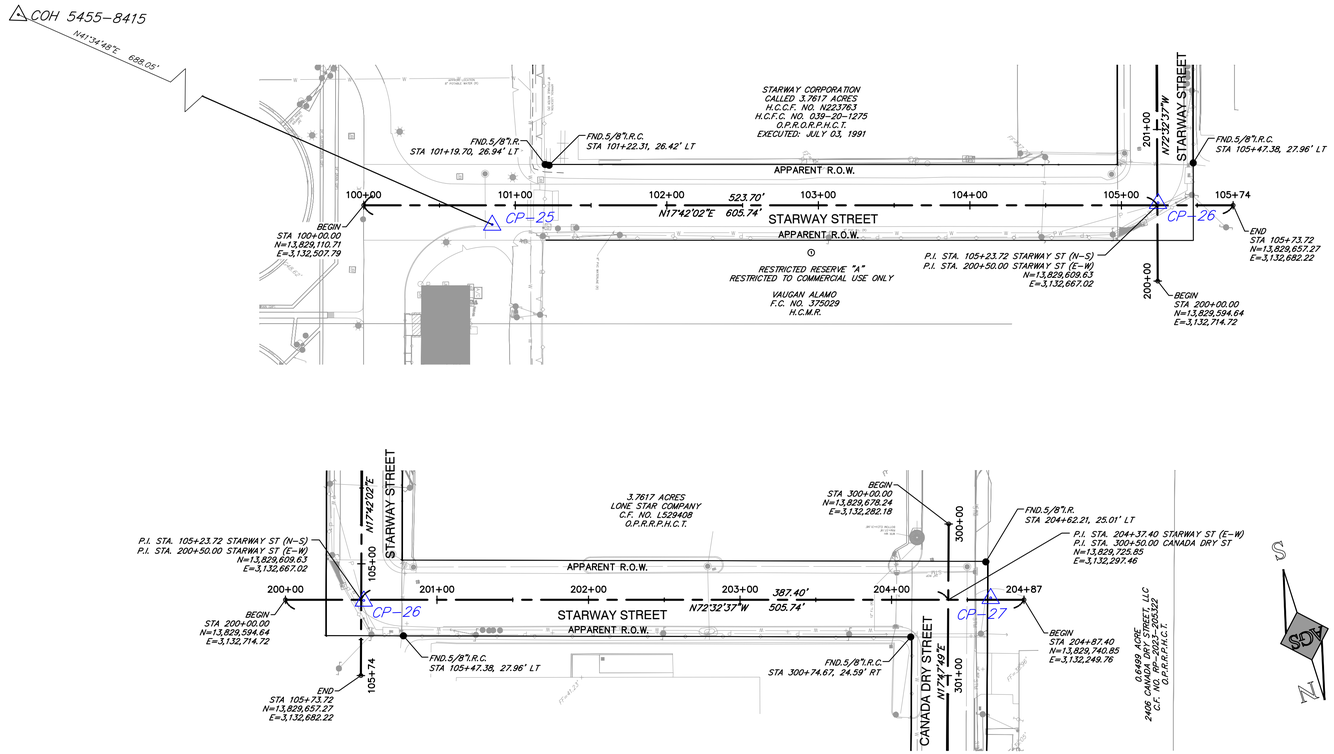
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

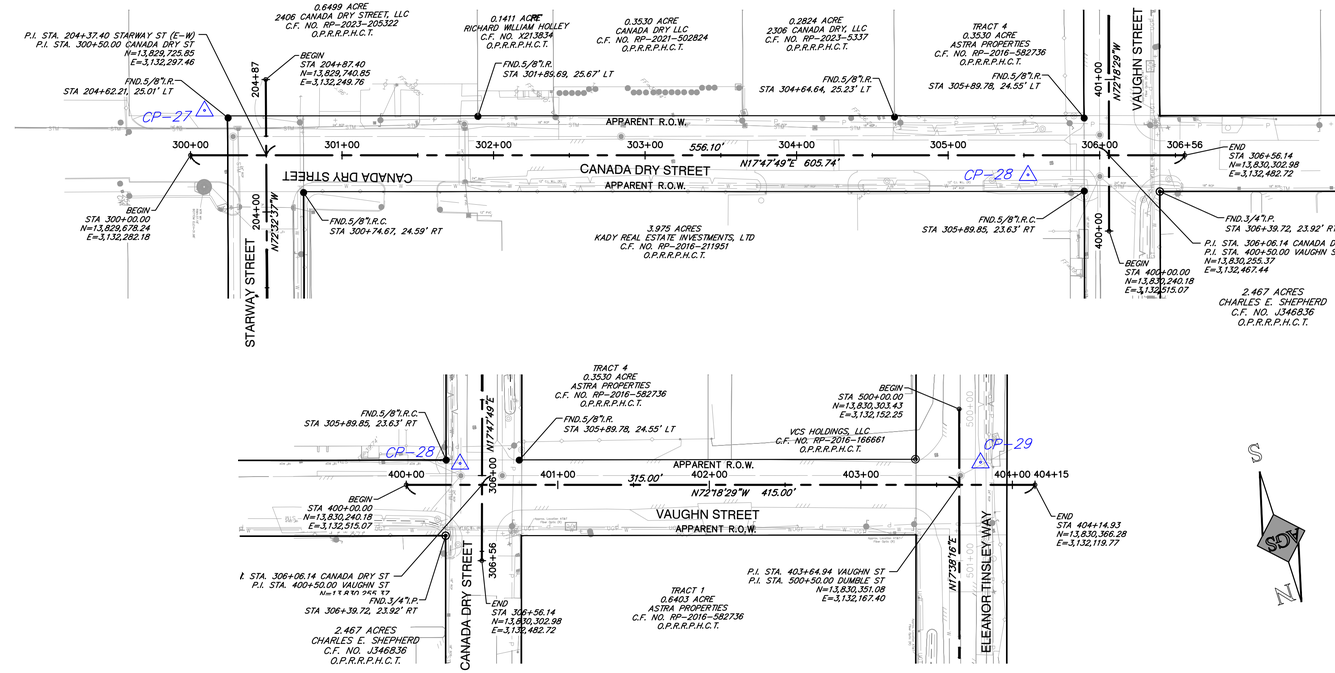
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

GENERAL NOTES

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. GF-2 OF C-70	

PLOTTED: 2/11/2026 10:59 AM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-GNAL.dwg





SYMBOL LEGEND	
●	FND IRON ROD
◉	FND IRON PIPE
○	SET IRON ROD
⊗	X CUT

BENCHMARKS:

ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.

C.O.H MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR.
ELEVATION=37.40'

C.O.H MONUMENT 5456-8305:
LOCATED AT SOUTHWEST CORNER OF IH-45 NW-FRONTAGE RD.
ELEVATION=34.58'

C.O.H MONUMENT 5456-8411:
LOCATED AT SOUTHWEST CORNER OF LEELAND ST. AND EASTWOOD ST.
ELEVATION=33.81'

C.O.H MONUMENT 5556-7109:
LOCATED AT NORTHEAST CORNER OF LEELAND ST. AND GUSTAV ST.
ELEVATION=34.16'

GENERAL NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON THIS MAP ARE REFERENCED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS SOUTH CENTRAL ZONE (4204), NAD 83 (2011 ADJ.); (EPOCH 2010.00). ALL SURFACE DISTANCES AND SURFACE COORDINATES MAY BE CONVERTED TO GRID BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999889376. (SURFACE X 0.999889376 = GRID).
2. ELEVATIONS SHOWN HEREON THIS MAP ARE BASED ON AVERAGE OF GPS OBSERVATIONS TAKEN ON C.O.H. SURVEY MONUMENT SHOWN HEREON USING ALLTERRA RTKNET. VERTICAL DATUM IS REFERENCED TO NAVD 88, 2011 ADJ. (GEOID18)
3. ALL COORDINATE VALUES AND BEARING SHOWN HERE ON THIS MAP ARE BASED ON VRS GPS OBSERVATIONS USING THE ALLTERRA CENTRAL RTKNET TRIMBLE VRS NETWORK.
4. ALL SURVEY MEASUREMENTS ARE US SURVEY FEET.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

AGS ENGINEERING&CONSTRUCTION
Ally General Solutions, LLC
dba AGS Engineering & Construction
5300 Hollister Rd. Ste. 111
Houston, Texas 77040
Phone: (281) 888-7682
TX Engineer Firm No. 13574
TBPELS Firm No. 10194392
Certified: DBE/SBE/MBE/HUB/8(A)

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

60% SUBMITTAL

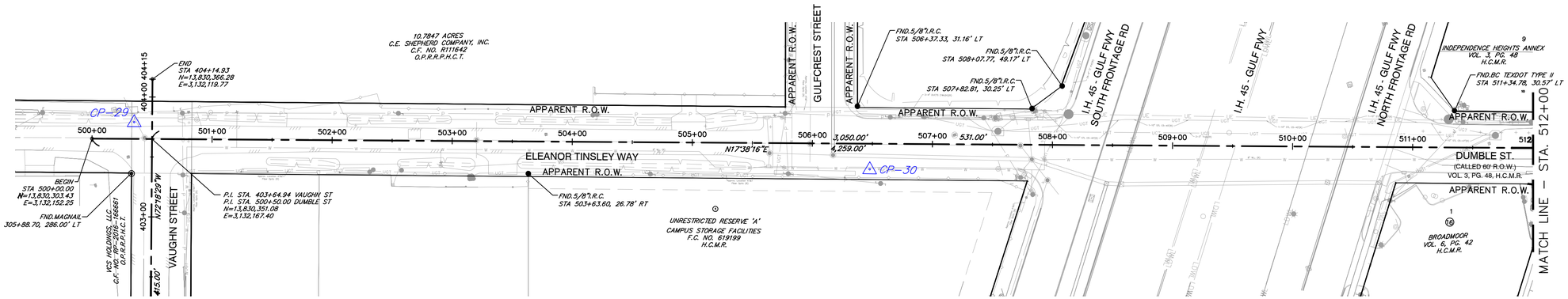
PRELIMINARY
Document Incomplete: not intended for permit, bidding or construction.
SURVEYOR: DANIEL P. COYER
R.P.L.S. No. 4867
Date: 01/28/2026

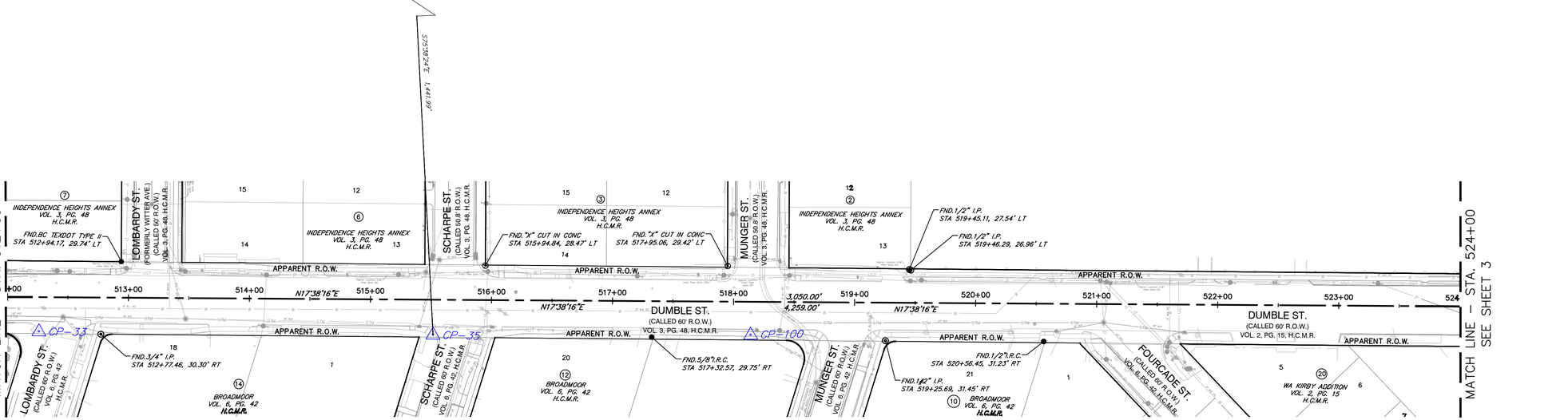
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

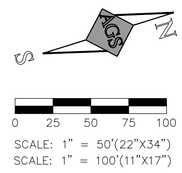
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 SURVEY CONTROL MAP (1 OF 5)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-00100-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-1 OF C-70	

PLOTTED: 2/11/2026 10:06 AM
PLOT STYLE: COH.ctb
FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\02_0060-014-24 COH Eddington LS - Ardurra_SCM.dwg







SYMBOL LEGEND	
●	FND IRON ROD
⊙	FND IRON PIPE
○	SET IRON ROD
⊗	X CUT

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

AGS ENGINEERING&CONSTRUCTION
Ally General Solutions, LLC
dba AGS Engineering & Construction
5300 Hollister Rd. Ste. 111
Houston, Texas 77040
Phone: (281) 888-7682
TX Engineer Firm No. 13574
TBPELS Firm No. 10194392
Certified: DBE/SBE/MBE/HUB/8(A)

60% SUBMITTAL

PRELIMINARY
Document Incomplete: not intended for permit, bidding or construction.

SURVEYOR: DANIEL P. COYER
R.P.L.S. No. 4867
Date: 01/28/2026

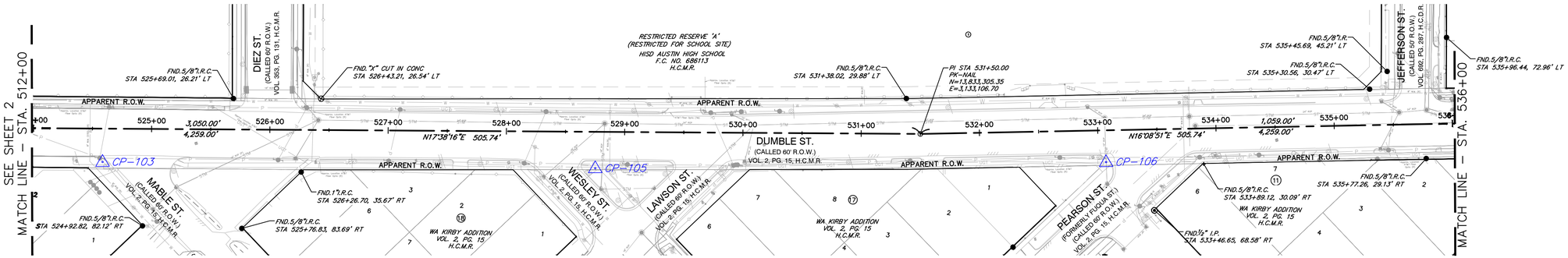
SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC FB NO. 340S1

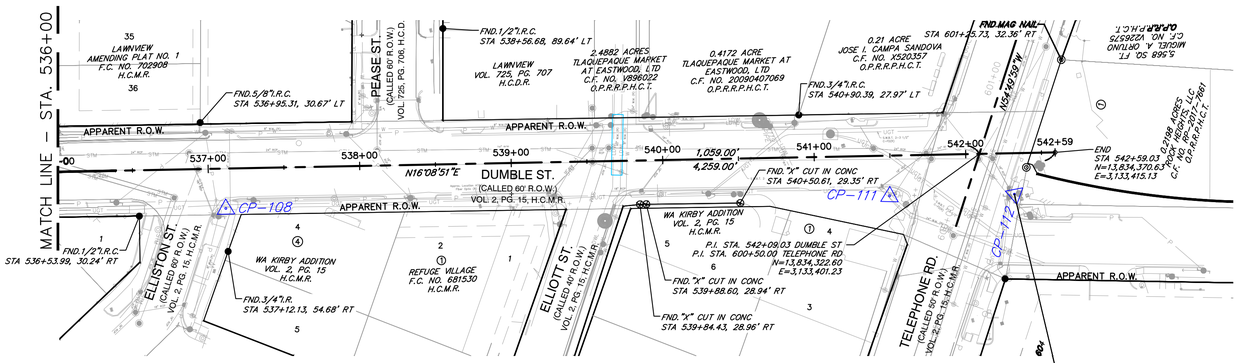
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 SURVEY CONTROL MAP (2 OF 5)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-00100-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-2 OF C-70	

PLOTTED: 2/11/2026 10:05 AM
PLOT STYLE: COH.ctb
FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\02_0060-014-24 COH Eddington LS - Ardurra_SCM.dwg





CONTROL POINTS										
NO.	NORTHING (Surface)	EASTING (Surface)	NORTHING (Grid)	EASTING (Grid)	ELEVATION	STATION	OFFSET LT	OFFSET RT	DESCRIPTION	BASELINE
CP-25	13,829,187.60	3,132,545.65	13,827,657.76	3,132,199.11	39.26'	100+84.76		12.69'	SET "X" IN CONCRETE	STARWAY STREET
CP-26	13,829,610.57	3,132,665.54	13,828,080.68	3,132,318.99	37.37'	105+24.16	1.70'		SET 5/8" I.R.C. "ALLY"	STARWAY STREET
CP-27	13,829,733.02	3,132,270.36	13,828,203.12	3,131,923.86	37.44'	105+24.16	1.29'		SET 5/8" I.R.C. "ALLY"	STARWAY STREET
CP-28	13,830,237.47	3,132,476.94	13,828,707.51	3,132,130.41	36.35'	305+92.00		14.52'	SET 5/8" I.R.C. "ALLY"	CANADA DRY STREET
CP-29	13,830,341.10	3,132,149.48	13,828,811.13	3,131,802.99	36.84'	403+78.16	14.96'		SET 5/8" I.R.C. "ALLY"	VAUGHN STREET
CP-30	13,830,914.41	3,132,368.86	13,829,384.38	3,132,022.35	35.16'	506+47.89		21.31'	SET 5/8" I.R.C. "ALLY"	ELEANOR TINSLEYWAY
CP-33	13,831,463.52	3,132,550.69	13,829,933.43	3,132,204.15	33.27'	512+26.28		28.20'	SET "X" IN CONCRETE	DUMBLE STREET
CP-35	13,831,773.61	3,132,649.89	13,830,243.48	3,132,303.34	35.36'	515+51.85		28.79'	SET 5/8" I.R.C. "ALLY"	DUMBLE STREET
CP-100	13,832,024.18	3,132,727.86	13,830,494.02	3,132,381.31	34.96'	518+14.26		27.17'	SET "X" IN CONCRETE	DUMBLE STREET
CP-103	13,832,638.00	3,132,924.09	13,831,107.78	3,132,577.51	35.49'	524+58.69		28.18'	SET 5/8" I.R.C. "ALLY"	DUMBLE STREET
CP-105	13,833,034.26	3,133,052.84	13,831,504.00	3,132,706.25	34.91'	528+75.33		30.82'	SET "X" IN CONCRETE	DUMBLE STREET
CP-106	13,833,448.27	3,133,176.10	13,831,917.96	3,132,829.50	35.14'	533+06.58		26.92'	SET "X" IN CONCRETE	DUMBLE STREET
CP-108	13,833,837.07	3,133,288.00	13,832,306.71	3,132,941.38	34.89'	537+11.16		26.27'	SET 5/8" I.R.C. "ALLY"	DUMBLE STREET
CP-111	13,834,257.79	3,133,410.13	13,832,727.38	3,133,063.50	33.48'	541+49.25		26.58'	SET "X" IN CONCRETE	DUMBLE STREET
CP-112	13,834,336.76	3,133,433.50	13,832,806.35	3,133,086.87	33.75'	542+31.60		27.06'	SET "X" IN CONCRETE	DUMBLE STREET
CP-114	13,834,555.07	3,133,132.69	13,833,024.64	3,132,786.09	33.97'	701+47.56	3.94'		SET 5/8" I.R.C. "ALLY"	TELEPHONE ROAD
CP-300	13,834,647.95	3,133,105.11	13,833,117.51	3,132,758.51	33.38'	604+03.42		35.37'	SET "X" IN CONCRETE	N/A

SCALE: 1" = 50'(22"X34")
SCALE: 1" = 100'(11"X17")

SYMBOL LEGEND	
●	FND IRON ROD
⊙	FND IRON PIPE
○	SET IRON ROD
⊗	X CUT

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

AGS ENGINEERING&CONSTRUCTION
Ally General Solutions, LLC
dba AGS Engineering & Construction
5300 Hollister Rd. Ste. 111
Houston, Texas 77040
Phone: (281) 888-7682
TX Engineer Firm No. 13574
TBPELS Firm No. 10194392
Certified: DBE/SBE/MBE/HUB/8(A)

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

60% SUBMITTAL

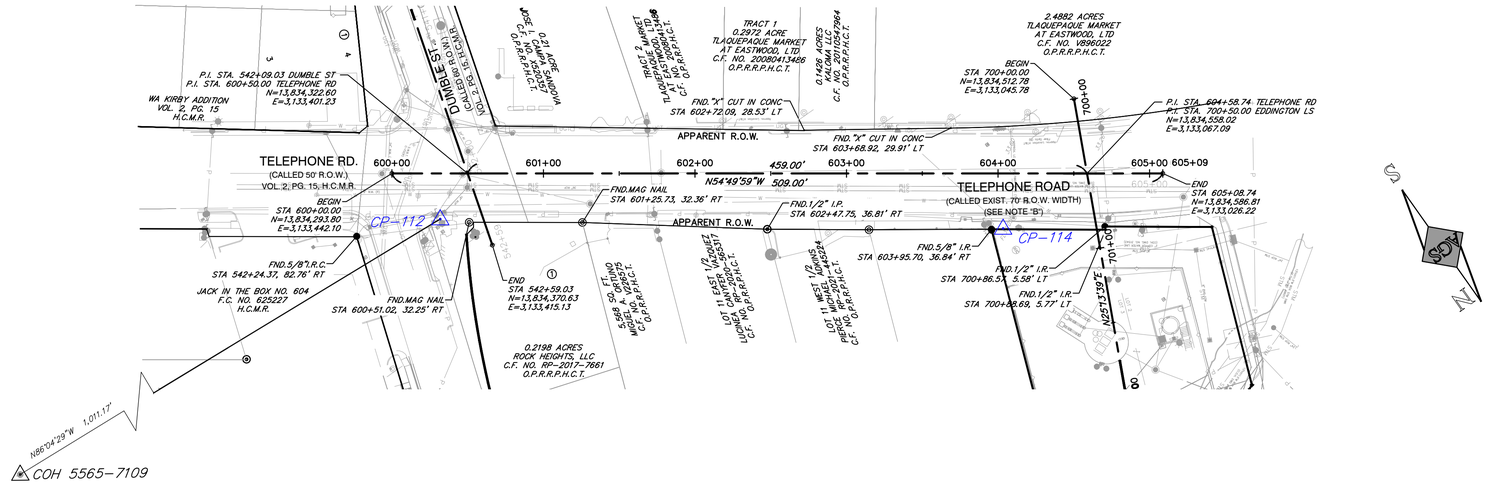
PRELIMINARY
Document Incomplete: not intended for permit, bidding or construction.
SURVEYOR: DANIEL P. COYER
R.P.L.S. No. 4867
Date: 01/28/2026

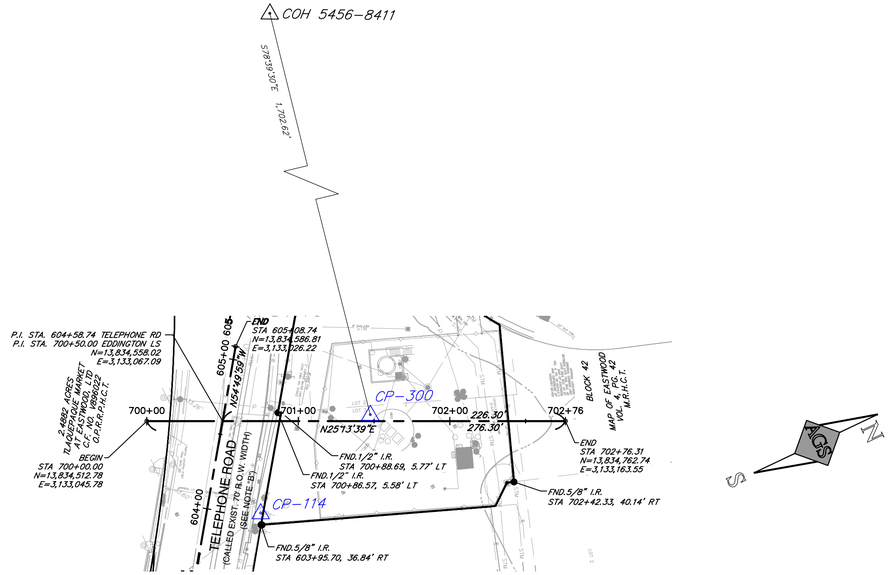
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 SURVEY CONTROL MAP (3 OF 5)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-00100-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-3 OF C-70	

PLOTTED: 2/11/2026 10:03 AM
PLOT STYLE: COH.ctb
FILE PATH: T:\0060-014-24 COH Eddington LS – Ardurra\02_0060-014-24 COH Eddington LS – Ardurra_SCM.dwg





ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

AGS ENGINEERING&CONSTRUCTION
Ally General Solutions, LLC
dba AGS Engineering & Construction
5300 Hollister Rd. Ste. 111
Houston, Texas 77040
Phone: (281) 888-7682
TX Engineer Firm No. 13574
TBPELS Firm No. 10194392
Certified: DBE/SBE/MBE/HUB/8(A)

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

60% SUBMITTAL

PRELIMINARY
Document Incomplete: not intended for permit, bidding or construction.

SURVEYOR: DANIEL P. COYER
R.P.L.S. No. 4867
Date: 01/28/2026

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 SURVEY CONTROL MAP (4 OF 5)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-00100-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C- 4 OF C-70	

PLOTTED: 2/11/2026 10:02 AM
PLOT STYLE: COH.ctb
FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\02_0060-014-24 COH Eddington LS - Ardurra_SCM.dwg

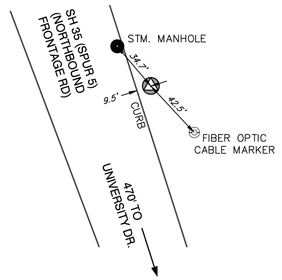
PLOTTED: 2/11/2026 10:07 AM

PLOT STYLE: COH.ctb

FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\02_0060-014-24 COH Eddington LS - Ardurra_SCM.dwg

CITY OF HOUSTON

CITY SURVEY 5455-8415
SITE CONTROL MONUMENT



Project WBS# R-001000-0035-3
Texas Coordinate System of 1983,
South Central Zone, U. S. Survey Feet
X= 3,131,742.53 (GRID)
Y= 13,827,143.13 (GRID)

Lat.= 29° 43' 07.81352" N
Lon.= 95° 20' 04.47977" W

Reference Frame Used: NAD 83 (2011)(EPOCH2010,00)
Datum Source & Adjustment: NAD 83 (2011 ADJ.)

Keymap Page: 534-A
Orthometric Elevation = 37.40'
Ellipsoid Height= -52.12'
Geoid: GEOID 18
Vertical Adjustment used:
NAVD 88 (2001 ADJ)
ELEV. BASED OF DIGITAL LEVELS

Date Surveyed: 04/21/2025

General Location: LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR.

Date Set: 04/07/2025 Type of Mark: ALUMINUM DISC STAMPED SURVEY MARKER

3 Nearest project control points (bearings and distances stated below):
S 15° 57' 50" E - 445.95' CP17 - 5/8 INCH I.R.C.
S 10° 39' 27" E - 42.61' CP18 - 5/8 INCH I.R.C.
N 19° 13' 17" W - 255.88' CP19 - 5/8 INCH I.R.C.

NOTE:
1. Bearings are grid bearings.
2. Scale Factor = (S.F. 0.999889376)
3. Surface= Grid / S.F.

Surveyed By: ALLY GENERAL SOLUTION, LLC
5300 HOLLISTER RD. STE. 111
HOUSTON, TX, 77040

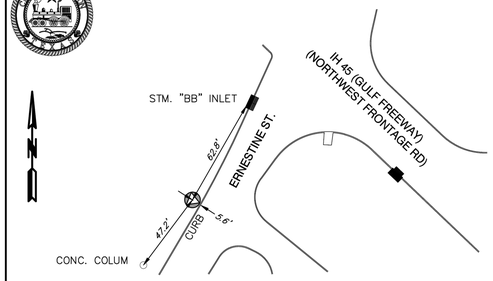
STATE OF TEXAS · DANIEL PAUL COYER · 4867 · PROFESSIONAL · LAND SURVEYOR · 06/09/2025

City of Houston, Harris County, Texas

T:\0060-014-24 COH Eddington LS - Ardurra\DWG\Coh Mon 901.dwg AGS36 6/3/2025

CITY OF HOUSTON

CITY SURVEY 5456-8305
SITE CONTROL MONUMENT



Project WBS# S-000700-0080-3
Texas Coordinate System of 1983,
South Central Zone, U. S. Survey Feet
X= 3,130,906.56 (GRID)
Y= 13,830,601.07 (GRID)

Lat.= 29° 43' 42.29006" N
Lon.= 95° 20' 12.72835" W

Reference Frame Used: NAD 83 (2011)(EPOCH2010,00)
Datum Source & Adjustment: NAD 83 (2011 ADJ.)

Keymap Page: 494-W
Orthometric Elevation = 34.58'
Ellipsoid Height= -54.97'
Geoid: GEOID 18
Vertical Adjustment used:
NAVD 88 (2001 ADJ)
ELEV. IS BASED ON AVERAGE OF GPS OBSERVATIONS USING ALLTERRA RTKNET

Date Surveyed: 02/27/2025

General Location: LOCATED AT SOUTHWEST CORNER OF IH-45 NW-FRONTAGE RD. AND ERNESTINE ST.

Date Set: 02/14/2014 Type of Mark: 4A

3 Nearest project control points (bearings and distances stated below):
S 78° 03' 23" E - 804.32' CP37 - X CUT IN CONC.
S 78° 55' 19" E - 695.57' CP38 - 5/8 INCH I.R.C.
N 82° 07' 48" E - 749.74' CP39 - 5/8 INCH I.R.C.

NOTE:
1. Bearings are grid bearings.
2. Scale Factor = (S.F. 0.999889376)
3. Surface= Grid / S.F.

Surveyed By: ALLY GENERAL SOLUTION, LLC
5300 HOLLISTER RD. STE. 111
HOUSTON, TX, 77040

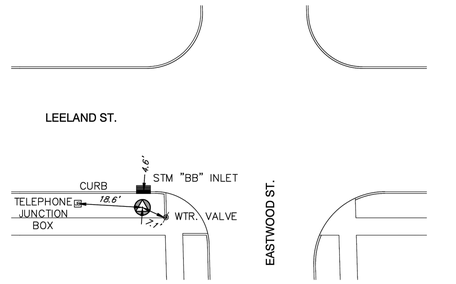
STATE OF TEXAS · DANIEL PAUL COYER · 4867 · PROFESSIONAL · LAND SURVEYOR · 06/09/2025

City of Houston, Harris County, Texas

T:\0060-014-24 COH Eddington LS - Ardurra\DWG\Coh Mon 915.dwg AGS36 6/3/2025

CITY OF HOUSTON

CITY SURVEY 5456-8411
SITE CONTROL MONUMENT



Project WBS# R-001000-0035-3
Texas Coordinate System of 1983,
South Central Zone, U. S. Survey Feet
X= 3,131,089.32 (GRID)
Y= 13,833,452.30 (GRID)

Lat.= 29° 44' 10.44700" N
Lon.= 95° 20' 09.64325" W

Reference Frame Used: NAD 83 (2011)(EPOCH2010,00)
Datum Source & Adjustment: NAD 83 (2011 ADJ.)

Keymap Page: 494-W
Orthometric Elevation = 33.81'
Ellipsoid Height= -55.75'
Geoid: GEOID 18
Vertical Adjustment used:
NAVD 88 (2001 ADJ)
ELEV. BASED OF DIGITAL LEVELS

Date Surveyed: 04/21/2025

General Location: LOCATED AT SOUTHWEST CORNER OF LEELAND ST. AND EASTWOOD ST.

Date Set: 04/07/2025 Type of Mark: ALUMINUM DISC STAMPED SURVEY MARKER

3 Nearest project control points (bearings and distances stated below):
S 55° 04' 20" E - 1,443.97' CP45 - 5/8 INCH I.R.C.
S 70° 24' 57" E - 1,380.19' CP46 - 5/8 INCH I.R.C.
S 77° 33' 01" E - 1,346.84' CP47 - X CUT IN CONC.

NOTE:
1. Bearings are grid bearings.
2. Scale Factor = (S.F. 0.999889376)
3. Surface= Grid / S.F.

Surveyed By: ALLY GENERAL SOLUTION, LLC
5300 HOLLISTER RD. STE. 111
HOUSTON, TX, 77040

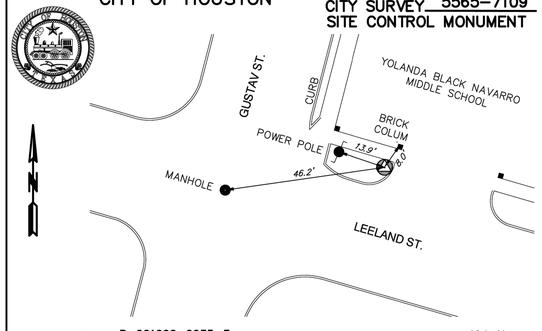
STATE OF TEXAS · DANIEL PAUL COYER · 4867 · PROFESSIONAL · LAND SURVEYOR · 06/09/2025

City of Houston, Harris County, Texas

T:\0060-014-24 COH Eddington LS - Ardurra\DWG\Coh Mon 903.dwg AGS36 6/3/2025

CITY OF HOUSTON

CITY SURVEY 5565-7109
SITE CONTROL MONUMENT



Project WBS# R-001000-0035-3
Texas Coordinate System of 1983,
South Central Zone, U. S. Survey Feet
X= 3,134,095.45 (GRID)
Y= 13,832,737.20 (GRID)

Lat.= 29° 44' 02.43742" N
Lon.= 95° 19' 35.81390" W

Reference Frame Used: NAD 83 (2011)(EPOCH2010,00)
Datum Source & Adjustment: NAD 83 (2011 ADJ.)

Keymap Page: 494-X
Orthometric Elevation = 34.16'
Ellipsoid Height= -55.39'
Geoid: GEOID 18
Vertical Adjustment used:
NAVD 88 (2001 ADJ)
ELEV. BASED OF DIGITAL LEVELS

Date Surveyed: 04/21/2025

General Location: LOCATED AT NORTHEAST CORNER OF LEELAND ST. AND GUSTAV ST.

Date Set: 04/07/2025 Type of Mark: ALUMINUM DISC STAMPED SURVEY MARKER

3 Nearest project control points (bearings and distances stated below):
S 80° 25' 43" W - 1,097.42' CP110 - X CUT IN CONC.
S 89° 27' 19" W - 1,031.99' CP111 - X CUT IN CONC.
N 86° 04' 40" W - 1,010.95' CP112 - X CUT IN CONC.

NOTE:
1. Bearings are grid bearings.
2. Scale Factor = (S.F. 0.999889376)
3. Surface= Grid / S.F.

Surveyed By: ALLY GENERAL SOLUTION, LLC
5300 HOLLISTER RD. STE. 111
HOUSTON, TX, 77040

STATE OF TEXAS · DANIEL PAUL COYER · 4867 · PROFESSIONAL · LAND SURVEYOR · 06/09/2025

City of Houston, Harris County, Texas

T:\0060-014-24 COH Eddington LS - Ardurra\DWG\Coh Mon 902.dwg AGS36 6/3/2025

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

AGS ENGINEERING&CONSTRUCTION
Ally General Solutions, LLC
dba AGS Engineering & Construction
5300 Hollister Rd. Ste. 111
Houston, Texas 77040
Phone: (281) 888-7682
TX Engineer Firm No. 13574
TBPELS Firm No. 10194392
Certified: DBE/SBE/MBE/HUB/8(A)

60% SUBMITTAL

PRELIMINARY
Document Incomplete: not intended for permit, bidding or construction.

SURVEYOR: DANIEL P. COYER
R.P.L.S. No. 4867
Date: 01/28/2026

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC FB NO. 340S1

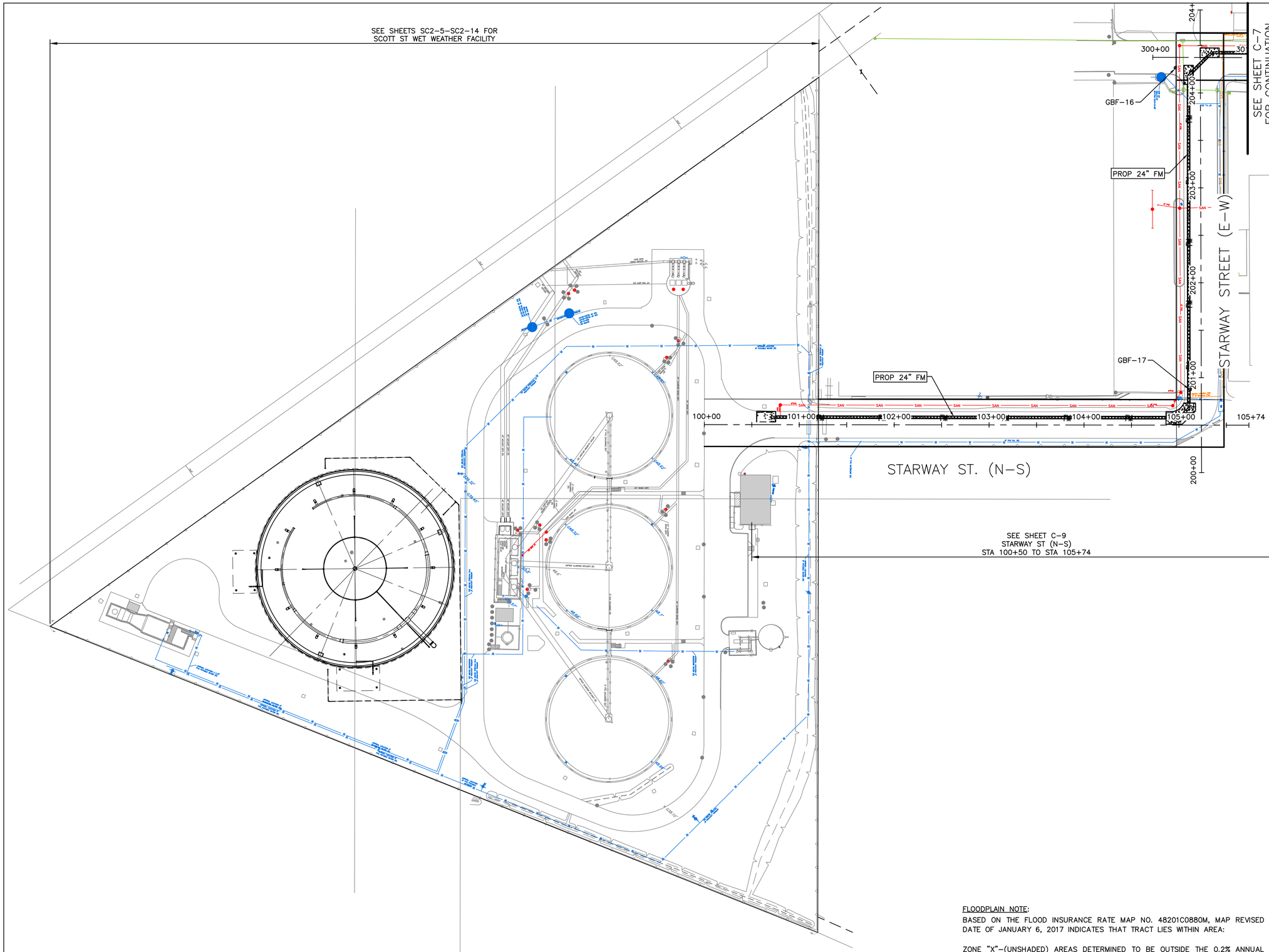
CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A - EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 SURVEY CONTROL MAP (5 OF 5)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-00100-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-5 OF C-70	

PLOT STYLE: COH.ctb
PLOTTED: 2/9/2026 5:40 PM
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-OS.dwg



FLOODPLAIN NOTE:
BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

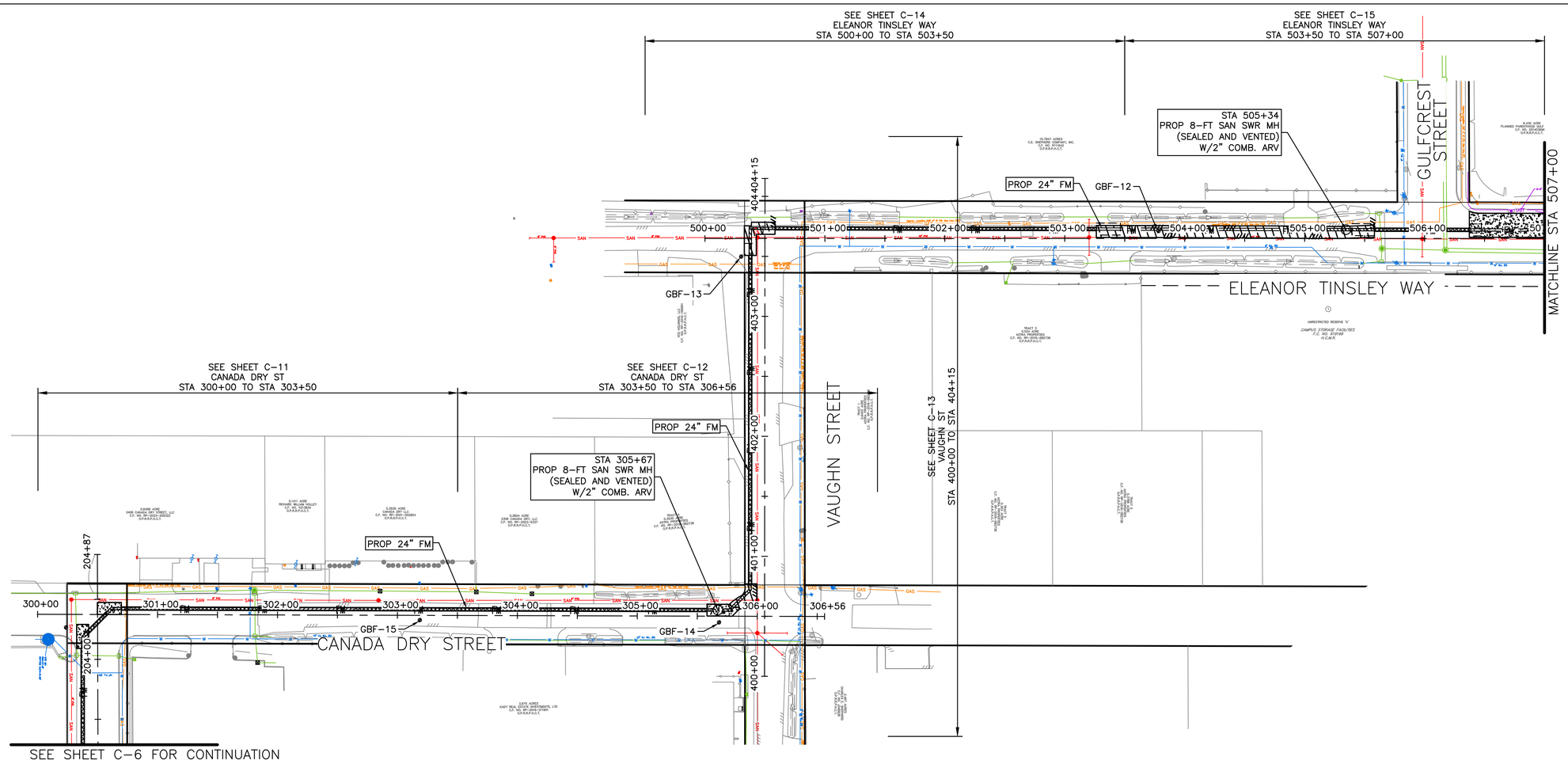
SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

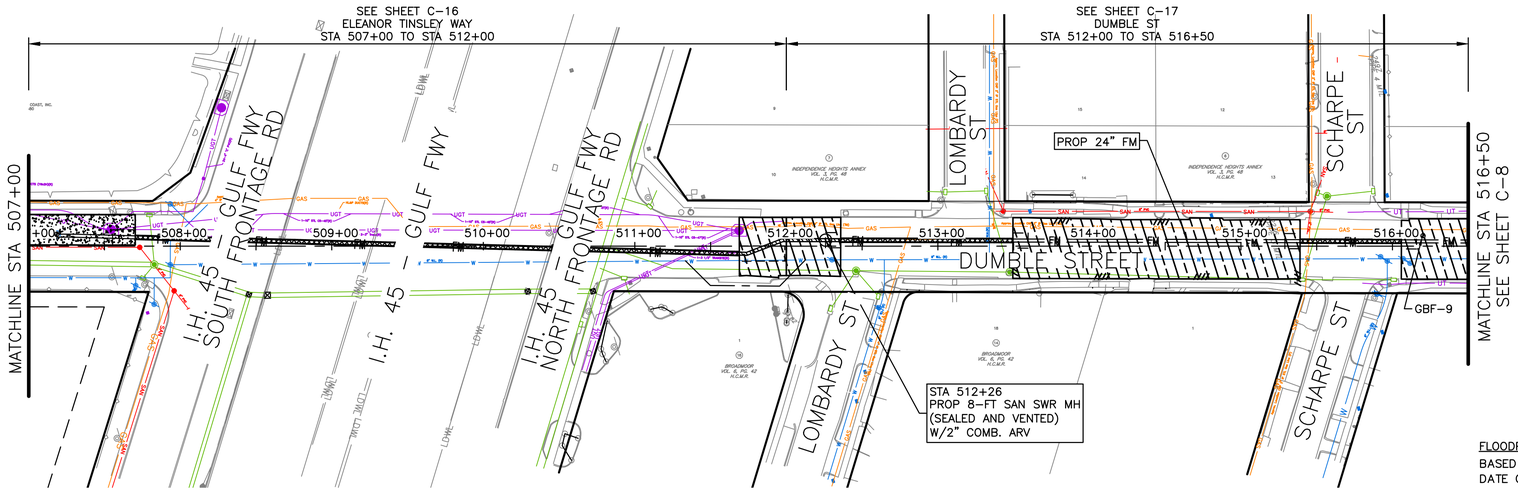
PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

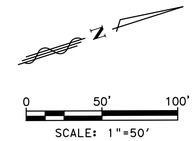
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1
EDDINGTON LS
24-INCH FM LAYOUT
SHEET 1 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-6 OF C-70	







FLOODPLAIN NOTE:
BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10353

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1
EDDINGTON LS
24-INCH FM LAYOUT
SHEET 2 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-7 OF C-70	

PLOTTED: 2/9/2026 5:40 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-05.dwg

SEE SHEET C-18
DUMBLE ST
STA 516+50 TO STA 520+50

SEE SHEET C-19
DUMBLE ST
STA 520+50 TO STA 525+50

SEE SHEET C-20
DUMBLE ST
STA 525+50 TO STA 530+50

MATCHLINE STA 516+50
SEE SHEET C-7

MUNGER ST

STA 519+36
PROP 8-FT SAN SWR MH
(SEALED AND VENTED)
W/2" COMB. ARV

PROP 24" FM

DIEZ ST

STA 530+33
PROP 8-FT SAN SWR MH
(SEALED AND VENTED)
W/2" COMB. ARV

MATCHLINE STA 530+50

517+00 518+00 519+00 520+00 521+00 522+00 523+00 524+00 525+00 526+00 527+00 528+00 529+00 530+00

DUMBLE STREET

GBF-8

GBF-7

GBF-6

MUNGER ST

FOURCADE ST

MABLE ST

DIEZ ST

STA 527+22
PROP 8-FT SAN SWR MH
(SEALED AND VENTED)
W/2" COMB. ARV

LAWSON ST

WESLEY ST

0 50' 100'
SCALE: 1"=50'

SEE SHEETS SC1-4-SC1-7FOR
EDDINGTON LS

FLOODPLAIN NOTE:
BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

SEE SHEET C-29
EDDINGTON ST
STA 700+00 TO STA 705+00

EDDINGTON STREET

700+00 701+00 702+00 702+76

GBF-2 GBF-1 GBF-1AP

PROP 24" FM

TELEPHONE ROAD

SEE SHEET C-27
TELEPHONE RD
STA 600+00 TO STA 605+00

SEE SHEET C-21
DUMBLE ST
STA 530+50 TO STA 535+00

SEE SHEET C-23
DUMBLE ST
STA 535+00 TO STA 538+75

SEE SHEET C-25
DUMBLE ST
STA 538+75 TO STA 543+00

MATCHLINE STA 530+50

PROP 24" FM

JEFFERSON ST

PEASE ST

531+00 531+50.00 532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 540+00 541+00 542+00 542+59

DUMBLE STREET

GBF-5

GBF-4

GBF-3

PEARSON ST

ELLISTON ST

ELLIOTT ST

STA 538+90
PROP 8-FT SAN SWR MH
(SEALED AND VENTED)
W/2" COMB. ARV

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

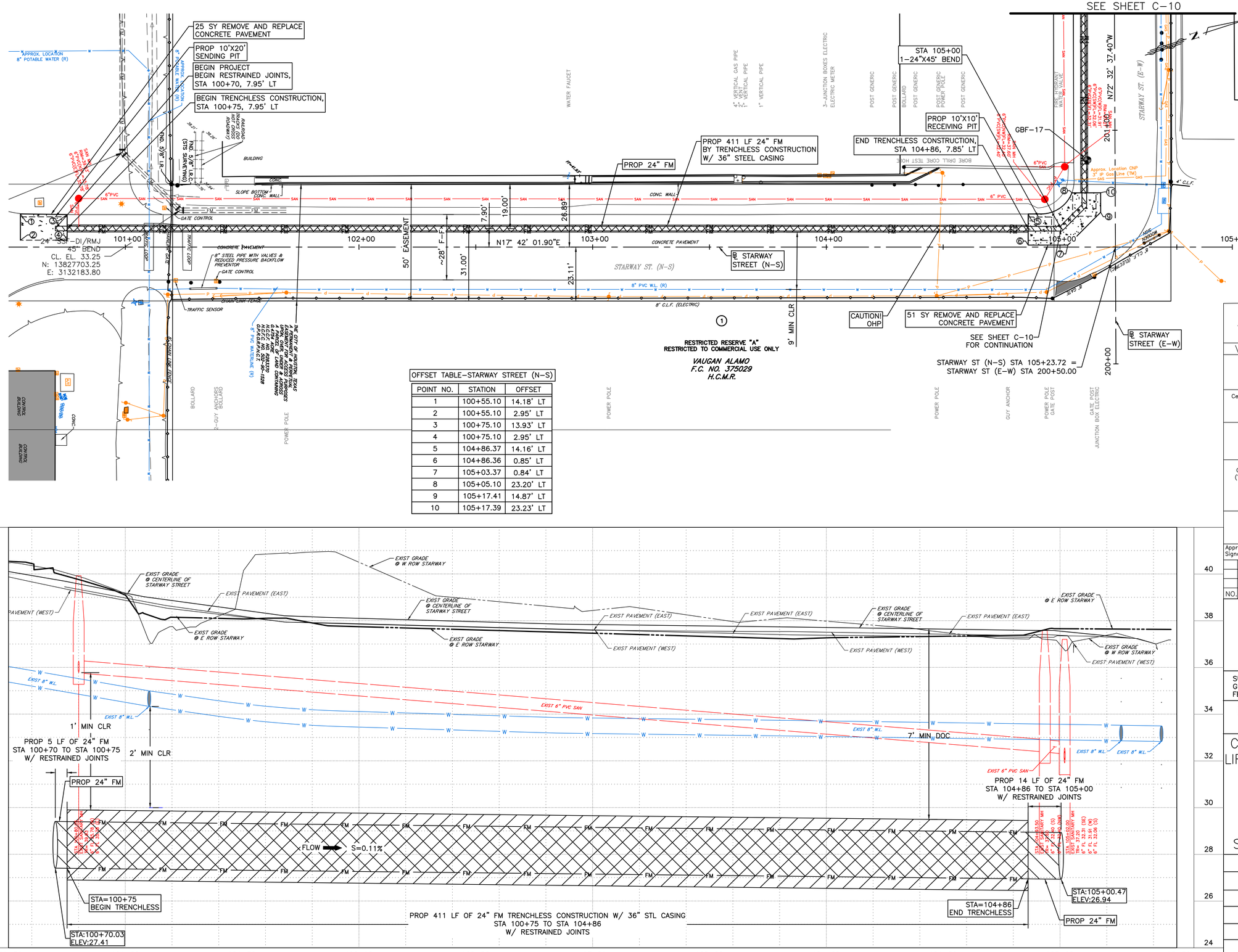
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

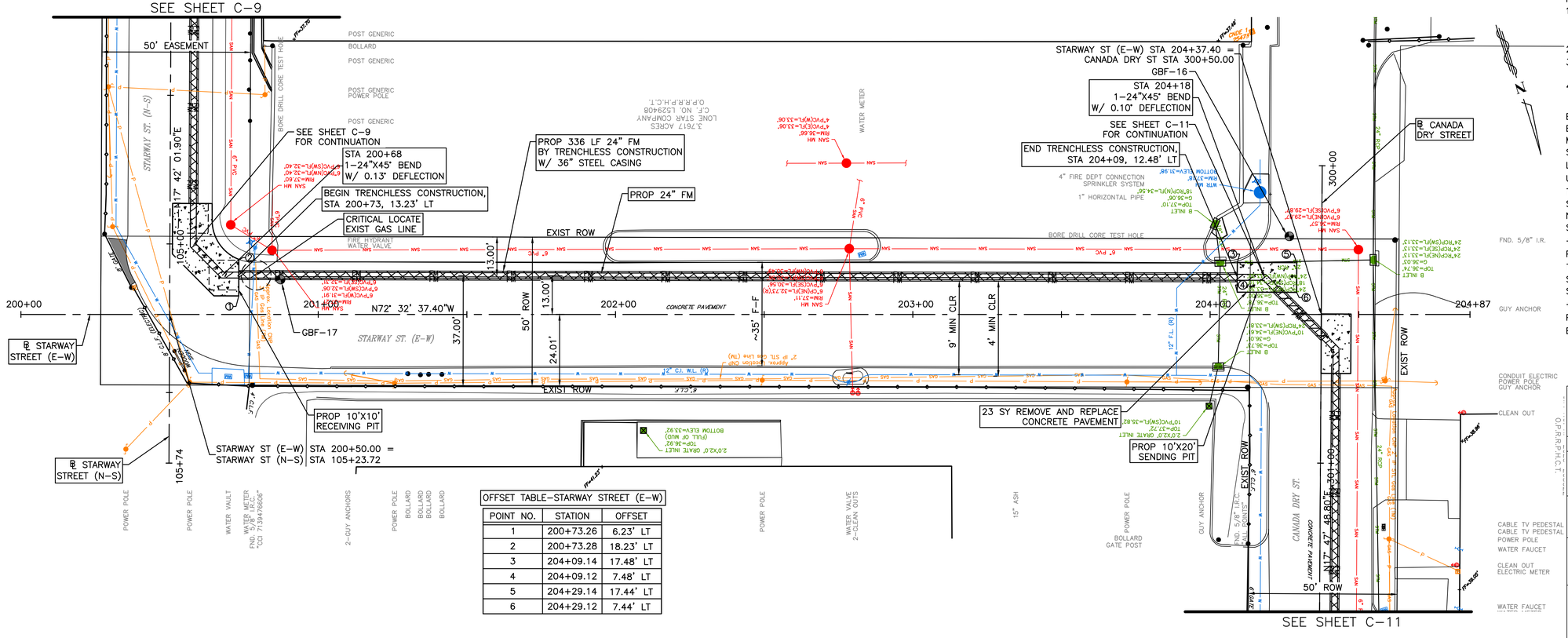
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A - EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1
EDDINGTON LS
24-INCH FM LAYOUT
SHEET 3 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-8 OF C-70	

PLOTTED: 2/9/2026 5:41 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-OS.dwg


SEE SHEET C-10
25 SY REMOVE AND REPLACE CONCRETE PAVEMENT
PROP 10'X20' SENDING PIT
BEGIN PROJECT BEGIN RESTRAINED JOINTS, STA 100+70, 7.95' LT
BEGIN TRENCHLESS CONSTRUCTION, STA 100+75, 7.95' LT
PROP 24" FM
PROP 411 LF 24" FM BY TRENCHLESS CONSTRUCTION W/ 36" STEEL CASING
STA 105+00 1-24"X45° BEND
PROP 10'X10' RECEIVING PIT
END TRENCHLESS CONSTRUCTION, STA 104+86, 7.85' LT
GBF-17
24" SSF-DI/RMJ 45° BEND
CL. EL. 33.25
N: 13827703.25
E: 3132183.80
101+00
102+00
103+00
104+00
105+00
105+74
N17° 42' 01.90"E
N72° 32' 37.40"W
50' EASEMENT
~28' F-F
7.90'
19.00'
26.89
23.11'
31.00'
9' MIN CLR
STARWAY ST. (N-S)
STARWAY ST. (E-W)
CONCRETE PAVEMENT
8" STEEL PIPE WITH VALVES & REDUCED PRESSURE BACKFLOW PREVENTOR
GATE CONTROL
TRAFFIC SENSOR
CHAIN-LINK FENCE
8" PVC W.L. (R)
8" C.L.F. (ELECTRIC)
6" PVC SAN
4' C.L.F.
RESTRICTED RESERVE "A" RESTRICTED TO COMMERCIAL USE ONLY
VAUGAN ALAMO F.C. NO. 375029 H.C.M.R.
CAUTION! OHP
51 SY REMOVE AND REPLACE CONCRETE PAVEMENT
SEE SHEET C-10 FOR CONTINUATION
STARWAY ST (N-S) STA 105+23.72 = STARWAY ST (E-W) STA 200+50.00
STARWAY STREET (N-S)
STARWAY STREET (E-W)
200+00
201+00
WATER FAUCET
3-JUNCTION BOXES ELECTRIC ELECTRIC METER
POST GENERIC
BOLLARD
POWER POLE
GUY ANCHOR
FIRE HYDRANT WATER VALVE
GATE POST JUNCTION BOX ELECTRIC
BUILDING
CONC. WALL
SLOPE BOTTOM
FINISH
TRAFFIC LOOP
APPROX. LOCATION 8" POTABLE WATER (R)
SAN MANHOLE RIM=30.61 6"PVC
RAILROAD (NOT IN SERVICE)
RAILROAD (NOT IN SERVICE) CROSS TIES
RAILROAD (NOT IN SERVICE) RAIL
RND 3/8" I.R. (ST SURVEY(NG))
RND 3/8" I.R.C.
Approx. Location GNP 4" IP Gas Line (TM)
GAS
CONTROL BUILDING
CONC.
2-GUY ANCHORS
THE CITY OF HOUSTON, TEXAS A MUNICIPAL CORPORATION EASEMENT FOR ACCESS PURPOSES VOLUME 6, PAGE 1, H.C.D.R. VOLUME 6, PAGE 2, H.C.D.R. VOLUME 6, PAGE 3, H.C.D.R. VOLUME 6, PAGE 4, H.C.D.R. VOLUME 6, PAGE 5, H.C.D.R. VOLUME 6, PAGE 6, H.C.D.R. VOLUME 6, PAGE 7, H.C.D.R. VOLUME 6, PAGE 8, H.C.D.R. VOLUME 6, PAGE



OFFSET TABLE–STARWAY STREET (E–W)		
POINT NO.	STATION	OFFSET
1	200+73.26	6.23' LT
2	200+73.28	18.23' LT
3	204+09.14	17.48' LT
4	204+09.12	7.48' LT
5	204+29.14	17.44' LT
6	204+29.12	7.44' LT

NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

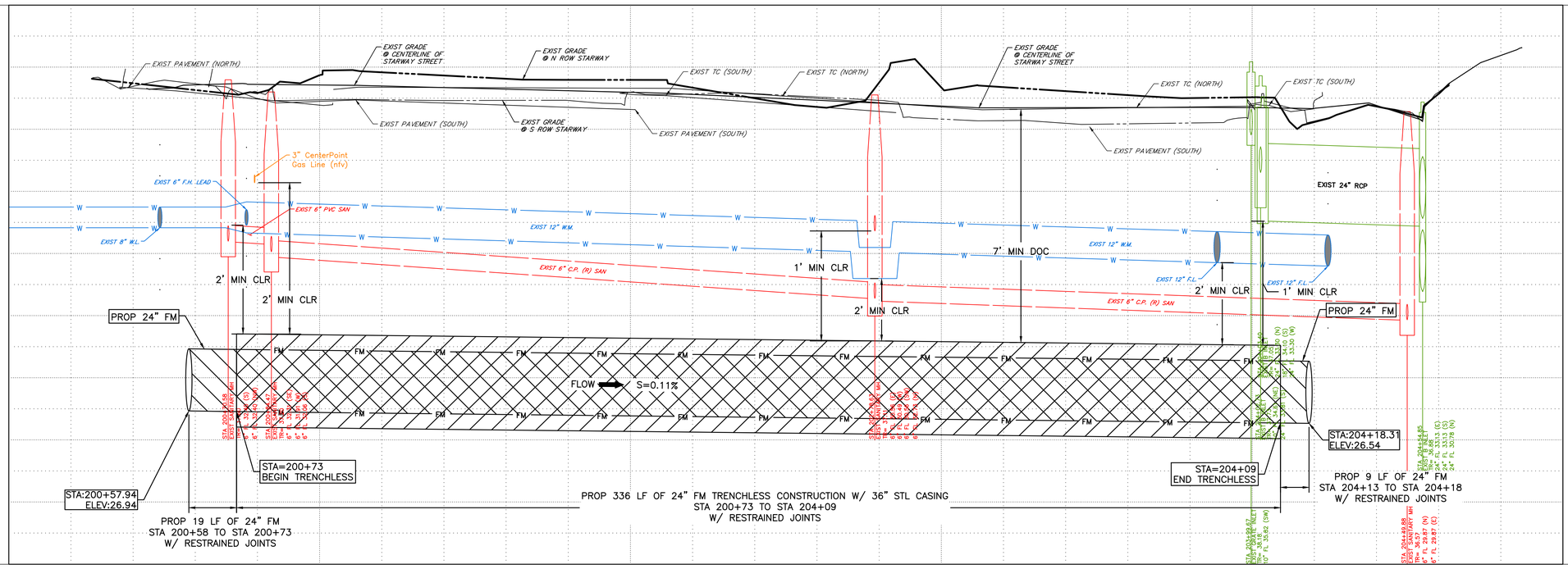
CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.



ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

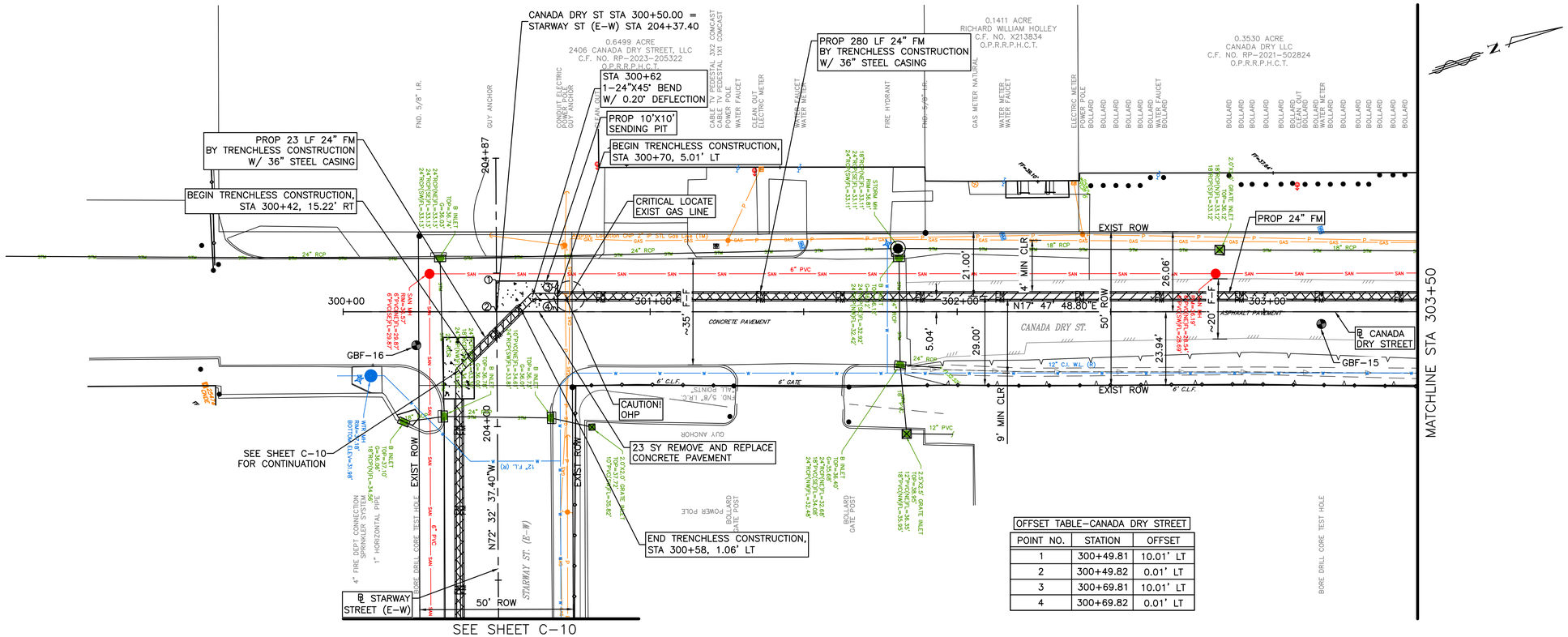
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN & PROFILE STARWAY ST (E–W) STA 200+00 TO STA 204+87

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–10 OF C–70	

PLOTTED: 2/9/2026 5:43 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP1.dwg



NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1-INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

OFFSET TABLE-CANADA DRY STREET		
POINT NO.	STATION	OFFSET
1	300+49.81	10.01' LT
2	300+49.82	0.01' LT
3	300+69.81	10.01' LT
4	300+69.82	0.01' LT

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

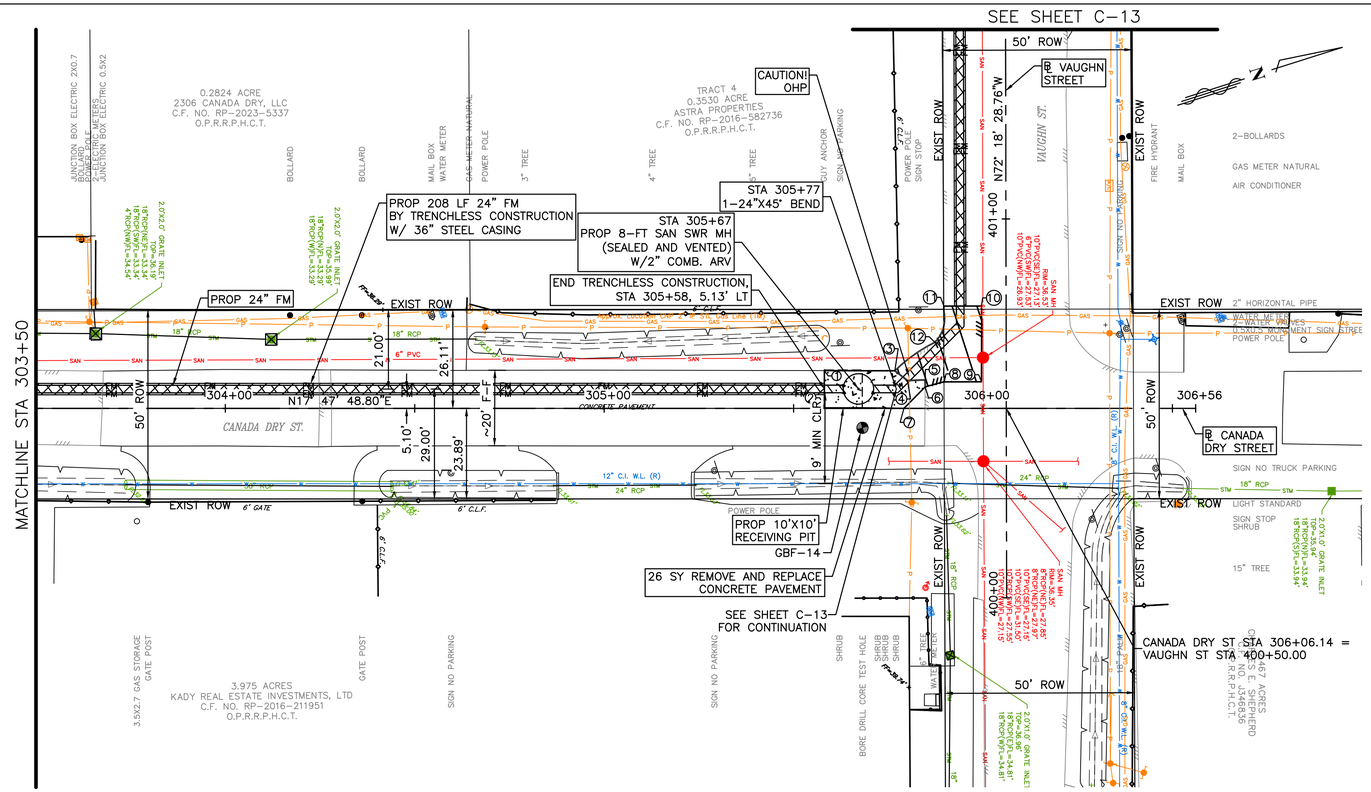
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

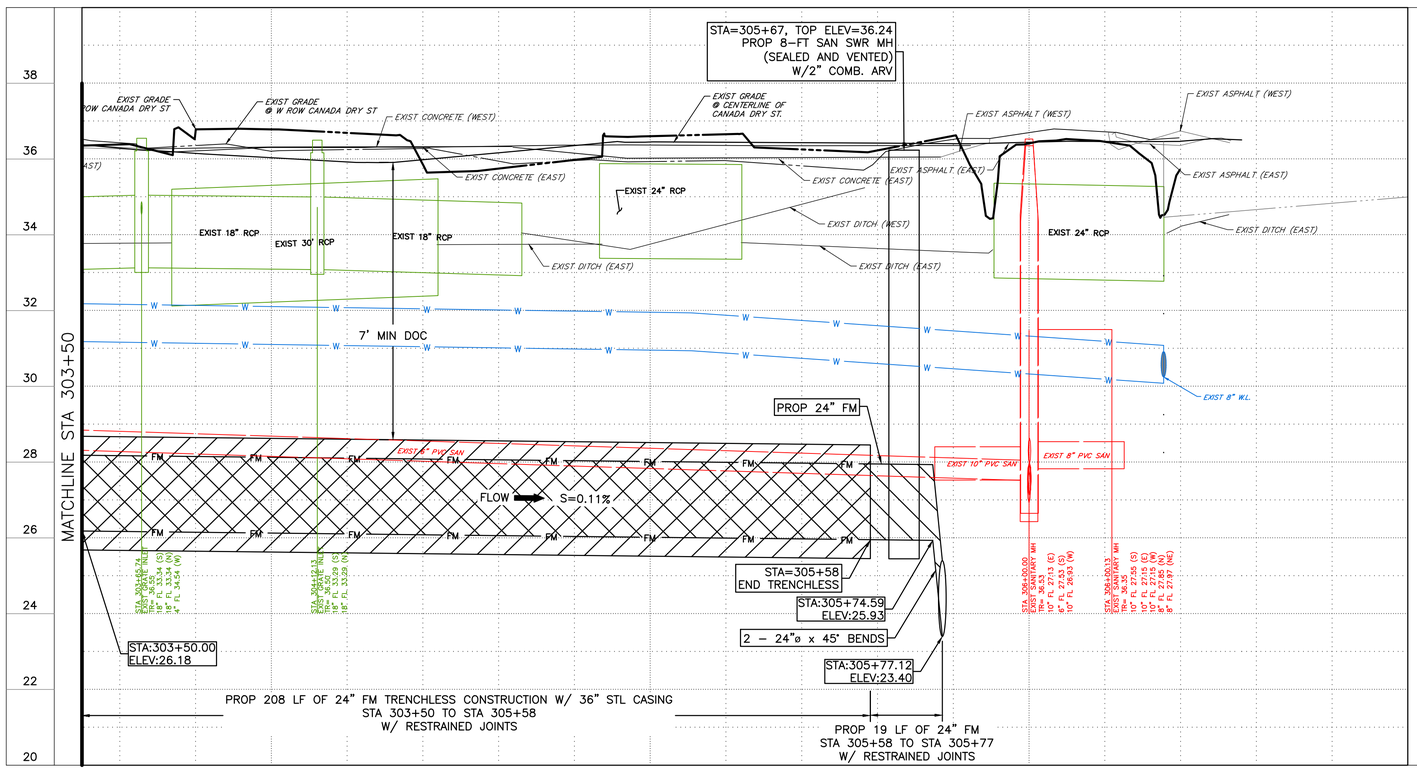
PLAN & PROFILE
CANADA DRY ST
STA 300+00 TO STA 303+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-11 OF C-70	

PLOTTED: 2/9/2026 5:44 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-11427\Project Files\03-Prod\03-Dwgs\C-PP1.dwg

OFFSET TABLE–CANADA DRY STREET		
POINT NO.	STATION	OFFSET
1	305+58.12	9.96' LT
2	305+58.13	0.13' LT
3	305+76.73	9.92' LT
4	305+80.06	7.36' LT
5	305+84.75	7.53' LT
6	305+84.74	5.68' LT
7	305+79.13	0.00' LT
8	305+89.70	7.01' LT
9	305+99.60	7.01' LT
10	305+99.59	27.01' LT
11	305+89.67	27.01' LT
12	305+87.28	17.43' LT





NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1-INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1060
Houston, Texas 77079
713.541.3330 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

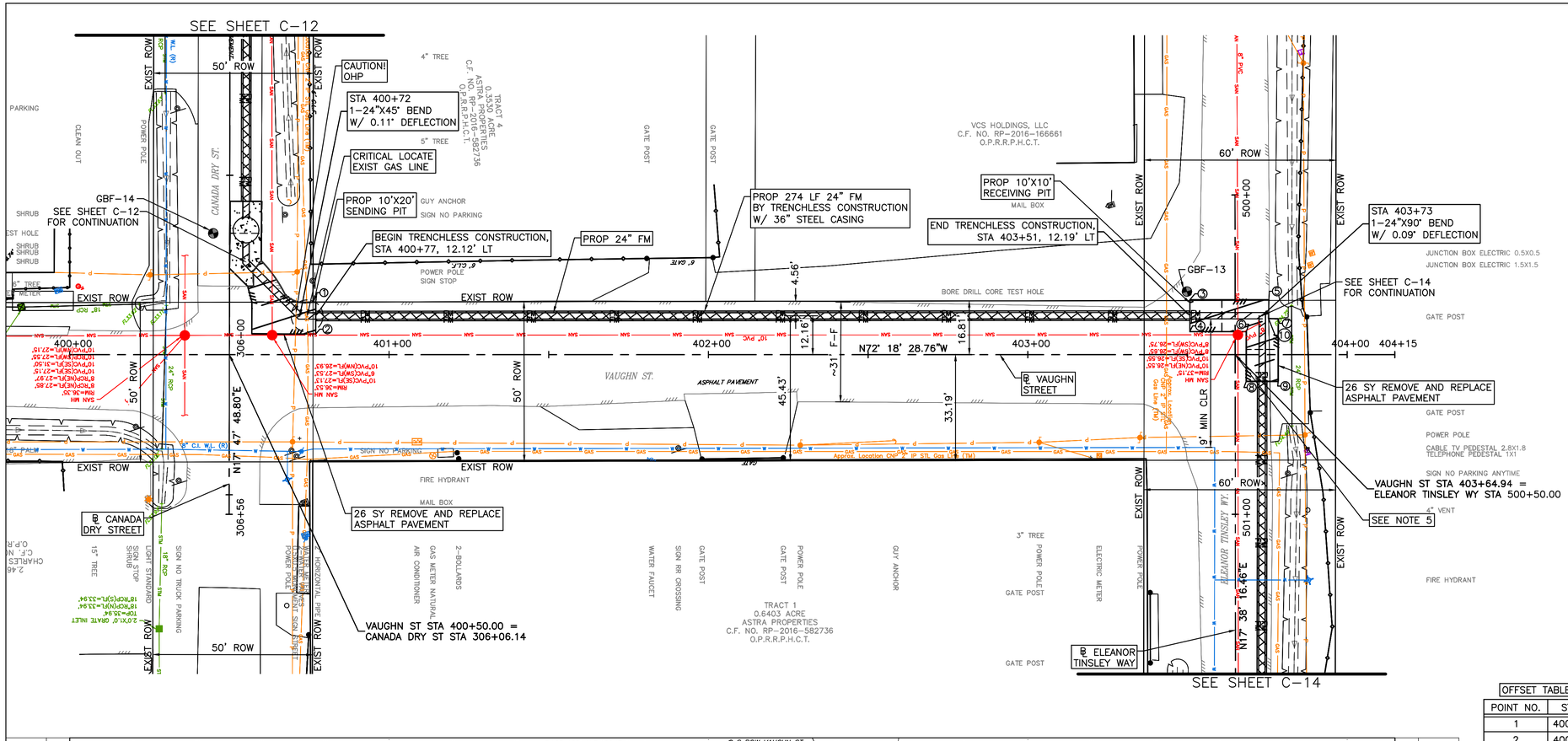
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN & PROFILE
CANADA DRY ST
STA 303+50 TO STA 306+56

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-12 OF C-70	

PLOTTED: 2/9/2026 5:44 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP1.dwg

PLOTTED: 2/9/2026 5:45 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP1.dwg



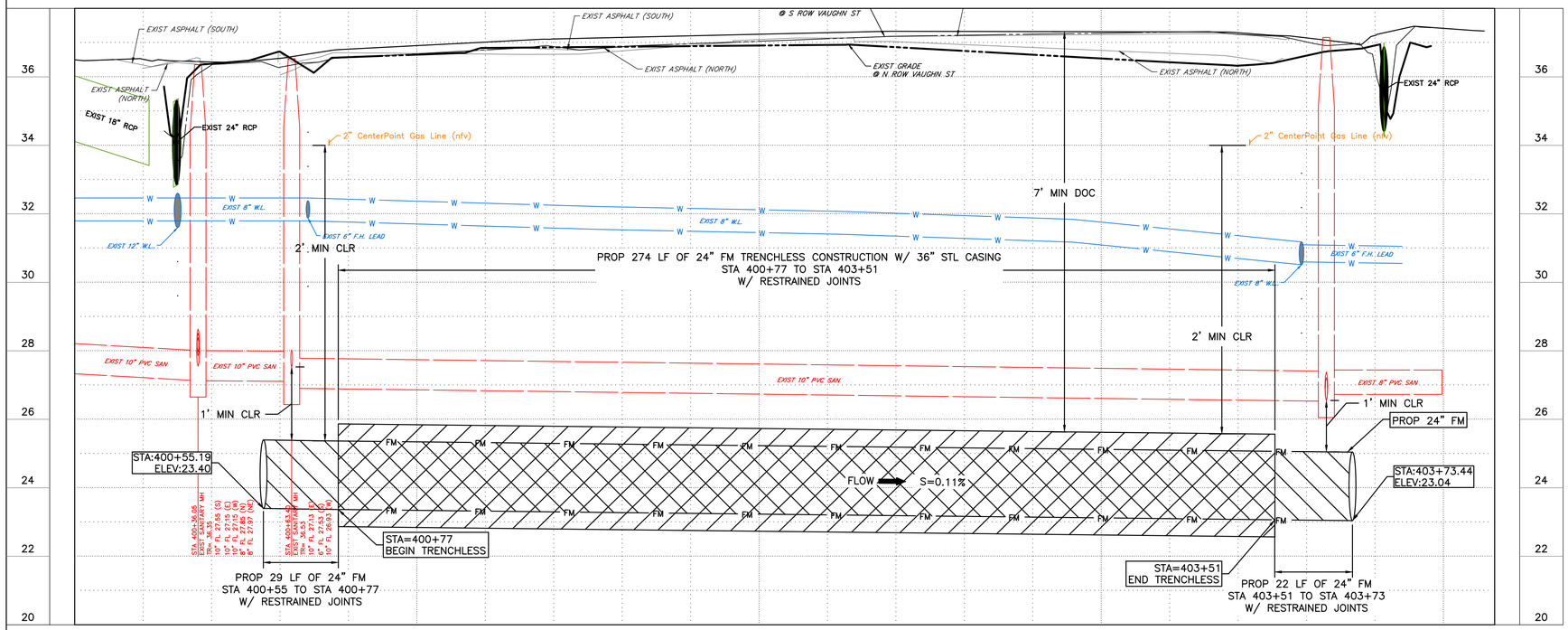
NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1-INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.
5. CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER TO DEVELOP A TIMELINE FOR CONSTRUCTION IN THIS INTERSECTION WHICH WILL NOT INTERFERE WITH HIS/HER OPERATIONS.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

OFFSET TABLE-VAUGHN STREET

POINT NO.	STATION	OFFSET
1	400+77.04	16.43' LT
2	400+77.02	6.46' LT
3	403+50.78	17.19' LT
4	403+50.76	7.19' LT
5	403+75.49	17.20' LT
6	403+68.43	7.20' LT
7	403+78.44	11.21' LT
8	403+68.41	8.37' RT
9	403+78.41	8.39' RT
10	403+75.41	11.30' LT



NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1060
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

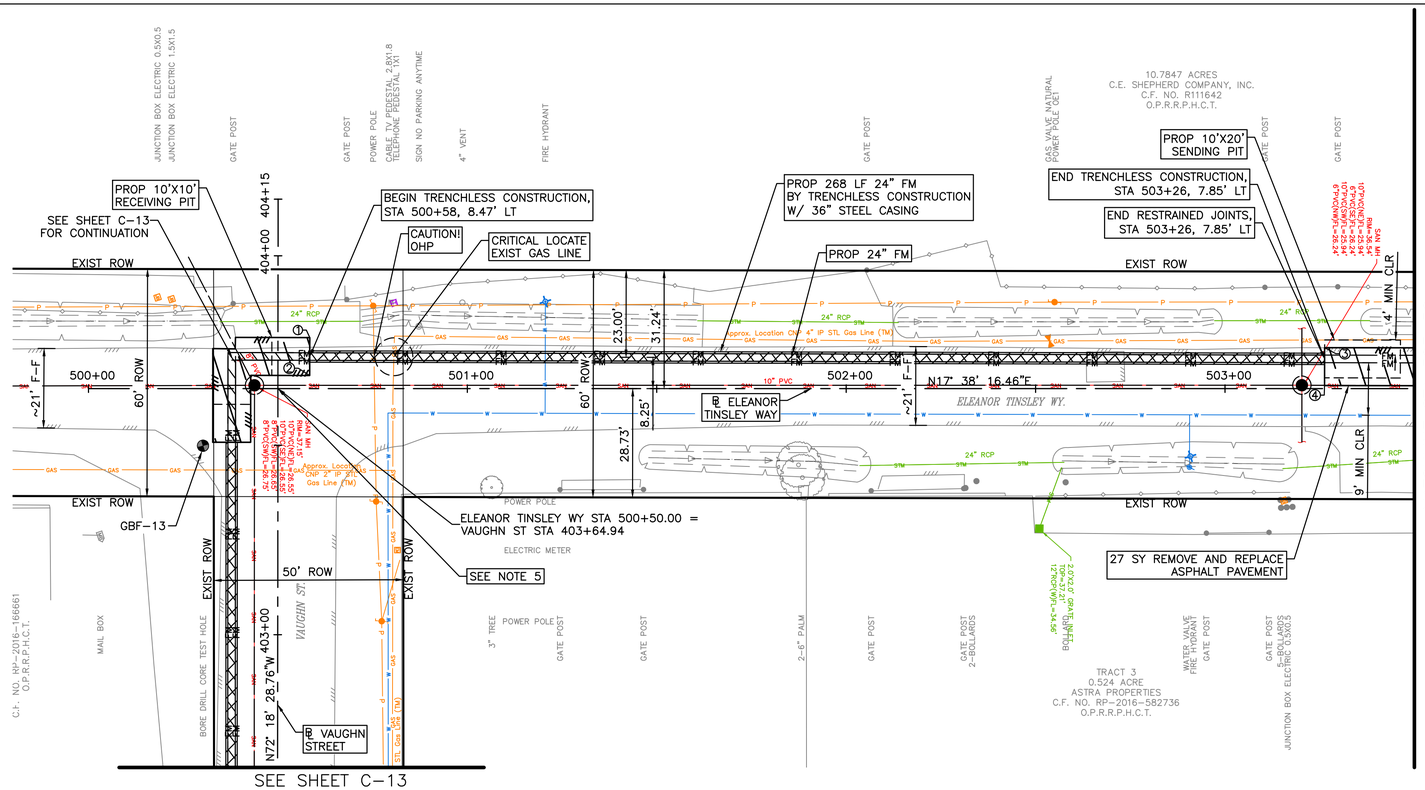
SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

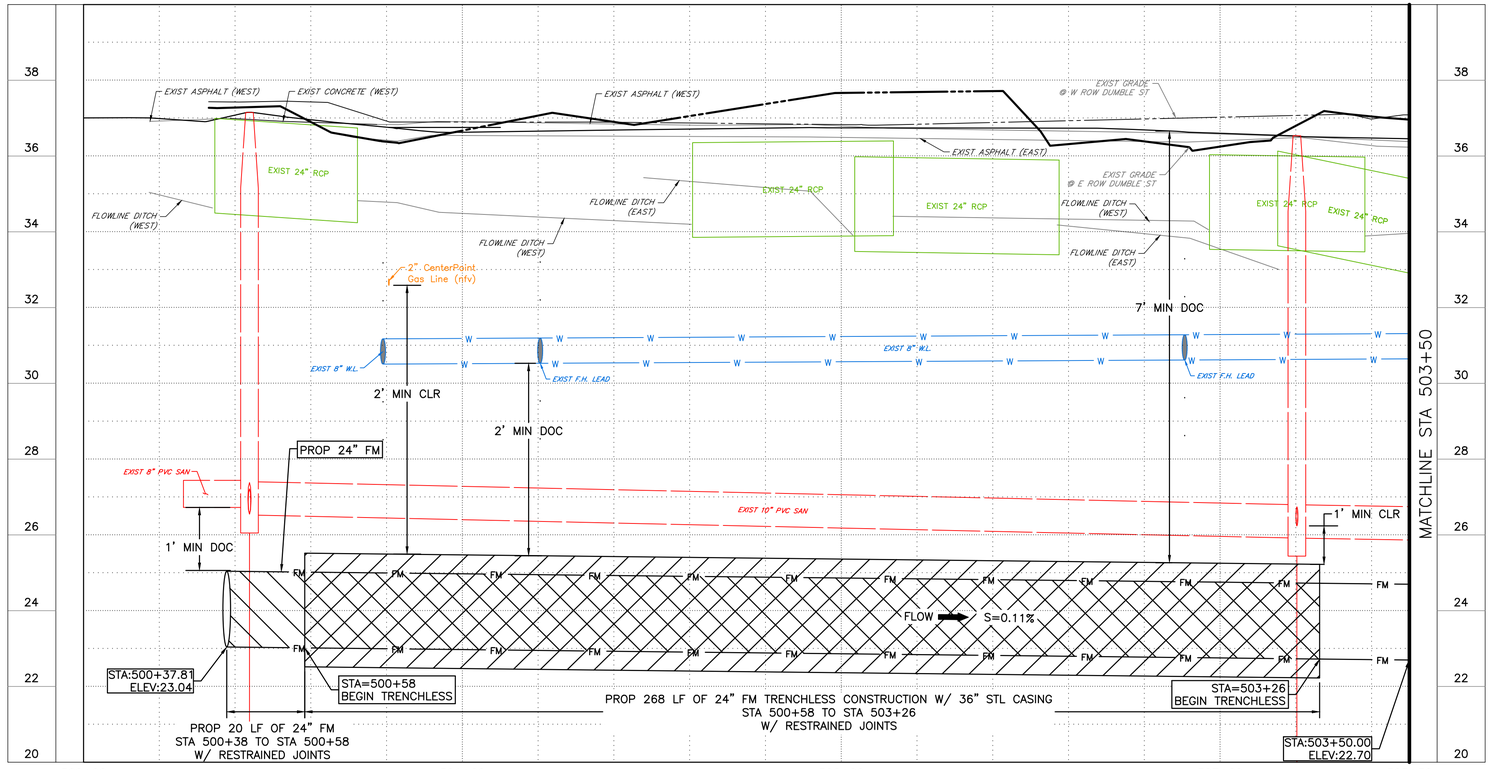
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN & PROFILE
VAUGHN ST
STA 400+00 TO STA 404+15

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-13 OF C-70	



OFFSET TABLE-ELEANOR TINSLEY WAY		
POINT NO.	STATION	OFFSET
1	500+58.40	13.47' LT
2	500+58.38	3.46' LT
3	503+26.30	10.79' LT
4	503+26.28	0.79' LT





NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1-INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.
5. CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER TO DEVELOP A TIMELINE FOR CONSTRUCTION IN THIS INTERSECTION WHICH WILL NOT INTERFERE WITH HIS/HER OPERATIONS.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities - not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

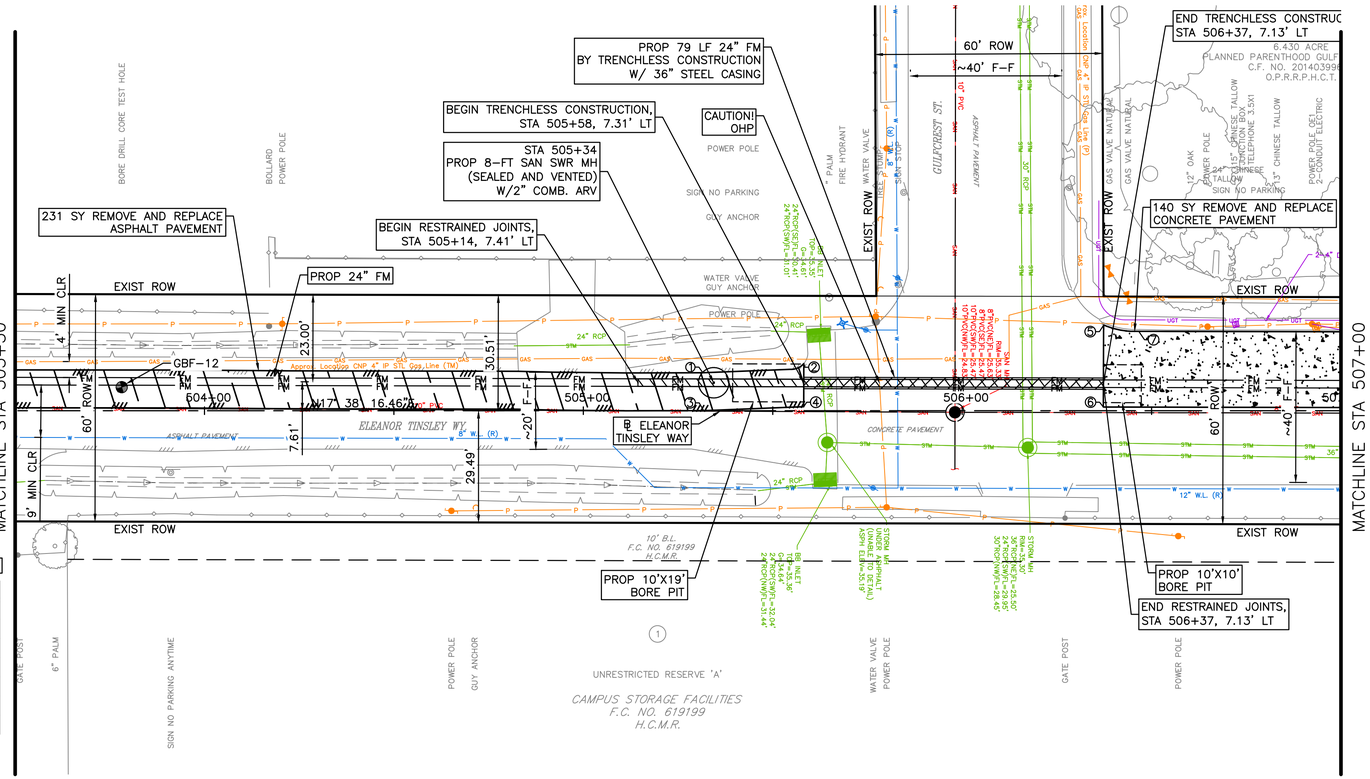
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A - EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

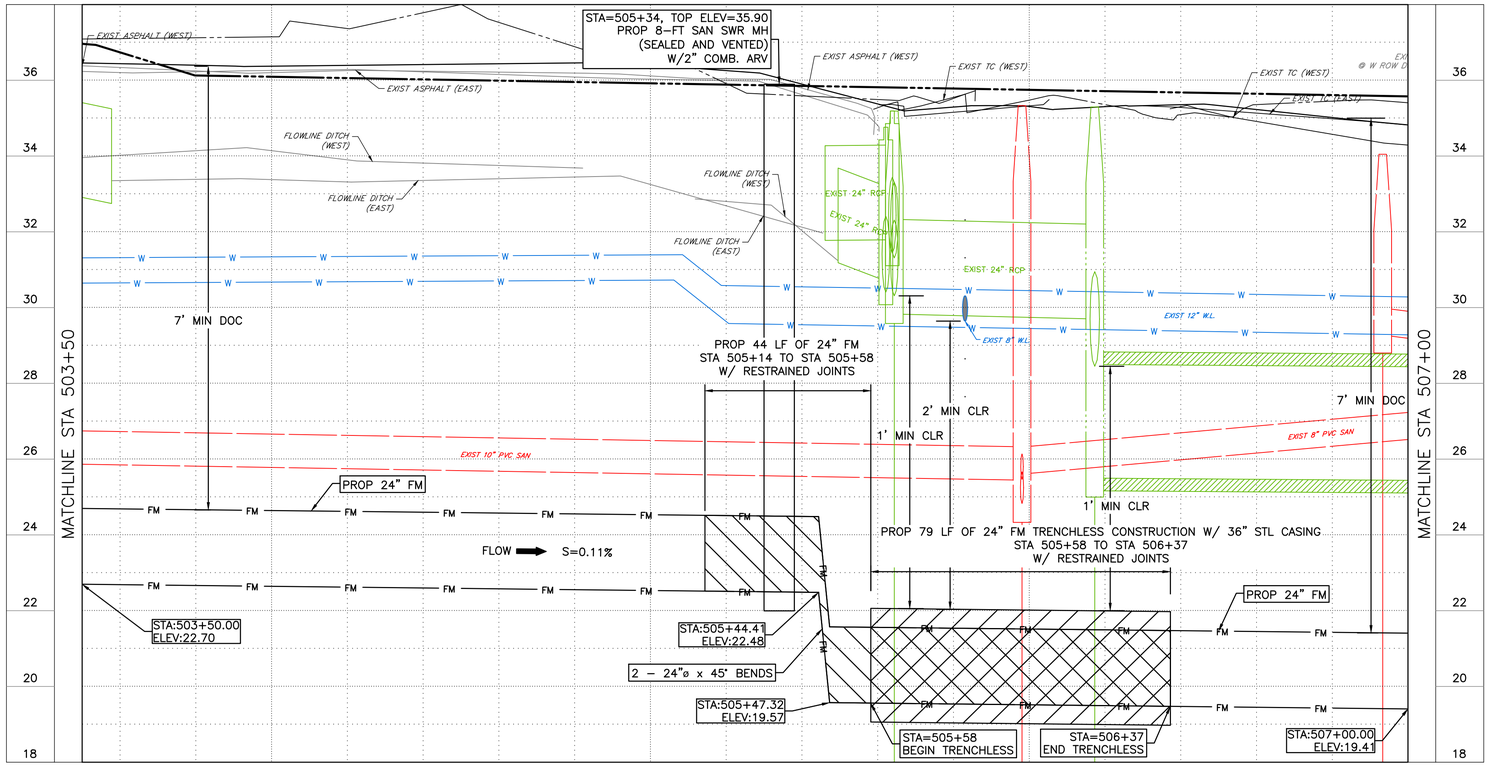
PLAN & PROFILE
ELEANOR TINSLEY WAY
STA 500+00 TO STA 503+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-14 OF C-70	

PLOTTED: 2/9/2026 5:45 PM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PPET.dwg



OFFSET TABLE–ELEANOR TINSLEY WAY		
POINT NO.	STATION	OFFSET
1	505+31.55	10.02' LT
2	505+58.20	12.44' LT
3	505+31.75	0.02' LT
4	505+58.17	1.05' LT
5	506+37.36	22.61' LT
6	506+37.27	0.97' LT
7	506+46.61	20.95' LT



NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

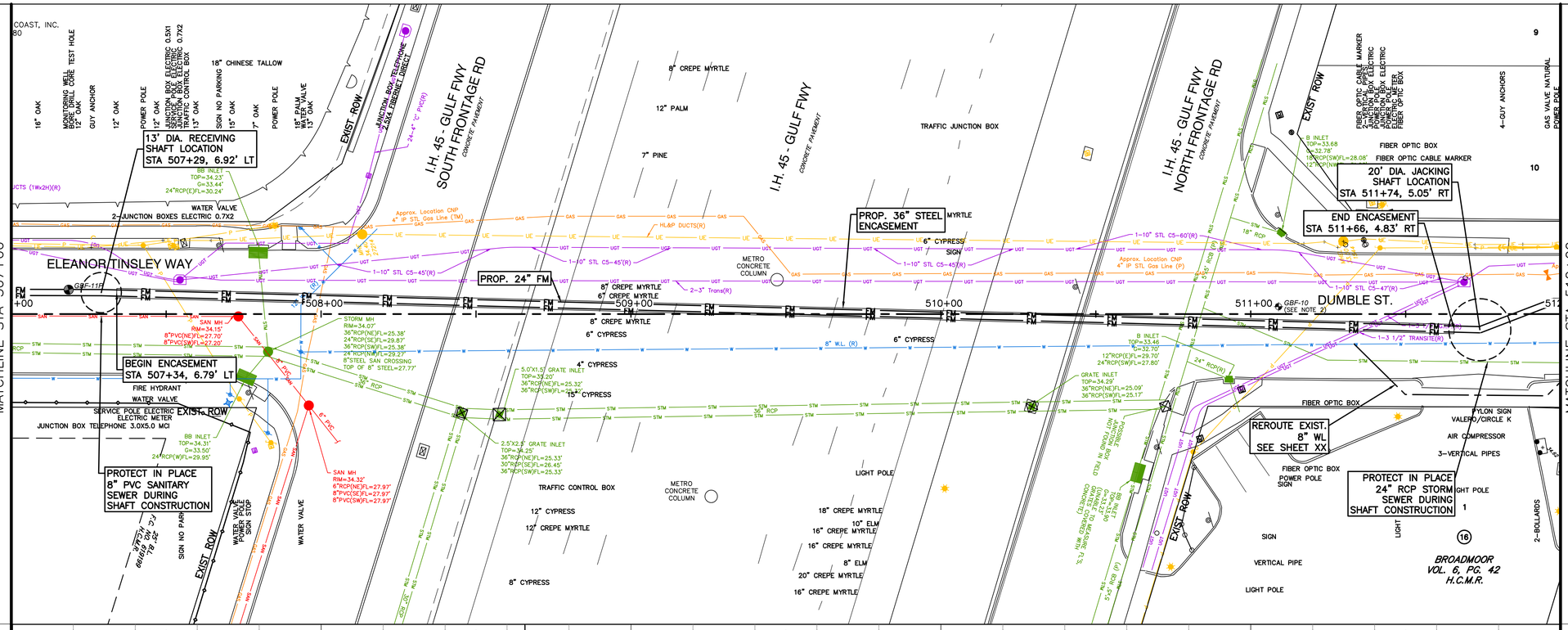
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN & PROFILE ELEANOR TINSLEY WAY STA 503+50 TO STA 507+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–15 OF C–70	

PLOTTED: 2/9/2026 5:46 PM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PPET.dwg

PLOTTED: 2/10/2026 8:22 AM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\p0033391\OneDrive - Parsons Corp\Documents\Jobs\Eddington FM\ENG\CAD\2024-1427_COH EDDINGTON LS & FM - Standard\C-PPET Parsons.dwg



NO.	REVISION	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

PARSONS
1 RIVERWAY
SUITE 1100
HOUSTON, TEXAS 77056
PH. 713 871-7000
TBPE FIRM REGISTRATION NO. 8008

60% SUBMITTAL

THIS DOCUMENT IS RELEASED FOR THE PURPOSES OF INTERIM REVIEW UNDER THE AUTHORITY OF

MONICA PATRICIA SUAREZ, P.E.
#99458
2/9/2026

THIS DOCUMENT IS NOT INTENDED FOR BIDDING, PERMITTING AND/OR CONSTRUCTION PURPOSES

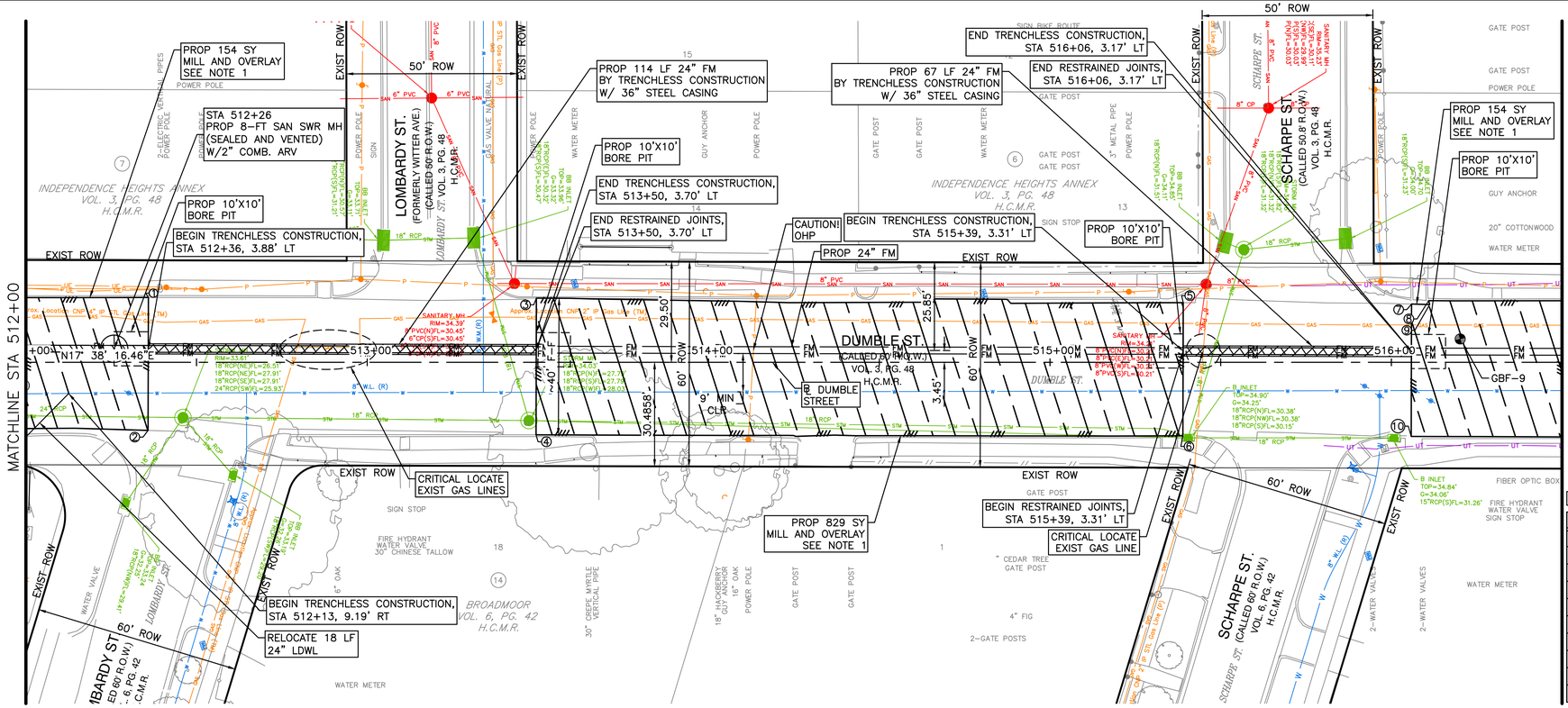
SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

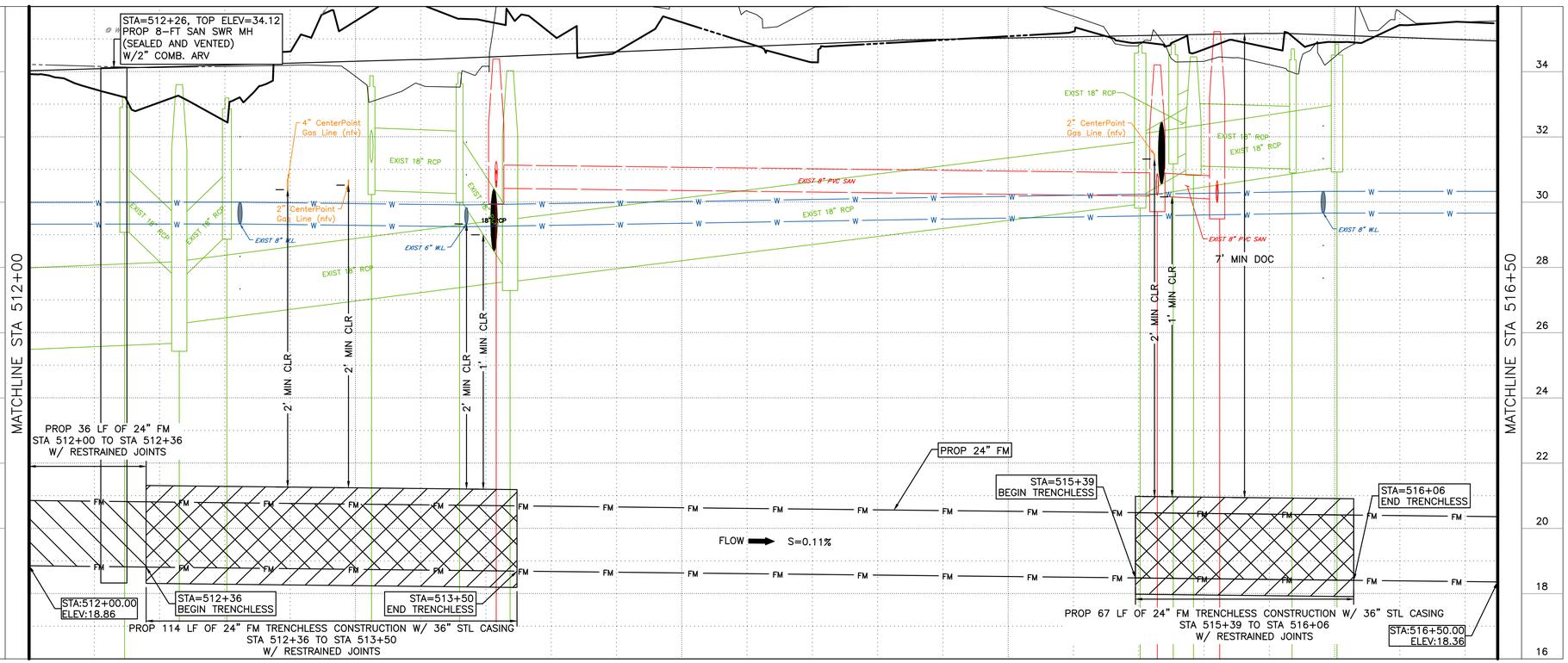
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN & PROFILE DUMBLE ST STA 507+00 TO STA 512+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-16 OF C-70	





OFFSET TABLE-DUMBLE STREET		
POINT NO.	STATION	OFFSET
1	512+35.89	19.01' LT
2	512+35.80	19.96' RT
3	513+49.55	18.81' LT
4	513+49.45	21.26' RT
5	515+39.03	17.47' LT
6	515+38.93	21.57' RT
7	516+05.90	17.07' LT
8	516+10.94	18.07' LT
9	516+11.21	16.92' LT
10	516+05.80	21.73' RT

NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1-INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities - not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

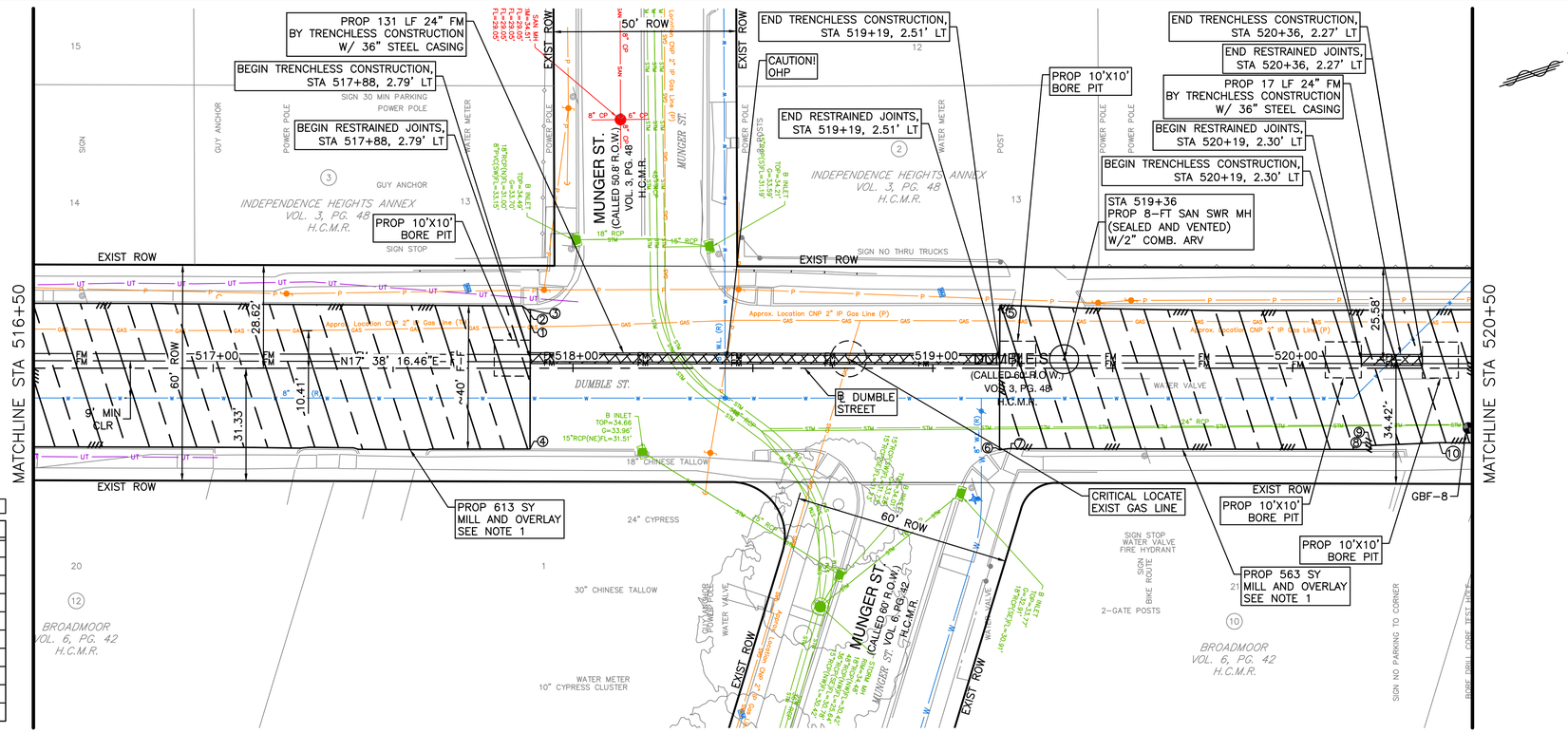
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

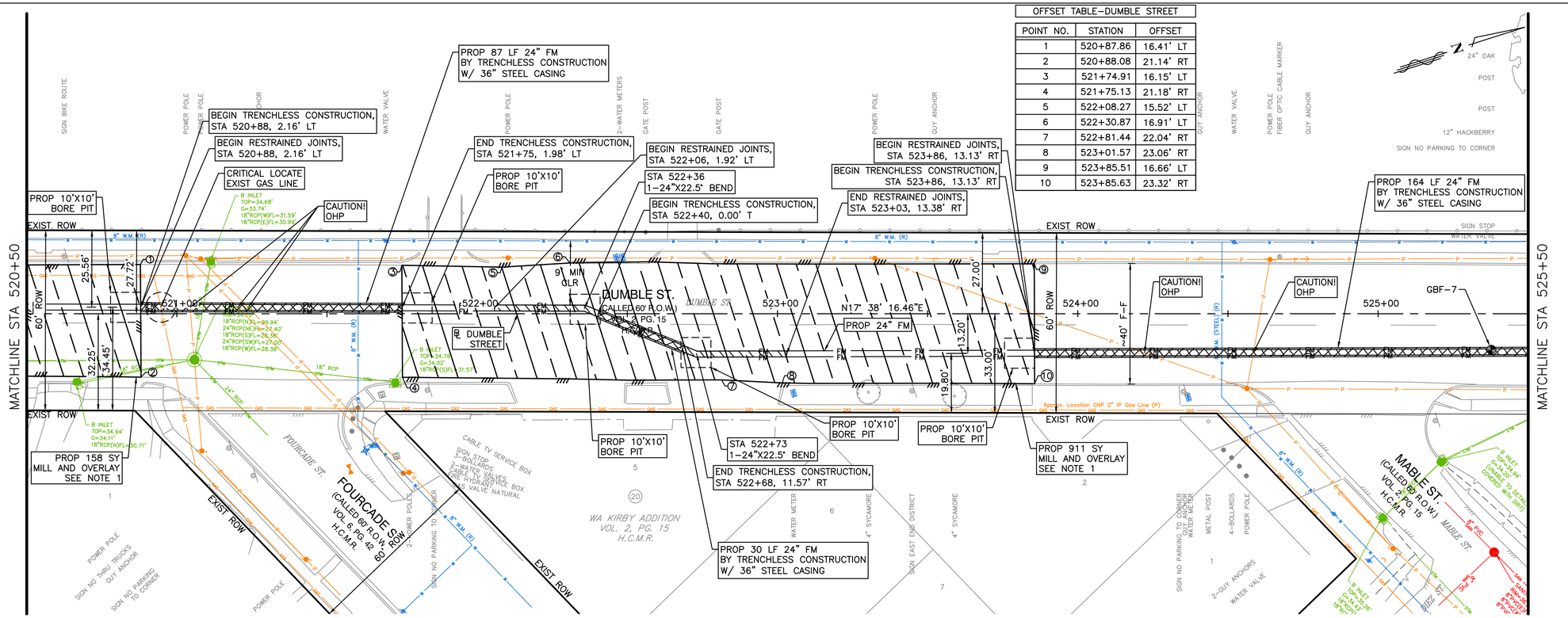
CRMP PACKAGE 4A - EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN & PROFILE DUMBLE ST STA 512+00 TO STA 516+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-17 OF C-70	

PLOTTED: 2/9/2026 5:47 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP2.dwg


PROP 131 LF 24" FM
BY TRENCHLESS CONSTRUCTION
W/ 36" STEEL CASING
BEGIN TRENCHLESS CONSTRUCTION,
STA 517+88, 2.79' LT
BEGIN RESTRAINED JOINTS,
STA 517+88, 2.79' LT
PROP 10'X10'
BORE PIT
EXIST ROW
50' ROW
MUNGER ST.
(CALLED 50.8' R.O.W.)
VOL. 3, PG. 48
H.C.M.R.
END TRENCHLESS CONSTRUCTION,
STA 519+19, 2.51' LT
CAUTION!
OHP
END RESTRAINED JOINTS,
STA 519+19, 2.51' LT
INDEPENDENCE HEIGHTS ANNEX
VOL. 3, PG. 48
H.C.M.R.
PROP 10'X10'
BORE PIT
END TRENCHLESS CONSTRUCTION,
STA 520+36, 2.27' LT
END RESTRAINED JOINTS,
STA 520+36, 2.27' LT
PROP 17 LF 24" FM
BY TRENCHLESS CONSTRUCTION
W/ 36" STEEL CASING
BEGIN RESTRAINED JOINTS,
STA 520+19, 2.30' LT
BEGIN TRENCHLESS CONSTRUCTION,
STA 520+19, 2.30' LT
STA 519+36
PROP 8-FT SAN SWR MH
(SEALED AND VENTED)
W/2" COMB. ARV
MATCHLINE STA 516+50
MATCHLINE STA 520+50
517+00
518+00
519+00
520+00
DUMBLE ST.
(CALLED 60' R.O.W.)
VOL. 3, PG. 48
H.C.M.R.
B. DUMBLE STREET
PROP 613 SY
MILL AND OVERLAY
SEE NOTE 1
CRITICAL LOCATE
EXIST GAS LINE
PROP 10'X10'
BORE PIT
PROP 10'X10'
BORE PIT
PROP 563 SY
MILL AND OVERLAY
SEE NOTE 1
GBF-8
60' ROW
BROADMOOR
VOL. 6, PG. 42
H.C.M.R.
MUNGER ST.
(CALLED 60' R.O.W.)
VOL. 6, PG. 42
H.C.M.R.
MUNGER ST. VOL. 6, PG. 42
24" CYPRESS
30" CHINESE TALLOW
18" CHINESE TALLOW
WATER METER
10" CYPRESS CLUSTER
SIGN NO PARKING TO CORNER
SIGN NO THRU TRUCKS
SIGN STOP
WATER VALVE
FIRE HYDRANT
2-GATE POSTS
WATER VALVE
POWER POLE
GUY ANCHOR
SIGN 30 MIN PARKING
SIGN STOP
N17° 38' 16.46"E
9' MIN CLR
28.62'
31.33'
10.41'
~40'
25.58'
34.42'
Approx. Location CNP 2" IP Gas Line (P)
Approx. Location CNP 2" IP Gas Line (P)
8" CP
18" RCP
16" RCP
24" RCP
B INLET
TOP=34.66
G=33.96'
15"RCP(NE)FL=31.51'
B INLET
TOP=34.77
G=33.77'
15"RCP(SW)FL=30.91'



OFFSET TABLE–DUMBLE STREET		
POINT NO.	STATION	OFFSET
1	520+87.86	16.41' LT
2	520+88.08	21.14' RT
3	521+74.91	16.15' LT
4	521+75.13	21.18' RT
5	522+08.27	15.52' LT
6	522+30.87	16.91' LT
7	522+81.44	22.04' RT
8	523+01.57	23.06' RT
9	523+85.51	16.66' LT
10	523+85.63	23.32' RT

NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11757 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

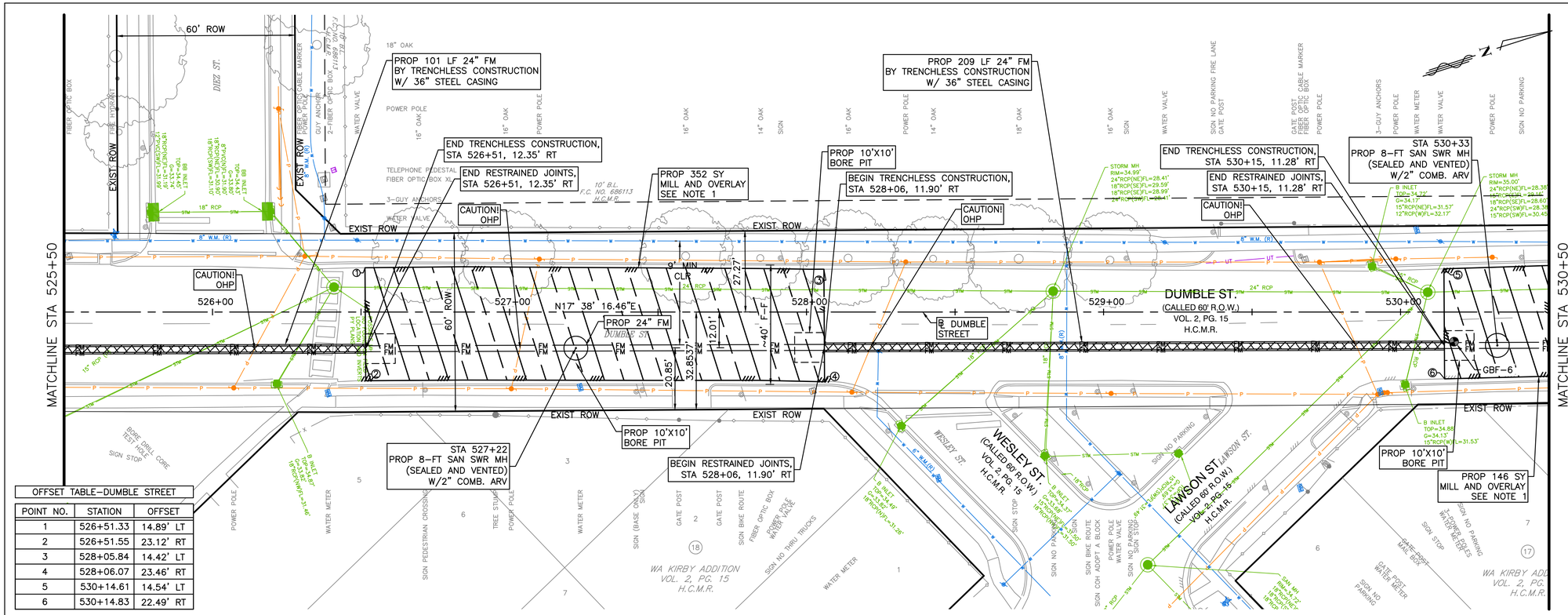
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

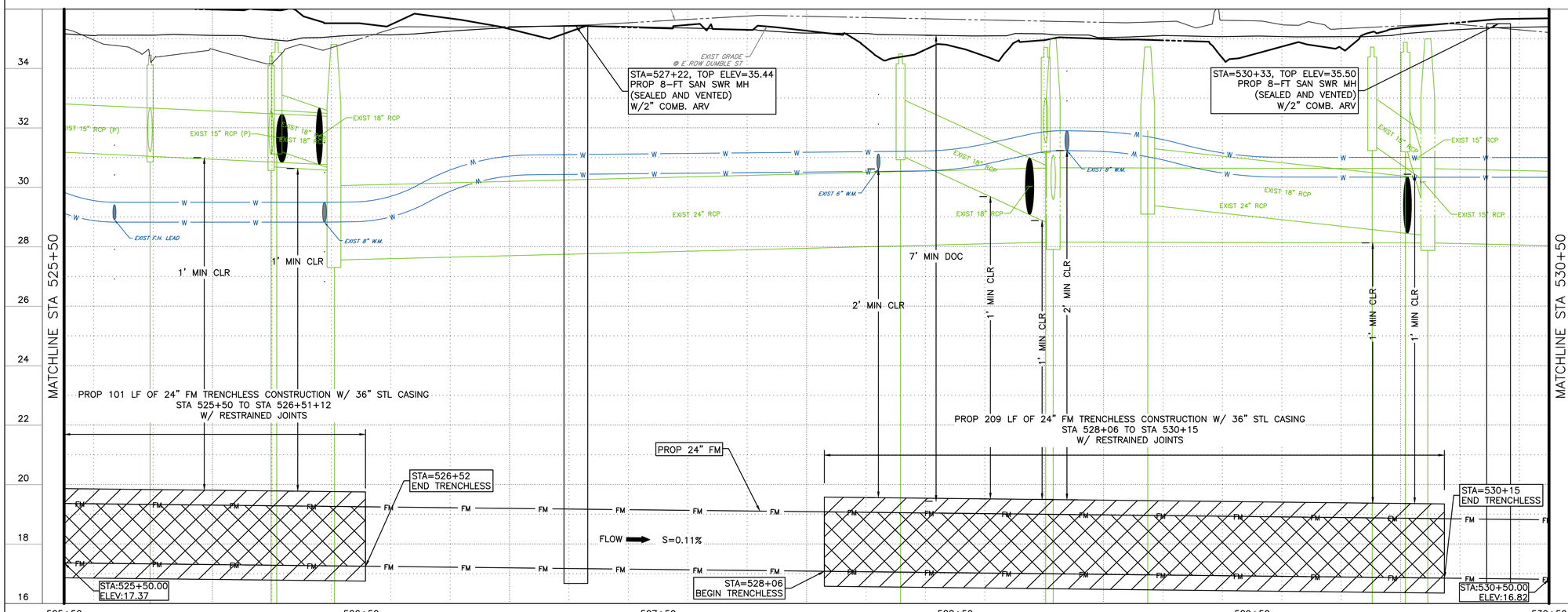
PLAN & PROFILE DUMBLE ST STA 520+50 TO STA 525+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–19 OF C–70	

PLOTTED: 2/9/2026 5:48 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP2.dwg



OFFSET TABLE–DUMBLE STREET		
POINT NO.	STATION	OFFSET
1	526+51.33	14.89' LT
2	526+51.55	23.12' RT
3	528+05.84	14.42' LT
4	528+06.07	23.46' RT
5	530+14.61	14.54' LT
6	530+14.83	22.49' RT



NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

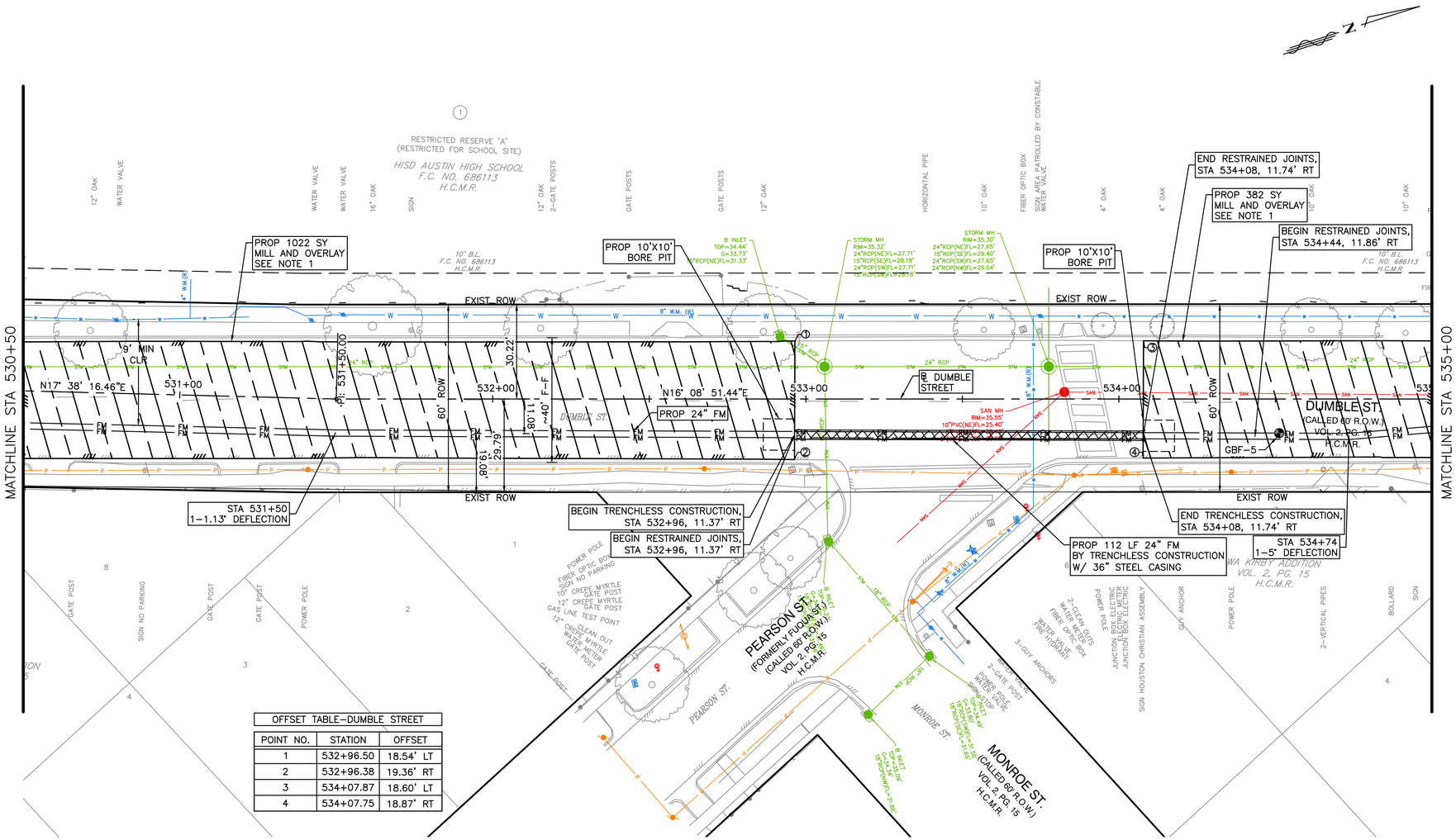
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN & PROFILE
DUMBLE ST
STA 525+50 TO STA 530+50

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–20 OF C–70	

PLOTTED: 2/9/2026 5:48 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP2.dwg



OFFSET TABLE–DUMBLE STREET		
POINT NO.	STATION	OFFSET
1	532+96.50	18.54' LT
2	532+96.38	19.36' RT
3	534+07.87	18.60' LT
4	534+07.75	18.87' RT

NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3330 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 3405 1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

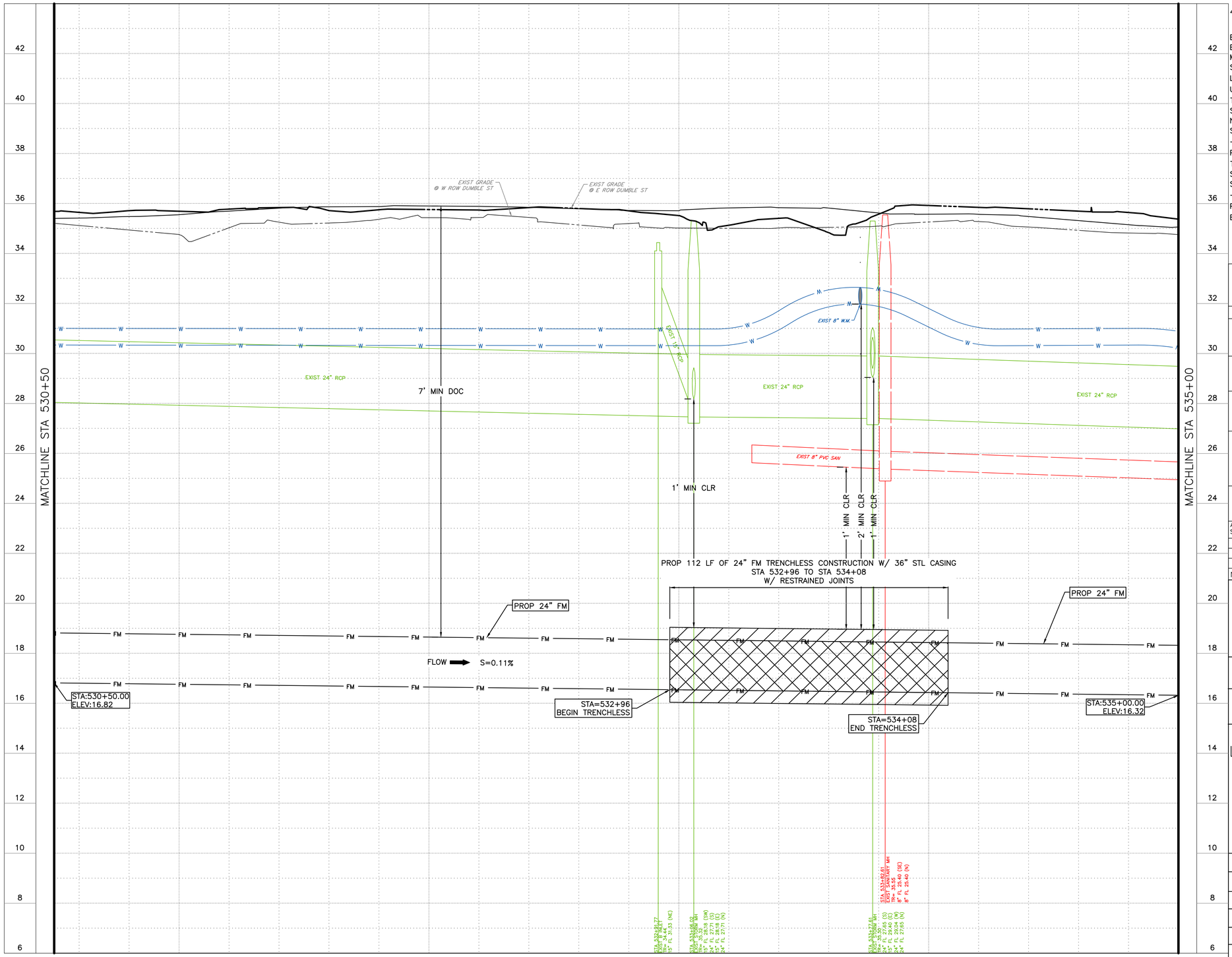
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN
DUMBLE ST
STA 530+50 TO STA 535+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-21 OF C-70	

PLOTTED: 2/9/2026 5:48 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP2.dwg



NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY.
+/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY.
+/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

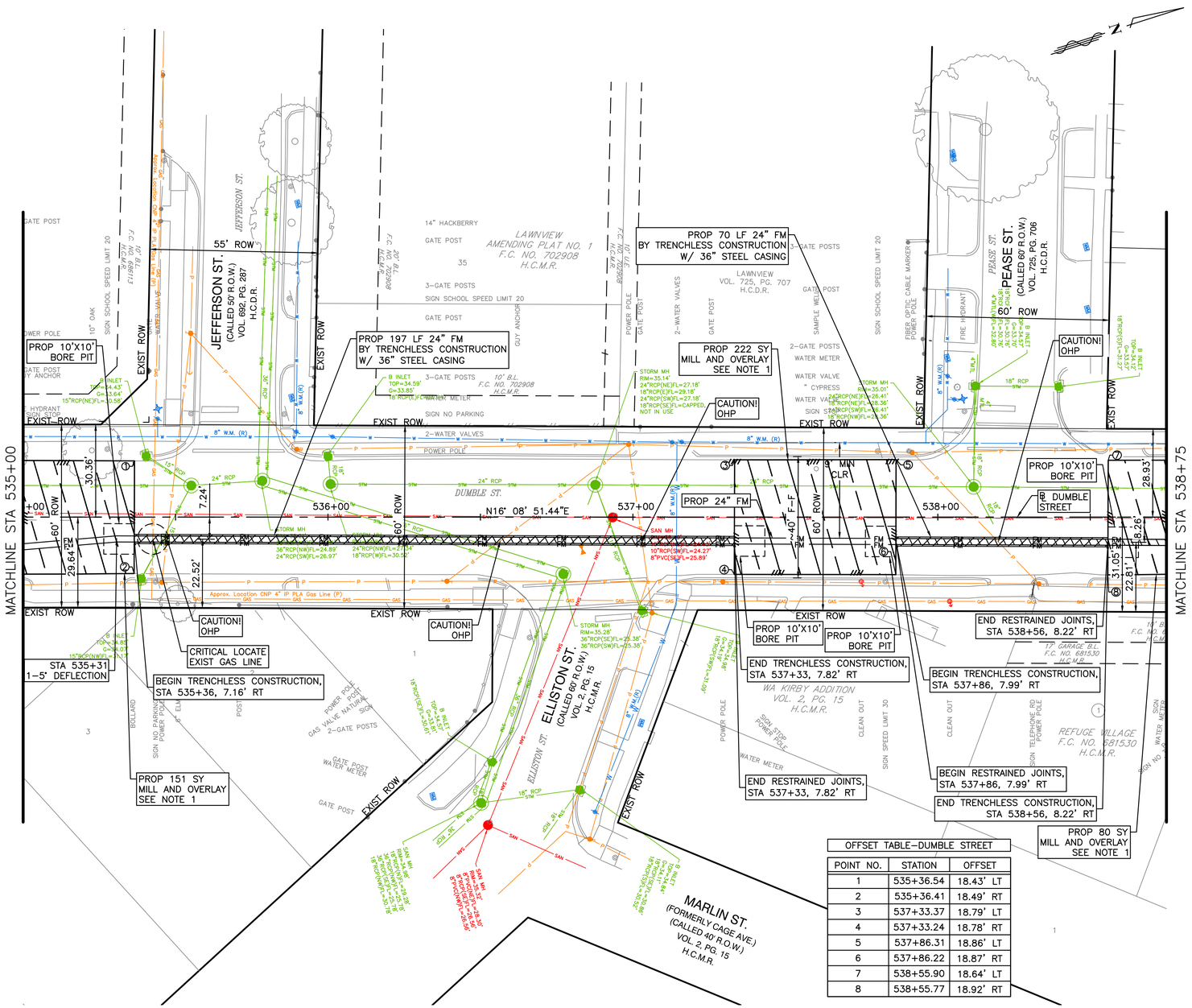
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PROFILE
DUMBLE ST
STA 530+50 TO STA 535+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–22 OF C–70	

PLOTTED: 2/9/2026 5:48 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024–1427\Project Files\03–Prod\03–Dwgs\C–PP2.dwg



NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1-INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities - not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

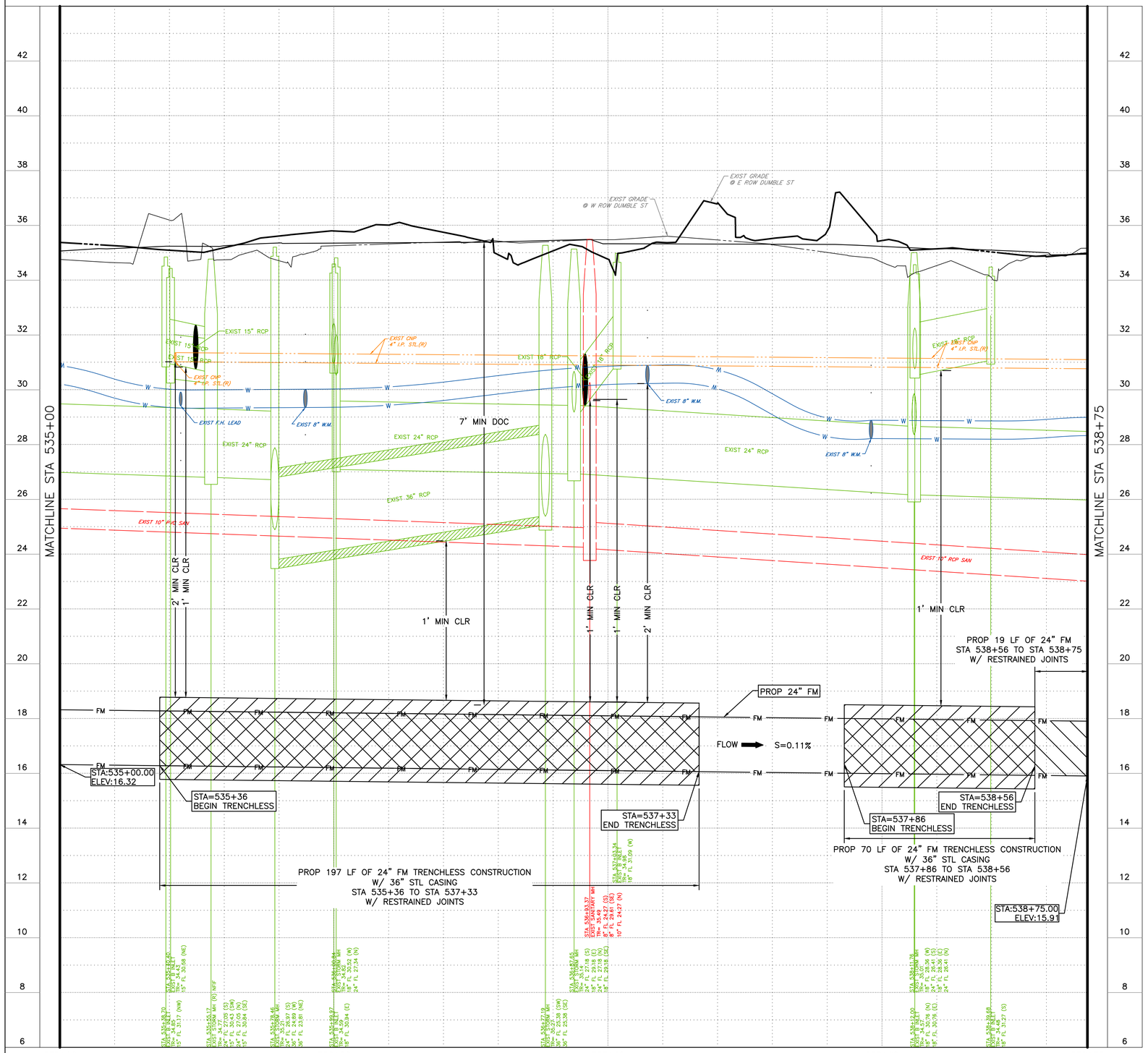
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A - EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN
DUMBLE ST
STA 535+00 TO STA 538+75

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-23 OF C-70	

PLOTTED: 2/9/2026 5:49 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP2.dwg



NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY.
+/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY.
+/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10153

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

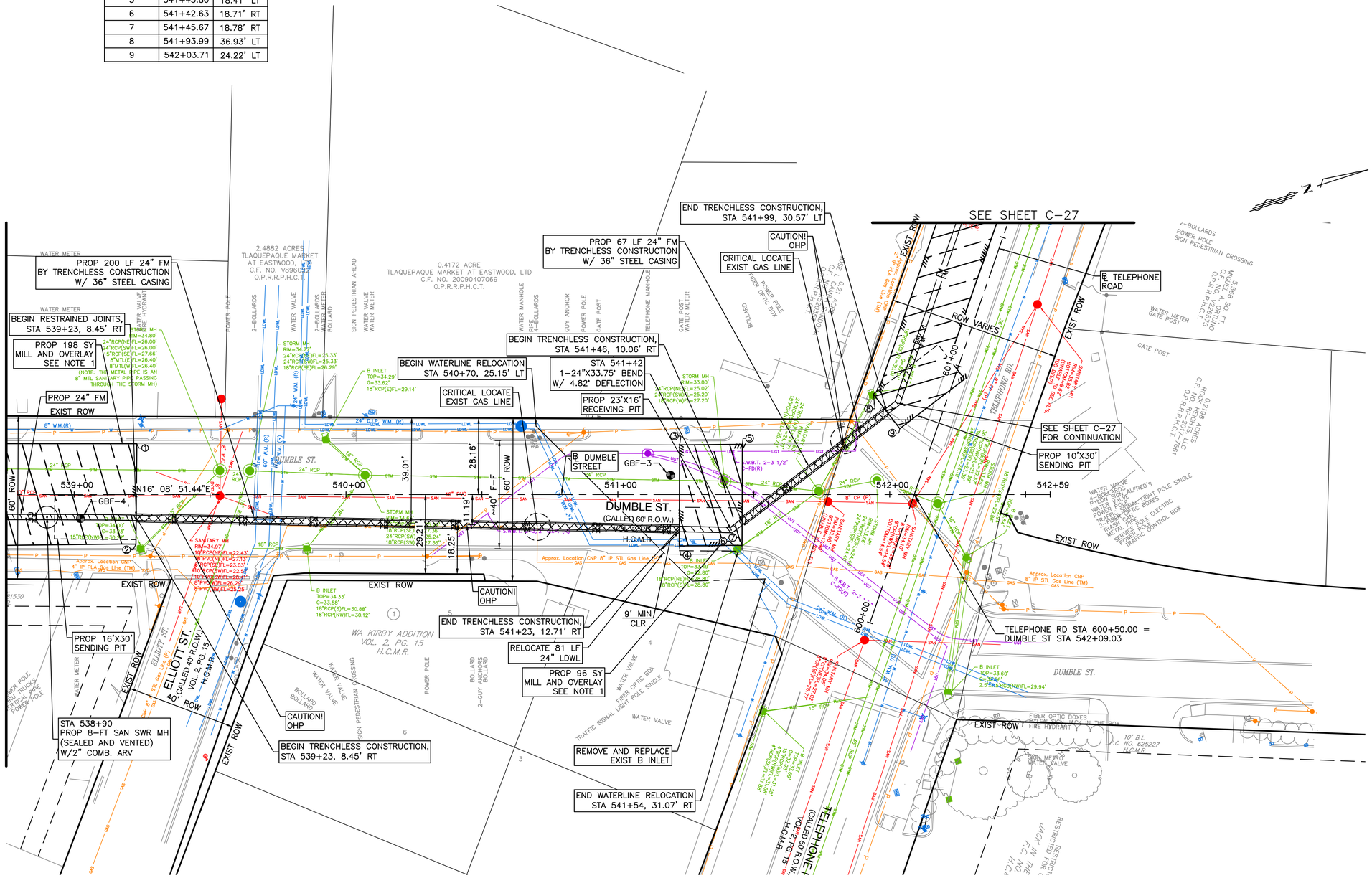
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PROFILE
DUMBLE ST
STA 535+00 TO STA 538+75

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–24 OF C–70	

PLOTTED: 2/9/2026 5:49 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP2.dwg

OFFSET TABLE–DUMBLE STREET		
POINT NO.	STATION	OFFSET
1	539+23.05	18.64' LT
2	539+22.71	18.29' RT
3	541+22.72	18.25' LT
4	541+22.60	18.92' RT
5	541+45.80	18.41' LT
6	541+42.63	18.71' RT
7	541+45.67	18.78' RT
8	541+93.99	36.93' LT
9	542+03.71	24.22' LT



NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

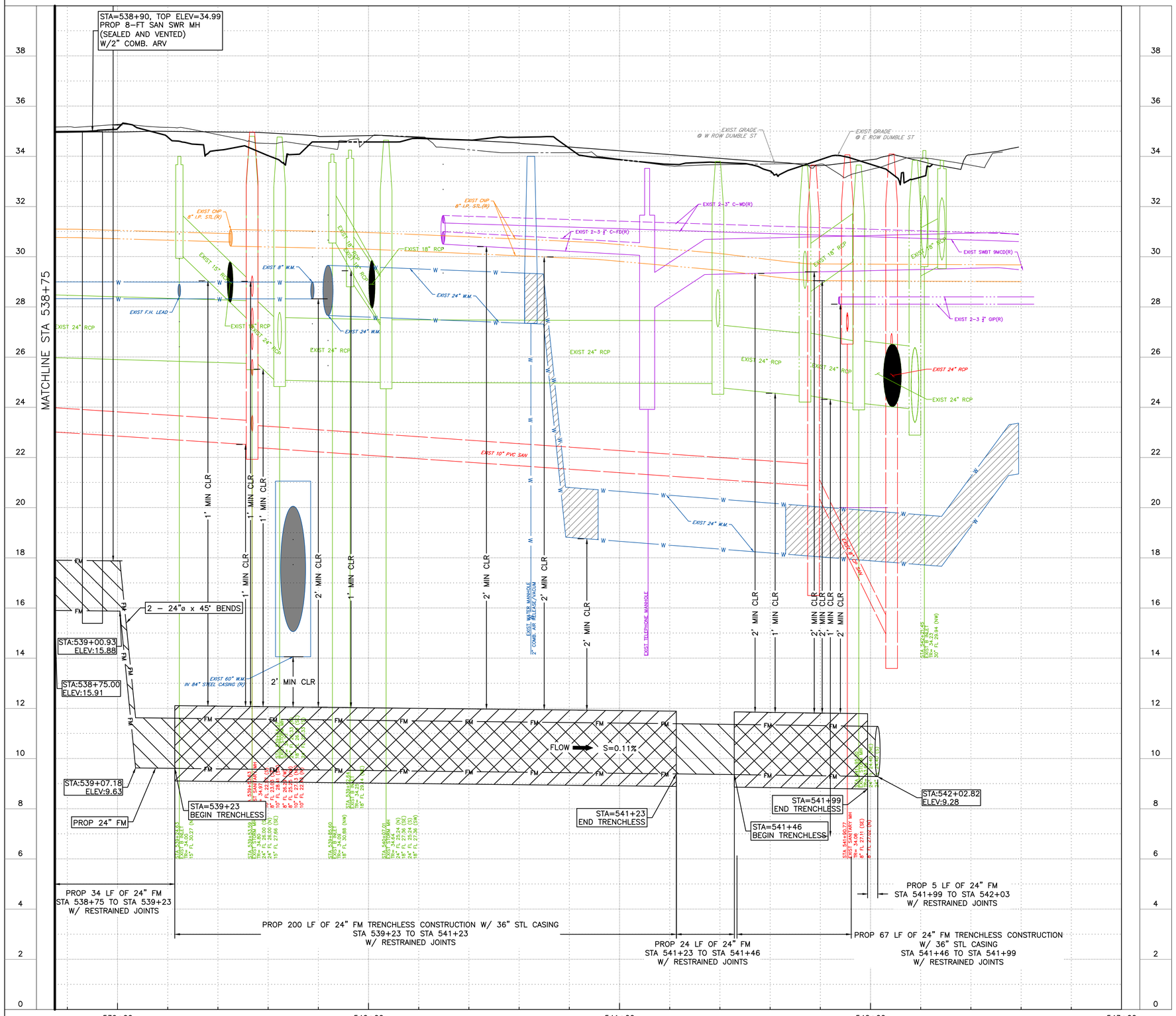
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN
DUMBLE ST
STA 538+75 TO STA 543+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-25 OF C-70	

PLOTTED: 2/9/2026 5:49 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP2.dwg



NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1-INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

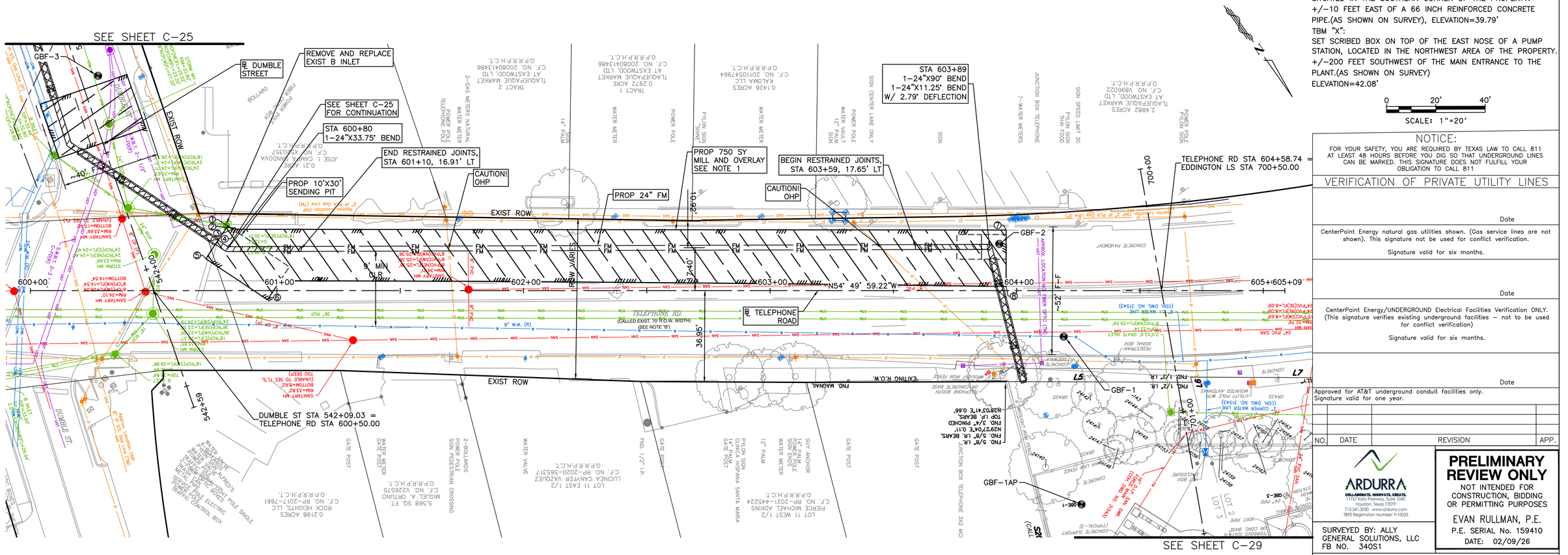
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PROFILE
DUMBLE ST
STA 538+75 TO STA 543+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-26 OF C-70	

PLOTTED: 2/9/2026 5:49 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP2.dwg



OFFSET TABLE–TELEPHONE ROAD		
POINT NO.	STATION	OFFSET
1	600+80.01	26.25' LT
2	600+81.19	25.47' LT
3	600+83.04	25.38' LT
4	600+83.35	24.86' LT
5	600+71.16	12.92' LT
6	600+96.15	3.67' RT
7	603+95.72	24.57' LT
8	603+95.70	1.76' LT

NOTES:
1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'
SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10033

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 3405 1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

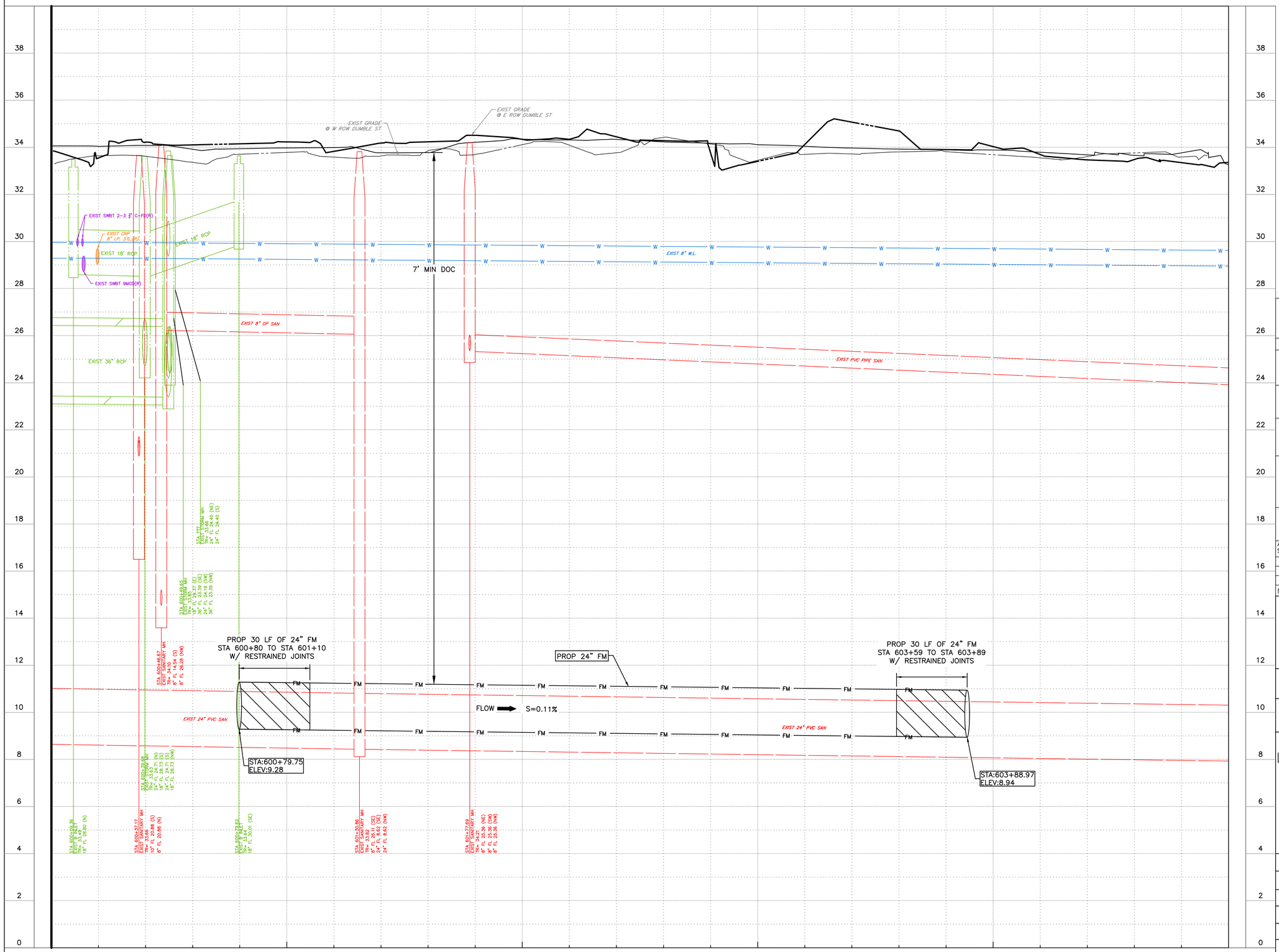
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN
TELEPHONE RD
STA 600+00 TO STA 605+00

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–27 OF C–70	

PLOTTED: 2/9/2026 5:50 PM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP3.dwg



NOTES:

1. CONTRACTOR TO CLEAN AND SEAL PAVEMENT JOINT SEPARATIONS GREATER THAN 1–INCH WITH FIBERCRETE (OR EQUAL).
2. ADJUST ALL MANHOLES TO PAVEMENT FINAL GRADE.
3. ONLY 150' OF OPEN CUT SHALL BE EXPOSED AT ANY GIVEN TIME.
4. CONTRACTOR SHALL LEAVE AT LEAST ONE LANE THROUGH THE WORK ZONE EACH NIGHT.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455–8415:
LOCATED ON SH 35 NORTH BOUND, +/–470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/–10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/–200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

0 20' 40'

SCALE: 1"=20'

NOTICE:
FOR YOUR SAFETY, YOU ARE REQUIRED BY TEXAS LAW TO CALL 811 AT LEAST 48 HOURS BEFORE YOU DIG SO THAT UNDERGROUND LINES CAN BE MARKED. THIS SIGNATURE DOES NOT FULFILL YOUR OBLIGATION TO CALL 811

VERIFICATION OF PRIVATE UTILITY LINES

Date

CenterPoint Energy natural gas utilities shown. (Gas service lines are not shown). This signature not be used for conflict verification.

Signature valid for six months.

Date

CenterPoint Energy/UNDERGROUND Electrical Facilities Verification ONLY. (This signature verifies existing underground facilities – not to be used for conflict verification)

Signature valid for six months.

Date

Approved for AT&T underground conduit facilities only.
Signature valid for one year.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

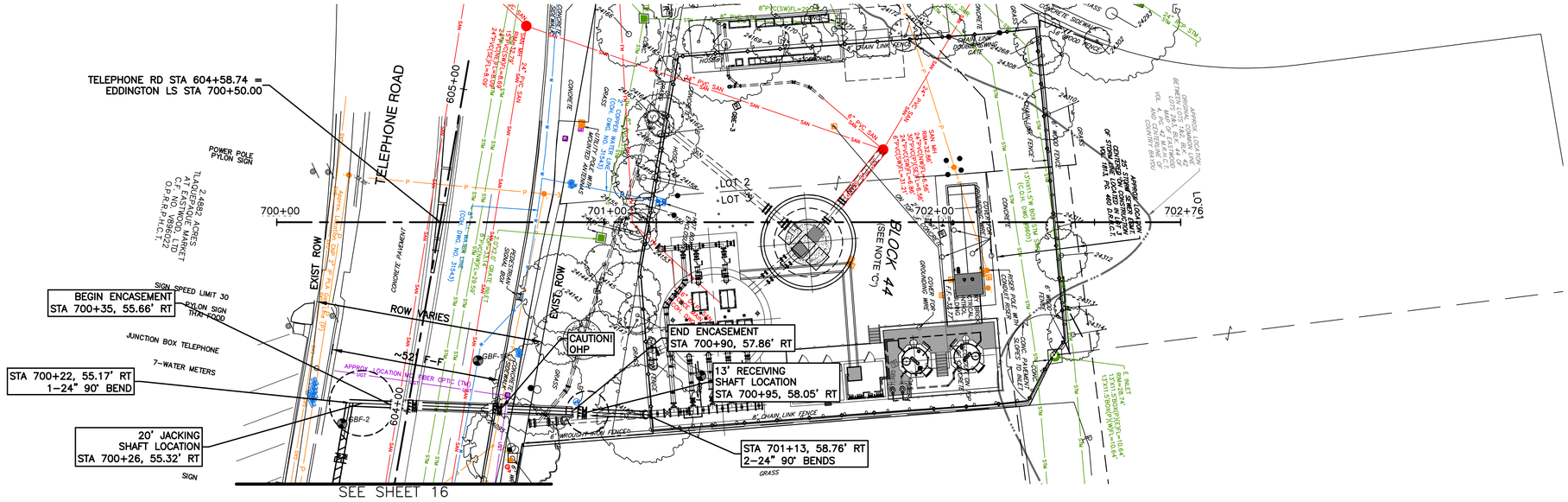
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

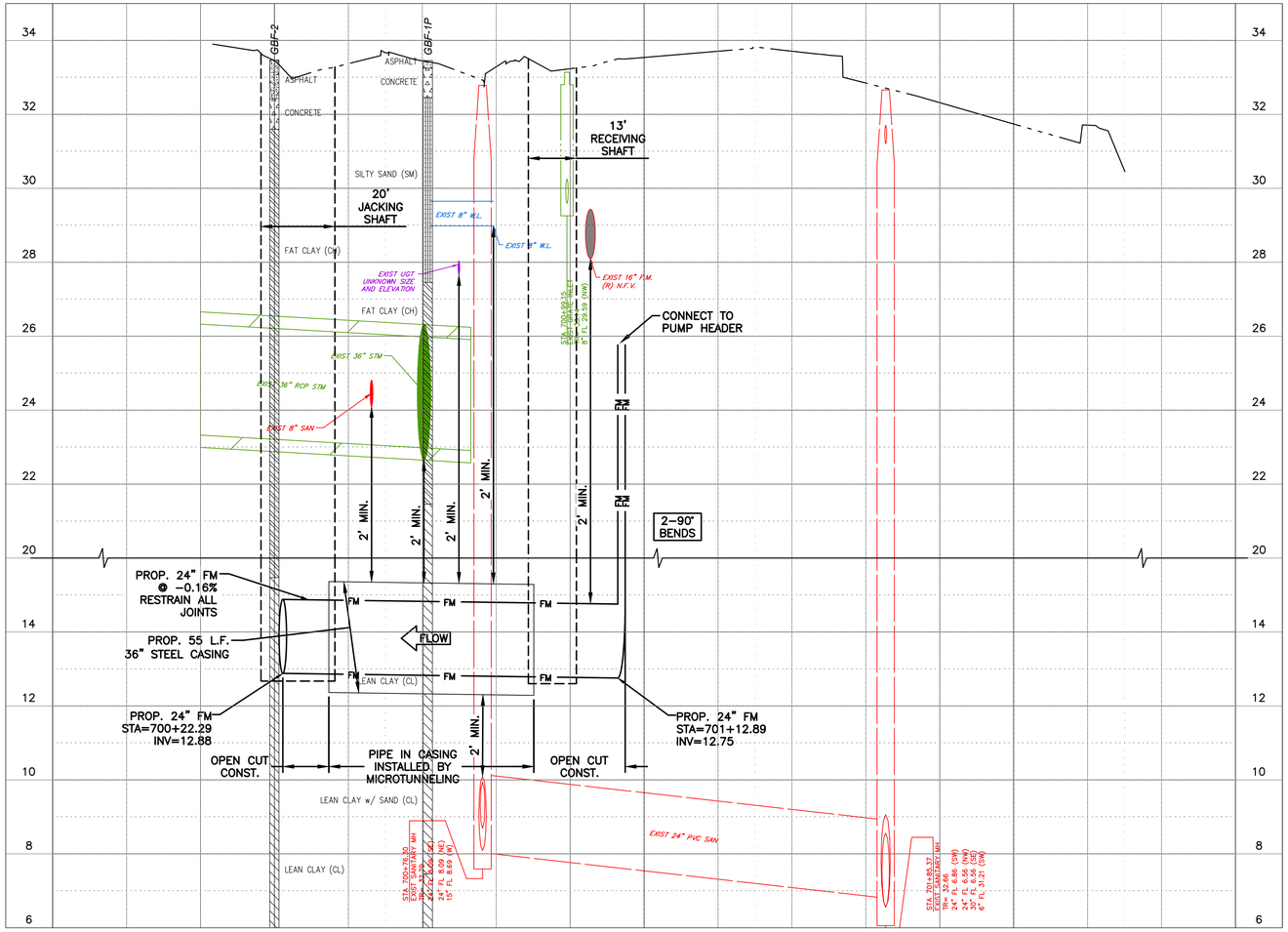
PROFILE
TELEPHONE RD
STA 600+00 TO STA 605+00

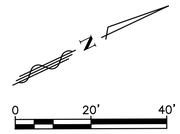
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-28 OF C-70	

PLOTTED: 2/9/2026 5:50 PM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-PP3.dwg

PLOTTED: 2/10/2026 8:28 AM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\p0033391\OneDrive - Parsons Corp\Documents\Jobs\Eddington FM\ENG\CAD\2024-1427_COH EDDINGTON LS & FM - Standard\C-PP3 Parsons.dwg







NOTE:
SHAFT SHAPE AND SIZE ARE SHOWN FOR REFERENCE ONLY. ACTUAL DIMENSIONS SHALL BE DETERMINED BY CONTRACTOR.

BENCHMARK:
ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.
SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR, ELEVATION=37.40'
TBM "V":
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY), ELEVATION=39.79'
TBM "X":
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

NO.	REVISION	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

PARSONS
1 RIVERWAY
SUITE 1100
HOUSTON, TEXAS 77056
PH. 713 871-7000
TBPE FIRM REGISTRATION NO. 8008

60% SUBMITTAL

THIS DOCUMENT IS RELEASED FOR THE PURPOSES OF INTERIM REVIEW UNDER THE AUTHORITY OF

MONICA PATRICIA SUAREZ, P.E.
#99458
2/9/2026

THIS DOCUMENT IS NOT INTENDED FOR BIDDING, PERMITTING AND/OR CONSTRUCTION PURPOSES

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A - EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLAN & PROFILE
EDDINGTON ST
STA 700+00 TO STA 702+76

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-29 OF C-70	

60% SUBMITTAL

PLOTTED: 2/10/2026 9:10 AM

PLOT STYLE: COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_GENERAL NOTES.dwg

GENERAL NOTES

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) LATEST EDITION WITIH REVISIONS DURING THE ENTIRE CONSTRUCTION PERIOD.
2. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM THE LATEST VERSION OF THE TMUTCD.
3. NO LANES SHALL BE CLOSED DURING THE HOURS OF 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM MONDAY THRU FRIDAY WITHOUT APPROVAL OF THE CITY TRAFFIC ENGINEER.
4. NO WORK SHALL BE PERFORMED IN RESIDENTIAL AREAS FROM 7:00 PM TO 7:00 AM.
5. CONTRACTOR SHALL MAINTAIN APPROVED NUMBER OF THROUGH LANES OF TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION WORKING HOURS. TRAFFIC CONTROL PLANS SHALL INCLUDE ONE-WAY AND/OR DETOUR PLANS. CONTRACTOR SHALL MAINTAIN ADA COMPLIANT PEDESTRIAN ACCESS TO BUS STOPS AND ADEQUATE BUS ACCESS TO ALL THE BUS STOPS.
6. CONTRACTOR SHALL MAINTAIN TRAFFIC LANES AND DETOURS ACCORDING TO TRAFFIC CONTROL PLANS DURING WORKING HOURS.
7. CONTRACTOR SHALL COVER OPEN PAVEMENT EXCAVATIONS FOR MINOR UTILITY WORK WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW WHEN FEASIBLE.
8. IF THE CONTRACTOR CHOOSES TO USE A DIFFERENT METHOD OF "TRAFFIC CONTROL PLANS" DURING THE CONSTRUCTION THAN WHAT IS OUTLINED IN THE CONTRACT DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT AN ALTERNATE SET OF TRAFFIC CONTROL PLANS TO THE CITY OF HOUSTON PROJECT MANAGER FOR APPROVAL TEN WORKING DAYS PRIOR TO IMPLEMENTATION. THESE PLANS SHALL BE DRAWN TO SCALE ON REPRODUCIBLE MYLARS AND SHALL BE SEALED BY A LICENSED ENGINEER IN THE STATE OF TEXAS. OFFICE OF CITY ENGINEER, MOBILITY PERMITS SECTION REPRESENTATIVE APPROVAL IS REQUIRED TO ACCEPT THE PROPOSED CHANGES.
9. CONTRACTOR SHALL SECURE LANE/SIDEWALK/BICYCLE FACILITY CLOSURE PERMITS FROM OFFICE OF CITY ENGINEER (MOBILITY PERMIT SECTION AT https://geohub.houstontx.gov) BEFORE IMPLEMENTING THE TRAFFIC CONTROL PLAN. THE APPLICATION MUST BE SUBMITTED AT LEAST TEN DAYS PRIOR TO THE IMPLEMENTATION OF THE TRAFFIC CONTROL PLAN AND/OR BEGINNING CONSTRUCTION WORK. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS, CONSTRUCTION SEQUENCING, AND CONSTRUCTION SCHEDULE WITH THE APPLICATION.
10. CONTRACTOR SHALL HAVE APPROVED TRAFFIC CONTROL PLAN AND PERMIT AT THE JOB SITE FOR INSPECTION AT ALL TIMES.
11. DURING PAVEMENT SURFACE RESTORATION PROJECTS; THE CONTRACTOR SHALL NOT OPEN CLOSED LANES UNTIL THE PAVEMENT SURFACE HAS CURED ENOUGH TO ALLOW VEHICULAR TRAFFIC ACCORDING TO CITY OF HOUSTON STANDARD SPECIFICATIONS.
12. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND COORDINATING ALL CONSTRUCTION ACTIVITIES WITH STAKE HOLDERS IN THE VICINITY INCLUDING EMERGENCY RESPONSE AGENCIES SUCH AS HOUSTON POLICE DEPARTMENT, HOUSTON FIRE DEPARTMENT, AND METROPOLITAN TRANSIT AUTHORITY.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ISSUING ALL WORK DIRECTIVES TO ALL SUB-CONTRACTORS, UTILITY COMPANIES, AND ALL OTHER ENTITIES PERFORMING CONSTRUCTION WORK ASSOCIATED WITH THE PROJECT.
14. NOTHING IN THESE NOTES OR PLANS SHALL RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT; INCLUDING SAFETY OF ALL MODES OF TRANSPORTATION, PERSONS, AND PROPERTY, AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS.
15. THE OFFICE OF CITY ENGINEER (MOBILITY PERMITS GROUP) PER THE DIRECTION OF THE CITY TRAFFIC ENGINEER HAVE THE RIGHT TO DEMAND THE INSTALLATION OF ADDITIONAL TRAFFIC CONTROL DEVICES OR MODIFICATIONS OF THESE PLANS AND NOTES, AS DEEMED NECESSARY TO PROMOTE THE SAFE AND ORDERLY FLOW OF TRAFFIC, INCLUDING PEDESTRIANS AND BICYCLES, THROUGH THE CONSTRUCTION WORK ZONE. THE CONTRACTOR SHALL COMPLY WITH THESE ADDITIONAL REQUESTS OR MODIFICATIONS WITH DUE DILIGENCE.
16. ALL EXISTING TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE MAINTAINED IN VISIBLE LOCATIONS DURING CONSTRUCTION UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM CITY OF HOUSTON PROJECT MANAGER. THE CONTRACTOR SHALL RESTORE OR REPLACE (AT THE DISCRETION OF THE CITY TRAFFIC ENGINEER) ANY PAVEMENT MARKING OR SIGNING DAMAGE DURING CONSTRUCTION OPERATIONS, INCLUDING RAISED PAVEMENT MARKERS (RPMS).
17. WHEN ENTERING OR LEAVING ROADWAYS CARRYING PUBLIC TRAFFIC, THE CONTRACTOR'S EQUIPMENT, WHETHER EMPTY OR LOADED SHALL IN ALL CASES YIELD TO PUBLIC TRAFFIC WITH THE ASSISTANCE OF CONTRACTOR PROVIDED CERTIFIED FLAGGER/PEACE OFFICER.
18. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL CONES AND/OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAYS, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM CITY OF HOUSTON PROJECT MANAGER.
19. SPILLAGE RESULTING FROM HAULING OPERATIONS ALONG OR ACROSS ANY PUBLIC TRAVELED WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
20. THE CONTRACTOR SHALL SUBMIT AN APPLICATION FOR TEMPORARY PARKING RESTRICTIONS IF THERE ARE PARKING METERS LOCATED AT THE PROPOSED LANE CLOSURES FROM PARKING MANAGEMENT DIVISION (832-393-8690) AT LEAST TEN BUSINESS DAYS BEFORE IMPLEMENTATION OF LANE CLOSURES. IN ADDITION, TEMPORARY NO PARKING SIGNS SHALL BE POSTED 24 HOURS PRIOR TO COMMENCEMENT OF WORK.
21. ADDITIONAL OFF DUTY OFFICERS/FLAGGERS MAY BE REQUESTED TO DIRECT TRAFFIC WHEN LANES ARE BLOCKED AT THE DISCRETION OF THE CITY PROJECT MANAGER EVEN IF THEY ARE NOT SPECIFICALLY IDENTIFIED ON THE PROJECT PLANS.
22. THE CONTRACTOR SHALL REPLACE WITHIN 72 HOURS, ALL TRAFFIC SIGNAL LOOP DETECTORS DAMAGED DURING CONSTRUCTION.
23. IN GENERAL, A SOLAR POWERED FLASHING ARROW BOARD SHALL BE REQUIRED ON ALL MAJOR THOROUGHFARE LANES CLOSURES. EXCEPTIONS TO FLASHING ARROW BOARDS AND/OR IMPLEMENTATION ON RESIDENTIAL LANE CLOSURES SHALL BE APPROVED BY CITY TRAFFIC ENGINEER.
24. APPROVED TRAFFIC CONTROL PLAN SHALL BE IN PLACE BEFORE STARTING ANY EXCAVATION.
25. WATER FILLED BARRIERS CAN BE USED AS INSTRUCTED BY THE ENGINEER AND APPROVED BY THE CITY FOR PROJECTS WHERE SPACE IS LIMITED AND HEAVY EQUIPMENT TO PLACE CONCRETE BARRIERS IS NOT FEASIBLE. WATER FILLED BARRIERS SHALL NOT BE USED ON ROADWAYS WITH A POSTED SPEED LIMIT MORE THAN 45 MPH.
26. WATER FILLED BARRIERS MUST BE INSTALLED AND MAINTAINED PER THE MANUFACTURER'S REQUIREMENTS AND ROUTINELY INSPECTED FOR DEFECTS.
27. IF WATER FILLED BARRIER IS PROVIDED, USE ENVIRONMENTALLY SAFE ANTI-FREEZING AGENT IN THE WATER WHEN IT IS APPLICABLE PER MANUFACTURER SPECIFICATIONS AND RECOVER AGENT WHEN THE BARRIER IS DRAINED.
28. DISPOSE OF WATER AND AGENT PROPERLY. DO NOT DRAIN WATER FILLED BARRIER INTO OR ACROSS AN EXISTING TRAVEL LANE.
29. PROVIDE BARRIER UNITS THAT ARE CAPABLE OF BEING LIFTED AND MOVED WHEN FILLED IF DRAINING IS NOT POSSIBLE.
30. PROVIDE WATER FILLED BARRIER THAT ACTS AS ITS OWN FREE STANDING, NON-REDIRECTIVE END TREATMENT.
31. WHEN WATER FILLED BARRIERS ARE USED TO CHANNELIZE PEDESTRIANS, THEY MUST HAVE A CONTINUOUS DETECTABLE BOTTOM FOR USERS OF LONG CANES AND THE TOP OF THE UNIT SHALL NOT BE LESS THAN 32 INCHES IN HEIGHT.
32. ANY CLOSURE OF A PEDESTRIAN OR BICYCLE FACILITY SHALL REQUIRE THE SHORTEST DETOUR THAT MAINTAINS THE SAFETY OF PEDESTRIAN AND/OR BICYCLISTS.

SPACING FOR CHANNELIZING DEVICES

A. PLASTIC DRUMS ON MERGING TAPER @ 30' C – C WITH CHEVRON SIGN @ 60' C – C AND WARNING LIGHTS FOR OVERNIGHT CLOSURE.

B. PLASTIC DRUMS ON DOWNSTREAM TAPER @ 30' C – C (RETURN TAPER AND BARRICADE ARE OPTIONAL AND DIVIDED ROADWAY SECTION)

C. PLASTIC DRUMS ON RADII @ 35' C –C.

D. PLASTIC DRUMS ON TANGENT @ 35' C – C WITH VERTICAL PANEL AT 70' C – C AND APPROVED WARNING LIGHT @ 70' C – C (FOR OVERNIGHT CLOSURE).

E. PLASTIC DRUMS IN FRONT OF CONSTRUCTION ZONE @ 20' C – C WITH VERTICAL PANEL AT 40' C – C AND APPROVED WARNING LIGHT @ 40' C – C (FOR OVERNIGHT CLOSURE).

F. CONCRETE TRAFFIC BARRIER (CTB) OR LOW PROFILE CONCRETE TRAFFIC BARRIER (LPCTB) WITH APPROVED REFLECTORS @ 10' C – C IF PAVEMENT DROP IS GREATER THAN 1 FOOT.

G. PLASTIC DRUMS W/GUARD RAIL MOUNTED.

H. SELF- RIGHTING VERTICAL PANEL SPACING.
- 4 LANES TO 2 LANES UNDIVIDED ROADWAY SECTION @ 20' C – C.
- 4 LANES DIVIDED ROADWAY TO ONE SIDE TWO WAY ROADWAY @ 20' C – C.
- LEFT LANE AND RIGHT LANE STORAGE BAYS @ 15' C – C.

I. SPACING SHOWN ON TRAFFIC CONTROL SHALL SUPERSEDE THE ABOVE SPACING.

J. SPACING MAY BE ADJUSTED TO PROVIDE DRIVEWAYS, INTERSECTIONS AND /OR MEDIAN OPENINGS.

TABLE C3 – TYPICAL SIGN SPACING, TAPER LENGTHS, AND SUGGESTED SPACING OF CHANNELIZATION DEVICES

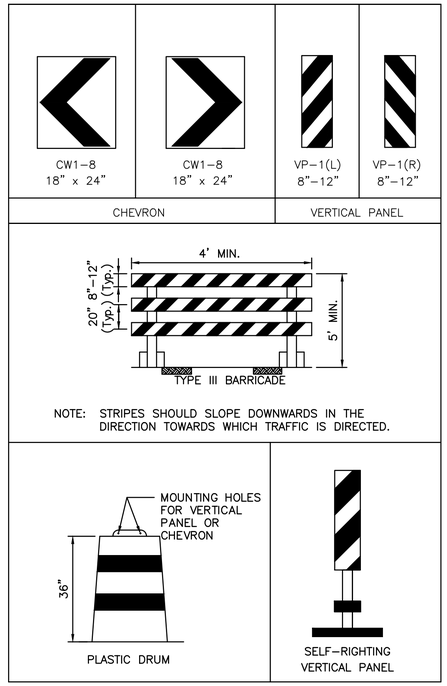
POSTED SPEED (MPH)	SIGN SPACING "X" (FEET)	MIN. DESIRABLE TAPER LENGTH "L"			SUGGESTED MAXIMUM SPACING OF DEVICE	
		10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT
30	120'	150'	165'	180'	30'	60'–75'
~~35~~	~~160'~~	~~205'~~	~~225'~~	~~245'~~	~~35'~~	~~70'–90'~~
~~40~~	~~240'~~	~~265'~~	~~295'~~	~~320'~~	~~40'~~	~~80'–100'~~
~~45~~	~~320'~~	~~450'~~	~~495'~~	~~540'~~	~~45'~~	~~90'–110'~~
~~50~~	~~400'~~	~~500'~~	~~550'~~	~~600'~~	~~50'~~	~~100'–125'~~
~~55~~	~~500'~~	~~550'~~	~~605'~~	~~660'~~	~~55'~~	~~110'–140'~~

TABLE C4 – STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

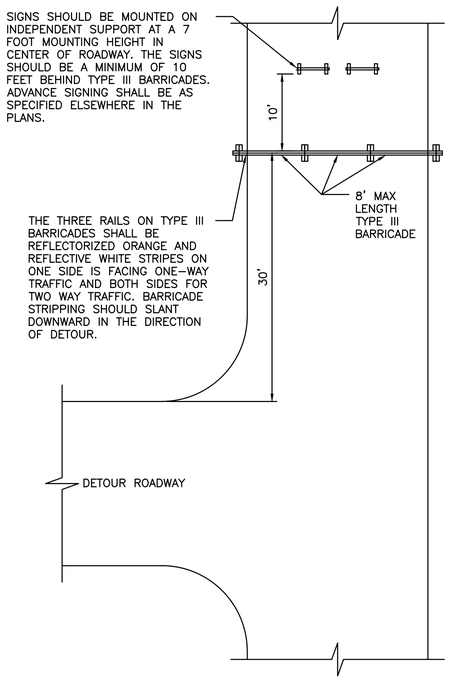
POSTED SPEED (MPH)	DISTANCE "D" (FEET)
30	200
~~35~~	~~250~~
~~40~~	~~305~~
~~45~~	~~360~~
~~50~~	~~425~~
~~55~~	~~495~~

SITE SPECIFIC NOTES

1. A UNIFORMED PEACE OFFICER SHALL DIRECT TRAFFIC DURING INTERSECTION CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE WITH RESIDENTS AND COMMERCIAL BUSINESS OWNERS FOR THE CONSTRUCTION ALONG STREETS.
3. NO CONSECUTIVE CROSS STREETS SHALL BE CLOSED AT SAME TIME.
4. DO NOT BLOCK INTERSECTIONS OR DRIVEWAYS WITH ANY CHANNELIZING DEVICE.
5. TWO ADJACENT CROSS STREETS CANNOT BE CONVERTED INTO ONE-WAY AT THE SAME TIME FOR CONSTRUCTION.
6. CONSTRUCTION SHOULD BE LIMITED TO 1 BLOCK OR 300' OR AS DIRECTED BY CITY ENGINEER.
7. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW.



CHANNELIZATION AND BARRICADES



PLAN VIEW
TYPE III BARRICADE (POST AND SKID)
TYPICAL APPLICATION

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN
GENERAL NOTES

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-30 OF C-70	

60% SUBMITTAL

PLOTTED: 2/10/2026 9:10 AM

PLOT STYLE: COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_GENERAL NOTES.dwg

CONSTRUCTION NARRATIVE

STARWAY ST:

1. CLOSE STARWAY ST USING THE TYPICAL TCP-01.
2. ALLOW TRAFFIC FLOW USING FLAGGER OPERATION.
3. CONSTRUCT THE FORCE MAIN.
4. REMOVE ALL THE TRAFFIC CONTROL DEVICES AND RESTORE 2-WAY OPERATION.

CANADA DRY ST:

1. CLOSE STARWAY ST AND CANADA DRY ST USING THE TYPICAL TCP-01.
2. ALLOW TRAFFIC FLOW USING FLAGGER OPERATION.
3. CONSTRUCT THE FORCE MAIN.
4. REMOVE ALL THE TRAFFIC CONTROL DEVICES AND RESTORE 2-WAY OPERATION.

VAUGHN ST:

1. CLOSE CANADA DRY ST AND VAUGHN ST USING THE TYPICAL TCP-02 DETAIL.
2. ALLOW TRAFFIC FLOW USING FLAGGER OPERATION.
3. CONSTRUCT THE FORCE MAIN.
4. REMOVE ALL THE TRAFFIC CONTROL DEVICES AND RESTORE 2-WAY OPERATION.

ELEANOR TINSLEY WAY:

1. CLOSE VAUGHN ST AND ELEANOR TINSLEY WAY USING THE TYPICAL TCP-01 DETAIL.
2. ALLOW TRAFFIC FLOW USING FLAGGER OPERATION.
3. CONSTRUCT THE FORCE MAIN AT THE INTERSECTION.
4. CLOSE ELEANOR TINSLEY WAY FROM STA 503+00 TO 508+00 USING TYPICAL TCP-01.
5. ALLOW ONLY NORTHBOUND TRAFFIC TOWARDS IH 45 AND CONSTRUCT THE FORCE MAIN.
6. USE DETOUR – 01 FOR DETOURING THE SOUTHBOUND TRAFFIC ALONG ELEANOR TINSLEY WAY.
7. REMOVE ALL THE TRAFFIC CONTROL DEVICES AND RESTORE 2-WAY OPERATION.

DUMBLE ST:

1. CLOSE DUMBLE ST FROM IH 45 NORTHBOUND FRONTAGE RD TO LOMBARDY ST.
2. CONSTRUCT THE FORCE MAIN AT THE INTERSECTION.
3. USE DETOUR – 02 FOR DETOURING THE TRAFFIC.
4. REMOVE THE WORKZONE AND RESTORE TRAFFIC.

PHASE IA:

1. CLOSE SOUTHBOUND LANE FROM LOMBARDY ST TO FOURCADE ST ALONG DUMBLE ST.
2. CONSTRUCT THE FORCE MAIN USING ROLLING OPERATION.
3. ALLOW NORTHBOUND TRAFFIC AND DETOUR THE SOUTHBOUND TRAFFIC USING DETOUR – 03.
4. REMOVE WORKZONE AND RESTORE TRAFFIC FLOW.

PHASE IB:

1. CLOSE NORTHBOUND LANE FROM FOURCADE ST TO TELEPHONE RD ALONG DUMBLE ST.
2. CONSTRUCT THE FORCE MAIN USING ROLLING OPERATION.
3. ALLOW SOUTHBOUND TRAFFIC AND DETOUR THE NORTHBOUND TRAFFIC USING DETOUR – 03.
4. REMOVE WORKZONE AND RESTORE TRAFFIC FLOW.

TELEPHONE RD:

1. CLOSE BOTH THE EASTBOUND LANES ALONG TELEPHONE RD AS SHOWN ON THE PLANS.
2. REFER TO TEMPORARY SIGNAL PLANS (TO BE DEVELOPED UPON CITY'S APPROVAL).
3. CONSTRUCT THE FORCE MAIN.
4. REMOVE WORKZONE AND RESTORE TRAFFIC FLOW.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN
CONSTRUCTION NARRATIVE

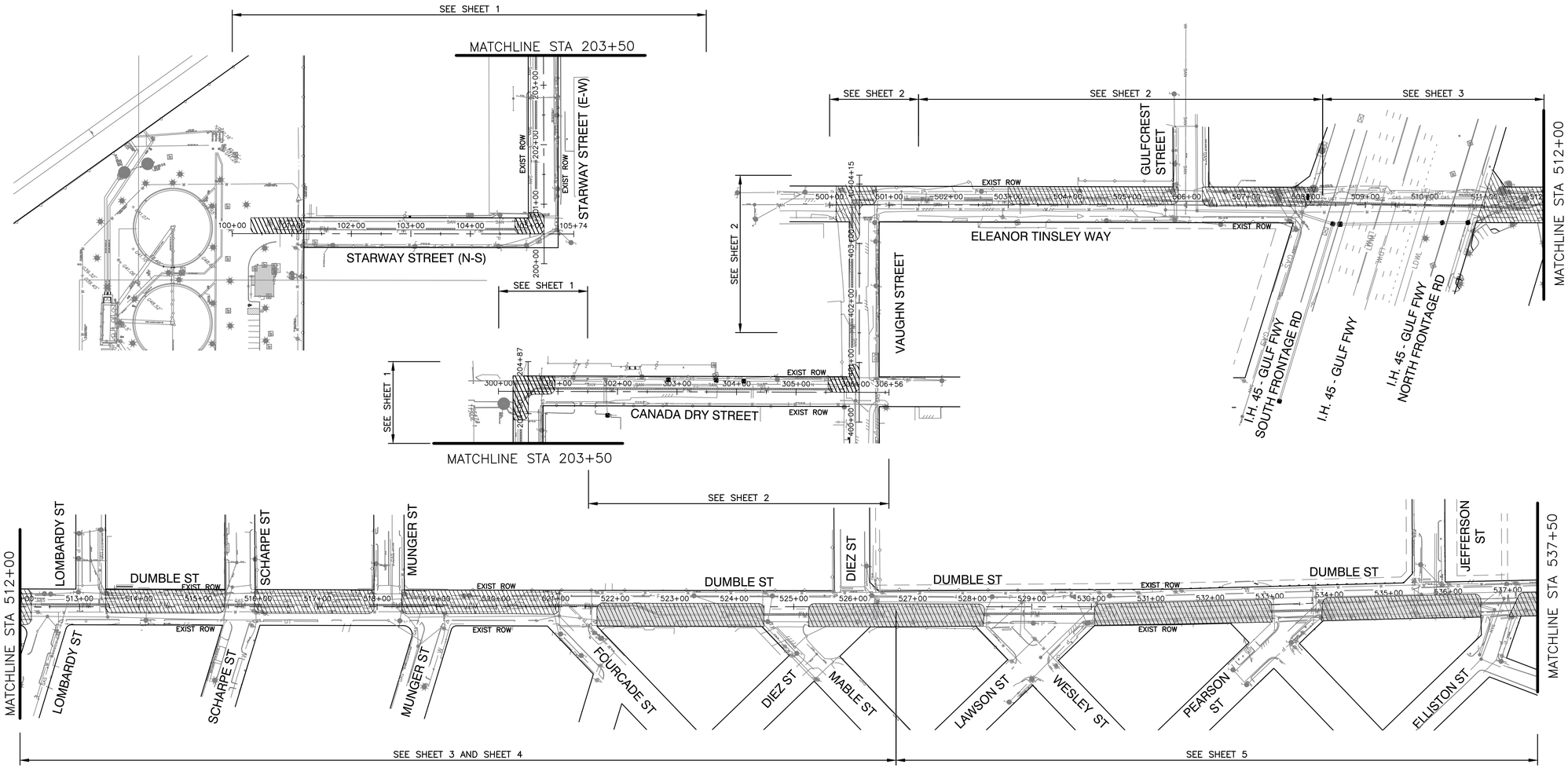
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-31 OF C-70	

60% SUBMITTAL

PLOTTED: 2/10/2026 9:11 AM

PLOT STYLE: COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-OS-TCP.dwg



LEGEND

- PHASE 1A
- PHASE 1B

STREET NAMES	SPEED LIMIT
STARWAY STREET	30 MPH
CANADA DRY ST	30 MPH
VAUGHN STREET	30 MPH
ELEANOR TINSLEY WAY	30 MPH
IH-45 – SB FRONTAGE	40 MPH
S LOCKWOOD DR	35 MPH
DUMBLE ST	30 MPH
TELEPHONE RD	30 MPH
BROADMOOR ST	40 MPH
IH-45 – NB FRONTAGE	40 MPH

N

0 100' 200'

SCALE: 1"=100'

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1060
Houston, Texas 77079
713.541.3330 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN OVERALL LAYOUT

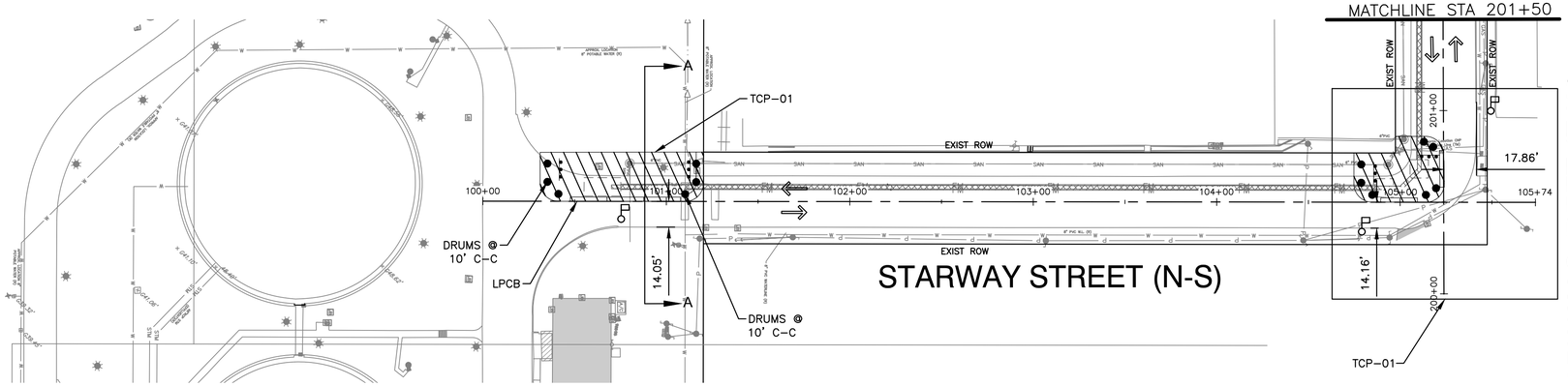
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-32 OF C-70	

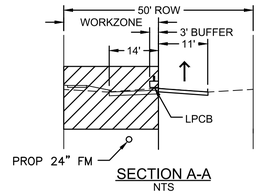
60% SUBMITTAL

PLOTTED: 2/10/2026 9:12 AM

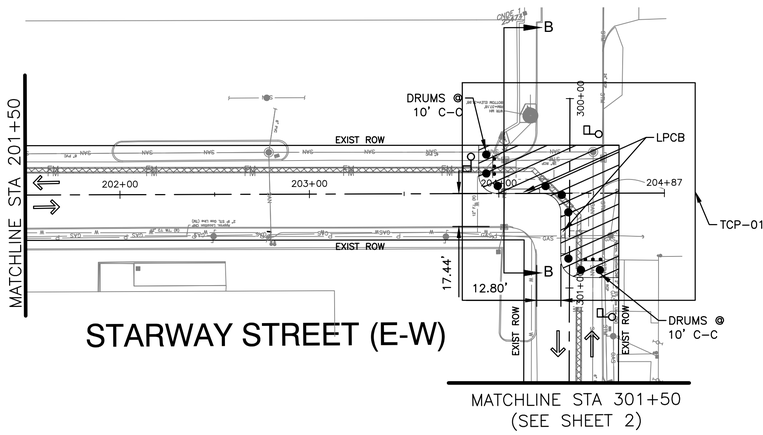
PLOT STYLE: COH.ctb

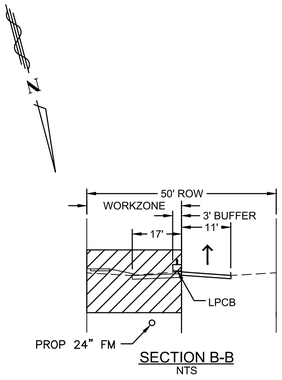
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34.dwg





SECTION A-A
NTS





SECTION B-B
NTS

LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

0 40' 80'

SCALE: 1"=40'

NOTES:

1. THIS TRAFFIC CONTROL PLAN PRESENTS MINIMUM REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR CHANGES REQUIRED AS PER/ACCORDING TO EXISTING FILED CONDITIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COVERING ALL EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH THIS TRAFFIC CONTROL PLANS AS NECESSARY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY PAVEMENT MARKINGS AS REQUIRED.
4. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW.
5. CONTRACTOR SHALL USE DRILLING CLOSURE METHOD FOR CONSTRUCTING THE FORCE MAIN, ONE BLOCK AT A TIME OR 300' MAX DURING ONE-WAY OPERATION AND 75' MAX DURING TWO-WAY OPERATION.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
7. NO CONSECUTIVE STREET CLOSURES ARE ALLOWED.
8. CONTRACTOR TO REFER TO TCP-01 DETAIL FOR DETAILED SIGNAGE.

A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W
ROAD WORK AHEAD	END DETOUR	ROAD CLOSED	DO NOT ENTER		ONE WAY		ONE WAY	DETOUR	DETOUR	ROAD CLOSED AHEAD	DETOUR AHEAD	ROAD CLOSED TO THRU TRAFFIC	DETOUR	DETOUR	DETOUR	BEGIN ONE WAY	STREET 1		END ROAD WORK
CW20-1D 48 X 48	M4-8a 24 X 18	R11-2 48 X 30	R5-1 36 X 36	R3-1	R6-2L	R3-2	R6-2R	M4-10L 48 X 18	M4-10R 48 X 18	CW20-3D 48 X 48	CW20-2D 48 X 48	R11-4	M4-9R 30 X 30	M4-9L 30 X 30	M4-9S 30 X 24		M4-9N 30 X 12	TYPE III BARRICADE	G20-2A 36X18

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN
STARWAY ST

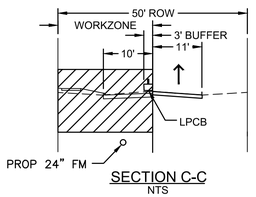
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-33 OF C-70	

60% SUBMITTAL

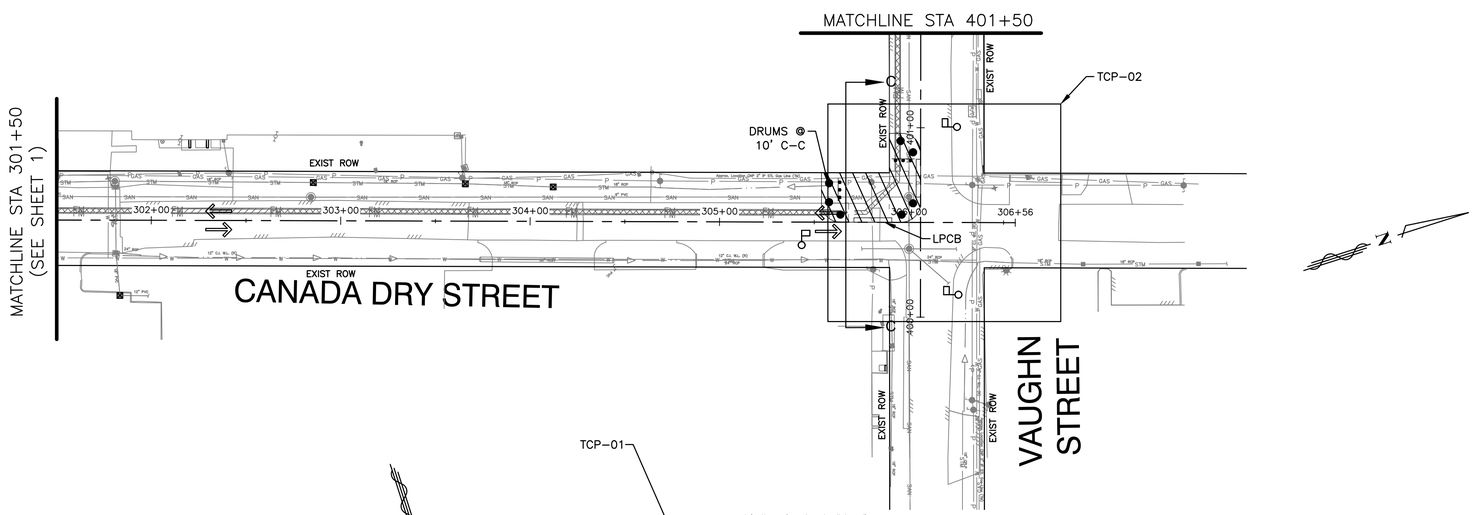
PLOTTED: 2/10/2026 9:12 AM

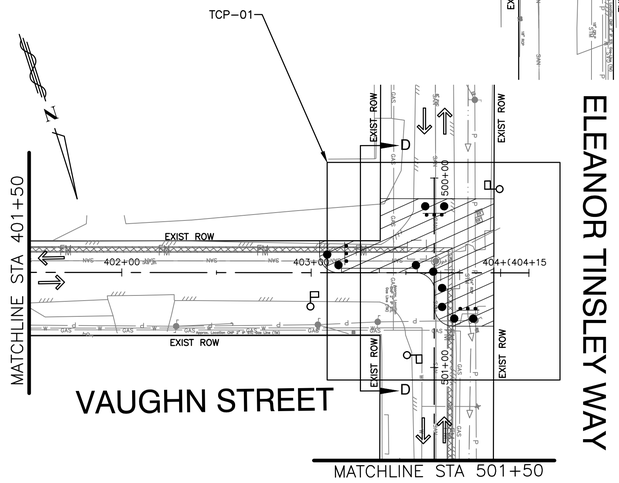
PLOT STYLE: COH.ctb

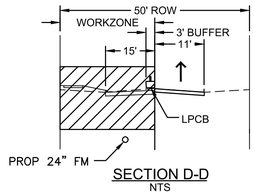
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34.dwg



SECTION C-C
NTS







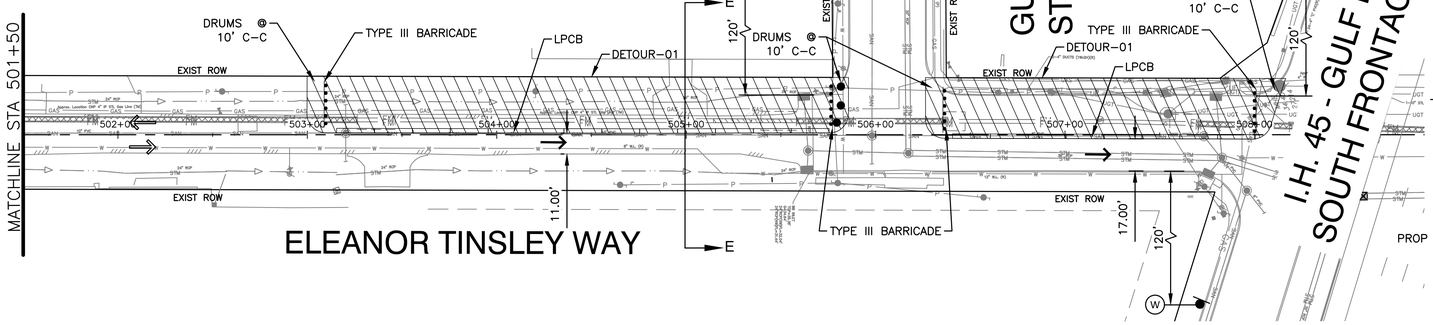
SECTION D-D
NTS

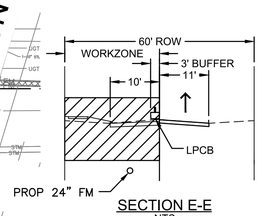
LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

NOTES:

1. THIS TRAFFIC CONTROL PLAN PRESENTS MINIMUM REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR CHANGES REQUIRED AS PER/ACCORDING TO EXISTING FILED CONDITIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COVERING ALL EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH THIS TRAFFIC CONTROL PLANS AS NECESSARY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY PAVEMENT MARKINGS AS REQUIRED.
4. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW.
5. CONTRACTOR SHALL USE DRILLING CLOSURE METHOD FOR CONSTRUCTING THE FORCE MAIN, ONE BLOCK AT A TIME OR 300' MAX DURING ONE-WAY OPERATION AND 75' MAX DURING TWO-WAY OPERATION.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
7. NO CONSECUTIVE STREET CLOSURES ARE ALLOWED.
8. REFER TO TCP-1 AND TCP-02 DETAILS FOR T-INTERSECTION AND 4-WAY INTERSECTIONS RESPECTIVELY.
9. REFER TO DETOUR - 01 FOR ELEANOR TINSLEY WAY DETOUR.





SECTION E-E
NTS

SCALE: 1"=40'

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1060
Houston, Texas 77079
713.541.3330 www.ardurra.com
TBPE Registration Number: F-10053

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN VAUGHN ST, CANADA DRY ST & ELEANOR TINSLEY WAY

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-34 OF C-70	

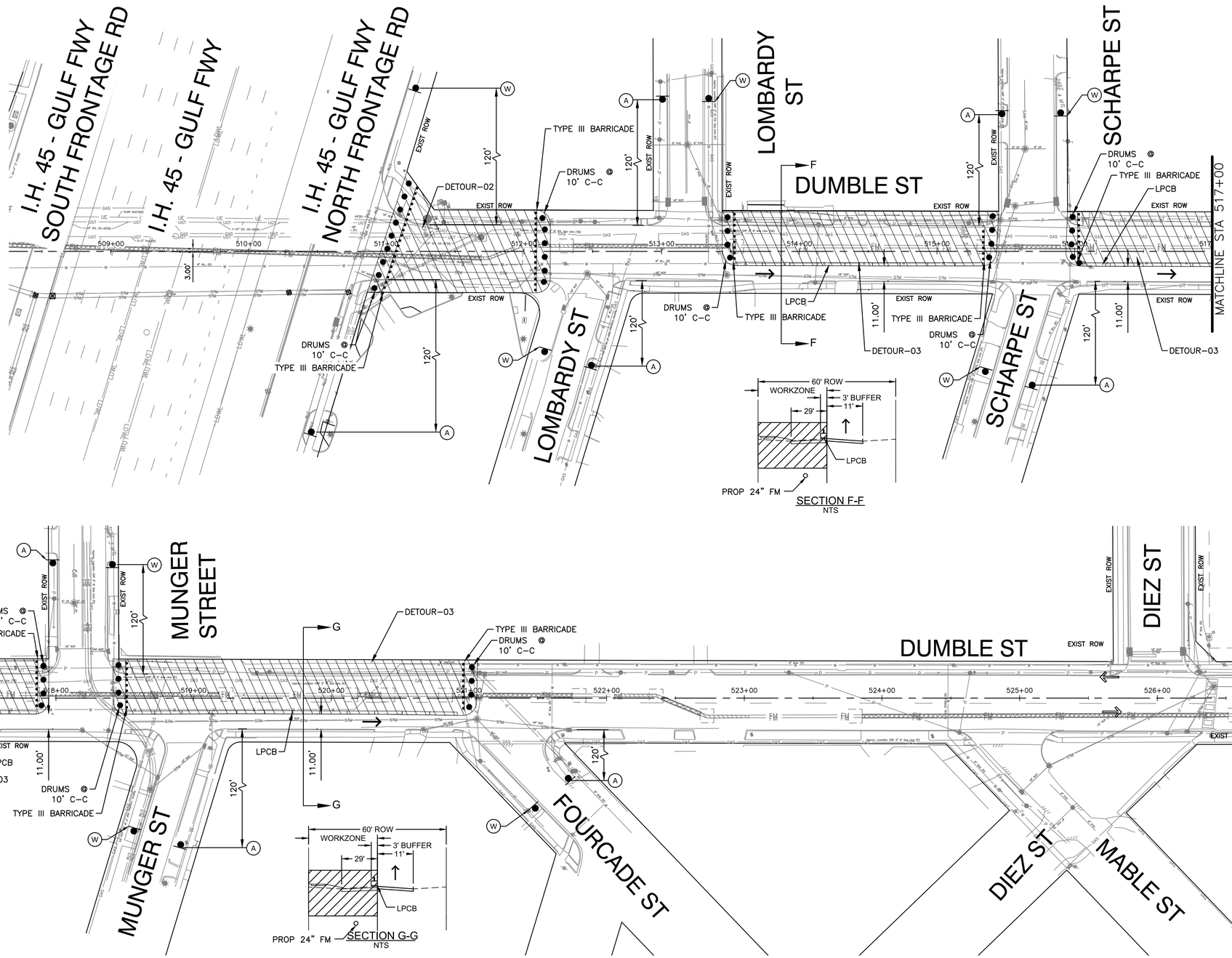
A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W
ROAD WORK AHEAD	END DETOUR	ROAD CLOSED	DO NOT ENTER		ONE WAY		ONE WAY	DETOUR	DETOUR	ROAD CLOSED AHEAD	DETOUR AHEAD	ROAD CLOSED TO THRU TRAFFIC	DETOUR	DETOUR	DETOUR	BEGIN ONE WAY	STREET 1	TYPE III BARRICADE	END ROAD WORK
CW20-1D 48 X 48	M4-8a 24 X 18	R11-2 48 X 30	R5-1 36 X 36	R3-1	R6-2L	R3-2	R6-2R	M4-10L 48 X 18	M4-10R 48 X 18	CW20-3D 48 X 48	CW20-2D 48 X 48	R11-4	M4-9R 30 X 30	M4-9L 30 X 30	M4-9S 30 X 24		M4-9N 30 X 12		G20-2A 36X18

60% SUBMITTAL

PLOTTED: 2/10/2026 9:12 AM

PLOT STYLE: COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34.dwg



LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

NOTES:

1. THIS TRAFFIC CONTROL PLAN PRESENTS MINIMUM REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR CHANGES REBURIED AS PER/ACCORDING TO EXISTING FILED CONDITIONS.
2. CONTRACTOR SHALL BE IRRESPONSIBLE FOR COVERING ALL EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH THIS TRAFFIC CONTROL PLANS AS NECESSARY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY PAVEMENT MARKINGS AS REQUIRED.
4. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW.
5. CONTRACTOR SHALL USE DRILLING CLOSURE METHOD FOR CONSTRUCTING THE FORCE MAIN, ONE BLOCK AT A TIME OR 300' MAX DURING ONE-WAY OPERATION AND 75' MAX DURING TWO-WAY OPERATION.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
7. NO CONSECUTIVE STREET CLOSURES ARE ALLOWED.
8. REFER TO DETOUR – 02 FOR IH-45 FRTG RD AND DUMBLE STREET INTERSECTION DETOUR.
9. REFER TO DETOUR – 03 FOR DETOURS ALONG DUMBLE STREET.

0 40' 80'

SCALE: 1"=40'

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10033

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 3405 1

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN DUMBLE ST – PHASE IA

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-35 OF C-70	

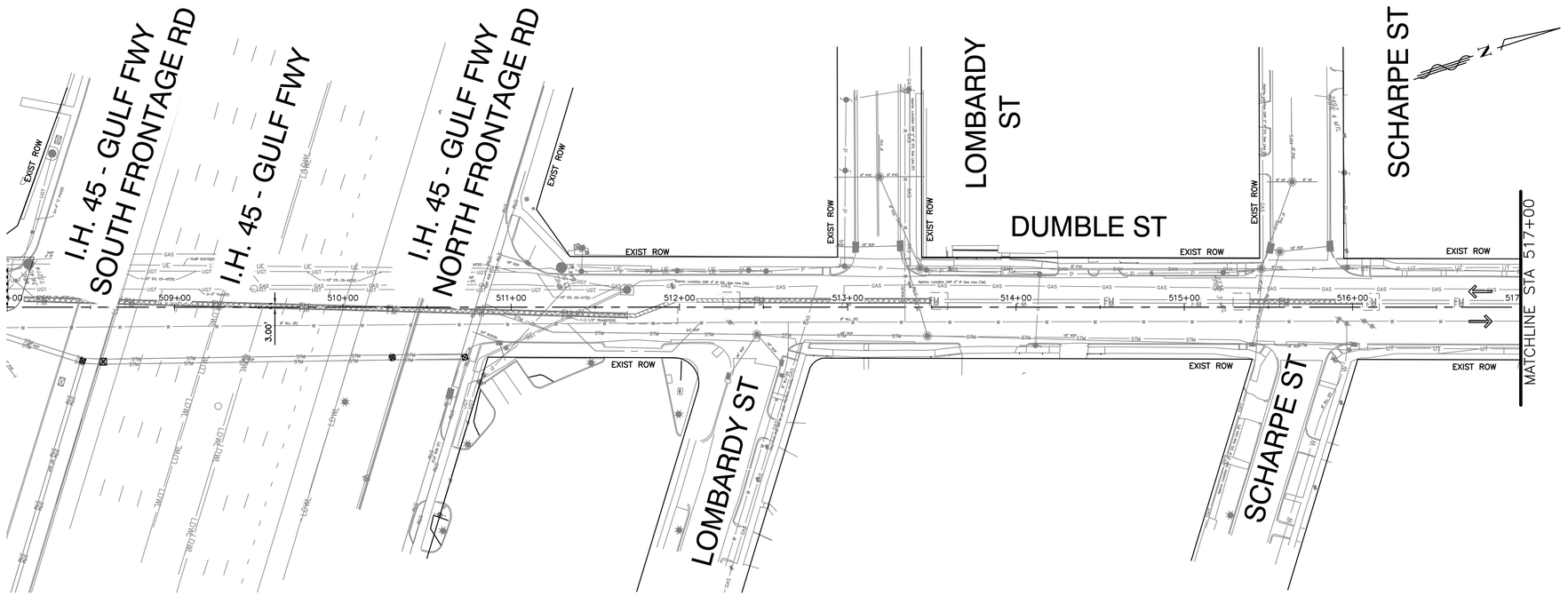
A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W
ROAD WORK AHEAD	END DETOUR	ROAD CLOSED	DO NOT ENTER		ONE WAY		ONE WAY	DETOUR	DETOUR	ROAD CLOSED AHEAD	DETOUR AHEAD	ROAD CLOSED TO THRU TRAFFIC	DETOUR	DETOUR	DETOUR	BEGIN ONE WAY	STREET 1		END ROAD WORK
CW20-1D 48 X 48	M4-8a 24 X 18	R11-2 48 X 30	R5-1 36 X 36	R3-1	R6-2L	R3-2	R6-2R	M4-10L 48 X 18	M4-10R 48 X 18	CW20-3D 48 X 48	CW20-2D 48 X 48	R11-4	M4-9R 30 X 30	M4-9L 30 X 30	M4-9S 30 X 24		M4-9N 30 X 12	TYPE III BARRICADE	G20-2A 36X18

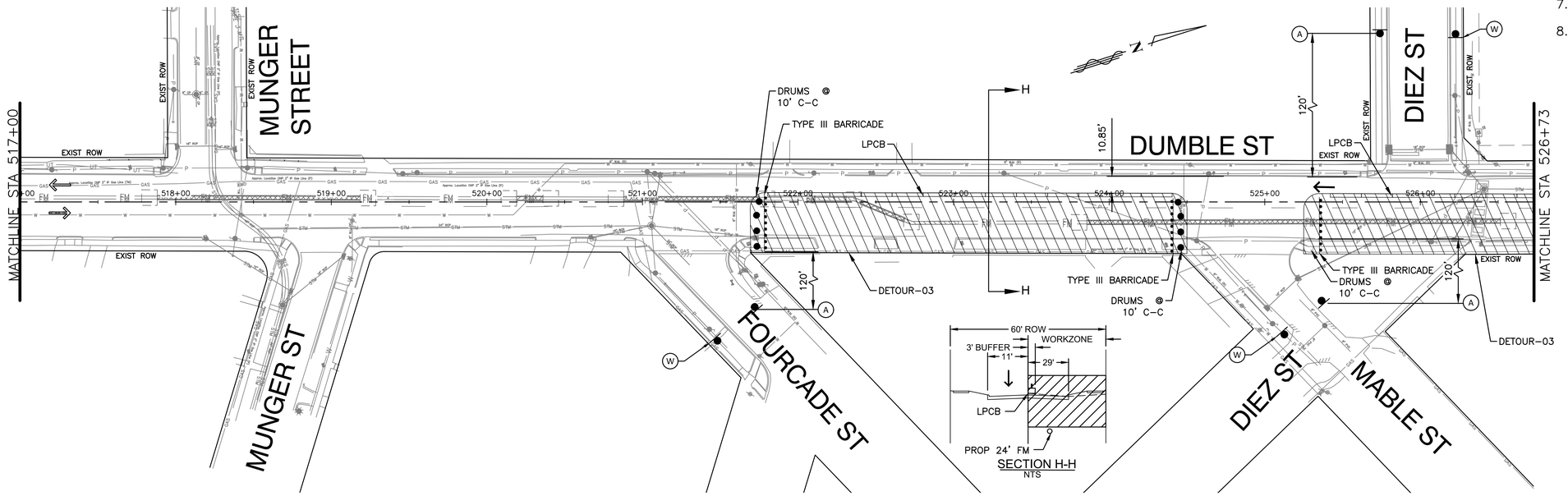
60% SUBMITTAL

PLOTTED: 2/10/2026 9:12 AM

PLOT STYLE: COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34.dwg





LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

NOTES:

1. THIS TRAFFIC CONTROL PLAN PRESENTS MINIMUM REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR CHANGES REBURIED AS PER/ACCORDING TO EXISTING FILED CONDITIONS.
2. CONTRACTOR SHALL BE IRRESPONSIBLE FOR COVERING ALL EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH THIS TRAFFIC CONTROL PLANS AS NECESSARY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY PAVEMENT MARKINGS AS REQUIRED.
4. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW.
5. CONTRACTOR SHALL USE DRILLING CLOSURE METHOD FOR CONSTRUCTING THE FORCE MAIN, ONE BLOCK AT A TIME OR 300' MAX DURING ONE-WAY OPERATION AND 75' MAX DURING TWO-WAY OPERATION.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
7. NO CONSECUTIVE STREET CLOSURES ARE ALLOWED.
8. REFER TO DETOUR - 03 FOR DETOURS ALONG DUMBLE STREET.

0 40' 80'

SCALE: 1"=40'

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 3405 1

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A - EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN DUMBLE ST - PHASE IB

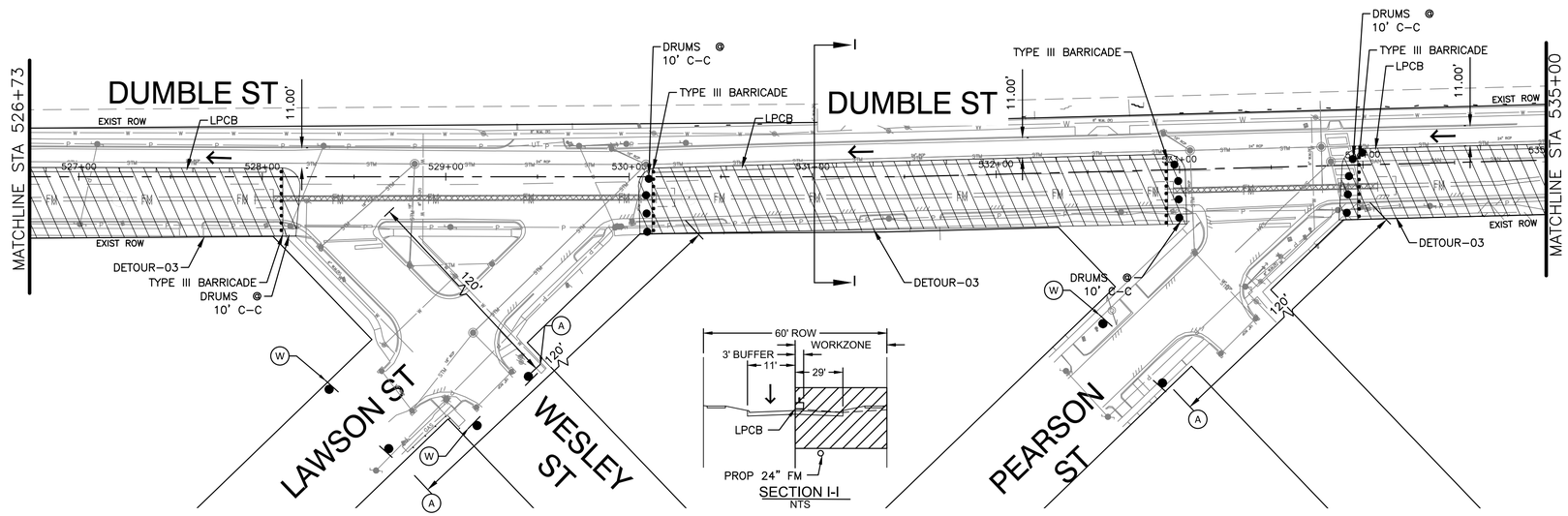
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-36 OF C-70	

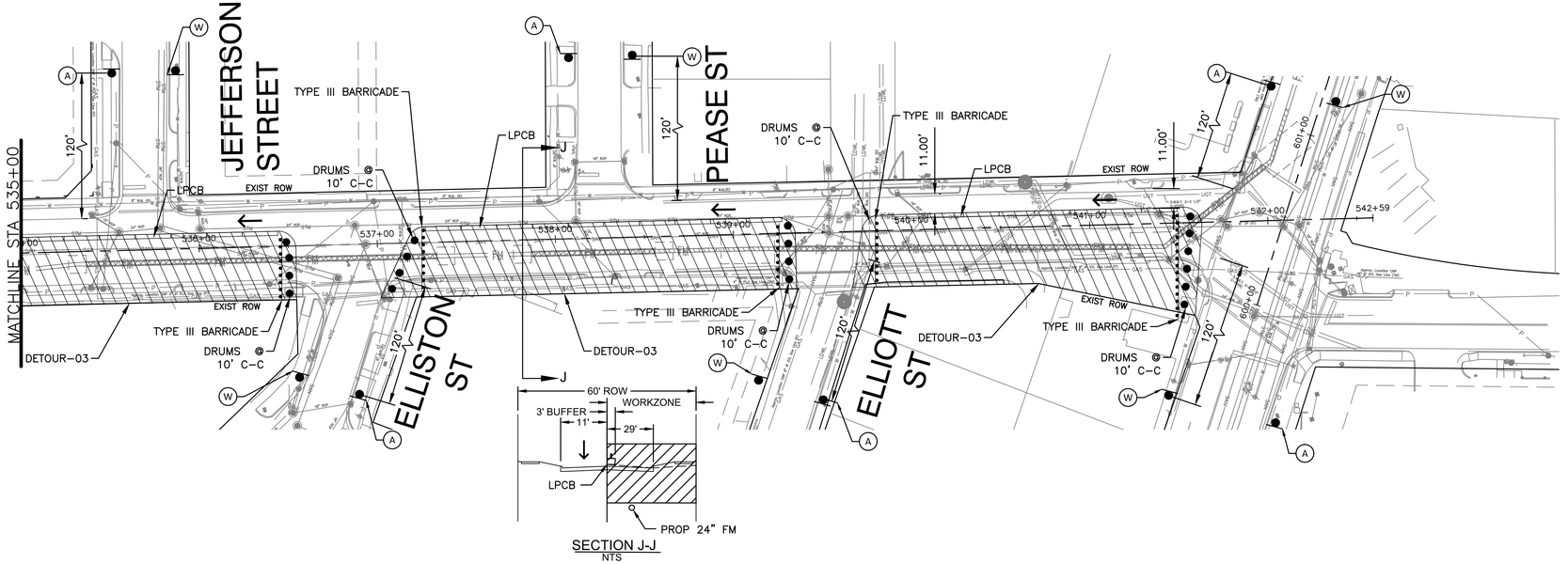
A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W
ROAD WORK AHEAD	END DETOUR	ROAD CLOSED	DO NOT ENTER		ONE WAY		ONE WAY	DETOUR	DETOUR	ROAD CLOSED AHEAD	DETOUR AHEAD	ROAD CLOSED TO THRU TRAFFIC	DETOUR	DETOUR	DETOUR	BEGIN ONE WAY	STREET 1		END ROAD WORK
CW20-1D 48 X 48	M4-8a 24 X 18	R11-2 48 X 30	R5-1 36 X 36	R3-1	R6-2L	R3-2	R6-2R	M4-10L 48 X 18	M4-10R 48 X 18	CW20-3D 48 X 48	CW20-2D 48 X 48	R11-4	M4-9R 30 X 30	M4-9L 30 X 30	M4-9S 30 X 24		M4-9N 30 X 12	TYPE III BARRICADE	G20-2A 36X18

60% SUBMITTAL

PLOTTED: 2/10/2026 9:13 AM

PLOT STYLE: COH.ctb





LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

NOTES:

1. THIS TRAFFIC CONTROL PLAN PRESENTS MINIMUM REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR CHANGES REBURIED AS PER/ACCORDING TO EXISTING FILED CONDITIONS.
2. CONTRACTOR SHALL BE IRRESPONSIBLE FOR COVERING ALL EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH THIS TRAFFIC CONTROL PLANS AS NECESSARY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY PAVEMENT MARKINGS AS REQUIRED.
4. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW.
5. CONTRACTOR SHALL USE DRILLING CLOSURE METHOD FOR CONSTRUCTING THE FORCE MAIN, ONE BLOCK AT A TIME OR 300' MAX DURING ONE-WAY OPERATION AND 75' MAX DURING TWO-WAY OPERATION.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
7. NO CONSECUTIVE STREET CLOSURES ARE ALLOWED.
8. REFER TO TCP – 01 FOR CLOSURE ALONG DUMBLE STREET.
9. REFER TO DETOUR – 03 FOR DETOURS ALONG DUMBLE STREET.

0 40' 80'

SCALE: 1"=40'

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN DUMBLE ST – PHASE IB

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-37 OF C-70	

A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W
ROAD WORK AHEAD	END DETOUR	ROAD CLOSED	DO NOT ENTER		ONE WAY		ONE WAY	DETOUR	DETOUR	ROAD CLOSED AHEAD	DETOUR AHEAD	ROAD CLOSED TO THRU TRAFFIC	DETOUR	DETOUR	DETOUR	BEGIN ONE WAY	STREET 1		END ROAD WORK
CW20-1D 48 X 48	M4-8a 24 X 18	R11-2 48 X 30	R5-1 36 X 36	R3-1	R6-2L	R3-2	R6-2R	M4-10L 48 X 18	M4-10R 48 X 18	CW20-3D 48 X 48	CW20-2D 48 X 48	R11-4	M4-9R 30 X 30	M4-9L 30 X 30	M4-9S 30 X 24		M4-9N 30 X 12	TYPE III BARRICADE	G20-2A 36X18

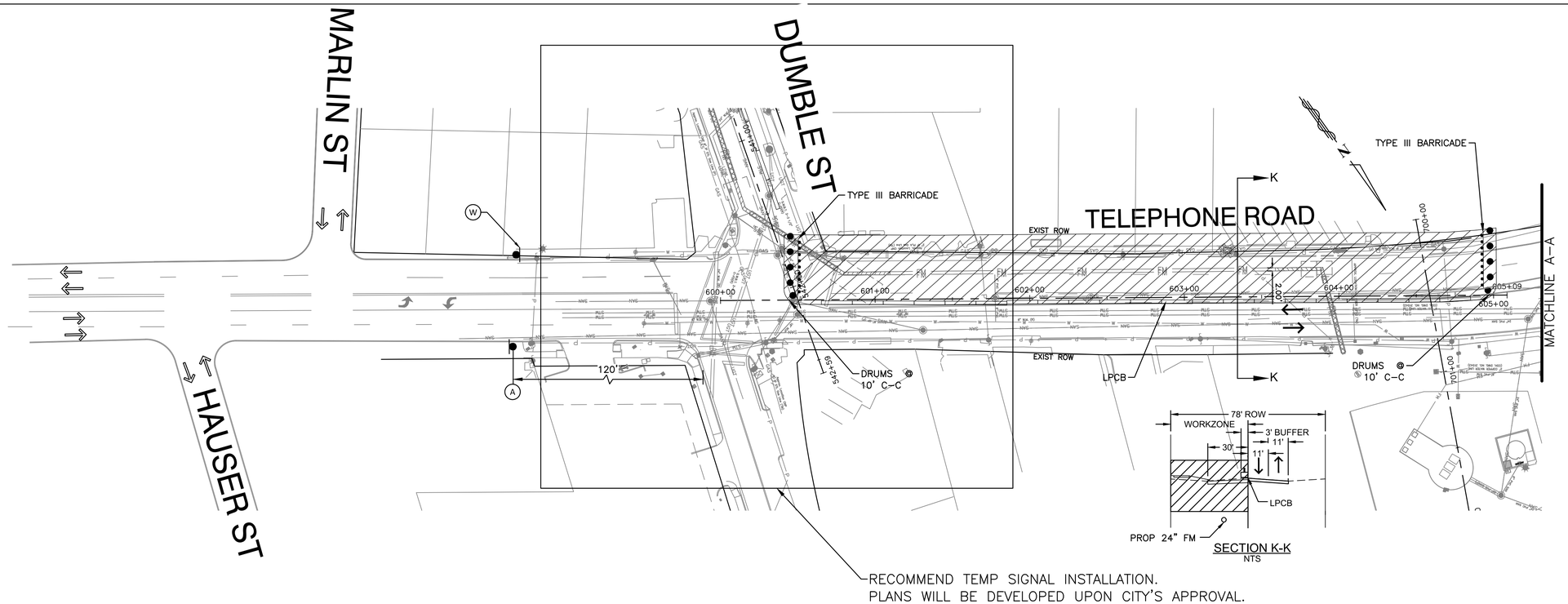
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34.dwg

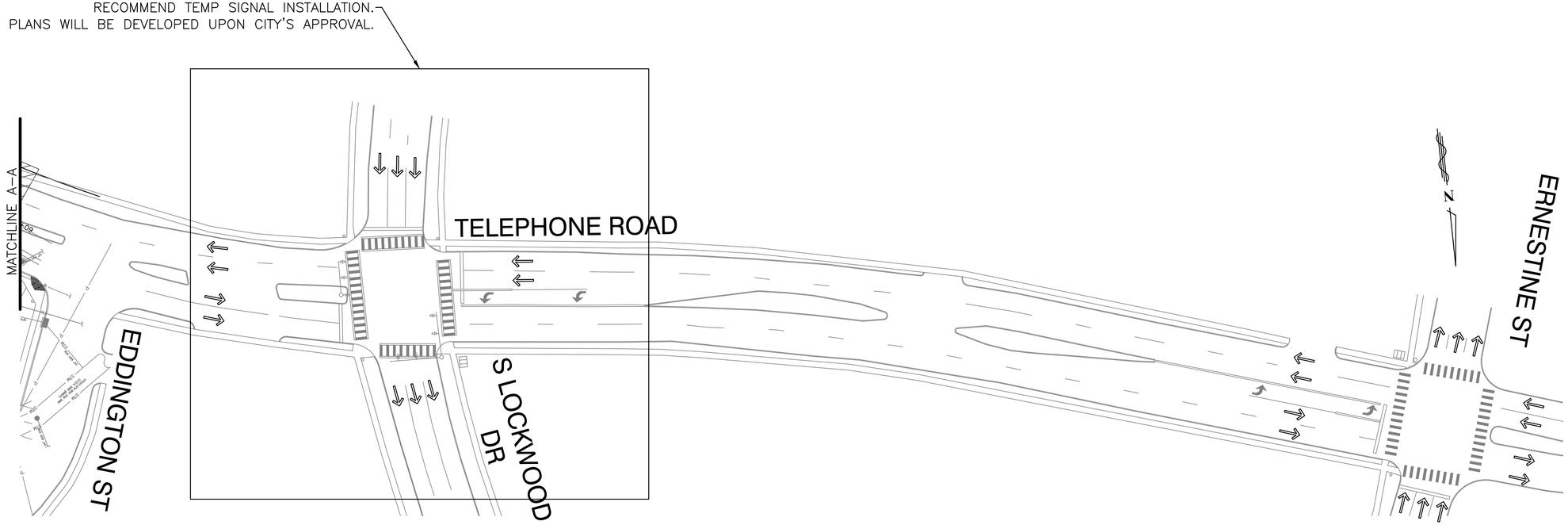
60% SUBMITTAL

PLOTTED: 2/10/2026 9:13 AM

PLOT STYLE: COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34.dwg





LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

NOTES:

1. THIS TRAFFIC CONTROL PLAN PRESENTS MINIMUM REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR CHANGES REBURIED AS PER/ACCORDING TO EXISTING FILED CONDITIONS.
2. CONTRACTOR SHALL BE IRRESPONSIBLE FOR COVERING ALL EXISTING PAVEMENT MARKINGS AND SIGNS THAT CONFLICT WITH THIS TRAFFIC CONTROL PLANS AS NECESSARY.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY PAVEMENT MARKINGS AS REQUIRED.
4. CONTRACTOR SHALL COVER OPEN EXCAVATIONS WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW.
5. CONTRACTOR SHALL USE DRILLING CLOSURE METHOD FOR CONSTRUCTING THE FORCE MAIN, ONE BLOCK AT A TIME OR 300' MAX DURING ONE-WAY OPERATION AND 75' MAX DURING TWO-WAY OPERATION.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
7. NO CONSECUTIVE STREET CLOSURES ARE ALLOWED.

0 40' 80'

SCALE: 1"=40'

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN TELEPHONE RD

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-38 OF C-70	

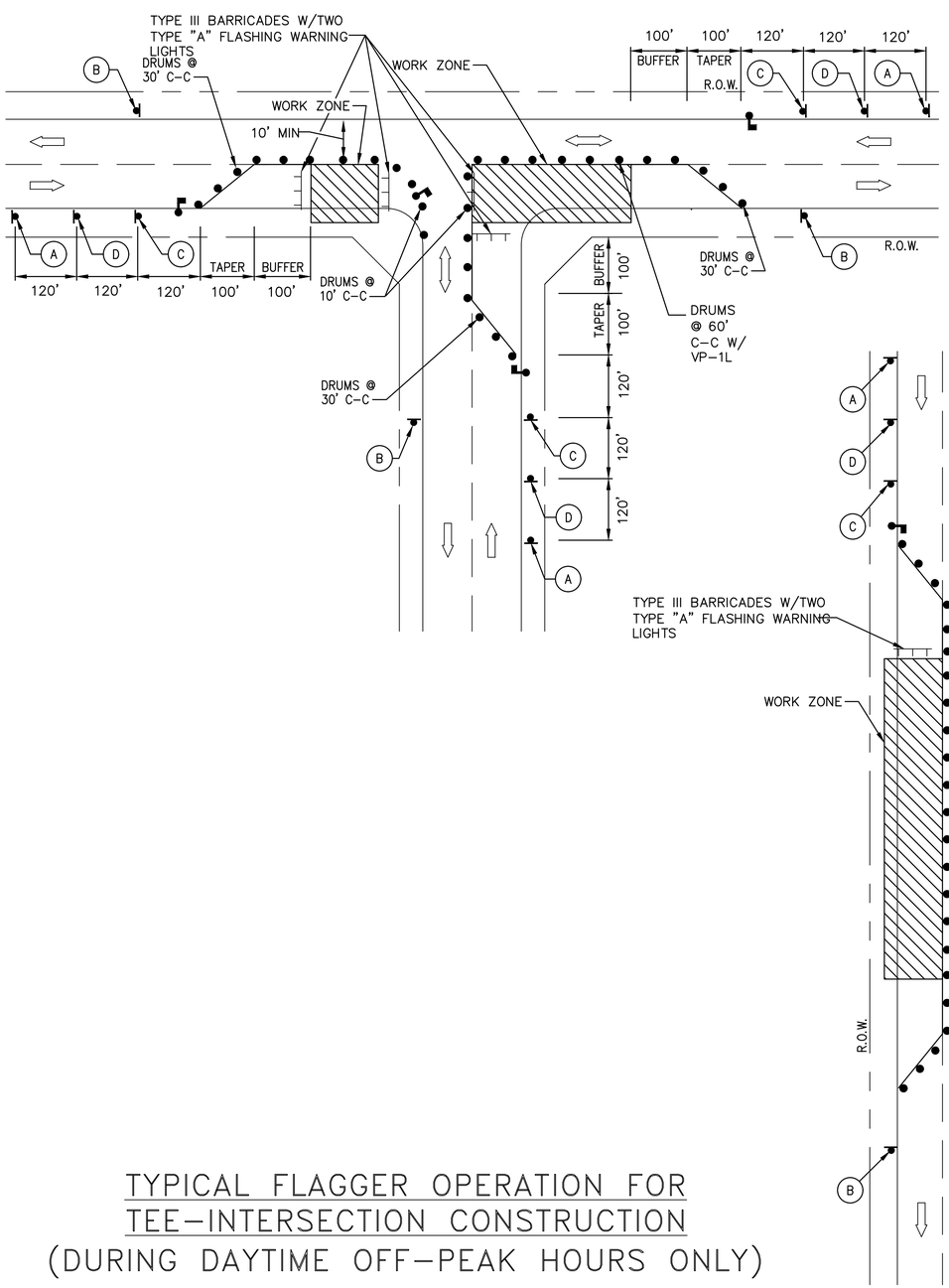
A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W
ROAD WORK AHEAD	END DETOUR	ROAD CLOSED	DO NOT ENTER		ONE WAY		ONE WAY	DETOUR	DETOUR	ROAD CLOSED AHEAD	DETOUR AHEAD	ROAD CLOSED TO THRU TRAFFIC	DETOUR	DETOUR	DETOUR	BEGIN ONE WAY	STREET 1		END ROAD WORK
CW20-1D 48 X 48	M4-8a 24 X 18	R11-2 48 X 30	R5-1 36 X 36	R3-1	R6-2L	R3-2	R6-2R	M4-10L 48 X 18	M4-10R 48 X 18	CW20-3D 48 X 48	CW20-2D 48 X 48	R11-4	M4-9R 30 X 30	M4-9L 30 X 30	M4-9S 30 X 24		M4-9N 30 X 12	TYPE III BARRICADE	G20-2A 36X18

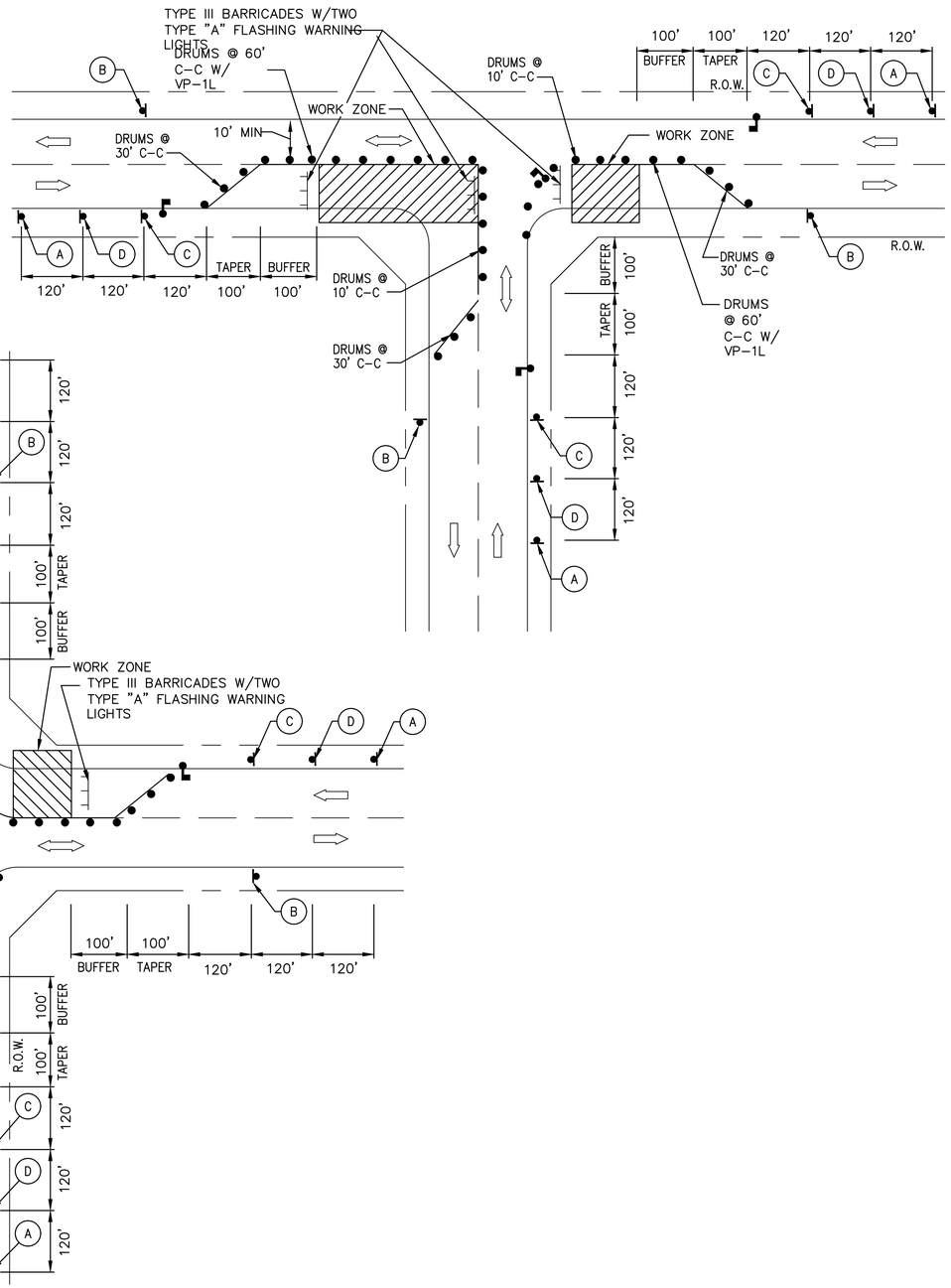
60% SUBMITTAL

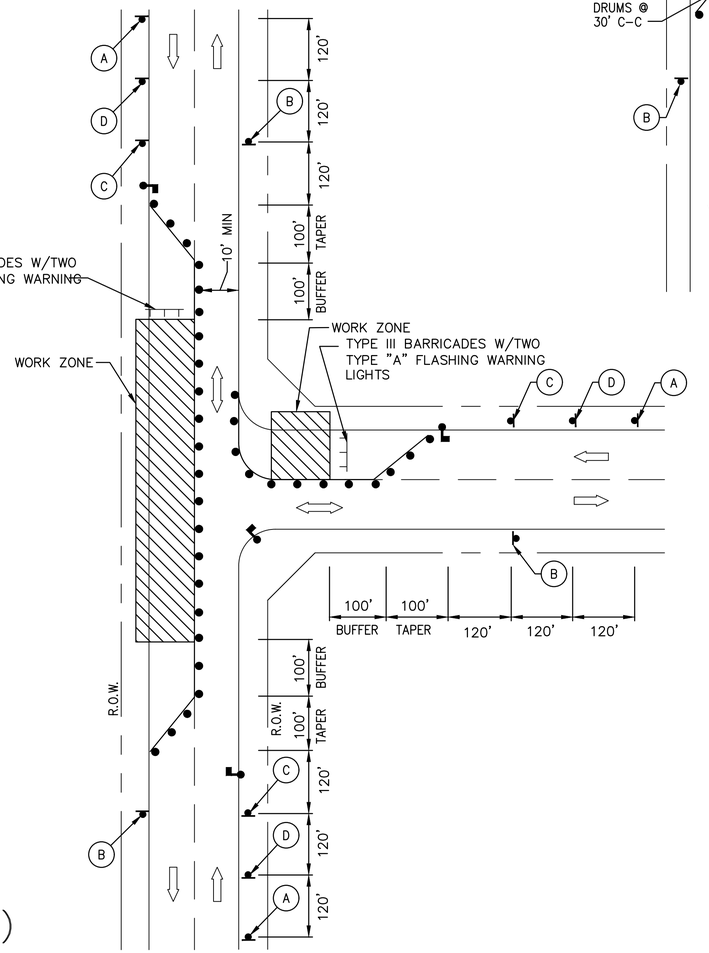
PLOTTED: 2/10/2026 9:13 AM

PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_TYP.dwg







TYPICAL FLAGGER OPERATION FOR TEE-INTERSECTION CONSTRUCTION (DURING DAYTIME OFF-PEAK HOURS ONLY)

LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

A	UTILITY WORK AHEAD	CW21-7D	48 X 48
B	END ROAD WORK	G20-2a	36 X 18
C		CW20-7a	48 x 48
D	ONE LANE ROAD AHEAD	CW20-4D	48 X 48
E	RIGHT LANE CLOSED AHEAD	CW20-5RD	48 X 48 PLAQUE 30 X 12
F	LEFT LANE CLOSED AHEAD	CW20-5LD	48 X 48 PLAQUE 30 X 12
G		CW6-3	30 X 30
H		CW1-6a	30 X 30
J		CW1-3L	30 X 30
K		CW1-3R	30 X 30
L	20 M.P.H.	CW13-1	18 X 18
M	DO NOT ENTER	R5-1	36 X 36
N	ROAD CLOSED	R11-2	48 X 30
P	ROAD WORK AHEAD	CW20-1D	48 X 48
R	DO NOT PASS	R4-1	18 X 24
S	DETOUR	M4-10L	48 X 18

TYPE III BARRICADE

LEFT — CW1-8, 18 x 24

RIGHT — CW1-8, 18 x 24

MOUNTING HOLES FOR VERTICAL PANEL OR CHEVRON — 36" — DRUM

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN
TCP-01

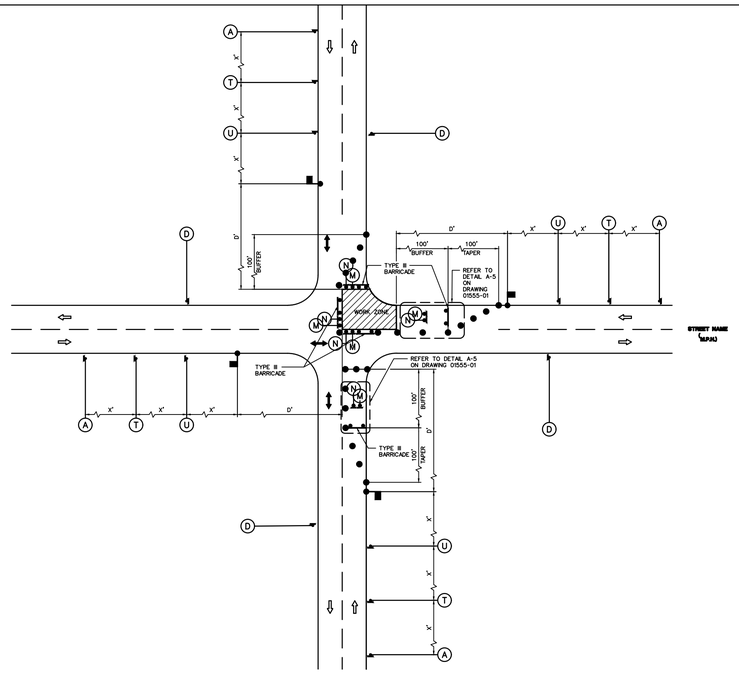
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-39 OF C-70	

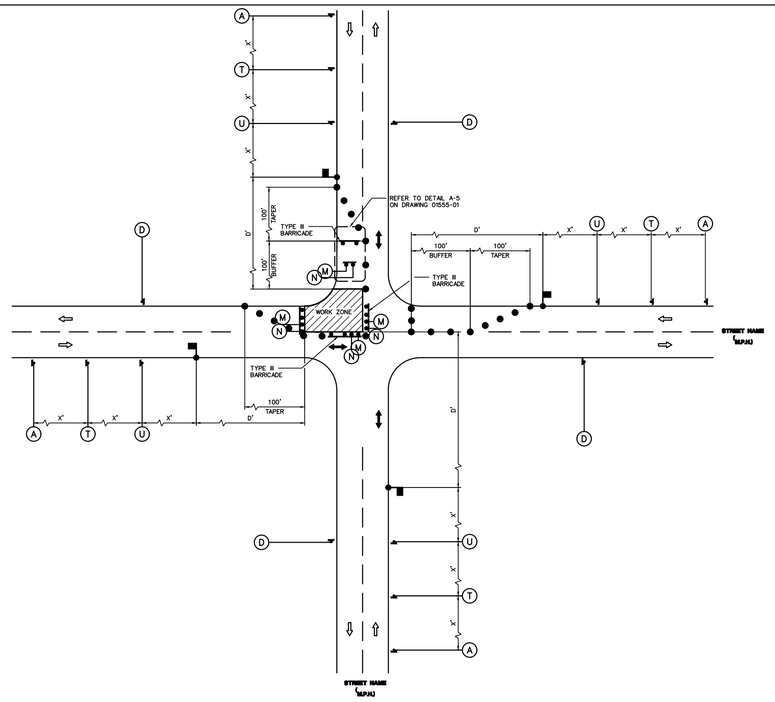
60% SUBMITTAL

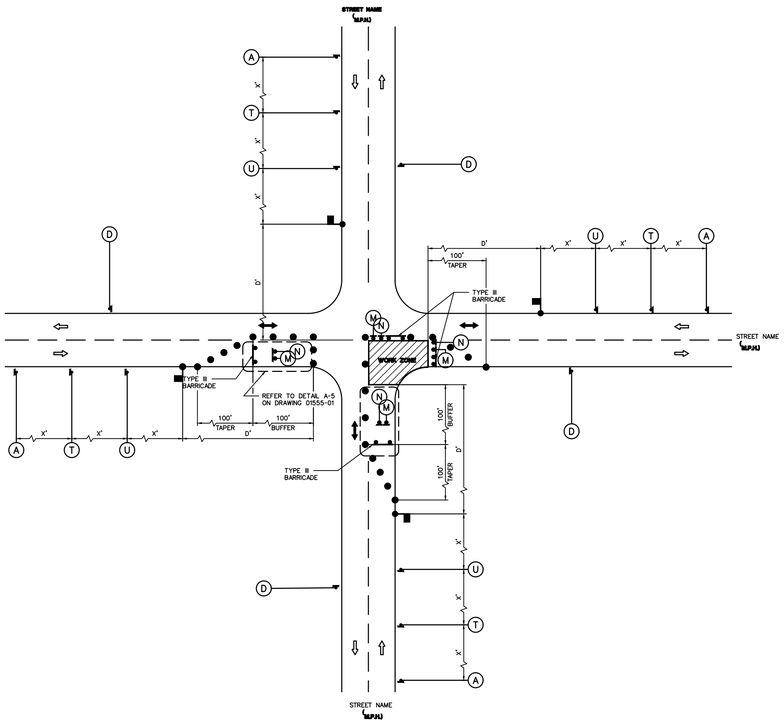
PLOTTED: 2/10/2026 9:14 AM

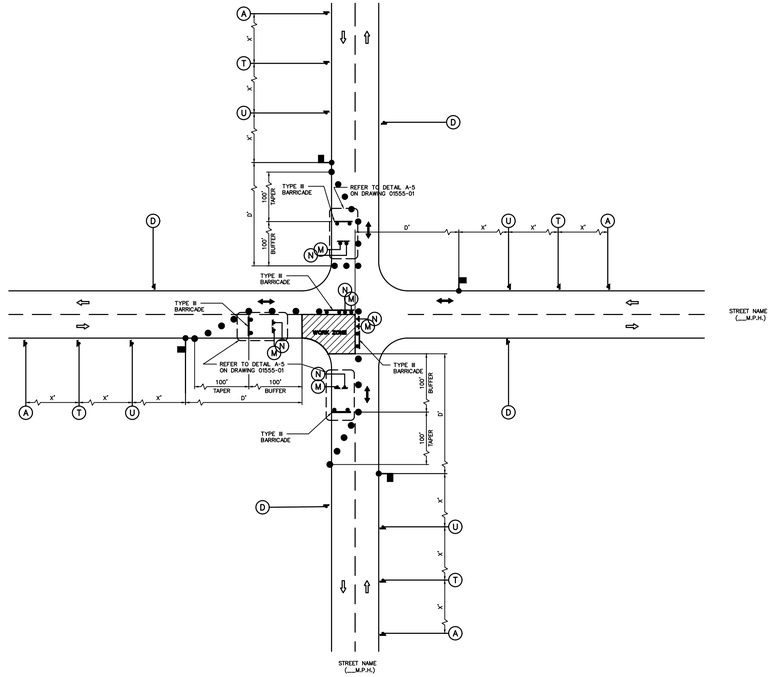
PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_TYP.dwg









LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

A	D	M	N	T	U
ROAD WORK AHEAD	END ROAD WORK	DO NOT ENTER	ROAD CLOSED	ONE LANE ROAD AHEAD	
CW20-1D 48 X 48	G20-2a 36 X 18	R5-1 36 X 36	R11-2 48 X 30	CW20-4D 48 X 48	CW20-7a 48 x 48

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN TCP–02

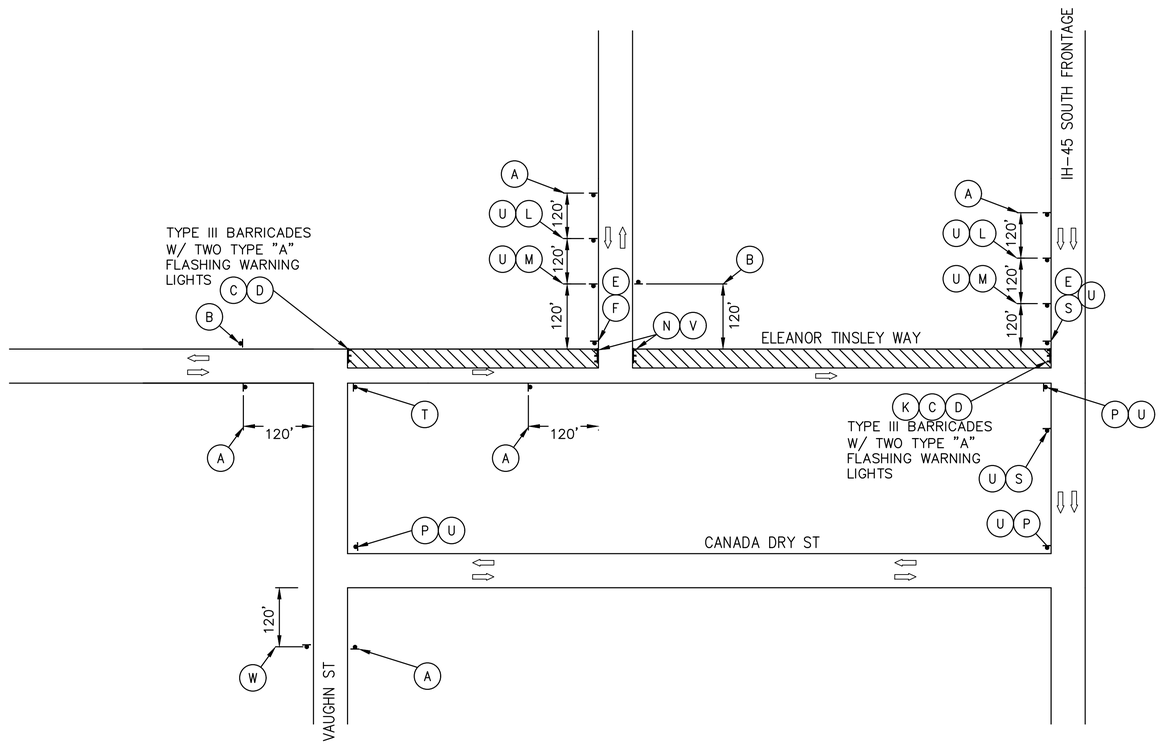
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-40 OF C-70	

60% SUBMITTAL

PLOTTED: 2/10/2026 9:14 AM

PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_DETOUR.dwg



LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W
ROAD WORK AHEAD CW20-1D 48 X 48	END DETOUR M4-8a 24 X 18	ROAD CLOSED R11-2 48 X 30	DO NOT ENTER R5-1 36 X 36	R3-1	ONE WAY R6-2L	R3-2	ONE WAY R6-2R	DETOUR M4-10L 48 X 18	DETOUR M4-10R 48 X 18	ROAD CLOSED AHEAD CW20-3D 48 X 48	DETOUR AHEAD CW20-2D 48 X 48	ROAD CLOSED TO THRU TRAFFIC R11-4	DETOUR M4-9R 30 X 30	DETOUR M4-9L 30 X 30	DETOUR M4-9S 30 X 24	BEGIN ONE WAY	ELEANOR TINSLEY WAY M4-9N 30 X 12	TYPE III BARRICADE	END ROAD WORK G20-2A 36X18

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11737 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3330 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN ELEANOR TINSLEY WAY DETOUR-01

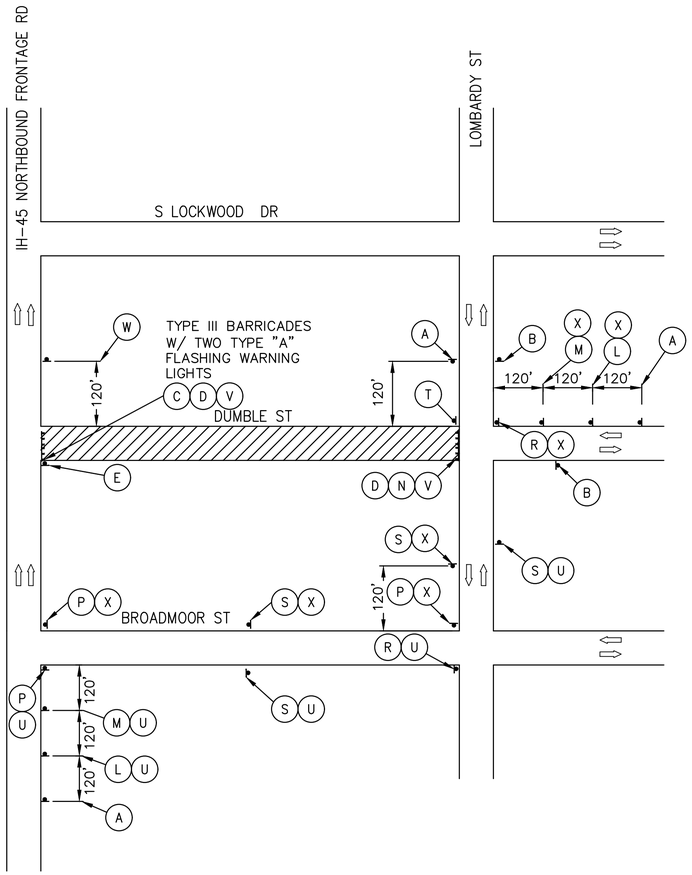
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-41 OF C-70	

60% SUBMITTAL

PLOTTED: 2/10/2026 9:14 AM

PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubi\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_DETOUR.dwg



LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	X
ROAD WORK AHEAD	END DETOUR	ROAD CLOSED	DO NOT ENTER	R3-1	ONE WAY	R3-2	ONE WAY	DETOUR	DETOUR	ROAD CLOSED AHEAD	DETOUR AHEAD	ROAD CLOSED TO THRU TRAFFIC	DETOUR	DETOUR	DETOUR	BEGIN ONE WAY	DUMBLE STREET	TYPE III BARRICADE	END ROAD WORK	IH-45 FRONTAGE ROAD
CW20-1D 48 X 48	M4-8a 24 X 18	R11-2 48 X 30	R5-1 36 X 36		R6-2L		R6-2R	M4-10L 48 X 18	M4-10R 48 X 18	CW20-3D 48 X 48	CW20-2D 48 X 48	R11-4	M4-9R 30 X 30	M4-9L 30 X 30	M4-9S 30 X 24		M4-9N 30 X 12		G20-2A 36X18	M4-9N 30 X 12

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3330 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY

NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1
TRAFFIC CONTROL PLAN
IH-45 NB FRONTAGE ROAD AT DUMBLE STREET
DETOUR-02

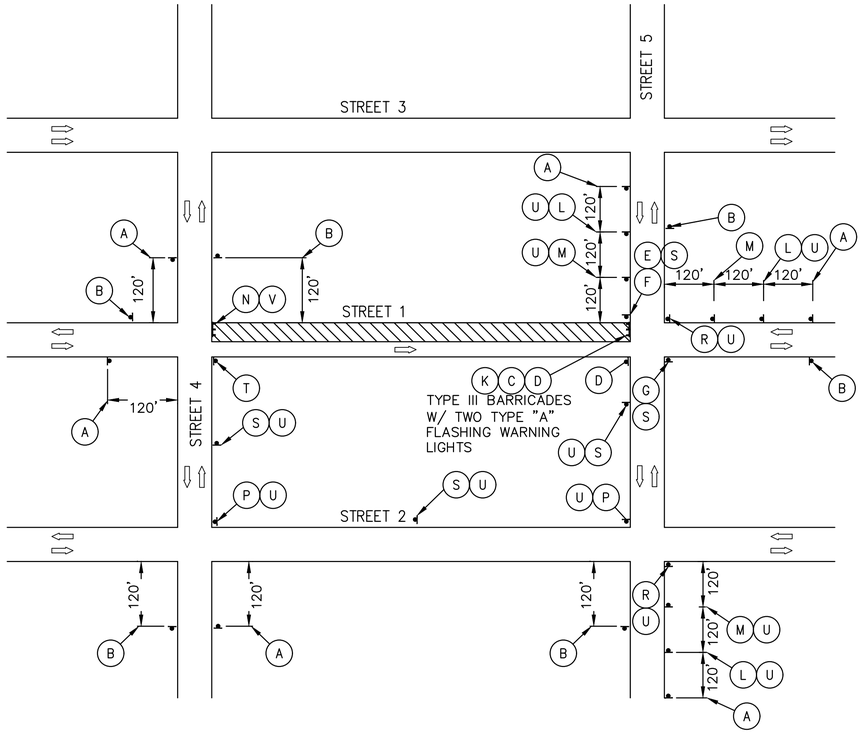
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-42 OF C-70	

60% SUBMITTAL

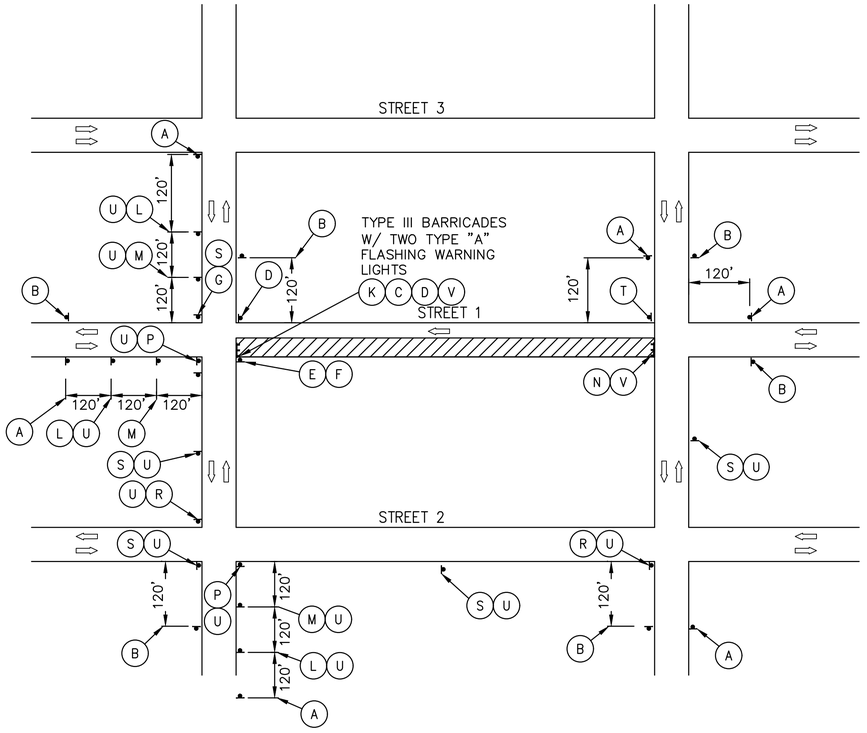
PLOTTED: 2/10/2026 9:14 AM

PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_DETOUR.dwg



TYPICAL TRAFFIC NEIGHBORHOOD DETOUR PLAN – STEP IA



TYPICAL TRAFFIC NEIGHBORHOOD DETOUR PLAN – STEP IB

LEGEND:

- CONSTRUCTION ZONE
- TEMP PAVEMENT (PREVIOUSLY CONSTRUCTED)
- PROPOSED SIGN
- CHANNELIZING DEVICES
- CONCRETE TRAFFIC BARRIER
- DIRECTION OF EXISTING TRAFFIC PATTERN
- DIRECTION OF PROPOSED TRAFFIC PATTERN
- TYPE III BARRICADE
- FLASHING ARROW PANEL
- FLAGGER (OFF DUTY POLICEMEN)

STREET 1	STREET 2	STREET 3	STREET 4	STREET 5
DUMBLE ST	BROADMOOR ST	LOCKWOOD ST	LOMBARDY ST	SCHARPE ST
	DIEZ ST	HICKSFIELD ST	SCHARPE ST	MUNGER ST
	LAWSON ST		MUNGER ST	FOURCADE ST
	PEARSON ST		FOURCADE ST	MABLE ST
	ELLISTON ST		MABLE ST	WESLEY ST
	ELLIOTT ST		WESLEY ST	MONROE ST
			MONROE ST	MARLIN ST
			MARLIN ST	TELEPHONE RD

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN DUMBLE STREET DETOUR–03

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-43 OF C-70	

A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W			
ROAD WORK AHEAD	END DETOUR	ROAD CLOSED	DO NOT ENTER		ONE WAY		ONE WAY	DETOUR	DETOUR	ROAD CLOSED AHEAD	DETOUR AHEAD	ROAD CLOSED TO THRU TRAFFIC	DETOUR	DETOUR	DETOUR	BEGIN ONE WAY	STREET 1		END ROAD WORK			
CW20-1D 48 X 48	M4-8a 24 X 18	R11-2 48 X 30	R5-1 36 X 36	R3-1	R6-2L	R3-2	R6-2R	M4-10L 48 X 18	M4-10R 48 X 18	CW20-3D 48 X 48	CW20-2D 48 X 48	R11-4	M4-9R 30 X 30	M4-9L 30 X 30	M4-9S 30 X 24		M4-9N 30 X 12	TYPE III BARRICADE	G20-2A 36X18			

60% SUBMITTAL
PLOTTED: 2/10/2026 9:15 AM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\rubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6

GENERAL NOTES

1. THE CONTRACTOR SHALL PROVIDE AND INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH PART VI OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) LATEST EDITION WITH REVISIONS DURING THE ENTIRE CONSTRUCTION PERIOD.
2. ALL SIGNS AND TRAFFIC CONTROL DEVICES SHALL CONFORM THE LATEST VERSION OF THE TMUTCD.
3. NO LANES SHALL BE CLOSED DURING THE HOURS OF 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM MONDAY THRU FRIDAY WITHOUT APPROVAL OF THE CITY TRAFFIC ENGINEER.
4. NO WORK SHALL BE PERFORMED IN RESIDENTIAL AREAS FROM 7:00 PM TO 7:00 AM.
5. CONTRACTOR SHALL MAINTAIN APPROVED NUMBER OF THROUGH LANES OF TRAFFIC IN EACH DIRECTION DURING CONSTRUCTION WORKING HOURS. TRAFFIC CONTROL PLANS SHALL INCLUDE ONE-WAY AND/OR DETOUR PLANS. CONTRACTOR SHALL MAINTAIN ADA COMPLIANT PEDESTRIAN ACCESS TO BUS STOPS AND ADEQUATE BUS ACCESS TO ALL THE BUS STOPS.
6. CONTRACTOR SHALL MAINTAIN TRAFFIC LANES AND DETOURS ACCORDING TO TRAFFIC CONTROL PLANS DURING WORKING HOURS.
7. CONTRACTOR SHALL COVER OPEN PAVEMENT EXCAVATIONS FOR MINOR UTILITY WORK WITH ANCHORED STEEL PLATES DURING NON-WORKING HOURS, AND OPEN LANES FOR NORMAL TRAFFIC FLOW WHEN FEASIBLE.
8. IF THE CONTRACTOR CHOOSES TO USE A DIFFERENT METHOD OF "TRAFFIC CONTROL PLANS" DURING THE CONSTRUCTION THAN WHAT IS OUTLINED IN THE CONTRACT DRAWINGS, THE CONTRACTOR SHALL BE RESPONSIBLE TO PREPARE AND SUBMIT AN ALTERNATE SET OF TRAFFIC CONTROL PLANS TO THE CITY OF HOUSTON PROJECT MANAGER FOR APPROVAL TEN WORKING DAYS PRIOR TO IMPLEMENTATION. THESE PLANS SHALL BE DRAWN TO SCALE ON REPRODUCIBLE MYLARS AND SHALL BE SEALED BY A LICENSED ENGINEER IN THE STATE OF TEXAS. OFFICE OF CITY ENGINEER, MOBILITY PERMITS SECTION REPRESENTATIVE APPROVAL IS REQUIRED TO ACCEPT THE PROPOSED CHANGES.
9. CONTRACTOR SHALL SECURE LANE/SIDEWALK/BICYCLE FACILITY CLOSURE PERMITS FROM OFFICE OF CITY ENGINEER (MOBILITY PERMIT SECTION AT https://geohub.houstontx.gov) BEFORE IMPLEMENTING THE TRAFFIC CONTROL PLAN. THE APPLICATION MUST BE SUBMITTED AT LEAST TEN DAYS PRIOR TO THE IMPLEMENTATION OF THE TRAFFIC CONTROL PLAN AND/OR BEGINNING CONSTRUCTION WORK. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS, CONSTRUCTION SEQUENCING, AND CONSTRUCTION SCHEDULE WITH THE APPLICATION.
10. CONTRACTOR SHALL HAVE APPROVED TRAFFIC CONTROL PLAN AND PERMIT AT THE JOB SITE FOR INSPECTION AT ALL TIMES.
11. DURING PAVEMENT SURFACE RESTORATION PROJECTS; THE CONTRACTOR SHALL NOT OPEN CLOSED LANES UNTIL THE PAVEMENT SURFACE HAS CURED ENOUGH TO ALLOW VEHICULAR TRAFFIC ACCORDING TO CITY OF HOUSTON STANDARD SPECIFICATIONS.
12. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND COORDINATING ALL CONSTRUCTION ACTIVITIES WITH STAKE HOLDERS IN THE VICINITY INCLUDING EMERGENCY RESPONSE AGENCIES SUCH AS HOUSTON POLICE DEPARTMENT, HOUSTON FIRE DEPARTMENT, AND METROPOLITAN TRANSIT AUTHORITY.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR ISSUING ALL WORK DIRECTIVES TO ALL SUB-CONTRACTORS, UTILITY COMPANIES, AND ALL OTHER ENTITIES PERFORMING CONSTRUCTION WORK ASSOCIATED WITH THE PROJECT.
14. NOTHING IN THESE NOTES OR PLANS SHALL RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT; INCLUDING SAFETY OF ALL MODES OF TRANSPORTATION, PERSONS, AND PROPERTY, AND THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS.
15. THE OFFICE OF CITY ENGINEER (MOBILITY PERMITS GROUP) PER THE DIRECTION OF THE CITY TRAFFIC ENGINEER HAVE THE RIGHT TO DEMAND THE INSTALLATION OF ADDITIONAL TRAFFIC CONTROL DEVICES OR MODIFICATIONS OF THESE PLANS AND NOTES, AS DEEMED NECESSARY TO PROMOTE THE SAFE AND ORDERLY FLOW OF TRAFFIC, INCLUDING PEDESTRIANS AND BICYCLES, THROUGH THE CONSTRUCTION WORK ZONE. THE CONTRACTOR SHALL COMPLY WITH THESE ADDITIONAL REQUESTS OR MODIFICATIONS WITH DUE DILIGENCE.
16. ALL EXISTING TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE MAINTAINED IN VISIBLE LOCATIONS DURING CONSTRUCTION UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM CITY OF HOUSTON PROJECT MANAGER. THE CONTRACTOR SHALL RESTORE OR REPLACE (AT THE DISCRETION OF THE CITY TRAFFIC ENGINEER) ANY PAVEMENT MARKING OR SIGNING DAMAGE DURING CONSTRUCTION OPERATIONS, INCLUDING RAISED PAVEMENT MARKERS (RPMS).
17. WHEN ENTERING OR LEAVING ROADWAYS CARRYING PUBLIC TRAFFIC, THE CONTRACTOR'S EQUIPMENT, WHETHER EMPTY OR LOADED SHALL IN ALL CASES YIELD TO PUBLIC TRAFFIC WITH THE ASSISTANCE OF CONTRACTOR PROVIDED CERTIFIED FLAGGER/PEACE OFFICER.
18. ACCESS TO DRIVEWAYS ADJACENT TO THE CONSTRUCTION WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS MUCH AS POSSIBLE. ADDITIONAL CONES AND/OR DELINEATORS MAY BE REQUIRED TO DELINEATE THE DRIVEWAY ACCESS ROUTE THROUGH THE CONSTRUCTION WORK ZONE. A MINIMUM OF ONE TRAVEL LANE SHALL BE MAINTAINED ACROSS THE DRIVEWAYS, UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM CITY OF HOUSTON PROJECT MANAGER.
19. SPILLAGE RESULTING FROM HAULING OPERATIONS ALONG OR ACROSS ANY PUBLIC TRAVELED WAY SHALL BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
20. THE CONTRACTOR SHALL SUBMIT AN APPLICATION FOR TEMPORARY PARKING RESTRICTIONS IF THERE ARE PARKING METERS LOCATED AT THE PROPOSED LANE CLOSURES FROM PARKING MANAGEMENT DIVISION (832-393-8690) AT LEAST TEN BUSINESS DAYS BEFORE IMPLEMENTATION OF LANE CLOSURES. IN ADDITION, TEMPORARY NO PARKING SIGNS SHALL BE POSTED 24 HOURS PRIOR TO COMMENCEMENT OF WORK.
21. ADDITIONAL OFF DUTY OFFICERS/FLAGGERS MAY BE REQUESTED TO DIRECT TRAFFIC WHEN LANES ARE BLOCKED AT THE DISCRETION OF THE CITY PROJECT MANAGER EVEN IF THEY ARE NOT SPECIFICALLY IDENTIFIED ON THE PROJECT PLANS.
22. THE CONTRACTOR SHALL REPLACE WITHIN 72 HOURS, ALL TRAFFIC SIGNAL LOOP DETECTORS DAMAGED DURING CONSTRUCTION.
23. IN GENERAL, A SOLAR POWERED FLASHING ARROW BOARD SHALL BE REQUIRED ON ALL MAJOR THOROUGHFARE LANES CLOSURES. EXCEPTIONS TO FLASHING ARROW BOARDS AND/OR IMPLEMENTATION ON RESIDENTIAL LANE CLOSURES SHALL BE APPROVED BY CITY TRAFFIC ENGINEER.
24. APPROVED TRAFFIC CONTROL PLAN SHALL BE IN PLACE BEFORE STARTING ANY EXCAVATION.
25. WATER FILLED BARRIERS CAN BE USED AS INSTRUCTED BY THE ENGINEER AND APPROVED BY THE CITY FOR PROJECTS WHERE SPACE IS LIMITED AND HEAVY EQUIPMENT TO PLACE CONCRETE BARRIERS IS NOT FEASIBLE. WATER FILLED BARRIERS SHALL NOT BE USED ON ROADWAYS WITH A POSTED SPEED LIMIT MORE THAN 45 MPH.
26. WATER FILLED BARRIERS MUST BE INSTALLED AND MAINTAINED PER THE MANUFACTURER'S REQUIREMENTS AND ROUTINELY INSPECTED FOR DEFECTS.
27. IF WATER FILLED BARRIER IS PROVIDED, USE ENVIRONMENTALLY SAFE ANTI-FREEZING AGENT IN THE WATER WHEN IT IS APPLICABLE PER MANUFACTURER SPECIFICATIONS AND RECOVER AGENT WHEN THE BARRIER IS DRAINED.
28. DISPOSE OF WATER AND AGENT PROPERLY. DO NOT DRAIN WATER FILLED BARRIER INTO OR ACROSS AN EXISTING TRAVEL LANE.
29. PROVIDE BARRIER UNITS THAT ARE CAPABLE OF BEING LIFTED AND MOVED WHEN FILLED IF DRAINING IS NOT POSSIBLE.
30. PROVIDE WATER FILLED BARRIER THAT ACTS AS ITS OWN FREE STANDING, NON-REDIRECTIVE END TREATMENT.
31. WHEN WATER FILLED BARRIERS ARE USED TO CHANNELIZE PEDESTRIANS, THEY MUST HAVE A CONTINUOUS DETECTABLE BOTTOM FOR USERS OF LONG CANES AND THE TOP OF THE UNIT SHALL NOT BE LESS THAN 32 INCHES IN HEIGHT.
32. ANY CLOSURE OF A PEDESTRIAN OR BICYCLE FACILITY SHALL REQUIRE THE SHORTEST DETOUR THAT MAINTAINS THE SAFETY OF PEDESTRIAN AND/OR BICYCLISTS.

SPACING FOR CHANNELIZING DEVICES

A. PLASTIC DRUMS ON MERGING TAPER @ 30' C – C WITH CHEVRON SIGN @ 60' C – C AND WARNING LIGHTS FOR OVERNIGHT CLOSURE.

B. PLASTIC DRUMS ON DOWNSTREAM TAPER @ 30' C – C (RETURN TAPER AND BARRICADE ARE OPTIONAL AND DIVIDED ROADWAY SECTION)

C. PLASTIC DRUMS ON RADII @ 35' C –C.

D. PLASTIC DRUMS ON TANGENT @ 35' C – C WITH VERTICAL PANEL AT 70' C – C AND APPROVED WARNING LIGHT @ 70' C – C (FOR OVERNIGHT CLOSURE).

E. PLASTIC DRUMS IN FRONT OF CONSTRUCTION ZONE @ 20' C – C WITH VERTICAL PANEL AT 40' C – C AND APPROVED WARNING LIGHT @ 40' C – C (FOR OVERNIGHT CLOSURE).

F. CONCRETE TRAFFIC BARRIER (CTB) OR LOW PROFILE CONCRETE TRAFFIC BARRIER (LPCTB) WITH APPROVED REFLECTORS @ 10' C – C IF PAVEMENT DROP IS GREATER THAN 1 FOOT.

G. PLASTIC DRUMS W/GUARD RAIL MOUNTED.

H. SELF- RIGHTING VERTICAL PANEL SPACING.
- 4 LANES TO 2 LANES UNDIVIDED ROADWAY SECTION @ 20' C – C.
- 4 LANES DIVIDED ROADWAY TO ONE SIDE TWO WAY ROADWAY @ 20' C – C.
- LEFT LANE AND RIGHT LANE STORAGE BAYS @ 15' C – C.

I. SPACING SHOWN ON TRAFFIC CONTROL SHALL SUPERSEDE THE ABOVE SPACING.

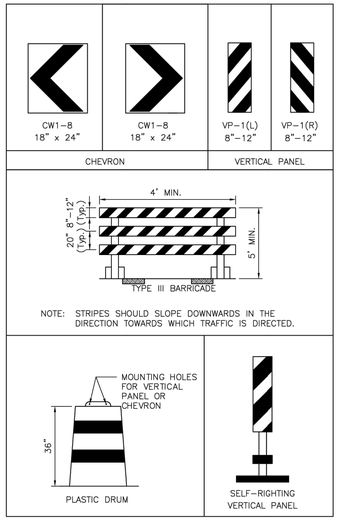
J. SPACING MAY BE ADJUSTED TO PROVIDE DRIVEWAYS, INTERSECTIONS AND /OR MEDIAN OPENINGS.

TABLE C3 – TYPICAL SIGN SPACING, TAPER LENGTHS, AND SUGGESTED SPACING OF CHANNELIZATION DEVICES

POSTED SPEED (MPH)	SIGN SPACING "X" (FEET)	MIN. DESIRABLE TAPER LENGTH "L"			SUGGESTED MAXIMUM SPACING OF DEVICE	
		10' OFFSET	11' OFFSET	12' OFFSET	ON A TAPER	ON A TANGENT
30	120'	150'	165'	180'	30'	60'–75'
35	160'	205'	225'	245'	35'	70'–90'
40	240'	265'	295'	320'	40'	80'–100'
45	320'	450'	495'	540'	45'	90'–110'
50	400'	500'	550'	600'	50'	100'–125'
55	500'	550'	605'	660'	55'	110'–140'

TABLE C4 – STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

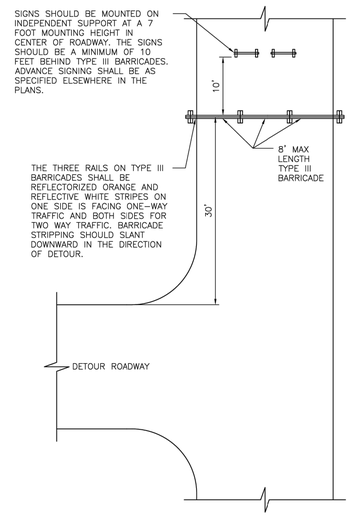
POSTED SPEED (MPH)	DISTANCE "D" (FEET)
30	200
35	250
40	305
45	360
50	425
55	495



CHANNELIZATION AND BARRICADES

LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY



PLAN VIEW
TYPE III BARRICADE (POST AND SKID)
TYPICAL APPLICATION

APPROVED BY:	APPROVED BY:
Docusigned by: Sukut Kanwar 0EF8B0C561F5478...	Docusigned by: HIMANG MCHEN 98A3EFDA7884C0...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: Docusigned by: Carl Haddock 4B0C416B72B3465...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-01

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP NOTES CHANNELIZING DEVICES AND BARRICADES

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
NOT TO SCALE

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

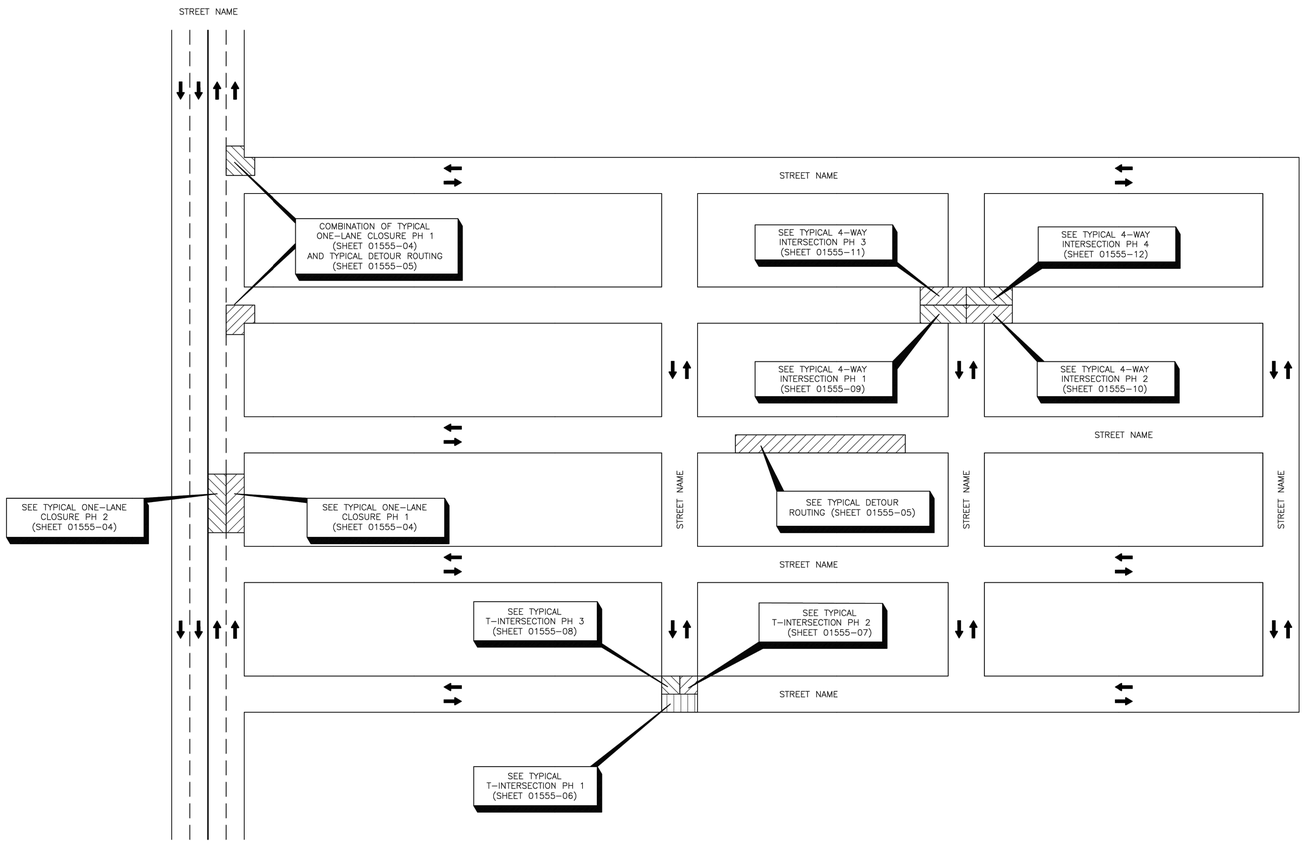
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 1 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-44 OF C-70	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6



DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukant Kanwar 0EFB80C581975478...	DocuSigned by: William McMeen 95A39EF0A758A4CC...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Hildebrandt ABBC41EB72B2466...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-02

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP OVERALL TRAFFIC CONTROL LAYOUT

DRAWING SCALE	FOR CITY OF HOUSTON USE ONLY
NOT TO SCALE	

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 2 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-45 OF C-70	

60% SUBMITTAL

PLOTTED: 2/10/2026 9:15 AM

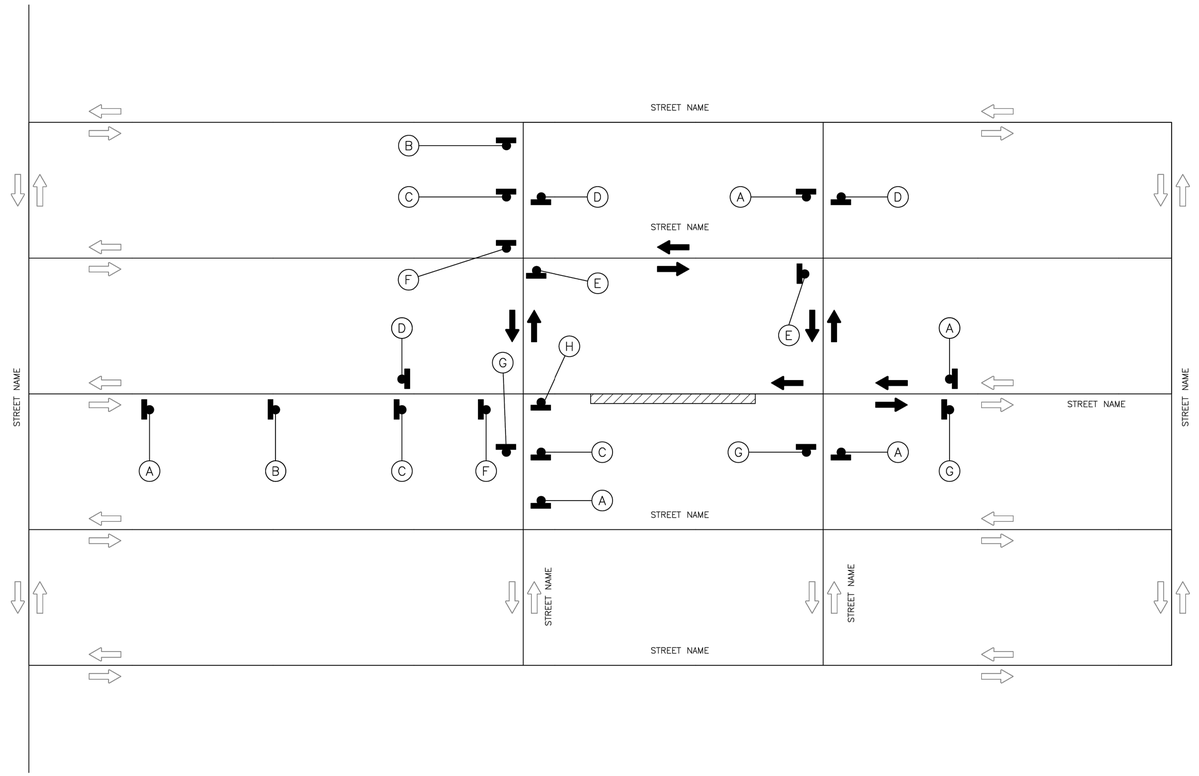
PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

60% SUBMITTAL
PLOTTED: 2/10/2026 9:15 AM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

A	B	C	D	E	F	G	H
ROAD WORK AHEAD	ROAD CLOSED AHEAD	DETOUR AHEAD	END ROAD WORK	STREET NAME DETOUR →	STREET NAME DETOUR ←	END DETOUR	STREET NAME DETOUR ↑
CW20-1	CW20-3	CW20-2	G20-2	M4-9R	M4-9L	M4-8a	M4-9T



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukant Kanwar 0EFB80C581F5478...	DocuSigned by: William McMeen 95A2667DA758A0D...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haldeboth A83C41EB72B2466...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-03

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TRAFFIC CONTROL LAYOUT

DRAWING SCALE	FOR CITY OF HOUSTON USE ONLY
NOT TO SCALE	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

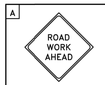
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN
STANDARD DETAILS
(SHEET 3 OF 16)

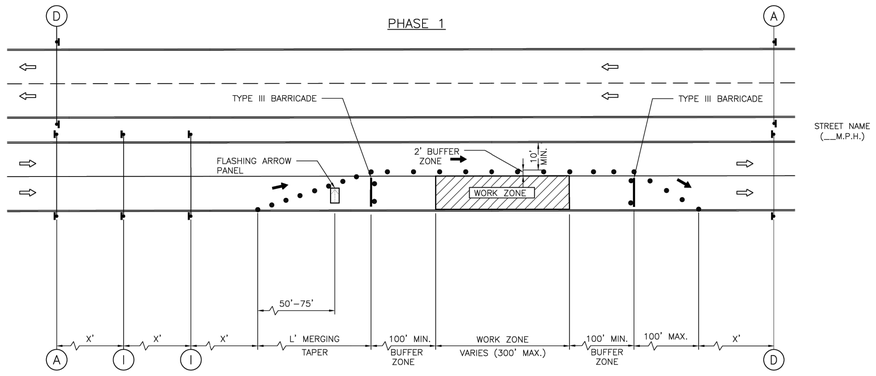
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-46 OF C-70	

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6

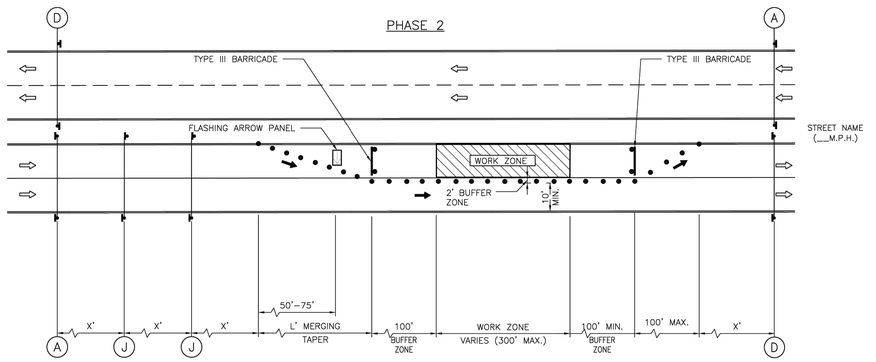
A	D	I	J
			
CW20-1	G20-2	CW20-5(2) CW16-3	CW20-5(1) CW16-3

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

PHASE 1



PHASE 2



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. RETURN TAPERS AND DOWNSTREAM BARRICADES ARE OPTIONAL ON A DIVIDED ROADWAY SECTION.
2. DOUBLE SIGNS SHALL BE USED ONLY ON ROADWAYS WITH MEDIANS.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat Barwar	DocuSigned by: HUNG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-04

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP ONE LANE CLOSURE
PHASE 1 & 2

DRAWING SCALE	FOR CITY OF HOUSTON USE ONLY
NOT TO SCALE	

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10353

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 4 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-47 OF C-70	

60% SUBMITTAL

PLOTTED: 2/10/2026 9:15 AM

PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

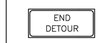
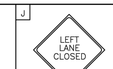
60% SUBMITTAL

PLOTTED: 2/10/2026 9:15 AM

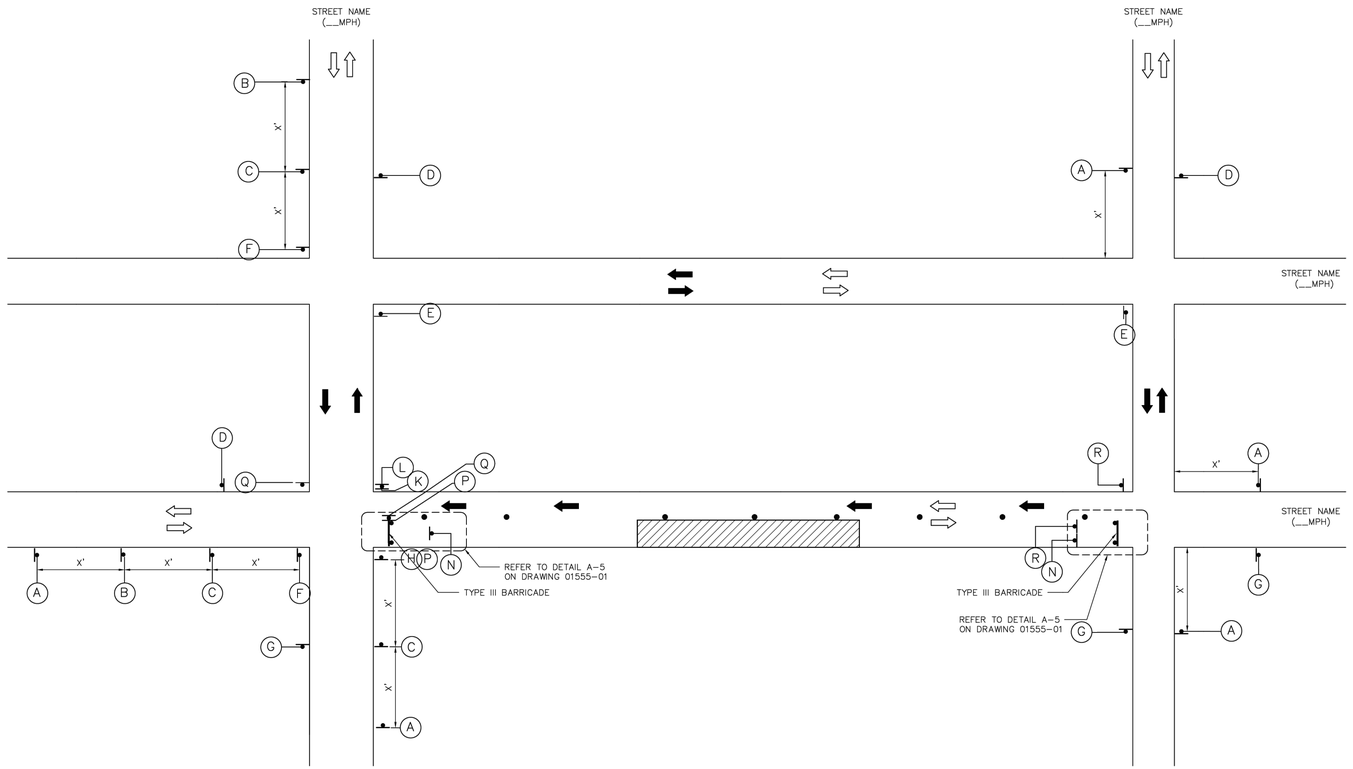
PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

A	B	C	D	E	F	G	H	I	J
									
CW20-1	CW20-3	CW20-2	G20-2	M4-9R	M4-9L	M4-8a	M4-9T	CW20-5(2) CW16-3	CW20-5(1) CW16-3

K	L	M	N	O	P	Q	R
							
R6-2(L)	R6-2(R)	R5-1	R11-2	M4-10(L)	R3-1	R3-2	R6-6



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. A 10' MINIMUM LANE WIDTH FOR EMERGENCY SHALL BE MADE AVAILABLE AND MAINTAINED BY THE CONTRACTOR AT ALL TIMES.
2. FOR DIMENSIONS REFER TO SHEET 01555-01.
3. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulat Iruvar	DocuSigned by: Eddins Agulfen
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Hubbuch	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-05

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL DETOUR ROUTING WITH ONE LANE CLOSURE (ONE BLOCK)

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10153

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

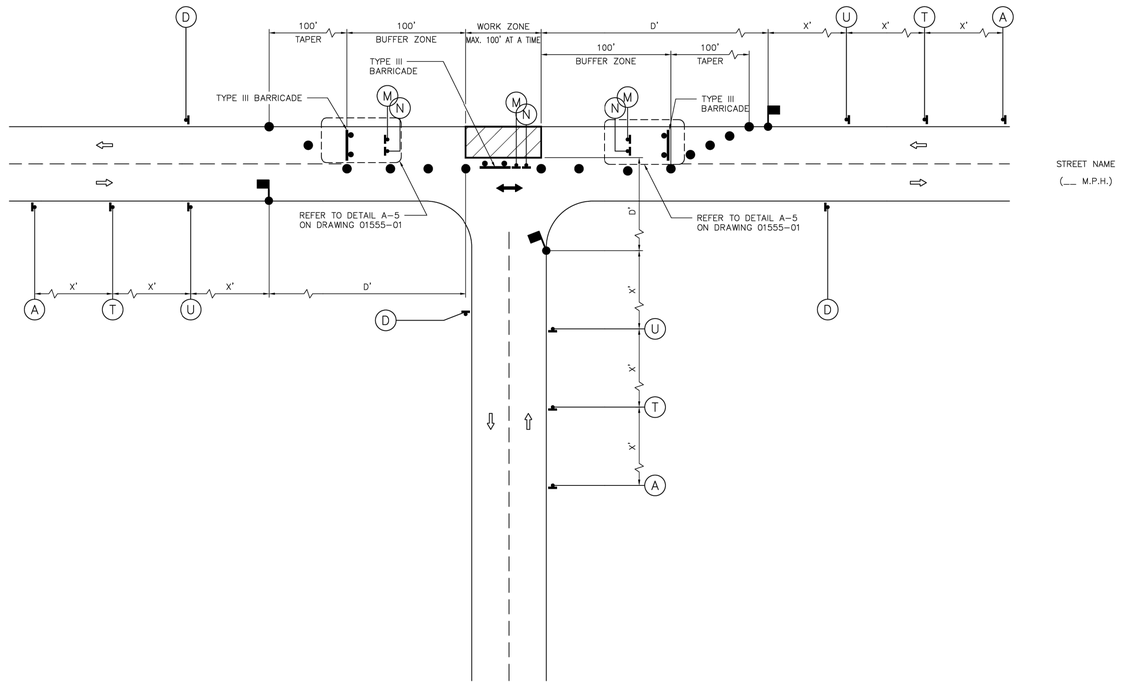
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 5 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-48 OF C-70	

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

A	T	U	D	M	N
					
CW20-1	CW20-4	CW20-7	G20-2	R5-1	R11-2



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat Barwar	DocuSigned by: HUNG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-06

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A T-INTERSECTION PHASE 1 OF 3

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10353

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 6 OF 16)

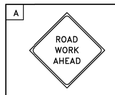
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-49 OF C-70	

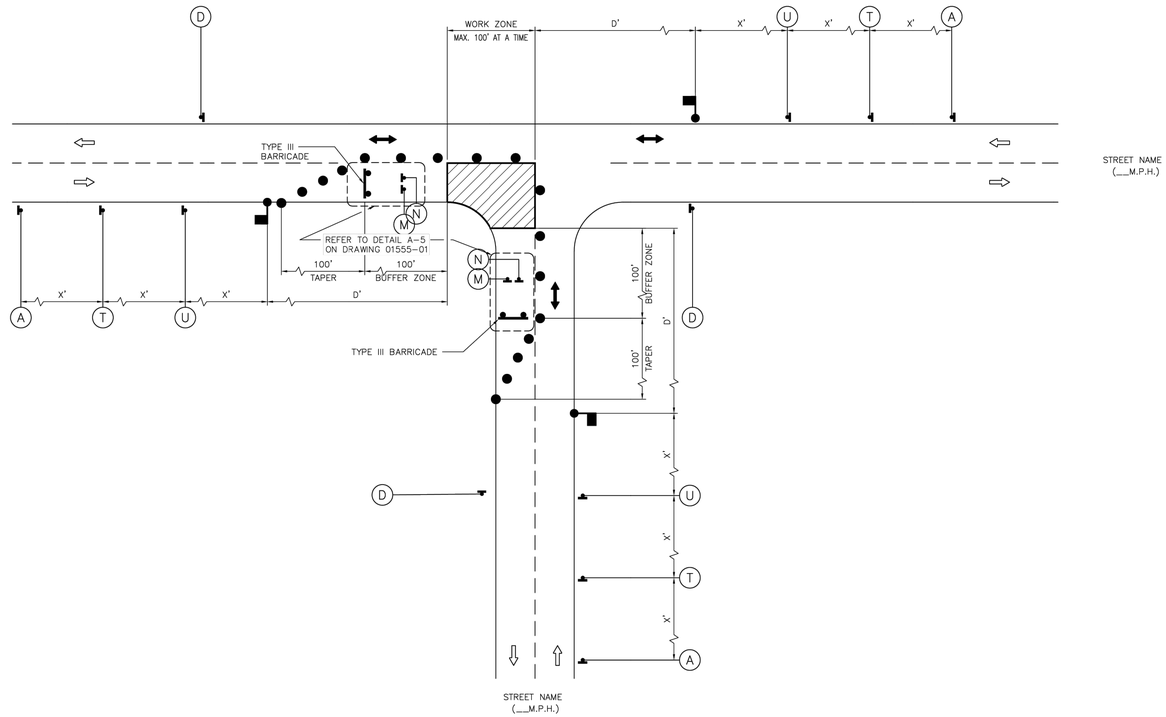
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

60% SUBMITTAL
PLOTTED: 2/10/2026 9:15 AM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

60% SUBMITTAL

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

A	T	U	D	M	N
					
CW20-1	CW20-4	CW20-7	G20-2	R5-1	R11-2



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sulat Kumar	DocuSigned by: Hanns Nguyen
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-07

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A T-INTERSECTION PHASE 2 OF 3

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

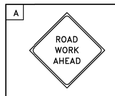
TRAFFIC CONTROL PLAN STANDARD DETAILS
(SHEET 7 OF 16)

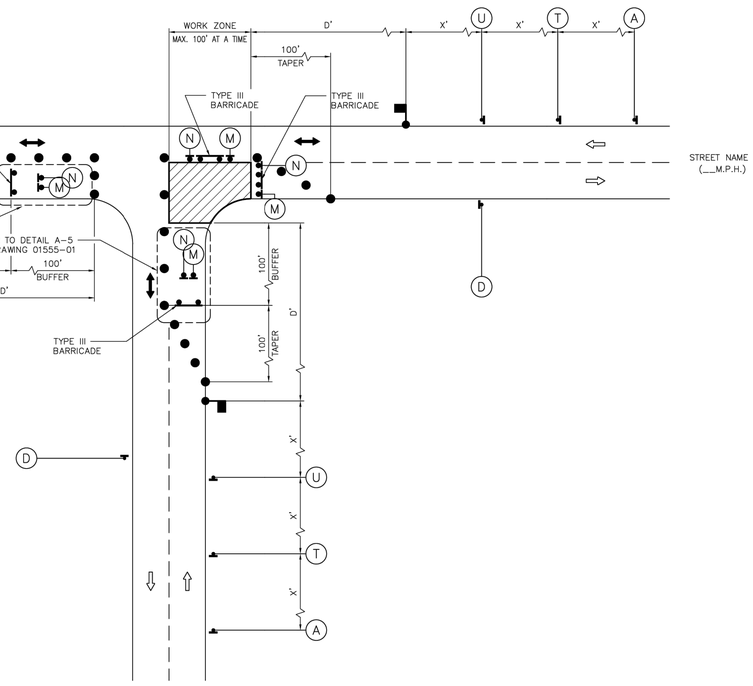
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-50 OF C-70	

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg PLOT STYLE: 2025 COH.ctb PLOTTED: 2/10/2026 9:15 AM

60% SUBMITTAL

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

A	T	U	D	M	N
					
CW20-1	CW20-4	CW20-7	G20-2	R5-1	R11-2



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukut Kunwar 0EFB80C041F547A...	DocuSigned by: HANG NGUYEN 99A3EFDA7684433...
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carol Haddock A80C4168F2B3465...	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-08

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A T-INTERSECTION PHASE 3 OF 3

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 8 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-51 OF C-70	

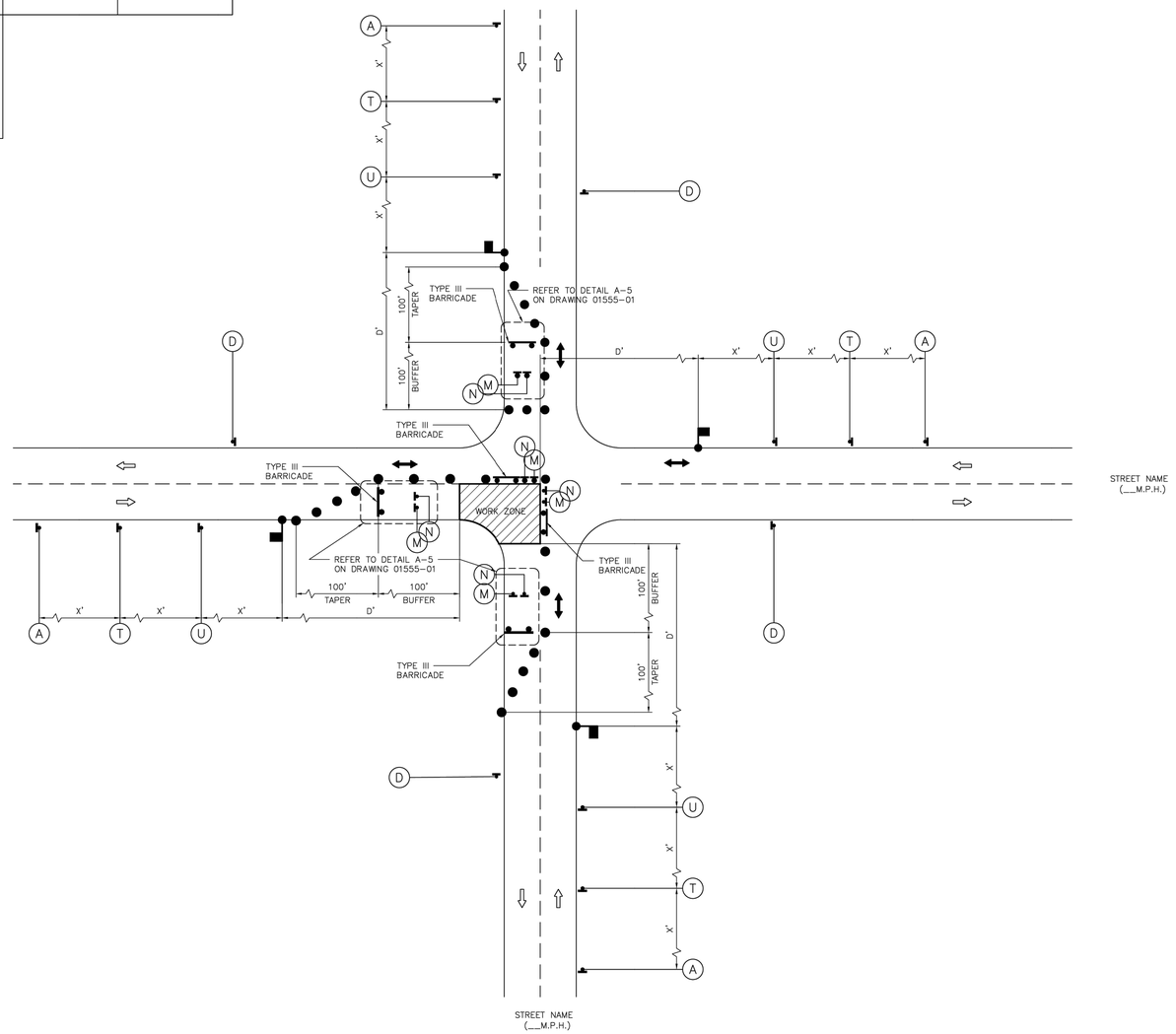
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg
PLOT STYLE: 2025 COH.ctb
PLOTTED: 2/10/2026 9:15 AM

60% SUBMITTAL
PLOTTED: 2/10/2026 9:16 AM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

A	T	U	D
ROAD WORK AHEAD CW20-1	ONE LANE ROAD AHEAD CW20-4	 CW20-7	END ROAD WORK G20-2

M	N
DO NOT ENTER R5-1	ROAD CLOSED R11-2



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat Barwal	DocuSigned by: Eddins Nguyen
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Hubbuch	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-09

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 1 OF 4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
NOT TO SCALE

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10153

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

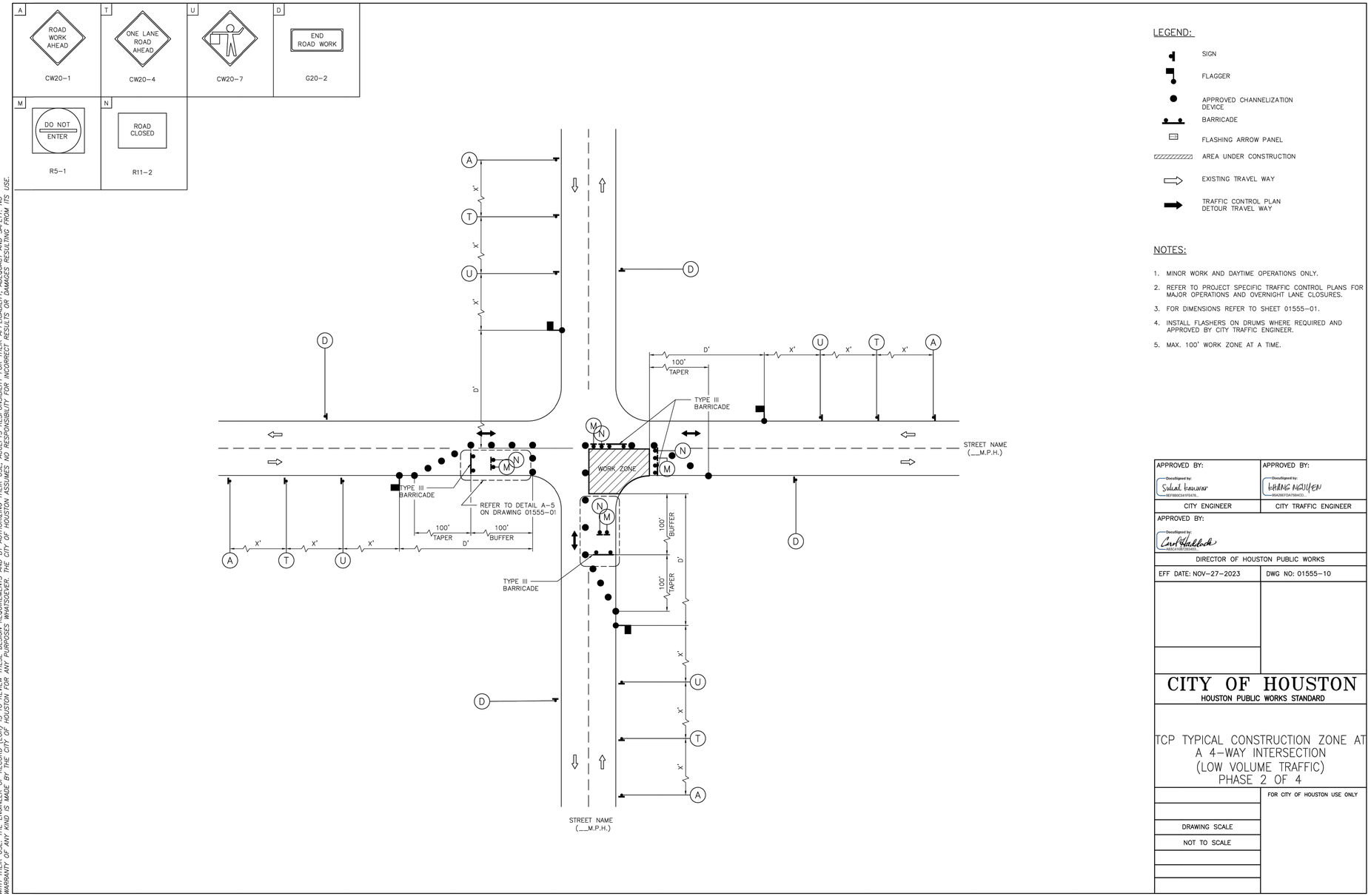
TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 9 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-52 OF C-70	

60% SUBMITTAL
PLOTTED: 2/10/2026 9:16 AM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
Docusigned by: Sulaat Imamaji	Docusigned by: Eddins Agustin
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: Docusigned by: Carl Hubbuch	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-10

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 2 OF 4

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

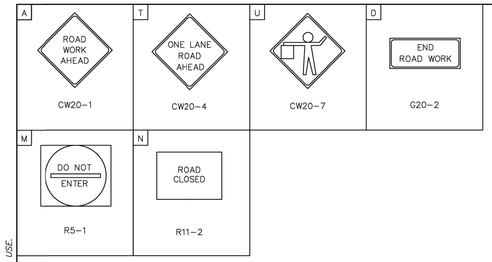
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

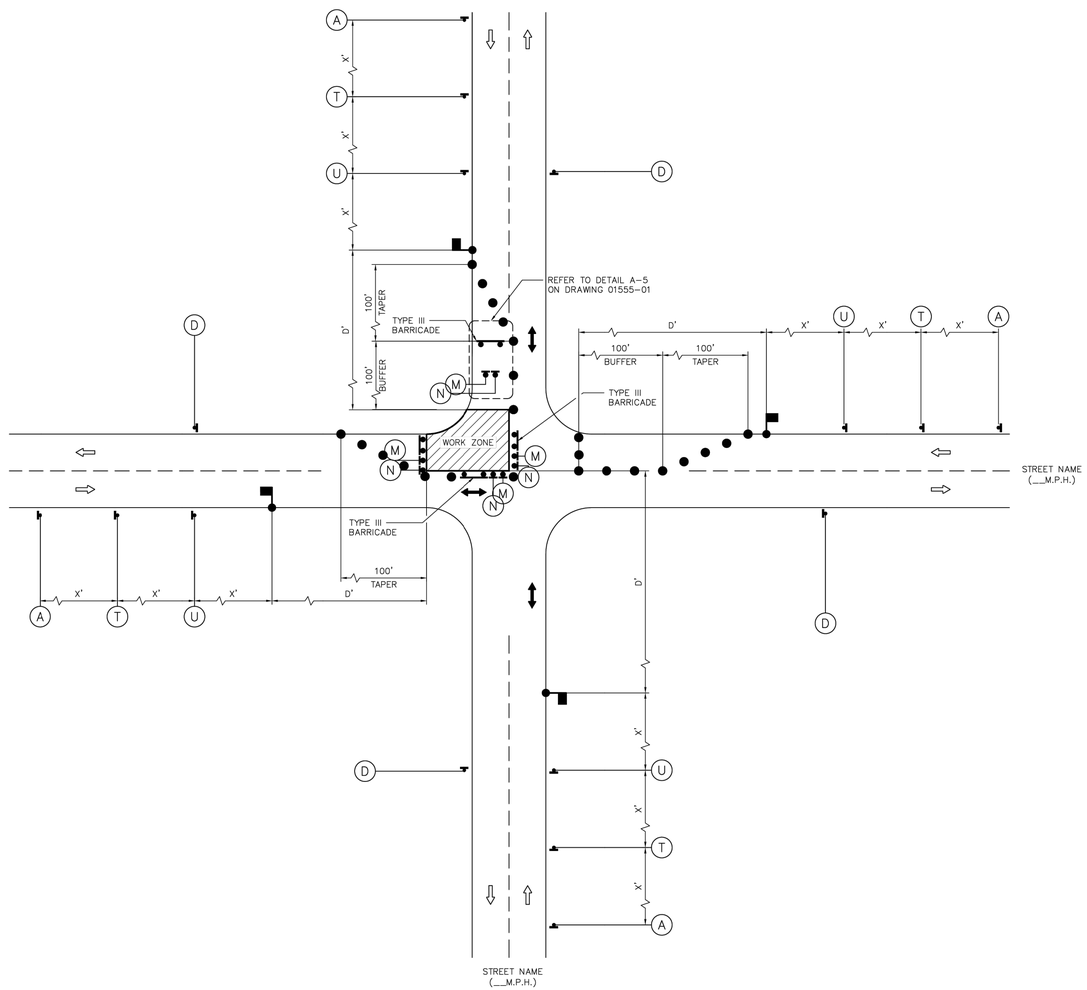
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 10 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-53 OF C-70	

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6





LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukut Kanwar	DocuSigned by: HANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-11

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 3 OF 4

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 11 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-54 OF C-70	

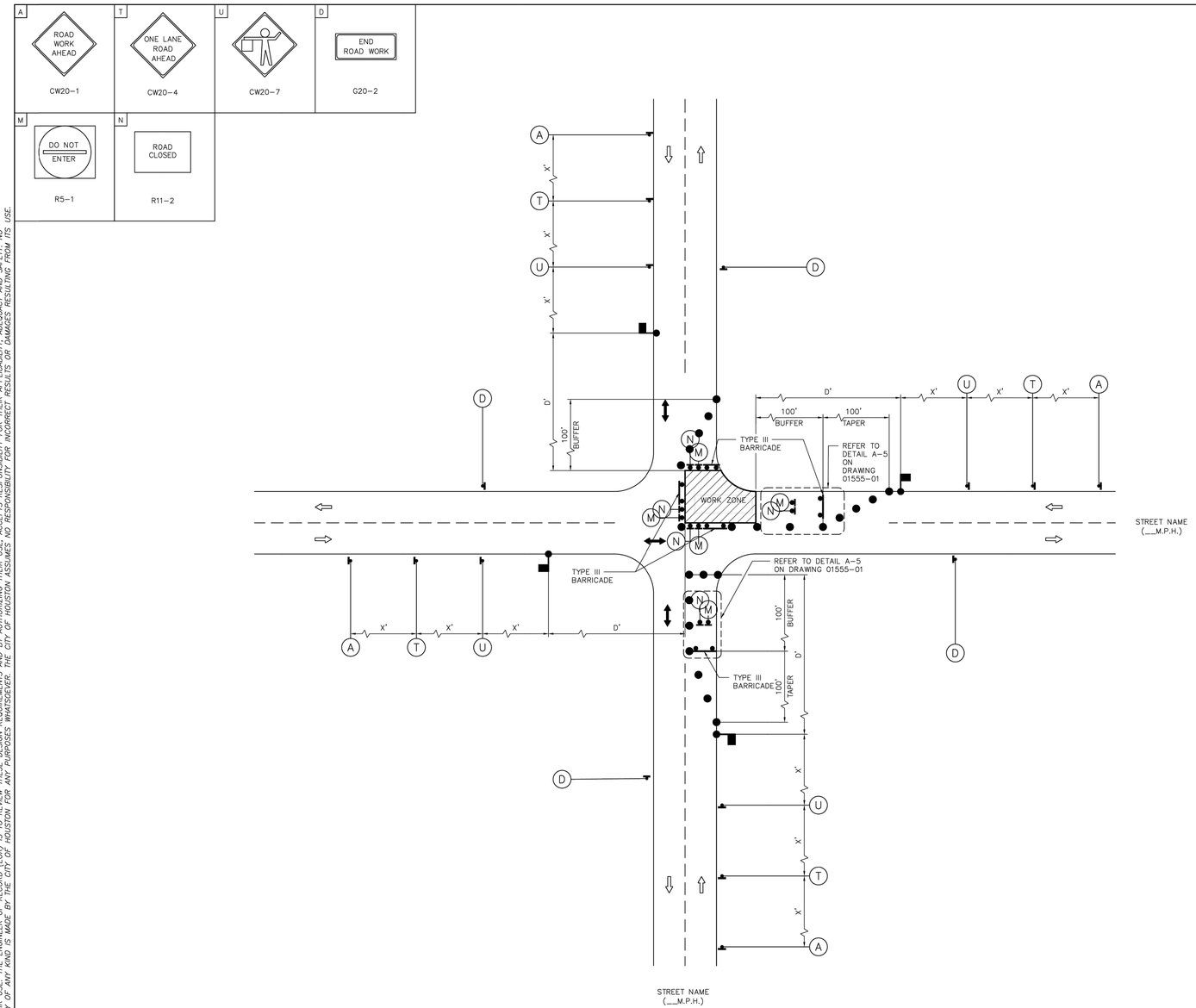
60% SUBMITTAL

PLOTTED: 2/10/2026 9:16 AM

PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat Kuruvar	DocuSigned by: Eddie Nguyen
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-12

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 4 OF 4

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10153

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 12 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-55 OF C-70	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

60% SUBMITTAL

PLOTTED: 2/10/2026 9:16 AM

PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

60% SUBMITTAL

PLOTTED: 2/10/2026 9:16 AM

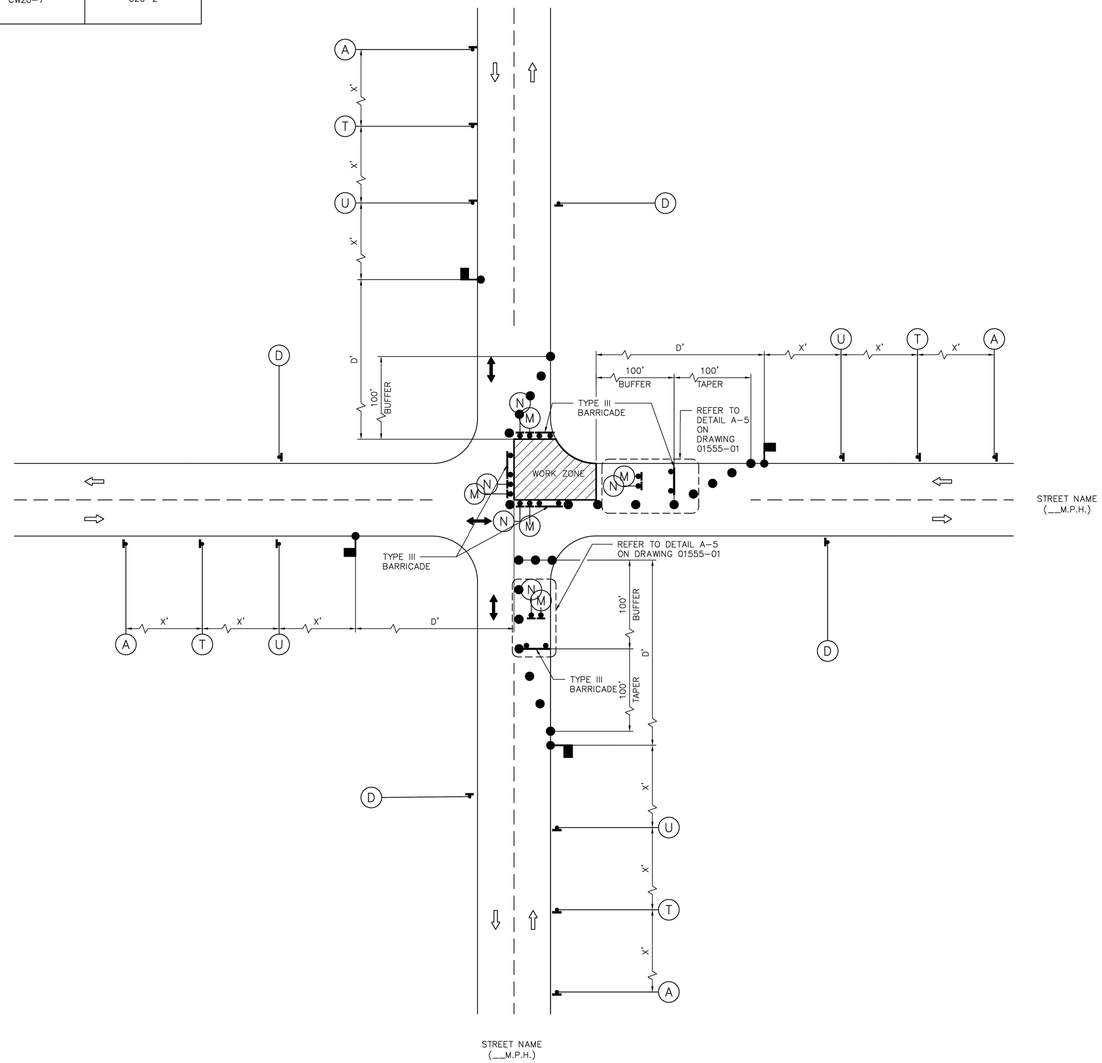
PLOT STYLE: 2025 COH.ctb

FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

A	T	U	D
ROAD WORK AHEAD	ONE LANE ROAD AHEAD		END ROAD WORK
CW20-1	CW20-4	CW20-7	G20-2

M	N
DO NOT ENTER	ROAD CLOSED
R5-1	R11-2



LEGEND:

- SIGN
- FLAGGER
- APPROVED CHANNELIZATION DEVICE
- BARRICADE
- FLASHING ARROW PANEL
- AREA UNDER CONSTRUCTION
- EXISTING TRAVEL WAY
- TRAFFIC CONTROL PLAN DETOUR TRAVEL WAY

NOTES:

1. MINOR WORK AND DAYTIME OPERATIONS ONLY.
2. REFER TO PROJECT SPECIFIC TRAFFIC CONTROL PLANS FOR MAJOR OPERATIONS AND OVERNIGHT LANE CLOSURES.
3. FOR DIMENSIONS REFER TO SHEET 01555-01.
4. INSTALL FLASHERS ON DRUMS WHERE REQUIRED AND APPROVED BY CITY TRAFFIC ENGINEER.
5. MAX. 100' WORK ZONE AT A TIME.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat Barwar	DocuSigned by: Eddie Nguyen
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Hubbuch	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-12

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

TCP TYPICAL CONSTRUCTION ZONE AT A 4-WAY INTERSECTION (LOW VOLUME TRAFFIC) PHASE 4 OF 4

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10153

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

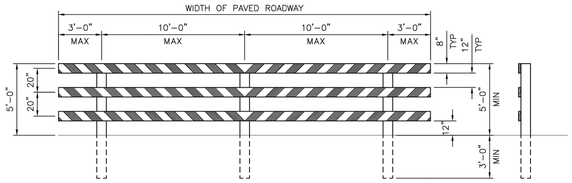
TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 13 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-56 OF C-70	

60% SUBMITTAL
PLOT STYLE: 2025 COH.ctb PLOTTED: 2/10/2026 9:16 AM
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

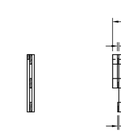
DocuSign Envelope ID: CB71C116-8716-4899-A5EE-0D2F2CC55AF6

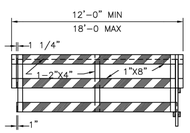
DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.



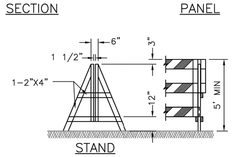
TYPE III BARRICADE FOR END OF ROAD

FOR TYPE III BARRICADE FOR END OF ROAD, THE THREE (3) RAILS SHALL BE REFLECTIVE RED AND RELFLECTIVE WHITE STRIPES ON SIDE FACING TRAFFIC





PANEL

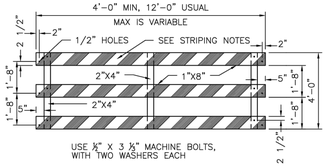


STAND

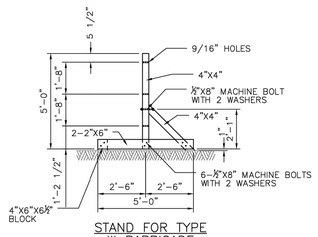


ASSEMBLY

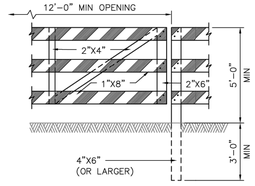
DEMOUNTABLE TYPE III BARRICADE



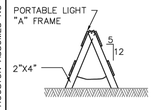
PANEL FOR TYPE III BARRICADE



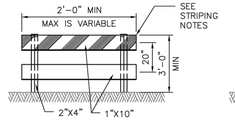
STAND FOR TYPE III BARRICADE



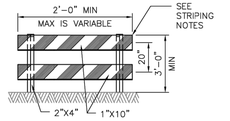
GATE FOR TYPE III BARRICADE



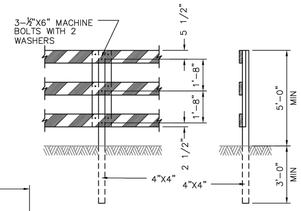
"A" FRAME



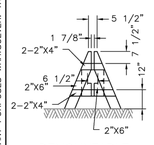
TYPE I



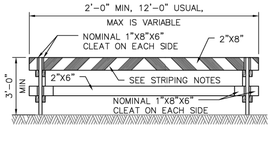
TYPE II



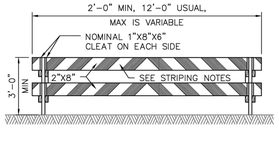
POST FOR TYPE III BARRICADE



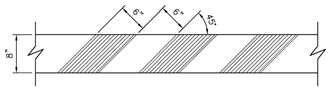
DEMOUNTABLE



TYPE I



TYPE II

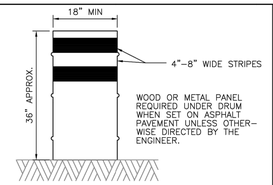


STRIPING FOR BARRICADE

BARRICADE NOTES:

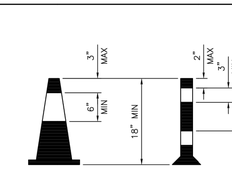
1. THE MOST RECENT EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND IT'S REVISIONS, SHALL GOVERN THE CONSTRUCTION AND USE OF ALL ITEMS HEREIN DESCRIBED.
2. CHANNELIZATION DEVICES OTHER THAN BARRICADES SHOULD NORMALLY BE USED FOR CHANNELIZATION PURPOSES.
3. BARRICADES SHOULD NORMALLY BE PLACED PERPENDICULAR TO THE TRAFFIC FLOW. OTHER CHANNELIZING DEVICES, SUCH AS DRUMS, VERTICAL PANELS OR PORTABLE BARRIERS, SHOULD BE USED WHERE NEEDED TO SEPARATE TRAFFIC FROM THE WORK AREA. IN ALL CASES, THE BARRICADES SHOULD BE SO LOCATED AS TO MOST ADVANTAGEOUSLY WARN AND DIRECT TRAFFIC.
4. BARRICADES MAY BE DESIGNED AND CONSTRUCTED FROM WOOD OR ANY OTHER SUITABLE MATERIAL APPROVED BY THE TMUTCD. THE CONSTRUCTION DETAILS SHOWN HEREON ARE TYPICAL AND ARE SUGGESTED DETAILS FOR WOOD SUPPORT SYSTEMS FOR BARRICADES. THE DETAILS OF RAIL WIDTH AND STRIPING, NUMBER AND SPACING OF RAILS, MINIMUM LENGTH AND HEIGHT (ABOVE PAVEMENT) OF RAILS MUST BE ADHERED TO WHEN ALTERNATE DESIGNS ARE USED.
5. BARRICADES ARE TO BE CONSTRUCTED OF CLEAN SOUND MATERIAL. ALL SURFACES ABOVE GROUND, WHICH ARE NOT STRIPED, SHALL BE WHITE EXCEPT THE UNPAINTED GALVANIZED METAL OR ALUMINUM COMPONENTS MAY BE USED. COMPONENTS MADE OF LUMBER SHALL BE PAINTED WITH A MINIMUM OF TWO COATS OF AN APPROVED BRAND OF WHITE PAINT TO SECURE THOROUGH COVERAGE AND A UNIFORM WHITE COLOR.
6. THE REFLECTORIZED WHITE AND REFLECTORIZED ORANGE (REFLECTORIZED RED) STRIPES FOR BARRICADES, DRUMS AND VERTICAL PANELS SHALL BE CONSTRUCTED OF HIGH INTESITY SHEETING AND SHALL BE MAINTAINED TO MEET THE APPEARANCE, COLOR AND REFLECTIVITY REQUIREMENTS SET BY DOTT.
7. THE CONTRACTOR SHALL MAINTAIN EACH BARRICADE IN A CLEAN AND GOOD CONDITION.
8. BARRICADES SHALL BE REMOVED UPON COMPLETION OF THE WORK AND/OR THE ELIMINATION OF THE HAZARD ON ANY SECTION.

1. FOR ALL TYPES OF BARRICADES WITH RAILS LESS THAN 3'-0" LONG, STRIPES 4" WIDE SHALL BE USED. IDENTIFICATION MARKINGS MAY BE SHOWN ONLY ON BACK SIDE OF BARRICADE RAILS.
2. STRIPING SHOULD COVER THE FULL WIDTH OF THE RAIL. STRIPING OF RAILS, PANELS, ETC, SHOULD SLOPE DOWNWARD AT AN ANGLE OF 45° DEGREES IN DIRECTIONS TRAFFIC IS TO PASS.
3. WHERE A BARRICADE EXTENDS ENTIRELY ACROSS A ROADWAY, IT IS DESIRABLE THAT THE STRIPES SLOPE DOWNWARD IN THE DIRECTION TOWARD WHICH TRAFFIC MUST TURN IN DETOURING. WHEN BOTH RIGHT AND LEFT TURNS ARE PROVIDED FOR, THE CHEVRON STRIPING MAY SLOPE DOWNWARD IN BOTH DIRECTIONS FROM THE CENTER OF THE BARRICADE.



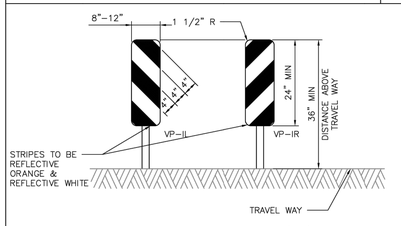
DRUMS

1. DRUMS, SET ON END, AND USED FOR TRAFFIC WARNING OR CHANNELIZATION SHALL BE APPROX 36" IN HEIGHT AND A MIN OF 18" IN DIAMETER. THE CONTRACTOR, AT HIS OPTION, MAY USE DRUMS MADE FROM STEEL BARRELS OR BLACK POLYETHYLENE PLASTIC DRUM LINERS WEIGHING APPROX EIGHT POUNDS EACH. THE MARKINGS ON DRUMS SHALL BE HORIZONTAL, CIRCUMFERENTIAL, REFLETORIZED ORANGE AND REFLECTORIZED WHITE STRIPES, 4 TO 8 INCHES WIDE. THE FIRST REFLECTORIZED STRIPE SHOULD START WITHIN TWO (2) INCHES OF THE TOP OF THE DRUM. THERE SHALL BE AT LEAST TWO ORANGE AND TWO WHITE STRIPES ON EACH DRUM. IF THERE ARE NON-REFLECTORIZED SPACES BETWEEN THE HORIZONTAL ORANGE AND WHITE STRIPES, THEY SHALL BE NO MORE THAN 2 INCHES WIDE. METAL DRUMS SHALL BE PAINTED BLACK OR ORANGE BEFORE REFLECTORIZED STRIPES ARE ADDED. ALL DRUMS ON PROJECT WILL BE THE SAME COLOR WHEN DRUMS ARE PLACED IN THE ROADWAY. APPROPIATE WARNING SIGNS SHOULD BE USED. DURING HOURS OF DARKNESS, A FLASHING WARNING LIGHT SHOULD BE PLACED ON DRUMS USED SINGLY AS A WARNING DEVICE. STEADY BURN ELECTRIC LIGHTS OR DELINEATORS SHOULD BE PLACED ON DRUMS USED IN SERIES FOR TRAFFIC CHANNELIZATION. DRUMS SHALL BE WEIGHTED WITH SAND TO THE EXTENT INDICATED IN THE PLANS.
2. CWI-8 CHEVRON SIGNS, CWI-6A ARROW SIGNS OR VP-I VERTICAL PANELS MOUNTED ABOVE DRUMS MAY BE USED AS SUPPLEMENTS TO DRUM DELINEATION.



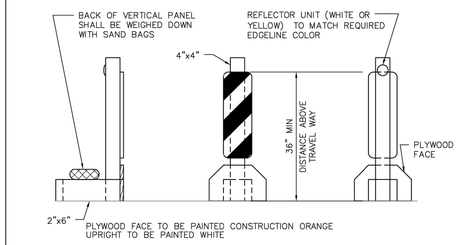
CONES

1. TRAFFIC CONES AND TUBULAR MARKERS SHALL BE A MIN OF 18" INCHES IN HEIGHT WITH A BROADENED BASE AND MAY BE MADE OF VARIOUS MATERIALS TO WITHSTAND IMPACT WITHOUT DAMAGE TO THEMSELVES OR TO VEHICLES. LARGER SIZES SHOULD BE USED ON FREEWAYS AND OTHER ROADWAYS WHERE SPEED ARE RELATIVELY HIGH OR WHERE EVER MORE CONSPICUOUS GUIDANCE IS NEEDED. ORANGE SHALL BE THE PREDOMINANT COLOR ON CONES AND TUBULAR MARKERS. THEY SHOULD BE KEPT CLEAN AND BRIGHT FOR MAX TARGET VALUE. FOR NIGHT TIME USE THEY SHALL BE REFLECTORIZED OR EQUIPPED WITH LIGHTING DEVICES FOR MAX VISIBILITY. REFLECTORIZED MATERIAL SHALL HAVE A SMOOTH, SEALED OUTER SURFACE WHICH WILL DISPLAY THE SAME APPROX COLOR DAY AND NIGHT.
2. REFLECTORIZATION OF TUBULAR MARKERS SHALL BE A MIN OF TWO THREE-INCH BANDS PLACED A MAX OF 2" FROM THE TOP WITH A MAX OF 6" BETWEEN THE BANDS. REFLECTORIZATION OF CONES SHALL BE PROVIDED BY A MIN 6" BAND PLACED A MAX OF 3" FROM THE TOP.
3. CONES OR TUBULAR MARKERS ARE GENERALLY ONLY SUITABLE FOR TEMPORARY USAGE (UP TO 8 HOURS) WITH OTHER CHANNELIZATION DEVICES SUCH AS VERTICAL PANELS OR BARRICADES PREFERRED FOR LONGER TERM USAGE. CARE SHOULD BE TAKEN TO INSURE THAT THEY REMAIN IN THEIR PROPER LOCATION AND IN AN UPRIGHT POSITION.



VERTICAL PANELS (VP)

VERTICAL PANELS ARE NORMALLY USED AS CHANNELIZING DEVICES TO INDICATE TANGENT OR NEARLY TANGENT ROADWAY ALIGNMENT WHERE GOOD TARGET VALUE OF A DEVICE IS NEEDED IN DAYTIME AS WELL AS THE NIGHTTIME. IN ADDITION, VERTICAL PANELS SHOULD BE USED AT THE EDGE OF SHOULDER DROP-OFFS AND OTHER SUCH AREAS AS LANE TRANSITIONS WHERE POSITIVE DAY AND NIGHT DELINEATION MAY BE REQUIRED. VERTICAL PANELS SHOULD BE MOUNTED BACK TO BACK IF USED AT THE EDGE OF CUTS ADJACENT TO TWO-WAY TWO LANE ROADWAYS. STRIPES SHOULD ALWAYS SLOPE DOWNWARD TOWARD THE TRAVELED WAY.



TYPICAL PORTABLE VERTICAL PANEL OR DELINEATOR

OTHER SIMILAR SUPPORTS MAY BE USED WHEN APPROVED BY TMUTCD AND DIRECTED BY THE CITY OF HOUSTON.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat Kunwar	DocuSigned by: HANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Hubbuch	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV-27-2023	DWG NO: 01555-14

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

BARRICADE AND CHANNELIZING DEVICES

	FOR CITY OF HOUSTON USE ONLY
DRAWING SCALE	
NOT TO SCALE	

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY
GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

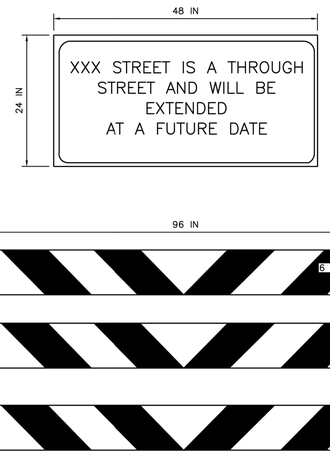
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 14 OF 16)

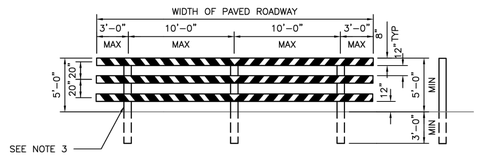
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-57 OF C-70	

60% SUBMITTAL
PLOTTED: 2/10/2026 9:16 AM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6



TYPE III BARRICADE
TYPICAL END OF ROAD BARRICADE



TYPE III BARRICADE
FOR END OF ROAD

NOTES:

1. FONT SHALL BE HWY GOTHIC C, 4 INCH HEIGHT.
2. REFER TO STANDARD DETAIL NO. 01555-14 FOR TYPE III BARRICADE DETAIL.
3. FOR TYPE III BARRICADE FOR END OF ROAD, THE THREE (3) RAILS SHALL BE REFLECTIVE RED AND REFLECTIVE WHITE STRIPES ON SIDE FACING TRAFFIC.

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE AUTHOR REGISTRANT'S ONLY WARRANTY WITH RESPECT TO THIS STANDARD IS THAT IT WAS PREPARED IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES AND STANDARDS. ANY PERSON OR ENTITY THAT USES OR MODIFIES THIS STANDARD FOR ANY PURPOSE OTHER THAN THAT ORIGINALLY INTENDED BY THE AUTHOR REGISTRANT AS EVIDENCED BY THE CONTRACT DOCUMENTS OR THIS STANDARD, OR THAT USES THIS STANDARD WITHOUT FIRST CAREFULLY REVIEWING THE CONTRACT DOCUMENTS AND THIS STANDARD TO DETERMINE THE APPROPRIATENESS OF THIS STANDARD FOR SUCH USE, DOES SO AT THEIR OWN RISK AND WITHOUT LIABILITY TO THE AUTHOR REGISTRANT. ANY PERSON OR ENTITY THAT MODIFIES THIS STANDARD, OR USES IT FOR PURPOSES OTHER THAN THOSE ORIGINALLY INTENDED BY THE AUTHOR REGISTRANT AS EVIDENCED BY THE CONTRACT DOCUMENTS, AGREES TO INDEMNIFY AND HOLD HARMLESS THE AUTHOR REGISTRANT AND ANY OTHER PERSON OR ENTITY WHOSE LIABILITY IS VICARIOUS BASED ON THE AUTHOR REGISTRANT'S ACTIONS OR INACTIONS. THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE AUTHOR REGISTRANT'S ONLY WARRANTY WITH RESPECT TO THIS STANDARD IS THAT IT WAS PREPARED IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES AND STANDARDS. ANY PERSON OR ENTITY THAT USES OR MODIFIES THIS STANDARD FOR ANY PURPOSE OTHER THAN THAT ORIGINALLY INTENDED BY THE AUTHOR REGISTRANT AS EVIDENCED BY THE CONTRACT DOCUMENTS OR THIS STANDARD, OR THAT USES THIS STANDARD WITHOUT FIRST CAREFULLY REVIEWING THE CONTRACT DOCUMENTS AND THIS STANDARD TO DETERMINE THE APPROPRIATENESS OF THIS STANDARD FOR SUCH USE, DOES SO AT THEIR OWN RISK AND WITHOUT LIABILITY TO THE AUTHOR REGISTRANT. ANY PERSON OR ENTITY THAT MODIFIES THIS STANDARD, OR USES IT FOR PURPOSES OTHER THAN THOSE ORIGINALLY INTENDED BY THE AUTHOR REGISTRANT AS EVIDENCED BY THE CONTRACT DOCUMENTS, AGREES TO INDEMNIFY AND HOLD HARMLESS THE AUTHOR REGISTRANT AND ANY OTHER PERSON OR ENTITY WHOSE LIABILITY IS VICARIOUS BASED ON THE AUTHOR REGISTRANT'S ACTIONS OR INACTIONS. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

END OF STREET SIGN

(SCALE: NOT TO SCALE)

APPROVED BY:

DocuSigned by: Sukut Bamwar — CITY ENGINEER
DocuSigned by: Leming Nguyen — CITY TRAFFIC ENGINEER
DocuSigned by: Carl Haddock — DIRECTOR OF HPW

EFF DATE: NOV-27-2023 | DWG NO: 01555-15

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

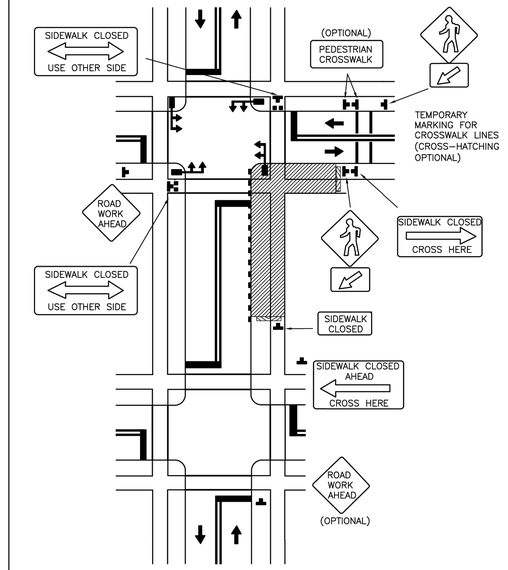
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 15 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-58 OF C-70	

60% SUBMITTAL
PLOTTED: 2/10/2026 9:16 AM
PLOT STYLE: 2025 COH.ctb
FILE PATH: C:\Users\crubit\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-TCP-22x34_STD DETAILS.dwg

DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6



DISCLAIMER: THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

CROSSWALK CLOSURES AND PEDESTRIAN DETOURS

(SCALE: NOT TO SCALE)

APPROVED BY:

CITY ENGINEER	CITY TRAFFIC ENGINEER	DIRECTOR OF HPW	EFF DATE: NOV-27-2023	DWG NO: 01555-16
DocuSigned by: Sukut Kanwar	DocuSigned by: KHANG NGUYEN	DocuSigned by: Carol Haddock		

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 3405 1

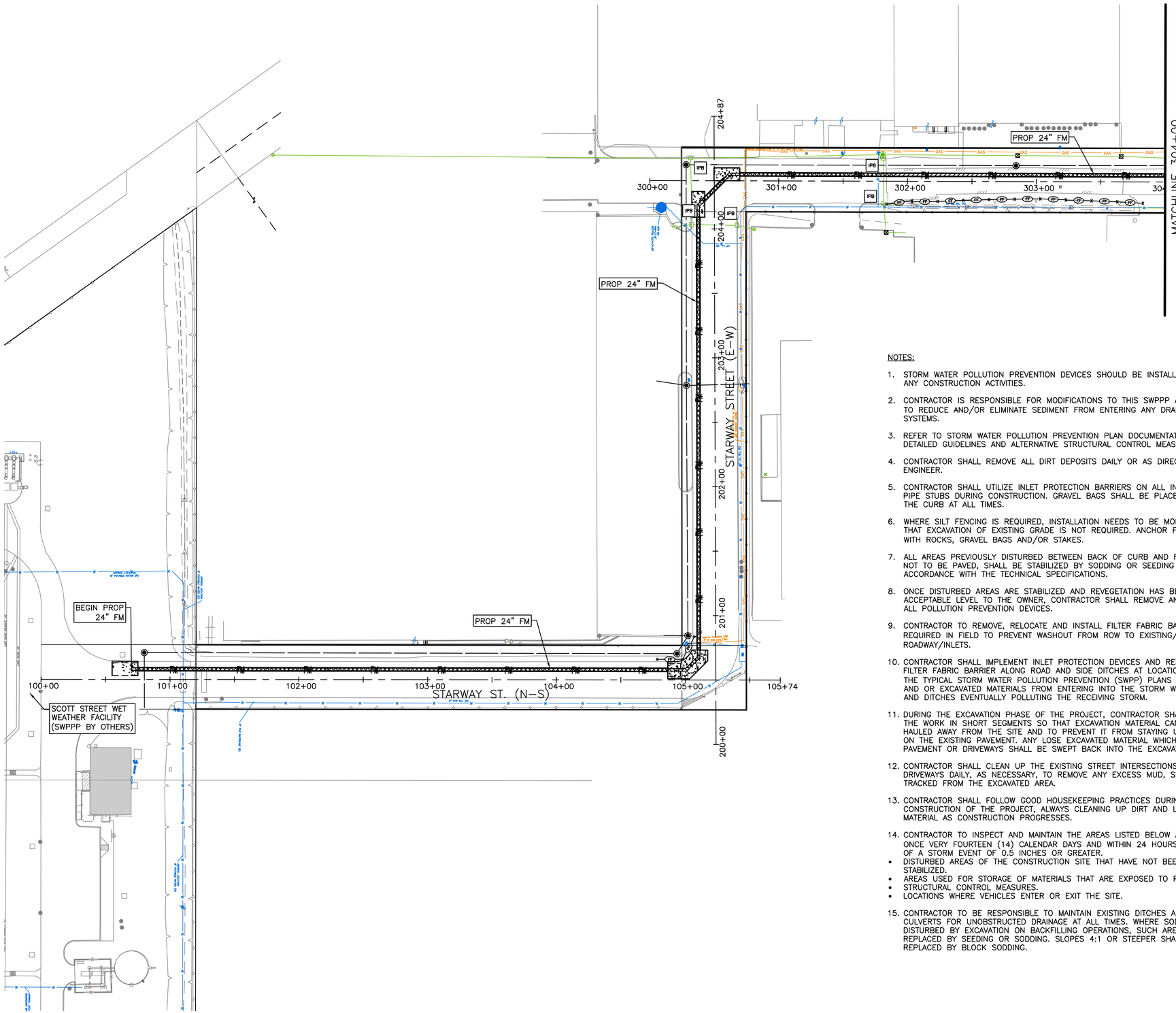
PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
RUDRARADHYA S. HIREMATH, P.E.
P.E. SERIAL NO. 135854
DATE: 02/10/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

TRAFFIC CONTROL PLAN STANDARD DETAILS (SHEET 16 OF 16)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-59 OF C-70	



0 40' 80'

SCALE: 1"=40'

NOTES:

1. STORM WATER POLLUTION PREVENTION DEVICES SHOULD BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THIS SWPPP AS NECESSARY TO REDUCE AND/OR ELIMINATE SEDIMENT FROM ENTERING ANY DRAINAGE SYSTEMS.
3. REFER TO STORM WATER POLLUTION PREVENTION PLAN DOCUMENTATION FOR DETAILED GUIDELINES AND ALTERNATIVE STRUCTURAL CONTROL MEASURES.
4. CONTRACTOR SHALL REMOVE ALL DIRT DEPOSITS DAILY OR AS DIRECTED BY ENGINEER.
5. CONTRACTOR SHALL UTILIZE INLET PROTECTION BARRIERS ON ALL INLETS AND PIPE STUBS DURING CONSTRUCTION. GRAVEL BAGS SHALL BE PLACED NEXT TO THE CURB AT ALL TIMES.
6. WHERE SILT FENCING IS REQUIRED, INSTALLATION NEEDS TO BE MODIFIED SO THAT EXCAVATION OF EXISTING GRADE IS NOT REQUIRED. ANCHOR FABRIC FLAP WITH ROCKS, GRAVEL BAGS AND/OR STAKES.
7. ALL AREAS PREVIOUSLY DISTURBED BETWEEN BACK OF CURB AND ROW THAT ARE NOT TO BE PAVED, SHALL BE STABILIZED BY SODDING OR SEEDING IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
8. ONCE DISTURBED AREAS ARE STABILIZED AND REVEGETATION HAS BEGUN TO AN ACCEPTABLE LEVEL TO THE OWNER, CONTRACTOR SHALL REMOVE AND DISPOSE ALL POLLUTION PREVENTION DEVICES.
9. CONTRACTOR TO REMOVE, RELOCATE AND INSTALL FILTER FABRIC BARRIER AS REQUIRED IN FIELD TO PREVENT WASHOUT FROM ROW TO EXISTING/PROPOSED ROADWAY/INLETS.
10. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
11. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENT OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
12. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FROM THE EXCAVATED AREA.
13. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
14. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE VERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
    - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
    - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
    - STRUCTURAL CONTROL MEASURES.
    - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
15. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

SW3P LEGEND

FILTER FABRIC FENCE	X—FF—X
REINFORCED FILTER FABRIC BARRIER	X—RFB—X
CONSTRUCTION FENCE	———
INLET PROTECTION BARRIER (STAGE II INLETS)	IPB
ROCK FILTER DAM	—RFD1—
CONSTRUCTION EXIT	CE-1

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

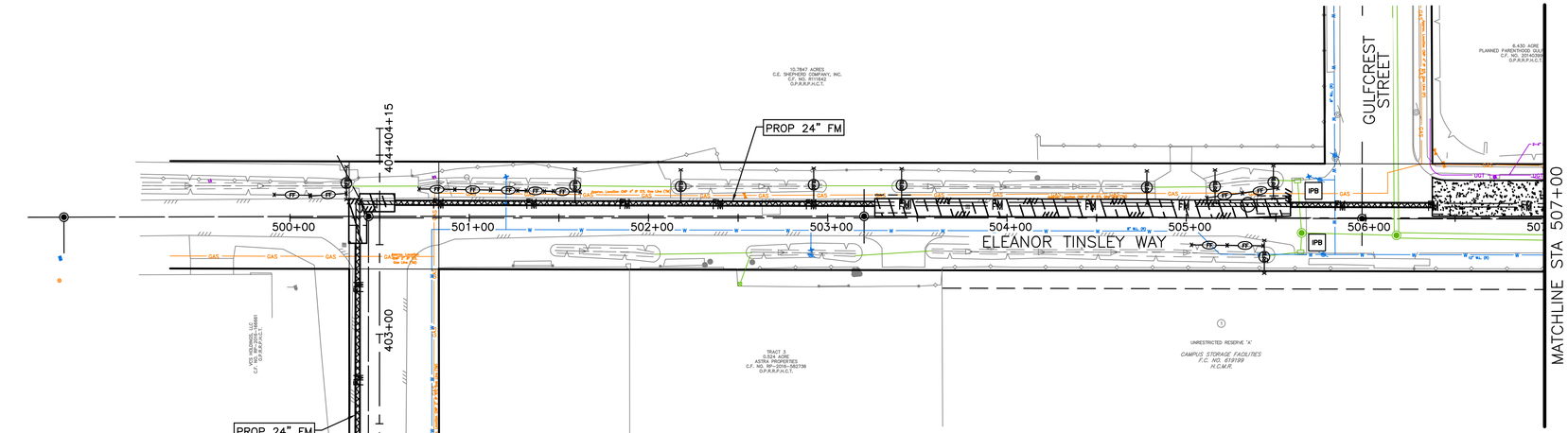
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

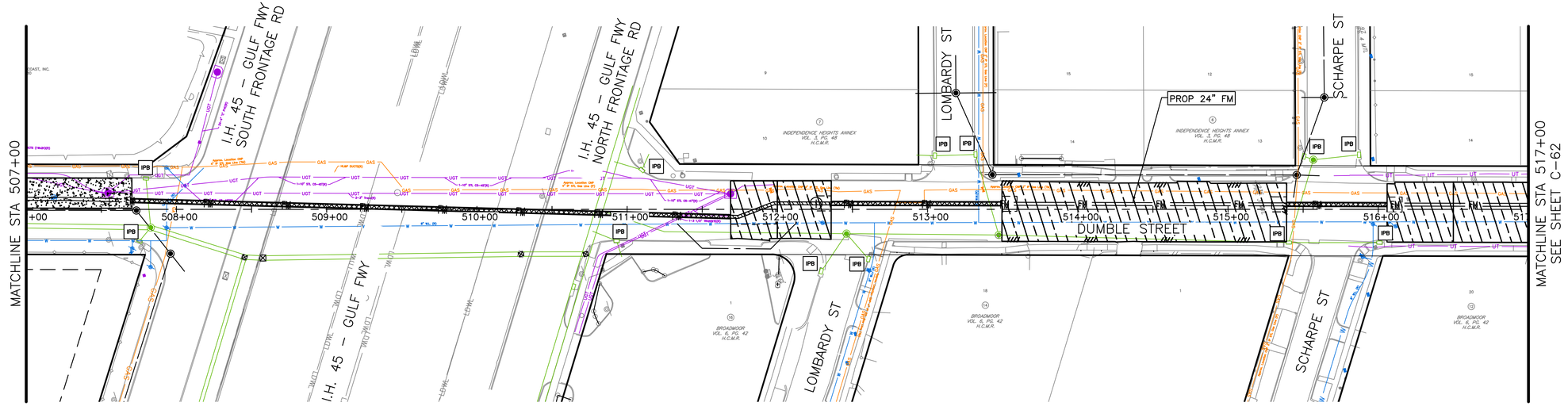
SWPPP

SHEET 1 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-60 OF C-70	

PLOTTED: 2/9/2026 5:51 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-SWPPP.dwg





NOTES:

1. STORM WATER POLLUTION PREVENTION DEVICES SHOULD BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THIS SWPPP AS NECESSARY TO REDUCE AND/OR ELIMINATE SEDIMENT FROM ENTERING ANY DRAINAGE SYSTEMS.
3. REFER TO STORM WATER POLLUTION PREVENTION PLAN DOCUMENTATION FOR DETAILED GUIDELINES AND ALTERNATIVE STRUCTURAL CONTROL MEASURES.
4. CONTRACTOR SHALL REMOVE ALL DIRT DEPOSITS DAILY OR AS DIRECTED BY ENGINEER.
5. CONTRACTOR SHALL UTILIZE INLET PROTECTION BARRIERS ON ALL INLETS AND PIPE STUBS DURING CONSTRUCTION. GRAVEL BAGS SHALL BE PLACED NEXT TO THE CURB AT ALL TIMES.
6. WHERE SILT FENCING IS REQUIRED, INSTALLATION NEEDS TO BE MODIFIED SO THAT EXCAVATION OF EXISTING GRADE IS NOT REQUIRED. ANCHOR FABRIC FLAP WITH ROCKS, GRAVEL BAGS AND/OR STAKES.
7. ALL AREAS PREVIOUSLY DISTURBED BETWEEN BACK OF CURB AND ROW THAT ARE NOT TO BE PAVED, SHALL BE STABILIZED BY SODDING OR SEEDING IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
8. ONCE DISTURBED AREAS ARE STABILIZED AND REVEGETATION HAS BEGUN TO AN ACCEPTABLE LEVEL TO THE OWNER, CONTRACTOR SHALL REMOVE AND DISPOSE ALL POLLUTION PREVENTION DEVICES.
9. CONTRACTOR TO REMOVE, RELOCATE AND INSTALL FILTER FABRIC BARRIER AS REQUIRED IN FIELD TO PREVENT WASHOUT FROM ROW TO EXISTING/PROPOSED ROADWAY/INLETS.
10. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
11. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENT OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
12. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FROM THE EXCAVATED AREA.
13. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
14. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE VERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
    - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
    - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
    - STRUCTURAL CONTROL MEASURES.
    - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
15. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

0 40' 80'

SCALE: 1"=40'

SW3P LEGEND

FILTER FABRIC FENCE	X—FF—X
REINFORCED FILTER FABRIC BARRIER	X—RFB—X
CONSTRUCTION FENCE	———
INLET PROTECTION BARRIER (STAGE II INLETS)	IPB
ROCK FILTER DAM	—RFD1—
CONSTRUCTION EXIT	CE-1

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

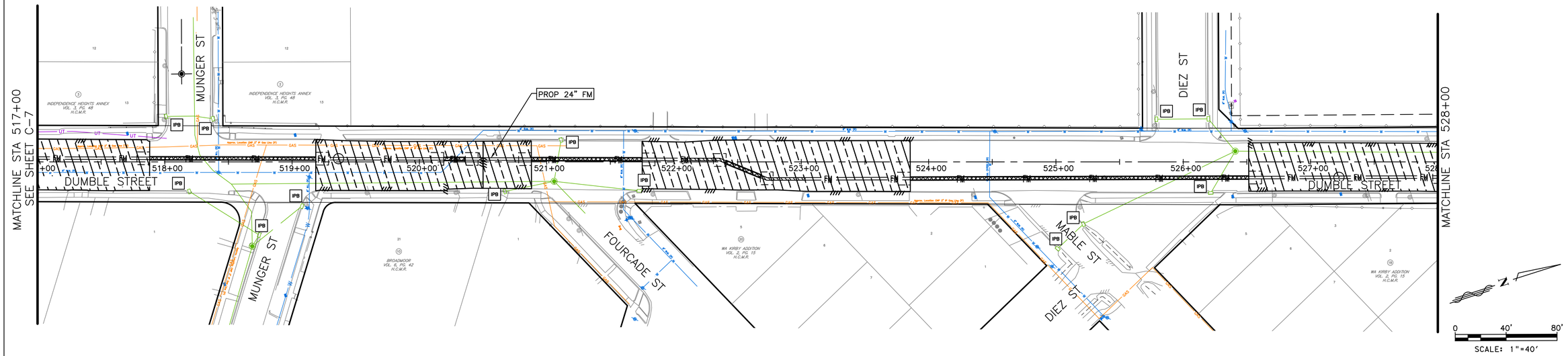
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

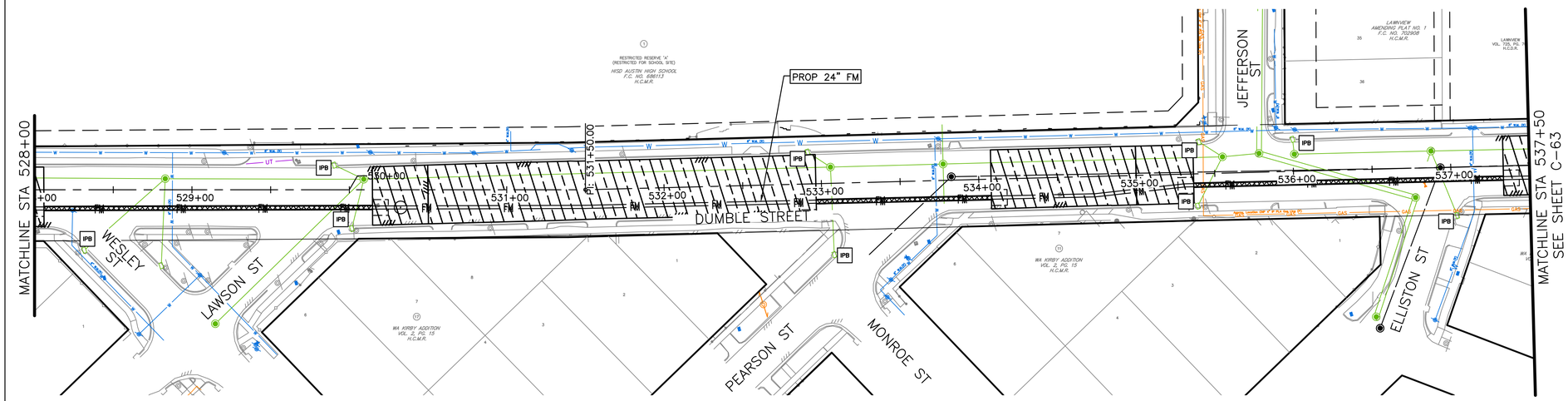
SWPPP

SHEET 2 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-61 OF C-70	

PLOTTED: 2/9/2026 5:51 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-SWPPP.dwg





SW3P LEGEND

- FILTER FABRIC FENCE — FF
- REINFORCED FILTER FABRIC BARRIER — RFB
- CONSTRUCTION FENCE
- INLET PROTECTION BARRIER (STAGE II INLETS) — IPB
- ROCK FILTER DAM — RFD1
- CONSTRUCTION EXIT — CE-1

NOTES:

1. STORM WATER POLLUTION PREVENTION DEVICES SHOULD BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THIS SWPPP AS NECESSARY TO REDUCE AND/OR ELIMINATE SEDIMENT FROM ENTERING ANY DRAINAGE SYSTEMS.
3. REFER TO STORM WATER POLLUTION PREVENTION PLAN DOCUMENTATION FOR DETAILED GUIDELINES AND ALTERNATIVE STRUCTURAL CONTROL MEASURES.
4. CONTRACTOR SHALL REMOVE ALL DIRT DEPOSITS DAILY OR AS DIRECTED BY ENGINEER.
5. CONTRACTOR SHALL UTILIZE INLET PROTECTION BARRIERS ON ALL INLETS AND PIPE STUBS DURING CONSTRUCTION. GRAVEL BAGS SHALL BE PLACED NEXT TO THE CURB AT ALL TIMES.
6. WHERE SILT FENCING IS REQUIRED, INSTALLATION NEEDS TO BE MODIFIED SO THAT EXCAVATION OF EXISTING GRADE IS NOT REQUIRED. ANCHOR FABRIC FLAP WITH ROCKS, GRAVEL BAGS AND/OR STAKES.
7. ALL AREAS PREVIOUSLY DISTURBED BETWEEN BACK OF CURB AND ROW THAT ARE NOT TO BE PAVED, SHALL BE STABILIZED BY SODDING OR SEEDING IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
8. ONCE DISTURBED AREAS ARE STABILIZED AND REVEGETATION HAS BEGUN TO AN ACCEPTABLE LEVEL TO THE OWNER, CONTRACTOR SHALL REMOVE AND DISPOSE ALL POLLUTION PREVENTION DEVICES.
9. CONTRACTOR TO REMOVE, RELOCATE AND INSTALL FILTER FABRIC BARRIER AS REQUIRED IN FIELD TO PREVENT WASHOUT FROM ROW TO EXISTING/PROPOSED ROADWAY/INLETS.
10. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
11. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENT OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
12. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FROM THE EXCAVATED AREA.
13. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
14. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE VERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
    - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
    - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
    - STRUCTURAL CONTROL MEASURES.
    - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
15. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1045
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10353

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 3405 1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

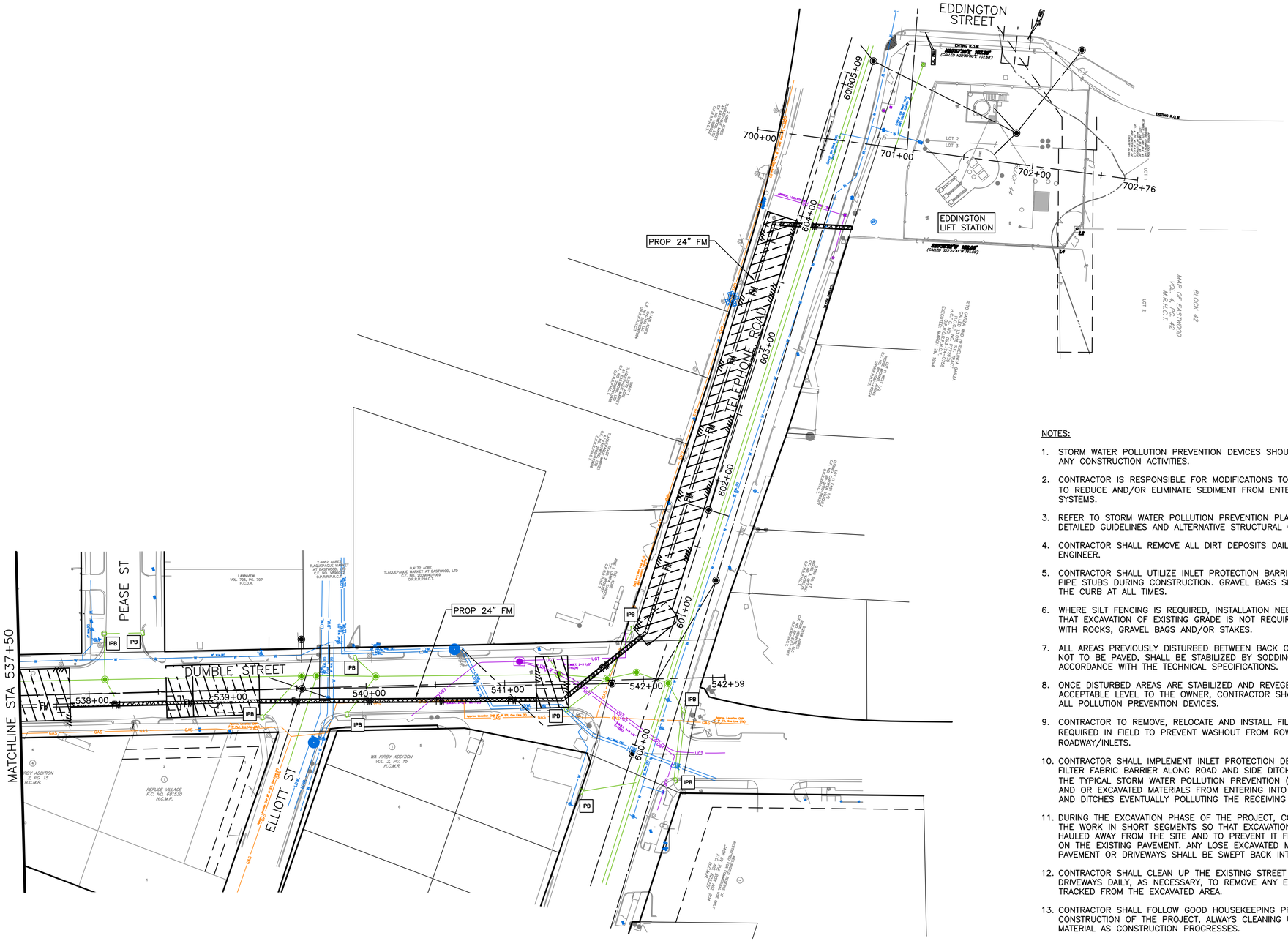
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SWPPP

SHEET 3 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-62 OF C-70	

PLOTTED: 2/9/2026 5:52 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-SWPPP.dwg



NOTES:

1. STORM WATER POLLUTION PREVENTION DEVICES SHOULD BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES.
2. CONTRACTOR IS RESPONSIBLE FOR MODIFICATIONS TO THIS SWPPP AS NECESSARY TO REDUCE AND/OR ELIMINATE SEDIMENT FROM ENTERING ANY DRAINAGE SYSTEMS.
3. REFER TO STORM WATER POLLUTION PREVENTION PLAN DOCUMENTATION FOR DETAILED GUIDELINES AND ALTERNATIVE STRUCTURAL CONTROL MEASURES.
4. CONTRACTOR SHALL REMOVE ALL DIRT DEPOSITS DAILY OR AS DIRECTED BY ENGINEER.
5. CONTRACTOR SHALL UTILIZE INLET PROTECTION BARRIERS ON ALL INLETS AND PIPE STUBS DURING CONSTRUCTION. GRAVEL BAGS SHALL BE PLACED NEXT TO THE CURB AT ALL TIMES.
6. WHERE SILT FENCING IS REQUIRED, INSTALLATION NEEDS TO BE MODIFIED SO THAT EXCAVATION OF EXISTING GRADE IS NOT REQUIRED. ANCHOR FABRIC FLAP WITH ROCKS, GRAVEL BAGS AND/OR STAKES.
7. ALL AREAS PREVIOUSLY DISTURBED BETWEEN BACK OF CURB AND ROW THAT ARE NOT TO BE PAVED, SHALL BE STABILIZED BY SODDING OR SEEDING IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.
8. ONCE DISTURBED AREAS ARE STABILIZED AND REVEGETATION HAS BEGUN TO AN ACCEPTABLE LEVEL TO THE OWNER, CONTRACTOR SHALL REMOVE AND DISPOSE ALL POLLUTION PREVENTION DEVICES.
9. CONTRACTOR TO REMOVE, RELOCATE AND INSTALL FILTER FABRIC BARRIER AS REQUIRED IN FIELD TO PREVENT WASHOUT FROM ROW TO EXISTING/PROPOSED ROADWAY/INLETS.
10. CONTRACTOR SHALL IMPLEMENT INLET PROTECTION DEVICES AND REINFORCED FILTER FABRIC BARRIER ALONG ROAD AND SIDE DITCHES AT LOCATIONS SHOWN ON THE TYPICAL STORM WATER POLLUTION PREVENTION (SWPP) PLANS TO KEEP SILT AND OR EXCAVATED MATERIALS FROM ENTERING INTO THE STORM WATER INLETS AND DITCHES EVENTUALLY POLLUTING THE RECEIVING STORM.
11. DURING THE EXCAVATION PHASE OF THE PROJECT, CONTRACTOR SHALL SCHEDULE THE WORK IN SHORT SEGMENTS SO THAT EXCAVATION MATERIAL CAN BE QUICKLY HAULED AWAY FROM THE SITE AND TO PREVENT IT FROM STAYING UNCOLLECTED ON THE EXISTING PAVEMENT. ANY LOSE EXCAVATED MATERIAL WHICH FALLS ON PAVEMENT OR DRIVEWAYS SHALL BE SWEPT BACK INTO THE EXCAVATED AREA.
12. CONTRACTOR SHALL CLEAN UP THE EXISTING STREET INTERSECTIONS AND DRIVEWAYS DAILY, AS NECESSARY, TO REMOVE ANY EXCESS MUD, SILT OR ROCK TRACKED FROM THE EXCAVATED AREA.
13. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT, ALWAYS CLEANING UP DIRT AND LOOSE MATERIAL AS CONSTRUCTION PROGRESSES.
14. CONTRACTOR TO INSPECT AND MAINTAIN THE AREAS LISTED BELOW AT LEAST ONCE VERY FOURTEEN (14) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT OF 0.5 INCHES OR GREATER.
    - DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
    - AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION.
    - STRUCTURAL CONTROL MEASURES.
    - LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE.
15. CONTRACTOR TO BE RESPONSIBLE TO MAINTAIN EXISTING DITCHES AND OR CULVERTS FOR UNOBSTRUCTED DRAINAGE AT ALL TIMES. WHERE SODDING IS DISTURBED BY EXCAVATION ON BACKFILLING OPERATIONS, SUCH AREAS SHALL BE REPLACED BY SEEDING OR SODDING. SLOPES 4:1 OR STEEPER SHALL BE REPLACED BY BLOCK SODDING.

SW3P LEGEND

- FILTER FABRIC FENCE — X—FF—X
- REINFORCED FILTER FABRIC BARRIER — X—RFB—X
- CONSTRUCTION FENCE
- INLET PROTECTION BARRIER (STAGE II INLETS) — IPB
- ROCK FILTER DAM — RFD1
- CONSTRUCTION EXIT — CE-1

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SWPPP

SHEET 4 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-63 OF C-70	

PLOTTED: 2/9/2026 5:52 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-SWPPP.dwg

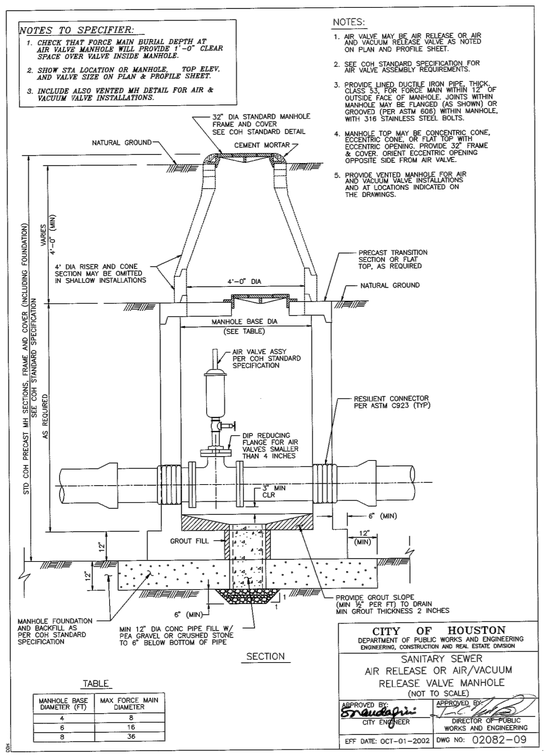
PLOT STYLE: COH.ctb PLOTTED: 2/9/2026 5:53 PM
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-DT.dwg

NOTES TO SPECIFIER:

1. *CHECK THAT FORCE MAIN BURIAL DEPTH AT AIR VALVE MANHOLE WILL PROVIDE 1'-0" CLEAR SPACE OVER VALVE INSIDE MANHOLE.*
2. *SHOW STA LOCATION OR MANHOLE TOP ELEV, AND VALVE SIZE ON PLAN & PROFILE SHEET.*
3. *INCLUDE ALSO VENTED MH DETAIL FOR AIR & VACUUM VALVE INSTALLATIONS.*

NOTES:

1. AIR VALVE MAY BE AIR RELEASE OR AIR AND VACUUM RELEASE VALVE AS NOTED ON PLAN AND PROFILE SHEET.
2. SEE COH STANDARD SPECIFICATION FOR AIR VALVE ASSEMBLY REQUIREMENTS.
3. PROVIDE LINED, DUCTILE IRON PIPE, THICK CLASS 53, FOR FORCE MAIN WITHIN 12" OF OUTSIDE FACE OF MANHOLE. JOINTS WITHIN MANHOLE MAY BE FLANGED (AS SHOWN) OR GROOVED (PER ASTM 606) WITHIN MANHOLE, WITH 316 STAINLESS STEEL BOLTS.
4. MANHOLE TOP MAY BE CONCENTRIC CONE, ECCENTRIC CONE, OR FLAT TOP WITH ECCENTRIC OPENING. PROVIDE 32" FRAME & COVER. ORIENT ECCENTRIC OPENING OPPOSITE SIDE FROM AIR VALVE.
5. PROVIDE VENTED MANHOLE FOR AIR AND VACUUM VALVE INSTALLATIONS AND AT LOCATIONS INDICATED ON THE DRAWINGS.



SECTION

TABLE

MANHOLE BASE DIAMETER (FT)	MAX FORCE MAIN DIAMETER
4	8
6	16
8	36

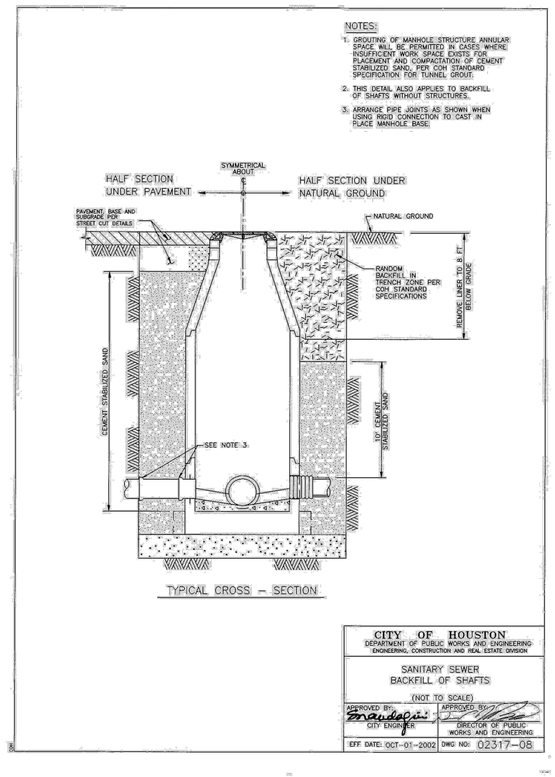
CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER
AIR RELEASE OR AIR/VACUUM RELEASE VALVE MANHOLE
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER
APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002
DWG NO: 02082-09

NOTES:

1. GROUTING OF MANHOLE STRUCTURE ANNULAR SPACE WILL BE PERMITTED IN CASES WHERE INSUFFICIENT WORK SPACE EXISTS FOR PLACEMENT AND COMPACTATION OF CEMENT STABILIZED SAND, PER COH STANDARD SPECIFICATION FOR TUNNEL GROUT.
2. THIS DETAIL ALSO APPLIES TO BACKFILL OF SHAFTS WITHOUT STRUCTURES.
3. ARRANGE PIPE JOINTS AS SHOWN WHEN USING RIGID CONNECTION TO CAST IN PLACE MANHOLE BASE.



TYPICAL CROSS - SECTION

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

SANITARY SEWER
BACKFILL OF SHAFTS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER
APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: OCT-01-2002
DWG NO: 02317-08

SCALE: N/A

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
15727 Katy Freeway, Suite 1060
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

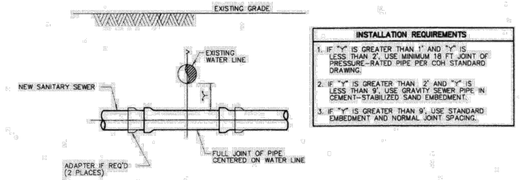
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SANITARY DETAILS
SHEET 1 OF 3

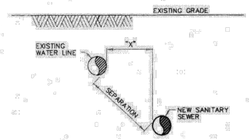
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-64 OF C-70	



INSTALLATION REQUIREMENTS

1. IF "X" IS GREATER THAN 1' AND "Y" IS LESS THAN 2', USE MINIMUM 18 FT JOINT OF PRESSURE-RATED PIPE PER COH STANDARD DRAWING.
2. IF "X" IS GREATER THAN 2' AND "Y" IS LESS THAN 9', USE GRAVITY SEWER PIPE IN CEMENT-STABILIZED SAND EMBEDMENT.
3. IF "Y" IS GREATER THAN 9', USE STANDARD EMBEDMENT AND NORMAL JOINT SPACING.

NEW SANITARY SEWER CROSSING EXISTING WATER LINE



INSTALLATION REQUIREMENTS

1. IF SEPARATION IS LESS THAN 9', USE PRESSURE-RATED PIPE MH TO MH, "X" MUST BE AT LEAST 4 FT. VERTICAL SEPARATION MUST BE AT LEAST 2 FT.
2. IF SEPARATION IS 9' OR GREATER, USE STANDARD PIPE AND EMBEDMENT.

NEW SANITARY SEWER PARALLEL TO EXISTING WATER LINE

INSTALLING SANITARY SEWERS CROSSING OR PARALLEL TO WATER LINES

NOTES:

1. SANITARY SEWER MUST BE BELOW WATER LINE WHEREVER POSSIBLE. WHEN WATERLINE IS BELOW THE SANITARY SEWER PROVIDE MINIMUM 2 FT SEPARATION AND INSTALL PIPE IN ACCORDANCE TO CHAPTER 7 TABLE 7.3 OF COH DESIGN MANUAL.
2. WHEN PRESSURE-RATED PIPE IS REQUIRED, PROVIDE PIPE WITH MINIMUM 150 psi PRESSURE RATING.
3. ADAPTERS MUST BE FACTORY MOLDED OR FABRICATED, WITH RING STIFFNES AT LEAST EQUAL TO THE ADJOINING SANITARY SEWER PIPE, AND USING RESILIENT GASKET OR SEAL MATERIAL. FLEXIBLE RUBBER "BOOT" TYPE ADAPTERS WILL NOT BE ACCEPTED.
4. INSTALL FORCE MAINS SAME AS FOR GRAVITY SEWER, USING SPECIFIED PRESSURE PIPE.
5. "Y" MUST ALWAYS BE GREATER THAN OR EQUAL TO 1 FT FOR PRESSURE RATED SS AND 2 FT FOR NON-PRESSURE RATED SS.
6. "X" MUST BE GREATER THAN OR EQUAL TO 4 FT.
7. ALTERNATIVES MAY BE SHOWN ON THE DRAWINGS OR DESCRIBED IN THE SPECIFICATIONS.
8. SEPARATION REQUIREMENTS SHOWN HERE DO NOT APPLY TO SERVICE CONNECTIONS -- REFER TO PLUMBING CODE FOR APPLICABLE REQUIREMENTS.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

SANITARY SEWER
INSTALLING SANITARY SEWERS CROSSING OR PARALLEL TO WATER LINES
(NOT TO SCALE)

APPROVED: CITY ENGINEER | APPROVED: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF. DATE: JUL-01-2010 | DWG NO: 02531-05

SCALE: N/A

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 3405 1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

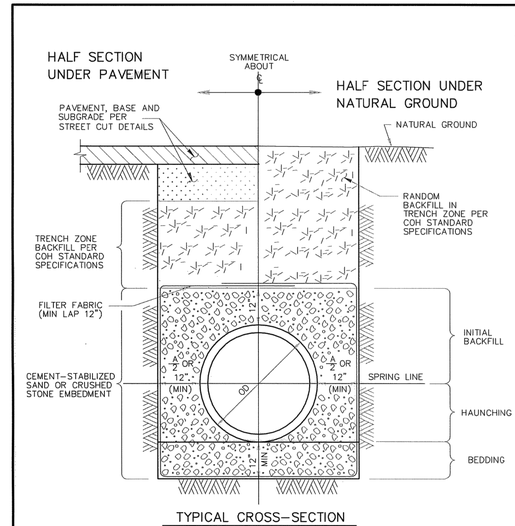
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

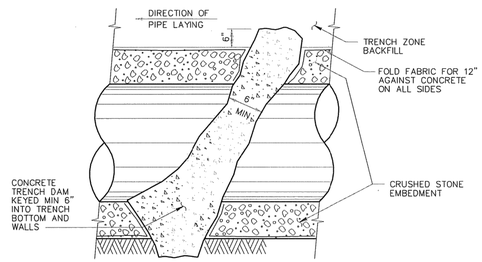
SANITARY DETAILS
SHEET 2 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-65 OF C-70	

PLOT STYLE: COH.ctb PLOTTED: 2/9/2026 5:53 PM
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-DT.dwg



TYPICAL CROSS-SECTION



LONGITUDINAL SECTION ALONG PIPE ℄

AT EMBEDMENT TRENCH DAM

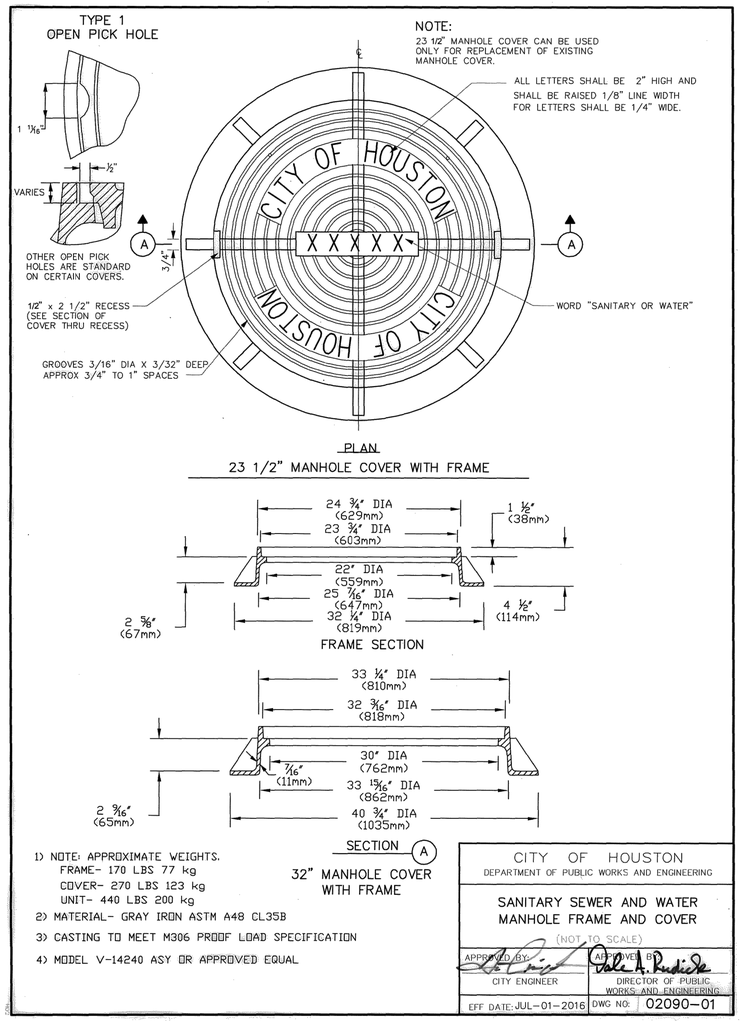
NOTES:

1. MIN TRENCH WIDTH SHALL BE PIPE OD PLUS AN ALLOWANCE "A" FOR THE NOMINAL PIPE SIZE:

NOMINAL PIPE SIZE	"A"
18" TO 30"	24"
OVER 30"	36"

2. MAX TRENCH WIDTH SHALL BE NOT GREATER THAN MIN TRENCH WIDTH PLUS 24 INCHES, UNLESS OTHERWISE NOTED.
3. TRENCH DAM MAY BE FORMED OR UNFORMED.ACTUAL SHAPE OF CONCRETE TRENCH DAM CROSS SECTION MAY BE DETERMINED BY CONTRACTOR IN FIELD, MEETING MINIMUM THICKNESS AND KEY DEPTH REQUIREMENTS.
4. TRENCH DAM SHALL BE PLACED AT LEAST 5 FT AWAY FROM ANY PIPELINE STRUCTURE.SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.
5. PLACE TRENCH DAMS IN CLASS I EMBEDMENTS AT THE MIDPOINT OF LINE SEGMENTS LONGER THAN 100 FEET BETWEEN MANHOLES.
6. CEMENT-STABILIZED SAND IS PREFERRED FOR EMBEDMENT, BUT CRUSHED STONE MAY BE USED ONLY WHEN SPECIFIED ON THE PLANS.

CITY OF HOUSTON	
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
SANITARY SEWER EMBEDMENT AND TRENCH ZONE BACKFILL FOR DRY OR WET STABLE TRENCH (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2016	DWG NO: 02317-01



PLAN

23 1/2" MANHOLE COVER WITH FRAME

FRAME SECTION

SECTION (A)

32" MANHOLE COVER
WITH FRAME

1) NOTE: APPROXIMATE WEIGHTS.
FRAME- 170 LBS 77 kg
COVER- 270 LBS 123 kg
UNIT- 440 LBS 200 kg
2) MATERIAL- GRAY IRON ASTM A48 CL35B
3) CASTING TO MEET M306 PROOF LOAD SPECIFICATION
4) MODEL V-14240 ASY OR APPROVED EQUAL

CITY OF HOUSTON	
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
SANITARY SEWER AND WATER MANHOLE FRAME AND COVER (NOT TO SCALE)	
APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JUL-01-2016	DWG NO: 02090-01

SCALE: N/A

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

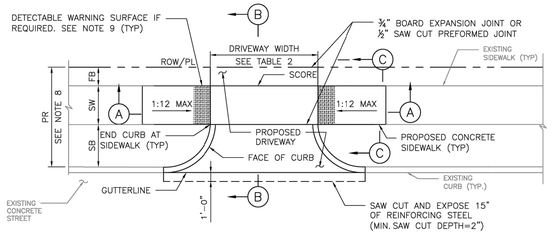
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SANITARY DETAILS
SHEET 3 OF 3

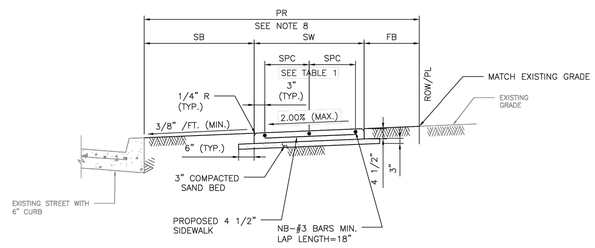
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C-66 OF C-70	

PLOT STYLE: COH.ctb PLOTTED: 2/9/2026 5:53 PM
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-DT.dwg

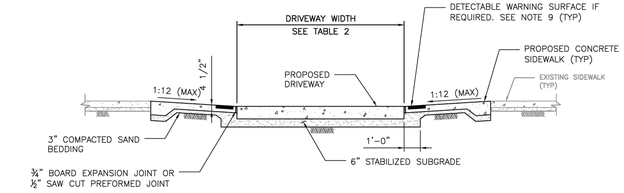
DocuSign Envelope ID: 9B122261-CF05-457B-9A65-2650F40B66D5



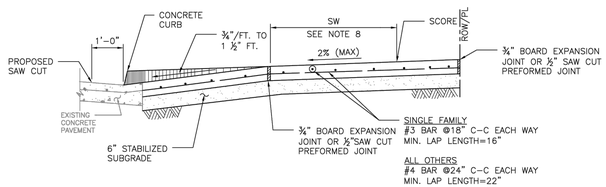
PLAN VIEW
DRIVEWAY



SECTION C–C
TYPICAL SIDEWALK SECTION



SECTION A–A
PROPOSED SIDEWALK THROUGH DRIVEWAY
WITH EXCESSIVE ELEVATION DIFFERENCE
WITH EXISTING SIDEWALK



SECTION B–B
TYPICAL DRIVEWAY SECTION

TABLE 1

REINFORCING STEEL INFORMATION
FOR 4 ½ " THICK SIDEWALKS
EXPANSION JOINT SPACING = 40 FT
fc' = 3,500 PSI AND fy = 60,000 PSI
REFER TO CONTRACT DRAWINGS FOR SIDEWALKS WIDER THAN 6 FEET.

SIDEWALK THICKNESS (IN)	SIDEWALK WIDTH (FT)	LONGITUDINAL STEEL			TRANSVERSE STEEL #3 BARS SPACING (IN)
		#3 BARS			
		NO. OF BARS "NB"	SPACING "SPC" (IN)	END BAR SPACING (IN)	
4.5	5	3	27	3	48
4.5	6	4	22	3	48

TABLE 2

DRIVEWAY DESIGN CRITERIA (1)(2)

TRAFFIC TYPE	TYPE A DRIVEWAY (FOR SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES)				TYPE B DRIVEWAY (SHARED ACCESS/SHARED DRIVEWAY)				TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)			
	WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)		WIDTH (FT)		RADIUS (FT)	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
ONE–WAY	10	12	4	10	12(5)	16(5)	4(5)	10(5)	15	20	10	20
TWO–WAY	10(3)	24(4)	4	10	16(6)	24	4	10	24	35	10	20

(1) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTICLE 15.2.07.C.1.F FOR DRIVEWAYS THAT REQUIRE A VEHICLE SWEPT PATH ANALYSIS.
(2) REFER TO INFRASTRUCTURE DESIGN MANUAL ARTCILES 15.2.07.C.1.G.(1) AND 15.2.07.C.1.G.(2) FOR TYPE 1 PAE AND TYPE 2 PAE REQUIREMENTS.
(3) THE MINIMUM WIDTH FOR JOINT ACCESS DRIVEWAY IS 12 FT.
(4) REFER TO CHAPTER 42 OF THE CODE OF ORDINANCES FOR DRIVEWAY WIDTHS FOR NARROW LOTS.
(5) ONLY MURS AND COURTYARD STYLE DEVELOPMENTS ON CORNER LOTS CAN HAVE ONE–WAY DRIVEWAYS.
(6) REFER TO CHAPTER 42, SECTION 42–146 OF THE CODE OF ORDINANCES FOR EXCEPTIONS TO THE MINIMUM DRIVEWAY WIDTH FOR SHARED DRIVEWAYS.

NOTES:

1. REPAIR, RECONSTRUCTION OR REPLACEMENT OF SIDEWALKS SHALL MEET PERMITTING REQUIREMENTS OF CODE OF ORDINANCES SECTION 40–552.
2. FOR REPAIR, RECONSTRUCTION, OR REPLACEMENT OF EXISTING SIDEWALKS:
   - 2.1. EXISTING SIDEWALKS LESS THAN OR EQUAL TO 20 FEET IN TOTAL LENGTH:
     - 2.1.1. THE PROPOSED SIDEWALK WIDTH WILL BE ALLOWED TO MATCH THE EXISTING SIDEWALK.
   - 2.2. EXISTING SIDEWALKS GREATER THAN 20 FEET IN TOTAL LENGTH:
     - 2.2.1. THE SIDEWALK WIDTH FOR THE ENTIRE PROPERTY WIDTH SHALL BE IMPROVED TO MEET WIDTH REQUIREMENTS ACCORDING TO THE LATEST INFRASTRUCTURE DESIGN MANUAL.
   - 2.3. 20 FOOT TOTAL LENGTH IS DEFINED AS:
     - 2.3.1. UP TO 10 FEET ON BOTH SIDES OF THE DRIVEWAY; OR
     - 2.3.2. UP TO 20 FEET WHEN SIDEWALK AFFECTED IS LOCATED ONLY ON ONE SIDE OF THE DRIVEWAY.
3. ALL JOINTS ALONG THE SIDEWALK SHALL BE CONSTRUCTED ACCORDING TO DRAWING 02752–02 AND SPECIFICATION 02752.
4. DRIVEWAYS SHALL BE MINIMUM 6" THICK FOR SINGLE FAMILY AND DUPLEXES. DRIVEWAYS SHALL BE MINIMUM 7" THICK FOR ALL OTHERS (I.E. COMMERCIAL, INDUSTRIAL, ETC.)
5. DRIVEWAYS AND SIDEWALKS SHALL BE CONSTRUCTED WITH PORTLAND CEMENT CONCRETE AND INCLUDE 5 1/2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE.
6. ALL RAMPS AND SIDEWALKS/WALKWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOUSTON PUBLIC WORKS STANDARDS, TEXAS ACCESSIBILITY STANDARDS (TAS) AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS. IF THERE IS A CONFLICT IN THE REQUIREMENTS, THE STRICTEST REQUIREMENTS SHALL GOVERN.
7. CURB RAMPS THAT ARE STEEPER THAN A 1:12 MAX SLOPE WILL NOT BE ACCEPTED BY THE CITY OF HOUSTON.
8. REFER TO CONTRACT DRAWINGS FOR PEDESTRIAN REALM (PR), SIDEWALK (SW), FRONTAGE BUFFER (FB), AND SAFETY BUFFER (SB) WIDTHS.
9. DETECTABLE WARNING SURFACES:
   - 9.1. SIDEWALK SHALL HAVE A DETECTABLE WARNING SURFACE WHERE:
     - 9.1.1. SIDEWALK INTERSECTS TYPE C DRIVEWAYS (COMMERCIAL DRIVEWAYS) THAT ARE STOP, YIELD, OR TRAFFIC SIGNAL CONTROLLED; OR
     - 9.1.2. SIDEWALK SLOPE IS GREATER THAN 1:20 AND INTERSECTS A TYPE C DRIVEWAY (COMMERCIAL DRIVEWAY)
   - 9.2. DETECTABLE WARNING SURFACES ARE OPTIONAL WHERE SIDEWALKS INTERSECT TYPE A DRIVEWAYS (SINGLE FAMILY RESIDENTIAL HOUSES OR DUPLEXES) OR TYPE B DRIVEWAYS (SHARED ACCESS/SHARED DRIVEWAYS).
   - 9.3. REFER TO STANDARD DETAILS 02775–06 TO 02775–07 FOR DETECTABLE WARNING SURFACE STANDARDS.

APPROVED BY:	APPROVED BY:
DocuSigned by: Sukat Kanwar	DocuSigned by: HANG NGUYEN
CITY ENGINEER	CITY TRAFFIC ENGINEER
APPROVED BY: DocuSigned by: Carl Haddock	
DIRECTOR OF HOUSTON PUBLIC WORKS	
EFF DATE: NOV–27–2023	DWG NO: 02754–01B

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

DRIVEWAY DETAIL WITH 6" CURBED STREETS

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
NOT TO SCALE

SCALE: N/A

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10033

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 3405 1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

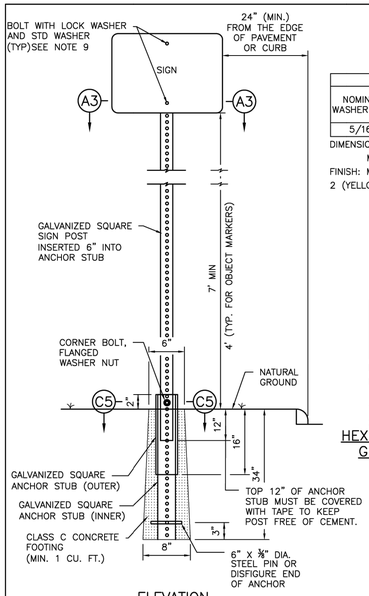
ROADWAY DETAILS
SHEET 1 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–67 OF C–70	

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD DO NOT PURPORT TO ADDRESS ALL OF THE SAFETY CONCERNS ASSOCIATED WITH THEIR USE. THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS AND BY AUTHORIZING THEIR USE, ACCEPTS RESPONSIBILITY FOR THEIR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON FOR ANY PURPOSES WHATSOEVER. THE CITY OF HOUSTON ASSUMES NO RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

PLOT STYLE: COH.ctb
PLOTTED: 2/9/2026 5:53 PM
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024–1427\Project Files\03–Prod\03–Dwgs\C–DT.dwg

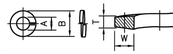
DocuSign Envelope ID: CB71C116-B716-4899-A5EE-0D2F2CC55AF6



ELEVATION

TYPICAL GROUND SIGN INSTALLATION
PERFORATED SQUARE METAL TUBING

TABLE A	
GALVANIZED SQUARE SIGN POST (PERFORATED)	1-3/4"x-1-3/4" (14 GAUGE)
GALVANIZED SQUARE ANCHOR STUB (PREFORATAED) (INNER)	2"x2"x36" (14 GAUGE)
GALVANIZED SQUARE ANCHOR STUB (PERFORATED) (OUTER)	2 1/4" x 2 1/4" x 18" (14 GAUGE)



NOMINAL WASHER SIZE	A INSIDE DIAMETER MAX	A INSIDE DIAMETER MIN	B OUTSIDE DIAMETER MAX	T MEAN SECTION (THICKNESS)	W SECTION WIDTH
5/16"	0.332"	0.314"	0.583"	0.078"	0.125"

DIMENSIONS: ASME B18.21.1
MATERIAL: ALLOY STEEL PER ASME B18.21.1
FINISH: MECHANICAL ZINC PER ASTM B695, CLASS 5, TYPE 2 (YELLOW)

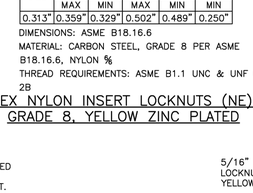
5/16" SPLIT LOCK WASHER, HIGH ALLOY MECHANICAL DEPOSITED YELLOW SINK



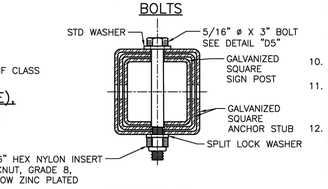
SIZE	C THICKNESS MAX	C THICKNESS MIN	A WIDTH ACROSS FLATS MAX	A WIDTH ACROSS FLATS MIN	D HEX HEIGHT MIN
0.313"	0.359"	0.329"	0.502"	0.489"	0.250"

DIMENSIONS: ASME B18.16.6
MATERIAL: CARBON STEEL, GRADE 8 PER ASME B18.16.6, NYLON 6/6
THREAD REQUIREMENTS: ASME B1.1 UNC & UNF CLASS 2B

HEX NYLON INSERT LOCKNUTS (NE), GRADE 8, YELLOW ZINC PLATED



STANDARD ORIENTATION



NON-NSTANDARD ORIENTATION

SECTION A3: SIGN CONNECTION DETAILS

SECTION D5
BOLTS

SECTION C5
CORNER BOLT



NOTES:

1. THE EXISTING SIGNS LOCATED ON PUBLIC CONSTRUCTION SITE ARE THE PROPERTY OF THE CITY OF HOUSTON. THROUGHOUT THE PERIOD OF THE CONTRACT, THE CONTRACTOR SHALL PROTECT THESE SIGNS SUCH THAT THEY ARE NOT DAMAGED IN THE COURSE OF CONSTRUCTION ACTIVITY. SUCH PROTECTION SHALL INCLUDE THE PERIOD AFTER SIGNS ARE REMOVED FROM INSTALLATION AND STORED BY THE CONTRACTOR OR DELIVERED TO THE TRAFFIC OPERATIONS CENTER (2200 PATTERSON). THE GENERAL TRAFFIC SUPERINTENDENT (832-395-6771) MUST BE NOTIFIED 48 HOURS IN ADVANCE PRIOR TO DELIVERY.
2. AFTER SIGNS ARE REMOVED FROM INSTALLATION AND ARE BEING STORED BY THE CONTRACTOR, THE CONTRACTOR SHALL CONTACT THE TRAFFIC OPERATIONS DIVISION OF HOUSTON PUBLIC WORKS (832-395-6771) AND ARRANGE FOR A CONVENIENT TIME TO DELIVER ONLY CITY SIGNS AND POSTS IDENTIFIED BY TRAFFIC OPERATIONS DIVISION TO 2200 PATTERSON.
3. PRIOR TO THE START OF CONSTRUCTION, ALL EXISTING SIGNS WITHIN THE AREA OF CONSTRUCTION WILL BE INVENTORIED AND DOCUMENTED JOINTLY BY THE CITY INSPECTOR AND THE CONTRACTOR. THIS DOCUMENT WILL BE JOINTLY SIGNED BY BOTH PARTIES REFLECTING THE SIGN TYPE, SIGN SIZE, SIGN CONDITION, SIGN LOCATION, REFLECTIVITY ADEQUACY, ETC. THE CONTRACTOR IS HELD ACCOUNTABLE FOR THESE SIGNS THROUGHOUT THE PROJECT AND AT THE PROJECTS COMPLETION.
4. ALL GROUND MOUNTED STOP SIGNS, WARNING SIGNS, AND OTHER REGULATORY SIGNS SHALL USE AT A MINIMUM HIGH INTENSITY PRISMATIC REFLECTIVE SHEETING.
5. ALL OVERHEAD SIGNS SHALL USE DIAMOND GRADE REFLECTIVE SHEETING.
6. ALL OTHER SIGNS SHALL USE SUPER ENGINEER GRADE SHEETING.
7. ALL BLANKS TO BE INSTALLED SHALL BE ALUMINUM ALLOY 6061-T-6 OR 5052-H38 IN ACCORDANCE WITH ASTM B209.
8. ALL HOLES SHALL BE ⅜" DIAMETER DRILLED OR PUNCHED AS SHOWN ON EACH BLANK DETAIL AND SHALL BE FREE OF BURRS AND / OR ROUGH EDGES. WHERE NON-STANDARD ORIENTATION OF SIGN IS USED, ENLARGE HOLE IN SIGN POST AT SIGN CONNECTION NOT GREATER THAN 11/16" IN DIAMETER.
9. BOLT SIZE REQUIREMENTS FOR SIGN CONNECTION:
   - 9.1. STANDARD ORIENTATION = 5/16" DIA X 2 1/2" BOLT
   - 9.2. NON STANDARD ORIENTATION = 5/16" DIA X 3" BOLT
10. SIGN BLANK CORNERS TO BE ROUNDED AS SHOWN ON EACH DETAIL ON SHEET 01554-06.
11. ALL SIGN BLANKS ARE TO BE ETCHED, DEGREASED, AND HAVE A COATING MEETING THE REQUIREMENTS OF ASTM B449, CLASS 2, OR ASTM B921, CLASS 2. PRIOR TO APPLICATION OF LEGENDS.
12. ALL SIGNS SHALL BE MANUFACTURED AND INSTALLED IN CONFORMANCE TO THE LATEST TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) AND STANDARD HIGHWAY SIGNS LATEST EDITION.

CITY OF HOUSTON
HOUSTON PUBLIC WORKS STANDARD

GENERAL NOTES AND GROUND MOUNTING SIGN

(SCALE: NOT TO SCALE)

APPROVED BY:

CITY ENGINEER	DIRECTOR OF HPW
CITY TRAFFIC ENGINEER	

EFF DATE: NOV-27-2023 | DWG NO: 01554-01

DISCLAIMER:
THE USE OF THIS STANDARD IS GOVERNED BY THE TEXAS ENGINEERING PRACTICE ACT. THE DESIGN REQUIREMENTS ON THIS STANDARD ARE THE MINIMUM REQUIREMENTS FOR THE CONDITIONS ANTICIPATED BY THE CITY OF HOUSTON. ALL USE OF THIS STANDARD IS AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO THE CITY OF HOUSTON. THE USER IS SOLELY RESPONSIBLE FOR SITE SPECIFIC CONDITIONS ASSOCIATED WITH THEIR USE, THE ENGINEER OF RECORD (EOR) IS TO REVIEW THESE DESIGN REQUIREMENTS FOR APPLICABILITY, ADEQUACY AND SAFETY. NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF HOUSTON WITH RESPECT TO ANY USE OF THIS STANDARD AND THE CITY OF HOUSTON EXPRESSLY DISCLAIMS ANY AND ALL LIABILITY ARISING FROM ITS USE. USER ACCEPTS RESPONSIBILITY FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

SCALE: N/A

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1060
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

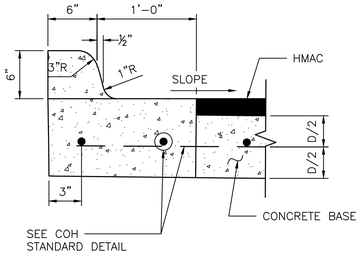
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

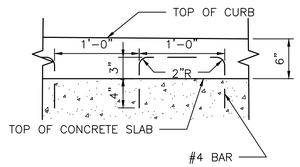
ROADWAY DETAILS
SHEET 2 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO.C-68 OF C-70	

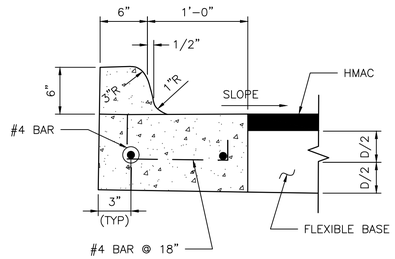
PLOTTED: 2/9/2026 5:53 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-DT.dwg



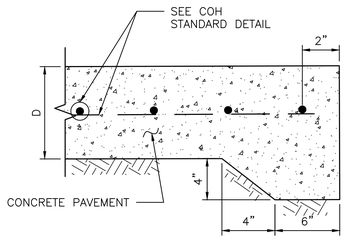
ESPLANADE CURB CONNECTED TO CONCRETE BASE



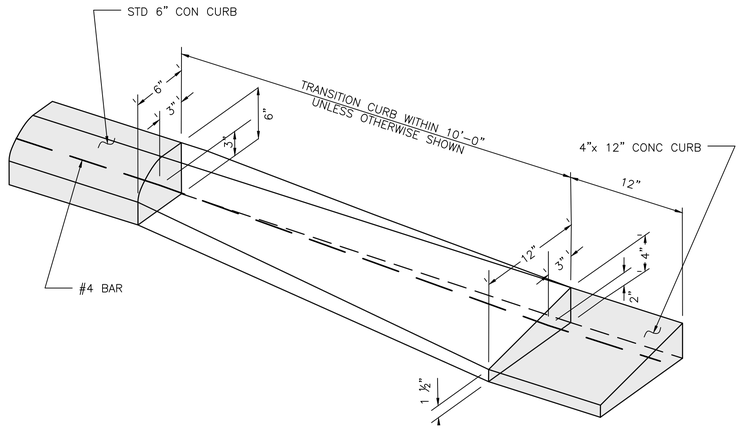
ALTERNATE CONCRETE CURB REINFORCEMENT



ESPLANADE CURB CONNECTED TO FLEXIBLE BASE

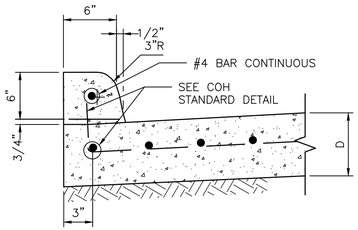


STANDARD CONCRETE PAVING HEADER



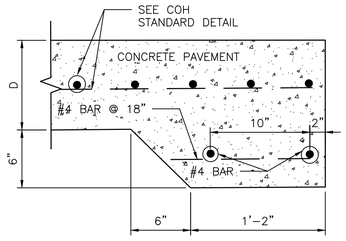
CURB TRANSITION

(SEE NOTES)

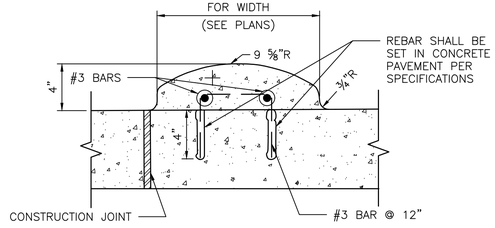


CONCRETE CURB

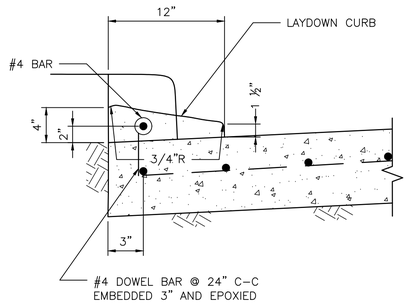
WHEN CONCRETE CURB IS TO BE PLACED EXISTING CONCRETE USE BASE
#4 BAR @ 18x10" LONG, DOWELED AND SET IN EPOXY GROUT.
SET #4 DOWEL BARS, 25" LONG AT 12" C–C WHEN PAVEMENT SECTION POURED.



STANDARD RAILROAD HEADER

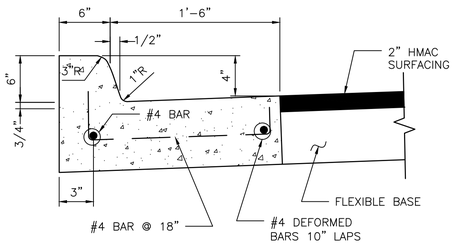


MOUNTABLE CURB

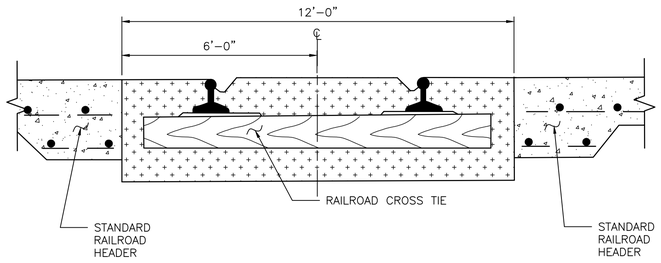


4–INCH x 12–INCH TRANSITION CURB

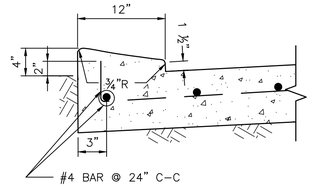
(SEE NOTES)



MONOLITHIC CURB AND GUTTER



STANDARD RAILROAD CROSSING – SINGLE TRACK



4–INCH x 12–INCH MONOLITHIC CURB

(SEE NOTES)

4"x12" MONOLITHIC AND TRANSITION CURB NOTES:

1. 6–INCH CONCRETE CURB TO BE CONSTRUCTED ON ALL ESPLANADES, ISLANDS, NON–RESIDENTIAL STREETS, AND RESIDENTIAL STREETS.
2. TRANSITIONS FROM 6– INCH CONCRETE CURB TO 4–INCH x 12–INCH CONCRETE CURB TO BE ACCOMPLISHED WITHIN 10 FEET, UNLESS OTHERWISE SHOWN. IF THIS 10–FEET TRANSITION CURB IS NOT POURED MONOLITHICALLY WITH THE PAVEMENT, THEN REINFORCING STEEL AS SHOWN IN "4–INCH x 12–INCH TRANSITION CURB" IS TO BE INSTALLED.

CURB, CURB AND GUTTER AND HEADER DETAILS

NOV–27–2023 02771–01

SCALE: N/A

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

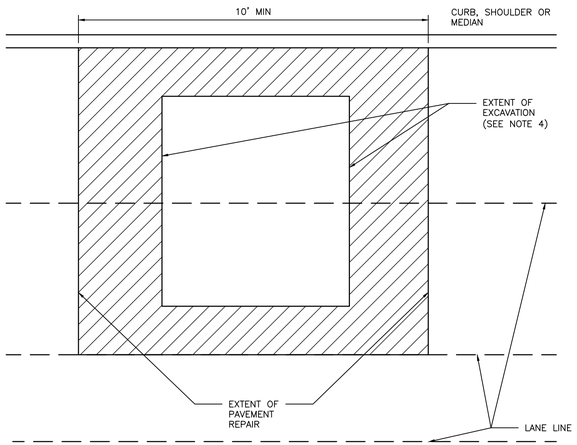
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ROADWAY DETAILS
SHEET 3 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO.C–69 OF C–70	

PLOTTED: 2/9/2026 5:53 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024–1427\Project Files\03–Prod\03–Dwgs\C–DT.dwg



NOTES:

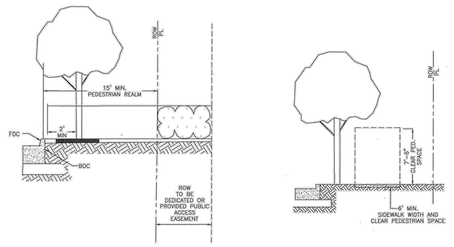
1. EXTENT OF PAVEMENT REPAIR SHALL BE PERPENDICULAR AND PARALLEL TO TRAVEL WAY.
2. FLEXIBLE BASE: REPLACE BASE TO SAME THICKNESS PLUS TWO INCHES (2") FOR EXTENT OF EXCAVATION. USE APPROVED BASE MATERIAL TYPE.*
3. SURFACE COURSE:
   - 3.1. WIDTH: SURFACE MILL AND OVERLAY FULL WIDTH OF LANE(S) TO NEAREST LANE DIVIDER BEYOND EDGE OF EXCAVATION.
   - 3.2. LENGTH: MINIMUM LENGTH OF SURFACE MILL ALONG TRAVEL WAY IS 10'.
   - 3.3. REPLACE PAVEMENT MARKINGS IN ACCORDANCE WITH CITY OF HOUSTON STANDARD SPECIFICATIONS 02764–RAISED PAVEMENT MARKERS AND 02767–THERMOPLASTIC PAVEMENT MARKINGS.
4. EXTENT OF EXCAVATION INCLUDES 18" OVER CUT AS SHOWN ON STANDARD DETAIL 02951–04 PAVEMENT REPAIR DETAIL FOR STREET CUTS (FLEX–BASE PAVEMENT AND CONCRETE PAVEMENT).
5. ADDITIONAL REQUIREMENTS FOR ASPHALT OVERLAY ON CONCRETE PAVEMENT:
   - 5.1. REPLACE CONCRETE FOR EXTENT OF EXCAVATION. REPLACE TO SAME THICKNESS PLUS TWO INCHES (2").
   - 5.2. WIDTH:
     - 5.2.1. IF EXCAVATION EXTENDS MORE THAN HALF OF A LANE, REPLACE ENTIRE LANE OF CONCRETE. OTHERWISE USE STANDARD DETAIL 02951–04 THROUGH 05.
   - 5.3. SAW CUT AND EXPOSE 15" OF REINFORCING STEEL AROUND EDGE OF CONCRETE REPLACEMENT. IF NO REINFORCING STEEL EXISTS, USE HORIZONTAL DOWELS PER CITY OF HOUSTON STANDARD SPECIFICATION SECTION 02951–PAVEMENT REPAIR AND RESTORATION.
   - 5.4. REPLACE CURB WHEN ADJACENT LANE IS REPLACED.
   - 5.5. MAINTAIN CONCRETE EXPANSION JOINTS AT EXISTING LOCATIONS UNLESS OTHERWISE APPROVED BY CITY ENGINEER.

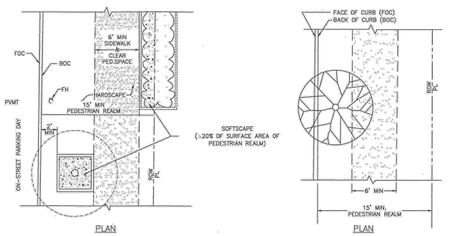
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

STREET CUT FOR ASPHALT PAVEMENT REPLACEMENT/RESTORATION FOR PAVEMENT OF ALL AGES
(SCALE: NOT TO SCALE)

NOV–27–2023 02951–03

02775–08

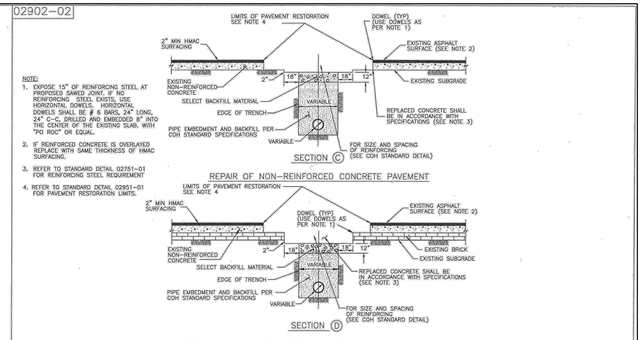




NOTES
1. REFER TO CHAPTER 42 OF THE CODE OF ORDINANCES, ARTICLE IV – TRANSIT CORRIDOR DEVELOPMENT.

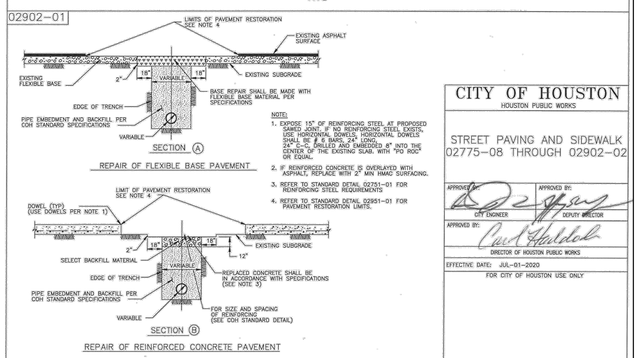
SIDEWALKS AND CLEAR ZONE TRANSIT CORRIDOR STREET
NTS

02902–02



PAVEMENT REPAIR DETAILS FOR STREET CUTS – NON REINFORCED CONCRETE AND BRICK PAVEMENT
NTS

02902–01



PAVEMENT REPAIR DETAILS FOR STREET CUTS
NTS

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

STREET PAVING AND SIDEWALK
02775–08 THROUGH 02902–02

APPROVED BY: CITY ENGINEER
APPROVED BY: DEPUTY DIRECTOR
APPROVED BY: DIRECTOR OF HOUSTON PUBLIC WORKS
EFFECTIVE DATE: JUL–01–2020
FOR CITY OF HOUSTON USE ONLY
SHEET NO.

NOV–27–2023

SCALE: N/A

NO.	DATE	REVISION	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 02/09/26

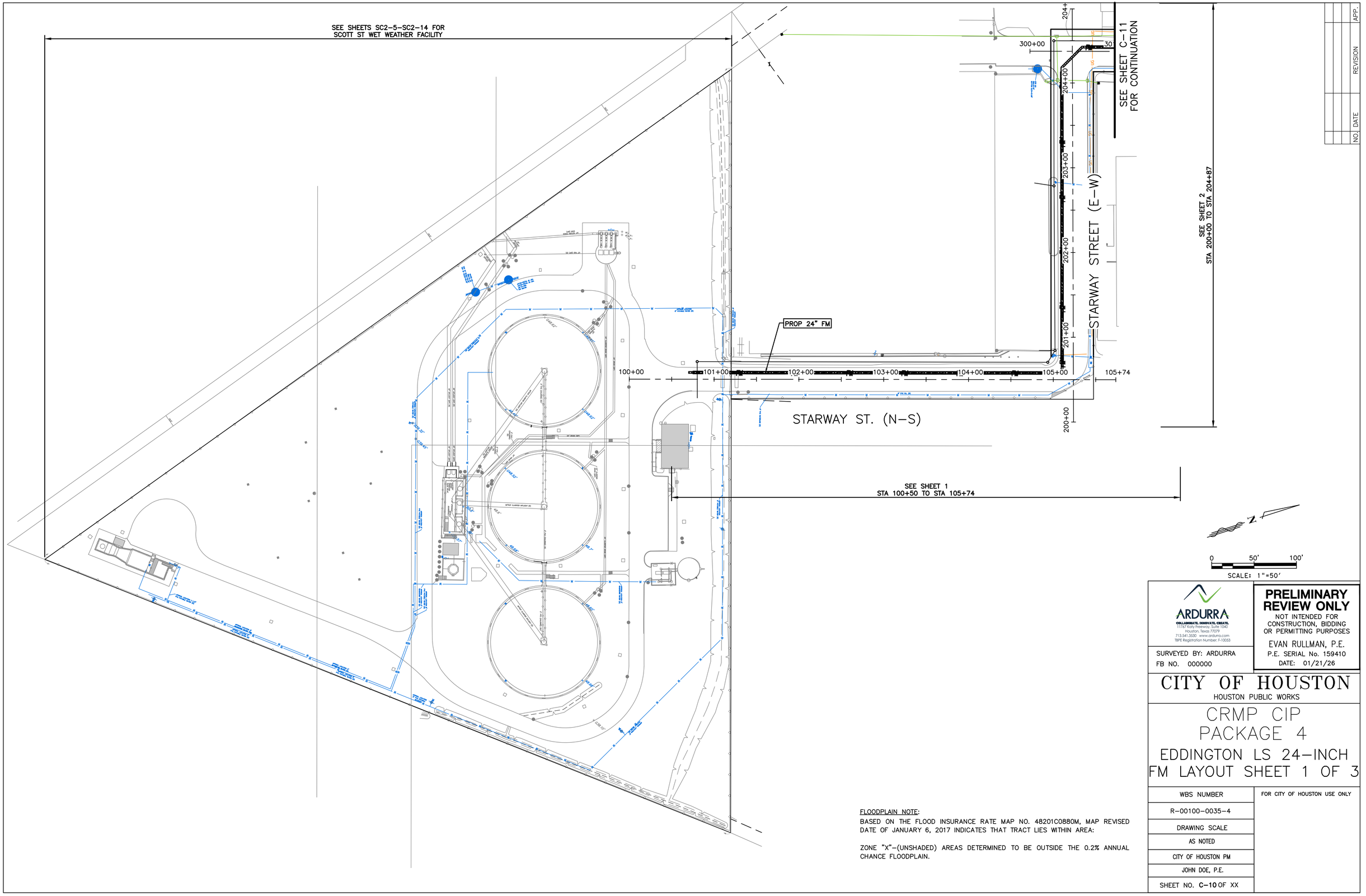
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ROADWAY DETAILS
SHEET 4 OF 4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. C–70 OF C–70	

PLOTTED: 2/9/2026 5:53 PM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024–1427\Project Files\03–Prod\03–Dwgs\C–DT.dwg



NO.	DATE	REVISION	APP.

FLOODPLAIN NOTE:
BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ARDURRA
FB NO. 000000

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 01/21/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

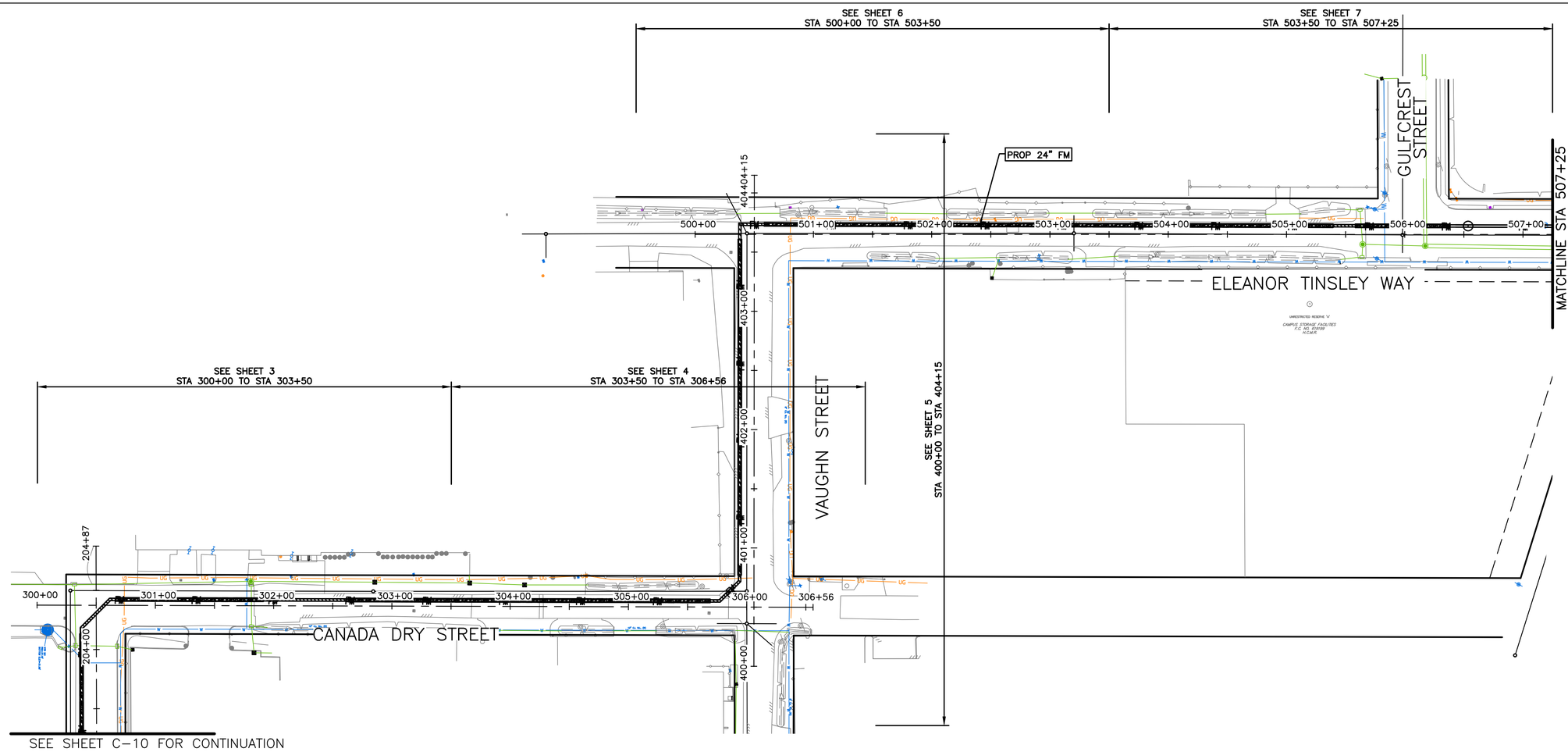
CRMP CIP PACKAGE 4
EDDINGTON LS 24-INCH FM LAYOUT SHEET 1 OF 3

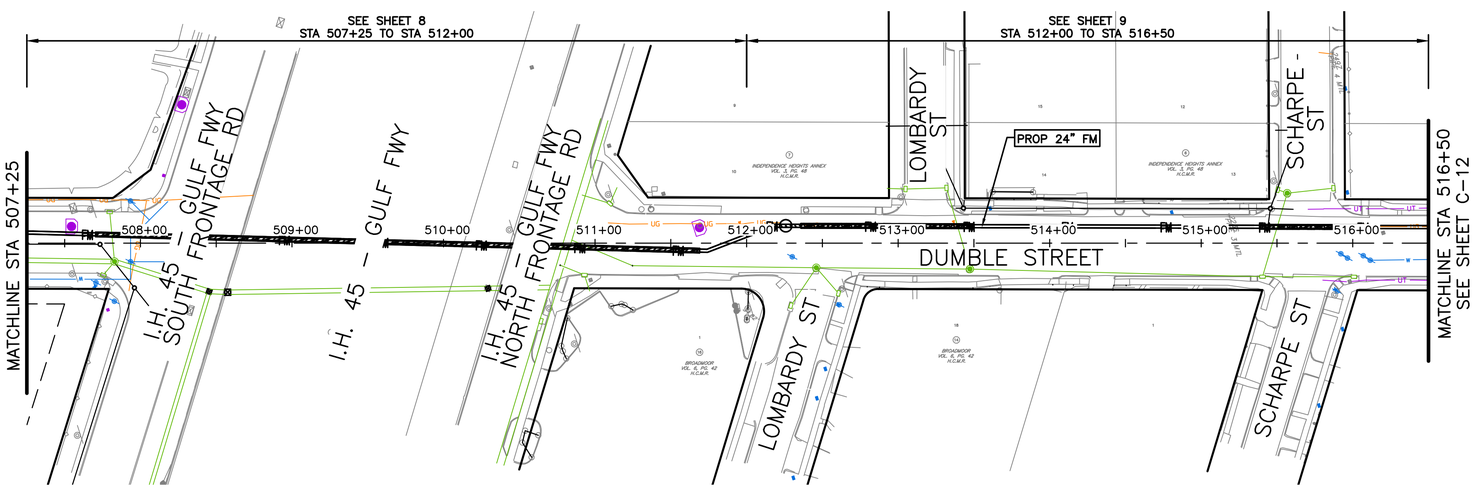
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-00100-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
JOHN DOE, P.E.	
SHEET NO. C-10 OF XX	

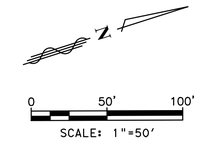
PLOTTED: 1/21/2026 10:44 AM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-OS.dwg

PLOTTED: 1/21/2026 10:44 AM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-OS.dwg

NO.	DATE	REVISION	APP.







FLOODPLAIN NOTE:
BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3330 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ARDURRA
FB NO. 000000

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 01/21/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP CIP PACKAGE 4
EDDINGTON LS 24-INCH FM LAYOUT SHEET 2 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-00100-0035-4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
JOHN DOE, P.E.	
SHEET NO. C-11 OF XX	

SEE SHEET 10
STA 516+50 TO STA 520+50

SEE SHEET 11
STA 520+50 TO STA 525+50

SEE SHEET 12
STA 525+50 TO STA 530+50

MATCHLINE STA 516+50
SEE SHEET C–11

MUNGER ST

DUMBLE STREET

517+00 518+00 519+00 520+00 521+00 522+00 523+00 524+00 525+00 526+00 527+00 528+00 529+00 530+00

PROP 24" FM

DIEZ ST

MATCHLINE STA 530+50

MUNGER ST

FOURCADE ST

MABLE ST

DIEZ ST

LAWSON ST

WESLEY ST

0 50' 100'
SCALE: 1"=50'

SEE SHEETS SC1–4–SC1–7FOR
EDDINGTON LS

FLOODPLAIN NOTE:
BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"–(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

SEE SHEET 17
STA 700+00 TO STA 705+00

EDDINGTON STREET

700+00 701+00 702+00 702+76

SEE SHEET 16
STA 600+00 TO STA 605+00

604+00 603+00 602+00 601+00 600+00

TELEPHONE ROAD

SEE SHEET 13
STA 530+50 TO STA 535+00

SEE SHEET 14
STA 535+00 TO STA 538+75

SEE SHEET 15
STA 538+75 TO STA 543+00

MATCHLINE STA 530+50

PROP 24" FM

JEFFERSON ST

PEASE ST

DUMBLE STREET

531+00 531+50.00 532+00 533+00 534+00 535+00 536+00 537+00 538+00 539+00 540+00 541+00 542+00 542+59

PEARSON ST

ELLISTON ST

ELLIOTT ST

NO.	DATE
	REVISION
	APP.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11767 Katy Freeway, Suite 1040
Houston, Texas 77079
713.541.3530 www.ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY: ARDURRA
FB NO. 000000

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
EVAN RULLMAN, P.E.
P.E. SERIAL No. 159410
DATE: 01/21/26

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP CIP PACKAGE 4
EDDINGTON LS 24–INCH FM LAYOUT SHEET 3 OF 3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–00100–0035–4	
DRAWING SCALE	
AS NOTED	
CITY OF HOUSTON PM	
JOHN DOE, P.E.	
SHEET NO. C–12 OF XX	

PLOTTED: 1/21/2026 10:45 AM
PLOT STYLE: COH.ctb
FILE PATH: C:\Users\jgottlieb\DC\ACCDocs\Ardurra, Inc\2024–1427\Project Files\03–Prod\03–Dwgs\C–OS.dwg

PLOTTED: 9/30/2025 11:30 AM
PLOT STYLE: AGS.ctb
FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\0060-014-24 COH Eddington LS - Ardurra.dwg

N

AGS

S

0 10 20 30 40

SCALE: 1" = 20'

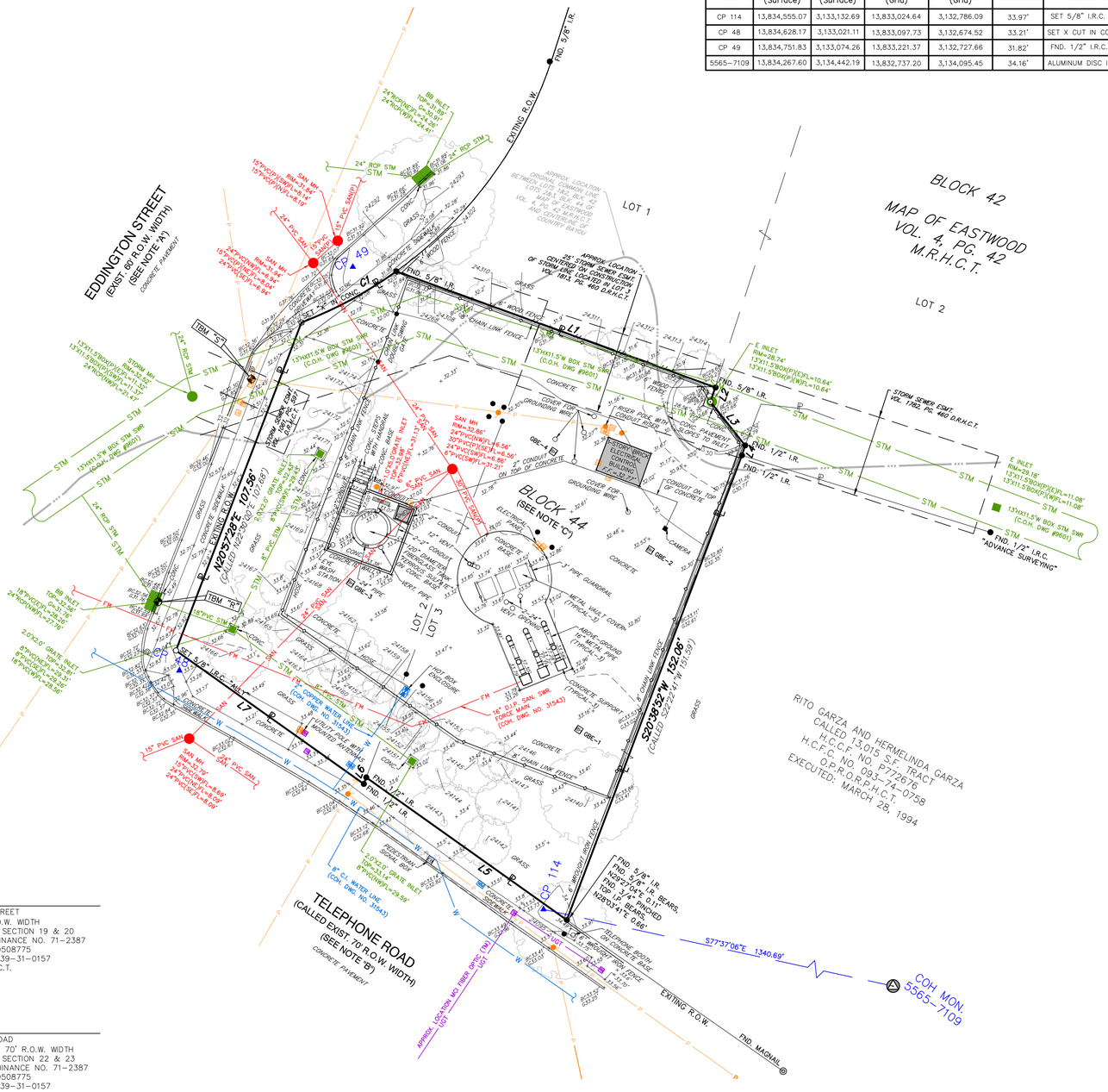
LEGEND

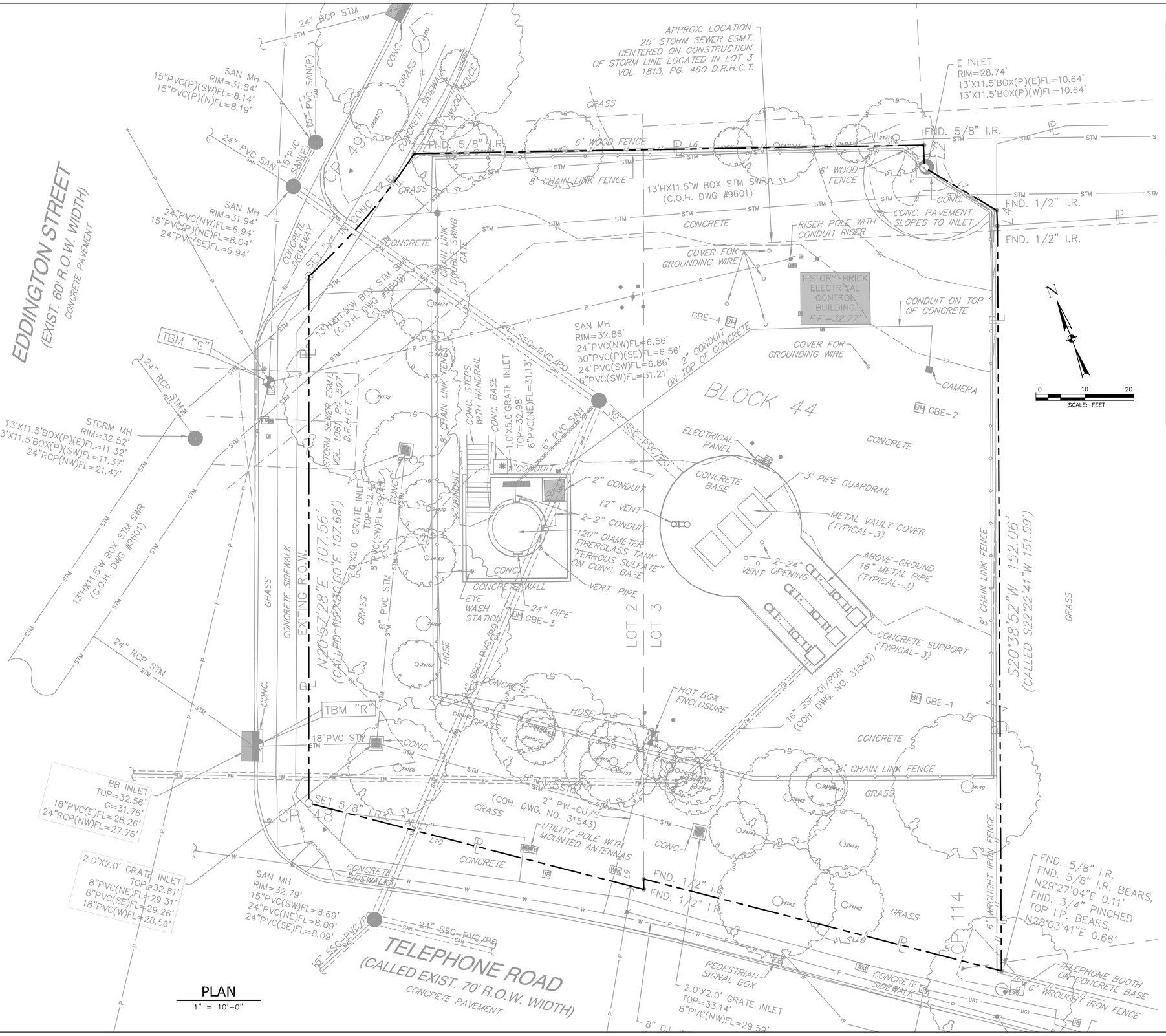
B.L.	BUILDING LINE
B.M.	BENCHMARK
CM	CONTROLLING MONUMENT
C.O.H.	CITY OF HOUSTON
CONC.	CONCRETE
D.R.H.C.T.	DEED RECORDS OF HARRIS COUNTY TEXAS
DRNG.	DRAINAGE
DWG.	DRAWING
ESMT.	EASEMENT
FL	FLOW LINE
FND.	FOUND
H.C.C.F.	HARRIS COUNTY CLERK FILE
H.C.F.C.	HARRIS COUNTY FILM CODE
H.C.T.	HARRIS COUNTY TEXAS
I.R.	IRON ROD
I.R.C.	IRON ROD CAPPED
I.P.	IRON PIPE
MH	MANHOLE
M.R.H.C.T.	MAP RECORDS OF HARRIS COUNTY TEXAS
NO.	NUMBER
O.P.R.O.R.P.H.C.T.	OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF HARRIS COUNTY TEXAS
PG.	PAGE
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R.O.W.	RIGHT-OF-WAY
S.F.	SQUARE FEET
SAN. SWR.	SANITARY SEWER
STM.	STORM
STM. SWR.	STORM SEWER
SW	SIDEWALK
TBM	TEMPORARY BENCHMARK
VERT.	VERTICAL
VOL.	VOLUME
-O-	ELECTRIC OVERHEAD
-UGT-	UNDERGROUND TELEPHONE
-SAN-	SANITARY SEWER
-STM-	STORM SEWER
-W-	WATER LINE
	GUARDRAIL/HANDRAIL
	CHAIN LINK FENCE
	WROUGHT IRON FENCE
	HIGH BANK

SYMBOL LEGEND	
	BACKFLOW PREVENTER
BB	BB INLET
	BREAK LINE
	BOLLARD
BH	BORE HOLE
E	E INLET
EJB	ELECTRIC JUNCTION BOX
EM	ELECTRIC METER
ES	ELECTRIC STUB-UP
	GATE POST
	GRATE INLET
	GUY WIRE
	LAND HOOK
	LIGHT POLE
	MANHOLE
	MISCELLANEOUS
PSB	PEDESTRIAN SIGNAL BOX
	POWER POLE
	PROPERTY LINE
	SIGN
TJB	TELEPHONE JUNCTION BOX
	TEMPORARY BENCHMARK
	TIC
	TREE
	UTILITY POLE
WM	WATER METER

SYMBOL LEGEND	
	FND IRON ROD
	FND IRON PIPE
	FND MAGNAIL
	POINT FOR CORNER
	SET IRON ROD
	X CUT

LUKE MOORE SURVEY, ABSTRACT NO. 51


EDDINGTON STREET
(EXIST. 60' R.O.W. WIDTH)
(SEE NOTE "A")
CONCRETE PAVEMENT
EXISTING R.O.W.
FND. 5/8" I.R.
LOT 1
BLOCK 42
MAP OF EASTWOOD
VOL. 4, PG. 42
M.R.H.C.T.
LOT 2
L1
L2
L3
L4
L5
L6
L7
CP 49
CP 114
SET 5/8" I.R.C. "ALLY"
FND. 1/2" I.R.
FND. 1/2" I.R. "ADVANCE SURVEYING"
BLOCK 44
(SEE NOTE "C")
LOT 2
LOT 3
TELEPHONE ROAD
(CALLED EXIST. 70' R.O.W. WIDTH)
(SEE NOTE "B")
CONCRETE PAVEMENT
N28°57'28"E 107.58'
(CALLED N28°02'E 107.58')
S20°38'52"W 152.06'
(CALLED S22°24'41"W 151.99')
S77°37'06"E 1340.69'
COH MON. 5565-7109
RITO GARZA AND HERMELINDA GARZA
CALLED 13.015 S.F. TRACT
H.C.C.F. NO. RP-2022-672676
H.C.F.C. NO. 093-74-0758
O.P.R.O.R.P.H.C.T.
EXECUTED: MARCH 28, 1994
TBM "S"
TBM "R"
STORM SEWER ESMT.
VOL. 7782, PG. 480 D.R.H.C.T.
APPROX. LOCATION OF CENTERLINE OF 24" STORM SEWER CONST. CONTRACT NO. 1 CONSTRUCTED IN 1913 VOL. 1813, PG. 480 D.R.H.C.T.
APPROX. LOCATION BETWEEN LOTS 1&2, BLK. 42 OF MAP OF EASTWOOD VOL. 4, PG. 42 D.R.H.C.T. AND CENTERLINE OF COUNTY BAYOU
APPROX. LOCATION OF 6" UGT
APPROX. LOCATION OF 2" CONDUIT
APPROX. LOCATION OF 6" UGT
APPROX. LOCATION OF 2" CONDUIT
FND. 5/8" I.R. BEARS N 28°22'04"E 0.12' FND. 3/4" I.R. BEARS N28°03'41"E 0.66'
FND. 5/8" I.R. BEARS N 28°22'04"E 0.12' FND. 3/4" I.R. BEARS N28°03'41"E 0.66'
SET 5/8" I.R.C. "ALLY"
SAN MH RIM=31.84' 15"PVC(W)FL=8.84' 15"PVC(E)FL=8.84'
SAN MH RIM=31.79' 15"PVC(W)FL=8.84' 24"PVC(N)FL=8.84' 24"PVC(S)FL=8.84'
SAN MH RIM=31.56' 24"PVC(W)FL=8.56' 30"PVC(SW)FL=8.56' 24"PVC(E)FL=8.86' 24"PVC(SW)FL=31.21'
SAN MH RIM=31.79' 15"PVC(W)FL=8.89' 24"PVC(N)FL=8.89' 24"PVC(S)FL=8.89'
STORM MH RIM=32.32' 13"X11.5"BOX(E)FL=11.32' 24"RCP(W)FL=4.47'
13"X11.5"BOX STM SWR (C.O.H. DWG #9601)
13"X11.5"W BOX STM SWR (C.O.H. DWG #9601)
13"X11.5"W BOX STM SWR (C.O.H. DWG #9601)
E INLET RIM=29.14' 13"X11.5"BOX(N)FL=10.64' 13"X11.5"BOX(E)FL=10.64'
E INLET RIM=29.18' 13"X11.5"BOX(N)FL=11.08' 13"X11.5"BOX(E)FL=11.08'
13"X11.5"W BOX STM SWR (C.O.H. DWG #9601)
2.0'X2.0' GRATE INLET TOP=32.81' 8"PVC(W)FL=29.31' 18"PVC(E)FL=28.96'
2.0'X2.0' GRATE INLET TOP=32.76' 8"PVC(W)FL=29.26' 18"PVC(E)FL=28.96'
BB INLET TOP=32.56' 24"RCP(W)FL=24.47' 24"RCP(E)FL=24.47'
BB INLET TOP=32.86' 24"RCP(W)FL=24.76' 24"RCP(E)FL=24.76'
2.0'X2.0' GRATE INLET TOP=32.81' 8"PVC(W)FL=29.31' 8"PVC(N)FL=29.31'
2.0'X2.0' GRATE INLET TOP=32.76' 8"PVC(W)FL=29.09' 8"PVC(N)FL=29.09'
24" RCP STM
24" CMP STM
24" PVC SAN.
15" PVC SAN.
6" PVC SAN.
6" CONCRETE STM
6" PVC STM
8" PVC STM
6" C.I. WATER LINE (CON. DWG. NO. 31543)
16" D.I.P. SAN. SWR. FORCE MAIN (CON. DWG. NO. 31543)
2" CONDUIT
3" CONDUIT
4" CONDUIT
12" VERT. PIPE
ELECTRICAL MANHOLE
ELECTRICAL CONTROL BUILDING
TRAFFIC SIGNAL CONTROL BOX
TELEPHONE BOOTH
TELEPHONE PEDESTAL
TELEPHONE BOX
CABLE TV PEDESTAL
CABLE TV BOX
POWER POLE WITH CONDUIT RISER
POWER POLE WITH GROUNDING WIRE
GUY WIRE
LIGHT POLE
METAL VAULT COVER
ABOVE-GROUND METAL PIPE (TYPICAL)
CONCRETE SUPPORT (TYPICAL)
3" PIPE GUARDRAIL
CHAIN LINK FENCE
WROUGHT IRON FENCE
WOOD FENCE
CONCRETE
GRASS
GRAVEL
FH
GBE-1
GBE-2
GBE-3
GBE-4
CAMERA
FIRE BOX ENCLOSURE
COVER FOR GROUNDING WIRE
CONDUIT ON TOP OF CONCRETE
CONC. PAVEMENT SLOPES TO INLET
CONC. PAVEMENT SLOPES TO CURB



PLAN
1" = 10'-0"

SYMBOL LEGEND

BFP	BACKFLOW PREVENTER
BB	BB INLET
	BREAK LINE
	BOLLARD
BH	BORE HOLE
	E INLET
JB	ELECTRIC JUNCTION BOX
EM	ELECTRIC METER
ES	ELECTRIC STUB-UP
	GATE POST
	GRATE INLET
	GUY WIRE
	LAND HOOK
	LIGHT POLE
	MANHOLE
	MISCELLANEOUS
PB	PEDESTRIAN SIGNAL BOX
	POWER POLE
PL	PROPERTY LINE
	SIGN
TB	TELEPHONE JUNCTION BOX
	TEMPORARY BENCHMARK
	TIC
	TREE
	UTILITY POLE
WM	WATER METER

LEGEND

B.L.	BUILDING LINE
B.M.	BENCHMARK
CM	CONTROLLING MONUMENT
C.O.H.	CITY OF HOUSTON
CONC.	CONCRETE
DRNG.	DRAINAGE
DWG.	DRAWING
ESMT.	EASEMENT
F.C.	FILM CODE
FL	FLOW LINE
FND.	FOUND
H..C.F.	HARRIS COUNTY CLERK FILE
H..D.R.	HARRIS COUNTY DEED RECORDS
H..M.R.	HARRIS COUNTY MAP RECORDS
H..T.	HARRIS COUNTY TEXAS
I.R.	IRON ROD
I.R.C.	IRON ROD CAPPED
I.P.	IRON PIPE
MH	MANHOLE
NO.	NUMBER
O..R.O.R.P.	OFFICIAL PUBLIC RECORDS OF REAL PROPERTY
PG.	PAGE
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R.O.W.	RIGHT-OF-WAY
SAN. SWR.	SANITARY SEWER
STM.	STORM
STM. SWR.	STORM SEWER
SW	SIDEWALK
VOL.	VOLUME
-P-	ELECTRIC OVERHEAD
-GAS-	UNDERGROUND GAS
-UGP-	UNDERGROUND ELECTRIC
-UGT-	UNDERGROUND TELEPHONE
-SAN-	SANITARY SEWER
-STM-	STORM SEWER
-W-	WATER LINE
——+——	CHAIN LINK FENCE
——·——	WROUGHT IRON FENCE

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

EXISTING EDDINGTON LIFT STATION SITE PLAN

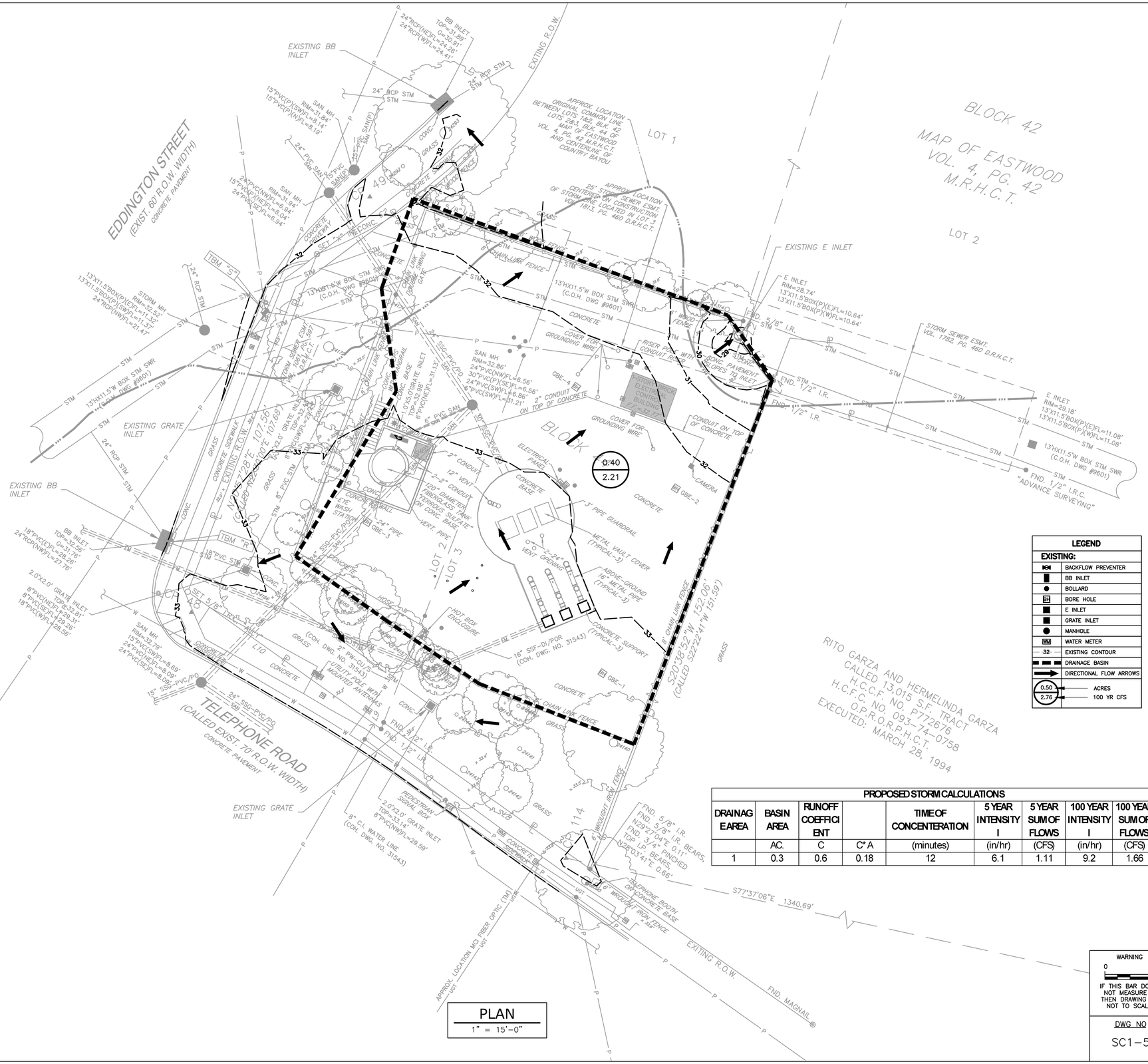
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC1-4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 10'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:07 PM

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-EDD.dwg



PLAN
1" = 15'-0"

LEGEND	
EXISTING:	
	BACKFLOW PREVENTER
	BB INLET
	BOLLARD
BH	BORE HOLE
	E INLET
	GRATE INLET
	MANHOLE
WM	WATER METER
32	EXISTING CONTOUR
	DRAINAGE BASIN
	DIRECTIONAL FLOW ARROWS
0.50 / 2.76	ACRES / 100 YR CFS

PROPOSED STORM CALCULATIONS

DRAINAGE AREA	BASIN AREA	RUNOFF COEFFICIENT		TIME OF CONCENTERATION	5 YEAR INTENSITY I	5 YEAR SUM OF FLOWS	100 YEAR INTENSITY I	100 YEAR SUM OF FLOWS
	AC.	C	C*A	(minutes)	(in/hr)	(CFS)	(in/hr)	(CFS)
1	0.3	0.6	0.18	12	6.1	1.11	9.2	1.66

N

0 15 30
SCALE: 1" = 15'

BENCHMARKS:

ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.

SITE CONTROL MONUMENT 5565-7109:
LOCATED AT NORTHEAST CORNER OF LEELAND ST. AND GUSTAV ST.
ELEVATION=34.16'

TBM "R"
SET SCRIBED BOX ON TOP OF A "BB" INLET LOCATED AT THE NORTHEAST CORNER OF EDDINGTON STREET AND TELEPHONE ROAD.(AS SHOWN ON SURVEY)
ELEVATION=32.55'

TBM "S"
SET RAILROAD SPIKE ON THE EAST SIDE OF A POWER POLE WITH A LIGHT, 1.6 FEET ABOVE GROUND. THE POWER POLE IS LOCATED ON THE EAST SIDE OF EDDINGTON STREET, APPROXIMATELY 120 FEET NORTH OF THE INTERSECTION TELEPHONE ROAD AND EDDINGTON STREET.
ELEVATION=32.32'

FLOODPLAIN NOTE:

BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:
ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

IN ADDITION THIS MAP STATES "THIS MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM; IT DOES NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE, OR ALL PLANIMETRIC FEATURES OUTSIDE SPECIAL FLOOD HAZARD AREAS. CERTAIN AREAS NOT IN SPECIAL FLOOD HAZARD AREAS MAY BE PROTECTED BY FLOOD CONTROL STRUCTURES". THE APPROXIMATE LIMITS OF SAID ZONES AS DETERMINED HEREON ARE SCALED FROM SAID MAP. THIS INFORMATION IS NOT INTENDED TO IDENTIFY SPECIFIC FLOOD CONDITIONS.

NO.	DATE	REVISION	APP.

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC1-5

TRILOGY ENGINEERING SERVICES

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699
TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 1/15/2026

DESIGNED BY: MS
DRAWN BY: MS
CHECKED BY: NS
REVIEWED BY: NS
APPROVED BY: NS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

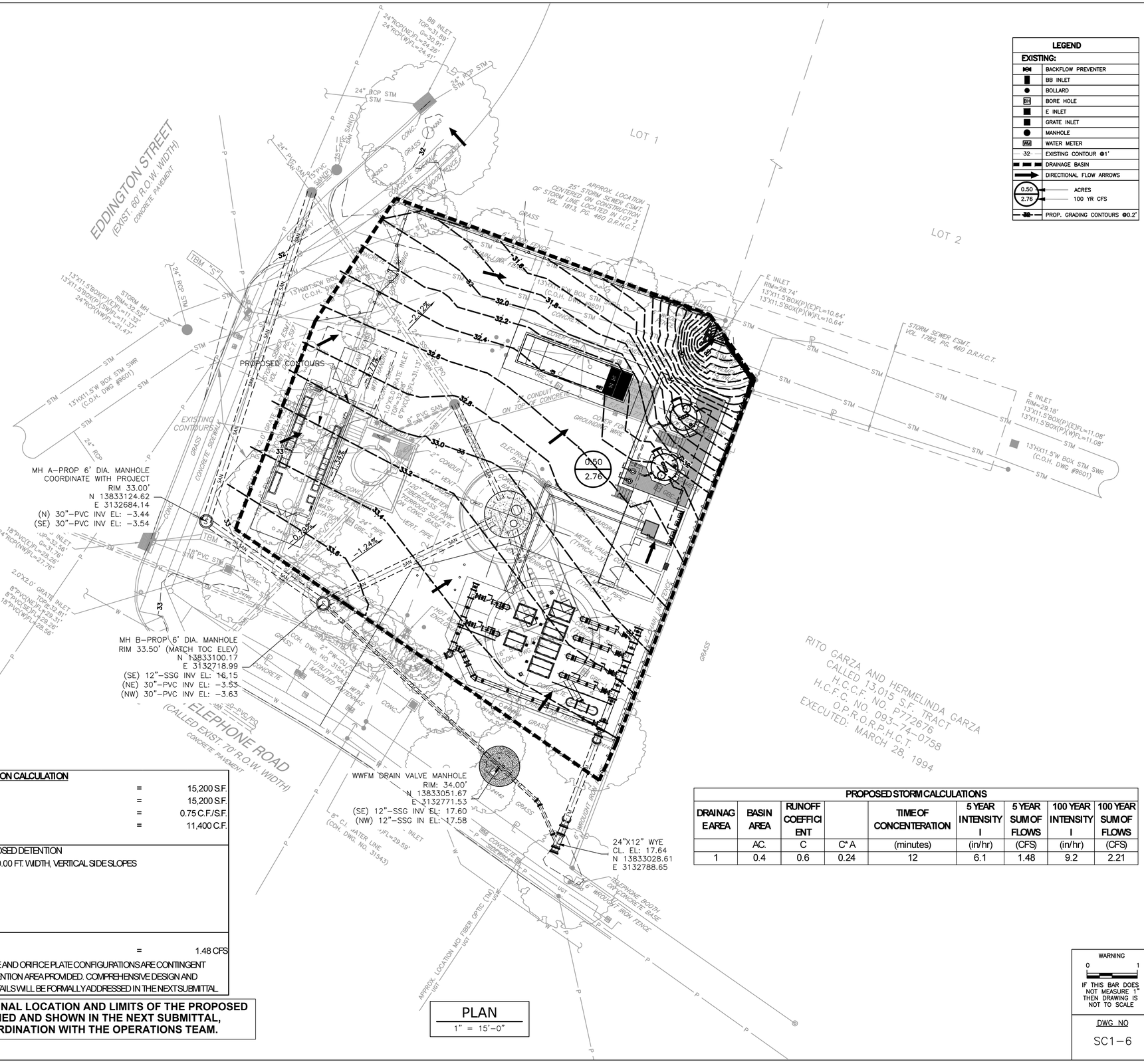
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

EDDINGTON LIFT STATION SITE EXISTING SITE DRAINAGE MAP AND CALCULATIONS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1"=15'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 45 OF 266	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/19/2026 10:26 AM

FILE PATH: C:\Projects\Eddington LS\Design\C-DRAINAGE-EDD.dwg



PLAN
1" = 15'–0"

LEGEND	
EXISTING:	
	BACKFLOW PREVENTER
	BB INLET
	BOLLARD
BH	BORE HOLE
	E INLET
	GRATE INLET
	MANHOLE
WM	WATER METER
32	EXISTING CONTOUR @1'
	DRAINAGE BASIN
	DIRECTIONAL FLOW ARROWS
0.50 / 2.76	ACRES / 100 YR CFS
32	PROP. GRADING CONTOURS @0.2'

N

0 15 30
SCALE: 1" = 15'

BENCHMARKS:

ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.

SITE CONTROL MONUMENT 5565–7109:
LOCATED AT NORTHEAST CORNER OF LEELAND ST. AND GUSTAV ST.
ELEVATION=34.16'

TBM "R"
SET SCRIBED BOX ON TOP OF A "BB" INLET LOCATED AT THE NORTHEAST CORNER OF EDDINGTON STREET AND TELEPHONE ROAD.(AS SHOWN ON SURVEY)
ELEVATION=32.55'

TBM "S"
SET RAILROAD SPIKE ON THE EAST SIDE OF A POWER POLE WITH A LIGHT, 1.6 FEET ABOVE GROUND. THE POWER POLE IS LOCATED ON THE EAST SIDE OF EDDINGTON STREET, APPROXIMATELY 120 FEET NORTH OF THE INTERSECTION TELEPHONE ROAD AND EDDINGTON STREET.
ELEVATION=32.32'

FLOODPLAIN NOTE:

BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:
ZONE "X"–(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

IN ADDITION THIS MAP STATES "THIS MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM; IT DOES NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE, OR ALL PLANIMETRIC FEATURES OUTSIDE SPECIAL FLOOD HAZARD AREAS. CERTAIN AREAS NOT IN SPECIAL FLOOD HAZARD AREAS MAY BE PROTECTED BY FLOOD CONTROL STRUCTURES". THE APPROXIMATE LIMITS OF SAID ZONES AS DETERMINED HEREON ARE SCALED FROM SAID MAP. THIS INFORMATION IS NOT INTENDED TO IDENTIFY SPECIFIC FLOOD CONDITIONS.

NO.	DATE	REVISION	APP.

DETENTION CALCULATION		
TOTAL AREA	=	15,200 S.F.
TOTAL IMPERVIOUS	=	15,200 S.F.
DEENTION RATE	=	0.75 C.F./S.F.
DETENTION REQUIRED	=	11,400 C.F.

PROPOSED DETENTION

THE PROPOSED DIMENSIONS : 100.00 FT LENGTH X 20.00 FT. WIDTH, VERTICAL SIDE SLOPES
STORAGE DEPTH = 6.0 FT
FREEBOARD = 1.0 FT.
TOTAL DEPTH = 7.00 FT
PTOPOSED VOLUME = 12,000 C.F.

OUTFLOW RATE ALLOWED FOR 5-YEAR FLOWRATE = 1.48 CFS

THE SPECIFIC DESIGN OF THE RESTRICTOR FLOWRATE AND ORIFICE PLATE CONFIGURATIONS ARE CONTINGENT UPON THE FINAL SITE LOCATION AND THE TOTAL DETENTION AREA PROVIDED. COMPREHENSIVE DESIGN AND CORRESPONDING OUTLET CONTROL STRUCTURE DETAILS WILL BE FORMALLY ADDRESSED IN THE NEXT SUBMITTAL

DETENTION LOCATION NOTE: THE FINAL LOCATION AND LIMITS OF THE PROPOSED DETENTION AREA WILL BE CONFIRMED AND SHOWN IN THE NEXT SUBMITTAL, PENDING CONSULTATION AND COORDINATION WITH THE OPERATIONS TEAM.

PROPOSED STORM CALCULATIONS								
DRAINAGE AREA	BASIN AREA	RUNOFF COEFFICIENT		TIME OF CONCENTERATION	5 YEAR INTENSITY I	5 YEAR SUM OF FLOWS	100 YEAR INTENSITY I	100 YEAR SUM OF FLOWS
	AC.	C	C* A	(minutes)	(in/hr)	(CFS)	(in/hr)	(CFS)
1	0.4	0.6	0.24	12	6.1	1.48	9.2	2.21

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC1–6

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699
TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 1/15/2026

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	NS
REVIEWED BY:	NS
APPROVED BY:	NS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

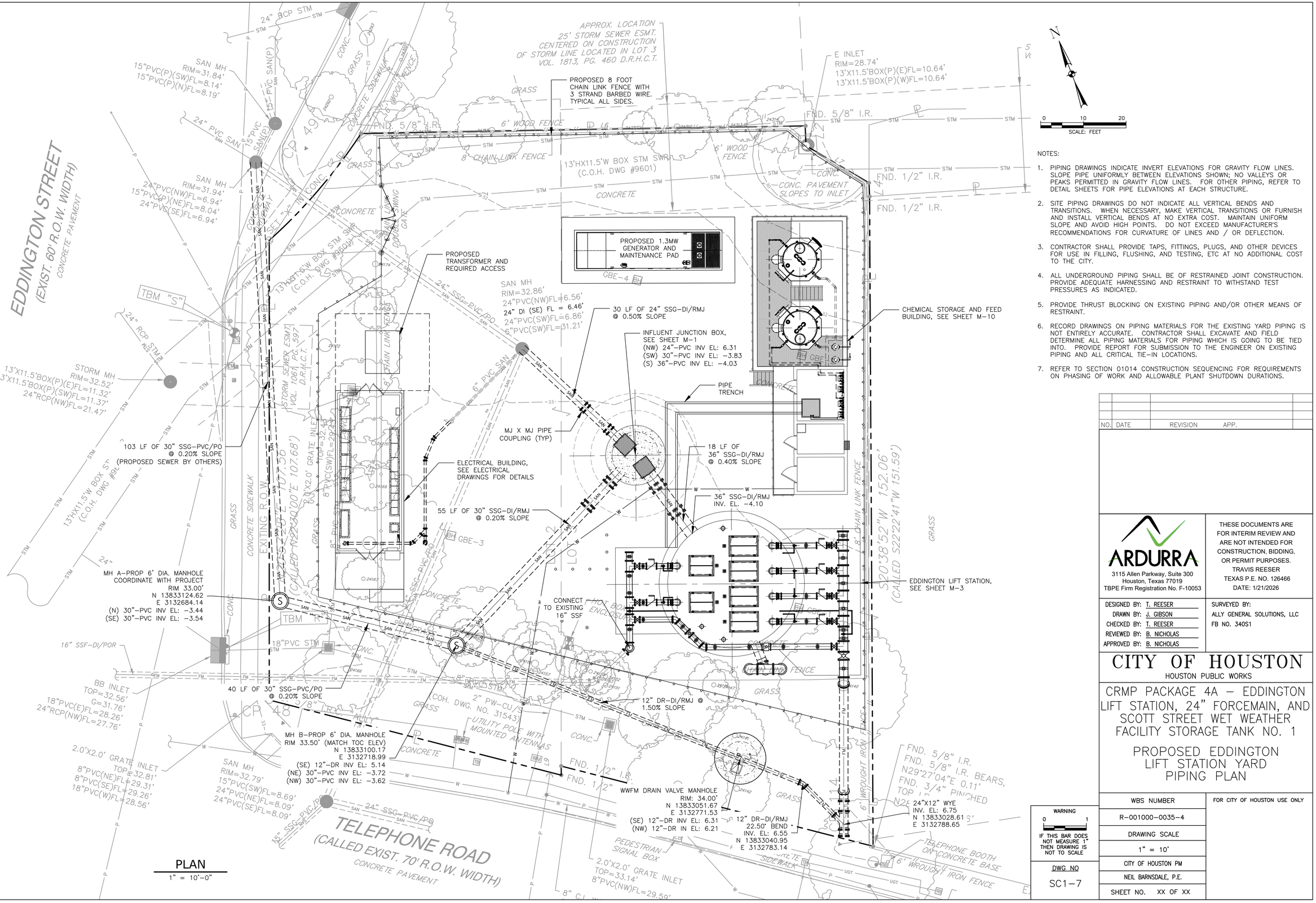
EDDINGTON LIFT STATION SITE PROPOSED SITE DRAINAGE AND GRADING

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
1"=15'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 46 OF 266	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/19/2026 10:52 AM

FILE PATH: C:\Projects\Eddington LS\Design\C–DRAINAGE–EDD.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 2:44 PM



PLAN
1" = 10'-0"

NOTES:

1. PIPING DRAWINGS INDICATE INVERT ELEVATIONS FOR GRAVITY FLOW LINES. SLOPE PIPE UNIFORMLY BETWEEN ELEVATIONS SHOWN; NO VALLEYS OR PEAKS PERMITTED IN GRAVITY FLOW LINES. FOR OTHER PIPING, REFER TO DETAIL SHEETS FOR PIPE ELEVATIONS AT EACH STRUCTURE.
2. SITE PIPING DRAWINGS DO NOT INDICATE ALL VERTICAL BENDS AND TRANSITIONS. WHEN NECESSARY, MAKE VERTICAL TRANSITIONS OR FURNISH AND INSTALL VERTICAL BENDS AT NO EXTRA COST. MAINTAIN UNIFORM SLOPE AND AVOID HIGH POINTS. DO NOT EXCEED MANUFACTURER'S RECOMMENDATIONS FOR CURVATURE OF LINES AND / OR DEFLECTION.
3. CONTRACTOR SHALL PROVIDE TAPS, FITTINGS, PLUGS, AND OTHER DEVICES FOR USE IN FILLING, FLUSHING, AND TESTING, ETC AT NO ADDITIONAL COST TO THE CITY.
4. ALL UNDERGROUND PIPING SHALL BE OF RESTRAINED JOINT CONSTRUCTION. PROVIDE ADEQUATE HARNESSING AND RESTRAINT TO WITHSTAND TEST PRESSURES AS INDICATED.
5. PROVIDE THRUST BLOCKING ON EXISTING PIPING AND/OR OTHER MEANS OF RESTRAINT.
6. RECORD DRAWINGS ON PIPING MATERIALS FOR THE EXISTING YARD PIPING IS NOT ENTIRELY ACCURATE. CONTRACTOR SHALL EXCAVATE AND FIELD DETERMINE ALL PIPING MATERIALS FOR PIPING WHICH IS GOING TO BE TIED INTO. PROVIDE REPORT FOR SUBMISSION TO THE ENGINEER ON EXISTING PIPING AND ALL CRITICAL TIE-IN LOCATIONS.
7. REFER TO SECTION 01014 CONSTRUCTION SEQUENCING FOR REQUIREMENTS ON PHASING OF WORK AND ALLOWABLE PLANT SHUTDOWN DURATIONS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

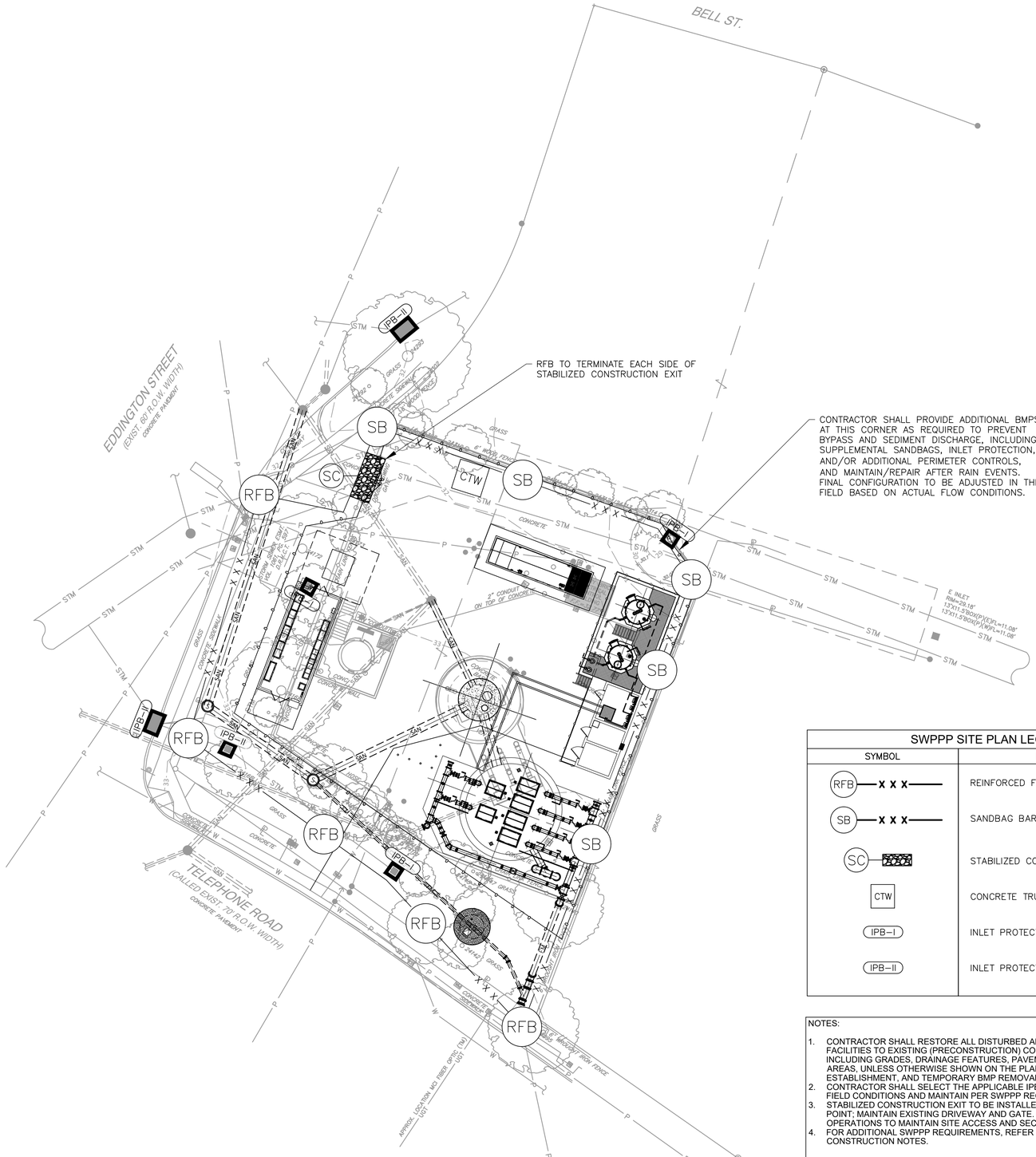
PROPOSED EDDINGTON LIFT STATION YARD PIPING PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 10'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC1-7

FILE PATH: C:\Users\jgibson\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\C-SP-EDD.dwg



PLAN
1" = 20'–0"

SWPPP SITE PLAN LEGEND	
SYMBOL	DESCRIPTION
RFB — X X X	REINFORCED FILTER BARRIER
SB — X X X	SANDBAG BARRIER
SC	STABILIZED CONSTRUCTION ENTRANCE
CTW	CONCRETE TRUCK WASHOUT
IPB–I	INLET PROTECTION BARRIER FOR STAGE I
IPB–II	INLET PROTECTION BARRIER FOR STAGE II

NOTES:

1. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS AND IMPACTED FACILITIES TO EXISTING (PRECONSTRUCTION) CONDITIONS OR BETTER, INCLUDING GRADES, DRAINAGE FEATURES, PAVEMENT, AND LANDSCAPED AREAS, UNLESS OTHERWISE SHOWN ON THE PLANS. FINAL STABILIZATION, TURF ESTABLISHMENT, AND TEMPORARY BMP REMOVAL SHALL BE PER SWPPP NOTES.
2. CONTRACTOR SHALL SELECT THE APPLICABLE IPB TYPE BASED ON ACTUAL FIELD CONDITIONS AND MAINTAIN PER SWPPP REQUIREMENTS.
3. STABILIZED CONSTRUCTION EXIT TO BE INSTALLED AT THE EXISTING ACCESS POINT; MAINTAIN EXISTING DRIVEWAY AND GATE. COORDINATE PLACEMENT AND OPERATIONS TO MAINTAIN SITE ACCESS AND SECURITY.
4. FOR ADDITIONAL SWPPP REQUIREMENTS, REFER TO SHEET G-7 FOR SWPPP CONSTRUCTION NOTES.

N

0 20 40
SCALE: 1" = 20'

BENCHMARKS:

ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.

SITE CONTROL MONUMENT 5565–7109:
LOCATED AT NORTHEAST CORNER OF LEELAND ST. AND GUSTAV ST.
ELEVATION=34.16'

TBM "R"
SET SCRIBED BOX ON TOP OF A "BB" INLET LOCATED AT THE NORTHEAST CORNER OF EDDINGTON STREET AND TELEPHONE ROAD.(AS SHOWN ON SURVEY)
ELEVATION=32.55'

TBM "S"
SET RAILROAD SPIKE ON THE EAST SIDE OF A POWER POLE WITH A LIGHT, 1.6 FEET ABOVE GROUND. THE POWER POLE IS LOCATED ON THE EAST SIDE OF EDDINGTON STREET, APPROXIMATELY 120 FEET NORTH OF THE INTERSECTION TELEPHONE ROAD AND EDDINGTON STREET.
ELEVATION=32.32'

FLOODPLAIN NOTE:

BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:
ZONE "X"–(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

IN ADDITION THIS MAP STATES "THIS MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM; IT DOES NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE, OR ALL PLANIMETRIC FEATURES OUTSIDE SPECIAL FLOOD HAZARD AREAS. CERTAIN AREAS NOT IN SPECIAL FLOOD HAZARD AREAS MAY BE PROTECTED BY FLOOD CONTROL STRUCTURES". THE APPROXIMATE LIMITS OF SAID ZONES AS DETERMINED HEREON ARE SCALED FROM SAID MAP. THIS INFORMATION IS NOT INTENDED TO IDENTIFY SPECIFIC FLOOD CONDITIONS.

NO.	DATE	REVISION	APP.

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699
TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 1/15/2026

DESIGNED BY: MS	SURVEYED BY:
DRAWN BY: MS	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: NS	FB NO. 340S1
REVIEWED BY: NS	
APPROVED BY: NS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

EDDINGTON LIFT STATION SITE STORM WATER POLLUTION PREVENTION PLAN

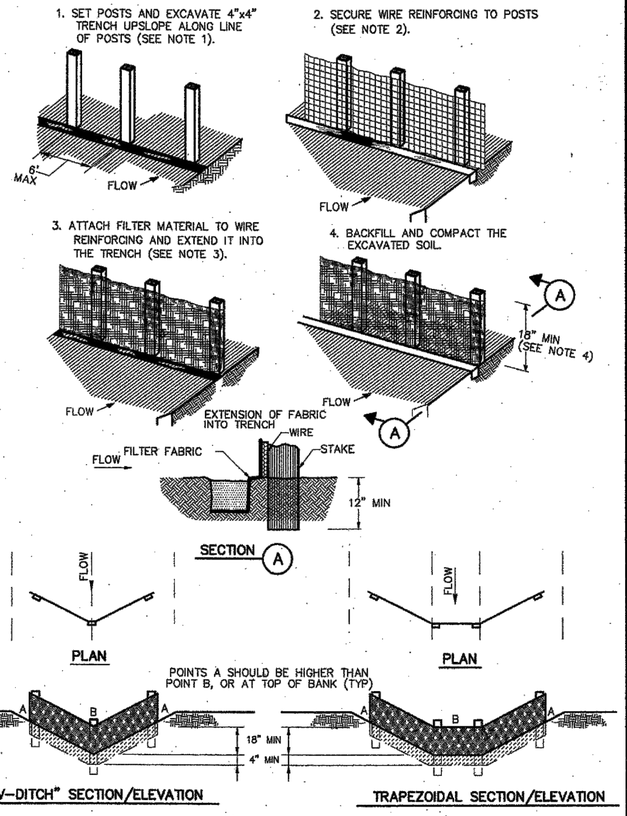
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
1"=20'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 40 OF 266	

DWG NO
SC1–8

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 3:21 PM

FILE PATH: D:\Eddington LS\Design\C–SWPPP–EDD.dwg

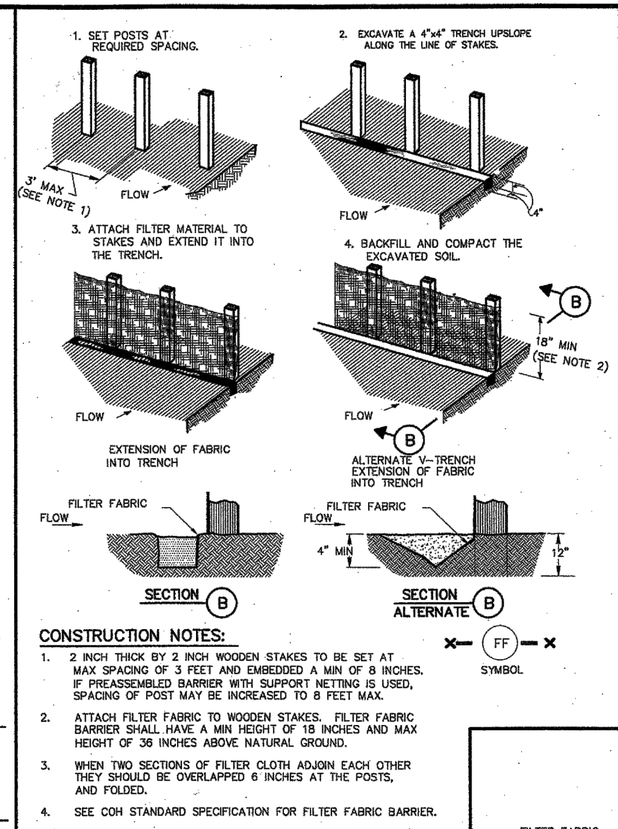


CONSTRUCTION NOTES:

1. SET 2 INCH BY 2 INCH WOODEN STAKES SPACED A MAX OF 6 FEET APART AND EMBEDDED A MIN OF 12 INCHES.
2. WOVEN WIRE REINFORCING TO BE FASTENED SECURELY TO BARRIER POSTS WITH STAPLES.
3. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE REINFORCING, WITH TIES SPACED EVERY 24 INCHES AT TOP AND MIDSECTION.
4. MINIMUM HEIGHT OF FILTER SHOULD BE 18 INCHES AND A MAXIMUM OF 36 INCHES ABOVE NATURAL GROUND.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.
6. SEE COH STANDARD SPECIFICATION FOR FILTER FABRIC BARRIER.

SYMBOL

REINFORCED FILTER FABRIC BARRIER

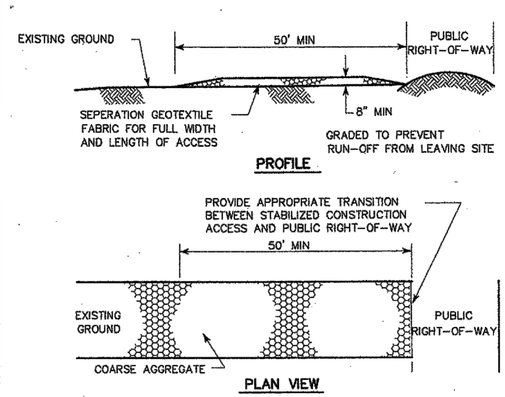


CONSTRUCTION NOTES:

1. 2 INCH THICK BY 2 INCH WOODEN STAKES TO BE SET AT MAX SPACING OF 3 FEET AND EMBEDDED A MIN OF 8 INCHES. IF PREASSEMBLED BARRIER WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAX.
2. ATTACH FILTER FABRIC TO WOODEN STAKES. FILTER FABRIC BARRIER SHALL HAVE A MIN HEIGHT OF 18 INCHES AND MAX HEIGHT OF 36 INCHES ABOVE NATURAL GROUND.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.
4. SEE COH STANDARD SPECIFICATION FOR FILTER FABRIC BARRIER.

SYMBOL

FILTER FABRIC BARRIER

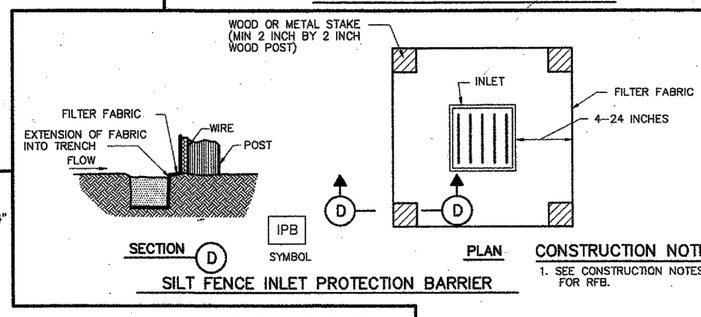


CONSTRUCTION NOTES:

1. LENGTH SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS, BUT NOT LESS THAN 50 FEET.
2. THICKNESS SHALL BE NOT LESS THAN 8 INCHES.
3. WIDTH SHALL BE NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
4. STABILIZATION FOR OTHER AREAS SHALL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION ACCESS, UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION DRAWINGS.
5. STABILIZED AREA MAY BE WIDENED OR LENGTHENED TO ACCOMODATE A WASHING AREA. AN OUTLET SEDIMENT TRAP MUST BE PROVIDED FOR THE WASHING AREA.
6. COH STANDARD SPECIFICATION FOR STABILIZED CONSTRUCTION ACCESS.
7. STABILIZED CONSTRUCTION ACCESS SHALL BE MAINTAINED FREE OF SEDIMENT FOR THE DURATION OF THE PROJECT.

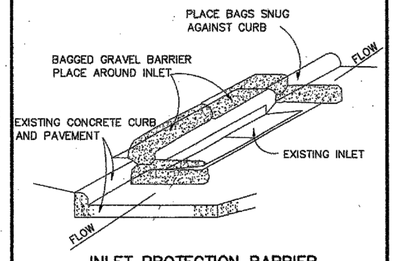
SYMBOL

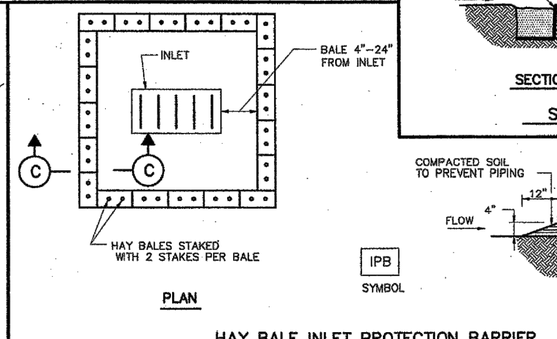
STABILIZED CONSTRUCTION ACCESS



CONSTRUCTION NOTE:

1. SEE CONSTRUCTION NOTES FOR RFB.





CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING

STORM WATER POLLUTION PREVENTION PLAN DETAILS

(NOT TO SCALE)

APPROVED BY: CITY ENGINEER

APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: JULY-01-2010

DWG NO: **01571-01**

NO.	DATE	REVISION	APP.

TRILOGY ENGINEERING SERVICES

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699

TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 12/16/2025

DESIGNED BY: MS	SURVEYED BY:
DRAWN BY: MS	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: NS	FB NO. 340S1
REVIEWED BY: NS	
APPROVED BY: NS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

STORM WATER POLLUTION PREVENTION PLAN DETAIL – 1

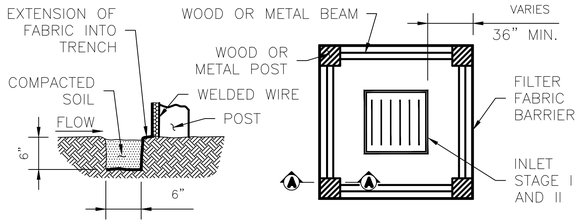
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 44 OF 266	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC1-9

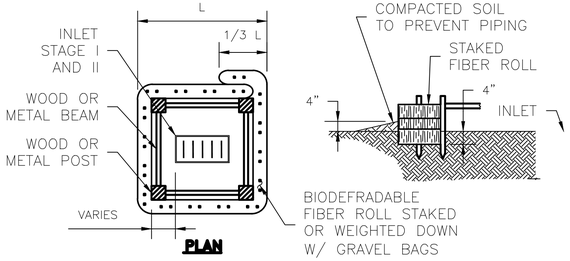
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 3:23 PM
FILE PATH: D:\Eddington LS\Design\C-SWPPP-DETAILS.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 3:25 PM



SECTION A–A **PLAN**

INLET PROTECTION WITH SEDIMENT CONTROL FENCE



PLAN

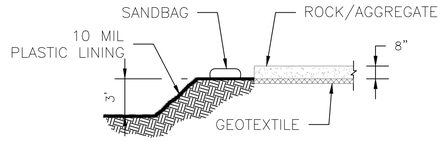
INLET PROTECTION WITH BIODEGRADABLE FILTER ROLLS

GENERAL NOTES:

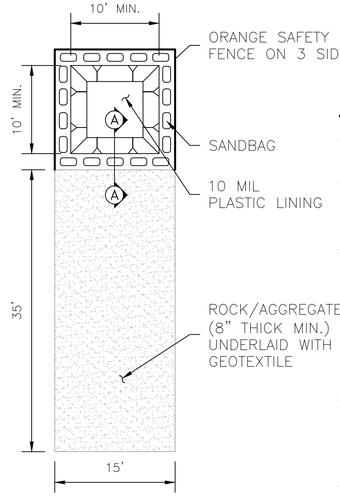
1. BIODEGRADABLE FIBER ROLLS WILL BE UTILIZED ONLY WHEN SITE CONDITIONS DO NOT PERMIT THE USE OF FILTER FABRIC BARRIER AND AS APPROVED BY THE ENGINEER.

INLET PROTECTION BARRIERS FOR STAGE I INLETS

IPB
SYMBOL



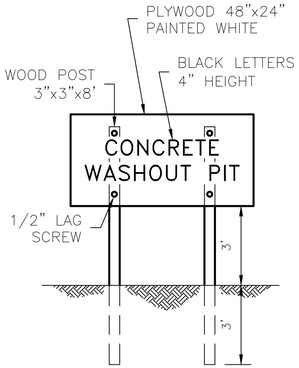
SECTION A–A



PLAN

GENERAL NOTES:

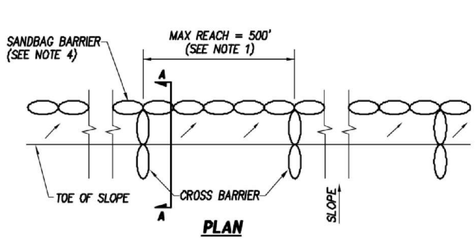
1. POST A SIGN READING "CONCRETE WASHOUT PIT" NEXT TO THE PIT.
2. VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASHOUT THEIR TRUCKS IN THE PIT AND NOWHERE ELSE.
3. UPON THE CONCRETE SETTING UP (CURING, DRYING OUT), THE CONCRETE WASTE SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR. AFTER REMOVAL OF THE CONCRETE WASTE, THE WASHOUT PIT SHALL BE FILLED WITH CLEAN FILL MATERIAL AND COMPACTED TO IN–SITU CONDITIONS, OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.
4. CONCRETE WASHOUT PITS SHALL NOT BE LOCATED DIRECTLY ADJACENT TO, NOR AT ANY TIME DRAIN INTO THE STORM SEWER SYSTEM OR ANY OTHER SWALE, DITCH, OR WATERWAY.
5. CONSTRUCT ENTRY ROAD AND BOTTOM OF WASHOUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCKS EQUIPMENT.



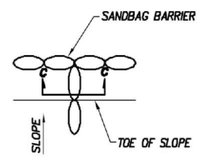
SIGN DETAIL (OR EQUIVALENT)

CONCRETE TRUCK WASHOUT

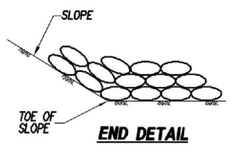
CTW
SYMBOL



PLAN



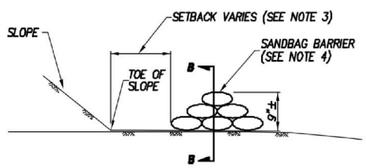
CROSS BARRIER DETAIL



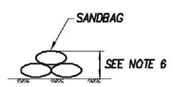
END DETAIL

NOTES

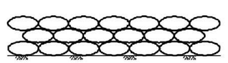
1. CONSTRUCT THE LENGTH OF EACH REACH SO THAT THE CHANGE IN BASE ELEVATION ALONG THE REACH DOES NOT EXCEED ½ THE HEIGHT OF THE LINEAR BARRIER. IN NO CASE SHALL THE REACH LENGTH EXCEED 500'.
2. PLACE SANDBAG TIGHTLY.
3. DIMENSION MAY VARY TO FIT FIELD CONDITION.
4. SANDBAG BARRIER SHALL BE A MINIMUM OF 3 BAGS HIGH.
5. THE END OF THE BARRIER SHALL BE TURNED UP SLOPE.
6. CROSS BARRIERS SHALL BE A MIN OF ½ AND A MAX OF ⅔ THE HEIGHT OF THE LINEAR BARRIER.
7. SANDBAG ROWS AND LAYERS SHALL BE STAGGERED TO ELIMINATE GAPS.



SECTION A-A



SECTION C-C



SECTION B-B

SANDBAG BARRIER

SB
SYMBOL

NO.	DATE	REVISION	APP.

TRILOGY ENGINEERING SERVICES

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699
TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 12/16/2025

DESIGNED BY: MS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: MS	FB NO. 340S1
CHECKED BY: NS	
REVIEWED BY: NS	
APPROVED BY: NS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

STORM WATER POLLUTION PREVENTION PLAN
DETAIL – 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 44 OF 266	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC1–10

FILE PATH: D:\Eddington LS\Design\C–SWPPP–DETAILS.dwg

PLOTTED: 10/17/2025 3:03 PM

PLOT STYLE: AGS.ctb

FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\0060-014-24 COH Eddington LS - Ardurra.dwg

SYMBOL LEGEND	
FND IRON ROD	
FND IRON PIPE	
FND MAGNAIL	
SET IRON ROD	
X CUT	

SYMBOL LEGEND			
AC	AIR CONDITIONER UNIT		MANHOLE
	BB INLET		POWER POLE
	BLOWOFF VALVE		PVC PIPE RISER
	BOLLARD	TB	TELEPHONE JUNCTION BOX
CO	CLEAN OUT		TEMPORARY BENCHMARK
EJB	ELECTRIC JUNCTION BOX		TIC
EM	ELECTRIC METER		WATER BLOWOFF VALVE
ES	ELECTRIC STUB-UP		WATER FIRE HYDRANT
	ELECTRIC PEDESTAL	WM	WATER METER
	GATE POST		WATER SPICKET
	GRATE INLET		WATER VALVE
	GUY WIRE		TREE
	IRRIGATION CONTROL VALVE		SHRUB
	LIGHT POLE		

LEGEND

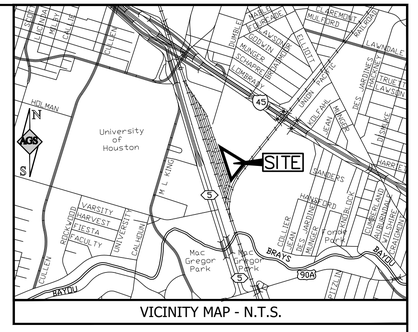
B.L.	BUILDING LINE
B.M.	BENCHMARK
CM	CONTROLLING MONUMENT
C.O.H.	CITY OF HOUSTON
CONC.	CONCRETE
DRNG.	DRAINAGE
DWG.	DRAWING
ESMT.	EASEMENT
F.C.	FILM CODE
FL	FLOW LINE
FND.	FOUND
H.C.C.F.	HARRIS COUNTY CLERK FILE
H.C.D.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
H.C.T.	HARRIS COUNTY TEXAS
I.R.	IRON ROD
I.R.C.	IRON ROD CAPPED
I.P.	IRON PIPE
MH	MANHOLE
NO.	NUMBER
O.P.R.O.R.P.	OFFICIAL PUBLIC RECORDS OF REAL PROPERTY
PG.	PAGE
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R.O.W.	RIGHT-OF-WAY
(R)	PIPE INFORMATION/LOCATION PER CITY OF HOUSTON RECORD PLANS (DWG. NO. 32325)
SAN. SWR.	SANITARY SEWER
STM.	STORM
STM. SWR.	STORM SEWER
SW	SIDEWALK
VOL.	VOLUME
-P-	ELECTRIC OVERHEAD
-GAS-	UNDERGROUND GAS
-UGP-	UNDERGROUND ELECTRIC
-UGT-	UNDERGROUND TELEPHONE
-SAN-	SANITARY SEWER
-STM-	STORM SEWER
-W-	WATER LINE
	CHAIN LINK FENCE
	WROUGHT IRON FENCE

STATE OF TEXAS
DANIEL PAUL COYER
6308
REGISTERED PROFESSIONAL LAND SURVEYOR
10/17/2025
DPC

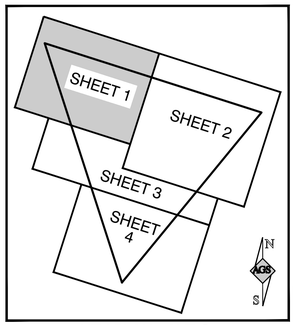
I, DANIEL PAUL COYER, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE STATE OF TEXAS, HEREBY CERTIFY THAT THE ABOVE PLAT CORRECTLY REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY MADE ON THE GROUND UNDER MY SUPERVISION. THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS' STANDARDS AND SPECIFICATIONS FOR A CATEGORY 1B, CONDITION 3, STANDARD LAND SURVEY AND A CATEGORY 6 CONDITION 1 TOPOGRAPHIC SURVEY.,

FIELD WORK WAS COMPLETED IN JULY, 2025

DATE OF SURVEY MAP: OCTOBER 17, 2025



VICINITY MAP - N.T.S.



KEY PLAN - N.T.S.

0 10 20 30 40

SCALE: 1" = 20'

EASEMENT FOR PURPOSE OF VEHICULAR ACCESS, PARKING & MANEUVERING ON & ALONG THE PROPERTY OF THE GRANTOR VOL. 6034, PG. 479 D.R.H.C.T.

STARWAY CORPORATION
CALLED 3.7617 ACRES
H.C.C.F. NO. N223763
H.C.F.C. NO. 039-20-1275
O.P.R.O.R.P.H.C.T.
EXECUTED: JULY 03, 1991

LUKE MOORE SURVEY
A-51

(Called S69°19'00"E 901.34')

FND. 3/4" I.R.

8' CHAIN LINK FENCE

CENTERPOINT ENERGY
(FORMERLY HOUSTON LIGHTING AND POWER COMPANY)
CALLED 1,494.1 S.F.
VOL. 2589, PG. 344
D.R.H.C.T.
EXECUTED: MARCH 27, 1953

CONCRETE CURB

HIGH BANK

BOTTOM OF SLOPE

TOP OF DITCH

ELECTRIC MH RIM=40.15'

CITY OF HOUSTON, TEXAS
CALLED 8.3718 ACRES
H.C.C.F. NO. R283368
H.C.F.C. NO. 502-90-158
O.P.R.O.R.P.H.C.T.
EXECUTED: FEBRUARY 15, 1995

SURVEY OF A CALCULATED
8.371 ACRES (CALC. 364,664 S.F.)

LUKE MOORE SURVEY
A-51

N17°54'07"W 999.57'
(Called N17°56'35"W 999.42')

15.0'

55.0'

TEXAS NEW MEXICO RAILROAD

REF. R.O.W.

G.C.&S.F. RAILROAD

THE CITY OF HOUSTON, TEXAS A PERMANENT & PERPETUAL EASEMENT FOR ACCESS PURPOSES UPON, OVER, UNDER & ACROSS A PARCEL OF LAND CONTAINING 0.4754 ACRE H.C.C.F. NO. R283370 H.C.F.C. NO. 502-90-1528 O.P.R.O.R.P.H.C.T.

8" PVC WATERLINE (R)

RAILROAD TRACKS (DO NOT CROSS ROADWAY)

BUILDING

SAN

STARWAY STREET

CONCRETE PAVEMENT

8" STEEL PIPE WITH VALVES & BACKFLOW PREVENTER

GATE CONTROL

CHAIN LINK POSTS

TRAFFIC SENSOR

TRAFFIC LOOP

FND. 5/8" I.R.C. (STS SURVEYING)

FND. 5/8" I.R.

APPROX. LOCATION 8" POTABLE WATER (R)

6" PVC SAN

SAN MH RIM=39.93' 6"PVC(N)FL=35.78' 6"PVC(E)FL=35.78'

CONCRETE

CONTROL BUILDING

1-STORY BUILDING F.F.=41.85'

METAL

CONCRETE PAVEMENT

24" VENT PIPE

SAN MH 22" DIA. RIM=42.11'

TBM "X"

10" PIPE

20" PIPE

RAISED CONC.

SAN MH 22" DIA. RIM=42.13' (ACCESS TO PUMPS)

5.5'x5.5' METAL VAULT COVER (TYPICAL-3)

CONC. SUPPORT (TYPICAL)

24" PIPE

1/2" PIPE

3" PIPE (TYPICAL-3)

24" REINFORCED CONC. PIPE SEWER

10" VAN (SW) (R)

8" VAN (SW) (R)

24" DRAIN (DIP)

24" CLARIFIER DRAIN (DIP)

20" HIGH OUTSIDE WALL OF CLARIFIER

4'x0.67' WALL PROJECTION (TYPICAL)

METAL GRID

WALL OVERHANG

ELECTRIC MOTOR OPERATED PLUG VALVE

24" CLARIFIER DRAIN VALVE

TOP OF 24" STL PIPE(E)=22.96'

TOP OF 24" STL PIPE(E)=22.96'

SAN MH RIM=41.36' 24" STL PIPE(E)=22.96'

SAN MH RIM=41.92' TOP OF VAL(E)=24.52'

METAL STAIRS WITH HANDRAILS

CONCRETE SIDEWALK

CLARIFIER

TOP OF CLARIFIER EL=48.62'

METAL WALKWAY WITH METAL PIPE GUARDRAIL

2" PVC (CHLORINE) (R)

TOP OF WEIR EL=46.27'

BOTTOM OF WEIR EL=46.07'

6" PIPE

54"RCP CLARIFIER EFFLUENT (R)

2" PVC (CHLORINE) (R)

STM

WATER MH RIM=41.04' TOP OF WL(S)=30.04'

WATERLINE

MATCH LINE - SHEET 3

MATCH LINE - SHEET 2

BENCHMARKS:

ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.

SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR.
ELEVATION=37.40'

TBM "V"
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY)
ELEVATION=39.79'

TBM "X"
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

GENERAL NOTES:

1. ALL BEARINGS AND COORDINATES SHOWN HEREON THIS MAP ARE REFERENCED TO THE TEXAS COORDINATE SYSTEM OF 1983, TEXAS SOUTH CENTRAL ZONE (4204), NAD 83 (2011 ADJ.); (EPOCH 2010.00). ALL SURFACE DISTANCES AND SURFACE COORDINATES MAY BE CONVERTED TO GRID BY MULTIPLYING BY A COMBINED SCALE FACTOR OF 0.999889376. (SURFACE X 0.999889376 = GRID).
2. ELEVATIONS SHOWN HEREON THIS MAP ARE BASED ON AVERAGE OF GPS OBSERVATIONS TAKEN ON C.O.H. SURVEY MONUMENT SHOWN HEREON USING ALLTERRA RTKNET. VERTICAL DATUM IS REFERENCED TO NAVD 88, 2011 ADJ. (GEOID18)
3. ALL COORDINATE VALUES AND BEARING SHOWN HERE ON THIS MAP ARE BASED ON VRS GPS OBSERVATIONS USING THE ALLTERRA CENTRAL RTKNET TRIMBLE VRS NETWORK.
4. ALL SURVEY MEASUREMENTS ARE US SURVEY FEET.
5. THIS TOPOGRAPHIC SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYOR'S STANDARDS AND SPECIFICATIONS FOR A CATEGORY 6, CONDITION 1, SURVEY.
6. ONLY VISIBLE EVIDENCE OF IMPROVEMENTS AND UTILITIES ARE SHOWN HEREON.
7. THE FIELD WORK FOR THE TOPOGRAPHIC SURVEY WAS COMPLETED IN JUNE 2025.
8. ABSTRACTING SERVICES WERE PERFORMED BY TITLE HOUSTON HOLDINGS AND WERE COMPLETED ON APRIL 2025.
9. SQUARE FOOTAGE TOTALS SHOWN HEREON OR REFERENCED HEREIN ARE BASED ON MATHEMATICAL CLOSURES AND DO NOT NECESSARILY REPRESENT THE POSITIONAL ACCURACY OF THE BOUNDARY MONUMENTS.
10. THIS SURVEY DOES NOT PROVIDE A DETERMINATION OR OPINION CONCERNING THE LOCATION OR EXISTENCE OF WETLANDS, FAULT LINES, TOXIC OR HAZARDOUS WASTE AREAS, SUBSIDENCE, OVERHEAD, SUBSURFACE AND ENVIRONMENTAL CONDITIONS OR GEOLOGICAL ISSUES. NO STATEMENT IS MADE CONCERNING THE SUITABILITY OF THE SUBJECT TRACT FOR ANY INTENDED USE, PURPOSE, OR DEVELOPMENT.
11. THE WORD "CERTIFY" OR "CERTIFICATE" AS SHOWN AND USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THE SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.
12. TREE TABLE IS SHOWN ON SHEET 4.

FLOODPLAIN NOTE:

BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

IN ADDITION THIS MAP STATES "THIS MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM; IT DOES NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE, OR ALL PLANIMETRIC FEATURES OUTSIDE SPECIAL FLOOD HAZARD AREAS. CERTAIN AREAS NOT IN SPECIAL FLOOD HAZARD AREAS MAY BE PROTECTED BY FLOOD CONTROL STRUCTURES". THE APPROXIMATE LIMITS OF SAID ZONES AS DETERMINED HEREON ARE SCALED FROM SAID MAP. THIS INFORMATION IS NOT INTENDED TO IDENTIFY SPECIFIC FLOOD CONDITIONS.

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11750 Katy Freeway, Suite 300
Houston, Texas 77079
(713) 541-3530 www.Ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
DAVID R. CASTELLANO, P.E.
P.E. SERIAL No. 97308
DATE: 10/17/25

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

TOPOGRAPHIC AND BOUNDARY SURVEY OF SCOTT STREET AREA WET WEATHER FACILITY SITUATED IN THE LUKE MOORE SURVEY ABSTRACT NO. 51 HARRIS COUNTY, TEXAS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-3	
SCALE	
1"=20'	
CITY OF HOUSTON PM	
JOHN DOE, P.E.	
SHEET NO. 1 OF 4	

PLOTTED: 10/17/2025 3:04 PM

PLOT STYLE: AGS.ctb

FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\0060-014-24 COH Eddington LS - Ardurra.dwg

VAUGHAN-ALAMO
BLOCK 1
RESTRICTED RESERVE "A"
RESTRICTED FOR COMMERCIAL USE ONLY
F.C. NO. 375029
M.R.H.C.T.

LUKE MOORE SURVEY
A-51

(Called S69°19'00"E 901.34')

FND. 1" I.P.

FND. 5/8" I.R.C. (PINNELL 5349)

8' CHAIN LINK FENCE

HIGH BANK

BOTTOM OF SLOPE

APPROX. LOCATION 8" POTABLE WATER (R)

WATER TANK

8" HORIZ. PIPE

4" HORIZ. PIPE

VERTICAL LADDER

CONC. SUPPORT (TYPICAL)

10" PIPE

1" PVC

6" PIPE

8" PIPE

CHAINLINK FENCE

ELEC. MOTOR GATE

CONTROL BUILDING

CONC.

1-STORY BUILDING F.F.=41.85'

RAMP

HANDRAIL

GROUND WIRE

CONCRETE SIDEWALK

CONCRETE PAVEMENT

APPROX. LOCATION 8" WASHDOWN WATER (R)

20' HIGH OUTSIDE WALL OF CLARIFIER

4'x0.67' WALL PROJECTION (TYPICAL)

METAL GRID

24" CLARIFIER DRAIN (DIP)

SAN MH RIM=40.65' BOTTOM=18.20'

ELECTRIC MOTOR OPERATED PLUG VALVE

WALL OVERHANG

CONCRETE SIDEWALK

METAL STAIRS WITH HANDRAILS

CONDUITS

SAN MH RIM=39.58' BOTTOM=18.28'

CITY OF HOUSTON, TEXAS
CALLED 8.3718 ACRES
H.C.C.F. NO. R283368
H.C.F.C. NO. 502-90-158
O.P.R.O.R.P.H.C.T.
EXECUTED: FEBRUARY 15, 1995

SURVEY OF A CALCULATED
8.371 ACRES (CALC. 364,664 S.F.)

CLARIFIER

METAL WALKWAY WITH METAL PIPE GUARDRAIL

TOP OF WEIR EL=46.32'

BOTTOM OF WEIR EL=46.11'

2" PVC (CHLORINE) (R)

2" PVC

6" STL. PIPE

2" PVC

TOP OF WEIR EL=46.28'

BOTTOM OF WEIR EL=46.09'

2" PVC (CHLORINE) (R)

66"RCP CLARIFIER INFLUENT (R)

TOP OF CLARIFIER EL=48.73'

SAN MH RIM=39.47' BOTTOM=11.67'

SAN MH RIM=39.68' BOTTOM=11.28'

1" CONDUIT

ELECTRIC MOTOR OPERATED PLUG VALVE

2" PVC (CHLORINE) (R)

66"RCP CLARIFIER EFFLUENT (R)

SAN MH RIM=39.75' BOTTOM=26.00'

2" PVC

48" PIPE

36" INFLUENT (DIP)

48" INFLUENT (DIP)

3-66" OPENINGS

METAL GUARDRAILS

FIBERGLASS BUILDING (MOTOR ROOM)

2" PVC

6" PIPE

SAN MH RIM=39.44' BOTTOM=11.74'

2-1" CONDUITS

METAL STAIRS WITH HANDRAILS

CONC.

120" DIA., 11' HIGH CYLINDER

SEE DETAIL "A"

CONCRETE PAVEMENT

APPROX. LOCATION 8" PVC POTABLE WATER (R)

APPROX. LOCATION 8" WASHDOWN WATER (R)

48"RCP STM (EFFLUENT) (R)

STORM MH RIM=40.65' 48"RCP(NW)EL=32.50' 54"RCP(SE)EL=32.50'

54" RCP STM (EFFLUENT)(M)

GRATE INLET TOP=39.04' BOTTOM=31.54'

STORM MH RIM=39.52' 54"RCP(NW)EL=31.92' 66"RCP(SE)EL=31.82'

48"RCP STM (EFFLUENT) (R)

APPROX. LOCATION 8" POTABLE WATER (R)

APPROX. LOCATION 8" WASHDOWN WATER (R)

APPROX. LOCATION 8" PVC POTABLE WATER (R)

APPROX. LOCATION 8" WASHDOWN WATER (R)

24" DRAIN (DIP)

CONCRETE PAVEMENT

MATCH LINE - SHEET 1

MATCH LINE - SHEET 3

(Called S42°20'55"W 870.59')

SYMBOL LEGEND			
AC	AIR CONDITIONER UNIT		MANHOLE
	BB INLET		POWER POLE
	BLOWOFF VALVE		PVC PIPE RISER
	BOLLARD	TB	TELEPHONE JUNCTION BOX
CO	CLEAN OUT		TEMPORARY BENCHMARK
JB	ELECTRIC JUNCTION BOX		TIC
EM	ELECTRIC METER		WATER BLOWOFF VALVE
ES	ELECTRIC STUB-UP		WATER FIRE HYDRANT
	ELECTRIC PEDESTAL	WM	WATER METER
	GATE POST		WATER SPICKET
	GRATE INLET		WATER VALVE
	GUY WIRE		TREE
	IRRIGATION CONTROL VALVE		SHRUB
	LIGHT POLE		

SCALE: 1" = 20'

KEY PLAN - N.T.S.

DETAIL "A" - N.T.S.

LUKE MOORE SURVEY
A-51

LEGEND			
B.L.	BUILDING LINE	PG.	PAGE
B.M.	BENCHMARK	P.O.B.	POINT OF BEGINNING
CM	CONTROLLING MONUMENT	P.O.C.	POINT OF COMMENCING
C.O.H.	CITY OF HOUSTON	PVC	POLYVINYL CHLORIDE PIPE
CONC.	CONCRETE	RCP	REINFORCED CONCRETE PIPE
DRNG.	DRAINAGE	R.O.W.	RIGHT-OF-WAY
DWG.	DRAWING	(R)	PIPE INFORMATION/LOCATION PER CITY OF HOUSTON RECORD PLANS (DWG. NO. 32325)
ESMT.	EASEMENT	SAN. SWR.	SANITARY SEWER
F.C.	FILM CODE	STM.	STORM
FL	FLOW LINE	STM. SWR.	STORM SEWER
FND.	FOUND	SW	SIDEWALK
H.C.C.F.	HARRIS COUNTY CLERK FILE	VOL.	VOLUME
H.C.D.R.	HARRIS COUNTY DEED RECORDS	-P-	ELECTRIC OVERHEAD
H.C.M.R.	HARRIS COUNTY MAP RECORDS	-GAS-	UNDERGROUND GAS
H.C.T.	HARRIS COUNTY TEXAS	-UGP-	UNDERGROUND ELECTRIC
I.R.	IRON ROD	-UGT-	UNDERGROUND TELEPHONE
I.R.C.	IRON ROD CAPPED	-SAN-	SANITARY SEWER
I.P.	IRON PIPE	-STM-	STORM SEWER
MH	MANHOLE	-W-	WATER LINE
NO.	NUMBER		CHAIN LINK FENCE
O.P.R.O.R.P.	OFFICIAL PUBLIC RECORDS OF REAL PROPERTY		WROUGHT IRON FENCE

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11750 Katy Freeway, Suite 300
Houston, Texas 77079
(713) 541-3530 www.Ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
DAVID R. CASTELLANO, P.E.
P.E. SERIAL No. 97308
DATE: 10/17/25

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

TOPOGRAPHIC AND BOUNDARY SURVEY OF SCOTT STREET AREA WET WEATHER FACILITY SITUATED IN THE LUKE MOORE SURVEY ABSTRACT NO. 51 HARRIS COUNTY, TEXAS

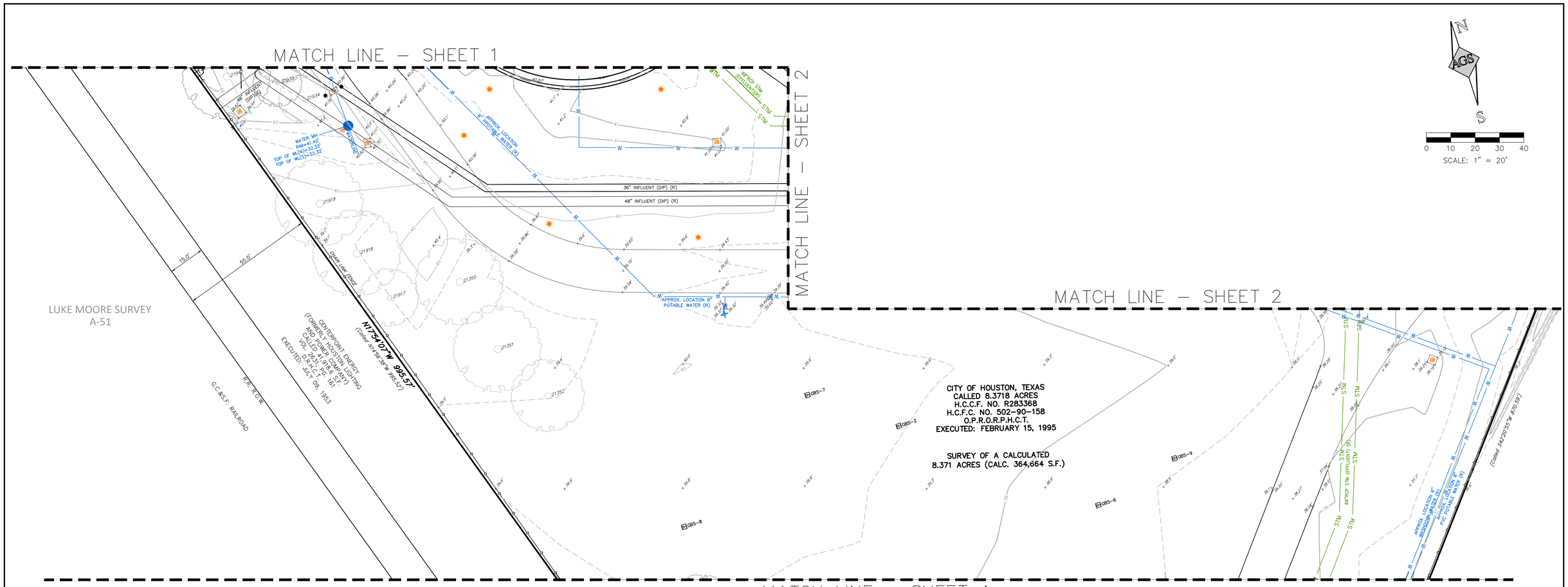
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-3	
SCALE	
1"=20'	
CITY OF HOUSTON PM	
JOHN DOE, P.E.	
SHEET NO. 2 OF 4	

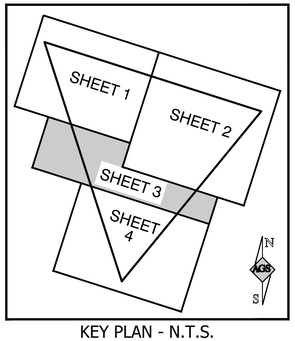
STATE OF TEXAS
DANIEL PAUL COYER
4662
REGISTERED PROFESSIONAL LAND SURVEYOR
10/17/2025
DPC

I, DANIEL PAUL COYER, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE STATE OF TEXAS, HEREBY CERTIFY THAT THE ABOVE PLAT CORRECTLY REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY MADE ON THE GROUND UNDER MY SUPERVISION. THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS' STANDARDS AND SPECIFICATIONS FOR A CATEGORY 1B, CONDITION 3, STANDARD LAND SURVEY AND A CATEGORY 6 CONDITION 1 TOPOGRAPHIC SURVEY.,

FIELD WORK WAS COMPLETED IN JULY, 2025

DATE OF SURVEY MAP: OCTOBER 17, 2025





KEY PLAN - N.T.S.

SYMBOL LEGEND			
AC	AIR CONDITIONER UNIT		MANHOLE
	BB INLET		POWER POLE
	BLOWOFF VALVE		PVC PIPE RISER
	BOLLARD	TB	TELEPHONE JUNCTION BOX
	CLEAN OUT		TEMPORARY BENCHMARK
JB	ELECTRIC JUNCTION BOX		TIC
EM	ELECTRIC METER		WATER BLOWOFF VALVE
ES	ELECTRIC STUB-UP		WATER FIRE HYDRANT
	ELECTRIC PEDESTAL	WM	WATER METER
	GATE POST		WATER SPICKET
	GRATE INLET		WATER VALVE
	GUY WIRE		TREE
	IRRIGATION CONTROL VALVE		SHRUB
	LIGHT POLE		

LEGEND

B.L.	BUILDING LINE
B.M.	BENCHMARK
CM	CONTROLLING MONUMENT
C.O.H.	CITY OF HOUSTON
CONC.	CONCRETE
DRNG.	DRAINAGE
DWG.	DRAWING
ESMT.	EASEMENT
F.C.	FILM CODE
FL	FLOW LINE
FND.	FOUND
H.C.C.F.	HARRIS COUNTY CLERK FILE
H.C.D.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
H.C.T.	HARRIS COUNTY TEXAS
I.R.	IRON ROD
I.R.C.	IRON ROD CAPPED
I.P.	IRON PIPE
MH	MANHOLE
NO.	NUMBER
O.P.R.O.R.P.	OFFICIAL PUBLIC RECORDS OF REAL PROPERTY
PG.	PAGE
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R.O.W.	RIGHT-OF-WAY
(R)	PIPE INFORMATION/LOCATION PER CITY OF HOUSTON RECORD PLANS (DWG. NO. 32325)
SAN. SWR.	SANITARY SEWER
STM.	STORM
STM. SWR.	STORM SEWER
SW	SIDEWALK
VOL.	VOLUME
-P-	ELECTRIC OVERHEAD
-GAS-	UNDERGROUND GAS
-UGP-	UNDERGROUND ELECTRIC
-UGT-	UNDERGROUND TELEPHONE
-SAN-	SANITARY SEWER
-STM-	STORM SEWER
-W-	WATER LINE
—•—	CHAIN LINK FENCE
—·—	WROUGHT IRON FENCE

STATE OF TEXAS
REGISTERED
DANIEL PAUL COYER
6852
PROFESSIONAL
LAND SURVEYOR
10/17/2025
DPC

I, DANIEL PAUL COYER, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE STATE OF TEXAS, HEREBY CERTIFY THAT THE ABOVE PLAT CORRECTLY REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY MADE ON THE GROUND UNDER MY SUPERVISION. THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS' STANDARDS AND SPECIFICATIONS FOR A CATEGORY 1B, CONDITION 3, STANDARD LAND SURVEY AND A CATEGORY 6 CONDITION 1 TOPOGRAPHIC SURVEY.,

FIELD WORK WAS COMPLETED IN JULY, 2025

DATE OF SURVEY MAP: OCTOBER 17, 2025

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11750 Katy Freeway, Suite 300
Houston, Texas 77079
(713) 541-3530 www.Ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 34051

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
DAVID R. CASTELLANO, P.E.
P.E. SERIAL No. 97308
DATE: 10/17/25

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

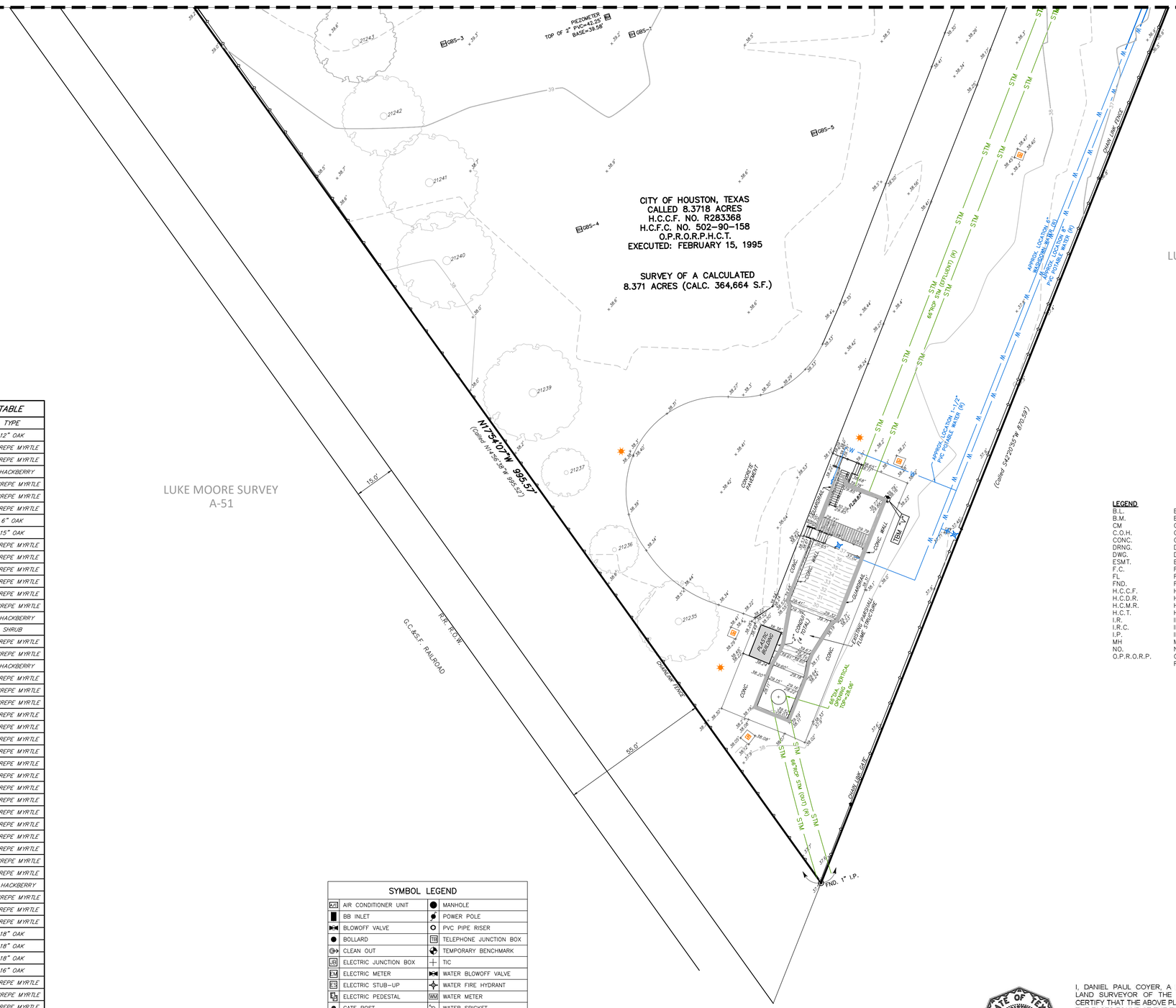
TOPOGRAPHIC AND BOUNDARY SURVEY OF SCOTT STREET AREA WET WEATHER FACILITY SITUATED IN THE LUKE MOORE SURVEY ABSTRACT NO. 51 HARRIS COUNTY, TEXAS

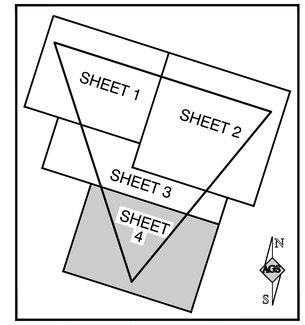
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-3	
SCALE	
1"=20'	
CITY OF HOUSTON PM	
JOHN DOE, P.E.	
SHEET NO. 3 OF 4	

PLOTTED: 10/17/2025 3:04 PM
PLOT STYLE: AGS.ctb
FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\0060-014-24 COH Eddington LS - Ardurra.dwg

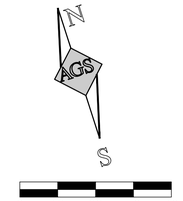
PLOT STYLE: AGS.ctb
PLOTTED: 10/17/2025 3:04 PM
FILE PATH: T:\0060-014-24 COH Eddington LS - Ardurra\0060-014-24 COH Eddington LS - Ardurra.dwg

MATCH LINE – SHEET 3





KEY PLAN - N.T.S.



TREE TABLE	
No.	TYPE
21235	15" CEDAR TREE
21236	9" CEDAR TREE
21237	9" CEDAR TREE
21239	18" OAK
21240	18" OAK
21241	18" OAK
21242	15" OAK
21243	15" OAK
21350	18" OAK
21351	18" OAK
21352	15" OAK
21917	12" OAK
21918	18" OAK
21919	18" OAK
21934	10" CEDAR TREE
21935	10" CEDAR TREE
21936	12" CEDAR TREE
21942	18" OAK
21943	15" OAK
21968	10" CEDAR TREE
21969	10" CEDAR TREE
21970	12" CEDAR TREE
21971	8" CEDAR TREE
21972	15" OAK
21973	18" OAK
21974	12" OAK
21975	18" OAK
21976	15" OAK
22384	9" CEDAR TREE
22385	18" OAK
22386	14" CEDAR TREE
22387	18" OAK
22388	8" OAK
22389	15" OAK
22390	10" CREPE MYRTLE
22391	10" CREPE MYRTLE
22392	10" HACKBERRY
22393	10" CREPE MYRTLE
22394	10" CREPE MYRTLE
22395	10" CREPE MYRTLE
22396	8" CREPE MYRTLE
22397	10" CREPE MYRTLE
22398	10" CREPE MYRTLE
22399	15" HACKBERRY
22400	10" CREPE MYRTLE
22401	10" CREPE MYRTLE
22402	8" CREPE MYRTLE
22403	10" CREPE MYRTLE
22404	10" CREPE MYRTLE
22405	8" CREPE MYRTLE
22406	8" CREPE MYRTLE
22407	12" CREPE MYRTLE

TREE TABLE	
No.	TYPE
22423	12" OAK
22424	5" CREPE MYRTLE
22425	4" CREPE MYRTLE
22426	7" HACKBERRY
22598	10" CREPE MYRTLE
22599	12" CREPE MYRTLE
22600	6" CREPE MYRTLE
22601	6" OAK
22613	15" OAK
22614	6" CREPE MYRTLE
22615	6" CREPE MYRTLE
22616	6" CREPE MYRTLE
22617	6" CREPE MYRTLE
22618	8" CREPE MYRTLE
22619	10" CREPE MYRTLE
22620	6" HACKBERRY
22722	SHRUB
22780	8" CREPE MYRTLE
22802	10" CREPE MYRTLE
22821	4" HACKBERRY
22822	8" CREPE MYRTLE
22823	12" CREPE MYRTLE
22824	10" CREPE MYRTLE
22825	8" CREPE MYRTLE
22826	8" CREPE MYRTLE
22920	8" CREPE MYRTLE
22921	8" CREPE MYRTLE
22929	8" CREPE MYRTLE
22930	8" CREPE MYRTLE
22931	8" CREPE MYRTLE
22932	8" CREPE MYRTLE
22934	8" CREPE MYRTLE
22935	8" CREPE MYRTLE
22936	8" CREPE MYRTLE
22937	8" CREPE MYRTLE
22938	15" CREPE MYRTLE
22939	4" CREPE MYRTLE
22940	15" HACKBERRY
22941	12" CREPE MYRTLE
22942	6" CREPE MYRTLE
22943	8" CREPE MYRTLE
22944	18" OAK
22945	18" OAK
22946	18" OAK
22947	16" OAK
22948	8" CREPE MYRTLE
22949	10" CREPE MYRTLE
22950	8" CREPE MYRTLE
22951	6" CREPE MYRTLE
22952	8" PECAN
22953	8" CREPE MYRTLE
22954	18" OAK

SYMBOL LEGEND			
AC	AIR CONDITIONER UNIT		MANHOLE
	BB INLET		POWER POLE
	BLOWOFF VALVE		PVC PIPE RISER
	BOLLARD	TB	TELEPHONE JUNCTION BOX
CO	CLEAN OUT		TEMPORARY BENCHMARK
EJB	ELECTRIC JUNCTION BOX		TIC
EM	ELECTRIC METER		WATER BLOWOFF VALVE
ES	ELECTRIC STUB-UP		WATER FIRE HYDRANT
	ELECTRIC PEDESTAL	WM	WATER METER
	GATE POST		WATER SPICKET
	GRATE INLET		WATER VALVE
	GUY WIRE		TREE
	IRRIGATION CONTROL VALVE		SHRUB
	LIGHT POLE		

LEGEND

B.L.	BUILDING LINE
B.M.	BENCHMARK
CM	CONTROLLING MONUMENT
C.O.H.	CITY OF HOUSTON
CONC.	CONCRETE
DRNG.	DRAINAGE
DWG.	DRAWING
ESMT.	EASEMENT
F.C.	FILM CODE
FL	FLOW LINE
FND.	FOUND
H.C.C.F.	HARRIS COUNTY CLERK FILE
H.C.D.R.	HARRIS COUNTY DEED RECORDS
H.C.M.R.	HARRIS COUNTY MAP RECORDS
H.C.T.	HARRIS COUNTY TEXAS
I.R.	IRON ROD
I.R.C.	IRON ROD CAPPED
I.P.	IRON PIPE
MH	MANHOLE
NO.	NUMBER
O.P.R.O.R.P.	OFFICIAL PUBLIC RECORDS OF REAL PROPERTY
PG.	PAGE
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R.O.W.	RIGHT-OF-WAY
(R)	PIPE INFORMATION/LOCATION PER CITY OF HOUSTON RECORD PLANS (DWG. NO. 32325)
SAN. SWR.	SANITARY SEWER
STM.	STORM
STM. SWR.	STORM SEWER
SW	SIDEWALK
VOL.	VOLUME
-P-	ELECTRIC OVERHEAD
-GAS-	UNDERGROUND GAS
-UGP-	UNDERGROUND ELECTRIC
-UGT-	UNDERGROUND TELEPHONE
-SAN-	SANITARY SEWER
-STM-	STORM SEWER
-W-	WATER LINE
—+—	CHAIN LINK FENCE
—·—	WROUGHT IRON FENCE

ARDURRA
COLLABORATE. INNOVATE. CREATE.
11700 Katy Freeway, Suite 300
Houston, Texas 77079
(713) 541-3530 www.Ardurra.com
TBPE Registration Number: F-10053

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 34051

PRELIMINARY REVIEW ONLY
NOT INTENDED FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES
DAVID R. CASTELLANO, P.E.
P.E. SERIAL No. 97308
DATE: 10/17/25

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

TOPOGRAPHIC AND BOUNDARY SURVEY OF SCOTT STREET AREA WET WEATHER FACILITY SITUATED IN THE LUKE MOORE SURVEY ABSTRACT NO. 51 HARRIS COUNTY, TEXAS

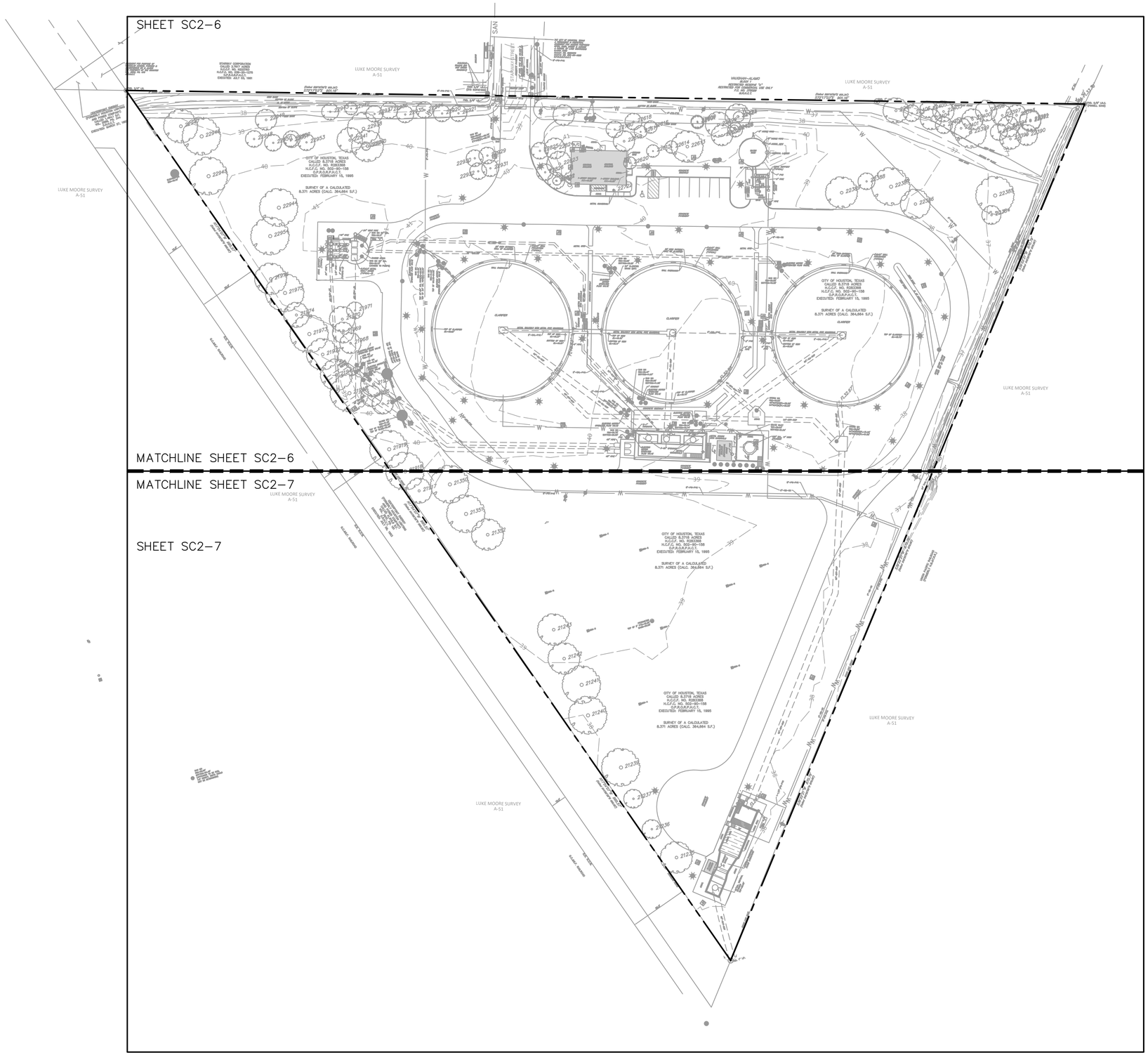
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-3	
SCALE	
1"=20'	
CITY OF HOUSTON PM	
JOHN DOE, P.E.	
SHEET NO. 4 OF 4	

STATE OF TEXAS
DANIEL PAUL COYER
4862
REGISTERED PROFESSIONAL LAND SURVEYOR
10/17/2025
DPC

I, DANIEL PAUL COYER, A REGISTERED PROFESSIONAL LAND SURVEYOR OF THE STATE OF TEXAS, HEREBY CERTIFY THAT THE ABOVE PLAT CORRECTLY REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY MADE ON THE GROUND UNDER MY SUPERVISION. THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL SURVEYORS' STANDARDS AND SPECIFICATIONS FOR A CATEGORY 1B, CONDITION 3, STANDARD LAND SURVEY AND A CATEGORY 6 CONDITION 1 TOPOGRAPGHIC SURVEY.,

FIELD WORK WAS COMPLETED IN JULY, 2025

DATE OF SURVEY MAP: OCTOBER 17, 2025



PLAN

1" = 50'-0"

SYMBOL LEGEND
AIR CONDITIONER UNIT
BB INLET
BLOWOFF VALVE
BOLLARD
BORE HOLE
CLEAN OUT
ELECTRIC JUNCTION BOX
ELECTRIC METER
ELECTRIC STUB-UP
ELECTRIC PEDESTAL
GATE POST
GRATE INLET
GUY WIRE
IRRIGATION CONTROL VALVE
LIGHT POLE
MANHOLE
POWER POLE
PVC PIPE RISER
SHRUB
TELEPHONE JUNCTION BOX
TEMPORARY BENCHMARK
TIC
TREE
WATER BLOWOFF VALVE
WATER FIRE HYDRANT
WATER METER
WATER SPICKET
WATER VALVE

LEGEND	
B.L.	BUILDING LINE
B.M.	BENCHMARK
CM	CONTROLLING MONUMENT
C.O.H.	CITY OF HOUSTON
CONC.	CONCRETE
DRNG.	DRAINAGE
DWG.	DRAWING
ESMT.	EASEMENT
F.C.	FILM CODE
FL.	FLOW LINE
FND.	FOUND
H..C.F.	HARRIS COUNTY CLERK FILE
H..D.R.	HARRIS COUNTY DEED RECORDS
H..M.R.	HARRIS COUNTY MAP RECORDS
H..T.	HARRIS COUNTY TEXAS
I.R.	IRON ROD
I.R.C.	IRON ROD CAPPED
I.P.	IRON PIPE
MH	MANHOLE
NO.	NUMBER
O..R.O.R.P.	OFFICIAL PUBLIC RECORDS OF REAL PROPERTY
PG.	PAGE
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCING
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
R.O.W.	RIGHT-OF-WAY
SAN. SWR.	SANITARY SEWER
STM.	STORM
STM. SWR.	STORM SEWER
SW	SIDEWALK
VOL.	VOLUME
-P-	ELECTRIC OVERHEAD
-GAS-	UNDERGROUND GAS
-UGP-	UNDERGROUND ELECTRIC
-UGT-	UNDERGROUND TELEPHONE
-SAN-	SANITARY SEWER
-STM-	STORM SEWER
-W-	WATER LINE
——+——	CHAIN LINK FENCE
——·——	WROUGHT IRON FENCE

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SCOTT STREET WWF EXISTING OVERALL SITE PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-5

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 50'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:08 PM

FILE PATH: C:\Users\vlgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-SCOTT.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:08 PM

FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-SCOTT.dwg

EASEMENT FOR PURPOSE OF VEHICULAR ACCESS, PARKING & MANEUVERING ON & ALONG THE PROPERTY OF THE GRANTOR V.C.R. 4479, PG. 479 D.R.H.C.T.

STARWAY CORPORATION
CALLED 3.7617 ACRES
H.C.C.F. NO. W223763
H.C.F.C. NO. 030-92-1375
O.P.R.O.R.P.H.C.T.
EXECUTED: JULY 03, 1991

LUKE MOORE SURVEY
A-51

STARWAY STREET

THE CITY OF HOUSTON, TEXAS A PERMANENT & PROPERTIAL EASEMENT FOR ACCESS PURPOSES UPON, OVER, UNDER & ACROSS 0.4784 ACRE LAND CONTAINING H.C.C.F. NO. R363370 H.C.F.C. NO. 552-90-1588 O.P.R.R.P.H.C.T.

VAUGHAN-ALAMO
BLOCK 1
RESTRICTED RESERVE "A"
RESTRICTED FOR COMMERCIAL USE ONLY
F.C. NO. 370039
M.R.H.C.T.

FND. 3/4" I.R.

FND. 5/8" I.R.C. (PINNELL 5349)

(Called S83°37'00"E 901.34')
S72°27'03"E 901.16'

CITY OF HOUSTON, TEXAS
CALLED 8.3718 ACRES
H.C.C.F. NO. R283368
H.C.F.C. NO. 502-90-158
O.P.R.O.R.P.H.C.T.
EXECUTED: FEBRUARY 15, 1995

SURVEY OF A CALCULATED
8.371 ACRES (CALC. 364,664 S.F.)

CLARIFIER

CONTROL BUILDING

1-STORY BUILDING F.F.=45.83'

WATER TANK

CONCRETE SIDEWALK

CONCRETE PAVEMENT

METAL GUARDRAIL

METAL WALKWAY WITH METAL PIPE GUARDRAIL

WALL OVERHANG

ELECTRIC MOTOR OPERATED PLUG VALVE

SAN MH RIM=46.90' BOTTOM=18.30'

SAN MH RIM=39.44' BOTTOM=10.74'

STORM MH RIM=43.80' 48"RCP(NE/FL=33.50' 54"RCP(SE/FL=31.50'

GRATE INLET TOP=39.04' BOTTOM=31.54'

STORM MH RIM=39.80' 54"RCP(NW/FL=31.80' 66"RCP(SE/FL=31.80'

MATCHLINE SHEET SC2-6

MATCHLINE SHEET SC2-7

LUKE MOORE SURVEY
A-51

0 30 60
SCALE: FEET

PLAN
1" = 30'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

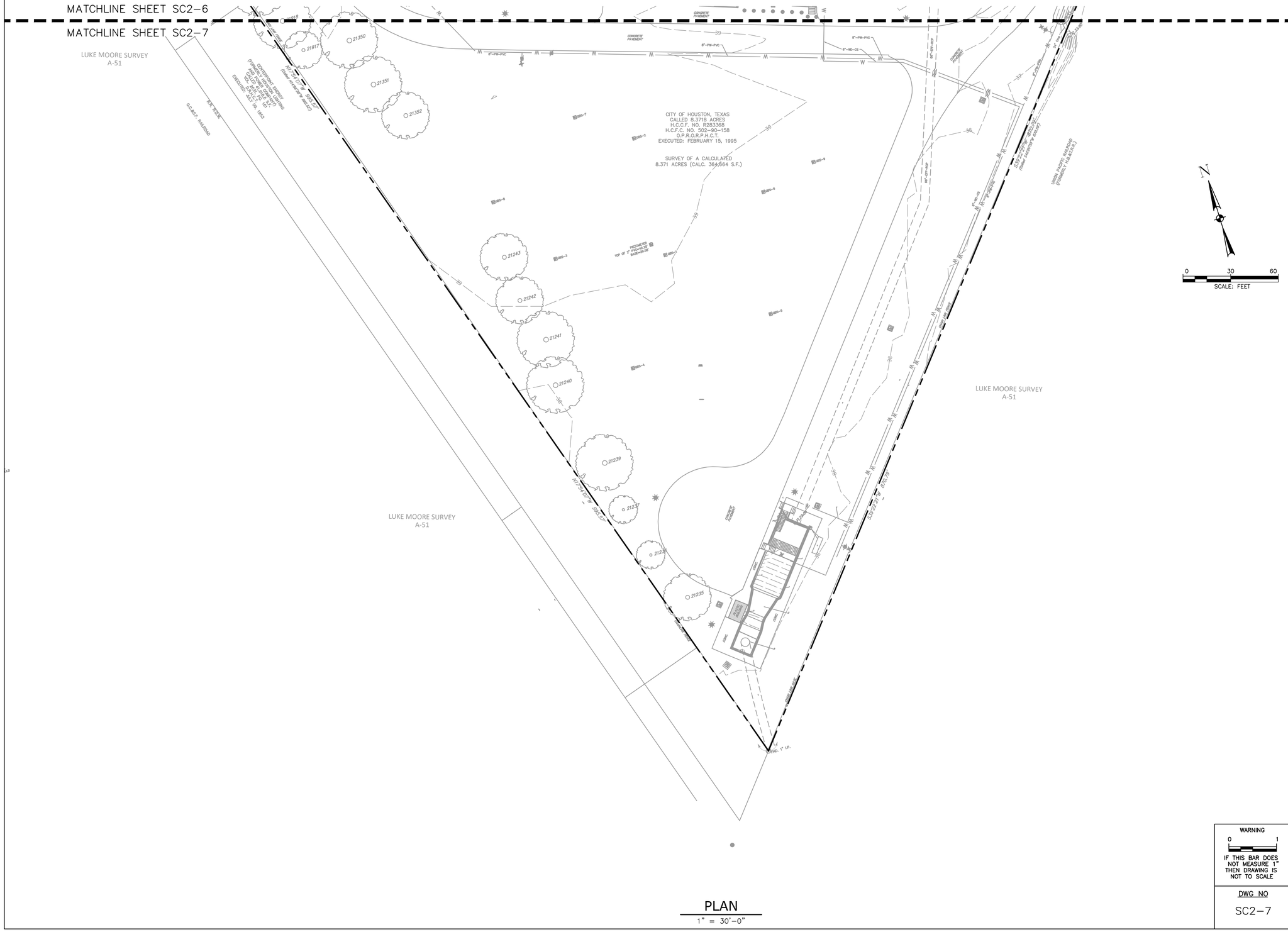
SCOTT STREET WWF EXISTING SITE PLAN (SHEET 1 OF 2)

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-6

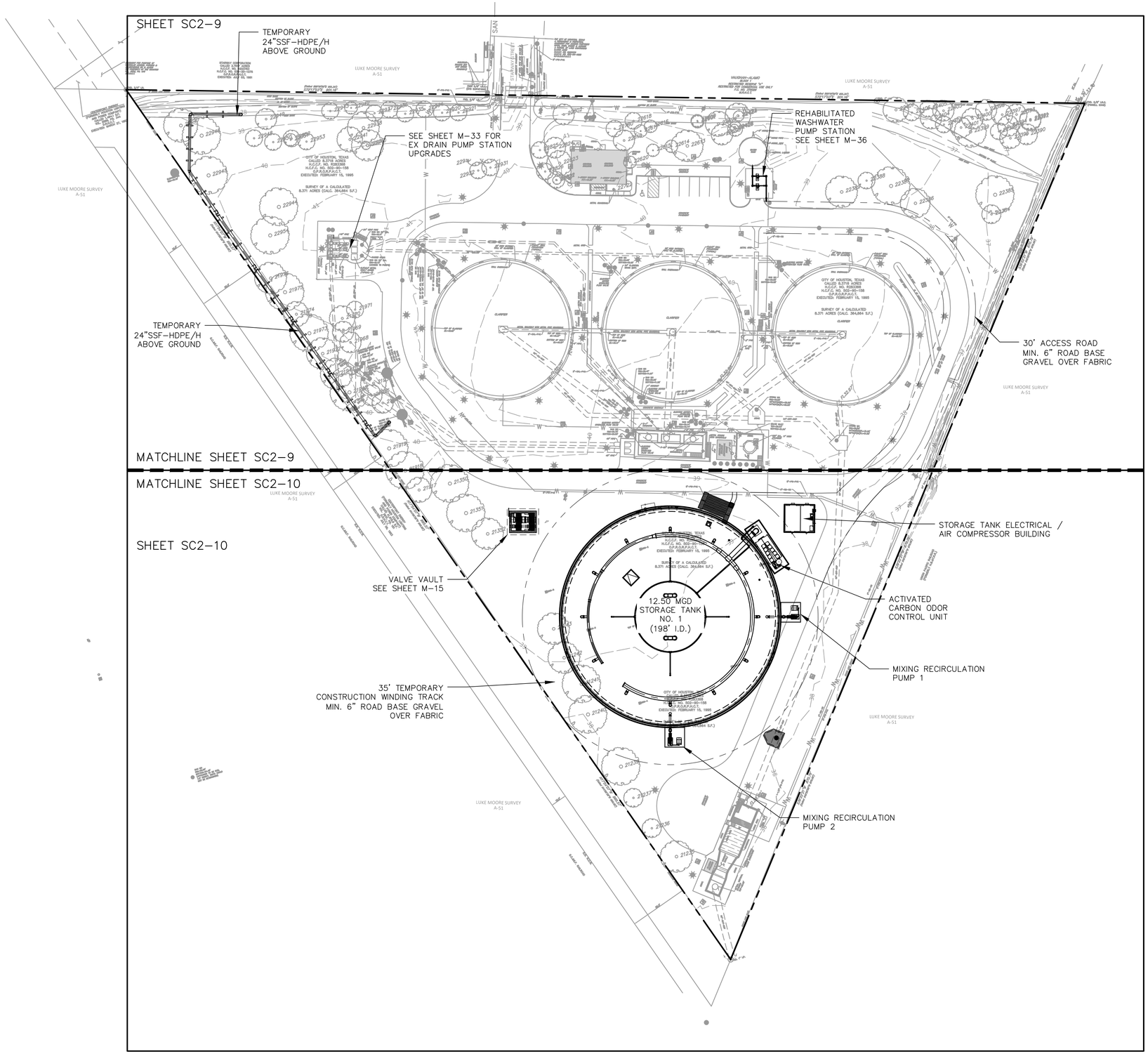
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 30'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:08 PM


MATCHLINE SHEET SC2-6
MATCHLINE SHEET SC2-7
LUKE MOORE SURVEY
A-51
CENTERPOINT ENERGY
(FORMERLY HOUSTON LIGHTING
AND POWER COMPANY)
CALL 811 BEFORE YOU DIG
EXECUTED: JULY 26, 1923
TEXAS AVENUE
G.C.&S.F. RAILROAD
N17°54'01"W 1,154.27'
(New Alignment per ARB)
N17°54'01"W 1,154.27'
(Record Alignment per ARB)
21918
21917
21350
21351
21352
CONCRETE PAVEMENT
8"-PW-PVC
8"-WD-CS
CITY OF HOUSTON, TEXAS
CALLED 8.3718 ACRES
H.C.C.F. NO. R283368
H.C.C.F. NO. 502-90-158
O.P.R.O.R.P.H.C.T.
EXECUTED: FEBRUARY 15, 1995
SURVEY OF A CALCULATED
8.371 ACRES (CALC. 364,664 S.F.)
21243
21242
21241
21240
21239
21237
21235
PIEZOMETER
TOP OF 2" PVC=45.55
BASE=39.55'
8"-DIP-SSP
8"-PW-PVC
8"-WD-CS
8"-WW-PVC
8"-DIP-SSP
SSP-22"-FM
(New Alignment per ARB)
UNION PACIFIC RAILROAD
(FORMERLY H.&T.C.R.R.)
LUKE MOORE SURVEY
A-51
LUKE MOORE SURVEY
A-51
S39°54'01"E 1,077.28'
S39°54'01"E 1,077.28'
CONCRETE PAVEMENT
CONCRETE PAVEMENT
CONCRETE PAVEMENT

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:08 PM

FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-SCOTT.dwg



PLAN

1" = 50'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SCOTT STREET WWF PROPOSED OVERALL SITE PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-8

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 50'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

BEGIN TEMPORARY 24"SSF–HDPE/H ABOVE GROUND

TEMPORARY 24"SSF–HDPE/H ABOVE GROUND

END TEMPORARY 24"SSF–HDPE/H ABOVE GROUND

REHABILITATED WASHWATER PUMP STATION SEE SHEET M–36

SEE SHEET M–33 FOR EX DRAIN PUMP STATION UPGRADES

30' ACCESS ROAD MIN. 6" ROAD BASE GRAVEL OVER FABRIC

MATCHLINE SHEET SC2–9

MATCHLINE SHEET SC2–10

PLAN
1" = 30'–0"

SCALE: FEET

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SCOTT STREET WWF PROPOSED SITE PLAN (SHEET 1 OF 2)

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
1" = 30'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
SC2–9

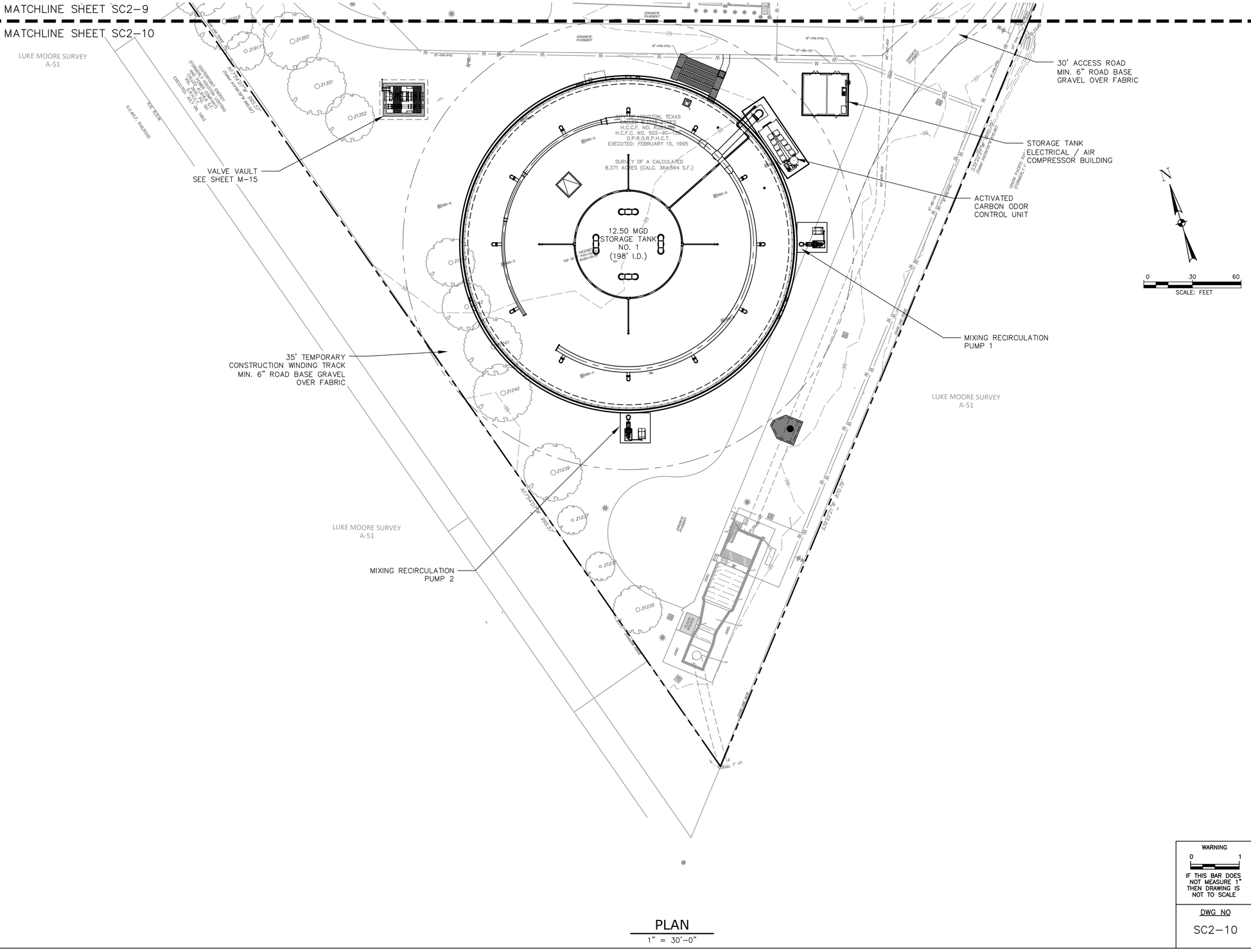
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:09 PM

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024–1427\project Files\03–Prod\03–Dwgs\C–SP–SCOTT.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:09 PM

MATCHLINE SHEET SC2-9

MATCHLINE SHEET SC2-10



PLAN
1" = 30'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

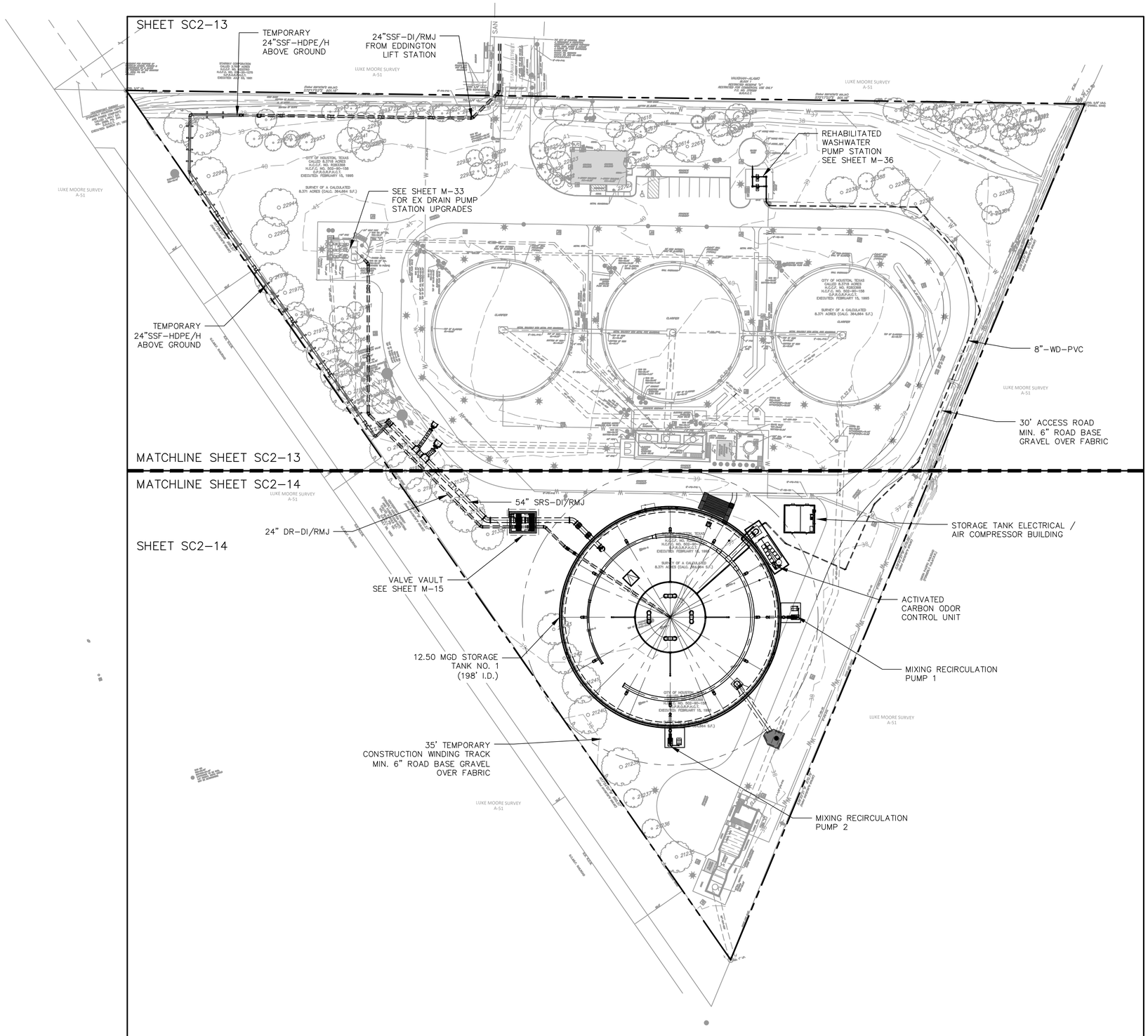
SCOTT STREET WWF
PROPOSED SITE PLAN
(SHEET 2 OF 2)

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 30'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
SC2-10

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-SCOTT.dwg



PLAN

1" = 50'-0"

NOTES:

1. PIPING DRAWINGS INDICATE INVERT ELEVATIONS FOR GRAVITY FLOW LINES. SLOPE PIPE UNIFORMLY BETWEEN ELEVATIONS SHOWN; NO VALLEYS OR PEAKS PERMITTED IN GRAVITY FLOW LINES. FOR OTHER PIPING, REFER TO DETAIL SHEETS FOR PIPE ELEVATIONS AT EACH STRUCTURE.
2. SITE PIPING DRAWINGS DO NOT INDICATE ALL VERTICAL BENDS AND TRANSITIONS. WHEN NECESSARY, MAKE VERTICAL TRANSITIONS OR FURNISH AND INSTALL VERTICAL BENDS AT NO EXTRA COST. MAINTAIN UNIFORM SLOPE AND AVOID HIGH POINTS. DO NOT EXCEED MANUFACTURER'S RECOMMENDATIONS FOR CURVATURE OF LINES AND / OR DEFLECTION.
3. CONTRACTOR SHALL PROVIDE TAPS, FITTINGS, PLUGS, AND OTHER DEVICES FOR USE IN FILLING, FLUSHING, AND TESTING, ETC AT NO ADDITIONAL COST TO THE CITY.
4. ALL UNDERGROUND PIPING SHALL BE OF RESTRAINED JOINT CONSTRUCTION. PROVIDE ADEQUATE HARNESSING AND RESTRAINT TO WITHSTAND TEST PRESSURES AS INDICATED.
5. PROVIDE THRUST BLOCKING ON EXISTING PIPING AND/OR OTHER MEANS OF RESTRAINT.
6. RECORD DRAWINGS ON PIPING MATERIALS FOR THE EXISTING YARD PIPING IS NOT ENTIRELY ACCURATE. CONTRACTOR SHALL EXCAVATE AND FIELD DETERMINE ALL PIPING MATERIALS FOR PIPING WHICH IS GOING TO BE TIED INTO. PROVIDE REPORT FOR SUBMISSION TO THE ENGINEER ON EXISTING PIPING AND ALL CRITICAL TIE-IN LOCATIONS.
7. REFER TO SECTION 01014 CONSTRUCTION SEQUENCING FOR REQUIREMENTS ON PHASING OF WORK AND ALLOWABLE PLANT SHUTDOWN DURATIONS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SCOTT STREET WWF PROPOSED OVERALL YARD PIPING PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-12

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 50'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:09 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-SCOTT.dwg

NOTES:

1. THE CONTRACTOR SHALL COORDINATE ROUTING OF THE TEMPORARY ABOVEGROUND FORCE MAIN THROUGH THE ON-SITE TREES AND LANDSCAPE VEGETATION. CONTRACTOR SHALL ADJUST ROUTING AS REQUIRED.
2. MAKE CONNECTIONS TO EXISTING 36" AND 48" SSF PIPELINE USING TAPPING SADDLES AND TAPPING KNIFE GATE VALVES. SEE SPECIFICATION SECTION 02768 PIPELINE LINE STOPPING.
3. PROVIDE 3-INCH COMBINATION AIR RELEASE / AIR VACUUM RELEASE VALVE WITH ISOLATION VALVE AND VENT ASSEMBLY COMPATIBLE WITH RAW SEWAGE SERVICE.

WOODEN DUNNAGE PIPE SUPPORTS FOR TEMPORARY 24" SSF (TYP)

BEGIN TEMPORARY 24"SSF-HDPE/H ABOVE GROUND

24" SSF-DI/RMJ CL. EL. 33.25

24" SSF-DI/RMJ CL. EL. 33.25 FROM EDDINGTON LIFT STATION

24" SSF-DI/RMJ 45° BEND CL. EL. 33.25 N: 13827703.25 E: 3132183.80

24" SSF-HDPE/H 90° BEND CL. EL. 41.50 N: 13827767.60 E: 3131899.89

24" SSF-DI/RMJ TEE W/ BLIND FLANGE CL. EL. 33.25 N: 13827747.90 E: 3131961.84

SEE SHEET M-33 FOR EX DRAIN PUMP STATION UPGRADES

24" SSF-DI/RMJ 45° BEND CL. EL. 33.25 N: 13827687.19 E: 3132152.78

REHABILITATED WASHWATER PUMP STATION SEE SHEET M-36

8"-WD-PVC/PO 45° BEND CL. EL. 33.00 N: 13827531.10 E: 3132394.19

8"-WD-PVC/PO 45° BEND CL. EL. 33.00 N: 13827485.87 E: 3132527.98

24" SSF-HDPE/H 45° BEND CL. EL. 41.50 N: 13827716.20 E: 3131883.54

CONNECT 24" DR-DI/RMJ TO EX DRAIN PUMP STATION INV EL. 26.72 N: 13827599.96 E: 3132011.24

8"-WD-PVC/PO 45° BEND CL. EL. 33.00 N: 13827527.42 E: 3132395.80

8"-WD-PVC/PO 22.50° BEND CL. EL. 33.00 N: 13827426.99 E: 3132554.88

30' ACCESS ROAD MIN. 6" ROAD BASE GRAVEL OVER FABRIC

WOODEN DUNNAGE PIPE SUPPORTS FOR TEMPORARY 24" SSF, SEE NOTE 1 (TYP)

24" DR-DI/RMJ 45° BEND INV EL. 27.06 N: 13827584.68 E: 3132019.40

8"-WD-PVC/PO 45° BEND CL. EL. 33.00 N: 13827375.27 E: 3132556.68

TEMPORARY 24"SSF-HDPE/H ABOVE GROUND

24" DR-DI/RMJ @ 2% SLOPE

24" DR-DI/RMJ 45° BEND INV EL. 29.89 N: 13827449.65 E: 3131978.36

END TEMPORARY 24"SSF-HDPE/H ABOVE GROUND

36" SSF-DI/RMJ, FL EL 17.38'

24" DR (SSF)-DI/RMJ, FL EL 18.32'

48" SSF-DI/RMJ, FL EL 18.32'

36" SRS-DI/RMJ HOT TAP W/ VALVE CL. EL. 33.45

24" SSF-HDPE/H 90° BEND CL. EL. 41.50 N: 13827426.95 E: 3131978.32

54" SRS-DI/RMJ 54"x36" TEE CL. EL. 34.00 N: 13827404.37 E: 3132011.54

36" SSF-DI/RMJ CL. EL. 33.45

48" SSF-DI/RMJ CL. EL. 33.95

54" SRS-DI/RMJ 54"x48" TEE CL. EL. 34.00 N: 13827394.27 E: 3132016.99

48" TAPPING SADDLE WITH STOP GATE VALVE CL. EL. 33.95

8"-WD-PVC

8"-WD-PVC/PO 22.50° BEND CL. EL. 33.00 N: 13827256.11 E: 3132459.78

CITY OF HOUSTON, TEXAS CALLED 8.3718 ACRES H.C.C.F. NO. R283368 H.C.C.F. NO. 502-90-158 O.P.R.O.R.P.H.C.T. EXECUTED: FEBRUARY 15, 1995

SURVEY OF A CALCULATED 8.371 ACRES (CALC. 364,664 S.F.)

LUKE MOORE SURVEY A-51

VAUGHAN-ALAMO BLOCK 1 RESTRICTED RESERVE "A" RESTRICTED FOR COMMERCIAL USE ONLY F.C. NO. 370239 M.R.H.C.T.

STARWAY STREET

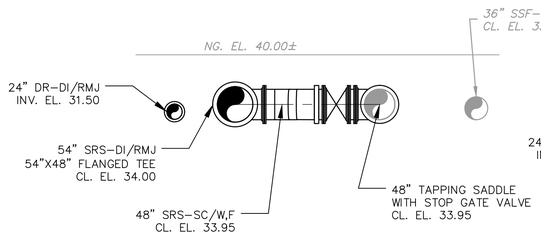
MATCHLINE SHEET SC2-13

MATCHLINE SHEET SC2-14

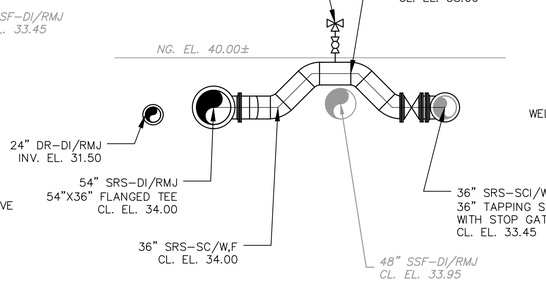
PLAN
1" = 30'-0"

0 30 60
SCALE: FEET

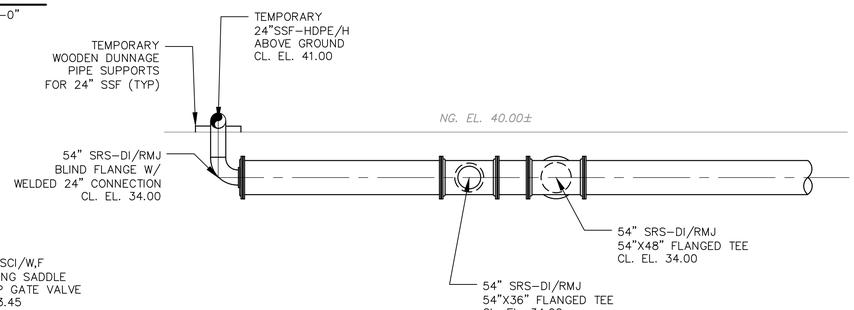
SECTION 1
1" = 10'-0"



SECTION 2
1" = 10'-0"



SECTION 3
1" = 10'-0"



WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-13

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

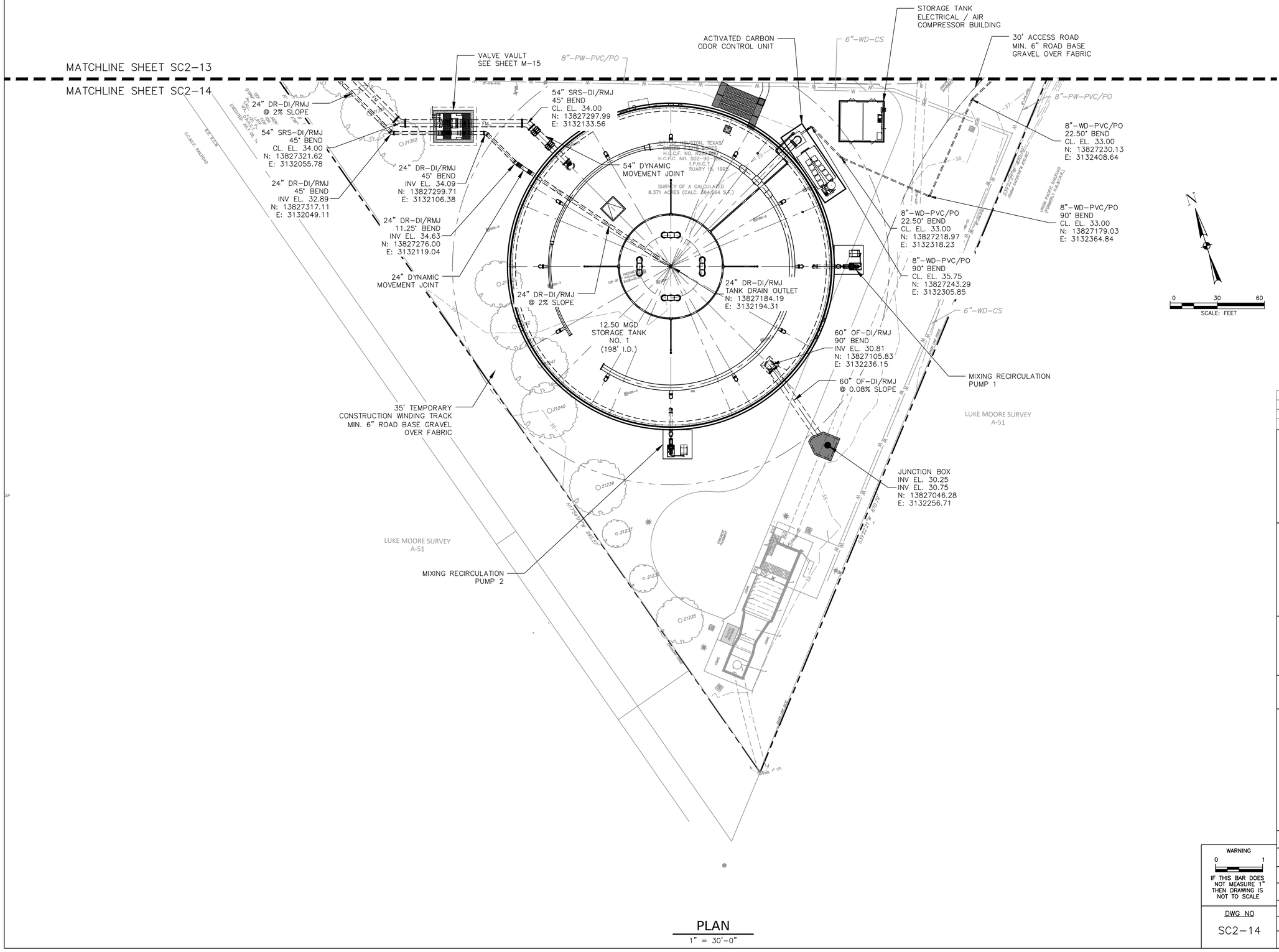
SCOTT STREET WWF PROPOSED YARD PIPING PLAN (SHEET 1 OF 2)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 30'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:29 PM

FILE PATH: C:\Users\vglbson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-SCOTT.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:31 PM



PLAN
1" = 30'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

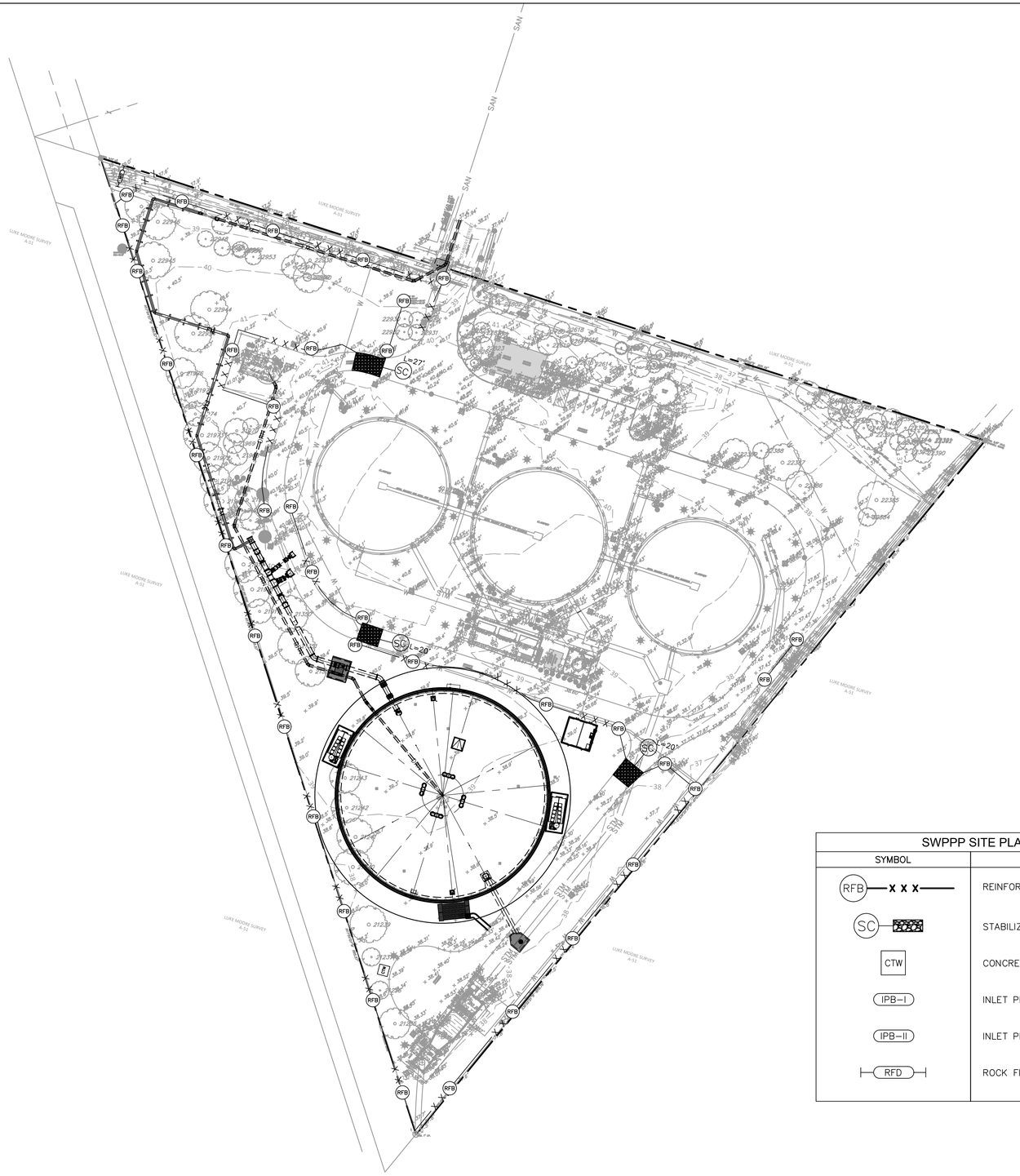
SCOTT STREET WWF PROPOSED YARD PIPING PLAN (SHEET 2 OF 2)

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 30'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-14

FILE PATH: C:\Users\JGibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-SCOTT.dwg



N

0 80 160

SCALE: FEET

BENCHMARKS:

ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.

SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR.
ELEVATION=37.40'

TBM "V"
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY)
ELEVATION=39.79'

TBM "X"
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

FLOODPLAIN NOTE:

BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

IN ADDITION THIS MAP STATES "THIS MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM; IT DOES NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE, OR ALL PLANIMETRIC FEATURES OUTSIDE SPECIAL FLOOD HAZARD AREAS. CERTAIN AREAS NOT IN SPECIAL FLOOD HAZARD AREAS MAY BE PROTECTED BY FLOOD CONTROL STRUCTURES". THE APPROXIMATE LIMITS OF SAID ZONES AS DETERMINED HEREON ARE SCALED FROM SAID MAP. THIS INFORMATION IS NOT INTENDED TO IDENTIFY SPECIFIC FLOOD CONDITIONS.

NO.	DATE	REVISION	APP.

SWPPP SITE PLAN LEGEND

SYMBOL	DESCRIPTION
RFB — X X X —	REINFORCED FILTER BARRIER
SC	STABILIZED CONSTRUCTION ENTRANCE
CTW	CONCRETE TRUCK WASHOUT
IPB-I	INLET PROTECTION BARRIER FOR STAGE I
IPB-II	INLET PROTECTION BARRIER FOR STAGE II
RFD	ROCK FILTER DAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-15

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699
TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 1/15/2026

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	NS
REVIEWED BY:	NS
APPROVED BY:	NS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

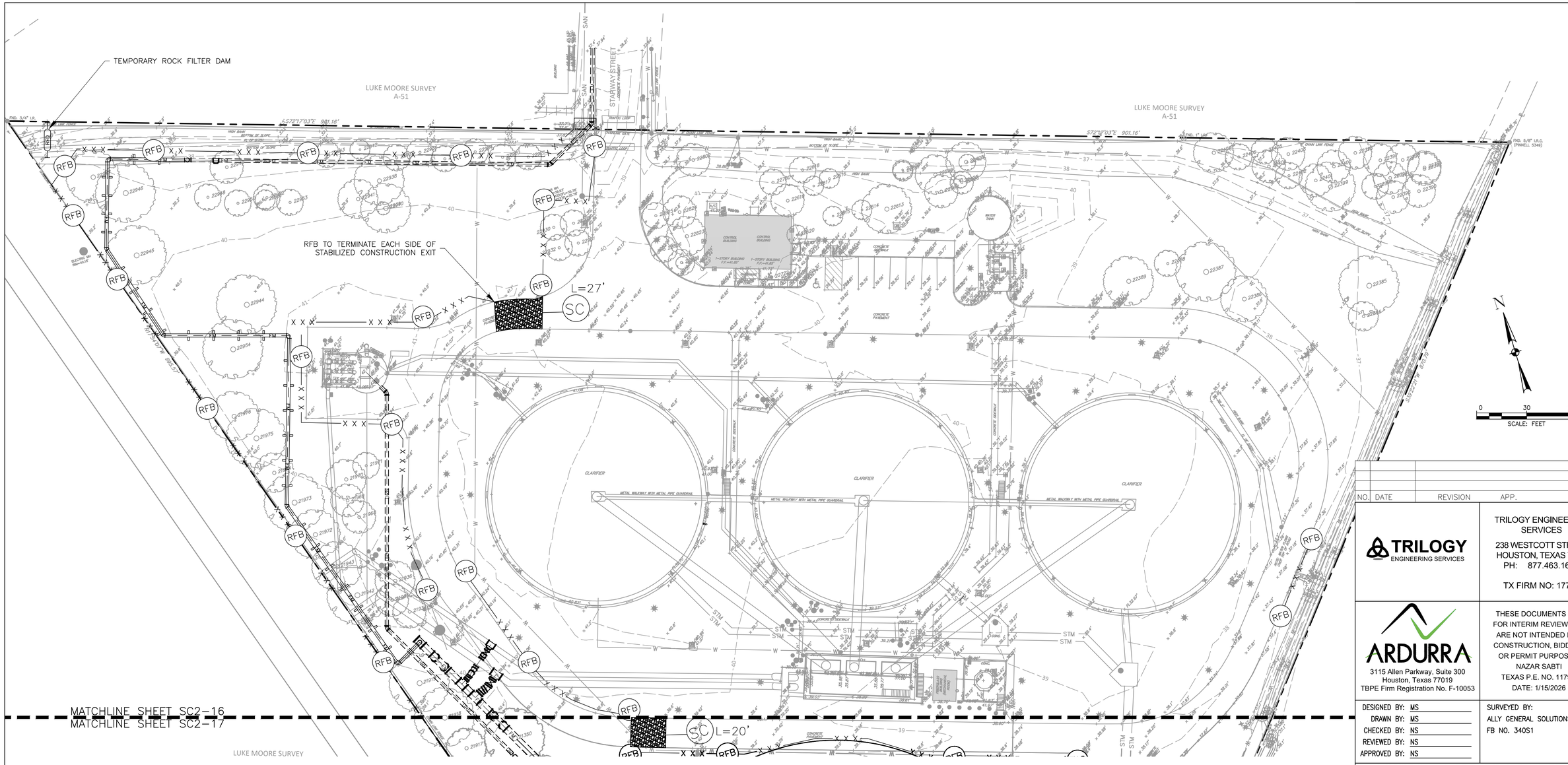
SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1"=80'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 41 OF 266	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 3:29 PM

FILE PATH: D:\Eddington LS\Design\C-SWPPP-SCOTT.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 3:30 PM



PLAN
1" = 30'-0"

SWPPP SITE PLAN LEGEND	
SYMBOL	DESCRIPTION
RFB — X X X	REINFORCED FILTER BARRIER
SC	STABILIZED CONSTRUCTION ENTRANCE
CTW	CONCRETE TRUCK WASHOUT
IPB-I	INLET PROTECTION BARRIER FOR STAGE I
IPB-II	INLET PROTECTION BARRIER FOR STAGE II
RFD	c

NOTES:
1. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS AND IMPACTED FACILITIES TO EXISTING (PRECONSTRUCTION) CONDITIONS OR BETTER, INCLUDING GRADES, DRAINAGE FEATURES, PAVEMENT, AND LANDSCAPED AREAS, UNLESS OTHERWISE SHOWN ON THE PLANS. FINAL STABILIZATION, TURF ESTABLISHMENT, AND TEMPORARY BMP REMOVAL SHALL BE PER SWPPP NOTES.
2. STABILIZED CONSTRUCTION EXIT TO BE INSTALLED AT THE EXISTING ACCESS POINT; MAINTAIN EXISTING DRIVEWAY AND GATE. COORDINATE PLACEMENT AND OPERATIONS TO MAINTAIN SITE ACCESS AND SECURITY.
3. FOR ADDITIONAL SWPPP REQUIREMENTS, REFER TO SHEET G-7 FOR SWPPP CONSTRUCTION NOTES.

BENCHMARKS:

ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.

SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR.
ELEVATION=37.40'

TBM "V"
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY)
ELEVATION=39.79'

TBM "X"
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

FLOODPLAIN NOTE:

BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

IN ADDITION THIS MAP STATES "THIS MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM; IT DOES NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE, OR ALL PLANIMETRIC FEATURES OUTSIDE SPECIAL FLOOD HAZARD AREAS. CERTAIN AREAS NOT IN SPECIAL FLOOD HAZARD AREAS MAY BE PROTECTED BY FLOOD CONTROL STRUCTURES". THE APPROXIMATE LIMITS OF SAID ZONES AS DETERMINED HEREON ARE SCALED FROM SAID MAP. THIS INFORMATION IS NOT INTENDED TO IDENTIFY SPECIFIC FLOOD CONDITIONS.

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-16

NO.	DATE	REVISION	APP.

TRILOGY ENGINEERING SERVICES

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699
TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 1/15/2026

DESIGNED BY: MS	SURVEYED BY:
DRAWN BY: MS	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: NS	FB NO. 340S1
REVIEWED BY: NS	
APPROVED BY: NS	

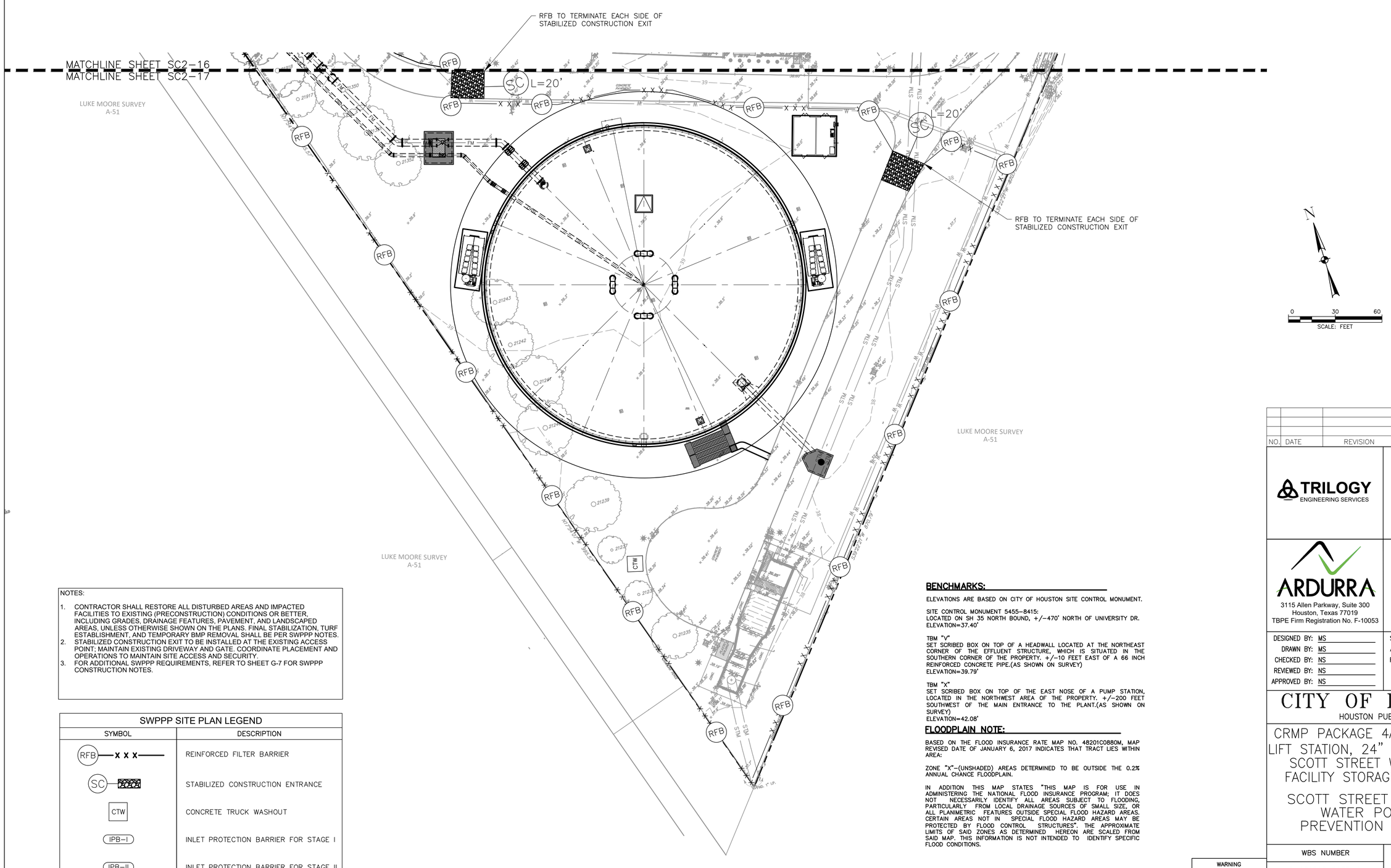
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1"=30'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 42 OF 266	

FILE PATH: D:\Eddington LS\Design\C-SWPPP-SCOTT.dwg



PLAN
1" = 30'-0"

NOTES:

1. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS AND IMPACTED FACILITIES TO EXISTING (PRECONSTRUCTION) CONDITIONS OR BETTER, INCLUDING GRADES, DRAINAGE FEATURES, PAVEMENT, AND LANDSCAPED AREAS, UNLESS OTHERWISE SHOWN ON THE PLANS. FINAL STABILIZATION, TURF ESTABLISHMENT, AND TEMPORARY BMP REMOVAL SHALL BE PER SWPPP NOTES.
2. STABILIZED CONSTRUCTION EXIT TO BE INSTALLED AT THE EXISTING ACCESS POINT; MAINTAIN EXISTING DRIVEWAY AND GATE. COORDINATE PLACEMENT AND OPERATIONS TO MAINTAIN SITE ACCESS AND SECURITY.
3. FOR ADDITIONAL SWPPP REQUIREMENTS, REFER TO SHEET G-7 FOR SWPPP CONSTRUCTION NOTES.

SWPPP SITE PLAN LEGEND

SYMBOL	DESCRIPTION
RFB — X X X —	REINFORCED FILTER BARRIER
SC	STABILIZED CONSTRUCTION ENTRANCE
CTW	CONCRETE TRUCK WASHOUT
IPB-I	INLET PROTECTION BARRIER FOR STAGE I
IPB-II	INLET PROTECTION BARRIER FOR STAGE II
RFD	ROCK FILTER DAM

BENCHMARKS:

ELEVATIONS ARE BASED ON CITY OF HOUSTON SITE CONTROL MONUMENT.

SITE CONTROL MONUMENT 5455-8415:
LOCATED ON SH 35 NORTH BOUND, +/-470' NORTH OF UNIVERSITY DR.
ELEVATION=37.40'

TBM "V"
SET SCRIBED BOX ON TOP OF A HEADWALL LOCATED AT THE NORTHEAST CORNER OF THE EFFLUENT STRUCTURE, WHICH IS SITUATED IN THE SOUTHERN CORNER OF THE PROPERTY. +/-10 FEET EAST OF A 66 INCH REINFORCED CONCRETE PIPE.(AS SHOWN ON SURVEY)
ELEVATION=39.79'

TBM "X"
SET SCRIBED BOX ON TOP OF THE EAST NOSE OF A PUMP STATION, LOCATED IN THE NORTHWEST AREA OF THE PROPERTY. +/-200 FEET SOUTHWEST OF THE MAIN ENTRANCE TO THE PLANT.(AS SHOWN ON SURVEY)
ELEVATION=42.08'

FLOODPLAIN NOTE:

BASED ON THE FLOOD INSURANCE RATE MAP NO. 48201C0880M, MAP REVISED DATE OF JANUARY 6, 2017 INDICATES THAT TRACT LIES WITHIN AREA:

ZONE "X"-(UNSHADED) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

IN ADDITION THIS MAP STATES "THIS MAP IS FOR USE IN ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM; IT DOES NOT NECESSARILY IDENTIFY ALL AREAS SUBJECT TO FLOODING, PARTICULARLY FROM LOCAL DRAINAGE SOURCES OF SMALL SIZE, OR ALL PLANIMETRIC FEATURES OUTSIDE SPECIAL FLOOD HAZARD AREAS. CERTAIN AREAS NOT IN SPECIAL FLOOD HAZARD AREAS MAY BE PROTECTED BY FLOOD CONTROL STRUCTURES". THE APPROXIMATE LIMITS OF SAID ZONES AS DETERMINED HEREON ARE SCALED FROM SAID MAP. THIS INFORMATION IS NOT INTENDED TO IDENTIFY SPECIFIC FLOOD CONDITIONS.

NO.	DATE	REVISION	APP.

TRILOGY ENGINEERING SERVICES

TRILOGY ENGINEERING SERVICES
238 WESTCOTT STREET
HOUSTON, TEXAS 77007
PH: 877.463.1699

TX FIRM NO: 17715

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NAZAR SABTI
TEXAS P.E. NO. 117913
DATE: 1/15/2026

DESIGNED BY:	MS
DRAWN BY:	MS
CHECKED BY:	NS
REVIEWED BY:	NS
APPROVED BY:	NS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SCOTT STREET SITE STORM WATER POLLUTION PREVENTION PLAN – 3

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
SC2-17

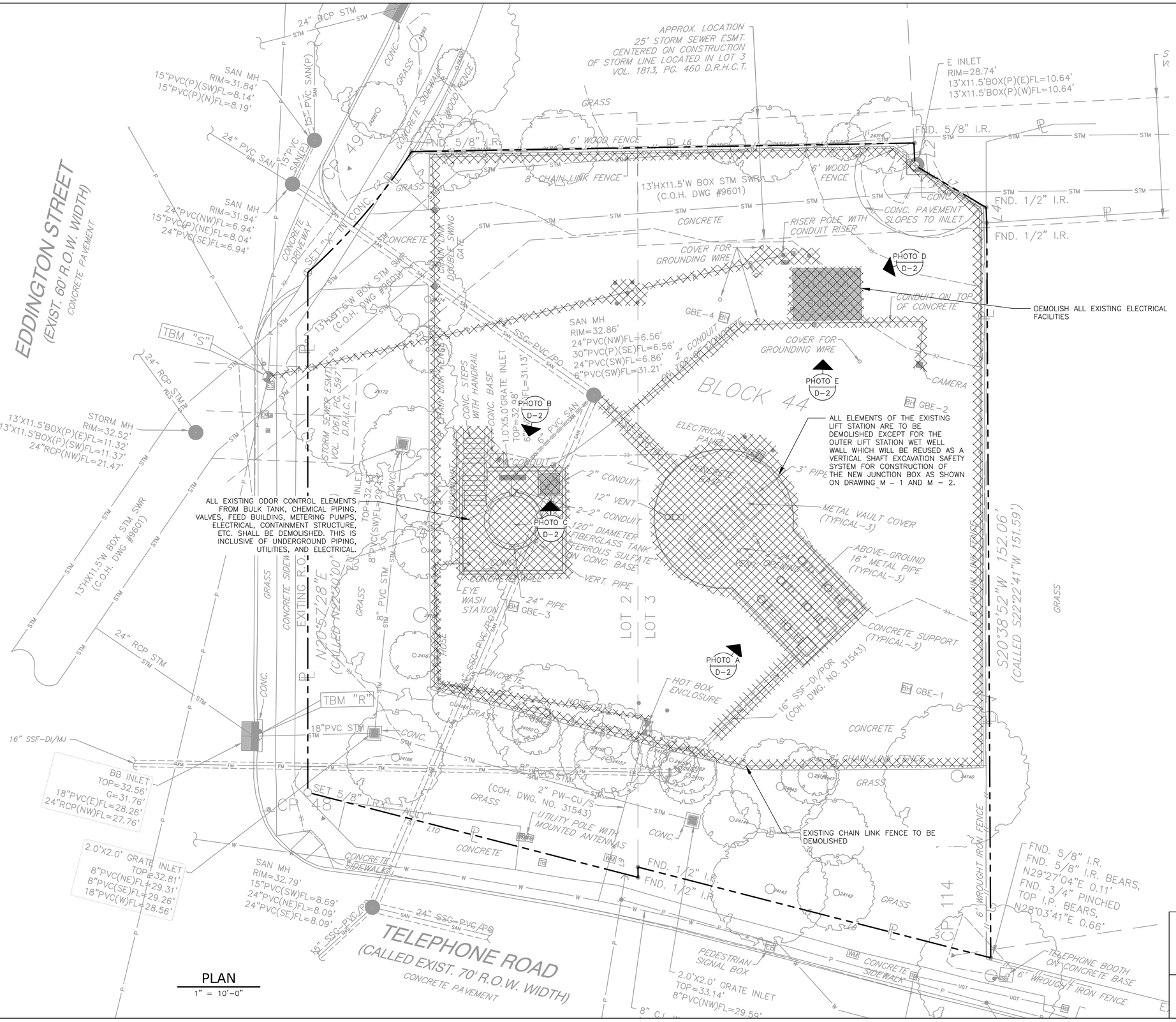
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 30'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. 43 OF 266	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 3:31 PM

FILE PATH: D:\Eddington LS\Design\C-SWPPP-SCOTT.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:10 PM

FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\C-SP-EDD.dwg



PLAN
1" = 10'-0"

NOTES

1. CONTRACTOR SHALL COORDINATE ALL ASPECTS OF DEMOLITION AND SCHEDULING, BYPASS PUMPING, ETC. REFER TO THE OTHER DEMOLITION DRAWINGS FOR CONSTRUCTION PHASING AND SPECIFICATION SECTION 01110 SUMMARY OF WORK FOR ADDITIONAL DETAILS.
2. AS PART OF THE WORK THE CONTRACTOR MAY REQUIRE DEMOLITION OF SOME OF THE EXISTING TREES AND LANDSCAPING VEGETATION. CONTRACTOR SHALL DEVELOP A FULLY DETAILED DEMOLITION PLAN INCLUSIVE OF ALL EXISTING TREES AND VEGETATION WHICH WILL REQUIRE REMOVAL TO PERFORM THE WORK.
3. EXISTING TREES AND LANDSCAPE VEGETATION THAT WILL REMAIN SHALL BE TRIMMED AND MAINTAINED BY A PROFESSIONAL ARBORIST DURING THE COURSE OF CONSTRUCTION.
4. THE CONTRACTOR SHALL MAINTAIN ALL TEMPORARY CONSTRUCTION SECURITY AND SAFETY FENCING AS REQUIRE TO SECURE THE JOBSITE FOR THE ENTIRETY OF THE CONSTRUCTION PHASE. COORDINATE WITH THE CONSTRUCTION MANAGER AND THE CITY WWOPS AS REQUIRED TO SUIT.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

EDDINGTON LIFT STATION DEMOLITION PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1" = 20'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
D-1



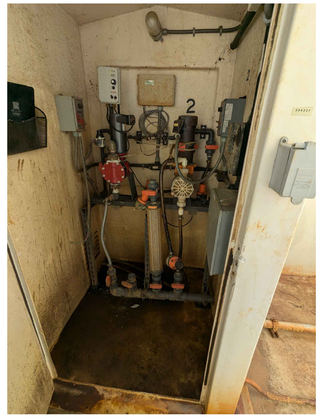
EDDINGTON PUMPS

PHOTOGRAPH A
NOT TO SCALE



EDDINGTON CHEMICAL FEED

PHOTOGRAPH B
NOT TO SCALE



EDDINGTON CHEMICAL FEED

PHOTOGRAPH C
NOT TO SCALE



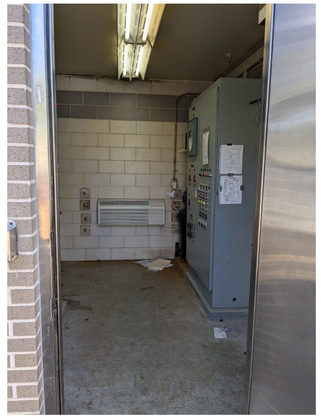
EDDINGTON CONTROL BUILDING

PHOTOGRAPH D
NOT TO SCALE



EDDINGTON CONTROL BUILDING

PHOTOGRAPH E
NOT TO SCALE



EDDINGTON CONTROL BUIDLING

PHOTOGRAPH G
NOT TO SCALE

NOTE:

1. SEE DRAWING D-1 FOR DIRECTION OF PHOTO TAKEN ON SITE.
2. THE CITY WILL HAVE FIRST RIGHT OF REFUSAL FOR ANY EQUIPMENT OR ITEMS SCHEDULED TO BE DEMOLISHED. DELIVER ITEMS TO LOCATION OF CITY'S CHOICE WITHIN THE CITY'S SERVICE BOUNDARY AFTER ITEMS ARE CLEANED.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

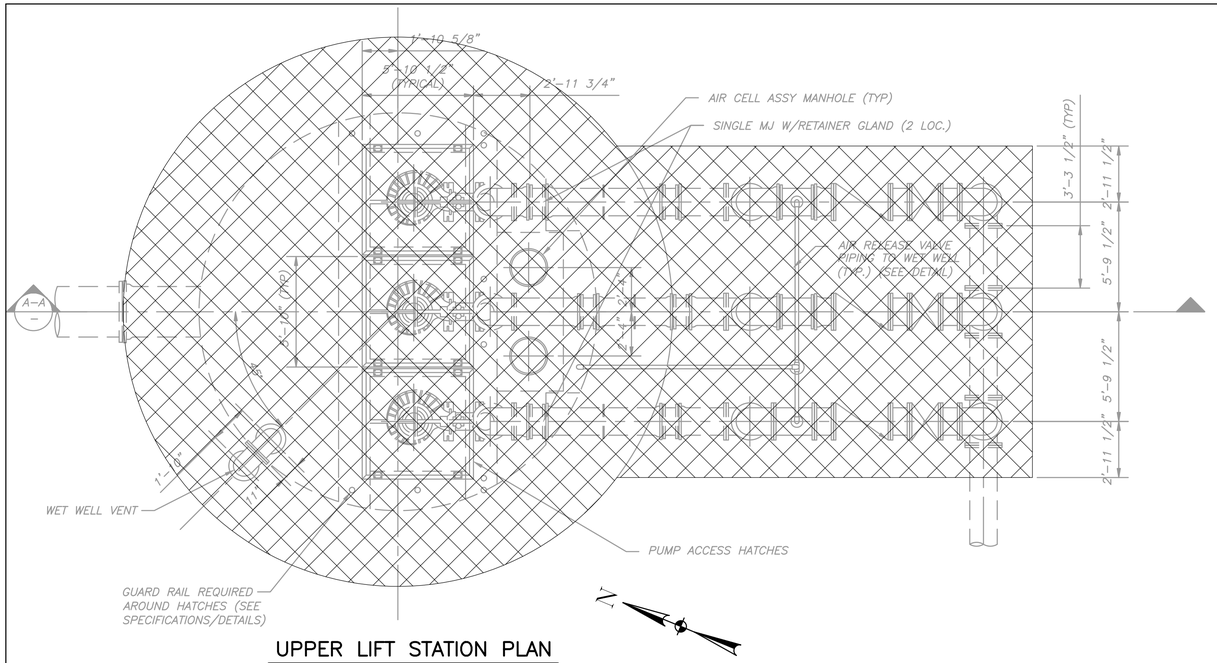
DEMOLITION PHOTOS I

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
D-2

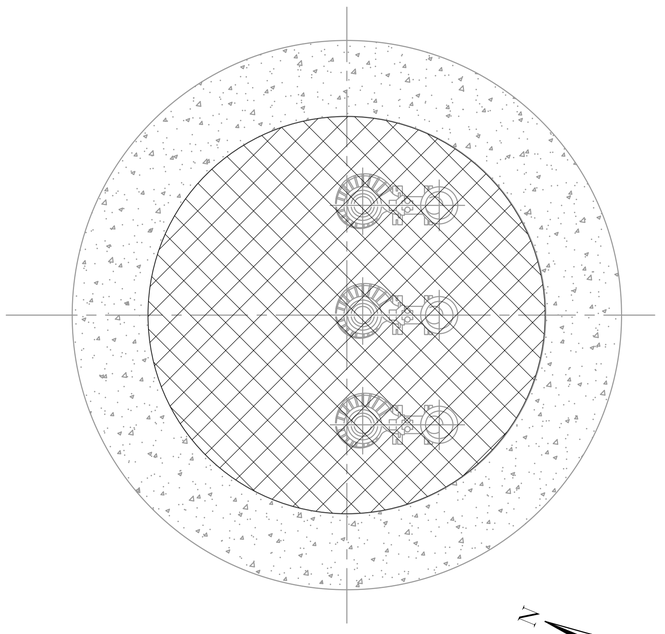
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:11 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\D-DEMO-EDD.dwg



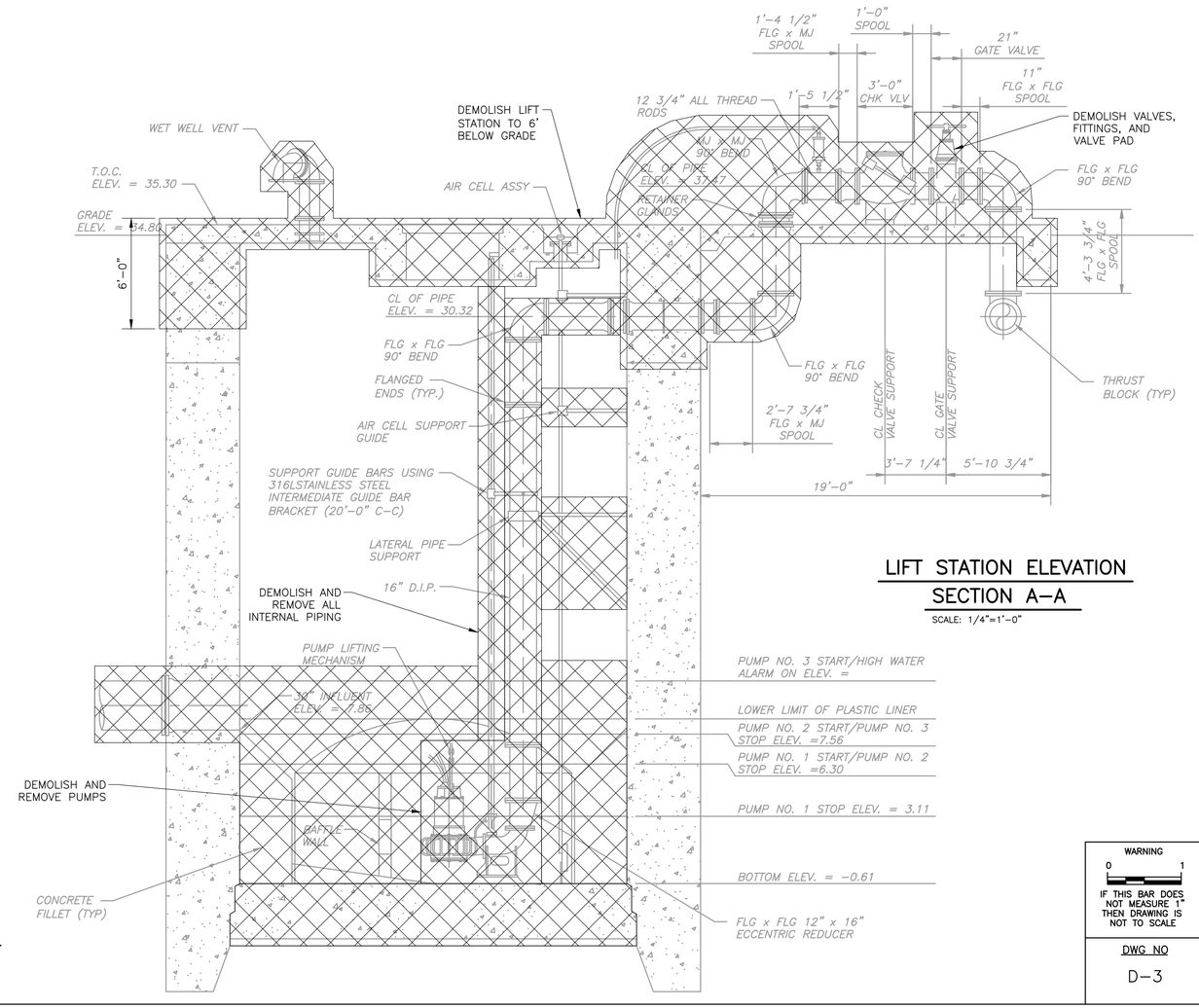
UPPER LIFT STATION PLAN

SCALE: 1/4"=1'-0"



LOWER LIFT STATION PLAN

SCALE: 1/4"=1'-0"



LIFT STATION ELEVATION
SECTION A-A

SCALE: 1/4"=1'-0"

NOTE:

1. ONCE THE TEMPORARY BYPASS PUMPING PLAN IS CONSTRUCTED AND BYPASS PUMPING ESTABLISHED; THE EXISTING EDDINGTON LIFT STATION MAY BEGIN TO BE DEMOLISHED.
2. ALL WET WELL CONTENTS SHALL BE DRAINED AND PUMPED TO THE EXISTING FORCE MAIN TEMPORARY CONNECTION. WET WELL AND EQUIPMENT CONTENTS SHALL BE THOROUGHLY PRESSURE WASHED CLEANED, DISINFECTED, AND MADE READY FOR DEMOLITION ACTIVITIES. WASHWATER SHALL BE PUMPED TO TEMPORARY FORCE MAIN CONNECTION AS INDICATED ABOVE.
3. ALL ELEMENTS OF THE EXISTING LIFT STATION ARE TO BE DEMOLISHED EXCEPT FOR THE OUTER LIFT STATION WET WELL WALL WHICH WILL BE REUSED AS A VERTICAL SHAFT EXCAVATION SAFETY SYSTEM FOR CONSTRUCTION OF THE NEW JUNCTION BOX AS SHOWN ON DRAWING M-1.
4. ALL CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE BOTTOM OF THE WET WELL AND SWEPT CLEAN PRIOR TO BREAKOUT OF LIFT STATION BOTTOM SLAB.
5. THE CONTRACTOR SHALL ESTABLISH AN ON-SITE GROUNDWATER CONTROL SYSTEM TO CONTROL GROUNDWATER AS THE JUNCTION BOX IS CONSTRUCTED DEEPER THAN THE EXISTING LIFT STATION BOTTOM. SEE STRUCTURAL DRAWINGS AND THE GEOTECHNICAL REPORT FOR FURTHER INFORMATION.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

EXISTING LIFT STATION DEMOLITION PLANS AND SECTIONS

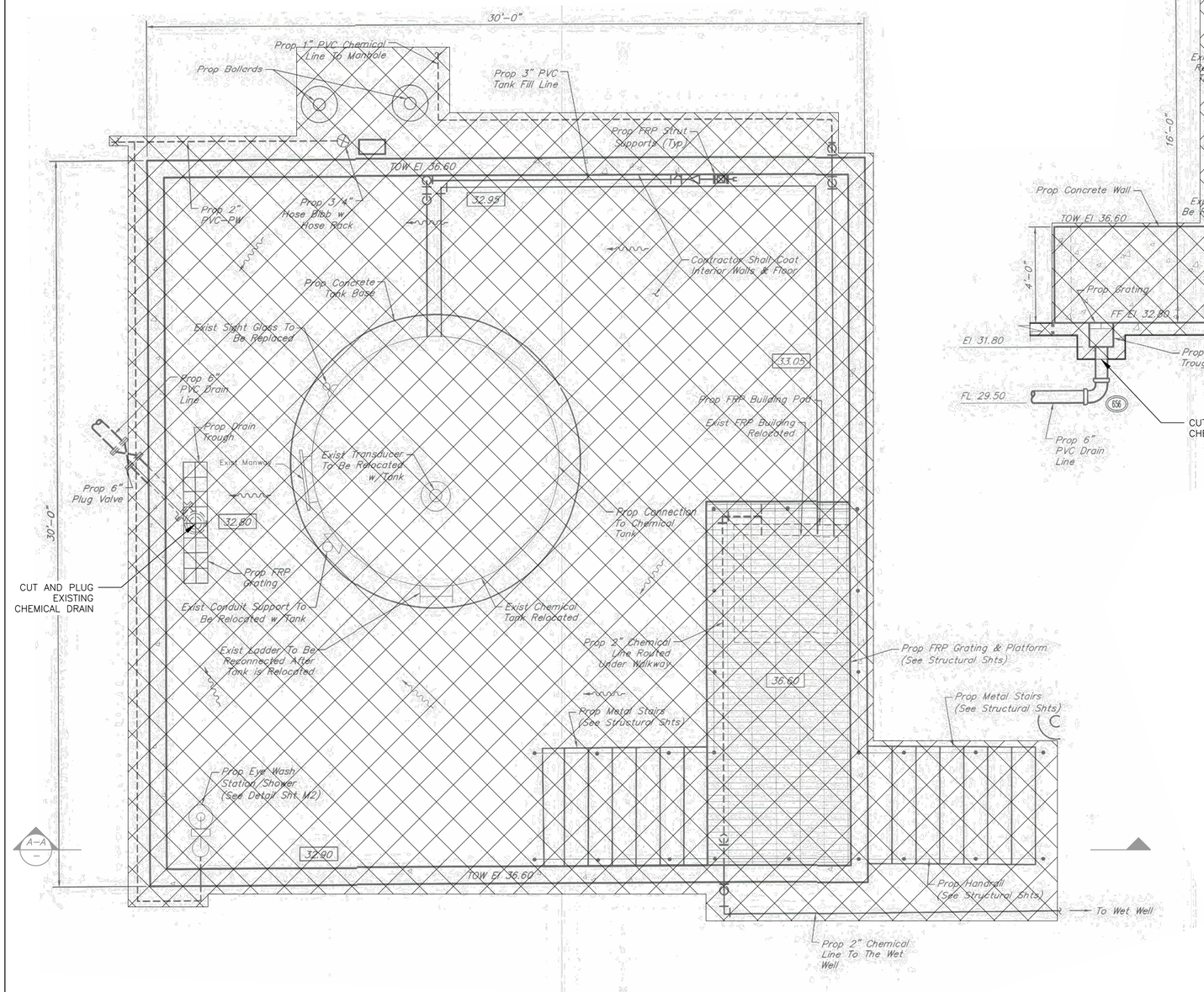
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
D-3

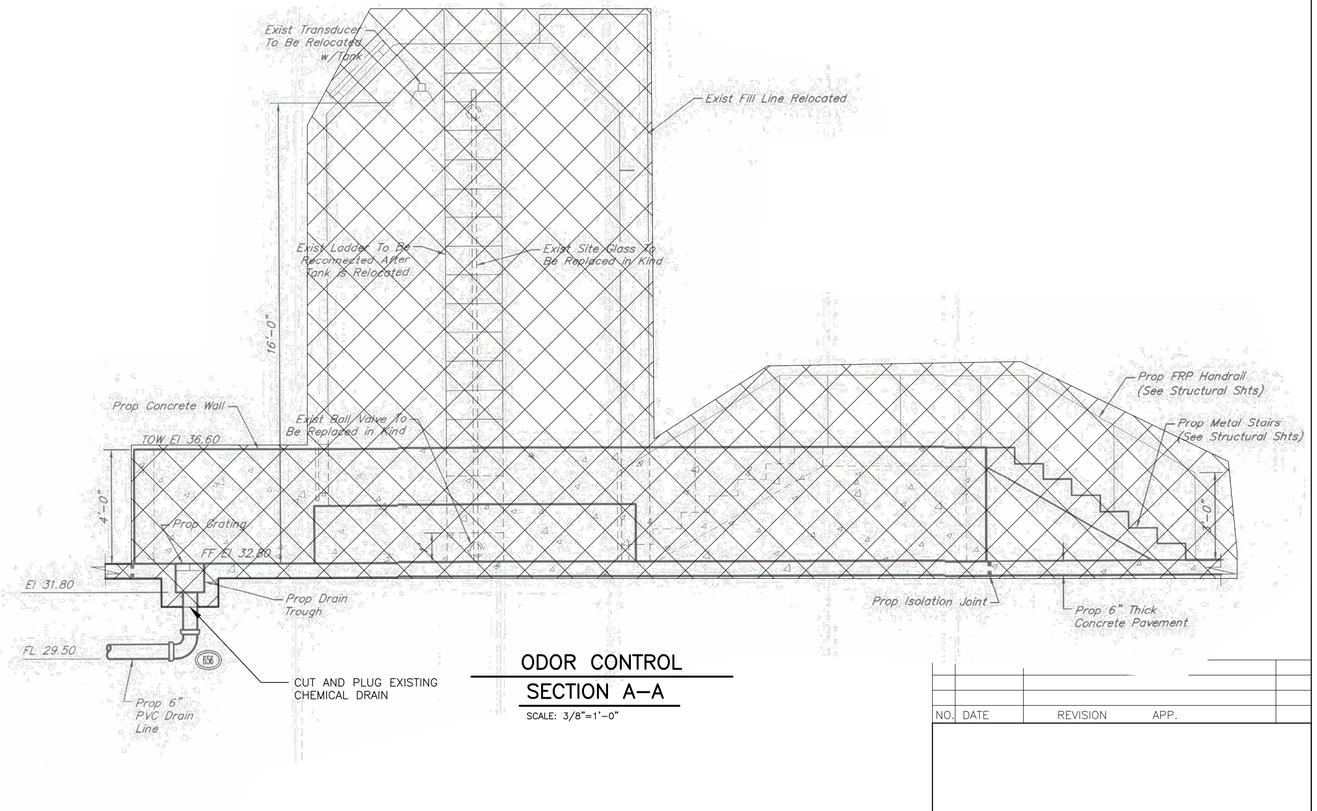
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:11 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\D-DEMO-EDD.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:11 PM



ODOR CONTROL PLAN

SCALE: 3/8"=1'-0"



ODOR CONTROL SECTION A-A

SCALE: 3/8"=1'-0"

NOTE:

1. IT IS DESIRABLE TO MAINTAIN OPERATION OF THE EXISTING ODOR CONTROL SYSTEM AS LONG AS POSSIBLE PRIOR TO DEMOLITION.
2. ONCE SPACE IS NEEDED BY THE CONTRACTOR TO CONSTRUCT PROPOSED IMPROVEMENTS, THE CONTRACTOR SHALL PROVIDE, MAINTAIN, AND RE-SUPPLY A TEMPORARY CHEMICAL STORAGE AND FEED SYSTEM TO PROVIDE METERED FEED OF FERROUS SULFATE FROM THE CITY'S PREFERRED VENDOR. THE SYSTEM WILL BE LOCATED ON SITE IN AN AREA OUT OF THE WAY OF CONSTRUCTION.
3. PRIOR TO DEMOLITION, ALL LIQUID CHEMICAL SHALL BE DRAINED FROM THE TANK AND ALL PIPING AND DISPOSED OF PER SPECIFICATION.
4. ONCE THE TEMPORARY CHEMICAL FEED SYSTEM IS CONSTRUCTED AND CHEMICAL FEED ESTABLISHED; THE EXISTING SYSTEM MAY BEGIN TO BE DEMOLISHED.
5. ALL EXISTING ODOR CONTROL ELEMENTS FROM BULK TANK, CHEMICAL PIPING, VALVES, FEED BUILDING, METERING PUMPS, ELECTRICAL, CONTAINMENT STRUCTURE, ETC. SHALL BE DEMOLISHED. THIS IS INCLUSIVE OF UNDERGROUND PIPING, UTILITIES, AND ELECTRICAL.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ODOR CONTROL AND CHEMICAL FEED DEMOLITION PLAN AND SECTIONS

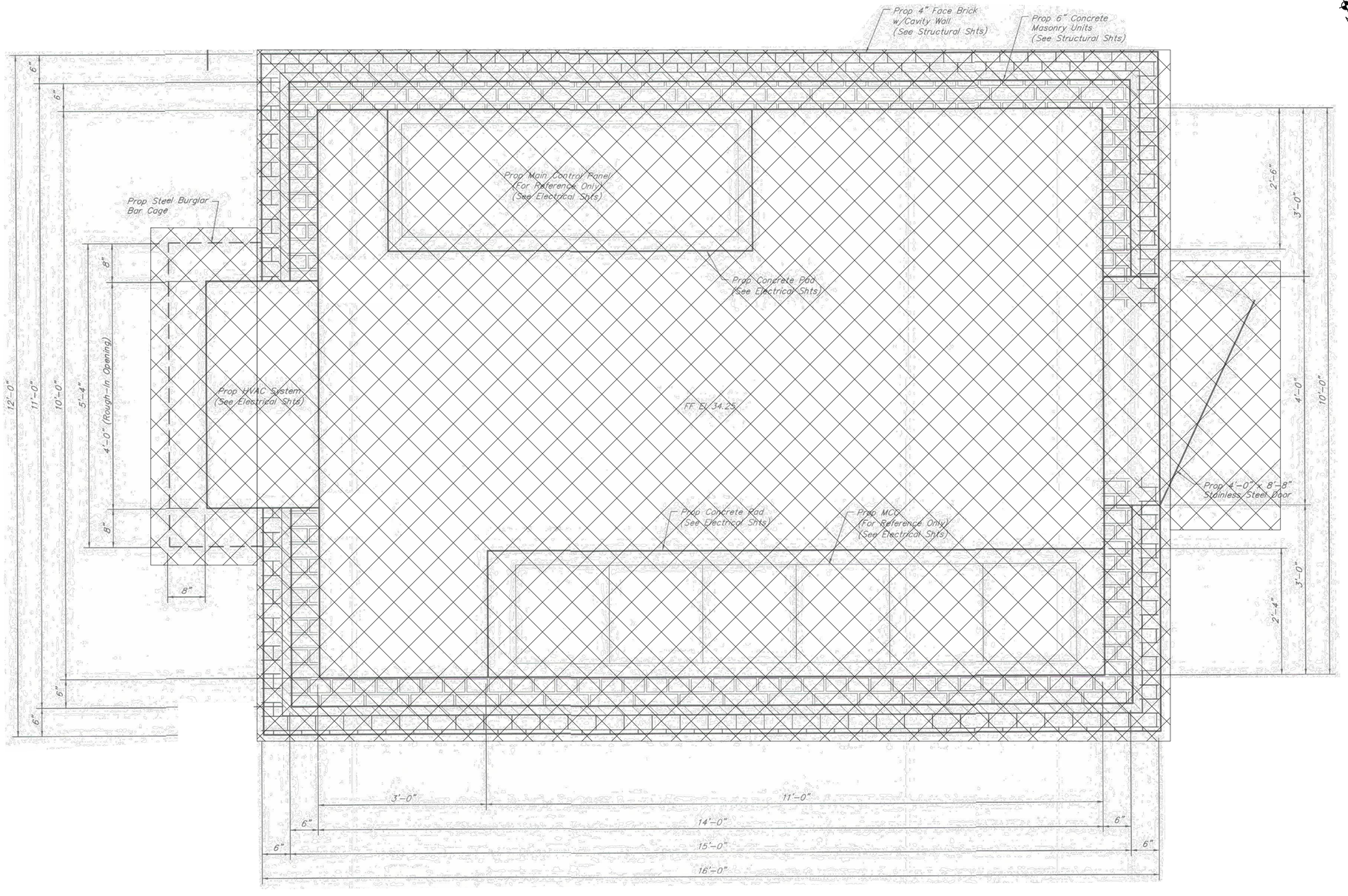
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
D-4

FILE PATH: C:\Users\JGibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\D-DEMO-EDD.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/20/2026 8:19 AM



CONTROL BUILDING PLAN

SCALE: 1"=1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

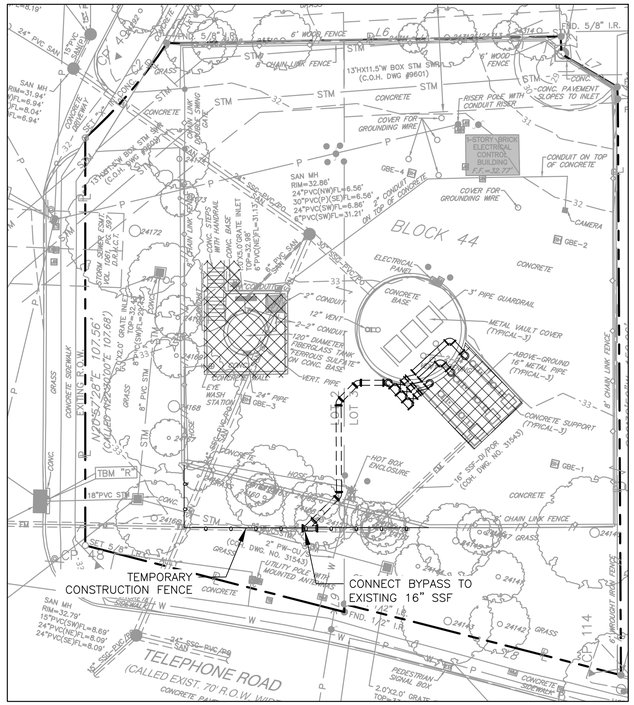
ELECTRICAL CONTROL BUILDING DEMOLTION PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
D-5

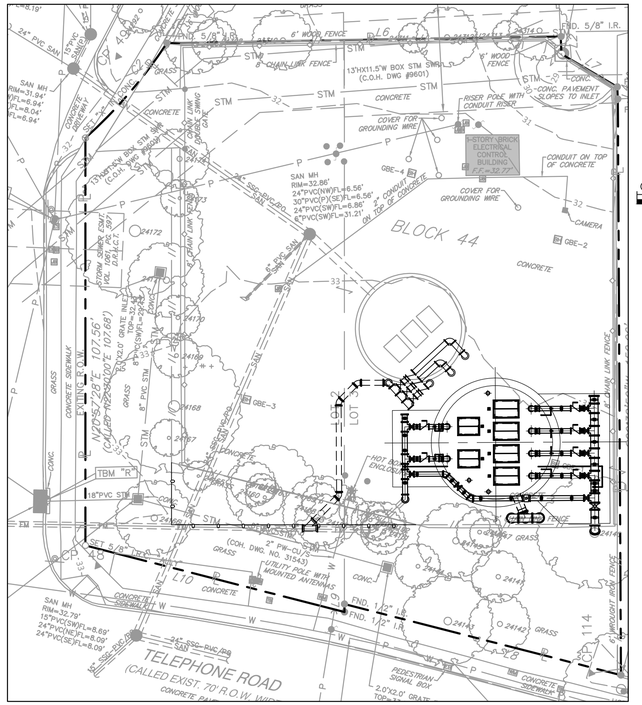
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\D-DEMO-EDD.dwg



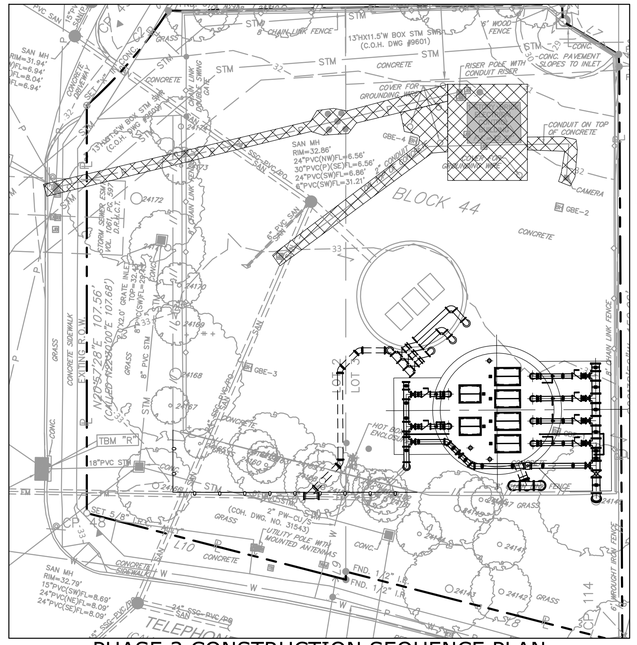
PHASE 1 CONSTRUCTION SEQUENCE PLAN

SCALE: 1" = 20'–0"



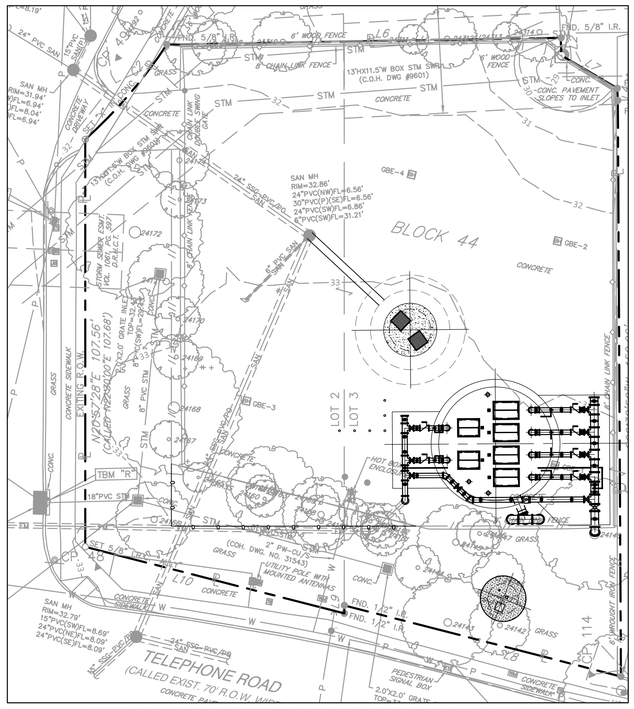
PHASE 2 CONSTRUCTION SEQUENCE PLAN

SCALE: 1" = 20'–0"



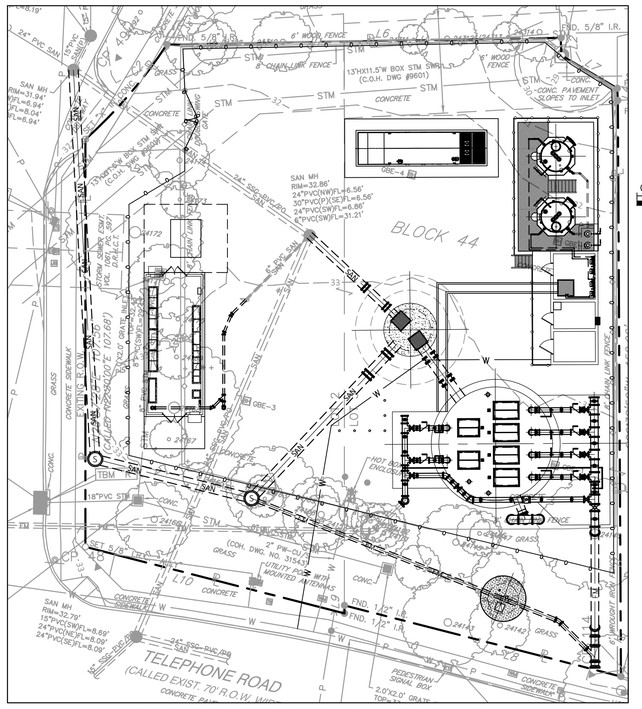
PHASE 3 CONSTRUCTION SEQUENCE PLAN

SCALE: 1" = 20'–0"



PHASE 4 CONSTRUCTION SEQUENCE PLAN

SCALE: 1" = 20'–0"



PHASE 5 CONSTRUCTION SEQUENCE PLAN

SCALE: 1" = 20'–0"

NOTE:

1. PHASE 1: INSTALLATION OF TEMPORARY BYPASS PIPING ON THE EXISTING LIFT STATION TO MAINTAIN IT IN SERVICE AS LONG AS POSSIBLE PRIOR TO HAVING TO PERFORM A FULL BYPASS TEMPORARY PUMPING PLAN. CONTRACTOR SHALL PROVIDE TEMPORARY CHEMICAL FEED SYSTEM FOR ODOR CONTROL.
2. PHASE 2: WHILE MAINTAINING OPERATION OF THE EXISTING EDDINGTON LIFT STATION; BEGIN CONSTRUCTION OF PROPOSED LIFT STATION AND OTHER FACILITY FEATURES AS SPACE WILL ALLOW.
3. PHASE 3: ESTABLISH TEMPORARY PUMP AND DEMOLISH EXISTING ELECTRICAL FACILITIES.
4. PHASE 4: MAINTAIN FULL TEMPORARY BYPASS PUMPING PROVISIONS. DEMOLISH AND CLEAN EXISTING EDDINGTON LIFT STATION WET WELL FOR CONVERSION TO A NEW JUNCTION BOX. EXISTING WALLS SHALL BE USED FOR THE FUNCTION OF ALLOWING EXCAVATION TRENCH SAFETY. CONTRACTOR SHALL DEVELOP HIS OWN PLAN FOR THIS PURPOSE.
5. PHASE 5: COMPLETE CONSTRUCTION OF ALL NEW FACILITY ELEMENTS AND PLACE ON–LINE. REMOVE ALL TEMPORARY BYPASS PUMPING PROVISIONS.
6. REFER TO SECTION 01114 CONSTRUCTION SEQUENCING AND 11500 TEMPORARY BYPASS PUMPING FOR ADDITIONAL INFORMATION AND DETAILS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

CONSTRUCTION SEQUENCING AND TEMPORARY PIPING MODIFICATIONS

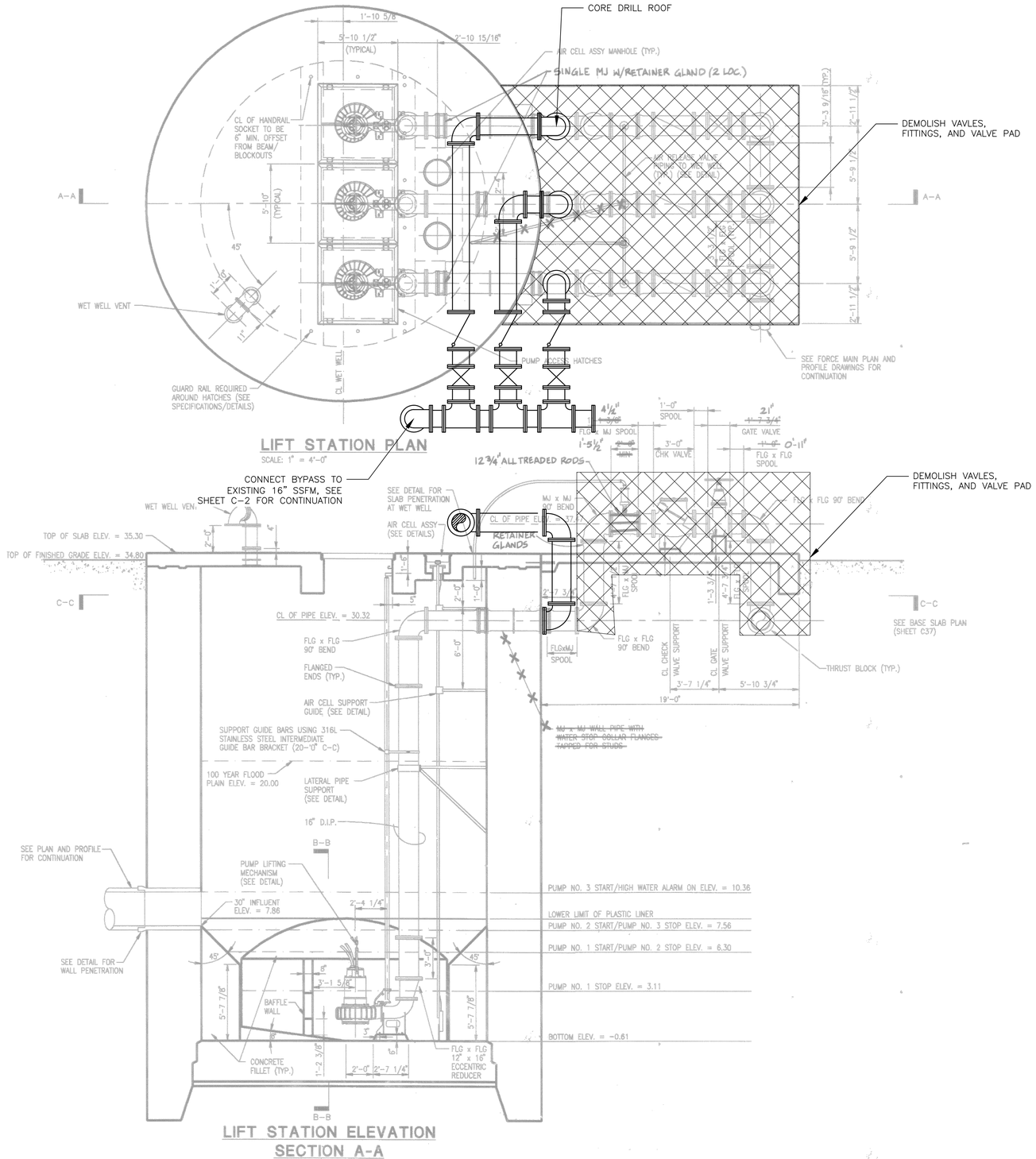
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO	D–6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
1" = 20'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 3:12 PM

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024–1427\project Files\03–Prod\03–Dwgs\C–SP–EDD.dwg



NOTE:

1. THE PURPOSE OF THE TEMPORARY PIPING WORK ILLUSTRATED ON THIS DRAWING AS PART OF CONSTRUCTION PHASE I IS TO MINIMIZE THE AMOUNT OF TIME THAT A TEMPORARY BYPASS PUMPING SYSTEM WOULD BE REQUIRED. IT IS DESIRED TO UTILIZE THE EXISTING LIFT STATION AS LONG AS POSSIBLE WHILE CONSTRUCTING THE NEW LIFT STATION. IT WILL BE UP TO THE CONTRACTOR TO DETERMINE THE EXACT SPECIFIC OF THIS PLAN AND COORDINATING WITH OTHER PHASES OF THE CONSTRUCTION.
2. REFER TO SECTION 01114 CONSTRUCTION SEQUENCING AND 11500 TEMPORARY BYPASS PUMPING FOR ADDITIONAL INFORMATION AND DETAILS.
3. ENGINEER'S SUGGESTED MAINTENANCE OF PROCESS OPERATIONS (MOPO) PLAN IS AS SHOWN. CONTRACTOR MAY ELECT TO ALTER PROPOSED TEMPORARY PIPING PLAN PER THE APPROVAL OF THE ENGINEER THROUGH THE SHOP DRAWING SUBMITTAL PROCESS.
4. TEMPORARY PUMP RISER PIPING SHALL BE FLANGED DUCTILE IRON PIPE OR LINED AND COATED WELDED CARBON STEEL. ISOLATION GATE VALVES AND SWING CHECK VALVES SHALL CONFORM TO AWWA AND TCEQ REQUIREMENTS AND BE COMPATIBLE FOR RAW SEWAGE SERVICE.
5. PROVIDE NEW STAINLESS STEEL AIR AND VACUUM RELIEF VALVES ON EACH PUMP RISER; SIZED FOR THE EXISTING PUMP RATED FLOW.
6. ALL ABOVE AND BELOWGROUND PIPING JOINTS SHALL BE OF RESTRAINED JOINT CONSTRUCTION.
7. THE CONTRACTOR SHALL DESIGN AND FABRICATE TEMPORARY CRADLED WOOD PIPE SUPPORT DUNNAGE AS REQUIRED TO TEMPORARILY SUPPORT ABOVEGROUND PIPING.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PHASE 1 CONSTRUCTION SEQUENCE BYPASS PUMPING AND PIPING PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

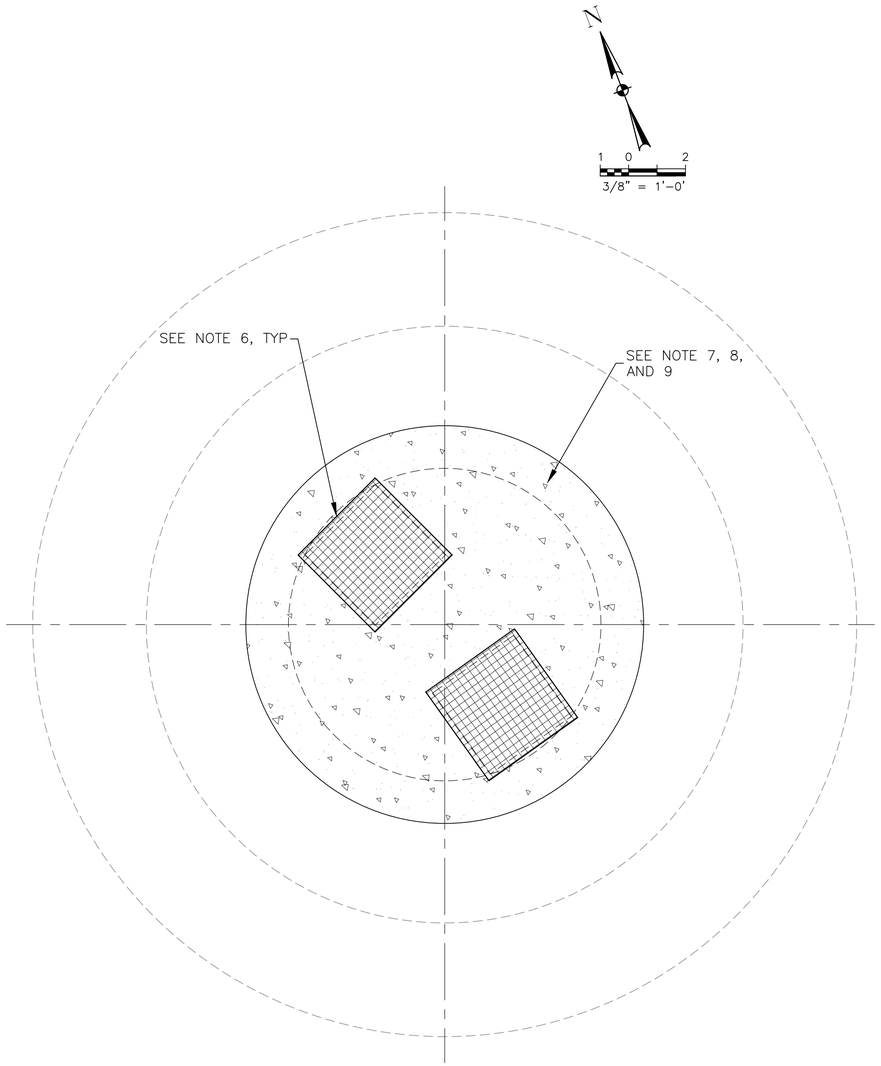
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
D-7

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:13 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\D-DEMO-EDD.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:13 PM

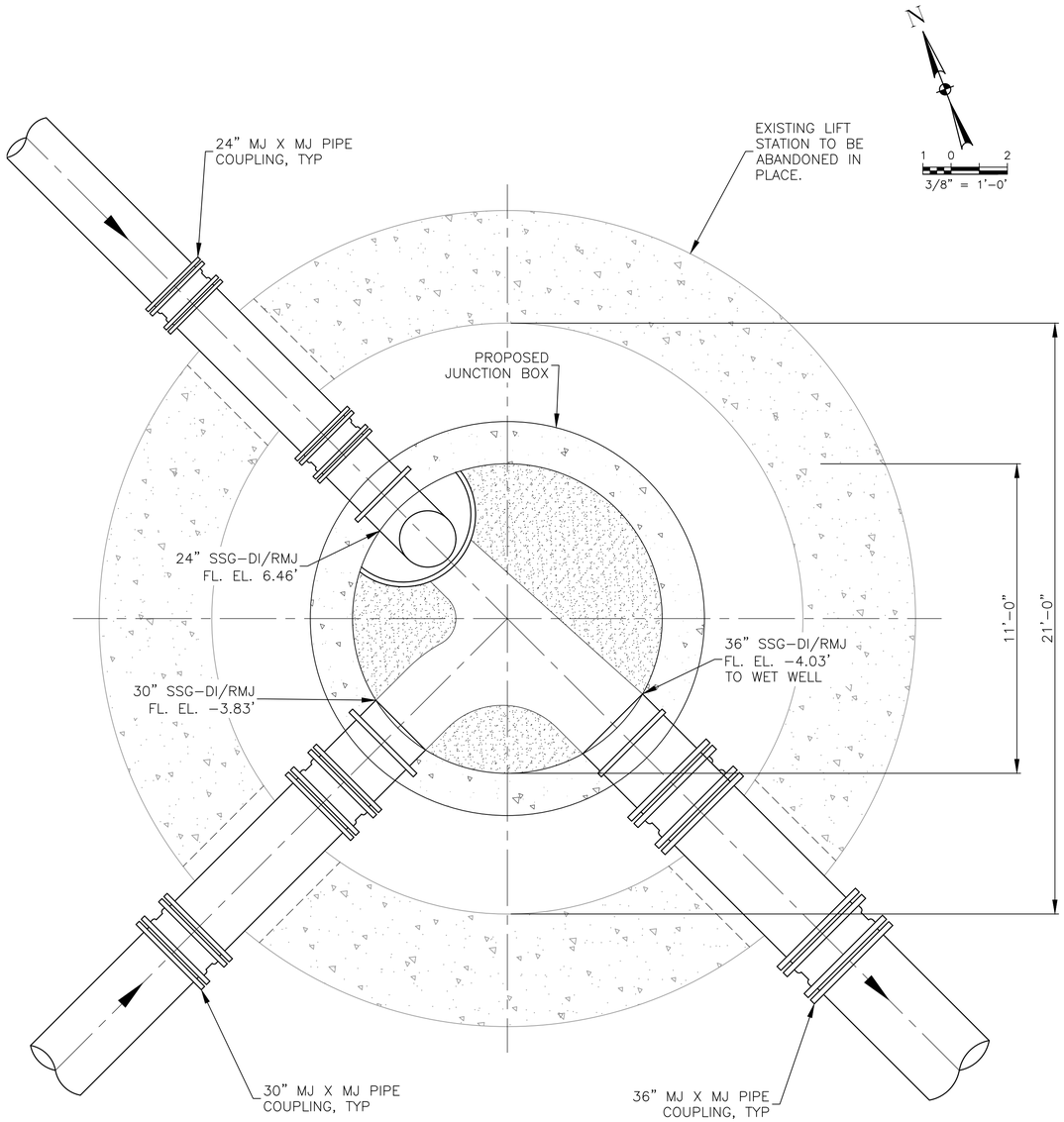
FILE PATH: C:\Users\JGibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-JBOX-EDD.dwg



JUNCTION BOX UPPER PLAN

PLAN

3/8" = 1'-0"



JUNCTION BOX LOWER PLAN

PLAN

3/8" = 1'-0"

NOTES

1. PROPOSED JUNCTION BOX WILL BE CONSTRUCTED WITHIN EXISTING LIFT STATION STRUCTURE. SEE SECTION 01110 SUMMARY OF WORK AND STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS.
2. EXISTING LIFT STATION WALLS SHALL BE CORE DRILLED AS REQUIRED FOR ROUTING NEW PROPOSED SANITARY SEWER GRAVITY PIPING.
3. MJ X MJ COUPLING PAIRS ARE TO PROVIDE FOR DIFFERENTIAL SETTLEMENT BETWEEN NEW PIPING AND PROPOSED JUNCTION BOX.
4. ALL PIPING SHALL BE OF RESTRAINED JOINT CONSTRUCTION.
5. DROP STRUCTURE IS A UNIT AS MANUFACTURERED BY DURAN, INC. – RELINER DROP BOWL AND PIPE SYSTEM.
6. 3.5 FT X 3.5 FT H–20 RATED FLOOD RATED ACCESS HATCH WITH HATCH GRATING.
7. CONTRACTOR SHALL MOUNT A CONFINED SPACE WARNING SIGN ON TOP OF ACCESS HATCH AS PER SPECIFICATION 10400 SIGNAGE.
8. TOP OF CONCRETE JUNCTION BOX ROOF SHALL BE PAINTED WITH AN ALTERNATING YELLOW AND BLACK CHEVRON PAINTING SCHEME TO WARN FUTURE FACILITY OPERATIONS OF MAXIMUM ALLOWABLE STRUCTURE LOAD ON ROOF.
9. CONTRACTOR SHALL MOUNT A CAUTION ANSI MAXIMUM LOAD SIGN OF XX,XXX LBS. CONCENTRATED LOAD OR XXX LBS/SF UNIFORM LOAD.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

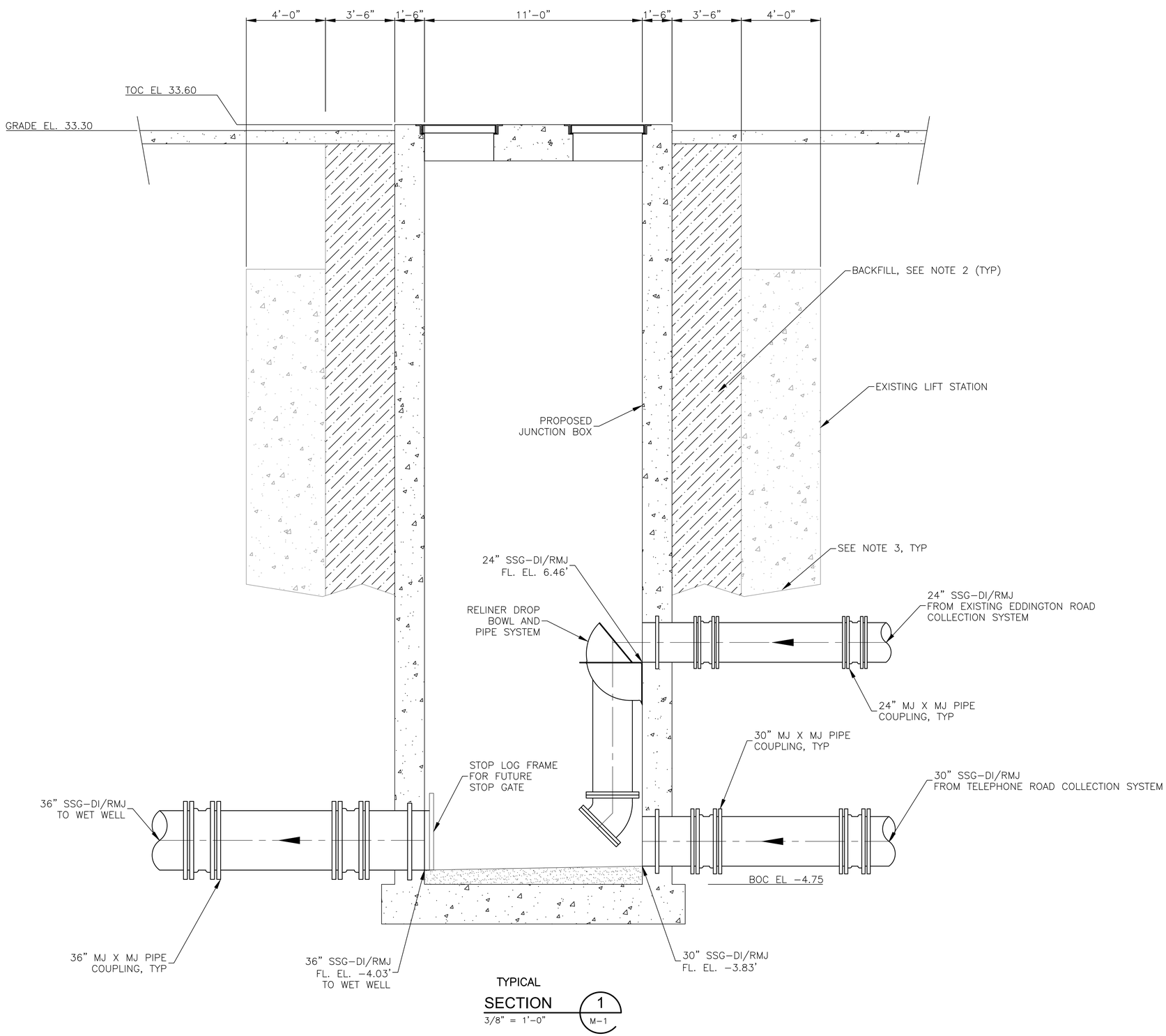
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

JUNCTION BOX UPPER AND LOWER PLANS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M–1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
3/8" = 1'–0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	



TYPICAL
SECTION 1
3/8" = 1'–0"
M–1

NOTES:

1. PROPOSED JUNCTION BOX WILL BE CONSTRUCTED WITHIN THE EXISTING LIFT STATION STRUCTURE. SEE SECTION 01110 SUMMARY OF WORK AND STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS.
2. BACKFILL TO 95% STANDARD PROCTOR. REFER TO SPECIFICATION SECTION 02316 EXCAVATION AND BACKFILL FOR STRUCTURES.
3. EXISTING LIFT STATION WALLS SHALL BE CORE DRILLED AS REQUIRED FOR ROUTING NEW PROPOSED SANITARY SEWER GRAVITY PIPING.
4. MJ X MJ COUPLING PAIRS ARE TO PROVIDE FOR DIFFERENTIAL SETTLEMENT BETWEEN NEW PIPING AND PROPOSED JUNCTION BOX.
5. DROP STRUCTURE IS A UNIT AS MANUFACTURERED BY DURAN, INC. – RELINER DROP BOWL AND PIPE SYSTEM.
6. 3.5 FT X 3.5 FT H–20 RATED FLOOD RATED ACCESS HATCH WITH HATCH GRATING.
7. CONTRACTOR SHALL PROVIDE A TYPE 316L STAINLESS STEEL STOP LOG FRAME FOR FUTURE LIFT STATION ISOLATION. SEE SECTION 11281 – SLIDE GATES FOR ADDITIONAL INFORMATION.
8. ALL INTERIOR SURFACES OF THE NEW JUNCTION BOX SHALL BE COATED WITH A SPECIALTY PROTECTIVE COATING SYSTEM AS SPECIFIED IN SECTION 09805 INTERIOR CONCRETE CORROSION BARRIER.
9. NOT ALL DETAILS ARE INDICATED AND PROPOSED PIPING IS NOT ALWAYS SHOWN IN ITS ENTIRETY FOR CLARITY PURPOSES. CONTRACTOR SHALL COORDINATE PIPING FABRICATION IN CONJUNCTION WITH PLAN, SECTIONS, P&ID DRAWINGS, EXISTING SHOP DRAWINGS, AND CONTRACTOR FILED MEASUREMENTS. SIZES OF PIPE AND GENERAL METHOD OF ROUTING IS ILLUSTRATED, BUT NOT INTENDED TO SHOW EVERY OFFSET AND FITTING FOR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED, ITEMS AS INDICATED ON THE P&ID, OR AS REQUIRED FOR TESTING AND DISINFECTION CONNECTIONS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

JUNCTION BOX TYPICAL SECTION

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

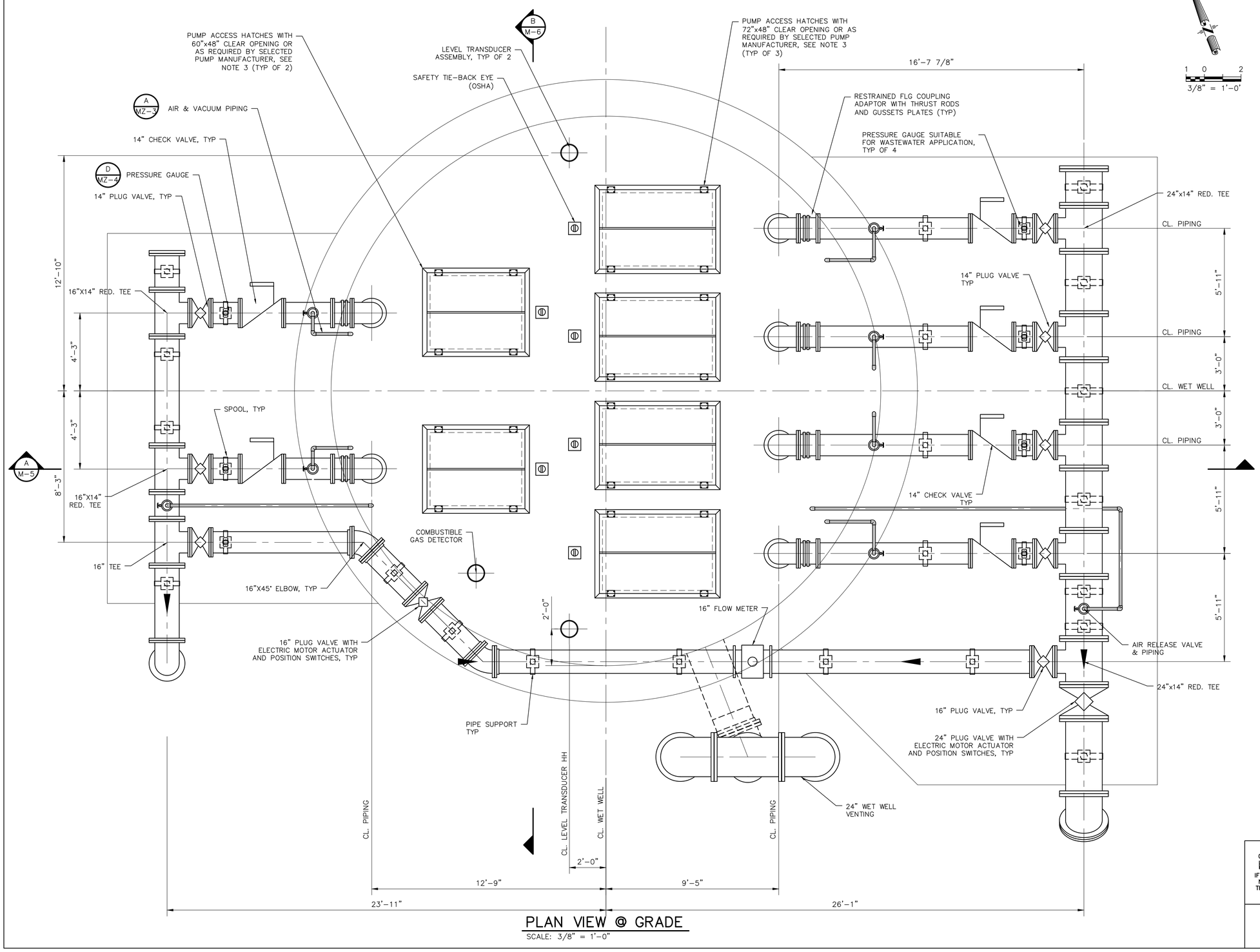
DWG NO
M–2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
3/8" = 1'–0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:13 PM
FILE PATH: C:\Users\Jgibson\DC\ACCDocs\ardurra, Inc\2024–1427\project Files\03–Prod\03–Dwgs\M–JBOX–EDD.dwg

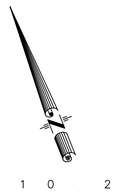
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:13 PM

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-LS-EDD.dwg



PLAN VIEW @ GRADE

SCALE: 3/8" = 1'-0"



NOTES:

1. SEE SECTION 01110 SUMMARY OF WORK AND STRUCTURAL DRAWINGS FOR ADDITIONAL DETAILS.
2. CONTRACTOR SHALL MOUNT A CONFINED SPACE WARNING SIGN ON TOP OF ACCESS HATCH AS PER SPECIFICATION 10400 SIGNAGE.
3. CONTRACTOR SHALL MOUNT A CAUTION ANSI MAXIMUM LOAD SIGN OF XX,XXX LBS. CONCENTRATED LOAD OR XXX LBS/SF UNIFORM LOAD.
4. ALL ALUMINUM ACCESS HATCHES SHALL BE 300 PSF MINIMUM LOAD RATED WITH ALUMINUM HATCH SAFETY GRATING WITH A 3-INCH CLERANCE ON THE OPENING EDGE. SAFETY GRATING SHALL OPEN THE SAME DIRECTION AS THE ACCESS HATCH DOORS. PUMP MANUFACTURER TO SIZE AND PROVIDE TO CLEAR ALL PUMP INSTALLATION AND REMOVAL OPERATIONS, TYP.
5. ALL INTERIOR SURFACES OF THE PROPOSED LIFT STATION SHALL BE COATED WITH A SPECIALTY PROTECTIVE COATING SYSTEM AS SPECIFIED IN SECTION 09805 INTERIOR CONCRETE CORROSION BARRIER.
6. DRY WEATHER CHECK VALVES ARE CONVENTIONAL AWWA SWING CHECK VALVES WITH OUTSIDE LEVER AND WEIGHT.
7. WET WEATHER CHECK VALVES ARE CONVENTIONAL AWWA SWING CHECK VALVES WITH OUTSIDE LEVER AND WEIGHT AND ADJUSTABLE OIL SUSHION CLOSURE MECHANISM.
8. ALL VALVES ON THE FORCE MAIN INTERTIE WHETHER MANUALLY ACTUATED OR ELECTRIC MOTOR ACTUATED SHALL BE EQUIPPED WITH POSITION SWITCHES FOR OPEN / CLOSE INDICATION IN THE CONTROL SYSTEM.
9. DRY WEATHER AIR RELEASE VALVES SHALL BE OF THE STAINLESS STEEL TYPE; PROVIDE AIR RELEASE VALVE OR COMBINATION AIR RELEASE – AIR VACUUM RELEASE VALVE AS SHOWN. SEE SPECIFICATION SECTION 15100 VALVES FOR ADDITIONAL DETAIL.
10. WET WEATHER AIR RELEASE VALVES SHALL BE OF THE STAINLESS STEEL TYPE; PROVIDE AIR RELEASE VALVE OR COMBINATION AIR RELEASE – AIR VACUUM RELEASE VALVE AS SHOWN. SEE SPECIFICATION SECTION 15100 VALVES FOR ADDITIONAL DETAIL.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

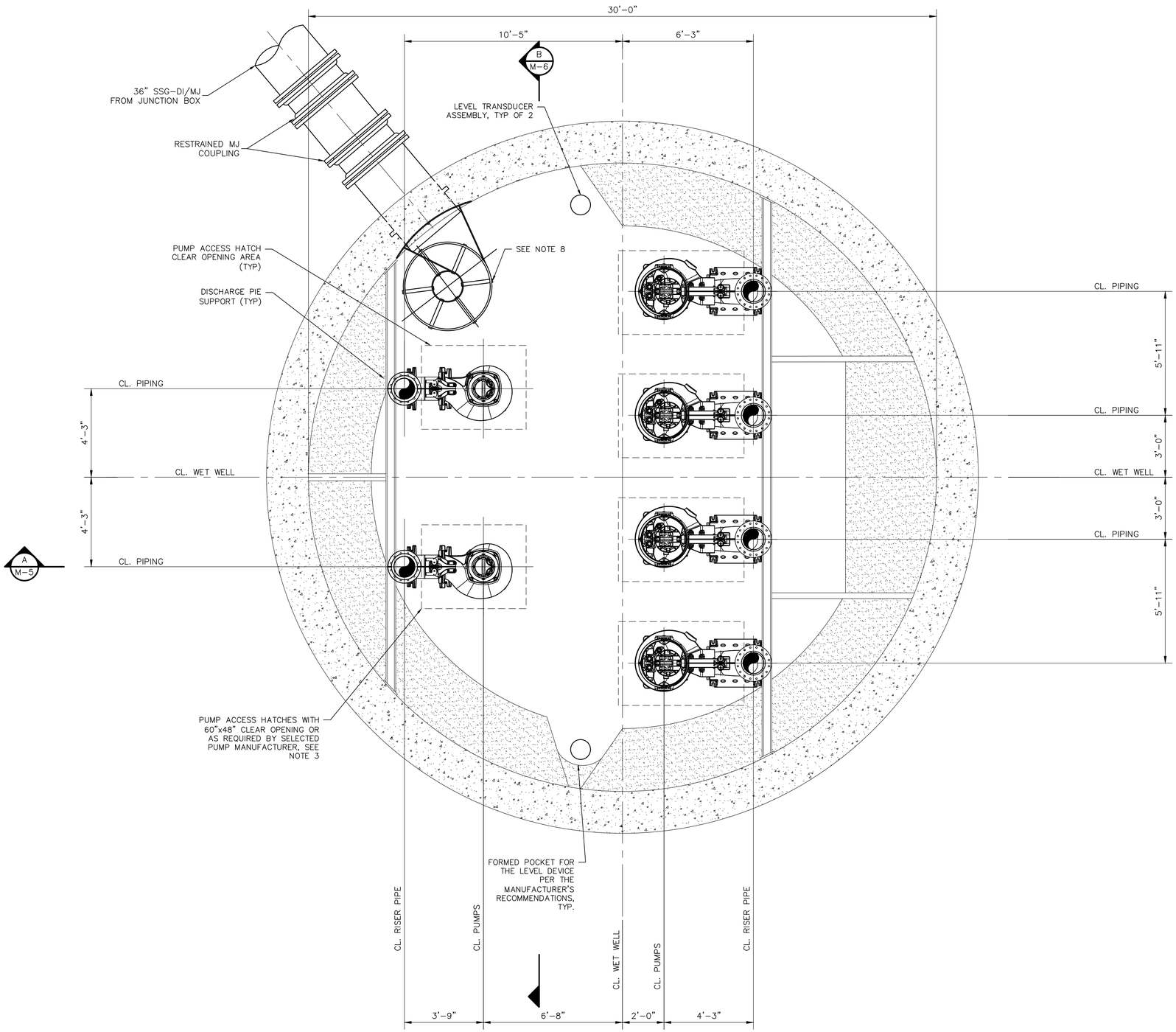
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

LIFT STATION UPPER PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-3



LOWER LIFT STATION PLAN VIEW

SCALE: 3/8" = 1'-0"

1 0 2

3/8" = 1'-0"

NOTES:

1. SEE NOTES ON M-3.
2. PUMP MANUFACTURER SHALL DESIGN, SIZE, AND PROVIDE ALUMINUM ACCESS HATCHES WITH ALUMINUM SAFETY GRATING TO CLEAR ALL PUMP INSTALLATION AND REMOVAL OPERATIONS, TYP.
3. ALL INTERIOR SURFACES OF THE PROPOSED LIFT STATION SHALL BE COATED WITH A SPECIALTY PROTECTIVE COATING SYSTEM AS SPECIFIED IN SECTION 09805 INTERIOR CONCRETE CORROSION BARRIER.
4. DRY WEATHER PUMPS ARE BASED ON UNITS AS MANUFACTURERED BY XYLEM FLYGT MODEL NUMBER XXXXX. SHOULD OTHER NAMED MANUFACTURER BE SUBMITTED AND APPROVED THE CONTRACTOR SHALL PAY FOR ANY ADDITIONAL COSTS INCURED TO MODIFY DESIGN TO SUIT INSTALLATION OF THE APPROVED PUMP.
5. WET WEATHER PUMPS ARE BASED ON UNITS AS MANUFACTURERED BY XYLEM FLYGT MODEL NUMBER XXXXX. SHOULD OTHER NAMED MANUFACTURER BE SUBMITTED AND APPROVED THE CONTRACTOR SHALL PAY FOR ANY ADDITIONAL COSTS INCURED TO MODIFY DESIGN TO SUIT INSTALLATION OF THE APPROVED PUMP.
6. NOT ALL DETAILS ARE INDICATED AND PROPOSED PIPING IS NOT ALWAYS SHOWN IN ITS ENTIRETY FOR CLARITY PURPOSES. CONTRACTOR SHALL COORDINATE PIPING FABRICATION IN CONJUNCTION WITH PLAN, SECTIONS, P&ID DRAWINGS, EXISTING SHOP DRAWINGS, AND CONTRACTOR FILED MEASUREMENTS. SIZES OF PIPE AND GENERAL METHOD OF ROUTING IS ILLUSTRATED, BUT NOT INTENDED TO SHOW EVERY OFFSET AND FITTING FOR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED, ITEMS AS INDICATED ON THE P&ID, OR AS REQUIRED FOR TESTING AND DISINFECTION CONNECTIONS.
7. CONTRACTOR SHALL COORDINATE ROUTING OF ALL STAINLESS STEEL PLANT AIR LINES TO WET WELL BUBBLE FORMING PLATES AS PER SPECIFICATION SECTION 11XXX PULSED AIR HYDRAULIC MIXING.
8. FOR FURTHER DETAILS ON THE VORTEX STYLE MANHOLE DROP STRUCTURE PLEASE REFER TO SPECIFICATION SECTION 11354 MANHOLE DROP STRUCTURE DEVICES AND DETAILS FOUND IN THE MZ DRAWINGS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

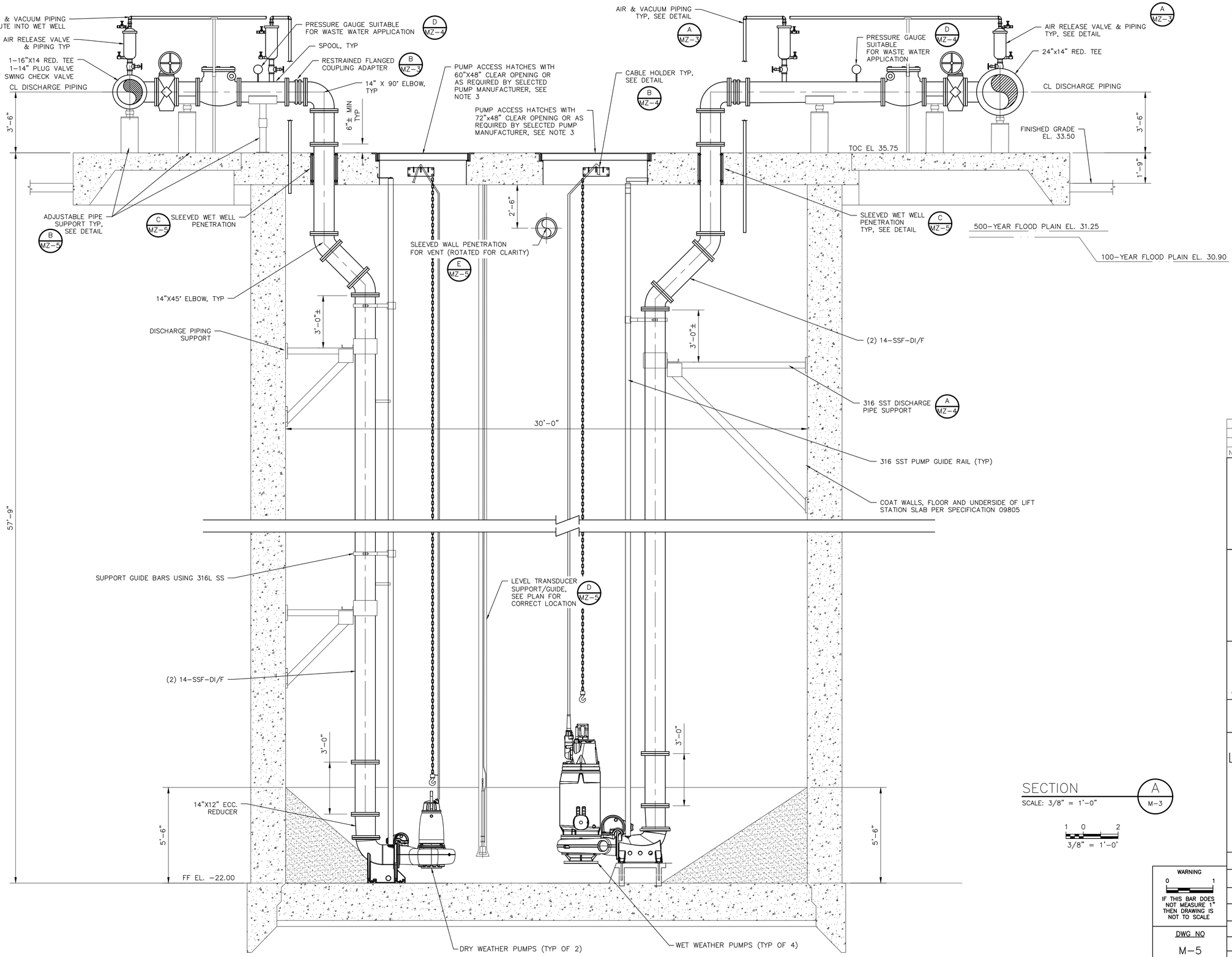
LIFT STATION LOWER PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8" = 1'-0'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	

DWG NO
M-4

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:13 PM
FILE PATH: C:\Users\vjgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-LS-EDD.dwg



NOTES:

1. DIMENSION NOTED ARE RELATIVE TO THE PUMP SIZE AND MANUFACTURER SELECTED. CONTRACTOR SHALL CONFIRM
2. CONTRACTOR SHALL VERIFY THE MINIMUM REQUIRED PUMP ACCESS HATCH SIZE AND MOUNTING REQUIREMENTS FOR THE HATCH WITH THE PUMP AND HATCH MANUFACTURERS.
3. PUMP ANCHOR BOLTS ARE TO BE ADHESIVE TYPE, AND EMBEDDED IN CONCRETE SLAB. CONTRACTOR TO SUBMIT DESIGN OF PUMP ANCHOR BOLTS AND PATTERN, INCLUDING CALCULATIONS, DURING SHOP DRAWING SUBMISSION.
4. CONTRACTOR TO PROVIDE ADHESIVE ANCHORS IN LIEU OF WEDGE ANCHORS FOR ALL SUBMERGED CONDITIONS. AND SUBMIT DESIGN OF ANCHOR BOLTS DURING SHOP DRAWING SUBMISSION.
5. ALL PIPING IN THE WET WELL SHALL BE FLANGED. NO FLANGED COUPLING ADAPTORS, OR VICTAULIC STYLE COUPLINGS SHALL BE PERMITTED INSIDE THE WET WELL.
6. MINIMUM WSE IN THE WET WELL SHALL REMAIN ABOVE THE TOP OF THE PUMP MOTOR. WSE AND PUMP SET POINTS ARE BASED ON FLYGT PUMP MODEL _____. CONFIRM PUMP HEIGHT WITH SELECTED PUMP MANUFACTURERS.
7. CONTRACTOR SHALL CONFIRM THAT THE WET WELL FLOOR GROUT FILLET DOES NOT INTERFERE WITH SELECTED PUMP INSTALLATION AND PUMP OPERATIONS AND IS OUTSIDE OF THE REQUIRED SUCTION CLEARANCE AREA.
8. PUMP ACCESS HATCHES SHALL HAVE AN ALUMINUM FALL PROTECTION GRATE. SEE SPECIFICATION 11311 FOR DETAILS.

SECTION A M–3
SCALE: 3/8" = 1'–0"

1 0 2
3/8" = 1'–0'

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

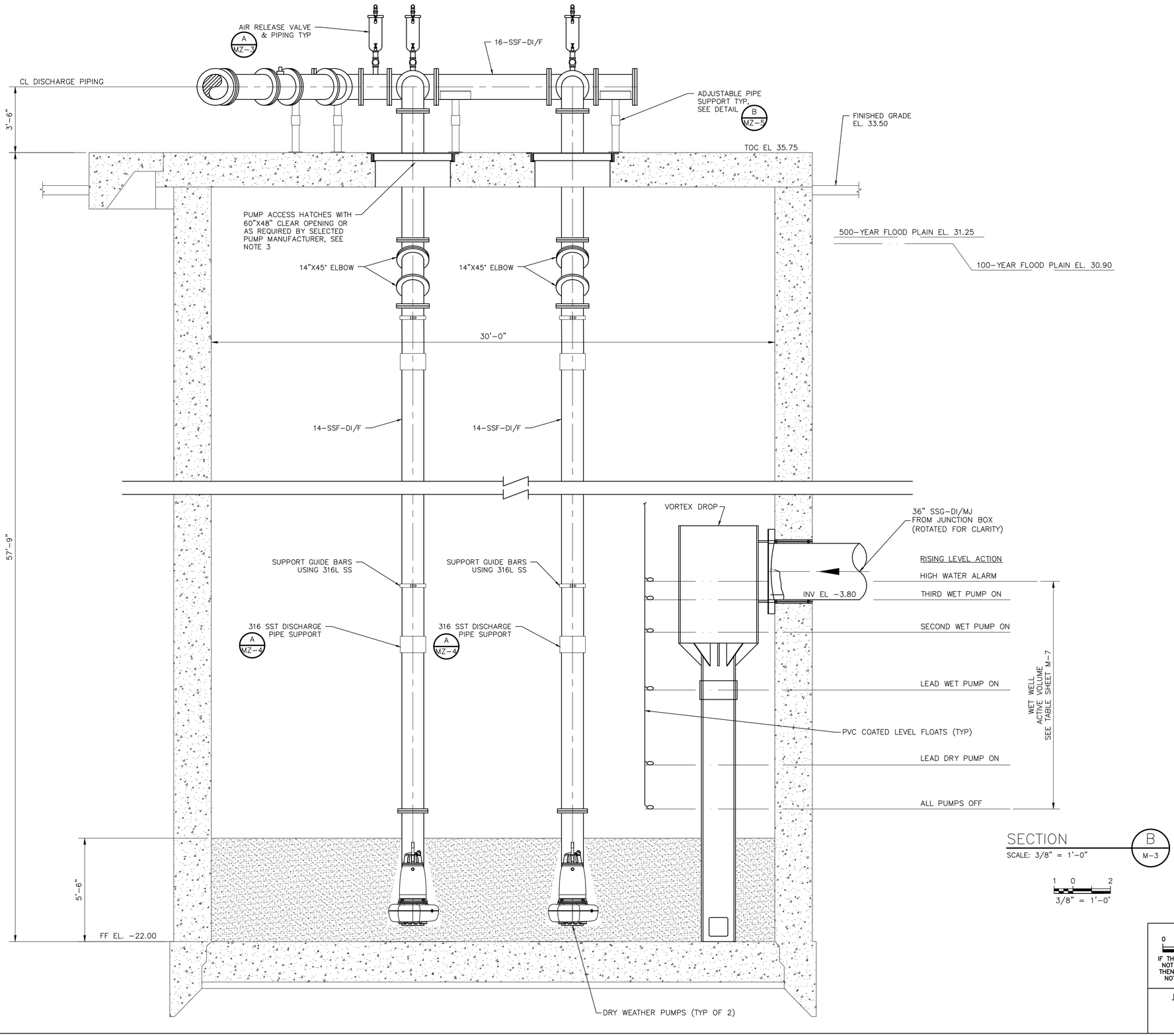
LIFT STATION SECTION SHEET 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
3/8" = 1'–0'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M–5

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:14 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024–1427\project Files\03–Prod\03–Dwgs\M–LS–EDD.dwg



SECTION B M-3

SCALE: 3/8" = 1'-0"

1 0 2

3/8" = 1'-0'

NOTES:

1. DIMENSION NOTED ARE RELATIVE TO THE PUMP SIZE AND MANUFACTURER SELECTED. CONTRACTOR SHALL CONFIRM
2. CONTRACTOR SHALL VERIFY THE MINIMUM REQUIRED PUMP ACCESS HATCH SIZE AND MOUNTING REQUIREMENTS FOR THE HATCH WITH THE PUMP AND HATCH MANUFACTURERS.
3. PUMP ANCHOR BOLTS ARE TO BE ADHESIVE TYPE, AND EMBEDDED IN CONCRETE SLAB. CONTRACTOR TO SUBMIT DESIGN OF PUMP ANCHOR BOLTS AND PATTERN, INCLUDING CALCULATIONS, DURING SHOP DRAWING SUBMISSION.
4. CONTRACTOR TO PROVIDE ADHESIVE ANCHORS IN LIEU OF WEDGE ANCHORS FOR ALL SUBMERGED CONDITIONS. AND SUBMIT DESIGN OF ANCHOR BOLTS DURING SHOP DRAWING SUBMISSION.
5. ALL PIPING IN THE WET WELL SHALL BE FLANGED. NO FLANGED COUPLING ADAPTORS, OR VICTAULIC STYLE COUPLINGS SHALL BE PERMITTED INSIDE THE WET WELL.
6. MINIMUM WSE IN THE WET WELL SHALL REMAIN ABOVE THE TOP OF THE PUMP MOTOR. WSE AND PUMP SET POINTS ARE BASED ON FLYGT PUMP MODEL _____. CONFIRM PUMP HEIGHT WITH SELECTED PUMP MANUFACTURERS.
7. CONTRACTOR SHALL CONFIRM THAT THE WET WELL FLOOR GROUT FILLET DOES NOT INTERFERE WITH SELECTED PUMP INSTALLATION AND PUMP OPERATIONS AND IS OUTSIDE OF THE REQUIRED SUCTION CLEARANCE AREA.
8. PUMP ACCESS HATCHES SHALL HAVE AN ALUMINUM FALL PROTECTION GRATE. SEE SPECIFICATION 11311 FOR DETAILS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

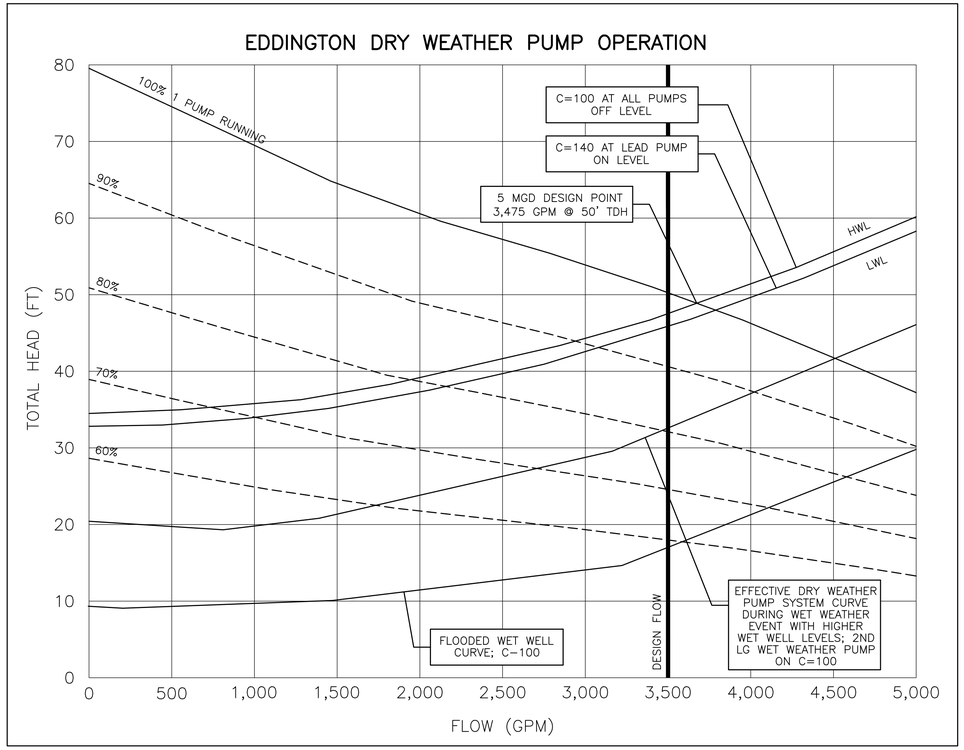
LIFT STATION SECTION SHEET 2

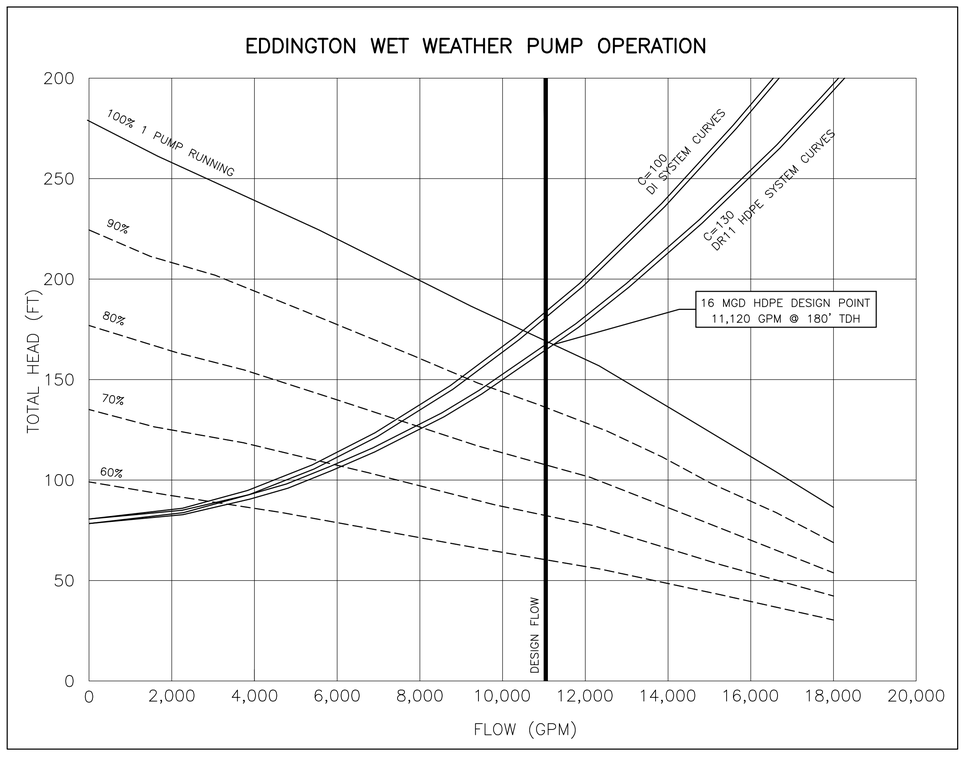
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8" = 1'-0'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	

DWG NO
M-6

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:14 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-LS-EDD.dwg





PUMP DATA TABLE

DRY WEATHER PUMPS		
PUMP CHARACTERISTICS	PUMP NO. 1	PUMP NO. 2
MOTOR DATA NOMINAL SIZE (HP) MAX SPEED (RPM)	 60 1170	 60 1170
SOLIDS PASSAGE MIN SPHERE (IN)		
CAPACITY (GPM) DESIGN RUNOUT	 3,485 8,200	 3,485 8,200
DISCHARGE HEAD (FT) DESIGN RUNOUT SHUT-OFF	 50 8 79	 50 8 79
EFFICIENCY (%) DESIGN	 80.0%	 80.0%
DISCHARGE HEAD (FT) DESIGN RUNOUT	 21 57	 21 57

STATION OPERATION TABLES

RISING LEVEL CYCLE – WWFM DRAIN PUMPS		
WATER LEVEL ELEVATION	ACTION	PUMP(S) IN OPERATION
-0.30	PUMPS OFF LEVEL – NO ACTION	ALL PUMPS ARE OFF
0.70	DRY PUMP TURNS ON	DRY PUMP ON
WATER LEVEL 1.20	LEAD WET PUMP TURNS ON DRY PUMPS TURN OFF	LEAD WET PUMP ON

FALLING LEVEL CYCLE – WWFM DRAIN PUMPS		
WATER LEVEL ELEVATION	ACTION	PUMP(S) IN OPERATION
-0.30	DRY PUMP TURNS OFF	LEAD DRY PUMP ON

PUMP DATA TABLE
WET WEATHER PUMPS

PUMP DATA TABLE – WWFM DRAIN PUMPS				
PUMP CHARACTERISTICS	PUMP NO. 1	PUMP NO. 2	PUMP NO. 3	PUMP NO. 4
MOTOR DATA NOMINAL SIZE (HP) MAX SPEED (RPM)	 250 1780	 250 1780	 250 1780	 250 1780
SOLIDS PASSAGE MIN SPHERE (IN)	2-1/2"	2-1/2"	2-1/2"	2-1/2"
CAPACITY (GPM) DESIGN RUNOUT	 3,700 6,150	 3,700 6,150	 3,700 6,150	 3,700 6,150
DISCHARGE HEAD (FT) DESIGN RUNOUT SHUT-OFF	 165 79 272	 165 79 272	 165 79 272	 165 79 272
EFFICIENCY (%) DESIGN	 75.8	 75.8	 75.8	 75.8
DISCHARGE HEAD (FT) DESIGN RUNOUT	 24.3 70	 24.3 70	 24.3 70	 24.3 70

STATION OPERATION TABLES

RISING LEVEL CYCLE – WWFM DRAIN PUMPS		
WATER LEVEL ELEVATION	ACTION	PUMP(S) IN OPERATION
1.20	LEAD WET PUMP TURNS ON DRY PUMPS TURN OFF	LEAD WET PUMP ON
2.20	SECOND WET PUMP TURNS ON	LEAD & SECOND WET PUMPS ON
3.30	THIRD WET PUMP TURNS ON	LEAD, SECOND & THIRD WET PUMPS ON
3.80	HIGH WATER ALARM ON	HIGH WATER ALARM SOUND

FALLING LEVEL CYCLE – WWFM DRAIN PUMPS		
WATER LEVEL ELEVATION	ACTION	PUMP(S) IN OPERATION
3.30	HIHG WATER LEVEL ALARM OFF	LEAD DRY PUMP ON
3.30	LEAD WET PUMP TURNS OFF	LEAD DRY PUMP ON
2.20	SECOND PUMP (W2) TURNS OFF	LEAD DRY PUMP ON
1.20	THIRD WET PUMP TURNS OFF	ALL PUMPS STOPPED – STANDBY PUMP SWITCHES TO LEAD PUMP

PUMP CURVE NOTES:

1. LOW NORMAL OPERATING LEVEL C=130 – DESIGN.
2. HIGH NORMAL OPERATING LEVEL C=100 – INFORMATION ONLY (TCEQ)
3. HIGH NORMAL OPERATING LEVEL C=130 = DESIGN
4. NET POSITIVE SUCTION HEAD REQUIRED (NPSHR) BASED ON NORMAL OPERATING WATER LEVELS.
5. PUMP CURVES ARE MODIFIED FOR STATION LOSSES.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

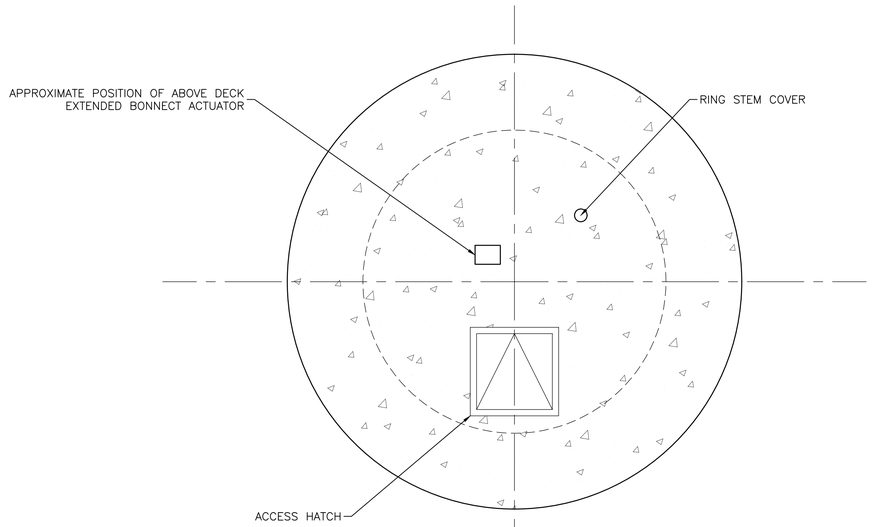
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

LIFT STATION PUMP CURVES AND OPERATION TABLES

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	
DWG NO M-7	

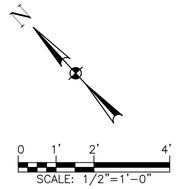
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:14 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-LS-EDD.dwg

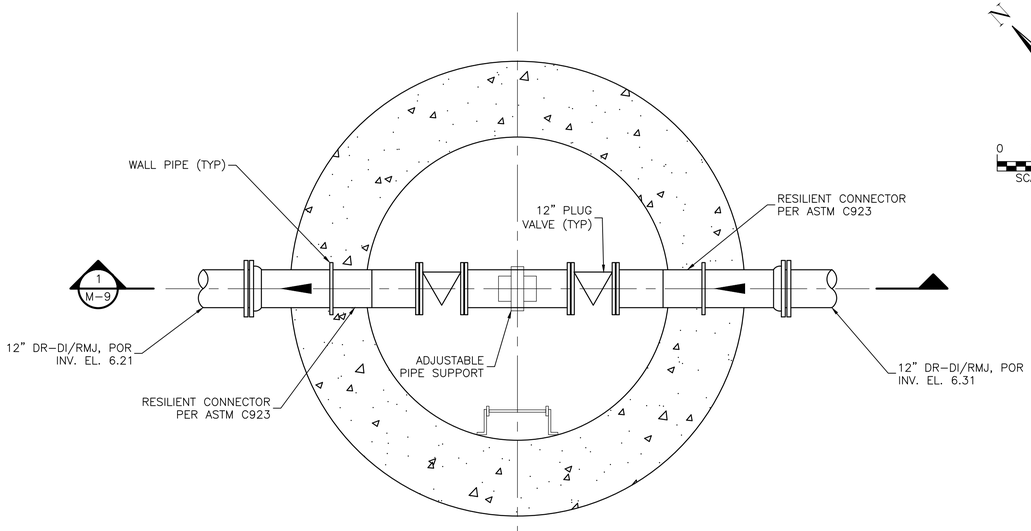


UPPER PLAN

PLAN

1/2" = 1'-0"

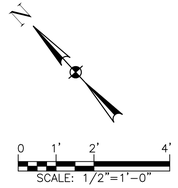




LOWER PLAN

PLAN

1/2" = 1'-0"



NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

WWFM DRAIN VALVE MANHOLE PLAN

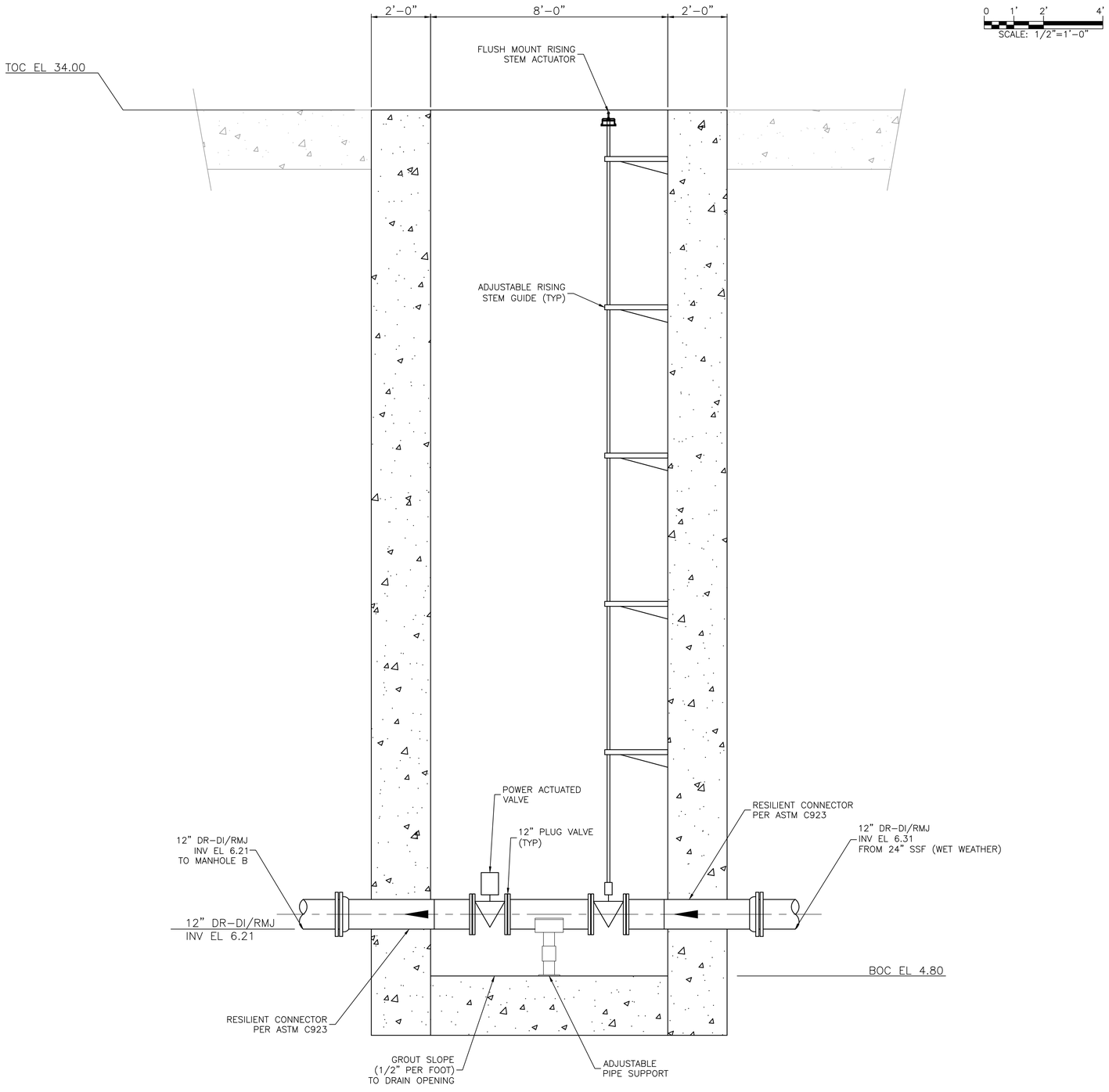
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-8

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1/2" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 12:32 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\M-DVMH-EDD.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/15/2026 12:32 PM



SECTION 1 (M-8)
1/2" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

WWFM DRAIN VALVE MANHOLE SECTION

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

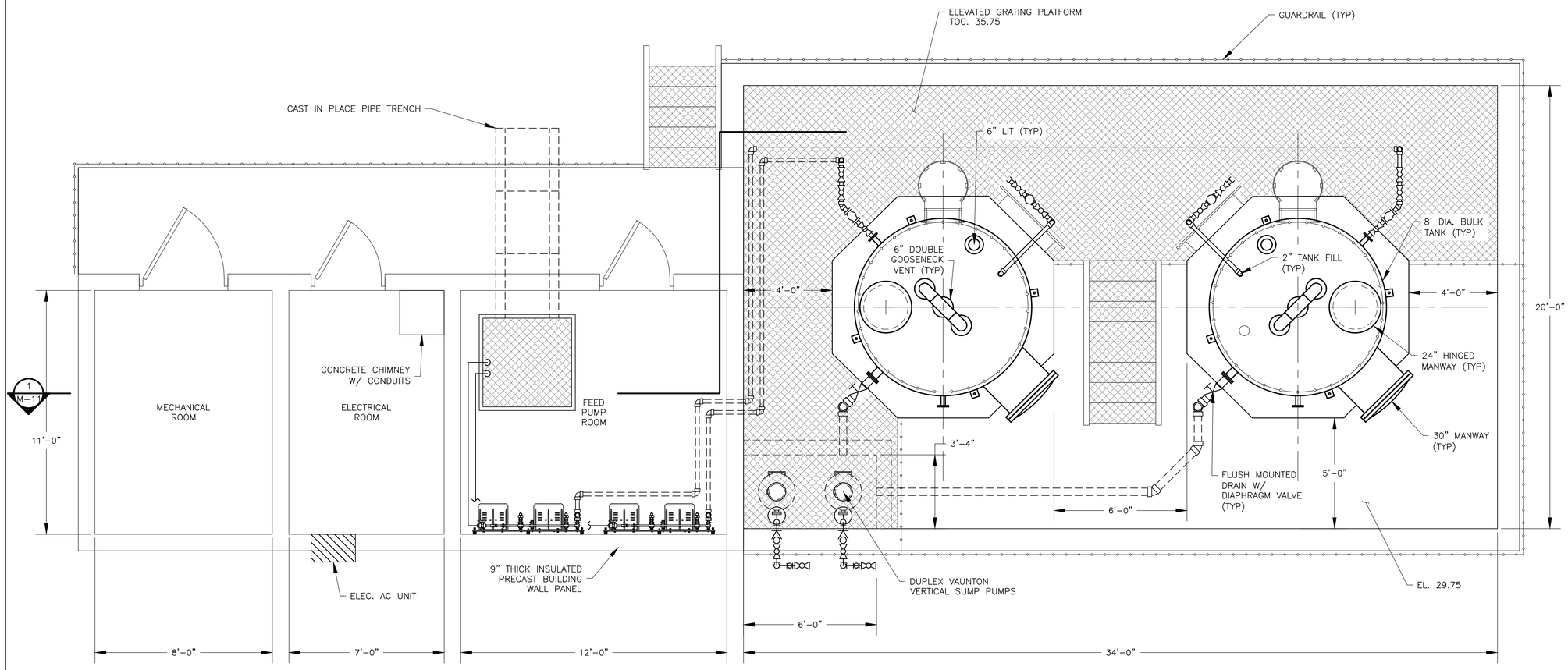
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1/2" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
M-9

FILE PATH: C:\Users\jgibson\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\M-DVMH-EDD.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 3:20 PM

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-CHEM-EDD.dwg



PLAN
3/8" = 1'-0"

N

0 1.25' 2.5' 5'
SCALE: 3/8"=1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

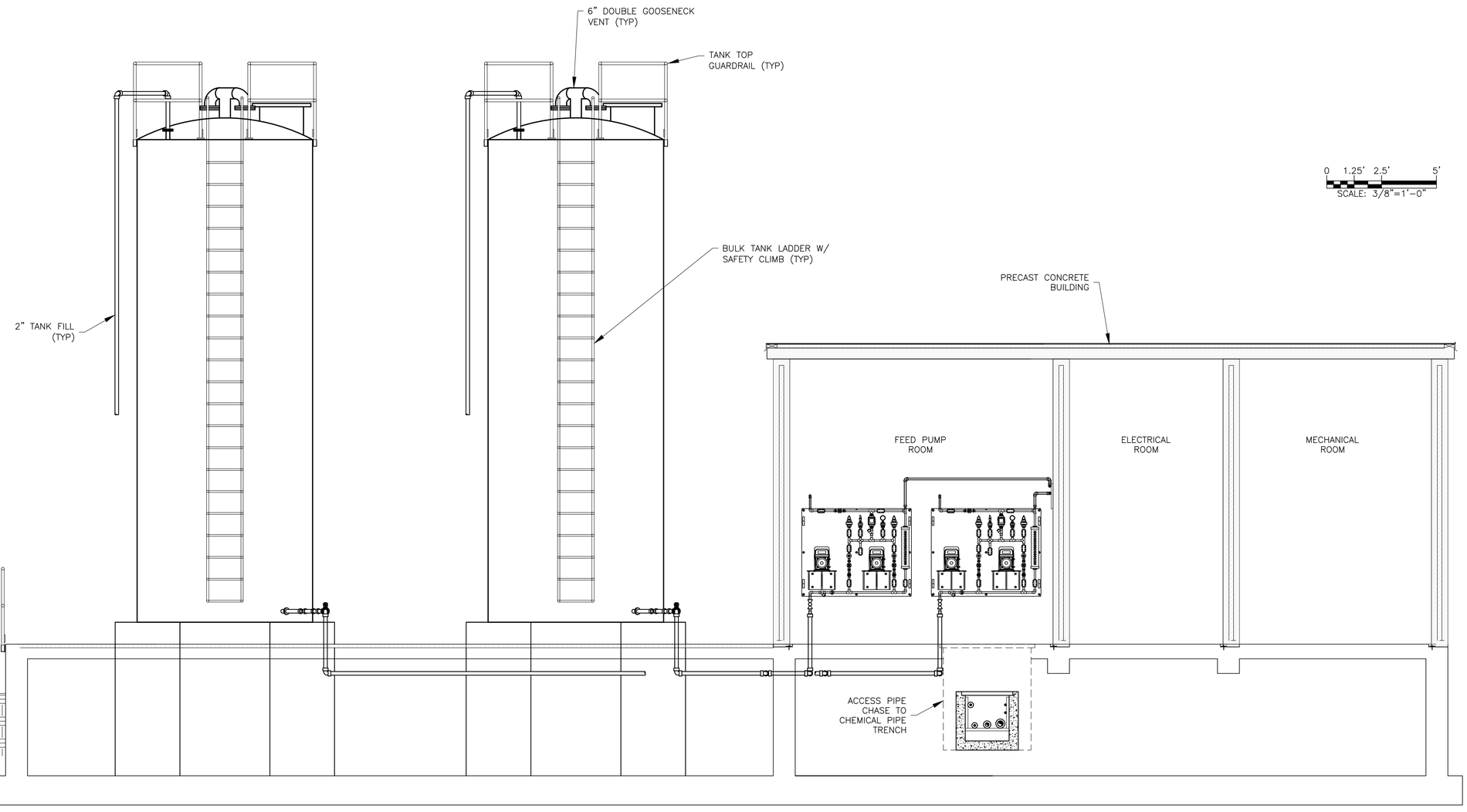
ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
M-10

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 3:22 PM



SECTION 1
3/8" = 1'-0" M-10

0 1.25' 2.5' 5'
SCALE: 3/8"=1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY:	B. NICHOLAS
DRAWN BY:	J. GIBSON
CHECKED BY:	T. REESER
REVIEWED BY:	B. NICHOLAS
APPROVED BY:	B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING SECTION SHEET 1

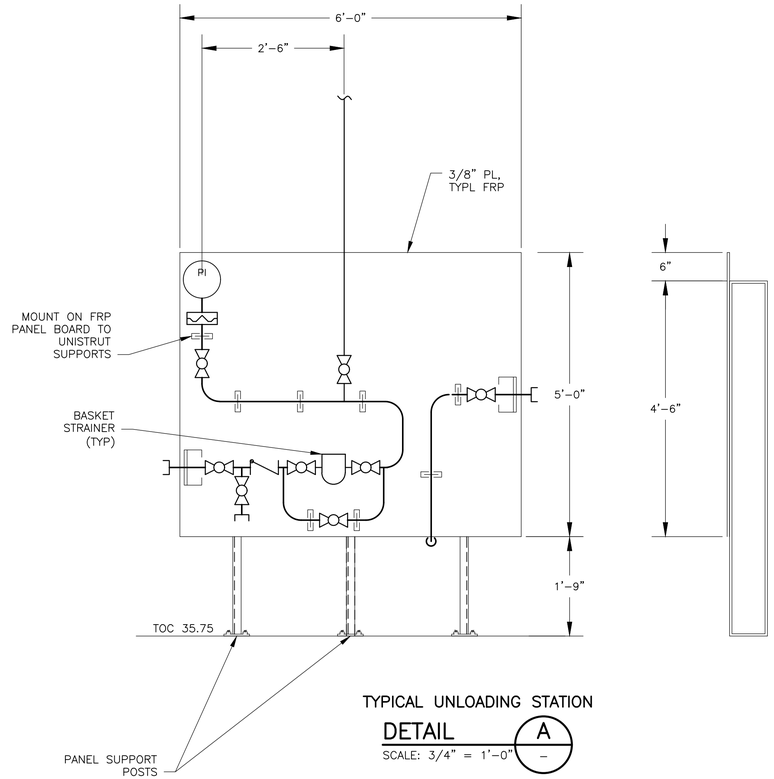
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-11

WBS NUMBER	R-001000-0035-4
DRAWING SCALE	AS SHOWN
CITY OF HOUSTON PM	NEIL BARNSDALE, P.E.
SHEET NO.	XX OF XX

FOR CITY OF HOUSTON USE ONLY

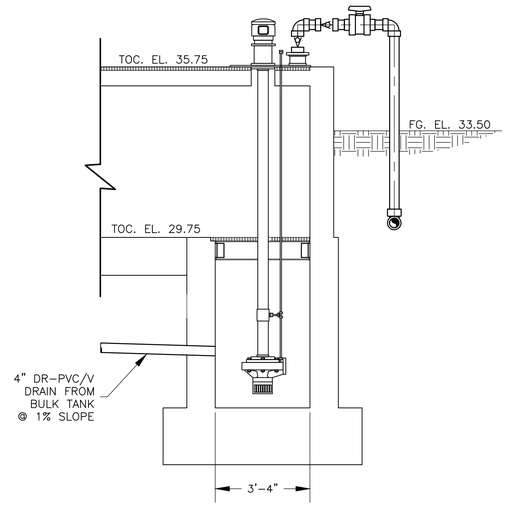
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-CHEM-EDD.dwg



TYPICAL UNLOADING STATION

DETAIL A

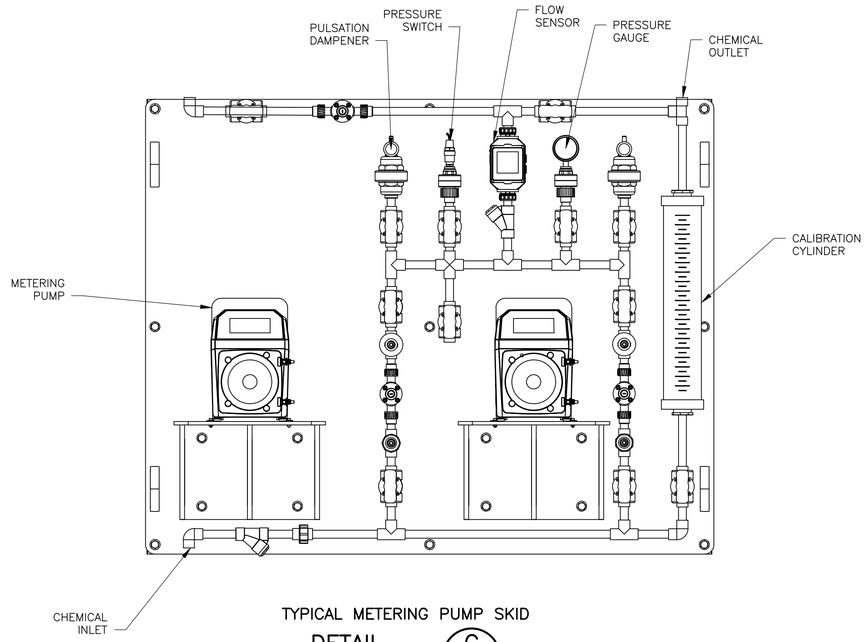
SCALE: 3/4" = 1'-0"



SUMP PUMP DETAIL

DETAIL B

SCALE: 3/8" = 1'-0"



TYPICAL METERING PUMP SKID

DETAIL C

SCALE: NTS

NO.	DATE	REVISION	APP.

ARDURRA

3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

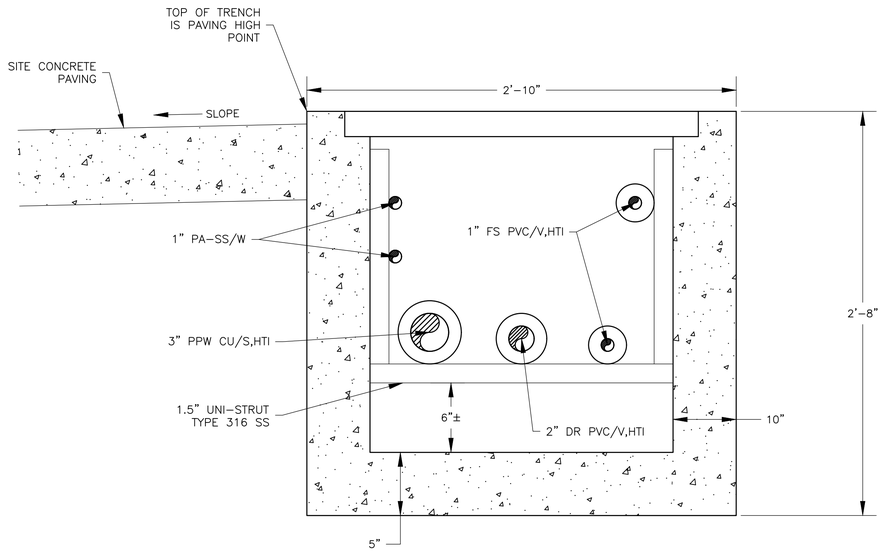
ODOR CONTROL CHEMICAL STORAGE AND FEED BUILDING DETAILS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-12

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 4:44 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-CHEM-EDD.dwg



PIPE TRENCH

DETAIL A

2" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

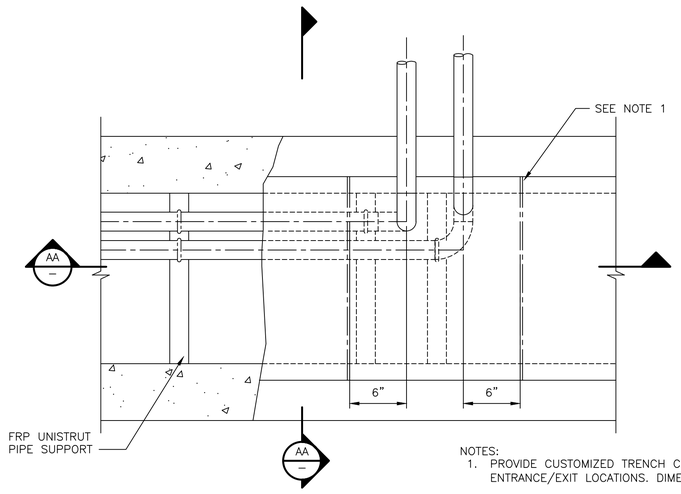
PIPE TRENCH DETAILS SHEET 1

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-13

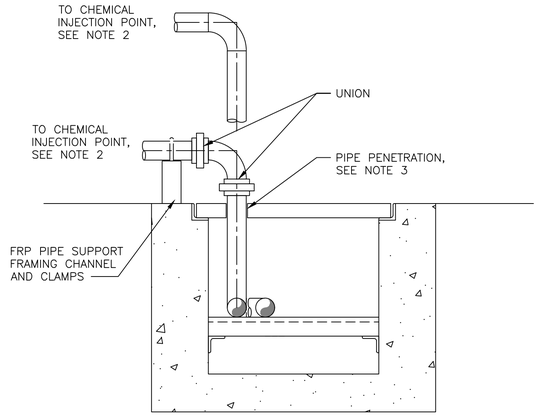
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:15 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-CHEM-EDD.dwg

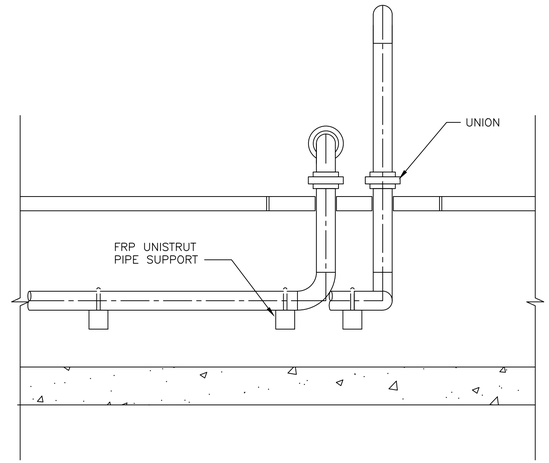


PLAN
NTS

NOTES:
1. PROVIDE CUSTOMIZED TRENCH COVER AT PIPE ENTRANCE/EXIT LOCATIONS. DIMENSIONS AS SHOWN.
2. SEE YARD PIPING PLANS AND MECHANICAL DRAWINGS FOR CHEMICAL FEED PIPE ELEVATIONS AND ADJUST TO SUIT INSTALLATION.
3. CONTRACTOR TO FIELD DRILL OPENINGS WHERE PIPE EXITS THE COVER AND PROVIDE RUBBERIZED FLASHING BOOTS AT PIPE PENETRATION.

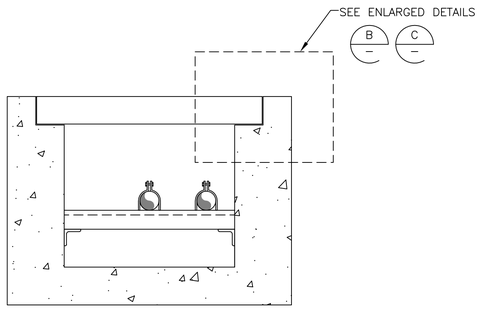


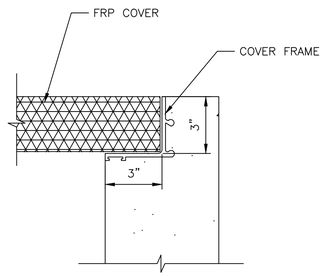
SECTION AA
NTS



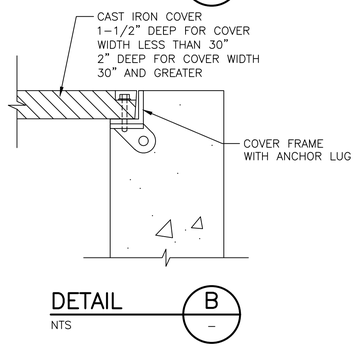
SECTION BB
NTS

TRENCH PIPE PENETRATION
DETAIL A
NTS





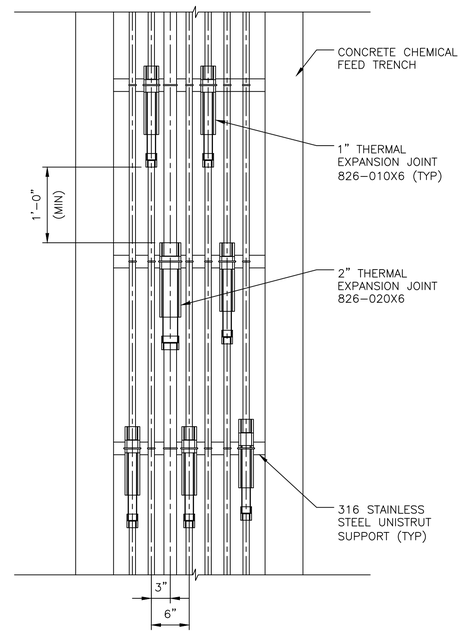
DETAIL A
NTS



DETAIL B
NTS

NOTES:
1. SEE STRUCTURAL DRAWINGS FO TRENCH DETAILS.
2. NEW CHEMICAL TRENCHES SHALL BE INSTALLED WITH COVER FRAMES PROVIDED BY TRENCH COVER MANUFACTURER. INSTALL PER MANUFACTURERS INSTRUCTION.
3. PROVIDE COVER LIFTING HANDLE. SEE SPECIFICATION 11501.

NEW CONCRETE TRENCH COVER
DETAIL B
NTS



NOTES:
1. SEE YARD PIPING PLANS FOR EXPANSION JOINT LOCATIONS. STAGGER THERMAL EXPANSION JOINTS A MINIMUM OF 12" OF FULL EXTENSION.
2. THERMAL EXPANSION JOINTS SHALL BE TRIPLE O-RING SEALED TELESCOPING DESIGN WITH 6" TRAVEL, BY SPEARS MANUFACTURER OR ENGINEER APPROVED EQUAL. SEE SPECIFICATION 15120. O-RING MATERIALS SHALL BE COMPATIBLE WITH CHEMICAL SERVICE, OR PROVIDE VITON O-RING FOR FLUORIDE CHEMICAL SERVICES AND EPDM O-RING FOR ALL REMAINING CHEMICAL SERVICES.
3. THERMAL EXPANSION JOINTS SHALL BE INSTALLED TO ENSURE THAT THE FULL EXPANSION AND CONTRACTION IS ALLOWED.
4. CONTRACTOR TO RIGIDLY SUPPORT ONE END OF THE THERMAL EXPANSION JOINT AND SUPPORT THE OTHER END TO PREVENT AXIAL MOVEMENT AND ALLOW LINEAR EXPANSION PER MANUFACTURERS RECOMMENDATION.

CHEMICAL FEED TRENCH EXPANSION JOINT
DETAIL C
NTS

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PIPE TRENCH DETAILS SHEET 2

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

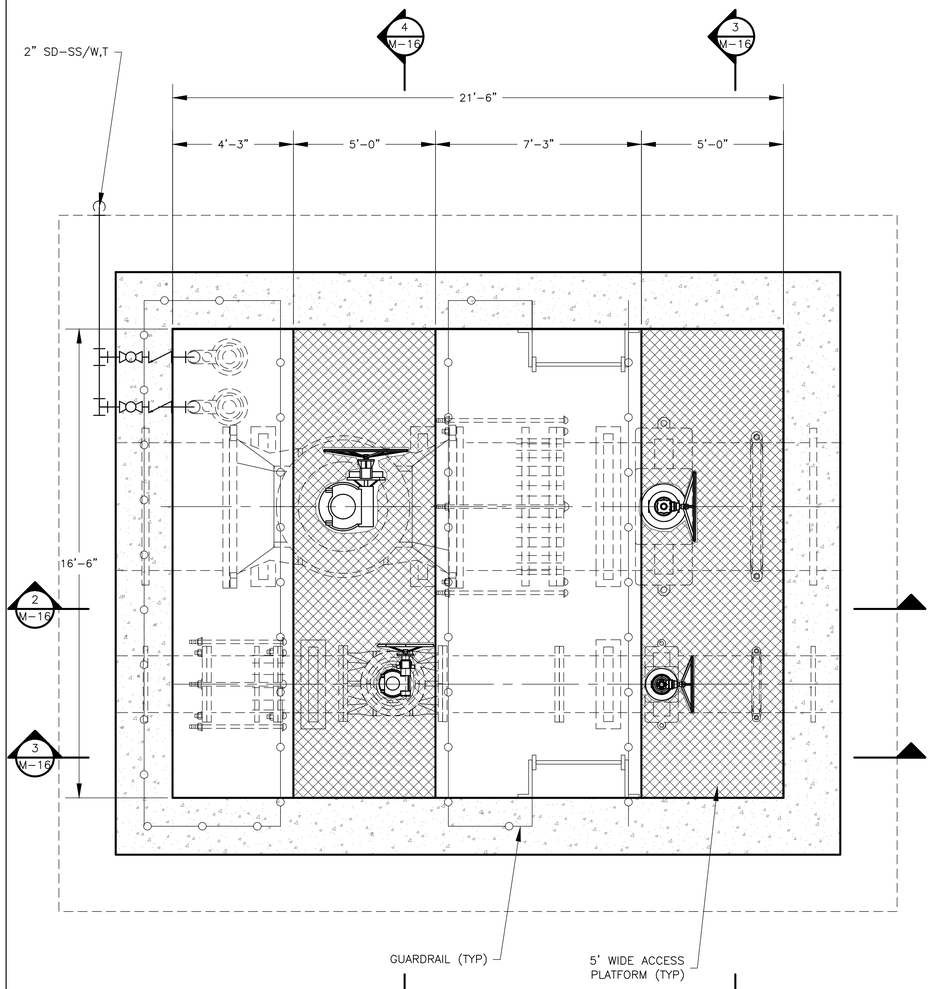
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
M-14

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:15 PM
FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-CHEM-EDD.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 4:13 PM

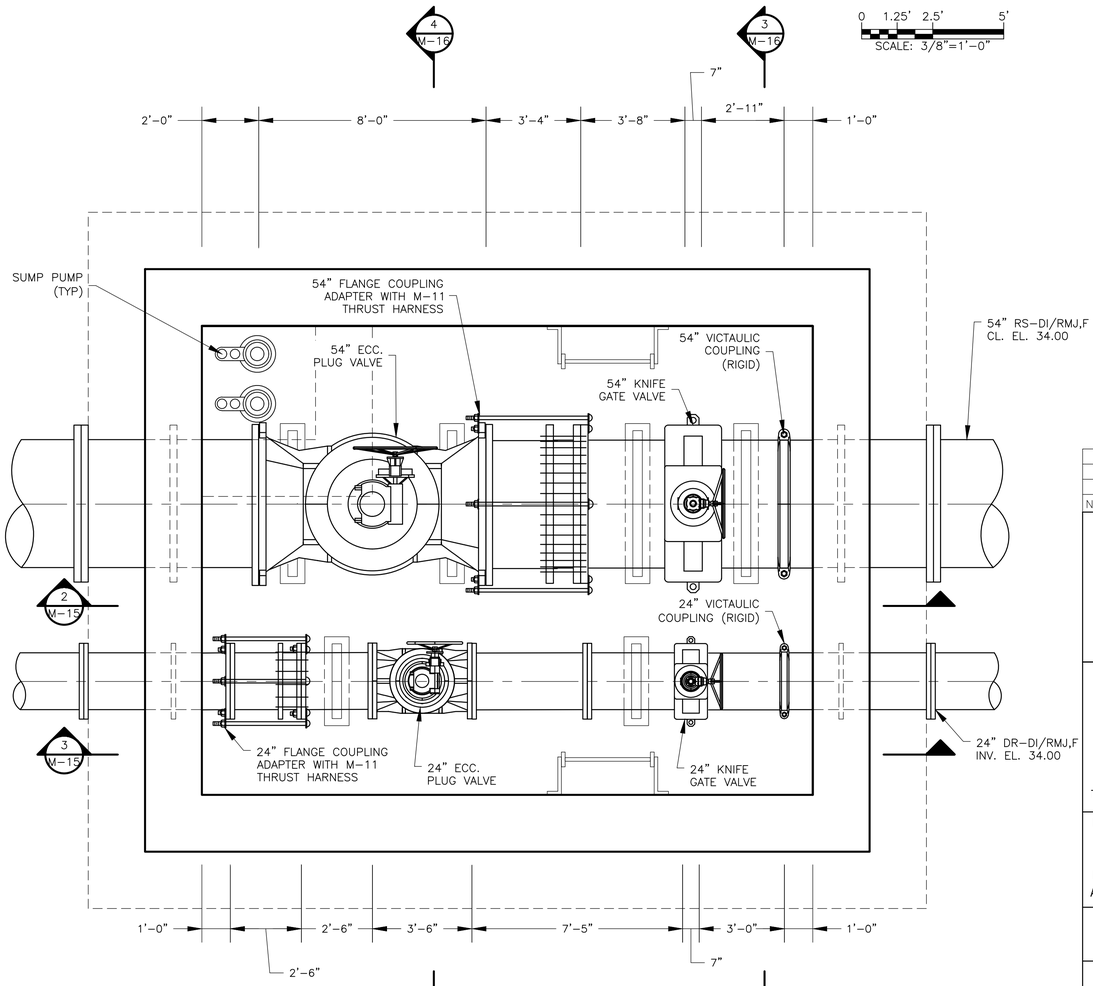
FILE PATH: C:\Users\jgibson\DC\ACCDocs\Ardurra, Inc\2024-1427\Project Files\03-Prod\03-Dwgs\M-VAULT-SCOTT.dwg



UPPER PLAN

PLAN

3/8" = 1'-0"



LOWER PLAN

PLAN

3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: XX/XX/2025

DESIGNED BY: B. NICHOLAS	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

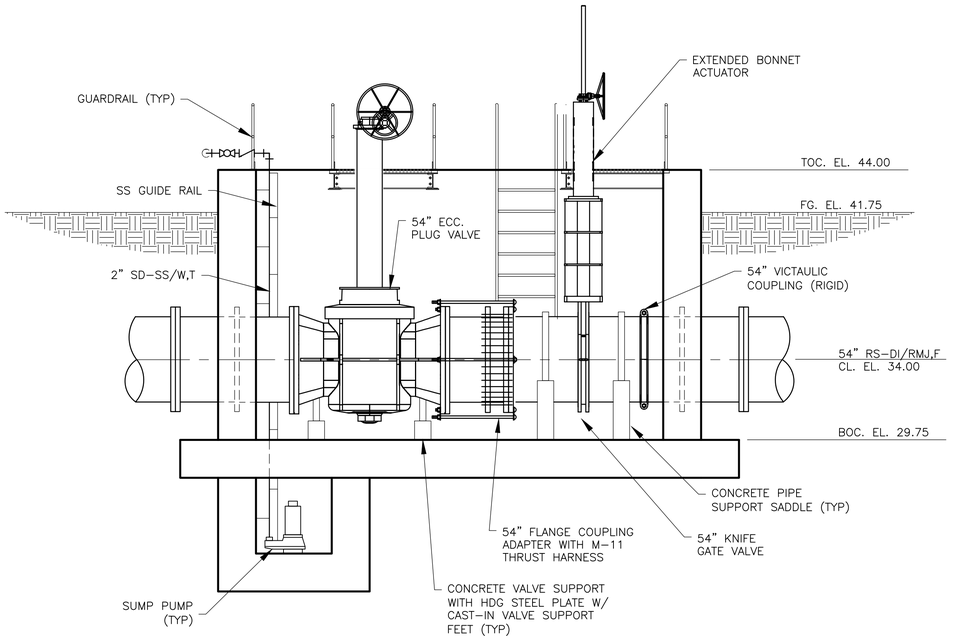
STORAGE TANK VALVE VAULT UPPER AND LOWER PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

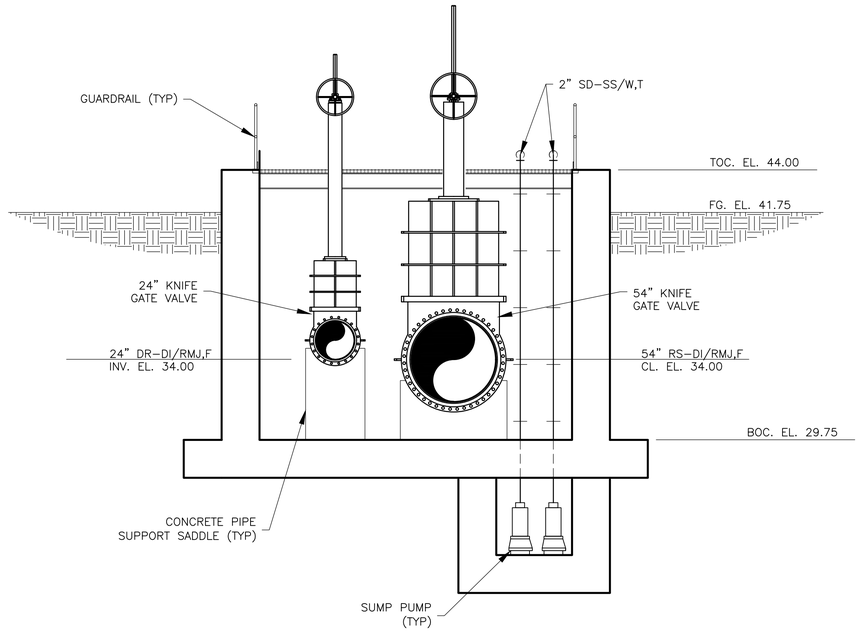
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
M-15

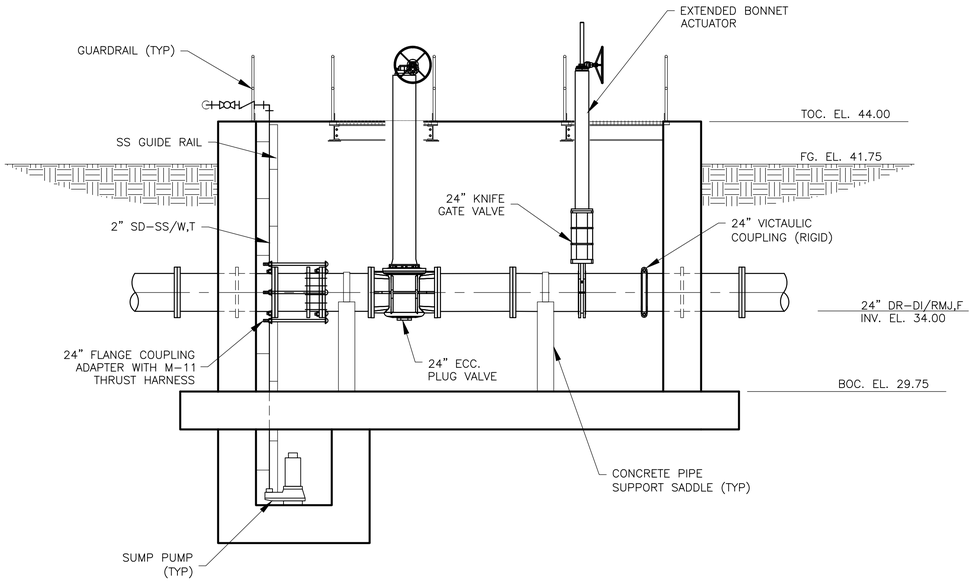
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:43 PM



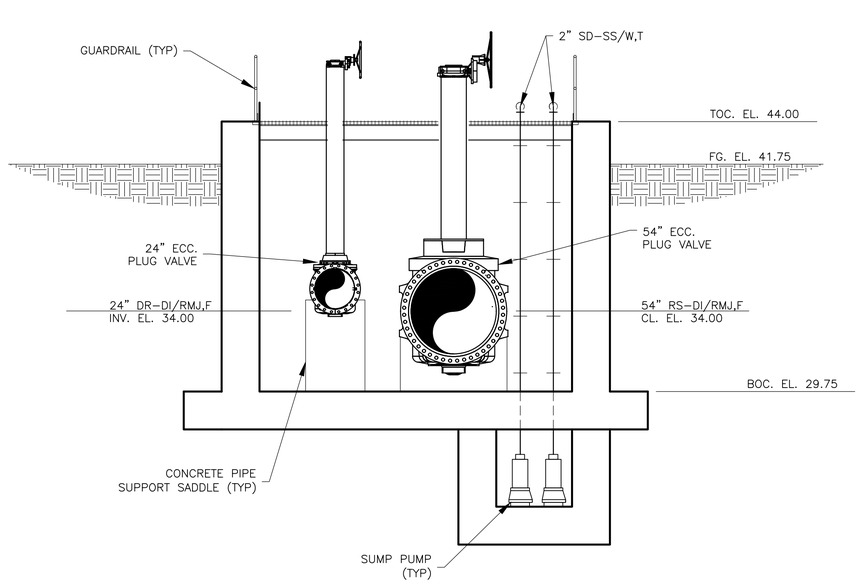
SECTION 1
1/4" = 1'-0"
M-15



SECTION 3
1/4" = 1'-0"
M-15



SECTION 2
1/4" = 1'-0"
M-15



SECTION 4
1/4" = 1'-0"
M-15

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: XX/XX/2025

DESIGNED BY: B. NICHOLAS	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

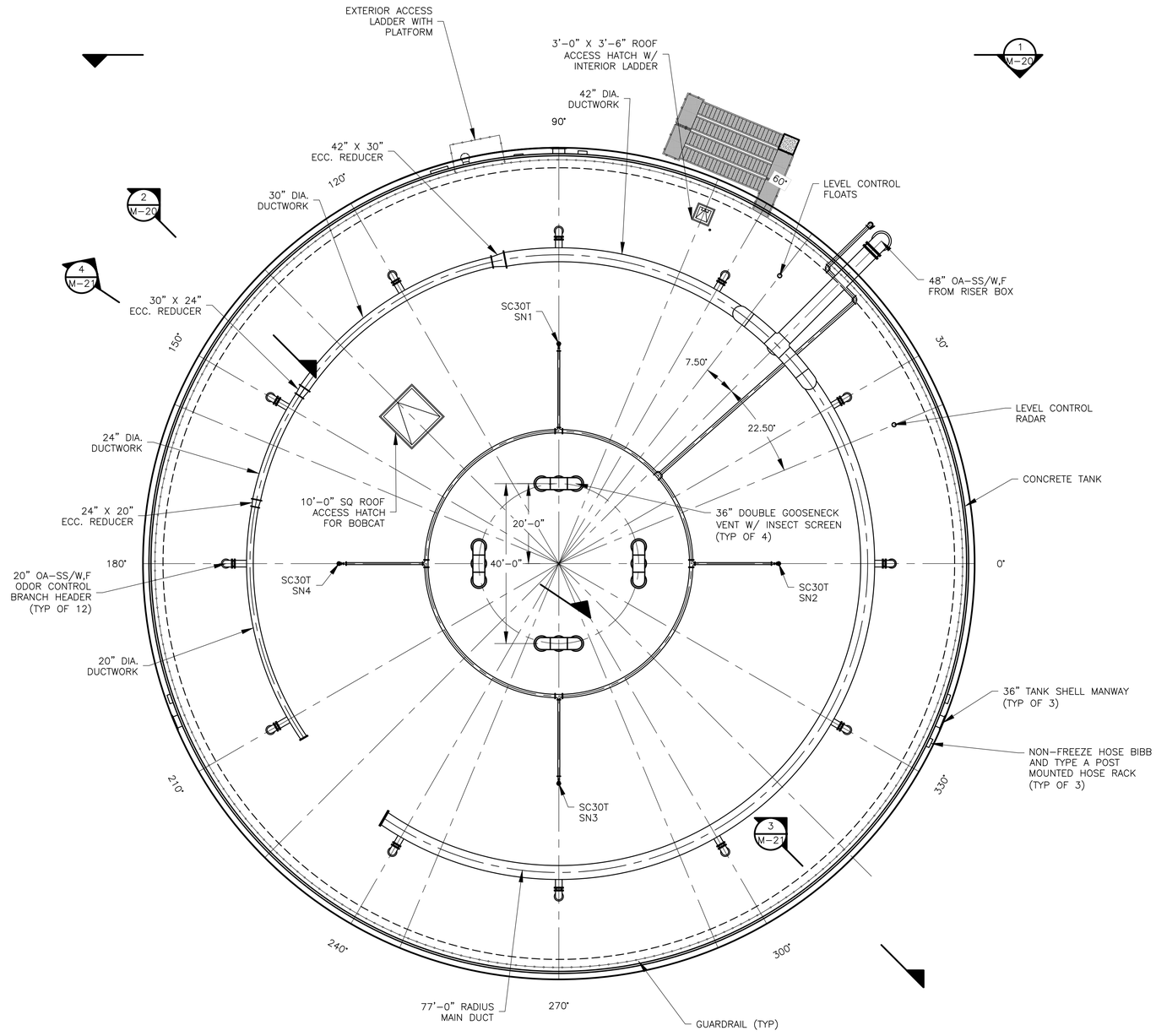
STORAGE TANK VALVE VAULT SECTIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-16

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1/4" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-VAULT-SCOTT.dwg



PLAN
1/16" = 1'-0"

N

0 5' 10' 20'
SCALE: 1/16"=1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

12.50 MG STORAGE TANK NO. 1 UPPER PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1/16" = 1'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

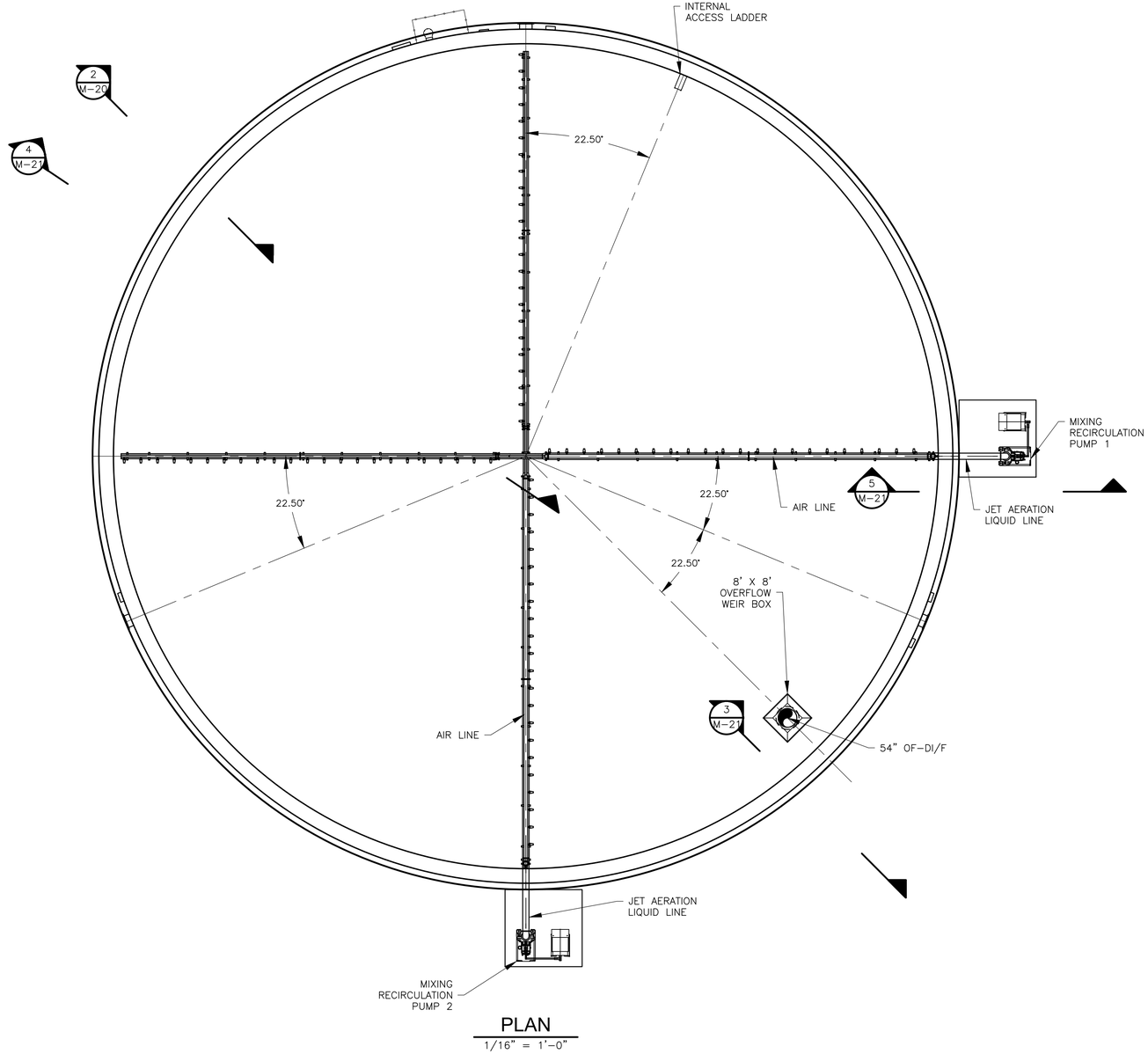
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-17

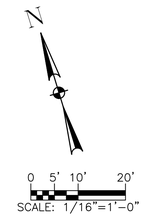
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM
FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM

FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg



PLAN
1/16" = 1'-0"



SCALE: 1/16"=1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

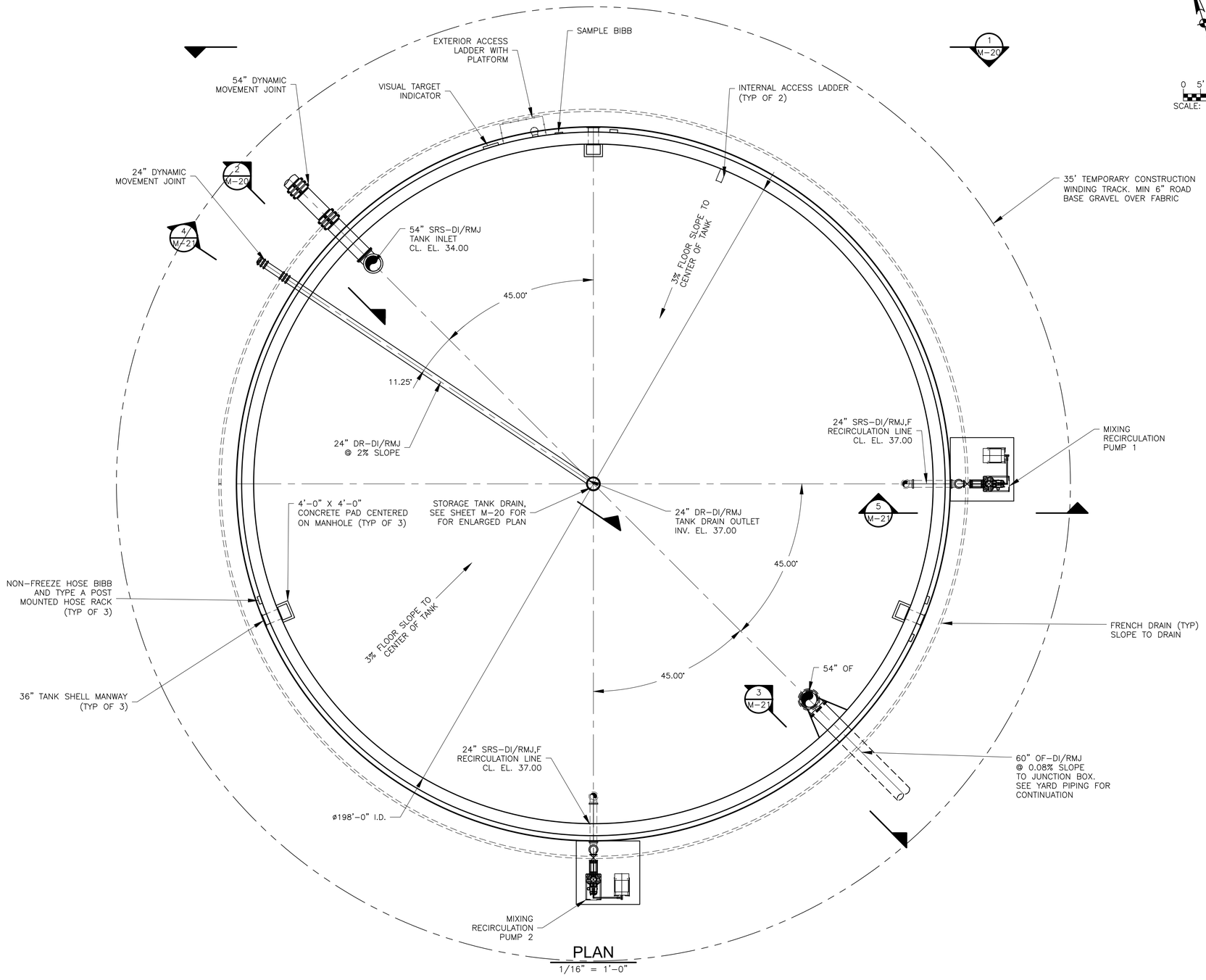
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

12.50 MG STORAGE TANK NO. 1 INTERMEDIATE PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-18

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1/16" = 1'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	



PLAN
1/16" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

12.50 MG STORAGE TANK NO. 1 LOWER PLAN

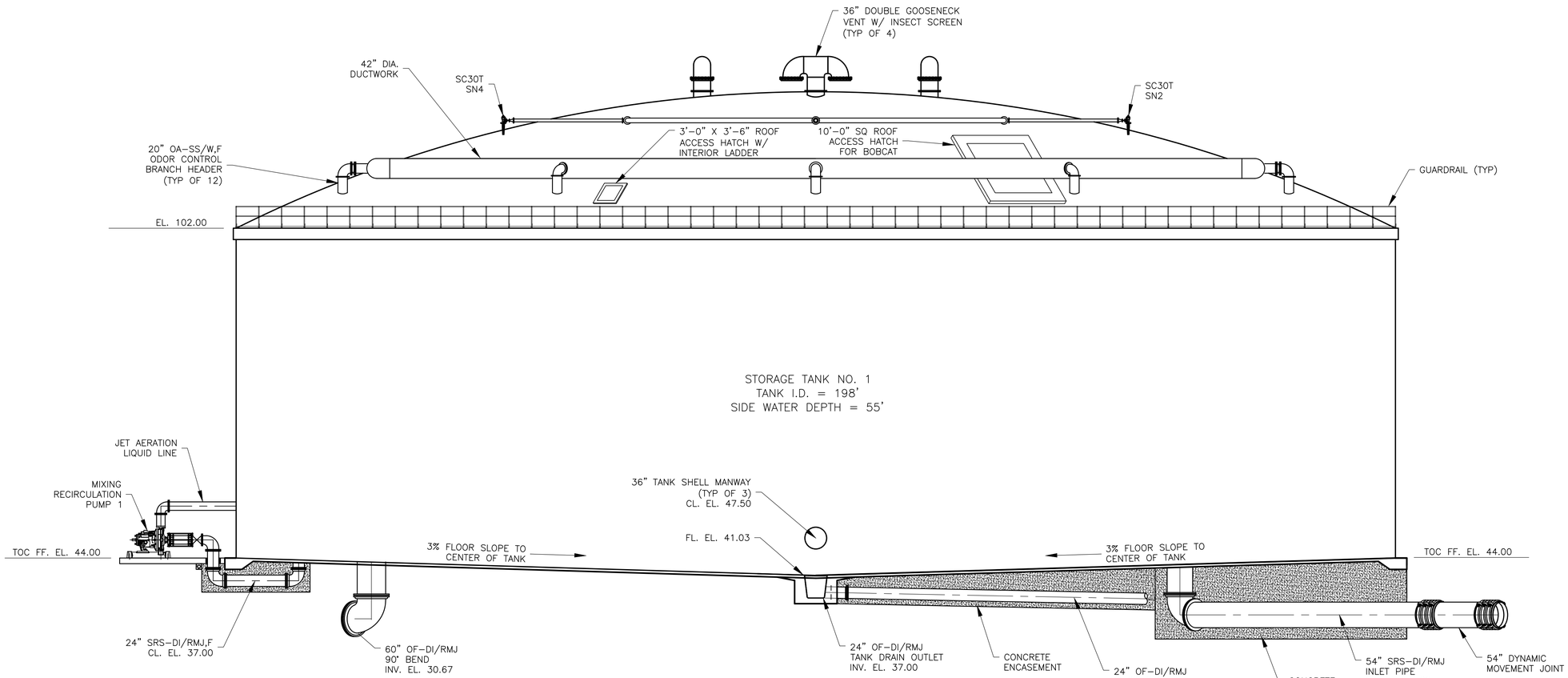
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-19

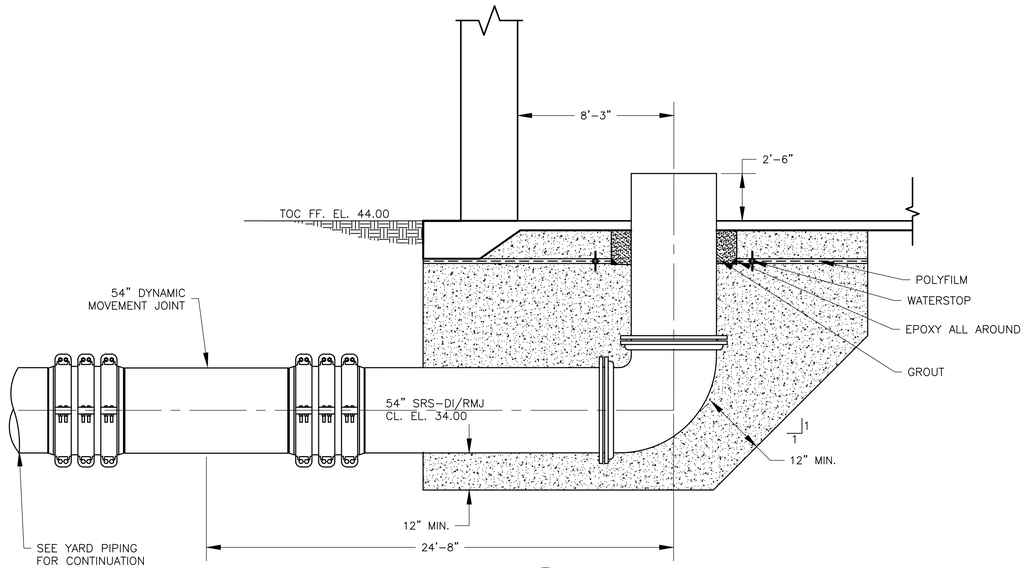
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1/16" = 1'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM
FILE PATH: C:\Users\Jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM



SECTION 1 (M-17)
3/32" = 1'-0"



SECTION 2 (M-17)
1/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

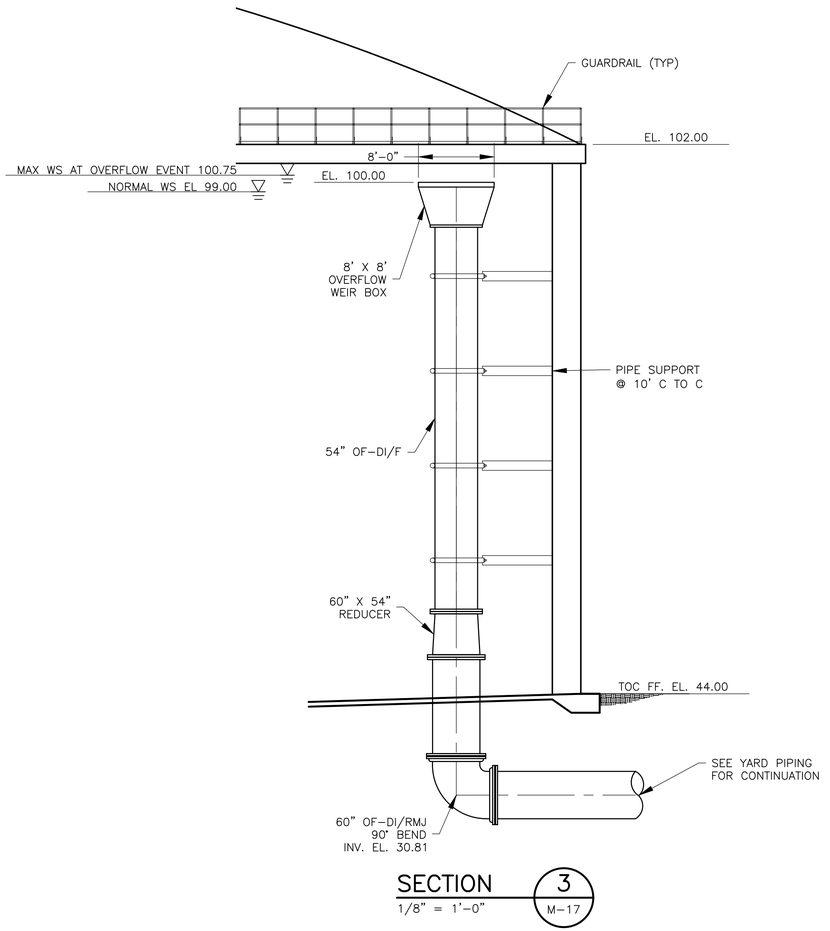
12.50 MG STORAGE TANK NO. 1 SECTIONS SHEET 1

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

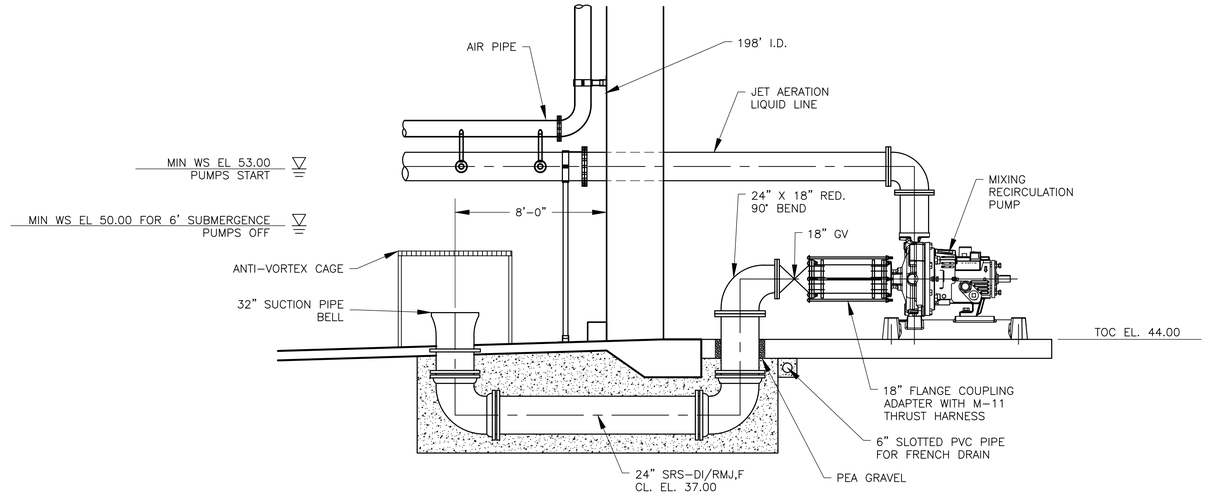
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
M-20

FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg

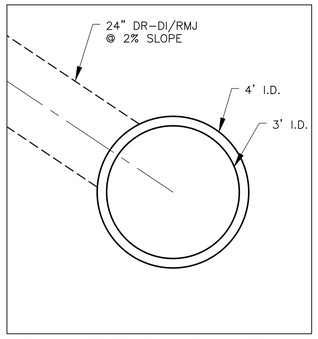


SECTION 3
1/8" = 1'-0"



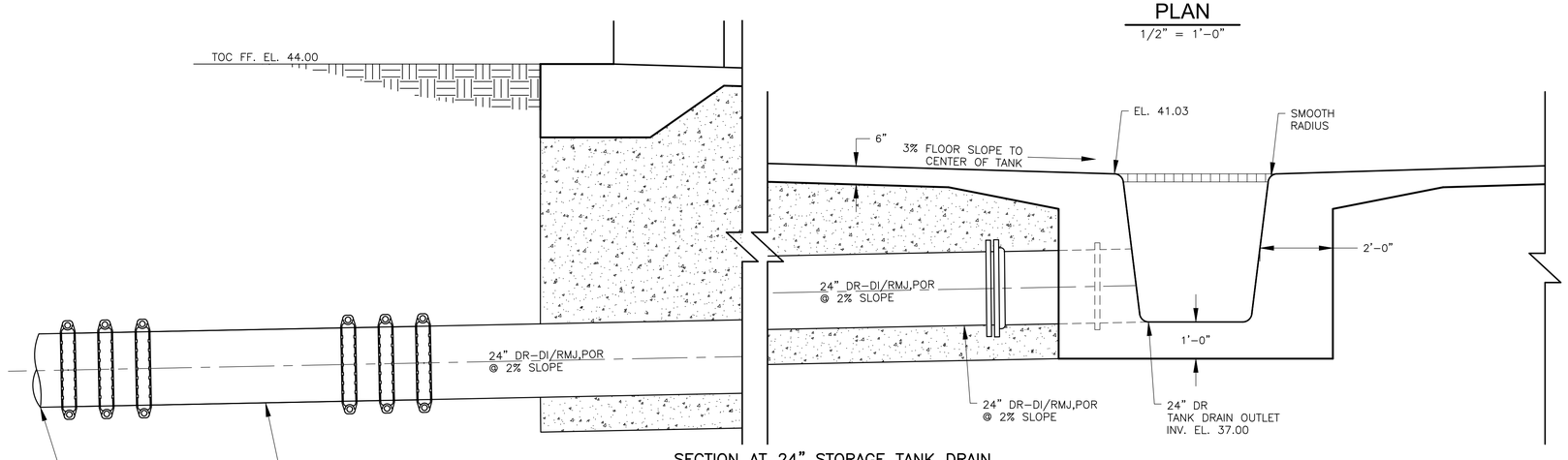
MIXING RECIRCULATION PUMP TYPICAL SECTION

SECTION 5
1/4" = 1'-0"
M-17



PLAN AT STORAGE TANK DRAIN

PLAN
1/2" = 1'-0"



SECTION AT 24" STORAGE TANK DRAIN

SECTION 4
1/2" = 1'-0"
M-17

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

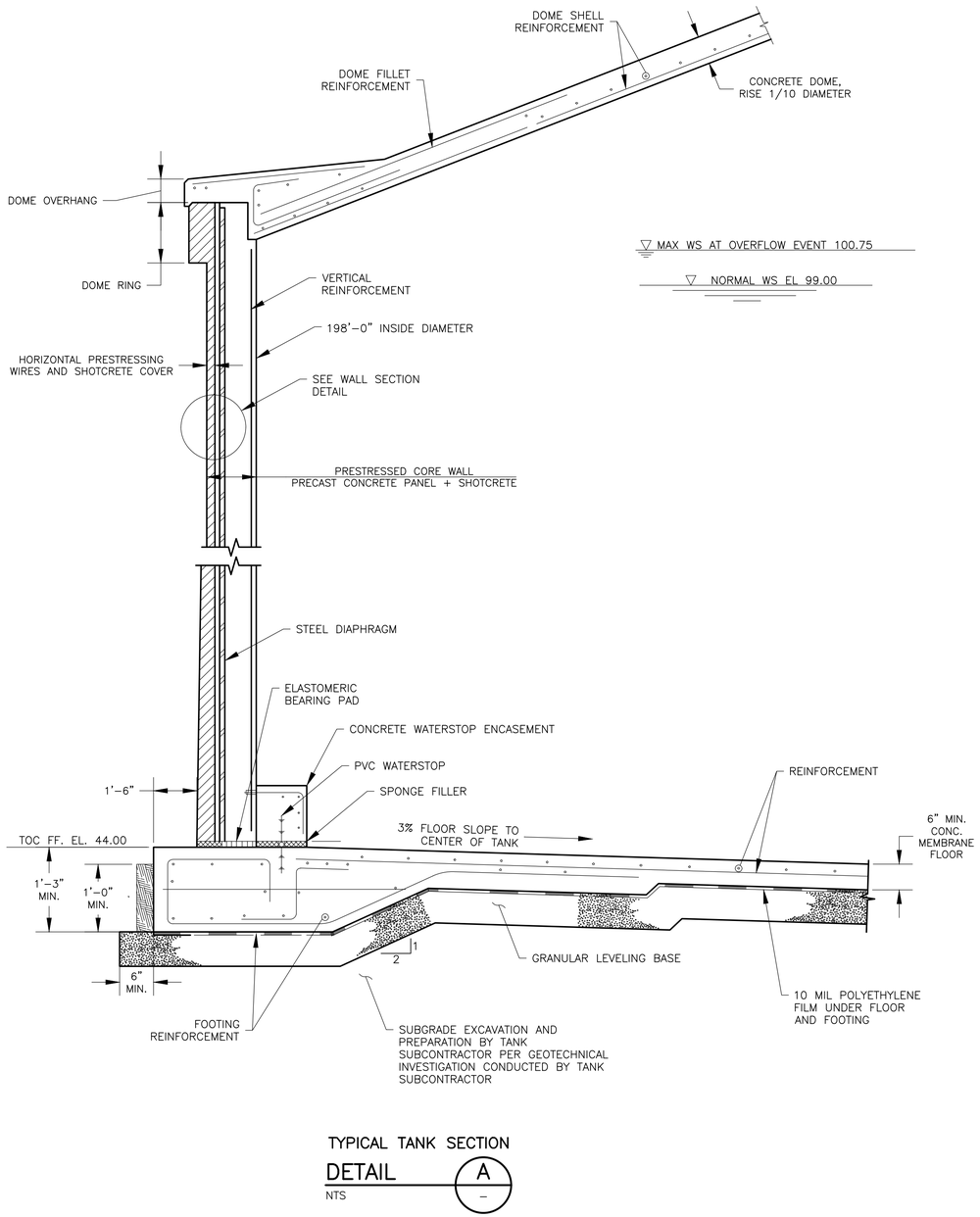
12.50 MG STORAGE TANK NO. 1 SECTIONS SHEET 2

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
M-21

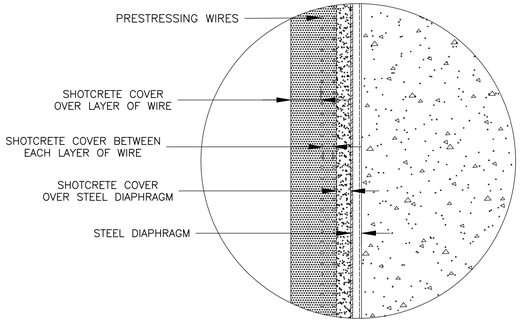
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg



TYPICAL TANK SECTION

DETAIL A

NTS



WALL SECTION

DETAIL B

NTS

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

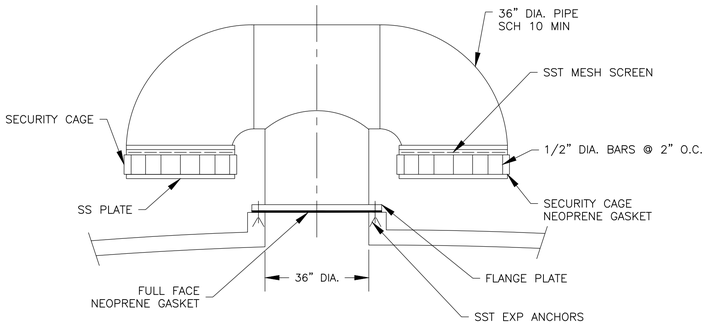
12.50 MG STORAGE TANK NO. 1 WALL SECTIONS SHEET 3

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
M-22

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM
FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg

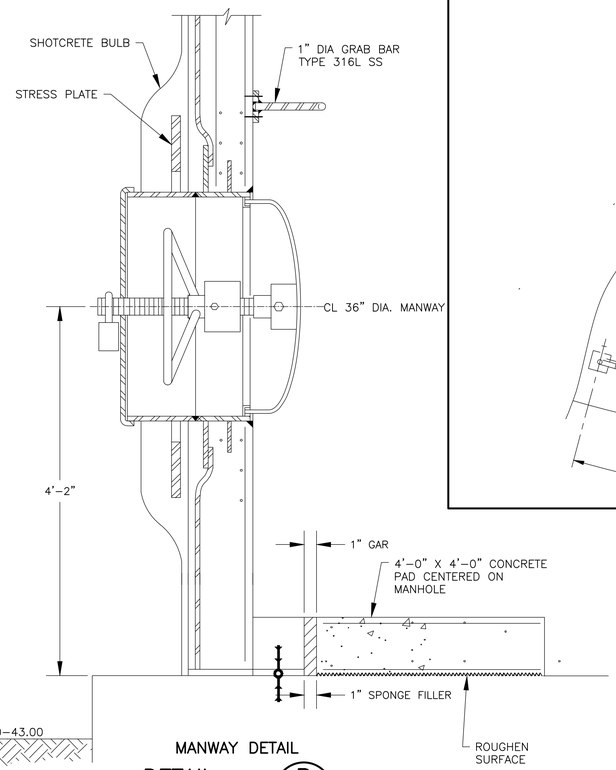


ROOF VENT NOTES:

1. VENT TO BE FABRICATED FROM THIN WALL SCH 10 STAINLESS STEEL PIPE.
2. VENT TO BE POSITIONED PLUMB.
3. SECURE VENT FLANGES WITH SS 316 BOLTING HARDWARE.
4. PROVIDE 3/8" DIA. SS CABLE SECURED AT VENT AND CENTER BOLLARD; 1000 LB CAPACITY. SEE SPECIFICATION FOR ADDITIONAL DETAIL.
5. MINIMUM VENT SIZE REQUIRED, TANK MANUFACTURER SHALL INCREASE VENT SIZE IF REQUIRED DUE TO INTERIOR PRESSURIZATION / VACUUM EXCEEDING MANUFACTURER'S TANK LIMITS BASED IN DESIGN INFORMATION / OUTFLOW RATES.

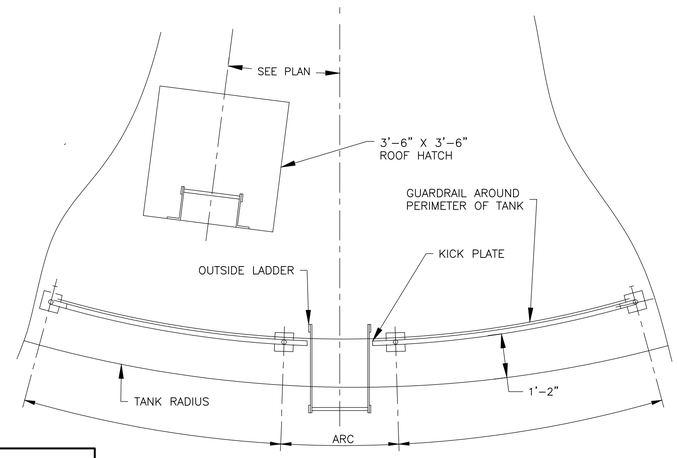
DOUBLE GOOSENECK VENT DETAIL

DETAIL A
NTS –



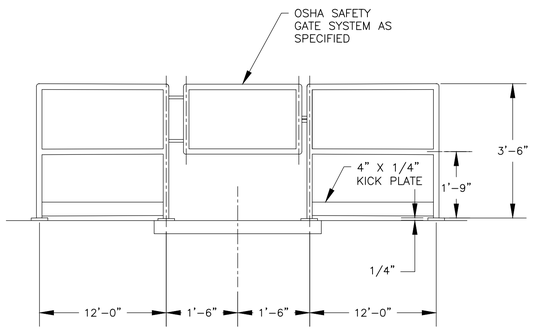
MANWAY DETAIL

DETAIL B
NTS –



PLAN AT HATCH SAFETY RAILING

DETAIL C
NTS –



SAFETY GATE

DETAIL D
NTS –

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

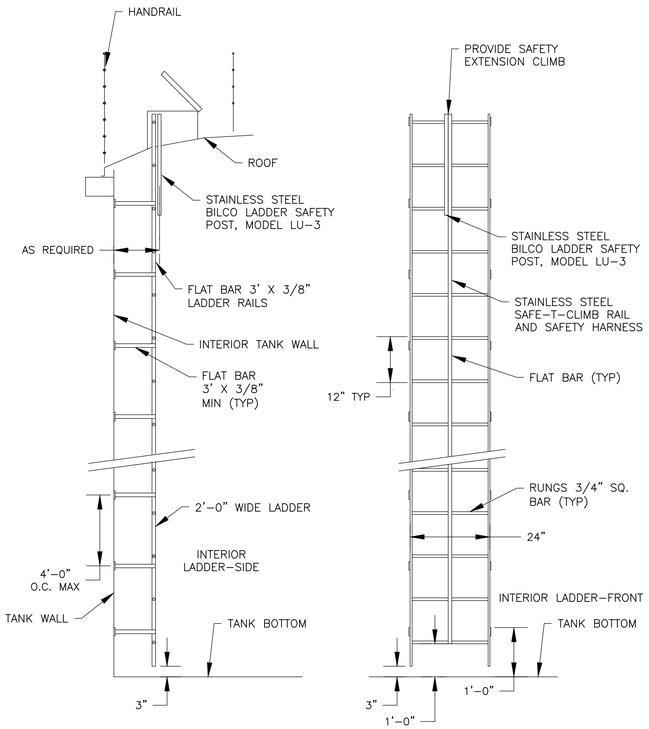
12.50 MG STORAGE TANK NO. 1 DETAILS SHEET 1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-23

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM
FILE PATH: C:\Users\JGibson\DC\ACCDocs\ardurra, Inc\2024-14427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg



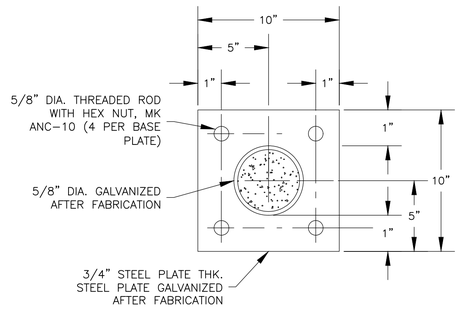
NOTE:

1. LADDER SHALL BE 316L STAINLESS STEEL.
2. ALL ALUMINUM SURFACE IN CONTACT WITH CONCRETE SHALL RECEIVE A PVC SHIM.
3. LADDER SHALL BE CONNECTED TO TANK USING TYPE 316 STAINLESS STEEL WEDGE ANCHOR

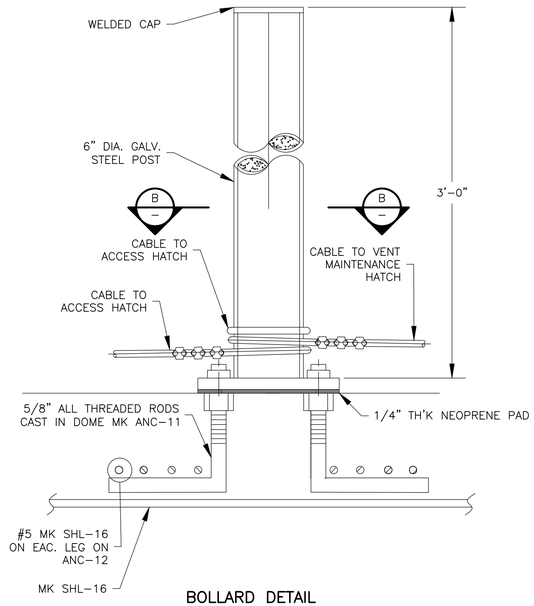
INTERIOR LADDER DETAIL

DETAIL A

NTS



SECTION B-B



BOLLARD DETAIL

DETAIL B

NTS

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

12.50 MG STORAGE TANK NO. 1 DETAILS SHEET 2

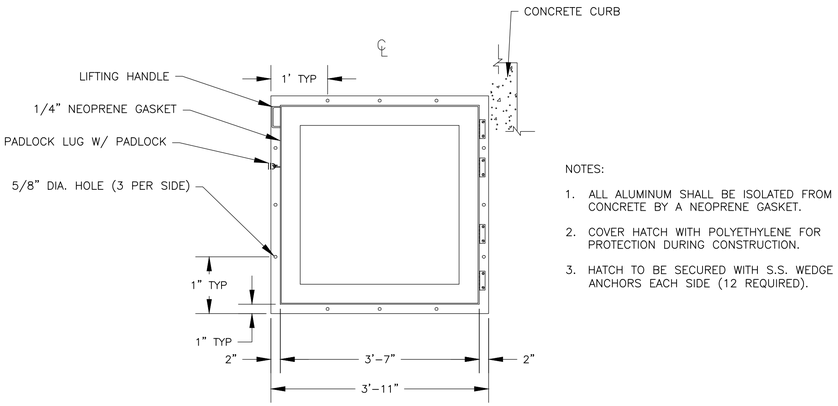
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-24

WBS NUMBER
R-001000-0035-4
DRAWING SCALE
AS SHOWN
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.
SHEET NO. XX OF XX

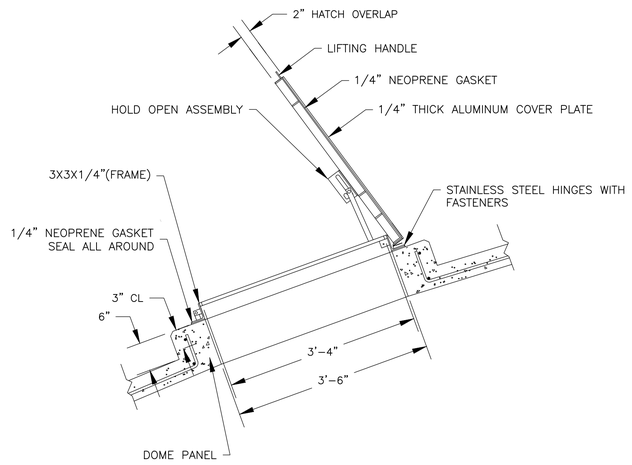
FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg



NOTES:

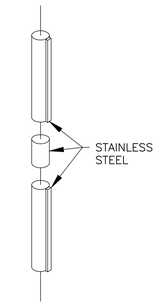
1. ALL ALUMINUM SHALL BE ISOLATED FROM CONCRETE BY A NEOPRENE GASKET.
2. COVER HATCH WITH POLYETHYLENE FOR PROTECTION DURING CONSTRUCTION.
3. HATCH TO BE SECURED WITH S.S. WEDGE ANCHORS EACH SIDE (12 REQUIRED).



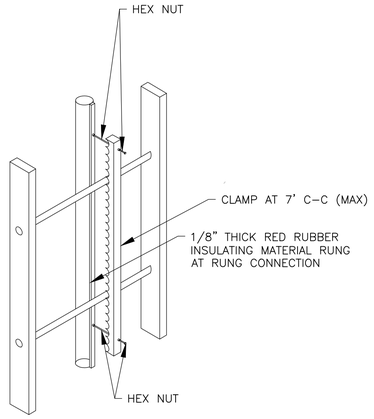
DOME HATCH

DETAIL A

NTS



RAIL SPLICE



LADDER RUNG CLAMP

DETAIL

DETAIL B

NTS

NO.	DATE	REVISION	APP.

ARDURRA

3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
B.W. NICHOLAS
TEXAS P.E. NO. 83349
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

12.50 MG STORAGE TANK NO. 1 DETAILS SHEET 3

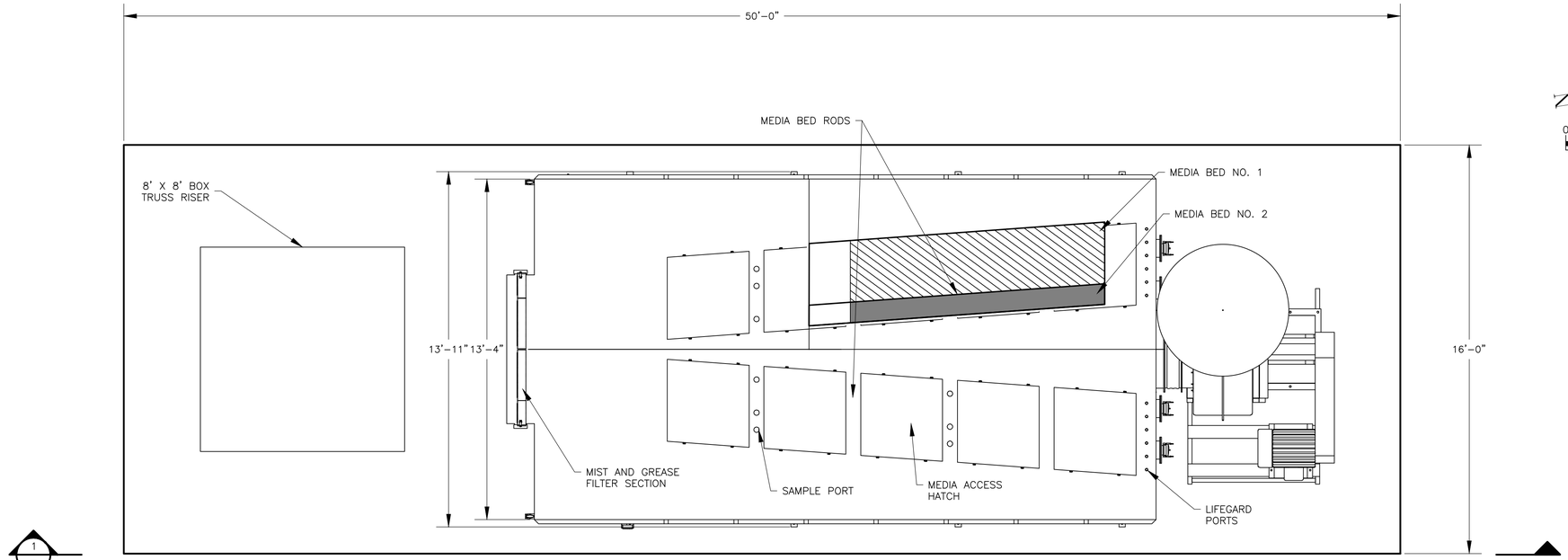
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

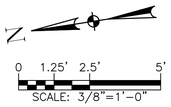
DWG NO
M-25

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-GST-SCOTT.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:16 PM

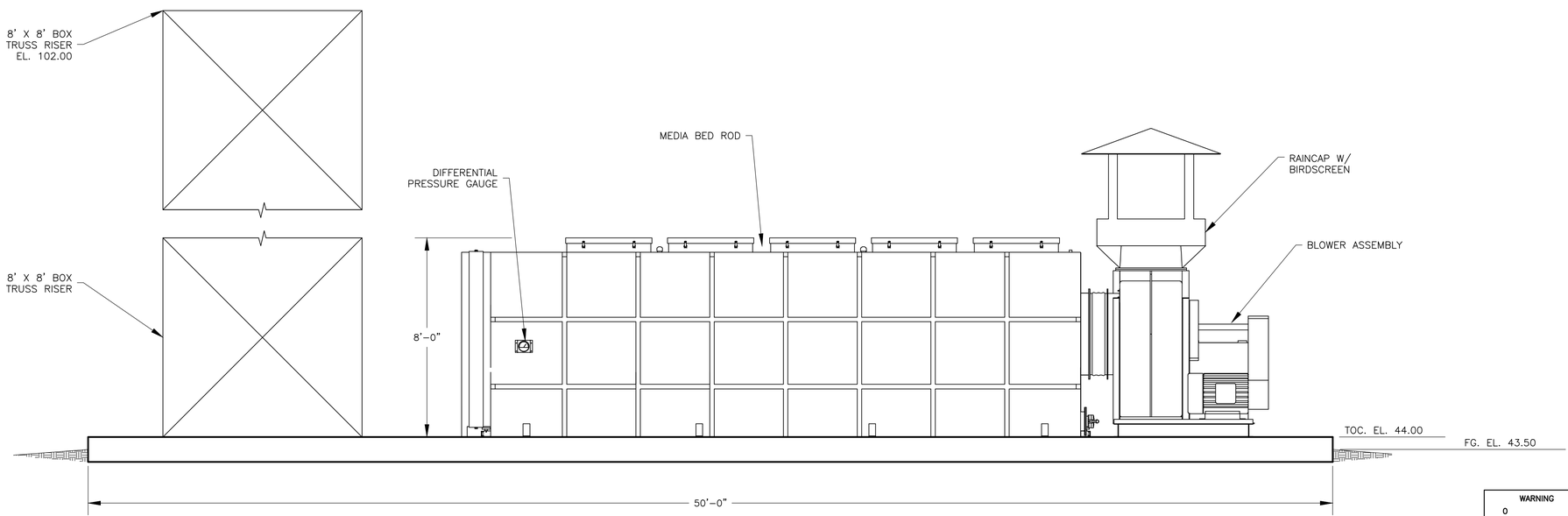




1
–

STORAGE TANK NO. 1– ACTIVATED CARBON SYSTEM ODOR CONTROL PLAN

PLAN
3/8" = 1'-0"



STORAGE TANK NO. 1– ACTIVATED CARBON SYSTEM ODOR CONTROL SECTION

SECTION 1 / –
3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

STORAGE TANK ODOR CONTROL PLAN AND SECTION

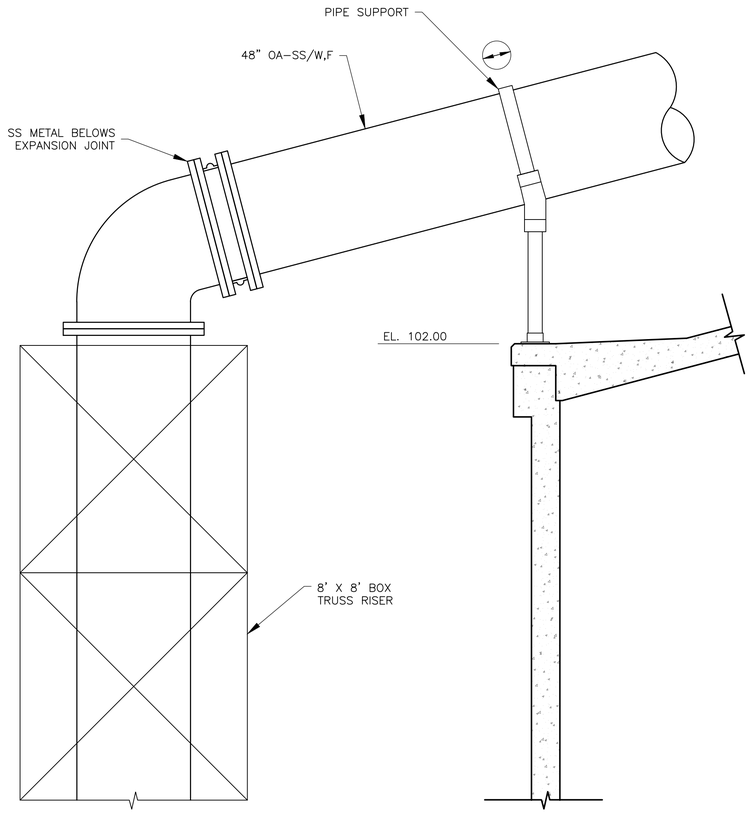
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M–27

WBS NUMBER	R–001000–0035–4
DRAWING SCALE	3/8" = 1'-0"
CITY OF HOUSTON PM	NEIL BARNSDALE, P.E.
SHEET NO.	XX OF XX

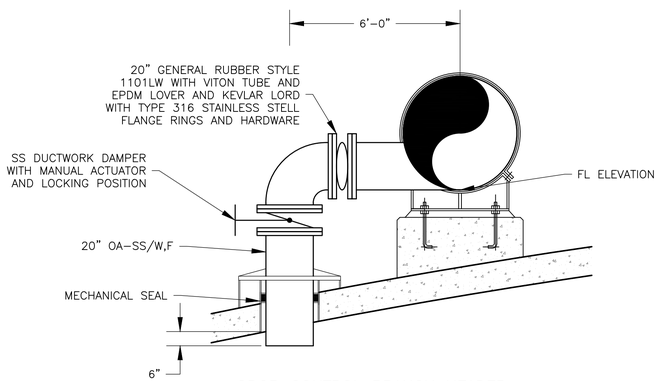
FOR CITY OF HOUSTON USE ONLY

FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-ODOR-SCOTT.dwg



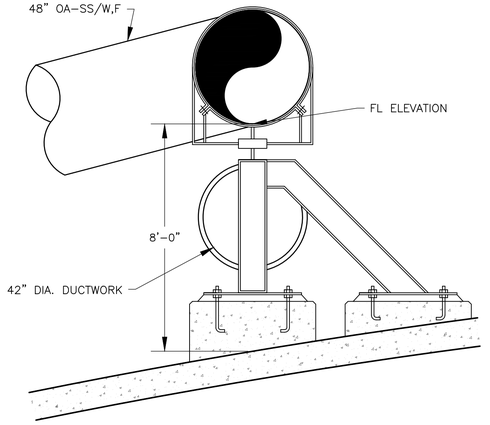
48" DIA. ODOR CONTROL DUCTWORK TRANSITION TO TANK ROOF

DETAIL A
3/8" = 1'–0"



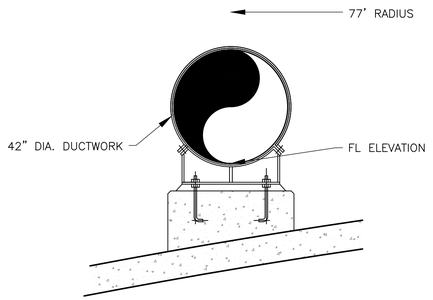
ODOR CONTROL BRANCH HEADER

DETAIL B
3/8" = 1'–0"



ODOR CONTROL DUCTWORK MAIN AIR HEADER TO MAIN BRANCH

DETAIL C
3/8" = 1'–0"



ODOR CONTROL DUCTWORK SUPPORT

DETAIL D
3/8" = 1'–0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

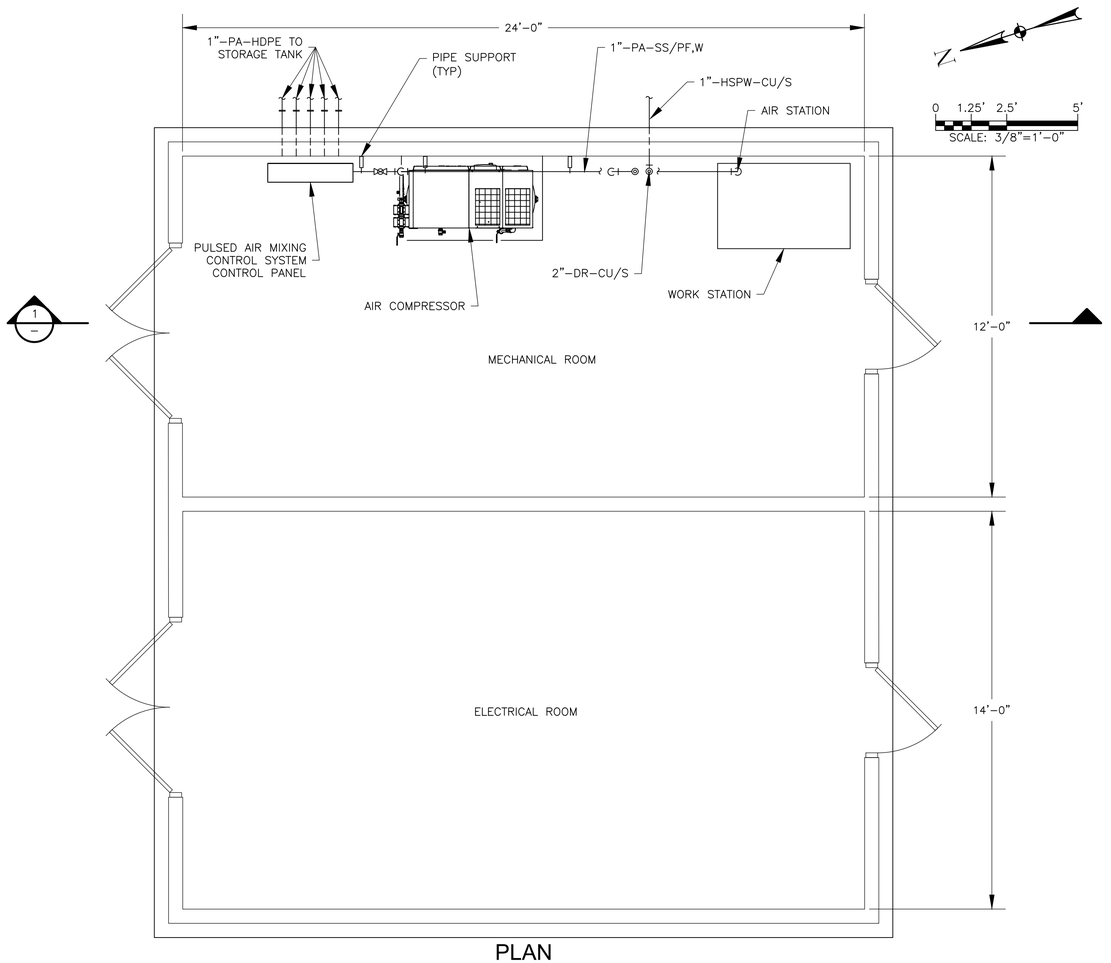
STORAGE TANK ODOR CONTROL DETAILS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

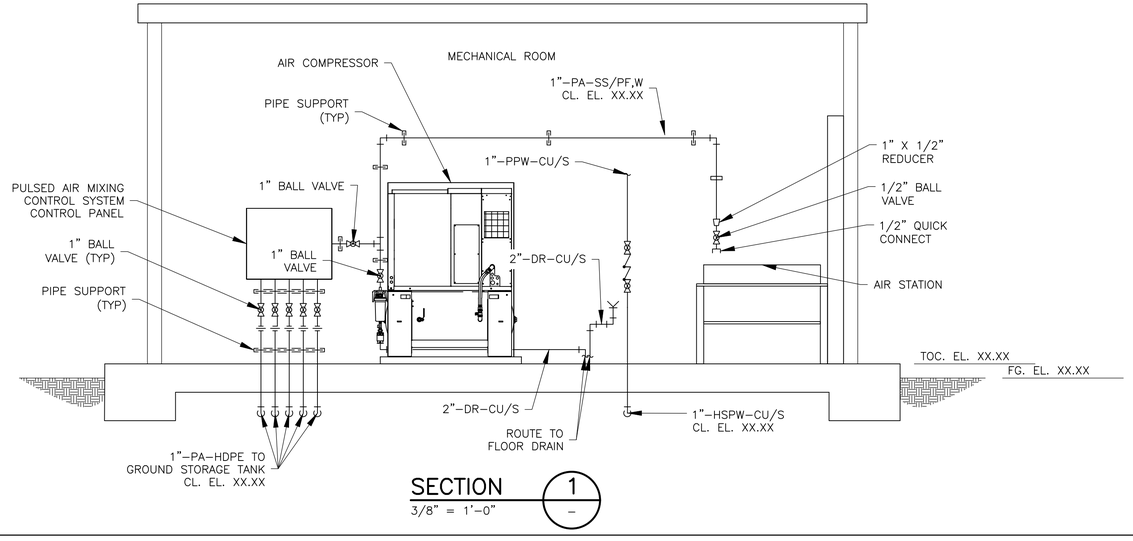
DWG NO
M–28

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
AS SHOWN	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:17 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024–1427\project Files\03–Prod\03–Dwgs\M–ODOR–SCOTT.dwg



PLAN
3/8" = 1'-0"



SECTION 1 –
3/8" = 1'-0"

NOTES:

1. CONTRACTOR TO COORDINATE WITH EQUIPMENT MANUFACTURER ON THE INSTALLATION OF THE AIR COMPRESSOR PACKAGE AND PULSED AIR MIXING SYSTEM CONTROL PANEL.
2. PROPOSED STAINLESS STEEL AIR PIPING SHALL BE TYPE 304 STAINLESS STEEL.
3. EACH STAINLESS STEEL AIR PIPELINE PENETRATING BOTH THE FLOOR SLAB AND GRADE BEAM SHALL BE ONE SINGLE WELDED PIECE TO PREVENT FUTURE LEAKS.
4. HDPE FOR UNDERGROUND USE ONLY. USE ASAHI-AMERICA AIR PRO COMPRESSED AIR PIPING SYSTEM. CONTRACTOR HAS OPTION TO SUE TYPE 316L STAINLESS STEEL STD. PIPE WALL THICKNESS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: B. NICHOLAS	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

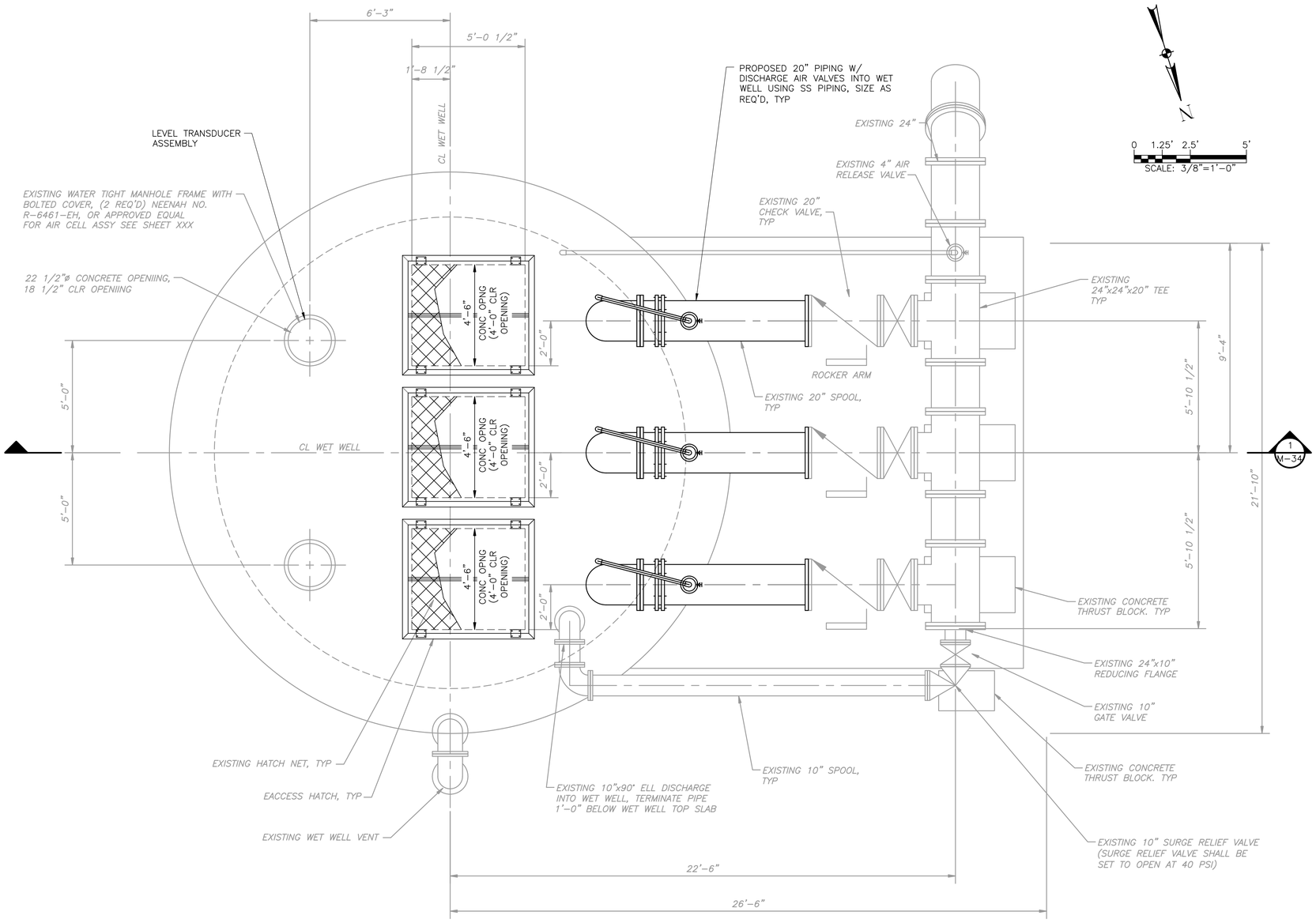
STORAGE TANK NO.1 ELEC. BLDG PLAN–MECH ROOM PLAN, SECTION

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-32

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:17 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-ELEC-AIRC-BLDG-SCOTT.dwg



PLAN
3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRIMP PACKAGE – NEDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

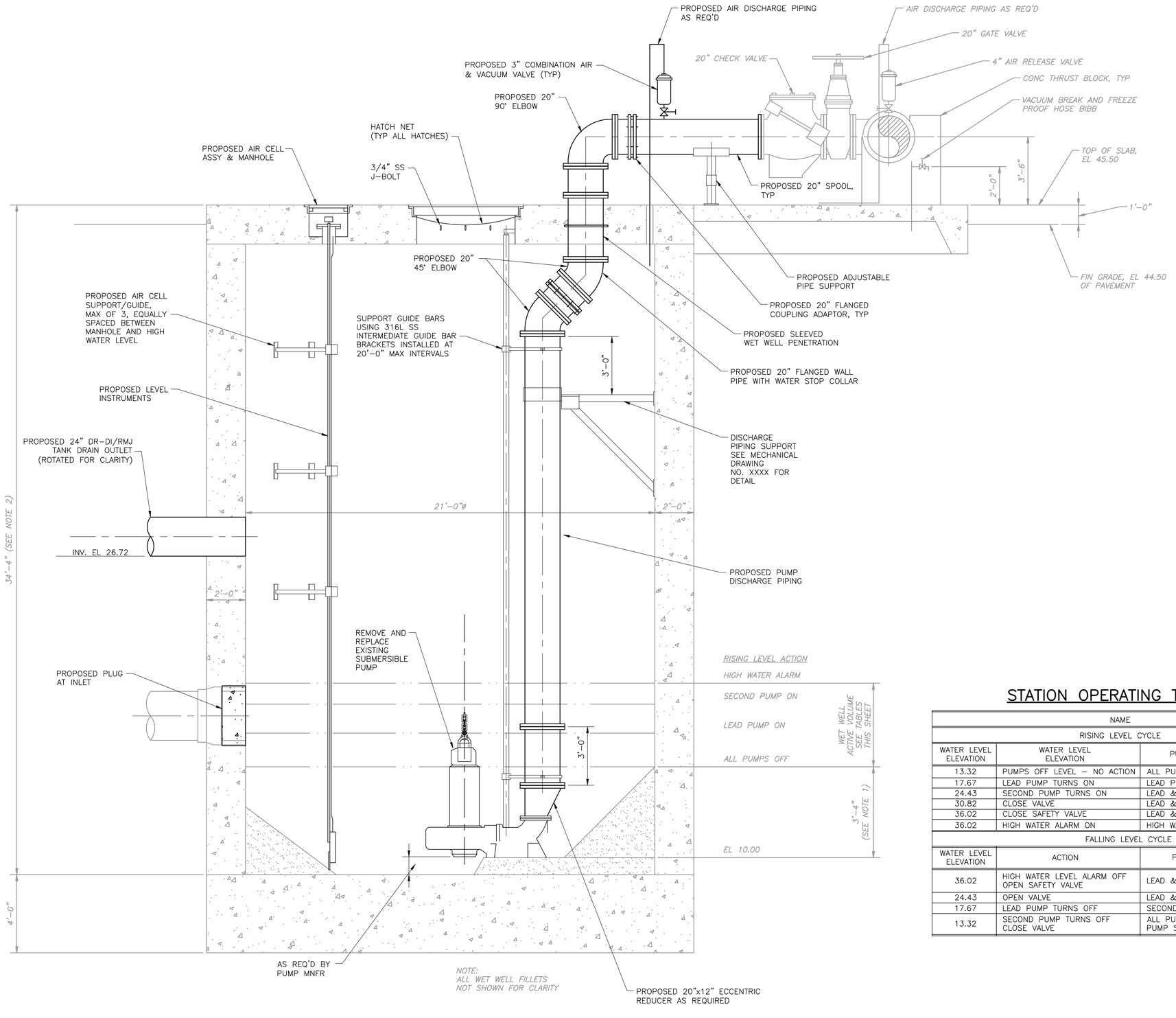
EXISTING DRAIN LIFT STATION IMPROVEMENTS PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-33

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:17 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-EX-WWF-DR-PS-SCOTT.dwg



SECTION 1 M-33
3/8" = 1'-0"

GENERAL NOTES:

1. NOMINAL DIMENSIONS NOTES ARE RELATIVE TO THE PUMP SIZE AND MANUFACTURER SELECTED. CONTRACTOR SHALL VERIFY AND ADJUST STATION OPERATING LEVELS ACCORDINGLY.
2. SEE DETAILS AND STRUCTURAL DRAWINGS FOR DIMENSIONS AND INFORMATION NOT SHOWN.
3. CONTRACTOR TO PROVIDE DETAIL FOR PIPE TO WET WELL CONNECTION AS SHOP DRAWING SUBMITTAL.

STATION OPERATING TABLES

NAME		
RISING LEVEL CYCLE		
WATER LEVEL ELEVATION	WATER LEVEL ELEVATION	PUMP(S) IN OPERATION
13.32	PUMPS OFF LEVEL – NO ACTION	ALL PUMPS ARE OFF
17.67	LEAD PUMP TURNS ON	LEAD PUMP ON
24.43	SECOND PUMP TURNS ON	LEAD & SECOND PUMP ON
30.82	CLOSE VALVE	LEAD & SECOND PUMP ON
36.02	CLOSE SAFETY VALVE	LEAD & SECOND PUMP ON
36.02	HIGH WATER ALARM ON	HIGH WATER ALARM SOUND
FALLING LEVEL CYCLE		
WATER LEVEL ELEVATION	ACTION	PUMP(S) IN OPERTION
36.02	HIGH WATER LEVEL ALARM OFF OPEN SAFETY VALVE	LEAD & SECOND PUMP ON
24.43	OPEN VALVE	LEAD & SECOND PUMP ON
17.67	LEAD PUMP TURNS OFF	SECOND PUMP ON
13.32	SECOND PUMP TURNS OFF CLOSE VALVE	ALL PUMPS STOPPED – STAND PUMP SWITCHES TO LEAD PUMP

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRIM PACKAGE – NEDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

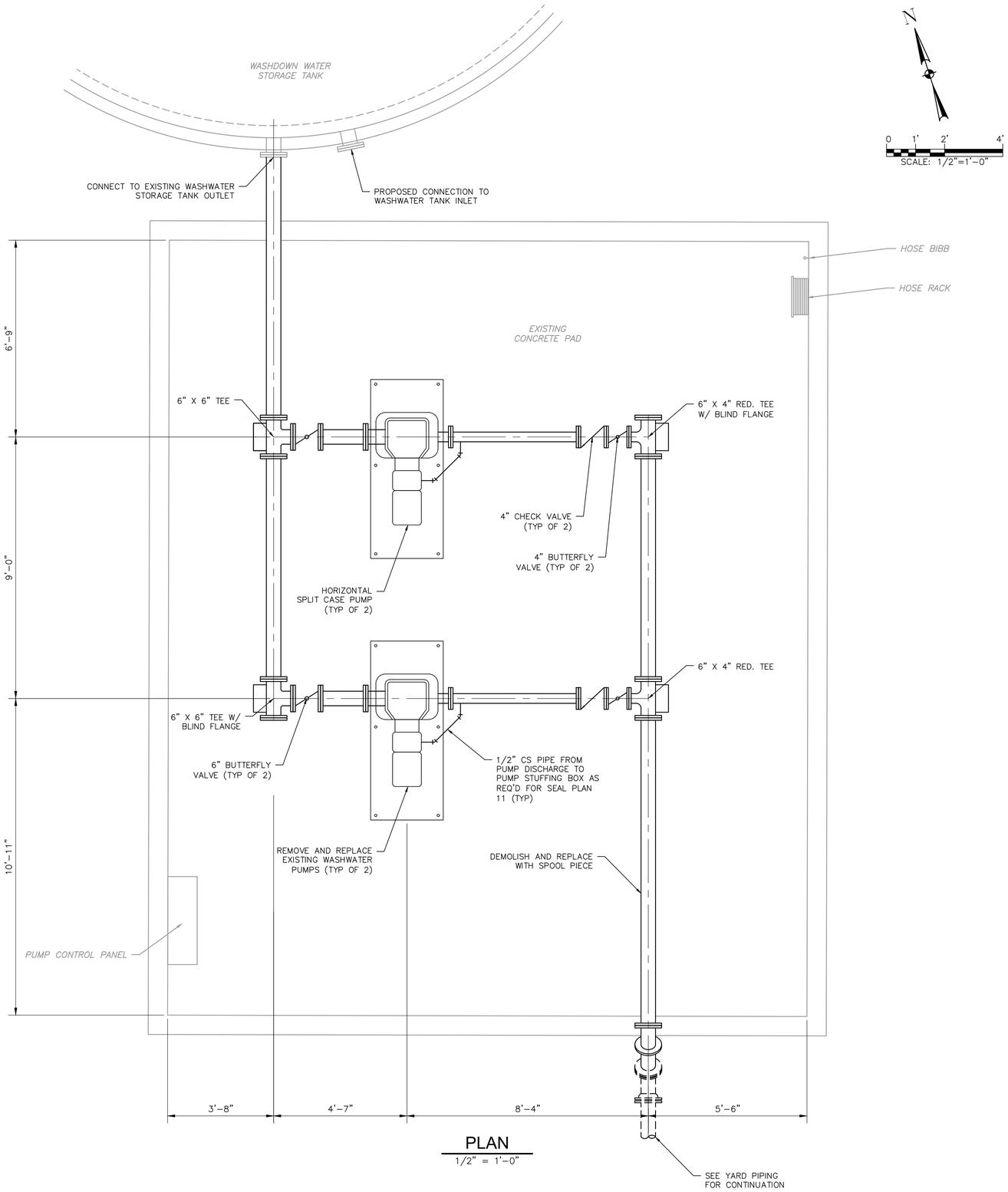
EXISTING DRAIN LIFT STATION IMPROVEMENTS SECTION

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-34

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:17 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\M-EX-WWF-DR-PS-SCOTT.dwg



PLAN
1/2" = 1'-0"

NOTES:

1. * INDICATES LOCATION OF PIPE SUPPORT.
2. PUMPS SHALL BE SUPPORTED BY A RIGID BASE PLATE, SUPPLIED BY THE PUMP MANUFACTURER.
3. GROUT BASE PLATE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. EXACT LOCATION OF PIPE CL MAY VARY DEPENDING UPON SIZE OF PUMP AND VALVES PURCHASED. CONTRACTOR SHALL VERIFY PIPING LAYOUT AND EXACT LOCATION OF THRUST BLOCKS.
5. PUMP MANUFACTURER SHALL SUBMIT MAXIMUM FLANGE LOAD CAPACITIES AND VERIFY ADEQUACY OF RESTRAIN FLEXIBLE COUPLING.
6. APPLY PROTECTIVE COATINGS PER SPECIFICATION 09915.
7. PUMP MANUFACTURER SHALL SUBMIT AN INSTALLATION SPECIFICATION TO ENGINEER FOR APPROVAL.
8. PAIN ALL EXPOSED WASHDOWN PIPING PER SPECIFICATIONS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

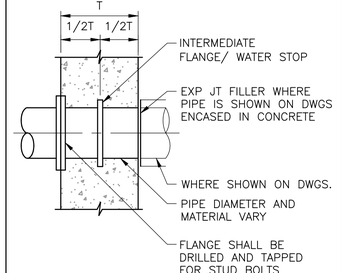
EXISTING WASHWATER PUMP STATION IMPROVEMENT PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
M-36

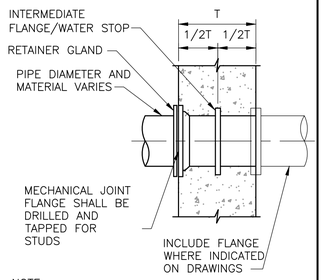
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1/2" = 1'-0"	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:17 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\M-WWPS-REHAB-SCOTT.dwg



DI FLANGE x PE WALL PIPE

DETAIL A — NOT TO SCALE

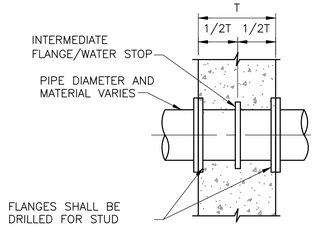


NOTE:

1. FURNISH RESTRAINED MECHANICAL JOINT WHERE INDICATED ON THE DRAWINGS OR SPECIFIED.

MJ x PE (OR FLANGE) WALL PIPE

DETAIL B — NOT TO SCALE

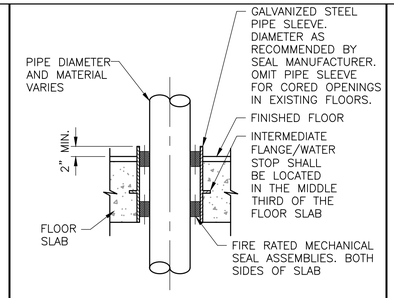


NOTE:

1. FURNISH RESTRAINED MECHANICAL JOINT WHERE INDICATED ON THE DRAWINGS OR SPECIFIED.

FLANGE x FLANGE WALL PIPE

DETAIL C — NOT TO SCALE

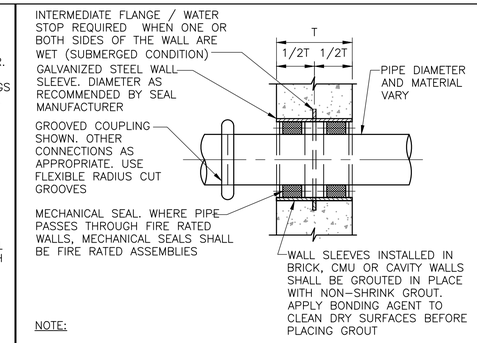


NOTES:

1. FLOOR SLEEVE WITH FIRE RATED MECHANICAL SEALS SHALL BE USED FOR ALL PIPING PENETRATIONS OF FIRE RATED FLOORS.
2. FOR INSULATED PIPING; INTERRUPT INSULATION ON BOTH SIDES OF SLEEVE, SEAL VAPOR BARRIER TO SLEEVE.

PIPE PENETRATION OF RATED FLOOR

DETAIL D — NOT TO SCALE



NOTE:

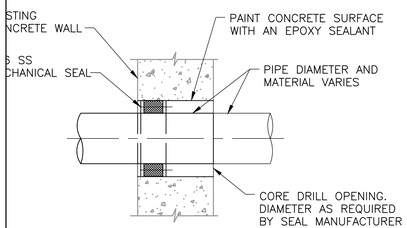
1. INSULATED PIPING: INTERRUPT INSULATION AT BOTH SIDES OF WALL. INSTALL INSULATION FLUSH WITH WALL AFTER WATER TIGHT INSTALLATION OF MECHANICAL SEAL.

WALL SLEEVE WITH MECHANICAL SLEEVE FOR CONCRETE, BRICK OR CMU CAVITY WALL

DETAIL E — NOT TO SCALE

NOTES:

1. THE DETAILS ILLUSTRATED ARE PART OF THE DESIGN PACKAGE – PROJECT STANDARD DETAILS.
2. THESE DETAILS ARE TO BE USED WHEN REFERRED TO OR WHEN NO OTHER MORE RESTRICTIVE OR DIFFERENT DETAILS ARE SHOWN ON THE DRAWINGS.
3. DETAILS NOT PERTAINING TO THE PROJECT ARE MARKED THUS N.I.C. (NOT IN CONTRACT). NOT ALL N.I.C. DETAILS MAY BE MARKED.
4. DETAILS SHOWN ARE INTENDED TO COVER A WIDE RANGE OF PROJECT SITUATIONS. ALL DETAILS MAY NOT APPLY TO THIS PROJECT.
5. STAINLESS STEEL ADHESIVE CAPSULE ANCHORS SHALL BE A TWO–PART STUD AND CAPSULE RESIN ANCHORING SYSTEM. CAPSULES SHALL BE SELF–CONTAINED, SEALED GLASS UNITS CONTAINING PRE–MEASURED AMOUNTS OF RESIN, AGGREGATES AND HARDENER, STUD ASSEMBLIES SHALL BE ALL–THREAD ANCHOR ROD WITH NUT AND WASHER. INSTALL WASHER IN FULL COMPLIANCE WITH THE MRF's RECOMMENDATIONS. ANCHORS SHALL BE HILTI "HVA ADHESIVE ANCHOR", MOLLY "PARABOUND CAPSULE ANCHOR" OR EQUAL. PROVIDE MINIMUM EMBEDMENT OF 10 BOLT DIAMETERS IN CONCRETE.
6. PIPE TO WALL PENETRATION CLOSURES SHALL BE OF THE MODULAR MECHANICAL TYPE CONSISTING OF INTERLOCKING SYNTHETIC RUBBER LINKS SHAPED TO FILL THE ANNULAR SPACE BETWEEN THE PIPE AND WALL OPENING. A PRESSURE PLATE SHALL BE PROVIDED UNDER EACH BOLT HEAD AND NUT WITH THE SEAL CONSTRUCTED TO PROVIDE ELECTRICAL INSULATION BETWEEN WALL AND PIPE. WALL SEAL ASSEMBLY SHALL BE LINK SEAL AS MFR. BY THUNDERLINE CORP., WAYNE MICHIGAN OR EQUAL. PROVIDE ESCUTCHEONS IN FINISHED SPACES.
7. STANDARD MECHANICAL DETAILS SHALL BE USED AT ALL APPLICABLE LOCATIONS, UNLESS NOTED OTHERWISE ON DRAWINGS. ALL DETAILS AND NOTES MARKED "TYPICAL" APPLY TO SIMILAR CONDITIONS THROUGH OUT THE PROJECT WHETHER SPECIFICALLY NOTED OR NOT.
8. PIPE PENETRATIONS ARE SHOWN AND CALLED OUT AS GOING THROUGH WALLS. THE SAME DETAIL MAY APPLY TO A PIPE PENETRATION GOING THROUGH A FLOOR.

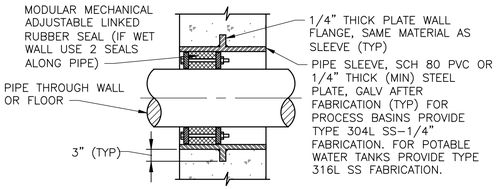


NOTE:

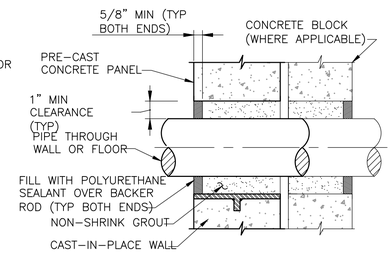
1. INSIDE DIA. OF EACH WALL OPENING SHALL BE OF THE SIZE RECOMMENDED BY MANUFACTURER TO FIT THE PIPE OR CONDUIT AND THE WALL SEAL ASSEMBLY TO ENSURE A WATER–TIGHT JOINT.

WALL PENETRATION THROUGH EXISTING CONCRETE

DETAIL F — NOT TO SCALE



METHOD "A"



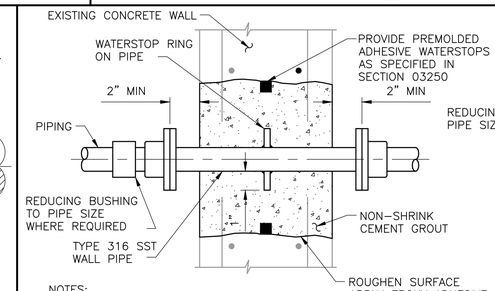
METHOD "B"

NOTES:

1. THESE SLEEVED PIPE DETAILS ARE TO BE USED IN DRY WALLS ONLY, EXCEPT AS NOTED.
2. PROVIDE SEALANT ON EXTERNAL FACES ONLY IN TWO WALL CONSTRUCTION.
3. CORE THE PRE–CAST CONCRETE WALL.

WALL PENETRATION IN NEW WALL

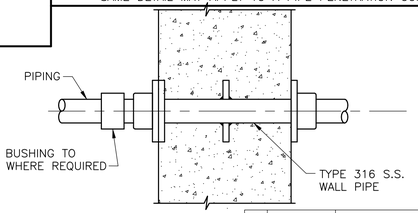
DETAIL G — NOT TO SCALE



NOTES:

1. CORE HOLE THROUGH WALL APPROX. SAME DIAMETER AS O.D. OF WATERSTOP RING. CHIP CONCRETE BACK ADDITIONAL 2" ALL AROUND LEAVING EXISTING REINF. EXPOSED.
2. ALL PIPE WALL PENETRATIONS SHALL BE 2" MINIMUM DIAMETER IF PIPE IS LARGER THAN 2", THE WALL PIPE SHALL BE THE SAME SIZE AS THE PIPE.

EXISTING WALL OR FLOOR



NOTES:

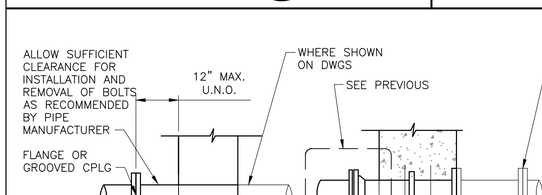
1. ALL PIPE WALL PENETRATIONS SHALL BE 2" MINIMUM DIAMETER. (UND) IF PIPE IS LARGER THAN 2", THE WALL PIPE SHALL BE THE SAME SIZE AS THE PIPE
2. FLANGES OF CAST–IN SS PIPE MAY BE FLUSH WITH FACE OF WALL. DRILL AND TAP FLANGE FOR STUD BOLTS.

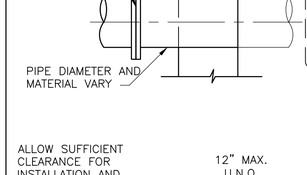
NEW WALL OR FLOOR

PIPE PENETRATION

DETAIL H — NOT TO SCALE

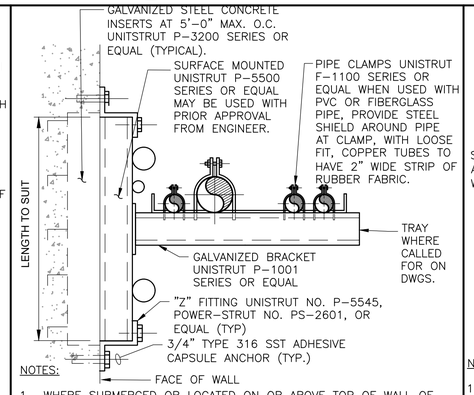
NO.	DATE	REVISION	APP.





DI CASTING WITH NON–FLUSH JOINTS

DETAIL I — NOT TO SCALE

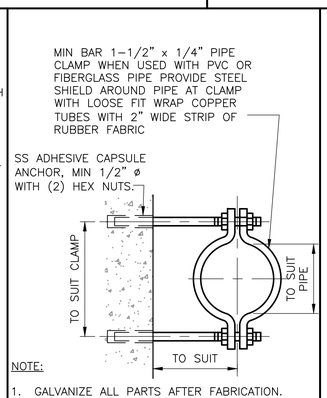


NOTES:

1. WHERE SUBMERGED OR LOCATED ON OR ABOVE TOP OF WALL OF HYDRAULIC STRUCTURE, FRAMING SUPPORT, Z FITTINGS, INTERMEDIATE SUPPORTS, BOLTS, WASHERS AND SHIELD SHALL BE TYPE 316 STAINLESS STEEL.
2. MAY BE COMBINED WITH RACKING PIPE IN VERTICAL AND WITH RUBBER HOSE IN TRAY.

CANTALIVERED PIPE SUPPORT

DETAIL J — NO SCALE

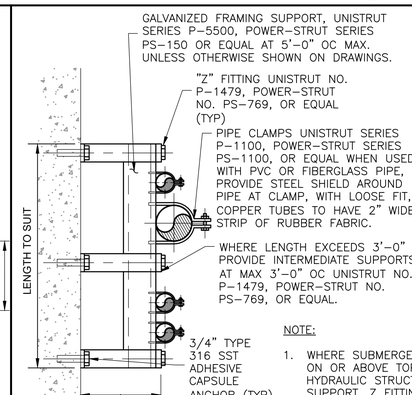


NOTE:

1. GALVANIZE ALL PARTS AFTER FABRICATION. WHERE SUBMERGED OR LOCATED ON OR ABOVE TOP OF WALL OF HYDRAULIC STRUCTURE, PIPE CLAMP, WASHER, AND SHIELD SHALL BE TYPE 316 STAINLESS STEEL.

PIPE CLAMP

DETAIL K — NOT TO SCALE



NOTE:

1. WHERE SUBMERGED OR LOCATED ON OR ABOVE TOP OF WALL OF HYDRAULIC STRUCTURE, FRAMING SUPPORT, Z FITTINGS, INTERMEDIATE SUPPORTS, BOLTS, WASHERS AND SHIELD SHALL BE TYPE 316 STAINLESS STEEL.

EXTENDED PIPE SUPPORT

DETAIL L — NO SCALE

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
MZ–1

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

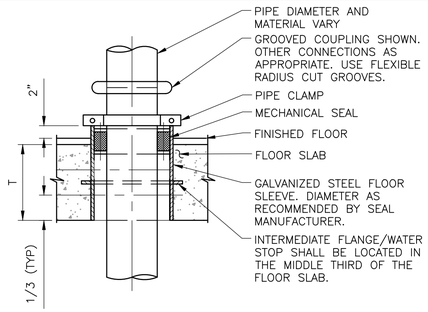
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PROCESS MECHANICAL STANDARD DETAILS I

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:17 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\MZ-SHEETS.dwg



NOTE:

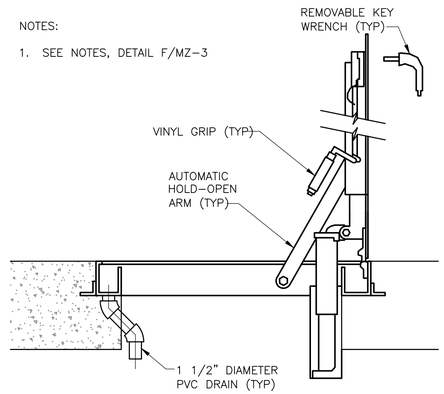
1. INSULATED PIPING: INTERRUPT INSULATION AT BOTH SIDES OF SLAB. INSTALL INSULATION FLUSH WITH SLAB AFTER WATER TIGHT INSTALLATION OF MECHANICAL SEAL.

FLOOR SLEEVE WITH MECHANICAL SEAL

DETAIL A — NOT TO SCALE

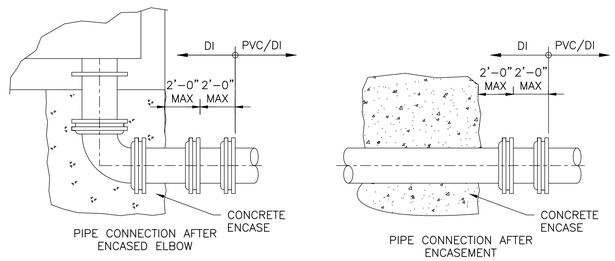
NOTES:

1. SEE NOTES, DETAIL F/MZ-3



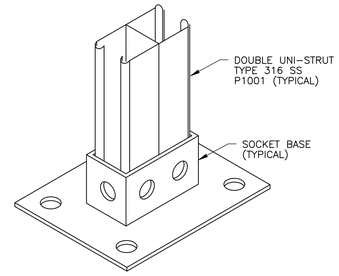
TYPICAL SINGLE LEAF HATCH FLUSH WITH CONCRETE

DETAIL B — NOT TO SCALE



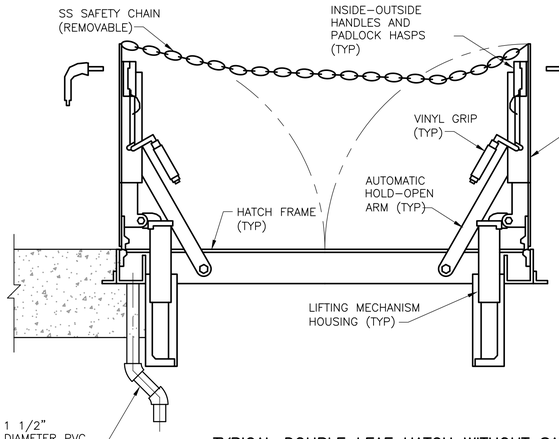
PIPE CONNECTION AFTER ENCASEMENT

DETAIL C — NTS



DOUBLE UNI-STRUT PIPE SUPPORT

DETAIL D — NTS

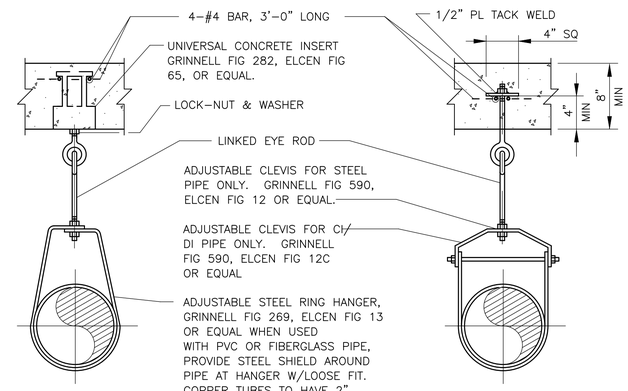


NOTES:

1. ALL ACCESS HATCH HARDWARE SHALL BE TYPE 316 STAINLESS STEEL.
2. ALL ACCESS HATCHES SHALL BE EQUIPPED WITH REMOVABLE SAFETY NETS OR SAFETY GRATING (NOT SHOWN).
3. CONTRACTOR SHALL COORDINATE ALL INSTALLATION DETAILS REQUIRED TO SUIT INSTALLATION. REFER TO DRAWINGS FOR LOCATION SIZE, AND QUANTITY OF PROPOSED ACCESS HATCHES.
4. FOR ACCESS HATCH INSTALLATIONS WHERE HATCH IS FLUSH WITH TOP OF CONCRETE. PIPE DRAINAGE CHANNEL TO INSIDE FACE OF CONCRETE OPENING.
5. ALL DOUBLE LEAF HATCHES 4' X 4' AND LARGER SHALL ALSO BE EQUIPPED WITH TYPE 316 STAINLESS SAFETY CHAINS.

TYPICAL DOUBLE LEAF HATCH WITHOUT SANITARY CURB

DETAIL E — NOT TO SCALE



TYPE 'A' FOR HANGER RODS 3/4" DIA AND SMALLER

TYPE 'B' FOR HANGER RODS 7/8" DIA AND LARGER AND MIN 8" THICK CONCRETE

PIPE HANGER RODS & SUPPORT SPACING					
PIPE DIA (INCHES)	ROD DIA (INCHES)	MAX SUPPORT SPACING (FEET)		WEIGHT LIMIT (LBS)	
		STL PIPE	CI/DI/FRP PIPE	TYPE 'A'	TYPE 'B'
1 & SMALLER	3/8	5	SEE SPECIFICATION SECTION 15140	610	---
1 1/4 TO 2	3/8	5		610	---
2-1/2 TO 3-1/2	1/2	10		1130	---
4 TO 5	5/8	10		1430	---
6	3/4	10		1430	3800
8,10,12	7/8	10		---	3800
14,16,18	1	10		---	3800
24	1 1/4	10		---	4800

NOTES:

1. PIPE CLAMP, WASHER AND SHIELD SHALL BE TYPE 316 STAINLESS STEEL OR AS NOTED IN SECTION 15140.
2. WHEN USED WITH PVC OR FIBERGLASS PIPE PROVIDE 316 SS SHIELD AROUND PIPE AT CLAMP, WITH LOOSE FIT. WRAP COPPER TUBES WITH 2" STRIP OF RUBBER FABRIC.
3. FOR FLANGED PIPING INCREASE 'B' DIMENSION AS REQUIRED.
4. FOR EXISTING CONCRETE CEILING LOCATIONS, INSTALL TO CONCRETE CEILING WITH FIG 32 CONCRETE ROD ATTACHMENT PLATE.

PIPE HANGER IN NEW CEILING

DETAIL F — NOT TO SCALE

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

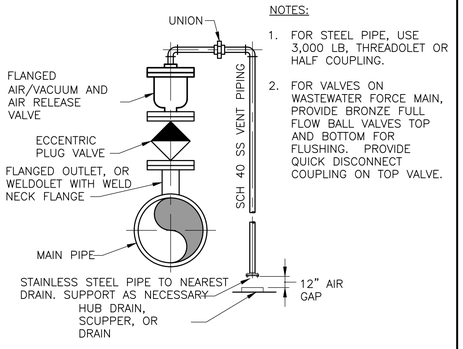
PROCESS MECHANICAL STANDARD DETAILS II

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
MZ-2

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:17 PM
FILE PATH: C:\Users\vgibson\DC\ACCDocs\ardurra, inc\2024-1427\project Files\03-Prod\03-Dwgs\MZ-SHEETS.dwg

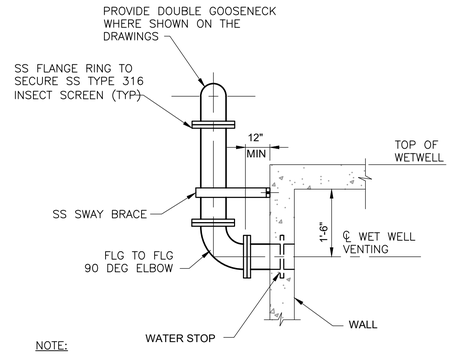


NOTES:

1. FOR STEEL PIPE, USE 3,000 LB, THREADOLET OR HALF COUPLING.
2. FOR VALVES ON WASTEWATER FORCE MAIN, PROVIDE BRONZE FULL FLOW BALL VALVES TOP AND BOTTOM FOR FLUSHING. PROVIDE QUICK DISCONNECT COUPLING ON TOP VALVE.

AIR AND AIR–VACUUM RELEASE (TYPE 2)

DETAIL A
NOT TO SCALE

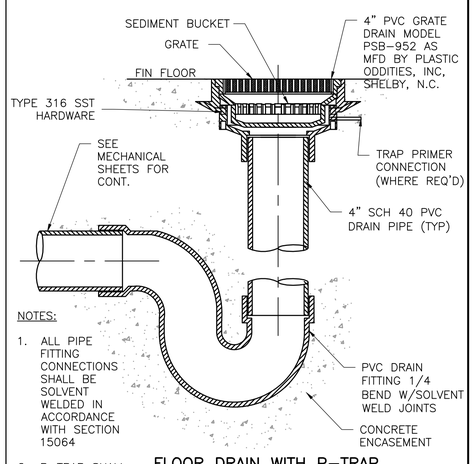


NOTE:

INSECT SCREEN SHALL BE 16 MESH USING WIRE 0.020 INCHES IN DIAMETER (46.2% OPEN AREA) BY CLEVELAND WIRE CLOTH COMPANY.

DOUBLE GOOSENECK VENT

DETAIL D
NOT TO SCALE

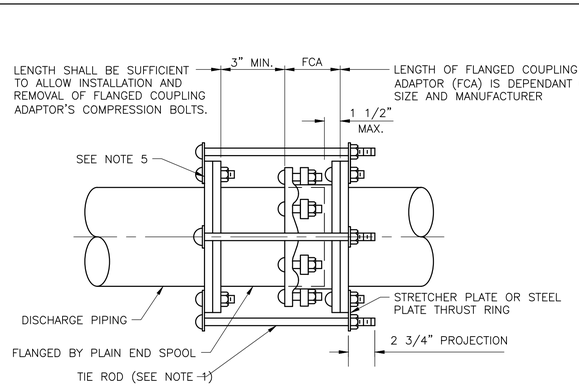


NOTES:

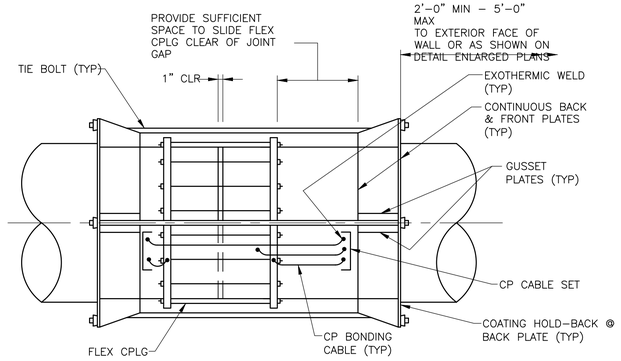
1. ALL PIPE FITTING CONNECTIONS SHALL BE SOLVENT WELDED IN ACCORDANCE WITH SECTION 15064
2. P–TRAP SHALL BE MODEL ZURN Z742V OR EQUAL.

FLOOR DRAIN WITH P–TRAP

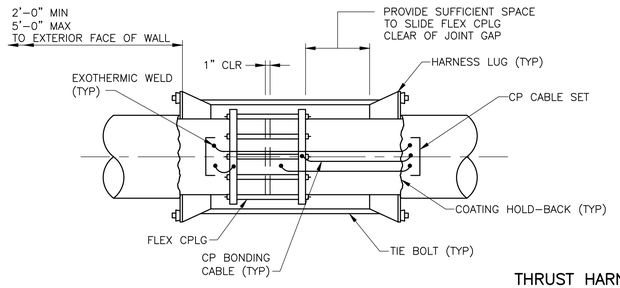
DETAIL G
NOT TO SCALE



FOR FLANGED COUPLING ADAPTOR



TYPICAL HARNESS FLEX/SLEEVE CPLG – 14" AND LARGER



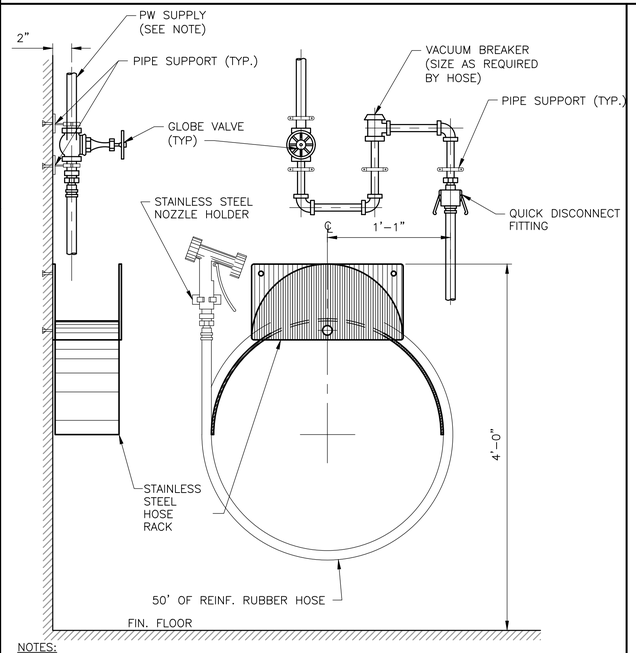
TYPICAL HARNESS FLEX/SLEEVE CPLG – 6" TO 12"

NOTES:

1. PROVIDE NUMBER (LATEST EDITION) AND DIAMETER OF TIE RODS PER AWWA MANUAL M–11 REQUIREMENTS. EVENLY SPACE INSTALLATION OF THE TIE RODS. LENGTH OF TIE RODS TO BE DETERMINED BY CONTRACTOR BASED ON SIZE AND FLANGED COUPLING ADAPTOR AND FINAL LENGTH OF SPOOL PIECE.
2. PROVIDE STRETCHER PLATE FOR ATTACHMENT OF TIE RODS. FOR SIZE SEE AWWA M–11 MANUAL.
3. MATERIALS – BOLTS: ASTM A–307 HOT DIP GALVANIZED, STRETCHER PLATE: ASTM A36 STEEL, HOT DIPPED GALVANIZED, FLEXIBLE COUPLING: SEE SPECIFICATION 15120 FOR BOLTING MATERIALS, TREATMENTS, AND COATING REQUIREMENTS FOR BURIED, ABOVE WATER SURFACE IN TREATMENT TANKS, AND SUBMERGED SERVICE.
4. HARNESS LUG DESIGN CRITERIA PER AWWA MANUAL M11 (LATEST EDITION) AND TEST PRESSURE SPECIFIED ON DRAWINGS AND/OR SPECIFICATIONS.
5. EXCEPT FOR INSULATING CPLG'S, EACH FLEX CPLG SLEEVE & FOLLOWER RINGS SHALL BE ELECTRICALLY BONDED TO THE PIPE WITH TYPE CP COPPER CATHODIC PROTECTION CABLES.
6. SEE ALSO CP DRAWINGS AND RELATED SPECIFICATIONS.

THRUST HARNESS OR FLEXIBLE CONNECTION

DETAIL B
NOT TO SCALE

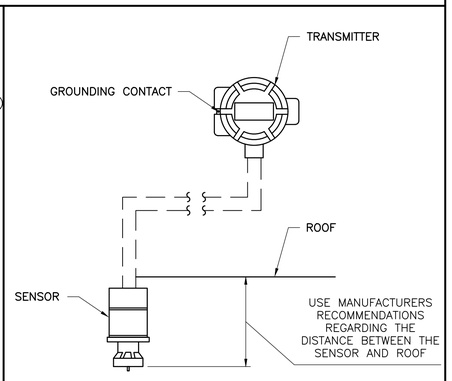


NOTES:

1. FOR PW SUPPLY SIZE AND LOCATION, SEE DRAWINGS.
2. PROVIDE REDUCER WHERE REQUIRED.
3. IN SOME CASES PW MAY COME UP THROUGH FLOOR. IN SUCH CASES USE FLOOR PENETRATION DETAIL E/MZ–3.

WASH HOSE STATION (TYPE A)

DETAIL E
NOT TO SCALE

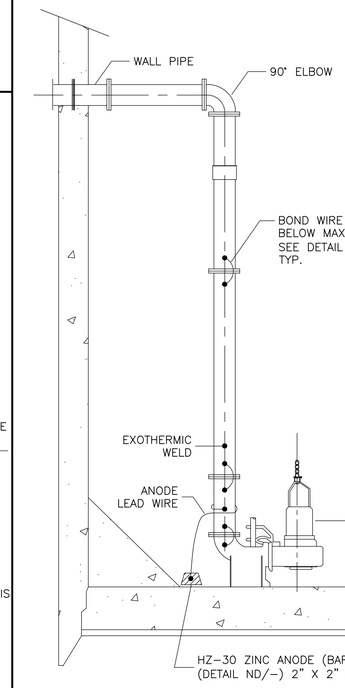


NOTES:

1. CONTRACTOR TO CONSULT THE ENGINEER AND FINALIZE THE LOCATION FOR INSTALLATION.
2. SENSOR IS LOCATED IN CLASS 1 AREA AND THE TRANSMITTER IS LOCATED IN UNCLASSIFIED AREA.
3. CONTACTOR TO PROVIDE ACCESS TO THE SENSOR SO THAT CALIBRATION GAS BULB CAN BE CONNECTED WHILE DOING CALIBRATION.

COMBUSTIBLE GAS DETECTOR INSTALLATION (GCD) (REMOTE SENSOR SUITABLE FOR WETWELL AND CLOSED ROOMS)

DETAIL F
NOT TO SCALE



WET WELL DIRECT CONNECT ANODE INSTALLATION

DETAIL H
NOT TO SCALE

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER
DRAWN BY: J. GIBSON
CHECKED BY: T. REESER
REVIEWED BY: B. NICHOLAS
APPROVED BY: B. NICHOLAS

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PROCESS MECHANICAL STANDARD DETAILS III

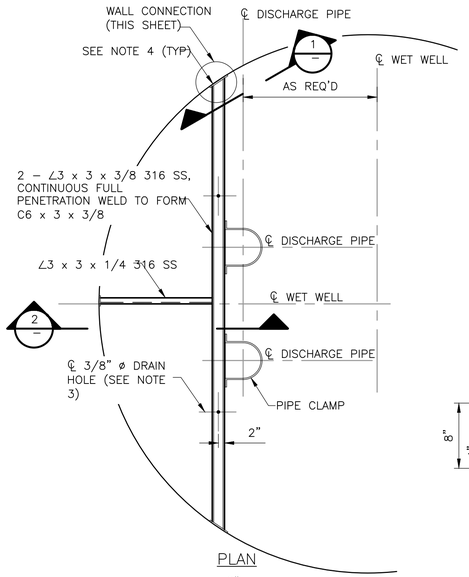
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
MZ–3

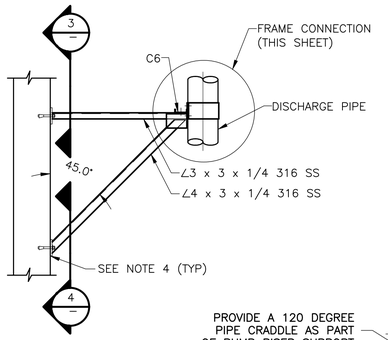
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:17 PM

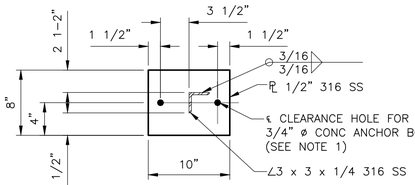
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024–1427\project Files\03–Prod\03–Dwgs\MZ–SHEETS.dwg



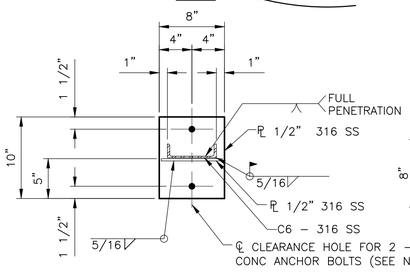
PLAN



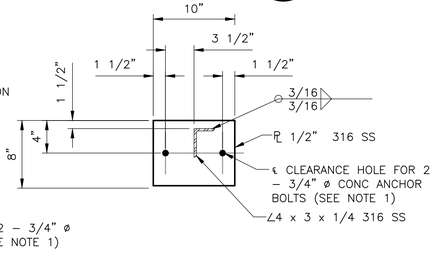
SECTION 2
NOT TO SCALE



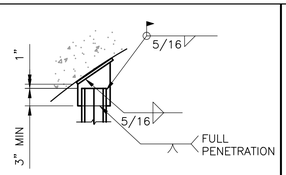
SECTION 3
NOT TO SCALE



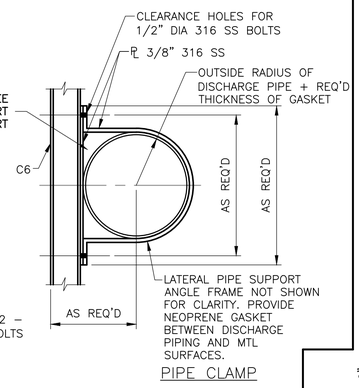
SECTION 1
NOT TO SCALE



SECTION 4
NOT TO SCALE



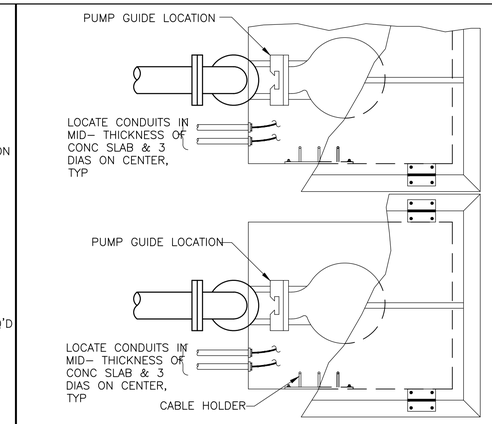
WALL CONNECTION



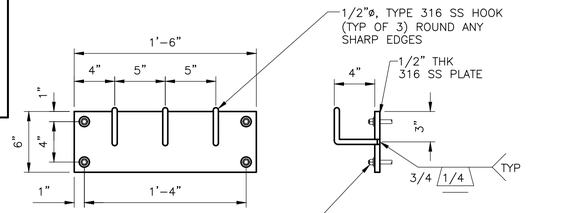
PIPE CLAMP

NOTES:

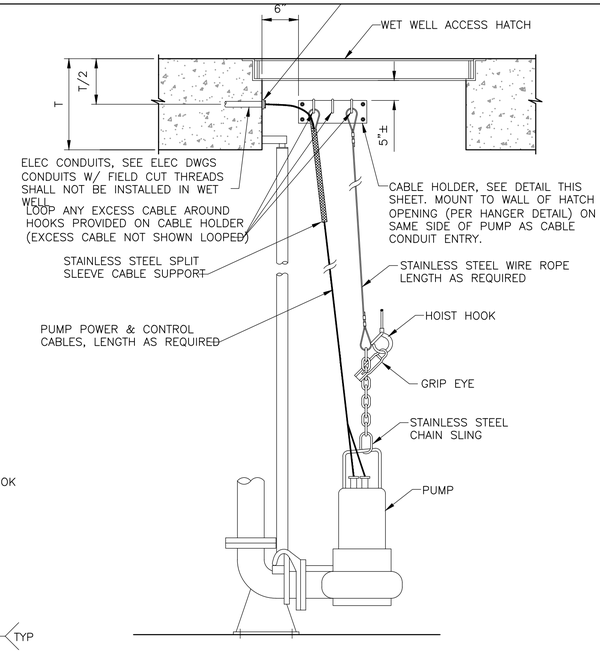
1. CONCRETE ANCHOR BOLTS SHALL HAVE 6" MINIMUM EMBEDMENT AND SHALL BE TYPE 316 STAINLESS STEEL, PER SPECIFICATIONS.
2. SEE STATION AND STRUCTURAL DRAWINGS FOR DIMENSIONS AND INFORMATION NOT SHOWN.
3. DRILL 3/8" DIA HOLES, 1" OFF CL OF C5 AT MIDSPAN 3. BETWEEN LATERAL PIPE SUPPORTS TO ALLOW FOR DRAINAGE. 3 HOLES PER CHANNEL WHERE 2 LATERAL SUPPORTS REQUIRED; 2 HOLES PER CHANNEL WHERE 1 LATERAL SUPPORT REQUIRED.
4. SET 1/4" NEOPRENE GASKET ON WALL SURFACE IN SIKA 1A (OR EQUAL) SEALANT.
5. DETAILS APPLICABLE TO SANITARY LIFT STATION. CABLE HOLDER DETAIL AND TYP. PUMP LIFTING AND CABLING DETAIL APPLICABLE TO SUBMERSIBLE PROCESS PUMPS.
6. PIPE SHALL BE FINISHED PAINTED ON ALL SURFACE PRIOR TO PLACEMENT IN PIPE SUPPORT, TYP



PLAN



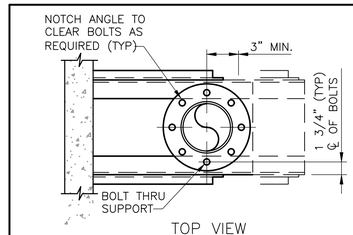
TYPICAL CABLE HOLDER ASSEMBLY



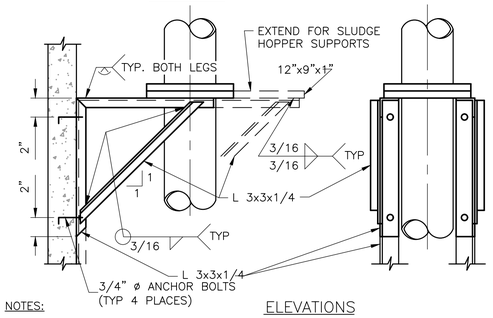
ELEVATION

TYPICAL PUMP LIFTING AND CABLEING

DETAIL B
NOT TO SCALE



TOP VIEW



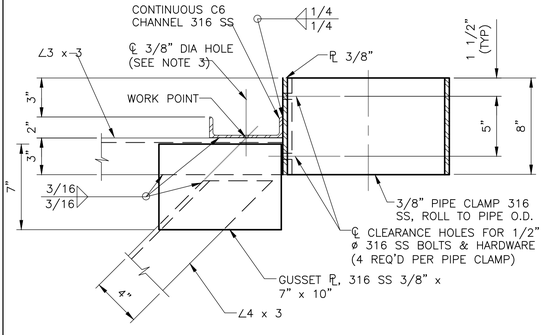
NOTES:

1. FOR 4" AND LARGER PIPE.
2. SUPPORT SHALL BE HOT DIP GALVANIZED.
3. MAXIMUM VERTICAL LOAD EQUALS 900 POUNDS.
4. FOR PIPE WITH JOINT TYPE OTHER THAN FLANGED, WELD SINGLE SLIP–ON TYPE FLANGE TO PIPE AT LOCATION OF EACH SUPPORT.

ELEVATIONS

VERITICAL PIPE SUPPORT

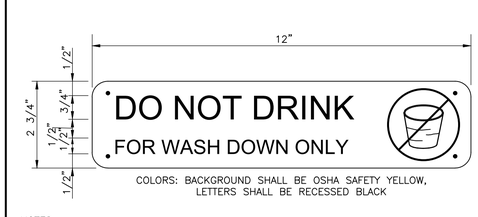
DETAIL E
NOT TO SCALE



FRAME CONNECTION

TYPICAL DISCHARGE PIPING SUPPORT FOR 2 PUMPS

DETAIL A
NOT TO SCALE



NOTES

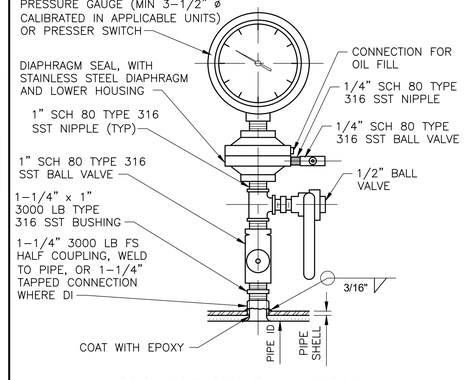
1 FURNISH & INSTALL THE ABOVE SIGN ON ALL PROCESS WATER (PW) LINE HOSE STATIONS. ATTACH THE SIGN TO THE STRUCTURE, GUARDRAIL OR POST WITH STAINLESS STEEL HARDWARE & MOUNTING BRACKET.

2 FURNISH ONE SIGN & RECEIVE APPROVAL FROM OWNER PRIOR TO ORDERING REMAINDER OF SIGNS.

3 SIGN SHALL BE ALUMINUM BACKED AND SHALL BE AS MANUFACTURED BY EMED CO, INC OR EQUAL.

WATER SIGN

DETAIL C



PRESSURE GAUGE OR SWITCH WITH DIAPHRAGM SEAL

DETAIL D
NOT TO SCALE

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: J. GIBSON	FB NO. 340S1
CHECKED BY: T. REESER	
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

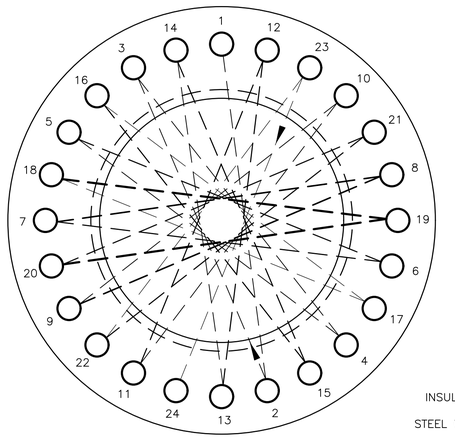
PROCESS MECHANICAL STANDARD DETAILS IV

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

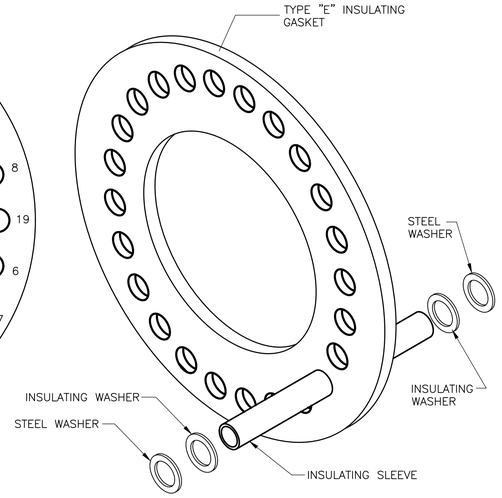
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
MZ–4

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:18 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024–1427\project Files\03–Prod\03–Dwgs\MZ–SHEETS.dwg



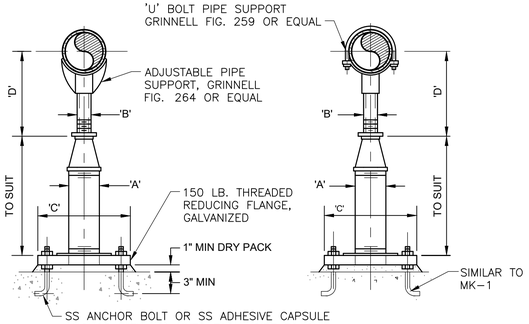
FLANGE BOLT TIGHTENING SEQUENCE



INSULATING SLEEVE AND ACCESSORIES

ISOLATION FLANGE ASSEMBLY

DETAIL A
NOT TO SCALE



MK-1 MK-2

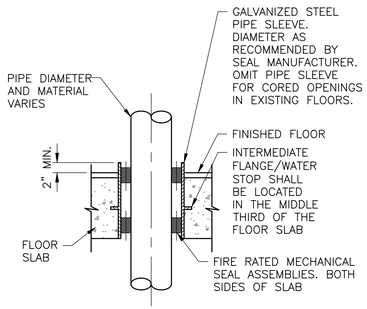
ADJUSTABLE PIPE SUPPORT APPROX DIMENSIONS IN INCHES					
PIPE SIZE	A	B	C	D MIN	D MAX
2 1/2	2 1/2	1 1/2	9	8	11 1/2
3	2 1/2	1 1/2	9	8 1/4	11 3/4
3 1/2	2 1/2	1 1/2	9	8 1/2	12
4	3	2 1/2	9	10 1/4	14
6	3	2 1/2	9	11 5/8	15 1/4
8	3	2 1/2	9	13 5/8	16 1/2
10	3	2 1/2	9	14 5/8	18 1/4
12	3	2 1/2	9	15 5/8	19 3/4
14	4	3	11	18 5/8	20 3/4
16	4	3	11	19 7/8	22 1/4
18	6	3 1/2	13 1/2	21 1/4	24
20	6	3 1/2	13 1/2	23 1/4	25 1/2
24	6	4	13 1/2	26 1/2	28 1/4
30	6	4	13 1/2	29 5/8	31 1/2
32	6	4	13 1/2	30 5/8	32 3/4
36	6	4	13 1/2	32 5/8	34 3/4

NOTE:

1. UNDER VALVES, METERS, OR OTHER SPECIAL APPURTENANCES A FABRICATED SUPPORT PIECE MAY BE UTILIZED AS ACCEPTABLE TO ENGINEER.
2. WHERE SHOWN UNDER PIPE OR VALVE FLANGE, PROVIDE FLANGE CRADLE SUPPORT BY MATERIAL RESOURCES OR ENGINEER APPROVED EQUAL.
3. HOT DIP GALVANIZE AFTER FABRICATION AND TOUCH-UP WITH COLD GALVANIZING COMPOUND AFTER INSTALLATION.
4. PROVIDE STAINLESS STEEL UNITS AS INDICATED BY NOTE ON SPECIFIC DRAWING.

ADJUSTABLE PIPE SUPPORT

DETAIL B
NOT TO SCALE

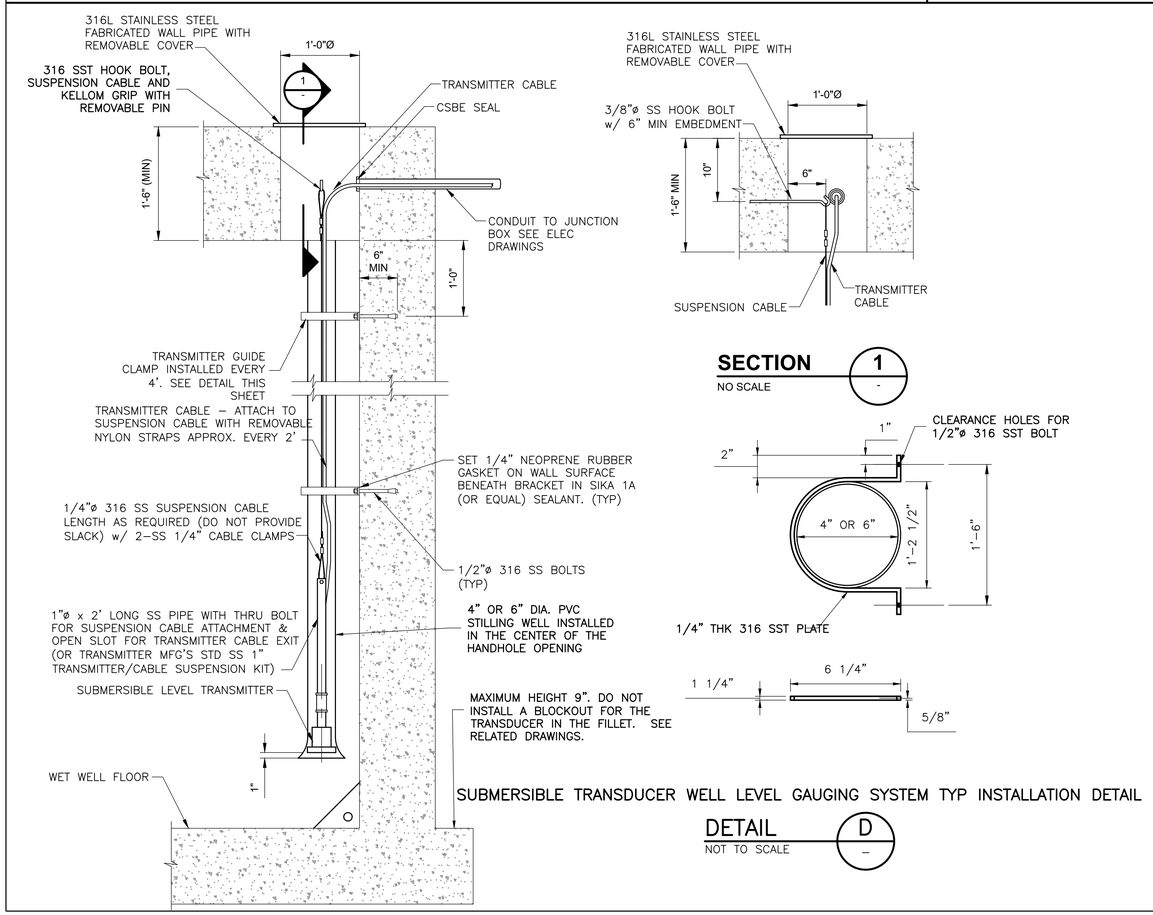


NOTES:

1. FLOOR SLEEVE WITH FIRE RATED MECHANICAL SEALS SHALL BE USED FOR ALL PIPING PENETRATIONS OF FIRE RATED FLOORS.
2. FOR INSULATED PIPING; INTERRUPT INSULATION ON BOTH SIDES OF SLEEVE, SEAL VAPOR BARRIER TO SLEEVE.

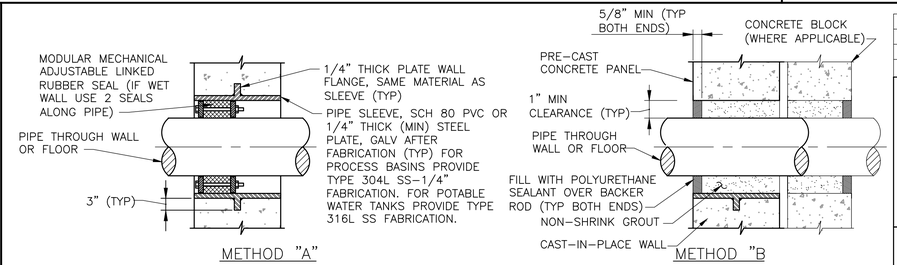
PIPE PENETRATION OF RATED FLOOR

DETAIL C
NOT TO SCALE



SUBMERSIBLE TRANSDUCER WELL LEVEL GAUGING SYSTEM TYP INSTALLATION DETAIL

DETAIL D
NOT TO SCALE

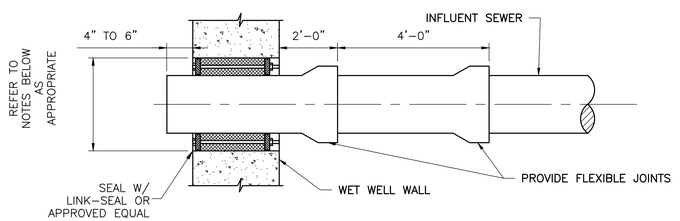


NOTES:

1. THESE SLEEVED PIPE DETAILS ARE TO BE USED IN DRY WALLS ONLY, EXCEPT AS NOTED.
2. PROVIDE SEALANT ON EXTERNAL FACES ONLY IN TWO WALL CONSTRUCTION.
3. CORE THE PRE-CAST CONCRETE WALL.

WALL PENETRATION IN NEW WALL

DETAIL E
NOT TO SCALE



FOR OPENINGS TO BE CORED (CAISSON CONSTRUCTION):

1. IDENTIFY PIPE PENETRATION LOCATION WITH 1" DIAMETER PLASTIC SLEEVE.
2. DIAMETER OF PENETRATION OPENING SHALL BE EQUAL TO PIPE OUTER DIAMETER PLUS 2 TIMES LINK SEAL THICKNESS.
3. PROVIDE ADDITIONAL REINFORCEMENT AROUND PENETRATION OPENING AS PER DETAIL ON STRUCTURAL SHEETS BEFORE CASTING WALL.

TYPICAL INFLUENT SEWER ENTRY DETAIL

DETAIL F
NOT TO SCALE

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
MZ-5

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: 1/21/2026

DESIGNED BY: T. REESER	SURVEYED BY:
DRAWN BY: J. GIBSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: T. REESER	FB NO. 340S1
REVIEWED BY: B. NICHOLAS	
APPROVED BY: B. NICHOLAS	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

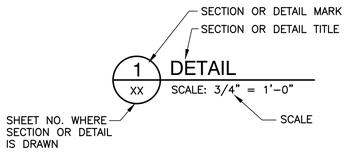
PROCESS MECHANICAL STANDARD DETAILS V

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NONE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 12:18 PM
FILE PATH: C:\Users\jgibson\DC\ACCDocs\ardurra, Inc\2024-1427\project Files\03-Prod\03-Dwgs\MZ-SHEETS.dwg

NOTATION

DETAIL IDENTIFICATION SYSTEM



ABBREVIATIONS

	ELEVATION TARGET
	REVISIONS
	COLUMN GRID
ADD'L	ADDITIONAL
ALUM.	ALUMINUM
ARCH.	ARCHITECTURAL
B.O.P.	BOTTOM OF PLATE
BOTT.	BOTTOM
℄	CENTER LINE
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONT.	CONTINUOUS
DIA.	DIAMETER
EA.	EACH
EL.	ELEVATION
ETC.	ETCETERA
EQUIP.	EQUIPMENT
EQ.	EQUAL
EXP.	EXPANSION
FD.	FLOOR DRAIN
F.O.C.	FACE OF CONCRETE
F.F.	FINISH FLOOR
GALV.	GALVANIZED
HORIZ.	HORIZONTAL
LG.	LONG
MAX.	MAXIMUM
MECH.	MECHANICAL
MFG.	MANUFACTURER
MIN.	MINIMUM
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
O.C.E.F.	ON CENTER EACH FACE
O.C.E.W.	ON CENTER EACH WAY
O.D.	OUTSIDE DIAMETER
ℙ	PLATE
PROJ.	PROJECTION
REINF.	REINFORCEMENT
REQ'D.	REQUIRED
R.O.	ROUGH OPENING
SIM.	SIMILAR
STD.	STANDARD
SQ.	SQUARE
S.S.	STAINLESS STEEL
THK.	THICK
THRD.	THREAD
T&B	TOP & BOTTOM
T.O.C.	TOP OF CONCRETE
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/	WITH

MATERIALS

CONCRETE:

ITEM	28 DAY COMPRESSIVE CYLINDER STRENGTH			REMARKS
	3000 PSI	4000 PSI	4500 PSI	
CONCRETE FOR WATER CONTAINING STRUCTURES			●	1" MAX AGGREGATE SLUMP = 4" ± 1" (FOUNDATIONS AND TOP SLABS) SLUMP = 6"±1" (WALLS)
CMU GROUT	●			3/8" MAX. PEA GRAVEL AGGREGATE 8"±1" SLUMP USE SUPERPLASTICIZER
ALL OTHER CONCRETE, U.N.O.		●		1" MAX AGGREGATE SLUMP = 4" ± 1"

REINFORCING STEEL:

ASTM–A615, GRADE 60, U.N.O.
ASTM–A185 – WELDED WIRE FABRIC

STEEL:

ITEM	ASTM DESIGNATION MINIMUM YIELD STRESS				REMARKS
	A992 50 KSI	A36 36 KSI	A572 50 KSI	A500 46 KSI	
BEAMS					
MISC. PL'S & SHAPES		●			
COLUMNS	●				
STRUCT. BOLTS U.N.O.					A325
ANCHOR BOLTS					F1554 36 KSI/ F1554 55 KSI U.N.O.
THREADED ROD		●			F1554 36 KSI/ F1554 55 KSI U.N.O.

DESIGN STD'S. & CODES OF PRACTICE

INTERNATIONAL BUILDING CODE 2021 (TDI)

BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318–19) AND COMMENTARY (ACI 318R–04) (D)

ACI MANUAL OF CONCRETE PRACTICE, 2008 (R)

CONTROLLED LOW–STRENGTH MATERIALS (CLSM), ACI 229, (R)

AMERICAN SOCIETY OF CIVIL ENGINEERS ASCE 7–22 (D)

CRSI DESIGN HANDBOOK, 2008 (R)

ACI 350–20 CODE REQUIREMENTS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES AND COMMENTARY (D)

ACI 350.1R TIGHTNESS TESTING OF ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES AND COMMENTARY (R)

AMERICAN INSTITUTE OF STEEL CONSTRUCTION, 16TH EDITION (D)

THE ALUMINUM ASSOCIATION, ALUMINUM DESIGN MANUAL, 2020 EDITION (D)

(D) USED FOR DESIGN & CONSTRUCTION
(R) USED FOR REFERENCE

GEOTECHNICAL

IN ACCORDANCE WITH A GEOTECHNICAL REPORT BY GEOTEST ENGINEERING, INC. ENTITLED "GEOTECHNICAL INVESTIGATION REPORT CRMP CIP PACKAGE NO. 4 – REPLACEMENT OF EDDINGTON LIFT STATION, FORCE MAIN INSTALLATION, AND CONSTRUCTION OF STORAGE TANK, AND LIFT STATION AT WET WATER FACILITY", HOUSTON, TEXAS, WBS NO. R–000020–0073–3/REPORT NO. 1140293001, DATED. NOVEMBER 12, 2025.

WIND DESIGN

BASIC WIND SPEED

WIND SPEED = 146 MPH, 3–SEC. GUST

RISK CATEGORY: III
EXPOSURE: C
TOPOGRAPHIC FACTOR (KZT): 1.0

DIRECTIONALITY FACTOR (KD) AS FOLLOWS:
- BUILDINGS = 0.85
- ROUND TANKS = 1.0
- TRUSSED STRUCTURES = 0.85

GUST EFFECT FACTOR (RIGID STRUCTURES) = 0.85

DESIGN LOADS

1. DEAD LOADS INCLUDE THE SELF WEIGHT OF THE STRUCTURAL ELEMENTS AND THE FOLLOWING SUPERIMPOSED LOADS:
   10 PSF AT CEILING AND MECHANICAL AT ROOF
   15 PSF AT CEILING AND MECHANICAL AT FLOOR
   10 PSF FOR ROOFING AND REGID INSULATIONS

2. LIVE LOADS:

OCCUPANCY OR USE	UNIFORM (PSF)	UNIFORM (PSF)
1. TYPICAL FLOOR, U.N.O.	100	N/A
2. STAIRS & EXITS	100	300
3. JUNCTION BOX UPPER SLAB	250	H20
4. LIFT STATION	250	N/A
5. CHEMICAL STORAGE CONTAINMENT BUILDING		
a. TANK	N/A	XX,XXX
b. FOUNDATION SLAB	250	N/A
c. BUILDING FLOOR SLAB	250	N/A
d. BUILDING ROOF	20	N/A
e. WALKWAY & GRATING	100	N/A
6. ELECTRICAL BUILDING	250	N/A
7. GENERATOR	N/A	30,500
8. TRANSFORMER	N/A	43,000
9. ELECTRICAL & AIR COMPRESSOR BUILDING	250	N/A
10. ODOR CONTROL UNIT	350	47,500

SEISMIC DESIGN

S_S = 0.081g S_{MS}= 0.11g S_{DS}= 0.074g
S_1 = 0.044g S_{M1}= 0.098g S_{D1}= 0.065g

SEISMIC RISK CATEGORY: III
SEISMIC DESIGN CATEGORY: A
SEISMIC SITE CLASS: D

FOUNDATION AND EARTHWORK

1. THE EXISTING AREA SHALL BE CLEARED OF ALL SURFACE VEGETATION AND THE REMAINING SURFACE SOILS BE SCARIFIED AND RE–COMPACTED TO THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEERING REPORT FOR THIS SITE.
2. FOUNDATION EXCAVATIONS SHALL BE CUT A MINIMUM DISTANCE OF 5'–0" BEYOND THE FOUNDATION LIMITS. SCARIFY THE TOP 6" AND RE–COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DENSITY DETERMINED BY ASTM D–698 STD. PROCTOR +/– 2% OF OPTIMUM MOISTURE CONTENT.
3. PLACE NON–EXPANSIVE SELECT FILL MATERIAL AS REQUIRED & 6" OF SAND TO GRADE. THIS SELECT FILL MATERIAL SHALL BE PLACED IN SUCH A MANNER THAT THE UN–COMPACTED LIFT HEIGHT DOES NOT EXCEED 8" INCHES. EACH LIFT SHALL BE TESTED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERING REPORT.
4. SELECT FILL MATERIAL SHALL BE PER THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEERING REPORT FOR THIS SITE.
5. FOUNDATION SYSTEM: CAST–IN–PLACE, SLAB–ON–GRADE SYSTEM.
6. DRAINAGE: PROVIDE POSITIVE SLOPES, BOTH DURING AND AFTER CONSTRUCTION, FOR SURFACE & ROOF RUNOFF, MINIMUM OF 5'–0" FROM BUILDING FOUNDATION. REFER TO GRADING & DRAINING PLAN.
7. ALL SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL ENGINEERING REPORT. THE SOIL SHALL BE COMPACTED AS REQUIRED FOR PROPER PLACEMENT OF CONCRETE.
8. ALL BACKFILL SHALL BE PLACED IN MAXIMUM 8" LOOSE LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY. BACKFILL MATERIAL SHALL BE AS REQUIRED BY THE GEOTECHNICAL ENGINEERING REPORT FOR THIS SITE.

SHOP DRAWING AND SUBMITTAL

1. SHOP DRAWINGS SHALL USE DRAFTING LINE WORK AND LETTERING THAT IS CLEARLY LEGIBLE. SHOP DRAWINGS SHALL NOT CONTAIN REPRODUCTIONS OF THE CONTRACT DRAWINGS PLANS OR DETAILS.
2. AN ELECTRONIC FILE OF FABRICATION AND ERECTION DRAWINGS OR A MINIMUM OF TWO HARD COPY SETS SHALL BE FURNISHED BY FABRICATOR TO THE STRUCTURAL ENGINEER FOR APPROVAL.
3. SHOP DRAWINGS SHALL NOT SHOW MATERIALS FOR MORE THAN ONE LEVEL OF THE SAME PLAN.
4. SHOP DRAWINGS SHALL SHOW CLEAR AND COMPLETE INFORMATION FOR THE FABRICATION (DETAIL SHEETS AND/OR MATERIAL LISTS) AND INSTALLATION.
5. ALLOW (2) WKS. FOR THE REVIEW OF SHOP DRAWINGS BY THE STRUCTURAL ENGINEER OF RECORD.
6. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A PROPOSED CONSTRUCTION JOINT LOCATION PLAN FOR APPROVAL.

GENERAL NOTES

1. COORDINATE DIMENSIONS, OPENINGS, EMBEDDED ITEMS AND CONDITIONS WITH ALL MECHANICAL, ELECTRICAL, PLUMBING & ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION. NOT ALL ITEMS INDICATED ARE SHOWN ON STRUCTURAL DRAWINGS. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. ALL DETAILS ARE TYPICAL, INCORPORATED INTO PROJECT AT APPROPRIATE LOCATIONS, WHETHER SPECIFICALLY INDICATED OR NOT.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND SITE CONDITIONS BEFORE STARTING WORK. THE STRUCTURAL ENGINEER SHALL IMMEDIATELY BE NOTIFIED IN WRITING, OF ANY DISCREPANCIES.
4. ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER. WORK SHOULD NOT PROCEED UNTIL A SOLUTION IS GIVEN BY THE STRUCTURAL ENGINEER.
5. IN CASE OF CONFLICT, NOTES AND DETAILS OF THESE STRUCTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER THE "GENERAL NOTES". TYPICAL DETAILS SHALL BE USED WHENEVER APPLICABLE. REFER TO SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE DRAWING NOTES.
6. IF A SPECIFIC DETAIL IS NOT SHOWN FOR ANY PART OF THE WORK, THE CONSTRUCTION SHALL BE THE SAME AS FOR SIMILAR WORK.
7. WORKING DIMENSIONS SHALL NOT BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THESE STRUCTURAL DRAWINGS.
8. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE ERECTION SHORING AND BRACING AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION.
9. PIPES, DUCTS, SLEEVES, OPENINGS, POCKETS, CHASES, BLACKOUTS, ETC. SHALL NOT BE PLACED IN SLABS, BEAMS, GIRDERS, COLUMNS, WALLS, FOUNDATION, ETC. NOR SHALL ANY STRUCTURAL MEMBER BE CUT FOR SUCH ITEMS, UNLESS SPECIFICALLY DETAILED ON THESE STRUCTURAL DRAWINGS. (IF ANY PIPES, DUCTS, ETC. DO OCCUR, THAT ARE NOT SHOWN ON THESE STRUCTURAL DRAWINGS, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED).
10. ANCHOR BOLTS OR INSERTS FOR EQUIPMENT ANCHORAGE OR INSTALLATION SHALL BE DESIGNED BY A CIVIL ENGINEER OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF TEXAS AND SHALL BE SHOWN ON THE MECHANICAL OR ELECTRICAL SHOP DRAWINGS.
11. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE STRUCTURAL ENGINEER FREE AND HARMLESS FROM ALL CLAIMS, DEMANDS AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE STRUCTURAL ENGINEER.
12. IF ANY SUBSTITUTION IS PROPOSED BY THE CONTRACTOR, NEW CALCULATIONS MAY HAVE TO BE PREPARED, THE DETAILS MAY HAVE TO BE ALTERED, AND NEW DRAWINGS MAY HAVE TO BE SUBMITTED TO THE BUILDING DEPARTMENT. THE CONTRACTOR SHALL PAY THE STRUCTURAL ENGINEERS FEES TO ALTER THE APPROVED PLANS. THE CONTRACTOR SHALL ALSO PROCESS THE REVISED PLANS, REFLECTING ALL SUBSTITUTIONS THROUGH THE BUILDING DEPARTMENT.

CONCRETE NOTES

SEE DRAWING NO. S2, "GENERAL NOTES & DESIGN CRITERIA – 2"

STRUCTURAL STEEL

SEE DRAWING NO. S2, "GENERAL NOTES & DESIGN CRITERIA – 2"

CONCRETE MASONRY NOTES

SEE DRAWING NO. S2, "GENERAL NOTES & DESIGN CRITERIA – 2"

REINFORCEMENT TENSION LAPS & EMBEDMENT

SEE DRAWING NO. S2, "GENERAL NOTES & DESIGN CRITERIA – 2"

PRESTRESSED HOLLOW-CORE SLAB NOTES

SEE DRAWING NO. S2, "GENERAL NOTES & DESIGN CRITERIA – 2"

CALL BEFORE YOU DIG!
Texas 811 Know what's below. Call before you dig.
PARTICIPANTS REQUEST 48 HOURS NOTICE BEFORE YOU DIG, DRILL, OR BLAST – STOP AND CALL 811
THE LONE STAR NOTIFICATION COMPANY AT 1–800–669–8344

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

GENERAL NOTES & DESIGN CRITERIA – 1

WBS NUMBER: S–001000–0035–4
DRAWING SCALE:
CITY OF HOUSTON PM: MEGAN R. JORDAN, P.E.
SHEET NO. OF
DWG NO: S1
FOR CITY OF HOUSTON USE ONLY

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/19/2026 2:58 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\GENERAL NOTES & DESIGN CRITERIA – 1.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.PLOTTED: 1/19/2026 2:58 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\GENERAL NOTES & DESIGN CRITERIA - 2.dwg

CONCRETE NOTES

1. ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI 318 AND ACI 350 BUILDING CODE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS UNLESS OTHERWISE NOTED.
   ALL CONCRETE – SEE SCHEDULE
3. REINFORCING STEEL TO HAVE 3" MINIMUM COVER WHERE CONCRETE IS CAST AGAINST EARTH. ALL OTHER REINFORCING SHALL HAVE 2" MINIMUM CONCRETE COVER, TYPICAL.
4. REINFORCING STEEL MATERIAL TO BE A615–GRADE 60 UNLESS NOTED OTHERWISE.
5. ALL REINFORCING STEEL SPLICES SHALL BE IN ACCORDANCE WITH ACI 318 LATEST REVISION. (MINIMUM 40 BAR DIAMETERS)
6. REINFORCING STEEL BENT BARS ARE DIMENSIONED OUT TO OUT OF STEEL.
7. ALL BARS ARE TO BE SUPPORTED IN FORMS AND SLABS WITH CHAIRS AND TIED AT EVERY OTHER INTERSECTION.
8. ALL BACKFILL SHALL BE PLACED IN MAXIMUM 8" LIFTS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY. BACKFILL MATERIAL SHALL BE GRANULAR HAVING A P.I. OF BETWEEN 7 AND 17.
9. ALL CONDUIT, GROUND WIRES, DRAINS, ANCHOR BOLTS ETC., SHALL BE IN PLACE BEFORE CONCRETE IS PLACED.
10. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING SERIES DRAWINGS FOR FLOOR ELEVATIONS, SLOPES, DRAINS, BLOCK OUT AND EMBEDDED ITEMS, ETC.. STRUCTURAL SERIES DRAWINGS SHALL BE COMPARED WITH DRAWINGS FOR OTHER SERIES. DIFFERENCES SHALL BE REFERRED TO THE ARCHITECT FOR INSTRUCTIONS.
11. ENTIRE AREA AROUND FOUNDATION MUST BE THOROUGHLY PROBED FOR UNDERGROUND PIPE, CONDUIT, HIGH PRESSURE LINES, ETC., BEFORE ANY EXCAVATIONS ARE BEGUN.
12. WELDED STEEL WIRE FABRIC SHALL CONFORM TO ASTM A–185. ALL WELDED STEEL WIRE FABRIC SHALL BE SUPPLIED IN FLAT SHEETS, NOT IN ROLLS.
13. MILD STEEL REINFORCEMENT AND ACCESSORIES SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH ACI SP–66.
14. PORTLAND CEMENT SHALL BE A SINGLE BRAND CONFORMING TO ASTM C–150, TYPE I/II OR TYPE II UNLESS OTHERWISE APPROVED BY THE ENGINEER.
15. NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C–33. EACH TYPE SHALL BE FROM A SINGLE SOURCE FOR EXPOSED CONCRETE.
16. ALL ADDITIVES FOR AIR ENTRAINMENT, WATER REDUCTION, AND SET CONTROL SHALL BE USED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE MANUFACTURER'S DIRECTIONS. THE USE OF CALCIUM CHLORIDE IS PROHIBITED UNLESS APPROVED IN WRITING BY THE ENGINEER.
17. THE MAXIMUM NOMINAL SIZES OF COARSE AGGREGATE SHALL BE AS FOLLOWS:
    a. ALL CONCRETE ..... 1"
    b. CMU GROUT..... 3/8"
18. CONCRETE SLUMPS SHALL BE AS INDICATED IN SPECIFICATION 03 30 00.
19. CONCRETE EXPOSED TO WEATHER OR IN LIQUID CONTAINING STRUCTURES SHALL BE AIR ENTRAINED AS INDICATED IN SPECIFICATION 03 30 00.
20. MILD STEEL REINFORCEMENT SHALL BE PLACED AND SECURED IN ACCORDANCE WITH CRSI "RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS".
21. ALL ANCHOR BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM F1554 SPECIFICATION FOR 55 KSI STEEL.
22. THE 15 MIL STEGO VAPOR BARRIER SHALL BE INSTALLED UNDER ALL CONCRETE FLOOR SLABS AND BEAMS. ALL PENETRATIONS THROUGH THE VAPOR BARRIER SHALL BE SEALED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO INSURE ITS INTEGRITY.
23. NOTIFY ENGINEER MINIMUM OF 24 HOURS PRIOR TO PLACING CONCRETE.
24. SECURE REINFORCING BARS, ANCHOR BOLTS AND EMBEDDED ITEMS PRIOR TO PLACING CONCRETE.
25. MINIMUM COVER UNLESS NOTED:
    a. CONCRETE CAST AGAINST & EXPOSED TO EARTH . . . . . 3"
    b. CONCRETE EXPOSED TO EARTH OR WEATHER:
    #6 THRU #18 BARS. . . . . 2"
    #5 BAR AND SMALLER. . . . . 2"
    c. CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR IN CONTACT WITH GROUND:
    SLABS, WALLS AND JOISTS:
    #11 BAR AND SMALLER . . . . . 3/4"
    BEAMS & COLUMNS:
    PRIMARY REINFORCEMENT, TIES, STIRRUPS AND SPIRALS. . . . . 1 1/2"
26. DETAILING: PER ACI DETAILING MANUAL, LATEST EDITION U.N.O.
27. MAXIMUM WATER/CEMENT RATIO SHALL BE AS INDICATED IN SPECIFICATION 03 30 00.
28. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A PROPOSED CONSTRUCTION JOINT LOCATION PLAN FOR APPROVAL PRIOR TO PLACEMENT OF ANY CONCRETE.

STRUCTURAL STEEL

1. ALL FABRICATION AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE A.I.S.C. "MANUAL OF STEEL CONSTRUCTION", LATEST EDITION.
2. ALL STRUCTURAL STEEL DETAILS AND CONNECTIONS SHALL CONFORM TO THE A.I.S.C. "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES".
3. ALL WIDE FLANGE "W" SHAPES SHALL CONFORM TO ASTM A992 (50 KSI) AND ALL OTHER STEEL AND PLATES SHALL CONFORM TO ASTM A36 SPECIFICATIONS.
4. ALL MAJOR CONNECTIONS SUCH AS BEAM TO BEAM, BEAM TO COLUMN, BRACING ETC. SHALL BE DONE WITH 3/4" DIA. A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE. ALL HOLES SHALL BE 13/16" DIAMETER FOR 3/4" BOLTS UNLESS NOTED OTHERWISE. ALL STRUCTURAL BOLTS 3/4" DIAMETER AND LARGER SHALL CONFORM TO ASTM A–325 TYPE N. BOLTS LESS THAN 3/4" DIAMETER SHALL CONFORM TO ASTM A–307.
5. EACH CONNECTION SHALL HAVE A MINIMUM OF TWO BOLTS.
6. BOLT SPACING SHALL BE 3 INCHES, UNLESS NOTED OTHERWISE.
7. MINIMUM EDGE DISTANCE (DISTANCE FROM CENTER OF BOLT TO NEAREST EDGE OF PLATE OR STRUCTURAL ELEMENT) SHALL BE 1 1/2 INCHES FOR 3/4 INCH DIAMETER BOLTS UNLESS NOTED OTHERWISE.
8. FABRICATOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
9. CONTRACTOR SHALL PROVIDE NECESSARY BRACING DURING STEEL ERECTION.
10. GALVANIZED BOLTS SHALL CONFORM TO ASTM A–307, GRADE A BOLTS AND NUTS WITH HEXAGONAL HEADS AND SHALL BE USED ONLY FOR BOLTED CONNECTIONS OF SECONDARY FRAMING MEMBERS TO PRIMARY MEMBERS, FOR TEMPORARY BRACING TO FACILITATE ERECTION, AND FOR ANCHORAGE TO CONCRETE OR MASONRY CONSTRUCTION. U.N.O.
11. WELDED CONSTRUCTION SHALL CONFORM TO AWS D–1.1, "STRUCTURAL WELDING CODE" LATEST EDITION. WELDING PROCESSES AND OPERATORS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATIONS PROCEDURES".
12. ALL WELDING SHALL BE DONE WITH E70XX ELECTRODES PER A.W.S. AND A.I.S.C.
13. ALL WELDED CONNECTIONS SHALL DEVELOP THE FULL STRENGTH OF MEMBER UNLESS NOTED OTHERWISE.
14. ALL CONNECTIONS SHALL BE SHOP WELDED AND FIELD BOLTED UNLESS NOTED OTHERWISE.
15. ALL SHOP JOINTS AND NOTED FIELD WELDS SHALL BE SEAL WELDED IN ADDITION TO STRENGTH WELDS SHOWN.
16. STRUCTURAL STEEL SHALL BE NEW DOMESTIC STEEL AND SHALL CONFORM TO THE A.I.S.C. "SPECIFICATION FOR THE DESIGN FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
17. ALL GUSSET PLATES SHALL BE 3/8" MINIMUM THICKNESS, U.N.O.
18. ANY HOLES REQUIRED FOR FIELD ERECTION SHALL BE DRILLED OR PUNCHED. NO BURNING SHALL BE PERMITTED UNLESS APPROVED BY OWNER.
19. ALL BEAM CONNECTIONS SHALL BE DESIGNED TO 60% OF THE SHEAR CAPACITY OF THE BEAMS. FOR MOMENT CONNECTIONS, ASSUME THE BEAM TO BE BRACED AS AS TO DEVELOP 60% OF THE PLASTIC MOMENT CAPACITY OF THE BEAM.
20. ALL CLIP ANGLES ARE TO BE MINIMUM 5/16" THICKNESS, U.N.O.
21. STEEL MEMBERS SHALL NOT BE SPLICED EXCEPT WHERE SHOWN ON THE DRAWINGS.
22. ALL STEEL BEAMS SHALL BE ERECTED WITH NATURAL CAMBER UP.
23. ALL STRUCTURAL STEEL, PLATES, BOLTS AND MISC. PIECES SHALL BE HOT DIP GALVANIZED.
24. ALL STRUCTURAL STEEL WHERE GALVANIZING HAS BEEN BURNED OFF OR OTHERWISE DAMAGED DURING TRANSPORTATION OR ERECTION SHALL BE REPAIRED BY COATING WITH "GALVACON" IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

CONCRETE MASONRY NOTES

1. ALL DOWELS FOR ANCHORING CMU WALL SHALL BE PLACED AS SHOWN AND COORDINATE WITH WALL REINFORCING.
2. ADDITIONAL CMU ANCHOR DOWELS AND CMU WALL REINFORCING SHALL BE PLACED ON BOTH SIDES OF ALL WALL OPENINGS, CORNERS AND CONSTRUCTION JOINTS (EXTERIOR & INTERIOR) IN ADDITION TO THE WALL REINFORCING SHOWN.
3. ALL CELLS IN CMU BLOCK PILASTERS SHALL BE REINFORCED, ANCHORED TO THE FOUNDATION SYSTEM AND FULLY GROUTED FOR ITS ENTIRE LENGTH.
4. PROVIDE GALVANIZED NO. 9 HORIZONTAL JOINT REINFORCING, TRUSS TYPE, H&B OR EQUAL, @ 16 INCHES O.C. REFER TO DETAIL 1 ON SHEET S–70–04.
5. ALL MASONRY GROUT FOR CMU WALLS AND PILASTERS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI W/ MAXIMUM 3/8" PEA GRAVEL. SLUMP SHALL BE 7" PLUS/MINUS 1" AND ACHIEVED USING SUPERPLASTICIZER.
6. CONCRETE MASONRY UNITS (CMU) SHALL CONFORM TO THE REQUIREMENTS OF THE ASTM C90. ALL CMU CONSTRUCTION SHALL CONFORM TO ACI 530. ALL WORK SHALL ALSO COMPLY WITH APPLICABLE PROJECT SPECIFICATIONS.
7. JOINT MORTAR SHALL BE IN CONFORMANCE WITH ASTM C270, TYPE S.
8. VERTICAL CELL REINFORCING SIZE AND SPACING SHALL BE AS SHOWN.
   - AT ALL EXTERIOR WALL CORNERS, OPENINGS, JAMBS AND INTERSECTIONS WITH THE INTERIOR WALLS THE CELLS SHALL BE REINFORCED AS SHOWN ON DRAWINGS.
   - AT INTERIOR WALL CORNERS, OPENINGS, AND JAMBS THE CELLS SHALL BE REINFORCED AS SHOWN ON DRAWINGS.
   - REINFORCED ADDITIONAL VERTICAL CELLS WHERE CALLED ON PLANS.
   - AT ALL EXTERIOR WALLS, VERTICAL REINFORCING SHALL BE DOWELED INTO FLOOR CONCRETE BY A MINIMUM OF 24" EMBEDMENT DURING CONCRETE PLACEMENT.
   - AT ALL INTERIOR WALLS, VERTICAL REINFORCING SHALL BE DRILLED AND EPOXY GROUTED 10" INTO FLOOR SLAB UNLESS NOTED OTHERWISE.
9. PROVIDE TEMPORARY BRACING DURING INSTALLATION OF MASONRY WORK.
10. CONTINUE ALL HORIZONTAL REINFORCING AT CONTROL JOINTS, BUT DISCONTINUE AT EXPANSION JOINTS. PROVIDE 24"x24" – (2) #7 CORNER BARS TO MATCH HORIZONTAL BOND BEAM REINFORCING AT ALL CORNERS.
11. UNLESS OTHERWISE INDICATED ON THE DRAWINGS. ALL WALLS SHALL BE REINFORCED WITH A MINIMUM OF NUMBER 5 VERTICAL REINFORCING BARS AT 2'–8" AND NUMBER 5 HORIZONTAL REINFORCING BARS AT 4'–0". SEE NOTE 12 FOR ADDITIONAL REINFORCING BARS ADJACENT TO WALL OPENINGS.
12. A VERTICAL BAR SHALL BE PLACED AT ALL WALL CORNERS AND WALL INTERSECTIONS, AND A VERTICAL BAR SHALL BE PLACED IN EACH OF THE FIRST TWO CELLS AT EACH JAMB OF ALL WALL OPENINGS. THE BAR SIZE SHALL BE NUMBER 5 MINIMUM, BUT NOT SMALLER THAN THE TYPICAL VERTICAL WALL REINFORCING BARS.

PRESTRESSED HOLLOW-CORE SLAB NOTES

1. GENERAL:
   A. THIS SECTION INCLUDES THE DESIGN, THE FURNISHING AND INSTALLATION OF PRE–STRESSED HOLLOW–CORE PANELS AS SHOWN ON FRAMING PLANS. THE MANUFACTURER SHALL HAVE AT LEAST 5 YEARS EXPERIENCE IN MANUFACTURING, TRANSPORTING AND ERECTING PRE–STRESSED HOLLOW–CORE PANELS.
   B. DESIGN
      i. ALL PRECAST SLABS SHALL BE DESIGNED BY THE SUPPLIER TO MEET OR EXCEED THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE AND THE PRE–STRESSED CONCRETE INSTITUTE.
      ii. PRECAST SLABS SHALL BE DESIGNED FOR THE SUPERIMPOSED DEAD LOADS (NOTED BELOW) AND LIVE LOADS (DESIGN CRITERIA). TOTAL DEFLECTION TO BE LESS THAN 1/360.
         a. ROOFS:
            DEAD LOAD: 10 PSF + SELF WEIGHT OF THE SYSTEM (INCLUDE 2" CONC. TOPPING)
            LIVE LOAD: 20 PSF
      iii. DESIGN SHALL BE IN ACCORDANCE WITH THE CURRENT ACI–318.
2. MATERIALS:
   A. CONCRETE MATERIALS SHALL BE CLEANED WITH CONTROLLED AGGREGATE GRADATION, FREE OF ALL FOREIGN MATTER, AND ELECTRONICALLY PROPORTIONED.
   B. PRESTRESSING STRANDS SHALL BE EQUIVALENT TO ASTM–A 416 & ASTM A 421.
   C. TEMPERED HARDBOARD BEARING PADS (1/8" x 3") SHALL BE PROVIDED.
3. CONSTRUCTION METHODS (BY GENERAL CONTRACTOR):
   A. PRESTRESSED CONCRETE UNITS SHALL BE ERECTED INTO FINAL POSITION UNDER THE SUPERVISION OF AN EMPLOYEE OF THE MANUFACTURER.
   B. ALL KEY WAY JOINTS SHALL BE FULLY GROUTED WITH A SIX (6") INCH SLUMP 3:1 MIXTURE OF SAND AND CEMENT PRIOR TO PLACEMENT OF TOPPING. PLANK UNITS SHALL BE ALIGNED AND LEVELED PRIOR TO GROUTING KEY WAY JOINTS.
   C. ANCHOR DOWELS AND SPECIAL REINFORCING SHALL BE PLACED BY THE CONTRACTOR IN STRICT ACCORDANCE WITH THE PLANS.

REINFORCEMENT TENSION LAPS & EMBEDMENT

fy = 60000 PSI, f'c = 3000 PSI

BAR SIZE	BAR DIA. (IN.)	EMBEDMENT AND CLASS A LAP (IN.)				CLASS B LAP (IN.)			
		TOP BAR		OTHER BARS		TOP BAR		OTHER BARS	
		CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
3	3/8	22	32	17	25	28	42	22	32
4	1/2	29	43	22	33	37	56	29	43
5	5/8	36	54	28	41	47	74	36	54
6	3/4	43	64	33	50	56	84	43	64
7	7/8	63	94	48	72	81	122	63	94
8	1	72	107	55	82	93	139	72	107
9	1 1/8	81	121	62	93	105	157	81	121
10	1 1/4	91	136	70	105	118	177	91	136
11	1 3/8	101	151	78	116	131	196	101	151

1. TABLE A PRESENTS LENGTHS OF TENSION DEVELOPMENT LENGTHS AND TENSION LAP SPLICE LENGTHS BASED ON ACI 318–22, SECTION 25.4.2.
2. CLASS A LAP LENGTHS APPLY WHEN BAR LAPS ARE STAGGERED TO LAP HALF THE BARS AT THE SAME LOCATION OR WHEN BARS ARE LAPPED AT A LOCATION WHERE THE REINFORCEMENT AREA PROVIDED IS AT LEAST TWICE THAT REQUIRED.
3. CLASS B LAP LENGTHS APPLY WHEN ALL BARS ARE SPLICED AT A LOCATION OF MAXIMUM STRESS IN THE BARS.
4. CASE 1 LENGTHS APPLY TO BEAMS AND COLUMNS WITH CONCRETE COVER EQUAL OR GREATER THAN THE BAR DIAMETER, CLEAR BAR SPACING EQUAL OR GREATER THAN THE BAR DIAMETER AND WITH STIRRUPS OR TIES NOT LESS THAN THE CODE MINIMUM THROUGHOUT THE LENGTH IN THE TABLE; AND FOR OTHER ELEMENTS WITH CONCRETE COVER EQUAL OR GREATER THAN THE BAR DIAMETER AND CLEAR SPACING EQUAL OR GREATER THAN TWO TIMES THE BAR DIAMETER.
5. CASE 2 LENGTHS APPLY TO BEAMS AND COLUMNS WITH CONCRETE COVER LESS THAN THE BAR DIAMETER, AND CLEAR BAR SPACING LESS THAN THE BAR DIAMETER; AND FOR OTHER ELEMENT WITH CONCRETE COVER LESS THAN THE BAR DIAMETER AND CLEAR BAR SPACING LESS THAN TWO TIMES THE BAR DIAMETER.
6. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 11 3/4" OF CONCRETE IS CAST BELOW THE REINFORCEMENT.
7. MULTIPLY LENGTHS SHOWN BY 0.87 FOR 28 MPa (4000 PSI) CONCRETE.
8. MULTIPLY LENGTHS SHOWN BY 0.82 FOR 31 MPa (4500 PSI) CONCRETE
9. MULTIPLY LENGTHS SHOWN BY 1.3 FOR LIGHTWEIGHT AGGREGATE CONCRETE.
10. MULTIPLY LENGTHS SHOWN BY 1.3 FOR EPOXY–COATED BARS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

GENERAL NOTES & DESIGN CRITERIA – 2

WBS NUMBER
S–001000–0035–4
DRAWING SCALE

FOR CITY OF HOUSTON USE ONLY

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

DWG NO
S2

SHEET NO. OF

PLOT STYLE: LNV-FS-2015-STRUCT.PLOTTED: 1/19/2026 2:58 PM

STATEMENT OF SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATIONS:

1. THE OWNER SHALL EMPLOY ONE OR MORE APPROVED AGENCIES TO PROVIDE SPECIAL INSPECTIONS AND TESTS DURING CONSTRUCTION ON THE TYPES OF WORK IN SECTION 1705 THE BUILDING CODE AND IDENTIFY THE APPROVED AGENCIES TO THE BUILDING OFFICIAL. THESE INSPECTIONS, AND TEST ARE IN ADDITION TO INSPECTIONS BY THE OFFICIAL THAT ARE IDENTIFIED IN SECTION 110 OF THE BUILDING CODE AND/OR TDI INSPECTIONS IF REQUIRED.
2. PRIOR TO CONSTRUCTION THE APPROVED AGENCIES SHALL PROVIDE WRITTEN DOCUMENTATION TO THE BUILDING OFFICIAL DEMONSTRATING THE COMPETENCE AND THE RELEVANT EXPERIENCE OR TRAINING OF THE SPECIAL INSPECTORS WHO WILL PERFORM THE SPECIAL INSPECTION AND TEST DURING CONSTRUCTION.
3. GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS SHALL ATTEND A PRE-CONSTRUCTION MEETING ARRANGED BY THE CITY OF HOUSTON.
4. THE CONSTRUCTION OR WORK FOR WHICH SPECIAL INSPECTIONS OR TESTING IS REQUIRED SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION OR TESTING PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTION OR TEST.
5. APPROVED AGENCIES SHALL KEEP RECORDS OF SPECIAL INSPECTIONS AND TEST. THE APPROVED AGENCY SHALL SUBMIT REPORTS OF SPECIAL INSPECTIONS AND TEST TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT THE WORK INSPECTED OR TEST WAS, OR WAS NOT, COMPLETED IN CONFORMANCE WITH APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT T TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THEY ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE EOR PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK. A FINAL REPORT DOCUMENTING THE REQUIRED SPECIAL INSPECTION AND TEST, AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS, SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON PRIOR TO THE START OF THE WORK BY THE OWNER TO THE BUILDING OFFICIAL.
6. WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBER OR ASSEMBLIES IS BEING CONDUCTED ON THE PREMISES OF A FABRICATOR'S SHOP, THE FABRICATOR SHALL BE APPROVED TO PERFORM WORK WITHOUT SPECIAL INSPECTIONS BY THE BUILDING OFFICIAL IN ACCORDANCE WITH SECTION 1704.2.5 OF THE BUILDING CODE.
7. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN WIND-OR SEISMIC FORCE-RESISTING SYSTEM, OR COMPONENT THEREOF, LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO COMMENCEMENT OF WORK ACKNOWLEDGING AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.
8. IN ADDITION TO THE SUBMITTAL OF REPORTS OF SPECIAL INSPECTIONS AND TEST, REPORTS AND CERTIFICATES SHALL BE SUBMITTED BY THE OWNER TO THE BUILDING OFFICIAL FOR EACH ITEM LISTED IN 1704.5 OF THE BUILDING CODE.

REQUIRED SPECIAL INSPECTIONS AND TEST OF CONCRETE CONSTRUCTION

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD[a]	IBC REFERENCE
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	–	X	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3	–
REINFORCING BAR WELDING:				
a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706	–	X	AWS D1.4 ACI 318: 26.6.4	–
b. INSPECT SINGLE-PASS FILLET WELDS, MAX. 5/16"	–	X		
c. INSPECT ALL OTHER WELDS.	X	–		
INSPECT ANCHORS CAST IN CONCRETE	–	X	ACI 318: 17.8.2	–
INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.[b]				
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARD INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	X	–	ACI 318: 17.8.2.4	–
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINES IN 4.a.	–	X	ACI 318: 17.8.2	
VERIFY USE OF REQUIRED DESIGN MIX.	–	X	ACI 318: CH. 19 26.4.3, 26.4.4	1904.1 1904.2
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONTENT TEST, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	–	ASTM C31 ASTM C172 ACI 318: 26.5, 26.12	–
INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	–	ACI 318: 26.5	–
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	–	X	ACI 318: 26.5.3-26.5.5	–
INSPECT PRESTRESSED CONCRETE FOR:				
a. APPLICATION OF PRESTRESSING FORCES; AND	X	–	ACI 318: 26.10	–
b. GROUTING OF BONDED PRESTRESSING TENDONS.	X	–		
INSPECT ERECTION OF PRECAST CONCRETE MEMBERS	–	X	ACI 318: 26.9	–
FOR PRECAST CONCRETE DIAPHRAGM CONNECTIONS OR REINFORCEMENT AS JOINTS CLASSIFIED AS MODERATE OR HIGH DEFORMABILITY ELEMENTS (MDE OR HDE) IN STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY C, D, E, OR F, INSPECT SUCH CONNECTIONS AND REINFORCEMENT IN THE FIELD FOR:			ACI 318: 26.13.13	–
a. INSTALLATION OF THE EMBEDDED PARTS.	X	–	ACI 550.5	
b. COMPLETION OF THE CONTINUITY OF REINFORCEMENT ACROSS JOINTS.	X	–		
c. COMPLETION OF CONNECTIONS IN THE FIELD.	X	–		
INSPECT INSTALLATION TOLERANCE OF THE PRECAST CONCRETE DIAPHRAGM CONNECTIONS FOR COMPLIANCE WITH ACI 550.5	–	X	ACI 318: 26.13.13	–
VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	–	X	ACI 318: 26.11.2	–
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	–	X	ACI 318: 26.11.1.2(b)	–

a. WHERE APPLICABLE, SEE SECTION 1705.13.
b. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IS THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CAST-IN-PLACE DEEP FOUNDATION ELEMENTS

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT.	X	–
VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM ELEMENT DIAMETERS, BELL DIAMETERS (IF APPLICABLE), LENGTHS, EMBEDMENT INTO BEDROCK (IF APPLICABLE) AND ADEQUATE END-BEARING STRATA CAPACITY. RECORD CONCRETE OR GROUT VOLUMES.	X	–
FOR CONCRETE ELEMENTS, PERFORM TESTS AND ADDITIONAL SPECIAL INSPECTIONS IN ACCORDANCE WITH SECTION 1705.3.	IN ACCORDANCE WITH SECTION 1705.3	

REQUIRED SPECIAL INSPECTIONS AND TEST OF SOILS

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	–	X
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	–	X
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	–	X
DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	–
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	–	X

TABLE N5.4-1
INSPECTION TASKS PRIOR TO WELDING

INSPECTION TASK PRIOR TO WELDING	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
WELDER QUALIFICATION RECORDS AND CONTINUITY RECORDS	–	X
WPS AVAILABLE	X	–
MANUFACTURER CERTIFICATION FOR WELDING CONSUMABLES AVAILABLE	X	
MATERIAL IDENTIFICATION (TYPE/GRADE)	–	X
WELDER IDENTIFICATION SYSTEM[a]	–	X
FIT-UP GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATIONS • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	–	X
FIT-UP CJP GROOVE WELDS OF HSS T-, Y- AND K-JOINTS WITHOUT BACKING (INCLUDING JOINT GEOMETRY) • JOINT PREPARATIONS • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	–	X
CONFIGURATION AND FINISH OF ACCESS HOLES	–	X
FIT-UP FILLET WELDS (INCLUDING JOINT GEOMETRY) • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	–	X
CHECK WELDER EQUIPMENT	–	X

a. THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED SHALL BE LOW-STRESS TYPE.

TABLE N5.4-2
INSPECTION TASKS DURING WELDING

INSPECTION TASK DURING WELDING	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
CONTROL AND HANDLING OF WELDING CONSUMABLES • PACKAGING • EXPOSURE CONTROL	–	X
NO WELDING OVER CRACKED TACK WELDS	–	X
ENVIRONMENTAL CONDITIONS • WIND SPEED WITHIN LIMITS • PRECIPITATION AND TEMPERATURE	–	X
WPS FOLLOWED • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYPE/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) • PROPER POSITION (F, V, H, OH)	–	X
WELDING TECHNIQUES • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	–	X
PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	X	–

TABLE N5.4-3
INSPECTION TASKS AFTER WELDING

INSPECTION TASK AFTER WELDING	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
WELDS CLEANED	–	X
SIZE LENGTH AND LOCATION OF WELDS	X	
WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELD/BASE=METAL FUSION • CRATER CROSS SECTION • WELD PROFILES • WELD SIZE • UNDERCUT • POROSITY	X	–
ARC STRIKES	X	–
K-AREA[a]	X	–
WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES[b]	X	–
BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	X	–
REPAIR ACTIVITIES	X	–
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	X	–
NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	–	X

a. WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT WEB K-AREA FOR CRACKS WITHIN 3 IN. (75MM) OF THE WELD.
b. AFTER ROLLED HEAVY SHAPES (SEE SECTION A3.1c) AND BUILT-UP HEAVY SHAPES (SEE SECTION A3.1d) ARE WELDED VISUALLY INSPECT THE WELD ACCESS HOLES FOR CRACKS

TABLE N5.6-1
INSPECTION TASKS PRIOR TO BOLTING

INSPECTION TASK PRIOR TO BOLTING	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
MANUFACTURER'S CERTIFICATE AVAILABLE FOR FASTENER MATERIALS	X	–
FASTENER MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	–	X
CORRECT FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	–	X
CORRECT BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	–	X
CONNECTION ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	–	X
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	–	X
PROTECTED STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	–	X

TABLE N5.6-2
INSPECTION TASKS DURING BOLTING

INSPECTION TASK DURING BOLTING	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
FASTENER ASSEMBLIES PLACED IS ALL HOLES AND WASHERS AND NUTS ARE POSITIONED AS REQUIRED	–	X
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	–	X
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	–	X
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	–	X

TABLE N5.6-3
INSPECTION TASKS AFTER BOLTING

INSPECTION TASK AFTER BOLTING	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	X	–

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

SCHEDULE OF SPECIAL INSPECTIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER
S-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

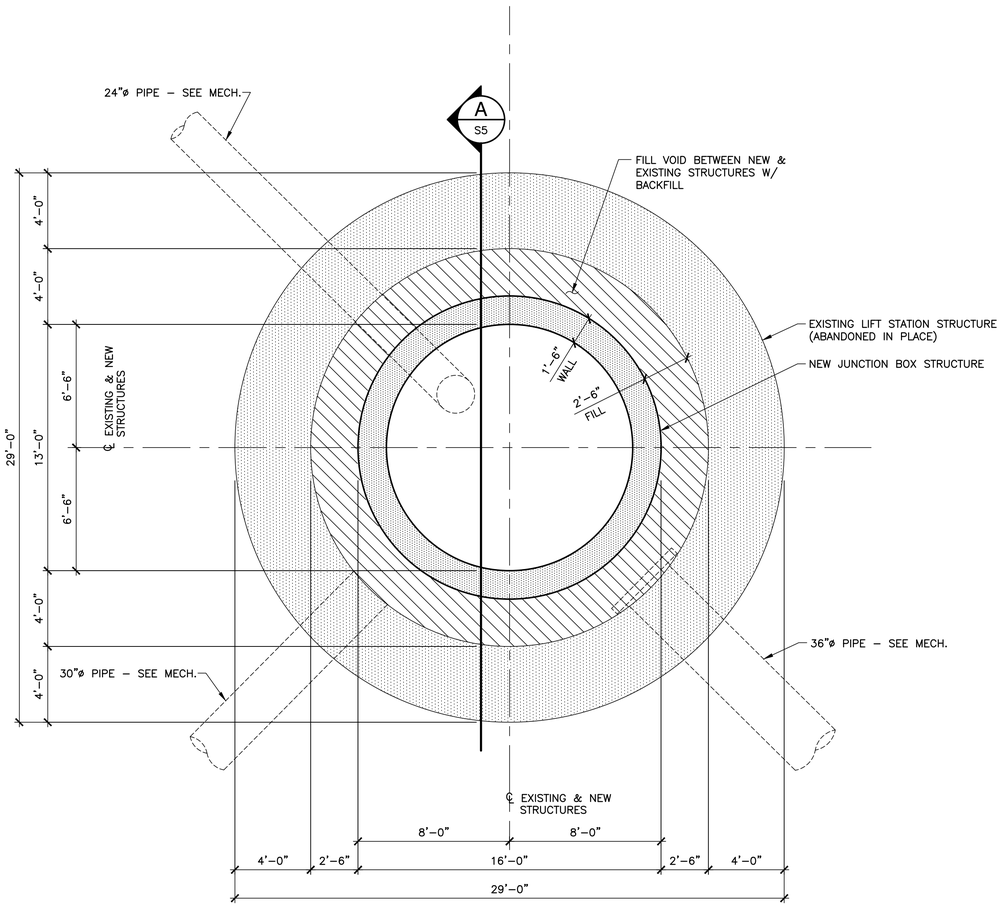
DRAWING SCALE

DWG NO
S3

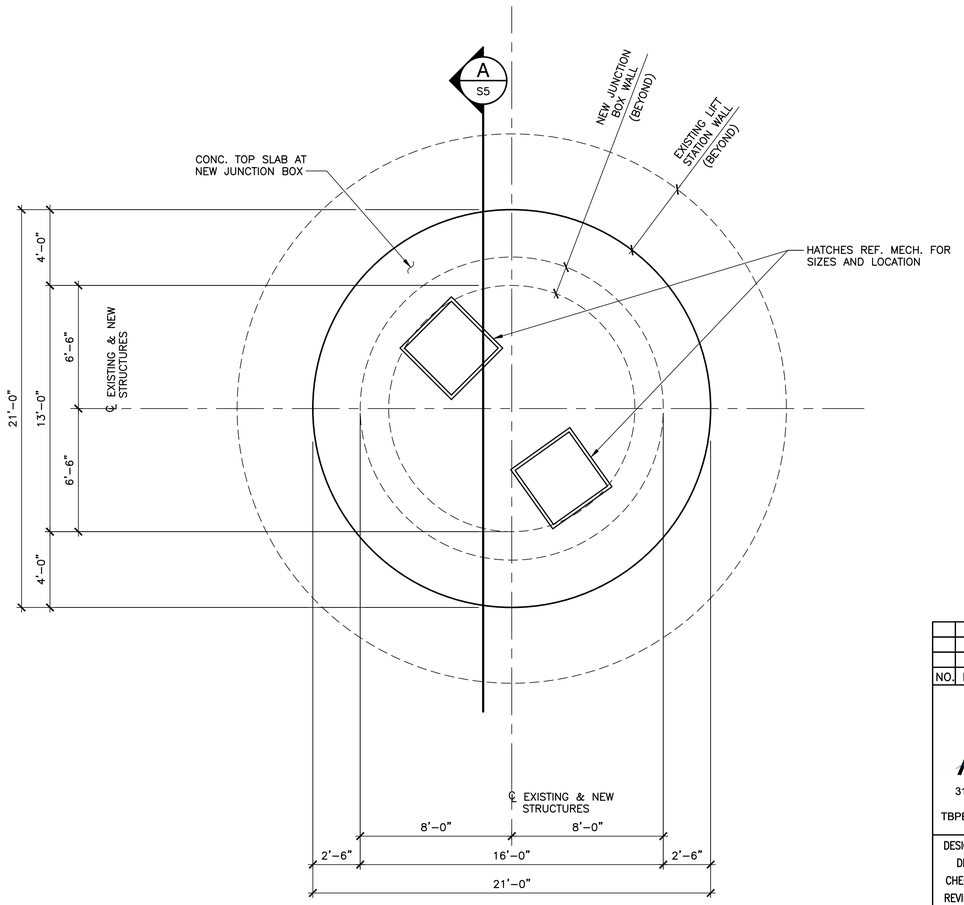
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\SCHEDULE OF SPECIAL INSPECTIONS.dwg



1 S4 JUNCTION BOX LOWER PLAN
SCALE: 1/4" = 1'-0"



1 S4 JUNCTION BOX UPPER PLAN
SCALE: 1/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

JUNCTION BOX LOWER AND UPPER PLAN

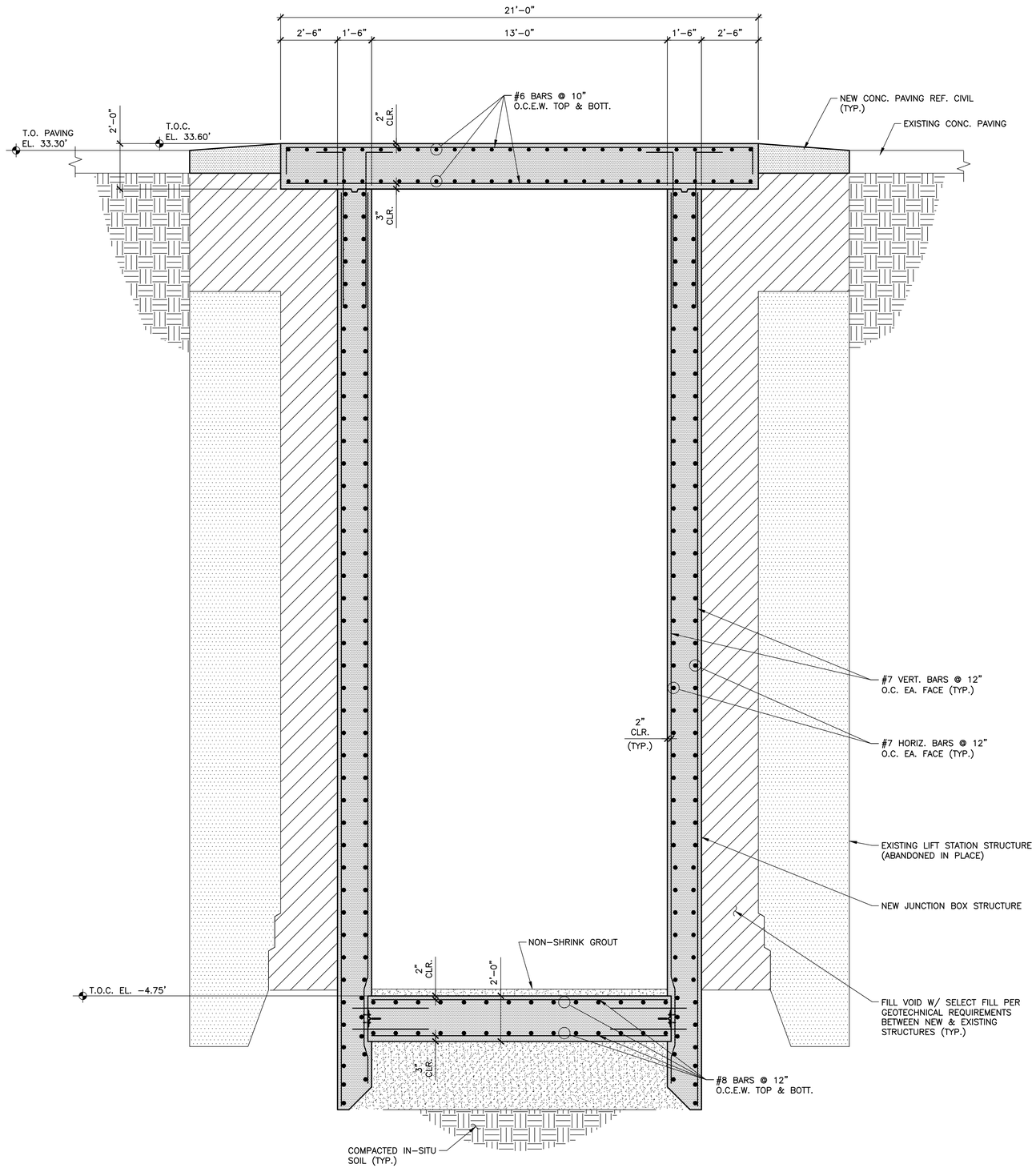
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–001000–0035–4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV–FS–2015–STRUCT.ctb PLOTTED: 1/19/2026 2:58 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\JUNCTION BOX LOWER AND UPPER PLAN.dwg



A / S5 SECTION AT JUNCTION BOX
SCALE: 3/8" = 1'-0"

NOTE:
DETAILS SHOWN ON JUNCTION BOX ARE FINAL IN PLACE CONDITION. CONTRACTOR TO PROVIDE CONSTRUCTION PLAN AND CONSTRUCTION SEQUENCE TO STRUCTURAL ENGINEER FOR FINAL APPROVAL

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

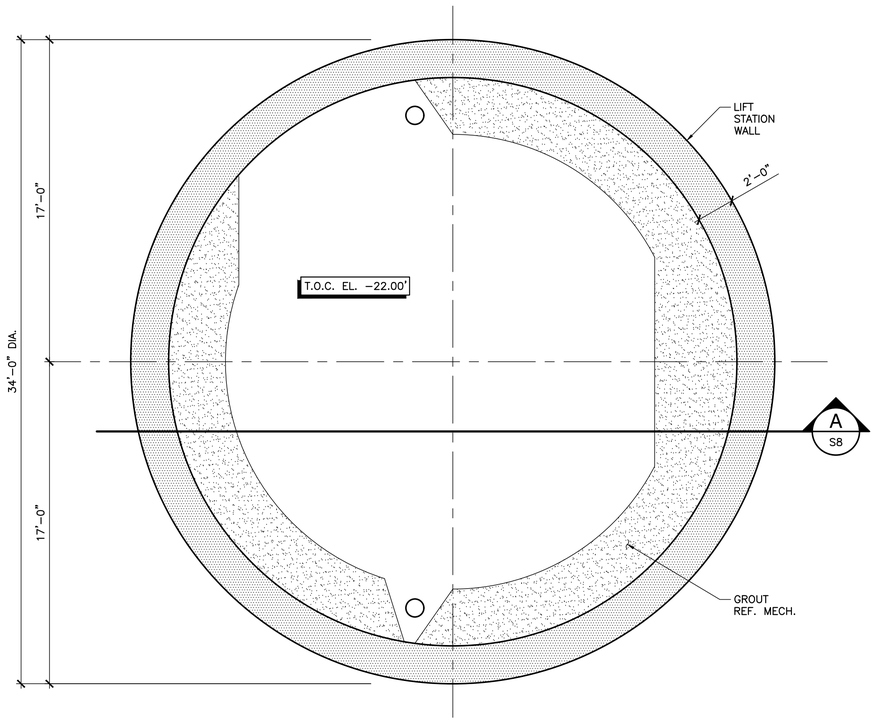
JUNCTION BOX SECTION

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S5

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV-FS-2015-STRUCT.CTB PLOTTED: 1/19/2026 2:58 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\JUNCTION BOX SECTION.dwg



1 / S6 LIFT STATION LOWER LEVEL PLAN
SCALE: 1/4" = 1'-0"

LEGEND:

LIFT STATION CONCRETE WALL

GROUT REF. MECH.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

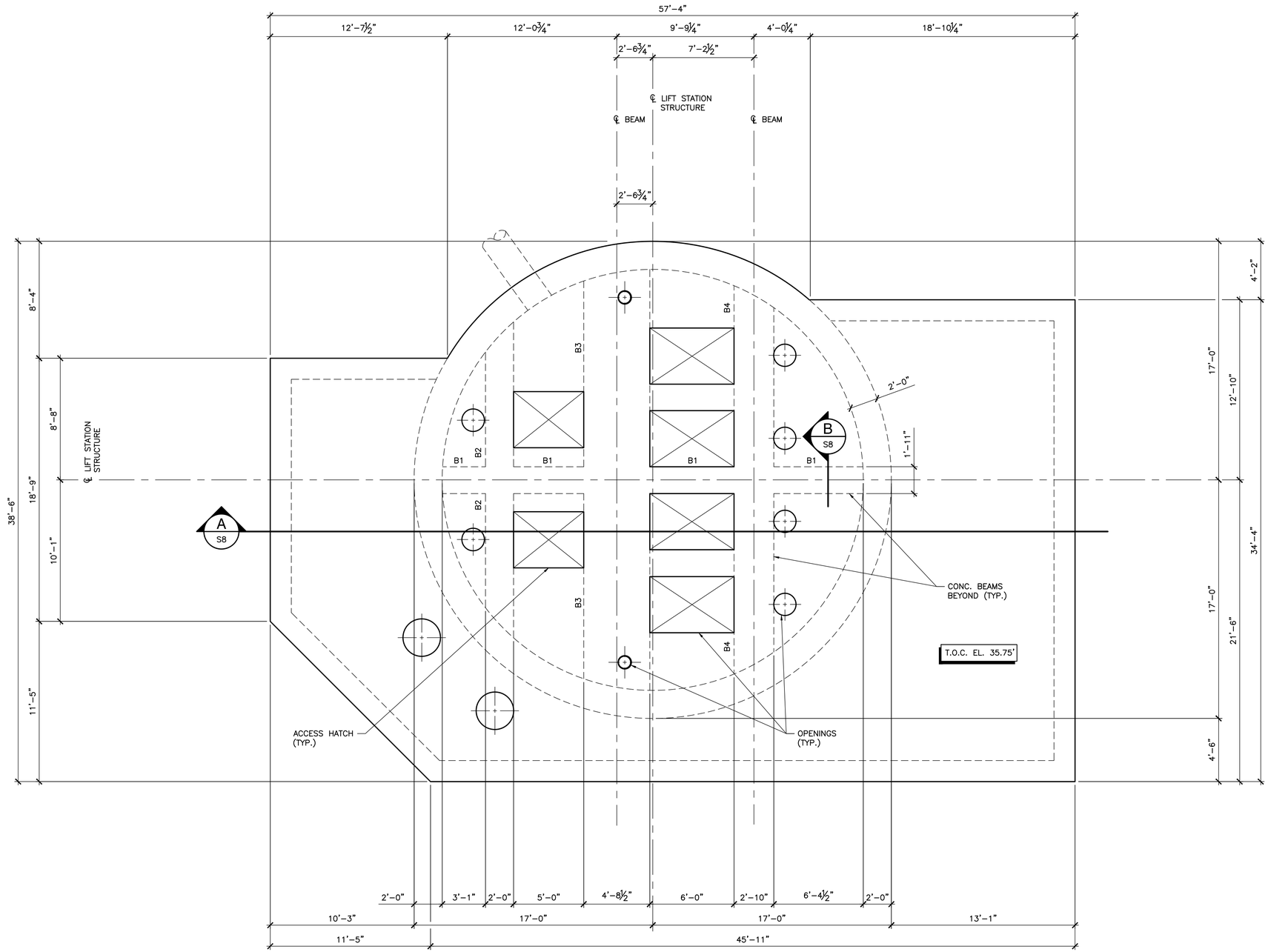
LIFT STATION LOWER LEVEL PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 2:58 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\LIFT STATION LOWER LEVEL PLAN.dwg



LEGEND:

B# BEAM SIZE & REINFORCING SEE SECTION B ON SHEET S8

1 / S7 LIFT STATION UPPER LEVEL PLAN
SCALE: 1/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

LIFT STATION UPPER LEVEL PLAN

WBS NUMBER
S-001000-0035-4
DRAWING SCALE
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.
SHEET NO. OF

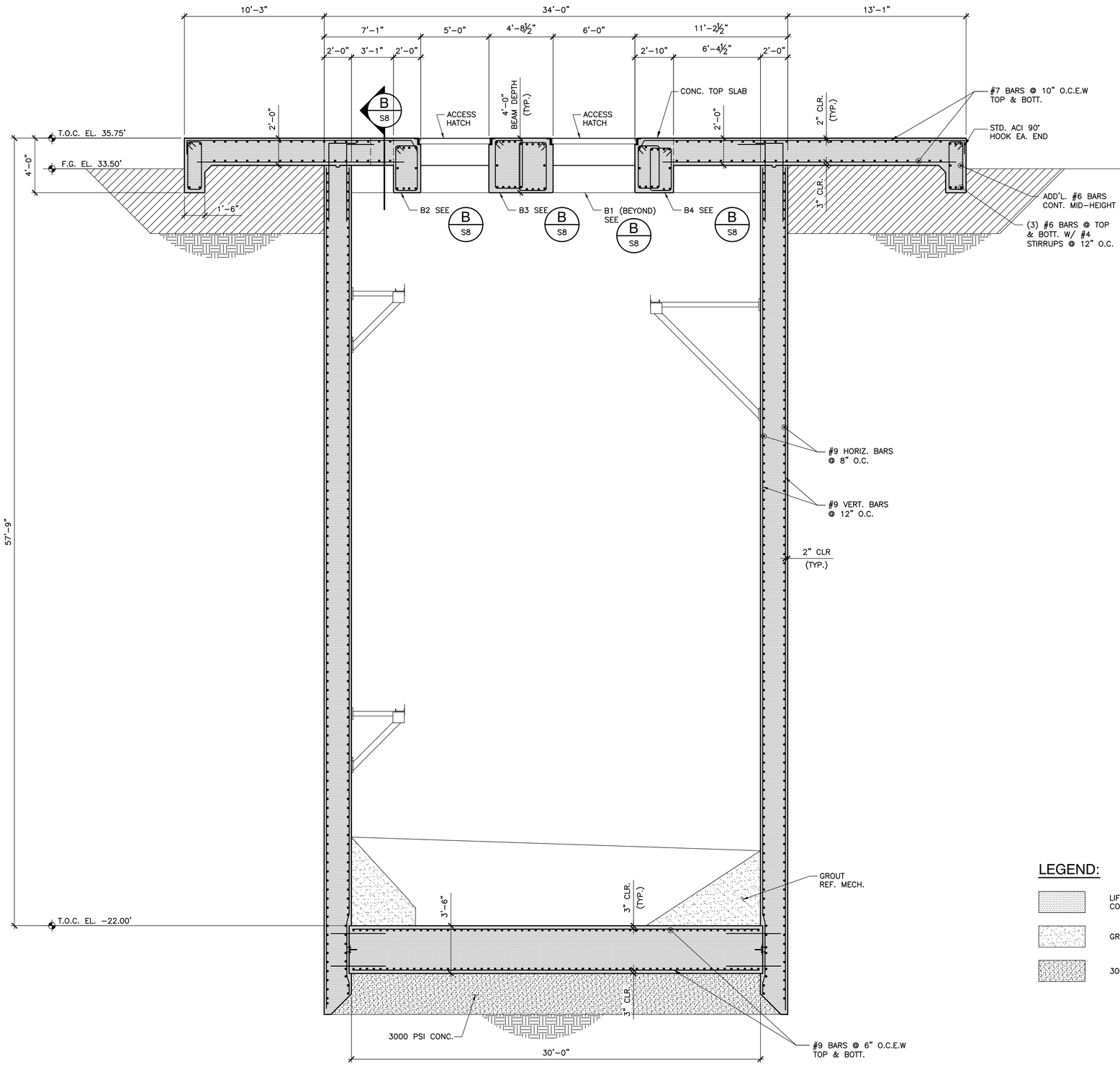
FOR CITY OF HOUSTON USE ONLY

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

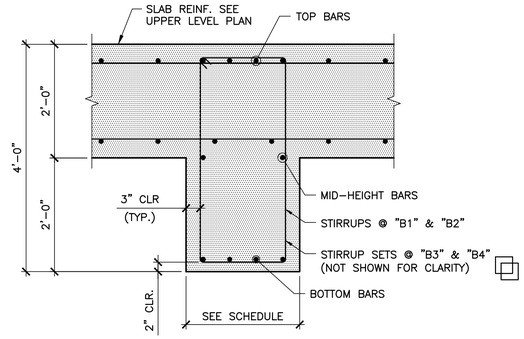
DWG NO
S7

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 2:58 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\LIFT STATION UPPER LEVEL PLAN.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.PLOTTED: 1/19/2026 2:59 PM



A S8 SECTION AT LIFT STATION
SCALE: 1/4" = 1'-0"



PLAN

BEAM SCHEDULE

MARK	SIZE W	SIZE D	TOP & BOTTOM	CONT. MID-HEIGHT	STIRRUPS SIZE	STIRRUPS SPACING	REMARKS
B1	23"	48"	(4) #9	(2) #6	#4	12" O.C. MAX.	
B2	24"	48"	(4) #9	(2) #6	#4	12" O.C. MAX.	
B3	56.5"	48"	(9) #9	(2) #6	#4	12" O.C. MAX.	PROVIDE STIRRUP SETS
B4	34"	48"	(6) #9	(2) #6	#4	12" O.C. MAX.	PROVIDE STIRRUP SETS

B S8 SECTION
SCALE: 3/4" = 1'-0"

LEGEND:

- LIFT STATION CONCRETE WALL
- GROUT REF. MECH.
- 3000 PSI CONCRETE

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

LIFT STATION SECTION

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S8

WBS NUMBER
S-001000-0035-4

DRAWING SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

FOR CITY OF HOUSTON USE ONLY

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\LIFT STATION SECTION.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 2:59 PM

THIS SHEET INTENTIONALLY LEFT BLANK

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station,
24-inch FM Installation,
and Scott Street Storage
Tank No. 1

LIFT STATION STEEL FRAMING PLAN AND SECTIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S9

WBS NUMBER
S-001000-0035-4

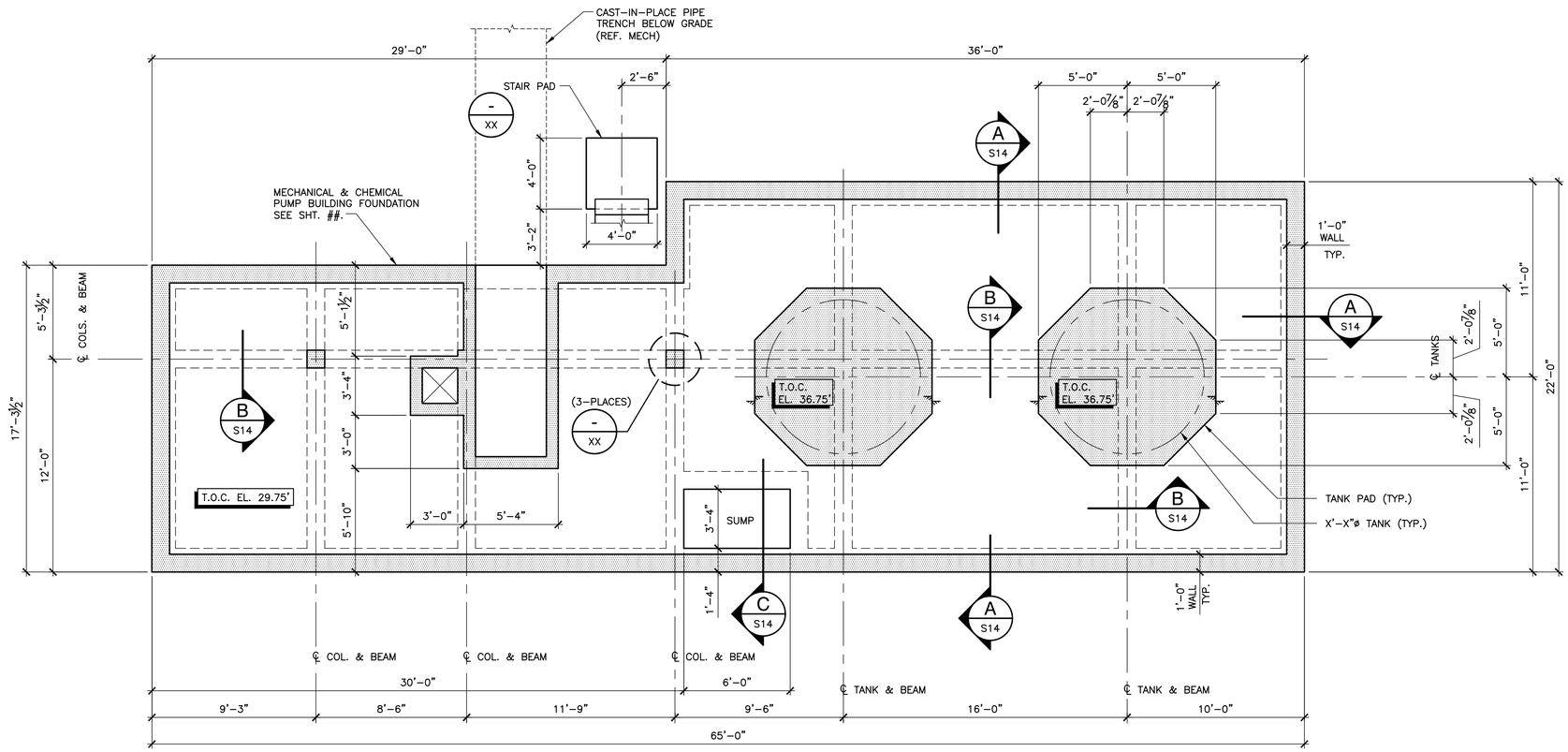
DRAWING SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

FOR CITY OF HOUSTON USE ONLY

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\LIFT STATION STEEL FRAMING PLAN AND SECTIONS.dwg



1 S10 CHEMICAL STORAGE AND FEED BUILDING FOUNDATION (LOWER) PLAN

SCALE: 1/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

CHEMICAL STORAGE AND FEED BUILDING LOWER PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S10

WBS NUMBER
S-001000-0035-4

DRAWING SCALE

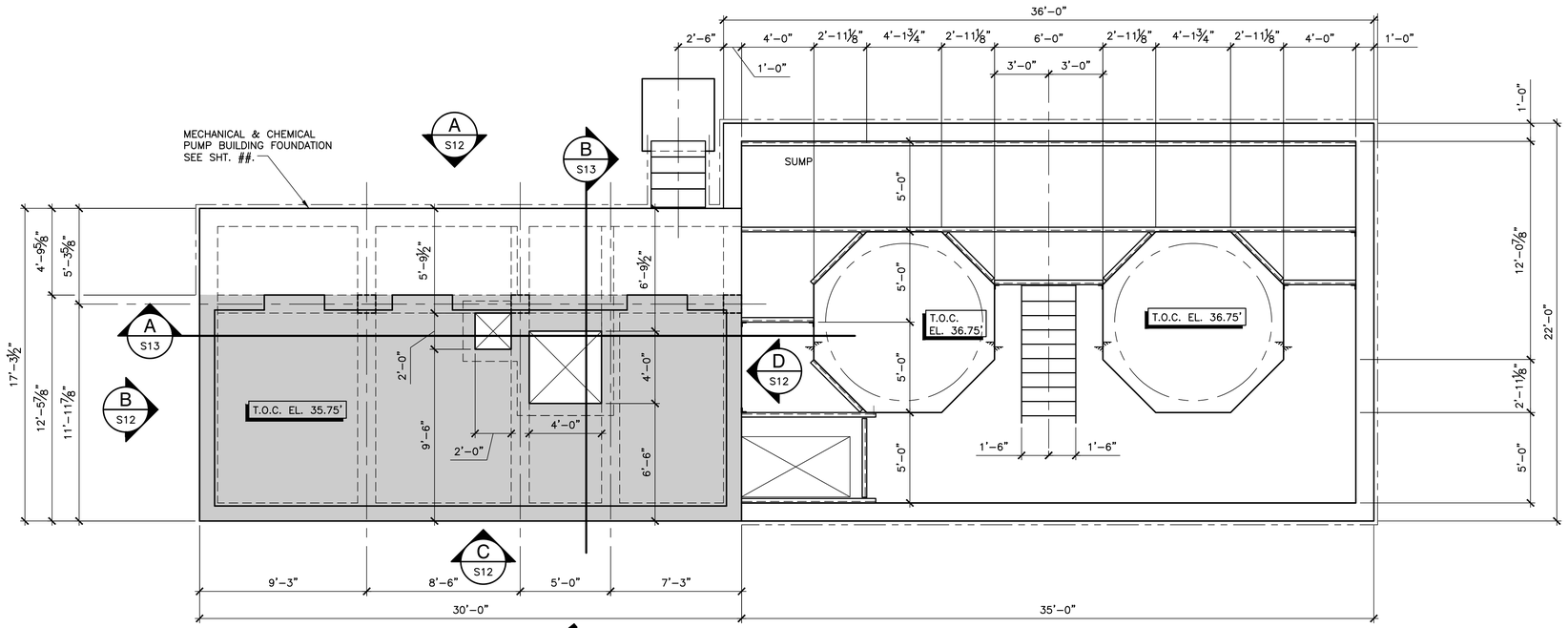
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

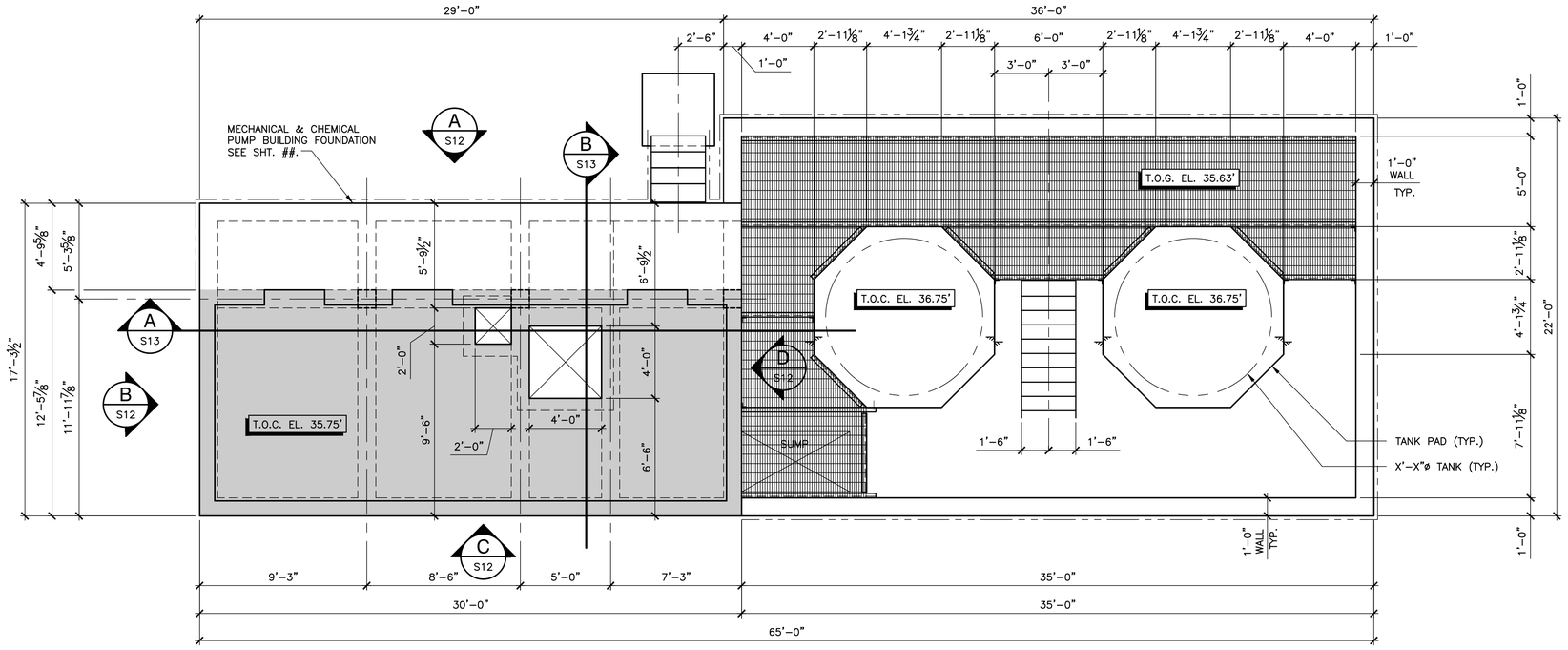
FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: LNV-FS-2015-STRUCT.CTB PLOTTED: 1/19/2026 2:59 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\CHEMICAL STORAGE AND FEED BUILDING LOWER PLAN.dwg



1 S11 CHEMICAL STORAGE AND FEED BUIDLING UPPER PLAN
SCALE: 1/4" = 1'-0"



2 S11 CHEMICAL STORAGE AND FEED BUILDING GRATING PLAN
SCALE: 1/4" = 1'-0"

NOTES:

1. CONTRACTOR SHALL CONSTRUCT THE FOUNDATION SO THAT THE FLOOR SHALL BE TRUE AND LEVEL TO A MAXIMUM TOLERANCE OF 1/8" IN 10 FEET.
2. OMIT LEDGE AT DOOR OPENINGS. REFER TO BUILDING DRAWINGS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

CHEMICAL STORAGE AND FEED BUILDING UPPER AND STEEL FRAMING PLAN

WBS NUMBER
S-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

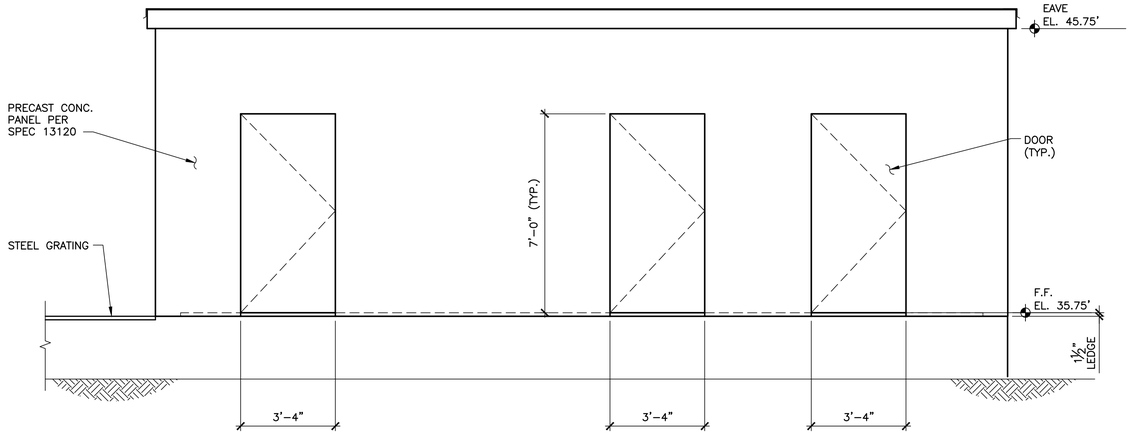
DWG NO
S11

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

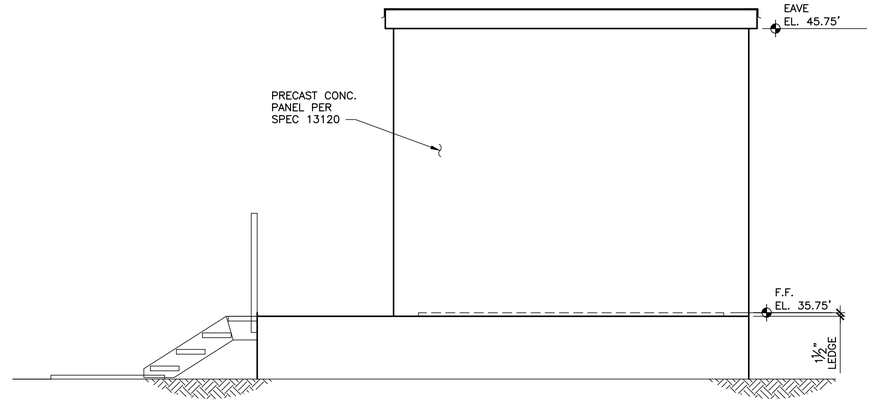
PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 2:59 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\CHEMICAL STORAGE AND FEED BUILDING UPPER AND STEEL FRAMING PLAN.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 2:59 PM

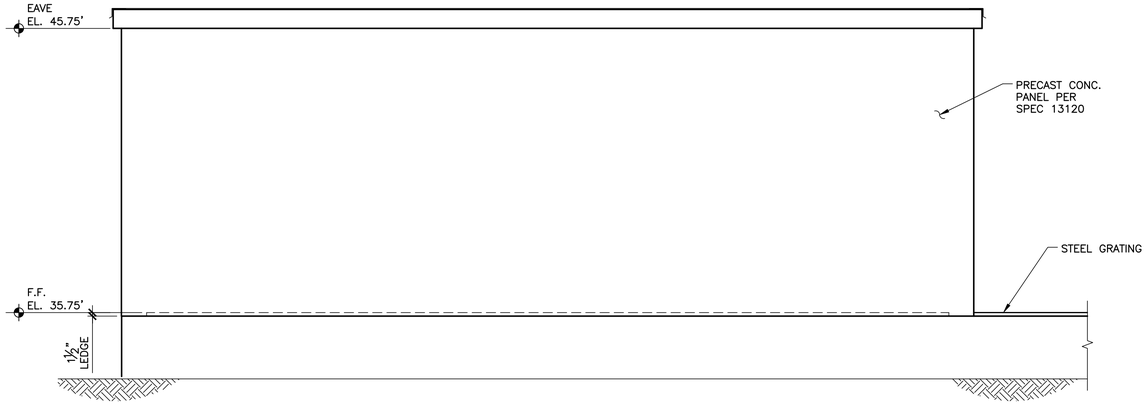
NOTE:
REFER TO MECHANICAL FOR SIGNAGE WITHIN MECHANICAL, ELECTRICAL AND FEED PUMP ROOMS.



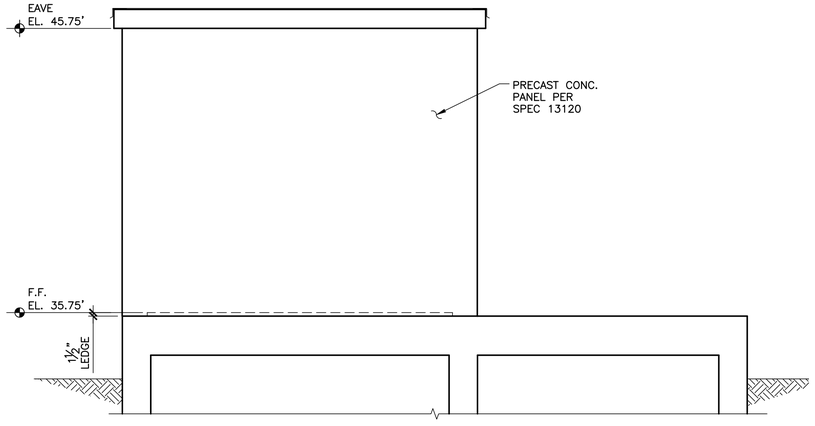
A S12 NORTH WEST EXTERIOR ELEVATION AT CHEMICAL STORAGE AND FEED BUILDING
SCALE: 3/8" = 1'-0"



B S12 SOUTHWEST EXTERIOR ELEVATION AT CHEMICAL STORAGE AND FEED BUILDING
SCALE: 3/8" = 1'-0"



C S12 SOUTH EAST EXTERIOR ELEVATION AT CHEMICAL STORAGE AND FEED BUILDING
SCALE: 3/8" = 1'-0"



D S12 NORTH EAST EXTERIOR ELEVATION AT CHEMICAL STORAGE AND FEED BUILDING
SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

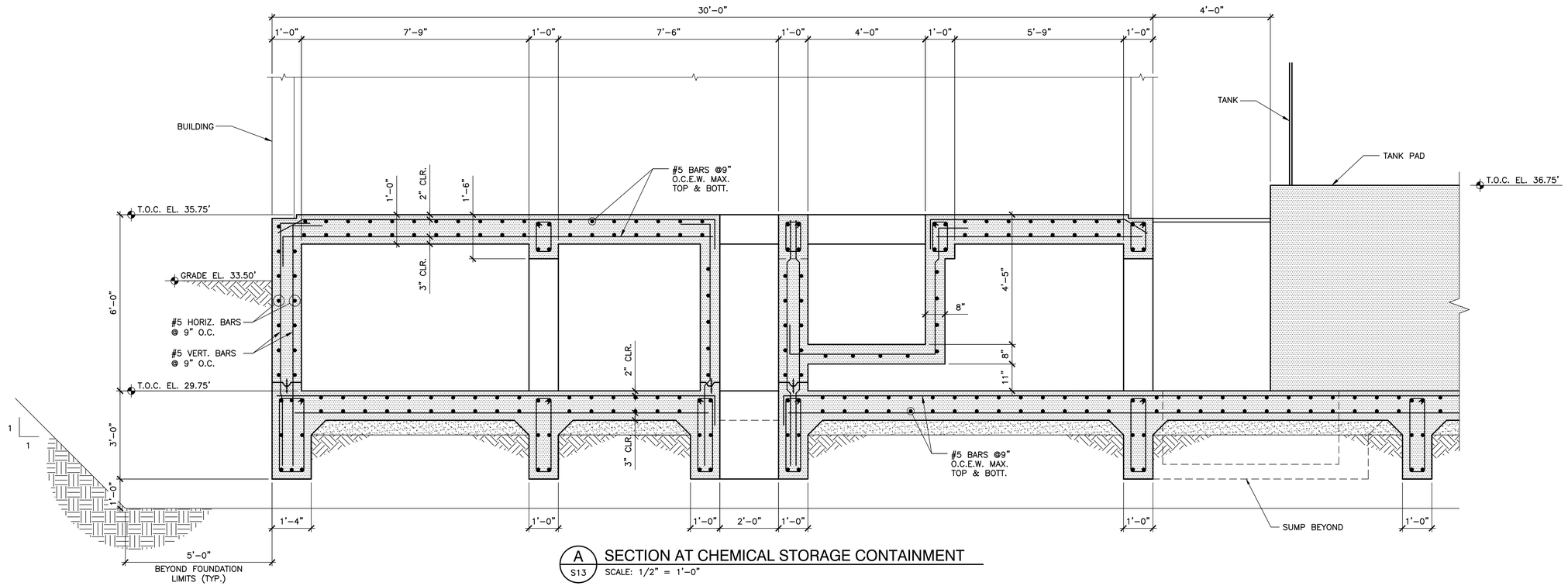
CHEMICAL STORAGE AND FEED BUILDING EXTERIOR ELEVATIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S12

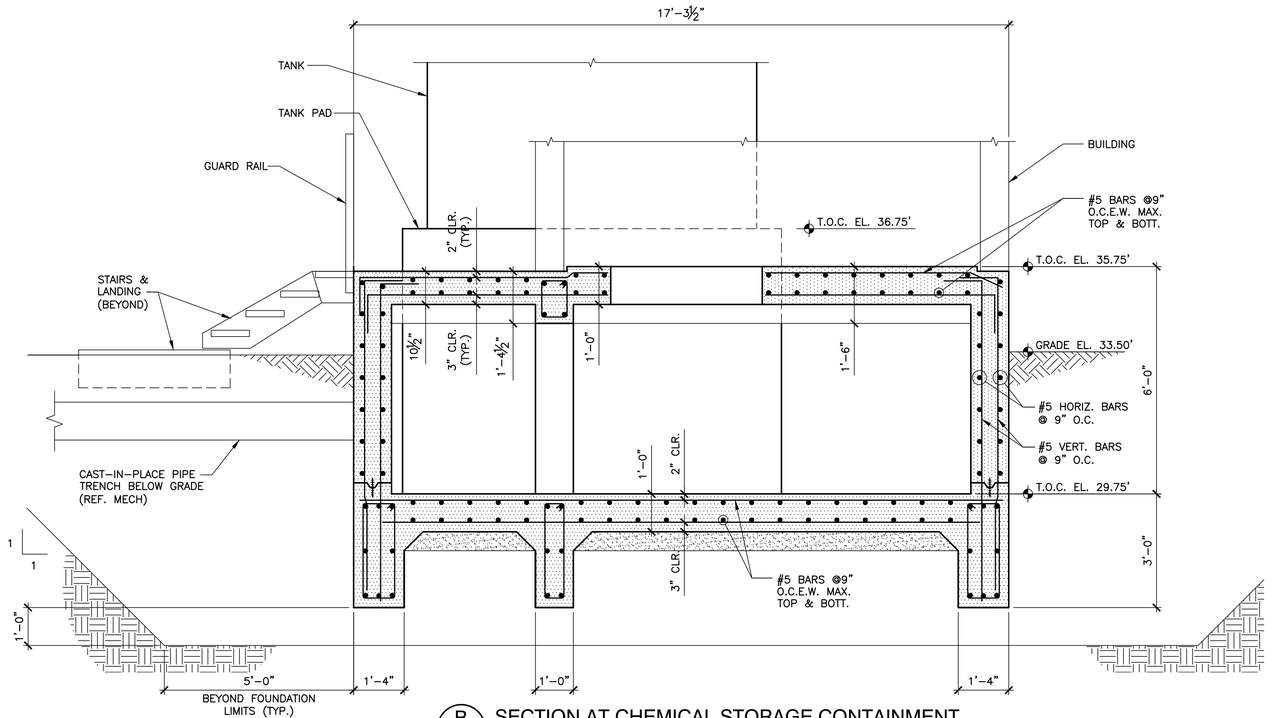
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\CHEMICAL STORAGE AND FEED BUILDING EXTERIOR ELEVATIONS.dwg



A S13 SECTION AT CHEMICAL STORAGE CONTAINMENT

SCALE: 1/2" = 1'-0"



B S13 SECTION AT CHEMICAL STORAGE CONTAINMENT

SCALE: 1/2" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

CHEMICAL STORAGE AND FEED BUILDING SECTIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S13

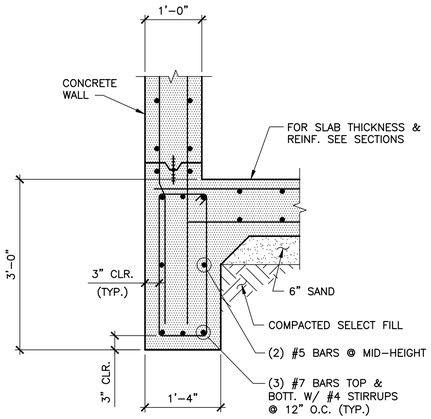
WBS NUMBER	S-001000-0035-4
DRAWING SCALE	
CITY OF HOUSTON PM	MEGAN R. JORDAN, P.E.
SHEET NO.	OF

FOR CITY OF HOUSTON USE ONLY

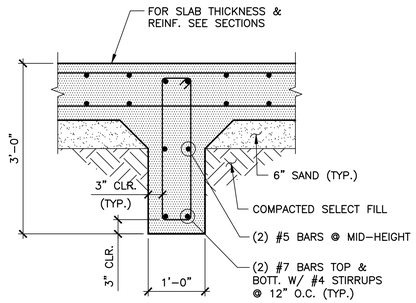
PLOT STYLE: LNV-FS-2015-STRUCT.CTB PLOTTED: 1/19/2026 2:59 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\CHEMICAL STORAGE AND FEED BUILDING SECTIONS.dwg

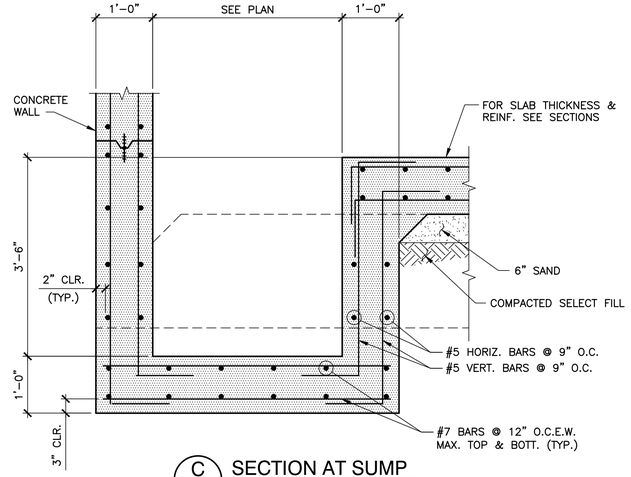
PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 2:59 PM



A S14 SECTION AT PERIMETER BEAM
SCALE: 3/4" = 1'-0"



B S14 SECTION AT INTERIOR BEAM
SCALE: 3/4" = 1'-0"



C S14 SECTION AT SUMP
SCALE: 3/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

CHEMICAL STORAGE AND FEED BUILDING SECTIONS & DETAILS

WBS NUMBER
S-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE

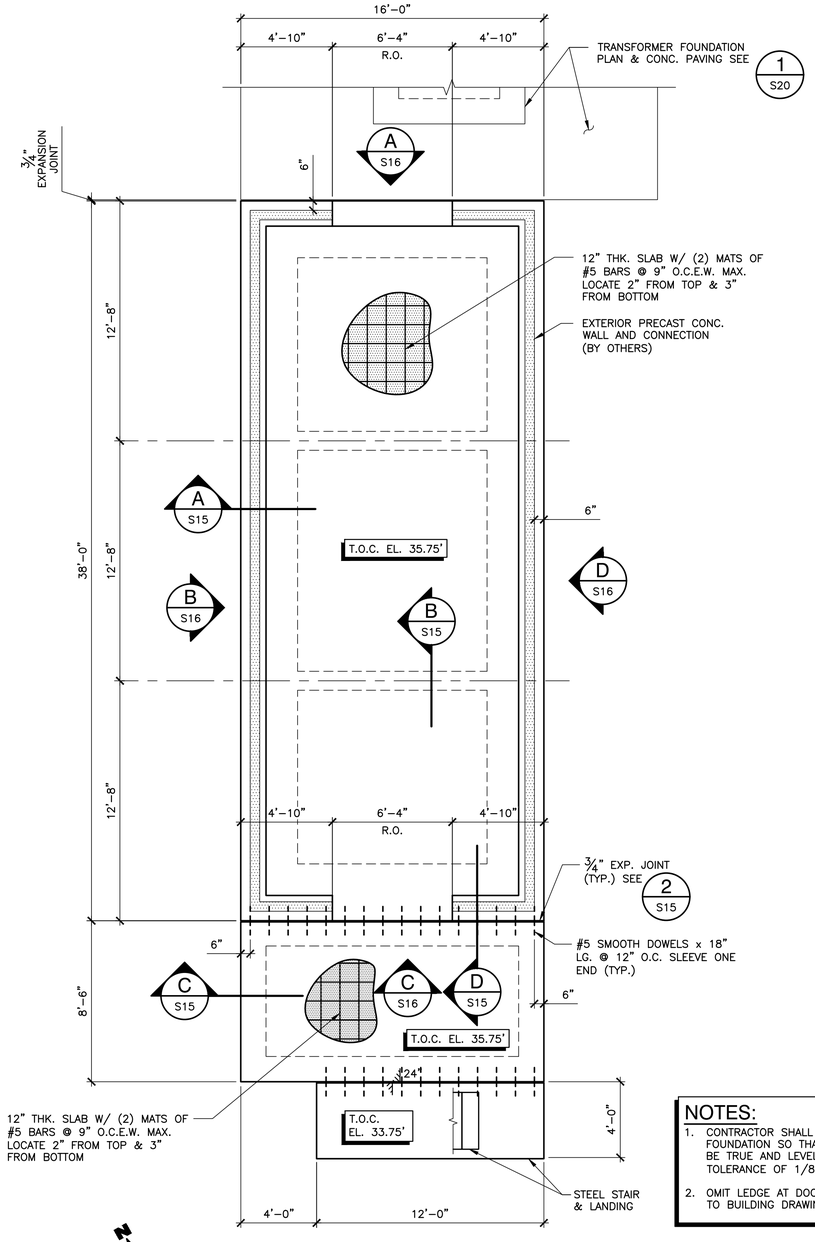
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

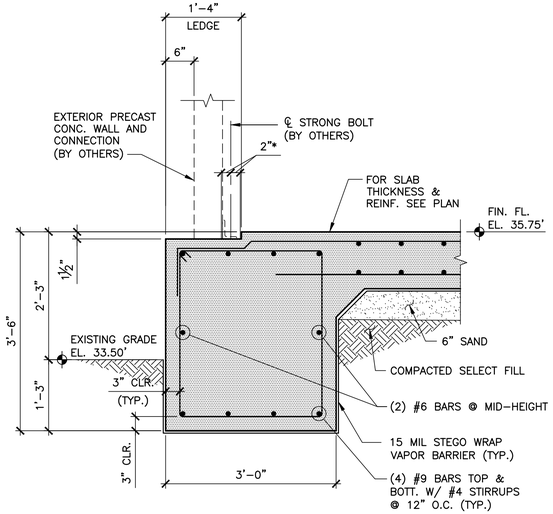
DWG NO
S14

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\CHEMICAL STORAGE AND FEED BUILDING SECTIONS & DETAILS.dwg

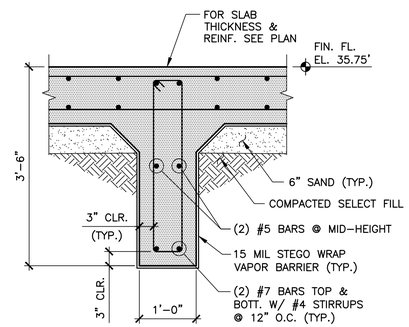


1 S15 ELECTRICAL BUILDING FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

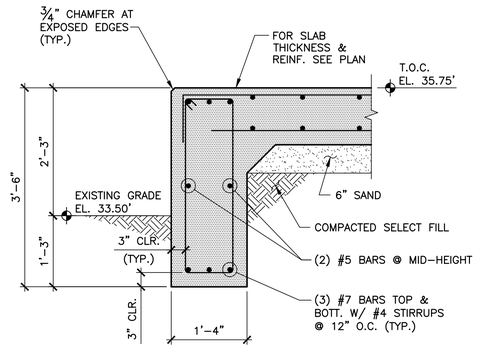
NOTES:
1. CONTRACTOR SHALL CONSTRUCT THE FOUNDATION SO THAT THE FLOOR SHALL BE TRUE AND LEVEL TO A MAXIMUM TOLERANCE OF 1/8" IN 10 FEET.
2. OMIT LEDGE AT DOOR OPENINGS. REFER TO BUILDING DRAWINGS.



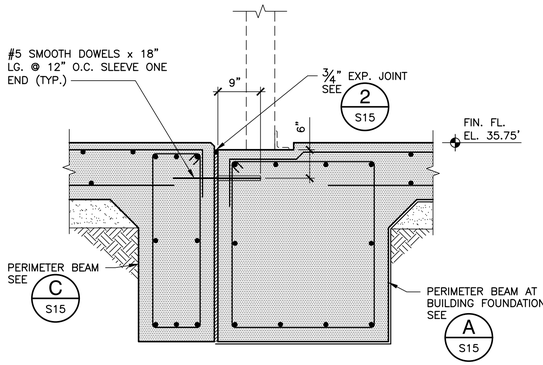
A S15 SECTION AT PERIMETER BEAM
SCALE: 3/4" = 1'-0"



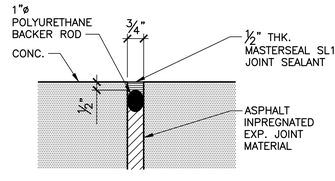
B S15 SECTION AT INTERIOR BEAM
SCALE: 3/4" = 1'-0"



C S15 SECTION AT PERIMETER BEAM
SCALE: 3/4" = 1'-0"



D S15 SECTION
SCALE: 3/4" = 1'-0"



2 S15 TYP. EXPANSION JOINT DETAIL
N.T.S.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

ELECTRICAL BUILDING FOUNDATION PLAN, SECTIONS & DETAILS

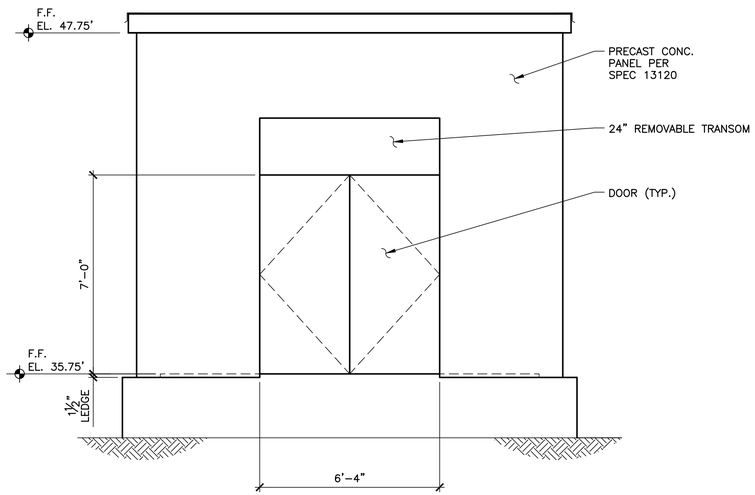
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S15

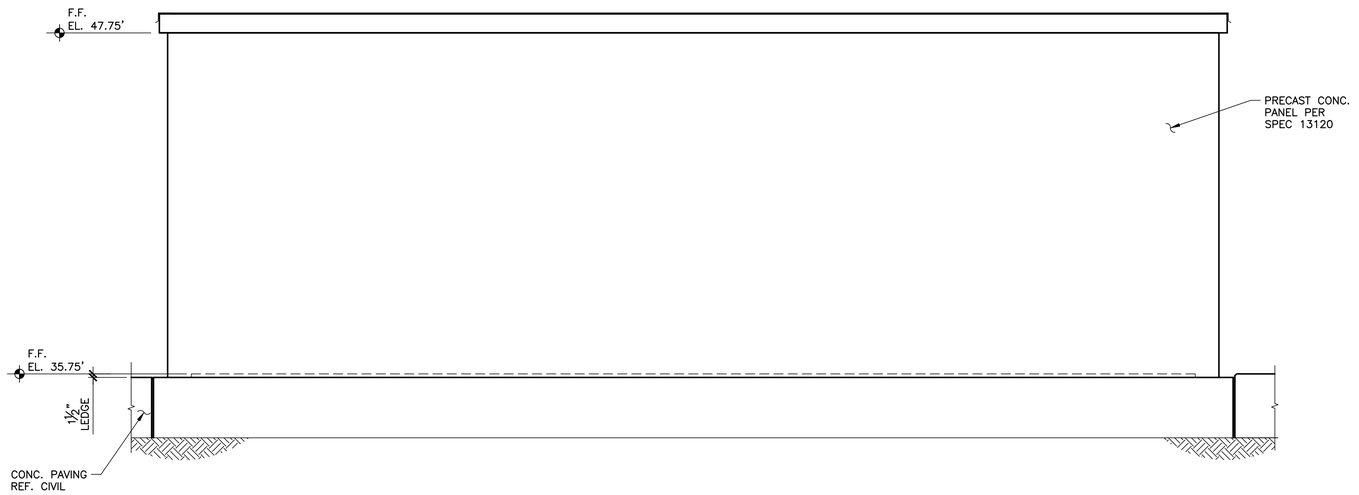
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 2:59 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\ELECTRICAL BUILDING FOUNDATION PLAN, SECTIONS & DETAILS.dwg

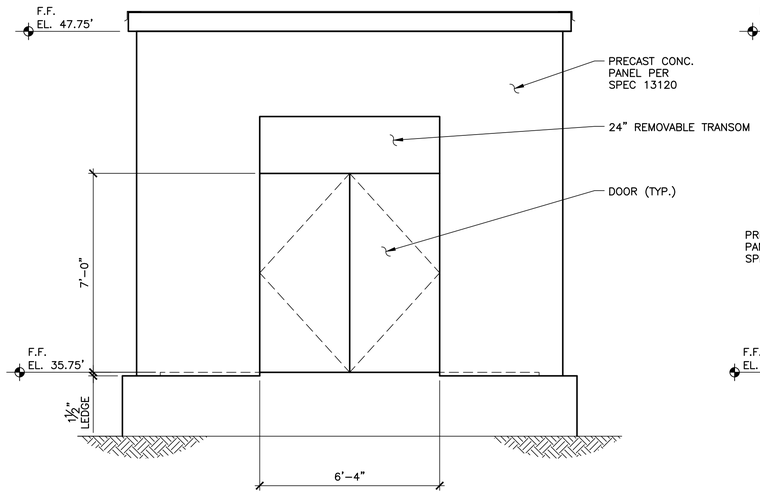
PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 2:59 PM



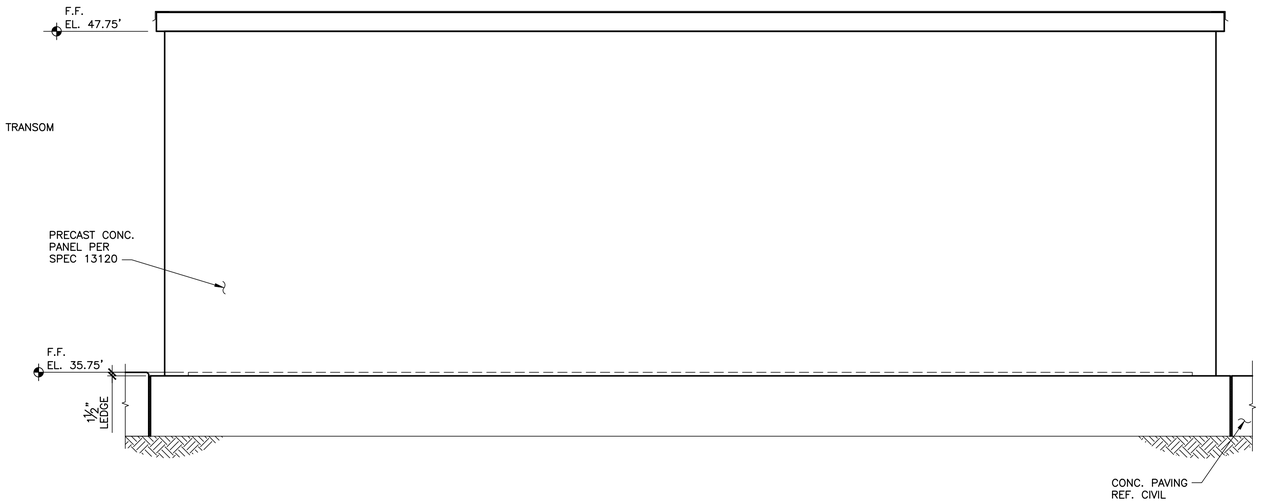
A S16 NORTH EAST EXTERIOR ELEVATION AT ELECTRICAL BUILDING
SCALE: 3/8" = 1'-0"



B S16 SOUTH EAST EXTERIOR ELEVATION AT ELECTRICAL BUILDING
SCALE: 3/8" = 1'-0"



C S16 SOUTH WEST EXTERIOR ELEVATION AT ELECTRICAL BUILDING
SCALE: 3/8" = 1'-0"



D S16 NORTH WEST EXTERIOR ELEVATION AT ELECTRICAL BUILDING
SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

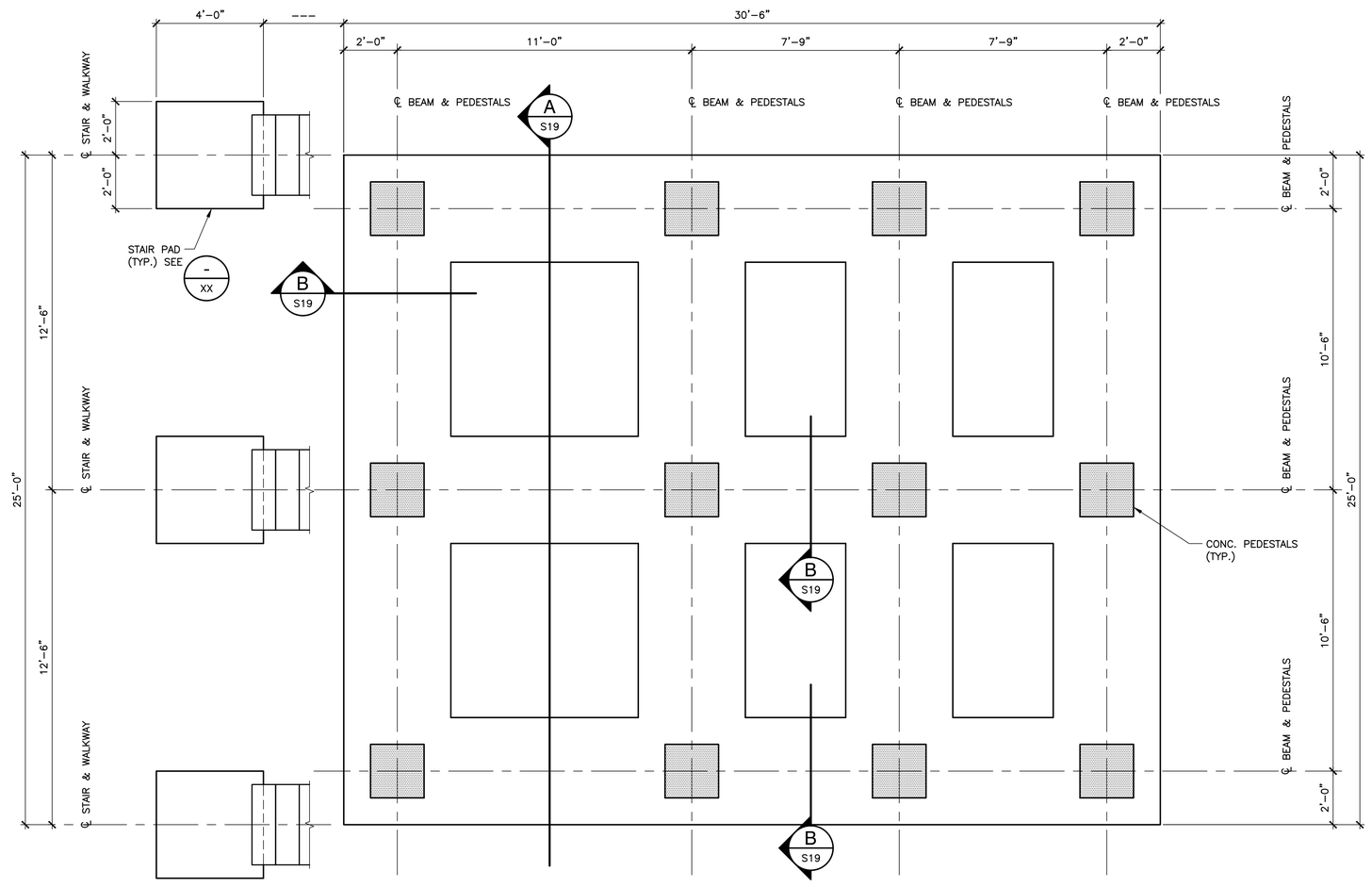
ELECTRICAL BUILDING FOUNDATION PLAN EXTERIOR ELEVATIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S16

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\ELECTRICAL BUILDING FOUNDATION PLAN EXTERIOR ELEVATIONS.dwg



1 S17 GENERATOR & MAINTENANCE FOUNDATION PLAN
SCALE: 3/8" = 1'–0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

GENERATOR AND MAINTENANCE PAD PLAN

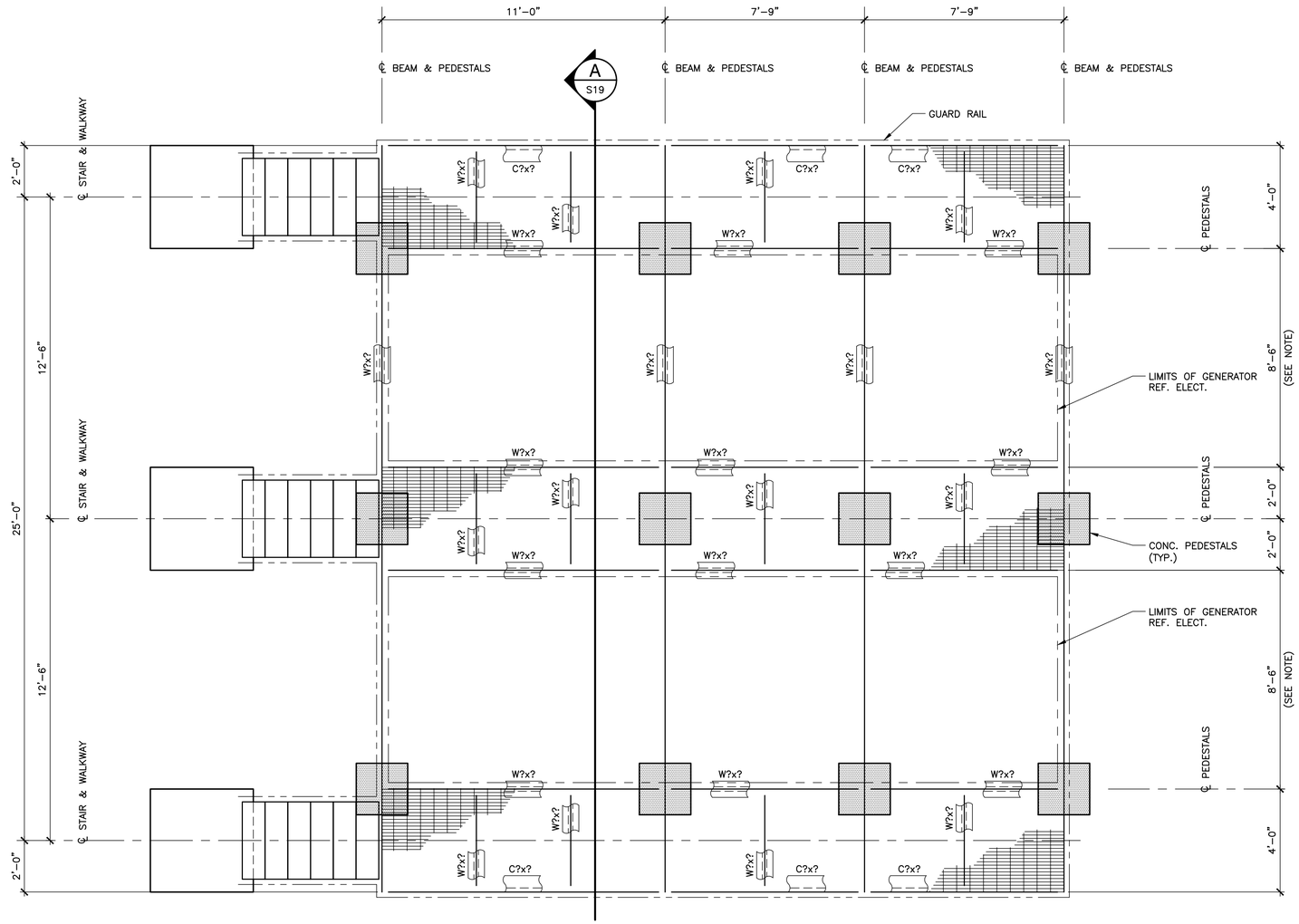
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S17

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–001000–0035–4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV–FS–2015–STRUCT.CTB PLOTTED: 1/19/2026 2:59 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\GENERATOR AND MAINTENANCE PAD PLAN.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.CTB PLOTTED: 1/19/2026 3:00 PM



N

1 / S18 GENERATOR & MAINTENANCE PAD FRAMING PLAN
SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

GENERATOR AND MAINTENANCE PAD FRAMING PLAN

WBS NUMBER
S-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE

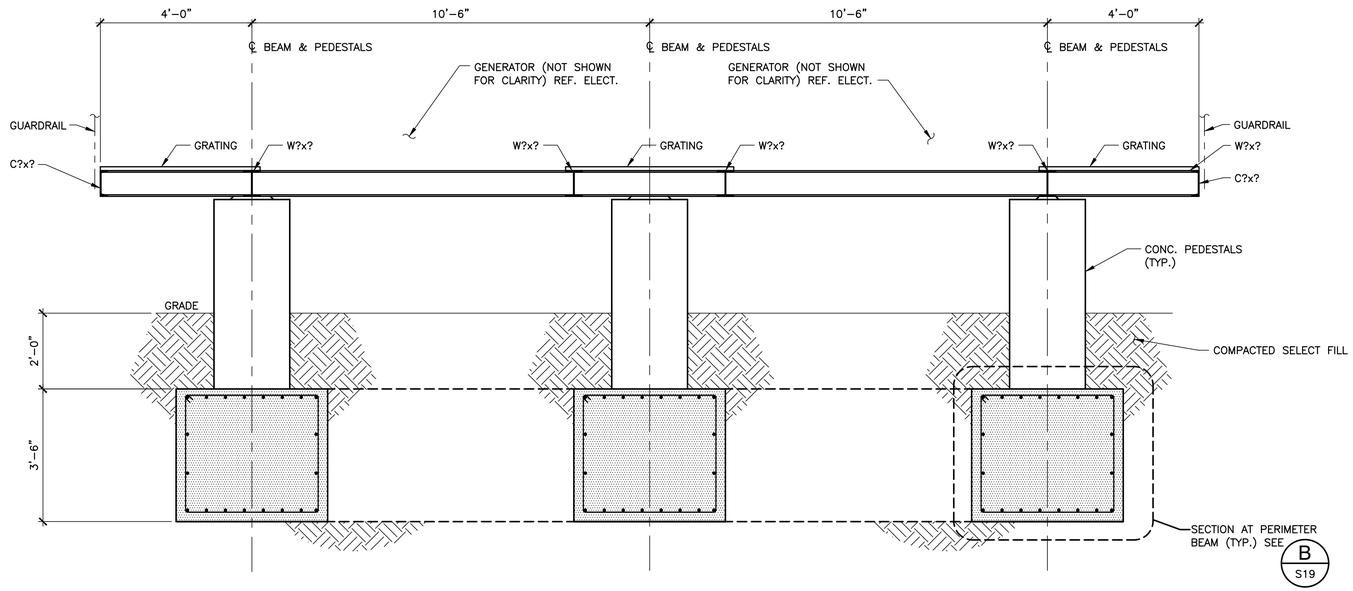
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

DWG NO
S18

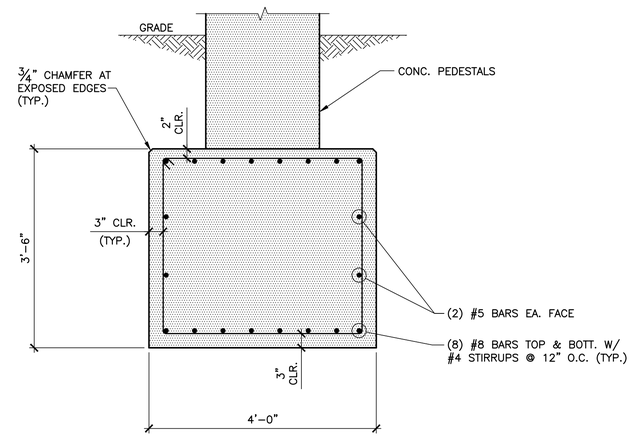
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\GENERATOR AND MAINTENANCE PAD FRAMING PLAN.dwg



A S19 SECTION THROUGH STRUCTURE

SCALE: 1/2" = 1'–0"



B S19 SECTION AT PERIMETER BEAM

SCALE: 3/4" = 1'–0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

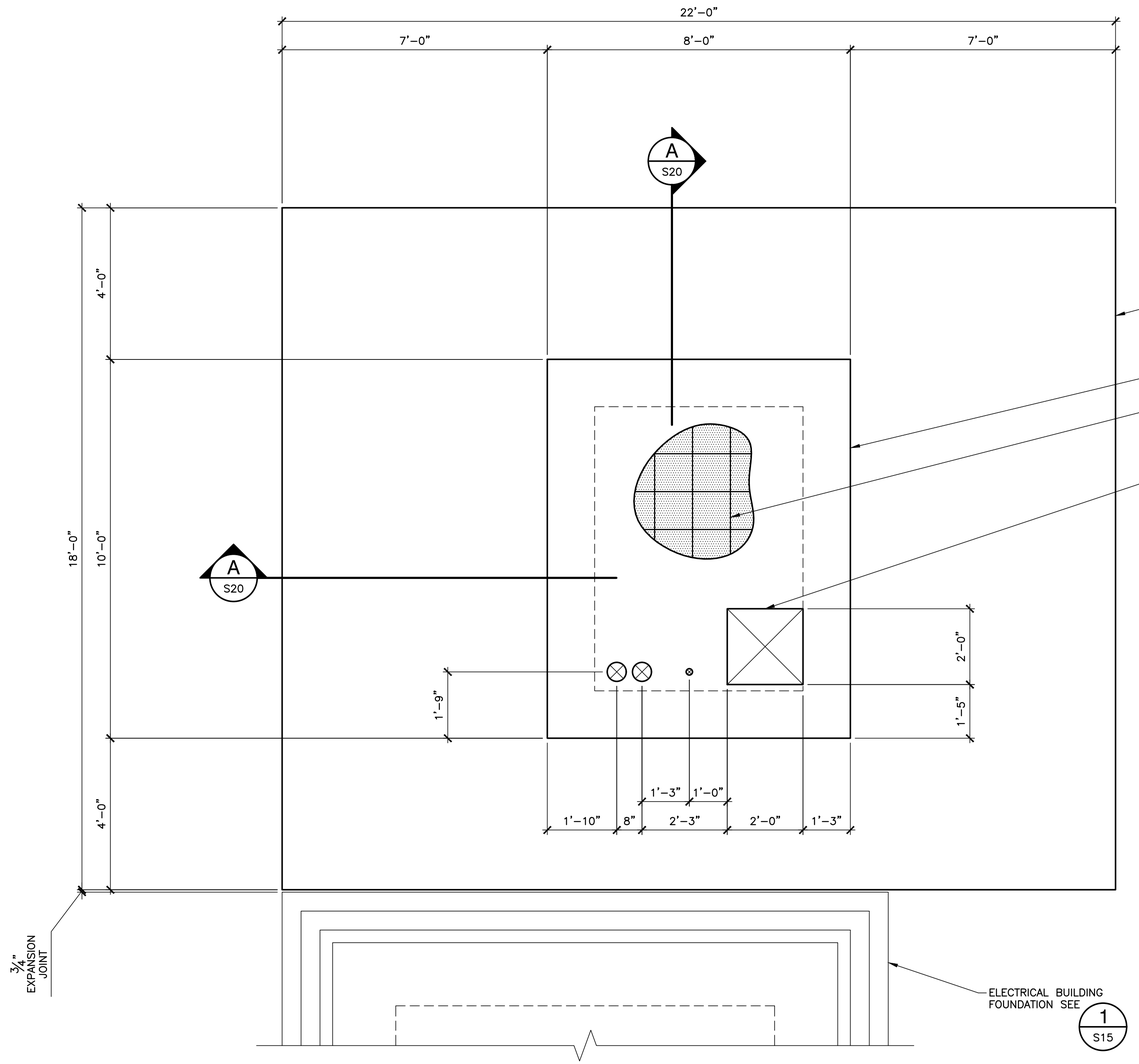
GENERATOR AND MAINTENANCE PAD SECTIONS & DETAIL

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

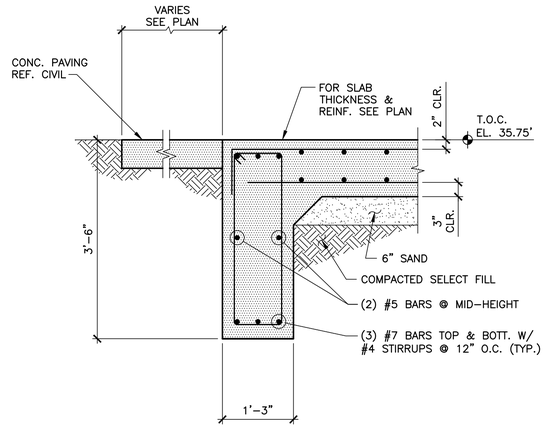
DWG NO
S19

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–001000–0035–4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV–FS–2015–STRUCT.ctb PLOTTED: 1/19/2026 3:00 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\GENERATOR AND MAINTENANCE PAD SECTIONS & DETAIL.dwg



1 S20 TRANSFORMER FOUNDATION PLAN
SCALE: 1/2" = 1'-0"



A S20 SECTION AT PERIMETER BEAM
SCALE: 3/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

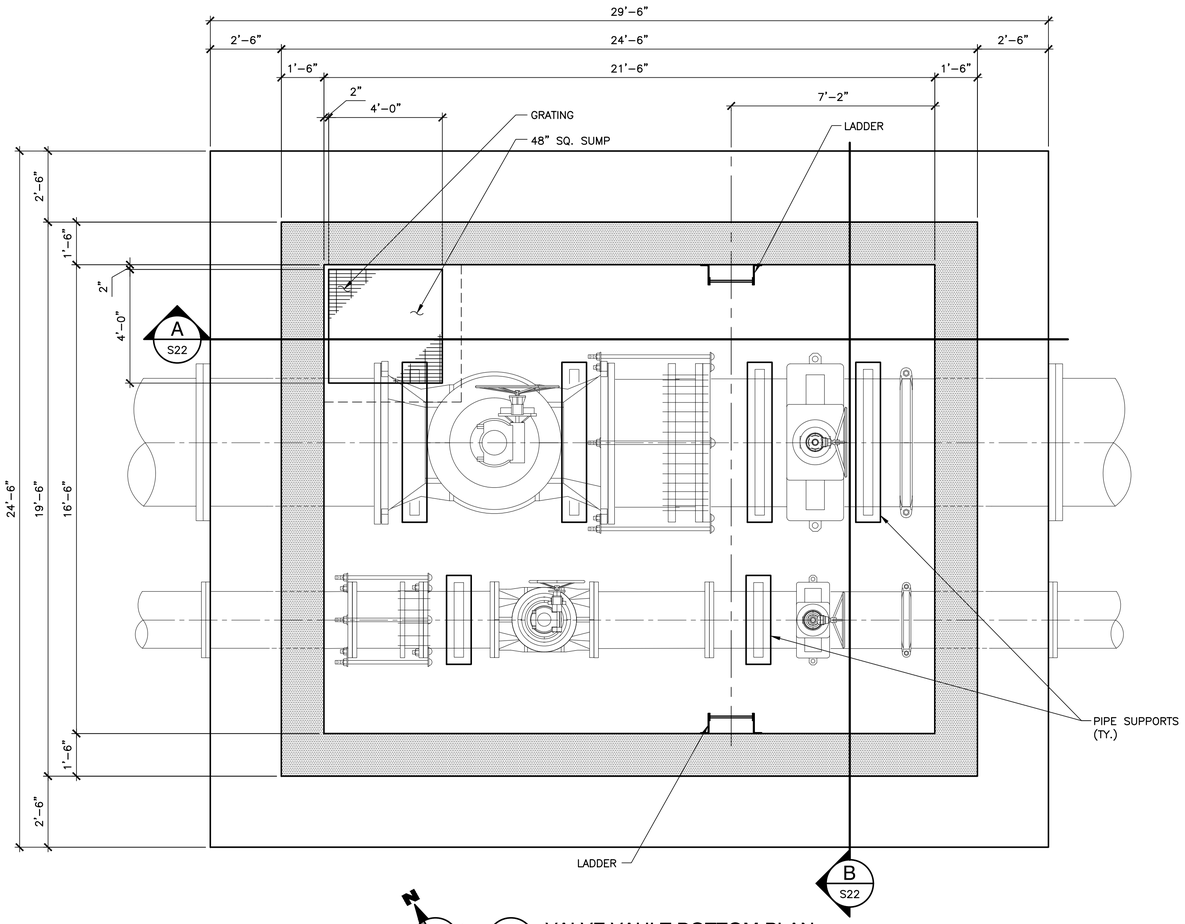
TRANSFORMER FOUNDATION PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S20

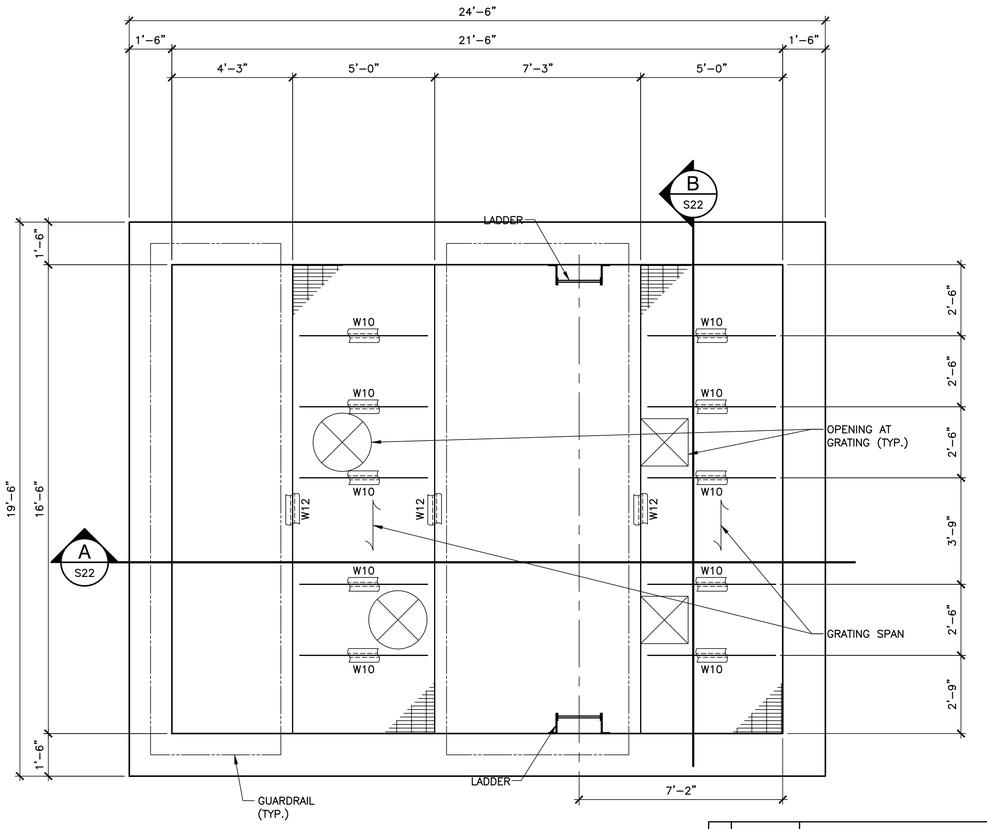
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:00 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\TRANSFORMER FOUNDATION PLAN.dwg



1 S21 VALVE VAULT BOTTOM PLAN

SCALE: 3/8" = 1'-0"



2 S21 VALVE VAULT TOP PLAN

SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

VALVE VAULT PLANS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S21

WBS NUMBER
S-001000-0035-4

DRAWING SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

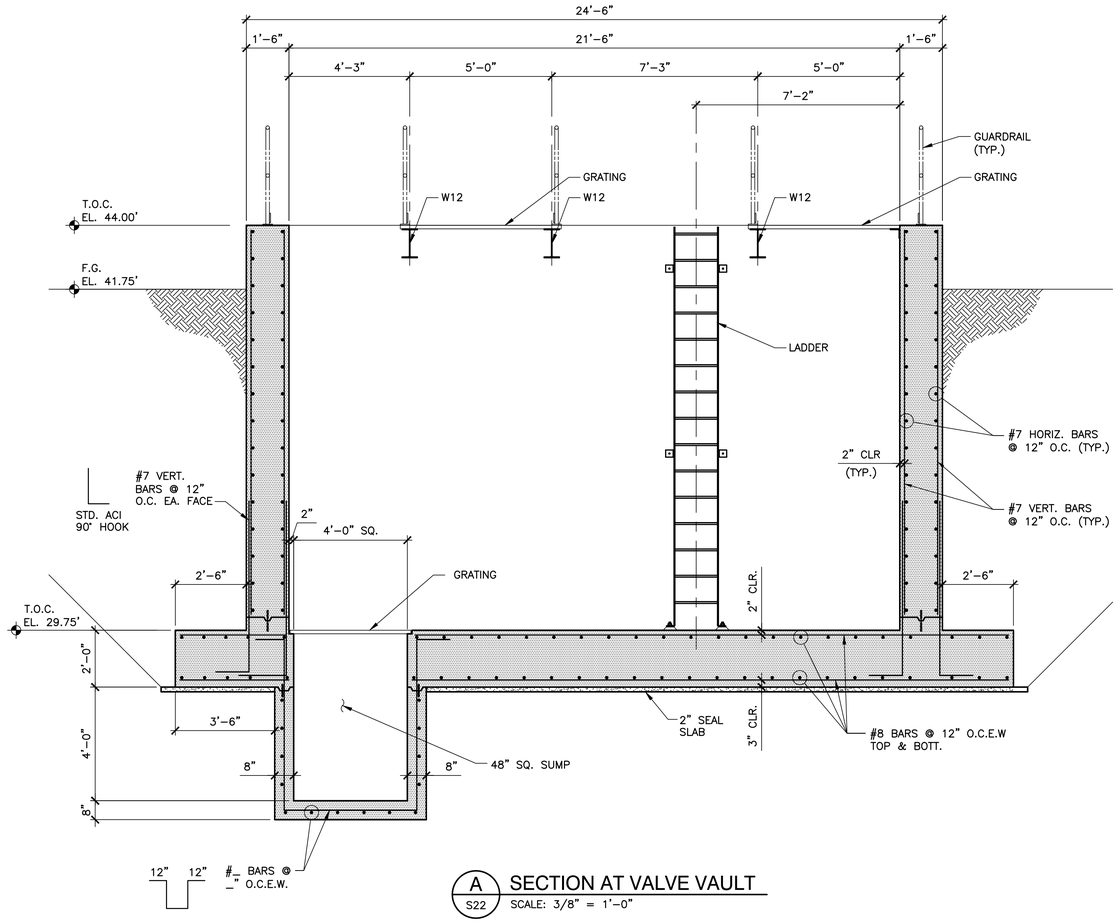
SHEET NO. OF

FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: LNV-FS-2015-STRUCT.CTB PLOTTED: 1/19/2026 3:00 PM

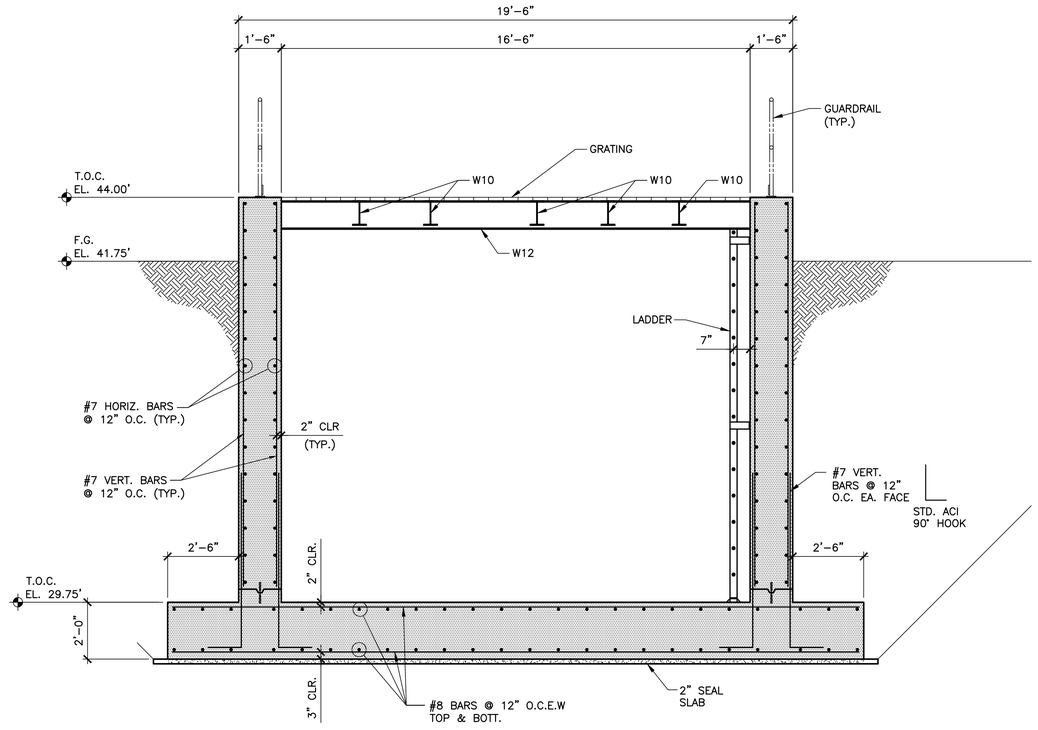
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\VALVE VAULT PLANS.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:00 PM



A S22 SECTION AT VALVE VAULT

SCALE: 3/8" = 1'-0"



B S22 SECTION AT VALVE VAULT

SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

VALVE VAULT SECTIONS

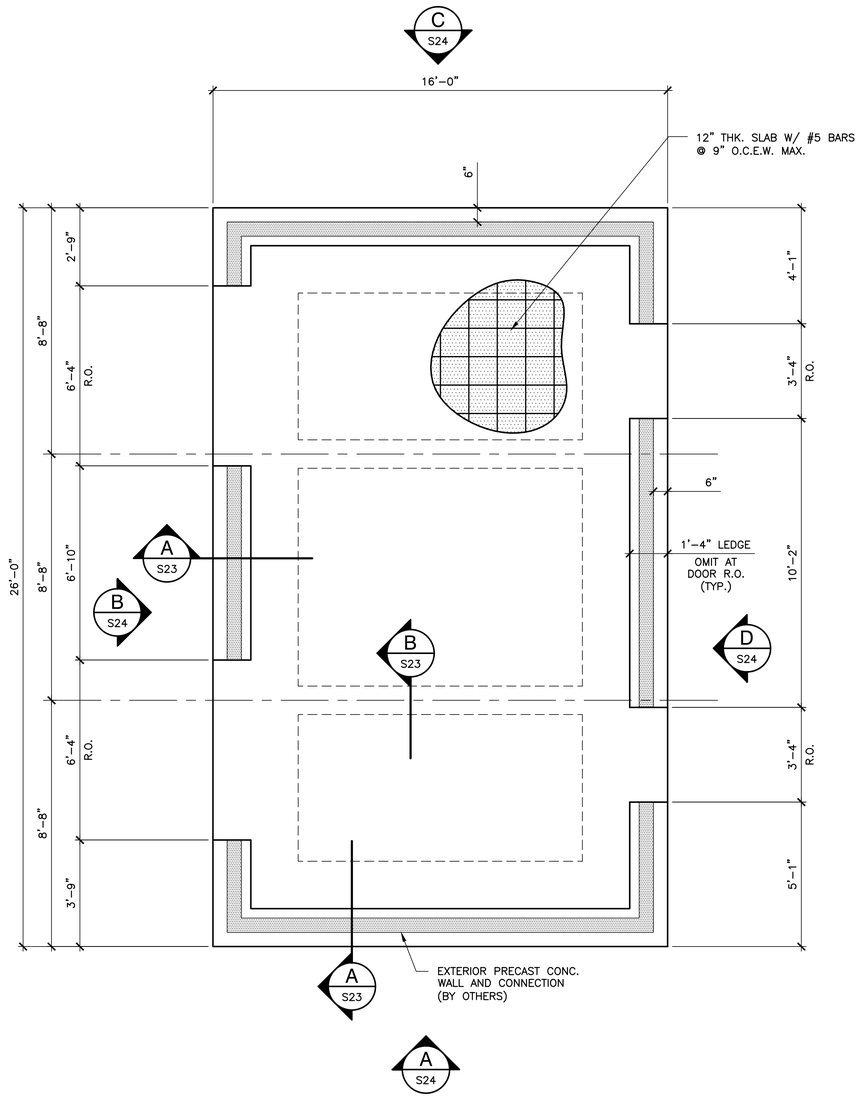
WBS NUMBER
S-001000-0035-4
DRAWING SCALE
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.
SHEET NO. OF

FOR CITY OF HOUSTON USE ONLY

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S22

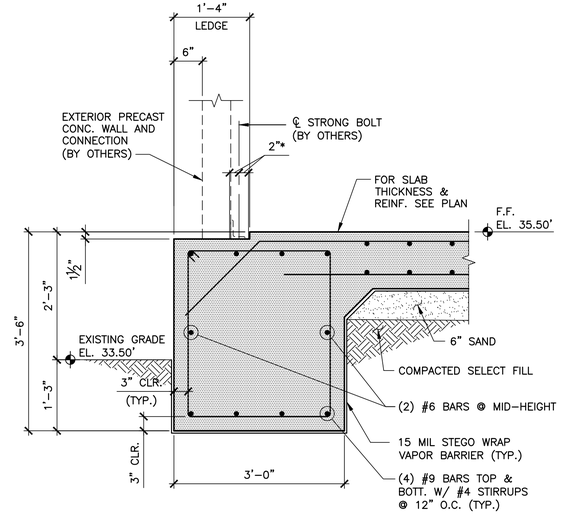
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\VALVE VAULT SECTIONS.dwg



N

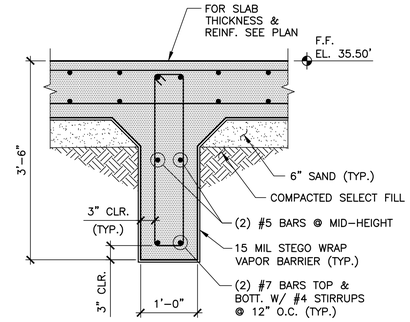
1 S23 STORAGE TANK NO. 1 ELECTRICAL BUILDING FOUNDATION PLAN

SCALE: 3/8" = 1'-0"



A S23 SECTION AT PERIMETER BEAM

SCALE: 3/4" = 1'-0"



B S23 SECTION AT INTERIOR BEAM

SCALE: 3/4" = 1'-0"

NOTES:

1. CONTRACTOR SHALL CONSTRUCT THE FOUNDATION SO THAT THE FLOOR SHALL BE TRUE AND LEVEL TO A MAXIMUM TOLERANCE OF 1/8" IN 10 FEET.
2. OMIT LEDGE AT DOOR OPENINGS. REFER TO BUILDING DRAWINGS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

STORAGE TANK NO. 1 ELECTRICAL BUILDING FOUNDATION

WBS NUMBER
S-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

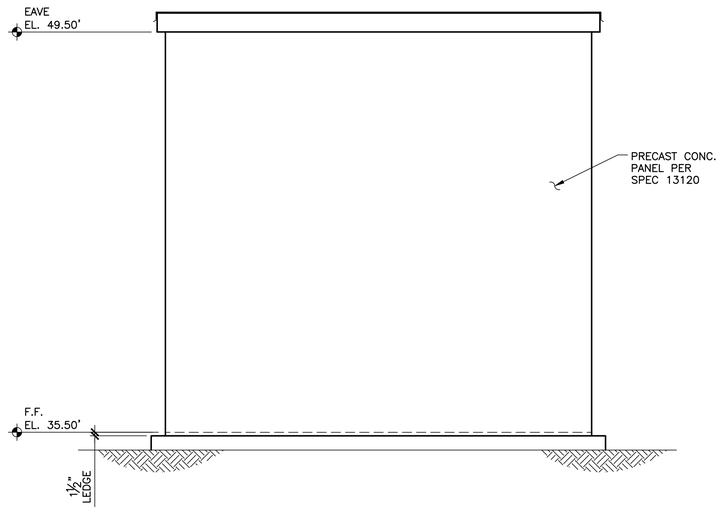
SHEET NO. OF

DWG NO
S23

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:00 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STORAGE TANK NO. 1 ELECTRICAL BUILDING FOUNDATION.dwg

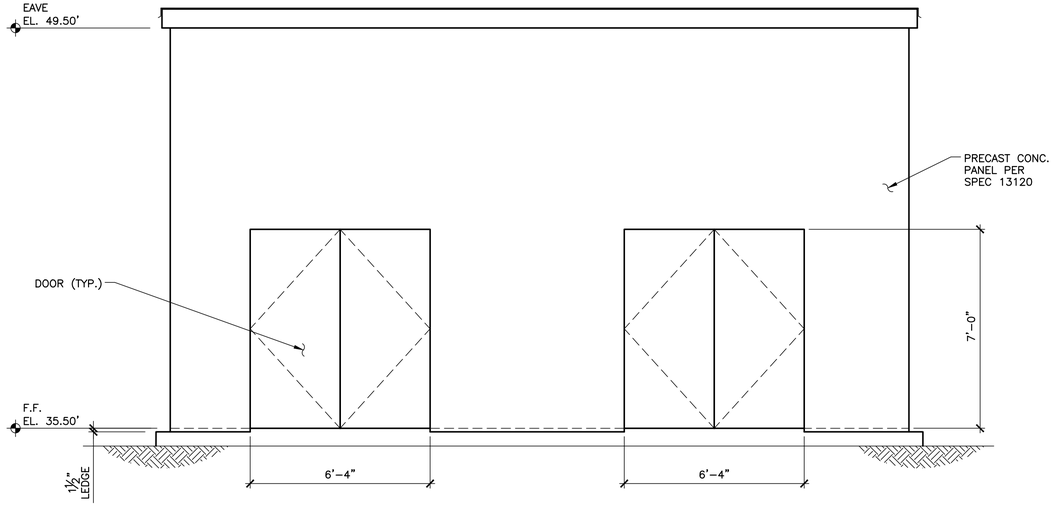
PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:00 PM



(LOOKING NORTH)

A S24 SOUTH EXTERIOR ELEVATION AT STORAGE TANK NO. 1 ELECTRICAL BUILDING

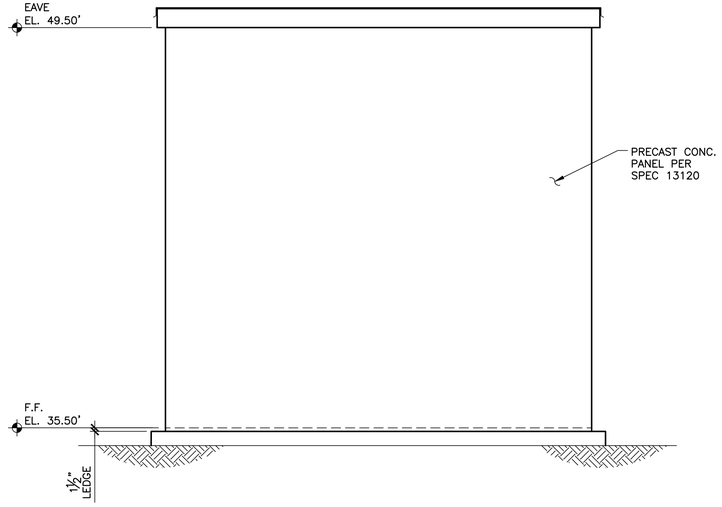
SCALE: 3/8" = 1'-0"



(LOOKING EAST)

B S24 WEST EXTERIOR ELEVATION AT STORAGE TANK NO. 1 ELECTRICAL BUILDING

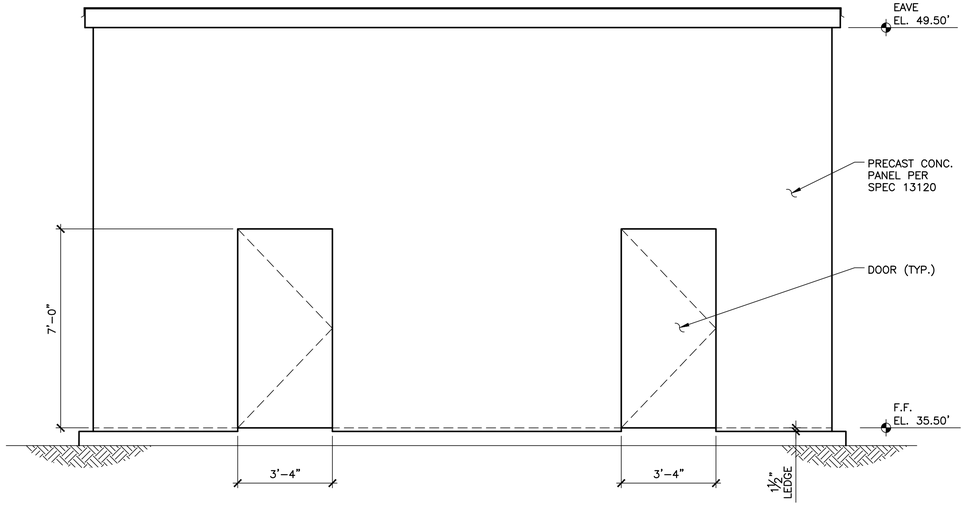
SCALE: 3/8" = 1'-0"



(LOOKING SOUTH)

C S24 NORTH EXTERIOR ELEVATION AT STORAGE TANK NO. 1 ELECTRICAL BUILDING

SCALE: 3/8" = 1'-0"



(LOOKING WEST)

D S24 EAST EXTERIOR ELEVATION AT STORAGE TANK NO. 1 ELECTRICAL BUILDING

SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

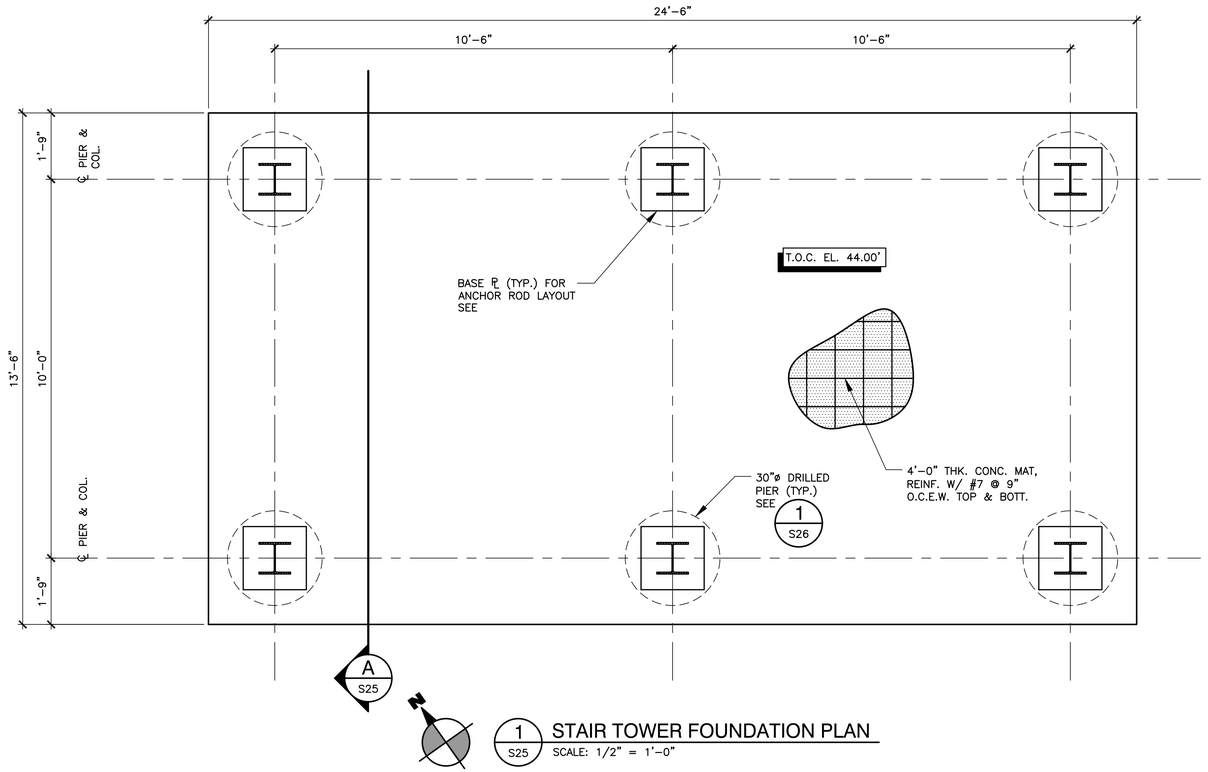
STORAGE TANK NO. 1 ELECTRICAL BUILDING EXTERIOR ELEVATIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

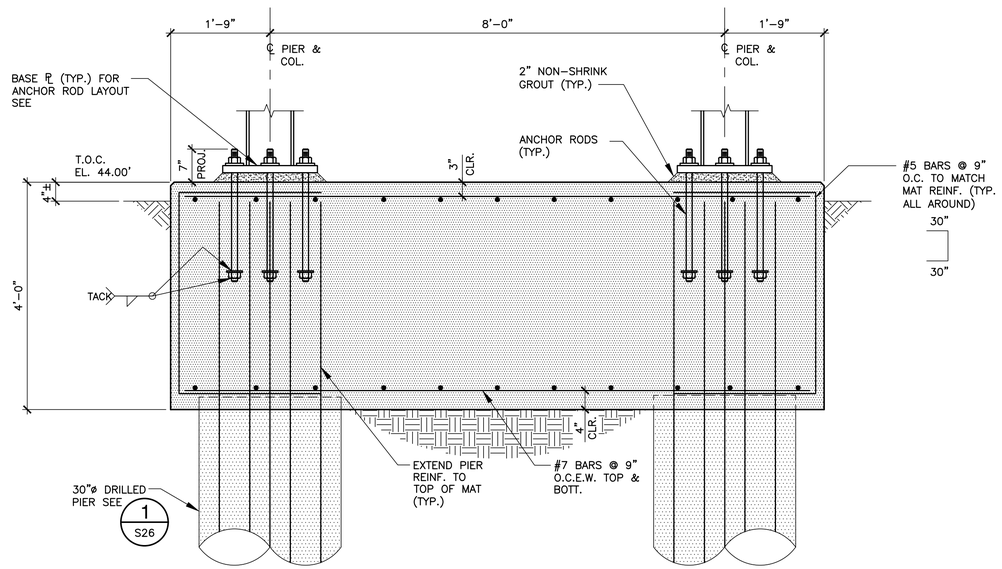
DWG NO
S24

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STORAGE TANK NO. 1 ELECTRICAL BUILDING EXTERIOR ELEVATIONS.dwg



1/S25 STAIR TOWER FOUNDATION PLAN
SCALE: 1/2" = 1'–0"



A/S25 FOUNDATION SECTION
SCALE: 3/4" = 1'–0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

STAIR TOWER FOUNDATION PLAN & SECTION

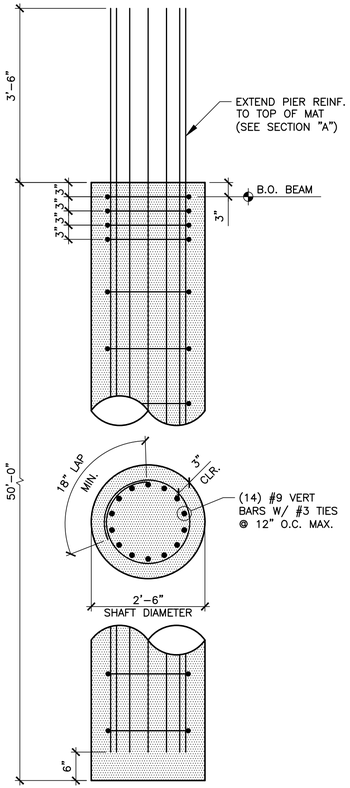
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S25

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–001000–0035–4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV–FS–2015–STRUCT.ctb PLOTTED: 1/19/2026 3:00 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER FOUNDATION PLAN & SECTION.dwg



1 / S26 DRILLED PIER DETAIL
SCALE: 3/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

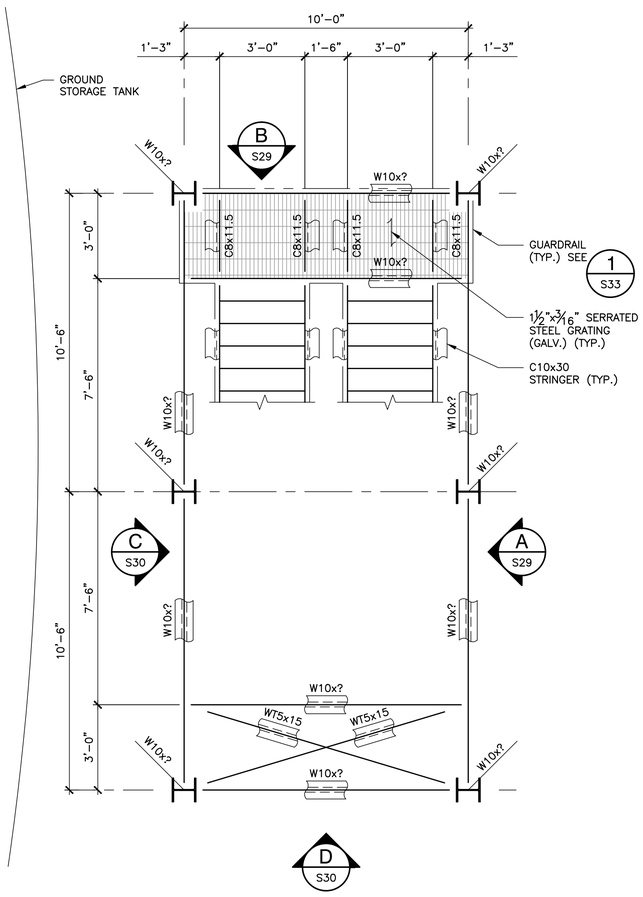
STAIR TOWER FOUNDATION DETAILS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

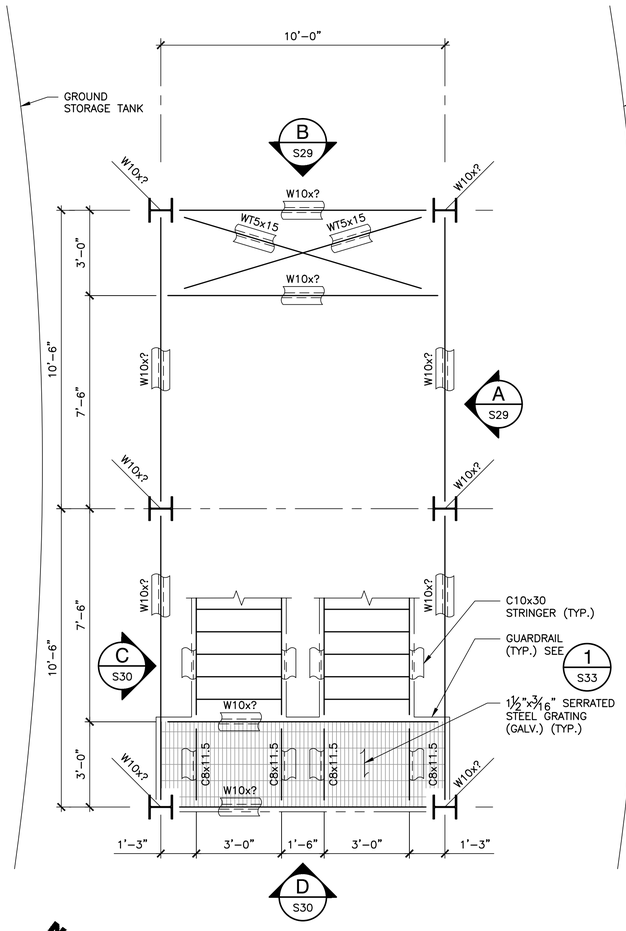
DWG NO
S26

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

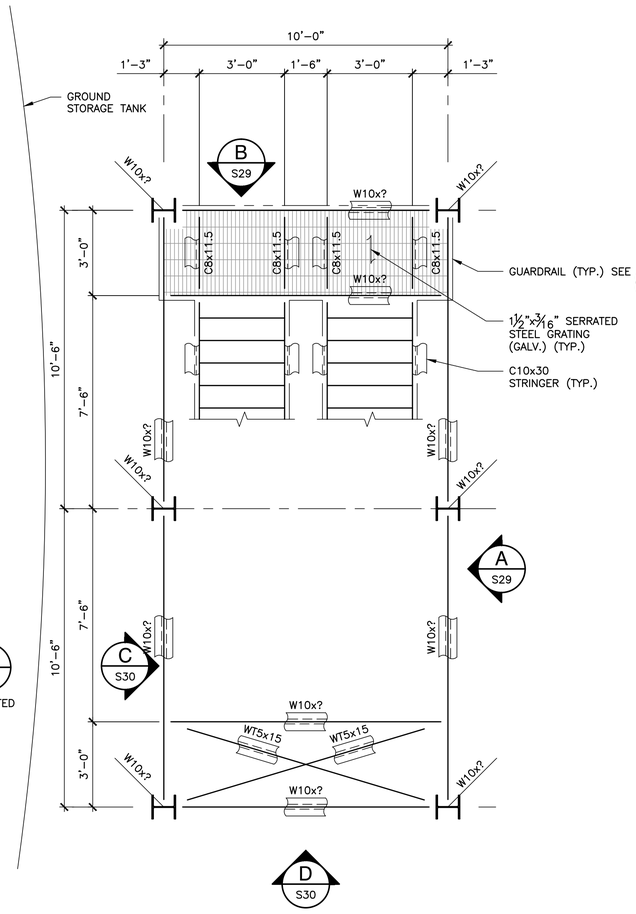
PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:00 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER FOUNDATION DETAILS.dwg



1 S27 STEEL FRAMING PLAN AT ELEV. 56.0'
SCALE: 3/8" = 1'-0"



2 S27 STEEL FRAMING PLAN AT ELEV. 68.0'
SCALE: 3/8" = 1'-0"



3 S27 STEEL FRAMING PLAN AT ELEV. 80.0'
SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

STAIR TOWER STEEL FRAMING PLANS I

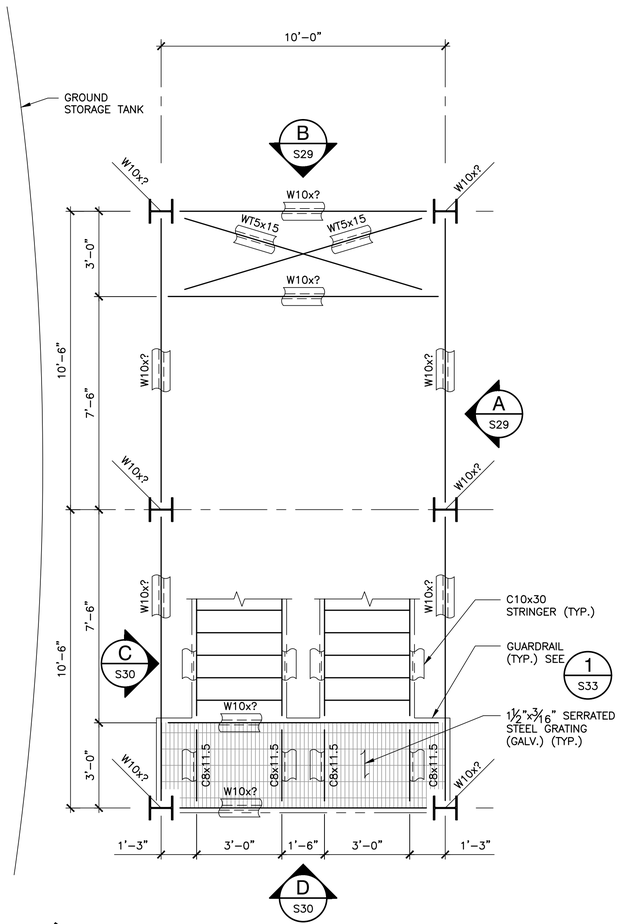
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S27

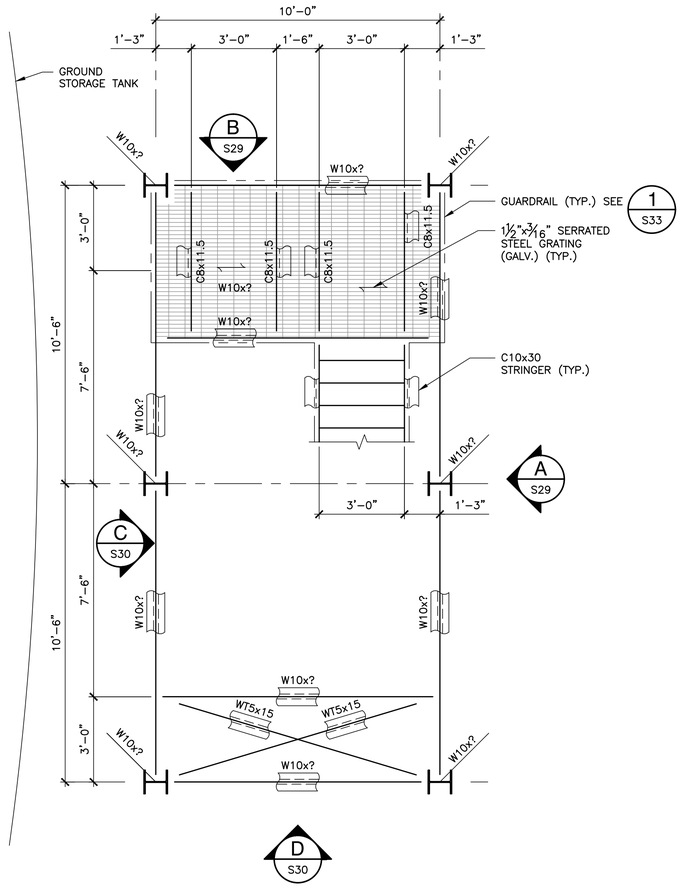
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:00 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER STEEL FRAMING PLANS I.dwg



1 S28 STEEL FRAMING PLAN AT ELEV. 92.0'
SCALE: 3/8" = 1'-0"



2 S28 STEEL FRAMING PLAN AT ELEV. 102.0'
SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

STAIR TOWER STEEL FRAMING PLANS II

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

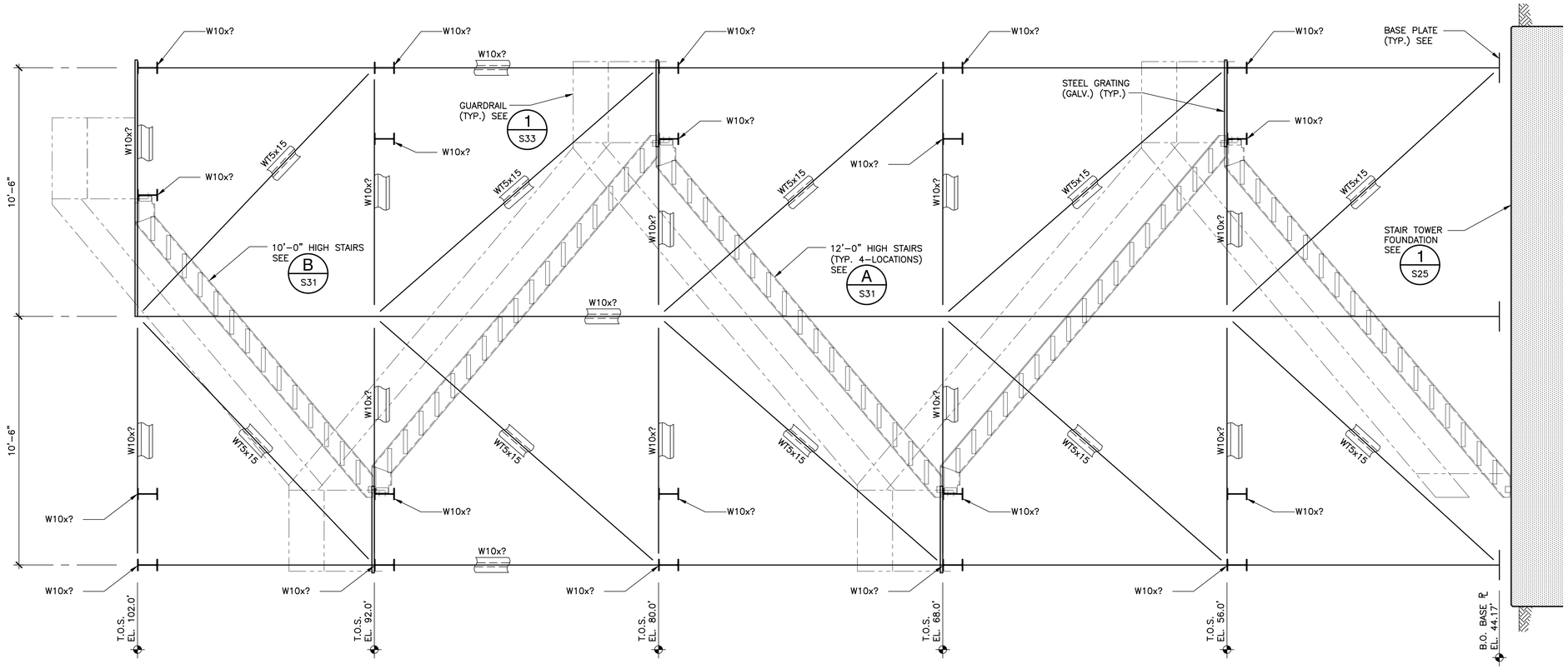
DWG NO
S28

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

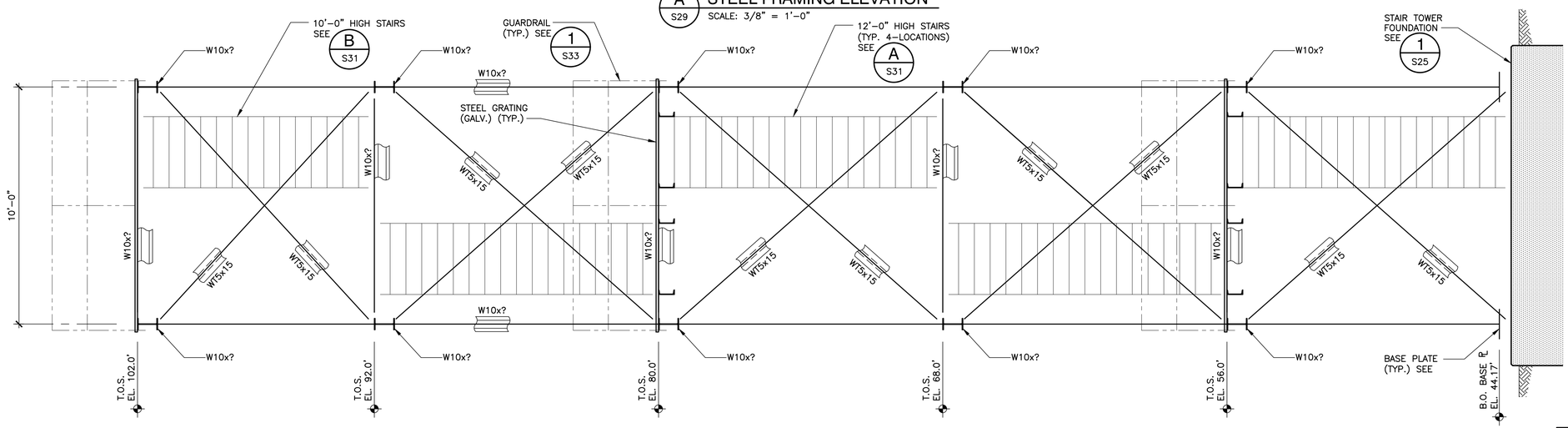
PLOT STYLE: LNV-FS-2015-STRUCT.STB PLOTTED: 1/19/2026 3:00 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER STEEL FRAMING PLANS II.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:01 PM



A S29 STEEL FRAMING ELEVATION
SCALE: 3/8" = 1'-0"



B S29 STEEL FRAMING ELEVATION
SCALE: 3/8" = 1'-0"

NOTE:
STRUCTURE SHOWN ROTATED ON SHEET FOR CLARITY

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S29

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

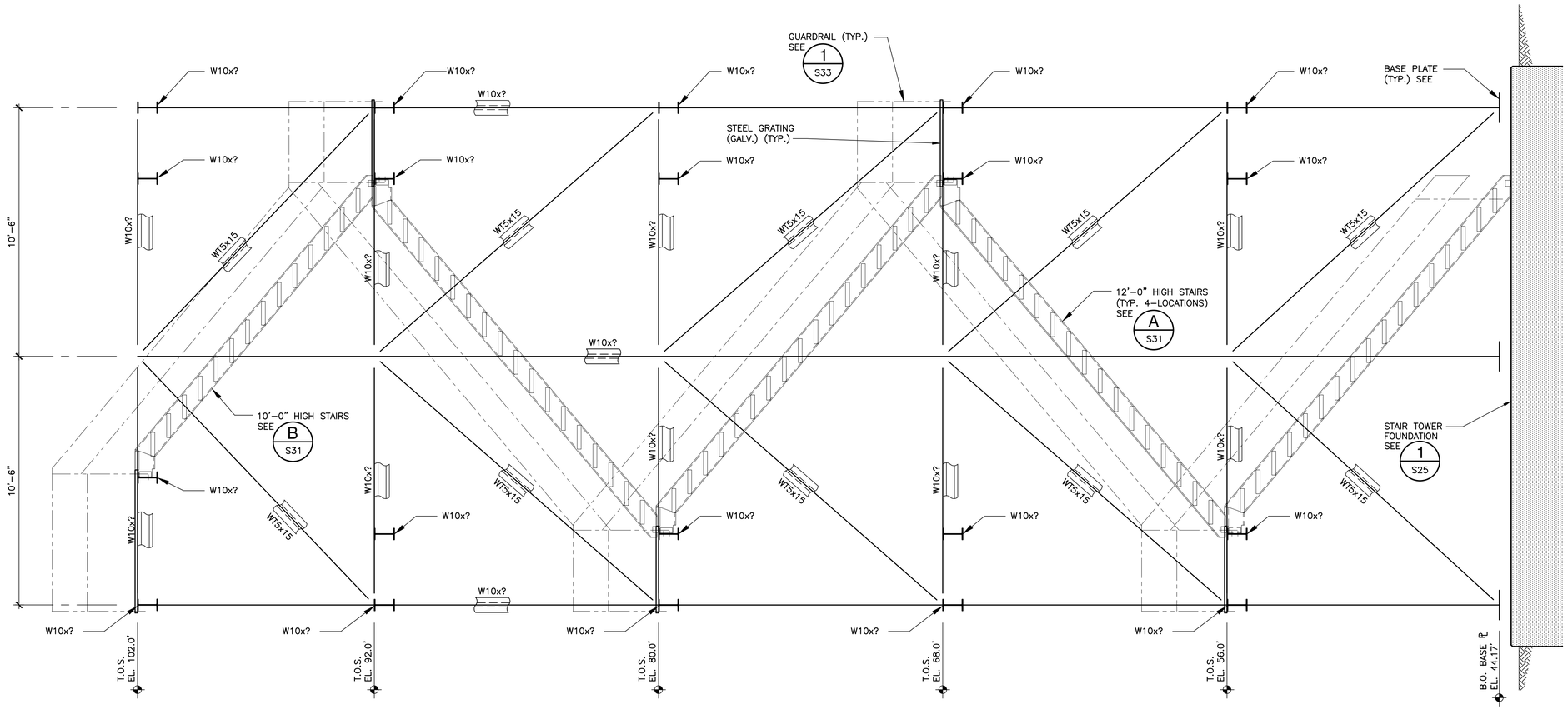
Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

STAIR TOWER STEEL FRAMING ELEVATIONS I

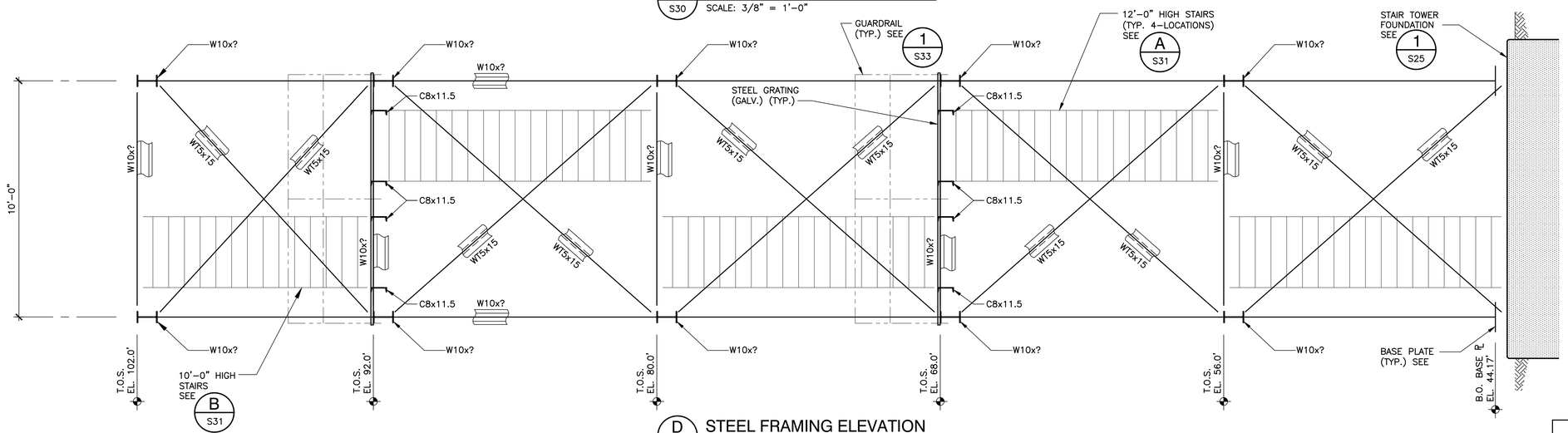
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER STEEL FRAMING ELEVATIONS I.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:01 PM



C S30 STEEL FRAMING ELEVATION
SCALE: 3/8" = 1'-0"



D S30 STEEL FRAMING ELEVATION
SCALE: 3/8" = 1'-0"

NOTE:
STRUCTURE SHOWN ROTATED ON SHEET FOR CLARITY

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S30

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

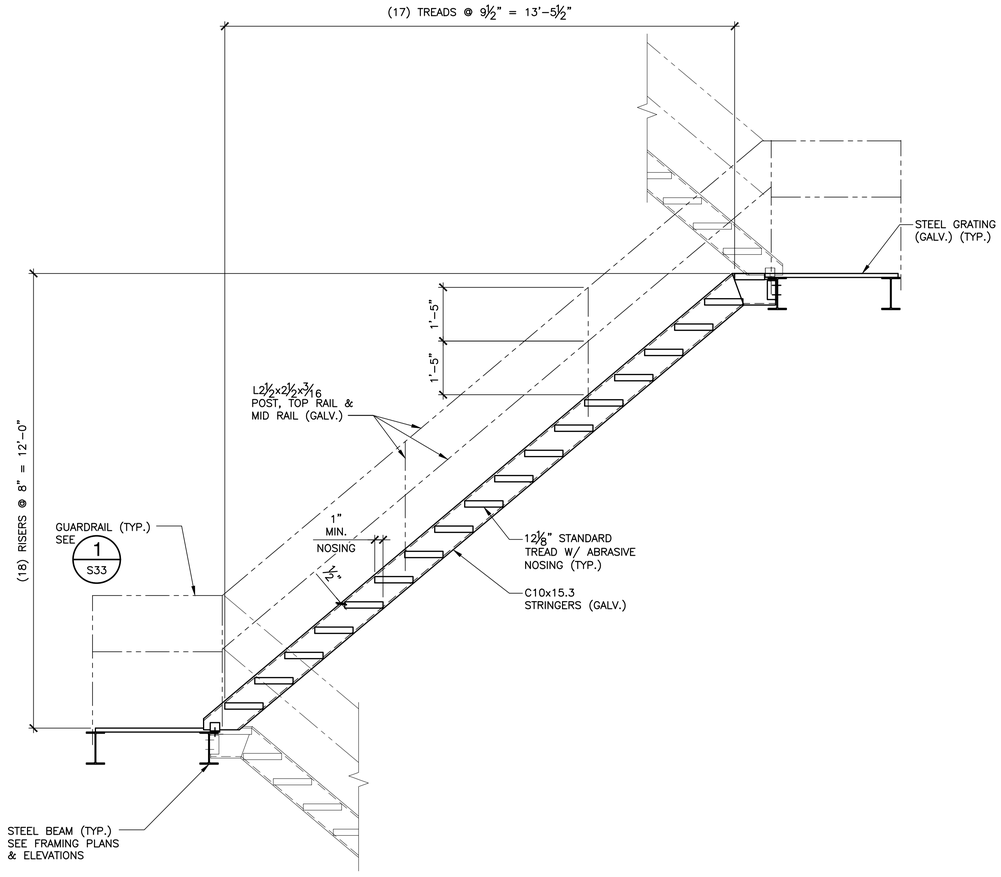
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

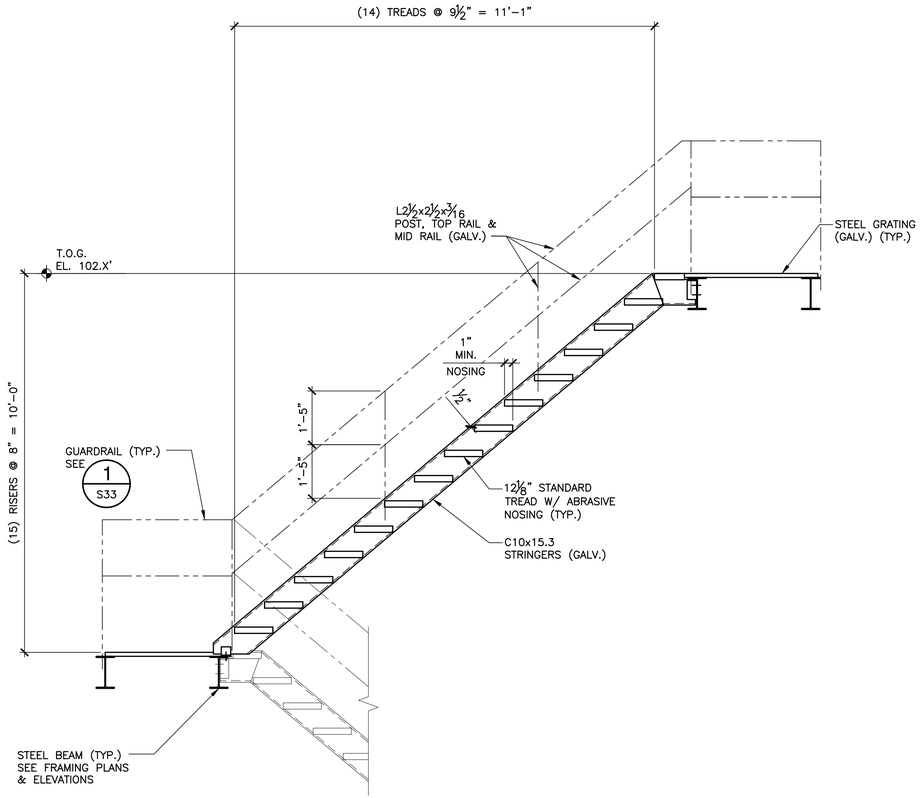
STAIR TOWER STEEL FRAMING ELEVATIONS II

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER STEEL FRAMING ELEVATIONS II.dwg



A S31 STAIR FRAMING SECTION (12'-0" HIGH)
SCALE: 1/2" = 1'-0"



B S31 STAIR FRAMING SECTION (10'-0" HIGH)
SCALE: 1/2" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

STAIR TOWER STAIR SECTIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S31

WBS NUMBER
S-001000-0035-4

DRAWING SCALE

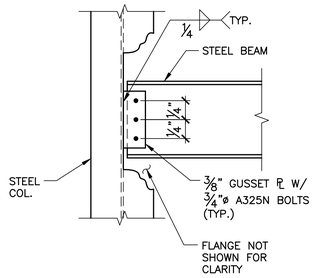
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

FOR CITY OF HOUSTON USE ONLY

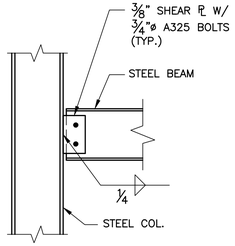
PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:01 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER STAIR SECTIONS.dwg



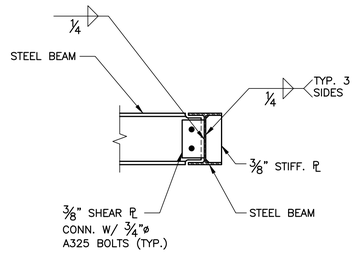
1 S32 SHEAR CONNECTION AT COLUMN WEB

N.T.S.



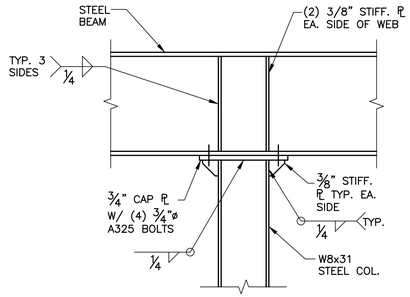
2 S32 SHEAR CONNECTION TO COLUMN FLANGE DETAIL

N.T.S.



3 S32 BEAM TO BEAM SHEAR CONNECTION DETAIL

N.T.S.



4 S32 BEAM TO COLUMN DETAIL

N.T.S.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

STAIR TOWER
STEEL DETAILS I

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S32

WBS NUMBER
S–001000–0035–4

DRAWING SCALE

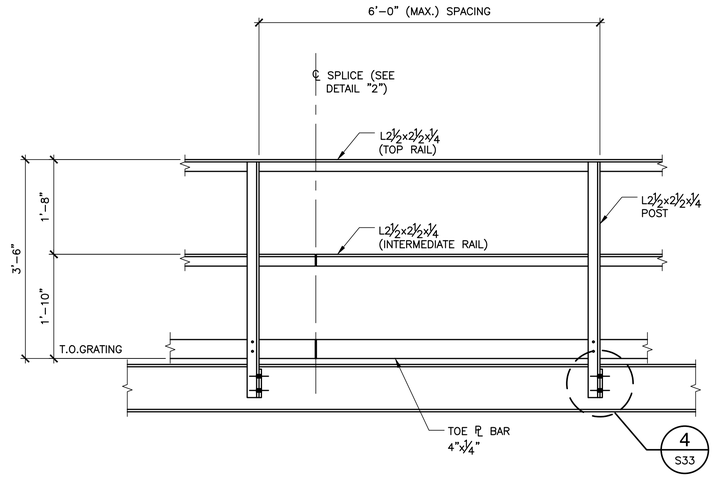
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

FOR CITY OF HOUSTON USE ONLY

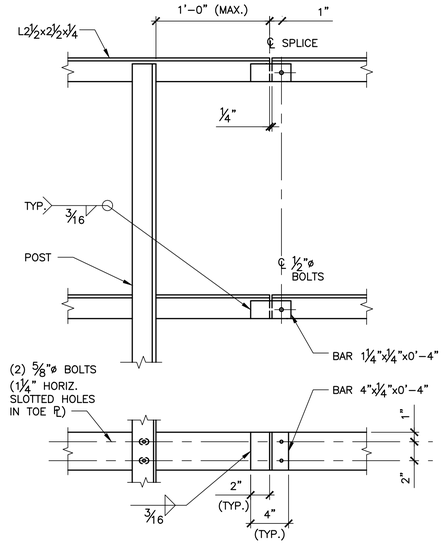
PLOT STYLE: LNV–FS–2015–STRUCT.ctb PLOTTED: 1/19/2026 3:01 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER STEEL DETAILS I.dwg

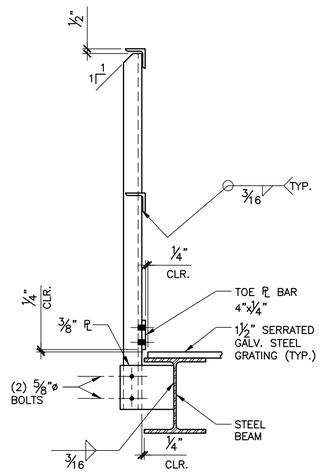


ELEVATION

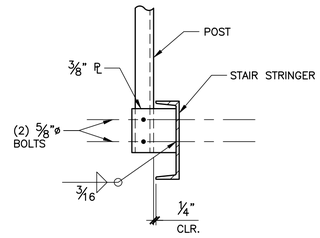
1 S33 **FIXED GUARDRAIL ELEVATION**
N.T.S.



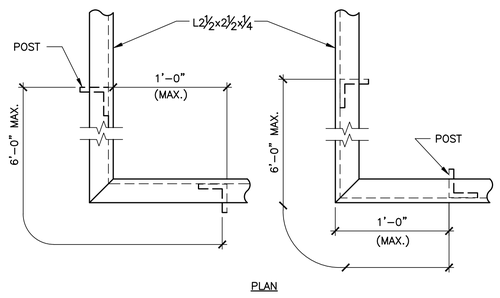
2 S33 **GUARDRAIL SPLICE**
N.T.S.



3 S33 **FIXED GUARDRAIL DETAIL**
N.T.S.

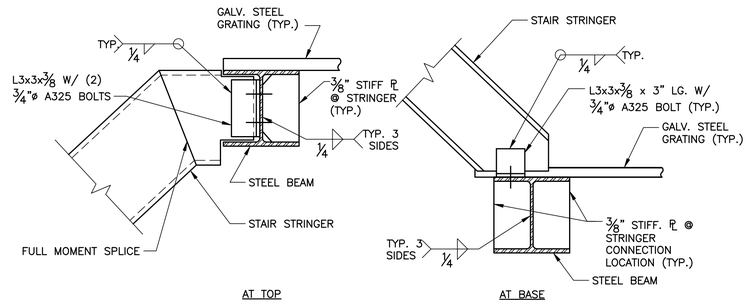


4 S33 **STAIR HANDRAIL DETAIL**
N.T.S.



PLAN

5 S33 **CORNER DETAILS**
N.T.S.



6 S33 **STRINGER CONNECTIONS**
N.T.S.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

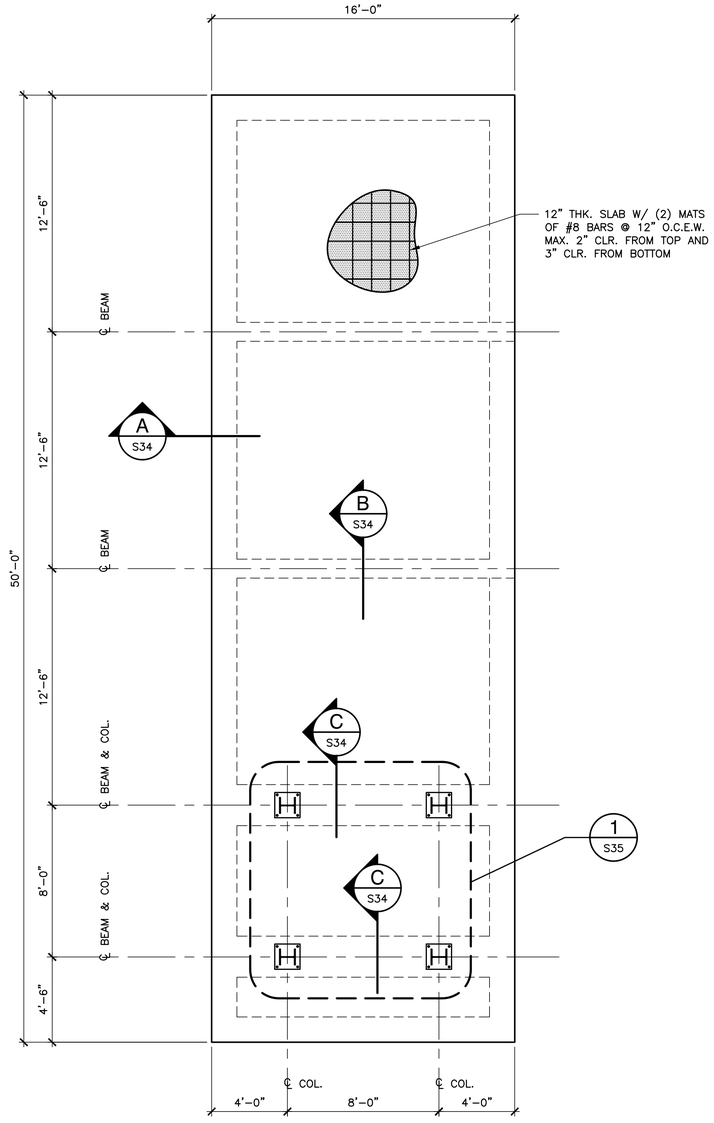
STAIR TOWER
STEEL DETAILS II

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

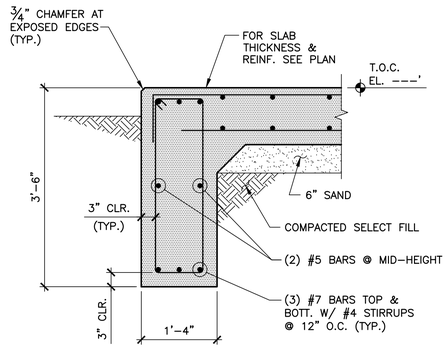
DWG NO
S33

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

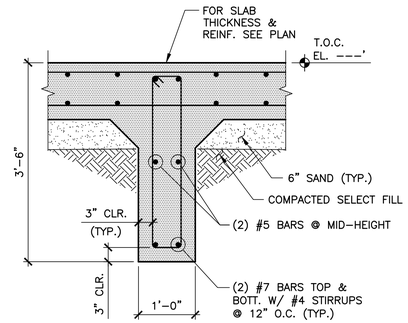
PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:01 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\STAIR TOWER STEEL DETAILS II.dwg



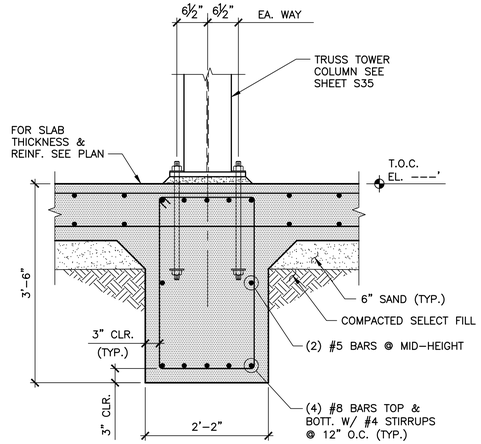
1 S34 ODOR CONTROL UNIT FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



A S34 SECTION AT PERIMETER BEAM
SCALE: 3/4" = 1'-0"



B S34 SECTION AT INTERIOR BEAM
SCALE: 3/4" = 1'-0"



C S34 SECTION AT INTERIOR BEAM W/ COLUMN
SCALE: 3/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

ODOR CONTROL UNIT AND UTILITY TRUSS FOUNDATION PLAN

WBS NUMBER
S-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

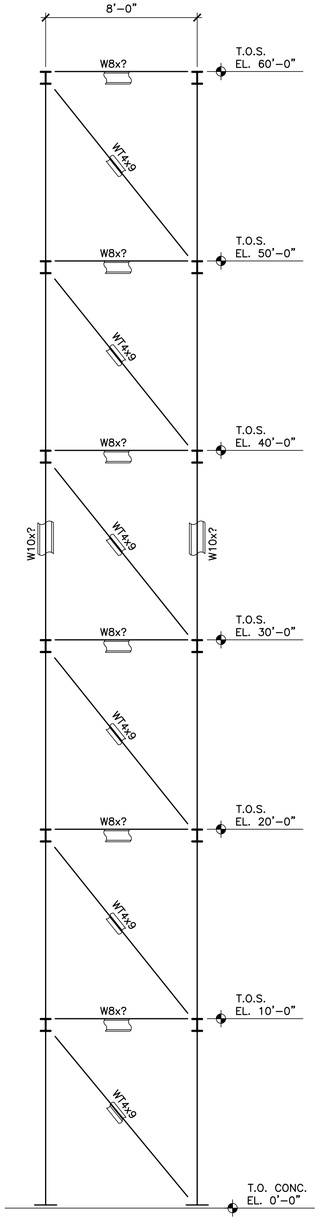
SHEET NO. OF

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

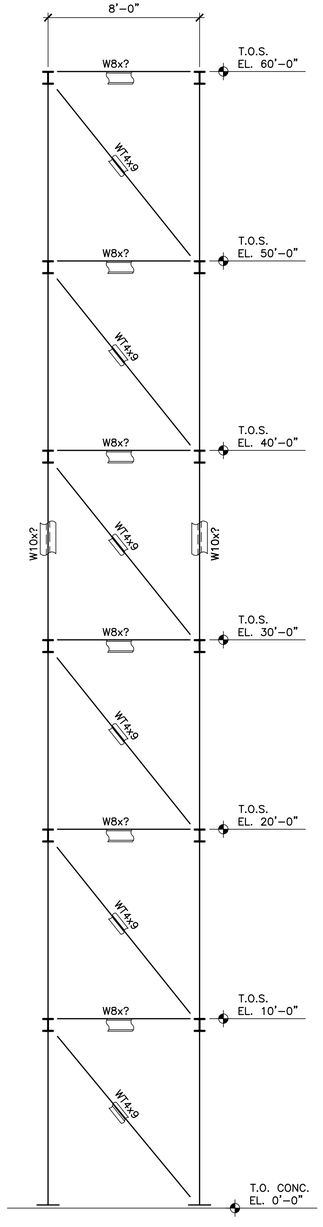
DWG NO
S34

PLOT STYLE: LNV-FS-2015-STRUCT.CTB PLOTTED: 1/19/2026 3:01 PM

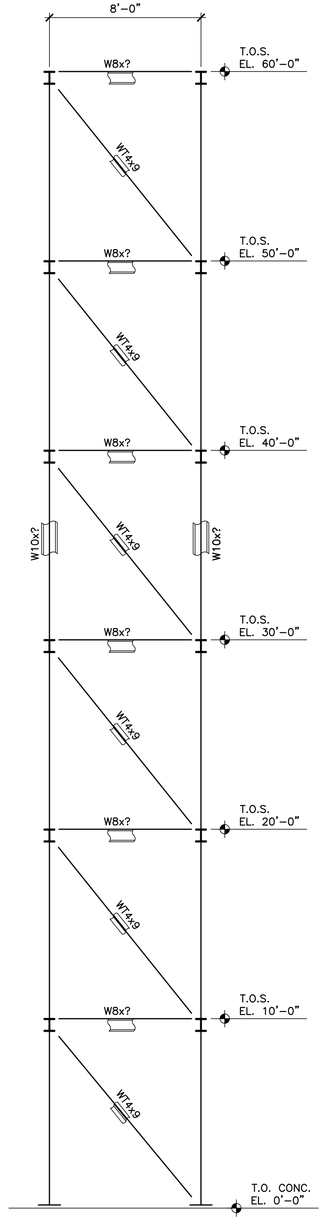
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\ODOR CONTROL UNIT AND UTILITY TRUSS FOUNDATION PLAN.dwg



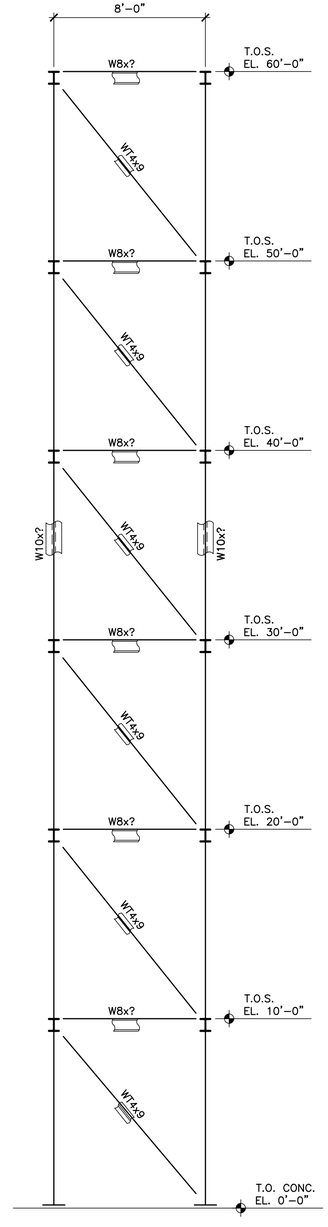
A S35 NORTH ELEVATION
SCALE: 1/4" = 1'-0"



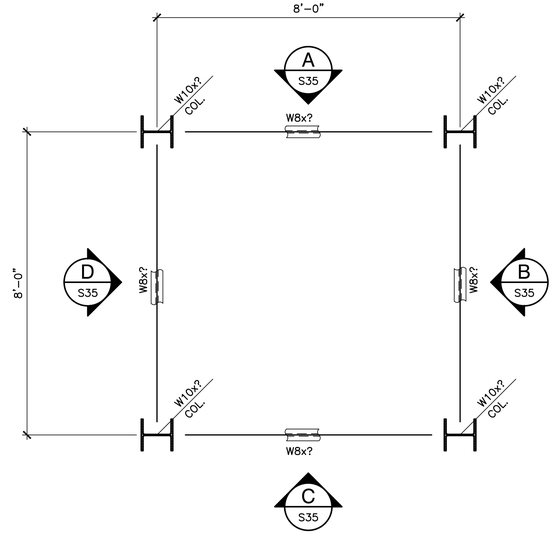
B S35 EAST ELEVATION
SCALE: 1/4" = 1'-0"



C S35 SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



D S35 WEST ELEVATION
SCALE: 1/4" = 1'-0"



N

1 S35 UTILITY TRUSS FRAMING PLAN
SCALE: 1/2" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station,
24-inch FM Installation,
and Scott Street Storage
Tank No. 1

UTILITY TRUSS STEEL FRAMING PLAN, SECTIONS & DETAILS

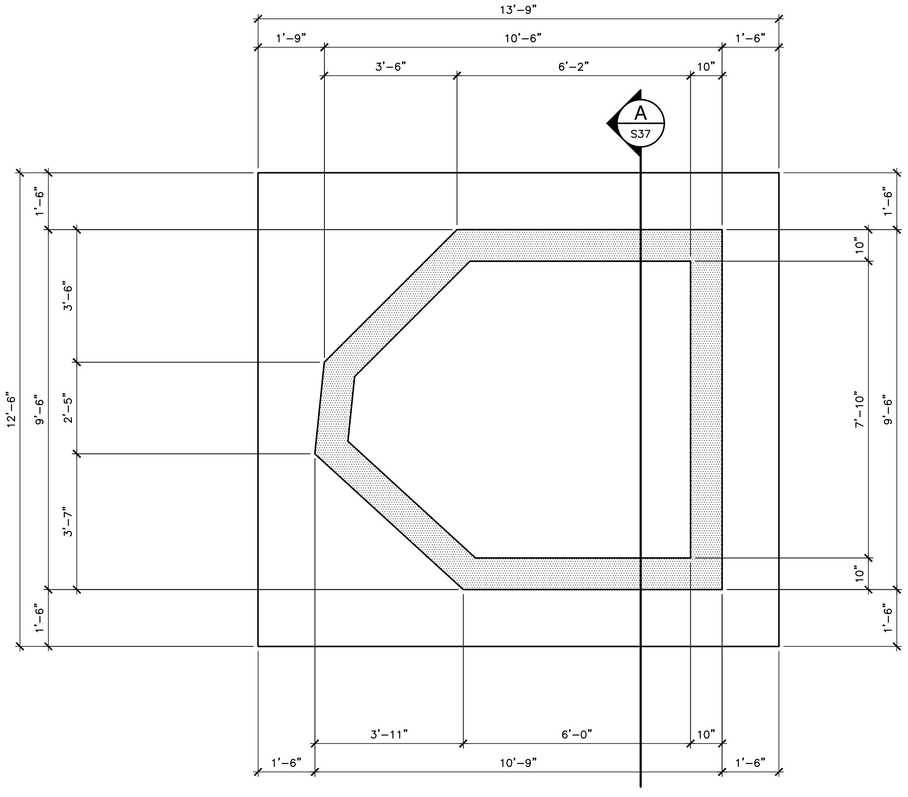
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S35

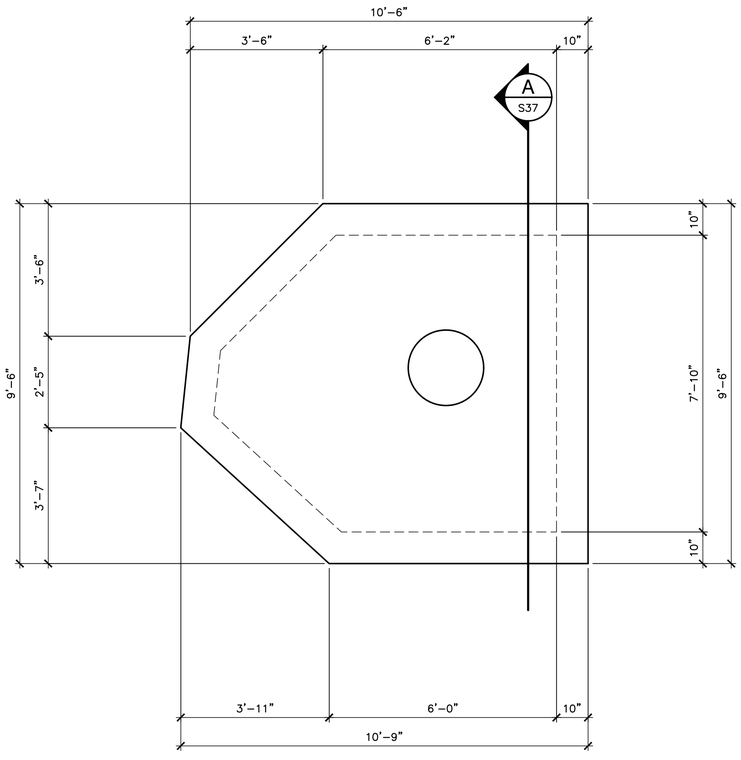
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:01 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\UTILITY TRUSS STEEL FRAMING PLAN, SECTIONS & DETAILS.dwg



1 S36 INTERCEPTOR BOX BOTTOM PLAN
SCALE: 1/4" = 1'–0"



2 S36 INTERCEPTOR BOX TOP PLAN
SCALE: 1/4" = 1'–0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

INTERCEPTOR BOX PLANS

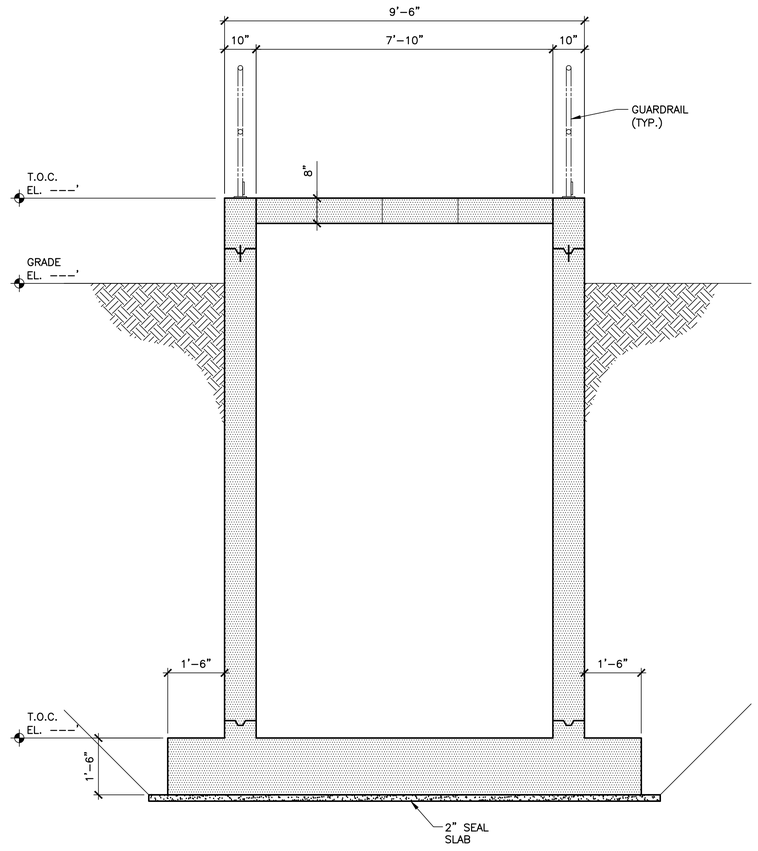
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S36

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S–001000–0035–4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV–FS–2015–STRUCT.ctb PLOTTED: 1/19/2026 3:01 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\INTERCEPTOR BOX PLANS.dwg



A / S37 SECTION AT INTERCEPTOR

SCALE: 1/2" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

INTERCEPTOR BOX SECTION

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S37

WBS NUMBER
S-001000-0035-4

DRAWING SCALE

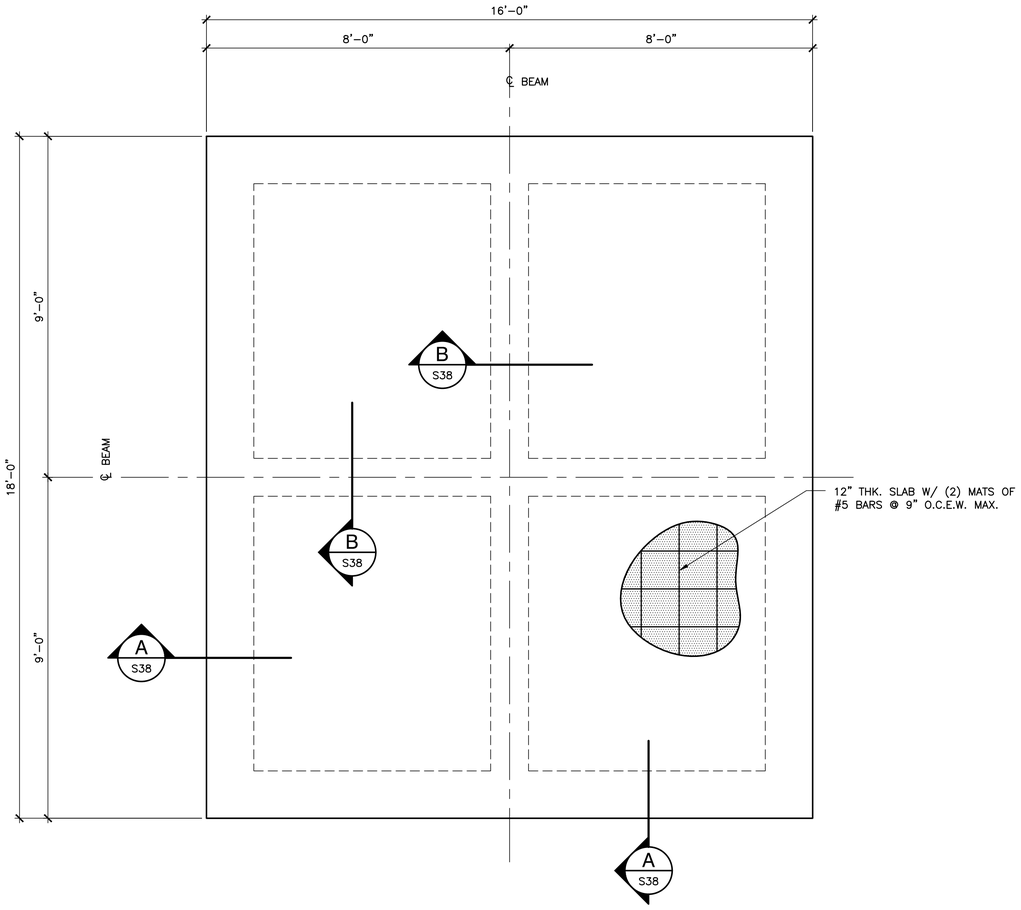
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

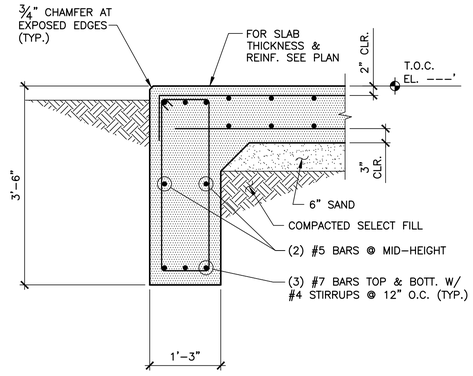
FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:01 PM

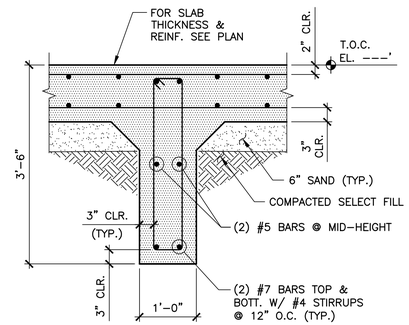
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\INTERCEPTOR BOX SECTION.dwg



1 / S38 MIXING RECIRCULATION PUMPS 1 & 2 FOUNDATION PLAN
SCALE: 1/2" = 1'-0"



A / S38 SECTION AT PERIMETER BEAM
SCALE: 3/4" = 1'-0"



B / S38 SECTION AT INTERIOR BEAM
SCALE: 3/4" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station,
24-inch FM Installation,
and Scott Street Storage
Tank No. 1

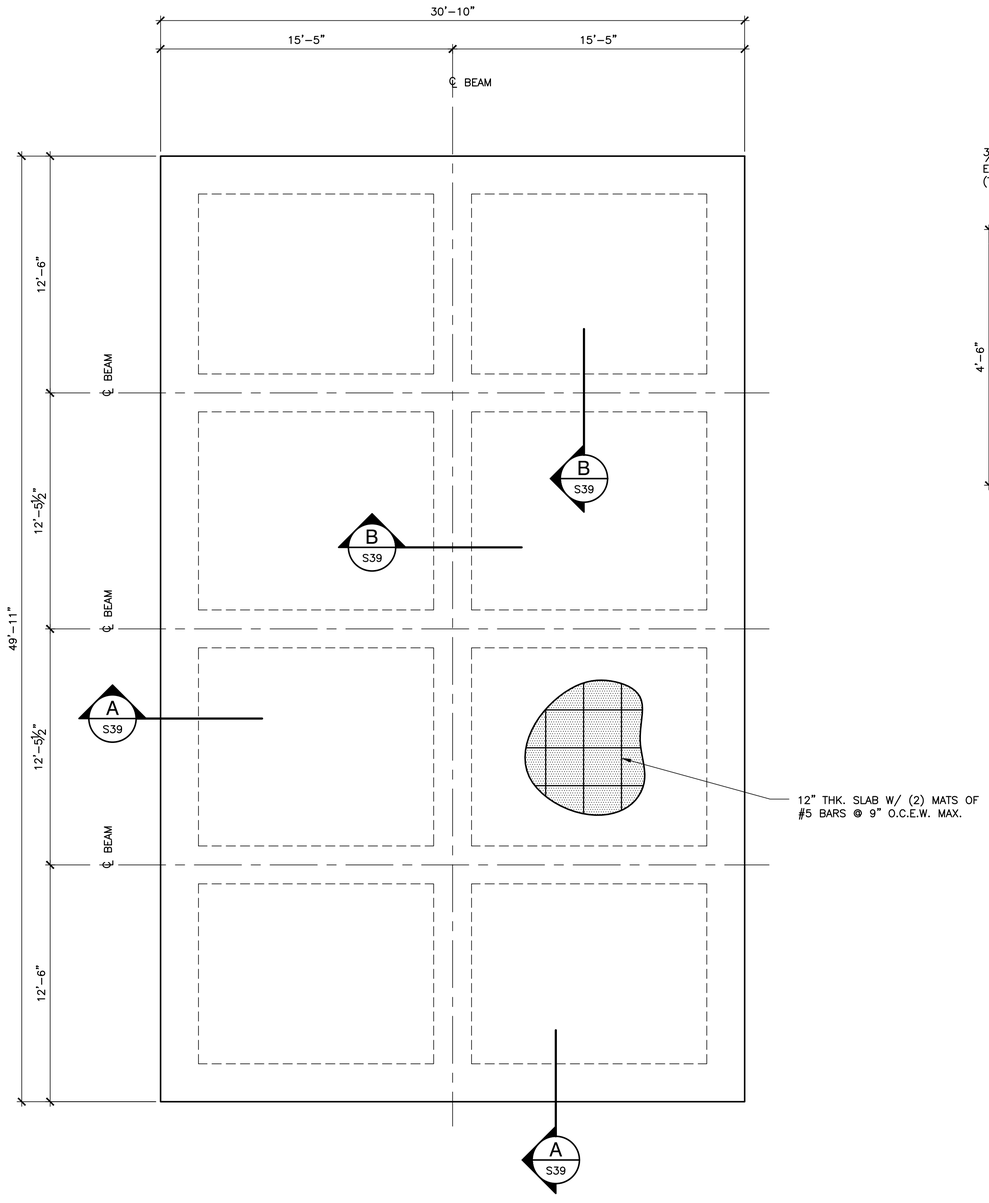
MIXING RECIRCULATION
PUMPS 1 & 2

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

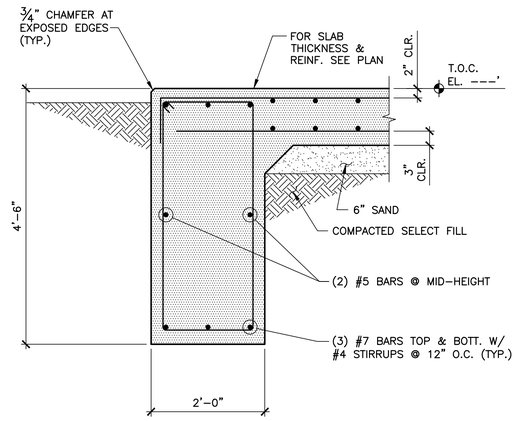
DWG NO
S38

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

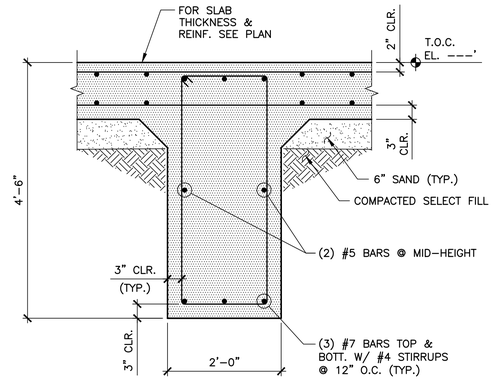
PLOT STYLE: LNV-FS-2015-STRUCT.CTB PLOTTED: 1/19/2026 3:01 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\MIXING RECIRCULATION PUMPS 1 & 2.dwg



1 S39 GENERATOR PAD PLAN
SCALE: 1/2" = 1'–0"



A S39 SECTION AT PERIMETER BEAM
SCALE: 3/4" = 1'–0"



B S39 SECTION AT INTERIOR BEAM
SCALE: 3/4" = 1'–0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24–inch FM Installation, and Scott Street Storage Tank No. 1

GENERATOR PAD PLAN & SECTIONS

WBS NUMBER
S–001000–0035–4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE

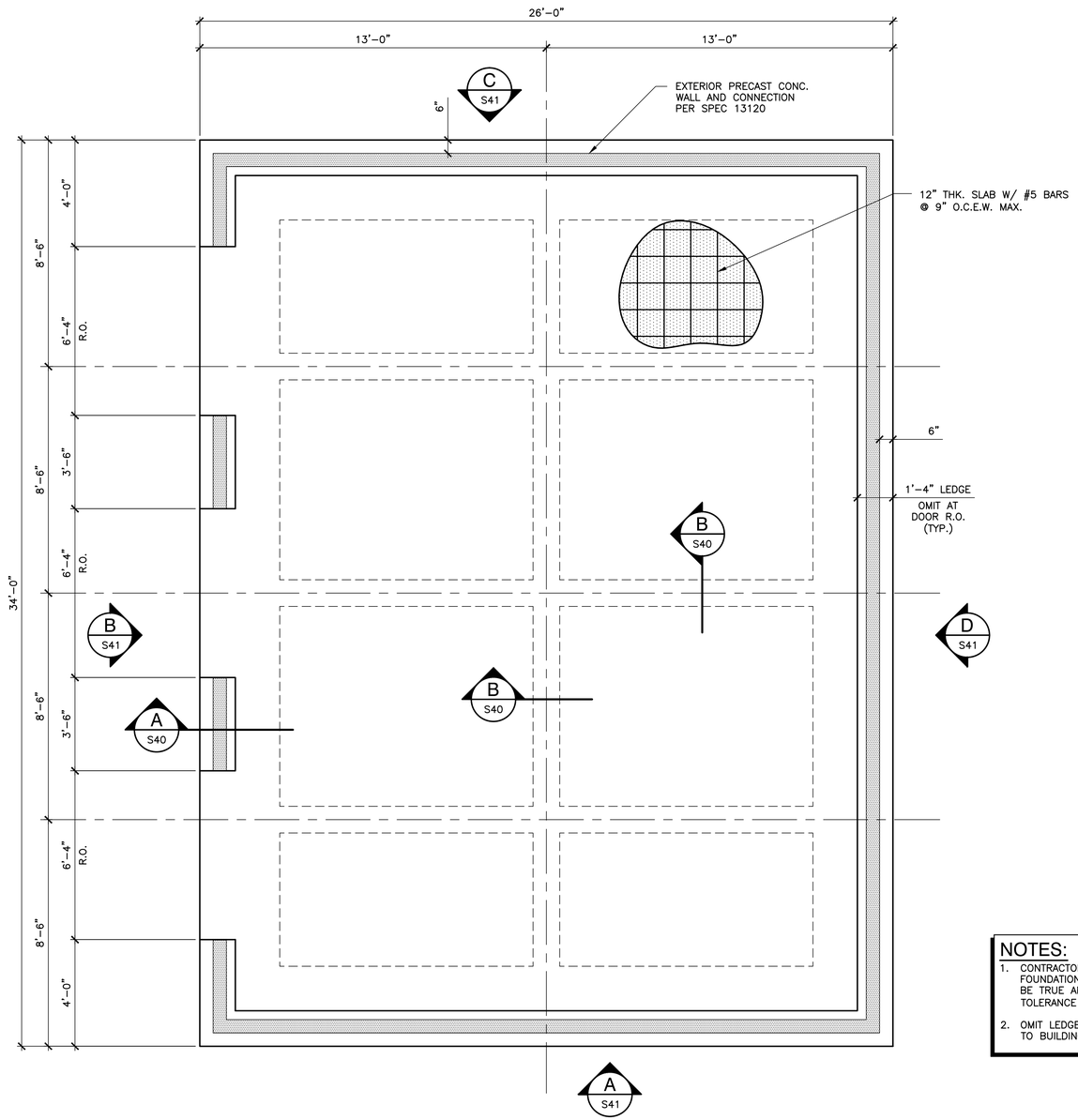
CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

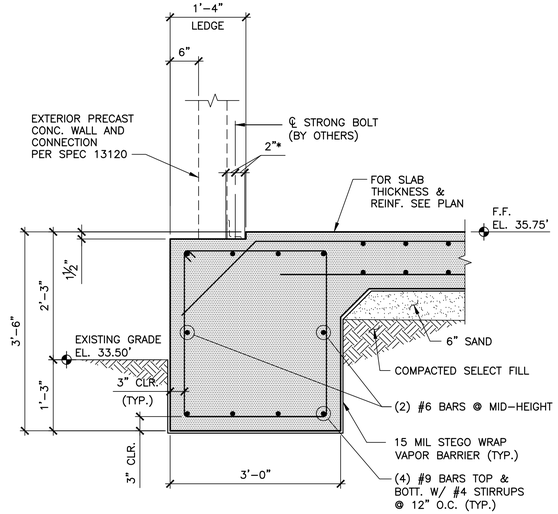
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S39

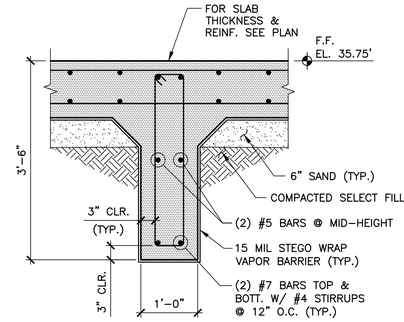
PLOT STYLE: LNV–FS–2015–STRUCT.ctb PLOTTED: 1/19/2026 3:02 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\GENERATOR PAD PLAN & SECTIONS.dwg



1 / S40 WASHWATER PUMP STATION BUILDING FOUNDATION PLAN
SCALE: 3/8" = 1'-0"



A / S40 SECTION AT PERIMETER BEAM
SCALE: 3/4" = 1'-0"



B / S40 SECTION AT INTERIOR BEAM
SCALE: 3/4" = 1'-0"

NOTES:

1. CONTRACTOR SHALL CONSTRUCT THE FOUNDATION SO THAT THE FLOOR SHALL BE TRUE AND LEVEL TO A MAXIMUM TOLERANCE OF 1/8" IN 10 FEET.
2. OMIT LEDGE AT DOOR OPENINGS. REFER TO BUILDING DRAWINGS.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

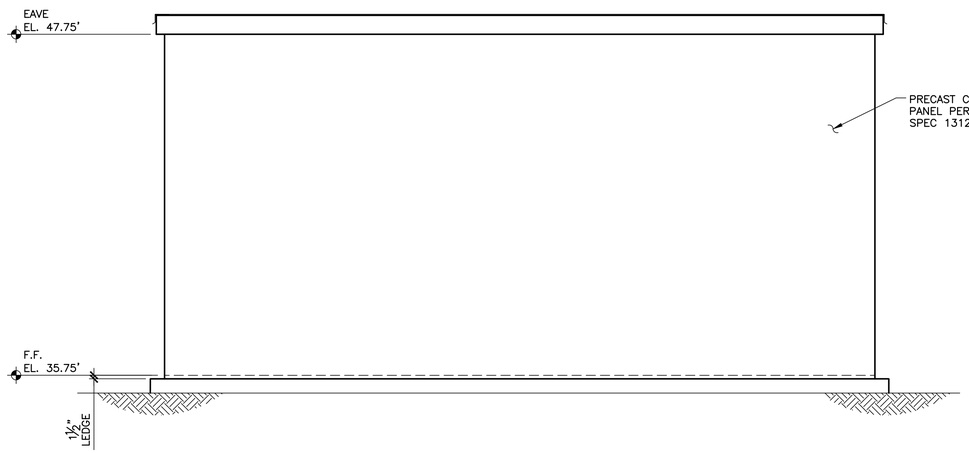
WASHWATER PUMP STATION BUILDING FOUNDATION

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S40

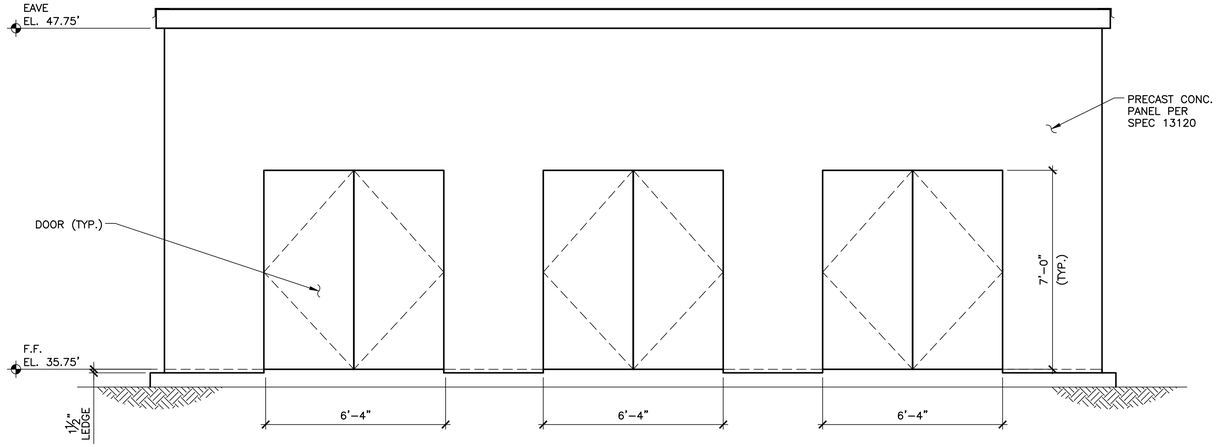
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:02 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\WASHWATER PUMP STATION BUILDING FOUNDATION.dwg



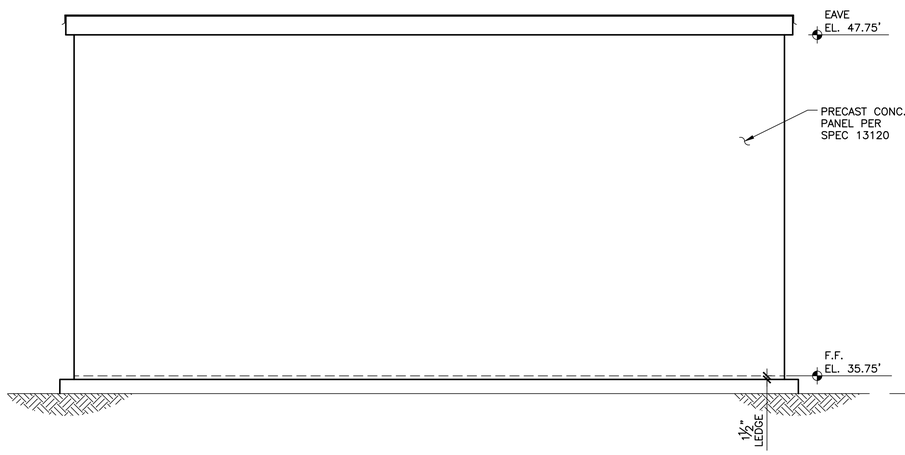
A S41 SOUTH EXTERIOR ELEVATION AT WASHWATER PUMP STATION BUILDING

SCALE: 3/8" = 1'-0"



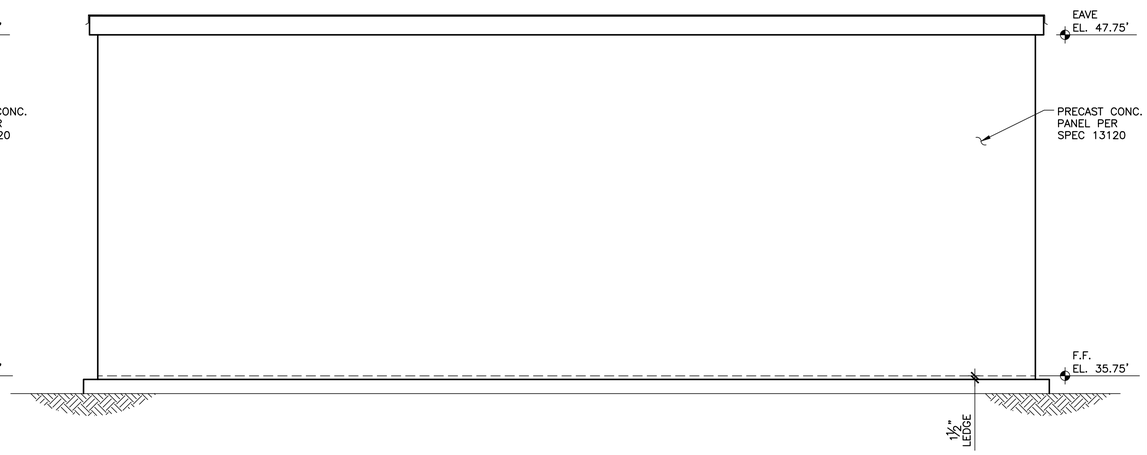
B S41 WEST EXTERIOR ELEVATION AT WASHWATER PUMP STATION BUILDING

SCALE: 3/8" = 1'-0"



C S41 NORTH EXTERIOR ELEVATION AT WASHWATER PUMP STATION BUILDING

SCALE: 3/8" = 1'-0"



D S41 EAST EXTERIOR ELEVATION AT WASHWATER PUMP STATION BUILDING

SCALE: 3/8" = 1'-0"

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24-inch FM Installation, and Scott Street Storage Tank No. 1

WASHWATER PUMP STATION BUILDING EXERIOR ELEVATIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

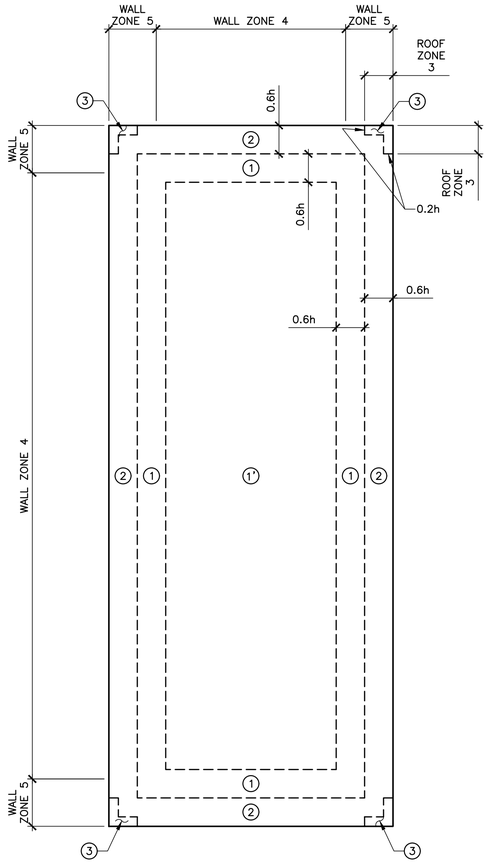
DWG NO
S41

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
S-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
MEGAN R. JORDAN, P.E.	
SHEET NO. OF	

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:02 PM

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\WASHWATER PUMP STATION BUILDING EXERIOR ELEVATIONS.dwg

PLOT STYLE: LNV-FS-2015-STRUCT.ctb PLOTTED: 1/19/2026 3:02 PM



ELECTRICAL BUILDING UPLIFT PRESSURES FOR ROOF & WIND WALL ZONES

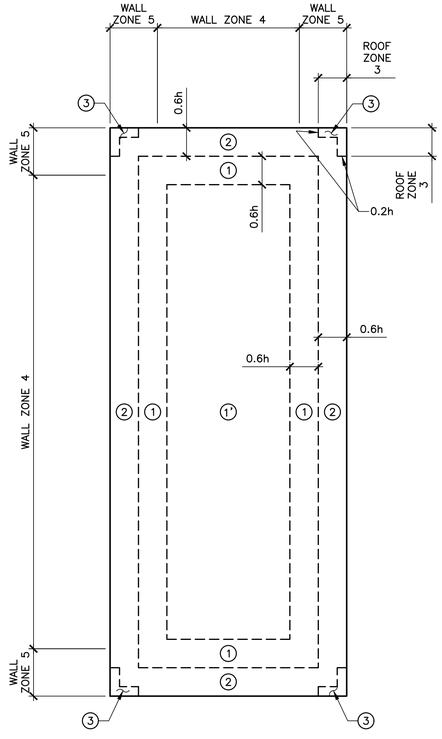
1 / S42 N.T.S.

ELECTRICAL BUILDING WIND PRESSURES FOR "COMPONENTS & CLADDING"			
ROOF ZONES			
ZONE	EFFECTIVE WIND AREA (SQ.FT.)	WIND PRESSURE (PSF)	
1'	10	11.8	−35.4
1'	100	7.87	−35.4
1'	500	7.87	−15.7
1	10	11.8	−66.9
1	100	7.87	−50.7
1	500	7.87	−39.4
2	10	11.8	−90.5
2	100	7.87	−69.7
2	500	7.87	−55.1
3	10	11.8	−126.0
3	100	7.87	−54.2
3	500	7.87	−55.1

ROOF ZONE 3 DIMENSION = 7'−2"

ELECTRICAL BUILDING WIND PRESSURES FOR "COMPONENTS & CLADDING"			
WALL ZONES			
ZONE	EFFECTIVE WIND AREA (SQ.FT.)	WIND PRESSURE (PSF)	
4	10	35.4	−39.0
	500	24.8	−28.3
5	10	35.4	−49.6
	500	24.8	−28.3

CORNER WALL ZONE 5 DIMENSION = 3'−0"



CHEMICAL STORAGE BUILDING UPLIFT PRESSURES FOR ROOF & WIND WALL ZONES

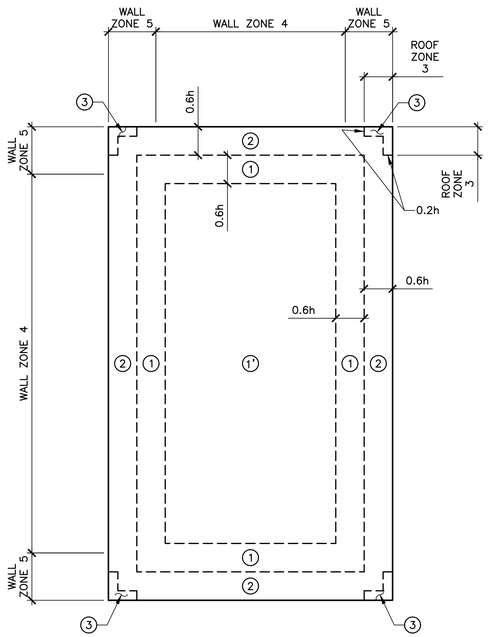
2 / S42 N.T.S.

CHEMICAL STORAGE BUILDING WIND PRESSURES FOR "COMPONENTS & CLADDING"			
ROOF ZONES			
ZONE	EFFECTIVE WIND AREA (SQ.FT.)	WIND PRESSURE (PSF)	
1'	10	11.8	−35.4
1'	100	7.87	−35.4
1'	500	7.87	−15.7
1	10	11.8	−66.9
1	100	7.87	−50.7
1	500	7.87	−39.4
2	10	11.8	−90.5
2	100	7.87	−69.7
2	500	7.87	−55.1
3	10	11.8	−126.0
3	100	7.87	−54.2
3	500	7.87	−55.1

ROOF ZONE 3 DIMENSION = 6'−0"

CHEMICAL STORAGE BUILDING WIND PRESSURES FOR "COMPONENTS & CLADDING"			
WALL ZONES			
ZONE	EFFECTIVE WIND AREA (SQ.FT.)	WIND PRESSURE (PSF)	
4	10	35.4	−39.0
	500	24.8	−28.3
5	10	35.4	−49.6
	500	24.8	−28.3

CORNER WALL ZONE 5 DIMENSION = 3'−0"



STORAGE TANK NO. 1 ELECTRICAL BUILDING UPLIFT PRESSURES FOR ROOF & WIND WALL ZONES

3 / S42 N.T.S.

STORAGE TANK NO. 1 ELECTRICAL BUILDING WIND PRESSURES FOR "COMPONENTS & CLADDING"			
ROOF ZONES			
ZONE	EFFECTIVE WIND AREA (SQ.FT.)	WIND PRESSURE (PSF)	
1'	10	11.8	−35.4
1'	100	7.87	−35.4
1'	500	7.87	−15.7
1	10	11.8	−66.9
1	100	7.87	−50.7
1	500	7.87	−39.4
2	10	11.8	−90.5
2	100	7.87	−69.7
2	500	7.87	−55.1
3	10	11.8	−126.0
3	100	7.87	−54.2
3	500	7.87	−55.1

ROOF ZONE 3 DIMENSION = 7'−2"

STORAGE TANK NO. 1 ELECTRICAL BUILDING WIND PRESSURES FOR "COMPONENTS & CLADDING"			
WALL ZONES			
ZONE	EFFECTIVE WIND AREA (SQ.FT.)	WIND PRESSURE (PSF)	
4	10	35.4	−39.0
	500	24.8	−28.3
5	10	35.4	−49.6
	500	24.8	−28.3

CORNER WALL ZONE 5 DIMENSION = 3'−0"

NOTES:

1. (+) PLUS SIGN SIGNIFIES PRESSURE ACTING TOWARDS THE SURFACE.
2. (−) NEGATIVE SIGN SIGNIFIES PRESSURES ACTING AWAY FROM THE SURFACE.
3. PRESSURES FOR EFFECTIVE WIND AREA BETWEEN THE LISTED VALUES MAY BE LINEARLY INTERPOLATED.
4. PRESSURES SHOWN ARE FOR GROSS UPLIFT CONDITIONS.
5. NET DESIGN WIND PRESSURES SHALL NOT BE LESS THAN 16 PSF IN EITHER DIRECTION NORMAL TO THE SURFACE.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY: _____
DRAWN BY: _____
CHECKED BY: _____
REVIEWED BY: _____
APPROVED BY: _____

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24−inch FM Installation, and Scott Street Storage Tank No. 1

WIND PRESSURE FOR COMPONENTS AND CLADDING I

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S42

WBS NUMBER
S−001000−0035−4

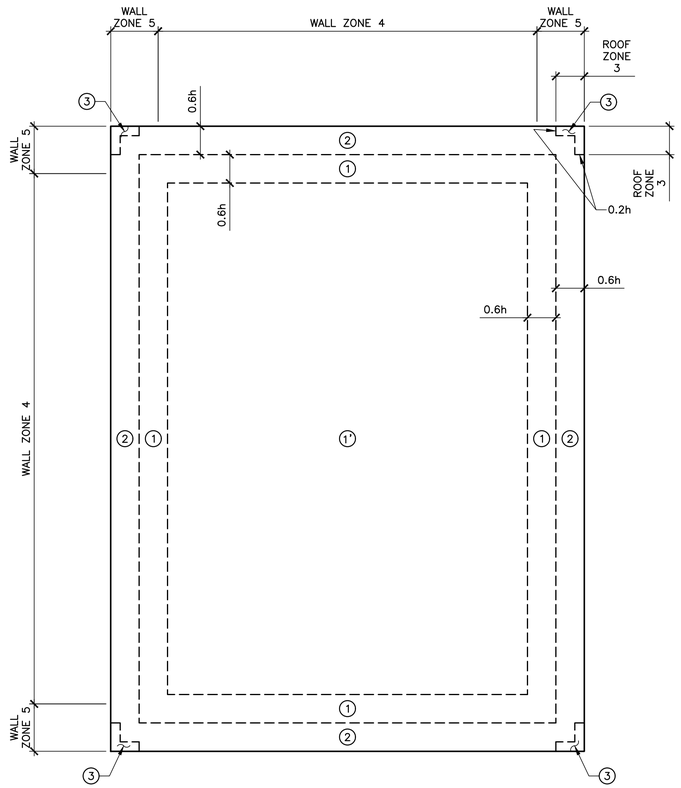
DRAWING SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

FOR CITY OF HOUSTON USE ONLY

FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\WIND PRESSURE FOR COMPONENTS AND CLADDING I.dwg



WASHWATER PUMP STATION BUILDING UPLIFT PRESSURES FOR ROOF & WIND WALL ZONES

1 / S43 N.T.S.

WASHWATER PUMP STATION BUILDING WIND PRESSURES FOR "COMPONENTS & CLADDING"			
ROOF ZONES			
ZONE	EFFECTIVE WIND AREA (SQ.FT.)	WIND PRESSURE (PSF)	
1'	10	11.8	−35.4
1'	100	7.87	−35.4
1'	500	7.87	−15.7
1	10	11.8	−66.9
1	100	7.87	−50.7
1	500	7.87	−39.4
2	10	11.8	−90.5
2	100	7.87	−69.7
2	500	7.87	−55.1
3	10	11.8	−126.0
3	100	7.87	−54.2
3	500	7.87	−55.1

ROOF ZONE 3 DIMENSION = 7'−2"

WASHWATER PUMP STATION BUILDING WIND PRESSURES FOR "COMPONENTS & CLADDING"			
WALL ZONES			
ZONE	EFFECTIVE WIND AREA (SQ.FT.)	WIND PRESSURE (PSF)	
4	10	35.4	−39.0
	500	24.8	−28.3
5	10	35.4	−49.6
	500	24.8	−28.3

CORNER WALL ZONE 5 DIMENSION = 3'−0"

NOTES:

1. (+) PLUS SIGN SIGNIFIES PRESSURE ACTING TOWARDS THE SURFACE.
2. (−) NEGATIVE SIGN SIGNIFIES PRESSURES ACTING AWAY FROM THE SURFACE.
3. PRESSURES FOR EFFECTIVE WIND AREA BETWEEN THE LISTED VALUES MAY BE LINEARLY INTERPOLATED.
4. PRESSURES SHOWN ARE FOR GROSS UPLIFT CONDITIONS.
5. NET DESIGN WIND PRESSURES SHALL NOT BE LESS THAN 16 PSF IN EITHER DIRECTION NORMAL TO THE SURFACE.

NO.	DATE	REVISION	APP.

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
NICLAS S. GREEN
TEXAS P.E. NO. 126232
DATE: 2/27/2025

DESIGNED BY:
DRAWN BY:
CHECKED BY:
REVIEWED BY:
APPROVED BY:

SURVEYED BY:
FB NO. N/A

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

Eddington Lift Station, 24−inch FM Installation, and Scott Street Storage Tank No. 1

WIND PRESSURE FOR COMPONENTS AND CLADDING II

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
S43

WBS NUMBER
S−001000−0035−4

DRAWING SCALE

CITY OF HOUSTON PM
MEGAN R. JORDAN, P.E.

SHEET NO. OF

FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: LNV−FS−2015−STRUCT.CTB PLOTTED: 1/19/2026 3:02 PM
FILE PATH: U:\STRUCTURAL\Eddington LS\Drawings\WIND PRESSURE FOR COMPONENTS AND CLADDING II.dwg

DUCTWORK SYMBOLS

- SUPPLY DIFFUSER/GRILLE
- RETURN GRILLE
- EXHAUST GRILLE
- 12" DIA. — ROUND DUCT. SIZE IN INCHES. SIZE INDICATED IS DUCT DIAMETER.
- 24x12 — RECTANGULAR DUCT. SIZE IN INCHES. FIRST NUMBER IS SIDE SHOWN.
- 20x12 — SUPPLY OR OUTSIDE AIR DUCT UP
- 20x12 — SUPPLY OR OUTSIDE AIR DUCT DOWN
- 20x12 — RETURN DUCT UP
- 20x12 — RETURN DUCT DOWN
- 20x12 — EXHAUST DUCT UP
- 20x12 — EXHAUST DUCT DOWN
- ROUND DUCT UP
- ROUND DUCT DOWN
- RECTANGULAR ELBOW WITH TURNING VANES
- 20x12 / 16x8 — TRANSITION - RECTANGULAR TO RECTANGULAR
- 20x12 / 10" — TRANSITION - RECTANGULAR TO ROUND
- UP — ELEVATION CHANGE (UP) RISE, (DN) DROP
- FLEXIBLE CONNECTION
- FLEXIBLE DUCT - SINGLE LINE
- DIFFUSER TAKEOFF WITH FLARED SPIN-IN TAP, MANUAL DAMPER AND FLEX DUCT
- RECTANGULAR DUCT BRANCH TAKEOFF WITH 45 DEG TAP
- ROUND DUCT BRANCH TAKEOFF WITH CONICAL TAP FROM RECT. OR ROUND MAIN

HVAC SYMBOLS

- DPT — DIFFERENTIAL PRESSURE TRANSMITTER
- DX — DIRECT EXPANSION (REFRIGERANT)
- ES — END SWITCH (DAMPER MOTOR)
- FS — FLOW SENSOR
- FS — FLOW SWITCH
- GUI — GRAPHICAL USER INTERFACE
- H — HUMIDISTAT
- H — HUMIDITY SENSOR
- HOA — HAND-OFF-AUTO SWITCH
- M — MOTORIZED OPPOSED BLADE DAMPER
- MCP — MANUFACTURER'S CONTROL PANEL
- PT — PRESSURE TRANSMITTER
- PRESSURE TEMPERATURE PORT
- SD — DUCT MOUNTED SMOKE DETECTOR
- S/D — COMBINATION STARTER/DISCONNECT
- SP — DUCT STATIC PRESSURE SENSOR
- T — TEMPERATURE SENSOR/TRANSMITTER
- TC — TEMPERATURE CONTROLLER
- TS — TEMPERATURE SENSOR/TRANSMITTER
- T — THERMOSTAT
- C — CURRENT SWITCH
- VFD — VARIABLE FREQUENCY DRIVE
- CONNECTION POINT NEW TO EXISTING
- FORCED AIR TO SPACE
- INDIRECT AIR FROM SPACE

GENERAL ABBREVIATIONS

A	@	AT
	AD	AIR DROP
	AFF	ABOVE FINISHED FLOOR
	ALT	ALTITUDE
	AP	ACCESS PANEL
	ASD	ADJUSTABLE SPEED DRIVE
	AUTO	AUTOMATIC
	AUX	AUXILIARY
	AVG	AVERAGE
B	BDD	BACKDRAFT DAMPER
	BHP	BRAKE HORSEPOWER
	BLDG	BUILDING
	BOD	BOTTOM OF DUCT
	BOP	BOTTOM OF PIPE
	BTM	BOTTOM
	BTU	BRITISH THERMAL UNIT
C	℄	CENTER LINE
	CCW	COUNTER CLOCKWISE
	CENT	CENTRIFUGAL
	CFM	CUBIC FEET PER MINUTE
	CLASS/DIV	NEC AREA CLASSIFICATION
	CLG	CEILING
	CLR	CLEAR
	COL	COLUMN
	CONT	CONTINUE, CONTINUOUS
	CTR	CENTER
	CU FT	CUBIC FEET
	CW	CLOCKWISE
D	DACS	DATA ACQUISITION AND CONTROL SYSTEM
I	DB	DRY BULB
	DCVBP	DOUBLE CHECK VALVE BACKFLOW PREVENTER
K	DEG	DEGREE
	DIA, Ø	DIAMETER
L	DN	DOWN
	DWG	DRAWING
E	EA	EACH
M	EL	ELEVATION
	EMERG	EMERGENCY
	ENT	ENTERING
	EQUIP	EQUIPMENT
	EWT	ENTERING WATER TEMPERATURE
F	F	FAHRENHEIT
	FLR	FLOOR
	FLG	FLANGE
	FL	FLOW LINE
	FOB	FLAT ON BOTTOM
	FPC	FIRE PROTECTION CONTRACTOR
	FPS	FEET PER SECOND
	FT	FEET
	FWE	FURNISHED WITH EQUIPMENT
G	GPM	GALLONS PER MINUTE
H	H-O-A	HAND-OFF-AUTO
	HP	HORSEPOWER
	HVAC	HEATING, VENTILATION AND AIR CONDITIONING
	HZ	HERTZ
	ID	INSIDE DIAMETER
	IE	INVERT ELEVATION
	INV	INVERT
	IOS	INSTALLED BY OTHER SECTION
	IPS	IRON PIPE SIZE
	KS	KITCHEN SINK
	KW	KILOWATT
	LAB	LABORATORY
	LVG	LEAVING
	LWT	LEAVING WATER TEMPERATURE
	M	MOTOR
	MATL	MATERIAL
	MAX	MAXIMUM
	MBH	THOUSAND BTU PER HOUR
	MCC	MOTOR CONTROL CENTER
	MECH	MECHANICAL
	MFR	MANUFACTURER
	MIN	MINIMUM
	MISC	MISCELLANEOUS
	MTD	MOUNTED
N	NA	NOT APPLICABLE
	NC	NORMALLY CLOSED
	NO	NORMALLY OPEN OR NUMBER
	NOM	NOMINAL
	NTS	NOT TO SCALE

ABBREVIATIONS - CONTINUED

O	OD	OUTSIDE DIAMETER
P	PD	PRESSURE DROP
	PG	PRESSURE GAUGE
	PLC	PROGRAMMABLE LOGIC CONTROLLER
	PNL	PANEL
	PSI	POUNDS PER SQUARE INCH
	PSIA	PSI ABSOLUTE
	PSIG	PSI GAUGE
	P&T	PRESSURE AND TEMPERATURE
R	RM	ROOM
	RPM	REVOLUTIONS PER MINUTE
S	SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
	SF	SQUARE FOOT (FEET)
	SHT	SHEET
	SPEC	SPECIFICATIONS
	SSTL	STAINLESS STEEL
	SQ	SQUARE
T	T&P	TEMPERATURE & PRESSURE RELIEF
	TEMP	TEMPERATURE
	THK	THICK(NESS)
	TOC	TOP OF CONCRETE
	TOP	TOP OF PIPE
	TOS	TOP OF STEEL
	TYP	TYPICAL
U	UL	UNDERWRITERS LABORATORY
	UNO	UNLESS NOTED OTHERWISE
W	W/	WITH
	W/O	WITHOUT
	WxH	WIDTH BY HEIGHT
	W&T	WASTE AND TRAP
	W&V	WASTE AND VENT

HVAC ABBREVIATIONS

AC	AIR CONDITIONER
AHU	AIR HANDLING UNIT
CU	CONDENSING UNIT
EA	EXHAUST AIR
EF	EXHAUST FAN
MAU	MAKE-UP AIR UNIT
OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY:	M. ANDERSON
DRAWN BY:	M. ANDERSON
CHECKED BY:	R. AZCARATE
REVIEWED BY:	T. GALLIA
APPROVED BY:	R. AZCARATE

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

HVAC SYMBOLS, LEGENDS, AND ABBREVIATIONS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
H–1

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:27 PM

FILE PATH: P:\083014 – Ardurra Houston – Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\HVAC\H–1.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:27 PM

FILE PATH: P:\083014 - Ardurra Houston - Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\HVAC\H-2.dwg

HVAC NOTES:

GENERAL:

1. CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS AND PROVIDE EQUIPMENT, DUCTWORK, PIPING, AND ASSOCIATED INSULATION, COATINGS, SUPPORTS, CONTROLS AND DEVICES, REGARDLESS OF WHETHER IT'S SHOWN ON ONE DRAWING AND NOT ANOTHER. FOR EXAMPLE, A DAMPER SHOWN ON A PLAN BUT NOT THE SCHEMATIC, OR VICE VERSA SHALL BE PROVIDED.

2. THIS IS A WASTEWATER TREATMENT PLANT WITH CORROSIVE AND CLASSIFIED AREAS. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS PER NFPA 820.

3. REFER TO INDIVIDUAL DRAWINGS FOR ADDITIONAL NOTES SPECIFIC TO THOSE SHEETS.

MATERIALS:

4. DUE TO THE PLANT'S CORROSIVE ENVIRONMENT, ALL HVAC MATERIALS SHALL BE ALUMINUM, 316 STAINLESS STEEL, OR FIBERGLASS REINFORCED PLASTIC (FRP), UNLESS NOTED OTHERWISE.

5. OUTDOOR EQUIPMENT THAT IS SCHEDULED TO BE MANUFACTURER'S STANDARD MATERIALS (E.G. PACKAGED DX AIR HANDLING UNITS, AC/CU EQUIPMENT) SHALL HAVE COATINGS FOR EXPOSURE TO HYDROGEN SULFIDE (H2S) AND SUITEABLE FOR SEACOAST ENVIRONMENT PER SPECIFICATION 15500.

6. EQUIPMENT THAT IS SCHEDULED TO BE ALUMINUM OR STAINLESS STEEL CONSTRUCTION AND HAS ANY COMPONENT THAT IS NOT OF THOSE MATERIALS, SHALL HAVE COATINGS SUITABLE FOR EXPOSURE TO HYDROGEN SULFIDE (H2S).

7. WHERE COATINGS ARE REQUIRED, ALL COMPONENTS INSIDE AND OUTSIDE OF THE EQUIPMENT EXPOSED TO THE ENVIRONMENT (I.E. NOT CHEMICALLY SCRUBBED OR TREATED) ARE TO BE COATED.

8. ALL SUPPORTS AND FASTENERS SHALL BE 316 STAINLESS STEEL, UNLESS NOTED OTHERWISE.

9. SODIUM HYPOCHLORITE AND SODIUM BISULFITE FEED ROOMS EXHAUST, AND THEIR ASSOCIATED DAMPERS SHALL BE FIBERGLASS REINFORCED PLASTIC (FRP). FRP SHALL BE PROTECTED WITH UV INHIBITORS WITH WHITE GEL COAT PAINT.

10. ALL EQUIPMENT SHALL HAVE EQUIPMENT TAGS WITH THEIR RESPECTIVE FACILITY CODE AND NUMBER.

EQUIPMENT:

11. EQUIPMENT CLEARANCES SHALL BE PROVIDED PER THE NATIONAL ELECTRIC CODE (NEC) AND ACCESS REQUIREMENTS PER EQUIPMENT MANUFACTURER FOR MAINTENANCE AND REMOVAL OF PARTS.

12. FIELD MODIFICATION (E.G. CUTTING, REPAIR OF DAMAGED EQUIPMENT, ETC) WILL NOT BE ACCEPTED.

13. ELECTRIC UNIT HEATERS AND RECIRCULATION FANS SHALL BE MOUNTED WITH BOTTOM OF EQUIPMENT AT 8'-0" AFF, UNLESS NOTED OTHERWISE. UNIT HEATERS ARE ALLOWED TO BE RAISED OR LOWERED BY CONTRACTOR DUE TO CONFLICT, BUT SHALL SUBMIT TO ENGINEER FOR APPROVAL IF THIS EXCEEDS MORE THAN 12-INCHES.

14. ALL EQUIPMENT SHALL BE SECURELY ANCHORED TO STRUCTURE AND/OR ITS CONCRETE PAD.

DAMPERS:

15. ALL MOTORIZED DAMPERS ARE LOW LEAKAGE CLASS 1A @ 1 IN.W.G., UNLESS NOTED OTHERWISE.

16. ACTUATORS SHALL BE TWO POSITION WITH MANUAL OVERRIDE, RATED FOR OUTDOORS WITH INTEGRAL NEMA 4X ENCLOSURE AS MANUFACTURED BY BELIMO (E.G. MODELS WITH N4 SUFFIX). NO SEPARATE ENCLOSURES SURROUNDING THE ACTUATOR SHALL BE ACCEPTED.

17. ACTUATORS SHALL BE SIZED FOR TWICE THE REQUIRED OPERATING TORQUE OF THE ASSOCIATED DAMPER OR DAMPER SECTION.

18. MANUAL BALANCING DAMPERS SHALL BE PROVIDED FOR EACH AIR INLET OR OUTLET TO ACHIEVE THE AIRFLOW INDICATED.

WALL LOUVERS & INTAKES:

26. WALL LOUVERS ARE FURNISHED AND INSTALLED UNDER DIVISION 10, REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION. HVAC CONTRACTOR SHALL COORDINATE ASSOCIATED DAMPER SIZES WITH LOUVERS AND REVIEW LOUVER SUBMITTALS.

27. PROVIDE HEAVY DUTY ALUMINUM WALL SLEEVES TO FINISH-OUT THE WALL OPENING AND CONNECT TO INTERIOR DAMPERS AND/OR FILTER HOUSINGS.

DUCTWORK INLET & OULETS (GRILLES, REGISTERS, DIFFUSERS, SCREENS):

28. ALL INLETS AND OUTLETS SHALL HAVE A TERMINATING DEVICE (E.G. GRILLE OR SCREEN). ALL BOTTOM INLETS AT FLOOR LEVEL (E.G. 12"AFF) SHALL BE TERMINATED WITH 1/2"x1/2" WIRE MESH IN A REMOVABLE FLANGED FRAME, UNLESS NOTED OTHERWISE. FRP DUCTWORK SHALL HAVE 316 STAINLESS STEEL DEVICE MATERIALS. ALUMINUM DUCTWORK SHALL HAVE ALUMINUM AND/OR 316 STAINLESS STEEL DEVICE MATERIALS.

PIPING:

29. PIPE SUPPORTS SHALL BE PROVIDED EVERY 5-FT MAXIMUM, UNLESS OTHERWISE NOTED.

30. WHERE INSULATION IS TO BE PROVIDED ON PIPING, THE PIPE CLAMPS SHALL BE ON THE OUTSIDE OF THE INSULATION. SUPPORTS SHALL NOT PENETRATE INSULATION OR JACKETING.

31. PROVIDE PRE-INSULATED PIPE SUPPORTS FOR INSTALLATION WITH PIPING. ASSEMBLY SHALL BE INSTALLED AT THE SAME TIME AS THE PIPING. REFER TO PIPING SYSTEMS SPECIFICATION FOR ADDITIONAL INFORMATION.

32. REFRIGERANT BASED AIR-CONDITIONING EQUIPMENT (AHU, AC) CONDENSATE DRAIN AND VENT PIPING SHALL BE SOLVENT WELDED PVC WITH DWV FITTINGS AND SLOPED AT 1/8" PER FOOT MINIMUM. BELOW GRADE PIPING SHALL BE SCHEDULE 80 PVC AND ABOVE-GRADE SHALL BE SCHEDULE 40 PVC.

33. PVC PIPING OUTDOORS SHALL BE PAINTED FOR UV PROTECTION.

34. PROVIDE PIPE SUPPORTS PER PLUMBING DETAILS.

35. REFER TO PLUMBING DIVISION15 SPECIFICATIONS FOR ADDITIONAL PIPING REQUIREMENTS.

36. COORDINATE WITH PLUMBING FOR CONDENSATE REQUIREMENTS.

CONTROLS:

37. THE HVAC CONTRACTOR SHALL EMPLOY A CONTROLS APPLICATION ENGINEER TO REVIEW AND SUBMIT A COMPLETE CONTROLS PACKAGE FOR A FULLY FUNCTIONAL SYSTEM. THESE DRAWINGS PROVIDE THE OVERALL PERFORMANCE AND INTENT, AND DO NOT SHOW ALL REQUIRED DEVICES OR DETAILED INFORMATION. THIS INCLUDES COORDINATING AND SHOWING ALL DEVICES AND INTERCONNECTS WITH ELECTRICAL AND I&C. THE CONTROLS APPLICATION ENGINEER SHALL SUBMIT A WRITTEN STATEMENT CONFIRMING THE SUBMITTAL HAS BEEN REVIEWED AND PROVIDES A COMPLETE, FULLY FUNCTIONAL SYSTEM PER THE DRAWINGS. ANY DEVIATIONS FROM THE DRAWINGS SHALL BE CLEARLY IDENTIFIED IN THE SUBMITTAL.

38. SUBMIT PANEL LAYOUTS, DIAGRAMS, SEQUENCES OF OPERATION, EQUIPMENT AND DEVICE CUTSHEETS WITH THE SHOP DRAWINGS FOR REVIEW AND APPROVAL.

39. CONDUIT/WIRING BETWEEN HVAC EQUIPMENT AND ELECTRICAL EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL.

40. CONDUIT/WIRING BETWEEN HVAC EQUIPMENT AND HVAC DEVICES SHALL BE FURNISHED AND INSTALLED BY HVAC PER DIVISION 16 SPECIFICATIONS.

41. CONTRACTOR SHALL VERIFY ALL EQUIPMENT AND DEVICE TAGS WITH DIVISION 17.

COORDINATION:

42. REFER TO MECHANICAL SHEETS FOR COORDINATION OF PROCESS EQUIPMENT, PIPING, AND ACCESSORIES. VERIFY SPACE REQUIREMENTS FOR HVAC EQUIPMENT, DUCTWORK, SUPPORTS, DEVICES, AND ALL CLEARANCES.

43. REFER TO ARCHITECTURAL AND STRUCTURAL SHEETS FOR COORDINATION OF ROOF, FLOOR, AND WALL OPENINGS.

44. REFER TO STRUCTURAL DETAILS FOR ADDITIONAL INFORMATION ON CONCRETE CURBS AND PADS.

45. HVAC CONTRACTOR SHALL COORDINATE PURCHASED EQUIPMENT WITH ROOF OPENINGS AND CONCRETE ROOF CURB/PAD SIZES.

46. REFER TO STRUCTURAL NOTES FOR ANCHORS IN PRECAST PANELS AND COORDINATION WITH REBAR. DO NOT DAMAGE REBAR.

47. ALL POWER WIRING/CONDUIT, STARTERS, AND DISCONNECTS ARE FURNISHED AND INSTALLED BY DIVISION 16, UNLESS OTHERWISE NOTED. NOTE, THE FOLLOWING EQUIPMENT HAVE STARTERS PROVIDED BY THE EQUIPMENT MANUFACTURER:

- PACKAGED MAKE-UP AIR UNITS (MAU)
- AIR FILTRATION UNITS (AFU).

49. ANY DEVIATION FROM SCHEDULED VOLTS/PHASE, HORSEPOWER, OR MAX OVER CURRENT PROTECTION (MOCP) IS TO BE COORDINATED WITH ELECTRICAL AND NOTED ON THE SUBMITTAL FOR APPROVAL.

OUTDOOR CONCRETE PADS:

50. PADS SHALL BE CLASS A2 NORMAL WEIGHT CONCRETE (4,000 PSI), 4" MINIMUM THICKNESS, WITH BAR REINFORCEMENT OR WELDED WIRE PER ASTM STANDARDS, AND 3/4" CHAMFERED EXPOSED CORNERS, UNLESS NOTED OTHERWISE .

51. REFER TO STRUCTURAL GENERAL NOTES SHEET AND SPECIFICATION FOR ADDITIONAL INFORMATION ON CAST-IN-PLACE CONCRETE.

52. WHERE OUTDOOR EQUIPMENT IS MOUNTED TO THE CONCRETE PAD, THE PAD SHALL EXTEND A MINIMUM OF 4" BEYOND THE EQUIPMENT AND ITS ANCHOR POINTS.

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY: M. ANDERSON	SURVEYED BY:
DRAWN BY: M. ANDERSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: R. AZCARATE	FB NO. 340S1
REVIEWED BY: T. GALLIA	
APPROVED BY: R. AZCARATE	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

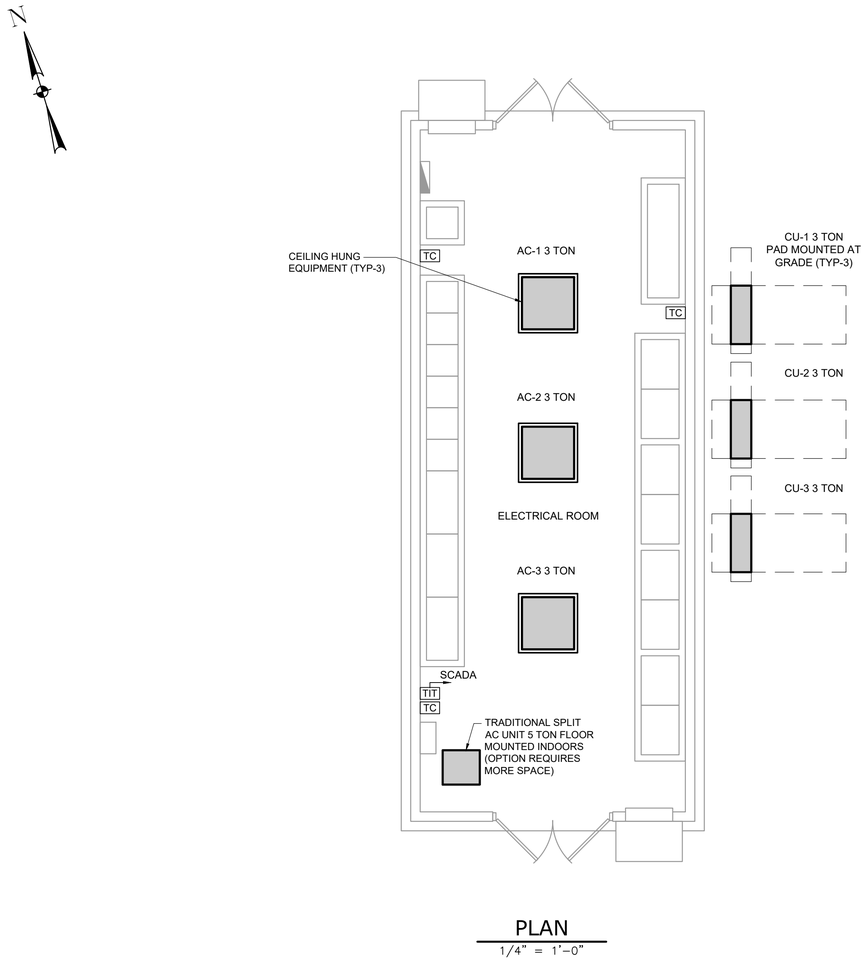
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

HVAC GENERAL NOTES

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
H-2

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	



PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO HVAC GENERAL NOTES SHEET FOR ADDITIONAL INFORMATION.

SEQUENCE OF OPERATION (ELECTRICAL ROOM)

GENERAL:
1. THE ELECTRICAL ROOM IS AIR-CONDITIONED BY DUCTLESS DX REFRIGERANT SPLIT SYSTEM, EACH WITH THEIR OWN ROOM-MOUNTED DEDICATED TEMPERATURE CONTROLLER.
2. ONE SYSTEM SHALL BE BACKUP FOR N+1 REDUNDANCY.
3. ALL SETPOINTS ARE ADJUSTABLE
4. DISCONNECTS AND CONDUIT/WIRING SHALL BE BY DIVISION 16 (ELECTRICAL).

SCADA:
1. THE DEDICATED ROOM TEMPERATURE SENSOR SHALL BE MONITORED BY SCADA. SCADA ALARM SETPOINTS TO BE PROGRAMMED BY DIVISION 13 (I&C)

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY: M. ANDERSON
DRAWN BY: M. ANDERSON
CHECKED BY: R. AZCARATE
REVIEWED BY: T. GALLIA
APPROVED BY: R. AZCARATE

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

EDDINGTON ELECTRICAL BUILDING HVAC PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
H-3

WBS NUMBER
R-001000-0035-4

DRAWING SCALE

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

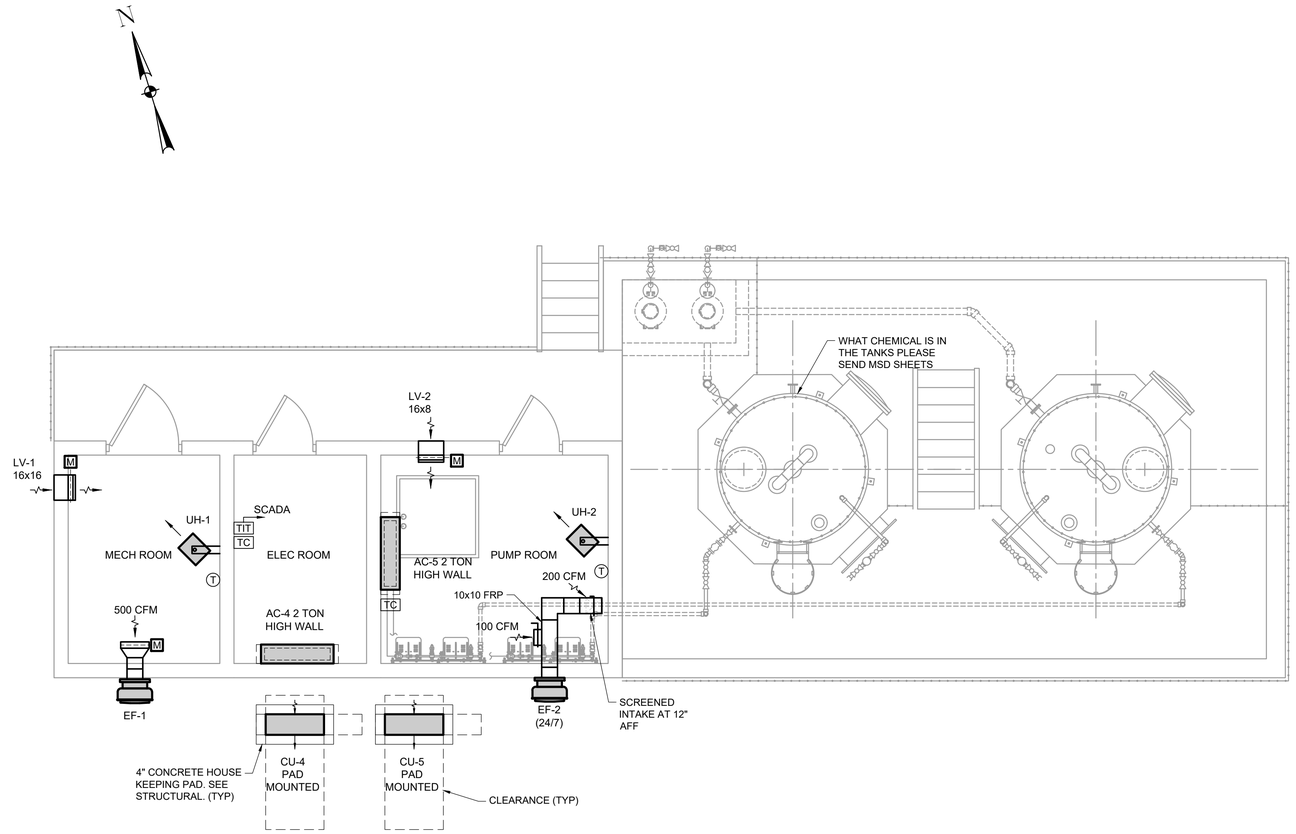
SHEET NO. OF XX

FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:27 PM
FILE PATH: P:\083014 - Ardurra Houston - Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\HVAC\H-3.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:27 PM

FILE PATH: P:\083014 - Ardurra Houston - Coh Eddington Lift Station Improvements\200 Design Phose\206 CAD\HVAC\H-4.dwg



PLAN

1/4" = 1'-0"

4' 0 4' 8'

SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO AIRFLOW SCHEMATICS FOR ADDITIONAL NOTES, CFM'S, DUCT SIZES, AND CONTROLS.
2. MOUNT UNIT HEATERS MINIMUM 8'-0" AFF TO BOTTOM CLEAR AND SECURE TO ADJACENT WALL.
3. COORDINATE UNIT HEATERS TO SUPPORT FROM GROUT FILLED CMU BLOCKS. NOT ALL CMU BLOCKS WILL BE GROUT FILLED.
4. ALL HANGER MATERIAL AND HARDWARE SHALL BE 316 STAINLESS STEEL.
5. ALL CHEMICAL ROOM EXHAUST, DUCTWORK, DAMPERS, AND ASSOCIATED FITTINGS SHALL BE FRP CONSTRUCTION UNLESS NOTED OTHERWISE.
6. ALL EXTERIOR FRP DUCT, DAMPERS, AND FITTINGS SHALL BE PROTECTED WITH UV LIGHT INHIBITORS AND WHITE GEL COAT PAINT.
7. SLEEVES AND MOTORIZED DAMPERS AT INTAKE LOUVERS SHALL BE ALUMINUM CONSTRUCTION IN NON-CHEMICAL ROOMS AND FRP IN CHEMICAL ROOMS. ALL FASTENERS AND HARDWARE SHALL BE 316 STAINLESS STEEL.
8. ALL DAMPER MOTORS SHALL BE NEMA 4X EQUAL TO BELIMO SERIES WITH SUFFIX N4. SIZE DAMPER MOTORS FOR TWICE THE REQUIRED OPERATING TORQUE OF THE ASSOCIATED DAMPER OR DAMPER SECTION.
9. COORDINATE DISTANCE FROM WALL FOR ALL DUCT DROPS TO ALLOW WALL MOUNTED PIPING TO PASS BEHIND.
10. PROVIDE MANUFACTURER REQUIRED MAINTENANCE ACCESS FOR ACTUAL EQUIPMENT PURCHASED.
11. CONDUIT AND WIRING BETWEEN HVAC PROVIDED DEVICES SHALL BE BY HVAC PER DIV 16. CONDUIT AND WIRING BETWEEN HVAC DEVICES AND ELECTRICAL PROVIDED EQUIPMENT SHALL BE BY ELECTRICAL. ALL TERMINATIONS AT HVAC DEVICES SHALL BE BY HVAC.
12. ALL ACTUATORS AT EQUIPMENT AND LOUVERS INDICATED TO BE CONTROLLED/INTERLOCKED W/FANS BY ELECTRICAL SHALL BE 120V.

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY: M. ANDERSON	SURVEYED BY:
DRAWN BY: M. ANDERSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: R. AZCARATE	FB NO. 340S1
REVIEWED BY: T. GALLIA	
APPROVED BY: R. AZCARATE	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

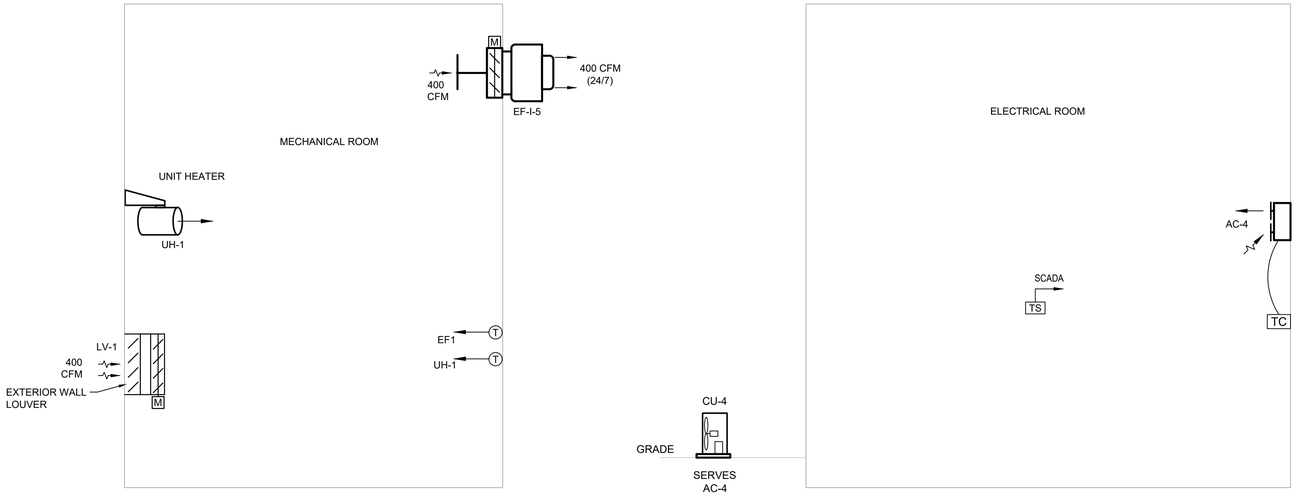
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

EDDINGTON CHEMICAL BUILDING HVAC PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
H-4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	



SEQUENCE OF OPERATION (MECHANICAL ROOM)

GENERAL:
1. THE MECHANICAL ROOM IS VENTILATED ONLY. NO COOLING, AND MINIMAL HEAT.
2. VENTILATION SYSTEM DAMPER ACTUATORS SHALL BE FAIL CLOSED.
3. DAMPERS ARE POWERED AND INTERLOCKED WITH FANS BY DIVISION 16 (ELECTRICAL).
4. DISCONNECTS AND CONDUIT/WIRING SHALL BE BY DIVISION 16 (ELECTRICAL).

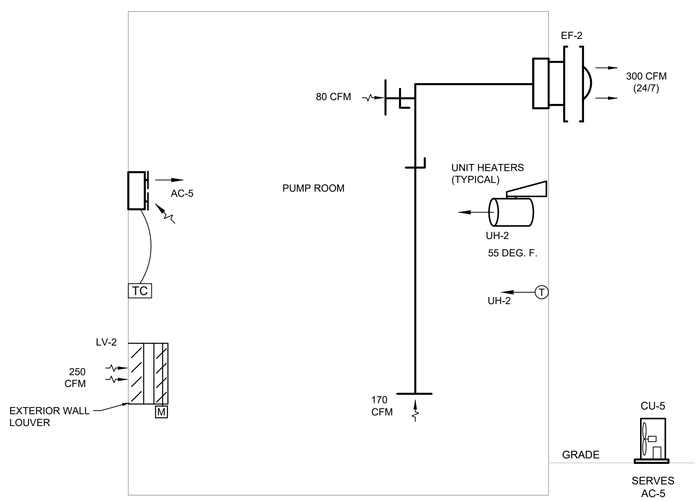
EXHAUST FANS (SUMMER):
1. THE SUMMER VENTILATION FAN EF-I-5 SHALL RUN WHEN THE ASSOCIATED ROOM TEMPERATURE RISES ABOVE SETPOINT AND DAMPER SHALL BE INTERLOCKED TO OPEN WHEN SUMMER FAN IS ENERGIZED.

UNIT HEATERS:
1. CYCLE ON/OFF BASED ON THEIR RESPECTIVE REMOTE ROOM-MOUNTED NEMA 4X THERMOSTATS.

SEQUENCE OF OPERATION (ELECTRICAL ROOM)

GENERAL:
1. THE ELECTRICAL ROOM IS AIR-CONDITIONED BY DUCTLESS DX REFRIGERANT SPLIT SYSTEM, EACH WITH THEIR OWN ROOM-MOUNTED DEDICATED TEMPERATURE CONTROLLER.
2. ONE SYSTEM SHALL BE BACKUP FOR N+1 REDUNDANCY.
3. ALL SETPOINTS ARE ADJUSTABLE
4. DISCONNECTS AND CONDUIT/WIRING SHALL BE BY DIVISION 16 (ELECTRICAL).

SCADA:
1. THE DEDICATED ROOM TEMPERATURE SENSOR SHALL BE MONITORED BY SCADA. SCADA ALARM SETPOINTS TO BE PROGRAMMED BY DIVISION 13 (I&C)



SEQUENCE OF OPERATION (PUMP ROOM)

GENERAL:
1. THE PUMP ROOM IS VENTILATED AND AIR CONDITIONED.
2. ALL NORMAL VENTILATION SYSTEM DAMPER ACTUATORS SHALL BE FAIL CLOSED.
3. DAMPERS ARE POWERED AND INTERLOCKED WITH FANS BY DIVISION 16 (ELECTRICAL).
4. DISCONNECTS AND CONDUIT/WIRING SHALL BE BY DIVISION 16 (ELECTRICAL).

EXHAUST FANS (24/7):
1. THE 24/7 VENTILATION FAN EF-I-1 SHALL RUN AT ALL TIMES TO PROVIDE CONTINUOUS VENTILATION. ASSOCIATED INTAKE DAMPER WILL HAVE MINIMUM OPENING TO ALLOW 24/7 VENTILATION AT 500FPM THRU THE LOUVER.

HIGH WALL SPLIT SYSTEM:
1. THE PUMP ROOM IS AIR-CONDITIONED BY DUCTLESS DX REFRIGERANT SPLIT SYSTEM, WITH ITS OWN ROOM-MOUNTED DEDICATED TEMPERATURE CONTROLLER.
2. ALL SETPOINTS ARE ADJUSTABLE

UNIT HEATERS:
1. CYCLE ON/OFF BASED ON THEIR RESPECTIVE REMOTE ROOM-MOUNTED NEMA 4X THERMOSTATS.

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY: M. ANDERSON	SURVEYED BY:
DRAWN BY: M. ANDERSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: R. AZCARATE	FB NO. 340S1
REVIEWED BY: T. GALLIA	
APPROVED BY: R. AZCARATE	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

EDDINGTON CHEMICAL BUILDING HVAC SCHEMATIC

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

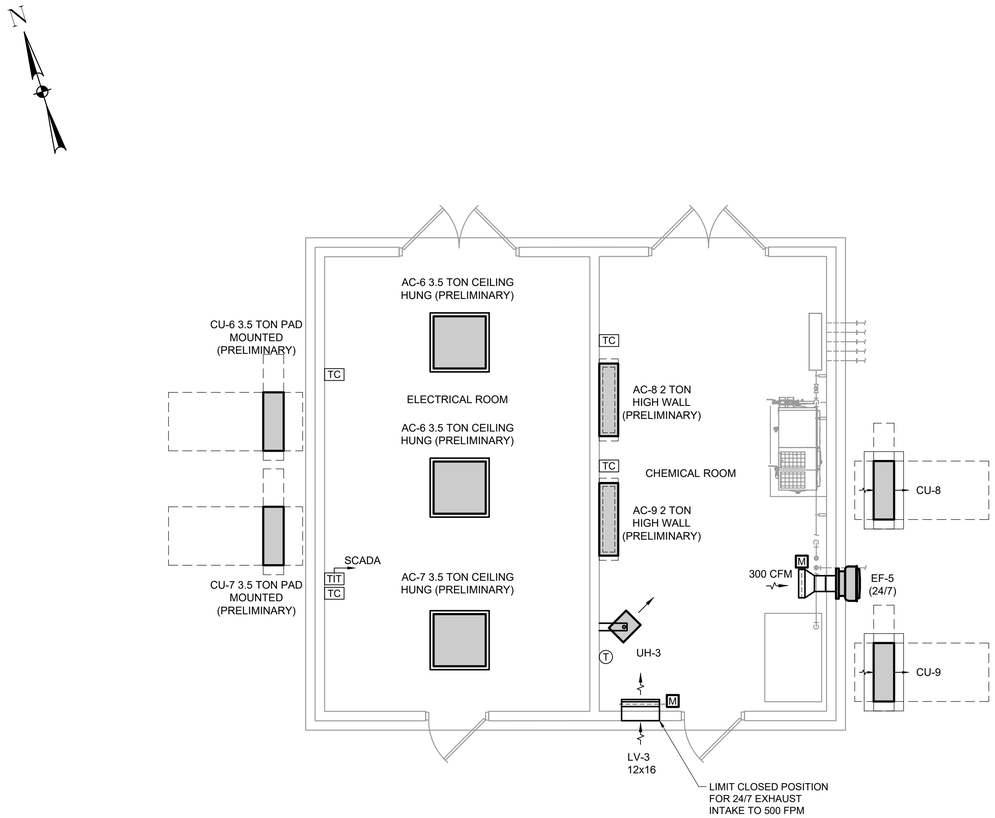
DWG NO
H-5

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:27 PM
FILE PATH: P:\083014 - Ardurra Houston - Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\HVAC\H-5.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:27 PM

FILE PATH: P:\083014 - Ardurra Houston - Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\HVAC\H-6.dwg



PLAN

1/4" = 1'-0"

GENERAL NOTES:

1. REFER TO AIRFLOW SCHEMATICS FOR ADDITIONAL NOTES, CFM'S, DUCT SIZES, AND CONTROLS.
2. MOUNT UNIT HEATERS MINIMUM 8'-0" AFF TO BOTTOM CLEAR AND SECURE TO ADJACENT WALL.
3. COORDINATE UNIT HEATERS TO SUPPORT FROM GROUT FILLED CMU BLOCKS. NOT ALL CMU BLOCKS WILL BE GROUT FILLED.
4. ALL HANGER MATERIAL AND HARDWARE SHALL BE 316 STAINLESS STEEL.
5. ALL CHEMICAL ROOM EXHAUST, DUCTWORK, DAMPERS, AND ASSOCIATED FITTINGS SHALL BE FRP CONSTRUCTION UNLESS NOTED OTHERWISE.
6. ALL EXTERIOR FRP DUCT, DAMPERS, AND FITTINGS SHALL BE PROTECTED WITH UV LIGHT INHIBITORS AND WHITE GEL COAT PAINT.
7. SLEEVES AND MOTORIZED DAMPERS AT INTAKE LOUVERS SHALL BE ALUMINUM CONSTRUCTION IN NON-CHEMICAL ROOMS AND FRP IN CHEMICAL ROOMS. ALL FASTENERS AND HARDWARE SHALL BE 316 STAINLESS STEEL.
8. ALL DAMPER MOTORS SHALL BE NEMA 4X EQUAL TO BELIMO SERIES WITH SUFFIX N4. SIZE DAMPER MOTORS FOR TWICE THE REQUIRED OPERATING TORQUE OF THE ASSOCIATED DAMPER OR DAMPER SECTION.
9. COORDINATE DISTANCE FROM WALL FOR ALL DUCT DROPS TO ALLOW WALL MOUNTED PIPING TO PASS BEHIND.
10. PROVIDE MANUFACTURER REQUIRED MAINTENANCE ACCESS FOR ACTUAL EQUIPMENT PURCHASED.
11. CONDUIT AND WIRING BETWEEN HVAC PROVIDED DEVICES SHALL BE BY HVAC PER DIV 16. CONDUIT AND WIRING BETWEEN HVAC DEVICES AND ELECTRICAL PROVIDED EQUIPMENT SHALL BE BY ELECTRICAL. ALL TERMINATIONS AT HVAC DEVICES SHALL BE BY HVAC.
12. ALL ACTUATORS AT EQUIPMENT AND LOUVERS INDICATED TO BE CONTROLLED/INTERLOCKED W/FANS BY ELECTRICAL SHALL BE 120V.

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY:	M. ANDERSON
DRAWN BY:	M. ANDERSON
CHECKED BY:	R. AZCARATE
REVIEWED BY:	T. GALLIA
APPROVED BY:	R. AZCARATE

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

SCOTT STREET CHEMICAL BUILDING HVAC PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
H-6

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	

AIR CONDITIONING UNIT SCHEDULE (DUCTLESS SPLIT SYSTEMS)

AIR CONDITIONER TAG NUMBER	AC-1 THRU 3 (BACKUP)	AC-4 THRU 5	
BUILDING	EDDINGTON ELECTRICAL BUILDING	EDDINGTON CHEMICAL BUILDING	
AREA SERVED	ELECTRICAL BUILDING	ELECTRICAL ROOM	
UNIT TYPE	SPLIT DX	SPLIT DX	
UNIT CONFIGURATION	4-WAY	1-WAY	
MOUNTING	CEILING-CASSETTE	HIGH WALL	
FAN CONFIGURATION	MFR. STD.	MFR. STD.	
ALTITUDE, FT. ABOVE SEA LEVEL	705	705	
NOMINAL TONS	3	2	
SUPPLY FAN:			
FAN TYPE	CENTRIFUGAL	CENTRIFUGAL	
TOTAL AIRFLOW, CFM (H/M/L)	570-670-780-880	265-310-375-450	
MIN. OUTSIDE AIR, CFM	NONE	NONE	
FAN CONTROL	4-SPEED	4-SPEED	
DRIVE TYPE	DIRECT	DIRECT	
COOLING COIL:			
ENT. AIR TEMP. DB/WB, DEG F	80/67	80/67	
APPROX. LVG. AIR TEMP. DB/WB, DEG F	55/54	55/54	
TOTAL COOLING CAPACITY, MBH	36.0	15.3	
SENSIBLE CAPACITY, MBH	30.9	10.1	
CALCULATED SENSIBLE LOAD, MBH	20.0	12.9	
HEATING:			
TYPE	HEAT PUMP	HEAT PUMP	
ACTUAL LOAD, BTUH	-	-	
RATED CAPACITY, MBH	19.3	13.3	
FILTERS	MFR STD	MFR STD	
REFRIGERANT LIQUID PIPE SIZE, IN	3/8	1/4	
REFRIGERANT GAS PIPE SIZE, IN	5/8	1/2	
DRAIN PIPE SIZE	1-1/4	1-1/4	
ELECTRICAL:			
VOLTS/PHASE/HERTZ	230/1/60	230/1/60	
MINIMUM CIRCUIT AMPACITY, MCA	1	1	
OPERATING WEIGHT, LBS	60	50	
MANUFACTURER	TRANE/MITSUBISHI	TRANE/MITSUBISHI	
MODEL NUMBER	PLA-A36EA8	PKA-AL24NL	
ASSOCIATED CONDENSING UNITS	CU-1 THRU 3	CU-4 THRU 5	

REMARKS: (APPLICABLE TO ALL UNITS)

1. SCHEDULE IS INCOMPLETE WITHOUT SPECIFICATION SECTION 23 81 26.
2. PROVIDE WIRED WALL MOUNTED CONTROLLER.
3. PROVIDE MANUFACTURER STANDARD CONDENSATE PUMP AND HIGH WATER CUTOFF.
4. PROVIDE WITH EEV KITS PER MANUFACTURER.
5. INDOOR UNIT IS POWERED BY OUTDOOR CONDENSING UNIT. FIELD WIRING/CONDUIT BY DIV.26.

ELECTRIC UNIT HEATER SCHEDULE

EQUIPMENT TAG NUMBER	UH-1	UH-2 THRU 3	
BUILDING	EDDINGTON CHEMICAL BUILDING	EDDINGTON CHEMICAL BUILDING	
ROOM SERVED	MECHANICAL ROOM	PUMP ROOM	
TOTAL CAPACITY, KW PER HEATER	3.75	5.0	
AIRFLOW, CFM	300	700	
AIR THROW, FT	N/A	26	
AIR TEMP RISE, DEG F	40	24	
FAN TYPE	PROPELLER	PROPELLER	
MOTOR ENCLOSURE	MFGR STD	TEFC	
TERMINAL ENCLOSURE		NEMA 4X	
RATING	N/A	WASHDOWN CORROSION RESISTANT	
VOLTS/PHASE/HERTZ PER HEATER	208/1/60	460/3/60	
TOTAL CURRENT DRAW, AMPS	18.4	12	
EMERGENCY POWER	NO	NO	
OPERATING WEIGHT, LBS	27	60	
MANUFACTURER	INDEECO ULI	TRIAD	
MODEL NUMBER	924U05000VA	234-U11N-005U-L	
CONTROLS NOTES	C1	C1	

REMARKS: (APPLICABLE TO ALL UNITS)

A. SCHEDULE IS INCOMPLETE WITHOUT SPECIFICATION SECTION 15550.
B. PROVIDE CLEARANCES PER MANUFACTURER.
C. UNIT SHALL BE MOUNTED AT 8'-0" UNLESS NOTED OTHERWISE.

NOTES:

1. UNIT SHALL BE SINGLE POINT ELECTRICAL CONNECTION WITH INTEGRAL TRANSFORMER FOR UNIT CONTROLS. DISCONNECT BY ELECTRICAL.
2. PROVIDE WITH SWIVEL BRACKET FOR WALL OR CEILING MOUNTING AS INDICATED ON PLANS.
3. HEATING ELEMENTS SHALL BE 316 STAINLESS STEEL.
4. PROVIDE WITH REMOTE MOUNTED NEMA4X THERMOSTAT AND AUTO RESET THERMAL CUTOUT.

CONTROLS NOTES:

C1. UNIT SHALL RUN INTERMITTENTLY, TURNING ON/OFF BASED ON ROOM THERMOSTAT SETPOINT.

CONDENSING UNIT SCHEDULE (DUCTLESS SPLIT SYSTEMS)

CONDENSING UNIT TAG NUMBER	CU-1 THRU 3	CU-4 THRU 5	
BUILDING	EDDINGTON ELECTRICAL BUILDING	GAC CONTACTOR FACILITY	
AREA SERVED	ELECTRICAL	CONTROL ROOM	
UNIT TYPE	AIR-COOLED	AIR-COOLED	
UNIT CONFIGURATION	HORIZONTAL	HORIZONTAL	
MOUNTING	CONC PAD ON GRADE	CONC PAD ON ROOF	
AMBIENT TEMP. RATING DEG F. MAX.	115	115	
AMBIENT TEMP. RATING DEG F. MIN.	0	0	
NOMINAL TONS	3.0	1.5	
GROSS COOLING CAPACITY, MBH	36.0	18.0	
GROSS HEATING CAPACITY, MBH	MFR. STD.	23.0	
VOLTS/PHASE/HERTZ	230/1/60	230/1/60	
ELECTRICAL MCA, AMPS	25	22	
ELECTRICAL MOCP, AMPS	30	37	
MANUFACTURER	TRANE/MITSUBISHI	TRANE/MITSUBISHI	
MODEL NUMBER	PUZ-AK36NL	PUZ-AK24NL	
COMPRESSOR TYPE	SCROLL	SCROLL	
REFRIGERANT TYPE/CHARGE	R454B/7.72LBS	R454B/4.41LBS	
COOLING SEER2	23.3	24.7	
COOLING EER @ 95 DEG.F.	13.7	13.7	
MOTOR HP	MFR. STD.	MFR. STD.	
OPERATING WEIGHT, LBS	160	100	

REMARKS: (APPLICABLE TO ALL UNITS)

1. SCHEDULE IS INCOMPLETE WITHOUT SPECIFICATION SECTION 23 81 26.
2. PROVIDE LOW AMBIENT CONTROL WIND BAFFLE FOR OPERATION DOWN TO 0 DEG.F..
3. CAPACITY SHALL BE AT 115 DEG.F. AMBIENT CONDITIONS.
4. UNIT SHALL HAVE SPECIAL COATINGS PER SPECIFICATION 23 00 00.
5. INDOOR UNIT IS POWERED BY OUTDOOR CONDENSING UNIT, FIELD WIRING/CONDUIT BY DIV. 26.

EXHAUST FAN SCHEDULE

EQUIPMENT TAG NUMBER	EF-1	EF-2	EF-3
BUILDING	MECHANICAL ROOM	EDDINGTON CHEMICAL BUILDING	SCOTT CHEMICAL BUILDING
SERVICE	EXHAUST (SUMMER)	EXHAUST (24/7)	EXHAUST (SUMMER)
UNIT CONFIGURATION	UPBLAST	UPBLAST	UPBLAST
LOCATION	WALL	WALL	WALL
DISCHARGE	HORIZONTAL	HORIZONTAL	HORIZONTAL
ALTITUDE, FT. ABOVE SEA LEVEL	20	20	20
FAN MATERIAL OF CONSTRUCTION	ALUMINUM	FIBERGLASS	FIBERGLASS
FAN TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
AIRFLOW, CFM	500	300	300
TOTAL STATIC PRESSURE, IN. WG	0.3	0.3	0.3
AIR STREAM TEMP RANGE, DEG F	70-110	70-110	70-110
FAN RPM	1,021	835	835
DRIVE TYPE	BELT	BELT	BELT
MOTOR HP	0.25	0.25	0.25
MOTOR RPM	1,725	1,725	1,725
MOTOR ENCLOSURE	TEFC	TEFC	TEFC
FAN SPEED CONTROL	ONLY FOR BALANCING	NO	NO
VOLTS/PHASE/HERTZ	120/1/60	460/3/60	460/3/60
EMERGENCY POWER	NO	NO	NO
SPARK PROOF	NO	NO	NO
SOUND DATA (DBA @ 5 FT. RADIUS)	64	64	64
VIBRATION ISOLATORS	MFR STD	MFR STD	MFR STD
STANDARD CURB CAP SIZE, IN x IN	19x19	19.63x19.63	19.63x19.63
CURB EXTENSION HEIGHT, IN	NONE	NONE	NONE
CURB ADAPTER SIZE, IN x IN	NONE	NONE	NONE
ROOF/WALL OPENING SIZE, IN x IN	15.5x15.5	19x19	19x19
OPERATING WEIGHT, LBS	111	111	111
MANUFACTURER	GREENHECK	MK PLASTICS	MK PLASTICS
MODEL NUMBER	CUE-099-VG	RBK-12	RBK-12
DAMPER	SEE PLANS	SEE PLANS	SEE PLANS
NOTES	1		
CONTROLS	SEE SCHEMATICS	SEE SCHEMATICS	SEE SCHEMATICS

GENERAL NOTES: (APPLICABLE TO ALL UNITS)

1. SCHEDULE IS INCOMPLETE WITHOUT SPECIFICATION SECTION 15860 & 15861.
2. PROVIDE ALL BELT DRIVEN EQUIPMENT WITH ONE SET OF SPARE BELT(S).

NOTES:

1. PROVIDE WITH ALUMINUM CONSTRUCTION, STAINLESS STEEL SHAFT AND FASTENERS, AND COATINGS ON FAN AND ACCESSORIES.

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY: M. ANDERSON
DRAWN BY: M. ANDERSON
CHECKED BY: R. AZCARATE
REVIEWED BY: T. GALLIA
APPROVED BY: R. AZCARATE

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

HVAC SCHEDULES

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
H-7

WBS NUMBER
R-001000-0035-4

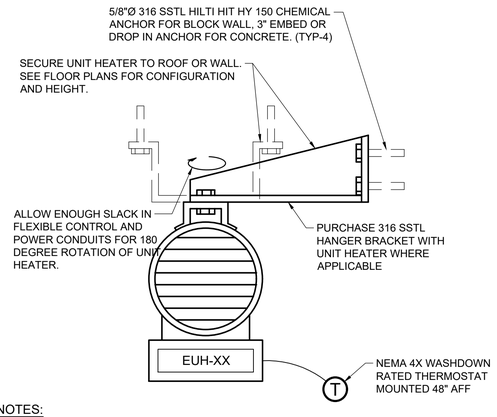
DRAWING SCALE

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

SHEET NO. OF XX

FOR CITY OF HOUSTON USE ONLY

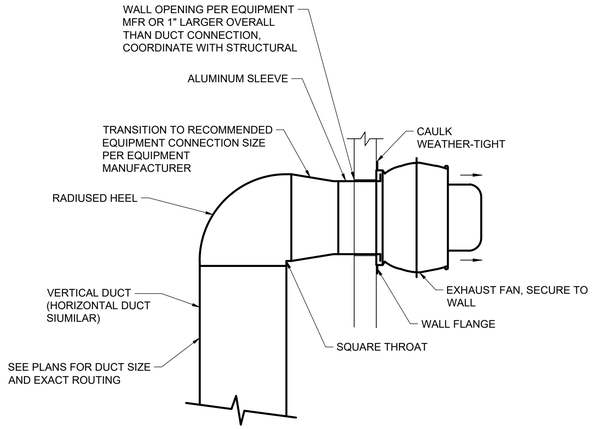
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:27 PM
FILE PATH: P:\083014 - Ardurra Houston - Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\HVAC\H-7.dwg



NOTES:

1. UNIT HEATER SHALL BE MOUNTED WITH BOTTOM AT 8'-0". THIS DIMENSION MAY BE ADJUSTED FROM 7'-0" MINIMUM TO 9'-0" MAXIMUM IF NEEDED DUE TO A CONFLICT IN THE FIELD. NOTIFY ENGINEER IF MORE ADJUSTMENT IS NEEDED.

A - NTS — ELECTRIC UNIT HEATER

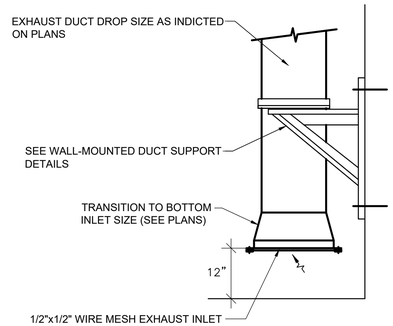


NOTES:

1. PROVIDE LONG RADIUSED ELBOWS WHERE POSSIBLE. SHORT RADIUS AND SQUARE THROAT ELBOWS MAY BE USED WHEN NECESSARY.

SINGLE DUCT

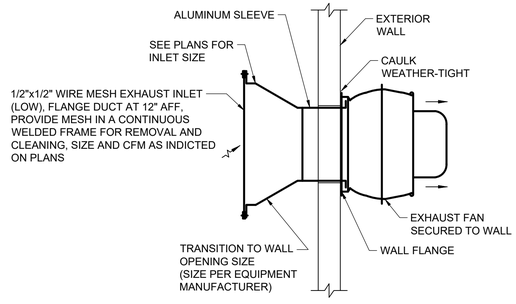
B - NTS — WALL-MOUNTED EXHAUST FAN W/DUCTED INLET



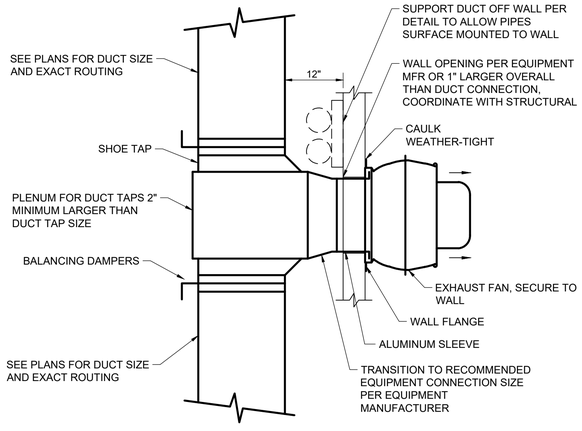
NOTES:

1. MATERIALS SHALL BE ALUMINUM OR 316 STAINLESS STEEL.

C - NTS — LOW POINT EXHAUST INLET



D - NTS — WALL-MOUNTED EXHAUST FAN WITH HIGH INTAKE



HIGH & LOW DUCT SPLIT

E - NTS — WALL-MOUNTED EXHAUST FAN W/DUCTED INLET

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY: M. ANDERSON	SURVEYED BY:
DRAWN BY: M. ANDERSON	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: R. AZCARATE	FB NO. 340S1
REVIEWED BY: T. GALLIA	
APPROVED BY: R. AZCARATE	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

HVAC DETAILS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

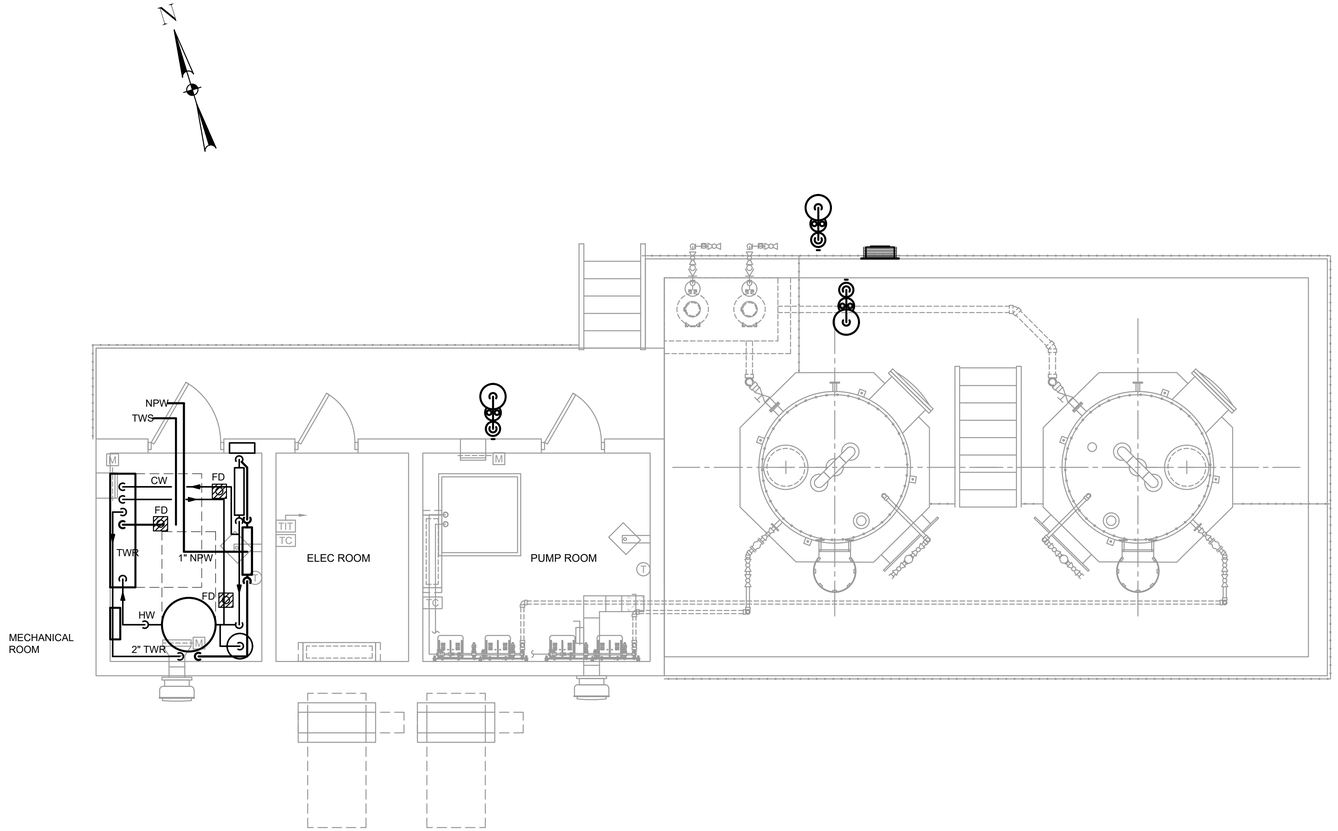
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. OF XX	

DWG NO
H-8

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:27 PM
FILE PATH: P:\083014 – Ardurra Houston – Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\HVAC\H-8.dwg

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:28 PM

FILE PATH: P:\083014 - Ardurra Houston - Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\Plumbing\P-2.dwg


N
NPW
TWS
CW
FD
FD
TWR
1" NPW
FD
HW
2" TWR
MECHANICAL ROOM
ELEC ROOM
TIT
TC
PUMP ROOM
M
M
M
M
T
T
T

ELECTRIC WATER HEATER SCHEDULE

EQUIPMENT TAG NUMBER	WH-1	
BUILDING	CHEMICAL BUIDLING	
SERVES	ESEW	
LOCATION	MECHANICAL RM	
TOTAL CAPACITY, GAL	150	
INPUT, KILOWATTS	36	
VOLTS/PHASE/HERTZ	480/3/60	
FULL LOAD AMPS	44	
RECOVERY RATE, GPH	180	
TEMPERATURE RISE, DEG F	80	
LEAVING WATER TEMP, DEG F	120	
MANUFACTURER	DURAWATT	
MODEL NUMBER	180 L 150A-E	
NOTES	1, 2	

GENERAL NOTES: (APPLICABLE TO ALL UNITS)

1. SCHEDULE IS INCOMPLETE WITHOUT SPECIFICATION SECTION 15450.

NOTES:

1. PROVIDE STORAGE TYPE HEATERS WITH HEAT TRAPS AT EACH WATER INLET AND OUTLET.
2. PROVIDE WATTS MODEL DETA-30 EXPANSION TANK (10 GAL ACCEPTANCE, 15 GAL VOLUME MIN).

TEPID WATER SKID SCHEDULE

EQUIPMENT TAG NUMBER	TWS-1	
AREA SERVED	CHEMICAL BUILDING	
LOCATION	MECHANICAL RM	
TEPID WATER SKID:		
RECIRC PUMP HORSEPOWER	1/2	
VOLTS/PHASE/HERTZ	460/3/60	
AMPS	15	
MANUFACTURER	HAWS	
MODEL NUMBER	8780-WALL	
NOTES	1, 2	

NOTES:

1. PROVIDE WALL MOUNTED CONFIGURATION (60"x18"x48") WITH ALL FRONT ACCESS.
2. PROVIDE WITH 316 SSTL SUPPORTS, NEMA 4X ENCLOSURE, INSULATED AND JACKETED PIPING.

EMERGENCY SHOWER/EYE WASH UNIT SCHEDULE

EQUIPMENT TAG NUMBER	ESEW-A	ESEW-B	
LOCATION	INDOOR	OUTDOOR	
CONFIGURATION	STANDARD	FLOW-THRU	
INSULATION & JACKET	NONE	YES	
MANUFACTURER	HAWS	HAWS	
MODEL NUMBER	8330CRP	8317CTFP CF N4-RECIRC	
HEAT TRACE	NONE	YES	
VOLTS/PHASE/HERTZ	N/A	120/1/60	
WATTS	N/A	80	
MAXIMUM CIRCUIT AMPACITY	N/A	15	

GENERAL NOTES: (APPLICABLE TO ALL UNITS)

1. SCHEDULE IS INCOMPLETE WITHOUT SPECIFICATION SECTION 15450.
2. CUSTOM ORDERED, SIMILAR TO HAWS MODEL INDICATED.
3. UNITS TO HAVE "CORROSION RESISTANT PACKAGE".

NO.	DATE	REVISION	APP.

AACE
TBPE Firm Registration No. F-10804

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
RICARDO AZCARATE
TEXAS P.E. NO. 81863
DATE: 12/19/2025

DESIGNED BY: M. ANDERSON
DRAWN BY: M. ANDERSON
CHECKED BY: R. AZCARATE
REVIEWED BY: T. GALLIA
APPROVED BY: R. AZCARATE

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

PLUMBING SCHEDULES

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
P–3

WBS NUMBER
R–001000–0035–4

DRAWING SCALE

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

SHEET NO. OF XX

FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/16/2026 3:28 PM
FILE PATH: P:\083014 – Ardurra Houston – Coh Eddington Lift Station Improvements\200 Design Phase\206 CAD\Plumbing\P–3.dwg

SYMBOLS	DESCRIPTION
52 CS	MEDIUM VOLTAGE DRAWOUT TYPE POWER CIRCUIT BREAKER CS-CONTROL SWITCH
(E.O.) FRAME TRIP	LOW VOLTAGE CIRCUIT BREAKER, 3 POLE UNLESS OTHERWISE NOTED. LSIG IF NOTED MCP IF NOTED ERMS IF NOTED
✳ OR	COMBINATION MOTOR CIRCUIT PROTECTOR AND MAGNETIC MOTOR STARTER, FULL VOLTAGE NON-REVERSING UNLESS OTHERWISE NOTED: ✳ FVR-FULL VOLTAGE REVERSING RVNR-REDUCED VOLTAGE NON-REVERSING 2S1W-TWO SPEED, ONE WINDING 2S2W-TWO SPEED, TWO WINDING
✳ OR	NON-FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE ✳ AMPERE RATING NOTED IF OTHER THAN 30A
✳ OR F	FUSIBLE DISCONNECT SWITCH, 600 VOLT, 3 POLE, AMPERE RATING AND FUSE SIZE AS NOTED: ✳ AMPERE RATING NOTED IF OTHER THAN 30A ✱ FUSE RATING
MIS OR I	MOTOR ISOLATION SWITCH, HORSEPOWER RATED
	DRAWOUT TYPE EQUIPMENT OR DEVICE
	MEDIUM VOLTAGE CABLE TERMINATION
	MEDIUM VOLTAGE AIR INTERRUPTER SWITCH
	MEDIUM VOLTAGE FUSED AIR INTERRUPTER SWITCH
	MEDIUM VOLTAGE FUSED MOTOR CONTROLLER
30KVA 480V- 120/208Y K-*	TRANSFORMER, RATINGS AND CONNECTIONS AS NOTED. UNLESS OTHERWISE NOTED ON THE SINGLE LINE DIAGRAMS ALL DRY TYPE TRANSFORMERS SERVICING ADMINISTRATIVE AND LABORATORY SPACES SHALL HAVE A K FACTOR OF 13. ALL OTHER DRY TYPE TRANSFORMERS SHALL HAVE A K-4 RATING. ISOLATION TRANSFORMERS SHALL HAVE A K-20 RATING
✳ A:5	CURRENT TRANSFORMER: ✳ QUANTITY A= PRIMARY AMPERES
✳ PV-SV	POTENTIAL TRANSFORMER: ✳ QUANTITY PV= PRIMARY VOLTAGE SV= SECONDARY VOLTAGE
	GENERATOR, RATINGS AND CONNECTIONS AS NOTED
100A ATS-1 N S	TRANSFER SWITCH AUTOMATIC TRANSFER SWITCH (EG ATS-1) MANUAL TRANSFER SWITCH (EG MTS-1) "N" INDICATES NORMAL SOURCE "S" INDICATES STANDBY SOURCE 100A INDICATES CONTINUOUS CURRENT RATING
✳	VARIABLE SPEED DRIVE CONTROLLER ✳ D.C.= D.C. DRIVE CONTROLLER SCR= SILICON CONTROLLED RECTIFIER VFD= VARIABLE FREQUENCY DRIVE AFD= ADJUSTABLE FREQUENCY DRIVE
	VACUUM CONTACTOR
5KW OR E	UNIT HEATER - ELECTRIC HEATING COIL AND FAN
5KW OR U	UNIT HEATER - STEAM OR WATER HEATING COIL AND FAN
M	MOTOR, NUMERAL INDICATES HORSEPOWER
SPD	SURGE PROTECTION DEVICE
VFD	VARIABLE FREQUENCY DRIVE

SYMBOLS	DESCRIPTION
VM ✳	VOLTMETER (WITH SWITCH IF 3-PHASE)
AM ✳	AMMETER (WITH SWITCH IF 3-PHASE)
*	METER ✳ WM- WATTMETER WHM- WATTHOUR METER WHDM- WATTHOUR DEMAND METER WHDR- WATTHOUR DEMAND RECORDER PF- POWER FACTOR METER RT- RUNNING TIME METER TRANSDUCER AX- CURRENT TRANSDUCER WX- WATT TRANSDUCER
#	RELAY, NO. AS INDICATED 25- SYNCHRONISM CHECK RELAY 27- UNDER VOLTAGE RELAY 38- BEARING PROTECTIVE DEVICE 40- LOSS OF EXCITATION RELAY 42- RUNNING CONTACTOR/PILOT RELAY 46- REVERSE PHASE/PHASE BALANCE/CURRENT RELAY 47- PHASE SEQUENCE VOLTAGE RELAY 49- MACHINE OR TRANSFORMER THERMAL RELAY 50- INSTANTANEOUS OVERCURRENT RELAY 50G- INSTANTANEOUS GROUND 51- TIME OVER CURRENT RELAY 51G- TIME OVERCURRENT RELAY, GROUNDING RESISTOR TYPE 51N- TIME OVERCURRENT RELAY, RESIDUAL TYPE 51V- TIME OVERCURRENT RELAY WITH VOLTAGE RESTRAINT 60- NEGATIVE SEQUENCE VOLTAGE RELAY 62- TIME DELAY RELAY 63- OVER PRESSURE RELAY 67- AC DIRECTIONAL OVERCURRENT RELAY 83- AUTOMATIC SELECTIVE CONTROL OR TRANSFER RELAY 86- LOCKING-OUT RELAY 87- DIFFERENTIAL PROTECTIVE RELAY B- SUFFIX INDICATES "BUS" G- SUFFIX INDICATES "GENERATOR" GF- GROUND FAULT ST- SHUNT TRIP T- SUFFIX INDICATES "TRANSFORMER" X- SUFFIX INDICATES "AUXILIARY"
*	SPECIAL CAPACITOR ✳ SC- SURGE CAPACITOR PF- POWER FACTOR CORRECTION CAPACITOR INCLUDING INDUCTIVE LINK AS NEEDED
	PUSH BUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY CLOSED
	PUSH BUTTON, MOMENTARY CONTACT, SPRING RETURN, NORMALLY OPEN
E-STOP	EMERGENCY STOP PUSH BUTTON WITH RED MUSHROOM HEAD OPERATOR (MAINTAINED CONTACT)
✳ N	STOP PUSH BUTTON WITH RED HEAD OPERATOR (MAINTAINED CONTACT) WITH LOCKABLE OPTION ✳: E-STOP ✳: STOP
STOP START	START-STOP PUSH BUTTON CONTROL STATION (MOMENTARY CONTACT) "L" DENOTES LOCKOUT TYPE
STOP START	START-STOP PUSH BUTTON CONTROL STATION, MAINTAINED CONTACT WITH LOCKOUT DEVICE ON STOP
OFF ON	OFF/ON SELECTOR SWITCH
A B C ✳ (XOO) (OOX)	3 POSITION SELECTOR SWITCH, MAINTAINED CONTACT O-OPEN X-CLOSED

POSITION	TOP CONTACT	MIDDLE CONTACT	BOTTOM CONTACT
A	X	O	O
B	0	0	O
C	0	O	X

✳ NAMEPLATE (A/B/C)
HOA- HAND/OFF/AUTO
HOR- HAND/OFF/REMOTE
LOR- LOCAL/OFF/REMOTE
RSL- RAISE/STOP/LOWER
TOA- TEST/OFF/AUTO

NOTE: 2 POSITION MULTI-CONTACT SWITCH FOLLOWS SAME CONVENTION

M #	MOTOR STARTER COIL, NUMBER AS INDICATED
CR #	CONTROL RELAY COIL, NUMBER AS INDICATED
	RVSS: REDUCED VOLTAGE STATIC SOLID SOFT STARTER

SYMBOLS	DESCRIPTION
*	PILOT LIGHT, COLOR AS NOTED ✳ R- RED G- GREEN B- BLUE W- WHITE A- AMBER
* PTT	PILOT LIGHT, PUSH-TO-TEST TYPE, COLOR AS NOTED ABOVE.
TD	TIME DELAY RELAY RANGE AS NOTED SET POINT AS NOTED TDD-TIME DELAY AFTER DE-ENERGIZATION-OFF DELAY TDE-TIME DELAY AFTER ENERGIZATION-ON DELAY
	NOTC-NORMALLY OPEN, TIMED CLOSING WHEN ENERGIZED
	NCTO-NORMALLY CLOSED, TIMED OPENING WHEN ENERGIZED
	NOTO-NORMALLY OPEN, TIMED OPENING WHEN DE-ENERGIZED
	NCTC-NORMALLY CLOSED, TIMED CLOSING WHEN DE-ENERGIZED
⊗	FIELD INSTRUMENT, TAG NO. OR LOOP # AS INDICATED ✳INDICATES INSTRUMENT TYPE DEFINED ON LOOP SHEETS ## - INDICATES LOOP NO.
OR ⊗	LIQUID LEVEL (FLOAT) SWITCH NORMALLY OPEN, CLOSES ON RISING LEVEL NORMALLY CLOSED, OPENS ON RISING LEVEL NORMALLY OPEN, CLOSES ON DROPPING LEVEL NORMALLY CLOSED, OPENS ON DROPPING LEVEL
OR ⊗	PRESSURE OR VACUUM SWITCH NORMALLY OPEN, CLOSES ON RISING PRESSURE NORMALLY CLOSED, OPENS ON RISING PRESSURE NORMALLY OPEN, CLOSES ON DROPPING PRESSURE NORMALLY CLOSED, OPENS ON DROPPING PRESSURE
OR ⊗	TEMPERATURE SWITCH OR THERMOSTAT NORMALLY OPEN, CLOSES ON RISING TEMPERATURE NORMALLY CLOSED, OPENS ON RISING TEMPERATURE NORMALLY OPEN, CLOSES ON DROPPING TEMPERATURE NORMALLY CLOSED, OPENS ON DROPPING TEMPERATURE
OR ⊗	FLOW SWITCH (AIR, WATER, ETC.) NORMALLY OPEN, CLOSES ON INCREASED FLOW NORMALLY OPEN, CLOSES ON DROPPING FLOW NORMALLY CLOSED, OPENS ON INCREASED FLOW NORMALLY CLOSED, OPENS ON DROPPING FLOW
OR ⊗	POSITION (LIMIT) SWITCH NORMALLY OPEN NORMALLY OPEN - HELD CLOSED NORMALLY CLOSED NORMALLY CLOSED - HELD OPEN
OR ⊗	TORQUE SWITCH NORMALLY CLOSED, OPENS ON HIGH TORQUE
	CONDUCTORS OR CONDUITS CROSSING PATHS BUT NOT CONNECTED
	CONDUCTORS ELECTRICALLY CONNECTED
FAN	SUPPLY/EXHAUST FAN

SYMBOLS	DESCRIPTION
LA SC	LIGHTNING ARRESTER/SURGE CAPACITOR
OR	GROUND ROD GROUND ROD WELL
30A	FUSE, AMPERE RATING AS NOTED
OR HTR	HEATER
	INDUCTOR
TG	TACHOMETER GENERATOR
	CONTACT, NORMALLY OPEN (NO)
	CONTACT, NORMALLY CLOSED (NC)
	OVERLOAD RELAY HEATER
K	KEY INTERLOCK
TB	TERMINAL OR TEST BLOCK
RTD	RESISTANCE TEMPERATURE DETECTOR
VE	VIBRATION DETECTOR
DM	DAMPER MOTOR
ETM OR	ELAPSED TIME METER
MOV	MOTOR OPERATED VALVE
	PUSH BUTTON STATION, REFER TO ELECTRICAL SCHEMATIC FOR NUMBER OF DEVICES.
J	JUNCTION BOX
JP	POWER JUNCTION BOX
JI	4-20mA SIGNAL JUNCTION BOX
JC	CONTROL JUNCTION BOX
PB	PULL BOX
TC	TERMINATION CABINET
	REMOTE DEVICES
5	MOV WITHOUT INTEGRATED DISCONNECT
5	MOV WITH INTEGRATED DISCONNECT
	INDICATES LIMITS OF EQUIPMENT OR WIRING ENCLOSURE
MPR	(MPR) MOTOR PROTECTION RELAY

GENERAL NOTE

THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@guiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED BY:
DRAWN BY: C. VALDEZ	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
ELECTRICAL LEGENDS & SYMBOLS – I

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
GE-1

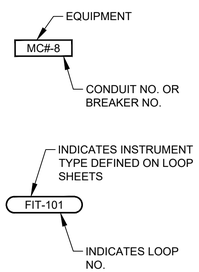
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 6:28 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\H8111_GE-01.dwg

SYMBOLS	DESCRIPTION
A LA-3 b	REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE FIXTURE: "A"- FIXTURE TYPE "b"- CONTROLLED BY SWITCH "b" "LA-3"- CIRCUIT 3 FROM PANEL LA
b A LA-3	REFER TO LIGHT FIXTURE SCHEDULE FOR TYPE FIXTURE, NOTATIONS SAME AS ABOVE
A LA-3 OR A LA-3 NS	INDICATES LIGHT FIXTURES WHICH ARE NONSWITCHED, NOTATIONS SAME AS ABOVE "NS" - NONSWITCHED
A LA-3 b	WALL MOUNTED LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
A LA-3 b	POLE MOUNTED LIGHTING FIXTURE, NOTATIONS SAME AS ABOVE
A LA-3	EMERGENCY LIGHTING BATTERY UNIT WITH TWO LAMP HEADS, NOTATIONS SAME AS ABOVE
A	REMOTE EMERGENCY ADJUSTABLE WALL LIGHTING FIXTURE WITH TWO LAMP HEADS, NOTATIONS SAME AS ABOVE
A LA-3	CEILING MOUNTED EXIT SIGN, NOTATIONS SAME AS ABOVE
A LA-3	WALL OUTLET EXIT SIGN. ARROW INDICATES DIRECTION OF EGRESS, NOTATIONS SAME AS ABOVE
	CONDUIT, EXPOSED/SURFACE MOUNTED
	CONDUIT OR DUCTBANK, CONCEALED
	CONDUIT, EXPOSED/SURFACE MOUNTED, TURNING UP
	CONDUIT, EXPOSED/SURFACE MOUNTED, TURNING DOWN
	CONDUIT STUBBED OUT AND CAPPED
2(3#3/0+1#2G, 3"C)	DENOTES A QUANTITY OF 2 SETS OF THREE (3) NO.3/0 AWG CONDUCTORS AND 1 NO.AWG GROUND CONDUCTOR EACH INSTALLED IN 3" CONDUIT.
2(2/C#16TS)	DENOTES A QUANTITY OF TWO INSTRUMENT CABLES. EACH CONSISTS OF TWO NO.16 AWG CONDUCTORS TWISTED TOGETHER AND COVERED WITH A METALLIC SHIELD AND AN OVERALL PROTECTIVE JACKET. REFER TO THE SPECIFICATIONS FOR THE EXACT CABLE TO BE PROVIDED.
3(4"C)	DENOTES A QUANTITY OF THREE 4-INCH CONDUITS.
	FLEXIBLE METAL CONDUIT "WHIP" (2#12, #12G, 3/4"C UNLESS OTHERWISE NOTED) FOR RECESSED LIGHTING FIXTURES AND LIQUID TIGHT MOTOR CONNECTIONS
LP#-1,3	HOMERUN, CIRCUITS 1 AND 3 RUN TO PANEL LP-1
$b	SINGLE POLE SWITCH "b"- INDICATES SWITCH LEG SHALL CONTROL LIGHT FIXTURES WITH "b" DESIGNATION
$b^x	MULTI POLE SWITCH "x"- INDICATES NUMBER OF POLE "b"- NOTATIONS SAME AS ABOVE
$b^P	SINGLE POLE SWITCH AND PILOT LIGHT, "b"- NOTATIONS SAME AS ABOVE
$b^D	DIMMER LIGHTING CONTROL SWITCH, "b"- NOTATIONS SAME AS ABOVE
$b^TM	TIME SWITCH, "b"-NOTATIONS SAME AS ABOVE
$^M	MANUAL MOTOR STARTER /DISCONNECT
$^OS	SINGLE POLE SWITCH WITH OCCUPANCY SENSOR
$^DM	SINGLE POLE DIMMER SWITCH
$b^x xx	SWITCH ENCLOSURE "x"- NOTATIONS SAME AS ABOVE "b"- NOTATIONS SAME AS ABOVE "xx"- INDICATES ENCLOSURE TYPE
LC-1	LIGHTING CONTACTOR WITH NUMBER OF POLES AS INDICATED

SYMBOLS	DESCRIPTION
L*-## OR L*-##	LIGHTING PANELBOARD (TYPICAL 120V/240V OR 120V/208V)
H*-## OR H*-##	DISTRIBUTION PANELBOARD (TYPICAL 277V/480V)
LA-3	DUPLEX RECEPTACLE, 20A, 120V, 2P, 3W GFI- GROUND FAULT INTERRUPTER TYPE WP- WEATHERPROOF "LA-3"- CIRCUIT 3 FROM PANEL LA
	WELDING RECEPTACLE
	20A, 240V, 2P, 3W, RECEPTACLE
	CLASS 1, DIVISION 1, RATED TWIST LOCK RECEPTACLE, VOLTAGE AND AMPERAGE RATING AS NOTED
	SINGLE FACE, SINGLE GANG PEDESTAL WITH 20A, 120V, 2P, 3W DUPLEX RECEPTACLE, FURNISHED AND INSTALLED UNDER DIVISION 16 UNLESS OTHERWISE NOTED. * DENOTES FURNISHED UNDER OTHER DIVISIONS OF THE SPECIFICATIONS BUT INSTALLED UNDER DIVISION 16
D	DOUBLE FACE, SINGLE GANG PEDESTAL WITH 20A, 120V, 2P, 3W DUPLEX RECEPTACLE AND 20A, 240V, 2P, 3W SINGLE RECEPTACLE, FURNISHED AND INSTALLED UNDER DIVISION 16 UNLESS OTHERWISE NOTED. * DENOTES FURNISHED UNDER OTHER DIVISIONS OF THE SPECIFICATIONS BUT INSTALLED UNDER DIVISION 16
	DOUBLE RECEPTACLE, 20A, 120V, 2P, 3W MOUNTED IN BOX CURB FURNISHED UNDER OTHER DIVISIONS OF THE SPECIFICATIONS BUT INSTALLED UNDER DIVISION 16
	SINGLE GANG 20A, 120V, 3P, 3W RECEPTACLE
	QUAD RECEPTACLE
OS	OCCUPANCY SENSOR CAPABLE OF VACANCY
PC	PHOTOCELL
	QUICK CONNECT TERMINALS

TAGGING		
EQUIPMENT	EQUIPMENT TAG	CONDUIT TAG
MOTOR CONTROL CENTER	MCC-1	MC1-XX
SWITCHBOARD	SWBD-1	SB1-XX
SWITCHGEAR	SWGR-1	SG1-XX
PROGRAMMABLE LOGIC CABINET	PLC-1	PL1-XX
VARIABLE FREQUENCY DRIVE	VFD-1	VF1-P
LOW VOLTAGE TRANSFORMER	TX-LX OR TX-HX	TXLX-P OR TXHX-P
SERVICE TRANSFORMER	TX-1	TX1-P
GENERATOR	GEN-1	GN1-X
LIGHTING/POWER PANELBOARD	LP/PP-XX	XX-XX
AUTOMATIC TRANSFER SWITCH	ATS-1	AT1-XX
TYPICAL TAG FOR CONDUIT FROM THIS EQUIPMENT TO DOWN STREAM LOAD FOR EXAMPLE.		

EXAMPLE LEGEND:



SYMBOLS	DESCRIPTION
COMMUNICATIONS SYSTEMS	
	TELEPHONE OUTLET
	DATA OUTLET
P	DATA INPUT/OUTPUT CABLE OUTLET. "P" DENOTES PROCESS COMPUTER SYSTEM
	VOICE/DATA OUTLET
S	PAGING SPEAKER HORN
S	PAGING SPEAKER BI-DIRECTIONAL
S	PAGING SPEAKER, CEILING MOUNTED TYPE
S	PAGING SPEAKER, WALL MOUNTED TYPE
SECURITY SYSTEMS	
SAP	SECURITY ALARM PANEL
DS	SECURITY ALARM DOOR SWITCH
KP	SECURITY ALARM KEY PAD
CR	SECURITY SYSTEM CARD ACCESS READER
WS	SECURITY ALARM WINDOW SWITCH
MD	SECURITY ALARM MOTION DETECTOR
	SECURITY CAMERA CCTV- CLOSED CIRCUIT TV CAMERA PTZ- PAN, TILT, ZOOM CAMERA LENS CONTROLS
GB	GLASS BREAK DETECTOR
ACP	ACCESS CONTROL PANEL
FIRE ALARM SYSTEMS	
FACP	FIRE ALARM CONTROL PANEL
SD	SMOKE DETECTOR : D- DENOTES DUCT SMOKE DETECTOR R- DENOTES FIXED TEMPERATURE RATE-OF-RISE TYPE.
F	FIRE ALARM MANUAL PULL STATION, MOUNT AT 4'-0"
	ALARM HORN, MOUNT AT 7'-6" : F- DENOTES FIRE ALARM
	ALARM STROBE, MOUNT AT 6'-8" : F- DENOTES FIRE ALARM
	ALARM HORN AND STROBE LIGHT COMBINATION, MOUNT AT 6'-8" : F- DENOTES FIRE ALARM

ABBREVIATIONS	
AC	ALTERNATING CURRENT
AFD	ADJUSTABLE FREQUENCY DRIVE
AFF	ABOVE FINISHED FLOOR
AG	ABOVE GRADE
ALUM	ALUMINUM
AMP/A	AMPERE
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLF	CURRENT LIMITING FUSE
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY
CS	CONTROL SWITCH
CT	CURRENT TRANSFORMER
CU	COPPER
DC	DIRECT CURRENT
DI	DOOR INTERLOCK
DN	DOWN
DWG	DRAWING
EHH	ELECTRICAL HANDHOLE
EC	EMPTY CONDUIT
ELEC	ELECTRICAL
ELEV	ELEVATION
EM	EMERGENCY
EMH	ELECTRICAL MANHOLE
EO	ELECTRICALLY OPERATED
ERMS	ENERGY-REDUCING MAINTENANCE SWITCH
FBO	FURNISHED BY OTHERS
FO	FIBER OPTIC
FRP	FIBERGLASS REINFORCED POLYESTER
FU	FUSE
GCP	GENERATOR CONTROL PANEL
GEN	GENERATOR
G, GRD	GROUND
GFI	GROUND FAULT INTERRUPTER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GO	GATE OPERATOR
GRS	GALVANIZED RIGID STEEL
HH	HANDHOLE
HT	HEIGHT
HTP	HEAT TRACE PANEL
HZ	HERTZ
IMH	INSTRUMENT MAN HOLE
INST	INSTRUMENT
LA	LIGHTNING ARRESTER
LC	LIGHTNING CONTACTOR
LCP	LOCAL CONTROL PANEL
LGTS	LIGHTS
LP	LIGHTING PANEL
	CONTINUED ABOVE RIGHT

	CONTINUED BELOW LEFT
LSIG	LONG TIME/SHORT TIME/ INSTANTANEOUS/GROUND FAULT FEATURE INCLUDED
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MH	MANHOLE
MLO	MAIN LUGS ONLY
MTG	MOUNTING
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OL	OVERLOAD
OLX	OVERLOAD CONTROL RELAY
PB	PUSH BUTTON OR PULL BOX
PCC	PUMP CONTROL CONSOLE
PPR	PHASE PROTECTIVE RELAY
PPU	PERPETUAL POWER UNIT
PFR	PHASE FAILURE RELAY
PH	PHASE
PNLBD	PANELBOARD
PR	PAIR
PT	POTENTIAL TRANSFORMER
PTT	PUSH TO TEST TYPE
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RCP	RELAY CONTROL PANEL
RECP	RECEPTACLES
RVSS	REDUCED VOLTAGE SOFT STARTER
SC	SURGE CAPACITOR
SCH	SCHEMATIC
SCCR	SHORT CIRCUIT CURRENT RATING
SEC	SECONDS OR SECONDARY
SH	SHIELDED OR SHEET
SHT	SHEET
SM	MOTOR RATED SWITCH
SN	SOLID NEUTRAL
SS	STAINLESS STEEL
ST	STARTER
SV	SOLENOID VALVE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TERMINATION CABINET
TEL	TELEPHONE
TO	TIME DELAY ON OPENING
TS	TEMPERATURE SWITCH
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TSW	TWISTED SHIELDED WIRE
TYP	TYPICAL
UG	UNDERGROUND
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
VO	VALVE OPERATOR
W	WIRE
WP	WEATHERPROOF
XP	EXPLOSION PROOF
XFMR	TRANSFORMER

GENERAL NOTE

THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED:
DRAWN BY: C. VALDEZ	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
ELECTRICAL LEGENDS & SYMBOLS – II

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
GE-2

PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:28 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\H8111_GE-02.dwg

LUMINAIRE SCHEDULE

FIXTURE TYPE	VOLTAGE	LAMP TYPE	TOTAL INPUT WATTS	TOTAL OUTPUT LUMENS	MOUNT	DESCRIPTION	MAKE/MODEL
A	120/277V UNIVERSAL DRIVER	LED	42	4000	SUSPENDED	LINEAR LED LUMINAIRE, UV-STABILIZED, INJECTION-MOLDED, IMPACT-RESISTANT, FROSTED POLYCARBONATE HOUSING, -29°C TO 40°C OPERATING TEMPERATURE, 4000K COLOR TEMPERATURE, 80CRI, UV-STABILIZED, INJECTION-MOLDED, IMPACT-RESISTANT CLEAR POLYCARBONATE LENS, UL 1598 WET LOCATION LISTED.	LITHONIA ARCHWAY VAP LED SERIES VAP-4000L-PCL-WD-MVOLT-40K-80CRI-VAPCMB DAY-BRITE CFI VAPORLUME LED V2 V2WPB70L840-4-UNV TBK OR WBK ACESSORY & FKR-126
B	120/277V UNIVERSAL DRIVER	LED	13	---	STEM MOUNT	RED POLYCARBONATE LENS SUITABLE FOR WET LOCATIONS - 120V, SERIES 105 XBR	---
C	120/277V UNIVERSAL DRIVER WITH EMERGENCY BATTERY PACK WITH PHOTO CELL	LED	12	1500	WALL	POWDER COATED DIE-CAST ALUMINUM HOUSING, NATURAL ALUMINUM FINISH, -30°C TO 40°C OPERATING TEMPERATURE, 4000K COLOR TEMPERATURE, 70CRI, GASKETED LENS, IESNA TYPE III DISTRIBUTION, NEMA 4X RATED, WET LOCATION RATED, WITH EMERGENCY BATTERY PACK.	LITHONIA LIGHTING WST LED SERIES WST LED P1 40K VF MVOLT E20WC GARDCO LED WALL SCONCE 101L SERIES 101L-16L-530-NW-G1-3-EBPC-UNV-MGY
D	120/277V UNIVERSAL DRIVER WITH EMERGENCY BATTERY PACK	LED	70	-	POLE MOUNT	HIGH EFFICIENCY LED UNIT; UL LISTED FOR WET LOCATION	LIHONIA LIGHTING D-SERIES SIZE 1 DSX1 LED P2 50K T3S MVOLT RPA DDBXD OR EQUAL
E	120/277V UNIVERSAL DRIVER WITH EMERGENCY BATTERY PACK	LED	1.2	536	WALL 8-FT ABOVE FLOOR	LED STANDBY EMERGENCY LUMINAIRE, WHITE ENGINEERING GRADE THERMOPLASTIC HOUSING, 16°C TO 32°C OPERATING TEMPERATURE, IMPACT RESISTANT, CORROSION-PROOF, DAMP LOCATION RATED, EMERGENCY BATTERY PACK INCLUDED.	LITHONIA ELM6 LED SERIES LV-S-W1R-120/277-EL-N-UM-DL
F	MVOLT (120/277 UNIVERSAL DRIVER)	LED	30	-	STANCHION MOUNT	BODY MOUNTING MODULES AND GUARD-COPPER-FREE AL WITH CORRO-FREE EPOXY POWDER COAT. SUITABLE FOR CLASS I, DIVISION I HAZARDOUS LOCATIONS.	CROUSE-HINDS EV LED J4C701
X	120/277V UNIVERSAL DRIVER WITH EMERGENCY BATTERY PACK	LED	18.2	N/A	UNIVERSAL	EMERGENCY EXIT SIGN, CAST-ALUMINUM, NEMA-4X, CLEAR UV-STABLE POLYCARBONATE COVER, SINGLE WHITE POLYCARBONATE, FACEPLATE WITH DIRECTIONAL CHEVRON KNOCKOUTS. WHITE HOUSING, UNIVERSAL MOUNT, SEALED MAINTENANCE-FREE NICKEL CADMIUM BATTERY WITH 90 MINUTE CAPACITY.	LITHONIA LIGHTING LV EL N LED SERIES LV-S-W-2-R-120/277-EL N-UM-4X
TPA	N/A	N/A	N/A	N/A	BASE MOUNTED POLE	ROUND STRAIGHT ALUMINUM POLE, 4" DIAMETER WITH 2-3/8" TENON, 8' POLE WITH LOW PROFILE BASE COVER, HANDHOLE WITH RECESSED COVER. RATED FOR 150 MPH. MATCH TENON TO LUMINAIRE TYPE.	LITHONIA LIGHTING FLORIDA RATED POLE RSALP 8 4C T20 VD DNA
TPB	N/A	N/A	N/A	N/A	BASE MOUNTED POLE	ROUND STRAIGHT ALUMINUM POLE, 5" DIAMETER WITH 2-3/8" TENON, 16' POLE WITH LOW PROFILE BASE COVER, HANDHOLE WITH RECESSED COVER. RATED FOR 150 MPH. MATCH TENON TO LUMINAIRE TYPE.	LITHONIA LIGHTING FLORIDA RATED POLE RSALP 16 5C T20 VD DNA

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
ELECTRICAL LIGHTING
FIXTURE SCHEDULE

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
GE-3

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO H8111.ctb | PLOTTED: 1/8/2026 6:28 PM

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\H8111_GE-03.dwg

ELECTRICAL GENERAL NOTES

1. THE NOTES CONTAINED ON THIS SHEET ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR WHEN WORKING IN THE FIELD, AND CONTAIN EXCERPTS FROM THE SPECIFICATION SECTIONS. HOWEVER THE CONTRACTOR IS HEREBY ADVISED THAT THE CONTRACT DOCUMENTS CONSIST OF BOTH THE DRAWINGS AND THE SPECIFICATIONS, AND THAT THE CONTRACTOR MUST COMPLY FULLY WITH BOTH THE BOUND DRAWINGS AND THE BOUND SPECIFICATIONS.

2. ALL EQUIPMENT WIRING, RACEWAYS, ETC. SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, LOCAL CODES, AND INDUSTRY STANDARDS (IE. UL, NEMA, IEEE, ANSI, ETC.) THE DRAWING NOTES AND DETAILS SHALL BE COMPLIED WITH IN ADDITION TO THE REQUIREMENTS IN THE SPECIFICATIONS. REFER TO EACH SPECIFICATION SECTION FOR SPECIFIC REQUIREMENTS.

3. ALL RACEWAY INSTALLATIONS SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. ALL EXPOSED RACEWAY SHALL BE INSTALLED PARALLEL TO BEAMS, CEILINGS, FLOORS AND WALLS. SEE SPECIFICATION ON RACEWAYS FOR ADDITIONAL REQUIREMENTS.

4. CONDUITS SHALL BE TERMINATED IN A NEAT MANNER AND STRICTLY IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWING DETAILS.

5. CONDUITS TERMINATED INTO ENCLOSURES SHALL BE PERPENDICULAR TO THE WALLS OF THE ENCLOSURE. THE USE OF SHORT SEALTIGHT ELBOW FITTINGS FOR SUCH TERMINATIONS IS NOT PERMITTED.

6. ALL RACEWAY INSTALLATIONS, CROSSING EXPANSION JOINTS OR TRANSITIONS FROM BELOW GRADE TO EXPOSED ABOVE GRADE, SHALL HAVE EXPANSION OR EXPANSION/DEFLECTION TYPE FITTINGS AS SPECIFIED FOR THE APPLICATION. SEE THE DRAWINGS AND THE SPECIFICATION ON RACEWAYS FOR THE EXACT TYPE OF FITTING TO BE USED.

7. NO CONDUIT SMALLER THAN 3/4", NOR WIRE SMALLER THAN NO. 12 AWG, SHALL BE USED UNLESS SPECIFICALLY NOTED.

8. ALL UNDERGROUND SINGLE CONDUITS AND DUCTBANKS OF MULTIPLE CONDUITS SHALL BE RIGID PVC CONDUIT ENCASED IN REINFORCED RED CONCRETE. CONCRETE DYED RED BEFORE PLACEMENT. MINIMUM SIZE IS 2 INCH. FIELD VERIFY THE ROUTING OF ALL EXISTING UNDERGROUND CONDUIT AND DUCTBANKS. COORDINATE ROUTING OF NEW CONDUIT AND DUCTBANKS TO AVOID INTERFERENCE WITH EXISTING CONDUIT, DUCTBANKS, AND OTHER UNDERGROUND UTILITIES.

9. ALL CHANGES OF DIRECTION GREATER THAN 20 DEGREES IN UNDERGROUND SINGLE, OR DUCTBANKS OF MULTIPLE CONDUITS, SHALL BE ACCOMPLISHED USING PVC COATED RIGID ALUMINUM LONG RADIUS BENDS. BENDS OF PVC CONDUIT GREATER THAN 20 DEGREES, OR THE USE OF FLEXIBLE CONDUIT OF ANY TYPE, WILL NOT BE PERMITTED. SEE THE SPECIFICATIONS FOR MORE REQUIREMENTS.

10. LIQUID TIGHT FLEXIBLE ALUMINUM CONDUIT SHALL BE USED FOR THE PRIMARY AND SECONDARY OF TRANSFORMERS, GENERATOR TERMINATIONS AND OTHER EQUIPMENT WHERE VIBRATION IS PRESENT. USE IN OTHER LOCATIONS IS NOT PERMITTED, EXCEPT FOR CONNECTIONS TO INSTRUMENTATION TRANSMITTERS, WHERE MULTIPLE PENETRATIONS ARE REQUIRED. LIQUID TIGHT FLEXIBLE ALUMINUM CONDUIT SHALL HAVE A MAXIMUM LENGTH NOT GREATER THAN THAT OF A FACTORY MANUFACTURED LONG RADIUS ELBOW OF THE CONDUIT SIZE BEING USED. THE MAXIMUM BENDING RADIUS SHALL NOT BE LESS THAN THAT SHOWN IN THE NEC CHAPTER 9, TABLE 2, "OTHER BENDS". BX OR AC TYPE PREFABRICATED CABLES WILL NOT BE PERMITTED.

11. THE WIRING DIAGRAMS, BLOCK DIAGRAMS, QUANTITY/SIZES OF WIRES/CONDUITS REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY APPROVED. ALL MODIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFIED.

12. ALL JUNCTION BOXES, PULL BOXES AND TERMINATION BOXES IN NEMA 12 AREAS SHALL BE ALUMINUM. FOR NEMA 4X AREAS SEE SPECIFICATIONS FOR BOX DETAILS AND SPECIFICATIONS.

13. SEAL ALL RACEWAYS ENTERING JUNCTION BOXES OR CONTROL PANELS CONTAINING ELECTRICAL OR INSTRUMENTATION EQUIPMENT WITH WATERTIGHT SEALANT. REFER TO THE SPECIFICATIONS FOR DETAILS.

14. ALL EQUIPMENT AND ELECTRICAL EQUIPMENT ENCLOSURE LOCATIONS, OR TERMINAL BOX LOCATIONS, ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER/ENGINEER, DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.

15. ALL EQUIPMENT AND ELECTRICAL EQUIPMENT ENCLOSURES DIMENSIONS ARE APPROXIMATE. ALL EQUIPMENT AND ELECTRICAL EQUIPMENT ENCLOSURES OR TERMINAL BOX DIMENSIONS SHALL BE VERIFIED WITH THE EQUIPMENT SUPPLIER. ALLOW FOR LOCATION CHANGES AND INCLUDE IN THE CONTRACT PRICE. THE EXACT LOCATIONS OF ALL ELECTRICAL EQUIPMENT AND ROUTING OF ALL CABLES AND CONDUITS SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER/ENGINEER DURING CONSTRUCTION.

16. CORING OF AN EXISTING STRUCTURE SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER/ENGINEER. CORING THROUGH STRUCTURAL BEAMS IS STRICTLY PROHIBITED WITHOUT PRIOR WRITTEN APPROVAL FROM THE OWNER/ENGINEER.

17. THE LOCATION OF ALL ELECTRICAL EQUIPMENT AND ROUTING OF CABLES AND CONDUITS SHALL BE COORDINATED AND APPROVED BY THE OWNER.

18. THE DUCTBANK ROUTING AS SHOWN ON THE DRAWING IS APPROXIMATE. FIELD VERIFY THE EXACT DUCTBANK ROUTING, CABLE LENGTH AND CONDUIT LENGTH.

19. PROVIDE CONDUIT SEALS FOR CONDUIT PENETRATIONS AS PER NEC AND NFPA820.

20. COORDINATE ALL WORK WITH THE OWNER.

21. LOCATE ALL UNDERGROUND UTILITIES BEFORE DIGGING. COORDINATE THE EFFORT WITH THE OWNER.

22. ALL SLOTTED CHANNEL, SLOTTED CHANNEL SUPPORT MATERIAL, WASHERS, SCREWS, NUTS, CONDUIT CLAMPS, ALL THREAD SPRING NUTS AND MISC. MOUNTING HARDWARE SHALL BE 316 STAINLESS STEEL.

23. LIGHTING FIXTURES SHALL BE MOUNTED ACCORDING TO THE MOUNTING HEIGHT GIVEN ON THE DRAWINGS. THE MOUNTING HEIGHT SHALL BE MEASURED FROM THE BOTTOM OF THE LIGHTING FIXTURE TO THE FINISHED FLOOR.

24. CONDUIT AND WIRE FOR THE HVAC EQUIPMENT AND MISCELLANEOUS DEVICES SHALL BE:

    A. 3/4" (MIN) RIGID ALUMINUM.

    B. NO.14 XHHW CU. WIRE XHHW (MIN.).

    C. IN ACCORDANCE WITH ALL ELECTRICAL AND HVAC SPECIFICATIONS REQUIREMENTS.

25. CONDUITS AND WIRES SHOWN ON THE INTERFACE DIAGRAM SHALL BE INSTALLED BY THE CONTRACTOR. GROUPING OF CONDUIT AND WIRE MAY BE CHANGED, IF APPROVED BY THE ENGINEER AND OWNER.

26. ALL CONDULETS SHALL BE FORM 7 AND SHALL HAVE 316 SS CLAMP COVERS WITH 316 SS CLAMPS AND SCREWS. SCREW DOWN COVERS ARE UNACCEPTABLE. REFER TO THE SPECIFICATIONS FOR MORE INFORMATION.

27. ALL UNDERGROUND GROUNDING CONDUCTORS SHALL BE BARE TIN-PLATED COPPER, ALL GROUND RODS SHALL BE 3/4" BY 10' LONG. ALL EXPOSED COPPER GROUND CABLES SHALL BE GREEN INSULATED CONDUCTORS. PROVIDE XHHW INSULATION.

28. WHERE NOTES ON THE DRAWING INDICATE THAT THE CONTRACTOR SHALL FIELD-VERIFY, THE INTENT IS FOR THE CONTRACTOR TO INVESTIGATE TO THE EXTENT NECESSARY TO PROVIDE THE WORK AND MATERIALS PRIOR TO BIDDING AND INCLUDE ALL COSTS IN THE BID PRICE. THE CONTRACT PRICE SHALL NOT BE INCREASED WHEN THE CONTRACTOR HAS NOT INVESTIGATED PER THE NOTES DIRECTING THAT BE DONE.

29. REFER TO SPECIFICATION SECTION 16110 RACEWAYS BOXES ENCLOSURES AND FITTINGS FOR INSTALLATION REQUIREMENTS.

TYPICAL ENCLOSURE TYPES BY AREA

NON-HAZARDOUS AREAS	BOXES & ENCLOSURES 1	3R	4X	4X*	12	
OUTDOOR; GENERAL AREAS		X	X			
OUTDOOR; CHEMICAL AREAS				X		
INDOOR; CHEMICAL ROOM				X		
INDOOR; CONDITIONED SPACE					X	
INDOOR; NON-CONDITIONED SHOP SPACE					X	
INDOOR; NON-CONDITIONED PROCESS AREA			X			
INDOOR, ADMIN BUILDING	X					
CLASS I, DIVISION 1	REFER TO NEC, NFPA-820, AND CONTRACT CONSTRUCTION SPECIFICATIONS					
CLASS I, DIVISION 2	REFER TO NEC, NFPA-820, AND CONTRACT CONSTRUCTION SPECIFICATIONS					

GENERAL NOTES:

- EQUIPMENT SUCH AS MOTOR CONTROL CENTER, SWITCHGEAR, VFDS, AND OTHER STAND-ALONE MOTOR STARTERS ARE TO BE SPECIFIED UNIQUELY.
- NEMA 1 ENCLOSURES ARE TO BE NEMA 1 GASKETED.
- NEMA 4X* ENCLOSURES ARE TO BE NON-METALLIC (ie PVC) NEMA 4X
- OUTDOOR GENERAL AREAS COULD BE 3R OR 4X DEPENDING ON OWNER PREFERENCE AND WHETHER WTP OR WWTP - REFER TO DRAWINGS.

CONDUIT TYPE	LOCATION
RIGID GALVANIZED CONDUIT	NOT ACCEPTABLE FOR USE ON THIS PROJECT EXCEPT FOR THE UTILITY COMPANY'S CONDUCTORS. ALL UTILITY COMPANY'S DUCTS SHALL BE AS SPECIFIED BY UTILITY COMPANY.
PVC COATED ALUMINUM CONDUIT	ALL EMBEDDED CONDUIT BENDS, UNDERGROUND DUCTBANK OF MORE THAN 20 DEGREES, AND ALL CONDUIT STUB-UPS TO A MINIMUM OF 6" ABOVE FINISHED FLOOR OR GRADE AND IN CHLORINE AND CAUSTIC ROOMS.
LIQUID TIGHT FLEXIBLE ALUMINUM CONDUIT	RACEWAY CONNECTION TO VIBRATING EQUIPMENT ONLY, IN ALL AREAS.
RIGID NON-METALLIC, SCHEDULE 40 PVC CONDUIT	UNDERGROUND ENCASED IN RED DYE REINFORCED CONCRETE. (AS WHERE SPECIFIED)
RIGID NON-METALLIC, SCHEDULE 80 PVC CONDUIT	FOR USE IN CHLORINE AND CAUSTIC ROOMS, AND UNDERGROUND. ENCASED IN RED DYED REINFORCED CONCRETE. (AS WHERE SPECIFIED)
FLEXIBLE ALUMINUM CONDUIT	FIXTURE WHIP CONNECTION TO LIGHTING FIXTURES IN NEMA 12 AREAS (MAXIMUM 3-FT). BX OR AC TYPE PREFABRICATED CABLES ARE NOT PERMITTED.
ALUMINUM RIGID METAL CONDUIT	ALL ABOVE GRADE AREAS, EXCEPT FOR CONCRETE EMBEDDED AND THOSE AREAS ALREADY DESCRIBED IN THIS TABLE
ELECTRIC METALLIC TUBING (EMT) CONDUIT	FOR USE ONLY ON CONCEALED, ABOVE GROUND, INTERIOR ELECTRICAL WIRING IN AIR-CONDITIONED BUILDINGS.

*REFER TO DESIGN GUIDE LINE SPECIFICATIONS.

DEMOLITION NOTES

1. COORDINATE THE DEMOLITION OF ELECTRICAL CONDUIT, WIRE, EQUIPMENT AND DEVICES WITH THE GENERAL DEMOLITION AND SCHEDULE. THE DRAWINGS ARE INTENDED TO CONVEY THE GENERAL NATURE AND SCOPE OF THE DEMOLITION WORK. EVERY ITEM TO BE DEMOLISHED MAY NOT BE SHOWN. FIELD VERIFY, AND INCLUDE ALL DEMOLITION WORK IN THE CONTRACT PRICE.

2. PROVIDE TEMPORARY WIRE AND CONDUIT FOR THE EQUIPMENT WHICH MAY BE AFFECTED BY THE DEMOLITION BUT TO REMAIN IN SERVICE.

3. RELOCATE AND RECONNECT POWER AND CONTROL RACEWAYS AND CONDUCTORS TO EQUIPMENT AFFECTED BY DEMOLITION WORK.

4. ALL CONDUCTORS BEING DEMOLISHED SHALL BE DISCONNECTED AND REMOVED FROM THE LOAD TO THE SOURCE. SURFACE MOUNTED CONDUITS AND MOUNTING HARDWARE SHALL BE REMOVED. UNDERGROUND CONDUITS WHICH ARE NOT BEING REMOVED OR OTHERWISE NOT BEING MADE UNUSABLE SHALL BE CAPPED AND TAGGED AS SPARE, WITH INFORMATION CLEARLY INDICATING THE LOCATION OF THE OTHER END.

5. ALL SURFACES WHERE DEMOLISHED EQUIPMENT OR CONDUIT IS REMOVED SHALL BE CLEANED, PATCHED AND PAINTED TO MATCH THE SURROUNDING SURFACE.

6. CHECK THE FUNCTION OF EACH CONDUCTOR BEFORE REMOVING OR DISCONNECTING.

7. IF A CONDUCTOR WHICH HAS TO STAY IN SERVICE (NOT BEING DEMOLISHED) IS INSTALLED IN A COMMON CONDUIT WITH CONDUCTORS WHICH ARE BEING DEMOLISHED, THE CONTRACTOR SHALL REMOVE ALL CONDUCTORS FROM THE CONDUIT, PROVIDE NEW CONDUCTORS WHICH ARE REPLACEMENTS FOR THE CONDUCTORS THAT ARE TO REMAIN IN SERVICE AND RE-INSTALL THE NEW CONDUCTORS. AFTER THE CONDUCTORS ARE PULLED, MEGGER OR VFL TEST EACH CONDUCTOR. CONNECT BOTH ENDS OF THE NEW CONDUCTORS AND TEST THE SYSTEM FOR PROPER FUNCTION. DO NOT RE-PULL USED CONDUCTORS UNLESS SPECIFIED.

8. WHERE EQUIPMENT IS BEING RE-FED FROM A NEW SOURCE, EXISTING CONDUIT MAY BE REUSED ONLY IF THE CONDUIT AND FITTINGS ARE OF THE TYPE SPECIFIED FOR NEW WORK ON THIS CONTRACT. IF NOT, THE CONDUIT AND CONDUCTORS SHALL BE REPLACED WITH NEW MATERIAL MEETING THE SPECIFICATIONS, AT NO ADDITIONAL COST TO THE OWNER.

9. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER/ENGINEER TO FLAG EXISTING UNDERGROUND CONDUITS BEFORE DIGGING.

10. THE OWNER HAS THE RIGHT OF FIRST REFUSAL TO THE EQUIPMENT BEING REMOVED. THE CONTRACTOR SHALL DELIVER THE EQUIPMENT WHICH THE OWNER WISHES TO KEEP AT A LOCATION DESIGNATED BY THE OWNER. SEE SPECIFICATIONS.

11. DO NOT MAKE ANY MODIFICATIONS TO THE EXISTING ELECTRICAL EQUIPMENT UNTIL THE FOLLOWING HAS BEEN DONE:

    A. THE OWNER/CONTRACTOR SHALL WITNESS AND RECORD THE CONDITION OF THE EXISTING EQUIPMENT, THE CONTRACTOR SHALL NOTE DOWN ANY DEFECTS OR DEFICIENCIES.

    B. THE OWNER SHALL OPERATE THE EQUIPMENT TO DEMONSTRATE THE CURRENT CONDITIONS. THE CONTRACTOR SHALL NOTE DOWN ANY DEFECTS OR DEFICIENCIES.

    C. A WRITTEN AND PHOTOGRAPHIC RECORD OF THE OPERATION AND EXISTING CONDITION SHALL BE KEPT IN A THREE RING BINDER AT THE OWNER/CONTRACTOR TRAILER, IN FORM OF PICTURES AND INFORMATION.

    D. A FORM SHALL BE GENERATED BY THE CONTRACTOR TO RECORD THE OBSERVATIONS. BOTH PARTIES SHALL SIGN ON THE FORM.

    E. REPLACE ALL MATERIAL OR EQUIPMENT DAMAGED DURING THE COURSE OF WORK.

    F. AFTER THE CHANGES ARE MADE, THE EQUIPMENT SHALL BE INSPECTED AND RE-TESTED TO DEMONSTRATE THAT IT FUNCTIONS CORRECTLY.

    G. NO PORTION OF EXISTING CONDUCTORS SHALL BE SPLICED TO NEW CONDUCTORS FOR RE-USE WITHOUT SPECIFIC APPROVAL FROM THE OWNER/ENGINEER ON A CASE-BY-CASE BASIS.

MCC, CONTROL PANELS, PANELBOARDS

THESE NOTES APPLY TO CONTROL PANELS, MCC ETC WHICH HAS TO BE REFURBISHED, MODIFIED, DISCONNECTED & RECONNECTED OR REWORKED. SEE SPECIFICATION SECTION 16060 ELECTRICAL DEMOLITION:

THE CONTRACTOR SHALL NOT MAKE ANY MODIFICATION UNTIL THE FOLLOWING HAS BEEN DONE:

A. THE OWNER/CONTRACTOR SHALL WITNESS THE CONDITION OF THE EXISTING EQUIPMENT, THE CONTRACTOR SHALL NOTE DOWN ANY DEFECTS OR DEFICIENCY.

B. THE OWNER SHALL OPERATE THE EQUIPMENT TO DEMONSTRATE THE CURRENT CONDITIONS. THE CONTRACTOR SHALL NOTE DOWN ANY DEFECTS OR DEFICIENCIES.

C. A RECORD OF THE OPERATION AND EXISTING CONDITION SHALL BE KEPT IN A THREE RING BINDER AT THE OWNER/CONTRACTOR TRAILER, IN FORM OF PICTURES AND INFORMATION.

D. A FORM SHALL BE GENERATED BY THE CONTRACTOR TO RECORD THE OBSERVATIONS. BOTH PARTIES SHALL SIGN ON THE FORM.

E. REPLACE ALL MATERIAL OR EQUIPMENT DAMAGED DURING THE COURSE OF WORK.

F. AFTER THE CHANGES ARE MADE, THE EQUIPMENT SHALL BE INSPECTED AND RE-TESTED TO DEMONSTRATE THAT IT FUNCTIONS CORRECTLY.

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
GE-4

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

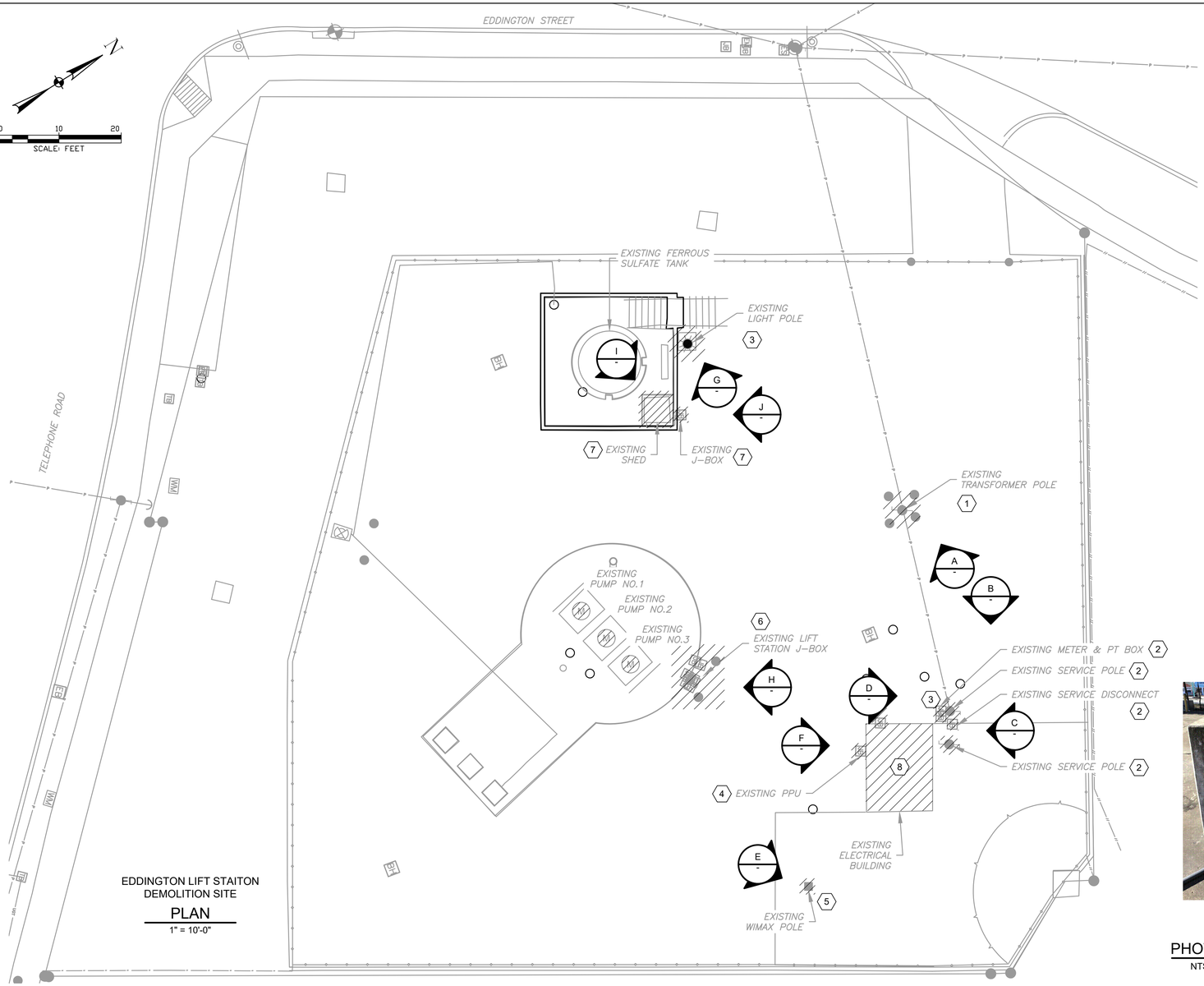
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
ELECTRICAL GENERAL NOTES

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:28 PM

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Electrical\Working\H8111_GE-04.dwg



EDDINGTON LIFT STAITON
DEMOLITION SITE

PLAN

1" = 10'-0"

NOTES BY SYMBOL "⟨#⟩":

1. CONTRACTOR TO COORDINATE WITH CENTER POINT ENERGY FOR THE REMOVAL AND DEMOLITION OF THE EXISTING TRANSFORMER POWER POLE.
2. EXISTING SERVICE POLE, METER, PT BOX, SERVICE DISCONNECT AND ASSOCIATED CONDUITS AND WIRES TO BE DEMOLISHED AND REMOVED.
3. EXISTING YARD LIGHT ON TOP OF SERVICE POLE, LIGHT POLE NEXT TO BISULFATE TANK AND ASSOCIATED CONDUITS AND WIRES TO BE DEMOLISHED AND REMOVED.
4. EXISTING PPU AND ASSOCIATED CONDUITS AND WIRES TO BE DEMOLISHED AND REMOVED AND RETURNED TO THE WASTEWATER FACILITY MAINTENANCE DEPARTMENT OF THE CITY.
5. EXISTING WIMAX POLE AND ASSOCIATED CONDUITS AND WIRES TO BE DEMOLISHED AND REMOVED.
6. EXISTING LIFT STATION PUMP J-BOX AND ASSOCIATED CONDUITS AND WIRES TO BE DEMOLISHED AND REMOVED.
7. EXISTING J-BOX, AND ALL ELECTRICAL EQUIPMENT AND COMPONENTS INSIDE THE SHED IN BISULFATE TANK AREA AND ASSOCIATED CONDUITS AND WIRES TO BE DEMOLISHED AND REMOVED.
8. EXISTING LIGHT FIXTURES, LIGHT SWITCHES, RECEPTACLES, MCC, CONTROL PANEL, ELECTRICAL COMPONENTS AND ASSOCIATED CONDUITS AND WIRES IN THE EXISTING ELECTRICAL BUILDING TO BE DEMOLISHED AND REMOVED.

LEGEND:

ITEMS TO BE DEMOLISHED.



EXISTING LIGHT POLE

PHOTOGRAPH J - 7

NTS



EXISTING LIFT STATION J-BOX

PHOTOGRAPH I - 7

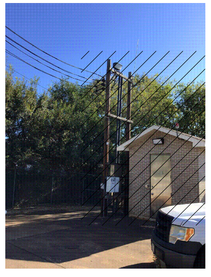
NTS



EXISTING TRANSFORMER POLE

PHOTOGRAPH A - 1

NTS



EXISTING SERIVCE POLE

PHOTOGRAPH B - 2

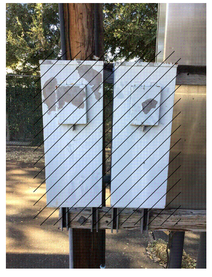
NTS



EXISTING SERIVCE DISCONNECT

PHOTOGRAPH C - 2

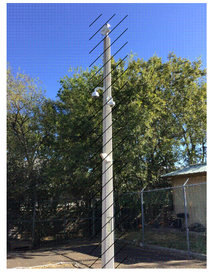
NTS



EXISTING METER & PT BOX

PHOTOGRAPH D - 2

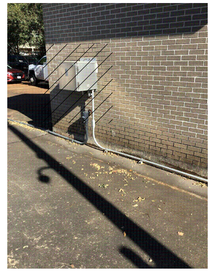
NTS



EXISTING WIMAX POLE

PHOTOGRAPH E - 5

NTS



EXISTING PPU BOX

PHOTOGRAPH F - 4

NTS



EXISTING LIGHT POLE

PHOTOGRAPH G - 3

NTS



EXISTING LIFT STATION J-BOX

PHOTOGRAPH H - 6

NTS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
DE-1

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

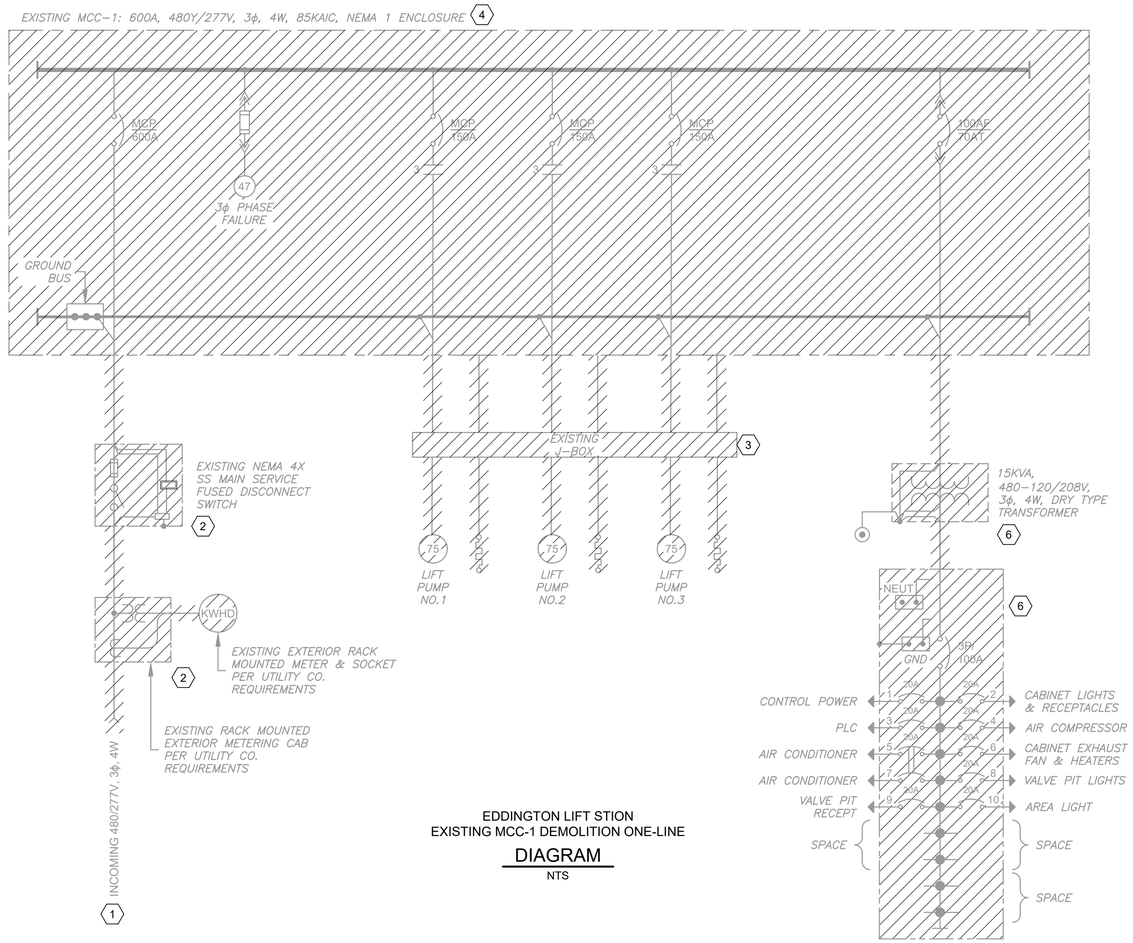
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION DEMOLITION SITE PLAN

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1"=10'-0'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

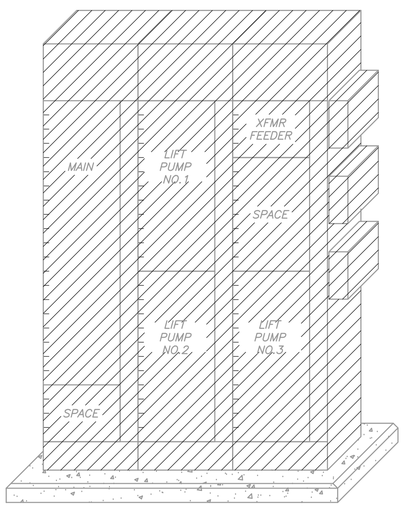
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 6:31 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_DE-01.dwg



EDDINGTON LIFT STION
EXISTING MCC-1 DEMOLITION ONE-LINE

DIAGRAM

NTS



EDDINGTON LIFT STION
EXISTING MCC-1 DEMOLITION

ELEVATION 4

NTS



EXISTING MCC-1

PHOTOGRAPH A - 4

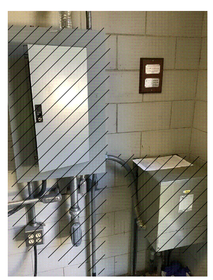
NTS



EXISTING CONTROL PANEL

PHOTOGRAPH B - 5

NTS



EXISTING XFMR & LIGHTING PANEL

PHOTOGRAPH C - 6

NTS



EXISTING BUILDING LIGHTS

PHOTOGRAPH D - 7

NTS

NOTES BY SYMBOL "#":

1. CONTRACTOR TO COORDINATE WITH CENTER POINT ENERGY FOR THE REMOVAL AND DEMOLITION OF THE EXISTING TRANSFORMER POWER POLE.
2. EXISTING SERVICE POLE, METER, PT BOX, SERVICE DISCONNECT AND ASSOCIATED CONDUITS AND WIRES TO BE DEMOLISHED AND REMOVED.
3. EXISTING LIFT STATION PUMP J-BOX AND ASSOCIATED CONDUITS AND WIRES TO BE DEMOLISHED AND REMOVED.
4. EXISTING MCC-1 AND ASSOCIATED CONDUITS AND WIRES IN THE EXISTING ELECTRICAL BUILDING TO BE DEMOLISHED AND REMOVED.
5. EXISTING CONTROL PANEL AND ASSOCIATED CONDUITS AND WIRES IN THE EXISTING ELECTRICAL BUILDING TO BE DEMOLISHED AND REMOVED.
6. EXISTING LIGHTING TRANSFORMER, LIGHTING PANEL AND ASSOCIATED CONDUITS AND WIRES IN THE EXISTING ELECTRICAL BUILDING TO BE DEMOLISHED AND REMOVED.
7. EXISTING LIGHT FIXTURES, LIGHT SWITCHES, RECEPTACLES, ELECTRICAL COMPONENTS AND ASSOCIATED CONDUITS AND WIRES IN THE EXISTING ELECTRICAL BUILDING TO BE DEMOLISHED AND REMOVED.

LEGEND:

ITEMS TO BE DEMOLISHED.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION
EXIST. MCC ONE–LINE DIAGRAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

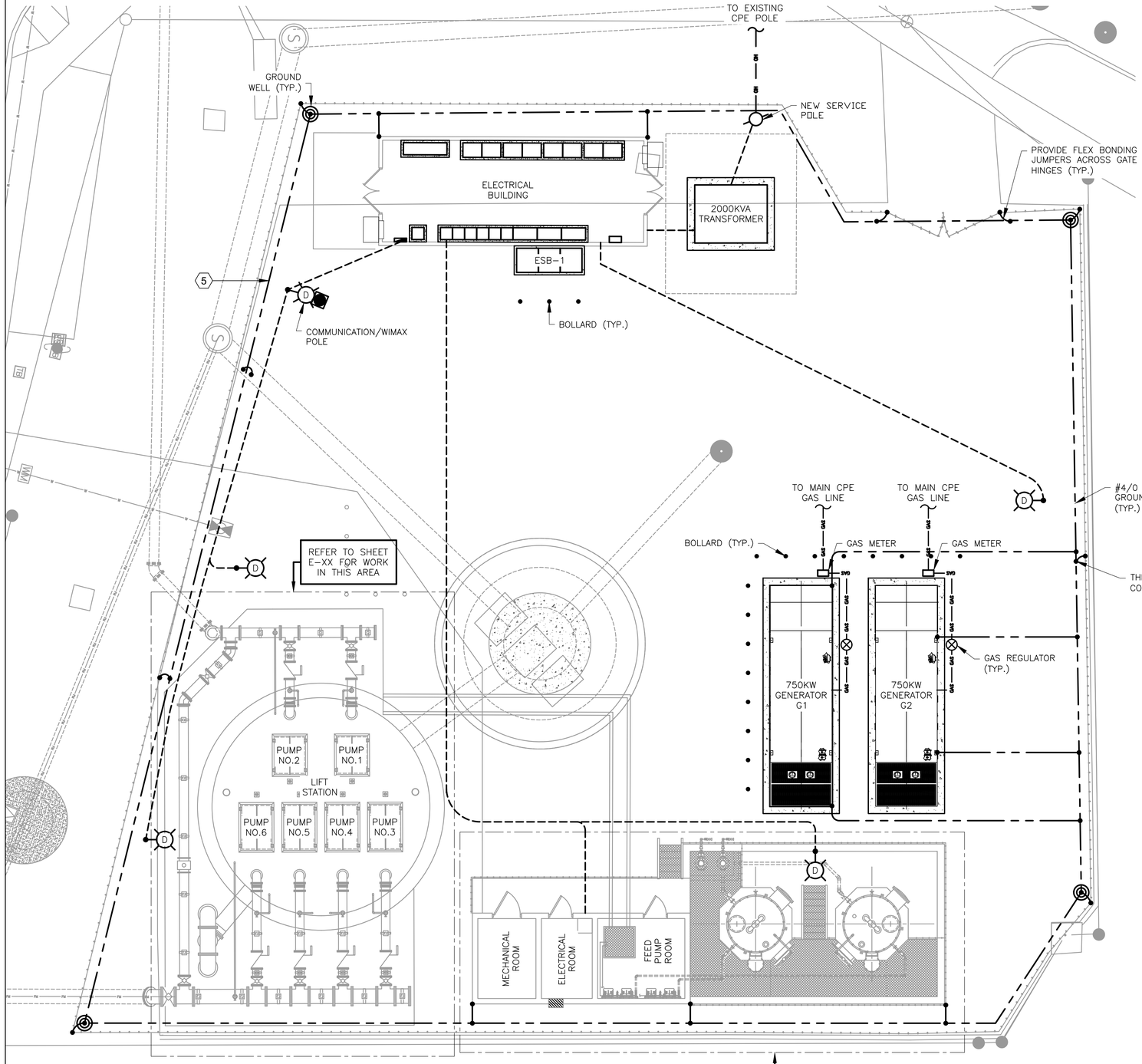
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
DE–2

PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:31 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP–Ardurra))\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_DE–02.dwg

PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:31 PM

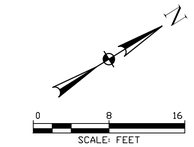
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-01.dwg



EDDINGTON LIFT STAITON
PROPOSED SITE

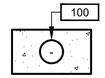
PLAN

1" = 8'-0"



NOTES BY SYMBOL "⟨#⟩":

1. THE ELECTRICAL INSTALLATION IN THE WET WELL SHALL BE EXPLOSION PROOF, IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE FOR CLASS I, DIVISION 1 LOCATIONS.
2. YARD LIGHT CONTROLLED BY LIGHTING SWITCH.
3. DUSK TO DAWN PHOTOCELL CONTROL.
4. INSIDE WETWELL RATED NEMA CLASS 1, DIV. 1. OUTSIDE ABOVE GROUND, AROUND WETWELL RATED CLASS 1, DIV. 2 ACCORDING TO NFPA 820.
5. GROUNDING LOOP SHALL BE BURIED 30" BELOW FINISHED GRADE.



DUCTBANK

SECTION A
NTS

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION
PROPOSED SITE PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

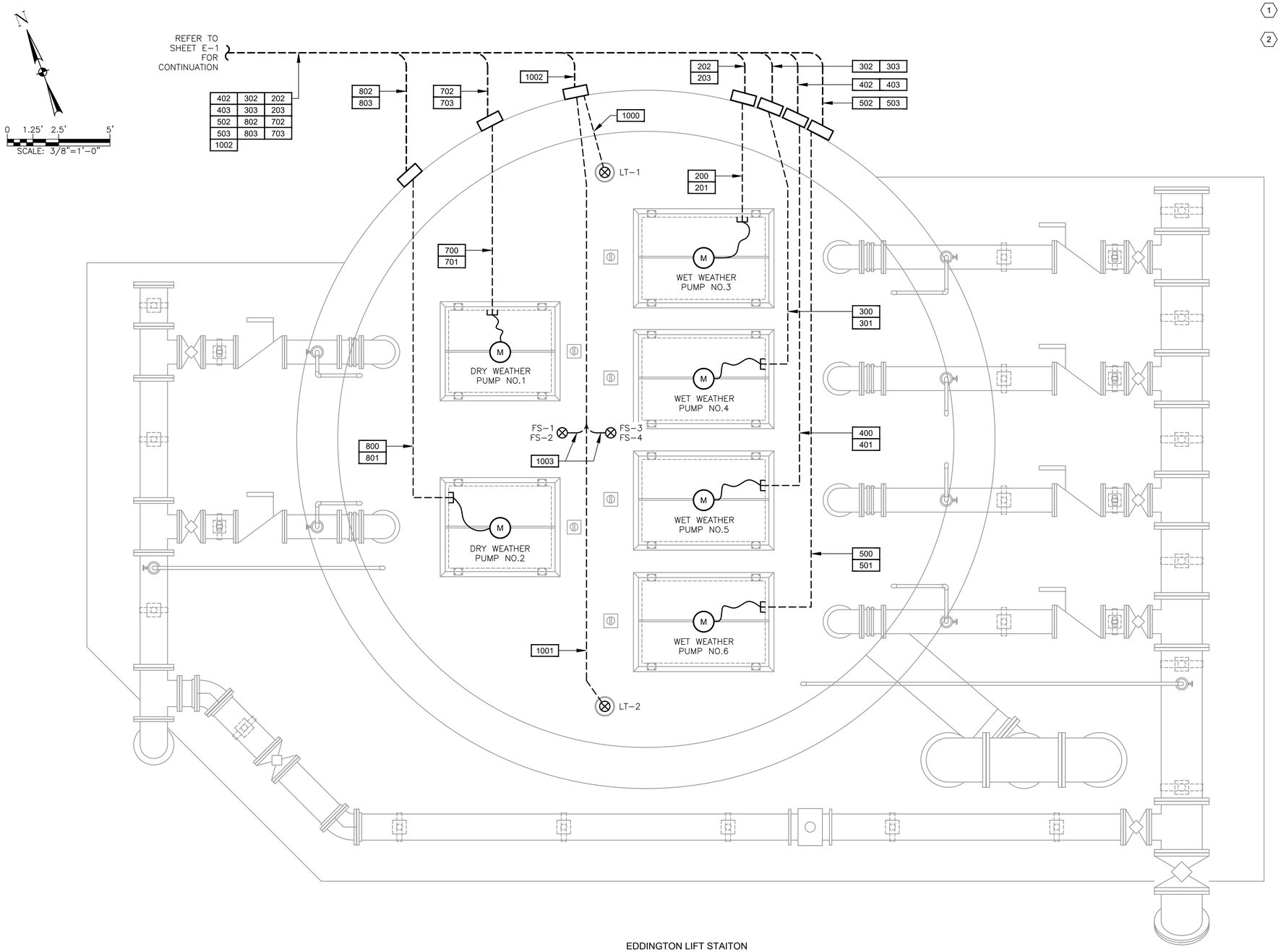
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
1"=10'-0'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
E-1

NOTES BY SYMBOL "⟨#⟩":

⟨1⟩ THE ELECTRICAL INSTALLATION IN THE WET WELL SHALL BE EXPLOSION PROOF, IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE FOR CLASS I, DIVISION 1 LOCATIONS.

⟨2⟩ INSIDE WETWELL RATED NEMA CLASS 1, DIV. 1. OUTSIDE ABOVE GROUND, AROUND WETWELL RATED CLASS 1, DIV. 2 ACCORDING TO NFPA 820.



EDDINGTON LIFT STAITON
ENLARGED SITE

PLAN ⟨1⟩⟨2⟩

3/8" = 1'-0"

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: C. VALDEZ	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION
ENLARGED SITE PLAN

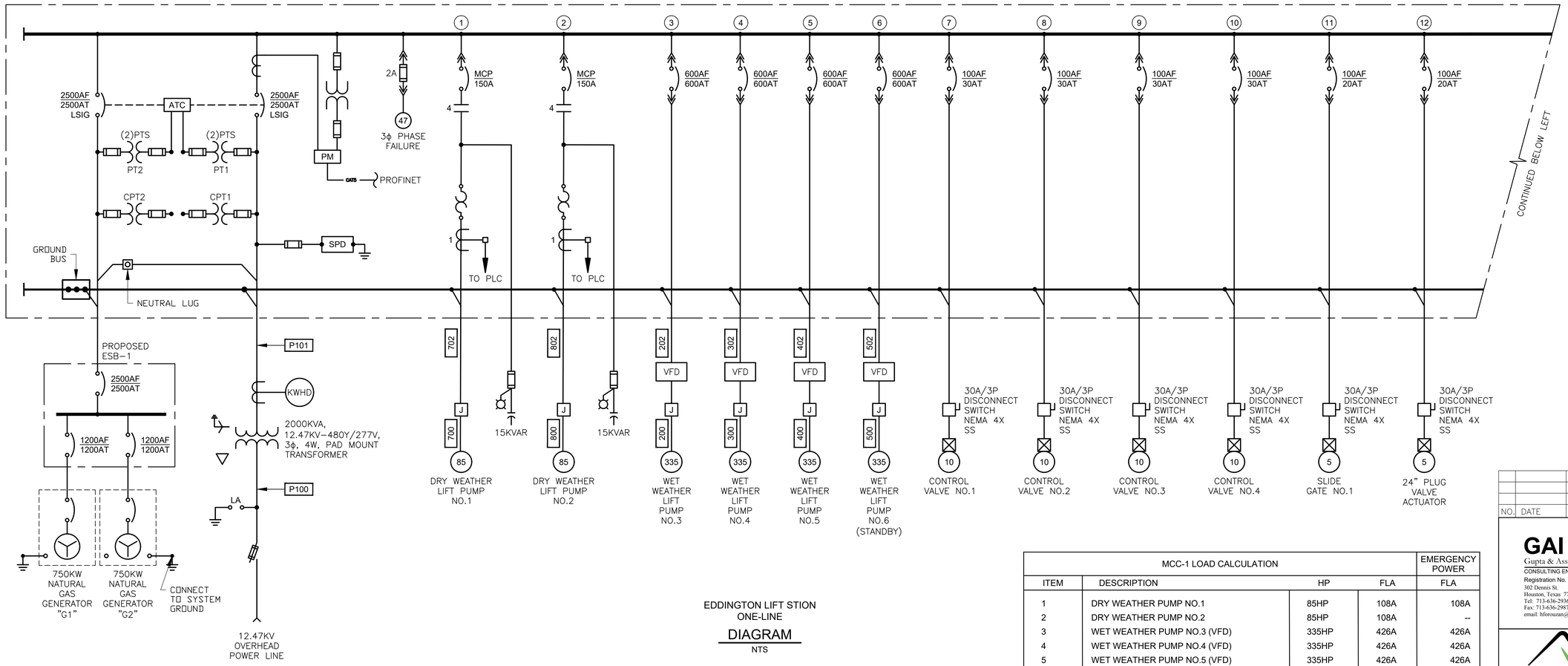
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
3/8"=1'-0'	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

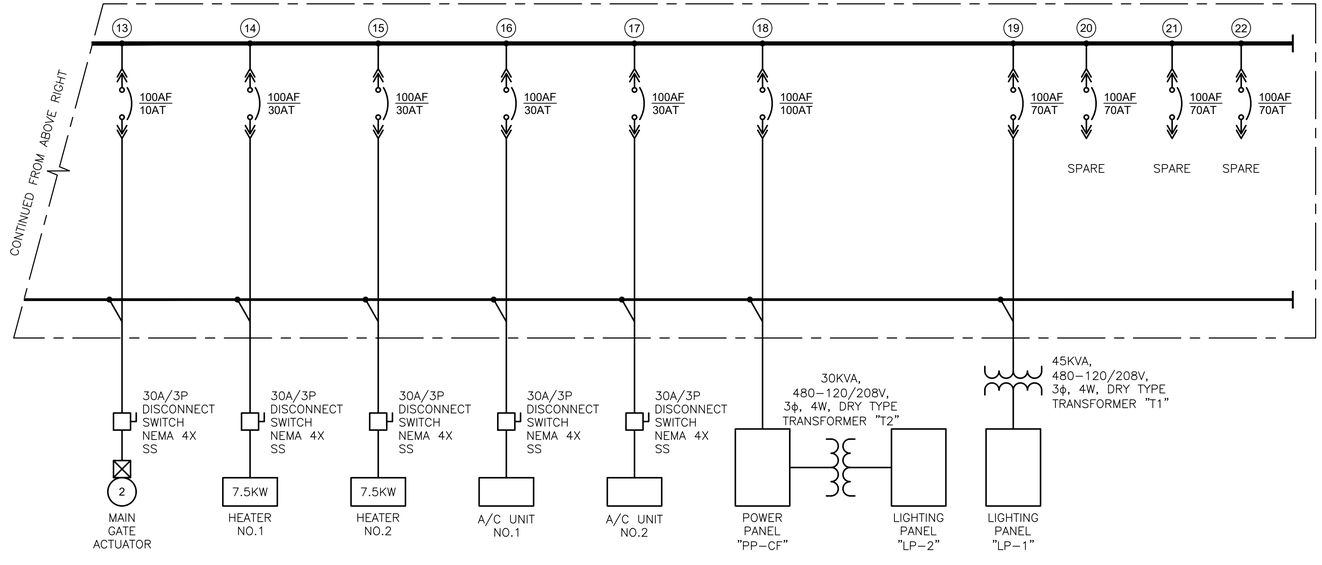
DWG NO
E-2

PLOT STYLE: ARD_FULL_MONO H8111#.CTB PLOTTED: 1/8/2026 6:31 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-02.dwg

PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:31 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-03.dwg

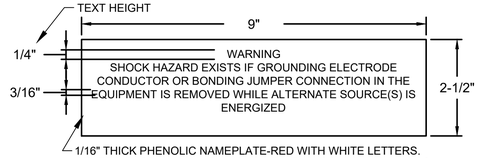


EDDINGTON LIFT STION
ONE-LINE
DIAGRAM
NTS



MCC-1 LOAD CALCULATION				EMERGENCY POWER
ITEM	DESCRIPTION	HP	FLA	FLA
1	DRY WEATHER PUMP NO.1	85HP	108A	108A
2	DRY WEATHER PUMP NO.2	85HP	108A	--
3	WET WEATHER PUMP NO.3 (VFD)	335HP	426A	426A
4	WET WEATHER PUMP NO.4 (VFD)	335HP	426A	426A
5	WET WEATHER PUMP NO.5 (VFD)	335HP	426A	426A
6	WET WEATHER PUMP NO.6 (VFD) (STANDBY)	335HP	--	--
7	CONTROL VALVE NO.1	10HP	14A	14A
8	CONTROL VALVE NO.2	10HP	14A	14A
9	CONTROL VALVE NO.3	10HP	14A	14A
10	CONTROL VALVE NO.4	10HP	14A	14A
11	SLIDE GATE NO.1	5HP	6A	6A
12	24" PLUG VALVE ACTUATOR	5HP	6A	6A
13	MAIN GATE ACTUATOR NO.1	2HP	3.4A	3.4A
14	UNIT HEATER NO.1	---	10A	10A
15	UNIT HEATER NO.2	---	10A	10A
16	A/C UNIT NO.1	---	10A	10A
17	A/C UNIT NO.2	---	10A	10A
18	POWER PANEL "PP-CF"	---	100A	100A
19	45 KVA TRANSFORMER "T1"	---	54A	54A
SUBTOTAL			1,759.4A	1,597.4A
25% OF LARGEST MOTOR LOAD			106.5A	106.5A
MINIMUM AMPACITY @480V/3ϕ			1,865.9A	1,703.9A

* BASED ON SELECTED PUMP MFG DATA



ELECTRICAL WARNING NAMEPLATE N-EW ENGRAVING

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E-3

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

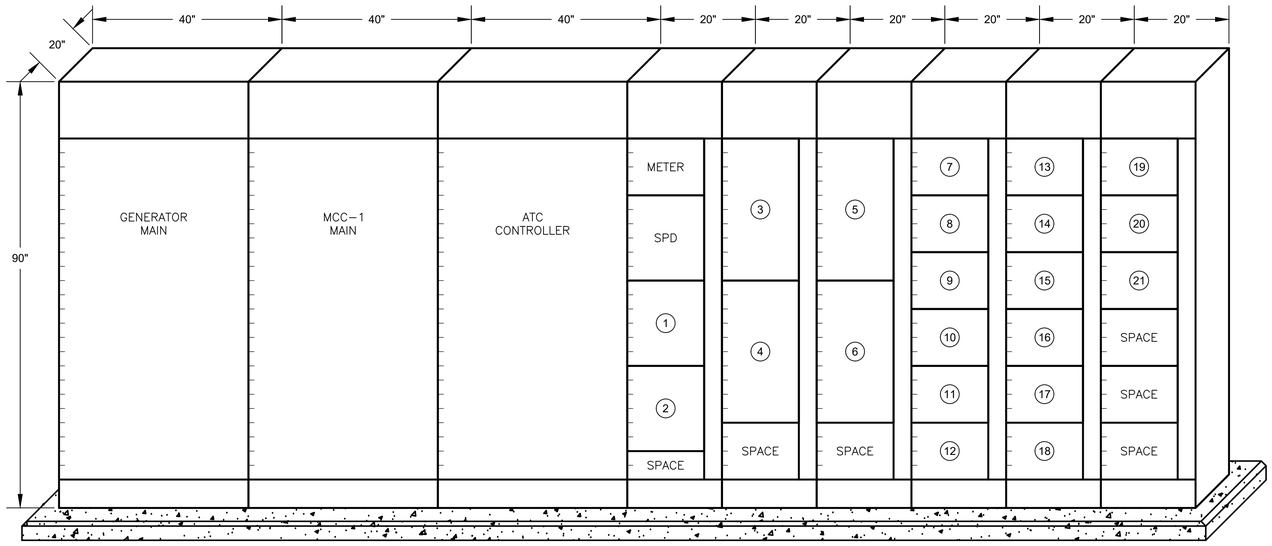
SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

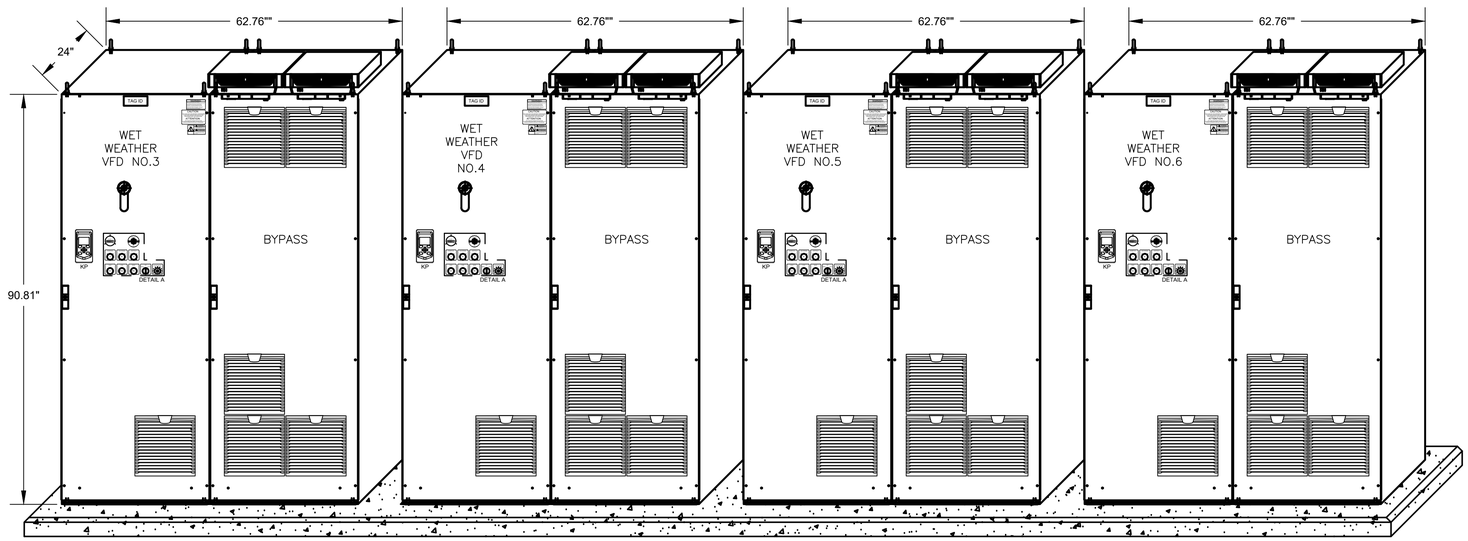
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION
MCC-1 ONE-LINE DIAGRAM

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	



EDDINGTON LIFT STION
MCC-1
ELEVATION
NTS



EDDINGTON LIFT STION
VFD
ELEVATION
NTS

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED BY:
DRAWN BY: C. VALDEZ	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION
MCC–1 ELEVATION DETAIL

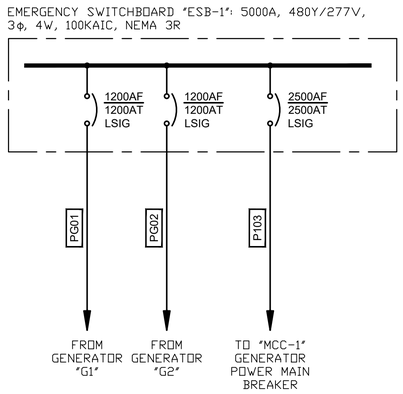
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

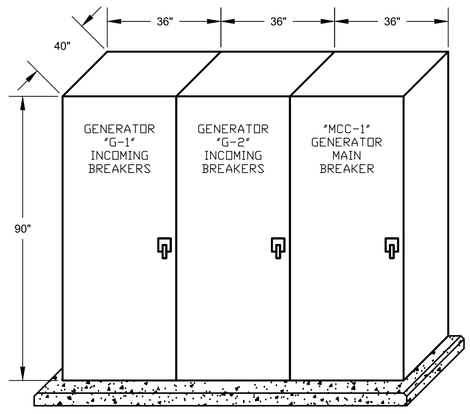
DWG NO
E–4

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP–Ardurra)\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E–04.dwg
PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:31 PM

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-05.dwg
PLOT STYLE: ARD_FULL_MONO H8111#.ctb PLOTTED: 1/8/2026 6:31 PM



EDDINGTON LIFT STION
ESB-1 ONE-LINE
DIAGRAM
NTS



EDDINGTON LIFT STION
ESB-1
ELEVATION
NTS

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

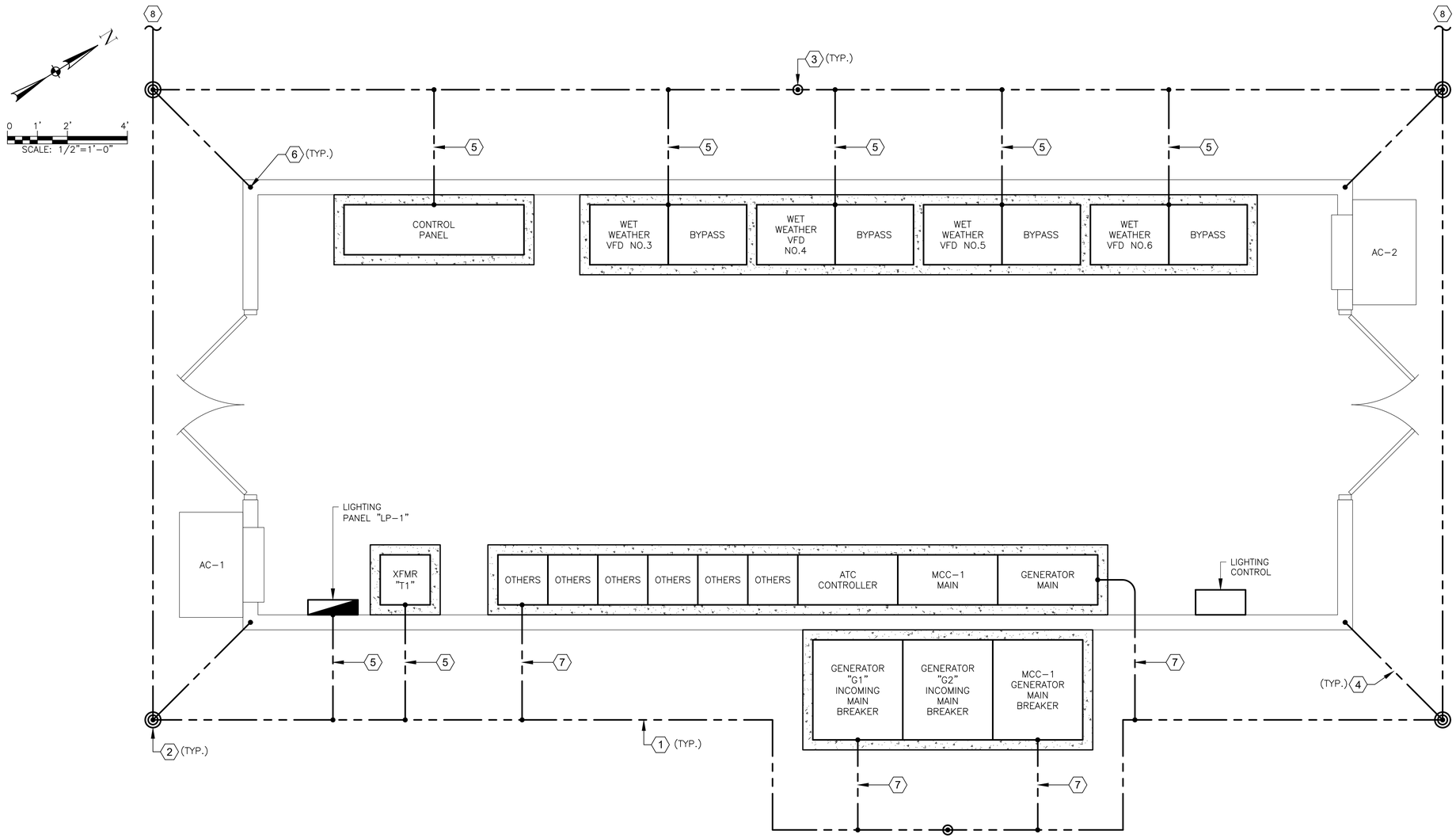
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION
ESB–1 ONE–LINE DIAGRAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
E–5



EDDINGTON LIFT STAITON
GROUNDING BUILDING

PLAN

1/2" = 1'-0"

NOTES BY SYMBOL "⟨#⟩":

1. MAIN BURIED GROUND LOOP, #4/0 BARE COPPER CONDUCTOR.
2. GROUND TEST WELL.
3. GROUND ROD.
4. #4/0 BARE COPPER BONDING CONDUCTOR.
5. #2/0 BARE COPPER BONDING CONDUCTOR.
6. BOND REBAR IN CONCRETE FOOTER OR SLAB TO MAIN BURIED GROUND LOOP.
7. #350 BARE COPPER BONDING CONDUCTOR.
8. REFER TO OVERALL ELECTRICAL SITE PLAN FOR CONTINUATION.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: C. VALDEZ	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION GROUNDING BUILDING PLAN

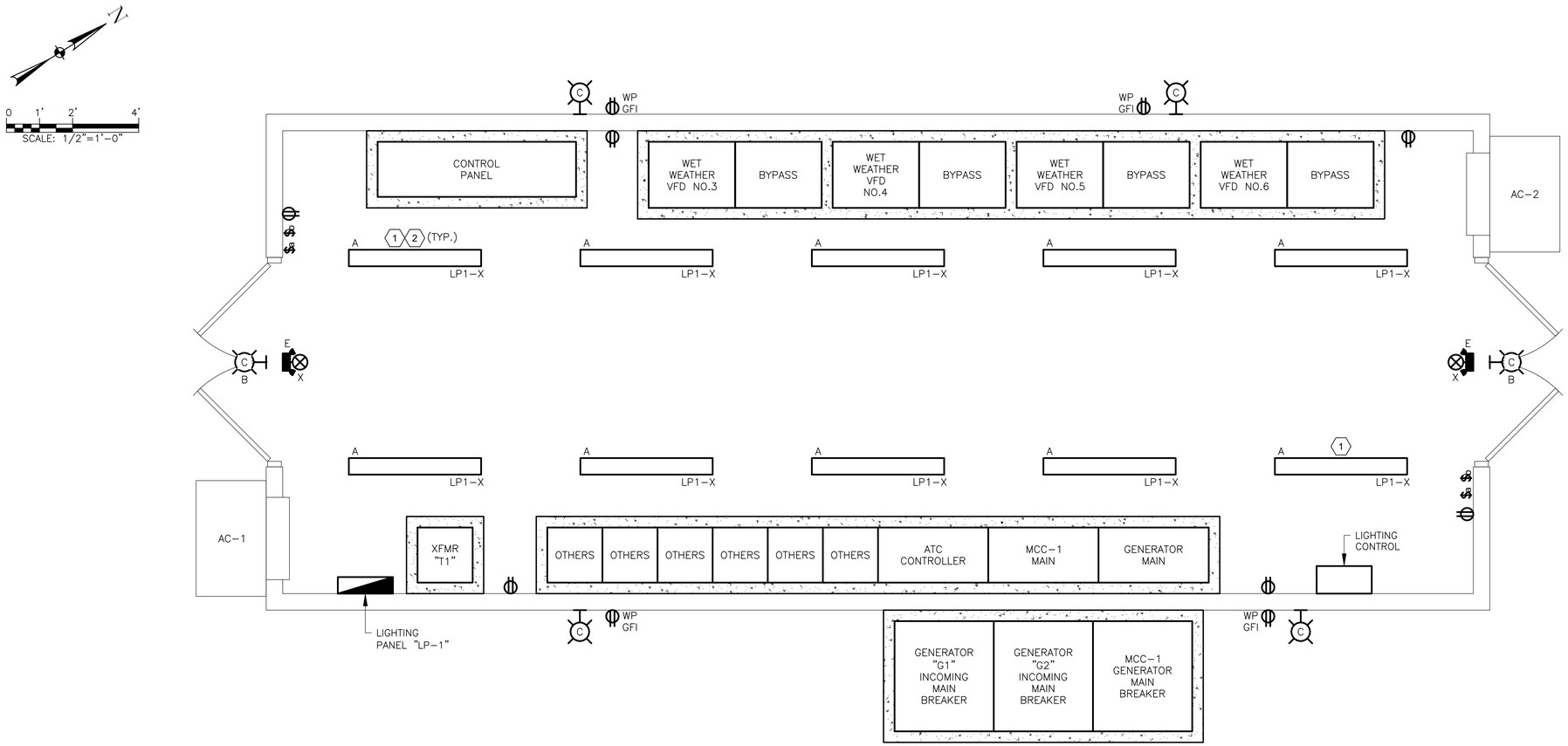
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
E-6

PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:32 PM

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-06.dwg



EDDINGTON LIFT STAITON
LIGHTING BUILDING

PLAN

1/2" = 1'-0"

NOTES BY SYMBOL "⟨#⟩":

1. PROVIDE WITH BATTERY BACKUP FOR THE FIXTURE.
2. LIGHTING FIXTURE "A" MOUNTING HEIGHT SHALL BE 10'-0" AFF.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION LIGHTING BUILDING PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E-7

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:32 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-07.dwg

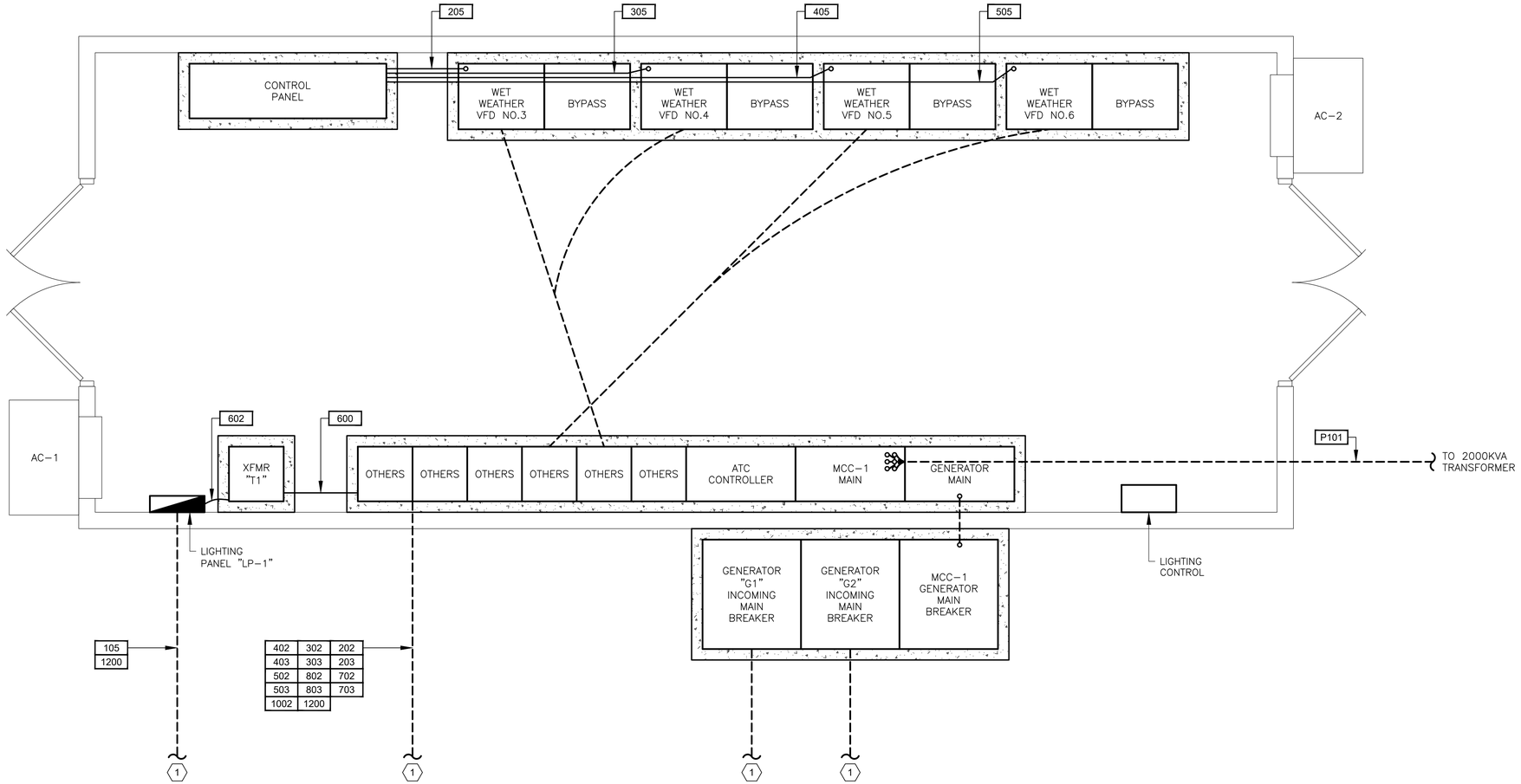
PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:32 PM

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-08.dwg

NOTES BY SYMBOL "⟨#⟩":

⟨1⟩ REFER TO OVERALL ELECTRICAL SITE PLAN FOR CONTINUATION.

0 1' 2' 4'
SCALE: 1/2"=1'-0"



EDDINGTON LIFT STAITON
POWER BUILDING

PLAN

1/2" = 1'-0"

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

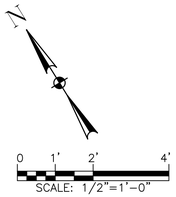
ELECTRICAL
EDDINGTON LIFT STATION POWER BUILDING PLAN

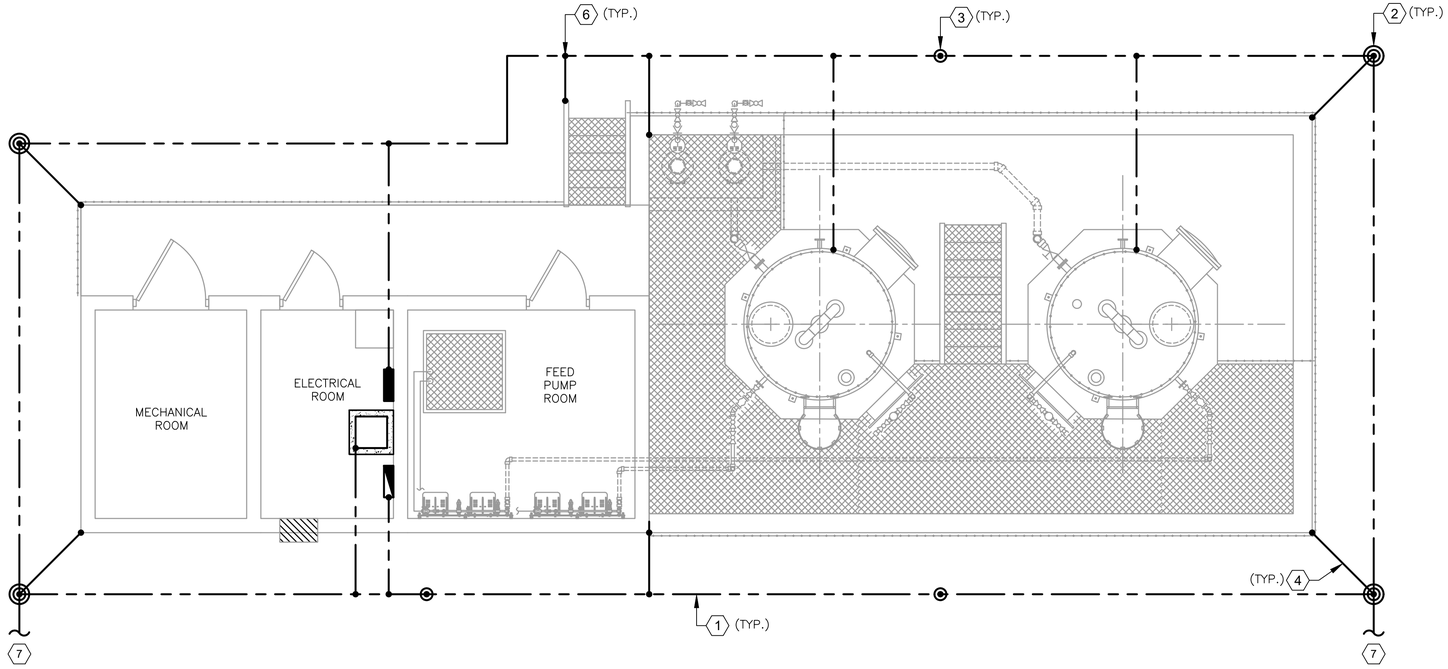
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
E-8

PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:32 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-09.dwg





EDDINGTON LIFT STAITON CHEMICAL BUILDING
AND STORAGE TANK GROUNDING BUILDING

PLAN

1/4" = 1'-0"

NOTES BY SYMBOL "⟨#⟩":

1. MAIN BURIED GROUND LOOP, #4/0 BARE COPPER CONDUCTOR.
2. GROUND TEST WELL.
3. GROUND ROD.
4. #4/0 BARE COPPER BONDING CONDUCTOR.
5. #2/0 BARE COPPER BONDING CONDUCTOR.
6. BOND REBAR IN CONCRETE FOOTER OR SLAB TO MAIN BURIED GROUND LOOP.
7. REFER TO OVERALL ELECTRICAL SITE PLAN FOR CONTINUATION.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2937
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION CHEMICAL BUILDING GROUNDING PLAN

WBS NUMBER
R-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

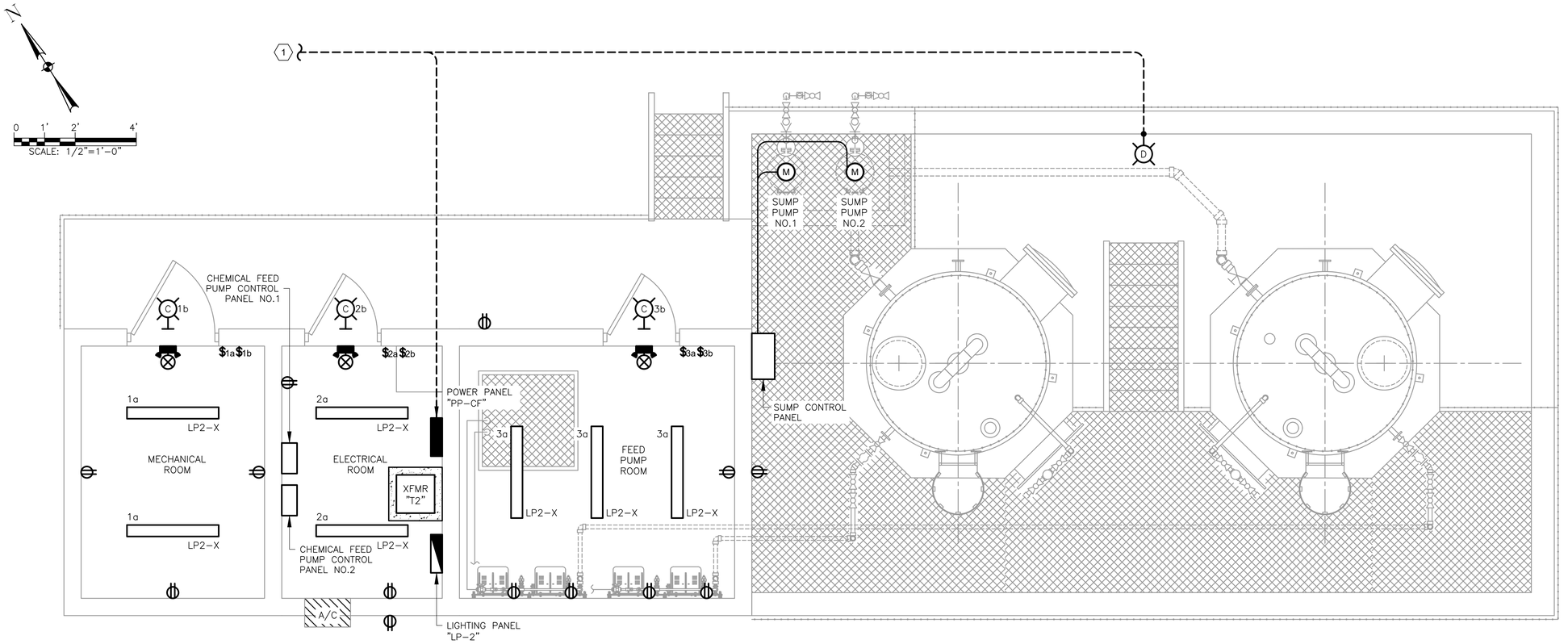
DRAWING SCALE
NTS

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

SHEET NO. XX OF XX

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E-9



EDDINGTON LIFT STAITON CHEMICAL BUILDING
LIGHTING AND POWER

PLAN

3/8" = 1'-0"

NOTES BY SYMBOL "⟨#⟩":

⟨1⟩ REFER TO OVERALL ELECTRICAL SITE PLAN FOR CONTINUATION.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION CHEMICAL BUILDING LIGHTING & POWER PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E-10

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:32 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-10.dwg

	DESCRIPTION	SERVICE		ROUTING			CONDUIT & WIRE SIZE
		VOLTAGE	AMPS OR HP	FROM	TO	VIA	
P100	SERVICE ENTRANCE	12.47KV	--	12.47KV SERVICE POLE	PAD MOUNT TRANSFORMER	--	3-2/0 AWG, 15KV SHIELDED, 3"C.
P101	TRANSFORMER SECONDARY FEEDER	12.47KV	2400A	2000KVA PAD MOUNT TRANSFORMER	MCC-1 NORMAL POWER	--	6 SETS, 4#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
P103	MCC-1 GENERATOR POWER	480V	2400A	ESB-1	MCC-1 GENERATOR POWER	--	6 SETS, 4#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
PG01	ENERGY POWER GEN 1	480V	1200A	GENERATOR G1	ESB-1 G1	--	3 SETS, 3#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
PG02	ENERGY POWER GEN 2	480V	1200A	GENERATOR G2	ESB-1 G2	--	3 SETS, 3#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
105	COMMUNICATION	--	--	PPU-AC	COMMUNICATION POLE	--	COMM. POLE, CAT 5E, 1"C.
200	WET PUMP NO. W3 POWER	480V	335HP	WET PUMP NO. W3	WET PUMP NO. W3 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
201	WET PUMP NO. W3 CONTROLS	120V	--	WET PUMP NO. W3	WET PUMP NO. W3 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
202	WET PUMP NO. W3 POWER	480V	335HP	WET PUMP NO. W3 JUNCTION BOX	VFD NO.3	--	2 SETS, 3#500 MCM, #1/0 GND, 4"C. EACH
203	WET PUMP NO. W3 CONTROLS	120V	--	WET PUMP NO. W3 JUNCTION BOX	VFD NO.3	--	3#3 AWG, 4#14, #8 GND. 2"C.
205	WET PUMP NO. W3 CONTROLS	120V	--	VFD NO.3	CONTROL PANEL	--	12#14 AWG, 1"C.
300	WET PUMP NO. W4 POWER	480V	335HP	WET PUMP NO. W4	WET PUMP NO. W4 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
301	WET PUMP NO. W4 CONTROLS	120V	--	WET PUMP NO. W4	WET PUMP NO. W4 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
302	WET PUMP NO. W4 POWER	480V	335HP	WET PUMP NO. W4 JUNCTION BOX	VFD NO.4	--	2 SETS, 3#500 MCM, #1/0 GND, 4"C. EACH
303	WET PUMP NO. W4 CONTROLS	120V	--	WET PUMP NO. W4 JUNCTION BOX	VFD NO.4	--	3#3 AWG, 4#14, #8 GND. 2"C.
305	WET PUMP NO. W4 CONTROLS	120V	--	VFD NO.4	CONTROL PANEL	--	12#14 AWG, 1"C.
400	WET PUMP NO. W5 POWER	480V	335HP	WET PUMP NO. W5	WET PUMP NO. W5 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
401	WET PUMP NO. W5 CONTROLS	120V	--	WET PUMP NO. W5	WET PUMP NO. W5 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
402	WET PUMP NO. W5 POWER	480V	335HP	WET PUMP NO. W5 JUNCTION BOX	VFD NO.5	--	2 SETS, 3#500 MCM, #1/0 GND, 4"C. EACH
403	WET PUMP NO. W5 CONTROLS	120V	--	WET PUMP NO. W5 JUNCTION BOX	VFD NO.5	--	3#3 AWG, 4#14, #8 GND. 2"C.
405	WET PUMP NO. W5 CONTROLS	120V	--	VFD NO.5	CONTROL PANEL	--	12#14 AWG, 1"C.
500	WET PUMP NO. W6 POWER	480V	335HP	WET PUMP NO. W6	WET PUMP NO. W6 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
501	WET PUMP NO. W6 CONTROLS	120V	--	WET PUMP NO. W6	WET PUMP NO. W6 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
502	WET PUMP NO. W6 POWER	480V	335HP	WET PUMP NO. W6 JUNCTION BOX	VFD NO.6	--	2 SETS, 3#500 MCM, #1/0 GND, 4"C. EACH
503	WET PUMP NO. W6 CONTROLS	120V	--	WET PUMP NO. W6 JUNCTION BOX	VFD NO.6	--	3#3 AWG, 4#14, #8 GND. 2"C.
505	WET PUMP NO. W6 CONTROLS	120V	--	VFD NO.6	CONTROL PANEL	--	12#14 AWG, 1"C.
600	LIGHTING PANEL FEEDER	480V	--	MOTOR CONTROL CENTER	LIGHTING TRANSFORMER "T1"	--	3#4 AWG, #8 GND, 1-1/2"C.
601	LIGHTING PANEL GROUND	--	--	LIGHTING PANEL	GROUND FIELD	--	--
602	LIGHTING PANEL FEEDER	120/240V	--	LIGHTING TRANSFORMER "T1"	LIGHTING PANEL	--	4#2/0 AWG, #6 GND, 3"C.
700	DRY PUMP NO. D1 POWER	480V	85HP	DRY PUMP NO. D1	DRY PUMP NO. D1 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
701	DRY PUMP NO. D1 CONTROLS	120V	--	DRY PUMP NO. D1	DRY PUMP NO. D1 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
702	DRY PUMP NO. D1 POWER	480V	85HP	DRY PUMP NO. D1 JUNCTION BOX	MCC-1 PUMP STARTER	--	3#1/0 AWG, #4 GND, 2"C.
703	DRY PUMP NO. D1 CONTROLS	120V	--	DRY PUMP NO. D1 JUNCTION BOX	MCC-1 PUMP STARTER	--	10#14 AWG, 1"C.
705	DRY PUMP NO. D1 CONTROLS	120V	--	MCC-1 PUMP STARTER	CONTROL PANEL	--	12#14 AWG, 1"C.
706	DRY PUMP NO. D1 CAPACITOR	480V	--	DRY PUMP NO. D1 MOTOR STARTER	POWER FACTOR CORRECTION CAPACITOR	--	--
800	DRY PUMP NO. D2 POWER	480V	85HP	DRY PUMP NO. D2	DRY PUMP NO. D2 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
801	DRY PUMP NO. D2 CONTROLS	120V	--	DRY PUMP NO. D2	DRY PUMP NO. D2 JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
802	DRY PUMP NO. D2 POWER	480V	85HP	DRY PUMP NO. D2 JUNCTION BOX	MCC-1 PUMP STARTER	--	3#1/0 AWG, #4 GND, 2"C.
803	DRY PUMP NO. D2 CONTROLS	120V	--	DRY PUMP NO. D2 JUNCTION BOX	MCC-1 PUMP STARTER	--	10#14 AWG, 1"C.
805	DRY PUMP NO. D2 CONTROLS	120V	--	MCC-1 PUMP STARTER	CONTROL PANEL	--	12#14 AWG, 1"C.
806	DRY PUMP NO. D2 CAPACITOR	480V	--	DRY PUMP NO. D2 MOTOR STARTER	POWER FACTOR CORRECTION CAPACITOR	--	--
1000	LEVEL TRANSMITTER	24VDC	--	LEVEL TRANSMITTER LT-1	TRANSMITTER JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
1001	LEVEL TRANSMITTER	24VDC	--	LEVEL TRANSMITTER LT-2	TRANSMITTER JUNCTION BOX	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
1002	COMBINED LEVEL TRANSMITTERS & FLOAT SWITCH	24VDC	--	CONTROL PANEL	TRANSMITTER JUNCTION BOX	--	2 TRIAD #16, 4#14 AWG, 1"C.
1003	WELL FLOAT SWITCHES	120V	--	TRANSMITTER JUNCTION BOX	FLOAT SWITCH NO.1 THROUGH NO.4	--	MANUFACTURER'S CABLE IN 2-1/2" CONDUIT
1200	SITE LIGHTING	120V	--	LIGHTING PANEL	SITE LIGHTING	--	2#12 AWG, #12 GND. 1"C.

NOTES BY SYMBOL "⟨#⟩":

⟨1⟩ REFER TO SPEC SECTION 16120 FOR CONDUCTOR COLOR CODE.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION
CONDUIT SCHEDULE

WBS NUMBER: R-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE: NTS

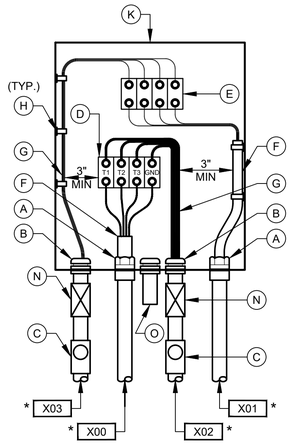
CITY OF HOUSTON PM: NEIL BARNSDALE, P.E.

SHEET NO. XX OF XX

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

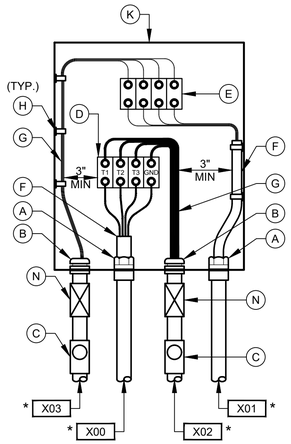
DWG NO
E-11

PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:32 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-11.dwg



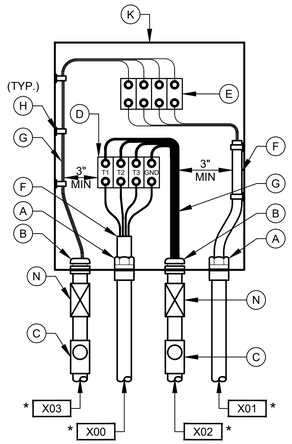
BEGINNING JUNCTION BOX

DETAIL 1 NTS (SEE NOTE 7)



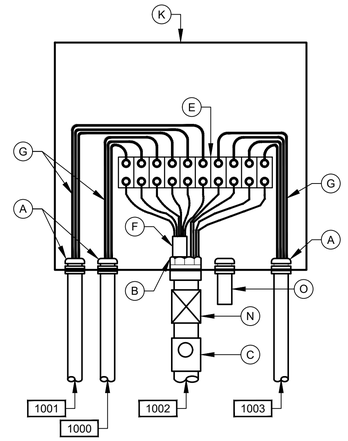
INTERMEDIATE JUNCTION BOX

DETAIL 2 NTS (SEE NOTE 7)



END JUNCTION BOX

DETAIL 3 NTS (SEE NOTE 7)



LEVEL TRANSMITTER JUNCTION BOX

DETAIL 4 NTS (SEE NOTE 7)

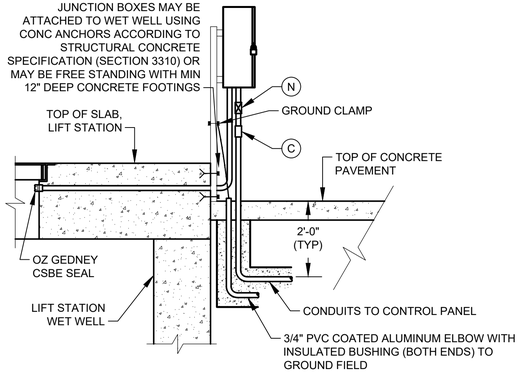
* REPLACE `X' PER NOTATION SCHEDULE

NOTATION SCHEDULE

`X'	PUMP NO.
2	3
3	4
4	5
5	6
7	1
8	2

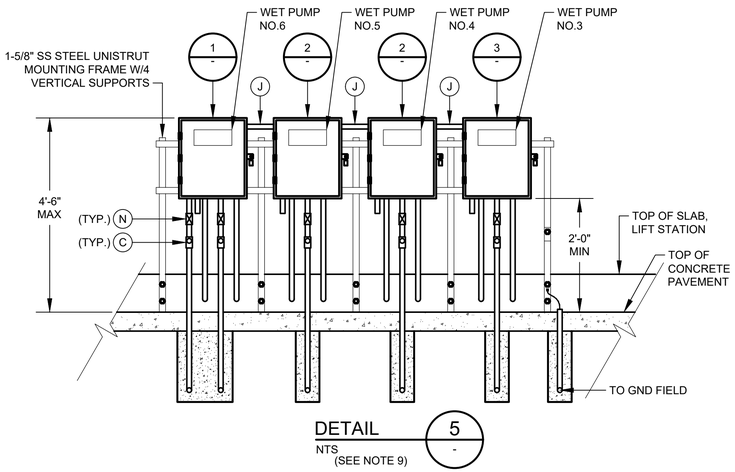
NOTES:

1. NAMEPLATES SHALL BE MOUNTED TO JUNCTION BOXES USING 316 STAINLESS STEEL HARDWARE.
2. MAINTAIN MINIMUM SEPARATION REQUIRED UNDER NEC ARTICLE 504, BETWEEN INTRINSICALLY SAFE CONTROL WIRING AND NON INTRINSICALLY SAFE MOTOR FEEDER WIRING.
3. UNLESS OTHERWISE NOTED, ALL EXTERIOR EXPOSED CONDUITS SHALL BE PVC COATED ALUMINUM.
4. UNLESS OTHERWISE NOTED, ALL NUTS, BOLTS, SCREWS WASHERS, ETC SHALL BE TYPE 316 STAINLESS STEEL.
5. ALL UNDERGROUND CONDUITS TO BE ENCASED IN REINFORCED CONCRETE DUCTBANK.
6. PROVIDE ANTI-CORROSIVE SPRAY ON ANY BARE METAL PARTS OR EXPOSED WIRE.
7. SEE WIRING SCHEMATICS FOR TERMINALS AND WIRE NUMBERS.
8. ANY CONDUIT REQUIRING A CSBE SEAL, SHALL BE A MINIMUM SIZE OF 2 1/2" PER CABLE.
9. DETAIL SHOWN MAY BE MODIFIED PER SITE SITUATION.
10. COORDINATE WITH WASTE WATER OPERATIONS ELECTRICAL ORGANIZATION FOR THE OPENING OF JUNCTION BOXES TO THE SIDE OF WET WELL IF REQUIRED DURING CONSTRUCTION.
11. THE ENCLOSURES WITH ELECTRICAL CIRCUITS SHALL BE A MINIMUM OF 5 FEET FROM ANY CLASSIFIED AREA, OTHERWISE EXPLOSION PROOF TYPE ENCLOSURES SHALL BE USED.
12. THE RECEPTACLES SHALL BE EXPLOSION PROOF TYPE IF INSTALLED WITHIN 5 FEET OF CLASSIFIED AREA.

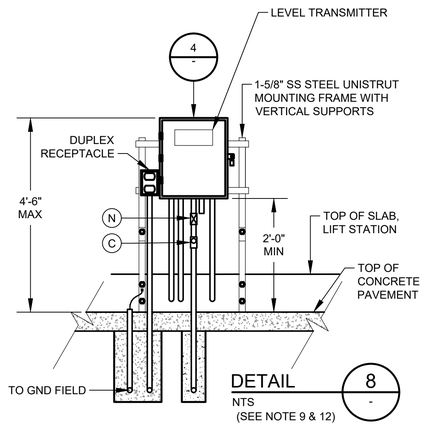


TYP SIDE VIEW FOR DETAIL 5, 6, 7, 8

(SEE NOTE 10)



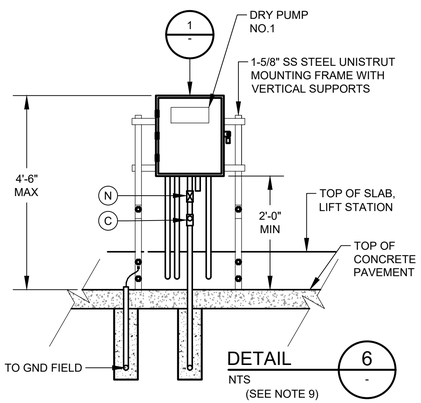
DETAIL 5 NTS (SEE NOTE 9)



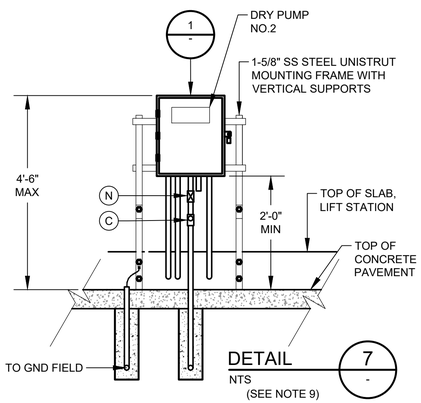
DETAIL 8 NTS (SEE NOTE 9 & 12)

JUNCTION BOX EQUIPMENT SCHEDULE

- A - OZ GEDNEY CSBE SEAL
- B - WATERTIGHT CONDUIT HUB WITH INSULATED BUSHING
- C - CLASS I, DIV 1, EXPLOSION PROOF SEAL INSTALLED PER NEC DIV 501
- D - POWER TERMINAL BLOCK W/SCREW DOWN BOX LUGS
- E - CONTROL TERM BLOCK W/SCREW DOWN BOX LUGS
- F - MULTI-CONDUCTOR CABLE, REMOVE OUTER JACKET AS SHOWN
- G - WIRING AS SCHEDULED
- H - WIRING HARNESS PERMANENTLY AFFIXED
- I - PUMP CONTROL WIRING FROM PUMPS 2; 2 & 3; 4; OR D2, AS APPLICABLE
- J - 1 1/2" PVC COATED CONDUIT NIPPLE
- K - NEMA 4X STAINLESS STEEL JUNCTION BOX WITH GASKETED FRONT COVER, SINGLE QUARTER TURN, OIL-TIGHT LATCH AND PADLOCKING PROVISIONS, HOFFMAN D-3L16H1206 SS LF OR EQUAL. MINIMUM SIZE: 12"W X 16"H X 6"D
- L - NAMEPLATE, SEE SPECIFICATIONES (SEE NAMEPLATE SCHEDULE)
- M - MOTOR RATED SWITCH
- N - EXPANSION FITTING
- O - DRAIN VENT



DETAIL 6 NTS (SEE NOTE 9)



DETAIL 7 NTS (SEE NOTE 9)

WARNING

0 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO

E-12

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED BY:
DRAWN BY: C. VALDEZ	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON

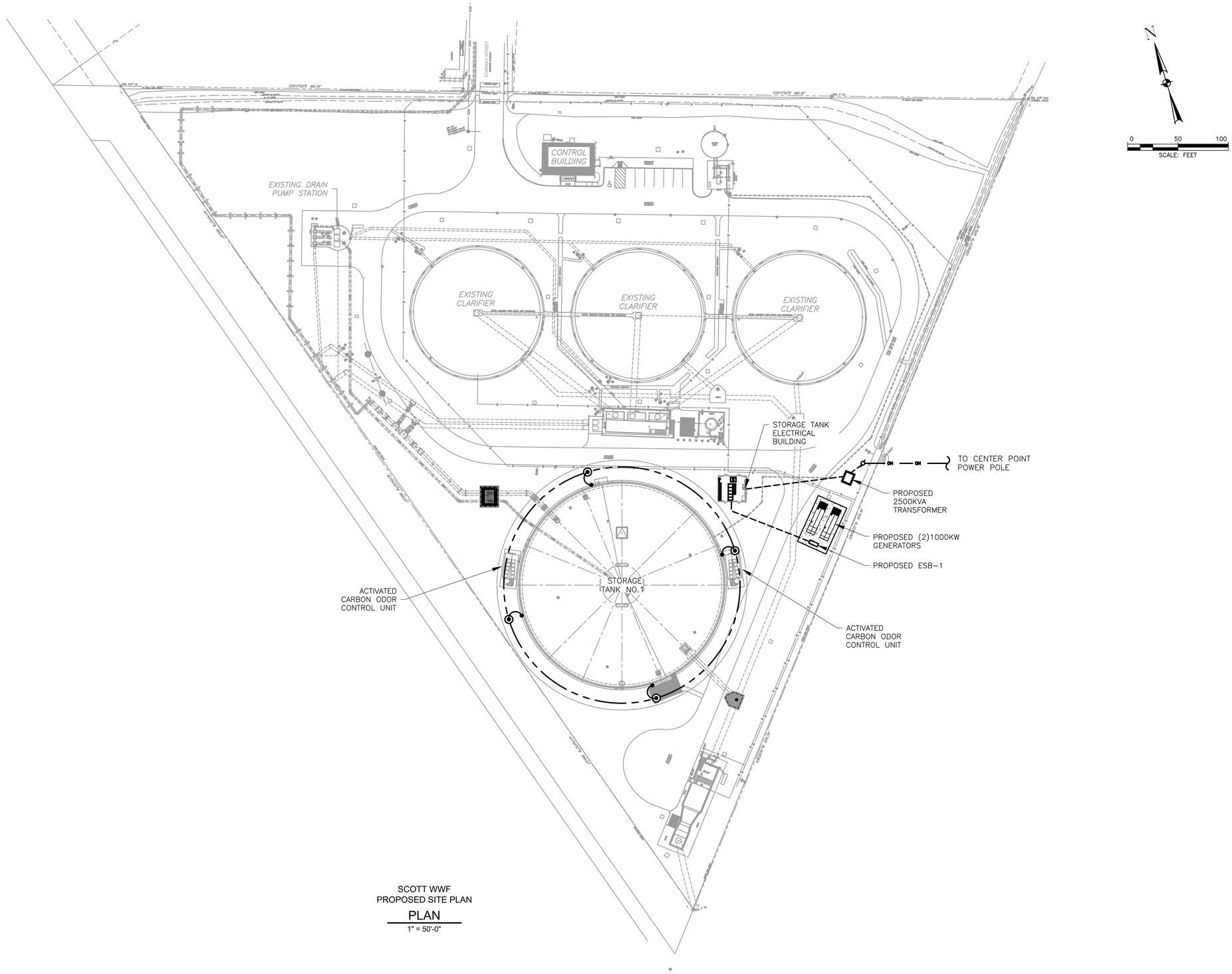
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
EDDINGTON LIFT STATION
TYPICAL JUNCTION BOX DETAILS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:32 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Electrical\Working\Eddington Lift Station\H8111_E-12.dwg



SCOTT WWF
PROPOSED SITE PLAN

PLAN

1" = 50'-0"

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

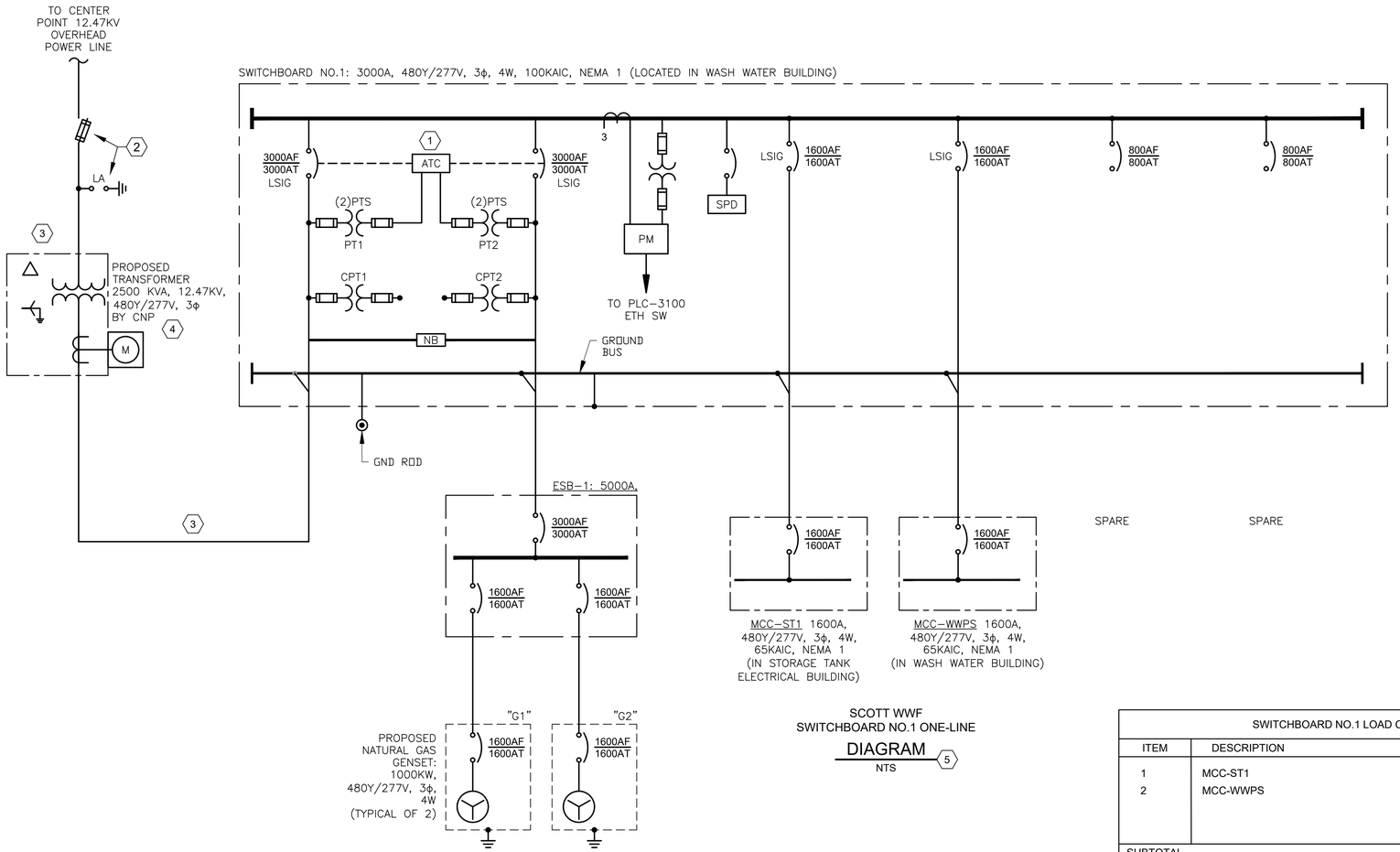
ELECTRICAL
SCOTT WWF PROPOSED ELECTRICAL SITE PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

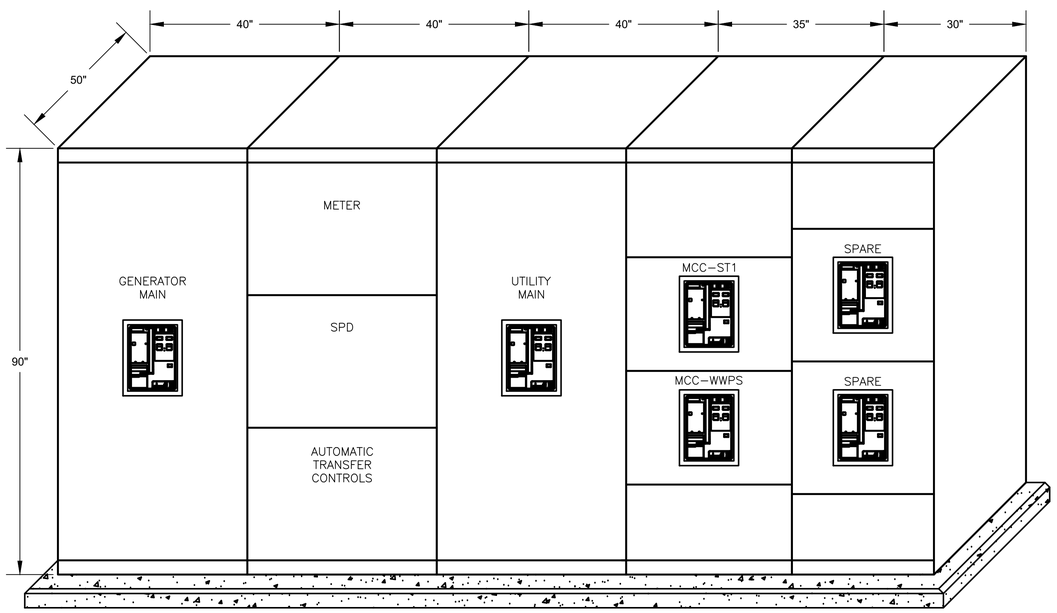
DWG NO
E-13

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO_H8111.CTB PLOTTED: 1/8/2026 6:32 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Scott WW\H8111_E-13.dwg



SCOTT WWF
SWITCHBOARD NO.1 ONE-LINE
DIAGRAM (5)
NTS



SCOTT WWF
SWITCHBOARD NO.1
ELEVATION
NTS

NOTES:

1. AUTOMATIC TRANSFER CONTROLLER.
2. PROVIDE AND INSTALLED BY CENTERPOINT ENERGY (CNP).
3. CONTRACTOR TO COORDINATE THE INSTALLATION OF THE FEEDER WITH CNP.
4. CONTRACTOR TO COORDINATE THE INSTALLATION OF THE PAD MOUNT POWER TRANSFORMER WITH CNP.
5. THE FINAL SETTINGS FOR ALL THE OVER CURRENT PROTECTION DEVICES SHALL BE PROVIDED BY THE POWER STUDY ENGINEER BASED ON THE COORDINATION STUDY.

SWITCHBOARD NO.1 LOAD CALCULATION			
ITEM	DESCRIPTION	HP	FLA
1	MCC-ST1	---	1,152.8A
2	MCC-WWPS	---	1,371A
SUBTOTAL			2,523.8A
25% OF LARGEST MOTOR LOAD			98A
MINIMUM AMPACITY @480V/3ϕ			2,621.8A

* BASED ON SELECTED PUMP MFG DATA

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
SCOTT WWF SWITCHBOARD NO.1 ONE-LINE DIAGRAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

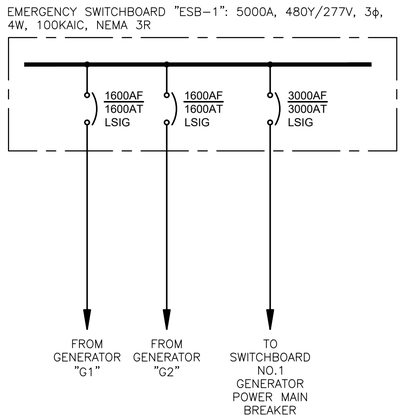
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
E-14

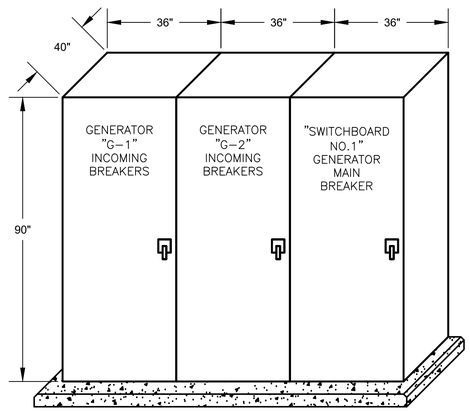
PLOT STYLE: ARD_FULL_MONO H8111.ctb | PLOTTED: 1/8/2026 6:32 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Scott WW\H8111_E-14.dwg

PLOT STYLE: ARD_FULL_MONO H8111#.CTB PLOTTED: 1/8/2026 6:32 PM

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Electrical\Working\Scott WW\H8111_E-15.dwg



SCOTT WWF
ESB-1 ONE-LINE
DIAGRAM
NTS



SCOTT WWF
ESB-1
ELEVATION
NTS

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

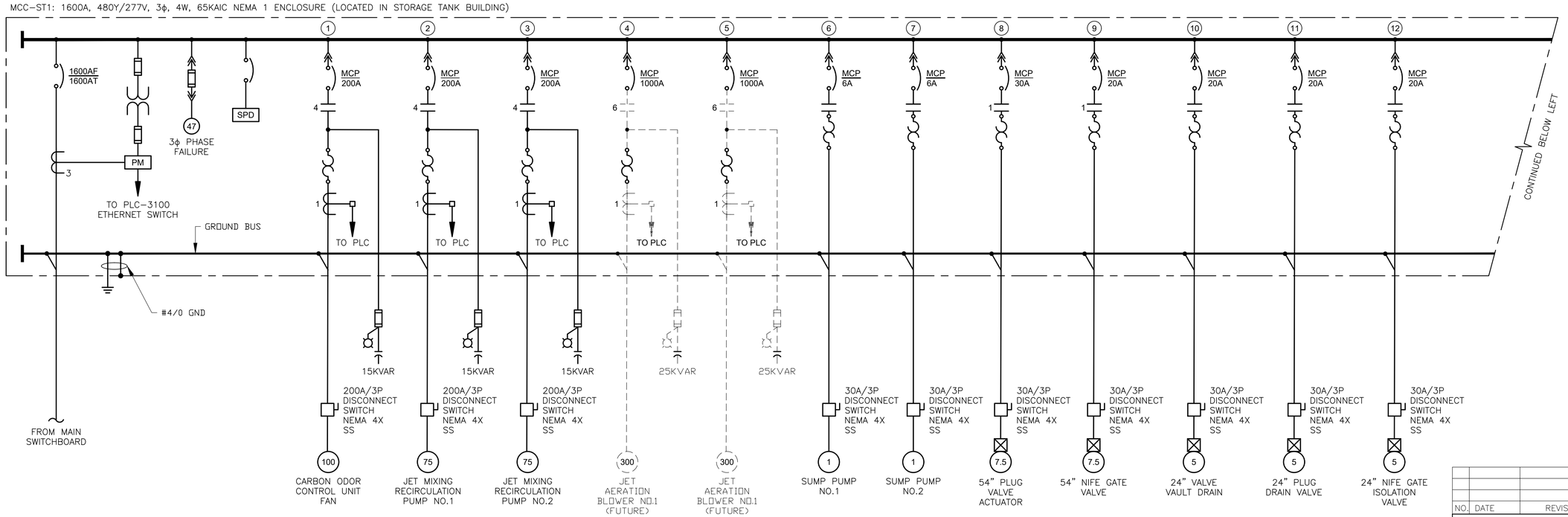
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
SCOTT WWF ESB-1
ONE-LINE DIAGRAM

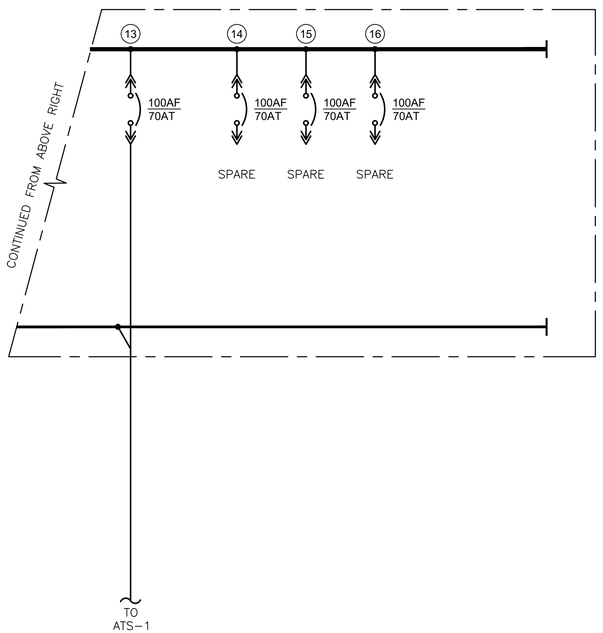
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

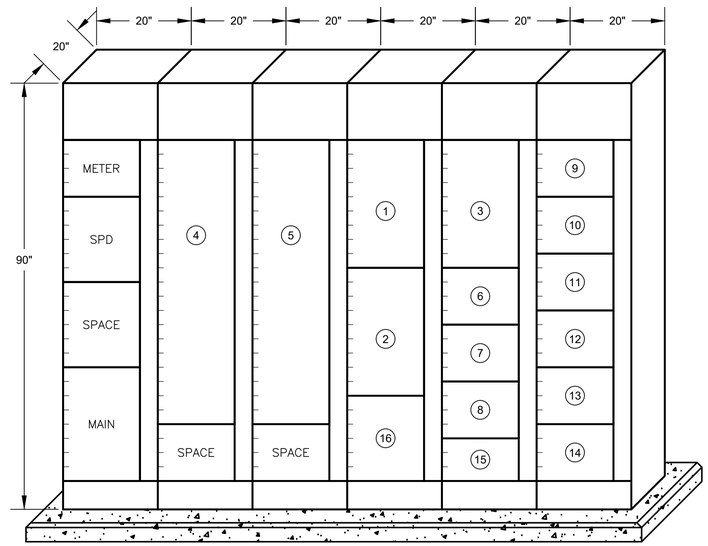
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
E-15



SCOTT WWF
MCC-ST1 ONE-LINE
DIAGRAM
NTS





SCOTT WWF
MCC-ST1
ELEVATION
NTS

MCC-ST1 LOAD CALCULATION			
ITEM	DESCRIPTION	HP	FLA
1	ODOR CONTROL UNIT FAN	100HP	130A
2	JET MIXING RECIRCULATION PUMP NO.1	75HP	98A
3	JET MIXING RECIRCULATION PUMP NO.2	75HP	98A
4	JET AERATION BLOWER NO.1 (FUTURE)	300HP	391A
5	JET AERATION BLOWER NO.1 (FUTURE)	300HP	391A
6	SUMP PUMP NO.1	1HP	1A
7	SUMP PUMP NO.2	1HP	1A
8	54" PLUG VALVE ACTUATOR	7.5HP	10A
9	54" NIFE GATE VALVE	7.5HP	10A
10	24" VALVE VAULT DRAIN	5HP	7.6A
11	24" PLUG DRAIN VALVE	5HP	7.6A
12	24" NIFE GATE ISOLATION VALVE	5HP	7.6A
SUBTOTAL			1152.8A
25% OF LARGEST MOTOR LOAD			98A
MINIMUM AMPACITY @480V/3ϕ			1,250.8A

* BASED ON SELECTED PUMP MFG DATA

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E-16

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

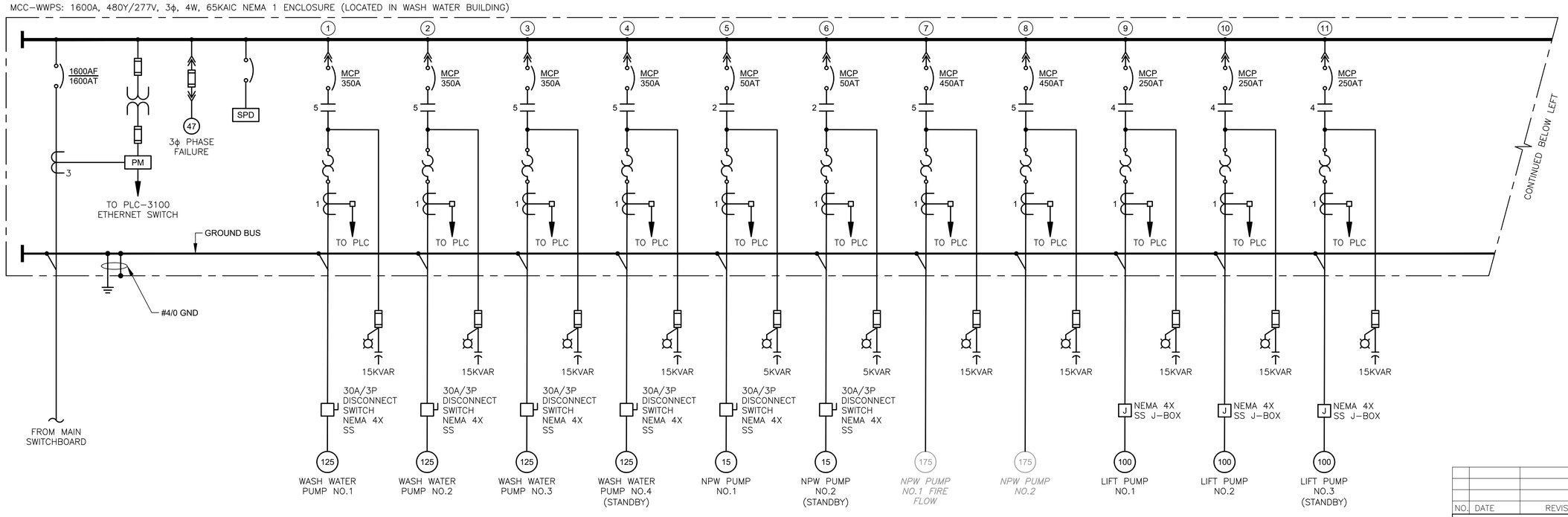
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

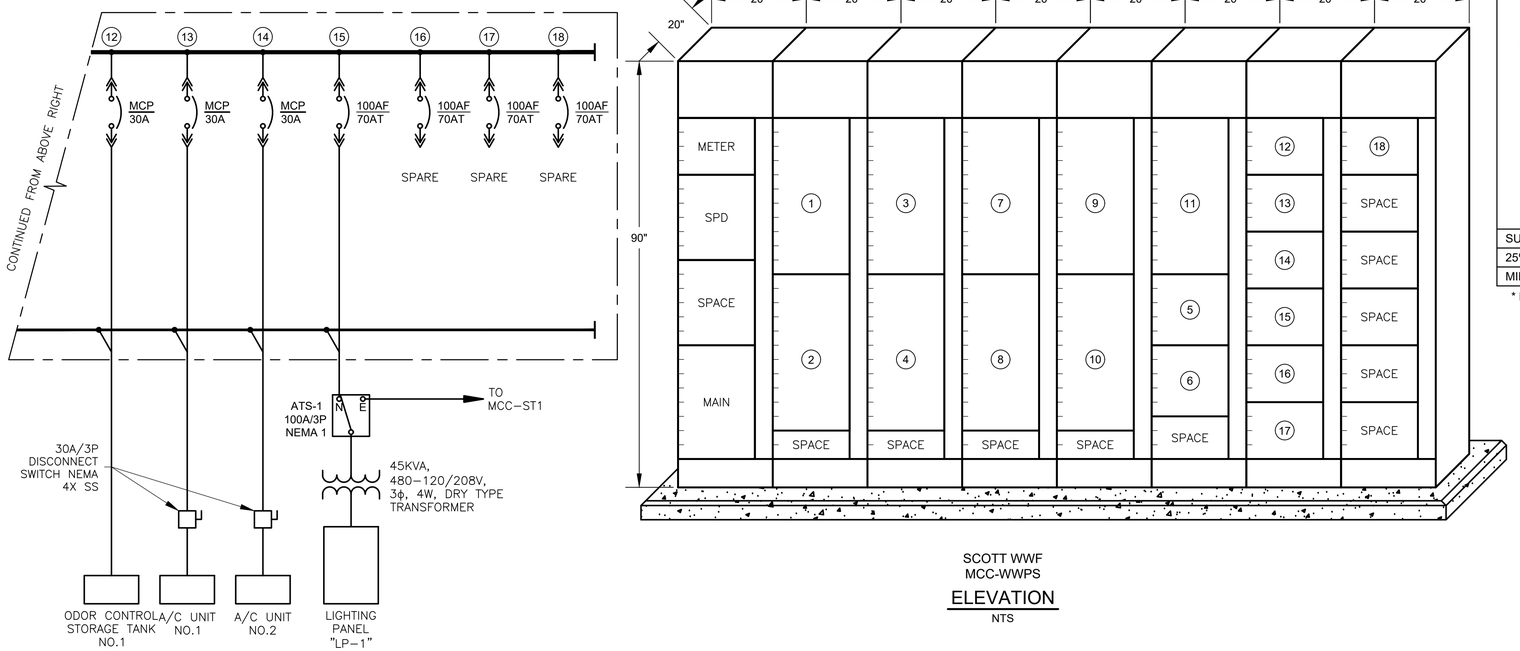
ELECTRICAL
SCOTT WWF MCC-ST1 ONE-LINE DIAGRAM

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO H8111.ctb | PLOTTED: 1/8/2026 6:32 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Scott WW\H8111_E-16.dwg



SCOTT WWF
MCC-WWPS ONE-LINE
DIAGRAM
NTS



SCOTT WWF
MCC-WWPS
ELEVATION
NTS

MCC-WWPS LOAD CALCULATION			
ITEM	DESCRIPTION	HP	FLA
1	WASH WATER PUMP NO.1	125HP	163A
2	WASH WATER PUMP NO.2	125HP	163A
3	WASH WATER PUMP NO.3	125HP	163A
4	WASH WATER PUMP NO.4 (STANDBY)	125HP	---A
5	NPW PUMP NO.1	15HP	20A
6	NPW PUMP NO.2 (STANDBY)	15HP	---A
7	EXISTING NPW PUMP FIRE FLOW NO.1	175HP	228A
8	EXISTING NPW PUMP NO.2	175HP	---A
9	LIFT PUMP NO.1	100HP	130A
10	LIFT PUMP NO.2	100HP	130A
11	LIFT PUMP NO.3 (STANDBY)	100HP	---A
12	ODOR CONTROL STORAGE TANK NO.1	---	200A
13	A/C UNIT NO.1	---	60A
14	A/C UNIT NO.2	---	60A
15	45 KVA TRANSFORMER		54A
SUBTOTAL			1,371A
25% OF LARGEST MOTOR LOAD			41A
MINIMUM AMPACITY @480V/3ϕ			1,412A

* BASED ON SELECTED PUMP MFG DATA

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E–17

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

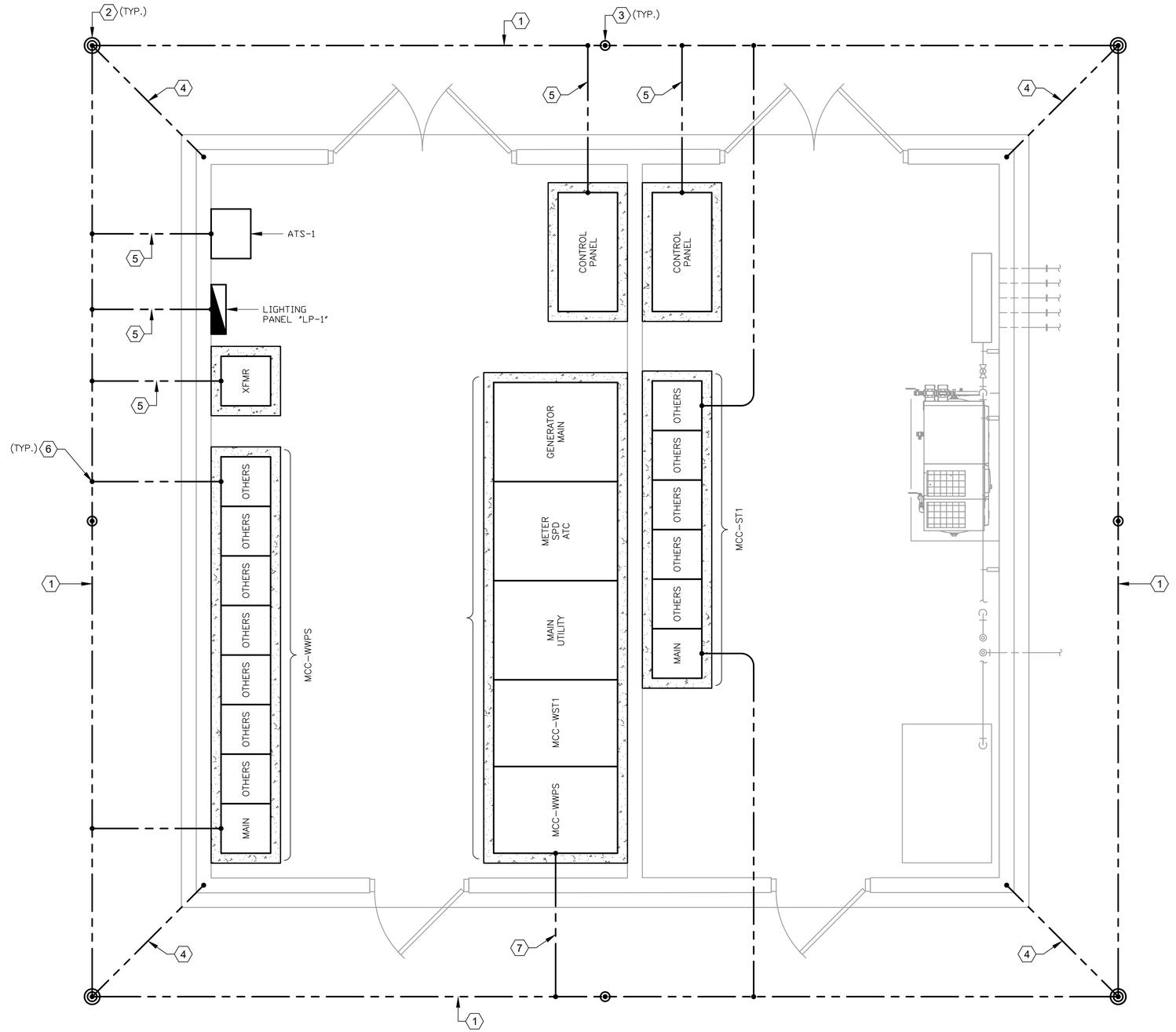
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
SCOTT WWF MCC–WWPS ONE–LINE DIAGRAM

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO H8111.ctb | PLOTTED: 1/8/2026 6:33 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP–Ardurra))\6 Drawings\Electrical\Working\Scott WW\H8111_E–17.dwg



SCOTT WWF
WASHWATER ELECTRICAL GROUNDING BUILDING

PLAN

1/2" = 1'-0"

SCOTT WWF
STORAGE TANK ELECTRICAL GROUNDING BUILDING

PLAN

1/2" = 1'-0"

NOTES BY SYMBOL "(#)":

1. MAIN BURIED GROUND LOOP, #4/0 BARE COPPER CONDUCTOR.
2. GROUND TEST WELL.
3. GROUND ROD.
4. #4/0 BARE COPPER BONDING CONDUCTOR.
5. #2/0 BARE COPPER BONDING CONDUCTOR.
6. BOND REBAR IN CONCRETE FOOTER OR SLAB TO MAIN BURIED GROUND LOOP.
7. #350 BARE COPPER BONDING CONDUCTOR.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED BY:
DRAWN BY: C. VALDEZ	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

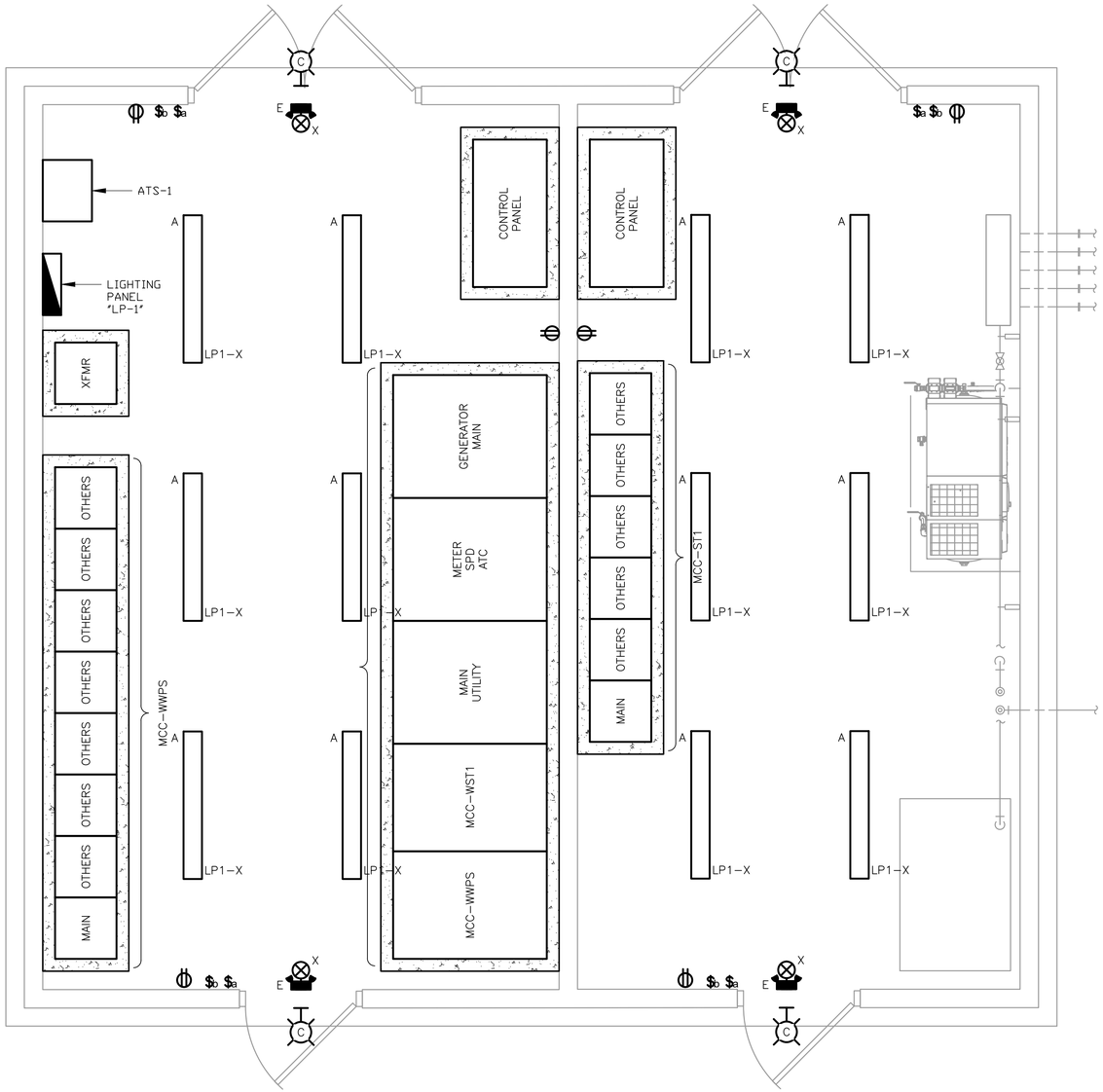
ELECTRICAL
SCOTT WWF STORAGE TANK BUILDING GROUNDING PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
E-18

PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:33 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Scott WW\H8111_E-18.dwg



SCOTT WWF
WASHWATER LIGHTING BUILDING

PLAN

1/2" = 1'-0"

SCOTT WWF
STORAGE TANK LIGHTING BUILDING

PLAN

1/2" = 1'-0"

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

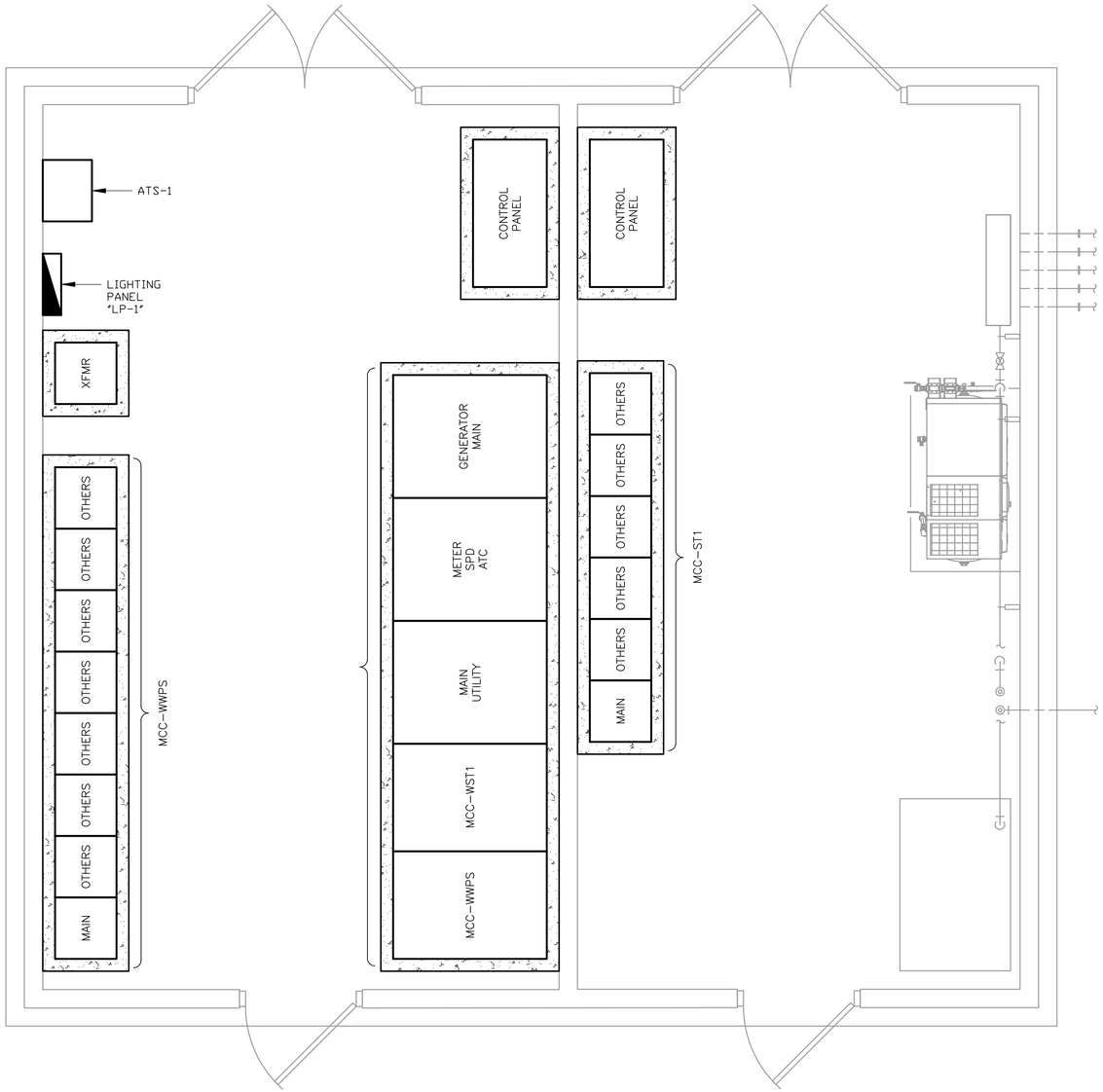
ELECTRICAL
SCOTT WWF STORAGE TANK BUILDING LIGHTING PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E-19

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Scott WW\H8111_E-19.dwg
PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:33 PM



SCOTT WWF
WASHWATER POWER BUILDING

PLAN

1/2" = 1'-0"

SCOTT WWF
STORAGE TANK POWER BUILDING

PLAN

1/2" = 1'-0"

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
SCOTT WWF STORAGE TANK BUILDING POWER PLAN

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E-20

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOT STYLE: ARD_FULL_MONO H8111#.CTB PLOTTED: 1/8/2026 6:33 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Scott WW\H8111_E-20.dwg

	DESCRIPTION	SERVICE		ROUTING			CONDUIT & WIRE SIZE
		VOLTAGE	AMPS OR HP	FROM	TO	VIA	
P100	SERVICE ENTRANCE	12.47KV	--	12.47KV SERVICE POLE	2500KVA PAD MOUNT TRANSFORMER	--	3-1/0 AWG, 15KV SHIELDED W/ 1#4 GND., 4"C.
P101	TRANSFORMER SECONDARY FEEDER	480V	--	2500KVA PAD MOUNT TRANSFORMER	SWITCHBOARD NO.1 NORMAL POWER	--	6 SETS, 3#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
P102	MCC-ST1 FEEDER	480V	--	ESB-1	MCC-ST1 POWER	--	4 SETS, 3#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
P103	MCC-WWPS FEEDER	480V	--	ESB-1	MCC-WWPS POWER	--	4 SETS, 3#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
PG01	ENERGY POWER GEN 1	480V	--	GENERATOR G1	ESB-1 G1	--	4 SETS, 3#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
PG02	ENERGY POWER GEN 2	480V	--	GENERATOR G2	ESB-1 G2	--	4 SETS, 3#600 MCM, #1/0 NEUT., #1/0 GND, 4"C. EACH
201	CARBON ODOR CONTROL FAN	480V	--	MCC-ST1	CARBON ODOR CONTROL FAN	--	--
202	JET MIXING PUMP NO.1	480V	--	MCC-ST1	JET MIXING PUMP NO.1	--	--
203	JET MIXING PUMP NO.2	480V	--	MCC-ST1	JET MIXING PUMP NO.2	--	--
204	SUMP PUMP NO.1	480V	--	MCC-ST1	SUMP PUMP NO.1	--	--
205	SUMP PUMP NO.2	480V	--	MCC-ST1	SUMP PUMP NO.2	--	--
206	54" PLUG VALVE	480V	--	MCC-ST1	54" PLUG VALVE	--	--
207	54" KNIFE VALVE	480V	--	MCC-ST1	54" KNIFE VALVE	--	--
208	24" VALVE VAULT DRAIN	480V	--	MCC-ST1	24" VALVE VAULT DRAIN	--	--
209	24" PLUG DRAIN VALVE	480V	--	MCC-ST1	24" PLUG DRAIN VALVE	--	--
210	24" KNIFE GATE ISOLATION VALVE	480V	--	MCC-ST1	24" KNIFE GATE ISOLATION VALVE	--	--
301	WASH WATER PUMP NO.1	480V	--	MCC-WWPS	WASH WATER PUMP NO.1	--	--
302	WASH WATER PUMP NO.2	480V	--	MCC-WWPS	WASH WATER PUMP NO.2	--	--
303	WASH WATER PUMP NO.3	480V	--	MCC-WWPS	WASH WATER PUMP NO.3	--	--
304	WASH WATER PUMP NO.4	480V	--	MCC-WWPS	WASH WATER PUMP NO.4	--	--
305	NPW PUMP NO.1	480V	--	MCC-WWPS	NPW PUMP NO.1	--	--
306	NPW PUMP NO.2	480V	--	MCC-WWPS	NPW PUMP NO.2	--	--
307	LIFT PUMP NO.1	480V	--	MCC-WWPS	LIFT PUMP NO.1	--	--
308	LIFT PUMP NO.2	480V	--	MCC-WWPS	LIFT PUMP NO.2	--	--
309	LIFT PUMP NO.3	480V	--	MCC-WWPS	LIFT PUMP NO.3	--	--
310	ODOR CONTROL STORAGE TANK NO.1	480V	--	MCC-WWPS	ODOR CONTROL STORAGE TANK NO.1	--	--
311	A/C UNIT NO.1	480V	--	MCC-WWPS	A/C UNIT NO.1	--	--
312	A/C UNIT NO.2	480V	--	MCC-WWPS	A/C UNIT NO.2	--	--
313	45 KVA TRANSFORMER T1	480V	--	MCC-WWPS	45 KVA TRANSFORMER T1	--	--

NOTES BY SYMBOL "⟨#⟩":

⟨1⟩ REFER TO SPEC SECTION 16120 FOR CONDUCTOR COLOR CODE.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
SCOTT WWF
CONDUIT SCHEDULE

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
E-21

WBS NUMBER
R-001000-0035-4

DRAWING SCALE
NTS

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

SHEET NO. XX OF XX

FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: ARD_FULL_MONO H8111 PLOTTED: 1/8/2026 6:33 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\Scott WW\H8111_E-21.dwg

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-01.dwg
PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 5:20 PM

PRIMARY FLOW ELEMENTS

	MAGNETIC FLOW METER
	ULTRASONIC DOPPLER FLOW METER
	ULTRASONIC TIME TRANSIT FLOW METER
	VORTEX FLOW METER
	VENTURI TUBE
	TURBINE OR PROPELLER TYPE METER
	ROTAMETER
	PITOT TUBE
	WEIR FLOW METER
	PARSHALL FLUME OR TRAPEZOIDAL FLUME
	ORIFICE PLATE
	THERMAL MASS FLOWMETER

PRIMARY LEVEL ELEMENTS

	ULTRASONIC LEVEL TRANSDUCER
	RADAR LEVEL TRANSDUCER
	PRIMARY ELEMENT PRESSURE PROBE LEVEL TRANSMITTER
	BUBBLER LEVEL TUBE ELEMENT
	CONDUCTIVE LEVEL PROBE
	FLOAT SWITCH

VALVES

	VALVE - OTHER IN-LINE TYPE NOT OTHERWISE IDENTIFIED
	THREE-WAY VALVE
	BALL VALVE
	GLOBE VALVE
	PINCH VALVE
	GATE VALVE
	NEEDLE VALVE
	DIAPHRAGM VALVE
	BUTTERFLY VALVE
	CHECK VALVE WITH FLOW DIRECTION
	PLUG VALVE
	PRESSURE-REDUCING REGULATOR INTERNAL PRESSURE TAP
	BACK PRESSURE REGULATOR INTERNAL PRESSURE TAP
	PRESSURE-REDUCING REGULATOR EXTERNAL PRESSURE TAP
	BACK PRESSURE REGULATOR EXTERNAL PRESSURE TAP

VALVES

S	SOLENOID ACTUATED VALVE
X	"X" = P: AIR CYLINDER; O: OIL CYLINDER; H: HYDRAULIC CYLINDER; E: ELECTRIC MOTOR; S: SOLENOID VALVE
OR NO SYMBOL	MANUAL VALVE

MISC PROCESS SYMBOLS

	ANNULAR TYPE SEAL
	CHEMICAL INJECTION POINT
	STRAINER
	DRAIN
	NORMAL OPERATING LEVEL
UV	UV CHAMBER
	FLOW STRAIGHTENER
	LOAD CELL
	SPRAY NOZZLE
	BLIND FLANGE
	FLANGE
	DIAPHRAGM SEAL
	PRESSURE RELIEF (OUT)
	VACUUM RELIEF (IN)

GATES

	SLUICE/SLIDE GATE
	FLOW CONTROL GATE

MOTORS

M	VARIABLE SPEED MOTOR
M	CONSTANT SPEED MOTOR

PUMPS, BLOWERS AND MISC EQUIPMENT

	CENTRIFUGAL BLOWER
	CENTRIFUGAL PUMP
	DIAPHRAGM PUMP AND MOTOR
	PROGRESSIVE CAVITY PUMP
	SUBMERSIBLE PUMP
	POSITIVE DISPLACEMENT BLOWER

PUMPS, BLOWERS AND MISC EQUIPMENT

	MIXER/FLOCCULATOR/AERATOR
	VERTICAL PUMP-1 USED WHEN DISCHARGE LINE IS IN WETWELL
	VERTICAL PUMP-2 USED WHEN DISCHARGE LINE IS EXPOSED.
	VERTICAL PUMP SHAFT USED WHEN INTAKE OF PUMP IS ENCASED.
	SUBMERSIBLE MIXER
	COMPRESSOR
	HEAT EXCHANGER
	FEED PUMP
	GRINDER/MACERATOR
	METERING PUMP
	PLUNGER PUMP
	PERISTALTIC METERING PUMP
	CENTRIFUGE
	PULSATION DAMPENER
	TURBO BLOWER

PUMPS, BLOWERS AND MISC EQUIPMENT

	ROTARY SCREEN

CONTROL ENCLOSURE, INSTRUMENTS AND SCADA

XXX P AAA BBB CCC D YY ZZZ	DIGITAL/ANALOG INSTRUMENT AAA: ISA TAG (REFER TO TABLE) BBB: LOOP NUMBER CCC: LOOP NUMBER SUB D: DIVISION NUMBER P: POWER REQUIREMENT XXX: DESCRIPTION (USED ON PANEL INSTRUMENTS) YY: CHEMICAL ZZZ: LOCATION DIGITAL/ANALOG INSTRUMENT -LOCATED IN THE FIELD -NOT INSIDE OF PANEL -VISIBLE AT FIELD LOCATION -NORMALLY OPERATOR ACCESSIBLE
XXX P AAA BBB CCC D YY ZZZ	DIGITAL/ANALOG INSTRUMENT -LOCATED ON PANEL -VISIBLE TO OPERATOR -NORMALLY OPERATOR ACCESSIBLE
XXX P AAA BBB CCC D YY ZZZ	DIGITAL/ANALOG INSTRUMENT -LOCATED INSIDE PANEL -NOT VISIBLE TO OPERATOR -NORMALLY NOT ACCESSIBLE
XXX AAA BBB CCC	DISPLAY (INDICATION/CONTROLLER) AAA: ISA TAG (REFER TO TABLE) BBB: LOOP NUMBER CCC: LOOP NUMBER SUB XXX: DESCRIPTION DISPLAY (INDICATION/CONTROLLER) -LOCATED IN THE FIELD -NOT INSIDE OF PANEL -VISIBLE AT FIELD LOCATION -NORMALLY OPERATOR ACCESSIBLE
XXX AAA BBB CCC	DISPLAY (INDICATION/CONTROLLER) -LOCATED ON PANEL -VISIBLE TO OPERATOR -NORMALLY OPERATOR ACCESSIBLE
XXX AAA BBB CCC	DISPLAY (INDICATION/CONTROLLER) -LOCATED INSIDE PANEL -NOT VISIBLE TO OPERATOR -NORMALLY NOT ACCESSIBLE
-	INTERLOCKING RELAY

CONTROL ENCLOSURE AND SCADA

	DIGITAL INPUT
	DIGITAL OUTPUT
	ANALOG INPUT
	ANALOG OUTPUT
	SURGE SUPPRESSOR
	OPTO ISOLATOR
/	SIGNAL CONVERTER/ ISOLATOR */* - (INPUT/OUTPUT) * DEFINED AS FOLLOWS: E - VOLTAGE I - CURRENT P - PNEUMATIC PD - PULSE DURATION H - HYDRAULIC O - ELECTROMAGNETIC, SONIC R - RESISTANCE (ELECTRIC)

CONTROL ENCLOSURE, INSTRUMENTS AND SCADA

PLC/RTU LOGIC

FUNCTION SYMBOLS AND ABBREVIATIONS

F(X)	
K	PROPORTIONAL GAIN OR ATTENUATE (INPUT:OUTPUT)
- K	REVERSE PROPORTIONAL GAIN OR ATTENUATE (INPUT:OUTPUT)
Σ	SUMMING
Σ/n	AVERAGING
Δ	SUBTRACTING
√	EXTRACT SQUARE ROOT
÷	DIVIDE
X	MULTIPLY
S	INTEGRATE
+	BIAS POSITIVE
-	BIAS NEGATIVE
F (X)	NONLINEAR OR UNSPECIFIED FUNCTION
>	HIGH SELECT
<	LOW SELECT
⊦	HIGH LIMIT
⊥	LOW LIMIT

INSTRUMENT (COMMON HOUSING)	INSTRUMENT (SEPERATOR HOUSING)	INSTRUMENT (PART OF MAJOR EQUIPMENT)

GENERAL NOTES:

1. THIS IS A GENERAL LEGEND SHEET, SOME SYMBOLS AND ABBREVIATIONS MAY NOT APPLY TO THIS SPECIFIC PROJECT.
2. THIS LEGEND APPLIES TO INSTRUMENTATION DIAGRAMS ONLY AND MAY DIFFER FROM LEGENDS FOR OTHER SHEETS.
3. IN GENERAL THIS LEGEND SHEET AND THE INSTRUMENTATION DIAGRAMS ARE BASED ON INTERNATIONAL SOCIETY OF AUTOMATION, STANDARDS FOR PRACTICES FOR INSTRUMENTATION, STANDARD S5.1 SOME MODIFICATIONS, ADDITIONS AND ALTERATIONS HAVE BEEN MADE AS REQUIRED TO ACCOMMODATE THE PROJECT REQUIREMENTS.
4. SOME PROCESS ITEMS, SUCH AS EQUIPMENT ISOLATION VALVES, BYPASS LINES, ETC., WHICH ARE NOT CRITICAL FOR AN UNDERSTANDING OF THE INSTRUMENTATION AND CONTROL FUNCTIONS ARE NOT SHOWN ON THE INSTRUMENTATION SHEETS.
5. SEE ELECTRICAL SHEETS AND SPECIFICATIONS FOR ADDITIONAL CONTROL AND INTERLOCK REQUIREMENTS FOR EQUIPMENT NOT SHOWN OR NOT PROVIDED BY THE INSTRUMENTATION SUPPLIER.
6. IN THE EVENT OF DISCREPANCY BETWEEN THE PROCESS & INSTRUMENTATION DIAGRAMS AND THE LOOP DIAGRAMS, THE INFORMATION FROM THE LOOP DIAGRAMS SHALL BE USED.

HAND SWITCH ABBREVIATIONS:

HOA	HAND/OFF/AUTO
HOR	HAND/OFF/REMOTE
LOC	LOCAL/OFF/COMPUTER
LOR	LOCAL/OFF/REMOTE
LOS	LOCKOUT STOP
OSC	OPEN/STOP/CLOSE
RSL	RAISE/STOP/LOWER
L/C	LOCAL/COMPUTER
L/R	LOCAL/REMOTE
O/C	OPEN/CLOSE
S/S	START/STOP
A/M	AUTO/MANUAL
H/C	HAND/COMPUTER
PB	PUSHBUTTON

GENERAL NOTE

THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION
INSTRUMENTATION LEGENDS AND SYMBOLS–I

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	R–001000–0035–4
DRAWING SCALE	NTS
CITY OF HOUSTON PM	NEIL BARNSDALE, P.E.
SHEET NO.	XX OF XX

FOR CITY OF HOUSTON USE ONLY

DWG NO
I–1

PLOTTED: 1/8/2026 5:20 PM

PLOT STYLE: GAI.ctb

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-02.dwg

LINE SYMBOLS

	MAJOR PROCESS LINE
	MINOR PROCESS LINE
	FUTURE PROCESS LINE
	EXISTING PROCESS LINE
	HARDWIRED SIGNAL
	SOFT LINK
— L — L —	HYDRAULIC LINK
— // — // —	PNEUMATIC LINK
— x — x —	CAPILLARY TUBE OR FILLED SYSTEM SIGNAL
	ELECTROMAGNET OR SONIC SIGNAL (GUIDED)
DESCRIPTION X SHEET# Y	(USED WHEN REFERRING TO A SHEET IN THE DESIGN SET) DESCRIPTION - WHERE FLOW IS GOING SHEET# - WHAT SHEET PROCESS CONTINUES ON X - USED WHEN TWO OR MORE ARROWS ARE REFERING TO THE SAME SHEET. Y - USED WHEN TWO OR MORE ARROWS ARE REFERRING TO THE SAME SHEET.
DESCRIPTION	(USED WHEN REFERRING TO A SHEET NOT IN THE DESIGN SET) DESCRIPTION - WHERE FLOW IS GOING
CAT5e — CAT5e	CAT-5e ETHERNET CABLE
CAT6 — CAT6	CAT-6 ETHERNET CABLE
	MODBUS PLUS CABLE
	RS-485 CABLE
RS-232 — RS-232	RS-232 CABLE
POE — POE	POWER OVER ETHERNET CABLE
T1 — T1	T1 FIBER CONNECTION
FO — FO	NON-SPECIFIC FIBER OPTIC CABLE
100 — 100	FIBER 100BASE-FX
1000 — 1000	FIBER 1000BASE-FX
	SIGNAL CROSSING
	PROCESS LINE CROSSING
	PROCESS LINE/ HARDWIRE SIGNAL CROSSING

EQUIPMENT/LOOP TAGGING

X	EQUIPMENT TAG USED TO IDENTIFY NON-INSTRUMENT EQUIPMENT
X	LOOP TAG USED TO TIE THE PROCESS FLOW DIAGRAM TO A LOOP DIAGRAM

STANDARD VALVE AND PIPING USAGE

PDIT 1	BLOCK/BLEED VALVE ARRANGEMENT
PI 1	INSTRUMENTS WITH VALVE ONLY
PI 1	INSTRUMENTS WITH DIAPHRAGM SEAL
PI 1	INSTRUMENTS WITH ANNULAR SEAL

PANEL DETAIL SYMBOLS

RUN	INDICATING LIGHT -R RED (ACTIVE EQUIPMENT) -G GREEN (EQUIPMENT OFF) -W WHITE (POWER) -B BLUE (CONDITION IE BACKWASH IN PROGRESS) -A AMBER (ALARM CONDITION)
H/O/A	SWITCH -L/R (LOCAL - REMOTE) -L/O/A (LOCAL - OFF - AUTO) -L/O/R (LOCAL - OFF - REMOTE) -H/O/A (HAND - OFF - AUTO) -H/O/R (HAND - OFF - REMOTE)
START	PUSHBUTTON
START	PUSHBUTTON
	HORN
	BEACON
OIT	OPERATOR INTERFACE TERMINAL

SECURITY SYSTEM SYMBOLS

CCTV	CLOSED CIRCUIT TELEVISION CAMERA
PTZ	PAN, TILT, ZOOM CAMERA

GENERAL ABBREVIATIONS

AI	ANALOG INPUT
AL	ALARM PILOT LIGHT
AO	ANALOG OUTPUT
AS	AIR SUPPLY
ASP	APPLICATION SERVICE PROVIDER
BFV	BUTTERFLY VALVE
CCTV	CLOSED CIRCUIT TELEVISION
CH4	METHANE
CL2	CHLORINE
COND	CONDUCTIVITY
COMP	COMPUTER
CP	CONTROL PANEL
CPU	CENTRAL PROCESSING UNIT
CRC	CONTROL ROOM CONSOLE
CTU	CENTRAL TELEMETRY UNIT
DCU	DISTRIBUTED CONTROL UNIT
DI	DIGITAL OR DISCRETE INPUT
DO	DISSOLVED OXYGEN OR DIGITAL OUTPUT
DPU	DISTRIBUTED PROCESSING UNIT
EPP	ETHERNET PATCH PANEL
ES	EMERGENCY STOP
ESW	ETHERNET SWITCH
ETM	ELAPSED TIME METER
FC	FAIL CLOSED
FCP	FIELD CONTROL PANEL
FCS	FILTER CONTROL STATION
FCV	FLOW CONTROL VALVE
FLP	FAIL LAST POSITION
FO	FAIL OPEN
FOPP	FIBER OPTIC PATCH PANEL
FPR	FEEDER PROTECTION RELAY
H2S	HYDROGEN SULFIDE
HMI	HUMAN MACHINE INTERFACE
JB	JUNCTION BOX
IO	INPUT/OUTPUT
IR	INFARED
LAS	LIQUID AMMONIA SULFATE
LCP	LOCAL CONTROL PANEL
LCS	LOCAL CONTROL STATION
LT	LEVEL TRANSMITTER
LPU	LOCAL PROCESSING UNIT
LTS	LOCAL TERMINAL SYSTEM
MC	MOTOR CONTROLLER
NAOCL	SODIUM HYPOCHLORIDE
NC	NORMALLY CLOSED
NH3	AMMONIA
NIM	NETWORK INTERFACE MODULE
NO	NORMALLY OPEN
MCC	MOTOR CONTROL CENTER
MM	MULTI MODE FIBER OPTIC CABLE
MPR	MOTOR PROTECTION RELAY
OIT	OPERATIONS INTERFACE TERMINAL
OL	OVERLOAD
OWS	OPERATOR WORKSTATION
PB	PUSH BUTTON
PCSI	PROCESS CONTROL SYSTEM INTEGRATOR
pH	HYDROGEN ION
PLC	PROGRAMMABLE LOGIC CONTROLLER
PMCS	PROCESS MONITORING CONTROL SYSTEM
POLY	POLYMER
PQM	POWER QUALITY METER
PS	POWER SUPPLY
PSU	POWER SUPPLY UNIT
PV	PINCH VALVE
RBC	REMOTE BASE CONTROLLER
RIO	REMOTE INPUT OUTPUT
RTU	REMOTE TERMINAL UNIT
SCADA	SUPERVISORY CONTROL AND DATA AQUISITION
SM	SINGLE MODE FIBER OPTIC CABLE
SO2	SULFUR DIOXIDE
SOL	SOLENOID
SPD	SURGE PROTECTION DEVICE
UPS	UNINTERRUPTIBLE POWER SUPPLY
TC	TERMINATION CABINET
TURB	TURBIDITY
VIB	VIBRATION
VFD	VARIABLE FREQUENCY DRIVE
VLV	VALVE

MEANINGS OF IDENTIFICATION LETTERS

THIS TABLE APPLIES ONLY TO THE FUNCTIONAL IDENTIFICATION OF INSTRUMENTS.

	FIRST LETTER		SUCCEEDING LETTERS		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS/ANALYTICAL		ALARM		
B	BURNER, COMBUSTION			CLOSE, STOP, DECREASE (1)	
C	CONDUCTIVITY			CONTROL	
D	DENSITY (MASS) OR SPECIFIC GRAVITY	DIFFERENTIAL		OPEN START, INCREASE (1)	
E	VOLTAGE (EMF)		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)			FAIL (1)
G	GAUGING (DIMENSIONAL)		GLASS VIEWING DEVICE		
H	HAND				HIGH OR OPEN
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME OR TIME SCHEDULE	TIME RATE OR CHANGE		CONTROL STATION	
L	LEVEL		LIGHT (PILOT)		LOW OR CLOSED
M	MOISTURE, HUMIDITY, MOTOR, MOTION	MOMENTARY		MOTOR (1)	MIDDLE OR INTERMEDIATE
N	USERS CHOICE		USER'S CHOICE		ON OR OPERATE (1)
O	USER'S CHOICE		ORIFICE (RESTRICTION)		OVERLOAD (1)
P	PRESSURE OR VACUUM		POINT (TEST CONNECTION)	PUMP (1)	
Q	QUANTITY (2)	INTEGRATE OR TOTALIZE			
R	RADIATION		RECORD		
S	SPEED OR FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE (2)		MULTIFUNCTION (2)	MULTIFUNCTION (2)	MULTIFUNCTION (2)
V	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER OR LOUVER	
W	WEIGHT OR FORCE		WELL		UNCLASSIFIED (2)
X	UNCLASSIFIED (2)	X AXIS	UNCLASSIFIED (2)	UNCLASSIFIED (2)	UNCLASSIFIED (2)
Y	EVENT, STATE, PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT	
Z	POSITION, DIMENSION	Z AXIS		DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	

COMMON HMI/INSTRUMENT ISA TAGGING

ABBREVIATION	MEANING
AIT	ANALYTICAL INDICATING TRANSMITTER
AE	ANALYTICAL ELEMENT
AI	CHEMICAL RESIDUAL/INDICATION
CT	CYCLE TIMER
FIT	FLOW INDICATING TRANSMITTER
FE	FLOW ELEMENT
FI	FLOW INDICATION
FS	FLOW SWITCH
HS	HAND SWITCH
JAL	POWER ALARM LOW
II	CURRENT INDICATION
LIT	LEVEL INDICATING TRANSMITTER
LE	LEVEL ELEMENT
LI	LEVEL INDICATION
LSH	LEVEL SWITCH HIGH
LSL	LEVEL SWITCH LOW
LAL	LEVEL ALARM LOW
LAH	LEVEL ALARM HIGH
PIT	PRESSURE INDICATING TRANSMITTER
PE	PRESSURE ELEMENT
PI	PRESSURE INDICATION
PPU	PERPETUAL POWER UNIT
PSH	PRESSURE SWITCH HIGH
PSL	PRESSURE SWITCH LOW
SI	SPEED INDICATION
SIC	SPEED INDICATING CONTROLLER
TIT	TEMPERATURE INDICATING TRANSMITTER
TE	TEMPERATURE ELEMENT
TI	TEMPERATURE INDICATION
TSH	TEMPERATURE SWITCH HIGH
WIT	WEIGHT INDICATING TRANSMITTER
WE	WEIGHT ELEMENT
WI	WEIGHT INDICATION
XA	FAULT ANNUNCIATION
YL	MISC. EVENT LIGHT (IN REMOTE)

COMMON HMI/INSTRUMENT ISA TAGGING

ABBREVIATION	MEANING
ZCH	OPEN GATE/VALVE
ZCL	CLOSE GATE/VALVE
ZSH	POSITION SWITCH HIGH
ZSL	POSITION SWITCH LOW
ZLH	VALVE/GATE OPEN
ZLL	VALVE/GATE CLOSED
ZIT	POSITION INDICATING TRANSMITTER

GENERAL NOTE

THIS IS A STANDARD LEGEND. SOME SYMBOLS MAY NOT APPEAR ON THE DRAWINGS.

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-2

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION INSTRUMENTATION LEGENDS & SYMBOLS – II

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-03.dwg

HMI

INFLUENT PUMP NO. 1 | INFLUENT PUMP NO. 2 | INFLUENT PUMP NO. 3 | INFLUENT PUMP NO. 4 | INFLUENT PUMP NO. 5

	SEAL FAIL ALARM	MOTOR OVERLOAD ALARM	MOTOR CURRENT	HIGH TEMP ALARM	IN HAND	IN AUTO	ON/OFF	START/ STOP	SPEED CTRL.	SPEED IND.	IN VFD
PUMP 1	MA 1	MO 1	II 1	TH 1	HI 1	IA 1	YFS 1	YCS 1			
PUMP 2	MA 2	MO 2	II 2	TH 2	HI 2	IA 2	YFS 2	YCS 2			
PUMP 3	MA 3	MO 3	II 3	TH 3	HI 3	IA 3	YFS 3	YCS 3	SC 3	SI 3	IS 3
PUMP 4	MA 4	MO 4	II 4	TH 4	HI 4	IA 4	YFS 4	YCS 4	SC 4	SI 4	IS 4
PUMP 5	MA 5	MO 5	II 5	TH 5	HI 5	IA 5	YFS 5	YCS 5	SC 5	SI 5	IS 5

SCADA

CONTROL PANEL PLC

CONTROL BUILDING

480V → INFLUENT PUMPS MCC

INFLUENT PUMP NO. 1 H/O/A RUN | INFLUENT PUMP NO. 2 H/O/A RUN | INFLUENT PUMP NO. 3 H/O/A RUN | INFLUENT PUMP NO. 4 H/O/A RUN | INFLUENT PUMP NO. 5 H/O/A RUN | INFLUENT PUMP NO. 6 H/O/A RUN

PRIMARY PLC | BACKUP PLC

INFLUENT PUMP CONTROL PANEL

ALARMS RESET | OIT

TO SHEET I-6

I-6

I-6

1

WET WELL

LT 1

LT 2

FS2 HIGH-HIGH LEVEL FLOAT SWITCH

FS4 HIGH-HIGH LEVEL FLOAT SWITCH

FS1 HIGH LEVEL FLOAT SWITCH

FS3 HIGH LEVEL FLOAT SWITCH

LSH 3A / TSH 3A

LSH 4A / TSH 4A

LSH 2A / TSH 2A

LSH 5A / TSH 5A

LSH 1A / TSH 1A

LSH 6A / TSH 6A

M

FIT 1

INFLUENT DISCHARGE

NOTES:

1. REFER TO MECHANICAL SHEETS FOR MORE DETAIL.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

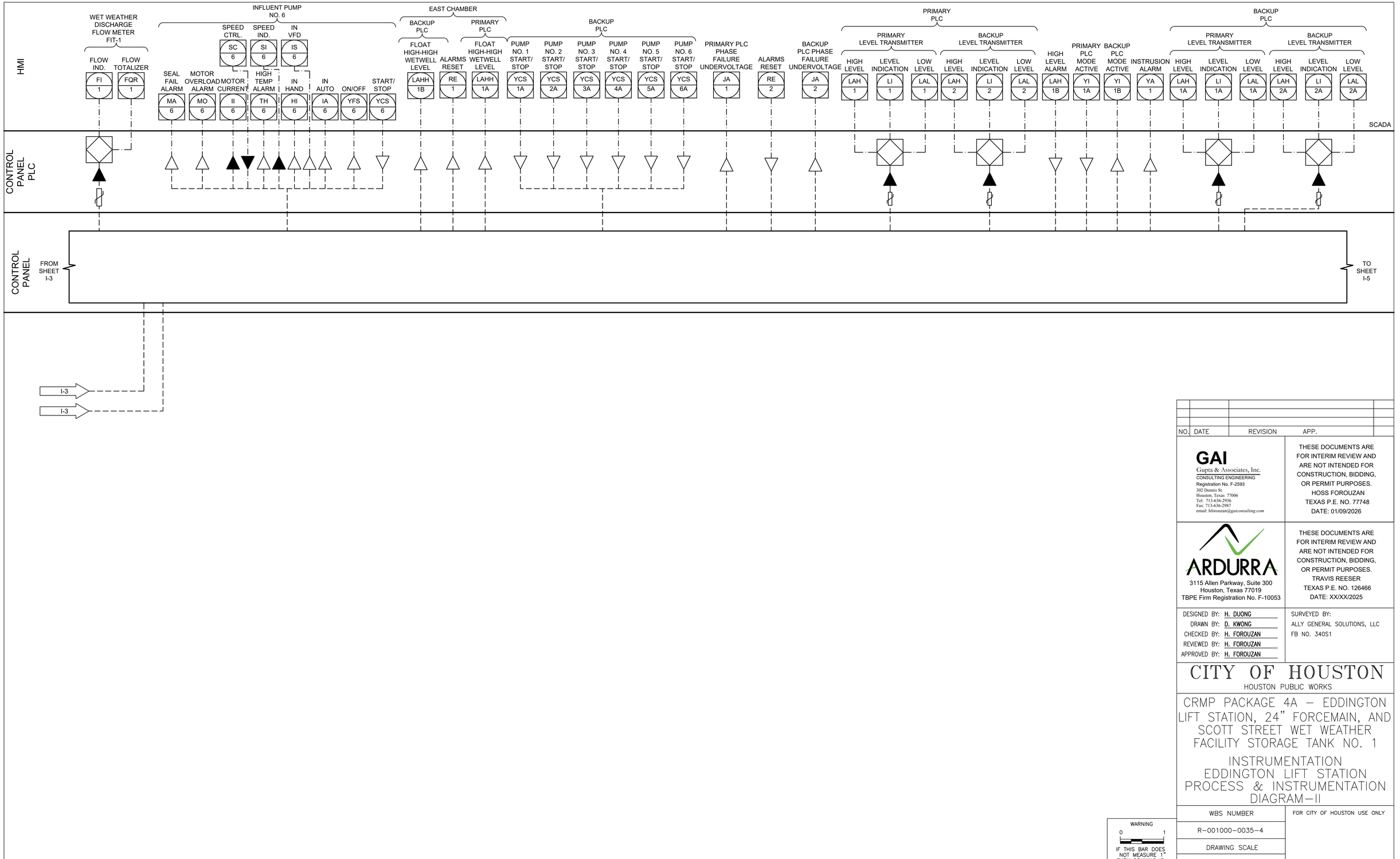
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION EDDINGTON LIFT STATION PROCESS & INSTRUMENTATION DIAGRAM–I

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-3



NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@guiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY:
DRAWN BY: D. KWONG	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

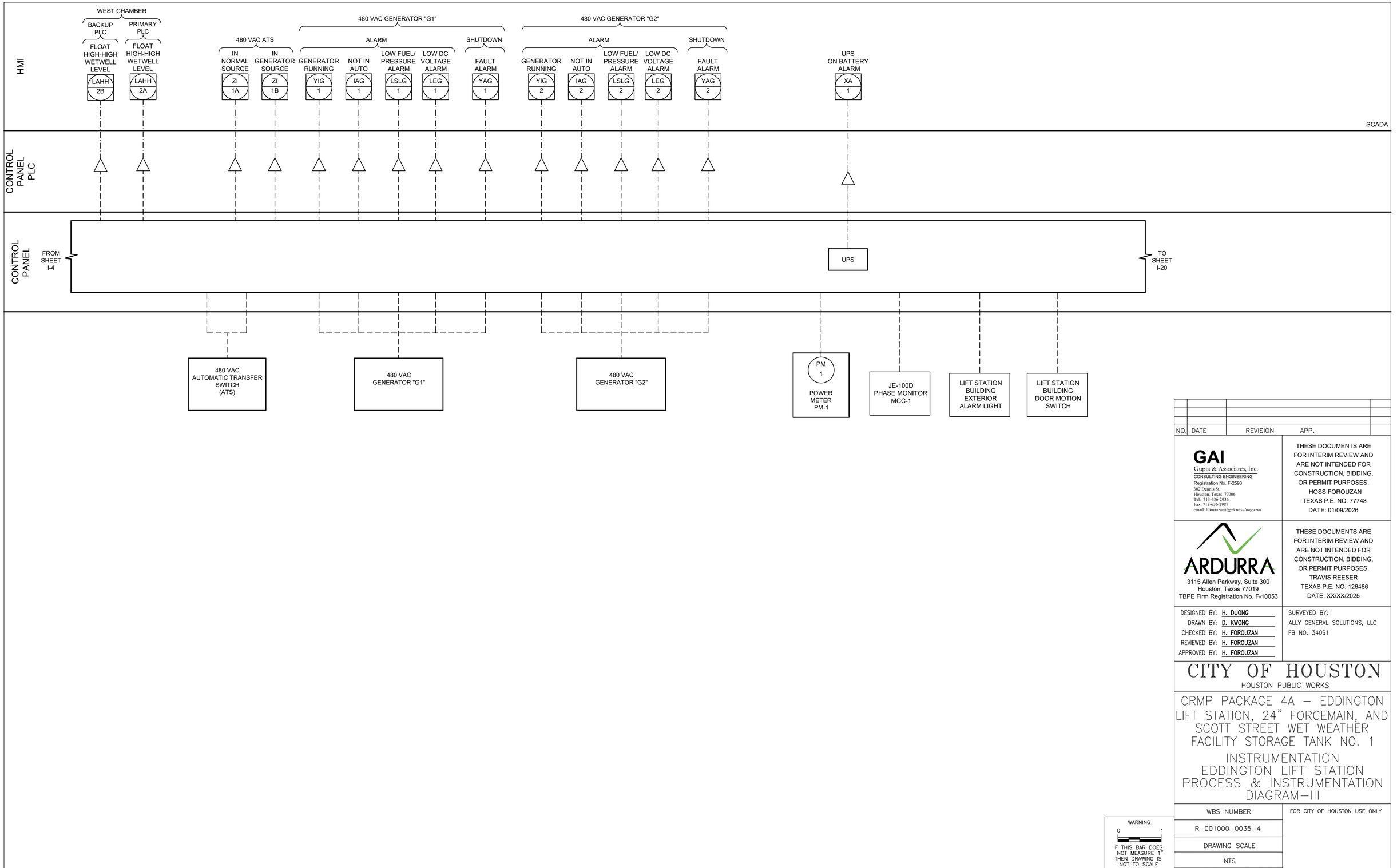
INSTRUMENTATION
EDDINGTON LIFT STATION
PROCESS & INSTRUMENTATION DIAGRAM–II

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I–4

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I–04.dwg



NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@guiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

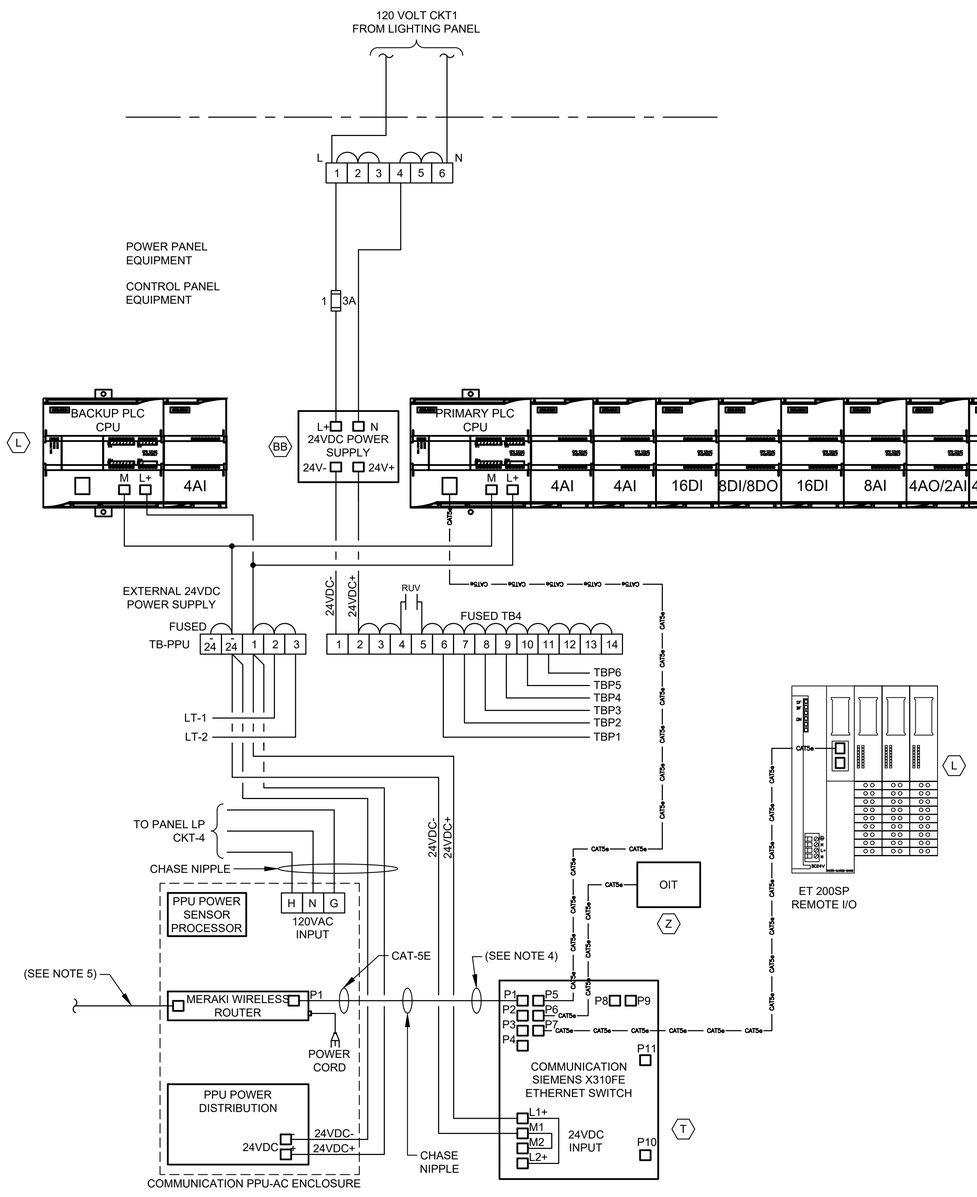
INSTRUMENTATION
EDDINGTON LIFT STATION
PROCESS & INSTRUMENTATION DIAGRAM–III

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I–5

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I–05.dwg

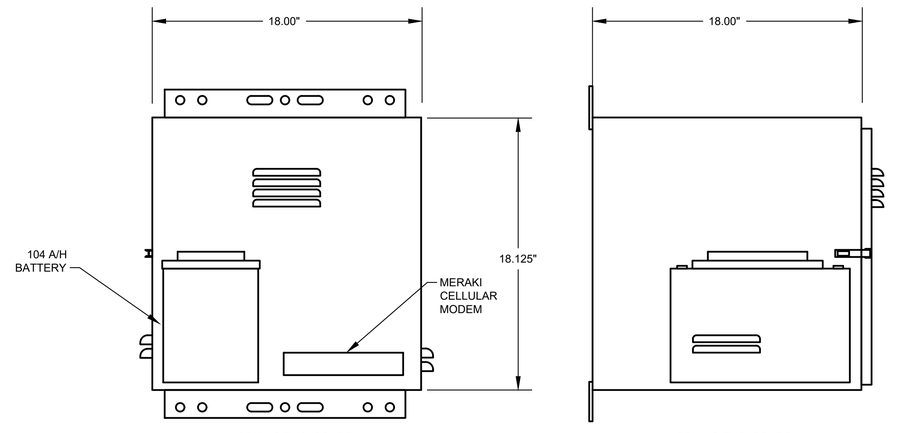


CONTROL POWER &
COMMUNICATIONS WIRING

DIAGRAM

NTS

(SEE NOTE 2 & 6)



PPU-AC ENCLOSURE
FRONT VIEW

PPU-AC ENCLOSURE
SIDE VIEW

PPU-AC
CONTROL ENCLOSURE

ELEVATION

NTS

(SEE NOTE 6 & 7)

NOTES:

1. FOR DESCRIPTION AND RATINGS OF ITEMS INDICATED WITH ITEM TAG, SEE DEVICE RATINGS SCHEDULE.
2. REFER TO SPEC SECTION 16120 FOR CONDUCTOR COLOR CODE.
3. THE PLC POWER SUPPLY SHALL FEED THE 24VDC I/O.
4. ETHERNET CABLE FOR MERAKI CELLULAR ROUTER (P1)
5. POE CABLE TO RADIO.
6. COMMUNICATION PPU-AC & SCADA SHALL BE PROVIDED BY CONTRACTOR INCLUDING TO RUN CONDUITS & WIRES.
7. COORDINATE WITH VENDOR TO PROVIDE PROPER VENTILATION WHERE APPLICABLE.

GENERAL NOTES:

1. NO ELECTRICAL MATERIAL, APPARATUS, DEVICES, APPLIANCES, FIXTURES, OR EQUIPMENT SHALL BE SOLD OR INSTALLED IN THE CITY UNLESS THEY ARE IN CONFORMANCE WITH THE PROVISIONS OF SECTION 508 CITY OF HOUSTON ELECTRICAL CODE, THE LAWS OF THE STATE OF TEXAS AND ANY APPLICABLE RULES AND REGULATIONS ISSUED UNDER THE AUTHORITY OF THE STATE STATUES. THE MAKER'S NAME, TRADEMARK, OR OTHER IDENTIFICATION SYMBOL SHALL BE PLACED ON ALL ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES, AND EQUIPMENT USED OR INSTALLED UNDER THE PROVISIONS OF THIS CODE. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED AND LABELED FOR THE INTENDED USE AND SHALL BE INCLUDED IN A LIST PUBLISHED BY AN APPROVAL AGENCY.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email. hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY:
DRAWN BY: D. KWONG	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION
EDDINGTON LIFT STATION
COMMUNICATIONS DIAGRAM

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-6

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-06.dwg

EQUIPMENT AND DEVICE SCHEDULE

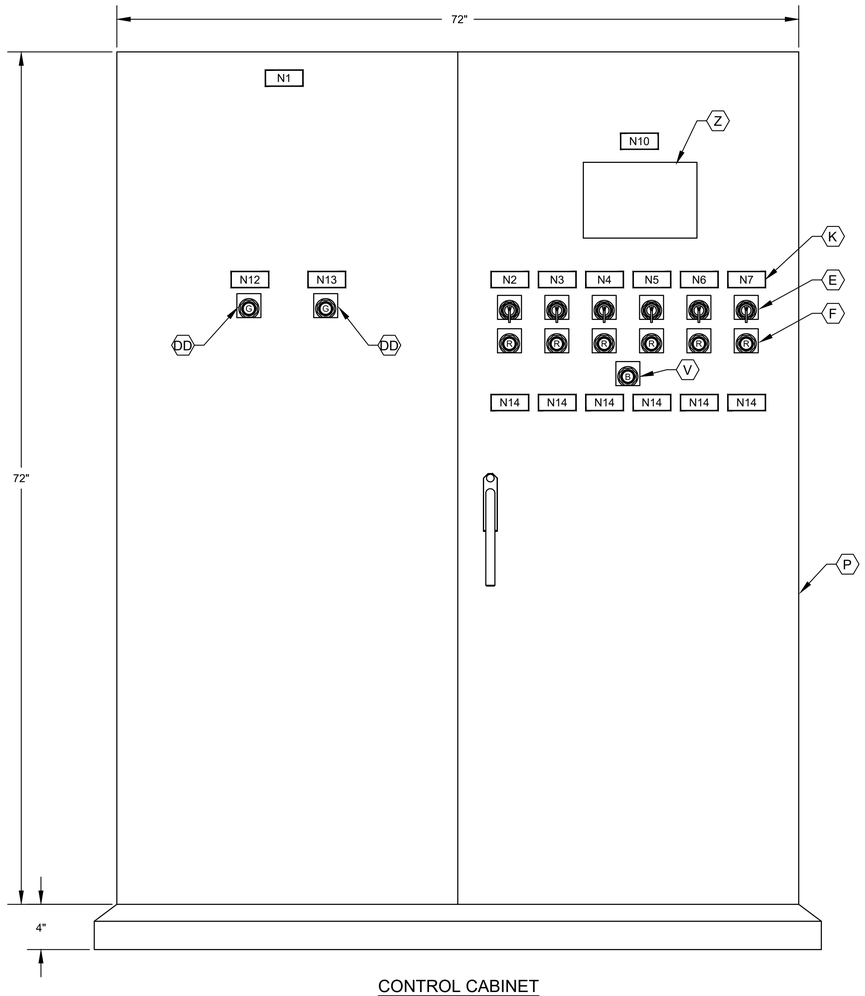
ITEM	QUANTITY	DESCRIPTION
A	1	SINGLE CHANNEL INTRINSICALLY SAFE RELAY
B	2	ANALOG SIGNAL ISOLATOR
C	6	PUMP PROTECTION MODULE
D	*	NOT USED
E	6	HAND-OFF-AUTO SWITCH, 3 POSITION, HEAVY-DUTY OIL TIGHT WITH 2 SETS OF CONTACT BLOCKS (PUMP CONTROL)
F	6	INDICATING LIGHT, HEAVY DUTY, OILTIGHT, RED, 24 VDC, LED, WITH "RUN" LEGEND
G	-	NOT USED
H	1	SWITCH FOR CABINET LIGHT, 120V, 20A, SPST
I	2	DUPLEX RECEPTACLE, 120V, 20A, 2 WIRE, GROUNDED, GFCI TYPE
J	1	24" LED STRIP LIGHT 120V SUITABLE FOR ZERO DEGREE OPERATION.
K	*	NAMEPLATES, SEE SPECIFICATIONS (SEE NAMEPLATE SCHEDULE)
L	2	PROGRAMMABLE LOGIC CONTROLLER WITH EXPANSION UNIT
M	*	CONTROL RELAY 24VDC RELAY WITH THREE FORM C CONTACTS AND 11 PIN SOCKET BASE
N	-	NOT USED
O	-	NOT USED
P	1	NEMA 12 GASKETED STEEL ENCLOSURES WITHOUT VENTS 72" H X 20" D X WIDTH AS REQUIRED
Q	*	TERMINAL BLOCK
R	1	WIRE DUCT 2" WIDE X 2" DEEP MINIMUM
S	1	GROUND BUS
T	1	COMMUNICATION ETHERNET SWITCH
U	9	CARTRIDGE
V	1	PUSHBUTTON, BLACK WITH RESET LEGEND
W	1	ET 200SP IM155 REMOTE I/O WITH EXPANSION UNIT
X	*	FUSED TERMINAL BLOCKS
Y	1	POWER SURGE PROTECTOR - CONTROL POWER
Z	1	PROGRAMMING SCREEN (OIT)
AA	*	120VAC SYSTEM FUSES
BB	1	120VAC - 24VDC POWER SUPPLY, 5A
CC	*	NOT USED
DD	2	INDICATING LIGHT, HEAVY DUTY, OILTIGHT, GREEN, 24VDC, LED WITH "BACKUP PLC" & "PRIMARY PLC" LEGEND
EE	2	ANALOG I/O SURGE SUPPRESSOR
FF	-	NOT USED

* - AS SCHEDULED

NAMEPLATE SCHEDULE

DESIGNATION	ENGRAVED
N1	PUMP STATION DESIGNATION
N2	PUMP NO. 1
N3	PUMP NO. 2
N4	PUMP NO. 3
N5	PUMP NO. 4
N6	PUMP NO. 5
N7	PUMP NO. 6
N8	NOT USED.
N9	NOT USED.
N10	PROGRAMMING SCREEN
N11	NOT USED.
N12	PRIMARY PLC
N13	BACKUP PLC
N14	MOTOR DATA

HORSEPOWER (OUTPUT) ----------
RPM AT FULL LOAD ----------
TIME RATING ----------
FREQUENCY ----------
NUMBER OF PHASES ----------
MODEL NUMBER ----------
RATED VOLTAGE ----------
SERVICE FACTOR ----------
FULL LOAD AMPS ----------
INSULATION CLAS ----------
NEMA DESIGN LETTER ----------
TEMPERATURE RISE ----------
NEMA FRAME SIZE ----------
DATE OF MANUFACTURE ----------
THERMO PROTECTION (IF REQUIRED) --
MOISTURE PROTECTION (IF REQUIRED)-



CONTROL CABINET
FRONT DOOR ELEVATION

NOTES:

1. NAMEPLATES SHALL BE MOUNTED TO PANELS USING STAINLESS STEEL HARDWARE.
2. REFER SPECIFICATIONS FOR ALL PANEL COMPONENTS.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION
EDDINGTON LIFT STATION
CONTROL CABINET EQUIPMENT LAYOUT & SCHEDULE

WBS NUMBER
R–001000–0035–4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
NTS

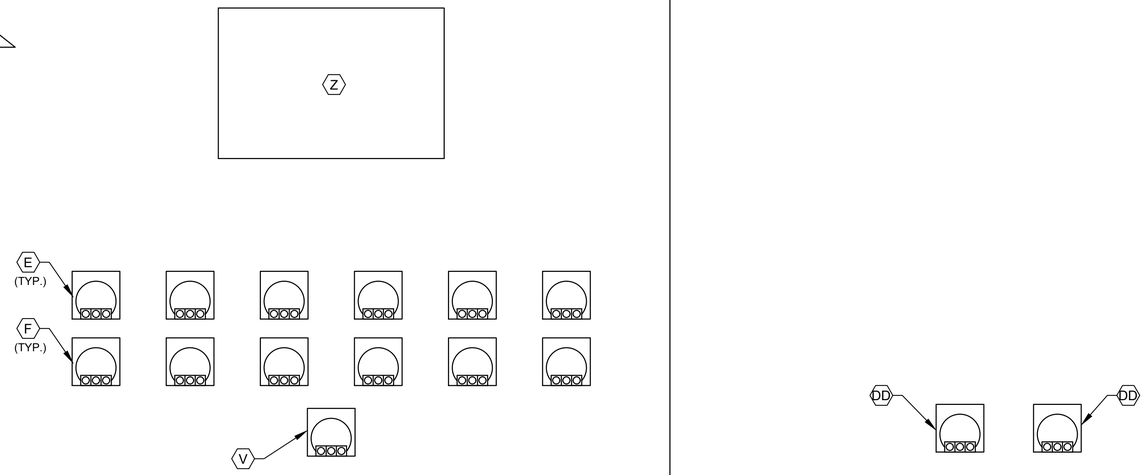
CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

SHEET NO. XX OF XX

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I–7

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-07.dwg



CONTROL CABINET
BACK DOOR ELEVATION

NOTES:

1. SEE SHEET I-7 FOR EQUIPMENT SCHEDULE.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

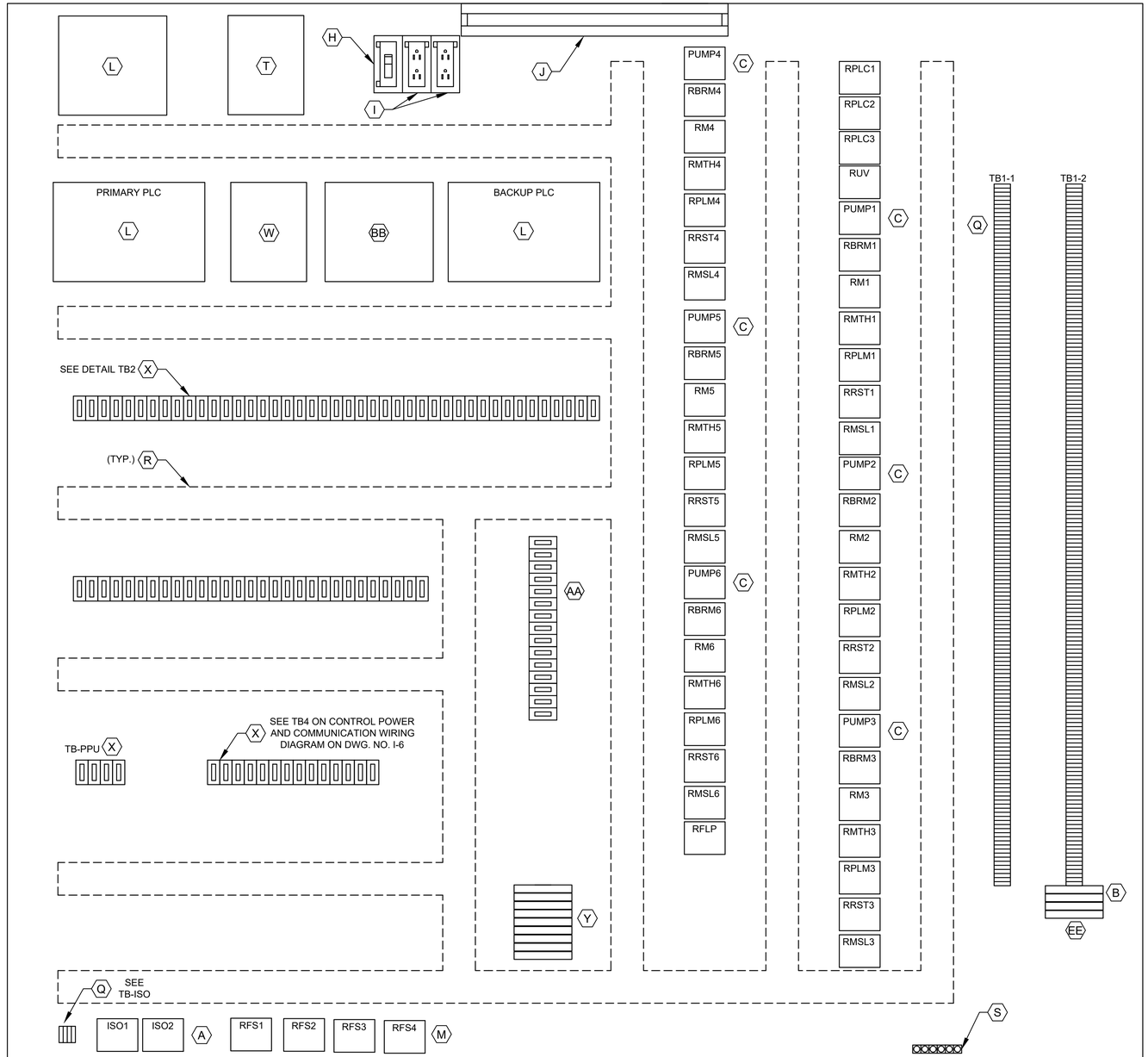
INSTRUMENTATION
EDDINGTON LIFT STATION
CONTROL CABINET
BACK DOOR ELEVATION

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-8

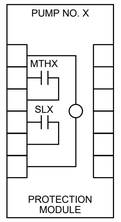
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-08.dwg



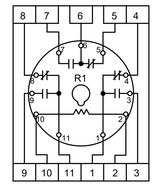
CONTROL PANEL ELEVATION

LEGEND	
TAG	DESCRIPTION
RMTH	MOTOR HIGH TEMPERATURE ALARM RELAY
RPLMP	PLC PUMP RUN RELAY
RRST	PUMP RESET AUX RELAY
RPLC	PLC MODE AUX RELAY
RM	PUMP RUN AUX RELAY
RUV	UNDER VOLTAGE RELAY
RBRM	BACKUP SYSTEM RUN RELAY
ISO	INTRINSICALLY SAFE RELAY
RFS	PUMP RUN FLOAT SWITCH RELAY
RMSL	MOTOR SEAL LEAK ALARM RELAY
RFLP	FLOAT LOCKOUT PUMP RELAY



PUMP PROTECTION MODULE DETAIL, ITEM C

NOTE: REPLACE "X" WITH APPROPRIATE PUMP NO.



RELAY DETAIL ITEM M

NOTES:

1. SEE SHEET I-7 FOR EQUIPMENT SCHEDULE.

DETAIL TB-ISO
1500
1501
1503
1504

DETAIL TB1-1
L1A
L1N
SPARE
3
3N
SPARE
49
50
51
52
53
54
1004
1
24V-
24V-
SPARE
1002
2
11
1001
1001A
12
1003
1003A
34
3N
19
20
102
103
3P1
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
SPARE
SPARE
202
203
3P2
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224

DETAIL TB1-1
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
SPARE
SPARE
SPARE
SPARE

DETAIL TB1-2
225
226
227
SPARE
SPARE
302
303
3P3
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
SPARE
SPARE
402
403
3P4
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427

DETAIL TB1-2
SPARE
SPARE
502
503
3P5
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
SPARE
SPARE
602
603
3P6
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
SPARE
SPARE

DETAIL TB2
36A
37A
50
52
54
52A
52A
54A
L+
M
35B
38B
41B
44B
SPARE
SPARE
47B
50B
53B
13B
13AB
13GB
L+
M
14B
14AB
14GB
SPARE
SPARE
L+
M
13
13A
13G
14
14A
14G
1M
2M
1L
3
30
32
34
37
38
41
33B
45
18B
SPARE

DETAIL TB2
100
112
113
114
115
117
118
119
120
121
122
123
124
125
126
SPARE
200
212
213
214
215
217
218
219
220
221
222
223
224
225
226
SPARE
300
312
313
314
315
317
318
319
320
321
322
323
324
325
326
SPARE

DETAIL TB2
400
412
413
414
415
417
418
419
420
421
422
423
424
425
426
SPARE
500
512
513
514
515
517
518
519
520
521
522
523
524
525
526
SPARE
600
612
613
614
615
617
618
619
620
621
622
623
624
625
626
SPARE

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-9

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

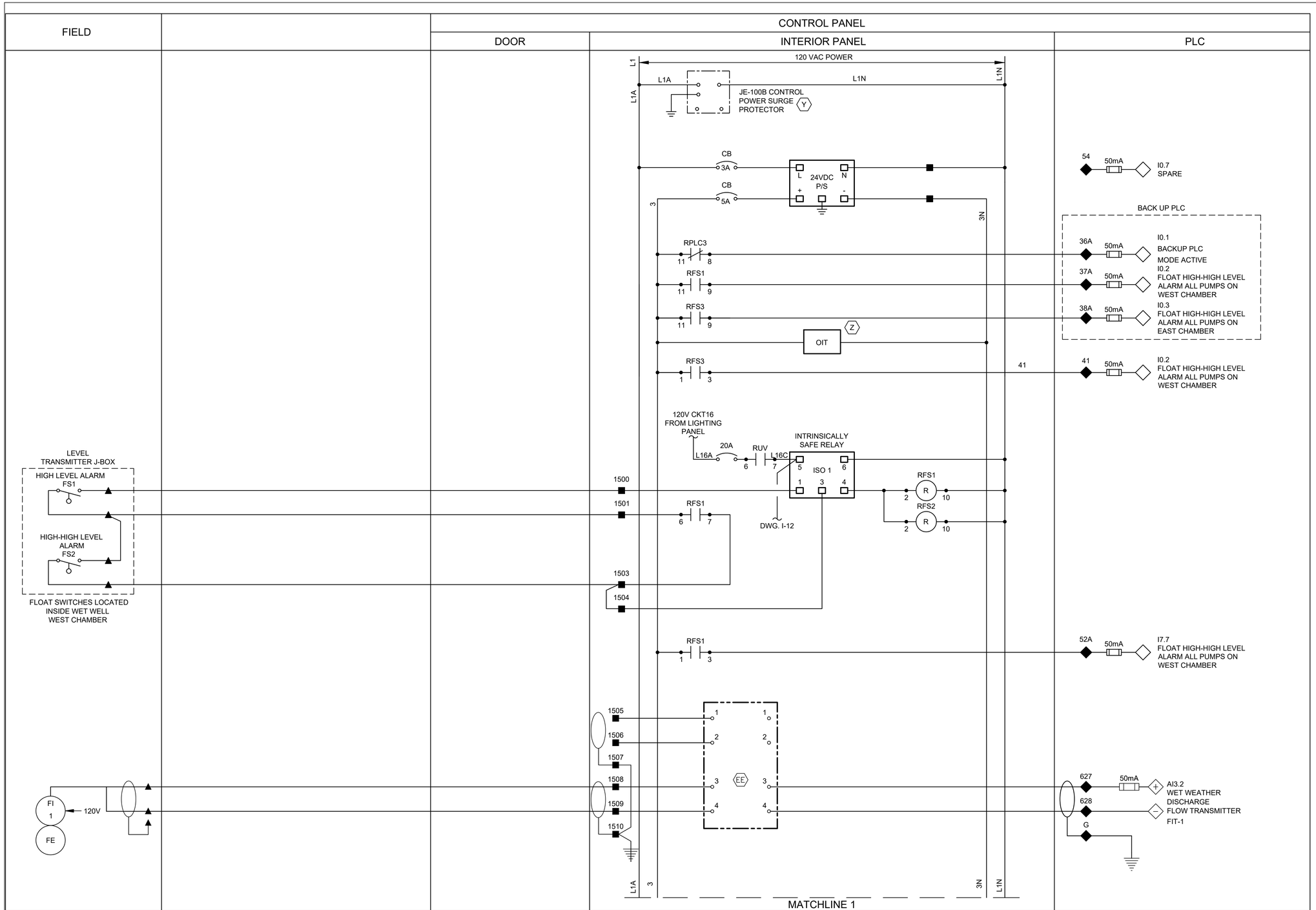
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION EDDINGTON LIFT STATION CONTROL CABINET EQUIPMENT LAYOUT

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-09.dwg

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-10.dwg



NOTES:

1. ALL FLOAT CONTROL CIRCUIT WIRES COLOR SHALL BE YELLOW.

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

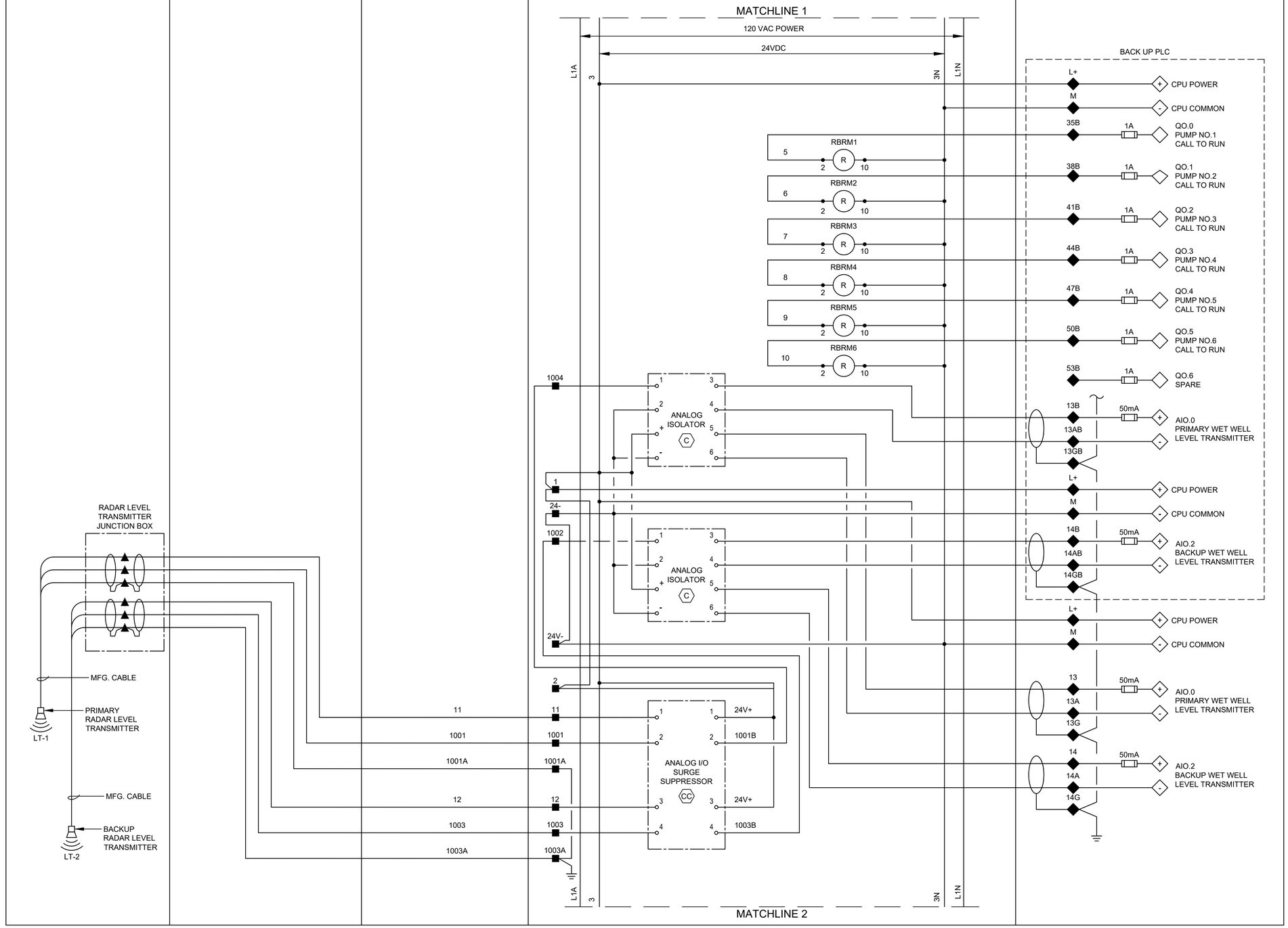
INSTRUMENTATION EDDINGTON LIFT STATION CONTROL PANEL CONTROL WIRING DIAGRAM–I

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I–10

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

FIELD	MOTOR CONTROL CENTER (INDOOR)	CONTROL PANEL		
		DOOR	INTERIOR PANEL	PLC



LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-11

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION
EDDINGTON LIFT STATION
CONTROL PANEL
CONTROL WIRING DIAGRAM–II

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-11.dwg

FIELD | MOTOR CONTROL CENTER | CONTROL PANEL: DOOR | INTERIOR PANEL | PLC

MATCHLINE 2

120 VAC POWER

24VDC

L1A | 24+ | 24- | L1N

LEVEL TRANSMITTER J-BOX
HIGH LEVEL ALARM FS3
HIGH-HIGH LEVEL ALARM FS4
FLOAT SWITCHES LOCATED INSIDE WET WELL EAST CHAMBER

1505
1506
1507
1508

DWG. I-10
L16C
INTRINSICALLY SAFE RELAY
ISO 2
5 6 1 3 4

RFS3 R 2 10
RFS4 R 2 10
RFS3 6 7

M4 M5 9
10
19
20

RFLP R 2 10

1L DO POWER
3 DO POWER

L1
N
MS

30 1A Q0.0 SPARE
32 50mA I0.0 PLC INTRUSION ALARM

34
34

RUV R 2 10
34 50mA I0.1 PHASE FAILURE UNDER VOLTAGE

RPLC1 R 2 10
38 50mA Q0.1 PLC MODE ACTIVE
1M DI COMMON
RPLC2 R 2 10
2M AI COMMON

YI-1 G PRIMARY PLC
RPLC3 R 2 10
RPLC3 6 5
YI-2 G BACKUP PLC

BACK UP PLC
33B 50mA Q0.6 SPARE

ØA ØB ØC
JE-100D PHASE MONITOR
7 8 9 10 11 12
N/C

YI-2 BUILDING EXTERIOR ALARM LIGHT R

45 50mA Q0.2 HIGH LEVEL ALARM

BACK UP PLC
18B 50mA I0.0 PHASE FAILURE UNDER VOLTAGE

RUV 11 9

L1A | 24+ | 24+ | L1N

MATCHLINE 3

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-12

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

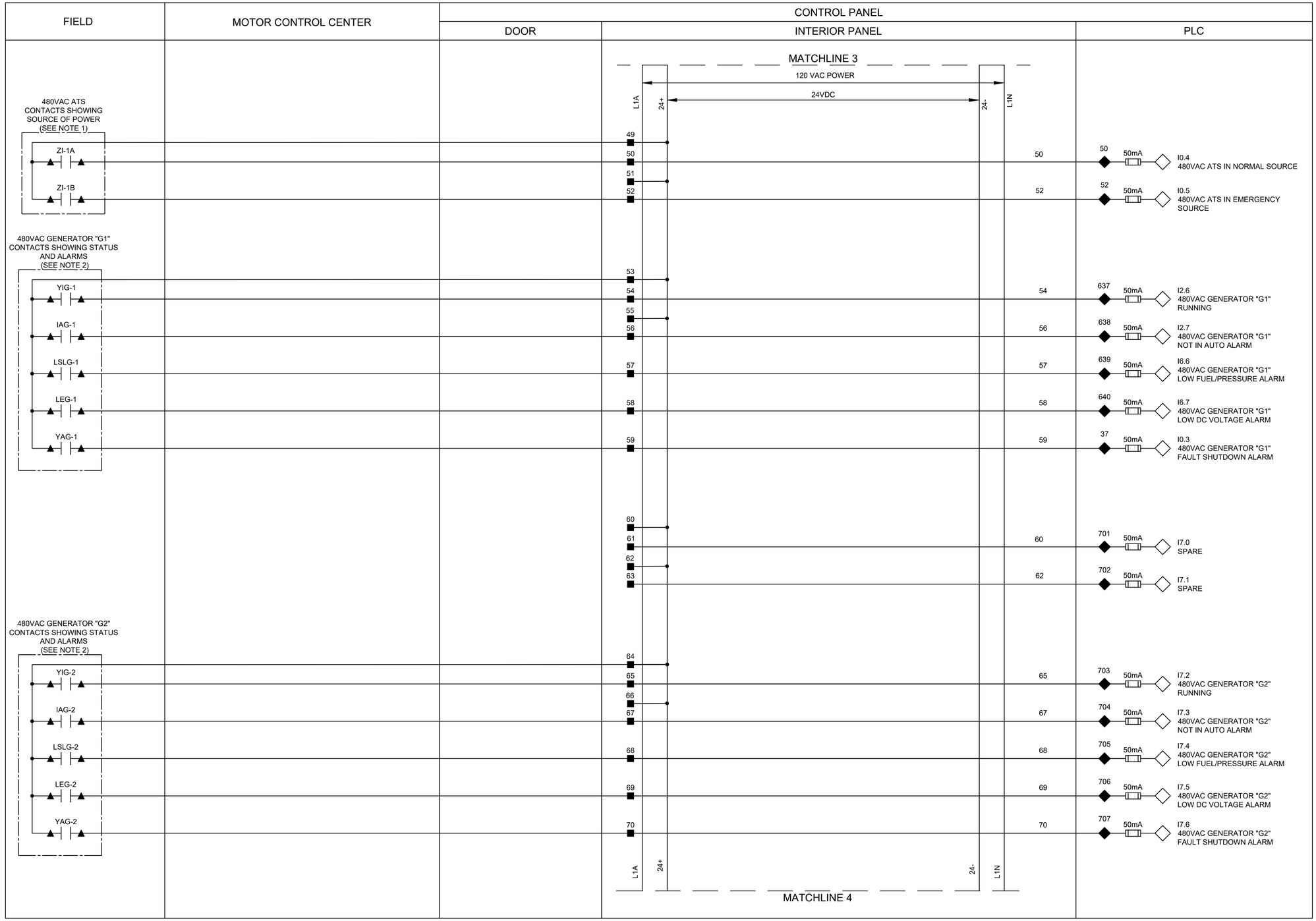
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION
EDDINGTON LIFT STATION
CONTROL PANEL
CONTROL WIRING DIAGRAM–III

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-12.dwg

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-13.dwg



NOTES:

1. PROVIDE AUTOMATIC TRANSFER SWITCH DRY CONTACT.
2. PROVIDE GENERATOR DRY CONTACT.

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-13

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

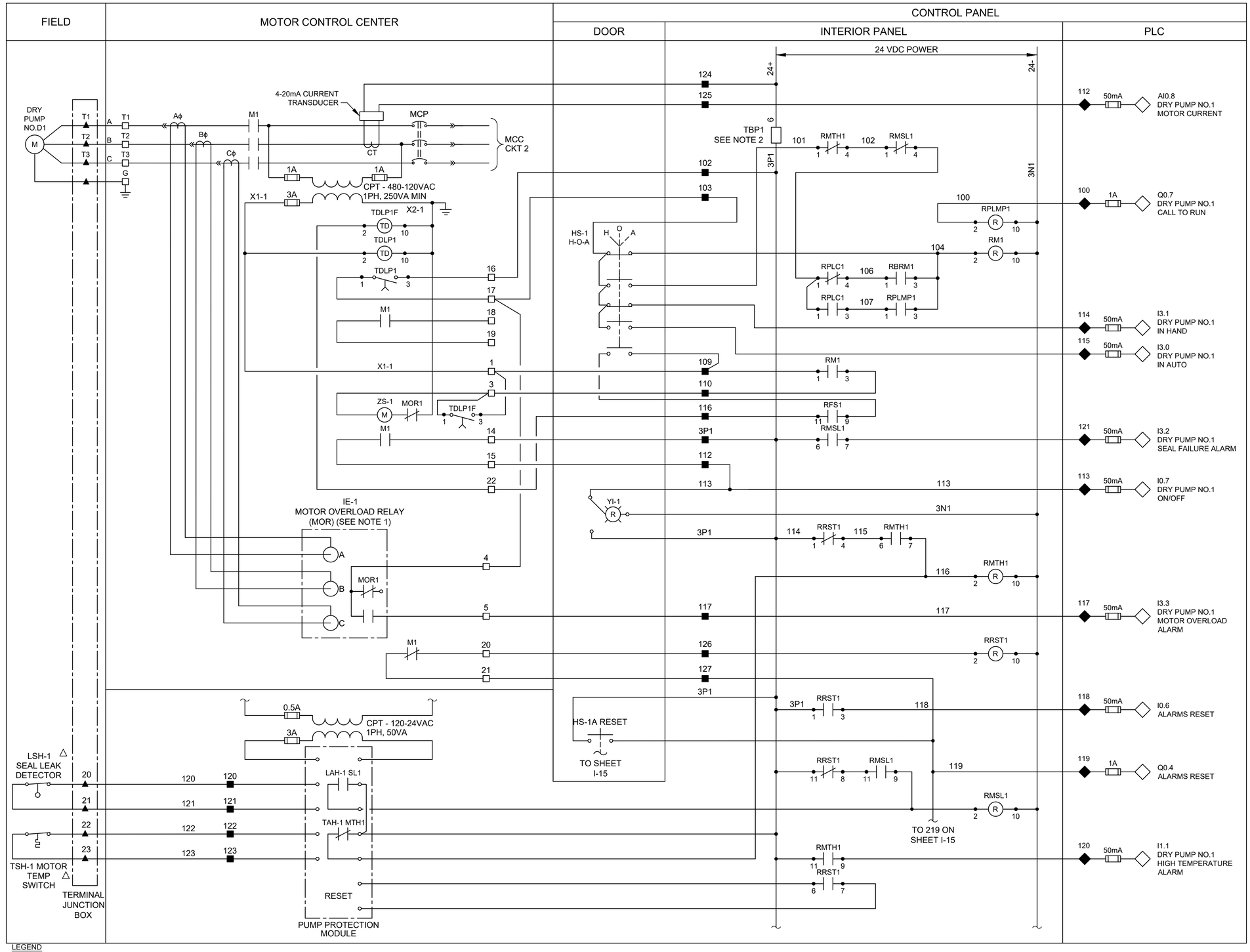
SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION
EDDINGTON LIFT STATION
CONTROL PANEL
CONTROL WIRING DIAGRAM – IV

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	



LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NOTES:

1. MOTOR OVERLOAD RELAY OUTPUT CONTACT SHOWN IS NORMALLY CLOSED WHEN RELAY IS DE-ENERGIZED, OPEN WHEN ENERGIZED, AND CLOSED WHEN IN ALARM. VERIFY OPERATION OF RELAY PROVIDED AND ADJUST CONNECTION OF RMOR AUXILIARY RELAYS.
2. FUSED TERMINAL ON TERMINAL BLOCK TB4 SEE CONTROL POWER AND COMMUNICATION WIRING DIAGRAM DRAWING NO. I-6.
3. ALL FLOAT CONTROL CIRCUIT WIRES COLOR SHALL BE YELLOW.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

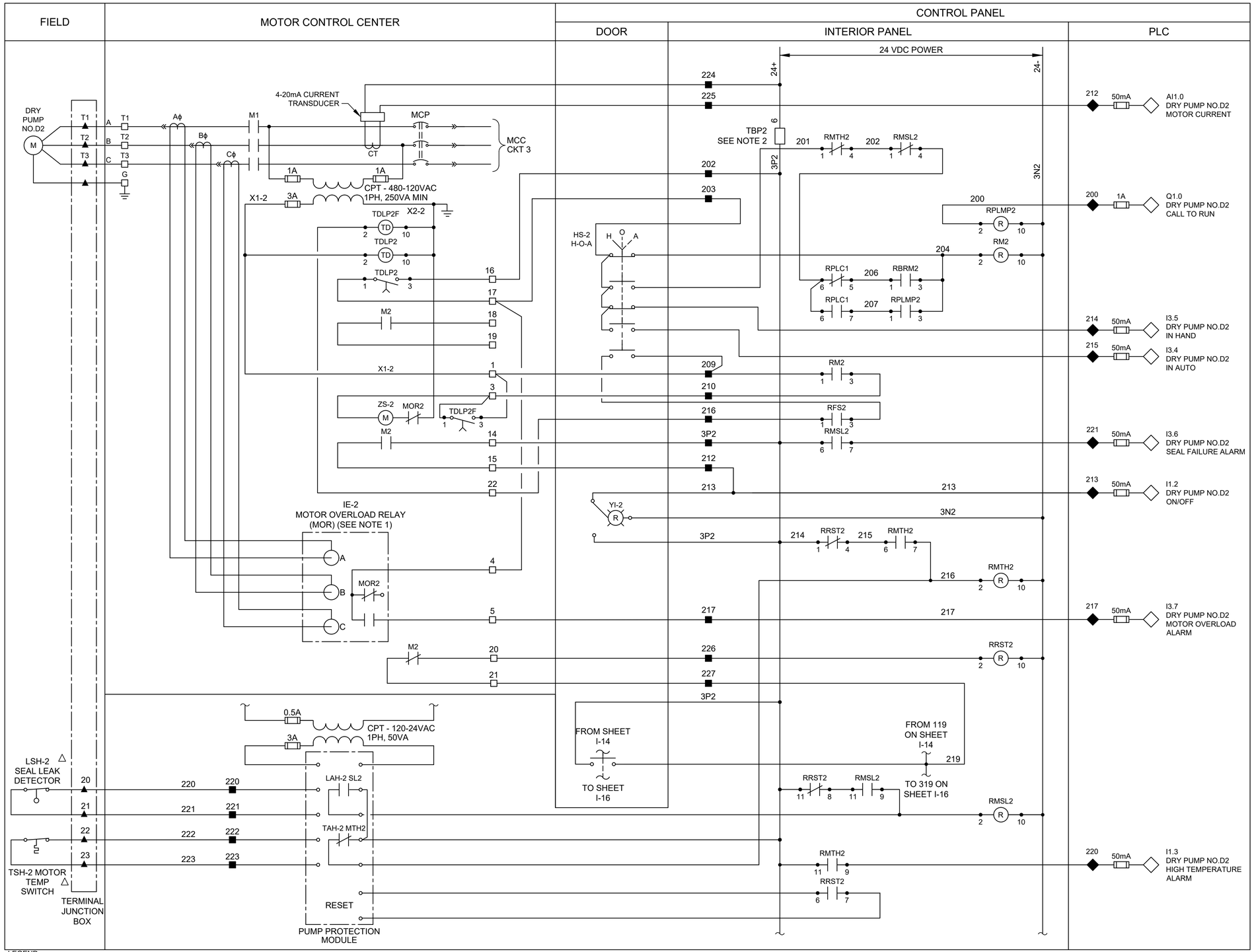
INSTRUMENTATION EDDINGTON LIFT STATION DRY PUMP NO.D1 CONTROL WIRING DIAGRAM

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-14

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-14.dwg



NOTES:

1. MOTOR OVERLOAD RELAY OUTPUT CONTACT SHOWN IS NORMALLY CLOSED WHEN RELAY IS DE-ENERGIZED, OPEN WHEN ENERGIZED, AND CLOSED WHEN IN ALARM. VERIFY OPERATION OF RELAY PROVIDED AND ADJUST CONNECTION OF RMOR AUXILIARY RELAYS.
2. FUSED TERMINAL ON TERMINAL BLOCK TB4 SEE CONTROL POWER AND COMMUNICATION WIRING DIAGRAM DRAWING NO. I-6.
3. ALL FLOAT CONTROL CIRCUIT WIRES COLOR SHALL BE YELLOW.

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION
EDDINGTON LIFT STATION
DRY PUMP NO.D2
CONTROL WIRING DIAGRAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
I-15

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-15.dwg

FIELD | MOTOR CONTROL CENTER | CONTROL PANEL — DOOR | INTERIOR PANEL | PLC

WET PUMP NO.1 (M) T1 T2 T3 G — A B C — 4-20mA CURRENT TRANSDUCER — Aϕ Bϕ Cϕ CT

M1 INPUT REACTOR — M2 VFD NO. 3 POWER MODULE — MCP — MCC CKT 4

1A 1A CPT - 480-120VAC 1PH, 250VA MIN — X1-3 3A X2-3

TDLP3 TD 2 10 — HS-3B VFD BYP. — SSCR3 — M3 X0 — M2 0X — MOR3 — M1 X0 X0

TDLP3F TD 2 10 — TDLP3F 1 3 — SSCR3 R 2 10

VFDR3 R 2 10

VFD RUN — SPEED SETPOINT — SPEED FEEDBACK — START/ STOP — VFD FAULT — VFD NO. 3 CONTROLLER BOARD

IE-3 MOTOR OVERLOAD RELAY (MOR) (SEE NOTE 1) — A B C — MOR3

M3 VFDR3 14 15 — VFDR3 30 31 32 — M3 VFDR3 33 20 21

TDLP3 1 3 16 17 — M3 18 19

HS-3 H-O-A (H O A)

24 VDC POWER — 24+ — 24-

TBP3 SEE NOTE 2 — 8 — 3P3 — 3N3

RPLMP3 R 2 10 — RMTH3 1 4 — RMSL3 1 4 — RM3 R 2 10 — RPLC1 11 8 — RBRM3 1 3 — RPLC1 11 9 — RPLMP3 1 3

RFS2 11 9 — RM3 1 3 — RMSL3 6 7 — YI-3 R — RRST3 1 4 — RMTH3 6 7 — RMTH3 R 2 10 — RRST3 R 2 10

RRST3 11 8 — RMSL3 11 9 — RMSL3 R 2 10 — RMTH3 11 9 — RRST3 6 7

FROM SHEET I-15 — TO SHEET I-17 — FROM 219 ON SHEET I-15 — TO 419 ON SHEET I-17

0.5A CPT - 120-24VAC 1PH, 50VA 3A

LSH-3 SEAL LEAK DETECTOR △ — TSH-3 MOTOR TEMP SWITCH △ — TERMINAL JUNCTION BOX — LAH-3 SL3 — TAH-3 MTH3 — RESET — PUMP PROTECTION MODULE

312	50mA	AI1.2	WET PUMP NO.1 MOTOR CURRENT
300	1A	Q1.1	WET PUMP NO.1 CALL TO RUN
314	50mA	I4.0	WET PUMP NO.1 IN HAND
315	50mA	I4.1	WET PUMP NO.1 IN AUTO
322	50mA	I6.2	WET PUMP NO.1 IN VFD MODE
323	50mA	AO0.4	WET PUMP NO.1 SPEED CONTROL
324	50mA	AI2.4	WET PUMP NO.1 SPEED INDICATION
321	50mA	I4.2	WET PUMP NO.1 SEAL FAILURE ALARM
313	50mA	I1.4	WET PUMP NO.1 ON/OFF
317	50mA	I4.3	WET PUMP NO.1 MOTOR OVERLOAD ALARM
320	50mA	I1.5	WET PUMP NO.1 HIGH TEMPERATURE ALARM

NOTES:

1. MOTOR OVERLOAD RELAY OUTPUT CONTACT SHOWN NORMALLY CLOSED WHEN RELAY IS DE-ENERGIZED, OPEN WHEN ENERGIZED, AND CLOSED WHEN IN ALARM. VERIFY OPERATION OF RELAY PROVIDED AND ADJUST CONNECTION OF RMOR AUXILIARY RELAYS.
2. FUSED TERMINAL ON TERMINAL BLOCK TB4 SEE CONTROL POWER AND COMMUNICATION WIRING DIAGRAM DRAWING NO. I-06.
3. ALL FLOAT CONTROL CIRCUIT WIRES COLOR SHALL BE YELLOW.

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

WARNING: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE (0 — 1)

DWG NO I-16

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

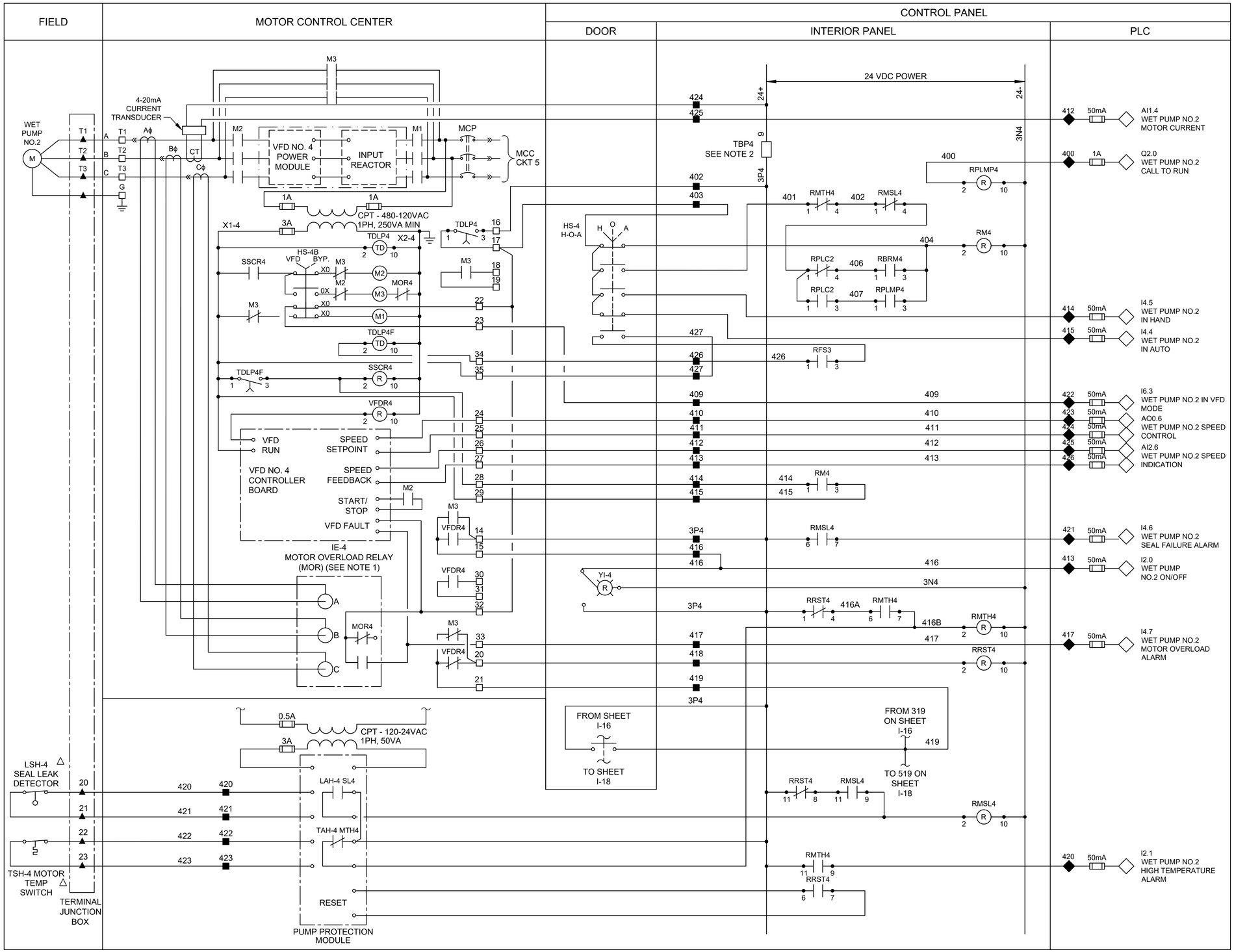
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION EDDINGTON LIFT STATION WET PUMP NO.1 CONTROL WIRING DIAGRAM

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-16.dwg



NOTES:

1. MOTOR OVERLOAD RELAY OUTPUT CONTACT SHOWN NORMALLY CLOSED WHEN RELAY IS DE-ENERGIZED, OPEN WHEN ENERGIZED, AND CLOSED WHEN IN ALARM. VERIFY OPERATION OF RELAY PROVIDED AND ADJUST CONNECTION OF RMOR AUXILIARY RELAYS.
2. FUSED TERMINAL ON TERMINAL BLOCK TB4 SEE CONTROL POWER AND COMMUNICATION WIRING DIAGRAM DRAWING NO. I-06.
3. ALL FLOAT CONTROL CIRCUIT WIRES COLOR SHALL BE YELLOW.

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION EDDINGTON LIFT STATION WET PUMP NO.2 CONTROL WIRING DIAGRAM

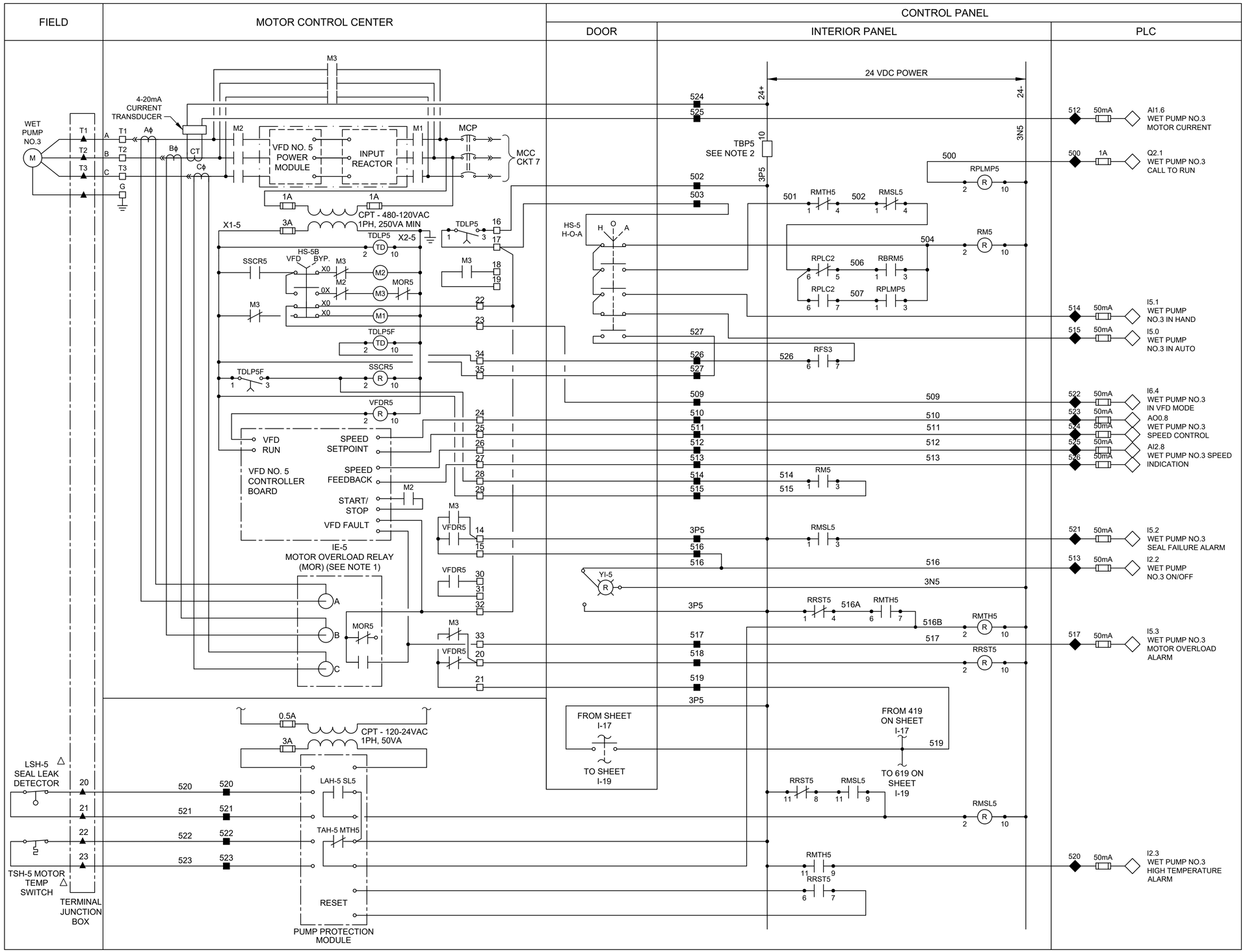
WBS NUMBER	R-001000-0035-4
DRAWING SCALE	NTS
	CITY OF HOUSTON PM
	NEIL BARNSDALE, P.E.
SHEET NO.	XX OF XX

FOR CITY OF HOUSTON USE ONLY

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-17

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-17.dwg



NOTES:

1. MOTOR OVERLOAD RELAY OUTPUT CONTACT SHOWN NORMALLY CLOSED WHEN RELAY IS DE-ENERGIZED, OPEN WHEN ENERGIZED, AND CLOSED WHEN IN ALARM. VERIFY OPERATION OF RELAY PROVIDED AND ADJUST CONNECTION OF RMOR AUXILIARY RELAYS.
2. FUSED TERMINAL ON TERMINAL BLOCK TB4 SEE CONTROL POWER AND COMMUNICATION WIRING DIAGRAM DRAWING NO. I-06.
3. ALL FLOAT CONTROL CIRCUIT WIRES COLOR SHALL BE YELLOW.

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-18

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION EDDINGTON LIFT STATION WET PUMP NO.W3 CONTROL WIRING DIAGRAM

WBS NUMBER	R-001000-0035-4
DRAWING SCALE	NTS
CITY OF HOUSTON PM	NEIL BARNSDALE, P.E.
SHEET NO.	XX OF XX

FOR CITY OF HOUSTON USE ONLY

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-18.dwg

FIELD | MOTOR CONTROL CENTER | CONTROL PANEL (DOOR | INTERIOR PANEL | PLC)

WET PUMP NO.W4
M
T1 T2 T3 G
A B C
4-20mA CURRENT TRANSDUCER
Aϕ Bϕ Cϕ CT
M3 M2 M1
VFD NO. 6 POWER MODULE
INPUT REACTOR
MCP
MCC CKT 8
1A 1A
CPT - 480-120VAC 1PH, 250VA MIN
X1-6 X2-6 3A
TDLP6 TDLP6F SSCR6 VFDR6
HS-6B VFD BYP.
X0 0X
MOR6
TDLP6F
VFD RUN
SPEED SETPOINT
SPEED FEEDBACK
START/ STOP
VFD FAULT
VFD NO. 6 CONTROLLER BOARD
IE-6 MOTOR OVERLOAD RELAY (MOR) (SEE NOTE 1)
A B C
0.5A 3A
CPT - 120-24VAC 1PH, 50VA
LSH-6 SEAL LEAK DETECTOR
TSH-6 MOTOR TEMP SWITCH
TERMINAL JUNCTION BOX
LAH-6 SL6
TAH-6 MTH6
RESET
PUMP PROTECTION MODULE

24 VDC POWER
24+ 24-
TBP6 SEE NOTE 2
3P6 3N6
HS-6 H-O-A
YI-6
FROM SHEET I-18
FROM 519 ON SHEET I-18
RMTH6 RMSL6 RPLMP6 RM6 RPLC2 RBRM6 RFS3 RFLP RRST6

612	50mA	AI1.8	WET PUMP NO.W4 MOTOR CURRENT
600	1A	Q2.2	WET PUMP NO.W4 CALL TO RUN
614	50mA	I5.5	WET PUMP NO.W4 IN HAND
615	50mA	I5.4	WET PUMP NO.W4 IN AUTO
622	50mA	I6.5	WET PUMP NO.W4 IN VFD MODE
623	50mA	AO1.0	WET PUMP NO.W4 SPEED CONTROL
624	50mA	AI3.0	WET PUMP NO.W4 SPEED INDICATION
625	50mA		
626	50mA		
621	50mA	I5.6	WET PUMP NO.W4 SEAL FAILURE ALARM
613	50mA	I2.4	WET PUMP NO.W4 ON/OFF
617	50mA	I5.7	WET PUMP NO.W4 MOTOR OVERLOAD ALARM
620	50mA	I2.5	WET PUMP NO.W4 HIGH TEMPERATURE ALARM

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NOTES:

1. MOTOR OVERLOAD RELAY OUTPUT CONTACT SHOWN NORMALLY CLOSED WHEN RELAY IS DE-ENERGIZED, OPEN WHEN ENERGIZED, AND CLOSED WHEN IN ALARM. VERIFY OPERATION OF RELAY PROVIDED AND ADJUST CONNECTION OF RMOR AUXILIARY RELAYS.
2. FUSED TERMINAL ON TERMINAL BLOCK TB4 SEE CONTROL POWER AND COMMUNICATION WIRING DIAGRAM DRAWING NO. I-06.
3. ALL FLOAT CONTROL CIRCUIT WIRES COLOR SHALL BE YELLOW.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

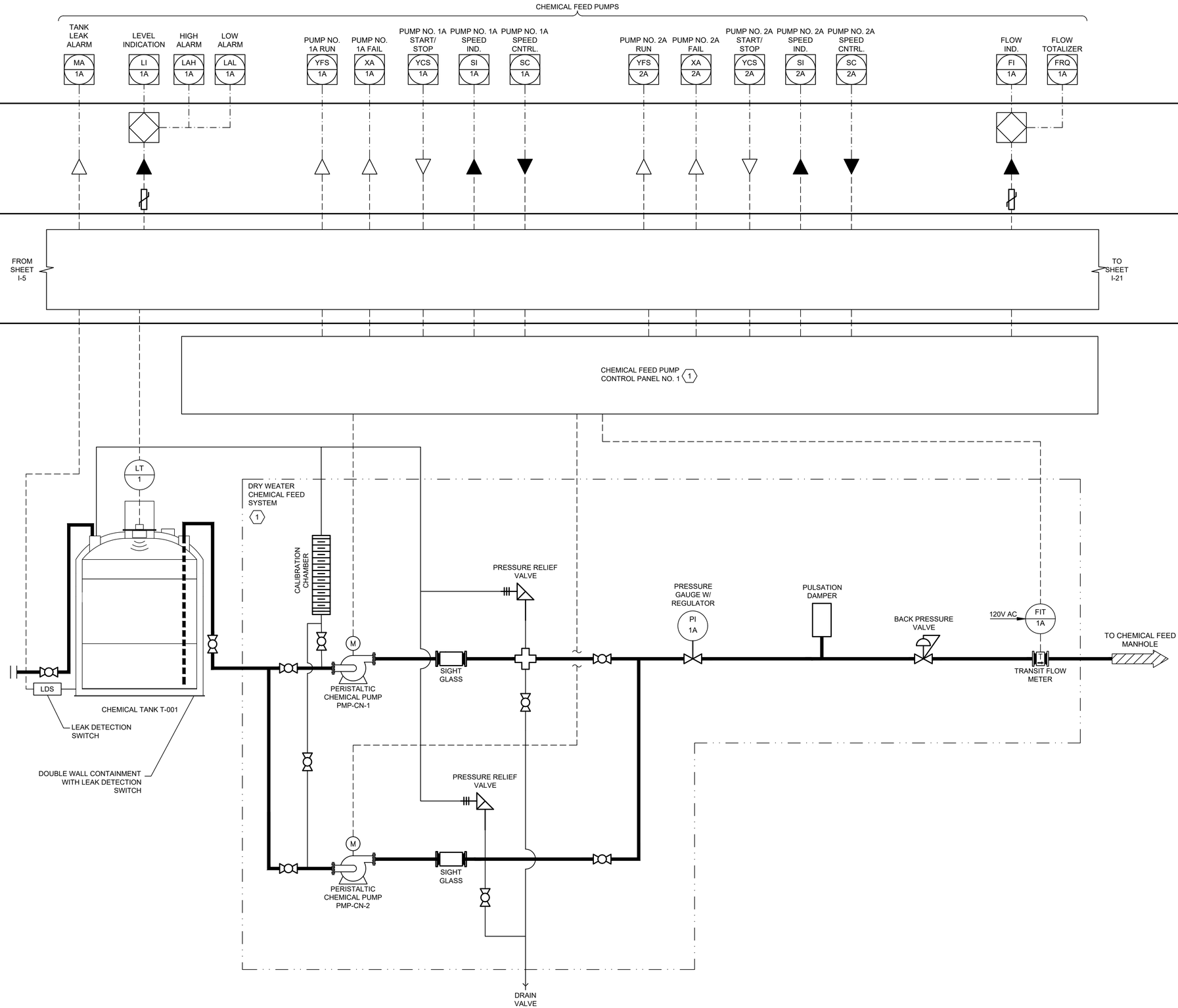
INSTRUMENTATION EDDINGTON LIFT STATION WET PUMP NO.W4 CONTROL WIRING DIAGRAM

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-19

PLOTTED: 1/8/2026 5:20 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-19.dwg



NOTES:

1. TO BE PROVIDED BY CHEMICAL FEED SYSTEM MANUFACTURER.

GENERAL NOTES:

1. NO ELECTRICAL MATERIAL, APPARATUS, DEVICES, APPLIANCES, FIXTURES, OR EQUIPMENT SHALL BE SOLD OR INSTALLED IN THE CITY UNLESS THEY ARE IN CONFORMANCE WITH THE PROVISIONS OF SECTION 508 CITY OF HOUSTON ELECTRICAL CODE, THE LAWS OF THE STATE OF TEXAS AND ANY APPLICABLE RULES AND REGULATIONS ISSUED UNDER THE AUTHORITY OF THE STATE STATUES. THE MAKER'S NAME, TRADEMARK, OR OTHER IDENTIFICATION SYMBOL SHALL BE PLACED ON ALL ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES, AND EQUIPMENT USED OR INSTALLED UNDER THE PROVISIONS OF THIS CODE. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED AND LABELED FOR THE INTENDED USE AND SHALL BE INCLUDED IN A LIST PUBLISHED BY AN APPROVAL AGENCY.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY:
DRAWN BY: D. KWONG	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

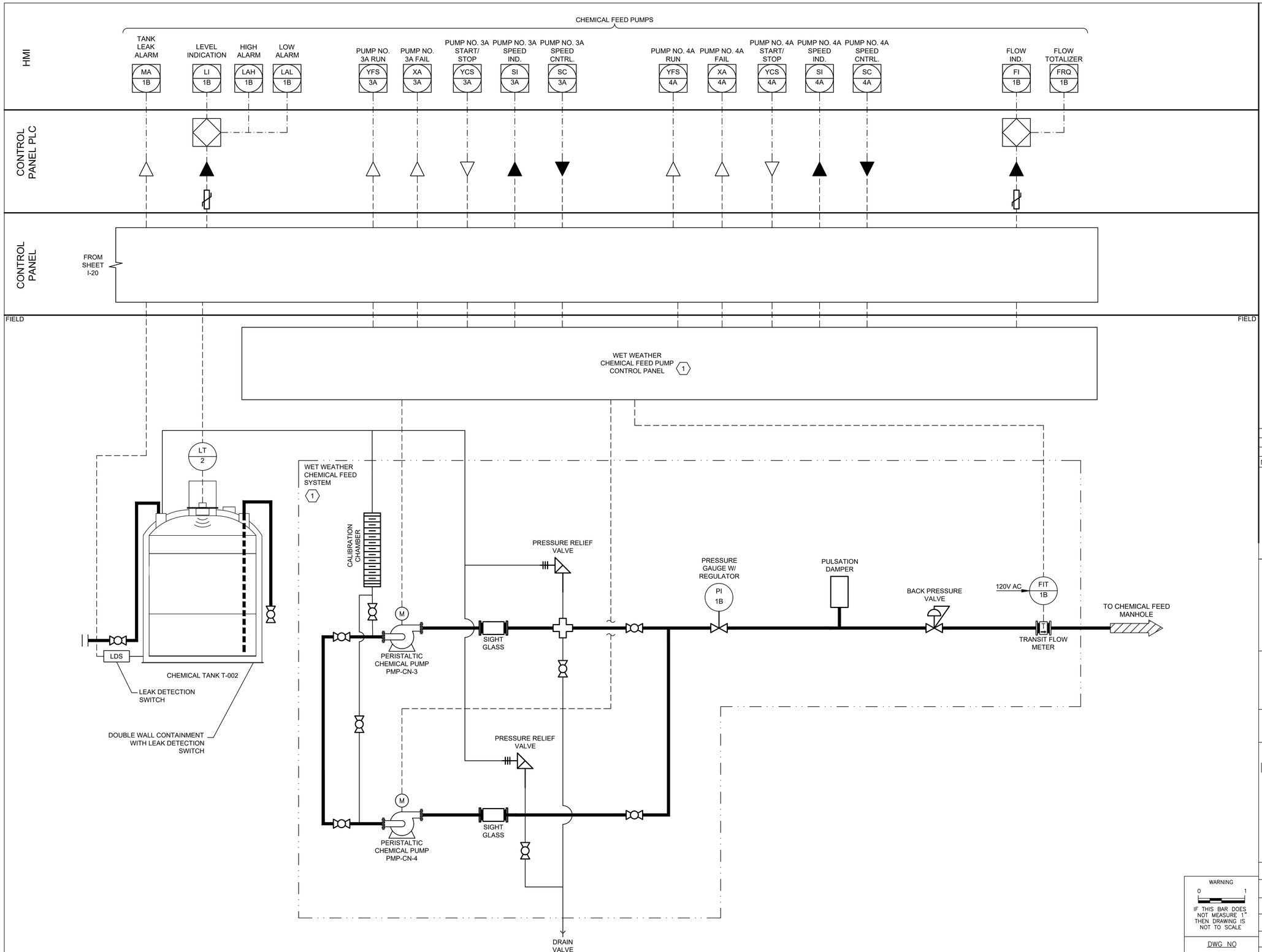
INSTRUMENTATION EDDINGTON LIFT STATION DRY WEATHER CHEMICAL FEED PUMPS P&ID DIAGRAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-20

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-20.dwg



NOTES:

1. TO BE PROVIDED BY CHEMICAL FEED SYSTEM MANUFACTURER.

GENERAL NOTES:

1. NO ELECTRICAL MATERIAL, APPARATUS, DEVICES, APPLIANCES, FIXTURES, OR EQUIPMENT SHALL BE SOLD OR INSTALLED IN THE CITY UNLESS THEY ARE IN CONFORMANCE WITH THE PROVISIONS OF SECTION 508 CITY OF HOUSTON ELECTRICAL CODE, THE LAWS OF THE STATE OF TEXAS AND ANY APPLICABLE RULES AND REGULATIONS ISSUED UNDER THE AUTHORITY OF THE STATE STATUES. THE MAKER'S NAME, TRADEMARK, OR OTHER IDENTIFICATION SYMBOL SHALL BE PLACED ON ALL ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES, AND EQUIPMENT USED OR INSTALLED UNDER THE PROVISIONS OF THIS CODE. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED AND LABELED FOR THE INTENDED USE AND SHALL BE INCLUDED IN A LIST PUBLISHED BY AN APPROVAL AGENCY.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY:
DRAWN BY: D. KWONG	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION
EDDINGTON LIFT STATION
WET WEATHER CHEMICAL FEED PUMPS P&ID DIAGRAM

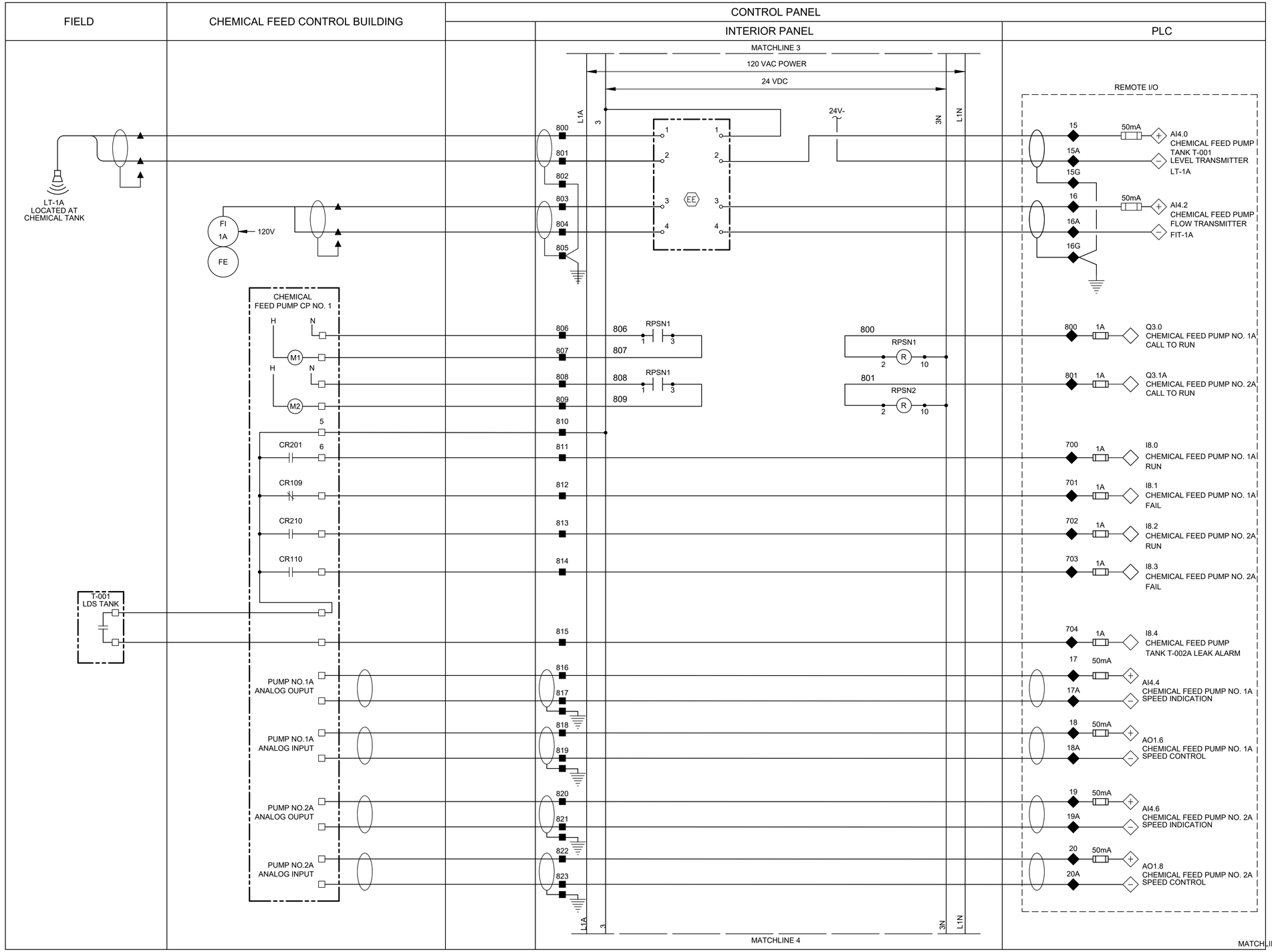
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
I-21

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-21.dwg

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-22.dwg
PLOT STYLE: GAI.ctb
PLOTTED: 1/8/2026 5:21 PM



LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT EQUIPMENT
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT CHEMICAL CONTROL PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

GENERAL NOTES:

1. NO ELECTRICAL MATERIAL, APPARATUS, DEVICES, APPLIANCES, FIXTURES, OR EQUIPMENT SHALL BE SOLD OR INSTALLED IN THE CITY UNLESS THEY ARE IN CONFORMANCE WITH THE PROVISIONS OF SECTION 508 CITY OF HOUSTON ELECTRICAL CODE, THE LAWS OF THE STATE OF TEXAS AND ANY APPLICABLE RULES AND REGULATIONS ISSUED UNDER THE AUTHORITY OF THE STATE STATUES. THE MAKER'S NAME, TRADEMARK, OR OTHER IDENTIFICATION SYMBOL SHALL BE PLACED ON ALL ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES, AND EQUIPMENT USED OR INSTALLED UNDER THE PROVISIONS OF THIS CODE. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED AND LABELED FOR THE INTENDED USE AND SHALL BE INCLUDED IN A LIST PUBLISHED BY AN APPROVAL AGENCY.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

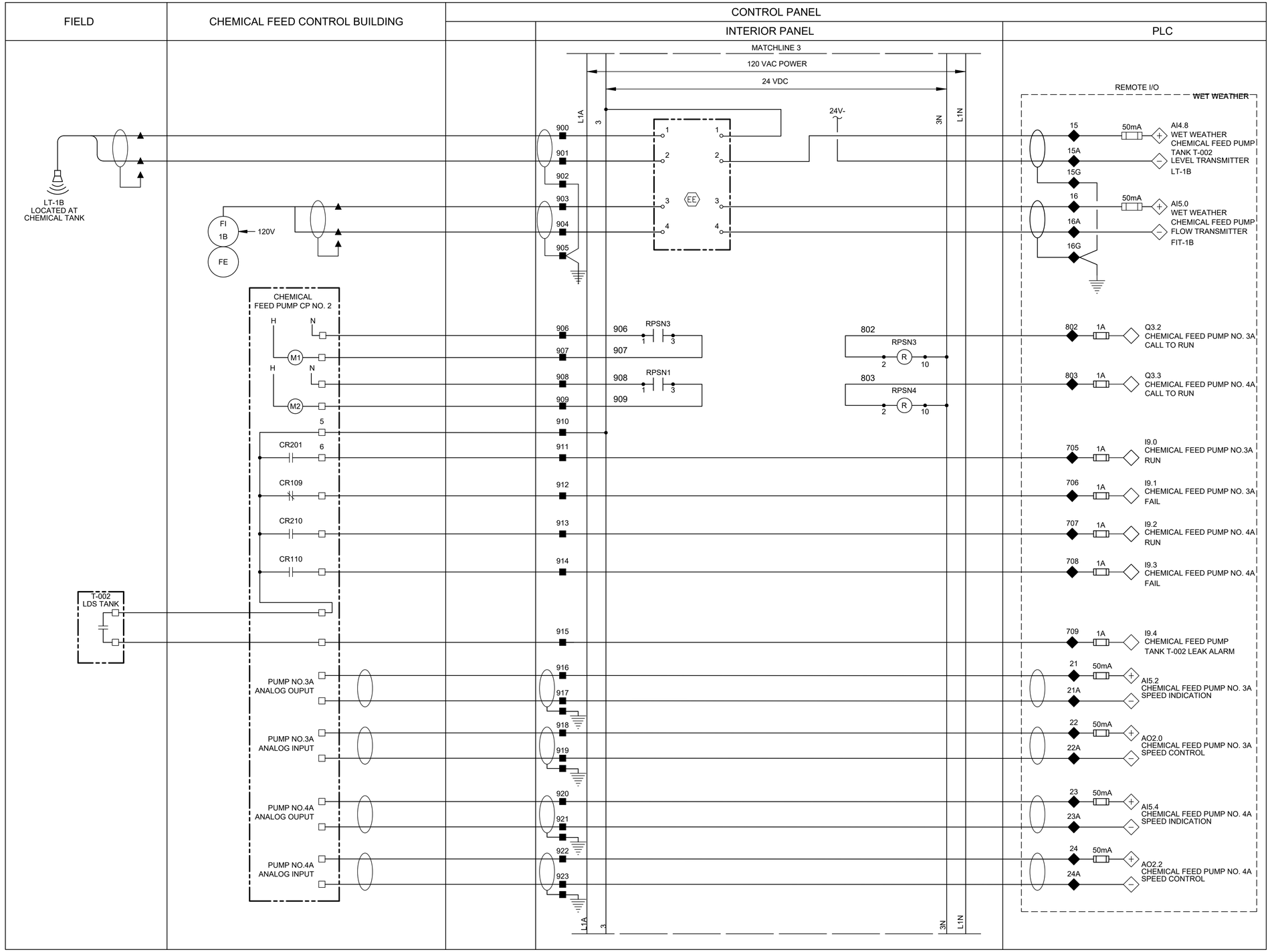
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

INSTRUMENTATION EDDINGTON LIFT STATION CHEMICAL FEED PUMPS NO. 1 & NO. 2 WIRING DIAGRAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-22

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	



LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT EQUIPMENT
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT CHEMICAL CONTROL PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

GENERAL NOTES:

1. NO ELECTRICAL MATERIAL, APPARATUS, DEVICES, APPLIANCES, FIXTURES, OR EQUIPMENT SHALL BE SOLD OR INSTALLED IN THE CITY UNLESS THEY ARE IN CONFORMANCE WITH THE PROVISIONS OF SECTION 508 CITY OF HOUSTON ELECTRICAL CODE, THE LAWS OF THE STATE OF TEXAS AND ANY APPLICABLE RULES AND REGULATIONS ISSUED UNDER THE AUTHORITY OF THE STATE STATUES. THE MAKER'S NAME, TRADEMARK, OR OTHER IDENTIFICATION SYMBOL SHALL BE PLACED ON ALL ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES, AND EQUIPMENT USED OR INSTALLED UNDER THE PROVISIONS OF THIS CODE. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED AND LABELED FOR THE INTENDED USE AND SHALL BE INCLUDED IN A LIST PUBLISHED BY AN APPROVAL AGENCY.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: D. KWONG	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

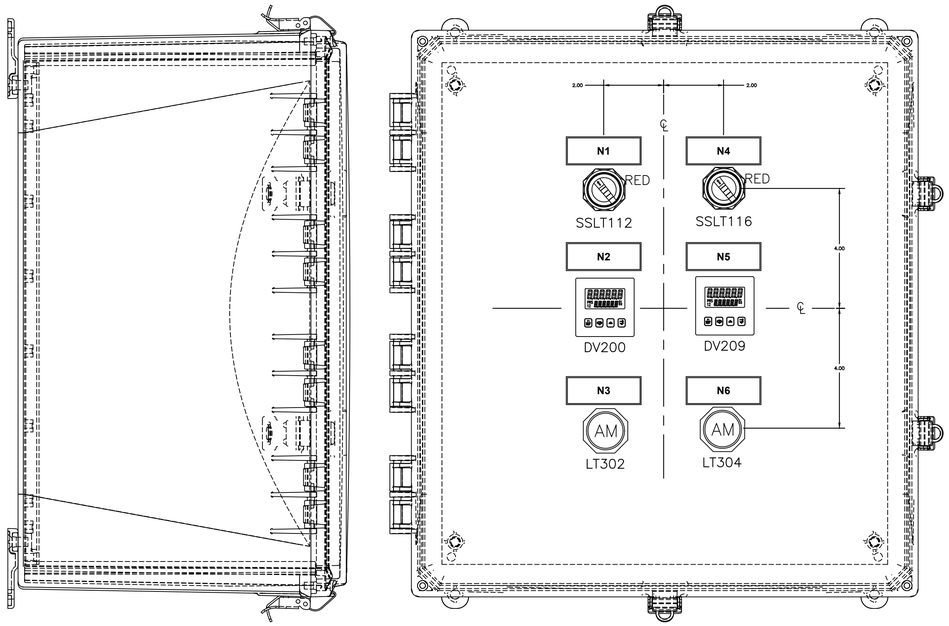
INSTRUMENTATION EDDINGTON LIFT STATION WET WEATHER CHEMICAL FEED PUMPS WIRING DIAGRAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I–23

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP–Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I–23.dwg



TYPE 4X ENCLOSURE

CHEMICAL FEED PUMP CONTROL PANEL NO. 1

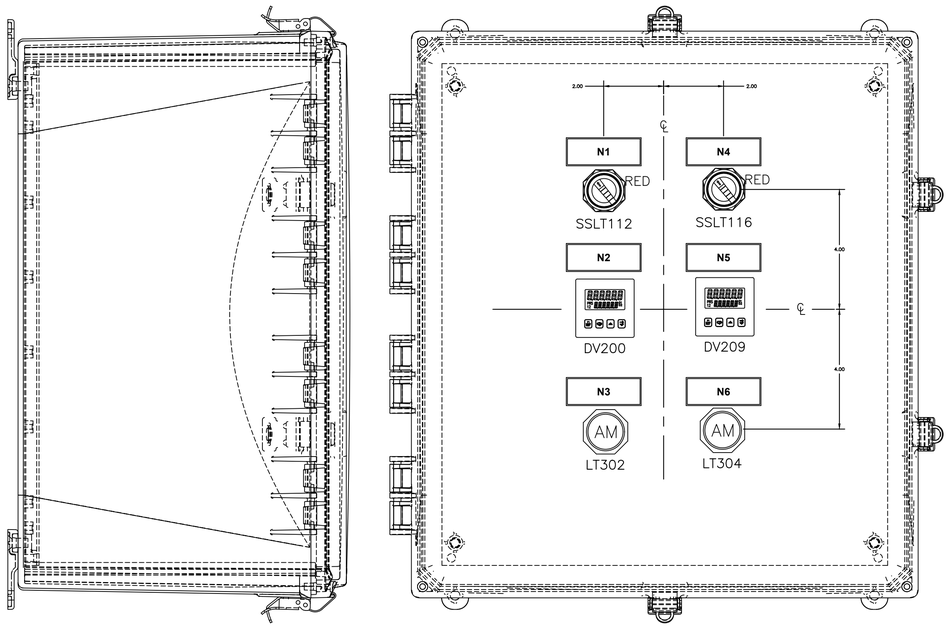
DETAIL 1 / NTS –

CHEMICAL FEED PUMP CONTROL PANEL NO. 1

DESIGNATION	ENGRAVED
N1	PUMP 1 HAND-OFF-REMOTE
N2	PUMP 1 SPEED
N3	PUMP 1 ALARM
N4	PUMP 2 HAND-OFF-REMOTE
N5	PUMP 2 SPEED
N6	PUMP 2 ALARM

GENERAL NOTES:

1. NO ELECTRICAL MATERIAL, APPARATUS, DEVICES, APPLIANCES, FIXTURES, OR EQUIPMENT SHALL BE SOLD OR INSTALLED IN THE CITY UNLESS THEY ARE IN CONFORMANCE WITH THE PROVISIONS OF SECTION 508 CITY OF HOUSTON ELECTRICAL CODE, THE LAWS OF THE STATE OF TEXAS AND ANY APPLICABLE RULES AND REGULATIONS ISSUED UNDER THE AUTHORITY OF THE STATE STATUES. THE MAKER'S NAME, TRADEMARK, OR OTHER IDENTIFICATION SYMBOL SHALL BE PLACED ON ALL ELECTRICAL MATERIALS, APPARATUS, DEVICES, APPLIANCES, FIXTURES, AND EQUIPMENT USED OR INSTALLED UNDER THE PROVISIONS OF THIS CODE. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE LISTED AND LABELED FOR THE INTENDED USE AND SHALL BE INCLUDED IN A LIST PUBLISHED BY AN APPROVAL AGENCY.



TYPE 4X ENCLOSURE

CHEMICAL FEED PUMP CONTROL PANEL NO. 2

DETAIL 2 / NTS –

WCHEMICAL FEED PUMP CONTROL PANEL NO. 2

DESIGNATION	ENGRAVED
N1	PUMP 3 HAND-OFF-REMOTE
N2	PUMP 3 SPEED
N3	PUMP 3 ALARM
N4	PUMP 4 HAND-OFF-REMOTE
N5	PUMP 4 SPEED
N6	PUMP 4 ALARM

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

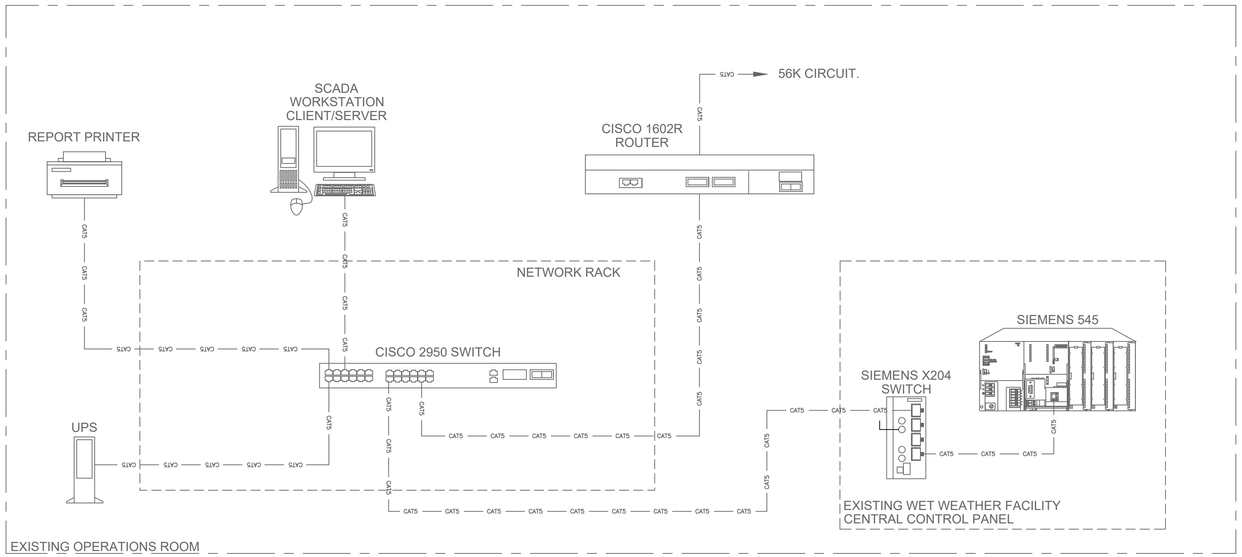
INSTRUMENTATION
EDDINGTON LIFT STATION
CHEMICAL FEED PUMPS
CONTROL PANEL

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
I-24

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Eddington\H8111_I-24.dwg



NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

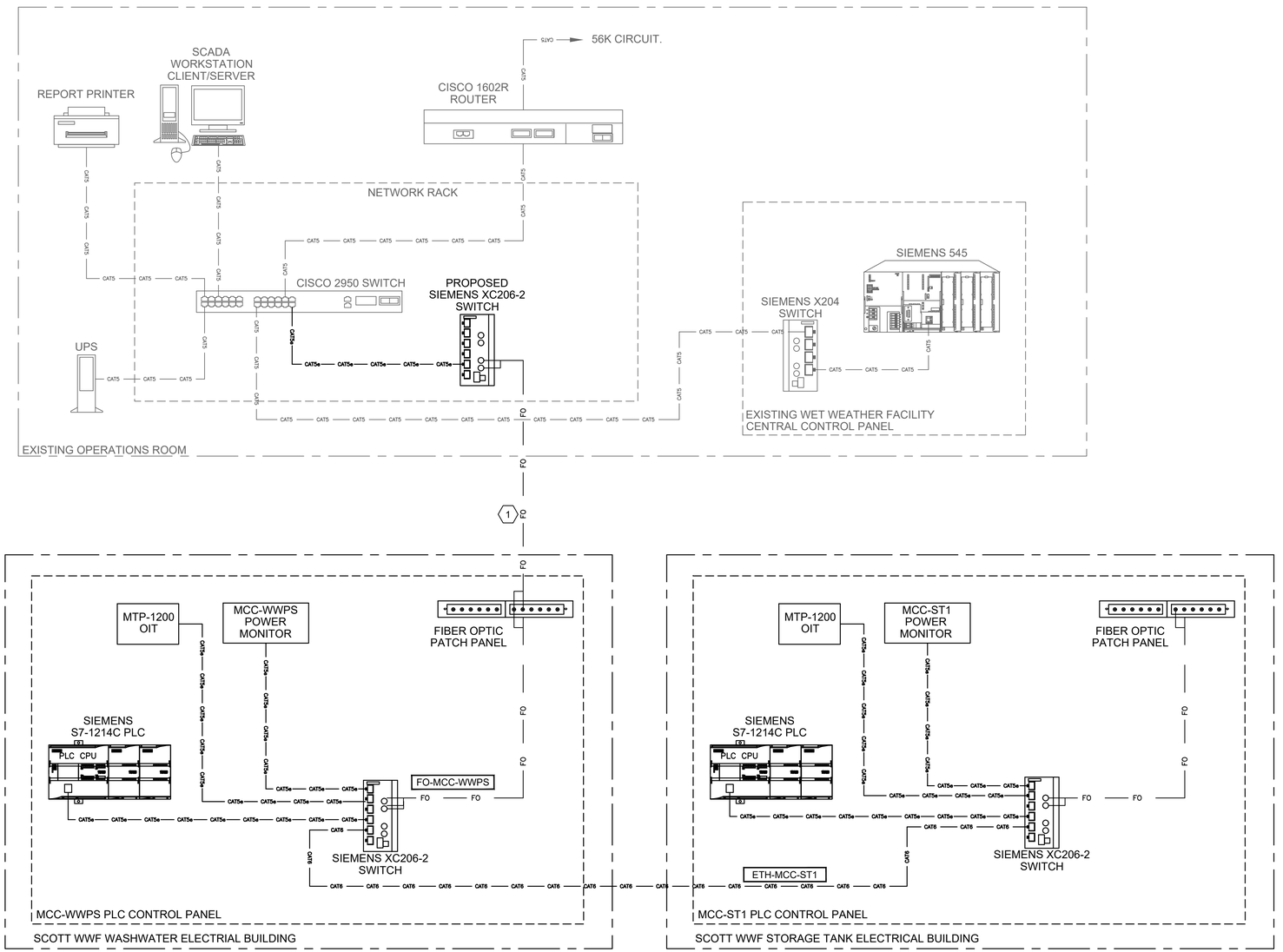
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
EXISTING OVERALL NETWORK DIAGRAM

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I–25

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP–Ardurra))\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I–25.dwg
PLOT STYLE: GAI.ctb
PLOTTED: 1/8/2026 5:21 PM



NOTES BY SYMBOL "⟨#⟩":

⟨1⟩ 12 STRANDS SINGLE MODE FIBER OPTIC CABLE.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
PROPOSED OVERALL NETWORK DIAGRAM

WBS NUMBER: R-001000-0035-4

FOR CITY OF HOUSTON USE ONLY

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

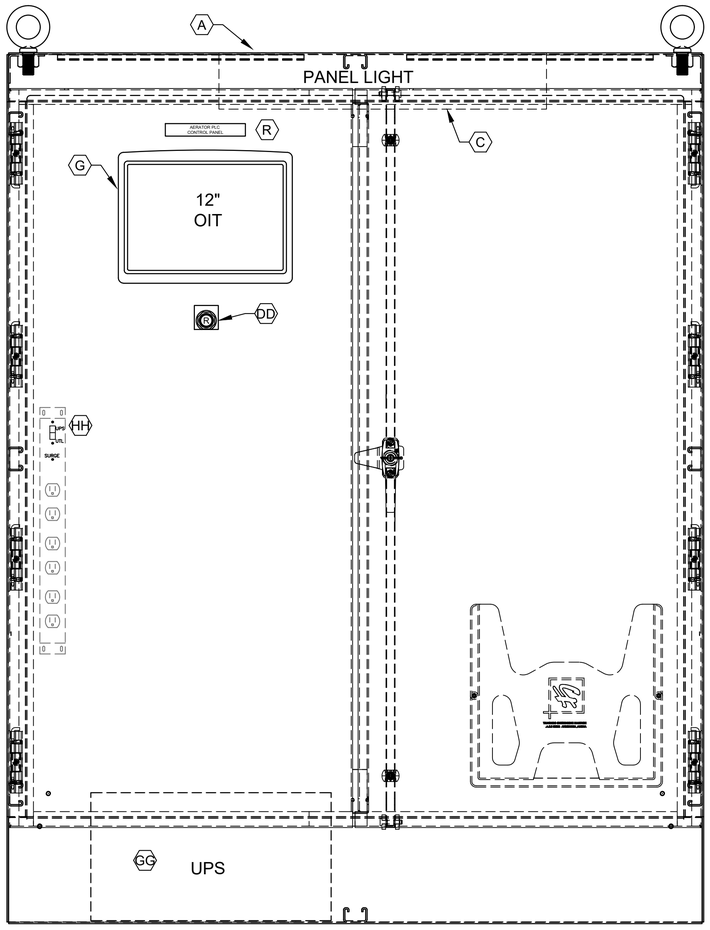
DRAWING SCALE: NTS

CITY OF HOUSTON PM: NEIL BARNSDALE, P.E.

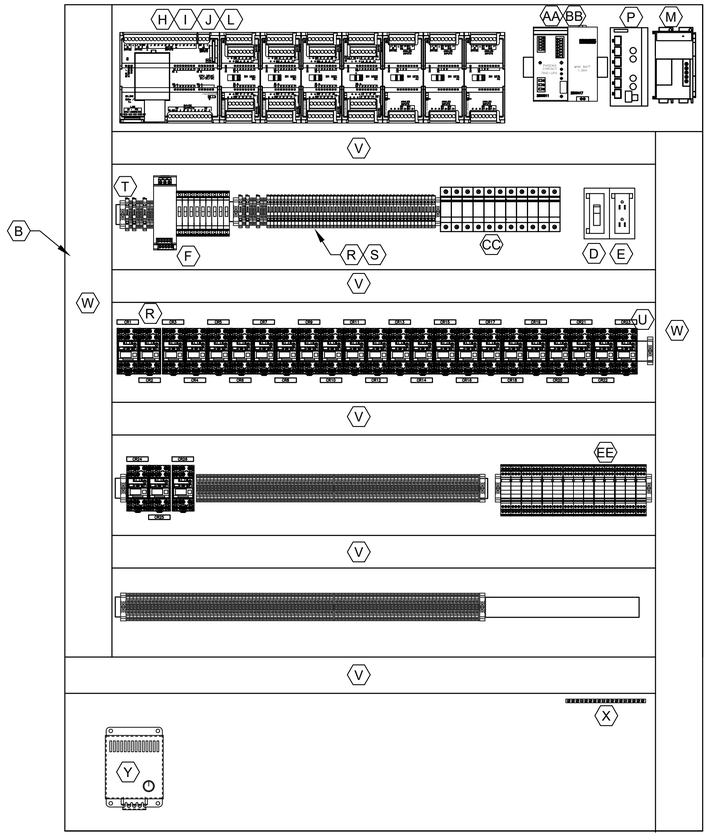
DWG NO: I-26

SHEET NO. XX OF XX

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-26.dwg



PLC CONTROL PANEL
FRONT VIEW
ELEVATION



PLC CONTROL PANEL
INTERIOR VIEW
ELEVATION

MCC-WWPS PLC CONTROL PANEL
EQUIPMENT & DEVICE SCHEDULE

ITEM	QUANTITY	DESCRIPTION
A	1	NEMA 12 3-POINT LATCH ENCLOSURE WITHOUT VENTS, 72"H x 48"W x 18"D, HOFFMAN A724818FSD
B	1	BACK PANEL 60"H x 44"W, PAINTED WHITE, HOFFMAN A72P48
C	1	6500K COOL WHITE, 400 LUMENS, 20" IN LENGTH LED LIGHT
D	1	SWITCH FOR CABINET LIGHT, 120V, 20A, SPST
E	1	DUPLEX RECEPTACLE, 120V, 20A, 2 WIRE, GROUNDED
F	1	SURGE PROTECTOR - 120VAC CONTROL POWER
G	1	12" TOUCH PANEL (OIT) SIEMENS MTP-1200
H	1	SIMATIC 1200, CPU-1214C, 14DI, 10DO RELAY, 2AI 24VDC POWER-6ES7214-1HG40-0XB0
I	1	MICRO MEMORY CARD, 4MB-SIEMENS 6ES7954-8LC02-0AA0
J	3	8-POINT ANALOG INPUT MODULE-SIEMENS 6ES7231-4HF32-0XB0
K	-	NOT USED
L	3	SIEMENS 16-POINT DIGITAL INPUT MODULE, 24VDC. SIEMENS 6ES7221-1BH32-0XB0
M	1	SIEMENS 16-POINT DIGITAL OUTPUT MODULE, 24VDC SIEMENS 6ES7222-1BH32-0XB0
N	1	5 AMP, 24VDC POWER SUPPLY PHOENIX CONTACT P/N 2866750
P	1	6 PORTS COPPER / 2 PORTS F/O ETHERNET SWITCH RJ45 SIEMENS XC206-2
Q	*	TERMINAL BLOCK
R	*	FUSED TERMINAL BLOCKS
S	*	FUSE (SIZE AS SCHEDULED)
T	*	END STOP
U	16	3 POLE CONTROL RELAY, 24 VDC WITH THREE FORM C CONTACTS AND 11 PIN SOCKET BASE
V	*	WIRE DUCT 2" WIDE X 3" DEEP MINIMUM, WITH COVER
W	*	WIRE DUCT 3" WIDE X 3" DEEP MINIMUM, WITH COVER
X	1	GROUND BUS
Y	1	120VAC PANEL HEATER W/BUILT IN T-STAT HOFFMAN MODEL DAH2001A
Z	1	NOT USED
AA	1	TRIO-UPS/1AC/24DC/5 (5 AMP 24 VDC POWER SUPPLY WITH UPS) PHOENIX CONTACT P/N 2866611
BB	1	MINI-BAT/24DC/1.3AH (BATTERY FOR TRIO UPS) PHOENIX CONTACT P/N 32381110
CC	12	SINGLE POLE DIN MOUNTED CIRCUIT BREAKER (2) 15A, (3) 10A, (4) 6A, (2) 2A
DD	1	ALARM RESET PUSHBUTTON
EE	*	ANALOG SIGNAL SURGE ARRESTER, PHOENIX CONTACT
FF	*	DIGITAL SIGNAL SURGE ARRESTER, PHOENIX CONTACT
GG	1	1.5KVA TOWER UPS W/ RELAY OUTPUT CARD, EATON OR APPROVED EQUAL
HH	1	MAINTENANCE BYPASS SWITCH FOR UPS, LOWELL POWER P/N UPS-XBDM-20RCD

* - AS SCHEDULED

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC–WWPS PLC CONTROL PANEL LAYOUT AND ELEVATION

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I–27

WBS NUMBER
R–001000–0035–4

DRAWING SCALE
NTS

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

SHEET NO. XX OF XX

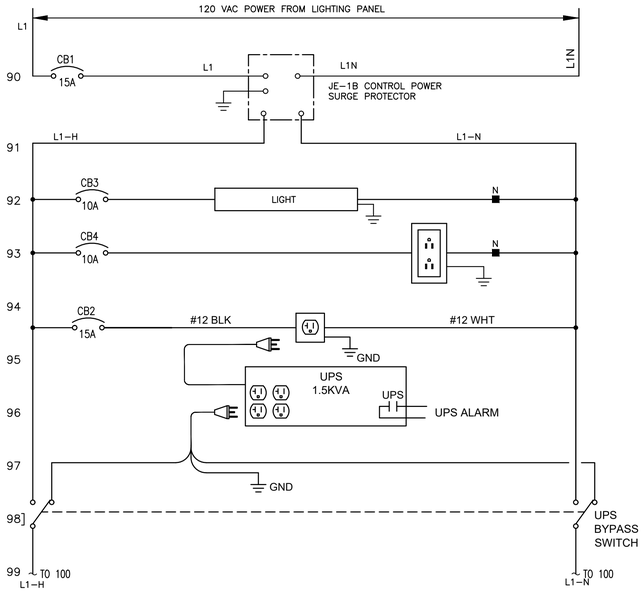
FOR CITY OF HOUSTON USE ONLY

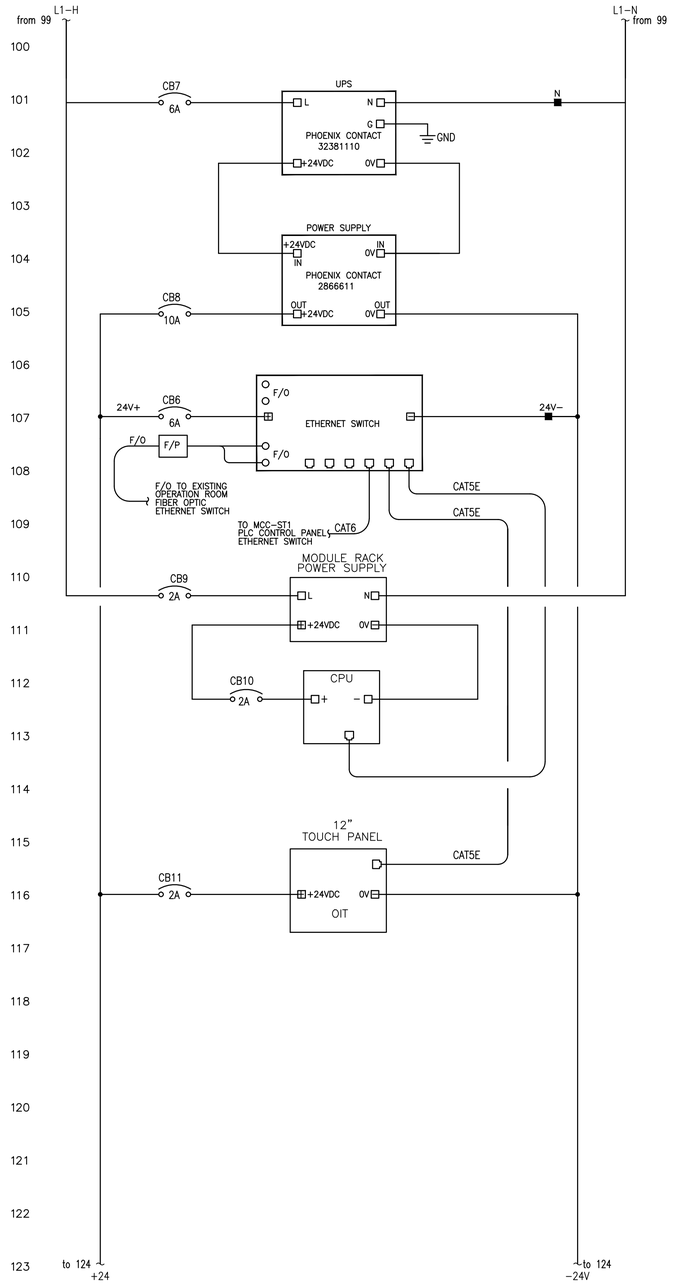
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP–Ardurra))\6 Drawings\Instrumentation And Control\1Working\Scott Area WWF\H8111_I–27.dwg
PLOT STYLE: GAI.ctb
PLOTTED: 1/8/2026 5:21 PM

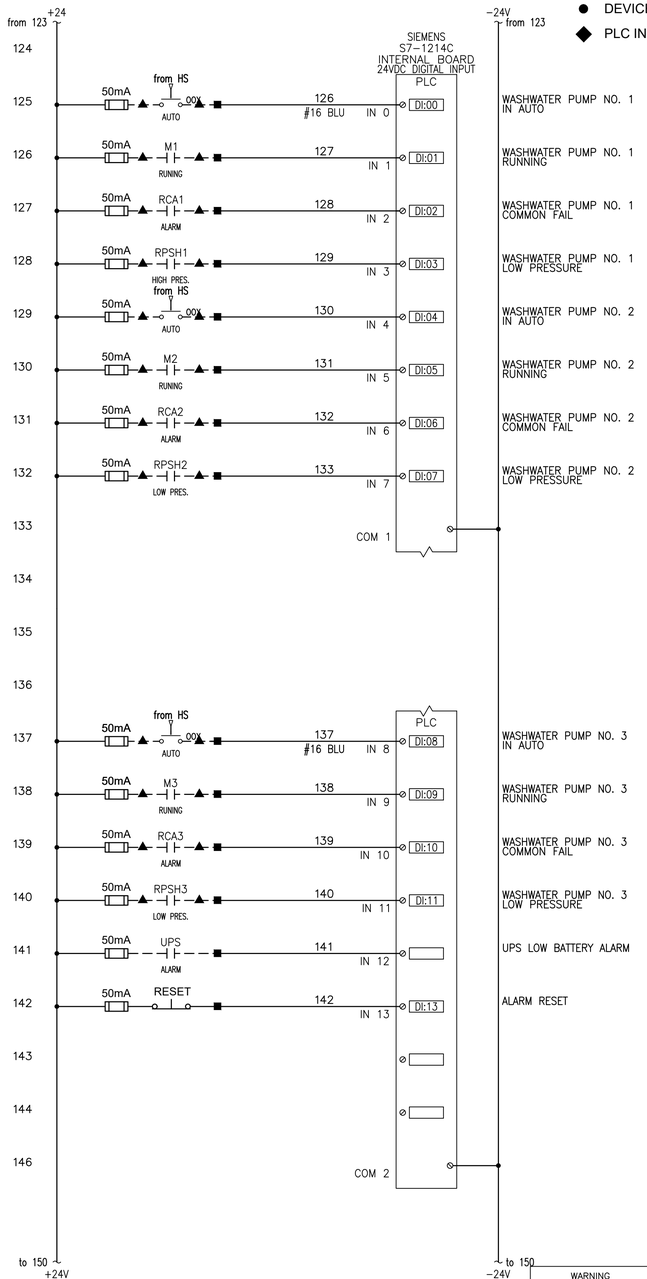
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-28.dwg
PLOT STYLE: GAI.ctb
PLOTTED: 1/8/2026 5:21 PM

LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL







NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

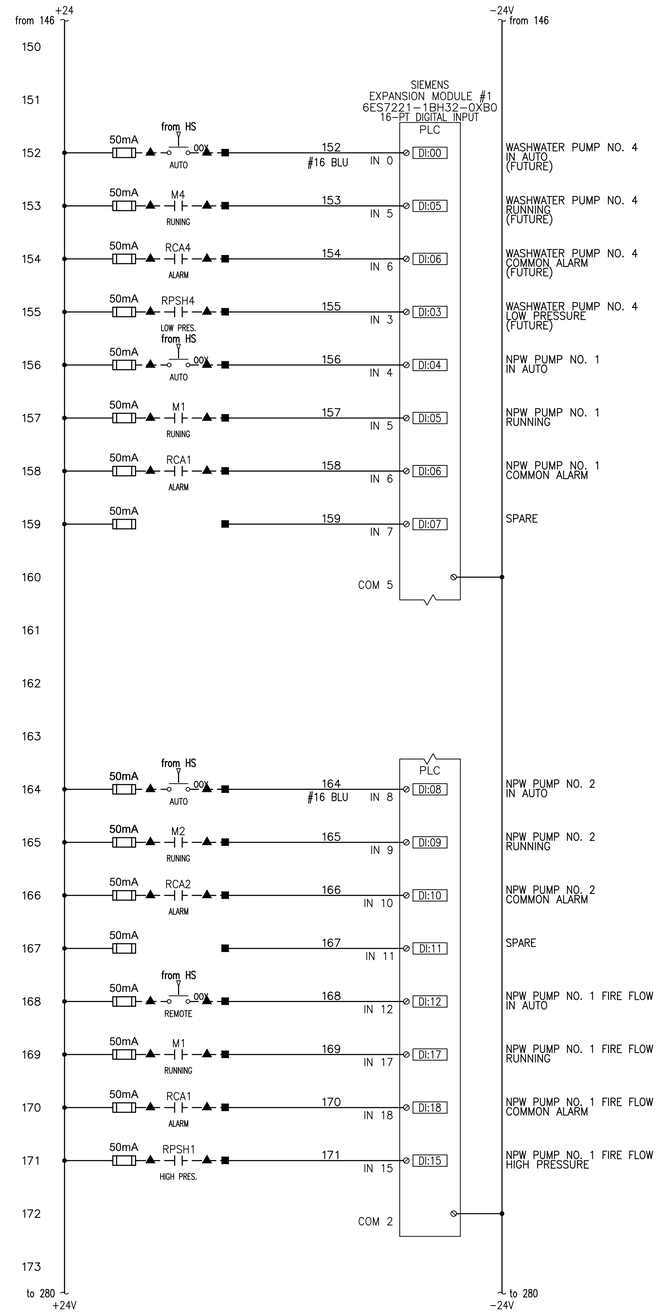
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC-WWPS PLC CONTROL PANEL CONTROL WIRING DIA.-I

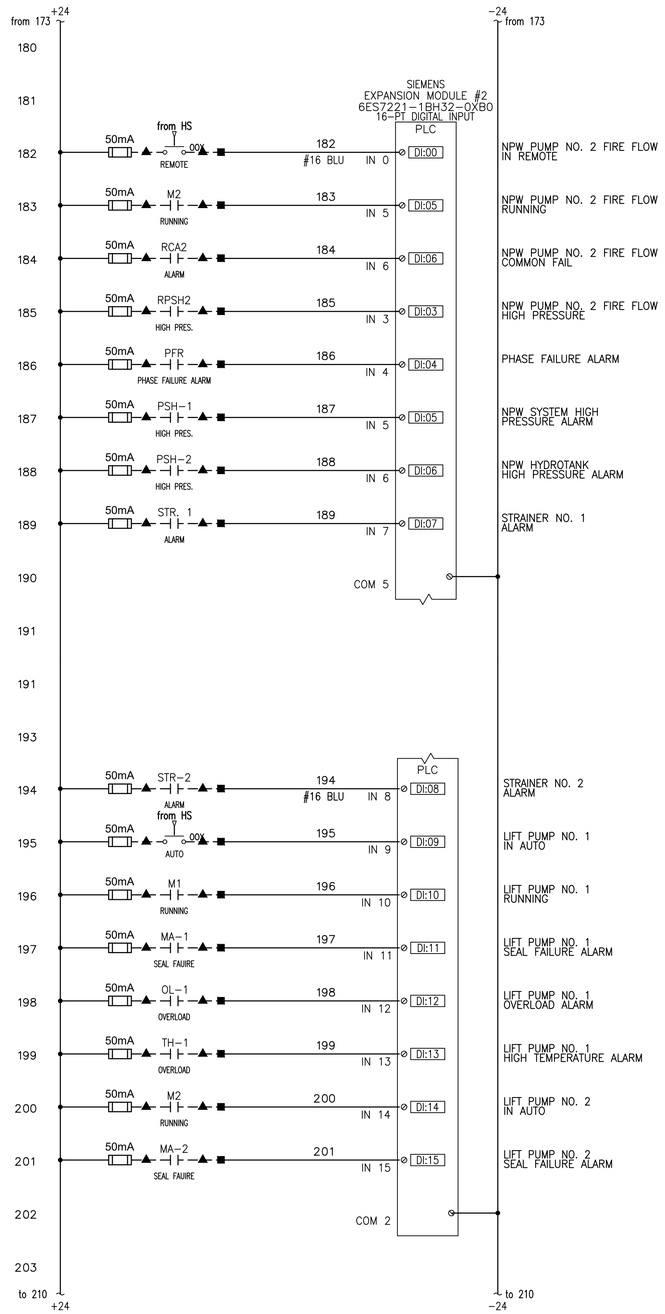
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

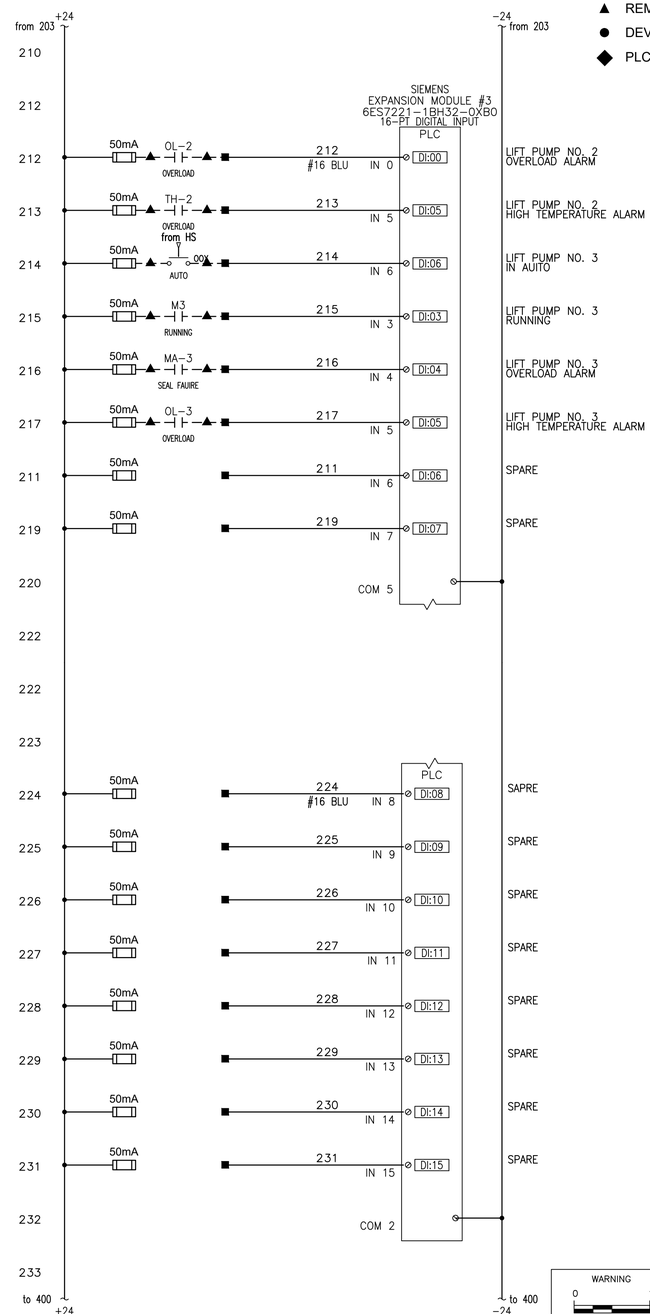
DWG NO
I-28

WBS NUMBER	R-001000-0035-4
DRAWING SCALE	NTS
CITY OF HOUSTON PM	NEIL BARNSDALE, P.E.
SHEET NO.	XX OF XX

FOR CITY OF HOUSTON USE ONLY







LEGEND

△ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR

✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE

□ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL

■ FIELD TERMINAL LOCATED AT CONTROL PANEL

▲ REMOTE TERMINAL

● DEVICE TERMINAL NO.

◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC–WWPS PLC CONTROL PANEL CONTROL WIRING DIA.–II

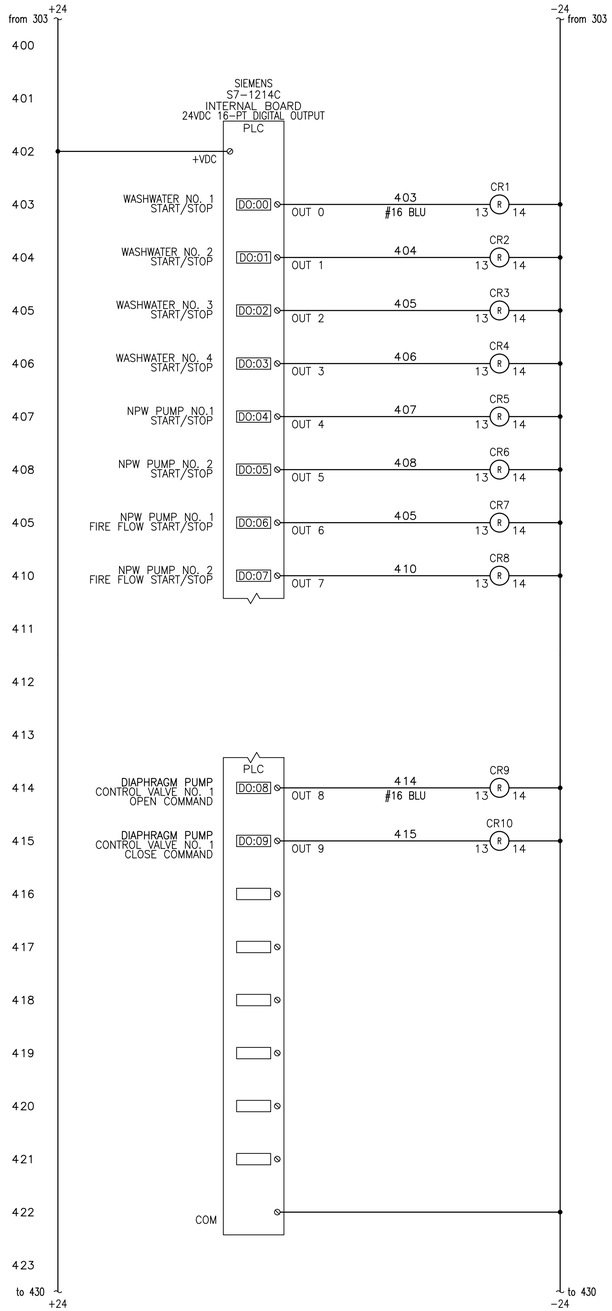
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

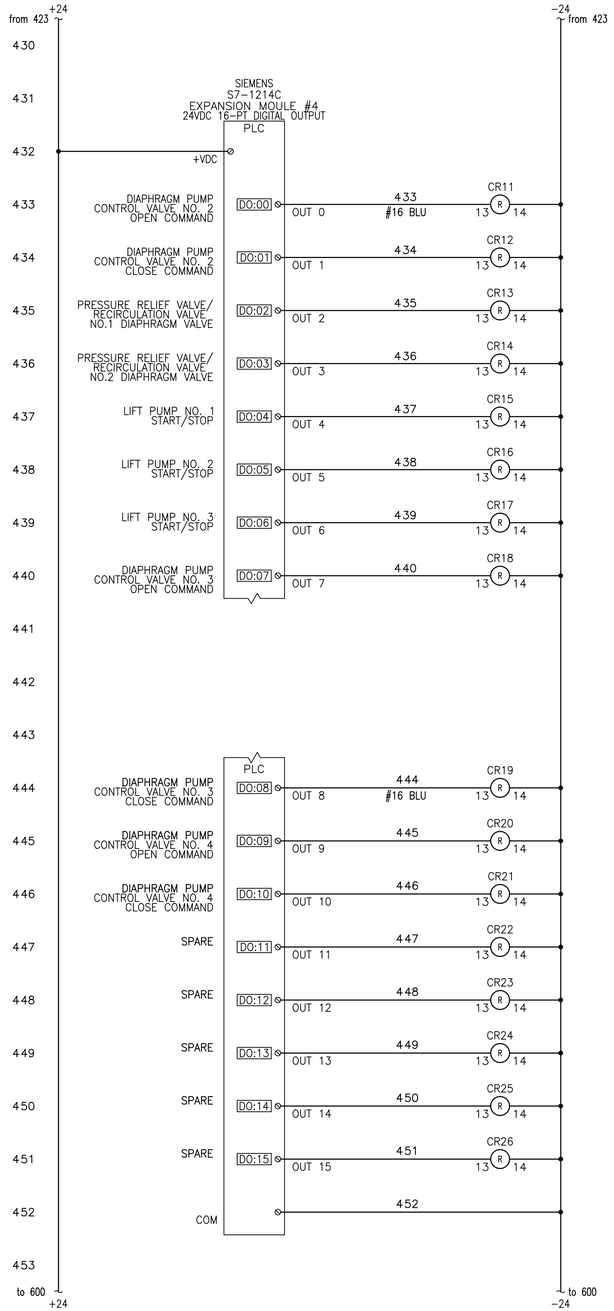
WBS NUMBER	R-001000-0035-4
DRAWING SCALE	NTS
CITY OF HOUSTON PM	NEIL BARNSDALE, P.E.
SHEET NO.	XX OF XX

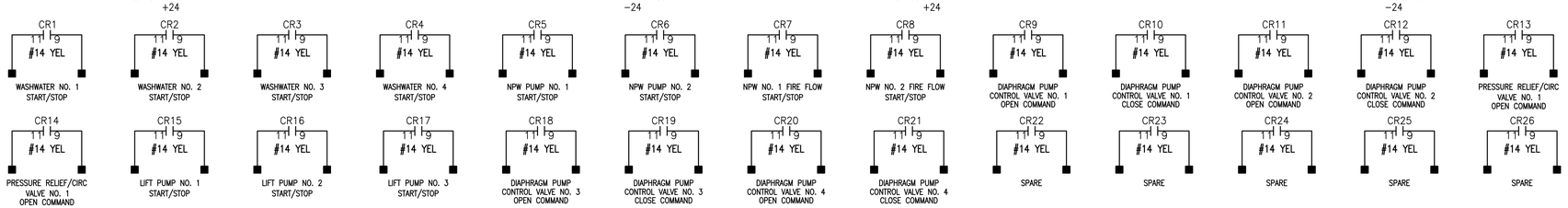
DWG NO
I-29

FOR CITY OF HOUSTON USE ONLY

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-29.dwg







LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

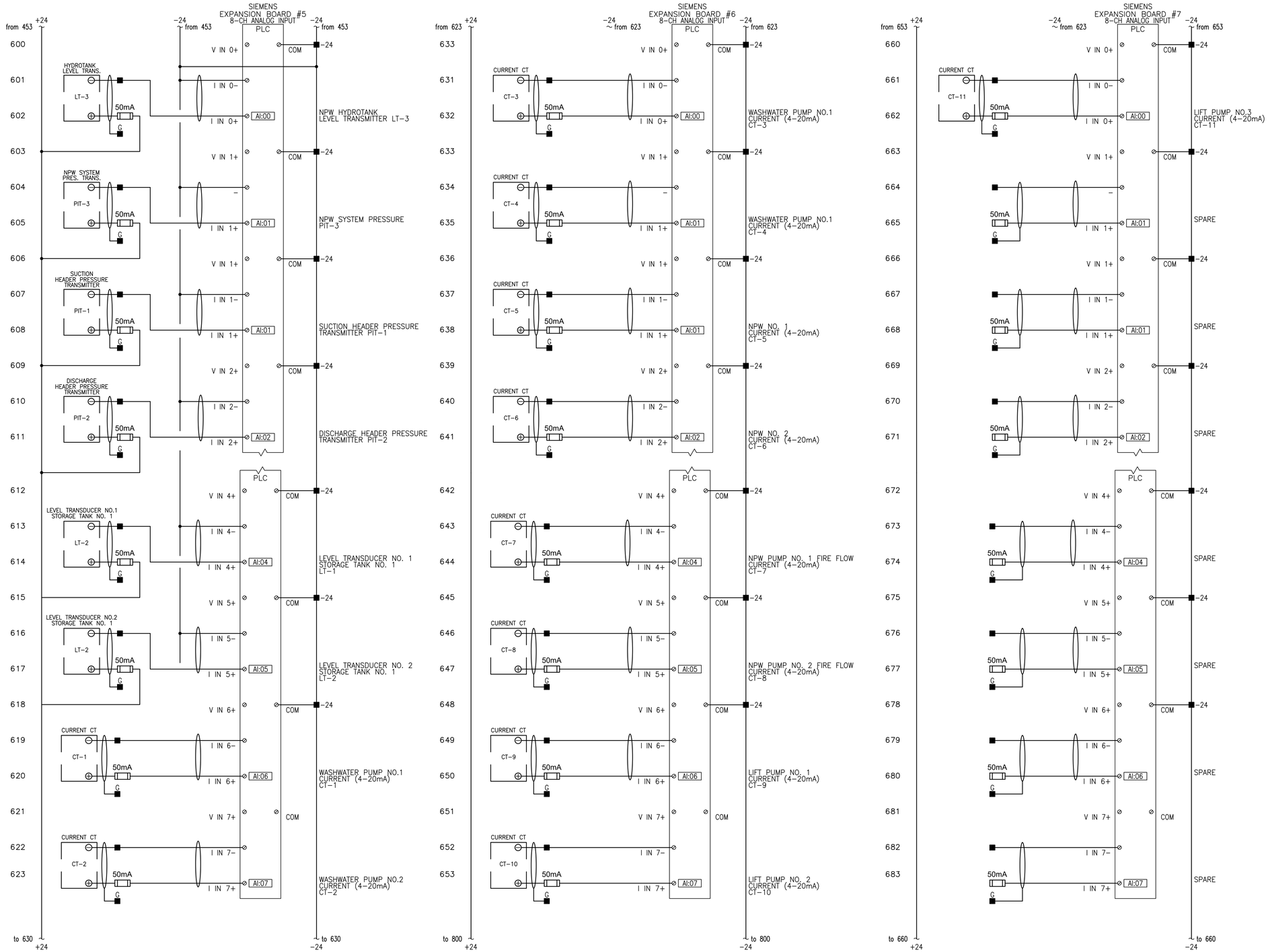
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC–WWPS PLC CNTL. PNL. CNTL. WIRING DIA.–III

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I–30

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-30.dwg



LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY:
DRAWN BY: D. KWONG	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

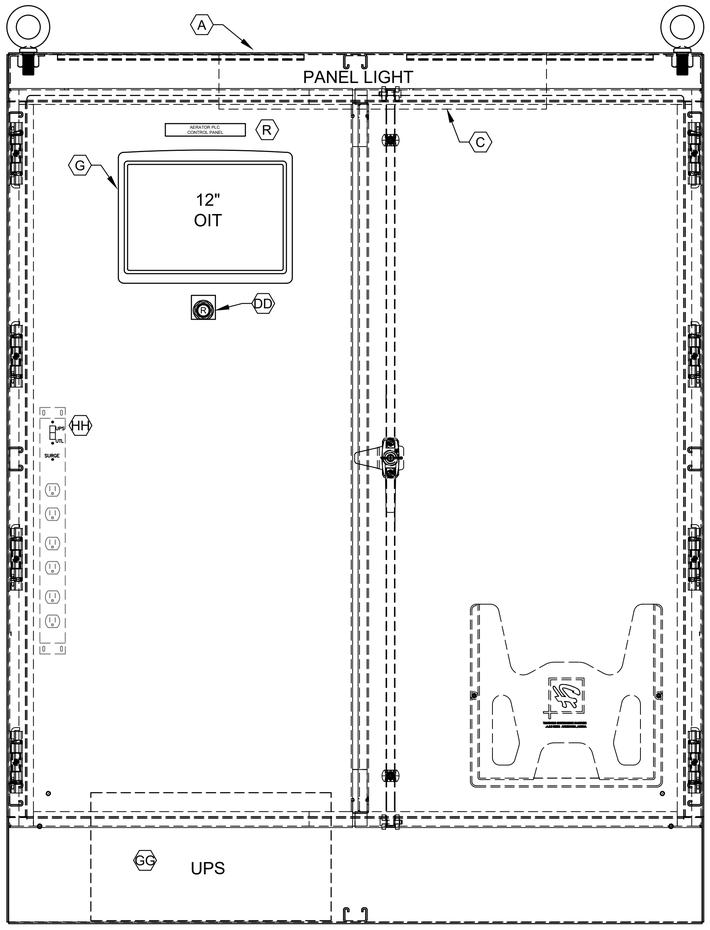
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC–WWPS PLC CNTL. PNL. CNTL. WIR. DIA.–IV

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

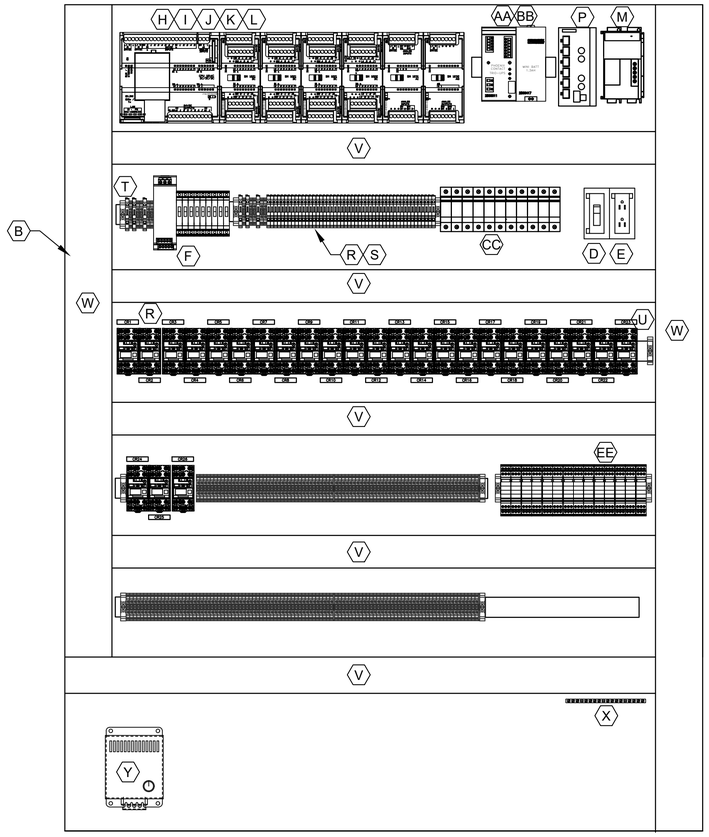
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
I–31

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-31.dwg



PLC CONTROL PANEL
FRONT VIEW
ELEVATION



PLC CONTROL PANEL
INTERIOR VIEW
ELEVATION

MCC-WWPS PLC CONTROL PANEL
EQUIPMENT & DEVICE SCHEDULE

ITEM	QUANTITY	DESCRIPTION
A	1	NEMA 12 3-POINT LATCH ENCLOSURE WITHOUT VENTS, 72"H x 48"W x 18"D, HOFFMAN A72418FSD
B	1	BACK PANEL 60"H x 44"W, PAINTED WHITE, HOFFMAN A72P48
C	1	6500K COOL WHITE, 400 LUMENS, 20" IN LENGTH LED LIGHT
D	1	SWITCH FOR CABINET LIGHT, 120V, 20A, SPST
E	1	DUPLEX RECEPTACLE, 120V, 20A, 2 WIRE, GROUNDED
F	1	SURGE PROTECTOR - 120VAC CONTROL POWER
G	1	12" TOUCH PANEL (OIT) SIEMENS MTP-1200
H	1	SIMATIC 1200, CPU-1214C, 14DI, 10DO RELAY, 2AI 24VDC POWER-6ES7214-1HG40-0XB0
I	1	MICRO MEMORY CARD, 4MB-SIEMENS 6ES7954-8LC02-0AA0
J	1	8-POINT ANALOG INPUT MODULE-SIEMENS 6ES7231-4HF32-0XB0
K	1	4-POINT ANALOG OUTPUT MODULE-SIEMENS 6ES7232-4HD32-0XB0
L	3	SIEMENS 16-POINT DIGITAL INPUT MODULE, 24VDC. SIEMENS 6ES7221-1BH32-0XB0
M	1	SIEMENS 16-POINT DIGITAL OUTPUT MODULE, 24VDC SIEMENS 6ES7222-1BH32-0XB0
N	1	5 AMP, 24VDC POWER SUPPLY PHOENIX CONTACT P/N 2866750
P	1	6 PORTS COPPER / 2 PORTS F/O ETHERNET SWITCH RJ45 SIEMENS XC206-2
Q	*	TERMINAL BLOCK
R	*	FUSED TERMINAL BLOCKS
S	*	FUSE (SIZE AS SCHEDULED)
T	*	END STOP
U	16	3 POLE CONTROL RELAY, 24 VDC WITH THREE FORM C CONTACTS AND 11 PIN SOCKET BASE
V	*	WIRE DUCT 2" WIDE X 3" DEEP MINIMUM, WITH COVER
W	*	WIRE DUCT 3" WIDE X 3" DEEP MINIMUM, WITH COVER
X	1	GROUND BUS
Y	1	120VAC PANEL HEATER W/BUILT IN T-STAT HOFFMAN MODEL DAH2001A
Z	1	NOT USED
AA	1	TRIO-UPS/1AC/24DC/5 (5 AMP 24 VDC POWER SUPPLY WITH UPS) PHOENIX CONTACT P/N 2866611
BB	1	MINI-BAT/24DC/1.3AH (BATTERY FOR TRIO UPS) PHOENIX CONTACT P/N 32381110
CC	12	SINGLE POLE DIN MOUNTED CIRCUIT BREAKER (2) 15A, (3) 10A, (4) 6A, (2) 2A
DD	1	ALARM RESET PUSHBUTTON
EE	*	ANALOG SIGNAL SURGE ARRESTER, PHOENIX CONTACT
FF	*	DIGITAL SIGNAL SURGE ARRESTER, PHOENIX CONTACT
GG	1	1.5KVA TOWER UPS W/ RELAY OUTPUT CARD, EATON OR APPROVED EQUAL
HH	1	MAINTENANCE BYPASS SWITCH FOR UPS, LOWELL POWER P/N UPS-XBDM-20RCD

* - AS SCHEDULED

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC–ST1 PLC CNTL. PNL. LYT. AND ELEV.

WBS NUMBER
R–001000–0035–4

FOR CITY OF HOUSTON USE ONLY

DRAWING SCALE
NTS

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

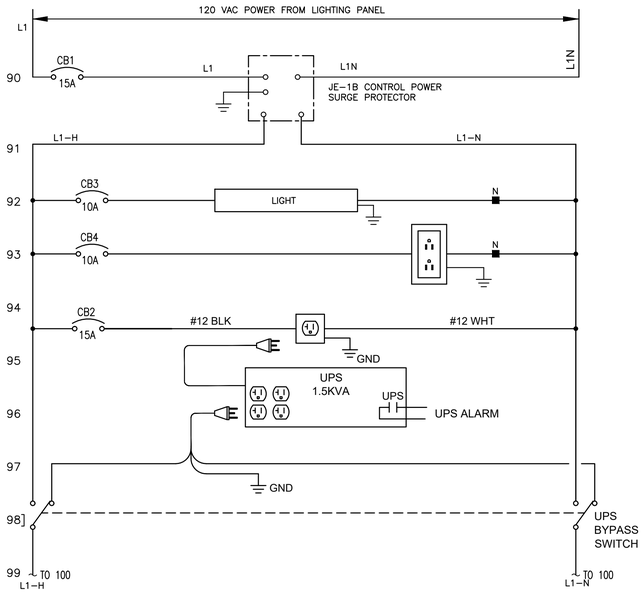
SHEET NO. XX OF XX

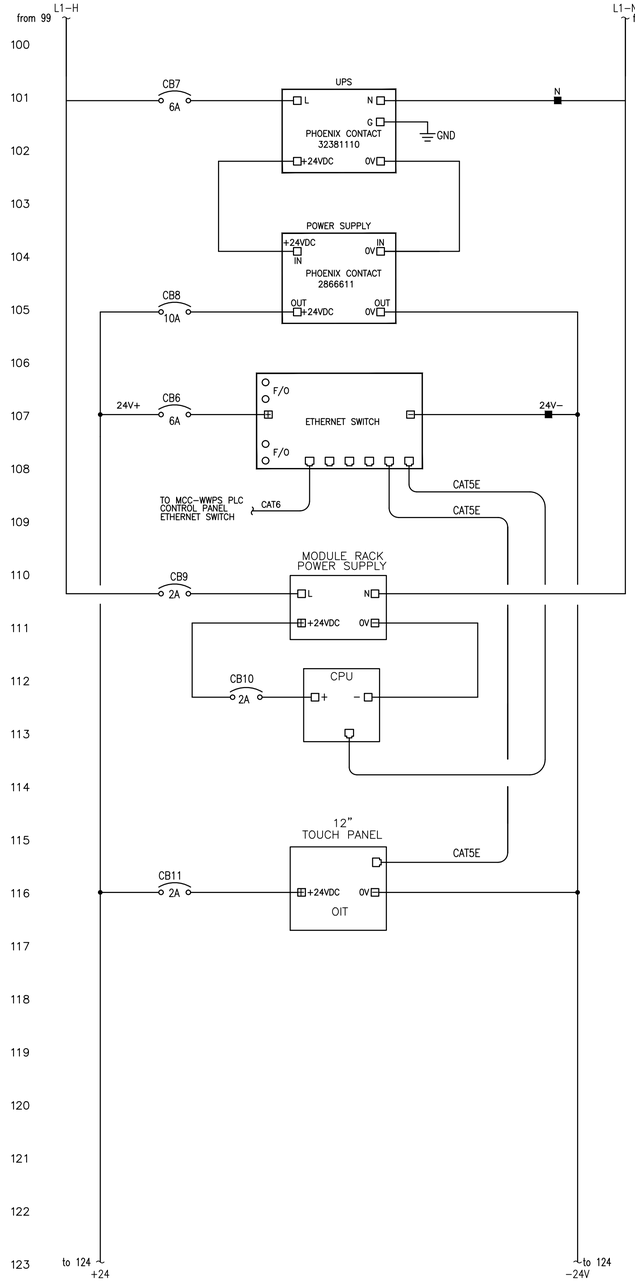
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

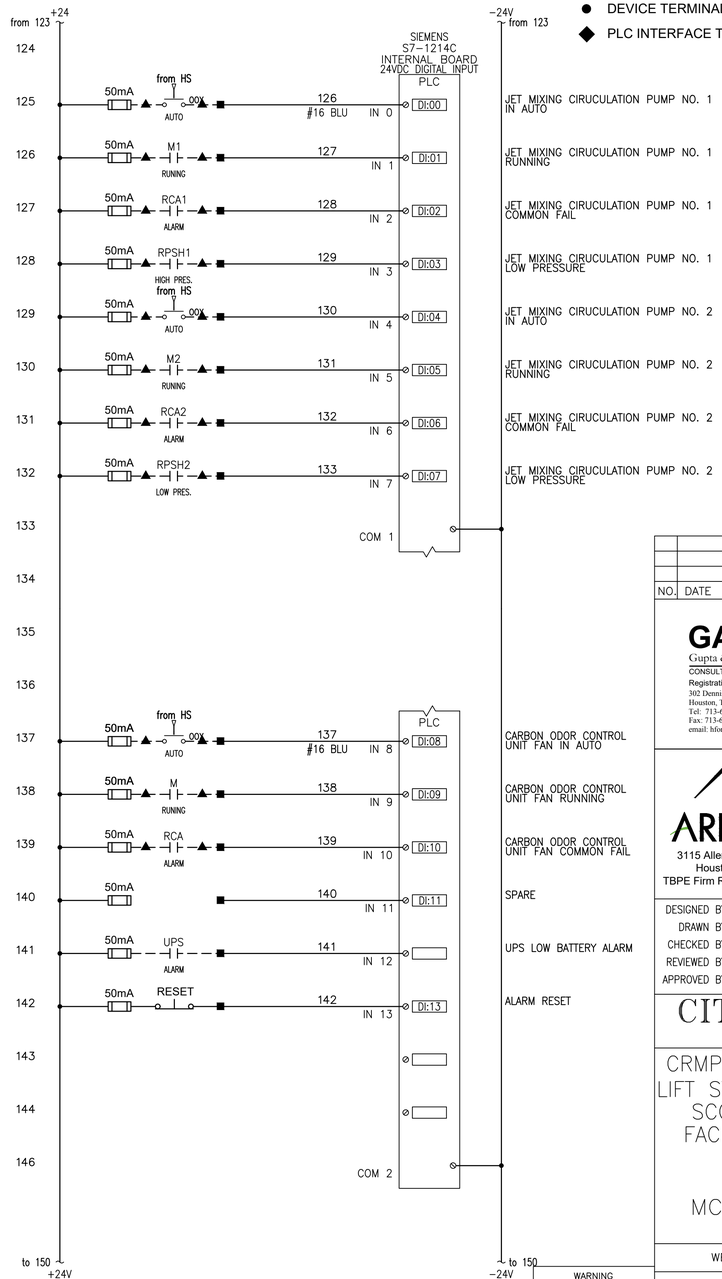
DWG NO
I–32

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP–Ardurra))\6 Drawings\Instrumentation And Control\1Working\Scott Area WWF\H8111_I–32.dwg
PLOT STYLE: GAI.ctb
PLOTTED: 1/8/2026 5:21 PM

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra)\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-33.dwg
PLOT STYLE: GAI.ctb
PLOTTED: 1/8/2026 5:21 PM







LEGEND

△ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
□ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
■ FIELD TERMINAL LOCATED AT CONTROL PANEL
▲ REMOTE TERMINAL
● DEVICE TERMINAL NO.
◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

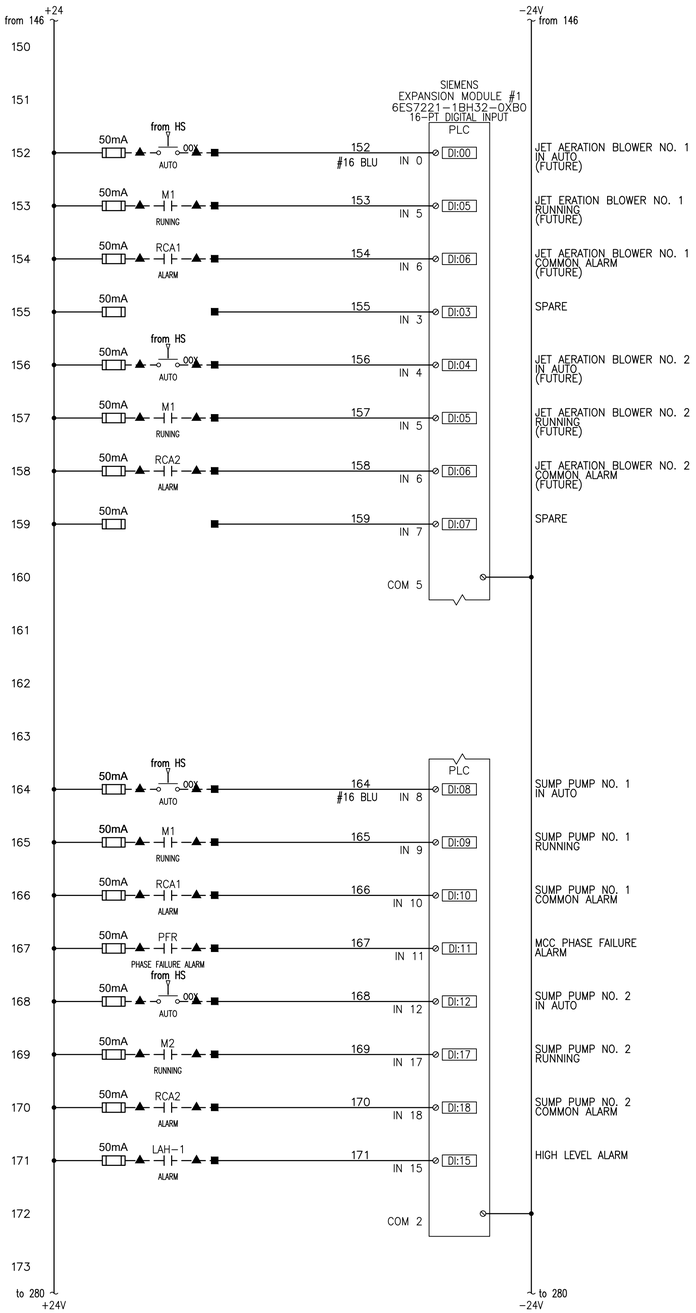
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

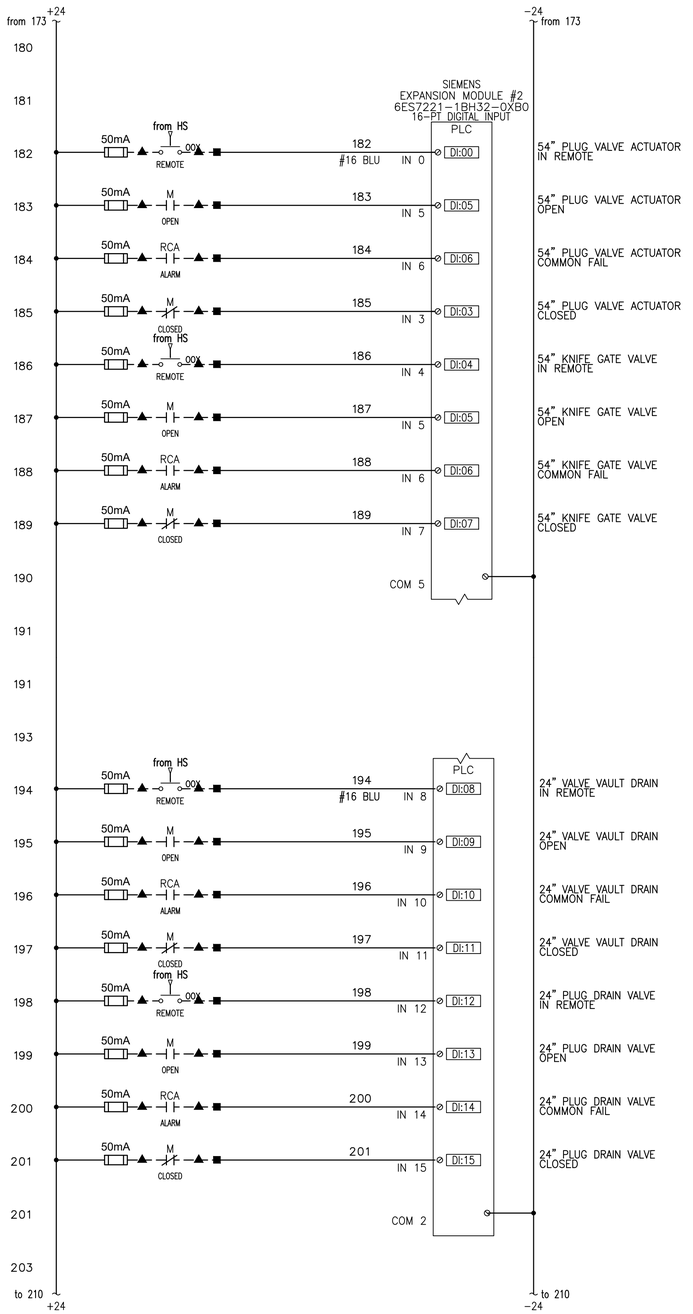
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC-ST1 PLC CNTL. PNL. CNTL. WIR. DIA.-I

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-33





LEGEND

△ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR

✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE

□ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL

■ FIELD TERMINAL LOCATED AT CONTROL PANEL

▲ REMOTE TERMINAL

● DEVICE TERMINAL NO.

◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG	SURVEYED BY:
DRAWN BY: D. KWONG	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

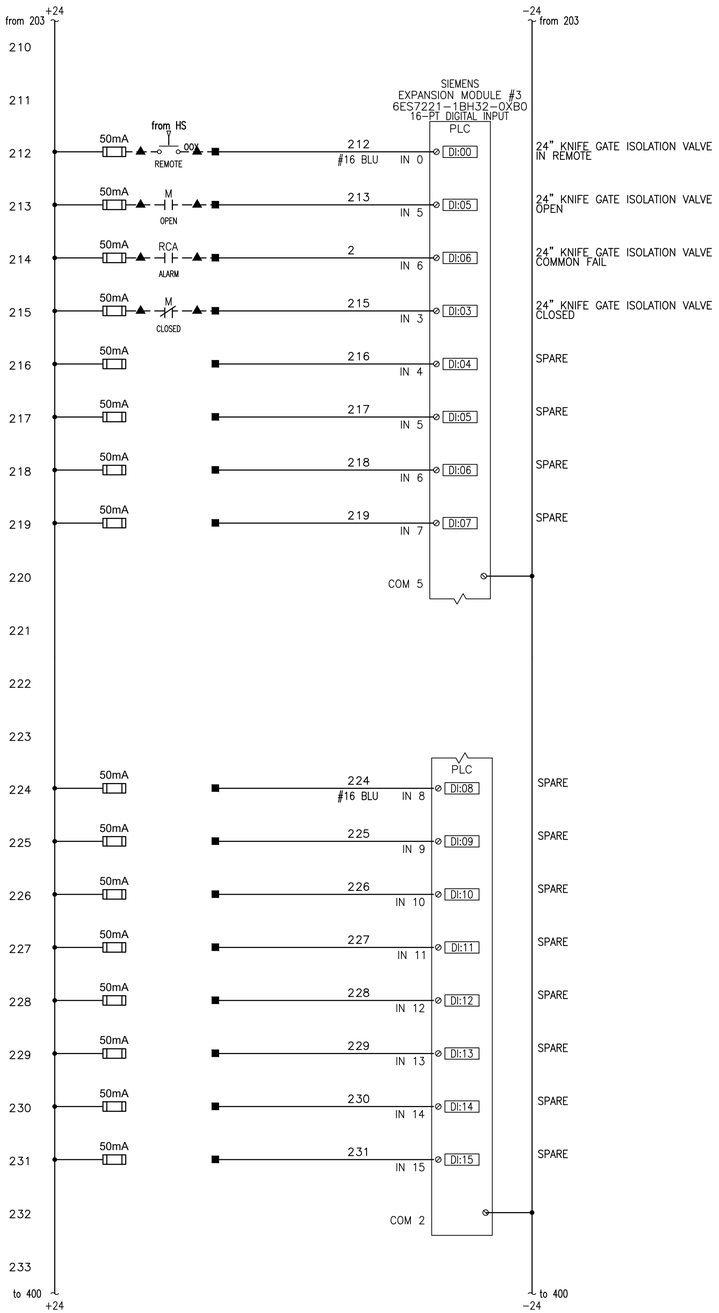
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA.–II

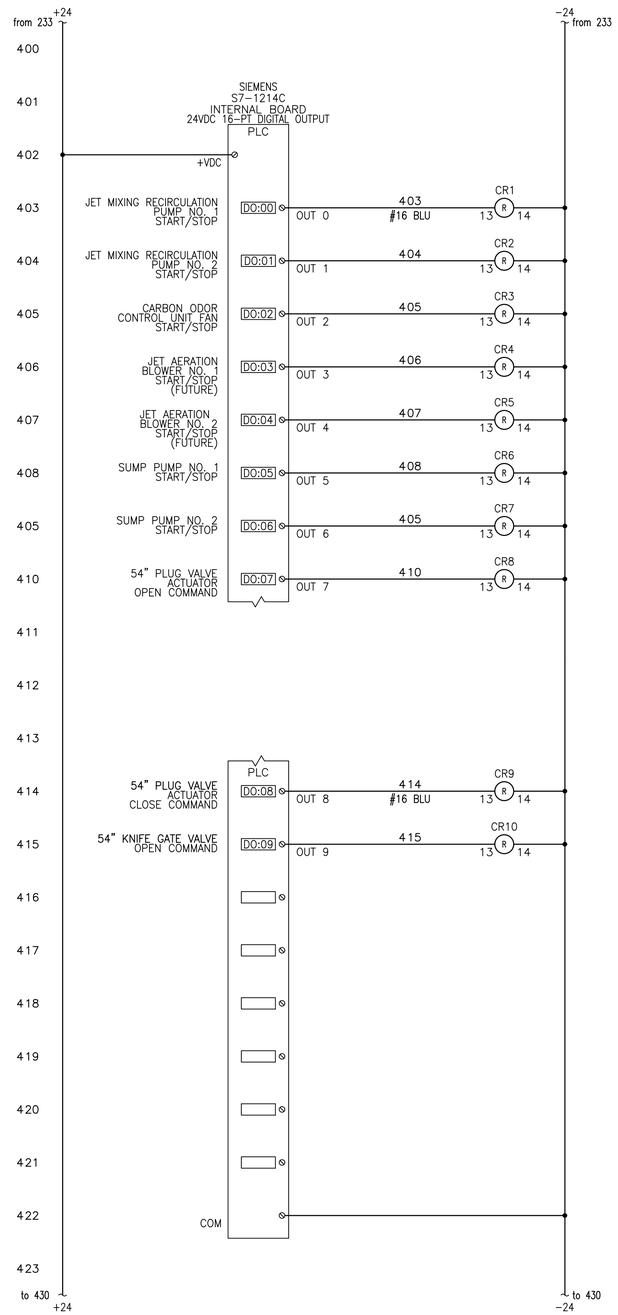
WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

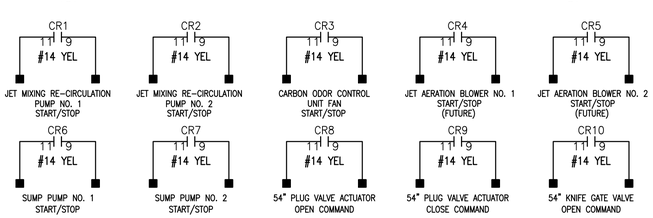
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
I-34

FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-34.dwg
PLOT STYLE: GAI.ctb
PLOTTED: 1/8/2026 5:21 PM







LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: H. DUONG
DRAWN BY: D. KWONG
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

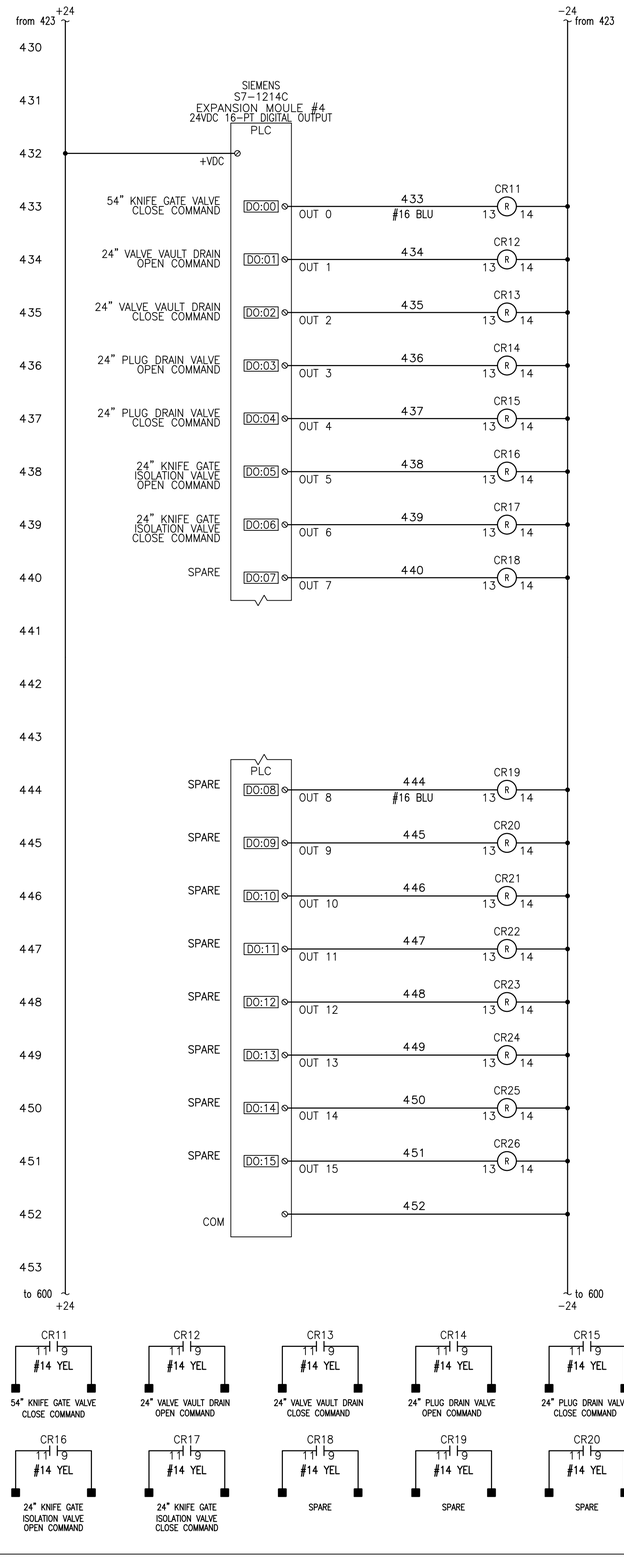
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF MCC–ST1 PLC CNTL. PNL. CNTL. WIR. DIA.–II

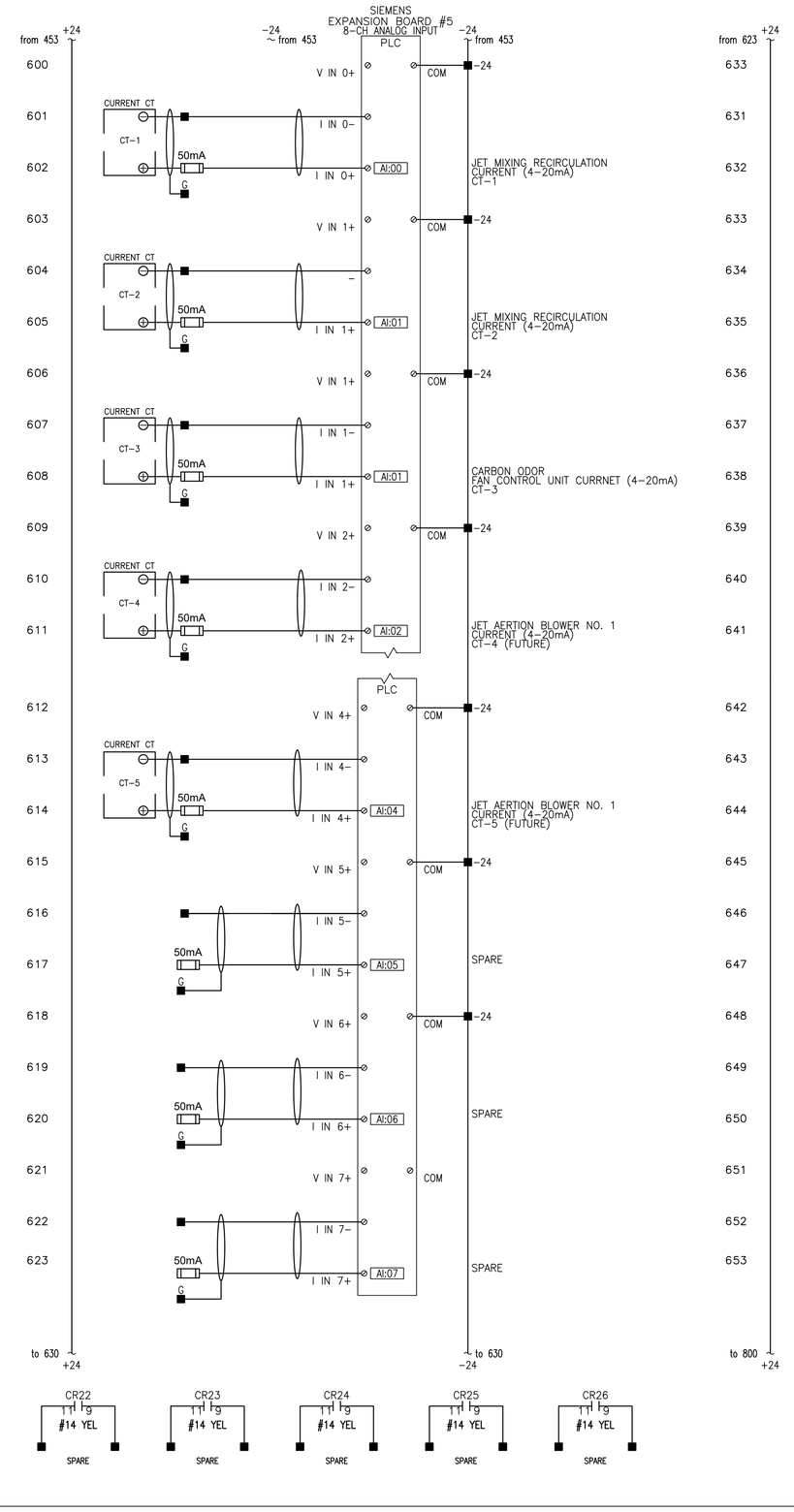
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

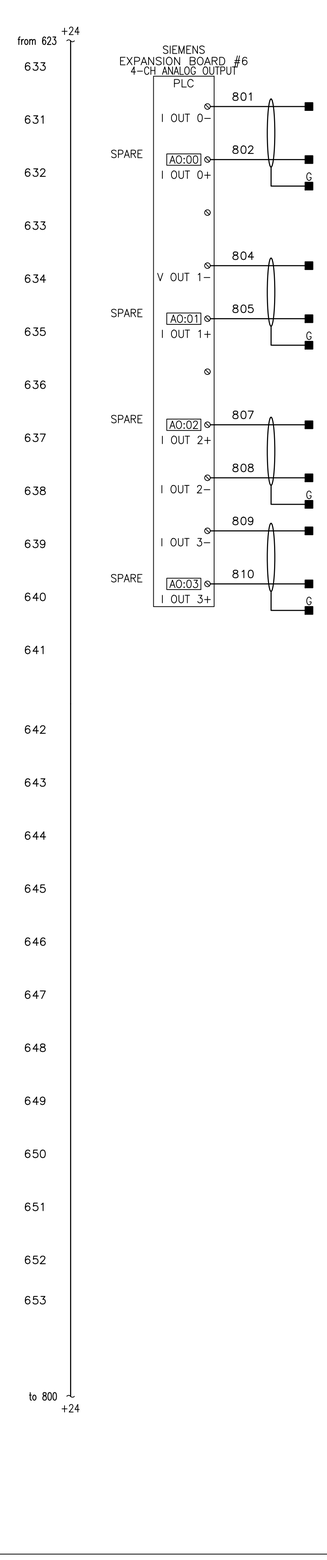
DWG NO
I–35

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R–001000–0035–4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-35.dwg







LEGEND

- △ DEVICE OR FIELD TERMINAL LOCATED AT MOTOR
- ✳ DEVICE OR FIELD TERMINAL LOCATED REMOTE
- □ DEVICE OR FIELD TERMINAL LOCATED AT MCC/POWER PANEL
- ■ FIELD TERMINAL LOCATED AT CONTROL PANEL
- ▲ REMOTE TERMINAL
- ● DEVICE TERMINAL NO.
- ◆ PLC INTERFACE TERMINAL

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY:	H. DUONG
DRAWN BY:	D. KWONG
CHECKED BY:	H. FOROUZAN
REVIEWED BY:	H. FOROUZAN
APPROVED BY:	H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

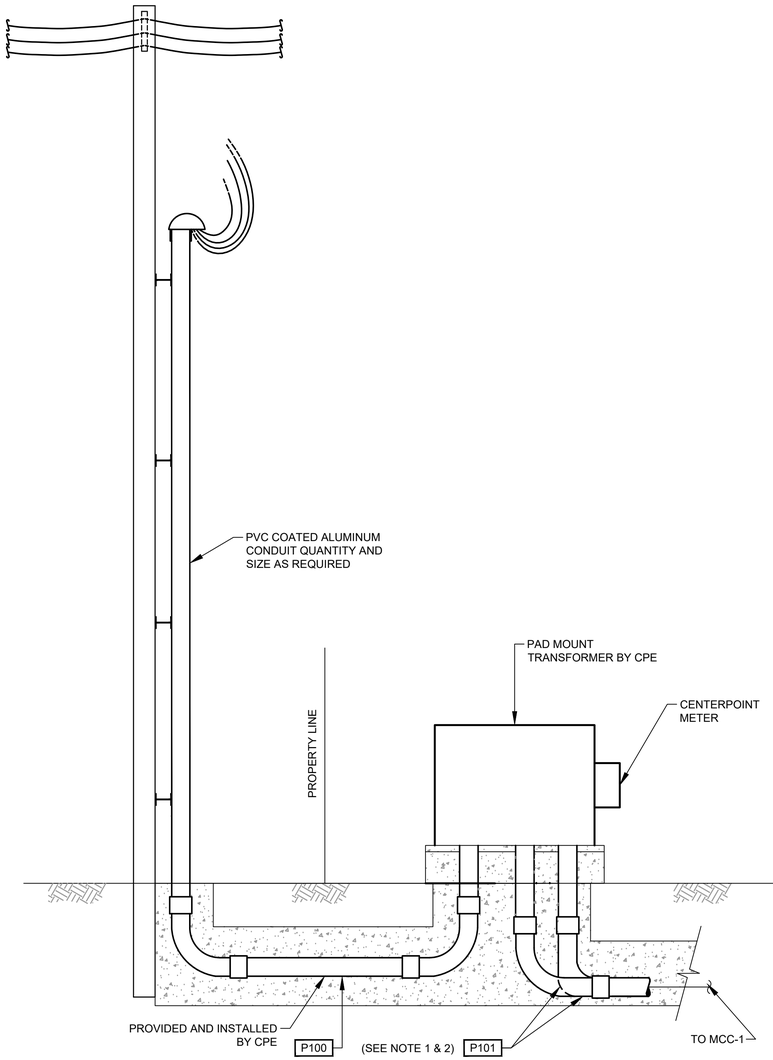
CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1 INSTRUMENTATION
SCOTT WWF
MCC-ST1 PLC CNTL. PNL. CNTL. WIR. DIA.-III

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
I-36

PLOTTED: 1/8/2026 5:21 PM
PLOT STYLE: GAI.ctb
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Instrumentation And Control\Working\Scott Area WWF\H8111_I-36.dwg



TYPICAL ELECTRICAL SERVICE ENTRANCE
FOR POWER SUPPLY 500KVA AND GREATER

DETAIL 1
NTS. -
(SEE NOTE 3 & 4)

NOTES:

1. WOODEN POLE 20' LONG. TOP DIAMETER 6", BOTTOM DIAMETER 8" PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR.
2. ELECTRICAL SERVICE FEEDER PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. COORDINATE WITH CPE FOR THE REQUIREMENTS OF THE INSTALLATION.
3. THE METERING CT TO BE MOUNTED INSIDE THE TRANSFORMER BY CENTERPOINT.
4. THE CONTRACTOR SHALL COORDINATE WITH CENTERPOINT FOR TRANSFORMER PAD REQUIREMENTS.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL SERVICE DETAILS

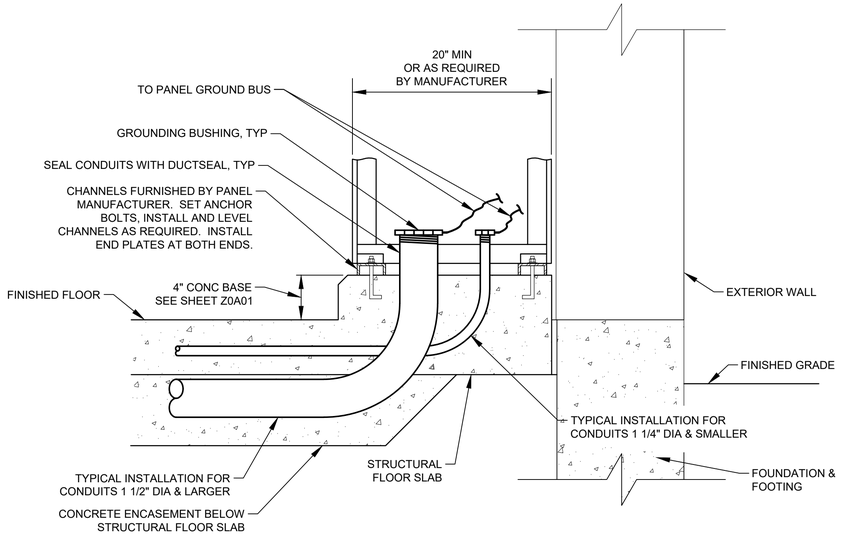
WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

DWG NO
ZE-1

PLOT STYLE: ARD_FULL_MONO.ctb PLOTTED: 1/8/2026 6:29 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\H8111_ZE-01.dwg

PLOT STYLE: ARD_FULL_MONO H8111.STB PLOTTED: 1/8/2026 6:29 PM

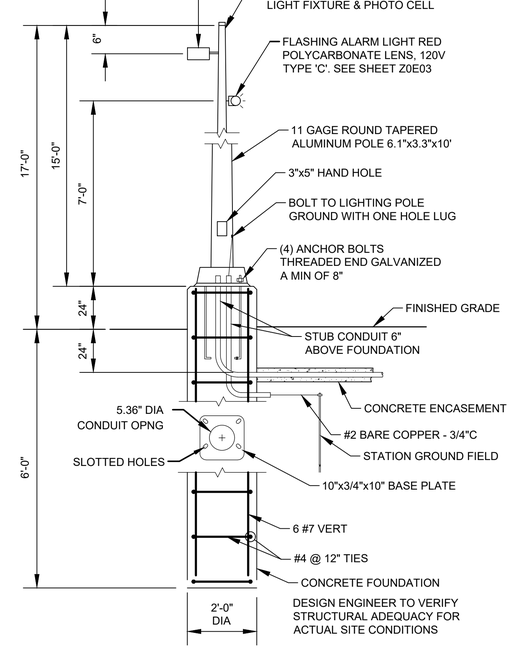


TYPICAL MCC & CONTROL PANEL INSTALLATION & CONDUIT ENTRY

DETAIL 1 / NTS -

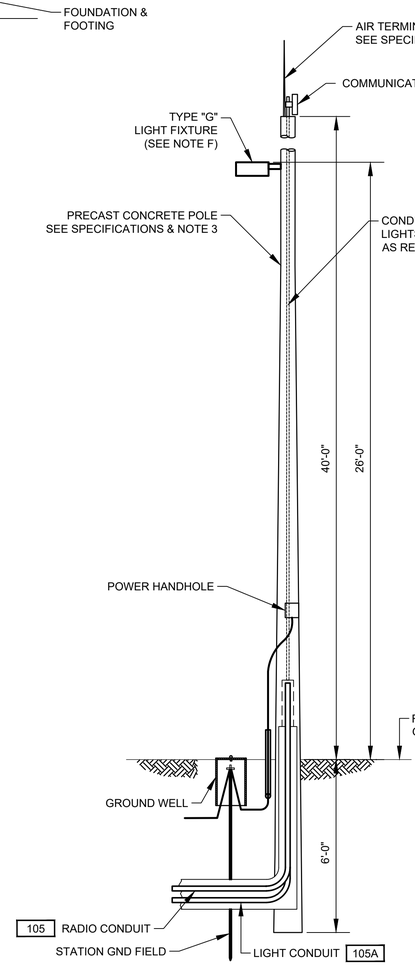
NOTES:

1. ON GROUND WIRE TERMINATION'S, ALL PAINTED OR COATED METAL SURFACES SHALL BE REMOVED AND CLEANED TO BARE METAL. TO OBTAIN A SOUND GROUND CONNECTION. ONCE INSTALLED APPLY PROTECTIVE COATING ON BARE METAL AREAS PER MANUFACTURER REQUIREMENTS.
2. PRECAST CONCRETE POLE TO MOUNT THE RADIO RECEIVER.
3. 1" CONDUIT TO EXTEND TO THE TOP OF POLE FOR ETHERNET CABLE FOR RADIO.



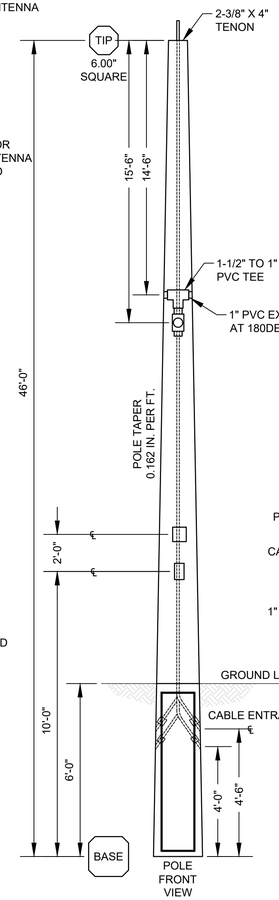
TYPICAL YARD LIGHT

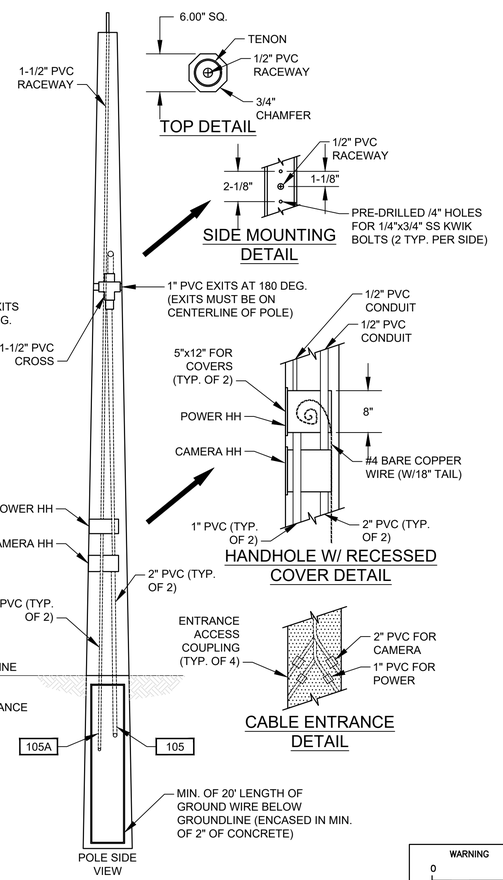
DETAIL 2 / NTS -



COMMUNICATION POLE MOUNTING DETAIL

DETAIL 3 / NTS - (SEE NOTE B)





WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
ZE-2

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED BY: ALLY GENERAL SOLUTIONS, LLC
DRAWN BY: C. VALDEZ	FB NO. 340S1
CHECKED BY: H. FOROUZAN	
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

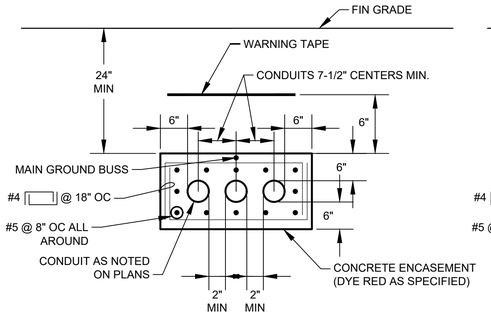
CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

ELECTRICAL
YARD LIGHT/COMMUNICATION POLE DETAILS

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

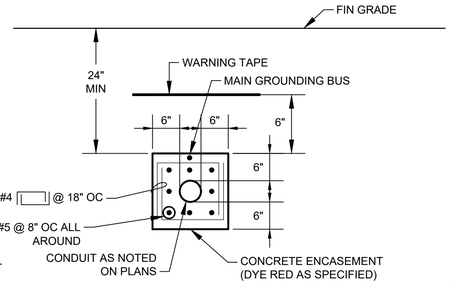
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\H8111_ZE-02.dwg



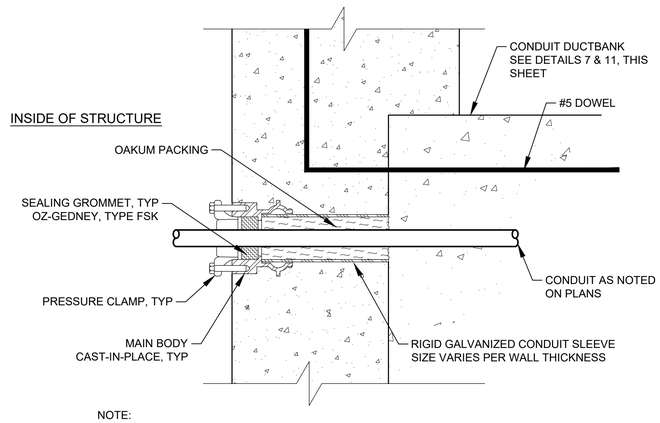
TYP MULTI-CONDUIT DUCTBANK SECTION

NOTE: TIE MAIN GROUNDING BUS TO REBAR AT A MAXIMUM INTERVAL OF EVERY 20 FEET.

DETAIL 1 / NTS



TYP SINGLE-CONDUIT DUCTBANK SECTION

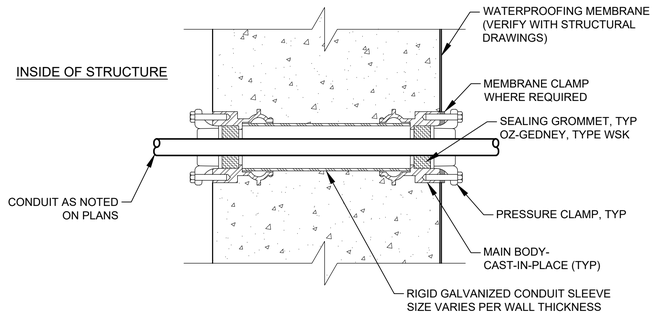


NOTE:

WALL SEAL SHOWN IS TYPICAL FOR EACH CONDUIT IN DUCTBANK.

SINGLE ENDED TYPE

FOR USE WHERE CONDUIT OUTSIDE THE STRUCTURE IS ENCASED IN CONCRETE

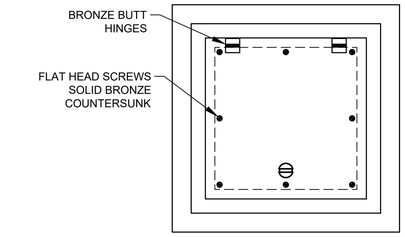


DOUBLE ENDED TYPE WITH MEMBRANE

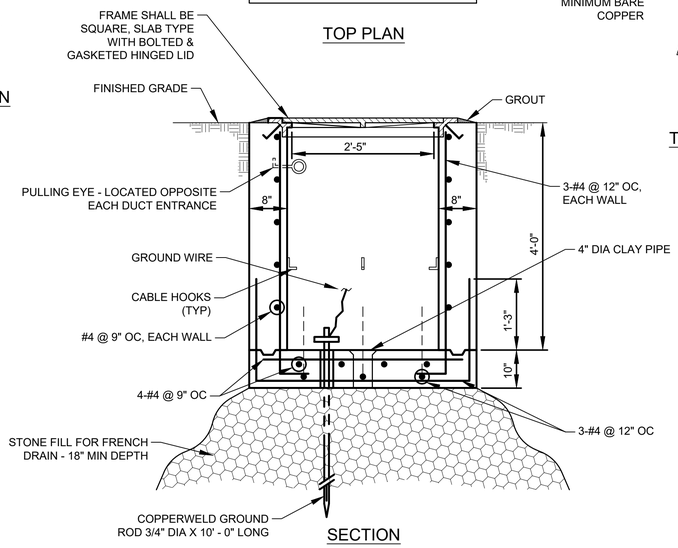
FOR USE WHERE CONDUIT OUTSIDE THE STRUCTURE IS ENCASED IN CONCRETE

TYPICAL CONDUIT SEALS

DETAIL 4 / NTS



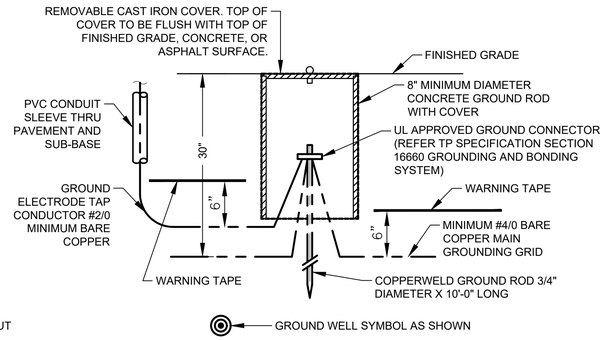
TOP PLAN



SECTION

TYPICAL ELECTRICAL HANDHOLE CONSTRUCTION

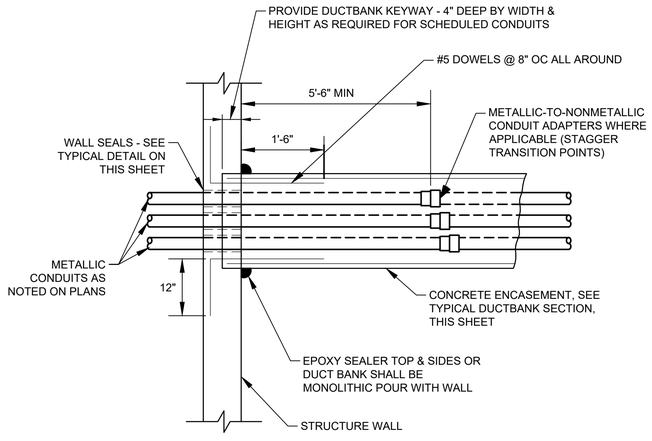
DETAIL 2 / NTS



TYPICAL GROUND ROD AND WELL INSTALLATION

DETAIL 3 / NTS

GROUND CONNECTOR SCHEDULE	
WIRE SIZE	BURNDY
#2 AWG	GAR 6426
#2/0 AWG	GAR 6426
#4/0 AWG	GAR 6429
500 kcmil	GAR 6434



PLAN

TYPICAL DUCTBANK ENTRANCE AT STRUCTURE WALL

DETAIL 5 / NTS

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email. hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG	SURVEYED BY:
DRAWN BY: C. VALDEZ	ALLY GENERAL SOLUTIONS, LLC
CHECKED BY: H. FOROUZAN	FB NO. 340S1
REVIEWED BY: H. FOROUZAN	
APPROVED BY: H. FOROUZAN	

CITY OF HOUSTON

HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

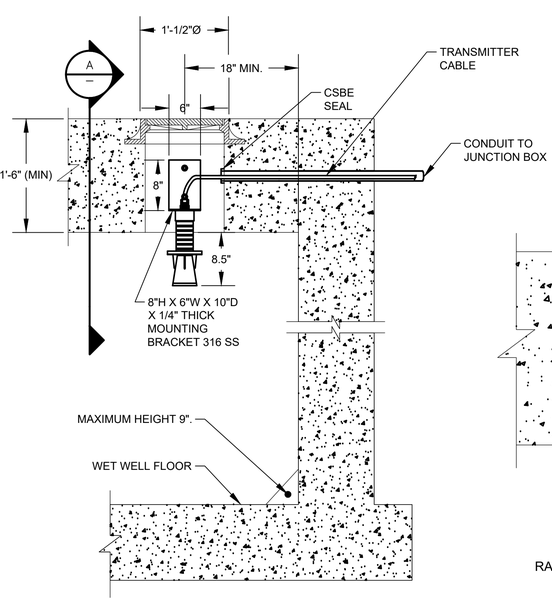
ELECTRICAL DETAILS

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

WBS NUMBER	FOR CITY OF HOUSTON USE ONLY
R-001000-0035-4	
DRAWING SCALE	
NTS	
CITY OF HOUSTON PM	
NEIL BARNSDALE, P.E.	
SHEET NO. XX OF XX	

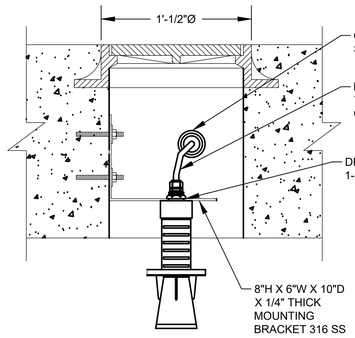
DWG NO
ZE-3

PLOT STYLE: ARD_FULL_MONO H8111.CTB PLOTTED: 1/8/2026 6:29 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\H8111_ZE-03.dwg



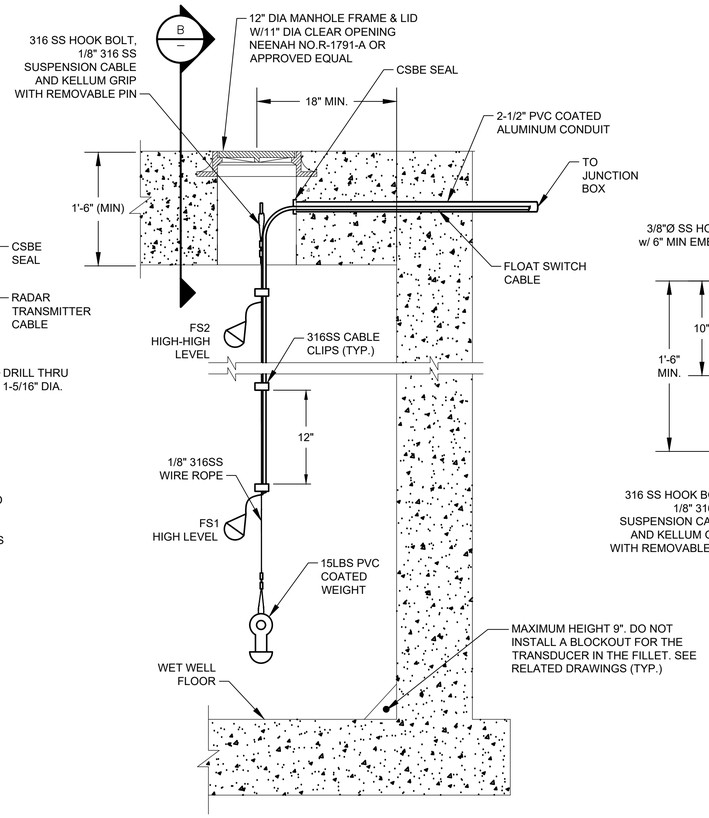
RADAR LEVEL TRANSMITTER MOUNTING
(TYP. LT-1, LT-2)

DETAIL 1
NTS
(SEE NOTE 1, 2, 4 & 5)



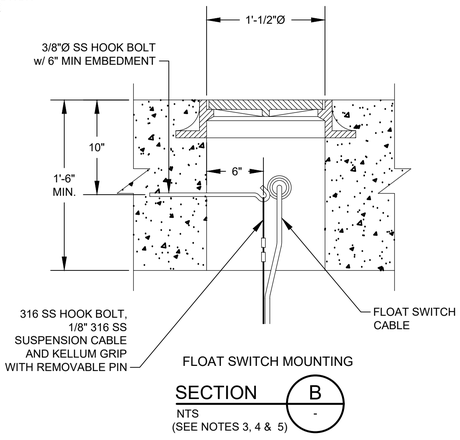
RADAR LEVEL TRANSMITTER MOUNTING
TYP. LT-1 & LT-2

SECTION A
NTS
(SEE NOTE 1, 2, 4 & 5)



FLOAT SWITCH MOUNTING

DETAIL 2
NTS
(SEE NOTES 3, 4 & 5)



FLOAT SWITCH MOUNTING

SECTION B
NTS
(SEE NOTES 3, 4 & 5)

NOTES:

1. NEW RADAR LEVEL TRANSMITTERS FOR LT-1, LT-2.
2. NEW MANHOLES FOR RADAR LEVEL TRANSMITTERS LT-1, LT-2.
3. NEW MANHOLE FOR FLOAT SWITCHES.
4. PAINT MANHOLE LIDS AND HATCHES HUNTER GREEN.
5. NEW MANHOLE INSTALLATION.
6. INSIDE WET WELL IS CLASSIFIED AS CLASS I, DIVISION 1. OUTSIDE WET WELL WITHIN 5 FEET OF WET WELL OPENINGS ARE CLASSIFIED AS CLASS I, DIVISION 2.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

RADAR LEVEL TRANSMITTER GAUGING SYSTEM INSTALLATION & DETAILS–I

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
ZE–4

WBS NUMBER
R–001000–0035–4

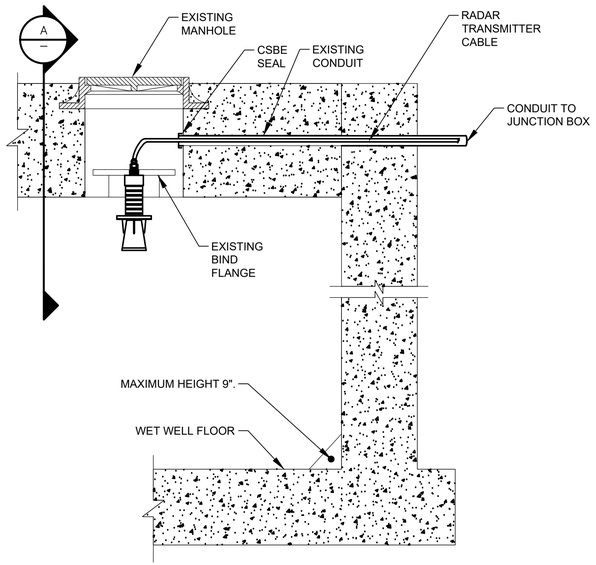
DRAWING SCALE
NTS

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

SHEET NO. XX OF XX

FOR CITY OF HOUSTON USE ONLY

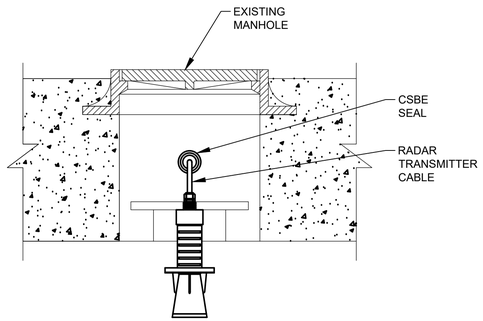
PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:29 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\H8111_ZE-04.dwg



RADAR LEVEL TRANSMITTER MOUNTING
(TYP. LT-1, LT-2)

DETAIL 1
NTS -

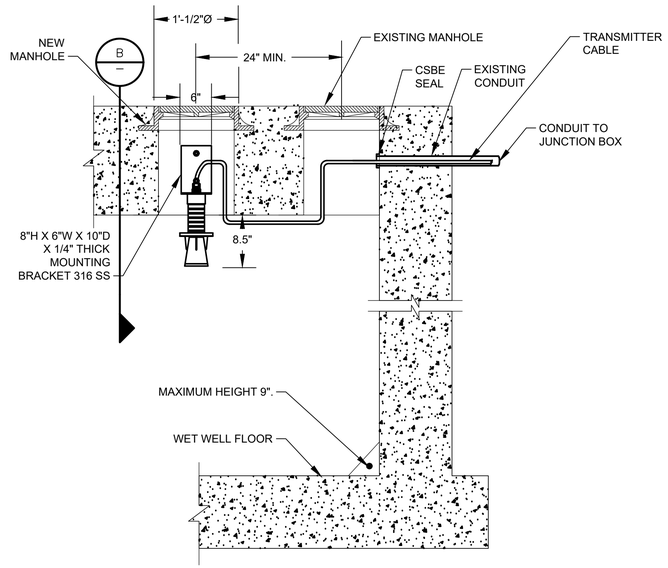
(SEE NOTES 1, 2, 4,)



RADAR LEVEL TRANSMITTER MOUNTING
TYP. LT-1 & LT-2

SECTION A
NTS -

(SEE NOTES 1, 2, 4,)



RADAR LEVEL TRANSMITTER MOUNTING
(TYP. LT-1, LT-2)

DETAIL 2
NTS -

(SEE NOTES 1, 3, 4, 5,)

NOTES:

1. NEW RADAR LEVEL TRANSMITTERS FOR LT-1, LT-2.
2. NEW MANHOLES FOR RADAR LEVEL TRANSMITTERS LT-1, LT-2.
3. NEW MANHOLE FOR FLOAT SWITCHES.
4. PAINT MANHOLE LIDS AND HATCHES HUNTER GREEN.
5. NEW MANHOLE INSTALLATION.
6. INSIDE WET WELL IS CLASSIFIED AS CLASS I, DIVISION 1. OUTSIDE WET WELL WITHIN 5 FEET OF WET WELL OPENINGS ARE CLASSIFIED AS CLASS I, DIVISION 2.

NO.	DATE	REVISION	APP.

GAI
Gupta & Associates, Inc.
CONSULTING ENGINEERING
Registration No. F-2593
302 Dennis St.
Houston, Texas 77006
Tel: 713-636-2936
Fax: 713-636-2987
email: hforouzan@gaiconsulting.com

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
HOSS FOROUZAN
TEXAS P.E. NO. 77748
DATE: 01/09/2026

ARDURRA
3115 Allen Parkway, Suite 300
Houston, Texas 77019
TBPE Firm Registration No. F-10053

THESE DOCUMENTS ARE FOR INTERIM REVIEW AND ARE NOT INTENDED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.
TRAVIS REESER
TEXAS P.E. NO. 126466
DATE: XX/XX/2025

DESIGNED BY: W. ZHENG
DRAWN BY: C. VALDEZ
CHECKED BY: H. FOROUZAN
REVIEWED BY: H. FOROUZAN
APPROVED BY: H. FOROUZAN

SURVEYED BY:
ALLY GENERAL SOLUTIONS, LLC
FB NO. 340S1

CITY OF HOUSTON
HOUSTON PUBLIC WORKS

CRMP PACKAGE 4A – EDDINGTON LIFT STATION, 24" FORCEMAIN, AND SCOTT STREET WET WEATHER FACILITY STORAGE TANK NO. 1

RADAR LEVEL TRANSMITTER GAUGING SYSTEM INSTALLATION & DETAILS–II

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DWG NO
ZE–5

WBS NUMBER
R–001000–0035–4

DRAWING SCALE
NTS

CITY OF HOUSTON PM
NEIL BARNSDALE, P.E.

SHEET NO. XX OF XX

FOR CITY OF HOUSTON USE ONLY

PLOT STYLE: ARD_FULL_MONO H8111.ctb PLOTTED: 1/8/2026 6:29 PM
FILE PATH: O:\H8111_Capacity Remedial Measures Plan (CRMP-Ardurra))\6 Drawings\Electrical\Working\H8111_ZE-05.dwg