

# CITY OF FAIRBANKS - PWD - PUMP ENCLOSURES

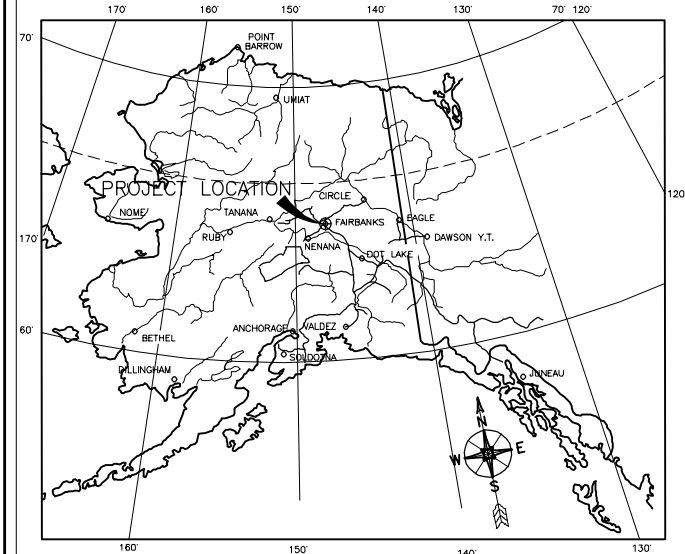
## FAIRBANKS, ALASKA

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### ABBREVIATIONS

<p>AFF above finished floor ADJ. adjustable ASD allowable stress design and AC alternating current ARCH. architectural BM beam BRG bearing BLK block BLKG. blocking B.O.S. bottom of steel BOT bottom CTR center CL center line C channel C.E. civil engineer BOT bottom CLR clear COL column CMPLT complete CONN connection CONT. continuous DC direct current DIA diameter DIM dimension(s) DR door DBL double DWN down ELEC electrical E.E. electrical engineer ELEV elevation EQ equal EQUIP equipment (E) existing EXP expansion EXT exterior FOC face of channel</p>	<p>F.O.S. face of steel FOS face of stud FIN finished FF finished floor FE fire extinguisher FX fixed FLSH. flashing FLR floor FL fluorescent FTR future GPM gallons per minute GALV galvanized GA gauge BOT. grade HD. hold down HP h pile HSS hollow structural section INFO. information I.P. in progress I.F.O. inside face of INSUL insulation INT interior IBC international building code JT joint L/S liters per second L angle LLBB long legs back to back LLH long leg horizontal LLV long leg vertical MAINT maintenance MTRL material MAX maximum M.E. mechanical engineer MECH mechanical MTL metal MIL one thousandth of an inch</p>	<p>MIN minimum MISC miscellaneous (N) new N.I.C. not in contract NIC not included N.F.S. non-frost susceptible N.T.S. not to scale # number O.C. on center OHD overhead door OMF ordinary moment frame PR. pair P&amp;ID piping and instrumentation diagram PL plate PLF pounds per lineal foot PSF pounds per square foot PF. pre-finished PROJ. projection PMP pump REINF reinforced REQ required REV revision RM room R.O. rough opening SCHD schedule SHT sheet(s) T&amp;B top and bottom TOS top of concrete slab T.O.S. top of steel</p>
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PROJECT LOCATION MAP

### OWNER

NAME CITY OF FAIRBANKS  
ADDRESS 800 CUSHMAN STREET  
CITY, STATE FAIRBANKS, AK 99701  
PHONE: (907)459-6745  
CONTACT - TIM ZINZA

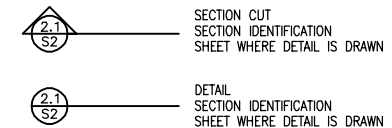
### PRIME

NAME EEIS CONSULTING ENGINEERS INC.  
ADDRESS P.O. BOX 92169  
CITY, STATE ANCHORAGE, ALASKA 99509  
PHONE: (907) 258-3231  
CONTACT - RICK BUTTON

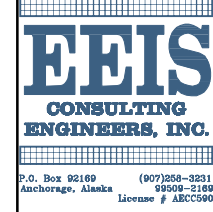
### SUBCONSULTANTS

NAME MBA CONSULTING ENGINEERS, INC.  
ADDRESS 3812 SPENARD RD, STE 200  
CITY, STATE ANCHORAGE, ALASKA 99687  
PHONE: (907) 272-2622  
CONTACT - ED CARLSON

### SYMBOLS



No.	DATE	DESCRIPTION	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
1	07-06-23	IFC REV 1 - ADDED MECHANICAL AND ELECTRICAL SPECIFICATION SHEETS	CJ	SA	BA	RB	RB
0	06-15-23	ISSUED FOR CONSTRUCTION	CJ	SA	BA	RB	RB
ISSUES / REVISIONS							
ENGINEERING APPROVALS							



### ISSUED FOR CONSTRUCTION

TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
COVER SHEET AND INDEX			
GENERAL			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-15-2023	G1.0	1

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- NOTES (FOR THIS SHEET)
- (N1) EXISTING 6" THICK CONCRETE ISLAND #1
  - (N2) EXISTING 6" THICK CONCRETE ISLAND #2
  - (N3) EXISTING CONCRETE PAD (THICKNESS UNKOWN)
  - (N4) EXISTING FUEL TANKS

2.1 CIVIL -LAYOUT  
 S(600) G(A) P(H) D(EEIS)  
 Scale: 0 25' 50'

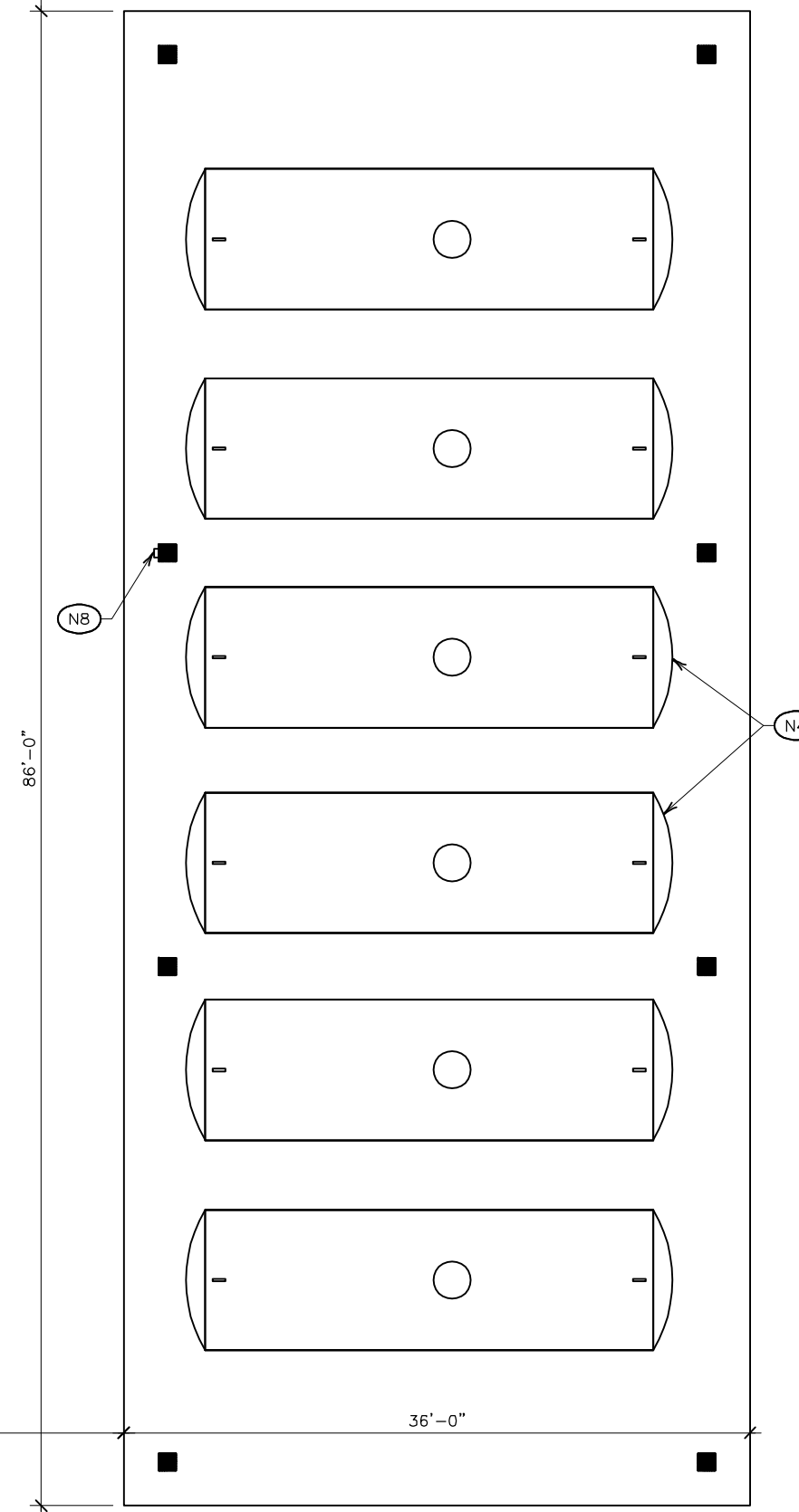
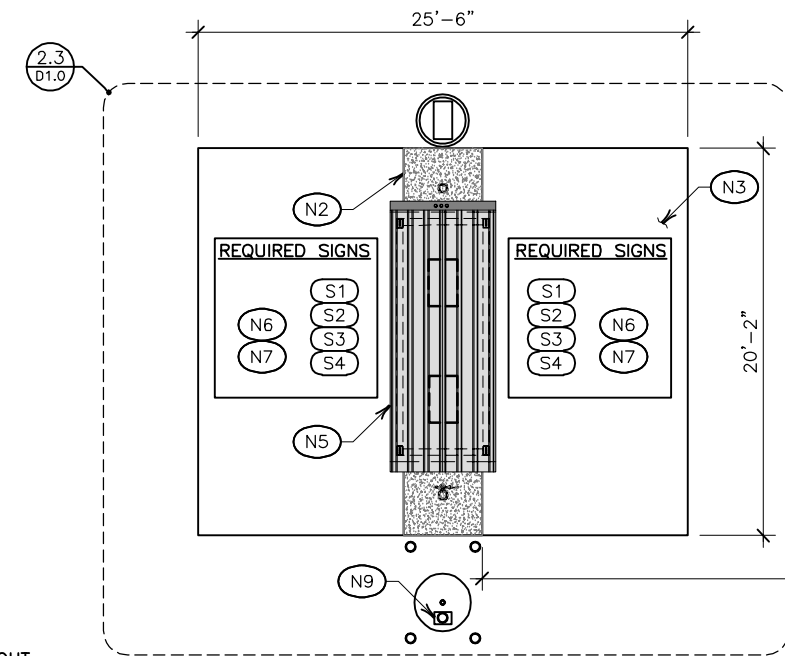
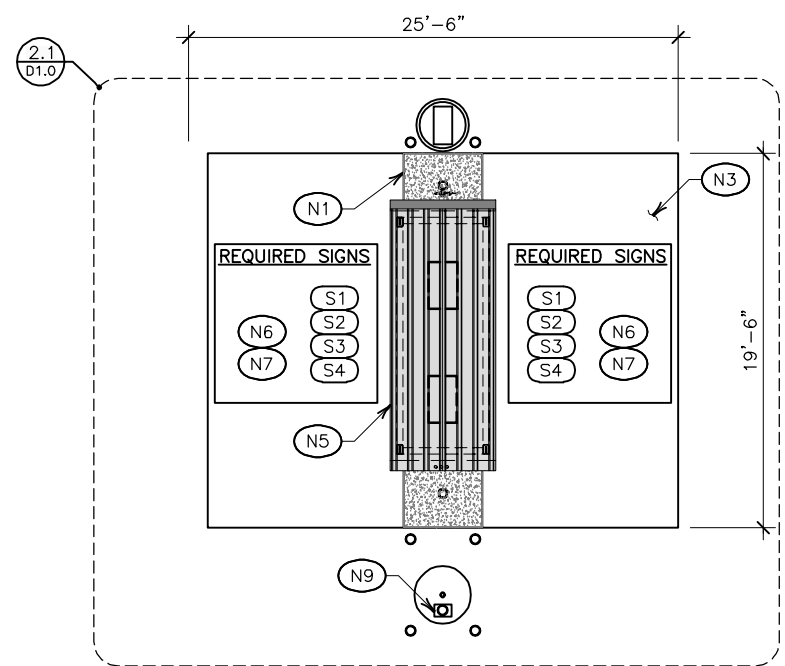
No.	DATE	DESCRIPTION	ISSUES / REVISIONS	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB	RB
				ENGINEERING APPROVALS				

SE-13698  
 07-06-23  
 PROFESSIONAL ENGINEER



<b>ISSUED FOR CONSTRUCTION</b>			
TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
LAYOUT			
GENERAL			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	04-20-2023	G2.0	0

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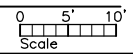


- NOTES (FOR THIS SHEET)**
- (N1) EXISTING 6" THICK CONCRETE ISLAND #1
  - (N2) EXISTING 6" THICK CONCRETE ISLAND #2
  - (N3) EXISTING CONCRETE PAD (UNKNOWN THICKNESS)
  - (N4) EXISTING FUEL TANKS
  - (N5) NEW FUEL DISPENSING MODULE
  - (N6) MOUNT DISPENSER NAME SIGNS S10 AND S11 BESIDE SHELTER DOORS
  - (N7) MOUNT SAFETY AND WARNING SIGNS S1, S2, S3, AND S4 ON DISPENSER SHELTER EXTERIOR WALLS SHOWN ON C2.0
  - (N8) EXISTING EMERGENCY FUEL SHUTOFF AND SIGN TO REMAIN
  - (N9) EXISTING CARD READER

**NOTE:**  
 SIGNS ON THE MODULES WILL BE PROVIDED AND INSTALLED BY THE CITY OF FAIRBANKS

SIGN SCHEDULE	
WARNING SIGNS & INFORMATIONAL PLACARDS - PROVIDE ALL SIGNS INDICATED IN THE SCHEDULE BELOW, QUANTITY & LOCATION AS INDICATED ON DRAWINGS. ALL SIGNS SHALL BE 0.08" ALUMINUM PLATE, 10" x 14" UNLESS INDICATED OTHERWISE OR REQUIRED TO BE LARGER FOR SPECIFIED LETTER SIZE. PROVIDE 3/16" HOLES IN ALL FOUR CORNERS. WHITE NON-REFLECTIVE VINYL BACKGROUND, 3M 3550-10, WITH 3M SERIES 225 HIGH PERFORMANCE VINYL LETTERS, ONE SIDE ONLY. WARNING LITES OR EQUAL. ATTACH TO STRUCTURES WITH LAGS OR TO SUPPORTS WITH BOLTS.	
<b>WARNING SIGNS</b>	
(S1)	"DANGER FLAMMABLE LIQUIDS" (3" HIGH LETTERS - 24" X 18")
(S2)	"DANGER NO SMOKING" (3" HIGH 1/2" STROKE LETTERS - 24" X 18")
(S3)	"TURN OFF YOUR ENGINE" (3" HIGH LETTERS - 24" X 14")
(S4)	"AUTHORIZED PERSONNEL ONLY" (24" X 18")
<b>INFORMATIONAL SIGNS</b>	
(S10)	"DIESEL"
(S11)	"GASOLINE"

**2.1 CIVIL - ENLARGED LAYOUT**  
 S(60 ) G(A) P(H) D(EEIS)

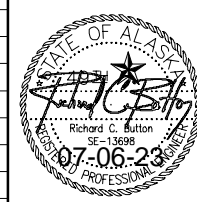


No.	DATE	DESCRIPTION	ISSUES / REVISIONS
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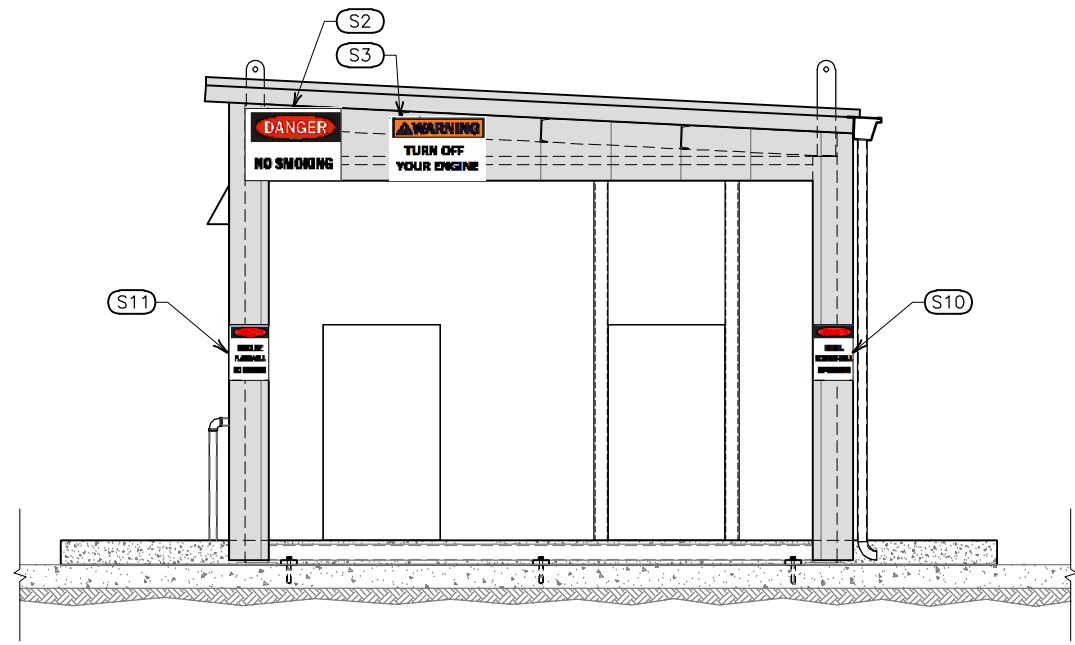
  

DWN.	CHK'D	D. ENG	P. ENG	P. MGR
CJ	SA	BA	RB	RB

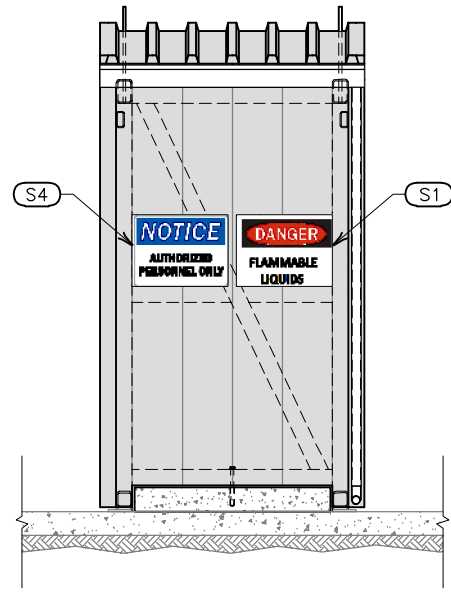
ENGINEERING APPROVALS



<b>ISSUED FOR CONSTRUCTION</b>			
TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
ENLARGED SITE PLAN			
CIVIL			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-29-2023	C1.0	0



1.1 SIDE ELEVATION  
S(24 ) G(A) P(H) D(EEIS)  
Scale 0 1' 2'



1.3 END ELEVATION  
S(24 ) G(A) P(H) D(EEIS)  
Scale 0 1' 2'

NOTE:  
SIGNS ON THE MODULES WILL BE PROVIDED AND INSTALLED BY THE CITY OF FAIRBANKS

**SIGN SCHEDULE**

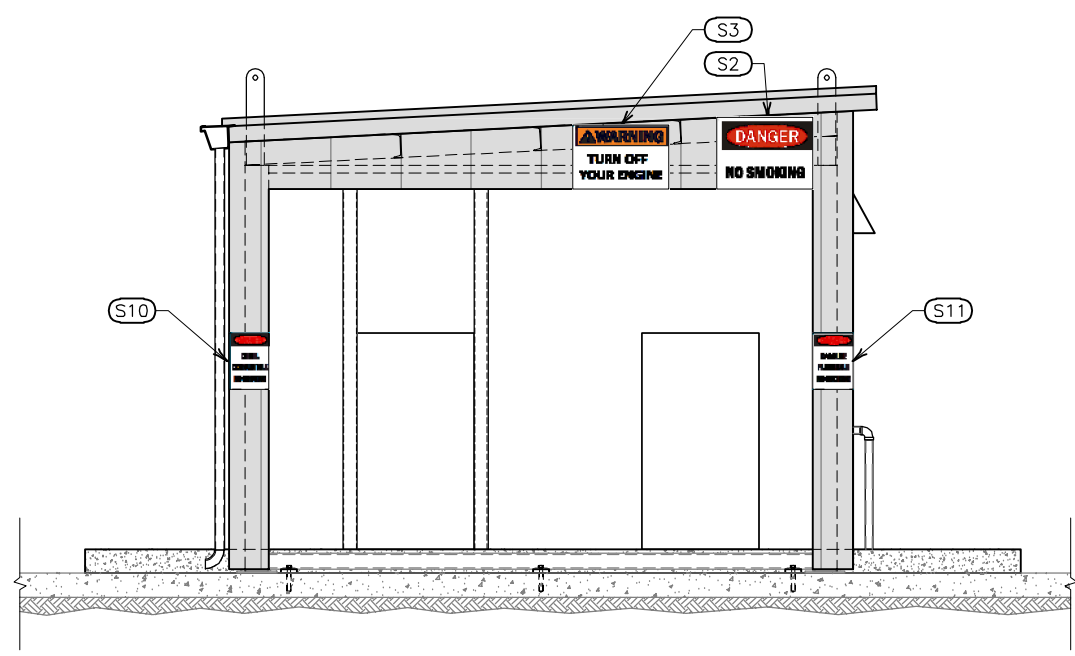
WARNING SIGNS & INFORMATIONAL PLACARDS – PROVIDE ALL SIGNS INDICATED IN THE SCHEDULE BELOW, QUANTITY & LOCATION AS INDICATED ON DRAWINGS. ALL SIGNS SHALL BE 0.08" ALUMINUM PLATE, 10" x 14" UNLESS INDICATED OTHERWISE OR REQUIRED TO BE LARGER FOR SPECIFIED LETTER SIZE. PROVIDE 3/16" HOLES IN ALL FOUR CORNERS. WHITE NON-REFLECTIVE VINYL BACKGROUND, 3M 3550-10, WITH 3M SERIES 225 HIGH PERFORMANCE VINYL LETTERS, ONE SIDE ONLY. WARNING LITES OR EQUAL. ATTACH TO STRUCTURES WITH LAGS OR TO SUPPORTS WITH BOLTS.

**WARNING SIGNS**

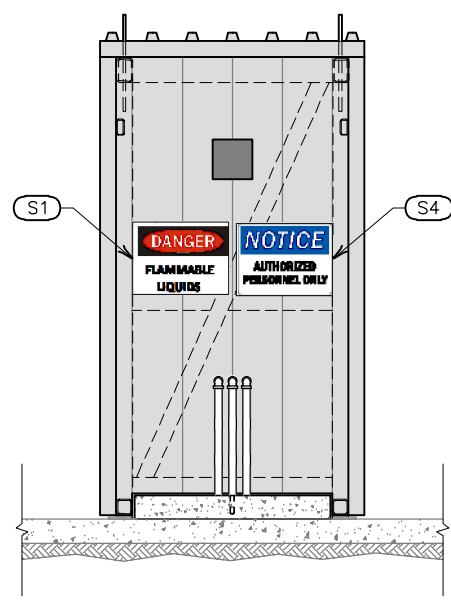
- (S1) "DANGER FLAMMABLE LIQUIDS" (3" HIGH LETTERS – 24" X 18")
- (S2) "DANGER NO SMOKING" (3" HIGH 1/2" STROKE LETTERS – 24" X 18")
- (S3) "TURN OFF YOUR ENGINE" (3" HIGH LETTERS – 24" X 14")
- (S4) "AUTHORIZED PERSONNEL ONLY" (24" X 18")

**INFORMATIONAL SIGNS**

- (S10) "DIESEL"
- (S11) "GASOLINE"



2.1 SIDE ELEVATION  
S(24 ) G(A) P(H) D(EEIS)  
Scale 0 1' 2'



2.3 END ELEVATION  
S(24 ) G(A) P(H) D(EEIS)  
Scale 0 1' 2'

(S1) DANGER FLAMMABLE LIQUIDS

(S2) DANGER NO SMOKING

(S3) WARNING TURN OFF YOUR ENGINE

(S4) NOTICE AUTHORIZED PERSONNEL ONLY

(S10) DANGER DIESEL COMBUSTIBLE NO SMOKING

(S11) DANGER GASOLINE FLAMMABLE NO SMOKING

2.4 SIGN SCHEDULE  
S(24 ) G(A) P(H) D(EEIS)

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	RB	RB	RB	RB

ENGINEERING APPROVALS

**EEIS CONSULTING ENGINEERS, INC.**  
P.O. Box 92169 Anchorage, Alaska 99508-2169  
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CITY OF FAIRBANKS  
INCORPORATED ON NOVEMBER 10, 1900

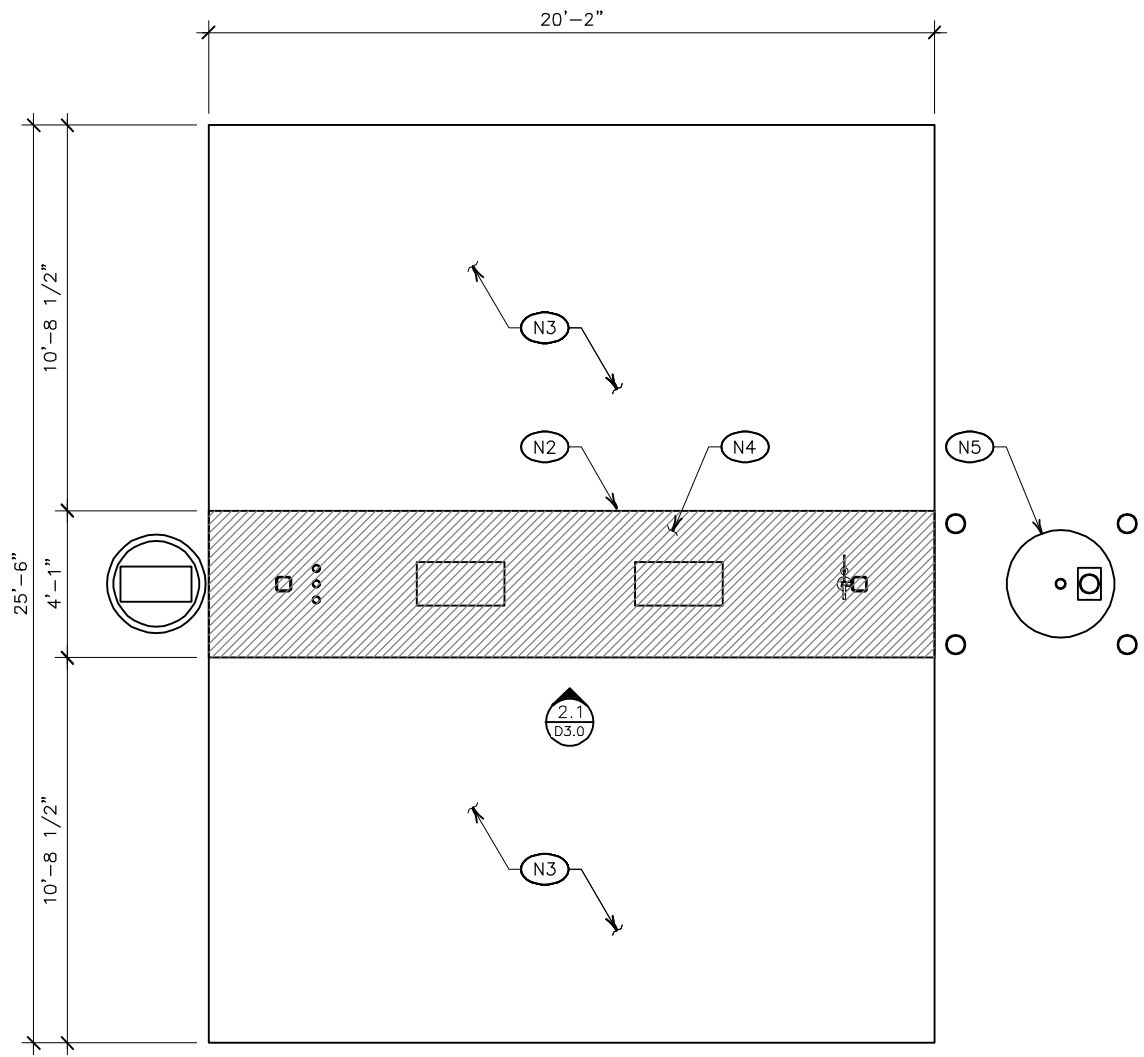
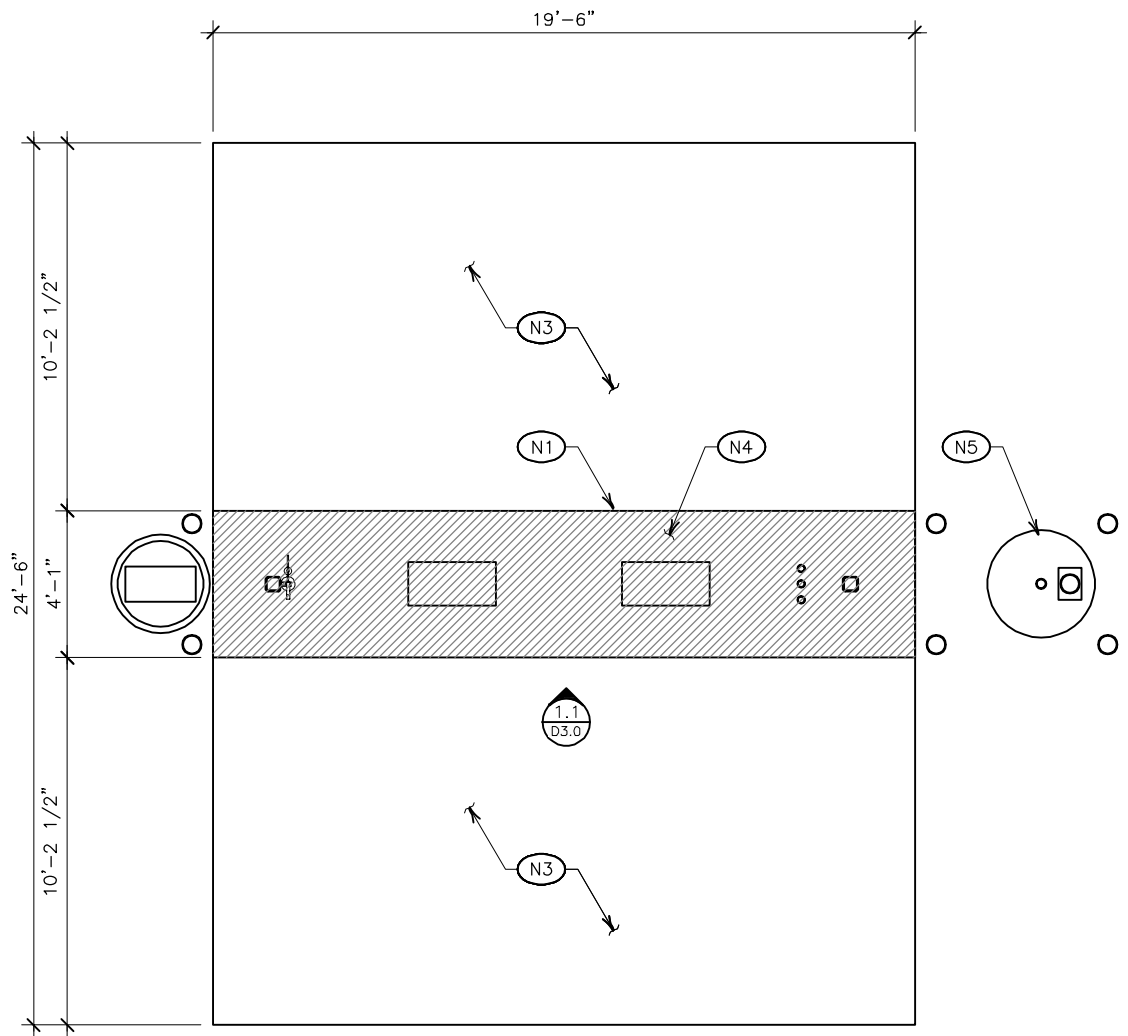
**ISSUED FOR CONSTRUCTION**

TITLE: CITY OF FAIRBANKS – PWD – PUMP ENCLOSURE SIGNAGE CIVIL

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
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- NOTES (FOR THIS SHEET)**
- (N1) EXISTING CONCRETE ISLAND #1 TO REMAIN
  - (N2) EXISTING CONCRETE ISLAND #2 TO REMAIN
  - (N3) EXISTING CONCRETE PAD TO REMAIN
  - (N4) DEMO EXISTING CANOPY STRUCTURE
  - (N5) PUMP ACCESS PANEL TO REMAIN



**2.1 ISLAND #1 DEMOLITION PLAN**  
 S(32 ) G(A) P(H) D(EEIS)  
 Scale 1" = 2'-8"

**2.3 ISLAND #2 DEMOLITION PLAN**  
 S(32 ) G(A) P(H) D(EEIS)  
 Scale 1" = 2'-8"

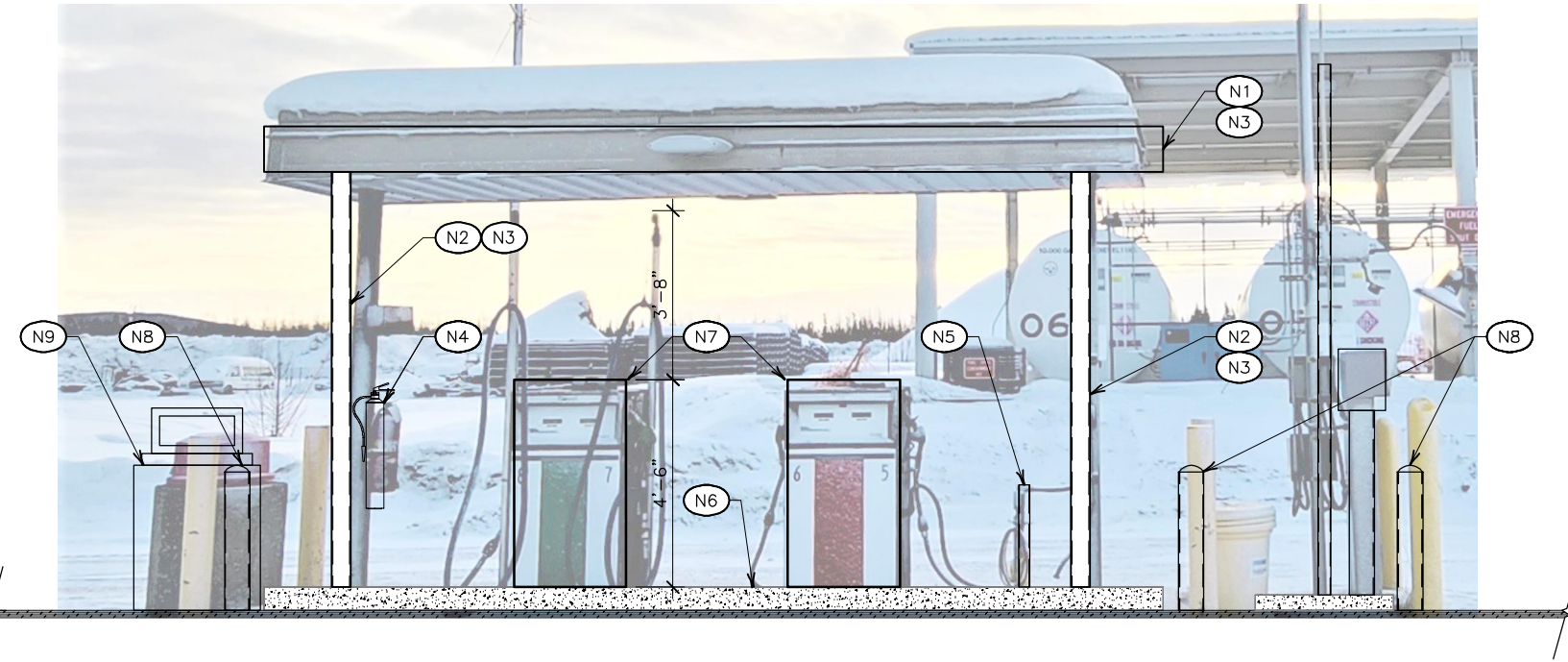
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No.	DATE	DESCRIPTION	ISSUES / REVISIONS	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB RB
				ENGINEERING APPROVALS			

STATE OF ALASKA  
 PROFESSIONAL ENGINEER  
 Richard G. Sutton  
 SE-13698  
 07-06-23

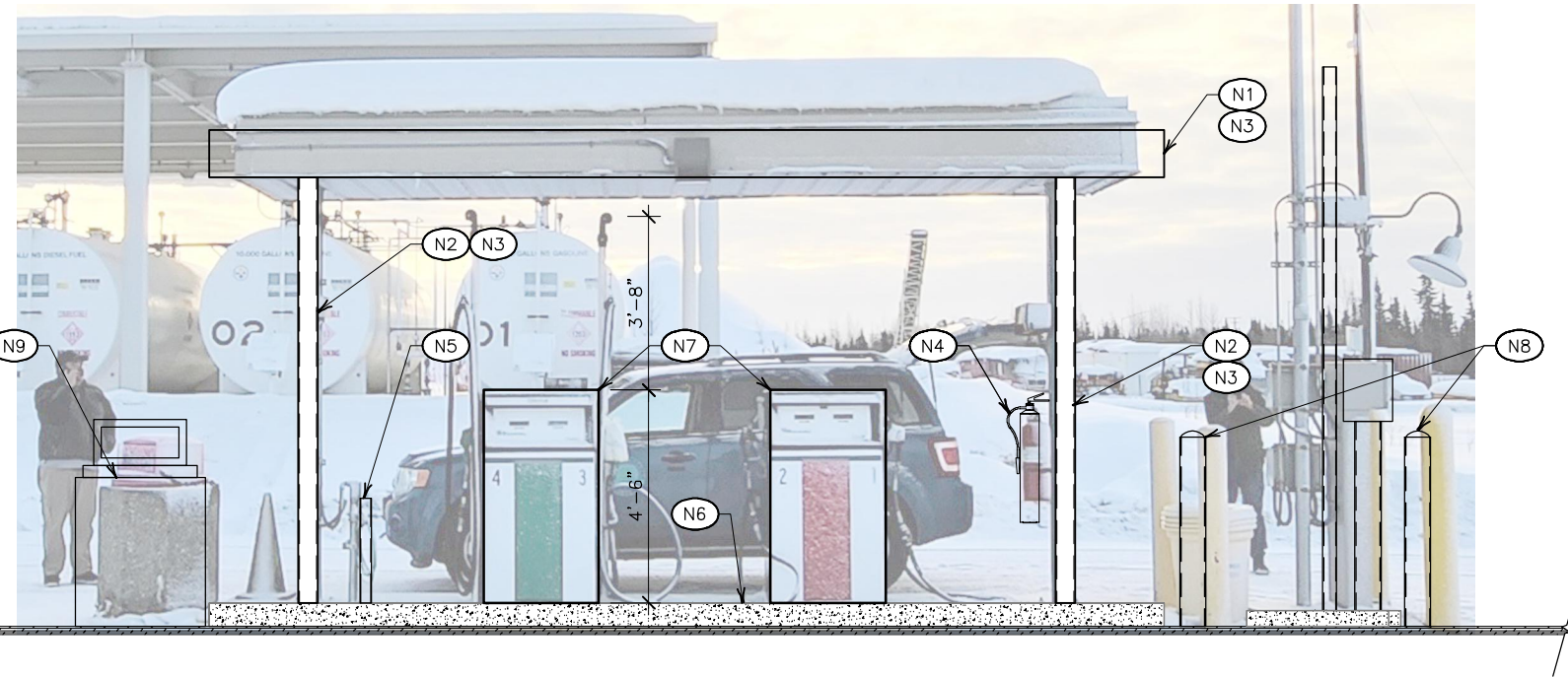
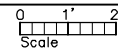
P.O. Box 92169 Anchorage, Alaska 99508-2169  
 (907)258-3231  
 License # ABCC500

<b>ISSUED FOR CONSTRUCTION</b>			
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
DEMO PLAN			
DEMO			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-07-2023	D1.0	0



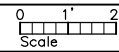
1.1 DEMOLITION - EXISTING ISLAND #1

S(24 ) G(A) P(H) D(EEIS)



2.1 DEMOLITION - EXISTING ISLAND #2

S(24 ) G(A) P(H) D(EEIS)



PROJECT DEMOLITION NOTES:

- CONDITIONS SHOWN ARE BASED ON EXISTING DRAWINGS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING DEMOLITION AND REPORT ANY AND ALL DISCREPANCIES TO THE OWNER'S REPRESENTATIVE.
- REFER TO EXISTING DRAWINGS FOR ADDITIONAL INFORMATION. DRAWINGS SHALL BE PROVIDED BY THE ENGINEER.
- THE DEMOLITION DRAWINGS FOR ARCHITECTURAL AND ENGINEERING WORK HAVE BEEN PREPARED USING SITE VISIT NOTES AND PHOTOGRAPHS. THE ENGINEER DOES NOT WARRANT THESE DRAWINGS TO BE "AS-BUILT" DOCUMENTS, AND ACTUAL CONDITIONS MAY VARY. THE DEMOLITION WORK INDICATED IS INTENDED TO SHOW THE GENERAL SCOPE OF THE DEMOLITION WORK AND IN NO WAY RELIEVES THE CONTRACTOR FROM PERFORMING ANY AND ALL DEMOLITION REQUIRED TO COMPLETE THE NEW WORK.
- ALL DEMOLITION WORK SHALL BE PERFORMED WITH "DUE CARE AND DILIGENCE" SO AS TO PREVENT THE ARBITRARY DESTRUCTION OR INTERRUPTION OF CONCEALED UTILITIES WHICH COULD NOT BE PREDETERMINED UNTIL DEMOLITION WAS STARTED. ALL SUCH DISCOVERIES OF UTILITIES DURING THE DEMOLITION PROCESS WHICH ARE IN A LOCATION DIFFERENT FROM FLOOR TO FLOOR, ETC., OR ARE UNIDENTIFIED, SHALL BE REPORTED TO THE ENGINEER BEFORE REMOVAL FOR FINAL DISPOSITION.
- REMOVE ALL CONSTRUCTION DESIGNATED TO BE REMOVED AND CLEAR TO RECEIVE NEW WORK AS HEREIN INDICATED.
- PROCEED WITH CARE AND CAUTION DURING DEMOLITION OF CANOPY TO AVOID AND MINIMIZE DAMAGE TO EXISTING CONSTRUCTION, MATERIALS, SYSTEMS AND FINISHES TO REMAIN.
- REMOVE PORTIONS OF EXISTING CONSTRUCTION AS DRAWN AND PATCH TO MATCH ADJACENT CONSTRUCTION.
- NEW WORK SHALL ALIGN WITH AND MATCH EXISTING WORK EXCEPT WHERE OTHERWISE DIMENSIONED OR DETAILED.
- ANY EXISTING CONDITIONS WHICH ARE INCONSISTENT WITH CONTRACT DRAWINGS RELEVANT TO THIS CONTRACT SHALL BE REPORTED TO THE ENGINEER.
- WHERE DEMOLITION OR RELATED WORK LEAVES FLOOR SURFACES WITH IMPERFECTIONS OR NOT LEVEL TO TOLERANCES SPECIFIED FOR NEW WORK PROVIDE SELF-LEVELING UNDERLAYMENT.
- WHERE DEMOLITION WORK UNCOVERS OR LEAVES OPENINGS IN PARTITIONS OR INCOMPLETE PARTITIONS, EXTEND, RESTORE, AND/OR CLOSE OPENING IN PARTITION AS INDICATED AND/OR AS REQUIRED TO MAINTAIN FIRE RATINGS. MATCH EXISTING CONSTRUCTION, U.N.O., WITHIN THE LIMITS AND TOLERANCES FOR MATERIAL AS SPECIFIED OR RECOMMENDED BY THE MANUFACTURER. REFINISH SURFACES TO ALIGN FLUSH WITH EXISTING.

NOTES (FOR THIS SHEET)

- (N1) DEMO EXISTING CANOPY STRUCTURES
- (N2) DEMO EXISTING COLUMNS SUPPORTING CANOPY. CUT ANCHOR BOLTS FLUSH WITH CONCRETE SURFACE AND GRIND SMOOTH
- (N3) DEMO ELECTRICAL CONDUITS AND JUNCTION BOX ATTACHED TO EXISTING ROOF AND COLUMNS. PRESERVE EXISTING WIRING AS DIRECTED IN ELECTRICAL
- (N4) TEMPORARILY RELOCATE FIRE EXTINGUISHER
- (N5) EXISTING ELECTRICAL CONDUITS TO REMAIN
- (N6) EXISTING CONCRETE ISLANDS TO REMAIN
- (N7) EXISTING FUEL DISPENSER TO REMAIN
- (N8) EXISTING BOLLARDS TO REMAIN
- (N9) EXISTING WASTE DISPOSAL TO REMAIN

2.1 DEMOLITION NOTES

S(1 ) G(A) P(H) D(EEIS)

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB	RB

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 (907)256-3231  
 License # ABCC590

**ISSUED FOR CONSTRUCTION**

TITLE: CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

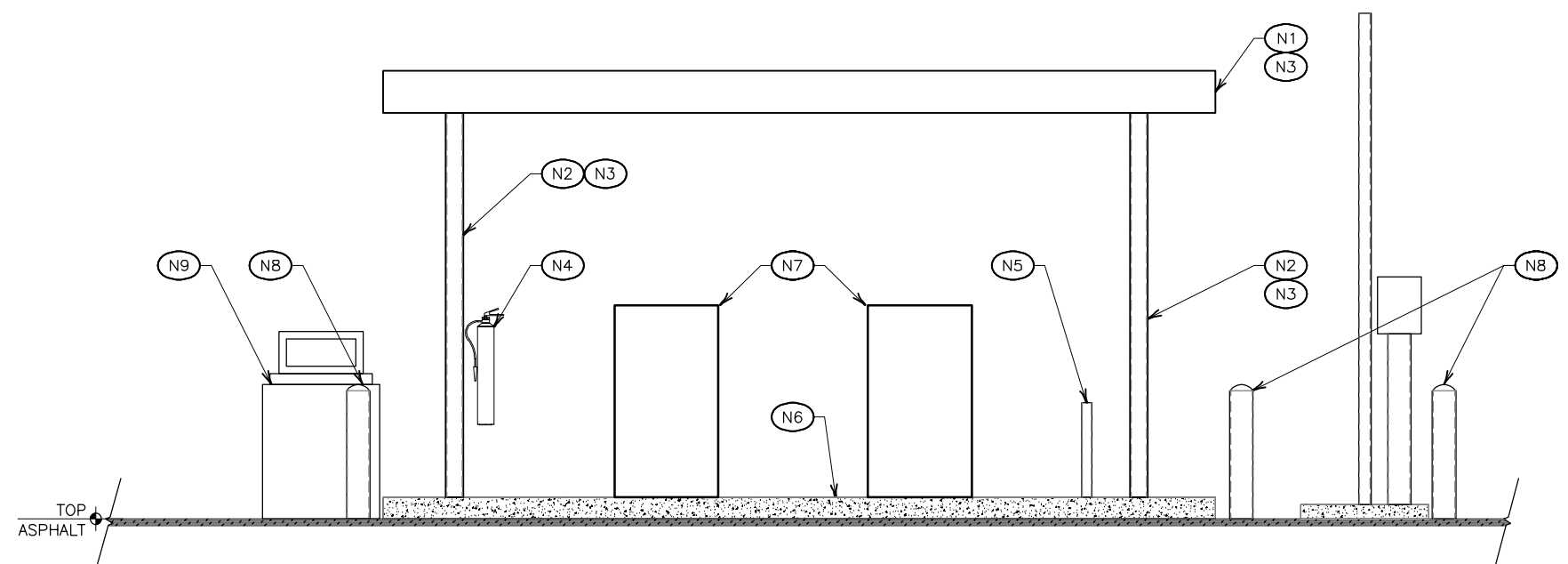
DEMO ELEVATIONS WITH PHOTO

DEMO

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	05-10-2023		D2.0 0

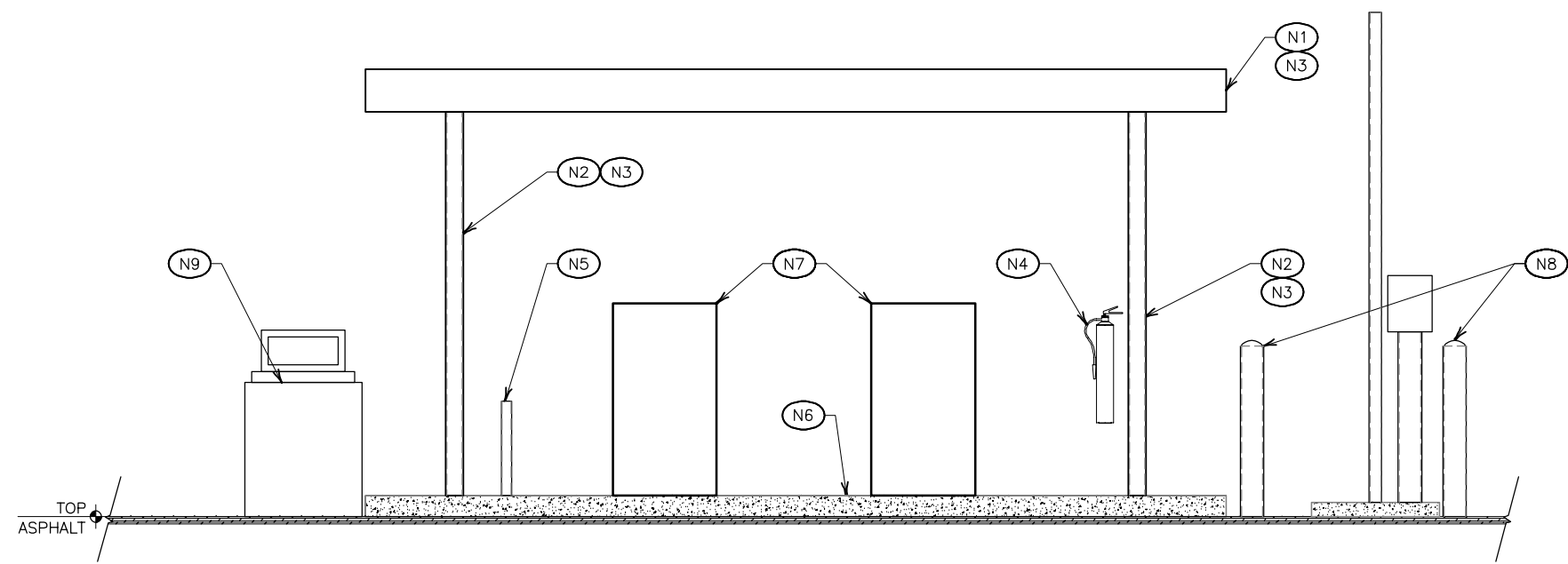
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 Plot Style: NCS 4.0.ctb - Page Setup: ACROPLOT1 - L1Scale: 1 - DimScale: 1 - VisRetain: 0

- NOTES (FOR THIS SHEET)**
- (N1) DEMO EXISTING CANOPY STRUCTURES
  - (N2) DEMO EXISTING COLUMNS SUPPORTING CANOPY. CUT ANCHOR BOLTS FLUSH WITH CONCRETE SURFACE AND GRIND SMOOTH
  - (N3) DEMO ELECTRICAL CONDUITS AND JUNCTION BOX ATTACHED TO EXISTING ROOF AND COLUMNS. PRESERVE EXISTING WIRING AS DIRECTED IN ELECTRICAL
  - (N4) TEMPORARILY RELOCATE FIRE EXTINGUISHER
  - (N5) EXISTING ELECTRICAL CONDUITS TO REMAIN
  - (N6) EXISTING CONCRETE ISLANDS TO REMAIN
  - (N7) EXISTING FUEL DISPENSER TO REMAIN
  - (N8) EXISTING BOLLARDS TO REMAIN
  - (N9) EXISTING WASTE DISPOSAL TO REMAIN



**1.1** EXISTING ISLAND #1 ELEVATION  
S(24 ) G(A) P(H) D(EEIS)  
Scale 0 1' 2'

**1.4** NOT USED  
S(1 ) G(A) P(H) D(EEIS)



**2.1** EXISTING ISLAND #2 ELEVATION  
S(24 ) G(A) P(H) D(EEIS)  
Scale 0 1' 2'

**2.4** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB	RB
				ENGINEERING APPROVALS				

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License # ABCC500



**ISSUED FOR CONSTRUCTION**  
TITLE: CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
DEMO ELEVATION  
DEMO

EIIS PROJECT #	DATE CREATED	EIIS DWG. #	REVISION
223004	04-25-2023		D3.0 0

File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE-CITY OF FAIRBANKS - PWD\sheet\DEMO\3.0 DEMO ELEVATION.dwg  
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**GENERAL PROJECT NOTES**

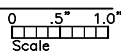
1. PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST STATE OF ALASKA ADOPTED EDITION OF THE INTERNATIONAL FIRE CODE, THE INTERNATIONAL MECHANICAL CODE, THE INTERNATIONAL BUILDING CODE, AND THE NATIONAL ELECTRICAL CODE INCLUDING STATE OF ALASKA AMENDMENTS. COMPLY WITH ALL APPLICABLE STATE AND FEDERAL REGULATIONS.
2. THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT NECESSARILY SHOW ALL FEATURES OF THE REQUIRED WORK. PROVIDE ALL LABOR, EQUIPMENT AND MATERIALS REQUIRED FOR A COMPLETE SYSTEM. VERIFY EXISTING FIELD CONDITIONS PRIOR TO STARTING CONSTRUCTION. IMMEDIATELY CONTACT THE ENGINEER FOR CLARIFICATION OF QUESTIONABLE ITEMS OR APPARENT CONFLICTS.
3. INSTALL ALL MATERIALS AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS, AND INSTALLATION DRAWINGS UNLESS INDICATED OTHERWISE.
4. PERFORM WORK WITH SKILLED CRAFTSMEN SPECIALIZING IN THE REQUIRED WORK. INSTALL ALL MATERIALS IN A NEAT ORDERLY AND SECURE FASHION, AS REQUIRED BY THESE SPECIFICATIONS DNA COMMONLY RECOGNIZED STANDARDS OF GOOD WORKMANSHIP.
5. MARK UP DESIGN DRAWINGS TO REFLECT FIELD CHANGES THROUGHOUT CONSTRUCTIONS. TURN OVER "RED LINED" CONSTRUCTION DRAWINGS TO ENGINEER AT COMPLETION OF THE PROJECT.
6. NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS. THE AREAS SURROUNDING THE PUMP ISLANDS HAVE BURIED UTILITIES. CONTRACTOR MUST FIELD LOCATE ALL EXISTING UTILITIES BEFORE BEGINNING CONSTRUCTION. PROTECT UTILITIES AT ALL TIMES DURING CONSTRUCTION. COORDINATE REQUIRED REPAIRS WITH THE OWNER AND PERFORM REPAIRS.
7. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH U.S. ENVIRONMENTAL PROTECTION AGENCY, ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION, AND STATE & FEDERAL OCCUPATIONAL HEALTH AND SAFETY REGULATIONS.
8. CAREFULLY LAYOUT WORK TO MINIMIZE DISRUPTION AND DAMAGE TO EXISTING STRUCTURES. PERFORM ALL WORK IN ACCORDANCE WITH OSHA REQUIREMENTS.
9. SCHEDULE AND COORDINATE DEMOLITION AND NEW CONSTRUCTION/ RENOVATION ACTIVITIES SUCH THAT FUEL STORAGE, TRANSFER, AND DISPENSING OPERATIONS ARE MAINTAINED WITH MINIMUM INTERRUPTION.

**1.2** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

**1.3** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

**1.4** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

**2.1** PROJECT GENERAL NOTES AND SPECIFICATIONS  
S(1 ) G(A) P(H) D(EEIS)



**2.2** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

**2.3** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

**2.4** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	ENGINEERING APPROVALS
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ SA BA RB RB
				DWN. CHK'D D. ENG P. ENG P. MGR



**ISSUED FOR CONSTRUCTION**

TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

GENERAL NOTES

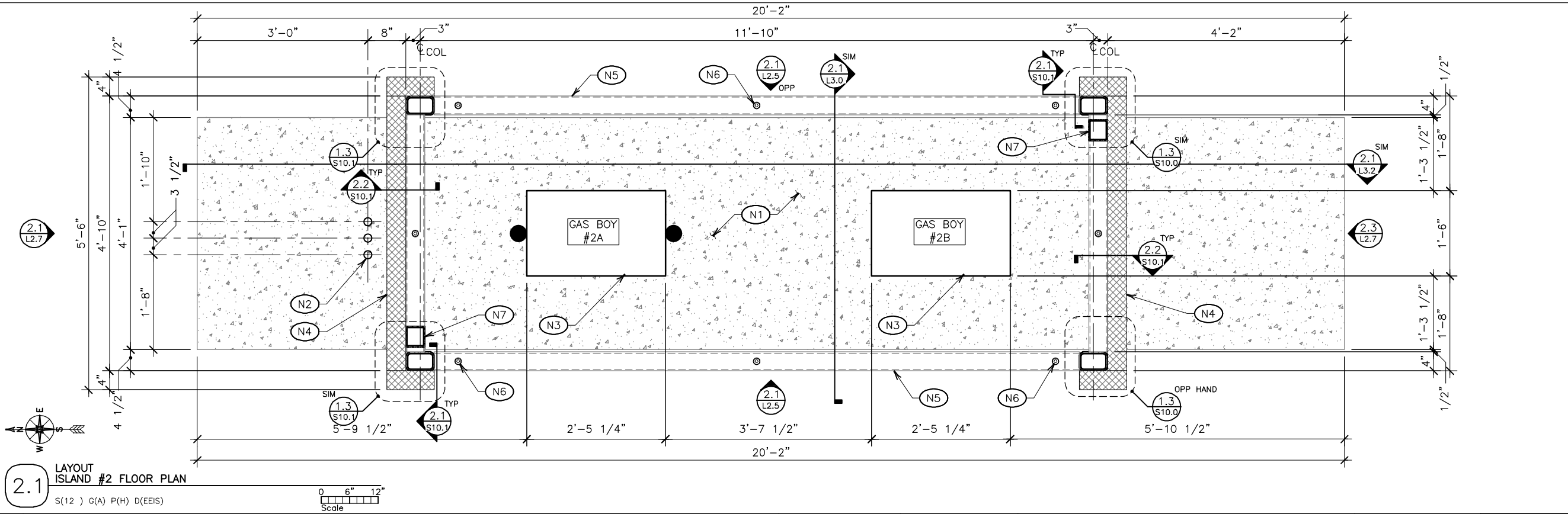
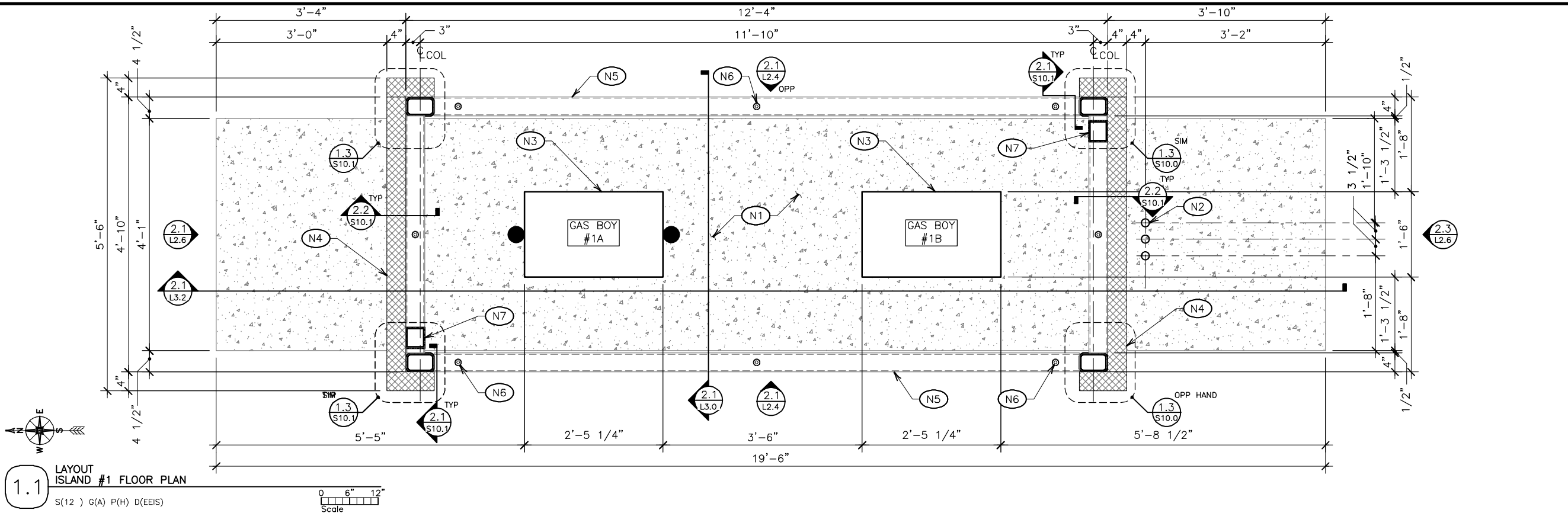
LAYOUT

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	04-24-2023	L1.0	0

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- NOTES (FOR THIS SHEET)**
- (N1) EXISTING CONCRETE ISLAND
  - (N2) EXISTING CONDUITS
  - (N3) EXISTING FUEL DISPENSER
  - (N4) INSULATED WALL PANEL
  - (N5) MODULE SKID
  - (N6) TIE-DOWN BOLTS
  - (N7) DIAGONAL BRACE

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

DWN.	CHK'D	D. ENG	P. ENG	P. MGR
CJ	SA	BA	RB	RB

ENGINEERING APPROVALS

STATE OF ALASKA  
 Richard D. Sulten  
 SE-13698  
 07-06-23  
 PROFESSIONAL ENGINEER

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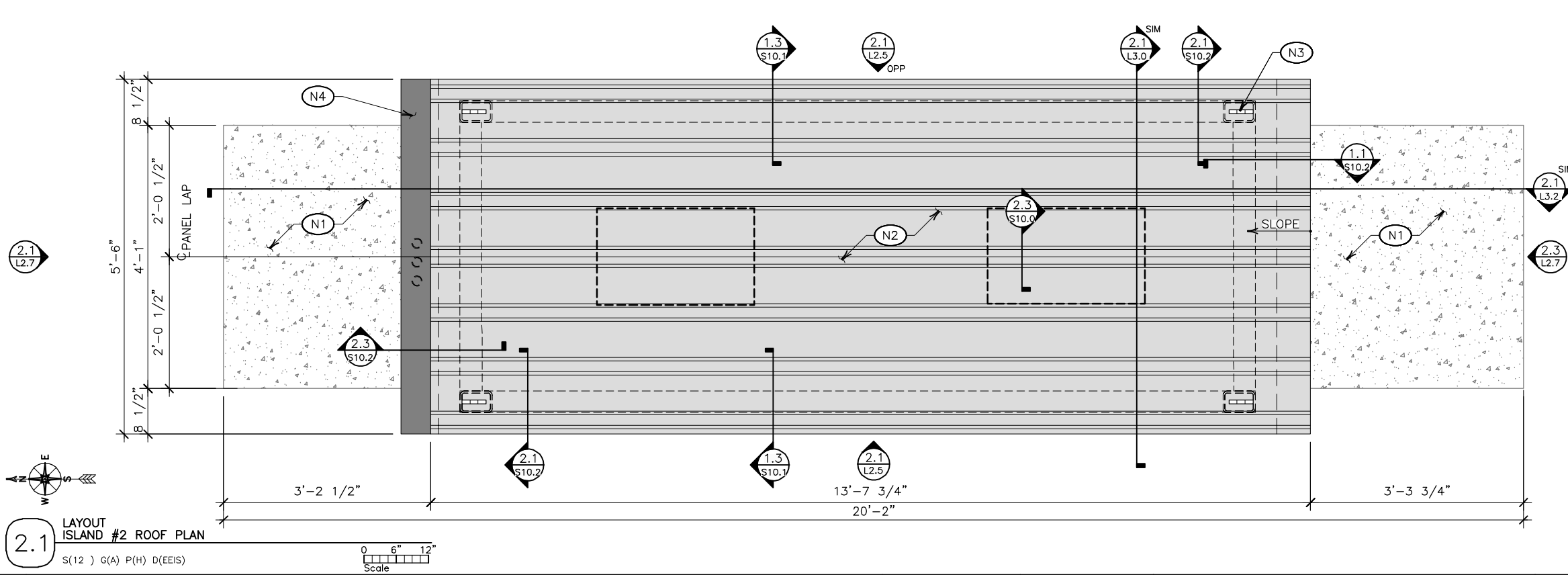
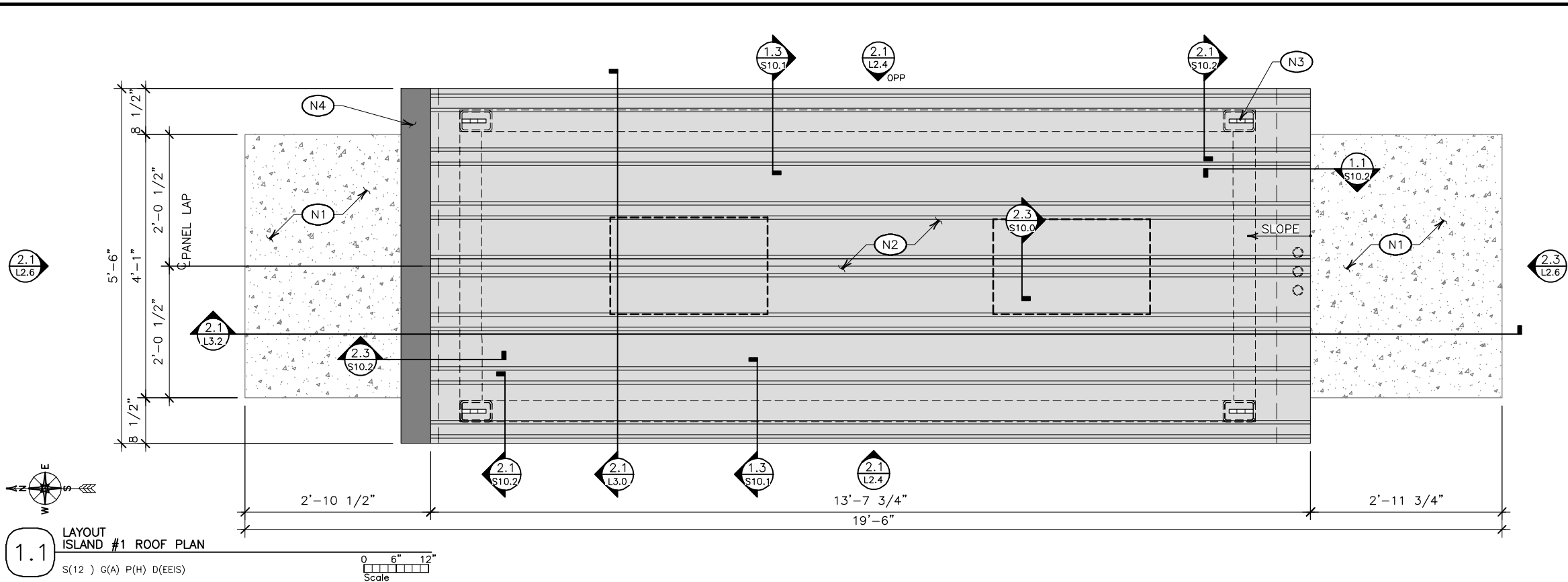
**ISSUED FOR CONSTRUCTION**

TITLE  
 CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

ISLAND 1 & 2 - PUMP ENCLOSURE FLOOR LAYOUT PLAN LAYOUT

EIS PROJECT # 223004	DATE CREATED 06-22-2023	EIS DWG. # L2.0	REVISION 0
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File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE CITY OF FAIRBANKS - PWD\Drawings\223004\_ISLAND 1 & 2 - PUMP ENCLOSURE ROOF PLAN.dwg  
 Plot Style: NCS 4.0.ctb - Page Setup: ACPLOT.ctb - E:\Scale: 1 - View: 0



- NOTES (FOR THIS SHEET)**
- (N1) EXISTING CONCRETE ISLAND
  - (N2) INSULATED ROOF PANEL
  - (N3) LIFTING PLATE AT EACH CORNER
  - (N4) GUTTER

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

DWN.	CHK'D	D. ENG	P. ENG	P. MGR
CJ	SA	BA	RB	RB

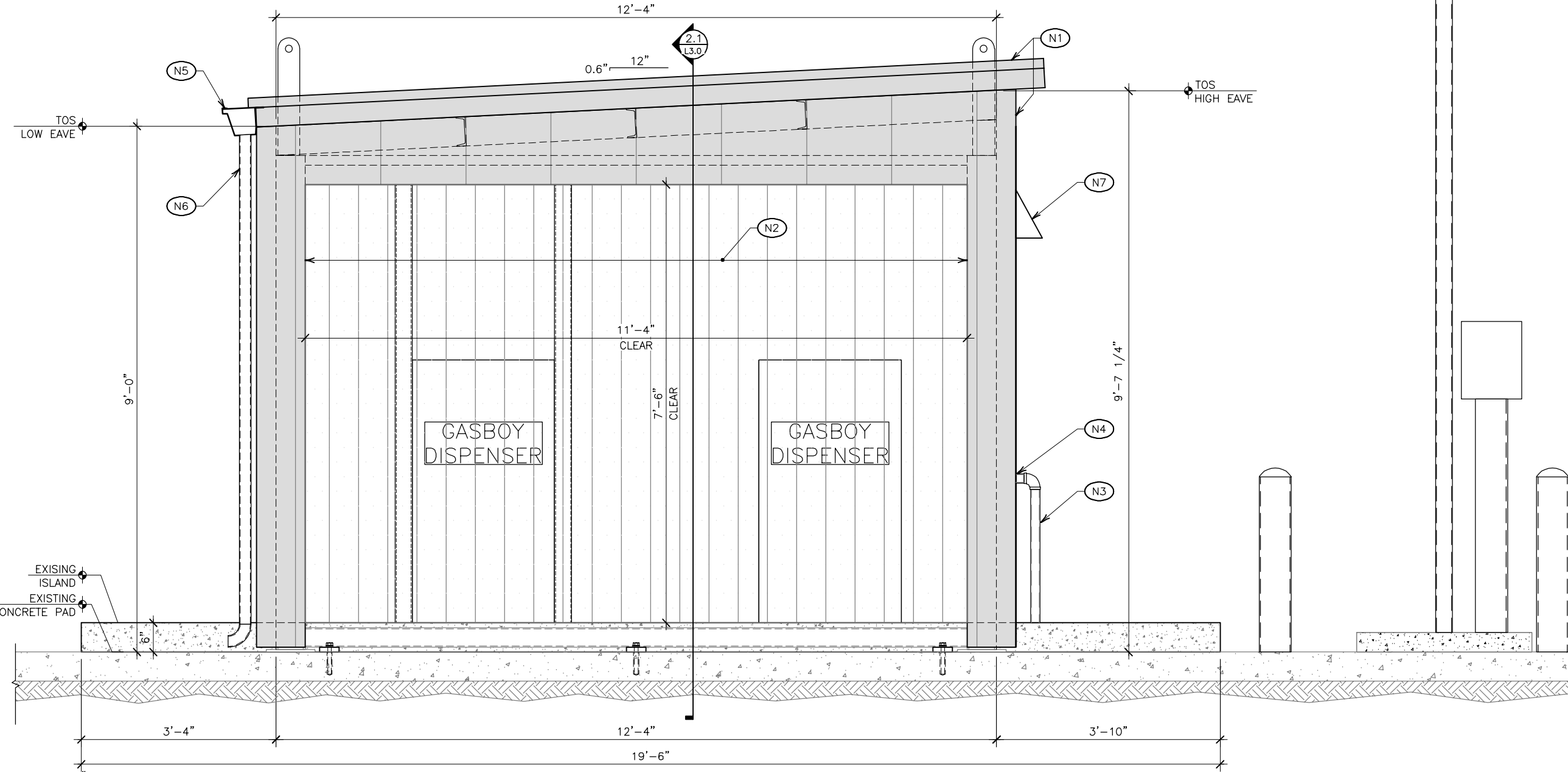
ENGINEERING APPROVALS

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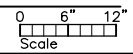
<b>ISSUED FOR CONSTRUCTION</b>			
TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
ISLAND 1 & 2 - PUMP ENCLOSURE ROOF PLAN			
LAYOUT			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-22-2023	L2.2	0

NOTE: FLASHING NOT SHOWN FOR CLARITY

- NOTES (FOR THIS SHEET)
- (N1) WALL AND ROOF INSULATED PANELS
  - (N2) 8" WIDE X 0.08" THICK W/PLASTIC STRIP CURTAIN KIT, (50% OVERLAP).
    - MANUFACTURED BY PLASTIC STRIP CURTAIN [www.pasticstripcurtain.com](http://www.pasticstripcurtain.com) (800)795-3083
      - LOW-TEMP SMOOTH (CLEAR) STRIPS
      - UNIVERSAL HANGER MOUNT
      - 14ga. HEAVY-DUTY GALVANIZED STEEL WALL MOUNT
    - CONTRACTOR TO VERIFY STRIP CURTAIN LENGTH REQUIRED AND FIELD FIT.
  - (N3) EXISTING ELECTRICAL CONDUITS
  - (N4) NEW CONDUIT OR FLEX TO MODULE - SEE ELECTRICAL
  - (N5) 6" STEEL ARCTIC GRADE PRE-FINISHED GUTTER W/END CAPS AND DOWNSPOUT
  - (N6) DOWNSPOUT
  - (N7) MECHANICAL DUCT - SEE MECHANICAL



2.1 ISLAND #1 WEST EXTERIOR ELEVATION



No.	DATE	DESCRIPTION	ISSUES / REVISIONS	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB
				DWN.	CHK'D	D. ENG	P. MGR

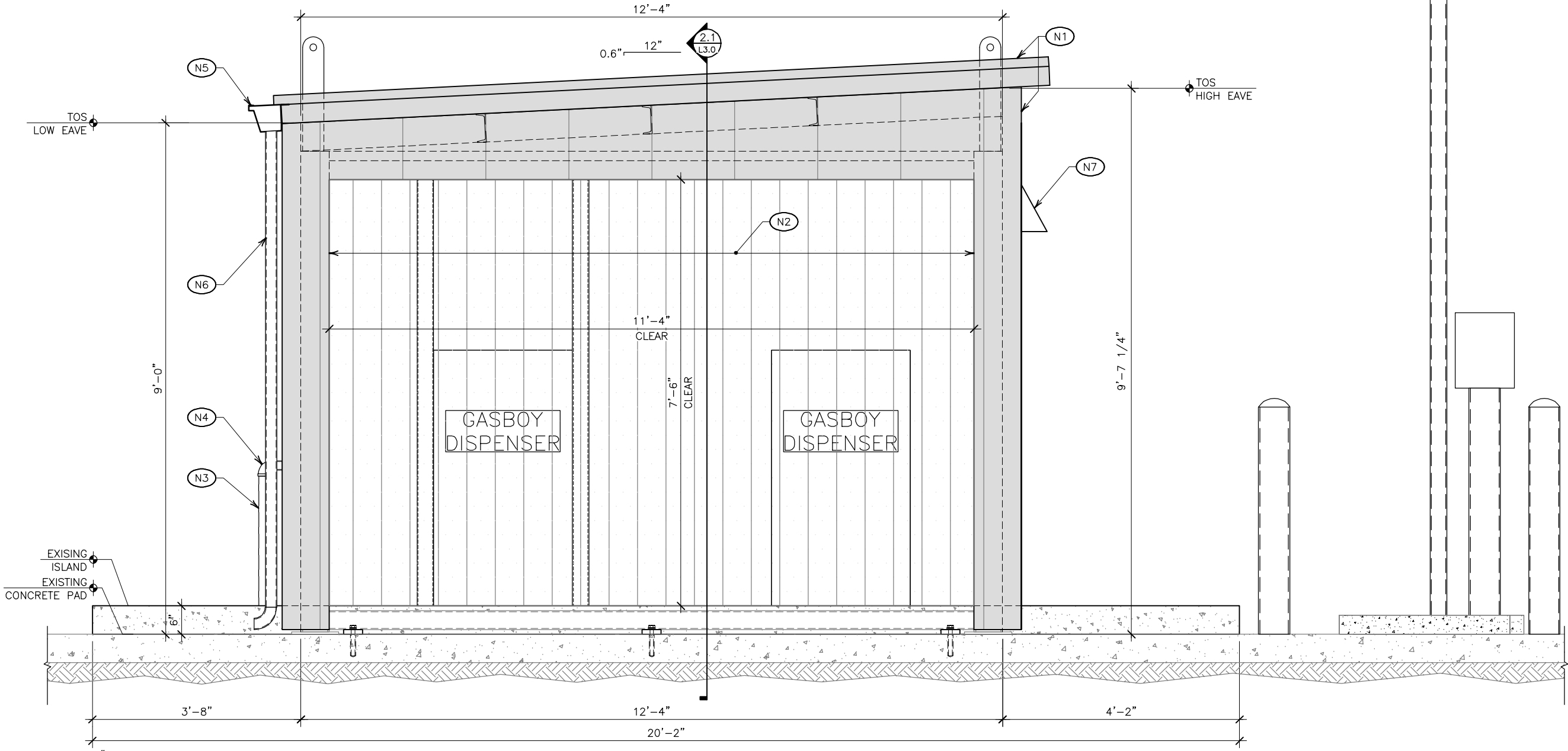


<b>ISSUED FOR CONSTRUCTION</b>			
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
ISLAND 1 - WEST EXTERIOR ELEVATION			
LAYOUT			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-22-2023		L2.4 0

File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS - PWD PUMP ENCLOSURE - PWD\sheets\layout\L2.4 ISLAND 1 - WEST EXTERIOR ELEVATION.dwg  
 Plot Style: NCS 4.0.ctb - Page Setup: ACROPLOT1 - E:\Scale: 1 - View: 0

NOTE: FLASHING NOT SHOWN FOR CLARITY

- NOTES (FOR THIS SHEET)
- (N1) WALL AND ROOF INSULATED PANELS
  - (N2) 8" WIDE X 0.08" THICK W/PLASTIC STRIP CURTAIN KIT, (50% OVERLAP).
    - MANUFACTURED BY PLASTIC STRIP CURTAIN www.pasticstripcurtain.com (800)795-3083
      - LOW-TEMP SMOOTH (CLEAR) STRIPS
      - UNIVERSAL HANGER MOUNT
      - 14ga. HEAVY-DUTY GALVANIZED STEEL WALL MOUNT
    - CONTRACTOR TO VERIFY STRIP CURTAIN LENGTH REQUIRED AND FIELD FIT.
  - (N3) EXISTING ELECTRICAL CONDUITS
  - (N4) NEW CONDUIT OR FLEX TO MODULE - SEE ELECTRICAL
  - (N5) 6" STEEL ARCTIC GRADE PRE-FINISHED GUTTER W/END CAPS AND DOWNSPOUT
  - (N6) DOWNSPOUT
  - (N7) MECHANICAL DUCT - SEE MECHANICAL



2.1 ISLAND #2 WEST EXTERIOR ELEVATION  
 S(12 ) G(A) P(H) D(EEIS)  
 Scale 0 6" 12"

File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE-CITY OF FAIRBANKS - PWD\sheets\layout\2.5 ISLAND 2 - WEST EXTERIOR ELEVATION.dwg  
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No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

CHK'D	D. ENG	P. ENG	P. MGR
CJ	SA	BA	RB

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**ISSUED FOR CONSTRUCTION**

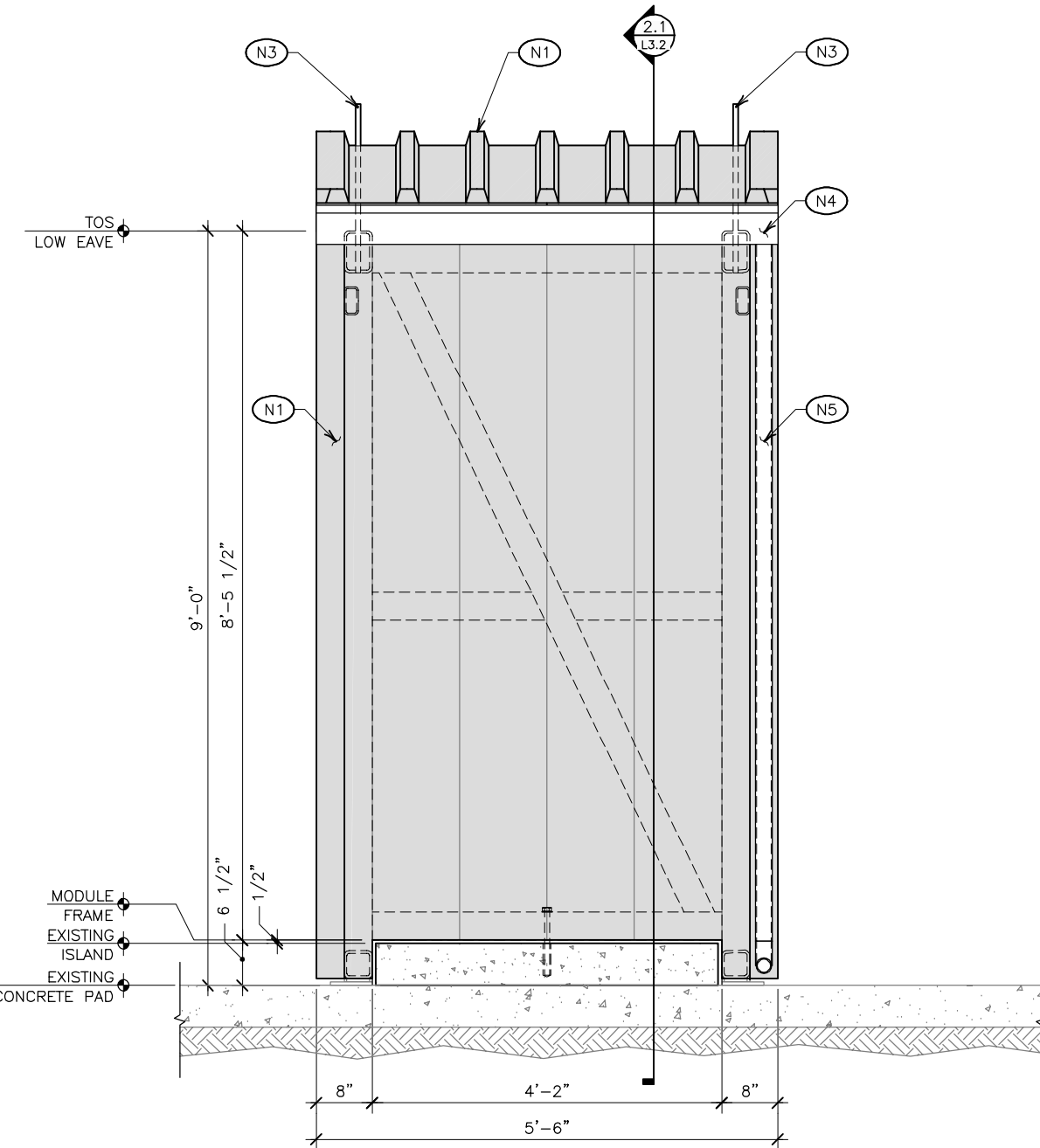
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 CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

ISLAND 2 - WEST EXTERIOR ELEVATION

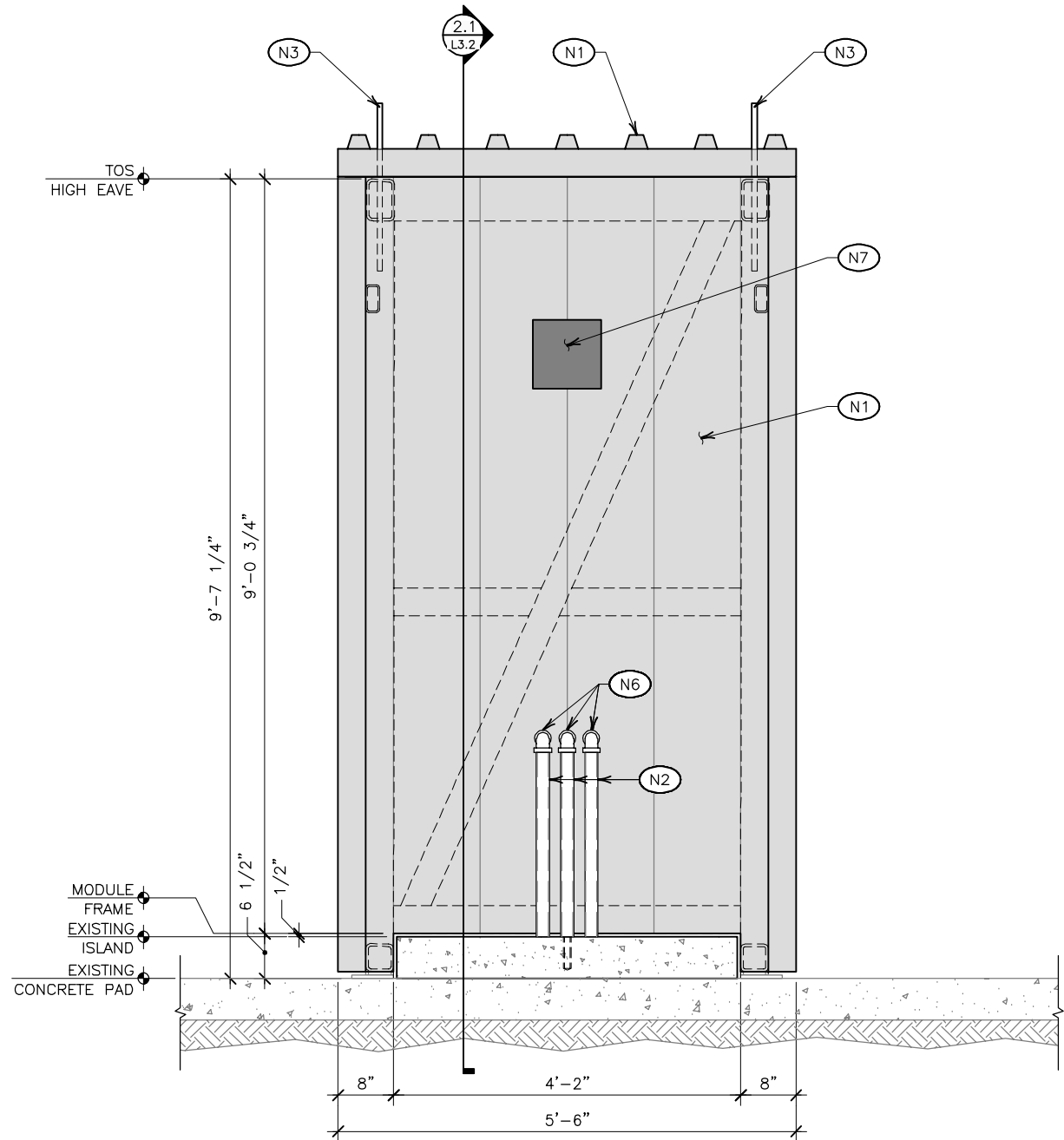
LAYOUT

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-22-2023		L2.5 0

NOTE: FLASHING NOT SHOWN FOR CLARITY



2.1 ISLAND #1 NORTH EXTERIOR ELEVATION  
S(12 ) G(A) P(H) D(EEIS)  
Scale 0 6 12"



2.3 ISLAND #1 SOUTH EXTERIOR ELEVATION  
S(12 ) G(A) P(H) D(EEIS)  
Scale 0 6 12"

- NOTES (FOR THIS SHEET)
- (N1) WALL AND ROOF INSULATED PANELS
  - (N2) EXISTING ELECTRICAL CONDUITS
  - (N3) LIFTING PLATES AT EACH CORNER
  - (N4) GUTTER
  - (N5) DOWNSPOUT
  - (N6) NEW CONDUIT OR FLEX TO MODULE - SEE ELECTRICAL
  - (N7) MECHANICAL DUCT - SEE MECHANICAL

File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE-PWD PUMP ENCLOSURE LAYOUT\2.6 ISLAND 1 - NORTH-SOUTH EXTERIOR ELEVATIONS.dwg  
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No.	DATE	DESCRIPTION	ISSUES / REVISIONS	APPROVALS
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ SA BA RB RB DWN. CHK'D D. ENG P. ENG P. MGR ENGINEERING APPROVALS

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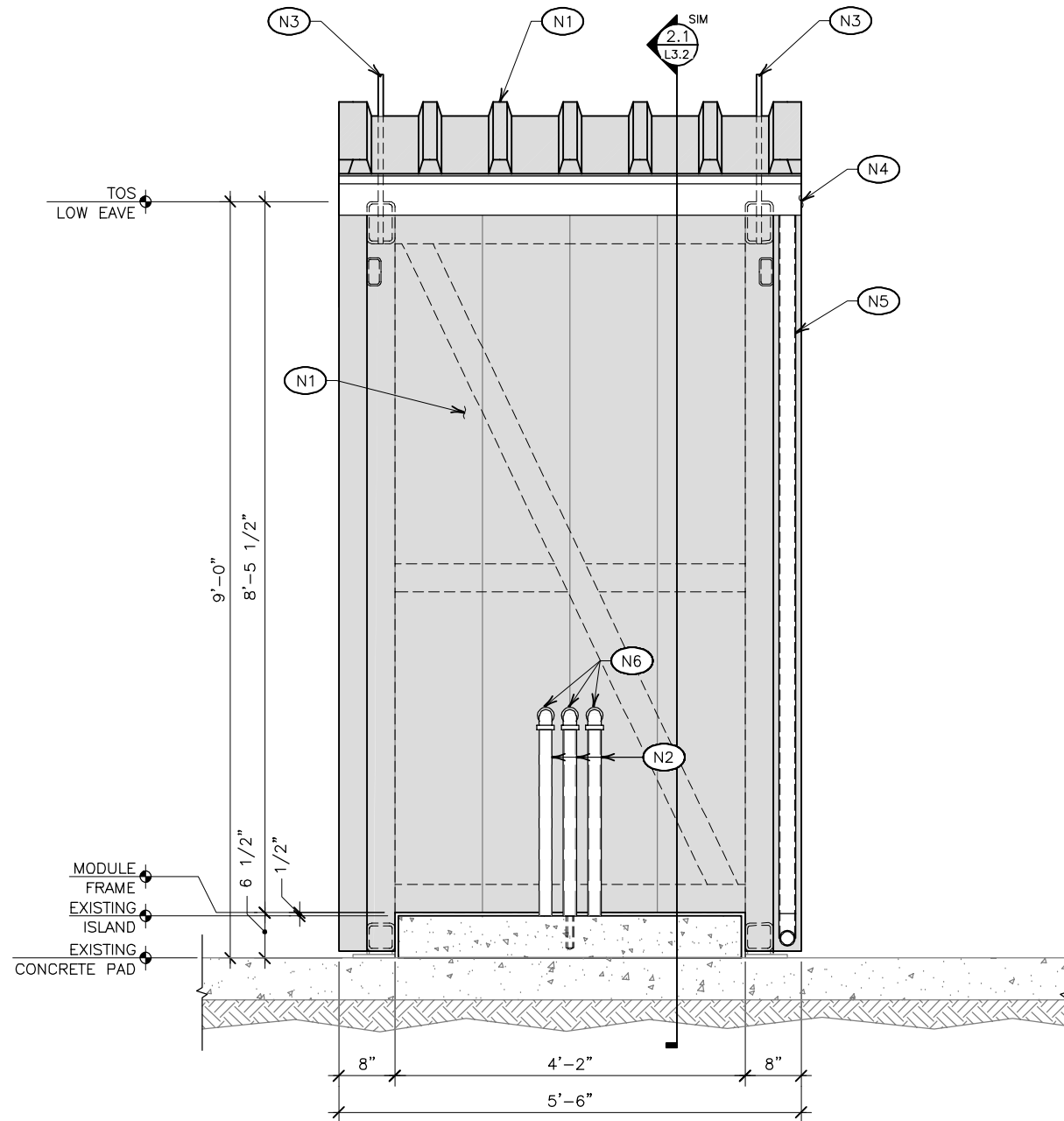


**ISSUED FOR CONSTRUCTION**

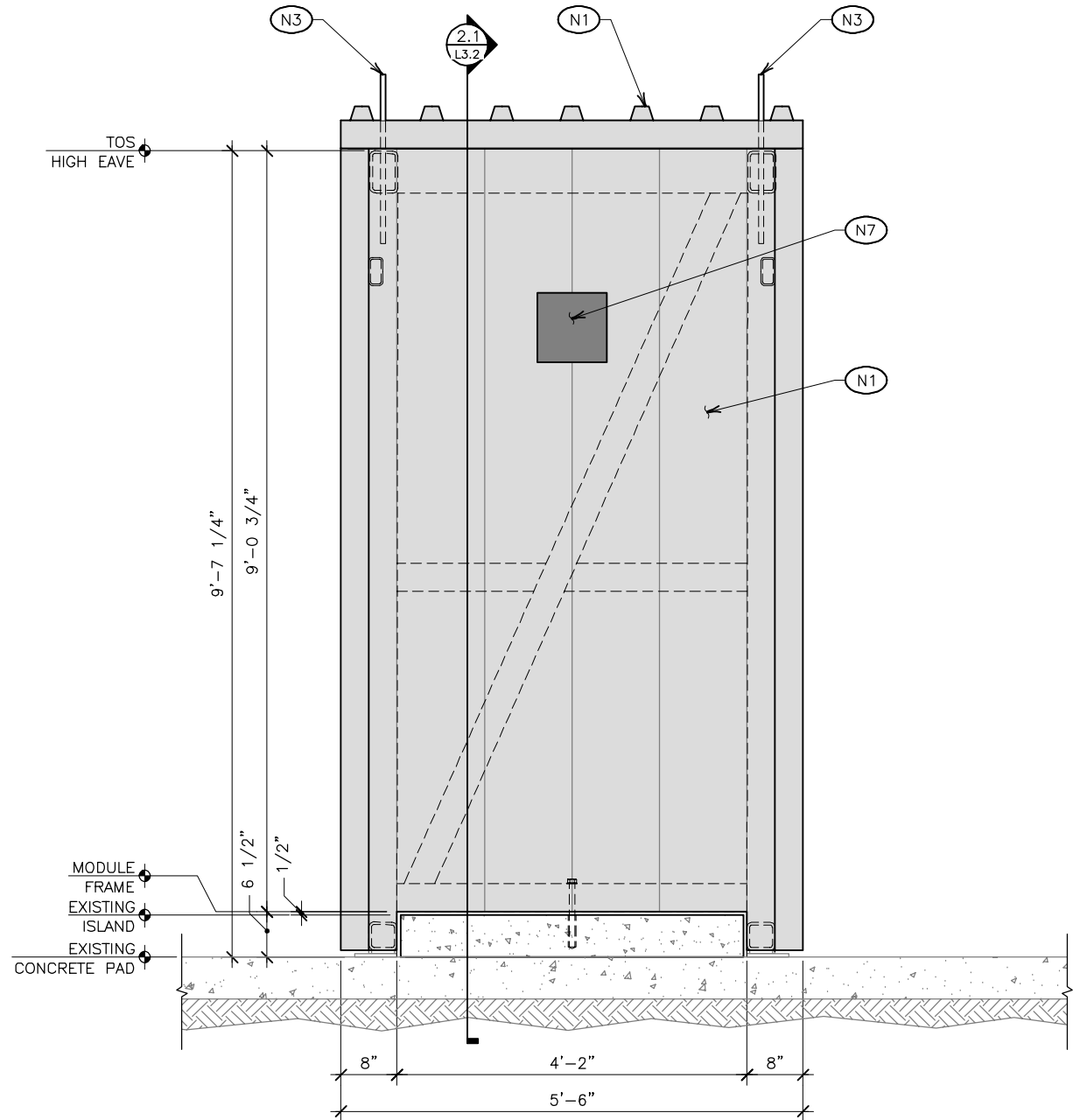
TITLE: CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
ISLAND 1 - NORTH-SOUTH EXTERIOR ELEVATIONS  
LAYOUT

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-22-2023		L2.6 0

NOTE: FLASHING NOT SHOWN FOR CLARITY



2.1 ISLAND #2 NORTH EXTERIOR ELEVATION



2.3 ISLAND #2 SOUTH EXTERIOR ELEVATION

- NOTES (FOR THIS SHEET)
- (N1) WALL AND ROOF INSULATED PANELS
  - (N2) EXISTING ELECTRICAL CONDUITS
  - (N3) LIFTING PLATES AT EACH CORNER
  - (N4) GUTTER
  - (N5) DOWNSPOUT
  - (N6) NEW CONDUIT OR FLEX TO MODULE - SEE ELECTRICAL
  - (N7) MECHANICAL DUCT - SEE MECHANICAL

S(12 ) G(A) P(H) D(EEIS)  
Scale 0 6 12"

S(12 ) G(A) P(H) D(EEIS)  
Scale 0 6 12"

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	APPROVALS
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ SA BA RB RB
				DWN. CHK'D D. ENG P. ENG P. MGR
				ENGINEERING APPROVALS

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License # ABCC500



**ISSUED FOR CONSTRUCTION**

TITLE: CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
ISLAND 2 - NORTH-SOUTH EXTERIOR ELEVATIONS

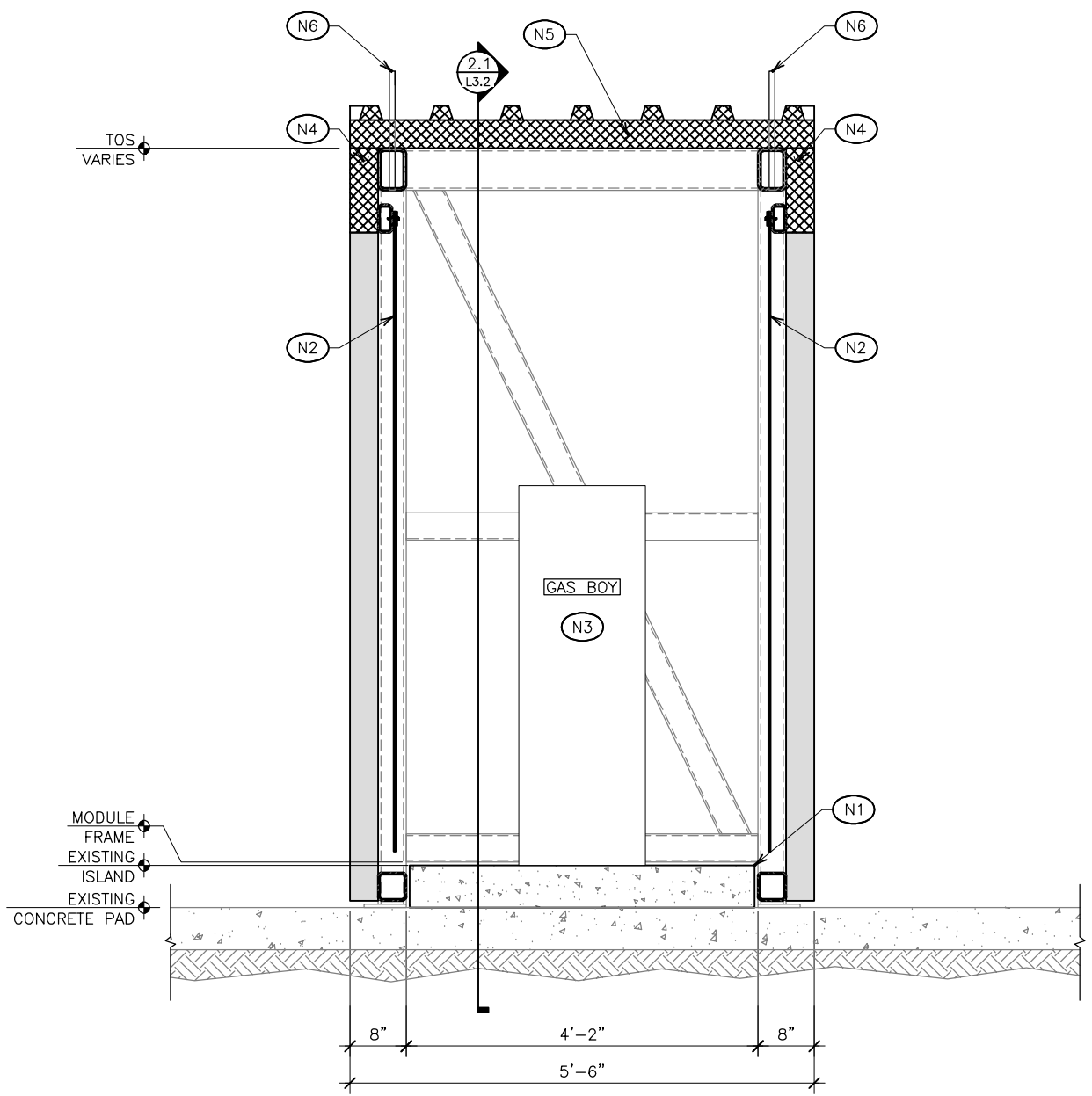
LAYOUT

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
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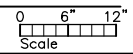
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- NOTES (FOR THIS SHEET)**
- (N1) EXISTING CONCRETE ISLAND
  - (N2) PLASTIC FREEZER STRIP-CURTAINS
  - (N3) EXISTING FUEL DISPENSER
  - (N4) INSULATED WALL PANEL
  - (N5) INSULATED ROOF PANEL
  - (N6) LIFTING PLATE AT EACH CORNER



**2.1** TYPICAL TRANSVERSE SECTION



**1.3** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

**1.4** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

**2.3** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

**2.4** NOT USED  
S(1 ) G(A) P(H) D(EEIS)

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB	RB
				ENGINEERING APPROVALS				

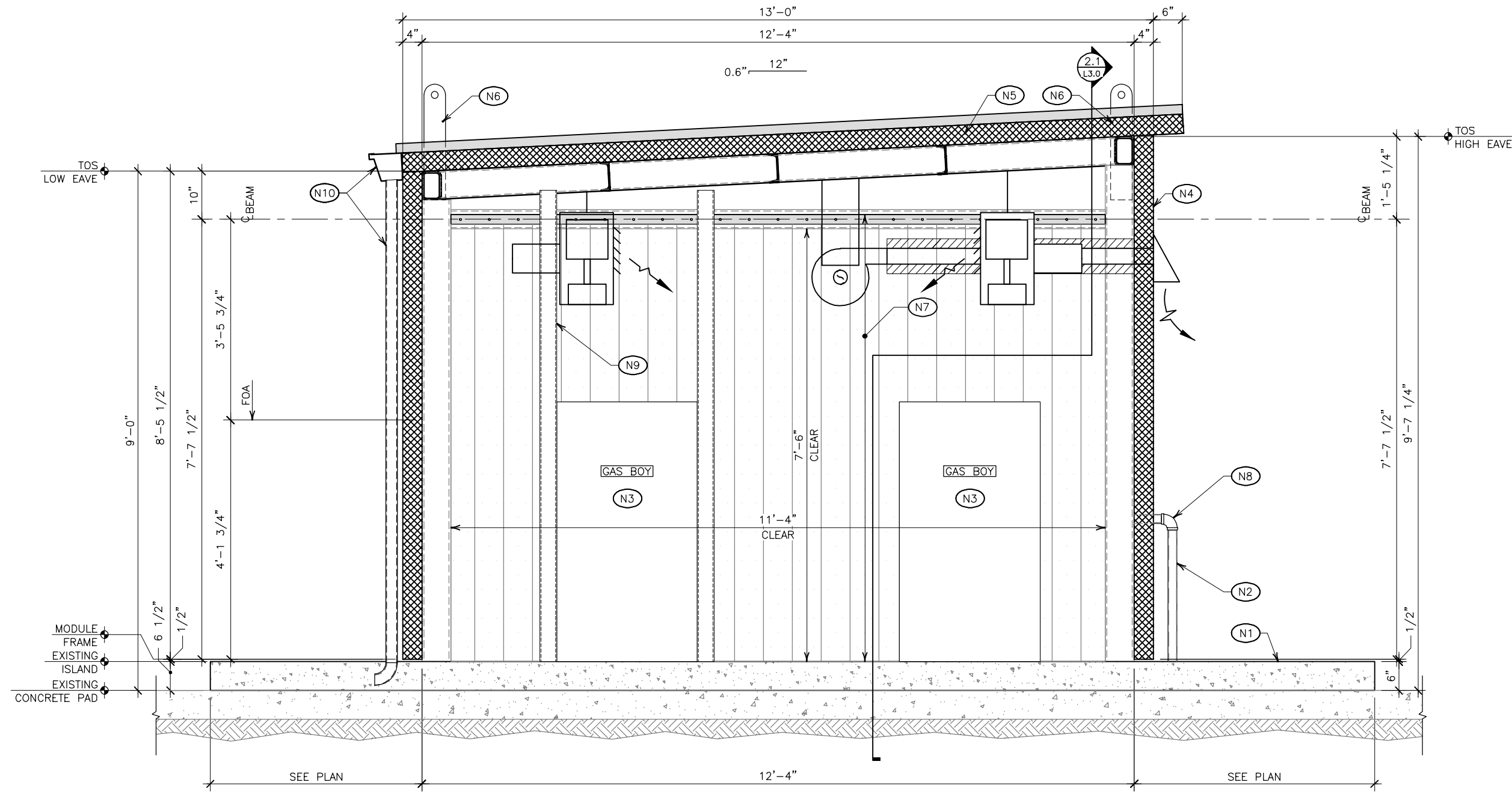


**ISSUED FOR CONSTRUCTION**

TITLE  
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
PUMP ENCLOSURE TRANSVERSE SECTION

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-01-2023		L3.0 0

File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE-PWD PUMP ENCLOSURE CITY OF FAIRBANKS - PWD\sheets\Layout\L3.2 PUMP ENCLOSURE LONGITUDINAL SECTION.dwg  
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- NOTES (FOR THIS SHEET)**
- (N1) EXISTING CONCRETE ISLAND
  - (N2) EXISTING CONDUITS
  - (N3) EXISTING FUEL DISPENSER
  - (N4) INSULATED WALL PANEL
  - (N5) INSULATED ROOF PANEL
  - (N6) LIFTING PLATE AT EACH CORNER
  - (N7) PLASTIC FREEZER STRIP-CURTAIN
  - (N8) NEW CONDUIT OR FLEX TO PUMP ENCLOSURE - SEE ELECTRICAL
  - (N9) RISER W/RETRACTABLE HOSE
  - (N10) GUTTER W/DOWNSPOUT

**2.1** TYPICAL LONGITUDINAL SECTION  
 S(12 ) G(A) P(H) D(EEIS)  
 Scale: 0 6" 12"

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB	RB

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CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
PUMP ENCLOSURE LONGITUDINAL SECTION			
LAYOUT			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-23-2023	L3.2	0



## GENERAL STRUCTURAL NOTES

ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO IBC 2021 AS AMENDED BY ALASKA STATE FIRE MARSHALL AND CITY OF FAIRBANKS PUBLIC WORKS DEPARTMENT.

Structural Design Criteria	
Dead Load	Structural Weight
Snow Load	Pf = 50 psf (Roof) Pg = 60 psf (Ground)

Building Category / Seismic Use Group	II
Site Class (assumed)	D
S <sub>s</sub>	0.996
S <sub>i</sub>	0.380
Exposure	B
Analysis Procedure	ASCE 7-10
Wind Pressure (145 mph 3 Second Gust, LRFD) (110 mph 3 Second Gust, ASD)	Iw = 1.0

### STRUCTURAL STEEL

All structural steel construction shall conform to the latest AISC handbook. Structural steel shall conform to the following material specifications:

W Sections	A992
Rectangular HSS	A500 GrB 46 ksi
Round HSS	A500 GrB 42 ksi
Channels	A36
Angles, Plate, and Misc.	A36
Pipe	A53
Bolts	A325N

Shop paint all steel surfaces with fabricator's standard rust inhibiting primer.

### WELDING

All welding shall conform to the requirements of the current AWS D1.1. Prepare welding procedure specifications and verify welder qualifications in accordance with AWS D1.1. WPS shall be specific to the welding to be performed.

Filler metal shall be E70XX or the equivalent. Welding consumables shall be of low-hydrogen type, and as to assure that notch toughness of the weld metal and heat-affected zone exceeds that of the base metal. Welding procedures shall include maintaining a minimum pre-heat and inter-pass temperature of 225 degrees F and all welding on primary structural frame material that is not +50 degree F minimum at the time of welding.

All welds shall be 3/16" fillet unless noted otherwise. All bevel welds shall be 1/16" less than the thickness of the material to be welded unless noted otherwise. Seal weld all metal/metal contacts in addition to weld symbols shown on the plan.

### BOLTS, ANCHORS, & THREADED STEEL RODS

Structural steel bolts shall conform to the following specifications:

Threaded Steel Rod	ASTM A36 or A307 GALV.
Anchor Bolts	ASTM A35 or A307
Anchor Rod	ASTM F1554 Gr 36 or Gr 55 Rods
Structural Bolts	A325N Heavy Hex Head
Nuts	A563
Washers	F436

Design of bolts is based on simple shear in non-slip critical connections; therefore, make bolts snug tight.

### CONCRETE OR MASONRY ADHESIVE

All-thread rod or reinforcing bars shall be secured to concrete or masonry with Hilti HIT HY-200-AV3 adhesive manufactured by Hilti Inc., 5400 South 122 East Avenue, Tulsa, OK, 74146, ICC Report ESR-3187. Thoroughly clean hole and install per manufacturer's instructions and guidelines.

### CONTRACTOR NOTE

Drawings indicate general and typical details of construction. Where conditions are not specifically indicated but are of similar character to details shown, similar details of construction shall be used, subject to review and approval of the Engineer. If any errors or omissions appear in the drawings, specifications, or other documents, the contractor shall notify the Owner or Engineer in writing of such omission or error before proceeding with the work or accept full responsibility for costs to rectify the error.

### HIDDEN CONDITIONS

It shall be the builder's responsibility to adjust the design as necessary to accommodate actual field conditions. The Engineer of record did not do any destructive or invasive investigation of the existing structure. When the builder cuts into the existing structure, they may have to make certain judgments about how to modify the design to fit the existing conditions. Notify Engineer if discrepancies are found between the construction documents and existing conditions.

### CONTRACTOR'S MEANS AND METHODS

The structural construction documents represent the finished structure. While the drawings may point out some temporary bracing requirements, they do not indicate all bracing required, and they do not indicate the sequence of construction. The Contractor shall be responsible for and provide all measures necessary to protect the structure during construction. Such measures shall include but not be limited to bracing and shoring for loads due to construction equipment. The Contractor shall be responsible for the design and implementation of all scaffolding, bracing, and shoring. The structural engineer shall not be responsible for the contractor's means, methods, techniques, procedures, and sequences of construction. The structural engineer's observation visits will not include inspection of these items.

### SEALANT

Sealant shall be Sikka DuoFlex NS with 50/50 Primer as manufactured by Sikka (www.usa.sikka.com) (800) 933-7452.

### Alaska Product Distributors:

Beacon Building Products (907) 931-7327  
Polar Supply Company Inc. (907) 563-5000  
Alaska Sand & Gravel (907) 348-6300

### GENERAL

These plans do not purport to show every aspect of the work required for completion. It shall be the builders' responsibility to:

- Verify dimensions and field conditions. Notify the Owner or Engineer of discrepancies and obtain approval for proposed field changes prior to construction or modification.
- Contact Utilities for field locates. Buried or covered utilities may exist which are not completely shown on the plans.
- Dispose of soil waste and demolished materials.
- Remove snow during construction.
- Obtain building permits.
- Perform all construction with materials, methods, and workmanship accepted as good practice in the construction industry.
- Provide adequate shoring, bracing, and formwork as required for the protection of life and property during construction.
- Follow manufacturers' recommendations.
- Control water runoff and drainage.
- Make all precaution to insure jobsite safety.
- Notify the local building official at construction stages requiring inspection.

### GENERAL LAYOUT REQUIREMENTS

See layout drawings for locations of openings in walls, and for all wall finish details. Drawings indicate general and typical details of construction. Where conditions are not specifically indicated but are of similar character to details shown, similar details of construction shall be used, subject to review and approval of the Engineer. If any errors or omissions appear in the drawings, specifications, or other documents, the contractor shall notify the Owner or Engineer in writing of such omission or error before proceeding with the work.

### SUBMITTALS

Shop Drawings

- Insulated Wall Panels
- Roof and Wall Flashing

### Special Inspection

Special inspections shall be performed by qualified personnel. Submit inspector's resumes to the Owner.

Special inspectors shall observe the work assigned for conformance with approved design drawings and specifications. Inspection reports shall be furnished to the Owner and the Engineer of Record. All discrepancies shall be brought to the immediate attention of the Contractor for correction, and to the attention of the Owner.

The special inspectors shall submit a final signed report stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved plans and specifications and the applicable workmanship provisions of the applicable codes.

Provide the following special inspections per Chapter 17 of the current International Building Code (IBC).

## REQUIRED SPECIAL INSPECTION

SYSTEM OR MATERIAL	IBC CODE REFERENCE	ICC CODE OR STANDARD REFERENCE	FREQUENCY		REMARKS
			CONTINUOUS	PERIODIC	
POST INSTALLED ANCHORS TO CONCRETE	1703.4.2 1704.15(3)	3187 HILTI HY-200-AV3 CONCRETE ADHESIVE ANCHORING		X	SPECIAL INSPECTION APPLY TO POST INSTALLED ANCHORS: PRODUCT NAME, ANCHOR MODEL AND DIMENSION, HOLE DIMENSIONS, COMPLIANCE TO DRILL BIT REQUIREMENTS, ANCHOR EMBEDMENT, TIGHTENING TORQUE, CLEANLINESS OF HOLE.

### 2.1 STRUCTURAL GENERAL NOTES

S(1 ) G(A) P(H) D(EEIS)

0 0.5" 1.0"  
Scale

-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
0	07-06-23	ISSUED FOR CONSTRUCTION	CJ	SA	BA
No.	DATE	DESCRIPTION	DWN.	CHK'D	D. ENG
		ISSUES / REVISIONS		P. ENG	P. MGR



## ISSUED FOR CONSTRUCTION

TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

GENERAL NOTES

STRUCTURAL

EIS PROJECT #

223004

DATE CREATED

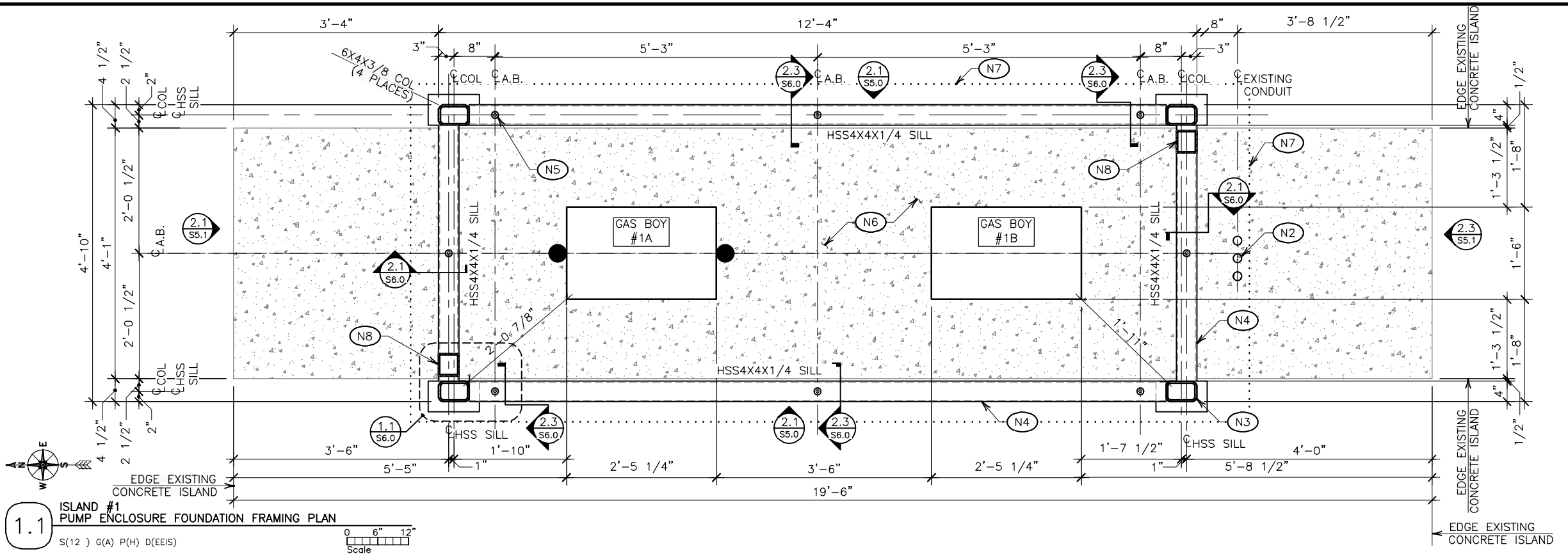
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EIS DWG. #

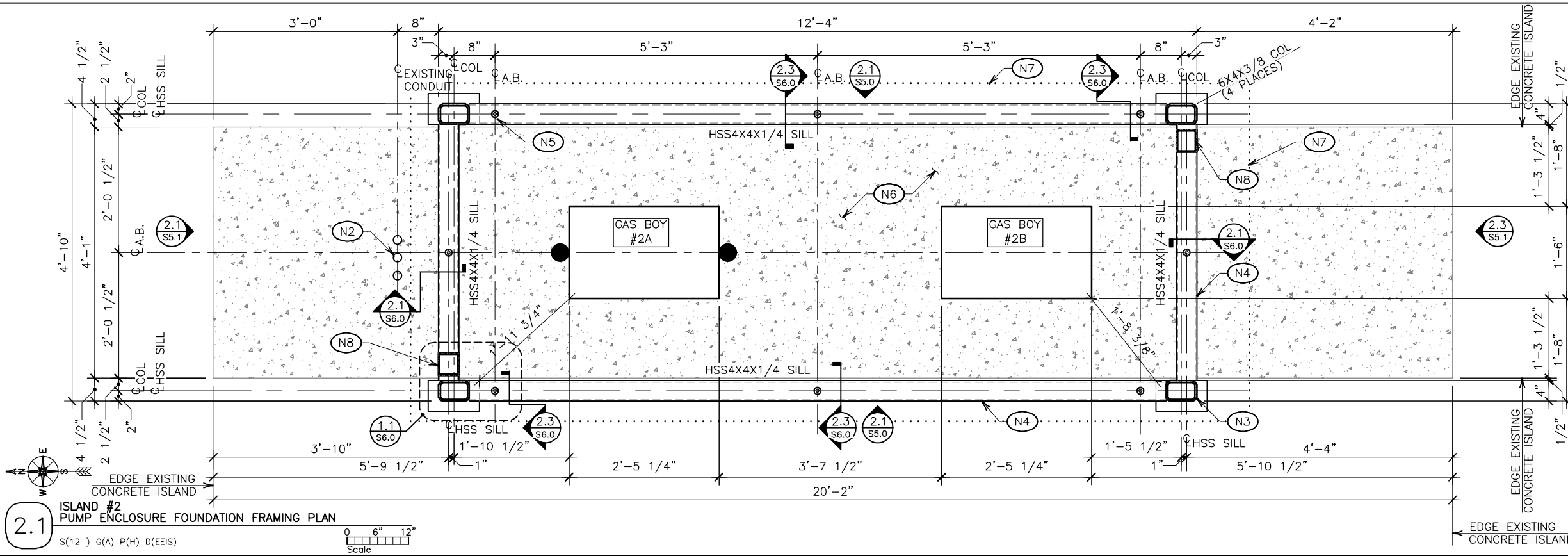
REVISION

S1.0 0

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**1.1**  
 ISLAND #1  
 PUMP ENCLOSURE FOUNDATION FRAMING PLAN  
 S(12 ) G(A) P(H) D(EEIS)  
 Scale: 0 6" 12"



**2.1**  
 ISLAND #2  
 PUMP ENCLOSURE FOUNDATION FRAMING PLAN  
 S(12 ) G(A) P(H) D(EEIS)  
 Scale: 0 6" 12"

- NOTES (FOR THIS SHEET)**
- (N1) CONTRACTOR NOTES:
    1. VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF PUMP ENCLOSURE STEEL FRAMING
    2. CONFIRM DIMENSIONS TO EXISTING CONCRETE ISLAND CLEARANCE TO PUMP ENCLOSURE STEEL FRAMING
  - (N2) EXISTING CONDUITS
  - (N3) HSS COLUMN W/BASE PLATE
  - (N4) HSS FOUNDATION SKID BEAM
  - (N5) THREADED ROD W/HILTI ADHESIVE ANCHOR BOLT (A.B.)
  - (N6) EXISTING CONCRETE ISLAND
  - (N7) WALL OR ROOF PANEL OUTLINE
  - (N8) DIAGONAL BRACE

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

DWN.	CHK'D	D. ENG	P. ENG	P. MGR
CJ	SA	BA	RB	RB

ENGINEERING APPROVALS

**EEIS**  
 CONSULTING  
 ENGINEERS, INC.  
 P.O. Box 92169 Anchorage, Alaska 99509-2169  
 (907)256-3231  
 License # ABCC590

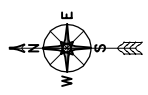
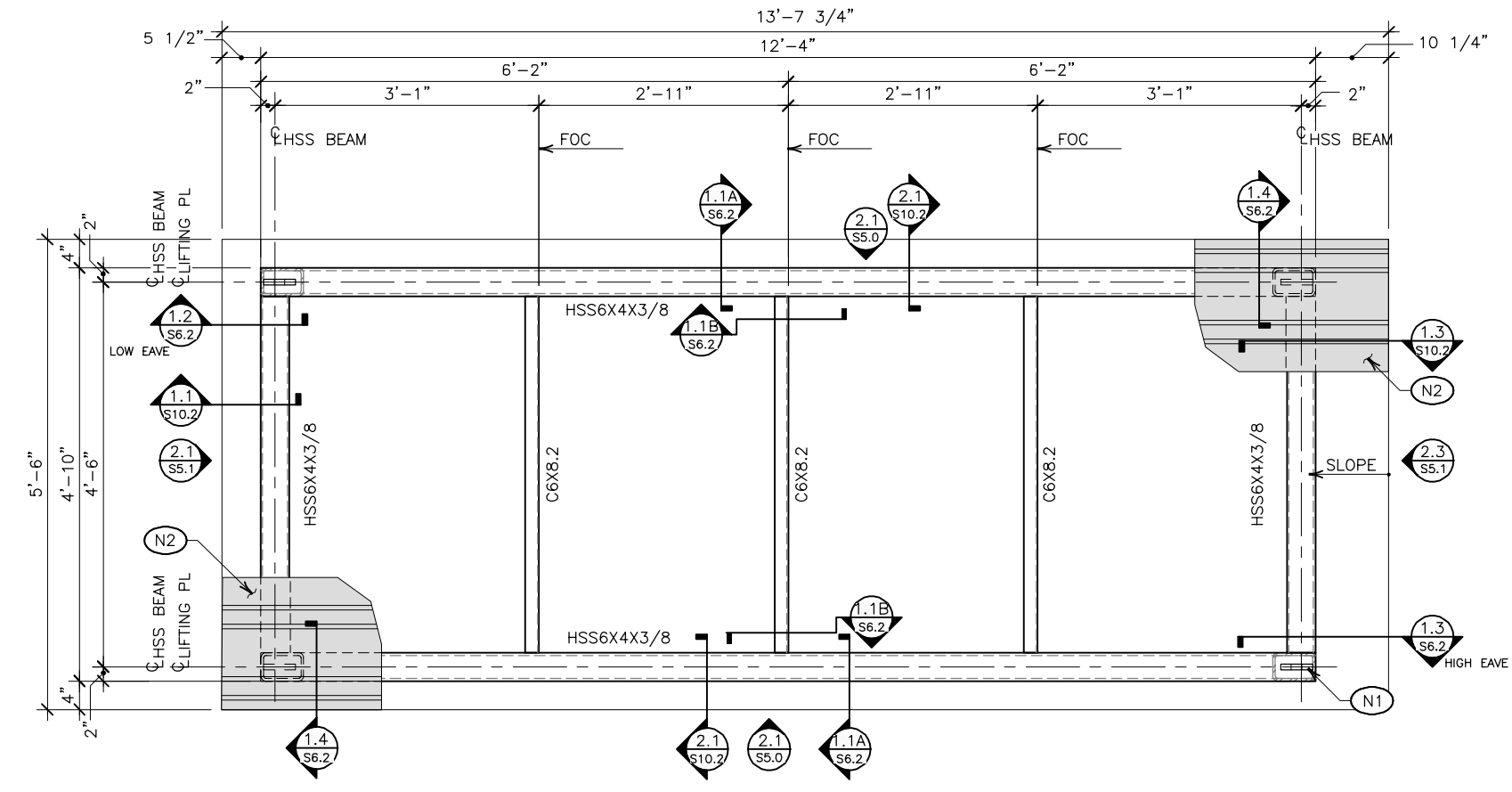
CITY OF FAIRBANKS  
 ALASKA

**ISSUED FOR CONSTRUCTION**

TITLE  
 CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
 ISLAND 1 & 2 - PUMP ENCLOSURE FOUNDATION  
 BASE FRAMING PLANS  
 STRUCTURAL

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-22-2023		S2.0 0

- NOTES (FOR THIS SHEET)
- (N1) LIFTING PLATE AT EACH CORNER
  - (N2) INSULATED ROOF PANELS SECTIONED FOR CLARITY



2.1 PUMP ENCLOSURE ROOF FRAMING PLAN  
 S(12 ) G(A) P(H) D(EEIS)  
 Scale 0 6" 12"

File Name: F:\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE CITY OF FAIRBANKS - PWD\sheet\STRUCT\S4.0 ISLAND 1 & 2 - PUMP ENCLOSURE ROOF FRAMING PLAN.dwg  
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No.	DATE	DESCRIPTION	ISSUES / REVISIONS	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB
				DWN.	CHK'D	D. ENG	P. ENG
				ENGINEERING APPROVALS			

STATE OF ALASKA  
 Richard G. Dalton  
 SE-13698  
 07-06-23  
 PROFESSIONAL ENGINEER

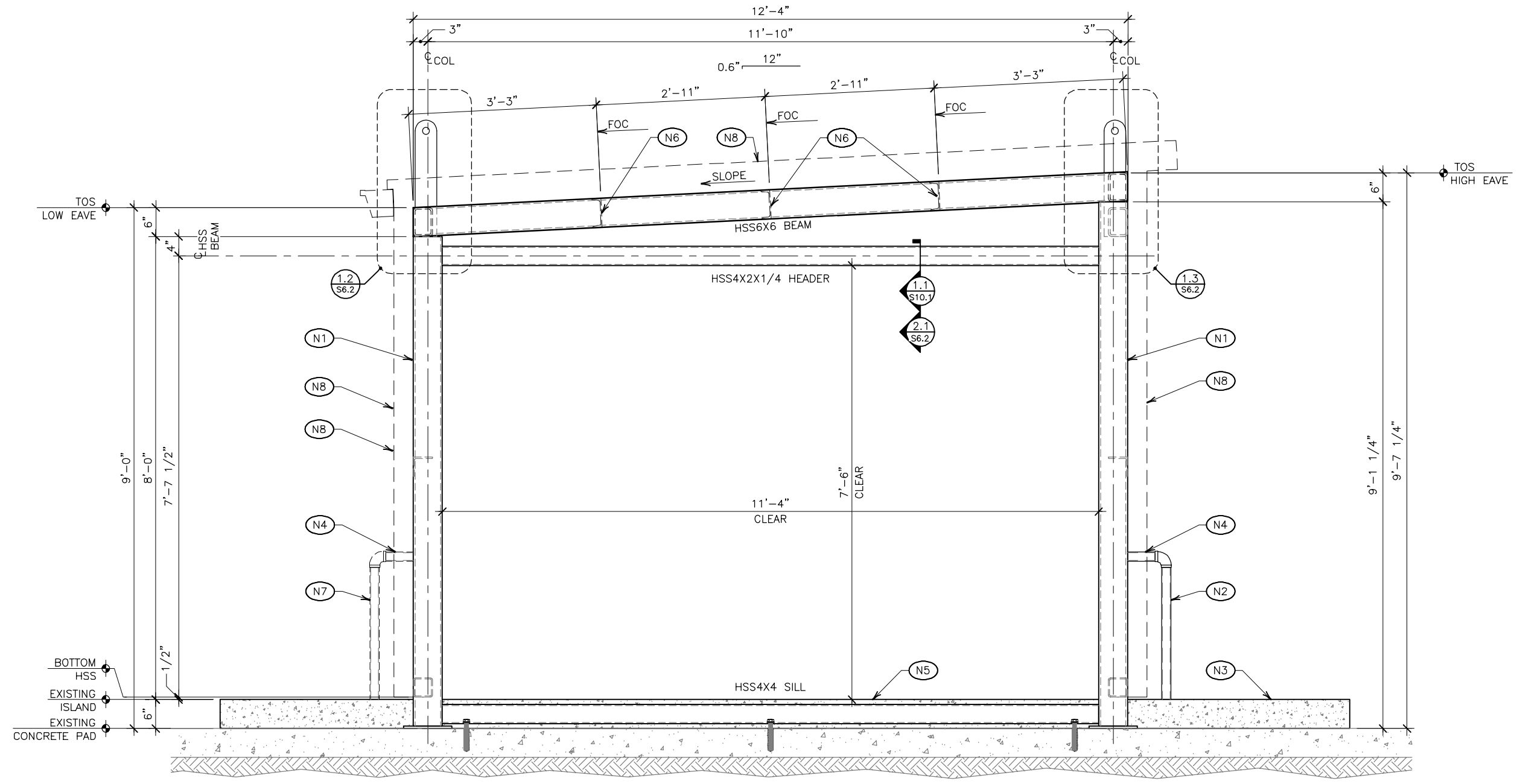
P.O. Box 92169 Anchorage, Alaska 99508-2169  
 (907)258-3231  
 90908-2168  
 License # ABCC500



<b>ISSUED FOR CONSTRUCTION</b>			
TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
ISLAND 1 & 2 - PUMP ENCLOSURE ROOF FRAMING PLAN STRUCTURAL			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-22-2023	S4.0	0

File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE-CITY OF FAIRBANKS - PWD\sheets\STRUCT\SS.0 ISLAND 1 & 2 - EAST-WEST FRAMING EXTERIOR ELEVATIONS.dwg  
 Plot Style: NCS 4.0.ctb - Page Setup: ACROPLOT1 - LTScale: 1 - DimScale: 1 - VisRetain: 0

- NOTES (FOR THIS SHEET)**
- (N1) HSS6X4 COLUMN
  - (N2) EXISTING CONDUIT AT ISLAND #1
  - (N3) EXISTING CONCRETE ISLAND
  - (N4) NEW CONDUIT OR FLEX TO MODULE - SEE ELECTRICAL
  - (N5) CLOSURE ANGLE NOT SHOWN FOR CLARITY
  - (N6) C6 ROOF PURLIN
  - (N7) EXISTING CONDUIT AT ISLAND #2
  - (N8) INSULATED ROOF AND WALL PANELS, AND FREEZER CURTAIN NOT, SHOWN FOR CLARITY



**2.1** STRUCTURAL EAST/WEST FRAMING ELEVATION  
 S(12 ) G(A) P(H) D(EEIS)  
 Scale: 0 6" 12"

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

CHK'D	D. ENG	P. ENG	P. MGR
CJ	SA	BA	RB

ENGINEERING APPROVALS

STATE OF ALASKA  
 PROFESSIONAL ENGINEER  
 Richard D. Sutton  
 SE-13698  
 07-06-23

**EEIS CONSULTING ENGINEERS, INC.**  
 P.O. Box 92169 Anchorage, Alaska 99508-2169  
 (907)256-3231  
 License # ABCC500



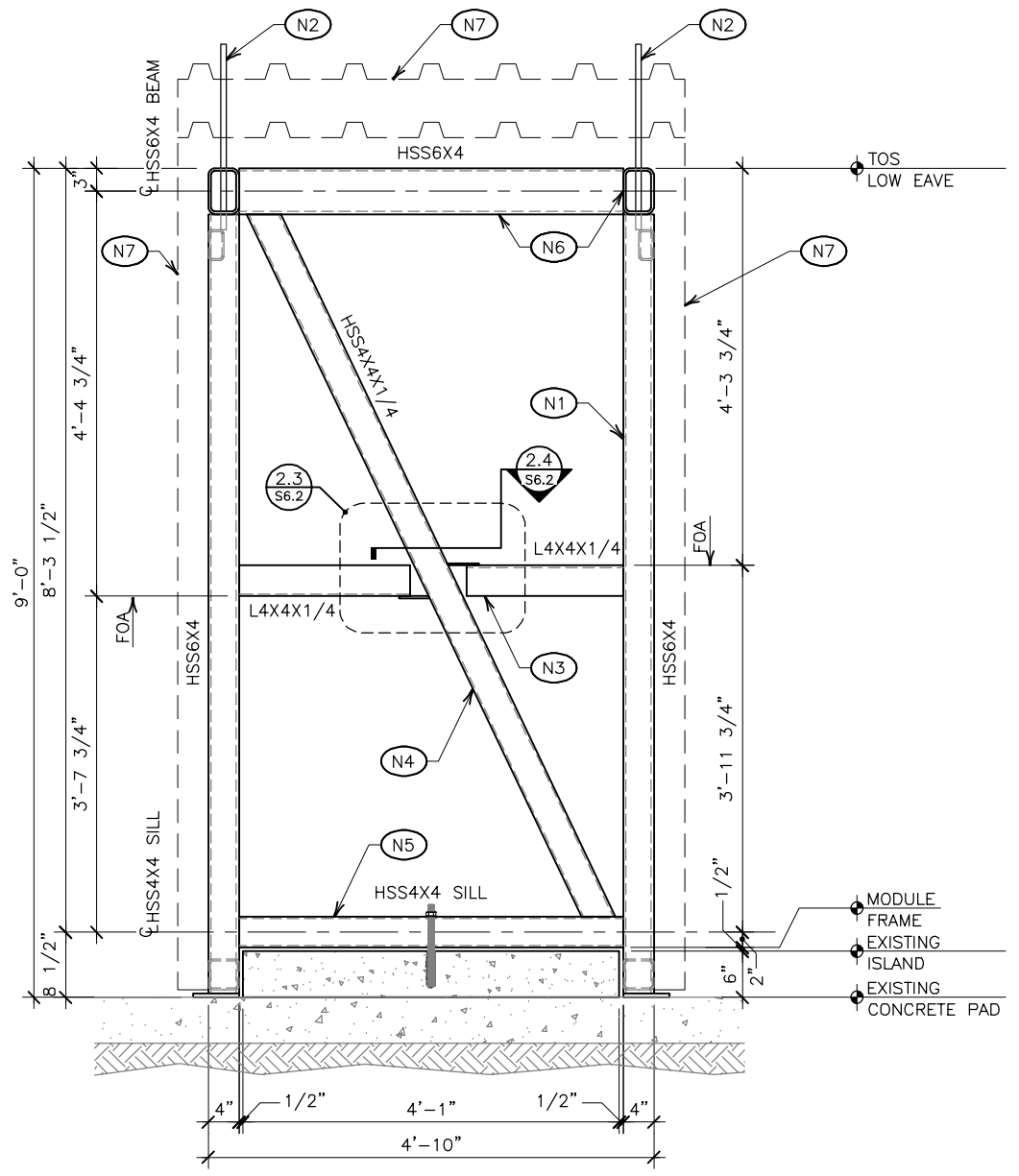
**ISSUED FOR CONSTRUCTION**

CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
 ISLAND 1 & 2 - EAST-WEST FRAMING EXTERIOR ELEVATIONS  
 STRUCTURAL

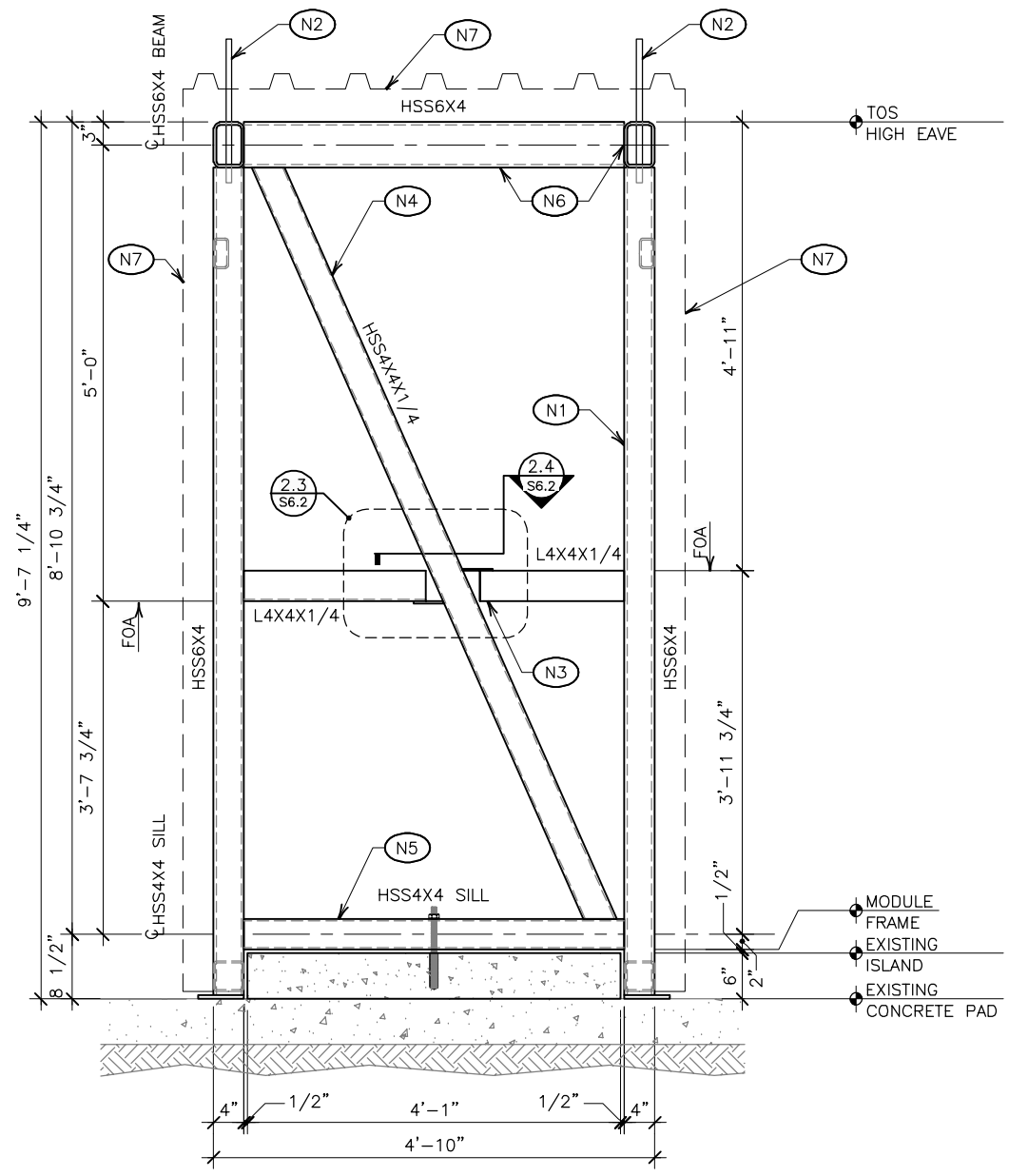
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 Plot Style: NCS 4.0.ctb - Page Setup: ACROPLOT1 - LinScale: 1 - DimScale: 0

- NOTES (FOR THIS SHEET)**
- (N1) HSS COLUMN
  - (N2) LIFTING PLATE AT EACH CORNER
  - (N3) GIRT
  - (N4) DIAGONAL BRACE
  - (N5) HSS SILL
  - (N6) HSS BEAM
  - (N7) INSULATED ROOF AND WALL PANELS NOT SHOWN FOR CLARITY



**2.1** STRUCTURAL NORTH FRAMING ELEVATION - LOW EAVE  
 S(12 ) G(A) P(H) D(EEIS)  
 Scale: 0 6" 12"



**2.3** STRUCTURAL SOUTH FRAMING ELEVATION - HIGH EAVE  
 S(12 ) G(A) P(H) D(EEIS)  
 Scale: 0 6" 12"

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB
				DWN.	CHK'D	D. ENG	P. ENG
				ENGINEERING APPROVALS			

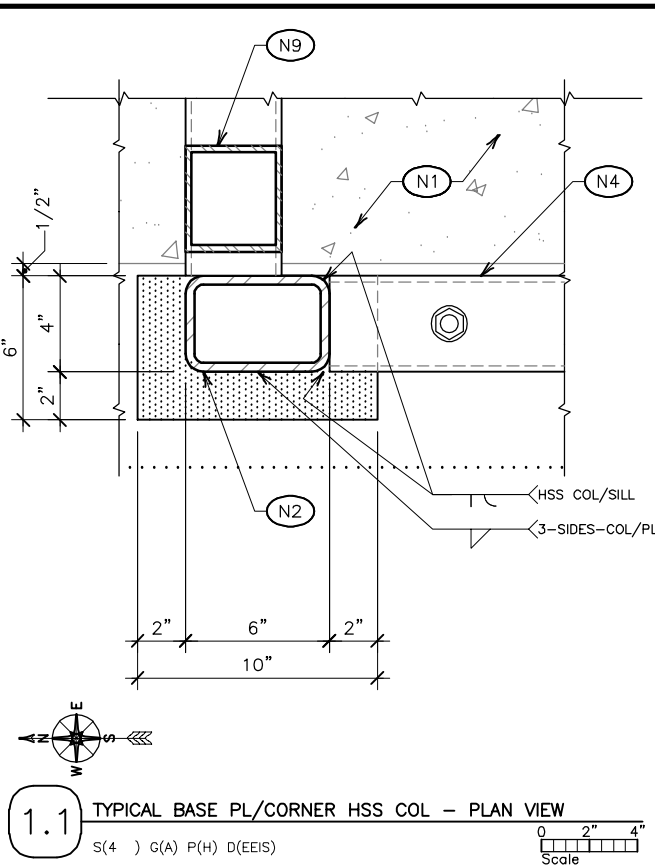
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 (907)258-3231 License # ABCC590

**CITY OF FAIRBANKS ALASKA**  
 INCORPORATED ON NOVEMBER 10, 1907

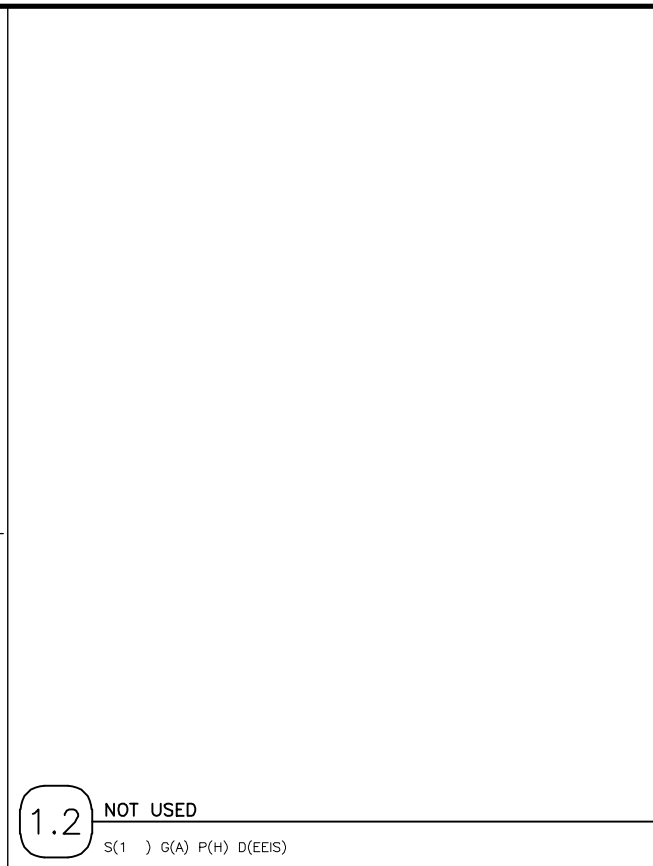
**ISSUED FOR CONSTRUCTION**

TITLE: CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
 ISLAND 1 & 2 - NORTH-SOUTH FRAMING ELEVATIONS  
 STRUCTURAL

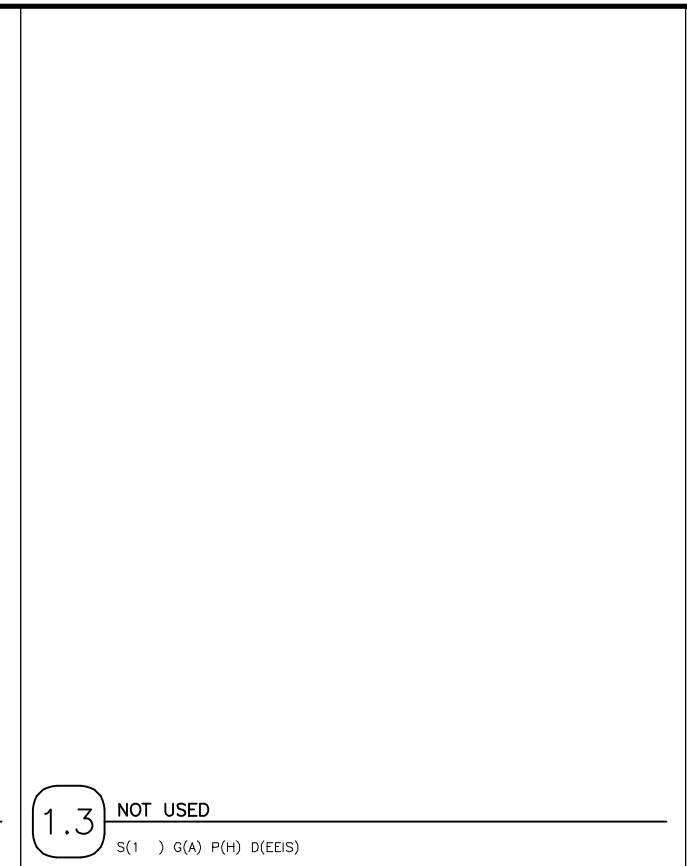
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223004	06-13-2023	S5.1	0



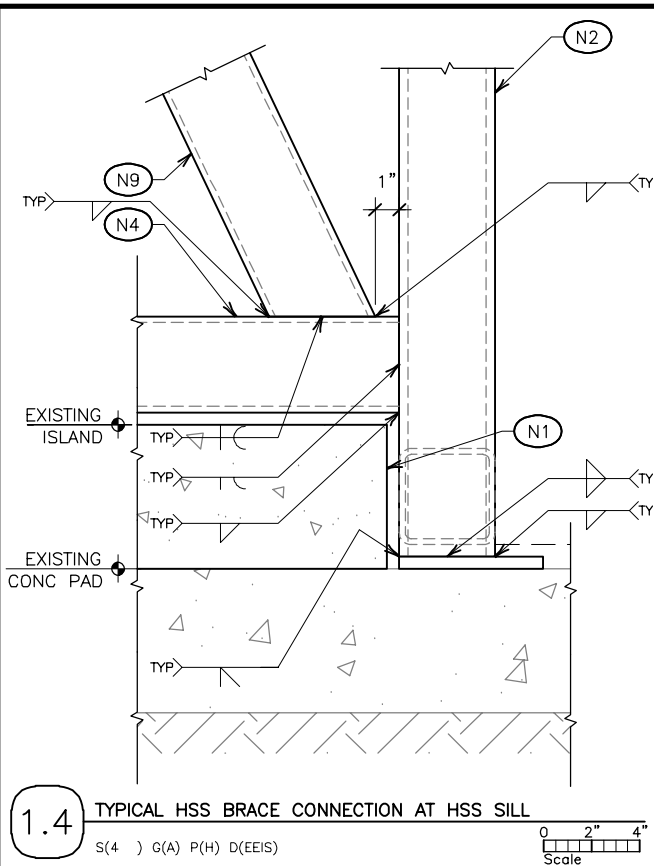
1.1 TYPICAL BASE PL/CORNER HSS COL - PLAN VIEW  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"



1.2 NOT USED  
S(1 ) G(A) P(H) D(EEIS)



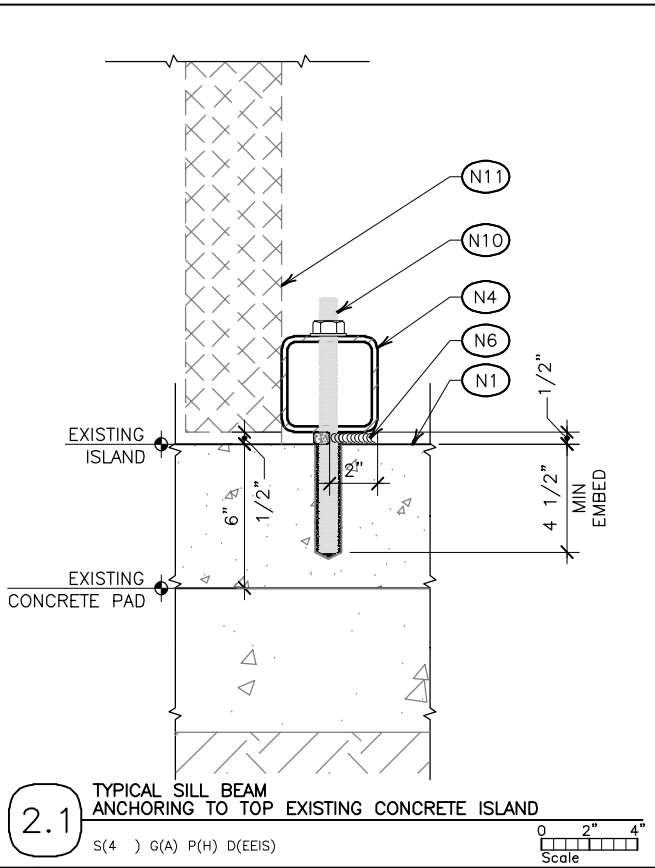
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S(1 ) G(A) P(H) D(EEIS)



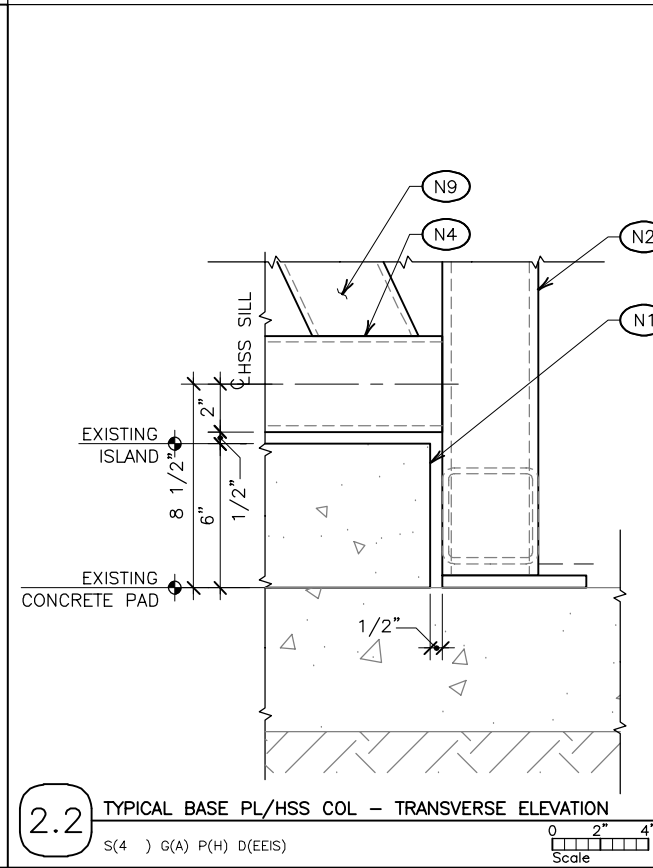
1.4 TYPICAL HSS BRACE CONNECTION AT HSS SILL  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"

- NOTES (FOR THIS SHEET)**
- N1 EXISTING CONCRETE ISLAND
  - N2 HSS6X4 COL (SEE PLAN)
  - N3 BASE PL 1/2"
  - N4 FOUNDATION/SILL BEAM (SEE PLAN)
  - N5 L5X3X3/8 CLOSURE ANGLE (LLH). CUT HORIZONTAL LEG AS REQUIRED FOR FIELD FIT. LEVEL WITH TOP EXISTING CONCRETE ISLAND.
  - N6 INSTALL 1" DIA. BACKER ROD WHEN SETTING CLOSURE ANGLE, FILL GAP W/SEALANT
  - N7 FINGER SHIM PL 1"X4" SQ - LOCATE NEXT TO ANCHOR ROD
  - N8 DRILL 2" DIA HOLE TO TOP HSS AS REQUIRED TO INSTALL ANCHOR ROD NUT. INSTALL GALV. KNOCKOUT COVER PLUG OVER HOLE OPENING.
  - N9 HSS4X4 DIAGONAL BRACE
  - N10 GALV. 3/4" DIA ALL-THREAD ROD. INSTALL IN PRE-DRILL HOLE TO CONCRETE WITH HILTI ADHESIVE PER MANUFACTURER'S INSTRUCTIONS
  - N11 INSULATED WALL PANEL (DASHED FOR CLARITY)
  - N12 FILL GAP WITH SEALANT

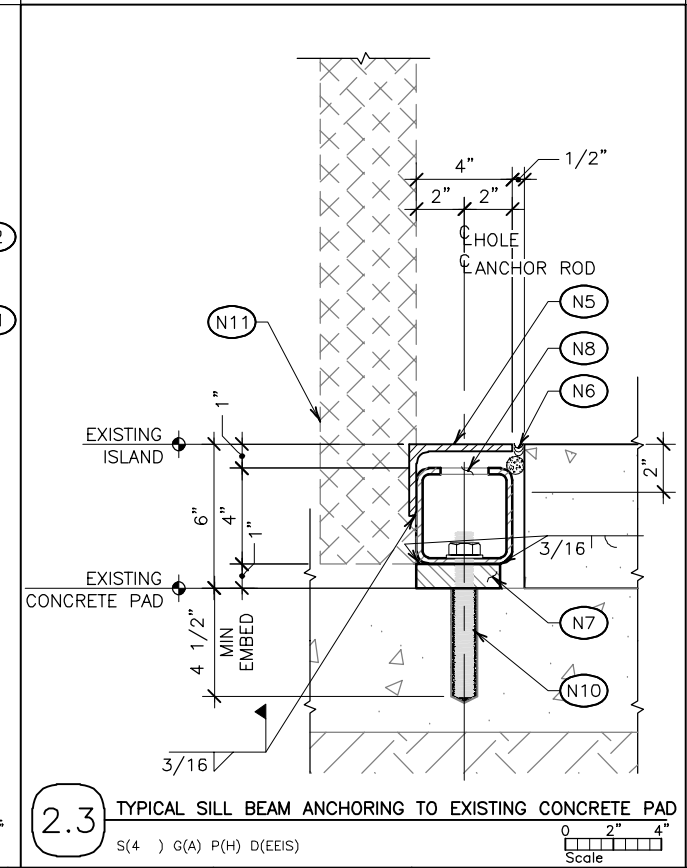
**CONTRACTOR'S NOTES:**  
NEED SURVEY TO CHECK THICKNESS REQUIRED ON ALL PLATES FOR (2) ISLANDS.



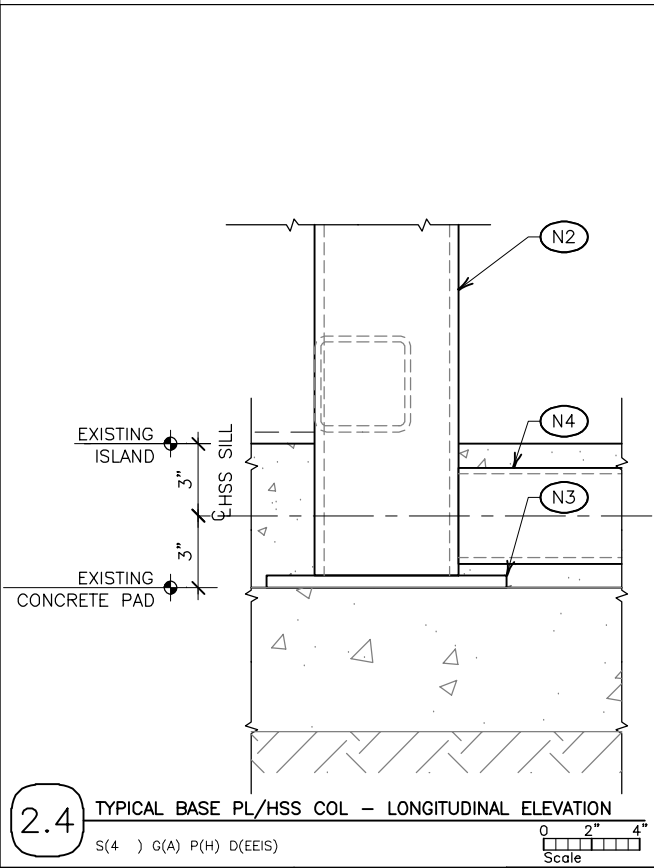
2.1 TYPICAL SILL BEAM ANCHORING TO TOP EXISTING CONCRETE ISLAND  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"



2.2 TYPICAL BASE PL/HSS COL - TRANSVERSE ELEVATION  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"



2.3 TYPICAL SILL BEAM ANCHORING TO EXISTING CONCRETE PAD  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"



2.4 TYPICAL BASE PL/HSS COL - LONGITUDINAL ELEVATION  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

DWN.	CHK'D	D. ENG	P. ENG	P. MGR
CJ	SA	BA	RB	RB

ENGINEERING APPROVALS

STATE OF ALASKA  
Professional Engineer  
Richard G. Dalton  
SE-13698  
07-06-23

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INCORPORATED ON NOVEMBER 10, 1907

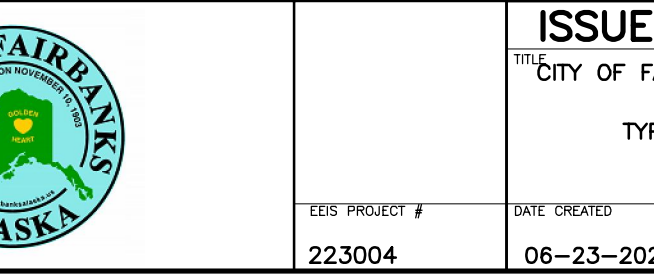
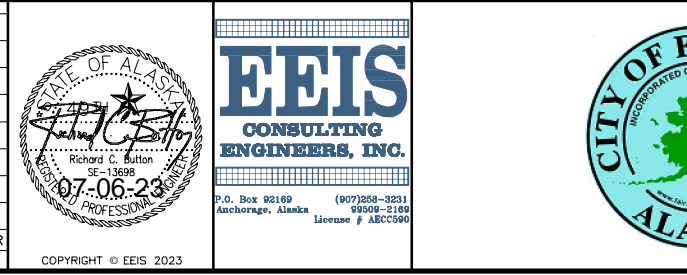
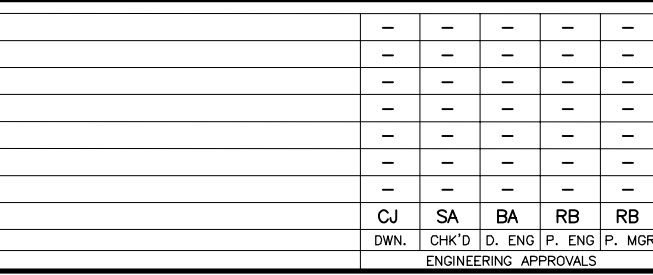
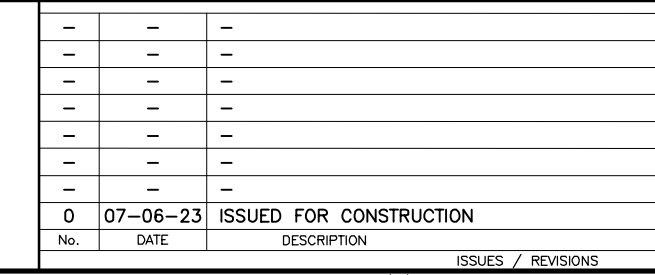
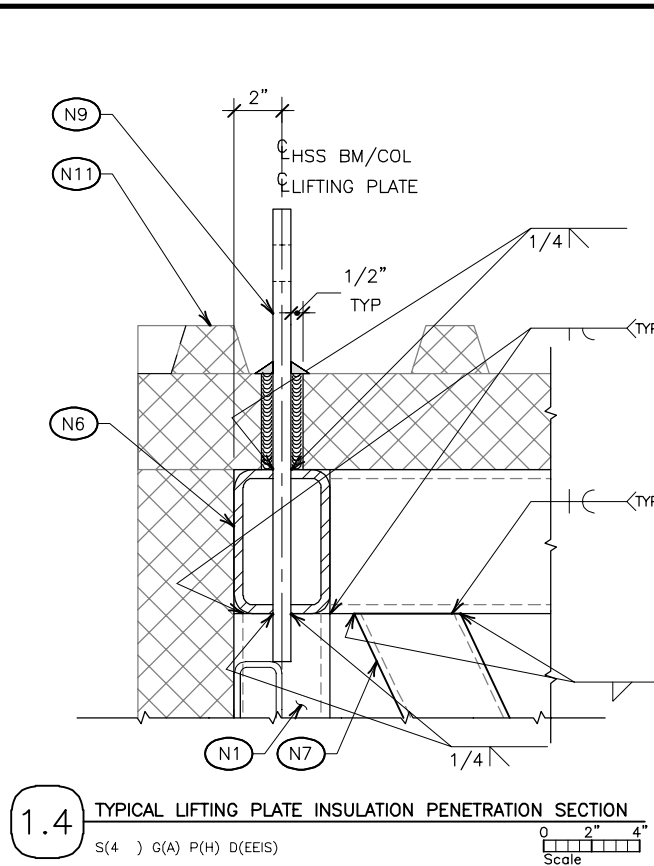
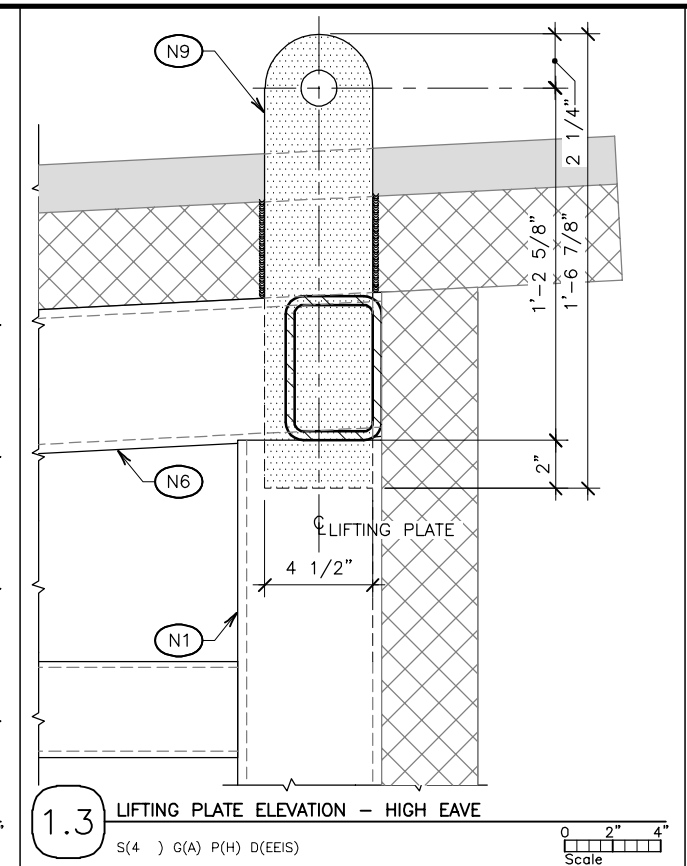
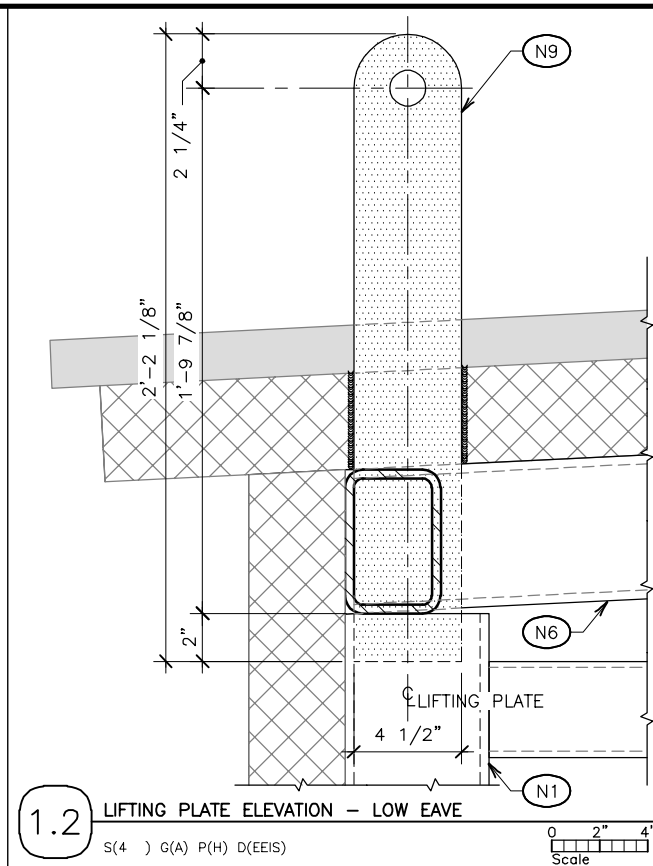
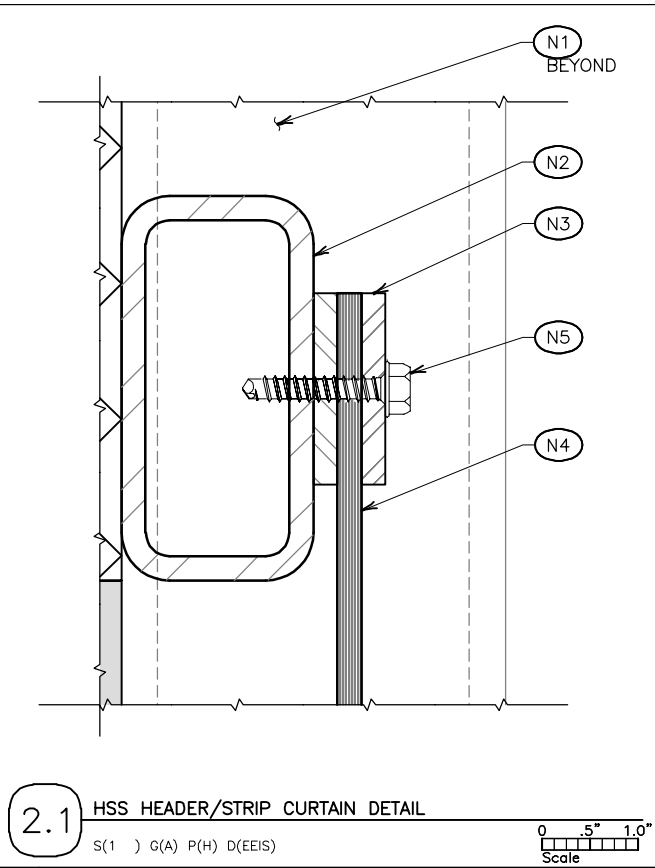
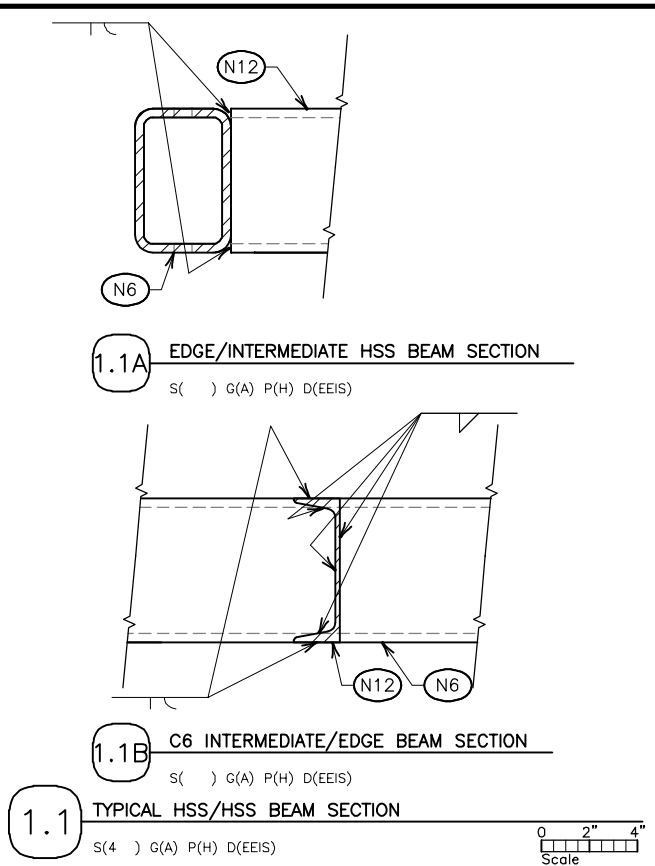
**ISSUED FOR CONSTRUCTION**

TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
TYPICAL FOUNDATION DETAILS  
STRUCTURAL

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-23-2023		S6.0 0

File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE STRUCT\SB.0 TYPICAL FOUNDATION DETAILS.dwg  
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File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS - PWD PUMP ENCLOSURE STRUCT\56.2 TYPICAL ROOF AND BRACE DETAILS.dwg  
 Plot Style: NCS 4.0.ctb - Page Setup: ACPLOT1 - LTScale: 1 - DimScale: 1 - VisRetain: 0



- NOTES (FOR THIS SHEET)**
- (N1) HSS COL
  - (N2) HSS4X4X3/16 HEADER
  - (N3) MANUFACTURER'S CONTINUOUS CURTAIN STRIP RETAINER BAR
  - (N4) 8" WIDE X 0.08" THICK W/PLASTIC STRIP CURTAIN KIT, (50% OVERLAP).
    - MANUFACTURED BY PLASTIC STRIP CURTAIN www.plasticstripcurtain.com (800)795-3083
    - LOW-TEMP SMOOTH (CLEAR) STRIPS
    - UNIVERSAL HANGER MOUNT 14ga. HEAVY-DUTY GALVANIZED STEEL WALL MOUNT
  - CONTRACTOR TO VERIFY STRIP CURTAIN LENGTH REQUIRED AND FIELD FIT.
  - (N5) 1/4" DIA. X 1-1/2" SELF-DRILLING SCREWS (LOCATE AT MANUFACTURERS RETAINER BAR ATTACHMENT HOLES)
  - (N6) HSS6X4 ROOF BEAM
  - (N7) HSS4X4 BRACE
  - (N8) WELD PL 3/8"
  - (N9) LIFTING PL 3/4" W/1-1/2" DIA. HOLE. (SPREADER BEAMS REQUIRED WHEN LIFTING MODULE) SLIT HSS BEAM PRIOR TO WELDING HSS BEAM TO HSS COLUMN.
  - (N10) L4X4 HORIZONTAL GIRT
  - (N11) INSULATED ROOF PANEL - SLIT PANEL AROUND LIFTING PL. FILL GAP WITH NON-SHRINK SEALANT IN 1/2" LIFTS. WHEN COMPLETE SEALANT SHOULD PROJECT ABOVE ROOF 3/4" AT LIFTING PLATE AND SLOPE ONTO SURFACE OF ROOF PANEL.
  - (N12) C6 RAFTER
  - (N13) HSS6X4 ROOF BEAM
  - (N14) L4X4X1/4 SUPPORT ANGLE
  - (N15) 5/8" THREADED ROD
  - (N16) HEX NUTS TOP AND BOTTOM
  - (N17) UNIT HEATER - SEE MECHANICAL
  - (N18) FUEL DISPENSER

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

CHK'D	D. ENG	P. ENG	P. MGR
CJ	SA	BA	RB

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 (907)258-3231 License # ABCC590

**CITY OF FAIRBANKS**  
 INCORPORATED ON NOVEMBER 10, 1907  
 ALASKA

<b>ISSUED FOR CONSTRUCTION</b>			
TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
TYPICAL ROOF AND BRACE DETAILS			
STRUCTURAL			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-23-2023		S6.2 0

# INSULATED METAL PANELS (AWIP OR EQUAL)

NO.	LOCATION	STYLE / MANUF.	WIDTH	THICKNESS	EXTERIOR SKIN PROFILE/GAUGE	INTERIOR SKIN PROFILE/GAUGE
1	EXTERIOR WALLS	HE40A	40"	4"	EMBOSSSED/24 GA	EMBOSSSED/26 GA
2	ROOF	HR5	40"	4"	5 RIBS/24 GA	EMBOSSSED/26 GA
3						
4						
5	EXT FLASHING/TRIM	-	-	24 GA	-	-
6	INT FLASHING/TRIM	-	-	24 GA	-	-

### GENERAL

SEAL ALL INSULATED METAL PANELS AT JOINTS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND AS INDICATED ON THESE DRAWINGS. AT PANEL END TO PANEL FACE JOISTS RUN (3) 3/8" DIA. BEADS OF SEALANT ON PANEL ENDS. IMMEDIATELY CLEAN OFF ANY SEALANT THAT COMES OUT OF JOINT ONTO PANEL FACE. AT WALL/ROOF JOINTS INSTALL BACKER ROD OF APPROPRIATE SIZE. SET ROD IN BEAD OF SEALANT AND RUN BEAD ON TOP OF ROD. BUTT RODS TOGETHER WITH SMOOTH, TIGHT JOINT. USE MINERAL WOOL INSULATION AT ENDS OF PANELS AND AT PERIMETER WHERE GAPS MAY OCCUR. COLOR OF ROOF AND WALLS TO BE SELECTED BY OWNER FROM STANDARD PVDG COLORS.

### COLOR/COATING

PANELS TO HAVE FLUOROCARBON (PVDF) FINISH.  
 INTERIOR: WHITE, SUBMIT COLOR SAMPLE FOR OWNER APPROVAL  
 EXTERIOR: GREEN, SUBMIT COLOR SAMPLE FOR OWNER APPROVAL

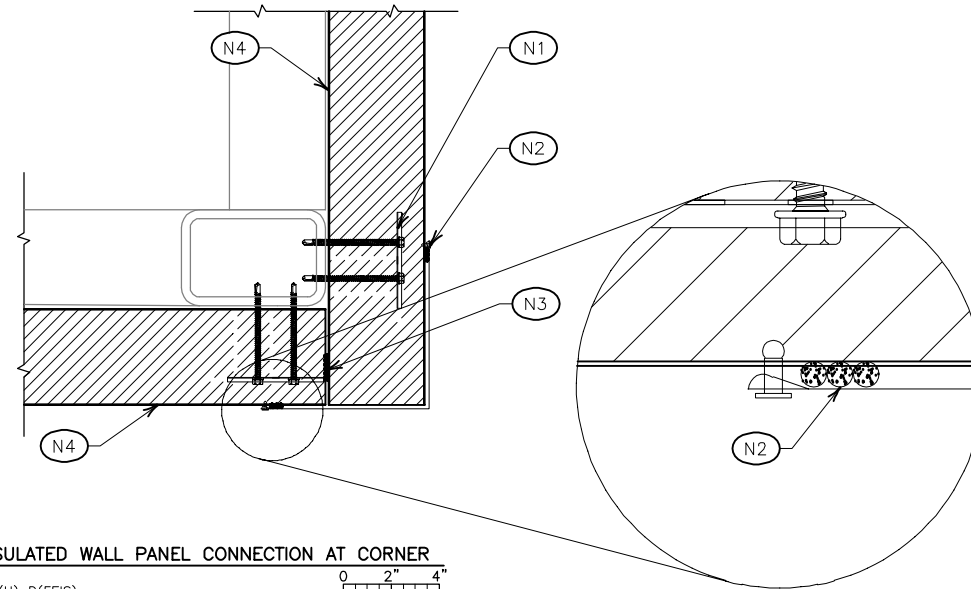
### FASTENERS

FASTENERS SHALL BE STAINLESS STEEL OR CARBON STEEL WITH A CADMIUM PLATED FINISH AND SHALL HAVE INTERLOCKING METAL AND NEOPRENE SEALING WASHER.

CLIP FASTENER: 1/4"-14 X 4" TEKS 5 - 3/8" HEX WASHER HEAD w/ 5/8" O.D. WASHER  
 THRU-FASTEN PANEL FASTENER: 1/4"-14 X 5" TEKS 5 - 3/8" HEX WASHER HEAD w/ 5/8" O.D. WASHER  
 FLASHING FASTENER: 1/4"-14 X 7/8" LAP TEK - 5/16" HEX WASHER HEAD w/ 5/8" O.D. WASHER

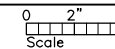
### NOTES (FOR THIS DETAIL)

- (N1) "WC-01" PANEL CLIP FASTENERS W/O WASHER AT PANEL JOINT
- (N2) "OC-03" OUTSIDE CORNER W/POP RIVETS AT 12" O.C. (SET TRIM IN 3/8" DIA. BEADS OF BUTYL SEALANT
- (N3) 1/2" DIA. BEADS OF BUTYL SEALANT
- (N4) AWIP WALL PANEL



1.3 TYPICAL INSULATED WALL PANEL CONNECTION AT CORNER

S(4 ) G(A) P(H) D(E)EIS)



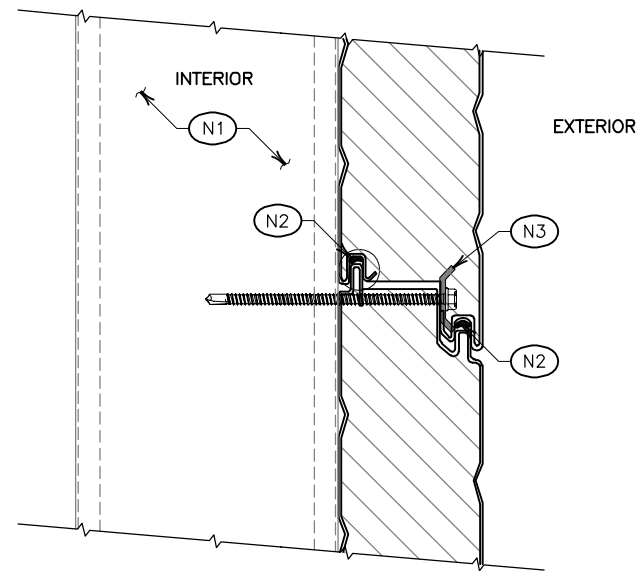
1.1 INSULATED PANEL SCHEDULE

S(1 ) G(A) P(H) D(E)EIS)

N.T.S.

### NOTES (FOR THIS DETAIL)

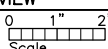
- (N1) MODULE FRAMING
- (N2) FIELD APPLIED NON-SKINNING BUTYL SEALANT BOTH SIDES
- (N3) PANEL CLIP W/(2) 1/4"-14 TEKS 5 W/O WASHER AT PANEL JOINT. SPACING BY PANEL MANUFACTURER BASED ON DESIGN LOADS.



NOTE: FILL BOTH SIDES OF FEMALE JOINT CONTINUOUSLY WITH APPROXIMATE 1/2" DIA. BEAD OF NON-SKINNING BUTYL SEALANT. (DO NOT UNDER FILL)

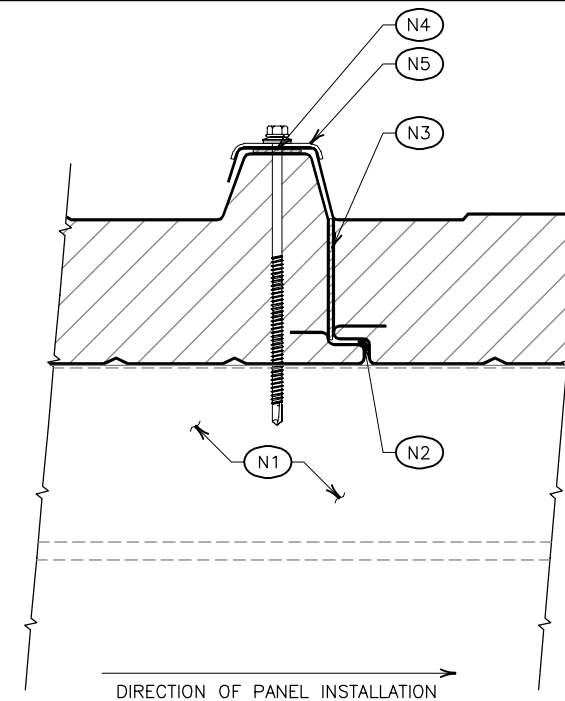
1.3 TYPICAL HORIZONTAL INSULATED PANEL JOINT SEALANT - "ALASKA" JOINT - SECTION VIEW

S(2 ) G(A) P(H) D(E)EIS)



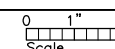
### NOTES (FOR THIS DETAIL)

- (N1) PURLIN, RAFTER, OR ROOF DECK
- (N2) 1/2" DIA. BEAD OF FIELD APPLIED NON-SKINNING BUTYL SEALANT
- (N3) CONTINUOUS FACTORY APPLIED COMPRESSIBLE GASKET
- (N4) 1/2" X 3/32" BUTYL TAPE SEALANT
- (N5) SADDLE WASHER WITH (1) 1/4"-14 TEKS 5 FASTENER INTO SUPPORT MEMBER, SPACING BY PANEL MANUFACTURER BASED ON DESIGN LOADS



2.3 ROOF PANEL JOINT

S(2 ) G(A) P(H) D(E)EIS)



No.	DATE	DESCRIPTION	ISSUES / REVISIONS	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
0	07-06-23	ISSUED FOR CONSTRUCTION		CJ	SA	BA	RB	RB

## ISSUED FOR CONSTRUCTION

TITLE  
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

ROOF AND WALL PANELS SCHEDULE AND TYPICAL DETAILS  
STRUCTURAL

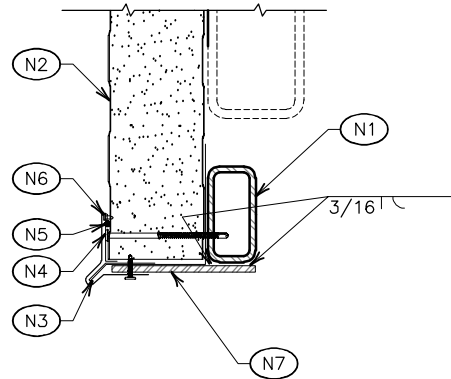
EIS PROJECT # <b>223004</b>	DATE CREATED <b>05-12-2023</b>	EIS DWG. # <b>S10.0</b>	REVISION <b>0</b>
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File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE CITY OF FAIRBANKS - PWD\sheets\STRUCT\S10.0 ROOF AND WALL PANELS SCHEDULE AND TYPICAL DETAILS.dwg  
 Plot Style: NCS 4.0.ctb - Page Setup: ACPLOT1.ctb - Scale: 1 - DimScale: 1 - VisRetain: 0



NOTES (FOR THIS DETAIL)

- (N1) HSS FRAMED OPENING - SEE FRAMING ELEVATION
- (N2) WALL PANEL
- (N3) AWIP "DF-01" DRIP FLASHING
- (N4) (1) 1/4"-14 X 4" TEKS POLARFAST FASTENER AT 2'-0" O.C.
- (N5) BUTYL SEALANT
- (N6) "BT-02" UNIVERSAL TRIM ANGLE W/ POP RIVETS AT 12" O.C.
- (N7) CONTINUOUS CLOSURE PL 1/4" X 6"

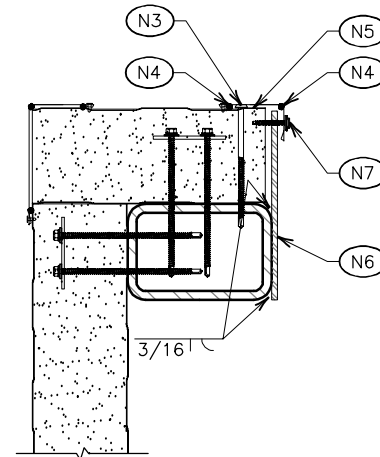


1.1 TYPICAL HEADER FRAMED OPENING HEAD  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"

1.2 NOT USED  
S(4 ) G(A) P(H) D(EEIS)

NOTES (FOR THIS DETAIL)

- (N1) HSS 4X FRAMED OPENING - SEE FRAMING ELEVATION
- (N2) WALL PANEL
- (N3) (1) 1/4"-14 X 4" TEKS POLARFAST FASTENER AT 24" O.C.
- (N4) BUTYL SEALANT
- (N5) AWIP "BT-02" UNIVERSAL TRIM ANGLE W/ POP RIVETS AT 1'-0" O.C.
- (N6) CONTINUOUS CLOSURE PL 1/4" X 10"
- (N7) #12 X 1" PANCAKE HEAD TEKS 5 AT 1'-0" O.C.

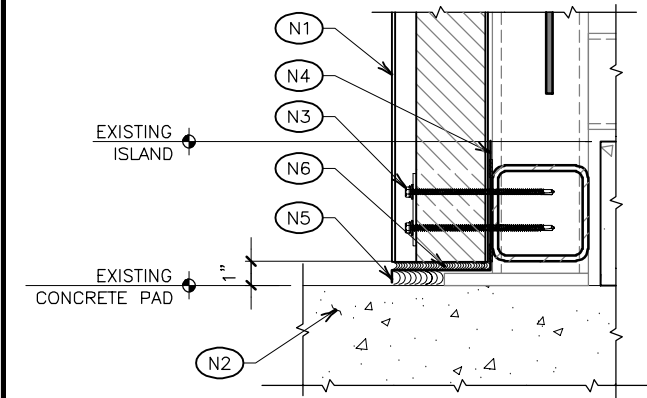


1.3 TYPICAL JAMB AT FRAMED OPENING  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"

1.4 NOT USED  
S(4 ) G(A) P(H) D(EEIS)

NOTES (FOR THIS DETAIL)

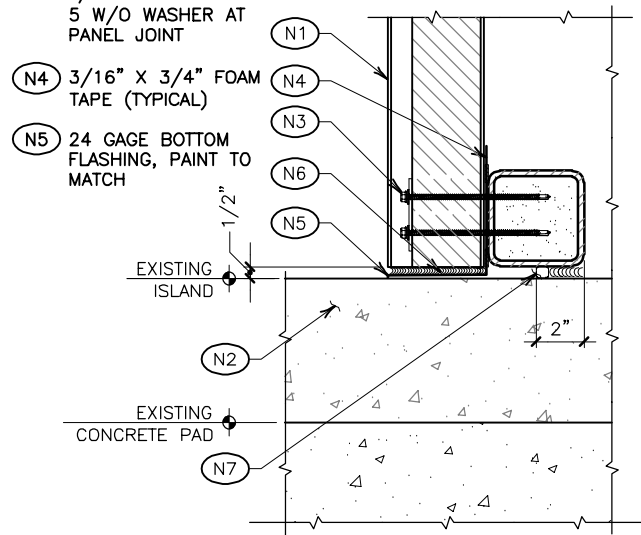
- (N1) WALL PANEL
- (N2) EXISTING CONCRETE SLAB
- (N3) PANEL CLIP W(2) 1/4"-14 X 4" TEKS 5 W/O WASHER AT PANEL JOINT
- (N4) 3/16" X 3/4" FOAM TAPE (TYPICAL)
- (N5) 24 GAGE BOTTOM FLASHING, PAINT TO MATCH
- (N6) NON-SKINNING BUTYL SEALANT



2.1 TYPICAL PANEL BASE AT SLAB  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"

NOTES (FOR THIS DETAIL)

- (N1) WALL PANEL
- (N2) EXISTING CONCRETE SLAB
- (N3) PANEL CLIP W(2) 1/4"-14 X 4" TEKS 5 W/O WASHER AT PANEL JOINT
- (N4) 3/16" X 3/4" FOAM TAPE (TYPICAL)
- (N5) 24 GAGE BOTTOM FLASHING, PAINT TO MATCH
- (N6) NON-SKINNING BUTYL SEALANT
- (N7) FILL GAP WITH CONTINUOUS 5/8" DIA BACKER ROD WITH SEALANT



2.2 TYPICAL PANEL BASE AT ISLAND  
S(4 ) G(A) P(H) D(EEIS)  
Scale 0 2" 4"

2.3 NOT USED  
S(4 ) G(A) P(H) D(EEIS)

2.4 NOT USED  
S(4 ) G(A) P(H) D(EEIS)

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

APPROVAL	DATE	NAME	TITLE
CJ		SA	BA
SA		BA	RB
BA		RB	RB
RB		RB	RB
RB		RB	RB

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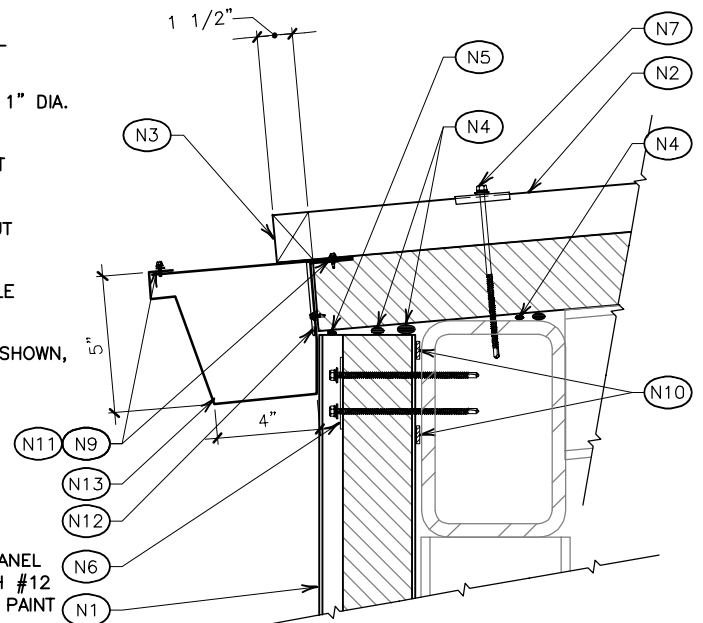
**ISSUED FOR CONSTRUCTION**  
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE  
TYPICAL PANEL DETAILS  
STRUCTURAL

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-01-2023		S10.1 0

File Name: FA\ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE CITY OF FAIRBANKS - PWD\sheet\STRUCT\S10.1 TYPICAL PANEL DETAILS.dwg  
Plot Style: NCS 4.0.ctb Page Setup: ACPLOT.ctb Date: 7/6/2023 2:53 PM User: Charles Jacobs

NOTES (FOR THIS DETAIL)

- (N1) WALL PANEL
- (N2) ROOF PANEL
- (N3) AWIP INSIDE CLOSURE KIT W/3/32" X 3/4" BUTYL SEALANT TAPE TOP AND BOTTOM
- (N4) CONTINUOUS CLOSED CELL BACKER ROD BACKING 1" DIA. BEAD OF NON-SKINNING BUTYL SEALANT
- (N5) 1/2" DIA. BEAD OF NON-SKINNING BUTYL SEALANT (TYPICAL)
- (N6) PANEL CLIP W/(2) 1/4"-14 X 4" TEKS 5 WITHOUT WASHER AT PANEL JOINT
- (N7) 1/4"-14 X 6" TEKS 5 FASTENER THROUGH SADDLE WASHER AT RIBS 10" O.C.
- (N8) 24 GAGE EAVE FLASHING WITH HEMMED EDGE AS SHOWN, PAINT TO MATCH
- (N9) 1/4"-14 X 7/8" TEKS AT 12" O.C.
- (N10) 3/16" X 3/4" FOAM TAPE (TYPICAL)
- (N11) 3/16" X 3/4" FOAM TAPE CENTER ON SCREWS SECURING FASTENER
- (N12) 12 GAGE WALL FLASHING BETWEEN GUTTER AND PANEL TO ATTACH GUTTER. SECURE TO ROOF PANEL WITH #12 SCREWS W/RUBBER WASHERS, SPACE AT 6" O.C., PAINT TO MATCH PANEL.
- (N13) 20 GAGE ARCTIC GRADE GUTTER. ATTACH AT 1'-0" O.C.

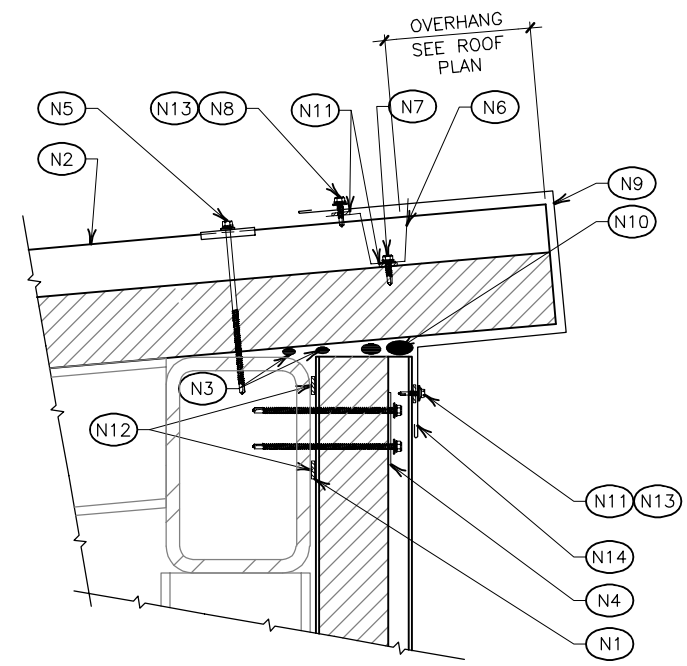


1.1 TYPICAL ROOF PANEL AT LOW EAVE OVERHANG

ALL TEKS FASTENERS TO HAVE BONDED WASHER UNLESS NOTED OTHERWISE

NOTES (FOR THIS DETAIL)

- (N1) WALL PANEL
- (N2) ROOF PANEL
- (N3) CONTINUOUS CLOSED CELL BACKER ROD BACKING 1" DIA. BEAD OF NON-SKINNING BUTYL SEALANT
- (N4) PANEL CLIP W/(2) 1/4"-14 X 4" TEKS 5 WITHOUT WASHER AT PANEL JOINT
- (N5) 1/4"-14 X 6" TEKS 5 FASTENER THROUGH SADDLE WASHER
- (N6) AWIP HIGH EAVES CLOSURE FLASHING
- (N7) 1/4"-14 X 7/8" TEKS (3) PER CLOSURE, 12 PER PANEL
- (N8) 1/4"-14 X 7/8" TEKS AT EACH HIGH RIB
- (N9) 24 GAGE HIGH EAVE FLASHING HEMMED AS SHOWN, PAINT TO MATCH.
- (N10) 1" DIA. CONTINUOUS CLOSED CELL BACKER ROD SET IN NON-SKINNING BUTYL SEALANT TOP AND BOTTOM
- (N11) 1/4"-14 X 7/8" TEKS FASTENER AT 12" O.C.
- (N12) 3/16" X 3/4" FOAM TAPE (TYPICAL)
- (N13) 3/16" X 3/4" FOAM TAPE CENTERED ON SCREWS
- (N14) 24 GAGE WALL FLASHING HEMMED AS SHOWN, PAINT TO MATCH

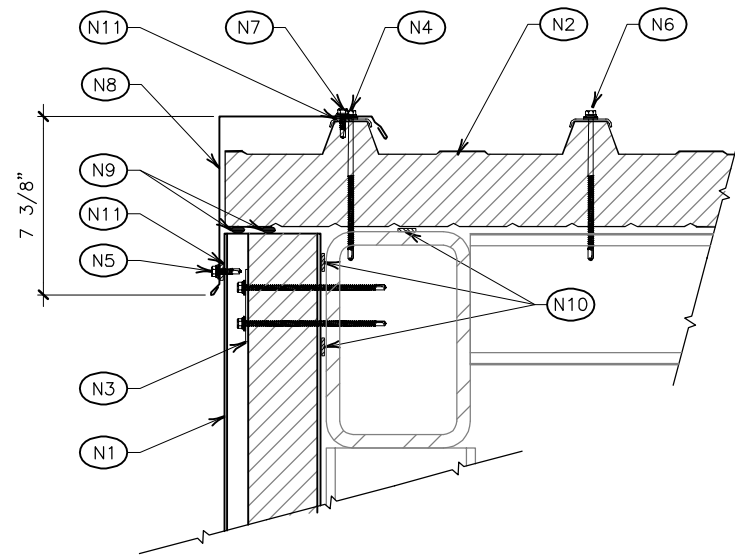


1.3 TYPICAL ROOF PANEL AT HIGH EAVE OVERHANG

ALL TEKS FASTENERS TO HAVE BONDED WASHER UNLESS NOTED OTHERWISE

NOTES (FOR THIS DETAIL)

- (N1) WALL PANEL
- (N2) ROOF PANEL
- (N3) PANEL CLIP W/(2) 1/4"-14 X 4" TEKS 5 W/O WASHER AT PANEL JOINT
- (N4) 1/4"-14 X 6" TEKS 5 FASTENER THROUGH SADDLE WASHER
- (N5) 1/4"-14 X 6" TEKS FASTENER AT 12" O.C.
- (N6) 1/4"-14 X 6" TEKS FASTENER SPACING BASED ON DESIGN LOADS
- (N7) 1/4"-14 X 7/8" TEKS FASTENER AT 6" O.C.
- (N8) RAKE TRIM - HEM DRIP EDGES
- (N9) (2) 1/2" DIA. BEADS CONTINUOUS ON TOP OF ALL RAKE WALL PANELS - BEADS TO WRAP ONTO SIDE WALL PANELS
- (N10) 3/16" X 3/4" FOAM TAPE (TYPICAL)
- (N11) 3/16" X 3/4" FOAM TAPE CENTER ON SCREWS SECURING FASTENER



2.1 TYPICAL ROOF PANEL AT RAKE

ALL TEKS FASTENERS TO HAVE BONDED WASHER UNLESS NOTED OTHERWISE

2.3 NOT USED

S(4 ) G(A) P(H) D(E)IS

2.4 NOT USED

S(1 ) G(A) P(H) D(E)IS

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

APPROVAL	DATE	NAME	TITLE
CJ		SA	BA
SA		BA	RB
BA		RB	RB
RB		RB	RB

ISSUED FOR CONSTRUCTION

CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

TYPICAL EAVE AND RAKE DETAILS

STRUCTURAL

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	06-14-2023	S10.2	0

File Name: FA ACAD\2023\223004\_CITY OF FAIRBANKS-PWD PUMP ENCLOSURE CITY OF FAIRBANKS - PWD\sheet\STRUCT\10.2 TYPICAL EAVE AND RAKE DETAILS.dwg  
Plot Style: NCS 4.0.ctb - Page Setup: ACPLOT1.ctb - EIScale: 1 - DimScale: 1 - VisRetain: 0

### LEGEND & ABBREVIATIONS

ABBR.	EXPLANATION	SYMBOL
AFF	ABOVE FINISHED FLOOR	
BDD	BACKDRAFT DAMPER	
BD	BALANCING DAMPER	
CFM	CUBIC FEET/INCH	
(E)	EXISTING	
E/A	EXHAUST AIR	
MOD	MOTOR OPERATED DAMPER	
NIC	NOT IN CONTRACT	
PH	PHASE	
POC/POD	POINT OF CONNECTION/DISCONNECT	
RPM	ROTATIONS PER MINUTE	
RV	RELIEF VALVE	
S/A	SUPPLY AIR	
SS	STAINLESS STEEL	
	THERMALLY INSULATED DUCT OR PIPE	
	THERMOMETER	
T'STAT	THERMOSTAT	

THIS IS A STANDARD LEGEND, SOME SYMBOLS SHOWN ON LEGEND ARE NOT NECESSARILY ON THE DRAWING.

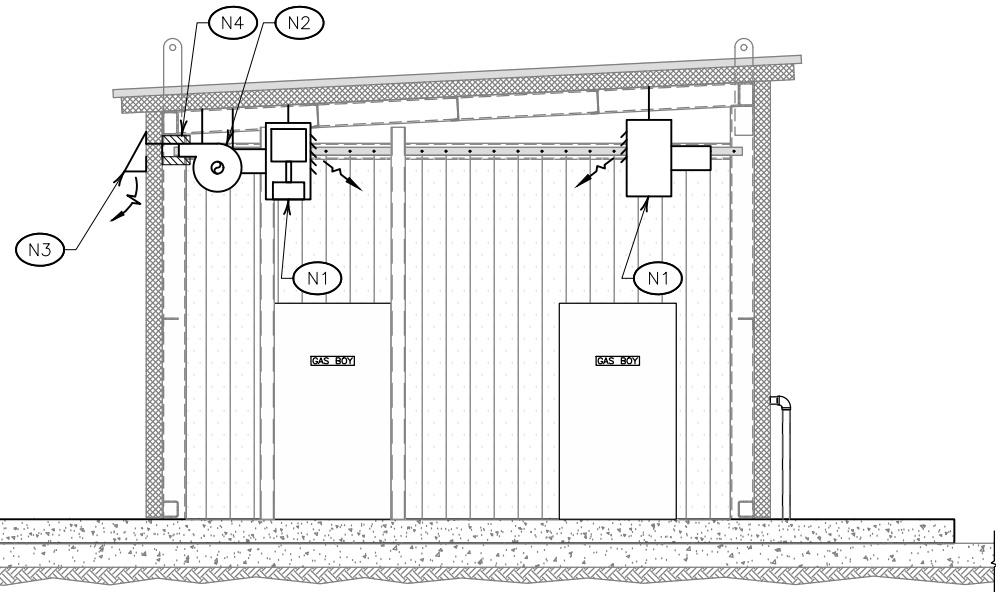
### FAN SCHEDULE

SYMBOL	LOCATION	CFM	S.P.		RPM	O.V. FPM	TYPE		USE	MOTOR HP/VOLTS/PH	DESIGN BASIS PRODUCT
			TOT	EXT			FAN	WHL			
EF-1	FUEL DISPENSING MODULE	75	0.2	0.2	1140	--	--	--	E/A	1/3/120/1	FANAM CAV SERIES PLASTIC RADIAL FAN, TOP HORIZONTAL CCW 90 DEGREES DISCHARGE, EXPLOSION PROOF DISCONNECT SWITCH, BACK DRAFT DAMPER, VIBRATION ISOLATOR

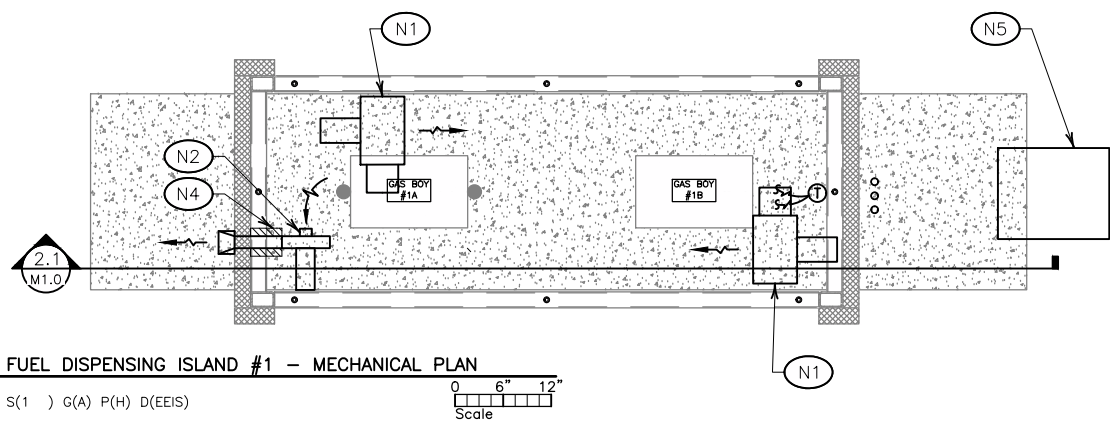
### HEATING UNIT SCHEDULE

SYMBOL	TYPE	KW	ELECTRICAL HP/VOLTS/PH	DESIGN BASIS PRODUCT
EUH-1	ELECTRIC	3	1/4/208/1	CHROMALOX EXPLOSION PROOF ELECTRIC UNIT HEATER MODEL CXH-A-03-83-32-00-20EP, CEILING MOUNT KIT HMK-00, EPETD-8D 50-90 DEGREE WALL MOUNTED THERMOSTAT

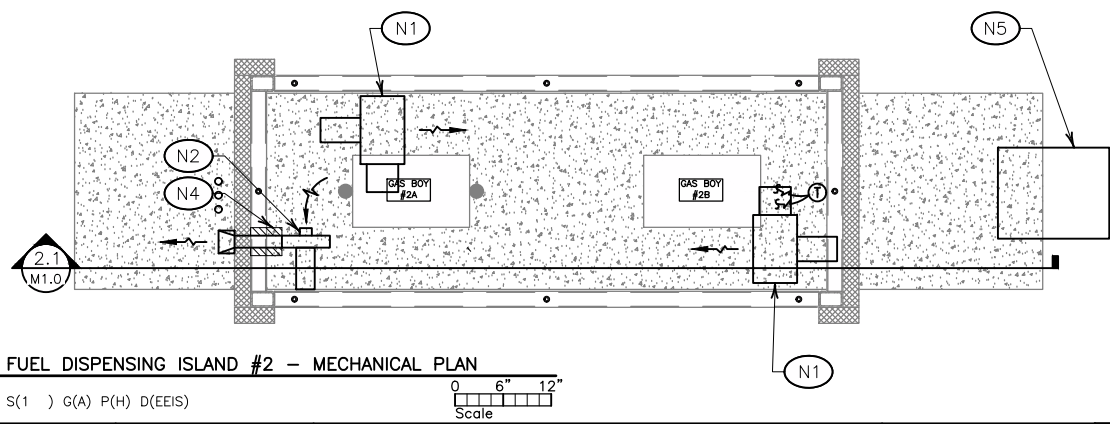
- NOTES (FOR THIS SHEET)**
- (N1) EUH-1 - CEILING MOUNT 3 KW EXPLOSION PROOF ELECTRIC UNIT HEATER. COORDINATE UNIT HEATER INSTALLATION WITH EXISTING FUEL DISPENSING EQUIPMENT
  - (N2) EF-1 - EXPLOSION PROOF EXHAUST FAN - CEILING MOUNT
  - (N3) SIDE WALL EXHAUST CAP
  - (N4) 2" DUCT INSULATION FROM FAN DISCHARGE TO WALL PENETRATION
  - (N5) EXHAUST SHALL BE ON THE OPPOSING SIDE OF THE VEEDER ROOT SYSTEM OUTSIDE MODULE



**2.1 FUEL DISPENSING ISLAND #1&2 - SECTION**  
S(24 ) G(A) P(H) D(EEIS)  
Scale: 0 6" 12"



**1.2 FUEL DISPENSING ISLAND #1 - MECHANICAL PLAN**  
S(1 ) G(A) P(H) D(EEIS)  
Scale: 0 6" 12"



**2.2 FUEL DISPENSING ISLAND #2 - MECHANICAL PLAN**  
S(1 ) G(A) P(H) D(EEIS)  
Scale: 0 6" 12"

No.	DATE	DESCRIPTION	ISSUES / REVISIONS	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
1	07-06-23	REVISION 1		NAC	SCH	SCH		
0	06-28-23	ISSUED FOR CONSTRUCTION		NAC	SCH	SCH		

SCOTT C. HALA  
ME-11405  
REGISTERED PROFESSIONAL ENGINEER

**E.E.I.S.**  
CONSULTING ENGINEERS, INC.  
P.O. Box 02169 Anchorage, Alaska 99509-2169 License # ABCC590

**CITY OF FAIRBANKS ALASKA**

**MBA** Consulting Engineers, Inc.  
3812 Spenard Road, Suite 200 • Anchorage, AK 99517  
(907) 274-2622 • FAX (907) 274-0914

**ISSUED FOR CONSTRUCTION**

CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

LEGEND, SCHEDULES, PLAN & SECTION

**MECHANICAL**

E.E.I.S. PROJECT #

**223004**

DATE CREATED

**06-29-2023**

E.E.I.S. DWG. #

**M1.0**

REVISION

**1**

File Name: Z:\23005\FDM - Fairbanks Fuel Dispensing Module M...Working\Drawings\23005\_M1.0\_LEGEND, SCHEDULES & PLAN.dwg  
Plot by: NCS 4.0.ctb Page Setup: 11x17.ctb Date Plotted: 7/6/2023 12:41 PM User: Nathan Chartier

DIVISION 15 - MECHANICAL

PART 1 - GENERAL

1.1 WORK INCLUDED

A. WORK CONSISTS OF PROVIDING LABOR, PRODUCTS, AND IN PERFORMING ALL OPERATIONS REQUIRED FOR THE COMPLETE OPERATING INSTALLATION OF ALL MECHANICAL SYSTEMS AS SHOWN AND SPECIFIED, IN STRICT ACCORDANCE WITH SPECIFICATIONS, APPLICABLE DRAWINGS, TERMS, AND CONDITIONS OF THE CONTRACT AND ALL APPLICABLE CODES AND ORDINANCES GOVERNING INSTALLATION OF THE VARIOUS MECHANICAL SYSTEMS. CORRELATE ALL WORK FULLY WITH THE WORK OF OTHER CRAFTS. PROVIDE ALL SYSTEMS COMPLETE AND IN PROPER OPERATING ORDER.

1.2 REGULATORY REQUIREMENTS

A. COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND NATIONAL CODES, ORDINANCES AND REGULATIONS IN EXISTENCE AT BID DATE AFFECTING MATERIALS AND METHODS OF INSTALLATION OF THE MECHANICAL SYSTEMS. FOLLOW RECOMMENDED PRACTICES AS SET DOWN BY ASME, SMACNA, INTERNATIONAL BUILDING CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL FIRE CODE, NATIONAL ELECTRICAL CODE, AND OSHA AS THEY APPLY TO THIS PROJECT EXCEPT IN CASES WHERE STATUTES GOVERN.

1.3 MANUFACTURER'S WARRANTIES

A. IN THE EVENT OF EQUIPMENT OR COMPONENT FAILURE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR OR REPLACE SUCH DEFECTIVE EQUIPMENT OR COMPONENTS AND BEAR ALL ASSOCIATED COSTS. THE CONTRACTOR SHALL PURSUE MANUFACTURER'S WRITTEN IMPLIED WARRANTIES TO THE EXTENT NECESSARY TO OBTAIN REPLACEMENT EQUIPMENT OR COMPONENTS PRIOR TO ANY OTHER ACTION BEING INITIATED.

1.4 ELECTRICAL WORK

A. ALL WIRING SHALL BE IN ACCORDANCE WITH NEC, STATE, AND LOCAL CODES.

1.5 TESTS AND INSPECTIONS

A. SCHEDULE, OBTAIN, AND PAY ALL FEES AND/OR SERVICES REQUIRED BY LOCAL AUTHORITIES AND BY THESE SPECIFICATIONS, TO TEST THE MECHANICAL SYSTEMS AS SPECIFIED.

B. DEFICIENCIES: IMMEDIATELY CORRECT ALL DEFICIENCIES, WHICH ARE EVIDENCED DURING THE TESTS AND REPEAT TESTS UNTIL SYSTEM IS APPROVED. DO NOT COVER OR CONCEAL PIPING, EQUIPMENT, OR OTHER PORTIONS OF THE MECHANICAL INSTALLATIONS UNTIL SATISFACTORY TESTS ARE MADE AND APPROVED.

C. COMPLETION: UPON COMPLETION OF THE MECHANICAL INSTALLATION, DEMONSTRATE TO THE CONTRACTING AGENCY'S SATISFACTION THAT THE SYSTEMS HAVE BEEN INSTALLED IN A SATISFACTORY MANNER IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, AND APPLICABLE CODES. DEMONSTRATE DYNAMIC OPERATION OF ALL SYSTEMS. SHOW THAT ALL CONTROLS ARE OPERABLE AND ARE PROPERLY ADJUSTED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FINAL SYSTEMS BALANCE, THAT ALL SYSTEMS ARE PROPERLY BALANCED, THAT ALL EQUIPMENT OPERATES PROPERLY, AND THAT ALL COMPONENTS OF ALL SYSTEMS ARE INSTALLED AND ADJUSTED FOR PROPER OPERATION.

1.6 PROJECT/SITE CONDITIONS

A. INSTALL WORK IN LOCATIONS SHOWN ON DRAWINGS, UNLESS PREVENTED BY PROJECT CONDITIONS.

B. PROVIDE INFORMATION SHOWING PROPOSED REARRANGEMENT OF WORK TO MEET PROJECT CONDITIONS, INCLUDING CHANGES TO WORK SPECIFIED IN OTHER SECTIONS OR INTERFERENCE WITH SITE CONDITIONS NOT IN THE CONTRACT. OBTAIN PERMISSION OF OWNER BEFORE PROCEEDING.

1.7 SEISMIC RESTRAINT

A. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS AND STRUCTURALLY ENGINEERED SHOP DRAWINGS FOR SEISMIC RESTRAINT OF ALL NEW MECHANICAL COMPONENTS AND EQUIPMENT, INCLUDING DUCTWORK AND PIPING. CALCULATIONS TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 16 OF THE 2021 INTERNATIONAL BUILDING CODE AND DRAWINGS ARE TO

BE STAMPED BY A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF ALASKA.

B. SEISMIC RESTRAINT DESIGN TO BE BASED ON SEISMIC RISK CATEGORY II, SEISMIC DESIGN CATEGORY D, AND IMPORTANCE FACTOR 1.0 FOR MECHANICAL EQUIPMENT. REFER TO STRUCTURAL DRAWINGS AND/OR SPECIFICATIONS FOR ADDITIONAL SEISMIC CRITERIA.

PART 2 - PRODUCTS

2.1 SUPPORTS AND ANCHORS

A. DUCTWORK HANGERS AND SUPPORTS

1. DUCTS 24 INCHES AND LESS: PROVIDE WITH ONE INCH X 18 GAUGE STRAPS FASTENED TO DUCTWORK AND TO BUILDING CONSTRUCTION. SPACE NOT MORE THAN EIGHT FEET ON CENTER.

2. RECOMMENDED METHODS OF FASTENING BRACING TO DUCTWORK, INCLUDE RIVETING, BOLTING, AND TACK WELDING.

2.2 MECHANICAL IDENTIFICATION

A. EQUIPMENT

1. PLASTIC NAMEPLATES: LAMINATED THREE-LAYER PLASTIC WITH ENGRAVED WHITE LETTERS ON DARK CONTRASTING BACKGROUND COLOR.

2.3 DUCTWORK

A. DEFINITIONS

1. DUCT SIZES: INSIDE CLEAR DIMENSIONS.

B. MATERIALS

1. GENERAL: NON-COMBUSTIBLE OR CONFORMING TO REQUIREMENTS FOR CLASS 1 AIR DUCT MATERIALS OR UL 181.

2. STEEL DUCTS: ASTM A525 GALVANIZED STEEL SHEET, LOCK FORMING QUALITY, HAVING ZINC COATING OF 1.25 OZ PER SQUARE FOOT FOR EACH SIDE IN CONFORMANCE WITH ASTM A90.

3. SEALANT: NON-HARDENING, WATER RESISTANT, FIRE RESISTIVE, COMPATIBLE WITH MATING MATERIALS, LIQUID USED ALONE OR WITH TAPE, OR HEAVY MASTIC.

C. DUCTWORK INSTALLATION

1. FABRICATE AND SUPPORT IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS AND ASHRAE HANDBOOKS, EXCEPT AS INDICATED. PROVIDE DUCT MATERIAL, GAGES, REINFORCING, AND SEALING FOR OPERATING PRESSURE INDICATED.

2. INCREASE DUCT SIZES GRADUALLY, NOT EXCEEDING 15 DEGREES DIVERGENCE WHEREVER POSSIBLE. DIVERGENCE UPSTREAM OF EQUIPMENT SHALL NOT EXCEED 30 DEGREES, CONVERGENCE DOWNSTREAM SHALL NOT EXCEED 45 DEGREES.

3. USE DOUBLE NUTS AND LOCK WASHERS ON THREADED ROD SUPPORTS.

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No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	07-06-23	ISSUED FOR CONSTRUCTION	

	NAC	SCH	SCH	—	—
	DWN.	CHK'D	D. ENG	P. ENG	P. MGR

ENGINEERING APPROVALS



**ISSUED FOR CONSTRUCTION**

TITLE  
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

SHEET SPECIFICATIONS

MECHANICAL

E.E.I.S. PROJECT # <b>223004</b>	DATE CREATED <b>07-06-2023</b>	E.E.I.S. DWG. #	REVISION <b>M2.0 0</b>
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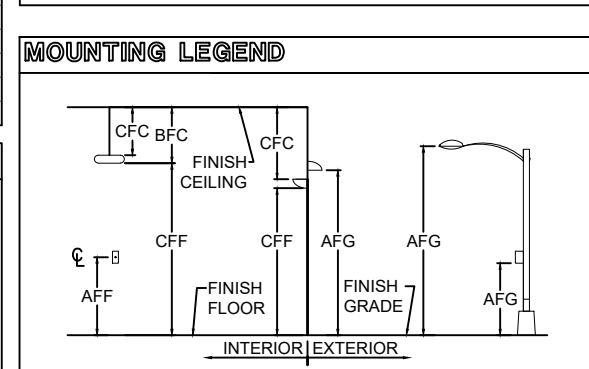
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ABBREVIATIONS LEGEND	
ABBR.	EXPLANATION
AB	ABOVE BASEBOARD
AC	ABOVE COUNTER
ADO	ACCESSIBLE DOOR OPERATOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFCI	ARC FAULT CIRCUIT INTERRUPTER
ATS	AUTOMATIC TRANSFER SWITCH
BFC	BELOW FINISHED CEILING
BMS	BALANCED MAGNETIC POSITION SWITCH
CFC	CLEARANCE FROM CEILING
CFF	CLEARANCE FROM FLOOR
CT	CURRENT TRANSFORMER
DDC	DIRECT DIGITAL CONTROL
E	EMERGENCY LIGHT, CIRCUIT, PANEL
EXT	EXTERNAL
EXIT	EXIT DOOR
ETR	EXISTING TO REMAIN
FA	CONNECT TO FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FAIL	SPECIFIES IF DOOR FAILS SAFE OR SECURE
FZR	FREEZER
GDP	GENERATOR DISTRIBUTION PANEL
GFCI	GROUND FAULT CURRENT INTERRUPTER
HACR	HEATING AIR-CONDITIONING REFRIGERATION
HBH	HEAD BOLT HEATER
HDPE	HIGH DENSITY POLYETHYLENE
HEA	HOMER ELECTRIC ASSOCIATION
HOA	HANDS OFF AUTO
HORN	SIREN
INT	INTERNAL
IT	INFORMATION TECHNOLOGY
MAG LOCK	MAGNETIC LOCK
MCC	MOTOR CONTROL CENTER
MC	METAL CLAD CABLE
MDP	MAIN DISTRIBUTION PANEL
NIC	NOT IN CONTRACT
PA	PUBLIC ADDRESS
PDU	POWER DISTRIBUTION UNIT
PVC	POLYVINYL CHLORIDE
REX	REQUEST TO EXIT
RSC	RIGID STEEL CONDUIT
SOO	SEQUENCE OF OPERATION (SEE TABLE)
SPD	SURGE PROTECTION DEVICE
ST	SHUNT TRIP CIRCUIT BREAKER
STBY	STANDBY CIRCUIT
TC	TIMECLOCK
TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
TP	TAMPER RESISTANT
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
VFD	VARIABLE FREQUENCY DRIVE
W	WALL MOUNT +60" AFF
WP	WEATHERPROOF
XFMR	TRANSFORMER

LINE TYPE LEGEND	
—	EXISTING
—	NEW
- - - -	DEMOLITION
- - - - UE - - - -	UNDERGROUND POWER LINE
— UGT —	UNDERGROUND TELECOM LINE

WIRING CIRCUITS LEGEND	
	CONDUIT
	CONNECTION POINT
	HOMERUN
	CONDUIT BREAK
	GROUND
	BREAKER
	STUB OUT
	2 HOT
	3 HOT
	4 HOT

WIRING DEVICES LEGEND	
	PUSH BUTTON
	JUNCTION BOX
	GFCI
	RECEPTACLE - DUPLEX CEILING MOUNT
	RECEPTACLE - SPLIT WIRE
	RECEPTACLE - DUPLEX
	RECEPTACLE - DUPLEX FLOOR MOUNT
	RECEPTACLE - DUPLEX ON EMERGENCY POWER
	RECEPTACLE - DUPLEX ISOLATED GROUND
	RECEPTACLE - QUAD
	RECEPTACLE - SINGLE
	RECEPTACLE - X-NEMA CALLOUT
	EQUIPMENT CONNECTION



POWER LEGEND	
	ELECTRICAL POWER PANEL
	ELECTRICAL DISTRIBUTION PANEL
	ELECTRICAL LIGHTING PANEL
	PANELBOARD CABINET FLUSH MOUNT
	PANELBOARD CABINET SURFACE MOUNT
	SWITCHBOARD EXISTING
	SWITCHBOARD NEW
	METER
	COMBINATION MOTOR STARTER/DISCONNECT
	UNFUSED DISCONNECT
	FUSED DISCONNECT
	VARIABLE FREQUENCY DRIVE
	CONTROLLER
	CONTACTOR
	MOTOR SINGLE PHASE
	MOTOR SINGLE PHASE : X = HORSE POWER
	MOTOR 3PH
	MOTOR 3PH : X = HORSE POWER
	GENERATOR POWER
	TRANSFORMER
	THERMAL SWITCH

PANEL: EMF		MOUNTING		MAINS		OPTIONS				
PROJECT:	Fairbanks PWD Pump	<input checked="" type="checkbox"/> SURFACE	<input checked="" type="checkbox"/> LUGS	<input type="checkbox"/> FEEDTHRU	<input type="checkbox"/> SHUNT TRIP	<input type="checkbox"/> ISO GND BAR				
LOCATION:	Mech RM	<input checked="" type="checkbox"/> FLUSH	<input type="checkbox"/> CB	<input type="checkbox"/> SUBFEED LUG	<input type="checkbox"/> SUBFEED BRKR	<input checked="" type="checkbox"/> SOLID NEUTRAL				
VOLTAGE:	208Y/120 VOLT	3 PHASE 4 WIRE		100 A MLO		10k AIC				
CIRCUIT DESCRIPTION		KVA	AMP	P	CKT	CKT	AMP	P	KVA	CIRCUIT DESCRIPTION
VEEDER ROOT			15	1	1	2				
OVERFILL ALARM			15	1	3	4	40	3		PANEL EMD
CANOPY LIGHTS			20	1	5	6				
UNLEADED COUNTER			15	1	7	8	15	2		SHUNT CONTROL
E-STOP			15	1	9	10				SPACE
AIR COMPRESSOR DRYER			15	2	11	12				SPACE
					13	14	15	1		DSI CONTROL
3KW ELECTRIC HEATER ISLAND #1		3.0	20	2	15	16				
					17	18	15	3		TANK 4 HEATER PROBE
3KW ELECTRIC HEATER ISLAND #1		3.0	20	2	19	20				
					21	22	20	1		TANK 4 HEATER CONTROL
3KW ELECTRIC HEATER ISLAND #2		3.0	20	2	23	24	15	1	0.8	EXHAUST FAN, ISLAND #1
					25	26	15	1	0.8	EXHAUST FAN, ISLAND #2
3KW ELECTRIC HEATER ISLAND #2		3.0	20	2	27	28				SPACE
					29	30				SPACE
CONNECTED LOAD:		13.7 KVA		37.9 A		REMARKS:				
DEMAND LOAD:		13.7 KVA		37.9 A						
DATE:										
REV:										

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
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DWN.	CHK'D	D. ENG	P. ENG	P. MGR
SNS	EWC	EWC	-	-

ENGINEERING APPROVALS

**E.E.I.S.**  
CONSULTING ENGINEERS, INC.  
P.O. Box 92169 Anchorage, Alaska 99509-2169  
(907) 256-3231  
License # ARCC500

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(907) 274-2622 • FAX (907) 274-0914

ISSUED FOR CONSTRUCTION

TITLE  
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

LEGEND AND PANEL SCHEDULES

ELECTRICAL

EIS PROJECT #  
**223004**

DATE CREATED  
**06-22-2023**

EIS DWG. #  
**E1.0**

REVISION  
**0**

- NOTES (FOR THIS SHEET)**
- (N1) EXISTING ISLAND #1
  - (N2) EXISTING ISLAND #2
  - (N3) LOCATION ELECTRICAL PANELS ON THE MEZZANINE.
  - (N4) LOCATON OF EXTERIOR WIRE WAY THAT FEEDS THE FUEL ISLANDS.
  - (N5) DISCONNECT POWER FROM LIGHTS PRIOR TO CANOPY DEMOLITION. COIL CONDUCTOR FOR REUSE TO POWER ENCLOSURE INTERIOR AND EXTERIOR LIGHTS.



**2.1 CIVIL - LAYOUT**  
 S(600) G(A) P(H) D(EEIS)  
 Scale: 0 25' 50'

No.	DATE	DESCRIPTION	ISSUES / REVISIONS
0	06-28-23	ISSUED FOR CONSTRUCTION	

SNS	EWC	EWC			
DWN.	CHK'D	D. ENG	P. ENG	P. MGR	

ENGINEERING APPROVALS

EDWARD CARLSON  
REGISTERED PROFESSIONAL ENGINEER

**E.E.I.S.**  
CONSULTING ENGINEERS, INC.

P.O. Box 92169 Anchorage, Alaska 99509-2169  
(907) 256-3231 License # ABCC500

**CITY OF FAIRBANKS**  
ALASKA

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3812 Spenard Road, Suite 200 • Anchorage, AK 99517  
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TITLE: CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

SITE PLAN

ELECTRICAL

E.E.I.S. PROJECT #  
**223004**

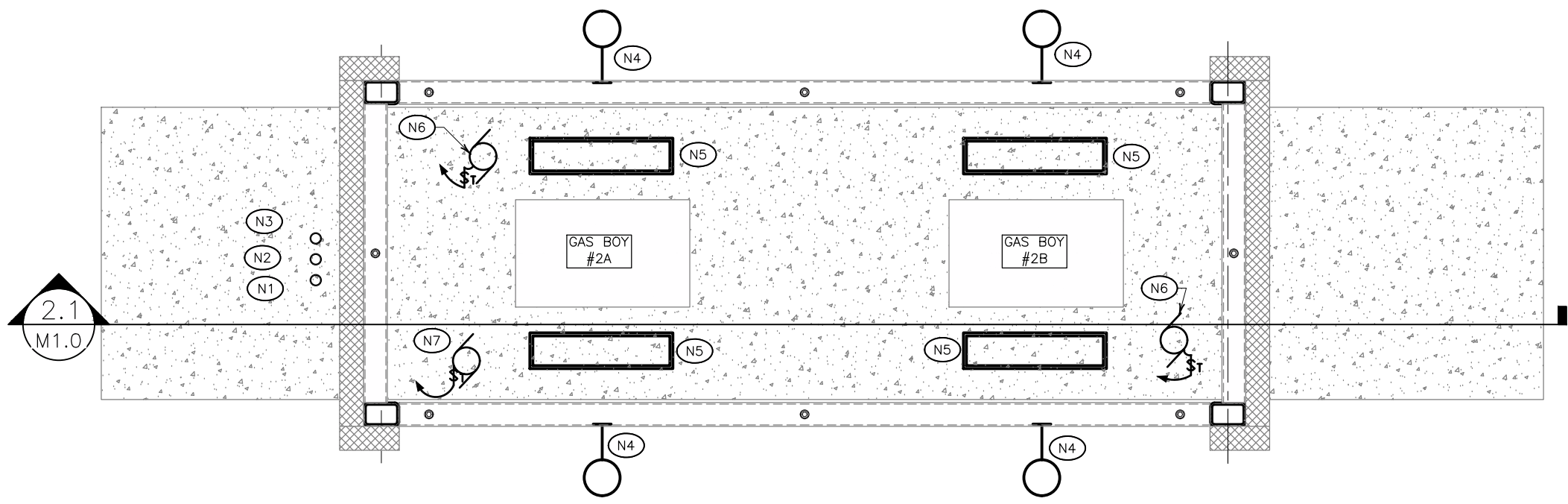
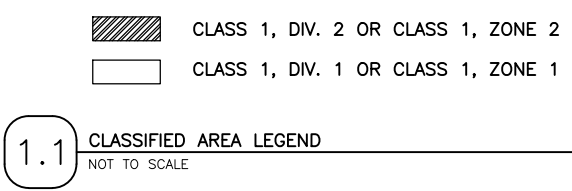
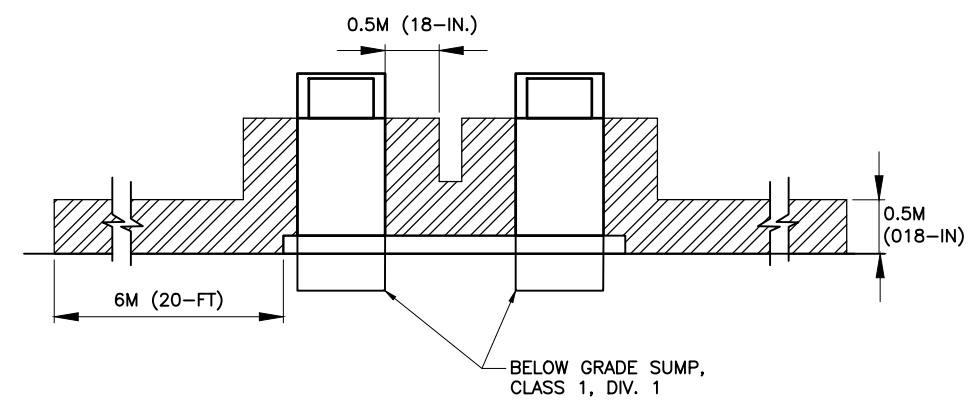
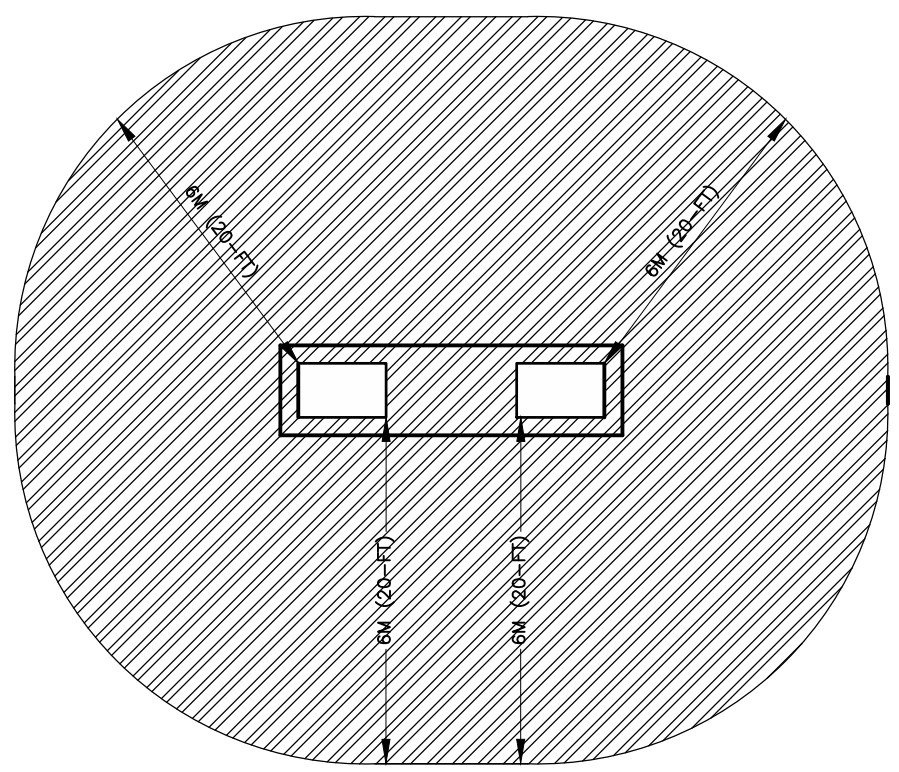
DATE CREATED  
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E.E.I.S. DWG. #  
**E2.0**

REVISION  
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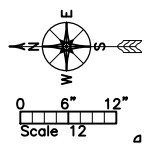
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- NOTES (FOR THIS SHEET)**
- (N1) EXISTING 120VAC POWER FEED TO CANOPY LIGHTS. EXISTING TO REMAIN PROTECT IN PLACE. RECONNECT TO INTERIOR AND EXTERIOR MODULE LIGHT FIXTURES.
  - (N2) SPARE 208VAC CONDUCTORS TO WIRE WAY ABOVE PANEL EMF. CONNECT TO 20A/2P CIRCUIT BREAKER IN PANEL EMF TO FEED 3KW EXPLOSION PROOF HEATER.
  - (N3) SPARE 3/4-INCH CONDUIT THAT RUNS TO EXTERIOR WIRE WAY (N4 ON SHEET E2.0). PROVIDE 2@#8 AWG XHHW-1 WITH #10 GND FROM 20A/2P CIRCUIT BREAKER IN PANEL EMF THROUGH SPARE CONDUIT TO FEED SECOND 3KW EXPLOSION PROOF HEATER.
  - (N4) EXTERIOR LIGHT; DIALIGHT MODEL: BHA-4UN2-3NFN-VGN, ULTRA-WIDE DISTRIBUTION, RATED FOR -40, PROVIDE WALL MOUNT OPTION.
  - (N5) INTERIOR LIGHT; DIALIGHT MODEL: LJU-5M(X)2-5DNN-NGN. 24-INCH, CLASS 1, DIV. 1. DIFFUSED POLYCARBONATE LENS. RATED FOR -40.
  - (N6) 3KW HAZARDOUS LOCATION ELECTRIC HEATER WITH INTERNAL THERMOSTAT.
  - (N7) EF-1, EXHAUST FAN, 1/3 HP MOTOR. 120V, SINGLE-PHASE. PROVIDE NEW 15A/1P BREAKER IN EXISTING SPACES ON PANEL EMF AND USE TO FEED EXHAUST FAN. PROVIDE 2-#10 AWG CONDUCTORS IN THE EXISTING 3/4" SPARE CONDUIT WITH UNIT HEATER CONDUCTORS.

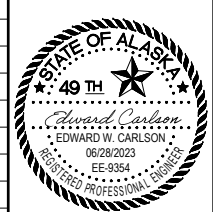


**2.1 PUMP ISLAND ELECTRICAL -- TYPICAL**  
SCALE 1"=1'-0"

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				DWN.	CHK'D	D. ENG	P. ENG	P. MGR	
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ISSUES / REVISIONS				ENGINEERING APPROVALS					



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EIS PROJECT #  
**223004**

**ISSUED FOR CONSTRUCTION**

TITLE  
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

FLOOR PLAN AND HAZARD DRAWING

**ELECTRICAL**

DATE CREATED	EIS DWG. #	REVISION
06-22-2023		<b>E3.0 0</b>

ELECTRICAL

PART 1 - GENERAL

1.1 SCOPE

A. PROVIDE COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON DRAWINGS AND SPECIFIED. FURNISH ALL LABOR, EQUIPMENT, APPLIANCES, MATERIALS, AND PERFORM OPERATIONS REQUIRED FOR COMPLETE INSTALLATION IN ACCORDANCE WITH ALL SECTIONS OF SPECIFICATIONS, DRAWINGS, CODES, AND CONDITIONS OF CONTRACT.

1.2 CODES, STANDARDS, FEES, PERMITS

A. COMPLY WITH LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, NATIONAL ELECTRICAL SAFETY CODE, LOCAL CODES, AMENDMENTS, ORDINANCES AND REQUIREMENTS OF UTILITY COMPANIES' FURNISHING SERVICES TO INSTALLATION. COMPLY WITH NEMA, UL, ANSI, ICEA AND OTHER INDUSTRY STANDARDS. COMPLY WITH REQUIREMENTS OF IBC, IMC, UPC, AND OTHER APPLICABLE CODES.

B. SECURE AND PAY FOR ALL INSPECTIONS, FEES, PERMITS, ETC., REQUIRED BY LOCAL AND STATE AGENCIES.

1.3 DRAWINGS

A. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW ALL FEATURES OF WORK. INSTALL ELECTRICAL ITEMS TO PROVIDE SYMMETRICAL APPEARANCE. DO NOT SCALE DRAWINGS. REVIEW OTHER DRAWINGS AND ADJUST WORK TO CONFORM TO CONDITIONS SHOWN. VERIFY FIELD CONDITIONS. IMMEDIATELY CONTACT THE OWNER'S REPRESENTATIVE FOR CLARIFICATION OF QUESTIONABLE, OBSCURE ITEMS, OR APPARENT CONFLICTS. THE OWNER'S REPRESENTATIVE'S DECISION IS FINAL FOR ALL CLARIFICATIONS REQUESTED. EXTRA COST RESULTING FROM A CONDITION WHERE CLARIFICATION WAS NOT REQUESTED: MADE AT NO INCREASE IN CONTRACT AMOUNT UNLESS EXTRA COST IS APPROVED IN WRITING.

1.4 WORKMANSHIP

A. CONSIDERED AS IMPORTANT AS ELECTRICAL AND MECHANICAL EFFICIENCY AND SUBJECT TO APPROVAL. EMPLOY WORKMEN SKILLED IN TRADE AND FAMILIAR WITH PARTICULAR TECHNIQUES APPLICABLE TO VARIOUS SECTIONS OF WORK. INSTALL IN ACCORDANCE WITH NECA "STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING."

1.5 COORDINATION

A. COORDINATE WITH OTHER TRADES FOR PROPER INSTALLATION AND TIMELY EXECUTION. ANY CHANGES NECESSITATED BY FAILURE TO PROPERLY COORDINATE WORK: MADE AT NO INCREASE IN CONTRACT AMOUNT.

B. VERIFY INFORMATION SHOWN ON PLANS WITH EQUIPMENT ITEMS ACTUALLY FURNISHED WHERE EQUIPMENT IS FURNISHED OR INSTALLED BY OTHERS. NOTIFY OWNER'S REPRESENTATIVE OF ANY CONFLICTS.

C. COORDINATE WITH SERVING UTILITIES. PROVIDE ALL EQUIPMENT AND LABOR REQUIRED, INCLUDE ALL COSTS NECESSARY FOR COMPLETE ELECTRICAL SERVICES.

1.6 REMODEL WORK

A. EXISTING CONDITIONS NOTED ON THE DRAWINGS WERE PREPARED FROM PREVIOUS CONSTRUCTION DRAWINGS. VISIT SITE, VERIFY EXISTING CONDITIONS AND ALLOW ADEQUATE MONIES TO COVER ADDITIONAL WORK REQUIRED AS A RESULT OF AS-BUILT CONDITIONS. ASSUME THAT THE AS-BUILT INFORMATION DOES NOT INDICATE EXACT CONDUIT ROUTING OR CIRCUITING. INCLUDE NECESSARY WORK TO PROVIDE CIRCUIT CONTINUITY TO EXISTING CIRCUITS THAT MAY BE AFFECTED BY NEW WORK. CUT BACK EXISTING WORK BEING REMOVED OR ABANDONED BEYOND FINISHED SURFACES TO ALLOW REPAIR AND REFINISHING. ASSUME CONDITION OF WIRING IS SUITABLE FOR RECONNECTING.

B. NOTIFY OWNER'S REPRESENTATIVE OF ANY FIELD CONDITIONS WHERE CONTRACTOR CANNOT REUSE EXISTING MATERIAL OR EQUIPMENT BECAUSE OF DETERIORATED CONDITIONS. ALSO NOTIFY OWNER'S REPRESENTATIVE OF ANY EXISTING CONDITIONS WHICH MAY BE CONSIDERED UNSAFE OR IN NEED OF REPAIR.

C. CERTAIN ITEMS SUCH AS FIXTURES ARE NOTED ON DRAWINGS TO BE REUSED. THOROUGHLY CLEAN, PLACE IN LIKE NEW CONDITION AND, IN THE CASE OF LIGHTING FIXTURES, PROVIDE WITH NEW LAMPS.

1.7 SUBMITTALS

A. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT ONLY AND DOES NOT RELIEVE THE CONTRACTOR FROM ANY REQUIREMENTS OF CONTRACT DOCUMENTS. PROVISION OF A COMPLETE AND SATISFACTORY WORKING INSTALLATION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

B. UNLESS NOTED, SUBMIT ELECTRONIC COPIES OF ALL MATERIALS AND EQUIPMENT AND LIGHTING FIXTURES.

1.8 SUBSTITUTIONS

A. MAKE NO SUBSTITUTIONS OR REVISIONS WITHOUT WRITTEN APPROVAL. FOR EQUIPMENT SCHEDULED BY MANUFACTURER'S NAME AND CATALOG DESIGNATIONS: MANUFACTURER'S PUBLISHED DATA AND/OR SPECIFICATION FOR THAT ITEM ARE CONSIDERED PART OF SPECIFICATION. ALL SIMILAR EQUIPMENT SAME MANUFACTURER THROUGHOUT.

1.9 PROJECT COMPLETION

A. THOROUGHLY CLEAN INSIDE AND OUT ALL FIXTURES AND EQUIPMENT. CLEAN PREMISES OF CONSTRUCTION DEBRIS. CALL FOR FINAL CONSTRUCTION OBSERVATION. CONDUCT OPERATING TEST FOR APPROVAL. DEMONSTRATE INSTALLATION TO OPERATE SATISFACTORILY IN ACCORDANCE WITH REQUIREMENTS OF CONTRACT DOCUMENTS. PROVIDE PERSONNEL TO ASSIST ENGINEER IN REMOVAL AND REPLACEMENT OF EQUIPMENT FOR OBSERVATION PURPOSES.

B. SHOULD ANY PORTION OF INSTALLATION FAIL, REPAIR OR REPLACE ITEMS UNTIL ITEMS CAN BE DEMONSTRATED TO COMPLY.

C. EMERGENCY SYSTEMS/DISCONNECT MUST BE OPERATIONAL PRIOR TO OCCUPANCY.

D. SUBMIT A LETTER CERTIFYING COMPLETION OF PROJECT IN ACCORDANCE WITH PLANS AND SPECIFICATIONS. TURN OVER RECORD DRAWINGS TO OWNER.

E. SUBMIT OPERATING AND MAINTENANCE MANUALS TO OWNER, TRAIN OWNER'S PERSONNEL IN OPERATION AND MAINTENANCE OF ELECTRICAL SYSTEMS.

1.10 GUARANTEE

A. GUARANTEE ALL MATERIAL TO BE NEW, ALL WORK TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE. REPAIR OR REPLACE ANY WORK OR MATERIAL DEEMED DEFECTIVE DURING THE GUARANTEE PERIOD AT NO COST TO THE OWNER.

PART 2 - PRODUCTS

2.1 RACEWAYS

A. GALVANIZED RIGID STEEL CONDUIT OR INTERMEDIATE METAL CONDUIT: USE IN DAMP OR WET LOCATIONS, UNDERGROUND, IN CONCRETE OR CMU, WHERE SUBJECT TO PHYSICAL DAMAGE, FOR SERVICE CONDUCTORS AND PANELBOARD FEEDERS.

B. FLEXIBLE METALLIC CONDUIT: USE FOR FINAL CONNECTIONS TO FIXTURES AND EQUIPMENT TO ISOLATE VIBRATION OR ALLOW RELOCATION. PROVIDE FLEXIBLE WATERTIGHT CONDUIT IN DAMP OR WET LOCATIONS (PUMPS, KITCHEN EQUIPMENT, ETC.). WHERE USED OUTDOORS, USE LIQUIDTIGHT FLEXIBLE CONDUIT RATED FOR -60 DEGREES F AND LISTED FOR DIRECT BURY.

C. UNLESS NOTED, INSTALL RACEWAYS CONCEALED EXCEPT AT SURFACE CABINETS, MOTOR AND EQUIPMENT CONNECTIONS, AND IN UTILITY ROOMS. LOCATE RACEWAYS TO NOT ENDANGER STRENGTH OF STRUCTURAL MEMBERS, AND SIX INCHES MINIMUM FROM PARALLEL RUNS OF HEAT PIPING. DO NOT INSTALL RACEWAYS IN OR THROUGH STRUCTURAL MEMBERS UNLESS SPECIFICALLY APPROVED. CROSS EXPANSION JOINTS WITH EXPANSION FITTINGS AND BONDING CONDUCTOR.

D. PROVIDE PULL WIRE IN RACEWAYS INSTALLED BUT LEFT EMPTY.

E. WATERPROOF ALL ROOF AND EXTERIOR WALL PENETRATIONS AS APPROVED.

F. PROVIDE SEALOFF AND EXPLOSION PROOF RACEWAY AND FITTING FOR HAZARDOUS AREAS.

2.2 WIRE AND CABLE

A. INSTALL ALL CONDUCTORS IN APPROVED RACEWAY SYSTEMS. #12 AWG MINIMUM EXCEPT CONTROL WIRING MAY BE #14.

B. PROVIDE XHHW THERMOSETTING MINIMUM INSULATION RATING 90 DEGREES C, 600 VOLT.

C. COLOR CODE 120/208 VOLT SYSTEMS: BLACK, RED, BLUE AND WHITE. MATCH EXISTING COLOR CODE IN REMODEL AREAS IF DIFFERENT FROM ABOVE. IF NO COLOR CODE IS PRESENT, PROVIDE NEW WORK WITH SPECIFIED COLOR CODE.

D. CONNECTIONS:

1. #6 AND LARGER: SOLDERLESS LUGS.

2. #8 AND SMALLER: INSULATED WIRE NUT CONNECTOR, IDEAL "WINGNUT" HARD SHELL.

E. LOW VOLTAGE, SPECIAL PURPOSE, COAXIAL CABLES, ETC.: INSTALL AND TERMINATE PER MANUFACTURER'S RECOMMENDATIONS.

2.3 BOXES

A. PROVIDE GALVANIZED OR CADMIUM PLATED, ONE PIECE PRESSED OR WELDED STEEL WITH DEVICE FINISH RING AND GANG COVER. FOUR INCH SQUARE OR OCTAGONAL, 1-1/2" DEEP MINIMUM SIZE.

B. PROVIDE ADDITIONAL PULL BOXES AS REQUIRED TO AVOID EXCESS PULLING TENSIONS AND TO FACILITATE WORK.

2.4 WIRING DEVICES

A. DEVICE PLATES: UL LISTED, ONE PIECE FLUSH PLATES STAINLESS STEEL. USE GALVANIZED PLATES FOR EXPOSED WIRING, GASKETED POLYCARBONATE SELF-CLOSING WEATHERPROOF PLATES OUTDOORS, U.L. LISTED FOR WET LOCATIONS WHILE IN USE.

2.5 MOTOR STARTER AND DISCONNECTS

A. PROVIDE EACH MOTOR WITH DISCONNECTING MEANS AND WITH SUITABLE CONTROLLER OR OTHER DEVICE AS REQUIRED, COMPLETE WITH MANUAL OR AUTOMATIC CONTROL OF STANDARD NEMA SIZES.

B. PROVIDE HORSEPOWER RATED MANUAL MOTOR STARTING SWITCH WITH THERMAL OVERLOAD PROTECTION FOR EACH SINGLE PHASE MOTOR. SIZE HEATERS FOR 115% MEASURED FULL LOAD CURRENT.

C. DISCONNECTS: HEAVY DUTY SAFETY SWITCHES, CIRCUIT BREAKERS OR MANUAL MOTOR STARTING SWITCHES APPROPRIATE FOR THE LOCATION.

2.6 GROUNDING

A. GROUND ALL ELECTRICAL DEVICES, MOTORS, METALLIC PIPING, DUCTWORK, METAL FRAMING, ETC., IN ACCORDANCE WITH N.E.C. ARTICLE 250.

B. UTILIZE THE METALLIC RACEWAY SYSTEM AS THE SYSTEM GROUNDING PATH FOR ALL DEVICES UNLESS OTHERWISE NOTED.

C. PROVIDE SEPARATE GREEN GROUNDING CONDUCTOR FOR ALL CONDUIT EQUIPMENT CONNECTIONS AND ALL EXTERIOR ELECTRICAL DEVICES, SUCH AS POLE MOUNTED LIGHTING, RECEPTACLES, BUILDING MOUNTED LIGHTING, ETC.

2.7 LIGHTING FIXTURES

A. PROVIDE ALL NEW FIXTURES, UL LISTED AND EQUIPPED WITH NECESSARY FRAMES AND MODIFICATIONS REQUIRED FOR COMPLETE INSTALLATION. UNIFORMLY SPACE AND COORDINATE INSTALLATION WITH CEILING OR WALL PATTERNS, GRILLES, REGISTERS, ETC., AS APPROVED. COORDINATE TO AVOID CONFLICTS.

B. PROVIDE ALL FIXTURES COMPLETE WITH LAMPS, BALLASTS, LENSES AND MOUNTING DEVICES AS REQUIRED.

C. COORDINATE ALL LIGHTING FIXTURES WITH CEILING TYPES PRIOR TO ORDERING. PROVIDE REQUIRED MOUNTING DEVICES, FRAMES, ETC., AT NO ADDITIONAL COST.

D. VERIFY MOUNTING HEIGHT OF PENDANT MOUNTED FIXTURE WITH ENGINEER PRIOR TO MOUNTING. USE BALL ALIGNER WITH CANOPY ON SLOPING CEILINGS.

E. PROVIDE ALL EXTERIOR LIGHTING FIXTURES U.L. LISTED FOR DAMP LOCATION WHERE BENEATH SOFFITS AND FOR WET LOCATION WHERE DIRECTLY EXPOSED TO RAIN.

F. EXTERIOR FIXTURES SHALL BE RATED FOR-40 DEGREES F.

G. SET FIXTURES TRUE AND PLUMB, FREE OF LIGHT LEAKS, WARPS, DENTS, IRREGULARITIES.

PART 3 - EXECUTION

3.1 GENERAL

A. INSTALL ALL MATERIAL AND EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND INSTALLATION DRAWINGS, UNLESS OTHERWISE INDICATED AND IN ACCORDANCE WITH NECA'S "STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING".

B. SEAL PENETRATIONS WITH UL-LISTED FIREPROOFING MATERIALS TO MAINTAIN FIREPROOFING INTEGRITY AND WATERTIGHTNESS.

C. SEAL AIRTIGHT ALL PENETRATIONS THROUGH SMOKE PARTITIONING, FAN PLENUMS, DUCTWORK, AND VAPOR BARRIERS.

D. REPAIR ALL DAMAGE TO FINISHED SURFACES WHERE CAUSED BY INSTALLATION OF ELECTRICAL EQUIPMENT.

E. PROVIDE PROPER IDENTIFICATION FOR PANELS, SWITCHES, OR ANY ITEM OF ELECTRICAL EQUIPMENT USED AS A CONTROL DEVICE OR DISCONNECTING MEANS FOR ANY EQUIPMENT. IDENTIFY BOXES CONTAINING EMERGENCY CIRCUITS PER N.E.C. ARTICLE 700-9. PROVIDE UPDATED TYPED PANEL SCHEDULE FOR PANELS AFFORDED BY THIS WORK.

3.2 SUPPORTS

A. ANCHOR EQUIPMENT TO THE BUILDING STRUCTURE TO RESIST SEISMIC DESIGN CATEGORY D EARTHQUAKE FORCES. PROVIDE ADEQUATE BACKING AT STRUCTURAL ATTACHMENT POINTS TO ACCEPT THE FORCES INVOLVED.

B. SECURE BOXES, WALL BRACKETS, CABINETS AND HANGERS BY MEANS OF TOGGLE BOLTS IN HOLLOW MASONRY AND GYPBOARD; PRESET INSERTS OR EXPANSION BOLTS IN SOLID MASONRY AND CONCRETE; MACHINE SCREWS, BOLTS OR WELDING ON METAL SURFACES; AND WOOD SCREWS IN WOOD CONSTRUCTION.

3.3 AS-BUILT DRAWINGS

A. KEEP CLEAN SET OF PRINTS AT JOB SITE AND RECORD ALL ELECTRICAL CHANGES THAT OCCURRED DURING CONSTRUCTION. FAILURE TO DO SO MAY DELAY PAYMENT.

B. AT END OF CONSTRUCTION, PROVIDE ONE COMPLETE SET OF DRAWINGS INDICATING ALL FIELD CHANGES FOR RECORD PURPOSES TO THE OWNER'S REPRESENTATIVE.

END OF SECTION

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No.	DATE	DESCRIPTION	SNS	EWC	EWC			
0	06-28-23	ISSUED FOR CONSTRUCTION						
ISSUES / REVISIONS			DWN.	CHK'D	D. ENG	P. ENG	P. MGR	
			ENGINEERING APPROVALS					



STATE OF ALASKA  
49<sup>TH</sup> ANNIVERSARY  
EDWARD W. CARLSON  
REGISTERED PROFESSIONAL ENGINEER  
06/28/2023  
EE-9354



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CONSULTING ENGINEERS, INC.  
P.O. Box 02169 Anchorage, Alaska 99509-2169 License # ABC0500



CITY OF FAIRBANKS  
INCORPORATED ON NOVEMBER 10, 1906  
FAIRBANKS, ALASKA



MBA Consulting Engineers, Inc.  
3812 Spenard Road, Suite 200 • Anchorage, AK 99517  
(907) 274-2622 • FAX (907) 274-0914



**ISSUED FOR CONSTRUCTION**

TITLE  
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

SPECIFICATIONS

**ELECTRICAL**

EIS PROJECT # <b>223004</b>	DATE CREATED <b>06-22-2023</b>	EIS DWG. #	REVISION <b>E4.0 0</b>
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