

CITY OF FAIRBANKS - PWD - PUMP ENCLOSURES

FAIRBANKS, ALASKA

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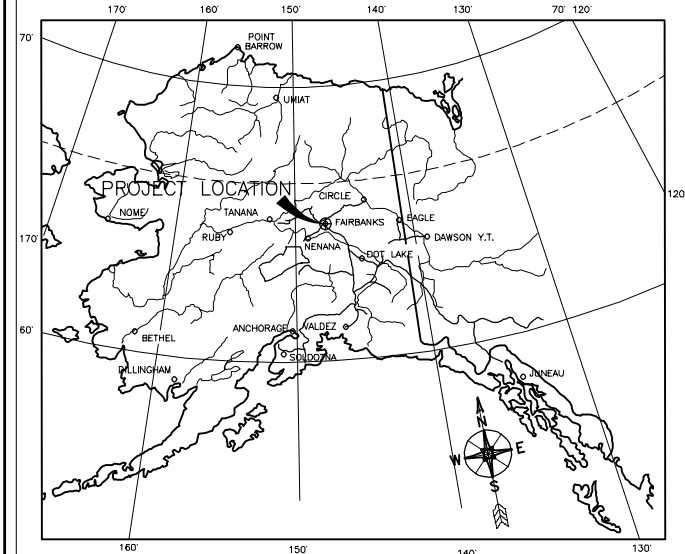
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ABBREVIATIONS

<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&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&B top and bottom TOS top of concrete slab T.O.S. top of steel</p>
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SYMBOLS

	SECTION CUT SECTION IDENTIFICATION SHEET WHERE DETAIL IS DRAWN
	DETAIL SECTION IDENTIFICATION SHEET WHERE DETAIL IS DRAWN



PROJECT LOCATION MAP

OWNER

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

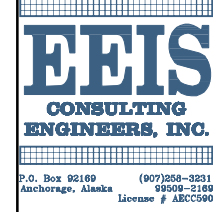
PRIME

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

No.	DATE	DESCRIPTION	DWN.	CHK'D	D. ENG	P. ENG	P. MGR
2	07-14-23	IFC REV 2 - ADDED STRUCTURAL GENERAL NOTE - PAINT SPECIFICATION	CJ	SA	BA	RB	RB
1	07-06-23	IFC REV 1 - ADDED MECHANICAL AND ELECTRICAL SPECIFICATION SHEETS	CJ	SA	BA	RB	RB
0	07-14-23	ISSUED FOR CONSTRUCTION	CJ	SA	BA	RB	RB



ISSUED FOR CONSTRUCTION

TITLE CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE			
COVER SHEET AND INDEX			
GENERAL			
EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	07-14-2023	G1.0	2

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 _s	0.996
S _i	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

PAINT ON STRUCTURAL STEEL

- Finish Coat: 3 mil minimum thickness multi-purpose epoxy coating, Americoat 235 or approved equal.
- Surface color white.
- Touch up after fabrication and installation using same procedure and paint profile.

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.

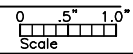
Special inspectors shall observe the work assigned for conformance with approved design drawings and specifications. Inspection reports shall be furnished to the Owner and the Engineer of Record. All discrepancies shall be brought to the immediate attention of the Contractor for correction, and to the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



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No.	DATE	DESCRIPTION	DWN.	CHK'D	D. ENG	P. ENG	P. MGR		

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ENGINEERING APPROVALS

ISSUED FOR CONSTRUCTION

TITLE
CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE

GENERAL NOTES
STRUCTURAL

EIS PROJECT #	DATE CREATED	EIS DWG. #	REVISION
223004	07-14-2023		S1.0 1

File Name: F:\ACAD\2023\223004_CITY OF FAIRBANKS - PWD - PUMP ENCLOSURE - PWD - SHEETS\STRUCT\SI.0_GENERAL NOTES.dwg
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