

CITY AND BOROUGH OF JUNEAU CONSOLIDATED PUBLIC WORKS FACILITY SALT AND SAND STORAGE FACILITY

217 SECOND STREET, SUITE 207
JUNEAU, AK 99801
MAIN: (907) 586-6400 FAX: (907) 463-3677

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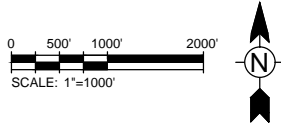
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VICINITY MAP

1" = 1000'



PROJECT LOCATION:

7100 GLACIER HIGHWAY
JUNEAU, ALASKA 99801

CLIENT INFORMATION:

CITY AND BOROUGH OF JUNEAU
ENGINEERING DEPARTMENT
JUNEAU, AK 99801

Tt PROJECT No.:

135-12554-15004

CLIENT PROJECT No.:

E16-013

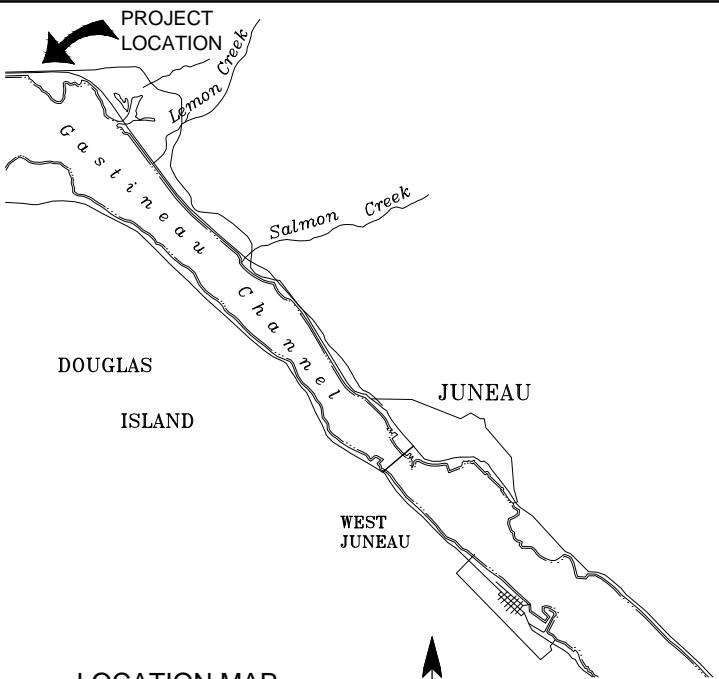
PROJECT DESCRIPTION / NOTES:

THE PROJECT CONSISTS OF SITE PREPARATION AND THE INSTALLATION OF A FABRIC STRUCTURE USED TO STORE SALT AND SAND AT THE CONSOLIDATED PUBLIC WORKS FACILITY IN JUNEAU, AK. THE STRUCTURE IS APPROXIMATELY 120 FEET BY 150 FEET IN PLAN AND SUPPORTED BY CONCRETE FOUNDATIONS. THE INTERIOR OF THE STRUCTURE IS PAVED WITH ASPHALT.

ISSUED:

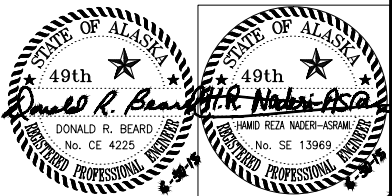
06-12-15: 60% SUBMITTAL
06-26-15: 100% SUBMITTAL
07-02-15: BID SET

LOCATION MAP:



LOCATION MAP

NOT TO SCALE



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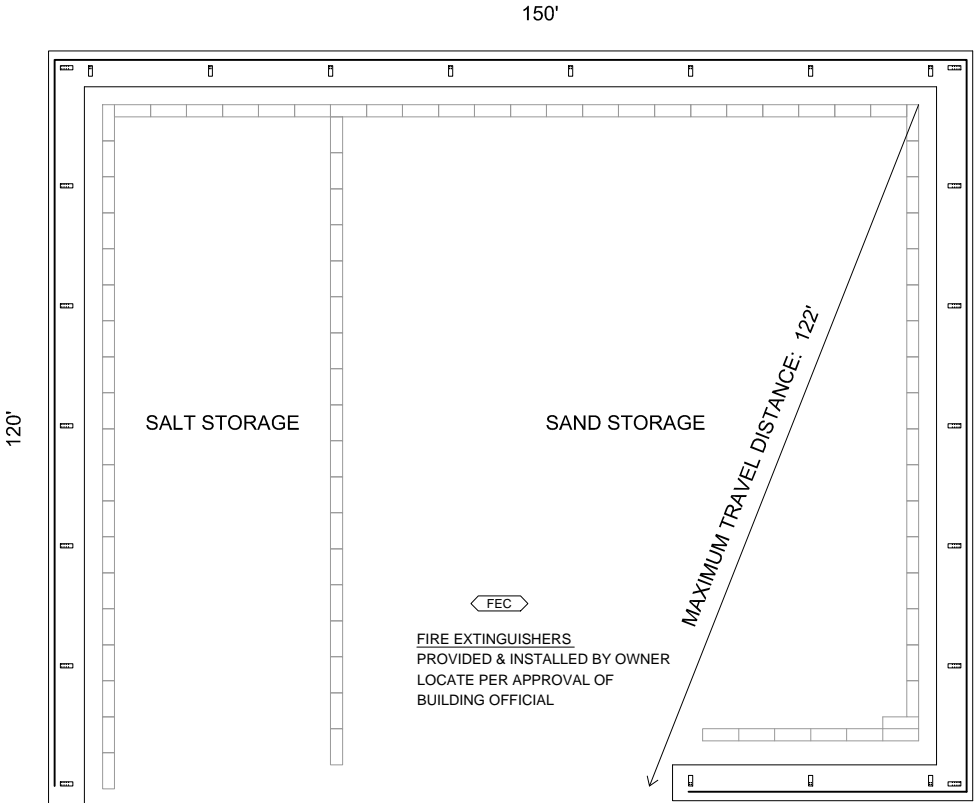
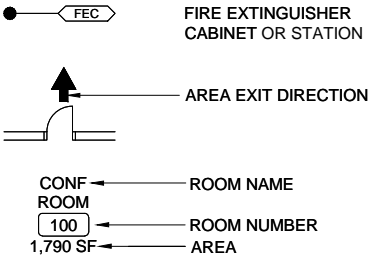
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CODE PLAN LEGEND



1 CODE REVIEW FLOOR PLAN
SCALE: 1/16"=1'-0"

CODE ANALYSIS

REVIEW DATA:

CODE AGENCY: CITY/BOROUGH OF JUNEAU, ALASKA
ENGINEERING DEPARTMENT

PROJECT NAME/ADDRESS:

SALT AND SAND STORAGE FACILITY
7100 GLACIER HIGHWAY
JUNEAU, AK 99801

PROJECT TYPE:

NEW CONSTRUCTION; 1 STORY OPEN MATERIAL HANDLING BUILDING
PRE-ENGINEERED METAL BUILDING WITH FABRIC EXTERIOR ON FOUNDATION
NON-SPRINKLERED

APPLICABLE CODES:

2009 INTERNATIONAL BUILDING CODE, WITH CITY/BOROUGH OF JUNEAU AMENDMENTS
2009 INTERNATIONAL MECHANICAL CODE, WITH CITY/BOROUGH OF JUNEAU AMENDMENTS
2009 UNIFORM PLUMBING CODE, WITH CITY/BOROUGH OF JUNEAU AMENDMENTS
2011 NATIONAL ELECTRIC CODE, WITH CITY/BOROUGH OF JUNEAU AMENDMENTS
JUNEAU MUNICIPAL CODE - TITLE 49 - LAND USE CODE

USE AND OCCUPANCY CLASSIFICATION (CHAPTER 3):

OCCUPANCY GROUP: S-2 - LOW HAZARD STORAGE

SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY (CHAPTER 4):

SMOKE CONTROL: NO SPECIAL REQUIREMENTS
ENCLOSURE: NO SPECIAL REQUIREMENTS

GENERAL BUILDING HEIGHTS AND AREAS (TABLE 503):

CONSTRUCTION TYPE: TYPE II-B
ALLOWABLE BUILDING AREA BY FLOOR: 26,000 SF
ALLOWABLE NUMBER OF STORIES: 3
PROPOSED BUILDING AREA - 1ST FLOOR: 18,000 SF
PROPOSED BUILDING HEIGHT: 45 FT
PROPOSED NUMBER OF STORIES: 1 STORY

TYPES OF CONSTRUCTION (CHAPTER 6):

CONSTRUCTION TYPE: II-B

FIRE-RESISTANCE RATING (HOURS) FOR BUILDING ELEMENTS (TABLE 601):

PRIMARY STRUCTURAL FRAME: 0
BEARING WALLS, EXTERIOR: 0
BEARING WALLS, INTERIOR: 0
NONBEARING WALLS AND PARTITIONS, EXTERIOR: 0
NONBEARING WALLS AND PARTITIONS, INTERIOR: 0
FLOOR CONSTRUCTION: 0
ROOF CONSTRUCTION: 0

NOTE THAT FABRIC ROOF WILL BE "A" MIN.

DOOR FIRE PROTECTION RATING (CHAPTER 7 - TABLE 716.5):

NO DOORS

INTERIOR FINISHES (CHAPTER 8 - TABLE 803.9):

ALL PROPOSED FINISHES TO HAVE MINIMUM CLASS "C" RATING

FIRE PROTECTION SYSTEMS (CHAPTER 9):

FIRE SPRINKLER SYSTEM: NONE PROVIDED
SMOKE CONTROL: NO SPECIAL REQUIREMENTS
ENCLOSURE: NO SPECIAL REQUIREMENTS

FIRE ALARM: NONE PROVIDED

FIRE CODE, TABLE 906.3

ALLOWED MAXIMUM DISTANCE TO FIRE EXTINGUISHER: 75 FEET
REFER TO CODE REVIEW FLOOR PLAN FOR FIRE EXTINGUISHER LOCATIONS
COMPLY w/ NFPA 10 - STANDARD FOR PORTABLE FIRE EXTINGUISHERS
- (3) 4A EXTINGUISHERS PROPOSED (RATED UP TO 6000SF EACH) - PROVIDED
AND INSTALLED BY OWNER.

OCCUPANT LOAD SCHEDULE (CHAPTER 10 - TABLE 1004.1.1):

FIRST FLOOR			
ROOM NAME	AREA	OCC/SF	# OCC
SALT STORAGE	4,500 SF	500SF	9 MAX
SAND STORAGE	13,500 SF	500SF	27 MAX*

*MAX OCCUPANCY w/ SINGLE MEANS OF EGRESS PER TABLE 1015.1 = 29

MEANS OF EGRESS (CHAPTER 10):

MAX EXIT TRAVEL DISTANCE TABLE 1016.1: 300 FT > 122 FT OK

TETRA TECH



BY									
DESCRIPTION									
DATE									
MARK									

CITY AND BOROUGH OF JUNEAU
JUNEAU, AK

SALT AND SAND STORAGE FACILITY E16-013

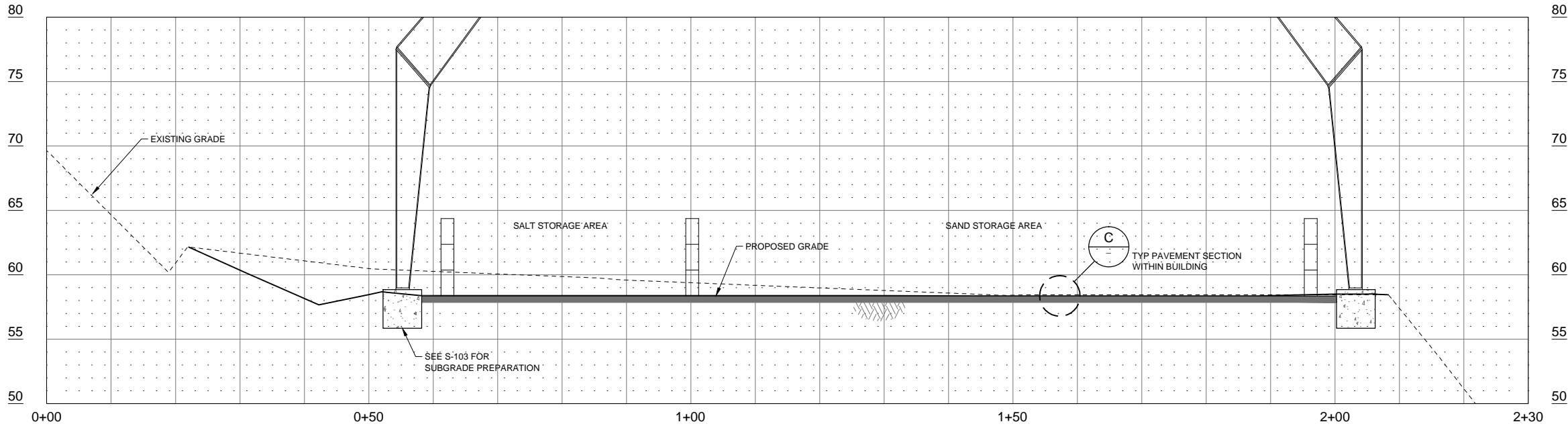
CODE SHEET

Project No.:	135-12554-15004
Designed By:	TR
Drawn By:	JDM
Checked By:	TR

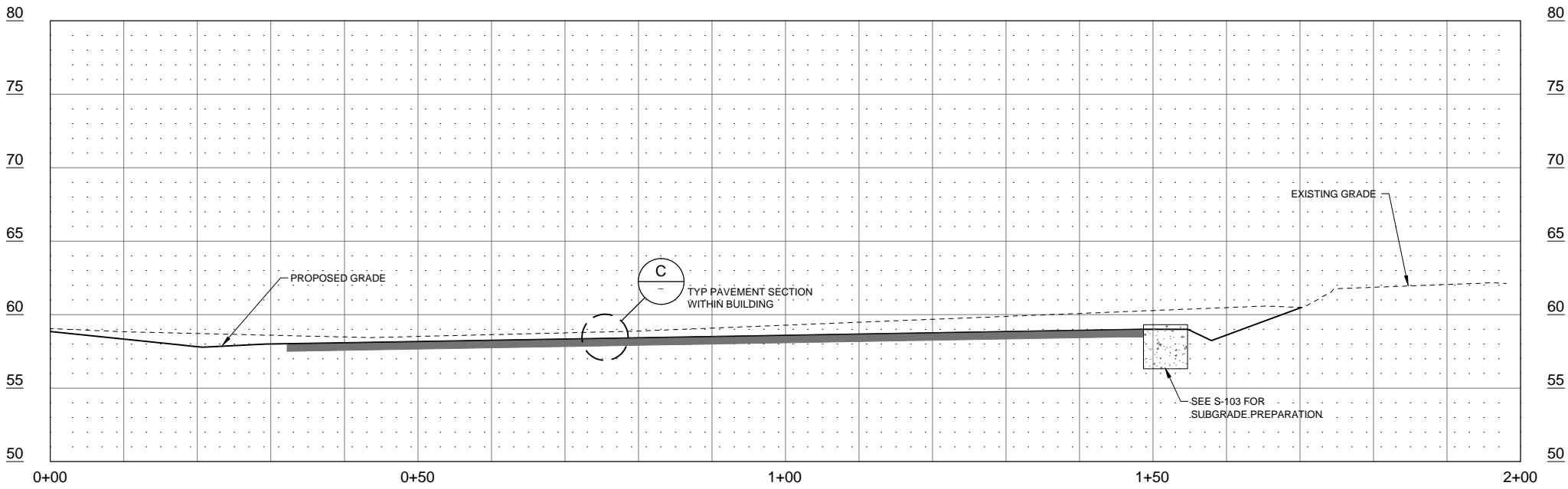
G-003

Bar Measures 1 inch

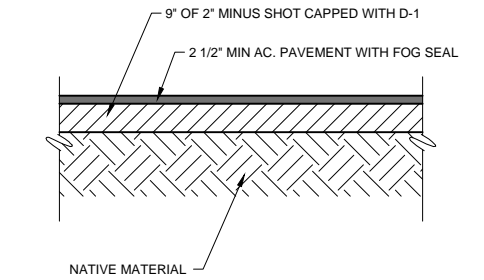
6/30/2015 3:21:58 PM - P:\12554\135-12554-1500\CAD\DWG\FILES\C-102 SECTIONS.DWG - MEADER, JACOB



A SECTION
C-101 SCALE: HORIZ 1" = 10' VERT 1" = 5'



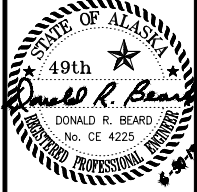
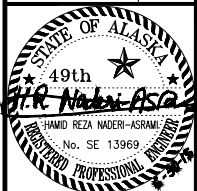
B SECTION
C-101 SCALE: HORIZ 1" = 10' VERT 1" = 5'



C TYPICAL PAVEMENT SECTION
NTS



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MARK	DATE	DESCRIPTION	BY

CITY AND BOROUGH OF JUNEAU
JUNEAU, AK
SALT AND SAND STORAGE FACILITY E16-013

Project No.: 135-12554-15004
Designed By: DRB
Drawn By: BKT
Checked By: DRB

C-102

Copyright: Tetra Tech
Bar Measures 1 inch

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G. STRUCTURAL - GENERAL

- G1 SCOPE**
THE NOTES AND DETAILS ON THIS SHEET ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.
- G2 APPLICABLE SPECIFICATIONS AND CODES**
CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE AND CBJ TITLE 19 (LOCAL AMENDMENTS). THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.
- G3 ALTERNATIVE DESIGNS**
THE STRUCTURAL SYSTEMS AND DETAILS ON THESE PLANS ARE THE PRIORITY DESIGN; HOWEVER, ALTERNATIVE SYSTEMS AND DETAILS MAY BE CONSIDERED IF THE CONTRACTOR SUBMITS PLANS WITH SUBSTANTIATING CALCULATIONS AND TEST DATA WHICH BEAR AN ALASKA STATE LICENSED ENGINEER'S SEAL AND SIGNATURE FOR APPROVAL OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHOSE EFFORTS FOR REVIEW OF SUCH ALTERNATIVE DESIGNS SHALL BE PAID FOR BY THE CONTRACTOR.
- G4 DIMENSIONS**
STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO FIELD CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. DEVIATIONS FROM THAT WHICH IS SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALES SHOWN ON THE DRAWINGS.
- G5 CONSTRUCTION LOADS**
STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURE. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND SUPPORTS AS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND MAINTENANCE OF TEMPORARY SUPPORTS. THE DESIGN OF THE TEMPORARY SUPPORTS SHALL BE PERFORMED BY A LICENSED ENGINEER HIRED BY THE CONTRACTOR.

F. STRUCTURAL DESIGN

- F1 DESIGN CODE**
DESIGN IS IN ACCORDANCE WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE AND CBJ TITLE 19. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.
- F2 DESIGN SOIL PRESSURE FOR FOUNDATIONS**
DESIGN BASED ON 2009 INTERNATIONAL BUILDING CODE TABLE 1806.2 AND GEOTECHNICAL REPORT BY R&M ENGINEERING DATED JUNE 18, 2008.
(1) ALLOWABLE BEARING PRESSURE = 2000 PSF
(2) LATERAL BEARING = 200 PCF
(3) COEFFICIENT OF FRICTION = 0.35

L. DESIGN LOADS

- A. LIVE**
(1) SLAB ON GRADE = 250 PSF
- B. SNOW**
(1) GROUND SNOW LOAD $P_g = 70$ PSF
(2) MINIMUM FLAT ROOF SNOW LOAD $P_f = 50$ PSF
(3) OCCUPANCY CATEGORY I
(4) IMPORTANCE FACTOR = 0.8
(5) EXPOSURE FACTOR $C_e = 1.0$
(6) THERMAL FACTOR $C_t = 1.2$
- C. WIND**
(1) BASIC WIND SPEED = 105 MPH
(2) OCCUPANCY CATEGORY I
(3) IMPORTANCE FACTOR = 0.87
(4) WIND EXPOSURE B
(5) INTERNAL PRESSURE COEFFICIENTS
PARTIALLY ENCLOSED BUILDINGS - $G C_{pi} = +/-0.55$
- D. SEISMIC**
(1) OCCUPANCY CATEGORY I
(2) IMPORTANCE FACTOR = 1.0
(3) SITE CLASS = D
(4) $S_S = 0.611$ $S_1 = 0.288$
(5) $S_{D5} = 0.534$ $S_{D1} = 0.351$
(6) SEISMIC DESIGN CATEGORY = D
(7) ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE

C. CONCRETE

- C1 APPLICABLE CODE**
CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO THE 2008 EDITION OF THE ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318.
- C2 REINFORCING STEEL DETAILS**
DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH DETAILS AND DETAILING OF CONCRETE REINFORCEMENT ACI 315.
- C3 DESIGN STRENGTHS**
A. CAST-IN-PLACE CONCRETE
(1) GENERAL USE - $f_c = 4500$ psi @ 28 DAYS
B. MAX WATER TO CEMENTITIOUS MATERIAL RATIO = 0.45
C. FOR NOMINAL MAXIMUM AGGREGATE SIZE OF 3/4" OR 1", AIR CONTENT = 6%
FOR NOMINAL MAXIMUM AGGREGATE SIZE OF 1 1/2", AIR CONTENT = 5.5%
D. REINFORCING STEEL SHALL BE ASTM A 615, GRADE 60.
E. GROUT SHALL BE ASTM C 1107 WITH $f_c = 7000$ psi @ 28 DAYS
F. CONCRETE SHALL BE PROPORTIONED TO MEET THE AVERAGE COMPRESSIVE STRENGTH REQUIREMENTS IN ACI 318, CHAPTER 5.
- C4 CONCRETE COVER**
CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:
A. FOOTINGS AND FOUNDATION MATS CAST ON GROUND - 3"
B. FORMED OR FINISHED SURFACES - 2"
- C5 DOWELS**
DOWELS SHALL BE AT LEAST THE SAME SIZE AND SPACING AS BARS WITH WHICH THEY ARE LAPPED. THE LAP EMBEDMENT SHALL BE AS RECOMMENDED BY ACI 318 OR AS NOTED.
- C6 BAR SPLICES**
SPLICES OF REINFORCING STEEL BAR SHALL BE IN ACCORDANCE WITH SCHEDULE SHOWN ON CONCRETE DETAILS AND ACI 318 AND SHALL BE CLASS B UNLESS OTHERWISE NOTED. THE LENGTH OF LAP SPlice OF BARS OF DIFFERENT DIAMETER SHALL BE BASED ON THE SMALLER DIAMETER. BAR SPLICES MAY ALSO BE MADE BY WELDING IN ACCORDANCE WITH AWS SPEC D 1.4 IF APPROVED BY THE ENGINEER.
- C7 RESTRICTED BAR ANCHORAGE**
IN CASES WHERE REINFORCING BARS CANNOT BE EXTENDED AS FAR AS REQUIRED DUE TO THE LIMITED EXTENT OF THE ADJACENT CONCRETE STRUCTURE, THE BARS SHALL EXTEND AS FAR AS POSSIBLE AND END IN STANDARD HOOKS.
- C8 STANDARD HOOKS**
BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318.
- C9 CHAMFERS**
EXCEPT AS OTHERWISE REQUIRED, EXPOSED CONCRETE CORNERS AND EDGES SHALL HAVE 3/4" CHAMFERS. RE-ENTRANT CORNERS SHALL NOT HAVE FILLETS.
- C10 CAST-IN-PLACE CONCRETE ANCHORS**
ANCHORS SHALL BE HEADED BOLTS OF ASTM F1554 GRADE 55 MATERIAL WITH ASTM A563 HEAVY HEXAGONAL NUTS AND ASTM A36 PLATE WASHERS WITH MINIMUM SIZE CONFORMING TO TABLE 14-2 OF THE CURRENT AISC STEEL CONSTRUCTION MANUAL, UNLESS NOTED OTHERWISE. ALTERNATELY, ANCHORS SHALL BE THREADED AND NUTTED ROD CONFORMING TO ASTM F1554 GRADE 55 (WITH SUPPLEMENT S1) WITH THE EMBEDDED NUT THREADED ON AND WELDED TO THE ROD. ALL MATERIALS SHALL BE HOT DIP GALVANIZED.
- C11 POST-INSTALLED ADHESIVE ANCHORS**
ADHESIVE ANCHORS AND THEIR PROPERTIES SUCH AS DIAMETER, SPACING, EDGE DISTANCE, EMBEDMENT AND MATERIAL/FINSH SHALL CONFORM TO DETAILS IN THESE DRAWINGS. AT CONTRACTOR'S OPTION, AN EQUIVALENT ALTERNATE ADHESIVE ANCHOR MAY BE SUBSTITUTED, PROVIDED THE ALTERNATE PRODUCT SUBMITTAL IS SUPPLEMENTED WITH CALCULATIONS INDICATING THAT THE PRODUCT MEETS OR EXCEEDS PROPERTIES OF THE ORIGINAL PRODUCT. THE SUPPLEMENTAL CALCULATIONS SHALL BE STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF PROJECT LOCATION. ACCEPTABLE ADHESIVE ANCHORS SHALL BE ICC APPROVED FOR SEISMIC LOADS AND USE IN CRACKED AND UNCRACKED CONCRETE. SUBMITTAL SHALL INCLUDE PRODUCT ESR REPORT.

THREADED ROD SHALL BE F1554 GRADE 55 HOT DIP GALVANIZED.
- C12 INSTALLATION OF POST-INSTALLED ANCHORS**
ALL ADHESIVE ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE TO MANUFACTURER'S DIRECTIONS.
- C13 SPECIAL WEATHER CONCRETING**
FOR SPECIAL WEATHER CONCRETING (HOT & COLD CONCRETING) ADHERE TO REPORTS OF ACI COMMITTEE 305, "HOT WEATHER CONCRETING", AND ACI 306, "COLD WEATHER CONCRETING."
- C14 CURING**
CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACI 308.1.
- C15 CONSTRUCTION JOINTS**
LOCATION OF CONSTRUCTION JOINTS SHALL HAVE THE APPROVAL OF THE ENGINEER. CONSTRUCTION JOINTS SHALL BE DETAILED AS SHOWN ON THE DRAWINGS. UNLESS A METAL KEYED FORM IS USED, ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED TO A MINIMUM 1/4" AMPLITUDE. ALL JOINT SURFACES SHALL BE THOROUGHLY CLEANED TO REMOVE GREASE, LOOSE CONCRETE, AND LAITANCE OR OTHER BOND REDUCING MATERIAL. SURFACES SHALL BE SATURATED SURFACE DRY PRIOR TO PLACING FRESH CONCRETE.
- C16 CRACK CONTROL JOINTS**
CCJ INDICATES A 1/8" WIDE CONTINUOUS SAW CUT CRACK CONTROL JOINT FILLED WITH ELASTOMERIC JOINT SEALANT. VERTICAL CONTROL JOINTS SHALL BE FORMED WITH 3/4 INCH CHAMFER STRIP AND FILLED WITH ELASTOMERIC JOINT SEALANT. THE ELASTOMERIC JOINT SEALANT SHALL CONFORM TO ASTM C920, TYPE S OR M, GRADE NS, CLASS 50.

M. ENGINEERED BUILDING

- M1 DESIGN**
THE ENGINEERED BUILDING SHALL BE DESIGNED BY THE BUILDING SUPPLIER, THIS INCLUDES THE LATERAL LOAD RESISTING SYSTEM AND ALL PERTINENT COMPONENTS AND CLADDING. SEE SECTION 133400 PRE-ENGINEERED FABRIC-COVERED METAL BUILDING OF THE SPECIFICATIONS FOR MORE INFORMATION.

ENGINEERED BUILDINGS SHALL BE DESIGNED ACCORDING TO THE LOADS AS REQUIRED BY IBC 2009 ASCE 7-05 AND ANY LOCAL AMENDMENTS. DESIGN LOADS SHALL NOT BE LESS THAN THOSE SHOWN ON THE DRAWING. DESIGN CALCULATIONS AND SHOP DRAWINGS SHALL BE STAMPED AND SIGNED BY AN ENGINEER IN THE STATE OF PROJECT LOCATION.
- M2 FABRICATION**
THE ENGINEERED BUILDING MANUFACTURERS SHALL BE REGULARLY ENGAGED IN THE DESIGN AND FABRICATION OF ENGINEERED BUILDING SYSTEMS. PRODUCT DATA AND SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND SHALL BE APPROVED PRIOR TO FABRICATION.
- M3 RESPONSIBILITY**
TETRA TECH IS NOT RESPONSIBLE FOR THE DESIGN OF ANY ASPECTS OF THESE BUILDINGS OTHER THAN THEIR FOUNDATION SYSTEMS. THE ENGINEERED BUILDING REGISTERED DESIGN PROFESSIONAL SHALL SUBMIT AN ANCHOR BOLT PLAN TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. THE ANCHOR BOLT PLAN SHALL INDICATE ANCHOR BOLT TYPE, LOCATION, DIAMETER, AND PROJECTION REQUIRED, ALONG WITH REACTION AT EACH LOCATION FOR LOAD COMBINATIONS IN THE IBC.

H. FOUNDATIONS

- H1 SUBGRADE AND STRUCTURAL FILL**
FOUNDATIONS SHALL BE SUPPORTED BY DENSELY COMPACTED NATIVE SOIL OR COMPACTED STRUCTURAL FILL PLACED DIRECTLY ONTO DENSELY COMPACTED NATIVE SOIL. IF LOOSE, SOFT, OR UNSUITABLE SOIL IS ENCOUNTERED, IT SHOULD BE REMOVED AND REPLACED WITH COMPACTED STRUCTURAL FILL. STRUCTURAL FILL SHOULD BE COMPACTED TO A DENSE, UNYIELDING CONDITION OF AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.

STRUCTURAL FILL SHALL MEET THE REQUIREMENTS FOR SELECTED BORROW OR SHOT ROCK BORROW AS SPECIFIED IN SECTION 02201 OF THE CBJ STANDARD SPECIFICATIONS.

BASE COURSE SHALL MEET THE REQUIREMENTS SPECIFIED FOR BASE COURSE MATERIAL, GRADING C-1 OR D-1, AS SPECIFIED IN SECTION 02204 OF THE CBJ STANDARD SPECIFICATIONS.

EXCAVATED NATIVE MATERIAL MAY BE USED FOR STRUCTURAL FILL OR BASE COURSE WHEN THE NATIVE MATERIAL MEETS THE APPLICABLE SPECIFICATIONS AND IS APPROVED BY THE ENGINEER.

K. SUBMITTALS

- K1 STRUCTURAL STEEL AND METAL FABRICATIONS**
SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL STEEL AND METAL FABRICATIONS.
- K2 REINFORCING STEEL**
SUBMIT SHOP DRAWINGS FOR REINFORCING STEEL FABRICATION.
- K3 CONCRETE**
SUBMIT CONCRETE MIX DESIGN AND CONCRETE CYLINDER TEST RESULTS.
- K4 ENGINEERED BUILDINGS**
SUBMIT SHOP DRAWINGS THAT ARE SIGNED AND STAMPED BY AN ENGINEER LICENSED IN THE STATE OF THE PROJECT LOCATION. SHOP DRAWINGS SHALL INCLUDE ANCHOR BOLT PLAN AND REACTIONS AT EACH LOCATION FOR THE LOAD COMBINATIONS IN THE IBC. SEE NOTES M ABOVE AND SECTION 133400 PRE-ENGINEERED FABRIC-COVERED METAL BUILDING OF THE SPECIFICATIONS FOR MORE DETAILS.

I. STRUCTURAL TESTS AND SPECIAL INSPECTIONS

- I1 STRUCTURAL TESTS AND SPECIAL INSPECTIONS**
SPECIAL INSPECTION SHALL CONFORM TO SECTION 1704 OF THE 2009 INTERNATIONAL BUILDING CODE AND ANY LOCAL AMENDMENTS. LABORATORIES FOR MATERIAL TESTING AND/OR AGENCIES FOR TESTING SERVICES SHALL BE SELECTED BY, ENGAGED BY, AND RESPONSIBLE TO THE OWNER / OWNERS REPRESENTATIVE.

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION PER IBC CHAPTER 17. THESE INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED SPECIAL INSPECTOR.
- | ITEM | DESCRIPTION |
|--|--|
| INSPECTION OF REINFORCING STEEL, INCLUDING PLACEMENT | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.4 |
| INSPECTION/OBSERVING SPECIMEN SAMPLING OF FRESH CONCRETE FOR TESTING | FREQUENCY: CONTINUOUS
REFERENCE: IBC 2009 TABLE 1704.4 |
| CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES | FREQUENCY: CONTINUOUS
REFERENCE: IBC 2009 TABLE 1704.4 |
| VERIFYING USE OF REQUIRED DESIGN MIX | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.4 |
| INSPECTION OF FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.4 |
| MECHANICAL ANCHORS INSTALLED IN CONCRETE FOR PROPER APPLICATION TECHNIQUES AS REQUIRED BY MANUFACTURER | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 SECTION 1704.15.3 |
| MATERIAL VERIFICATION OF HIGH STRENGTH BOLTS, NUTS AND WASHERS: MANUFACTURER'S CERTIFICATE OF COMPLIANCE AND IDENTIFICATION MARKINGS CONFORMING TO ASTM STANDARDS SPECIFIED IN APPROVED CONSTRUCTION DOCUMENTS | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.3 |
| INSPECTION OF HIGH-STRENGTH BOLTING BEARING-TYPE CONNECTIONS (JOINTS DESIGNATED AS SNUG TIGHT) | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.3 |
| INSPECTION OF WELDING: CJP, PJP, MULTIPASS FILLET WELDS, AND SINGLE PASS FILLET WELDS > 5/16" | FREQUENCY: CONTINUOUS
REFERENCE: IBC 2009 TABLE 1704.3 |
| INSPECTION OF WELDING: SINGLE PASS FILLET WELDS < 5/16", FLOOR AND ROOF DECK WELDS | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.3 |
| INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS: BRACING AND STIFFENING, MEMBER LOCATIONS, APPLICATION OF JOINT DETAILS AT EACH CONNECTION | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.3 |
| VERIFYING MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY AND THAT EXCAVATIONS ARE EXTENDED TO PROPER DEPTH | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.7 |
| PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS | FREQUENCY: PERIODIC
REFERENCE: IBC 2009 TABLE 1704.7 |

MARK	DATE	DESCRIPTION	BY

CITY AND BOROUGH OF JUNEAU
JUNEAU, AK
SALT AND SAND STORAGE FACILITY E16-013
STRUCTURAL GENERAL
NOTES

Project No.: 135-12554-15004
Designed By: RWM
Drawn By: RWM
Checked By: HRN

S-001



TETRA TECH

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217 SECOND STREET, SUITE 207
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1. FRAME AND COLUMN SPACING IS SUBJECT TO CHANGED BASED ON FABRIC BUILDING MANUFACTURERS REQUIREMENTS AND MOST ECONOMICAL FRAME SPACING. OVERALL BUILDING SIZE SHALL BE MAINTAINED.
2. FOOTING SIZES TO BE FINALIZED BY THE ENGINEER OF RECORD UPON RECEIPT OF FINAL APPROVED FABRIC BUILDING DRAWINGS AND CALCULATIONS. COORDINATE WITH ENGINEER PRIOR TO CONSTRUCTION.
3. FOR ANCHOR BOLTS SEE NOTE 1 ON S-103.

[illegible]

CITY AND BOROUGH OF JUNEAU
JUNEAU, AK

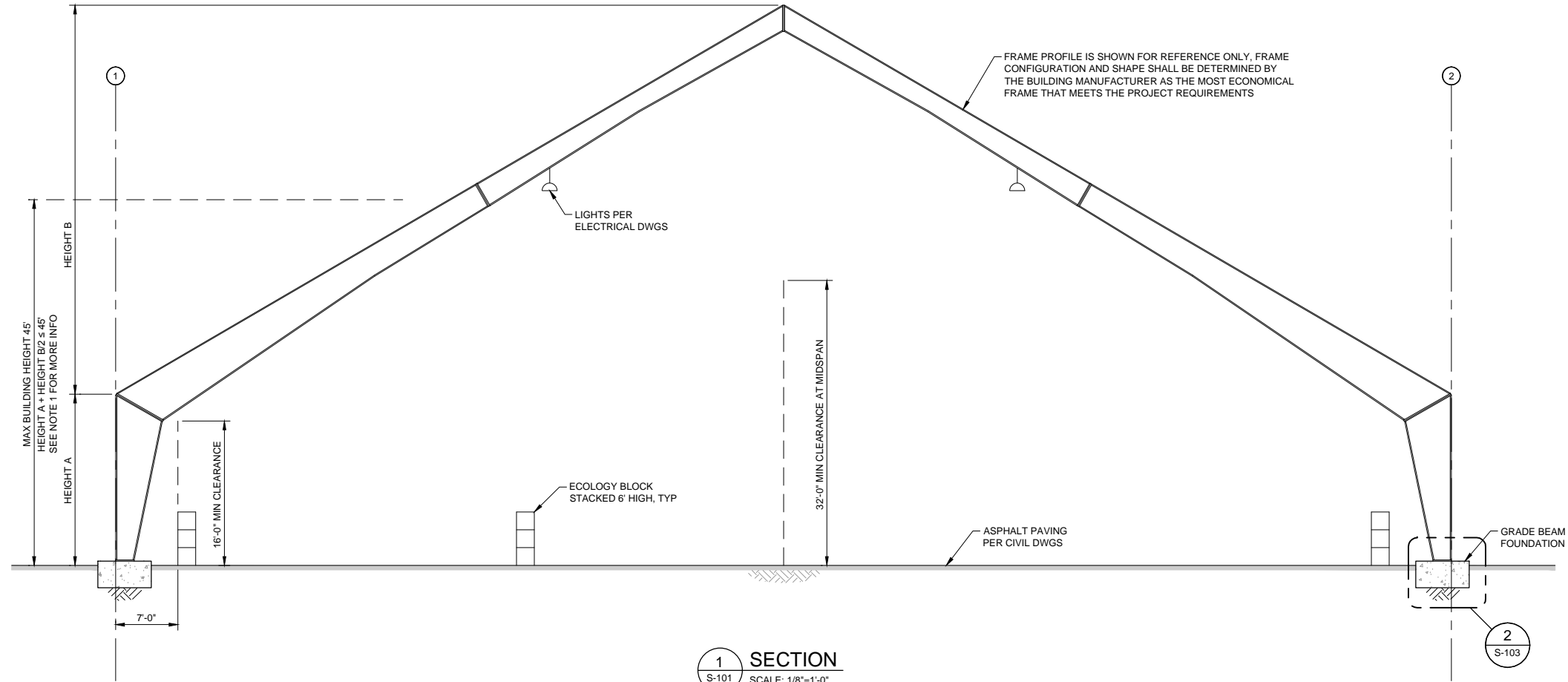
SALT AND SAND STORAGE FACILITY E16-013

FOUNDATION PLAN

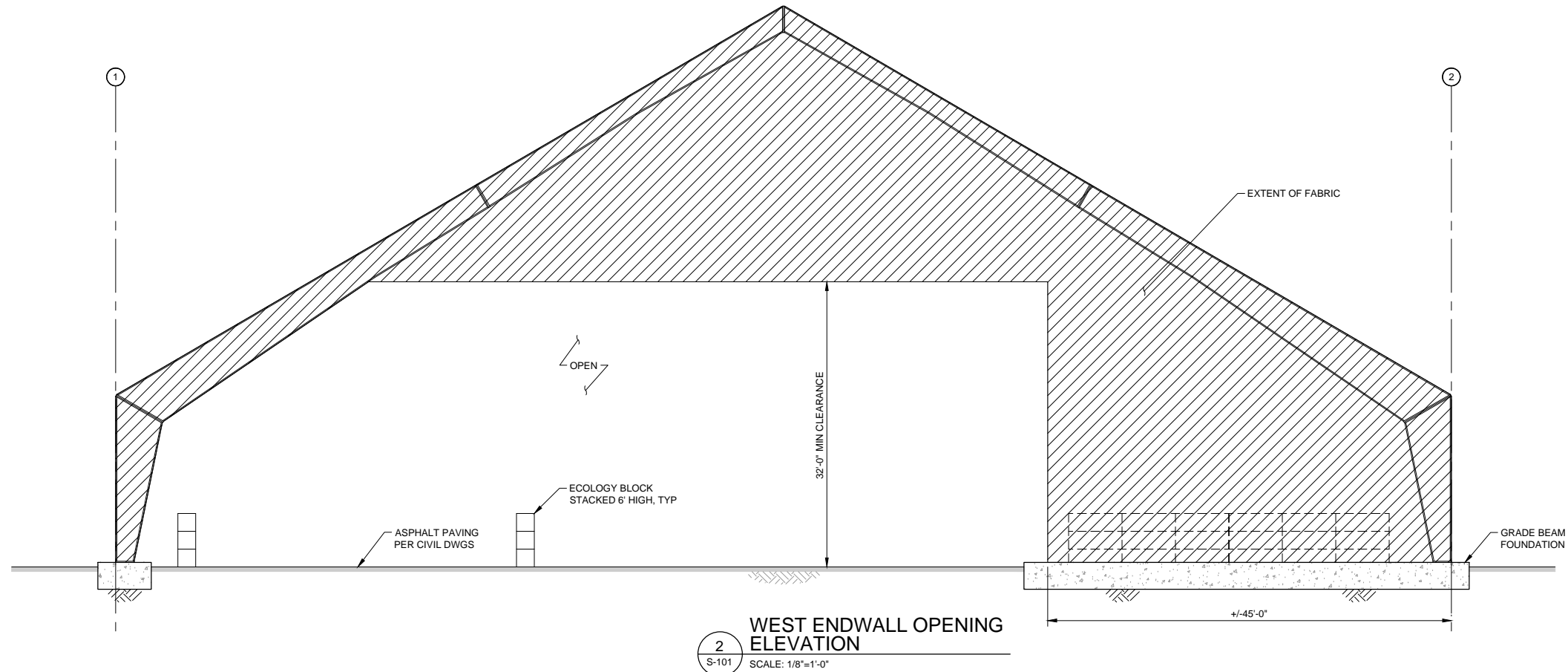
Project No.:	135-12554-15004
Designed By:	RWM
Drawn By:	RWM
Checked By:	HRN

S-101

6/30/2015 3:26:53 PM - P:\12554\135-12554-1500\CAD\SHSHEETFILES\S-102 BUILDINGSECTION.DWG - MEADER, JACOB

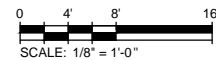


1 SECTION
S-101
SCALE: 1/8"=1'-0"



2 WEST ENDWALL OPENING
ELEVATION
S-101
SCALE: 1/8"=1'-0"

- NOTES**
1. THE BUILDING HEIGHT IS LIMITED TO 45 FEET. THE BUILDING HEIGHT IS DEFINED AS THE HEIGHT TO THE EAVE, SHOWN AS HEIGHT A, PLUS HALF OF THE HEIGHT OF THE GABLE ROOF, SHOWN AS HEIGHT B. BUILDING HEIGHT = HEIGHT A + HEIGHT B/2.
 2. SEE SPECIFICATIONS FOR FABRIC STRUCTURE DETAILS.



TETRA TECH

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STATE OF ALASKA
49th
HAMID REZA NADERI-ASRAMI
No. SE 13969
REGISTERED PROFESSIONAL ARCHITECT

MARK	DATE	DESCRIPTION	BY

CITY AND BOROUGH OF JUNEAU
JUNEAU, AK

SALT AND SAND STORAGE FACILITY E16-013

BUILDING SECTION

Project No.: 135-12554-15004

Designed By: RWM

Drawn By: RWM

Checked By: HRN

S-102

Copyright: Tetra Tech

Bar Measures 1 inch

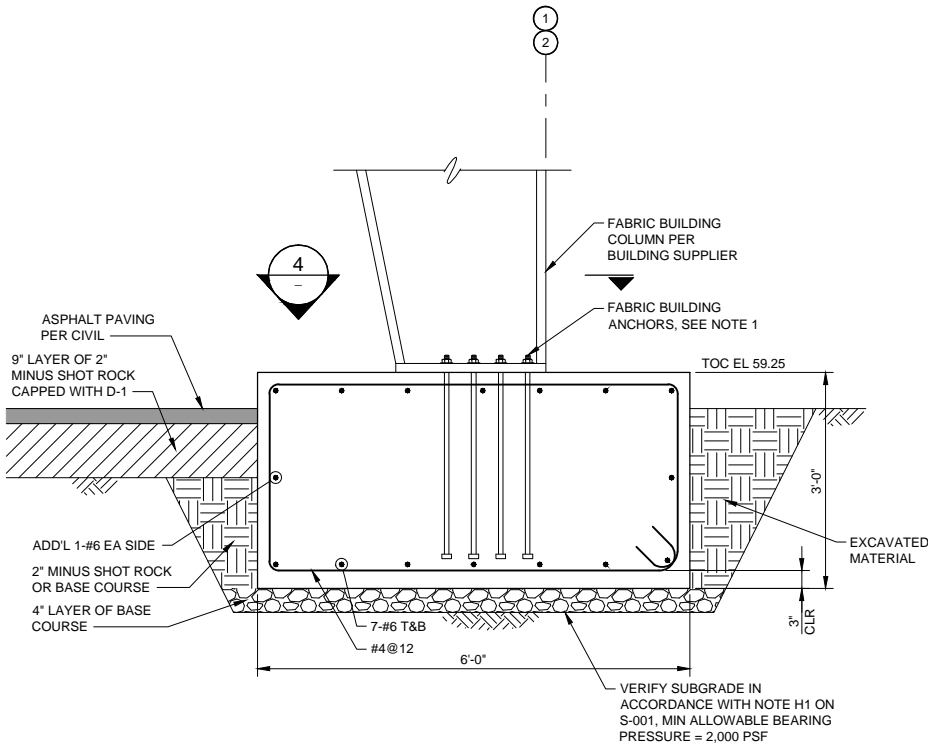
6/30/2015 3:27:32 PM - P:\12554\135-12554-1500\CAD\SHEETFILES\S-103 DETAILS.DWG - MEADER, JACOB

TENSION DEVELOPMENT AND SPLICE LENGTHS							
BAR SIZE	Ld		CLASS B TENSION LAP		STD 90° HOOK		
	TOP BARS (NOTE 2)	OTHER BARS	TOP BARS (NOTE 2)	OTHER BARS	Ldh	HOOK LENGTH	BEND DIA
#3	18	14	23	19	7	5	3
#4	24	18	31	25	9	6	3
#5	30	23	38	31	12	8	4
#6	35	27	46	37	14	9	5
#7	51	40	67	54	16	11	6
#8	59	45	76	62	18	12	6
#9	66	51	86	70	21	14	10
#10	74	57	96	79	23	16	11
#11	82	64	107	87	26	17	12

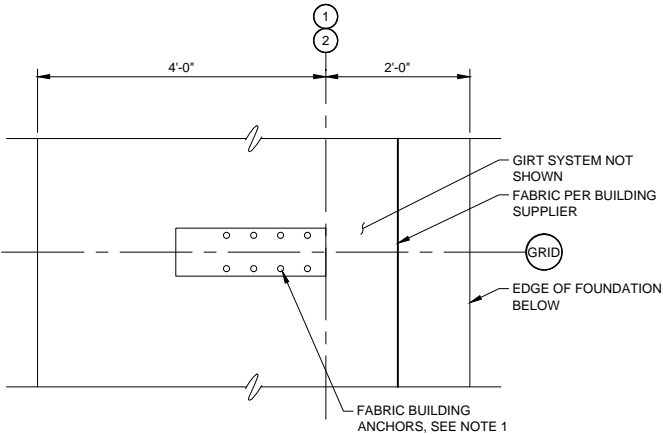
- NOTES
- FOR GRADE 60 UNCOATED BARS AND NORMAL WEIGHT CONCRETE, $f'c = 4500$ PSI.
 - "TOP BARS" ARE HORIZONTAL REINFORCING BARS WHERE 12" OF FRESH CONCRETE IS CAST BELOW THE DEVELOPMENT LENGTH OR SPLICE.

REINFORCING DEVELOPMENT AND LAP SPLICE LENGTHS

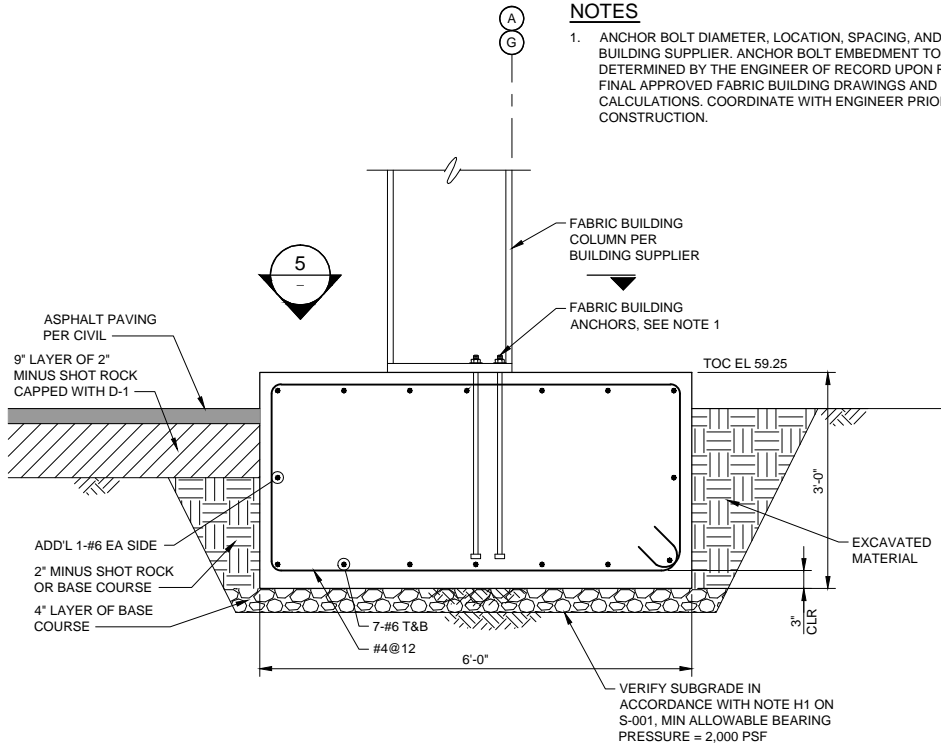
1
DETAIL
SCALE: NONE



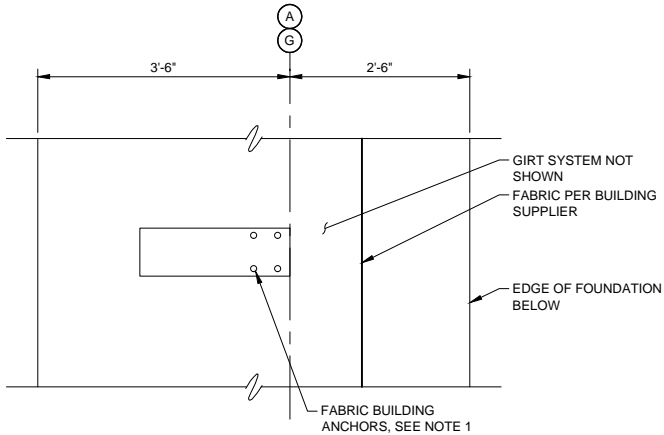
2
TYPICAL SIDEWALL FOUNDATION
S-102 SCALE: 3/4"=1'-0"



4
DETAIL
SCALE: 3/4"=1'-0"



3
TYPICAL ENDWALL FOUNDATION
S-101 SCALE: 3/4"=1'-0"



5
DETAIL
SCALE: 3/4"=1'-0"

NOTES

- ANCHOR BOLT DIAMETER, LOCATION, SPACING, AND GRADE PER BUILDING SUPPLIER. ANCHOR BOLT EMBEDMENT TO BE DETERMINED BY THE ENGINEER OF RECORD UPON RECEIPT OF FINAL APPROVED FABRIC BUILDING DRAWINGS AND CALCULATIONS. COORDINATE WITH ENGINEER PRIOR TO CONSTRUCTION.

0 8' 1'-4" 2'-8"
SCALE: 3/4" = 1'-0"

TETRA TECH



MARK	DATE	DESCRIPTION	BY

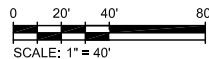
CITY AND BOROUGH OF JUNEAU
JUNEAU, AK
SALT AND SAND STORAGE FACILITY E16-013
DETAILS

Project No.: 135-12554-15004
Designed By: RWM
Drawn By: RWM
Checked By: HRN

S-103

Bar Measures 1 inch

1. THIS IS A HIGHLY CORROSIVE ATMOSPHERE. USE STAINLESS STEEL SUPPORTS AND HARDWARE. ACHIEVE A SAFETY FACTOR OF 5 MIN. USE SCHEDULE 80 PVC CONDUIT AND NONMETALLIC BOXES FOR USE WITH SCHEDULE 80 PVC CONDUIT. USE COPPER CONDUCTORS WITH XHHW INSULATION. USE GEL FILLED WIRE NUTS OR OTHER SEALED MEANS OF SPLICING THAT WILL NOT ALLOW THE SALT AIR TO CORRODE THE BARE COPPER WIRES. USE NONMETALLIC COVERS FOR SWITCHES AND RECEPTACLES THAT ALLOW THE COVER TO REMAIN CLOSED WHEN OPERATING SWITCH OR USING RECEPTACLE.
2. ALL ENCLOSURES SHALL BE NEMA 4X WATER TIGHT, DUST TIGHT STAINLESS STEEL. USE 316 STAINLESS STEEL. MOUNT THE PANELBOARD IN A NEMA 4X WATER TIGHT, DUST TIGHT 316 STAINLESS STEEL HOFFMAN ENCLOSURE AND ROUTE CONDUIT THROUGH HOFFMAN ENCLOSURE INTO THE PANELBOARD. SEAL OPENINGS IN HOFFMAN ENCLOSURE AROUND CONDUIT WITH DUST TIGHT, WATER TIGHT SEALANT 3M 5200 OR EQUIVALENT.
3. THE BUILDING STRUCTURE IS UNKNOWN. THE SIZE AND LOCATION OF THE TRUSSES ARE UNKNOWN. MOUNT THE LUMINAIRES IN THE APPROXIMATE LOCATIONS SHOWN. EITHER MOUNT THE LUMINAIRES FROM THE TRUSSES, PERLINS, OR FROM SUPPORT CHANNEL SPANNING TRUSSES OR PERLINS. USE STAINLESS STEEL MATERIALS AND HARDWARE TO MOUNT LUMINAIRES. KEEP THE LUMINAIRES ABOVE THE 40' MINIMUM CLEARANCE AREA IN THE CENTER OF THE BUILDING. SEE STRUCTURAL DRAWINGS. MOUNT THE LUMINAIRES LEVEL. FEED THE LUMINAIRES WITH TYPE SO CABLE OR NONMETALLIC FLEXIBLE CONDUIT AND CONDUCTORS FROM A BOX ON THE STRUCTURE. A COMPLETELY DIFFERENT SPACING AND ORIENTATION OF THE LUMINAIRES IS ACCEPTABLE AS LONG AS THE SAME LIGHT LEVEL IS ACHIEVED AS IN THE DESIGN. PROVIDE LIGHTING CALCULATIONS FOR A DIFFERENT SPACING AND ORIENTATION. THE DESIGN LIGHT LEVEL IS 10 FOOT CANDLES WITH 6.0 (AVE/MIN) MAXIMUM UNIFORMITY AT THE GROUND MAINTAINED WITH 50% REFLECTANCES OFF THE WALLS AND CEILING AND 10% OFF THE GROUND. NO MORE THAN 0.8 LLF MAY BE USED.
4. PERFORM ALL WORK PER THE NATIONAL ELECTRICAL CODE AND APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
5. DO NOT ASSUME ANY EQUIPMENT OR CONDUIT MAY BE DIRECTLY SECURED TO STRUCTURE WITHOUT FIRST BUILDING A BRACKET TO THE STRUCTURE.



W O R R I S
ENGINEERING GROUP
LLC

12480 Mendenthall Loop Rd, Auklee Bay, AK 99621
Phone: 907-789-3350
Fax: 907-789-3360

MARK	DATE	DESCRIPTION	BY
	7/15	07/02/15 BID SET	

CITY AND BOROUGH OF JUNEAU
JUNEAU, AK
SALT AND SAND STORAGE FACILITY E16-013
SITE PLAN ELECTRICAL

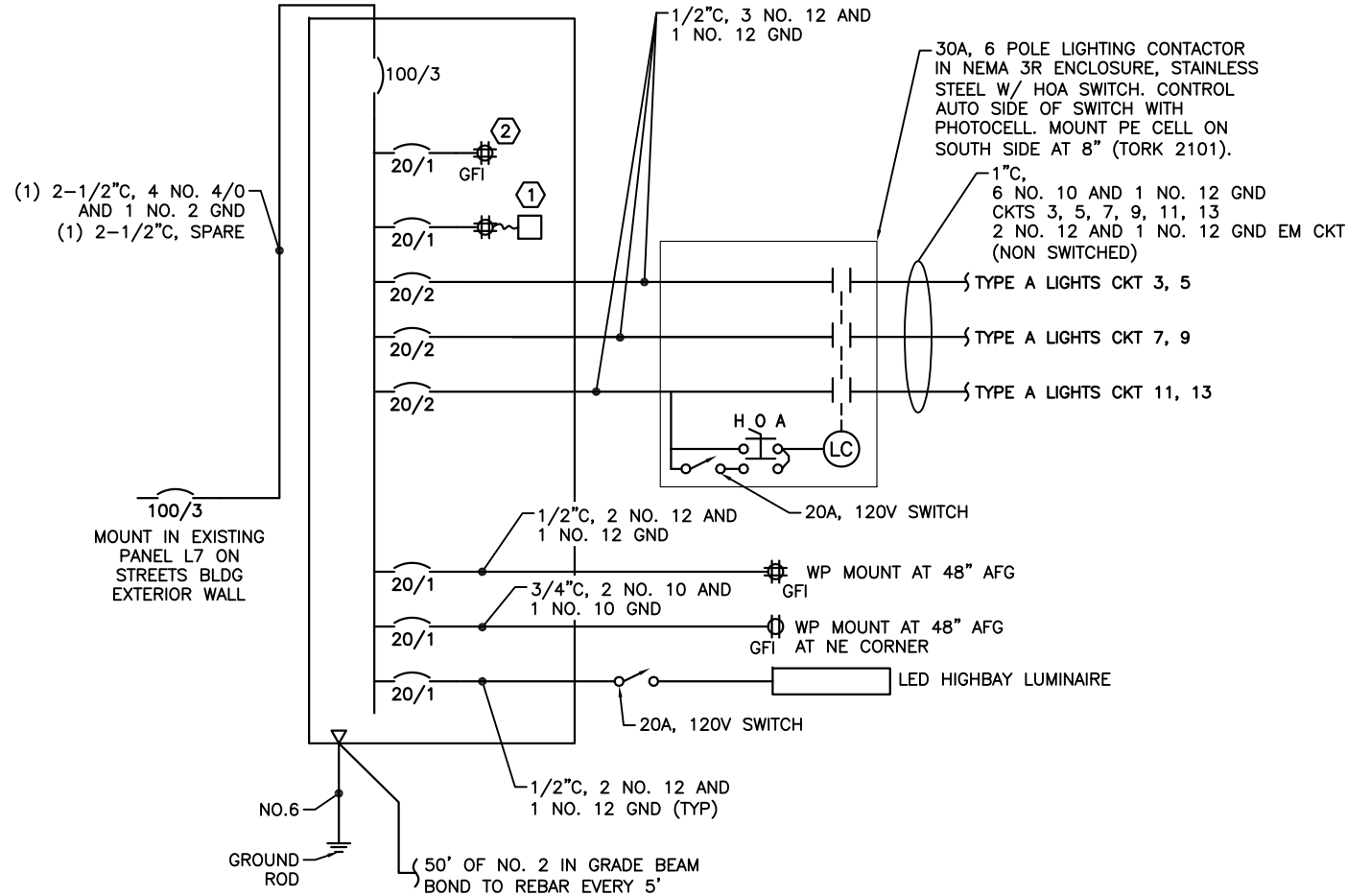
Project No.:	135-12554-15004
Designed By:	MGM
Drawn By:	AQM
Checked By:	MGM

E-001

Bar Measures 1 inch

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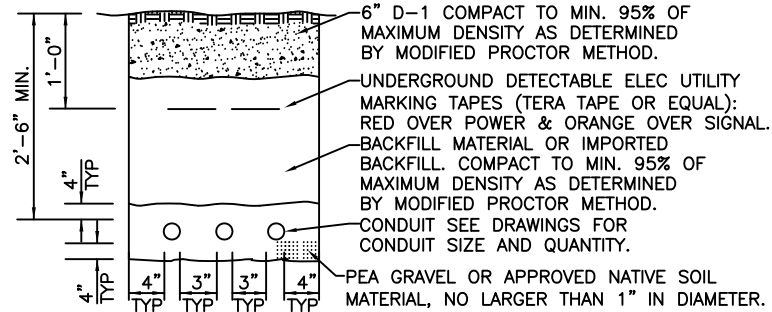
PANEL S
SQUARE D NQO PANEL
120/208V, 3 ϕ , 4W, 100A 42 CKT
IN NEMA 3R 304 STAINLESS
STEEL ENCLOSURE
MOUNTED INSIDE A SEPARATE
NEMA 4X 316L STAINLESS STEEL
ENCLOSURE WITH BACK PANEL
WITH HINGED DOOR. HOFFMAN OR
EQUAL.



① SINGLE LINE DIAGRAM
NO SCALE

NOTE:

- ① HOFFMAN 400W FAN ENCLOSURE HEATER
W/ BUILT IN THERMOSTAT. MOUNT INSIDE
NEMA 4X OUTER ENCLOSURE. SIZE
ENCLOSURE ACCORDINGLY.
- ② MOUNT A GENERAL USE RECEPTACLE INSIDE
NEMA 4X OUTER ENCLOSURE.
3. FOR PANEL S PROVIDE
(4) SPARE 50/2 C/BS
(4) SPARE 30/2 C/BS
(4) SPARE 20/2 C/BS
(10) SPARE 30/1 C/BS
(9) SPARE 20/1 C/BS



NOTES:

1. ALL DIMENSIONS ARE MINIMUM.
2. THE LOCATION OF ALL EXISTING PIPING, CONDUIT, ETC MAY NOT BE WHERE SHOWN AND MAY
NOT BE SHOWN. ALL LOCATIONS THAT ARE SHOWN ARE APPROXIMATE AND SHOULD BE FIELD
VERIFIED. OBTAIN UTILITY LOCATES PRIOR TO DIGGING. DIG WITH CAUTION. AVOID WATER,
SEWER, DRAINAGE PIPES AND OTHER CONFLICTS.
3. MAINTAIN 12 INCHES MINIMUM SEPARATION (ALL DIRECTIONS) BETWEEN POWER AND OTHER
EXISTING CONDUITS, PIPES, ETC.
4. CUT & REPLACE EXISTING ASPHALT, CONCRETE, CONCRETE CURB, GUTTER, SIDEWALK, ETC AS
NECESSARY. TRENCHES SHALL BE 18" WIDE MIN. COMPACT BACKFILL TO 95%. TOP 6" OF
MATERIAL SHALL BE D-1.
5. POWER UTILITY CONDUITS SHALL BE BURIED AT A MINIMUM OF 3'-6". BURY CONDUITS
DEEPER WHERE REQUIRED TO AVOID OTHER PIPES AND STRUCTURES.

② TRENCH DETAIL
NO SCALE



JULY 2, 2015



MARK	DATE	DESCRIPTION	BY
	7/15	07/02/15 BID SET	

CITY AND BOROUGH OF JUNEAU
JUNEAU, AK
SALT AND SAND STORAGE FACILITY E16-013
SINGLE LINE
AND TRENCH DETAIL

Project No.: 135-12554-15004
Designed By: MGM
Drawn By: AQM
Checked By: MGM

E-003

Bar Measures 1 inch

6/30/2015 3:00:03 PM - Y:\127 TETRA TECH KOM07 CBU SALT AND SAND STORAGE\1. WORKING DRAWINGS\E-004.DWG - LISA SHERRELL

F
E
D
C
B
A

16010 GENERAL

- A. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE. THE PLANS SHOW THE GENERAL LOCATIONS OF ELECTRICAL DEVICES, UNLESS DIMENSIONED THEREON. MAKE MINOR RELOCATIONS AS REQUIRED TO PROVIDE A SYMMETRICAL APPEARANCE, OR TO AVOID CONFLICT WITH OTHER STRUCTURAL, ARCHITECTURAL, OR MECHANICAL FEATURES.
- B. COMPLY WITH THE LATEST EDITIONS OF THE NEC AND NFPA CODES AND STANDARDS, AS WELL AS THE APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
- C. MOUNT DEVICES AT HEIGHTS ABOVE THE FINISHED FLOOR AS FOLLOWS, UNLESS OTHERWISE NOTED. MEASURE HEIGHTS TO THE CENTERLINE OF THE BOXES.
1. SWITCHES

48 INCHES
2. INTERIOR RECEPTACLES

48 INCHES
- D. UNLESS OTHERWISE NOTED, PROVIDE NEW, HIGH-QUALITY EQUIPMENT AND MATERIALS WHICH ARE STANDARD AND CURRENT WITHIN THE INDUSTRY, AND LISTED BY UNDERWRITERS' LABORATORY.
- E. ALL PRODUCTS SHALL BE DELIVERED AND STORED IN ORIGINAL CONTAINERS. PROTECT ALL ITEMS FROM DIRT, WATER, CHEMICAL, AND/OR MECHANICAL DAMAGE.
- F. PROVIDE A ONE YEAR PARTS AND LABOR WARRANTY FOR ALL WORK PERFORMED.
- G. CONTRACTOR SHALL PROVIDE (5) SETS OF SUBMITTALS ON ALL ELECTRICAL ITEMS TO THE ENGINEER. THE SUBMITTALS SHALL CONTAIN CATALOG CUT SHEETS, WIRING DIAGRAMS, AND SHOP DRAWINGS AS APPLICABLE. THE CONTRACTOR SHALL ALLOW TWO WEEKS FOR THE ENGINEER TO REVIEW THE SUBMITTALS. THE CONTRACTOR SHALL REVISE AND RESUBMIT SUBMITTALS AS REQUESTED BY THE ENGINEER. MATERIALS SHALL NOT BE ORDERED PRIOR TO SUBMITTAL APPROVAL BY THE ENGINEER.

16020 SCOPE OF WORK

- A. ALL CIRCUITING SHALL UTILIZE CONDUCTORS IN CONDUIT. MC CABLE MAY NOT BE USED. ALL WIRING SHALL BE EXPOSED AND DEVICES SURFACE MOUNTED UNLESS NOTED OTHERWISE.
- B. PROVIDE NEW ELECTRICAL POWER AND LIGHTING FOR THE SALT AND SAND STORAGE FACILITY.
- C. PROVIDE NEW POWER, LIGHTING, AND SIGNAL SYSTEMS & WIRING AS SHOWN.
- D. ALL ENCLOSURES SHALL BE 316 STAINLESS STEEL.
- E. ALL SUPPORTING HARDWARE SHALL BE 316 STAINLESS STEEL.

16110 RACEWAYS

- A. ALL CONDUIT SHALL BE SCHEDULE 80 PVC.
- B. EXTERIOR CONDUIT: PROVIDE ONLY SCHEDULE 80 PVC CONDUIT ON BUILDING EXTERIOR AND UNDERGROUND UNLESS OTHERWISE NOTED.
- C. INSTALL ALL CONDUIT PARALLEL OR PERPENDICULAR TO TENT STRUCTURE. INSTALL MECHANICALLY CONTINUOUS FROM TERMINATION TO TERMINATION. PROVIDE EQUIPMENT GROUNDING CONDUCTOR WITH ALL CONDUIT.

16120 WIRE AND CABLE

- A. UTILIZE 600 VOLT RATED WIRE INSULATION.
- B. UTILIZE MINIMUM WIRE SIZES AS FOLLOWS, UNLESS OTHERWISE NOTED:
1. NO. 12 AWG FOR BRANCH CIRCUIT WIRING.

2. NO. 12 AWG FOR CONTROL CIRCUIT WIRING.

3. NO. 12 AWG FOR LIGHTING FIXTURE WIRING.
- C. SIZE ALL CONDUCTORS ACCORDING TO AMERICAN WIRE GAUGE (AWG).
- D. PROVIDE CONDUCTORS WITH XHHW INSULATION, UNLESS OTHERWISE NOTED.
- E. PROVIDE SOLDERLESS TYPE CONNECTORS FOR CONDUCTORS. UTILIZE PREINSULATED 'TWIST-ON' GELFILLED TYPE FOR CONDUCTORS NO. 10 AWG OR LESS IN SIZE, OR BOLT OR COMPRESSION SET TYPE WITH A PREFORMED COVER OR TAPE FOR INSULATION THEN HEAT SHRINK TUBING OVER THE INSULATED SPLICE.

ELECTRICAL SPECIFICATIONS

16130 OUTLET AND JUNCTION BOXES

- A. PROVIDE NONMETALLIC JUNCTION BOXES LISTED FOR USE WITH SCHEDULE 80 PVC OR USE 316 STAINLESS STEEL JUNCTION BOXES.
- B. INSTALL JUNCTION BOXES IN PERMANENTLY ACCESSIBLE LOCATIONS ONLY.

16140 SWITCHES AND RECEPTACLES

- A. PROVIDE SPECIFICATION GRADE, ENCLOSED, TUMBLER TYPE SWITCHES, APPROVED BY U.L., RATED 20 AMPERS AT 120 VOLTS.
- B. PROVIDE SPECIFICATION GRADE, NEMA 5-20R, PHENOLIC RECEPTACLES, GFI TYPE APPROVED BY U.L.
- C. DEVICES SHALL BE IVORY COLORED WITH WEATHER PROOF (NONMETALLIC OR STAINLESS) COVER PLATES.

16170 DISCONNECTS

- A. PROVIDE STAINLESS STEEL HEAVY DUTY TYPE DISCONNECTS, RATED FOR 600 VOLT SERVICE. EACH SHALL BE HORSEPOWER RATED WITH QUICK-MAKE, QUICK-BREAK SWITCHING.

16180 CIRCUIT BREAKERS

- A. PROVIDE 10,000 AMPERE SYMMETRICAL INTERRUPTING CAPACITY MINIMUM, UNLESS OTHERWISE NOTED. ALL CIRCUIT BREAKERS SHALL BE A BOLT-IN TYPE.
- B. THE SINGLE LINE DIAGRAM IN THE DRAWINGS INDICATE THE NUMBER OF POLES AND AMPERE RATINGS FOR BRANCH CIRCUITS TO ELECTRICAL DEVICES. PROVIDE THE RATINGS AS REQUIRED WITH CHANGES IN EQUIPMENT OR CIRCUIT REQUIREMENTS.
- C. CIRCUIT ALL FEEDER AND BRANCH CIRCUITS AS SHOWN IN THE DRAWINGS.

16190 SUPPORTING DEVICES

- A. CONDUIT: UTILIZE STAINLESS STEEL CONDUIT STRAPS WHERE SURFACE MOUNTED.
- B. BOXES: UTILIZE PURPOSE MADE HANGERS AS REQUIRED WHERE FLUSH MOUNTED.
- C. ALLOW FOR A MINIMUM SAFETY FACTOR OF FIVE TO ONE TO SUPPORT EQUIPMENT LOADS. PLUMBERS TAPE AND WIRE ARE NOT APPROVED. USE 316 STAINLESS SUPPORTING DEVICES.

16450 GROUNDING

- A. CONNECT ALL NON-CURRENT CARRYING ELECTRICAL EQUIPMENT, RACEWAYS, AND ENCLOSURES TO THE GROUND BUSS IN THE PANEL. PROVIDE EQUIPMENT GROUNDING CONDUCTORS IN ALL CIRCUITS.
- B. PROVIDE A GROUNDING SYSTEM FOR THE PANEL AS SHOWN IN THE DRAWINGS.

16471 PANELBOARDS

- A. PANELBOARDS SHALL BE SIZED AND RATED IN ACCORDANCE WITH THE SINGLE LINE DIAGRAM IN THE DRAWINGS. THE BUSS BARS SHALL BE COPPER. PROVIDE WITH MULTIPLE LUGS AS REQUIRED. PROVIDE A NEUTRAL TERMINAL BAR. PROVIDE A GROUND TERMINAL BAR SO GROUND CONDUCTORS ARE TERMINATED IN THE PANELBOARD. BRACE FOR 10,000 SYMMETRICAL RMS AMPERES, UNLESS OTHERWISE NOTED.
- B. SIZE THE ENCLOSURE TO ALLOW FOR ADEQUATE WIRE GUTTER SPACE. THE FRONT SHALL BE A SINGLE ELEMENT WITH A LOCKABLE DOOR. A TYPED CIRCUIT DIRECTORY SHALL BE LOCATED INSIDE THE DOOR. PROVIDE KEYS. THE INTERIOR ASSEMBLY SHALL BE DEADFRONT WITH THE FRONT COVER OPENED.
- C. MOUNT WITH THE TOP OF THE ENCLOSURE AT 72 INCHES ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. INSTALL THE PANELBOARD INTERIORS AFTER THE ENCLOSURE HAS BEEN INSTALLED.
- D. INSTALL CIRCUIT BREAKERS IN THE ORDER SPECIFIED IN THE DRAWING PANELBOARD SCHEDULES, UNLESS APPROVED OTHERWISE. TYPE THE CIRCUIT DIRECTORY WITH CIRCUIT DESCRIPTIONS AS THEY ARE SHOWN IN THE DRAWING PANELBOARD SCHEDULES. THE DIRECTORY SHALL BE CONFIGURED IDENTICALLY WITH THE CIRCUIT BREAKER CONFIGURATION.

SECTION 16476 DISCONNECT SWITCHES AND CIRCUIT BREAKERS

- A. PROVIDE CIRCUIT BREAKERS WITH A U.L. LISTED INTERRUPTING RATING OF 10,000 RMS SYMMETRICAL AMPERES MIN. AT 208 VOLTS UNLESS OTHERWISE NOTED.
- B. THE PANEL OR METER CENTER MANUFACTURER SHALL APPROVE ALL CIRCUIT BREAKERS INSTALLED IN THE PANEL.

SECTION 16515 LIGHTING

- A. PROVIDE LIGHTING AS DESCRIBED ON THE DRAWINGS.



JULY 2, 2015



MARK	DATE	DESCRIPTION	BY
	7/15	07/02/15 BID SET	

CITY AND BOROUGH OF JUNEAU
JUNEAU, AK

SALT AND SAND STORAGE FACILITY E16-013

ELECTRICAL
SPECIFICATIONS

Project No.:	135-12554-15004
Designed By:	MGM
Drawn By:	AQM
Checked By:	MGM

E-004

TETRA TECH

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