DRAIN LINE REPAIRS

BID DOCUMENTS

FOR:

PETERSBURG AQUATIC CENTER
PETERSBURG, ALASKA 99833

PREPARED BY:

Juneau, AK
9109 Mendenhall Mall Rd, Ste 4
Juneau, AK 99801
Phone: 907.780.6060
www.respec.com
AECC163270

SHEET INDEX

EXHIBIT DRAWINGS

SHEET	SHEET TITLE
EX1	EXHIBIT DRAWING
EX2	EXHIBIT DRAWING
EX3	EXHIBIT DRAWING
EX4	EXHIBIT DRAWING
EX5	EXHIBIT DRAWING
EX6	EXHIBIT DRAWING

REVISIONS

Juneau, AK
9109 Mendenhall Mall Rd, Ste 4
Juneau, AK 99801
Phone: 907.780.6060
AECC163270

PROJECT: PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

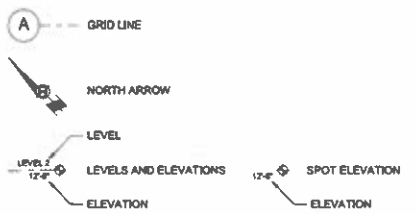
SHEET TITLE: PROJECT COVER SHEET
BID DOCUMENTS

DESIGN
DRAWN
CHECKED
DATE

PROJECT No. 10313.24002

SHEET NUMBER G-001

DATUM

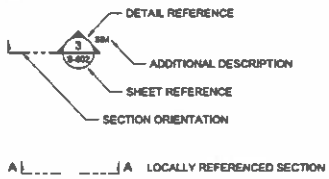


LINEWORK

1. EXISTING TO REMAIN:
2. DEMOLITION:
1. NEW:
2. BY OTHERS:

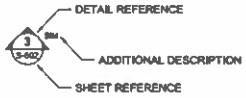
REFERENCES

1. SECTIONS:

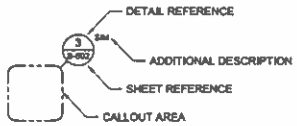


A A LOCALLY REFERENCED SECTION

2. ELEVATIONS:



3. CALLOUTS:



4. MATCHLINES:

CODE ANALYSIS

1. PROJECT:
   A. PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
   PETERSBURG PARKS AND RECREATION, PETERSBURG, AK 99833
2. CLIENT:
   A. PETERSBURG PARKS AND RECREATIONS
3. CONTRACTOR:
   A. TBD
4. SCOPE OF WORK:
   A. REPLACING/REPAIRING BROKEN SANITARY PIPING BELOW EXISTING SLAB FOUNDATION.
5. ORIGINAL CODES:
   A. 2003 INTERNATIONAL FAMILY OF CODES
6. CURRENT CODES:
   A. 2021 INTERNATIONAL FAMILY OF CODES WHERE APPLICABLE, INCLUDING:
      a. 2021 EXISTING BUILDING CODE, LEVEL 1 ALTERATION (SECTION 302)
7. CONSTRUCTION TYPE:
   A. VB - FULLY AUTOMATIC SPRINKLERED OCCUPANCY TYPE A-3

GENERAL NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES IN ACCOMPLISHING NEW WORK.
2. REMOVE AND STORE ALL EXISTING FIXTURES, CABINETRY CASEWORK INCLUDING LOCKERS, BENCHES, TOILETS, SINKS, TOILET/URINAL PARTITIONS, ACCESSORIES, UNLESS NOTED OTHERWISE. REFER TO EXHIBIT DRAWING EX1 FOR EXISTING LIST. REINSTALL TO COMPLETE WORK.
3. REFER TO STRUCTURAL DRAWINGS FOR EXTENT OF CONCRETE FLOOR AND CMU WALL SHORING OR DEMOLITION EXTENTS.
4. CONTRACTOR TO PROTECT ALL EXISTING FINISHES AND FURNISHINGS TO ACCOMPLISH THE WORK. DAMAGED FINISHES OR FURNISHINGS TO BE REPLACED AT CONTRACTOR'S EXPENSE.
5. ADDITIVE ALTERNATES:
   A. ADD ALT 1 AND 2 ARE AREAS OF THE FIRST FLOOR SLAB WHICH MAY NEED TO BE REMOVED TO REPAIR THE EXISTING UTILITIES. SEE MECHANICAL AND STRUCTURAL FOR ADDITIONAL INFORMATION.

REVISIONS

No.	Date	Item

CONSULTANT:

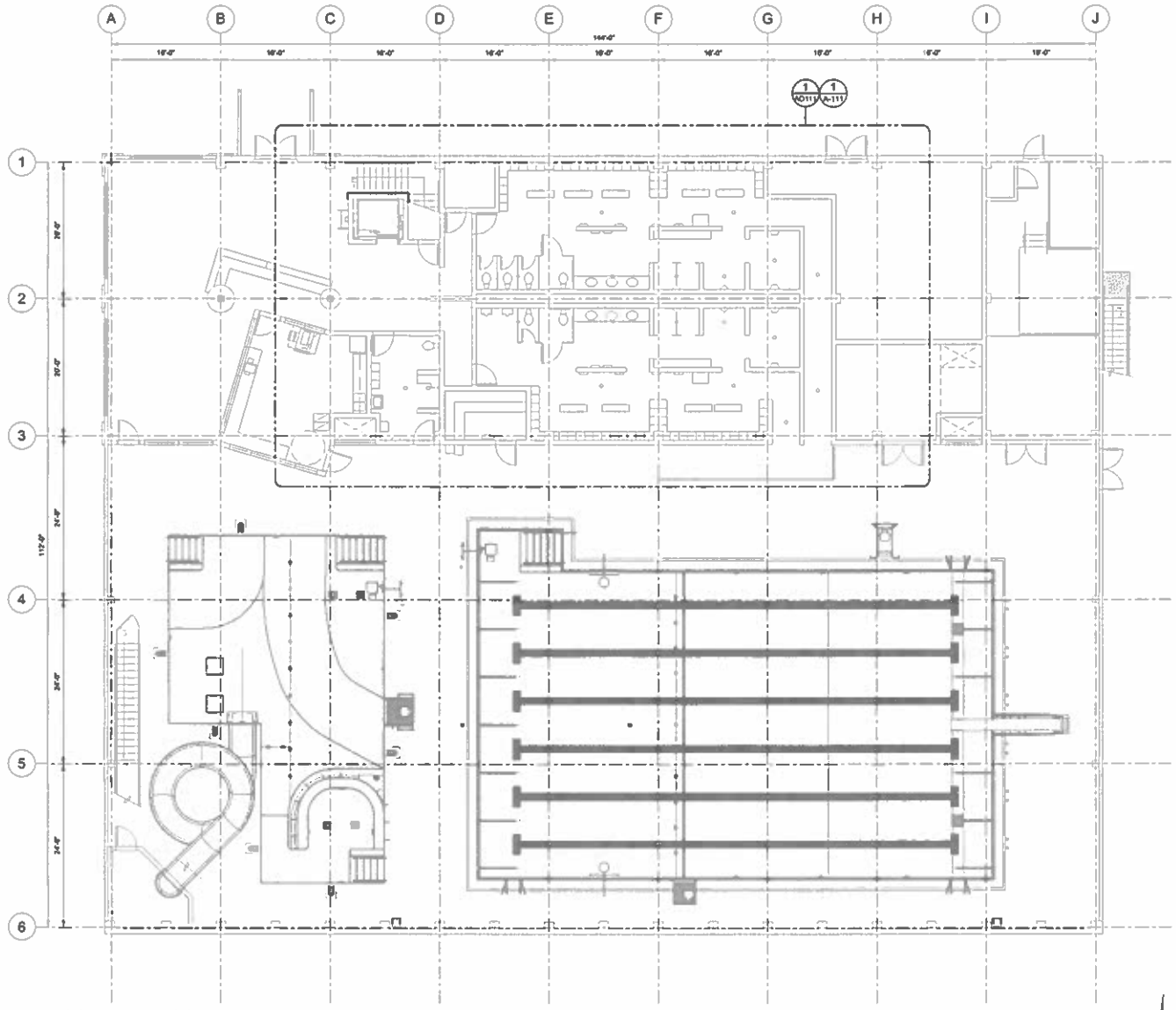
Juneau, AK

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE:
LEGEND AND ABBREVIATIONS
BID DOCUMENTS

DESIGN	TKM
DRAWN	CLM
CHECKED	TKM
DATE	07/30/2025

PROJECT No.
80315.24002
SHEET NUMBER
A-001



1 A-101 **FIRST FLOOR REFERENCE PLAN**

SCALE: 1/8" = 1'-0"

SHEET NOTES

1. FIELD VERIFY EXISTING CONDITIONS.

REVISIONS

CONSULTANT:

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE:
REFERENCE PLAN
BID DOCUMENTS

PROJECT No.
I0315.24002

SHEET NUMBER
A-101

EXISTING FINISHES LEGEND

1. EXISTING CARPET:
2. EXISTING TILE:
3. EXISTING FINISHES TO REMAIN:

SHORING AND DEMOLITION LEGEND

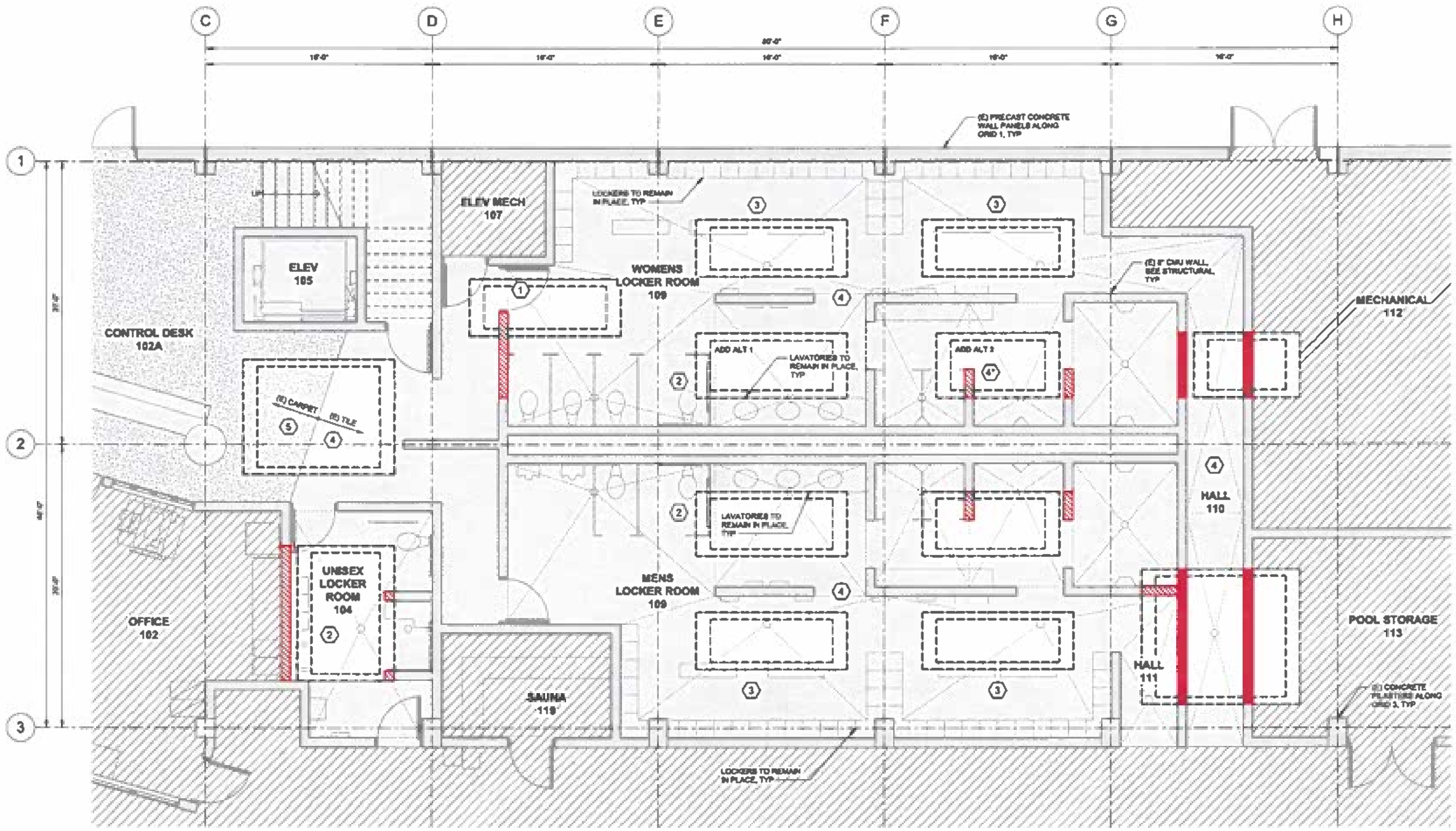
1. 8" CMU PARTITION WALL SHORING: (SEE STRUCTURAL)
2. 8" CMU SHEAR WALL SHORING: (SEE STRUCTURAL)
3. CONCRETE FLOOR SLAB DEMOLITION: (SEE STRUCTURAL)

DEMOLITION KEYNOTES (#)

1. REMOVE DOOR, FRAME, HARDWARE, AND STORE FOR REINSTALL.
2. REMOVE EXISTING CABINETRY, LAVATORIES, TOILETS, PARTITIONS, ACCESSORIES, AND LOCKERS AS NEEDED TO ACCOMPLISH WORK. PROTECT AND STORE FOR REINSTALL.
3. REMOVE EXISTING BENCHES AS NEEDED TO ACCOMPLISH WORK. PROTECT AND STORE FOR REINSTALL.
4. REMOVE ALL (E) TILE, TILE BASE, GROUT, AND MORTAR. PREPARE FOR NEW SEALED CONCRETE FINISH.
5. PEEL BACK (E) CARPET AND PROTECT TO ACCOMPLISH SLAB DEMO.

SHEET NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES IN ACCOMPLISHING NEW WORK.
2. REMOVE AND STORE ALL EXISTING FIXTURES, CABINETRY, CASEWORK INCLUDING LOCKERS, BENCHES, TOILETS, SINKS, TOILET/URINAL PARTITIONS, ACCESSORIES UNLESS NOTED OTHERWISE. REFER TO EXHIBIT DRAWING EX1 FOR EXISTING LIST.
3. REFER TO STRUCTURAL DRAWINGS FOR EXTENTS OF EXISTING CONCRETE FLOOR DEMOLITION AND CMU WALL SHORING. CONTRACTOR TO REPAIR/REPLACE EXISTING CMU WALL ASSEMBLIES AND REPAINT ENTIRE WALLS WHERE REQUIRED DUE TO DAMAGE TO EXISTING WALLS.
4. CONTRACTOR TO PROTECT ALL EXISTING FINISHES AND FURNISHINGS TO ACCOMPLISH THE WORK. DAMAGED FINISHES OR FURNISHINGS TO BE REPLACED AT CONTRACTOR'S EXPENSE.



1 AD111 **PARTIAL FIRST FLOOR PLAN - DEMOLITION**
SCALE: 1/4" = 1'-0"

REVISIONS

CONSULTANT:

Juneau, AK
RESPEC

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

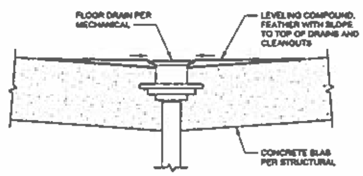
SHEET TITLE: PARTIAL FIRST FLOOR PLAN - DEMOLITION

BID DOCUMENTS

PROJECT No. 0315.24002

SHEET NUMBER **AD111**

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION. AFFECTING ALL LABELED SCALES



2 A-111 **FLOOR DRAIN DETAIL**
SCALE: 1 1/2" = 1'-0"

FINISHES LEGEND

1. EXISTING CARPET:
2. SEALED CONCRETE:
3. EXISTING FINISHES TO REMAIN:

NEW WORK KEYNOTES (#)

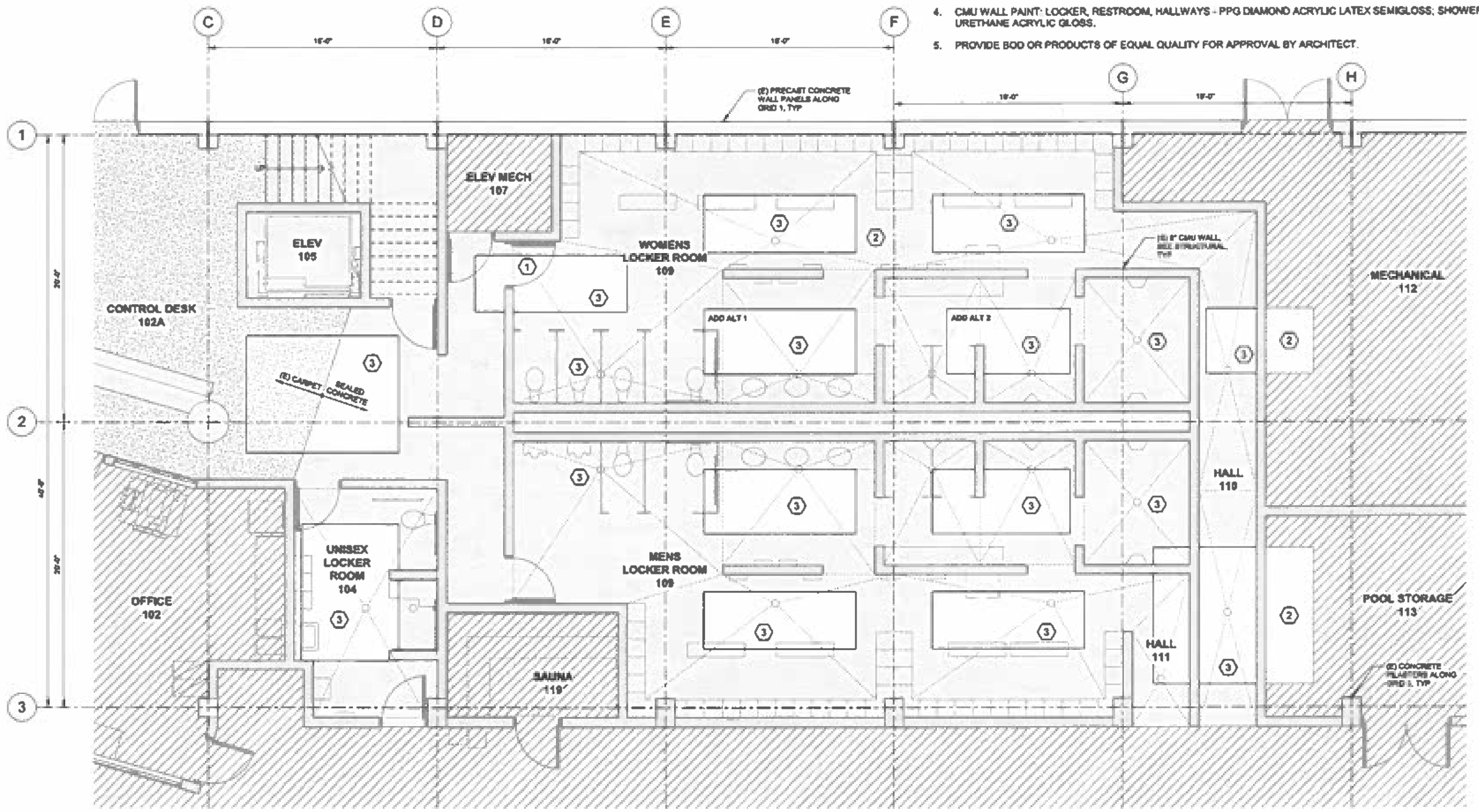
1. REINSTALL EXISTING DOOR FRAME, DOOR, AND HARDWARE.
2. NEW AND EXISTING CONCRETE FLOORS SHALL BE SEALED.
3. NEW CONCRETE FLOOR INFILL, SEE STRUCTURAL. MATCH SLOPE TO DRAINS (1/8" PER 1'-0" MINIMUM). INSTALL NEW FLOOR DRAINS WHERE REQUIRED, SEE MECHANICAL. PREPARE EXISTING CONCRETE FLOORS AS REQUIRED FOR ACCEPTANCE OF SEALER AND LEVELING COMPOUND WHERE REQUIRED TO FILL VOIDS AND AT EXISTING DRAINS PER PRODUCT MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL LEVELING COMPOUND WITH POSITIVE SLOPE WHERE NEW DRAIN PROVIDED AT EREAS WHERE EXISTING SLABS TO REMAIN

SHEET NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES IN ACCOMPLISHING NEW WORK.
2. REINSTALL EXISTING FIXTURES, CABINETRY, CASEWORK INCLUDING LOCKERS, BENCHES, TOILETS, SINKS, TOILET/URINAL PARTITIONS, ACCESSORIES UNLESS NOTED OTHERWISE. REFER TO EXHIBIT DRAWING EX1 FOR EXISTING LIST.
3. INSTALL NEW 6" RUBBER BASE AT ALL LOCATIONS WHERE EXISTING TILE BASE HAS BEEN REMOVED AT CMU WALLS AND LOCKER BASES.
4. REFER TO STRUCTURAL DRAWINGS FOR EXTENTS OF NEW CONCRETE FLOOR AND CMU WALL DEMOLITION. WHERE CMU WALL DEMO OR DAMAGE HAS OCCURED, REPLACE AND/OR REPAIR CMU WALL AND PAINT ENTIRE WALL.

BASIS OF DESIGN (BOD) FINISHES

1. FLOOR LEVELING COMPOUND: ARDEX V 1000.
2. CONCRETE FLOOR SEALER/COATING: SIKA SIKAGUARD-62 EPOXY COATING WITH CUSTOM COLOR KIT (AS SELECTED BY OWNER), PRIMER: SIKA SIKADUR-32 HI-MOD, ANTI-SLIP ADDITIVE - BROADCAST SILICA SAND (20-40 MESH).
3. RUBBER WALL BASE: ROPPE SERIES 700 6" NO TOE RUBBER WALL BASE.
4. CMU WALL PAINT: LOCKER, RESTROOM, HALLWAYS - PPG DIAMOND ACRYLIC LATEX SEMIGLOSS; SHOWERS - PPG BREAK-THROUGH URETHANE ACRYLIC GLOSS.
5. PROVIDE BOD OR PRODUCTS OF EQUAL QUALITY FOR APPROVAL BY ARCHITECT.



1 A-111 **PARTIAL FIRST FLOOR PLAN**
SCALE: 1/4" = 1'-0"

No.	Date	Item

REVISIONS

CONSULTANT:

Juneau, AK
RESPEC

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

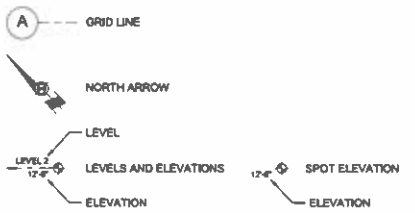
SHEET TITLE: PARTIAL FIRST FLOOR PLAN

BID DOCUMENTS

PROJECT No. I0315.24002

SHEET NUMBER
A-111

DATUM

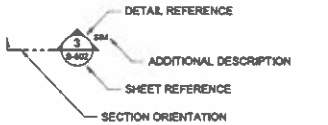


LINEWORK

1. EXISTING TO REMAIN:
2. DEMOLITION:
1. NEW:
2. BY OTHERS:

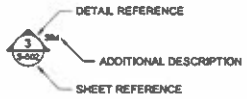
REFERENCES

1. SECTIONS:

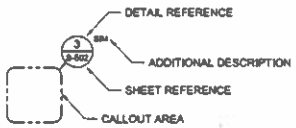


A LOCALLY REFERENCED SECTION A

2. ELEVATIONS:



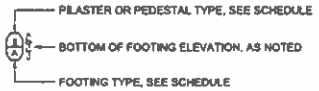
3. CALLOUTS:



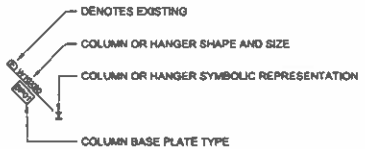
4. MATCHLINES:

TAGS AND SYMBOLS

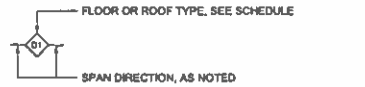
1. FOUNDATIONS:



2. COLUMNS AND HANGERS:



3. FLOORS AND ROOFS:

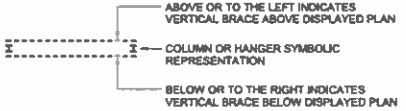


4. WALLS

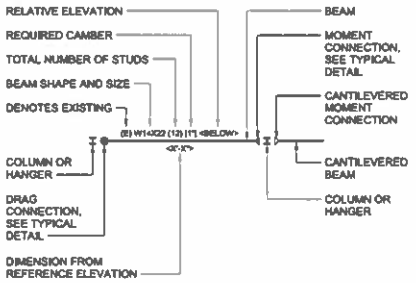
5. CHANGES IN ELEVATION:

STEP DOWN / UP RAMP DOWN RAMP UP

6. VERTICAL BRACING:



7. BEAMS:



A. NOTES:

a. SEE TYPICAL FRAMING DETAILS FOR CONNECTIONS.

b. SPACE STUDS PER TYPICAL SHEAR STUD PLACEMENT DETAIL.

STRUCTURAL ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS USED.

@	AT
AB	ANCHOR BOLT
AFF	ABOVE FINISH FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
APPROX	APPROXIMATELY
ARCH	ARCHITECTURAL
ASD	ALLOWABLE STRENGTH DESIGN
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATR	ALL THREAD ROD
AWS	AMERICAN WELDING SOCIETY
AWW	ALL WEATHER WOOD
BET / BTWN	BETWEEN
BLKG	BLOCKING
BM	BEAM
BN	BOUNDARY NAILING
BOF	BOTTOM OF FOOTING
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BP	BUTTON PUNCH
BPL	BOTTOM PLATE
BRKT	BRACKET
BS	BOTH SIDES
CANT	CANTILEVER
CBJ	CITY AND BOROUGH OF JUNEAU
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CONTR'S	CONTRACTORS
CP	COMPLETE PENETRATION
DBL	DOUBLE
DIA / DIAM / ø	DIAMETER
DIAG	DIAGONAL
DICA	DRILLED IN CONCRETE ANCHOR
DIM	DIMENSION
DL	DEAD LOAD
DP	DEEP
DWG	DRAWING
(E)	EXISTING
EA	EACH
EJ	EXPANSION JOINT
ELEV	ELEVATION
ELF	EQUIVALENT LATERAL FORCE PROCEDURE
EMBED	EMBEDDED
EN	END NAILING
EOR	ENGINEER OF RECORD
EQ	EQUAL
EQUIV	EQUIVALENT
ES	EQUALLY SPACED
EW	EACH WAY
FB	FLAT BAR
FDN	FOUNDATION
FF	FINISH FLOOR
FNSB	FAIRBANKS NORTH STAR BOROUGH
FRMG	FRAMING
FS	FAR SIDE
FT	FOOT/FEET
FTG	FOOTING
GA	GAGE
GALV	GALVANIZED
GLB	GLULAM BEAM
GR	GRADE
GWB	GYPSUM WALL BOARD
HD	HOLDOWN
H / HORIZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION
IBC	INTERNATIONAL BUILDING CODE
ICF	INSULATED CONCRETE FORM
IN	INCH(ES)
INSUL	INSULATION
INT	INTERIOR
JT	JOINT
K	KIP (1000 LB)
KSI	KIPS PER SQUARE INCH
LL	LIVE LOAD
LLV	LONG LEG VERTICAL
LOC	LOCATION
LONG	LONGITUDINAL

STRUCTURAL ABBREVIATIONS (CONTINUED)

NOTE: NOT ALL ABBREVIATIONS USED.

MANUF	MANUFACTURER
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MID	MIDDLE
MIN	MINIMUM
MOA	MUNICIPALITY OF ANCHORAGE
MPH	MILES PER HOUR
MSB	MATANUSKA-SUSITNA BOROUGH
MTL	METAL
(N)	NEW
NIC	NOT IN CONTRACT
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OPP	OPPOSITE HAND
OSB	ORIENTED STRAND BOARD
OWSJ	OPEN WEB STEEL JOIST
PDF	POWDER DRIVEN FASTENER
PC	PRECAST
PEN	PENETRATION
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLB	PARALLAM BEAM
PLF	POUNDS PER LINEAL FOOT
PLY	PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PWJ	PLYWOOD WEB JOIST
REF	REFERENCE
REINF	REINFORCEMENT
REQ'D	REQUIRED
RO	ROUGH OPENING
SCH / SCHED	SCHEDULE
SIM	SIMILAR
SIP	STRUCTURAL INSULATED PANELS
SFRS	SEISMIC FORCE RESISTING SYSTEM
SMS	SHEET METAL SCREWS
SOG	SLAB-ON-GRADE
SQ	SQUARE
STAGG	STAGGERED
STD	STANDARD
STL	STEEL
STR / STRUCT	STRUCTURAL
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
TEMP	TEMPERATURE
THRD	THREADED
TO	TOP OF
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TS	TUBE STEEL
TYP	TYPICAL
UFC	UNIFIED FACILITIES CRITERIA
UNO	UNLESS NOTED OTHERWISE
V / VERT	VERTICAL
W/	WITH
WD	WIDE
WF	WIDE FLANGE
WP	WORKING POINT
WWF	WELDED WIRE FABRIC

REVISIONS

CONSULTANT:

STATE OF ALASKA

Juneau, AK

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE:
LEGEND AND ABBREVIATIONS
BID DOCUMENTS

DESIGN	ACL
DRAWN	CJM
CHECKED	ETM
DATE	07-02-2019

PROJECT No.
10315.24002
SHEET NUMBER
S-001

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION. AFFECTING ALL LABELED SCALES

STRUCTURAL DESIGN DATA

1. RISK CATEGORY (PER RECORD DRAWINGS) — III
2. LIVE LOADS:
   - A. FIRST FLOOR — 100 PSF
   - B. ROOF — 20 PSF
   - C. STAIRS & CORRIDORS — 100 PSF
   - D. MECHANICAL MEZZANINE — 125 PSF
   - E. MECHANICAL MEZZANINE — 170 PSF
3. SNOW LOADS:
   - A. GROUND SNOW LOAD — P_g = 65 PSF (ORIGINAL) 150 PSF (CURRENT)
   - B. EXPOSURE FACTOR — C_e = 1.0
   - C. THERMAL FACTOR — C_t = 1.0
   - D. IMPORTANCE FACTOR — I_s = 1.1
   - E. ROOF SNOW LOAD — P_s = 50 PSF (ORIGINAL) 116 PSF (CURRENT)
4. WIND LOADS:
   - A. WIND SPEED — V_{ULT} = 147 MPH
   - B. WIND EXPOSURE CATEGORY — C
   - C. IMPORTANCE FACTOR — I_w = 1.00
5. SEISMIC LOADS:
   - A. SEISMIC FORCE RESISTING SYSTEM
     - a. STEEL BRACED FRAMES
     - b. CMU SHEAR WALLS
     - c. CONCRETE SHEAR WALLS
   - B. SEISMIC IMPORTANCE FACTOR — I_e = 1.25
   - C. SITE CLASS — D (RECORD DOC'S)
   - D. MAPPED ACCELERATIONS
     - a. SHORT-PERIOD — S_S = 0.29 g
     - b. 1-SECOND — S_1 = 0.28 g
   - E. DESIGN ACCELERATIONS
     - a. SHORT-PERIOD — S_{DS} = 0.30 g
     - b. 1-SECOND — S_{D1} = 0.37 g
   - F. SEISMIC DESIGN CATEGORY — D
6. FOUNDATION DESIGN CRITERIA
   - A. THE BUILDING IS FOUNDED ON STEEL PILES. REFER TO THE EXISTING BUILDING DRAWINGS FOR MORE INFORMATION.

STRUCTURAL GENERAL NOTES

1. THE SCOPE OF WORK IS TO REPAIR THE EXISTING SEWER PIPING. THE EXISTING UTILITIES ARE LOCATED BELOW THE FIRST FLOOR SLAB. THE FIRST FLOOR IS COMPOSED OF AN ELEVATED CONCRETE SLAB SUPPORTED BY CONCRETE BEAMS AND GIRDERS, WHICH ARE FOUNDED ON STEEL PILES.
   - A. THE EXISTING STRUCTURAL FLOOR SLAB MUST BE DEMOLISHED AND REPLACED AS INDICATED TO PROVIDE ACCESS TO THE UNDERFLOOR UTILITIES.
   - B. MULTIPLE INTERIOR CMU PARTITION WALLS MUST BE SHORED IN PLACE OR REMOVED AND RE-INSTALLED. MULTIPLE INTERIOR CMU SHEAR WALLS MUST BE SHORED IN PLACE. ALL SHORING OF EXISTING WALLS IS PART OF THE DELEGATED DESIGN, FOR MORE INFORMATION, SEE THE STRUCTURAL DELEGATED DESIGN NOTES.
2. PERFORM ALL WORK IN COMPLIANCE WITH THE MINIMUM STANDARDS OF THE FOLLOWING CODES:
   - A. THE INTERNATIONAL BUILDING CODE (IBC) 2021 AND ITS REFERENCED STANDARDS, HEREIN REFERRED TO AS "THE CODE", AND OTHER REGULATORY CRITERIA WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
3. THIS WORK INVOLVES EXISTING STRUCTURES, PERFORM THE FOLLOWING TASKS PRIOR TO STARTING CONSTRUCTION:
   - A. SURVEY AND FIELD VERIFY ALL EXISTING CONDITIONS ASSOCIATED WITH THE WORK.
   - B. INVESTIGATE THE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS FOUNDATIONS, ETC.
   - C. ALL OMISSIONS OR CONFLICTS BETWEEN ELEMENTS OF THE CONTRACT DOCUMENTS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD, PRIOR TO PROCEEDING WITH THE RELATED WORK.
4. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. CONSTRUCTION LOADS MUST NOT EXCEED THE DESIGN LIVE LOADS.
5. IF THE STRUCTURAL ENGINEER OF RECORD IS NOT RETAINED BY THE OWNER TO OVERSEE CONSTRUCTION ACTIVITIES, THE STRUCTURAL ENGINEER OF RECORD IS NOT IN RESPONSIBLE CHARGE OF THE CONSTRUCTION PER SECTION 107.3.4 OF THE CODE. CONSTRUCTION ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO, REVIEW OF SPECIAL INSPECTION AND STRUCTURAL OBSERVATION REPORTS, REVIEW OF SUBMITTAL DOCUMENTS, AND REVIEW OF DELEGATED DESIGN SUBMITTALS.
6. THE FOLLOWING ITEMS ARE PART OF THE LATERAL FORCE RESISTING SYSTEM (LFRS):
   - A. PRECAST CONCRETE SHEAR WALLS, CMU SHEAR WALLS, STEEL BRACED FRAMES, DRAG BEAMS, CONCRETE FLOORS (AT MEZZANINE AND GROUND FLOORS), ROOF DECK, AND ALL ASSOCIATED CONNECTIONS.

STRUCTURAL DELEGATED DESIGN NOTES

1. THE DESIGN OF THE FOLLOWING ELEMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR:
   - A. ALL SHORING OF EXISTING BUILDING ELEMENTS REQUIRED TO COMPLETE THE WORK, INCLUDING BUT NOT LIMITED TO:
     - a. INTERIOR CMU PARTITION WALLS
     - b. INTERIOR CMU SHEAR WALLS
   - B. THE SHORING DESIGN MUST INCLUDE ALL ASPECTS NECESSARY TO SUPPORT THE EXISTING BUILDING ELEMENTS WITHOUT DAMAGE OR OVERLOAD.
   - C. THE DESIGN OF ALL FORMWORK AND SHORING REQUIRED FOR THE NEW FLOOR SLAB.
   - D. ALL ARCHITECTURAL, MECHANICAL AND ELECTRICAL EQUIPMENT BRACING AND ANCHORAGE TO THE STRUCTURE
2. PROVIDE SUBMITTALS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW.
3. SUBMITTALS MUST INCLUDE DRAWINGS AND CALCULATIONS SEALED BY A CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF ALASKA.

STRUCTURAL CONCRETE NOTES

1. PERFORM ALL CONCRETE WORK IN ACCORDANCE WITH CHAPTER 19 OF THE IBC, AND ALL REFERENCED STANDARDS.
2. USE NORMAL WEIGHT (150 PCF) CAST-IN-PLACE CONCRETE WITH 28 DAY COMPRESSIVE STRENGTHS (F'_c) AS FOLLOWS:

CONDITION	MINIMUM STRENGTH (PSI)	EXPOSURE CATEGORY	MAX W/C RATIO	AIR ENTRAINMENT
FLOOR SLAB	5,000	F0, S0, W2, C2	0.50	0%

3. CONCRETE MATERIAL REQUIREMENTS:
   - A. USE PORTLAND CEMENT CONFORMING TO ASTM STANDARD C-150 AND TYPE I, II, OR III, UNLESS NOTED OTHERWISE.
   - B. USE NORMAL WEIGHT AGGREGATE OF NATURAL SAND AND ROCK CONFORMING TO THE REQUIREMENTS AND TESTS OF ASTM C-33.
4. REINFORCING MATERIAL REQUIREMENTS:
   - A. USE DEFORMED REINFORCING BARS CONFORMING TO THE STANDARDS OF ASTM A615, GRADE 60. WHERE WELDING OF REINFORCING BARS OCCURS, USE ASTM A706 GRADE 60.
5. PROVIDE DOWELS, WHERE REQUIRED, THAT MATCH THE SIZE AND NUMBER OF MAIN REINFORCING.
6. SPLICE REINFORCING BARS WHERE INDICATED ON THE DRAWINGS. LAP HORIZONTAL REINFORCING AT CORNERS AND INTERSECTIONS. STAGGER ALL SPLICES UNLESS NOTED OTHERWISE. IF SPLICE LOCATIONS ARE NOT SPECIFICALLY INDICATED, VERIFY PLANNED LOCATION WITH THE EOR.
7. DETAIL, FABRICATE, LABEL, SUPPORT, AND SPACE ALL CONCRETE REINFORCEMENT CONFORMING TO THE PROCEDURES AND REQUIREMENTS OF THE LATEST EDITION OF CHAPTER 19 OF THE CODE, ACI 318, AND THE "ACI DETAILING MANUAL: DETAILS AND DETAILING CONCRETE REINFORCEMENT", ACI 315.
8. PROVIDE A MINIMUM CONCRETE COVER OVER REINFORCING OF:
   - A. 3" FOR CONCRETE CAST AGAINST THE EARTH.
   - B. 1 1/2" FOR BARS EXPOSED TO WEATHER AND BEAMS AND COLUMNS.
   - C. 1 1/2" FOR INTERIOR SLABS.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF SHORING. THE DESIGN, REMOVAL, AND RESHORING OF FORMWORK MUST CONFORM TO ACI 318, THE CODE, AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. PROVIDE CONCRETE WITH A MAXIMUM SLUMP OF 8 INCHES ± 1 INCH WITH VERIFIED SLUMP OF 3 INCHES ± 1 INCH BEFORE ADDING HIGH-RANGE WATER REDUCING OR PLASTICIZING ADMIXTURES AT THE PROJECT SITE.
11. SUBMIT THE FOLLOWING TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL:
    - A. CONCRETE MIX DESIGN DATA FOR EACH TYPE AND COMPRESSIVE STRENGTH OF CONCRETE REQUIRED. BASE MIX DESIGNS ON FIELD EXPERIENCE, TRIAL MIXTURES, OR BOTH, IN CONFORMANCE WITH ACI 318. MIX DESIGNS MUST BE SIGNED BY A REGISTERED CIVIL OR STRUCTURAL ENGINEER.
    - B. REINFORCING BAR SHOP DRAWINGS, CONTAINING ALL REINFORCING DETAILS, SPACING, PLACEMENT, COUPLERS, AND PLANNED CONSTRUCTION JOINTS. PREPARE SHOP DRAWINGS IN CONFORMANCE WITH ACI 315.
12. MAINTAIN CONCRETE ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION FOR A MINIMUM OF SEVEN DAYS AFTER PLACEMENT.

STRUCTURAL MASONRY NOTES

1. PERFORM ALL MASONRY WORK IN ACCORDANCE WITH CHAPTER 21 OF THE IBC, AND ALL REFERENCED STANDARDS.
2. USE MASONRY COMPONENT AND DESIGN COMPRESSIVE STRENGTHS AS SHOWN BELOW:

COMPONENT	REQUIRED STRENGTH	MATERIAL NOTES
CMU BLOCKS	F'_{cmu} = 3,250 PSI (MIN)	ASTM C-90, NORMAL WEIGHT
MORTAR	F'_m = 1,800 PSI (MIN)	ASTM C-270, TYPE S OR M
GROUT	F'_g = 2,500 PSI (MIN)	ASTM C-476
MASONRY ASSEMBLY	F'_m = 2,500 PSI	NET AREA COMPRESSIVE STRENGTH

   - A. USE CLEAN, ANGULAR, WELL-GRADED SAND AGGREGATES FREE FROM DETRIMENTAL AMOUNTS OF DUSTS, LUMPS, SHALE AND ALKALI OR ORGANIC MATERIAL. REFER TO ASTM C144 FOR MORTARS AND ASTM C404 FOR GROUTS.
   - B. VERIFY THE SPECIFIED COMPRESSIVE STRENGTH OF MASONRY WITH THE UNIT STRENGTH METHOD OR THE PRISM TESTING METHOD IN ACCORDANCE WITH TMS 602.
3. USE REINFORCING STEEL CONFORMING TO ASTM A615 OR A706, GR 60. DETAIL REINFORCING IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI STANDARD OF PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.
4. SPLICE REINFORCING STEEL WHERE INDICATED. LAP REINFORCING STEEL AT SPLICES A MINIMUM OF (48) BAR DIAMETERS, UNLESS NOTED OTHERWISE. WHERE CLEAR DISTANCE BETWEEN BARS AT ADJACENT SPLICES IS 3 INCHES OR LESS, INCREASE LAP LENGTH BY 30 PERCENT UNLESS SPLICES ARE STAGGERED AT LEAST (24) BAR DIAMETERS.
5. ENSURE A MINIMUM OF 1" OF GROUT COVER AROUND REINFORCING STEEL, ANCHOR BOLTS, AND INSERTS PENETRATING THE MASONRY SHELL.
6. PROVIDE NOT LESS THAN 1/2" OF GROUT BETWEEN MASONRY UNITS AND REINFORCING STEEL, AND BETWEEN PARALLEL REINFORCING NOT LESS THAN 1 INCH OR ONE BAR DIAMETER, WHICHEVER IS LARGER.
7. GROUT ALL CELLS SOLID, UNLESS NOTED OTHERWISE.
8. CLEANOUTS ARE REQUIRED AT ALL CELLS TO RECEIVE GROUT TO THOROUGHLY INSPECT FOR AND CLEAR DEBRIS.
9. CONSOLIDATE ALL GROUT POURS WITH MECHANICAL VIBRATION.
10. LIMIT ALL GROUT LIFTS TO 5'-4" IN 4 HOUR INCREMENTS, UNLESS THE CONDITIONS OF TMS 602-16 SECTION 3.5D HAVE BEEN MET.
11. PROVIDE ADEQUATE TEMPORARY BRACING, AS REQUIRED, DURING CONSTRUCTION TO WITHSTAND LATERAL LOADS AND THE HYDROSTATIC PRESSURES OF FLUID GROUT.
12. PROVIDE CONTROL JOINTS IN CMU WALLS, MATCH EXISTING LOCATIONS.
13. PLACE ALL MASONRY IN A ½ UNIT RUNNING BOND PATTERN, UNLESS NOTED OTHERWISE. PLACE CELLS IN VERTICAL ALIGNMENT. USE CLOSED-END UNITS AT CORNERS, OPENINGS AND END-WALLS.

STRUCTURAL CONCRETE ANCHOR NOTES

1. USE THE FOLLOWING POST INSTALLED ANCHORS OR APPROVED EQUALS:
   - A. ADHESIVE ANCHORS: HILTI HIT-RE 500 V3 EPOXY
   - B. REBAR EMBED: HILTI HIT-RE 500 V3 EPOXY, OR HILTI HIT-HY-200
   - C. EXPANSION ANCHORS: HILTI KWIK BOLT-TZ SS304 OR 316
   - D. THE SIZE, ORIENTATION, SPACING, AND ADDITIONAL REQUIREMENTS AS INDICATED ON THE DRAWINGS.
2. MEET THE MINIMUM EMBEDMENT, EDGE DISTANCE AND SPACING REQUIREMENTS OF THE APPLICABLE ICC-ES REPORT FOR POST INSTALLED CONCRETE ANCHORS AND INSERTS.
3. DO NOT CUT OR DAMAGE EXISTING REINFORCING STEEL WHEN PLACING POST INSTALLED ANCHORS INTO EXISTING CONCRETE.
4. DO NOT SUBSTITUTE CAST-IN-PLACE BOLTS AND RODS WITH POST-INSTALLED ANCHORS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.
5. USE HOT-DIPPED GALVANIZED OR STAINLESS ANCHORS WHEN EXPOSED TO EXTERIOR OR DAMP CONDITIONS, IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
6. INSTALL AND TEST POST INSTALLED ANCHORS IN ACCORDANCE WITH CHAPTER 17 OF THE CURRENT IBC CODE AND THE APPLICABLE ICC-ES REPORT.
7. PERFORM ALL TESTING IN THE PRESENCE OF THE PROJECT INSPECTOR OF RECORD.

No.	Date	Item
REVISIONS		

CONSULTANT :

STATE OF ALASKA — 49 TH — EVERET O' MEGU — SE 140571 — REGISTERED STRUCTURAL ENGINEER

RESPEC
Juneau, AK
9109 Mendenhall Mall Rd Ste 4
Juneau, AK 99801
Phone: 907 780 6060
www.respec.com
AECC163270

PROJECT :
PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
GENERAL NOTES
BID DOCUMENTS

DESIGN: JCL
DRAWN: DJW
CHECKED: EDM
DATE:

PROJECT No.: I0315.24002
SHEET NUMBER: **S-002**

SPECIAL INSPECTION NOTES

1. ALL SPECIAL INSPECTIONS AND REPORTING REQUIREMENTS PER SECTION 1704 OF THE IBC AND REFERENCED STANDARDS, INCLUDING THE TASKS OUTLINED IN THE TABLES ON THIS SHEET, SHALL BE PROVIDED.
2. THE OWNER OR OWNER'S AGENT, OTHER THAN THE CONTRACTOR, SHALL EMPLOY QUALIFIED AGENCIES TO PROVIDE SPECIAL INSPECTION AND TESTS FOR THE WORK SPECIFIED IN SECTION 1705 OF THE IBC. SPECIAL INSPECTION AGENCIES SHALL BE QUALIFIED PER 1704.2.1 OF THE IBC.
3. THE SPECIAL INSPECTORS SHALL, AT A MINIMUM, PROVIDE SPECIAL INSPECTION REPORTS TO THE BUILDING OFFICIAL, OWNER OR OWNER'S AUTHORIZED AGENT, ARCHITECT, AND THE ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONTRACTOR, OWNER OR OWNER'S AUTHORIZED AGENT, ARCHITECT, AND THE ENGINEER OF RECORD.
4. THE SPECIAL INSPECTORS SHALL SUBMIT A FINAL SIGNED REPORT DOCUMENTING ALL SPECIAL INSPECTIONS AND TESTS, AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS OR TESTS.
5. QUALITY ASSURANCE AS REQUIRED BY TABLES ON THIS SHEET SHALL BE THE RESPONSIBILITY OF THE OWNER'S REPRESENTATIVE. QUALITY CONTROL AS REQUIRED BY THE SPECIAL INSPECTION SCHEDULES SHALL BE PROVIDED BY THE FABRICATOR AND/OR ERECTOR.
6. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 24 HOURS OF ADVANCE NOTICE PRIOR TO A REQUIRED SPECIAL INSPECTION AND PROVIDE ACCESS TO THE SITE AS REQUIRED FOR THE SPECIAL INSPECTOR TO COMPLETE THEIR WORK.
7. THE COST OF ANY REINSPECTION REQUIRED DUE TO CONSTRUCTION ERROR IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. DEFINITIONS:
   - A. QC - QUALITY CONTROL, TO BE PROVIDED BY THE FABRICATOR AND ERECTOR, PER AISC 360 CHAPTER N.1.
   - B. QA - QUALITY ASSURANCE, TO BE PROVIDED BY OTHERS WHEN REQUIRED BY THE AUTHORITY HAVING JURISDICTION, BUILDING CODE, PURCHASER, OWNER, OR ENGINEER OF RECORD, PER AISC 360 CHAPTER N.1
   - C. O - OBSERVE THESE ITEMS ON A RANDOM BASIS, OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
   - D. P - PERFORM THESE TASKS FOR EACH JOINT OR MEMBER
   - E. D - DOCUMENT INSPECTION ACTIVITIES.
   - F. FREQUENCY
     - a. P - PERIODIC
     - b. C - CONTINUOUS

STRUCTURAL OBSERVATION NOTES

1. THE OWNER OR OWNER'S AUTHORIZED AGENT SHALL EMPLOY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ALASKA, TO PERFORM STRUCTURAL OBSERVATIONS IN ACCORDANCE WITH SECTION 1704.6 OF THE IBC.
2. PRIOR TO THE COMMENCEMENT OF OBSERVATIONS THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL, A WRITTEN STATEMENT IDENTIFYING THE FREQUENCY AND EXTENT OF STRUCTURAL OBSERVATIONS.
3. AT THE CONCLUSION OF THE WORK INCLUDED IN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

TABLE 1 - REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

REFERENCE IBC TABLE 1705.3 AND ASSOCIATED SECTIONS FROM ACI318-19

	REQUIRED VERIFICATION AND INSPECTION	FREQUENCY
1.	INSPECT REINFORCEMENT AND VERIFY PLACEMENT.	P
2.	REINFORCING BAR WELDING:	
	A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	P
	B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND	P
	C. INSPECT ALL OTHER WELDS.	C
3.	INSPECT ANCHORS CAST IN CONCRETE.	P
4.	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.	
	A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	C
	B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	P
5.	VERIFY USE OF REQUIRED DESIGN MIX.	P
6.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	C
7.	INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	C
8.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	P
9.	INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	P

TABLE 2 - REQUIRED SPECIAL INSPECTIONS FOR MASONRY CONSTRUCTION

REFERENCE IBC SECTION 1705.4 AND TMS 602 SECTION 1.6

	REQUIRED VERIFICATION AND INSPECTION	FREQUENCY
1	AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE	
	A. PROPORTIONS OF SITE-PREPARED MORTAR	P
	B. GRADE, TYPE, AND SIZE OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS.	P
2.	PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE	
	A. GROUT SPACE	C
	B. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	C
3.	VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION	
	A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	C
	B. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	P
	C. SIZE AND LOCATION OF STRUCTURAL MEMBERS	P
	D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	C
	E. WELDING OF REINFORCEMENT	C
	F. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE OVER 90°F)	P
4.	OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND PRISMS	C

REVISIONS

No.	Date	Item

CONSULTANT:

Juneau, AK

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE:
SPECIAL INSPECTIONS
BID DOCUMENTS

DESIGN	JCA
DRAWN	DJM
CHECKED	CDM
DATE	07/02/2025

PROJECT No.
10315.24002
SHEET NUMBER
S-003

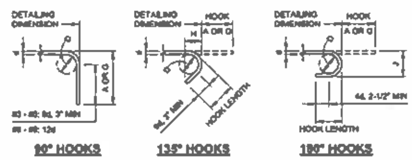
IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

LAP SPLICE LENGTH SCHEDULE: CLASS B										
F'C (PSI)	BAR SIZE (GR 60)	#3	#4	#5	#6	#7	#8	#9	#10	#11
	BAR DIAMETER (IN)	0.375	0.500	0.625	0.750	0.875	1.000	1.128	1.270	1.410
5,000	TOP BAR	22	29	36	43	63	72	81	92	102
	OTHER	17	23	28	34	49	56	63	70	78
CLASS A LAP LENGTH SCHEDULE: DIVIDE SCHEDULE VALUES BY 1.3										

NOTES

1. SCHEDULE VALUES ARE VALID FOR NORMAL WEIGHT CONCRETE WITH REBAR LAYOUTS MEETING THE REQUIREMENTS OF EITHER A, B, OR C:
   A. CLEAR SPACING AND CLEAR COVER OF BARS BEING DEVELOPED OR LAP SPLICED IS NOT LESS THAN (1) BAR DIAMETER AND WITHIN STIRRUPS OR TIES THROUGHOUT.
   B. CLEAR SPACING OF BARS BEING DEVELOPED OR LAP SPLICED IS AT LEAST (2) BAR DIAMETERS AND CLEAR COVER IS AT LEAST (1) BAR DIAMETER.
   C. LAP SPLICE LENGTHS ARE INCREASED BY 1.5.
2. IF EPOXY COATED REINFORCING IS USED, INCREASE LAP SPLICE LENGTH BY 1.5.
3. TOP BAR REFERS TO HORIZONTAL REINFORCEMENT WITH MORE THAN 1'-6" OF FRESH CONCRETE PLACED BELOW THE BAR.
4. OTHER REFERS TO ALL OTHER CONDITIONS NOT DEFINED AS TOP BARS.

1 (S-101) TYPICAL LAP SPLICE SCHEDULE
SCALE: NO SCALE



BEND DIMENSION SCHEDULE										
	90° HOOKS		135° HOOKS				180° HOOKS			
BAR SIZE	D	A OR G	D	A OR G	H	HOOK LENGTH	D	A OR G	J	HOOK LENGTH
#3	2"	4-1/2"	2"	4-1/2"	2-3/4"	4-1/4"	2"	5"	2-3/4"	3-3/4"
#4	2-1/2"	4-3/4"	2-1/2"	5"	3"	4-3/4"	2-1/2"	6-1/2"	3-1/2"	4-1/4"
#5	3-1/4"	6"	3-1/4"	6"	3-3/4"	6"	3-1/4"	9-1/2"	4-1/2"	4-3/4"
#6	4-1/2"	1'-0"	4-1/2"	8"	4-1/2"	7-3/4"	4-1/2"	8-1/4"	6"	6"
#7	5-1/4"	1'-2"	5-1/4"	9"	5-1/4"	8-3/4"	5-1/4"	9-3/4"	7"	7"
#8	6"	1'-4"	6"	10-1/2"	6"	10"	6"	11"	8"	8"

D = FINISHED INSIDE BEND DIAMETER (INCLUDES SPRING BACK), d = BAR DIAMETER, ACI 318 MINIMUM BEND DIAMETER: #3 - #8: 4d (6d USED IN TABLE), #9 - #8: 6d

2 (S-101) TYPICAL STANDARD HOOK DIMENSIONS
SCALE: NO SCALE

REVISIONS

CONSULTANT :

STATE OF ALASKA

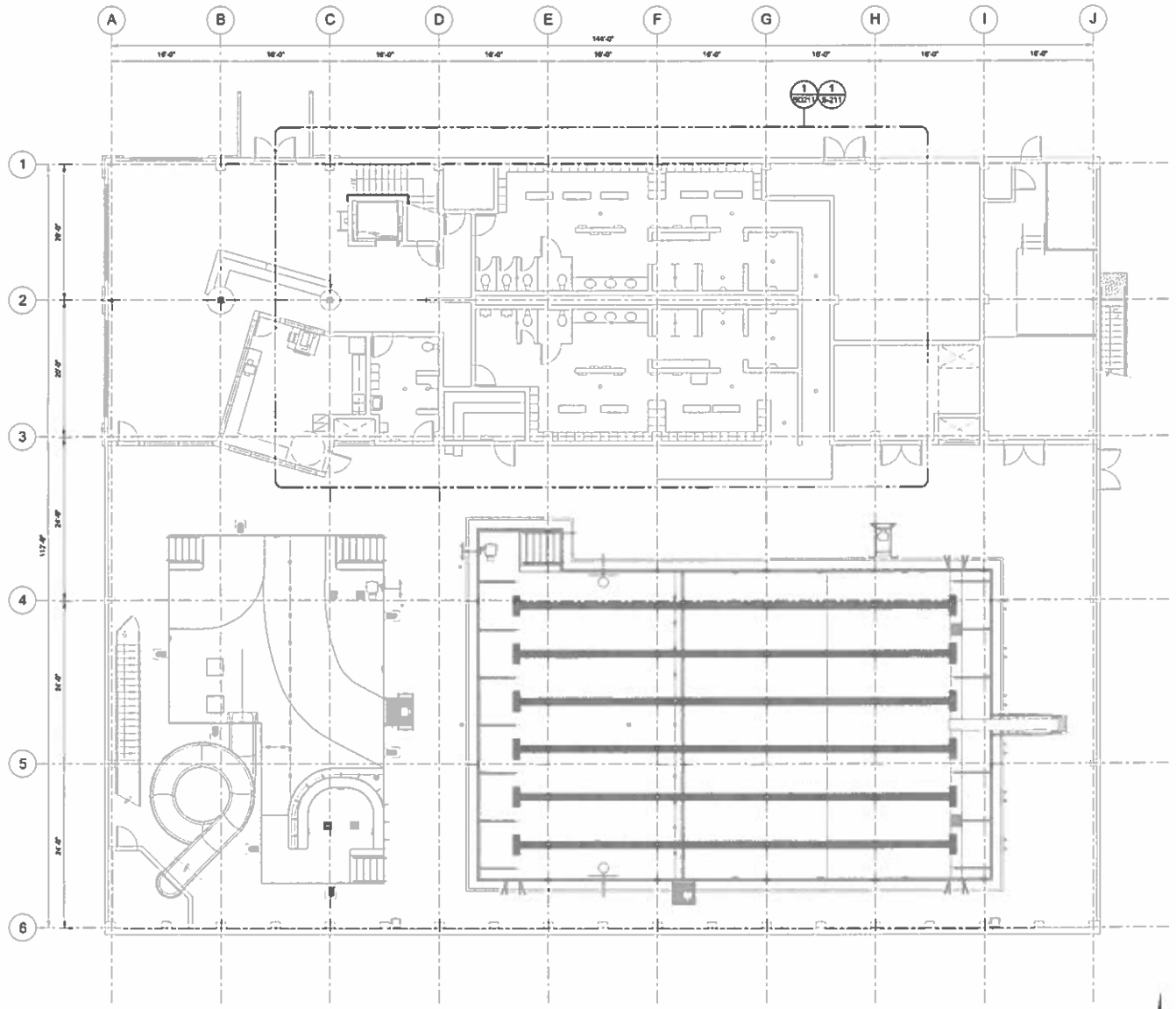
Juneau, AK
RESPEC

PROJECT :
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
TYPICAL DETAILS
BID DOCUMENTS

DESIGN	JCL
DRAWN	DAV
CHECKED	CDW
DATE	

PROJECT No.
10315.24002
SHEET NUMBER
S-101



SHEET NOTES

1. FIELD VERIFY EXISTING CONDITIONS.
2. MATERIAL EXCAVATED FROM BELOW THE FIRST FLOOR SLAB MAY NOT BE STORED ON THE FLOOR SLAB. AN APPROXIMATE LOCATION FOR STORAGE OF MATERIAL OUTSIDE OF THE BUILDING IS INDICATED. COORDINATE THE FINAL LOCATION WITH OWNER.

APPROXIMATE LOCATION OF STORAGE FOR EXCAVATED MATERIAL, SEE SHEET NOTE 2

1 S-201 **FIRST FLOOR FOUNDATION AND SLAB PLAN**

SCALE: 1/8" = 1'-0"

No.	Date	Item
REVISIONS		

CONSULTANT:

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE: REFERENCE PLAN

BID DOCUMENTS

DESIGN	JCL
DRAWN	CLM
CHECKED	CDW
DATE	07-09-2025

PROJECT No. 10315.24002

SHEET NUMBER S-201

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION. AFFECTING ALL LABELED SCALES

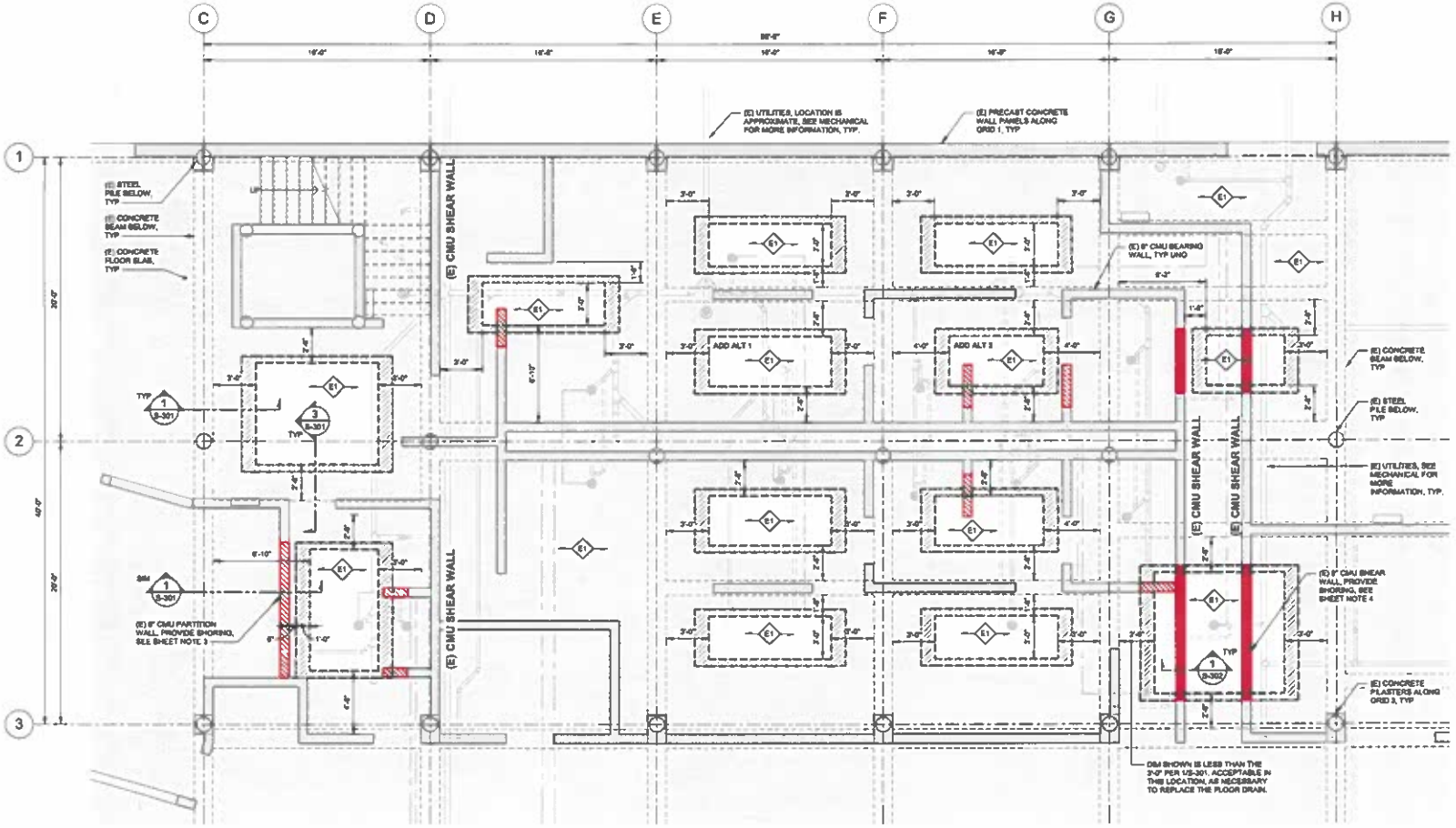
EXISTING FLOOR SCHEDULE	
TYPE	FLOOR DESCRIPTION
E1	EXISTING 8" ELEVATED CONCRETE SLAB REINFORCED WITH #5 BARS AT 6" OC, TOP AND BOTTOM, IN SPAN DIRECTION AND #4 BARS AT 1'-6" OC IN PERPENDICULAR DIRECTION, TOP AND BOTTOM.

SHORING AND DEMOLITION LEGEND

1. 6" CMU PARTITION WALL SHORING: (SEE SHEET NOTE 3)
2. 8" CMU SHEAR WALL SHORING: (SEE SHEET NOTE 4)
3. SAW CUT EXTENTS.
4. CHIP OUT EXTENTS (SEE SHEET NOTE 2)

SHEET NOTES

1. FIELD VERIFY EXISTING CONDITIONS.
2. CHIP OUT EXTENTS ARE THE MAXIMUM EXTENT OF DAMAGE TO THE EXISTING FLOOR SLAB ALLOWED IN ORDER TO EXPOSE THE EXISTING SLAB REBAR FOR CONNECTION TO NEW SLAB REBAR.
3. PROVIDE SHORING FOR ALL INDICATED EXISTING CMU WALLS AS NECESSARY TO PROTECT FROM DAMAGE.
   A. THE CMU WALLS MAY BE REMOVED AND REPLACED TO MATCH EXISTING AT THE CONTRACTOR'S OPTION. SEE REMOVAL AND REPAIR DETAILS ON SHEET S-302.
4. PROVIDE SHORING FOR ALL INDICATED EXISTING CMU SHEAR WALLS.
5. ADDITIVE ALTERNATES:
   A. ADD-ALT 1 AND 2 ARE AREAS OF THE FIRST FLOOR SLAB WHICH MAY NEED TO BE REMOVED TO REPAIR THE EXISTING UTILITIES, SEE MECHANICAL FOR MORE DETAILS.
6. DO NOT STORE EXCAVATED MATERIAL ON THE FIRST FLOOR BUILDING SLAB.



1 / SD211 FIRST FLOOR FOUNDATION AND SLAB PLAN - DEMOLITION

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

REVISIONS

CONSULTANT:

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE: PARTIAL FOUNDATION AND SLAB PLAN - DEMOLITION

BID DOCUMENTS

DESIGN JCL
DRAWN CLM
CHECKED ZDM
DATE 07/09/2025

PROJECT No. 10313.24002

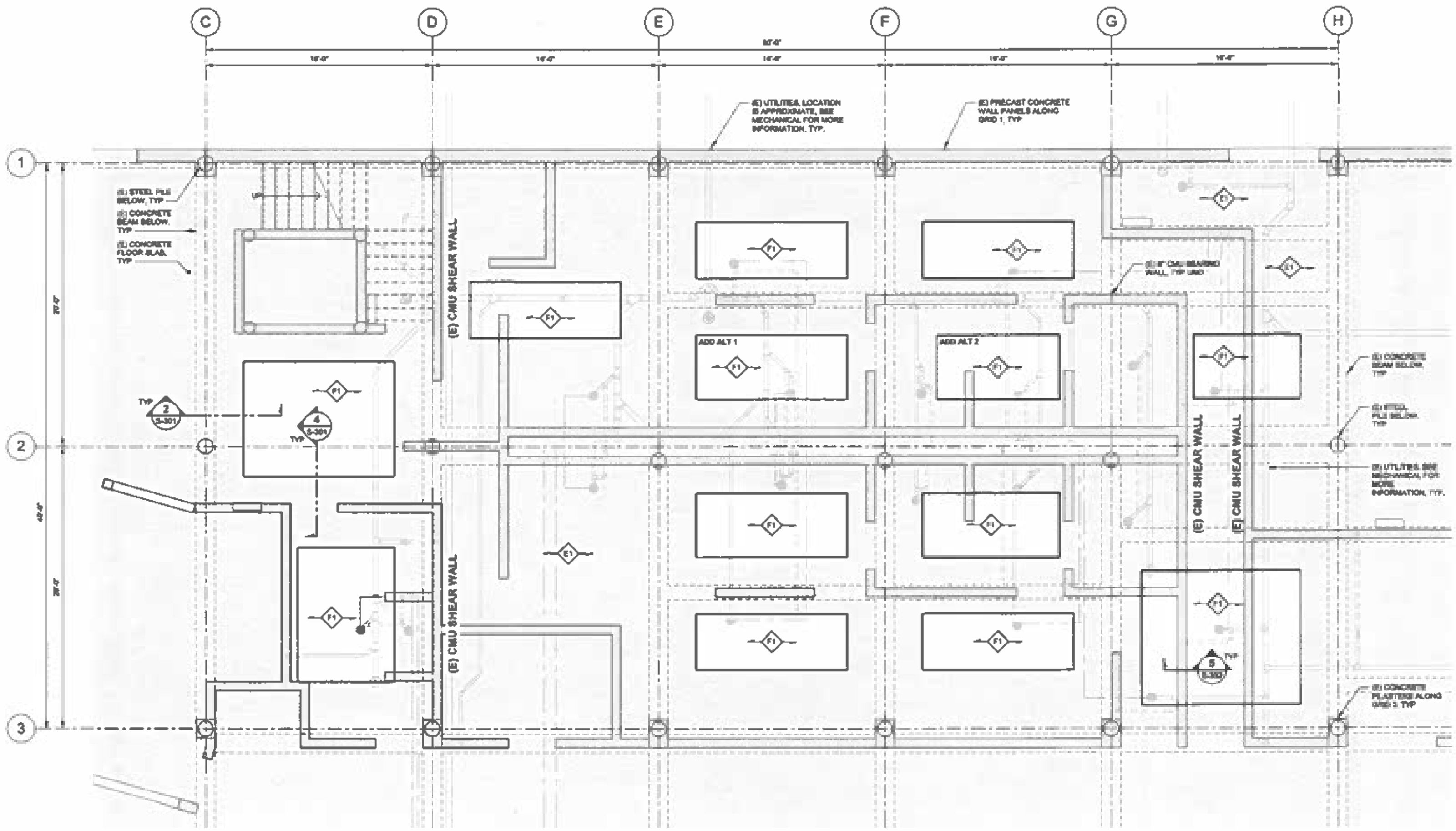
SHEET NUMBER SD211

FLOOR SCHEDULE

TYPE	FLOOR DESCRIPTION
E1	EXISTING 8" ELEVATED CONCRETE SLAB REINFORCED WITH #5 BARS AT 6" OC, TOP AND BOTTOM, IN SPAN DIRECTION AND #4 BARS AT 1'-6" OC IN PERPENDICULAR DIRECTION, TOP AND BOTTOM.
F1	8" ELEVATED CONCRETE SLAB REINFORCED WITH #5 BARS AT 6" OC, TOP AND BOTTOM, IN SPAN DIRECTION AND #4 BARS AT 1'-6" OC IN PERPENDICULAR DIRECTION, TOP AND BOTTOM.

SHEET NOTES

1. FIELD VERIFY EXISTING CONDITIONS.
2. DO NOT STORE EXCAVATED MATERIAL ON THE FIRST FLOOR BUILDING SLAB.
3. ADDITIVE ALTERNATES:
   A. ADD-ALT 1 AND 2 ARE AREAS WHICH MAY NEED TO BE REMOVED TO PROVIDE SUPPORT FOR THE EXISTING PIPING, SEE MECHANICAL FOR MORE DETAILS.



1 / S-211 **FIRST FLOOR FOUNDATION AND SLAB PLAN**
SCALE: 1/4" = 1'-0"

REVISIONS

CONSULTANT :

RESPEC
Juneau, AK

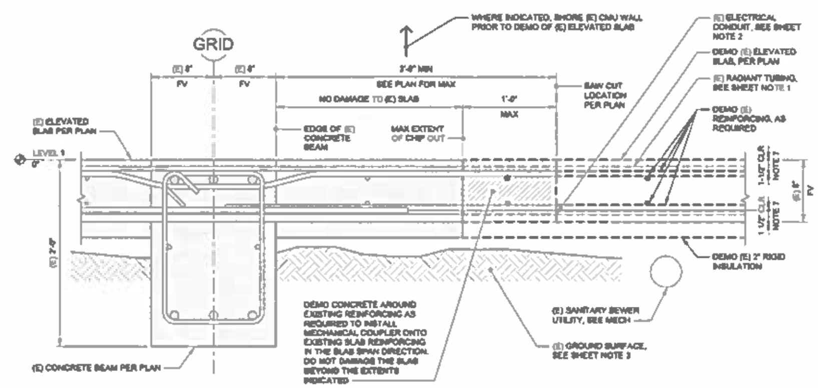
PROJECT : PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE : PARTIAL FOUNDATION AND SLAB PLAN

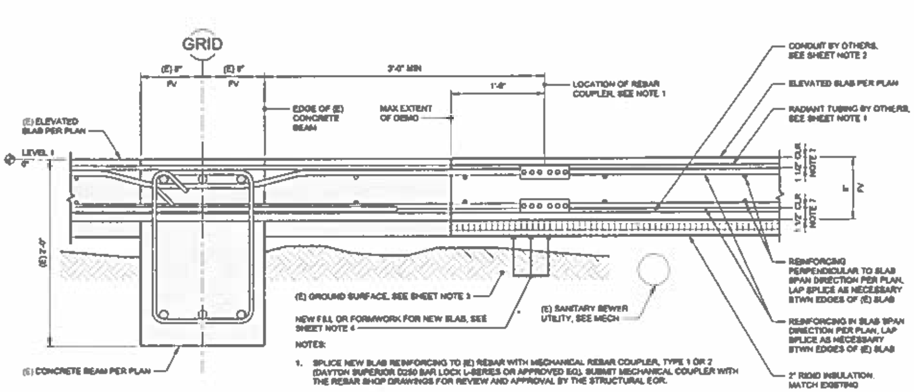
BID DOCUMENTS

PROJECT No. I0315.24002

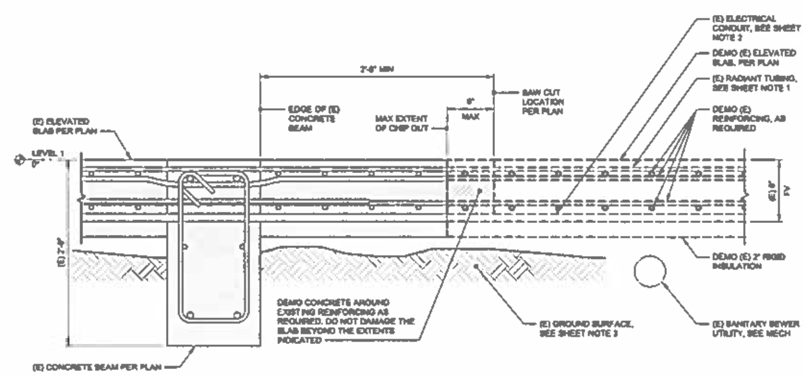
SHEET NUMBER S-211



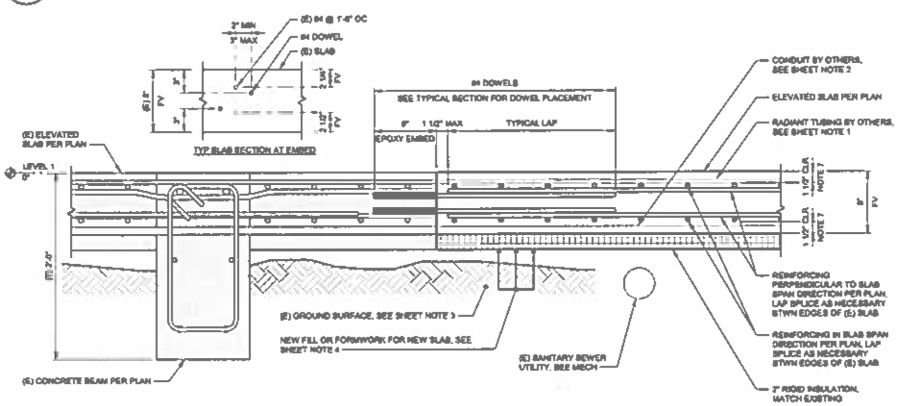
1 DEMOLITION SECTION - PARALLEL TO SLAB SPAN
S-301 SCALE: 1 1/2" = 1'-0"



2 REPAIR SECTION - PARALLEL TO SLAB SPAN
S-301 SCALE: 1 1/2" = 1'-0"



3 DEMOLITION SECTION - PERPENDICULAR TO SLAB SPAN
S-301 SCALE: 1 1/2" = 1'-0"



4 REPAIR SECTION - PERPENDICULAR TO SLAB SPAN
S-301 SCALE: 1 1/2" = 1'-0"

SHEET NOTES

1. RADIANT HEAT TUBING IS PRESENT WITHIN THE EXISTING FLOOR SLAB, SEE MECHANICAL FOR DEMO AND REPAIR DETAILS.
2. UTILITIES, INCLUDING BUT NOT LIMITED TO ELECTRICAL CONDUIT, ARE LOCATED IN THE EXISTING FLOOR SLAB. THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES DURING DEMO AND REPAIR OPERATIONS. SEE ELECTRICAL AND MECHANICAL FOR DEMO AND REPAIR DETAILS IF UTILITES ARE ENCOUNTERED.
3. THE EXISTING GROUND SUFRACE MAY VARY. THE GRADE BELOW THE FLOOR SLAB MAY HAVE SETTLED SINCE IT'S ORIGINAL CONSTRUCTION. THE CONTRACTOR MUST TAKE ALL MEASURES NECESSARY TO ACCOUNT FOR THE VARIABLE SURFACE OF THE EXISTING SUBGRADE.
4. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF FORMWORK TO SUPPORT THE NEW FLOOR SLAB.
5. AT EXISTING TO NEW SURFACES:
   A. ROUGHEN JOINT AND CLEAN ALL DEBRIS
   B. APPLY A BONDING AGENT BETWEEN ALL NEW AND EXISTING CONCRETE SURFACES, SIKA SIKADUR 32-HI-MOD OR APPROVED EQUAL.
6. EXISTING CMU WALLS NOT SHOWN IN TYPICAL DETAILS FOR CLARITY, SHEET S-301 ONLY.
7. MATCH EXISTING CLEAR DIMENSIONS, IF THE DIMENSION VARIES BY MORE THAN 1/2" FROM WHAT IS SHOWN, NOTIFY THE ENGINEER OF RECORD IN A TIMELY MANNER.
8. DO NOT STORE EXCAVATED MATERIAL ON THE FIRST FLOOR SLAB.

REVISIONS

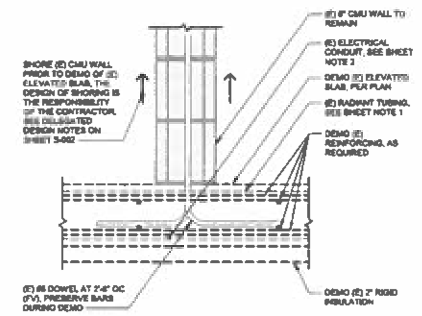
CONSULTANT :

RESPEC
Juneau, AK

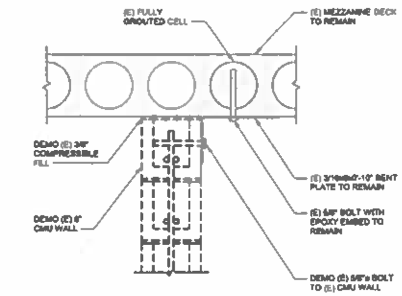
PROJECT :
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
FOUNDATION DETAILS
BID DOCUMENTS

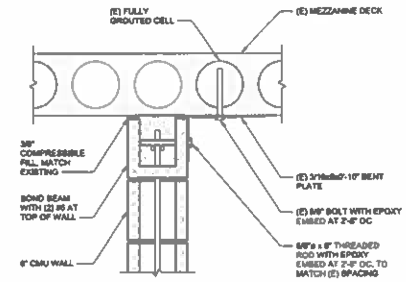
PROJECT No.
I0315.24002
SHEET NUMBER
S-301



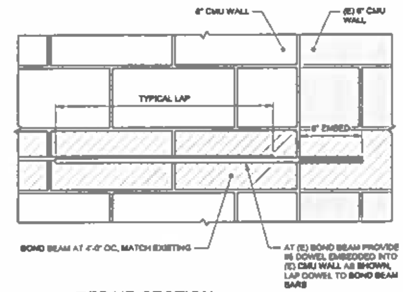
1 S-302 **DEMOLITION SECTION - CMU WALL SHORING**
SCALE: 1 1/2" = 1'-0"



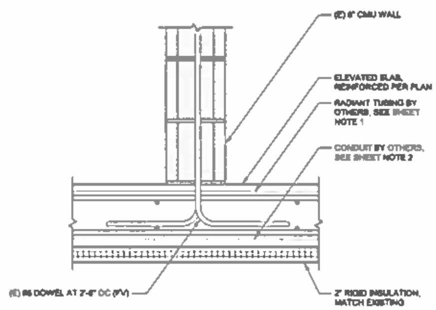
2 S-302 **DEMOLITION SECTION - CMU WALL TOP**
SCALE: 1 1/2" = 1'-0"



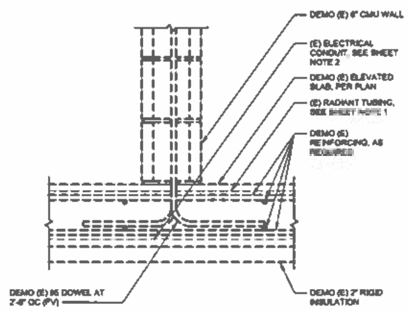
3 S-302 **REPAIR SECTION - CMU WALL TOP**
SCALE: 1 1/2" = 1'-0"



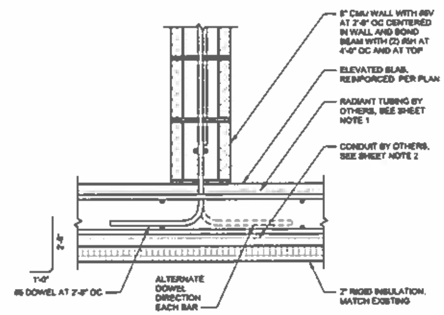
4 S-302 **REPAIR SECTION NEW TO EXISTING CMU WALL JOINT**
SCALE: 1 1/2" = 1'-0"



5 S-302 **REPAIR SECTION - CMU WALL SHORING**
SCALE: 1 1/2" = 1'-0"



6 S-302 **DEMOLITION SECTION - CMU WALL BASE**
SCALE: 1 1/2" = 1'-0"



7 S-302 **REPAIR SECTION - CMU WALL BASE**
SCALE: 1 1/2" = 1'-0"

SHEET NOTES

1. RADIANT HEAT TUBING IS PRESENT WITHIN THE EXISTING FLOOR SLAB, SEE MECHANICAL FOR DEMO AND REPAIR DETAILS.
2. UTILITIES, INCLUDING BUT NOT LIMITED TO ELECTRICAL CONDUIT, ARE LOCATED IN THE EXISTING FLOOR SLAB. THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES DURING DEMO AND REPAIR OPERATIONS. SEE ELECTRICAL AND MECHANICAL FOR DEMO AND REPAIR DETAILS IF UTILITES ARE ENCOUNTERED.
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   B. APPLY A BONDING AGENT BETWEEN ALL NEW AND EXISTING CONCRETE SURFACES, SIKA SIKADUR 32-HI-MOD OR APPROVED EQUAL.
6. EXISTING CMU WALLS NOT SHOWN IN TYPICAL DETAILS FOR CLARITY, SHEET S-301 ONLY.
7. MATCH EXISTING CLEAR DIMENSIONS, IF THE DIMENSION VARIES BY MORE THAN 1/2" FROM WHAT IS SHOWN, NOTIFY THE ENGINEER OF RECORD IN A TIMELY MANNER.
8. DO NOT STORE EXCAVATED MATERIAL ON THE FIRST FLOOR SLAB.

REVISIONS

CONSULTANT :

Juneau, AK
RESPEC
AECC163270

PROJECT :
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
FOUNDATION DETAILS
BID DOCUMENTS

PROJECT No. I0315.24002
SHEET NUMBER S-302

GENERAL

- DETAIL SYMBOL — DETAIL IDENTIFICATION; DRAWING ON WHICH DETAIL IS SHOWN (1 / M-101)
- SECTION SYMBOL — SECTION IDENTIFICATION; DRAWING ON WHICH SECTION IS SHOWN (A / M-101)
- MATCHLINE VIEW REFERENCE — DETAIL IDENTIFICATION; DRAWING ON WHICH CONTINUATION OF VIEW IS SHOWN (1/M-102A)
- ROOM NAME AND NUMBER DESIGNATION — ROOM NAME 101
- SHEET KEYNOTE — 1
- GENERAL SHEET NOTE — 3.
- POINT OF CONNECTION
- NORTH ARROW — N

CONSTRUCTION PHASE LINESTYLE

- TO BE DEMOLISHED OR RELOCATED
- EXISTING TO REMAIN
- NEW

MECHANICAL TAGS

- EQUIPMENT DESIGNATION, SEE EQUIPMENT SCHEDULE — EF-1 — EQUIPMENT DESIGNATION
- PLUMBING FIXTURE DESIGNATION, SEE FIXTURE CONNECTION SCHEDULE — P-01 — FIXTURE DESIGNATION

CODE NOTES

1. ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH APPLICABLE BUILDING CODES INCLUDING THE 2021 INTERNATIONAL BUILDING CODES, 2021 INTERNATIONAL MECHANICAL CODE, 2018 UNIFORM PLUMBING CODE, NATIONAL ELECTRICAL CODE, STATE OF ALASKA, AND CITY OF PETERSBURG.
2. INSTALLATION OF PLUMBING SYSTEMS SHALL BE IN ACCORDANCE WITH CROSS CONNECTIONS REQUIREMENTS OF CHAPTER 6 OF THE UNIFORM PLUMBING CODE AND LOCAL REQUIREMENTS.

GENERAL CONSTRUCTION NOTES

1. ALL PLUMBING CONSTRUCTION SHALL CONFORM TO PLUMBING & DRAINAGE INSTITUTE UNIVERSAL PLUMBING CODE STANDARDS.
2. PROVIDE TESTING AND BALANCING OF RADIANT HEATING SYSTEM AS INDICATED. MATCH EXISTING FLOW RATES. PROVIDE FIELD REPORT OF MANIFOLD ZONE FLOWS.
3. "EXHIBIT" SHEETS (EX-SERIES SHEETS) CONTAINING RECORD INFORMATION ARE PROVIDED FOR REFERENCE. FIELD VERIFY AS REQUIRED.

PIPE FITTINGS & VALVES

- ELBOW, TURNED DOWN
- ELBOW, TURNED UP
- TEE, OUTLET DOWN
- TEE, OUTLET UP
- FLOW DIRECTION
- CONCENTRIC REDUCER
- ISOLATION VALVE
- BALL VALVE
- PRESSURE REDUCING VALVE
- CHECK VALVE
- STRAINER
- STRAINER W/ BLOWDOWN
- PRESSURE TEMPERATURE TAP ("PETE'S PLUG")
- AUTOMATIC FLOW CONTROL VALVE
- BALANCE VALVE
- RELIEF OR SAFETY VALVE
- DRAIN ISOLATION VALVE AND HOSE ADAPTOR
- DRAIN ISOLATION VALVE AND CAP
- UNION
- FLANGE CONNECTION
- PIPE ANCHOR
- PIPE GUIDE
- METER
- THERMOMETER
- PRESSURE GAUGE W/ ISOLATION VALVE
- PUMP - CIRC
- PUMP - INLINE

ABBREVIATIONS

ACFM	ACTUAL CUBIC FEET PER MINUTE	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MBH	THOUSAND BTU's PER HOUR
AHAP	AS HIGH AS POSSIBLE	MIN	MINIMUM
APPROX	APPROXIMATE	MISC	MISCELLANEOUS
BTU	BRITISH THERMAL UNIT	NC	NORMALLY CLOSED
CFM	CUBIC FEET PER MINUTE	NO	NORMALLY OPEN
CIRC	CIRCULATION	NO.	NUMBER
CLNG	CEILING	OC	ON CENTER
CONT	CONTINUATION, CONTINUED	P	PUMP
CP	CIRCULATING PUMP	PD	PRESSURE DROP
CU	COPPER	PDI	PLUMBING & DRAINAGE INSTITUTE
CW	COLD WATER	POC	POINT OF CONNECTION
(D)	DEMOLISH	PSI	POUNDS PER SQUARE INCH
DIA	DIAMETER	RL	RAINLEADER
DN	DOWN	RZ	RADIANT ZONE
(E)	EXISTING	SA	SUPPLY AIR
ENT	ENTERING	SCH	SCHEDULE
ESP	EXTERNAL STATIC PRESSURE	SQFT	SQUARE FEET
FCO	FLOOR CLEANOUT	SS	STAINLESS STEEL
FD	FLOOR DRAIN	TEMP	TEMPERATURE
FT	FEET	TP	TRAP PRIMER
GAL	GALLONS	TYP	TYPICAL
GALV	GALVANIZED	UL	UNDERWRITER'S LABORATORY
GPM	GALLONS PER MINUTE	UON	UNLESS OTHERWISE NOTED
HW	HOT WATER	VTR	VENT THROUGH ROOF
HWC	HOT WATER CIRCULATION	VR	VENT RISER
HWR	HEATING WATER RETURN	W	WASTE
HWS	HEATING WATER SUPPLY	W/	WITH
HZ	HERTZ	W.C.	WATER COLUMN
ID	INSIDE DIAMETER	WCO	WALL CLEANOUT
IN	INCHES		
LAV	LAVATORY		
LF	LINEAL FEET		
LVG	LEAVING		

REVISIONS

No.	Date	[illegible]

CONSULTANT :

Juneau, AK
RESPEC
AECC163270

PROJECT :
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
MECHANICAL SYMBOL LEGEND & ABBREVIATIONS
BID DOCUMENTS

DESIGN	NRS
DRAWN	TKS
CHECKED	DM
DATE	[illegible]

PROJECT No.
I0315.24002
SHEET NUMBER
M-001

PART 1 - GENERAL

1. DESCRIPTION:
   A. PROVIDE LABOR, MATERIALS, EQUIPMENT, SUPERVISION OF LABOR, AND PERFORMANCE OF OPERATIONS REQUIRED TO INSTALL MECHANICAL AND PLUMBING SYSTEMS AS DEFINED HEREIN ON THE DRAWINGS AND GENERAL SPECIFICATIONS.

2. CODE:
   A. COMPLETE WORK IN ACCORDANCE WITH THE 2021 EDITIONS OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL FUEL-GAS CODE, AND NATIONAL ELECTRICAL CODE (NEC) AND 2018 EDITIONS OF THE UNIFORM PLUMBING CODE (UPC), AS AMENDED BY THE STATE OF ALASKA, THEY CITY OF PETERSBURG, AND STANDARD APPROVED INDUSTRY PRACTICES.

3. DRAWINGS:
   A. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW OFFSETS OR EXACT LOCATIONS OF PIPING UNLESS DIMENSIONED.
   B. REVIEW DRAWINGS AND SPECIFICATIONS FOR FEATURES AND EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION.
   C. BRING QUESTIONABLE OR CONFLICTING ITEMS TO THE IMMEDIATE ATTENTION OF THE OWNER'S REPRESENTATIVE.
   D. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS, OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.

4. COORDINATION:
   A. COORDINATE WORK UNDER THIS DIVISION WITH WORK OF OTHER TRADES TO AVOID CONFLICTS, ERRORS, AND DELAYS. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION.

5. EQUIPMENT SUBSTITUTIONS:
   A. SCHEDULED BASIS OF DESIGN EQUIPMENT IS REPRESENTATIVE OF THE STANDARD OF QUALITY AND PERFORMANCE REQUIRED.
   B. SUBSTITUTIONS WILL BE CONSIDERED IF THE CONTRACTOR DEMONSTRATES, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE, THAT THE SUBSTITUTES ARE OF EQUAL OR BETTER QUALITY.

6. PRODUCTS:
   A. PROVIDE PRODUCTS AND MATERIALS NEW AND UNUSED, UNLESS OTHERWISE NOTED.
   B. OBTAIN OWNER'S APPROVAL OF PRODUCTS AND MATERIALS PRIOR TO ORDERING OR INSTALLING PARTS OF SYSTEMS.

7. SUBMITTALS:
   A. PROVIDE PRODUCT SUBMITTALS FOR MATERIALS AND EQUIPMENT SHOWN ON THE DRAWINGS, DESCRIBED IN THE SPECIFICATIONS, AND REQUIRED FOR THE COMPLETION OF THE PROJECT.
   B. INCLUDE DIMENSIONS, WEIGHTS, CATALOG NUMBERS, WIRING DIAGRAMS, ROUGH-IN DIMENSIONS, AND PERFORMANCE DATA FOR MATERIAL AND EQUIPMENT.
   C. HIGHLIGHT DEVIATIONS FROM THESE SPECIFICATIONS OR BASIS OF DESIGN. INDEX AND IDENTIFY MATERIALS AND EQUIPMENT BY ITEM, NAME, OR DESIGNATION USED ON THE DRAWINGS.
   D. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT AND DOES NOT RELIEVE THE CONTRACTOR FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SUBMITTAL REVIEW DOES NOT INCLUDE CHECKING FOR QUANTITY, DIMENSION, OR FOR PROPER OPERATION. PROVIDE SUBMITTALS ELECTRONICALLY IN PDF FORMAT WITH SECTIONS LABELED AND BOOKMARKED IN ALIGNMENT WITH SPECIFICATIONS.

8. RECORD DRAWINGS:
   A. MAINTAIN A SET OF RECORD DRAWINGS ON THE CONSTRUCTION SITE. RECORD CHANGES ON FLOOR PLANS AND DIAGRAMS AS WORK IS COMPLETED.

PART 2 - PRODUCTS

22 05 29 - HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT

1. MSS SP-58 COMPLIANT.
2. PIPE SUPPORT: 5/8" HILTI KWIK BOLT-TZ2 SS304 OR 316 WITH AN ATR COUPLER.
   A. PROVIDE STAINLESS STEEL SUPPORT FROM SLAB ABOVE.
   B. PROVIDE CONCRETE INSERTS IN NEW SLAB.
   C. PROVIDE IMPACT SCREW TYPE IN EXISTING SLAB.
3. PIPE HANGER TYPE: SPLIT RING.
   A. STAINLESS STEEL OR OTHER APPROVED CORROSION RESISTANT MATERIAL.

22 11 00 - FACILITY WATER DISTRIBUTION

1. TRAP PRIMER PIPING:
   A. CROSSLINKED POLYETHYLENE (PEX) PIPING (INDIVIDUAL FIXTURES ONLY):
      a. PROVIDE PIPING MANUFACTURED IN ACCORDANCE WITH ASTM F876 AND ASTM F877; BY PEX-A OR ENGEL METHOD; WITH FIBER LAYER (FASER) TO RESTRICT THERMAL EXPANSION, MATCH EXISTING.
      b. PROVIDE ASTMF1960 TYPE PEX-A COLD EXPANSION FITTINGS.
      c. PROVIDE ASSEMBLY CONSISTING OF PROPEX INSERT AND CORRESPONDING PROPEX RING.
      d. PROVIDE TYPE L COPPER BODY WITH UNS 3600 SERIES BRASS PROPEX OUTLET CONNECTIONS MANIFOLDS.

22 13 00 - FACILITY SANITARY SEWER

A. SANITARY WASTE AND VENT PIPING:
B. PVC PIPE: ASTM D2665 OR ASTM D303, SCHEDULE 40.
   a. FITTINGS: PVC.
   b. JOINTS: ASTM D2855, SOLVENT WELD WITH ASTM D2564 SOLVENT CEMENT.

22 13 19.13 - SANITARY DRAINS

1. FLOOR DRAIN, FD-1:
   A. PROVIDE OUTLET SAME AS CONNECTED PIPING. CAULKED OUTLET CONNECTION FOR UNDERGROUND OTHERWISE SCREWED OR CAULKED AS REQUIRED. SECURED BY COUNTER SUNK SCREWS. ANSI A1121.1; GALVANIZED CAST IRON TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEEP HOLES, REVERSIBLE CLAMPING COLLAR, AND ROUND, ADJUSTABLE POLISHED-BRONZE 6"X6" INCH STRAINER WITH SQUARE HOLES. WITH PRIMING LINE CONNECTION. BASIS OF DESIGN IS ZURN ZN-Z415S-G-P. PROVIDE TRAP PRIMER TAILPIECE ADAPTER.
   B. FLOOR DRAIN STRAINER TOP: SEE ABOVE.
   C. FLOOR CLEANOUT COVER: POLISHED BRONZE.
   D. CONTRACTOR TO VERIFY COMPATABILITY ONSITE.

23 83 00 - RADIANT HEATING FLOOR SYSTEMS

1. RADIANT FLOOR HEATING SYSTEM:
   A. SUPPLY 1/2-INCH DIAMETER UPONOR (WIRSBO) OR PEX COMPOSITE POLYETHYLENE PIPE, EXISTING TUBING IS WIRSBO HEPEX 1/2-INCH DIAMETER:
      a. LAYERED HIGH DENSITY CROSS-LINKED POLYETHYLENE,125 PSIG OPERATING PRESSURE AT MAXIMUM 180 DEGREES F.
      b. JOINTS: ENGINEERED PLASTIC COUPLING FOR USE IN JOINING HEPEX TUBING. 210 DEGREES F MAX OPERATING TEMPERATURE.

PART 3 – EXECUTION

1. GENERAL:
   A. INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND PER INDUSTRY STANDARDS.
   B. PROVIDE CLEARANCE IN HANGERS AND FROM STRUCTURE AND OTHER EQUIPMENT FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS. EXAMINE AREAS TO RECEIVE EQUIPMENT FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
   C. EXAMINE ROUGHING-IN FOR PIPING AND ELECTRICAL CONNECTIONS TO VERIFY ACTUAL LOCATIONS BEFORE EQUIPMENT INSTALLATION.
   D. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

2. PIPING, VALVES, AND SPECIALTIES:
   A. PREPARE AND MAKE FUSION JOINTS ACCORDING TO MANUFACTURER'S REQUIREMENTS USING APPLICABLE TOOLS.
   B. INSTALL SPECIALTIES IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.

3. DRAINAGE PIPING:
   A. INSTALL SOIL, WASTE, AND FLOOR DRAINAGE PIPING RUN AS SHOWN AND WITH GRADES NOT LESS THAN 1/4 INCH PER 1 FOOT. PITCH VENT PIPING 1/4 INCH PER 10 FEET.
   B. SECURE HANGER TO CONCRETE SLAB ABOVE. COORDINATE LOCATION WITH REBAR AND RADIANT TUBING.

4. UNDERGROUND PIPING, VALVES, AND SPECIALTIES:
   A. INSTALL PER MANUFACTURER WRITTEN INSTRUCTION WHERE SPECIFIC INSTALLATION IS NOT INDICATED.
   B. INSTALL BEGINNING AT LOW POINT OF EACH SYSTEM.
   C. INSTALL TRUE TO GRADES AND ALIGNMENTS INDICATED WITH UNBROKEN CONTINUITY OF INVERT.
   D. INSTALL REQUIRED GASKETS ACCORDING TO MANUFACTURER WRITTEN INSTRUCTION FOR USE OF LUBRICANTS, CEMENTS, AND OTHER INSTALLING REQUIREMENTS.
   E. INSTALL AT MINIMUM SLOPES UNLESS OTHERWISE NOTED AND IN ACCORDANCE WITH ASTM D2321.

5. PIPING SYSTEM TEST AND START-UP:
   A. TEST AND CLEAN DOMESTIC WATER HEATING SYSTEMS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE AND UNIFORM PLUMBING CODE.
   B. TEST PIPING SYSTEMS IN THE PRESENCE OF THE OWNER OR OWNER'S REPRESENTATIVE.
   C. PROTECT EQUIPMENT, GAGES, CONTROLS, AND THERMOMETER WELLS DURING TESTS.
   D. TEST DRAINAGE, WASTE, AND VENT PIPING HYDROSTATICALLY BY FILLING PIPING WITH WATER TO THE HIGHEST POINT FOR A MINIMUM OF ONE HOUR.
   E. SYSTEMS SHALL REMAIN TIGHT WITHOUT LEAKS, DISPLACEMENT, OR STRAINING UNDER TESTING CONDITIONS. CORRECT DEFICIENT WORK RESULTING IN LEAKS, DISPLACEMENT, OR STRAINING AND RETEST THE SYSTEM UNTIL NO DEFICIENCIES REMAIN.

6. PENETRATIONS:
   A. SEAL WALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, AND CEILINGS WITH FIRE RATED SEALANT. INSTALL COVER PLATE WHERE EXPOSED.
   B. INSTALL INSULATED PIPES, DUCTS, OR CONDUIT WITH INSULATION BUTTED TO SURFACE.
   C. SEAL UNINSULATED PIPES, DUCTS, OR CONDUIT WITH SILICONE OR CEMENT.
   D. FLASH AND SEAL PENETRATIONS THROUGH ROOF DECK WATERTIGHT.

7. RADIANT PIPING
   A. SEE SHEETS MD111 AND M111.
   B. ISOLATE AND DRAIN RESPECTIVE RADIANT MANIFOLD AND TUBING.
   C. AFTER SAW CUTTING OF SLAB COORDINATE WITH GENERAL CONTRACTOR TO CHIP AWAY CONCRETE TO EXPOSE ENOUGH EXISTING RADIANT TUBING FOR CONNECTION. CLEAN TUBING AND PREP FOR JOINING TO NEW RADIANT TUBING WITH APPROVED COUPLINGS.
   D. PROVIDE PRESSURE TESTING OF RADIANT TUBING. MAINTAIN 5 PSI DURING CONCRETE POURING.

No.	Date	Item

REVISIONS

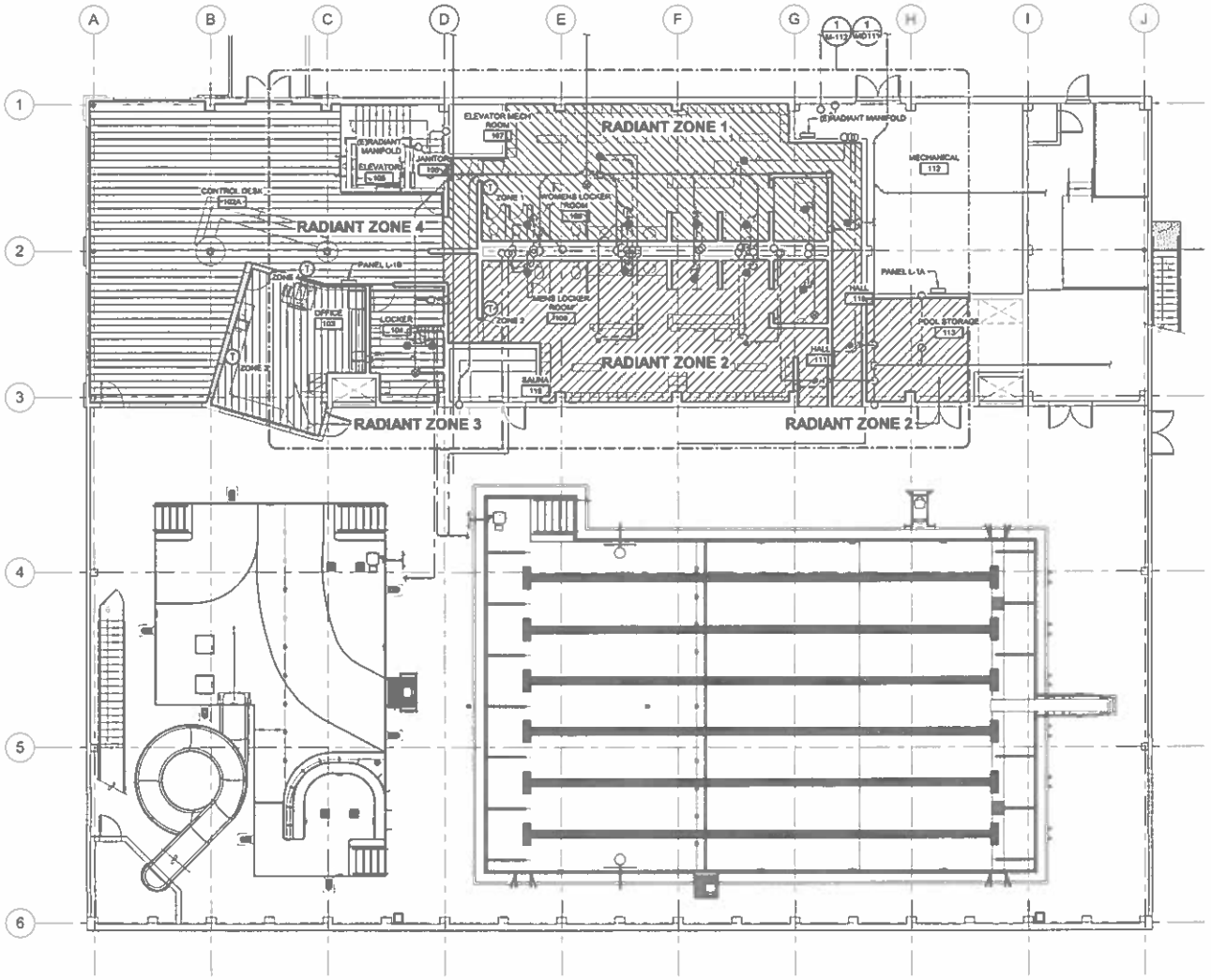
CONSULTANT :

Juneau, AK
RESPEC

PROJECT :
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
SPECIFICATIONS
BID DOCUMENTS

PROJECT No. 0315.24002
SHEET NUMBER
M-002



1 / M-111 **OVERALL PLAN - PLUMBING**

SCALE: 1/8" = 1'-0"

SHEET NOTES

1. EXISTING RADIANT TUBING IS WIRSBO HEPEX 1/2" TUBING, INSTALLED 12" OC. SHOP DRAWINGS OF THE TUBING ARE NOT AVAILABLE.

RADIANT PIPING RECONNECTION INSTRUCTIONS

1. OPEN THE MANIFOLD DRAIN VALVES TO RELEASE WATER FROM THE ZONES AS REQUIRED. FLUSH/PURGE THE TUBING SYSTEM OF WATER WITH COMPRESSED AIR. CHECK FOR DRAINAGE: MAKE SURE NO WATER IS LEFT IN THE TUBING. YOU WANT TO AVOID ANY LEFTOVER WATER DURING REPAIRS.
2. REMOVAL OF RADIANT TUBING: COORDINATE WITH GENERAL CONTRACTOR DURING CONCRETE SLAB REMOVAL FOR TUBING REMOVAL. SAWCUT SLAB FOR INITIAL DEMOLITION, IN AREA SHOWN. REMOVE CONCRETE, REBAR, AND TUBING. CAREFULLY CHIP CONCRETE OUT AROUND TUBING FOR APPROXIMATELY 8-12" FURTHER FROM SAW CUT FOR RECONNECTION TO EXISTING TUBING. SEE DETAIL 2 ON SHEET M-511.
3. USING REPAIR FITTINGS: IF THE LEAK IS AT A JOINT, CUT THE PEX TUBING ON EITHER SIDE OF THE CONNECTION. USE AN APPROVED PEX COUPLING TO CONNECT THE TUBING SECTIONS.
4. REPLACE DAMAGED OR REMOVED SECTIONS: IF THE TUBING SHOWS SIGNIFICANT WEAR OR DAMAGE, CUT OUT THE AFFECTED SECTION AND REPLACE IT WITH A NEW PIECE OF PEX TUBING.
5. TEST THE SYSTEM: ONCE REPAIRS ARE COMPLETE, REFILL THE SYSTEM WITH WATER, CHECK FOR LEAKS, AND ALLOW THE SYSTEM TO RETURN TO OPERATING TEMPERATURE. MONITOR THE AREA FOR SIGNS OF ISSUES.
6. MAINTAIN 3-6 PSI PRESSURE AND CONTINUOUSLY MONITOR DURING CONCRETE SLAB POUR. REPAIR TUBING AS NEEDED. PROVIDE FIELD REPORT OF TEST PRESSURES.
7. VERIFY PROPER OPERATION OF RADIANT TUBING HEATING SYSTEM AFTER COMPLETION AND CONTROL FROM ROOM THERMOSTAT.

REVISIONS

CONSULTANT :

Juneau, AK

PROJECT :
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
OVERALL PLAN - RADIANT TUBING
BID DOCUMENTS

DESIGN
DRAWN
CHECKED
DATE

PROJECT No.
10315.24002

SHEET NUMBER
M-111

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

RADIANT PIPING RECONNECTION INSTRUCTIONS

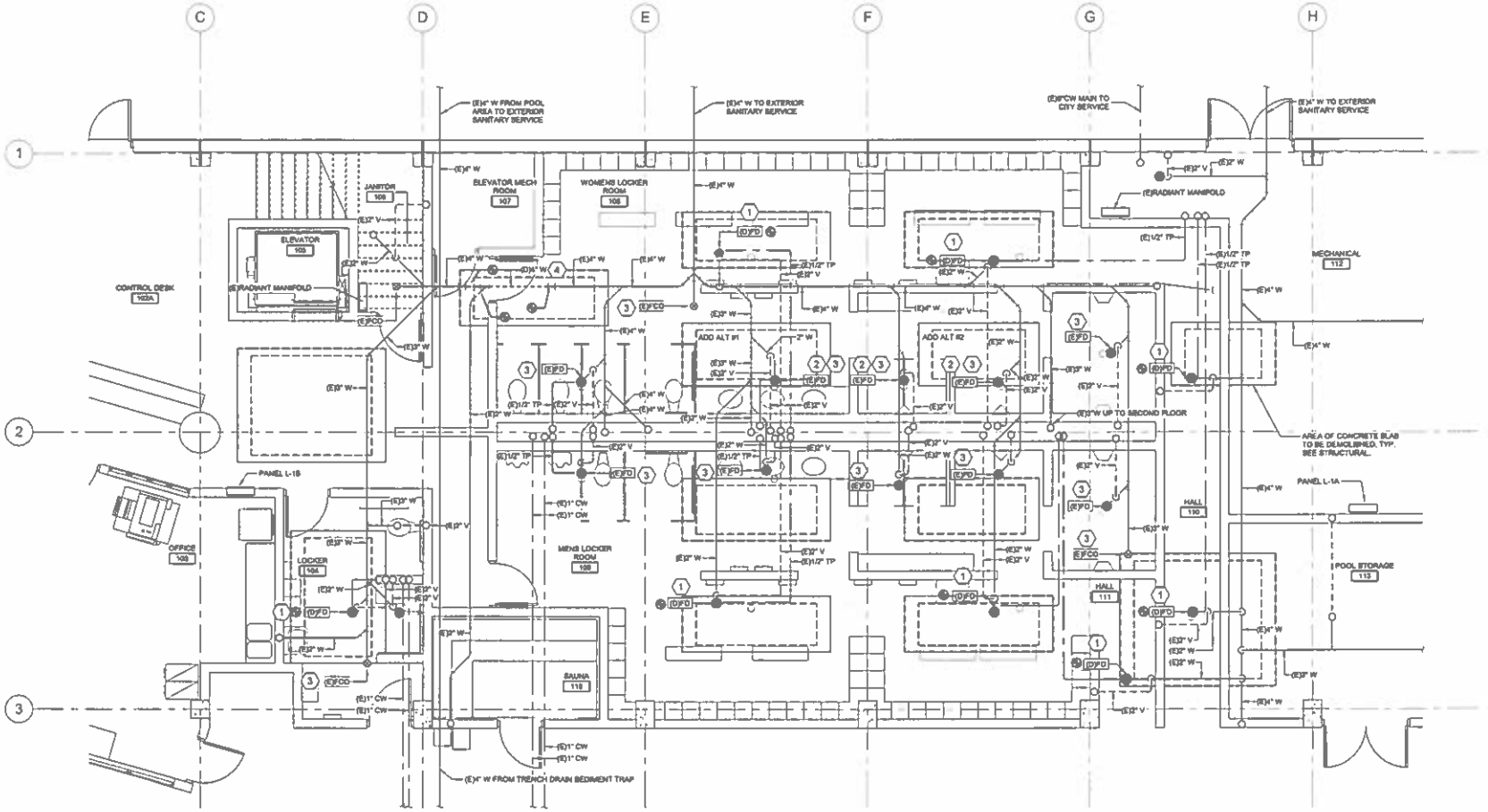
1. OPEN THE MANIFOLD DRAIN VALVES TO RELEASE WATER FROM THE ZONES AS REQUIRED. FLUSH/PURGE THE TUBING SYSTEM OF WATER WITH COMPRESSED AIR. CHECK FOR DRAINAGE: MAKE SURE NO WATER IS LEFT IN THE TUBING. YOU WANT TO AVOID ANY LEFTOVER WATER DURING REPAIRS.
2. REMOVAL OF RADIANT TUBING: COORDINATE WITH GENERAL CONTRACTOR DURING CONCRETE SLAB REMOVAL FOR TUBING REMOVAL. SAWCUT SLAB FOR INITIAL DEMOLITION, IN AREA SHOWN. REMOVE CONCRETE, REBAR, AND TUBING. CAREFULLY CHIP CONCRETEOUT AROUND TUBING FOR APPROXIMATELY 6-12" FURTHER FROM SAW CUT FOR RECONNECTION TO EXISTING TUBING. SEE DETAILS ON SHEET M-511.
3. USING REPAIR FITTINGS: IF THE LEAK IS AT A JOINT, CUT THE PEX TUBING ON EITHER SIDE OF THE CONNECTION. USE AN APPROVED PEX COUPLING TO CONNECT THE TUBING SECTIONS.
4. REPLACE DAMAGED OR REMOVED SECTIONS: IF THE TUBING SHOWS SIGNIFICANT WEAR OR DAMAGE, CUT OUT THE AFFECTED SECTION AND REPLACE IT WITH A NEW PIECE OF PEX TUBING.
5. TEST THE SYSTEM. ONCE REPAIRS ARE COMPLETE, REFILL THE SYSTEM WITH WATER, CHECK FOR LEAKS, AND ALLOW THE SYSTEM TO RETURN TO OPERATING TEMPERATURE. MONITOR THE AREA FOR SIGNS OF ISSUES.
6. MAINTAIN 3-5 PSI PRESSURE AND CONTINUOUSLY MONITOR DURING CONCRETE SLAB POUR. REPAIR TUBING AS NEEDED. PROVIDE FIELD REPORT OF TEST PRESSURES.
7. VERIFY PROPER OPERATION OF RADIANT TUBING HEATING SYSTEM AFTER COMPLETION AND CONTROL FROM ROOM THERMOSTAT.

SHEET NOTES

1. DEMO CONCRETE SLAB PER STRUCTURAL PLANS AS NECESSARY FOR WORK. EXCAVATE, BACKFILL, AND REPAIR CONCRETE SLAB PER STRUCTURAL DRAWINGS.
2. CONTRACTOR RESPONSIBLE FOR LOCATING EXISTING UNDERGROUND PIPING AND UNDERGROUND ELECTRIC. VERIFY INVERT ELEVATIONS OF PIPING AND CONNECTION POINTS PRIOR TO DEMOLITION.
3. UNDERGROUND PIPING IS EXISTING EXCEPT WHERE SHOWN AS DEMOLISHED OR NEW.
4. RADIANT TUBING SHOP DRAWINGS ARE NOT AVAILABLE. EXISTING RADIANT TUBING IS 1/2-INCH DIAMETER AND 12" ON CENTER.
5. ELECTRICAL CIRCUITING TO POWER OUTLETS IS LOCATED UNDERGROUND IN PLASTIC CONDUIT LIKELY AT BOTTOM OF SLAB. SEE ELECTRICAL REFERENCE DRAWINGS FOR CIRCUIT IDENTIFICATION. IDENTIFY AND DEENERGIZE RESPECTIVE CIRCUITS PRIOR TO DEMOLITION OF SLAB.
6. CONTRACTOR IS TO BE PREPARED TO REPAIR/REPLACE ANY DMAGED CONDUITS. THERE ARE NO AS-BUILT RECORDS OF ELECTRICAL ROUTES.

SHEET KEYNOTES (#)

1. DEMO FLOOR DRAIN IN SLAB.
2. ALTERNATE WORK: DEMOLISH IF NECESSARY TO COMPLETE BASE WORK.
3. WHERE DEMO OF CONCRETE NOT REQUIRED AND (E) DRAINS AND CLEANOUTS LEFT IN PLACE, PROVIDE SLOPED LEVELING COMPOUND PER DETAIL 2/A-111. REPLACE FLOOR DRAIN GRATE AND CLEAN OUT COVERS LEVEL WITH FLOOR.
4. DEMO SECTION OF WASTE PIPE AND CLEAR OUT GRAVEL BLOCKAGE.



1 MD111 **FIRST FLOOR PLAN - PLUMBING - DEMOLITION**

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

No.	Date	By
REVISIONS		

CONSULTANT :

PROJECT : PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS — PETERSBURG, ALASKA 99833

SHEET TITLE : FIRST FLOOR PLAN - PLUMBING - DEMOLITION — BID DOCUMENTS

DRAWN	NRS
DRAWN	TRS
CHECKED	DM
DATE	07/09/2025

PROJECT No. 0315.24002

SHEET NUMBER MD111

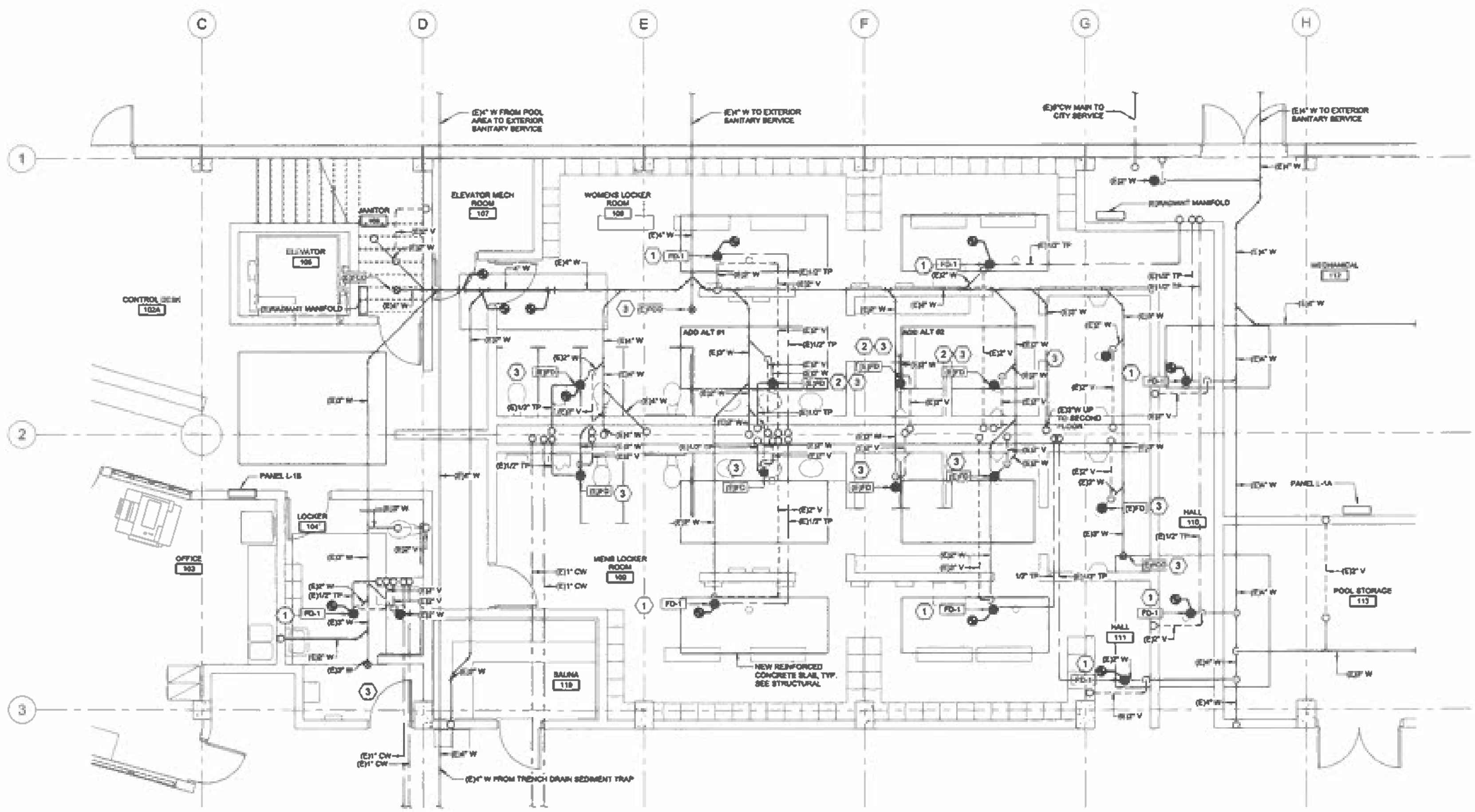
IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES

SHEET NOTES

1. REPLACE UNDERGROUND WASTE, VENT, AND TRAP PRIMER PIPING AS NECESSARY IN ORDER TO CONNECT TO EXISTING FLOOR DRAINS. LOCATION OF UNDERGROUND PIPING SHOWN IS NOT AS-BUILT BUT IS TAKEN FROM ORIGINAL CONSTRUCTION DOCUMENTS AND SUBSEQUENT RECENT SITE PICTURES.
2. SEE SHEET M-111 FOR RELATED WORK REPLACING AND REPAIRING RADIANT TUBING IN CUT SLAB LOCATIONS.
3. PRESSURE TEST AND BALANCE MODIFIED RADIANT HEATING SYSTEM AS NEEDED FOR NEW WORK.

SHEET KEYNOTES (#)

1. REPLACE FLOOR DRAIN CONNECT TO EXISTING WASTE PIPING. SECURE EXISTING FLOOR DRAIN WASTE PIPING TO SLAB. SEE DETAIL ON SHEET M-001.
2. ALTERNATE WORK. REPLACE IF NECESSARY TO COMPLETE BASE BID WORK.
3. WHERE DEMO OF CONCRETE NOT REQUIRED AND (E) DRAINS AND CLEANOUTS LEFT IN PLACE, PROVIDE SLOPED LEVELING COMPOUND PER DETAIL 2/A-111. REPLACE FLOOR DRAIN GRATE AND CLEAN OUT COVERS LEVEL WITH FLOOR.



1 M-112 FIRST FLOOR PLAN - PLUMBING
SCALE: 1/4" = 1'-0"

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES

CONSULTANT:

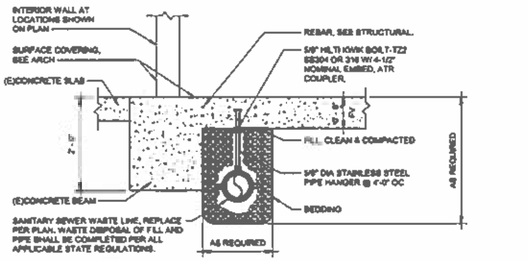
RESPEC
Juneau, AK

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE:
FIRST FLOOR PLAN -
UNDERGROUND PLUMBING
BID DOCUMENTS

PROJECT No. 10315.24002
SHEET NUMBER
M-112

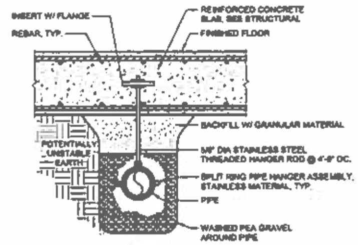
REVISIONS



NOTE: CONTRACTOR SHALL AVOID (E) STRUCTURAL REINFORCEMENT WITH POST INSTALLED ANCHOR INSTALLATION. COORDINATE LENGTH OF HANGER ROD TO MAINTAIN SLOPE OF PIPE AND CONTINUATION OF EXISTING CONNECTION POINTS.

1 (M-511) BELOW GRADE PIPE HANGER - EXISTING SLAB DETAIL

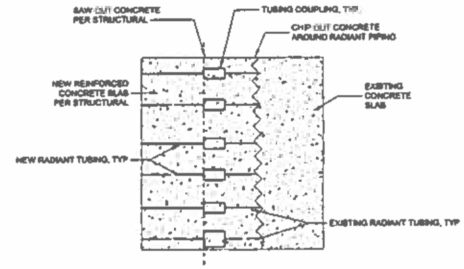
SCALE: NOT TO SCALE



NOTE: CONTRACTOR SHALL AVOID (E) STRUCTURAL REINFORCEMENT WITH POST INSTALLED ANCHOR INSTALLATION. COORDINATE LENGTH OF HANGER ROD TO MAINTAIN SLOPE OF PIPE AND CONTINUATION OF EXISTING CONNECTION POINTS.

2 (M-511) BELOW GRADE PIPE HANGER - NEW SLAB DETAIL

SCALE: NOT TO SCALE



3 (M-511) RADIANT PIPING CONNECTION DETAIL

SCALE: NOT TO SCALE

REVISIONS

No.	Date	Desc

CONSULTANT:

RESPEC
Juneau, AK
9109 Mendenhall Mall Rd. Ste 4
Juneau, AK 99801
Phone 907 780 6060
www.respec.com

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE: PLUMBING DETAILS

BID DOCUMENTS

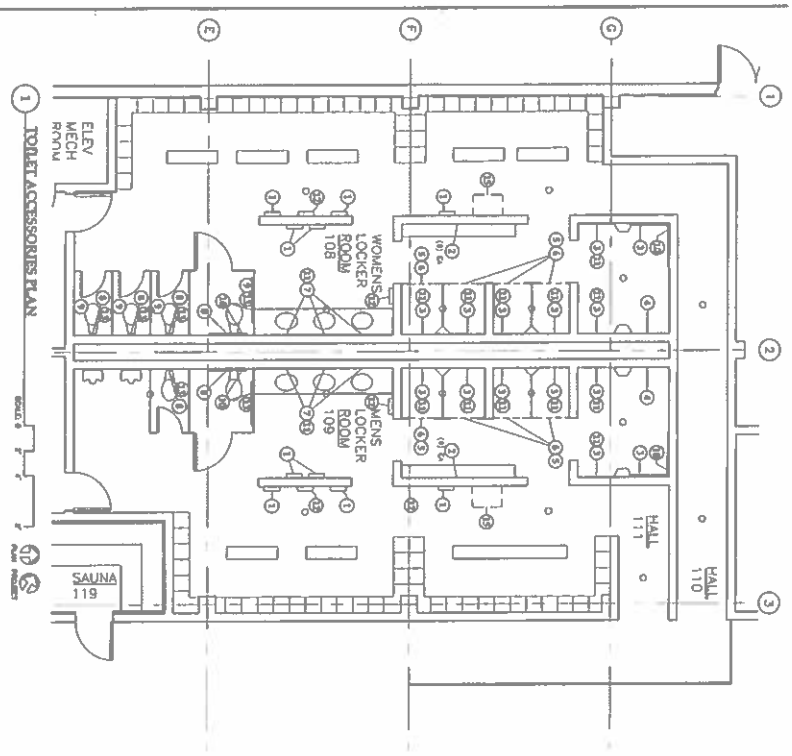
DESIGN: NRS
DRAWN: TKB
CHECKED: DW

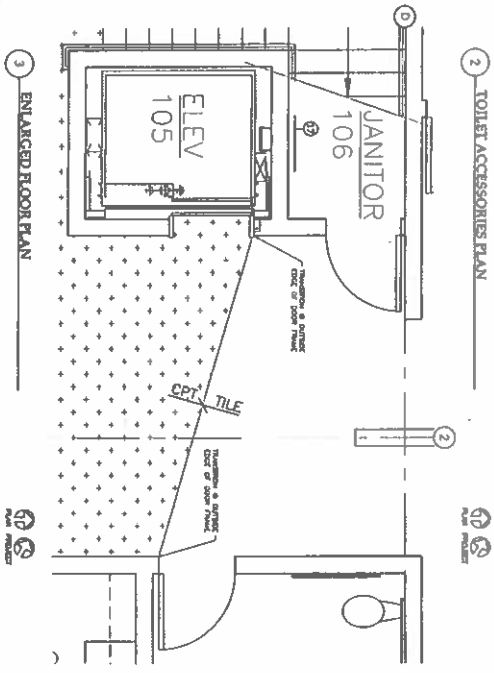
PROJECT No. I0315.24002

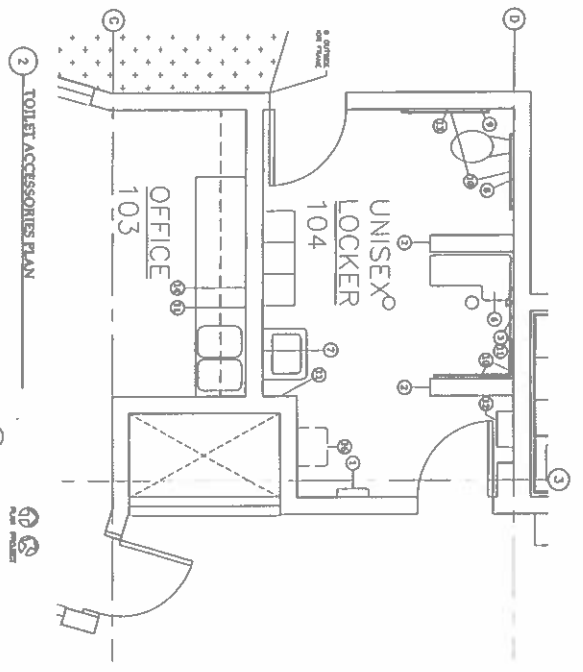
SHEET NUMBER M-511

ACCESSORY SCHEDULE

1. RECESSED HAND DRYER
2. TOWEL HOOK
3. SOAP DISH
4. FOLDING SHOWER SEAT
5. SHOWER CURTAIN
6. SHOWER CURTAIN ROD
7. MIRROR
8. TOILET-SEAT-COVER DISPENSER
9. SANITARY NAPKIN DISPOSAL
10. GRAB BAR
11. SOAP DISPENSER
12. WASTE RECEPTACLE
13. MULTI-ROLL TOILET TISSUE DISPENSER
14. ROLL-PAPER-TOWEL DISPENSER
15. DIAPER CHANGING STATION
16. FOLDING DRESSING AREA SEAT
17. MOP AND BROOM HOLDER







PETERSBURG AQUATIC CENTER

PETERSBURG, ALASKA

A403

SHEET TITLE: TOILET ACCESSORIES PLAN

Jensen Yorba Lott Inc.

EX1

SHEET TITLE: EXHIBIT DRAWING

BID DOCUMENTS

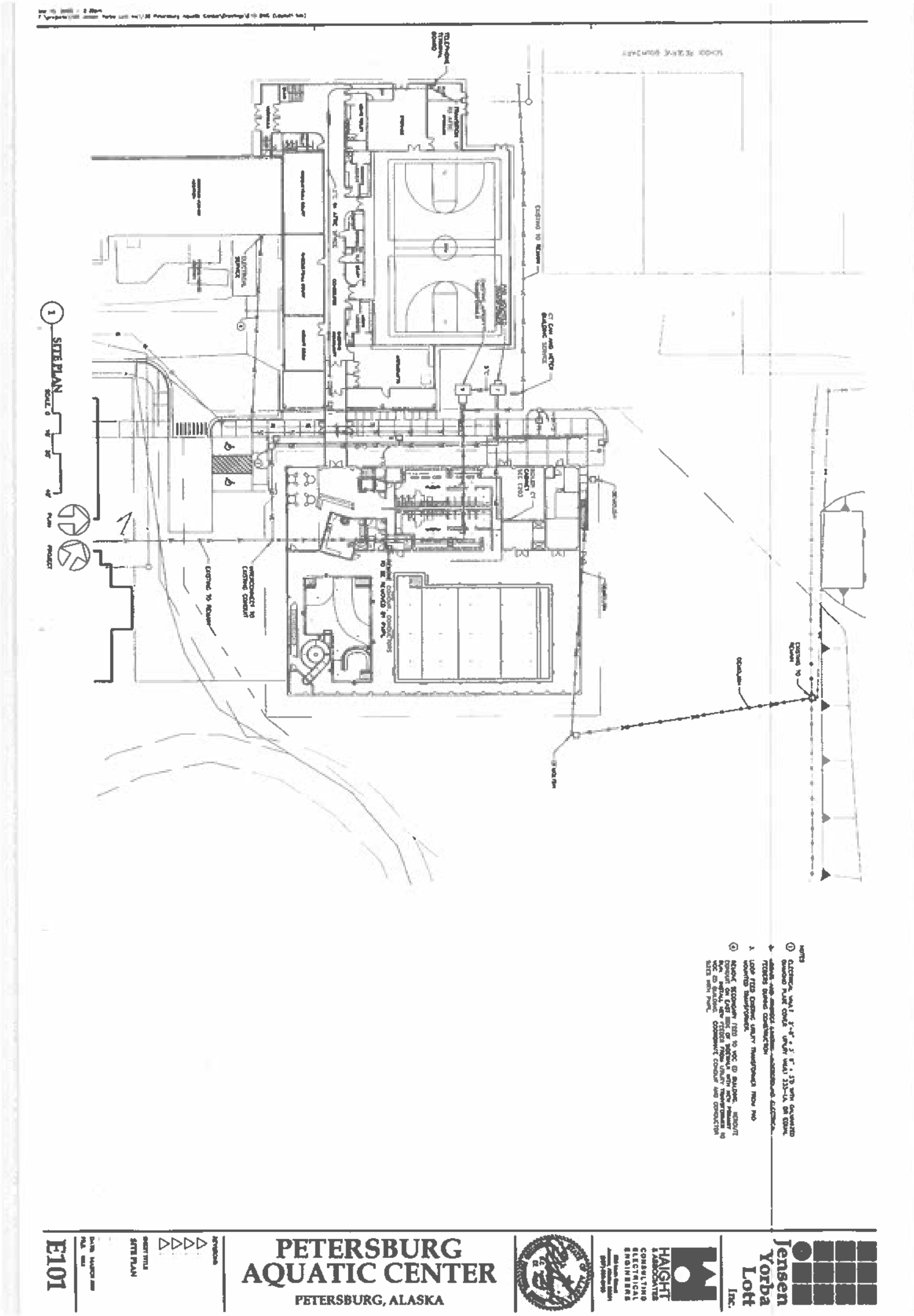
PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

RESPEC Juneau, AK

CONSULTANT:

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION. AFFECTING ALL LABELED SCALES 1"



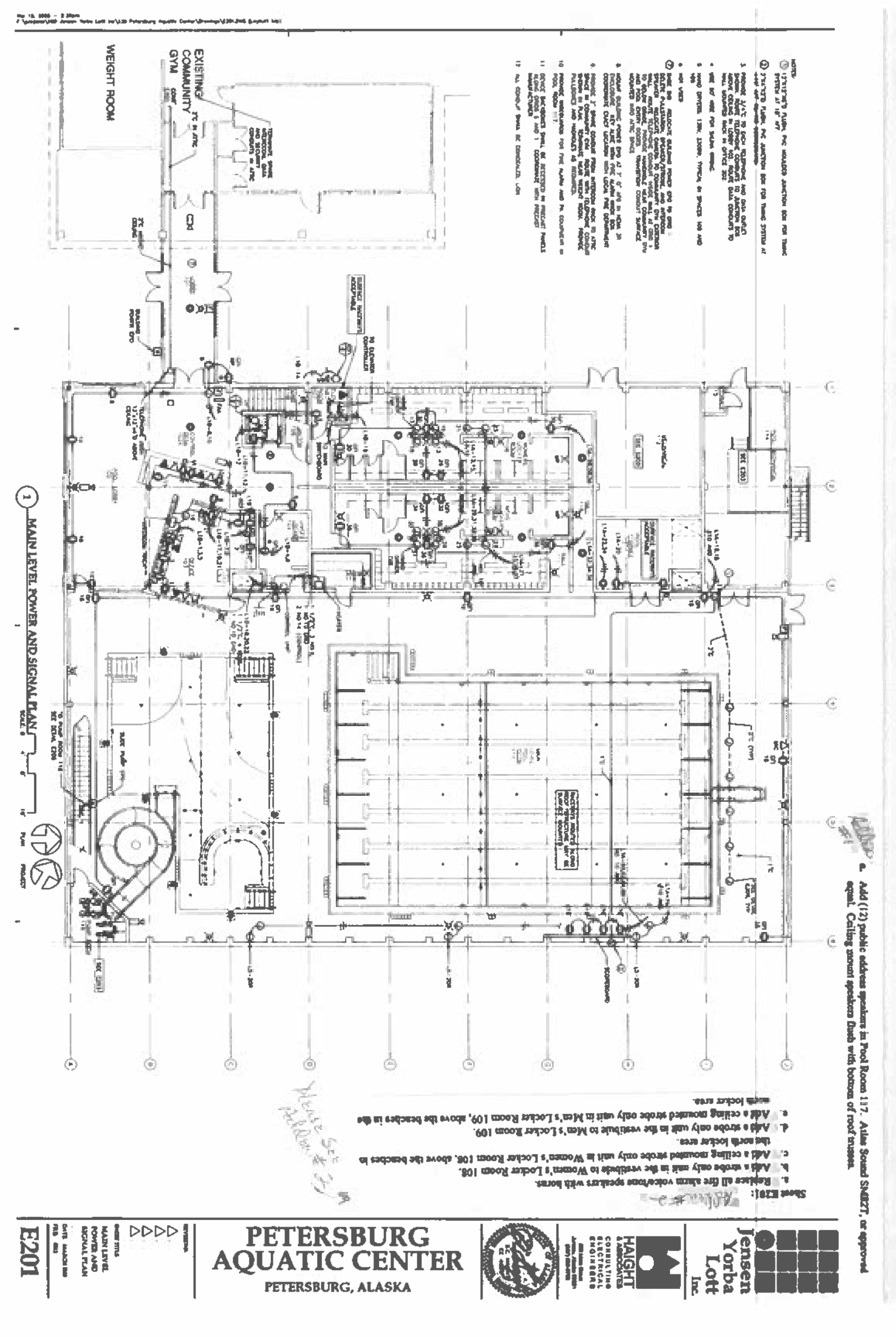
REVISIONS

SHEET TITLE: EXHIBIT DRAWING BID DOCUMENTS	PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS PETERSBURG, ALASKA 99833	RESPEC Juneau, AK	CONSULTANT:

PROJECT No. 0315.24002

SHEET NUMBER EX2

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES. 1"



SHEET TITLE :

EXHIBIT DRAWING

BID DOCUMENTS

PROJECT :

PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

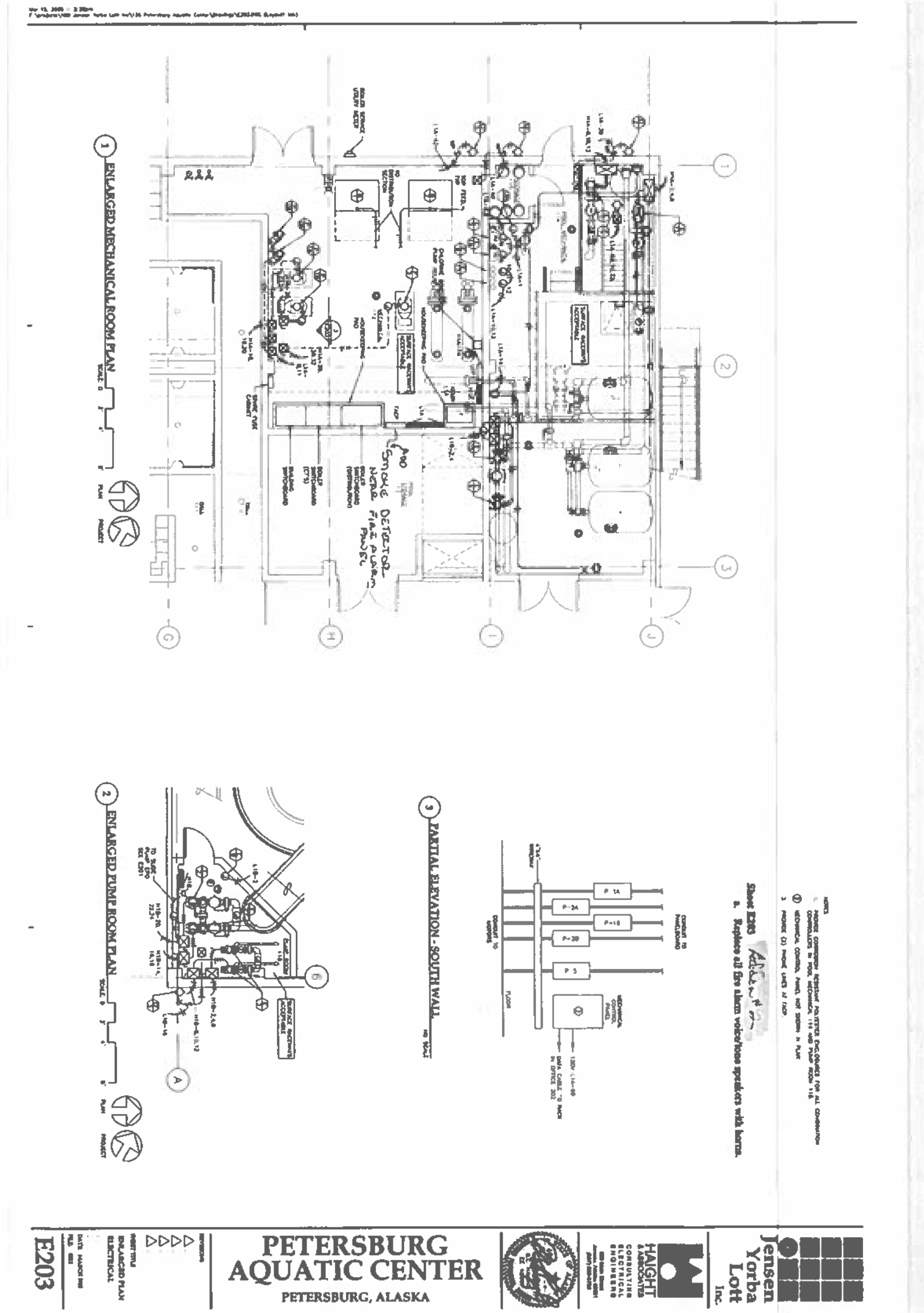
RESPEC

Juneau, AK

CONSULTANT :

EX3

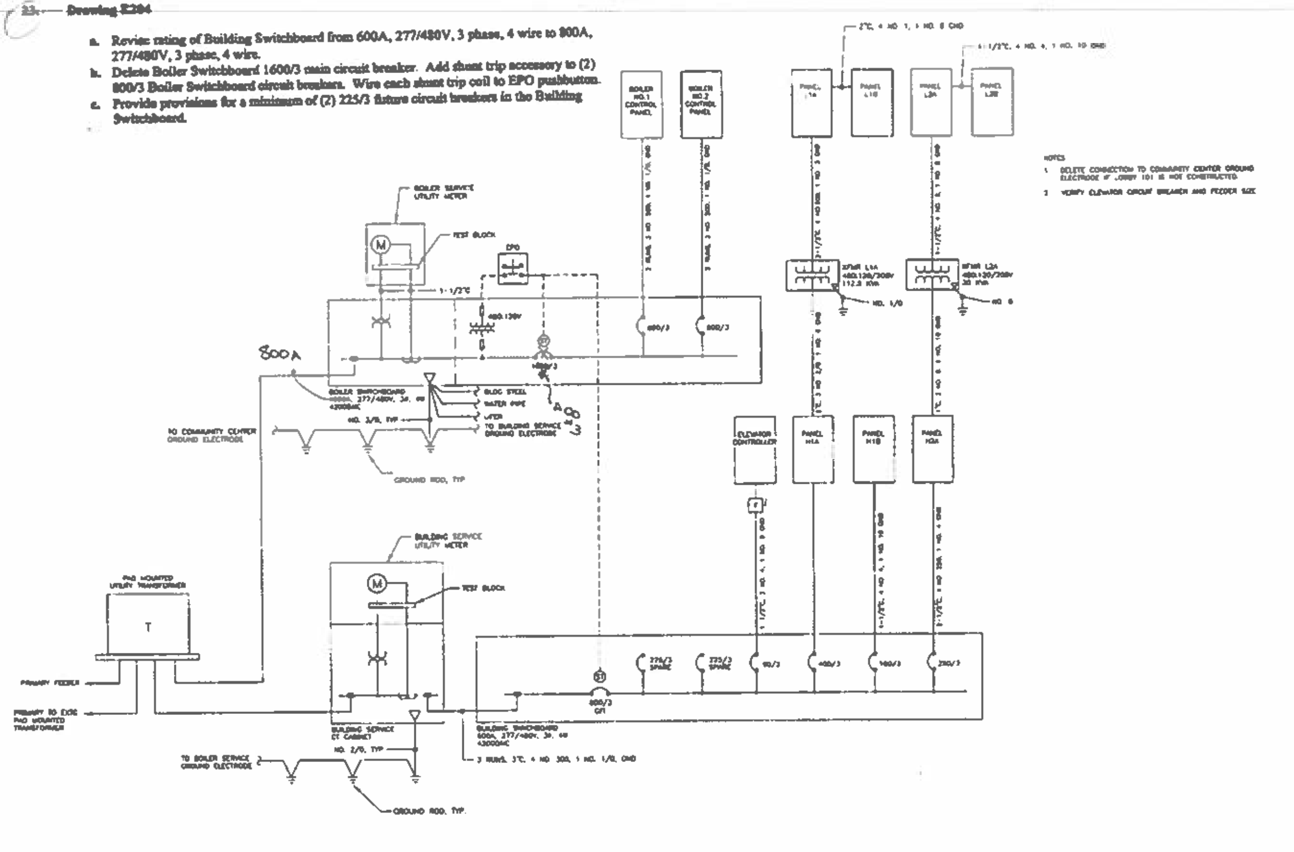
IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION. AFFECTING ALL LABELED SCALES



EX4 SHEET NUMBER PROJECT No. 8315.24002	SHEET TITLE : EXHIBIT DRAWING BID DOCUMENTS	PROJECT : PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS PETERSBURG, ALASKA 99833	RESPEC Juneau, AK	CONSULTANT :

23. Drawing E204

a. Revise rating of Building Switchboard from 600A, 277/480V, 3 phase, 4 wire to 800A, 277/480V, 3 phase, 4 wire.
b. Delete Boiler Switchboard 1600/3 main circuit breaker. Add shunt trip accessory to (2) 800/3 Boiler Switchboard circuit breakers. Wire each shunt trip coil to EPO pushbutton.
c. Provide provisions for a minimum of (2) 225/3 future circuit breakers in the Building Switchboard.



① SINGLE LINE DIAGRAM

NOTES
1. DELETE CONNECTION TO COMMUNITY CENTER GROUND ELECTRODE IF LOBBY 101 IS NOT CONSTRUCTED.
2. VERIFY ELEVATOR CIRCUIT BREAKER AND FEEDER SIZE

Jensen Yorba Lott Inc.

HAIGHT & ASSOCIATES CONSULTING ELECTRICAL ENGINEERS

PETERSBURG AQUATIC CENTER
PETERSBURG, ALASKA

SHEET TITLE: SINGLE LINE DIAGRAM

E204

SHEET TITLE: EXHIBIT DRAWING

BID DOCUMENTS

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

RESPEC
Juneau, AK
AECC 183270

CONSULTANT:

REVISIONS

PROJECT No. I0315.24002

SHEET NUMBER

EX5

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION. AFFECTING ALL LABELED SCALES 1"

PANEL H1A

SIZE	VOLTS/PHASE	MAIN	LOCATION	MOUNT
400 AMPS	277/480V, 3 PH	LUGS ONLY	MECHANICAL 112	SURFACE

NO.	DESCRIPTION	BREAKER AMP/POLE	CKT	AØ	BØ	CØ	CKT	BREAKER AMP/POLE	DESCRIPTION	NO.
1	POOL MECH 114, MECH 112, STORAGE 113 LTG	20/1	1.3	10.7			9.4	70/3	FILTRATION PUMP	2
3	LOBBIES 101,102, OFFICE 103, LOCKER RMS.	20/1	3.8		13.2		9.4	--	---	4
5	EXTERIOR BUILDING, WALKWAY	20/1	0.7			10.1	9.4	--	---	6
7	POOL AREA STEPLIGHTS E. WALL, PUMP RM 118	20/1 *	0.3	6.4			6.1	60/3	FILTRATION PUMP	8
9	SPARE	20/1	0.0		6.1		6.1	--	---	10
11	SPARE	20/1	0.0			6.1	6.1	--	---	12
13	SPARE	20/1	0.0	0.2			0.2	20/1	LCP1	14
15	SPARE	20/1	0.0		2.1		2.1	15/3	P-16	16
17	SPARE	20/1	0.0			2.1	2.1	--	---	18
19	SPARE	20/1	0.0	2.1			2.1	--	---	20
21	SPARE	20/1	0.0		2.1		2.1	15/3	P-18	22
23	SPARE	20/1	0.0			2.1	2.1	--	---	24
25	HAND DRYER 108	15/2	1.2	3.3			2.1	--	---	26
27	SPARE	20/1	0.0		2.1		2.1	15/3	P-5	28
29	RECEPTACLES 117	20/1	0.5			3.6	3.1	--	---	30
31	SPARE	20/1	0.0	2.1			2.1	--	---	32
33	SPARE	20/1	0.0		0.0		0.0	20/1	SPARE	34
35	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	36
37	XFMR L1A	175/3	37.5	37.5			0.0	20/1	SPARE	38
39	---	--	37.5		37.5		0.0	20/1	SPARE	40
41	---	--	37.5			37.5	0.0	20/1	SPARE	42
	BALANCED CONNECTED LOAD = 185.9 KVA / 224 AMPS			62.3	63.1	60.5			BALANCED DEMAND LOAD = 0.0 KVA / 00 AMPS	
	MAXIMUM CONNECTED LOAD = 185.9 KVA / 228 AMPS								MAXIMUM DEMAND LOAD = 0.0 KVA / 00 AMPS	

* GFI CIRCUIT BREAKER

PANEL H1B

SIZE	VOLTS/PHASE	MAIN	LOCATION	MOUNT
90 AMPS	277/480V, 3 PH	LUGS ONLY	PUMP ROOM 118	SURFACE

NO.	DESCRIPTION	BREAKER AMP/POLE	CKT	AØ	BØ	CØ	CKT	BREAKER AMP/POLE	DESCRIPTION	NO.
1	SPARE	20/1	0.0	1.3			1.3	15/3	JET PUMP	2
3	SPARE	20/1	0.0		1.3		1.3	--	---	4
5	SPARE	20/1	0.0			1.3	1.3	--	---	6
7	SPARE	20/1	0.0	1.3			1.3	15/3	JET PUMP	8
9	SPARE	20/1	0.0		1.3		1.3	--	---	10
11	SPARE	20/1	0.0			1.3	1.3	--	---	12
13	SPARE	20/1	0.0	3.8			3.8	25/3	SLIDE PUMP	14
15	SPARE	20/1	0.0		3.8		3.8	--	---	16
17	SPARE	20/1	0.0			3.8	3.8	--	---	18
19	SPARE	20/1	0.0	3.8			3.8	25/3	SLIDE PUMP	20
21	SPARE	20/1	0.0		3.8		3.8	--	---	22
23	SPARE	20/1	0.0			3.8	3.8	--	---	24
25	SPARE	20/1	0.0	0.0			0.0	20/1	SPARE	26
27	SPARE	20/1	0.0		0.0		0.0	20/1	SPARE	28
29	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	30
31	SPARE	20/1	0.0	0.0			0.0	20/1	SPARE	32
33	SPARE	20/1	0.0		0.0		0.0	20/1	SPARE	34
35	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	36
37	SPARE	20/1	0.0	0.0			0.0	20/1	SPARE	38
39	SPARE	20/1	0.0		0.0		0.0	20/1	SPARE	40
41	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	42
	BALANCED CONNECTED LOAD = 31.2 KVA / 38 AMPS			10.4	10.4	10.4			BALANCED DEMAND LOAD = 0.0 KVA / 00 AMPS	
	MAXIMUM CONNECTED LOAD = 31.2 KVA / 38 AMPS								MAXIMUM DEMAND LOAD = 0.0 KVA / 00 AMPS	

PANEL L1B

SIZE	VOLTS/PHASE	MAIN	LOCATION	MOUNT
100 AMPS	120/208V, 3 PH	LUGS ONLY	CONTROL DESK 102A	FLUSH

NO.	DESCRIPTION	BREAKER AMP/POLE	CKT	AØ	BØ	CØ	CKT	BREAKER AMP/POLE	DESCRIPTION	NO.
1	RECEPTACLE OFFICE 103	20/1	0.4	0.6			0.2	20/1	RECEPTACLE 118	2
3	RECEPTACLE OFFICE 103	20/1	0.4		0.8		0.4	20/1	RECEPTACLES 107,105	4
5	RECEPTACLE OFFICE 103	20/1	0.4			0.8	0.4	20/1	RECEPTACLES 102A,104	6
7	RECEPTACLE OFFICE 103	20/1	0.4	0.9			0.5	20/1	RECEPTACLES 101,102	8
9	COPY MACHINE OFFICE 103	20/1	1.2		1.7		0.5	20/1	RECEPTACLES 102	10
11	RECEPTACLE 102A	20/1	[illegible]			1.5	0.9	15/1	P-6	12
13	RECEPTACLE 102A	20/1	0.4	1.6			1.2	20/1	EF-4	14
15	ELEVATOR LIGHTING	20/1	1.0		2.2		1.2	20/1	EF-3	16
17	COPY MACHINE	20/1	1.8			5.8	4.0	45/3	SAUNA HEATER/CONTROLS	18
19	INTERCOM RACK	20/1	0.7	4.7			4.0	--	---	20
21	REFER	20/1	0.7		4.7		4.0	--	---	22
23	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	24
25	SPARE	20/1	0.0	0.0			0.0	20/1	SPARE	26
27	SPARE	20/1	0.0		0.0		0.0	20/1	SPARE	28
29	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	30
31	SPARE	20/1	0.0	0.0			0.0	20/1	SPARE	32
33	SPARE	20/1	0.0		0.0		0.0	20/1	SPARE	34
35	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	36
37	SPARE	20/1	0.0	0.0			0.0	20/1	SPARE	38
39	SPARE	20/1	0.0		0.0		0.0	20/1	SPARE	40
41	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	42
	BALANCED CONNECTED LOAD = 25.1 KVA / 70 AMPS			7.8	9.4	7.9			BALANCED DEMAND LOAD = 0.0 KVA / 00 AMPS	
	MAXIMUM CONNECTED LOAD = 25.1 KVA / 38 AMPS								MAXIMUM DEMAND LOAD = 0.0 KVA / 00 AMPS	

PANEL L1A (SECTION 1)

SIZE	VOLTS/PHASE	MAIN	LOCATION	MOUNT
400 AMPS	120/208V, 3 PH	400/3 MCB	MECHANICAL 112	SURFACE

NO.	DESCRIPTION	BREAKER AMP/POLE	CKT	AØ	BØ	CØ	CKT	BREAKER AMP/POLE	DESCRIPTION	NO.
1	UNIT HEATER	20/1	1.3	3.0			1.7	25/1	CHLORINE BOOSTER PUMP	2
3	SPARE	20/1	0.0		1.9		1.9	20/1	CHLORINE BOOSTER PUMP	4
5	SPARE	20/1	0.0			0.1	0.1	20/1 *	CHEMICAL CONTROLLER	6
7	SPARE	20/1	0.0	0.1			0.1	20/1 *	CHEMICAL CONTROLLER	8
9	P-3A	15/1	0.5		0.6		0.1	20/1	CO2 FOOD SYSTEM	10
11	P-2B	15/1	0.5			0.6	0.1	20/1	CO2 FOOD SYSTEM	12
13	HAND DRYER 108	20/1	2.3	0.8			0.9	20/1	RECEPTACLES 114	14
15	HAND DRYER 108	20/1	2.3		0.7		0.7	20/1	RECEPTACLES 117	16
17	HAND DRYER 108	20/1	2.3			0.5	0.5	20/1	RECEPTACLES 117	18
19	HAND DRYER 108	20/1	2.3	1.4			1.4	20/1	WASHER/RECEPTACLE 113	20
21	HAND DRYER 108	20/1	2.3		2.5		2.5	30/2	DRYER 113	22
23	HAND DRYER 108	20/1	2.3			2.5	2.5	--	---	24
25	HAND DRYER 108	20/1	2.3	1.2			1.2	20/1	RECEPTACLES 108	26
27	HAND DRYER 108	20/1	2.3		1.2		1.2	20/1	RECEPTACLES 108	28
29	HAND DRYER 108	20/1	2.3			0.5	0.5	20/1	RECEPTACLES 108	30
31	HAND DRYER 108	20/1	2.3	1.2			1.2	20/1	RECEPTACLES 108	32
33	HAND DRYER 108	20/1	2.3		1.2		1.2	20/1	RECEPTACLES 108	34
35	HAND DRYER 108	20/1	2.3			0.5	0.5	20/1	RECEPTACLES 109	36
37	PANEL L1B	100/3	7.8	9.0			1.2	20/1	EF-2	38
39	---	--	8.4		10.6		1.2	20/1	EF-1	40
41	---	--	7.0			8.1	1.2	20/1	EF-5	42
	BALANCED CONNECTED LOAD = 77.5 KVA / 215 AMPS			27.1	27.0	23.4			BALANCED DEMAND LOAD = 0.0 KVA / 00 AMPS	
	MAXIMUM CONNECTED LOAD = 77.5 KVA / 220 AMPS								MAXIMUM DEMAND LOAD = 0.0 KVA / 00 AMPS	

* GFI CIRCUIT BREAKER

PANEL L1A (SECTION 2)

SIZE	VOLTS/PHASE	MAIN	LOCATION	MOUNT
400 AMPS	120/208V, 3 PH	LUGS ONLY	MECHANICAL 112	SURFACE

NO.	DESCRIPTION	BREAKER AMP/POLE	CKT	AØ	BØ	CØ	CKT	BREAKER AMP/POLE	DESCRIPTION	NO.
43	LAP POOL N. UNDERWATER LTG	20/1 *	1.0	2.0			1.0	20/1 *	LEISURE POOL N.& W. UNDERWATER LTG	44
45	LAP POOL N. UNDERWATER	20/1 *	1.0		2.0		1.0	20/1 *	LEISURE POOL S. & E. UNDERWATER	46
47	LAP POOL E. UNDERWATER	20/1 *	1.0			2.0	1.0	20/1 *	LEISURE POOL E. UNDERWATER	48
49	LAP POOL E. UNDERWATER	20/1 *	1.0	2.0			1.0	20/1 *	LEISURE POOL E. UNDERWATER	50
51	LAP POOL E. UNDERWATER	20/1 *	1.0		1.0		0.0		SPACE	52
53	LAP POOL E. UNDERWATER	20/1 *	1.0			1.0	0.0		SPACE	54
55	LAP POOL W. UNDERWATER	20/1 *	1.0	1.0			0.0		SPACE	56
57	LAP POOL W. UNDERWATER	20/1 *	1.0		1.0		0.0		SPACE	58
59	LAP POOL W. UNDERWATER	20/1 *	1.0			2.6	1.6	20/1	SCOREBOARD	60
61	LAP POOL W. UNDERWATER	20/1 *	1.0	2.6			1.6	20/1	SCOREBOARD	62
63	LAP POOL S. UNDERWATER	20/1 *	1.0		2.6		1.6	20/1	SCOREBOARD	64
65	LAP POOL S. UNDERWATER	20/1 *	1.0			2.6	1.6	20/1	SCOREBOARD	66
67	LAP POOL S. UNDERWATER	20/1 *	1.0	2.0			1.0	15/3	P-7	68
69	CONTROL PANEL 112	20/1	0.5		1.5		1.0	--	---	70
71	SPACE		0.0			1.0	1.0	--	---	72
73	SPACE		0.0	0.5			0.5	20/1 *	REC 117	74
75	SPACE		0.0		0.0		0.0		SPACE	76
77	SPACE		0.0			0.0	0.0		SPACE	78
79	SPACE		0.0	0.0			0.0		SPACE	80
81	SPACE		0.0		0.0		0.0		SPACE	82
83	SPACE		0.0			0.0	0.0		SPACE	84
	BALANCED CONNECTED LOAD = 77.5 KVA / 215 AMPS			27.1	27.0	23.4			BALANCED DEMAND LOAD = 0.0 KVA / 00 AMPS	
	MAXIMUM CONNECTED LOAD = 77.5 KVA / 226 AMPS								MAXIMUM DEMAND LOAD = 0.0 KVA / 00 AMPS	

* GFI CIRCUIT BREAKER

PANEL H2A

SIZE	VOLTS/PHASE	MAIN	LOCATION	MOUNT
250 AMPS	277/480V, 3 PH	LUGS ONLY	MECHANICAL 203	SURFACE

NO.	DESCRIPTION	BREAKER AMP/POLE	CKT	AØ	BØ	CØ	CKT	BREAKER AMP/POLE	DESCRIPTION	NO.
1	LOBBY 102,201,MECH 204,RMS 200,202,203 LTG	20/1	3.6	15.3			11.7	100/3	HRV-1	2
3	POOL ROOM LIGHTRUSS	20/1	2.0		13.7		11.7	--	---	4
5	POOL ROOM LIGHTRUSS	20/1	2.0			13.7	11.7	--	---	6
7	POOL ROOM LIGHTRUSS	20/1	2.0	13.7			11.7	100/3	HRV-2	8
9	POOL ROOM LIGHTRUSS	20/1	2.0		13.7		11.7	--	---	10
11	POOL ROOM LIGHTRUSS	20/1	2.0			13.7	11.7	--	---	12
13	POOL ROOM LIGHTRUSS	20/1	2.0	2.2			0.2	20/1	LCP2	14
15	POOL ROOM LIGHTRUSS	20/1	2.0		2.0		0.0	20/1	SPARE	16
17	POOL ROOM LIGHTRUSS	20/1	2.0			2.0	0.0	20/1	SPARE	18
19	POOL ROOM LIGHTRUSS	20/1	2.0	2.0			0.0	20/1	SPARE	20
21	POOL ROOM LIGHTRUSS	20/1	2.0		2.0		0.0	20/1	SPARE	22
23	POOL ROOM LIGHTRUSS	20/1	2.0			2.0	0.0	20/1	SPARE	24
25	POOL ROOM LIGHTRUSS	20/1	2.0	2.0			0.0	20/1	SPARE	26
27	POOL ROOM LIGHTRUSS	20/1	2.0		2.0		0.0	20/1	SPARE	28
29	POOL ROOM LIGHTRUSS	20/1	2.0			2.0	0.0	20/1	SPARE	30
31	POOL ROOM LIGHTRUSS	20/1	2.0	2.0			0.0	20/1	SPARE	32
33	POOL ROOM LIGHTRUSS	20/1	2.0		2.0		0.0	20/1	SPARE	34
35	POOL ROOM LIGHTRUSS	20/1	2.0			2.0	0.0	20/1	SPARE	36
37	POOL ROOM [illegible] WALLS	20/1	1.0	11.0			10.0	20/3	XFMR L2A	38
39	EXTERIOR BUILDING	20/1	0.5		10.5		10.0	--	---	40
41	SPARE	20/1	0.0			10.0	10.0	--	---	42
	BALANCED CONNECTED LOAD = 138.5 KVA / 168 AMPS			46.2	45.9	46.4			BALANCED DEMAND LOAD = 0.0 KVA / 00 AMPS	
	MAXIMUM CONNECTED LOAD = 138.5 KVA / 174 AMPS								MAXIMUM DEMAND LOAD = 0.0 KVA / 00 AMPS	

Jensen Yorba Lott Inc.

HAIGHT & ASSOCIATES
CONSULTING ELECTRICAL ENGINEERS

PETERSBURG AQUATIC CENTER
PETERSBURG, ALASKA

REVISIONS

SHEET TITLE: SCHEDULES

E205

No.	Date	Description

REVISIONS

CONSULTANT :

RESPEC
Juneau, AK
AECC183270

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE:
EXHIBIT DRAWING
BID DOCUMENTS

DESIGN
DRAWN
CHECKED
DATE

PROJECT No. I0315.24002
SHEET NUMBER
EX6