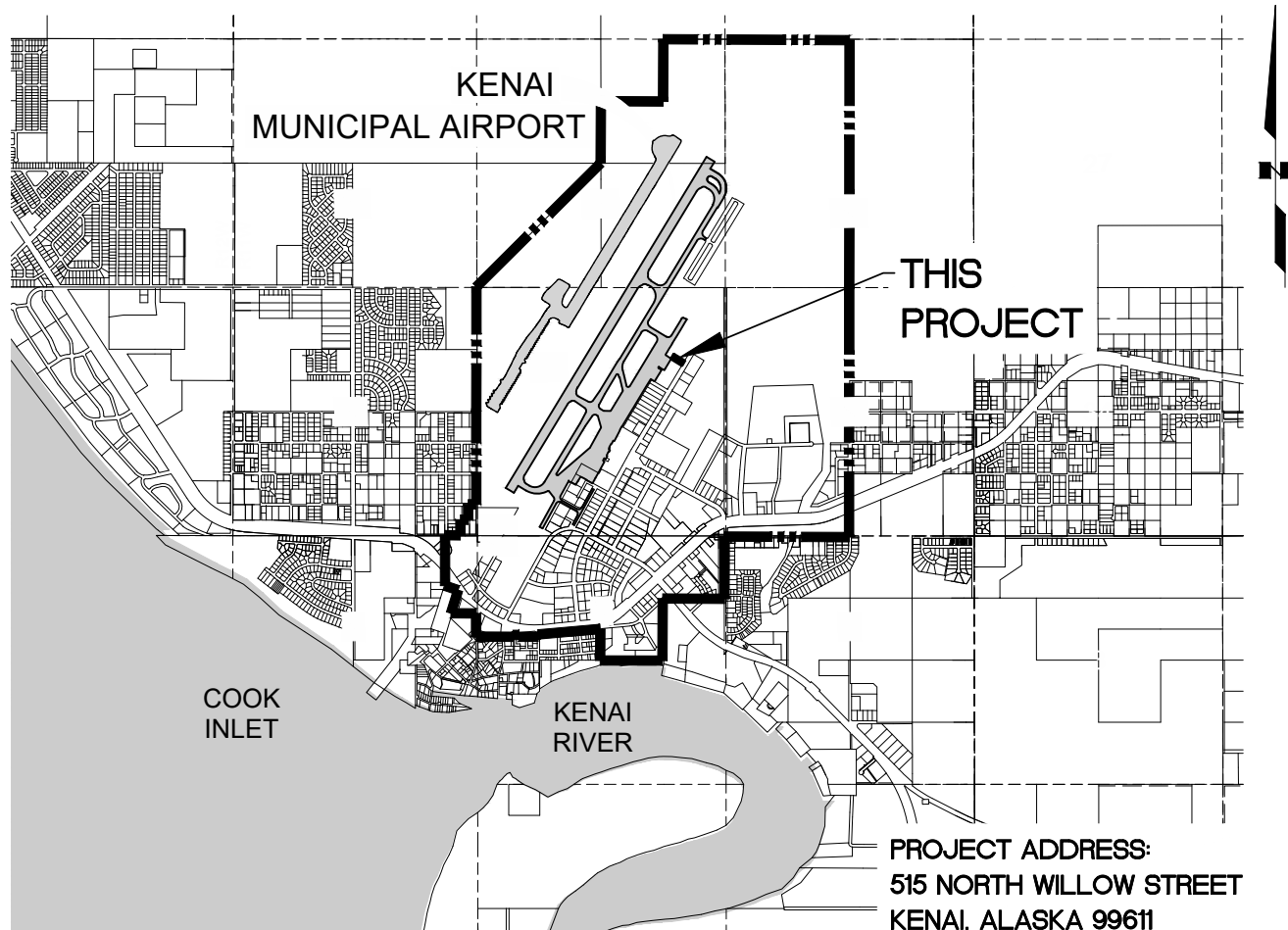




LOCATION MAP



VICINITY MAP

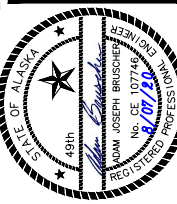
KENAI MUNICIPAL AIRPORT SAND STORAGE BUILDING KENAI, ALASKA



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SAND STORAGE BUILDING	KENAI MUNICIPAL AIRPORT	KENAI, ALASKA
SHEET TITLE COVER SHEET AND DRAWING INDEX	SHEET G1.01	
DRAWN BY: KK	CHECKED BY: MRS	
DATE: 08/05/2020	SCALE: AS SHOWN	
JOB NUMBER: 20-009-01		

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CIVIL GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
- THE LOCATION OF EXISTING FEATURES, SERVICE LINES, UTILITIES, ETC. IN THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FIELD VERIFICATION OF ALL BURIED AND OVERHEAD UTILITIES FROM THE APPROPRIATE UTILITY COMPANIES OR AUTHORITIES. THE CONTRACTOR SHALL CONTACT THE LOCATE CALL CENTER OF ALASKA, AS WELL AS ANY NON-PARTICIPATING UTILITIES, TO FIELD LOCATE ALL UTILITIES PRIOR TO DIGGING. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO DIGGING. OTHERWISE CONTRACTOR IS RESPONSIBLE FOR ALL ADDITIONAL COSTS ASSOCIATED WITH WORKING AROUND UTILITIES DIFFERENT THAN WHAT IS SHOWN ON THE PLANS.
- UTILITY LINES OCCUR WITHIN THE PROJECT AREA. CONTRACTOR SHALL COORDINATE WORK ACCORDINGLY. ALL WORK IN CLOSE PROXIMITY TO EXISTING UTILITY LINES SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL STATUTES, CODES AND GUIDELINES, AND THE ELECTRICAL FACILITY CLEARANCE REQUIREMENTS OF THE GOVERNING UTILITY. CONTRACTOR SHALL HAND DIG WITHIN TWO FEET OF BURIED ELECTRICAL CABLE.
- THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES AND THE GENERAL REQUIREMENTS, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS, SUBCONTRACTORS, SUPPLIERS, PROPERTY, AND TRAFFIC SAFETY. THE CONTRACTOR SHALL ALSO HAVE SOLE AND COMPLETE AND COMPLETE RESPONSIBILITY OF STORM WATER MANAGEMENT. THESE REQUIREMENTS SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING, PAYING FOR, AND COORDINATING ALL INSPECTIONS REQUIRED BY THE BUILDING PERMIT. THE ENGINEER WILL PROVIDE SPECIAL INSPECTION IN ACCORDANCE WITH IBC 1704.7.
- THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCY IN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- OTHER CONTRACTORS OR THE UTILITY COMPANIES MAY BE WORKING ON THE SAME PROJECT SITE OR IN THE VICINITY DURING THE PROGRESS OF THIS CONTRACT'S WORK. CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER CONTRACTORS OR UTILITY COMPANIES WORKING IN THE AREA.
- TOPOGRAPHIC SURVEY INFORMATION WAS PREPARED FROM A FIELD SURVEY CONDUCTED BY HDL ENGINEERING CONSULTANTS, LLC DATED APRIL, 2020.
- SEE SHEET G1.05 FOR BASIS OF HORIZONTAL AND VERTICAL CONTROL.
- ALL SURVEYING AND LAYOUT SHALL BE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL RECORD SURVEY NOTES FOR SUBMITTAL WITH RECORD DRAWINGS, INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD. CONTRACTOR SHALL RECORD ALL DEVIATIONS FROM THE PLANS AND SUBMIT DAILY SURVEY NOTES TO THE ENGINEER.
- CONTRACTOR SHALL PROTECT ALL MONUMENTS AND PROPERTY CORNERS. DAMAGED/MOVED MONUMENTS AND CORNERS, WHETHER OR NOT THEY ARE SHOWN ON THE DRAWINGS, SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH CURRENT ALASKA STATUTE.
- GEOTECHNICAL INFORMATION AND FOUNDATION RECOMMENDATIONS FOR THIS PROJECT WERE TAKEN FROM HDL'S MAY 2020 REPORT TITLED "GEOTECHNICAL REPORT FOR KENAI MUNICIPAL AIRPORTS SAND STORAGE BUILDING".

- ALL CONSTRUCTION ACTIVITIES, EXCAVATED MATERIAL, EQUIPMENT STORAGE, ETC. SHALL REMAIN WITHIN THE LIMITS OF THE AREA DISTURBED BY CONSTRUCTION OR AT THE IDENTIFIED STAGING AREA. CONTRACTOR SHALL MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS TO ALL STRUCTURES AT ALL TIMES.
- CONTRACTOR SHALL USE ONLY APPROVED HAUL ROUTES AS SHOWN ON THE CONSTRUCTION SAFETY PHASING PLAN. CONTRACTOR SHALL MAINTAIN HAUL ROUTES AND SHALL REPAIR ANY DAMAGE TO THE ROUTE SURFACE IN ACCORDANCE WITH THE PROJECT MANUAL OR AS DIRECTED BY THE ENGINEER TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
- HAUL ROUTES FOR REMOVAL AND DELIVERY OF MATERIALS SHALL UTILIZE EXISTING ROADWAYS. MUD AND DEBRIS TRACKED ONTO ROADWAYS SHALL BE PROMPTLY REMOVED. TRAFFIC LAWS ARE TO BE OBEYED AT ALL TIMES.
- CONTRACTOR SHALL PROVIDE ALL PERMITS WHICH ARE NOT SPECIFICALLY INDICATED AS PROVIDED BY THE OWNER IN THE SPECIFICATIONS.
- CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE IBC, OSHA, AND ALL OTHER FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS PERTAINING TO THIS PROJECT. ANY WORK PERFORMED BY THE CONTRACTOR CONTRARY TO SUCH LAWS OR REGULATIONS SHALL BE AT THE CONTRACTOR'S SOLE RISK AND EXPENSE.
- CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT (ROADS, PARKING AREAS, ETC.,) TO A LINE 2 FEET BEYOND THE PROPOSED IMPROVEMENTS, AND MORE IF NECESSARY, DURING THE INITIAL EXCAVATION OPERATIONS. IF EXISTING PAVEMENT HAS BEEN LIFTED, IF EDGE DOES NOT OCCUR IN UNDISTURBED MATERIAL, OR IF EDGE IS LOCATED WITHIN A TRAVEL LANE, FURTHER REMOVAL MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, TO PROVIDE A PROPER TRANSITION BETWEEN NEW AND EXISTING PAVEMENT. SAW CUTTING OF EXISTING PAVEMENT IS INCIDENTAL TO PAVEMENT REMOVAL, AND NO SEPARATE PAYMENT SHALL BE MADE.
- CONTRACTOR SHALL APPLY JOINT SEALANT TO THE SAW CUT ASPHALT PRIOR TO PAVING.
- THE ENGINEER MAY DIRECT THE CONTRACTOR IN WRITING TO REMOVE ADDITIONAL MATERIAL BEYOND THE LIMITS OF EXCAVATION IF IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE OWNER. CONTRACTOR SHALL REMOVE SAID MATERIAL AND REPLACE WITH SUITABLE MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS OR OTHER DEVICES NECESSARY TO PROVIDE FOR SAFETY.
- CONTRACTOR SHALL MAINTAIN STOP SIGNS AND STREET SIGNS OPERATIONAL IN THE PROJECT AREA DURING CONSTRUCTION.
- WORK AND MATERIAL REQUIRED FOR REMOVING LITTER OR DEBRIS THAT EXISTS WITHIN THE PROJECT LIMITS IS INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE.
- CONTRACTOR SHALL ESTABLISH, PROVIDE AND MAINTAIN AN EFFECTIVE STORM WATER POLLUTION PREVENTION PROGRAM AND DUST CONTROL PROGRAM IN ACCORDANCE WITH SECTION 01 57 13 OF THE CONTRACT SPECIFICATIONS.
- THE CONTRACTOR SHALL ESTABLISH, PROVIDE, AND MAINTAIN A QUALITY CONTROL PROGRAM IN ACCORDANCE WITH THE PROJECT MANUAL.
- CONTRACTOR SHALL MAINTAIN "REDLINE" RECORD DRAWINGS ON A CLEAN SET OF CONSTRUCTION DRAWINGS IN ACCORDANCE WITH THE PROJECT MANUAL. THE CONTRACTOR SHALL MAINTAIN "REDLINES" CURRENT ON A DAILY BASIS WHICH SHALL BE AVAILABLE TO THE ENGINEER FOR INSPECTION ON THE JOB SITE.
- CONTRACTOR SHALL RESTORE DISTURBED PROPERTY TO PRE-CONSTRUCTION CONDITION(S), UNLESS OTHERWISE DIRECTED BY THE ENGINEER. RESTORING DISTURBED PROPERTY IS INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
- CONTRACTOR SHALL TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE IMPROVED, AS DIRECTED BY THE ENGINEER.

DESCRIPTION OF WORK

PHASE 1: SCHEDULE A – SITE PREPARATION (BASE BID)

ALL WORK NECESSARY TO CLEAR, GRUB, EXCAVATE, AND INSTALL FILL IN PROJECT AREA TO TOP OF SUBBASE ELEVATION. WORK ALSO INCLUDES CONSTRUCTING WATER SERVICE, RAIN LEADER EXTENSIONS, INFILTRATION BASIN , BOILER CONDENSATE DRAIN LINE AND LEACH FIELD, FENCING, TOP SOIL, SEEDING AND OTHER RELATED WORK. EXTEND SERVICE LINES TO WITHIN 5- FEET OF NEW BUILDING. COORDINATE WITH UTILITY COMPINES FOR OTHER UTILITY INSTALLATION AND RELOCATIONS.

PHASE 2: SCHEDULE B – SAND STORAGE BUILDING (BASE BID)

ALL REMAINING WORK REQUIRED TO PROVIDE A FULL FUNCATIONAL SAND STORAGE BUILDING AS SHOWN.

SCHEDULE C – 30' ALUMINUM, SLIDING GATE (ADDITIONAL ALTERNATE 1)

DEMOLISH EXISTING VEHICLE GATE AND FURNISH AND INSTALL 30' ALUMINUM SLIDING GATE AS SHOWN.

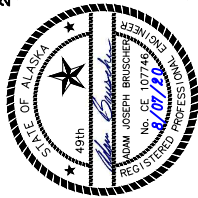
CALL BEFORE YOU DIG!

THE CONTRACTOR SHALL NOTIFY ALL AREA UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION

LOCATE CALL CENTER OF ALASKA

1-800-478-3121

REVISIONS	MARK	DATE	DESCRIPTION
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AECL861

SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE
CIVIL GENERAL
NOTES

SHEET
G1.02

DRAWN BY:
KK

CHECKED BY:
MRS

DATE:
08/05/20

SCALE:
AS SHOWN

JOB NUMBER:
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

































ABBREVIATIONS

AC	ASPHALT CONCRETE
ADA	AMERICANS WITH DISABILITIES ACT
ADEC	ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
ADOT	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
AFSS	KENAI FLIGHT SERVICE STATION
AL	ALUMINUM
APPROX	APPROXIMATELY
ARFF	AIRCRAFT RESCUE AND FIRE FIGHTING
ASTM	AMERICAN STANDARD TESTING MATERIALS
BLK	BLOCK
BRL	BUILDING RESTRICTION LINE
CL, CL	CENTERLINE
CF	CUBIC FOOT
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONT'D	CONTINUED
CSPP	CONSTRUCTION SAFETY AND PHASING PLAN
CY	CUBIC YARDS
DEMO	DEMOLISH
E	EAST, EASTING
EA	EACH
EL, ELEV	ELEVATION
ELEC	ELECTRICAL
EOA	EDGE OF ASPHALT
EOP	EDGE OF PAVEMENT, END OF PROJECT
EW	EACH WAY
EXIST	EXISTING
FAA	FEDERAL AVIATION ADMINISTRATION
FATO	FINAL APPROACH AND TAKEOFF AREA
FF	FINISHED FLOOR
FG	FINISHED GRADE
FO	FIBER OPTIC, FACE OF
FT	FEET
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HEA	HOMER ELECTRICAL ASSOCIATION
HORZ	HORIZONTAL
HR	HOUR
IBC	INTERNATIONAL BUILDING CODE
IN	INCH, INSERT
INV	PIPE INVERT
LB	POUND
LT	LEFT
LF	LINEAR FEET
MAX	MAXIMUM
ME	MATCH EXISTING
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
N	NORTH, NORTHING
NE	NORTHEAST
NBS	NUMBER OF SUSCEPTIBLE
NTS	NOT TO SCALE

















ABBREVIATIONS CONTINUED

O.D.	OUTER DIAMETER
OHW	OVERHEAD WIRE
OPS	AIRPORT OPERATIONS
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OWSIM	ONSITE WASTEWATER SYSTEM INSTALLATION MANUAL
PVMT	PAVEMENT
R, RAD	RADIUS
REQ'D	REQUIRED
RD	ROAD
RL	RAIN LEADER
ROFA	RUNWAY OBJECT FREE AREA
ROW	RIGHT-OF-WAY
R/W	RIGHT-OF-WAY
RT	RIGHT
S	SOUTH
SCH	SCHEDULE
SF	SQUARE FOOT
SPCD	SAFETY PLAN COMPLIANCE DOCUMENT
SPEC	SPECIFICATION
SS	SANITARY SEWER, STAINLESS STEEL
SSMH	SANITARY SEWER MANHOLE
ST	STREET
STA	SURVEY STATION
SY	SQUARE YARDS
TCE	TEMPORARY CONSTRUCTION EASEMENT
TCP	TRAFFIC CONTROL PLAN
TELE	TELEPHONE
TOFA	TAXIWAY OBJECT FREE AREA
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VB	VALVE BOX
VERT	VERTICAL
W	WEST
W/	WITH

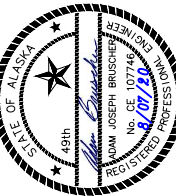
LEGEND (UNLESS NOTED OTHERWISE)

PROPOSED	EXISTING	
		VALVE
		CLEANOUT
		GAS LINE
		METER
		UNDERGROUND TELEPHONE
		TELEPHONE PEDESTAL
		UNDERGROUND CABLE - TV
		CABLE TV PEDESTAL
		OVERHEAD ELECTRIC
		UNDERGROUND ELECTRIC
		ELECTRIC LOAD CENTER
		ELECTRIC TRANSFORMER
		ELECTRIC PEDESTAL
		GUY WIRE
		UTILITY POLE
		STREET LIGHT
		JUNCTION BOX
		NEW SLOPE GRADE
		GRADE TO DRAIN
		TEST PIT LOCATION
		FENCE
		SIGN
		TREE
		LIMITS OF VEGETATION
		POST MISC
		MONUMENT W/BRASS OR AL CAP
		MONUMENT W/PLASTIC CAP
		REBAR
		IRON PIPE
		CONTROL POINT
		TEMPORARY BENCH MARK
		SPIKE
		BUILDING
		AC PAVEMENT
		GRAVEL
		CONCRETE
		INSULATION
		CUT CONDITION CATCH POINT
		FILL CONDITION CATCH POINT
		TOPSOIL & SEED (PROFILE)
		TOPSOIL & SEED (PLAN)

LEGEND CONTINUED

PROPOSED	EXISTING	
		PROPERTY LINE
		EASEMENT
		CENTERLINE
		EDGE OF PAVEMENT
		MINOR CONTOUR
		MAJOR CONTOUR
		SANITARY SEWER PIPE
		SANITARY SEWER MANHOLE
		SANITARY SEWER CLEANOUT
		STORM DRAIN MANHOLE
		INLET BOXES
		CULVERT
		WATER MAIN
		RAIN LEADER
		CLEARING & GRUBBING LIMITS
		GRADE BREAK

REVISIONS	DATE	DESCRIPTION
1		
2		
3		
4		
5		



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AECL981

SAND STORAGE BUILDING

KENAI MUNICIPAL AIRPORT

KENAI, ALASKA

SHEET TITLE
ABBREVIATIONS, AND
LEGEND

SHEET
G1.03

DRAWN BY:
KK

CHECKED BY:
MRS

DATE:
08/05/20

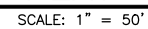
SCALE:
AS SHOWN

JOB NUMBER:
20-009-01

CALL BEFORE YOU DIG!

THE CONTRACTOR SHALL NOTIFY ALL AREA UTILITY
COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION

LOCATE CALL CENTER OF ALASKA 1-800-478-3121



6. EXISTING SAND LOADING DOCK IS AVAILABLE FOR CONTRACTOR'S USE DURING CONSTRUCTION PROVIDED USE AND ACCESS IS COORDINATED WITH KENAI AIRPORT OPERATIONS PERSONNEL. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE LOADING DOCK TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.

7. NEW GAS AND ELECTRIC SERVICES NOT SHOWN FOR CLARITY. COORDINATE LOCATION AND INSTALLATION WITH ENSTAR AND HEA, RESPECTIVELY.

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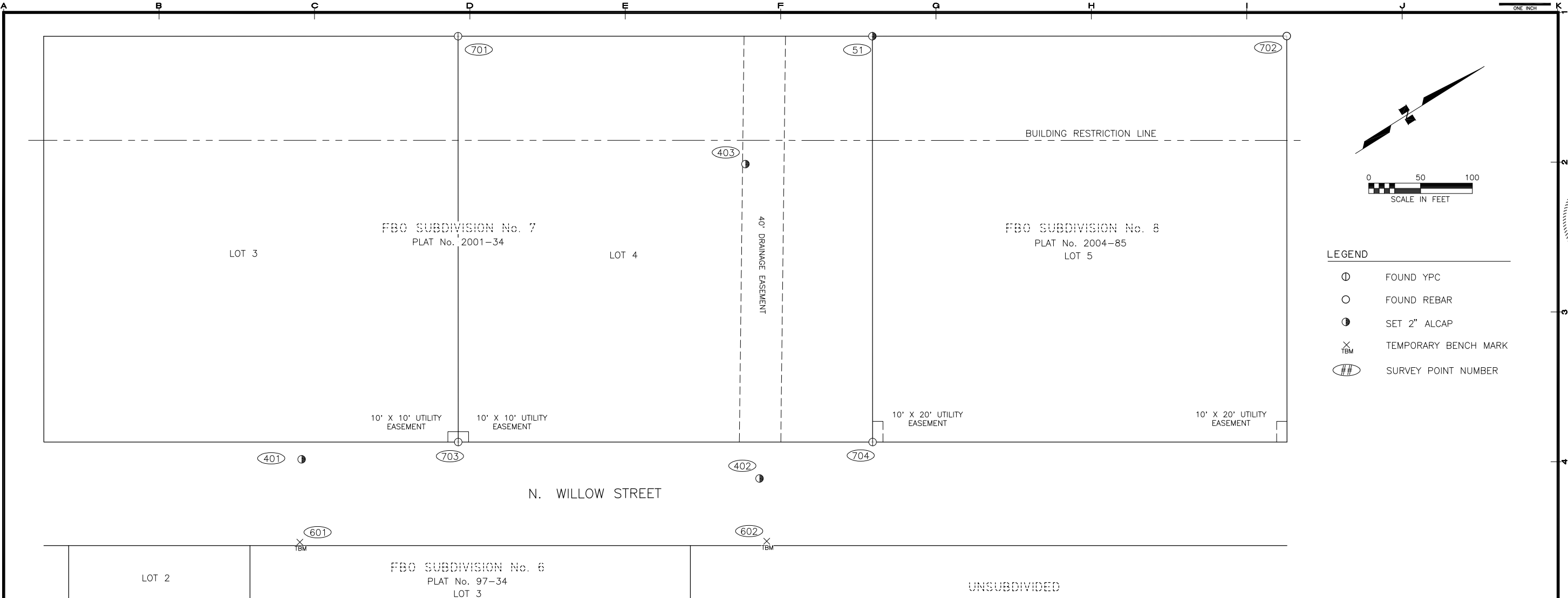
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SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE	
PROJECT LAYOUT PLAN	
SHEET	
G1.04	
DRAWN BY: KK	CHECKED BY: MRS
DATE: 08/05/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	



HORIZONTAL CONTROL STATEMENT

COORDINATE SYSTEM:
THIS PROJECT IS LOCATED ENTIRELY WITHIN THE "ENA" 2020 ADJUSTMENT, A LOCAL SURFACE GRID COORDINATE SYSTEM EXPRESSED IN U.S. SURVEY FEET, DEVELOPED BY HDL ENGINEERING CONSULTANTS, LLC.

BASIS OF COORDINATES:
THE BASIS OF COORDINATES FOR THIS PROJECT IS THE PRIMARY AIRPORT CONTROL STATION "KENAI USCG A" (POINT NO. 551), A 9/16" STAINLESS STEEL ROD IN A 6" PVC CASE, HAVING THE FOLLOWING VALUES:

NAD 83 (2011) (EPOCH 2010.00) GEODETIC COORDINATES:
LATITUDE: 60° 34' 40.90810" NORTH
LONGITUDE: 151° 13' 42.25535" WEST

ALASKA STATE PLANE ZONE 4, NAD83 (2011) COORDINATES:
NORTHING: 2,405,227.4193
EASTING: 1,419,497.4427

ENA 2020 COORDINATES:
NORTHING: 60,000.0000
EASTING: 40,000.0000

BASIS OF BEARINGS:
BEARINGS ARE ALASKA STATE PLANE ZONE 4, NAD83 (2011) GRID BEARINGS FROM GPS OBSERVATIONS.

TRANSLATION PARAMETERS:
TO CONVERT LOCAL COORDINATES TO NAD83 (2011) STATE PLANE ZONE 4 U.S. SURVEY FEET COORDINATES, TRANSLATE USING +2,345,347.3739 NORTH, +1,379,568.2366 EAST, AND SCALE USING 0.99995013.

VERTICAL CONTROL STATEMENT

THE VERTICAL DATUM FOR THIS SURVEY IS A NAVD88 (GEOID 12B) ORTHOMETRIC HEIGHT. THE BASIS OF VERTICAL CONTROL IS THE PRIMARY AIRPORT CONTROL STATION "KENAI USCG A" (POINT NO. 551), A 9/16" STAINLESS STEEL ROD IN A 6" PVC CASE, HAVING AN ELEVATION OF 96.80 FEET (29.506 METERS). THE ELEVATION WAS COMPUTED BY SUBTRACTING THE GEOID12B HEIGHT FROM THE ELLIPSOID HEIGHT PUBLISHED ON THE NGS DATA SHEET.

A LEICA DNA10 DIGITAL LEVEL WAS USED AND THE DATA WAS PROCESSED WITH LEICA INFINITY VERSION 3.3 SOFTWARE. ALL LEVEL LOOPS CLOSED WITHIN THIRD-ORDER SPECIFICATIONS.

HORIZONTAL CONTROL				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
401	57027.0322	38072.1376	91.97	SET 2" ALUMINUM CAP
402	57391.3625	38322.9583	91.11	SET 2" ALUMINUM CAP
403	57541.3857	38058.6330	92.21	SET 2" ALUMINUM CAP
*551	60000.0000	40000.0000	96.80	FOUND 9/16" STAINLESS STEEL DRIVE ROD
*552	58711.4815	37435.8390	95.72	FOUND 3-1/2" BRASS CAP

*NOT SHOWN HEREON

VERTICAL CONTROL				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
601	56983	38139	94.64	SCRIBED "X" ON WEST FIRE HYDRANT BOLT
602	57365	38378	94.94	SCRIBED "X" ON WEST FIRE HYDRANT BOLT

PROPERTY MONUMENTATION			
POINT	NORTHING	EASTING	DESCRIPTION
51	57710.8686	38019.2540	SET 2" ALUMINUM CAP
701	57372.2269	37806.5572	FOUND YELLOW PLASTIC CAP
702	58049.5582	38231.9018	FOUND 5/8" REBAR
703	57163.8492	38138.4605	FOUND YELLOW PLASTIC CAP
704	57502.5427	38351.2654	FOUND YELLOW PLASTIC CAP

NOTES

1. THE INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY COMPLETED BY HDL ENGINEERING CONSULTANTS, LLC, FROM APRIL 21, 2020 THROUGH MAY 01, 2020.
2. ALL DIMENSIONS AND COORDINATES SHOWN ARE IN U.S. SURVEY FEET.
3. THE FIELD SURVEY INFORMATION FOR THIS PROJECT IS LOCATED IN HDL FIELD BOOK KENAI AIRPORT TERM 20-009, BOOK 1, PAGES 1 THROUGH 27.
4. EASEMENTS OF RECORD OTHER THAN THOSE SHOWN ON FIRST AMERICAN TITLE INSURANCE COMPANY REPORT NUMBER 3462693, DATED APRIL 30, 2020 AND THE RECORDED PLATS ARE NOT SHOWN HEREON.
5. THE 40' DRAINAGE EASEMENT LOCATED ON LOT 4, FBO SUBDIVISION No. 7, PLAT No. 2001-34 WAS NOT DIMENSIONED ON THE PLAT OF RECORD. THE POSITION WAS SCALED OFF THE PLAT OF RECORD AND IS APPROXIMATE.
6. THE BUILDING RESTRICTION LINE WAS COMPUTED HOLDING THE POSITION OF POINT NO. 552, THE KENAI AIRPORT SECONDARY CONTROL POINT "KENAI AZ 2", AND IT'S RELATIONSHIP WITH THE "AIRPORT PROPERTY MAP" CREATED BY WINCE-CORTHELL-BRYSON, DATED DECEMBER 20, 2017.
7. VERIFY HORIZONTAL AND VERTICAL CONTROL PRIOR TO USE AND ON A SEASONAL BASIS.

REVISIONS	MARK	DATE	DESCRIPTION
1			
2			
3			
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KENAI, ALASKA

SHEET TITLE
SURVEY CONTROL

SHEET
G1.05

DRAWN BY: BAM
CHECKED BY: GEL
DATE: 08/05/20
SCALE: 1" = 50'
JOB NUMBER: 20-009-01

LAYOUT
G2.00

DATE TIME
8/7/2020 3:49 PM

CORPOR

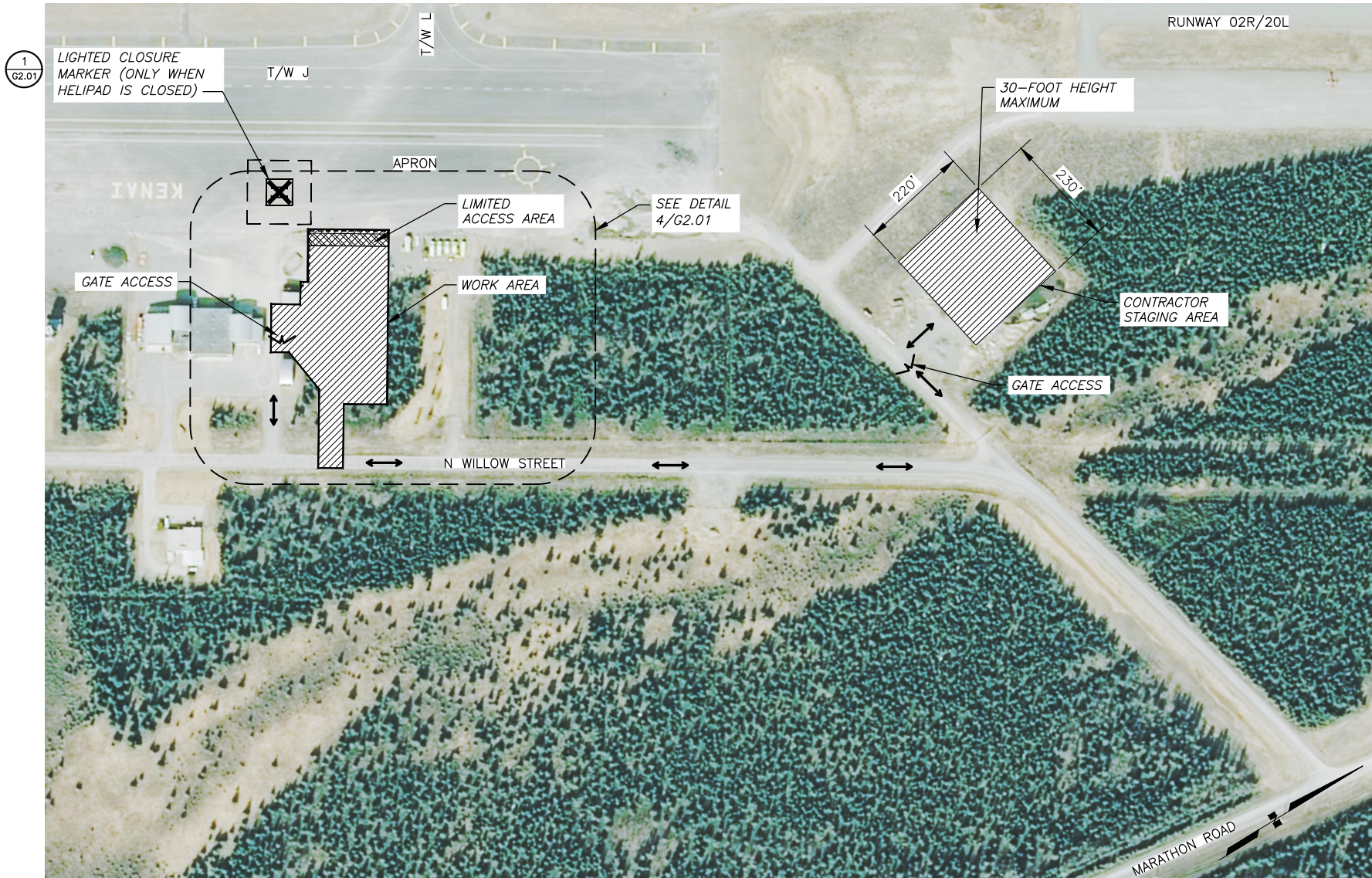
DRAWING LOCATION
\\hdalaska.com\HDL\Jobs\20-009-Kenai Airport Term (COK)\01-Sand Storage Building\CAD\Drawings\20-009-01_CSPP.dwg

PROJECT GENERAL SAFETY REQUIREMENTS (ALL WORK AREAS):

- CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO AND SHALL COMPLY WITH PROJECT PLANS, SPECIFICATIONS, AND FAA ADVISORY CIRCULAR AC 150/5370-2G OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.
- SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) PER FAA AC 150/5370-2G, OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION (SAFETY AC), TO THE ENGINEER FOR REVIEW. DO NOT BEGIN CONSTRUCTION ACTIVITIES UNTIL THE ENGINEER APPROVES THE SPCD IN WRITING. ALLOW 30 DAYS FOR INITIAL REVIEW. INCLUDE CONSTRUCTION SEQUENCING. IF PLAN DIFFERS FROM WHAT IS SHOWN ON THE CSPP, OR IF SUBSEQUENT CHANGES ARE MADE, SUBMIT A REVISION TO THE ENGINEER FOR APPROVAL.
- ALLOW 5 DAYS FOR REVIEW OF REVISED SPCD. MAJOR CHANGES TO THE SPCD MAY REQUIRE RE-EVALUATION BY THE FAA. SEE EXHIBIT D OF THE SUPPLEMENTAL CONDITIONS FOR THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) DOCUMENT, AND MORE INFORMATION ON THE REQUIREMENTS OF THE SAFETY AC AND SPCD. SEE SECTION 1.4.3 OF AC 150/5370-2G FOR A SUMMARIZED GENERAL LIST OF CONTRACTOR RESPONSIBILITIES REGARDING SAFETY DURING CONSTRUCTION.
- WHENEVER THE PLANS OR SPECIFICATIONS CALL FOR COORDINATION, NOTIFICATION, CONTACT, OR OTHER INTERACTION WITH THE FAA, AIRPORT MANAGEMENT, MAINTENANCE AND OPERATIONS, AIRPORT SECURITY SYSTEM MAINTENANCE CONTRACTORS, AIRPORT TENANTS, AIRPORT USERS, AND LOCAL, STATE, OR FEDERAL AGENCY, GROUP, OR ASSOCIATION, OR THE GENERAL PUBLIC, SUCH ACTIVITY SHALL BE DONE IN PRESENCE OF, OR WITH THE WRITTEN APPROVAL OF THE ENGINEER. ALLOW SUFFICIENT TIME FOR COORDINATION AND APPROVALS WITHIN PROPOSED WORK SCHEDULES.
- NOTIFICATION TO ALL AFFECTED AIRPORT LEASEHOLDERS IS REQUIRED FOR ROAD CLOSURES AND NEW TRAFFIC PATTERNS. COORDINATE FIRST LEASEHOLDER NOTIFICATIONS 45 DAYS PRIOR TO BEGINNING OF WORK. SEE CSPP FOR ADDITIONAL LEASEHOLDER NOTIFICATIONS. CONTRACTOR SHALL ASSUME THAT ALMOST CONTINUOUS LEASEHOLDER AND BUSINESS COORDINATION WILL BE REQUIRED DURING CONSTRUCTION AND SHALL PLAN AND BUDGET ACCORDINGLY.
- DELINEATE WORK AREA ON THE APRON WITH LOW PROFILE BARRICADES. INSTALL TRAFFIC CONTROL DEVICES (FLAGGERS, SIGNAGE, BARRIERS, ETC.) AT ALL HAUL ROUTE INTERSECTIONS WITH OPEN ROADS IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED SPCD AND TRAFFIC CONTROL PLAN.
- A SAFETY MEETING SHALL BE HELD EVERY DAY PRIOR TO WORK TO DISCUSS COMMUNICATION, WORK OPERATIONS, MATERIAL HAUL, MOBILIZATION, AND ANY OTHER TOPIC RELATING TO PROJECT SAFETY. CONTRACTOR AND SUBCONTRACTORS SHALL ATTEND.
- COORDINATE START DATE WITH THE ENGINEER AT LEAST 3 DAYS PRIOR TO STARTING WORK SO THAT THE AIRPORT CAN ISSUE NOTAMS AND COORDINATE WITH LEASE LOT HOLDERS. NO WORK SHALL BEGIN UNTIL ACCESS IS GRANTED BY THE AIRPORT.
- CONSTRUCTION ACTIVITIES FOR THIS PROJECT OCCUR WITHIN THE HELIPAD SAFETY AREA AND REQUIRES CLOSURE OF THE HELIPAD. FOLLOW PROCEDURES FOR STATUS CHANGE INCLUDED ON SHEET G2.01. IN CASE OF EMERGENCY, THE CONTRACTOR SHALL REMOVE CLOSURE MATERIALS AND OPEN HELIPAD FOR OPERATIONS WITHIN 15 MINUTES OF NOTIFICATION.
- WHILE HELIPAD IS OPERATIONAL, CONTRACTOR SHALL NOT CONDUCT WORK ACTIVITIES WITHIN THE LIMITED ACCESS AREA.
- NO MATERIAL OR EQUIPMENT SHALL BE STAGED OR STORED WITHIN THE LIMITED ACCESS AREA.
- PROVIDE UNOBSTRUCTED ACCESS TO ALL AIRPORT OPERATIONS NEAR AND ADJACENT TO WORK AREAS.
- CONTRACTOR IS PROHIBITED TO ENTER PAVED AIRFIELD AREAS OUTSIDE THE DELINEATED WORK AREA WITHOUT APPROVAL FROM THE AIRPORT MANAGER AND PERMISSION FROM THE ATCT FOR EACH OCCURRENCE.
- ALL PERSONS AND EQUIPMENT WORKING WITHIN THE AIRPORT PROPERTY SHALL REMAIN IN CONSTANT RADIO CONTACT WITH THE CONTRACTOR'S SAFETY MANAGER USING A RADIO FREQUENCY OTHER THAN THE AVIATION RADIO BAND APPROVED FOR USE BY THE FEDERAL COMMUNICATIONS COMMISSION.
- THE CONTRACTOR'S SAFETY MANAGER, ADDITIONAL SAFETY PERSONNEL, AND SUPERINTENDENT SHALL HAVE A 2-WAY RADIO AND CONTINUOUSLY MONITOR KENAI GROUND FREQUENCY (118.75) WHILE WORK IS OCCURRING. MONITOR COMMON TRAFFIC ADVISORY FREQUENCY (CTAF, 121.3) ANY TIME TOWER IS CLOSED. SEE CONSTRUCTION SAFETY AND PHASING PLAN IN THE PROJECT MANUAL FOR ADDITIONAL RADIO COMMUNICATION REQUIREMENTS.
- CONTRACTOR SHALL KEEP ACTIVE PAVED SURFACES CLEAR OF CONSTRUCTION MATERIALS, FOREIGN OBJECTS, DIRT, GRAVEL, AND DEBRIS. REMOVE MATERIALS FROM ACTIVE PAVED SURFACES WITHIN 15 MINUTES OF VERBAL NOTICE FROM THE AIRPORT MANAGER OR HIS REPRESENTATIVE. CONTRACTOR SHALL INSPECT THE HAUL ROUTES EVERY 4 HOURS WORK IS PERFORMED AND AT END OF EACH SHIFT. REMOVE ALL SPILLED MATERIAL AND SWEEP AND BROOM.
- USE OF HAUL ROUTES AS SHOWN ON THE SAFETY PLANS IS MANDATORY. NO HAUL VEHICLES OR EQUIPMENT SHALL BE PERMITTED ON OPEN APRONS, RUNWAYS OR TAXIWAYS. HAUL TRUCKS AND CONSTRUCTION VEHICLES MUST YIELD TO ALL ROADWAY, PEDESTRIAN, AND AIRPORT TRAFFIC. HAUL VEHICLES SHALL NOT ENTER ONTO THE AIRPORT OPERATIONS AREA. CONTRACTOR SHALL REPAIR ANY DAMAGE TO HAUL ROUTES AT NO ADDITIONAL COST TO THE OWNER.

- RETURN STAGING AREA, HAUL ROUTES, AND OTHER DISTURBED AREAS OUTSIDE THE LIMITS OF CONSTRUCTION TO PRE-PROJECT CONDITION UPON COMPLETION OF THE WORK.
- CONTRACTOR IS NOT PERMITTED ON ANY AIRPORT AREA OTHER THAN PUBLIC ROADS OR AREAS DESIGNATED ON THE SAFETY PLAN DRAWINGS AS A WORK AREA OR HAUL ROUTE, WITHOUT PERMISSION FROM THE AIRPORT MANAGER OR HIS DESIGNATED REPRESENTATIVE.
- CONTRACTOR SHALL SECURE ALL GATES OR OPEN FENCE AREAS TO MAINTAIN A SECURE PERIMETER THROUGHOUT CONSTRUCTION. ANY OPENINGS REQUIRED FOR CONSTRUCTION SHALL BE ATTENDED TO PREVENT ENTRY OF UNAUTHORIZED PERSONNEL ONTO THE AIRFIELD.
- ALL CONSTRUCTION AREAS ON APRONS SHALL BE DELINEATED WITH REFLECTIVE WEIGHTED CONES OR LOW PROFILE BARRICADES. LOW PROFILE BARRICADES SHALL BE IN ACCORDANCE WITH FAA AC 150/5370-2G. EVERY LOW PROFILE BARRICADE SHALL BE EQUIPPED WITH A CAUTION FLAG AND EVERY OTHER LOW PROFILE BARRICADE SHALL BE EQUIPPED WITH A RED FLASHING CONSTRUCTION LIGHT. LOW PROFILE BARRICADES SHALL BE PLACED 8 FEET APART. CONES SHALL BE PLACED 3 FEET APART.
- SIGNS, CONES, BARRIERS, AND MARKERS SHALL BE ANCHORED OR WEIGHTED TO PREVENT MOVEMENT FROM HIGH WINDS, PROPELLER BLAST, OR JET BLAST. CONTRACTOR SHALL PERFORM NECESSARY MEASURES TO PROTECT ASPHALT FROM DAMAGE DUE TO WEIGHTED SIGN BASES.
- THE ENGINEER MAY REQUIRE ADDITIONAL TRAFFIC CONTROL DEVICES AND SIGNAGE ALONG THE HAUL ROUTE AND AROUND THE WORK AREAS AS THE NEED ARISES DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE THIS SIGNAGE AT NO ADDITIONAL COST TO THE OWNER.

- SIGNS SHALL MEET THE REQUIREMENTS OF THE ALASKA TRAFFIC MANUAL, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE ALASKA SIGN DESIGN SPECIFICATIONS.
- REPORT ANY SAFETY ISSUES TO THE ENGINEER UPON DISCOVERY. TAKE IMMEDIATE ACTION TO RESOLVE SAFETY ISSUES AS DIRECTED.
- CONTRACTOR SHALL PERFORM DUST MONITORING ON A DAILY BASIS AND IMMEDIATELY PROVIDE WATER FOR DUST CONTROL AS REQUIRED AND AS DIRECTED BY THE ENGINEER. DUST, SMOKE, STEAM, OR OTHER AIRBORNE PARTICULATES CAUSED BY CONTRACTOR ACTIVITIES MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER. SEE SPECIFICATIONS FOR ADDITIONAL DUST CONTROL REQUIREMENTS.
- STORAGE OF EQUIPMENT OR MATERIALS ON RUNWAYS, APRONS, TAXIWAYS, OR WITHIN TAXIWAY OBJECT FREE AREAS (TOFA), OR RUNWAY OBJECT FREE AREAS (ROFA) SHALL NOT BE ALLOWED.
- PREPARE A TRAFFIC CONTROL PLAN (TCP) SPECIFIC TO CONSTRUCTION ACTIVITIES AND HAUL OPERATIONS IN ACCORDANCE WITH THE PROJECT MANUAL. TCP SHALL BE APPROVED BY THE ENGINEER AND THE CITY PRIOR TO MOBILIZING TO THE SITE OR BEGINNING CONSTRUCTION ACTIVITIES.
- ALASKA DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FORESTRY SHALL HAVE PREFERENTIAL ACCESS TO ALL AREAS OF THE NORTH APRON, AS NEEDED, TO PROVIDE SUPPORT FOR FIREFIGHTING OPERATIONS, EQUIPMENT, AND PERSONNEL. CONTRACTOR SHALL ACCOMMODATE THE SPACE AND ACCESS DEMANDS OF THE FIREFIGHTING OPERATIONS, AS NEEDED.



LEGEND

- | | | | |
|--------------|--|---------------------|--|
| PROJECT AREA | | LIMITED ACCESS AREA | |
| HAUL ROUTE | | | |
| ACCESS GATE | | | |

REVISIONS	DATE	DESCRIPTION
1		
2		
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KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE	CONSTRUCTION SAFETY & PHASING PLAN - SITE PLAN
SHEET	G2.00
DRAWN BY:	TLC
CHECKED BY:	MRS
DATE:	08/05/20
SCALE:	AS SHOWN
JOB NUMBER:	20-009-01

LAYOUT
G2.01

DATE TIME
8/7/2020 3:49 PM

CORPOR

DRAWING LOCATION
\\hda\ask\com\HDL\Jobs\20-009 Kenai Airport Term (COK)\01-Sand Storage Building\CAD\Drawings\20-009-01_CSP.dwg

STATUS CHANGE PROCEDURES:

THESE PROCEDURES SHALL BE FOLLOWED FOR WORK WITHIN THE LIMITED ACCESS AREA ANY TIME THE STATUS OF THE HELIPAD IS TO BE ALTERED.

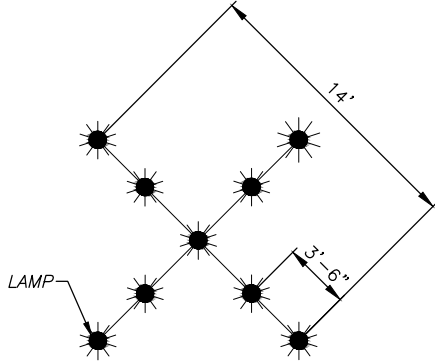
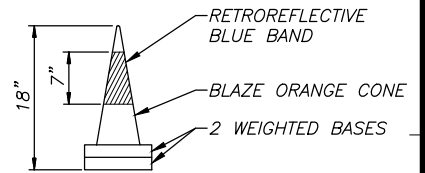
1. CONTRACTOR NOTIFIES AIRPORT MANAGER OR HIS DESIGNATED REPRESENTATIVE OF UPCOMING CHANGE IN AIRPORT STATUS. PROVIDE 3 DAY ADVANCED NOTICE.
2. AIRPORT MANAGER OR HIS DESIGNATED REPRESENTATIVE FILES ALL NOTAMS.
3. CONTRACTOR ENSURES SAFETY PROCEDURES ARE FOLLOWED.
4. CONTRACTOR INSTALLS APPROVED SIGNAGE AND MARKINGS AS DETAILED IN APPROVED TRAFFIC CONTROL PLAN.
5. AIRPORT MANAGER OR HIS DESIGNATED REPRESENTATIVE INSPECTS AND APPROVES THE SIGNAGE AND MARKINGS.
6. CONTRACTOR PROCEEDS WITH HIS WORK.
7. CONTRACTOR SHALL PERFORM WORK AND COMMUNICATE WITH VEHICLES, KENAI FLIGHT SERVICE STATION (AFSS), AND FAA TOWER IN ACCORDANCE WITH SAFETY REQUIREMENTS IDENTIFIED IN THE PLANS, SPECIFICATIONS, AND CONTRACTOR'S SAFETY PLAN COMPLIANCE DOCUMENT (SPCD).
8. CONTRACTOR SHALL SECURE ALL GATES OR OPEN FENCE AREAS TO MAINTAIN SECURED PERIMETER THROUGHOUT CONSTRUCTION. ANY OPENINGS REQUIRED FOR CONSTRUCTION SHALL BE ATTENDED AT ALL TIMES TO PREVENT ENTRY OF UNAUTHORIZED PERSONNEL ONTO THE AIRFIELD.

WORK AREA NOTES:

1. ALL WORK SHALL BE PERFORMED BETWEEN THE HOURS OF 7:00 AM AND 7:00 PM MONDAY THROUGH SATURDAY.
2. CLOSE HELIPAD AND INSTALL LIGHTED CLOSURE MARKER ANYTIME WORK IS PERFORMED IN THE LIMITED ACCESS AREA AND/OR EQUIPMENT PENETRATES THE HELIPORT TRANSITIONAL SURFACE.
3. REMOVE PERSONNEL AND EQUIPMENT FROM LIMITED ACCESS AREA WHEN REQUIRED FOR HELIPORT OPERATIONS AND DIRECTED BY THE OWNER. SEE NOTE 9 ON SHEET G2.00.
4. HELIPORT AND APRON AREAS ADJACENT TO THE PROJECT ARE USED BY ALASKA DEPARTMENT OF NATURAL RESOURCES, DIVISION OF FORESTRY FOR FIRE FIGHTING ACTIVITIES. FIRE FIGHTING AND ASSOCIATED TRAINING ACTIVITIES HAVE PRIORITY OVER CONSTRUCTION WORK AT ALL TIMES. CONTRACTOR SHALL ACCOMMODATE NEEDS OF DIVISION OF FORESTRY AND FIRE FIGHTING ACTIVITIES THROUGHOUT THE PROJECT. DURING TIMES OF INCREASED FIRE FIGHTING ACTIVITIES, SITE ACCESS MAY BE LIMITED OR RESTRICTED. MAINTAIN UNINTERRUPTED ACCESS AND UTILITIES TO DIVISION OF FORESTRY FACILITIES AT ALL TIMES.
5. CONTRACTOR IS ALLOWED ONE 5-DAY CLOSURE OF NORTH WILLOW STREET FOR WATER LINE CONNECTION TO THE EXISTING WATER MAIN. PRIOR TO CLOSURE OF NORTH WILLOW STREET, CONTRACTOR SHALL INSTALL DETOUR ROUTE SIGNAGE IN ACCORDANCE WITH APPROVED TRAFFIC CONTROL PLAN (TCP). MAINTAIN UNRESTRICTED ACCESS TO ALL BUSINESS LEASE LOTS, AIRPORT AREAS, AND OTHER PROPERTY ON NORTH WILLOW STREET THROUGHOUT CONSTRUCTION.

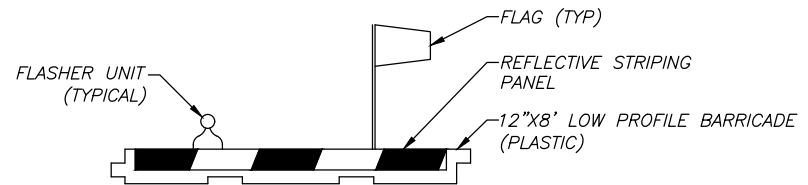
NOTES:

1. LIGHTED MARKER SHALL COMPLY WITH FAA AC 150/5345-55A.
2. THE LIGHTED MARKER SHALL BE PLACED HORIZONTALLY AT THE CENTER OF THE HELIPAD "H" MARKER OR AS DIRECTED BY THE ENGINEER.
3. LIGHTED MARKER SHALL BE SECURED FROM WIND EFFECTS BY THE CONTRACTOR AND AS RECOMMENDED BY THE MANUFACTURER.
4. LIGHTED MARKER SHALL BE IN PLACE AND OPERATING WHENEVER HELIPAD IS CLOSED AND REMOVED WHEN RE-OPENED.



1 LIGHTED CLOSURE MARKER
SCALE: NTS

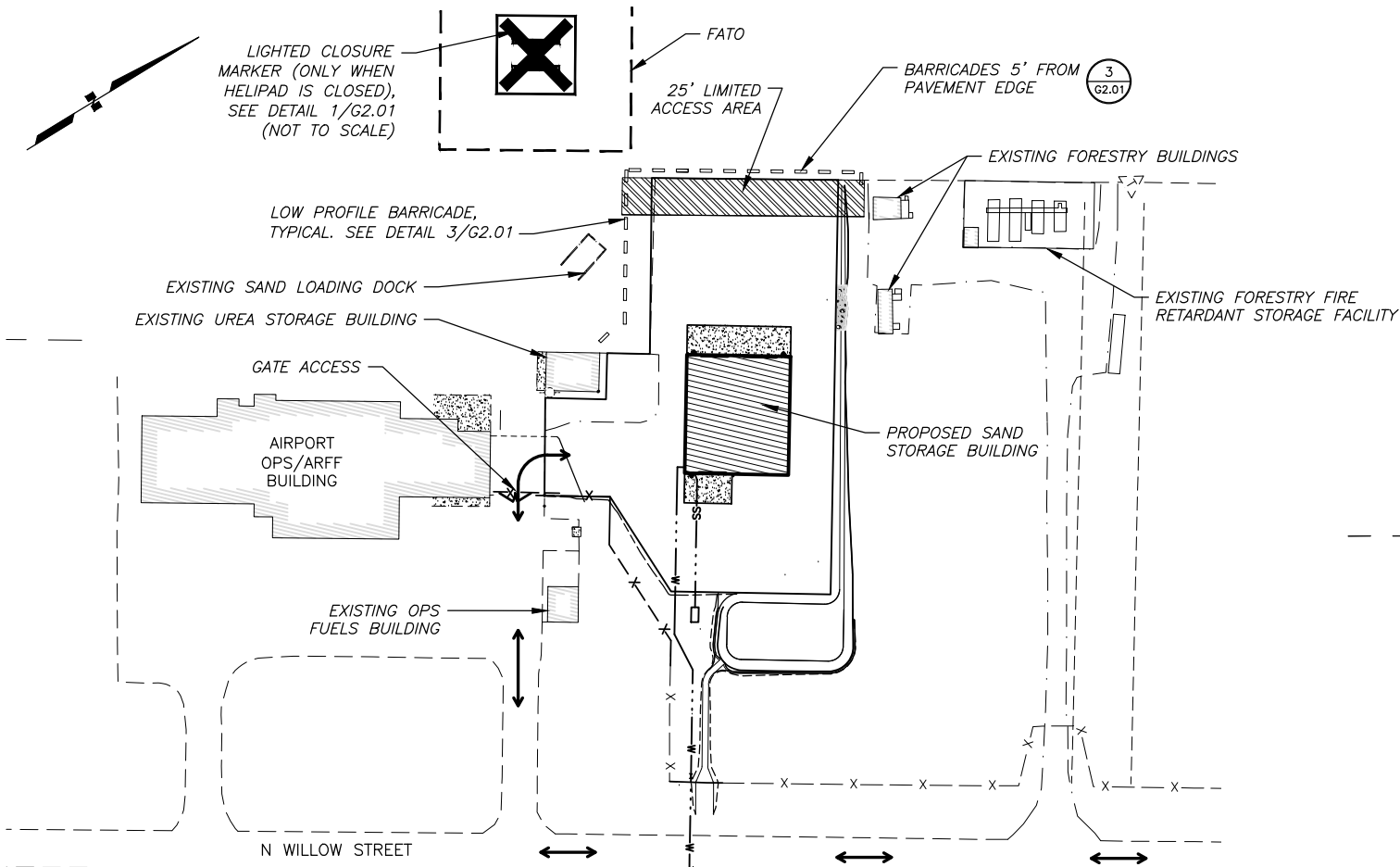
2 CONE DETAIL
SCALE: NTS



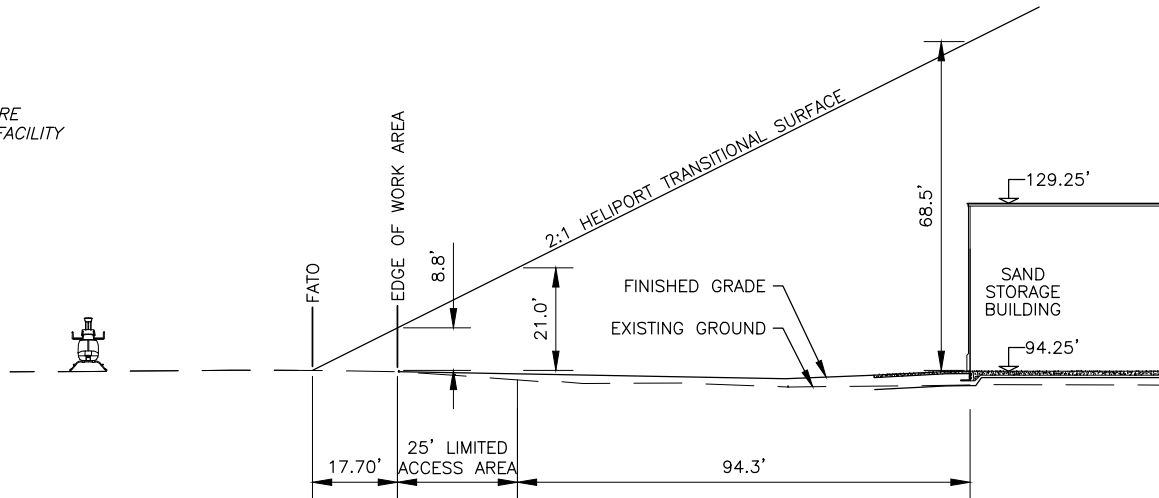
NOTES:

1. LOW PROFILE BARRICADES SHALL NOT BE PLACED WITHIN 20' OF THE FATO WHEN HELIPAD IS OPEN FOR OPERATIONS.
2. DISTANCE BETWEEN BARRICADES CAN BE ADJUSTED FOR CONSTRUCTION TRAFFIC, NOT TO EXCEED 8'.
3. SECURE FLAGS AND FLASHERS TO WITHSTAND HELICOPTER ROTOR WASH.

3 LOW PROFILE BARRICADE DETAIL
SCALE: NTS

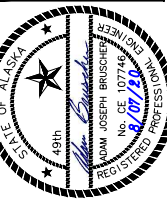


4 SITE LAYOUT - WORK AREA
SCALE: NTS



5 HELIPORT TRANSITIONAL SURFACE DETAIL
SCALE: NTS

REVISIONS	DATE	DESCRIPTION
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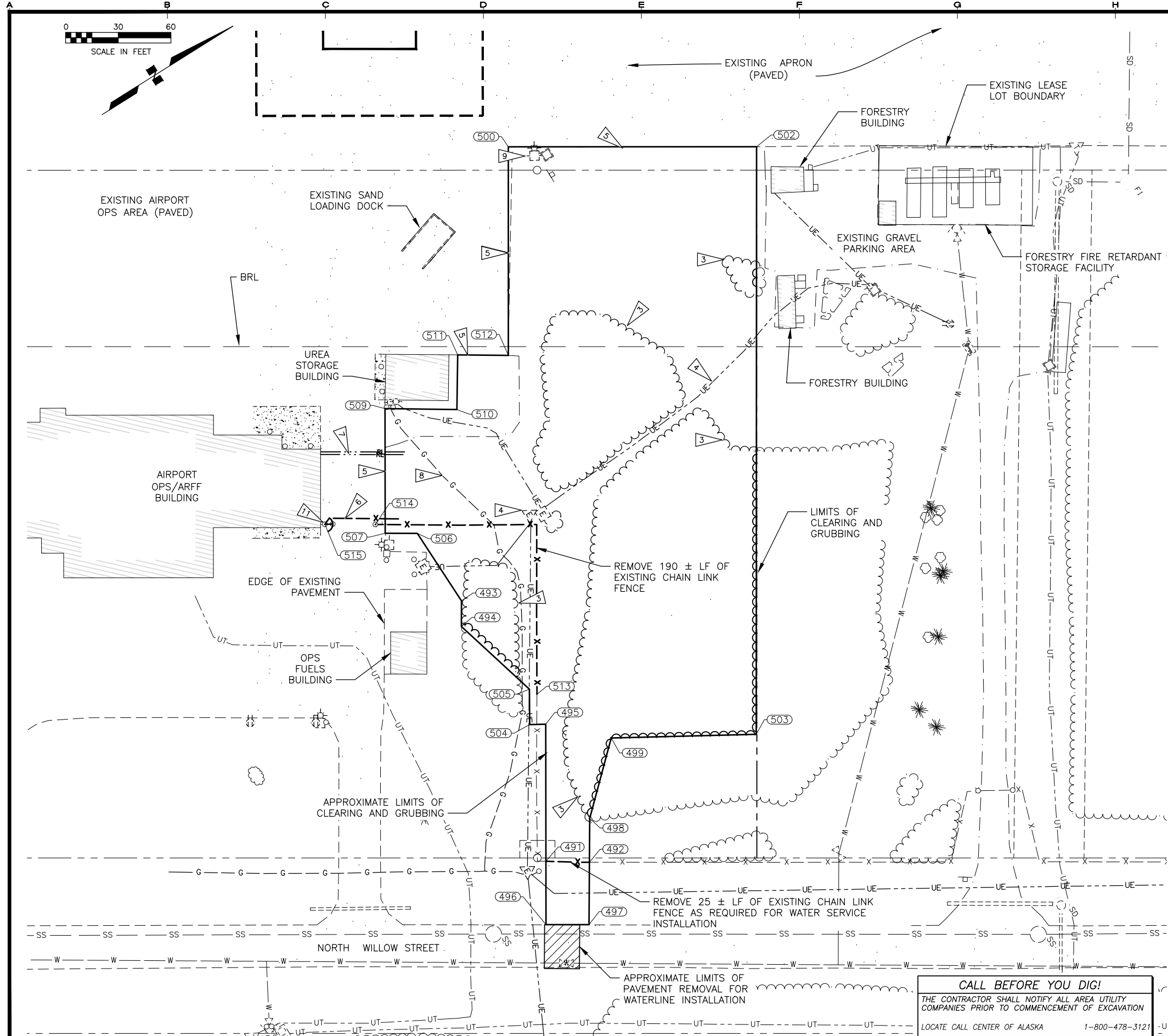


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KENAI, ALASKA

SHEET TITLE	CONSTRUCTION SAFETY & PHASING PLAN - DETAILS
SHEET	G2.01
DRAWN BY:	TLC
CHECKED BY:	MRS
DATE:	08/05/2020
SCALE:	AS SHOWN
JOB NUMBER:	20-009-01

DRAWING LOCATION
\\hda\askal.com\hda\jobs\20-009 Kenai Airport Term (COK)\01-Sand Storage Building\CAD\Drawings\20-009-01_C-DEM0.dwg
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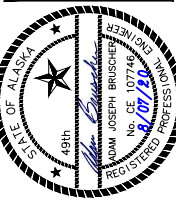
- NOTES:**
- SEE SHEETS G1.02 AND G1.03 FOR CIVIL GENERAL NOTES, ABBREVIATIONS, AND LEGEND. SEE SHEET G1.05 FOR SURVEY CONTROL INFORMATION.
 - EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATION AND AT STANDARD DEPTH. ACTUAL LOCATION AND DEPTH IS UNKNOWN. PROTECT IN PLACE AND WORK AROUND ALL EXISTING UTILITIES NOT SPECIFICALLY INDICATED TO BE RELOCATED.
 - CLEAR AND GRUB TO LIMITS SHOWN AND REMOVE ORGANIC MATERIALS.
 - EXISTING UNDERGROUND ELECTRICAL, PEDESTAL AND TRANSFORMER TO BE RELOCATED BY HEA. COORDINATE NEW UTILITY IMPROVEMENTS AND RELOCATIONS WITH HEA AND ENSTAR AND PLAN AND PERFORM WORK AS NECESSARY TO ALLOW HEA AND ENSTAR TO CONSTRUCT NEW AND TEMPORARY IMPROVEMENTS.
 - SAWCUT AND REMOVE EDGE OF ASPHALT PAVEMENT AS IDENTIFIED. IN PREPARATION FOR AND IMMEDIATELY PRIOR TO PAVING, CONTRACTOR SHALL SAW CUT AND REMOVE AN ADDITIONAL 12" FROM EXISTING PAVEMENT EDGE. THE ENGINEER MAY REQUIRE MORE THAN A 12" ADDITIONAL CUT IF THE EXISTING PAVEMENT HAS BEEN LIFTED IN THE REMOVING PROCESS.
 - REMOVE (1) 24' SLIDING GATE AND (1) 4' PEDESTRIAN GATE, ONLY IF ADDITIVE ALTERNATE 1 IS AWARDED.
 - EXISTING AIRPORT OPS/ARFF BUILDING RAIN LEADER AND OVERFLOW DRAIN. PROTECT IN PLACE AND EXTEND AS SHOWN ON SHEET C1.02.
 - EXISTING GAS LINE TO REMAIN. PROTECT IN PLACE.
 - ELECTRICAL ROUTING TO EXISTING APRON LIGHT POLE AND HANDHOLE UNKNOWN. CONTRACTOR TO FIELD VERIFY AND PROTECT IN PLACE PRIOR TO BEGINNING WORK.
 - MAINTAIN SECURITY AT PERIMETER FENCE LINE DURING FENCE REMOVAL AND REPLACEMENT AT ALL TIME DURING CONSTRUCTION, AS REQUIRED BY THE CSPP.
 - END OF GATE REMOVAL ONLY IF ADDITIVE ALTERNATE 1 IS AWARDED. EXISTING GATE POST TO REMAIN, SEE DETAIL 1 SHEET C3.02.

DEMOLITION COORDINATE POINT TABLE			
Point #	Northing	Easting	Description
491	57166.9324	38142.6377	BEGIN FENCE REMOVAL
492	57187.6454	38156.2954	END FENCE REMOVAL
493	57205.1488	37991.3947	CLEAR AND GRUB LIMITS
494	57197.3918	38003.7211	CLEAR AND GRUB LIMITS
495	57208.4021	38076.4372	CLEAR AND GRUB LIMITS
496	57147.7618	38173.2409	CLEAR AND GURB LIMITS
497	57168.5016	38186.2719	CLEAR AND GRUB LIMITS
498	57201.1031	38135.2225	CLEAR AND GRUB LIMITS
499	57235.8307	38102.9754	CLEAR AND GRUB LIMITS
500	57365.3989	37786.5634	LIMITS EXISTING PAVEMENT – SAWCUT
502	57485.1762	37861.7383	LIMITS EXISTING PAVEMENT – SAWCUT
503	57306.8938	38145.1358	CLEAR AND GRUB LIMITS
504	57200.5456	38071.7760	CLEAR AND GRUB LIMITS
505	57211.1495	38054.6359	CLEAR AND GRUB LIMITS
506	57204.3347	37945.4733	CLEAR AND GRUB LIMITS
507	57188.8368	37935.6774	LIMITS EXISTING PAVEMENT – SAWCUT
509	57226.5682	37875.4667	LIMITS EXISTING PAVEMENT – SAWCUT
510	57260.9677	37897.7426	CLEAR AND GRUB LIMITS
511	57277.9167	37871.5800	LIMITS EXISTING PAVEMENT – SAWCUT
512	57302.1850	37887.1836	LIMITS EXISTING PAVEMENT – SAWCUT
513	57213.2544	38059.3722	BEGIN FENCE REMOVAL
514	57186.8122	37928.4617	END FENCE REMOVAL/GATE POST
515	57162.5165	37913.0856	GATE POST REMAIN

1
C1.01
DEMOLITION PLAN
SCALE: 1" = 30.0'

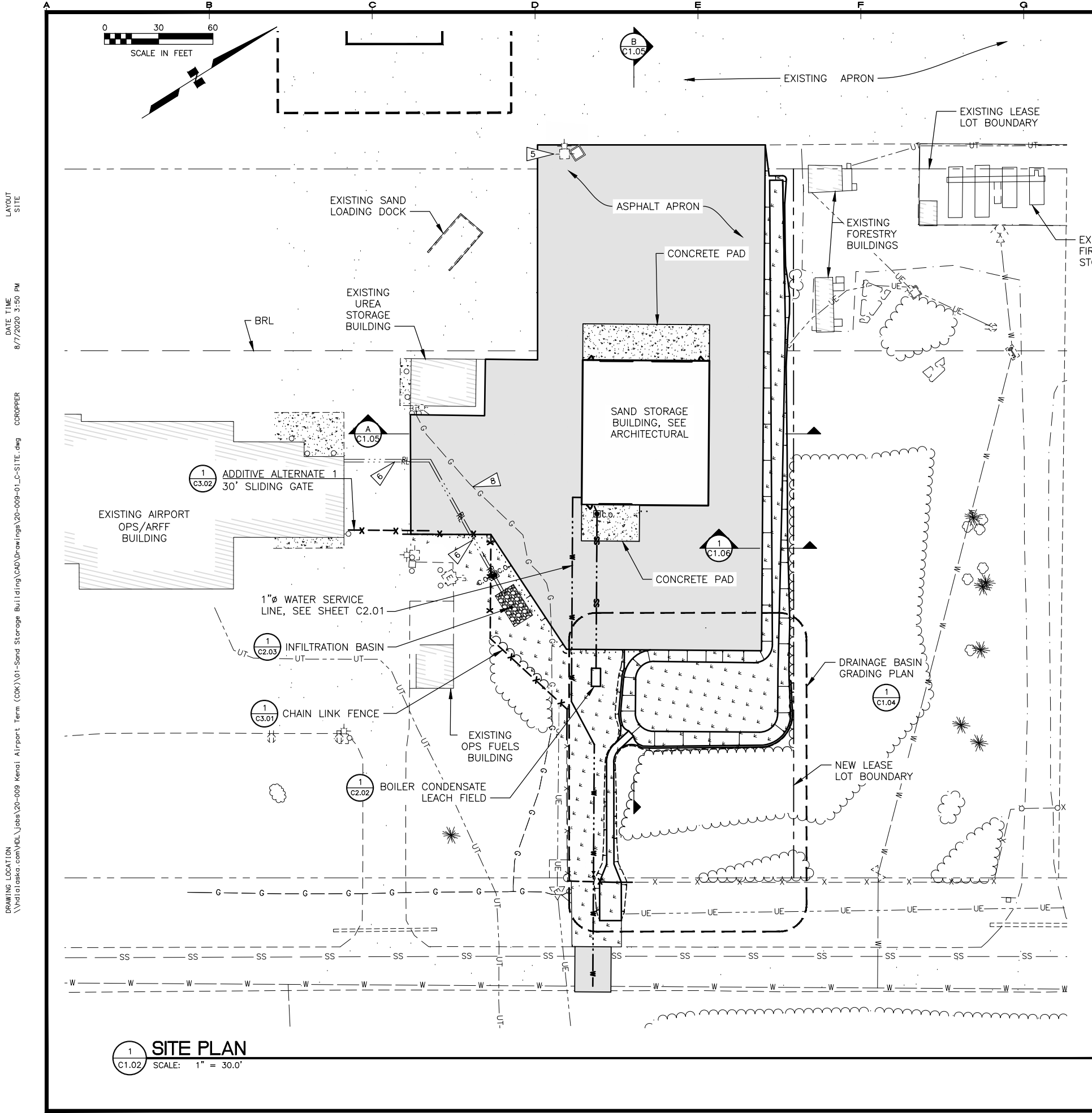
CALL BEFORE YOU DIG!
THE CONTRACTOR SHALL NOTIFY ALL AREA UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION
LOCATE CALL CENTER OF ALASKA 1-800-478-3121

REVISIONS	DATE	DESCRIPTION
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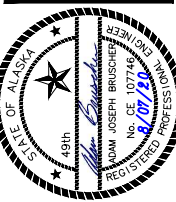
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SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA
SHEET TITLE
DEMOLITION PLAN
SHEET
C1.01
DRAWN BY: KK
CHECKED BY: MRS
DATE: 08/05/2020
SCALE: AS SHOWN
JOB NUMBER: 20-009-01



- NOTES:**
- SEE SHEETS G1.02 AND G1.03 FOR CIVIL GENERAL NOTES, ABBREVIATIONS, AND LEGEND. SEE SHEET G1.05 FOR SURVEY CONTROL INFORMATION.
 - EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATION AND AT STANDARD DEPTH. ACTUAL LOCATION AND DEPTH IS UNKNOWN. PROTECT IN PLACE AND WORK AROUND ALL EXISTING UTILITIES NOT SPECIFICALLY INDICATED TO BE RELOCATED.
 - SEE SHEET C1.03 FOR GRADING PLAN AND LAYOUT POINTS.
 - SEE SHEET C1.05 & C1.06 FOR TYPICAL SECTIONS.
 - ELECTRICAL ROUTING TO EXISTING APRON LIGHT POLE AND ADJACENT HANDHOLE UNKNOWN. CONTRACTOR TO FIELD VERIFY AND PROTECT IN PLACE PRIOR TO BEGINNING WORK.
 - FIELD LOCATE RAIN LEADER AND OVERFLOW DRAIN PIPES AND VERIFY SIZE AND TYPE OF PIPE FOR EXISTING AIRPORT OPS/ARFF BUILDING PIPING. CONNECT TO EXISTING PIPES AND EXTEND TO INFILTRATION BASIN. INSTALL NEW FITTINGS AND PIPING AS-NECESSARY. MATCH EXISTING MATERIALS.
 - TOPSOIL AND SEED ALL DISTURBED AREAS NOT SCHEDULED TO RECEIVE OTHER SURFACING.
 - EXISTING GAS LINE TO REMAIN. PROTECT IN PLACE.
 - NEW HEA ELECTRICAL IMPROVEMENTS AND ENSTAR GAS SERVICE NOT SHOWN FOR CLARITY. COORDINATE NEW AND TEMPORARY IMPROVEMENTS AND RELOCATIONS WITH HEA AND ENSTAR SO UTILITY CONSTRUCTION OCCURS PRIOR TO INSTALLATION OF BASE COURSE, PAVEMENT, AND TOPSOIL.

REVISIONS	DATE	DESCRIPTION
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SHEET TITLE
SITE PLAN

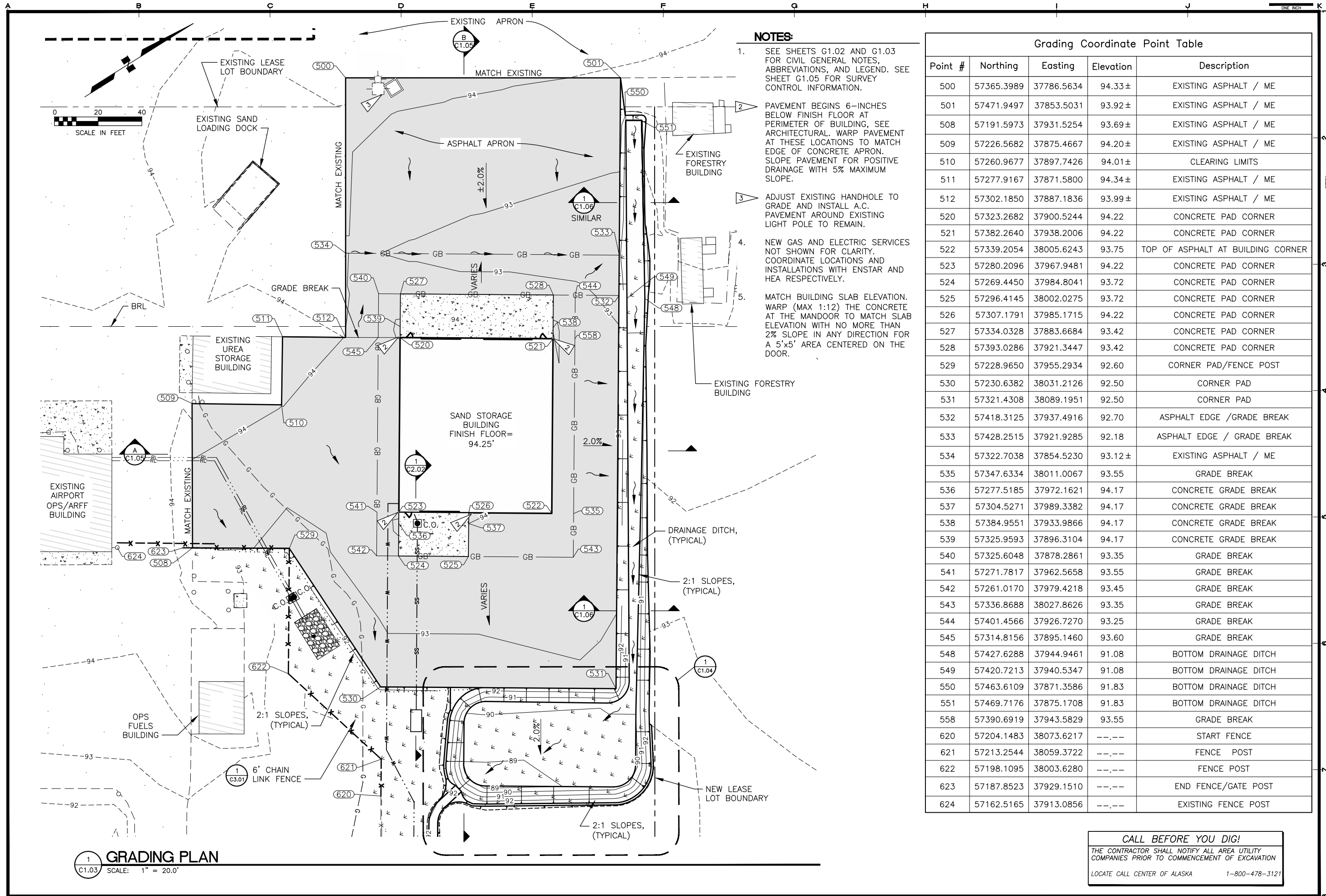
SHEET
C1.02

DRAWN BY: **KK** CHECKED BY: **MRS**

DATE: **08/05/20** SCALE: **AS SHOWN**

JOB NUMBER: **20-009-01**

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REVISIONS
MARK
DATE
DESCRIPTION

1
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STATE OF ALASKA
REGISTERED PROFESSIONAL ENGINEER
ADAM JOSEPH BRUSCH
No. CE 107748
Exp. 12/31/2023

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KENAI, ALASKA

SHEET TITLE
GRADING PLAN

SHEET
C1.03

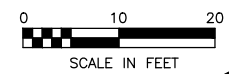
DRAWN BY:
KK

CHECKED BY:
MRS

DATE:
08/05/2020

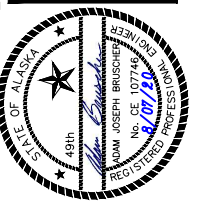
SCALE:
AS SHOWN

JOB NUMBER:
20-009-01



Grading Coordinate Point Table

REVISIONS		
MARK	DATE	DESCRIPTION
1		
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SHEET TITLE	
DITCH - DRAINAGE BASIN GRADING PLAN	
SHEET	
C1.04	
DRAWN BY: KK	CHECKED BY: MRS
DATE: 08/05/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

1 DITCH / DRAINAGE BASIN GRADING PLAN
C1.04 SCALE: 1" = 10.0'

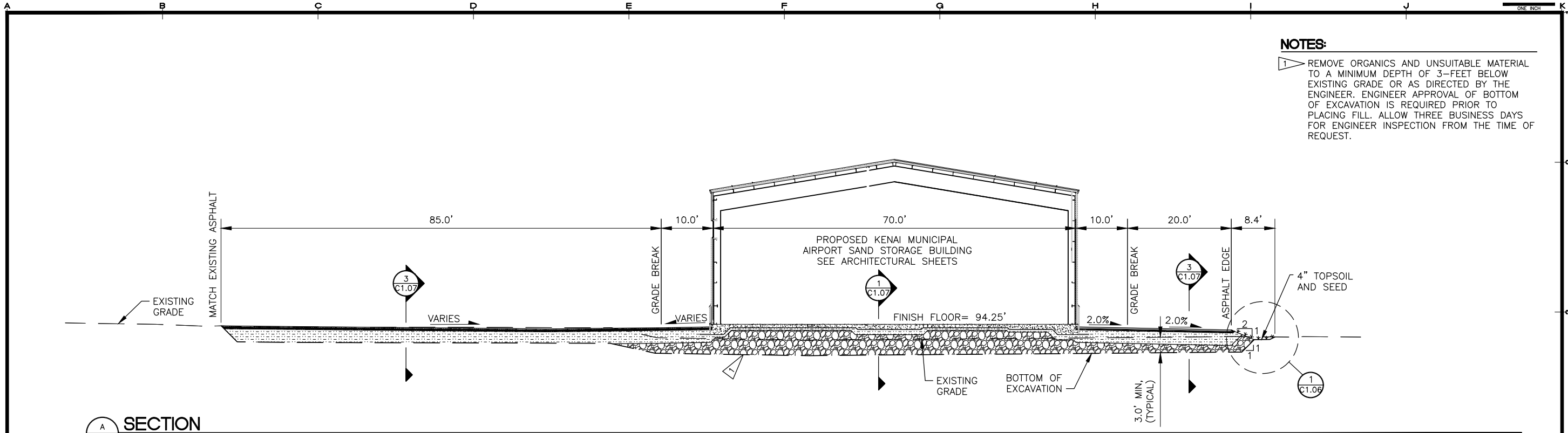
LAYOUT
SECTIONS

DATE TIME
8/7/2020 3:53 PM

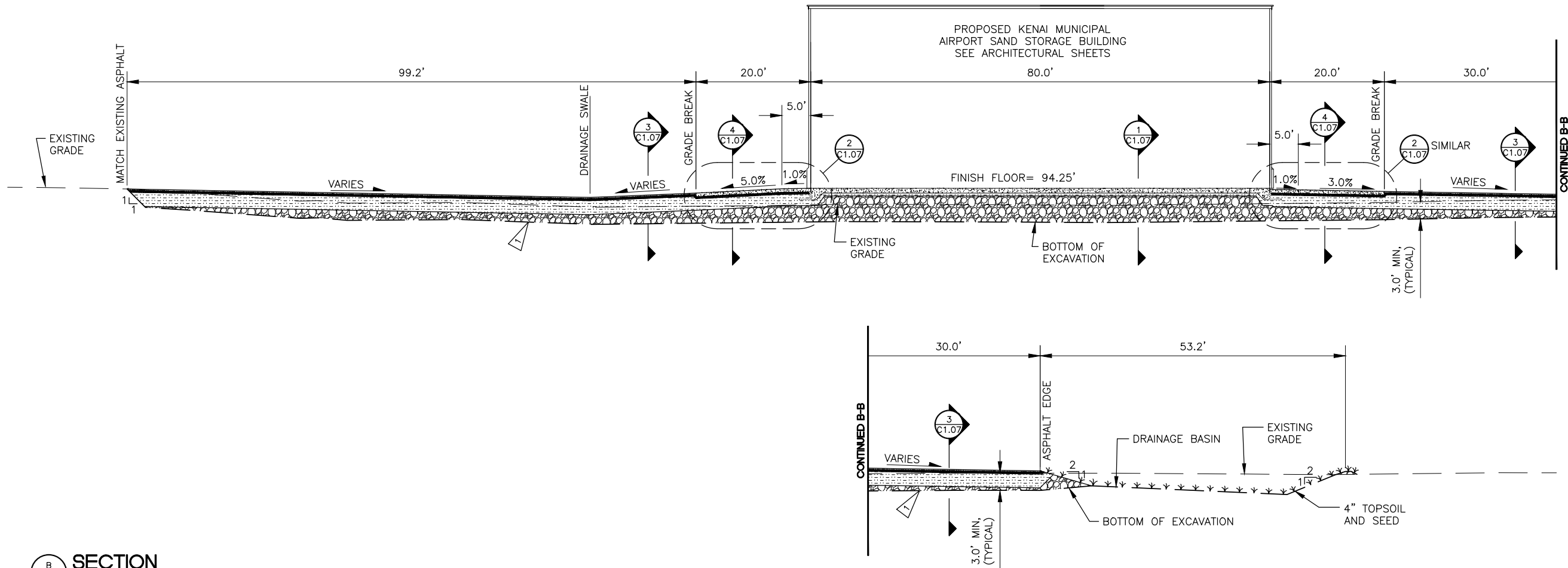
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COROPPER

DRAWING LOCATION
\\hda1aska.com\hda1\Jobs\20-009 Kenai Airport Term (COP)\01-Sand Storage Building\CAD\Drawings\20-009-01_C-SECT.dwg



A SECTION
C1.05 SCALE: 1" = 10.0'

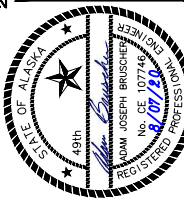


B SECTION
C1.05 SCALE: 1" = 10.0'

NOTES:

- REMOVE ORGANICS AND UNSUITABLE MATERIAL TO A MINIMUM DEPTH OF 3- FEET BELOW EXISTING GRADE OR AS DIRECTED BY THE ENGINEER. ENGINEER APPROVAL OF BOTTOM OF EXCAVATION IS REQUIRED PRIOR TO PLACING FILL. ALLOW THREE BUSINESS DAYS FOR ENGINEER INSPECTION FROM THE TIME OF REQUEST.

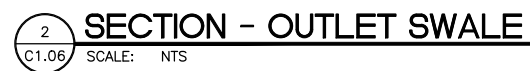
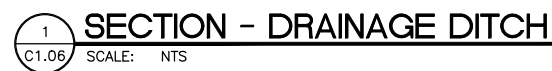
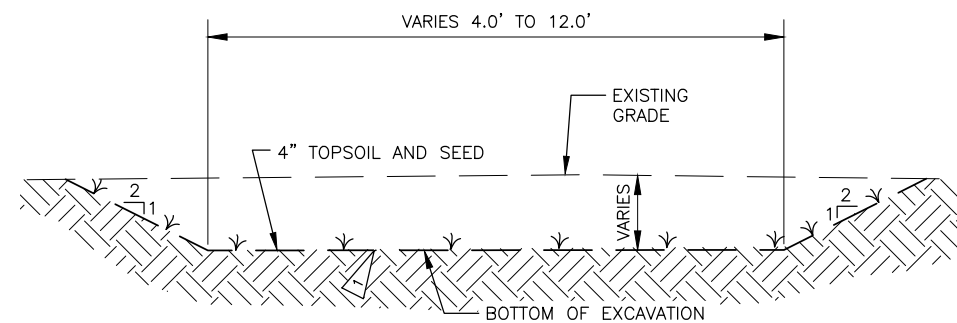
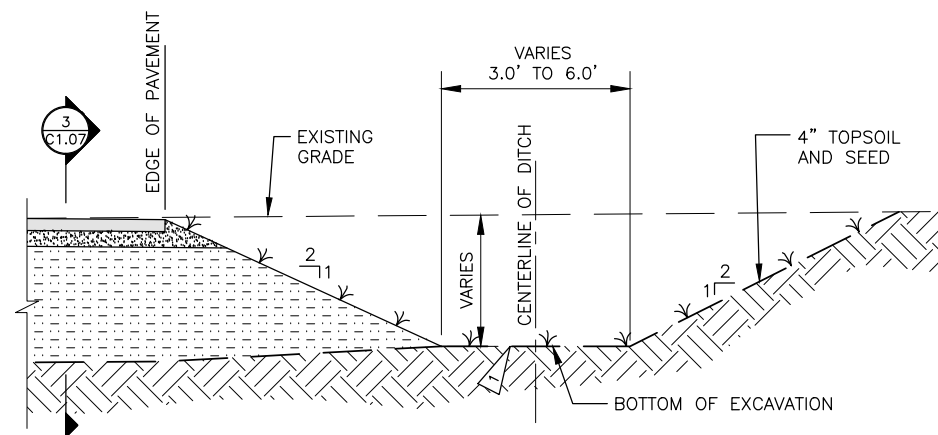
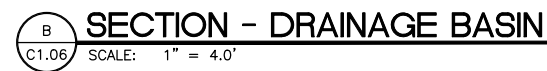
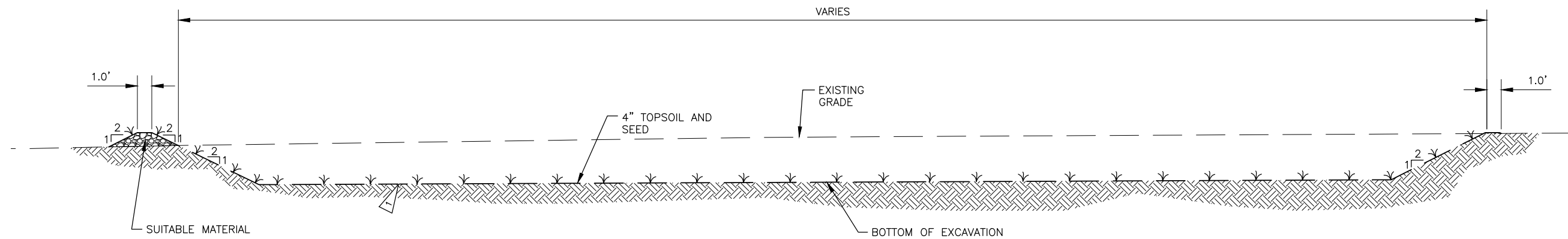
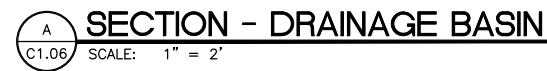
REVISIONS	DATE	DESCRIPTION
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SHEET TITLE	CIVIL SECTIONS
SHEET	C1.05
DRAWN BY:	KK
CHECKED BY:	MRS
DATE:	08/05/2020
SCALE:	AS SHOWN
JOB NUMBER:	20-009-01



2. TOPSOIL AND SEED ALL DISTURBED AREAS NOT SCHEDULED TO RECEIVE OTHER SURFACING.

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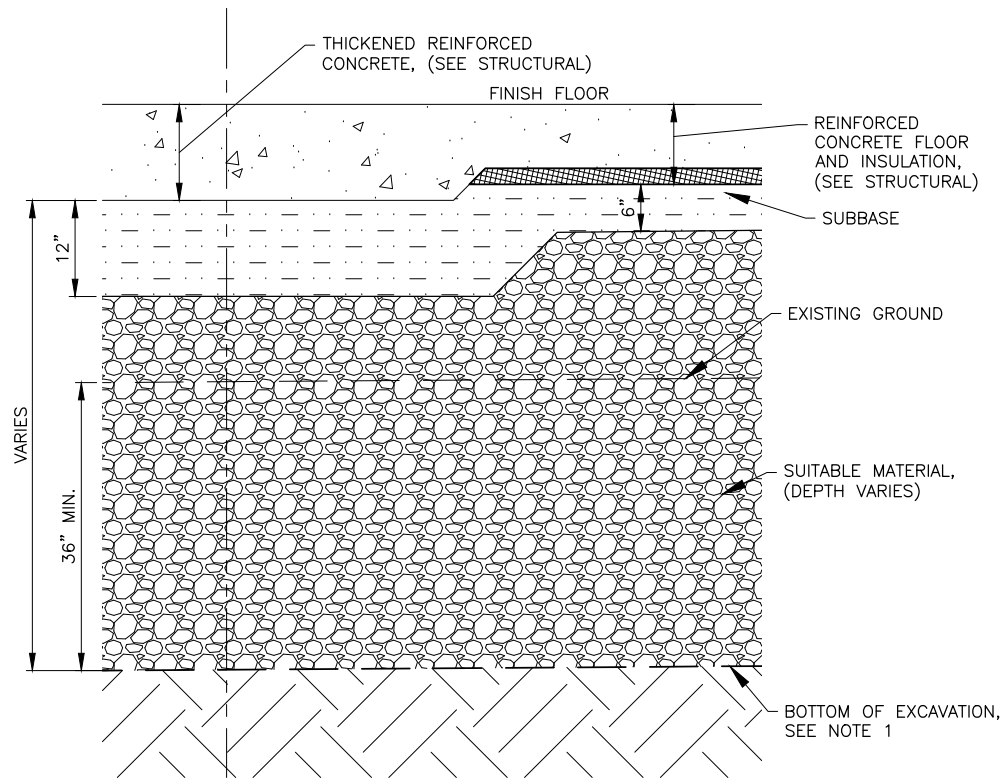
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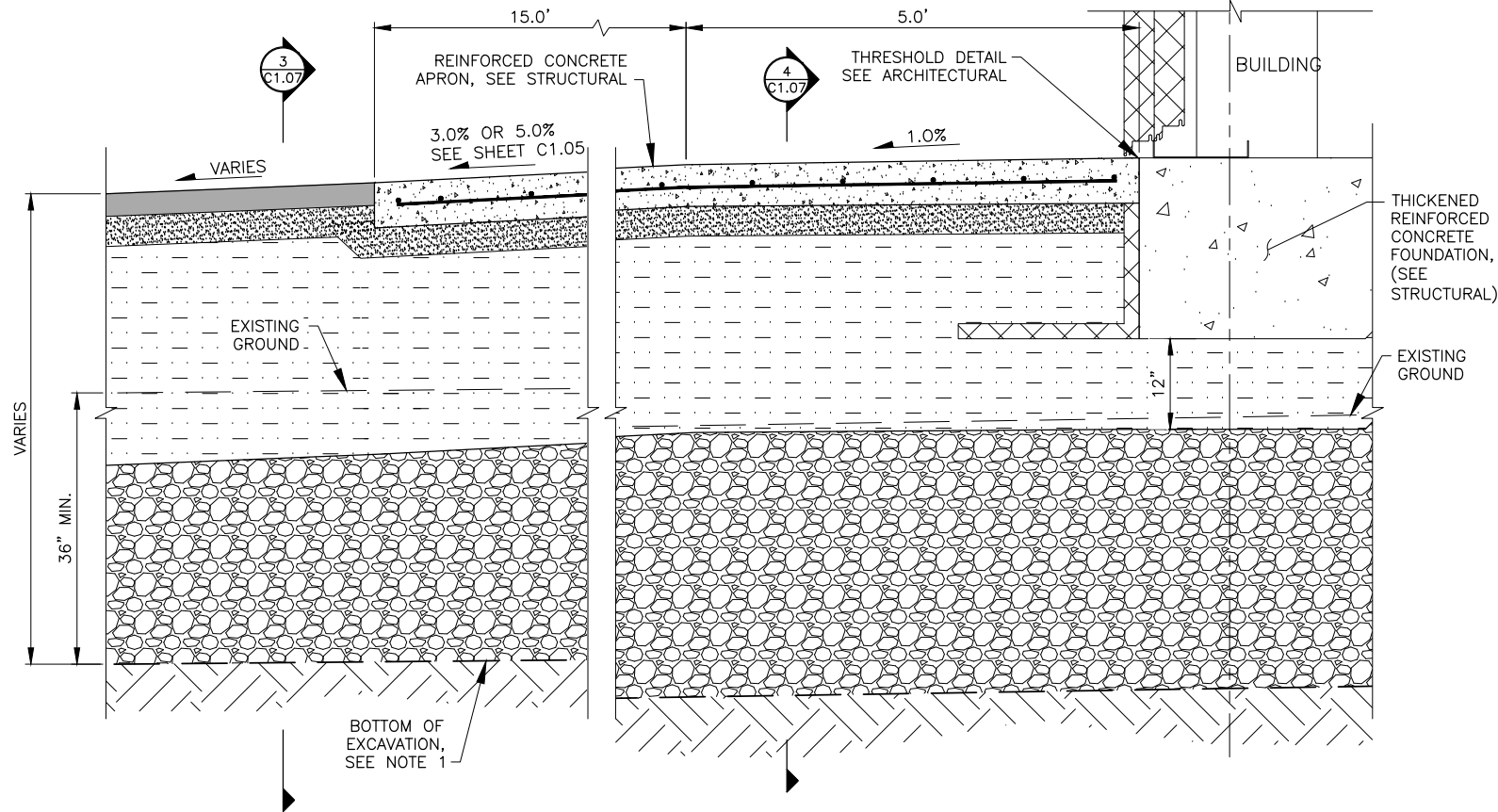
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KENAI, ALASKA

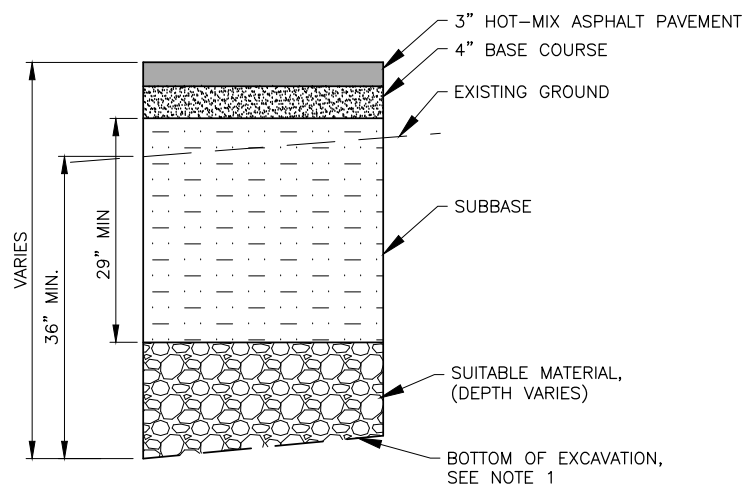
SHEET TITLE	
DITCH - DRAINAGE BASIN SECTIONS	
C1.06	
DRAWN BY: KK	
CHECKED BY: MRS	
DATE: 08/05/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	



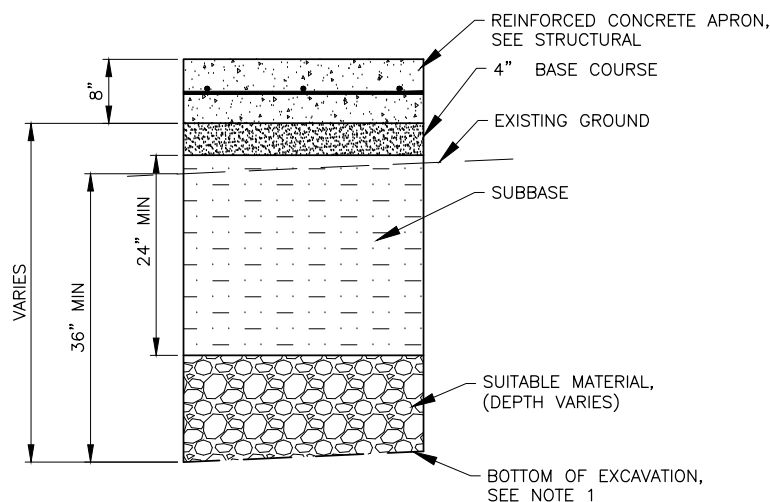
1 BUILDING SECTION
SCALE: NONE



2 DETAIL - CONCRETE APRON SLAB
SCALE: NONE



3 PAVEMENT SECTION
SCALE: NONE

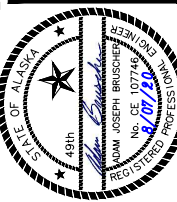


4 CONCRETE APRON SECTION
SCALE: NONE

NOTE:

1. REMOVE ORGANICS AND UNSUITABLE MATERIAL TO A MINIMUM DEPTH OF 3- FEET BELOW EXISTING GRADE OR AS DIRECTED BY THE ENGINEER. ENGINEER APPROVAL OF BOTTOM OF EXCAVATION IS REQUIRED PRIOR TO PLACING FILL. ALLOW THREE BUSINESS DAYS FOR ENGINEER INSPECTION FROM THE TIME OF REQUEST.

REVISIONS	DATE	DESCRIPTION
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SHEET TITLE	CIVIL SECTIONS
SHEET	C1.07
DRAWN BY:	KK
CHECKED BY:	MRS
DATE:	08/05/20
SCALE:	AS SHOWN
JOB NUMBER:	20-009-01

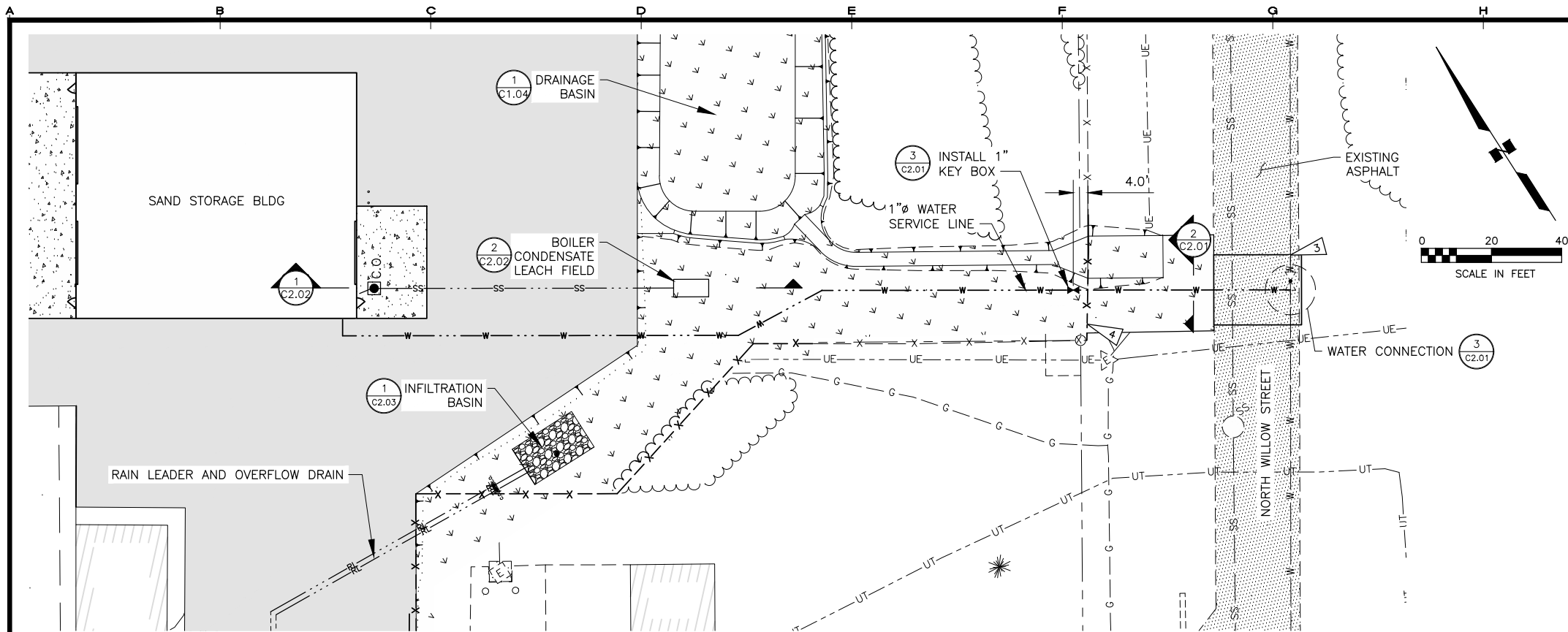
LAYOUT
C2.01

DATE TIME
8/7/2020 3:53 PM

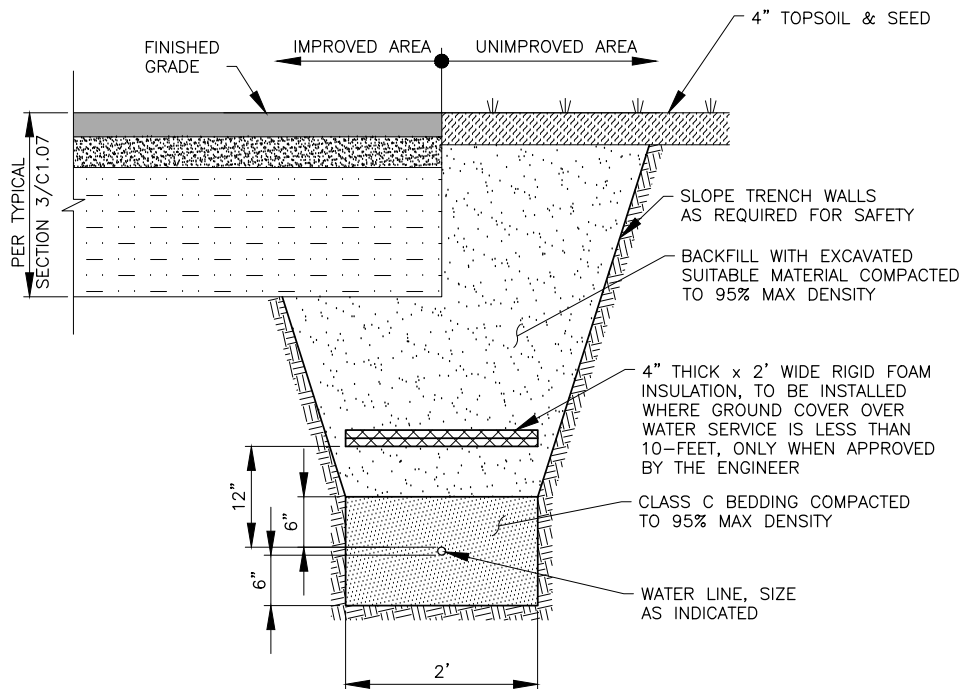
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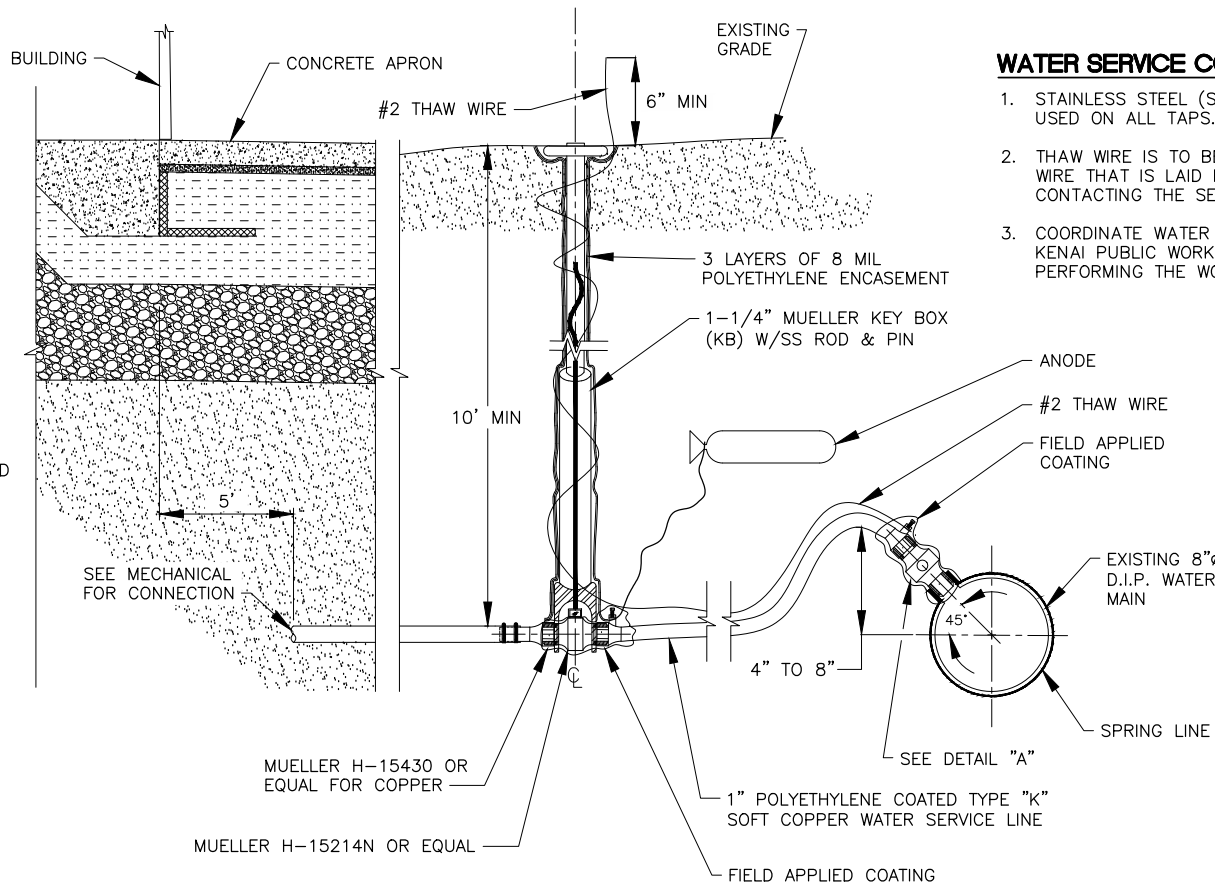
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\\hda\ask\com\HDL\Jobs\20-009 Kenai Airport Term (COK)\01-Sand Storage Building\CAD\Drawings\20-009-01_C-WATER.dwg



1 WATER SERVICE SITE PLAN
C2.01 SCALE: 1" = 20.0'



2 WATER TRENCH TYPICAL SECTION
C2.01 SCALE: NONE



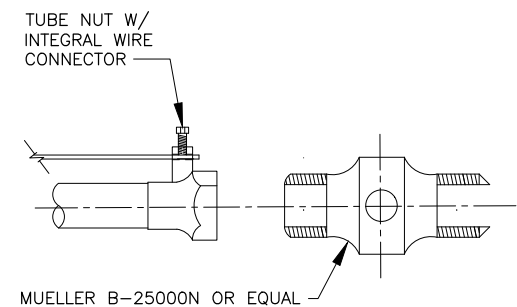
3 1" WATER SERVICE CONNECTION
C2.01 SCALE: NONE

NOTES:

- SEE SHEETS G1.02 AND G1.03 FOR CIVIL GENERAL NOTES, ABBREVIATIONS, AND LEGEND. SEE SHEET G1.05 FOR SURVEY CONTROL INFORMATION.
- EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATION AND AT STANDARD DEPTH. ACTUAL LOCATION AND DEPTH IS UNKNOWN. PROTECT IN PLACE AND WORK AROUND ALL EXISTING UTILITIES NOT SPECIFICALLY INDICATED TO BE RELOCATED.
- REPLACE A.C. PAVEMENT DAMAGED BY UTILITY INSTALLATION. SAWCUT EDGES AND TACK COAT IMMEDIATELY PRIOR TO PAVING.
- REMOVE AND REPLACE FENCING DURING INSTALLATION OF WATER SERVICE AND CONSTRUCTION OF DRAINAGE SWALE. CONTRACTOR SHALL MAINTAIN SECURITY AND PERIMETER CONTROL.
- NEW HEA ELECTRICAL IMPROVEMENTS AND ENSTAR GAS SERVICES NOT SHOWN FOR CLARITY. COORDINATE NEW AND TEMPORARY IMPROVEMENTS AND RELOCATIONS WITH HEA AND ENSTAR SO UTILITY CONSTRUCTION OCCURS PRIOR TO INSTALLATION OF BASE COURSE, PAVEMENT, AND TOPSOIL.
- DEWATERING TRENCH EXCAVATION SHALL BE ANTICIPATED.

WATER SERVICE CONNECTION NOTES:

- STAINLESS STEEL (SS) WRAP AROUND SERVICE SADDLE TO BE USED ON ALL TAPS.
- THAW WIRE IS TO BE #2 GAUGE HMWPE INSULATED COPPER WIRE THAT IS LAID PARALLEL TO THE SERVICE LINE WITHOUT CONTACTING THE SERVICE LINE.
- COORDINATE WATER SERVICE CONNECTION WORK WITH CITY OF KENAI PUBLIC WORKS AT LEAST 21 DAYS PRIOR TO PERFORMING THE WORK.



DETAIL A

REVISIONS	DATE	DESCRIPTION
1		
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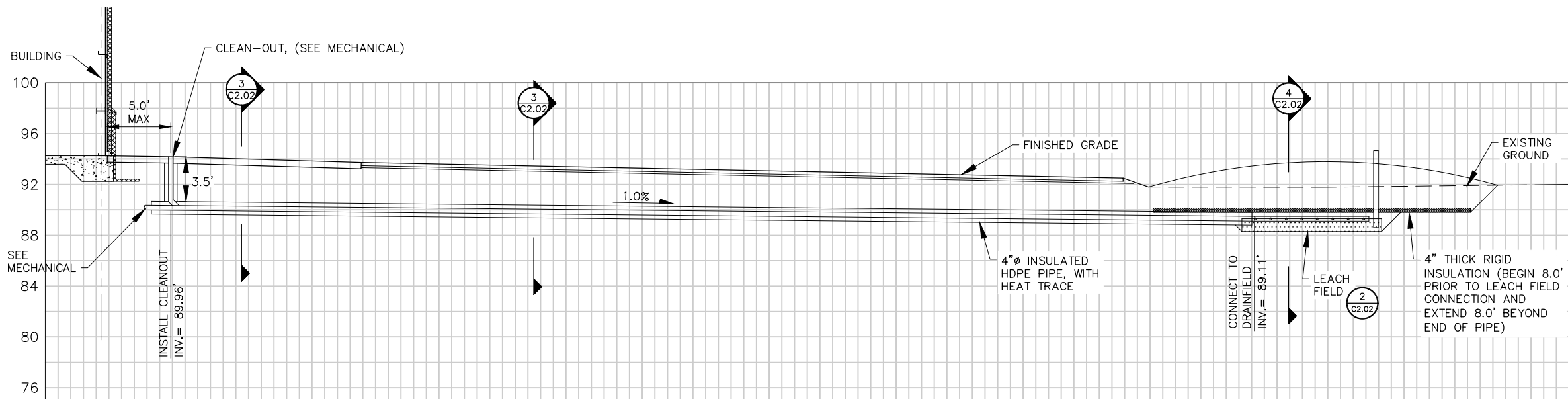
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WATER SERVICE LINE AND DETAILS	
SHEET	
C2.01	
DRAWN BY: KK	CHECKED BY: MRS
DATE: 08/05/2020	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

LAYOUT
C2.02

DATE TIME
8/7/2020 3:55 PM

DRAWING LOCATION
\\hda\asko.com\hda\Jobs\20-009 Kenai Airport Term (COK)\01-Sand Storage Building\CAD\Drawings\20-009-01_C-Sewer.dwg

CORPOR



NOTES:

- SEE SHEETS G1.02 AND G1.03 FOR CIVIL GENERAL NOTES, ABBREVIATIONS, AND LEGEND.
- BURIAL DEPTH OVER SEWER ROCK SHALL BE 2.5-FOOT MINIMUM BELOW EXISTING GRADE. MOUND TWO FEET OF ADDITIONAL EXCAVATED ORGANICS FOR A TOTAL MINIMUM DEPTH OF COVER OF 4.5-FOET.
- SLOPE TRENCH WALLS AS REQUIRED FOR SAFETY.
- MONITORING TUBES SHALL BE 4-INCHES PERFORATED PIPE IN SEWER ROCK LAYER, SOLID ABOVE AND CAPPED. THE BOTTOM OF THE PIPE SHALL BE LEVEL WITH THE BOTTOM OF THE SEWER ROCK.
- FIELD LOCATE CLEAN OUT SO IT DOES NOT OBSTRUCT DOOR SWING OR IMPEDE PEDESTRIAN OR VEHICLE TRAFFIC.

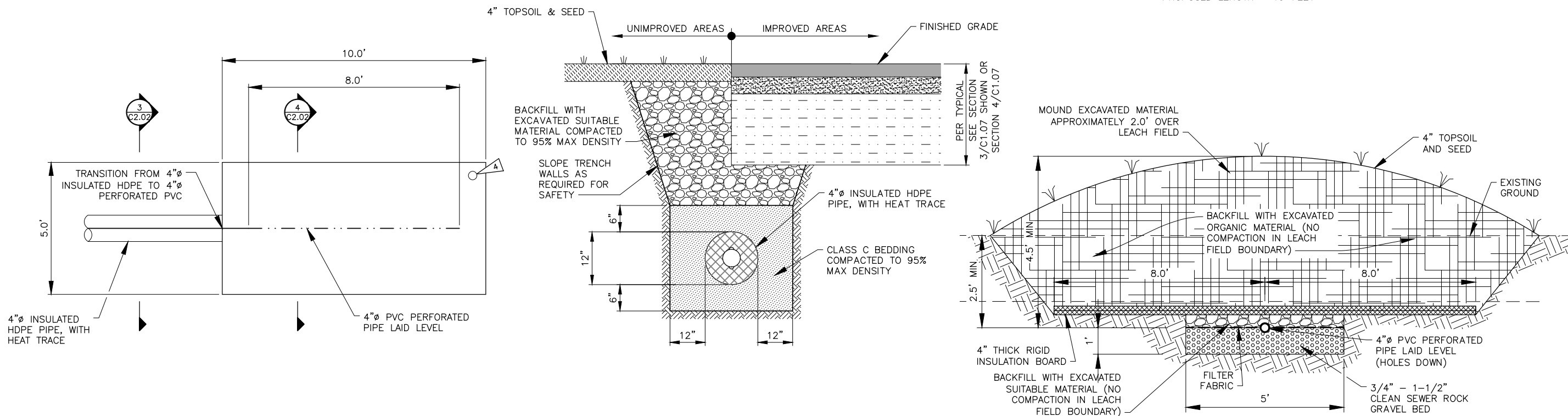
REVISIONS	DATE	DESCRIPTION
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SHALLOW TRENCH DESIGN CRITERIA:

- BOILER CONDENSATE
- DESIGN FLOW = 38.4 GPD (1.6 GAL/HR MAX)
- RECEIVING SOIL IS EXPECTED TO BE POORLY GRADED SAND (SP)
1 GAL/DAY/SF
- ABSORPTION FIELD AREA IS ESTIMATED TO BE: 40 SF.
- SHALLOW TRENCH SYSTEM - PROPOSED WIDTH = 5-FOET;
PROPOSED LENGTH = 10-FOET



2 PLAN VIEW - BOILER CONDENSATE LEACH FIELD

C2.02 SCALE: NONE

3 BOILER CONDENSATE TRENCH SECTION

C2.02 SCALE: NONE

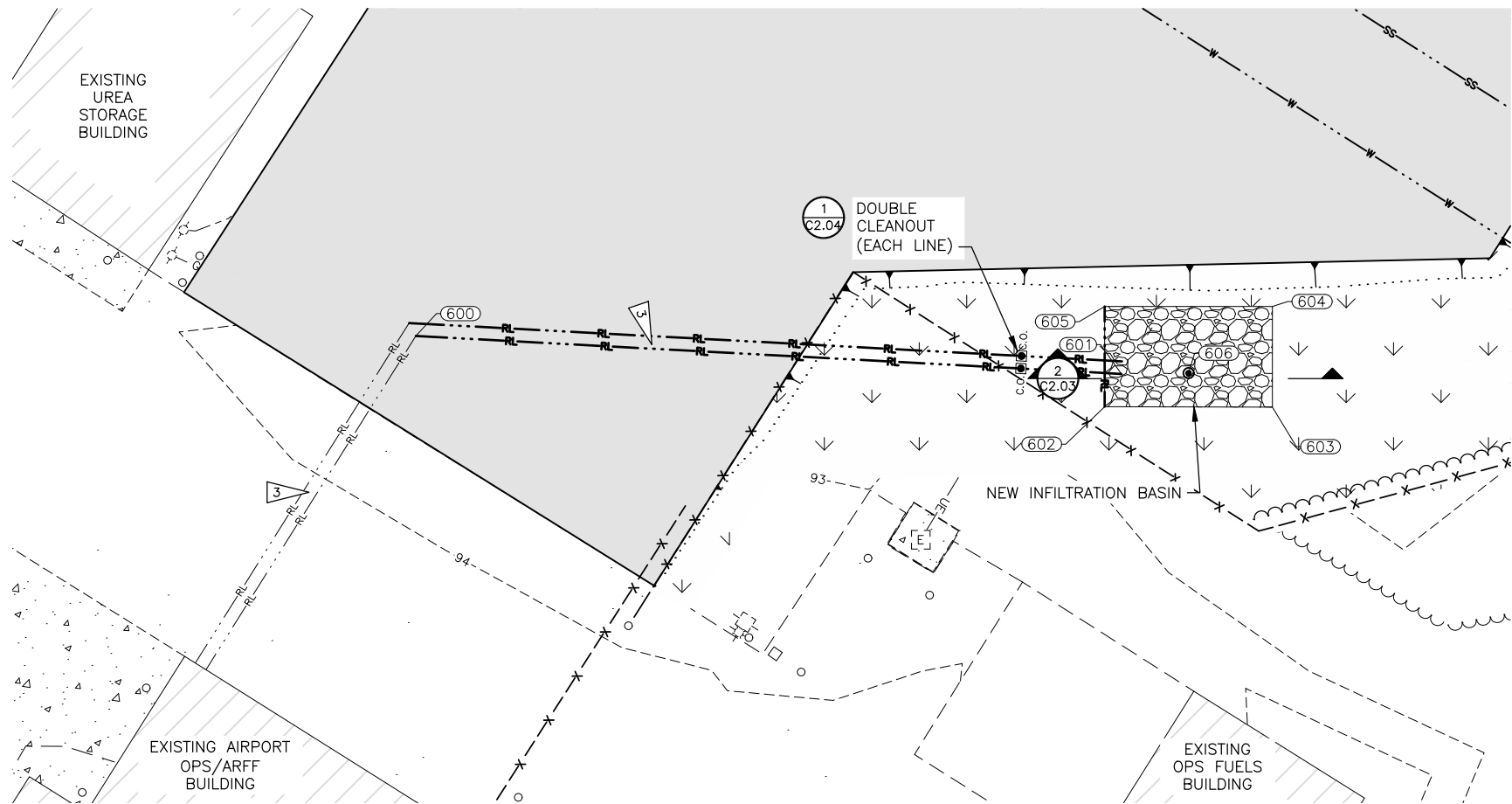
4 SECTION - BOILER CONDENSATE LEACH FIELD

C2.02 SCALE: NONE

SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE	BOILER CONDENSATE PLAN AND DETAILS
SHEET	C2.02
DRAWN BY	KK
CHECKED BY	MRS
DATE	08/05/2020
SCALE	AS SHOWN
JOB NUMBER	20-009-01

DRAWING LOCATION: \\hda\aska.com\hda\Jobs\20-009 Kenai Airport Term (COK)\01-Sand Storage Building\CAD\Drawings\20-009-01_C-BASIN.dwg CCRPPER
DATE TIME: 8/7/2020 3:55 PM
LAYOUT: INFILT-BASIN



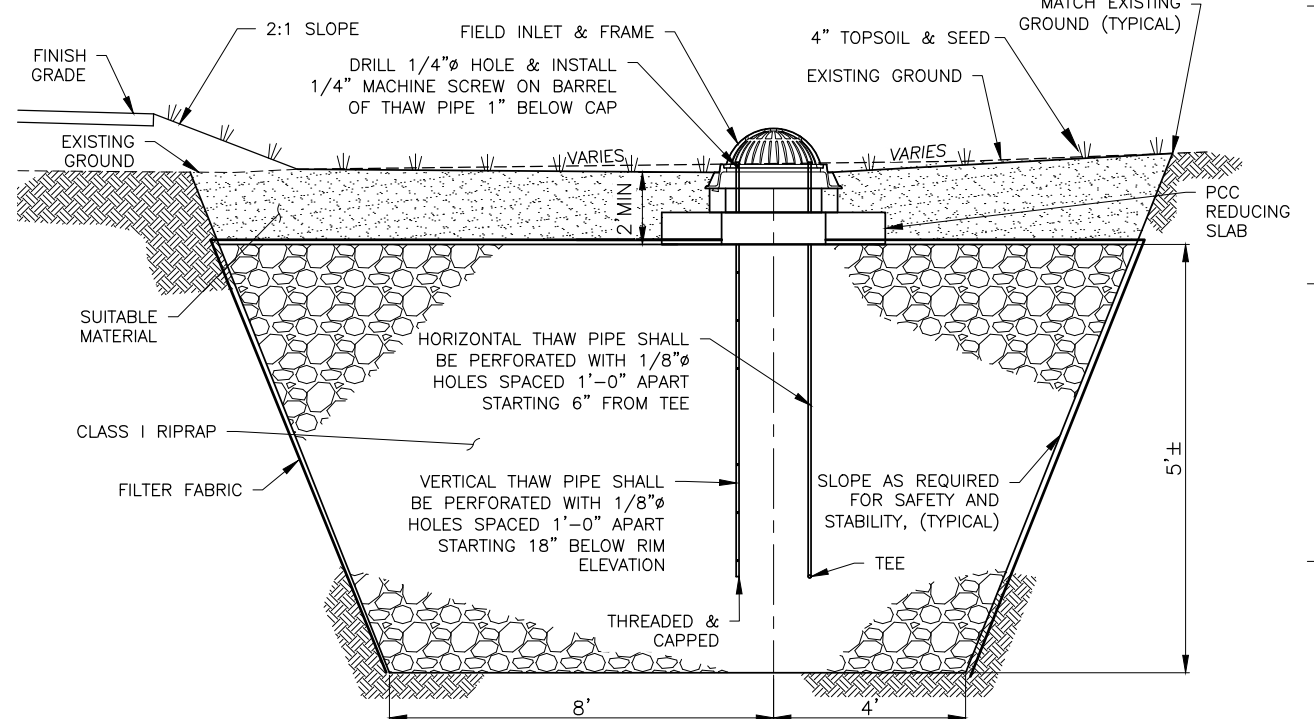
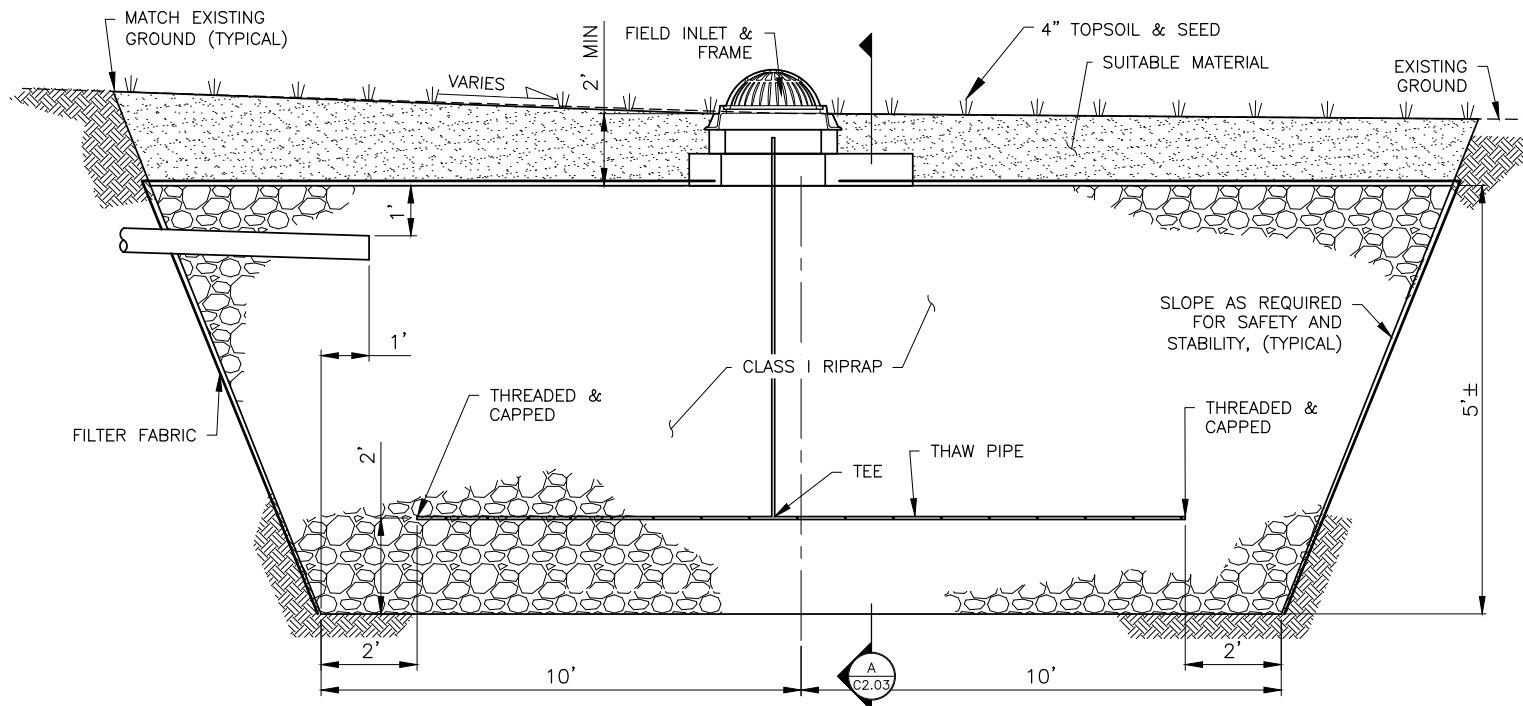
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- FIELD LOCATE AND VERIFY SIZE AND TYPE OF EXISTING AIRPORT OPS/ARFF BUILDING ROOF DRAIN PIPE. 6-INCH CAST IRON NO-HUB PIPE ANTICIPATED. CONNECT TO EXISTING PIPE AND EXTEND TO INFILTRATION BASIN. INSTALL NEW FITTINGS AND PIPING AS-NECESSARY. MATCH EXISTING MATERIALS.
- TOPSOIL AND SEED ALL DISTURBED AREAS NOT SCHEDULED TO RECEIVE OTHER SURFACING.
- THAW PIPE SHALL BE 3/4" GALVANIZED PIPE, THREADED AND CAPPED AT ALL ENDS WITH MALLEABLE FITTINGS.
- FIELD INLET ELEVATIONS ARE TO CENTER OF STRUCTURE AT FRAME ELEVATION.
- INSTALL NEW THAW WIRE IN RAIN LEADER AND OVERFLOW DRAIN PIPES, SEE ELECTRICAL.
- NEW HEA ELECTRICAL IMPROVEMENTS AND ENSTAR GAS SERVICES NOT SHOWN FOR CLARITY. COORDINATE LOCATION AND INSTALLATION WITH ENSTAR AND HEA RESPECTIVELY.
- DEWATERING EXCAVATION SHALL BE ANTICIPATED.

Coordinate Point Table

Point #	Northing	Easting	Description
600	57221.3622	37903.1141	RAIN LEADER AND OVERFLOW DRAIN CONNECTION
601	57216.8389	37987.2699	APPROXIMATE LOCATION OF RAIN LEADER AND OVERFLOW DRAIN END
602	57212.9258	37985.2699	BOTTOM CORNER INFILTRATION BASIN
603	57212.8741	38005.2699	BOTTOM CORNER INFILTRATION BASIN
604	57224.8741	38005.2699	BOTTOM CORNER INFILTRATION BASIN
605	57224.8741	37985.2699	BOTTOM CORNER INFILTRATION BASIN
606	57216.9259	37995.2699	INFILTRATION BASIN INLET

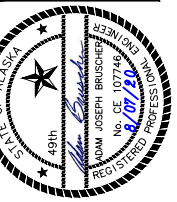
1 ENLARGED SITE PLAN - ROOF DRAIN INFILTRATION BASIN
SCALE: 1" = 10.0'



2 INFILTRATION BASIN
SCALE: NTS

A SECTION
SCALE: NTS

REVISIONS	DATE	DESCRIPTION
1		
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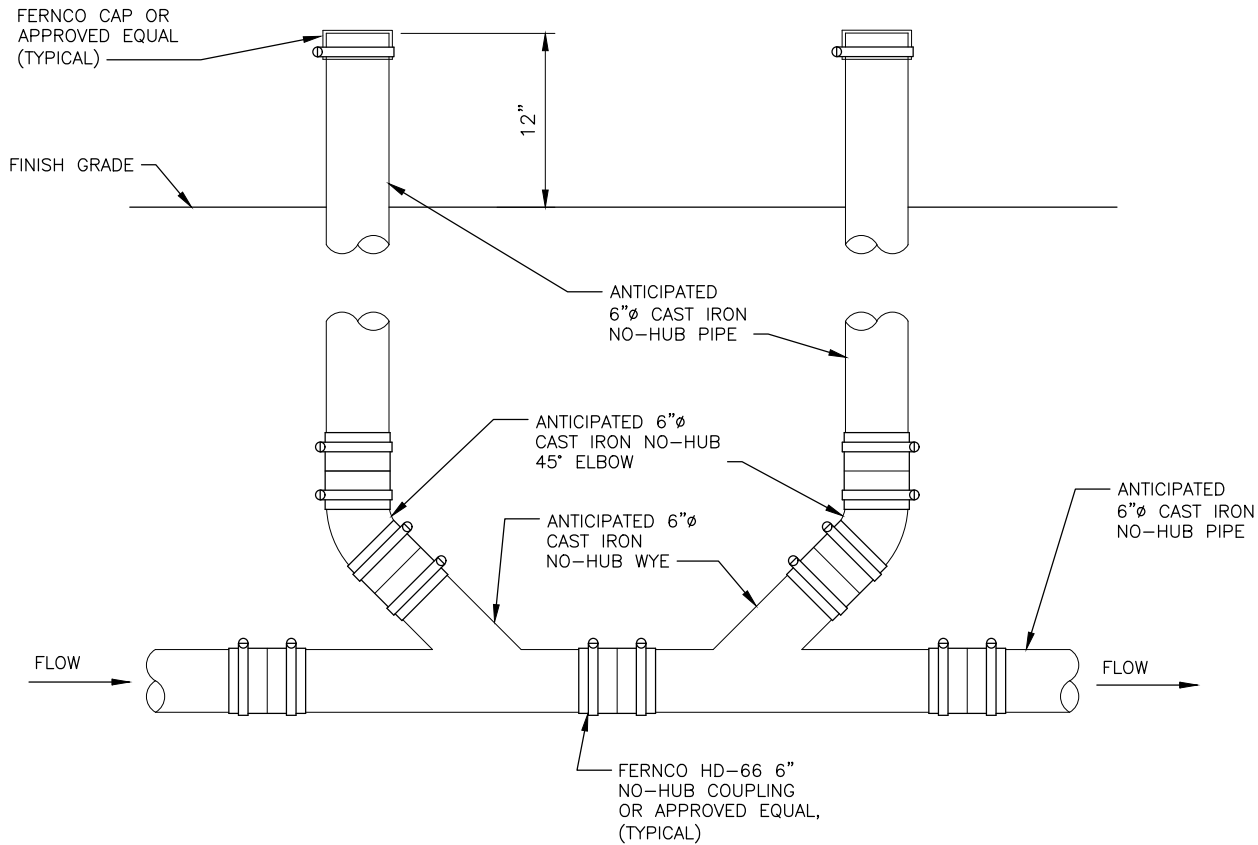


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KENAI, ALASKA

SHEET TITLE	ENLARGED SITE PLAN - ROOF DRAIN INFILTRATION BASIN
SHEET	C2.03
DRAWN BY:	KK
CHECKED BY:	MRS
DATE:	08/05/20
SCALE:	1" = 5'
JOB NUMBER:	20-009-01

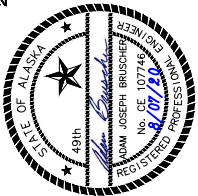
DRAWING LOCATION: \\hda1aska.com\hda1\Jobs\20-009-Kenai-Airport-Term (CDK)\01-Sand Storage Building\CAD\Drawings\20-009-01_C-BASIN.dwg CDRPPER 8/7/2020 3:55 PM LAYOUT BASIN DETAILS



- NOTES:**
- SEE SHEETS G1.02 AND G1.03 FOR CIVIL GENERAL NOTES, ABBREVIATIONS, AND LEGEND. SEE SHEET G1.05 FOR SURVEY CONTROL INFORMATION.
 - LOCATE DOUBLE CLEANOUT (1 EACH PIPE) IN GRASSED AREA APPROXIMATELY 10.0' FROM END OF PIPE.

1
C2.04 **DOUBLE CLEANOUT DETAIL**
SCALE: NTS

REVISIONS	MARK	DATE	DESCRIPTION
1			
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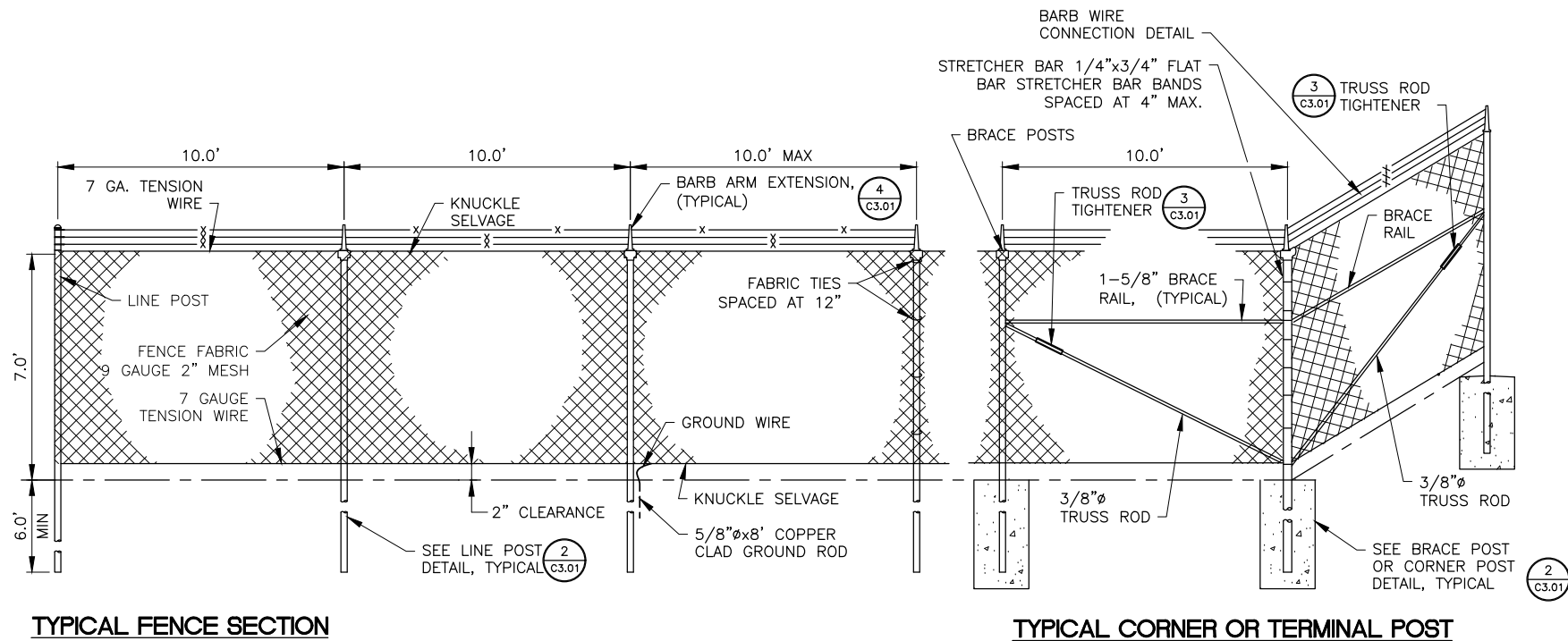


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SHEET TITLE INFILTRATION BASIN DETAIL	
SHEET C2.04	
DRAWN BY: KK	CHECKED BY: MRS
DATE: 08/05/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

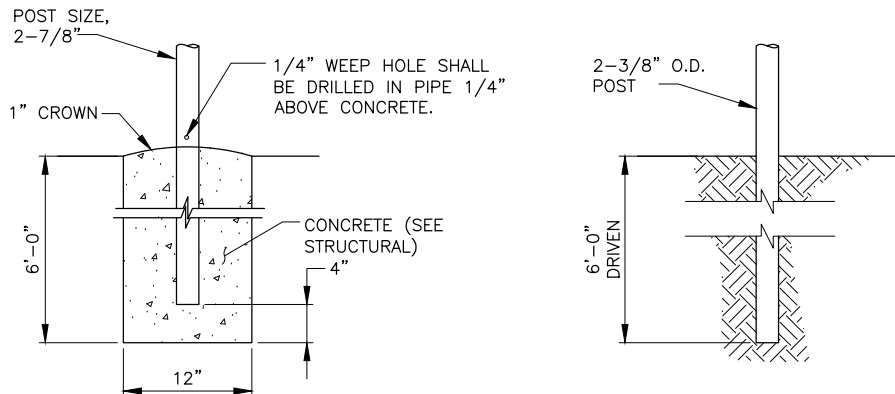
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DATE TIME: 08/05/2020 2:09 PM
LAYOUT: C3.01



TYPICAL FENCE SECTION

TYPICAL CORNER OR TERMINAL POST

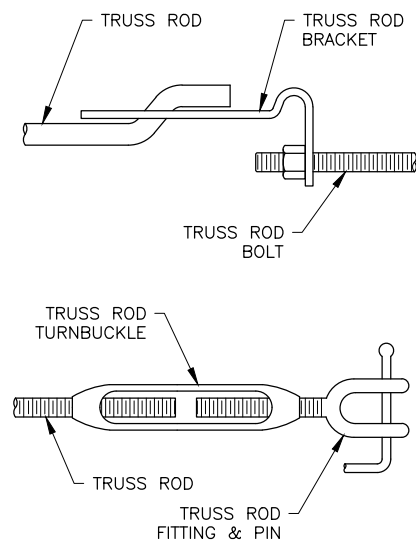
1 CHAINLINK FENCE DETAILS
SCALE: NONE



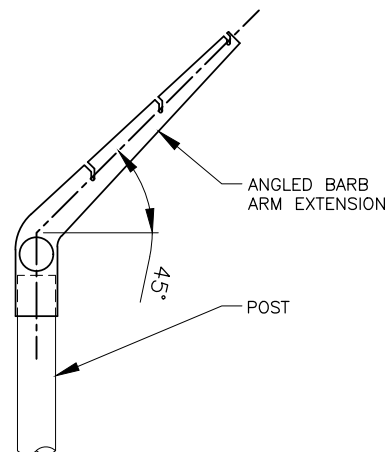
BRACE - CORNER POST

LINE POST

2 POST DETAIL
SCALE: NONE



3 TYPICAL TRUSS ROD TIGHTENERS
SCALE: NONE

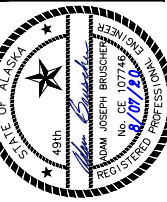


4 TYPE II BARB ARM EXTENSION
SCALE: NONE

NOTES:

1. POSTS SHALL BE SPACED EQUAL DISTANCES APART. MAXIMUM SPACING SHALL BE 10 FEET UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. POST TOPS SHALL BE SECURELY FASTENED TO POST.
3. BRACE RAILS AND TRUSS RODS SHALL BE SECURELY FASTENED TO POST WITH BRACE BANDS WITH THREADED TAKE-UP ADAPTOR FOR TRUSS RODS.
4. GROUND WIRE SHALL BE ATTACHED TO FENCE FABRIC BY MEANS OF A SPLIT BOLT.
5. FENCE FABRIC SHALL BE STRETCHED TO A SMOOTH UNIFORM APPEARANCE.
6. FENCE FABRIC SHALL BE FURNISHED WITH KNUCKLE SELVAGE TOP AND BOTTOM.
7. DETAILS SHOWN INDICATE GENERAL DESIGN AND DIMENSIONS MAY VARY AMONG MANUFACTURERS. MATCH EXISTING FENCING SCHEDULED TO REMAIN.
8. FOR FENCE GATE DETAILS SEE DRAWING C3.02.
9. LINE POSTS SHALL BE DRIVEN TO A DEPTH OF 6.0' BELOW FINISHED GRADE. CORNER AND BRACE GATE POSTS SHALL BE SET IN CONCRETE, WITH A MINIMUM 6-FOOT EMBEDMENT.
10. FABRIC SHALL BE PLACED ON OUTER PERIMETER SIDE OF POST.
11. WIRE MESH FASTENED TO TENSION WIRE WITH 12 GAUGE HOG RING FASTENER MAX. SPACING 24" TOP AND BOTTOM.

REVISIONS	DATE	DESCRIPTION
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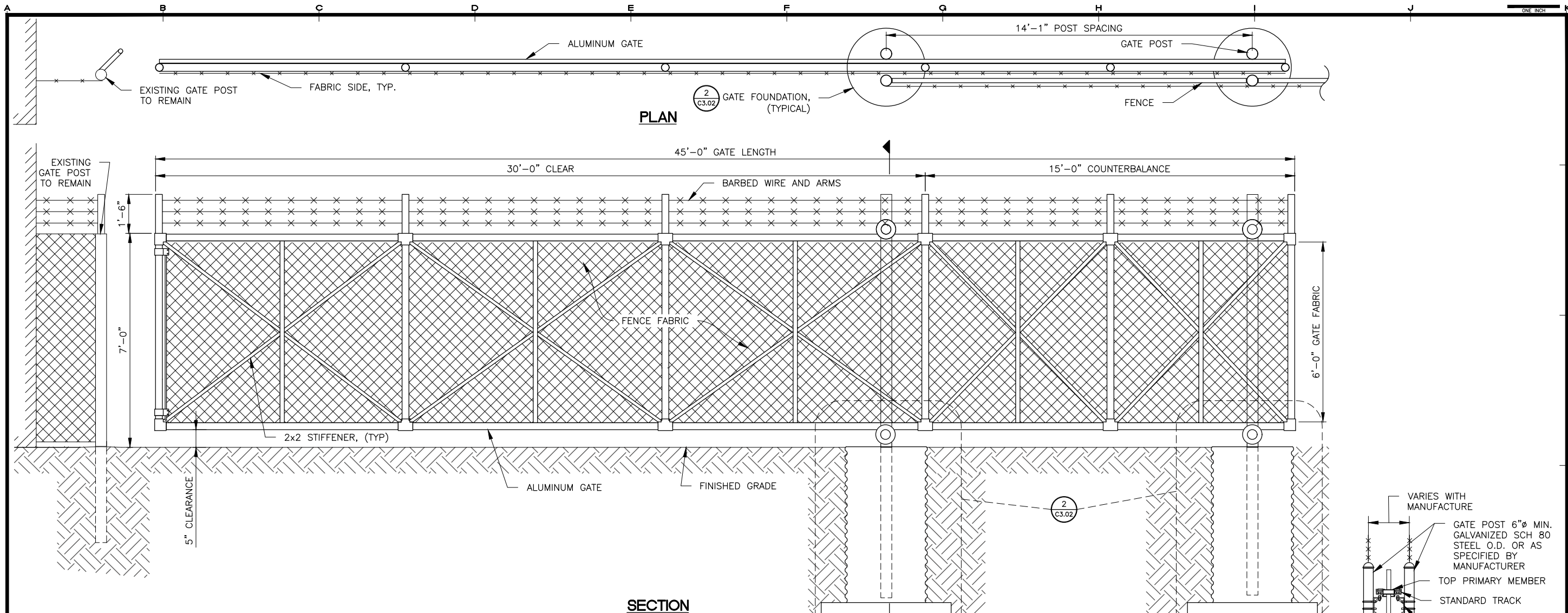
SAND STORAGE BUILDING
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SHEET TITLE	
FENCE DETAILS	
SHEET C3.01	
DRAWN BY: KK	CHECKED BY: MRS
DATE: 08/05/2020	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

LAYOUT
C3.02

DATE TIME
K3/20/2020 2:09 PM

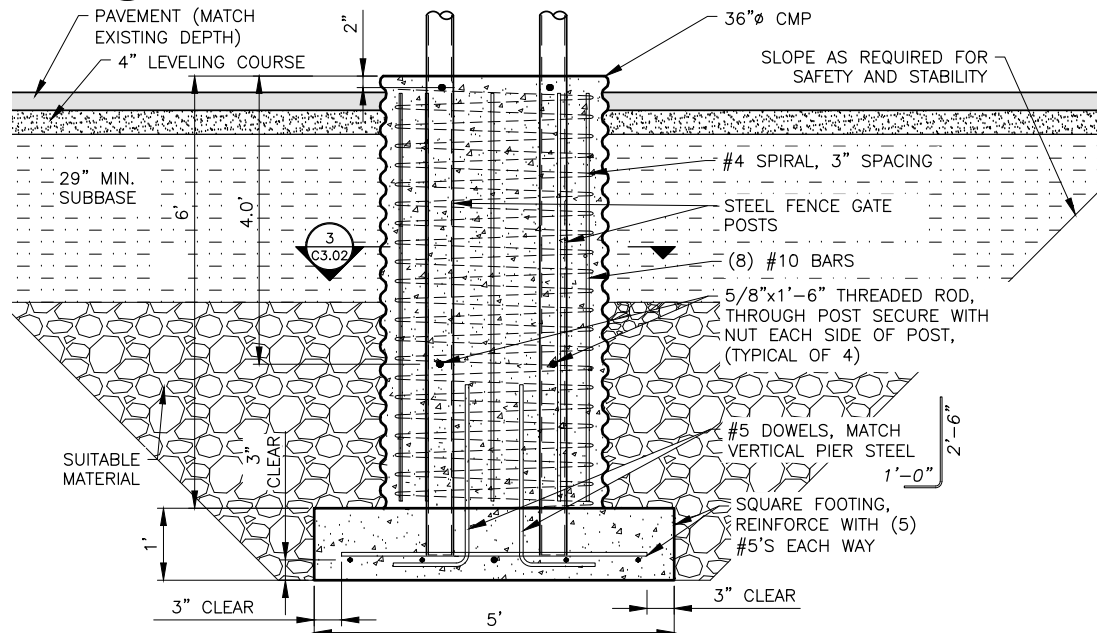
DRAWING LOCATION
\\hda\ask\com\HDL\Jobs\20-009 Kenai Airport Term (COK)\01-Sand Storage Building\CAD\Drawings\20-009-01-Fence and Gate Details.dwg



SECTION

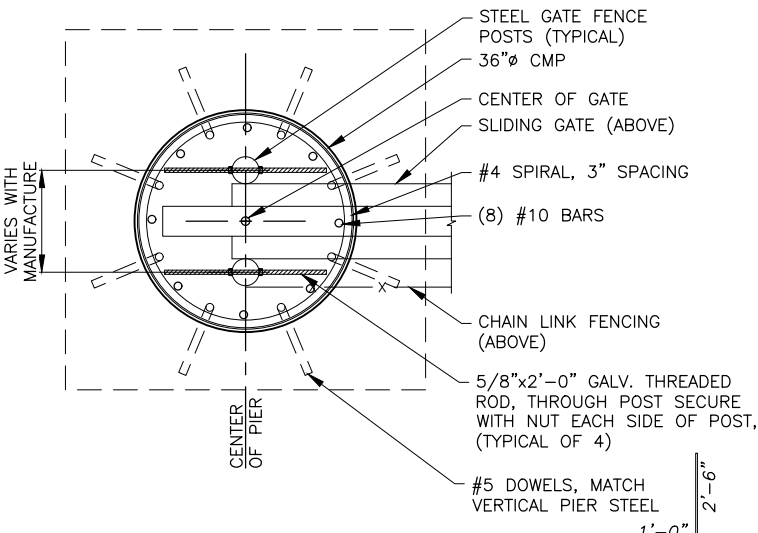
1 CANTILEVER SLIDE GATE - ADDITIVE ALTERNATE 1

C3.02 SCALE: NONE



2 TYPICAL GATE POST WITH REINFORCING

C3.02 SCALE: 3/4" = 1'-0"

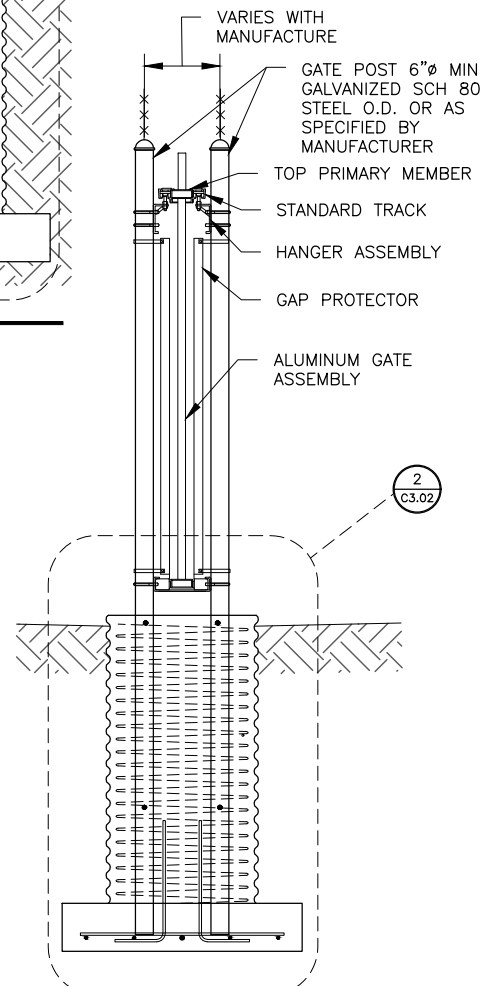


3 SECTION

C3.02 SCALE: NONE

NOTES:

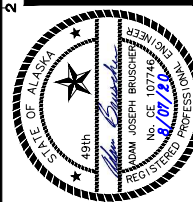
1. DETAILS SHOWN ARE TO INDICATE GENERAL DESIGN ONLY. DIMENSIONS MAY VARY SLIGHTLY AMONG THE MANUFACTURERS. TYMETAL CORP STRUCTURAL CANTILEVER SLIDE GATE SHOWN AS BASIS OF DESIGN.
2. GATE FABRIC SHALL BE OF THE SAME DESIGN AND HEIGHT OF THE LINE FENCE FABRIC.
3. GATE FABRIC SHALL BE FURNISHED WITH KNUCKLE SELVAGE TOP AND BOTTOM.
4. CONCRETE FOOTINGS SHALL BE 3,000 PSI EXTERIOR CONCRETE.
5. GATE FRAMES MAY BE FABRICATED BY WELDING OR RIVETING AND SHALL BE BRACED TO ELIMINATE SAGGING. HINGES, LATCHES, AND OTHER GATE APPURTENANCES SHALL BE OF SUFFICIENT STRENGTH AND DESIGN TO ASSURE EASE OF OPERATION.



4 SECTION

C3.02 SCALE: NONE

REVISIONS	DATE	DESCRIPTION
1		
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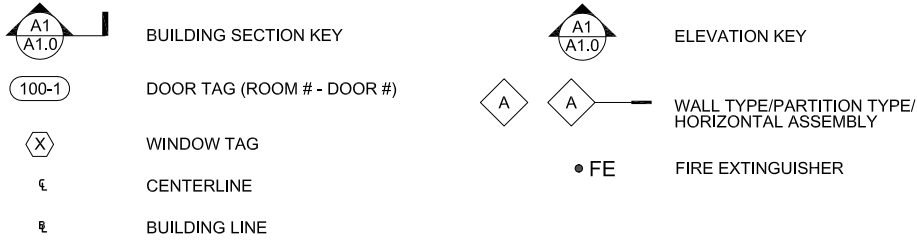
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SHEET TITLE	SECURITY GATE - ADDITIVE ALTERNATIVE 1
SHEET	C3.02
DRAWN BY	KK
CHECKED BY	MRS
DATE	08/05/20
SCALE	AS SHOWN
JOB NUMBER	20-009-01

GENERAL NOTES

- THESE DRAWINGS ARE "NOT FOR CONSTRUCTION" DOCUMENTS UNLESS THEY ARE CLEARLY MARKED "FOR CONSTRUCTION." DO NOT SCALE THE DRAWINGS.
- ALL WORK SHALL COMPLY WITH THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE, THE 2018 INTERNATIONAL FIRE CODE, OR THE MOST CURRENT EDITION OF ALL RELEVANT CODES ADOPTED BY THE AUTHORITY HAVING JURISDICTION IN THE PROJECT AREA.
- AS A SIMPLE REFERENCE ELEVATION ON THE ARCHITECTURAL DRAWINGS THE FINISH FLOOR TOP OF SLAB IS CALLED OUT AT 0'-0". FOR THE ACTUAL SITE AND BUILDING ELEVATIONS SEE CIVIL.

KEY SYMBOLS:



CODE DATA

OCCUPANCY GROUP	GROUP S-1: STORAGE
AUTOMATIC SPRINKLER SYSTEM	NOT REQUIRED
CONSTRUCTION TYPE	V-B
ALLOWABLE AREA	1 STORY, 9,000 S.F.
ALLOWABLE AREA INCREASES	WITH FRONTAGE: 15,750 S.F. SPRINKLER: NOT REQUIRED
ACTUAL AREAS BUILDING OVERALL	5,600 S.F.
EXITING EQUIPMENT AND SAND STORAGE 19 OCCUPANTS EXITS REQUIRED	5,600 S.F. (3) EXITS REQUIRED; (3) EXITS PROVIDED

ABBREVIATIONS:

A.G.P.T.	ABOVE GROUND PRESSURE TREATED	STRUCT	STRUCTURAL
A.F.F.	ABOVE FINISH FLOOR	TYP	TYPICAL
CONC	CONCRETE		
ELECT	ELECTRICAL		
EQ	EQUAL		
F.F.	FINISH FLOOR		
GA	GAUGE		
HR	HOUR		
I.D.	INTERIOR DIMENSION		
MBS	METAL BUILDING SUPPLIER		
MECH	MECHANICAL		
MFR	MANUFACTURER		
NIC	NOT IN CONTRACT		
OH	OVERHEAD		
P.T.	PRESSURE TREATED		
SIM	SIMILAR		

REVISIONS	DATE	DESCRIPTION
MARK	1	
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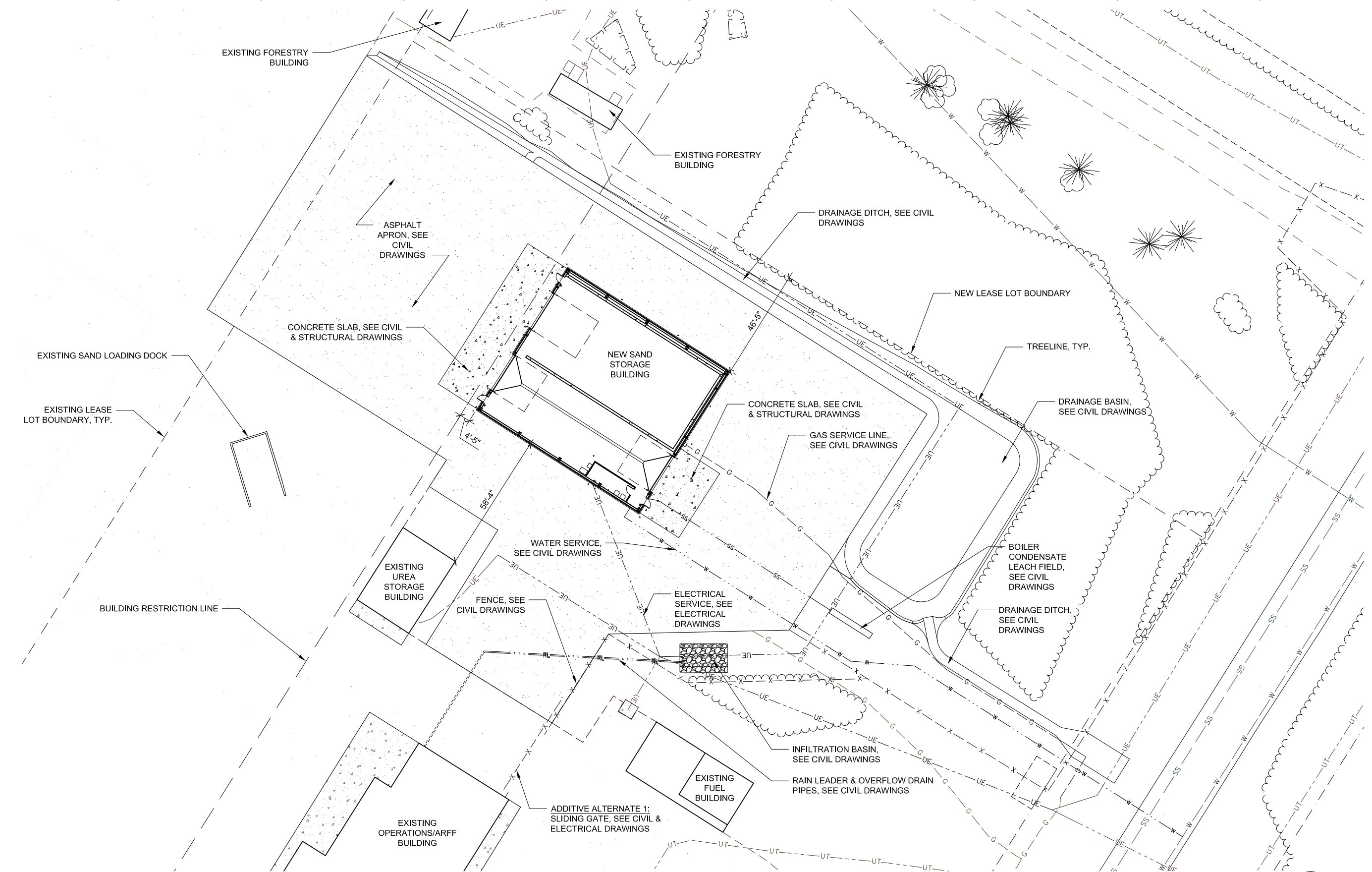
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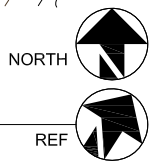
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SHEET	A0.00
DRAWN BY:	EF
CHECKED BY:	PK
DATE:	8/5/20
SCALE:	AS SHOWN
JOB NUMBER:	20-009-01

LAYOUT
-00 SITE PLAN
DATE TIME
8/6/2020 1:35 PM

DRAFT-03
DRAWING LOCATION
Z:\Jobs\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A1.dwg



A7 SITE PLAN
A1.00 1" = 20'-0" (22x34); 1" = 40'-0" (11x17)



REVISIONS		DATE	DESCRIPTION
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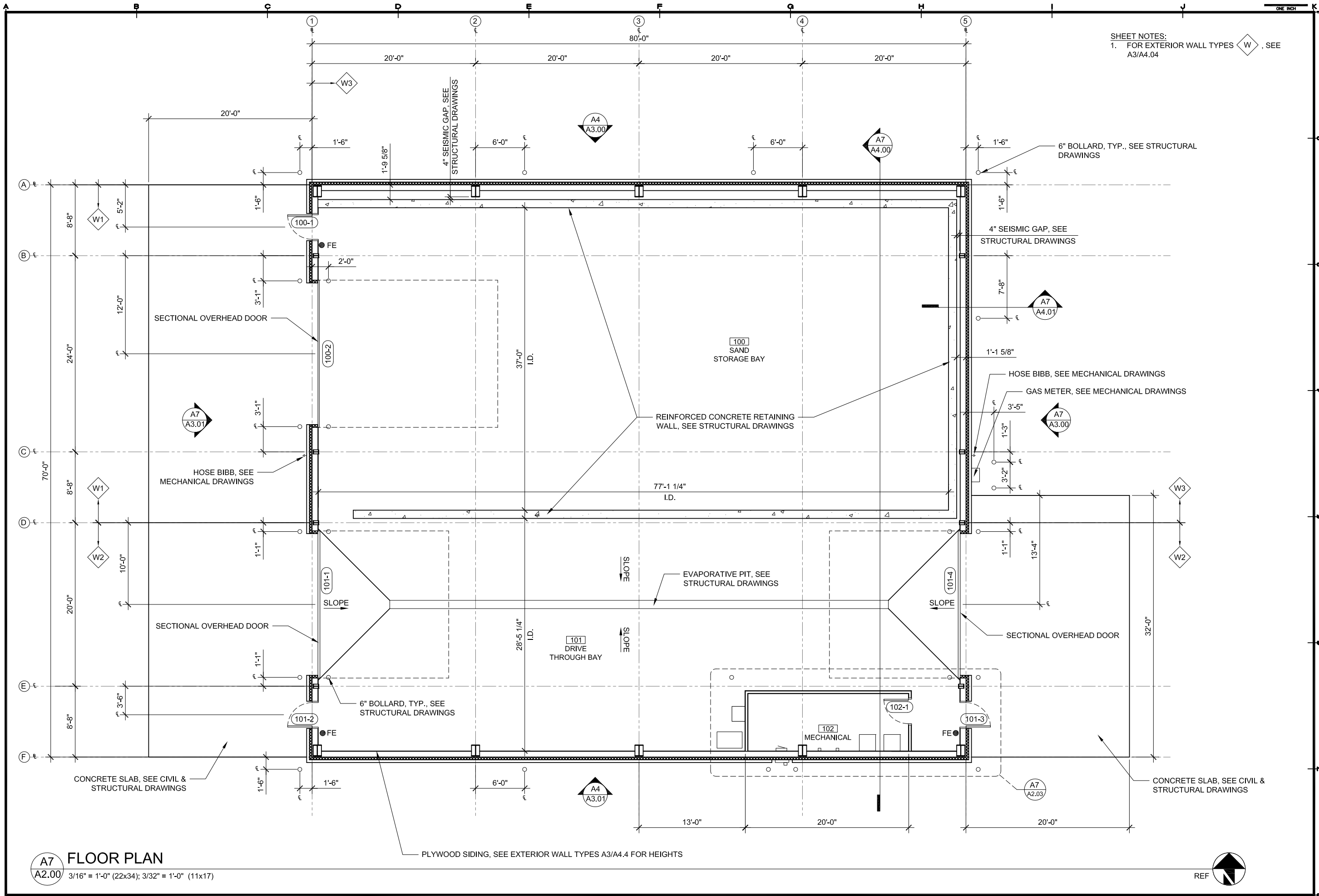
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SITE PLAN	
SHEET	
A1.00	
DRAWN BY: EF	CHECKED BY: PK
DATE: 8/5/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

LAYOUT
-00 FLOOR PLAN

DATE TIME
8/6/2020 1:35 PM

DRAFT-03

DRAWING LOCATION
Z:\Projects\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A2.dwg



SHEET NOTES:
1. FOR EXTERIOR WALL TYPES  , SEE A3/A4.04

REVISIONS	DATE	DESCRIPTION
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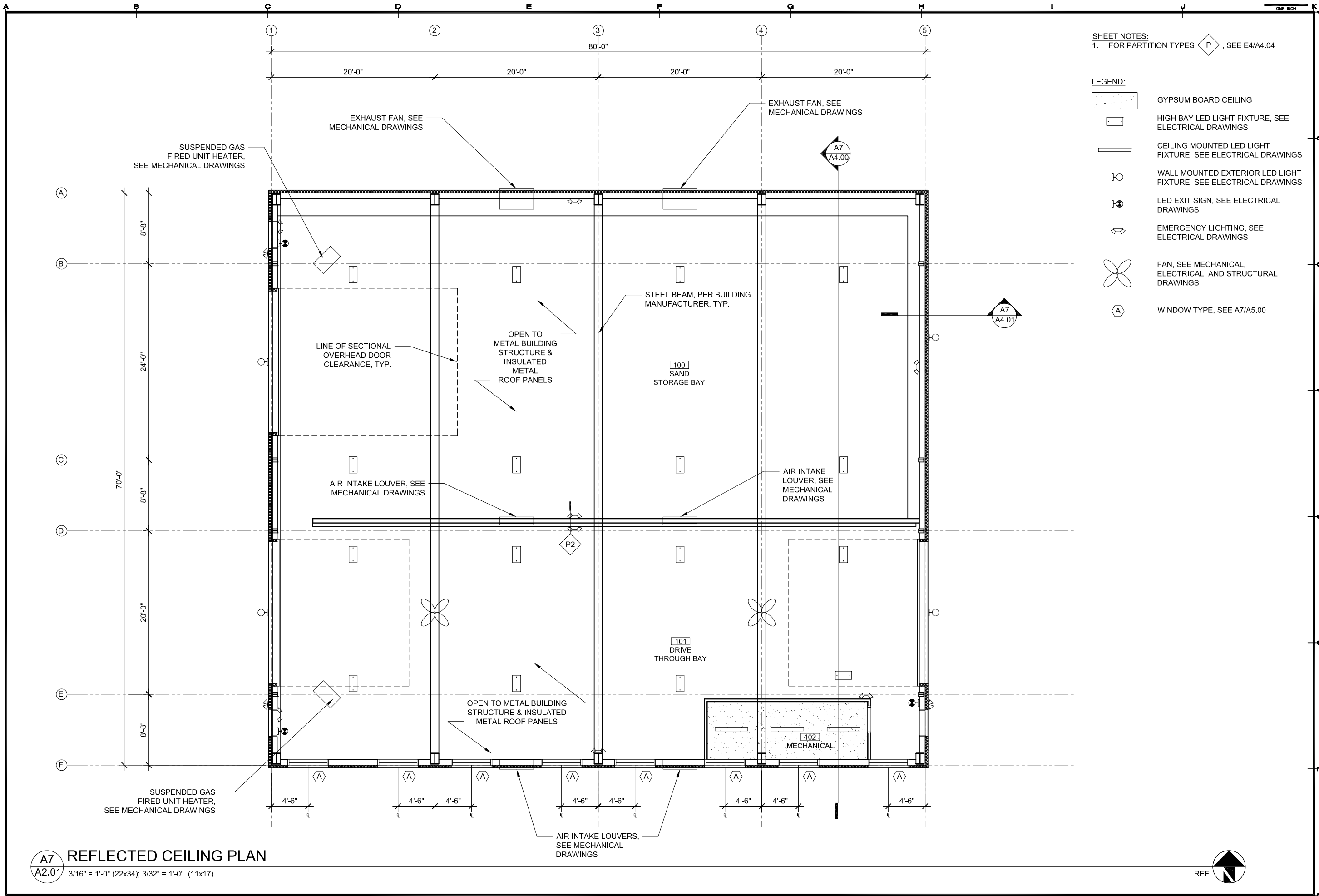
SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE	
FLOOR PLAN	
SHEET	
A2.00	
DRAWN BY: EF	CHECKED BY: PK
DATE: 8/5/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

LAYOUT
-01 RCP

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8/6/2020 1:35 PM

DRAWING LOCATION
Z:\Jobs\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A2.dwg DRAFT-03



SHEET NOTES:
1. FOR PARTITION TYPES **P**, SEE E4/A4.04

LEGEND:

- GYPSUM BOARD CEILING
- HIGH BAY LED LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS
- CEILING MOUNTED LED LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS
- WALL MOUNTED EXTERIOR LED LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS
- LED EXIT SIGN, SEE ELECTRICAL DRAWINGS
- EMERGENCY LIGHTING, SEE ELECTRICAL DRAWINGS
- FAN, SEE MECHANICAL, ELECTRICAL, AND STRUCTURAL DRAWINGS
- WINDOW TYPE, SEE A7/A5.00

REVISIONS	DATE	DESCRIPTION
1		
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SHEET TITLE	
REFLECTED CEILING PLAN	
SHEET	
A2.01	
DRAWN BY:	CHECKED BY:
EF	PK
DATE:	SCALE:
8/5/20	AS SHOWN
JOB NUMBER:	
20-009-01	

A7 REFLECTED CEILING PLAN
A2.01 3/16" = 1'-0" (22x34); 3/32" = 1'-0" (11x17)

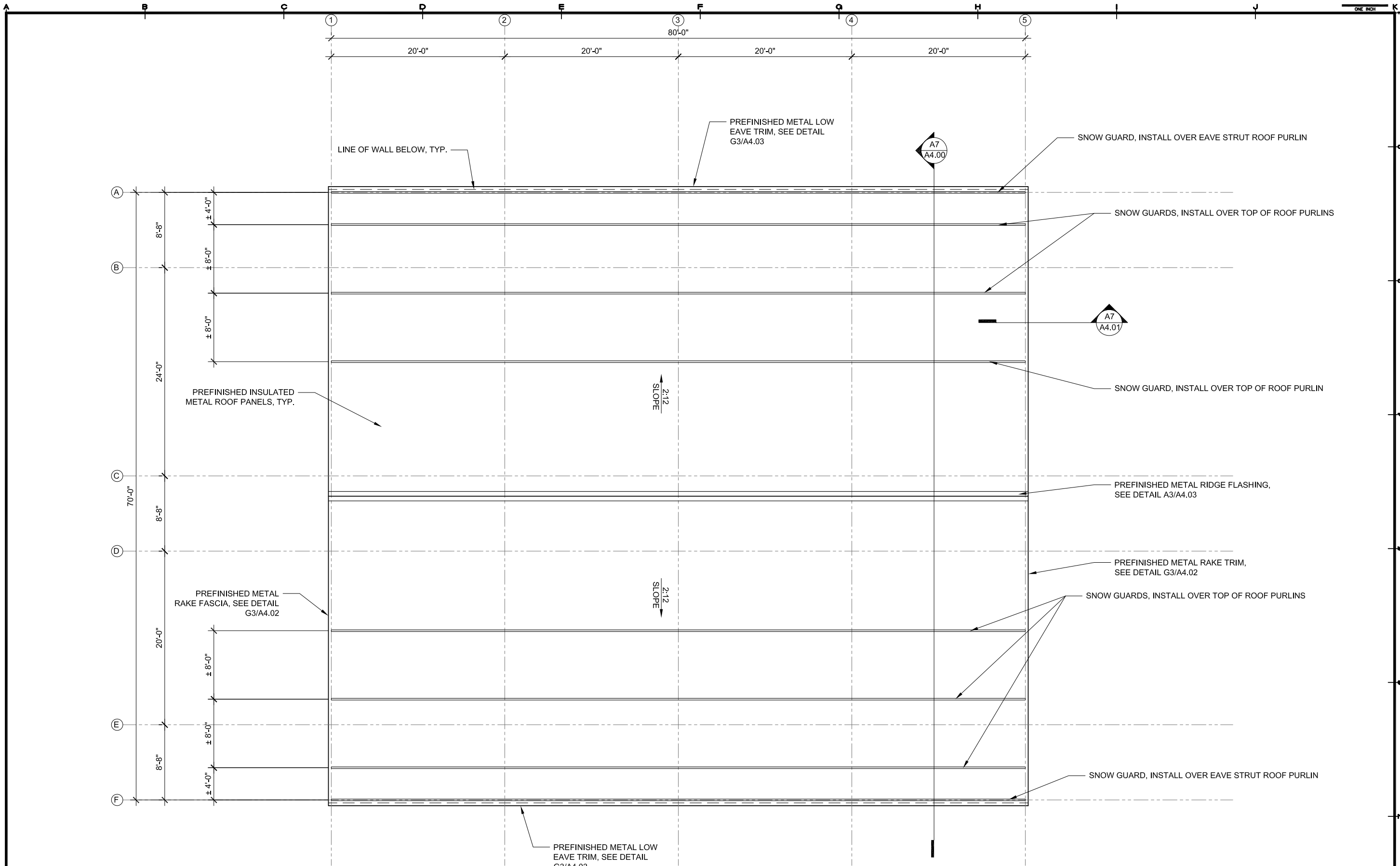


LAYOUT
-02 ROOF PLAN

DATE TIME
8/6/2020 1:35 PM

DRAFT-03

DRAWING LOCATION
Z:\Jobs\Current Jobs\010 ENA Sand Storage Building\010 Drawings\010 A2.dwg



A7
A2.02
3/16" = 1'-0" (22x34); 3/32" = 1'-0" (11x17)

REF

REVISIONS	DATE	DESCRIPTION
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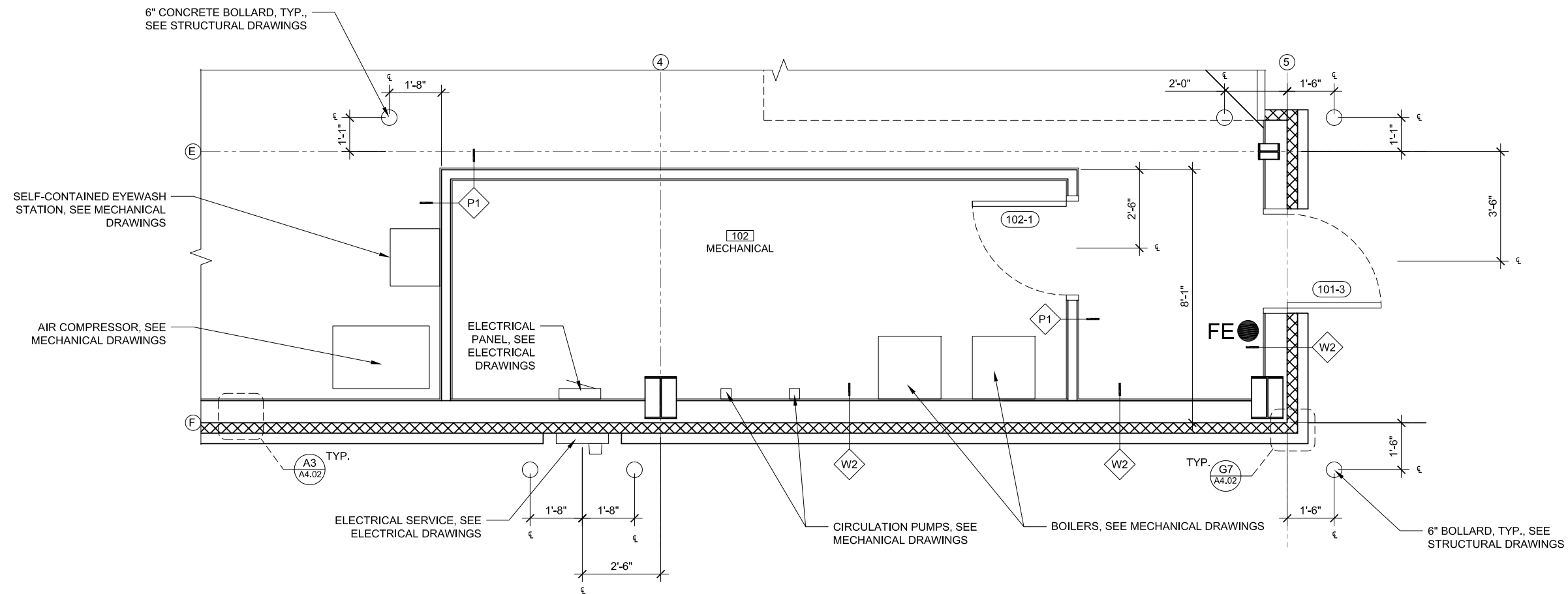


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KENAI, ALASKA

SHEET TITLE	
ROOF PLAN	
SHEET A2.02	
DRAWN BY: EF	CHECKED BY: PK
DATE: 8/5/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	



SHEET NOTES:

1. FOR EXTERIOR WALL TYPES  , SEE A3/A4.04

2. FOR PARTITION TYPES  , SEE E4/A4.04

REVISIONS		
MARK	DATE	DESCRIPTION
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SHEET TITLE	
ROOF PLAN	
SHEET	
A2.03	
DRAWN BY:	CHECKED BY:
EF	PK
DATE:	SCALE:
8/5/20	AS SHOWN
JOB NUMBER:	
20-009-01	

A7 ENLARGED FLOOR PLAN: MECHANICAL ROOM
A2.03 1/2" = 1'-0" (22x34); 1/4" = 1'-0" (11x17)



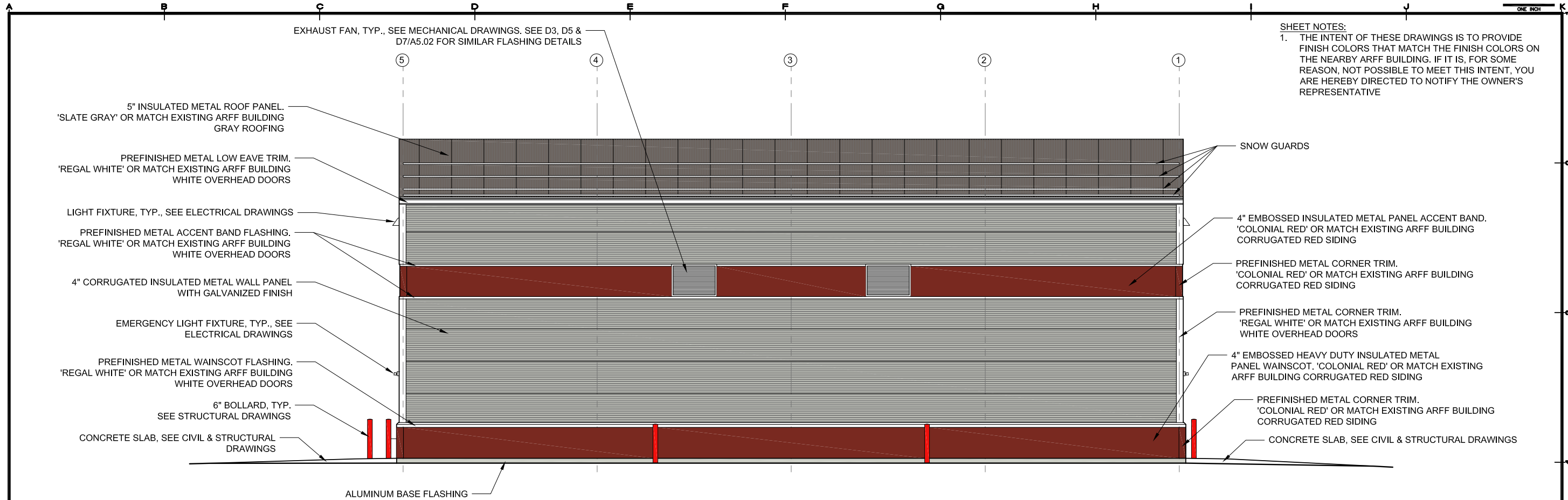
LAYOUT
-00 ELEVATIONS

DATE TIME
8/7/2020 9:49 AM

DRAFT-03

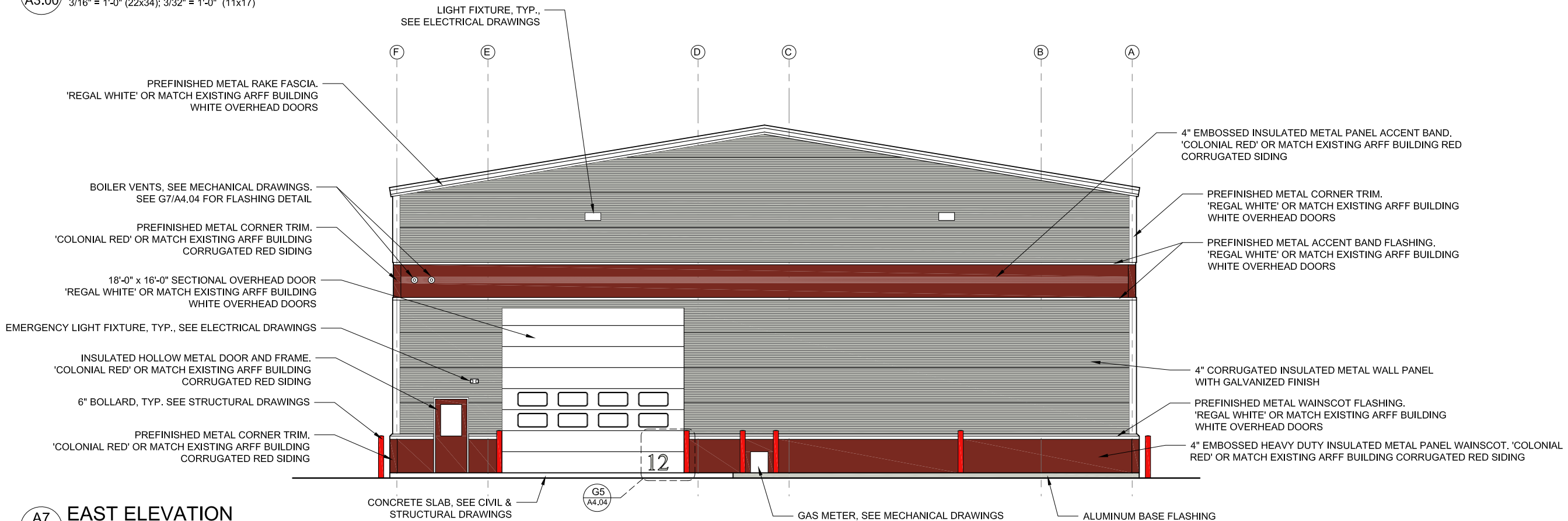
DRAWING LOCATION
Z:\Projects\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A3.dwg

2: Vojtes\Current



A4 NORTH ELEVATION

A3.00 3/16" = 1'-0" (22x34); 3/32" = 1'-0" (11x17)



A7 EAST ELEVATION

A3.00 3/16" = 1'-0" (22x34); 3/32" = 1'-0" (11x17)

SHEET NOTES:

1. THE INTENT OF THESE DRAWINGS IS TO PROVIDE FINISH COLORS THAT MATCH THE FINISH COLORS ON THE NEARBY ARFF BUILDING. IF IT IS, FOR SOME REASON, NOT POSSIBLE TO MEET THIS INTENT, YOU ARE HEREBY DIRECTED TO NOTIFY THE OWNER'S REPRESENTATIVE

REVISIONS	DATE	DESCRIPTION
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SHEET TITLE
NORTH & EAST
ELEVATIONS

SHEET
A3.00

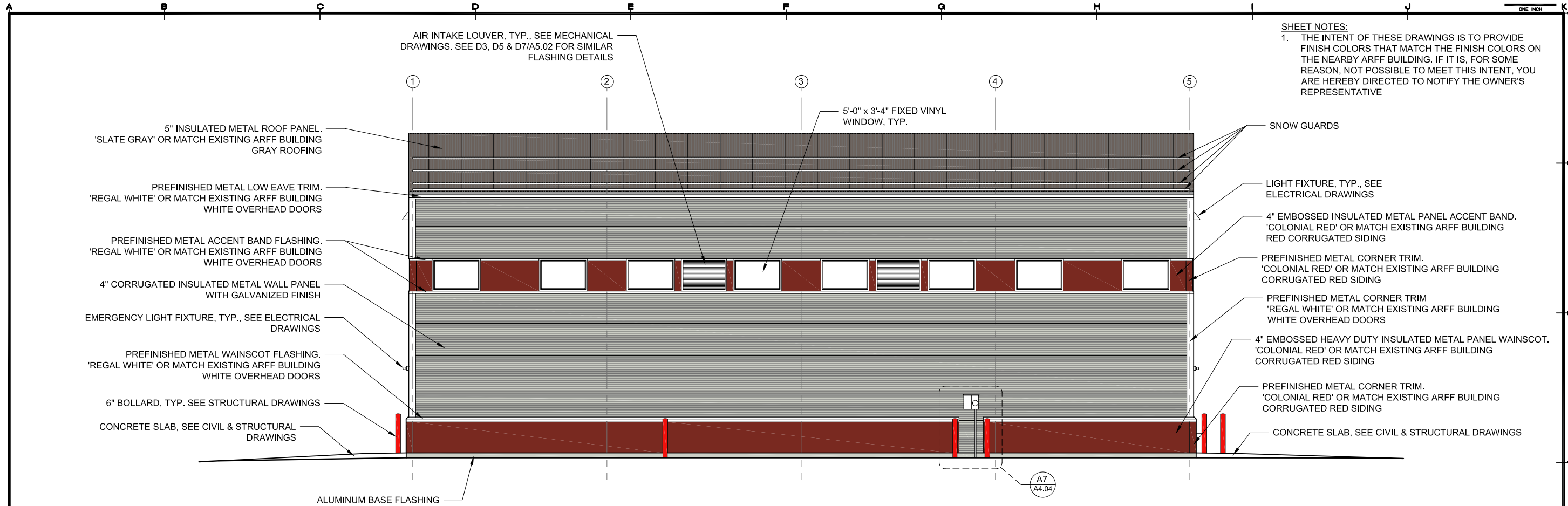
DRAWN BY: EF	CHECKED BY: PK
DATE: 8/5/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

LAYOUT
-01 ELEVATIONS

DATE TIME
8/7/2020 9:49 AM

DRAFT-03

DRAWING LOCATION
Z: \\vadis\current\Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A3.dwg



SHEET NOTES:
1. THE INTENT OF THESE DRAWINGS IS TO PROVIDE FINISH COLORS THAT MATCH THE FINISH COLORS ON THE NEARBY ARFF BUILDING. IF IT IS, FOR SOME REASON, NOT POSSIBLE TO MEET THIS INTENT, YOU ARE HEREBY DIRECTED TO NOTIFY THE OWNER'S REPRESENTATIVE

REVISIONS	DATE	DESCRIPTION
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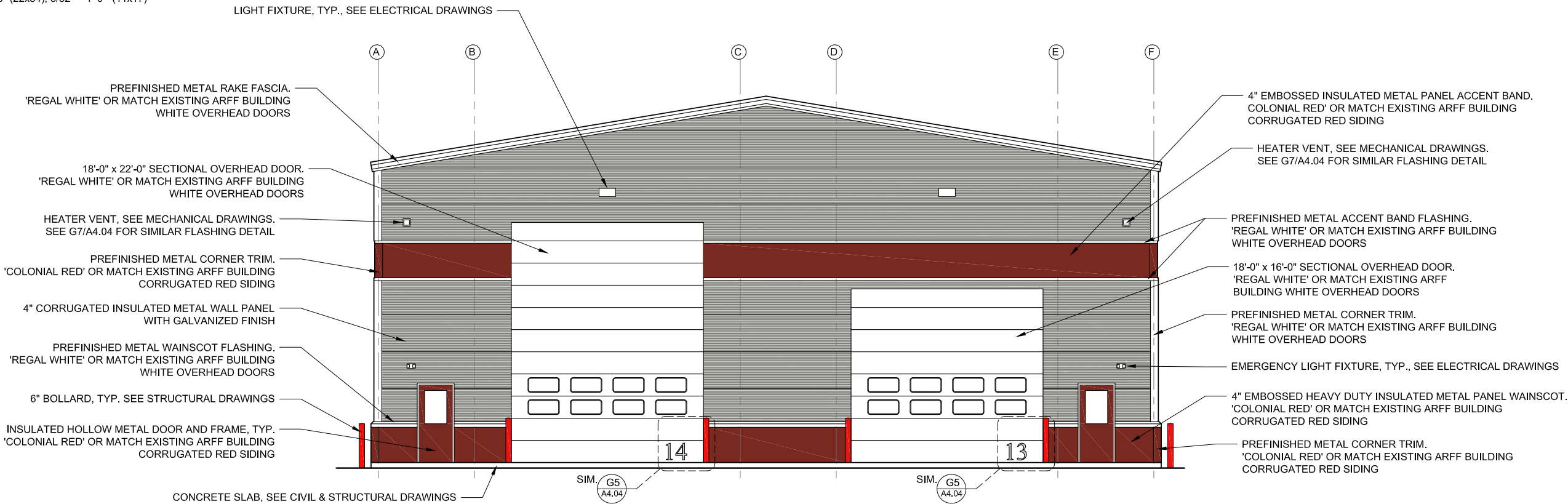
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KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE SOUTH & WEST ELEVATIONS	
SHEET A3.01	
DRAWN BY: EF	CHECKED BY: PK
DATE: 8/5/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

A4 SOUTH ELEVATION
A3.01 3/16" = 1'-0" (22x34); 3/32" = 1'-0" (11x17)






A7 WEST ELEVATION
A3.01 3/16" = 1'-0" (22x34); 3/32" = 1'-0" (11x17)

LAYOUT
-00 SECTION

DATE TIME
8/5/2020 1:35 PM

DRAWING LOCATION
Z:\Projects\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A4.dwg DRAFT-03

- SHEET NOTES:
1. FOR EXTERIOR WALL TYPES , SEE A3/A4.04
 2. FOR PARTITION TYPES , SEE E4/A4.04
 3. FOR HORIZONTAL ASSEMBLIES , SEE A5/A4.04

REVISIONS		DATE	DESCRIPTION
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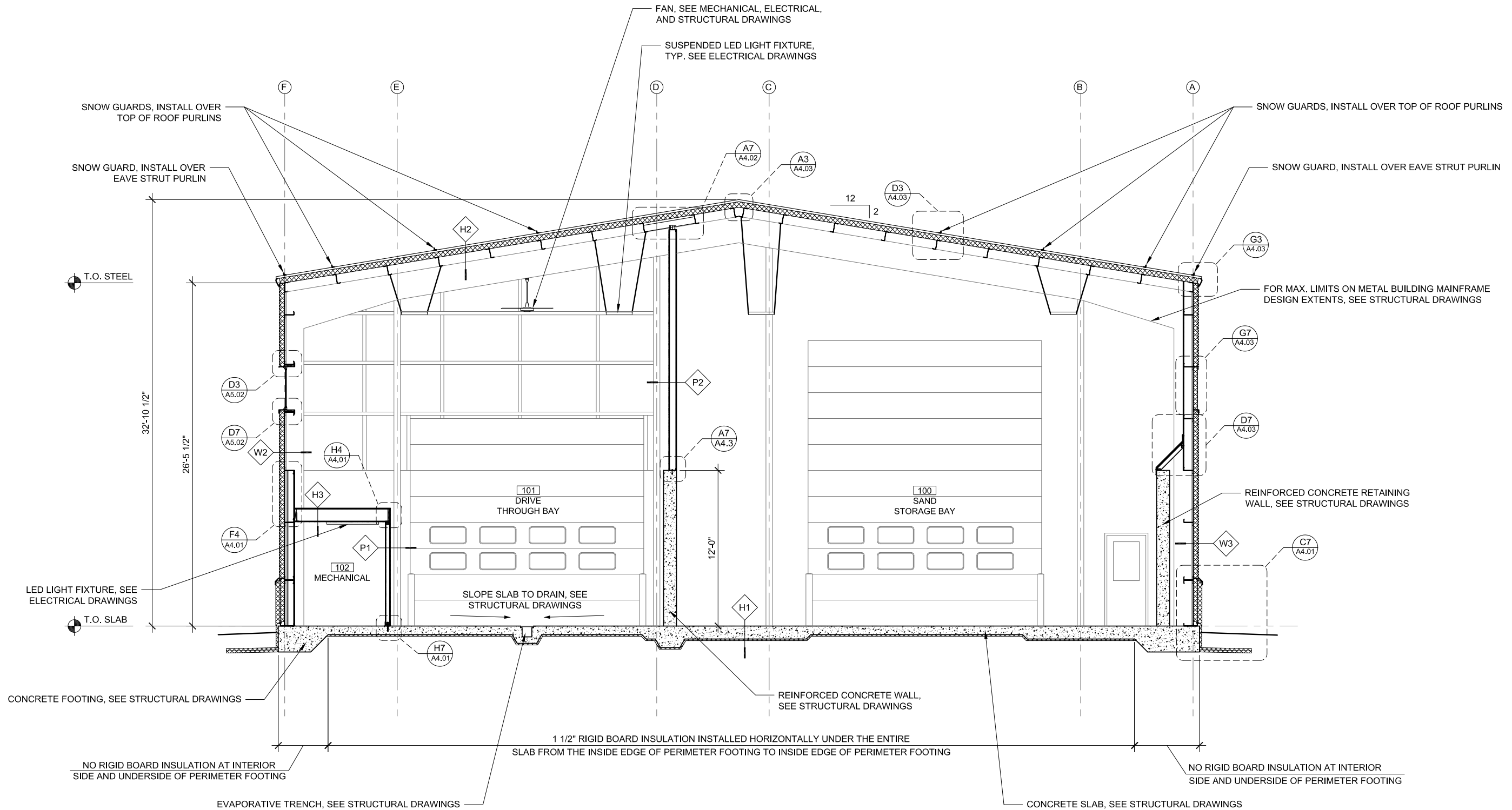


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SHEET TITLE	
BUILDING SECTION	
SHEET A4.00	
DRAWN BY EF	CHECKED BY PK
DATE 8/5/20	SCALE AS SHOWN
JOB NUMBER 20-009-01	



A7 BUILDING SECTION
A4.00 1/4" = 1'-0" (22x34); 1/8" = 1'-0" (11x17)

LAYOUT
-01 SECTION & DETAILS

DATE TIME
8/6/2020 1:35 PM

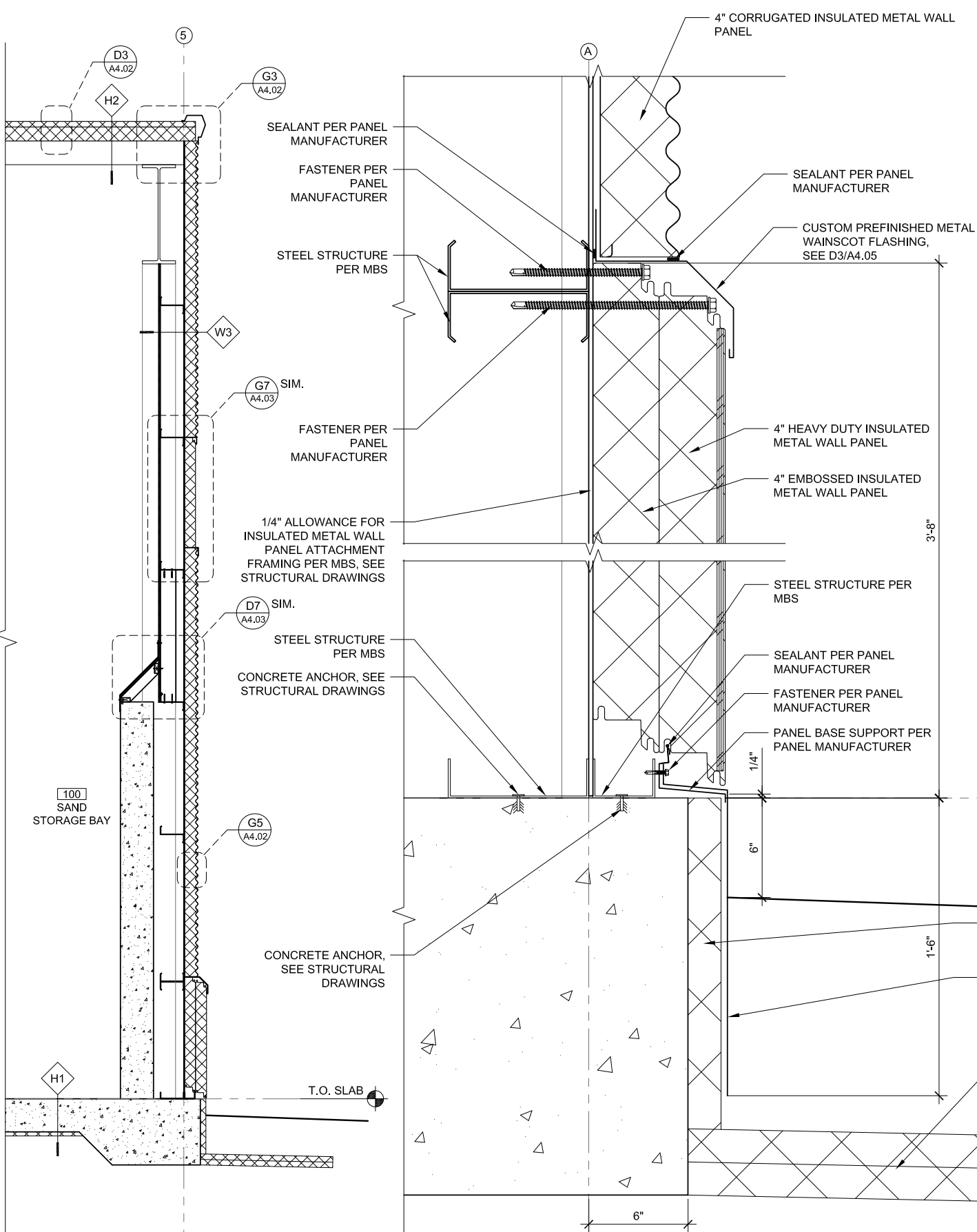
DRAFT-03

DRAWING LOCATION
Z:\Projects\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A4.dwg

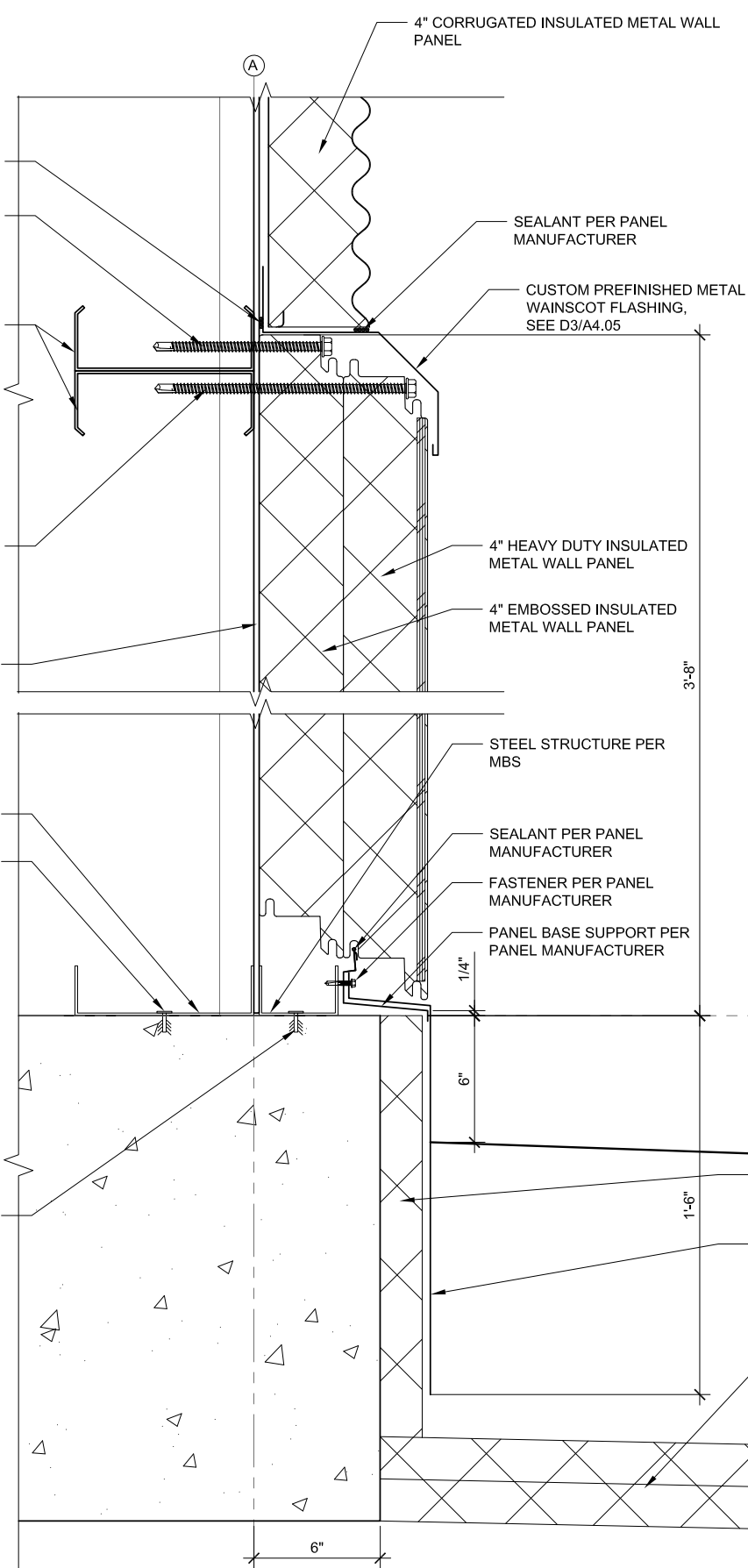
2: Vojteski

100
SAND
STORAGE BAY

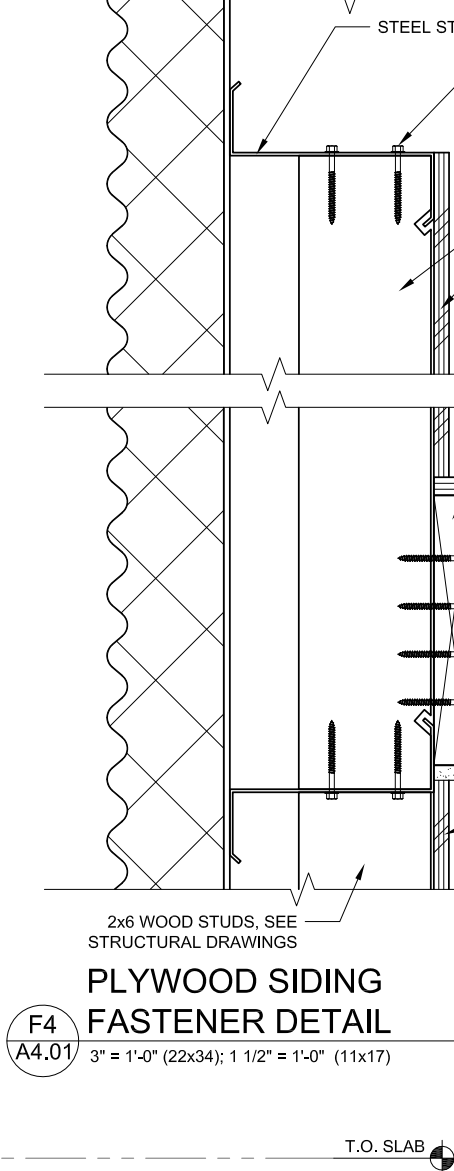
A7 WALL SECTION
A4.01 1/2" = 1'-0" (22x34); 1/4" = 1'-0" (11x17)



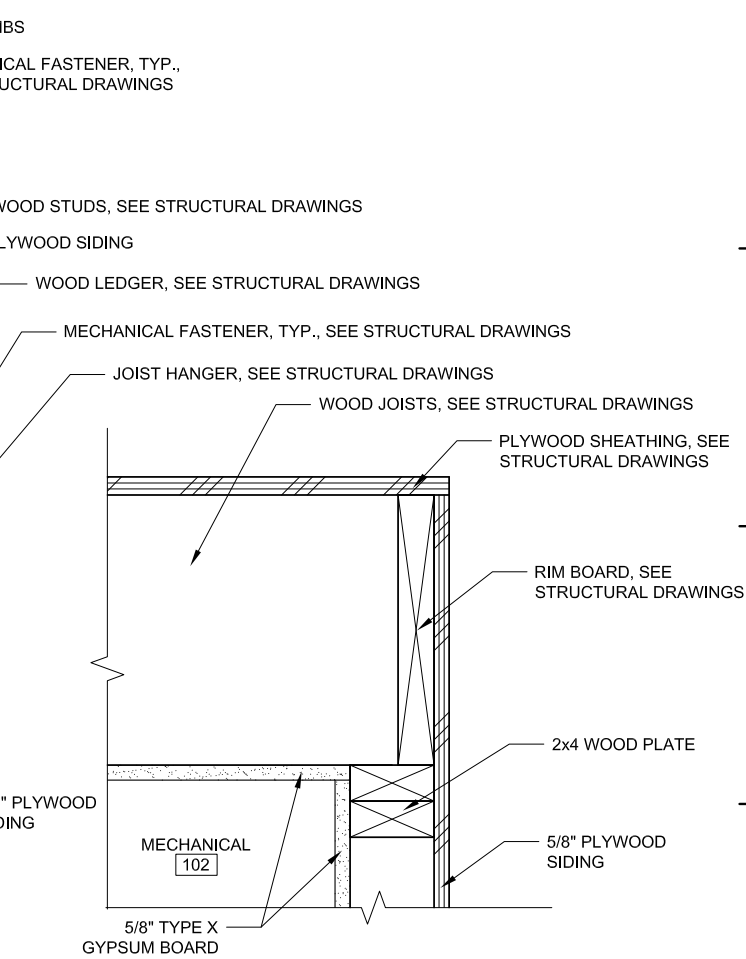
C7 INSULATED METAL PANEL WAINSCOT DETAIL
A4.01 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



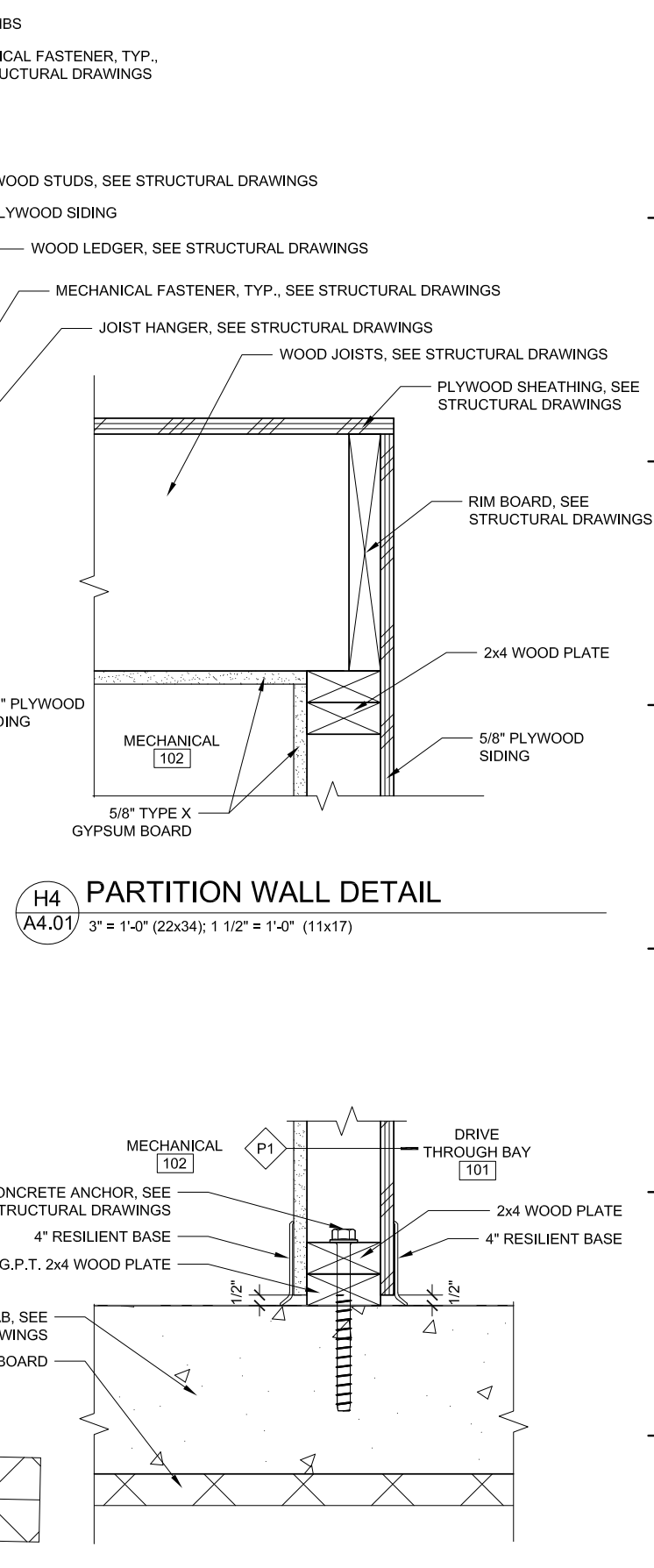
F4 PLYWOOD SIDING FASTENER DETAIL
A4.01 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



H4 PARTITION WALL DETAIL
A4.01 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



H7 PARTITION WALL BASE DETAIL
A4.01 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



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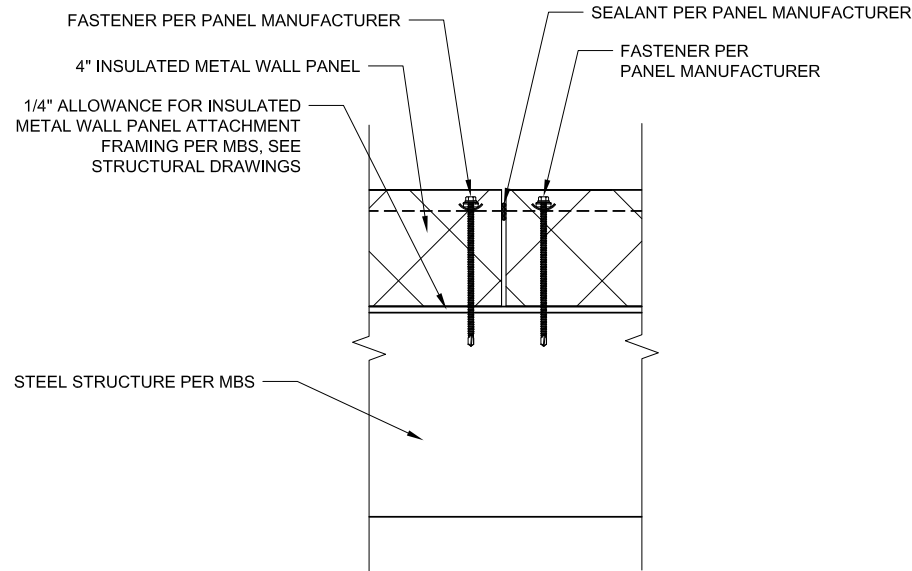
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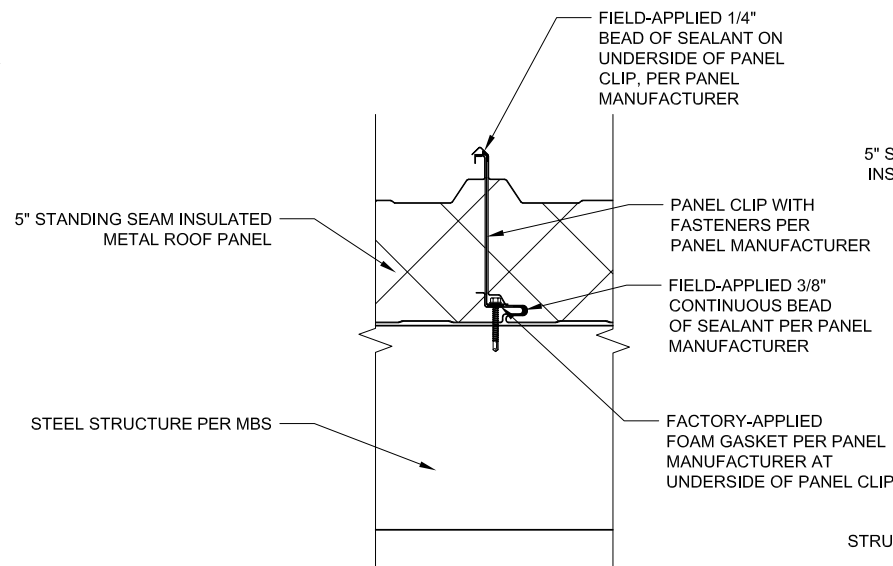
SHEET TITLE	
WALL SECTION & DETAILS	
SHEET	
A4.01	
DRAWN BY	CHECKED BY
EF	PK
DATE	SCALE
8/5/20	AS SHOWN
JOB NUMBER	
20-009-01	

LAYOUT
-02 DETAILS
DATE TIME
8/6/2020 1:35 PM

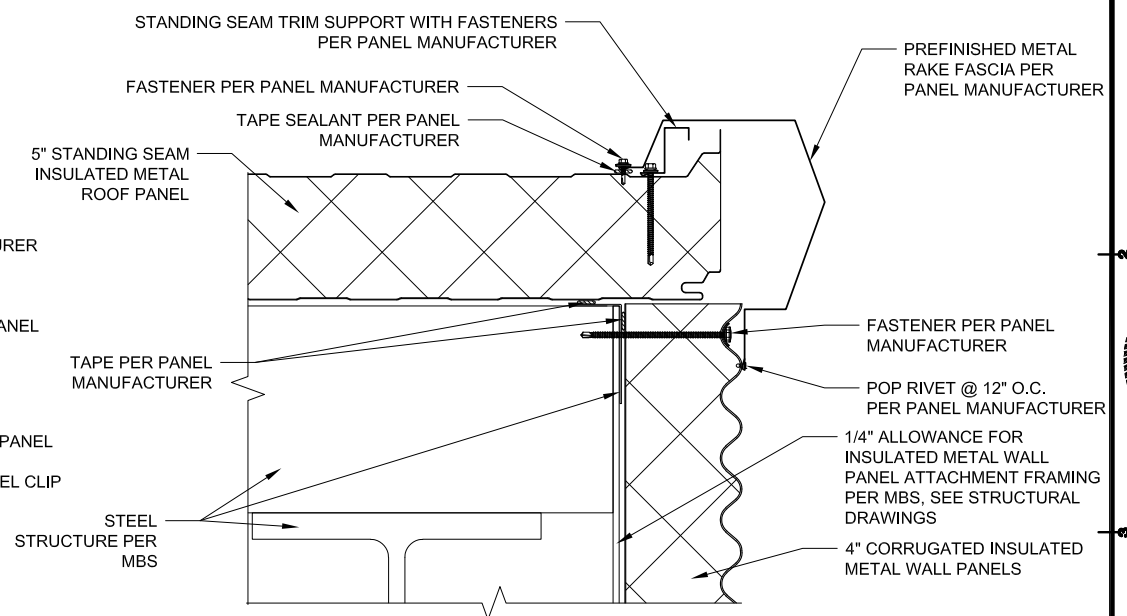
DRAFT-03
DRAWING LOCATION
Z:\Projects\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A4.dwg



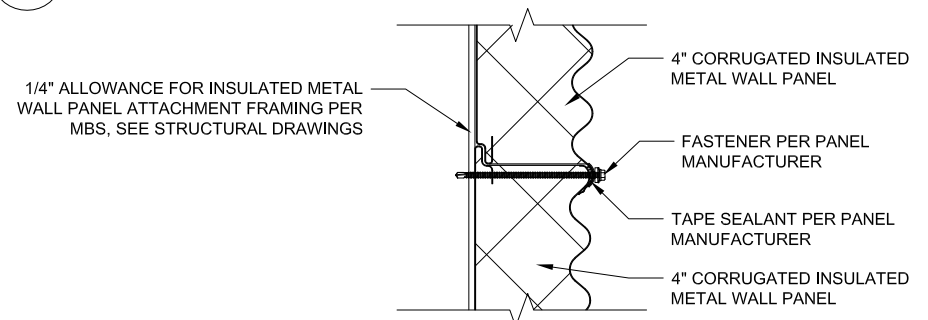
A3
A4.02 PLAN DETAIL: INSULATED METAL WALL PANEL VERTICAL JOINT DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



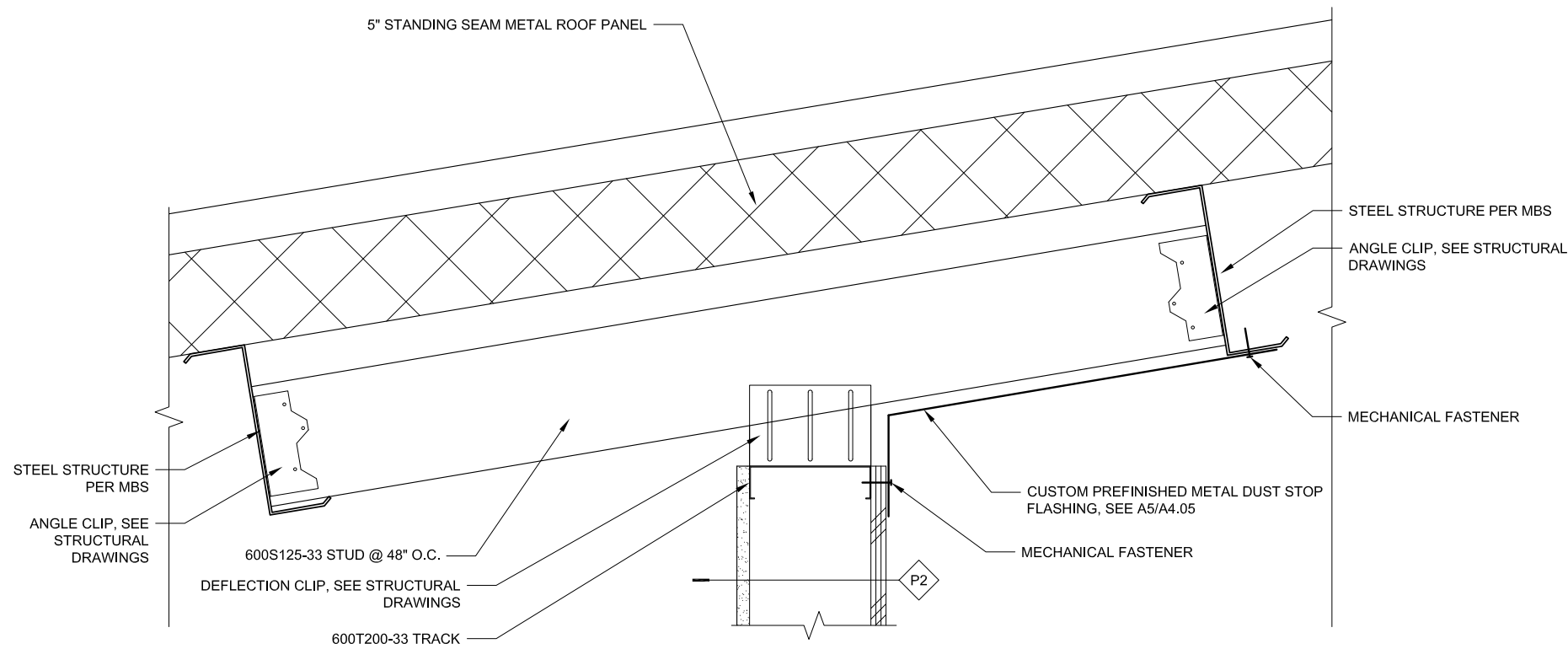
D3
A4.02 INSULATED METAL ROOF PANEL JOINT DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



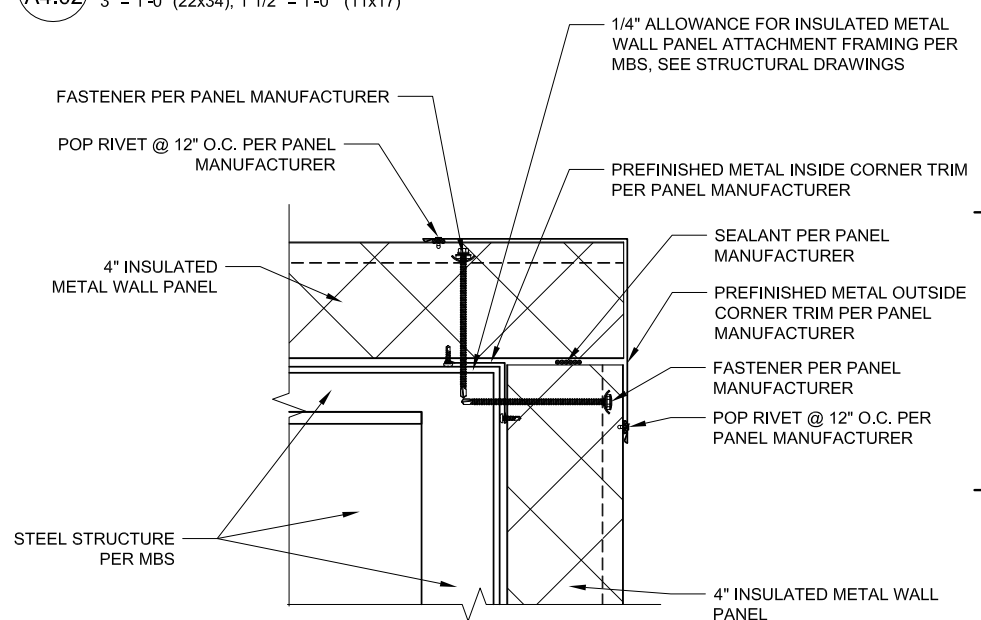
G3
A4.02 INSULATED METAL ROOF PANEL RAKE FASCIA DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



G5
A4.02 CORRUGATED INSULATED METAL WALL PANEL HORIZONTAL PANEL JOINT DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

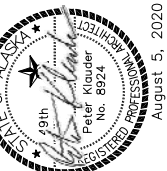


A7
A4.02 DEFLECTION CLIP DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



G7
A4.02 PLAN DETAIL: INSULATED METAL WALL PANEL TYPICAL OUTSIDE CORNER DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

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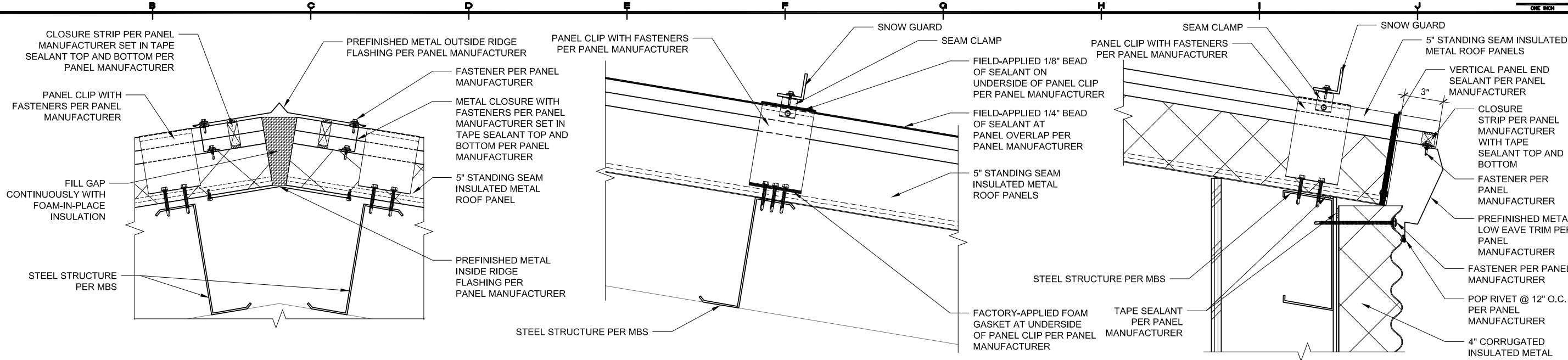
SHEET TITLE	DETAILS
A4.02	
DRAWN BY EF	CHECKED BY PK
DATE 8/5/20	SCALE AS SHOWN
JOB NUMBER 20-009-01	

LAYOUT
-03 DETAILS

DATE TIME
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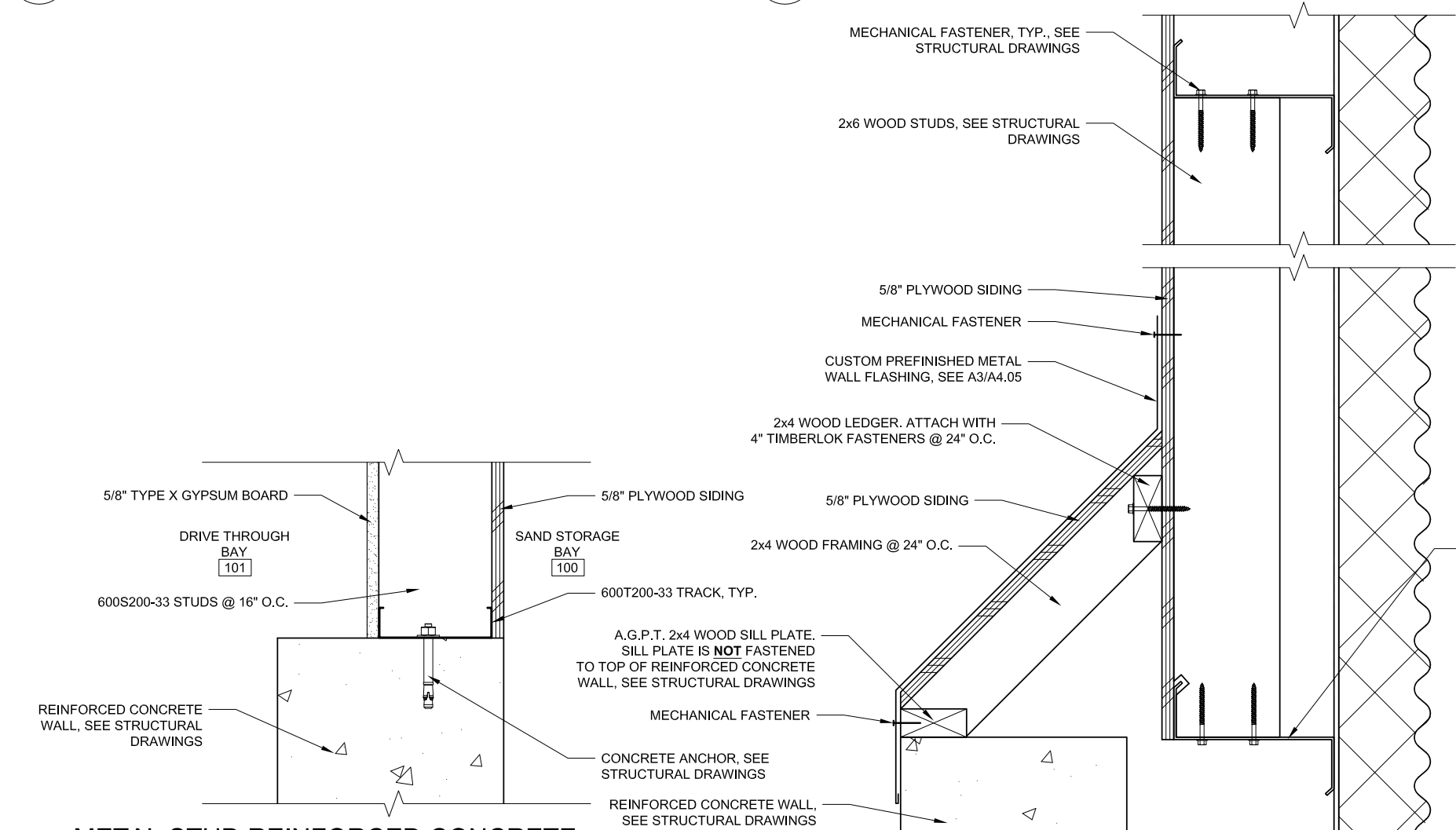
DRAWING LOCATION
Z:\Projects\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A4.dwg



A3
A4.03 INSULATED METAL PANEL ROOF RIDGE DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

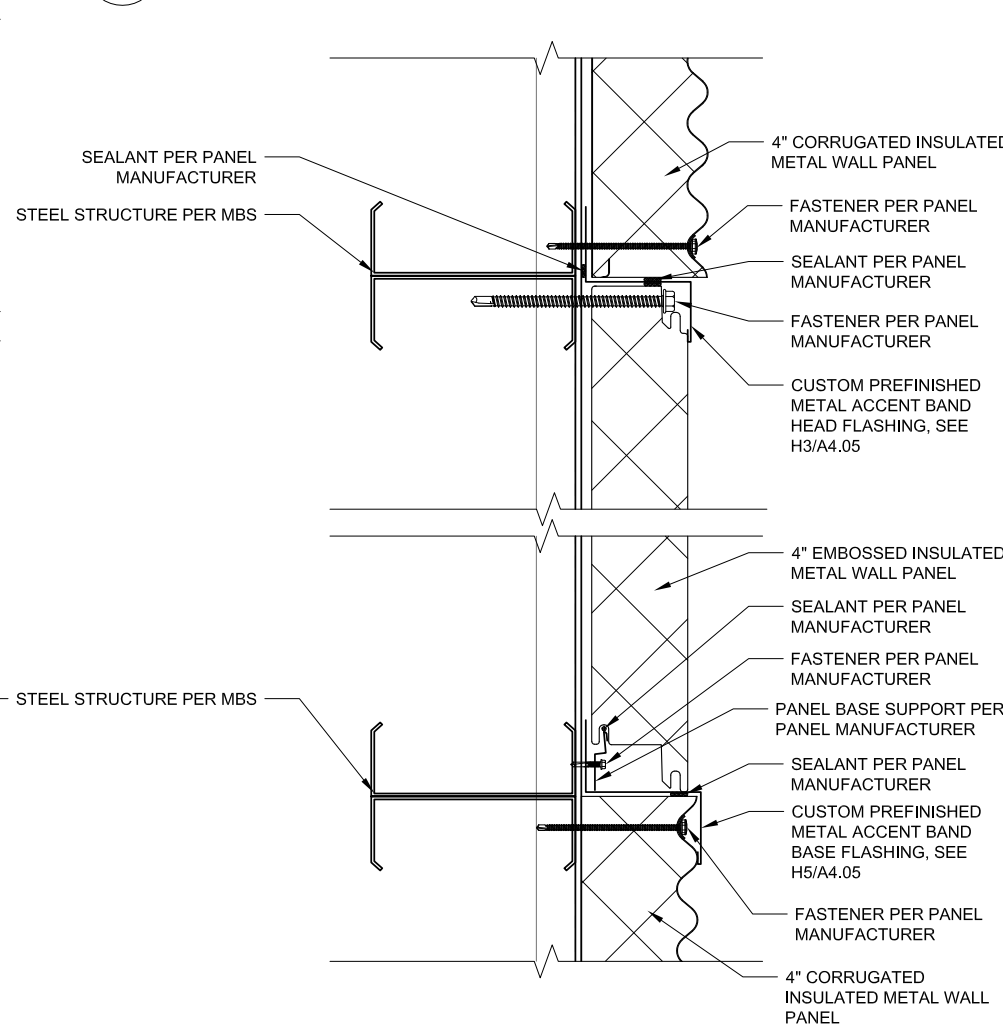
D3
A4.03 INSULATED METAL ROOF PANEL INTERMEDIATE SUPPORT & SNOW GUARD DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

G3
A4.03 INSULATED METAL ROOF PANEL LOW EAVE DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



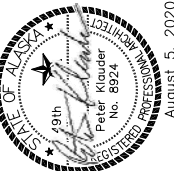
A7
A4.03 METAL STUD REINFORCED CONCRETE WALL CONNECTION DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

D7
A4.03 SAND STORAGE BAY WALL FLASHING DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



G7
A4.03 ACCENT BAND INSULATED METAL WALL PANEL TRANSITION DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

REVISIONS	DATE	DESCRIPTION
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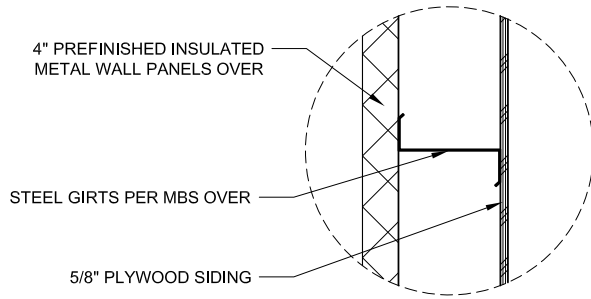


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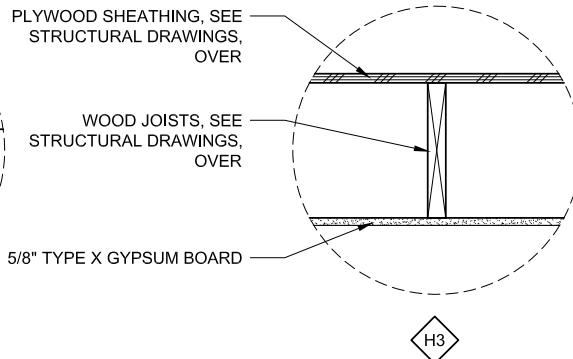
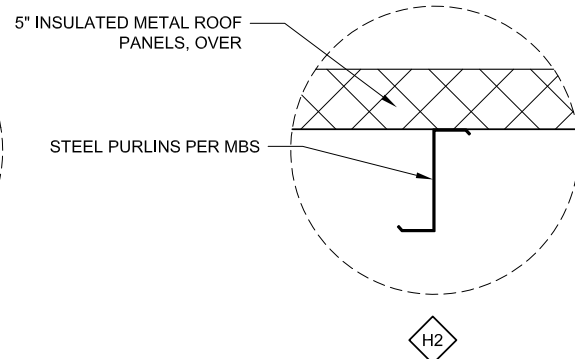
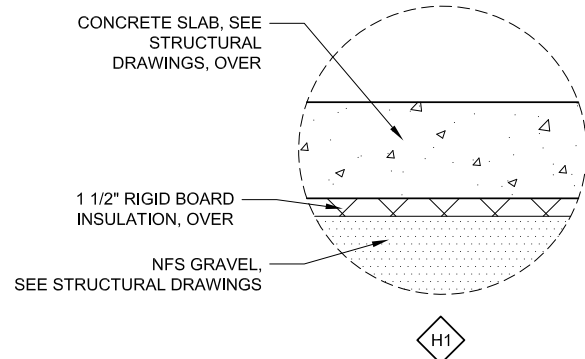
SHEET TITLE	DETAILS
A4.03	
DRAWN BY: EF	CHECKED BY: PK
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JOB NUMBER: 20-009-01	



- W1 5/8" PLYWOOD SIDING TO RUN FROM F.F. TO UNDERSIDE OF INSULATED METAL ROOF PANEL
- W2 5/8" PLYWOOD SIDING TO RUN FROM 1/2" A.F.F. TO 12'-0" A.F.F.
- W3 5/8" PLYWOOD SIDING TO RUN FROM 12'-0" A.F.F. TO UNDERSIDE OF INSULATED METAL ROOF PANEL

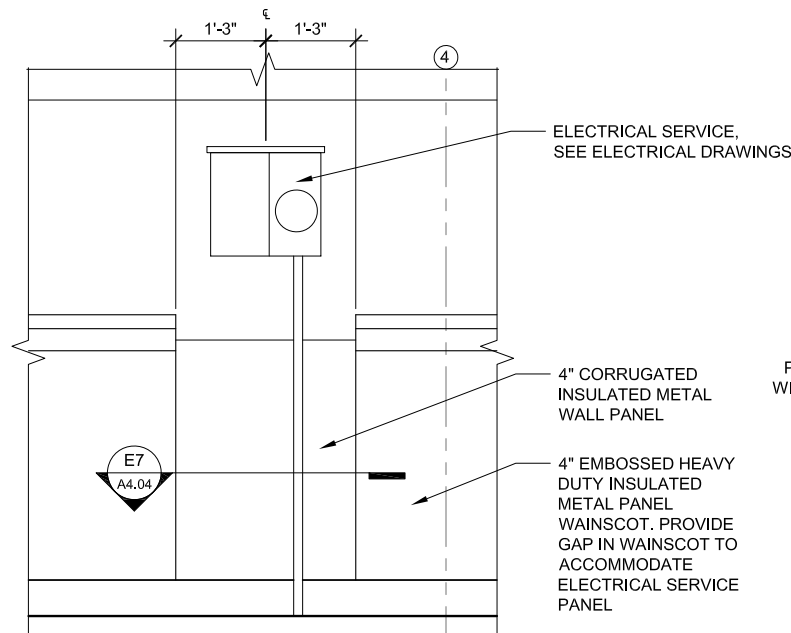
A3 EXTERIOR WALL TYPES

A4.04 1 1/2" = 1'-0" (22x34); 3/4" = 1'-0" (11x17)



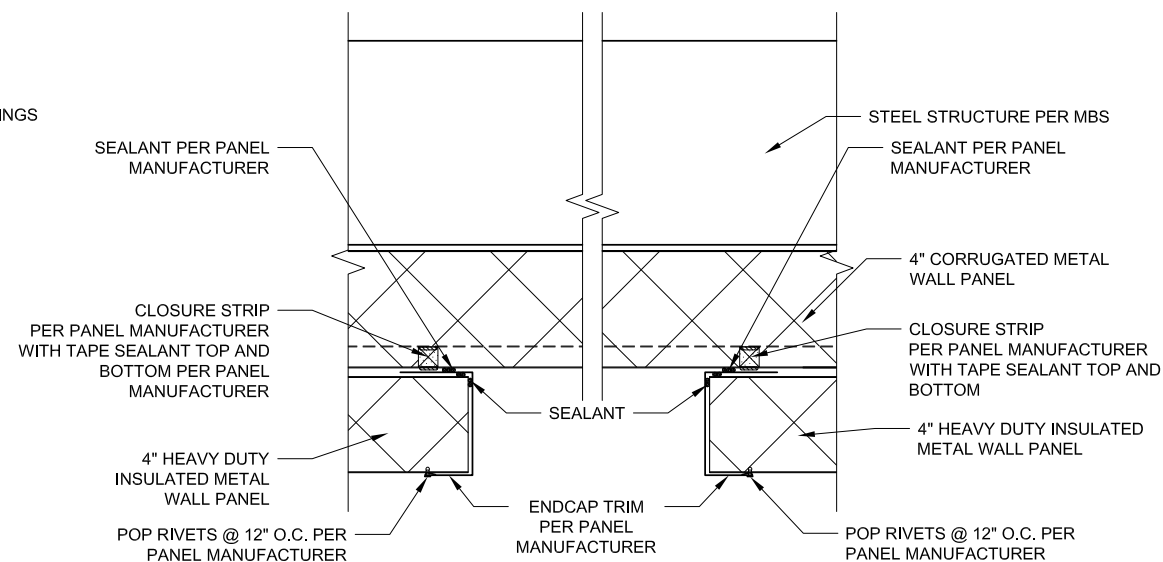
A5 HORIZONTAL ASSEMBLIES

A4.04 1 1/2" = 1'-0" (22x34); 3/4" = 1'-0" (11x17)



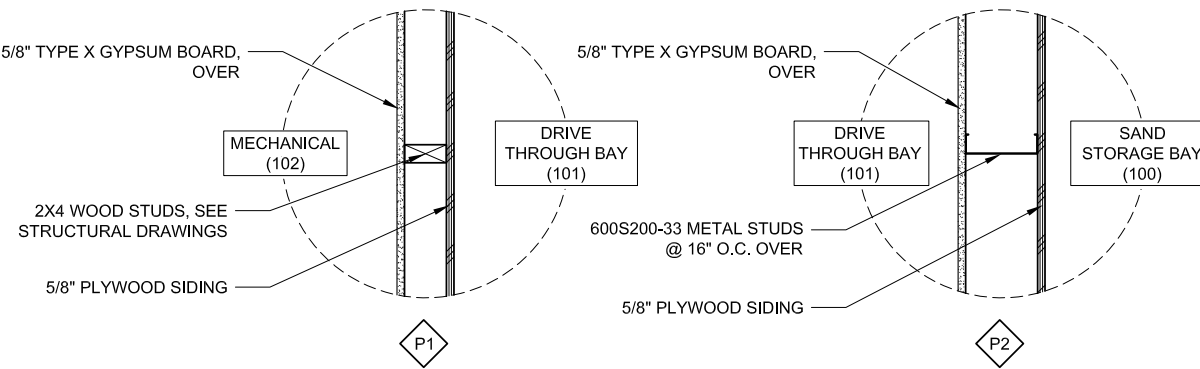
A7 ELEVATION DETAIL: ELECTRICAL SERVICE PANEL

A4.04 3/4" = 1'-0" (22x34); 3/8" = 1'-0" (11x17)



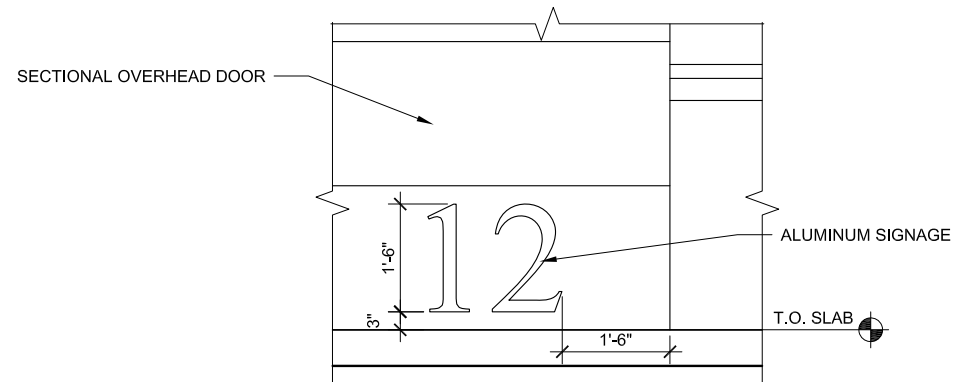
PLAN DETAIL: WAINSCOT TERMINATION AT ELECTRICAL SERVICE PANEL

E7 A4.04 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



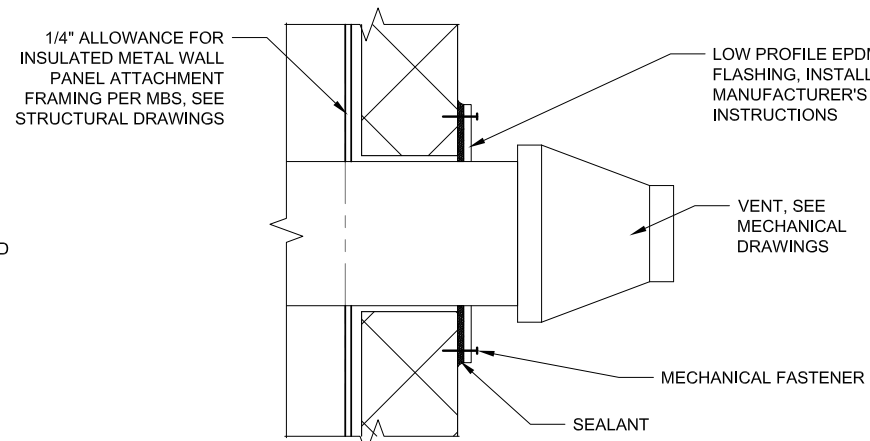
E4 INTERIOR PARTITION TYPES

A4.04 1 1/2" = 1'-0" (22x34); 3/4" = 1'-0" (11x17)



G5 SECTIONAL OVERHEAD DOOR SIGNAGE DETAIL

A4.04 3/4" = 1'-0" (22x34); 3/8" = 1'-0" (11x17)



G7 VENT FLASHING DETAIL

A4.04 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

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SHEET TITLE	
ASSEMBLIES & DETAILS	
SHEET	
A4.04	
DRAWN BY: EF	CHECKED BY: PK
DATE: 8/5/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

LAYOUT
-05 CUSTOM FLASHING

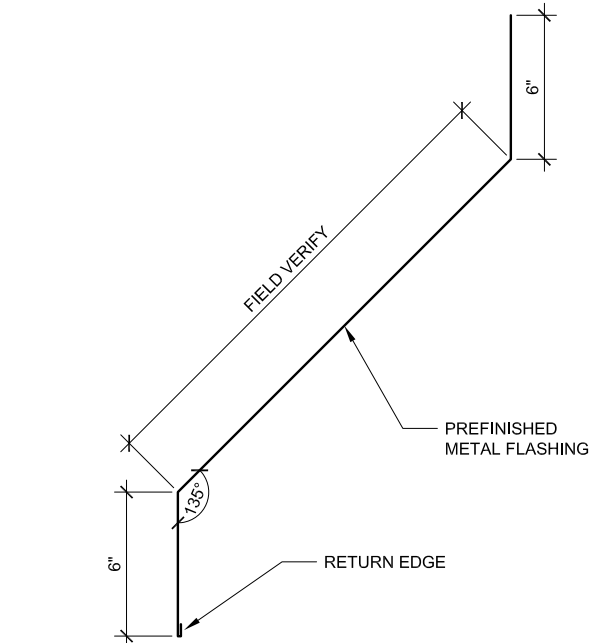
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DRAWING LOCATION
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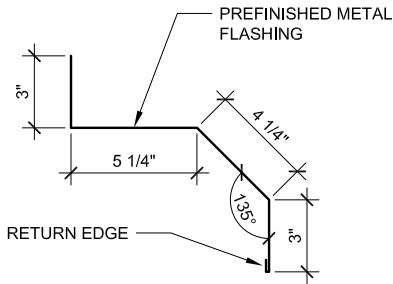
CUSTOM FLASHING DETAILS

SHEET NOTES:

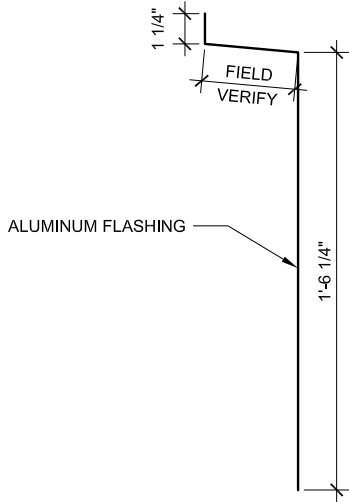
1. FIELD VERIFY ALL CUSTOM FLASHING DIMENSIONS PRIOR TO FABRICATION



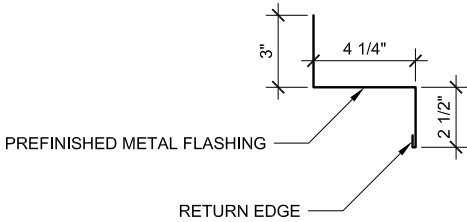
A3 SAND STORAGE BAY WALL FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



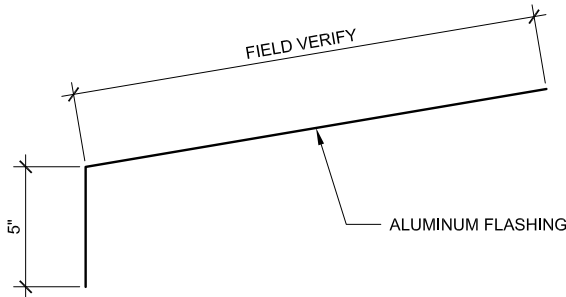
D3 WAINSCOT FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



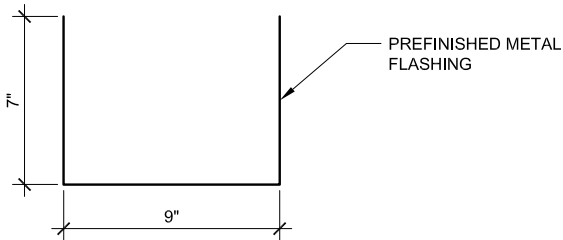
F3 BASE FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



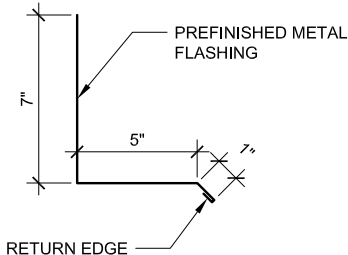
H3 ACCENT BAND HEAD FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



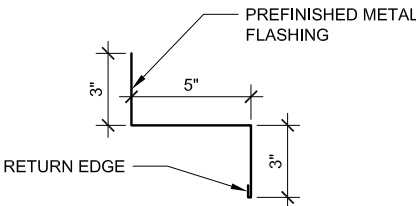
A5 DUST STOP FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



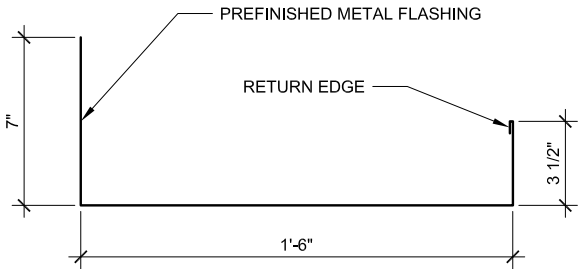
D5 OVERHEAD DOOR HEAD ENDCAP FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



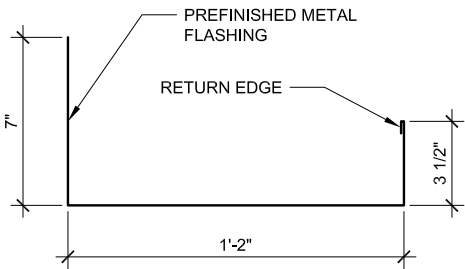
F5 OVERHEAD DOOR HEAD DRIP FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



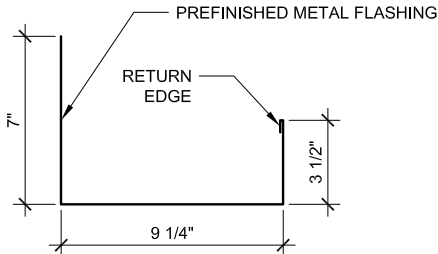
H5 ACCENT BAND BASE FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



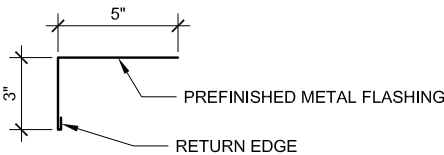
A7 OVERHEAD DOOR JAMB WAINSCOT ENDCAP FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



D7 OVERHEAD DOOR JAMB ENDCAP FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



F7 DOOR JAMB WAINSCOT ENDCAP FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



H7 WINDOW SILL FLASHING
A4.05 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

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KENAI, ALASKA

SHEET TITLE	CUSTOM FLASHING DETAILS
SHEET	A4.05
DRAWN BY	EF
CHECKED BY	PK
DATE	8/5/20
SOIL	AS SHOWN
JOB NUMBER	20-009-01

DOOR SCHEDULE

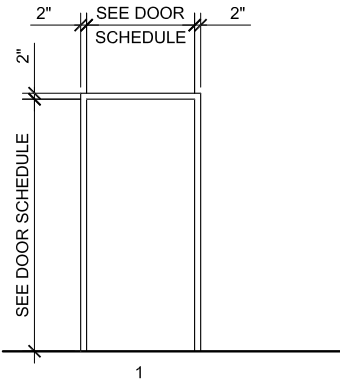
DOOR							GLASS		FRAME				DETAILS			REMARKS	HARDWARE SET NUMBER	DOOR NO.
DOOR NO.	FIRE RATING	SIZE (WIDTH x HEIGHT)	TYPE	INSULATED	MATERIAL	FINISH	TYPE	SIZE (W x H)	TYPE	INSULATED	MATERIAL	FINISH	HEAD	JAMB	SILL			
100-1	NA	3'-0" x 7'-0"	2	YES	HM	P&P	GL-1	24" x 36"	1	YES	HM	P&P	H3/A6.1	E5 & H5/A6.1	H7/A6.1	-	4	100-1
100-2	NA	18'-0" x 22'-0"	4	YES	STEEL	FF	GL-2	34" x 16"	NA	NA	NA	NA	A3/A6.1	A5 & E3/A6.1	A7/A6.1	SECTIONAL STEEL DOOR WITH '14' SIGNAGE	3	100-2
101-1	NA	18'-0" x 16'-0"	3	YES	STEEL	FF	GL-2	34" x 16"	NA	NA	NA	NA	A3/A6.1	A5 & E3/A6.1	A7/A6.1	SECTIONAL STEEL DOOR WITH '13' SIGNAGE	3	101-1
101-2	NA	3'-0" x 7'-0"	2	YES	HM	P&P	GL-1	24" x 36"	1	YES	HM	P&P	H3/A6.1	E5 & H5/A6.1	H7/A6.1	-	1	101-2
101-3	NA	3'-0" x 7'-0"	2	YES	HM	P&P	GL-1	24" x 36"	1	YES	HM	P&P	H3/A6.1	E5 & H5/A6.1	H7/A6.1	-	4	101-3
101-4	NA	18'-0" x 16'-0"	3	YES	STEEL	FF	GL-2	34" x 16"	NA	NA	NA	NA	A3/A6.1	A5 & E3/A6.1	A7/A6.1	SECTIONAL STEEL DOOR WITH '12' SIGNAGE	3	101-4
102-1	NA	3'-0" x 7'-0"	1	YES	HM	P&P	-	NA	1	NO	HM	P&P	A3/A6.2	A5/A6.2		-	2	102-1

DOOR SCHEDULE LEGEND

FF	FACTORY FINISH
HM	HOLLOW METAL
NA	NOT APPLICABLE
NO.	NUMBER
P&P	PRIMED AND PAINTED
SS	SECTIONAL STEEL

GLASS TYPES

GL-1	1" INSULATING GLASS
GL-2	INSULATING GLASS PER SECTIONAL STEEL DOOR MANUFACTURER
GL-3	INSULATING GLASS PER VINYL WINDOW MANUFACTURER

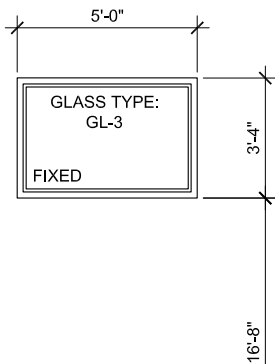


17 FRAME TYPES

A5.00 3/8" = 1'-0" (22x34); 3/16" = 1'-0" (11x17)

A5 DOOR TYPES

A5.00 3/8" = 1'-0" (22x34); 3/16" = 1'-0" (11x17)



HEAD DETAIL: D3/A5.02
JAMB DETAIL: D5/A5.02
SILL DETAIL: D7/A5.02

A7 WINDOW TYPES

A5.00 3/8" = 1'-0" (22x34); 3/16" = 1'-0" (11x17)

REVISIONS	DESCRIPTION	
MARK	DATE	
1		
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SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE
DOOR SCHEDULE,
DOOR TYPES

SHEET
A5.00

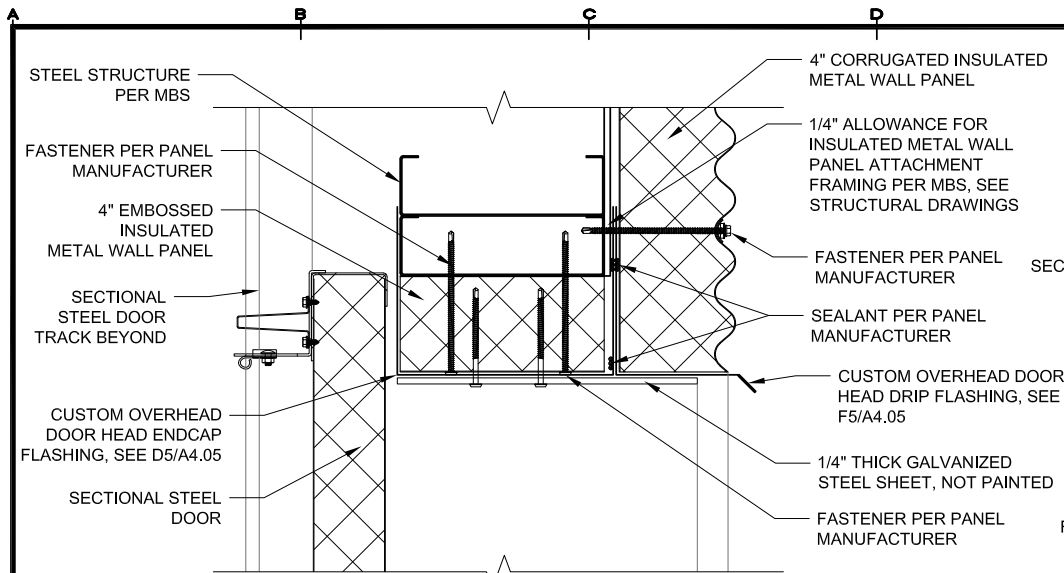
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JOB NUMBER: 20-009-01	

LAYOUT
-01 DOOR DETAILS

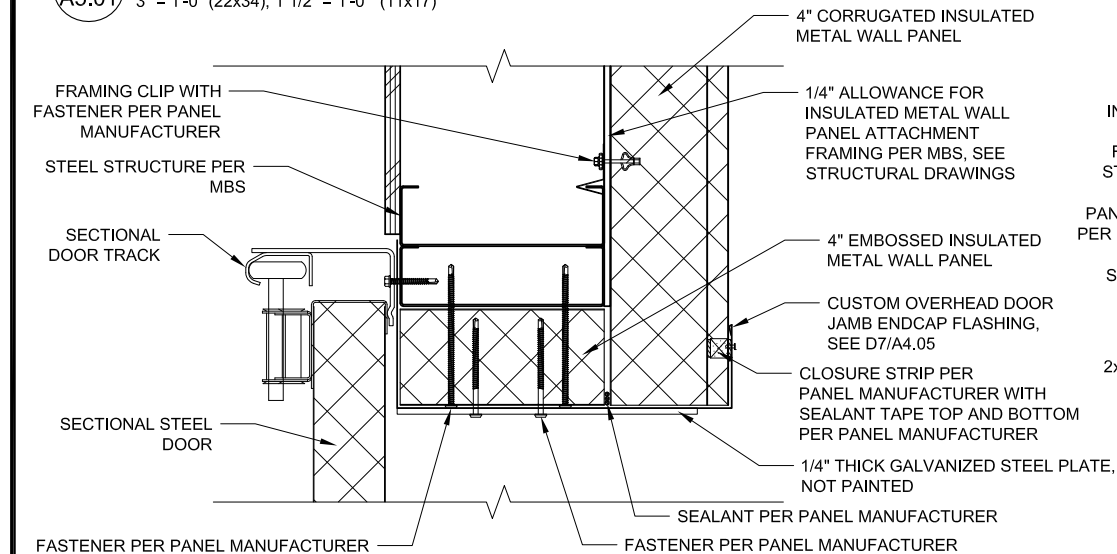
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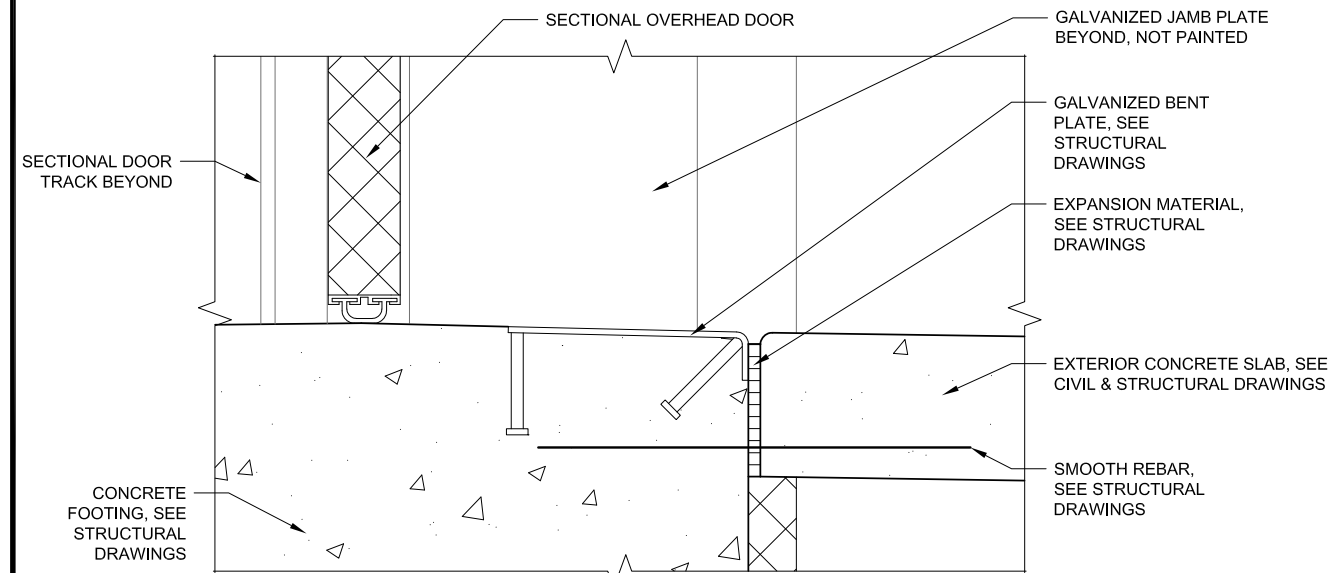
DRAWING LOCATION
Z:\Jobs\Current Jobs\0010 ENA Sand Storage Building\0010 Drawings\0010 A5.dwg



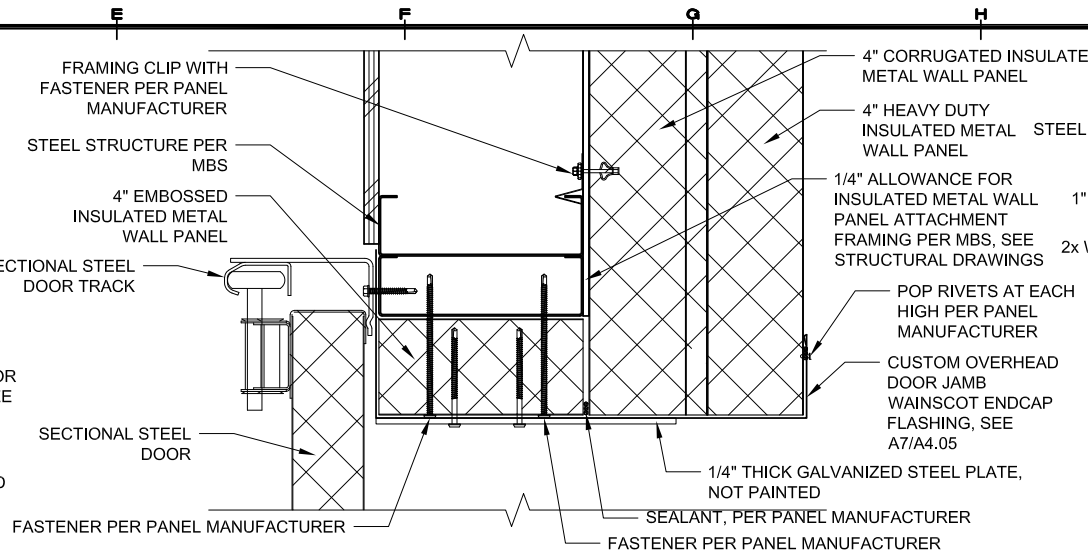
A3
A5.01 SECTIONAL OVERHEAD DOOR HEAD DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



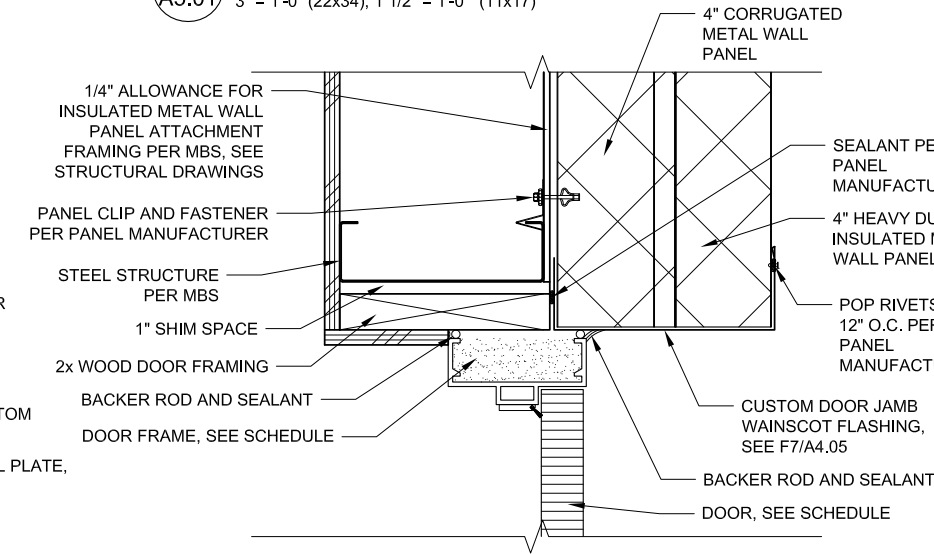
A5
A5.01 SECTIONAL OVERHEAD DOOR JAMB DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



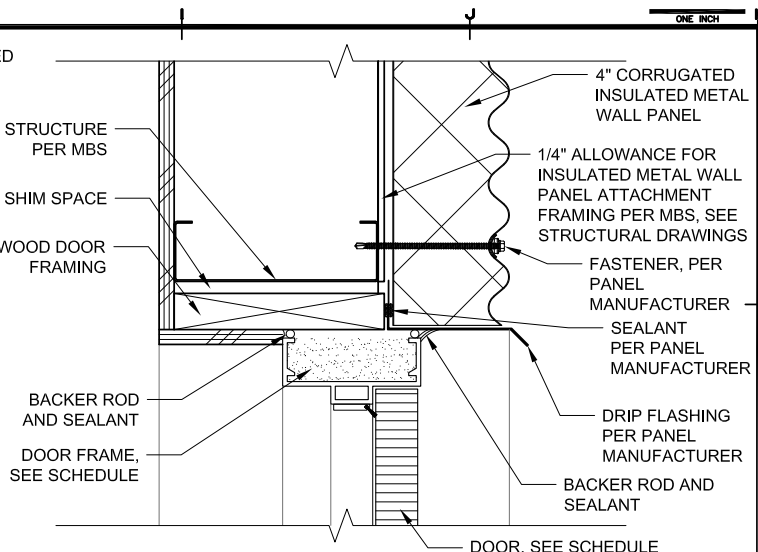
A7
A5.01 SECTIONAL OVERHEAD DOOR THRESHOLD DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



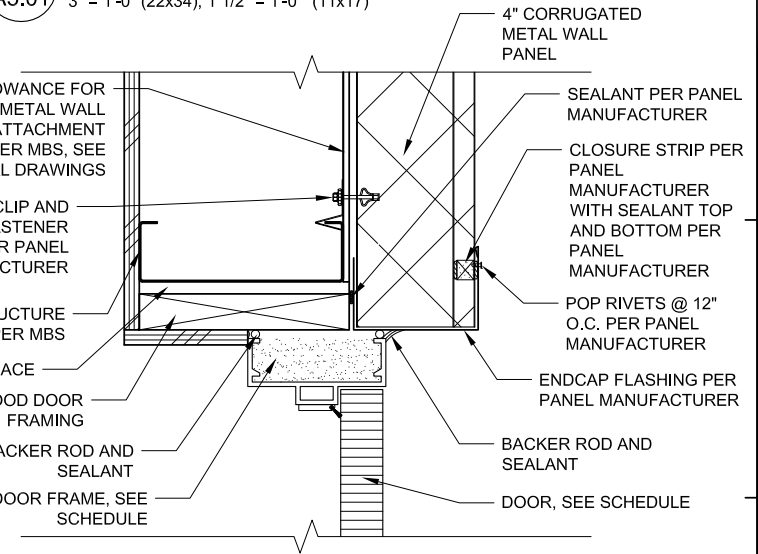
E3
A5.01 SECTIONAL OVERHEAD DOOR WAINSCOT JAMB DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



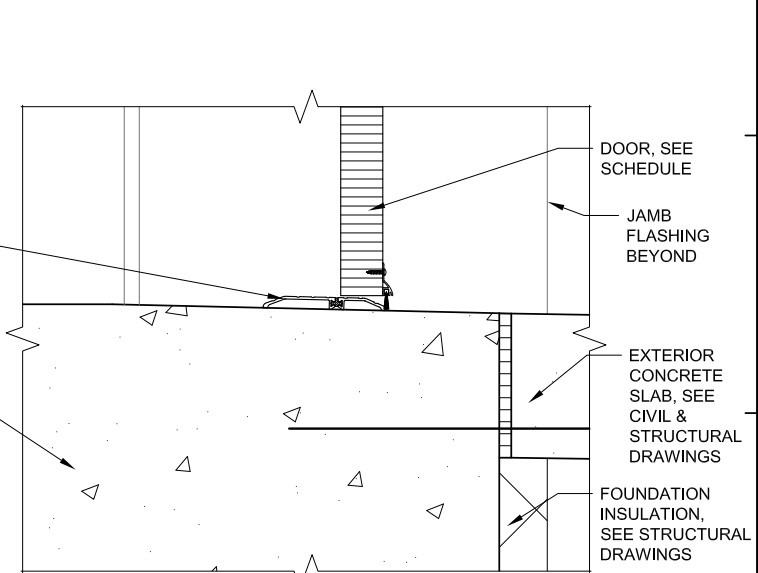
E5
A5.01 EXTERIOR DOOR WAINSCOT JAMB DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



H3
A5.01 EXTERIOR DOOR HEAD DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



H5
A5.01 EXTERIOR DOOR JAMB DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)



H7
A5.01 EXTERIOR DOOR THRESHOLD DETAIL
3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

REVISIONS	DATE	DESCRIPTION
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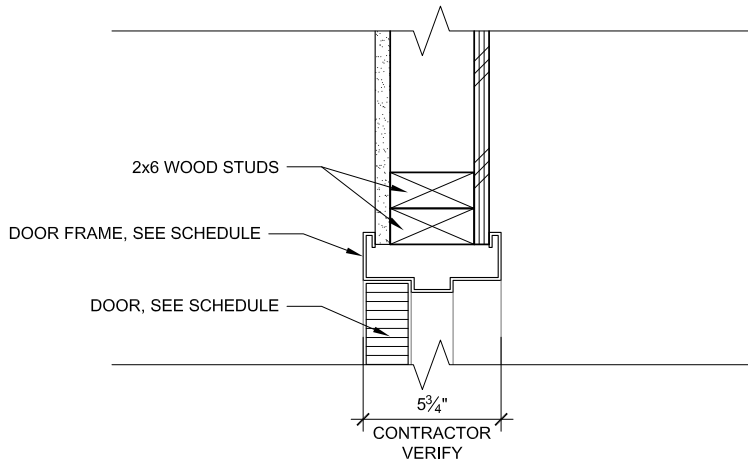
SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE	
DOOR DETAILS	
SHEET	
A5.01	
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DATE:	SCALE:
8/5/20	AS SHOWN
JOB NUMBER:	
20-009-01	

HEADER, SEE STRUCTURAL
DRAWINGS

DOOR FRAME, SEE SCHEDULE

DOOR, SEE SCHEDULE

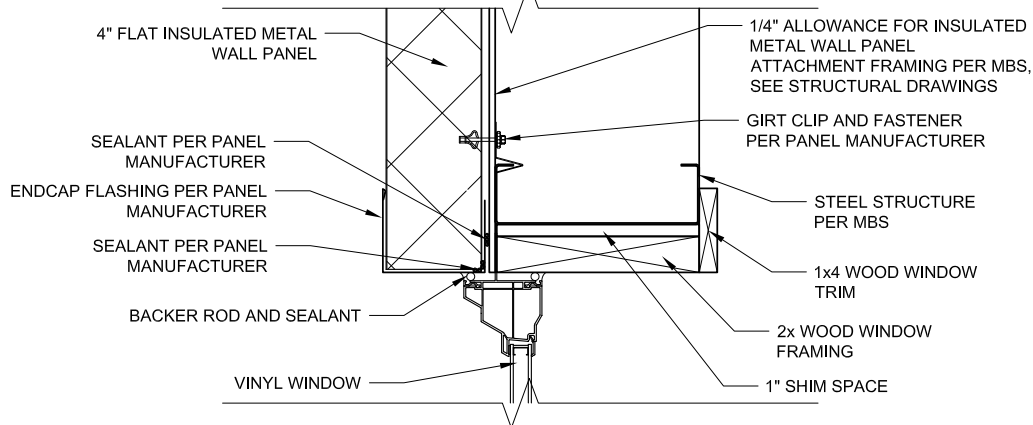
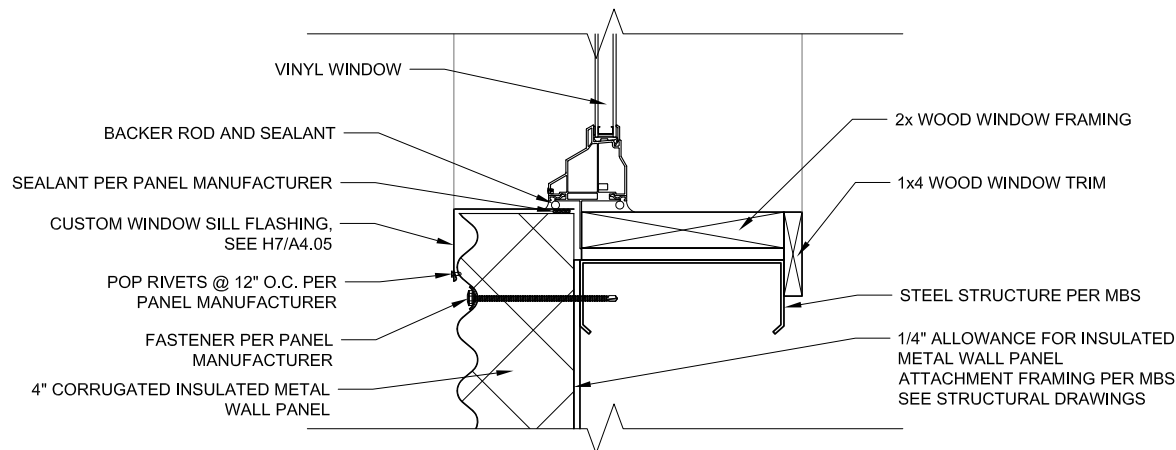
5 3/4"
CONTRACTOR
VERIFY**A3** INTERIOR DOOR HEAD DETAIL**A5.02** 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)**A5** INTERIOR DOOR JAMB DETAIL**A5.02** 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)4" CORRUGATED INSULATED
METAL WALL PANELFASTENER PER PANEL
MANUFACTURERSEALANT PER PANEL
MANUFACTURERDRIP FLASHING PER
PANEL MANUFACTURER

BACKER ROD & SEALANT

VINYL WINDOW

1/4" ALLOWANCE FOR INSULATED
METAL WALL PANEL
ATTACHMENT FRAMING PER MBS,
SEE STRUCTURAL DRAWINGSSTEEL STRUCTURE
PER MBS
1x4 WOOD WINDOW
TRIM

1" SHIM SPACE

2x WOOD
WINDOW FRAMING**D3** WINDOW HEAD DETAIL**A5.02** 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)**D5** WINDOW JAMB DRAWING**A5.02** 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)**D7** WINDOW SILL DETAIL**A5.02** 3" = 1'-0" (22x34); 1 1/2" = 1'-0" (11x17)

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KENAI, ALASKA

SHEET TITLE
DOOR & WINDOW
DETAILS

SHEET
A5.02

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20-009-01

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR			BASE			NORTH			EAST			SOUTH			WEST			CEILING				REMARKS	ROOM NO.
		MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR	WALL			WALL			WALL			WALL			MATERIAL	FINISH	COLOR	HEIGHT		
								MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR	MATERIAL	FINISH	COLOR						
100	SAND STORAGE BAY	F1	CC	NA	NA	FF	X1	W1	P1	X2	W1	P1	X2	W1	P1	X2	W1	P1	X2	ES	NA	NA	SLOPED	AT WALLS, PAINT ONLY TO BE APPLIED TO PLYWOOD SIDING.	100
101	DRIVE THROUGH BAY	F1	CC	NA	B1	FF	X1	W2	P1	X2	W1	P1	X2	W1	P1	X2	W1	P1	X2	ES	NA	NA	SLOPED	AT WALLS, PAINT ONLY TO BE APPLIED TO PLYWOOD SIDING. RUBBER BASE ONLY TO BE INSTALLED AT PLYWOOD SIDING	101
102	MECHANICAL	F1	CC	NA	B1	FF	X1	W2	P1	X2	W2	P1	X2	W1	P1	X2	W2	P1	X2	C1	P1	X2	8'-0"		102

FINISH SCHEDULE LEGEND

GENERAL		FLOORS		BASE		WALLS		CEILINGS		FINISHES		COLORS	
AFF	ABOVE FINISH FLOOR	F1	EXPOSED CONCRETE	B1	RESILIENT BASE	W1	5/8" PLYWOOD SIDING	C1	5/8" TYPE X MOLD RESISTANT GYPSUM	FF	FACTORY FINISH	X1	BLACK
ES	EXPOSED STRUCTURE					W2	5/8" TYPE X MOLD RESISTANT GYPSUM BOARD		CEILING BOARD	P1	PAINT (GLOSS LATEX)	X2	WHITE
NA	NOT APPLICABLE									CC	CURING COMPOUND		
NO.	NUMBER												

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SHEET TITLE	
FINISH SCHEDULE	
SHEET	
A5.03	
DRAWN BY: EF	CHECKED BY: PK
DATE: 8/5/20	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

LAYOUT NOTES
DATE TIME
9/4/2020 10:20 AM

DRAWING LOCATION
Z:\proj\kenai\2020\2020018 Kenai Sand Storage Building\HDL\Kenai Sand Storage Building- Structural.dwg ZACSR

GENERAL
ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO REQUIREMENTS OF THE INTERNATIONAL CODE COUNCIL INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION. WHERE EXPLICIT DETAILS ARE NOT SHOWN OR DESCRIBED, THE MINIMUM REQUIREMENTS OF THE ABOVE CODE SHALL APPLY. UNLESS OTHERWISE NOTED, ALL CODES, STANDARDS AND OTHER PUBLICATIONS CITED SHALL REFER TO THE LATEST EDITION.

FOR DIMENSIONING PURPOSES THE STRUCTURAL DRAWINGS HAVE FINISH FLOOR TOP OF SLAB ELEVATION SET AS ZERO. FOR THE ACTUAL SITE AND BUILDING ELEVATIONS SEE CIVIL.

LOCATION
THESE DRAWINGS ARE FOR THE CONSTRUCTION OF (1) BUILDING IN KENAI, ALASKA.

DESIGN LOADS
IN ADDITION TO DEAD LOADS, THE FOLLOWING LIVE LOADS SHALL BE USED FOR DESIGN:

COLLATERAL LOAD: 5 PSF ROOF LOAD FOR MECHANICAL SYSTEMS

ROOF: GROUND SNOW LOAD Pg = 70 PSF
FLAT-ROOF SNOW LOAD Pf = 60 PSF
SNOW EXPOSURE FACTOR Ce = 0.9
SNOW LOAD IMPORT FACTOR Is = 1.0

WIND: BASIC WIND SPEED (3 SEC GUST) V = 137 MPH
EXPOSURE C EXP = 1.4
WIND LOAD IMPORT FACTOR Iw = 1.0

METHOD 1 SIMPLIFIED PROCEDURE USED FOR DESIGN
COMP & CLADDING WIND LOADS TO BE USED FOR DESIGN
PER ASCE 7-16.

SEISMIC: SEISMIC IMPORTANCE FACTOR Ie = 1.0
RESPONSE ACCEL. Ss=150%, S1=60%
SITE CLASS D
SPECTRAL RESPONSE COEFF. Sds = 1.00
SEISMIC DESIGN CATEGORY: D
SIMPLIFIED DESIGN PROCEDURE PER ASCE 7-16 12-14
USED FOR DESIGN.
FOR ORDINARY STEEL MOMENT FRAMES
SEISMIC RESPONSE COEFF. Cs = 0.28
RESPONSE MODIFICATION FACTOR R = 3.5
FOR ORDINARY STEEL CONCENTRICALLY BRACED FRAMES
SEISMIC RESPONSE COEFF. Cs = 0.31
RESPONSE MODIFICATION FACTOR R = 3.25

LATERAL LOADS IN THE PRE-ENGINEERED METAL BUILDING ARE TO BE RESISTED BY STEEL MOMENT FRAMES AND STEEL BRACED FRAMES TO BE DESIGNED BY THE PRE-ENGINEERED METAL BUILDING MANUFACTURER.

FLOOR LIVE LOAD (INTERIOR & EXTERIOR SLAB ON GRADE):
-HEAVY INDUSTRIAL STORAGE=250 PSF
-ASSHTO DESIGN VEHICULAR LIVE LOAD HL-93: MAX POINT LOAD OF 16 KIP OVER 20"x20" AREA. SEE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR ADDITIONAL LOAD REQUIREMENTS.

FLOOR LIVE LOAD (FUTURE STORAGE AREA ABOVE MECHANICAL ROOM):
-MECHANICAL EQUIPMENT LIVE LOAD =125 PSF

SITE WORK
PREPARATION OF A SAFE AND SUITABLE BUILDING SITE SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF FOUNDATIONS AND SLABS. THE FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY HDL ENGINEERING, DATED AUGUST 2020. THE REPORTED ALLOWABLE BEARING CAPACITY OF 3500 PSF WAS USED FOR DESIGN.

ANCHOR BOLTS AND CONCRETE EXPANSION ANCHORS
ANCHOR BOLTS AND THREADED RODS SHALL CONFORM TO ASTM F1554 GRADE 36. CONCRETE ANCHORS SHALL BE "SIMPSON TITEN HD" CONCRETE ANCHORS OR ENGINEER APPROVED EQUAL, INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ANCHOR BOLTS IN BEARING WALL SILL PLATES SHALL BE PROVIDED WITH HEX HEAD NUTS AND 3"x3"x¼" STEEL PLATE WASHERS. PROVIDE CONCRETE ANCHORS AT 24" O/C SPACING AT ALL SILL GIRTS UNLESS NOTED OTHERWISE. NELSON STUDS SHALL BE ⅝" DIAMETER BY 4-1/8" IN LENGTH UNLESS OTHERWISE NOTED.

FOUNDATIONS
REMOVE ORGANICS AND UNSUITABLE MATERIAL TO A MINIMUM DEPTH OF 3 FT BELOW EXISTING GRADE OR AS DIRECTED BY THE ENGINEER. FILL PLACED LESS THAN 12" BELOW THE PROPOSED FOOTINGS AND LESS THAN 6" BELOW THE BUILDING SLAB SHALL BE MATERIAL MEETING THE REQUIREMENTS OF SUBBASE. FILL PLACED MORE THAN 12" BELOW THE PROPOSED FOOTINGS AND MORE THAN 6" BELOW THE BUILDING SLAB SHALL BE MATERIAL MEETING THE REQUIREMENT OF SUITABLE MATERIAL.

CONCRETE
MIXING, SELECTION OF MATERIALS, AND PLACING OF ALL CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE IBC, CHAPTER 19. AN AIR ENTRAINING AGENT SHALL BE USED IN ALL CONCRETE MIXES FOR CONCRETE WORK WHICH IS TO BE EXPOSED TO EARTH OR WEATHER. AIR ENTRAINMENT SHALL BE 6% +/- 1.5% BY VOLUME. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (F'C) = 3000 P.S.I. CONCRETE FOR INTERIOR AND EXTERIOR SLABS SHALL CONTAIN 0.1% BY VOLUME 'GENESIS FIBER' COLLATED FIBRILLATED POLYPROPYLENE FIBER PER CUBIC YARD OF CONCRETE, OR ENGINEER APPROVED EQUAL. THE FIBER SHALL BE THOROUGHLY MIXED INTO THE CONCRETE IN TRANSIT TO THE SITE, IN ACCORDANCE WITH THE FIBER MANUFACTURER'S RECOMMENDATIONS.

SLAB ON GRADE
PLACE REINFORCING STEEL AT MID-DEPTH OF SLAB AND SUPPORT AT 4' O/C MAXIMUM WITH WELL CURED CONCRETE BLOCKS OR APPROVED METAL CHAIRS UNLESS NOTED OTHERWISE. REINFORCEMENT AT TOP OF 12" SLAB SHALL CONSIST OF #8 REBAR AT 10" O/C PERPENDICULAR TO THE ADJACENT RETAINING WALL & #5 BARS AT 12" O/C PARALLEL TO THE ADJACENT RETAINING WALL. REINFORCEMENT AT BOTTOM OF SLAB SHALL CONSIST OF #5 BARS AT 12" O/C EACH WAY.

INTERIOR SLABS: PROVIDE PREFORMED CONSTRUCTION JOINTS (C.J.) AT LOCATIONS SHOWN ON THE PLANS AND AT 24' O/C MAXIMUM.

EXTERIOR SLABS: PROVIDE PREFORMED CONSTRUCTION JOINTS (C.J.) AT LOCATIONS SHOWN ON THE PLANS AND AT 20' O/C MAXIMUM.

REINFORCING STEEL
UNLESS NOTED OTHERWISE, ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO IBC CHAPTER 19. REINFORCING BARS SHALL BE GRADE 60. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH NO. 16 DOUBLE ANNEALED IRON WIRE. REINFORCING IN FOOTINGS SHALL BE SUPPORTED ON WELL CURED CONCRETE BLOCKING OR APPROVED METAL CHAIRS. REINFORCING BARS NO. 6 AND SMALLER SHALL BE SPLICED BY A LAP OF AT LEAST (44) BAR DIAMETERS. REINFORCING BARS NO. 7 OR LARGER SHALL BE SPLICED BY A LAP OF AT LEAST (55) BAR DIAMETERS. A MINIMUM LAP FOR ALL BARS SHALL BE 24". CONCRETE COVER OVER REINFORCING SHALL BE 3" FOR CONCRETE CAST AGAINST EARTH. CONCRETE COVER FOR FORMED CONCRETE THAT WILL BE EXPOSED TO WEATHER OR EARTH SHALL BE 2" MINIMUM FOR NO. 6 THROUGH NO. 18 BARS AND 1 1/2" MINIMUM FOR NO. 5 BARS AND SMALLER, INCLUDING WELDED WIRE FABRIC (WWF). OTHER REINFORCEMENT SHALL HAVE A MINIMUM COVERAGE OF NOT LESS THAN 3/4".

STRUCTURAL STEEL AND CONNECTORS
STRUCTURAL STEEL SHALL CONFORM TO IBC CHAPTER 22, FOR ASTM SPECIFICATION A-36, FY = 36 K.S.I. EXCEPT WHERE NOTED OTHERWISE. STEEL TUBING (TS) SHALL CONFORM TO ASTM A500, GRADE B, FY = 46 K.S.I. DESIGN, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE IBC CHAPTER 22, DIVISION IX, ALLOWABLE STRESS DESIGN. MACHINE BOLTS (MB) SHALL CONFORM TO ASTM A307 AND SHALL BE PROVIDED WITH STANDARD HEX HEAD NUTS CONFORMING TO ASTM A563, GRADE A AND HARDENED STEEL CIRCULAR WASHERS CONFORMING TO ASTM F436. ALL WELDING SHALL CONFORM TO AMERICAN WELDING SOCIETY D1.1. ALL WELDS SHALL BE CONTINUOUS 3/16" MINIMUM UNLESS OTHERWISE NOTED. ELECTRODES SHALL BE A.W.S. E-70.

STEEL BAR GRATING
ALL STEEL BAR GRATING SHALL BE 1 1/4" X 1/4" 19-W-4 GRATING. ALL BAR GRATING SHALL BE HOT DIPPED GALVANIZED AND SHALL HAVE A MINIMUM YIELD STRENGTH OF 36 KSI. BEARING BARS SHALL BE 1 1/4" X 1/4" AND SPACED 1 3/16" O/C. BEARING BARS SHALL BE LOCKED BY SWAGING CONSTRUCTION WITH REGULAR CROSS BARS SPACED AT 4" O/C. BEARING BARS SHALL BE ALIGNED PERPENDICULAR TO DIRECTION OF TRENCH.

METAL BUILDING NOTES:
METAL BUILDING SUPPLIER SHALL PROVIDE STAMPED PLANS & REACTIONS TO THE ENGINEER OF RECORD AS A DEFERRED SUBMITTAL. THE METAL BUILDING SHALL MEET THE FOLLOWING REQUIREMENTS:

- 1) FRAMES, COLUMNS, BRACES, WALL GIRTS AND PURLINS SHALL BE LOCATED AS SHOWN IN THIS DRAWING SET. NO STRUCTURAL MEMBERS SHALL BE RELOCATED WITHOUT APPROVAL OF ENGINEER OF RECORD.
- 2) COLUMNS SHALL BE PROVIDED WITHOUT FLANGE BRACES.
- 3) WIND LOAD DESIGN SHALL CONSIDER THE DOORS OPEN AND CLOSED.
- 4) METAL BUILDING FRAMING SHALL BE PROVIDED AS REQUIRED TO MAINTAIN OPENING AND CLEARANCE DIMENSIONS AS SHOWN ON THE STRUCTURAL DRAWINGS.
- 5) WALL AND ROOF GIRTS SHALL HAVE A MAXIMUM SPACING OF 4' O/C.
- 6) METAL BUILDING SHALL BE DESIGNED TO SUPPORT LATERAL FORCES FROM INTERIOR WOOD STRUCTURE.
- 7) BASE PLATE DESIGN SHALL USE THE ANCHOR BOLT LAYOUT PROVIDED IN THESE PLANS.
- 8) METAL BUILDING SUPPLIER SHALL PROVIDE FURRING MEMBERS FOR HORIZONTAL PANEL ATTACHMENT.

PLYWOOD
ALL PLYWOOD SHALL CONFORM TO IBC CHAPTER 23 AND SHALL BE AMERICAN PLYWOOD ASSOCIATION GRADE TRADE MARKED. PLYWOOD SHALL BE GROUP I OR GROUP II DOUGLAS FIR. ALL PANELS SHALL BE NOMINAL 4' X 8' PANELS. UTILIZE FULL SHEETS WHEREVER POSSIBLE. LAY FACE GRAIN OF FLOOR SHEATHING PANELS PERPENDICULAR TO JOISTS AND WITH PANEL CONTINUOUS OVER THREE OR MORE SPANS. STAGGER END JOINTS OF SUCCESSIVE COURSES 4' - 0". WALL SHEATHING SHALL BE INSTALLED WITH THE FACE GRAIN PARALLEL TO STUDS, (LONG DIMENSION VERTICAL).

WALL SHEATHING: EXCEPT WHERE NOTED OTHERWISE, WALL SHEATHING SHALL BE 15/32" THICK STRUCTURAL 1 PLYWOOD AND SHALL BE FASTENED TO STEEL FRAMING WITH #10 GALV SCREWS @ 6" O/C ALONG PANEL EDGES AND #10 GALV SCREWS @ 12" O/C ALONG INTERMEDIATE FRAMING. FASTEN SHEATHING TO WOOD FRAMING WITH 8D (0.131"x2.5" COMMON, 0.113"x2.5" GALVANIZED BOX) GALV NAILS @ 6" O/C ALONG PANEL EDGES AND 8D GALV NAILS @ 12" O/C ALONG INTERMEDIATE FRAMING. WALL SHEATHING SHALL BE BLOCKED AT ALL EDGES WITH NOMINAL 2" WIDE BLOCKING.

FLOOR SHEATHING: EXCEPT WHERE NOTED OTHERWISE, FLOOR SHEATHING SHALL BE 3/4" THICK TONGUE AND GROOVE STRUCTURAL 1 PLYWOOD AND SHALL BE FASTENED TO FRAMING WITH #10 GALV SCREWS @ 6" O/C ALONG PANEL EDGES AND #10 GALV SCREWS @ 12" O/C ALONG INTERMEDIATE FRAMING.

SAWN LUMBER AND TIMBER
LUMBER SHALL CONFORM TO THE CLASSIFICATION, DEFINITION, AND GRADING REQUIREMENTS OF IBC CHAPTER 23 WITH ALLOWABLE UNIT STRESSES AS GIVEN IN THE AMERICAN FOREST & PAPER ASSOCIATION 'NATIONAL DESIGN SPECIFICATION 2012 SUPPLEMENT', TABLE 4A. LUMBER SHALL BE GRADE MARKED BY THE WEST COAST LUMBER INSPECTION BUREAU /WESTERN WOOD PRODUCTS ASSOCIATION.

ITEM	SPECIES
4 X AND LARGER	DOUGLAS FIR #2
BEARING WALL PLATES	HEM FIR #2
BEARING WALL STUDS	HEM FIR #2
ALL OTHER LUMBER	HEM FIR #2

ALL LUMBER SHALL BE FASTENED IN CONFORMANCE WITH TABLE 2304.9.1 OF THE IBC, UNLESS NOTED OTHERWISE. FASTENERS SHALL BE GALVANIZED UNLESS OTHERWISE NOTED. FASTEN ALL JOIST BLOCKING TO PLATES WITH (4) 16D MINIMUM AND FASTEN ALL WALL PLATES TO WOOD FLOORS WITH 16D AT 6" ON CENTER TYPICAL. DOUBLE TOP PLATES SHALL OVERLAP 8'-0" MINIMUM AND SHALL BE SPLICED TOGETHER WITH (40) 16D NAILS. (2" O/C STAGGERED MINIMUM UNLESS NOTED OTHERWISE.) NAIL LENGTH AND DIAMETER SHALL BE AS REQUIRED IN THE NAIL SIZE SCHEDULE UNLESS NOTED OTHERWISE IN DRAWING SET.

PROVIDE JOIST/BEAM HANGERS WITH LOAD CAPACITY EQUAL TO SUPPORTED MEMBER SHEAR LOAD CAPACITY FOR ALL MEMBERS NOT OTHERWISE PROVIDED WITH DIRECT BEARING SUPPORT. PROVIDE A MINIMUM OF (2) KING STUDS AND (2) CRIPPLE STUDS FOR ALL BEARING WALL HEADERS. PROVIDE A MINIMUM OF (1)KING STUD AND (1) CRIPPLE STUD AT NON-BEARING WALL HEADERS. PROVIDE SOLID BLOCKING SUPPORT FOR BEAMS AND HEADERS CONTINUOUS DOWN TO FOUNDATIONS. MINIMUM HEADER OVER OPENINGS IN BEARING WALLS SHALL BE 4X12 DF#1 UNLESS NOTED OTHERWISE. MINIMUM HEADER IN NON-BEARING INTERIOR PARTITION WALLS SHALL BE A SINGLE 2X8.

BOLT HEADS AND NUTS BEARING AGAINST WOOD TO BE PROVIDED WITH FLAT WASHERS. SOLID BLOCKING OF NOT LESS THAN 2" NOMINAL THICKNESS SHALL BE PROVIDED AT ENDS AND AT ALL SUPPORTS OF JOISTS AND RAFTERS, UNLESS SHOWN OTHERWISE. BEAM AND JOIST HANGERS SHALL HAVE A CAPACITY EQUAL TO THE SHEAR STRENGTH OF THE BEAM OR JOIST WHICH IT IS SUPPORTING, UNLESS NOTED OTHERWISE. ALL METAL FRAMING ANCHORS AND HANGERS SHOWN ON DRAWINGS SHALL BE "STRONG TIE CONNECTORS" AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUAL. ALL METAL FRAMING ANCHORS AND HANGERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE TYPE 304 OR TYPE 316 STAINLESS STEEL.

NAIL SIZE SCHEDULE		
MARK	MIN. SHANK DIA.	MIN. LENGTH
8D	0.113"	2-3/8"
10D	0.120"	2-7/8"
16D	0.148"	3-1/4"

REVISIONS	DATE				
	1	2	3	4	5



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SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE
NOTES & SPECIFICATIONS

SHEET
S1.01

DRAWN BY: CAM
DATE: 07/27/20
JOB NUMBER: 20-009-01

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SCALE: AS SHOWN

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SPECIAL INSPECTION NOTES

THE OWNER SHALL PROVIDE THE FOLLOWING SPECIAL INSPECTION FOR THE PROJECT DURING CONSTRUCTION. OWNER SHALL CONTRACT DIRECTLY AND PAY FOR SPECIAL INSPECTION.

CONTRACTOR SHALL:

- 1. NOTIFY OWNERS REP WITHIN 24 HOURS OF REQUIRED INSPECTION.
- 2. COORDINATE & PLAN WORK TO ALLOW FOR INSPECTION TIME.
- 3. PROVIDE ALL ITEMS LISTED AT QUALITY CONTROL.
- 4. PROVED AISC APPROVED FABRICATION SHOP FOR ALL STEEL FRAMING.

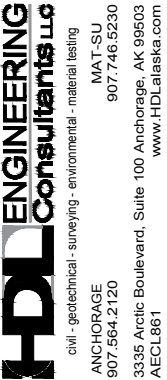
IBC TABLE 1705.6 REQUIRED VERIFICATION AND INSPECTION OF SOILS			
VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC	REQUIRED
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATION ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY .	-	X	YES
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	-	X	YES
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	-	X	YES
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	-	YES
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	-	X	YES

IBC TABLE 1705.3 REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION					
VERIFICATION AND INSPECTION	CONT.	PERIODIC	REFERENCED STANDARD ^a	IBC REF	REQUIRED
1. INSPECTION FOR REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT.	-	X	ACI 318: 3.5, 7.1-7.7	1910.4	YES
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2b.	-	-	AWS D1.4 ACI 318:3.5.2	-	NO
3. INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	X	-	ACI 318: 8.1.3, 21.1.8	1908.5, 1909.1	YES
4. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS	-	X	ACI3 18: 3.8.6, 8.1.3, 21.1.8	1909.1	YES
5. VERIFY USE OF REQUIRED DESIGN MIX	-	X	ACI 318: CH. 4, 5.2-5.4	1904.2, 1910.2, 1910.3	YES
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1910.10	YES
7. INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 5.9, 5.10	1910.6, 1910.7, 1910.8	YES
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	-	X	ACI 318: 5.11-5.13	1910.9	YES
9. INSPECTION OF PRESTRESSED CONCRETE: a. APPLICATION OF PRESTRESSING FORCES. b. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM.	X	-	ACI 318: 18.20 ACI 318: 18.18.4	-	NO
10. ERECTION OF PRECAST CONCRETE MEMBERS.	-	X	ACI 318: CH. 16	-	NO
11. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POSTTENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	X	ACI 318: 6.2	-	NO
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 6.1.1	-	YES

^a WHERE APPLICABLE, SEE ALSO SECTION 1705.11, SPECIAL INSPECTION FOR SEISMIC RESISTANCE

^b SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACI 355.2 OR OTHER QUALIFICATION PROCEDURES.

REVISIONS		DATE	DESCRIPTION
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SAND STORAGE BUILDING

KENAI MUNICIPAL AIRPORT

KENAI, ALASKA

SHEET TITLE

SPECIAL INSPECTION

SHEET

S1.02

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SPECIAL INSPECTION NOTES

THE OWNER SHALL PROVIDE THE FOLLOWING SPECIAL INSPECTION FOR THE PROJECT DURING CONSTRUCTION.

AISC TABLE N5.4-1 INSPECTION TASKS PRIOR TO WELDING		
VERIFICATION AND INSPECTION TASK	QC	QA
1. WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE.	P	P
2. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	P	P
3. MATERIAL IDENTIFICATION (TYPE/GRADE)	O	O
4. WELDER IDENTIFICATION SYSTEM	O	O
5. FIT-UP GROOVE WELDS (INCLUDING JOINT GEOMETRY) <ul style="list-style-type: none">• JOINT PREPARATION• DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL)• CLEANLINESS (CONDITION OF STEEL SURFACES)• TACKING (TACK WELD QUALITY AND LOCATION)• BACKING TYPE AND FIT (IF APPLICABLE)	O	O
6. CONFIGURATION AND FINISH OF ACCESS HOLES	O	O
7. FIT-UP OF FILLET WELDS <ul style="list-style-type: none">• DIMENSIONS (ALIGNMENT, GAPS AT ROOT)• CLEANLINESS (CONDITION OF STEEL SURFACE)• TACKING (TACK WELD QUALITY AND LOCATION)	O	O
8. CHECK WELDING EQUIPMENT	O	-

P= PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER
O= OBSERVE THESE ITEMS ON A RANDOM BASIS.
QC= QUALITY CONTROL AS SPECIFIED SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
QA= QUALITY ASSURANCE SHALL BE PROVIDED BY THE SPECIAL INSPECTOR EMPLOYED BY THE OWNER.

AISC TABLE N5.4-2 INSPECTION TASKS DURING WELDING		
VERIFICATION AND INSPECTION TASK	QC	QA
1. USE OF QUALIFIED WELDERS	O	O
2. CONTROL AND HANDLING OF WELDING CONSUMABLES <ul style="list-style-type: none">• PACKAGING• EXPOSURE CONTROL	O	O
3. NO WELDING OVER CRACKED TACK WELDS	O	O
4. ENVIRONMENTAL CONDITIONS <ul style="list-style-type: none">• WIND SPEED WITHIN LIMITS• PRECIPITATION AND TEMPERATURE	O	O
5. WPS FOLLOWED <ul style="list-style-type: none">• SETTINGS ON WELDING EQUIPMENT• TRAVEL SPEED• SELECTED WELDING MATERIALS• SHIELDING GAS TYPE/FLOW RATE• PREHEAT APPLIED• INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.)• PROPER POSITION (F,V,H,OH)	O	O
6. WELDING TECHNIQUES <ul style="list-style-type: none">• INTERPASS AND FINAL CLEANING• EACH PASS WITHIN PROFILE LIMITATIONS• EACH PASS MEETS QUALITY REQUIREMENTS	O	O

P= PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER
O= OBSERVE THESE ITEMS ON A RANDOM BASIS.
QC= QUALITY CONTROL AS SPECIFIED SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
QA= QUALITY ASSURANCE SHALL BE PROVIDED BY THE SPECIAL INSPECTOR EMPLOYED BY THE OWNER.

AISC TABLE N5.4-3 INSPECTION TASKS AFTER WELDING		
VERIFICATION AND INSPECTION TASK	QC	QA
1. WELDS CLEANED	O	O
2. SIZE, LENGTH AND LOCATION OF WELDS	P	P
3. WELDS MEET VISUAL ACCEPTANCE CRITERIA <ul style="list-style-type: none">• CRACK PROHIBITION• WELD/BASE-METAL FUSION• CRATER CROSS SECTION• WELD PROFILES• WELD SIZE• UNDERCUT• POROSITY	P	P
4. ARC STRIKES	P	P
5. k-AREA	P	P
6. BACKING REMOVED AND WELD TABS REMOVED	P	P
7. REPAIR ACTIVITIES	P	P
8. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	P	P

P= PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER
O= OBSERVE THESE ITEMS ON A RANDOM BASIS.
QC= QUALITY CONTROL AS SPECIFIED SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
QA= QUALITY ASSURANCE SHALL BE PROVIDED BY THE SPECIAL INSPECTOR EMPLOYED BY THE OWNER.

AISC TABLE N5.6-1 INSPECTION TASKS PRIOR TO BOLTING		
VERIFICATION AND INSPECTION TASK	QC	QA
1. MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	O	P
2. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	O	O
3. PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	O	O
4. PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	O	O
5. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	O	O
6. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED.	P	O
7. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	O	O

P= PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER
O= OBSERVE THESE ITEMS ON A RANDOM BASIS.
QC= QUALITY CONTROL AS SPECIFIED SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
QA= QUALITY ASSURANCE SHALL BE PROVIDED BY THE SPECIAL INSPECTOR EMPLOYED BY THE OWNER.

AISC TABLE N5.6-2 INSPECTION TASKS DURING BOLTING		
VERIFICATION AND INSPECTION TASK	QC	QA
1. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED	O	O
2. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	O	O
3. FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	O	O
4. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	O	O

P= PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER
O= OBSERVE THESE ITEMS ON A RANDOM BASIS.
QC= QUALITY CONTROL AS SPECIFIED SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
QA= QUALITY ASSURANCE SHALL BE PROVIDED BY THE SPECIAL INSPECTOR EMPLOYED BY THE OWNER.

AISC TABLE N5.6-3 INSPECTION TASKS AFTER BOLTING		
VERIFICATION AND INSPECTION TASK	QC	QA
1. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	P	P

P= PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER
O= OBSERVE THESE ITEMS ON A RANDOM BASIS.
QC= QUALITY CONTROL AS SPECIFIED SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
QA= QUALITY ASSURANCE SHALL BE PROVIDED BY THE SPECIAL INSPECTOR EMPLOYED BY THE OWNER.

AISC TABLE N6.1 INSPECTION OF STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT		
VERIFICATION AND INSPECTION TASK	QC	QA
1. PLACEMENT AND INSTALLATION OF STEEL DECK	P	P
2. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	P	P
3. DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	P	P

P= PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER
O= OBSERVE THESE ITEMS ON A RANDOM BASIS.
QC= QUALITY CONTROL AS SPECIFIED SHALL BE PROVIDED BY THE FABRICATOR AND ERECTOR.
QA= QUALITY ASSURANCE SHALL BE PROVIDED BY THE SPECIAL INSPECTOR EMPLOYED BY THE OWNER.

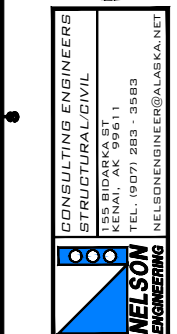
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SHEET TITLE SPECIAL INSPECTION	
SHEET S1.03	
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GENERAL SHEET NOTES	
1.	E.O.C. = EDGE OF CONCRETE.
2.	FOR DIMENSIONING PURPOSES THE STRUCTURAL DRAWINGS HAVE FINISH FLOOR TOP OF SLAB ELEVATION SET AS ZERO. FOR ACTUAL SITE AND BUILDING ELEVATIONS SEE CIVIL.
3.	EXTERIOR APRON SLABS SHALL BE SLOPED PER CIVIL.



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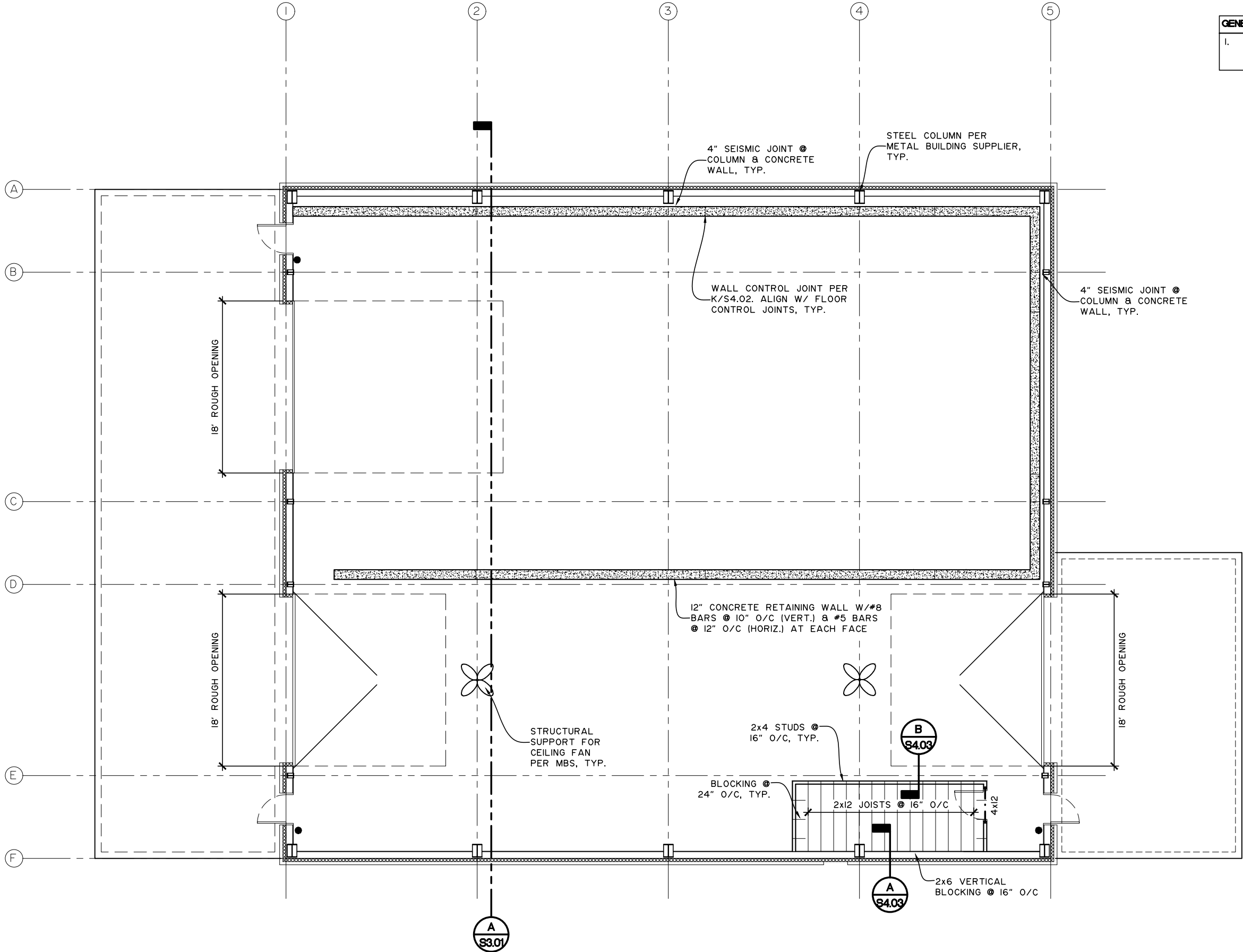
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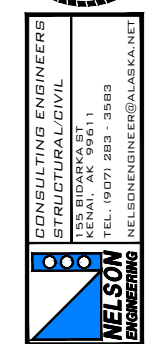
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GENERAL SHEET NOTES

1. PROVIDE HEADER PER DETAIL F/S4.03

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SHEET TITLE	INTERIOR FRAMING PLAN
SHEET	S2.02
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DATE:	07/27/20
SCALE:	AS SHOWN
JOB NUMBER:	20-009-01

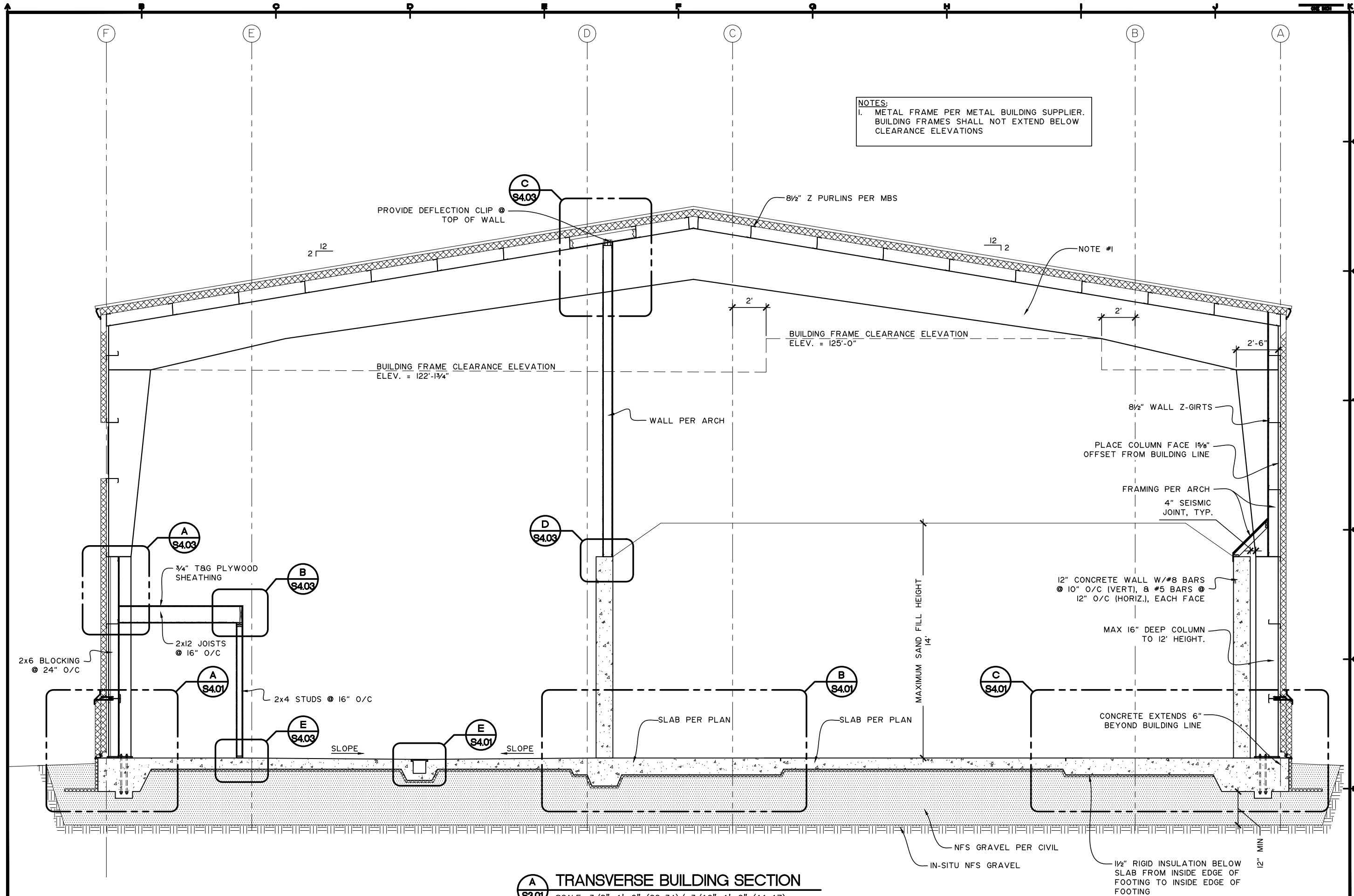
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S2.02 INTERIOR FRAMING PLAN

SCALE: 3/16"=1'-0" (22x34)/ 3/32"=1'-0" (11x17)

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SHEET TITLE
BUILDING SECTION

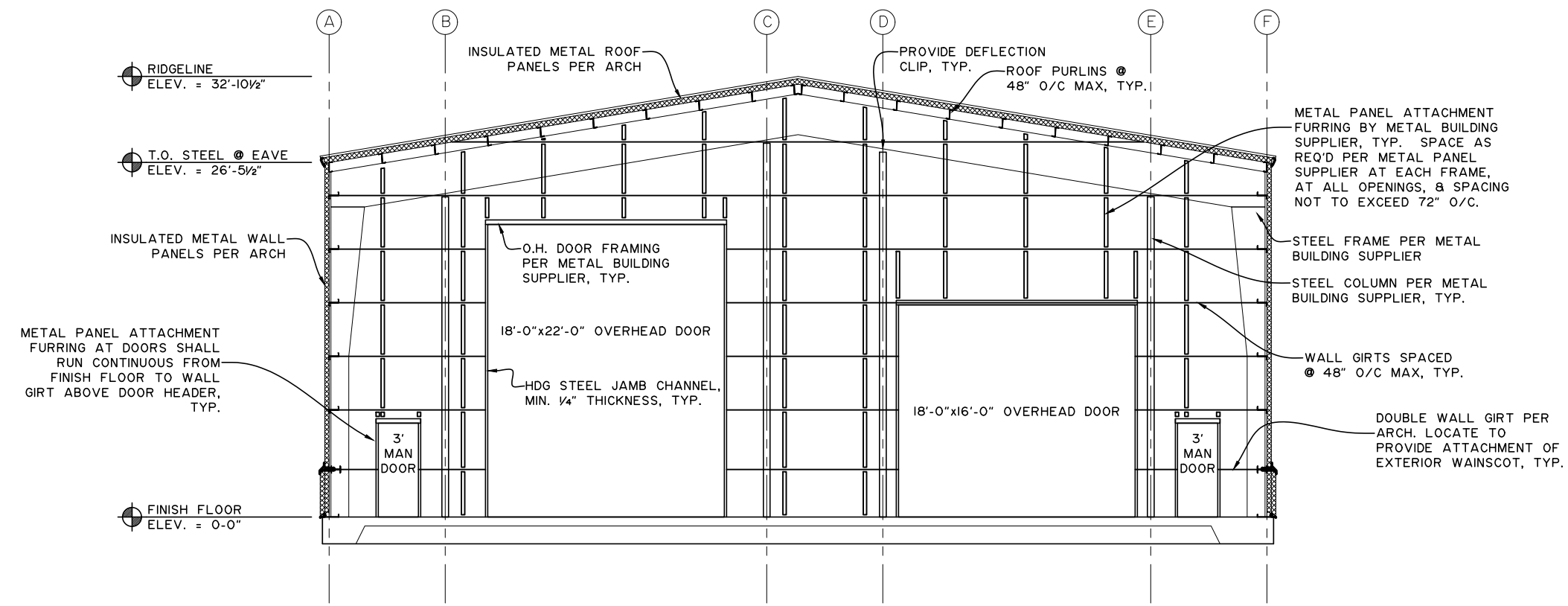
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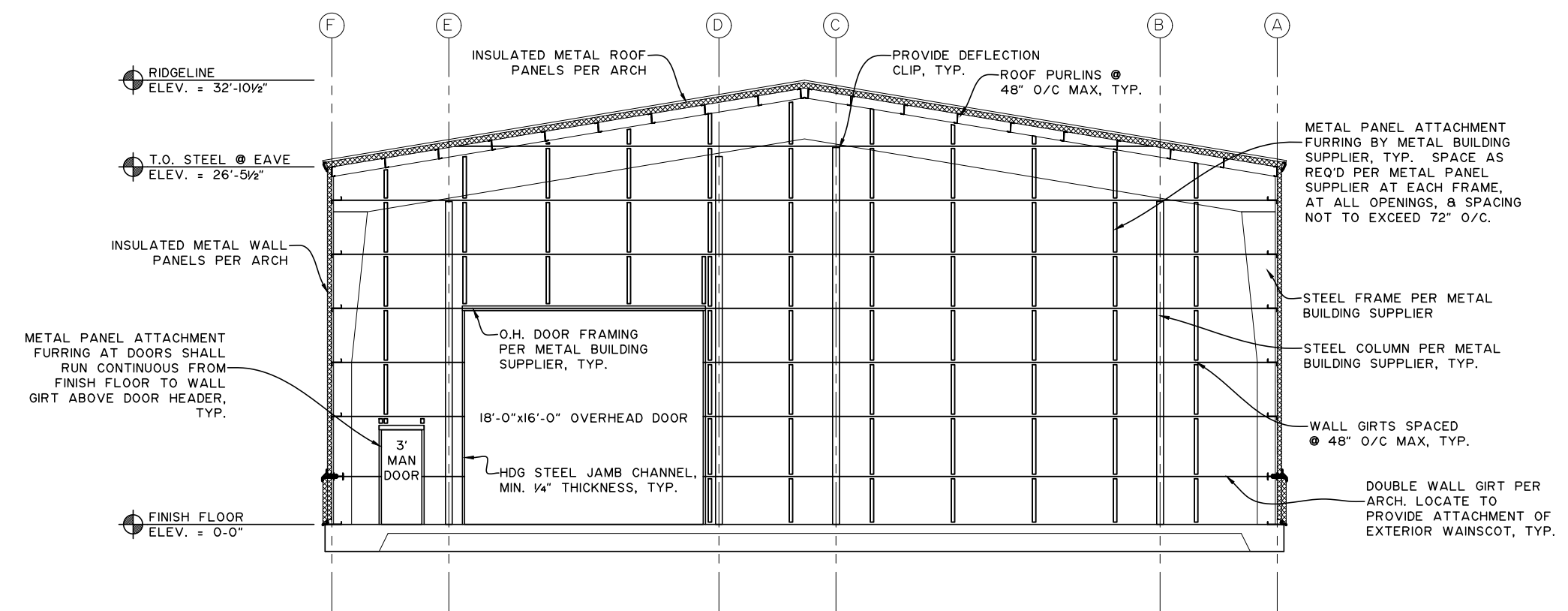
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A FRAMING ELEVATION @ GL-1
S3.02 SCALE: 3/16"=1'-0" (22x34)/ 3/32"=1'-0" (11x17)



B FRAMING ELEVATION @ GL-5
S3.02 SCALE: 3/16"=1'-0" (22x34)/ 3/32"=1'-0" (11x17)

GENERAL SHEET NOTES

1. FOR DIMENSIONING PURPOSES THE STRUCTURAL DRAWINGS HAVE FINISH FLOOR TOP OF SLAB SET AS ZERO. FOR ACTUAL SITE AND BUILDING ELEVATIONS SEE CIVIL.

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SHEET TITLE
FRAMING ELEVATIONS

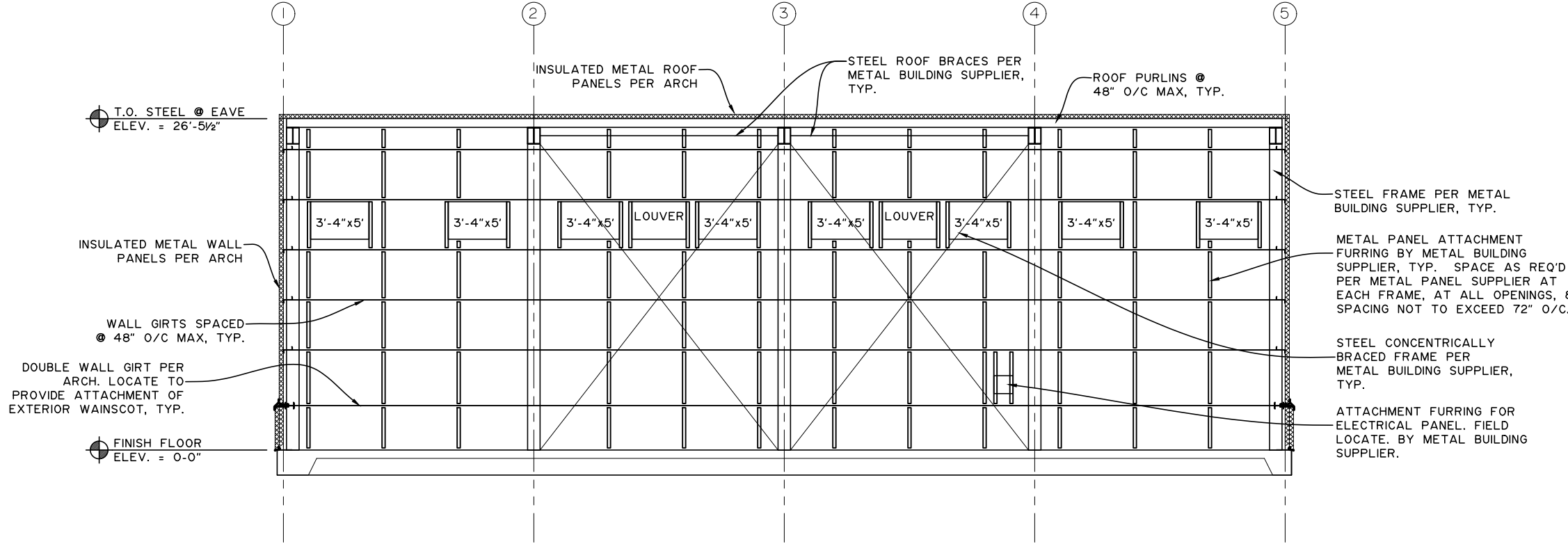
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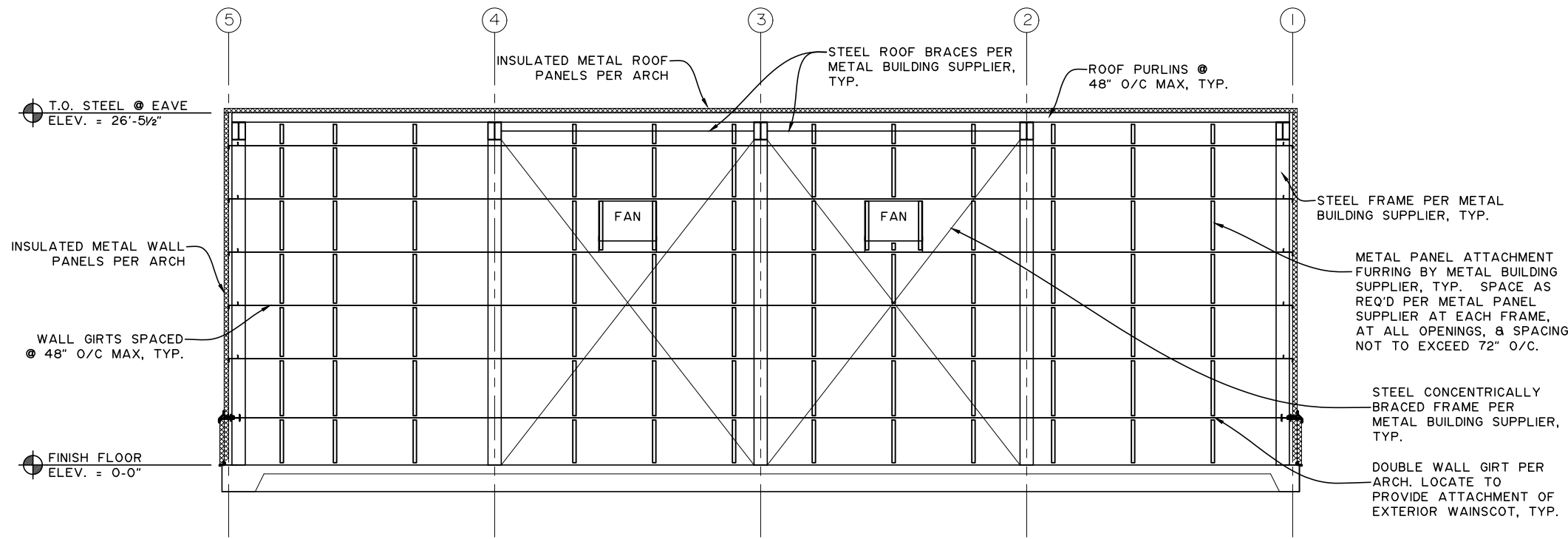
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A FRAMING ELEVATION @ GL-F
SCALE: 3/16"=1'-0" (22x34)/ 3/32"=1'-0" (11x17)

GENERAL SHEET NOTES

1. FOR DIMENSIONING PURPOSES THE STRUCTURAL DRAWINGS HAVE FINISH FLOOR TOP OF SLAB SET AS ZERO. FOR ACTUAL SITE AND BUILDING ELEVATIONS SEE CIVIL.



B FRAMING ELEVATION @ GL-A
SCALE: 3/16"=1'-0" (22x34)/ 3/32"=1'-0" (11x17)

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FRAMING ELEVATIONS

SHEET
S3.03

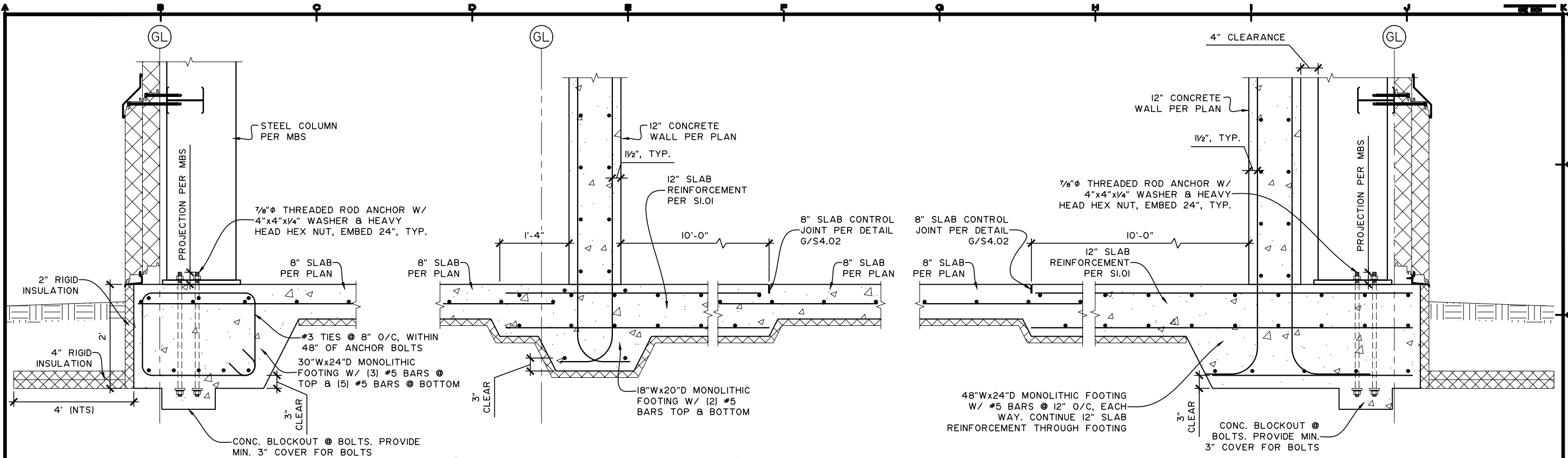
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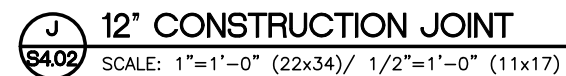
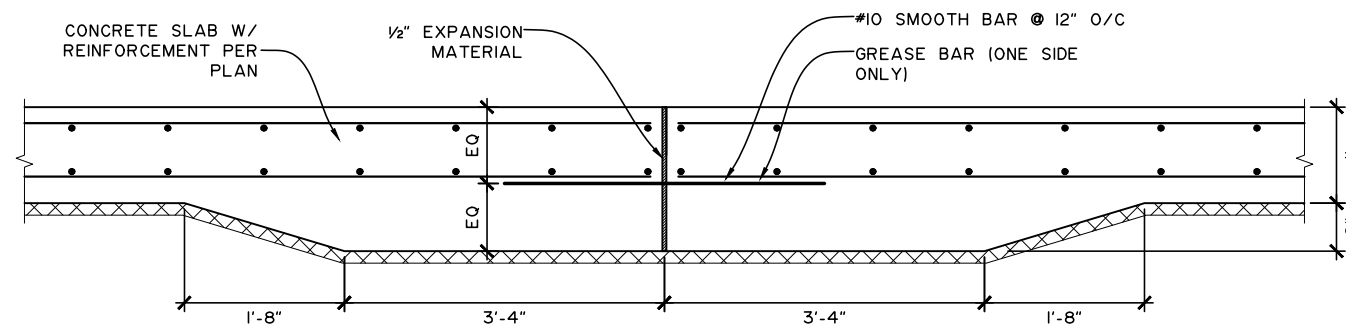
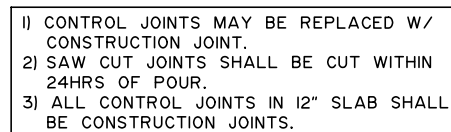
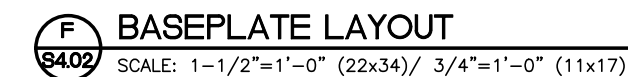
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SHEET TITLE
DETAILS

SHEET
S4.01

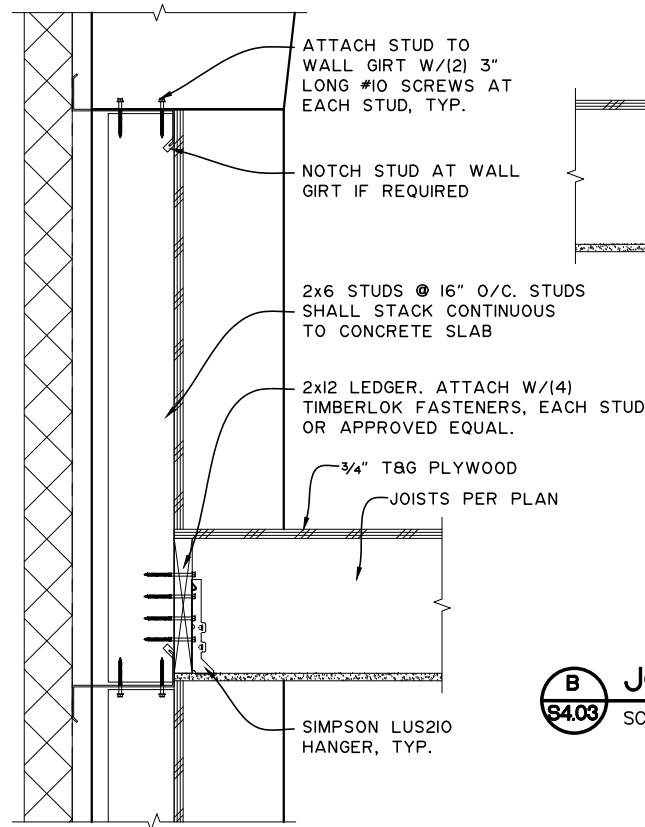
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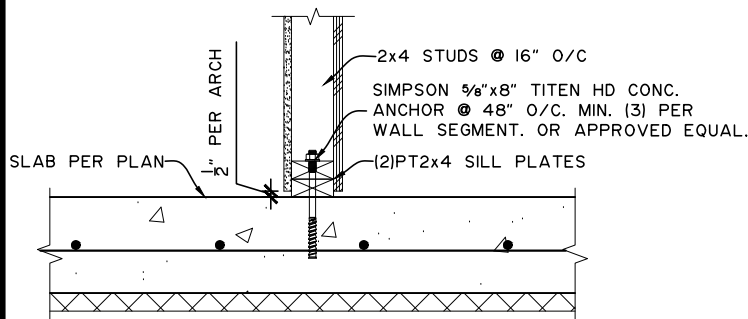
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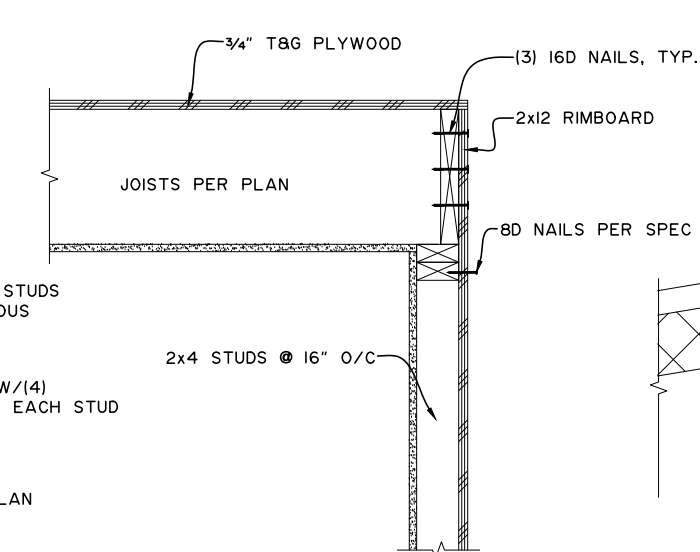
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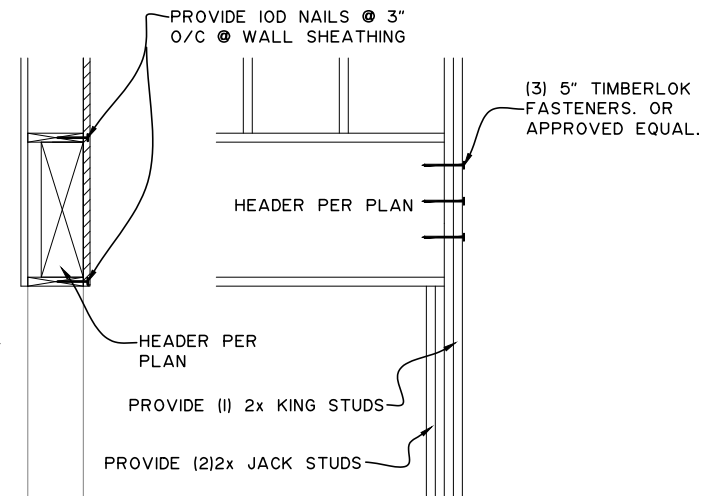
A JOIST BEARING AT WALL GIRTS
S4.03 SCALE: 1-1/2"=1'-0" (22x34)/ 3/4"=1'-0" (11x17)



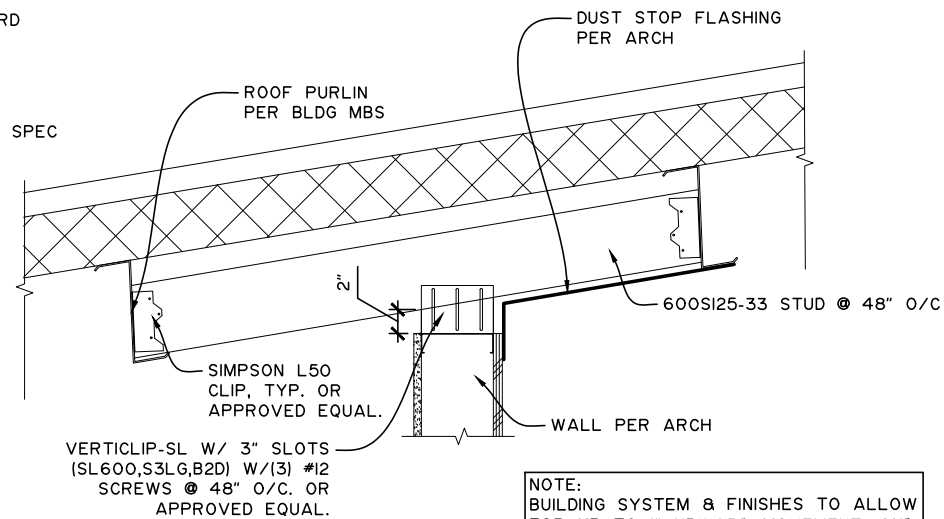
E WOOD WALL BEARING
S4.03 SCALE: 1-1/2"=1'-0" (22x34)/ 3/4"=1'-0" (11x17)



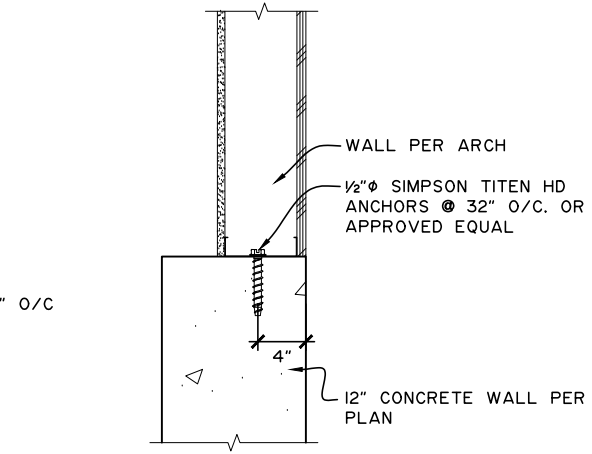
B JOIST BEARING AT WOOD WALL
S4.03 SCALE: 1-1/2"=1'-0" (22x34)/ 3/4"=1'-0" (11x17)



F TYPICAL HEADER
S4.03 SCALE: 1-1/2"=1'-0" (22x34)/ 3/4"=1'-0" (11x17)



C DEFLECTION CLIP
S4.03 SCALE: 1-1/2"=1'-0" (22x34)/ 3/4"=1'-0" (11x17)



D WALL BEARING @ TOP OF WALL
S4.03 SCALE: 1-1/2"=1'-0" (22x34)/ 3/4"=1'-0" (11x17)

NOTE:
BUILDING SYSTEM & FINISHES TO ALLOW
FOR UP TO 1" UPWARD MOVEMENT, AND
2" DOWNWARD MOVEMENT.

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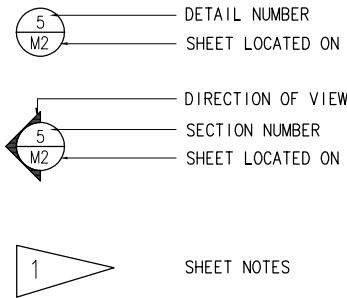
PIPING LEGEND

	DENOTES DEMOLITION		CAP		BALANCE/SHUT-OFF VALVE		PUMP		STRAINER W/ BLOWDOWN
	WASTE		UNION		FUSIBLE VALVE		CLEANOUT		FLOOR CLEANOUT
	VENT PIPING		DIRECTION OF FLOW		REDUCED PRESSURE BACKFLOW PREVENTER		FILTER		FLOOR DRAIN
	COLD WATER		BALL/BUTTERFLY VALVE		PRESSURE REDUCING VALVE		METER		FLOOR SINK
	HOT WATER		GATE VALVE		FLEXIBLE PIPING CONNECTOR		PIPE GUIDE		MANUAL SWITCH
	HOT WATER RECIRCULATED		2-WAY CONTROL VALVE		GAS SHUT-OFF VALVE		PIPE ANCHOR		COUNTDOWN TIMER
	SEE ABBREVIATIONS FOR MEDIA		3-WAY CONTROL VALVE		PRESSURE/TEMPERATURE RELIEF VALVE		THERMOMETER		DOOR END SWITCH
	PIPE UP		SELF CONTAINED THERMOSTATIC CONTROL VALVE		HOSE BIBB				VARIABLE SPEED CONTROL
	PIPE DOWN		CHECK VALVE						
	TEE UP								
	TEE DOWN								

ABBREVIATIONS

A	COMPRESSED AIR	CIRC	CIRCULATING	ESP	EXTERNAL STATIC PRESSURE	HGR	HEATING GLYCOL RETURN	MOD	MOTOR OPERATED DAMPER	SQ	SQUARE
ABV	ABOVE	CLG	CEILING	EGT	ENTERING GLYCOL TEMPERATURE	HGS	HEATING GLYCOL SUPPLY	MTD	MOUNTED	TEMP	TEMPERATURE
ADA	AMERICAN W/ DISABILITIES ACT GUIDELINES	CONT	CONTINUED	ENT	ENTERING	HOA	HAND-OFF-AUTO	NC	NOISE CRITERIA	TSP	TOTAL STATIC PRESSURE
AF	AIR FOIL	C.O./CO	CLEANOUT	EXIST	EXISTING	HW	HOT WATER	NO.	NUMBER	T'STAT	THERMOSTAT
AFF	ABOVE FINISHED FLOOR	CONN	CONNECTION	FT	FEET	HWC	HOT WATER CIRCULATED	NTS	NOT TO SCALE	TTL	TOTAL
AFG	ABOVE FINISHED GRADE	CUH-X	CABINET UNIT HEATER DESIGNATOR	FT-X	FINNED TUBE RADIATION DESIGNATOR	HP	HORSEPOWER	O/A	OUTSIDE AIR	TW	TEMPERED WATER
AHAP	AS HIGH AS POSSIBLE	CU	COPPER	FPM	FEET PER MINUTE	HZ	HERTZ	OD	OUTSIDE DAMPER	TWC	TEMPERED WATER CIRCULATED
AL	ALUMINUM	CW	COLD WATER	FPF	FINS PER FOOT	ID	INSIDE DAMPER	PD	PRESSURE DROP	TYP	TYPICAL
AMPS	AMPERES	DIA	DIAMETER	F	FAHRENHEIT	IN	INCHES	PG	PROPYLENE GLYCOL	UPC	UNIFORM PLUMBING CODE
APD	AIR PRESSURE DROP	dB	DECIBLES	FCO	FLOOR CLEANOUT	LAT	LEAVING AIR TEMPERATURE	PH	PHASE	V	VENT
ARCH	ARCHITECTURAL	DEG	DEGREE	FD	FIRE DAMPER	LAV	LAVATORY	PSI	POUND PER SQUARE INCH	VAC	VOLT-AC
BDD	BACKDRAFT DAMPER	DIM	DIMENSION	FIN	FINISHED	LF	LINEAL FEET	PSIG	POUNDS PER SQUARE INCH GAUGE	VDC	VOLT-DC
BLDG	BUILDING	DN	DOWN	FLR	FLOOR	LGT	LEAVING GLYCOL TEMPERATURE	R/A	RETURN AIR	VEL	VELOCITY
BTUH	BRITISH THERMAL UNIT/HOUR	DWG	DRAWING	GA	GAUGE	LWT	LEAVING WATER TEMPERATURE	RPM	REVOLUTIONS PER MINUTE	VTR	VENT THRU ROOF
CAP	CAPACITY	E/A	EXHAUST AIR	GPH	GALLONS PER HOUR	MAX	MAXIMUM	RZM-X	RADIANT ZONE MANIFOLD DESIGNATOR	WC	WATER COLUMN
C/A	COMBUSTION AIR	EAT	ENTERING AIR TEMPERATURE	GAL	GALLONS	MBH	THOUSAND BTUH	S/A	SUPPLY AIR	WG	WATER GAUGE
CFM	CUBIC FEET PER MINUTE	EFF	EFFICIENCY	GPM	GALLONS PER MINUTE	MCA	MINIMUM CIRCUIT AMPACITY	SCFM	STANDARD CUBIC FEET PER MINUTE	W	WASTE
CGR	COOLING GLYCOL RETURN	EXH	EXHAUST	GTD	GLYCOL TEMPERATURE DROP	MFCR	MANUFACTURER	SD	SMOKE DAMPER	W/	WITH
CGS	COOLING GLYCOL SUPPLY	EWT	ENTERING WATER TEMPERATURE	HD	HEAD	MIN	MINIMUM	SP	STATIC PRESSURE	W/O	WITHOUT
										WPD	WATER-PRESSURE DROP

LOGIC



SEQUENCE OF OPERATIONS

BOILERS B-1,2: THE BOILER SYSTEM SHALL BE CONTROLLED USING A MULTIPLE BOILER CONTROL PANEL(S) SUPPLIED WITH THE BOILERS. BOILER CONTROL PANEL SHALL MODULATE THE BOILER FIRING RATE IN PARALLEL BETWEEN 20-100% TO MAINTAIN THE SUPPLY TEMPERATURE SETPOINT. THE SYSTEM HYDRONIC LOOP TEMPERATURE SHALL BE ADJUSTABLE, INITIALLY SET TO 120 DEG F. BOILER PUMPS SUPPLIED WITH BOILER ARE POWERED FROM AND INTERLOCKED TO OPERATE WITH BOILER-1,2.

RADIANT HEAT PUMPS CP-1,2: EQUIP WITH HAND OFF AUTO SWITCH. PUMPS SHALL CYCLE ON/OFF TO MAINTAIN SPACE TEMPERATURE AS CONTROLLED BY A WALL MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT IN ASSOCIATED RADIANT ZONE. PROVIDE COVER ON THERMOSTATS. RADIANT ZONE SETPOINT 72°F (ADJUSTABLE).

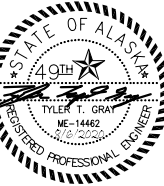
AIR COMPRESSOR AC-1: AIR COMPRESSOR SHALL CYCLE ON/OFF TO MAINTAIN SYSTEM PRESSURE SETOUT BY UNITED MOUNTED MANUFACTURER CONTROLS.

EXHAUST FANS EF-1,2: FANS SHALL BE SUPPLIED WITH HAND OFF AUTO SWITCH. IN AUTO MODE FANS SHALL CYCLE ON/OFF FOR DUST CONTROL. IN AUTO MODE FANS SHALL START UPON OPENING OF ANY OVERHEAD DOOR BY MEANS OF AN END SWITCH LOCATED AT DOOR ELECTRIC OPERATOR. UPON ACTIVATION OF DOOR OPEN END SWITCH THE FANS SHALL OPERATE FOR 30 MINS (ADJUSTABLE). IN HAND MODE ADJUSTABLE WALL MOUNTED TIMER SWITCH SHALL CYCLE FAN SYSTEM ON/OFF FOR MANUAL OPERATION OF FANS. LOCATE WALL MOUNTED TIMER SWITCH CONTROL WHERE INDICATED ON PLANS. INTERLOCK OUTSIDE AIR INTAKE AND EXHAUST AIR DAMPERS TO OPEN WHENEVER FAN IS ON.

UNIT HEATERS UH-1,2: THERMOSTAT SHALL CYCLE HEATER ON/OFF TO MAINTAIN ROOM SETPOINT 68°F (ADJUSTABLE). UNIT HEATER FAN AND INDIRECT FIRED HEATER SHALL BE SEQUENCED BY UNIT MOUNTED CONTROLS.

PROPELLER FAN PF-1,2: PROPELLER FANS SHALL BE MANUALLY CONTROLLED BY WALL MOUNTED VARIABLE SPEED CONTROLLER PROVIDED WITH FANS. PROVIDE ADDITIONAL WALL MOUNTED SWITCH FOR FAN SYSTEM ON/OFF OPERATION WHERE INDICATED ON PLANS.

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LEGEND &
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BOILER SCHEDULE

			HEATED		GROSS INPUT	AHRI RATING	ELECTRICAL			
SYMBOL	MANUFACTURER	MODEL	MEDIUM	FUEL	MBH	OUTPUT (MBH)	MCA	POWER (VOLTS/HZ/PH)	LABEL	REMARKS
B-1	LOCHINVAR	WHB-155N	WATER	N.G.	155	144	15A	120/60/1	ASME	INTEGRAL CONTROLS, CIRCULATION PUMP SUPPLIED WITH BOILER PACKAGE, CONCENTRIC VENT KIT, CONDENSATE TREATMENT KIT
B-2	LOCHINVAR	WHB-155N	WATER	N.G.	155	144	15A	120/60/1	ASME	INTEGRAL CONTROLS, CIRCULATION PUMP SUPPLIED WITH BOILER PACKAGE, CONCENTRIC VENT KIT, CONDENSATE TREATMENT KIT

EXPANSION TANK SCHEDULE

						TANK VOLUME				
SYMBOL	MANUFACTURER	MODEL	FUNCTION	MEDIUM	MATERIAL	TOTAL (GAL)	MAX ACC. FACTOR	DIMENSIONS	LABEL	REMARKS
ET-1	AMTROL	EX-90	HEATING	WATER	STEEL/BUTYL	14.0	0.81	21"H X 15"DIA	IAPMO	PRECHARGE TO 15 PSI.

PUMP SCHEDULE

				PUMPED		HEAD		MOTOR DATA		
SYMBOL	MANUFACTURER	MODEL	FUNCTION	MEDIUM	GPM	FEET	RPM	HP	POWER (VOLTS/HZ/PH)	REMARKS
CP-1	GRUNDFOS	UPS 40-160/2	RZM-1 CIRCULATION PUMP	WATER	10.2	35	3332	3/4	115/60/1	THREE SPEED PUMP, SET PUMP SPEED DURING BALANCING.
CP-2	GRUNDFOS	UPS 40-160/2	RZM-2,3 CIRCULATION PUMP	WATER	7.6	35	3332	3/4	115/60/1	THREE SPEED PUMP, SET PUMP SPEED DURING BALANCING.

PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE	MANUFACTURER	MODEL	CW	HW/TW	WASTE	VENT	TRAP	COLOR/FINISH	TRIM/REMARKS
HB-1	HOSE BIB	WOODFORD	MODEL 25	3/4	--	--	--	--	BRASS	ANTI-SIPHON, AUTO DRAIN, FREEZELESS
FD-1	FLOOR DRAIN	JR SMITH	2005-B	--	--	2	1-1/2	2	BRONZE	SQUARE TOP
EW-1	EYE WASH	GUARDIAN	G1540	--	--	--	--	--	POLY	GRAVITY FLOW PORTABLE EYEWASH, 16 GALLON

AIR COMPRESSOR SCHEDULE

				MOTOR DATA		
SYMBOL	MANUFACTURER	MODEL	SCFM	TANK CAPACITY	HP/VOLTS/PH	REMARKS
AC-1	QUINCY	271CS80VCB	22.6	80 GALLON TANK	7.5/240/1	VERTICAL AIR COMPRESSOR WITH INLINE MOISTURE SEPARATOR/FILTER ASSEMBLY.

UNIT HEATER SCHEDULE

				CAPACITY		MOTOR DATA			
SYMBOL	MANUFACTURER	MODEL	FUEL	MBH	CFM	RPM	HP	POWER (VOLTS/PHASE)	REMARKS
UH-1	MODINE	PTS 250	N.G.	250	3995	1725	1/3	115/1	SEALED COMBUSTION. PROVIDE W/ HORIZONTAL CONCENTRIC VENT KIT, 30' DEFLECTOR HOOD. 409 STAINLESS HEAT EXCHANGER, MOUNT AT 20' AFF.
UH-2	MODINE	PTS 250	N.G.	250	3995	1725	1/3	115/1	SEALED COMBUSTION. PROVIDE W/ HORIZONTAL CONCENTRIC VENT KIT, 30' DEFLECTOR HOOD. 409 STAINLESS HEAT EXCHANGER, MOUNT AT 20' AFF.

FAN SCHEDULE

						TSP		MOTOR DATA				
SYMBOL	MANUFACTURER	MODEL	TYPE	SERVICE	CFM	IN WG	RPM	HP	POWER (VOLTS/HZ/PH)	DRIVE	SONES	REMARKS
EF-1	GREENHECK	AER-E24C-615-B	AXIAL	EXHAUST	4000	0.36	1160	0.50	115/60/1	DIRECT	22	INTERLOCK TO OPERATE W/ OVERHEAD DOOR END SWITCH AND DELAY TIMER.
EF-2	GREENHECK	AER-E24C-615-B	AXIAL	EXHAUST	4000	0.36	1160	0.50	115/60/1	DIRECT	22	INTERLOCK TO OPERATE W/ OVERHEAD DOOR END SWITCH AND DELAY TIMER.

LOUVER SCHEDULE

SYMBOL	MANUFACTURER	MODEL	SERVICE	MATERIAL	FINISH	SIZE (IN.)	REMARKS
L-1	RUSKIN	ELF 6375DX	EXHAUST	ALUMINUM	PVDF	40W" X 56H"	PROVIDE W/ 3/4" BIRD SCREEN.
L-2	RUSKIN	ELF 6375DX	MAKEUP	ALUMINUM	PVDF	40W" X 56H"	PROVIDE W/ 3/4" BIRD SCREEN.

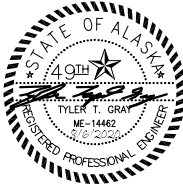
AIR SEPARATOR SCHEDULE

SYMBOL	MANUFACTURER	MODEL	SIZE	CONNECTION	MATERIAL	FLUID	REMARKS
AS-1	SPIROTHERM	VDN 125	1-1/4"	THREADED	STEEL	WATER	COMBINATION AIR AND DIRT SEPARATOR, 1 FT PRESSURE DROP, 15 GPM.

PROPELLER FAN SCHEDULE

						BLADE	MOTOR DATA			
SYMBOL	MANUFACTURER	MODEL	TYPE	SERVICE	MAX CFM	SWEEP	FLA	RPM	POWER (WATTS)	REMARKS
PF-1	LEADING EDGE	48201	PADDLE FAN	HEATING CIRCULATION	21,000	48"	0.85	315	86	48" PADDLE FANS WITH VARIABLE FAN SPEED CONTROLLER.
PF-2	LEADING EDGE	48201	PADDLE FAN	HEATING CIRCULATION	21,000	48"	0.85	315	86	48" PADDLE FANS WITH VARIABLE FAN SPEED CONTROLLER.

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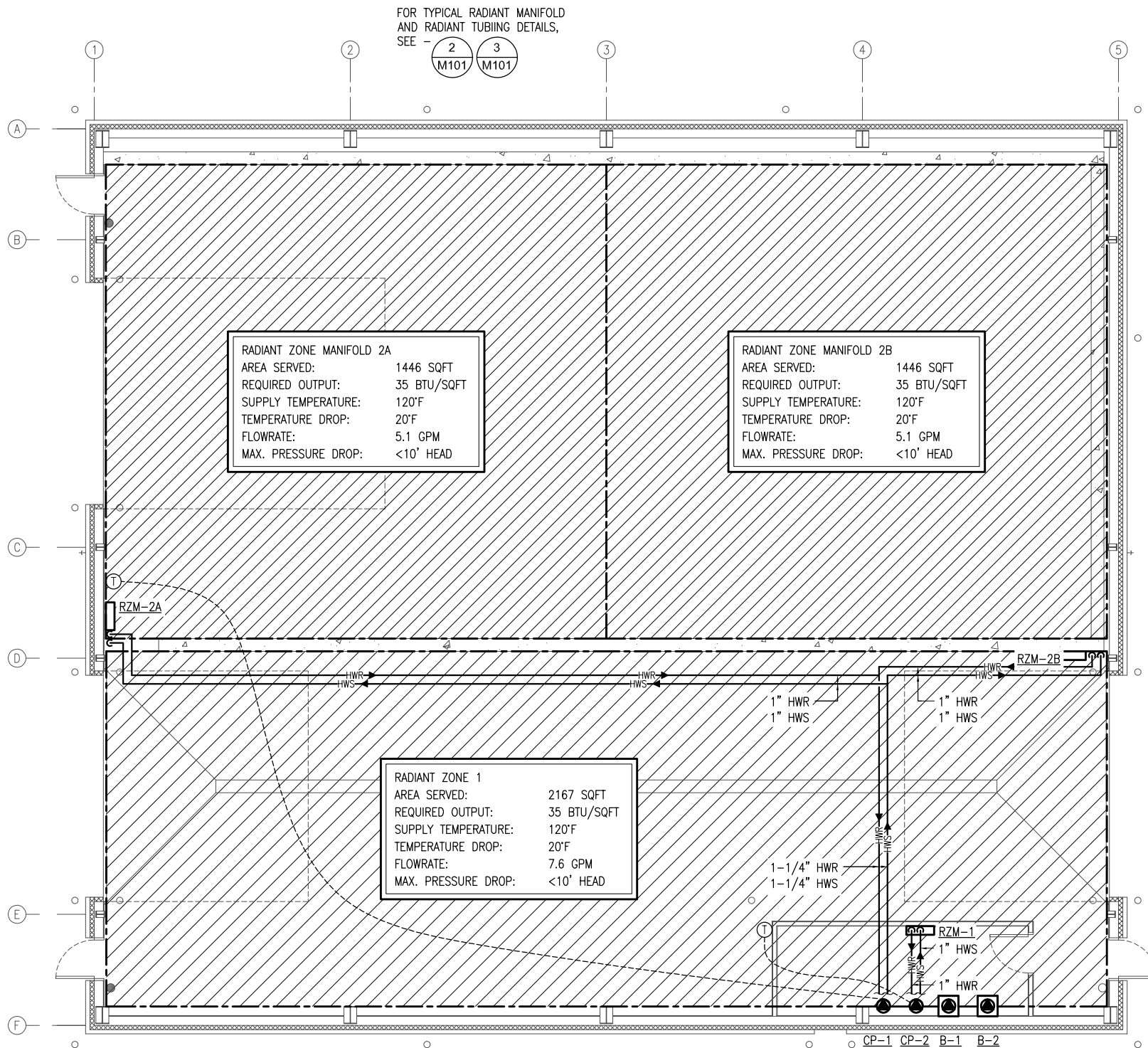
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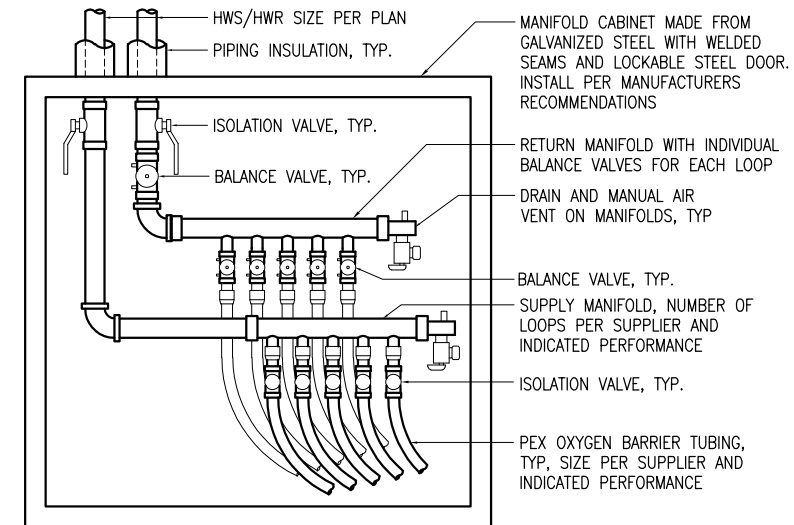
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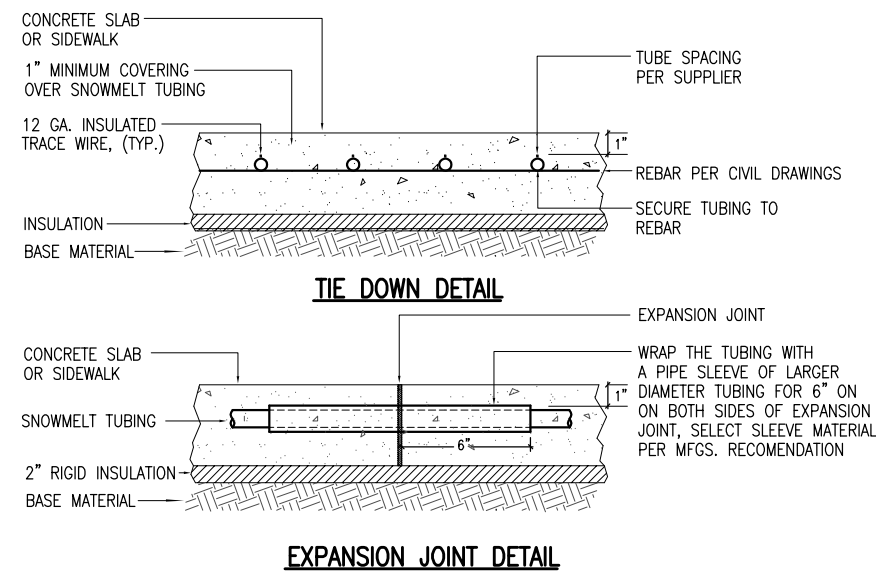
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1 RADIANT FLOOR HEATING PLAN
3/16" = 1' 0" (22X34); 3/32" = 1' 0" (11X17)



2 RADIANT ZONE MANIFOLD DETAIL
NO SCALE



3 RADIANT FLOOR TUBING DETAIL
NO SCALE

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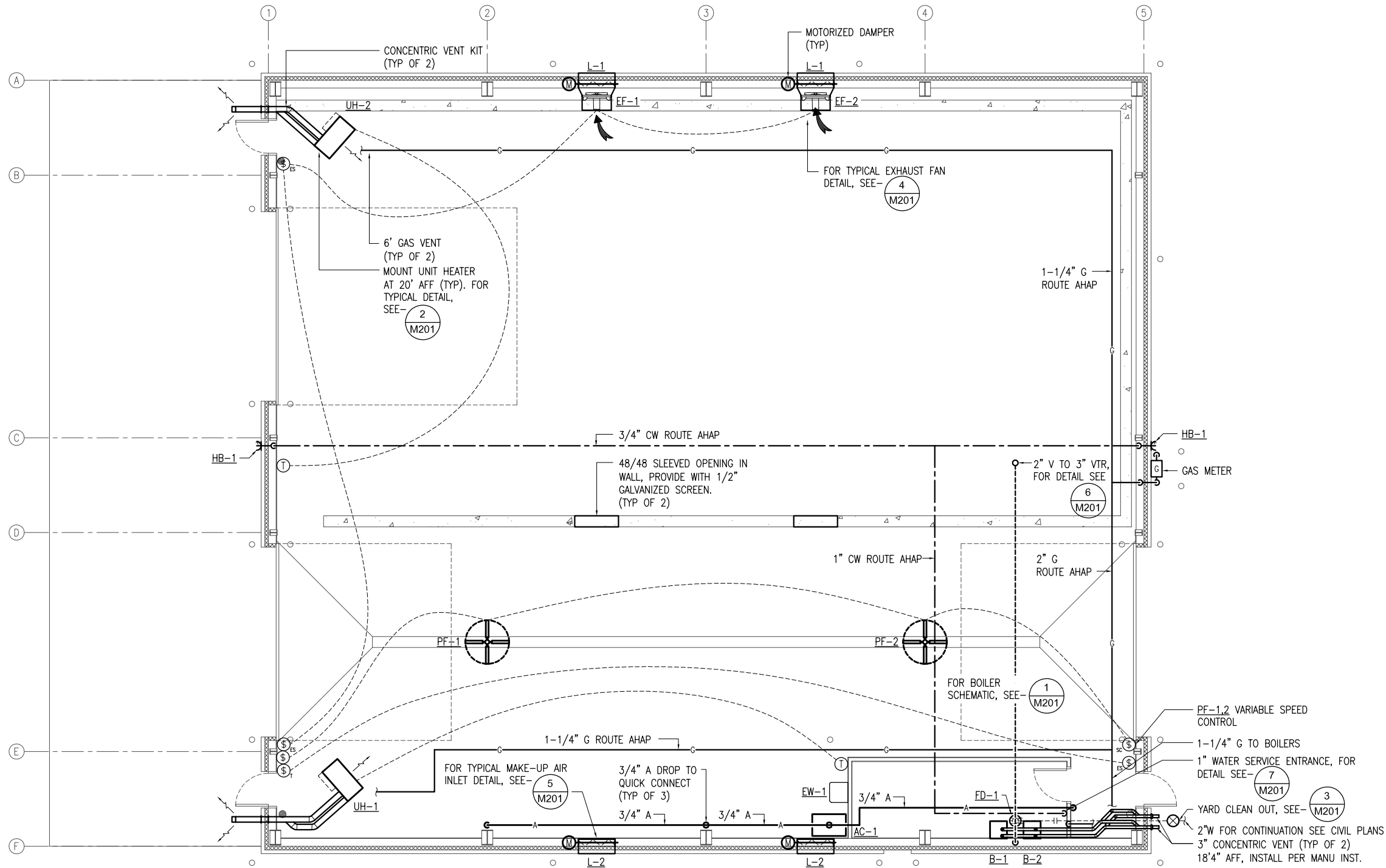
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1 PLUMBING, HEATING, AND VENTILATION PLAN

3/16\" = 1' 0\" (22X34); 3/32\" = 1' 0\" (11X17)



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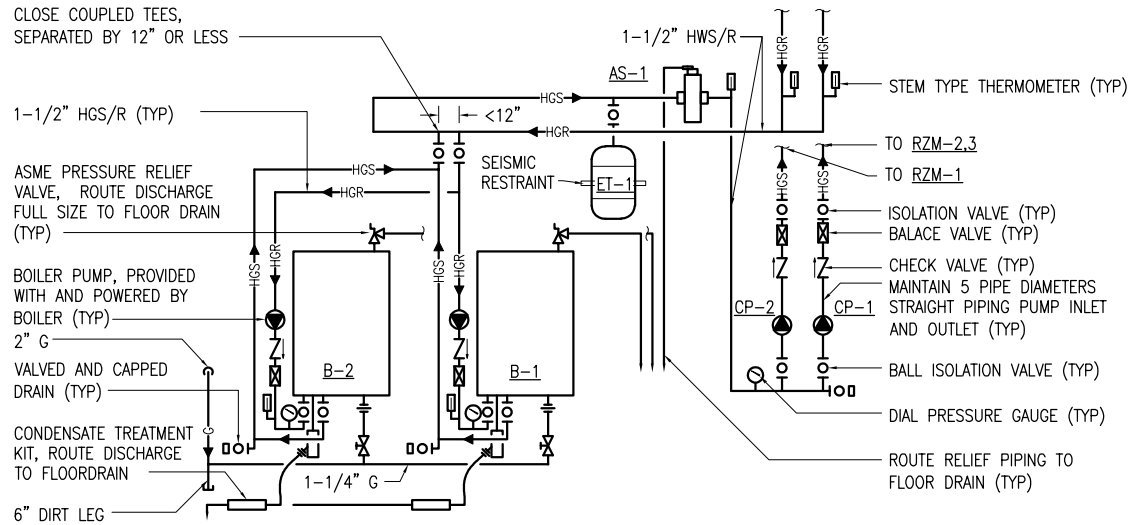
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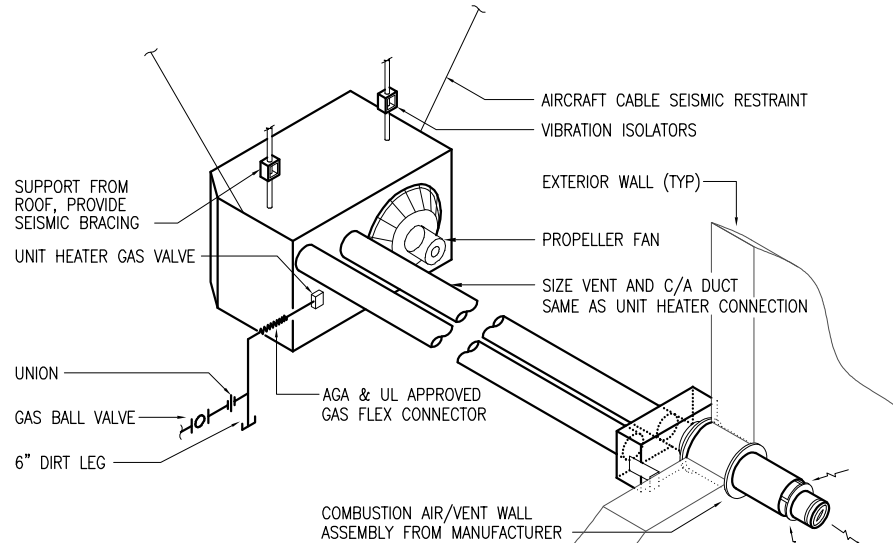
PLUMBING, HEATING,
& VENTILATION
PLANS
M1.02
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20-009-01

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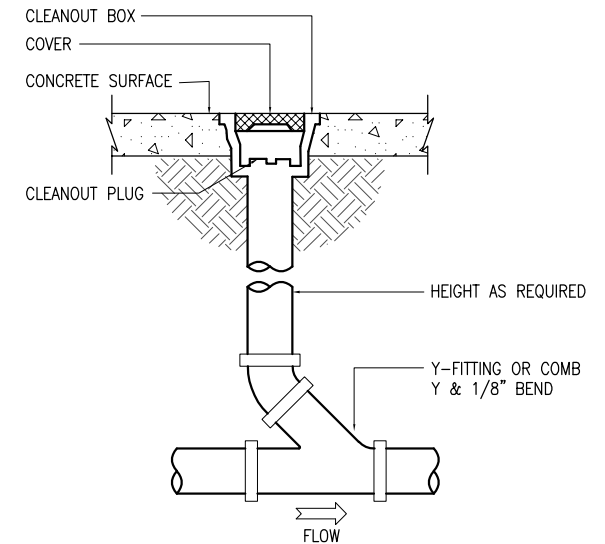
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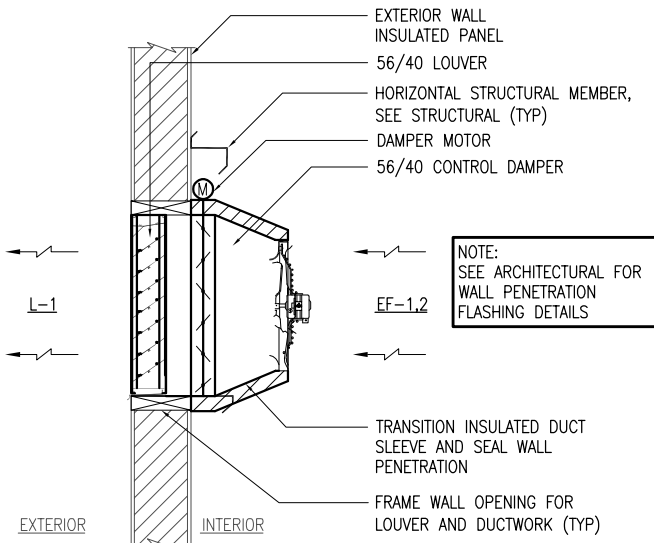
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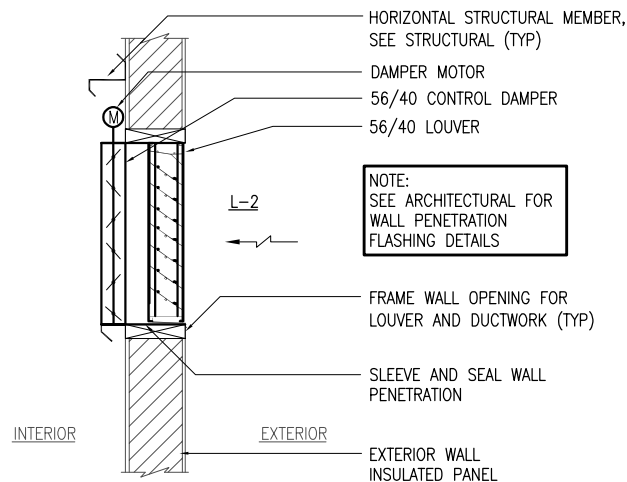
2 UNIT HEATER DETAIL
NO SCALE



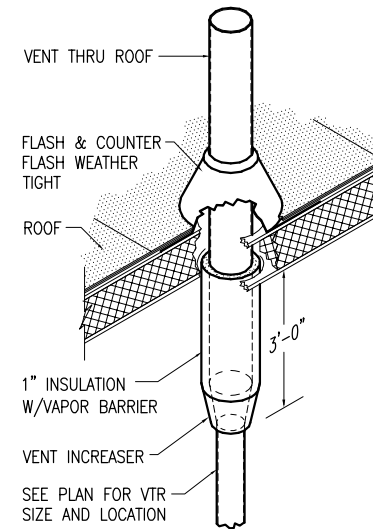
3 YARD CLEAN OUT DETAIL
NO SCALE



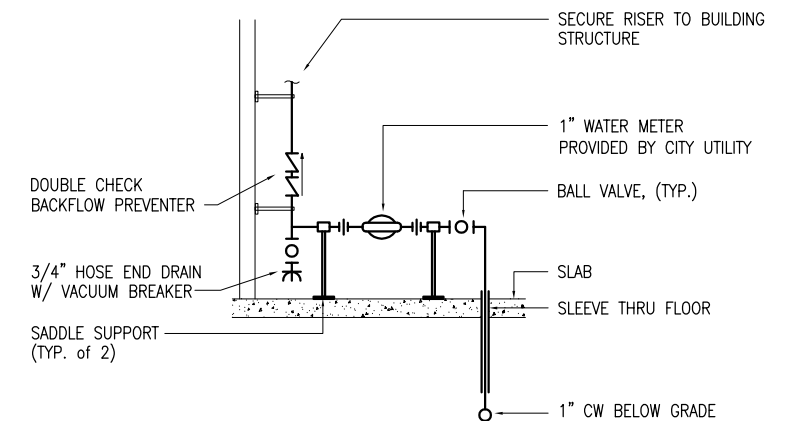
4 EXHAUST FAN DETAIL
NO SCALE



5 MAKE-UP AIR INLET DETAIL
NO SCALE



6 VENT THROUGH ROOF DETAIL
NO SCALE



7 WATER SERVICE ENTRANCE
NO SCALE

REVISIONS	DATE	DESCRIPTION
1		
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SCHEMATICS &
DETAILS

M2.01
AJH TTG
08/05/20 AS SHOWN
20-009-01

LAYOUT
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8/6/2020 11:53 AM

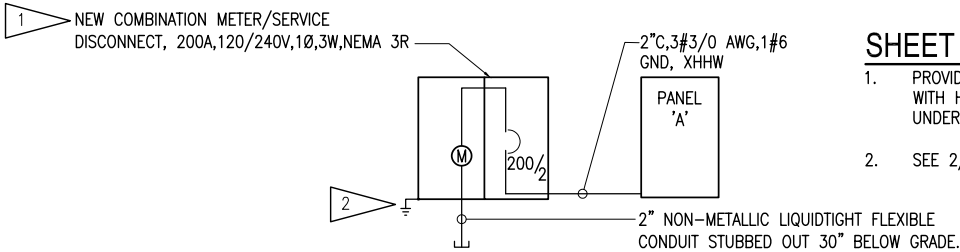
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LEGEND			
	ROUND LIGHT FIXTURE - PENDANT OR SURFACE MTD CLG		MOTOR (SIZED AS NOTED)
	LIGHT FIXTURE - SURFACE MTD ON WALL		FRACTIONAL HORSEPOWER MOTOR STARTER
	EMERGENCY EXIT LIGHT - SURFACE MTD CLG		DISCONNECT SWITCH
	EMERGENCY EXIT LIGHT - SURFACE MTD WALL		COMBINATION DISCONNECT/MAGNETIC MOTOR STARTER
	EMERGENCY LIGHT		DUPLEX RECEPTACLE TO BE REMOVED (DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED TYPICAL)
	LINEAR LIGHT FIXTURE - PENDANT MTD		NOTE TAG (No. INDICATES NOTE)
	STRIPLIGHT - PENDANT OR SURFACE MTD CLG		ABOVE FINISHED FLOOR
	FIXTURE TAG (LETTER INDICATES TYPE)		ABOVE FINISHED GRADE
	SINGLE POLE SWITCH		CONDUIT
	SINGLE POLE SWITCH (LOWERCASE LETTER INDICATES SWITCHING)		DENOTES EXISTING ITEM
	THREE WAY SWITCH, FOUR WAY SWITCH		DENOTES EMERGENCY POWER
	OCCUPANCY SENSOR WALL SWITCH (DUALTECH)		GROUND FAULT CIRCUIT INTERRUPTER
	CONDUIT, CONCEALED		GALVANIZED RIGID STEEL CONDUIT
	NUMBER AND SIZE OF WIRES (NO MARKS = 3 #12)		KELVIN
	HOMERUN TO PANEL (PANEL AND CIRCUIT No.)		LIGHT EMITTING DIODE
	UNDERGROUND ELECTRICAL CONDUCTORS		LUMENS
	HEAT TRACE WIRES		MAIN CIRCUIT BREAKER
	PANEL		MAIN LUGS ONLY
	DUPLEX RECEPTACLE		NATIONAL ELECTRICAL CODE
	DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER		NOT TO SCALE
	SPECIAL PURPOSE OUTLET		TYPICAL
	JUNCTION BOX		UNLESS OTHERWISE NOTED

ELECTRICAL LOAD CALCULATION	
LIGHTING LOAD	
FIXTURE TYPE 'A'	2,608 VA
FIXTURE TYPE 'B'	66 VA
FIXTURE TYPE 'C'	452 VA
125% TOTAL LIGHTING LOAD	3,908 VA
MOTOR AND EQUIPMENT LOADS	
B-1.2 (2 @ 15A, 120V)	3,600 VA
EF-1.2 (2 @ 0.5HP, 120V)	2,352 VA
PF-1.2 (2 @ 86VA)	172 VA
UH-1.2 (2 @ 1/3HP, 120V)	1,728 VA
CP-1.2 (2 @ 0.75HP, 120V)	3,312 VA
DRIVE BAY OH DOOR OPERATORS (2 @ 0.75HP, 120V)	3,312 VA
SAND BAY OH DOOR OPERATOR (1 @ 1.5HP, 240V)	2,400 VA
AIR COMPRESSOR (1 @ 7.5HP, 240V)	9,600 VA
GATE OPERATOR (1 @ 26A, 120V)	3,120 VA
YARD CLEAN OUT HEAT TRACE	1,080 VA
25% LARGEST MOTOR (AIR COMPRESSOR)	2,400 VA
GATE CONTROLS (ESTIMATED)	1,100 VA
TOTAL THIS SECTION	34,176 VA
RECEPTACLE LOADS	
RECEPTACLE LOAD (NEC TABLE 220.44)	
RECEPTACLES AT 180VA: 11	1,980 VA
NET COMPUTED DEMAND LOAD:	40,064 VA
MINIMUM FEEDER/SERVICE SIZE FOR 120/240 V, SINGLE PHASE SERVICE:	
40,064 VA / 240V=	166.9 A

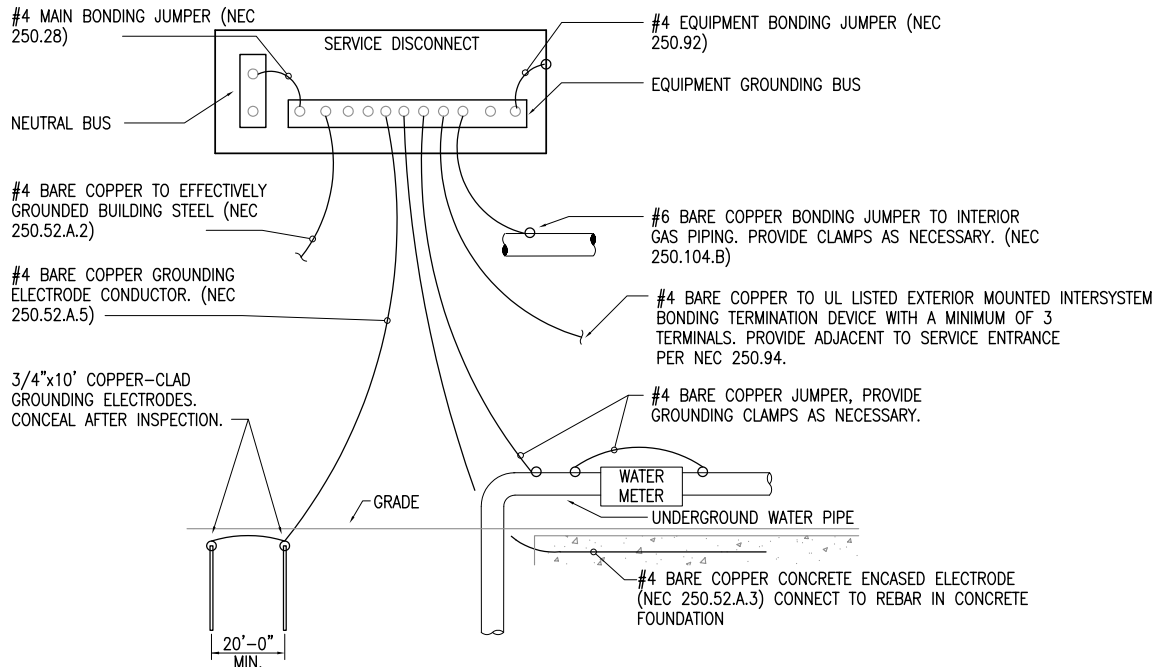
SHORT CIRCUIT CALCULATION SUMMARY	
FAULT ANALYSIS WAS PERFORMED USING POINT-TO-POINT METHOD THE FOLLOWING ARE THE UTILITY CONTRIBUTION AND EQUIPMENT ASSUMPTIONS:	
AVAILABLE FAULT CURRENT AT UTILITY XFMR: INFINITE BUS	
UTILITY TRANSFORMER SIZE:	50 KVA
UTILITY TRANSFORMER IMPEDENCE:	3.00 %
SERVICE LATERAL # PARALLEL RUNS	1 EA.
SERVICE LATERAL SIZE:	#3/0 KCMIL
SERVICE LATERAL LENGTH:	100 FEET
SERVICE LATERAL CONDUIT TYPE:	Cu
TOTAL MOTOR CONTRIBUTIONS:	29.63 AMPS
AVAILABLE FAULT CURRENT AT MDP: 3557 A RMS (SYM)	
NOTE: VERIFY THE ABOVE TRANSFORMER RATINGS AND SERVICE LATERAL SIZE/TYPE WITH LOCAL UTILITY PRIOR TO ORDERING EQUIPMENT. ADJUST EQUIPMENT SHORT CIRCUIT RATINGS ACCORDINGLY BASED ON ACTUAL EQUIPMENT INSTALLED BY UTILITY.	

LIGHT FIXTURE SCHEDULE								
TYPE	LOCATION	MANUFACTURER AND CATALOG NUMBER (OR APPROVED EQUAL)	LUMINAIRE DESCRIPTION	MOUNTING		LAMPS	BALLAST/DRIVER	TOTAL INPUT WATTS
				TYPE	HEIGHT			
A	BAYS	LUX DYNAMICS #LUX-IK10P-L-2-S-A-H03-840-2'-U10-CP2-BOT-DIR-MFHB-H10-18YT-WHS	HIGH BAY LED LUMINAIRE WITH CLEAR WRAP AROUND POLYCARBONATE LENS, EXTRUDED ALUMINUM CONSTRUCTION, IK10 IMPACT RATING, CORROSION RESISTANT FINISH, AND 2-POINT AIRCRAFT CABLE.	CABLE	23'-0" AFF	4,000K LED 20,326 LM	120/277, 0-10V DIMMING DRIVER TO 10%	163
B	MECH ROOM	ILP #FZ4-20W-U-40	LED LOW-PROFILE LINEAR FIXTURE, FROSTED ACRYLIC LENS, WHITE FINISH, (PROVIDE WITH OPTION #F1/ILBCP10 WHERE INDICATED 'EM' ON PLANS)	SURFACE, CEILING	CEILING	4,000K LED 3,190LM	120/277, 0-10V DIMMING DRIVER TO 10%	22
C	EXTERIOR	MCGRAW EDISON #MUSA-GWC-AF-02-LED-E1-SL3-BZ-CBP-P	EXTERIOR HIGH OUTPUT LED WALL PACK WITH TEMPERATURE RATING TO -40F, TYPE iii DISTRIBUTION WITH SPILL CONTROL, ALUMINUM HOUSING, DARK BRONZE FINISH, AND PHOTOCCELL.	SURFACE, WALL	24'-0" AFG	4,000K LED 12,709 LM	120/277, BI-LEVEL DIMMING 100/35%	113
E1	EGRESS PATH	EMERGI-LITE #12HPH-M60-2-L15-D	HIGH PERFORMANCE LED EMERGENCY LIGHTING UNIT, NEMA-4X RATED, COMPACT FIBERGLASS HOUSING, DIE-CAST ALUMINUM LED HEADS, AND 60W LEAD CALCIUM BATTERY.	SURFACE, WALL	8'-6" AFF, UON	1,300 LM PER LAMP	120/277 INPUT	N/A
E2	EXTERIOR MAN DOORS	EMERGI-LITE #HPHRL-D-15	LIGHT WEIGHT POLYCARBONATE GRAY HOUSING AND DIE CAST FULLY ADJUSTABEL HEADS, NEMA-4X PROTECTION, STAINLESS STEEL FASTENERS AND HARDWARE, 15W HIGH EFFICIENCY LAMP HEADS.	SURFACE, WALL	8'-6" AFG	1,300 LM PER LAMP	12-24VDC INPUT	N/A
EX	MAN DOORS	EMERGI-LITE #GA-SVXN-1-R-D-4X	LED EXIT SIGN, NEMA-4X, POLYVINYL CHLORIDE FRAME, FULLY GASKETED LENS, BACKPLATE, AND CANOPY, FIELD SELECTABLE CHEVRONS, POLYCARBONATE FACEPLATE, Ni-Cd BATTERY, AND 6" RED LETTERING.	SURFACE, WALL	8'-6" AFF	LED	120/277 INPUT	N/A



1 ONE-LINE DIAGRAM

NO SCALE



2 SERVICE GROUNDING DETAIL

NO SCALE

REVISIONS		DATE	DESCRIPTION
MARK	DATE	DESCRIPTION	
1			
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SHEET TITLE	
LEGEND, ONE-LINE, FIXTURE SCHEDULE, CALCULATIONS, AND DETAILS	
SHEET E0.01	
DRAWN BY: BC	CHECKED BY: DO,TEH
DATE: 08/05/20	SCALE: NO SCALE
JOB NUMBER: 20-009-01	

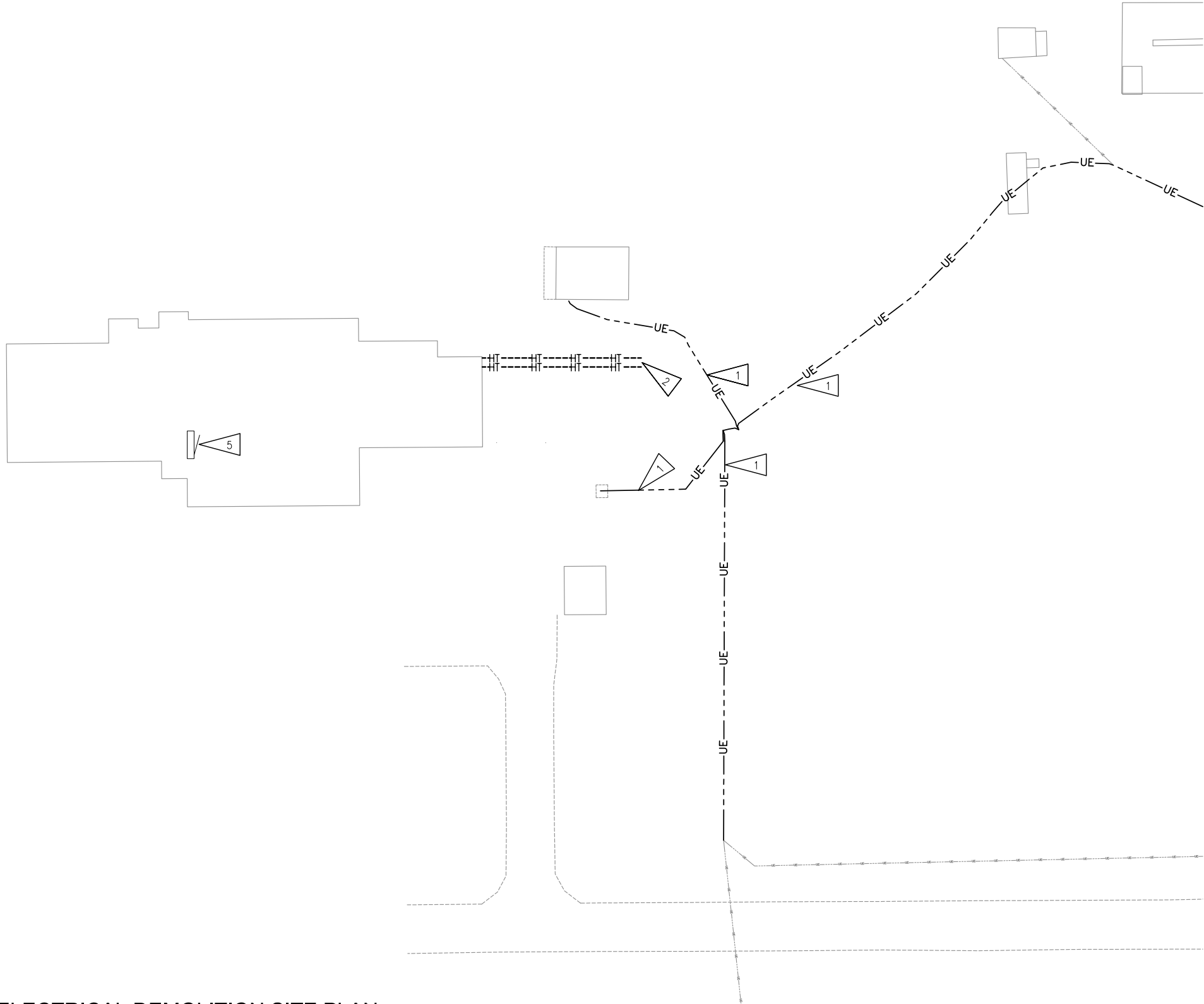
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E1.01

DATE TIME
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DRAWING LOCATION
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1 ELECTRICAL DEMOLITION SITE PLAN

1" = 30'-0" (22X34); 1" = 60'-0" (11X17)



GENERAL NOTES

- THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.
- THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS TO A WAREHOUSE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS.
- DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED. SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.

SHEET NOTES:

- EXISTING UNDERGROUND ELECTRICAL UTILITY LINE MAY BE IMPACTED BY NEW CONSTRUCTION AND MAY NEED TO BE RE-ROUTED. COORDINATE WITH HEA TO IDENTIFY AND PULL BACK UNDERGROUND ELECTRICAL UTILITY LINES FROM THE PROJECT AREA TO ACCOMMODATE NEW WORK. ASSUME LINE IDENTIFIED NEEDS TO BE RE-ROUTED. SEE 1/E1.02 FOR PROPOSED REROUTING.
- RAIN LEADER HEATING CABLE AND OVERFLOW HEATING CABLE TO BE PULLED BACK TO PANEL 'NDP' IN ARFF BUILDING. SEE 1/E1.02 AND COORDINATE ALL REQUIREMENTS WITH CIVIL PRIOR TO START OF DEMOLITION.
- APPROXIMATE LOCATION OF PANEL 'NDP' ON FIRST FLOOR OF ARFF BUILDING.

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL CALL FOR A UTILITY LOCATE A MINIMUM OF TWO WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

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PO BOX 773005
EAGLE RIVER, AK 99577

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ANCHORAGE AREA: 1-907-278-3121
FAX-A-LOCATE: 1-907-278-0696
E-TICKET: www.811ak.com

REVISIONS	MARK	DATE	DESCRIPTION
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KENAI, ALASKA

SHEET TITLE
ELECTRICAL
DEMOLITION SITE
PLAN

SHEET
E1.01

DRAWN BY: BC CHECKED BY: DO,TEH

DATE: 08/05/2020 SCALE: AS SHOWN

JOB NUMBER: 20-009-01

LAYOUT
E1.02

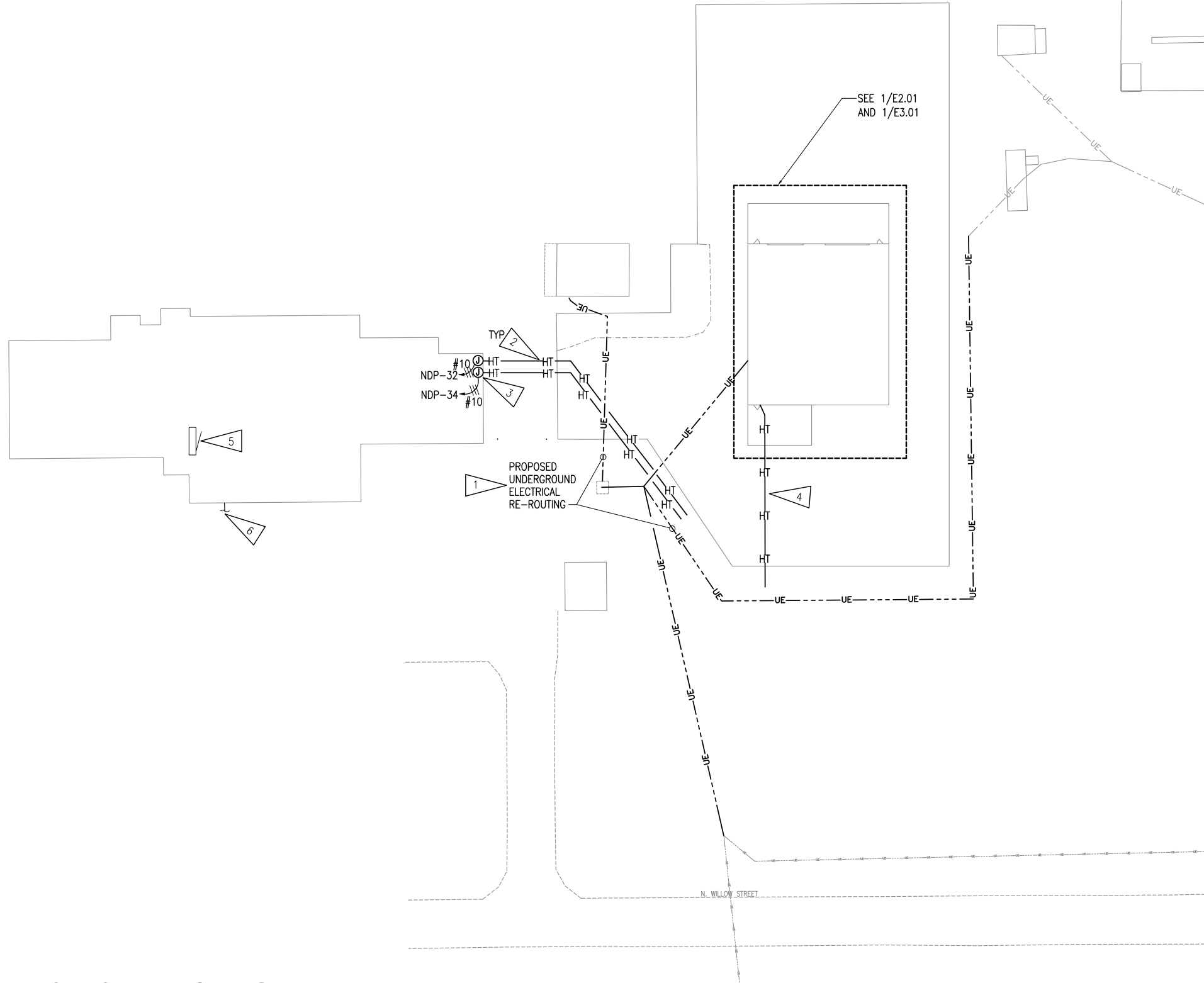
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BEAU COUNTS

1 ELECTRICAL REMODEL SITE PLAN

1" = 30'-0" (22X34); 1" = 60'-0" (11X17)



GENERAL NOTES

A. SEE GENERAL NOTES E1.01.

SHEET NOTES:

- COORDINATE FINAL UTILITY SERVICE ENTRANCE LOCATION AND RE-ROUTING WITH HEA PRIOR TO BEGINNING WORK. ALL SERVICE EQUIPMENT SHALL BE INSTALLED PER HEA REQUIREMENTS.
- INSTALL 12W/FT SELF-REGULATING HEATING CABLE INSIDE RAIN LEADER PIPING AND OVERFLOW PIPING, RAYCHEM #GM-1XT OR APPROVED EQUAL. CONNECT TO NEW HEAT TRACE CONTROLLER. COORDINATE WITH CIVIL.
- PROVIDE (2) ELECTRONIC AMBIENT SENSING CONTROLLER WITH INTEGRAL 30mA EPD AND THERMOSTATIC CONTROLS, RAYCHEM #ECW-GF OR APPROVED EQUAL. PROVIDE CONDUIT, CONDUCTORS, AND CONNECTION TO CIRCUITS INDICATED. PROVIDE CONNECTION TO NEW 12W/FT HEATING CABLE INSIDE RAIN LEADER PIPING AND OVERFLOW PIPING. INSTALL OUTDOOR AMBIENT TEMPERATURE SENSOR ON EXTERIOR WALL AND CONNECT WITH PROVIDED CABLE PER MANUFACTURER'S INSTRUCTIONS. INITIAL SET POINT SHALL BE 40°F, COORDINATE FINAL SET POINT WITH OWNER. PROVIDE ONE LABEL WHICH READS "RAIN LEADER HEAT TRACE" AND A SECOND LABEL WHICH READS "OVERFLOW HEAT TRACE". SEE PANEL 'NDP' SCHEDULE ON SHEET E5.01 FOR CIRCUITING INFORMATION.
- INSTALL 12W/FT SELF-REGULATING HEATING CABLE INSIDE MECHANICAL YARD CLEAN OUT, RAYCHEM #GM-1XT OR APPROVED EQUAL. CONNECT TO NEW HEAT TRACE CONTROLLER. SEE 2/E4.01 FOR CONNECTION REQUIREMENTS. COORDINATE WITH MECHANICAL AND CIVIL.
- APPROXIMATE LOCATION OF PANEL 'NDP' ON FIRST FLOOR OF ARFF BUILDING.
- APPROXIMATE LOCATION OF 1" CONDUIT ENTRANCE INTO ARFF BUILDING INSTALLED FOR FUTURE USE. SEE 1/E3.01.

REVISIONS	DATE	DESCRIPTION
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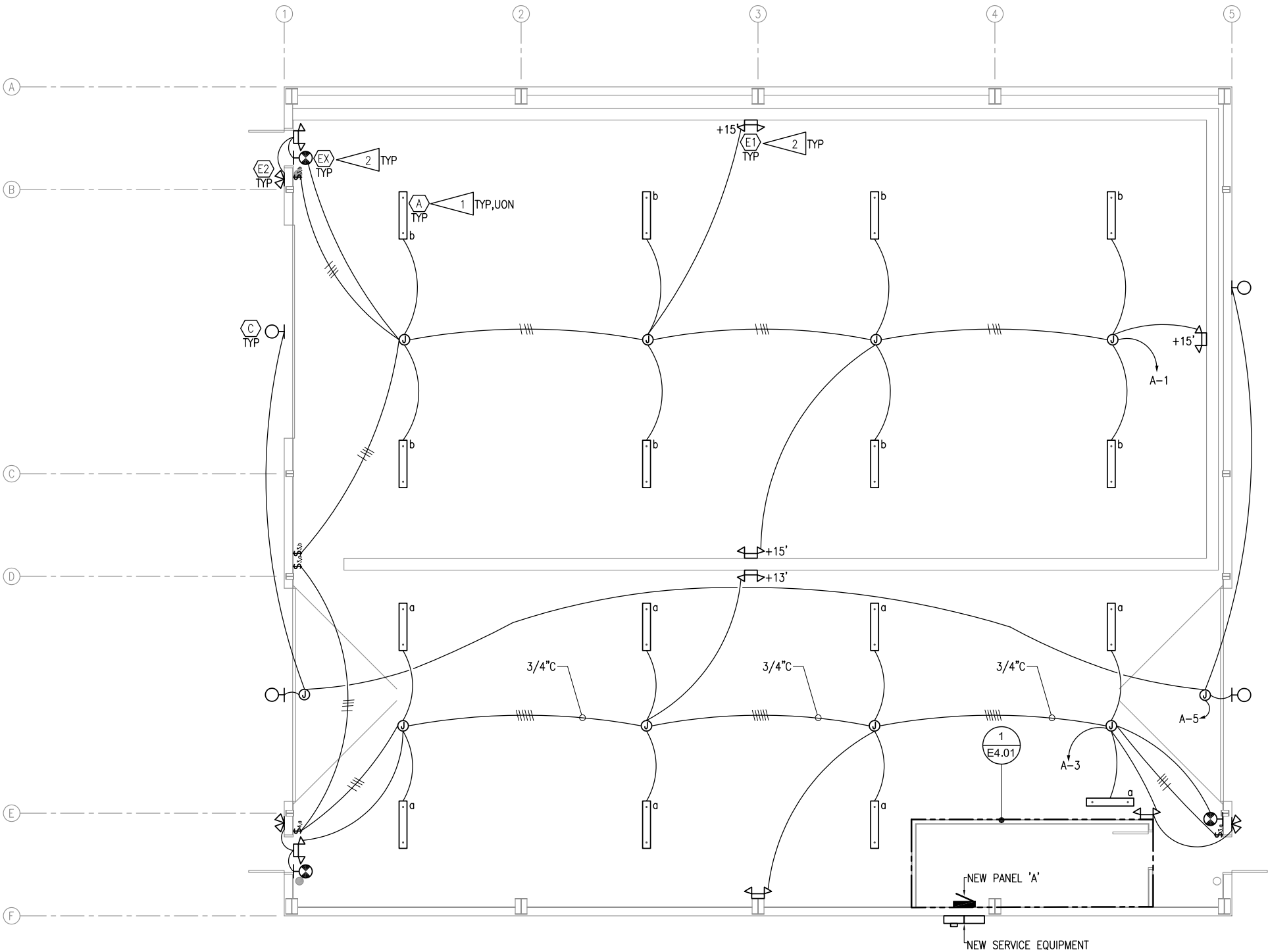
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SHEET TITLE	
ELECTRICAL REMODEL SITE PLAN	
SHEET	
E1.02	
DRAWN BY	CHECKED BY
BC	DO,TEH
DATE	SCALE
08/05/2020	AS SHOWN
JOB NUMBER	
20-009-01	

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SHEET NOTES:

1. PROVIDE CONNECTION TO LIGHTING SWITCH INDICATED.
2. PROVIDE CONNECTION TO UNSWITCHED LEG OF LOCAL LIGHTING CIRCUIT.

REVISIONS	DATE	DESCRIPTION
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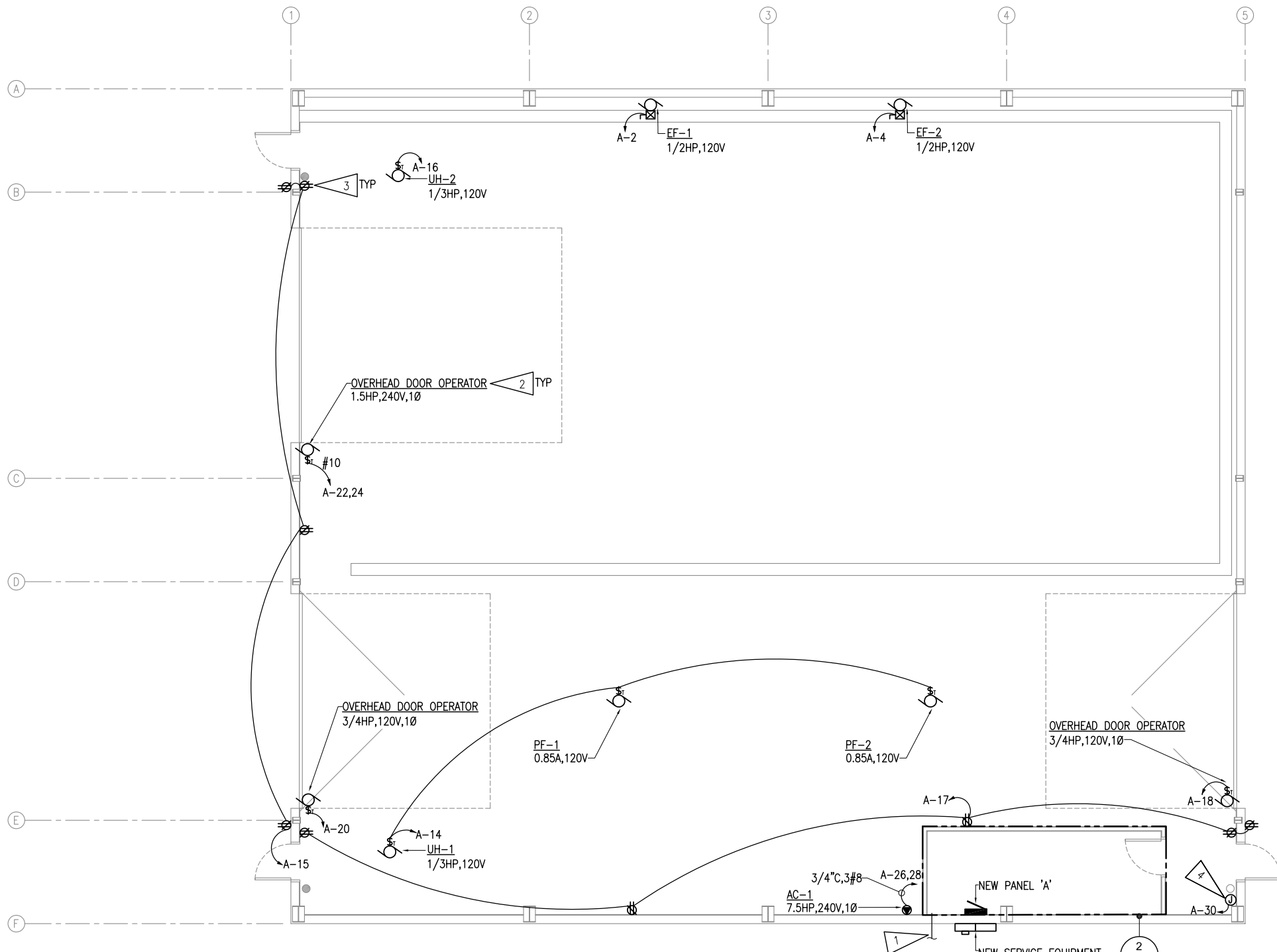
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SAND STORAGE BUILDING LIGHTING PLAN	
SHEET	
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DRAWN BY	CHECKED BY
BC	DO,TEH
DATE	SCALE
08/05/2020	AS SHOWN
JOB NUMBER	
20-009-01	

LAYOUT
E3.01

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BEAU COUNTS



1 SAND STORAGE BUILDING POWER PLAN
3/16" = 1'-0" (22X34); 3/32" = 1'-0" (11X17)

GENERAL NOTES

- A. COORDINATE EQUIPMENT LOCATIONS AND REQUIREMENTS PRIOR TO ROUGH-IN. PROVIDE INTERCONNECTING WIRING FOR POWER AND/OR CONTROLS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS.
- B. COORDINATE WITH OWNER FOR EXACT LOCATIONS AND REQUIREMENTS FOR OWNER PROVIDED CONTRACTOR INSTALLED EQUIPMENT.

SHEET NOTES

- 1. PROVIDE 1" UNDERGROUND EMPTY CONDUIT WITH PULL STRING FROM EXISTING ARFF BUILDING WITH 3" STUB-UP AFF IN LOCATION SHOWN FOR FUTURE USE. COORDINATE WITH OWNER FOR EXACT LOCATION AND RUN LENGTH PRIOR TO ROUGH-IN.
- 2. PROVIDE AND INSTALL ALL CONDUIT, BOXES, WIRING, ETC AS REQUIRED TO INSTALL AND CONNECT DOOR OPERATOR CONTROLS, SAFETIES, ETC FOR THE OVERHEAD DOORS, TYPICAL.
- 3. ALL EXTERIOR RECEPTACLES AND ALL RECEPTACLES IN THE DRIVE THROUGH BAY AND SAND STORAGE BAY SHALL BE GFCI RECEPTACLES INSTALLED IN CAST WEATHERPROOF OUTLET BOXES WITH WEATHERPROOF COVERS.
- 4. PROVIDE NEW ELECTRONIC AMBIENT SENSING CONTROLLER WITH INTEGRAL 30mA EPD AND THERMOSTATIC CONTROLS, RAYCHEM #ECW-GF OR APPROVED EQUAL. PROVIDE CONDUIT, CONDUCTORS, AND CONNECTION TO CIRCUIT INDICATED. PROVIDE CONNECTION TO NEW 12W/FT HEATING CABLE INSIDE YARD CLEAN OUT PIPING. INSTALL OUTDOOR AMBIENT TEMPERATURE SENSOR ON EXTERIOR WALL AND CONNECT WITH PROVIDED CABLE PER MANUFACTURER'S INSTRUCTIONS. INITIAL SET POINT SHALL BE 40°F, COORDINATE FINAL SET POINT WITH OWNER. PROVIDE LABEL WHICH READS "YARD CLEAN OUT HEAT TRACE". SEE NEW PANEL 'A' SCHEDULE ON SHEET E5.01 FOR CIRCUIT INFORMATION. SEE CIVIL SHEETS 1/C2.01 AND 1/C2.02 FOR THE LOCATION OF THE YARD CLEAN OUT AND COORDINATE WITH MECHANICAL.

REVISIONS	DATE	DESCRIPTION
1		
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SHEET TITLE
SAND STORAGE BUILDING POWER PLAN

SHEET
E3.01

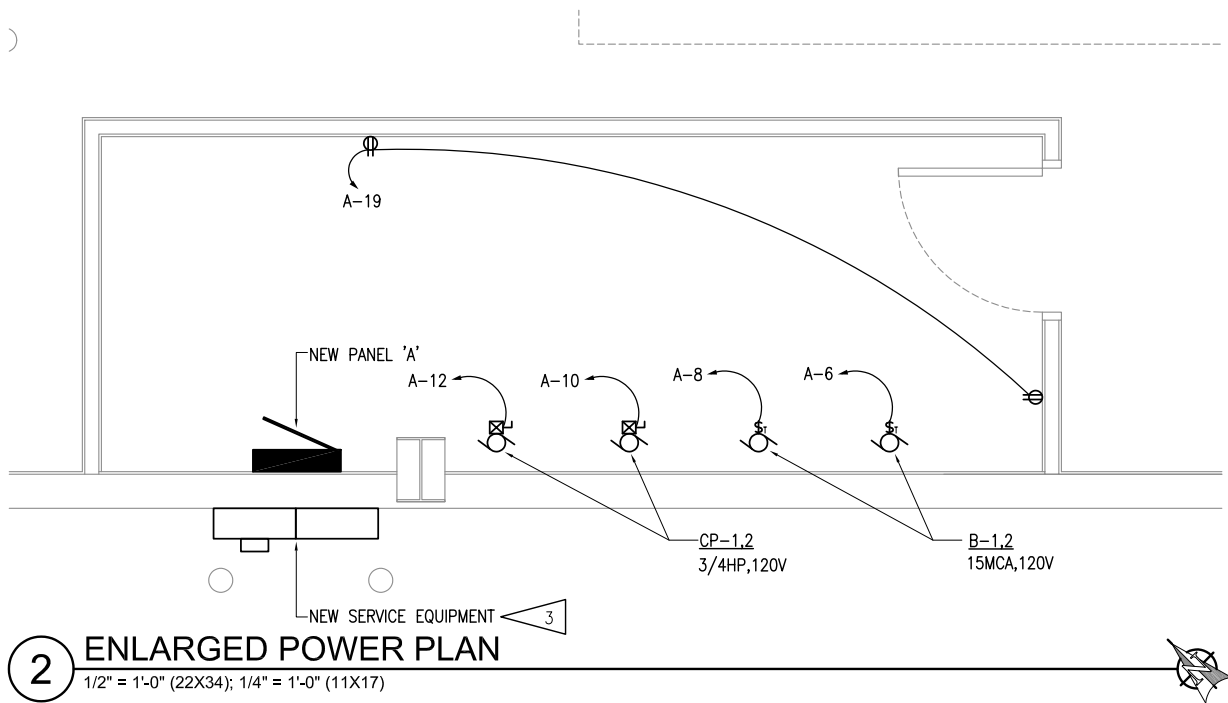
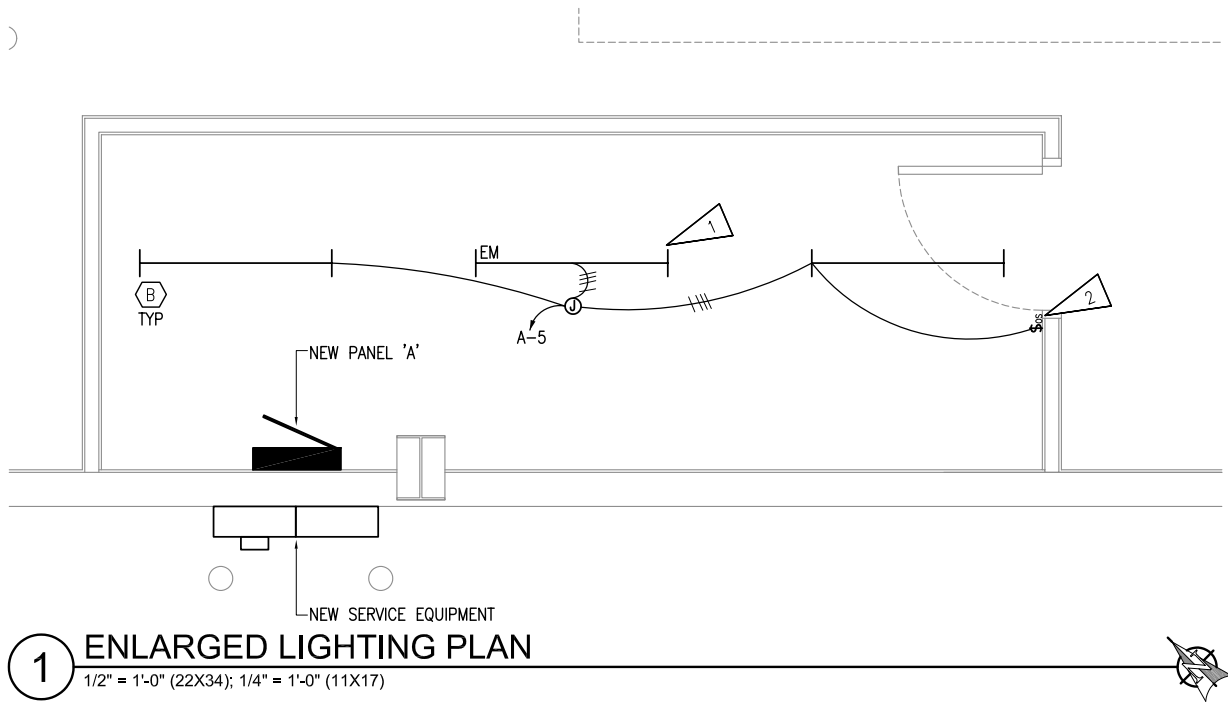
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DATE 08/05/2020	SCALE AS SHOWN
JOB NUMBER 20-009-01	

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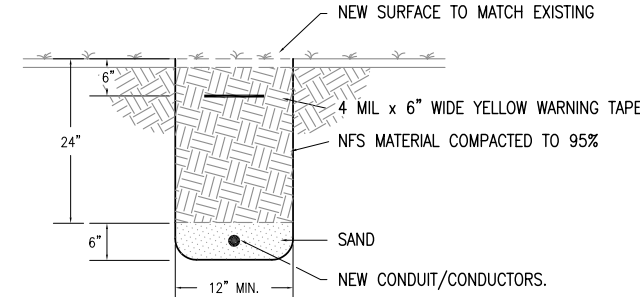
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BEAU COUNTS



SHEET NOTES:

1. FIXTURE WITH BATTERY BACKUP. PROVIDE CONNECTION TO LIGHTING CIRCUIT INDICATED AND PROVIDE CONNECTION TO UNSWITCHED LEG OF LOCAL LIGHTING CIRCUIT FOR THE BATTERY.
2. SWITCH WITH INTEGRAL OCCUPANCY SENSOR.
3. SEE DETAILS A7/A4.04 AND E7/A4.04 FOR MOUNTING OF SERVICE ENTRANCE EQUIPMENT. EQUIPMENT SHALL BE MOUNTED IN ACCORDANCE WITH HOMER ELECTRIC ASSOCIATION REQUIREMENTS. INSTALL BUTYL TAPE SEALANT WHERE SERVICE ENTRANCE SUPPORT FASTENERS PENETRATE WALL PANEL. USE EXPANDING FOAM SEALANT TO SEAL WALL PENETRATION AROUND CONDUIT ENTRY. SEE ONE-LINE DIAGRAM 1/E0.01



REVISIONS	DATE	DESCRIPTION
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SHEET TITLE ENLARGED ELECTRICAL PLANS AND DETAILS	
SHEET E4.01	
DRAWN BY: BC	CHECKED BY: DO,TEH
DATE: 08/05/2020	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	

LAYOUT
E5.01

DATE TIME
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BEAU COUNTS

NEW PANEL 'A'																
MFR/MODEL: SIEMENS TYPE PRL1A						VOLTS: 120/240V,1PH,3W				ENCLOSURE: NEMA 1				225 A		
TYPE: PANELBOARD						VOLT-AMPS				MTG: SURFACE						
NOTE	CIRC	POLE	AMPS	SERVICE	TYPE	A		B		TYPE	SERVICE	AMPS	POLE	CIRC	NOTE	
	1	1	20	LTS - SAND BAY	LTG	1,304	1,176			MOTR	EF-1	20	1	2		
	3	1	20	LTS - DRIVE BAY, MECH ROOM	LTG			1,370	1,176	MOTR	EF-2	20	1	4		
	5	1	20	LTS - EXTERIOR	LTG	452	1,800			MOTR	BOILER 1	30	1	6		
	7	1	20	SPARE					1,800	MOTR	BOILER 2	30	1	8		
	9	1	20	SPARE		1,656				MOTR	CP-1	25	1	10		
	11	1	20	SPARE					1,656	MOTR	CP-2	25	1	12		
	13	1	20	SPARE		1,036				MOTR	UH-1, PF-1,2	20	1	14		
	15	1	20	RECEP - SAND BAY, EXT W.	RECP			720	864	MOTR	UH-2	15	1	16		
	17	1	20	RECEP - DRIVE BAY, EXT E.	RECP	900	1,656			MOTR	O/H DOOR - DRIVE BAY EAST	25	1	18		
	19	1	20	RECEP - MECH ROOM	RECP			360	1,656	MOTR	O/H DOOR - DRIVE BAY WEST	25	1	20		
	21	1	-	SPACE		1,200				MOTR	O/H DOOR - SAND BAY	20	2	22		
	23	1	-	SPACE					1,200	MOTR	^^	20	2	24		
	25	1	-	SPACE		4,800				MOTR	AIR COMPRESSOR	80	2	26		
	27	1	-	SPACE					4,800	MOTR	^^	80	2	28		
	29	1	-	SPACE		1,080				HEAT	BOILER CLEAN OUT HT. TRACE	20	1	30	a	
	31	1	-	SPACE					3,120	MOTR	GATE OPERATOR	35	1	32		
	33	1	-	SPACE		1,100				SPEC	GATE CONTROLS	20	1	34		
	35	1	-	SPACE							SPARE	20	1	36		
	37	1	-	SPACE							SPARE	20	1	38		
	39	1	-	SPACE							SPACE	-	1	40		
	41	1	-	SPACE							SPACE	-	1	42		
TOTAL V-A						18,160		18,722		36,882 VA						
TOTAL AMPS						151		156		154 A						
A.I.C. RATING: 10,000																
CONNECTED LOAD IN KVA (THIS PANEL):					LTG	RECP	MOTR	LG.MT	HEAT	SPEC	TOTAL		AMPS			
					3.13	1.98	29.60	2.40	1.08	1.10	36.9 KVA		158 A			
DEMAND LOAD IN KVA:					3.91	1.98	29.60	2.40	1.08	1.10	40.1 KVA		167 A			
PANEL NOTES:										PANEL OPTIONS:						
a CIRCUIT BREAKER SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION.										MAIN LUGS ONLY						

PANEL 'NDP'																	
MFR/MODEL: SIEMENS TYPE 'S1'						VOLTS: 120/208V,3PH,4W						ENCLOSURE: NEMA 1				400 A	
						VOLT-AMPS						MTG: SURFACE					
NOTE	CIRC	POLE	AMPS	SERVICE	TYPE	A		B		C		TYPE	SERVICE	AMPS	POLE	CIRC	NOTE
a	1	1	20	RECPT TIRE CHANGE 115	RECP	800	800					MOTR	TRANSFER PUMP	20	2	2	a
a	3	1	20	RECPT BENCH AREA 117	RECP			400	800			MOTR	^^	20	2	4	a
a	5	1	20	RECPT BENCH AREA 117	RECP					400			SPACE	-	1	6	
a	7	1	20	RECPT BENCH AREA 118	RECP	400							SPACE	-	1	8	
a	9	1	20	RECPT EQT STG 120 S.	RECP			1000				MOTR	HOIST EQT STG 120	15	3	10	b
a	11	1	20	RECPT EQT STG 120 CT	RECP					800		MOTR	^^^	15	3	12	b
a	13	1	20	RECPT EQT STG 120 N.	RECP	400						MOTR	^^^	15	3	14	b
a	15	1	20	RECPT EQT STG 120 N.	RECP			600					SPACE	-	1	16	
a	17	1	20	RECPT WASH 121,SAND 122	RECP					600	700	HEAT	ROOF DRAIN HEAT CABLE	20	1	18	a,c
a	19	1	20	RECPT MECH 119	RECP	400	750					LTG	POLE MTD LTS	20	2	20	a
a	21	1	20	LTS STG 204, 205, & 206	LTG			1400	750			LTG	^^	20	2	22	a
a	23	1	20	LTS MECH 119,EQPT 120	LTG					800	1500	SPEC	WASHER - TIRE 115	20	1	24	a
a	25	1	20	LTS TIRE 116,BENCH 117	LTG	800	500					SPEC	GAS DRYER - TIRE 115	20	1	26	a
a	27	1	20	LTS EXTERIOR NE	LTG			1800					UNKNOWN	20	1	28	b
a	29	1	20	LTS EXTERIOR NW	LTG					1800			SPARE	20	1	30	
a	31	1	20	LTS EQT STG 120	LTG	1200	1560					HEAT	HEAT CABLE OUT FALL	30	1	32	
a	33	1	20	LTS EQT STG 121	LTG			1200	1560			HEAT	HEAT CABLE OUT FALL	30	1	34	
a	35	1	20	LTS EQT STG 122	LTG					1500			SPACE	-	1	36	
a	37	1	20	LTS WASH 121	LTG	1500	1800					MOTR	PRESSURE WASHER	60	3	38	a
a	39	1	20	LTS SAND 122	LTG			900	1800			MOTR	^^^	60	3	40	a
b	41	1	20	CAMERA	MISC					1800		MOTR	^^^	60	3	42	a
TOTAL V-A						10910		12210		9900		33,020 VA					
TOTAL AMPS						91		102		83		92 A					
A.I.C. RATING: 10,000																	
TOTAL CONNECTED LOAD IN KVA:						14.40	5.80	7.00	1.35	0.00	0.00	3.82	2.00	33.0 KVA		92 A	
DEMAND LOAD IN KVA:						18.00	5.80	7.00	1.35	0.00	0.00	4.78	2.00	38.9 KVA		108 A	
PANEL NOTES:												PANEL OPTIONS:					
a CIRCUIT LOAD TAKEN FROM POSTED PANEL SCHEDULE.												MAIN LUGS ONLY					
b LOAD INFORMATION IS UNKNOWN.																	
c 30mA GFI TYPE BREAKER.																	

SHEET NOTES:

- INSTALL NEW 30A, 1P CIRCUIT BREAKER IN SPACE INDICATED IN EXISTING PANEL 'NDP' IN ARFF BUILDING. CIRCUIT BREAKER SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION. THE EXISTING PANEL IS A SIEMENS TYPE S1, 208Y/120V, 3Ø, 4W, 400A MAIN BREAKER/SERVICE DISCONNECT. THE NEW CIRCUIT BREAKER SHALL BE COMPATIBLE WITH AND LISTED FOR USE IN THE EXISTING PANEL BOARD AND SHALL HAVE A MINIMUM SHORT CIRCUIT AIC RATING TO MATCH THE LOWEST RATED EXISTING DEVICE IN THE PANEL.

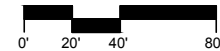
REVISIONS		DATE	DESCRIPTION
1			
2			
3			
4			
5			



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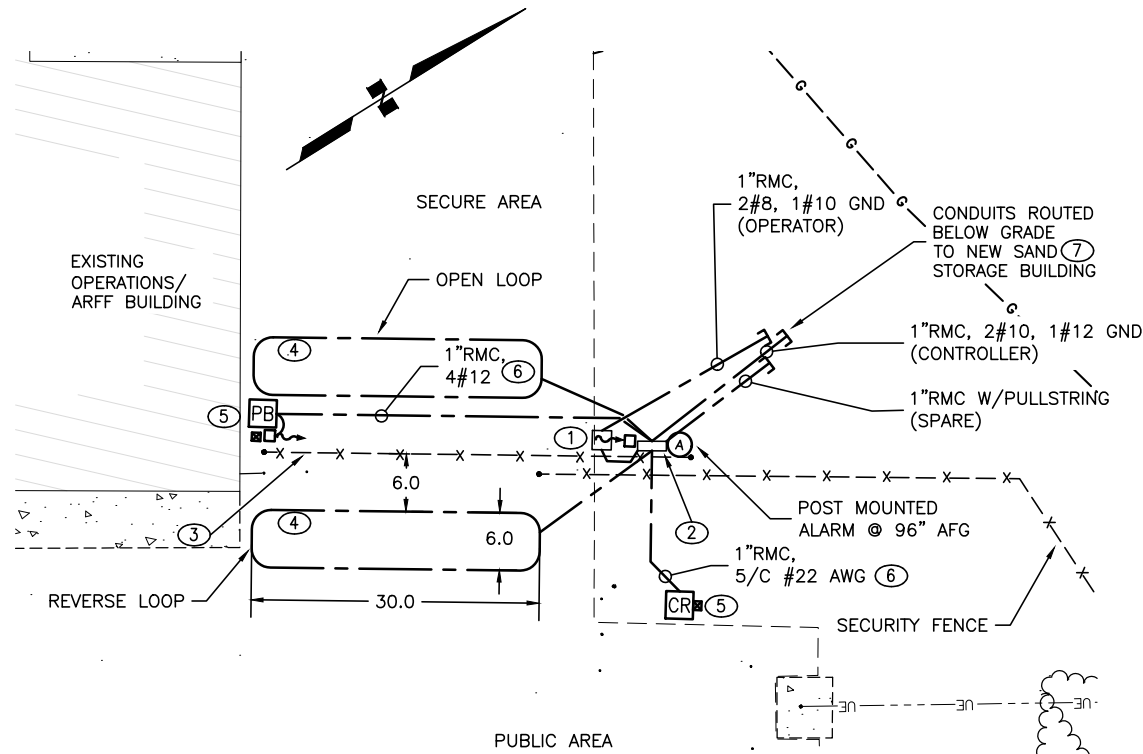
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SAND STORAGE BUILDING		KENAI MUNICIPAL AIRPORT		KENAI, ALASKA	
SHEET TITLE PANEL SCHEDULES					
SHEET E5.01					
DRAWN BY: BC		CHECKED BY: DO,TEH			
DATE: 08/05/2020		SCALE: AS SHOWN			
JOB NUMBER: 20-009-01					

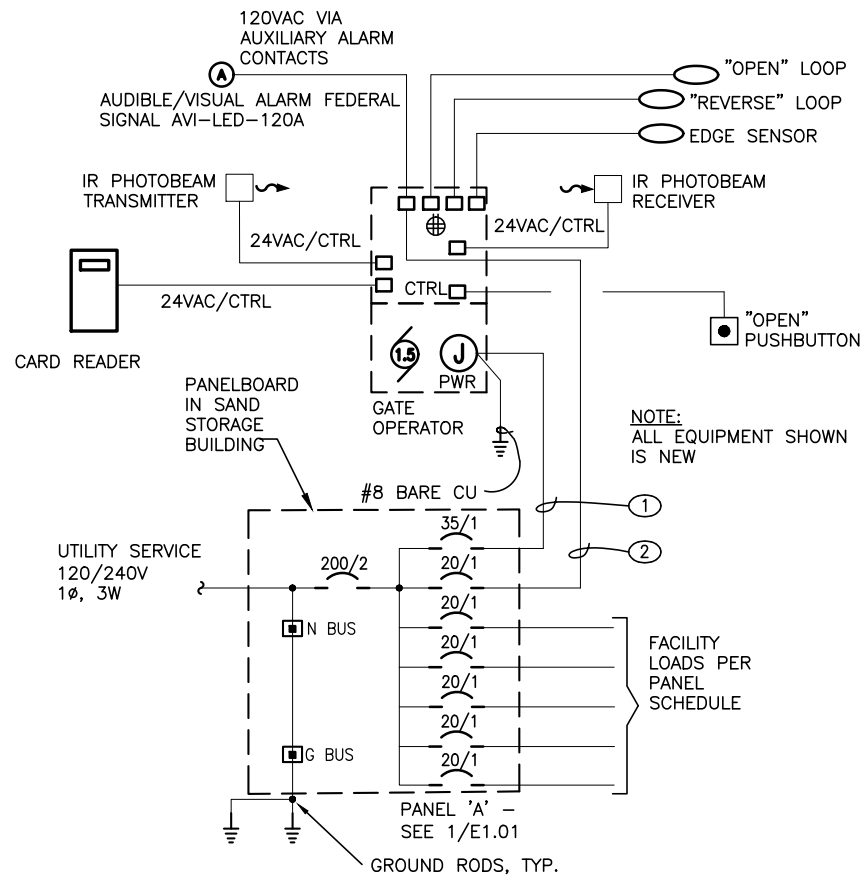


THIS IS A STANDARD LEGEND, ALL SYMBOLS SHOWN ON LEGEND
ARE NOT NECESSARILY ON THE DRAWING(S).

SHEET TITLE	
SLIDEING GATE ELECTRICAL LEGEND & SITE PLAN	
SHEET	
E6.00	
DRAWN BY: JHE	CHECKED BY: EWC
DATE: 8/5/2020	SCALE: AS SHOWN
JOB NUMBER: 20-009-01	



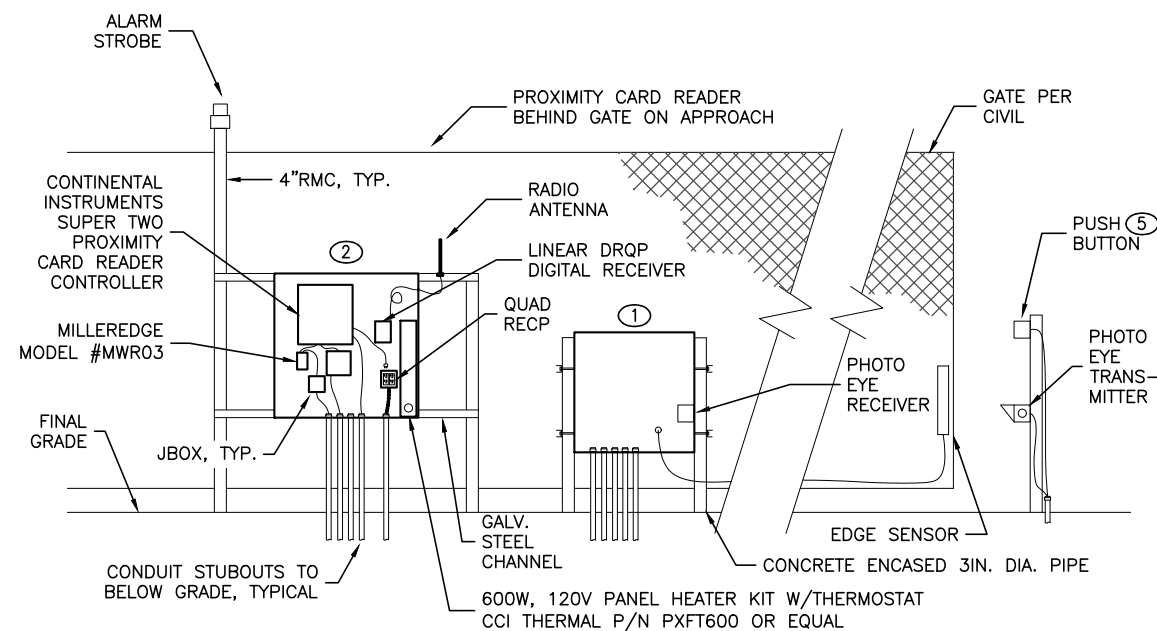
1 GATE ELECTRICAL PLAN
E6.01 SCALE: 1" = 10.0



2 ONE-LINE DIAGRAM - NEW GATE
E6.01 NO SCALE

SEQUENCE OF OPERATIONS:

- "OPEN" LOOP: GATE OPENS WHEN LOOP IS TRIGGERED AND REMAINS OPEN FOR A PRESET TIME.
- "REVERSE" LOOP: IF GATE IS CLOSING, WHEN LOOP IS TRIGGERED GATE RETURNS TO OPEN POSITION.
- PHOTOBEAM: IF GATE IS CLOSING AND PHOTOBEAM IS BROKEN, GATE RETURNS TO OPEN POSITION.
- PUSHBUTTON: WHEN OPERATED, GATE OPENS FOR PRESET TIME. TIMER STARTS WHEN PUSHBUTTON IS RELEASED.
- CARD READER: ACTIVATION OF CARD READER OPENS GATE FOR PRESET TIME.
- AUDIBLE/VISUAL ALARM ACTIVATES DURING GATE OPERATION. NOTE: VERIFY AUXILIARY CONTACT RATINGS. PROVIDE INTERPOSING RELAY AS REQUIRED.



3 GATE CONTROLLER/OPERATOR ELEVATION
E6.01 NO SCALE

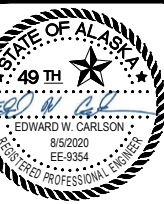
SHEET NOTES: ①

- NEW MOTORIZED GATE OPERATOR: 1.5HP, 120V, 1Ø, 3W. BASIS OF DESIGN IS LIFTMASTER SL59515UL OR APPROVED EQUAL RATED 26A WITH ACCESSORY OUTLETS. PROVIDE 35A/1P BREAKER FOR CIRCUIT. SEE SPECIFICATION SECTION 32 31 13.
- NEW 3x4x1FT NEMA 4X STAINLESS STEEL POST MOUNTED GATE CONTROLLER CABINET, HOFFMAN P/N A48H3612SSLP OR EQUAL. PROVIDE CONTINENTAL ACCESS SUPERTWO HID ICLASS PACKAGE CA-2PACK-I FOR INTEGRATION WITH EXISTING CA4K ACCESS CONTROLS. PROVIDE ADDITIONAL READER TO AIRPORT OPERATIONS AS SPARE. SEE DETAIL 3/E6.01.
- NEW 30FT SLIDE GATE PER CIVIL.
- NEW 6X32FT LOOP DETECTOR. 1" SCH 40 PVC, MIN. #18 AWG COPPER.
- NEW POST MOUNTED ACCESS CONTROL DEVICE AT 4.0FT AFG.
- MANUFACTURER'S RECOMMENDED MULTI-CONDUCTOR CABLE MAY BE USED AT CONTRACTOR'S OPTION FOR LOW VOLTAGE WIRING.
- SEE 2/E6.00 FOR TRENCHING DETAIL.

GATE LEGEND:

- CR CARD READER
- PHOTO BEAM RECEIVER
- PHOTO BEAM TRANSMITTER
- K SECURITY KEYPAD
- A AUDIBLE/VISUAL ALARM
- PB PUSH BUTTON

REVISIONS	DATE	DESCRIPTION
1		
2		
3		
4		
5		



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SAND STORAGE BUILDING
KENAI MUNICIPAL AIRPORT
KENAI, ALASKA

SHEET TITLE	
SLIDING GATE PLAN AND DETAILS	
SHEET	
E6.01	
DRAWN BY:	CHECKED BY:
JHE	EWC
DATE:	SCALE:
8/5/2020	AS SHOWN
JOB NUMBER:	
20-009-01	