CAPITAL TRANSIT VALLEY TRANSFER STATION

VOLUME III of III

Contract No. BE20-268

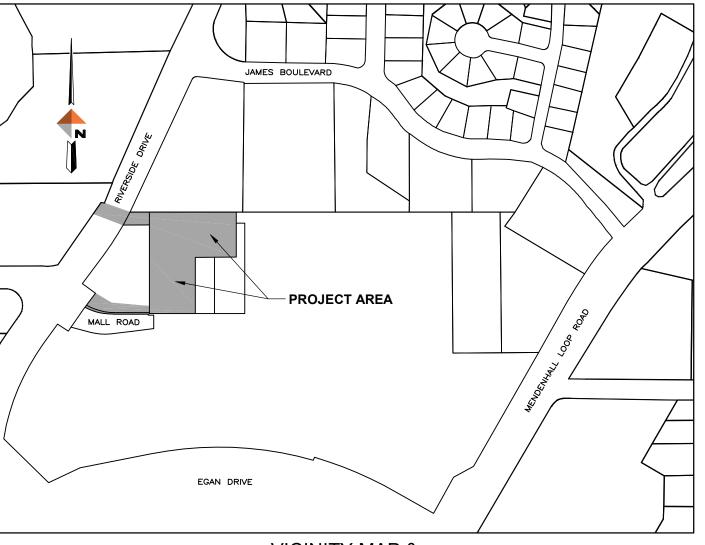
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CAPITAL TRANSIT VALLEY TRANSFER STATION **CONTRACT NO. BE20-268**

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VICINITY MAP & PROJECT AREA

DOWL Juneau, Alaska 99801 907-780-3533

PREPARED BY:

PREPARED FOR:



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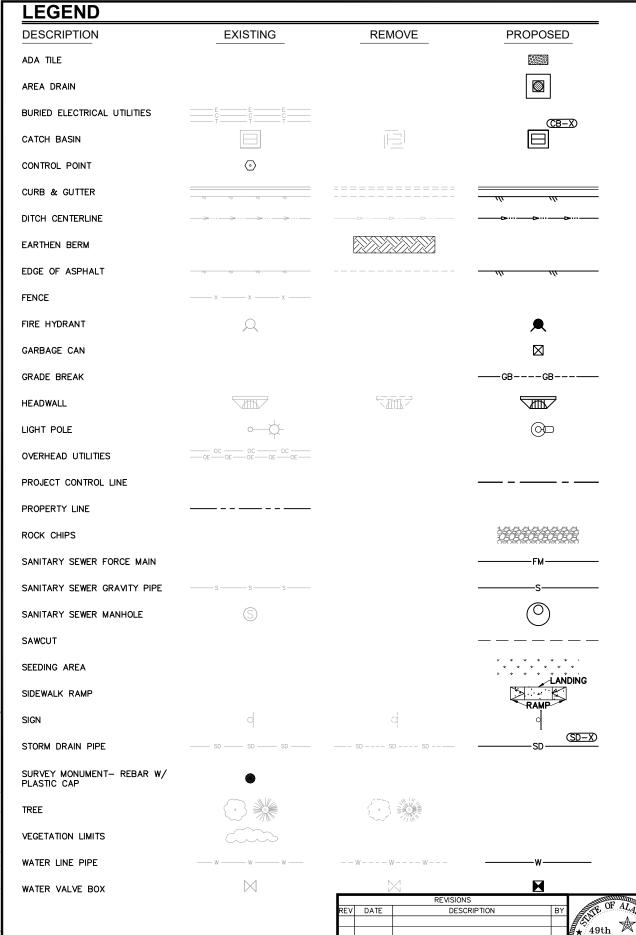
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ABBREVIATIONS

AC	ASPHALT CONCRETE
ADOT&PF	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
ВОР	BEGINNING OF PROJECT
СВ	CATCH BASIN
СМР	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
CONC	CONCRETE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIA	DIAMETER
EOP	END OF PROJECT
FL	FLOW LINE
FG	FINISHED GRADE
GV	GATE VALVE
INV	INVERT
LG	LIP OF GUTTER
LT	LEFT
мн	MANHOLE
MN	MAGNETIC NAIL
мте	MATCH TO EXISTING
NO	NUMBER
NTS	NOT TO SCALE
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY
PVI	POINT OF VERTICAL INTERSECTION
POC	POINT ON CURVE
PCC	POINT OF COMPOUND CURVE
PVC	POLYVINYL CHLORIDE PIPE
ROW	RIGHT-OF-WAY
RT	RIGHT
SHLD	SHOULDER
STA	STATION
STD	STANDARD
TBC	TOP BACK OF CURB
TBG	TOP BACK OF GUTTER
TP	TOP OF PAVEMENT
TRMP	TOP OF RAMP
TSW	TOP OF SIDEWALK
TTCP	TEMPORARY TRAFFIC CONTROL PLAN
UD	UNDER DRAIN
ABBREVIATIONS TO BE PERIODS	USED WITHOUT

DOWL

5368 Commercial Boulevard

907-780-353

AECL848

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GENERAL NOTES

- THE 4TH EDITION OF THE CBJ STANDARD DETAILS, DATED AUGUST 14 2011, IS MADE PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.
- 2. EXISTING PIPE LOCATIONS ARE DERIVED FROM CBJ AS-BUILTS OR FIELD LOCATED. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. FOR UNDERGROUND UTILITY LOCATES CALL "DIAL BEFORE YOU DIG" AT 586-1333 AND "ALASKA DIGLINE"
- 3. CONTRACTOR SHALL ENSURE UNINTERRUPTED GARBAGE PICKUP AND DAILY MAIL SERVICE TO ALL BUSINESSES EFFECTED BY THIS PROJECT.
- 4. GRADING AND LAYOUT INFORMATION IS SUBJECT TO MINOR REVISIONS BY THE ENGINEER
- 5. LOCATION OF CULVERTS AND CULVERT LENGTHS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER.
- 6. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES (LONI VANKIRK AT 723-4975) OF PROPOSED WATER SERVICE CONNECTION AT RIVERSIDE DRIVE ATLEAST 7 DAYS PRIOR TO THE WORK AND SHALL COORDINATE THE LIVE TAP WITH WITH THE WATER UTILITY. THE RIVERSIDE DRIVE WATER MAIN SHALL NOT BE TURNED OFF DURING THE WORK.
- 7. PROPERTY LINE LOCATIONS USED IN THESE PLANS ARE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT A BOUNDARY SURVEY, EXISTING RECORD PLATS DO NOT CLOSE WITH EACH OTHER IN SOME CASES. THE PROPERTY LINES SHOWN ON THESE PLANS ARE A BEST FIT APPROXIMATION OF CLOSURE.
- 8. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE, EXCEPT AS NOTED IN
- 9. CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. REBARS, CONCRETE NAILS, BRASS CAP MONUMENT AND ETC.) PRIOR TO CONSTRUCTION, REMONUMENT AFTER SURFACING IS REPLACED, AND SUBMIT A RECORD OF MONUMENT TO THE ENGINEER. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED
- 10. ALL ASPHALT PAVEMENT TO BE REMOVED AND DISPOSED OF SHALL BE DELIVERED TO A STOCKPILE AREA AT THE LEMON CREEK CITY PIT TO BE DESIGNATED BY THE ENGINEER. CONTACT THE ENGINEER FOR THE EXACT LOCATION OF THE
- 11. AEL&P, ACS, AND GCI WILL BE CONDUCTING WORK WITHIN THE PROJECT LIMITS TO RELOCATE UTILITIES AND UPGRADE THEIR RESPECTIVE SYSTEMS. THE CONTRACTOR SHALL COORDINATE ITS ACTIVITIES WITH EACH UTILITY COMPANY AND PROVIDE ACCESS AS NECESSARY FOR UTILITY COMPANIES TO CONDUCT THEIR WORK.
- 12. THE CONTRACTOR SHALL RESTRICT ITS COMPACTION AND OTHER VIBRATION INDUCING OPERATIONS AS NECESSARY TO ENSURE NO DAMAGE OCCURS TO ADJACENT BUILDINGS OR STRUCTURES. REFER TO SECTION 01530, ARTICLE 1.7 FOR FURTHER REQUIREMENTS
- 13. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT, OR OPERATE EQUIPMENT WITH ITS TRACKS OR WHEELS PLACED ON PRIVATE PROPERTY, WITHOUT WRITTEN APPROVAL OF THE PROPERTY OWNER.
- 14. UNLESS APPROVED BY ASIANA GARDEN, NO WORK SHALL BE PERFORMED WITHIN THE PARKING LOT AND DRIVEWAY ADJACENT TO MALL ROAD BETWEEN THE NORMAL BUSINESS HOURS OF 11AM AND 9PM M-F, 12PM-9PM SATURDAY, OR 12PM-8PM SUNDAY. A MINIMUM DRIVEWAY WIDTH OF 20-FT SHALL BE MAINTAINED AT ALL TIMES UNLESS APPROVED BY THE OWNER. A MINIMUM OF 7 DAYS NOTICE SHALL BE PROVIDED BEFORE ANY WORK IS PERFORMED.
- 15. UNLESS APPROVED BY NAPA, A MINIMUM OF 48 HOURS NOTICE SHALL BE REQUIRED BEFORE COMMENCEMENT OF WORK ADJACENT TO THEIR BUILDING
- 16. "JUMPING JACK" OR SIMILAR TYPE COMPACTORS SHALL BE USED TO THOROUGHLY COMPACT ALL LAYERS OF MATERIAL AROUND WATER VALVE BOXES, CATCH BASINS, MANHOLES AND OTHER STRUCTURES.
- 17. FOR WORK REQUIRED BETWEEN 10:00PM AND 7:00AM, A CBJ NOISE PERMIT WILL BE REQUIRED. CONTACT CHARLIE FORD AT CBJ COMMUNITY DEVELOPMENT (586-0767) FOR APPROVAL

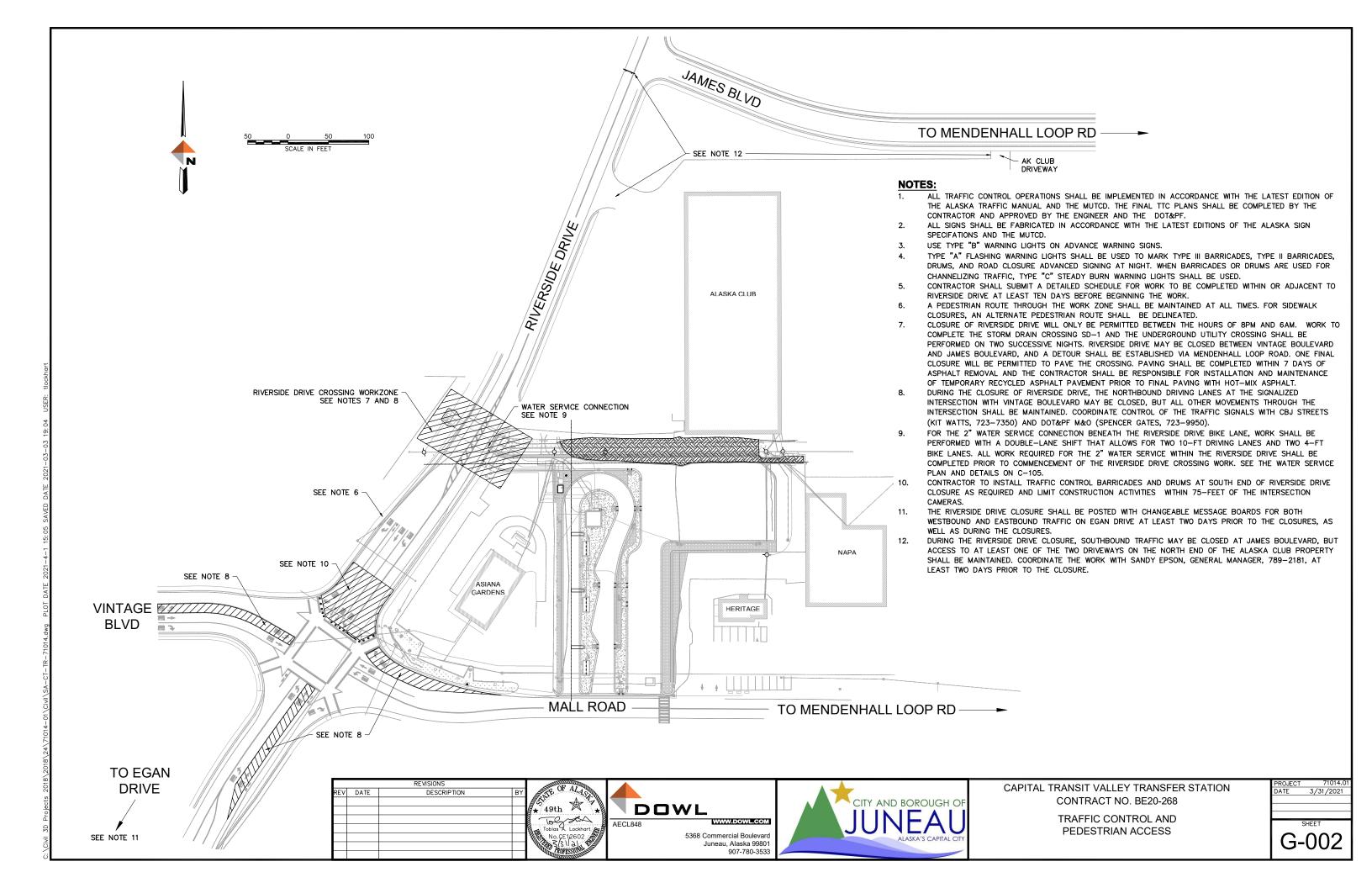
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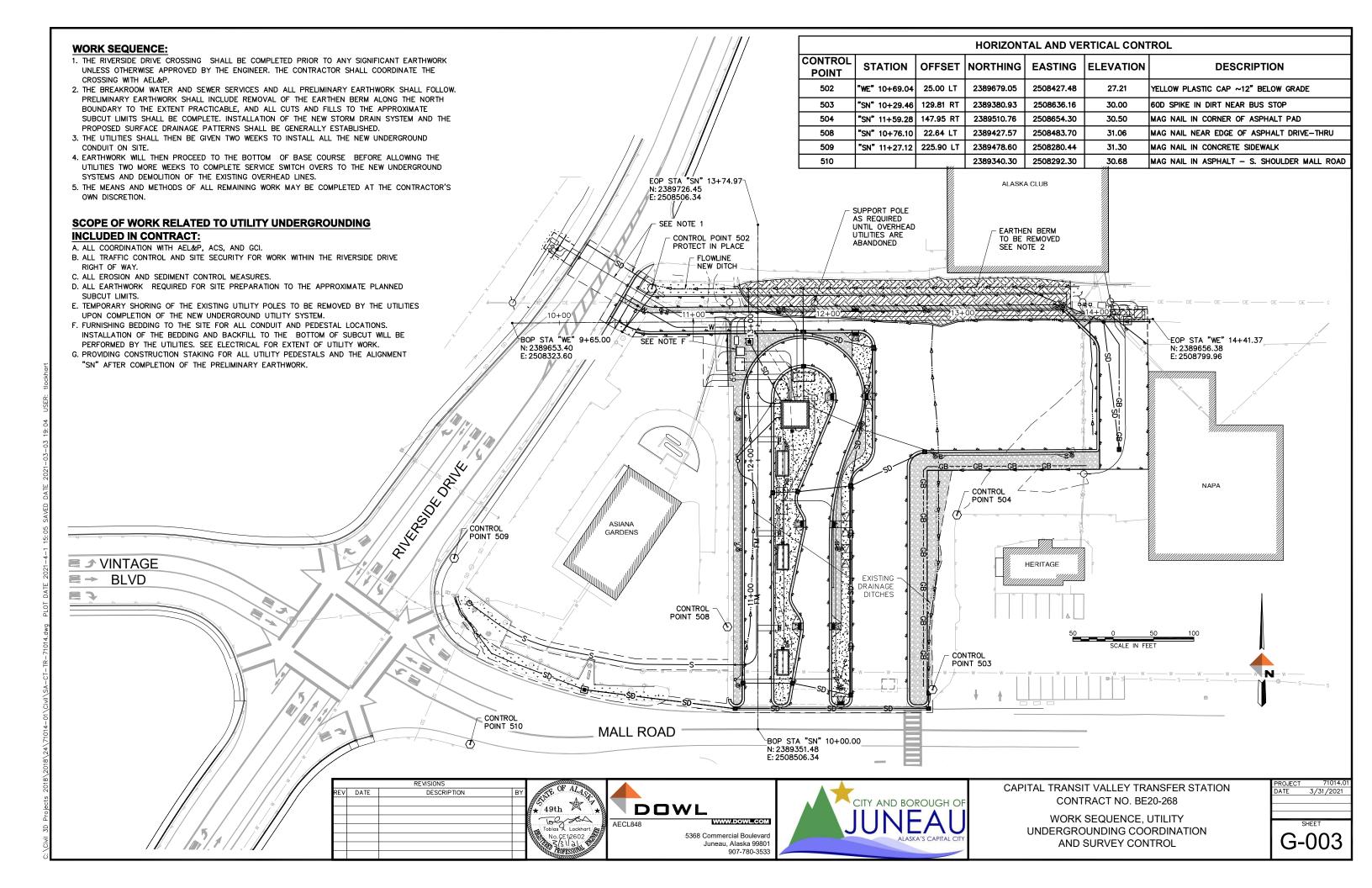
CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

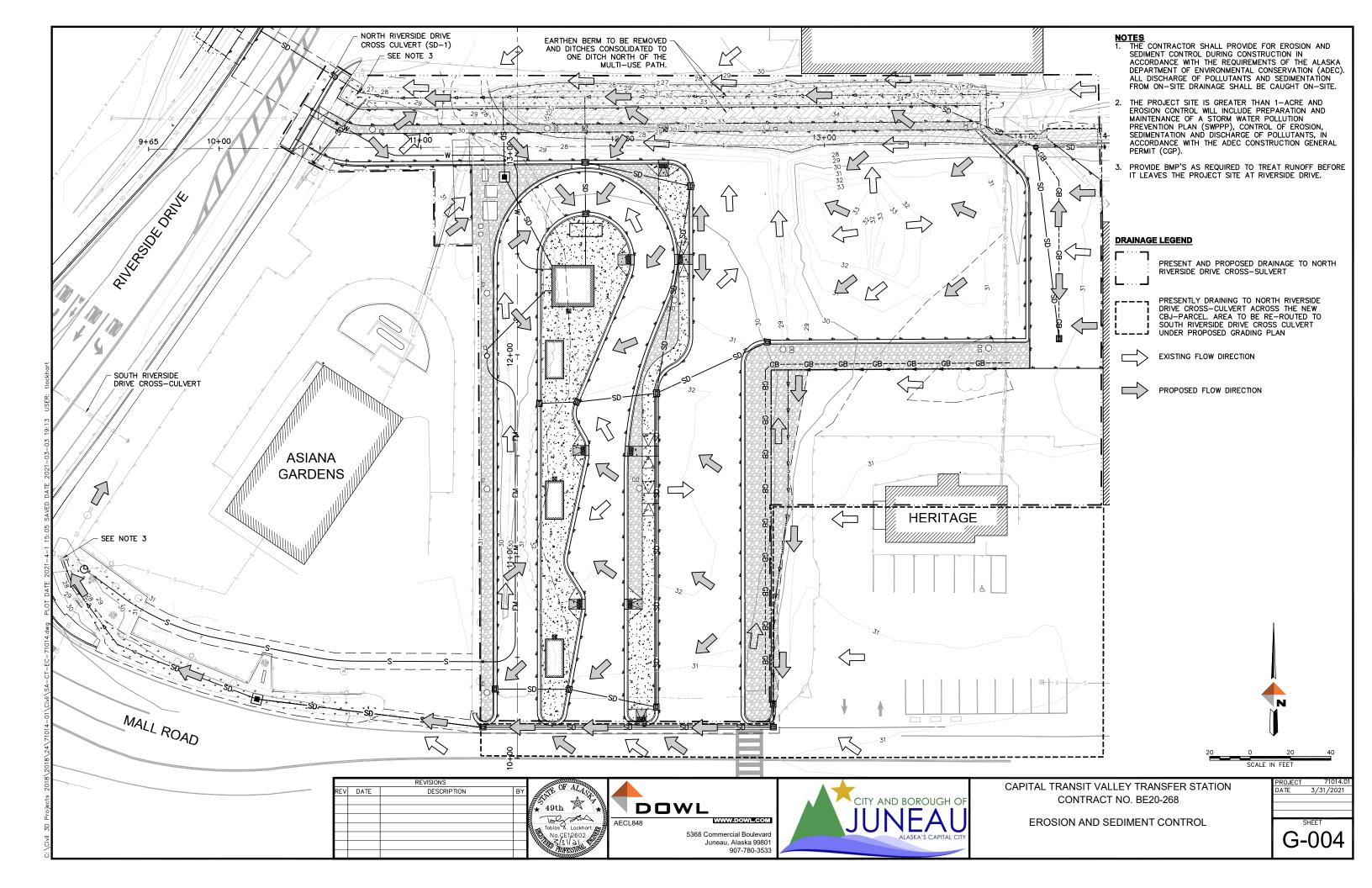
LEGEND, ABBREVIATIONS, AND GENERAL NOTES

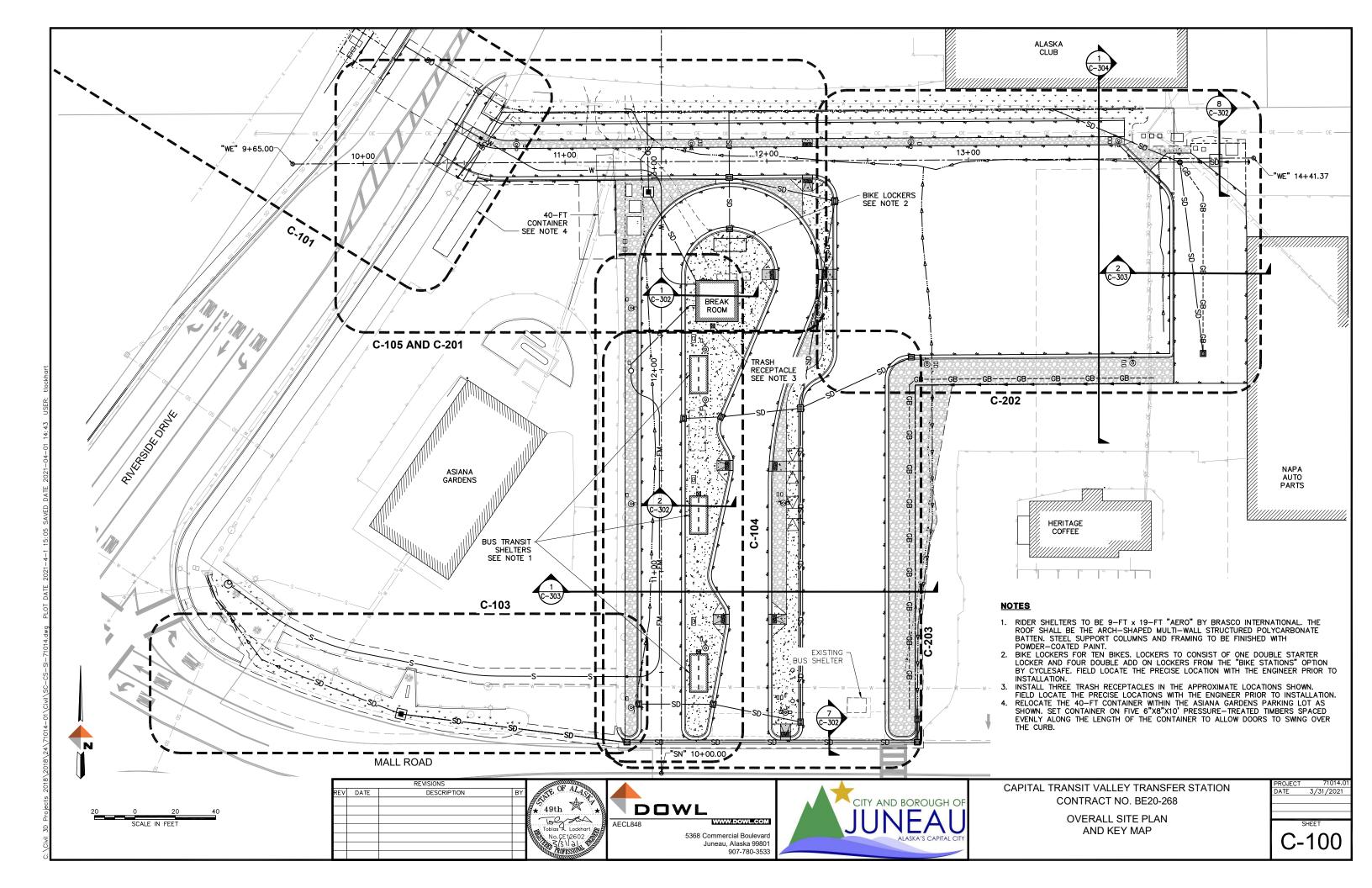
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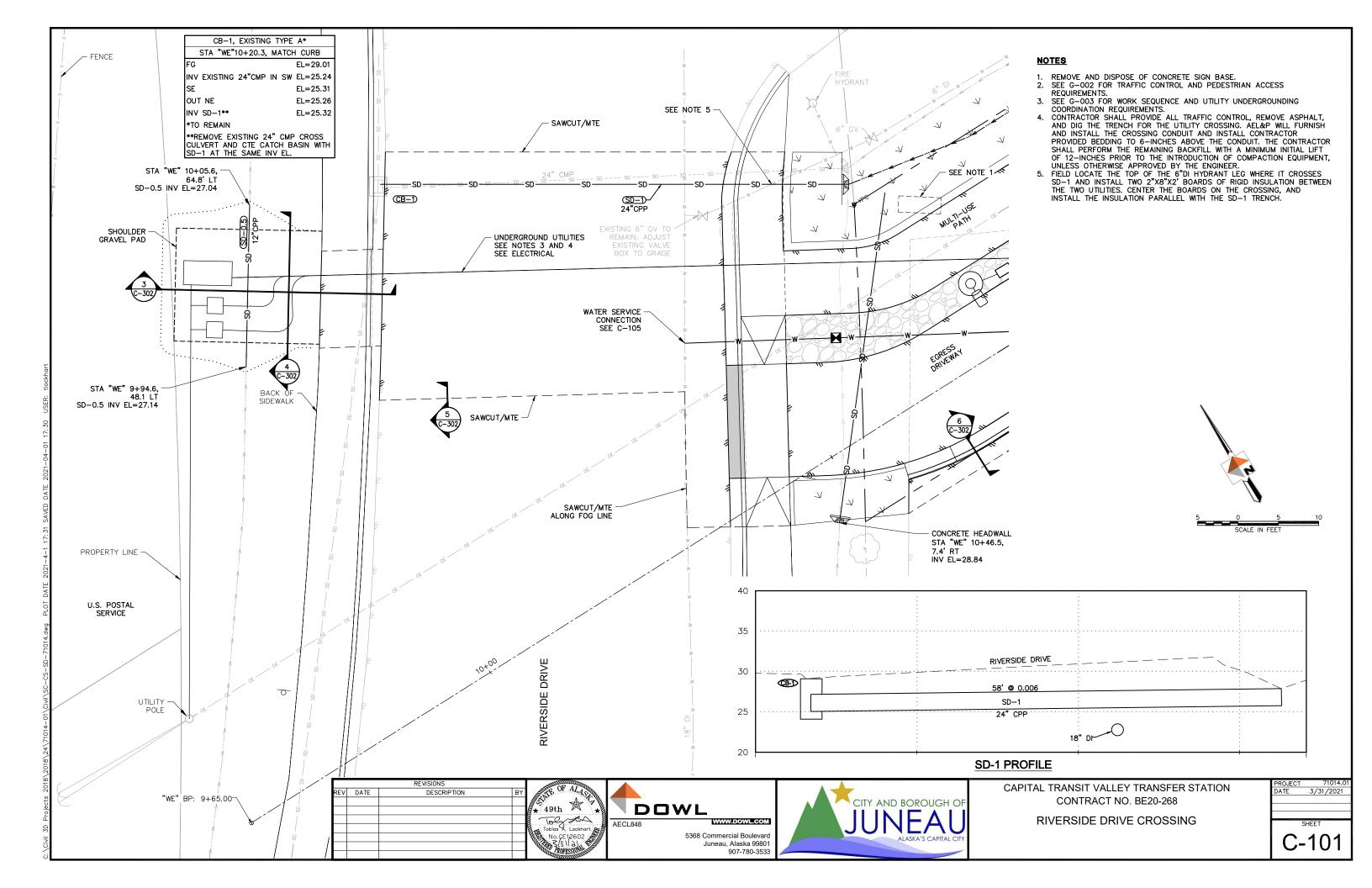
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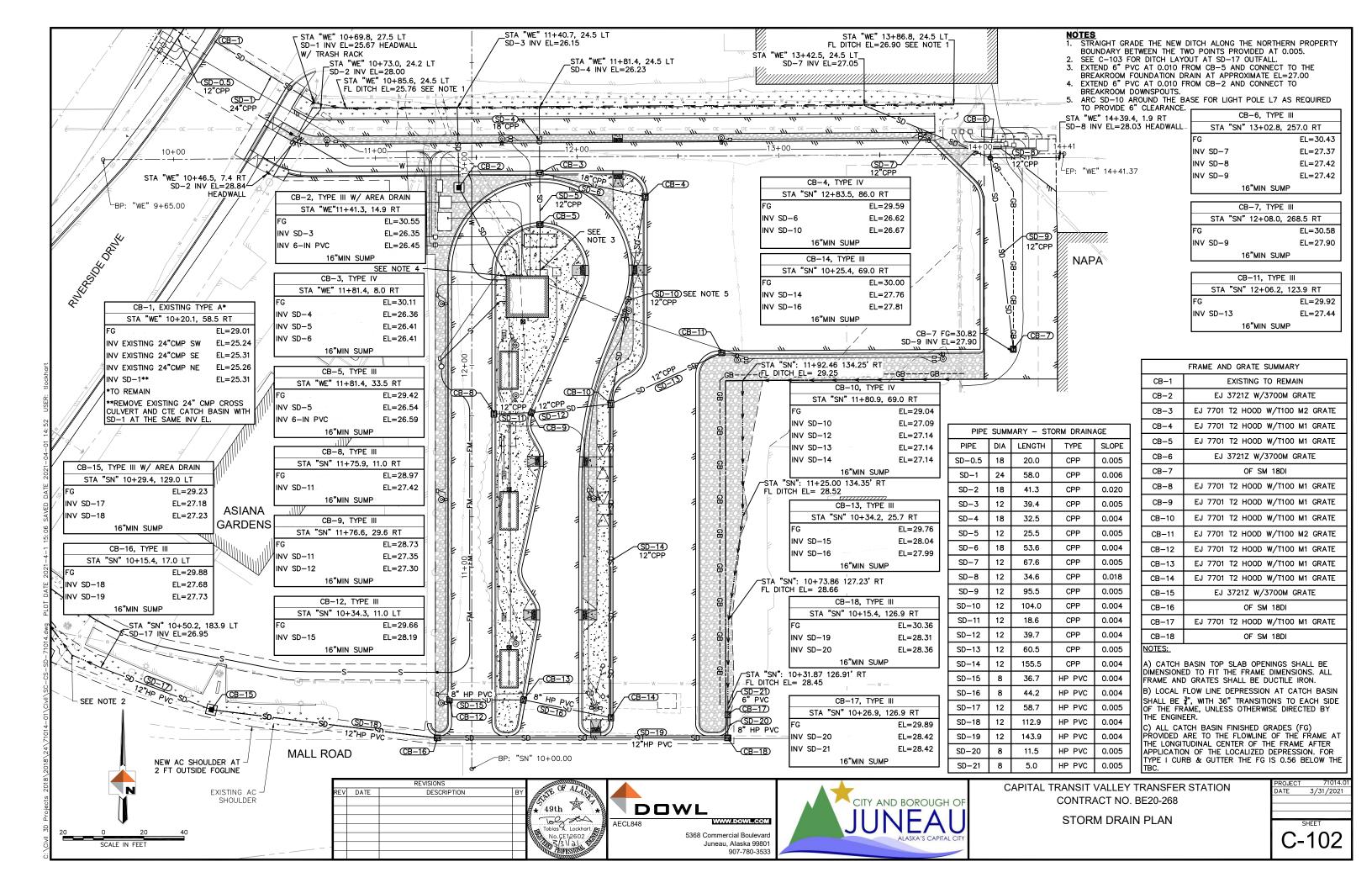


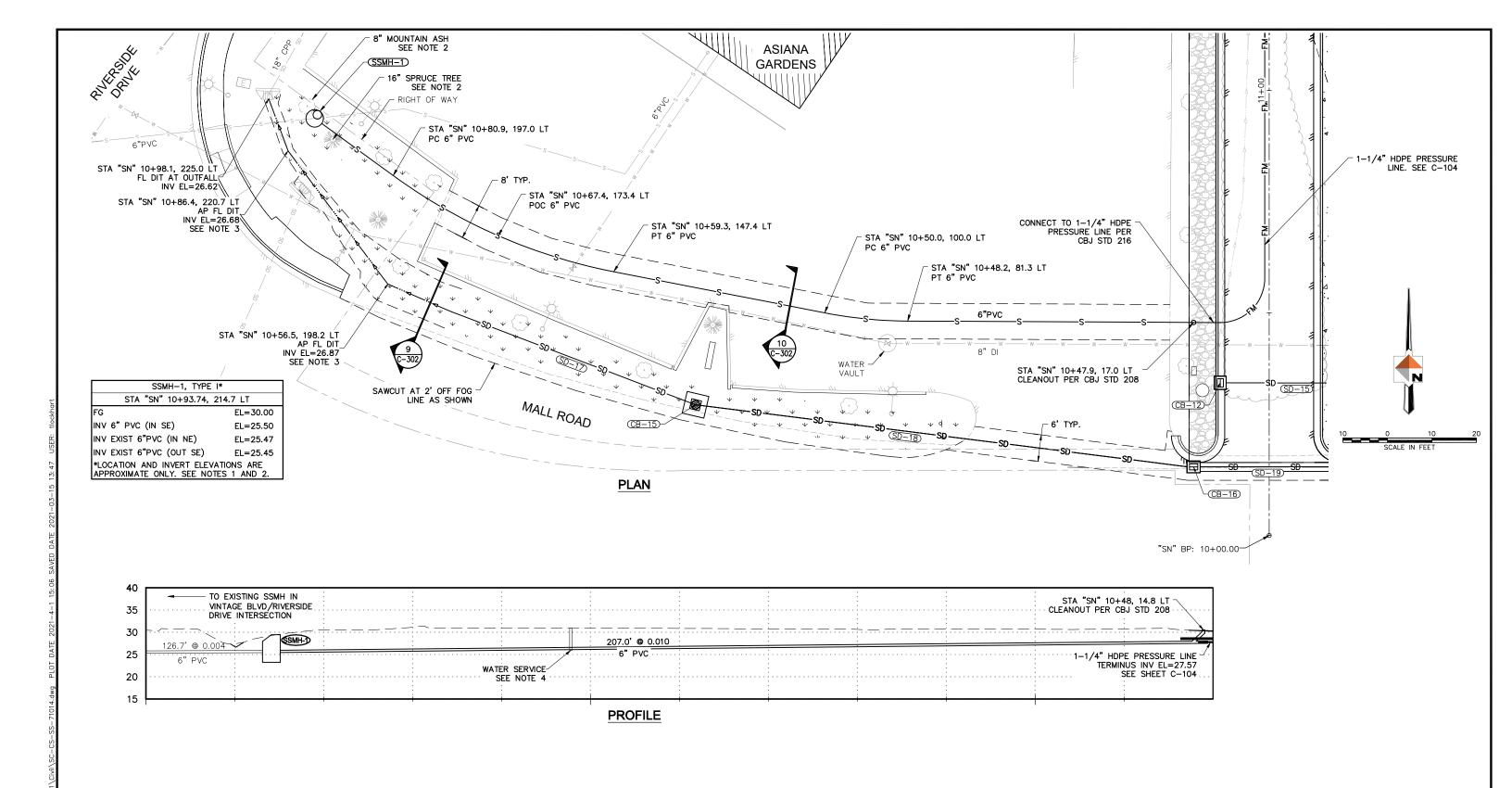












- FIELD LOCATE SSMH—1 AS REQUIRED TO CONNECT TO EXISTING 6" PVC WITHIN THE RIGHT OF WAY IN THE APPROXIMATE LOCATION SHOWN. ADJUST PIPE INVERT ELEVATIONS AS REQUIRED TO MATCH
- EXISTING.
 REMOVE AND DISPOSE OF TWO TREES ADJACENT TO SSMH-1.
 FIELD VERIFY LOCATION AND ALIGNMENT OF EXISTING SEWER
- SERVICE PRIOR TO TREE REMOVAL.
 ESTABLISH NEW DITCH BETWEEN THE OUTFALL FOR SD-17 AND
 THE 18" CPP TO RIVERSIDE DRIVE AT APPROXIMATELY 0.005 AS
- PROTECT EXISTING ASIANA GARDENS WATER SERVICE AS REQUIRED. EXISTING 8" DI WATER MAIN IS NOT SHOWN IN PROFILE FOR CLARITY, BUT ASSUMED TO BE AT 5-FT BURY.

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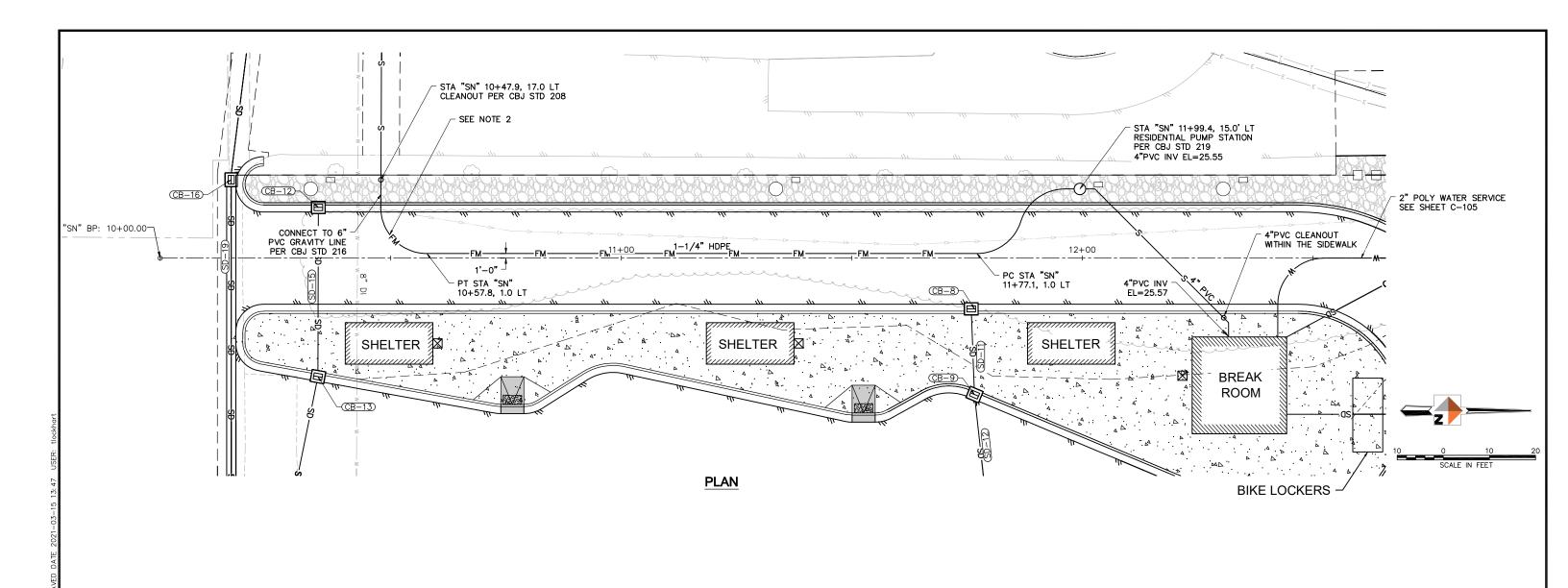
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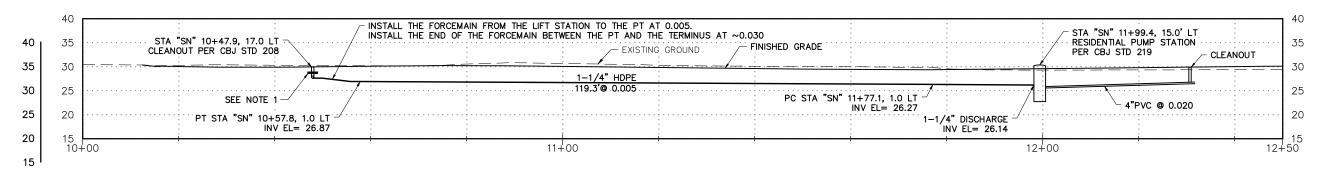


CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

SANITARY SEWER GRAVITY LINE PLAN AND PROFILE

PROJECT	71014.01
DATE	3/31/2021
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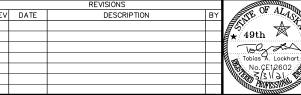




"SN" FORCE MAIN PROFILE

NOTES

- TWO LAYERS OF 2" RIGID BOARD INSULATION 4'X16' PLAN DIMENSIONS CENTERED ON PIP. STAGGER JOINTS BETWEEN PIECES TO ELIMINATE GAPS MORE THAN ONE 2" BOARD
- 2. MAINTAIN MINIMUM BENDING RADIUS OR GREATER PER MANUFACTURERS RECOMMENDATIONS.





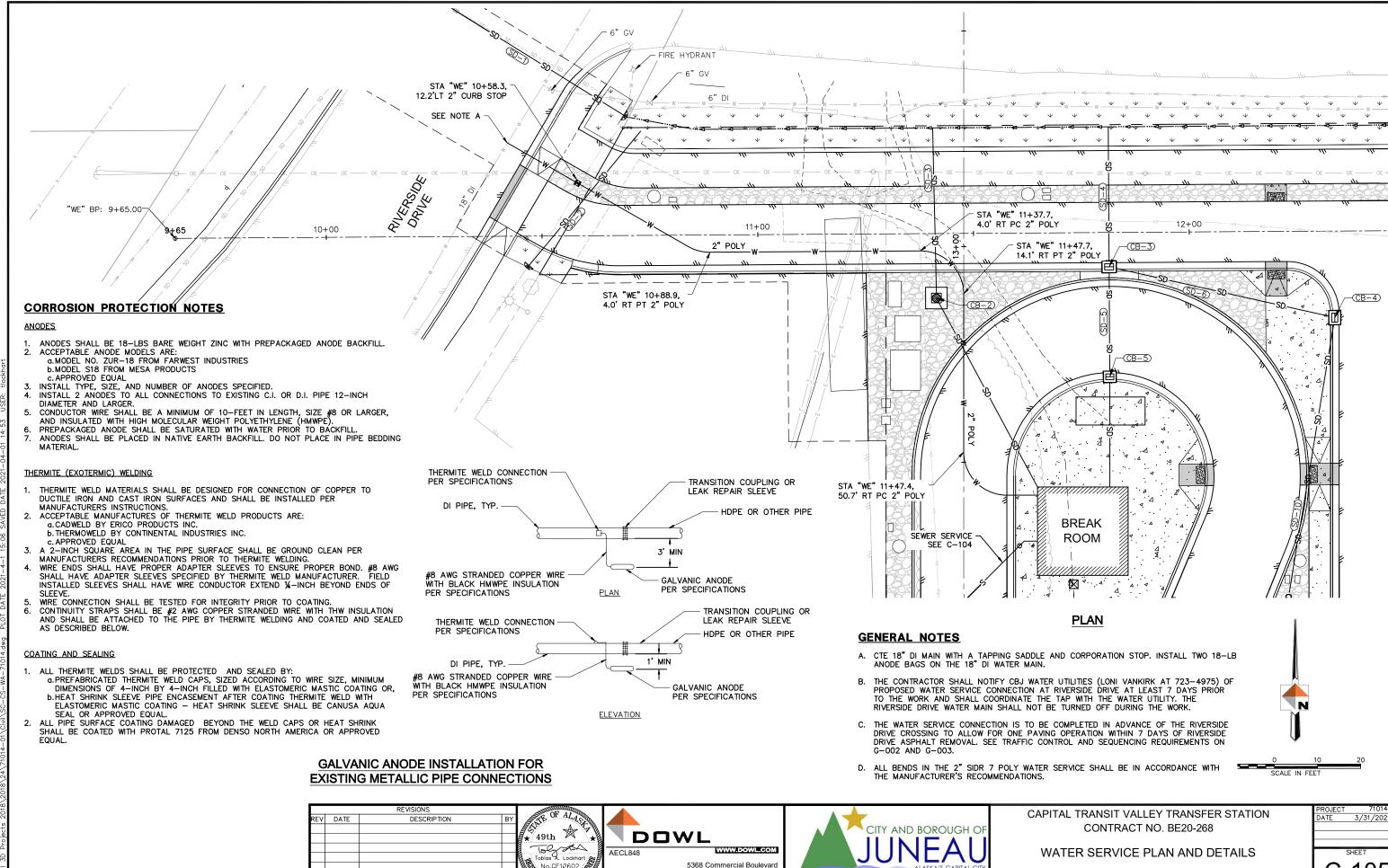




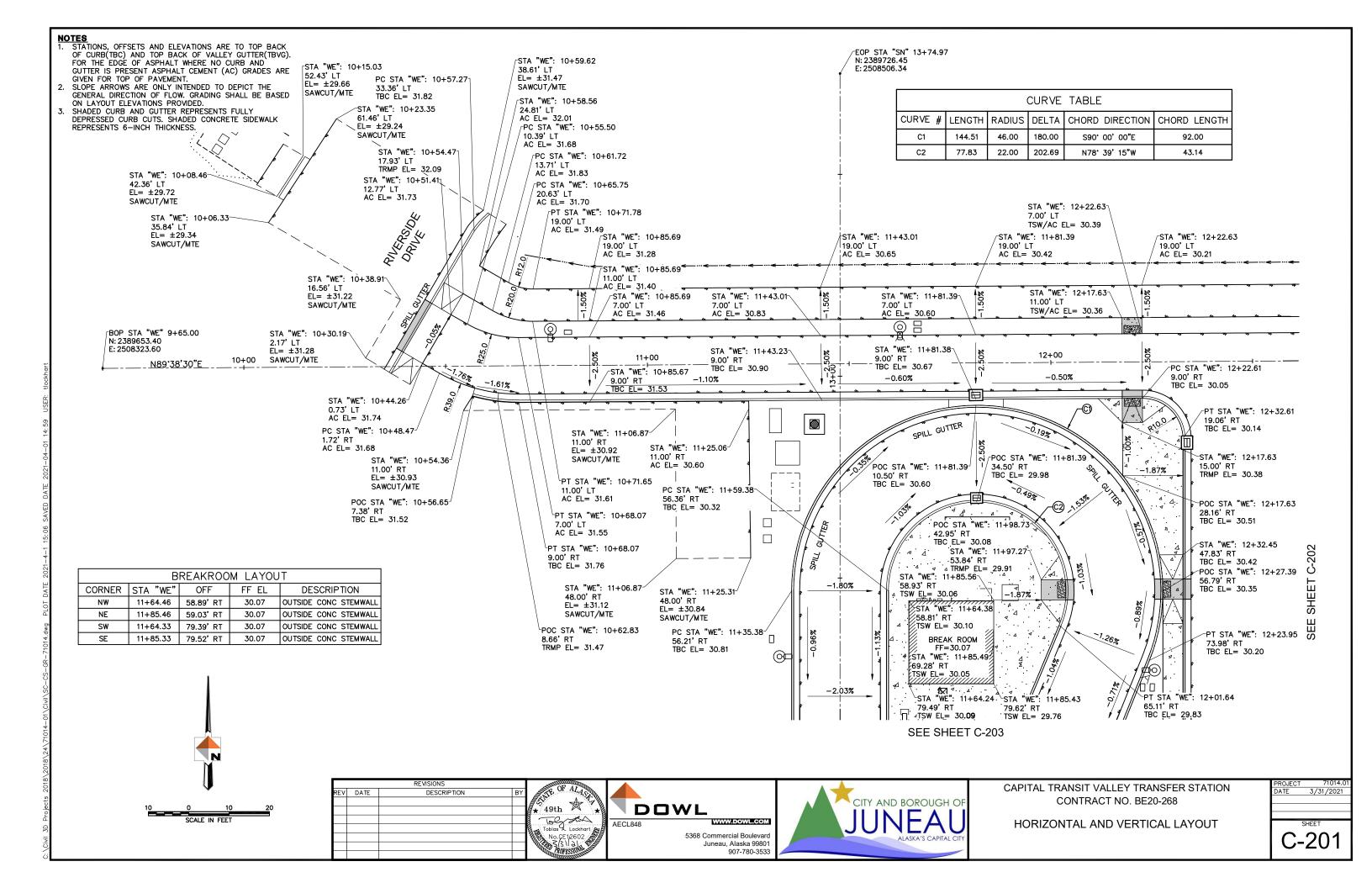
CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

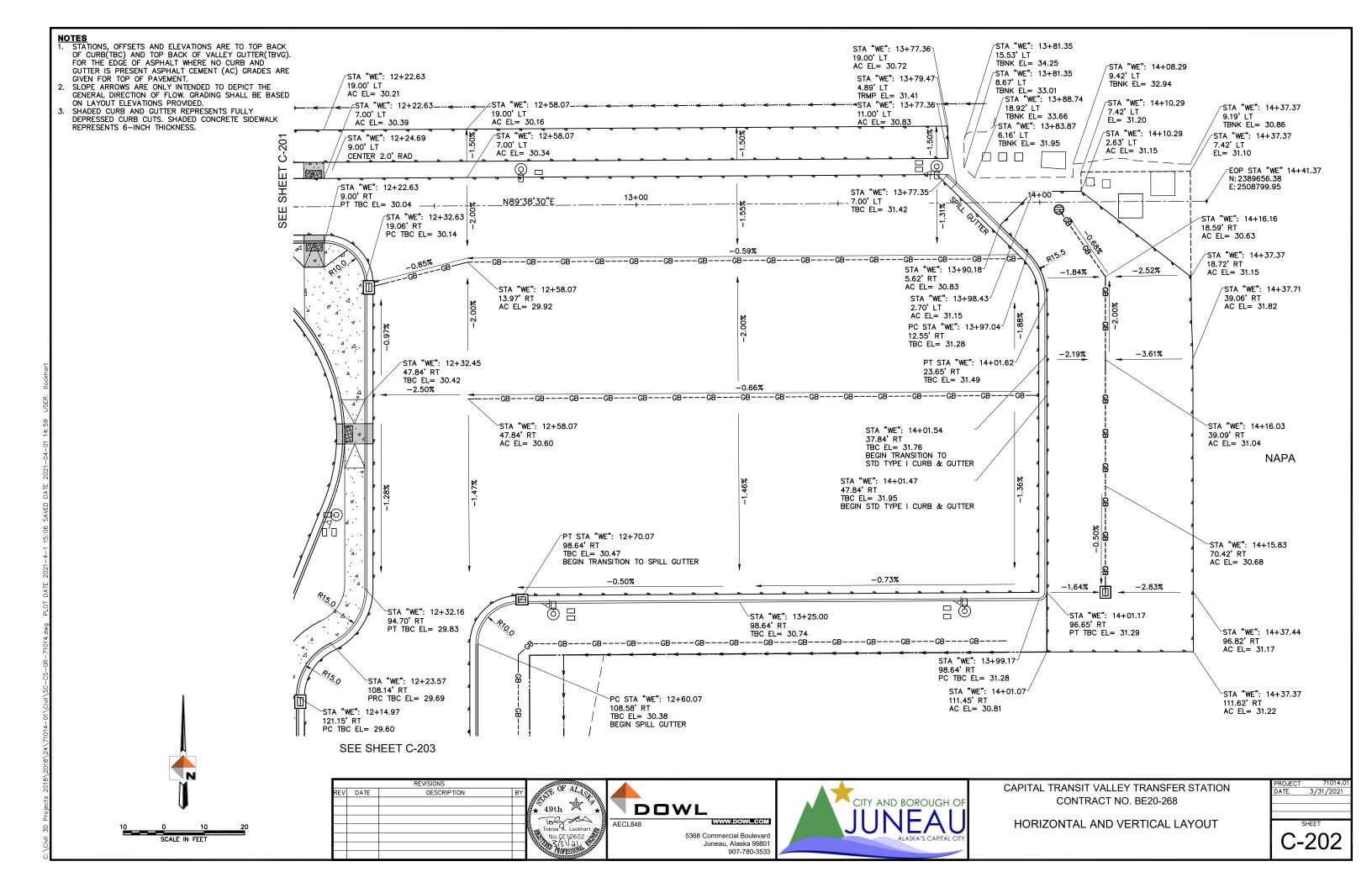
SANITARY SEWER PRESSURE LINE PLAN AND PROFILE

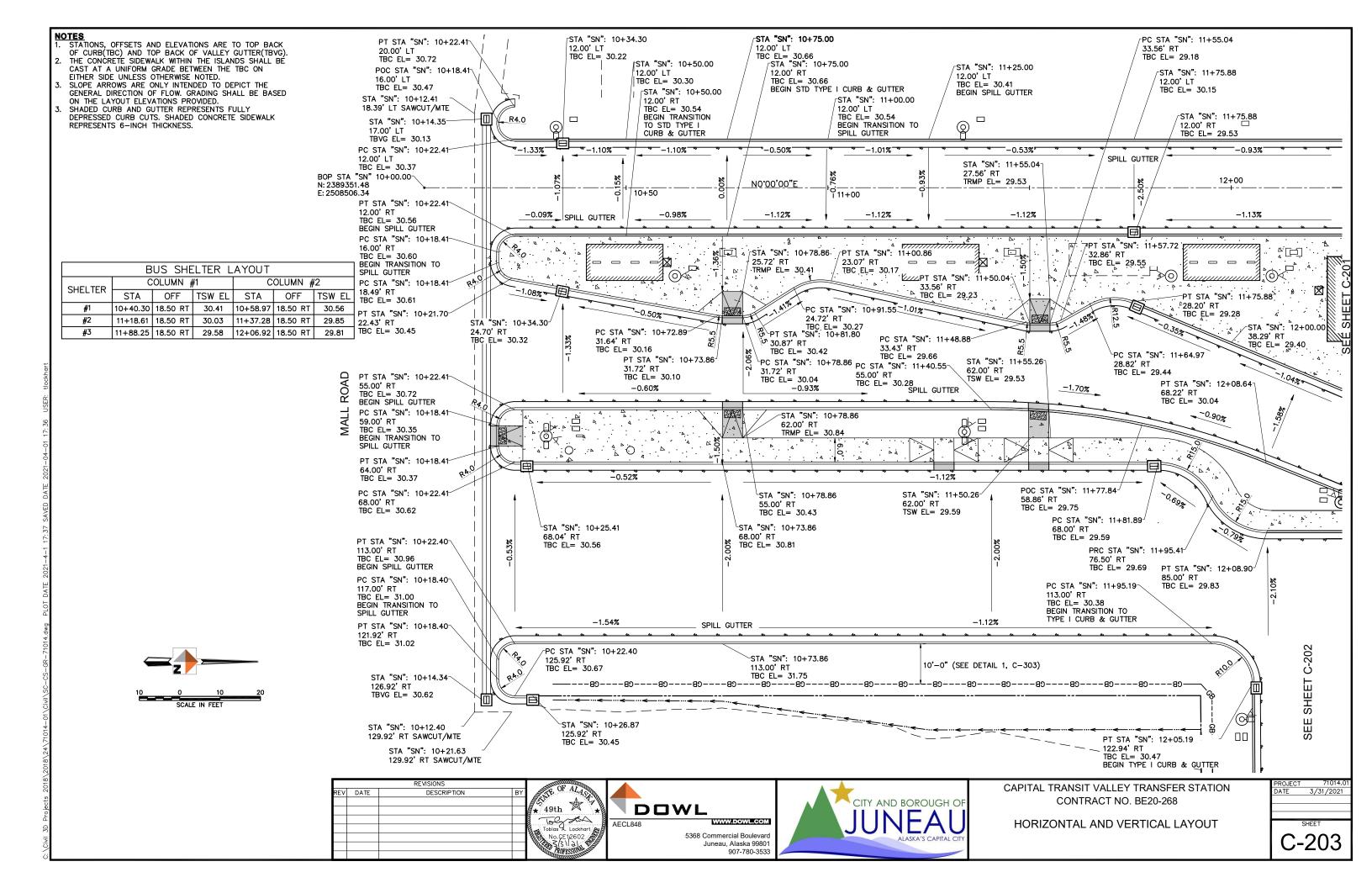
PROJECT	71014.01
DATE	3/31/2021
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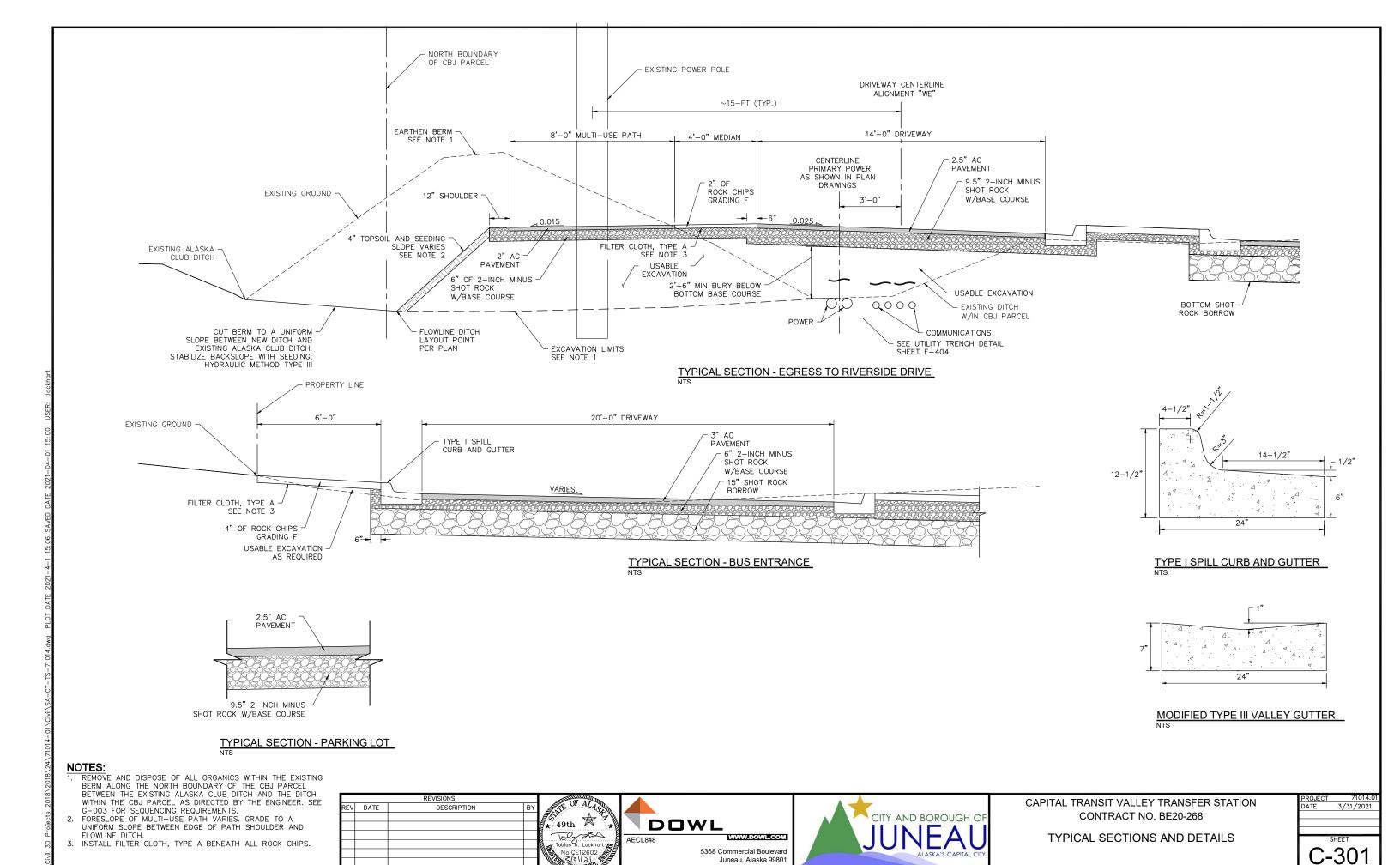


Juneau, Alaska 99801 907-780-3533

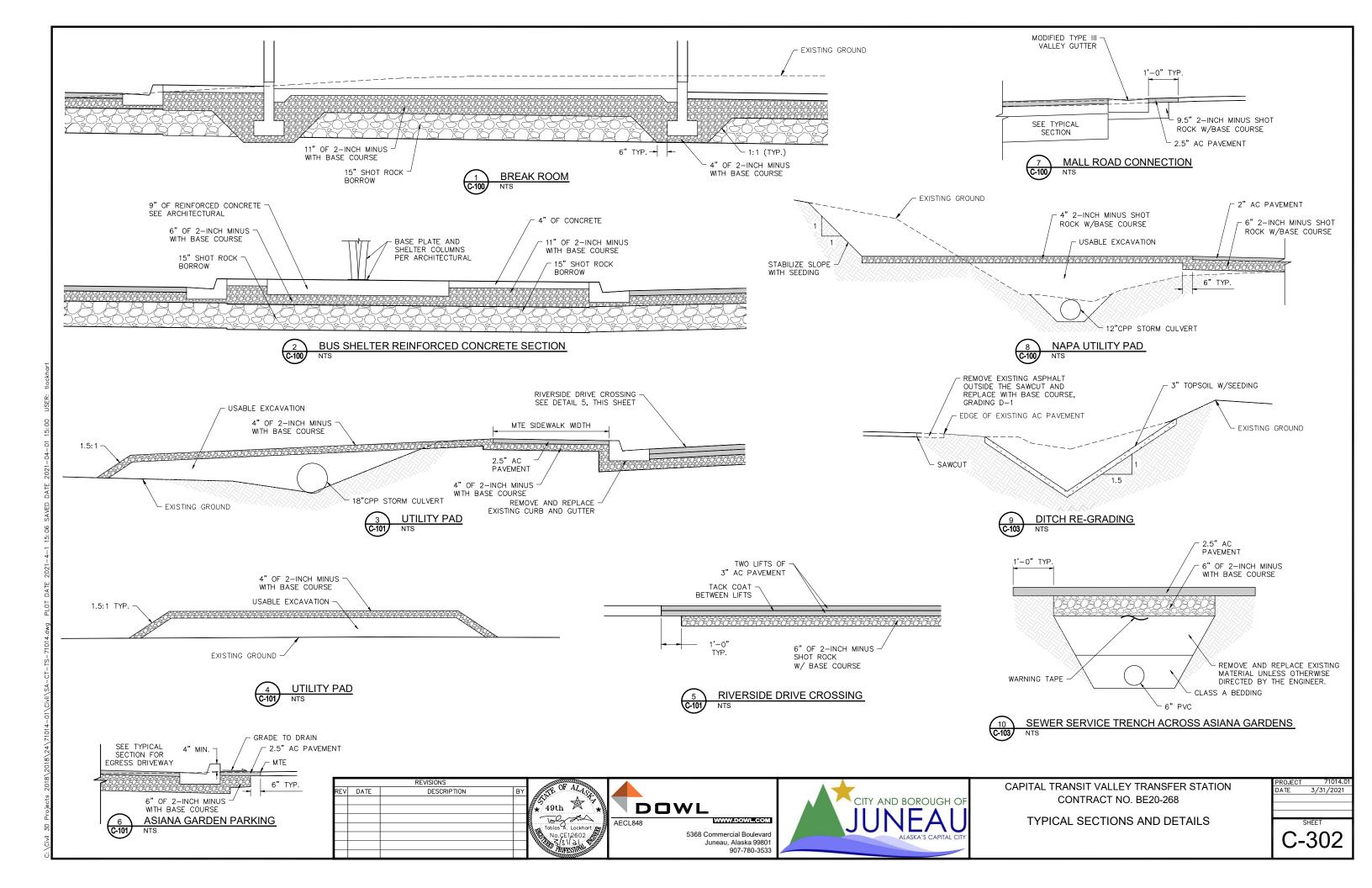


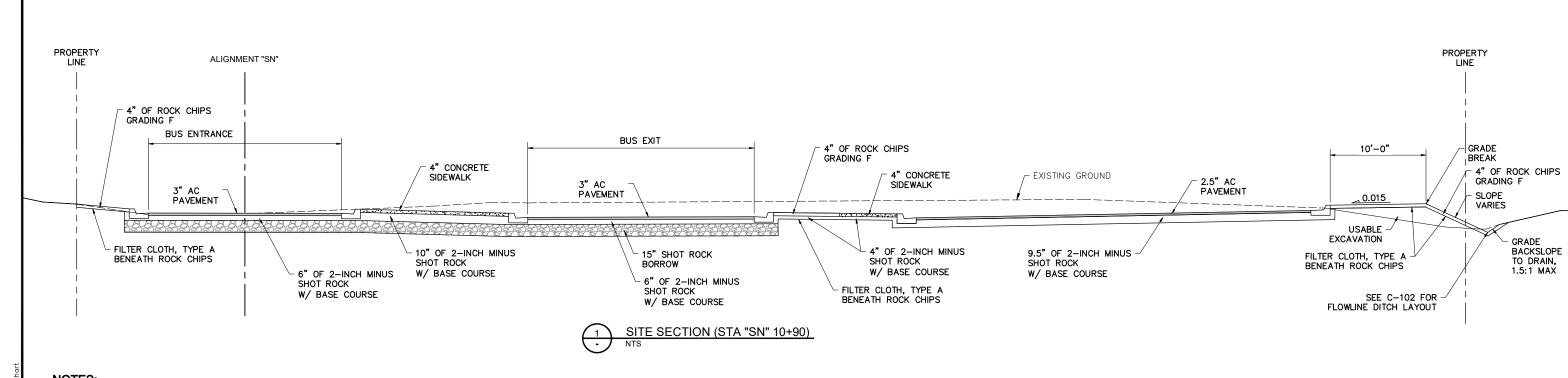






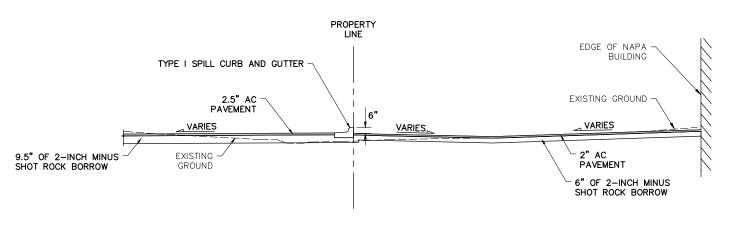
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NOTES:

1. INSTALL FILTER CLOTH, TYPE A BENEATH ALL ROCK CHIPS.



SITE SECTION (STA "SN" 12+40)
NTS

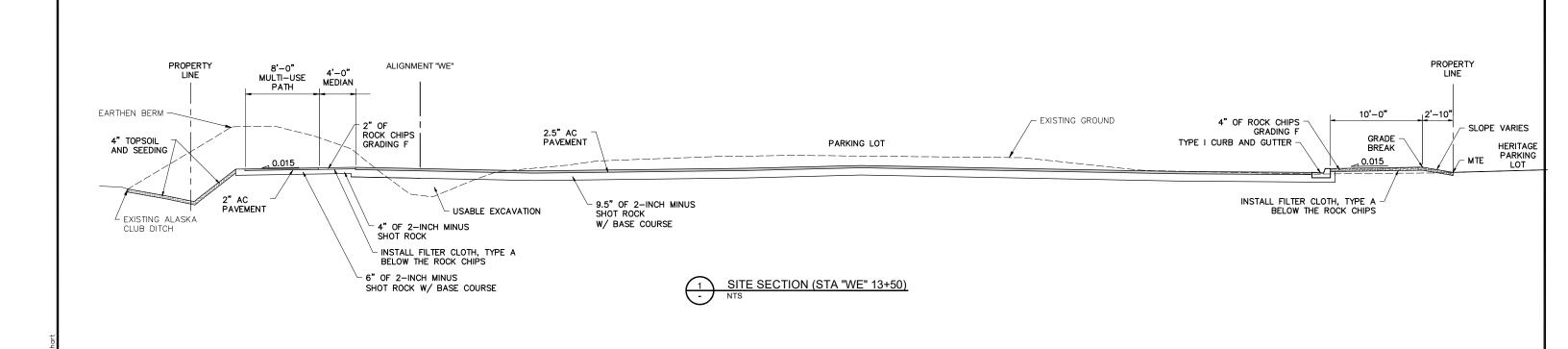
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				\$ 13 1(3)	Juneau, Alaska 99801
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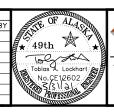
CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

EAST-WEST SECTIONS

PROJECT 71014.01
DATE 3/31/2021



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DESCRIPTION
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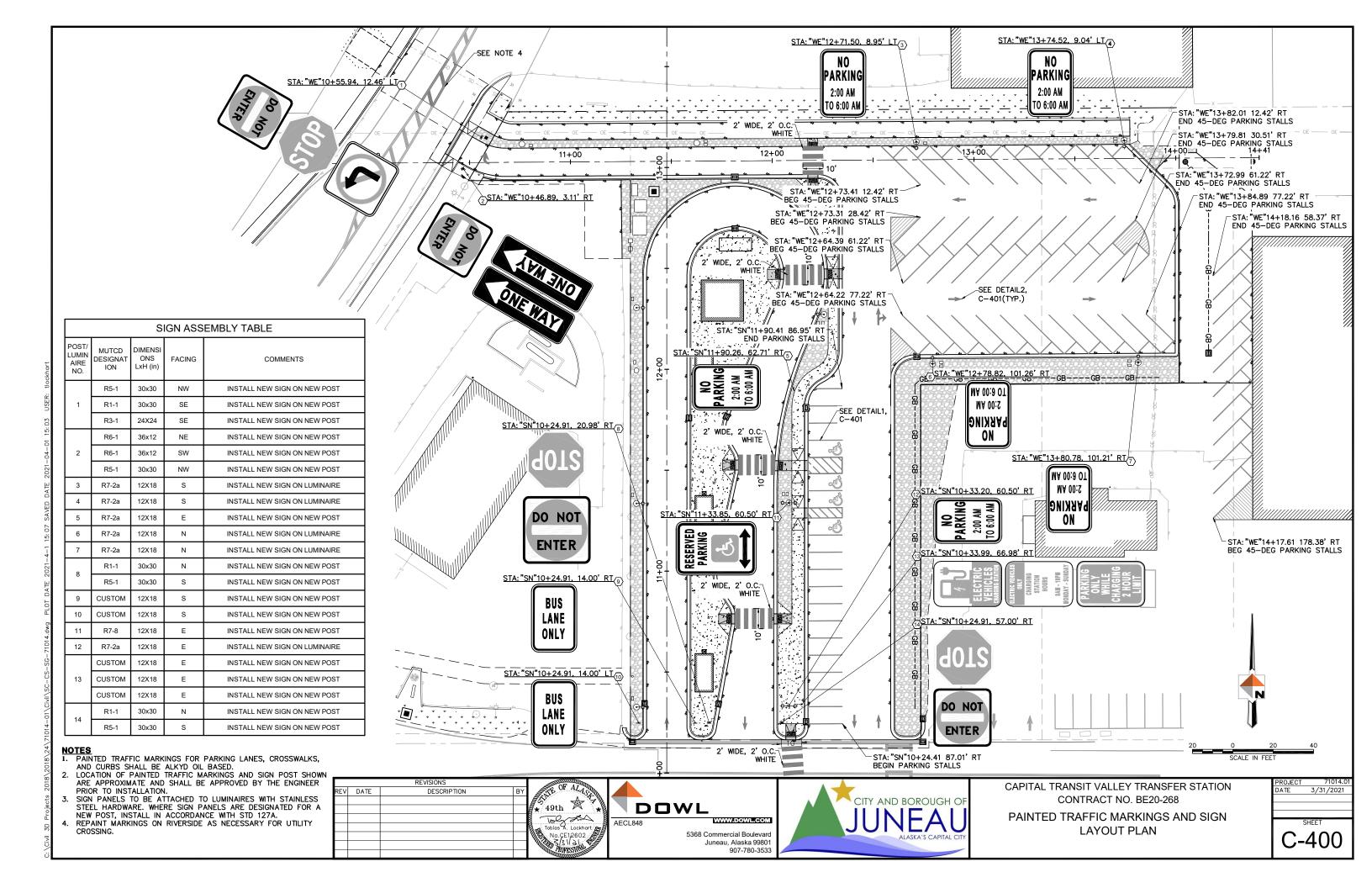


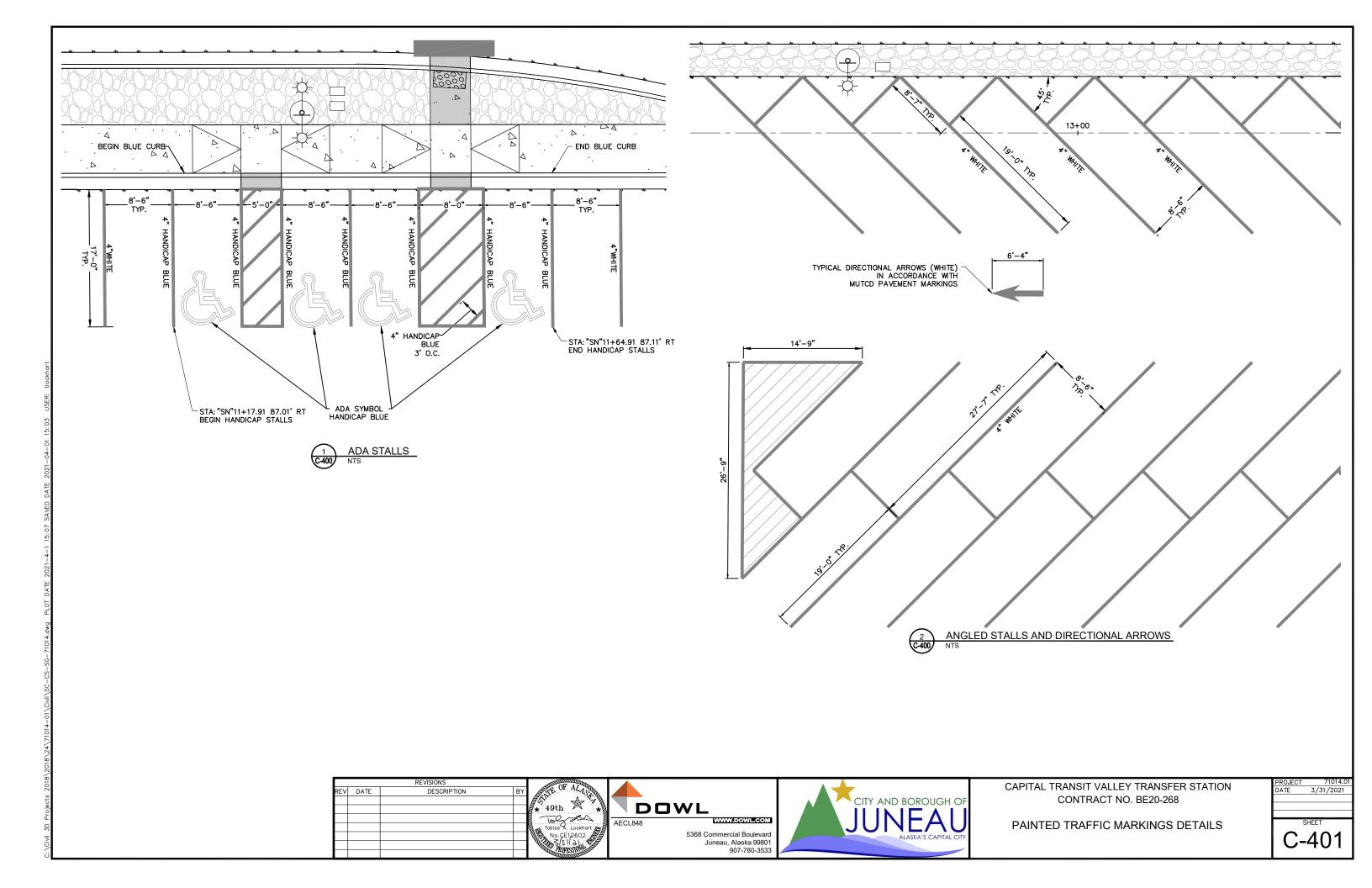




CAPITAL TRANSIT VALLEY TRANSFER STATION
CONTRACT NO. BE20-268
NORTH-SOUTH SECTIONS

PROJECT 71014.01 DATE 3/31/2021





DO	OR SCHEDULE									RO	OM FINI	SHS	SCF	HEDU	ILE				NOTE: ALL VISIBLE METAL STRUCTURAL CONNECTORS & FASTENERS TO BE PAINTED	SCHE	DULE ABBRE	VIATI	ONS
#	SIZE	DC MTL	OR FIN	FR. MTL		HW		J" HEAD JAMB DETAIL DETAIL		#	NAME		_OOR _ FIN		WALLS L FIN	BASE		ILING FIN	COMMENTS	CON FF	C CONCRETE FACTORY FINISH	PR PT	PAIR PAINT / PRESERVATIVE
101	1-3/4 x 3-0 x 7-0	FG	FF	FG	FF	01	0.2	.20 6/A-102 1/A-102	ELECTRIC LOCK & KEY PAD, ALWAYS LOCKED, CLOSER	100	JANITOR	CONC	SEA	AL GWB)/ * PT	R	WD*	* PV	*4'x4' FRP @ WEST & SOUTH WALLS @ SINK - **WD BEAMS & DECKING	FIN FG	FINISH FIBERGLASS	PV	TREATED POLYURETHANE VARNISH
102	1-3/4 x 3-0 x 7-0	FG	FF	FG	FF	02	-	2/A-102 2/A-102	PRIVACY FUNCTION	101	BREAK ROOM	CONC	SEA	AL GWE	B PT	R	WD*	PV	*WD BEAMS & DECKING	FRP GWB	FIBERGLASS REINFORCED PLASTI GYPSUM WALL BOAR		RUBBER / RESILIENT STAINLESS STEEL CLEAR SEALER
103	(PR) 1-3/4 x 3-0 x 7-0	FG	FF	FG	FF	03	0.2	.20 6/A-102 6/A-102	*ACTIVE LEAF W/KEY LOCK & CLOSER, INACTIVE LEAF W/ ASTRAGAL & SURFACE BOLTS - WEATHERSTRIP & DRAINING THRESHOLD	102	TOILET	CON	C SEA	AL GWE	3 РТ	R	WD*	PV	*WD BEAMS & DECKING	GAL\ MTI		WD	WOOD, PLYWOOD
104	1-3/4 x 3-0 x 7-0	FG	FF	FG	FF	04	0.2	.20 6/A-102 6/A-102	ELECTRIC LOCK & KEY PAD, ALWAYS OPEN DURING SERVICE		STORAGE	CONC	SEA	AL PLYW	/D PT	R	WD*	PV	*WD BEAMS & DECKING		WATERWAET METAE		
									HOURS, PRIVACY FUNCTION, LOCKED DURING OFF HOURS, CLOSER		TOILET	CON	C SEA	AL GWE	3/ PT/	R	WD*	PV	*WD BEAMS & DECKING				

APPLICABLE CODES

- 2012 INTERNATIONAL BUILDING CODE 2012 UNIFORM PLUMBING CODE 2012 INTERNATIONAL MECHANICAL CODE

- 2011 NATIONAL ELECTRICAL CODE 2012 INTERNATIONAL FIRE CODE

BUILDING INFORMATION

- FLOOR AREA:
 OCCUPANCY CLASSIFICATION:
 CONSTRUCTION TYPE:
 TOTAL CROSSING FROM B - BUSINESS USE
- FIRE SPRINKLERS:

THERMAL ENVELOPE - ENERGY

ITEM	REQUIRED	PROVIDED
ROOF INSULATION:	R-30d	R-30cl
WALL INSULATION:	R-11 + R-10ci	R-15+R-10
UNHEATED SLAB ON GRADE:	R-10 EDGE	R-10 EDG
OPAQUE DOORS:	U=0.7 (max)	U=0.2

- EXPOSED GLULAM, TYP

- EXPOSED WD DECKING, TYP

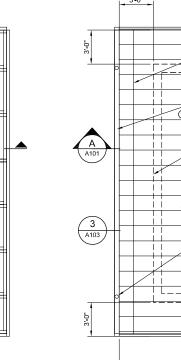
EXPOSED GLULAM LOOKOUT, TYP

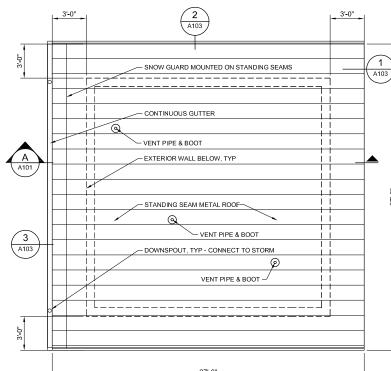
GENERAL NOTES

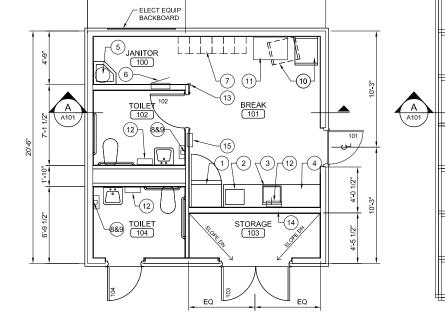
- 1. FIELD VERIFY ALL EXISTING CONDITIONS AND CONNECTION POINTS PRIOR TO STARTING WORK. THE CONTRACTOR SHALL COORDINATE ALL PORTIONS OF WORK AS DESCRIBED IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND RELATIONS TO OTHER WORK, NOTIFY THE PROJECT REPRESENTATIVE FOR RESOLUTION OF ALL DISCREPANCIES PRIOR TO BEGINNING
- COORDINATES AND WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE DRAWING.
- 3. CONTRACTOR TO USE ALL APPROPRIATE DUST AND MUD CONTROL METHODS. COORDINATE DUST AND MUD CONTAINMENT EFFORTS WITH PROJECT REPRESENTATIVE PRIOR TO INITIATING WORK.
- 4. MECHANICAL ELECTRICAL AND PLUMBING INFORMATION SHOWN ON THE ARCHITECTURAL DRAWINGS IS SHOWN FOR LOCATION PURPOSES ONLY. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS. SEE COORDINATING DISCIPLINE FOR SPECIFICATIONS.
- 5. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE/PRESERVATIVE-TREATED. INTERIOR PLYWOOD ELECTRICAL EQUIPMENT MOUNTING PANELS SHALL BE
- 6. SEAL AROUND ALL WALL PENETRATIONS & ROOF TO WALL, FOLLOW METAL WALL PANEL MANUFACTURER'S STANDARD DETAILS FOR PANEL CLOSURES AT PENETRATIONS.

KEYED NOTES

- (1) REFRIGERATOR
- 2 COUNTERTOP MICROWAVE
- (3) SINGLE COMPARTMENT ADA SINK
- 4 SOLID SURFACE COUNTERTOP & PLAM-FACED CABINETS
- 5 FLOOR MOP SINK w/ HW HEATER ABOVE
- 6 ELECT PANEL - FLUSH MOUNT
- 7 FUTURE DOUBLE TIER LOCKERS (N.I.C.)
- 8 WALL-MOUNT SS WASTE RECEPTACLE
- WALL-MOUNT NO TOUCH FOAM SOAP DISPENSER BATTERY (MOUNT ABOVE WASTE RECEPTACLE) 9
- 10 WALL-MOUNT I.T. RACK - REFER TO ELECTRICAL
- (11) WALL-HUNG COUNTERTOP DESK
- 12 WALL-MOUNT NO TOUCH ROLL PAPER TOWEL DISPENSER
- 2-1/2" x 2-1/2" x 48" STAINLESS STEEL CORNER GUARD ABOVE BASE 13
- 14) 2x6 PLUMBING WALL
- (15) SEMI-RECESSED FIRE EXTINGUISHER CABINET







NOTE:
REFER TO SHEET A-102 FOR INTERIOR ELEVATIONS OF BREAK ROOM & TOILET ROOMS



8'-7 1/2"









TETRA



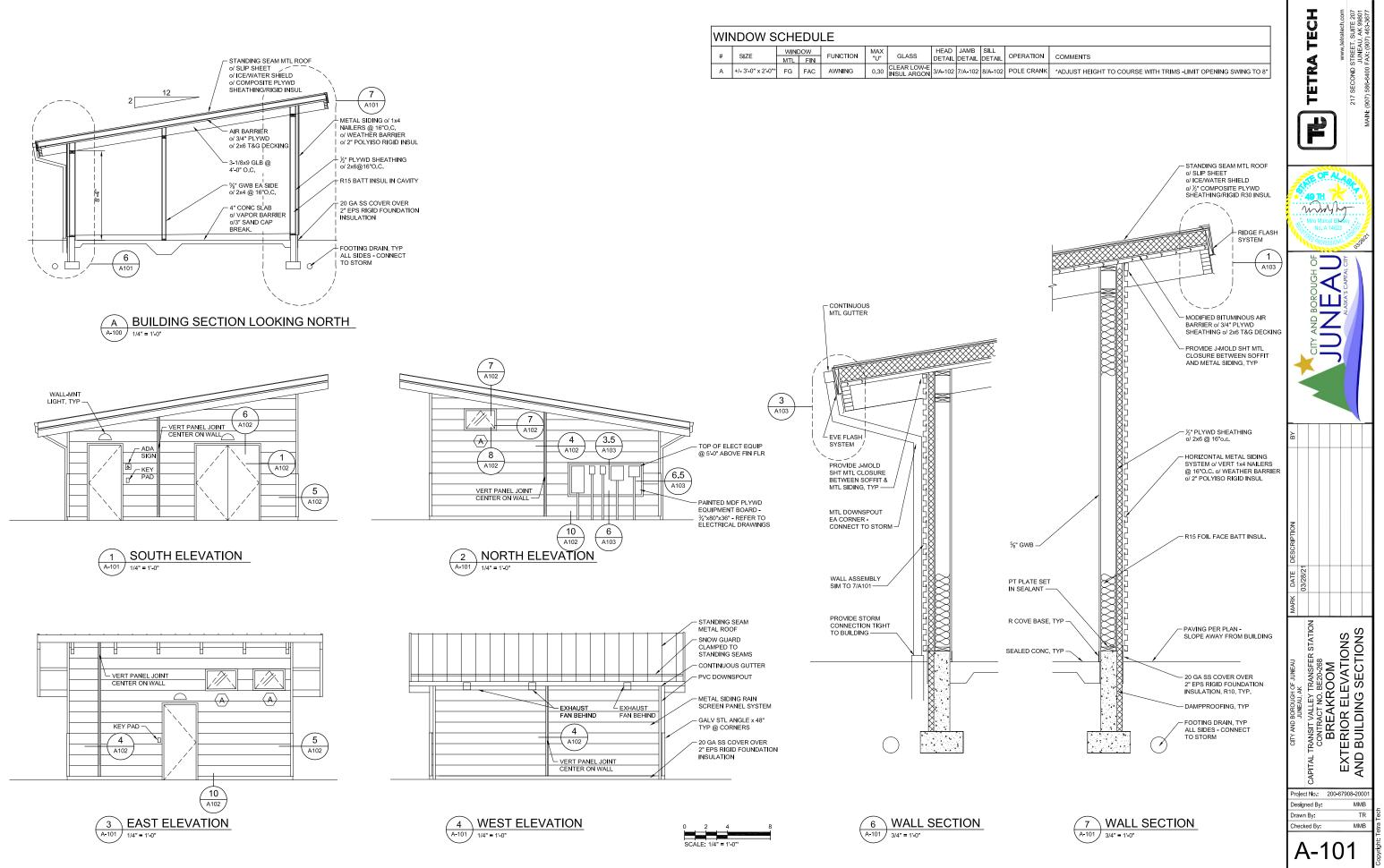


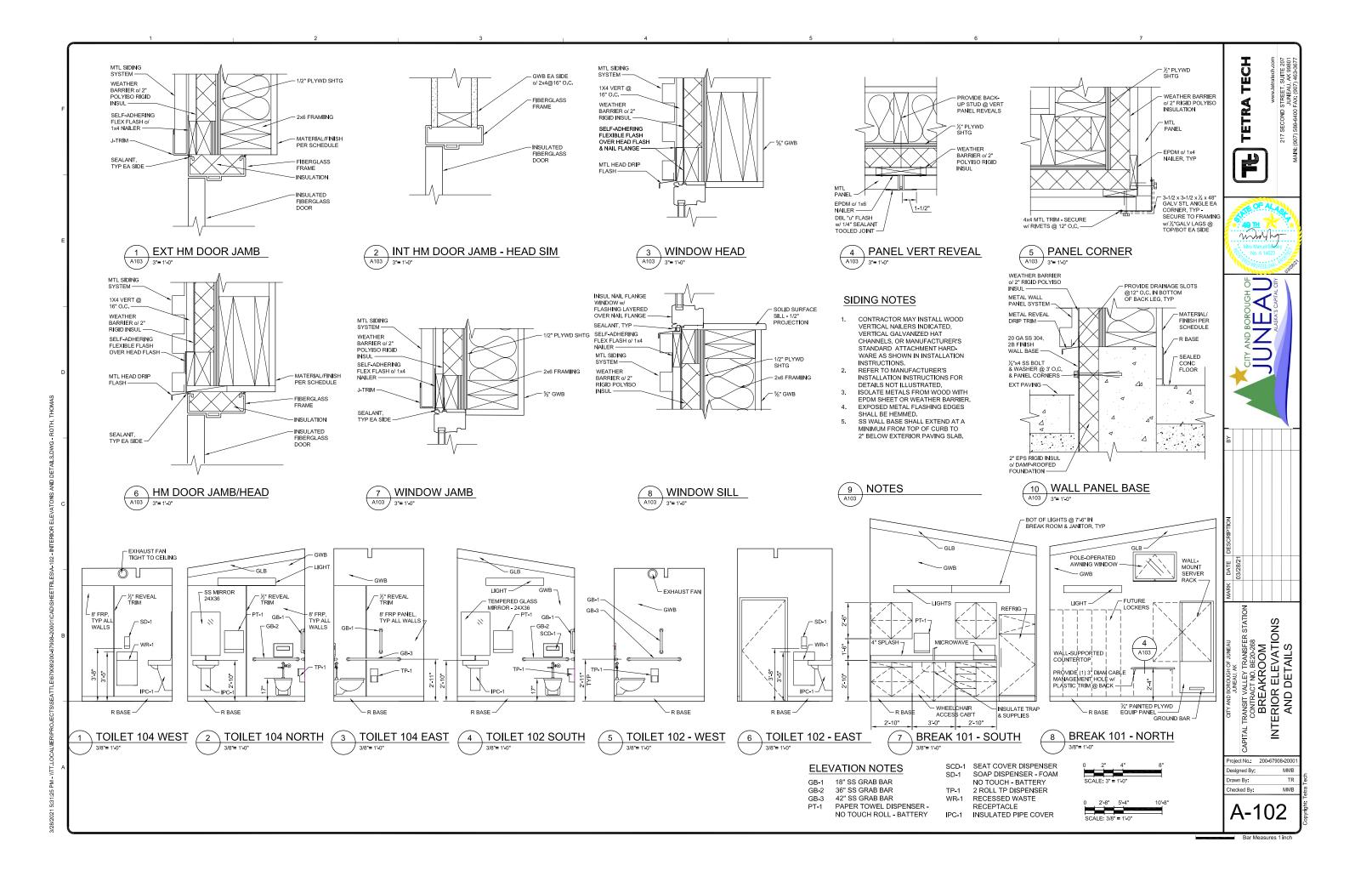


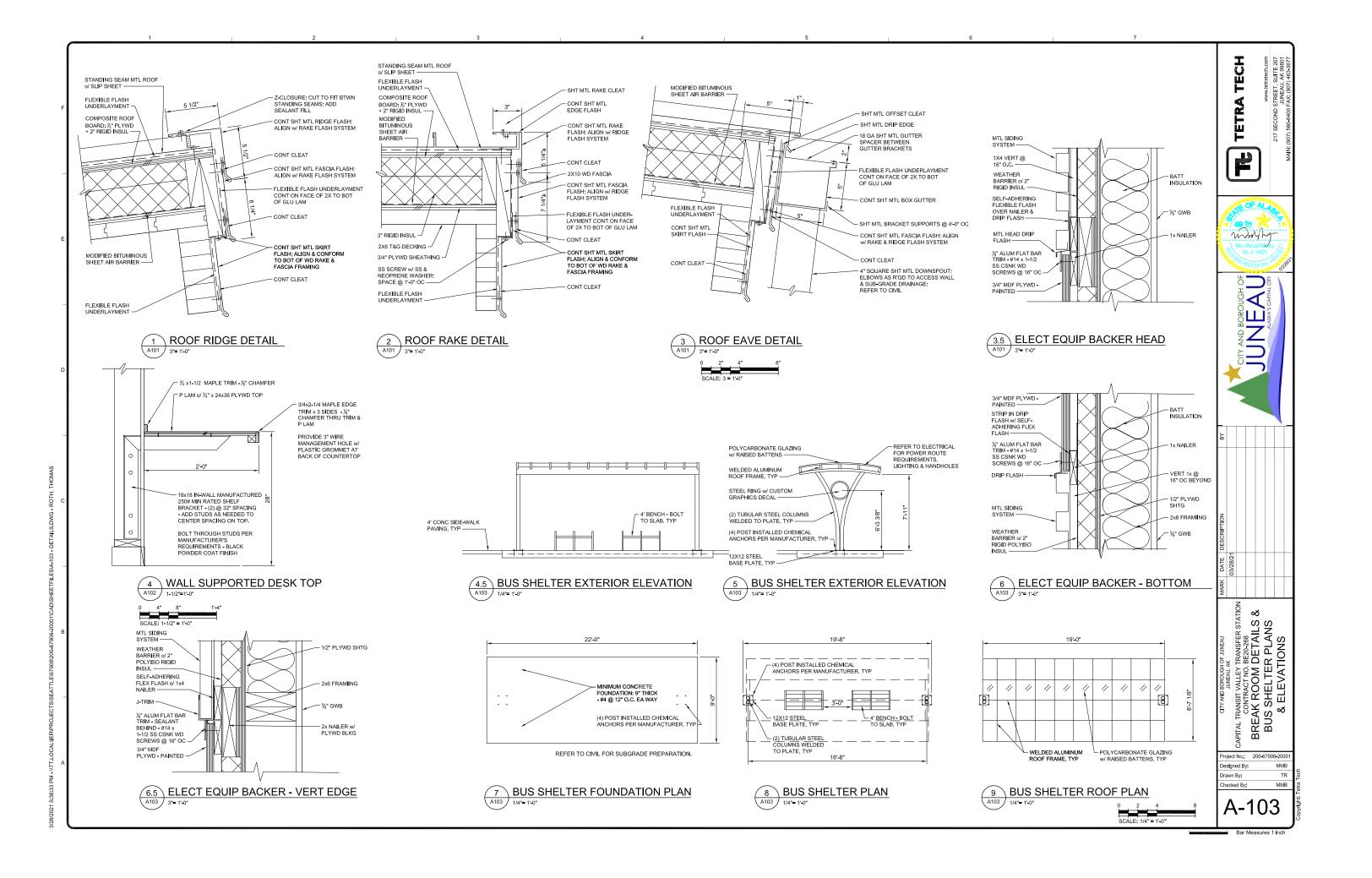


LTRANSIT VALLEY TRANSFER ST CONTRACT NO. BE20-268 BREAKROOM PLANS, NOTES AND SCHEDULES

Project No.: 200-67908-2000 Designed By: rawn Bv: hecked By: MMB







G2 APPLICABLE SPECIFICATIONS AND CODES

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE AND CITY AND BOROUGH OF JUNEAU TITLE 19 LOCAL AMENDMENTS. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.

G3 ALTERNATIVE DESIGNS

THE STRUCTURAL SYSTEMS AND DETAILS ON THESE PLANS ARE THE PRIORITY DESIGN: HOWEVER, ALTERNATIVE SYSTEMS AND DETAILS MAY BE CONSIDERED IF THE CONTRACTOR SUBMITS PLANS WITH SUBSTANTIATING CALCULATIONS AND TEST DATA WHICH BEAR AN ALASKA STATE LICENSED ENGINEER'S SEAL AND SIGNATURE FOR APPROVAL OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHOSE EFFORTS FOR REVIEW OF SUCH ALTERNATIVE DESIGNS SHALL BE PAID FOR BY THE CONTRACTOR

G4 DIMENSIONS

STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO FIELD CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. DEVIATIONS FROM THAT WHICH IS SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WRITTEN DIMENSIONS SHALL TAKE RECEDENCE OVER SCALES SHOWN ON THE DRAWINGS

G5 CONSTRUCTION LOADS

STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURE. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND SUPPORTS AS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND MAINTENANCE OF TEMPORARY SUPPORTS. THE DESIGN OF THE TEMPORARY SUPPORTS HALL BE PERFORMED BY A LICENSED ENGINEER HIRED BY THE CONTRACTOR

F. STRUCTURAL DESIGN

F1 DESIGN CODE

DESIGN IS IN ACCORDANCE WITH THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE AND CITY AND BOROUGH OF JUNEAU TITLE 19 LOCAL AMENDMENTS. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE

DESIGN SOIL PRESSURE FOR FOUNDATIONS

DESIGN BASED ON PRESUMPTIVE LOAD-BEARING VALUES OF TABLE 1806.2 OF THE 2012

INTERNATIONAL BUILDING CODE. (1) ALLOWABLE BEARING PRESSURE = 3000 PSF

(2) ACTIVE EARTH PRESSURE = 30 PCF (3) AT-REST EARTH PRESSURE = 60 PCF

(4) LATERAL BEARING = 200 PCE

5) COEFFICIENT OF FRICTION = 0.35

(6) FROST DEPTH = 32"

NON-STRUCTURAL COMPONENT DESIGN

MECHANICAL, ELECTRICAL AND ARCHITECTURAL COMPONENTS THAT ARE ARE NOT OF THE STRUCTURE SHALL BE DESIGNED BY THE CONTRACTOR IN ACCORDANCE WITH THE APPLICABLE CODES, THIS INCLUDES SUPPORT AND ANCHORAGE OF THE COMPONENT, SUBMIT SUBSTANTIATING CALCULATIONS WHICH BEAR AN ALASKA STATE LICENSED ENGINEER'S SEAL AND SIGNATURE FOR APPROVAL.

L. DESIGN LOADS

SLAB ON GRADE = 125 PSF ROOF = 20 PSF / 300 LB CONCENTRATED

GROUND SNOW LOAD Pg = 70 PSF

MINIMUM FLAT ROOF SNOW LOAD Pf = 50 PSF RISK CATEGORY II

IMPORTANCE FACTOR Is = 1.0

EXPOSURE FACTOR Co = 1.0

THERMAL FACTOR Ct = 1.0

C. WIND

NOMINAL DESIGN WIND SPEED = 101 MPH ULTIMATE DESIGN WIND SPEED = 130 MPH

RISK CATEGORY II

IMPORTANCE FACTOR Iw = 1.0 WIND EXPOSURE B

INTERNAL PRESSURE COEFFICIENTS

ENCLOSED BUILDINGS - GCpi = +/-0.18 SEISMIC

RISK CATEGORY II

IMPORTANCE FACTOR le = 1.0 SITE CLASS = D

Ss = 0.614 S₁ = 0.385

SDS = 0.536 SD1 = 0.418 SEISMIC DESIGN CATEGORY = D

ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE

LATERAL FORCE RESISTING SYSTEM = LIGHT-FRAME (WOOD) WALLS SHEATHED R = 6.5 / Cs = 0.08 / V = 2.6K

S. STEEL

CODES AND SPECIFICATIONS

STEEL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS AS CONTAINED IN THE 14TH EDITION OF THE AISC MANUAL OF STEEL CONSTRUCTION

MATERIAL

STRUCTURAL BARS, PLATES, ANGLES, AND CHANNELS INDICATED ON THE DRAWINGS SHALL
BE STEEL MEETING ASTM A36 SPECIFICATIONS. ROLLED W SECTIONS SHALL BE STEEL
MEETING ASTM A572 GR50 OR ASTM A992. HOLLOW STRUCTURAL SECTIONS SHALL BE STEEL
H1 SUBGRADE MEETING ASTM A500 GRADE B. PIPE SHALL BE STEEL MEETING ASTM A53 TYPE E OR S GRADE B. BOLTS SHALL BE STEEL MEETING ASTM A325. HEAVY HEXAGONAL NUTS SHALL BE STEEL MEETING ASTM A563. WASHERS SHALL BE STEEL MEETING ASTM F436 UNLESS OTHERWISE

S3 HOT-DIP GALVANIZING

UNLESS OTHERWISE NOTED, ALL STEEL FABRICATIONS SHALL BE HOT-DIPPED GALVANIZED. STEEL SHALL BE GALVANIZED AFTER FARRICATION

WELDING - GENERAL

WELDING SHALL CONFORM TO AWS D1.1. ELECTRODE SHALL BE E70XX GROUP, LOW HYDROGEN, LIGHT GAUGE STEEL WELDING SHALL CONFORM TO AWS D1.3. WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED BY THE AWS.

C. CONCRETE

C1 APPLICABLE CODE

CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO THE 2011 EDITION OF THE ACL BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI 318, AND THE 2016 EDITION OF THE SPECIFICATIONS FOR STRUCTURAL CONCRETE, ACI 301.

C2 REINFORCING STEEL DETAILS

DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH DETAILS AND DETAILING OF CONCRETE REINFORCEMENT ACI 315.

C3 DESIGN STRENGTHS

A REINFORCING STEEL SHALL BE ASTM A 615 GRADE 60. GROUT SHALL BE ASTM C 1107 WITH fc = 7000 psi @ 28 DAYS

C4 GENERAL USE CONCRETE

A. CAST-IN-PLACE CONCRETE
(1) GENERAL USE - fc = 4500 psi @ 28 DAYS MAX WATER TO CEMENTITIOUS MATERIAL RATIO = 0.45

FOR NOMINAL MAXIMUM AGGREGATE SIZE OF 3/4" OR 1", AIR CONTENT = 6% FOR NOMINAL MAXIMUM AGGREGATE SIZE OF 1 1/2", AIR CONTENT = 5.5%

D. CONCRETE SHALL BE PROPORTIONED TO MEET THE AVERAGE COMPRESSIVE STRENGTH

C5 CONCRETE COVER

CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:

A. FOOTINGS AND FOUNDATION MATS CAST ON GROUND - 3" B. FORMED OR FINISHED SURFACES - 2"

C6 DOWELS

DOWELS SHALL BE AT LEAST THE SAME SIZE AND SPACING AS BARS WITH WHICH THEY ARE LAPPED. THE LAP EMBEDMENT SHALL BE AS RECOMMENDED BY ACI 318 OR AS NOTE

C7 BAR SPLICES

SPLICES OF REINFORCING STEEL BAR SHALL BE IN ACCORDANCE WITH SCHEDULE SHOWN ON CONCRETE DETAILS AND ACI 318 AND SHALL BE CLASS B UNLESS OTHERWISE NOTED. THE LENGTH OF LAP SPLICE OF BARS OF DIFFERENT DIAMETER SHALL BE BASED ON THE SMALLER DIAMETER. BAR SPLICES MAY ALSO BE MADE BY WELDING IN ACCORDANCE WITH AWS SPEC D1.4 IF APPROVED BY THE ENGINEER.

C8 RESTRICTED BAR ANCHORAGE

IN CASES WHERE REINFORCING BARS CANNOT BE EXTENDED AS FAR AS REQUIRED DUE TO THE LIMITED EXTENT OF THE ADJACENT CONCRETE STRUCTURE, THE BARS SHALL EXTEND AS FAR AS POSSIBLE AND END IN STANDARD HOOKS.

C9 STANDARD HOOKS

BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE REQUIREMENTS OF

C10 CHAMFERS

EXCEPT AS OTHERWISE REQUIRED, EXPOSED CONCRETE CORNERS AND EDGES SHALL HAVE 3/4" CHAMFERS. RE-ENTRANT CORNERS SHALL NOT HAVE FILLETS.

C11 CAST-IN-PLACE CONCRETE ANCHORS ANCHORS SHALL BE HEADED BOLTS OF ASTM F1554 GRADE 55 (WITH SUPPLEMENT S1) WITH

CONFORMING TO TABLE 14-2 OF THE CURRENT AISC STEEL CONSTRUCTION MANUAL, UNLESS NOTED OTHERWISE, ALTERNATELY, ANCHORS SHALL BE THREADED AND NUTTED ROD CONFORMING TO ASTM F1554 GRADE 55 (WITH SUPPLEMENT S1). ALL MATERIALS SHALL BE C12 POST-INSTALLED ADHESIVE ANCHORS

ASTM A563 HEAVY HEXAGONAL NUTS AND ASTM A36 PLATE WASHERS WITH MINIMUM SIZE

ADHESIVE ANCHORS AND THEIR PROPERTIES SUCH AS DIAMETER, SPACING, EDGE DISTANCE, EMBEDMENT AND MATERIAL/FINSH SHALL CONFORM TO THE DETAILS IN THESE DRAWINGS. ADHESIVE SHALL BE HILTI HIT-HY 200 OR APPROVED EQUAL. THREADED ROD SHALL BE F1554 GRADE 55 (WITH SUPPLEMENT S1) HOT DIP GALVANIZED UNLESS NOTED OTHERWIS

C13 INSTALLATION OF POST-INSTALLED ANCHORS

ALL ADHESIVE ANCHORS SHALL BE INSTALLED IN STRICT CONFORMANCE TO MANUFACTURER'S DIRECTIONS. ALL HOLES SHALL BE HAMMER DRILLED WITH A CARBIDE BIT

C14 SPECIAL WEATHER CONCRETING

FOR SPECIAL WEATHER CONCRETING (HOT & COLD CONCRETING) ADHERE TO REPORTS OF ACI COMMITTEE 305, "HOT WEATHER CONCRETING", AND ACI 306, "COLD WEATHER

C15 CURING

CONCRETE SHALL BE CURED IN ACCORDANCE WITH ACL 308.1

C16 CONSTRUCTION JOINTS

LOCATION OF CONSTRUCTION JOINTS SHALL HAVE THE APPROVAL OF THE ENGINEER CONSTRUCTION JOINTS SHALL BE DETAILED AS SHOWN ON THE DRAWINGS. UNLESS A METAL KEYED FORM IS USED, ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED TO A MINIMUM 1/4" AMPLITUDE. ALL JOINT SURFACES SHALL BE THOROUGHLY CLEANED TO REMOVE GREASE, LOOSE CONCRETE, AND LAITANCE OR OTHER BOND REDUCING MATERIAL. SURFACES SHALL E SATURATED SURFACE DRY PRIOR TO PLACING FRESH CONCRETE.

C17 CRACK CONTROL JOINTS

CCJ INDICATES A 1/8" WIDE CONTINUOUS SAW CUT CRACK CONTROL JOINT FILLED WITH ELASTOMERIC JOINT SEALANT. VERTICAL CONTROL JOINTS SHALL BE FORMED WITH 3/4 INCH CHAMFER STRIP AND FILLED WITH ELASTOMERIC JOINT SEALANT. THE ELASTOMERIC JOINT SEALANT SHALL CONFORM TO ASTM C920, TYPE S OR M, GRADE NS, CLASS 50.

C18 CONCRETE FINISHES

CONCRETE SHALL BE FINISHED TO A UNIFORM COLOR, APPEARANCE AND TEXTURE IN ACCORDANCE WITH ACI 301 SECTION 5. APPLY SURFACE FINISH SF-2.0 TO CONCRETE SURFACES NOT EXPOSED TO VIEW. APPLY SURFACE FINISH SF-2.0 FOLLOWED BY A SMOOTH-RUBBED FINISH TO CONCRETE SURFACES EXPOSED TO VIEW, APPLY A FLOAT FINISH FOLLOWED BY A TROWEL FINISH TO ALL SLABS UNLESS NOTED OTHERWISE

H1 SUBGRADE

SUBGRADE SHALL BE PREPARED AS SHOWN ON THE CIVIL DRAWINGS.

SL. SAWN LUMBER

SL1 GRADE

SAWN LUMBER SHALL CONFORM TO THE WEST COAST LUMBER INSPECTION BUREAU (WCLIB) OR THE WESTERN WOODS PRODUCTS ASSOCIATION (WWPA) GRADING RULES AND SHALL BE IDENTIFIED BY THE GRADE MARK. ALL LUMBER SHALL BE THE SPECIES AND GRADES AS FOLLOWS UNLESS NOTED OTHERWISE

SAWN LUMBER							
USE	SPECIES/GRADE						
LUMBER 2" TO 4" THICK	DOUGLAS FIR-LARCH NO. 2						
BEAMS 5"x5" AND GREATER	DOUGLAS FIR-LARCH NO. 1						
POSTS	DOUGLAS FIR-LARCH NO. 1						
T AND G DECKING	DOUGLAS FIR-LARCH COMMERCIAL						

SL2 FINISH

ALL LUMBER SHALL BE SURFACED ON FOUR SIDES.

SL3 MOISTURE CONTENT

ALL DIMENSIONAL LUMBER AND TIMBERS SHALL BE KILN DRIED AND CERTIFIED IN WRITING BY THE SUPPLIER TO BE LESS THAN 19 PERCENT MOISTURE CONTENT.

ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY, OR OTHERWISE IDENTIFIED TO BE PRESERVATIVE TREATED, SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH THE AWPA U1 AND M4. ALL PRESERVATIVE TREATED LUMBER SHALL BEAR THE AWPA QUALITY MARK. FIELD CUT OR DRILLED TREATED WOOD SHALL BE TREATED WITH FIELD APPLIED PRESERVATIVE, APPLIED PER MANUFACTURER'S DIRECTIONS.

SL4 NOTCHING AND CUTTING

CUTTING AND NOTCHING OF JOISTS AND STUDS SHALL CONFORM TO IBC SECTIONS 2308.8.2, 2308.9.10. 2308.9.11 AND THE LIMITATIONS SHOWN ON THE DRAWINGS

SL5 BLOCKING

PROVIDE SOLID LINES OF BLOCKING, SAME DEPTH OF FRAMING MEMBER, AT ALL BEARING POINTS

SL6 BRIDGING

JOIST BRIDGING SHALL BE REQUIRED WHERE JOISTS HAVE A DEPTH-TO-THICKNESS RATIO GREATER THAN 5-TO-1 AND WHERE ONE EDGE IS UNSUPPORTED. JOIST BRIDGING SHALL BE SPACED AT 8'-0" ON CENTER MAXIMUM.

GLUED LAMINATED TIMBER

GL1 FABRICATION

GLUED LAMINATED TIMBERS SHALL BE MANUFACTURED AND IDENTIFIED IN CONFORMANCE WITH ANSI/AITC A190.1 AND ASTM D3737 MANUFACTURING AND QUALITY ASSURANCE

GL2 ADHESIVE

ADHESIVE SHALL BE WET-USE EXTERIOR WATERPROOF GLUE.

GL3 NOTCHING AND CUTTING

NOTCHING AND/OR BORING OF GLUED LAMINATED MEMBERS (FITHER IN THE SHOP OR FIELD) IS STRICTLY PROHIBITED UNLESS AS SPECIFICALLY DETAILED IN THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER OF RECORD. ONE COAT OF END SEALER SHALL BE APPLIED IMMEDIATELY AFTER TRIMMING IN FITHER THE SHOP OR FIELD.

GL4 GRADE

GLUED LAMINATED MEMBERS SHALL BE WESTERN SPECIES WITH THE FOLLOWING PROPERTIES, APPEARANCE GRADE ARCHITECTURAL, UNLESS NOTED OTHERWISE:

GLUED LAMINATED MEMBERS							
	USE	COMBINATION SYMBOL (SPECIES)					
	SIMPLE SPAN	24F-V4 (DF/DF)					
	CANTILEVER OR CONTINUOUS	24F-V8 (DF/DF)					

SH. WOOD STRUCTURAL SHEATHING

SH1 GRADE

WOOD STRUCTURAL ROOF, FLOOR AND WALL SHEATHING SHALL CONFORM TO THE REQUIREMENTS FOR THEIR TYPE IN DOC PS1 OR DOC PS2. EACH PANEL SHALL BE IDENTIFIED FOR GRADE, BOND CLASSIFICATION AND PERFORMANCE CATEGORY.

SH2 EXPOSURE

UNLESS NOTED OTHERWISE, ALL PANELS SHALL BE APA RATED SHEATHING, EXPOSURE 1, OF THE THICKNESS AND SPAN RATING AS SHOWN. WHERE SHEATHING IS TO REMAIN EXPOSED, IT SHALL BE EXTERIOR GRADE.

SH3 INSTALLATION AND BLOCKING

ALL FLOOR AND ROOF SHEATHING SHALL BE INSTALLED WITH FACE GRAIN PERPENDICULAR TO SUPPORTS AND END JOINTS SHALL BE STAGGERED. PANELS SHALL BE INSTALLED WITH PANEL JOINTS CENTERED ON STUDS, BLOCKING OR FRAMING MEMBERS. ROOF AND FLOOR SHEATHING SHALL BE BLOCKED AT ALL PANEL EDGES WHERE SHOWN ON THE DRAWINGS SHEAR WALL SHEATHING SHALL BE INSTALLED EITHER HORIZONTALLY OR VERTICALLY, UNLESS NOTED OTHERWISE ON THE DRAWINGS, AND BE BLOCKED AT ALL PANEL EDGES. SHEET SIZES SHALL BE 4'X8' UNLESS AT BOUNDARIES OR FRAMING CHANGES.

SH4 SHEATHING FASTENERS

SHEATHING FASTENERS SHALL NOT BE SPACED LESS THAN 3/8" FROM EDGES AND ENDS OF PANELS, STUDS, BLOCKING, FRAMING, AND TOP AND BOTTOM PLATES. FASTENERS SHALL BE DRIVEN SO THAT THEIR HEAD OR CROWN IS FLUSH WITH THE TOP SURFACE OF THE SHEATHING.

N. NAILING AND FASTENERS

N1 FRAMING NAILS AND FASTENERS

- A LI FRAMING NAILS SHALL BE OF THE SIZE AND NUMBER INDICATED ON THE DRAWINGS AND CONFORM TO THE "STANDARD SPECIFICATION OF DRIVEN FASTENERS: NAILS, SPIKES, AND STAPLES" (ASTM F1667) INCLUDING SUPPLEMENT 1 AND "POWER-DRIVEN STAPLES AND NAILS FOR USE IN ALL TYPES OF BUILDING CONSTRUCTION" (NER 272).
- NAILING NOT SHOWN SHALL BE AS INDICATED ON IBC TABLE 2304.9.1, OR NER-272
- C. NAILS SHALL BE IDENTIFIED BY LABELS ATTACHED TO THEIR CONTAINERS. THAT SHOW THE MANUFACTURER'S NAME, NAIL SHANK DIAMETER, AND LENGTH
- D. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF APPROXIMATELY 30 DEGREES WITH THE MEMBER AND STARTED APPROXIMATELY 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER
- F. NAILS SHALL BE COMMON WIRE NAILS AS FOLLOWS:

FRAMING NAILS							
NAIL TYPE	SHANK DIAMETER (IN)	LENGTH (IN)					
6d	.113	2.0					
8d	.131	2.5					
10d	.148	3.0					
16d	.162	3.5					
20d	.203	4.0					
30d	.207	4.5					

N2 SHEATHING NAILS

UNLESS OTHERWISE NOTED ON PLANS, PLYWOOD SHEATHING SHALL BE ATTACHED TO THE FRAMING SUPPORTS AS FOLLOWS

	SHEATHING NAILING								
USE	PANEL EDGES	INTERMEDIATE FRAMING MEMBERS							
ROOF SHEATHING	.131" DIA x 2.5" AT 6" OC	.131" DIA x 2.5" AT 12" OC							
FLOOR SHEATHING	.148" DIA x 3.0" AT 6" OC	.148" DIA x 3.0" AT 12" OC							
WALL SHEATHING	.131" DIA x 2.5" AT 6" OC	.131" DIA x 2.5" AT 12" OC							

ALL NAILS SHALL BE COMMON NAILS EXCEPT FOR RING SHANK NAILS SHALL BE USED FOR FASTENING ROOF SHEATHING.

N3 BOLTS AND LAG SCREWS BOLTS AND LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1. ALL

BOLTS AND LAG SCREWS SHALL BE INSTALLED WITH STANDARD CUT WASHERS. ALL ASTM A307 BOLTS SHALL HAVE CUT THREADS. PREDRILLING AND LEAD HOLES

A. PREDRILL HOLES FOR NAILS AND SPIKES AS REQUIRED TO PREVENT SPLITTING OF WOOD. PREDRILLED HOLES SHALL NOT EXCEED 75% OF THE NAIL OR SPIKE DIAMETER.

B. PROVIDE BORED HOLES FOR ALL BOLTS, BORED HOLES SHALL BE A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER. BOLTS SHALL NOT BE FORCIBLY C. PROVIDE LEAD HOLES FOR LAG SCREWS TO PREVENT SPLITTING OF WOOD. THE CLEARANCE HOLE FOR THE SHANK SHALL HAVE THE SAME DIAMETER AS THE SHANK, AND THE SAME DEPTH OF PENETRATION AS THE LENGTH OF UNTHREADED SHANK. THE LEAD

HOLE FOR THE THREADED PORTION SHALL HAVE A DIAMETER FOLIAL TO 40% TO 70% OF

D. WHERE LEAD HOLES ARE USED FOR WOOD SCREWS. THE PART OF THE LEAD HOLE RECEIVING THE SHANK SHELL BE 7/8 THE DIAMETER OF THE SHANK AND THAT RECEIVING THE THREADED PORTION SHALL BE 7/8 THE DIAMETER OF THE SCREW AT THE ROOT OF

THE SHANK DIAMETER AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE

N5 CONNECTORS, HANGERS AND CLIPS

NOTATIONS ON THE DRAWINGS RELATING TO JOIST HANGERS, HOLDOWNS, AND OTHER FRAMING ACCESSORIES REFER TO PRODUCTS MANUFACTURED BY SIMPSON STRONG TIE AND BE OF THE SIZE AND TYPE SHOWN ON THE DRAWINGS. USE ALL HARDWARE FASTENERS SPECIFIED UNLESS SPECIFICALLY NOTED OTHERWISE AND INSTALL IN STRICT CONFORMANCE WITH THE MANUFACTURER'S REQUIREMENTS. EQUIVALENT DEVICES MAY BE SUBMITTED FOR APPROVAL PRIOR TO USE. ANY PRODUCT SUBSTITUTIONS TO SIMPSON SHALL MEET OR EXCEED SIMPSON'S PUBLISHED DESIGN CAPACITIES AND MUST HAVE A CURRENT EVALUATION REPORT FOR THE APPLICABLE CODES.

N6 FINISHES

FASTENERS INCLUDING NUTS AND WASHERS IN CONTACT WITH PRESERVATIVE TREATED WOOD SHALL BE HOT-DIPPED ZING-COATED GALVANIZED STEEL. COATING WEIGHT FOR ZINC-COATED FASTENERS SHALL BE IN ACCORDANCE WITH ASTM A153. FASTENERS OTHER THAN NAILS, WOOD SCREWS, LAG SCREWS, OR BOLTS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B695, CLASS 55 MINIMUM. CONNECTORS THAT ARE USED IN EXTERIOR APPLICATIONS AND IN CONTACT WITH PRESERVATIVE TREATED WOOD SHALL HAVE COATING TYPES AND WEIGHTS IN ACCORDANCE WITH THE TREATED WOOD OR CONNECTOR MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, NOT LESS THAN ASTM A653, TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.

SILLS AT WALLS SHALL BE BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS WITH 7

EMBED AT 4"-0" OC MAXIMUM AND WITHIN 1"-0" OF SILL PLATE ENDS, CORNERS OR SPLICES, UNLESS DETAILED OTHERWISE. WASHERS TO BE MINIMUM 1/4"x3"x3", IN ACCORDANCE WITH IBC 2308.12.8. ALL SILL PLATES AND LEDGERS SHALL BE ANCHORED WITH A MINIMUM OF TWO K. SUBMITTALS

N7 SILLS

K1 STRUCTURAL STEEL AND METAL FABRICATIONS

SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL STEEL AND METAL FABRICATIONS.

K2 REINFORCING STEEL SUBMIT SHOP DRAWINGS FOR REINFORCING STEEL FABRICATION.

CONCRETE SUBMIT CONCRETE MIX DESIGN AND SUBSTANTIATING CONCRETE CYLINDER TEST RESULTS IN ACCORDANCE WITH ACI 301.

H







BREAKROOM AND BUS SHELTER GENERAL NOTES

ject No.: 200-67908-200 awn By necked By:

I1 STRUCTURAL TESTS AND SPECIAL INSPECTIONS

SPECIAL INSPECTION SHALL CONFORM TO SECTION 1705 OF THE 2012 INTERNATIONAL BUILDING CODE. LABORATORIES FOR MATERIAL TESTING AND/OR AGENCIES FOR TESTING SERVICES SHALL BE SELECTED BY, ENGAGED BY, AND RESPONSIBLE TO THE OWNER /

THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION PER IBC CHAPTER 17. THESE INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED SPECIAL INSPECTOR.

INSPECTION OF REINFORCING STEEL, INCLUDING PLACEMENT

INSPECTION OF ANCHORS CAST IN CONCRETE

INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS

VERIFYING USE OF REQUIRED DESIGN MIX

PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE

CONCRETE PLACEMENT FOR PROPER APPLICATION

VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUE

INSPECTION OF FORMWORK FOR SHAPE, LOCATION

VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING

VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL

PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS

VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL

PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN

NAILING, BOLTING, ANCHORING AND OTHER FASTENING COMPONENTS WITHIN THE MAIN WIND FORCE RESISTING SYSTEM OR THE SEISMIC FORCE RESISTING SYSTEM, INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES, SHEAR PANELS AND HOLDDOWNS.

FREQUENCY: PERIODIC REFERENCE: IBC 2012 TABLE 1705.3

FREQUENCY: PERIODIC REFERENCE: IBC 2012 TABLE 1705.3

FREQUENCY: PERIODIC

REFERENCE: IBC 2012 TABLE 1705.3

FREQUENCY: PERIODIC REFERENCE: IBC 2012 TABLE 1705.3

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FREQUENCY: PERIODIC

REFERENCE: IBC 2012 TABLE 1705.3

FREQUENCY: PERIODIC REFERENCE: IBC 2012 TABLE 1705.3

FREQUENCY: PERIODIC REFERENCE: IBC 2012 TABLE 1705.3

FREQUENCY: PERIODIC REFERENCE: IBC 2012 TABLE 1705.6

FREQUENCY: PERIODIC

REFERENCE: IBC 2012 TABLE 1705.6

FREQUENCY: PERIODIC REFERENCE: IBC 2012 TABLE 1705.6

FREQUENCY: CONTINUOUS REFERENCE: IBC 2012 TABLE 1705.6

FREQUENCY: PERIODIC REFERENCE: IBC 2012 TABLE 1705.6

FREQUENCY: PERIODIC REFERENCE: IBC 2012 SECTION 1705.10.1 **TETRA TECH**







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MARK				
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CAPITAL TRANSIT WILLEY, AND CONTRACT NO. BEZO-288

BREAKROOM AND BUS SHELTER

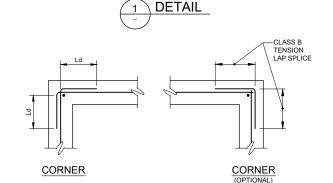
GENERAL NOTES

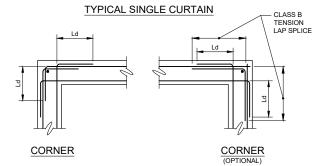
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NOTES

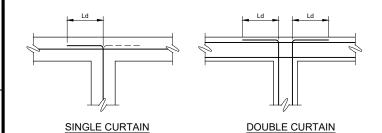
- 1. FOR GRADE 60 UNCOATED BARS AND NORMAL WEIGHT CONCRETE, f $^{\circ}$ c =
- 2. "TOP BARS" ARE HORIZONTAL REINFORCING BARS WHERE 12" OF FRESH CONCRETE IS CAST BELOW THE DEVELOPMENT LENGTH OR SPLICE.

REINFORCING DEVELOPMENT AND LAP SPLICE LENGTHS

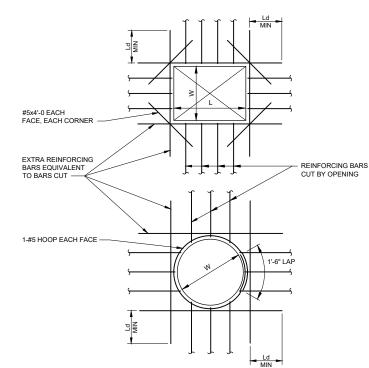




TYPICAL DOUBLE CURTAIN





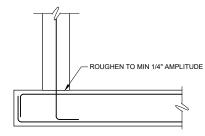


NOTES:

- 1. REINFORCEMENT IN OTHER DIRECTION SHALL BE TREATED IN A SIMILAR MANNER.
- 2. "W" AND "L" = DIMENSION OF OPENING. FOR CIRCULAR OPENINGS, "W"= DIAMETER.
- 3. ALL OPENINGS IN WALLS AND SLABS LARGER THAN OR EQUAL TO 10" IN ANY ONE DIRECTION SHALL
- 4. OPENING DETAILS SHOWN ARE TYPICAL UNLESS NOTED OTHERWISE
- 5. THE NUMBER OF ADDITIONAL BARS AT EACH SIDE OF THE OPENING EQUALS HALF THE NUMBER OF TYPICAL REINFORCING BARS THAT ARE INTERRUPTED BY THE OPENING.

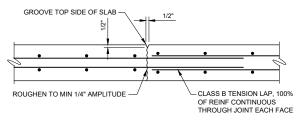
REINFORCING AT WALL AND SLAB OPENINGS





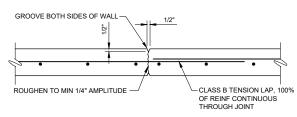
WALL BASE CONSTRUCTION JOINT WITH SINGLE CURTAIN REINFORCING





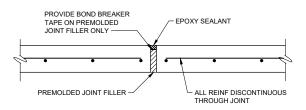
SLAB CONSTRUCTION JOINT





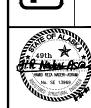
WALL CONSTRUCTION JOINT





SLAB ISOLATION JOINT





TETRA TECH



MARK DATE DESCRIPTION					
DATE					
MARK					
		STATION			

BREAKROOM AND BUS SHELTER TYPICAL DETAILS

oject No.: 200-67908-20 rawn By: hecked By:

TYPICAL INTERSECTION

REINFORCING AT WALL INTERSECTIONS



FASTE	ENING SCHEDULE	
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
	ROOF	•
BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3-8D COMMON (2 1/2" X 0.131"); OR 3-10D BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE	2-8D COMMON (2 1/2" X 0.131") 2-3" X 0.131" NAILS 2-3" 14 GAGE STAPLES	EACH END, TOENAIL
WALL TOP PLATE, TO RAFTER OR TRUSS	2-16D COMMON (3 1/2" X 0.162") 3-3" X 0.131" NAILS 3-3" 14 GAGE STAPLES	END NAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	16D COMMON (3 1/2" X 0.162") @ 6" O.C. 3" X 0.131" NAILS @ 6" O.C. 3" 14 GAGE STAPLES @ 6" O.C.	FACE NAIL
2. CEILING JOISTS TO TOP PLATE	3-8D COMMON (2 1/2" X 0.131"); OR 3-10D BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST, TOENAIL
3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER. LAPS OVER PARTITIONS (NO THRUST) (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	3-16D COMMON (3 1/2" X 0.162"); OR 4-10D BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	PER IBC TABLE 2308.7.3.1	FACE NAIL
5. COLLAR TIE TO RAFTER	3-10D COMMON (3" X 0.148"); OR 4-10D BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL
6. RAFTER OR ROOF TRUSS TO TOP PLATE (SEE SECTION 2308.7.5, TABLE 2308.7.5)	3-10D COMMON (3 1/2" X 0.148"); OR 3-16D BOX (3 1/2" X 0.135"); OR 4-10D BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL ^C
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS;	2-16D COMMON (3 1/2" X 0.162"); OR 3-10D BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL
OR ROOF RAFTERS TO 2-INCH RIDGE BEAM	3-10D COMMON (3 1/2" X 0.148"); OR 4-16D BOX (3 1/2" X 0.135"); OR 4-10D BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" X 0.131" NAILS; OR	TOENAIL
	WALL	
	16D COMMON (3 1/2" X 0.162")	24" O.C. FACE NAIL
8. STUD TO STUD (NOT AT BRACED WALL PANELS)	10D BOX (3" X 0.128"); OR 3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
	16D COMMON (3 1/2" X 0.162")	16" O.C. FACE NAIL
9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL	16D BOX (3 1/2" X 0.135"); OR	12" O.C. FACE NAIL
PANELS)	3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
	16D COMMON (3 1/2" X 0.162"); OR	16" O.C. EACH EDGE, FACE NAIL
10. BUILT-UP HEADER (2" TO 2" HEADER)	16D BOX (3 1/2" X 0.135")	12" O.C. EACH EDGE, FACE NAIL
11. CONTINUOUS HEADER TO STUD	4-8D COMMON (2 1/2" X 0.131"); OR 4-10D BOX (3" X 0.128")	TOENAIL
	16D COMMON (3 1/2" X 0.162"); OR	16" O.C. FACE NAIL
12. TOP PLATE TO TOP PLATE	10D BOX (3" X 0.128"); OR 3" X 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
13. TOP PLATE TO TOP PLATE, AT END JOINTS	8-16D COMMON (3 1/2" X 0.162"); OR 12-10D BOX (3" X 0.128"); OR 12-3" X 0.131" NAILS; OR 12-3" 14 GAGE STAPLES, 7/16" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
	16D COMMON (3 1/2" X 0.162"); OR	16" O.C. FACE NAIL
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16D BOX (3 1/2" X 0.135"); OR 3" X 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	12" O.C. FACE NAIL
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALL PANELS	2-16D COMMON (3 1/2" X 0.162"); OR 3-16D BOX (3 1/2" X 0.135"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	16" O.C. FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	4-8D COMMON (2 1/2" X 0.131"); OR 4-10D BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL
ISSUED TO STREET ON THE	2-16D COMMON (3 1/2" X 0.162"); OR 3-10D BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL

FASTENING SCHEDULE (CONTINUED)								
DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION						
WALL (CONTINUED)								
17. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16D COMMON (3 1/2" X 0.162"); OR 3-10D BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL						
18. 1" BRACE TO EACH STUD AND PLATE	2-8D COMMON (2 1/2" X 0.131"); OR 2-10D BOX (3" X 0.128"); OR 2-3" X 0.131" NAILS; OR 2-3" 14 GAGE STAPLES, 7/16" CROWN	FACE NAIL						
19. 1" X 6" SHEATHING TO EACH BEARING	2-8D COMMON (2 1/2" X 0.131"); OR 2-10D BOX (3" X 0.128")	FACE NAIL						
20. 1" X 8" AND WIDER SHEATHING TO EACH BEARING	3-8D COMMON (2 1/2" X 0.131"); OR 3-10D BOX (3" X 0.128")	FACE NAIL						
	FLOOR							
21. JOIST TO SILL, TOP PLATE, OR GIRDER	3-8D COMMON (2 1/2" X 0.131"); OR 3-10D BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	TOENAIL						
22. RIM JOIST, BAND JOIST, OR BLOCKING TO TOP PLATE, SILL OR OTHER FRAMING BELOW	8D COMMON (2 1/2" X 0.131"); OR 10D BOX (3" X 0.128"); OR 3" X 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	6" O.C., TOENAIL						
23. 1" X 6" SUBFLOOR OR LESS TO EACH JOIST	2-8D COMMON (2 1/2" X 0.131"); OR 2-10D BOX (3" X 0.128")	FACE NAIL						
24. 2 SUBFLOOR TO JOIST TO GIRDER	2-16D COMMON (3 1/2" X 0.162")	FACE NAIL						
25. 2" PLANKS (PLANK & BEAM - FLOOR & ROOF)	2-16D COMMON (3 1/2" X 0.162")	EACH BEARING, FACE NAIL						
	20D COMMON (4" X 0.192")	32" O.C., FACE NAIL AT TOP ANI BOTTOM STAGGERED ON OPPOSITE SIDES						
26. BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	10D BOX (3" X 0.128"); OR 3" X 0.131" NAILS; OR 3" 14 GAGE STAPLES, 7/16" CROWN	24" O.C., FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES						
2.02.0	AND: 2-20D COMMON (4" X 0.192"); OR 3-10D BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS; OR 3-3" 14 GAGE STAPLES, 7/16" CROWN	ENDS AND AT EACH SPLICE, FACE NAIL						
27. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-16D COMMON (3 1/2" X 0.162"); OR 4-10D BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	EACH JOIST OR RAFTER, FACE NAIL						
28. JOIST TO BAND JOIST OR RIM JOIST	3-16D COMMON (3 1/2" X 0.162"); OR 4-10D BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS; OR 4-3" 14 GAGE STAPLES, 7/16" CROWN	END NAIL						
29. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	2-8D COMMON (2 1/2" X 0.131"); OR 2-10D BOX (3" X 0.128"); OR 2-3" X 0.131" NAILS; OR 2-3" 14 GAGE STAPLES, 7/16" CROWN	EACH END, TOENAIL						

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING A	AND LOCATION
WOOD STRUCTURAL PANELS (WSP), SUBFLOOR, R	OOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTI FRAMING ^A	L CLEBOARD WA	LL SHEATHING T
		EDGES (INCHES)	INTERMEDIATI SUPPORTS (INCHES)
	6D COMMON OR DEFORMED (2" X 0.113") (SUBFLOOR AND WALL)	6	12
	8D COMMON OR DEFORMED (2 1/2" X 0.131") (ROOF) OR RSRS-01 (2 3/8" X 0113") NAIL (ROOF) ^D	6	12
30. 3/8" - 1/2"	2 3/8" X 0.113" NAIL (SUBFLOOR AND WALL)	6	12
00.00	1 3/4" 16 GAGE STAPLE, 7/16" CROWN (SUBFLOOR AND WALL)	4	8
	2 3/8" X 0.113" NAIL (ROOF)	4	8
	1 3/4" 16 GAGE STAPLE, 7/16" CROWN (ROOF)	3	6
	8D COMMON (2 1/2" X 0.131"); OR 6D DEFORMED (2" X 0.113") (SUBFLOOR AND WALL)	6	12
31. 19/32" - 3/4"	8D COMMON OR DEFROMED (2 1/2" X 0.131") (ROOF) OR RSRS-01 (2 3/8" X 0.113") NAIL (ROOF) ^D	6	12
	2 3/8" X 0.113" NAIL; OR 2" 16 GAGE STAPLE, 7/16" CROWN	4	8
32. 7/8" - 1 1/4"	10D COMMON (3" X 0.148"); OR 8D DEFORMED (2 1/2" X 0.131")	6	12
	OTHER EXTERIOR WALL SHEATHING		
33. 1/2" FIBERBOARD SHEATHING ^B	1 1/2" GALVANIZED ROOFING NAIL (7/16" HEAD DIAMETER); OR 1 1/4" 16 GAGE STAPLE WITH 7/16" OR 1" CROWN	3	6
34. 25/32" FIBERBOARD SHEATHING ^B	1 3/4" GALVANIZED ROOFING NAIL (7/16" HEAD DIAMETER); OR 1 1/2" 16 GAGE STAPLE WITH 7/16" OR 1" CROWN	3	6
WOOD STRUCTURAL	PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMI	NG	
35. 3/4" AND LESS	8D COMMON (2 1/2" X 0.131"); OR 6D DEFORMED (2" X 0.113")	6	12
36. 7/8" - 1"	8D COMMON (2 1/2" X 0.131"); OR 8D DEFORMED (2 1/2" X 0.131")	6	12
37. 1 1/8" - 1 1/8"	10D COMMON (3" X 0.148"); OR 8D DEFORMED (2 1/2" X 0.131")	6	12
	PANEL SIDING TO FRAMING		
38. 1/2" OR LESS	6D CORROSION-RESISTANT SIDING (1 7/8" X 0.106"); OR 6D CORROSION-RESISTANT CASING (2" X 0.099")	6	12
39. 5/8"	8D CORROSION-RESISTANT SIDING (2 3/8" X 0.128"); OR 8D CORROSION-RESISTANT CASING (2 1/2" X 0.113")	6	12
WOOD STRUCTURAL PANELS (WSP), SUBFLOOR, R	OOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTI FRAMING ^A	CLEBOARD WA	LL SHEATHING 1
	I IVWING	EDGES (INCHES)	INTERMEDIATI SUPPORTS (INCHES)

A. NAILS SPACED AT 6 INCHES AT INTERMEDIATE SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.

6D CASING (2" X 0.099"); OR 6D FINISH (PANEL SUPPORTS AT 24 INCHES)

4D CASING (1 1/2" X 0.080"); OR 4D FINISH (1 1/2" X 0.072")

- B. SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).
- C. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO REDUCED BY ONE NAIL.
- D. RSRS-01 IS A ROOF SHEATHING RINK SHANK NAIL MEETING THE SPECIFICATIONS IN ASTM F1667.

40. 1/4"

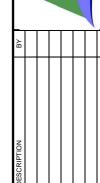
41. 3/8"

TETRA TECH









12

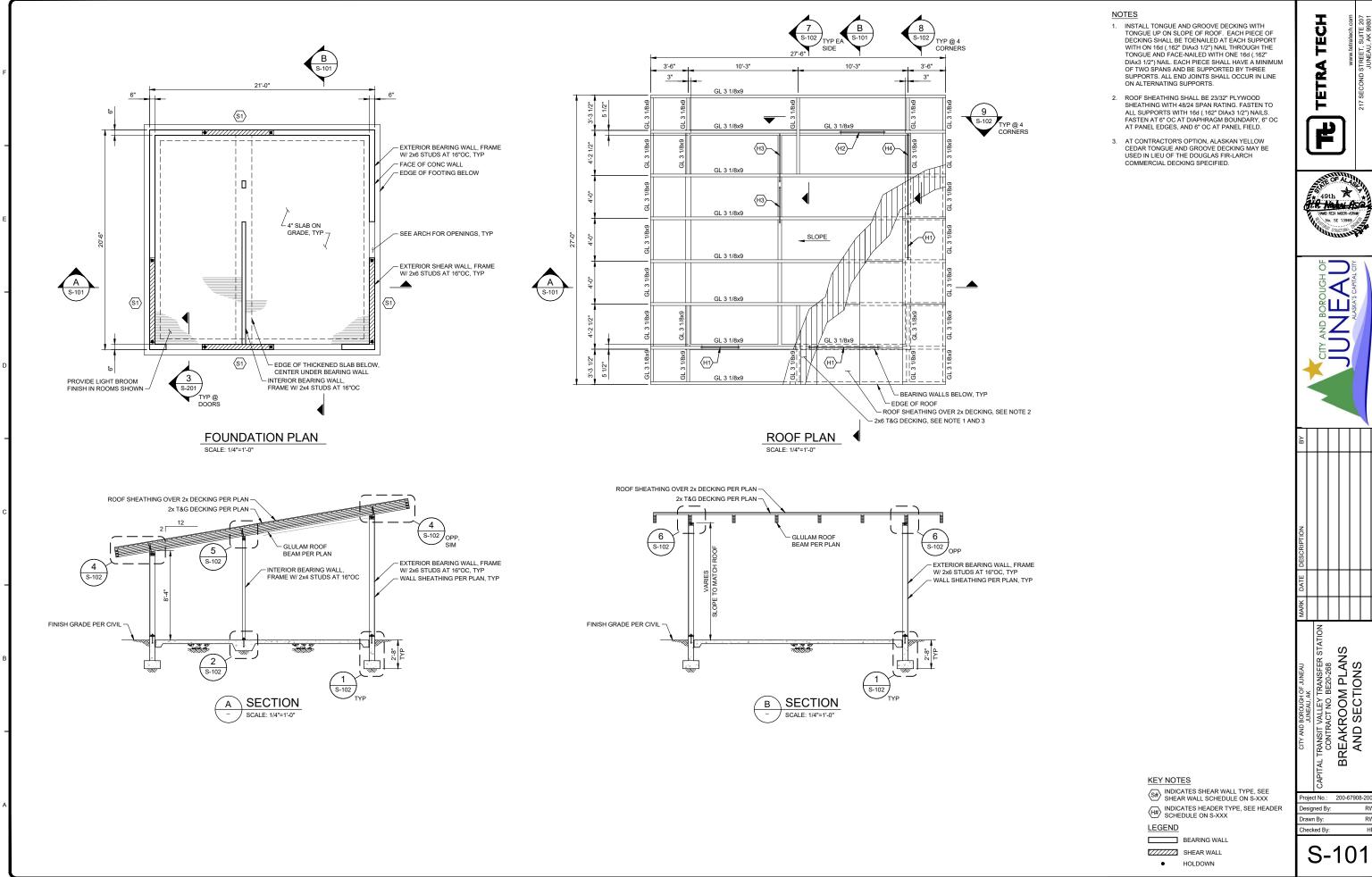
12

CAPITAL TRANSIT VALLEY TRANSFER STATION
CONTRACT NO. BE20-268

TYPICAL WOOD FASTENING

roject No.: 200-67908-2000
lesigned By: RW
lrawn By: RW
checked By: HR

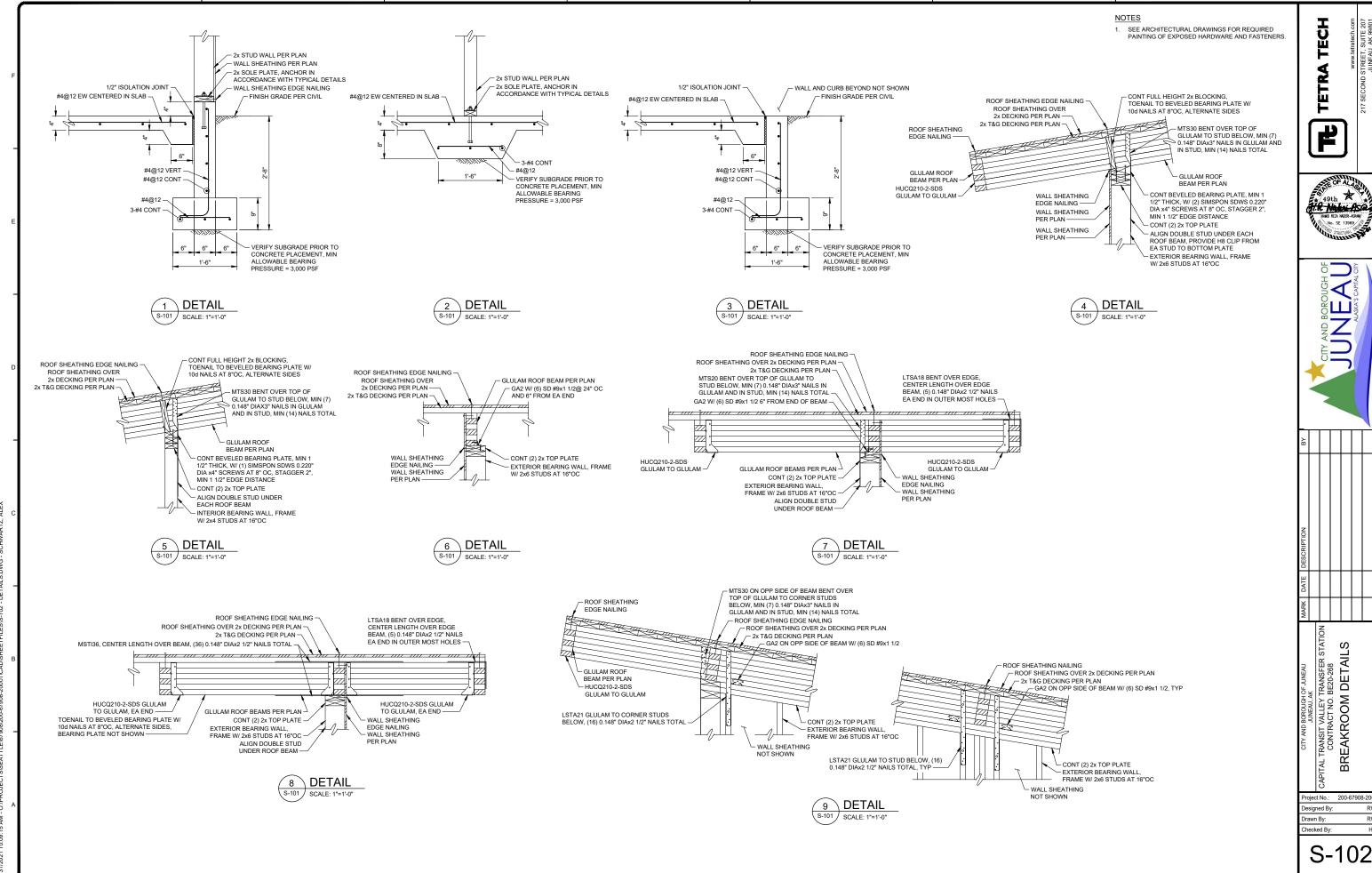
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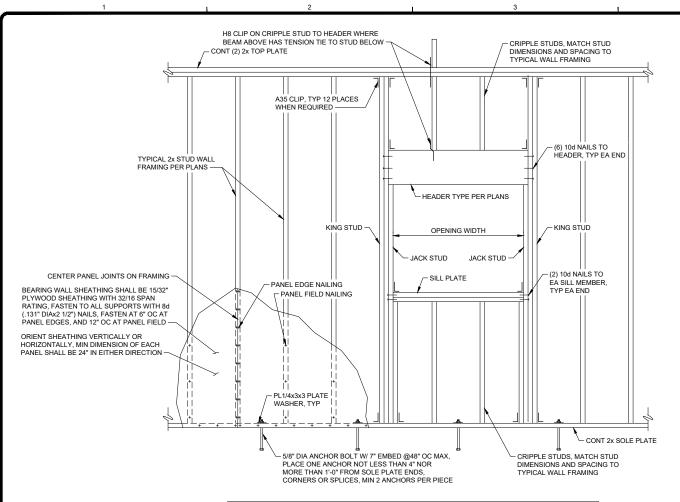






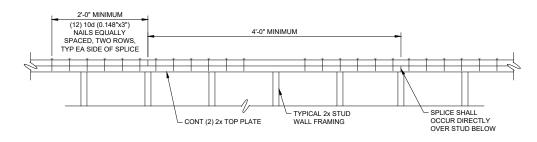
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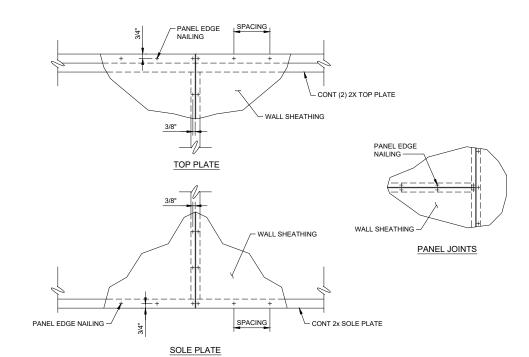


TYPICAL 2x STUD WALL FRAMING SOLE PLATE BELOW (3) 2x STUDS IN CORNER 10d (0.148" DIAx3") NAILS AT 6" OC, STAGGERED WALL SHEATHING 10d (0.148" DIAx3") NAILS AT 9" OC	TYPICAL 2x STUD WALL FRAMING SOLE PLATE BELOW 10d (0.148" DIAX3") NAILS AT 6" OC, STAGGERED (4) 2x STUDS IN CORNER WALL SHEATHING 10d (0.148" DIAX3") NAILS AT 9" OC, TYP EA SIDE	(2) 16d (0.162" DIAX3 1/2") NAILS, TYP LAP UPPER TOP PL ON TO PERPENDICULAR WALL, TYP
CORNER PLAN VIEW	INTERSECTION PLAN VIEW	ISOMETRIC VIEW

4 TYPICAL WALL FRAMING AT CORNERS AND INTERSECTIONS SCALE: 1"=1'-0"



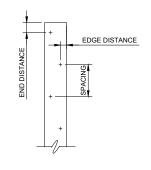
5 TYPICAL TOP PLATE SPLICE - SCALE: 1"=1"-0"



6	TYPICAL WALL SHEATHING EDGE NAILING
	SCALE: 1 1/2"=1'-0"

HEADER SCHEDULE HEADER TYPE KING STUD CLIPS REQUIRED HEADER SILL JACK STUD N/A (2) 2x NO H2 (1) 6x6 (2) 2x (1) 2x (2) 2x NO НЗ (1) 4x8 N/A (2) 2x (2) 2x YES (2) 2x (1) 6x8 (1) 2x (2) 2x YES H4

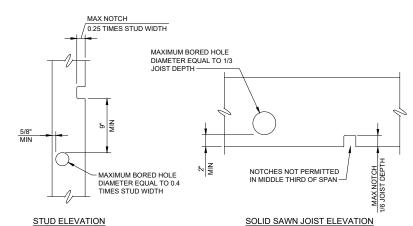
1 TYPICAL BEARING WALL SCALE: 3/4"=1'-0"



BUILT-UP COLUMNS												
BUILT-UP MEMBERS	FASTENER SIZE	FASTENER SPACING	FASTENER END DISTANCE	FASTENER EDGE DISTANCE								
(2) 2x4	10d	6"	2 1/2"	1"								
(3) 2x4	30d	8"	3 1/2"	1 1/2"								
(2) 2x6	10d	8"	2 1/2"	1 1/2"								
(3) 2x6	30d	8"	3 1/2"	1 1/2"								

NOTE: ADJACENT NAILS SHALL BE DRIVEN FROM OPPOSITE SIDES OF THE COLUMN.





NOTE: CUTTING AND NOTCHING OF JOISTS AND STUDS SHALL CONFORM TO IBC SECTIONS 2308.8.2, 2308.9.10, 2308.9.11 AND THE LIMITATIONS SHOWN ON THE DRAWINGS. NOTCHING OR CUTTING OF OTHER MEMBERS IS STRICTLY PROHIBITED UNLESS SPECIFICALLY DETAILED OR AS APPROVED BY THE ENGINEER.



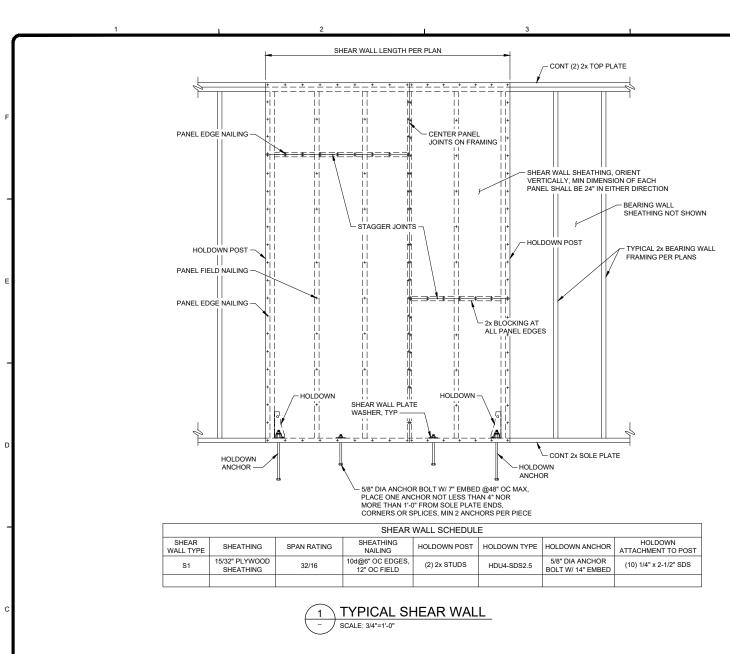
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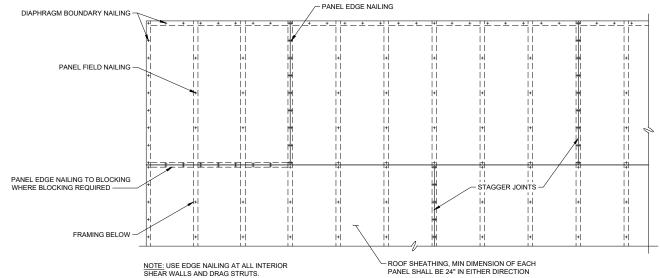
BREAKROOM DETAILS

oject No.: 200-67908-200

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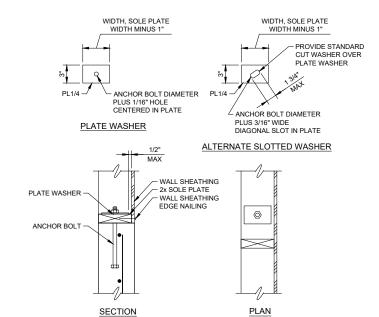
TETRA TECH





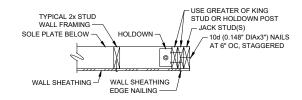
TYPICAL DIAPHRAGM

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



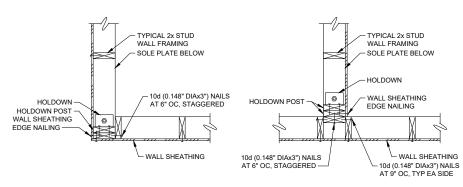
TYPICAL SHEAR WALL PLATE WASHER

SCALE: 1 1/2"=1'-0"



PLAN VIEW

4 TYPICAL HOLDOWN AT OPENINGS
SCALE: 1"=1'-0"



CORNER PLAN VIEW

INTERSECTION PLAN VIEW

5 TYPICAL HOLDOWN AT CORNERS AND INTERSECTIONS

SCALE: 1"=1-0"

TETRA TECH

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CAPITAL TRANSIT VALLEY TRANSFER S'
CONTRACT NO. BE20-268
BREAKROOM DETAIL

Project No.: 200-67908-200
Designed By: RI
Drawn By: RI
Checked By: H

S-104

BREAKROOM FLOOR PLAN-HVAC

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

	ELECTRIC HEATER SCHEDULE													
SYM.	MFGR	TYPE	LOCATION FLOOR	SERVICE	CFM	CAPACITY	ELECTRIC	CAL	REMARKS					
011111	MODEL		AREA	JOEN VIOL	01 111	WATTS	V-PH	AMPS	TALII III III					
EWH-1	QMARK CWH3404	ELECTRIC WALL HEATER	RESTROOM JANITOR STORAGE	GENERAL HEAT	100	2000	208–1	14.5						
CH-1	KING KCV2018-W	ELECTRIC COVE HEATER	BREAK ROOM	GENERAL HEAT	_	1800	208-1	8.7	LENGTH= 118". PROVIDE KING MODEL K101 LINE VOLTAGE T-STAT (208 V)					

	EXHAUST FAN SCHEDULE													
SYM.	MFGR MODEL	TYPE	LOCATION FLOOR AREA	SERVICE	FLOW (CFM)	ESP ("wc)	FRPM	VOLT-PH	AMPS	OPER. WT. (LBS)	REMARKS			
EF-1	BROAN 512M	SIDEWALL	RESTROOM/ JANITOR	GENERAL VENT	70	0.2	-	115-1	0.7	_	PROVIDE DAMPER WEATHERHOOD AND MOTOR GUARD			

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	FLA	FULL LOAD AMPERES	NTS	NOT TO SCALE
BTUH	BRITISH THERMAL UNITS/HOUR	FLR	FLOOR	N/A	NOT APPLICABLE
CFM	CUBIC FEET PER MINUTE	FT	FEET	OSA	OUTSIDE AIR
CONT	CONTINUATION	HP	HORSE POWER	PH	PHASE
DET	DETAIL	IN	INCH	RPM	REVOLUTIONS PER MINU
DET	DETAIL	MBH	THOUSAND BTU PER HOUR	SF	SQUARE FEET
DN	DOWN	MCA	MINIMUM CURRENT AMPERES	TEMP	TEMPERATURE
EA	EXHAUST AIR	MECH	MECHANICAL	T STAT	THERMOSTAT
ea	EACH	MIN	MINIMUM	TYP	TYPICAL
ELEC	ELECTRICAL	MOCP	MAX OVERCURRENT PROTECTION		WATT
				W/	WITH
				WT	WEIGHT

EQUIPMENT DESIGNATION

EXHAUST FAN EWH ELECTRIC WALL HEATER
CH COVE HEATER TETRA TECH







03-31-2021

					1	_
ВУ	КРК	111 11				
MARK DATE DESCRIPTION	03-31-21 STAMPED AND SIGNED DRAWINGS KPK	OFFICE CONTROL OF WILLOW				
DATE	03-31-21	2 10 00				
MARK						
			SIAIION	- NAC		

CAPITAL TRANSIT VALLEY TRANSFER STA
CAPITAL TRANSIT VALLEY TRANSFER STA
CONTRACT NO. BE20-268
BREAKROOM PLANS-HV

Project No.: 200-67908-2000 KRPK KRPK TNRB esigned By: rawn By: hecked By:

M-101

BREAKROOM FLOOR PLAN-PLUMBING SCALE: 1/4"=1'-0"

EQUIPMENT SCHEDULE							
WH-1	WATER HEATER	A.D. SMITH DSE-10A, 6KW INPUT, 10 GAL STORAGE, 27 GPH RECOVERY @ 90° RISE. 208 V1ø ELECTRICAL CIRCUIT					
WH-2	WATER HEATER	CHRONOMITE MODEL CM-12L/208, 2500 WATTS@ 208 V1Ø					
BFP-1	BACKFLOW PREVENTER	WATTS MODEL 009 REDUCED PRESSURE BACKFLOW PREVENTER. UNIT SHALL BE FULL LINE SIZE. PROVIDE INDIRECT DRAIN TO CLOSEST APPROVED RECEPTACLE.					

PIPE SCHEDULE											
AG: ABOVE GRADE BG: BELOW GRADE SERVICES PIPE MATERIALS PIPE MATERIALS AG: ABOVE GRADE AG: ABOVE GRADE											
<u>SERVICES</u>		/ડૂડે	× / ;	78°		* /5°			2 /		REMARKS
WASTE	AG	•									
WASTE	BG	•									
VENT	AG	•									
VEINT	BG	•									
COLD & HOT	AG							•			
WATER	BG						•			1	

1 SOFT DRAWN W / POLYETHYLENE SLEEVE

	FIXTURE SCHEDULE						
			ROUGH-II	N CONNECTI	ONS		
ITEM	FIXTURE*	WASTE	TRAP	VENT	COLD WATER	HOT WATER	REMARKS
WC-1	WATER CLOSET ADA	4″	INT	2″	1"	-	AMER. STD. MODEL 3351.660 AFWALL WALL MOUNTED 1.6 GALLON PER FLUSH, WITH ZURN MODEL 111-1.6-ES-S TMO FLUSH VAL. W/EL-154 XFRM, ZURN MODEL Z-1204-N CARRIER, AND OPEN END SEAT.
L-1	LAVATORY ADA	1 1/2″	1 1/2″	1 1/2"	1/2*	1/2″	AMER. STD. MODEL 0355.012, W/ SLOAN MODEL ETF-600 24 VAC POWERED FAUCET GRID DRAIN, TRANSFORMER & SOLENOID VALVE. PROVIDE SLOAN MIX-135-A THERMOSTATIC MIXING VALVE WHICH MEETS ASSE 1070 PERFORMANCE STANDARDS.
MS-1	MOP SINK	3″	3″	2″	3/4″	3/4″	FLOOR MOUNTED, TERRAZZO. 24 x 24 x 12 DEEP. PROVIDE CHICAGO MODEL 897 FAUCET WITH VACUUM BREAKER
KS-1	KITCHEN SINK	1 1/2"	1 1/2"	1 1/2"	1/2″	1/2"	JUST MODEL SLF-1921-A-GR 18 GA. TYPE 304 SS SELF RIMMING 21X19 SINGLE COMPARTMENT SINK WITH JUST MODEL JRL FAUCET, AND CUP STRAINER.

ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	GA	GAGE or GAUGE	PH	PHASE
CLG	CEILING	GAL	GALLON	POC	POINT OF CONNECTION
СО	CLEANOUT	HOA	HAND-OFF-AUTO SWITCH	PSIG	POUNDS PER SQUARE INCH
CONC	CONCRETE	HP	HORSE POWER		(GAUGE)
CONT	CONTINUATION	HR	HOUR	PTRV	PRESSURE/TEMPERATURE RELIEF VALVE
CW	COLD WATER	HW	HOT WATER	RHW	RECIRCULATED HOT WATER
CD	CONDENSATE DRAIN	I.E.	INVERT ELEVATION	RM	ROOM
DEG	DEGREE	MAX	MAXIMUM	RPM	REVOLUTIONS PER MINUTE
DET	DETAIL	MBH	(1000) BTU'S	SS	STAINLESS STEEL
DIA	DIAMETER	MIN	MINIMUM		
DN	DOWN	NC	NORMALLY CLOSED	TEMP	TEMPERATURE
EFF	EFFICIENCY	NG	NATURAL GAS	T STAT	THERMOSTAT
EL	ELEVATION	NTS	NOT TO SCALE	TYP	TYPICAL
EWT	ENTERING WATER TEMPERATURE	N/A	NOT APPLICABLE	UTR	UP THRU ROOF
FC		OA	OUTSIDE AIR	V	VOLT, VENT
FFE	FLEXIBLE CONNECTION FINISHED FLOOR ELEVATION			VTR	VENT THROUGH ROOF
		OD	OUTSIDE DIAMETER	w	WATT, WASTE
FLEX	FLEXIBLE	OPNG	OPENING		•
FLR	FLOOR			W/	WITH
FS	FLOOR SINK			WG	WATER GAUGE
				WT	WEIGHT

INTERIOR WALL

FOR EXACT ROUTING. HOT WATER SUPPLY

WATER HEATER

COLD WATER SUPPLY

FIELD FABRICATED -WALL SHELF

TOP OF SHELF 60" ABOVE FF.

WH-1 SUPPORT

DETAIL

NOT TO SCALE

PRESSURE/TEMPERATURE
PIPING. ROUTE TO NEAREST
SERVICE SINK, BASIN OR
EXTERIOR GRADE; SEE PLANS

ATTACH TO WALL W/AN APPROVED SEISMIC STRAP

FLOW STREAM IDENTIFICATION

<u>LEGE</u>	<u>ND</u>	<u>SERVICE</u>
V W CW HW		VENT (SANITARY) WASTE COLD WATER HOT WATER

PLUMBING FIXTURE IDENTIFICATION

	TIFICATION	
TAG	FIXTURE	
CO COTG KS L MS WC WCO	CLEANOUT CLEANOUT TO GRADE KITCHEN SINK LAVATORY MOP SINK WATER CLOSET WALL CLEANOUT	

EXAMPLE CALLOUT: WC - 1 FIXTURE LEGEND -NO. ON FIXTURE SCHEDULE -

TETRA TECH





03-31-2021

CAPITAL TRANSIT VALLEY TRANSFER STATION
CONTRACT NO. BE20-288
BREAKROOM PLANS
PLUMBING

roject No.: 200-67908-2000 esigned By:

rawn By: KRIK hecked By:

P-101

	SHEET LIST TABLE					
Sheet Number Sheet Title						
E-100	TITLE, INDEX, LEGEND, AND GENERAL NOTES					
E-101	OVERALL SITE PLAN AND KEY MAP					
E-102	ENLARGED SITE PLAN (1 OF 4)					
E-103	ENLARGED SITE PLAN (2 OF 4)					
E-104	ENLARGED SITE PLAN (3 OF 4)					
E-105	ENLARGED SITE PLAN (4 OF 4)					
E-201	BREAKROOM FLOOR PLANS					
E-202	BREAKROOM ELEVATION AND ACCESS CONTROL SCHEMATIC					
E-203	SINGLE LINE DIAGRAM AND ELECTRICAL SCHEDULES					
E-204	LUMINIARE SCHEDULE AND LIGHTING CONTROL SCHEMATIC					
E-205	TELECOMM AND CAMERA DETAILS					
E-301	LIGHT POLE AND HANDHOLE SUMMARIES					
E-302	POLE AND HANDHOLE DETAILS					
E-401	AEL&P SINGLE LINE DIAGRAM (NIC)					
E-402	ACS TELEPHONE RISER DIAGRAM (NIC)					
E-403	GCI TV RISER DIAGRAM (NIC)					
E-404	TRENCH DETAIL AND CHARGING STATION POST MOUNTING DETAILS					
E-405	UTILITY EQUIPMENT LOCATIONS TABLE AND PANEL C ELEVATION					
E-406	LIFT STATION ELECTRICAL DETAILS					

GENERAL NOTES:

- 1. PERFORM ALL WORK PER NATIONAL ELECTRICAL CODE (NEC). 2020
- 2. PERFORM ALL WORK AS SHOWN ON DRAWINGS AND AS REQUIRED TO PROVIDE OPERATIONAL SYSTEMS.
- 3. COORDINATE WITH POWER, TELEPHONE, AND TELEVISION UTILITIES TO ALLOW THEM TO PERFORM THEIR WORK. UTILITY WORK WILL BE PAID FOR BY OTHERS. DO NOT INSTALL ANYTHING IN CONFLICT WITH UTILITIES. BRING ALL CONFLICTS TO THE ATTENTION OF THE ENGINEER. OBTAIN LOCATES BEFORE WORKING TO AVOID NEWLY INSTALLED UTILITIES. POWER TELEPHONE. AND TV UTILITY FACILITIES ARE SHOWN TO INFORM THE CONTRACTOR WHERE AND HOW THEY WILL BE INSTALLED TO ALLOW FOR PROPER COORDINATION. THE POWER, TELEPHONE AND TV UTILITY COMPANIES WILL INSTALL THEIR FACILITIES, NOT THE CONTRACTOR.
- 4. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC EXCEPT ALL CONDUIT UNDER ASPHALT OR CONCRETE SHALL BE SCHEDULE 80 PVC. PROVIDE SCHEDULE 80 PVC WITHIN 10' OF LIGHT POLE FOUNDATIONS, HANDHOLES AND CONCRETE STRUCTURES. INSTALL CONDUIT PER TRENCH DETAIL ON, SHEET E-404.
- 5. ALL EXTERIOR LIGHTING WIRING SHALL BE IN CABLE WITH COPPER CONDUCTOR, 600V RATED XHHW INSULATION, AND OVERALL PVC JACKET. PROVIDE ADDITIONAL BARE GROUND. USE BARE GROUND TO GROUND HANDHOLES, LIGHT POLES, FOUNDATIONS, ETC. BOND GROUND INSIDE CABLE TO PANEL B AND LIGHT POLES.
- 6. LOCATE EQUIPMENT WHERE SHOWN ON THE STATION AND OFFSET TABLES, SEE SHEET E-301.
- 7. ALL UTILITY WORK NOT IN CONTRACT (NIC). SEE SINGLE LINE AND RISER DIAGRAMS ON SHEETS E-401 TO E-403.
- 8. COORDINATE ALL CONDUIT CROSSING WITH CIVIL INFRASTRUCTURE PRIOR TO WORK. NOT ALL CROSSINGS NOTED ON THE DRAWINGS. CALL FOR LOCATES.
- 9. SIZE CONDUIT AND CONDUCTORS AS REQUIRED PER NEC UNLESS OTHERWISE NOTED. IN ALL CASES, INCREASE CONDUIT AND CONDUCTORS SIZES IF REQUIRED TO MEET NEC.

- 10. ALL CIRCUITS SHALL HAVE A DEDICATED EQUIPMENT GROUNDING CONDUCTOR.
- 11. LIFT STATION IS CONSIDERED A CLASS 1 DIVISION 2 LOCATION. ELECTRICAL WORK ASSOCIATED WITH THE LIFT STATION SHALL COMPLY WITH NEC REQUIREMENTS FOR SUCH HAZARDOUS LOCATIONS.
- 12. PROVIDE PULL STRING IN ALL SPARE CONDUITS.
- 13. BUY AMERICA PROVISIONS APPLY ON THIS PROJECT. SEE SPECIFICATIONS GENERAL CONDITIONS SECTION FOR COMPLETE DETAILS. PRODUCTS CATEGORIZED BELOW ARE EXPECTED TO COMPLY, OTHERS MAY WARRANT INCLUSION. PRIOR TO COMMENCEMENT OF CONSTRUCTION PROVIDE PRODUCT SUBMITTALS WITH EVIDENCE OF COMPLIANCE. CONSIDER MANUFACTURERS LISTED IN PARENTHESIS OR EQUAL.
 - A. EMT, IMC, GRC, ALUMINUM CONDUIT, INCLUDING FLEX METALLIC CONDUIT (REPUBLIC CONDUIT, WHEATLAND TUBE, ELECTRI-FLEX).
 - B. CONDUIT CONNECTORS, STRAPS, BUSHINGS, COUPLINGS, HANGERS, LOCKNUTS, ETC. (AMERICAN FITTINGS CORPORATON).
 - C. METALLIC ENCLOSURES, WIREWAYS, OUTLET BOXES (APPLETON, COPPER
 - D. LIGHT POLES (LITHONIA, MILLERBERND).
 - E. ELECTRIC VEHICLE CHARGING STATIONS (CLIPPER CREEK).
- 14. IN THE SPIRIT OF THE PROJECT REQUIREMENTS FOR 'MADE IN THE USA' COMPLIANCE, PROVIDE OTHER ELECTRICAL MATERIALS, EQUIPMENT, AND COMPONENTS OF USA ORIGIN OR USA POINT OF MANUFACTURER (USPOM) THAT ARE NOT SPECIFICALLY REQUIRED PER NOTE 9 ABOVE BUT CAN BE READILY OBTAINED. EXAMPLES OF SUCH PRODUCTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
 - A. PVC CONDUIT, FITTINGS, ELBOWS, ETC. (PRIME CONDUIT) B. LIGHT FIXTURES (LITHONIA, OTHERS WITH 'USPOM' MARKINGS)
- 15. PROVIDE SWING TIES ON AS-BUILT DRAWINGS AND 4' OF NO. 3 REBAR AT EVERY CONDUIT LOCATION THAT IS CAPPED BELOW GRADE.

LEGEND

- ABOVE FINISHED FLOOR
- ABOVE FINISHED GRADE
- ACCESS CONTROL CARD READER
- ACCESS CONTROL DOOR CONTROL DCD DEVICE
- ACCESS CONTROL ELECTRIC HINGE, EH
- ACCESS CONTROL POWER SUPPLY
- ACCESS CONTROL SITE CONTROL SCU
- ALASKA COMMUNICATIONS (TELEPHONE)
- ALASKA ELECTRIC LIGHT & POWER AEL&P
- APPROX APPROXIMATELY
- CU BARE COPPER
- 4 CAMERA
- CAMERA
- CAMERA HANDHOLE
- CAPL# CAMERA ONLY POLE
- С CIRCUIT
- CKT CIRCUIT
- CIRCUIT BREAKER
- CIRCUIT BREAKER (AMPS/POLES)
- CITY & BOROUGH OF JUNEAU
- CONTACTOR
- ∇ DATA
- DIST DISTANCE
- ELECTRIC VEHICLE
- EMERGENCY BATTERY PACK
- Q **EXHAUST FAN**
- EXISTING
- EXIT SIGN

EXTG

- FOOT CANDLE
- GALVANIZED RIGID STEEL
- GCI GENERAL COMMUNICATIONS INC (TV)
- GND GROUND
- GROUND FAULT INTERRUPTER
- HAND-OFF-AUTO

LEGEND

HAND-OFF-AUTO SWITCH

HH# HANDHOLF

J-BOX JUNCTION BOX

JUNCTION BOX

LIGHT POLE

(O) LIGHT POLE WITH LUMINAIRE

LTG LIGHTING

LIGHTING CONTACTOR

MAX MAXIMUM

METER

MINIMUM

NATIONAL ELECTRICAL CODE

NID NETWORK INTERFACE DEVICE

NOM NOMINAL

NOT IN CONTRACT

NON-METALLIC

OVERHEAD

PARTIAL PART

PEDESTAL PFD

PHOTOCELL

POLYVINYL CHLORIDE CONDUIT

RECEPTACLE

REC RECEPTACLE

REPEPTACLE, DOUBLE DOUPLEX

SS STAINLESS STEEL

SURGE PROTECTION DEVICE

TELECOM MAIN GROUNDING BAR

THERMOSTAT

XFMR TRANSFORMER

TYP-# TYPICAL

UNDERGROUND

UON UNLESS OTHERWISE NOTED



REVISIONS DATE DESCRIPTION







907-780-3533



CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

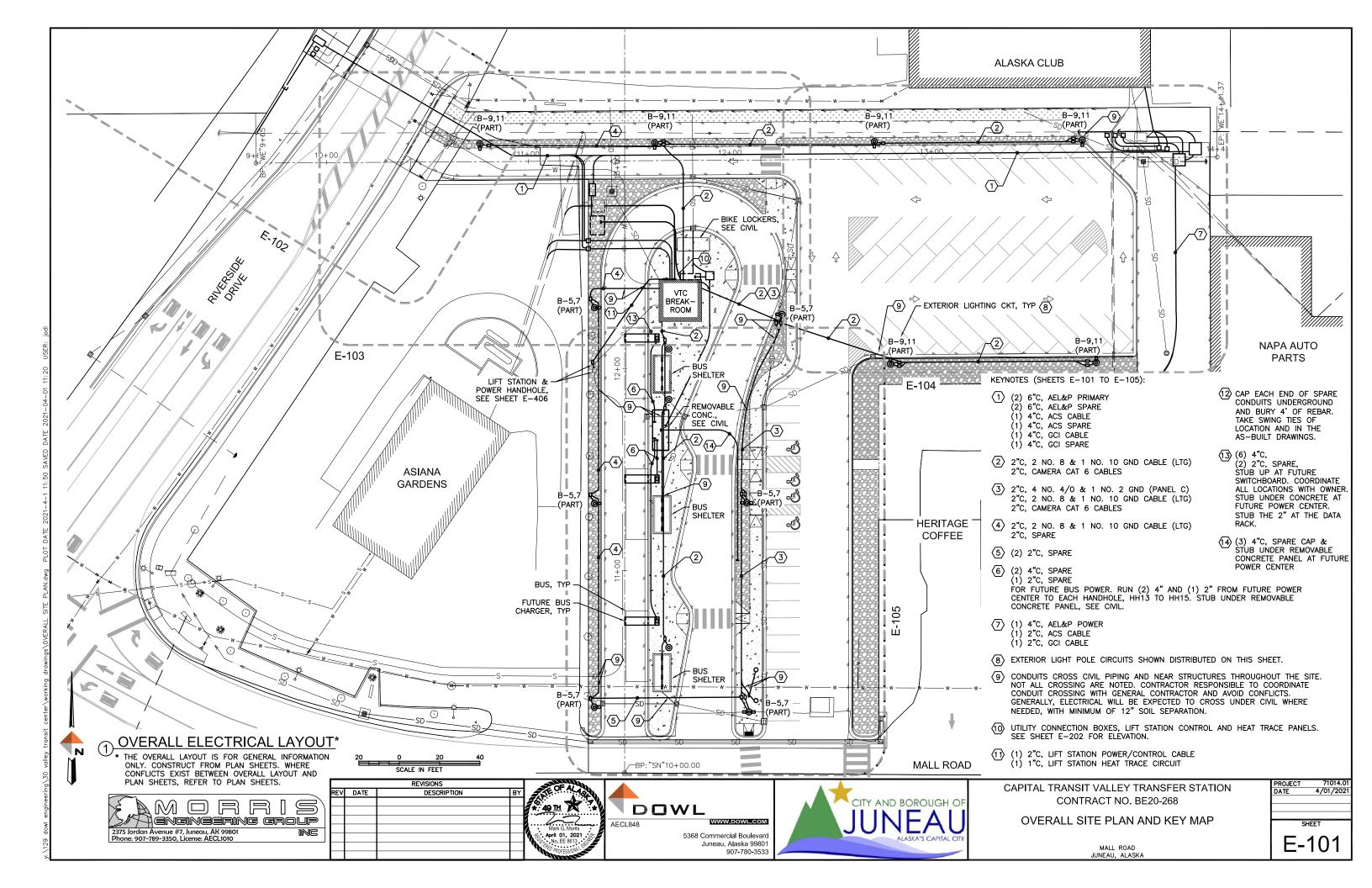
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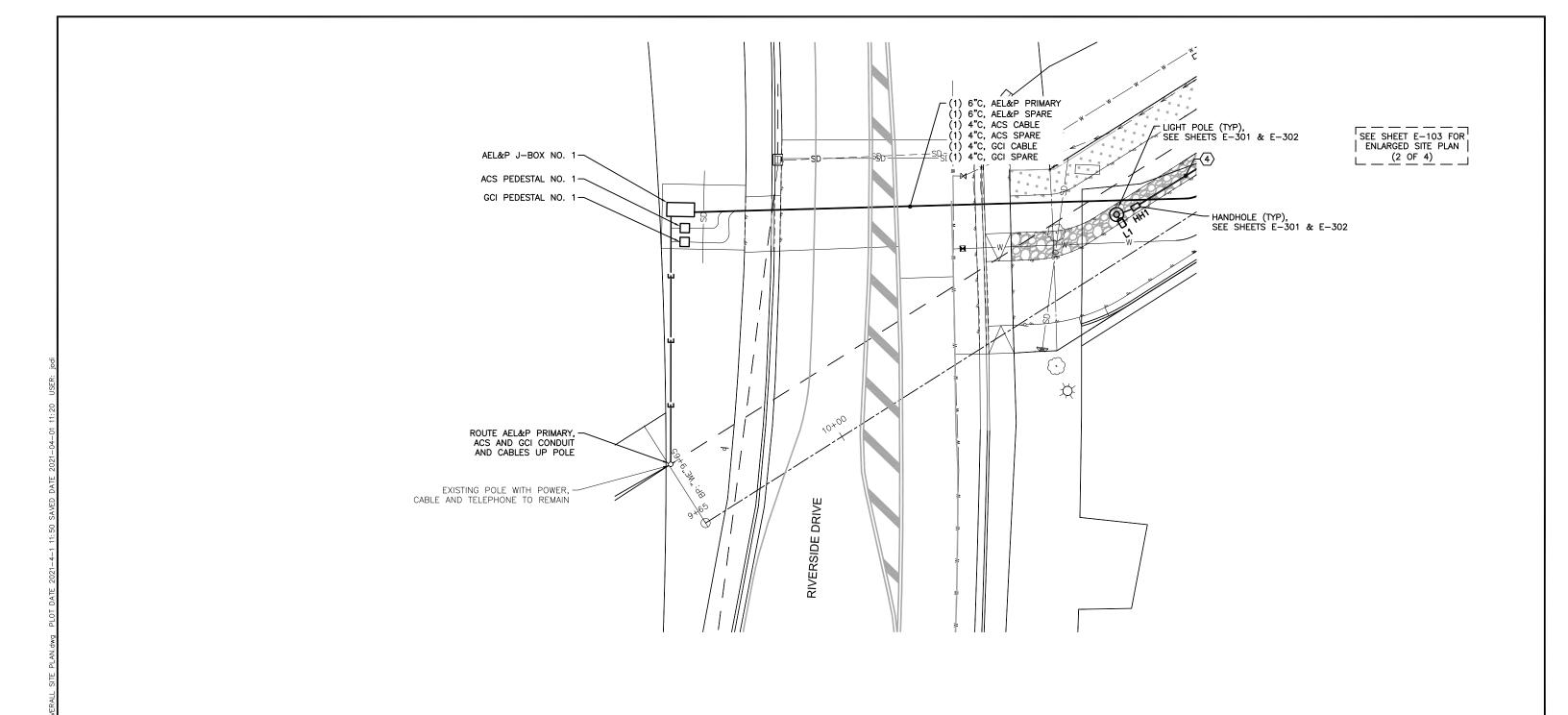
E-100

4/01/202

SHEET

MALL ROAD



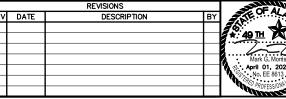


SHEET NOTES:

- SEE OVERALL SITE PLAN, SHEET E-101, FOR KEYNOTE REFERENCES.
- 2. MUCH OF THE WORK ON THIS SHEET IS NOT IN CONTRACT. SEE SHEETS E-401 TO E-403.



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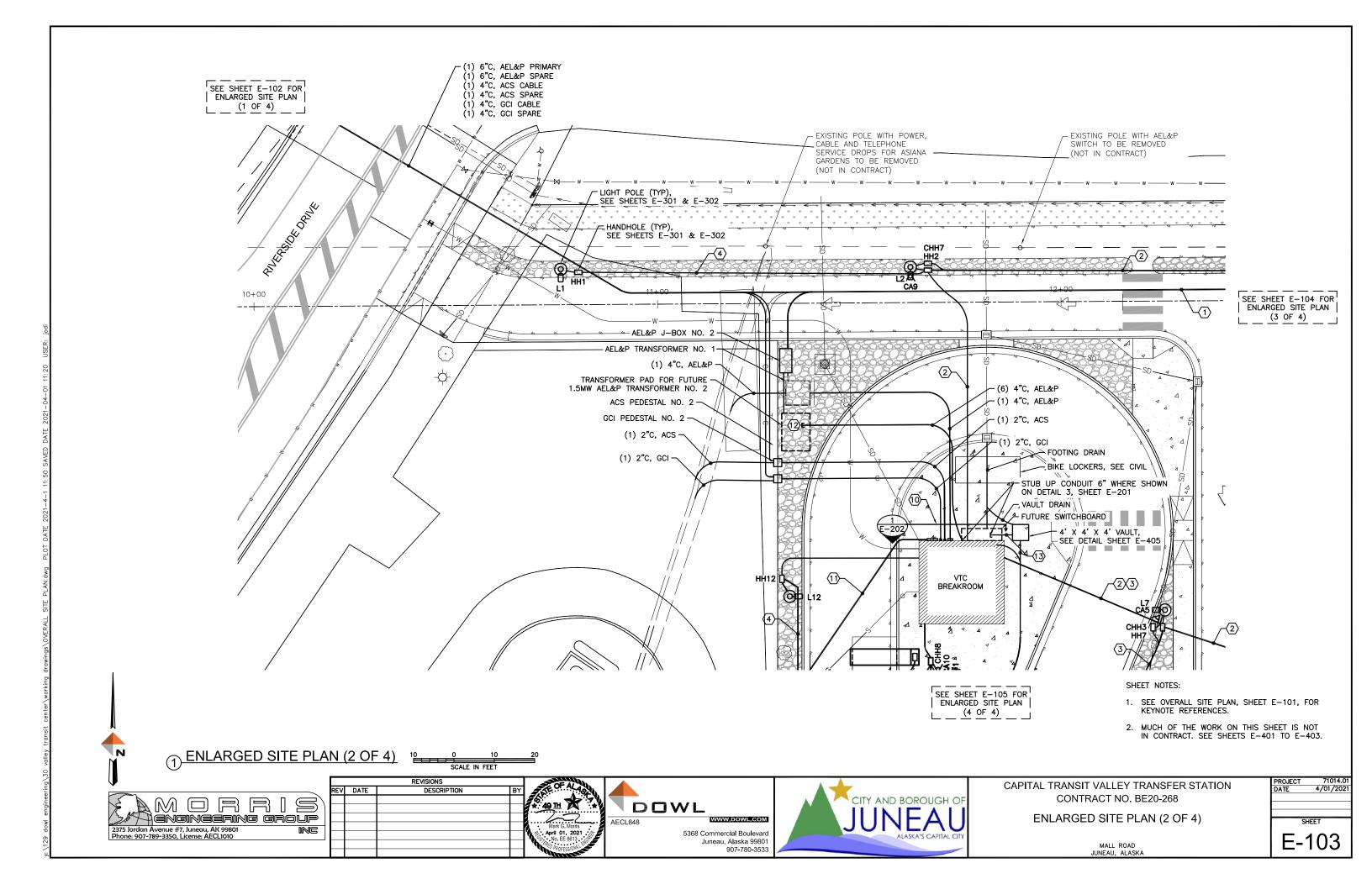
CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

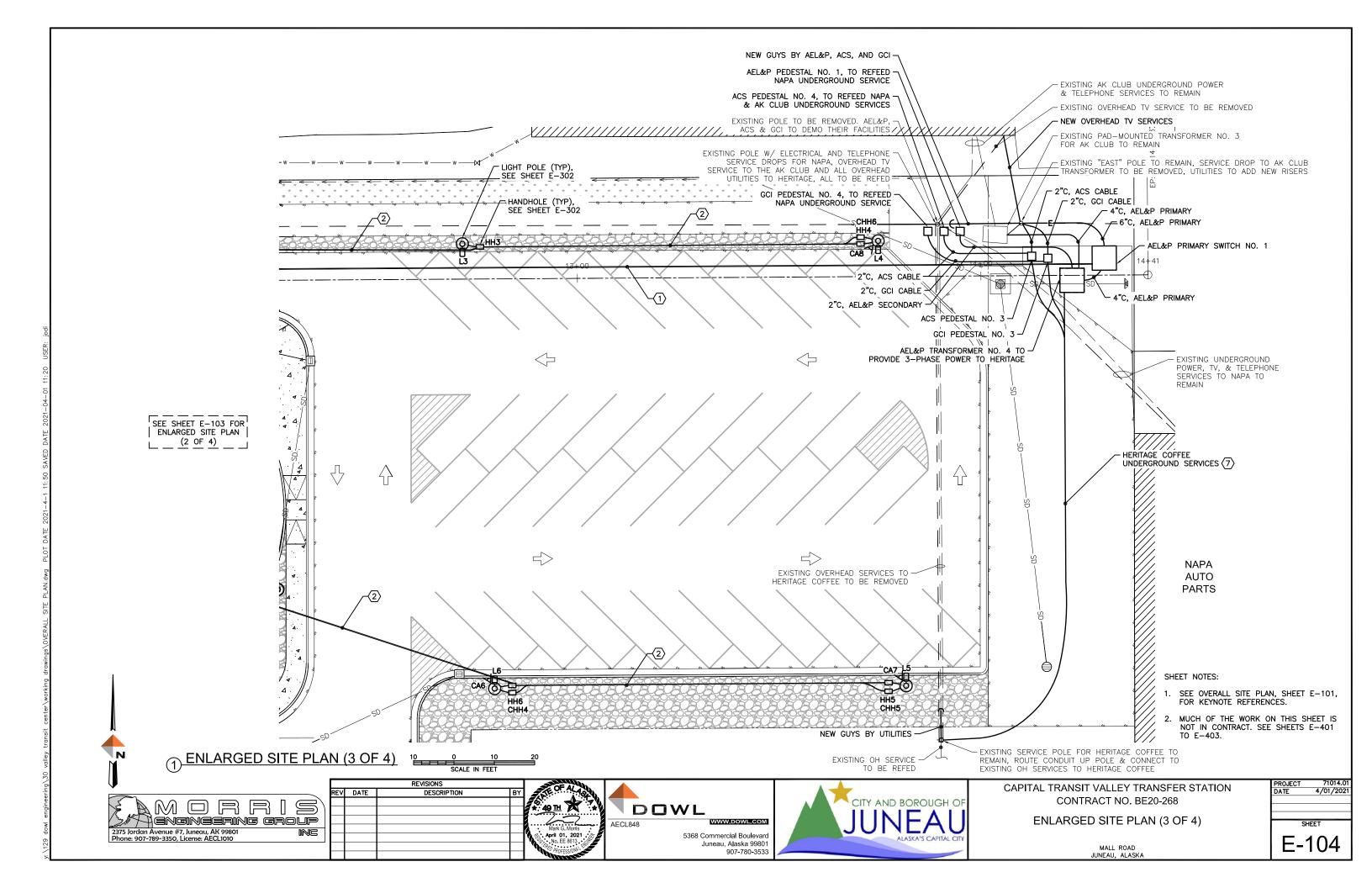
ENLARGED SITE PLAN (1 OF 4)

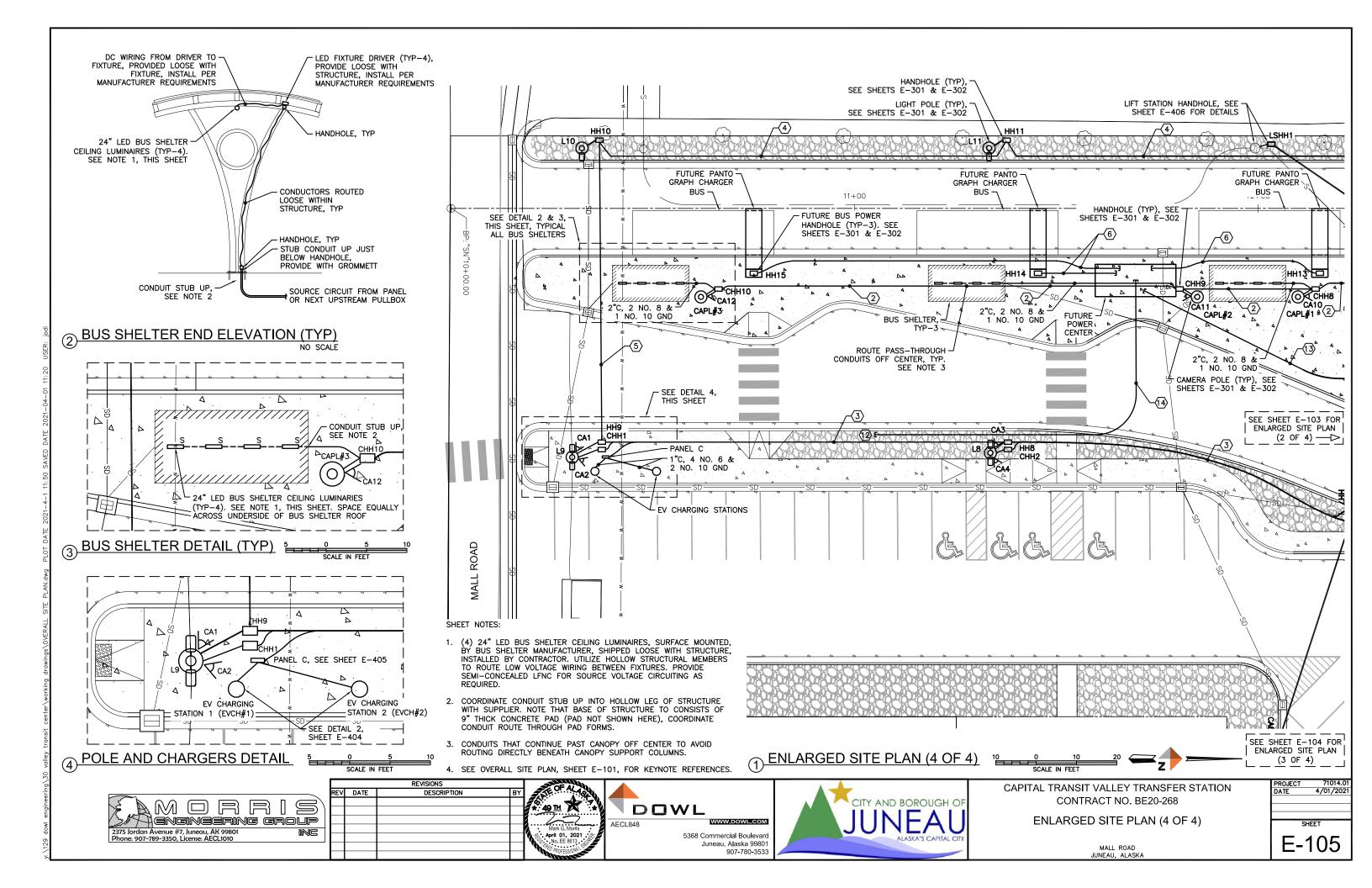
MALL ROAD

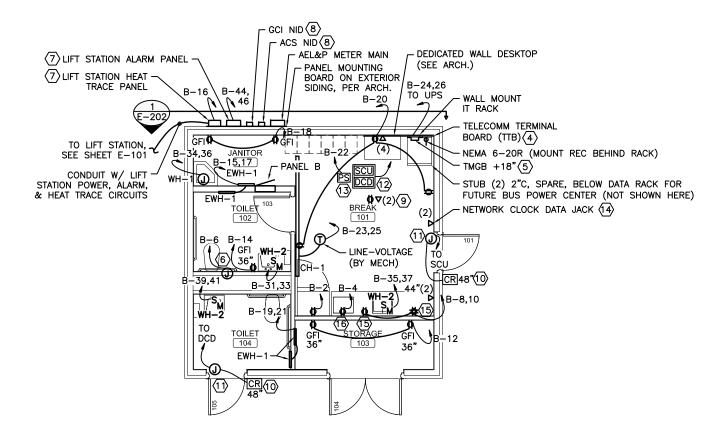
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SHEET E-102





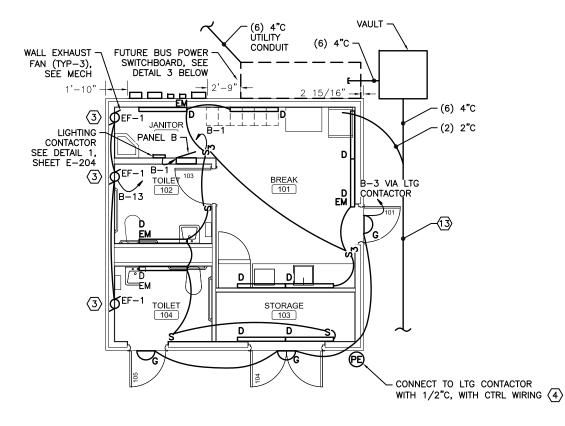




NOTES (APPLICABLE TO DETAIL 1):

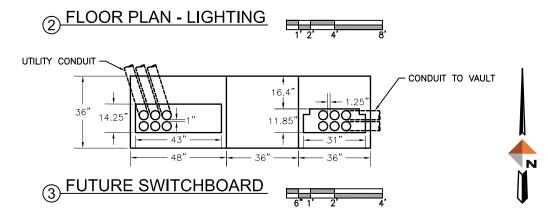
- 1. USE NUMBER OF AND SIZE CONDUCTORS AND CONDUIT AS REQUIRED.
- 2. UNLESS OTHERWISE NOTED, USE 3/4"C IN BUILDING EXCEPT FOR DATA USE 1"C. CONCEAL ALL CONDUIT. ROUTE DATA CONDUIT CONCEALED TO BACK OF IT RACK THEN THROUGH JUNCTION BOX IN WALL WITH NO COVER IN BACK OF IT
- 3. USE THWN INSULATED COPPER WIRE IN BUILDING.
- (4) 3/4"D X 30"W X 72"H (NOM., CUT TO SIZE) 3-PLY PLYWOOD BOARD AS THE TELECOM TERMINAL BOARD (TTB). PAINT WITH TWO COATS OF FIRE RETARDANT PAINT, MATCHED TO WALL PAINT COLOR. MOUNT TOP OF BOARD AT 84" ABOVE FINISHED GRADE. INSTALL IT RACK, TMGB, AND RACK RECEPTACLE ON BOARD.
- PROVIDE TELECOM MAIN GROUNDING BAR (TMGB) BELOW IT RACK, SEE DETAIL 8 SHEET A-102 FOR ELEVATION, AND SEE DETAIL 2, SHEET E-205.
- (6) PROVIDE JUNCTION BOX FLUSH IN WALL ABOVE STALL IN STAFF TOILET WITH SWITCH AND TRANSFORMER FOR HARDWIRED FLUSH VALVES. COORDINATE WORK WITH PLUMBER. SEE DETAIL 2 ON SHEET E-204 FOR MORE INFORMATION. PROVIDE WIRING TO REMAINING TOILETS IN SAME MANNER. POWER BOTH TOILETS
- COORDINATE HOME RUN CIRCUITS TO LIFT STATION PANELS AND CIRCUITS OUT TO LIFT STATION WITH OTHER TRADES. SEE E-405 FOR DETAILS.
- COORDINATE INSTALLATION OF ACS AND GCI NETWORK INTERFACE DEVICES (NID) ON BUILDING EXTERIOR WITH UTILITIES. FROM ACS NID RUN (1) 1" CONDUIT TO IT RACK BUILDING WITH (2) CAT 6 CABLES. FROM GCI NID RUN (1) 1" CONDUIT SPARE WITH PULLSTRING TO IT RACK FOR FUTURE SERVICE NEEDS.

- (9) PROVIDE A CEILING MOUNTED 120V RECEPTACLE AND RJ45 DATA JACK OUTLET FOR WIRELESS ACCESS POINT. POWER RECEPTACLE FROM AREA GENERAL USE
- PROVIDE A BLACK, EXTERIOR RATED, MULTI-CLASS PROXIMITY CARD READY AT DOOR. HID RP40 OR EQUAL. SURFACE MOUNT TO SINGLE GANG BOX MOUNTED FLUSH IN EXTERIOR SIDING. FEED WITH CIRCUIT FROM SCU OR DCD AS NOTED ON ACCESS SCHEMATIC, SEE SHEET E-202.
- DOOR WILL BE PROVIDED WITH ELECTRONIC LOCK, POWERED HINGE, AND WIRING HARNESS. SEE ARCHITECTURAL SPECS. COORDINATE WITH DOOR HARDWARE SUPPLIER TO PROVIDE A 8-CONDUCTOR CABLE FROM A 4" SQUARE JUNCTION BOX ABOVE DOOR TO HINGE CONNECT. SEE SCHEMATIC ON SHEET E-202 FOR
- PROVIDE INDIVIDUAL DOOR CONTROLLERS IN A COMMON, LOCKABLE ENCLOSURE MOUNTED TO THE TTB BOARD ADJACENT TO THE IT RACK. SEE SCHEMATIC ON
- (13) PROVIDE A DEDICATED POWER SUPPLY IN LOCKABLE ENCLOSURE TO POWER CARD ACCESS SYSTEM. MOUNT ADJACENT TO DOOR CONTROLLER BOX. SEE SCHEMATIC ON SHEET E-202.
- SURFACE MOUNT SINGLE GANG BOX WITH RJ45 FACEPLATE FOR NETWORK TIME CLOCK. CLOCK BY OWNER. VERIFY EXACT HEIGHT WITH ARCHITECT PRIOR TO
- (15) SPLIT THE INDIVIDUAL RECEPTACLES EVENLY ACROSS THE TWO SOURCE 120V CIRCUITS. MOUNT RECEPTACLES AT 44" AFF AND PROVIDE AS GFI TYPE.
- (16) MOUNT RECEPTACLES AT 44" AFF AND PROVIDE AS GFI TYPE.



NOTES (APPLICABLE TO DETAIL 2):

- PROVIDE A SWITCHED AND NON SWITCHED CONDUCTOR TO EACH TYPE D LUMINAIRE TO POWER EM BALLAST/DRIVER.
- 2. SEE LIGHT FIXTURE SCHEDULE AND ARCHITECTURAL ELEVATIONS FOR LIGHT FIXTURE MOUNTING HEIGHT INFORMATION.
- (3) EXHAUST FANS SHALL RUN CONTINUOUSLY. CIRCUIT TOGETHER TO DEDICATED CIRCUIT. POWER EACH FROM A RECESSED SIMPLEX OUTLET, COORDINATE WORK WITH MECHANICAL.
- (4) NEMA 3R RATED PE CELL 120V WITH 1-2 FC (ON) AND 3-5 FC (OFF) ADJUSTABLE AND FAIL ON DESIGN, TORK 2000-2 OR INTERMATIC K4123CMX OR EQUAL. CIRCUIT IN SERIES WITH AUTO LEG OF EXTERIOR LIGHTING CONTRACTOR FOR AUTOMATIC LIGHTING CONTROL. SCREW PE CELL TO SIDE OF 4"SQ. NEMA 3R GASKETED BOX ON EXTERIOR WALL OF BUILDING. AIM AWAY FROM AREA ARTIFICIAL LIGHT SOURCES.



1) FLOOR PLAN - POWER & SIGNAL

REVISIONS





CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

BREAKROOM FLOOR PLANS

SHEET E-201 MALL ROAD

4/01/202



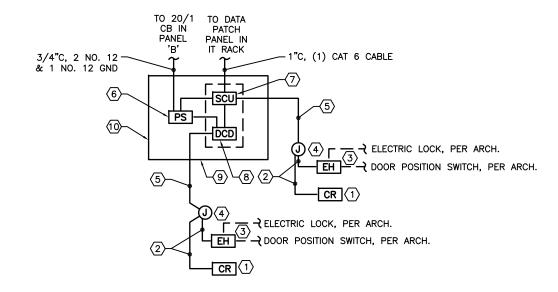
WWW.DOWL.COM AFCI 848 5368 Commercial Boulevard Juneau, Alaska 99801 907-780-3533





NOTES (APPLICABLE TO DETAIL 1):

- 1 METER MAIN, SEE SHEET E-203 FOR SCHEMATIC.
- 2 ASC (TELECO) NETWORK INTERFACE DEVICE.
- 3 GCI (TELEVISION) NETWORK INTERFACE DEVICE.
- (4) LIFT STATION ALARM / CONTROL PANEL.. SEE SHEETS E-203 AND E-406 FOR SCHEMATICS AND MOUNTING DETAILS.
- (5) LIFT STATION HEAT TRACE CONTROL PANEL. SEE SHEETS E-203 AND E-406 FOR SCHEMATICS AND MOUNTING DETAILS.
- 6. COORDINATE INSTALLATION OF ALL EXTERIOR PANELS AND ENCLOSURES WITH GENERAL CONTRACTOR. ALL UNITS TO BE MOUNTED ON PLYWOOD BOARD PROVIDED PER ARCHITECTURAL DRAWINGS.
- 7. PROVIDE ALL STAINLESS STEEL MOUNTING HARDWARE.
- 8. FOR THE UTILITY CONDUIT AND CIRCUIT INFORMATION SHOWN ON THIS SHEET, SEE SHEET E-203 FOR POWER CIRCUIT, SHEET E-402 FOR ACS CIRCUIT, AND SHEET E-403 FOR GCI CIRCUIT INFORMATION.
- 9. ALL EQUIPMENT MOUNTED ON OUTSIDE WALL SHALL BE SET PLUMB AND SQUARE. EXACT SEPARATION OF ENCLOSURES AND MOUNTING HEIGHTS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO WORK.

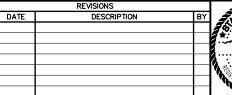


2 ACCESS CONTROL SCHEMATIC NO SCALE

NOTES (APPLICABLE TO DETAIL 2):

- 1 EXTERIOR PROXIMITY CARD READER, HID RP40 OR EQUAL.
- (2) 3/4"C, WITH COMPOSITE CABLE PER KEYNOTE 5 BELOW. ALTERNATIVELY, CONTRACTOR MAY SUBMIT INDIVIDUAL CARD READER AND DOOR LOCK CABLES FOR CONSIDERATION.
- (3) ELECTRIFIED HINGE, INTERNAL DOOR WIRING, AND DOOR LOCK AND POSITION SWITCH PER ARCHITECTURAL. COORDINATE WITH DOOR HARDWARE SUPPLIER.
- 4 Square junction above door. Split out individual card reader and electronic lock feeds at box down to each device.
- (5) 3/4"C, WITH COMPOSITE CABLE. CABLE TO INCLUDE 6-22, 2-22, 4-18, AND 4-22 FOR READER, DOOR CONTACTS, LOCK POWER, AND REX DEVICES. WEST PENN #AC1822 OR EQUAL.
- (6) DEDICATED 120V:12VDC POWER SUPPLY FOR ACCESS CONTROL SYSTEM. ALTRONIX 600UL OR EQUAL. MOUNT TO THE TTB ADJACENT TO IT RACK. PROVIDE 3-14 POWER CABLE IN CONDUIT TO EACH DOWNSTREAM DEVICE.
- (7) SITE CONTROLLER WITH INTEGRAL 1-DOOR CONTROL DEVICE. TYCO MILLENNIUM NETDCD1 OR EQUAL. PROVIDE ALL SYSTEM SETUP, TESTING, COMMISSIONING, AND PROGRAMMING PER MANUFACTURER REQUIREMENTS AND CBJ TRANSIT REQUIREMENTS. MOUNT IN COMMON ENCLOSURE PER KEYNOTE 9.
- (8) DOOR CONTROL DEVICE FOR 1-DOOR APPLICATION. TYCO MILLENNIUM EDCD OR EQUAL. PROVIDE ALL SYSTEM SETUP, TESTING COMMISSIONING, AND PROGRAMMING PER MANUFACTURER REQUIREMENTS AND CBJ TRANSIT REQUIREMENTS. MOUNT IN COMMON ENCLOSURE PER KEYNOTE 9.
- (9) MOUNT THE TWO DOOR CONTROLLER MODULES IN A COMMON, LOCKABLE ENCLOSURE. TYCO MILLENNIUM 062-510235 OR EQUAL. MOUNT TO THE TTB ADJACENT TO THE IT RACK.
- MOUNT POWER SUPPLY, AND DOOR CONTROLLER ENCLOSURE ON THE TELEPHONE TERMINAL BOARD (TTB)
 ADJACENT TO THE IT RACK. COORDINATE EXACT LOCATION ON BOARD WITH RACK SWING OUT REQUIREMENTS.











CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

BREAKROOM ELEVATION AND ACCESS CONTROL SCHEMATIC

HEMATIC E-2

E-202

2. EACH ELECTRIC VEHICLE (EV) CHARGING STATION TO CONSIST OF:

ONE (1) RUGGEDIZED FREE STANDING PEDESTAL. STAINLESS STEEL WITH STAINLESS STEEL HARDWARE, POWDER COATED, AND 44" MOUNTING HEIGHT (NOM.) ACCOMMODATES 2 CHARGING PORTS MOUNTED ONTO A SINGLE PEDESTAL. FLAT BLACK FINISH. PROVIDE CLIPPERCREEK #0300-00-026 OR EQUAL.

TWO (2) LEVEL 2, 10KW, 208V, 1-PHASE, RUGGEDIZED CHARGING PORTS. EACH INCLUDES A 25' CABLE, NEMA 4 ENCLOSURE, WALL HOLSTERS, SAE-J1772 CONNECTORS, WITH NEMA 4X RUBBER OVERMOLDED EV CONNECTORS, FLAT BLACK FINISH, HARDWIRE INTO PEDESTAL, CLIPPERCREEK #HCS-60R OR EQUAL.

NOTE: EACH EV CHARGING STATION SHALL BE INSTALLED SO THAT EACH CHARGING PORT IS ADA HEIGHT AND REACH COMPLIANT.

NOTE: SEE DETAIL 2 ON SHEET E-404 FOR MOUNTING AND MORE INFORMATION ON THE CHARGING STATIONS.

3. ALL PANELS TO INCLUDE COPPER BUSSING, PRINTED CIRCUIT SCHEDULE, AND FILLED WITH SPARE 20/1 BREAKERS AT ALL UNUSED POSITIONS. NOTE: INTEGRAL SPD DEVICE IS ACCEPTABLE.

2°C, 2 NO. 12 & 1 NO. 12 GND HEAT TRACE PANEL B, 120/208V, 36, 4W, 225A, ∇ CIRCUIT, CABLE PER CIVIL, SEE SHEET E-406 120/208V, 3ф, 4W, 7-JAW, 225A METER MAIN NEMA 3R SS, MOUNT TO BLDG EXTERIOR, 22 KAIC, 42 CKT, MLO, NEMA 1 ENCL, 72", AFF TO TOP, SEE NOTE 3 HANDHOLE AT LIFT STATION, WITH HEAT TRACE CONNECTION KIT, SEE SHEET E-202 FOR ELEVATION SEE DETAIL SHEET E-406, HANDHOLE PER DETAIL 3, SHEET E-302 150/3 20/2 3/4"C, 2 NO, 10 & 1 NO. 12 GND 20/1 LIFT STATION HEAT TRACE PANEL, SEE SHEET E-406 FOR (м) *225/3 PANEL ELEVATION

30/3

(1) SINGLE LINE DIAGRAM

2-1/2"C, 4 NO. 4/0-

TO TELCO MAIN GROUNDING BAR

GROUNDING SYSTEM

(TMGB) SEE DETAIL 2, SHEET E-205 FOR COMPLETE DETAILS ON

& 1 NO. 2 GND

NOTE 1 SPD -

MECHANICAL EQUIPMENT SCHEDULE								
EQUIPMENT	HP/KW	VOLTS/PH	STARTER SWITCH	DISCONNECT AT MOTOR	CIRCUIT INFO.	REMARKS		
EWH-1	2KW	208/1	INTEGRAL	NOTE 1	3/4"C, 2 NO. 8 & 1 NO. 12 GND	NOTES 1,2		
CH-1	1.8KW	208/1	T-STAT	T-STAT N/A		NOTE 2		
EF-1	FRAC HP	120/1	N/A DEDIC		3/4°C, 2 NO. 12 & 1 NO. 12 GND	NOTES 2,3		
WH-1	6KW	208/1	INTEGRAL	NOTE 1	3/4"C, 2 NO. 8 & 1 NO. 12 GND	NOTES 1,2		
WH-2	2.5KW			MTR RATED SWITCH	3/4°C, 2 NO. 12 & 1 NO. 12 GND	NOTE 2		

MECHANICAL FOLUBLIENT COLIEBLIE

NOTES (APPLICABLE TO MECHANICAL EQUIPMENT SCHEDULE):

- DEDICATED CIRCUIT BREAKER ON BRANCH CIRCUIT SHALL FUNCTION AS LOAD DISCONNECTING MEANS.
- COORDINATE FINAL ELECTRICAL REQUIREMENTS WITH APPROVED MECHANICAL SUBMITTALS COORDINATE WORK WITH MECHANICAL CONTRACTOR PRIOR TO ORDERING AND PRIOR TO WORK
- FAN COMES WITH CORD AND PLUG DEDICATED RECEPTACLE AT UNIT SHALL FUNCTION AS DISCONNECTING MEANS.

LIFT STATION HEAT — TRACE PANEL, SEE	ACE PANEL SEE				OLTS, PH	IASE	MOUN	NTING	MAIN	LOCATION	
SHEET E-406 FOR PANEL ELEVATION		PANEL B	225A	120,	/208V, 3ф, 4W		SURFACE		MLO	JANITOR	
	CKT NO	NO DESCRIPTION		СКТ	CKT A¢ B¢		Сф СКТ		C/B SIZE	DESCRIPTION	
. TO TELOO MAIN	1	LTG - BUILDING INTERIOR	20/1	0.5	1.0			0.5	20/1	REC REFRIGERATOR (GFI TYPE)	2
TO TELCO MAIN GROUNDING BAR	3	LTG - BUILDING EXTERIOR WALL FIXTURES	20/1	0.1		1.6		1.5	20/1	REC MICROWAVE	4
(TMGB) SEE DETAIL 2,	5	LTG - BUS LANE LIGHT POLES	20/2	0.6			0.7	0.1	20/1	TOILET FLUSH VALVES	6
SHEET E-205 FOR COMPLETE DETAILS	7	-	l –	0.6	0.9			0.3	20/1	REC COUNTER	8
ON GROUNDING	9	LTG - PARKING LOT LIGHT POLES	20/2	0.6		0.9		0.3	20/1	REC COUNTER	10
SYSTEM	11	-	-	0.6			1.0	0.4	20/1	REC STORAGE	12
	13	EF-1 JANITOR, TOILET ROOMS	20/1	0.3	0.5			0.2	20/1	REC STAFF BATH	14
	15	EWH-1 HEAT JANITOR & STAFF TOILET	25/2	2.0		2.1		0.1	20/1	LIFT STATION HEAT TRACE	16
	17	-	-	2.0			2.4	0.4	20/1	REC JANITOR	18
	19	EWH-1 HEAT PUBLIC TOILET & STORAGE	25/2	2.0	2.6			0.6	20/1	REC BREAKROOM & DESKTOP	20
	21	-	_	2.0		2.2		0.2	20/1	ACCESS CONTROL POWER SUPPLY	22
	23	CH-1 HEAT BREAKROOM	20/2	0.9			1.7	0.8	20/2	REC IT RACK UPS	24
	25	_	! –	0.9	1.7			0.8	_	_	26
L EQUIPMENT	27	LTG - BUS WAITING SHELTER	20/2	0.2		13.5		13.3	150/3	PANEL C	28
L LOON MILITI	29	-	 	0.2			13.5	13.3	-	-	30
ON BRANCH	31	WH-2 HOT WATER STAFF TOILET	20/2	1.3	14.6			13.3	-	-	32
LOAD	33	-	T -	1.3		4.3		3.0	40/2	WH-1 HOT WATER HEATER	34
	35	WH-2 HOT WATER BREAKROOM	20/2	1.3			4.3	3.0	_	_	36
L REQUIREMENTS	37	-	-	1.3	1.3			0.0	30/3	SURGE PROTECTION DEVICE	38
SUBMITTALS	39	WH-2 HOT WATER PUBLIC TOILET	20/2	1.3		1.3		0.0	-	-	40
HANICAL RING AND PRIOR	41	-	T -	1.3			1.3	0.0	-	-	42
	43	SPARE	20/1	0.0	0.6			0.6	20/2	LIFT STATION POWER	44
PLUG DEDICATED	45	SPARE	20/1	0.0		0.6		0.6	-	_	46
FUNCTION AS	47	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	48
	49	SPARE	20/1	0.0	0.0			0.0	20/1	SPARE	50
	51	SPARE	20/1	0.0		0.0		0.0	20/1	SPARE	52
	53	SPARE	20/1	0.0			0.0	0.0	20/1	SPARE	54
		TOTAL CONNECTED LOAD = 74.6 KVA/ 207 AMPS			23.2	26.5	24.9		· ·		



4"C, AEL&P

TO UTILITY

* PROVIDE 100% RATED

CIRCUIT BREAKER

TRANSFORMER

REVISIONS / DATE DESCRIPTION April 01, 2021





Juneau, Alaska 99801

907-780-3533

PANEL C, 120/208V, 36, 4W, 225A,

22 KAIC, 30 CKT, MOUNT IN NEMA

4X, SS ENCLOSURE, SEE NOTE 3

60/2

60/2

60/2

60/2

30/3

150/3

NOTE 1 SPD

2-1/2°C, 4 NO. 4/0 7 & 1 NO. 2 GND

1"C. 4 NO. 6 & 2 NO. 10 GND

EV CHARGING STATION 1, 48A (SEE NOTE 2, THIS SHEET)

EV CHARGING STATION 2, 48A (SEE NOTE 2, THIS SHEET)

WITH PUMP POWER/ALARM CABLE, CABLE PER CIVIL, SEE SHEET E-406 FOR SEAL-OFF DETAIL

· LIFT STATION ALARM PANEL, PER CIVIL, SEE SHEET E-406 FOR PANEL ELEVATION

E-406 FOR DETAIL

- LIFT STATION, PER CIVIL, SEE SHEET



CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

SINGLE LINE DIAGRAM AND ELECTRICAL SCHEDULES

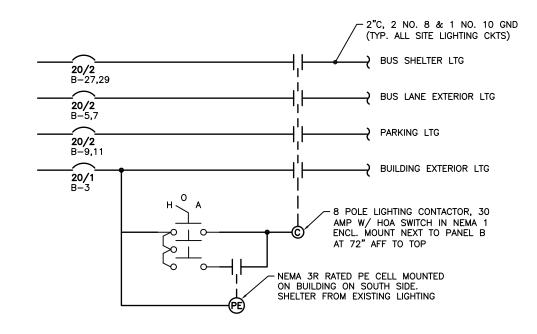
MALL ROAD JUNEAU, ALASKA

4/01/202 SHEET

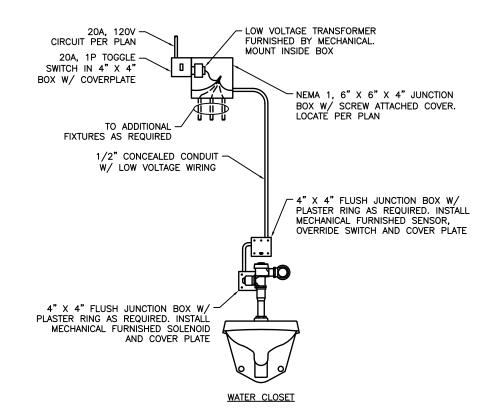
	LUMINAIRE SCHEDULE										
TYPE DESCRIPTION	DESCRIPTION	LAMPS	MANUFACTURER			SPARES	REMARKS	NOTES			
1117	DESCRIPTION	LAWIFS		BRAND	PART NO.	SFAILS	ILMAINS	NOTES			
A	A TYPE 4 POLE MOUNTED LUMINAIRE	LED, 4000K, 850mA 26,000 LUMENS,	(OR)	LITHONIA LIGHTING	DSX2-LED-P3-40K-T4M-MVOLT-SPA-SF-BS-DBLBXD	1	TYPE 4 DISTRIBUTION, 120-277V, FLAT BLACK, INTEGRAL FUSING, BIRD SPIKES, AND INTEGRAL 10KV (CAT C) SURGE PROTECTION COORDINATE MOUNTING ARM WITH POLE SELECTION	1, 2, 3, 4, 7			
		70 CRI, MIN.		VIPER	VPL-80L-240-3K7-4-UNV-A-BL-F-BSP						
В	B TYPE 3 POLE MOUNTED LUMINAIRE	LED, 4000K, 850mA 26,000 LUMENS, 70 CRI, MIN.	(OR)	LITHONIA LIGHTING	DSX2-LED-P3-40K-T3M-MVOLT-SPA-SF-BS-DBLBXD	1	TYPE 3 DISTRIBUTION, 120–277V, FLAT BLACK, INTEGRAL FUSING, BIRD SPIKES, AND INTEGRAL 10KV (CAT C) SURGE PROTECTION COORDINATE	1, 2, 3, 4, 7			
				VIPER	VPL-80L-240-3K7-3-UNV-A-BL-F-BSP		MOUNTING ARM WITH POLE SELECTION				
D	4' WALL MOUNT UP/DN LED	LED, 3500K, 4000 LUMENS	LED, 3500K, (OR)	(OR)	LITHONIA	WL4-40L-GZ10-LP840	1	120/277V. PROVIDE WITH EM BATTERY PACK 1,400 LUMENS WHERE SHOWN	1, 2, 5, 7		
	T WALL MOON! OF ON LED		(OK)	HUBBELL	CWM-4-40-LW-SR-FR-WA-ED-U-ELL14		WITH EM.	1, 2, 3, 7			
G	WALL MOUNT EXTERIOR WALL BACK, LED,	LED, 4000K, 2900 LUMENS, 30W (OF	(OR)	LITHONIA	WSQ-LED-P2-40K-SR4-MVOLT-SF-DBLXD	1	TYPE 5 DISTRIBUTION, BLACK, DIE CAST ALUMINUM HOUSING, POWDER COATED, RATED FOR WET LOCATIONS, WITH INTERNAL FUSING, LED SOURCE,	1, 2, 6, 7			
	QUARTER SPHERE			COLUMBIA	QSP1-12L-40-3K7-4-U-BL-F	'	MOUNT ABOVE DOOR	1, 2, 0, 7			
s	24" LED BUS SHELTER CEILING	LED, 6500K,		SEE NOTE 1, SHEET E-105			DROWNED BY DUC CHELTED CURRIED CONTRACTOR TO WATEL				
	LUMINAIRE, SURFACE MOUNTED	280 LUMENS					PROVIDED BY BUS SHELTER SUPPLIER, CONTRACTOR TO INSTALL				

SHEET NOTES:

- 1. THE PART NUMBERS IN THE LUMINAIRE SCHEDULE MAY NOT BE COMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL PARTS AND ACCESSORIES NECESSARY TO COMPLY WITH THE FEATURES SHOWN IN THE LUMINAIRE SCHEDULE (INCLUDING THE MOUNTING) AS SHOWN ON THE OTHER PLAN SHEETS AND SPECIFICATIONS.
- 2. SUBSTITUTE FIXTURES OF EQUAL PERFORMANCE, PHYSICAL FORM, AESTHETIC, AND MOUNTING SHALL BE CONSIDERED FOR APPROVAL DURING THE SUBMITTAL PROCESS.
- SEE SHEET E-302 FOR POLE DETAIL & MOUNTING INFO AND SHEET E-301 FOR LIGHT POLE SUMMARY INDICATING WHERE EACH FIXTURE TYPE AND FIXTURE QUANTITIES ARE TO BE PROVIDED PER POLE. SEE SITE PLAN SHEETS E-102 TO E-105 FOR POLE LOCATIONS.
- 4. PROVIDE POLE LIGHT FIXTURES PROTECTED UPSTREAM FUSING AND SPD UNITS INSTALLED IN POLE. SEE WIRING DIAGRAM ON SHEET E-301.
- CENTER TYPE 'D' WALL FIXTURES ON THE WALL SEGMENT THEY ARE MOUNTED TO. HEIGHT OF FIXTURES PER ARCHITECTURAL ELEVATIONS. COORDINATE FINAL HEIGHT WITH ARCHITECT PRIOR TO ROUGH—IN WORK.
- TYPE 'G' FIXTURE MOUNTING HEIGHT ANTICIPATED AT APPROXIMATELY 90"
 ABOVE FINISHED GRADE. CENTER WITHIN EXTERIOR PANELING SEGMENTS
 ABOVE DOOR. REFER TO ARCHITECTURAL ELEVATIONS FOR PRECISE DETAILS,
 COORDINATE FINAL HEIGHT WITH ARCHITECT PRIOR TO ROUGH—IN WORK.
- 7. LIGHT FIXTURES COMPLYING WITH 'USPOM' AND BUY AMERICA PROVISIONS ARE EXPECTED ON THIS PROJECT. SEE NOTES 9 AND 10 ON SHEET E-100 FOR MORE DETAILS.



(1) EXTERIOR LIGHTING SCHEMATIC



2 TOILET FLUSH VALVE CONTROLS NO SCALE

NOTES (APPLICABLE TO DETAIL 2):

- COORDINATE MOUNTING HEIGHTS AND ALL INSTALLATION REQUIREMENTS WITH VALVE INSTALLATION DRAWINGS AND WITH MECHANICAL CONTRACTOR.
- 2. MAKE FINAL CONNECTIONS TO ALL ASSOCIATED DEVICES.



	REVISIONS		STATE OF THE PARTY	
DATE	DESCRIPTION	BY	ASTE OF THE PARTY.	
			36	
			*: 49 H	
				AE01040
			Mark G. Morris	AECL848
			April 01, 2021	
			NO. EE 6013	
			PROFESSIONA	



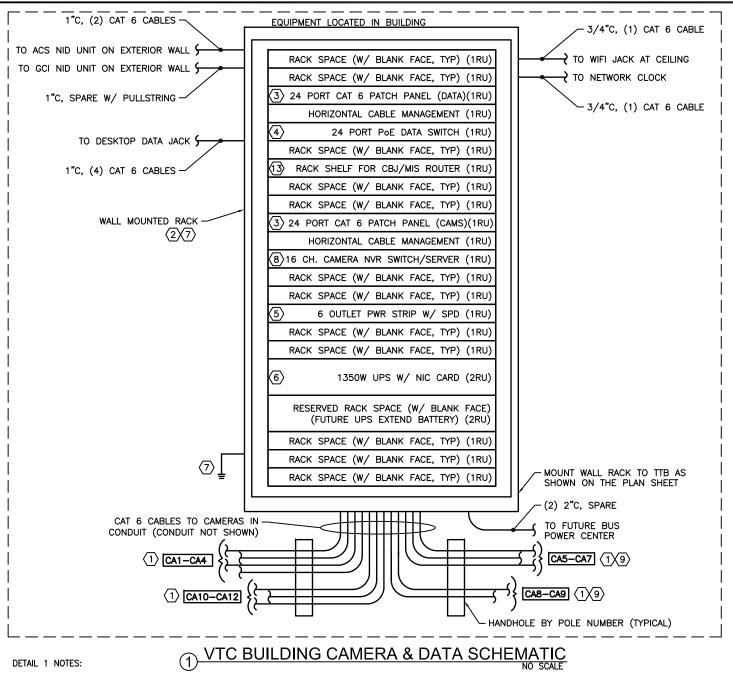


CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

LUMINIARE SCHEDULE AND LIGHTING CONTROL SCHEMATIC

MALL ROAD

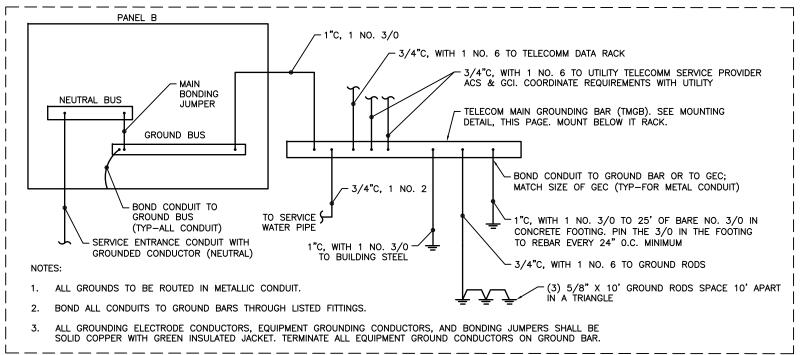
E-204

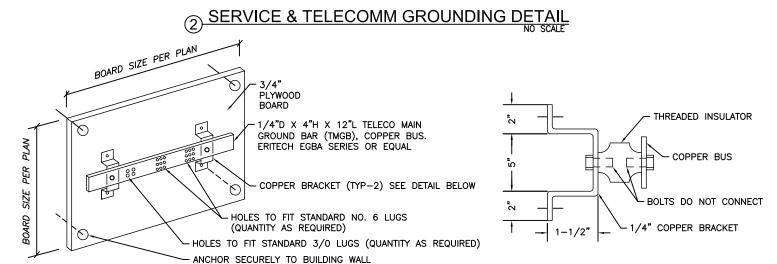


- OUTDOOR DAY/NIGHT FIXED PENDANT POLE MOUNT MINI-DOME. POE WITH 1080P, WDR, IR, IP66 AND IK10 RATED. AXIS P3245-LVE + T91B47 OR EQUAL. PROVIDE PENDANTS WITH BIRD SPIKES. CAMERA TYPE APPLIES FOR CAMERAS CA1-CA5, AND CA9-CA12.
- TIA/EIA 19" USEABLE, 24" OVERALL WIDTH, 24" USEABLE DEPTH, SWING OUT WALL RACK. FULLY ENCLOSED ALL SIDES, TOP AND BOTTOM, WITH LOCKABLE DOOR, WITH VENTED FRONT DOOR, TOP DUST COVER, FAN AND FILTER KIT, AND RACK SHELF. INCLUDES MINIMUM OF 24 RACK UNITS OF SPACE (24RU). MIDDLE ATLANTIC DWR-24 SERIES OR EQUAL. PROVIDE A MINIMUM OF 42" WALL SPACE FOR FULL RACK SWING OUT.
- 24 PORT CAT 6 STANDARD DENSITY PATCH PANEL. COMPLETED WITH 18 PRE-POPULATED PORT POSITIONS WITH RJ45 JACKS AND 6 SPACES WITH BLANK FILLERS. FRONT FACING PANEL JACKS.
- 24 PORT POE+ SWITCH, FURNISHED AND INSTALLED BY OWNER, CONNECT ALL DATA DROPS TO SWITCH VIA PATCH PANEL, INCLUDING THE OUTPUT OF THE CAMERA RACK.
- COMMERCIAL GRADE 120V POWER STRIP WITH ON INDICATOR LIGHT, BUILT IN SURGE PROTECTION AND MINIMUM (6) OUTPUT RECEPTACLES. REAR FACING RECEPTACLES TRIPP-LITE DRS-1215 OR ITW LINX GRM0600 OR EQUAL POWER FROM UPS OUTPUT RECEPTACLE AND POWER ALL RACK LOADS FROM SURGE STRIP.
- 1500VA/1350W, 208V:120V RACK MOUNTED UPS WITH INPUT CORD AND PLUG. INCLUDES FRONT LDC INDICATOR SCREEN, MIN. (5) OUTPUT RECEPTACLES, NIC CARD WITH RJ45 JACK, AND APC SMT1500RM2UNC SMART-UPS OR EQUAL. POWER FROM DEDICATED WALL OUTLET AND POWER THE RACK SURGE STRIP FROM THE UPS. CONNECT NIC CARD TO RACK SWITCH VIA PATCH PANEL, COORDINATE WITH OWNER ON CONFIGURATION OF OUTPUT ALARMS AND NOTIFICATIONS TO THE EXTERNAL NETWORK.

REVISIONS

GROUND THE RACK TO THE TMGB IN THE ROOM AND GROUND ALL RACK EQUIPMENT TO THE RACK PER TIA/EIA STANDARDS. GROUND PER DETAIL 2, THIS SHEET





(3) TELEPHONE TERMINAL BOARD (TTB) TMGB DETAILS

- 16-CHANNEL NETWORK VIDEO RECORDER, RACK MOUNTED WITH REDUNDANT POWER SUPPLIES, AND SSD TYPE HARD DRIVE. PROVIDE WITH 8TB OF ONBOARD STORAGE AS PART OF THIS PROJECT. AXIS S2216 OR EQUAL.
- OUTDOOR DAY/NIGHT FIXED PENDANT POLE MOUNT MINI-DOME. INCLUDES 4-SENSORS FOR MULTIPLE CAMERA FUNCTIONALITY. POE WITH 1080P, WDR, IR, IP66, AND IK10 RATED. AXIS P3717-PLE + T91B67 + T94N01D OR EQUAL. PROVIDE PENDANTS WITH BIRD SPIKES. CAMERA TYPE APPLIES FOR CAMERAS CA6-CA8.
- 10. ALL DATA CABLES ENTERING THE RACK SHALL BE IN CONDUIT CONNECTED AT RACK KNOCKOUTS. CONDUIT NOT SHOWN HERE.
- CAMERA CABLES ARE ROUTED THROUGH SITE JUNCTION BOXES, NOT ALL OF WHICH ARE NOTED HERE. REVIEW SITE PLANS, BUILDING FLOOR PLANS, AND CAMERA DETAIL PLANS FOR MORE PRECISE ROUTING AND THE NUMBER AND LOCATION OF ENCLOSURES ALONG THE CAMERA CABLE PATHS.
- CAMERAS SHALL BE LOCATED TO BEST ACHIEVE STATED VIEWING OBJECTIVES. ADJUST PHYSICAL POSITIONS AT MOUNTING LOCATIONS, ALONG WITH ADJUSTMENTS TO AIMING VIA SOFTWARE, ETC., IN COORDINATION WITH OWNER PRIOR TO SUBSTANTIAL COMPLETION.
- PROVIDE SHELF FOR OWNER PROVIDED ROUTER.
- PROVIDE 24" LONG, CAT 6 PATCH CORDS WITH RJ45 JACKS ON BOTH ENDS. PROVIDE QUANTITY OF CABLES NEEDED FOR ALL CAMERA DROPS AND DATA DROPS ON THE
- 15. CONTRACTOR SHALL PROVIDE PRINTED LABELS FOR ALL PATCH PANEL CAMERA AND DATA DROP POSITIONS. COORDINATE EXACT LABEL DESCRIPTIONS WITH ENGINEER PRIOR TO APPLYING.









CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

TELECOMM AND CAMERA DETAILS

SHEET

MALL ROAD

E-205

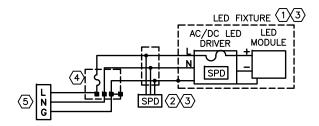
	LIGHT POLE & CAMERA SUMMARY										
POLE NO.	POLE HEIGHT	POLE CAMERA NO.	LUMINAIRE MOUTING HEIGHT	CAMERA MOUNTING HEIGHT	STATION	OFFSET	POLE BASE ELEVATION *	LUMINAIRE TYPE	REMARKS	SHEET E-302 DETAILS	
L1	30'	N/A	33'	N/A	STA "WE" 10+76.0	9.0' LT	31.55'	(1) B	EXTERNAL SHIELD BACK & RIGHT	1, 2, 3	
L2	30'	CA9	33'	15'	STA "WE" 11+62.7	9.0' LT	30.68'	(1) B	EXTERNAL SHIELD BACK	1, 2, 3	
L3	40'	N/A	43'	N/A	STA "WE" 12+71.5	9.0' LT	30.37'	(1) A	EXTERNAL SHIELD BACK	1, 2, 3	
L4	40'	CA8	43'	15'	STA "WE" 13+74.5	9.0' LT	30.84'	(1) A	EXTERNAL SHIELD BACK & LEFT	1, 2, 3	
L5	40'	CA7	43'	15'	STA "WE" 13+80.8	101.2' RT	31.07'	(1) A	EXTERNAL SHIELD BACK & RIGHT	1, 2, 3	
L6	40'	CA6	43'	15'	STA "WE" 12+78.8	101.3' RT	30.31'	(1) A	EXTERNAL SHIELD BACK	1, 2, 3	
L7	30'	CA5	33'	15'	STA "WE" 12+25.2	76.4' RT	30.16'	(1) A		1, 2, 3	
L8	30'	CA3 & CA4	33'	15'	STA "SN" 11+33.9	60.5' RT	29.92'	(2) A		1, 2, 3	
L9	30'	CA1 & CA2	33'	15'	STA "SN" 10+30.2	61.6' RT	30.72'	(2) A		1, 2, 3	
L10	30'	N/A	33'	N/A	STA "SN" 10+32.6	15.0' LT	30.35'	(1) A	EXTERNAL SHIELD BACK & RIGHT	1, 2, 3	
L11	30'	N/A	33'	N/A	STA "SN" 11+33.5	15.0' LT	30.74'	(1) A	EXTERNAL SHIELD BACK	1, 2, 3	
L12	30'	N/A	33'	N/A	STA "WE" 11+32.3	72.5' RT	31.12'	(1) A	EXTERNAL SHIELD BACK	1, 2, 3	
CAPL#1	12'	CA10	N/A	13'	STA "SN" 12+10.1	21.9' RT	29.78'	N/A	12' HIGH CAMERA ONLY POLE	3, 4, 5	
CAPL#2	14'	CA11	N/A	15'	STA "SN" 11+85.1	21.9' RT	29.48'	N/A	14' HIGH CAMERA ONLY POLE	3, 4, 5	
CAPL#3	12'	CA12	N/A	13'	STA "SN" 10+62.1	21.9' RT	30.50'	N/A	12' HIGH CAMERA ONLY POLE	3, 4, 5	
PROVIDE CAMERA(S) AS SHOWN ON SITE PLANS, SHEET E-102 - E-105.											

PROVIDE CAMERA(S) AS SHOWN ON SITE PLANS, SHEET E-102 - E-105. PROVIDE POLES PER DETAILS ON SHEET E-302.

PROVIDE LUMINAIRE PER LUMINAIRE SCHEDULE ON SHEET E-204 TOP OF SIDEWALK OR GROUND ELEVATION AT CENTER OF POLE BASE.

SUMMARY NOTES:

1. PROVIDE 6" MINIMUM HORIZONTAL CLEARANCE BETWEEN ALL POLE BASES AND OTHER BURIED PIPES, STORM DRAINS, ETC. CONSULT WITH ENGINEER BEFORE ADJUSTING THE LOCATION OF ANY LIGHT POLES.



LIGHT POLE FUSE HOLDER AND SPD WIRING DIAGRAM

NOTES:

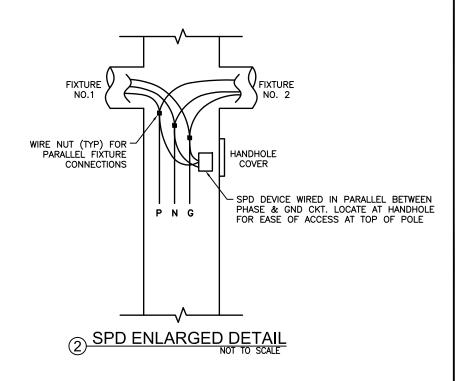
- KEEP WIRES AS STRAIGHT AND SHORT AS POSSILE.
- ROUND WIRES RATHER THEN BENDING AT A HARD 90 DEGREE ANGLE.
- DO NOT CROSS OR OVERLAP PROTECTED WIRES (THOSE AFTER THE SPD, EITHER AC OR DC WIRES).
- ONLY ONE EXTERNAL SPD REQUIRED PER POLE, REGARDLESS OF THE NUMBER OF FIXTURE HEADS ON THE POLE.
- SEE DETAIL 1, SHEET E-302 FOR POLE ELEVATION AND MORE ON SPD AND FUSE HOLDER MOUNTING.
- 6. SEE DETAIL 2, THIS SHEET, FOR SPD INSTALLATION AT TOP OF POLE.

KEYNOTES:

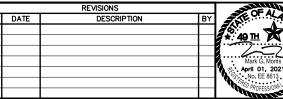
- OVERALL LED FIXTURE WITH FUSED DRIVER FURNISHED WITH INTEGRAL AND INTERNAL SPD.
- 2 CIRCUIT EXTERNAL LED FIXTURE SPD AS SHOWN. MAKE PARALLEL CONNECTION INTO CIRCUIT. SEE ENLARGED DETAIL, THIS SHEET. SIZE MATCHED TO CIRCUIT CONDUCTORS SIZES. SPD SHALL BE LITTLEFUSE LSP10 OR EATON MTL LS10N OR EQUAL. SPD TO INCLUDE OPTIONAL END OF LIFE INDICATOR LED.
- 3 CO-LOCATE EXTERNAL SPD WITHIN LIGHT FIXTURE HOUSING IF ACCEPTABLE TO FIXTURE MANUFACTURER. OTHERWISE INSTALL WITHIN POLE IMMEDIATELY ADJACENT TO FIXTURE MOUNTING LOCATION.
- FINGER SAFE FUSE HOLDER AT BASE OF LIGHT POLE ACCESSIBLE FROM 4 BASE HANDHOLE. SEC 1791-SF OR EATON HEZ-AA. PROVIDE WITH CLASS CC FAST ACTING FUSE SIZED PER SELECTED FIXTURE LOAD
- (5) SOURCE PANEL PER PLANS.



TOP OF SIDEWALK OR GROUND ELEVATION AT CENTER OF POLE BASE













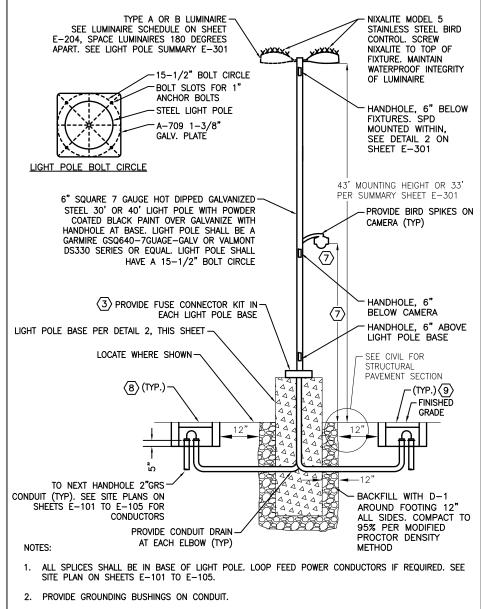
CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

LIGHT POLE AND HANDHOLE SUMMARIES

SHEET E-301

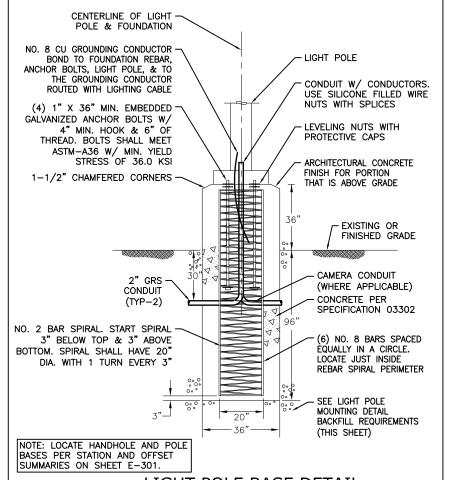
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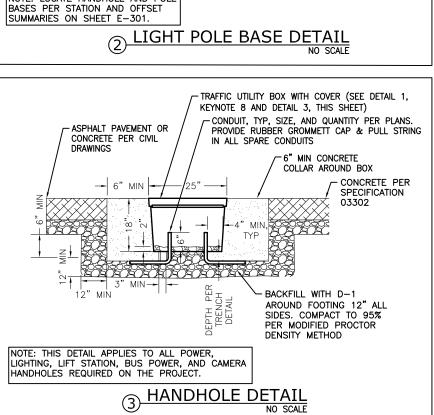
MALL ROAD

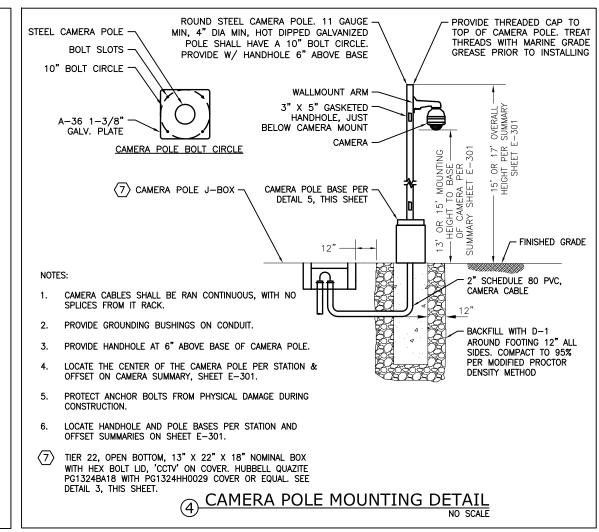


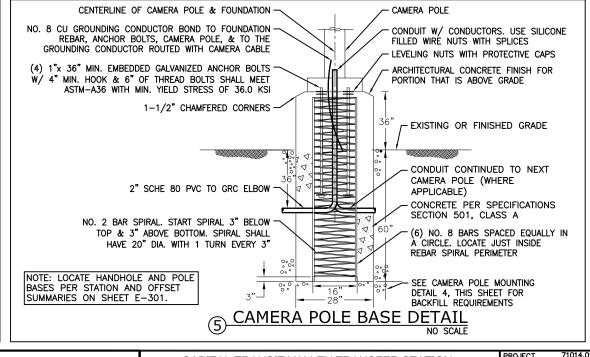
- PROVIDE FUSE KITS IN EACH LIGHT POLE BASE ACCESSIBLE FROM BOTTOM HANDHOLE AND SPD AT TOP OF LIGHT POLE. SEE DETAIL 1, SHEET E-301 FOR WIRING DIAGRAM.
- SIZE LIGHT POLE WITH LUMINAIRES FOR 120 MPH SUSTAINED WINDS WITH GUSTS TO 150 MPH. LIGHT POLE DIMENSIONS SHOWN ARE A MINIMUM. PROVIDE CALCULATIONS SHOWING COMPLIANCE SEALED BY CIVIL ENGINEER REGISTERED IN ALASKA.
- 5. LOCATE HANDHOLE AND POLE BASES PER STATION AND OFFSET SUMMARIES ON SHEET E-301.
- 6. LOCATE TOP OF BASE 3' ABOVE FINISHED GRADE PER LIGHT POLE BASE DETAIL 2, THIS SHEET
- 7 PROVIDE POLE MOUNTED CAMERAS WHERE SHOWN ON THE PLANS, MULTIPLE WHERE SHOWN ON SITE PLAN (ONLY ONE DEPICTED HERE). CAMERA HEIGHTS PER SUMMARY TABLE ON SHEET E-301.
- (8) TIER 22, OPEN BOTTOM, 13" X 22" X 18" NOMINAL BOX WITH HEX BOLT LID, 'LIGHTING' ON COVER. HUBBELL QUAZITE PG1324BA18 WITH PG1324HH0029 COVER OR EQUAL. SEE DETAIL 3, THIS SHEET.
- $\langle 9 \rangle$ an additional handhole required at light poles that have cameras. Shown here on OPPOSITE SIDE OF POLE FOR CLARITY ONLY. BOX TO MATCH REQUIREMENTS PER KEYNOTE 8, THIS DETAIL WITH 'CCTV' ON COVER.

1 LIGHT POLE MOUNTING DETAIL













REVISIONS

DOWL WWW.DOWL.COM AFCI 848 5368 Commercial Boulevard Juneau, Alaska 99801

907-780-3533



CONTRACT NO. BE20-268

POLE AND HANDHOLE DETAILS

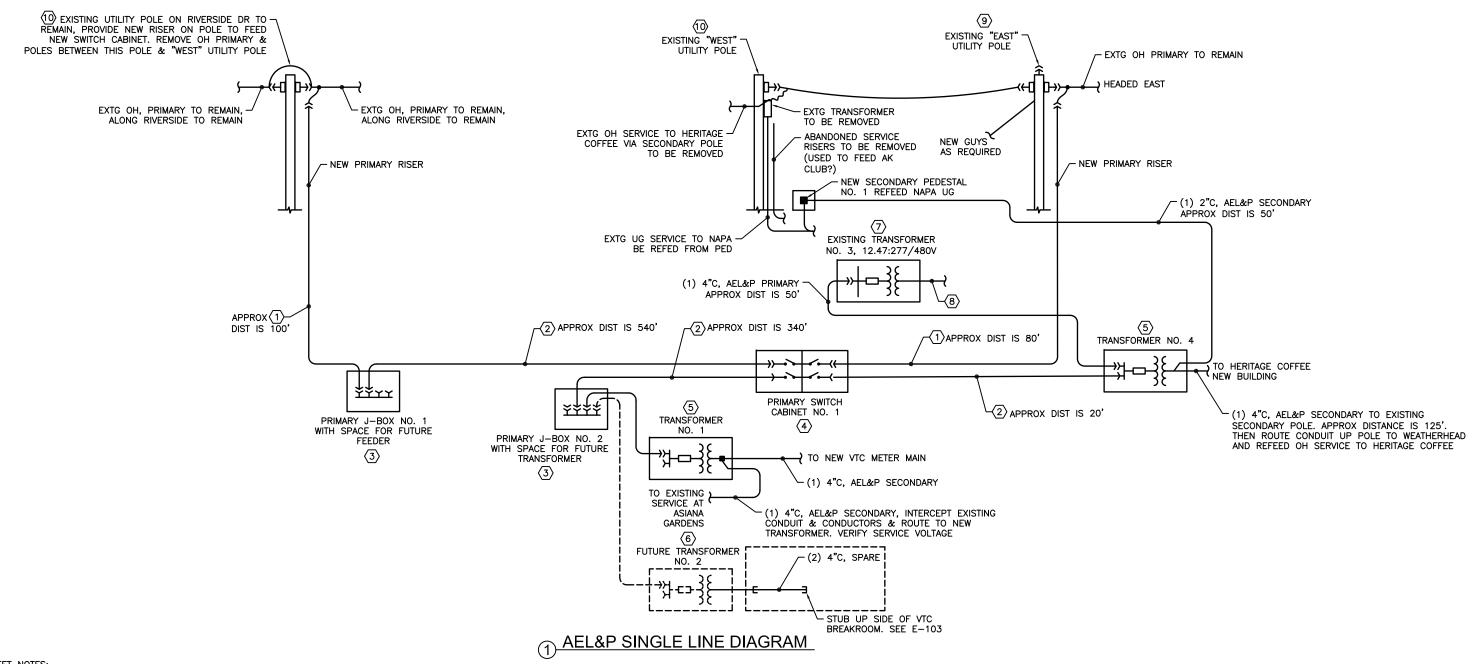
E-302

4/01/202

MALL ROAD

CAPITAL TRANSIT VALLEY TRANSFER STATION

SHEET



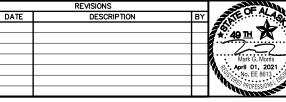
SHEET NOTES:

- (1) (1) 6"C, AEL&P PRIMARY. MOUNT ON STANDOFFS (1) 6"C, AEL&P SPARE. STUB UP SIDE OF POLE 6'.
- (2) (1) 6"C, AEL&P PRIMARY UNDERGROUND. SEE TRENCH DETAIL (1) 6"C, AEL&P SPARE
- $\langle \overline{3} \rangle$ PRIMARY PEDESTAL, 3 ϕ , 4 POSITION MINIMUM. DESIGN PER AEL&P.
- 4 PRIMARY SWITCH CABINET. DESIGN PER AEL&P.
- 5) 112.5KVA 12.47 KVΔ:120/208V Y PAD MOUNT TRANSFORMER WITH PRIMARY LOOP FEED. DESIGN BY AEL&P.
- (6) 1.5MW, 12.47 KVΔ:277/480V Y PAD MOUNT TRANSFORMER FOR FUTURE ELECTRIC BUS SERVICE. PROVIDE TRANSFORMER PAD NOW.

- (7) EXISTING PAD MOUNT TRANSFORMER FEEDS ALASKA CLUB. IT IS CURRENTLY FED BY RISER UP "EAST" EXISTING UTILITY POLE ON DIKE. REFEED FROM NEW TRANSFORMER AS SHOWN.
- (8) EXISTING UNDERGROUND SERVICE TO ALASKA CLUB TO REMAIN.
- (9) EXISTING "EAST" UTILITY POLE ON TOP OF DIKE. REMOVE FEED TO EXISTING TRANSFORMER THAT FEEDS ALASKA CLUB. PROVIDE NEW PRIMARY RISER TO CONNECT OVERHEAD PRIMARY TO UNDERGROUND PRIMARY AT SWITCH CABINET. PROVIDE NEW GUYS TO THE WEST.
- EXISTING "WEST" UTILITY POLE. THIS POLE IS TO BE REMOVED. REMOVE OVERHEAD LINE FROM THIS POLE TO POLE ON RIVERSIDE AND POLES IN BETWEEN. REFEED UNDERGROUND SERVICE TO NAPA FROM NEW SECONDARY PEDESTAL. REFEED HERITAGE COFFEE OVERHEAD SERVICE FROM NEW TRANSFORMER.
- 11. BUILD NEW UNDERGROUND FACILITIES AND CUT OVER ALL SERVICES AND PRIMARY PRIOR TO DEMOLISHING EXISTING OVERHEAD. ALL CUT OVERS TO OCCUR OUTSIDE OF BUSINESS HOURS OF AFFECTED CUSTOMERS. COORDINATE ALL OUTAGES WITH CUSTOMERS AND CBJ.
- 12. ALL CONDUIT SHALL BE SCHEDULE 80 PVC. USE RIGID STEEL ELBOWS. ALL RISERS SHALL BE RIGID STEEL.
- 13. INSTALL SECONDARY PEDESTAL TO REFEED NAPA UNDERGROUND SERVICE.

UON WORK ON THIS SHEET IS NOT—IN—CONTRACT (NIC).









CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

AEL&P SINGLE LINE DIAGRAM

NOT IN CONTRACT

SHEET **E-401**

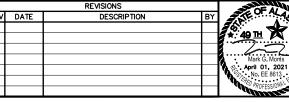
1) ACS TELEPHONE RISER DIAGRAM

SHEET NOTES:

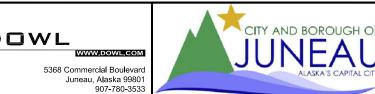
- 4"C, ACS TELEPHONE CABLES 4"C, ACS SPARE
- THE OVERHEAD SERVICES TO HERITAGE COFFEE IS TO BE REFED FROM PEDESTAL NO. 3. THE UNDERGROUND SERVICE TO NAPA AUTO PARTS IS TO BE REFED FROM PEDESTAL NO. 4.
- REMOVE THE OVERHEAD CABLE BETWEEN THE WEST POLE AND THE POLE ON RIVERSIDE DRIVE. REPLACE IT WITH AN UNDERGROUND CABLE AS SHOWN. REFEED THE UNDERGROUND SERVICE TO ASIANA GARDENS AS SHOWN.
- 4. ALL CONDUIT SHALL BE SCHEDULE 80 PVC. USE RIGID STEEL ELBOWS. USE SCHEDULE 80 PVC OR RIGID STEEL RISERS UP POLE.
- 5. BUILD UNDERGROUND FACILITIES AND CUT OVER ALL SERVICES BEFORE DEMOLISHING EXISTING OVERHEAD. ALL CUTOVERS SHALL BE DONE AFTER BUSINESS HOURS OF CUSTOMERS. COORDINATE ALL OUTAGES WITH CUSTOMERS AND THE CBJ.
- (6) PROVIDE RISER UP EAST POLE.

ALL WORK ON THIS SHEET IS NOT-IN-CONTRACT (NIC).









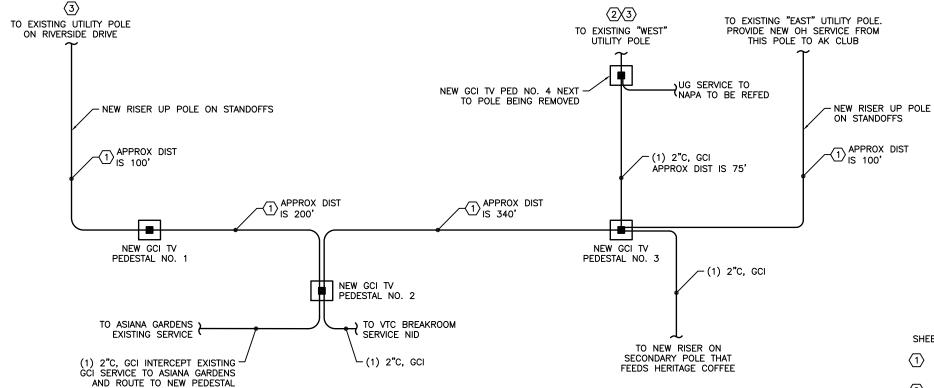
CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

ACS TELEPHONE RISER DIAGRAM

NOT IN CONTRACT

DATE 4/01/202

SHEET



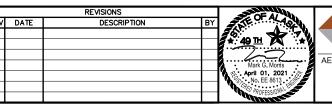
GCI TV RISER DIAGRAM

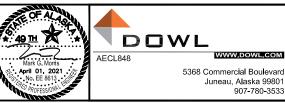
SHEET NOTES:

- 4"C, GCI TV CABLES 4"C, GCI SPARE
- THE OVERHEAD SERVICE TO ALASKA CLUB TO BE REFED FROM EAST UTILITY POLE. THE OVERHEAD SERVICE TO HERITAGE COFFEE TO BE REFED FROM PEDESTAL NO. 3. THE UNDERGROUND SERVICE TO NAPA AUTO PARTS IS TO BE REFED FROM PEDESTAL NO. 4.
- REMOVE THE OVERHEAD CABLE BETWEEN THE WEST POLE AND THE POLE ON RIVERSIDE DRIVE. REPLACE IT WITH AN UNDERGROUND CABLE AS SHOWN. REFEED THE UNDERGROUND SERVICE TO ASIANA GARDENS AS SHOWN.
- 4. ALL CONDUIT SHALL BE SCHEDULE 80 PVC EXCEPT ALL ROAD CROSSINGS SHALL BE SCHEDULE 80 PVC. PROVIDE SCHEDULE 80 PVC WITHIN 10' OF PEDESTALS, BUILDINGS, OR OTHER STRUCTURES. USE RIGID STEEL ELBOWS. USE SCHEDULE 80 PVC OR RIGID STEEL RISERS UP POLE.
- 6. BUILD UNDERGROUND FACILITIES AND CUT OVER ALL SERVICES BEFORE DEMOLISHING EXISTING OVERHEAD. ALL CUTOVERS SHALL BE DONE AFTER BUSINESS HOURS OF CUSTOMERS. COORDINATE ALL OUTAGES WITH CUSTOMERS AND THE CBJ.

ALL WORK ON THIS SHEET IS NOT-IN-CONTRACT (NIC).







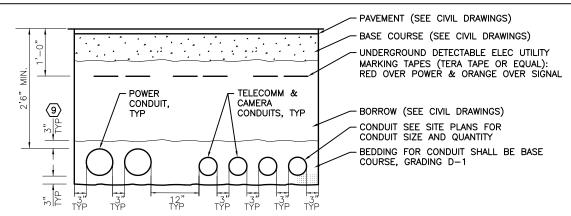


CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

GCI TV RISER DIAGRAM

NOT IN CONTRACT

PROJECT 71014.0 DATE 4/01/202

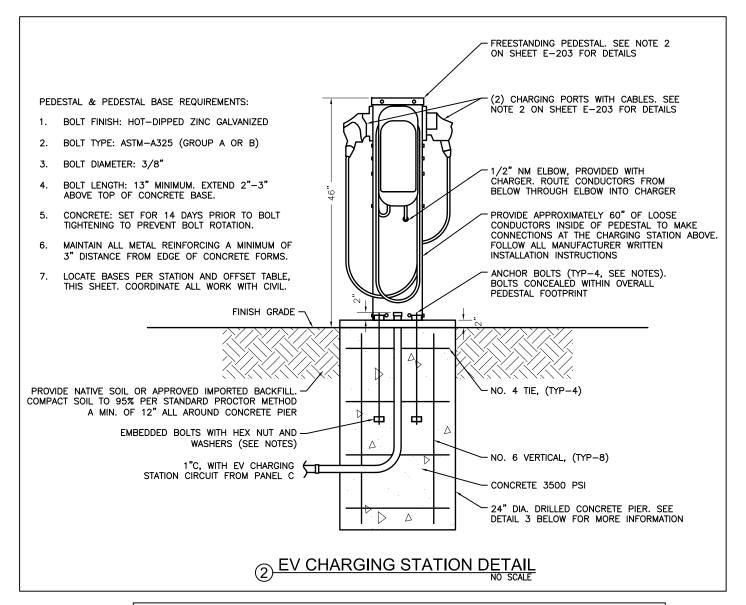


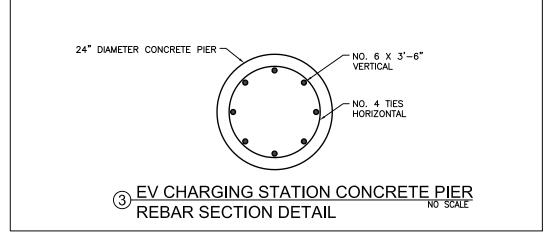
NOTES:

- 1. ALL DIMENSIONS ARE MINIMUM.
- SEE CIVIL DRAWINGS FOR TYPICAL SECTIONS UNDER PAVED AREAS. PROVIDE BACKFILL (MATERIAL, COMPACTION, ETC.) PER THE CIVIL DRAWINGS. WHERE NOT UNDER PAVEMENT, PROVIDE D1 IN THE TOP 12" WITH SELECT
- THE LOCATION OF ALL EXISTING PIPING, CONDUIT, ETC MAY NOT BE WHERE SHOWN AND MAY NOT BE SHOWN. ALL LOCATIONS THAT ARE SHOWN ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED. OBTAIN UTILITY LOCATES PRIOR TO DIGGING. DIG WITH CAUTION, AVOID WATER, SEWER, DRAINAGE PIPES AND OTHER CONFLICTS.
- MAINTAIN 12 INCHES MINIMUM SEPARATION (ALL DIRECTIONS) BETWEEN POWER AND OTHER CONDUITS, PIPES, ETC.
- 5. PROVIDE 36" MINIMUM BURIAL DEPTH FOR ALL CONDUITS WITHIN THE ROADWAY PRISMS.
- SAWCUT AND REPLACE ASPHALT, CONCRETE, Z E CONCRETE CURB, GUTTER, SIDEWALKS, ETC. AS NECESSARY TO INSTALL CONDUIT AND OTHER ELECTRICAL ITEMS. SAWCUT ASPHALT BACK 18" ON EACH SIDE OF EDGE OF TRENCH OR EXCAVATION AREA (ALL SIDES). THERE SHALL BE 18" OF UNDISTURBED SOIL BETWEEN EDGE OF SAWCUT AND EXCAVATION LIMITS. ALL TRENCHES SHALL BE 18" WIDE MINIMUM. COMPACT BACKFILL TO 95%. COMPACT D-1 TO 100% WHERE COVERED WITH PAVEMENT. RE-PAVE SAWCUT AREAS PER PAVING SPECIFICATIONS.
- 7. POWER UTILITY CONDUITS SHALL BE BURIED AT A MINIMUM OF 3'-6". BURY CONDUITS DEEPER WHERE REQUIRED TO AVOID OTHER PIPES AND STRUCTURES.
- MODIFY CONDUIT BURIAL DEPTH WHERE SHOWN ON DRAWINGS AND AS REQUIRED TO AVOID ALL OBSTACLES. ROUTE
- (9) PROVIDE 6" BEDDING OVER UTILITY CONDUITS ON RIVERSIDE DRIVE CROSSING.

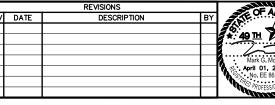


CHARGING STATION BASE SUMMARY									
NO.	STATION	OFFEST	BASE ELEVATION						
EVCS#1	"SN" 10+35.86	65.07'RT	30.67						
EVCS#2	"SN" 10+51.12	65.07'RT	30.74						
PANEL C	"SN" 10+38.50	61.49'RT	30.76						















CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

TRENCH DETAIL AND CHARGING STATION POST MOUNTING DETAILS

MALL ROAD

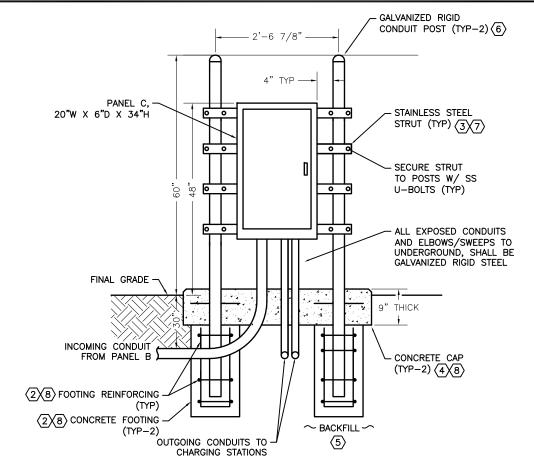
4/01/202

SHEET E-404

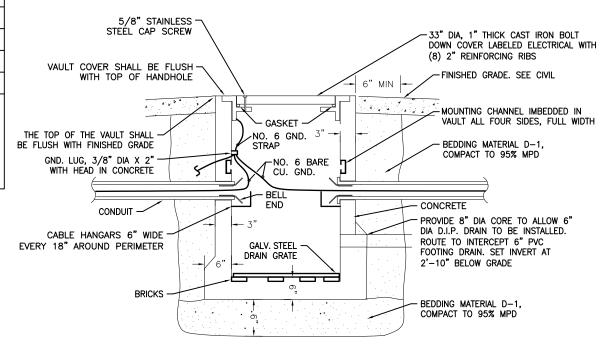
UTILITY EQUIPMENT LOCATIONS (FOR COORDINATION ONLY) STATION OFFSET ELEVATION DESCRIPTION STA "WE" 9+96.7 29.49 AEL&P J-BOX NO. 1 STA "WE" 9+95.4 ACS PEDESTAL NO. 1 56.6' LT 29.55 STA "WE" 9+93.7 54.1' IT GCI PDEDSTAL NO. 1 29.56 STA "WE" 11+31.7 14.0' RT AEL&P J-BOX NO. 2 30.88 STA "WE" 11+34.6 22.0' RT AEL&P TRANSFORMER NO. 1 STA "WE" 11+34.1 FUTURE AEL&P TRANSFORMER NO. 2 31.7' RT STA "WE" 11+29.5 39.3' RT 31.11 ACS PEDESTAL NO. 2 STA "WF" 11+29.5 43.3' RT 31.11 GCI PEDESTAL NO. 2 EXISTING TRANSFORMER NO. 3 STA "WE" 14+03.5 10.4' IT 33.40 STA "WE" 14+12.5 5.0' LT 31.17 ACS PEDESTAL NO. 3 STA "WE" 14+16.5 4.5' LT 31.15 GCI PEDESTAL NO. 3 AEL&P TRANSFORMER NO. 4 STA "WE" 14+22.5 31.14 STA "WE" 14+30.5 4.4' LT 31.12 AEL&P SWITCH NO. 1 STA "WE" 13+94.9 11.3' LT 34.35 AEL&P PEDESTAL NO.1 STA "WE" 13+90.9 ACS PEDESTAL NO. 4 11.3' LT 34.74 STA "WE" 13+86.9 11.4' LT 34.70 GCI PEDESTAL NO. 4 STA "WE" 11+89.6 57.0' RT VAULT 29.95

NOTES:

- LOCATE EQUIPMENT WHERE SHOWN. LOCATIONS ARE PROVIDED TO THE CENTER OF THE EQUIPMENT. ADJUST CONDUIT FEEDING EQUIPMENT SO IT ENTERS EQUIPMENT AT THE CORRECT LOCATIONS.
- 2. ELEVATIONS PROVIDED ARE THE ELEVATION TO FINISHED GRADE AT THE LOCATION GIVEN. INSTALL EQUIPMENT PER MOUNTING DETAILS.



1 PANEL C ELEVATION 3'6' 1'



NOTES: (APPLICABLE TO DETAIL 1)

- PROVIDE APPROVAL DRAWINGS FOR CHANNEL STRUT RACK DURING THE SUBMITTAL PROCESS. DRAWINGS SHALL INCLUDE THE FOLLOWING INFORMATION: DIMENSIONS, WEIGHTS, DETAILS, REINFORCING, SEGMENTS LENGTHS AND SIZES, ENCLOSURE LAYOUTS TO SCALE, AND CONDUIT LOCATIONS.
- (2) 12" DIAMETER X 4' DEEP CONCRETE FOOTINGS. PROVIDE WITH REINFORCING AS FOLLOWS: (4) #4 VERTICAL AND #3 CIRC. TIES AT 12" O.C. (2-TIES NEAR TOP).
- 3) ALL CHANNEL STRUT TO BE STAINLESS STEEL. ALL POSTS AND CONDUIT TO BE GALVANIZED RIGID STEEL. TREAT ALL FIELD CUT STRUT AND CONDUIT SEGMENTS WITH GREY GALVANIC TOUCH UP PAINT TO INHIBIT CORROSION.
- PROVIDE CONCRETE CAP AROUND POST PENETRATION INTO GRADE THAT EXTENDS 2" ABOVE GRADE, AND MINIMUM OF 2" PAST FOOTING BELOW ALL SIDES. PROVIDE CAP WITH EMBEDDED GALVANIZED WIRE MESH.
- PROVIDE NATIVE SOIL OR APPROVED IMPORTED BACKFILL. COMPACT A MINIMUM OF 12" ALL SIDES OF FOOTINGS TO 95% PER MODIFIED PROCTOR DENSITY METHOD.
- 4" DIAMETER X 8' TALL HOT DIPPED GRS CONDUIT POST FILLED WITH CONCRETE. BURY 3' INTO GROUND (TYP-2).
- 7) 1-1/2" STAINLESS STEEL CHANNEL STRUT. MOUNT STRUT TO POSTS AND EQUIPMENT TO STRUT.
- (8) MAINTAIN ALL METAL REINFORCING A MINIMUM OF 3" DISTANCE FROM EDGE OF CONCRETE FORMS.
- 9. ALL MOUNTING HARDWARE TO BE STAINLESS STEEL.

NOTES: (APPLICABLE TO DETAIL 2)

- 1. VAULT SHALL HAVE OUTSIDE DIMENSIONS OF 4' WIDE X 4' LONG X 4' DEEP. OLD CASTLE 444-LA OR LINDSEY CSU #194-115-111 OR EQUAL. INCREASE DEPTH AS REQUIRED TO MAINTAIN DRAINAGE AT 1% MIN SLOPE.
- THE COVERS FOR VAULTS CONTAINING POWER CABLES SHALL BE LABELED "ELECTRICAL". THE COVERS FOR VAULTS CONTAINING TELEPHONE CABLES SHALL BE LABELED "SIGNAL".
- 3. PROVIDE 6" DRAINS FOR ALL VAULTS.
- PROVIDE A NO. 2, 30' GROUND RING AROUND THE VAULT. BOND TO GROUND LUG.
- 5. ROUTE THE DRAINS FROM VAULTS TO STRUCTURES/DAYLIGHT AS SHOWN ON SITE SHEETS EU10-EU13. CUT A HOLE IN THE STRUCTURE AND SEAL THE DRAIN PIPE ENTRANCE INTO THE STRUCTURE PER CIVIL AND AS REQUIRED. SLOPE THE DRAINS AT 1% MIN INTO THE STRUCTURE/DAYLIGHT.

2 POWER AND SIGNAL VAULT NO SCALE



REVISIONS

DATE

DESCRIPTION

BY

Mark G, Morris

April 01, 2021

No. EE 8613





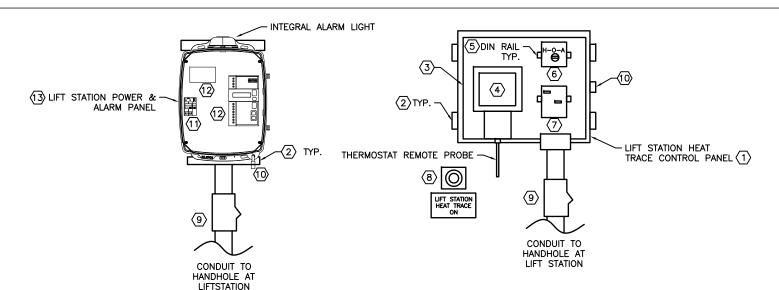
CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

UTILITY EQUIPMENT LOCATIONS TABLE AND PANEL C ELEVATION

MALL ROAD JUNEAU, ALASKA PROJECT 71014.01 DATE 4/01/2021

NOTES (APPLICABLE TO DETAIL !):

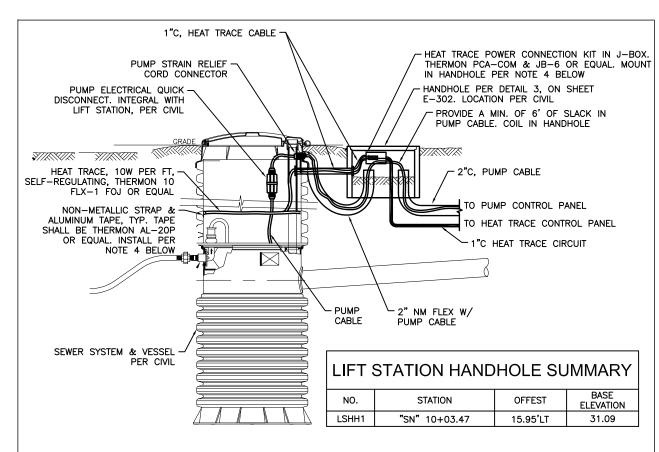
- 1. POWER THE HEAT TRACE WITH A NEW 20/1 CIRCUIT BREAKER.
- 2. PROVIDE ALL CONTROL PANEL WIRING REQUIRED. NEATLY TRAIN AND BUNDLE WIRING. PROVIDE ANY TERMINAL BLOCKS OR OTHER PERIPHERALS NECESSARY
- SEE DETAIL 2, THIS SHEET FOR PANEL ELEVATION AND FURTHER DETAILS.



NOTES (APPLICABLE TO DETAIL 2):

- 2 LIFT STATION PANEL ELEVATIONS NO SCALE
- (1) LIFT STATION HEAT TRACE CONTROL BOX. 12" X 12" X 6", NEMA 4X STAINLESS STEEL WITH HINGED, PAD LOCKABLE DOOR. MOUNT TO BUILDING EXTERIOR SIDING ON MOUNTING BOARD, PER ARCH. MOUNT HOA SWITCH AND BREAKER INSIDE ON EQUIPMENT MOUNTING BOARD.
- STAINLESS STEEL SUPPORT CHANNEL, AS REQUIRED FOR PANEL MOUNTING ONTO EXTERIOR WALL. USE ALL STAINLESS HARDWARE.
- AMBIENT SENSING THERMOSTAT WITH REMOTE PROBE. THERMON BX4-15140 OR EQUAL. MOUNT SO THAT ONLY THE REMOTE PROBE IS OUTSIDE THE ENCLOSURE. SET TO 40 DEGREES FAHRENHEIT OR AS RECOMMENDED PER MANUFACTURER LITERATURE.
- PROVIDE SEGMENTS OF DIN RAIL AS REQUIRED FOR BREAKER, HOA SWITCH, AND ANY OTHER COMPONENTS AS NECESSARY.
- (6) PROVIDE 30.5MM, OIL TIGHT/WATER TIGHT/CORROSION RESISTANT NEMA 4X SWITCH MOUNTED IN ITS OWN ENCLOSURE ON BACKBOARD OF ENCLOSURE.
- PROVIDE A 20/1, 120V, 30mA GFI CIRCUIT BREAKER POWERED FROM SOURCE

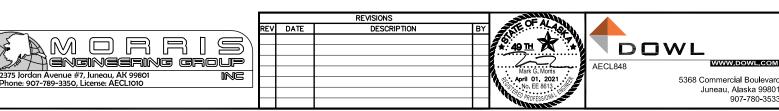
- (8) OIL TIGHT/WATER TIGHT/CORROSION RESISTANT NEMA 4X PUSH-TO-TEST LED LIGHT WITH RED LENS, 30.5MM DIAMETER. MOUNT ONTO DOOR OF ENCLOSURE SO VISIBLE FROM OUTSIDE. PROVIDE PHENOLIC LABEL SCREWED TO COVER.
- PROVIDE CLASS 1, DIVISION 2 CONDUIT SEAL—OFF. HUBBELL KILLARK EY SERIES OR EQUAL. FILL WITH MANUFACTURER APPROVED SEALING COMPOUND PRIOR TO SUBSTANTIAL COMPLETION.
- 10 PADLOCK PROVISION FOR CBJ LOCK.
- (11) INTEGRAL 20/2, 240V MAIN CIRCUIT BREAKER POWER FROM SOURCE CIRCUIT.
- (2) INTEGRAL CONTROL CONTACTOR AND CONTROL/PROGRAMMING BOARD. CONTRACTOR TO PROVIDE ALL SYSTEM SETUP, COMMISSIONING, TESTING, AND PROGRAMMING OF THE LIFT STATION CONTROL PANEL PER MANUFACTURER INSTRUCTIONS.
- (13) LIFT STATION ALARM PANEL. NEMA 4X (THERMOPLASTIC ENCLOSURE WITH INTEGRAL ALARM LIGHT, CONTROL BOARD, CONTACTOR, BREAKERS. SEE CIVIL FOR COMPLETE DETAILS. BASIS OF DESIGN IS THE E-ONE SENTRY PANEL.
- 14. PROVIDE ALL POWER AND CONTROL TO AND WITHIN PANELS AS REQUIRED. NEATLY TRAIN AND BUNDLE WIRING. PROVIDE ANY TERMINAL BLOCKS OR OTHER PERIPHERALS NECESSARY.



3 LIFT STATION PUMP DETAIL NO SCALE

NOTES (APPLICATION TO DETAIL 3):

- 1. BURY THE CONDUIT PER THE TRENCH DETAIL, SHEET E-404.
- INSTALL (2) HALF CIRCLE SECTIONS OF 1" RIGID INSULATION (PINK BOARD) THAT ARE HINGED IN THE MIDDLE FORMING A CIRCLE.
 INSTALL THIS AS HIGH AS POSSIBLE IN THE WELL WITH A CUTOUT FOR THE VENT TUBE AND ELECTRICAL CORDS AS REQUIRED.
 INSTALL THE FOAM SO THAT IT CAN BE EASILY REMOVED TO CHANGE OUT THE CORE. INSTALL THE FOAM ON "L" BRACKETS INSIDE
 THE WELL ABOVE THE HEAT TRACE AND DISCHARGE PIPING.
- 3. PROVIDE FLEX CONDUIT LARGE ENOUGH TO GO OVER THE PROTECTIVE CABLE SHROUD OF THE PUMP CABLE. ROUTE THE PUMP CABLE FROM THE PUMP CONTROL PANEL IN 2" GRS UP INTO THE HANDHOLE. LOOP AT LEAST 6' OF SLACK IN HANDHOLE THEN ROUTE THROUGH NM FLEX TO PROTECTIVE SHROUD THEN INTO WELL CASING THROUGH THE STRAIN RELIEF CORD CONNECTOR AND TO THE ELECTRICAL QUICK DISCONNECT.
- 4. INSTALL THE HEAT TRACE JUNCTION BOX AND CONNECTION KIT ON THE INSIDE WALL OF THE HANDHOLE. CONNECT THE HEAT TRACE TO THE INCOMING BRANCH CONDUCTORS VIA THE KIT PER WRITTEN MANUFACTURER INSTRUCTIONS. ROUTE THE HEAT TRACE THROUGH THE 1" CONDUIT INTO THE WELL CASING AS HIGH AS POSSIBLE. LOCATE THE HANDHOLE AS CLOSE AS PRACTICAL TO THE WELL CASING USE GRS CONDUIT WITH BUSHINGS ON EACH END. ROUTE THE HEAT TRACE CABLE DOWN THE SIDE OF THE WELL CASING AND AROUND THE PERIMETER AS LOW AS POSSIBLE WHILE LEAVING ENOUGH ROOM TO DISCONNECT THE PUMP CORD AND TO REMOVE IT WITHOUT DAMAGING THE HEAT TRACE. SECURE THE HEAT TRACE TO THE WELL WALL WITH NM STRAPS OVER A RUBBER GROMMET TO PROTECT THE HEAT TRACE. PROVIDE TWO REVOLUTIONS OF HEAT TRACE SPACED 6" APART AROUND THE WELL PERIMETER. PROVIDE A TERMINATION KIT ON THE END OF THE TRACE. ATTACH THE HEAT TRACE TO THE WELL WALL WITH THE ALUMINUM TAPE. OVER THE TAPE ON 6" CENTERS PROVIDE A NM STRAP WITH A RUBBER GROMMET BETWEEN THE STRAP AND THE TAPE TO PROTECT THE HEAT TRACE. ATTACH THE GROUND CONDUCTOR TO THE COPPER BRAID. DO NOT PENETRATE THE OUTER WALL OF THE WELL WITH THE STRAP SCREWS. LOCATE THE SCREWS SO THAT THEY ENTER THE DEAD AIR SPACE IN THE WELL WALL.
- 5. THE LIFT STATION IS FULLY SPECIFIED PER THE CIVIL PLANS AND SPECIFICATIONS. SEE CIVIL FOR COMPLETE DETAILS.
- 6. THE HEAT TRACE SYSTEM PROVIDED SHALL BE PROVIDED COMPLETE FROM ONLY ONE MANUFACTURER, THERMON OR EQUAL. HEAT TRACE SYSTEM SHALL BE FULLY COMPATIBLE WITH LIFT STATION REQUIREMENTS.





CAPITAL TRANSIT VALLEY TRANSFER STATION CONTRACT NO. BE20-268

LIFT STATION ELECTRICAL DETAILS

SHEET

MALL ROAD JNEAU, ALASKA E-406