

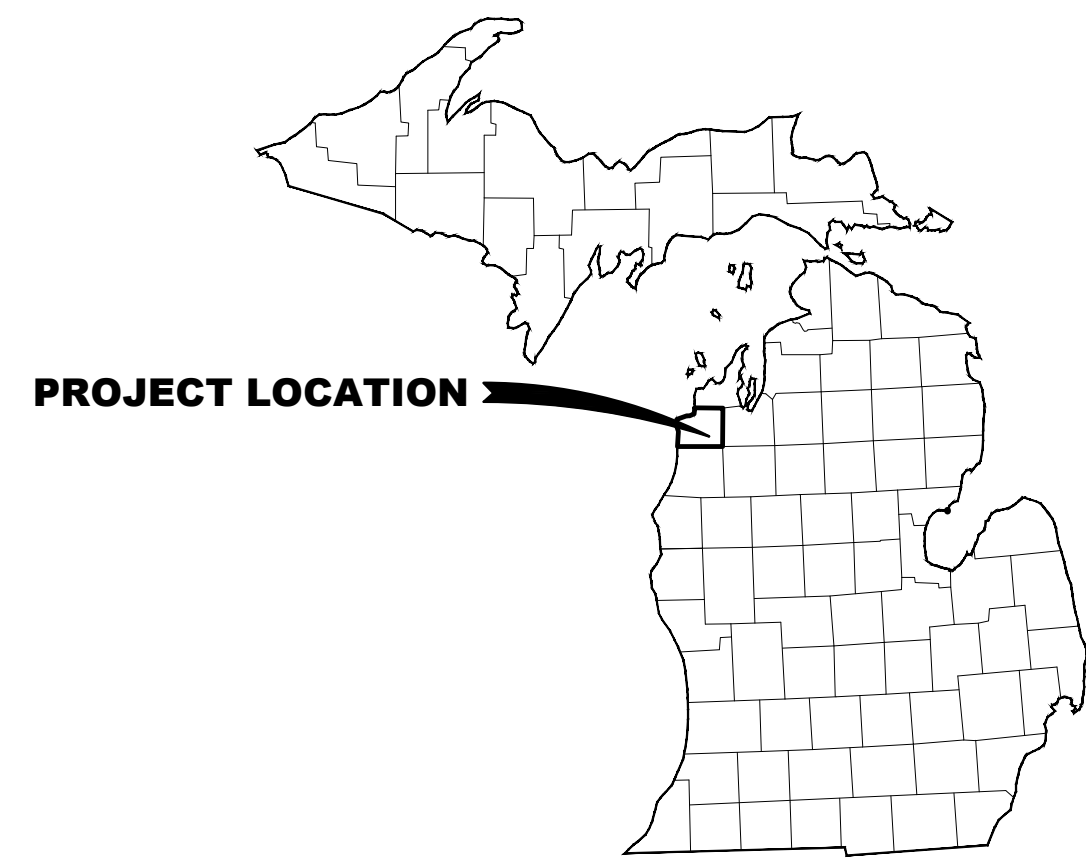
VILLAGE OF ELBERTA BENZIE COUNTY, MICHIGAN IN COOPERATION WITH MICHIGAN DEPARTMENT OF NATURAL RESOURCES TRUST FUND GRANT PROGRAM



603 Bay St, First Floor
 Traverse City, MI 49684
 P: 231.932.8600
 F: 231.932.6700

VILLAGE OF ELBERTA
 BENZIE COUNTY, MI
 ELBERTA LAKE MICHIGAN BEACH IMPROVEMENT PROJECT

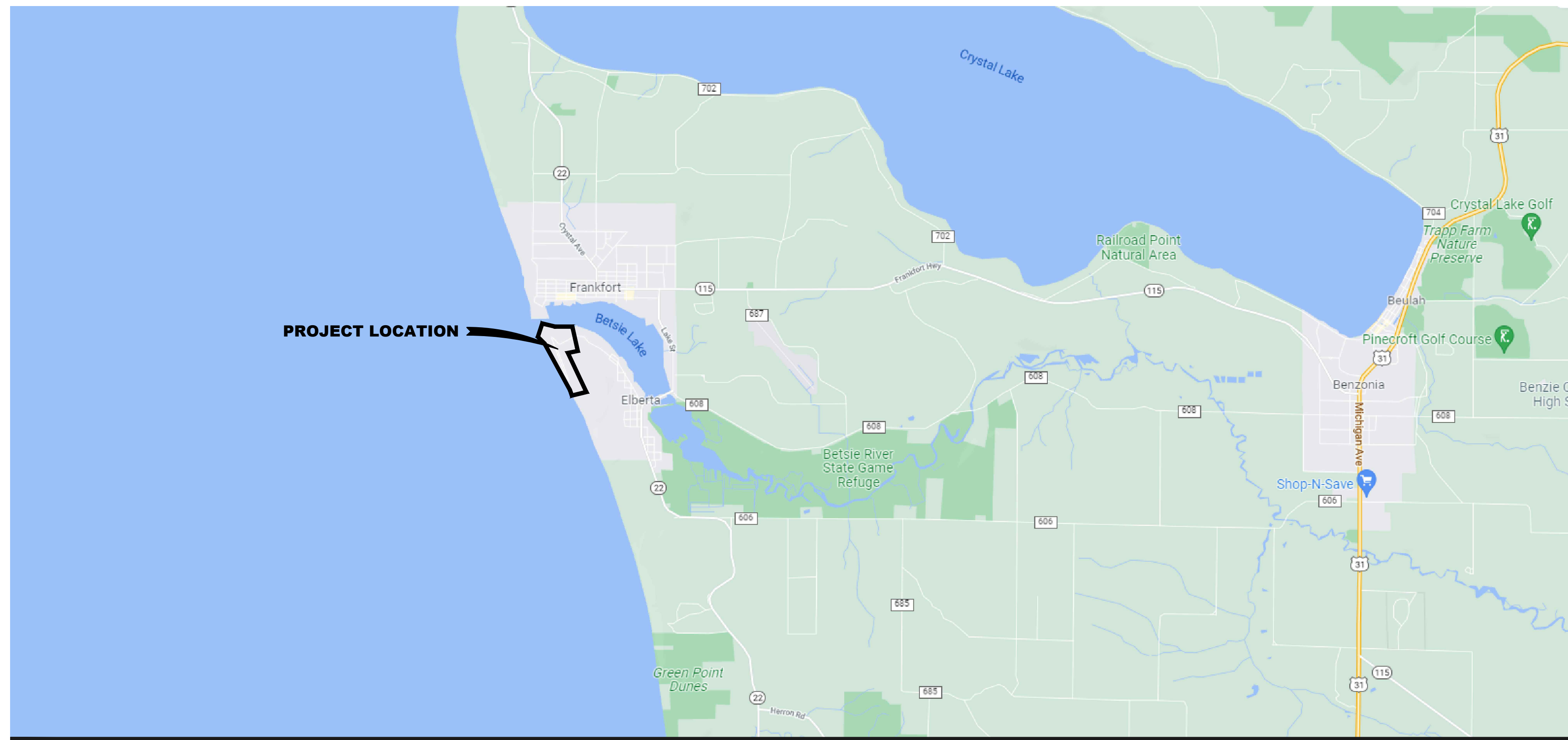
FOR ELBERTA LAKE MICHIGAN BEACH IMPROVEMENT PROJECT APRIL 2023 TF20-0013



VICINITY MAP

INDEX OF DRAWINGS

Sheet Title	Sheet Number
COVER SHEET	G001
EXISTING CONDITIONS AND REMOVAL SHEET	C101
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SOUTH PARKING LAYOUT	C103
PATHWAY NORTH PARKING GRADING & SESC	C104
SOUTH PARKING GRADING & SESC	C105
DETAILS	C500
PREFABRICATED RESTROOM BASE BID	C501
PREFABRICATED RESTROOM BID ALTERNATE A	C502
DRAINFIELD DETAILS (ALTERNATE A)	C503
SITE ELECTRICAL PLAN	E101



LOCATION MAP



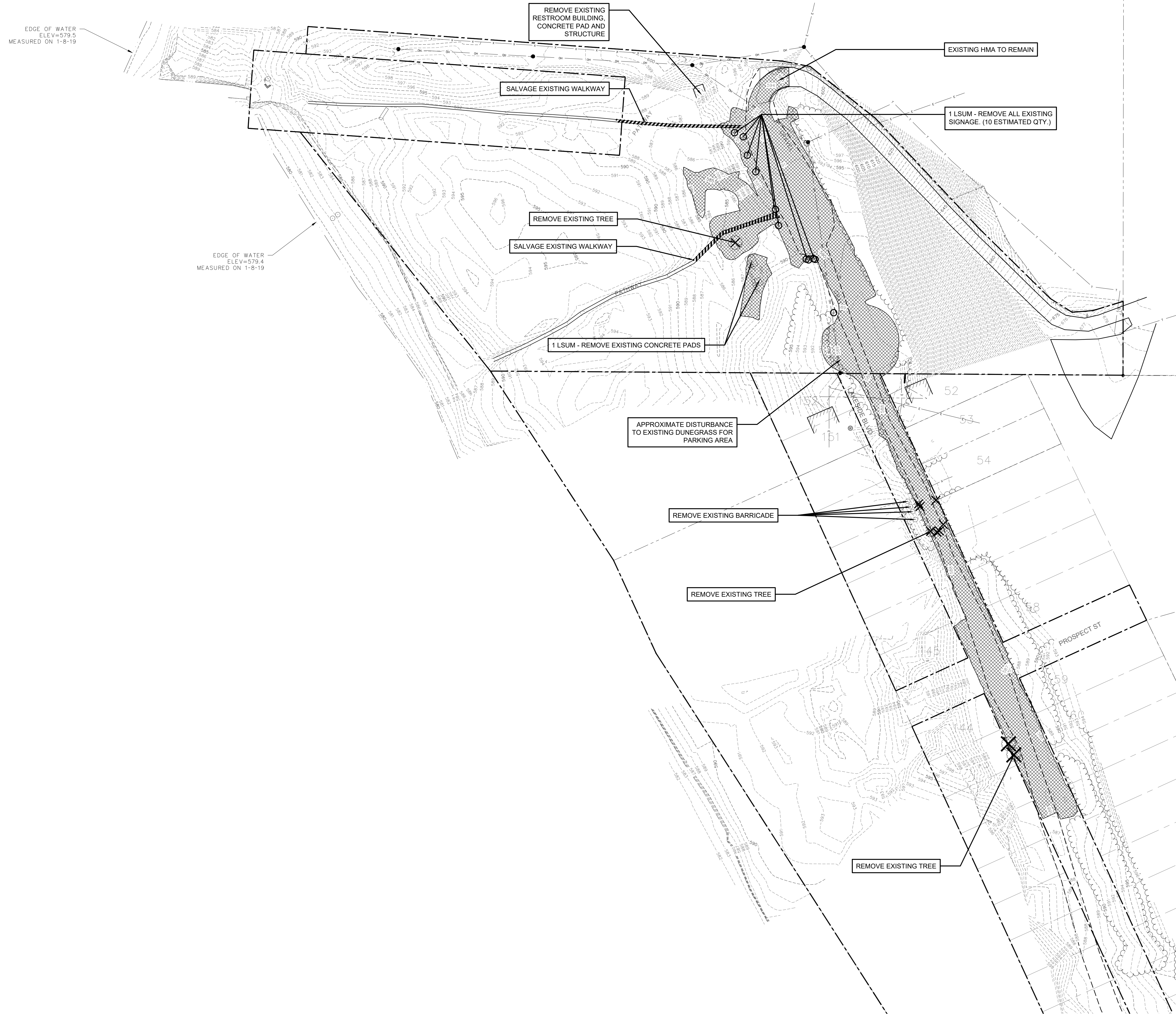
Know what's below.
 Call before you dig.

C100_COVER SHEET
 032923 Kenn





FAV PROJECT NO.
 847860

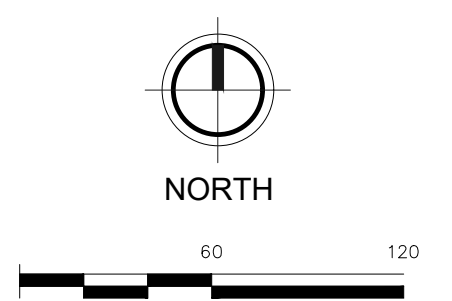
G001

M:\Proj\847860\847860\847860 - Elberta Beach\W817\Plan\CGI_OVERALL SITE.dwg - plotted on 3/29/2023 3:24 PM



REMOVAL LEGEND

-  PAVEMENT REMOVAL
-  DISTURBED AREA
-  PARK ELEMENTS REMOVAL
-  REMOVE EXISTING TREE



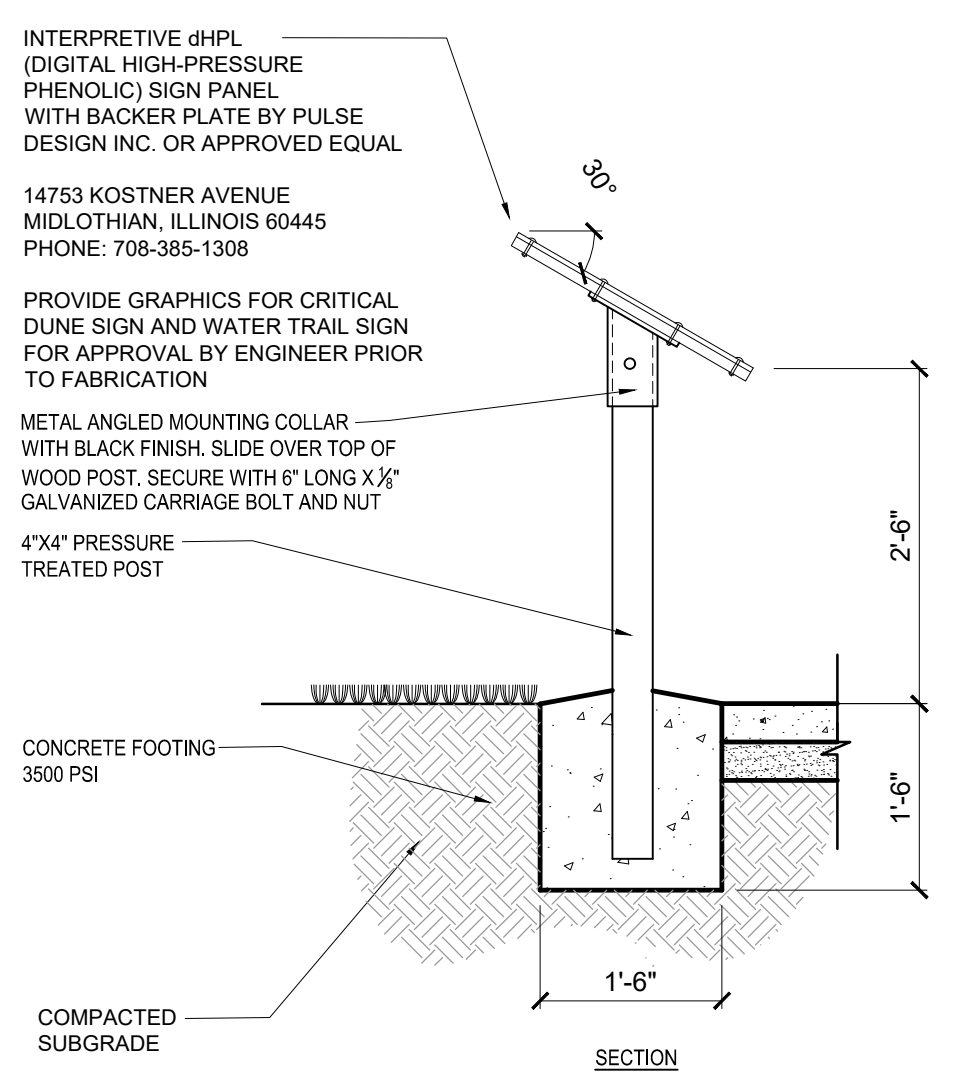
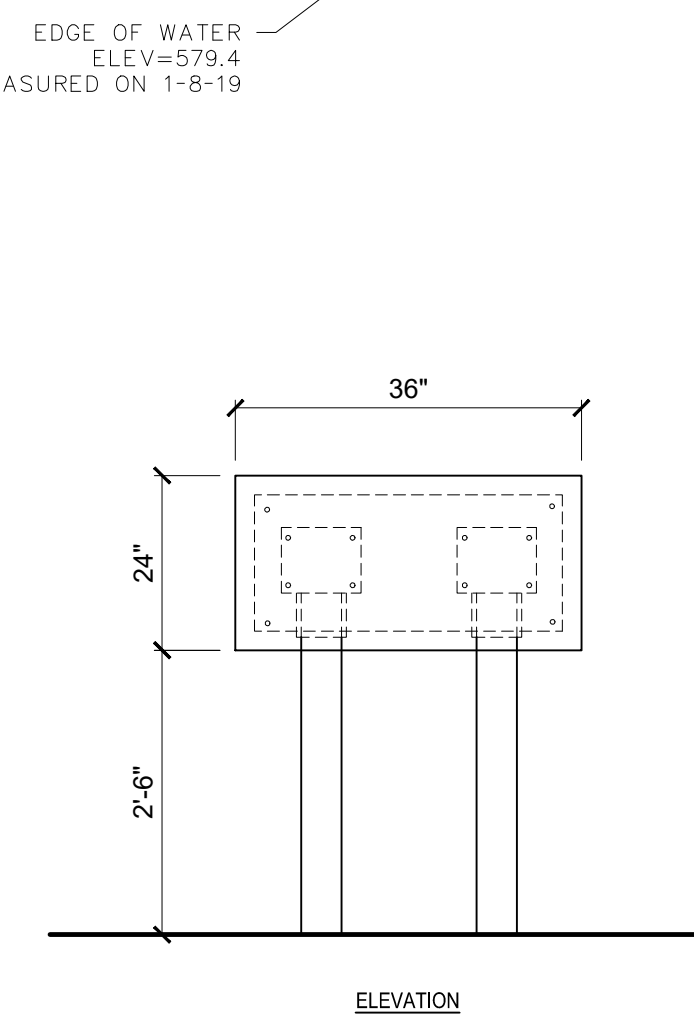
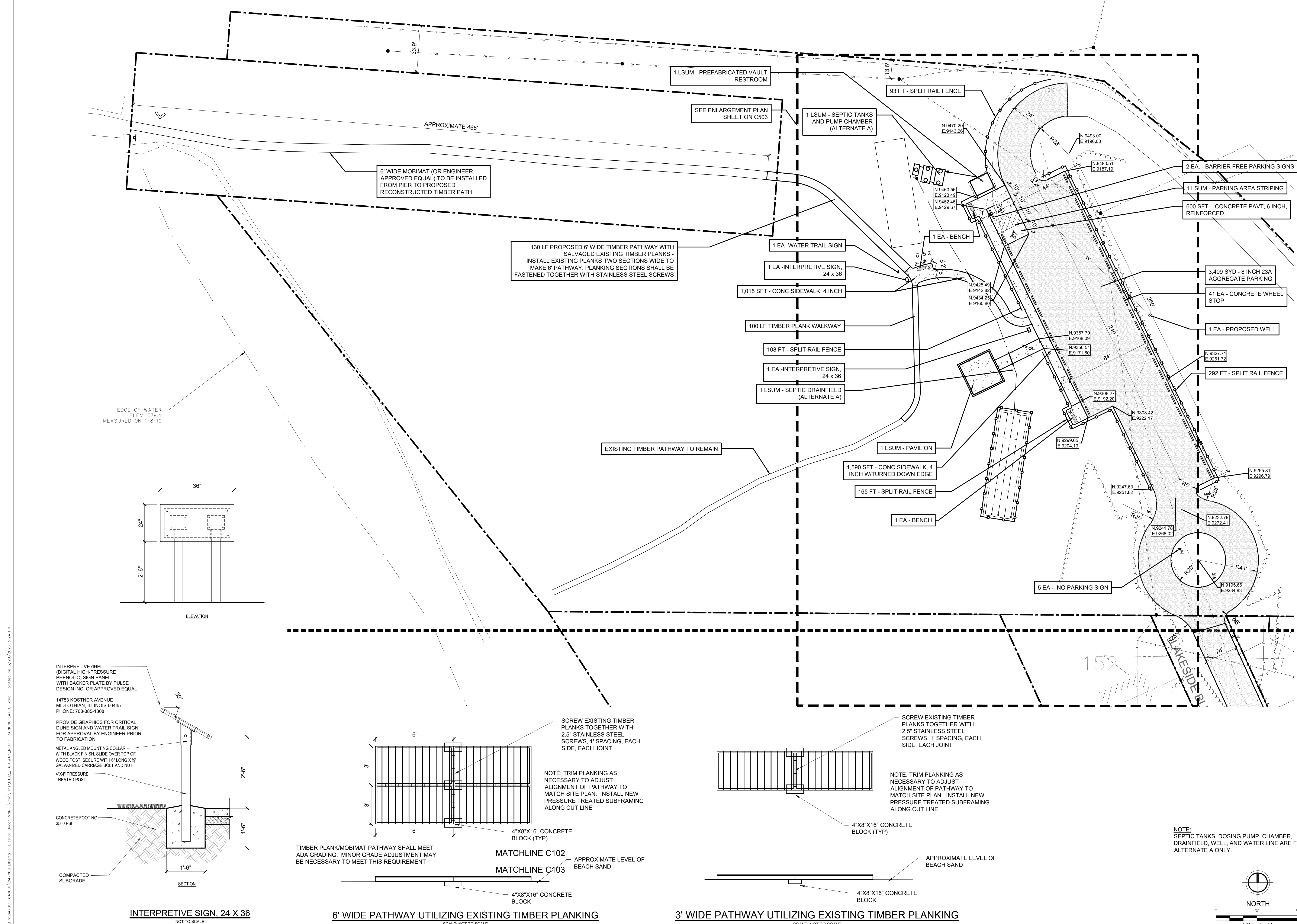
REVISION:

**VILLAGE OF ELBERTA
 BENZIE COUNTY, MICHIGAN
 ELBERTA LAKE MICHIGAN BEACH IMPROVEMENT PROJECT
 EXISTING CONDITIONS AND REMOVAL SHEET**

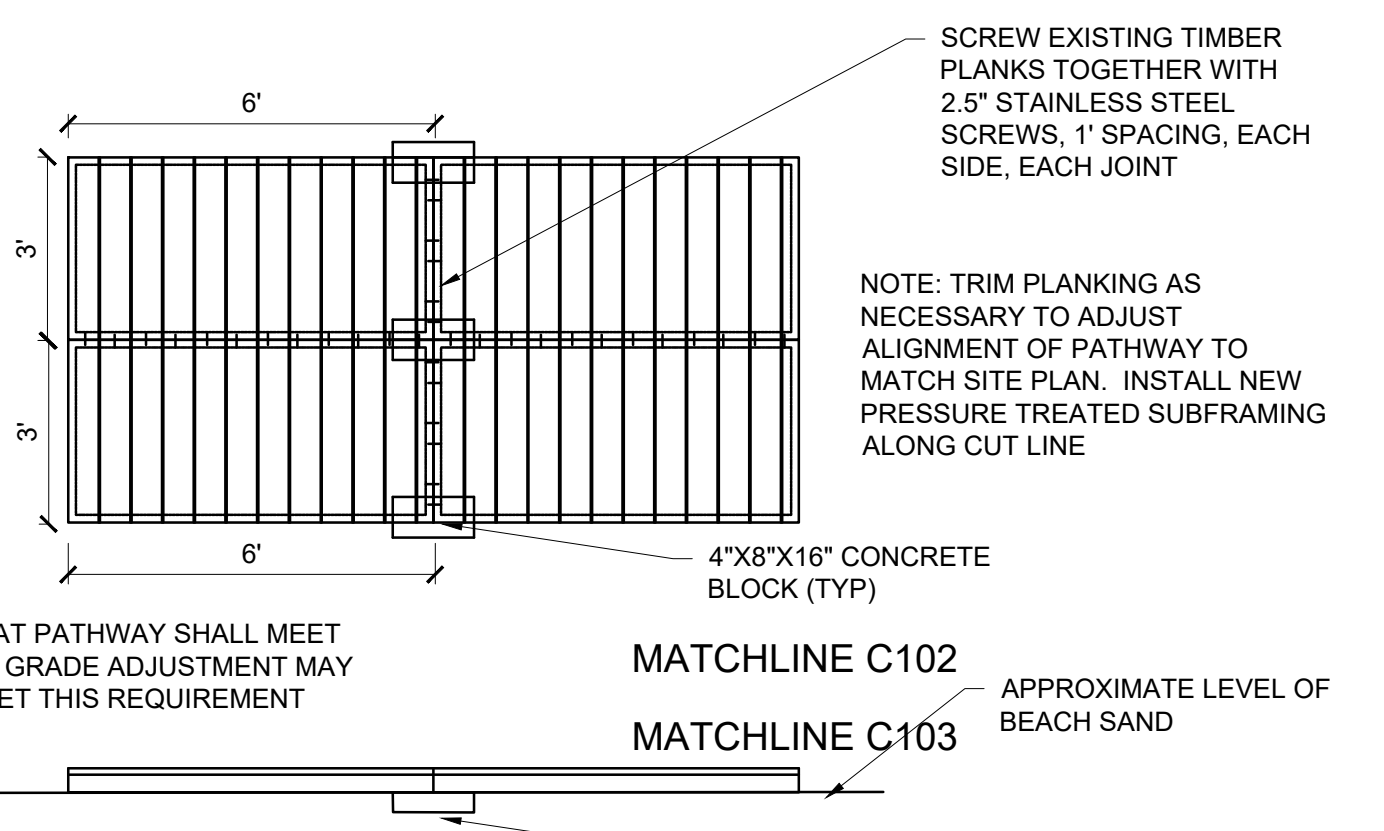
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 DESIGNED BY: RWS
 DRAWN BY: AWF
 CHECK BY:

C101_OVERALL SITE
 101022 andrew.filler

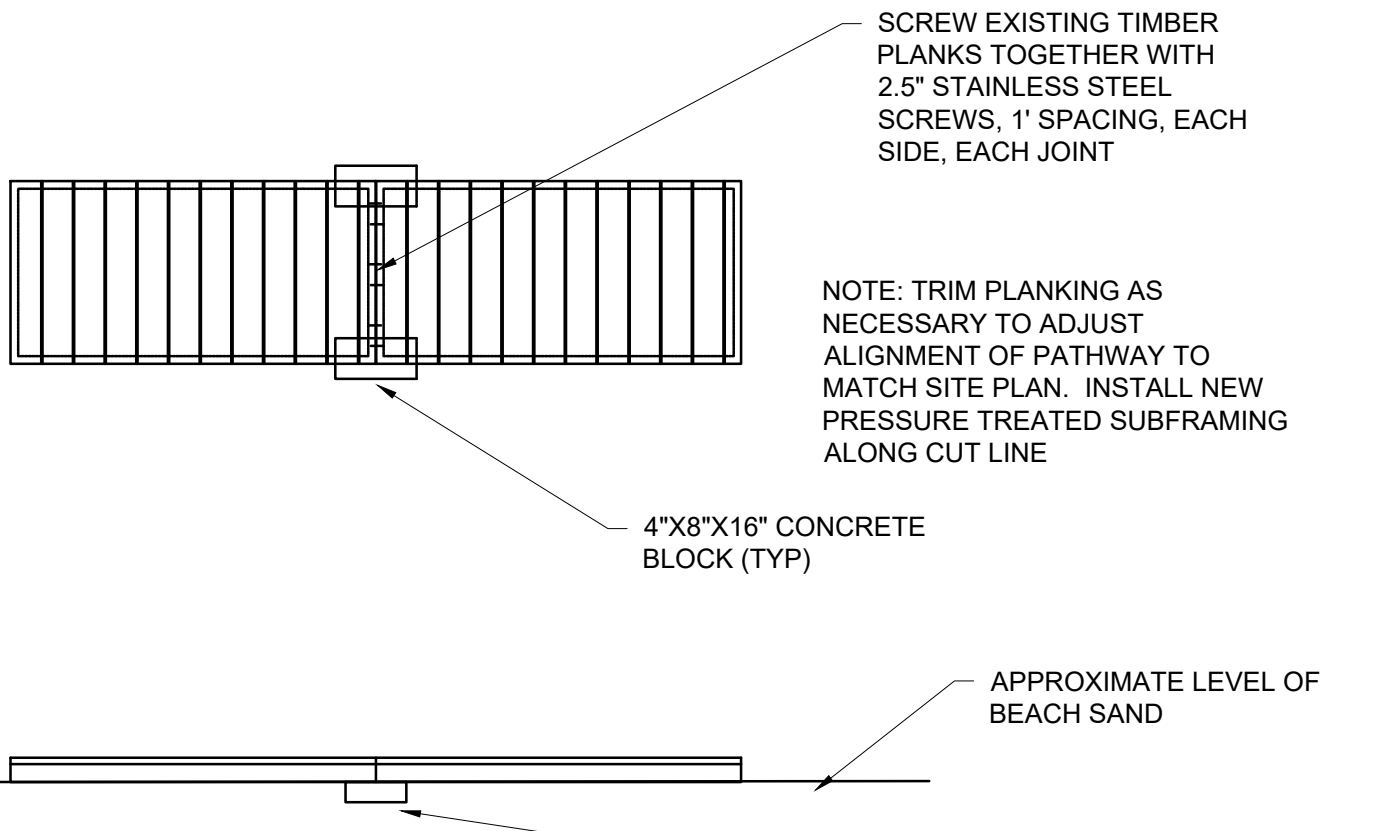
APRIL 2023
 F&W PROJECT NO.
 847860



INTERPRETIVE SIGN, 24 X 36
NOT TO SCALE



6' WIDE PATHWAY UTILIZING EXISTING TIMBER PLANKING
SCALE: NOT TO SCALE

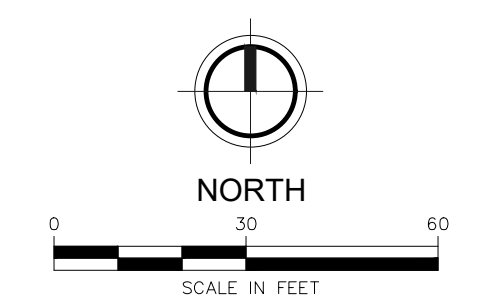
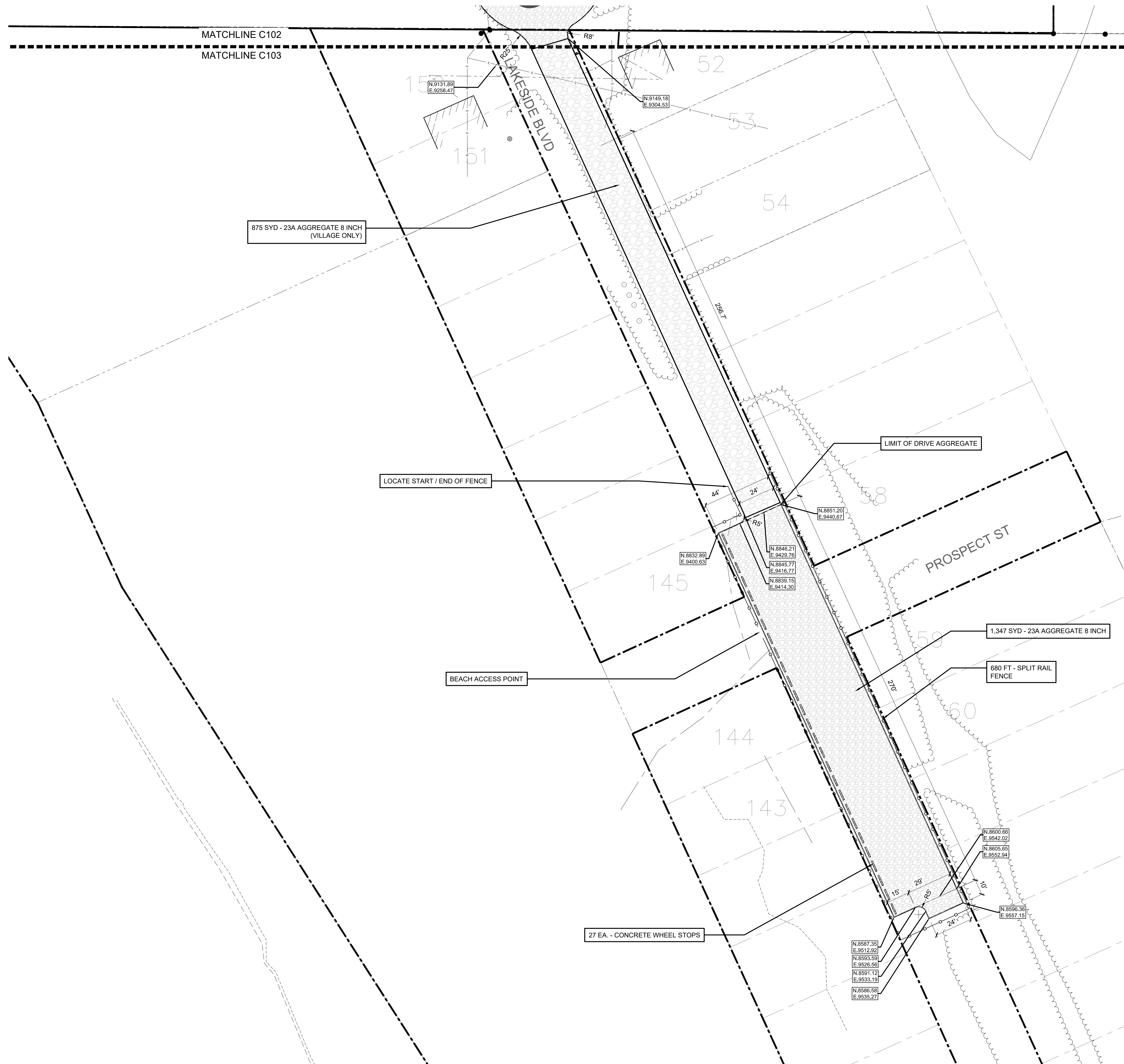


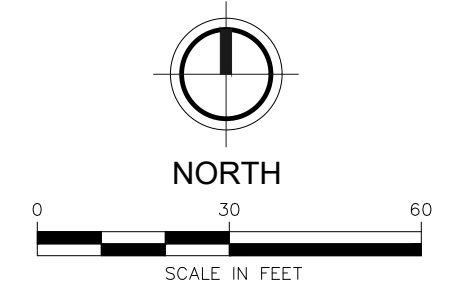
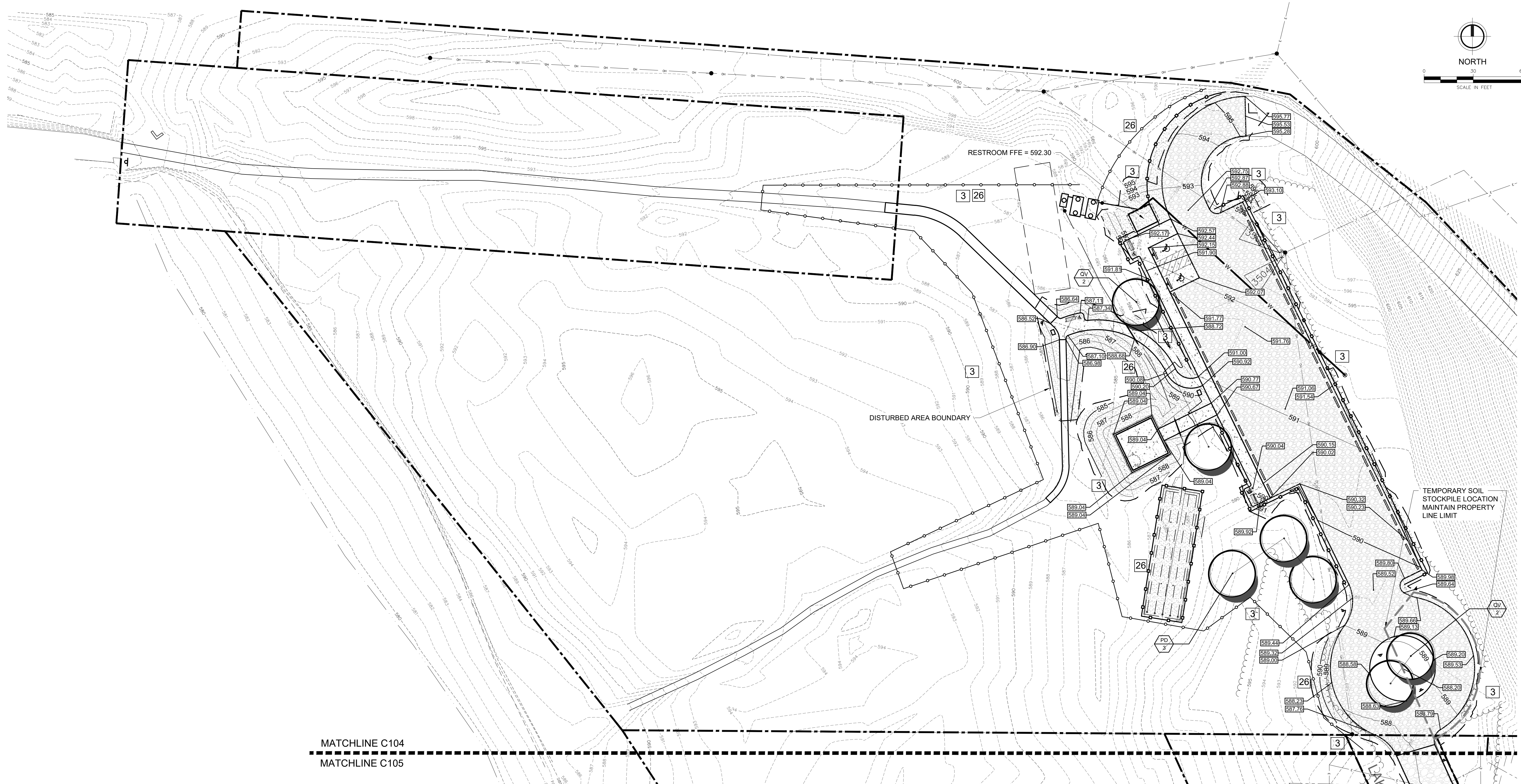
3' WIDE PATHWAY UTILIZING EXISTING TIMBER PLANKING
SCALE: NOT TO SCALE

NOTE: SEPTIC TANKS, DOSING PUMP, CHAMBER, DRAINFIELD, WELL, AND WATER LINE ARE FOR ALTERNATE A ONLY.

U:\Projects\1001-848000\847860_Elberta - Elberta Beach\847860_Plan\1022_PATHWAY_NORTH_PARKING_LAYOUT.dwg - plotted on: 3/29/2023, 3:24 PM

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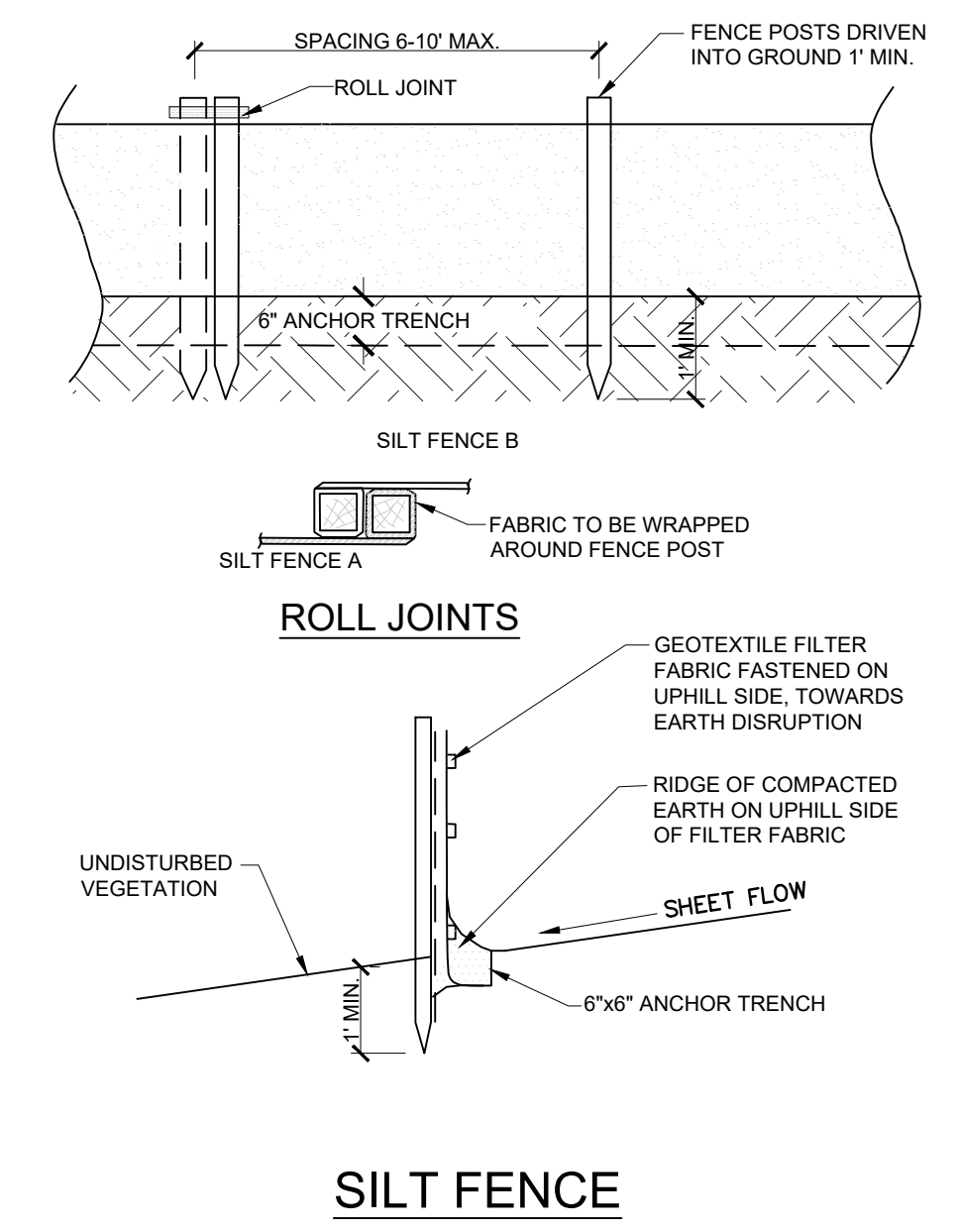




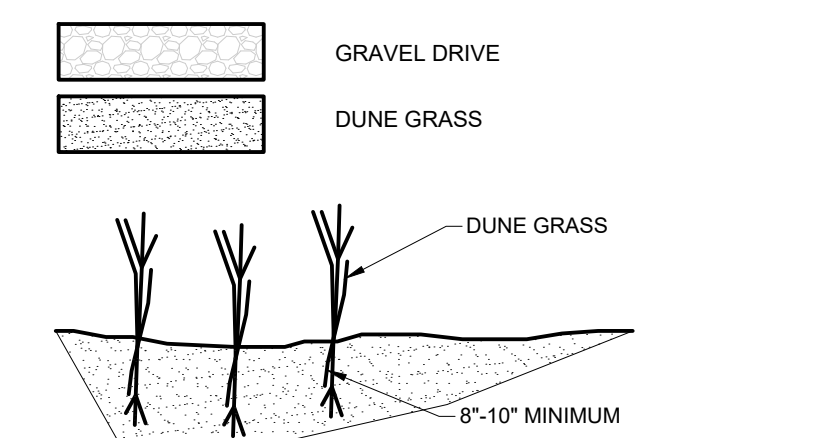
MATCHLINE C104
MATCHLINE C105

BM #3505 EL. 594.97'
MAG SPIKE N FACE PP, E SIDE GRAVEL DRIVE
PARKING LOT @ ELBERTA BEACH
(NAVD88 VIA NGS MONUMENT - FORTPORT PID -
PM0582, STATE/COUNTY - MI/BENZIE, COUNTRY - US
USGS QUAD - FRANKFORT (2017))

TBM #3504 EL. 596.29'
TOP OF TELE NETWORK INTERFACE BO ON PP, E
SIDE GRAVEL DRIVE PARKING LOT @ ELBERTA
BEACH



LEGEND



DUNE GRASS PLANTING DETAIL

NOT TO SCALE

PLANT MATERIAL LIST

QTY	KEY	BOTANICAL NAME COMMON NAME	MIN. REQ'D SIZE	COMMENTS
DECIDUOUS TREES				
3	PD	<i>Populus deltoides</i> Cottonwood	Min. 2-1/2" Cal.	BALLED & BURLAPPED FULL AND EVENLY BRANCHED HEADS
4	QV	<i>Quercus velutina</i> Black Oak	Min. 2-1/2" Cal.	BALLED & BURLAPPED FULL AND EVENLY BRANCHED HEADS

CONSTRUCTION SEQUENCE	YEAR: 2023							
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
INSTALL / MAINTAIN TEMPORARY CONTROL MEASURES								
STRIP TOPSOIL / MASS GRADING								
EXCAVATE STORMWATER BASIN								
CONSTRUCT FOUNDATION AND BUILDING								
PLACE UNDERGROUND UTILITIES								
PLACE PAVEMENTS AND WALKS								
ESTABLISH FINAL GRADES								
INSTALL LANDSCAPING								
INSPECT PERMANENT EROSION CONTROL MEASURES								
REMOVE TEMPORARY EROSION CONTROL MEASURES								

PROPOSED LEGEND

□ BARRIER FREE SIGN	○ LIGHT POLE	— CONCRETE WHEEL STOP
● STORM MANHOLE	○ CLEAN OUT	
— STM	— STORM SEWER	
— W	— SANITARY SEWER	
— W	— DOMESTIC WATER SERVICE	
— 636	— PROPOSED MINOR CONTOUR	
— 635	— PROPOSED MAJOR CONTOUR	
MX	— MATCH EXISTING ELEVATION	— 638.00 FG
FL	— FLOW LINE GRADE	— TC
RIM	— STRUCTURE RIM ELEVATION	— SW
BIT	— BITUMINOUS GRADE	— CON

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES

KEY	DETAIL	CHARACTERISTICS
3	PERMANENT / TEMPORARY SEEDING DUNE GRASS PLANTING	INEXPENSIVE BUT EFFECTIVE EROSION CONTROL MEASURE TO STABILIZE FLAT AREAS AND MILD SLOPES. PERMITS RUNOFF TO INFILTRATE SOIL, REDUCING RUNOFF VOLUMES. PROPER PREPARATION OF THE SEED BED, FERTILIZATION, MULCHING AND WATERING IS CRITICAL TO ITS SUCCESS.
26	SILT FENCE	A PERMEABLE BARRIER ERRECTED BELOW DISTURBED AREAS TO CAPTURE SEDIMENTS FROM SHEET FLOW. CAN BE SUED TO DIVERT SMALL VOLUMES OF WATER TO STABLE OUTLETS. INEFFECTIVE AS A FILTER AND NEVER BE PLACED ACROSS STREAMS OR DITCHES WHERE FLOW IS CONCENTRATED.

MATCHLINE C104
MATCHLINE C105



BM #3505 EL. 594.97'
MAG SPIKE N FACE PP, E SIDE GRAVEL DRIVE
PARKING LOT @ ELBERTA BEACH
(NAVD88 VIA NGS MONUMENT - FORTPORT PID -
PM0582, STATE/COUNTY - MI/BENZIE, COUNTRY - US
USGS QUAD - FRANKFORT (2017))

TBM #3504 EL. 596.29'
TOP OF TELE NETWORK INTERFACE BO ON PP, E
SIDE GRAVEL DRIVE PARKING LOT @ ELBERTA
BEACH

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES		
KEY	DETAIL	CHARACTERISTICS
3	 PERMANENT/ TEMPORARY SEEDING DUNE GRASS PLANTING	INEXPENSIVE BUT EFFECTIVE EROSION CONTROL MEASURE TO STABILIZE FLAT AREAS AND MILD SLOPES. PERMITS RUNOFF TO INFILTRATE SOIL, REDUCING RUNOFF VOLUMES. PROPER PREPARATION OF THE SEED BED, FERTILIZATION, MULCHING AND WATERING IS CRITICAL TO ITS SUCCESS.
26	 SILT FENCE	A PERMEABLE BARRIER ERRECTED BELOW DISTURBED AREAS TO CAPTURE SEDIMENTS FROM SHEET FLOW. CAN BE USED TO DIVERT SMALL VOLUMES OF WATER TO STABLE OUTLETS. INEFFECTIVE AS A FILTER AND NEVER BE PLACED ACROSS STREAMS OR DITCHES WHERE FLOW IS CONCENTRATED.

PROPOSED LEGEND		
	□ LIGHT POLE	— CONCRETE WHEEL STOP
● STORM MANHOLE	⊙ CLEAN OUT	
— STM	— STORM SEWER	
— W	— SANITARY SEWER	
— W	— DOMESTIC WATER SERVICE	
— 636	— PROPOSED MINOR CONTOUR	
— 635	— PROPOSED MAJOR CONTOUR	
MX MATCH EXISTING ELEVATION	— PROPOSED SPOT GRADE	
FL FLOW LINE GRADE	TC TOP OF CURB GRADE	
IRM STRUCTURE RIM ELEVATION	SW SIDEWALK GRADE	
BIT BITUMINOUS GRADE	CON CONCRETE GRADE	

CONSTRUCTION SEQUENCE	YEAR: 2023						
	SEP	OCT	NOV	DEC	APR	MAY	JULY
INSTALL / MAINTAIN TEMPORARY CONTROL MEASURES							
STRIP TOPSOIL / MASS GRADING							
EXCAVATE STORMWATER BASIN							
CONSTRUCT FOUNDATION AND BUILDING							
PLACE UNDERGROUND UTILITIES							
PLACE PAVEMENTS AND WALKS							
ESTABLISH FINAL GRADES							
INSTALL LANDSCAPING							
INSPECT PERMANENT EROSION CONTROL MEASURES							
REMOVE TEMPORARY EROSION CONTROL MEASURES							

LEGEND

GRAVEL DRIVE

DUNE GRASS

NORTH

0 30 60
SCALE IN FEET

FLEIS & VANDENBRINK
DESIGN. BUILD. OPERATE.

603 Bay St, First Floor
Traverse City, MI 49685
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F: 231.932.8700

VILLAGE OF ELBERTA
BENZIE COUNTY, MICHIGAN
ELBERTA LAKE MICHIGAN BEACH IMPROVEMENT PROJECT
SOUTH PARKING GRADING & SECC

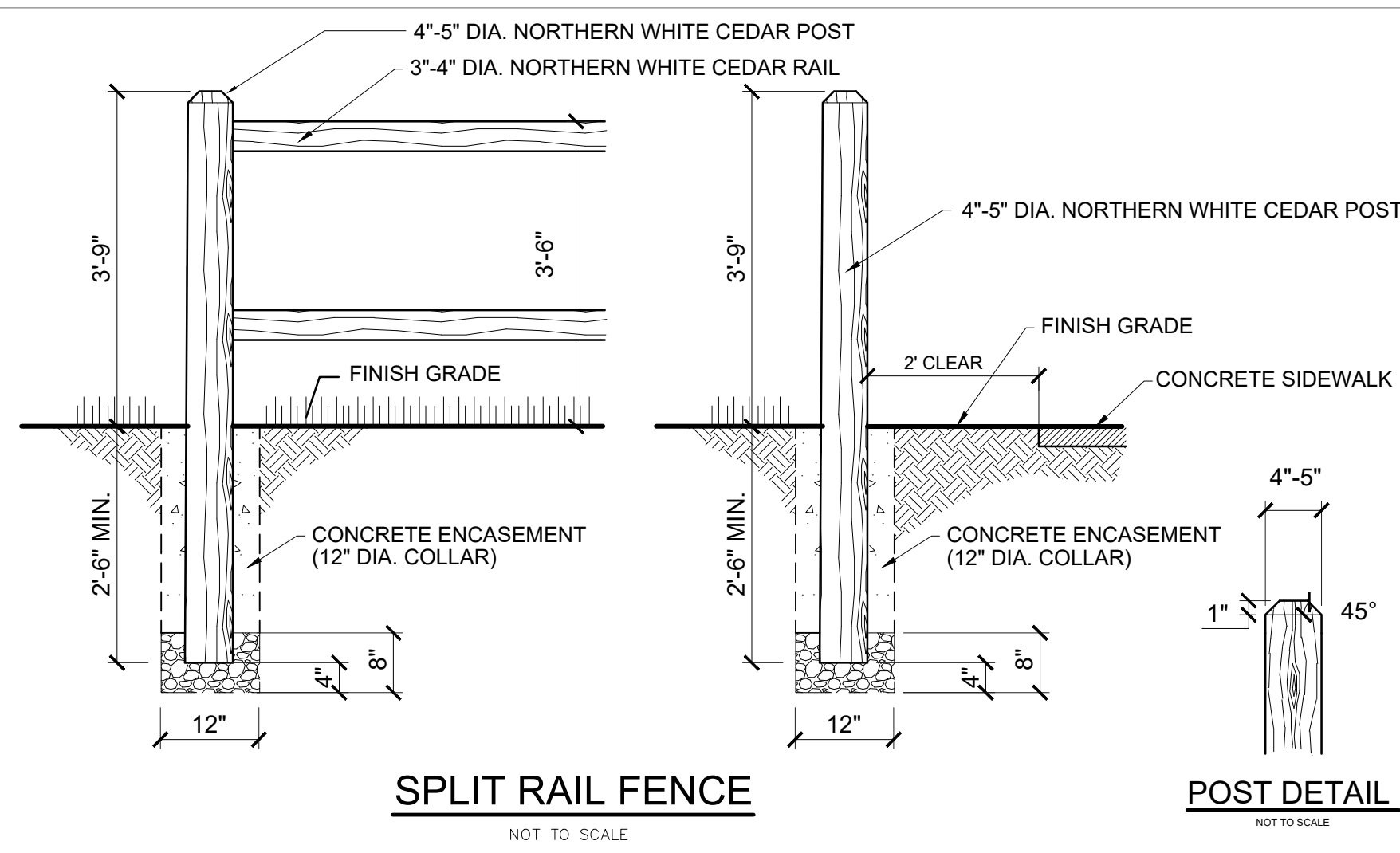
DESIGN TEAM: PROJ MGR: RWS
DESIGNED BY: RWS
DRAWN BY: AWF
CHECK BY:

C105_SOUTH PARKING GRADING
101022 andrew.filler

APRIL 2023
F&V PROJECT NO.
847860

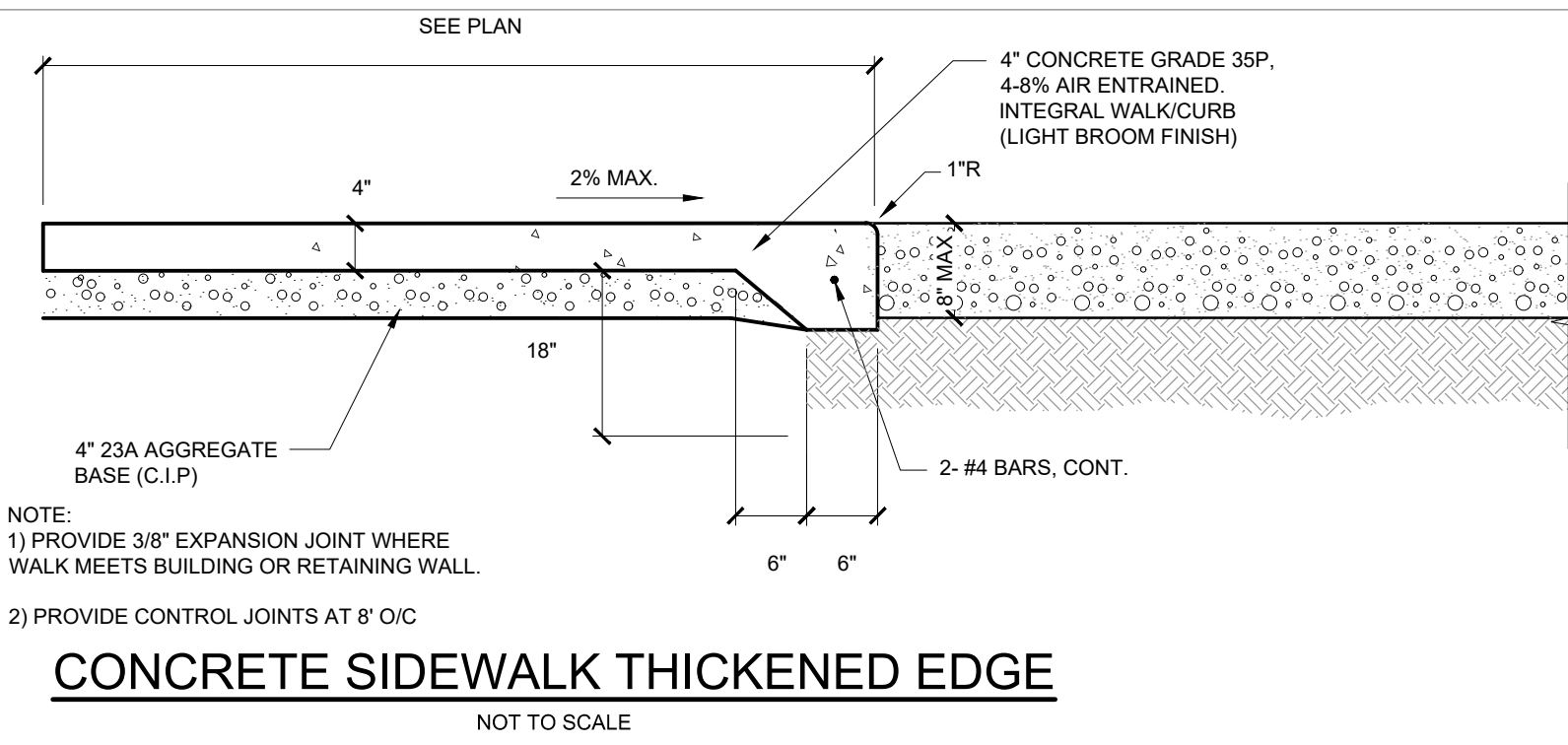
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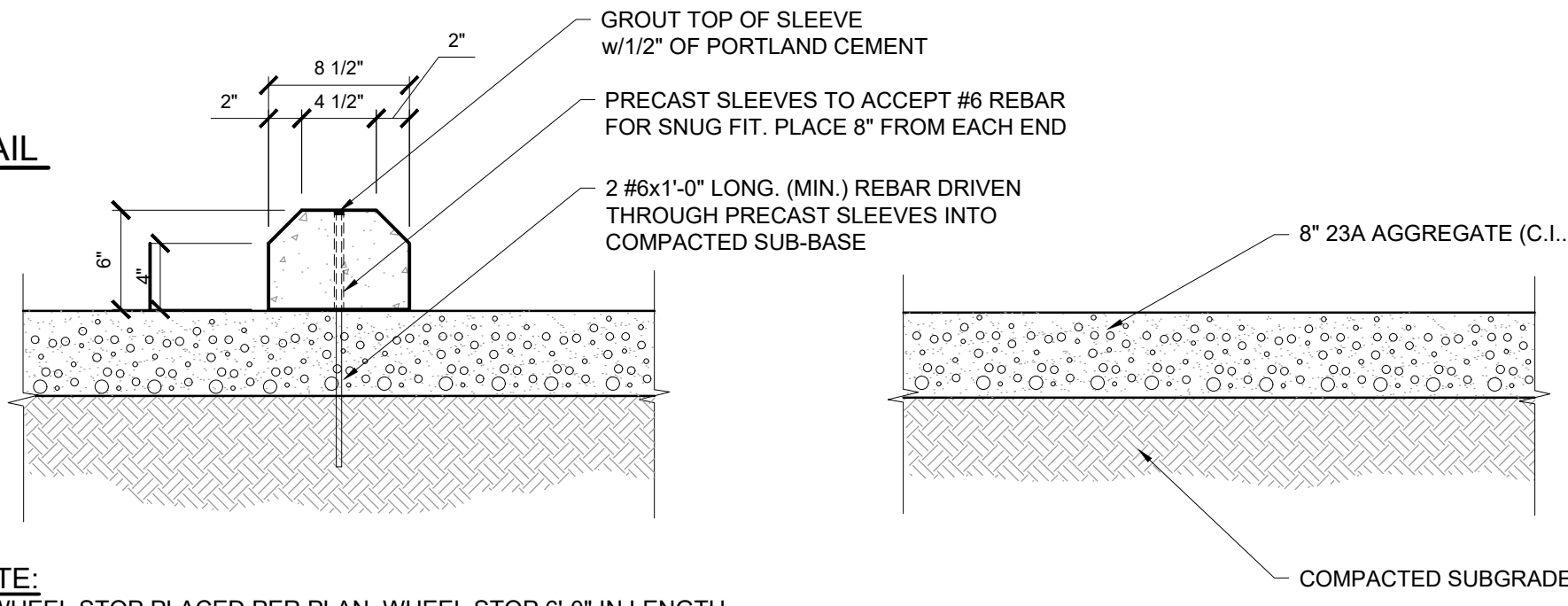


SPLIT RAIL FENCE
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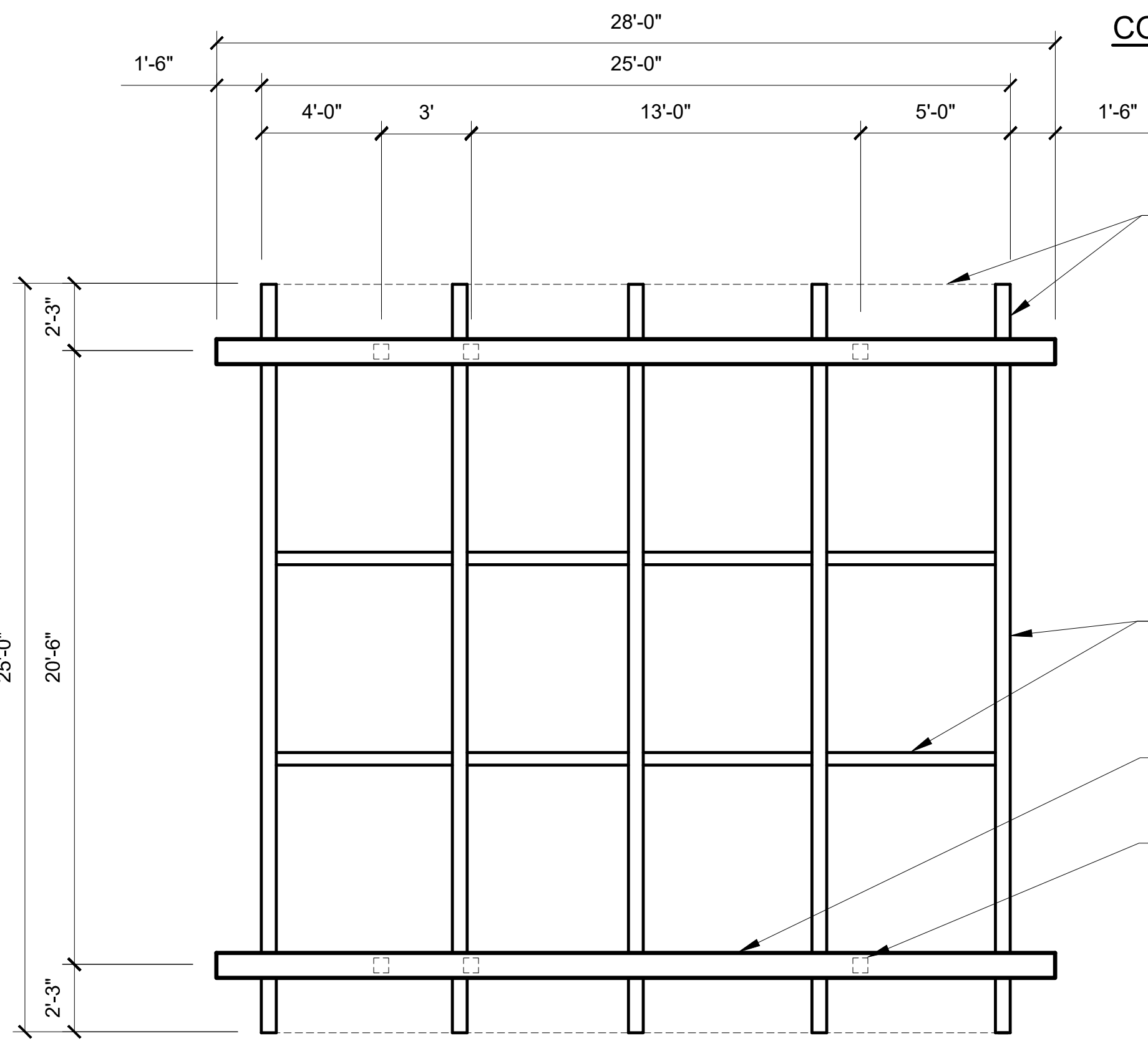
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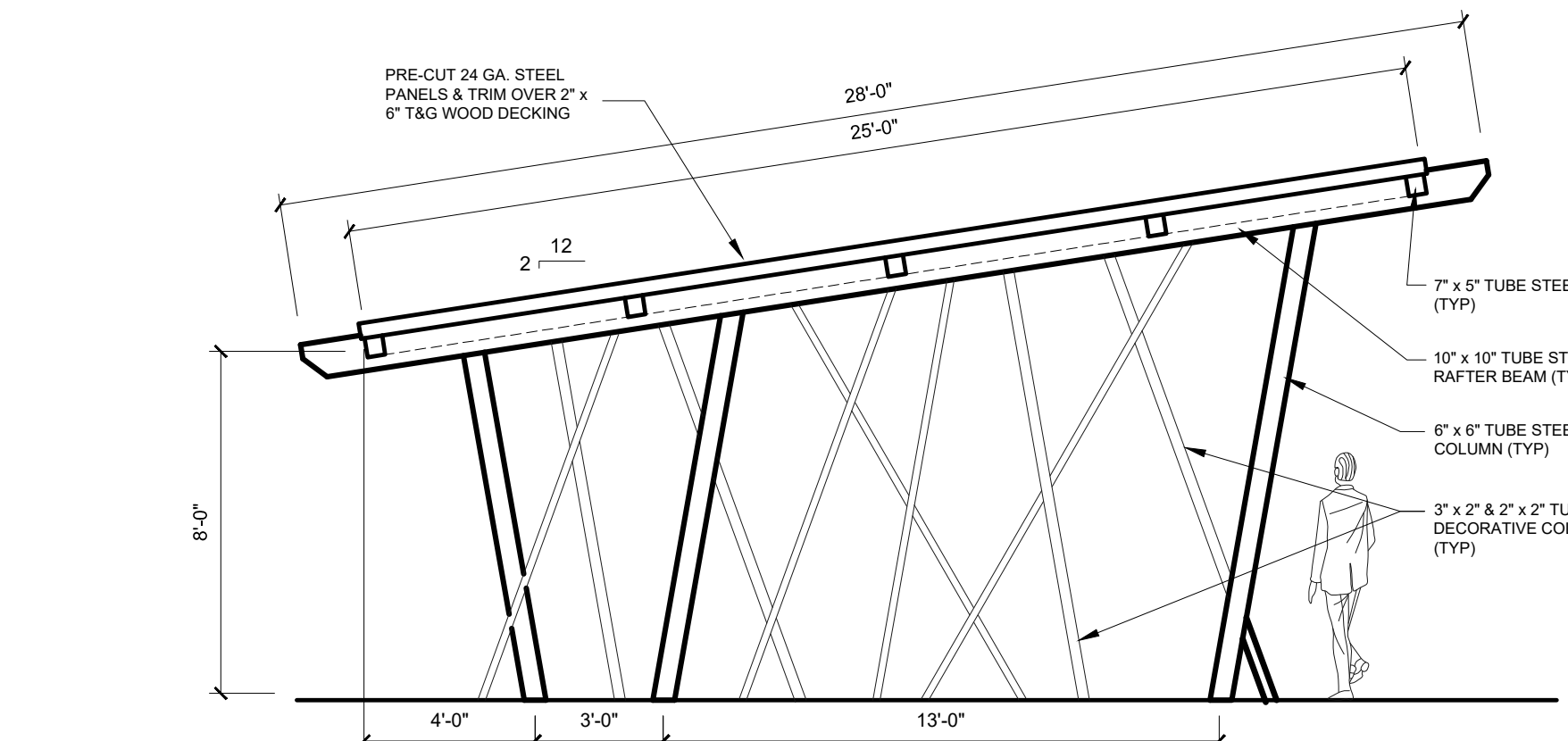
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NOT TO SCALE



23A AGGREGATE BASE, 8 INCH
SCALE: NOT TO SCALE



PAVILION FRAMING PLAN
SCALE: 1/8" = 1'-0"



PAVILION SIDE ELEVATION
SCALE: 3/16" = 1'-0"

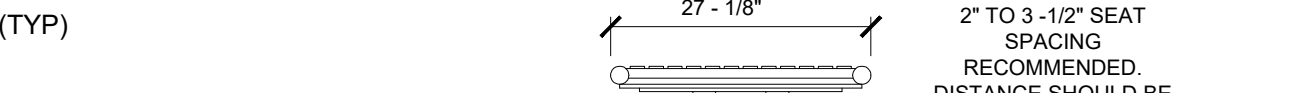
CONCRETE WHEEL STOP
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CONCRETE WHEEL STOP
SCALE: NOT TO SCALE



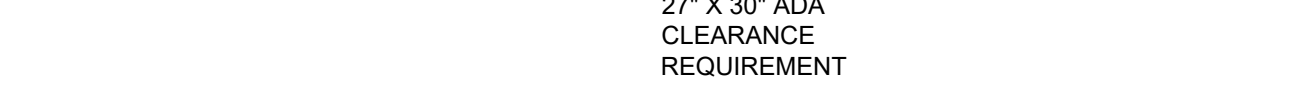
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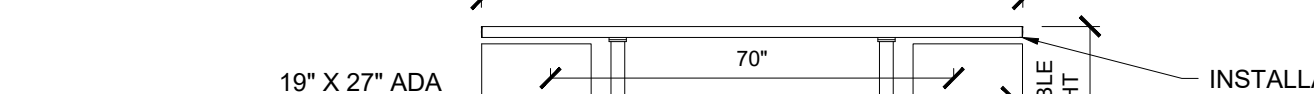
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CONCRETE WHEEL STOP
SCALE: NOT TO SCALE



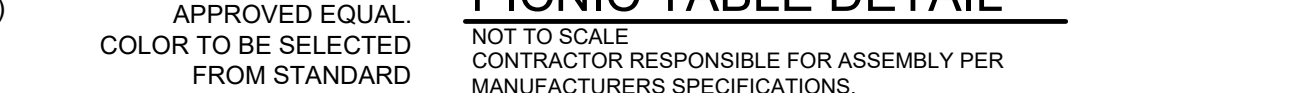
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CONCRETE WHEEL STOP
SCALE: NOT TO SCALE



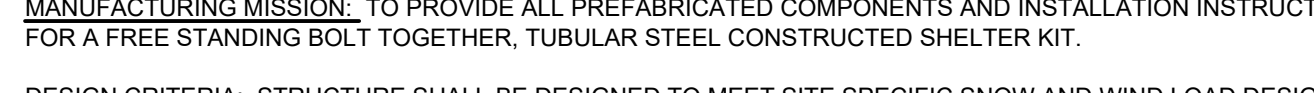
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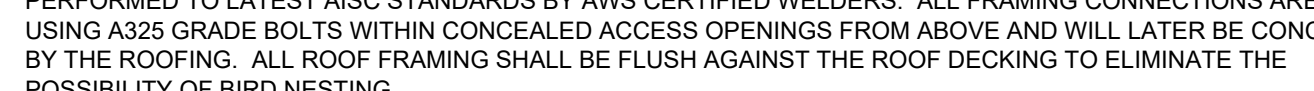
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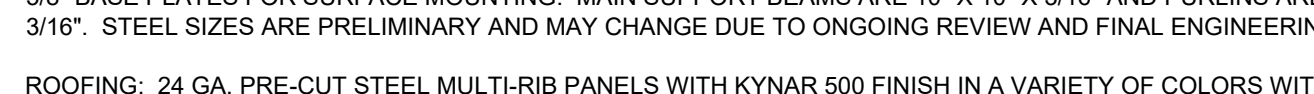
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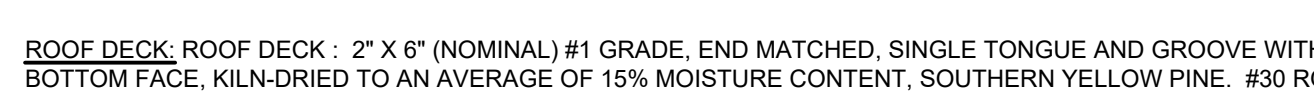
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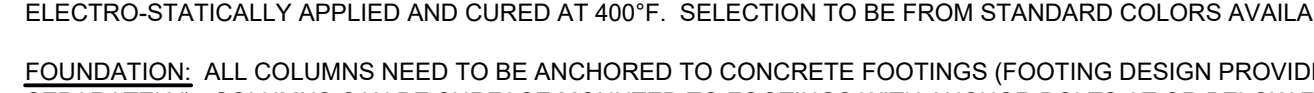
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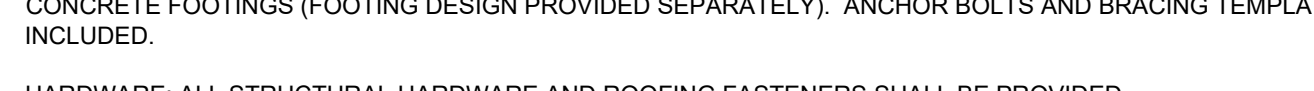
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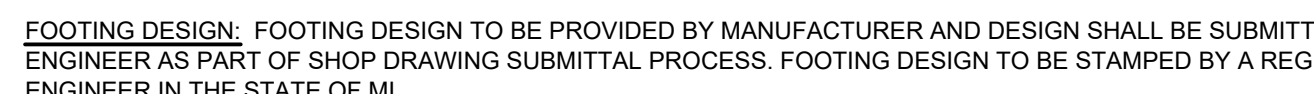
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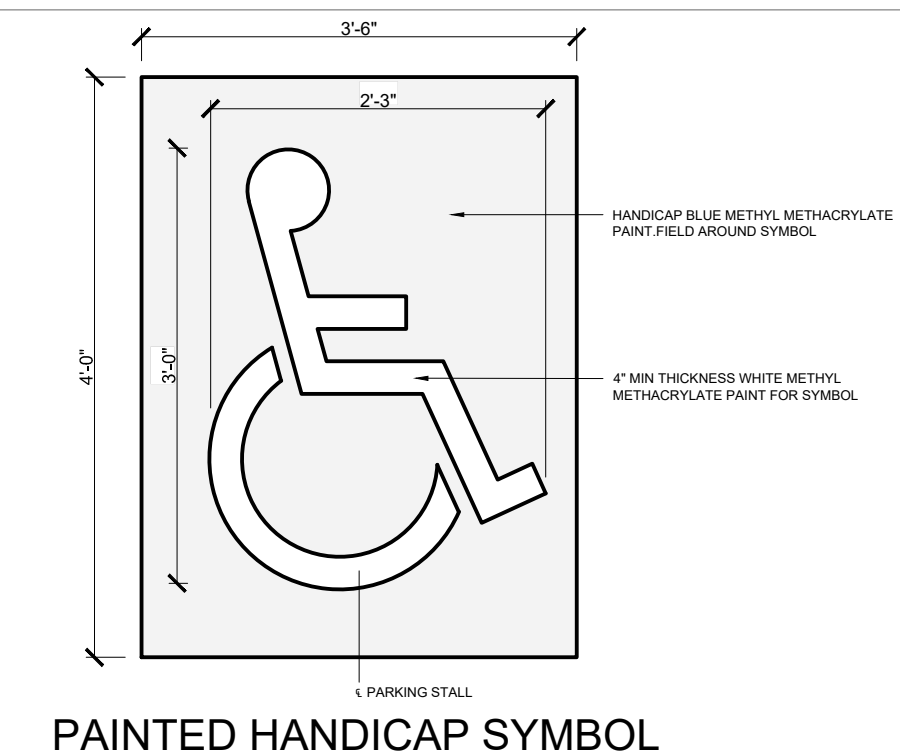
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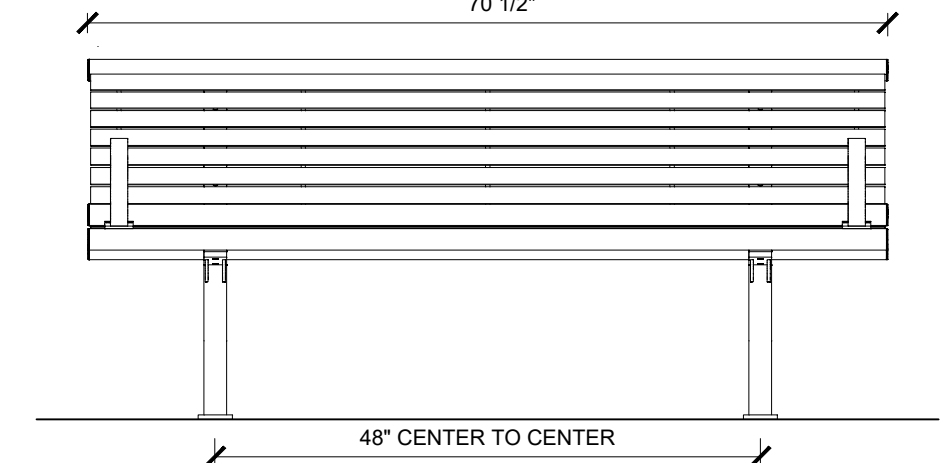
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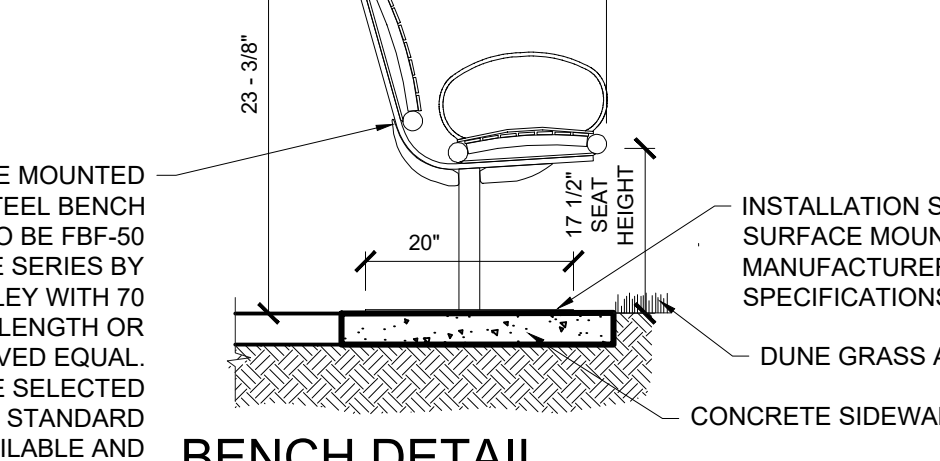
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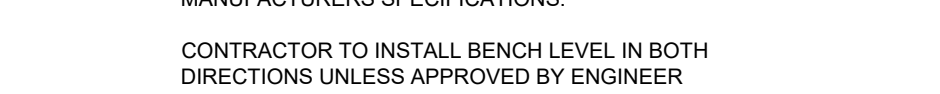
PAINTED HANDICAP SYMBOL
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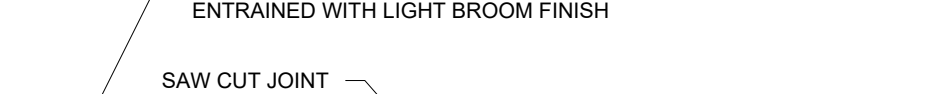
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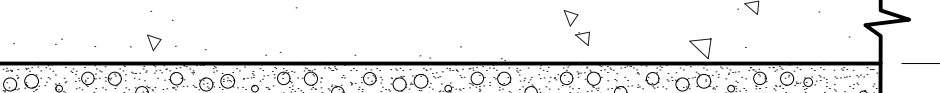
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BENCH DETAIL
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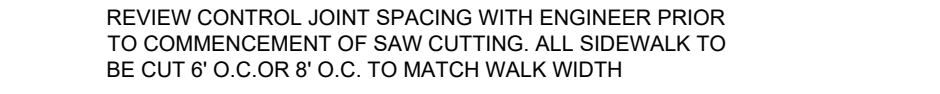
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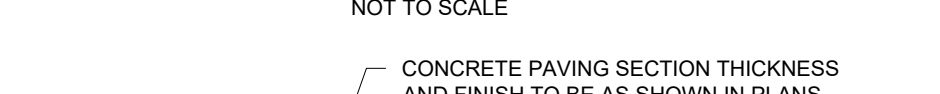
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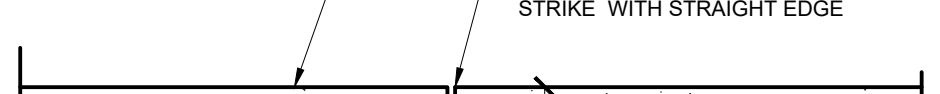
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BENCH DETAIL
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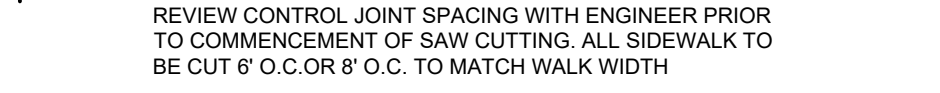
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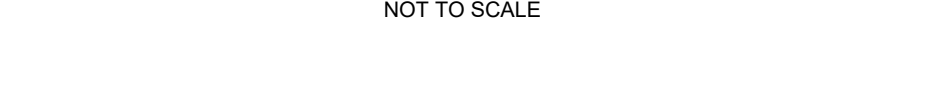
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BENCH DETAIL
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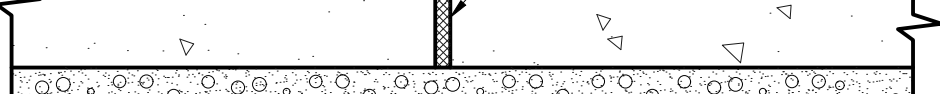
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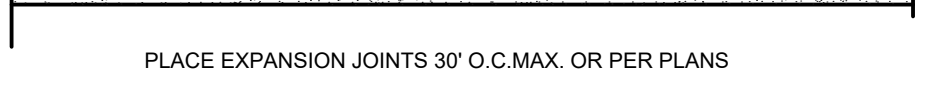
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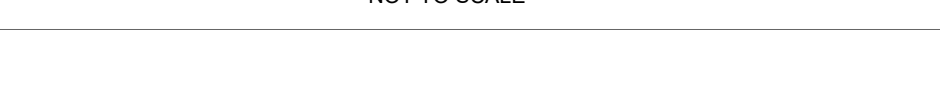
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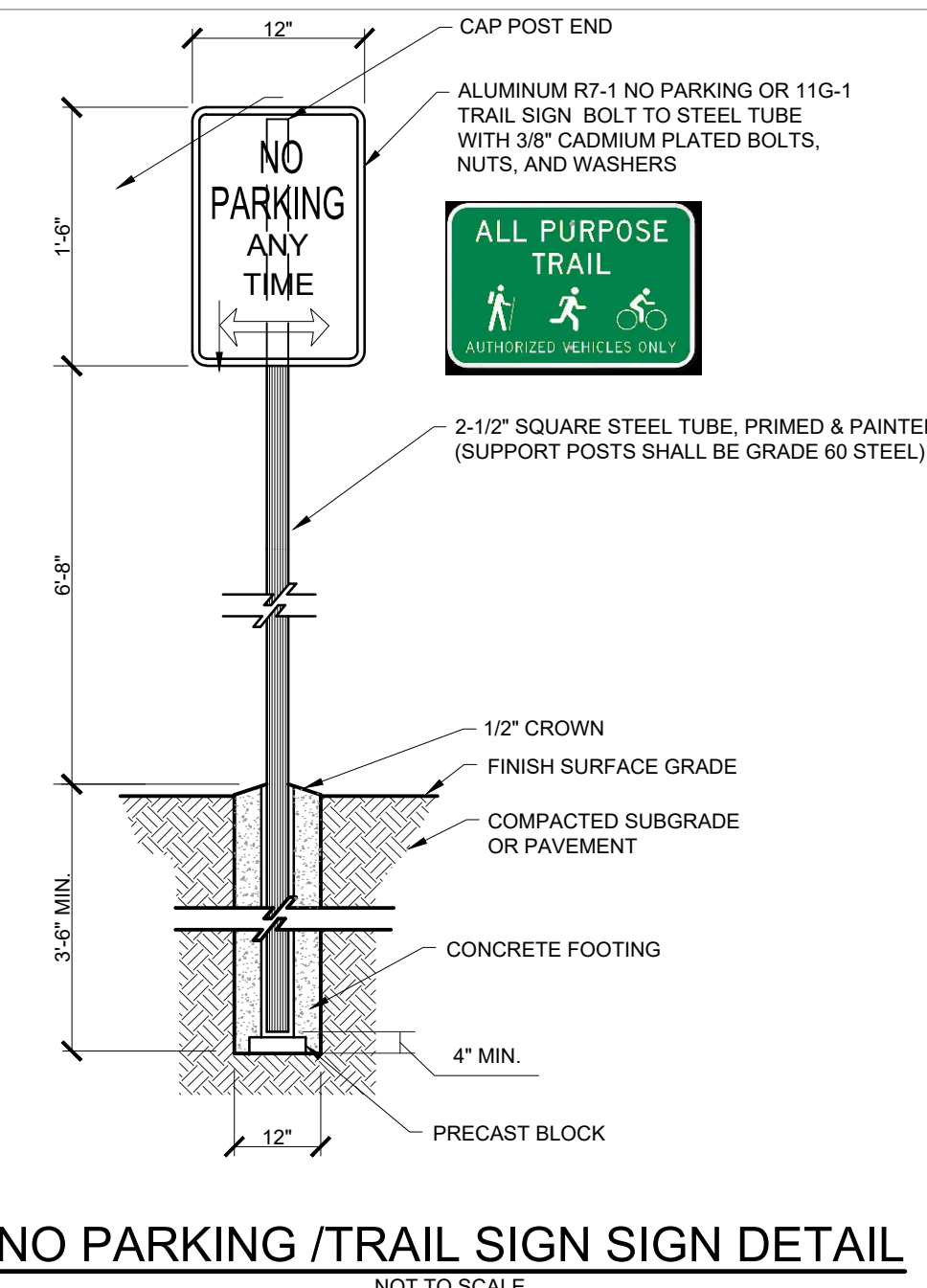
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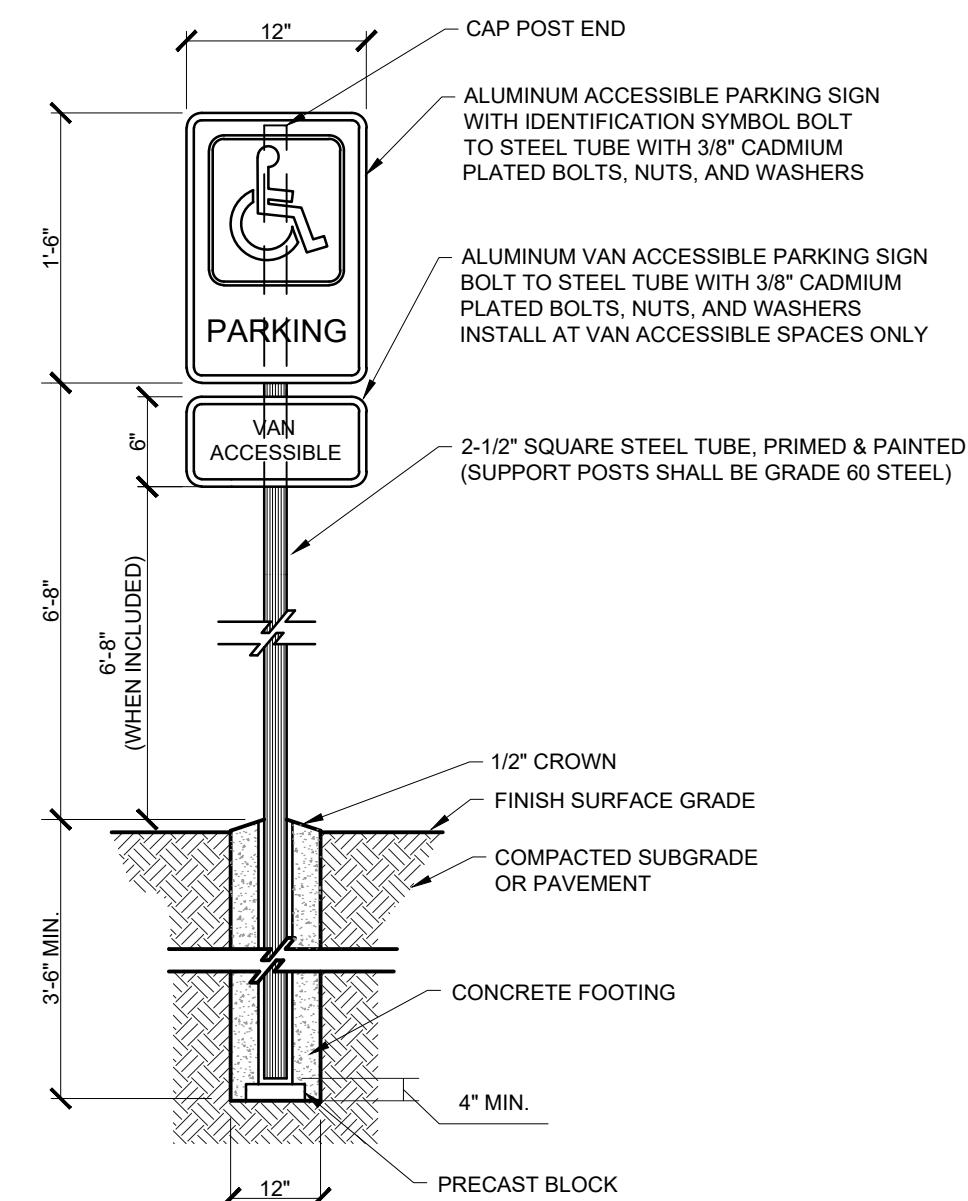
BENCH DETAIL
NOT TO SCALE



BENCH DETAIL
NOT TO SCALE

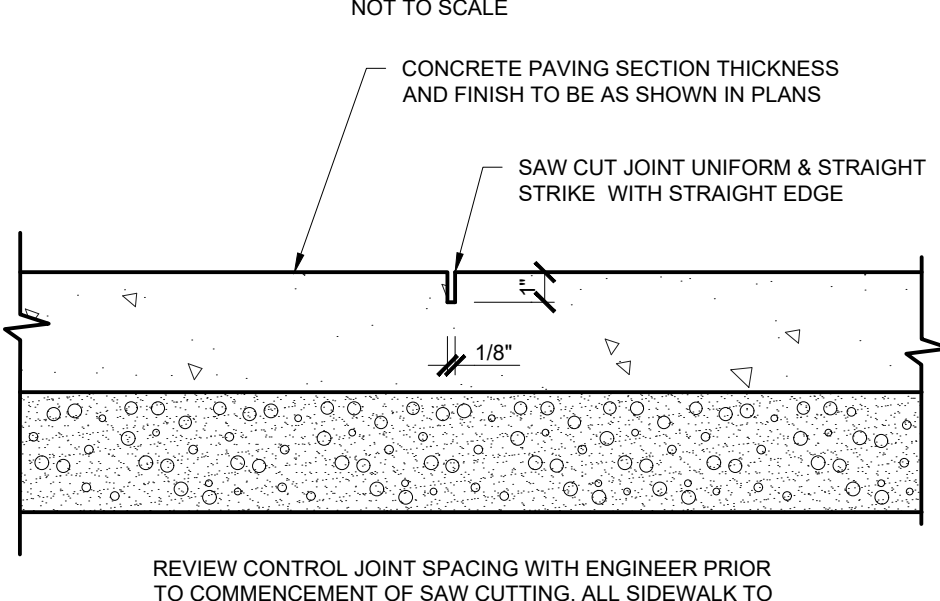


NO PARKING / TRAIL SIGN SIGN DETAIL
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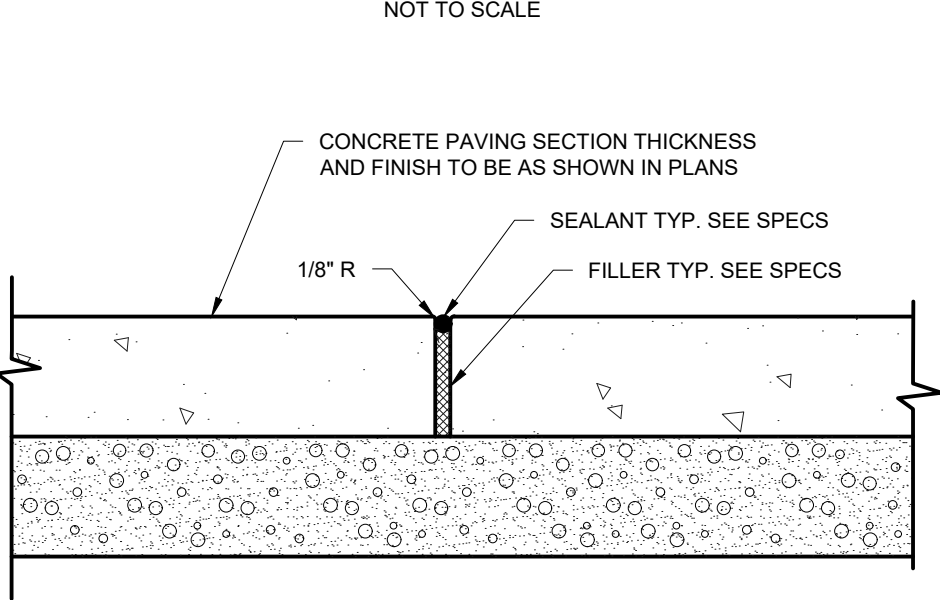


BARRIER FREE PARKING SIGN DETAIL
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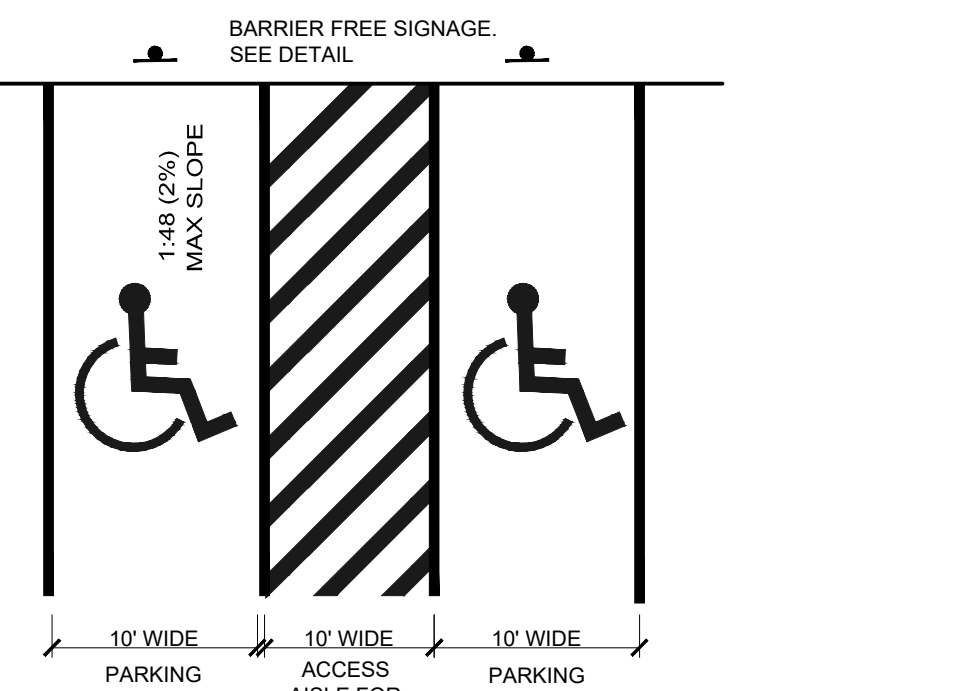
CONCRETE SIDEWALK (4 INCH)
NOT TO SCALE



SAWCUT CONTROL JOINT DETAIL
NOT TO SCALE



EXPANSION JOINT DETAIL
NOT TO SCALE



BARRIER FREE PARKING SPACE DETAIL
NOT TO SCALE

REFER TO THE FOLLOWING FOR ADDITIONAL DETAILS AND REQUIREMENTS:
1) ADA-ABA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES AS AMENDED AUGUST 5, 2005.
2) ICC/ANSI A117.1-1998 ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
3) UNLESS SPECIFIED OTHERWISE BY LOCAL REGULATIONS, MARKINGS SHALL BE BLUE IN COLOR AND PLACED USING PAINTS OR THERMOPLASTICS IN ACCORDANCE WITH THE 2011 MICHIGAN M.U.T.C.D.

U:\Proj\847001-848000\847860-Elberta Beach\847860_Village\500_DETAILS.dwg - plotted on 3/29/2023 3:25 PM

REVISION:

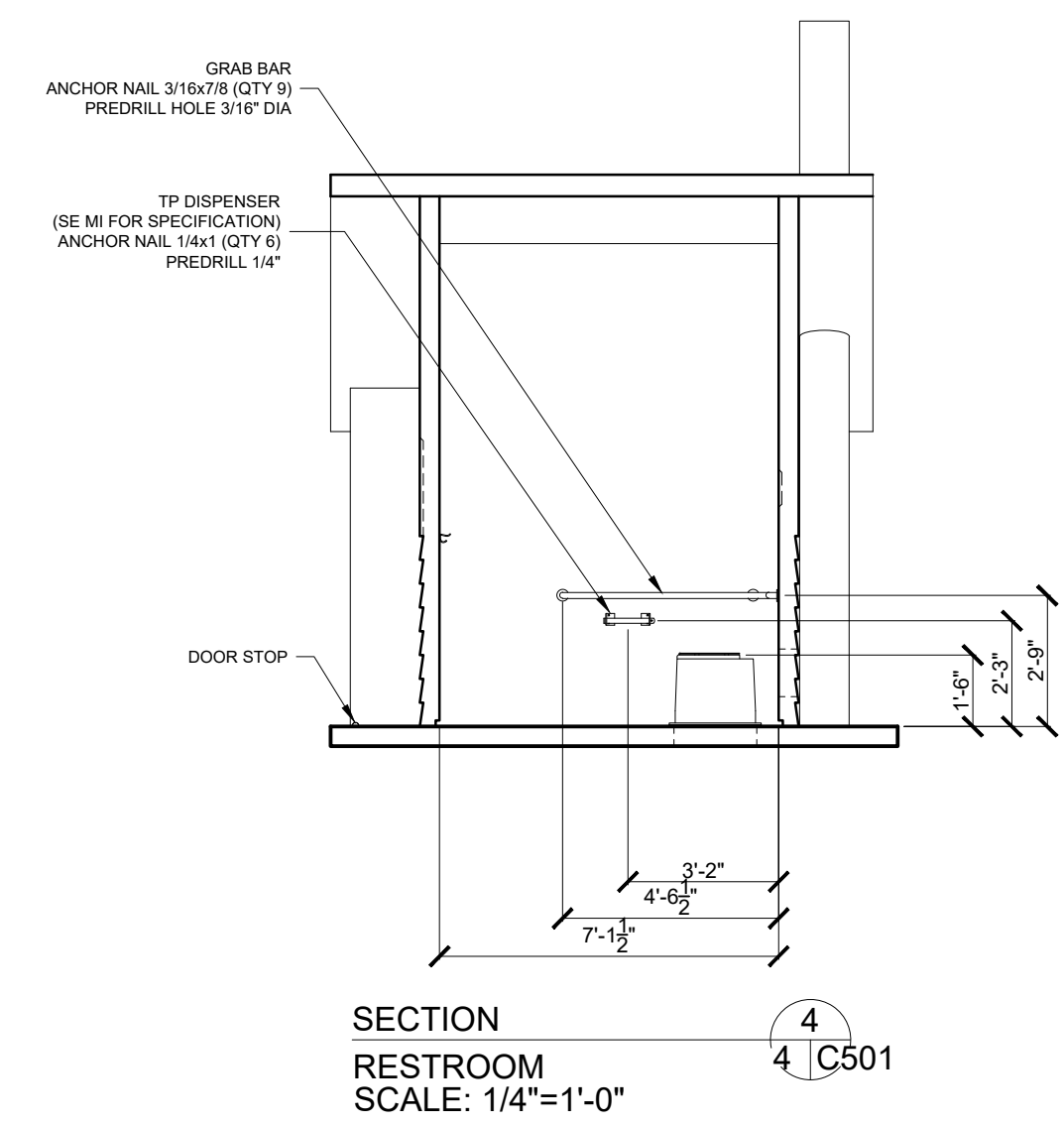
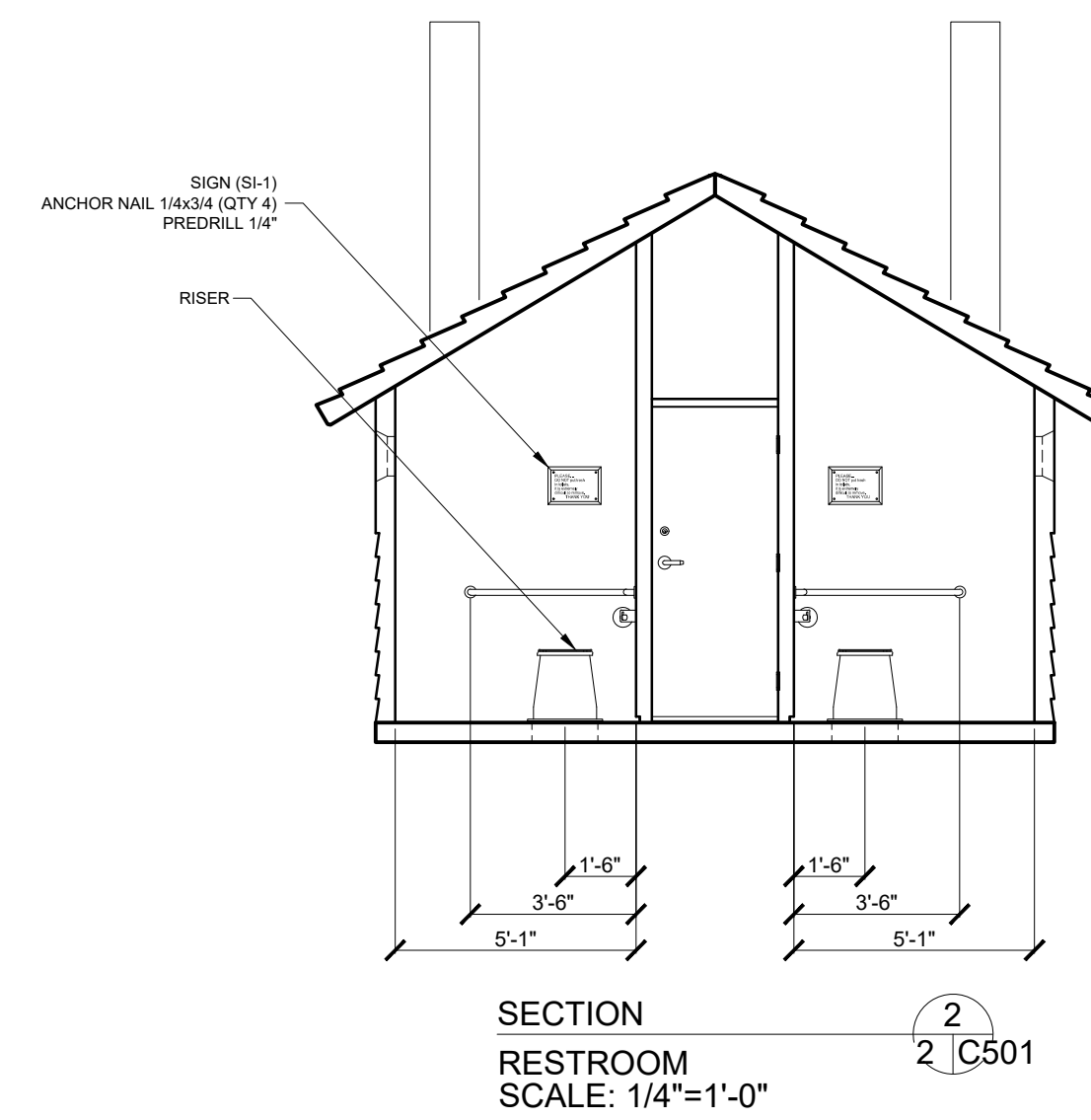
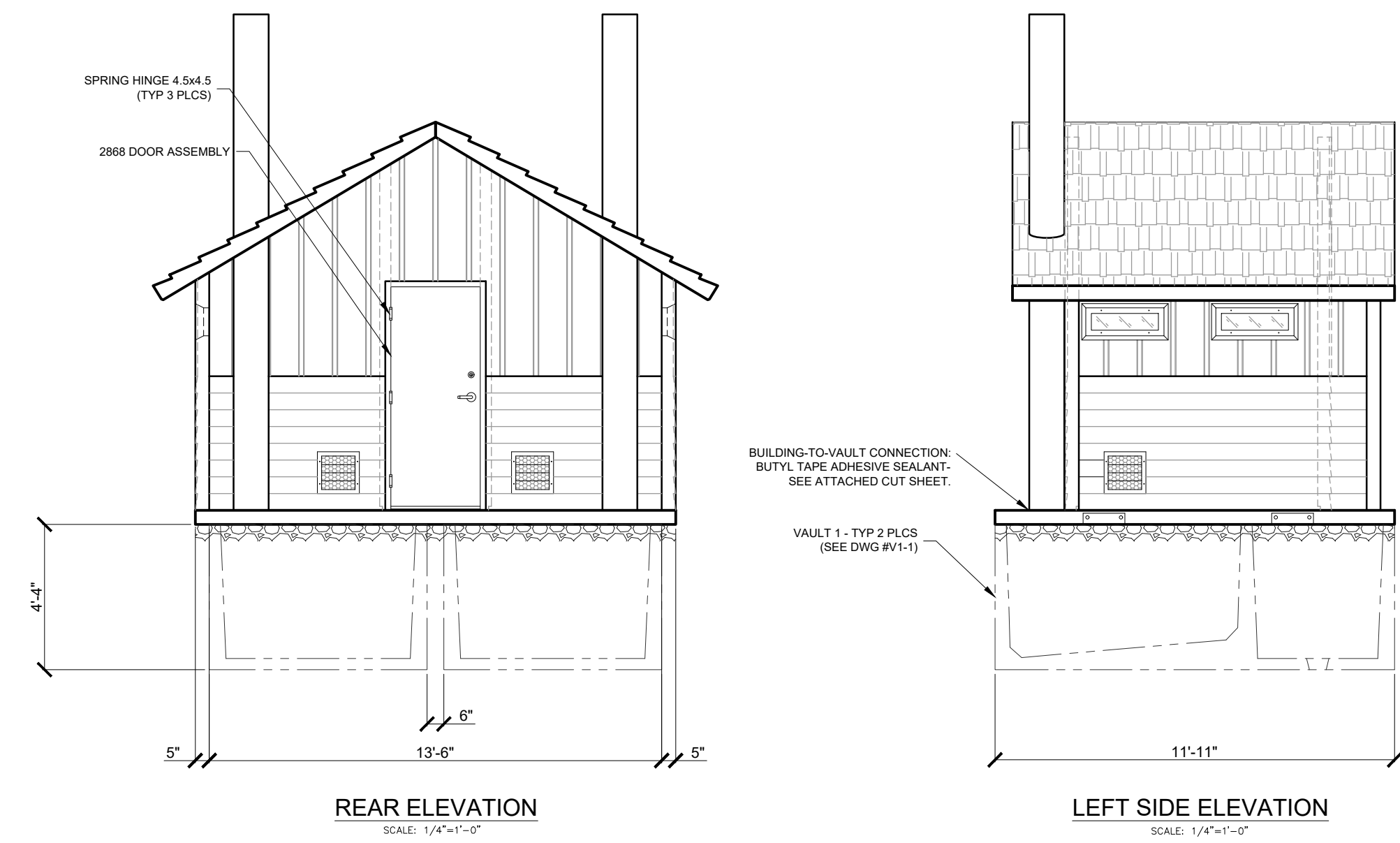
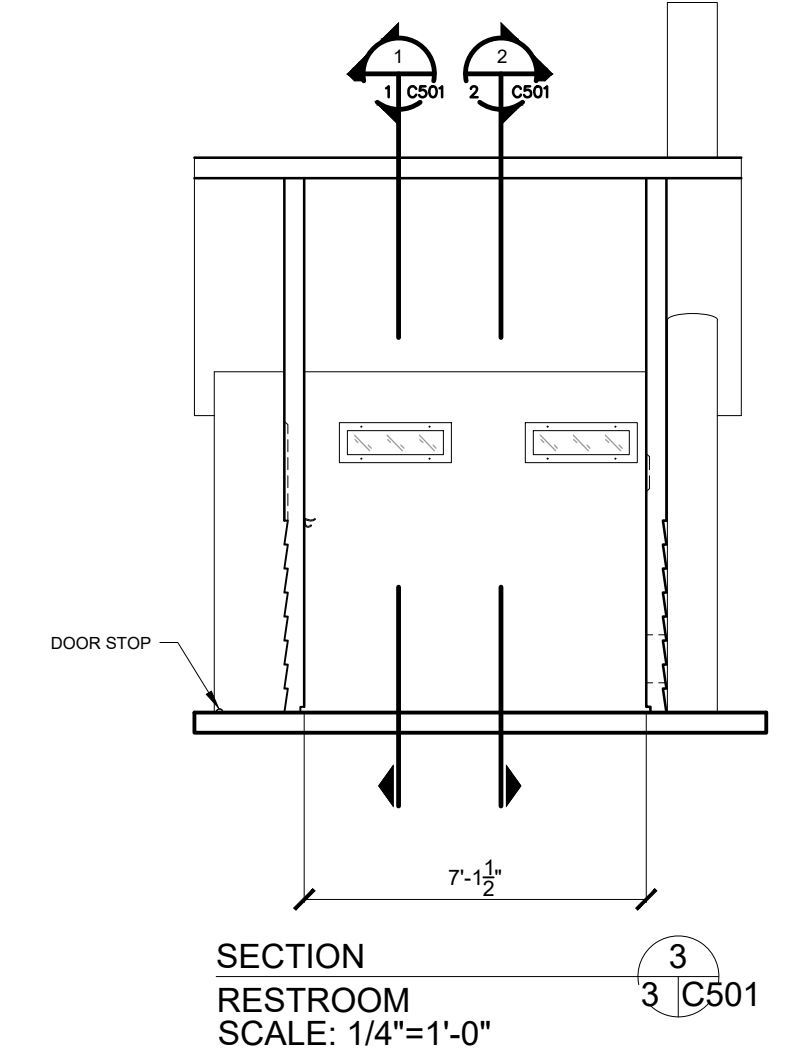
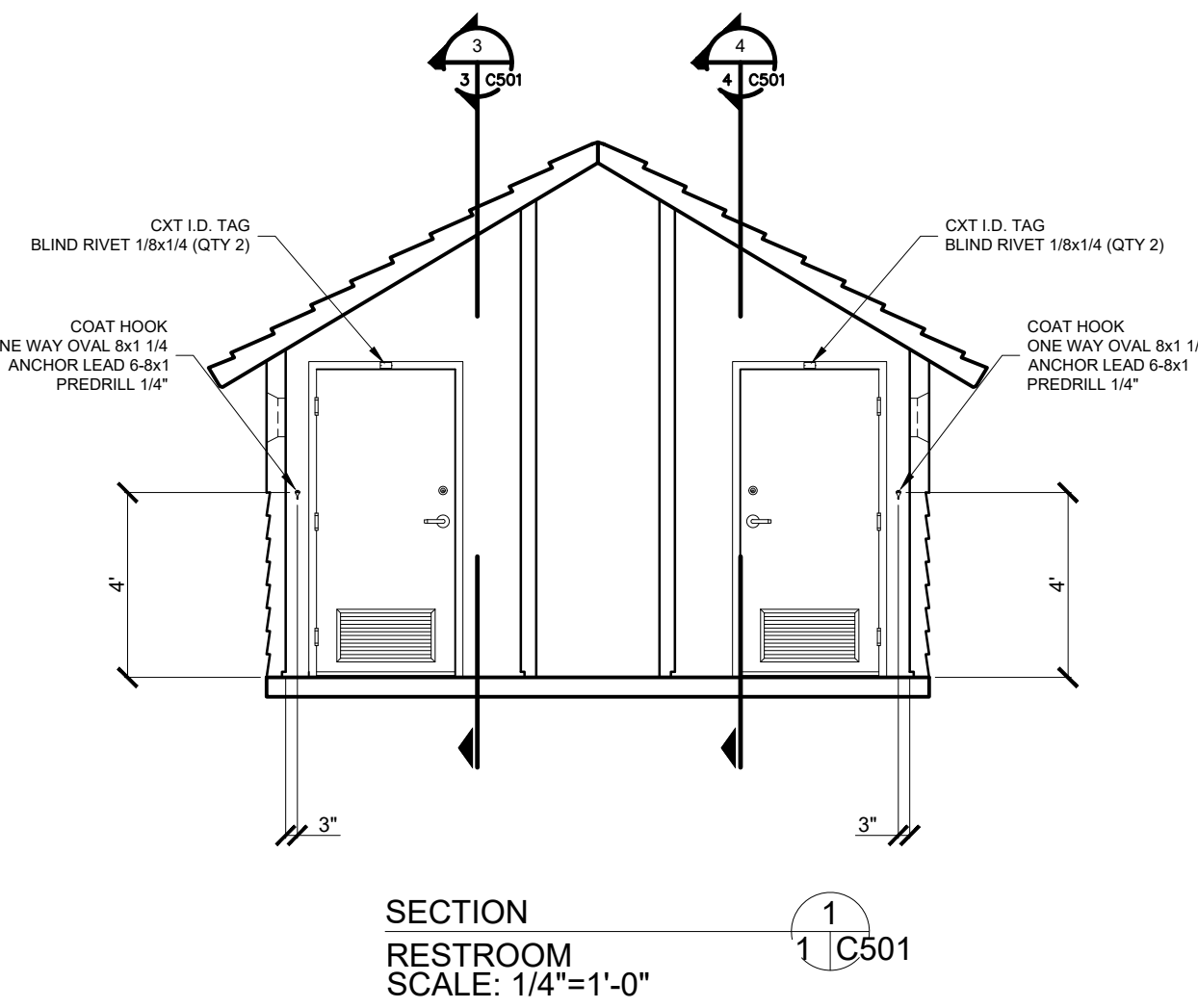
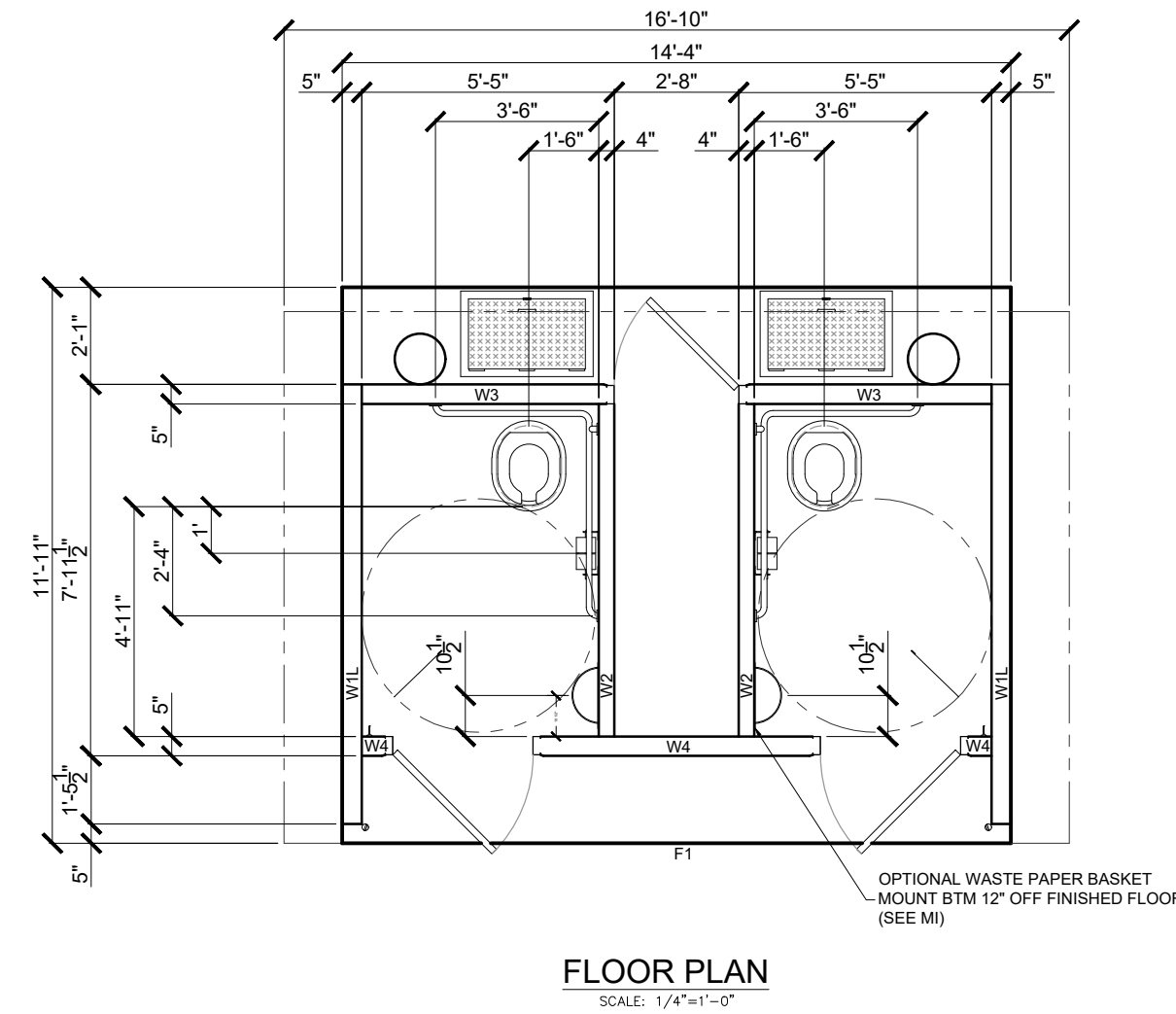
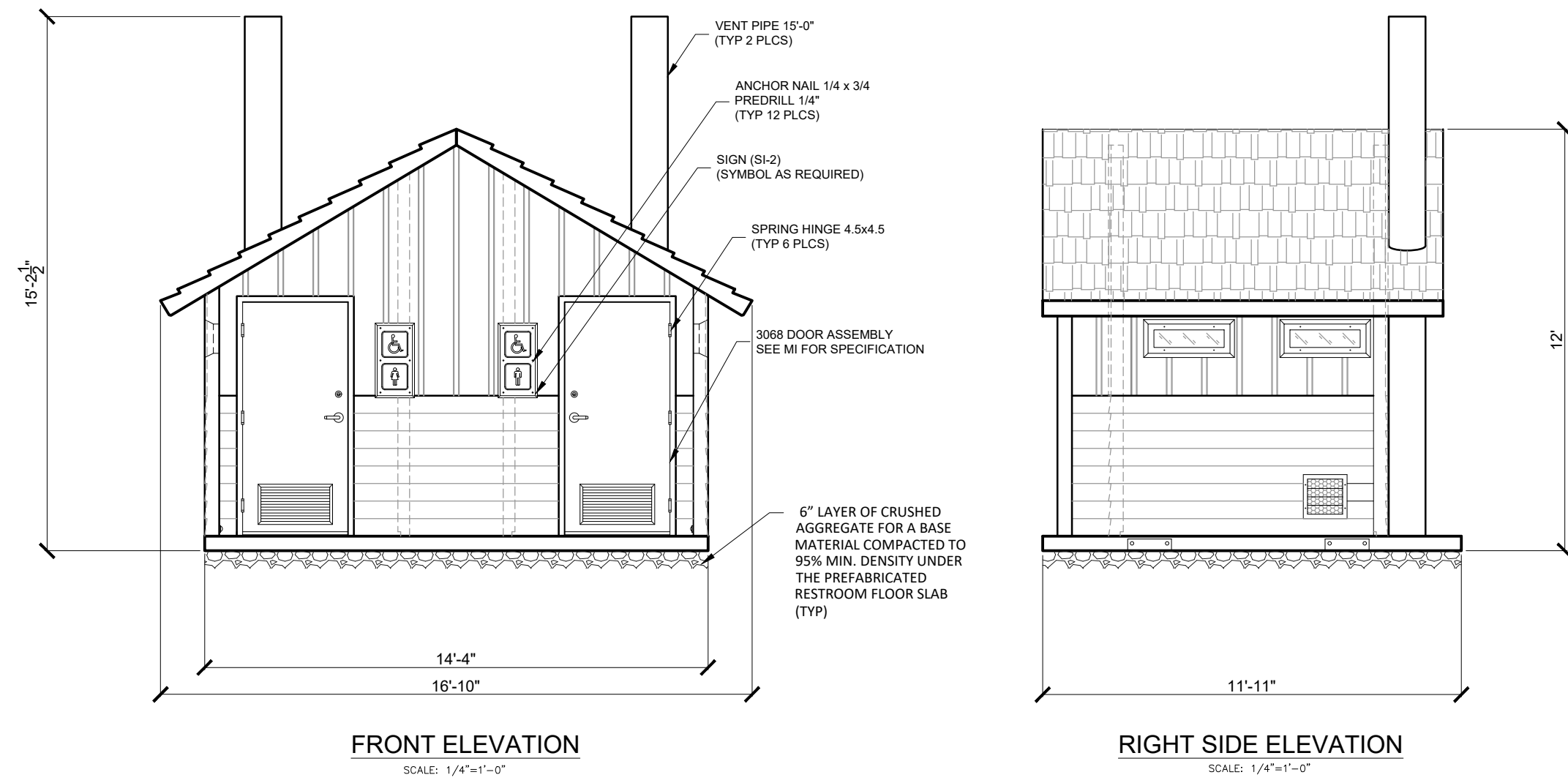
VILLAGE OF ELBERTA
BENZIE COUNTY, MICHIGAN
ELBERTA LAKE MICHIGAN BEACH IMPROVEMENT PROJECT
PREFABRICATED RESTROOM BASE BID

DESIGN TEAM: PROJ MGR: RWS
DESIGNED BY: RWS
DRAWN BY: AWF
CHECK BY:

C501_DETAILS
101022 andrew.filler

APRIL 2023
F&V PROJECT NO.
847860

C501

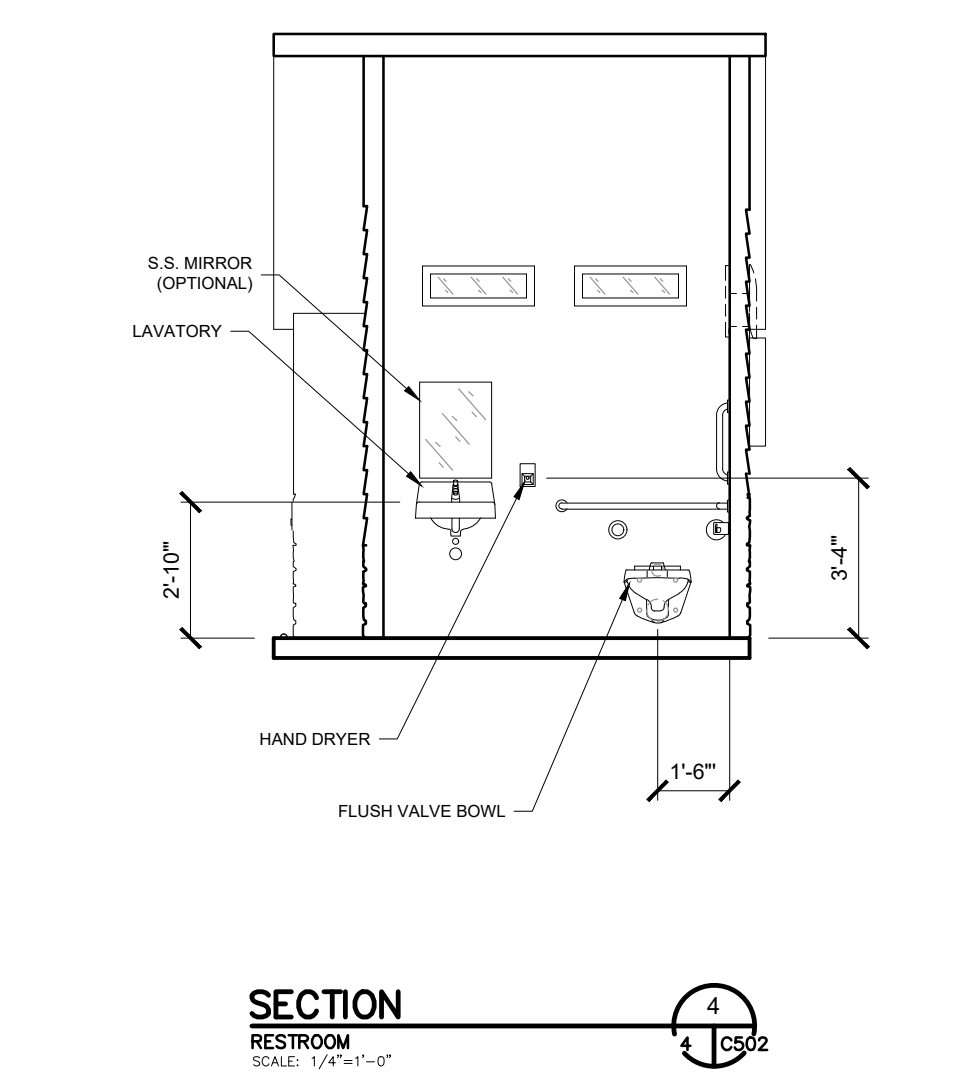
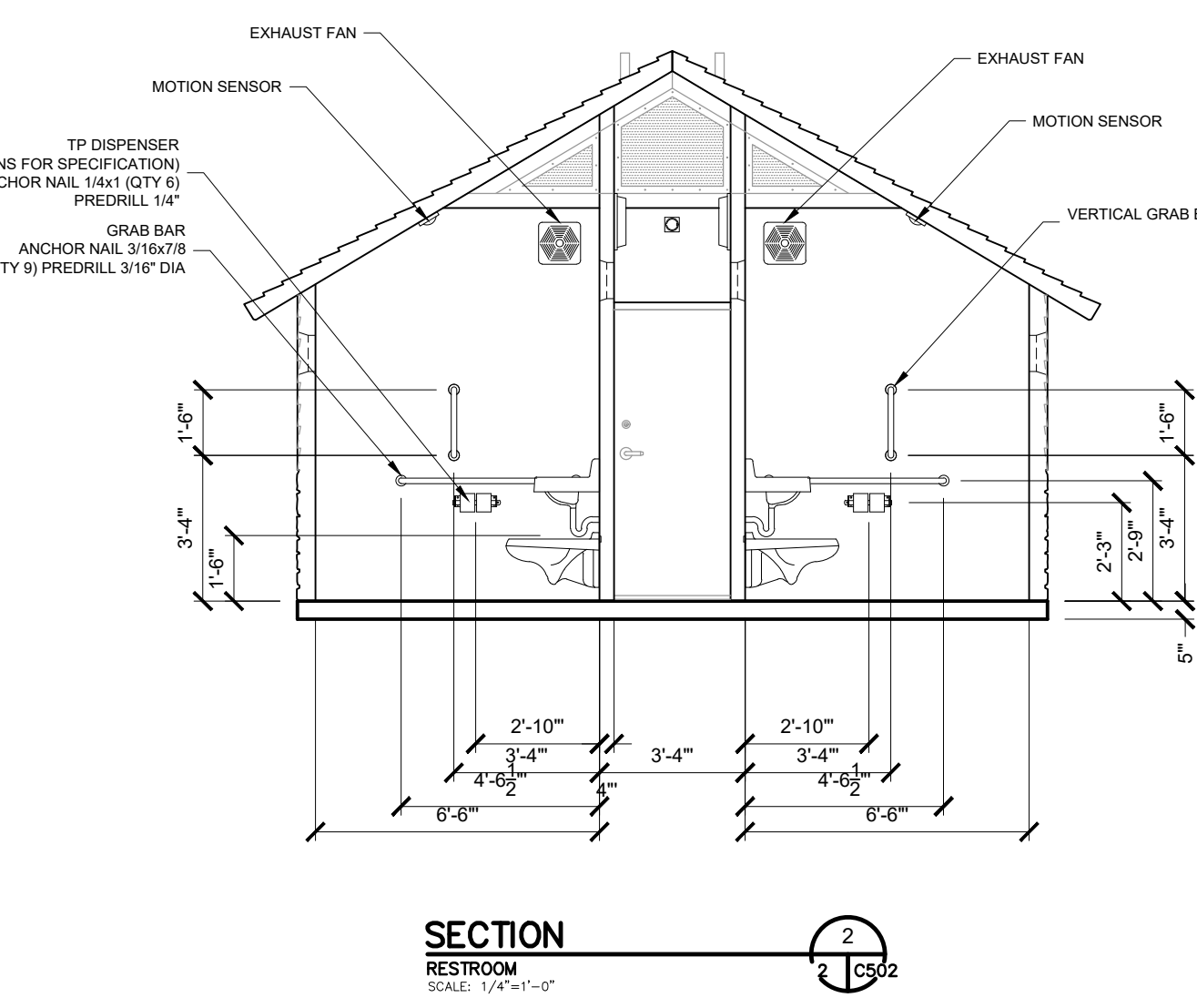
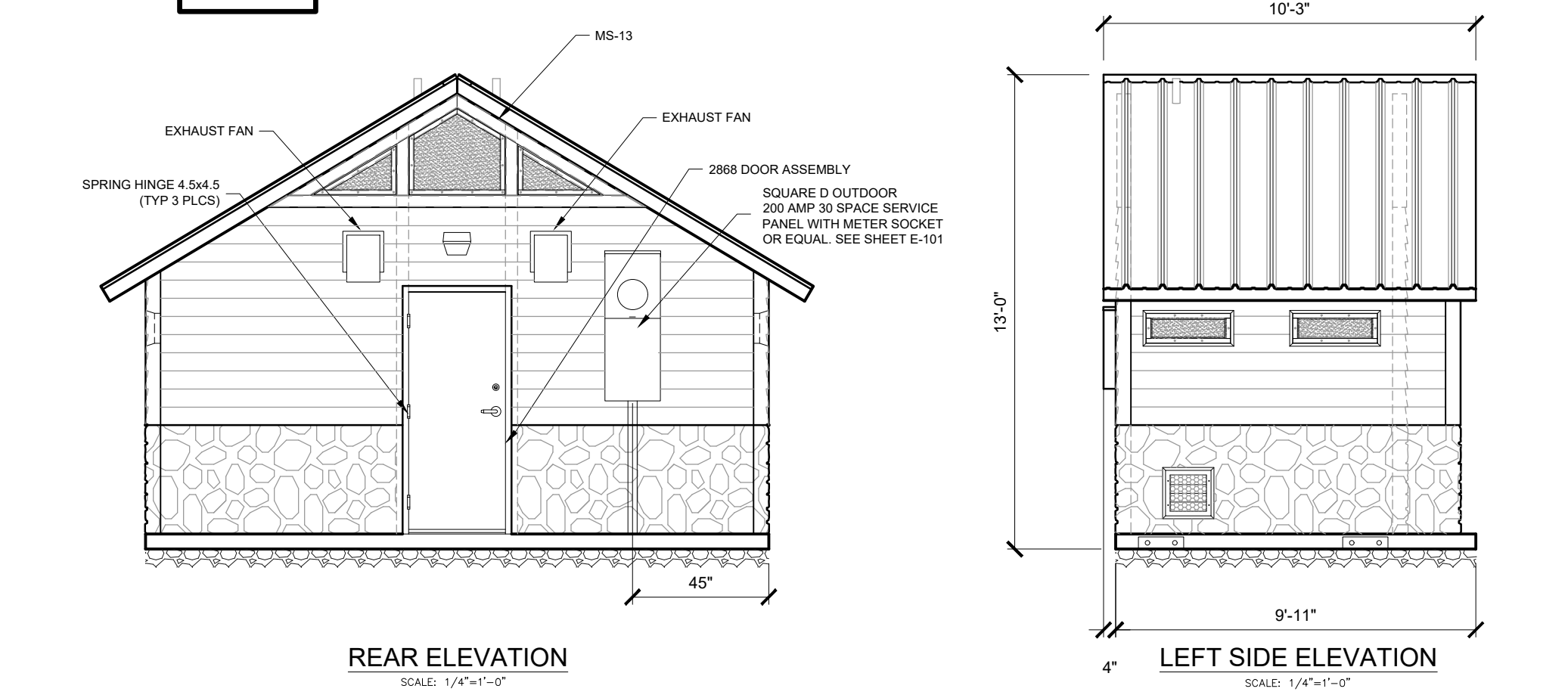
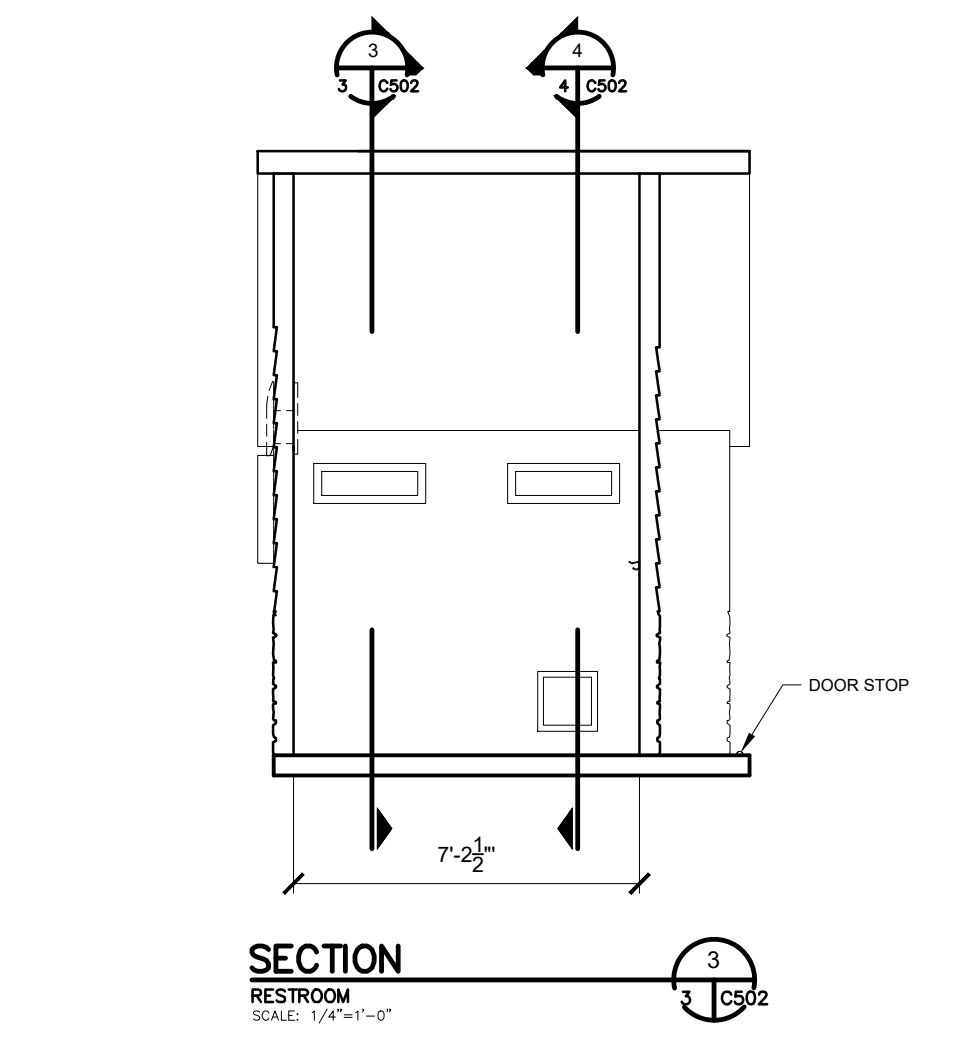
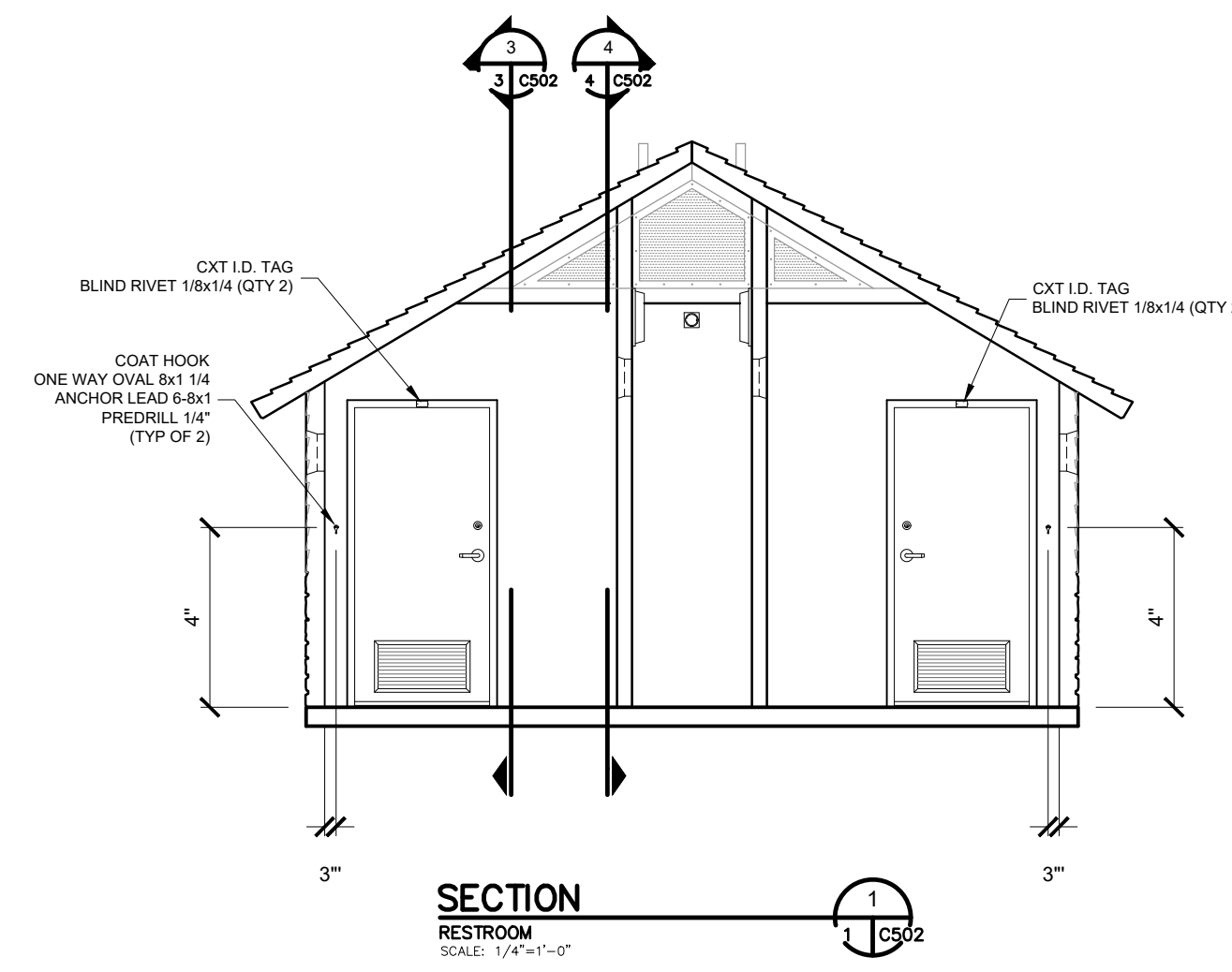
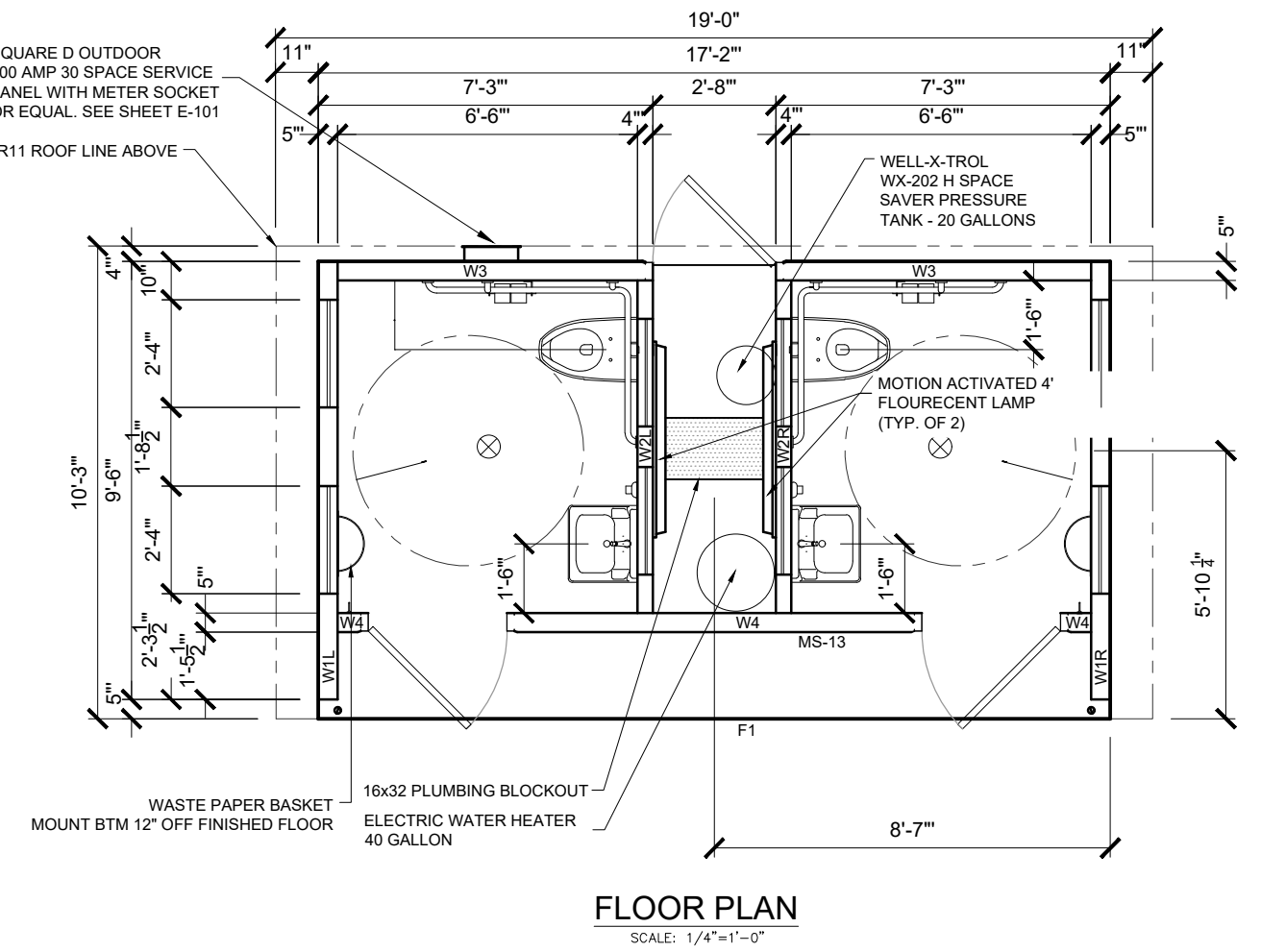
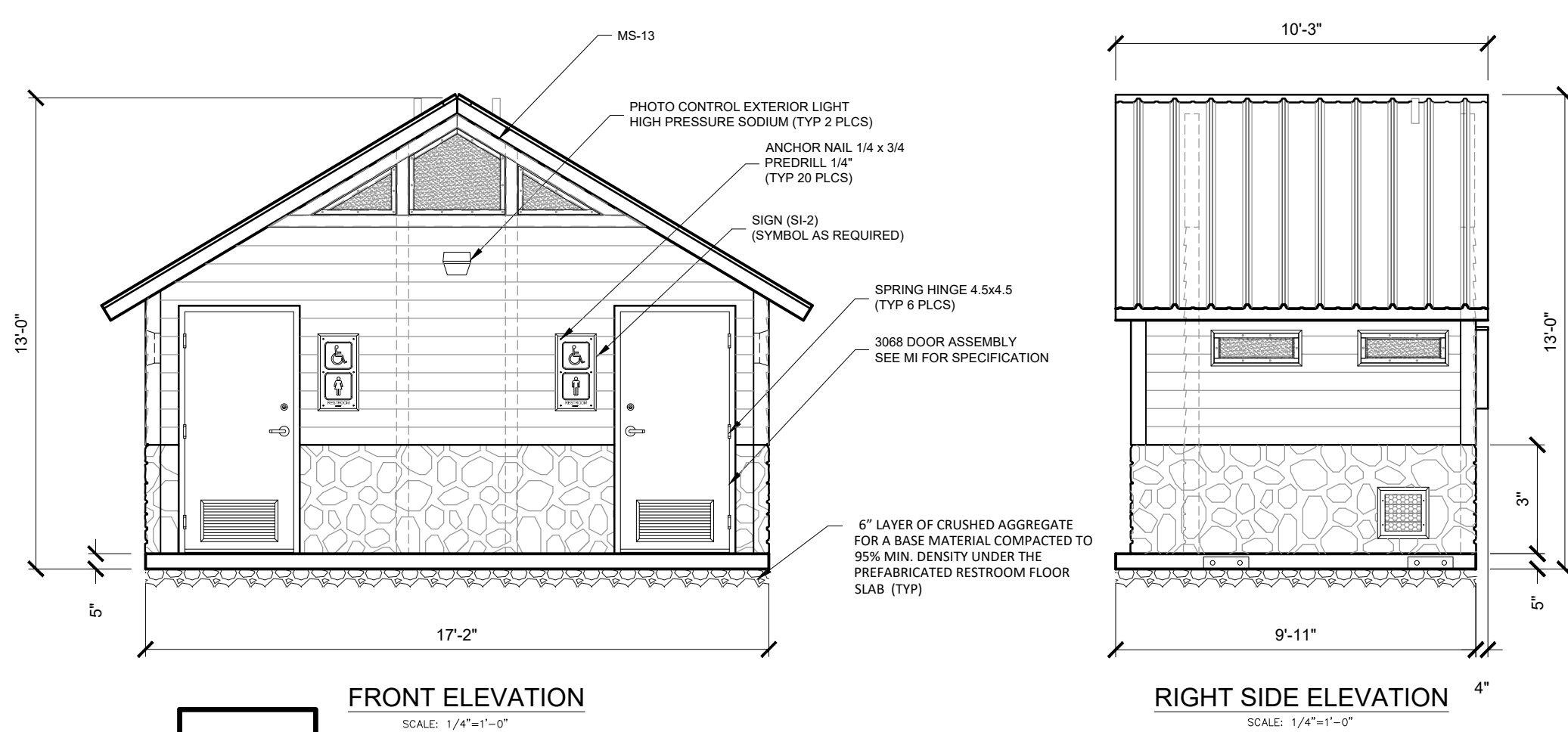


FABRICATION NOTES:

The Contractor shall submit to Engineer for approval, shop drawings and details of fabrication with dimensions shown. Shop drawings shall include structural calculations and shall be sealed by a professional engineer licensed in the State of Michigan

DOUBLE CASCADIAN @ UNISEX PREFABRICATED VAULT RESTROOM WITH CHASE CXT STANDARD BUILDING

CONTACT:
Gregg Zentarsky, Territory Sales Manager
(Pittsburgh, PA based)
415 Holiday Drive
Pittsburgh, PA 15220
(412) 398-4286
gzentarsky@lbfoster.com

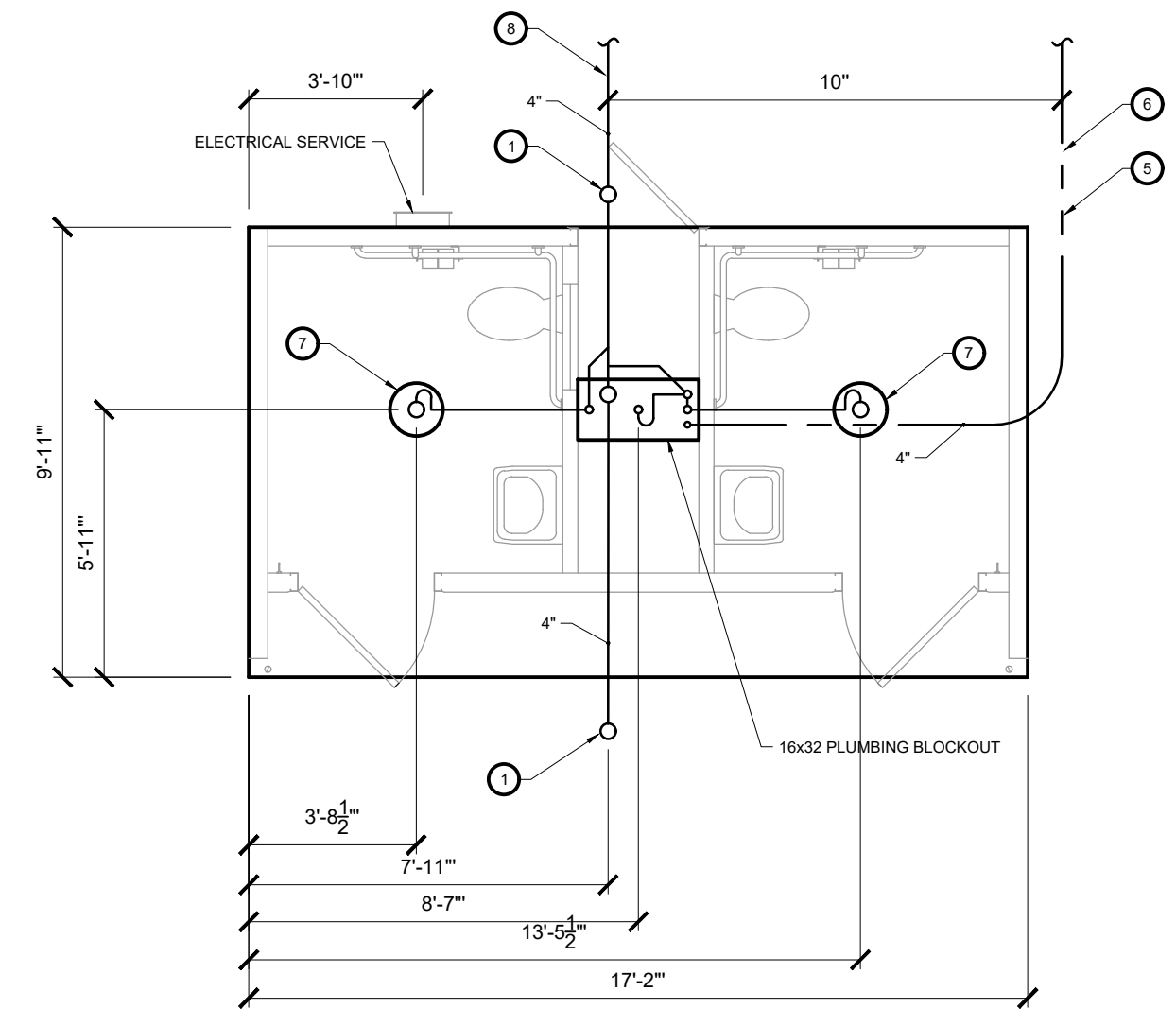


FABRICATION NOTES:

The Contractor shall submit to Engineer for approval, shop drawings and details of fabrication with dimensions shown. Shop drawings shall include structural calculations and shall be sealed by a professional engineer licensed in the State of Michigan

DENALI FLUSH TWO UNISEX UNIT PREFABRICATED RESTROOM

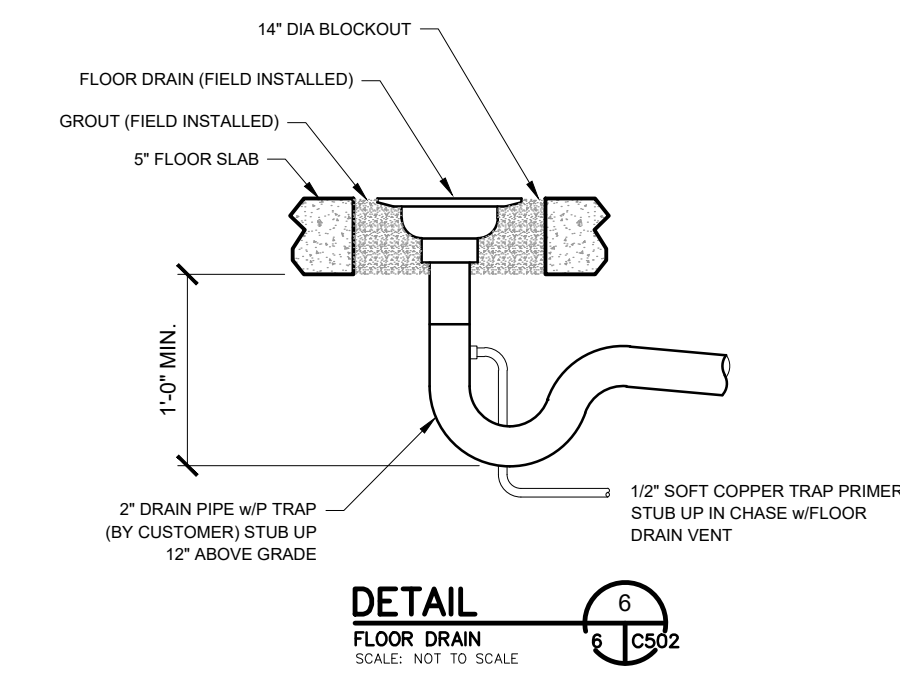
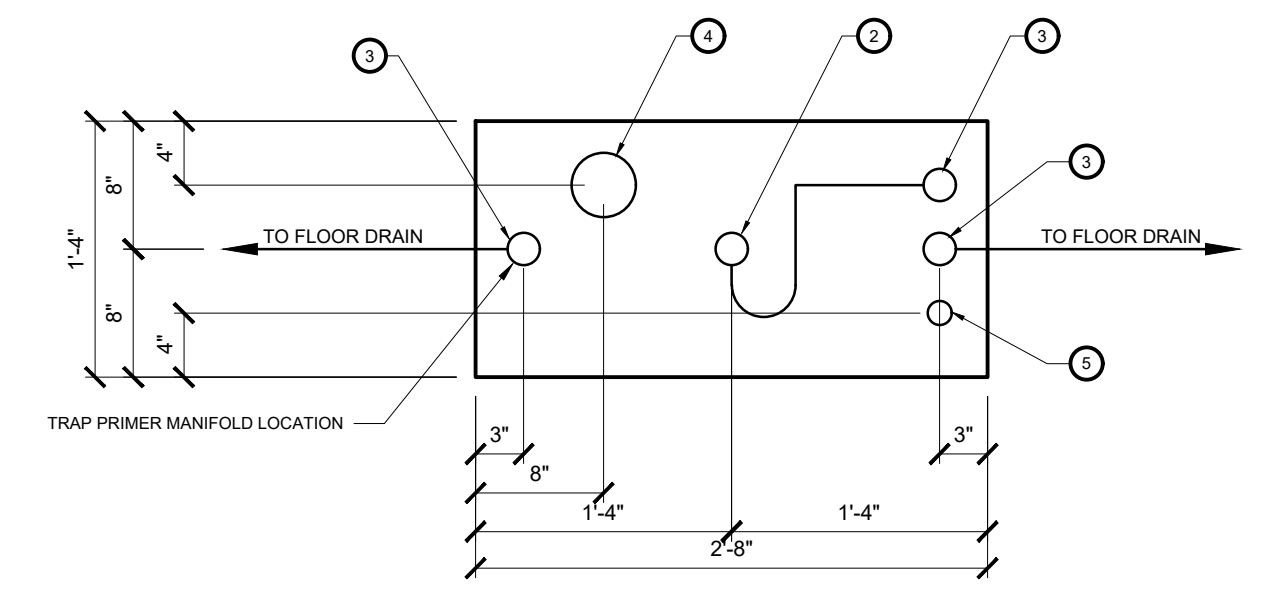
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- PIPING LEGEND**
- BELOW FLOOR WASTE PIPING SCH 40 ABS TYPE DWV
 - - - BELOW FLOOR VENT PIPING SCH 40 ABS TYPE DWV
 - 1 1/2" TYPE 'K' ANNEALED "SOFT" COPPER WATER SERVICE

BELOW FLOOR PIPING - KEY NOTES:

- 1 4" CLEAN OUT TO GRADE
- 2 2" FLOOR DRAIN, FIELD INSTALLED TRAP PRIMER SYSTEM REQUIRED BY AUTHORITY HAVING JURISDICTION. (1 1/4" DIA. BLOCKOUT)
- 3 2" VENT PIPES EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST PLUG. (16x24" BLOCKOUT)
- 4 4" WASTE PIPE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST PLUG. (16x24" BLOCKOUT)
- 5 1 1/2" TYPE 'K' ANNEALED "SOFT" COPPER WATER SERVICE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE CAT AT THE END. (16x24" BLOCKOUT)
- 6 6" MIN. BURY, PROVIDE TRACER TAPE.
- 7 MINIMUM BURY PER LOCAL REQUIREMENTS TO PROTECT FROM FREEZING AND DAMAGE.
- 8 2" FLOOR DRAIN, FIELD INSTALLED TRAP PRIMER SYSTEM IF REQUIRED BY AUTHORITY HAVING JURISDICTION. (16x24" BLOCKOUT)



GENERAL CONSTRUCTION NOTES:
 ALL SANITARY AND SEPTIC MATERIALS AND CONSTRUCTION SHALL CONFORM TO MICHIGAN CRITERIA FOR SUBSURFACE SEWAGE DISPOSAL, APRIL 1994 AND CURRENT BENZIE COUNTY (BLDHD) ENVIRONMENTAL HEALTH REGULATIONS

ALL SANITARY AND SEPTIC MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE ENVIRONMENTAL HEALTH REGULATIONS FOR BENZIE - LEELENAU HEALTH DEPARTMENT (BLDHD).

SEPTIC LOAD CALCULATION (40 Visitors per day):
 THE RESTROOM WILL BE OPEN 12 HOURS PER DAY AND WILL BE LOCKED BY VILLAGE STAFF DURING HOURS WHEN THE RESTROOM IS CLOSED.

2 TOILETS AT 432 GPD EACH (36 GPH FOR 12 HRS/DAY) = 864 GPD
 2 FAUCETS AT 180 GPD EACH (15 GPH FOR 12 HRS/DAY) = 360 GPD
TOTAL SEPTIC LOAD = 1,224 GPD

SEPTIC TANK DESIGN:
 1,224 GPD DESIGN FLOW AT 48-HOUR RETENTION = 2,448 GALLON TOTAL LIQUID CAPACITY
 USE TWO 1,600 GALLON TANKS = 3,200 GALLONS
 INSTALL FILTER FOR EFFLUENT ON TERMINAL TANK. EFFLUENT FILTER SHALL BE ZABEL A600 SERIES FILTER, OR ENGINEER APPROVED EQUAL.
 SEPTIC TANK RISERS SHALL BE LOCKABLE.

DRAIN FIELD CALCULATION:
 DESIGN APPLICATION RATE BASED ON SANDY SOILS = 0.75 GPD/SF
 REQUIRED AREA AT 1,224 GPD / 0.5 GPD/SF = 1,632 SF (22'x75')

ABSORPTION BED CONSTRUCTION:

1. ABSORPTION BED PIPING SHALL BE LAID AS SHOWN AT A SLOPE NOT TO EXCEED 1 1/4" PER 50'
2. CONSTRUCTION OF THE DRAIN FIELD SHALL NOT OCCUR WHEN SOILS ARE SATURATED.
3. THE ACTIVE AND RESERVE AREAS SHALL BE PROTECTED FROM CONSTRUCTION TRAFFIC.
4. CONSTRUCTION PRACTICES THAT CAUSE COMPACTION OF THE INFILTRATIVE SURFACE SHOULD BE AVOIDED.
5. THE DRAIN FIELD BED SHOULD NOT REMAIN OPEN FOR MORE THAN 7 DAYS OR SUBJECT TO TEMPERATURES BELOW FREEZING.
6. ABSORPTION SYSTEMS SHALL NOT BE LOCATED WITHIN 100 FEET OF SURFACE WATER.
7. DEPTH TO GROUNDWATER - TO FACILITATE THE MAINTENANCE OF AEROBIC CONDITIONS IN THE SOIL UNDER THE ABSORPTION SYSTEM, THE BED OR FIELD MUST BE LOCATED ONLY WHERE A MINIMUM OF FOUR FEET CAN BE MAINTAINED BETWEEN THE BOTTOM OF THE TRENCH OR BED AND THE HIGH GROUNDWATER ELEVATION. GROUNDWATER WAS OBSERVED ON June 29, 2022 AT THE ELEVATION OF 582.00. IF WATER IS ENCOUNTERED DURING EXCAVATION, PLEASE CONTACT THE ENGINEER.

SEPTIC TANK LOCATION:

1. SEPTIC TANKS SHALL BE LOCATED AT LEAST 75 FEET FROM ANY POTABLE WATER SUPPLY, WELL, SPRING OR UNPROTECTED SUCTION LINE
2. A MINIMUM ISOLATION DISTANCE OF 100 FEET SHALL BE MAINTAINED FROM ANY LAKE, POND, CREEK OR OTHER SURFACE WATER FLOODING OR ITS HIGHEST FLOOD PLAIN ELEVATION.
3. NO SEPTIC TANK SHALL BE LOCATED CLOSER THAN 5 FEET TO ANY FOOTING OR FOUNDATION WALL.
4. NO SEPTIC TANK SHALL BE LOCATED CLOSER THAN 10 FEET TO ANY LOT LINE.
5. NO SEPTIC TANK SHALL BE PLACED WHERE IT IS INACCESSIBLE FOR CLEANING OR INSPECTION. NOR SHALL ANY STRUCTURE BE PLACED OVER ANY SEPTIC TANK RENDERING IT INACCESSIBLE FOR CLEANING OR INSPECTION

LOW PRESSURE DISTRIBUTION SUMMARY:

LATERAL LENGTH: 75 FT
 LATERAL DIAMETER: 1.5 IN
 NO. OF LATERALS: FIVE (5)
 LATERAL SPACING: 5 FT O/C
 ORIFICE DIAMETER: 3/16 IN
 ORIFICE SPACING: 5 FT O/C
 NO. OF ORIFICES: 16 PER LATERAL
 80 TOTAL
 12.2 GPM PER LATERAL
 61 GPM TOTAL
 284 GALLONS
 DOSING VOLUME:
 WORKING LEVEL (ON/OFF): 1.5 FT
 FRICTION LOSSES IN PIPING: 11.1 FT
 ELEVATION HEAD: 3.1 FT
 PRESSURE HEAD: 3.0 FT
 TOTAL PUMPING HEAD: 17.8 FT
 PUMP DESIGN POINT: 61 GPM @ 17.8 TDH

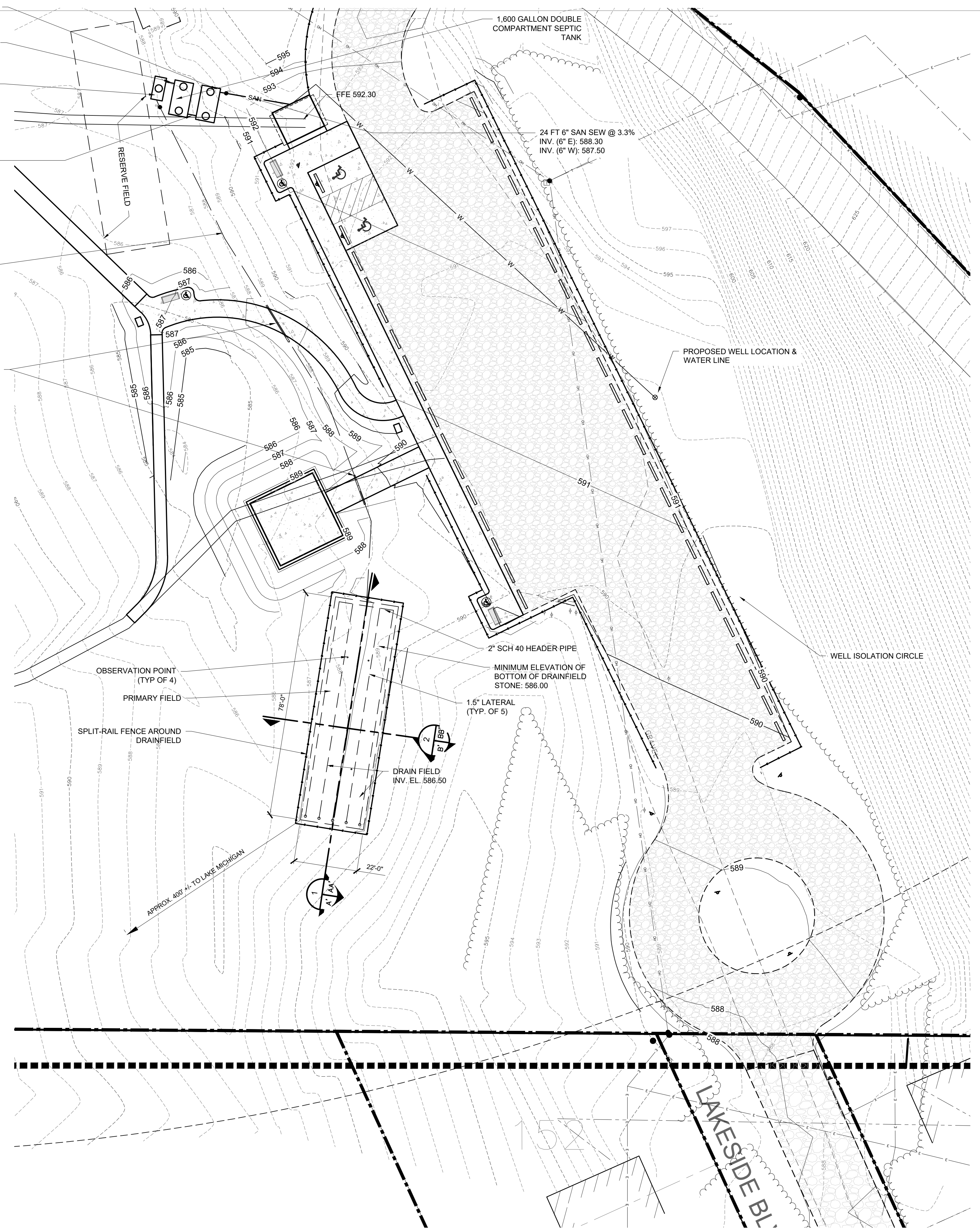
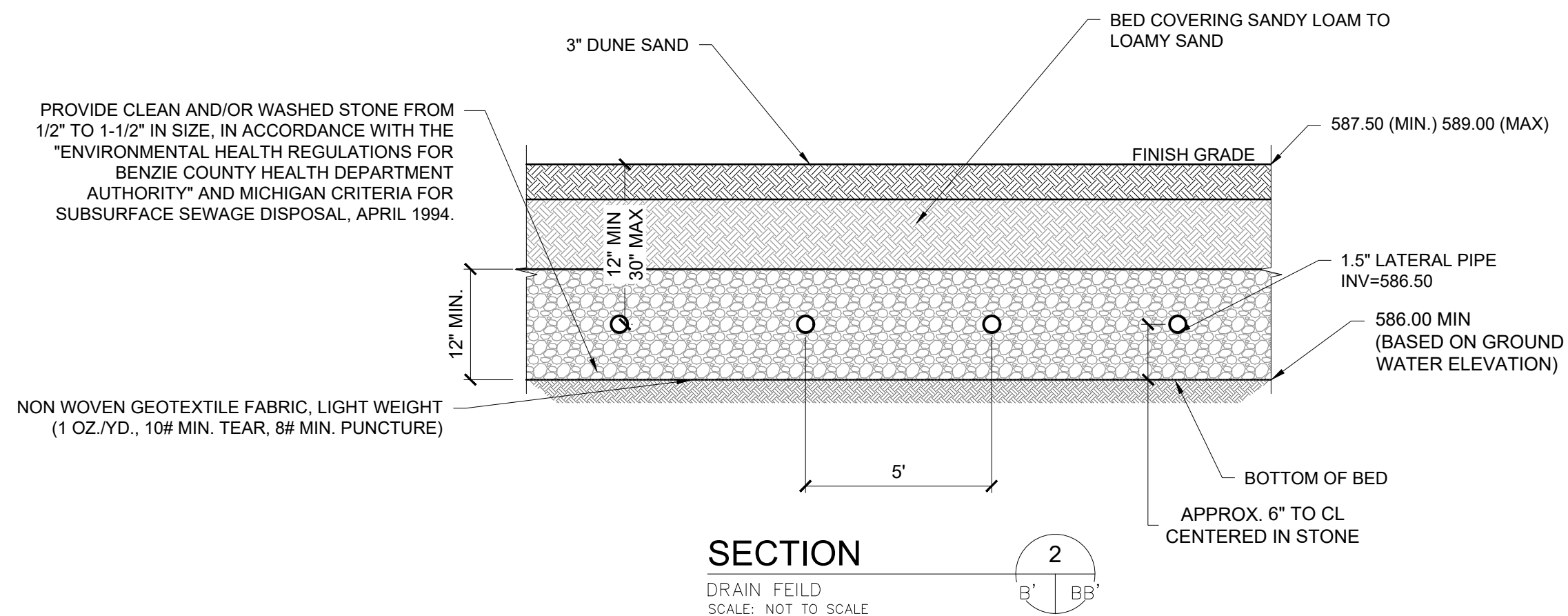
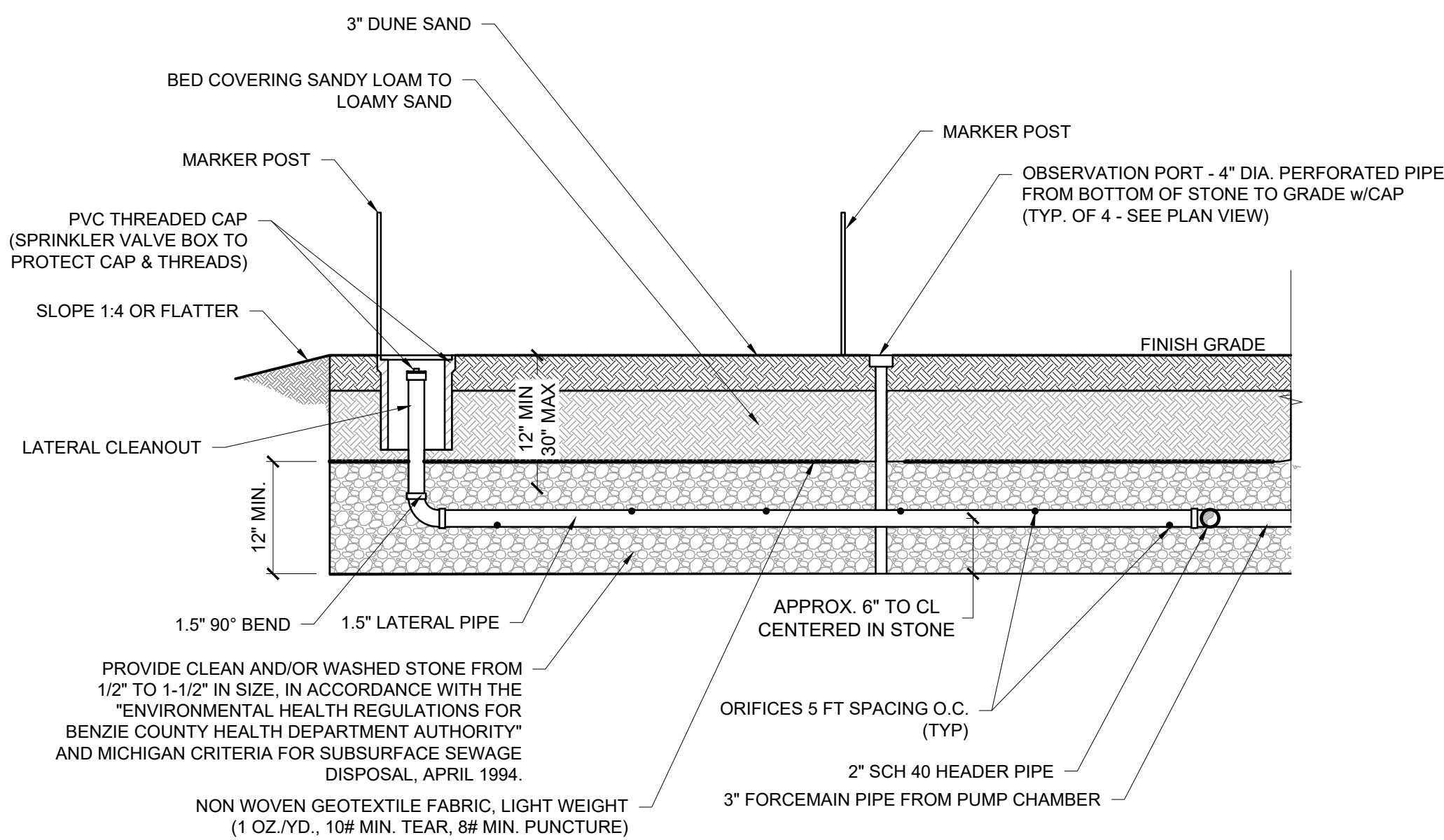
1,600 GALLON SINGLE COMPARTMENT SEPTIC TANK
 3 FT 6" SAN SEW @ 2.0% INV. (6" E): 585.94 INV. (6" W): 585.88
 750 GALLON PUMP CHAMBER WITH ORENCO PF5007 HIGH HEAD EFFLUENT PUMP 3/4 HP, 220V SINGLE PHASE, OR ENGINEER APPROVED EQUAL
 3 FT 6" SAN SEW @ 2.0% INV. (6" E): 587.25 INV. (6" W): 586.19

1,600 GALLON DOUBLE COMPARTMENT SEPTIC TANK

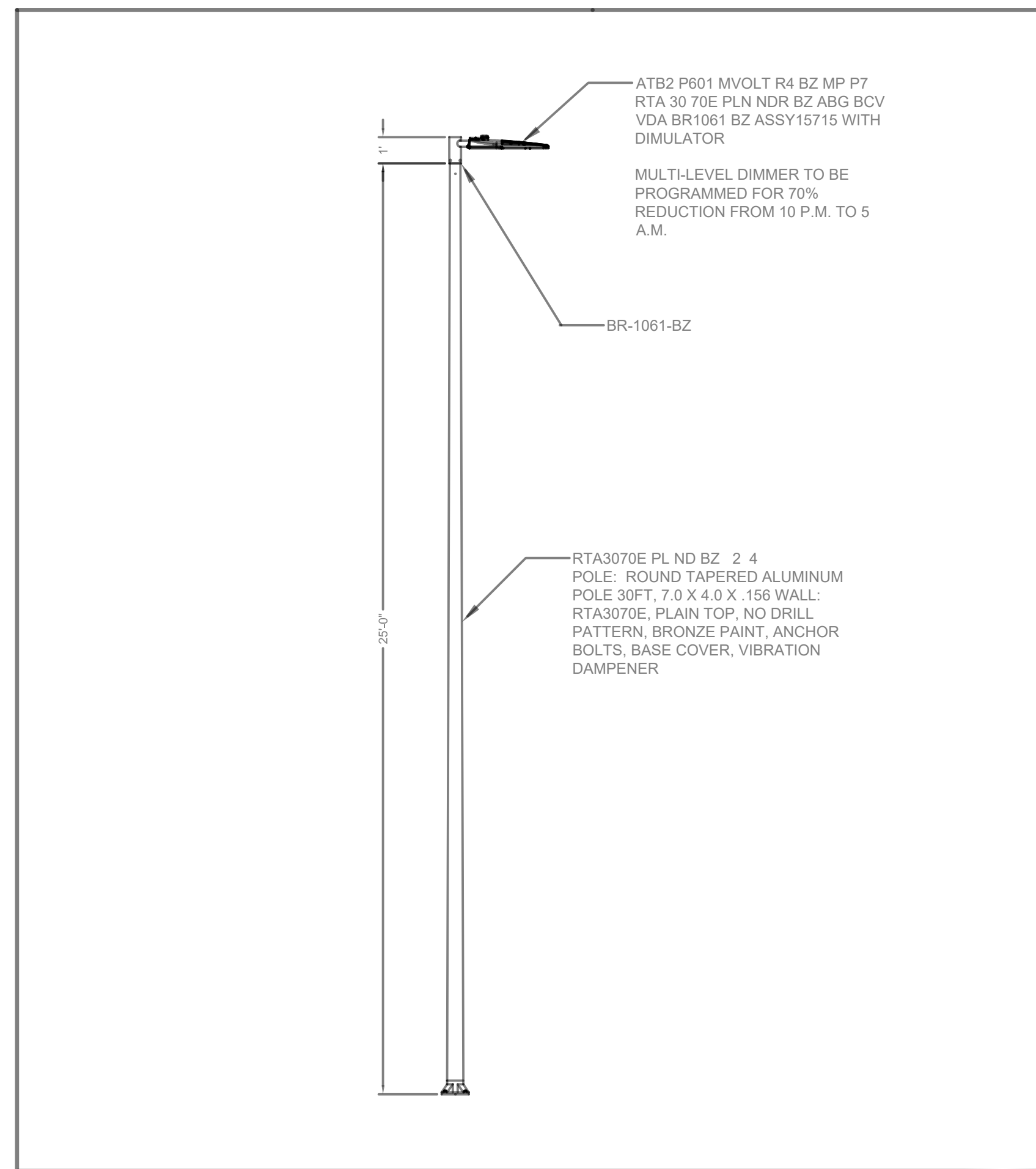
24 FT 6" SAN SEW @ 3.3% INV. (6" E): 588.30 INV. (6" W): 587.50

193 FT - 3 INCH FORCEMAIN

4" SCH 40 PVC SLEEVE BENEATH SIDEWALK. INCLUDE 2" RIGID FOAM OVER TOP OF SLEEVE AND FORCEMAIN, 4" WIDTH X LENGTH OF SLEEVE. PLUG ENDS OF SLEEVE WHEN FORCEMAIN HAS BEEN INSTALLED.



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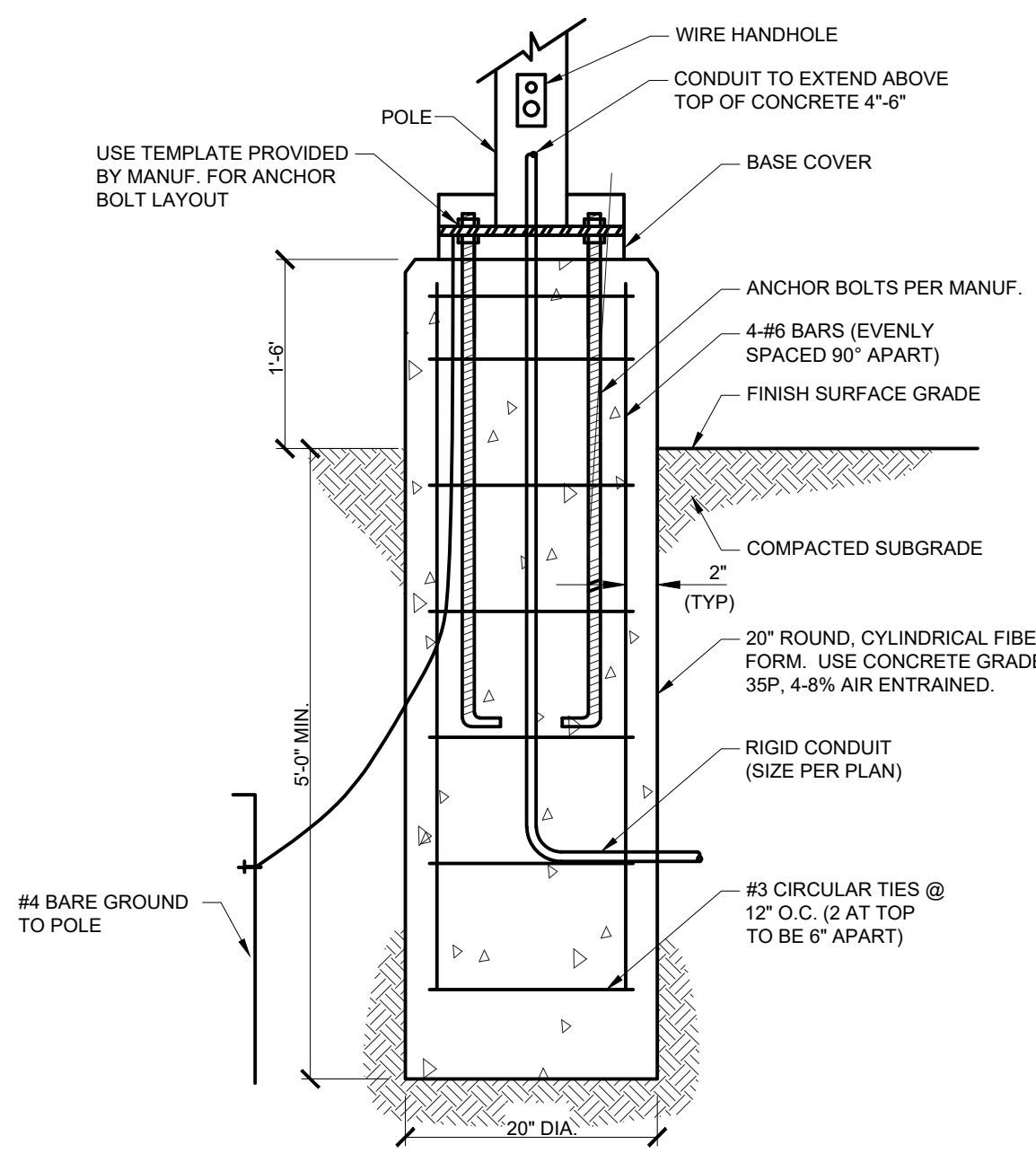


Parking Lot 2019
Grand Rapids, Michigan

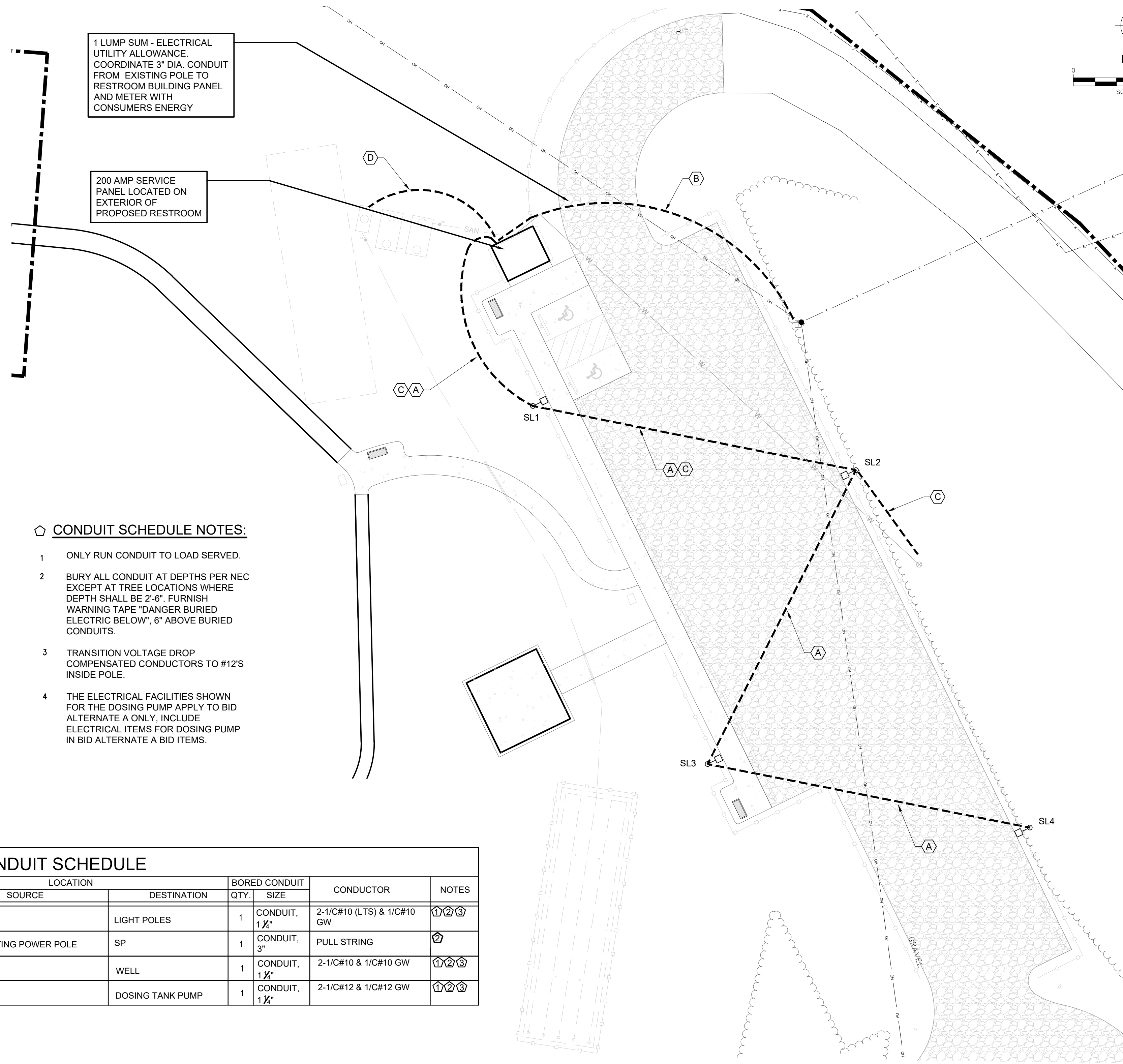
ORDER #:	TYPE:	DRAWING #:
REVISION:	REVISION DATE:	DR- 17704
DRAWN: BGW	ORIGIN DATE: 12-17-18	PAGE: 1

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE ON THE ORDER NOTED ABOVE. A LIST OF SIMILAR DESIGN MAY BE SUPPLIED, BUT ONLY AFTER APPROVAL BY THE CUSTOMER. IN WRITING. ON POLE ORDER AN ANCHOR BOLT TEMPLATE SHALL BE SUPPLIED WITH EACH ANCHOR BOLT ORDER TO MATCH THE POLE PROVIDED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS LOANED SUBJECT TO RETURN UPON DEMAND AND UPON EXPRESS CONDITION THAT IT WILL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIAL FURNISHED BY HOLOPHANE.

PARKING AREA LIGHT
NOT TO SCALE



LIGHT POLE BASE DETAIL
NOT TO SCALE



CONDUIT SCHEDULE

REF	LOCATION		BORED CONDUIT		CONDUCTOR	NOTES
	SOURCE	DESTINATION	QTY	SIZE		
A	SP	LIGHT POLES	1	CONDUIT, 1 1/2"	2-1/C#10 (LTS) & 1/C#10 GW	①②③
B	EXISTING POWER POLE	SP	1	CONDUIT, 3"	PULL STRING	④
C	SP	WELL	1	CONDUIT, 1 1/2"	2-1/C#10 & 1/C#10 GW	①②③
D	SP	DOSING TANK PUMP	1	CONDUIT, 1 1/2"	2-1/C#12 & 1/C#12 GW	①②③

PANEL BOARD LOCATION		EXTERIOR RESTROOM/REAR WALL		VOLTAGE MAIN C.B.		120/240, 1Ø, 3W.										
SURFACE ENCLOSURE				BUS SIZE		200 AMP										
NO.	AMPS	POLES	VA	OUTLETS			DESCRIPTION	VOLT AMP.	DESCRIPTION	OUTLETS			CIRCUIT NO.			
				LTS.	REC.	OTHER				LTS.	REC.	OTHER		VA	POLES	AMPS
1	20	1	45	1			STORAGE ROOM LIGHTS	245	OUTSIDE LIGHTS	2			100	1	20	2
3	30	1	1440	4			PARKING AREA LIGHTS	580	OUTSIDE RECEPTACLES	2	2		180	1	20	4
5	20	1	180		1		STORAGE RM. RECEPTACLES		RESTROOM FAN			2	200	1	20	6
7	20	1	45	2			RESTROOM LIGHTS	3090	DOSING TANK PUMP			1	3000	1	20	8
9	20	1	1500			1	HAND DRYER	3360	SPARE				180	1	20	10
11	30	1	3000			1	ELEC. WH	4500	HAND DRYER			1	1500	1	20	12
13	30	1	4800			1	WELL	4800								14
15																16
17																18
19																20
21																22
23																24
25																26
27																28
29																30
TOTALS								8,985	9,390							

PANELBOARD SCHEDULE



- NOTES:**
- RESTROOM ELECTRICAL PANEL WILL BE PROVIDED BY RESTROOM MANUFACTURER DETAILS AND CONTRACTOR SHALL SUBMIT MANUFACTURER'S PANEL SCHEDULE FOR FINAL REVIEW BY ENGINEER. (200 AMP)
 - SEE SHEET C501 AND 502 FOR PREFABRICATED RESTROOM BUILDING DETAILS.



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