

ADDENDUM NO. 1

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

Replace 29 Basic Sites with 25 New Premium Sites
Lake of The Ozarks State Park
Kaiser, Missouri
PROJECT NO. X2316-01

Bid Opening Date: 1:30 PM, Thursday, July 18, 2024

Bidders are hereby informed that the Construction Plans and/or Specifications are modified as follows:

SPECIFICATION CHANGES:

1. Section 007346 - Wage Rate

a. REPLACE Annual Wage Order No. 31 Section 066 Miller County with attached Annual Wage Order 31 Section 015 Camden County.

2. Appendix 1 - Storm Water Pollution Prevention Plan (SWPPP)

a. As indicated in Section 1.5 of the SWPPP, the Contractor is responsible for all aspects of the SWPPP including providing qualified inspectors, conducting all required inspections, and notifying each subcontractor of SWPPP requirements. The Contractor is also responsible for any enforcement action taken or imposed resulting from the Contractor's failure to comply with the permit provisions.

3. DNR Sanitary Sewer Permit

a. A Department of Natural Resources (DNR) Sanitary Sewer Construction Permit application has been submitted for this project. The construction permit will be provided to the successful bidder prior to the notice to proceed. The plans have been updated, via this addendum, to comply with the requirements to obtain this permit.

DRAWING CHANGES:

1. Sheet C-103 – Grading Plan

a. REPLACE Sheet C-103 with attached revised Sheet C-103.

Sheet C-103 was amended to show revised sewer structures and flow lines.

2. Sheet C-106 – Utility Plan

a. REPLACE Sheet C-106 with attached revised Sheet C-106.

Sheet C-106 was amended to show revised sewer structures and flow lines. 7 additional manholes were added, flowlines were adjusted across the sewer plan, and the pump station panel was placed on a separate structure and aligned to face the pump station.

3. **Sheet C-201 – Sanitary Sewer Profiles**

- a. REPLACE Sheet C-201 with attached revised Sheet C-201.

Sheet C-201 was revised to add manholes and adjust flowlines of the cleanouts and manholes. The minimum cover shown on the Force Main profile was changed to 36" minimum. Water line crossings were also added to the profiles.

4. **Sheet C-505 – Sanitary Sewer Details**

- a. REPLACE Sheet C-505 with attached revised Sheet C-505.

Sheet C-505 was amended to include a force main trench detail. The wet well details were also revised to include a separate fiberglass vault for valves necessary for the lift station pump system. Additionally, a screened J-vent was added to the lift station lid.

5. **Sheet E-101 – Site Electrical Plan**

- a. REPLACE Sheet E-101 with attached revised Sheet E-101.

Sheet E-101 was amended to include a separate structure for the lift station panel oriented to face the lift station. Note 5 was amended to indicate providing a 120V 20A branch circuit and GFCI receptacle installed inside the control panel for the force main.

6. **Sheet E-601 – Site Electrical Plan**

- a. REPLACE Sheet E-601 with attached revised Sheet E-601.

Sheet E-601 was amended to modify the Electrical Panel Schedule to include the 120V 20A branch circuit inside the control panel for the force main.

GENERAL COMMENTS:

1. The Pre-Bid Meeting was held on June 25, 2024. The Pre-Bid Meeting sign-in sheet is attached.
2. Please contact Paul Girouard: 573-751-4797; paul.girouard@oa.mo.gov for questions regarding bidding procedures, MBE/WBE/SDVE Goals, and other submittal requirements.
3. The deadline for technical questions was July 11, 2024 at 12:00 PM.
4. Changes to, or clarification of, the Bid Documents are only made as issued in the Addenda.
5. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
6. Current Planholders list is available online at: <https://www.oafmdcplanroom.com/projects/2477/plan-holders/x2316-01-replace-29-basic-sites-with-25-new-premium-sites-lake-of-the-ozarks-state-park>

7. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd., Suite 7A, Columbia, Missouri 65203, 573-446-7768 to order official plans and specifications.
8. **All bids shall be submitted without additional terms and conditions, modification or reservation on the bid form with each space properly filled. Bids not on these forms will be rejected. Failure to do so will result in rejection of the bid.**
9. **MBE/WBE/SDVE participation requirements can be found in DIVISION 00. MBE/WBE/SDVE Goals: MBE 10%, WBE 10%, and SDVE 3%. NOTE: Only MBE/WBE firms certified by the State of Missouri Office of Equal Opportunity as of the date of bid opening, or SDVE(s) meeting the requirements of Section 34.074, RSMo and 1 CSR 30-5.010, can be used to satisfy the MBE/WBE/SDVE participation goals for this project. No other certifications from other Missouri certifying agencies will be accepted. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid.**

ATTACHMENTS

1. Section 007346 - Wage Rate
2. Pre-Bid Meeting Minutes
3. Pre-Bid Meeting Sign-In Sheet
4. Sheets C-103, C-106, C-201, C-505, E-101, E-601

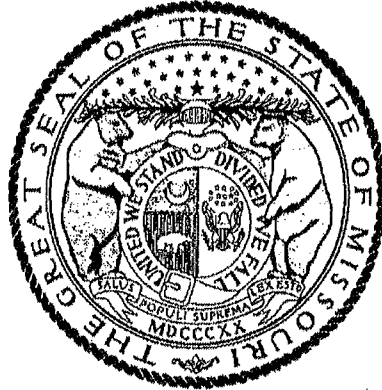
July 11, 2024

END ADDENDUM NO. 1

Missouri

Division of Labor Standards

WAGE AND HOUR SECTION



MICHAEL I. PARSON, Governor



Annual Wage Order No. 31

Section 015
CAMDEN COUNTY

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by _____

Todd Smith, Director
Division of Labor Standards

Filed With Secretary of State: _____ **March 8, 2024**

Last Date Objections May Be Filed: **April 8, 2024**

Prepared by Missouri Department of Labor and Industrial Relations

Building Construction Rates for
CAMDEN County

Section 015

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$25.63*
Boilermaker	\$25.63*
Bricklayer-Stone Mason	\$25.63*
Carpenter	\$52.74
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$25.63*
Plasterer	
Communication Technician	\$25.63*
Electrician (Inside Wireman)	\$58.50
Electrician Outside Lineman	\$25.63*
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	\$25.63*
Glazier	\$25.63*
Ironworker	\$71.02
Laborer	\$52.04
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$25.63*
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$60.68
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$25.63*
Plumber	\$67.99
Pipe Fitter	
Roofer	\$25.63*
Sheet Metal Worker	\$56.62
Sprinkler Fitter	\$66.90
Truck Driver	\$25.63*
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in RSMo Section 290.210.

Heavy Construction Rates for
CAMDEN County

Section 015

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$25.63*
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$25.63*
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$49.46
General Laborer	
Skilled Laborer	
Operating Engineer	\$57.94
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$25.63*
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

**The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

OVERTIME and HOLIDAYS

OVERTIME

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "**overtime work**" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

HOLIDAYS

January first;
The last Monday in May;
July fourth;
The first Monday in September;
November eleventh;
The fourth Thursday in November; and
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.

X2316-01 Lake of the Ozarks State Park – Replace 29 Basic Campsites with 25 Premium Campsites

Pre-Bid Conference

Lake Ozark State Park Office

Date: 6/25/2024

Time: 10:00 am

See Attached sign in sheet for attendees.

Bryan Chinn, Senior Engineer Project Manager with Office of Administration (OA)-Facilities Management, Design, and Construction (FMDC), opened the meeting at 10:00am.

Introductions of OA, Division of State Parks, and Engineering Surveys & Services staff were conducted.

Bryan began going through the Division 00 and Division 1 Specifications. Specific highlights are as follows:

- Project bid date will be July 18, 2024
- Questions will be received up to one week prior to the letting date (up to July 11, 2024)
- All questions should be sent to the OA project representative, Lorena Villalobos, and Engineering Surveys & Services Engineer, Chris Yarnell. Please include both on all email questions.
- The project is not tax exempt.
- All bid forms can be found on Missouri Buys site, and all bids shall be submitted through Missouri Buys site.
- All bid forms shall be signed in the appropriate location based on the submitter's corporation designation.
- Bids will be awarded to the lowest and responsible bidder.
- There are 200 working days and 15 bad weather days allowed for the project. Working days are defined as every day except Saturdays, Sundays, and State Holidays.
- Liquidated damages are set for the project at \$1,000.00 per day.
- Contractors shall be aware change order information is outlined in the General Provisions included in the project manual. Updated overhead and profit allowances can be found in the change order information.
- Wage rates will be updated via addendum to reflect Camden County.
- Construction will not be able to begin until November 1, 2024.
- There is owner furnished, contractor installed items included in the contract. Fire rings, picnic tables, and lantern holders will be supplied by the owner.
- There is one unit bid price item included in the contract-rock removal. The base bid includes 150 cy of rock removal. If the project underruns the quantity of rock removal, a

deduction will be made based on the price bid for rock removal. If quantities exceed 150 cy, the contractor will be compensated at the bid price rate for the overage.

- There is 1 alternate for the project-the addition of three campsites as noted on the plans.
- The project will use E-Builder for project management communications and submittals.

One question was asked following the Division 00 and Division 1 specifications, **“When does the 200-day count start, from November 1?”** *ANSWER:* The count of working days will begin at the Intent to Award notification. This is anticipated to be around August 1.

Bryan turned the presentation over to Chris Yarnell to go over project specifications. Specific highlights are as follows:

- The work area will be closed, lower and upper roads will remain open until such time as they need to be closed for grading. The contractor shall work with Parks staff to address potential access to the primitive sites to the south of the work area.
- Demolition items shall become the property of the contractor with the exceptions of specific items.
- Changes to the sewer will be coming via addendum due to change requested by the City of Osage Beach. Three additional manholes will be added, and adjustments to the lift station panel, as well as additional emergency storage in the lift station wet will was addressed.
- Earthwork is straight forward; the 150 cy of rock excavation is mostly in trenches.
- Roadway pavement will be at the contractor’s option, the plans include a design for concrete and for asphalt. All pavement for camper pads shall be concrete, no substitutions will be allowed.
- Asphalt mixes shall be a MoDOT approved mix design.
- Concrete testing shall be the responsibility of the contractor
- The plans include trench details for sewer and water line installation as well as minimum separation requirements.
- There is a waterline construction permit included in Appendix B. There is a separate project to supply new water mains to the park, including this section of the campground. The campground water line construction permit is contingent on the water main project being completed.

Brian Williams, ES&S, went over the applicable land disturbance permit that the project will be constructed under and the SWPPP, included in the contract as Appendix A. It was determined that the SWPPP will be amended to indicate the contractor will be responsible for the regularly scheduled inspections required by the permit. The contractors were encouraged to install erosion and sediment control early as outlined in the plans and the SWPPP and any adjustments be documented on the SWPPP site plans as required by the permit.

Troy Wolken, Construction Manager for OA-FMDC, encouraged long lead time item submittals be submitted and ordered early.

A question was asked about who will be responsible for mowing grass. It was answered based on the contractor will be responsible for maintenance within their perimeter erosion control fencing. Parks staff will address maintenance of grass outside the perimeter controls.

Meeting was adjourned at 10:20 am, and all parties went to the project site.

At the project site, the project boundaries were pointed out as well as the approximate location of the flood plain area. It was outlined that all trees within the project limit were to be removed except the clump noted on the plans near the vaulted toilet. A question was asked if Parks had a location to dispose of the trees, it was noted that tree disposal was to be off site by the contractor. It was reiterated there will be no burning allowed in the park.

No further questions were provided. The onsite meeting ended at approximately 11:30 pm.

Pre-Bid Meeting Attendance Sheet
Lake of the Ozarks State Park-Replace 29 Basic Sites With 25 New Premium Sites
 Lake of the Ozarks State Park
 Lake of the Ozarks State Park Office
 Project No. X2316-01
 June 25, 2024 10:00 A.M.

Name & Title	Company Name & Type of Contracting	MBE/WBE/SDVE Status	Phone	E-Mail Address of Attendee & E-Mail Address of Individual filling out Bid Documents
Denver Spurgeon Project manager	Don Maggi Inc. General	N	573-364-7733	Maggi const@gmail.com
Darrin Shoemaker	Shuco Construction	N	573-544-5934	darrinshoemaker RTA@gmail.com
Terry Tobias	B&B'S	N	573-257-0509	terrytobias@hironandpfeiffer.com
Charles Saunders	SES (austwecker)	WBE	573-721-3564	Charles@SES(austwecker).com
Tom Lenz	PROST BUILDERS		573-645-6975	estimating@prostbuilders.com
Eric Stuckenschneider	Capital Paving	N	573-239-4244	eric@capitalmaterialsmo.com

Pre-Bid Meeting Attendance Sheet
Lake of the Ozarks State Park-Replace 29 Basic Sites With 25 New Premium Sites
 Lake of the Ozarks State Park
 Lake of the Ozarks State Park Office
 Project No. X2316-01
 June 25, 2024 10:00 A.M.

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address of Attendee and E-Mail Address of Individual filling out Bid Documents
Justin Adams	DNR- State Parks		417-955-2624	justin.adams@dnr.mo.gov
Troy Wilkin	OA/FMDC		573-257-0615	Troy.Wilkin@oa.mo.gov
Aron Lublin	OA/FMDC		573-619-5361	
Bryan Clark	OA-FMDC		573-821-1067	bryan.clark@oa.mo.gov
Lorena Villalobos	OA-FMDC		573.751.3565	Lorena.Villalobos@oa.mo.gov

Pre-Bid Meeting Attendance Sheet
Lake of the Ozarks State Park-Replace 29 Basic Sites With 25 New Premium Sites
 Lake of the Ozarks State Park
 Lake of the Ozarks State Park Office
 Project No. X2316-01
 June 25, 2024 10:00 A.M.

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address of Attendee and E-Mail Address of Individual filling out Bid Documents
Kim Willey Operations Director	Quick Enterprise	SDVASSB	636-209-8681	kim@quickconcretesolutions.com
Brian Willey Sr. Proj. Mgr.	Quick Enterprise	SDVASSB	314-939-7977	brian@quickconcretesolutions.com
Kyle Te	Aete Contracting	NBE SDV08	573-694-0748	BIDS@AETECONTRACTING.COM
Wyatt Alvaert Project Manager	Kaiser Electric of Central mo		(573) 280-0373	wvaert@kaisercentralmo.com
Brian Williams	ESSAS		573-631-3303	bwilliams@ess-inc.com
Chris Yarnell	ESSAS		573 634 3303	cYarnell@ess-inc.com

Travis Hodge
Travis Hodge
Hauling LLC

573-280-
7759

thh@windstream.net

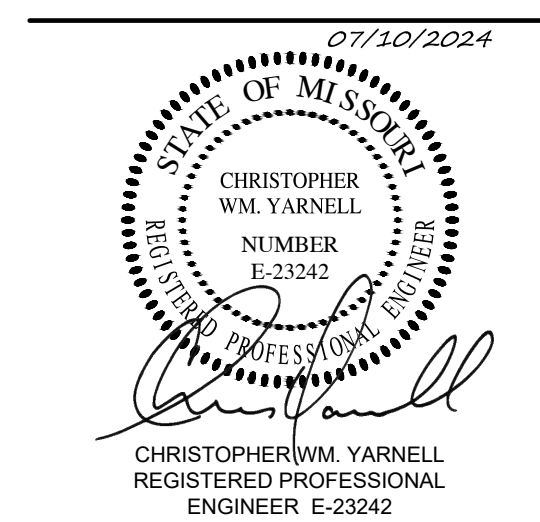
Pre-Bid Meeting Attendance Sheet
 Lake of the Ozarks State Park-Replace 29 Basic Sites With 25 New Premium Sites
 Lake of the Ozarks State Park
 Lake of the Ozarks State Park Office
 Project No. X2316-01
 June 25, 2024 10:00 A.M.

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address of Attendee and E-Mail Address of Individual filling out Bid Documents
Paul Logan Owner	Logan Excavating LLC Sitegrading & concrete		573 690-2844	Paul@loganexcavatingllc.com
NATH SCHULTZ	McNEN Electric		573 761 0030 (TRUST)	nath@mcnenelectric.com trusts@mcnenelectric.com
WAYNE REASON	SPA EQUIPMENT BUILDERS		593-220-7515	Amanda@spaequipmentbuilders.com
Kemper Virtue LARRY WEBB	MO State Parks MO STATE PARKS		573-348-2894	kempervirtue@dnr.mo.gov larry.webb@dnr.mo.gov
ADAM ENBODEN	MO STATE PARKS		817-322-4192	adam.enboden@dnr.mo.gov
Jack Cull	FMDG		573 680 6754	jack.cull@oa.mo.gov

Dwight Thompson

MO STATE PARKS

573/348-2654



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OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
NATURAL RESOURCES
DIVISION OF STATE PARKS

LAKE OF THE OZARKS
STATE PARK
REPLACE 29 BASIC SITES WITH 25
NEW PREMIUM SITES

LAKE OF THE OZARKS
STATE PARK
CAMPGROUND #4
MO ROUTE 134
KAISER, MISSOURI 65047
CAMDEN COUNTY

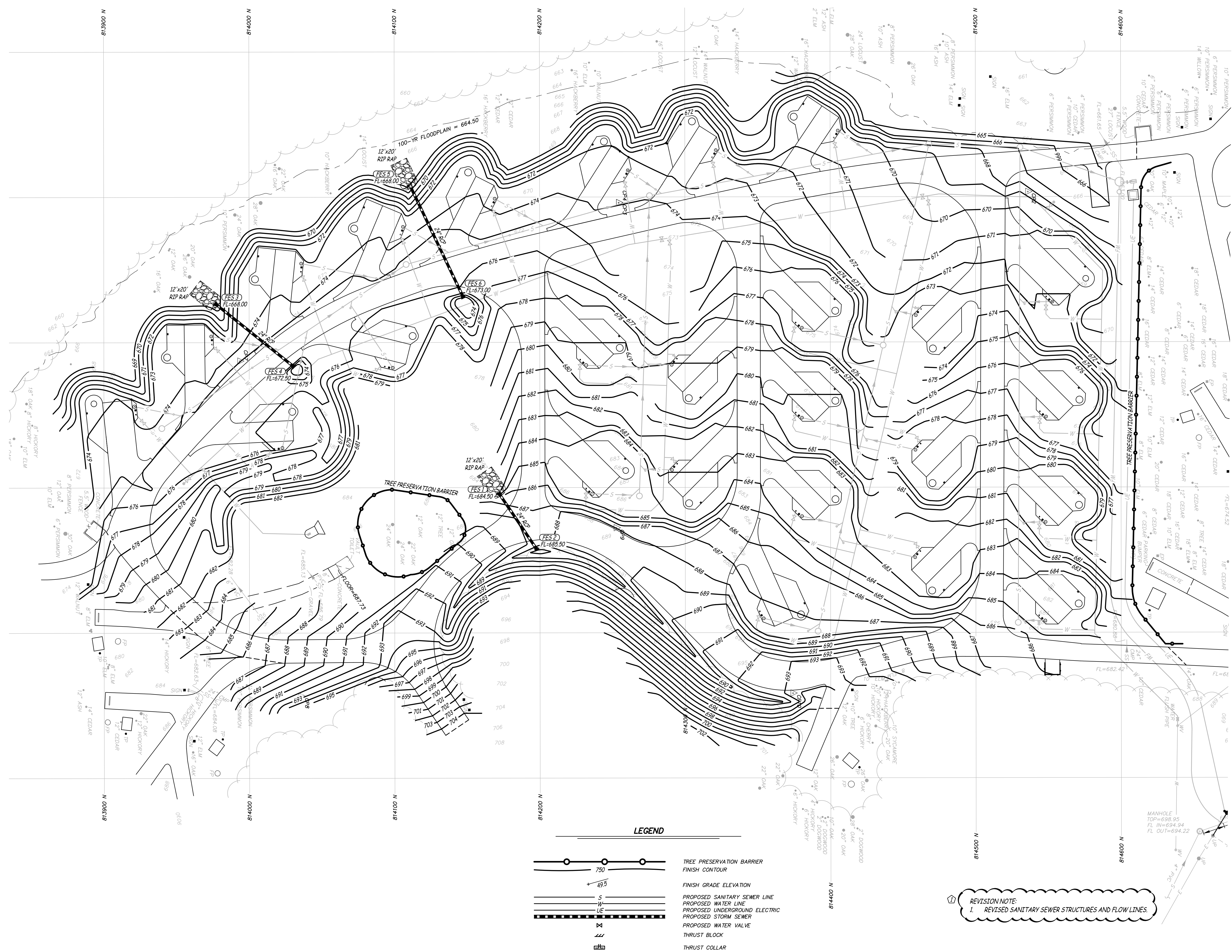
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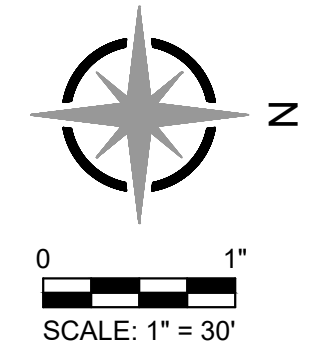
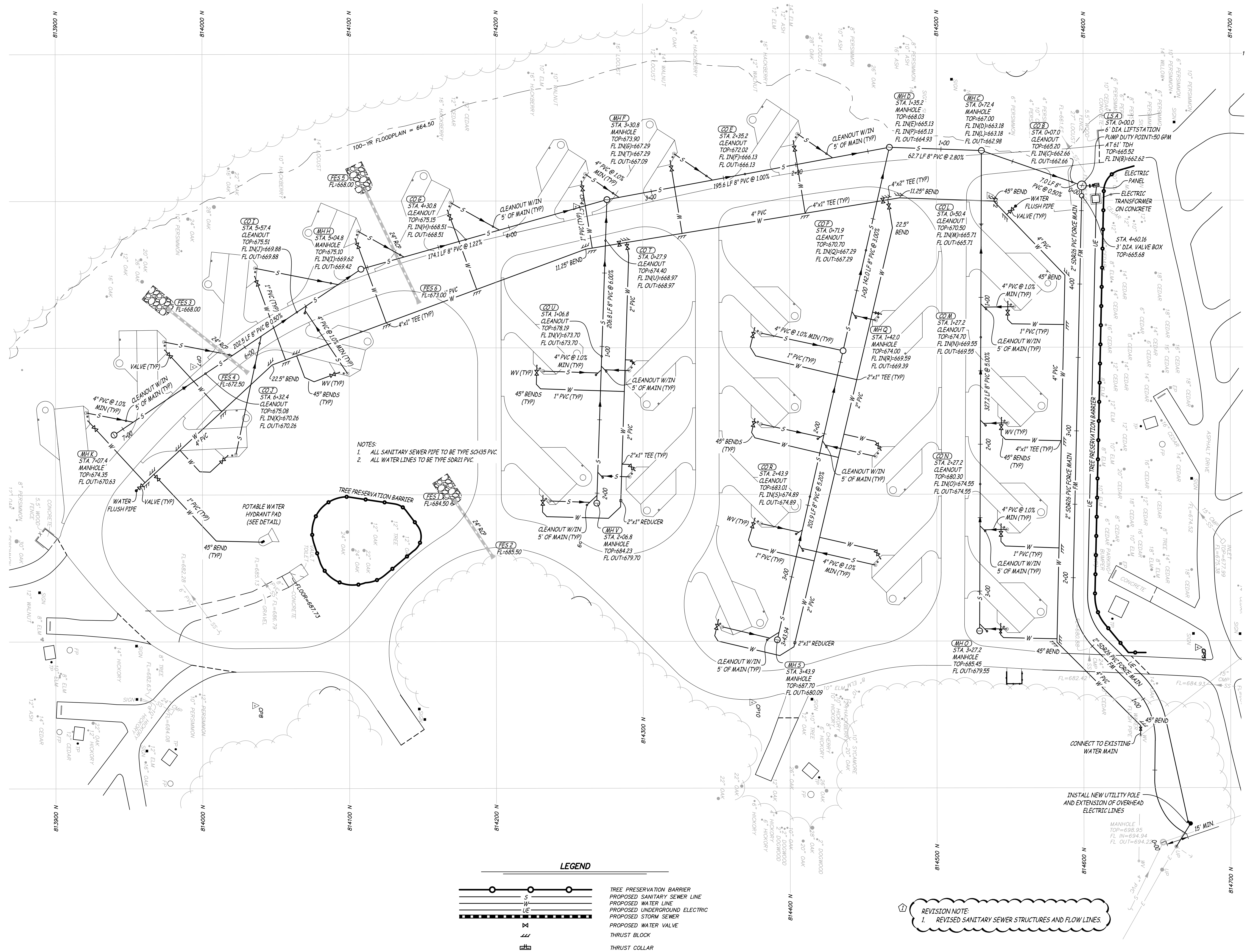
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DATE: JULY 10, 2024
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 4/2/2024

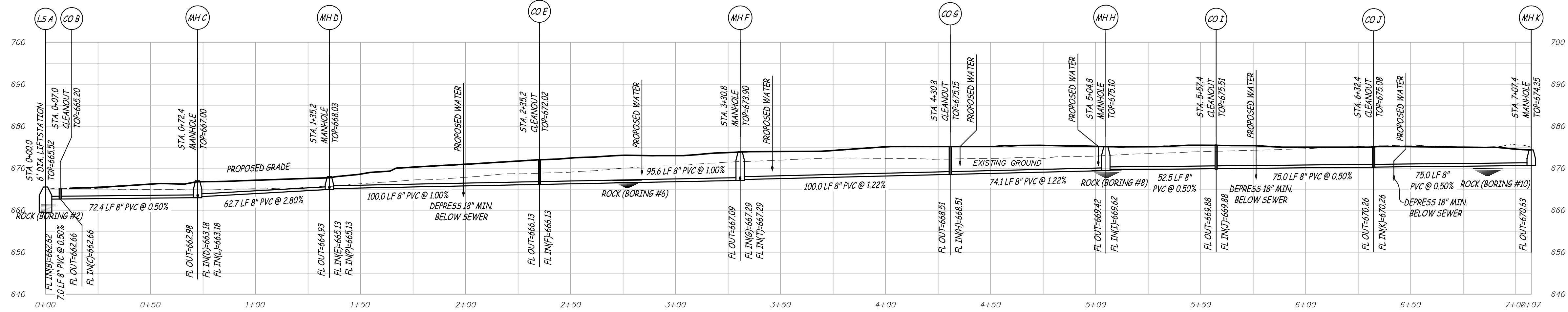
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DESIGNED BY: CWY

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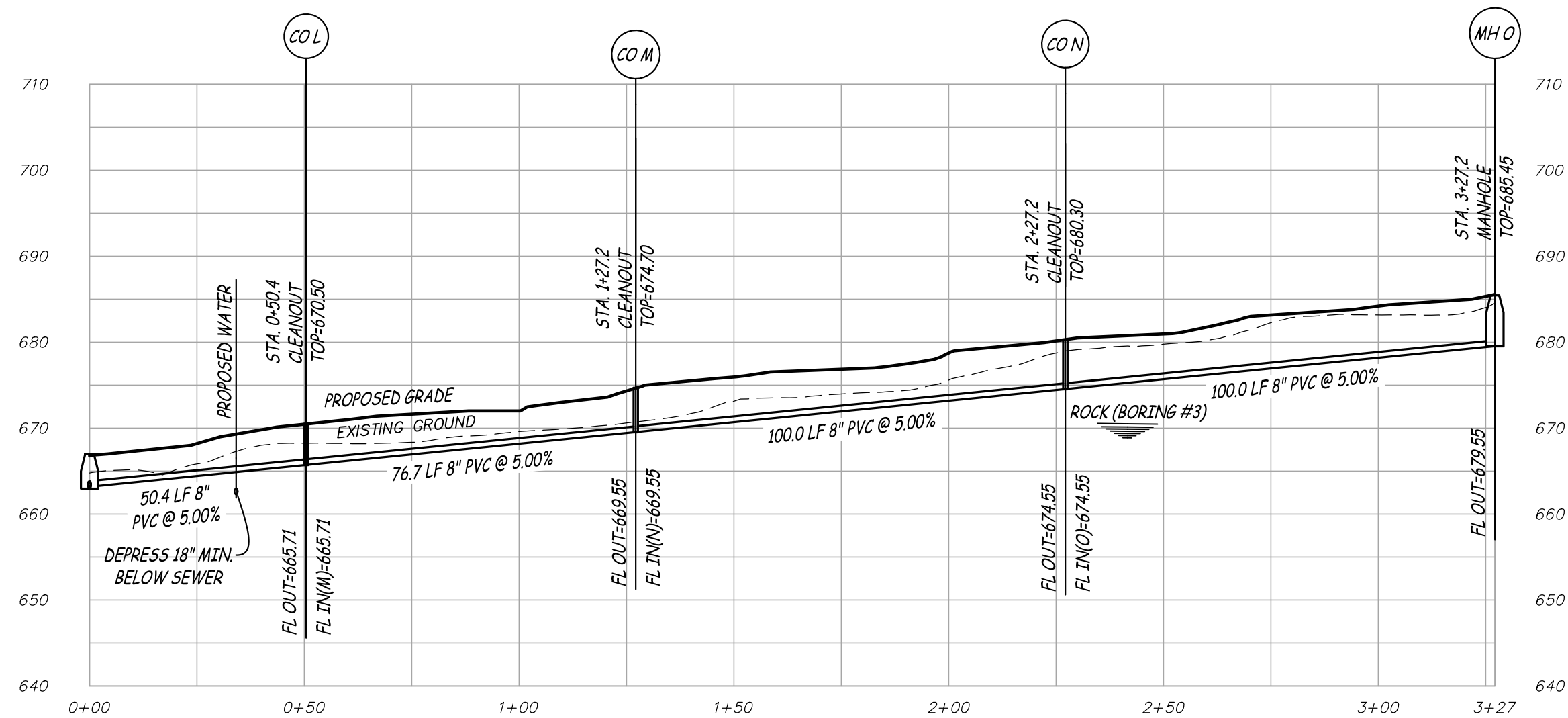
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C-103
5 OF 17 SHEETS
7/10/2024



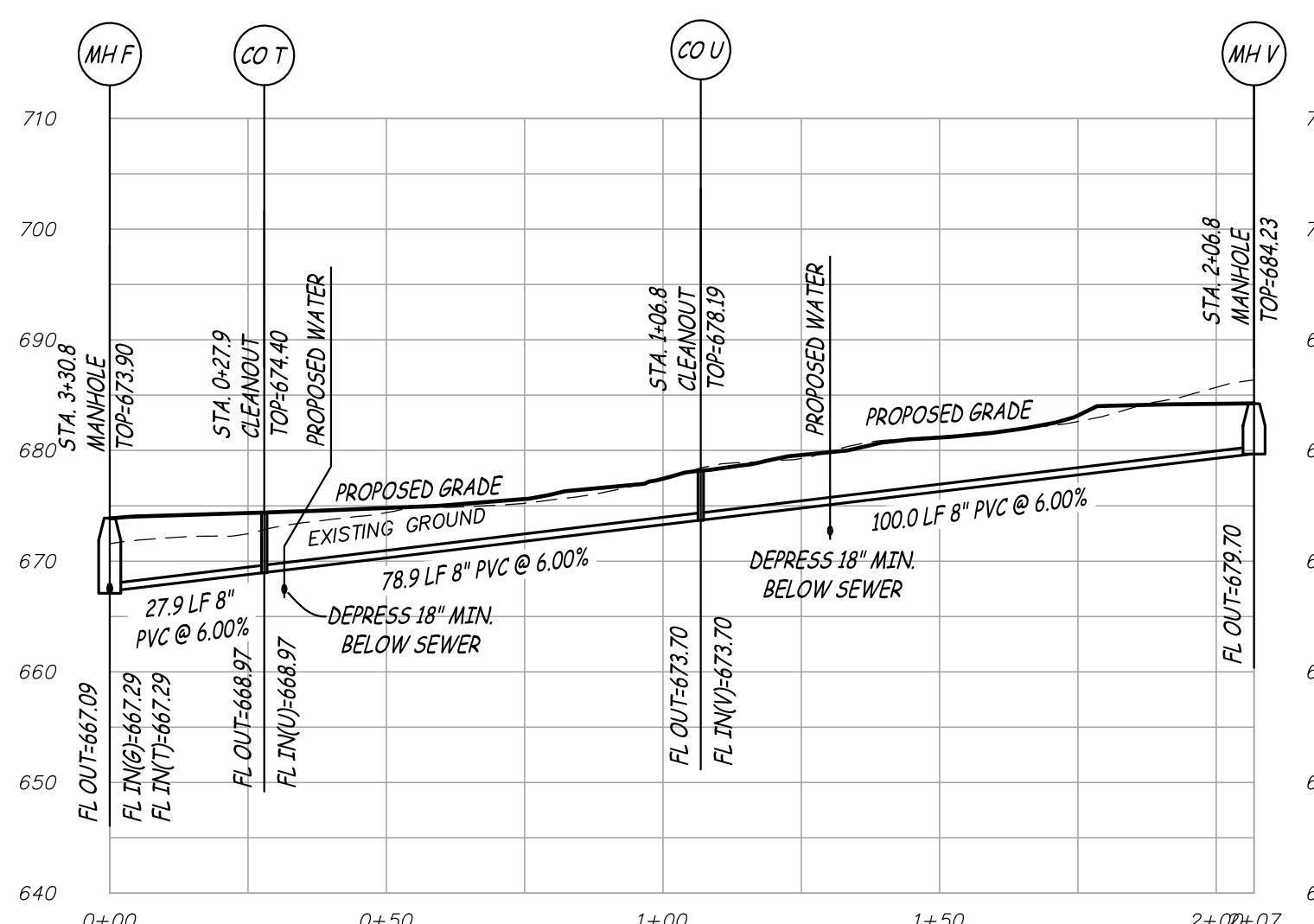




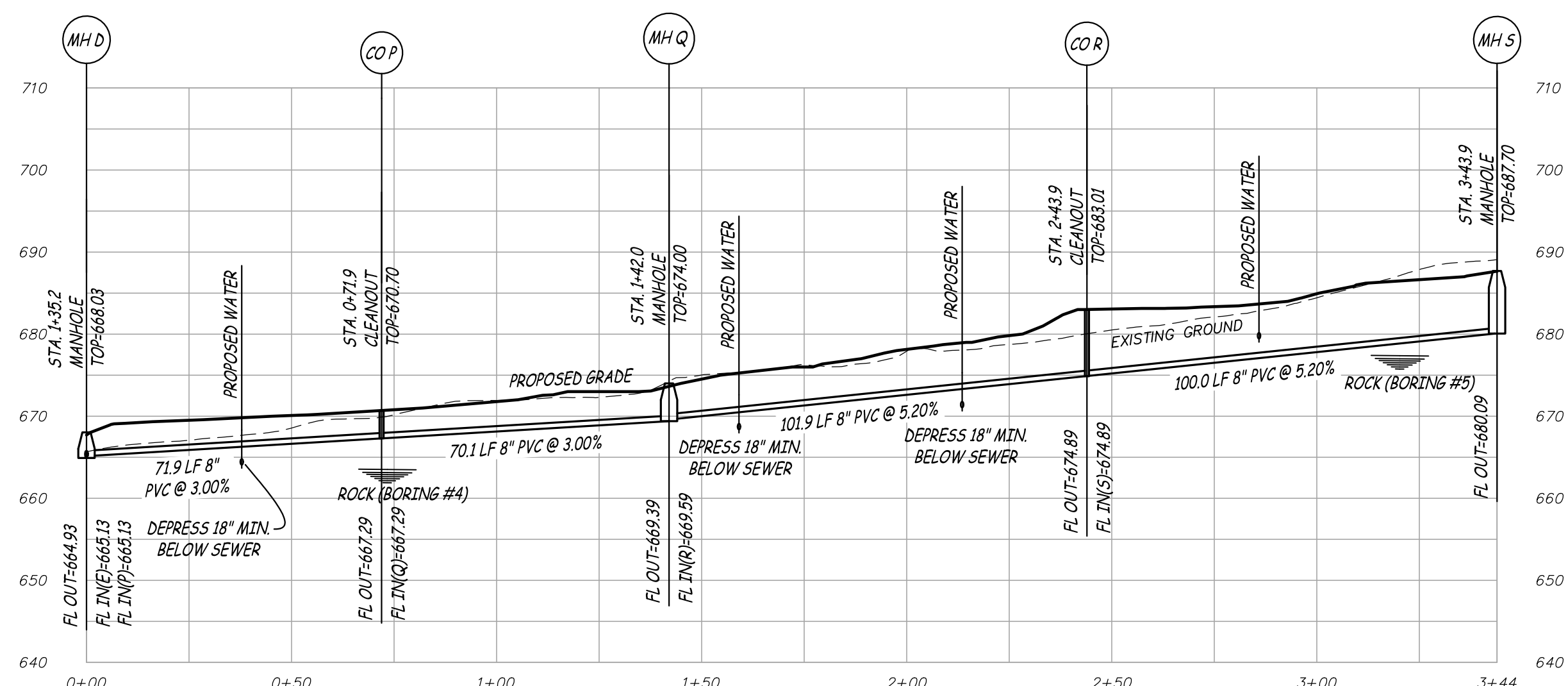
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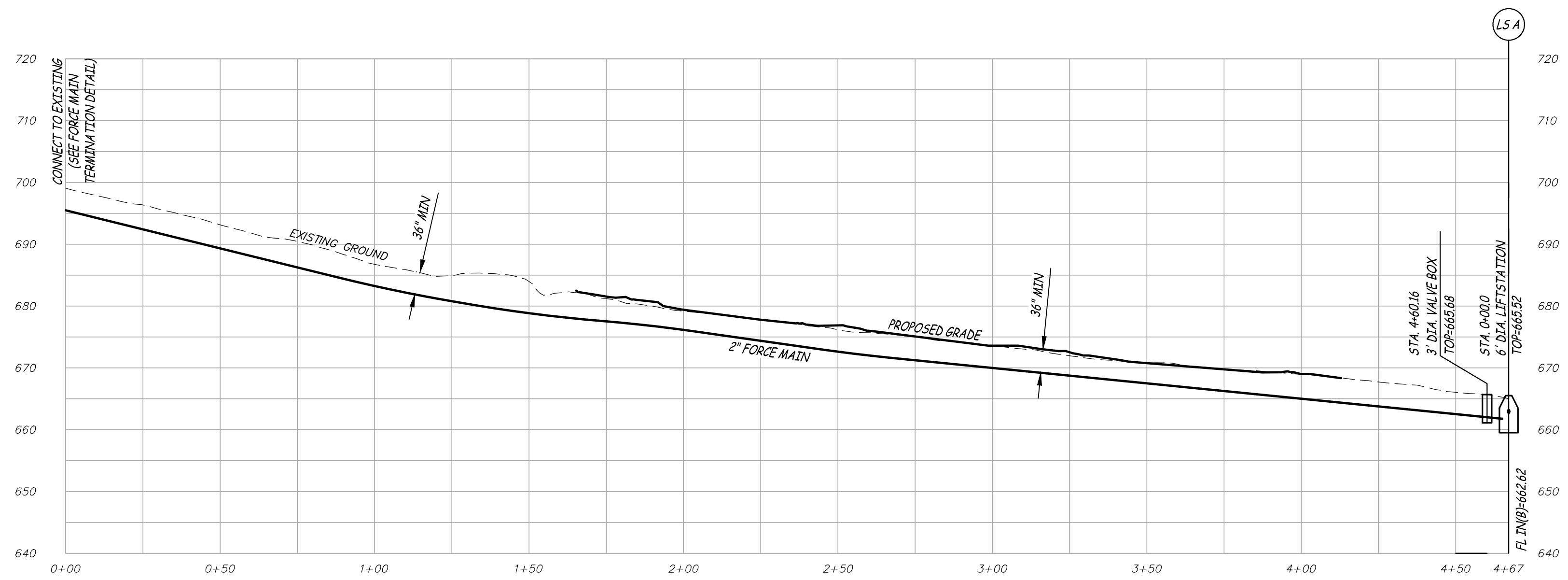
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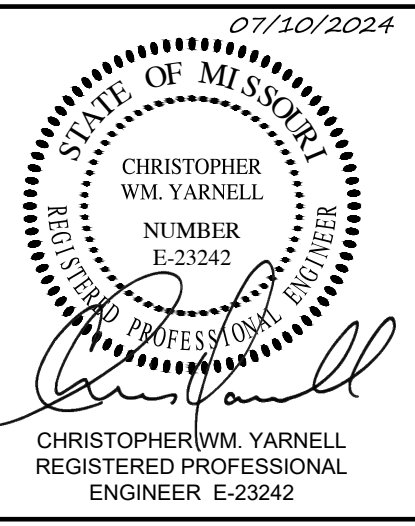
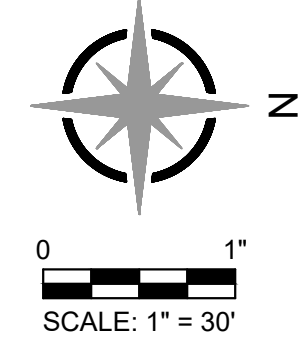


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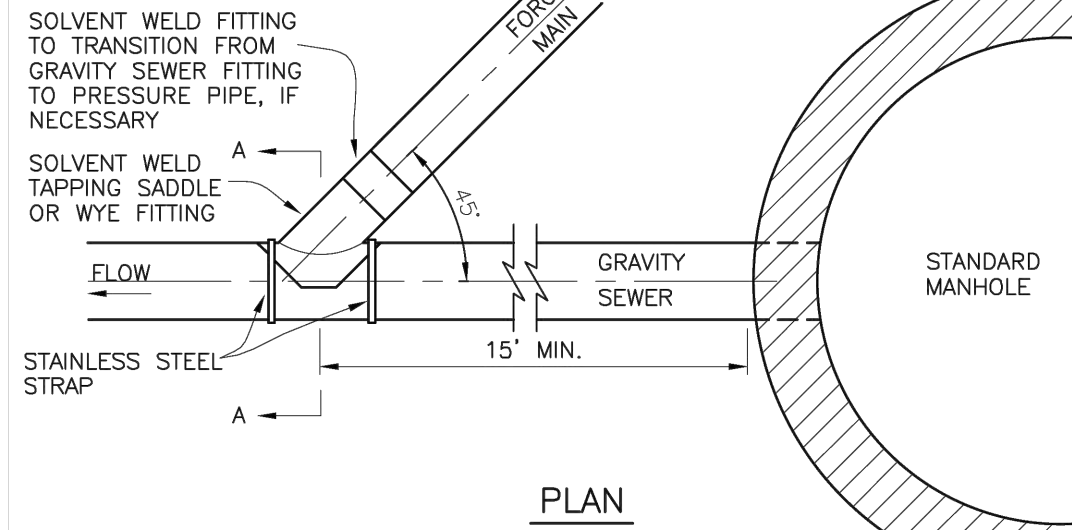
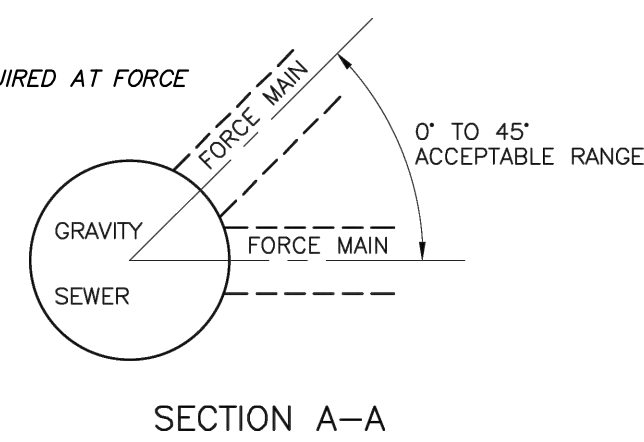


SANITARY FORCE MAIN
SCALE - HORIZ. 1" = 30'
VERT. 1" = 10'

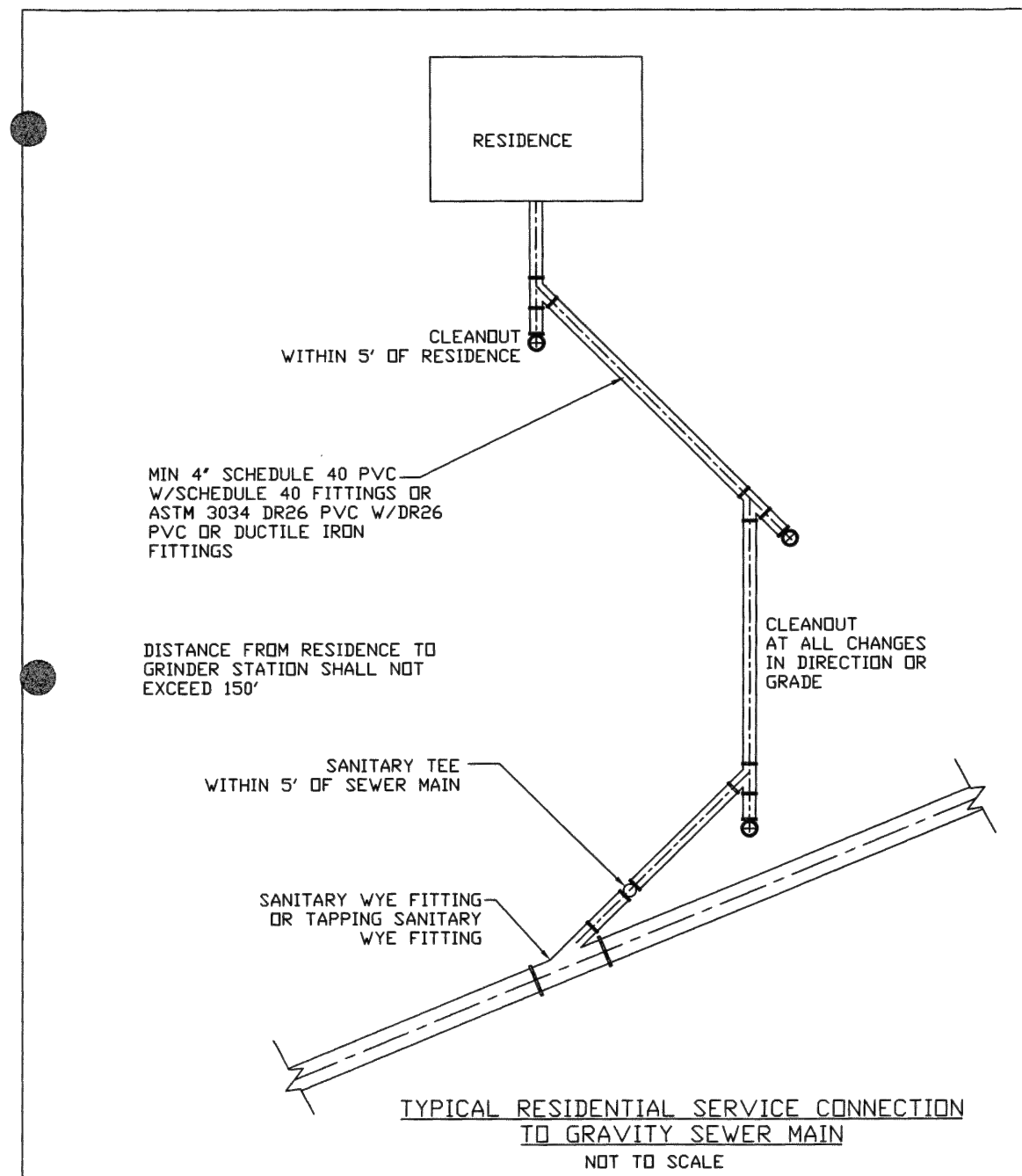
REVISION NOTE:
1. REVISED SANITARY SEWER STRUCTURES AND FLOWLINES.
2. ADDED PROPOSED WATER CROSSINGS.



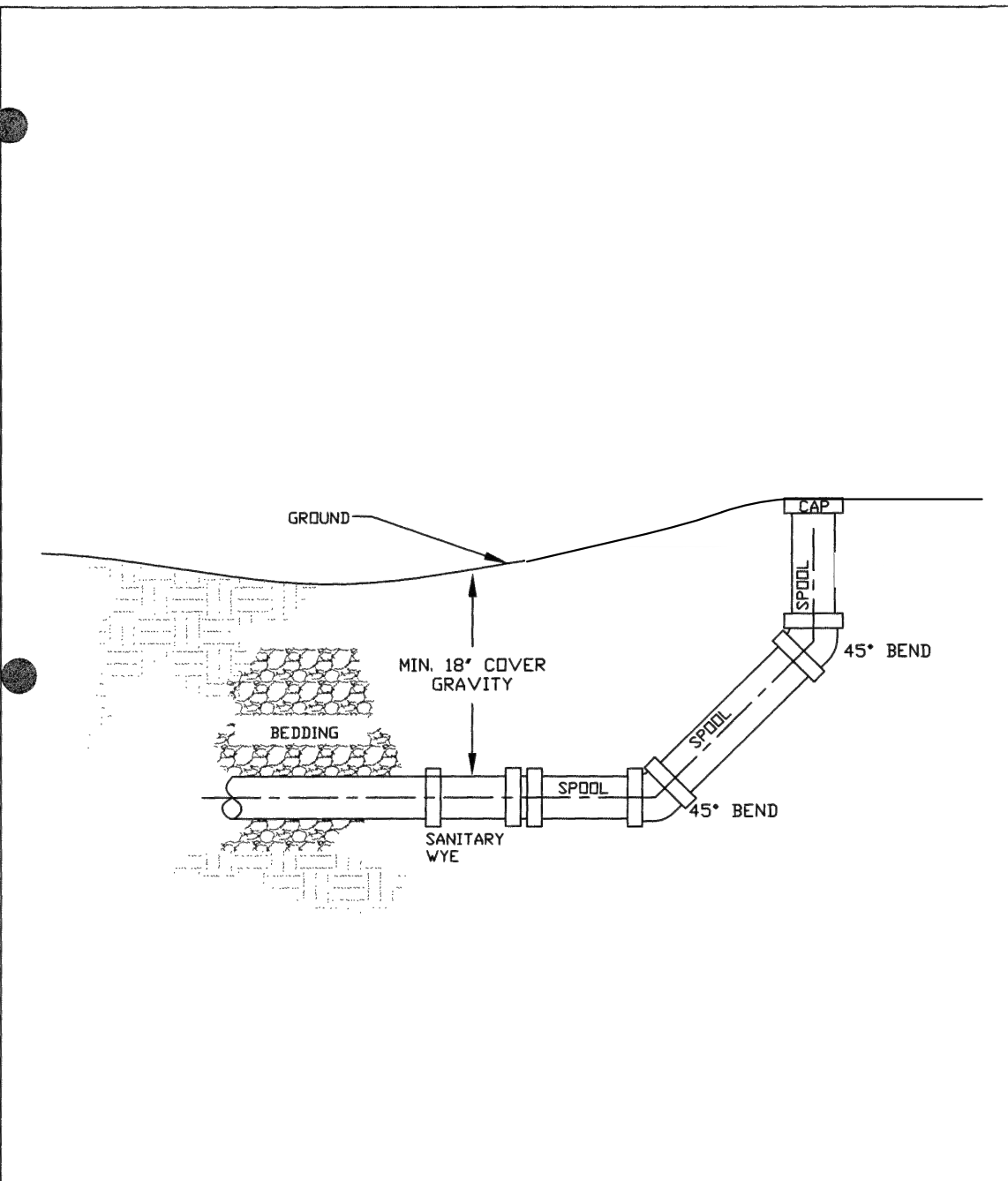
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1. THRUST BLOCKING REQUIRED AT FORCE MAIN TERMINATION.



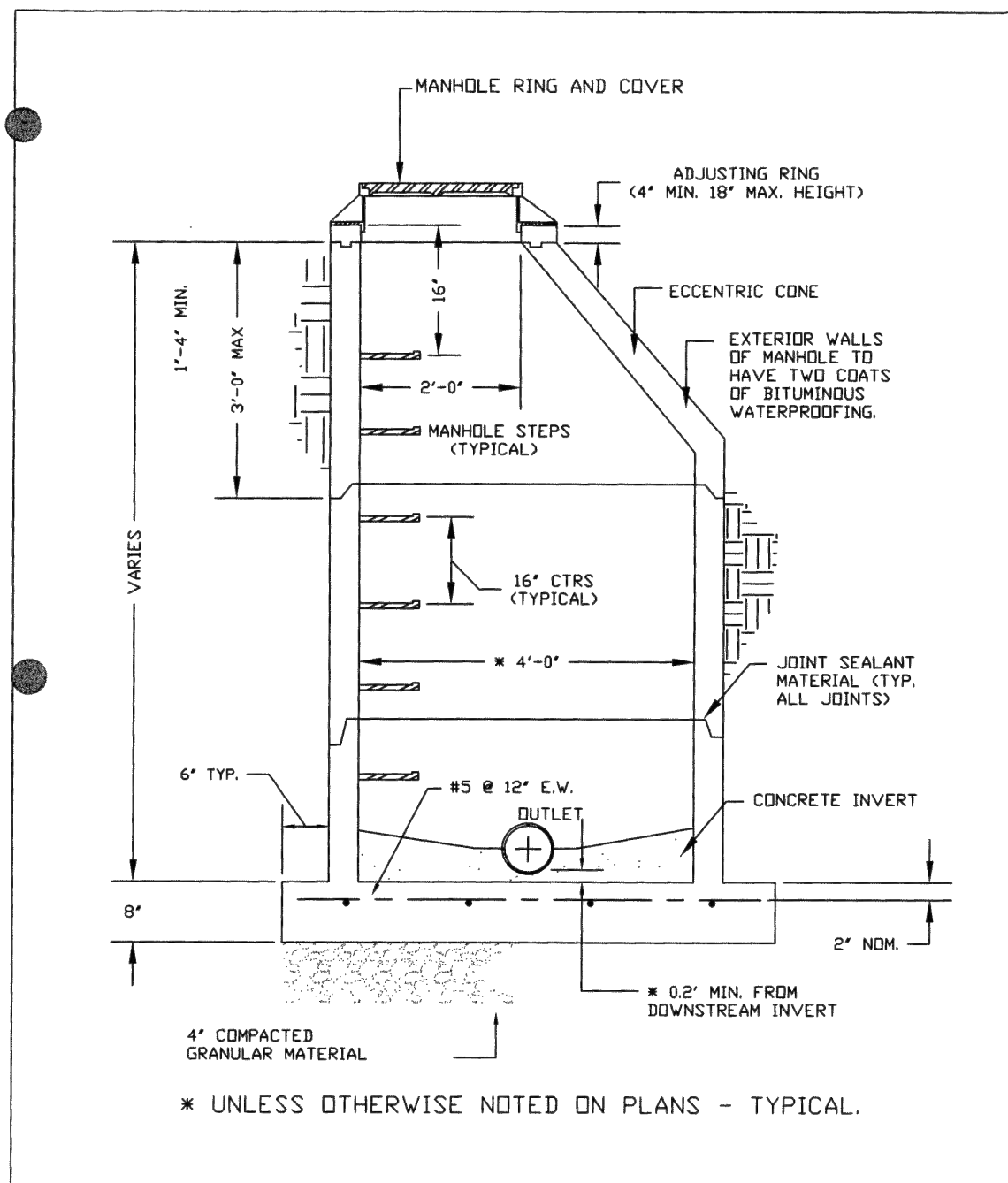
FORCE MAIN TERMINATION
NOT TO SCALE



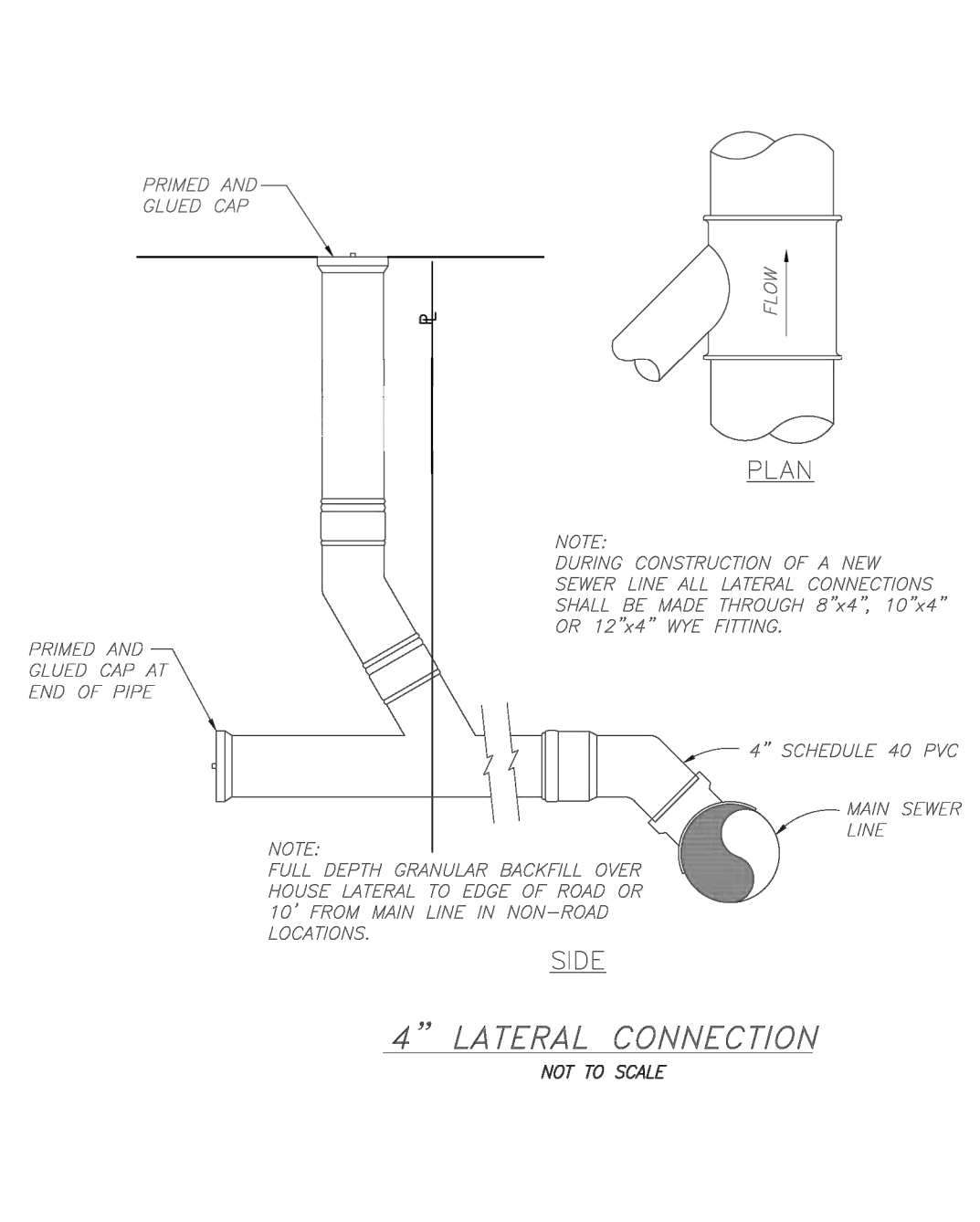
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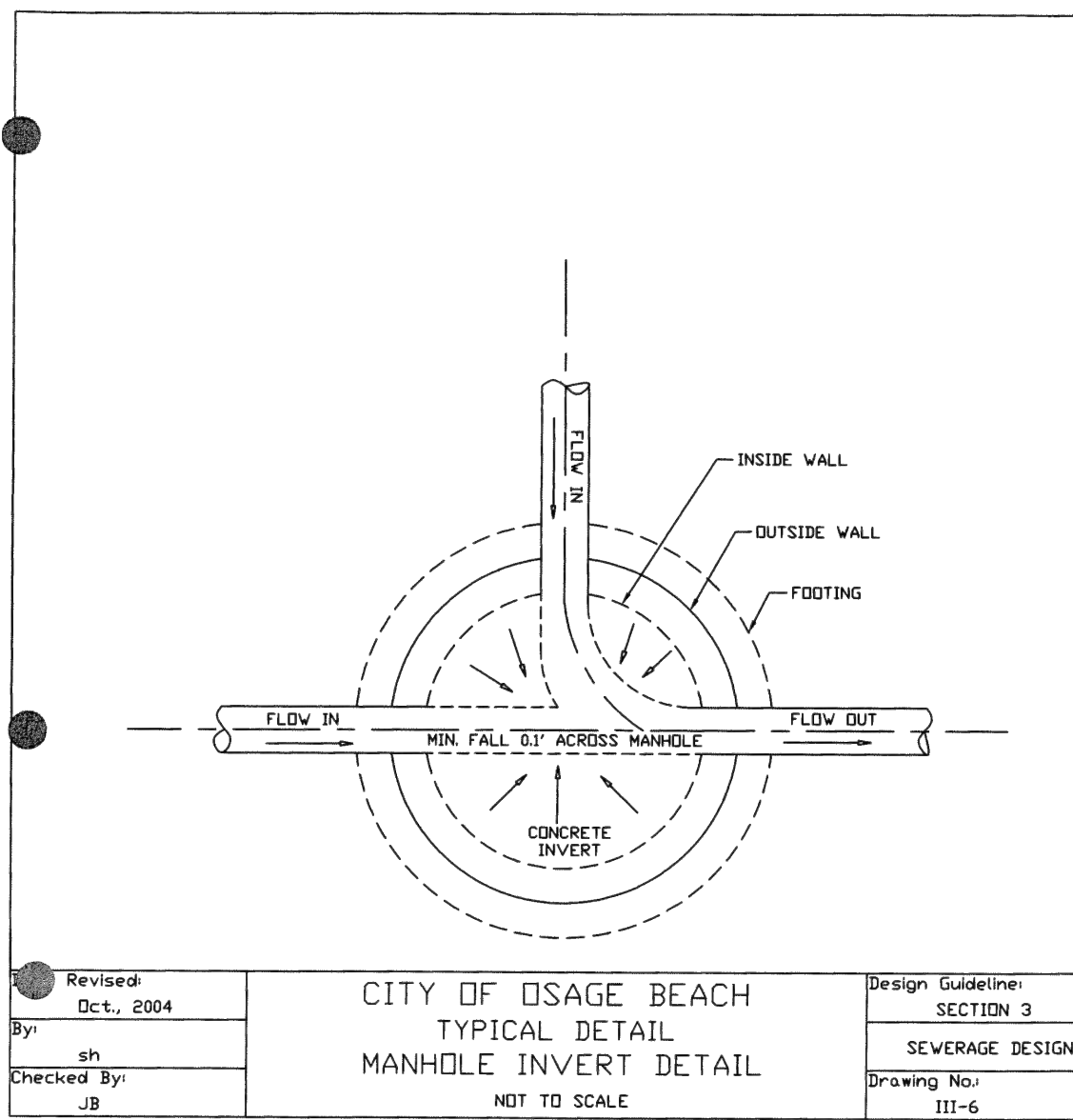
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NOT TO SCALE



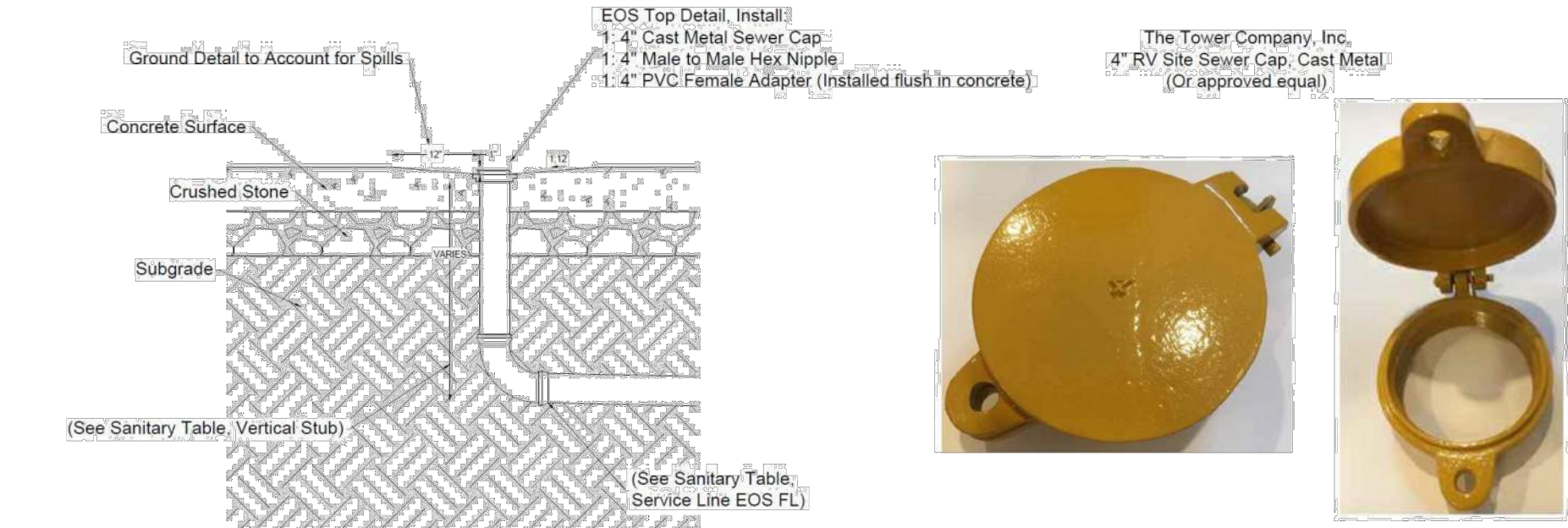
STANDARD PRECAST MANHOLE
NOT TO SCALE



4" LATERAL CONNECTION
NOT TO SCALE

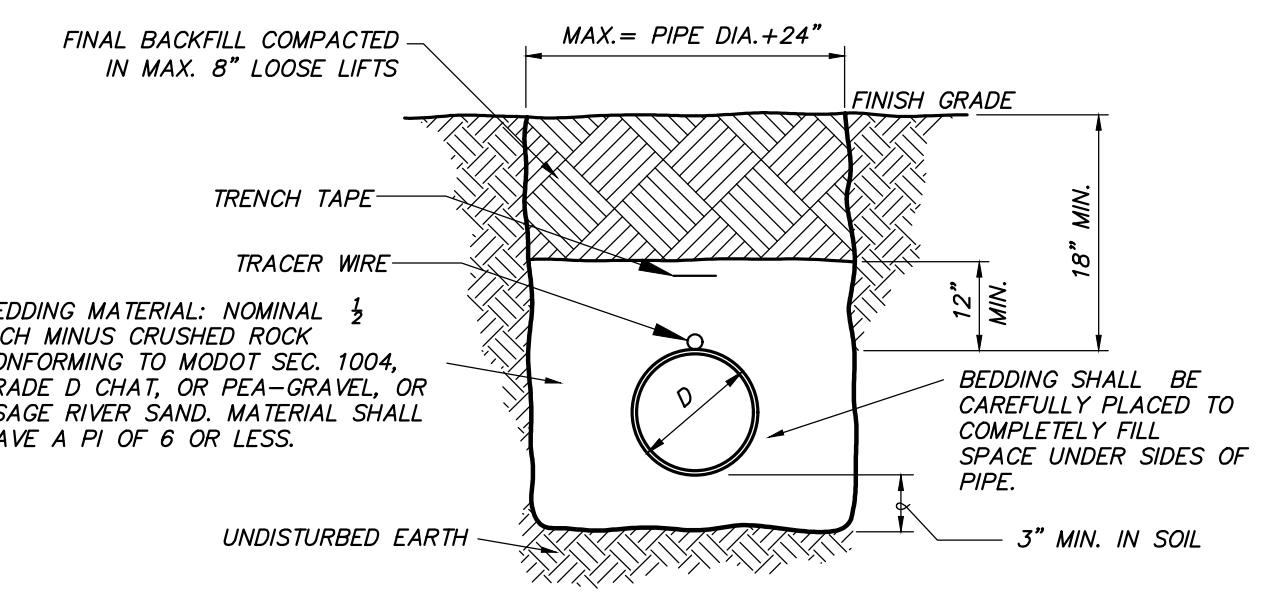


TYPICAL DETAIL MANHOLE INVERT DETAIL
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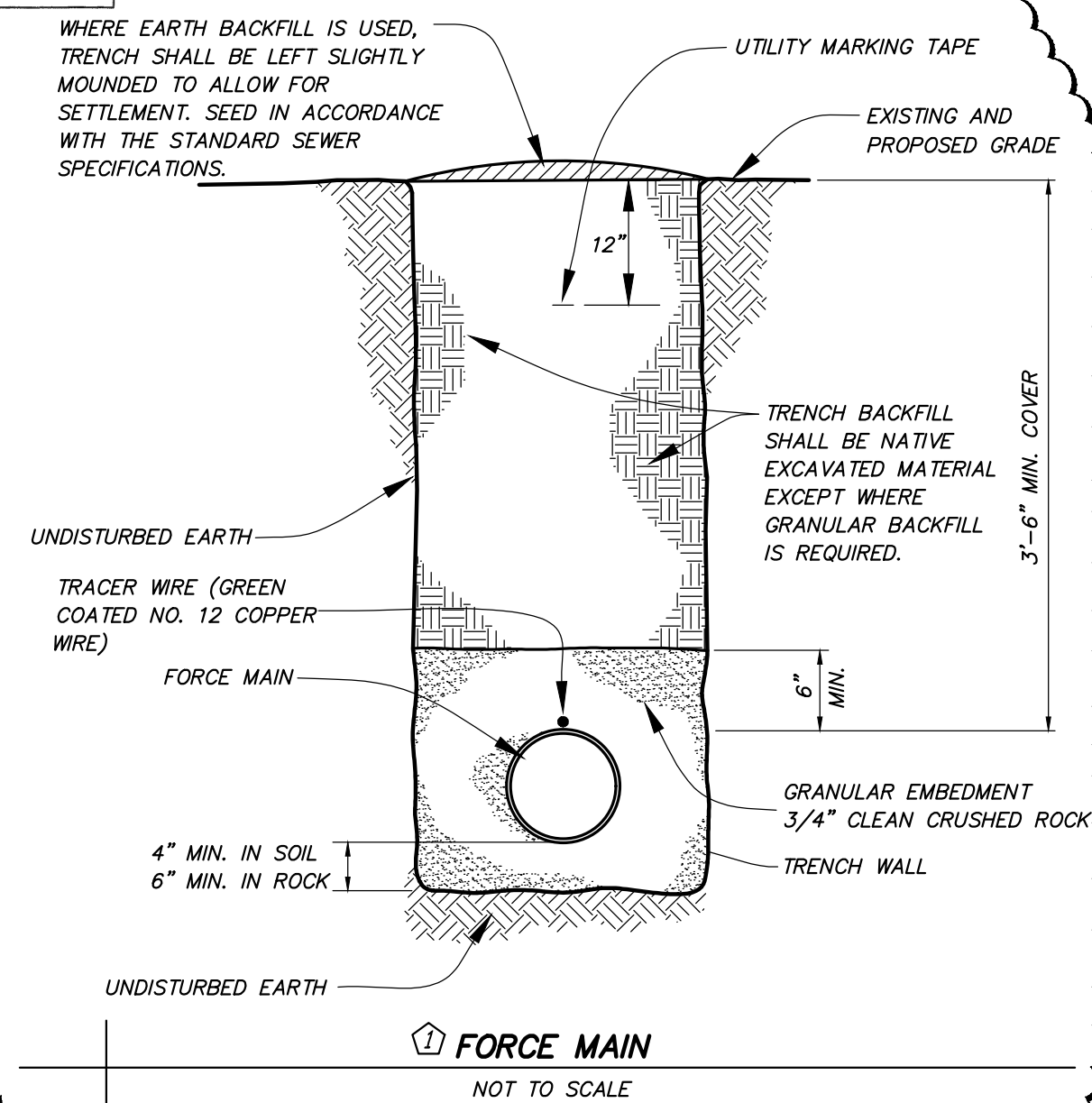


Ground Detail to Account for Spills

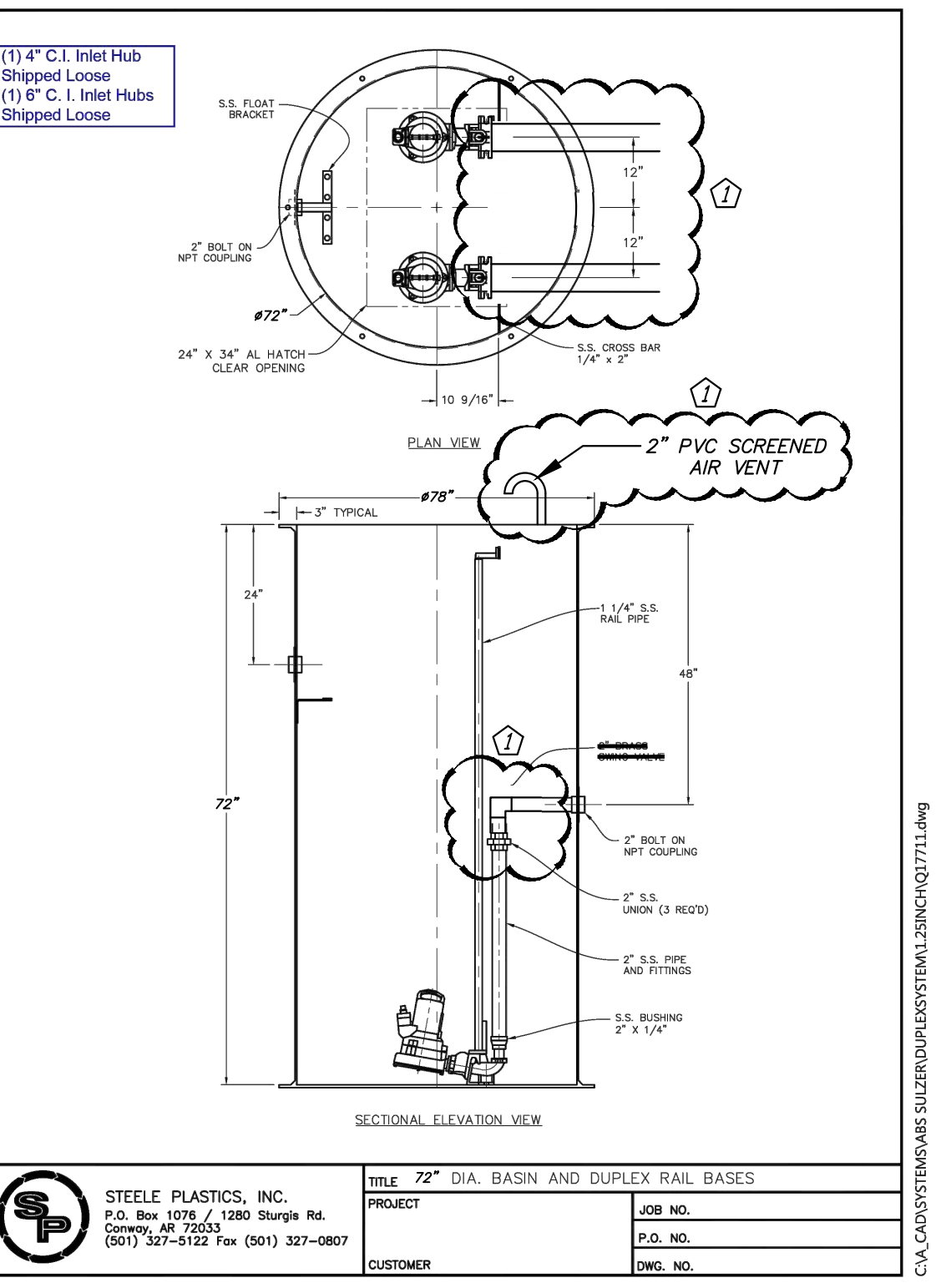
PIPE DIA.	MIN. TRENCH WIDTH
≤ 6"	PIPE DIA. + 18"
8"-10"	PIPE DIA. + 10"
12"-36"	PIPE DIA. + 12"



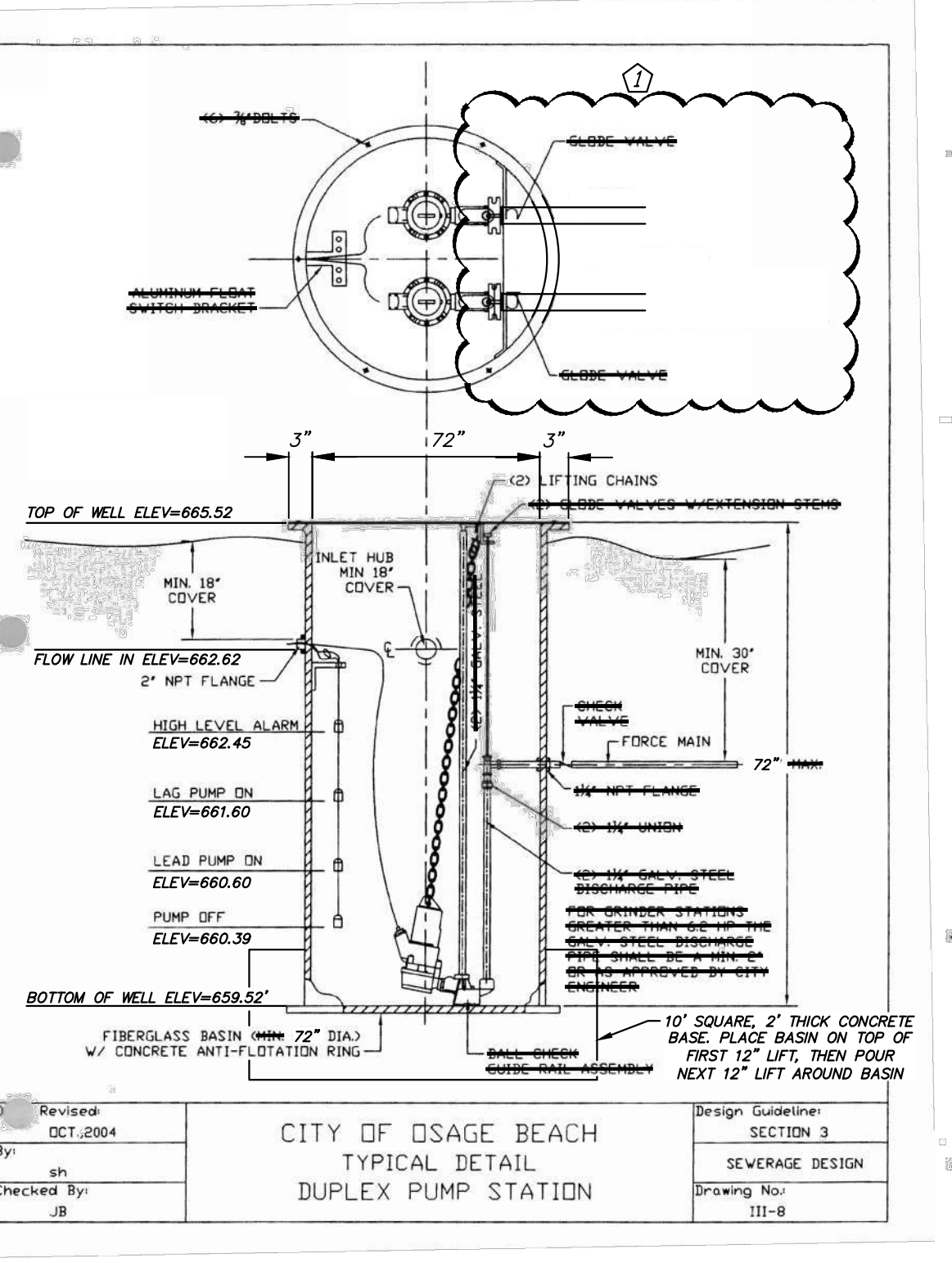
EMBEDMENT OF PVC SANITARY SEWER PIPE - GRAVITY LINE
NOT TO SCALE



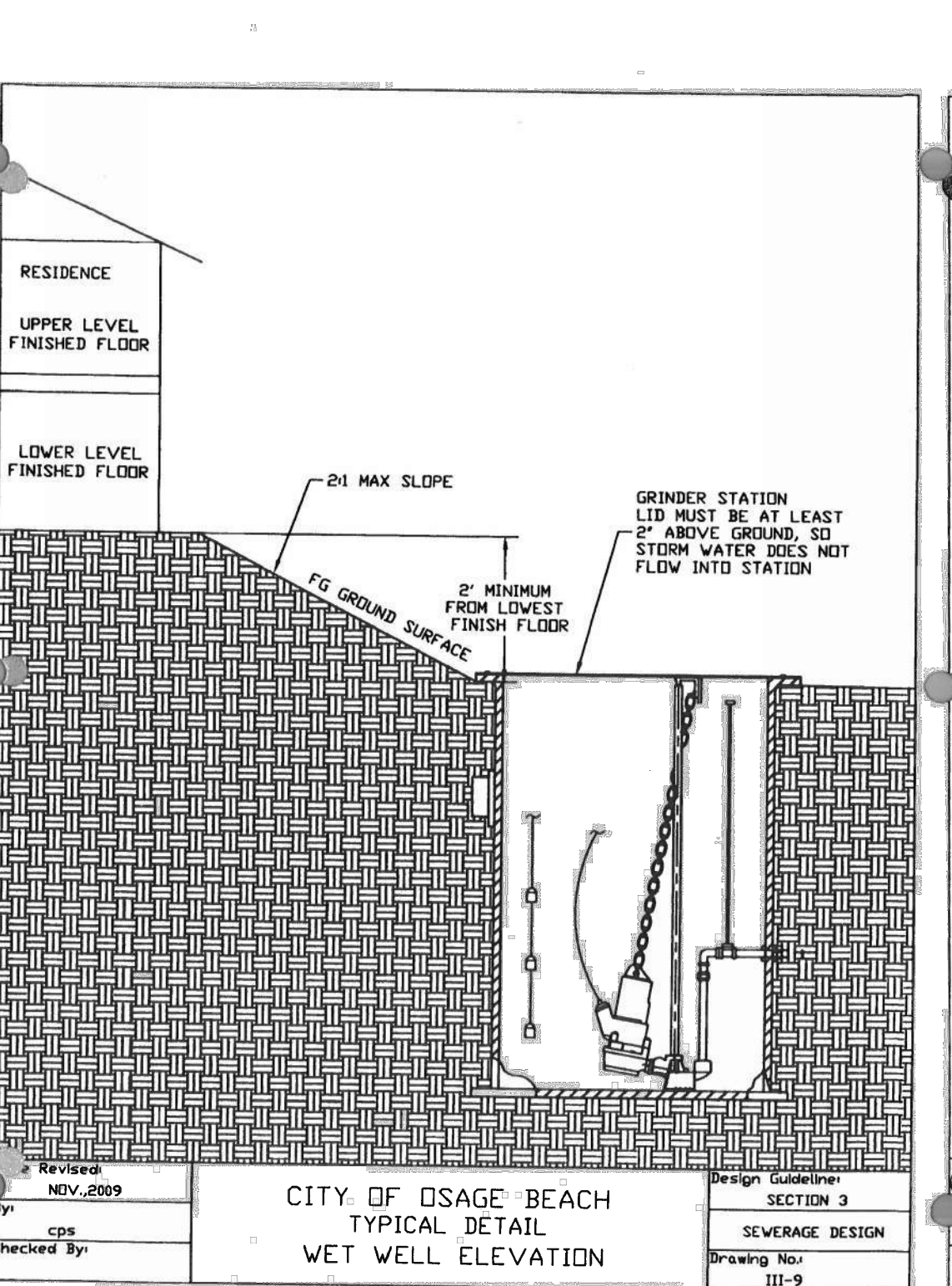
FORCE MAIN
NOT TO SCALE



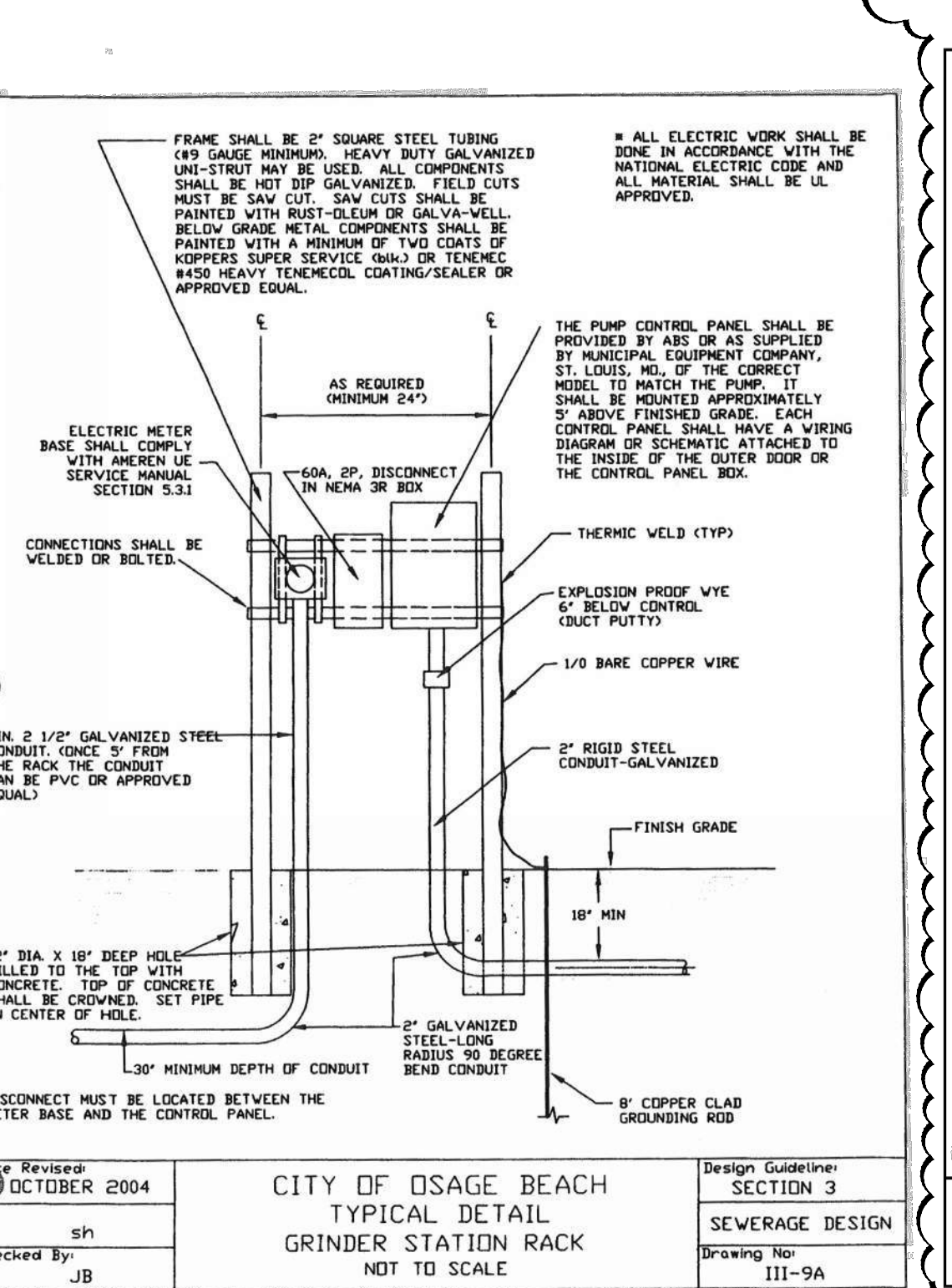
72" DIA. BASIN AND DUPLEX RAIL BASES



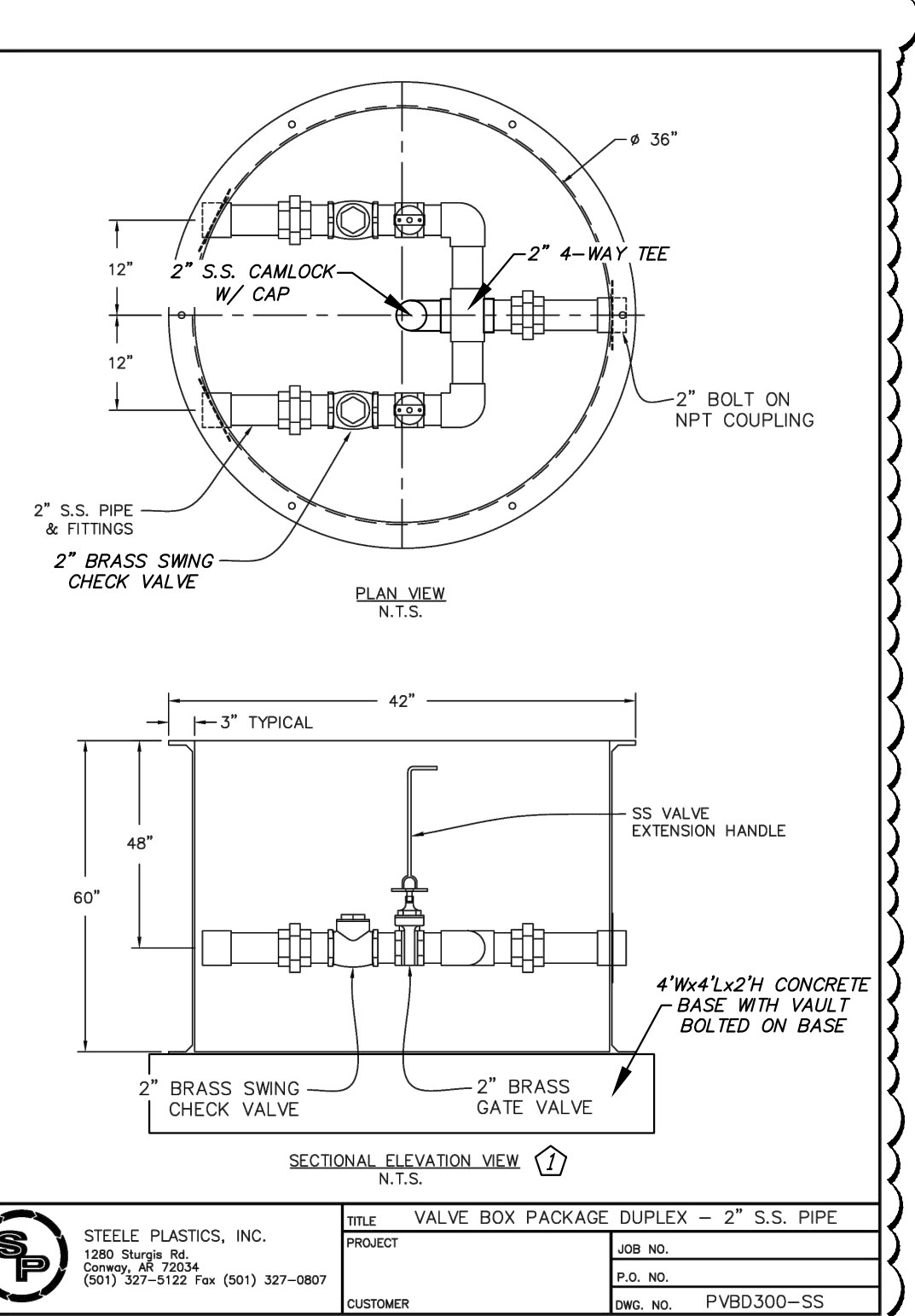
TYPICAL DETAIL DUPLEX PUMP STATION



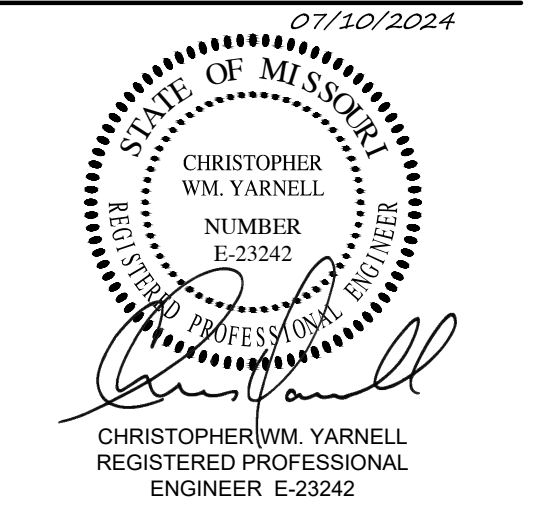
TYPICAL DETAIL WET WELL ELEVATION



TYPICAL DETAIL GRINDER STATION RACK
NOT TO SCALE

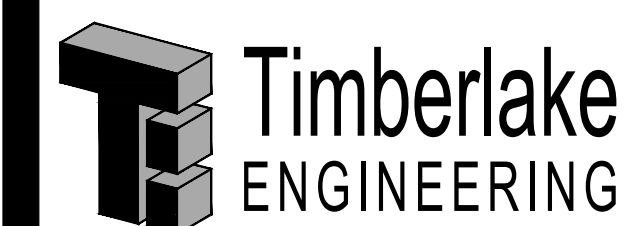


VALVE BOX PACKAGE DUPLEX - 2" S.S. PIPE





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STATE PARK
REPLACE 29 BASIC SITES WITH 25
NEW PREMIUM SITES

LAKE OF THE OZARKS
STATE PARK
CAMPGROUND #4
MO ROUTE 134
KAISER, MISSOURI 65047
CAMDEN COUNTY

PROJECT # X2316-01
SITE # 5306
ASSET # 7815306134

REVISION: ADDENDUM #1
DATE: 7/8/24
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
ISSUE DATE: 02/22/2024

CAD DWG FILE: E-101.DWG
DRAWN BY: RAV
CHECKED BY: SLF
DESIGNED BY: RAV

SHEET TITLE:
SITE ELECTRICAL
PLAN

SHEET NUMBER:

E-101

16 OF 17 SHEETS
02/22/2024

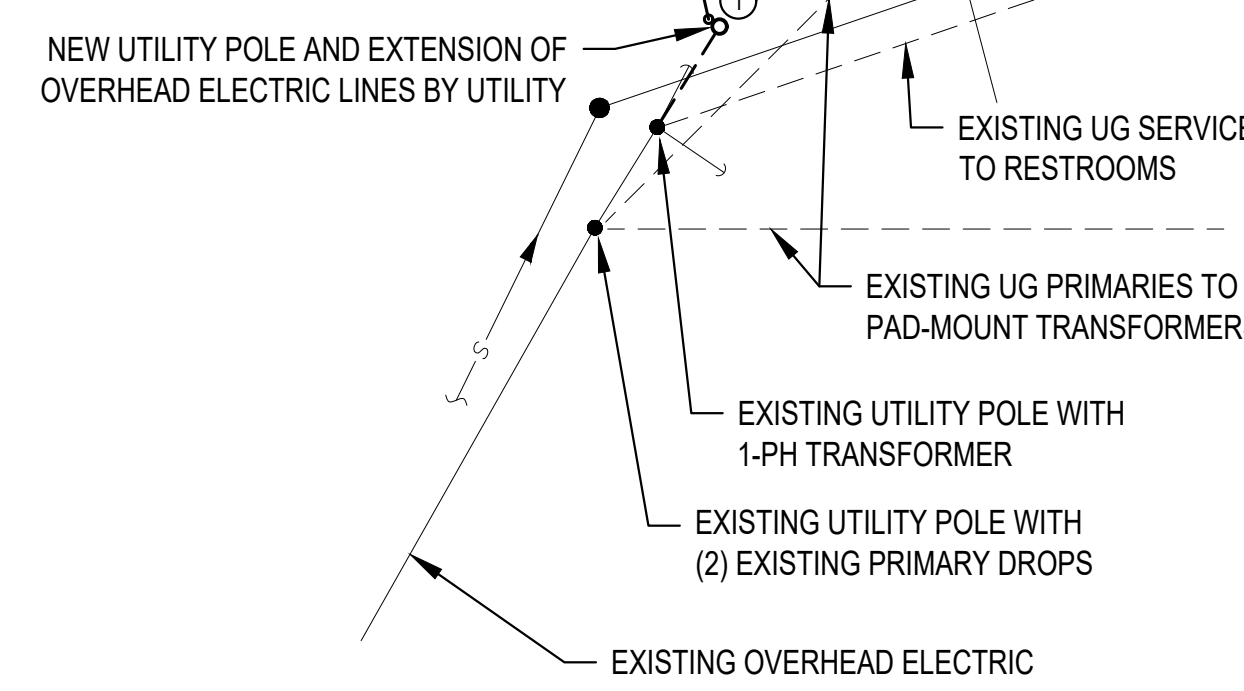


ELECTRICAL SPECIFICATIONS

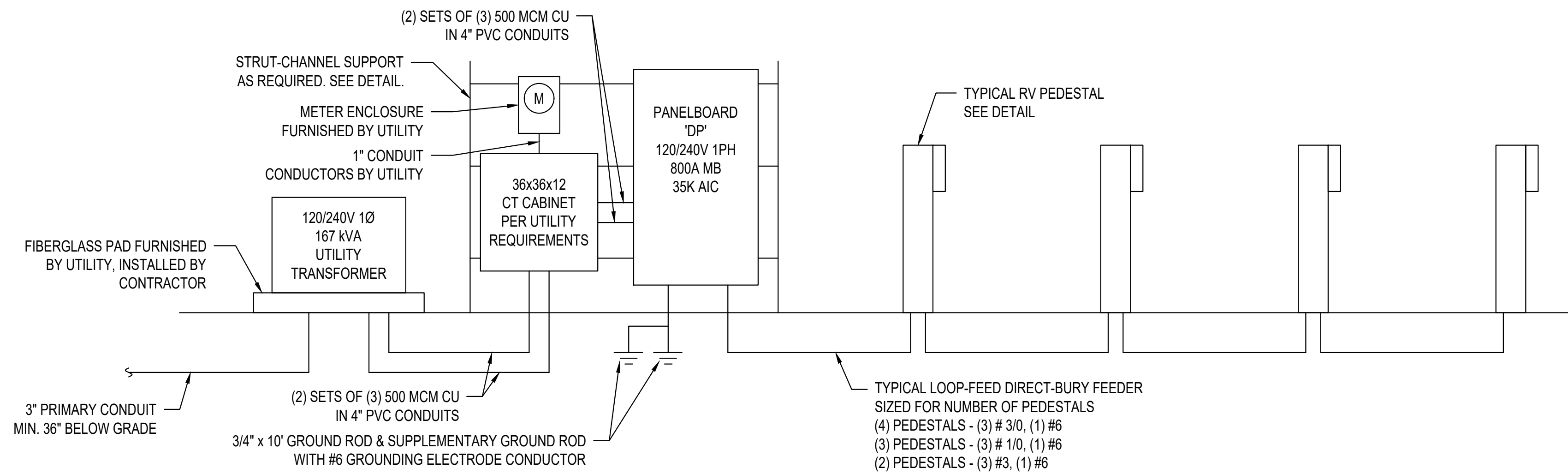
- ALL CONDUCTORS SHALL BE THHN COPPER ABOVE GRADE, XHHW-2 BELOW GRADE, MINIMUM #12 OR LARGER AS REQUIRED OR SHOWN.
- ALL SERVICE WIRING, EXPOSED TO WEATHER, OR WIRING BELOW GRADE, SHALL BE IN RIGID GALVANIZED CONDUIT OR SCH. 40 PVC.
- THE ENTIRE SYSTEM SHALL BE ELECTRICALLY CONTINUOUS AND PROPERLY GROUNDED. EVERY FEEDER AND BRANCH CONDUIT SHALL HAVE CODE SIZED GREEN INSULATED GROUND CONDUCTOR.

KEY NOTES

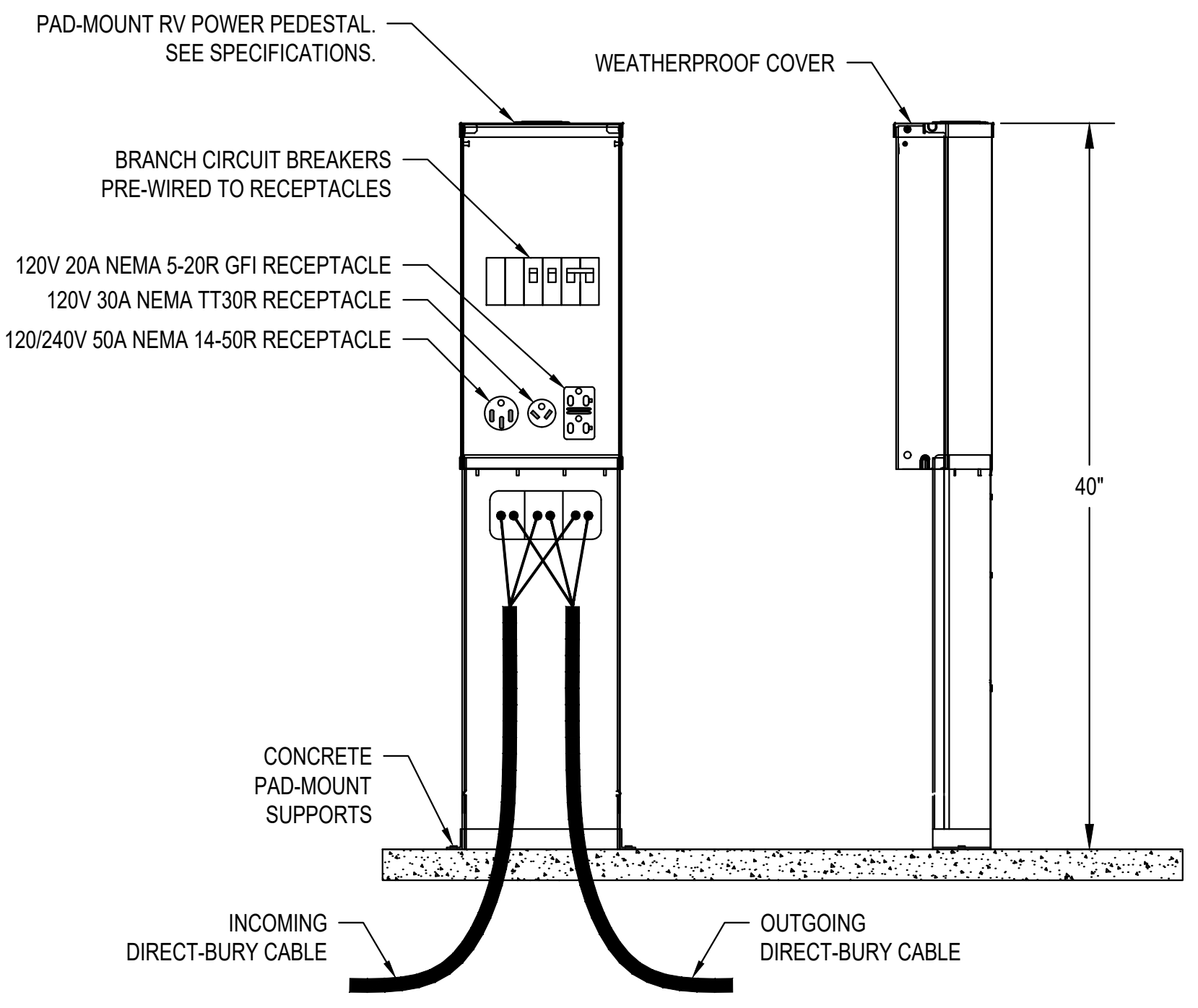
- COORDINATE WITH UTILITY TO INSTALL NEW UTILITY POLE AND EXTEND OVERHEAD ELECTRIC SERVICE AS REQUIRED FOR NEW PRIMARY DROP BELOW GRADE. INSTALL NEW 3" PVC CONDUIT AND TURN UP AT NEW POLE PER UTILITY REQUIREMENTS.
- INSTALL 3" PRIMARY CONDUIT MINIMUM 36" DEEP FROM NEW POLE TO NEW PAD-MOUNT TRANSFORMER. PROVIDE PULL BOX IF TOTAL LENGTH EXCEEDS 500' CONDUCTORS BY UTILITY.
- CONTRACTOR SHALL INSTALL FIBERGLASS TRANSFORMER PAD PROVIDED BY UTILITY. FIELD VERIFY EXACT LOCATION AND INSTALL CONDUITS IN DESIGNATED AREAS. COORDINATE WITH UTILITY TO INSTALL TRANSFORMER.
- FIELD FABRICATE STRUT CHANNEL SUPPORT RACK AS REQUIRED FOR MOUNTING ELECTRICAL METERING & SERVICE EQUIPMENT. REFER TO EQUIPMENT RACK DETAIL ON E-601. INSTALL CT CABINET AND METER ENCLOSURE PER UTILITY REQUIREMENTS. INSTALL PANELBOARD, SERVICE CONDUCTORS, FEEDERS AND BRANCH CIRCUITS AS REQUIRED.
- FIELD FABRICATE STRUT CHANNEL SUPPORT RACK AS REQUIRED TO MOUNT SEWER LIFT STATION CONTROL PANEL WITH DOOR FACING THE PUMP VAULT PER CITY OF OSAGE BEACH REQUIREMENTS. REFER TO EQUIPMENT RACK DETAIL ON E-601. INSTALL BRANCH CIRCUIT TO CONTROL PANEL FROM PANEL DP AND WIRING TO DUPLEX GRINDER PUMPS (ABS PIRAHNA PE 252W 3.4 HP PUMPS REQUIRED BY CITY OF OSAGE BEACH). PROVIDE EXTERNAL MOTOR STARTER KITS FOR EACH PUMP INSIDE CONTROL PANEL PER MANUFACTURERS REQUIREMENTS. REFER TO CIVIL PLANS FOR DETAILS OF PUMP VAULT. PROVIDE 120V 20A BRANCH CIRCUIT AND GFI RECEPTACLE INSTALLED INSIDE CONTROL PANEL FOR MAINTENANCE.
- AT EACH CAMPSITE, INSTALL RVP POWER PEDESTAL MOUNTED TO CONCRETE PAD COORDINATE EXACT PLACEMENT WITH OTHER UTILITIES. THROUGH-WIRE FEEDERS TO EACH PEDESTAL AS SHOWN, SIZED FOR THE NUMBER OF PEDESTALS FOR EACH CIRCUIT.



SITE ELECTRICAL PLAN
SCALE: 1" = 30'-0"



ELECTRICAL RISER DIAGRAM

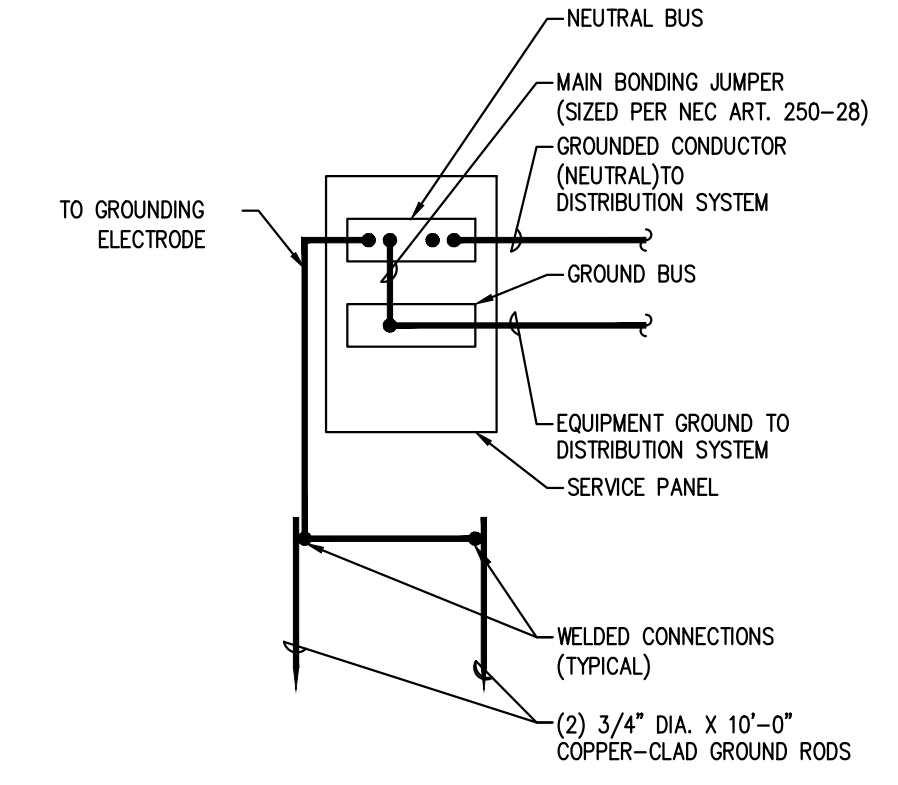


RV CAMPSITE POWER PEDESTAL

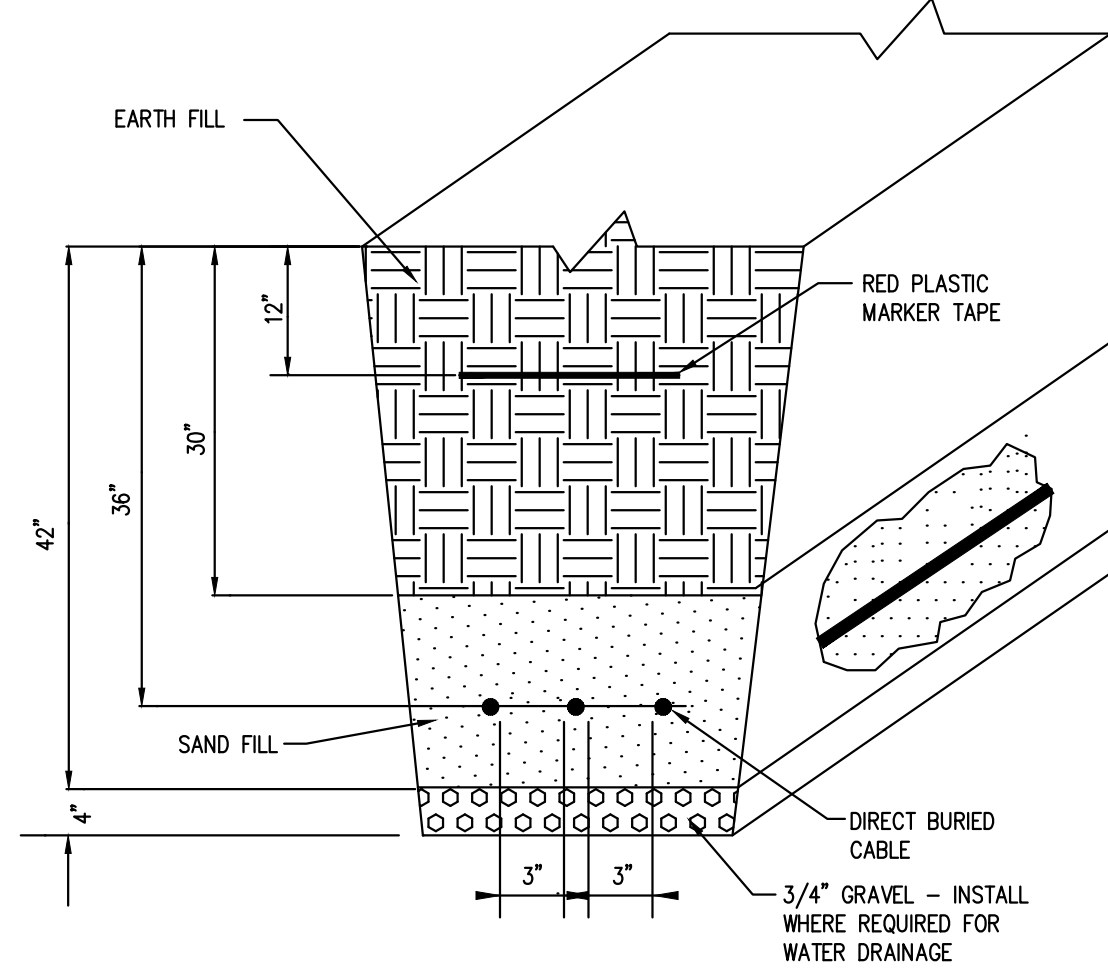
ELECTRICAL PANEL SCHEDULE				PANEL NO.		DP		
VOLTS:	120/240	MAIN CAPACITY:	800A MB	"A" AMPS =	1264.8			
PHASE:	1	MOUNTING:	SURFACE	"B" AMPS =	1263.3			
WIRE:	(2 SETS) 500 MCM CU	BUSS MATERIAL:	COPPER					
AIR:	35K AIC	SQUARE D MODEL:	I-LINE					
CKT.	LOCATION/DESC.	BREAKER	AMPS	PH.	AMPS	BREAKER	LOCATION/DESC.	CKT.
1	4 RV SITES	200-2	200	A	150	150-2	3 RV SITES	2
3	\	\	200	B	150	\	\	4
5	3 RV SITES	150-2	150	A	150	150-2	3 RV SITES	6
7	\	\	150	B	150	\	\	8
9	4 RV SITES	200-2	200	A	100	100-2	2 RV SITES	10
11	\	\	200	B	100	\	\	12
13	4 RV SITES	200-2	200	A	100	100-2	2 RV SITES	14
15	\	\	200	B	100	\	\	16
17	SEWER LIFT STATION (3.4 HP DUPLEX)	35-2	13.3	A	1.5	20-1	SEWER LIFT STATION GFI RECEPT.	18
19	\	\	13.3	B	\	\	SPACE	20
21	SPACE			A			SPACE	22
23	SPACE			B			SPACE	24
25	SPACE			A			SPACE	26
27	SPACE			B			SPACE	28
29	SPACE			A			SPACE	30
31	SPACE			B			SPACE	32
33	SPACE			A			SPACE	34
35	SPACE			B			SPACE	36
37	SPACE			A			SPACE	38
39	SPACE			B			SPACE	40
41	SPACE			A			SPACE	42

NOTE: ELECTRICIAN TO VERIFY ALL EQUIPMENT POWER REQUIREMENTS PRIOR TO ANY EQUIPMENT & BREAKER PURCHASE OR INSTALLATION. PROVIDE WITH LOCKABLE NEMA 3R CABINET

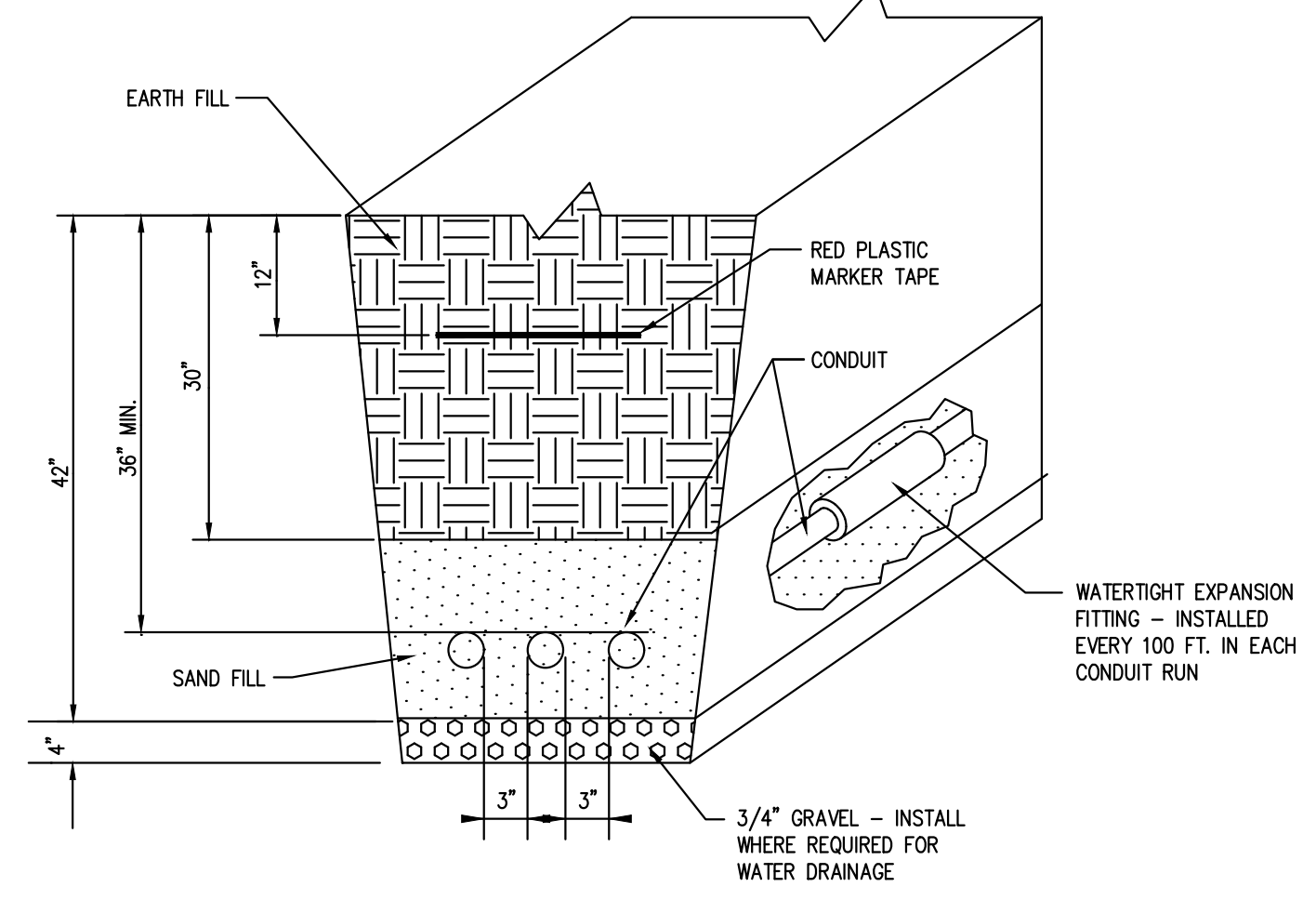
PER NEC TABLE 551.73(A) THE CALCULATED DEMAND FACTOR APPLIED FOR 25 RV SITES IS 42%. THE TOTAL CALCULATED SERVICE DEMAND IS 538.3 AMPS.



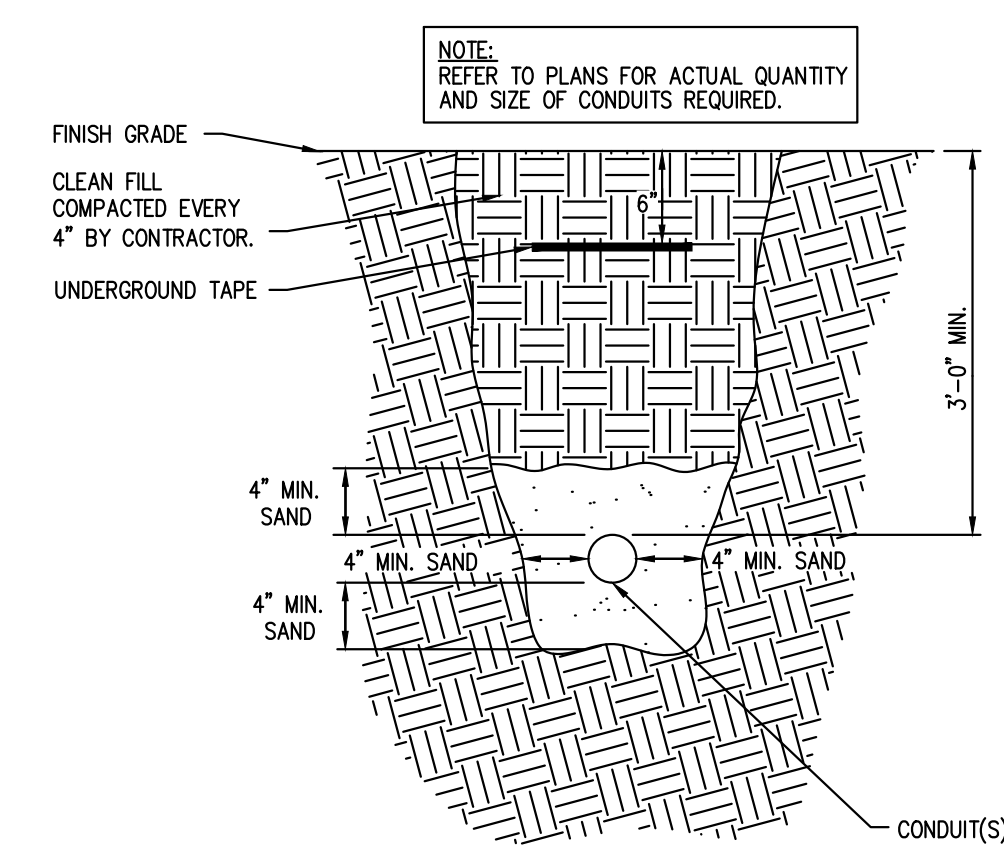
SERVICE GROUNDING ELECTRODE CONNECTION DETAIL
NOT TO SCALE



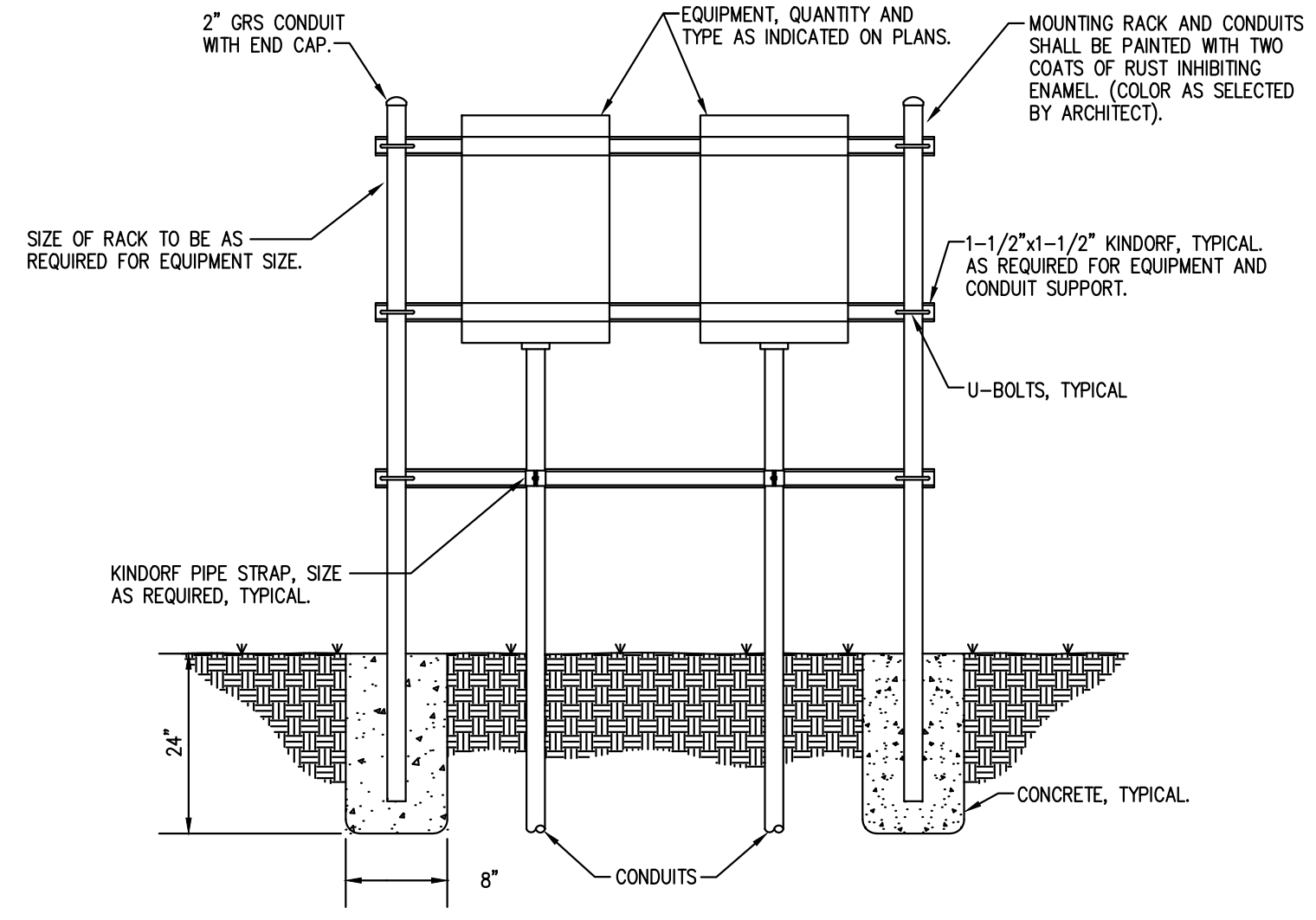
INSTALLATION OF DIRECT BURIED UNDERGROUND CABLES
NOT TO SCALE



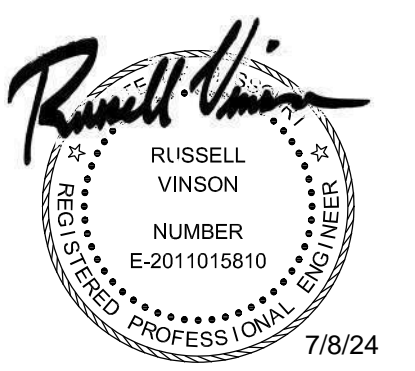
INSTALLATION OF UNDERGROUND PRIMARY CONDUITS
NOT TO SCALE



UNDERGROUND PRIMARY CONDUIT TRENCH DETAIL
NOT TO SCALE



EQUIPMENT RACK MOUNTED AT GRADE DETAIL
NOT TO SCALE



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SHEET TITLE:
**ELECTRIC
SCHEDULES
AND DETAILS**

SHEET NUMBER:

E-601

17 OF 17 SHEETS
02/22/2024