



ADDENDUM No. 01
DNR-220039
Delaware State Park Wastewater Treatment
March 14, 2024

All Bidders:

This Addendum is issued to modify the original Project Manual and Drawings and is hereby made a part of the Contract Documents. This Addendum shall be attached to the Project Manual(s) in your possession and shall become a part of your bid. Bidders shall review changes to all portions of the work, as changes to one portion may affect the work of another portion, and include all such related changes. Please notify all subcontractors of this addendum.

The following statement is added to the requirements:

“Bidder shall have an active and full SAM.Gov registration.”

The following specification pages are provided or revised for clarification and update:

1. PROCURMENT REQUIREMENTS, Document 00 10 00 – Solicitation
2. UV DISINFECTION SYSTEM 46 66 13, Page 2 –
 - a. clarification of model number for basis of design
 - b. clarification of lamps, modules, and UV banks

The following plan pages are provided for clarification and update:

1. Title Sheet, C1: Addition of Alternate (ALT) Identification
2. Index Map, C2: Improved resolution for clarity
3. C3: Revised Bollard Detail – Identified as inclusion in ALT 1
4. C9: Revised elevation into Disk Filter
5. C11: Revised Plant Flow and Filter Flow data in chart
6. C15: Revised Disk Filter Model Number for Basis of Bid
7. C16: Revised Demo Keynotes
8. C17: Revised Site Keynote #13
9. C18: Revised profiles
10. C19: Revised to identify work as ALT 2
11. C21: Revised to identify ALT 2 and ALT 3 associated work

12. C22: Revised to identify power supply connection location and site surface aggregate addition of 2" #8 limestone. Revise propane tank bollard total from 2 to 4, and clarify work responsibility associated with propane tank and propane piping (associated with ALT 1)
13. C23: Revised note to read "Breakers and Staters" , not just "Breakers". Identify this sheet as inclusion with ALT2
14. E2: Revised electrical site plan

A signed copy of this Addendum must be included with the bid submission. This Addendum 01 does NOT change the bid date and time. This Addendum 01 does NOT change the estimated construction cost for this project.

The undersigned states that the changes and/or clarifications described in this Addendum have been incorporated in his/her bid submission.

Signature of Person Preparing Bid

Date

Plan sheets and specifications identified above are included as attachments and are therefore a part of this Addendum.

END OF ADDENDUM 01

Document 00 10 00 - Solicitation (General Contracting / Electronic Bid) State of Ohio Standard Requirements for Public Facility Construction

Electronic bids will be received by:

The Ohio Facilities Construction Commission
<https://bidexpress.com>

for the following Project:

Project: DNR-220039
Delaware State Park New Wastewater Treatment Facility
Ohio Department of Natural Resources
Hocking Hills State Park, Hocking County, Ohio

in accordance with the Contract Documents prepared by:

Sands Decker CPS, LLC
1495 Old Henderson Road
Columbus, Ohio 43220
614-459-6992
Mark E. Cameron
mcameron@sandsdecker.com
www.sandsdecker.com

In compliance with Section 153.08 of the Ohio Revised Code and Section 153:1-8-01 of the Ohio Administrative Code, Bids for this Project are being received, opened, and published through electronic means using the State's electronic bidding service.

To access this Project through the electronic bidding service, you must first register at <https://bidexpress.com> by clicking on the "REGISTER FOR FREE" button and following the instructions. In order to bid, you must create and enable a digital ID within the service. This process requires the submission of notarized paperwork and may take up to five business days to complete. There are no fees to register, create and enable a digital ID, or to download bid documents. There is a small expense on a monthly or per bid basis to submit a bid. The electronic bidding service offers customer support that may be reached at 888.352.2439 or via email at support@bidexpress.com.

Bidders may submit requests for consideration of a proposed Substitution for a specified product, equipment, or service to the Architect/Engineer ("A/E") no later than 10 days prior to the bid opening. Additional products, equipment, and services may be accepted as approved Substitutions only by written Addendum.

From time to time, the Commission issues new editions of the "State of Ohio Standard Requirements for Public Facility Construction" and may issue interim changes. Bidders must submit Bids that comply with the version of the Standard Requirements included in the Contract Documents.

Prevailing Wage rates and Equal Employment Opportunity requirements are applicable to this Project.

This Project is subject to the State of Ohio's Encouraging Diversity, Growth, and Equity ("EDGE") Business Development Program. A Bidder is required to submit with its Bid and with its Bidder's Qualifications form, certain information about the certified EDGE Business Enterprise(s) participating on the Project with the Bidder. Refer to **Section 6.1.10** of the **Instructions to Bidders**.

The EDGE Participation Goal for the Project is **«5.0» percent**.

The percentage is determined by the contracted value of goods, services, materials, and labor that are provided by EDGE-certified business(es). The participation is calculated on the total amount of each awarded contract. For more information about EDGE, contact the State of Ohio EDGE Certification Office at <http://das.ohio.gov/eod>, or at its physical location: 4200 Surface Road, Columbus, Ohio 43228-1395; or by telephone at (614) 466-8380.

The Bidder may be subject to a Pre-Award Affirmative Action Compliance Review in accordance with Section 123:2-5-01 of the Ohio Administrative Code including a review of the Bidder's employment records and an on-site review.

The Bidder must indicate on the electronic Bid Form, the locations where its services will be performed in the spaces provided or by attachment in accordance with the requirements of Executive Order 2019-12D related to providing services only within the United States. Failure to do so may cause the Bid to be rejected as non-responsive.

DOMESTIC STEEL USE REQUIREMENTS AS SPECIFIED IN OHIO REVISED CODE SECTION 153.011 APPLY TO THIS PROJECT. COPIES OF OHIO REVISED CODE SECTION 153.011 CAN BE OBTAINED FROM ANY OF THE OFFICES OF THE OHIO FACILITIES CONSTRUCTION COMMISSION.

Bidders are encouraged to be enrolled in and to be in good standing in a Drug-Free Safety Program (“DFSP”) approved by the Ohio Bureau of Workers' Compensation (“OBWC”) prior to submitting a Bid and provide, on the Electronic Bid Form with its Bid, certain information relative to their enrollment in such a program; and, if awarded a Contract, shall comply with other DFSP criteria described in **Section 1.6** of the **General Conditions**.

Electronic bids will be received for:

<u>Trade</u>	<u>Estimate</u>
General Contract.....	\$1,900,000
Alternate 1 – Generator, ATS, Lines, Pad, Bollards.....	\$ 108,465
Alternate 2 – PS removal, 1,200’ FM, 4 Pumps, Breakers, Starters.....	\$ 158,550
Alternate 3 – Asphalt Pavement.....	\$ 8,7200

until **April 8, 2024**, at 2:00 p.m., when all Bids will be electronically opened. Bid tabulations will be posted no later than 5:00 p.m. on the day Bids are opened.

All Bidders are strongly encouraged to attend the Pre-Bid Meeting on **March 21, 2024, at 11:00 a.m.** at the following location:

Delaware State Park, 5202 US Route 23 North, Delaware, Ohio 43015, at the Hurricane Shelter.

The Contractor is responsible for scheduling the Project, coordinating the Subcontractors, and providing other services identified in the Contract Documents.

The Contract Documents are available for purchase from **Key Blue Print, 195 East Livingston Avenue, Columbus, Ohio 43215, Phone 614-228-3285** at the non-refundable cost of **\$75.00** per set, plus shipping, if requested.

The Contract Documents may be downloaded as electronic PDF files from the State’s electronic bidding service at <https://bidexpress.com> at no charge.

END OF DOCUMENT

DELAWARE STATE PARK WASTEWATER TREATMENT PLANT IMPROVEMENTS
DNR-220039
DELAWARE COUNTY, OH

- A. Store and protect the UV disinfection equipment and accessories in accordance with the Manufacturer's recommendations.

1.7 GUARANTEE

- A. Provide a guarantee against defective and deficient equipment and workmanship in accordance with the requirements of the General Conditions.
- B. The UV lamps to be warranted for a minimum of 12,000 hours (non- prorated) or thirty-six (36) calendar months from shipment, whichever comes first. Pro-rated lamp warranties will not be accepted. On / offcycles are limited to an average of four (4) per day without exception.

1.8 MEASUREMENT AND PAYMENT

- A. Payment for this work will include all equipment, materials and labor necessary to perform the work under this specification as shown on the Drawings and specified herein and included in Individual Contract I – General. Payment for all work performed under this section shall be included in the lump sum price of Individual Contract I – General –WWTP Ultraviolet Disinfection, Complete.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

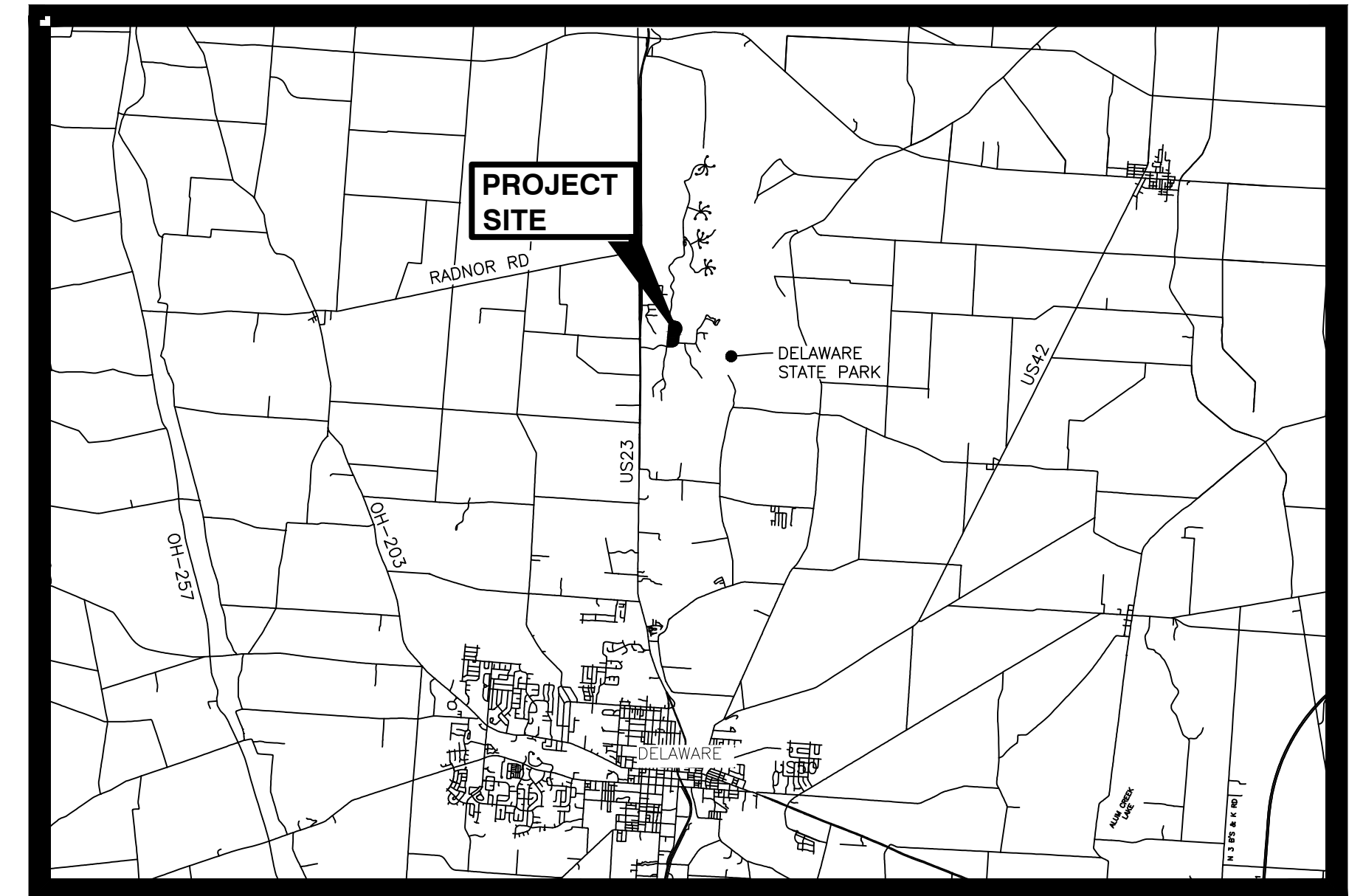
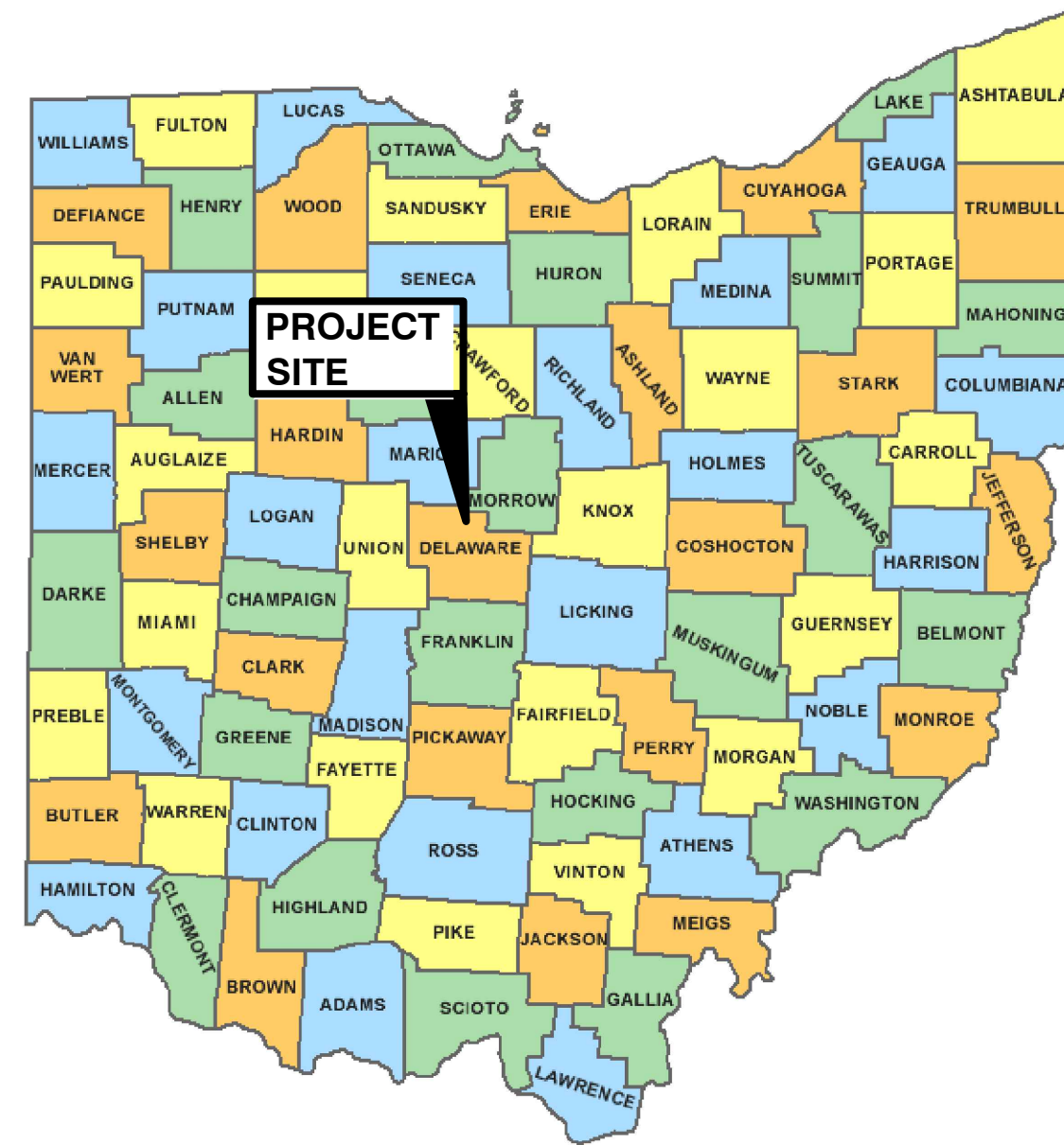
- A. The design has been based on equipment provided by the following manufacturers:

- 1. Trojan Technologies, Inc. Trojan Model UV3050K SS (Basis of Design)
- 2. Calgon Carbon
- 3. ETS-UV, EVOQUA
- 4. Or ODNR approved equal.

2.2 SYSTEM COMPONENTS

- A. Ultraviolet Disinfection

- 1. Channel construction: Type 304 Stainless steel.
- 2. Transition box construction: Type 304 Stainless steel.
- 3. Integral stainless steel flow channel designed to accept the ultraviolet disinfection modules.
- 4. Number of lamps in each UV module: 2
- 5. Number of UV lamp modules: 2
- 6. Number of UV banks: 1
- 7. Lamp array configuration: evenly spaced in both horizontal and vertical rows, parallel to each other and the flow line.
- 8. All material in contact with effluent: stainless steel or quartz.
- 9. All wire exposed to UV light: stainless steel.
- 10. All material exposed to UV light: stainless steel, anodized aluminum, quartz 214, or Teflon.
- 11. UV Modules
 - a. Each lamp shall be enclosed in its individual quartz sleeve, one end of which shall be enclosed and the other end sealed by a lamp end seal and holder.



DIVISION OF ENGINEERING

DELAWARE STATE PARK NEW WASTEWATER TREATMENT FACILITY

DELAWARE COUNTY
DNR-220039



INDEX OF SHEETS

<p><u>CIVIL</u></p> <p>C1 - TITLE SHEET C2 - LOCATION MAP C3 - GENERAL NOTES & MISC. SITE DETAILS C4 - MISC. SITE DETAILS CONT. C5 - WWTP SITE SURVEY C6 - WWTP SITE SURVEY C7 - WWTP PLAN VIEW C8 - WWTP SECTION VIEWS C9 - HYDRAULIC GRADE LINE C10 - WWTP DETAILS C11 - DISK FILTER DETAILS C12 - DISK FILTER DETAILS C13 - DISK FILTER DETAILS C14 - FILTER BUILDING LAYOUT PLAN C15 - UV DISINFECTION DETAILS C16 - DEMOLITION PLAN PHASE 1 C17 - SITE PLAN PHASE 1 C18 - SITE PLAN PHASE 1 PROFILES C19 - S3 PUMP STATION, FORCE MAIN & PROFILES C20 - LAGOON BYPASS PLAN & PROFILE C21 - DEMOLITION PLAN PHASE 2 C22 - SITE PLAN PHASE 2 GRADING C23 - SITE PLAN PHASE 2 PROFILE C24 - STORMWATER POLLUTION PREVENTION PLAN C25 - PUMP STATION - PUMP REPLACEMENTS</p>	<p><u>ARCHITECTURAL</u></p> <p>A1 - LIFE SAFETY PLAN & ARCHITECTURAL GENERAL NOTES A2 - FILTER BUILDING PLANS A3 - FILTER BUILDING EXTERIOR ELEVATIONS A4 - FILTER BUILDING SECTIONS & DETAILS A5 - DOOR SCHEDULES & DETAILS</p>	<p><u>STRUCTURAL</u></p> <p>S0.1 GENERAL STRUCTURAL NOTES S0.2 GENERAL STRUCTURAL NOTES (CONT.) S1.1 FOUNDATION PLAN S1.2 FOUNDATION PLAN S3.1 ROOF FRAMING PLAN S4.1 ROOF FRAMING PLAN S5.1 FOUNDATION DETAILS S7.1 TYPICAL FRAMING DETAILS</p>	<p><u>MECHANICAL</u></p> <p>M1 - FILTER BUILDING MECHANICAL PLAN</p>	<p><u>ELECTRICAL</u></p> <p>E1 - ELECTRICAL SYMBOLS, NOTES, LUMINAIRE SCHEDULE, AND DETAILS E2 - FILTER BUILDING ELECTRICAL PLAN</p>	<p><u>PLUMBING</u></p> <p>P1 - FILTER BUILDING PLUMBING PLAN P2 - PLUMBING DETAILS</p>
---	--	--	--	--	--

APPROVALS

GLEN COBB, CHIEF, DIVISION OF PARKS AND WATERCRAFT
DATE _____

JEREMY WENNER, P.E., CHIEF, DIVISION OF ENGINEERING
DATE _____

REVIEWED BY

KEITH DOLL, P.E., ASSISTANT CHIEF, DIVISION OF ENGINEERING
DATE _____

SCOTT SANDS, P.E.
PROJECT ENGINEER
03-01-24
DATE

STATE OF OHIO
J. SCOTT SANDS
55001
REGISTERED
PROFESSIONAL ENGINEER

▲

ALTERNATES

ALTERNATE 1 - GENERATOR, ATS, LINES, PAD, 4 BOLLARDS
ALTERNATE 2 - S-3 PUMP STATION AND VALVE VAULT REMOVAL, 1,200' DIRECTIONAL DRILLED FORCE MAIN, REPLACEMENT OF 4 PUMP STATION PUMPS, STARTERS & BREAKERS
ALTERNATE 3 - ADD ASPHALT PAVING TO DRIVE & PARKING

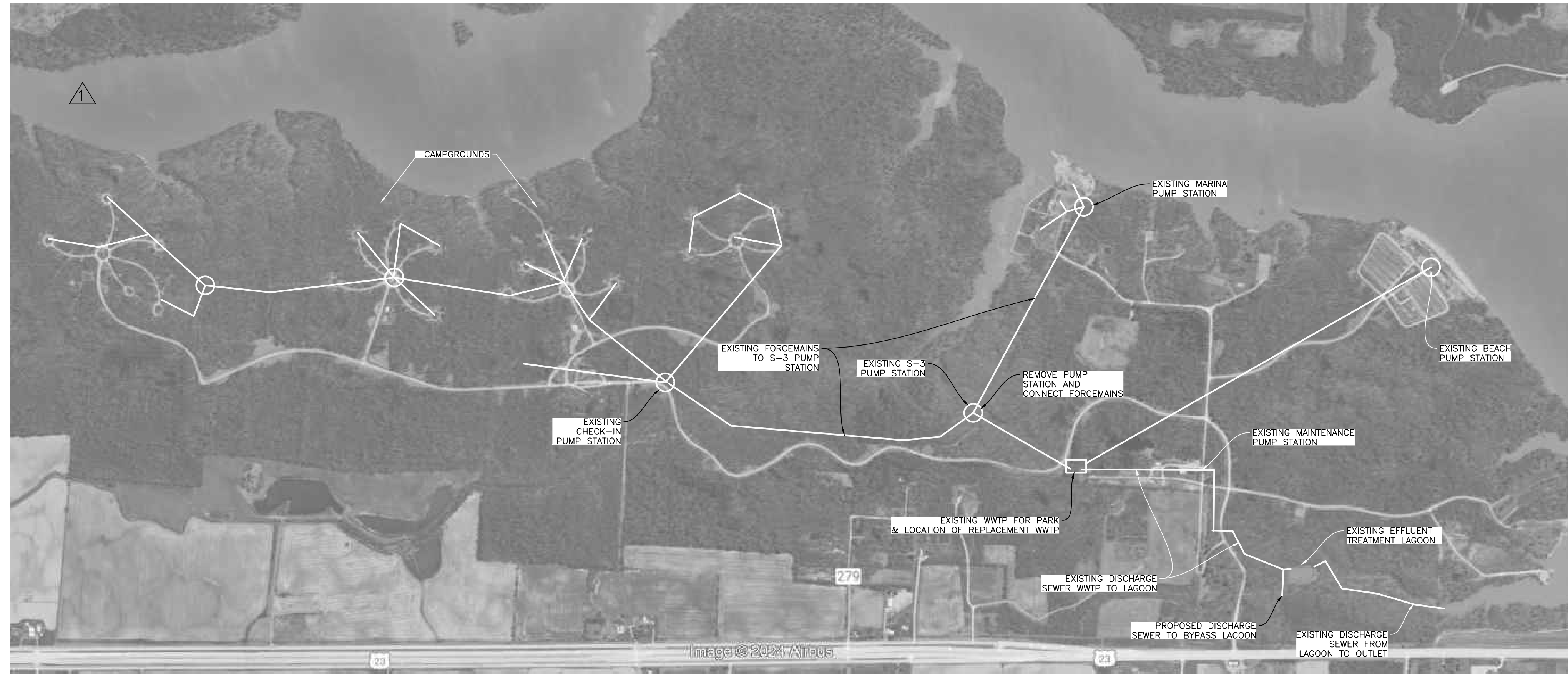
ISSUED FOR
CONSTRUCTION



Know what's below.
Call before you dig.

These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.

OHIO EPA REVISION SUBMISSION DATE: 01/30/2024

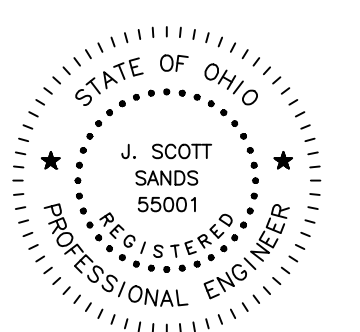


ISSUED FOR CONSTRUCTION

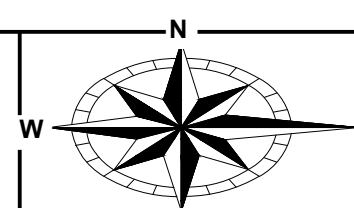


**Know what's below.
Call before you dig.**

These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.



MAIN OFFICE
1495 Old Henderson Road
Columbus, Ohio 43220
614-459-6992



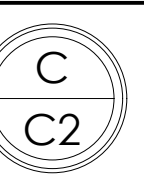
ENGINEERING
Ohio Department of Natural Resources

DESIGNED BY:	...			
DRAWN BY:	...			
CHECKED BY:	...			
APPROVED BY:	...			
		NO.	DATE	SUBJECT
		REVISION OR ISSUE		

AS NOTED
SCALE
MM/DD/YY
03/01/2024

DELAWARE STATE PARK
NEW WASTEWATER TREATMENT FACILITY
DNR-220039

SITE INDEX MAP



APPROVED PLANS: THE CIVIL/SITE DRAWINGS PREPARED BY SANDS DECKER FOR THIS PROJECT ARE NOT FOR CONSTRUCTION UNLESS AND UNTIL ALL APPLICABLE APPROVALS HAVE BEEN SECURED AND THE DRAWINGS ARE ISSUED FOR CONSTRUCTION. LAYOUT, FABRICATION OF MATERIALS, CONSTRUCTION, OR ANY CONSTRUCTION-RELATED ACTIVITIES ASSOCIATED WITH THESE DRAWINGS IS NOT TO PROCEED UNLESS EACH SHEET INCLUDES THE ISSUED FOR CONSTRUCTION LABEL.

GENERAL: THE CURRENT STATE OF OHIO, DEPARTMENT OF TRANSPORTATION CONSTRUCTION & MATERIAL SPECIFICATIONS (ODOTCMS) TOGETHER WITH THE REQUIREMENTS OF DELAWARE COUNTY, INCLUDING ALL SUPPLEMENTS THERETO, IN FORCE ON THE DATE OF CONTRACT, SHALL GOVERN ALL MATERIALS & WORKMANSHIP INVOLVED IN THE IMPROVEMENTS SHOWN ON THESE PLANS. WHEN THERE IS OR APPEARS TO BE A CONFLICT BETWEEN THE ABOVE REFERENCED SPECIFICATIONS & THESE PLANS, THE MOST STRINGENT REQUIREMENT SHALL GOVERN. UNLESS OTHERWISE SPECIFIED, ALL ITEM NUMBERS REFER TO ODOTCMS.

PROJECT LIMITS: THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHTS-OF-WAY, CONSTRUCTION EASEMENTS & PERMANENT EASEMENTS, & SHALL NOT TRESPASS UPON PRIVATE PROPERTY WITHOUT WRITTEN CONSENT OF THE PROPERTY OWNER.

PROTECTION OF SURVEY MONUMENTS: THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, & ANY OTHER SURVEY MONUMENTS OR MARKERS. IF THE ACTIONS OF THE CONTRACTOR, HIS EMPLOYEES, OR HIS SUB-CONTRACTORS RESULT IN DESTRUCTION OF OR DAMAGE TO ANY OF THE ABOVE ITEMS, THOSE ITEMS SHALL BE ACCURATELY RESTORED, AT THE CONTRACTOR'S EXPENSE, BY A LICENSED SURVEYOR REGISTERED IN THE STATE OF OHIO.

MISCELLANEOUS WORK: ALL ITEMS OF WORK CALLED FOR ON THE PLANS FOR WHICH NO SPECIFIC METHOD OF PAYMENT IS PROVIDED SHALL BE PERFORMED BY THE CONTRACTOR & THE COST OF SAME SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS RELATED ITEMS.

PERMITS: THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS UNLESS OTHERWISE INDICATED IN THESE DOCUMENTS.

TRAFFIC CONTROL: THE CONTRACTOR SHALL USE ADEQUATE LIGHTS, SIGNS, FLAGGERS, & BARRICADES AS REQUIRED IN ITEM 614 TO SAFEGUARD THE TRAVELING PUBLIC AT ALL TIMES. ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS. WHERE IT IS ANTICIPATED THAT WORK WILL CLOSE A ROAD OR STREET, THE CONTRACTOR SHALL INFORM THE RESIDENTS TO BE AFFECTED, THE LOCAL LAW ENFORCEMENT AGENCY, THE LOCAL FIRE DEPARTMENT, & THE ENGINEER AS TO THE EXTENT, NATURE, & THE TIME OF THE ANTICIPATED WORK. THE CONTRACTOR SHALL SUBMIT A PLAN & SCHEDULE FOR DETOURING TRAFFIC 10 DAYS PRIOR TO THE CLOSING OF ANY ROAD OR STREET TO THE ENGINEER & ROAD OWNER. DURING A CLOSING OF A ROAD OR STREET, THE CONTRACTOR SHALL PROVIDE ACCESS TO PROPERTIES FOR EMERGENCY VEHICLES & THE PROPERTY OWNERS. NO ROAD OR STREET SHALL BE CLOSED UNTIL THE SCHEDULE IS APPROVED BY THE AGENCY HAVING CONTROL OF THE ROAD.

SAFETY OF CONSTRUCTION: THE CONTRACTOR SHALL COMPLY WITH THE FEDERAL OCCUPATIONAL SAFETY & HEALTH ACT OF 1970 (OSHA) & ALL OTHER APPLICABLE FEDERAL, STATE, & LOCAL LAWS, REGULATIONS, FINDINGS & ORDERS RELATING TO SAFETY & HEALTH CONDITIONS ON THE WORK SITE. CONSTRUCTION METHODS FOR COMPLETING THE WORK DESCRIBED IN THESE CONTRACT DOCUMENTS SHALL BE CONSISTENT WITH THE OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) AMENDED CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUB-PART P, EFFECTIVE MARCH 5, 1990.

EROSION & SEDIMENT CONTROL: PROJECTS DISTURBING ONE ACRE OR MORE (OR PROJECTS DISTURBING LESS THAN ONE ACRE BUT PART OF A LARGER COMMON PLAN OF DEVELOPMENT) ARE REQUIRED TO SUBMIT A NOTICE OF INTENT (NOI) TO THE OHIO EPA FOR COVERAGE UNDER THEIR GENERAL CONSTRUCTION STORM WATER PERMIT & ARE REQUIRED TO MAINTAIN AN APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWP3) ON SITE AT ALL TIMES. ALL PROJECT CONTRACTORS & SUBCONTRACTORS INVOLVED IN ACTIVITIES RELATED TO THE SWP3 OR OTHER STORM WATER PERMIT CONDITIONS ARE REQUIRED TO SUBMIT INDIVIDUAL CO-PERMITTEE NOI APPLICATIONS. ALL LAND DISTURBING ACTIVITIES SHALL COMPLY WITH THE CONDITIONS OF THE GENERAL PERMIT & THE DETAILS DESCRIBED IN THE SWP3.

BORROW MATERIAL & SURPLUS EXCAVATION: THE SITE SHALL BE CONSTRUCTED TO THE FINAL GRADES SHOWN ON THE PLANS. WHERE NECESSARY, THE CONTRACTOR SHALL OBTAIN SUITABLE BORROW MATERIAL ON-SITE OR OFF-SITE AS NEEDED TO COMPLETE THE SITE CONSTRUCTION AS DESCRIBED HEREIN. THE CONTRACTOR SHALL DISPOSE OF ALL SURPLUS EXCAVATION ON SITE &, IF NECESSARY, SHALL HAUL SURPLUS EXCAVATED MATERIAL AWAY FROM THE SITE & DISPOSE OF PROPERLY.

EXISTING UTILITIES: THE INFORMATION SHOWN CONCERNING EXISTING UTILITIES IS APPROXIMATE, THE LOCATION, SIZES, & OTHER INFORMATION SHOWN IS ONLY AS ACCURATE AS THAT PROVIDED BY THE OWNERS OF THE UTILITY. THIS INFORMATION IS NOT REPRESENTED, WARRANTED OR GUARANTEED TO BE COMPLETE OR ACCURATE. THE ENGINEER DOES NOT INDEPENDENTLY VERIFY NOR FIELD LOCATE UTILITIES. THE CONTRACTOR IS RESPONSIBLE TO PHYSICALLY LOCATE & VERIFY, IN THE FIELD, THE HORIZONTAL & VERTICAL LOCATIONS OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO THE BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL SUPPORT, PROTECT & RESTORE ALL EXISTING UTILITIES & THEIR ASSOCIATED ITEMS. THE CONTRACTOR SHALL ADHERE TO ALL APPLICABLE SECTIONS OF THE OHIO REVISED CODE INCLUDING SECTIONS 153.64 & 3781.28. THE CONTRACTOR SHALL NOTIFY THE REGISTERED UTILITY PROTECTION SERVICE & ALL UTILITY OWNERS HAVING FACILITIES IN THE CONSTRUCTION AREA WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND UTILITY PROTECTION SERVICE. THE CONTRACTOR SHALL GIVE NOTIFICATION AS REQUIRED BY OHIO REVISED CODE, AT LEAST TWO (2) & NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS, EXCLUDING SATURDAYS, SUNDAYS, & LEGAL HOLIDAYS, & SHALL COORDINATE HIS WORK WITH THE UTILITY OWNERS UNTIL HIS WORK IS COMPLETED. THE CONTRACTOR SHALL KEEP THE UTILITY OWNERS APPRISED OF HIS SCHEDULE & REQUIREMENTS & SHALL PROVIDE THE PROJECT OWNER WITH EVIDENCE OF HAVING NOTIFIED THE UTILITIES & PROVIDED THEM WITH HIS WORK SCHEDULE PRIOR TO BEGINNING ANY WORK.

THE CONTRACTOR MAY REVIEW THE INFORMATION PROVIDED TO THE ENGINEER BY THE UTILITY OWNERS AT THE ENGINEER'S OFFICE PRIOR TO SUBMITTING A BID. CONTRACTORS REQUIRING MORE INFORMATION REGARDING EXISTING UTILITIES SHOULD CONDUCT THEIR OWN FIELD INVESTIGATIONS OR OTHERWISE LOCATE THE UTILITIES PRIOR TO SUBMITTING A BID FOR THE CONSTRUCTION. SEE EXISTING SITE SURVEY FOR A LISTING OF UTILITIES THAT MAY HAVE UNDERGROUND FACILITIES IN THE PROJECT AREA.

DRAINAGE TILE: ALL FARM DRAINS, ROADWAY DRAINS, & OTHER DRAINAGE TILE WHICH ARE ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS DURING CONSTRUCTION SHALL BE PROVIDED WITH AN UNOBSTRUCTED OUTLET. EXISTING COLLECTOR TILES WHICH ARE LOCATED BELOW THE PROPOSED FINISHED ELEVATION & WHICH CROSS THE TRENCH SHALL BE REPLACED WITHIN THE TRENCH LIMITS BY ITEM 611 CONDUIT. THE LOCATION, TYPE, SIZE, & GRADE OF THE REQUIRED REPLACEMENT SHALL BE DETERMINED BY THE PROJECT ENGINEER OR HIS SITE REPRESENTATIVE DURING CONSTRUCTION. NECESSARY BENDS OR FITTINGS, COMPACTED GRANULAR BACKFILL, & ASSOCIATED ITEMS SHALL BE INCLUDED IN THE BID PRICE.

TEMPORARY PAVEMENT: TEMPORARY PAVEMENT REPLACEMENT SHALL BE PROVIDED ON PERMANENT PAVEMENT DAMAGED OR REMOVED BY THE CONTRACTOR IN THE PERFORMANCE OF THE WORK. AS SOON AS THE TRENCH HAS BEEN BACKFILLED, TEMPORARY PAVEMENT SHALL BE INSTALLED. THE ENGINEER MAY REQUIRE THAT ALL MATERIALS & EQUIPMENT INCIDENTAL TO PROVIDING THE TEMPORARY PAVEMENT BE ON THE JOB SITE PRIOR TO REMOVING THE EXISTING PAVEMENT. TEMPORARY PAVEMENT SHALL CONSIST OF 2" OF BITUMINOUS COLD MIX PLACED UPON 6" OF COMPACTED ITEM 304, AGGREGATE BASE. TEMPORARY PAVEMENT SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL PERMANENT PAVEMENT IS INSTALLED.

PERMANENT PAVEMENT: WHERE DAMAGED OR REMOVED, THE PAVEMENT SHALL BE REPLACED BY FIRST REMOVING TEMPORARY PAVEMENT DOWN TO CLEAN GRANULAR MATERIAL & REMOVING EXISTING PAVEMENT FOR AT LEAST 12" BEYOND THE TRENCH LIMITS ON EACH SIDE. PAVEMENT TO BE REMOVED SHALL BE NEATLY SAVED NOT MORE THAN 72 HOURS PRIOR TO THE PLACING OF PERMANENT PAVEMENT MATERIALS. PERMANENT PAVEMENT REPLACEMENT MATERIALS & WORKMANSHIP SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS. ITEM 407, TACK COAT, SHALL BE APPLIED TO THE EXPOSED EXISTING PAVEMENT EDGES WHEN EITHER THE EXISTING OR NEW PAVEMENT IS BITUMINOUS MATERIAL. WHEN THE PERMANENT PAVEMENT IS BITUMINOUS MATERIAL, ITEM 407, TACK COAT SHALL BE APPLIED TO BITUMINOUS OR CONCRETE BASE MATERIAL PRIOR TO THE PLACING OF THE PERMANENT PAVEMENT.

INSTALLATION IN EMBANKMENT: WHERE UTILITIES ARE TO BE INSTALLED IN EMBANKMENT AREAS, THE EMBANKMENT SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS, A MINIMUM OF 2' ABOVE THE PIPE BUT SUFFICIENTLY ABOVE THE PIPE TO PROTECT THE PIPE FROM DAMAGE DUE TO FURTHER CONSTRUCTION ACTIVITIES PRIOR TO THE INSTALLATION OF THE UTILITY.

CONFLICTS IN GRADE: IN ALL CONFLICTS IN GRADE BETWEEN THE WATER LINES OR WATER SERVICES & OTHER EXISTING UTILITIES, THE WATER LINE/SERVICE LINE SHALL BE LOWERED DURING CONSTRUCTION. A MINIMUM 18" VERTICAL & 10' HORIZONTAL CLEARANCE SHALL BE MAINTAINED BETWEEN THE WATER LINE & ANY SANITARY OR STORM SEWER. 12" MINIMUM VERTICAL CLEARANCE FOR OTHER UTILITIES. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AHEAD OF HIS CONSTRUCTION OPERATIONS TO ALLOW FOR ADJUSTMENTS IN GRADE TO THE WATER LINE THAT MAY BE REQUIRED AS A RESULT OF POTENTIAL CONFLICTS WITH AN EXISTING UTILITY. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR LOWERING THE WATER LINE TO AVOID CONFLICTS WITH EXISTING UTILITIES.

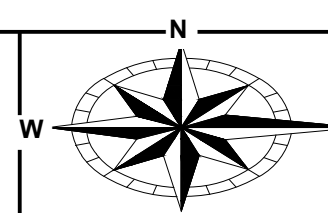
EXISTING DITCHES: WHERE IT BECOMES NECESSARY TO LOCATE A MAIN LINE VALVE, FIRE HYDRANT OR MANHOLE IN AN EXISTING DITCH, THE CONTRACTOR SHALL RELOCATE THE DITCH BEHIND THE PROPOSED VALVE, HYDRANT OR MANHOLE.

MANHOLE TOPS: WHERE MANHOLES ARE LOCATED WITHIN PUBLIC OR PRIVATE PAVEMENT, SIDEWALK, CONCRETE PAD OR PAVED SHOULDER, THE TOPS SHALL BE BUILT TO EXISTING PAVEMENT ELEVATIONS. ELSEWHERE MANHOLES SHALL BE BUILT OR SUBSEQUENTLY ADJUSTED TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE MANHOLE. THE COST OF ADJUSTMENT IS TO BE INCLUDED IN THE PRICE BID FOR THE MANHOLE.

FINAL GRADING & CLEAN-UP: THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS & MATERIALS RESULTING FROM HIS OPERATION & RESTORE ALL SURFACES, STRUCTURES, DITCHES, SIGNS, MAILBOXES, FENCES, GUARDRAILS, OR OTHER PHYSICAL FEATURES OR PROPERTY DISTURBED OR DAMAGED DURING WORK UNDER THIS CONTRACT TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER. THE COST OF ALL SUCH WORK SHALL BE INCLUDED WITH THE VARIOUS RELATED ITEMS.

These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.

MAIN OFFICE
1495 Old Henderson Road
Columbus, Ohio 43220
614-459-6992

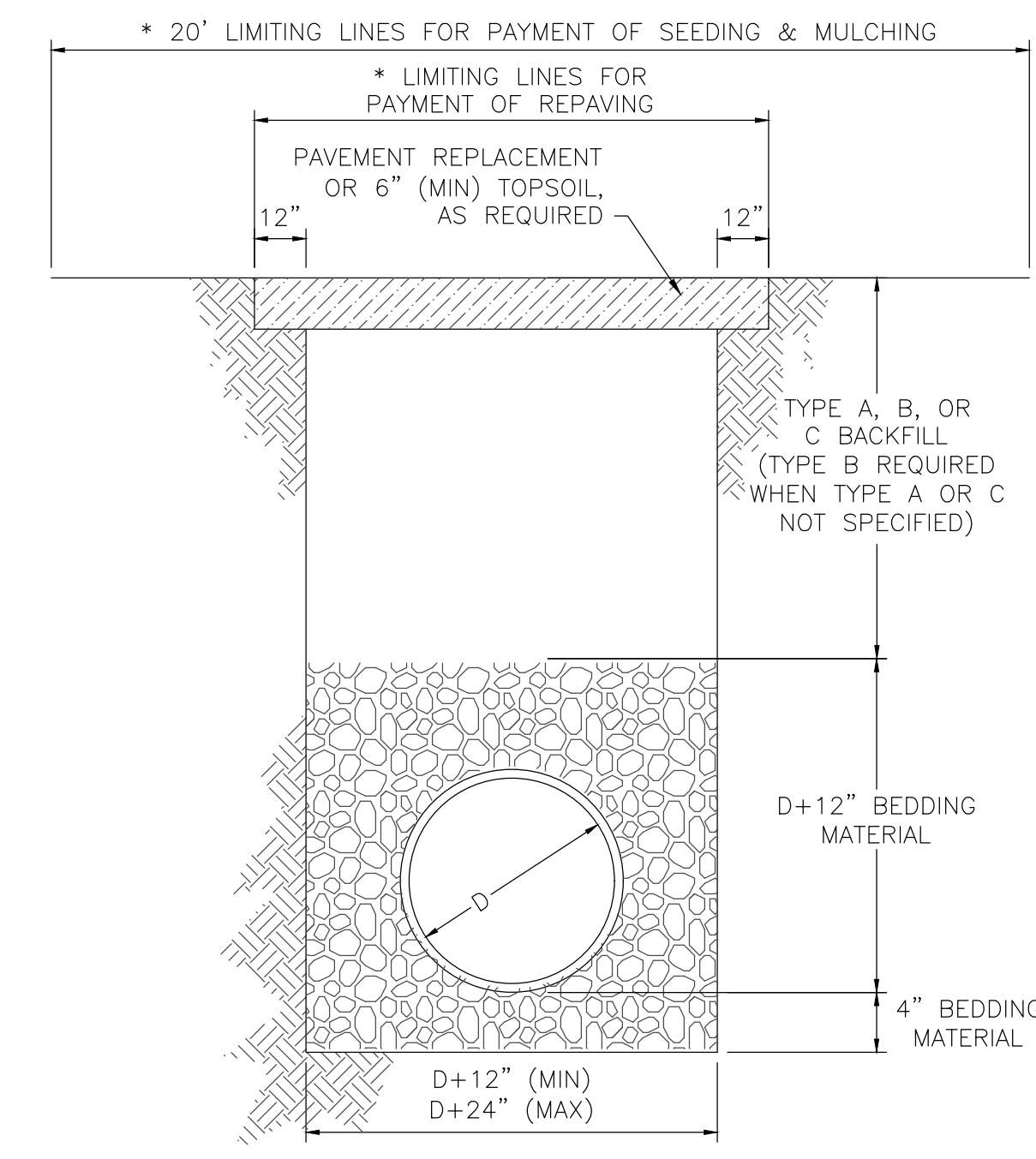
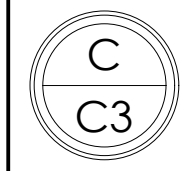


ENGINEERING
Ohio Department of Natural Resources

DESIGNED BY:	...	AS NOTED SCALE
DRAWN BY:	...	MM/DD/YY
CHECKED BY:	...	03/01/2024
APPROVED BY:	...	
	NO. DATE SUBJECT	
	REVISION OR ISSUE	

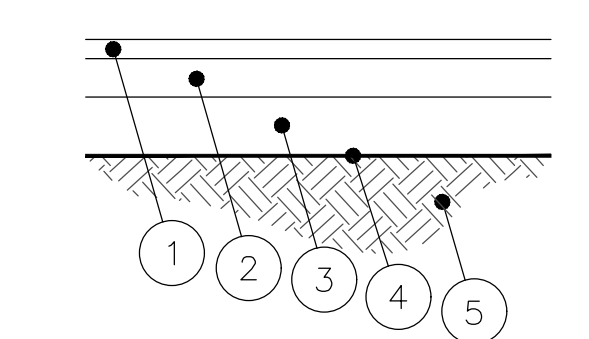
DELAWARE STATE PARK
NEW WASTEWATER TREATMENT FACILITY
DNR-220039

GENERAL NOTES & MISC. SITE DETAILS

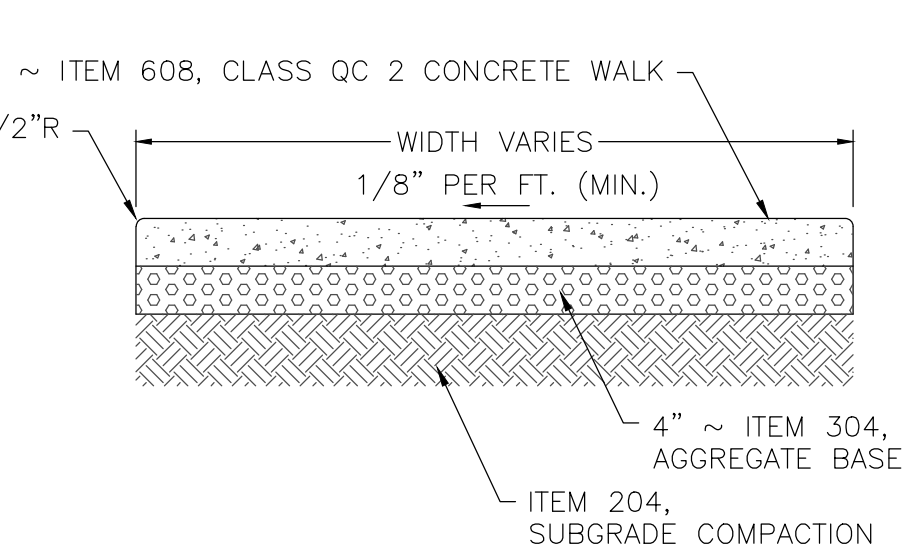


* LIMITING LINES FOR PAYMENT APPLY ONLY WHEN CONTRACT PROVIDES FOR UNIT PRICE PAYMENT OF PAVEMENT REPLACEMENT AND SEEDING & MULCHING.

TYP. TRENCH FOR PVC STORM & SANITARY PIPE
NOT TO SCALE

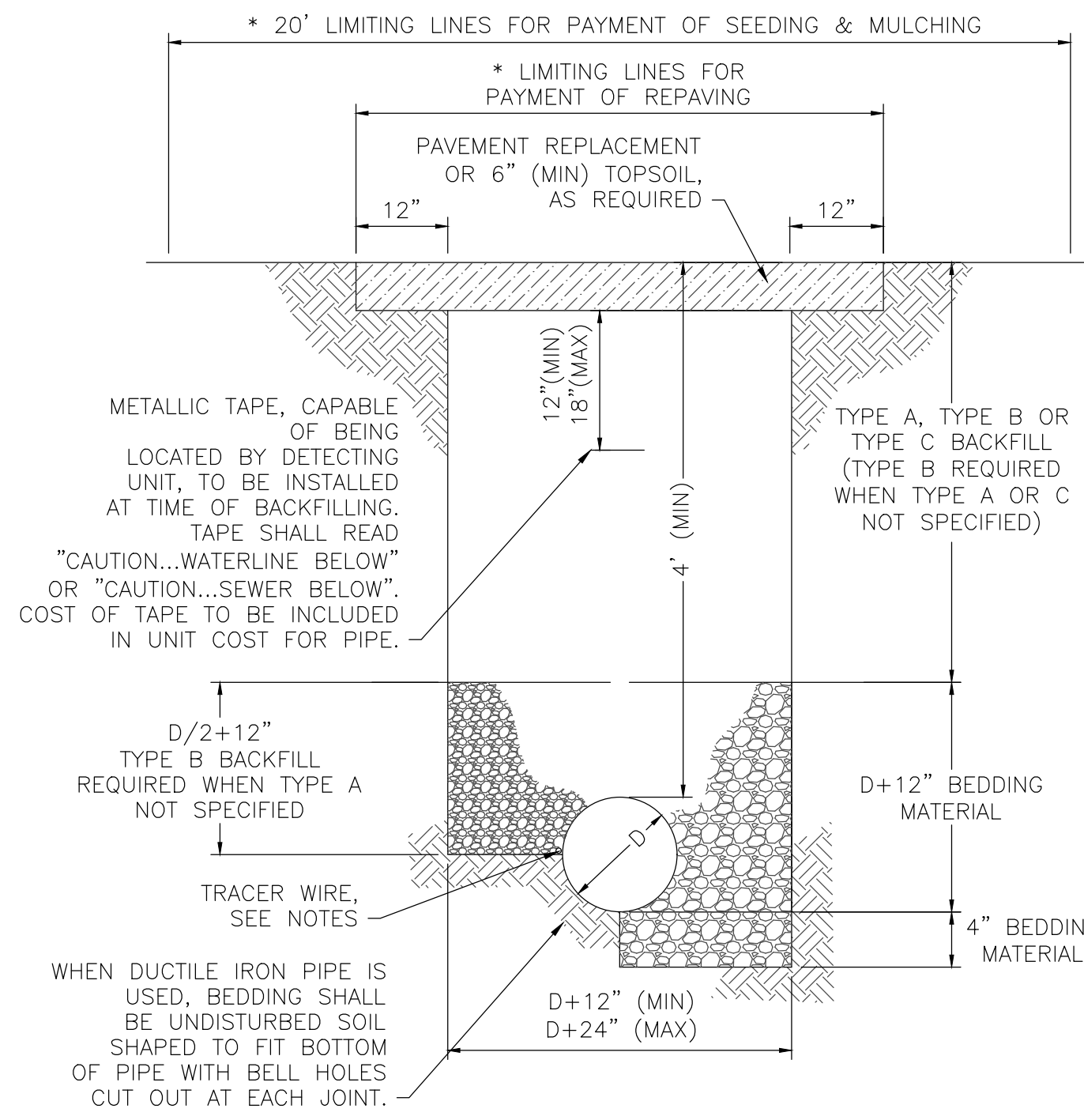


GRAVEL PAVEMENT
NOT TO SCALE



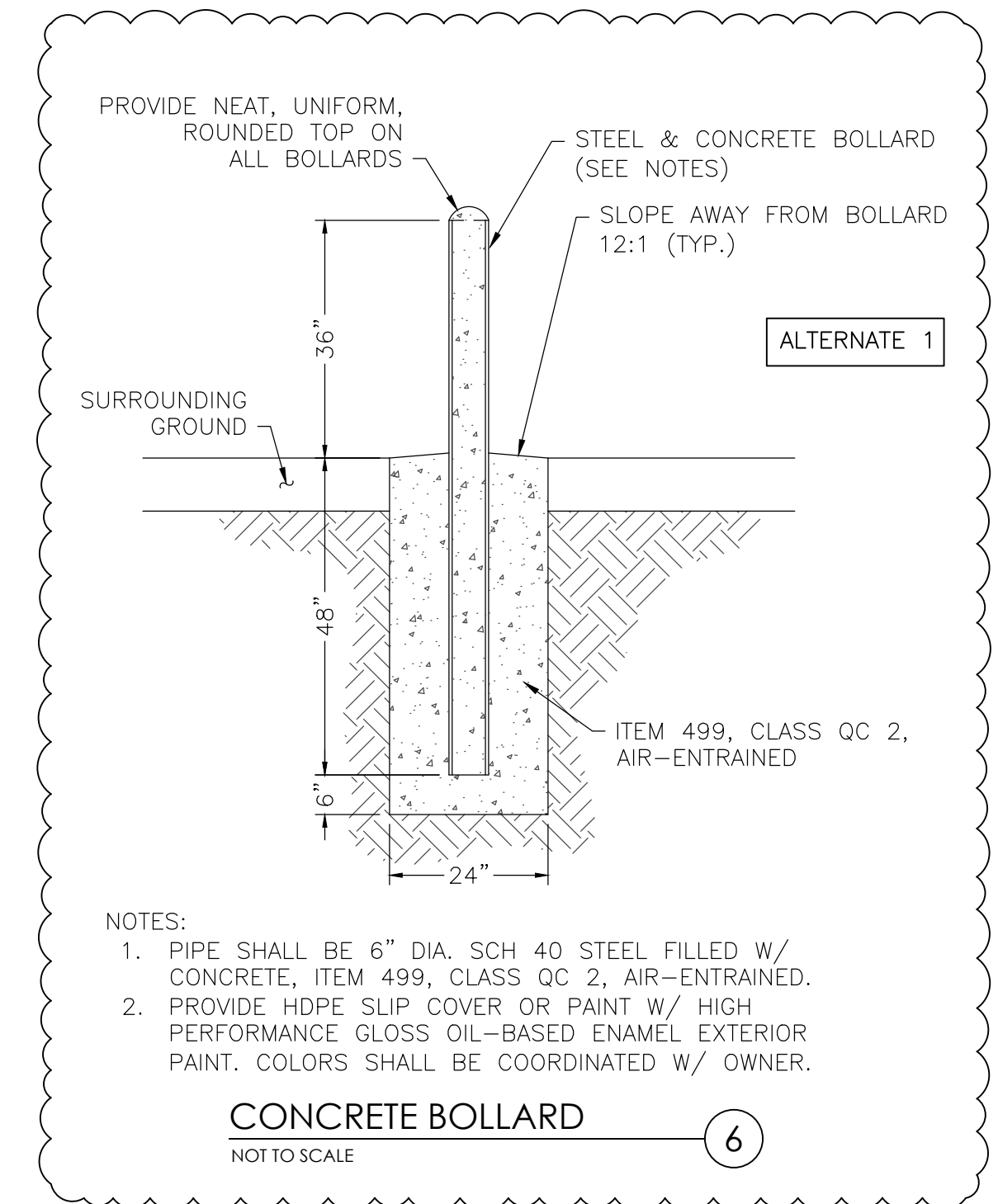
CONCRETE SIDEWALK
NOT TO SCALE

- NOTES:
- ITEM NUMBERS REFER TO STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS.
 - AGGREGATE FOR BEDDING IS WASHED GRAVEL NO. 57, NO. 6, NO. 67, NO. 68, OR NO. 7, ITEM 703.
 - TYPE A BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL AS SPECIFIED IN ITEM 304, GRADE A. TYPE A BACKFILL SHALL BE USED WHEN THE TRENCH IS 5' OR LESS FROM ANY PAVED OR GRAVEL SURFACE, OR BENEATH THE PAVEMENT OR GRAVEL. COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 203.
 - TYPE B BACKFILL SHALL BE NATURAL SOIL FREE FROM STONES LARGER THAN 2" ACROSS THEIR GREATEST DIMENSION, TOPSOIL, VEGETATION, DEBRIS, RUBBISH, OR FROZEN MATERIAL, COMPACTED TO 95% OF ITS MAXIMUM LABORATORY DRY WEIGHT.
 - TYPE C BACKFILL SHALL BE NATURAL SOIL FREE FROM STONES LARGER THAN 6" ACROSS THEIR GREATEST DIMENSION, TOPSOIL, VEGETATION, DEBRIS, RUBBISH, OR FROZEN MATERIAL, COMPACTED TO 90% OF ITS MAXIMUM LABORATORY DRY WEIGHT. WHEN APPROVED BY THE ENGINEER, STONES NO LARGER THAN ONE CUBIC FOOT MAY BE DEPOSITED AT LEAST 3' ABOVE THE TOP OF THE PIPE.
 - THE EXCAVATED TRENCH WIDTH 12" ABOVE THE CONDUIT MAY BE INCREASED WITHOUT EXTRA COMPENSATION.
 - COVER OVER PIPE SHALL BE AS SPECIFIED ON PLANS. UNLESS OTHERWISE SPECIFIED, ROOF DRAINS SHALL HAVE 30" MIN. COVER AND SANITARY SEWER SERVICES SHALL HAVE 48" MIN. COVER.



* LIMITING LINES FOR PAYMENT APPLY ONLY WHEN CONTRACT PROVIDES FOR UNIT PRICE PAYMENT OF PAVEMENT REPLACEMENT AND SEEDING & MULCHING.

TYP. TRENCH FOR WATER MAINS & SEWER FORCE MAINS
NOT TO SCALE

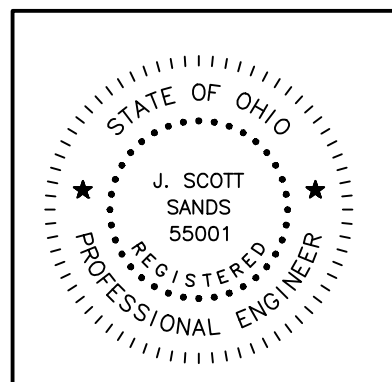


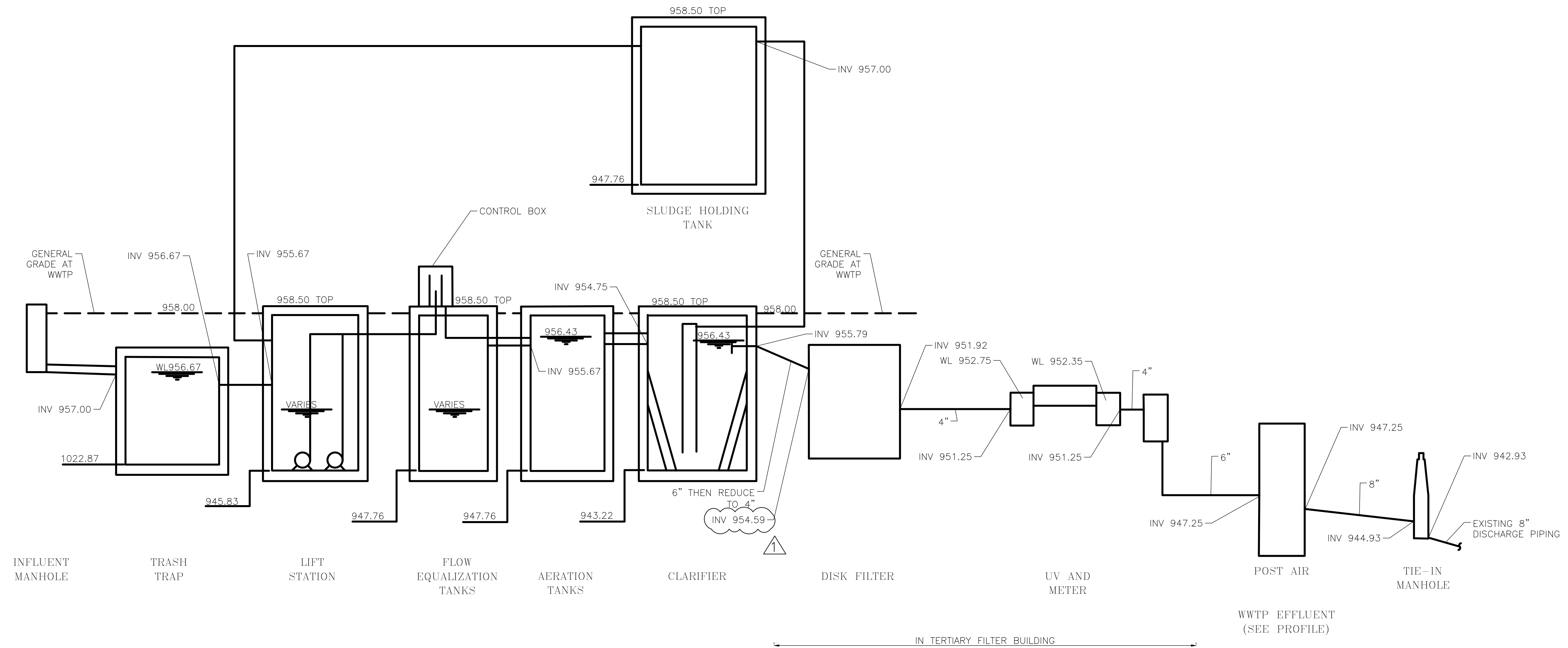
- NOTES:
- PIPE SHALL BE 6" DIA. SCH 40 STEEL FILLED W/ CONCRETE, ITEM 499, CLASS QC 2, AIR-ENTRAINED.
 - PROVIDE HDPE SLIP COVER OR PAINT W/ HIGH PERFORMANCE GLOSS OIL-BASED ENAMEL EXTERIOR PAINT. COLORS SHALL BE COORDINATED W/ OWNER.

CONCRETE BOLLARD
NOT TO SCALE

- NOTES:
- ITEM NUMBERS REFER TO STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIAL SPECIFICATIONS.
 - AGGREGATE FOR BEDDING IS NO. 57, NO. 6, NO. 67, NO. 68, OR NO. 7, ITEM 703.
 - TYPE A BACKFILL SHALL BE COMPACTED GRANULAR MATERIAL AS SPECIFIED IN ITEM 304, GRADE A. TYPE A BACKFILL SHALL BE USED WHEN THE TRENCH IS 5' OR LESS FROM ANY PAVED OR GRAVEL SURFACE, OR BENEATH THE PAVEMENT OR GRAVEL. COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 203.
 - TYPE B BACKFILL SHALL BE NATURAL SOIL FREE FROM STONES LARGER THAN 2" ACROSS THEIR GREATEST DIMENSION, TOPSOIL, VEGETATION, DEBRIS, RUBBISH, OR FROZEN MATERIAL, COMPACTED TO 95% OF ITS MAXIMUM LABORATORY DRY WEIGHT.
 - TYPE C BACKFILL SHALL BE NATURAL SOIL FREE FROM STONES LARGER THAN 6" ACROSS THEIR GREATEST DIMENSION, TOPSOIL, VEGETATION, DEBRIS, RUBBISH, OR FROZEN MATERIAL, COMPACTED TO 90% OF ITS MAXIMUM LABORATORY DRY WEIGHT. WHEN APPROVED BY THE ENGINEER, STONES NO LARGER THAN ONE CUBIC FOOT MAY BE DEPOSITED AT LEAST 3' ABOVE THE TOP OF THE PIPE.
 - THE EXCAVATED TRENCH WIDTH 12" ABOVE THE CONDUIT MAY BE INCREASED WITHOUT EXTRA COMPENSATION.
 - RIGID PIPE SHALL BE DUCTILE IRON, THICKNESS CLASS 53, PRESSURE RATING 350. FLEXIBLE PIPE SHALL BE PVC C-900 DR14 FOR SIZES UP TO 12" AND PVC C-905 DR18 FOR LARGER SIZES.
 - WHEN CALLED FOR ON THE CONSTRUCTION DRAWINGS, ENCASEMENT SHALL BE CLASS C CONCRETE.
 - SECTIONS ARE SYMMETRICAL ABOUT THE CENTERLINE.
 - GRANULAR BEDDING AND BACKFILL SHALL NOT BE REQUIRED FOR DUCTILE IRON PIPE UNLESS WITHIN LIMITS REQUIRING GRANULAR BACKFILL FOR ROADS AND DRIVEWAYS.
 - INSTALL #12 AWG INSULATED SOLID CORE TRACER WIRE RATED FOR UNDERGROUND APPLICATIONS ALONG/ABOVE ALL CONSTRUCTED WATER MAINS AND SEWER FORCE MAINS. COST OF TRACE WIRE BE INCLUDED IN UNIT COST FOR PIPE. SEE TRACE WIRE SPECIFICATION FOR FURTHER DETAILS.

ISSUED FOR CONSTRUCTION



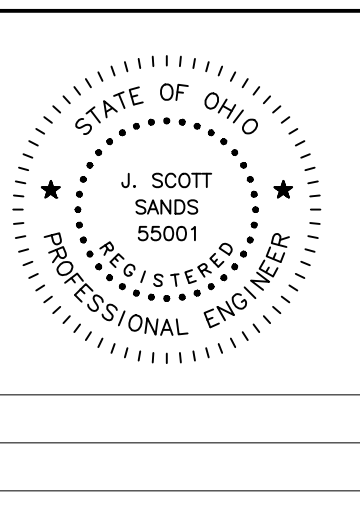


ISSUED FOR CONSTRUCTION

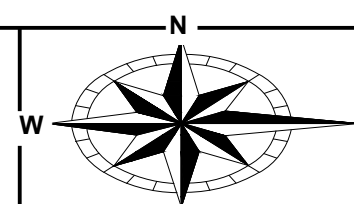


**Know what's below.
Call before you dig.**

These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.



MAIN OFFICE
1495 Old Henderson Road
Columbus, Ohio 43220
614-459-6992



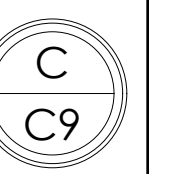
ENGINEERING
Ohio Department of Natural Resources

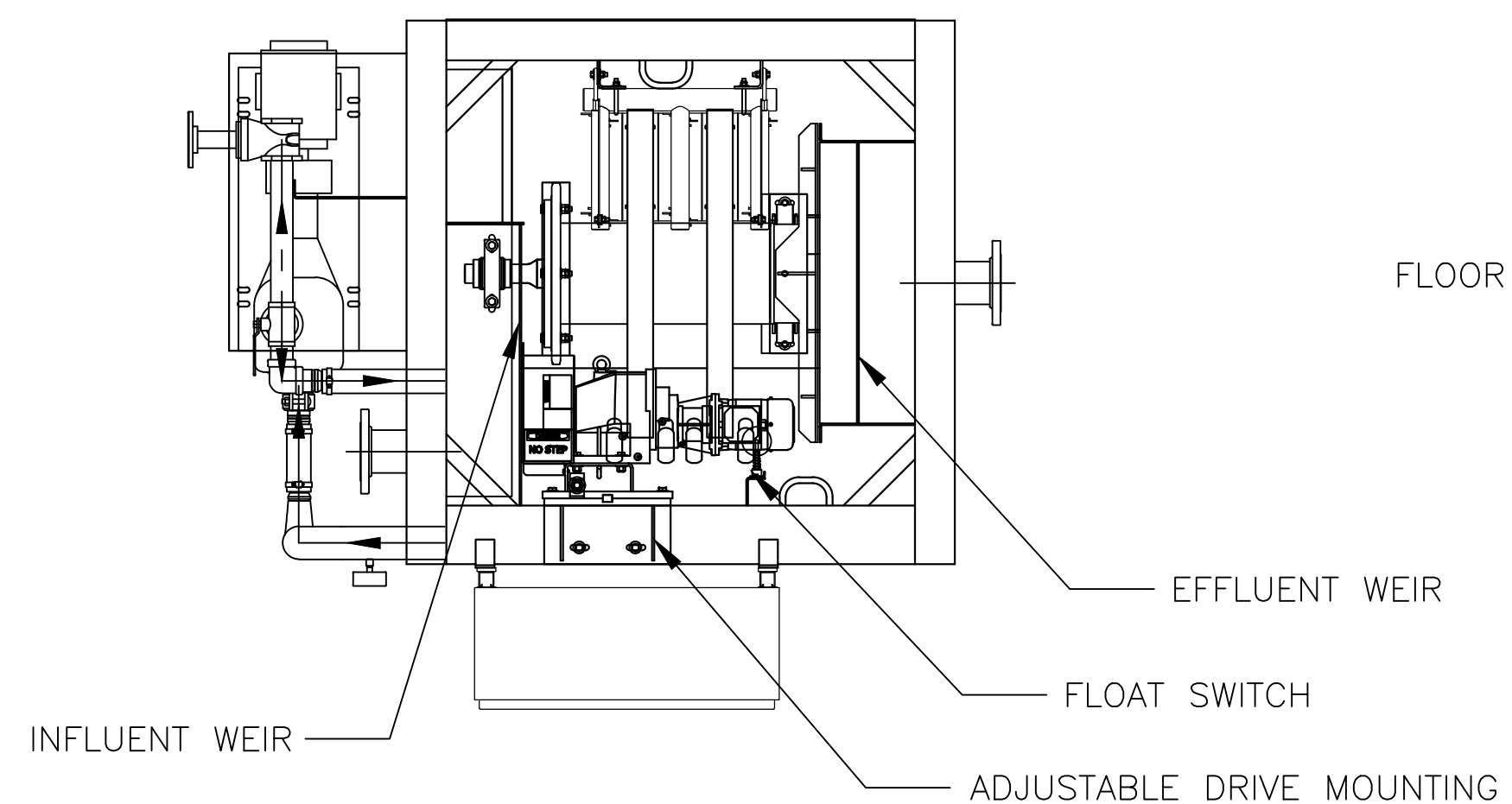
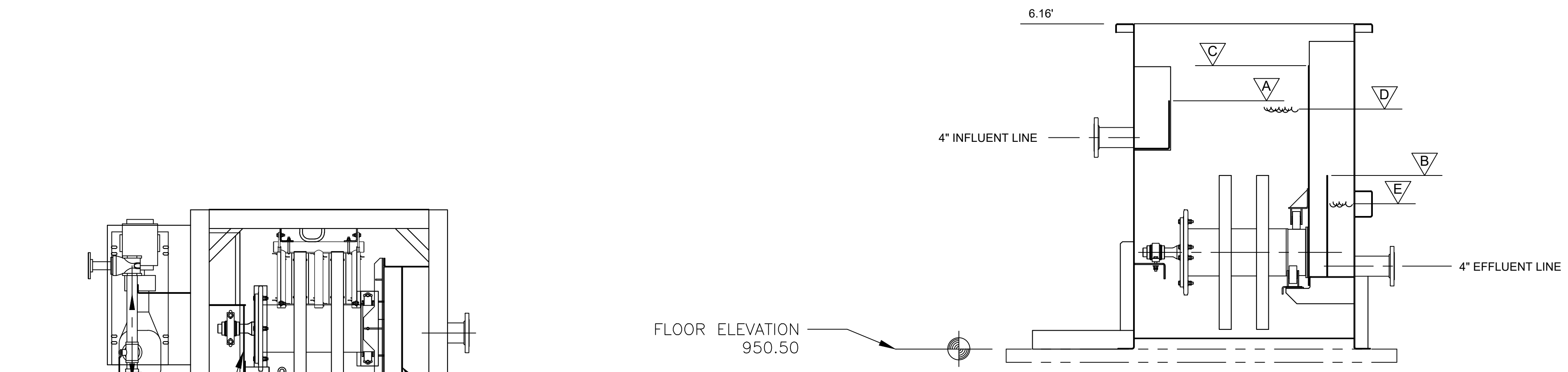
DESIGNED BY:	...		
DRAWN BY:	...		
CHECKED BY:	...		
APPROVED BY:	...	NO. DATE	SUBJECT
		REVISION OR ISSUE	

AS NOTED
SCALE
MM/DD/YY
03/01/2024

DELAWARE STATE PARK
NEW WASTEWATER TREATMENT FACILITY
DNR-220039

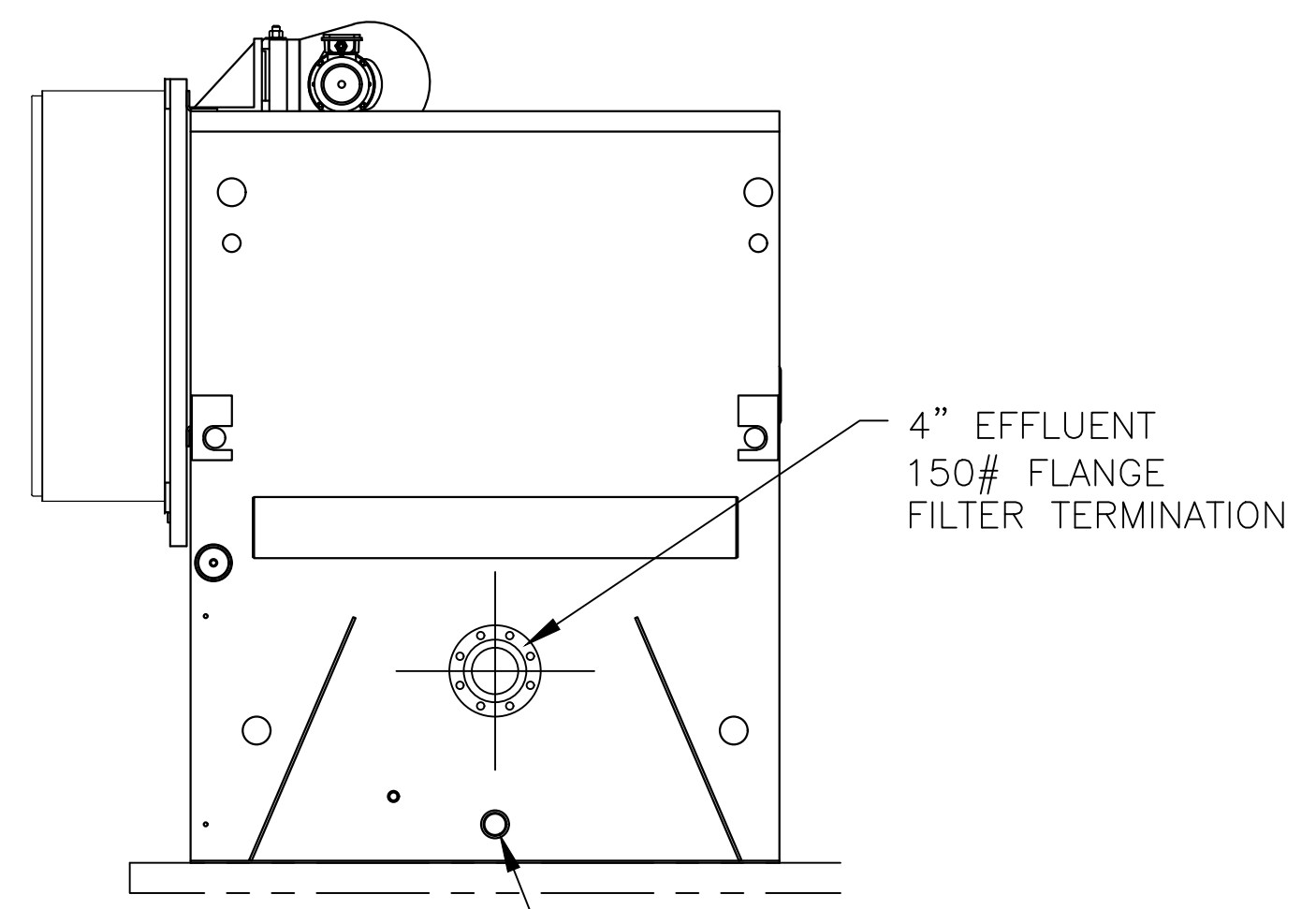
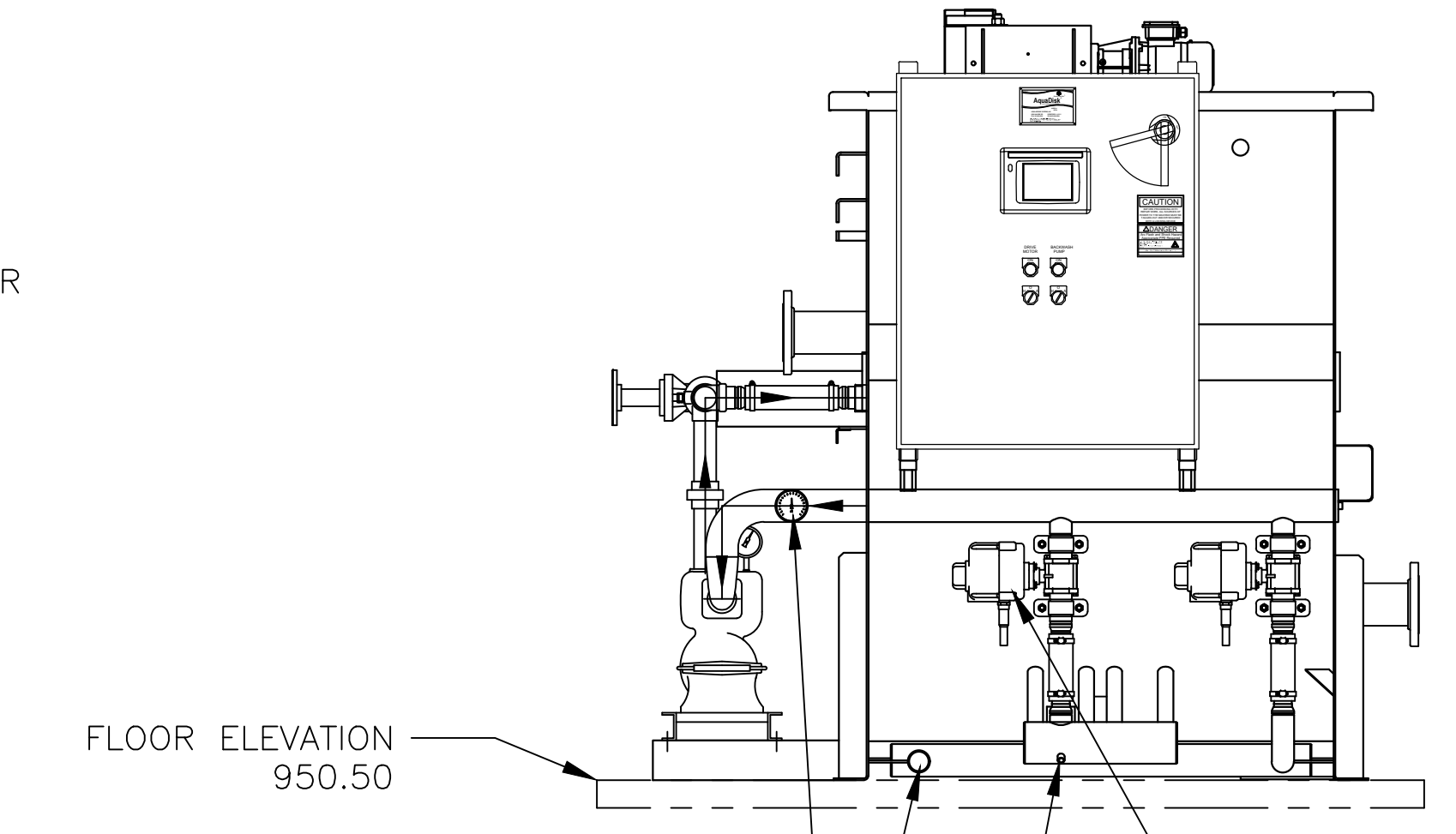
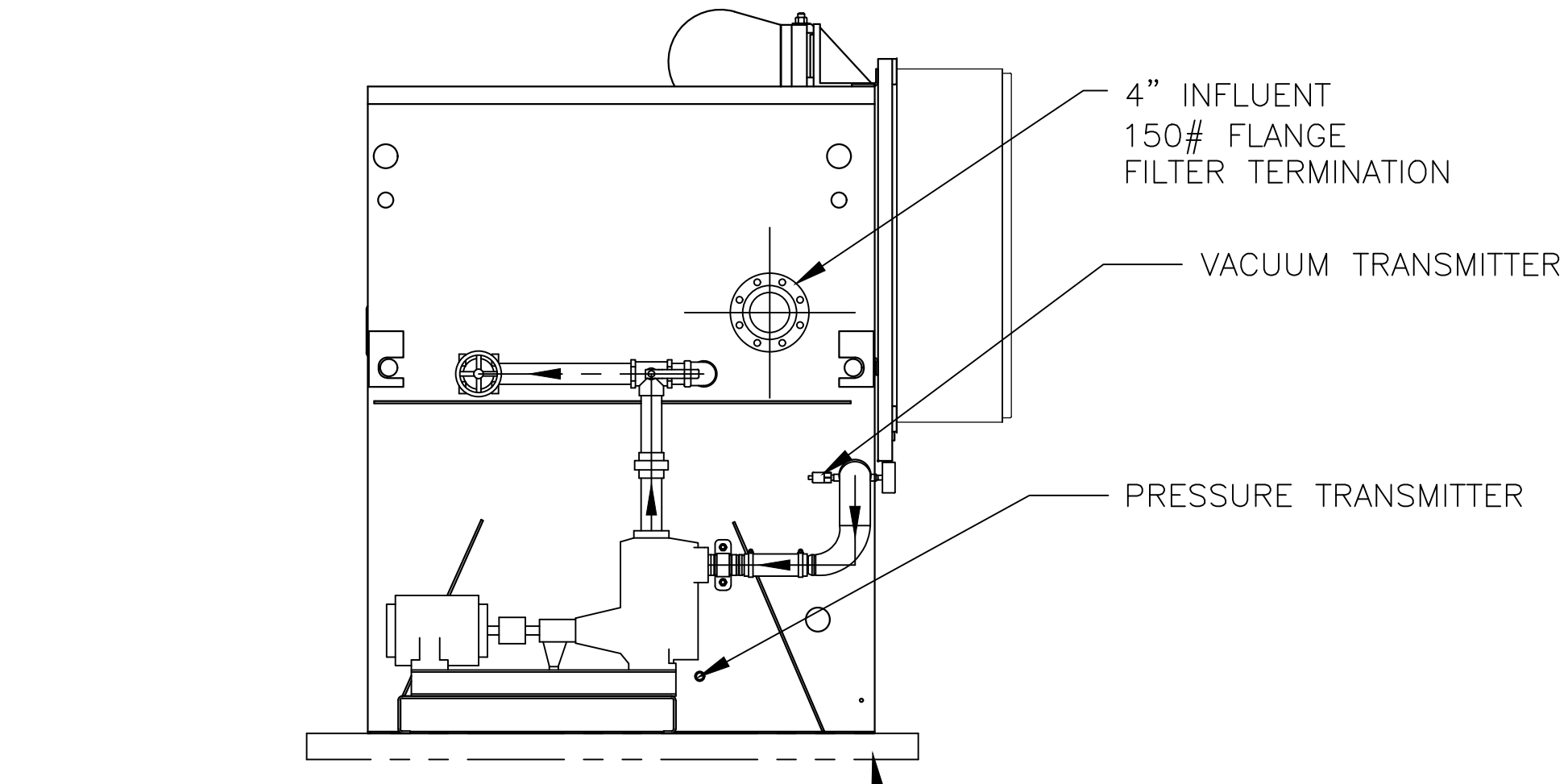
WWTP HYDRAULIC PROFILE





FLOW CONDITION	MAX. DESIGN
QTY FILTERS ONLINE	1
PLANT FLOW (MGD)	0.03
FLOW / FILTER (MGD)	0.03
FLUX RATE (GPM/FT ²)	1.93

LOCATION	LENGTH (FT)	ELEVATION (FT)	NAPPE EL (FT)
A INFLUENT WEIR	2.50	4.71 (955.21)	4.76
B EFFLUENT WEIR	2.50	3.29 (953.79)	3.34
C OVERFLOW WEIR	2.50	5.35 (955.85)	5.40
D BACKWASH INITIATE	-	4.67 (955.17)	-
E MAX. DOWNSTREAM EL	-	2.79 (953.29)	-



MINIMUM 3" THICK CONCRETE PAD UNDER TANK

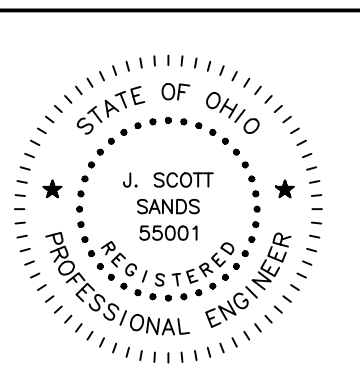
2" MANUAL BALL VALVE FOR DRAIN PROVIDED BY MANUFACTURER
 2" BACKWASH / SOLIDS WASTE ELECTRIC BALL VALVES FACTORY INSTALLED

DRY WT (LBS)	OPER. WT. (LBS)
3,475	7,750

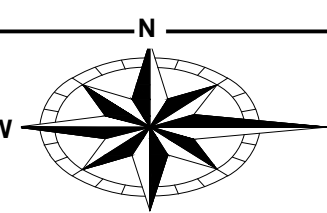
These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.

NOTE: AQUA-AEROBIC AQUA MINIDISK, CLOTH MEDIA FILTER SYSTEM IS BASIS OF DESIGN

ISSUED FOR CONSTRUCTION



MAIN OFFICE
 1495 Old Henderson Road
 Columbus, Ohio 43220
 614-459-6992



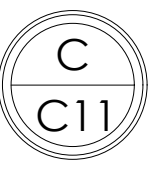
ENGINEERING
 Ohio Department of Natural Resources

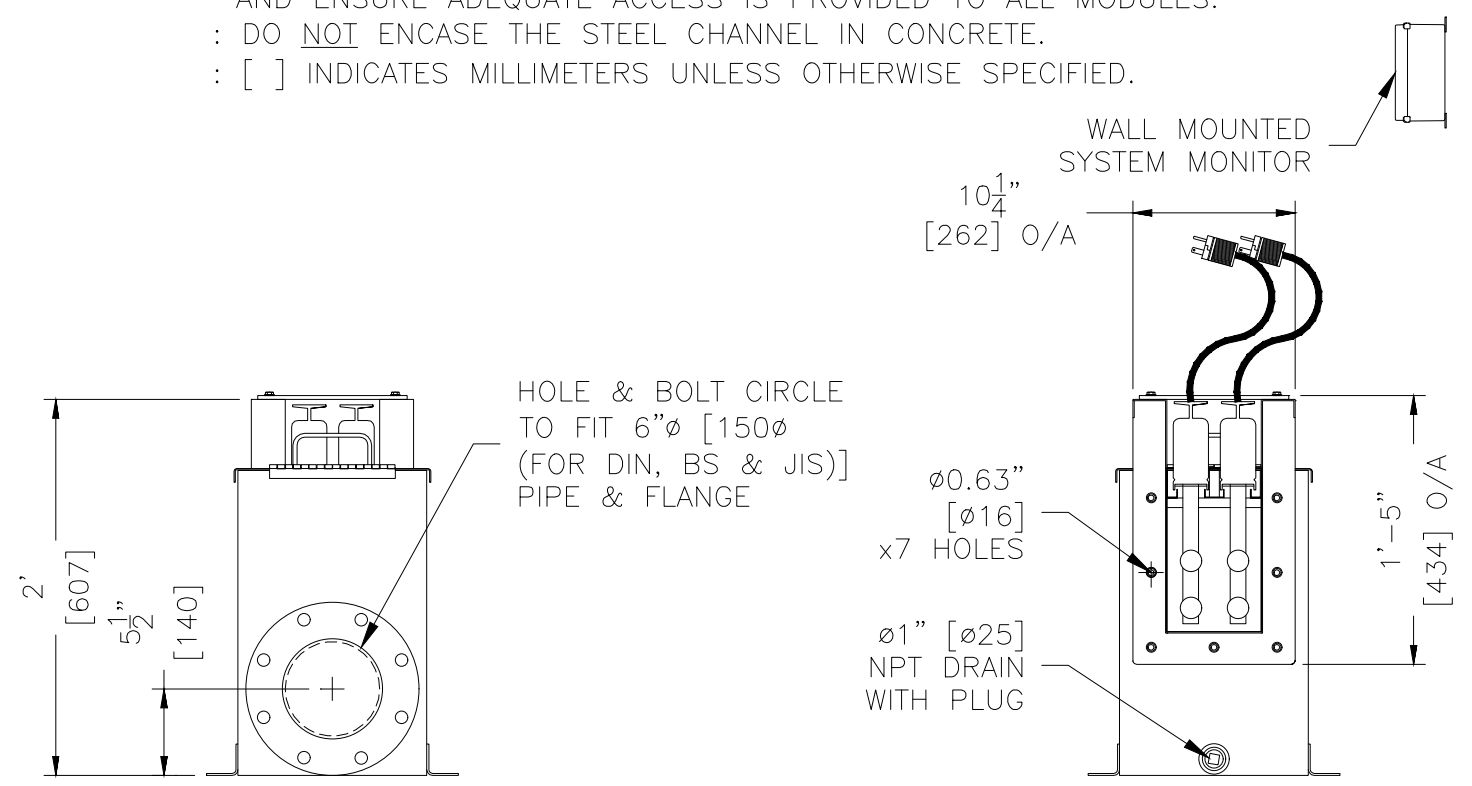
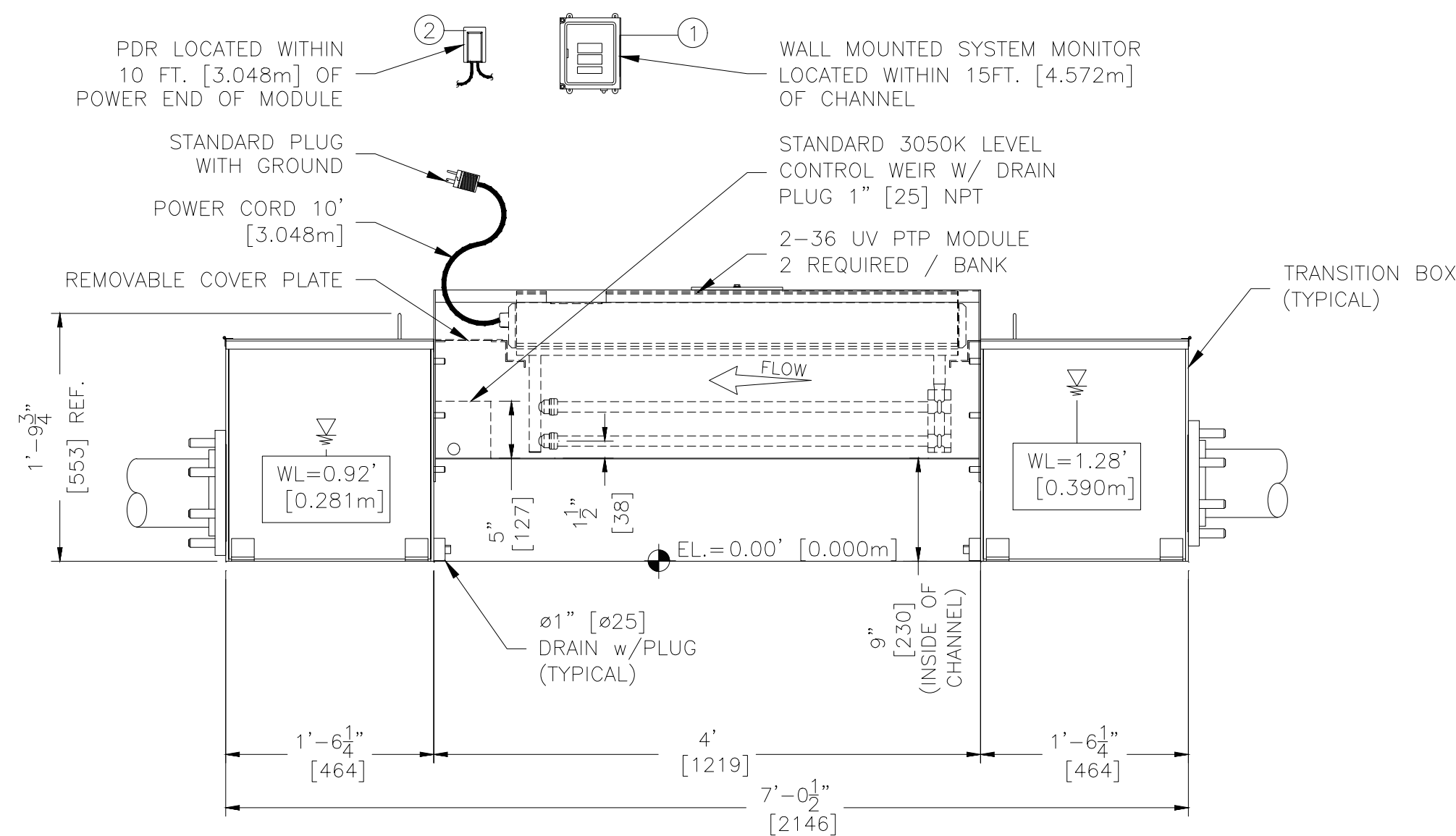
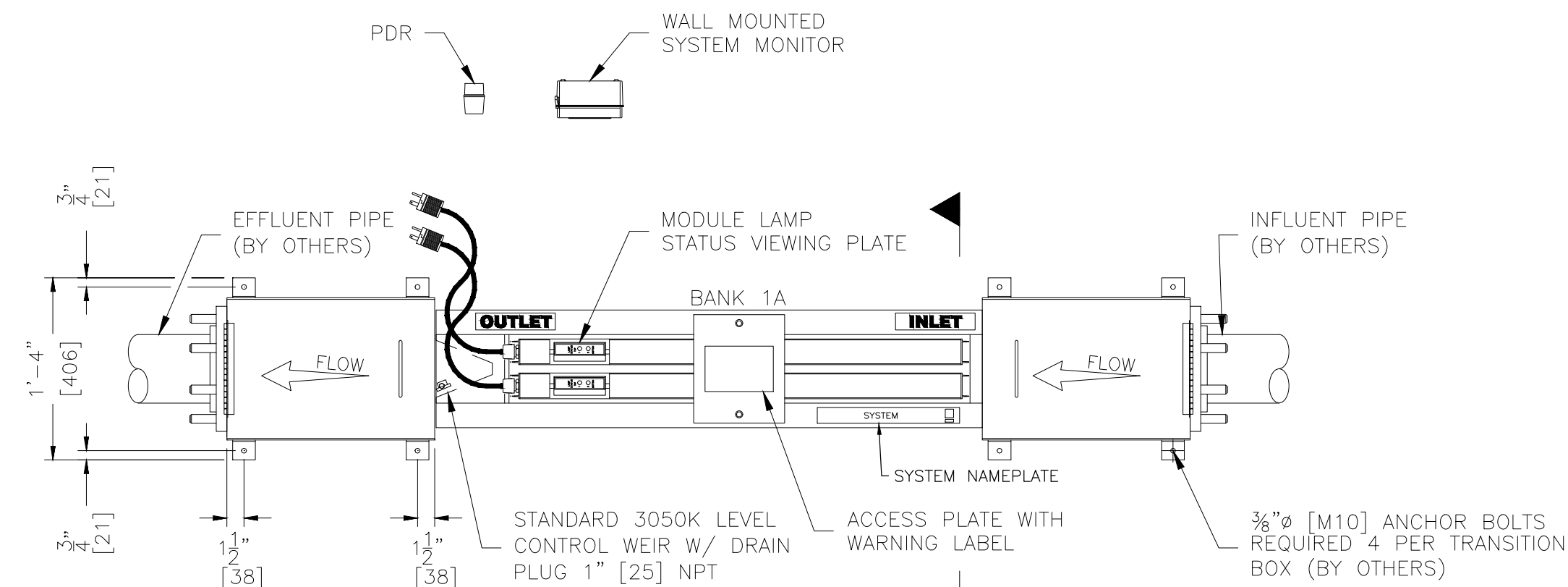
DESIGNED BY: ...			
DRAWN BY: ...			
CHECKED BY: ...			
APPROVED BY: ...			
	NO. DATE	SUBJECT	
	REVISION OR ISSUE		

AS NOTED SCALE
 MM/DD/YY
 03/01/2024

DELAWARE STATE PARK
 NEW WASTEWATER TREATMENT FACILITY
 DNR-220039

DISK FILTER DETAILS





EQUIPMENT INTERCONNECTIONS

No.	DESCRIPTION	FROM	TO
1	SYSTEM MONITOR POWER SUPPLY 120V, 1 PHASE, 2 WIRE, 5 AMPS	DISTRIBUTION PANEL (DP) (NOT SHOWN) (BY OTHERS)	SYSTEM MONITOR
2	POWER DISTRIBUTION RECEPTACLE (PDR) POWER SUPPLY 120V, 1 PHASE, 2 WIRE, ACTUAL DRAW 1.7 AMPS / PDR	DP (NOT SHOWN) (BY OTHERS)	PDR

NOTES:

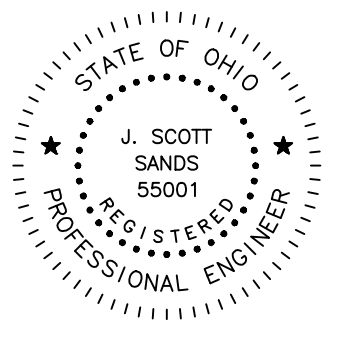
- : DO NOT SLOPE CHANNEL FLOOR.
- : CHANNEL WIDTH & DEPTH MUST BE KEPT WITHIN A TOLERANCE OF + OR - 1/4" [6].
- : ANCHOR BOLTS ARE NOT SUPPLIED BY TROJAN TECHNOLOGIES.
- : BOLTS, WASHERS & NUTS FOR CONNECTION OF CHANNEL TO TRANSITION BOXES ARE PROVIDED BY TROJAN TECHNOLOGIES.
- : SYSTEM CONDUIT, WIRING, DISTRIBUTION PANELS & INTERCONNECTIONS BY OTHERS.
- : ELECTRICAL REQUIREMENTS SHOWN ARE TO SUPPLY TROJAN UV EQUIPMENT ONLY. ELECTRICAL INRUSH FACTOR TO BE ADDED AS PER LOCAL CODE.
- : ANY EXTRA OUTLETS NOT BEING USED BY TROJAN EQUIPMENT HAVE NOT BEEN INCLUDED IN THE INTERCONNECT AMPERAGE.
- : CONTRACTOR TO REVIEW ALL TROJAN TECHNOLOGIES INSTALLATION INSTRUCTIONS PRIOR TO EQUIPMENT INSTALLATION.
- : ACCESS IS REQUIRED FOR MODULE REMOVAL - NOTE THE CHANNEL WIDTH AND ENSURE ADEQUATE ACCESS IS PROVIDED TO ALL MODULES.
- : DO NOT ENCASE THE STEEL CHANNEL IN CONCRETE.
- : [] INDICATES MILLIMETERS UNLESS OTHERWISE SPECIFIED.

MULTIPLE CHANNELS IN PARALLEL (OPTION):

- : ADDITIONAL UNITS CAN BE INSTALLED PARALLEL TO THE UNIT SHOWN.
- : ACCESS BETWEEN EVERY 2 PARALLEL CHANNELS IS REQUIRED FOR MODULE REMOVAL - NOTE THE CHANNEL WIDTH AND ENSURE ADEQUATE ACCESS IS PROVIDED BETWEEN TRANSITION BOXES AND CHANNELS.
- : ACCESS BETWEEN A MAXIMUM OF 2 CHANNELS IS NOT REQUIRED FOR MODULE REMOVAL. TRANSITION BOXES CAN BE INSTALLED ADJACENT TO EACH OTHER.

ISSUED FOR CONSTRUCTION

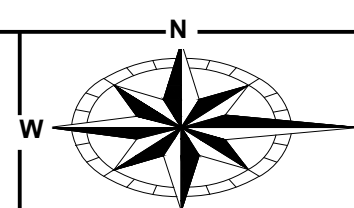
NOTE:
TROJAN UV3050K SYSTEM IS BASIS OF DESIGN FOR ULTRA VIOLET DISINFECTION SYSTEM



These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.



MAIN OFFICE
1495 Old Henderson Road
Columbus, Ohio 43220
614-459-6992

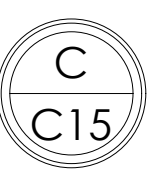


ENGINEERING
Ohio Department of Natural Resources

DESIGNED BY:	...	AS NOTED SCALE
DRAWN BY:	...	MM/DD/YY
CHECKED BY:	...	03/01/2024
APPROVED BY:	...	
	NO. DATE SUBJECT	
	REVISION OR ISSUE	

DELAWARE STATE PARK
NEW WASTEWATER TREATMENT FACILITY
DNR-220039

UV DISINFECTION DETAILS



LEGEND

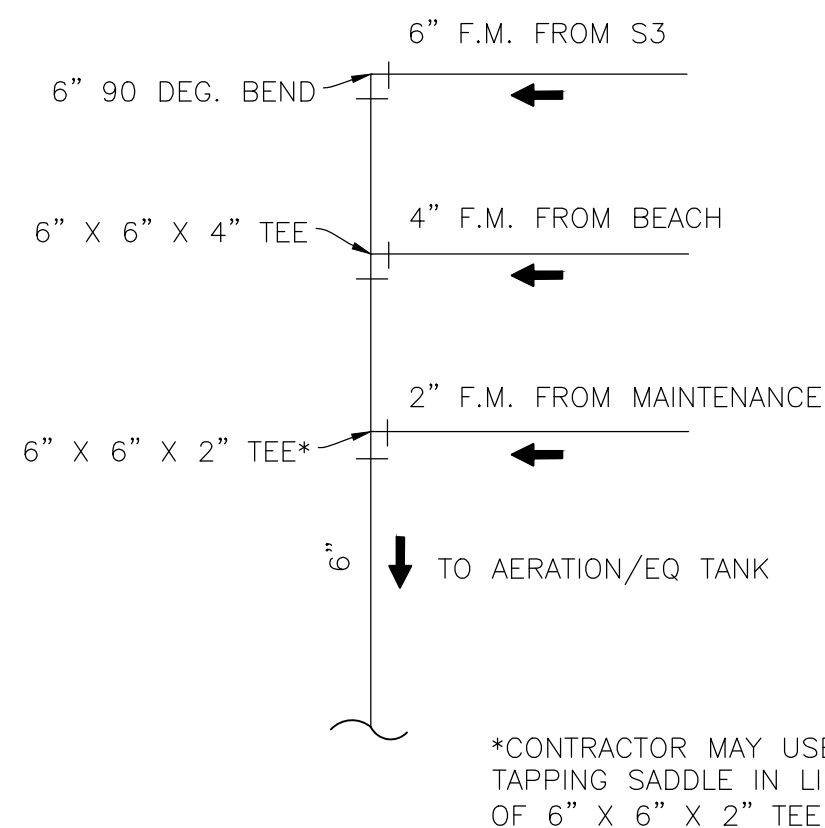
- P — PROPERTY LINE
- F — FLOOD PLAIN
- W — WATER LINE
- SAN — SANITARY SEWER
- OHEC — OVERHEAD ELEC & COMM LINE
- CL — CHAIN LINK FENCE
- TL — TREE LINE
- DL — DITCH LINE
- — MANHOLE
- — CLEANOUT
- — LIFT STATION
- ⊕ — FIRE HYDRANT
- ⊕ — WATER MAIN VALVE
- ⊕ — WATER VALVE
- ⊕ — POWER POLE
- ⊕ — DECIDUOUS TREE
- ⊕ — BENCHMARK
- ⊕ — IRON PIN FOUND
- — CONCRETE
- — BUILDING
- — INACTIVE
- — PHASE 1 DEMO LIMITS

NOTES

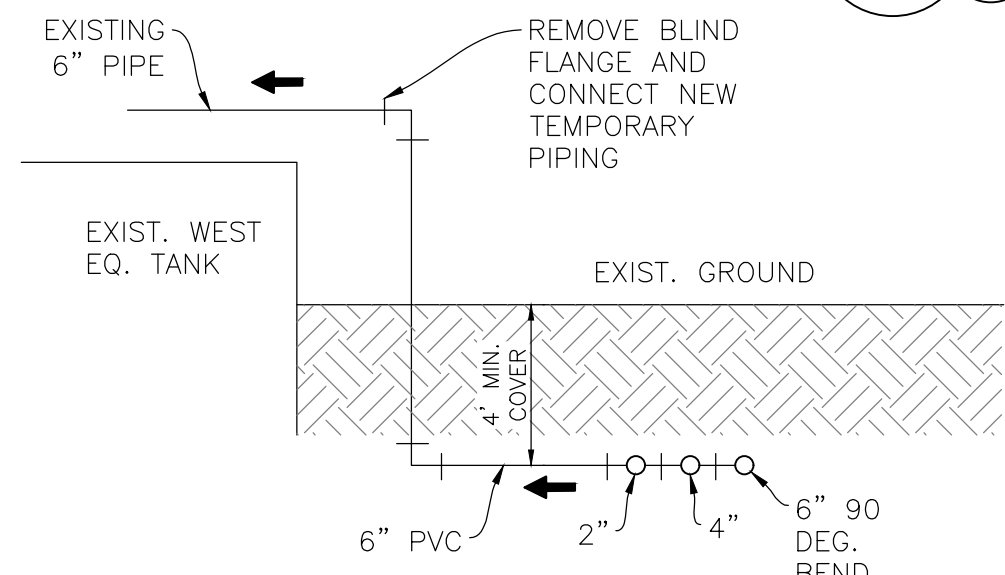
- ALL ITEMS NOTED FOR DEMOLITION SHALL BE REMOVED AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE FEDERAL AND LOCAL REGULATIONS, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- CONTRACTOR SHALL COORDINATE THE DISCONNECTION, REMOVAL, RELOCATION, AND/OR ABANDONMENT OF EXISTING UTILITIES WITH THE APPROPRIATE UTILITY OWNER AS NECESSARY AND SHALL MEET ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND REQUIREMENTS. ANY ABANDONED OR INACTIVE UTILITIES ENCOUNTERED ON-SITE, WHETHER SHOWN ON THESE PLANS OR NOT, SHALL BE REMOVED TO THE PROPERTY LINE AND CAPPED.
- AT-GRADE STRUCTURES (MANHOLES, VALVE BOXES, ETC.) FOR ANY REMAINING ACTIVE UTILITIES THAT LIE WITHIN PROP. GRADING LIMITS SHALL BE ADJUSTED AS NEEDED TO MEET FINISH GRADE. COORDINATE WORK WITH APPROPRIATE UTILITY OWNERS.
- THE REMOVAL OF ANY ITEMS WHICH HAVE IN-GROUND FOUNDATIONS, BASES OR FOOTERS OF ANY KIND SHALL INCLUDE COMPLETE REMOVAL OF SAID FOUNDATIONS.
- VOIDS REMAINING AFTER DEMOLITION WHICH DO NOT FALL WITHIN AREAS OF PROP. PAVEMENT SHALL BE BROUGHT TO WITH 6" OF FINISHED GRADE THEN FINISHED WITH TOPSOIL, SEEDING & MULCHING PER SPECIFICATIONS.
- ALL ITEMS AND EQUIPMENT SHALL BE DISPOSED OF UNLESS MARKED FOR OWNER TO RETAIN. ALL RETAINED MATERIAL AND EQUIPMENT SHALL BE DELIVERED TO A LOCATION WITHIN THIS SITE. ALL OTHER SHALL BE DISPOSED OF BY CONTRACTOR.

DEMO KEYNOTES

1. TEMPORARY CONSTRUCTION FENCE TO BE INSTALLED.
2. CAP AIR PIPING TO EAST PLANT.
3. EX. 6" FORCE MAIN FROM S-3 PUMP STATION. EXACT LOCATION UNKNOWN AT HEAD OF PLANT. CONTRACTOR TO LOCATE PRIOR TO REROUTING PIPING. SEE PROPOSED ROUTING DETAIL.
4. EX. 4" FORCE MAIN FROM BEACH PUMP STATION. EXACT LOCATION UNKNOWN AT HEAD OF PLANT. CONTRACTOR TO LOCATE PRIOR TO REROUTING PIPING. SEE PROPOSED ROUTING DETAIL.
5. EX. 2" FORCE MAIN FROM MAINTENANCE BUILDING PUMP STATION. EXACT LOCATION UNKNOWN AT HEAD OF PLANT. CONTRACTOR TO LOCATE PRIOR TO REROUTING PIPING. SEE PROPOSED ROUTING DETAIL.
6. EAST WWTP THAT IS INACTIVE (SEE SHADED AREA) AND ALL ASSOCIATED PIPING, ELECTRICAL EQUIPMENT, AND FACILITY COMPONENTS, SHALL BE DEMOLISHED TO FACILITATE PLACEMENT OF NEW WWTP. ALL MATERIAL SHALL BE REMOVED COMPLETELY WITHIN FOOTPRINT OF, AND WITHIN 5' OF THE LIMITS OF, THE NEW WWTP. ANY AREA(S) REMOVED TO A DEPTH LOWER THAN SUBBASE OF NEW WWTP SHALL BE BROUGHT BACK TO SUBBASE GRADE FOR NEW WWTP WITH COMPACTED GRANULAR FILL. AREAS BEYOND 5' OF NEW WWTP SHALL HAVE ALL EXISTING WWTP MATERIAL BE REMOVED TO A DEPTH OF 18" BELOW PROPOSED FINAL GRADE. SITE SHALL BE BROUGHT BACK UP TO GRADE WITH COMPACTED SOIL AND SUITABLE COMPACTABLE STRUCTURAL FILL TO WITHIN 6" OF FINAL GRADE.
7. REMOVE ALL STUMPS AND VEGETATION WITHIN DASHED LIMITS. CONTRACTOR RESPONSIBLE FOR HAUL AWAY OF ALL DEBRIS.
8. EX. WEST PLANT TO REMAIN IN OPERATION DURING NEW PLANT CONSTRUCTION.
9. CUT AND CAP EXISTING SANITARY TO EAST PLANT.
10. TEMPORARY SANITARY PVC PIPING TO WEST TREATMENT PLANT.
11. EX. FENCE TO BE REMOVED.
12. CONTRACTOR MAY REMOVE PORTIONS OF THE EXISTING OVERHANG TO FACILITATE NEW CONSTRUCTION IF NEEDED.

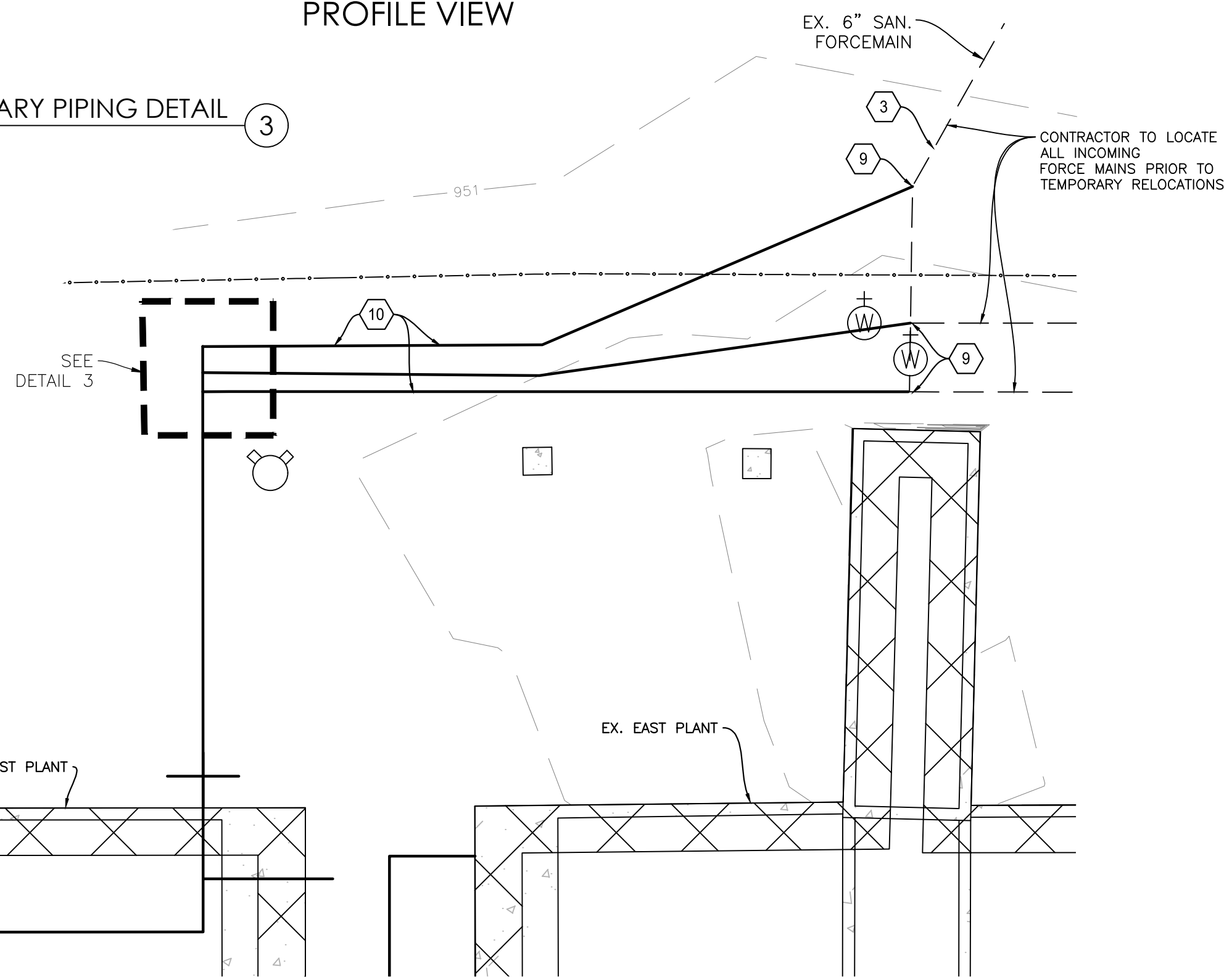


PLAN VIEW

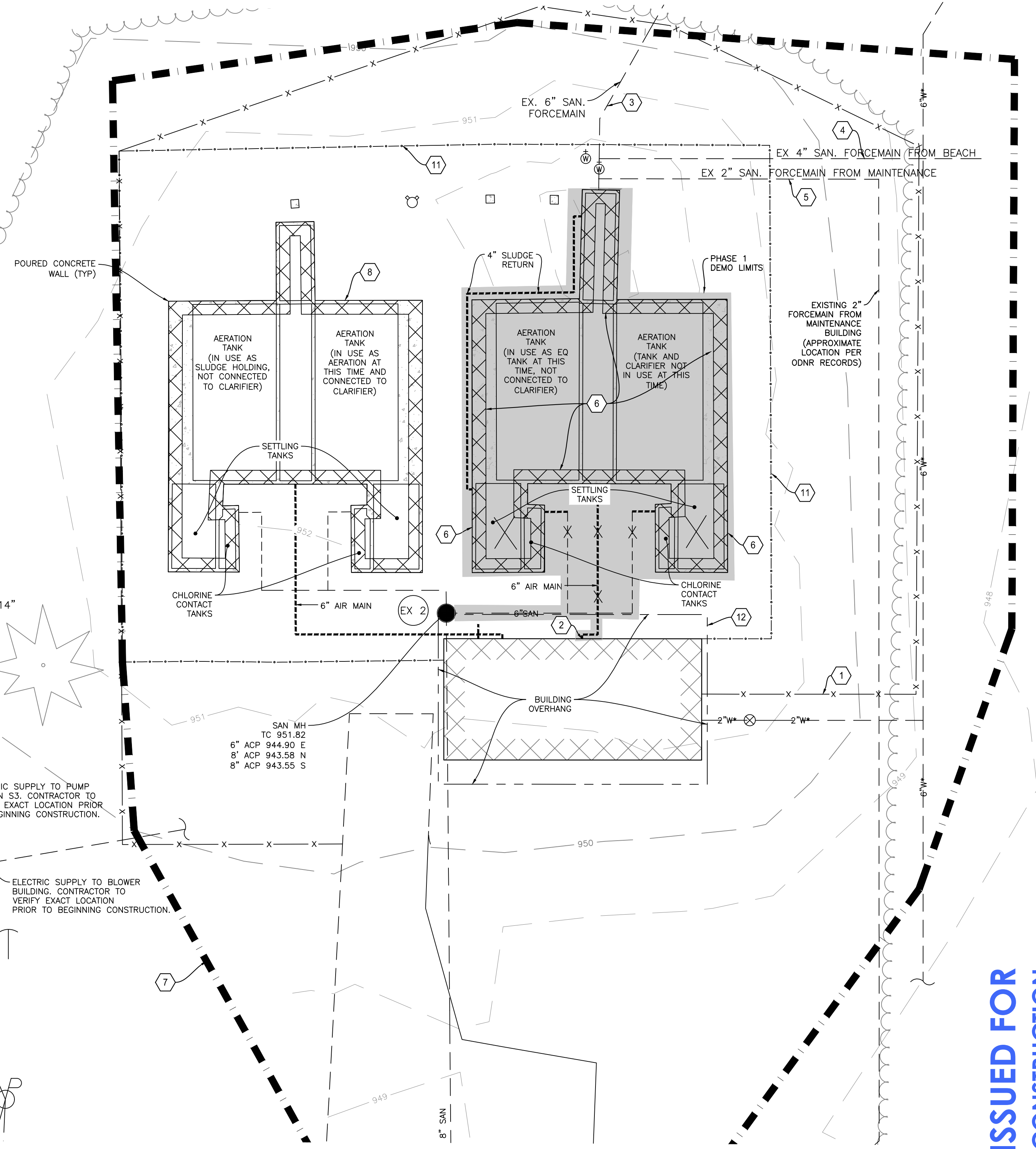


PROFILE VIEW

TEMPORARY PIPING DETAIL 3
SCALE 1" = 5'



TEMPORARY PIPING 2
SCALE 1" = 5'

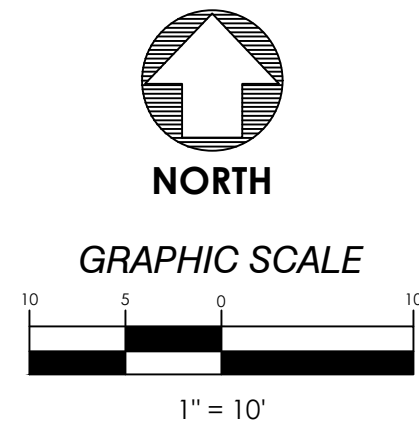
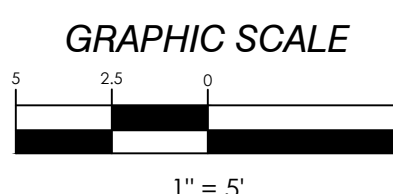


DEMO PLAN PHASE 1
SCALE 1" = 10'

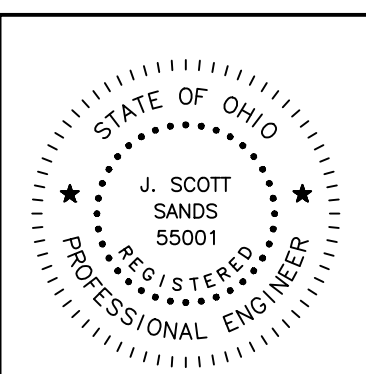


Know what's below.
Call before you dig.

These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.



ISSUED FOR CONSTRUCTION



NOTES

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE GROUND & REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE A/E.
- REFER TO THE ARCHITECTURAL DRAWINGS FOR BUILDING LAYOUT. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING ALL BUILDING CORNER LOCATIONS IN THE FIELD.
- DO NOT SCALE FROM THIS DRAWING. ALL WRITTEN DIMENSIONS SHALL GOVERN. ANY DISCREPANCIES SHALL IMMEDIATELY BE REPORTED TO THE A/E.
- ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
- CONTRACTOR SHALL PROVIDE DEWATERING OF SITE AND PLACEMENT OF STANDPIPE AS NEEDED DURING CONSTRUCTION. CONTRACTOR SHALL REMOVE AT CONCLUSION OF CONSTRUCTION.

PHASING NOTES

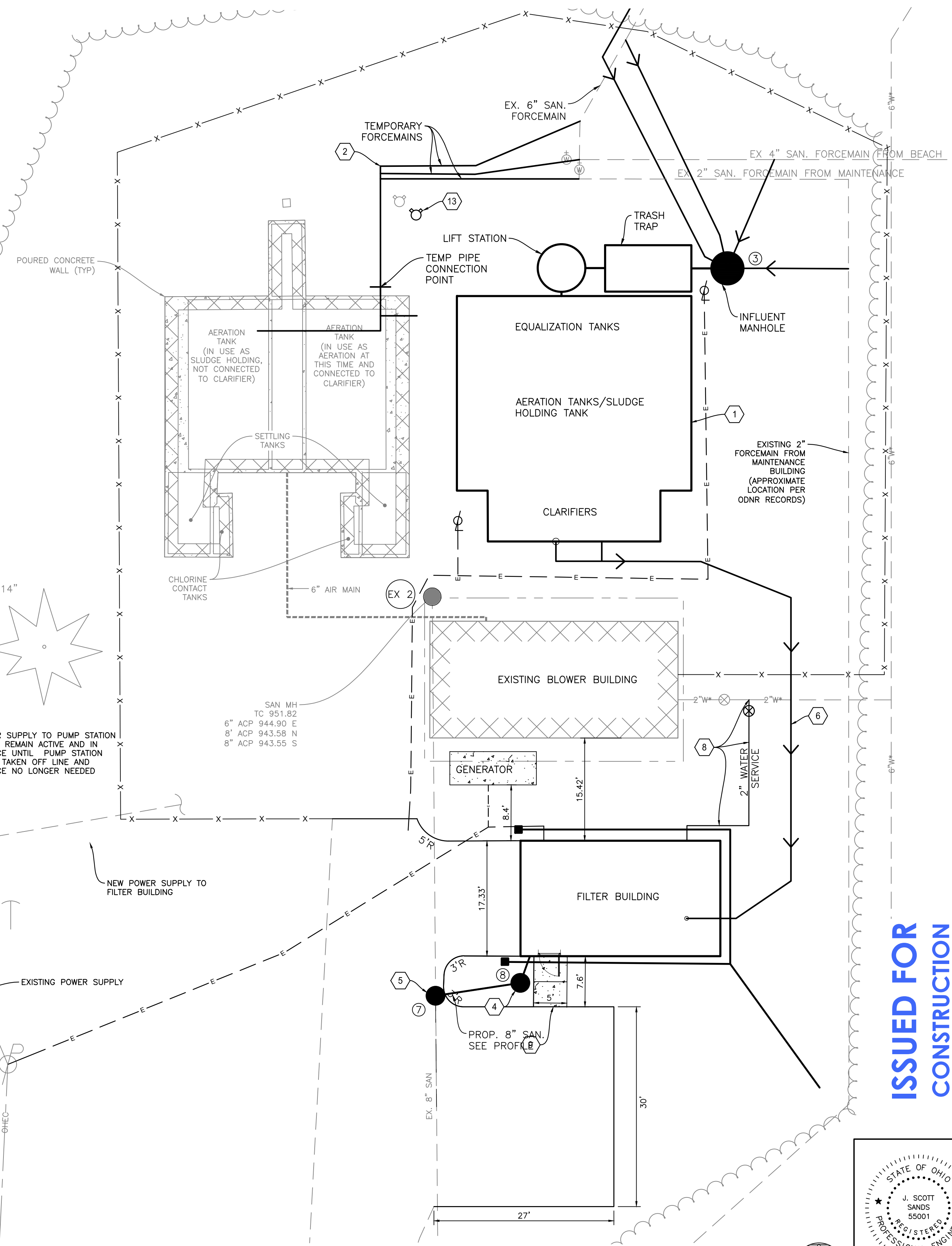
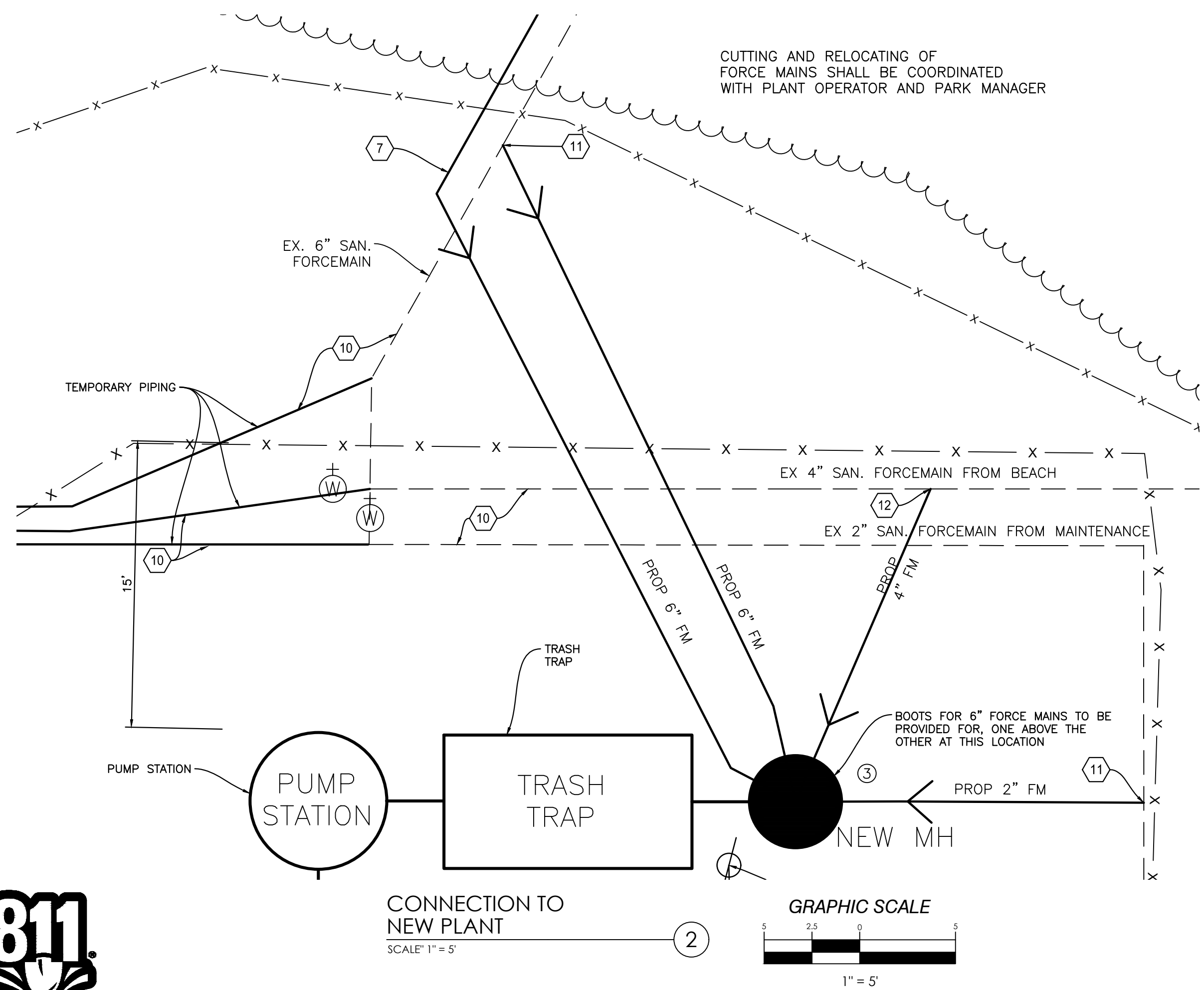
- INSTALL FILTER UV BUILDING, SEE ARCH. PLANS FOR DETAILS.
- INSTALL SANITARY OUTFALL PIPE AND "DOGHOUSE" MANHOLE ONTO EXISTING LINE.
- INSTALL SANITARY INFLUENT LINE FROM TREATMENT PLANT TO EXISTING - "DOGHOUSE" MANHOLE AND ENSURE FLOW IS MAINTAINED TO EXISTING TREATMENT PLANT.
- INSTALL FORCEMAIN FROM PROPOSED AERATION MANHOLE TO CONNECTION POINT.
- ONCE NEW TREATMENT EQUIPMENT IS VERIFIED TO BE OPERATIONAL, MAKE CONNECTION TO EXISTING FORCE MAIN AND REROUTE.
- CAP UNUSED OUTLETS IN "DOGHOUSE" SANITARY STRUCTURES. DEMOLISH EXISTING BUILDING LIFT STATION.
- REMOVE EXISTING PLANT AND ASPHALT PER KEYNOTES. PLACE GRAVEL IN ASPHALT AREAS AND SEED REMAINING AREA PER NOTES.

SITE KEYNOTES

- PLANT FOOTPRINT, SEE DETAIL SHEETS.
- TEMPORARY FORCEMAIN PIPING TO DISCHARGE DIRECTLY INTO AERATION TANK. PIPES SHALL BE INSTALLED UNDERGROUND TO THE TANK, UP TO THE TANK WALL AND OVER TANK CAP. SS ANCHORS AND ANCHORING EQUIPMENT SHALL BE USED TO HOLD ALL TEMPORARY PIPING TO CONCRETE TANK FOR THE DURATION OF USE.
- EXISTING ELECTRIC PANELS AND/OR METER PANELS TO BE REMOVED AND REPLACED WITH NEW METER AND SUB PANEL. RECONNECT THE EXISTING ELECTRIC SERVICE TO NEW METER PANEL. NEW METER PANEL AND SUB PANEL TO BE ATTACHED TO EXISTING SUPPORT POLE. POWER SERVICES FROM THIS PANEL SERVE EXISTING BLOWER BUILDING AND PUMP STATION S3.
- PROPOSED POST AERATION MANHOLE INV. 947.25.
- PROPOSED MANHOLE FOR TIE INTO EXISTING FORCE MAIN.
- PROPOSED 6" SANITARY PVC TO NEW FILTER BUILDING. COORDINATE BUILDING CONNECTION WITH MEP PLANS.
- SANITARY FORCE MAIN, SEE PROFILES.
- 2" WATER SERVICE AND VALVE. CONNECT TO EXISTING SERVICE LINE, ABANDON REMAINING LINE TO EXISTING BLDG. MIN. 4" COVER. COORDINATE BLDG. SERVICE LOCATION WITH MEP PLANS.
- CONCRETE SIDEWALK, SEE DETAIL.
- TEMPORARY AND EXISTING SANITARY FORCEMAINS TO BE REMOVED AFTER ALL NEW PIPING IS INSTALLED AND NEW PLANT IS OPERATIONAL.
- CUT AND INSTALL. PROVIDE 45 BEND AND PIPING TO NEW PLANT.
- CUT AND CAP EXISTING SANITARY. PROVIDE 90 BEND AND PIPING TO NEW PLANT.
- PROPOSED 1" FROST PROOF YARD HYDRANT. CONTRACTOR TO LOCATE EXISTING WATER SERVICE LINE AND CONNECT TO NEW HYDRANT.

EXISTING LEGEND

- PROPERTY LINE
- FLOOD PLAIN
- WATER LINE
- SANITARY SEWER
- OHEC OVERHEAD ELEC & COMM LINE
- CHAIN LINK FENCE
- TREE LINE
- DITCH LINE
- MANHOLE
- CLEANOUT
- LIFT STATION
- FIRE HYDRANT
- WATER MAIN VALVE
- WATER VALVE
- POWER POLE
- DECIDUOUS TREE
- BENCHMARK
- IRON PIN FOUND
- CONCRETE
- BUILDING

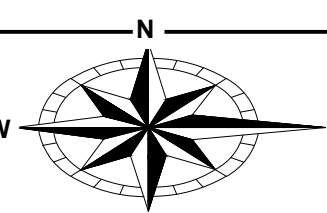


ISSUED FOR CONSTRUCTION



These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.

MAIN OFFICE
1495 Old Henderson Road
Columbus, Ohio 43220
614-459-6992

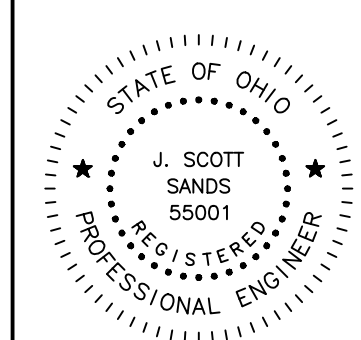


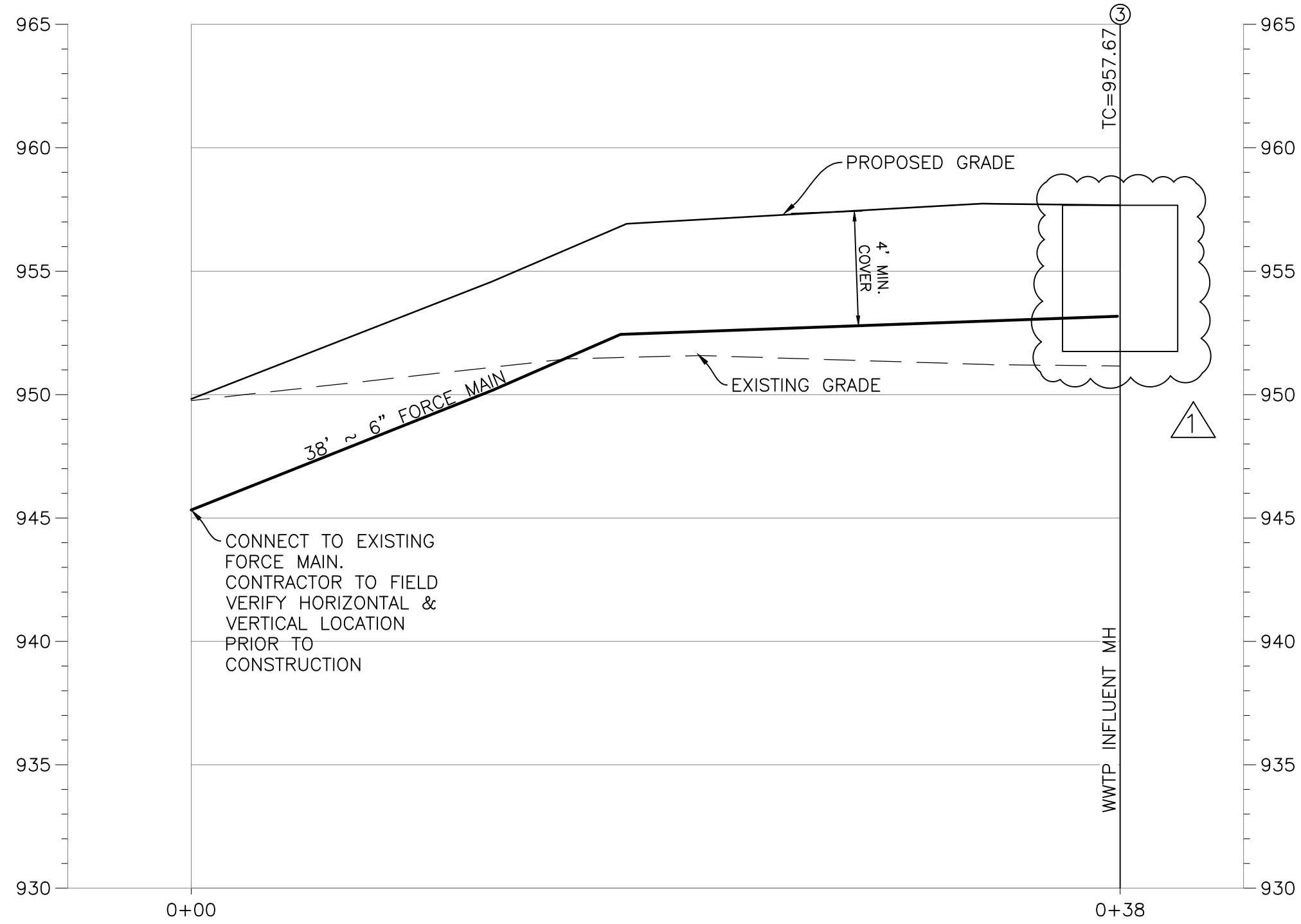
ENGINEERING
Ohio Department of Natural Resources

DESIGNED BY:	...	AS NOTED SCALE
DRAWN BY:	...	MM/DD/YY
CHECKED BY:	...	03/01/2024
APPROVED BY:	...	
	NO. DATE SUBJECT	
	REVISION OR ISSUE	

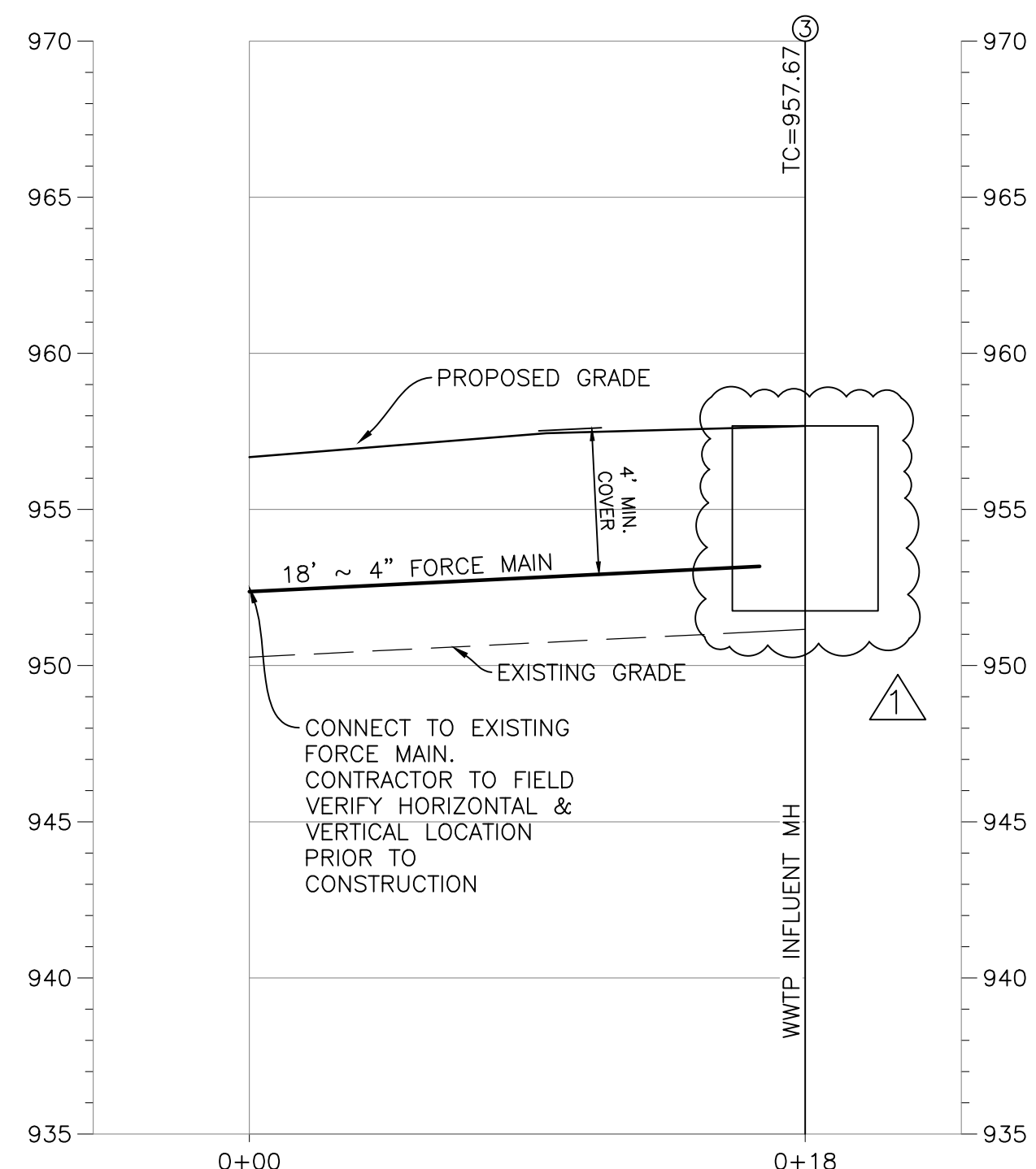
DELAWARE STATE PARK
NEW WASTEWATER TREATMENT FACILITY
DNR-220039

SITE PLAN PHASE 1

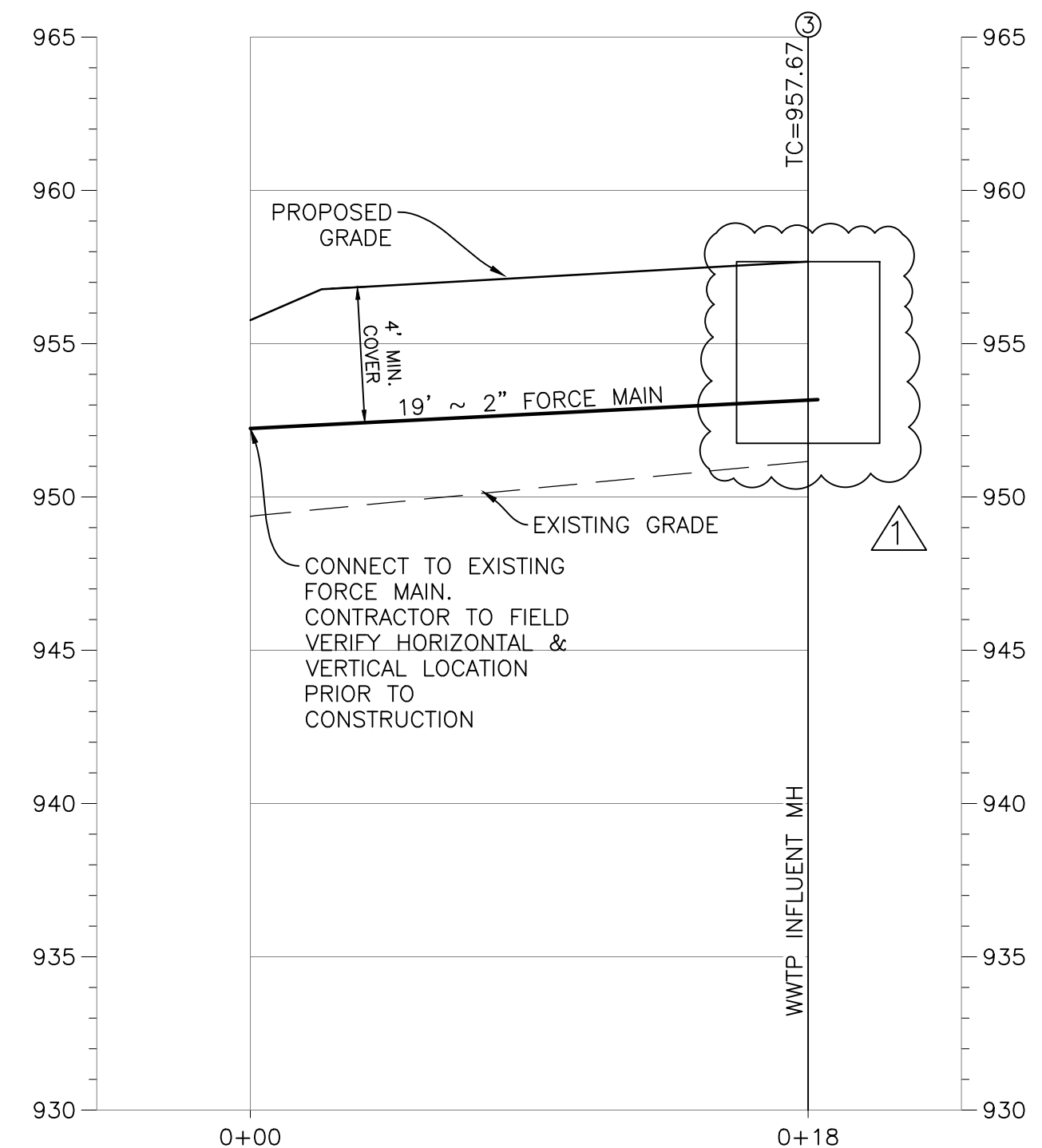




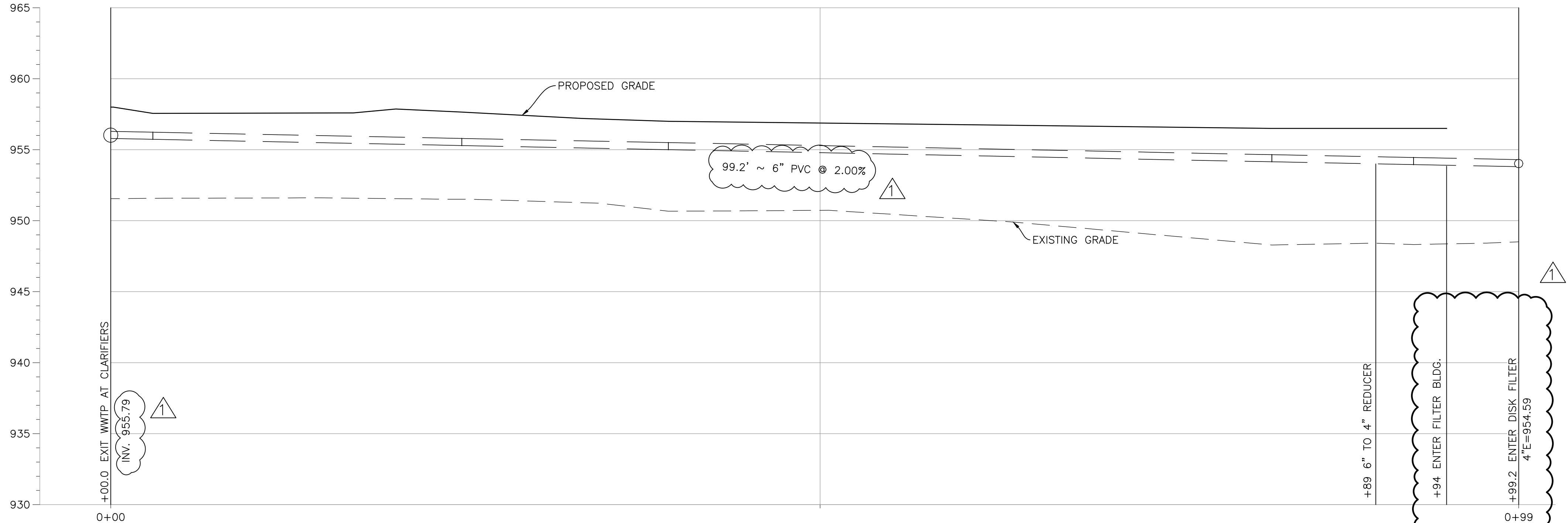
6" FM FROM EX. 6" FM TO MH 3
 HORIZONTAL: 1" = 5'
 VERTICAL: 1" = 5'



4" FM FROM EX. 4" FM FROM BEACH TO MH 3
 HORIZONTAL: 1" = 5'
 VERTICAL: 1" = 5'



2" FM FROM EX. 2" FM FROM MAINTENANCE TO MH 3
 HORIZONTAL: 1" = 5'
 VERTICAL: 1" = 5'



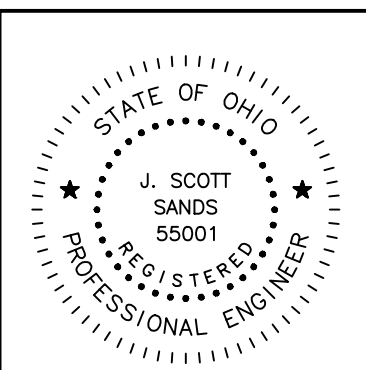
6" SAN FROM AERATION TANKS/SLUDGE HOLDING TANK TO FILTER BUILDING
 HORIZONTAL: 1" = 5'
 VERTICAL: 1" = 5'



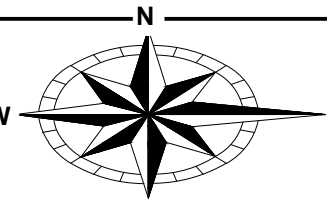
Know what's below.
 Call before you dig.

These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.

ISSUED FOR CONSTRUCTION



MAIN OFFICE
 1495 Old Henderson Road
 Columbus, Ohio 43220
 614-459-6992



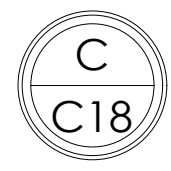
ENGINEERING
 Ohio Department of Natural Resources

DESIGNED BY:	...	NO.	DATE	SUBJECT
DRAWN BY:	...	REVISION OR ISSUE		
CHECKED BY:	...			
APPROVED BY:	...			

AS NOTED SCALE
 MM/DD/YY
 03/01/2024

DELAWARE STATE PARK
 NEW WASTEWATER TREATMENT FACILITY
 DNR-220039

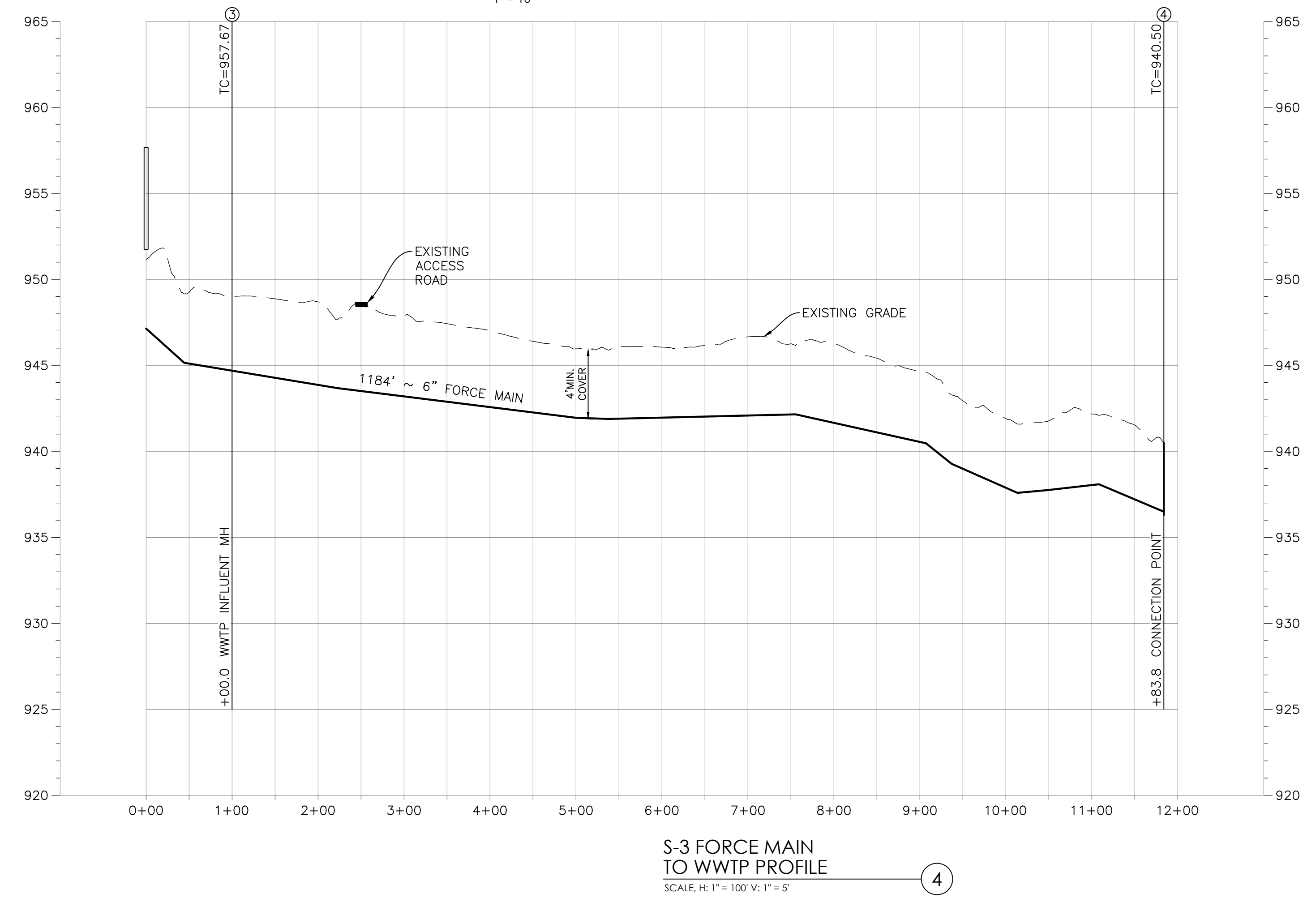
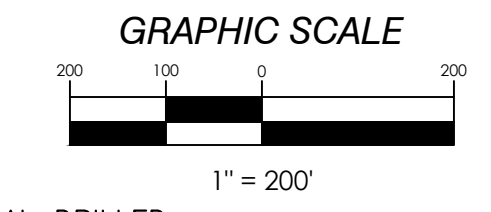
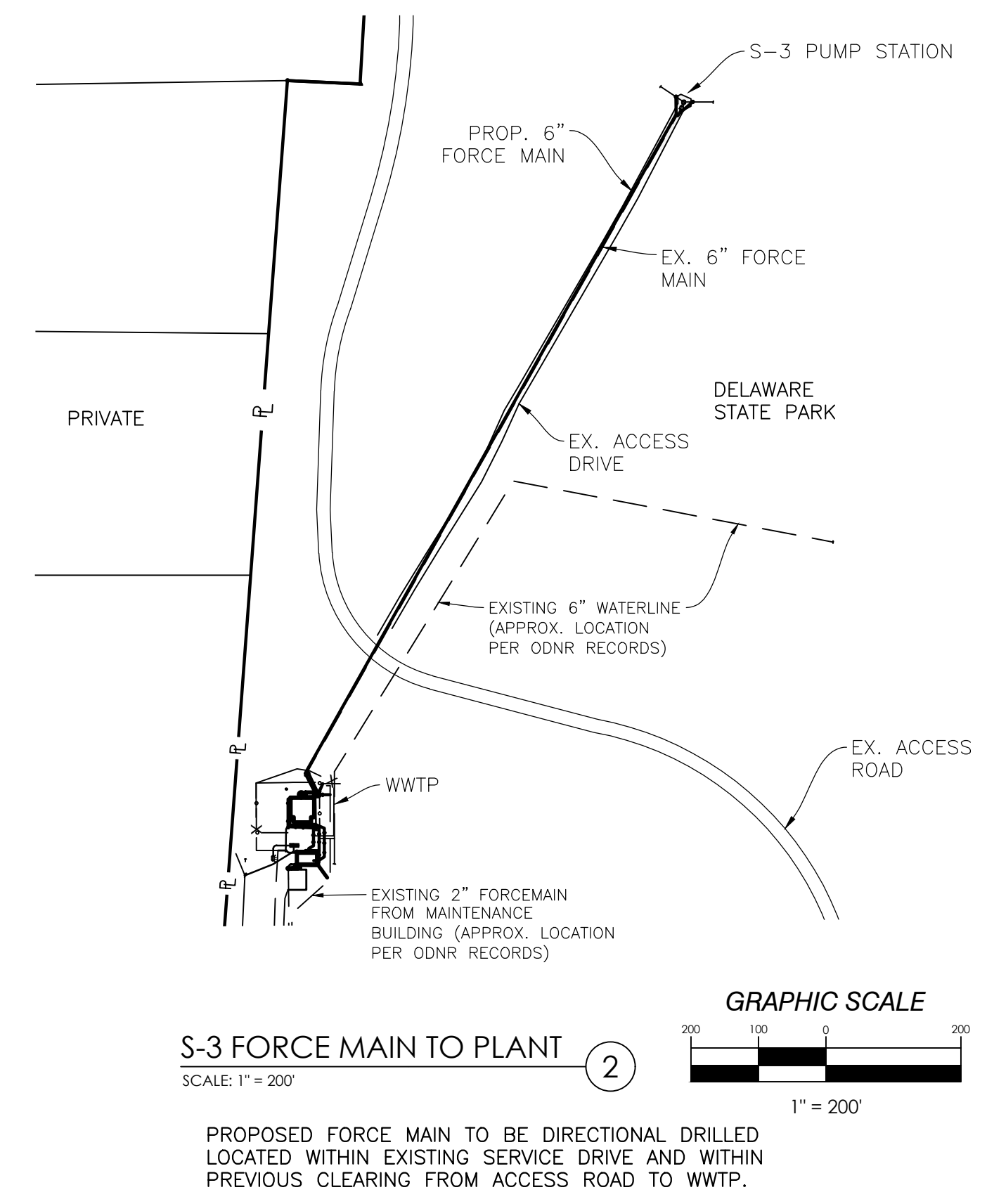
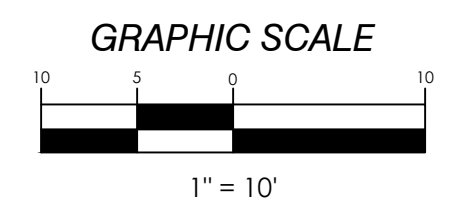
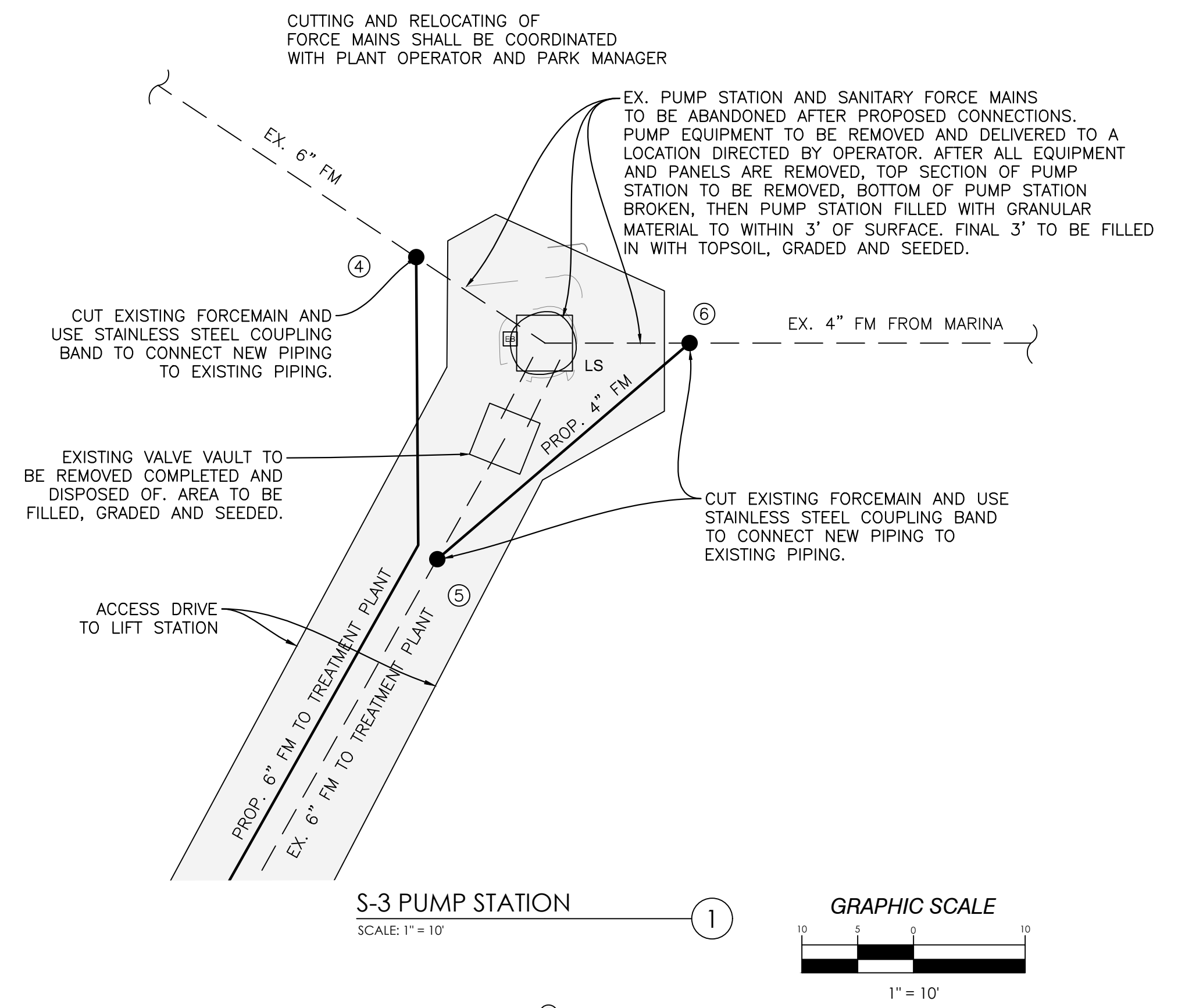
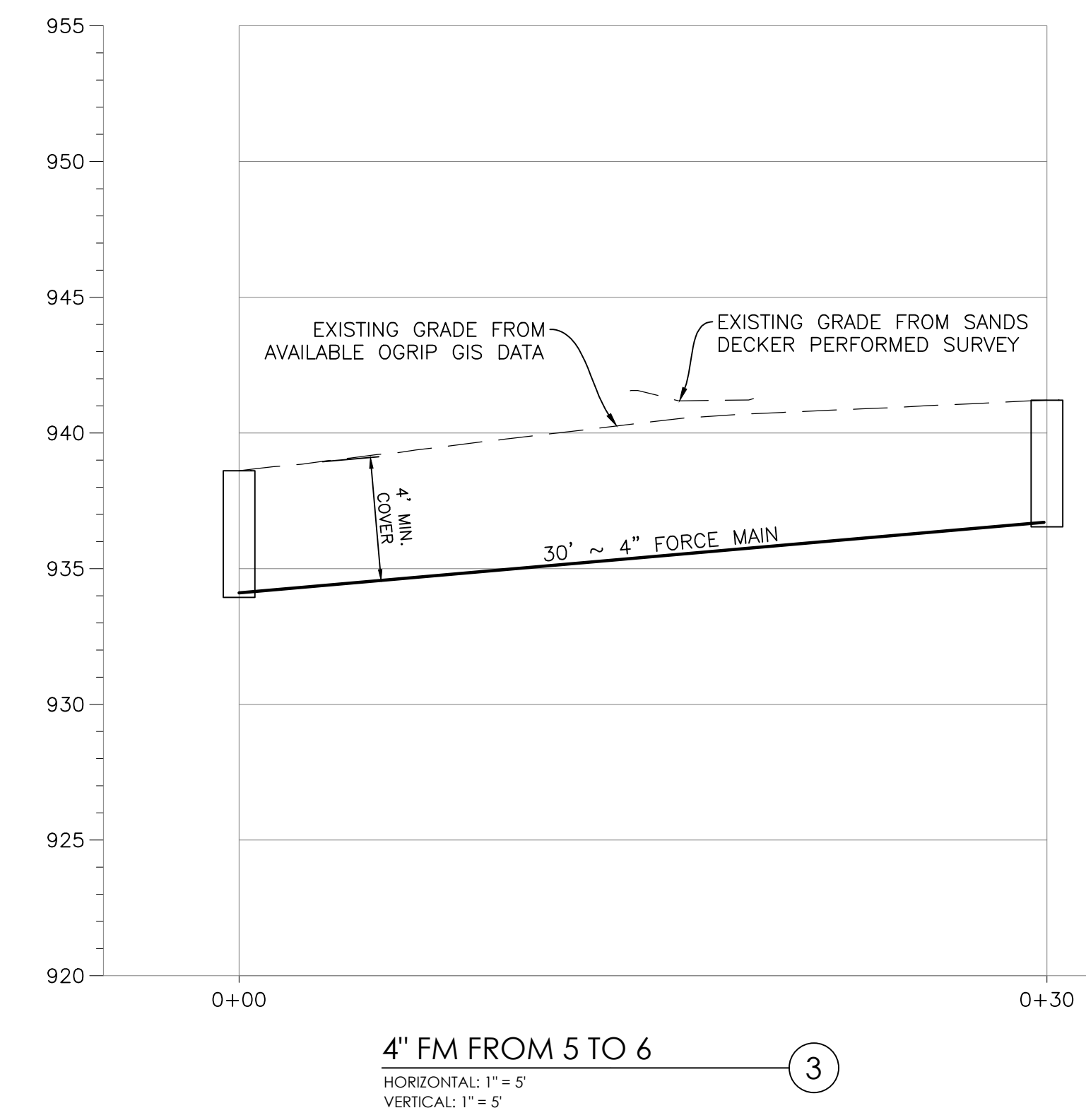
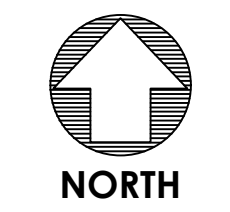
SITE PLAN PHASE 1 PROFILES



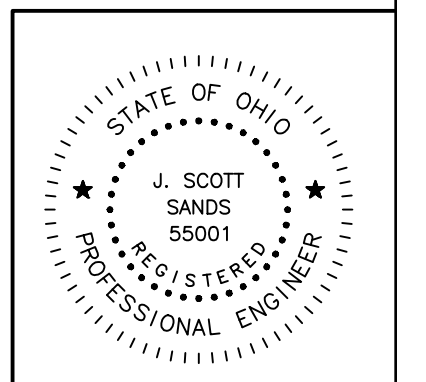
ALTERNATE 2

EXISTING LEGEND

- PROPERTY LINE
- FLOOD PLAIN
- WATER LINE
- SANITARY SEWER
- OVERHEAD ELEC & COMM LINE
- CHAIN LINK FENCE
- TREE LINE
- DITCH LINE
- MANHOLE
- CLEANOUT
- LIFT STATION
- FIRE HYDRANT
- WATER MAIN VALVE
- WATER VALVE
- POWER POLE
- DECIDUOUS TREE
- BENCHMARK
- IRON PIN FOUND
- ELECTRIC METER BOX
- EXISTING GRAVEL



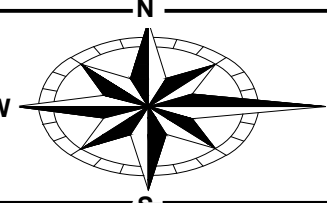
ISSUED FOR CONSTRUCTION



These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.

SANDS DECKER
 ENGINEERS & SURVEYORS

MAIN OFFICE
 1495 Old Henderson Road
 Columbus, Ohio 43220
 614-459-6992

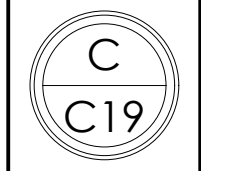


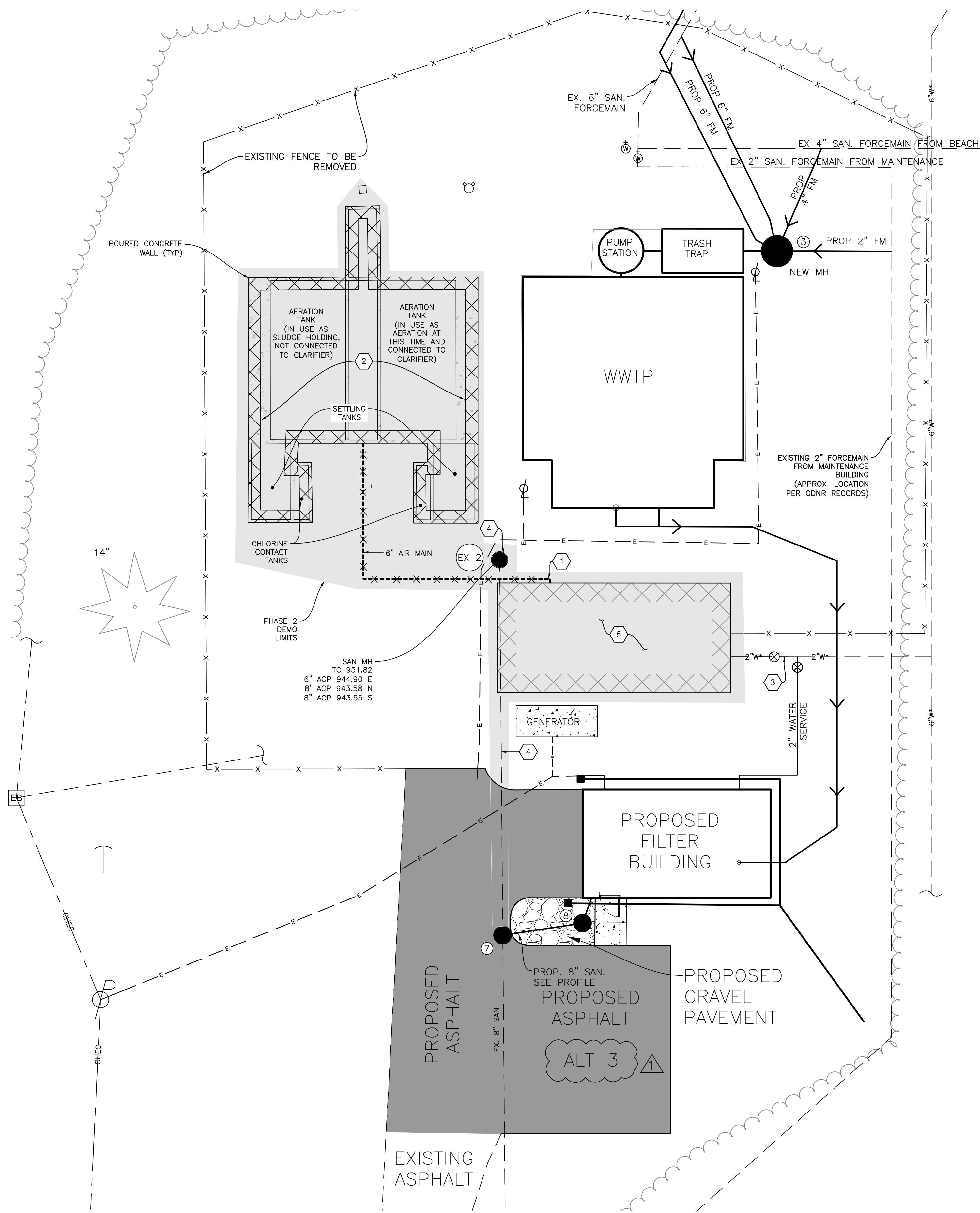
ENGINEERING
 Ohio Department of Natural Resources

DESIGNED BY: ...	AS NOTED SCALE
DRAWN BY: ...	MM/DD/YY
CHECKED BY: ...	03/01/2024
APPROVED BY: ...	
NO. DATE	SUBJECT
REVISION OR ISSUE	

DELAWARE STATE PARK
 NEW WASTEWATER TREATMENT FACILITY
 DNR-220039

S-3 PUMP STATION, FORCE MAIN & PROFILES





EXISTING LEGEND

- P — PROPERTY LINE
- - - FLOOD PLAIN
- W - WATER LINE
- SAN - SANITARY SEWER
- OHEC - OVERHEAD ELEC & COMM LINE
- - - CHAIN LINK FENCE
- - - TREE LINE
- - - DITCH LINE
- MANHOLE
- CLEANOUT
- LIFT STATION
- ⊕ FIRE HYDRANT
- ⊗ WATER MAIN VALVE
- ⊗ WATER VALVE
- ⊗ POWER POLE
- ⊗ DECIDUOUS TREE
- ⊗ BENCHMARK
- IRON PIN FOUND
- ▭ CONCRETE
- ▭ BUILDING
- EB ELECTRIC METER BOX

PROPOSED LEGEND

- ▭ PHASE 2 DEMO LIMITS
- ▭ PROPOSED PAVEMENT SEE DETAIL ON SHEET C3
- ▭ PROPOSED GRAVEL SEE DETAIL ON SHEET C3
- ▲ ALTERNATE 3

1 DEMO KEYNOTES

1. CAP AIR PIPING TO WEST PLANT.
2. EXISTING WASTEWATER TREATMENT PLANT AND ALL ASSOCIATED EQUIPMENT/FENCING/ELECTRICAL TO BE DEMOLISHED AFTER NEW PLANT IS OPERATIONAL. BREAK BOTTOM OF TANKS. REMOVE ALL AT-GRADE CONCRETE TO 18" BELOW GRADE. FILL WITH COMPACTED FILL TO 6" BELOW FINISH GRADE. FINISH WITH TOPSOIL, SEED AND MULCH.
3. EX. WATER SERVICE TO BE ABANDONED.
4. EX. SAN. TO BE REMOVED FROM MH "EX 2" TO MH 7.
5. EX. BUILDING TO BE REMOVED AFTER NEW PLANT IS OPERATIONAL.

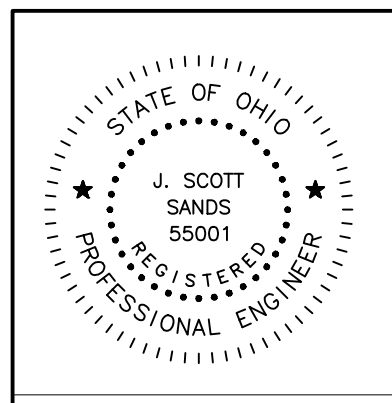
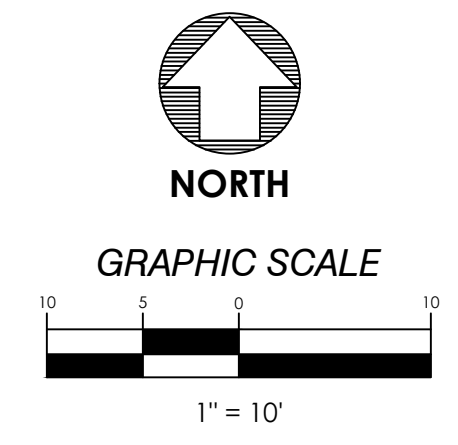
MISC. NOTES

CONTRACTOR MAY USE DEMOLISHED CONCRETE PORTIONS OF EXISTING WWTP AS BACKFILL, ONLY WHEN PIECES ARE REDUCED IN SIZE TO NO LARGER THEN 12" DIAMETER AND WHEN INCORPORATED IN COMPACTED LAYERS WITH SOIL, SO AS TO ELIMINATE ALL VOIDS AND FUTURE GROUND SETTLEMENT.

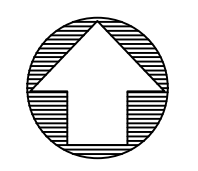


These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.

ISSUED FOR CONSTRUCTION

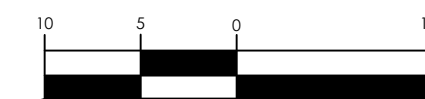


	<p>MAIN OFFICE 1495 Old Henderson Road Columbus, Ohio 43220 614-459-6992</p>	<p>ENGINEERING Ohio Department of Natural Resources</p>	DESIGNED BY: ...	AS NOTED SCALE	<p>DELAWARE STATE PARK NEW WASTEWATER TREATMENT FACILITY DNR-220039</p>	<p>DEMOLITION PLAN PHASE 2</p>
			<p>DRAWN BY: ...</p> <p>CHECKED BY: ...</p> <p>APPROVED BY: ...</p>			



NORTH

GRAPHIC SCALE



1" = 10'

EXISTING LEGEND

- PROPERTY LINE
- WATER LINE
- SANITARY SEWER
- OVERHEAD ELEC & COMM LINE
- CHAIN LINK FENCE
- TREE LINE
- DITCH LINE
- MANHOLE
- CLEANOUT
- EX. LIFT STATION
- FIRE HYDRANT
- WATER MAIN VALVE
- WATER VALVE
- POWER POLE
- DECIDUOUS TREE
- BENCHMARK
- IRON PIN FOUND
- BUILDING

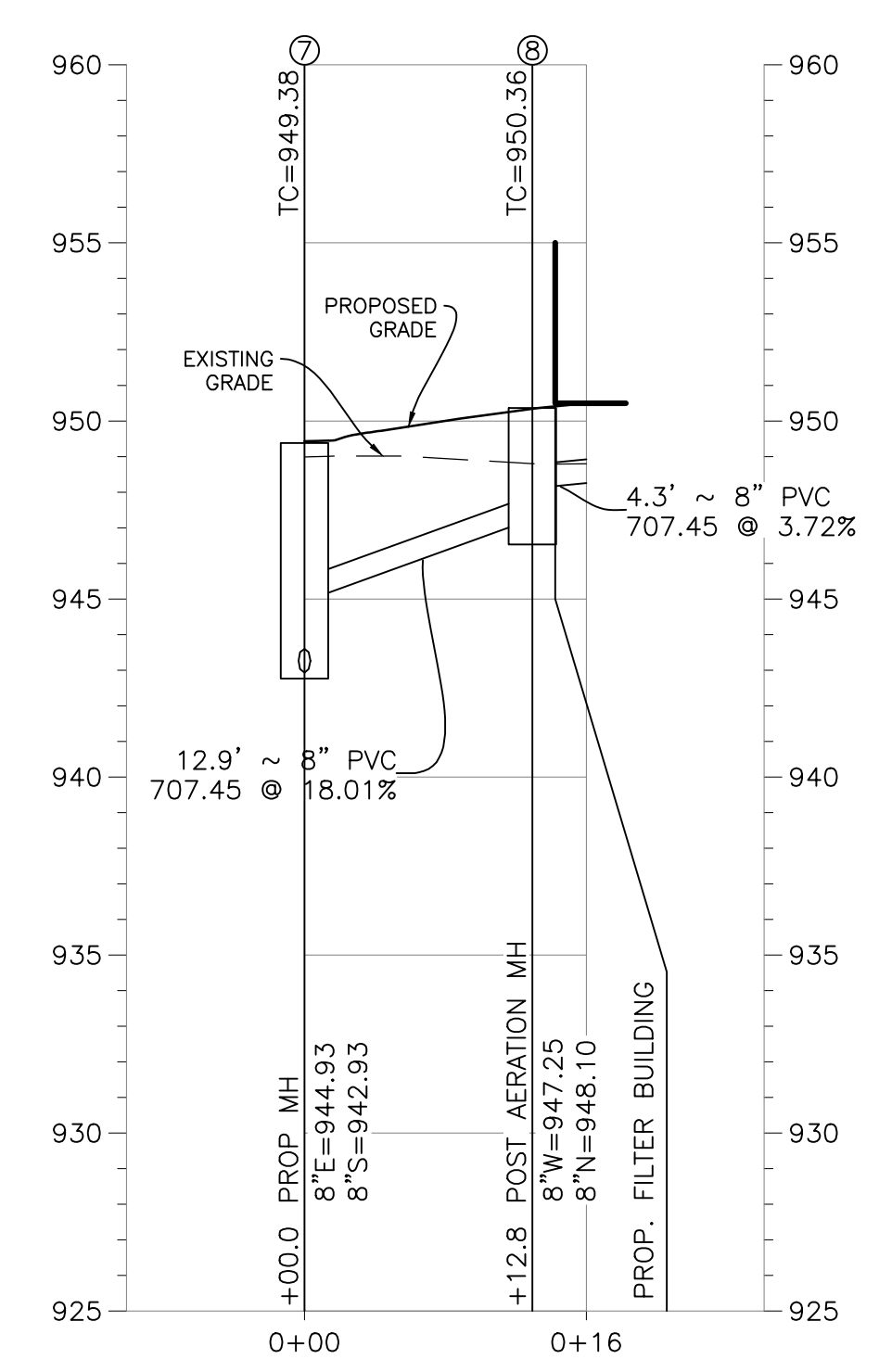
GRADING LEGEND

- PROPOSED CONTOUR & LABEL
- EXISTING CONTOUR & LABEL
- TRUNCATED SPOT GRADE MARKER
- TRUNCATED SPOT GRADE - MATCH EXISTING
- SANITARY STRUCTURE DESIGNATION
- SEDIMENT FENCE
- PROPOSED FENCE
- PROPOSED PAVEMENT SEE DETAIL ON SHEET C3
- PROPOSED 4" ~ 304 AGGREGATE TOPPED WITH 2" OF #8 LIMESTONE

NOTES

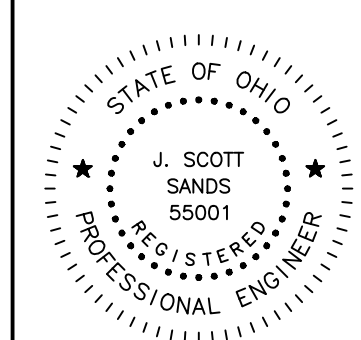
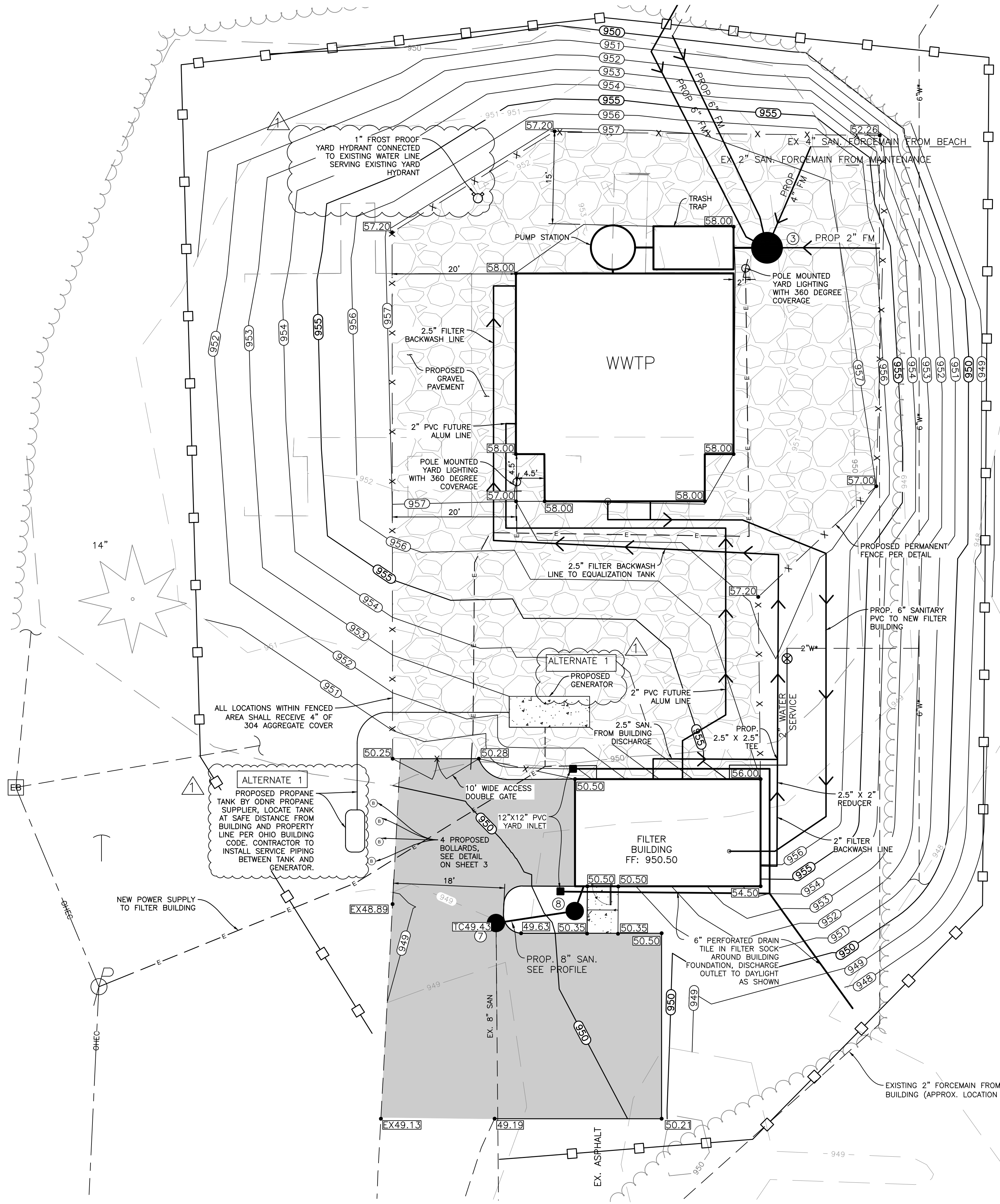
BUILDING DOWNSPOUTS TO DISCHARGE ONTO SPLASH BLOCKS

ISSUED FOR CONSTRUCTION



SANITARY OUTFALL PROFILE

SCALE: H: 1" = 10' V: 1" = 5'

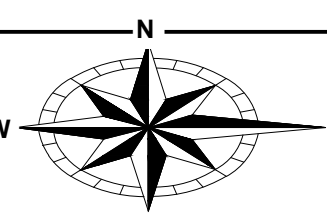


Know what's below. Call before you dig.

These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.



MAIN OFFICE
 1495 Old Henderson Road
 Columbus, Ohio 43220
 614-459-6992



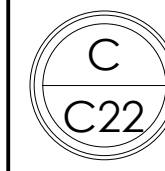
ENGINEERING
 Ohio Department of Natural Resources

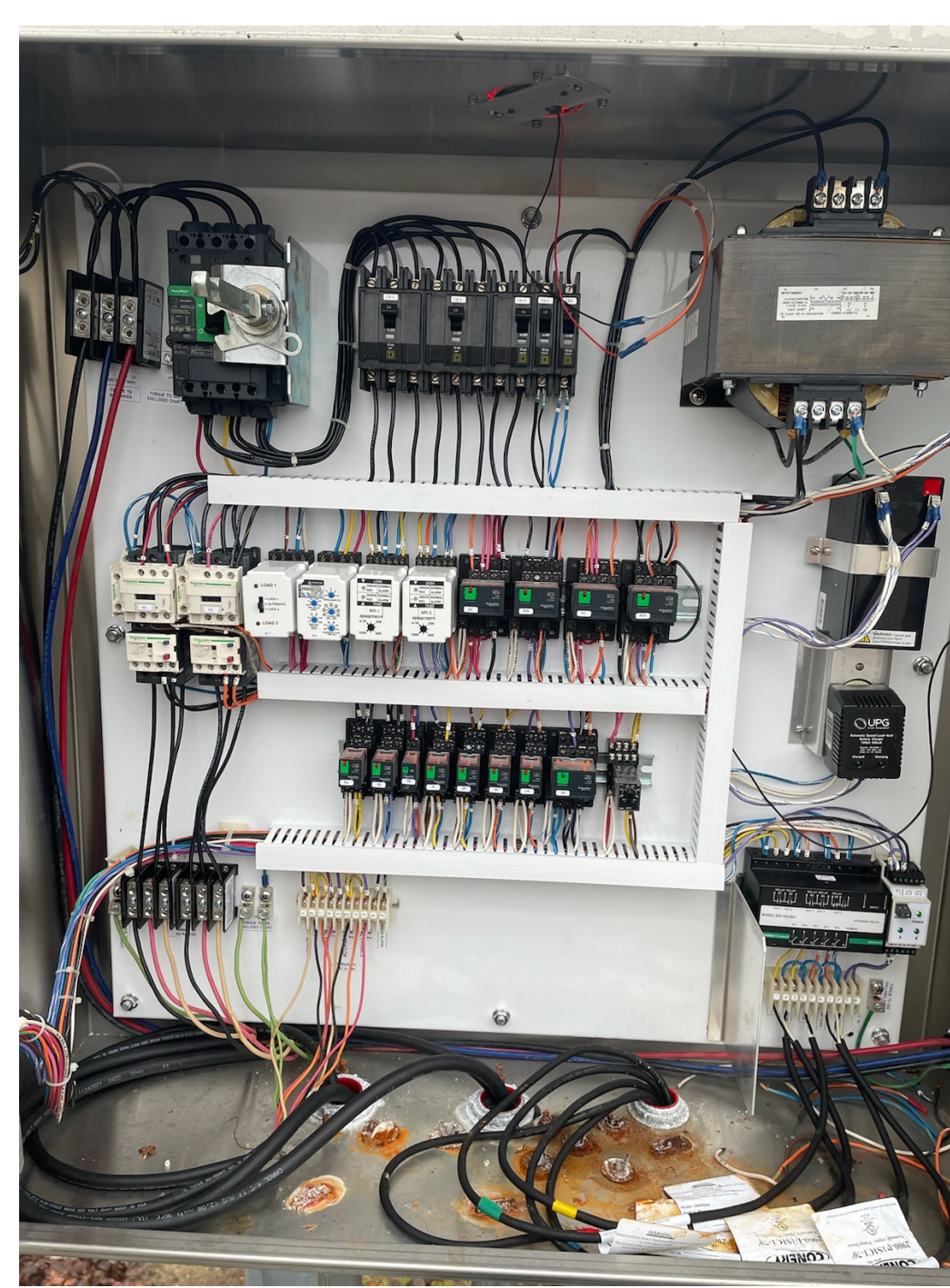
DESIGNED BY:	...
DRAWN BY:	...
CHECKED BY:	...
APPROVED BY:	...

AS NOTED SCALE
 MM/DD/YY
 03/01/2024

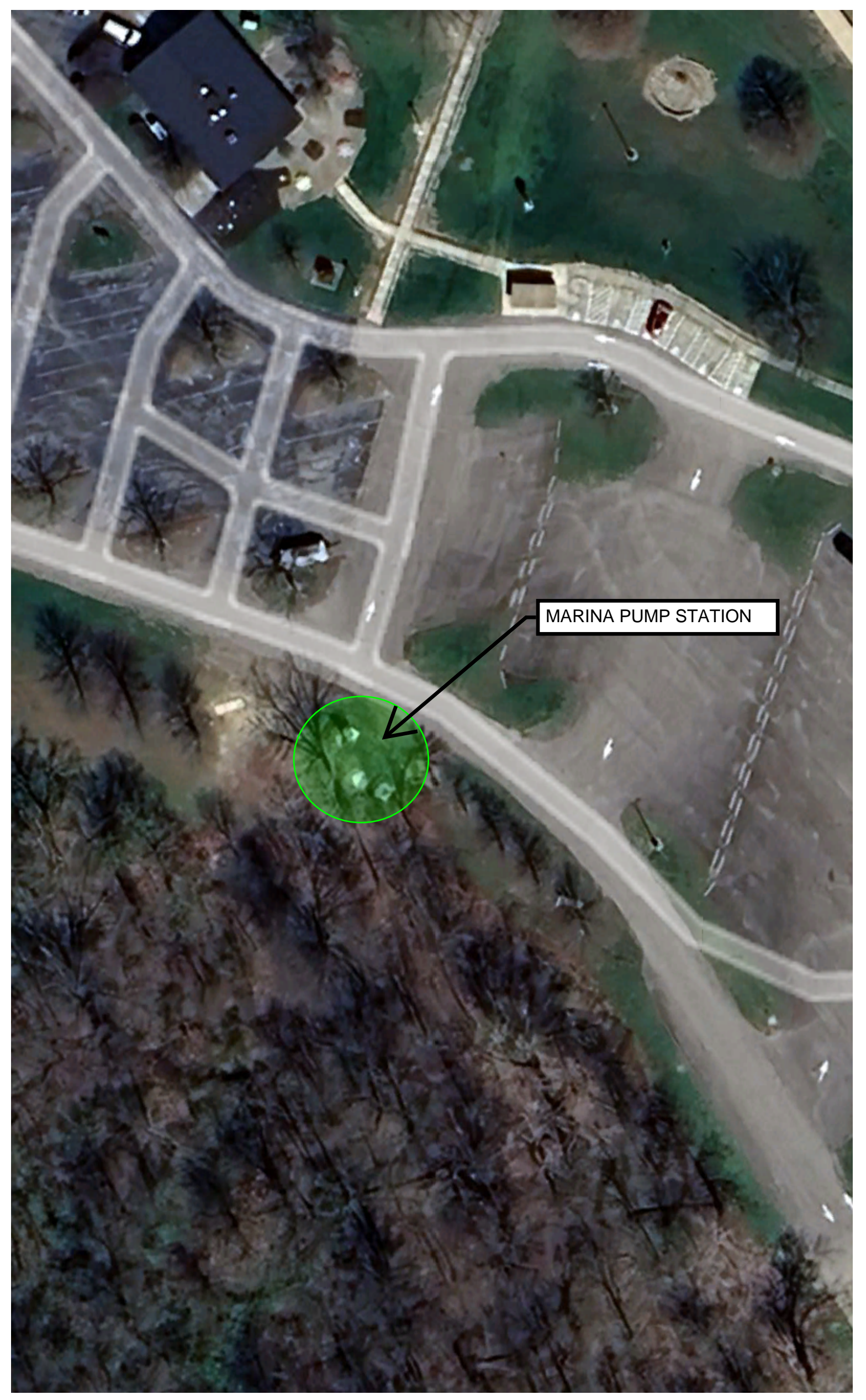
DELAWARE STATE PARK
 NEW WASTEWATER TREATMENT FACILITY
 DNR-220039

SITE PLAN PHASE 2 - GRADING



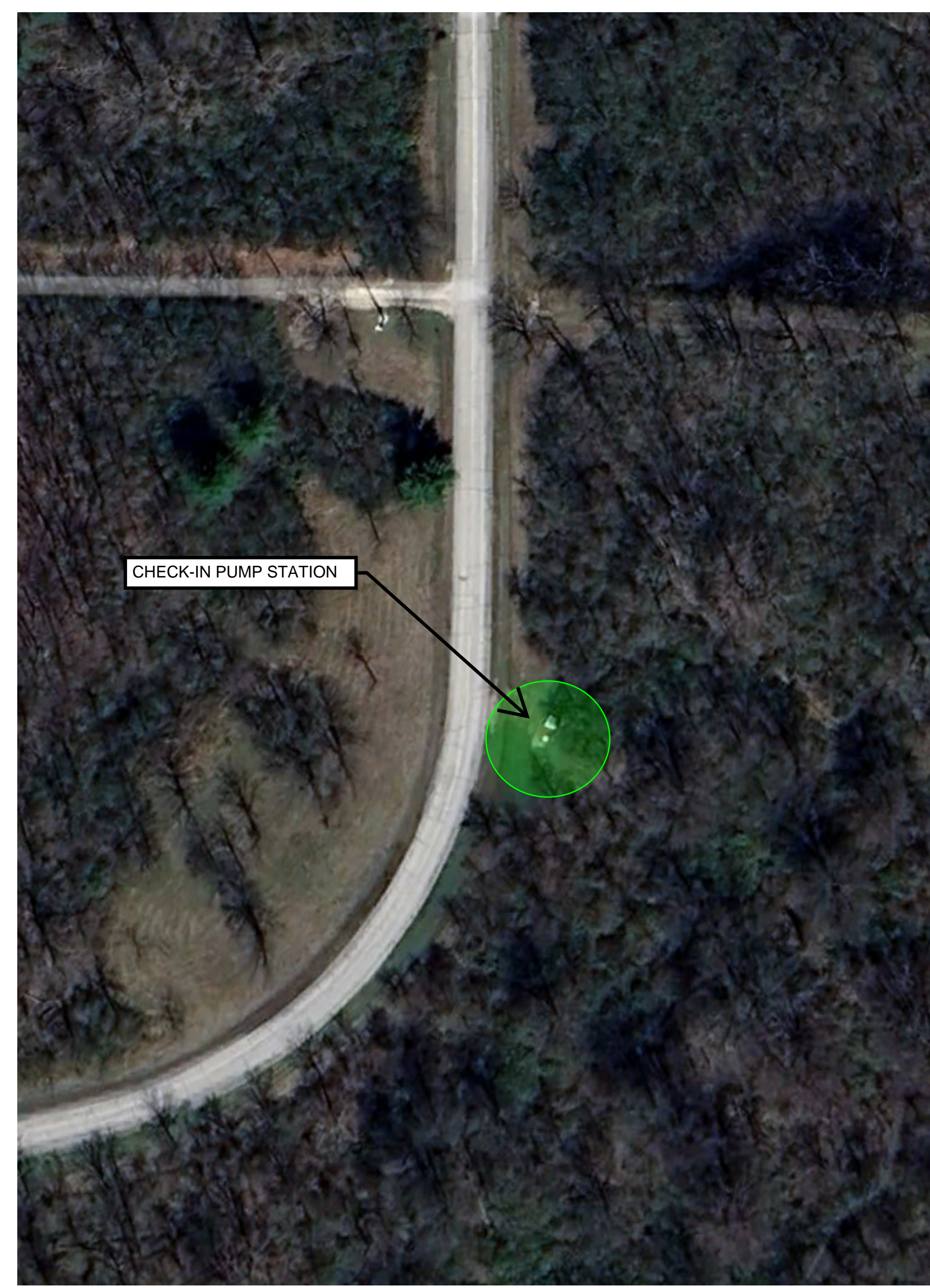


EXISTING CONTROL PANEL AND BREAKERS



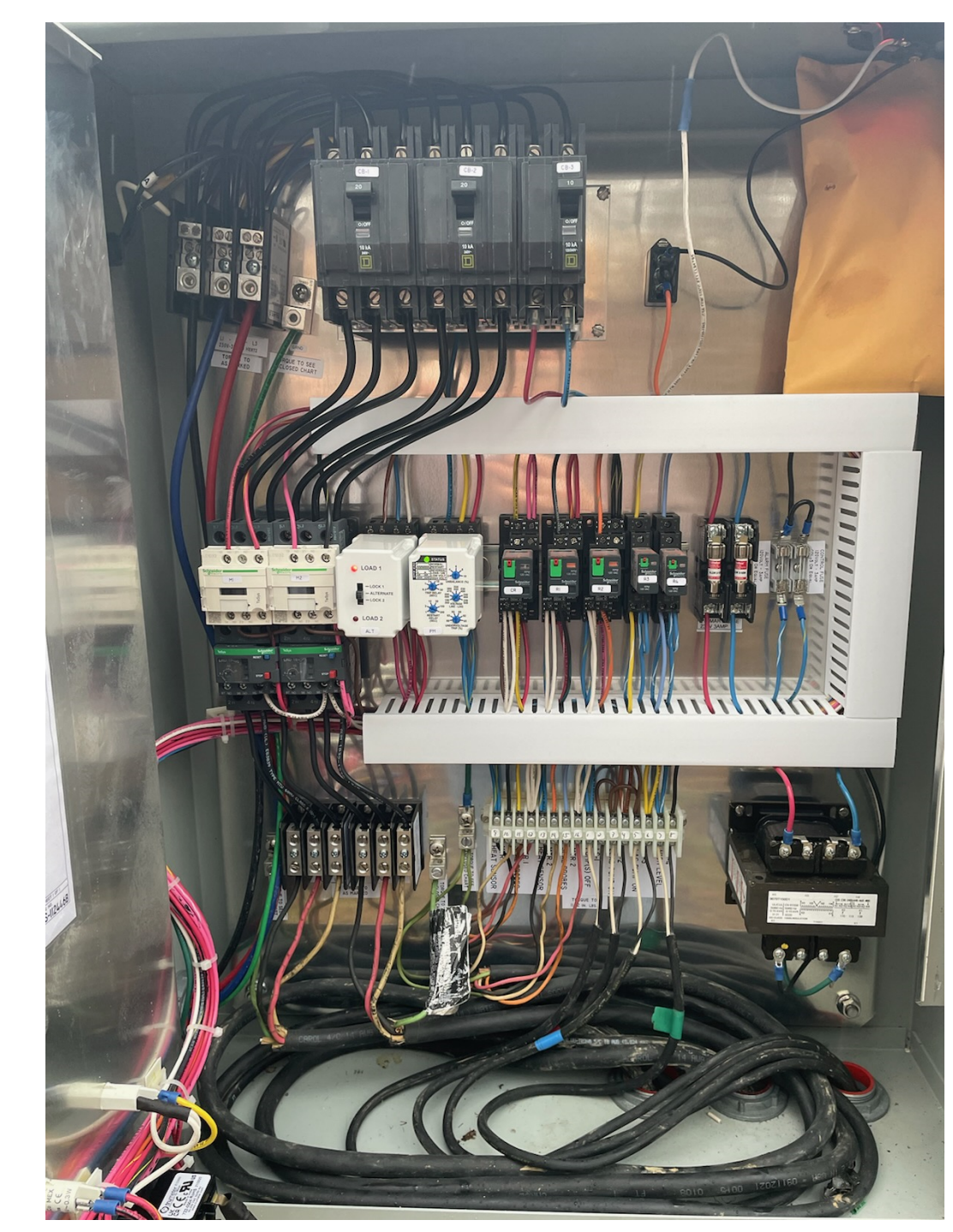
MARINA PUMP STATION

MARINA PUMP STATION



CHECK-IN PUMP STATION

CHECK-IN PUMP STATION



EXISTING CONTROL PANEL AND BREAKERS

OPERATION DATA
 TYPE: SUBMERSIBLE GRINDER SEWAGE PUMP
 MANUFACTURER: BARNES, HYDROMATIC, FLYGHT, EQUIV.
 MOTOR: 5.0 HP., 208 VOLTS, 3 PH.
 DUTY: 65 GPM AT 49 FT. TDH

PUMPS ARE TO BE REPLACED FOR THE CHECK-IN PUMP STATION AND THE MARINA PUMP STATION. 2 PUMPS PER EACH LOCATION. PUMP DATA IS SHOWN FOR EACH LOCATION. CONTRACTOR SHALL INCLUDE BREAKER AND STARTER REPLACEMENTS FOR THE CONTROL PANELS, BASED ON ELECTRIC REQUIREMENTS OF THE PUMPS SELECTED FOR EACH LOCATION.

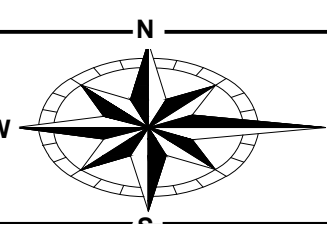
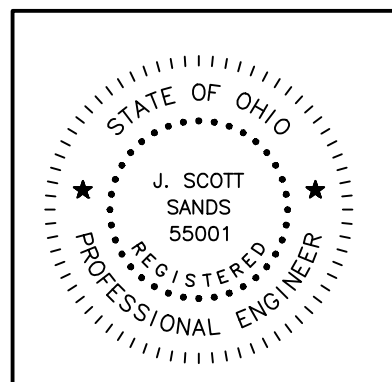
OPERATION DATA
 TYPE: SUBMERSIBLE GRINDER SEWAGE PUMP
 MANUFACTURER: BARNES, HYDROMATIC, FLYGHT, EQUIV.
 MOTOR: 5.0 HP., 208 VOLTS, 3 PH.
 DUTY: 65 GPM AT 33 FT. TDH



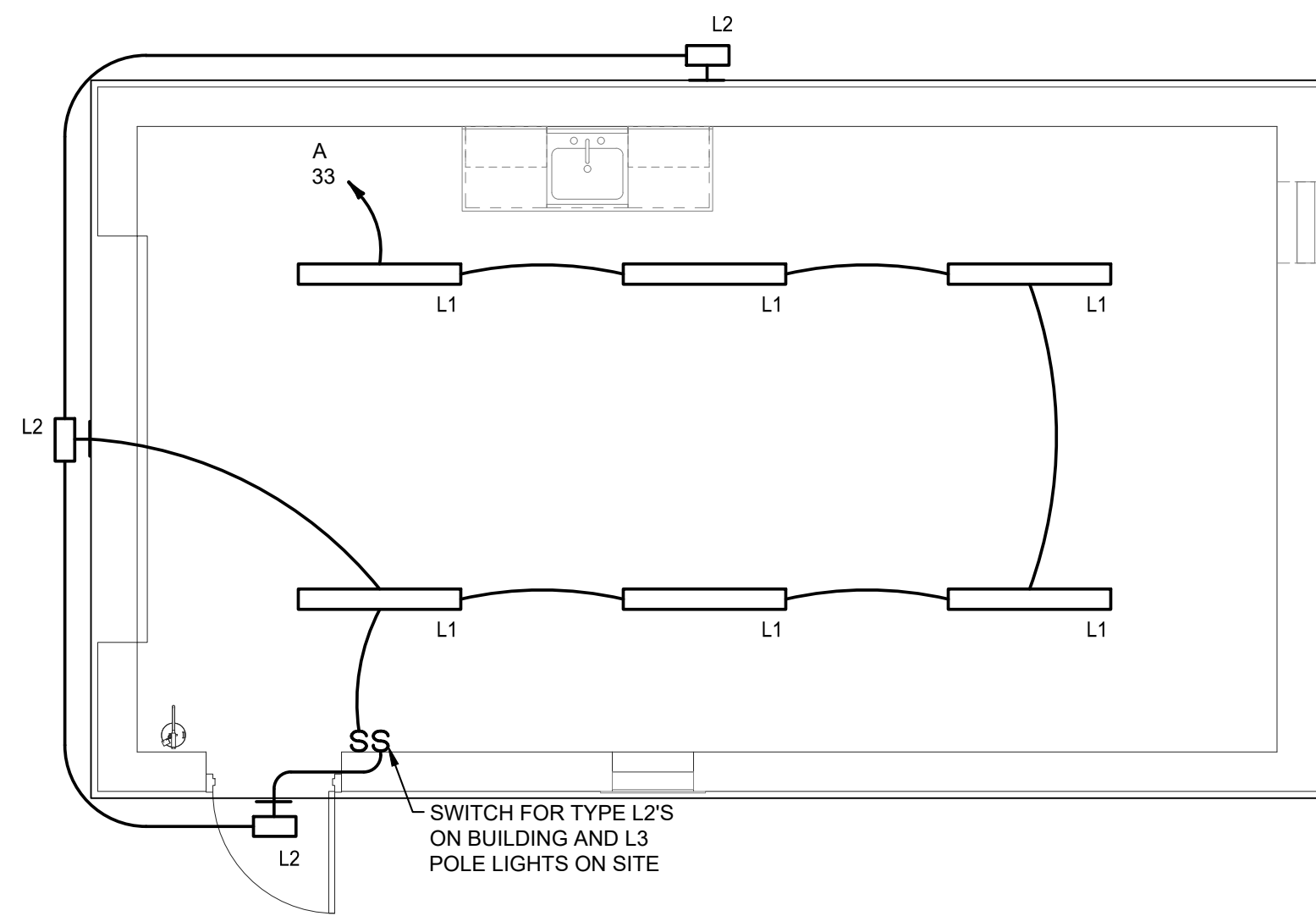
Know what's below.
 Call before you dig.

These drawings are instruments of professional service by Sands Decker CPS, LLC for the designated project. Sands Decker CPS, LLC assumes no liability for unauthorized use of these drawings, specifications, and documents.

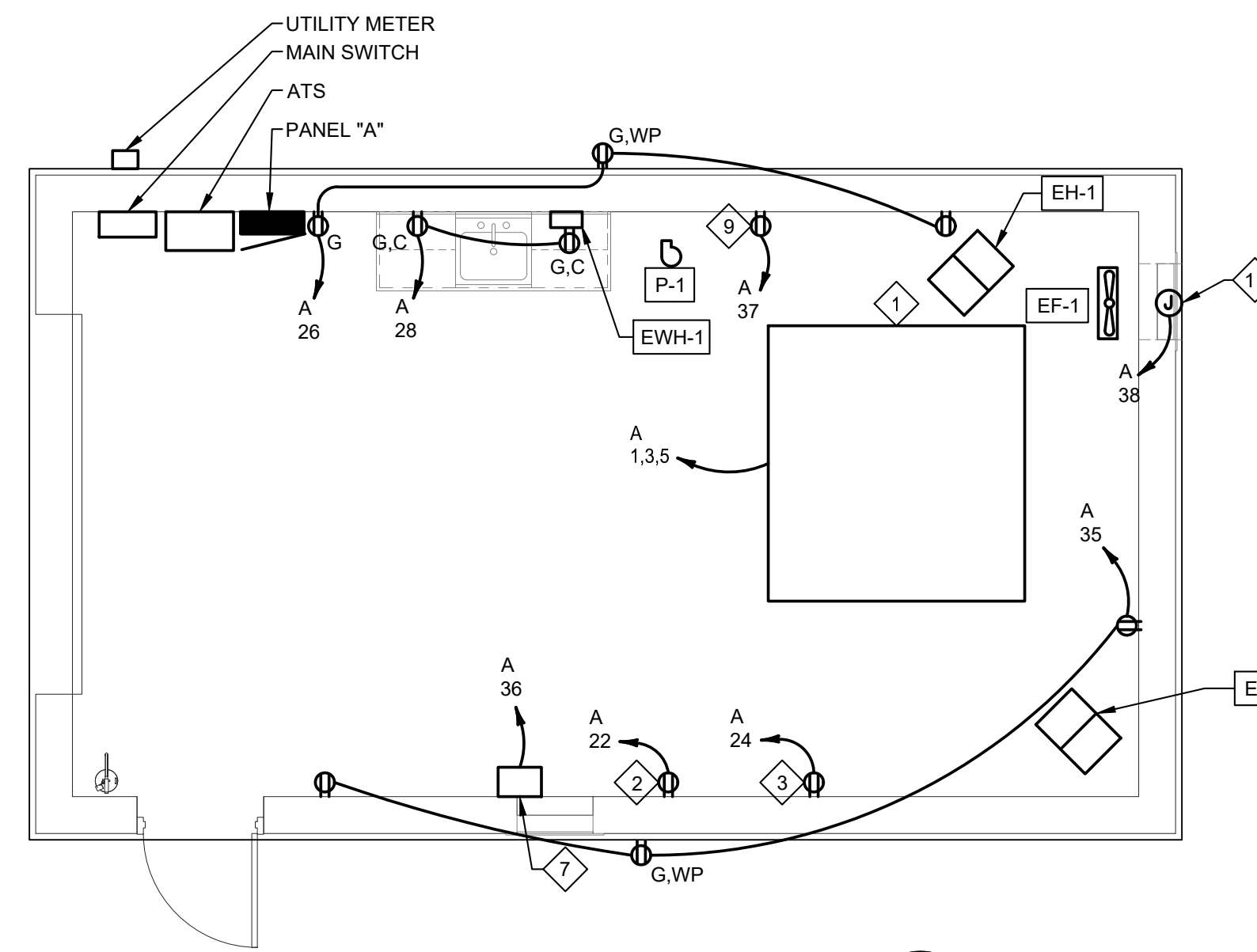
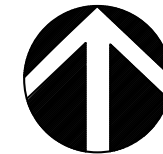
ISSUED FOR CONSTRUCTION



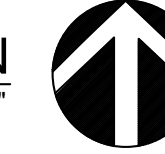
DESIGNED BY:	...			
DRAWN BY:	...			
CHECKED BY:	...			
APPROVED BY:	...			
		NO. DATE		SUBJECT
		REVISION OR ISSUE		



FILTER BUILDING LIGHTING PLAN
SCALE: 1/4" = 1'-0"

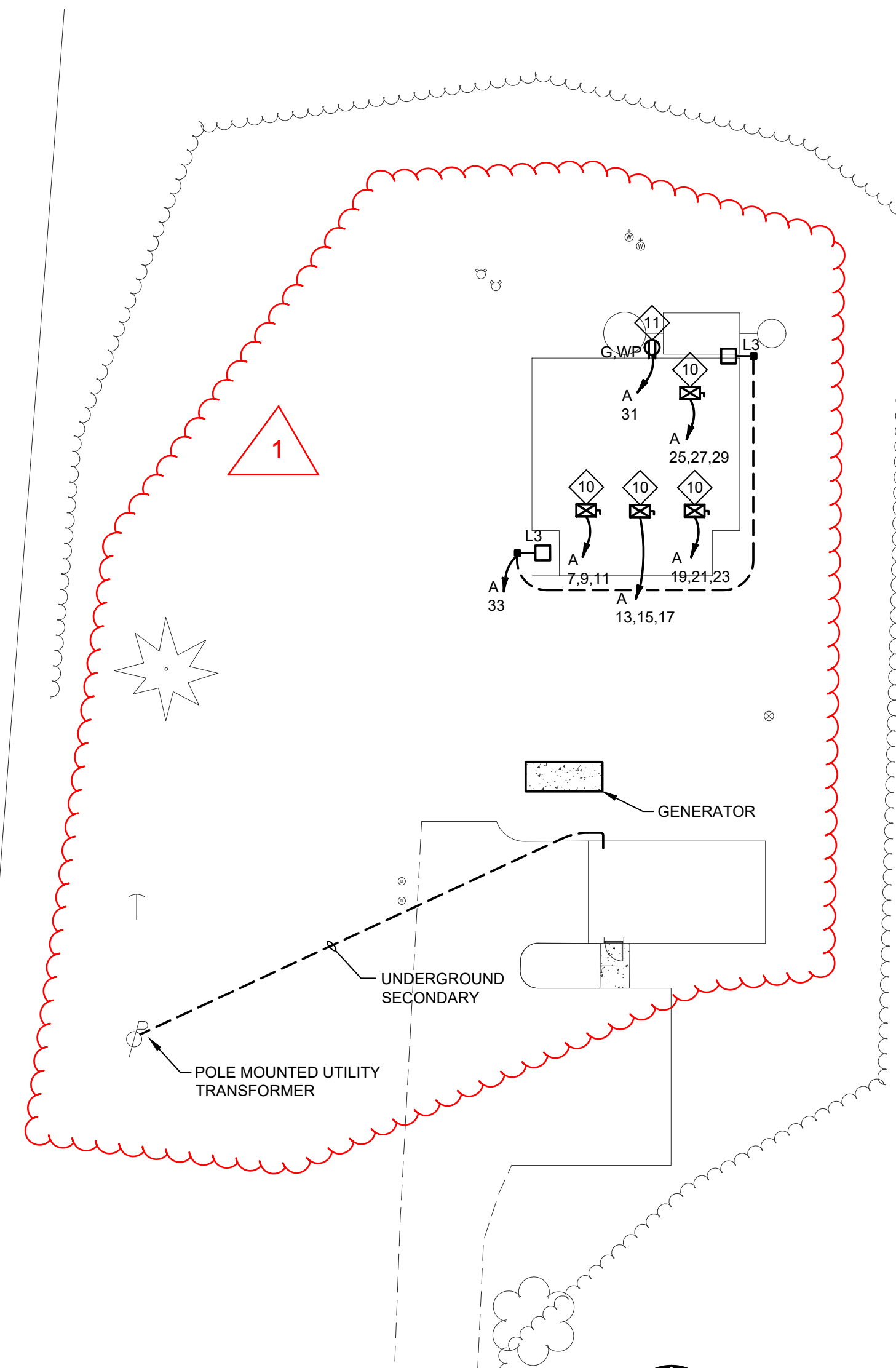


FILTER BUILDING POWER PLAN
SCALE: 1/4" = 1'-0"



PLAN NOTES

1. DISC FILTER - 208V, 3PH, 4KW - COORDINATE SINGLE POINT CONNECTION LOCATION AT CONTROL PANEL WITH EQUIPMENT.
2. UV SYSTEM - 120V, 0.6KW. COORDINATE FINAL LOCATION OF DEVICE WITH EQUIPMENT CORD LOCATION BEFORE ROUGH-IN.
3. FLOW METER - 120V, 0.5KW ASSUMED. COORDINATE FINAL LOCATION OF DEVICE WITH EQUIPMENT CORD LOCATION BEFORE ROUGH-IN.
4. AERATION BLOWER - 208V, 3PH, 5HP. PROVIDE AND WIRE THRU COMBINATION 3-PHASE STARTER / DISCONNECT IN NEMA 3R ENCLOSURE. WIRING TO BE 3-8 AWG & 1-10 AWG GND - 3/4" C. CONFIRM EXACT LOCATION IN FIELD. REFER TO THE TYPICAL BLOWER WIRING DETAIL.
5. EQUALIZATION TANK BLOWER - 208V, 3PH, 5HP. PROVIDE AND WIRE THRU COMBINATION 3-PHASE STARTER / DISCONNECT IN NEMA 3R ENCLOSURE. WIRING TO BE 3-8 AWG & 1-10 AWG GND - 3/4" C. CONFIRM EXACT LOCATION IN FIELD. REFER TO THE TYPICAL BLOWER WIRING DETAIL.
6. PROVIDE RECEPTACLE NEAR AERATION TANKS - MOUNT ON UNISTRUT AT 24" A.F.G.
7. CIRCULAR CHART RECORDER - 120V. FURNISHED AND INSTALLED BY OTHERS, WIRED BY E.C.
8. PROVIDE RECEPTACLE NEAR AERATION TANKS - MOUNT ON UNISTRUT AT 24" A.F.G.
9. ALUM PUMP - 120V, 0.5KW ASSUMED. CONFIRM LOCATION BEFORE ROUGH-IN.
10. AERATION BLOWER - 208V, 3PH, 5HP. PROVIDE AND WIRE THRU COMBINATION 3-PHASE STARTER / DISCONNECT IN NEMA 3R ENCLOSURE. WIRING TO BE 3-8 AWG & 1-10 AWG GND - 3/4" C. CONFIRM EXACT LOCATION IN FIELD. REFER TO THE TYPICAL BLOWER WIRING DETAIL.
11. LOUVER - 120V, 0.1KW. PROVIDE AND WIRE THRU SWITCH WITH PILOT LIGHT AND INTERLOCK WITH EF-1.



ELECTRICAL SITE PLAN
SCALE: 1/4" = 1'-0"

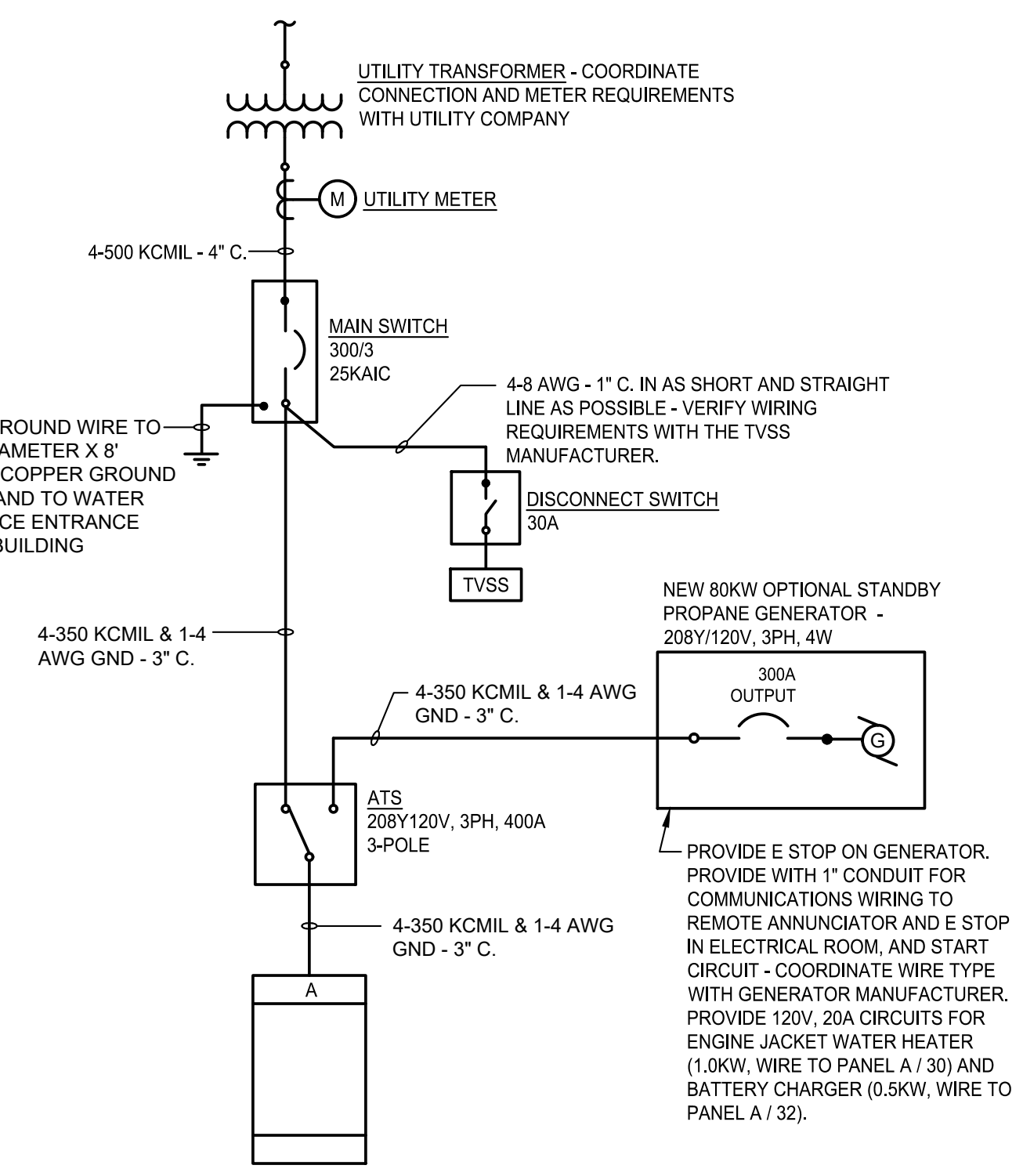


CIRCUIT BREAKER PANEL SCHEDULE													
PANEL <u>A</u> AMP <u>400</u> VOLTAGE <u>208/120V-3Ø-4W</u>													
INTERRUPTING CAPACITY <u>25,000</u> SPACES <u>54</u> AMPS RMS SYM <u>25,000</u> MAIN M.L.O. MOUNTING SURFACE													
LOAD DESCRIPTION	CONTINUOUS LOAD			NON-CONTINUOUS LOAD (80%)			RECEPTACLE LOAD			CONTINUOUS LOAD			LOAD DESCRIPTION
	ØA	ØB	ØC	ØA	ØB	ØC	ØA	ØB	ØC	ØA	ØB	ØC	
DISC FILTER	1.4						15/3	3	B	4			SPACE
AERATION BLOWER #1	2.1						35/3	9	B	10			EH-1
AERATION BLOWER #2	2.1						35/3	11	C	12			EH-2
AERATION BLOWER #3	2.1						35/3	13	A	14			EW-1
AERATION BLOWER #4	2.1						35/3	15	B	18			EF-1
AER. TANK REC							20/1	21	B	22	20/1		UV SYSTEM
LIGHTING	0.9						20/1	23	C	24	20/1		FLOW METER
BUILDING REC							20/1	25	A	26	20/1	0.5	BUILDING REC
ALUM PUMP							20/1	27	B	28	20/1	0.4	BUILDING REC
SPARE							20/1	29	C	30	20/1		GEN WATER HTR
SPARE							20/1	31	A	32	20/1	0.5	BATTERY CHARGER
SPARE							20/1	33	B	34	15/1		P-1
SPARE							20/1	35	C	36	20/1		CHART RECORDER
SPARE							20/1	37	A	38	20/1	0.1	LOUVER
SPARE							20/1	39	B	40	20/1		SPARE
SPARE							20/1	41	C	42	20/1		SPARE
SPARE							20/1	43	A	44	20/1		SPARE
SPARE							20/1	45	B	46	20/1		SPARE
SPARE							20/1	47	C	48	20/1		SPARE
SPARE							20/1	49	A	50	20/1		SPARE
SPARE							20/1	51	B	52	20/1		SPARE
SPARE							20/1	53	C	54	20/1		SPARE
KW SUB-TOTALS KW 9.8 10.7 9.8 0.5 0.2 0.5 0.5 0.4 0.6 7.3 7.7 5.6 2.5 2.5													

CONNECTED LOAD PER PHASE	
PHASE A	17.2 KWC 143.5 AMPS
PHASE B	20.8 KWC 173.1 AMPS
PHASE C	20.4 KWC 170.3 AMPS

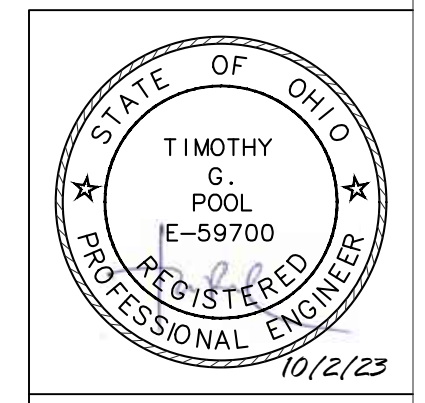
TOTAL CONNECTED LOAD	58.4 KWC 162.2 AMPS
TOTAL DEMAND LOAD	55.2 KWD 153.3 AMPS

SCHEDULE REMARKS:



ONE LINE DIAGRAM
NO SCALE

ISSUED FOR CONSTRUCTION



3/01/24 BID SET

