

## ADDENDUM NO. 1

**TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI**

**Water and Wastewater System Improvements  
Bothwell Lodge State Historic Site  
Sedalia, Missouri  
Project No. X2305-03**

**Bid Opening Date: 1:30 PM, Tuesday, October 29, 2024 (Not Changed)**

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

### **SPECIFICATION CHANGES:**

1. None.

### **DRAWING CHANGES:**

1. Sheet G-001
  - a. ADD Building Construction notes 1 through 8. See attached revised drawing.
2. Sheet G-002
  - a. REVISE site name to "Bothwell Lodge State Historic Site". See attached revised drawing.
3. Sheet C-100
  - a. DELETE concrete sidewalk between Admin building and proposed water treatment building. See attached revised drawing.
4. Sheet C-101
  - a. REVISE Septic Note 2.
  - b. ADD labels for section B-B on the distribution piping.
  - c. REVISE distribution pipe label.
  - d. See attached revised drawing.
5. Sheet C-102
  - a. REVISE existing waterline text. See attached revised drawing.
6. Sheet C-400
  - a. REVISE Water Note 2.
  - b. REVISE Description of Point No. T.
  - c. See attached revised drawing.
7. Sheet C-500
  - a. DELETE Detail 1 / Temporary Construction Entrance.
  - b. DELETE Detail 2 / Inlet Protection.
  - c. REVISE Sediment Control Detail to detail number 5.
  - d. See attached revised drawing.
8. Sheet C-501
  - a. REVISE Absorption Trench and Distribution Pipe Trench details.
  - b. DELETE Fabric Barrier information.
  - c. See attached revised drawing.

## **GENERAL COMMENTS:**

1. The Pre-Bid Meeting was held on October 10, 2024 at 1:00 PM. The Pre-Bid Meeting sign-in sheet is attached.
2. Please contact April Howser, Contract Specialist, at 573-751-0053 or April.Howser@oa.mo.gov for questions about bidding procedures, MBE\WBE\SDVE Goals, and other submittal requirements.
3. The deadline for technical questions was October 21, 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 Plan holders list available online at <https://www.oafmdcplanroom.com/projects/2613/plan-holders/x2305-03-water-wastewater-system-improvements-bothwell-lodge-state-historic-site>
7. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd Suite 1C, Columbia MO 65201, 573-446-7768 to order official plans and specifications.
8. **All bids shall be submitted on the bid form without additional terms and conditions, modifications, or stipulations. Each space on the bid form shall be properly filled. Failure to do so will result in rejection of the bid.**
9. **MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. Only certified firms as of the bid opening date can be used to satisfy the MBE/WBE/SDVE participation goals for this project. 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. Pre-Bid Meeting Sign-In Sheet
2. Sheets G-001, G-002, C-100, C-101, C-102, C-400, C-500, C-501

**October 21, 2024**

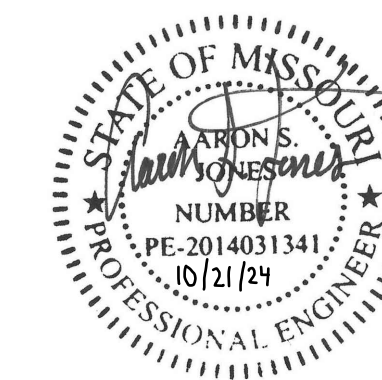
**END OF ADDENDUM NO. 1**

Water and Wastewater System Improvements  
 Bothwell Lodge State Historic Site  
 Sedalia, MO

Project No. X2305-03  
 October 10, 2024

Name & Title	Company Name	Phone	E-Mail Address
Eric Hibdon	OA FMDC	573-522-0322	<a href="mailto:Eric.Hibdon@oa.mo.gov">Eric.Hibdon@oa.mo.gov</a>
Wayne Farson	SFA Equipment Builders	573-220-7515	<a href="mailto:WPFarson@EquipmentBuilders.com">WPFarson@EquipmentBuilders.com</a>
Aaron Jones	TREKK Design Group	573-864-9323	<a href="mailto:ajones@trekkdesigngroup.com">ajones@trekkdesigngroup.com</a>
Tayren Leeds	TREKK Design Group	816-874-4000	<a href="mailto:tleeds@trekkdesigngroup.com">tleeds@trekkdesigngroup.com</a>
Charles Saunders	Brown and Root	573-721-3564	<a href="mailto:Charles.Saunders@BrownandRoot.com">Charles.Saunders@BrownandRoot.com</a>
Kyle Houston	Mccalister construction	660-287-4635	<a href="mailto:Kyle@Mccalisterconstruction.com">Kyle@Mccalisterconstruction.com</a>
John Grentges	OA-FMDC	873 291-9596	<a href="mailto:John.Grentges@OA.mo.gov">John.Grentges@OA.mo.gov</a>
Dustin Webb	DSP - North Branch	573-418-7332	<a href="mailto:webb@dnr.mo.gov">webb@dnr.mo.gov</a>
Andrea Goldstrom	Historian/Resource Interpreter	827-0510 (660)	<a href="mailto:andrea.goldstrom@dnr.mo.gov">andrea.goldstrom@dnr.mo.gov</a>
Jim Griggs	MO State Parks/Bothwell	660-287-6164	<a href="mailto:jim.griggs@dnr.mo.gov">jim.griggs@dnr.mo.gov</a>
Teresa Anderson	MSP/Bothwell	660-229-3177	<a href="mailto:teresa.anderson@dnr.mo.gov">teresa.anderson@dnr.mo.gov</a>





AARON S. JONES  
MO PE-2014031341



1411 E 104th St  
Kansas City, MO 64131  
Tel (816) 874-4655  
Fax (816) 874-4675

MO St. Cert. of Authority: 2002010300

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES/  
STATE PARKS &  
HISTORIC PRESERVATION

WATER AND WASTEWATER  
SYSTEM IMPROVEMENT,  
INFRASTRUCTURE PROJECT  
American Rescue Plan Act (ARPA)

BOTHWELL LODGE  
STATE HISTORIC SITE  
19349 BOTHWELL  
STATE PARK RD  
SEDALIA, MISSOURI

PROJECT # X230503  
SITE # 5303  
ASSET # 7815303016

REVISION: ADDENDUM   
DATE: 10/21/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 8/29/2024

CAD DWG FILE: 2-G001\_GN\_22-0510.dgn  
DRAWN BY: MBT  
CHECKED BY: MS  
DESIGNED BY: TML

SHEET TITLE:  
GENERAL NOTES  
AND LEGEND

SHEET NUMBER:

G-001

2 OF 9 SHEETS  
10/21/2024

**GENERAL NOTES:**

- UTILITIES: LOCATIONS OF UTILITIES ARE SHOWN FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE EITHER ACCURATE OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITIES, OBTAIN UTILITY LOCATIONS, AND VERIFY THE FIELD LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- DEVIATIONS FROM PLAN AND SPECIFICATIONS: ANY DEVIATIONS IN THE LOCATIONS OR NUMBER OF FACILITIES NOTED FOR INSTALLATION ON THESE PLANS, OR EXTENSION OR RE-ROUTING THE UTILITIES CONSTRUCTED UNDER THESE PLANS, REQUIRES WRITTEN AUTHORIZATION OF THE OWNER'S REPRESENTATIVE BEFORE PROCEEDING. ITEMS INSTALLED IN CONFLICT WITH THE PLANS AND SPECIFICATIONS AND WITHOUT SUCH APPROVAL WILL NOT BE APPROVED FOR PAYMENT.
- SITE ACCESS: THE CONTRACTOR SHALL PROVIDE ACCESS TO THE WORK AT ANY TIME FOR THE OWNER, ENGINEER, AND STATE AND LOCAL OFFICIALS.
- SAFETY ON THE JOB IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO REPLACE AND MAINTAIN PROPER BARRICADES AND/OR FENCES TO PREVENT INJURY TO HIS/HER AND OTHER PERSONNEL AND THE PUBLIC.
- THE CONTRACTOR SHALL LEAVE SUCH BARRICADES AND/OR FENCES IN PLACE AT ANY TIME HE/SHE IS ABSENT FROM THE JOB SITE. WORK IN THE RIGHT-OF-WAY SHALL HAVE ADEQUATE TRAFFIC CONTROL TO PROVIDE A SAFE WORK AREA IN ACCORDANCE WITH PART 6 OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OF THE US DEPARTMENT OF TRANSPORTATION. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC WAYS (SIGNS AND DEVICES) DURING THE CONSTRUCTION WORK AND AT ALL TIMES UNDER THIS CONTRACT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY PROPERTY MONUMENTS (IRONS) REMOVED OR DESTROYED BY THIS CONSTRUCTION. MONUMENTS BEING RESET SHALL BE PLACED BY A SURVEYOR, REGISTERED TO PRACTICE IN THE STATE OF MISSOURI.
- THIS SHALL BE CONSIDERED SUBSIDIARY WORK. EXISTING CURBS, SIDEWALKS, LANDSCAPING, STORM DRAINAGE STRUCTURES AND PIPES, WATERLINE AND SERVICES, SIGNAGE, AND UTILITIES WITHIN THE LIMITS OF CONSTRUCTION SHALL REMAIN AND BE PROTECTED FROM DAMAGE DURING CONSTRUCTION ACTIVITIES UNLESS NOTED OTHERWISE.
- THE CONTRACTOR WILL MINIMIZE ANY EQUIPMENT PARKING ON GRASS AREAS. IN THE EVENT THIS IS UNAVOIDABLE AND RESULTS IN RUTTING OF THE TURF AND SOIL, RESTORATION WILL NOT BE CONSIDERED COMPLETE UNTIL ANY RUTS HAVE BEEN LEVELED OUT AND GRASS SEED IS ADEQUATELY ESTABLISHED. CONTRACTORS WILL PLANT GRASS SEED TO MATCH THAT EXISTING AT THE SITE; FESCUE WITH FESCUE, BERMUDA WITH BERMUDA, ETC., (NO MORE THAN 10% ANNUAL RYE ALLOWED IN ANY CASE). SEED PLACED AFTER JUNE 15TH CANNOT BE EXPECTED TO SHOW A SUBSTANTIAL RE-GROWTH AND MUST BE RE-SEEDED IN THE FALL. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED YARD FEATURE OR EXISTING ITEM TO "PRE-EXISTING" OR "BETTER" CONDITION AT NO EXPENSE TO THE CITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORED SEED/SOD AREAS FOR UP TO 6 MONTHS FROM THE CONCLUSION OF THE WORK PERFORMED. IF THE LANDOWNER ACCEPTS THE WORK, THIS TIME SHALL END.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
- ALL SUBSURFACE WORK SHALL BE COORDINATED WITH THE APPROVED ARCHEOLOGIST.

**WELL NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DRINKING WELL INSPECTION. PRIOR TO INSPECTION, THE CONTRACTOR SHALL PURCHASE REPLACEMENT PUMP PIPING ELECTRICAL WIRE NECESSARY AND ALL REQUIRED APPURTANANCES TO HAVE ON-SITE DURING INSPECTION.
- THE CONTRACTOR SHALL NOTIFY ENGINEER (AARON JONES 573-864-9323) AND STATE PARKS PM (ERIC HIBDON 573-508-3666) SO THEY CAN BE PRESENT ON-SITE FOR THE WELL INSPECTION.
- THE CONTRACTOR SHALL PULL THE EXISTING PUMP AND REMOVE FROM EXISTING WELL.
- THE EXISTING WELL SHALL BE INSPECTED FOR CONDITION ASSESSMENT. INSPECTION SHALL INCLUDE BUT NOT LIMITED TO THE WELL LID/HATCH, WELL CASING, ELECTRICAL SUPPLY, AND APPURTENANCES. IN THE EVENT THE CONTRACTOR DETERMINES DEFICIENT EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER IMMEDIATELY. AT THAT TIME THE OWNER WILL DETERMINE IF REPAIR WILL BE COMPLETED IMMEDIATELY OR EARMARKED FOR THE FUTURE.
- AFTER INSPECTION AND ANY REPAIRS APPROVED BY THE OWNER ARE COMPLETE, THE CONTRACTOR SHALL INSTALL NEW PUMP PIPING AND WIRING INTO THE WELL.
- THE CONTRACTOR SHALL RECEIVE LUMP SUM PAYMENT FOR WELL INSPECTION UNDER BID ITEM NAMED CONTRACTOR WELL INSPECTION. OWNER APPROVED REPAIRS SHALL BE PAID FOR UNDER BID ITEM NAMED WELL MODIFICATIONS.

**DEMO:**

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL CURRENT CITY, STATE AND/OR FEDERAL STANDARD PLANS, GUIDELINES AND SPECIFICATIONS AS APPLICABLE.
- THE CONTRACTOR SHALL CONTACT THE DIGSAFE/DIGRITE UTILITY INFORMATION SERVICE. LOCATION OF EXISTING STRUCTURES AND UTILITIES LINES AS SHOWN ON THE PLANS ARE APPROXIMATE.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OF THE SCOPE OF WORK AND BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL UTILITY LOCATIONS AND DEPTHS ON-SITE PRIOR TO ANY EXCAVATION. UTILITIES INCLUDE, BUT ARE NOT LIMITED TO STORM, SANITARY, GAS, ELECTRIC, WATER, TELEPHONE, AND CABLE AND FIBER.
- IN THE EVENT ANY UTILITY DISCONNECTION OR RELOCATION IS NECESSARY, THE CONTRACTOR SHALL COORDINATE AND ALLOW ACCESS FOR UTILITY COMPANIES TO PERFORM THE DISCONNECTION OR RELOCATION ACTIVITIES AS STATED IN THE CONTRACT DRAWINGS OR PER UTILITY COORDINATION EFFORTS. IN THE EVENT ANY UTILITY REQUIRES SHORING, BRACING OR TEMPORARY SUPPORT DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION, DETERMINATION, AND IMPLEMENTATION OF EACH UTILITY PROVIDERS REQUIREMENTS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE PRECAUTIONS TO NOT DAMAGE ANY EXISTING PUBLIC INFRASTRUCTURE, INCLUDING SIGNING, SIDEWALKS, STREET LIGHTING, EXIST PUBLIC UTILITIES, STREET OR PARKING LOT PAVEMENT, CONCRETE OR ASPHALT CURBING. ANY ITEMS REMOVED AND STORED SHALL BE COORDINATED AND APPROVED BY CITY STAFF. THE CONTRACTOR SHALL AT HIS OWN EXPENSE, REMOVE, STORE, REPAIR OR REPLACE ANY DAMAGED PORTIONS OF THE PUBLIC INFRASTRUCTURE CAUSED BY DEMOLITION ACTIVITIES AND/OR HAULING ACTIVITIES.
- REMOVALS OF PORTIONS OF PAVEMENT, CURB AND GUTTERS, SIDEWALK, AND OTHER SIMILAR IMPROVEMENTS SHALL BE REMOVED TO AN EXISTING JOINT IF ONE IS WITHIN 5'. IF THERE IS NO EXISTING JOINT, A JOINT WILL BE SAWED TO A MINIMUM DEPTH OF 2" WITH TRUE LINE AND VERTICAL FACE PRIOR TO REMOVAL.
- IF DESIGNATED FOR REMOVAL, THE CONTRACTOR SHALL REMOVE TREES, SHRUBS, BRUSH, GROUND VEGETATION MARKED BY AN "X" LOCATED WITHIN THE DEMOLITION SITE UNLESS OTHERWISE INDICATED ON THE DEMOLITION PLANS. CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING TREES, SHRUBS, AND PLANTS UNLESS OTHERWISE NOTED.
- CARE SHALL BE EXERCISED TO PRESERVE AND/OR PROTECT EXISTING VEGETATION OUTSIDE OF AREAS TO BE GRADED. ANY OF THESE AREAS DAMAGED BY THE GENERAL CONTRACTOR AND/OR HIS ASSIGNEES SHALL BE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP STREETS, PARKING LOT, & ENTRANCE FREE OF ALL MUD AND DEBRIS CREATED BY THE DEMOLITION WORK AND/OR HAULING TRUCKS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAUL-OFF AND DISPOSAL OF ALL ITEMS TO BE REMOVED. THE CONTRACTOR SHALL NOT USE ANY REMOVED PAVEMENT OR CURB AS BACKFILL.
- ALL WASTE EXCAVATION, CONSTRUCTION MATERIALS, DEMOLISHED STRUCTURES AND DEBRIS SHALL BE REMOVED FROM THE SITE AS SPECIFIED AND PER GOVERNING STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ESTABLISH, INSTALL AND MAINTAIN ALL APPURTENANCES OF THE SWPPP TO PREVENT SILT WASHOUT UNTIL COMPLETION AND FINAL ACCEPTANCE OF THE CONTRACT. ADDITIONALLY, THE CONTRACTOR SHALL INSTALL EROSION CONTROL AROUND ALL STORM INLETS, AREA INLETS AND CULVERT INLETS TO PREVENT SILTATION INTO THE SEWERS. (THE CONTRACTOR MAY BE REQUIRED TO INSTALL ADDITIONAL SILT FENCE EROSION CONTROL AS DIRECTED BY THE DESIGN PROFESSIONAL).

**GRADING:**

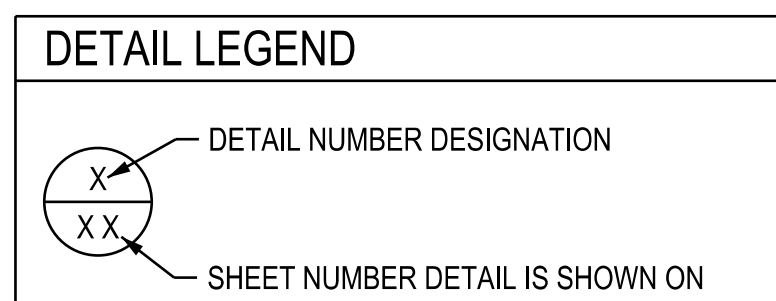
- THE CONTRACTOR'S OPERATIONS SHALL CONFORM TO OSHA CONSTRUCTION STANDARDS 29 CFR PERTAINING TO EXCAVATION AND TRENCHING. THE CONTRACTOR SHALL UTILIZE TRENCH BOXES TO MINIMIZE DISTURBANCE FROM TRENCHING OPERATIONS..
- CONTACT THE DIGSAFE/DIGRITE UTILITY INFORMATION SERVICE. LOCATION OF EXISTING STRUCTURES AND UTILITIES LINES AS SHOWN ON THE PLANS ARE APPROXIMATE.
- THE CONTRACTOR SHALL MINIMIZE LIMITS OF DISTURBANCE AND EXCAVATION. AN ON-SITE ARCHEOLOGISTS IS REQUIRED DURING GRADING ACTIVITIES.
- IF THE CONTRACTOR ENCOUNTERS UNSUITABLE OR HAZARDOUS MATERIAL AT ANY TIME, THE CONTRACTOR SHALL STOP WORK AND IMMEDIATELY NOTIFY THE ENGINEER.
- ALL EXCAVATION SHALL BE CONSIDERED UNCLASSIFIED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING.

**EROSION NOTES**

- ALL WORK SHALL CONFORM TO THE EROSION & SEDIMENT CONTROL SPECIFICATIONS CRITERIA SET FORTH BY THE STATE OF MISSOURI AND AS NOTED IN THE PROJECT DRAWINGS & SPECIFICATIONS. EROSION CONTROL MUST BE IN PLACE PRIOR TO ANY SITE WORK AND MUST BE MAINTAINED CONTINUOUSLY THROUGHOUT THE PROJECT.
- CONTRACTOR SHALL COMPLY WITH THE GOVERNING AGENCY CONSTRUCTION REQUIREMENTS AND NPDES REQUIREMENTS AND SHALL PROVIDE APPROPRIATE MITIGATION MEASURES FOR PROTECTION AND RESTORATION AT ALL LOCATIONS AS REQUIRED BY THEIR OPERATIONS AND AS REQUIRED BY THE CITY'S REPRESENTATIVE. SPECIAL CONSTRUCTION REQUIREMENTS, TEMPORARY PROTECTIVE FENCING OR BARRICADES, SHEETING, SHORING, EROSION PROTECTION, AND SURFACE RESTORATION AT CERTAIN LOCATIONS ARE INDICATED ON THE DRAWINGS TO BRING CONTRACTORS' ATTENTION TO SENSITIVE AREAS.
- THE CONSTRUCTION STAGING AREA AND ANY STOCK PILES SHALL HAVE SILT FENCE AROUND THE PERIMETER.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ESTABLISH, INSTALL AND MAINTAIN ALL APPURTENANCES TO PREVENT SILT WASHOUT UNTIL COMPLETION AND FINAL ACCEPTANCE OF THE CONTRACT. ADDITIONALLY, THE CONTRACTOR SHALL INSTALL EROSION CONTROL AROUND ALL STORM INLETS, AREA INLETS AND CULVERT INLETS TO PREVENT SILTATION INTO THE SEWERS. (THE CONTRACTOR MAY BE REQUIRED TO INSTALL ADDITIONAL SILT FENCE EROSION CONTROL AS DIRECTED BY THE CITY'S REPRESENTATIVE).
- THE TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING A TEMPORARY CONSTRUCTION ENTRANCE AT LOCATIONS WHERE CONSTRUCTION VEHICLES WILL BE ENTERING AND EXITING THE LIMITS OF DISTURBANCE. CONSTRUCTION ENTRANCE SHALL BE REMOVED AT THE END OF CONSTRUCTION.
- THE LIMITS OF DISTURBANCE SHOWN ARE APPROXIMATE. THE CONTRACTOR SHOULD TAKE CARE TO MINIMIZE DISTURBANCE AS MUCH AS POSSIBLE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROJECT SWPPP THROUGHOUT THE PROJECT.
- THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS AS CONSTRUCTION PHASES ARE COMPLETED AND IN ACCORDANCE WITH THE PROJECT SWPPP.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSPECTION & MAINTENANCE OF ALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE SWPPP THROUGHOUT THE DURATION OF THE PROJECT.

**BUILDING CONSTRUCTION**

- CONTRACTOR SHALL CONSTRUCT/INSTALL MINIMUM OF 10' x 12' WOOD FRAME SHED TO HOUSE THE WELL WATER SOFTENING STATION. INTERIOR STUDS SHALL HAVE A MAXIMUM SPACING AT 16" ON CENTER.
- CONTRACTOR SHALL INSTALL EARTHEN ANCHORS SUFFICIENT TO THE SIZE OF THE STRUCTURE. SUBMIT ANCHOR MANUFACTURER TYPE, SIZE AND SPACING RECOMMENDATIONS/SPECIFICATIONS FOR APPROVAL.
- INSULATION SHALL BE A MINIMUM OF R-16 IN WALLS AND CEILING.
- WATERLINES, DRAINS, AND ELECTRICAL INGRESS/EGRESS SHALL BE WITHIN CONDUIT AT LEAST THREE TIMES THE DIAMETER OF THE SERVICE CONDUIT AND SHALL TERMINATE 12" - 24" BELOW GRADE TO REDUCE VECTOR ACCESS.
- EXTERIOR SHALL BE FINISHED TO BLEND WITH THE ADJACENT ADMINISTRATION BUILDING, TO OWNERS APPROVAL.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PROPOSED STRUCTURE TO THE ENGINEER FOR REVIEW.
- PROPOSED STRUCTURE TO BE SET ON PRECAST CONCRETE DECK FOUNDATION PIERS OR EQUIVALENT.
- STRUCTURE SHALL HAVE WEED BARRIER AND A MINIMUM OF 6" THICK LAYER OF CLEAN 1/2" GRAVEL (COMPACTED BY VIBRATORY PLATE) UNDER ENTIRE FOOT PRINT.



**UTILITIES LEGEND**

EXISTING UNDERGROUND POWER LINES	---	E	---
EXISTING OVERHEAD UTILITIES	---	OHU	---
EXISTING UNDERGROUND TELEPHONE LINES	---	T	---
EXISTING WATER LINE	---	W	---
EXISTING SANITARY SEWER	---	SAN	---
EXISTING GAS LINE	---	G	---
EXISTING STORM SEWER	---	ST	---
EXISTING FIBER OPTIC	---	FO	---
EXISTING TREE LINE	---		---
EXISTING CHAINLINK FENCE	---		---
EXISTING WIRE/ BARBED WIRE FENCE	---		---
EXISTING WOOD FENCE	---		---
PROPOSED SANITARY SEWER	---	SAN	---
RIGHT OF WAY	---	R/W	---
PROPERTY LINE	---	P/L	---
EXISTING EASEMENT	---		---
PERMANENT EASEMENT	---	P/E	---
TEMPORARY CONSTRUCTION EASMENT	---	T/E	---
SECTION LINE	---		---
PROPOSED MANHOLE	○		
PROPOSED COMBINATION AIR VALVE	⊙		
ROAD LIMITS	---		---

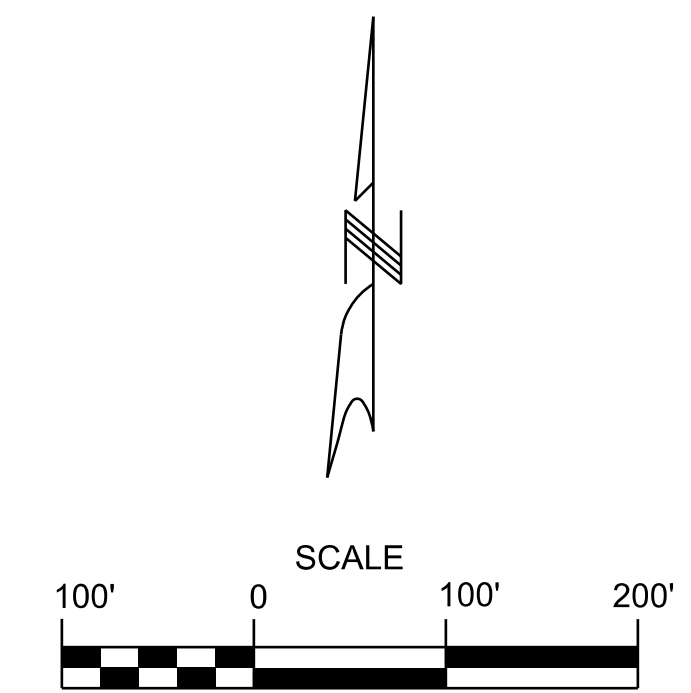
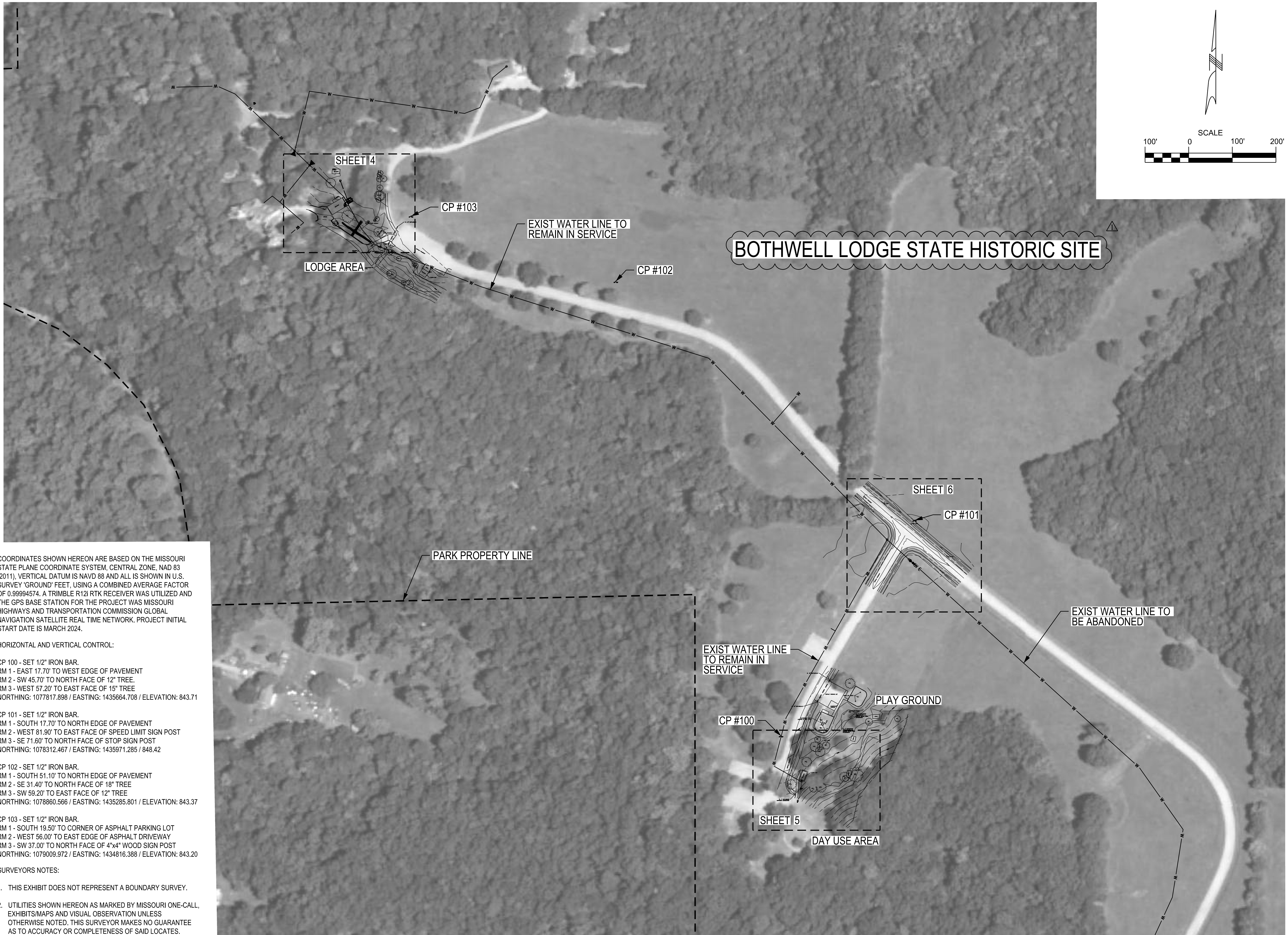
**LEGEND**

ENCASEMENT PIPE	---	
SIGN	⊥	
TYPE 3 BARRICADE	E	
POWER POLE	⊠	
LIGHT POLE	⊠	
PROPERTY LINE	---	
ELECTRIC TRANSFORMER	⊠	
TELEPHONE POLE	⊠	
TELEPHONE PEDESTAL	⊠	
CABLE TV PEDESTAL	⊠	
GUY ANCHOR	⊠	
GAS METER	G	
GAS VALVE	G	
MAIL BOX	MB	
SIGN (SURVEY)	⊠	
EXISTING TREE (DIA)	12"	
EXISTING PINE TREE (DIA)	12"	
EXISTING BUSH	3'	
TREE REMOVAL	12"	
EXISTING MANHOLE	⊙	
BORING REFUSAL	⊠	
BORING LOCATION	⊙	
GATE VALVE	⊙	
FLUSHING ASSEMBLY	⊙	
PLUG	]	

**ABBREVIATIONS:**

AI	AREA INLET
BMP	BEST MANAGEMENT PRACTICE
CI	CURB INLET
CMP	CORRUGATED METAL PIPE
CY	CUBIC YARD
CTR	CENTER
DIA	DIAMETER
DND	DO NOT DISTURB
DWG	DRAWING
EGL	ENERGY GRADE LINE
EL	ELEVATION
EOP	EDGE OF PAVEMENT
EXIST	EXISTING
FES	FLARED END SECTION
FH	FIRE HYDRANT
FL	FLOWLINE
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
INV	INVERT
JB	JUNCTION BOX
LF	LINEAR FEET
MH	MANHOLE
PVC	POLYVINYL CHLORIDE PIPE
PVMT	PAVEMENT
PG	PROFILE GRADE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
SE	SANITARY EASEMENT
SF	SQUARE FEET
SY	SQUARE YARD
TCE	TEMPORARY CONSTRUCTION EASEMENT
UIP	USE IN PLACE
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPT	VERTICAL POINT OF TANGENCY
YD	YARD





COORDINATES SHOWN HEREON ARE BASED ON THE MISSOURI STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NAD 83 (2011). VERTICAL DATUM IS NAVD 88 AND ALL IS SHOWN IN U.S. SURVEY 'GROUND' FEET. USING A COMBINED AVERAGE FACTOR OF 0.99994574. A TRIMBLE R12I RTK RECEIVER WAS UTILIZED AND THE GPS BASE STATION FOR THE PROJECT WAS MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION GLOBAL NAVIGATION SATELLITE REAL TIME NETWORK. PROJECT INITIAL START DATE IS MARCH 2024.

**HORIZONTAL AND VERTICAL CONTROL:**

CP 100 - SET 1/2" IRON BAR.  
 RM 1 - EAST 17.70' TO WEST EDGE OF PAVEMENT  
 RM 2 - SW 45.70' TO NORTH FACE OF 12" TREE.  
 RM 3 - WEST 57.20' TO EAST FACE OF 15" TREE  
 NORTHING: 1077817.898 / EASTING: 1435664.708 / ELEVATION: 843.71

CP 101 - SET 1/2" IRON BAR.  
 RM 1 - SOUTH 17.70' TO NORTH EDGE OF PAVEMENT  
 RM 2 - WEST 81.90' TO EAST FACE OF SPEED LIMIT SIGN POST  
 RM 3 - SE 71.60' TO NORTH FACE OF STOP SIGN POST  
 NORTHING: 1078312.467 / EASTING: 1435971.285 / 848.42

CP 102 - SET 1/2" IRON BAR.  
 RM 1 - SOUTH 51.10' TO NORTH EDGE OF PAVEMENT  
 RM 2 - SE 31.40' TO NORTH FACE OF 18" TREE  
 RM 3 - SW 59.20' TO EAST FACE OF 12" TREE  
 NORTHING: 1078860.566 / EASTING: 1435285.801 / ELEVATION: 843.37

CP 103 - SET 1/2" IRON BAR.  
 RM 1 - SOUTH 19.50' TO CORNER OF ASPHALT PARKING LOT  
 RM 2 - WEST 56.00' TO EAST EDGE OF ASPHALT DRIVEWAY  
 RM 3 - SW 37.00' TO NORTH FACE OF 4"x4" WOOD SIGN POST  
 NORTHING: 1079009.972 / EASTING: 1434816.388 / ELEVATION: 843.20

**SURVEYORS NOTES:**

1. THIS EXHIBIT DOES NOT REPRESENT A BOUNDARY SURVEY.
2. UTILITIES SHOWN HEREON AS MARKED BY MISSOURI ONE-CALL, EXHIBITS/MAPS AND VISUAL OBSERVATION UNLESS OTHERWISE NOTED. THIS SURVEYOR MAKES NO GUARANTEE AS TO ACCURACY OR COMPLETENESS OF SAID LOCATES. CONTRACTOR TO FIELD VERIFY BEFORE ANY EXCAVATION.

STATE OF MISSOURI  
 MICHAEL L. PARSON,  
 GOVERNOR



AARON S. JONES  
 MO PE-2014031341



1411 E 104th St  
 Kansas City, MO 64131  
 Tel (816) 874-4655  
 Fax (816) 874-4675

MO St. Cert. of Authority: 2002010300


OFFICE OF ADMINISTRATION  
 DIVISION OF FACILITIES  
 MANAGEMENT,  
 DESIGN AND CONSTRUCTION

DEPARTMENT OF  
 NATURAL RESOURCES/  
 STATE PARKS &  
 HISTORIC PRESERVATION

WATER AND WASTEWATER  
 SYSTEM IMPROVEMENT,  
 INFRASTRUCTURE PROJECT  
 American Rescue Plan Act (ARPA)

BOTHWELL LODGE  
 STATE HISTORIC SITE  
 19349 BOTHWELL  
 STATE PARK RD  
 SEDALIA, MISSOURI

PROJECT # X230503  
 SITE # 5303  
 ASSET # 7815303016

REVISION: ADDENDUM   
 DATE: 10/21/2024  
 REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 ISSUE DATE: 8/29/2024

CAD DWG FILE: 3-G002\_GL\_22-0510.dgn  
 DRAWN BY: MBT  
 CHECKED BY: MS  
 DESIGNED BY: TML

SHEET TITLE:  
**OVERALL SITE  
 LAYOUT**

SHEET NUMBER:

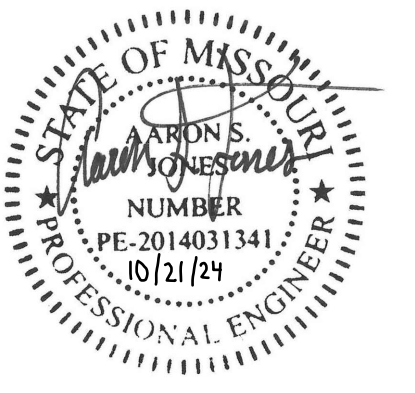
**G-002**

3 OF 9 SHEETS  
 10/21/2024



NOTE:  
 ARCHAEOLOGIST SHALL BE CONSULTED BEFORE  
 THE START OF CONSTRUCTION.

STATE OF MISSOURI  
 MICHAEL L. PARSON,  
 GOVERNOR



AARON S. JONES  
 MO PE-2014031341



1411 E 104th St  
 Kansas City, MO 64131  
 Tel (816) 874-4655  
 Fax (816) 874-4675

MO St. Cert. of Authority: 2002010300

OFFICE OF ADMINISTRATION  
 DIVISION OF FACILITIES  
 MANAGEMENT,  
 DESIGN AND CONSTRUCTION

DEPARTMENT OF  
 NATURAL RESOURCES/  
 STATE PARKS &  
 HISTORIC PRESERVATION

WATER AND WASTEWATER  
 SYSTEM IMPROVEMENT,  
 INFRASTRUCTURE PROJECT  
 American Rescue Plan Act (ARPA)

BOTHWELL LODGE  
 STATE HISTORIC SITE  
 19349 BOTHWELL  
 STATE PARK RD  
 SEDALIA, MISSOURI

PROJECT # X230503  
 SITE # 5303  
 ASSET # 7815303016

REVISION: ADDENDUM  $\Delta$   
 DATE: 10/21/2024  
 REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 ISSUE DATE: 8/29/2024

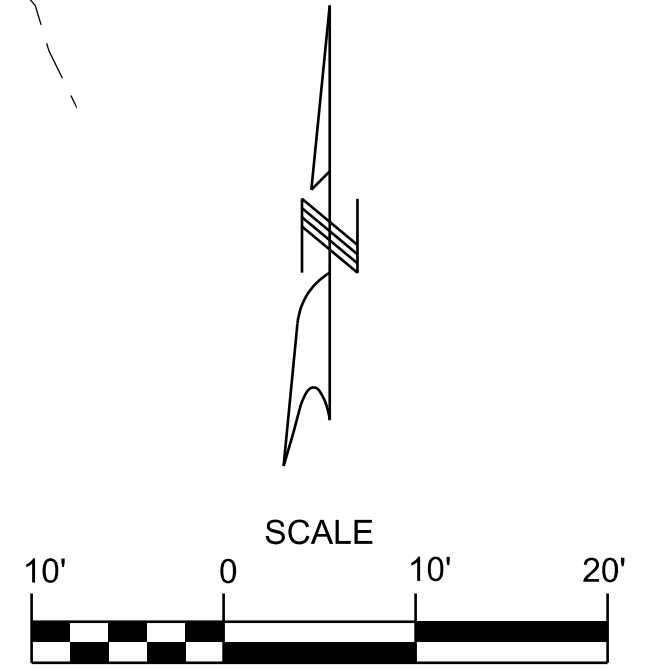
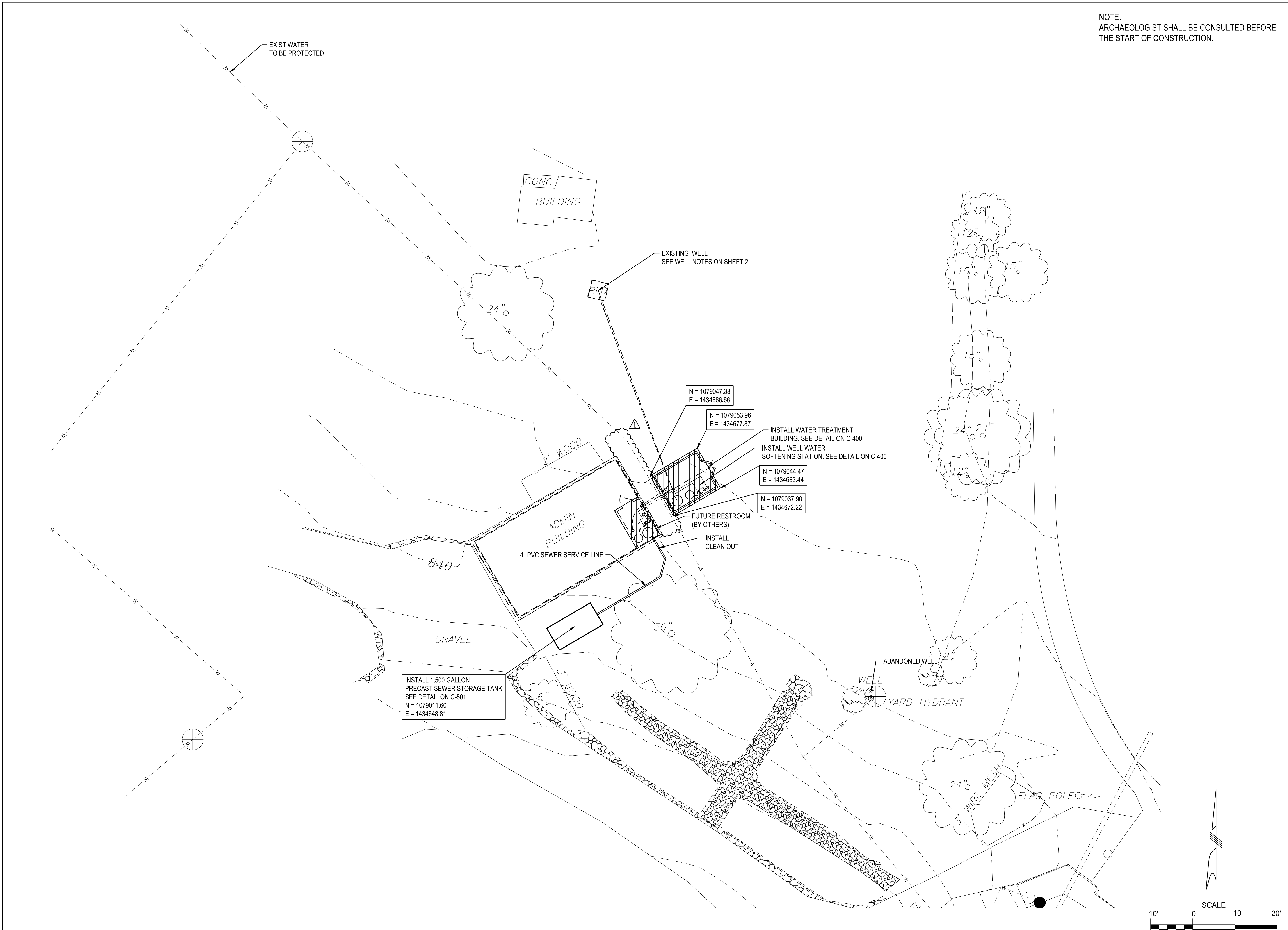
CAD DWG FILE: 4-C100\_PP\_22-0510.dgn  
 DRAWN BY: MBT  
 CHECKED BY: MS  
 DESIGNED BY: TML

SHEET TITLE:  
 ADMIN BUILDING  
 HOLDING TANK

SHEET NUMBER:

C-100

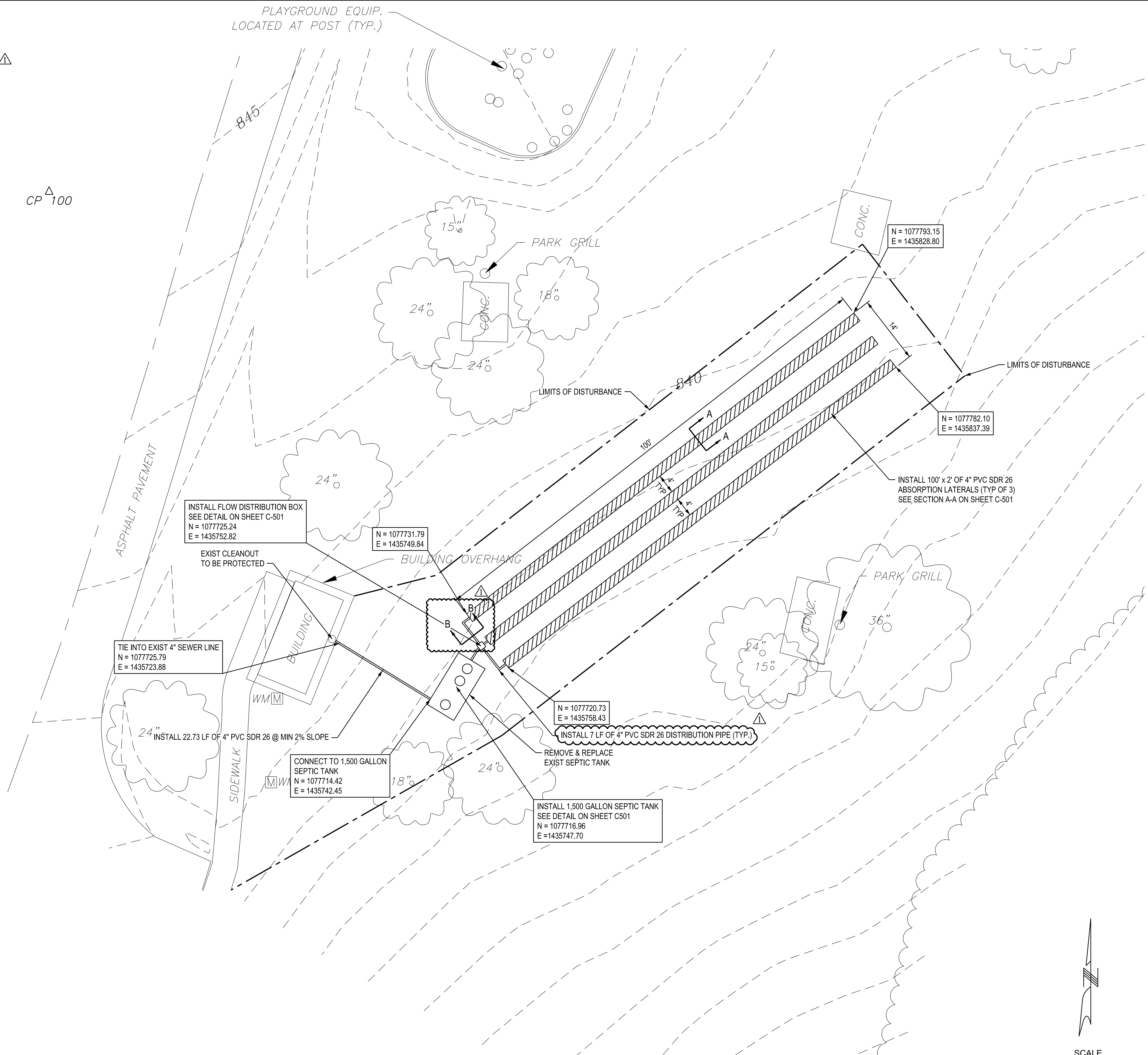
4 OF 9 SHEETS  
 10/21/2024



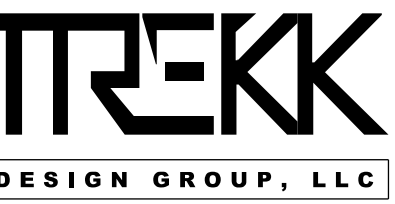
SEPTIC NOTES:

1. REMOVE AND REPLACE EXISTING SEPTIC TANK WITH 1,500 GALLON DUAL CHAMBER POLY TANK.
2. REMOVE AND REPLACE EXISTING LATERAL FIELD WITH 2' WIDE - 100 FT LONG 4" PVC PERFORATED LATERAL LINES.
3. EXCAVATION TO REMAIN WITHIN THE LIMITS OF THE EXISTING SYSTEM FOOTPRINT.
4. LATERALS SHALL RUN PARALLEL TO EXISTING GRADE AT NO MORE THAN 1/4" PER 10 FT OF SLOPE AWAY FROM THE TANK.
5. TRENCHES MUST MAINTAIN 6' SEPARATION ON CENTER.
6. INSTALLATION SHALL BE CONDUCTED DURING DRY CONDITIONS.
7. INSTALL A MINIMUM OF 6" CLEAN CRUSHED 1 1/2" WASHED GRAVEL BELOW THE LATERAL PIPE. PLACE AT LEAST 2" OF THE BEDDING AGGREGATE ABOVE THE PIPE. PLACE A LAYER OF GEOTEXTILE FABRIC ABOVE THE 2" LAYER, THEN BACKFILL WITH NATIVE MATERIAL.
8. SEPTIC TANK SHALL BE PLACED UPON 6" OF COMPACTED 1 1/2" GRAVEL.
9. ARCHEOLOGIST SHALL BE CONSULTED BEFORE START OF CONSTRUCTION.

CP  $\Delta$  100



AARON S. JONES  
MO PE-2014031341



1411 E 104th St  
Kansas City, MO 64131  
Tel (816) 874-4655  
Fax (816) 874-4675

MO St. Cert. of Authority: 2002010300

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES/  
STATE PARKS &  
HISTORIC PRESERVATION

WATER AND WASTEWATER  
SYSTEM IMPROVEMENT,  
INFRASTRUCTURE PROJECT  
American Rescue Plan Act (ARPA)

BOTHWELL LODGE  
STATE HISTORIC SITE  
19349 BOTHWELL  
STATE PARK RD  
SEDALIA, MISSOURI

PROJECT # X230503  
SITE # 5303  
ASSET # 7815303016

REVISION: ADDENDUM  $\Delta$   
DATE: 10/21/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 8/29/2024

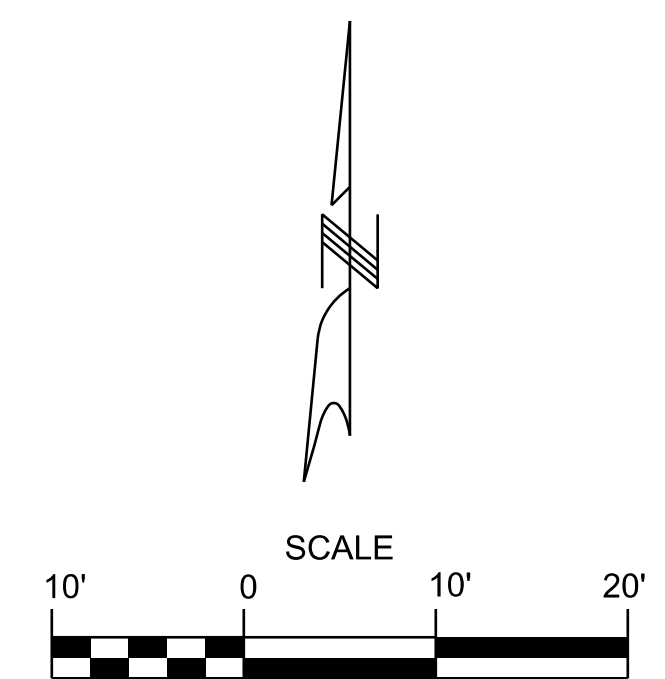
CAD DWG FILE: S-C101\_PP\_22-0510.dgn  
DRAWN BY: MBT  
CHECKED BY: MS  
DESIGNED BY: TML

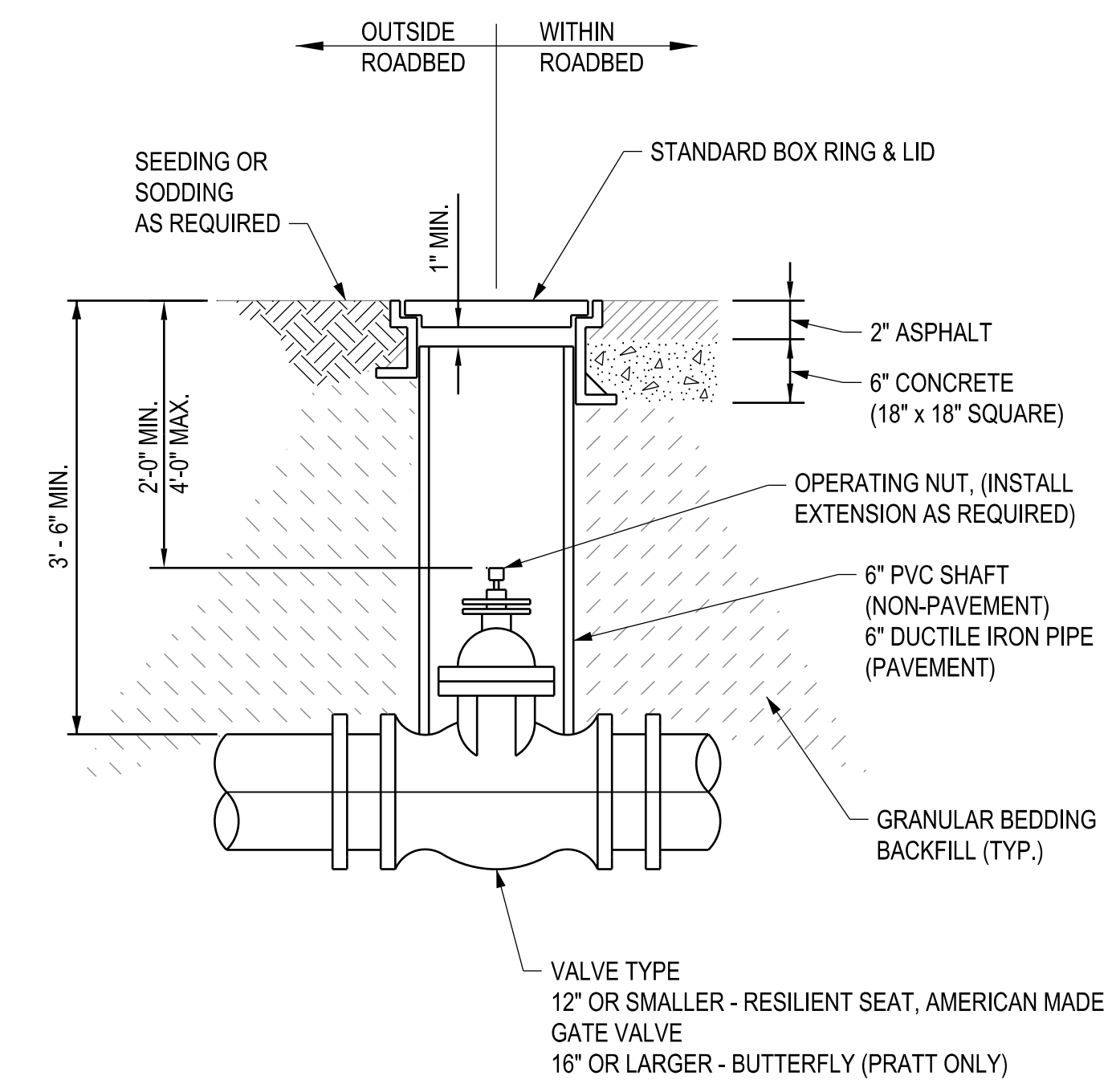
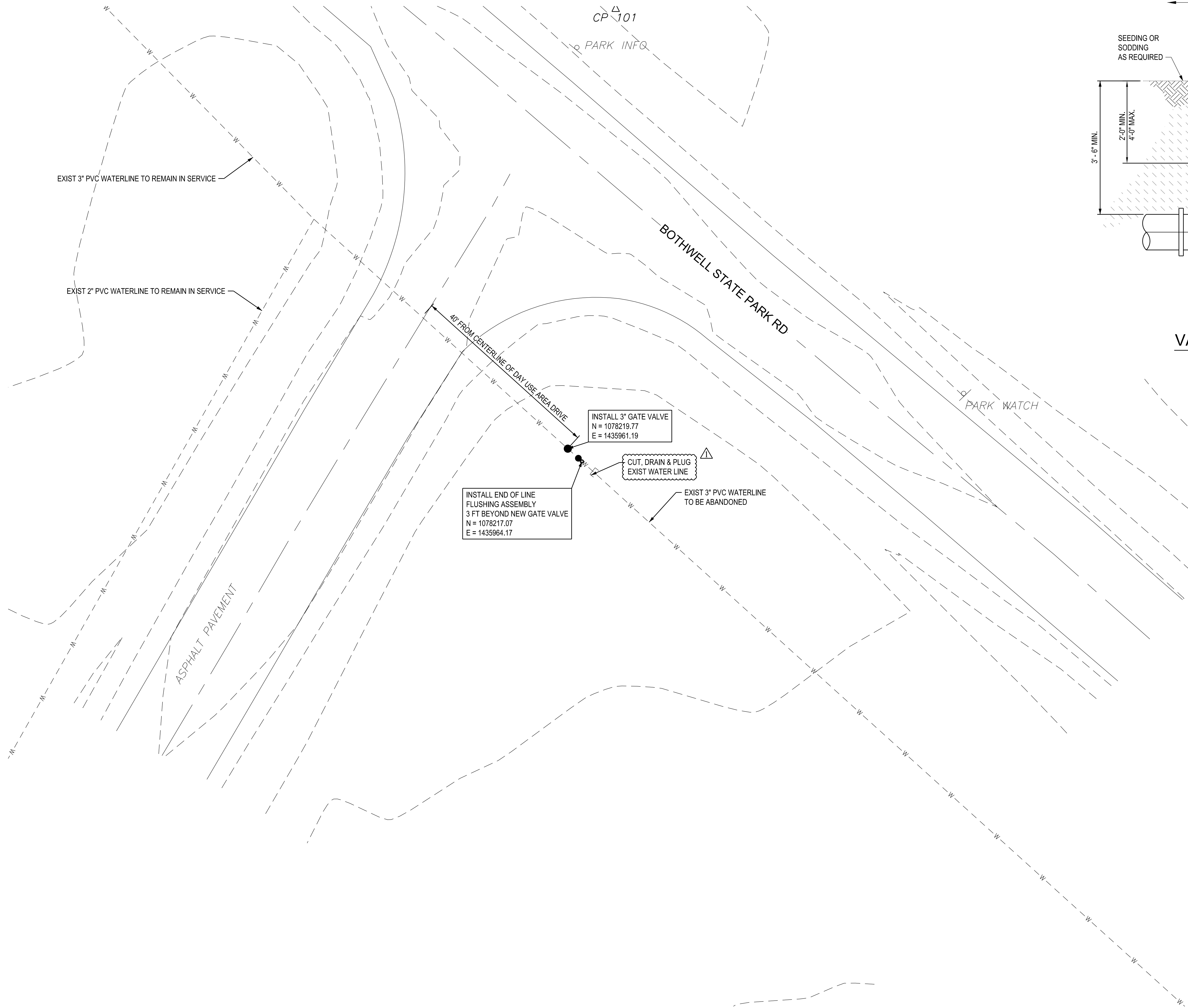
SHEET TITLE:  
**DAY USE TANK  
& LATERAL FIELD**

SHEET NUMBER:

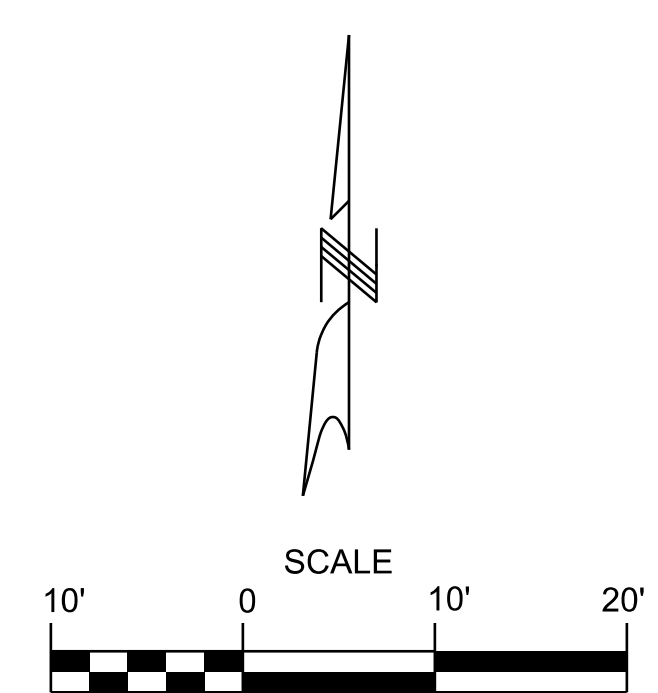
**C-101**

5 OF 9 SHEETS  
10/21/2024





**VALVE BOX DETAIL**  
NOT TO SCALE



STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



AARON S. JONES  
MO PE-2014031341



1411 E 104th St  
Kansas City, MO 64131  
Tel (816) 874-4655  
Fax (816) 874-4675

MO St. Cert. of Authority: 2002010300

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES/  
STATE PARKS &  
HISTORIC PRESERVATION

WATER AND WASTEWATER  
SYSTEM IMPROVEMENT,  
INFRASTRUCTURE PROJECT  
American Rescue Plan Act (ARPA)

BOTHWELL LODGE  
STATE HISTORIC SITE  
19349 BOTHWELL  
STATE PARK RD  
SEDALIA, MISSOURI

PROJECT # X230503  
SITE # 5303  
ASSET # 7815303016

REVISION: ADDENDUM   
DATE: 10/21/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 8/29/2024

CAD DWG FILE: 6-C102\_PP\_22-0510.dgn  
DRAWN BY: MBT  
CHECKED BY: MS  
DESIGNED BY: TML

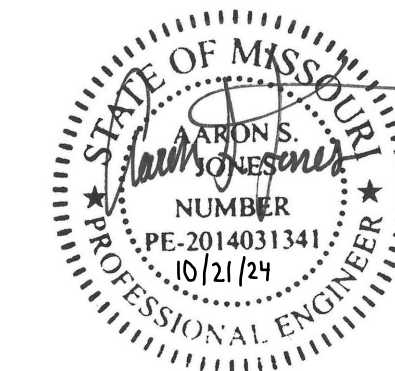
SHEET TITLE:  
**WATERLINE  
MODIFICATIONS**

SHEET NUMBER:

**C-102**

6 OF 9 SHEETS  
10/21/2024





AARON S. JONES  
MO PE-2014031341



1411 E 104th St  
Kansas City, MO 64131  
Tel (816) 874-4655  
Fax (816) 874-4675

MO St. Cert. of Authority: 2002010300

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES/  
STATE PARKS &  
HISTORIC PRESERVATION

WATER AND WASTEWATER  
SYSTEM IMPROVEMENT,  
INFRASTRUCTURE PROJECT  
American Rescue Plan Act (ARPA)

BOTHWELL LODGE  
STATE HISTORIC SITE  
19349 BOTHWELL  
STATE PARK RD  
SEDALIA, MISSOURI

PROJECT # X230503  
SITE # 5303  
ASSET # 7815303016

REVISION: ADDENDUM   
DATE: 10/21/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 8/29/2024

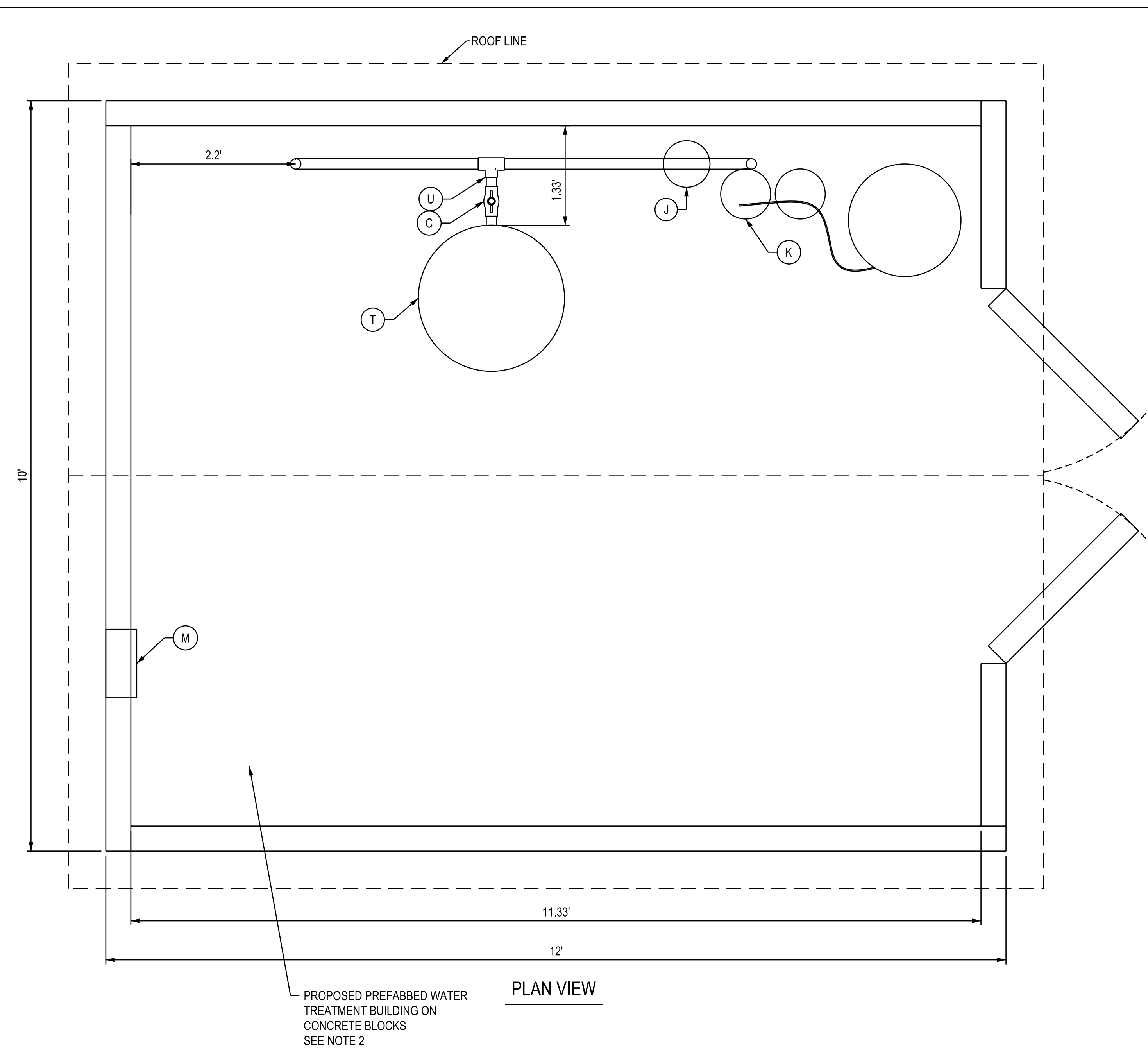
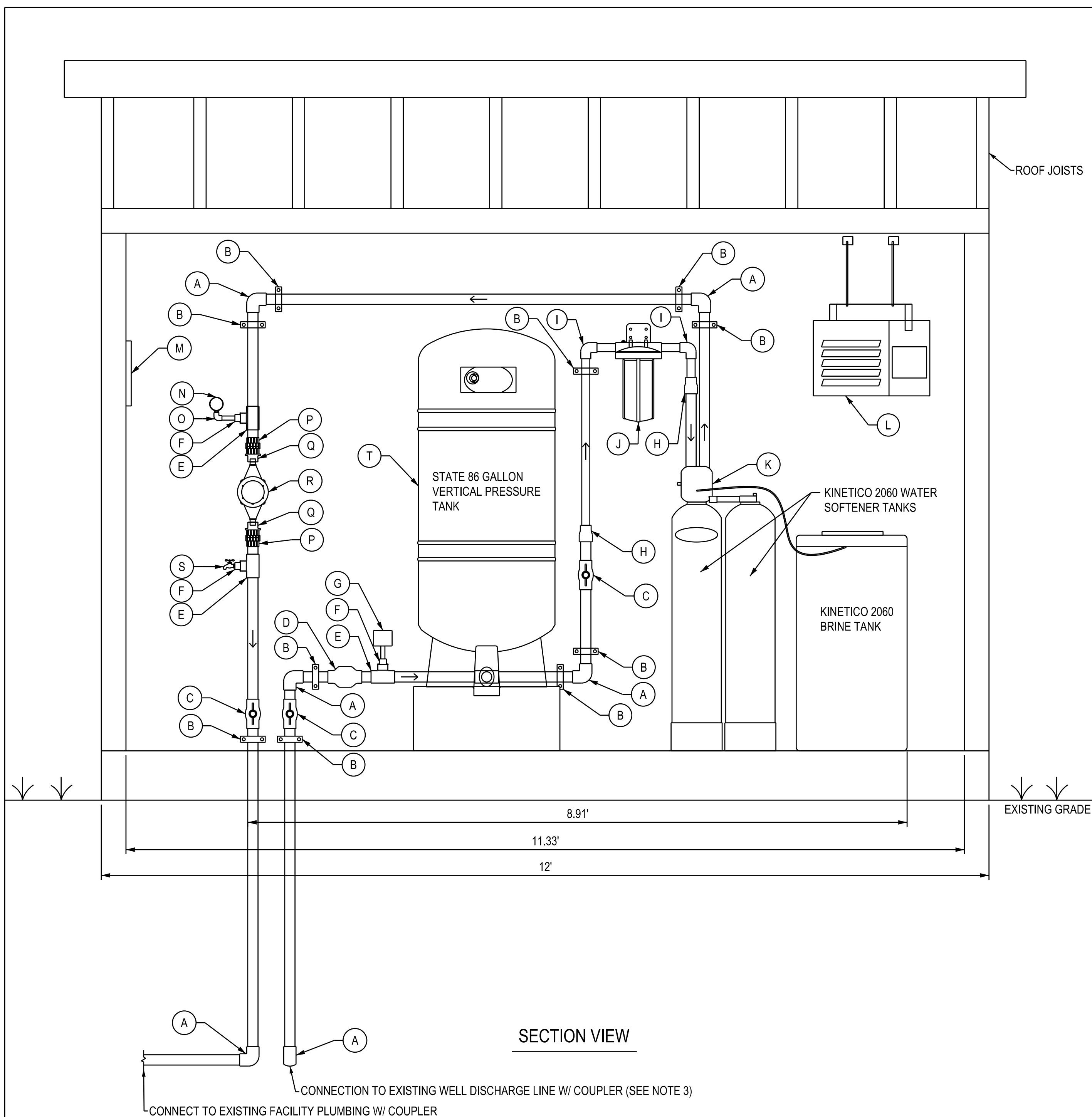
CAD DWG FILE: 7-C400\_WT\_22-0510.dgn  
DRAWN BY: MBT  
CHECKED BY: MS  
DESIGNED BY: TML

SHEET TITLE:  
**WELL WATER  
SOFTENING STATION**

SHEET NUMBER:

**C-400**

7 OF 9 SHEETS  
10/21/2024



- WATER NOTES:**
- MINIMUM OF 6.5' x 8' x 3/4" OF PLYWOOD SHEETING TO BE INSTALLED ON WALL BEHIND WATER EQUIPMENT TO HOLD PIPE AND EQUIPMENT SUPPORTS.
  - THE WATER TREATMENT BUILDING SHALL BE PREFABBED OR ERECTED ON SITE. THE STRUCTURE SHALL BE INSULATED BETWEEN ALL STUDS AND ROOF JOISTS/TRUSSES. SEE BUILDING CONSTRUCTION NOTES ON SHEET 2 (G-001).
  - TIE-IN TO EXISTING WELL DISCHARGE LINE IS APPROXIMATE AND CONTRACTOR MUST COORDINATE WITH ARCHEOLOGIST PRIOR TO ANY EXCAVATION.
  - CONTRACTOR WILL VERIFY WELL DISCHARGE PIPE DIAMETER AND CONNECT TO SYSTEM AS DESIGNED.
  - NO FITTINGS OR VALVES SHALL CONTAIN ANY LEAD.
  - PRESSURE SWITCH ON/OFF SETTINGS TO BE CONFIRMED BY OPERATOR. THE CONTRACTOR WILL SET AND CONFIRM THE LIMIT SWITCH.
  - EXHAUST FAN AND HEATER SHALL HAVE INDEPENDENT SWITCHES.
  - EXTERIOR SHALL MATCH GENERAL APPEARANCE OF THE ADJACENT OFFICE BUILDING EXTERIOR.

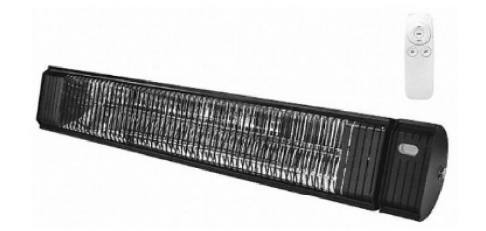
**Corrosion-Resistant Shutter-Mount Exhaust Fans**

The blades and housing on these fans are made from materials that will not rust or corrode when exposed to water and moisture, making the fans suitable for use in humid and wet environments. Direct-drive shutter-mount exhaust fans have few moving parts and typically require minimal maintenance. Each fan features a motor that's directly mounted on the fan shaft.

- Motor Enclosure: Totally Enclosed Air Over
- Brand: DAYTON

Fiberglass Blades & Fiberglass Frame	Blade Diameter	Number of Speeds	Nameplate Voltage	Phase	Motor Horsepower	Max. Exhaust Airflow @ 0.000 in SP
	12 in	1	115V AC	1	1/8 hp	900 cfm

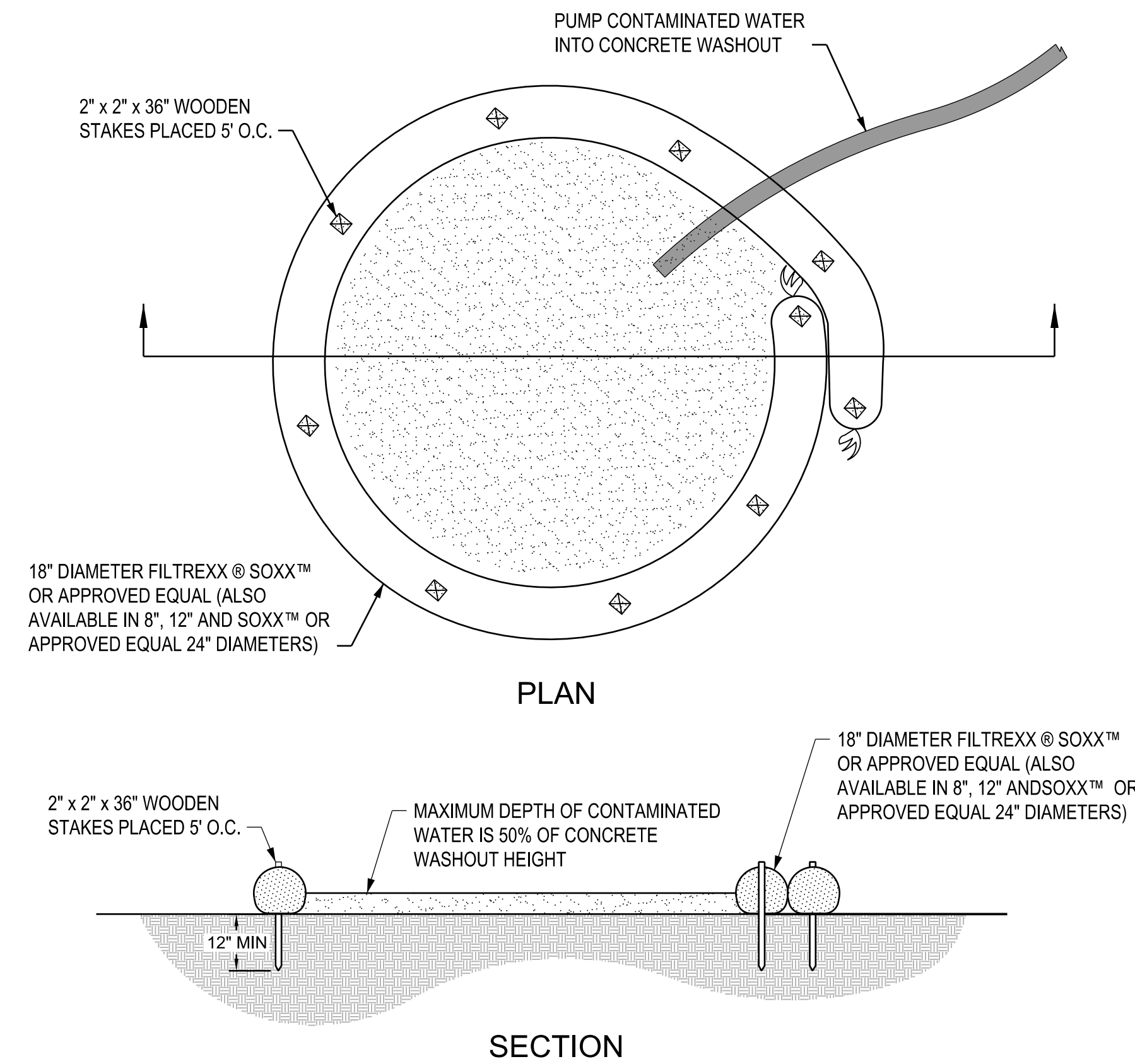
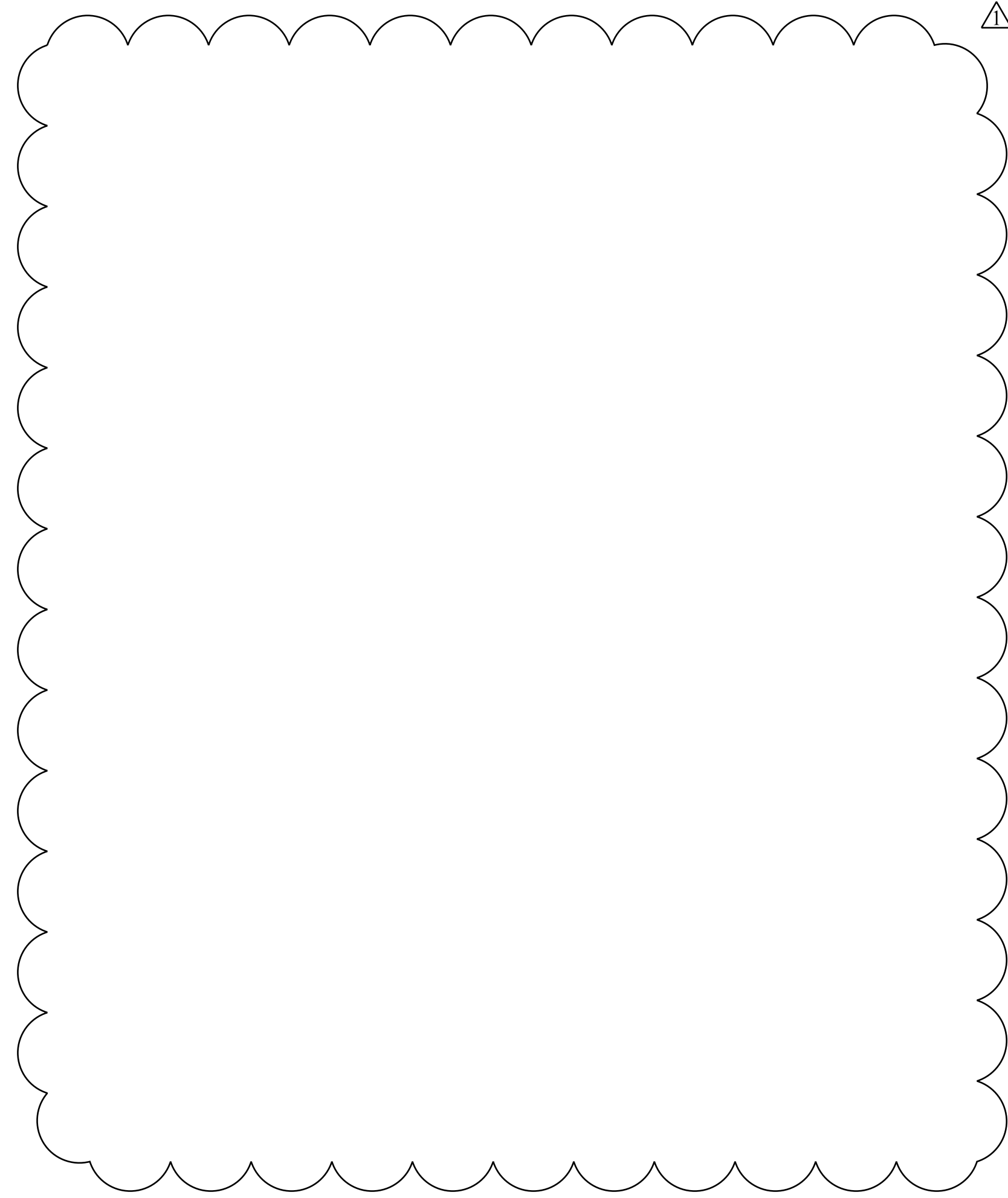
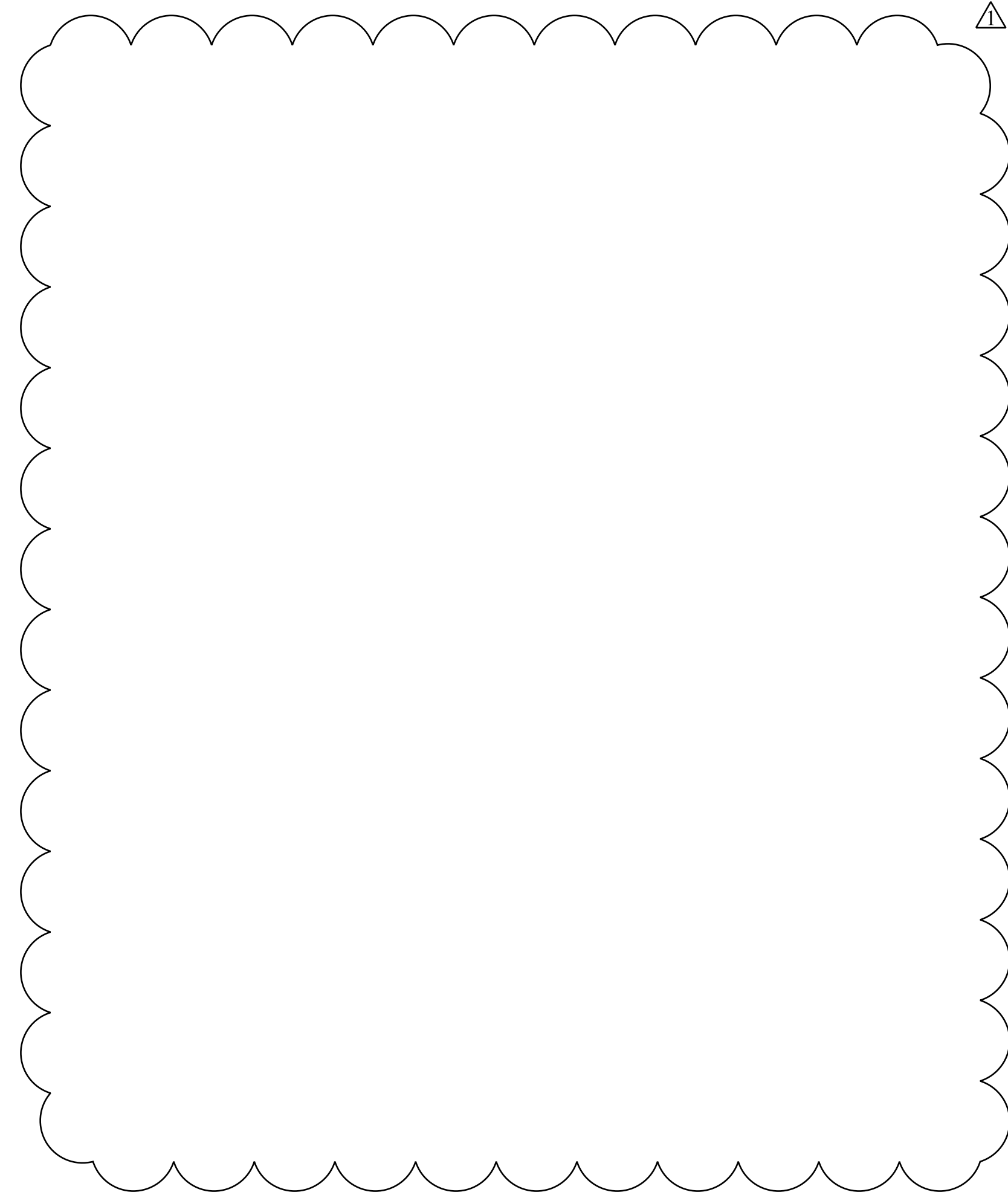
**AURA Electric Infrared Heater: 1500W Watt Output, 120V AC, 1 Phase, Plug-In, 45° Beam Pattern, Black**



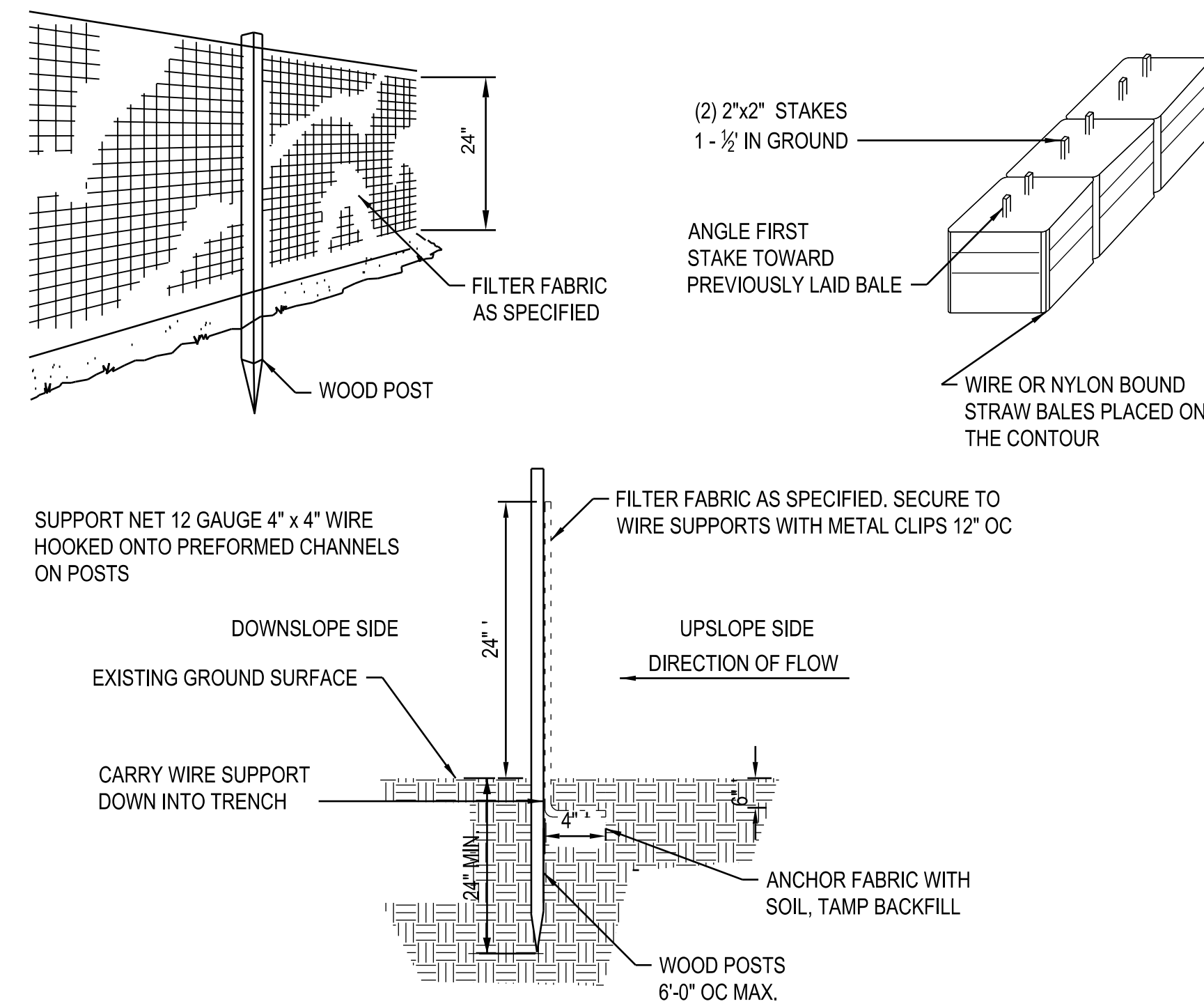
Item 55EA57 Mfr. Model CF15120B

Product Details		Catalog Page 2951
Brand <b>AURA</b>		Cord Construction <b>14/3</b>
Overall Length <b>27 in</b>		Electrical Connection <b>Plug-In</b>
Overall Width <b>6-1/2 in</b>		Frequency <b>50/60Hz</b>
Overall Depth <b>5-1/2 in</b>		Amperage <b>12.5A</b>
Phase <b>1</b>		NEMA Plug Configuration <b>5-15P</b>
Voltage <b>120V AC</b>		UL Cord Rating <b>SJTW with Molded Plug</b>
Wattage Output <b>1500W</b>		Infrared Electromagnetic Wave Type <b>Short/Medium Wave</b>
Beam Pattern <b>45°</b>		Radiant Efficiency <b>80 %</b>
Element Type <b>Carbon Fiber Emitter</b>		Number of Lamps <b>1</b>
Housing Color <b>Black</b>		Max. Operating Temp. <b>122°F</b>
Housing Material <b>Aluminum</b>		Mobility <b>Stationary</b>
Grille Depth <b>1/2 in</b>		Brightness <b>70 lm</b>
Grille Height <b>4-1/2 in</b>		For Use Outdoors <b>Indoor/Outdoor</b>
Grille Width <b>27 in</b>		Reflector Material <b>Polished Aluminum</b>
Grille Material <b>Coated Steel; Galvanized</b>		Includes <b>Bracket; Waterproof</b>
Heating Capacity <b>5,120 BtuH</b>		Standards <b>UL 2021, CSA C22.2</b>
Heating Method <b>Radiant</b>		UNSPSC <b>40101824</b>
Housing Finish <b>Powder Coated</b>		Country of Origin <b>China (subject to change)</b>

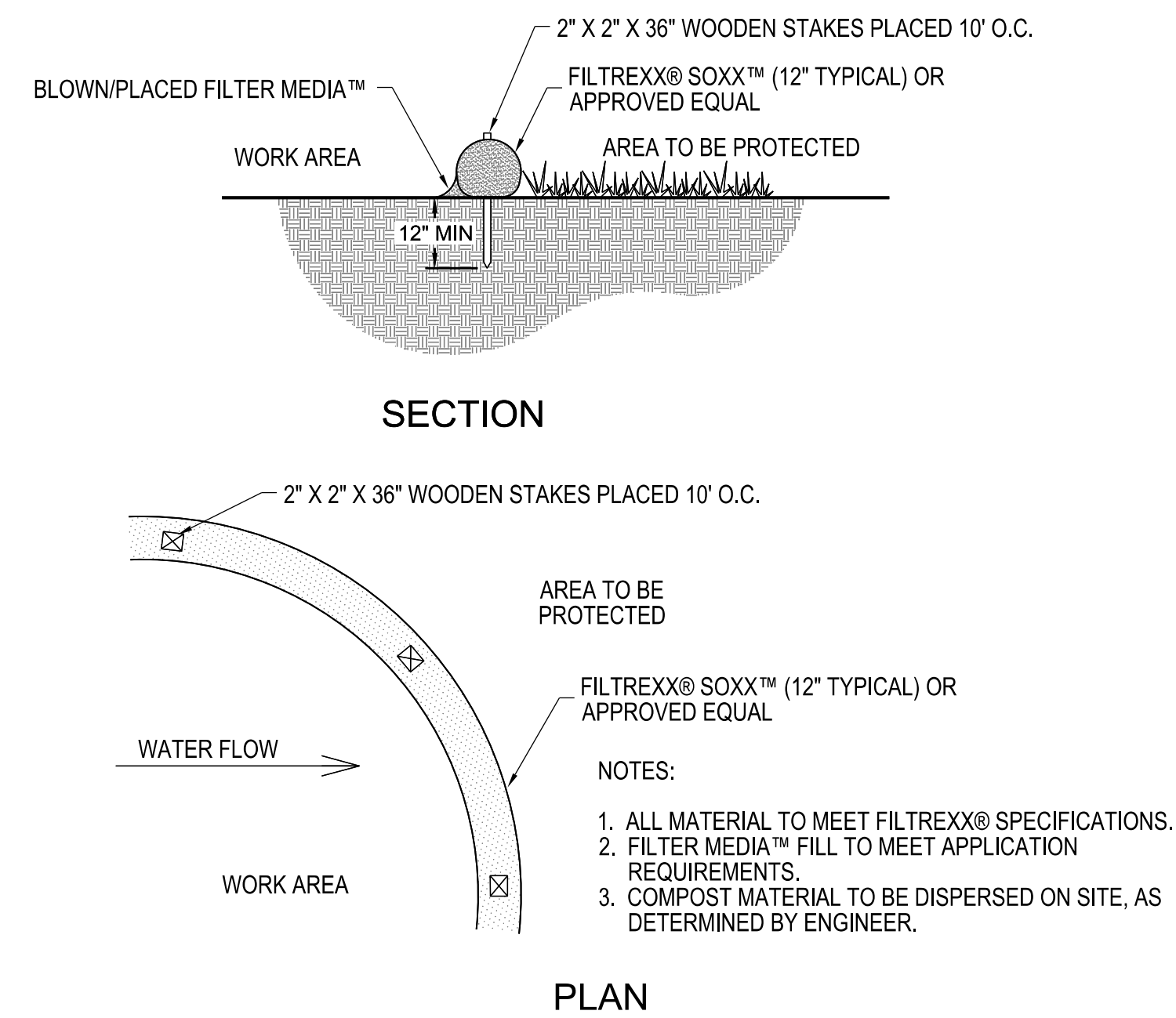
POINT NO.	DESCRIPTION
A	1 1/4" PVC SCH 40 90° BEND
B	PIPE SUPPORT BRACKETS TYP.
C	1 1/4" PVC SCH 40 BALL VALVE
D	1 1/4" PVC SCH 40 CHECK VALVE
E	1 1/4" x 1" PVC SCH 40 TEE
F	1" x 1/2" PVC SCH 40 ADAPTER
G	PRESSURE SWITCH FOR ITEM T
H	1 1/4" x 1" PVC SCH 40 REDUCER
I	1" PVC SCH 40 90° BEND
J	PENTAIR BIG BLUE 10" FILTER & MOUNTING BRACKET
K	KINETICO 2060 WATER SOFTENER & BRINE TANK
L	ELECTRIC UNIT HEATER (SEE DETAIL ON THIS SHEET)
M	EXHAUST FAN (SEE DETAIL ON THIS SHEET)
N	PRESSURE GAUGE
O	1/2" 90° BEND
P	1 1/4" PVC SCH 40 UNION FITTING
Q	1 1/4" x 1" PVC SCH 40 ADAPTER
R	1" WATER METER
S	1/2" INLET SMOOTH SAMPLE TAP
T	STATE 86 GALLON VERTICAL PRESSURE TANK & RISER BLOCK
U	1 1/4" x 1 1/4" PVC SCH 40 TEE



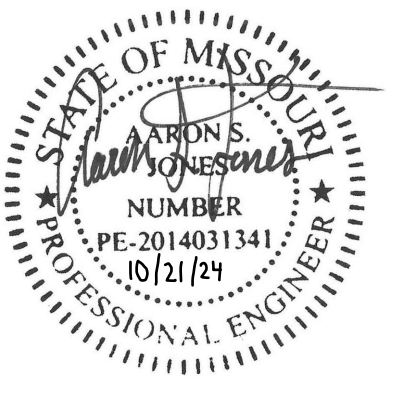
**CONCRETE WASHOUT** 3  
NOT TO SCALE X-XX



**SILT FENCE** 4  
NOT TO SCALE X-XX



**SEDIMENT CONTROL DETAIL** 5  
NOT TO SCALE X-XX



AARON S. JONES  
MO PE-2014031341



1411 E 104th St  
Kansas City, MO 64131  
Tel (816) 874-4655  
Fax (816) 874-4675

MO St. Cert. of Authority: 2002010300

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES/  
STATE PARKS &  
HISTORIC PRESERVATION

WATER AND WASTEWATER  
SYSTEM IMPROVEMENT,  
INFRASTRUCTURE PROJECT  
American Rescue Plan Act (ARPA)

BOTHWELL LODGE  
STATE HISTORIC SITE  
19349 BOTHWELL  
STATE PARK RD  
SEDALIA, MISSOURI

PROJECT # X230503  
SITE # 5303  
ASSET # 7815303016

REVISION: ADDENDUM A  
DATE: 10/21/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 8/29/2024

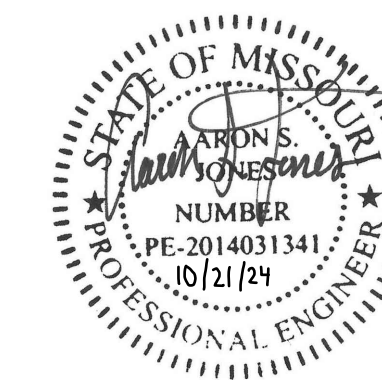
CAD DWG FILE: 8-C500\_DT\_22-0510.dgn  
DRAWN BY: MBT  
CHECKED BY: MS  
DESIGNED BY: TML

SHEET TITLE:  
**EROSION  
CONTROL  
DETAILS**

SHEET NUMBER:

**C-500**

8 OF 9 SHEETS  
10/21/2024



AARON S. JONES  
MO PE-201403134



1411 E 104th St  
Kansas City, MO 64131  
Tel (816) 874-4655  
Fax (816) 874-4675

MO St. Cert. of Authority: 2002010300

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES/  
STATE PARKS &  
HISTORIC PRESERVATION

WATER AND WASTEWATER  
SYSTEM IMPROVEMENT,  
INFRASTRUCTURE PROJECT  
American Rescue Plan Act (ARPA)

BOTHWELL LODGE  
STATE HISTORIC SITE  
19349 BOTHWELL  
STATE PARK RD  
SEDALIA, MISSOURI

PROJECT # X230503  
SITE # 5303  
ASSET # 7815303016

REVISION: ADDENDUM   
DATE: 10/21/2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 8/29/2024

CAD DWG FILE: 9-C501\_DT\_22-0510.dgn  
DRAWN BY: MBT  
CHECKED BY: MS  
DESIGNED BY: TML

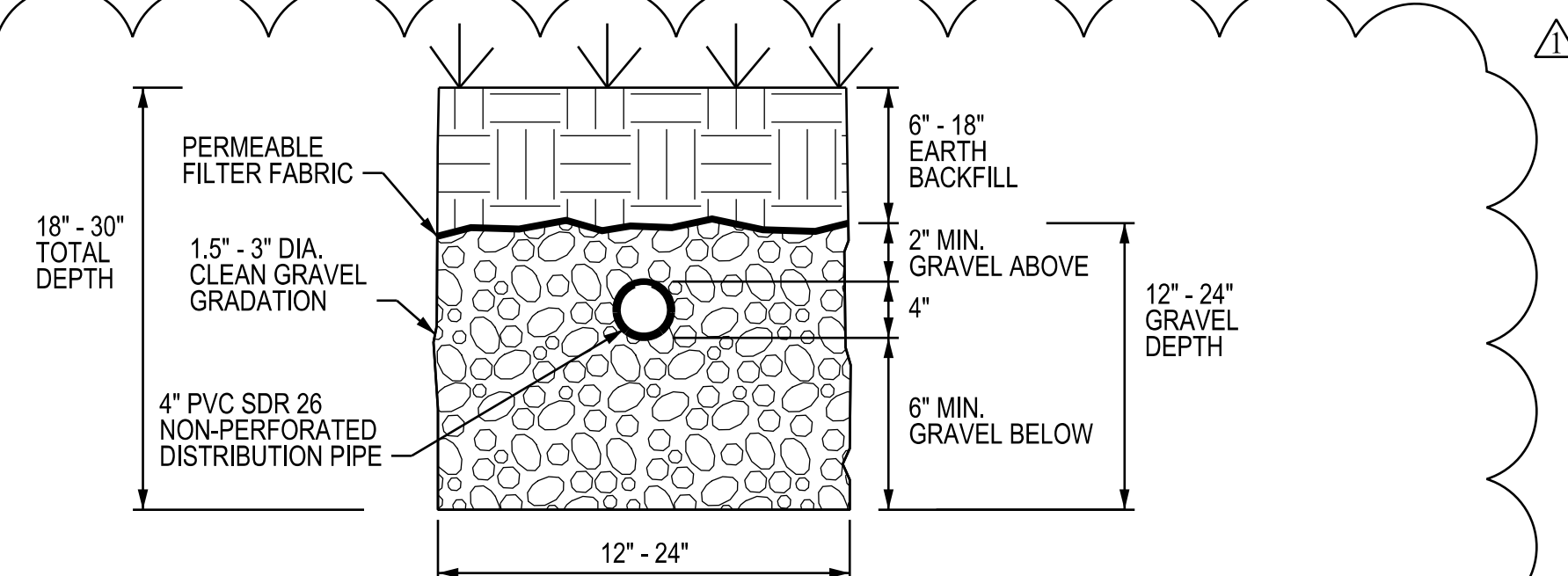
SHEET TITLE:

SITE  
DETAILS

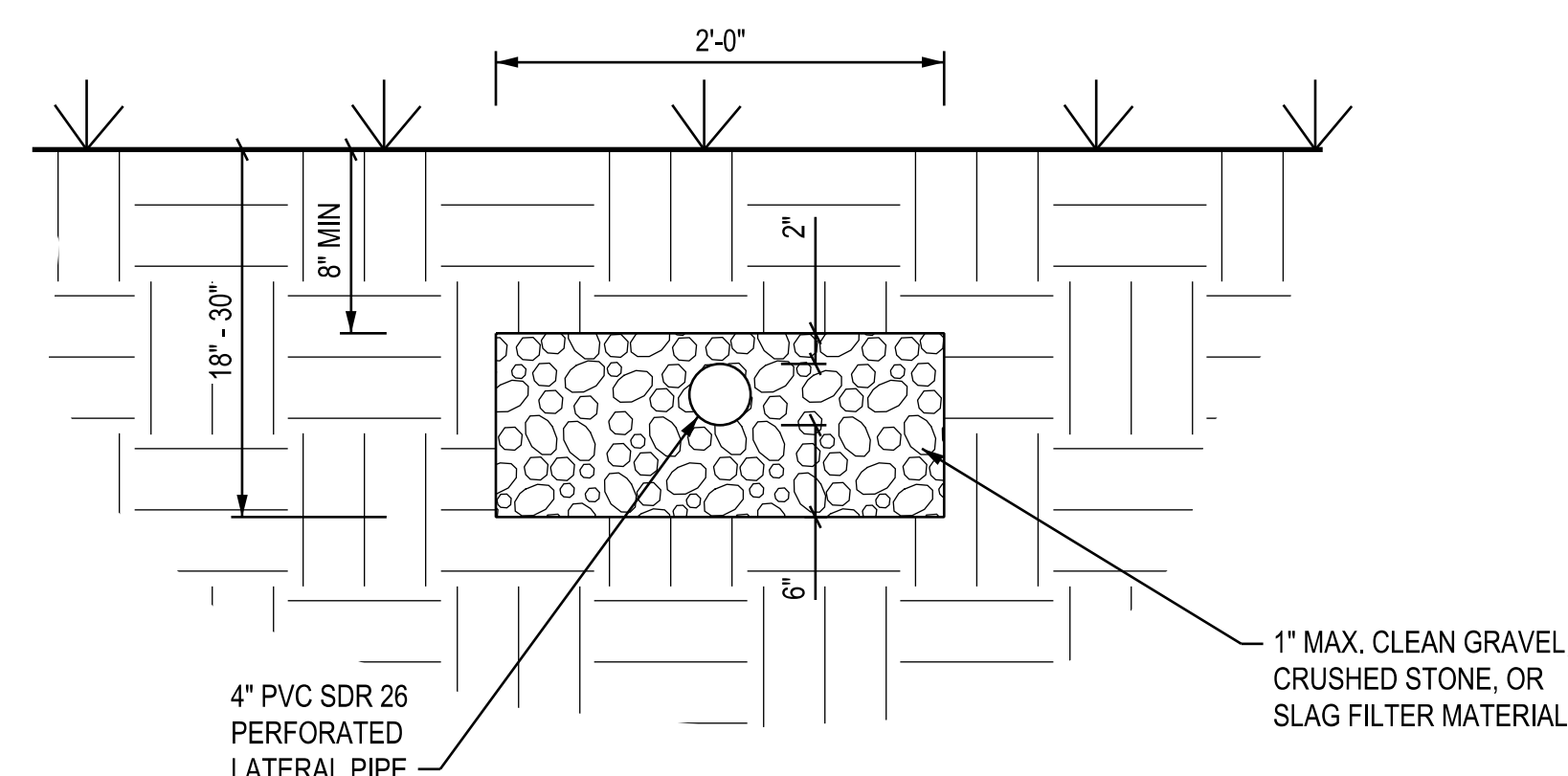
SHEET NUMBER:

C-501

9 OF 9 SHEETS  
10/21/2024

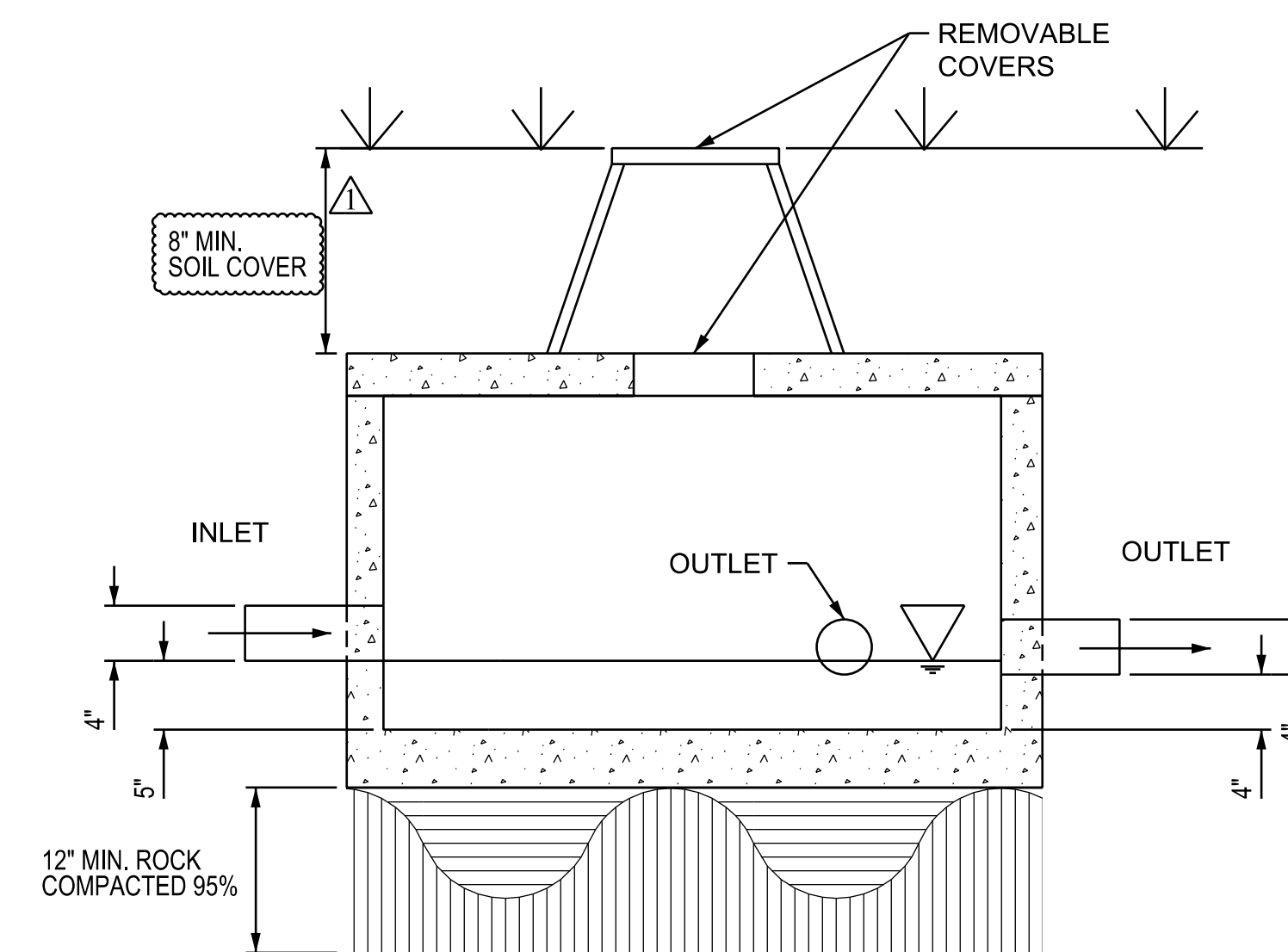


SECTION B-B  
SECTION VIEW OF TRENCH  
FOR DISTRIBUTION PIPE



SECTION A-A  
ABSORPTION TRENCH  
FOR LATERAL PIPE

Tuf-Tite® Distribution Box



SECTION VIEW OF DISTRIBUTION BOX

MINIMUM DISTANCE FROM (IN FEET)	SEWAGE TANK <sup>1</sup>	MEETS SEWAGE TANK SETBACK		DISPOSAL AREA <sup>2</sup>	MEETS DISPOSAL AREA SETBACKS
		DAY USE	ADMIN		
PRIVATE WATER SUPPLY WELL <sup>3</sup>	50	√	√	100	√
PRIVATE WATER SUPPLY WELL	300	√	√	300	√
CISTERN	25	√	√	25	√
SPRING	50	√	√	100	√
CLASSIFIED STREAM, LAKE, OR IMPOUNDMENT <sup>4</sup>	50	√	√	50	√
STREAM OR OPEN DITCH <sup>4</sup>	25	√	√	25	√
PROPERTY LINES	10	√	√	10**	√
BUILDING FOUNDATION	5	√	√	15	√
BASEMENT	15	√	√	25	√
SWIMMING POOL	15	√	√	15	√
WATER LINE UNDER PRESSURE	10	√	√	10	√
SUCTION WATER LINE	50	√	√	100	√
UPSLOPE INTERCEPTOR DRAINS	-			10	√
DOWNSLOPE INTERCEPTOR DRAINS	-			25	√
TOP OF SLOPE OF EMBANKMENTS OR CUTS OF TWO FEET (2') OR MORE VERTICAL HEIGHT	-			20	√
EDGE OF SURFICIAL/SINK HOLES	50	√	√	100	√
OTHER SOIL ABSORPTION SYSTEM EXCEPT REPAIR AREA	-			20	√

<sup>1</sup> A CLASSIFIED STREAM IS ANY STREAM THAT MAINTAINS PERMANENT FLOW OR PERMANENT POOLS DURING DROUGHT PERIODS AND SUPPORTS AQUATIC LIFE.

<sup>2</sup> RECOMMEND TWENTY-FIVE FEET (25') OF DOWNSLOPE PROPERTY LINE INITIALLY, BUT REPAIR MAY BE ALLOWED TO TEN FEET (10') OF DOWNSLOPE PROPERTY LINE.

1. INCLUDES SEWAGE TANKS, INTERMITTENT SAND FILTERS, AND DOSING CHAMBERS  
2. INCLUDES ALL SYSTEMS (SAND FILTER, WETLAND, AND THE LIKE) EXCEPT WASTEWATER STABILIZATION POOLS  
3. UNPLUGGED ABANDONED WELLS OR WELLS WITH LESS THAN EIGHTY FEET (<80') OF CASING DEPTH SHALL HAVE ONE-HUNDRED-FIFTY FEET (150') MINIMUM DISTANCE FROM ALL ABOVE  
4. SEWAGE TANKS AND SOIL ABSORPTION SYSTEMS SHOULD NEVER BE LOCATED IN THE DRAINAGE AREA OF A SINKHOLE

Snyder NexGen D2™ Septic Tanks

- No special backfill required
- May be pumped dry
- May be intalled with only 6" of cover
- Requires NexGen2 manhole extensions and lids
- Lightweight, easy to handle

