

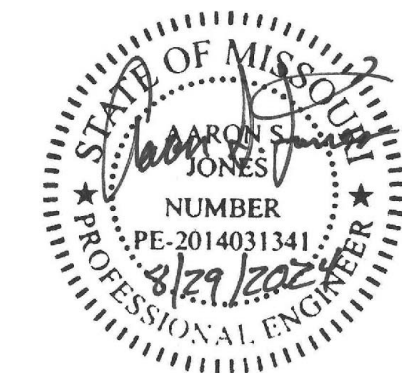
Water and Wastewater System Improvements Bothwell Lodge State Historic Site Sedalia, Missouri



DESIGN GROUP, LLC

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MO St. Cert. of Authority: 2002010300



AARON S. JONES
MO PE-2014031341

OWNER: STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR

DEPARTMENT OF
NATURAL RESOURCES/ STATE PARKS

PROJECT
MANAGEMENT: OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT, DESIGN AND
CONSTRUCTION

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DESIGNER: TREKK Design Group, LLC
1411 E 104th ST,
Kansas City, MO 64131

PROJECT NUMBER: X230503

SITE NUMBER: 5303
ASSET NUMBER: 7815303016

SHEET NUMBER:

G-000

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.

DETAIL LEGEND

DETAIL NUMBER DESIGNATION

SHEET NUMBER DETAIL IS SHOWN ON

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	—x—x—x—
EXISTING WOOD FENCE	—□—□—□—
PROPOSED SANITARY SEWER	— SAN —
RIGHT OF WAY	— R/W —
PROPERTY LINE	— P/L —
EXISTING EASEMENT	— P/E ---
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	⊕
MAIL BOX	MB
SIGN (SURVEY)	⊕
EXISTING TREE (DIA)	12"
EXISTING PINE TREE (DIA)	12"
EXISTING BUSH	3'
TREE REMOVAL	⊕
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
SE	SQUARE FEET
SY	SQUARE YARD
TCE	TEMPORARY CONSTRUCTION EASEMENT
UP	USE IN PLACE
VCP	VITRIFIED CLAY PIPE
VPC	VERTICAL POINT OF CURVATURE
VPT	VERTICAL POINT OF TANGENCY
YD	YARD

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).

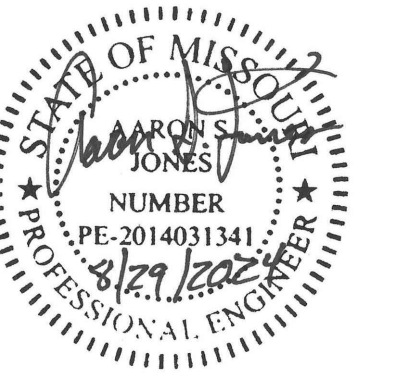
GRADING:

- 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.

**STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR**



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**DEPARTMENT OF
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WATER AND WASTEWATER
SYSTEM IMPROVEMENT,
INFRASTRUCURE PROJECT
American Rescue Plan Act (ARPA)

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

PROJECT # X230503
SITE # 5303
ASSET # 7815303016

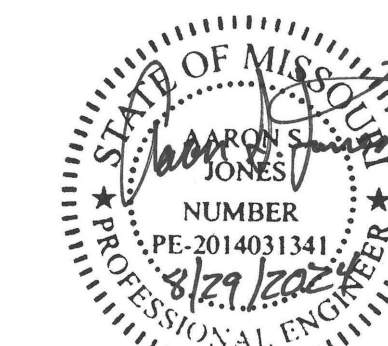
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DATE: _____
ISSUE DATE: 8/29/2024

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CHECKED BY: MS
DESIGNED BY: TML

SHEET TITLE:
**GENERAL NOTES
AND LEGEND**

SHEET NUMBER:

G-001



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DESIGNED BY: TML

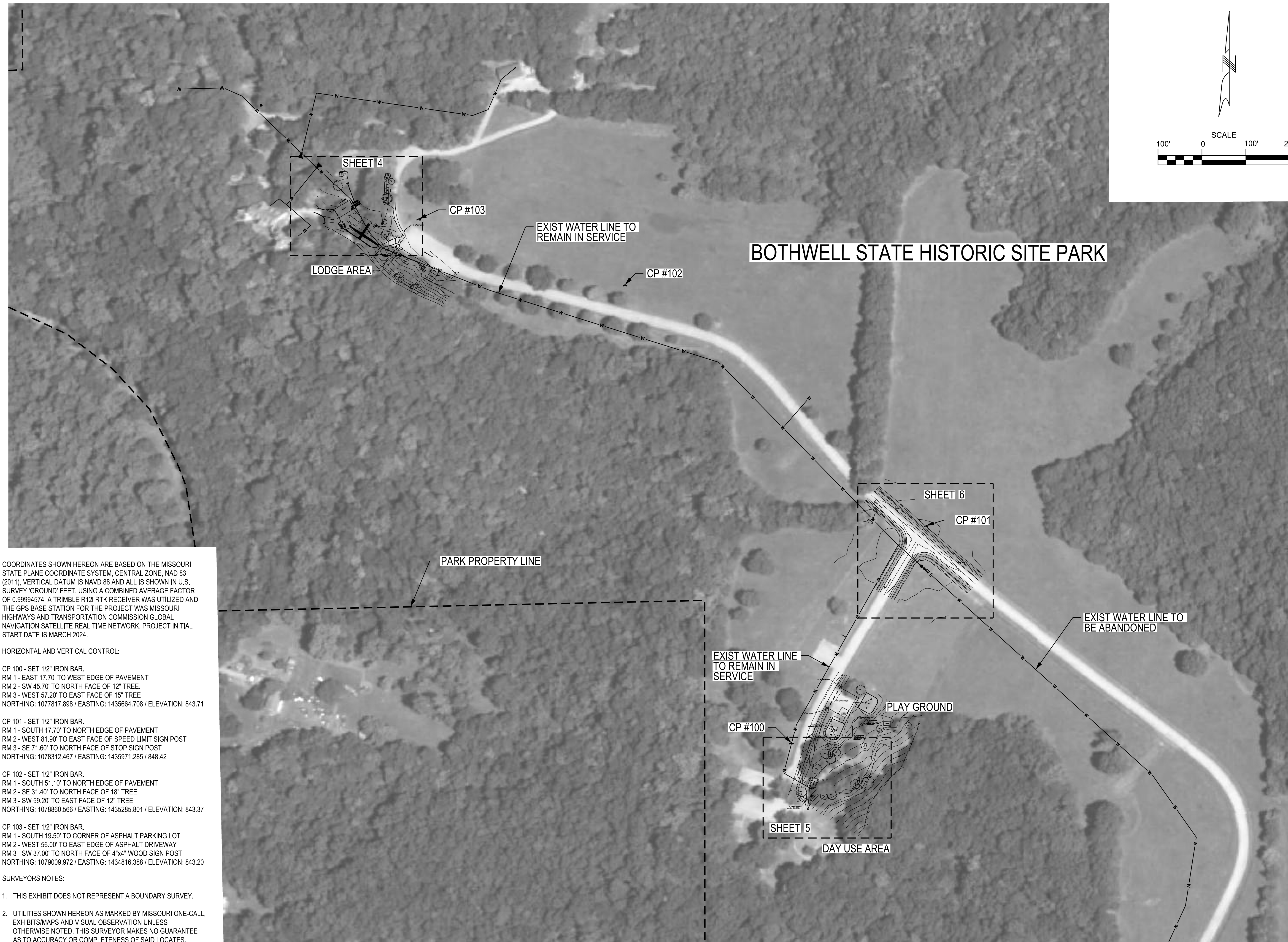
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OVERALL SITE
LAYOUT

SHEET NUMBER:

G-002

3 OF 9 SHEETS
8/29/2024



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

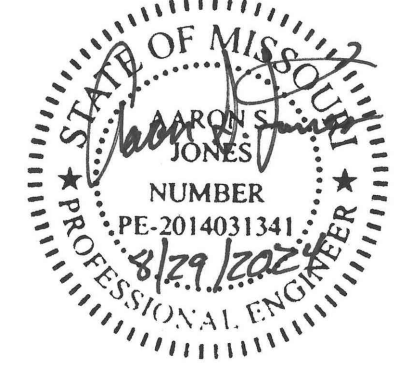
CP 103 - SET 1/2" IRON BAR.
RM 1 - SOUTH 19.50' TO CORNER OF ASPHALT PARKING LOT
RM 2 - WEST 56.00' TO EAST EDGE OF ASPHALT DRIVEWAY
RM 3 - SW 37.00' TO NORTH FACE OF 4"x4" WOOD SIGN POST
NORTHING: 1079009.972 / EASTING: 1434816.388 / ELEVATION: 843.20

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.

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

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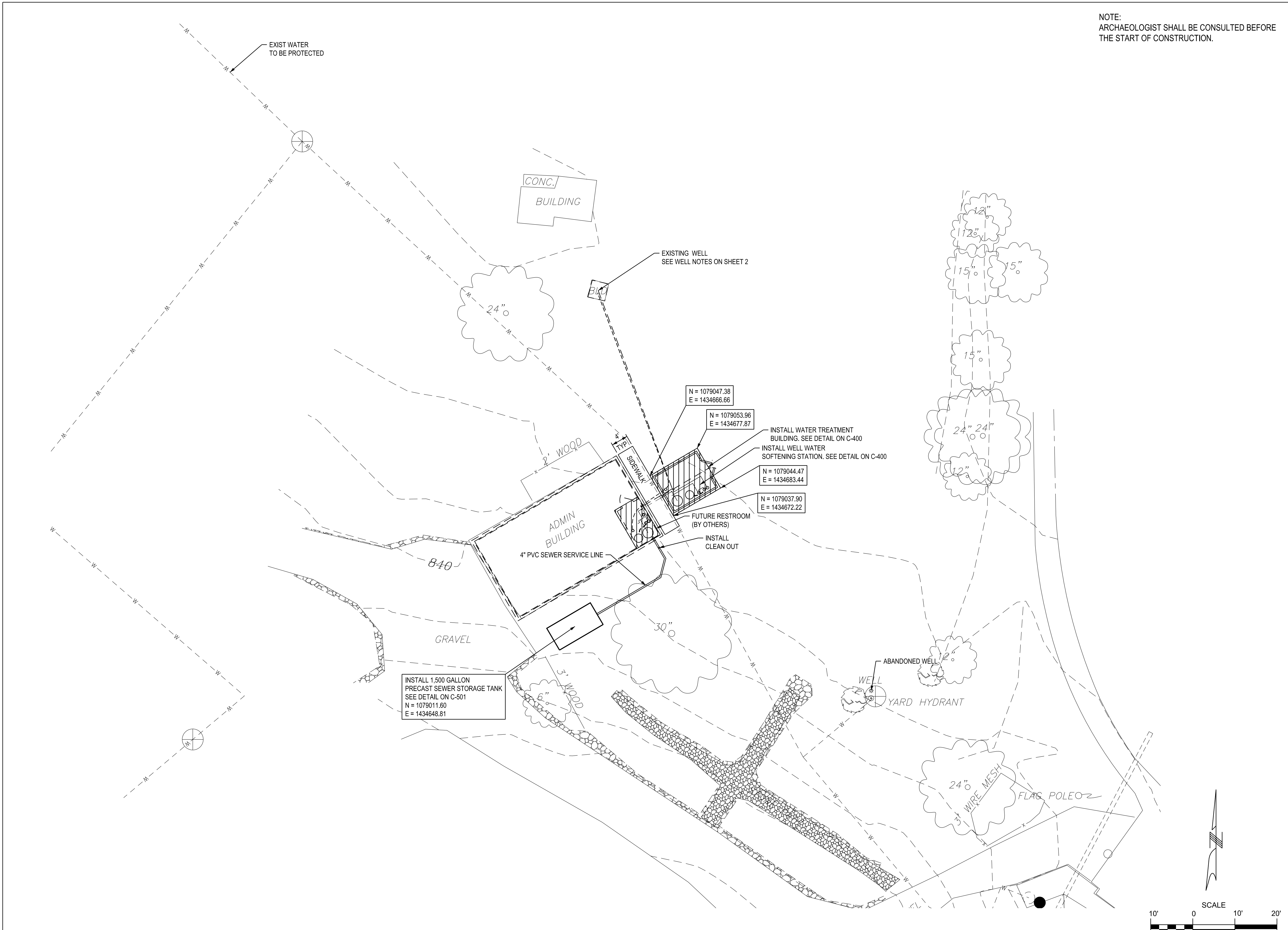
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 CHECKED BY: MS
 DESIGNED BY: TML

SHEET TITLE:
**ADMIN BUILDING
 HOLDING TANK**

SHEET NUMBER:

C-100

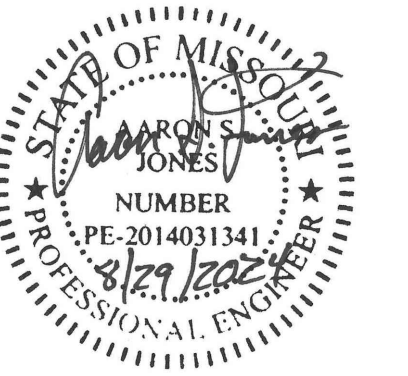
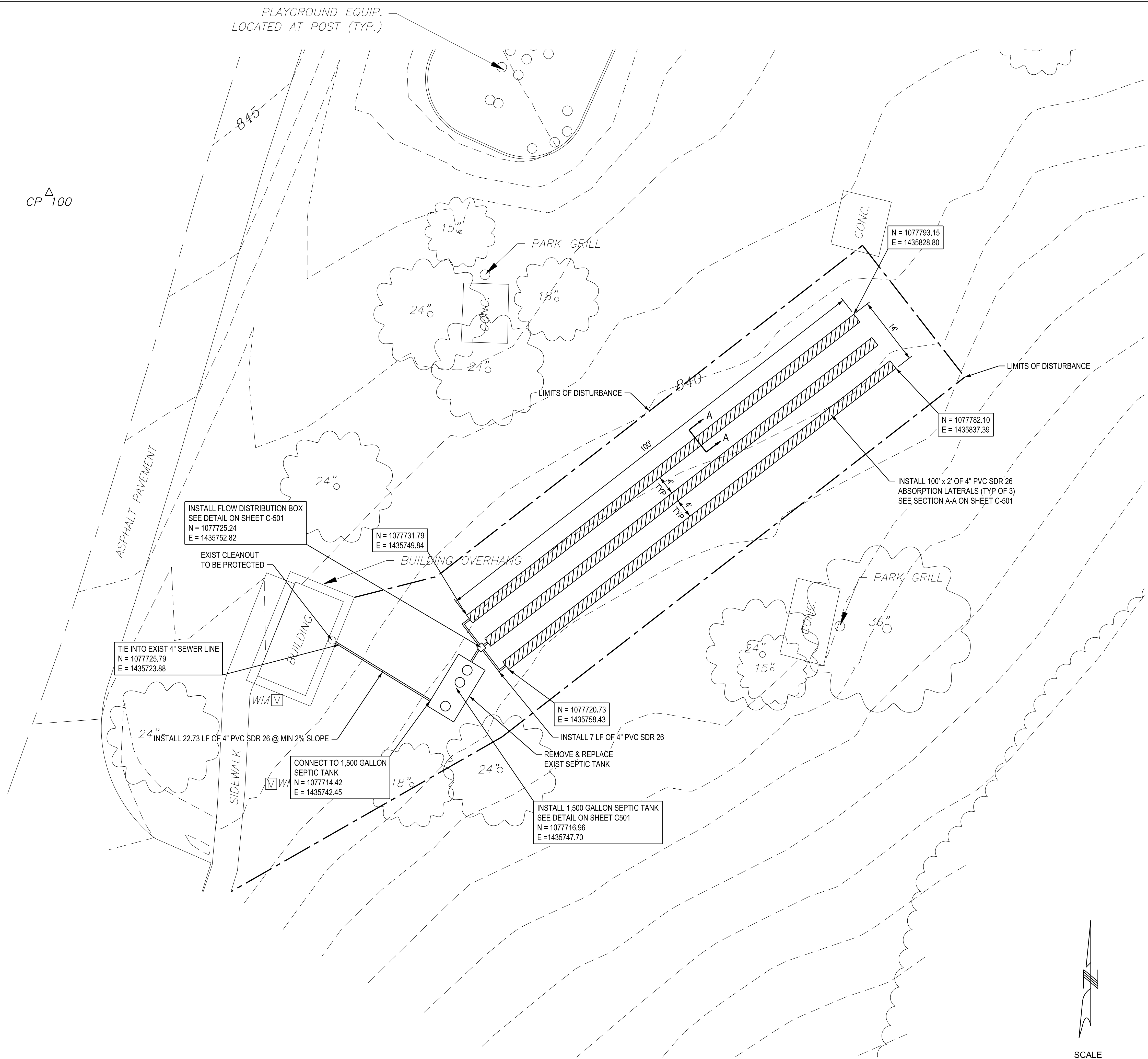
4 OF 9 SHEETS
 8/29/2024



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 3 - 100 FT 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 Δ 100



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DATE: _____

ISSUE DATE: 8/29/2024

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DRAWN BY: MBT
CHECKED BY: MS
DESIGNED BY: TML

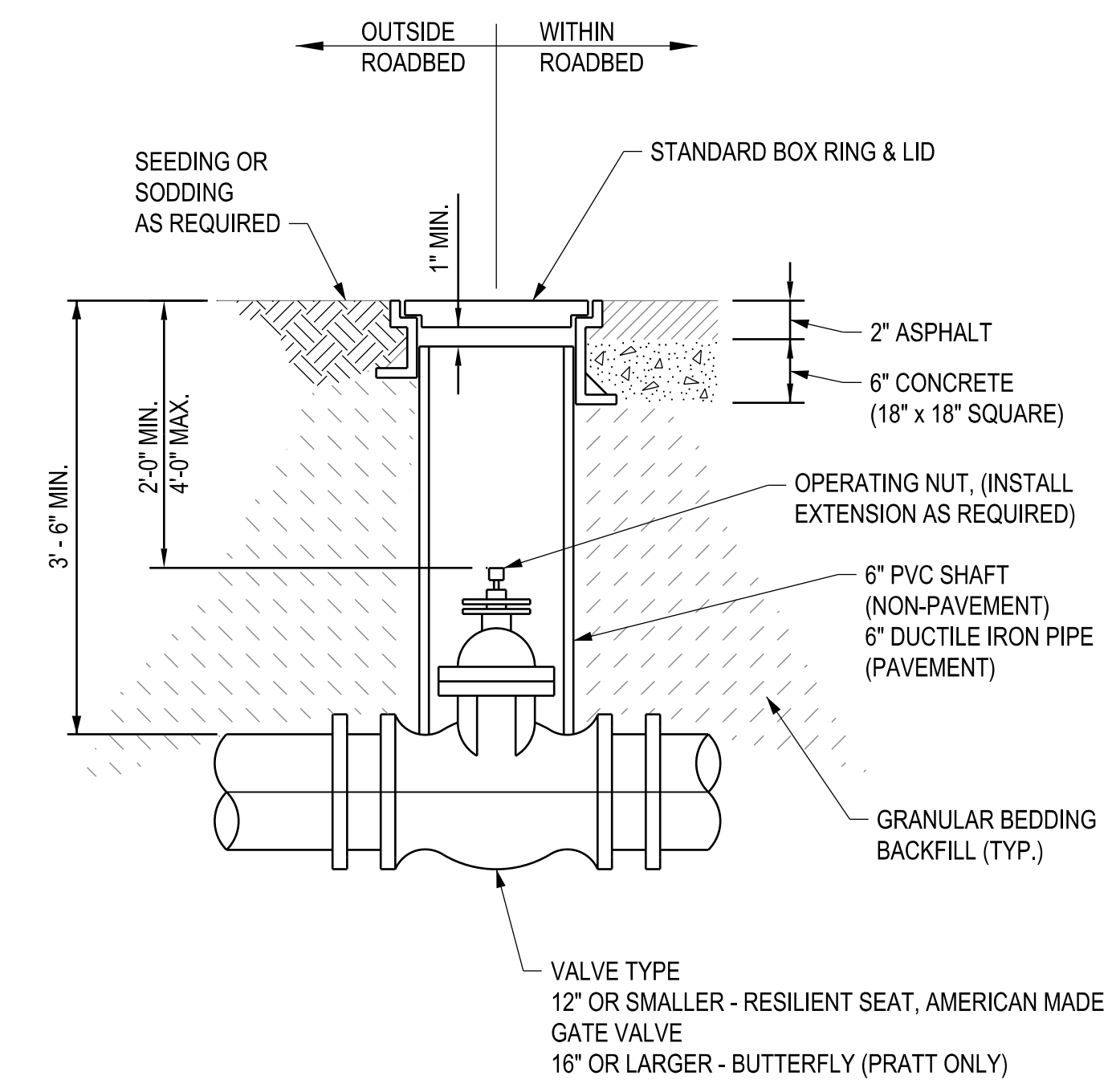
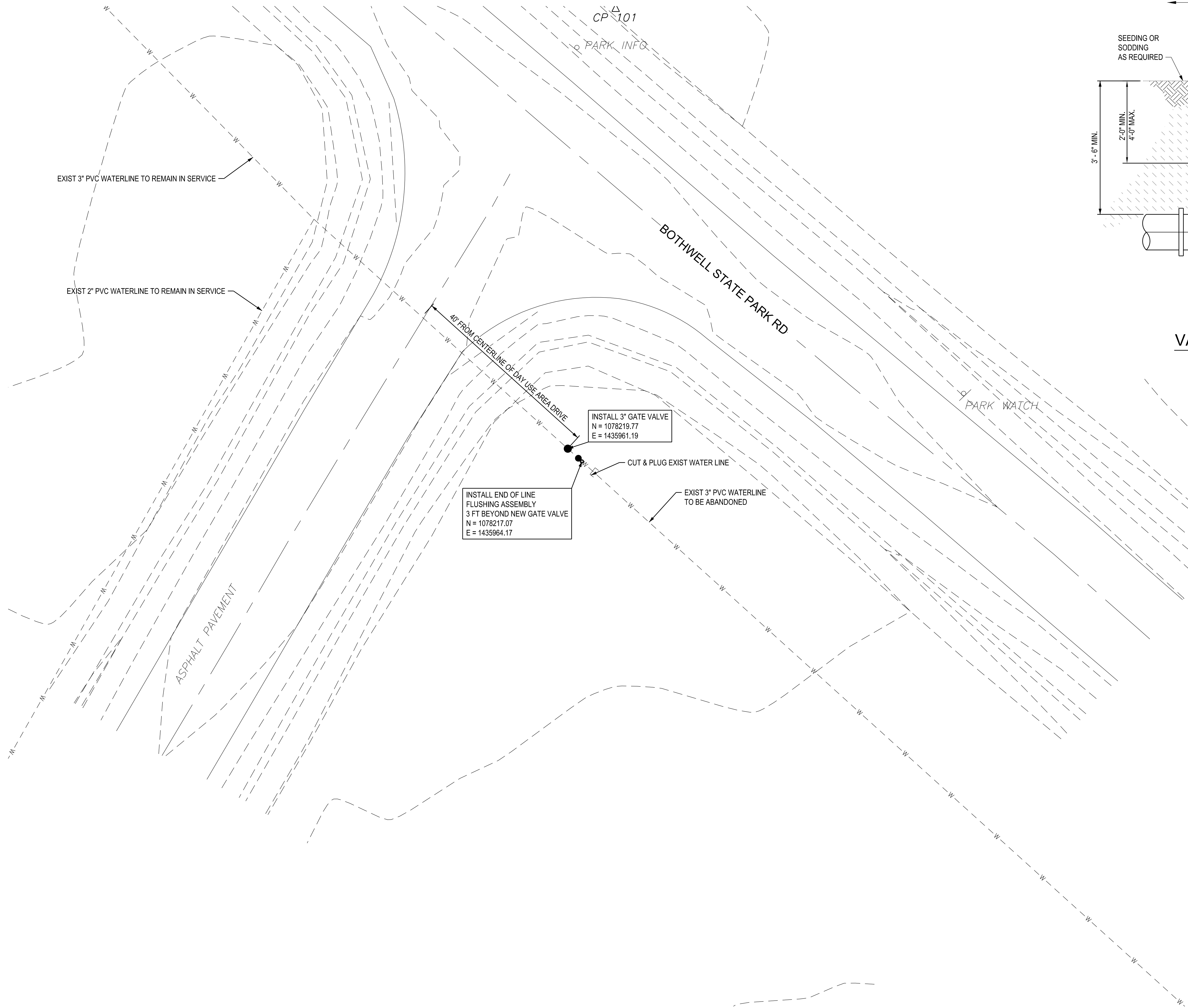
SHEET TITLE:

DAY USE TANK
& LATERAL FIELD

SHEET NUMBER:

C-101

5 OF 9 SHEETS
8/29/2024



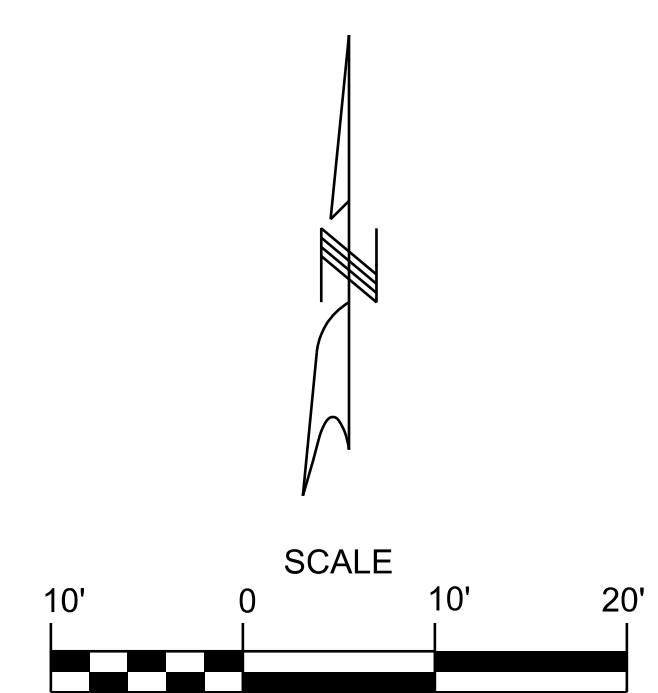
VALVE BOX DETAIL
NOT TO SCALE

INSTALL 3" GATE VALVE
N = 1078219.77
E = 1435961.19

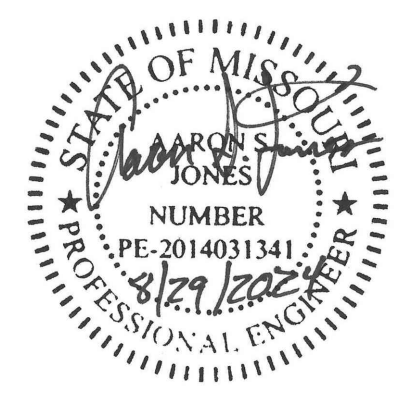
CUT & PLUG EXIST WATER LINE

EXIST 3" PVC WATERLINE TO BE ABANDONED

INSTALL END OF LINE FLUSHING ASSEMBLY
3 FT BEYOND NEW GATE VALVE
N = 1078217.07
E = 1435964.17



STATE OF MISSOURI
MICHAEL L. PARSON,
GOVERNOR



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STATE HISTORIC SITE
19349 BOTHWELL
STATE PARK RD
SEDALIA, MISSOURI

PROJECT # X230503
SITE # 5303
ASSET # 7815303016

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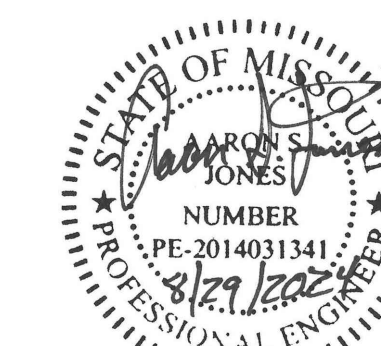
CAD DWG FILE: 6-C102_PP_22-0510.dgn
DRAWN BY: MBT
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DESIGNED BY: TML

SHEET TITLE:
**WATERLINE
MODIFICATIONS**

SHEET NUMBER:

C-102

6 OF 9 SHEETS
8/29/2024



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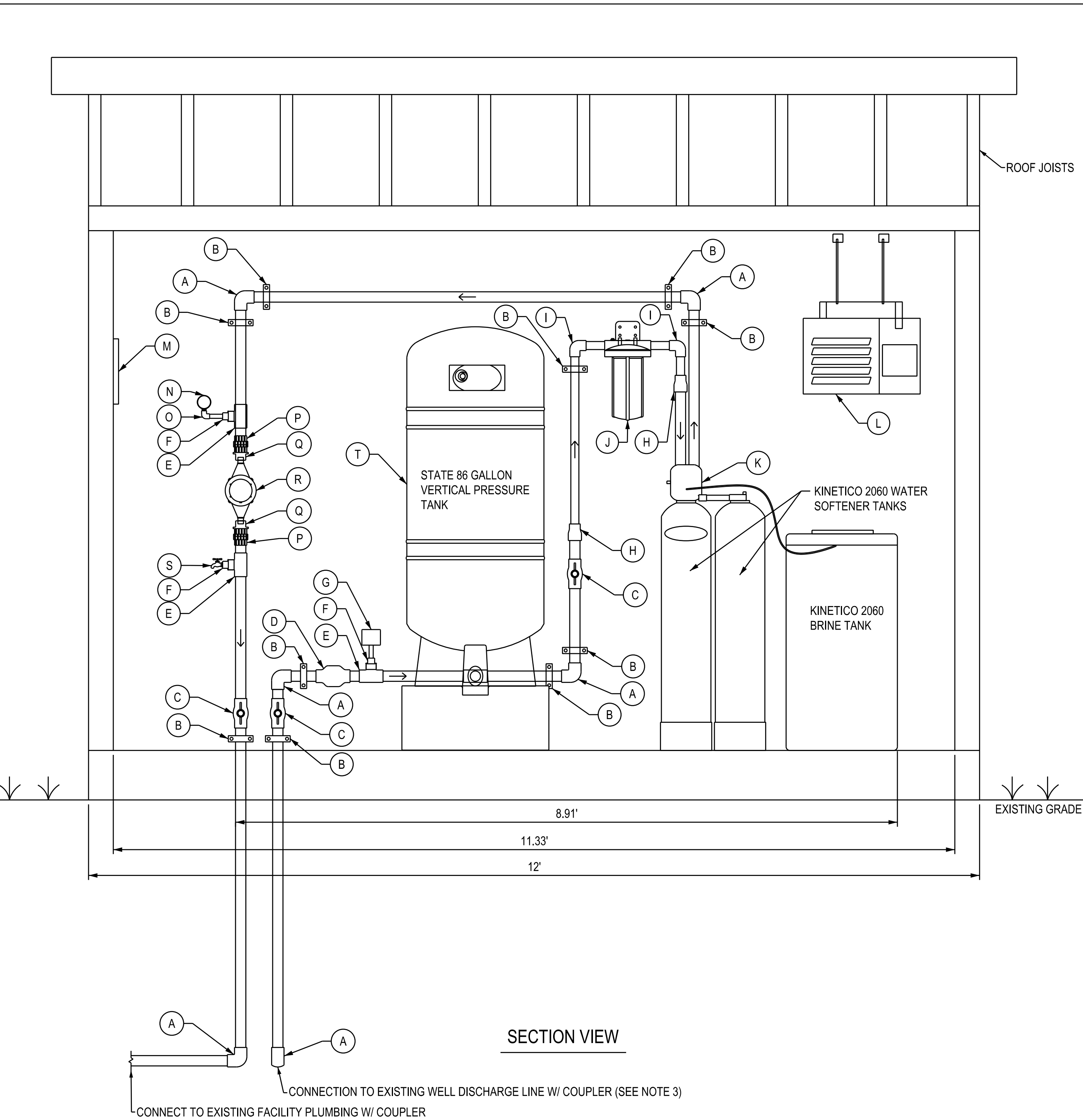
CAD DWG FILE: 7-C400_WT_22-0510.dgn
DRAWN BY: MBT
CHECKED BY: MS
DESIGNED BY: TML

SHEET TITLE:
**WELL WATER
SOFTENING STATION**

SHEET NUMBER:

C-400

7 OF 9 SHEETS
8/29/2024



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. THE STRUCTURE SHALL BE INSULATED BETWEEN ALL STUDS AND ROOF JOISTS/TRUSSES. SEE SPECIFICATION SECTION.
- 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.

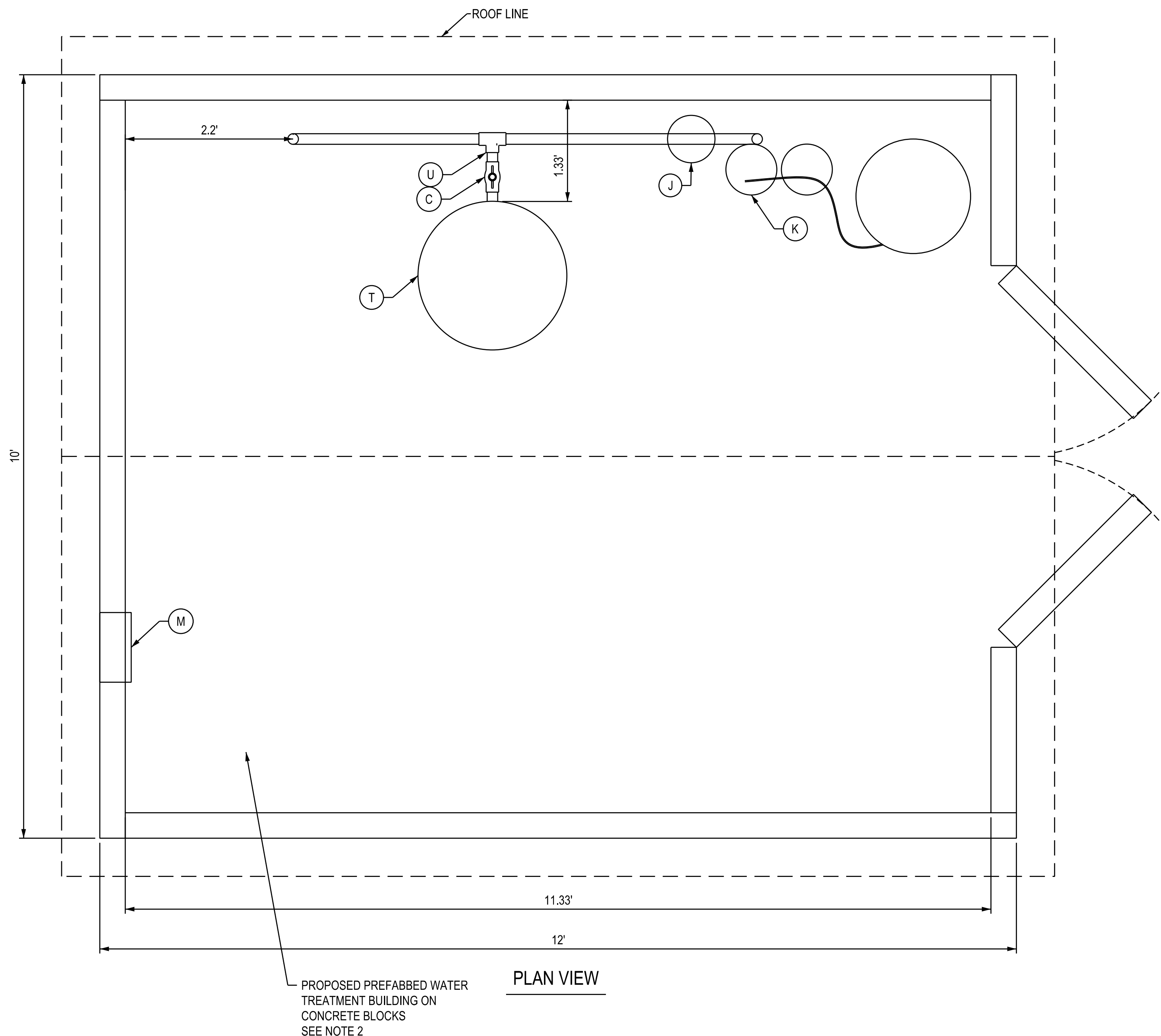
Corrosion-Resistant Shutter-Mount Exhaust Fans

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

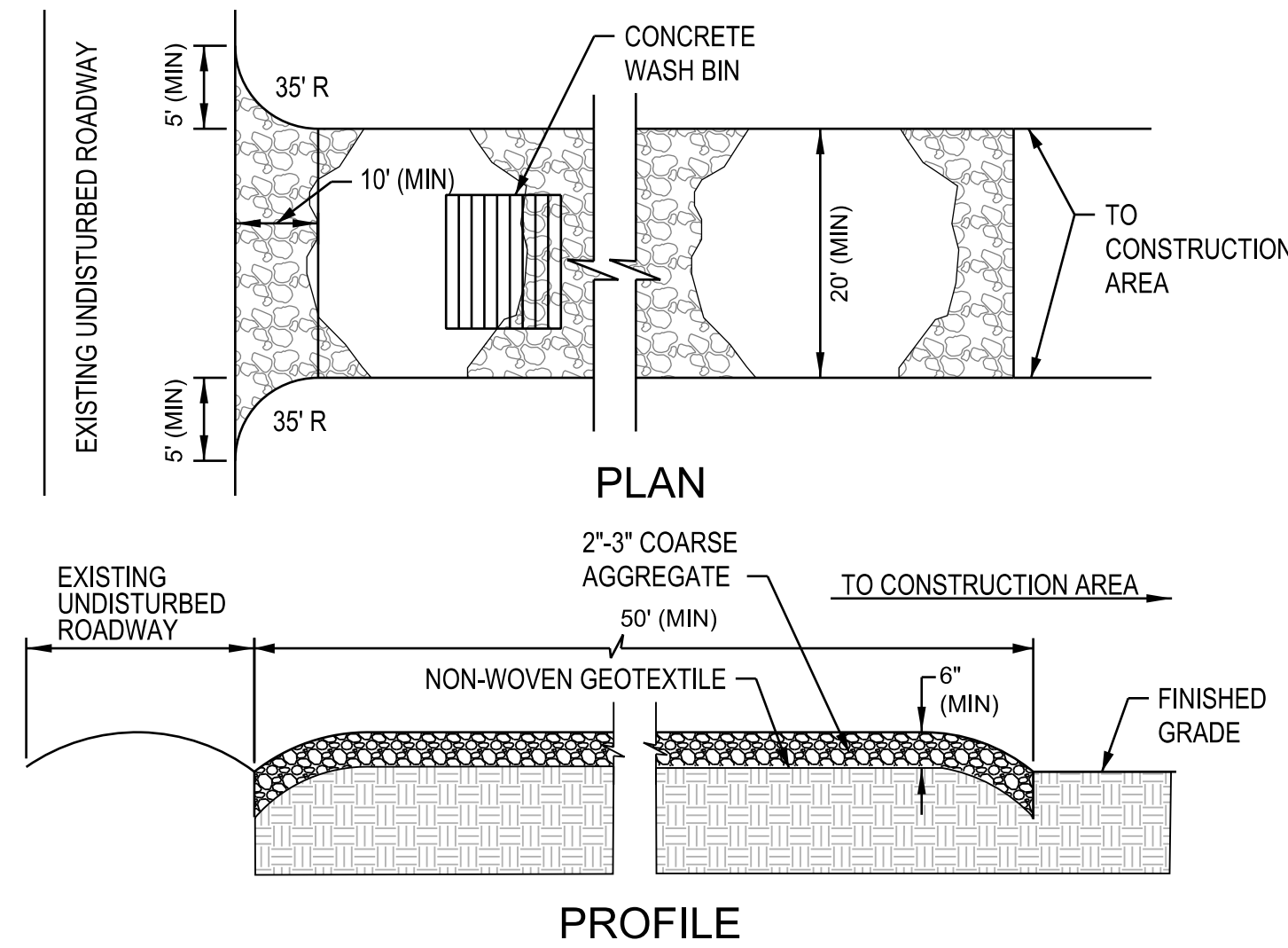
Brand AURA	Cord Construction 14/3
Overall Length 27 in	Electrical Connection Plug-In
Overall Width 6-1/2 in	Frequency 50/60Hz
Overall Depth 5-1/2 in	Amperage 12.5A
Phase 1	NEMA Plug Configuration 5-15P
Voltage 120V AC	UL Cord Rating SJTW with Molded Plug
Wattage Output 1500W	Infrared Electromagnetic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

Catalog Page 2951

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
U	1 1/4" x 1 1/4" PVC SCH 40 TEE

NOTES:

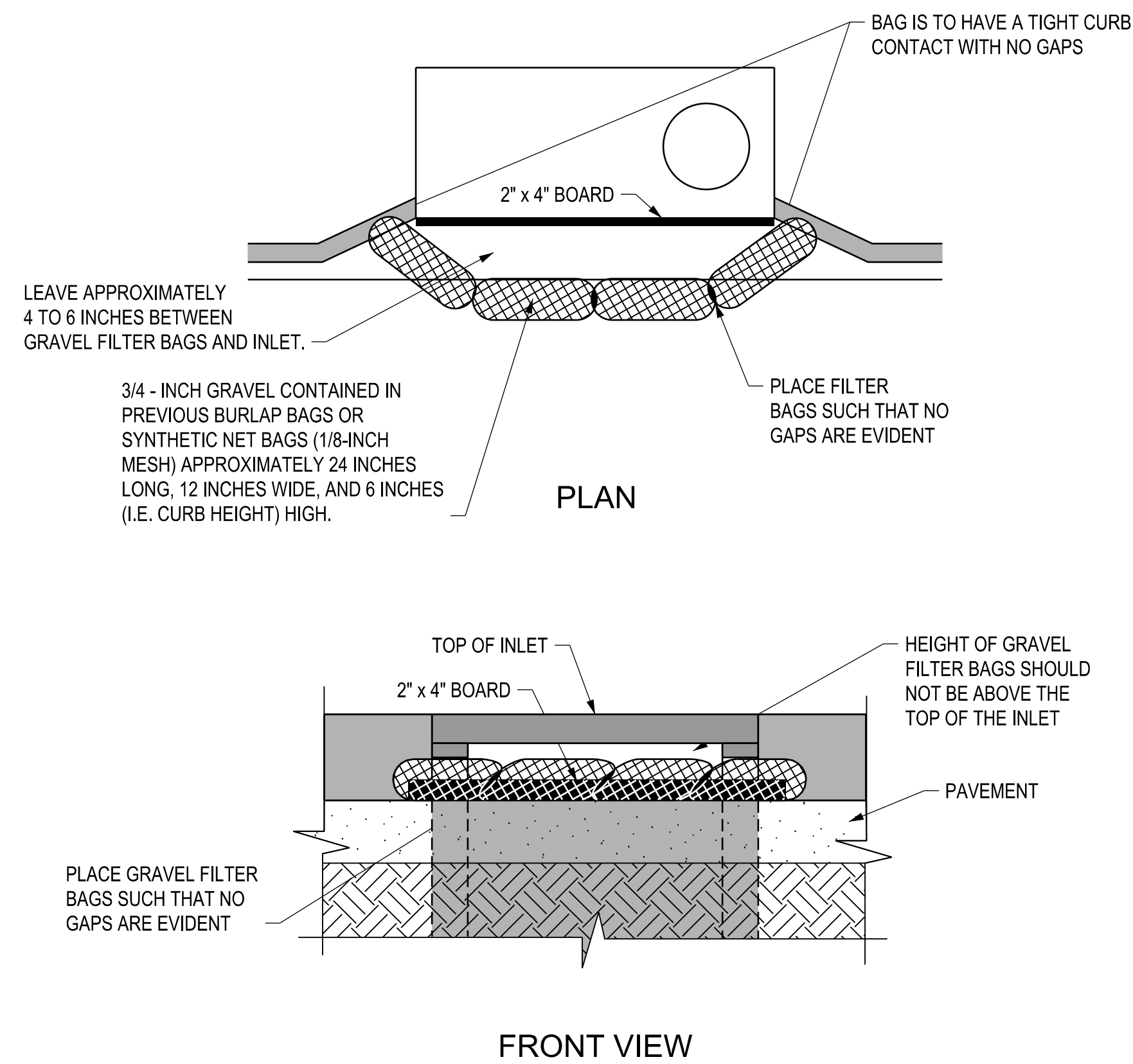
1. PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND UNDISTURBED ROADWAY.
2. LIMITS OF STABILIZED CONSTRUCTION ENTRANCE SHALL BE AS DIRECTED BY THE ENGINEER.
3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO UNDISTURBED ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDING STONE TO THE LENGTH OF THE ENTRANCE.
4. REPAIR AND CLEAN OUT MEASURES USED TO TRAP SEDIMENT.
5. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO UNDISTURBED ROADWAY SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.



TEMPORARY CONSTRUCTION ENTRANCE

NOT TO SCALE

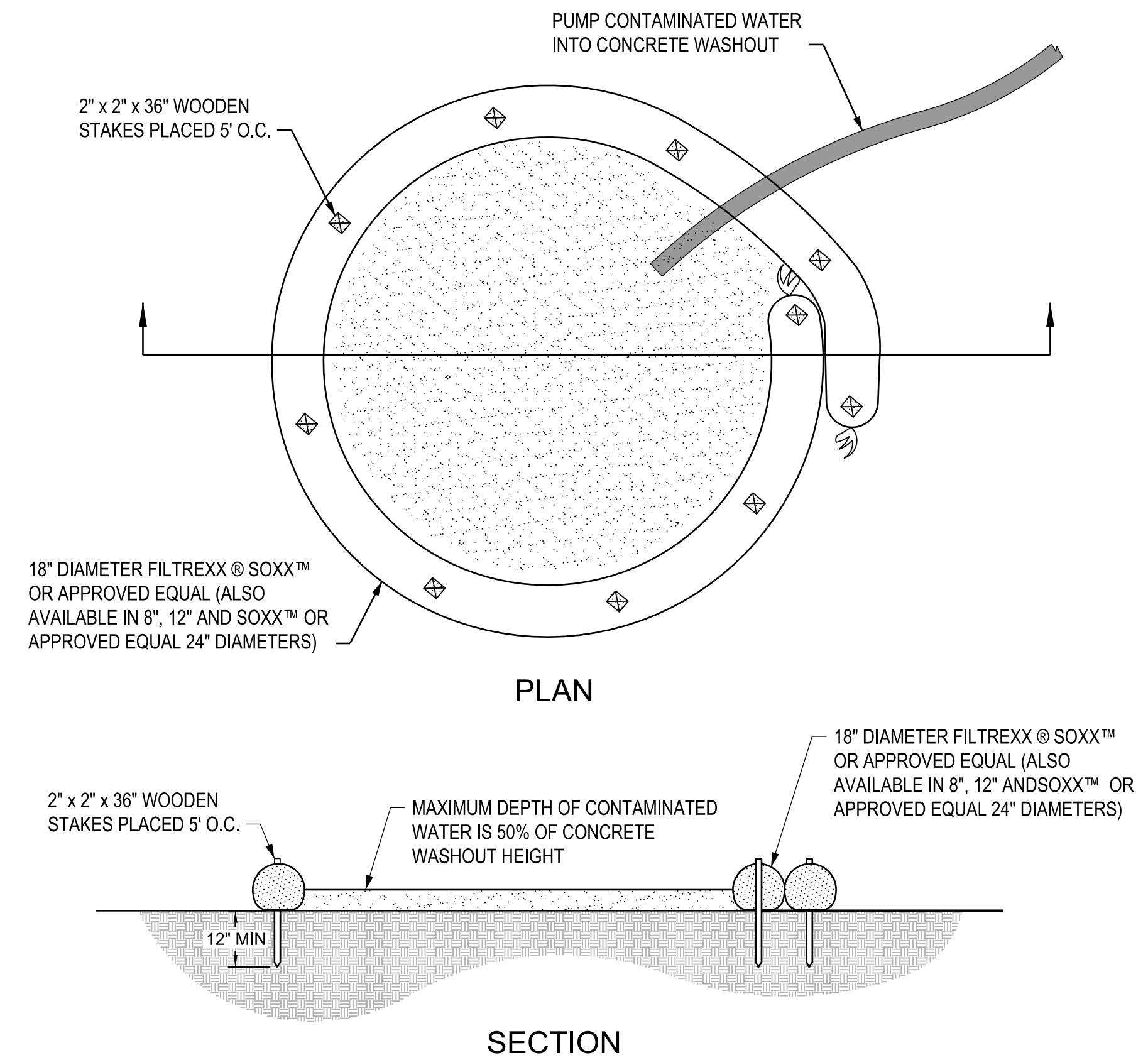
1
X-XX



INLET PROTECTION

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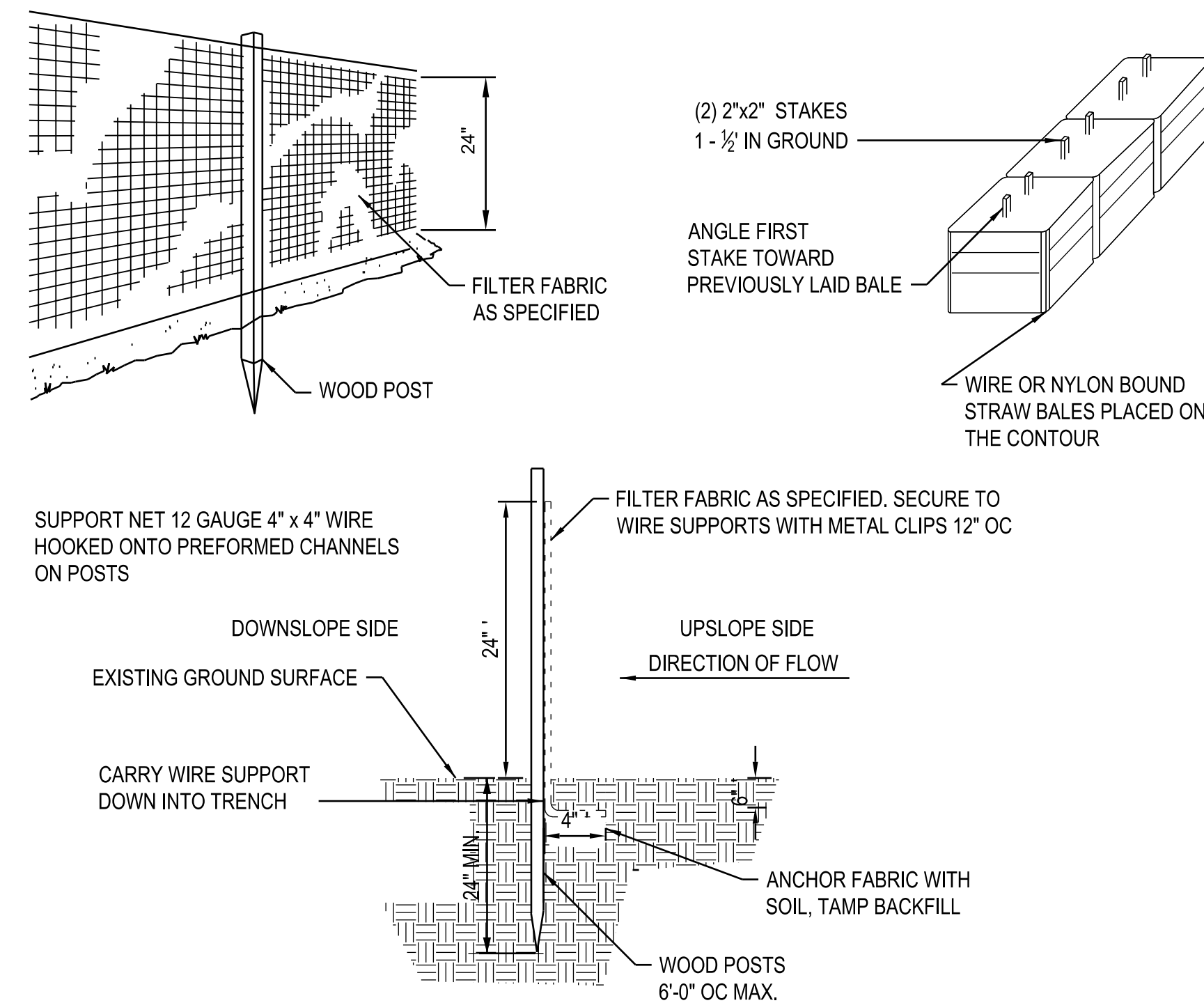
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X-XX



CONCRETE WASHOUT

NOT TO SCALE

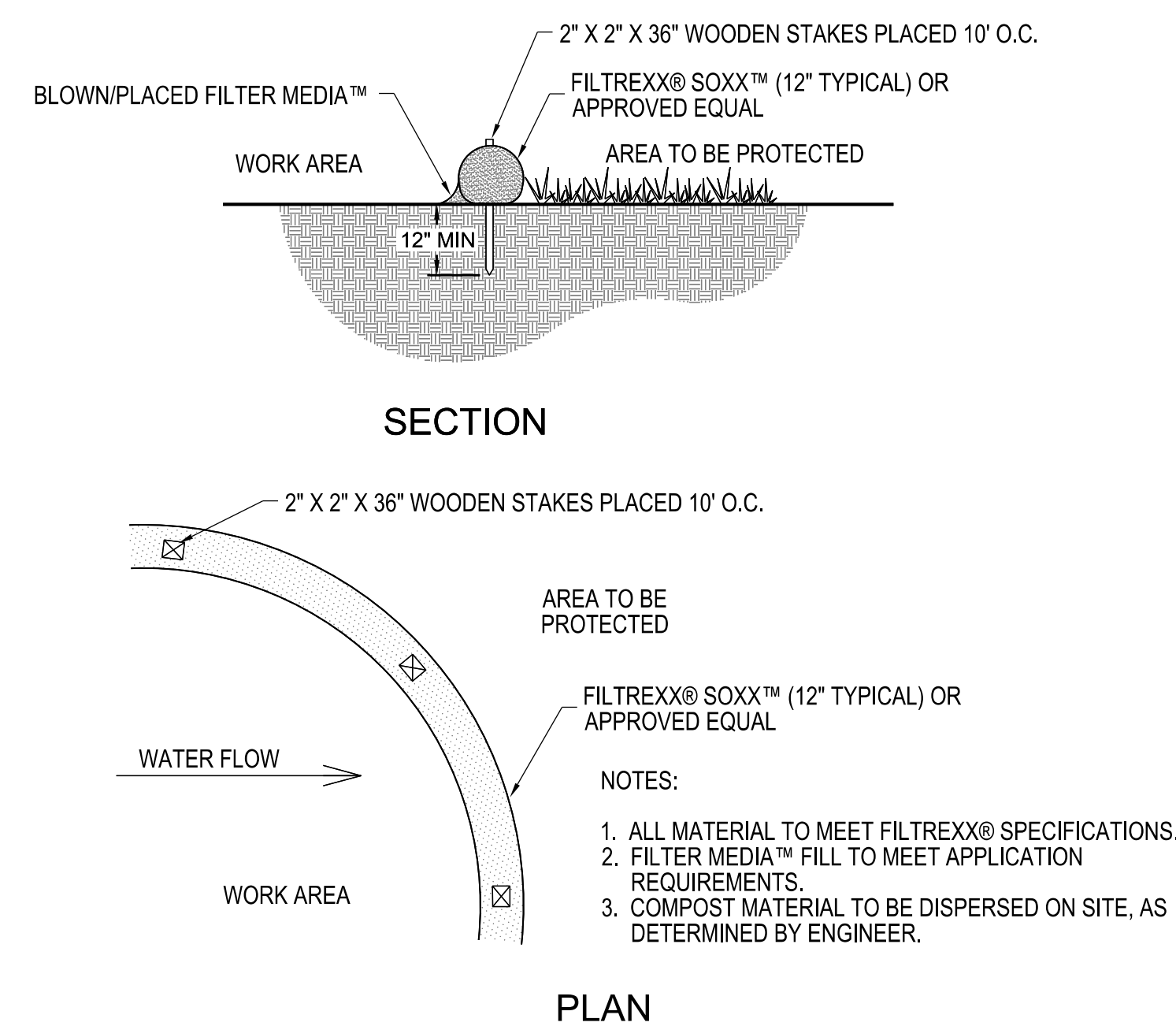
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X-XX



SILT FENCE

NOT TO SCALE

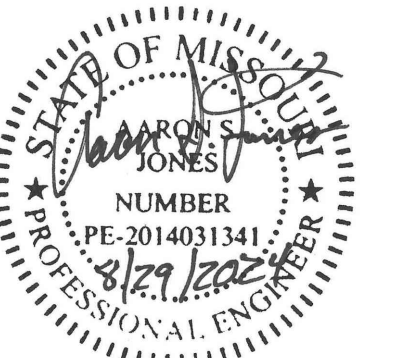
4
X-XX



SEDIMENT CONTROL DETAIL

NOT TO SCALE

4
X-XX



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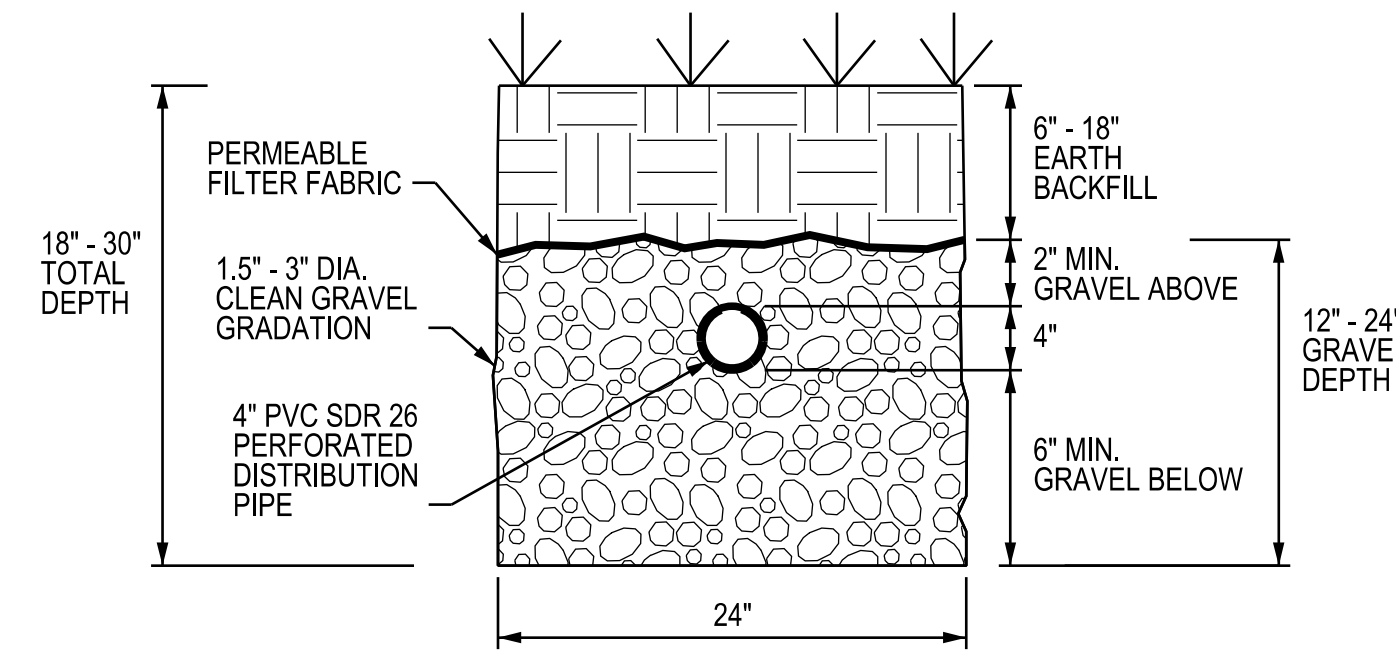
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SHEET TITLE:
**EROSION
CONTROL
DETAILS**

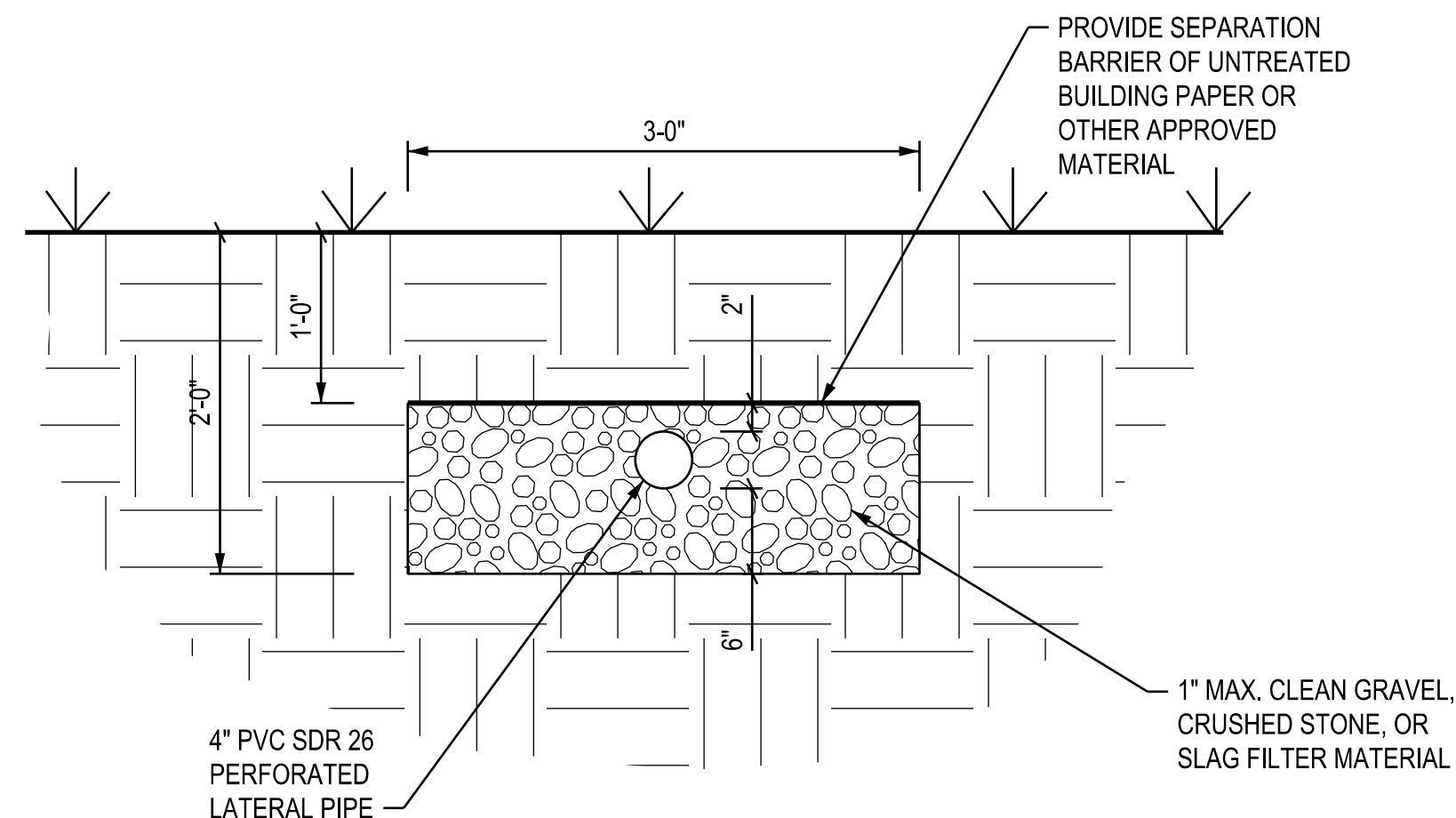
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C-500

8 OF 9 SHEETS
8/29/2024

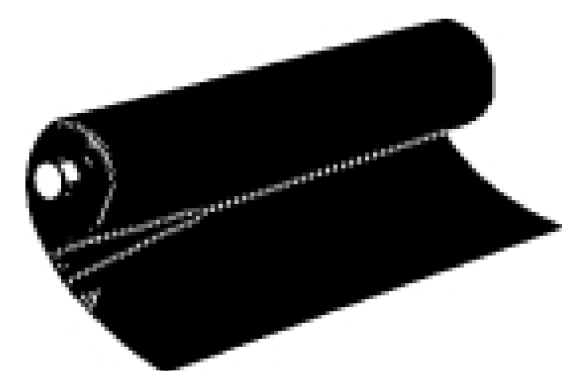


SECTION VIEW OF ABSORPTION TRENCH FOR DISTRIBUTION PIPE



ABSORPTION TRENCH FOR LATERAL PIPE

Fabric Barriers



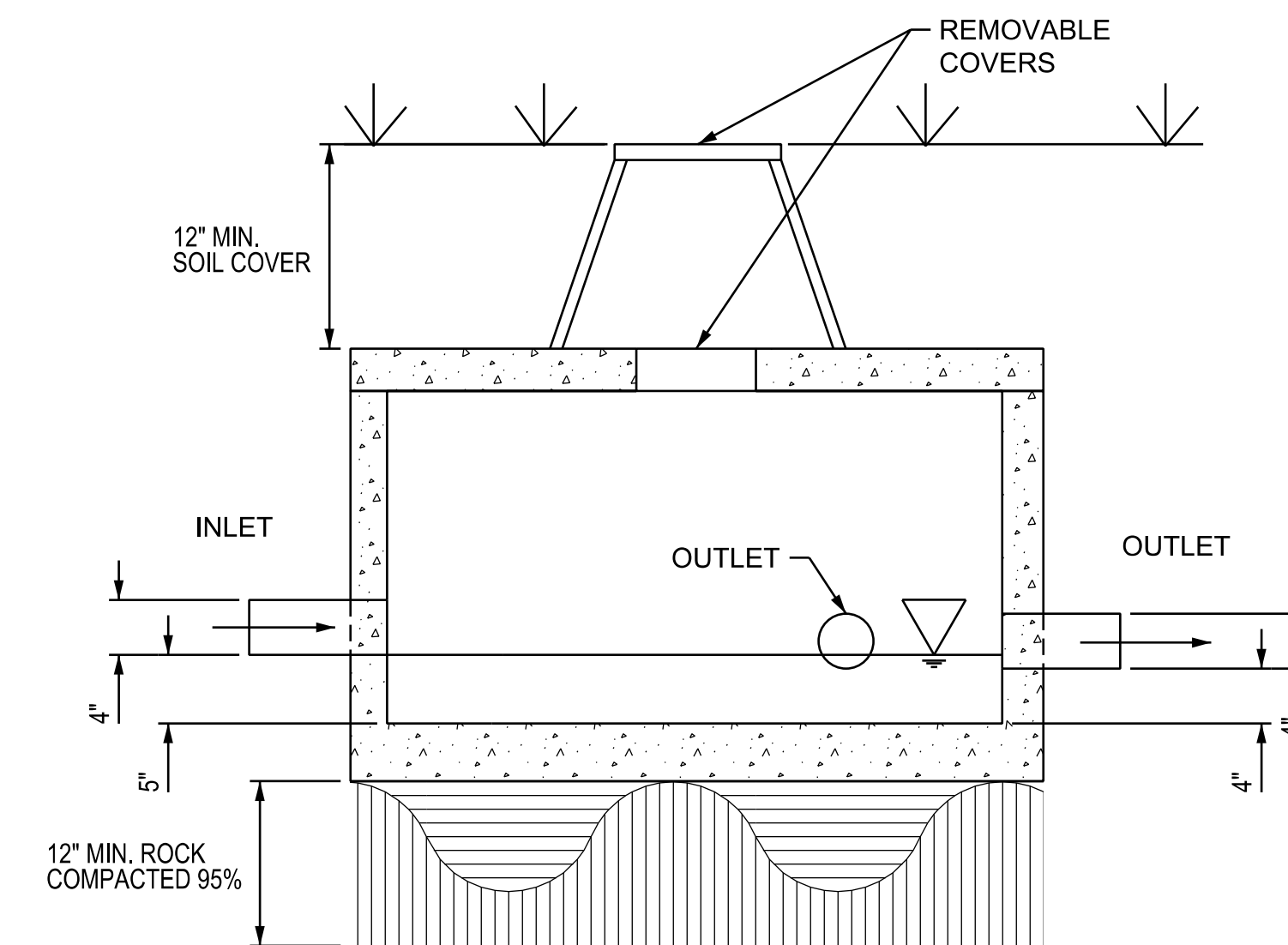
Part #	Description
01696075	Geo040 500 Sq Yd Reemay Style 2004 Filter Fabric-priced Per Roll

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



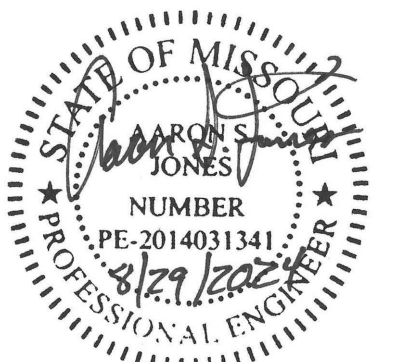
Tuf-Tite® Distribution Box



SECTION VIEW OF DISTRIBUTION BOX

MINIMUM DISTANCE FROM (IN FEET)	SEWAGE TANK ¹	MEETS SEWAGE TANK SETBACK		DISPOSAL AREA ²	MEETS DISPOSAL AREA SETBACKS
		DAY USE	ADMIN		
PRIVATE WATER SUPPLY WELL ³	50	√	√	100	√
PRIVATE WATER SUPPLY WELL	300	√	√	300	√
CISTERN	25	√	√	25	√
SPRING	50	√	√	100	√
CLASSIFIED STREAM, LAKE, OR IMPOUNDMENT*	50	√	√	50	√
STREAM OR OPEN DITCH ⁴	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	√

* A CLASSIFIED STREAM IS ANY STREAM THAT MAINTAINS PERMANENT FLOW OR PERMANENT POOLS DURING DROUGHT PERIODS AND SUPPORTS AQUATIC LIFE.
 ** 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



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SHEET TITLE:

**SITE
DETAILS**

SHEET NUMBER:

C-501

9 OF 9 SHEETS
8/29/2024