

## ADDENDUM NO. 2

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

**Sewer Renovations  
Mark Twain State Park  
Florida, Missouri  
PROJECT NO.: X2333-01**

**Bid Opening Date: 1:30 PM, Nov 14, 2024 (Changed)**

**Bidders are hereby informed of the following:**

### **SPECIFICATION CHANGES:**

#### **1. CLARIFICATION:**

**SECTION 004113 – BID FORM:** The bidder agrees to complete the work within 180 working days from the date of Notice of Intent to Award is issued as modified by additional days added by the Owner's acceptance of alternates, if applicable.

Specification Section 005213 provides different working days. The 180 Working Days will be the Contracted days of work to complete the project.

#### **2. Section 005213 Construction Contract – Article 2: Revise as follows –**

“The contract performance time is **180 working days** from the transmittal date of this agreement.”

### **DRAWING CHANGES:**

#### **C-101**

1. Per coordination with the manufacturer, the drip field has been split into 10 zones instead of 5 zones for efficacy of the controls and equipment.
2. Due to concerns with some rock fragments, the drip field has been moved entirely within the trees to allow for all tubing to be laid on the ground. Key note J has been adjusted accordingly.
3. Main and sub-manifolds adjusted to match details on C-204
4. Supply and return main cleanouts added. Key Note “O” added to match detail 4 on C-204.

#### **C-201**

1. Detail 7 updated to show 10 zones instead of 5 zones.

#### **C-203**

1. Detail 4 updated to show required fiberglass marker

#### **C-204**

1. Detail 1 and 2 to show fiberglass marker required in mulch areas

**GENERAL:**

1. The Pre-Bid Meeting was held on October, 24 2024 at 10:00 AM.
2. Site Inspection occurred immediately after the formal Pre-Bid Meeting at Mark Twain State Park.
3. Bidders needing an additional site inspection should contact Rachel Hoemann at (573) 248-9985 [rachel.hoemann@dnr.mo.gov](mailto:rachel.hoemann@dnr.mo.gov)
4. Please contact April Howser, Contract Specialist, at (573) 751-0053 for questions regarding bidding procedures and MBE/WBE/SDVE goals and submittal requirements.
5. The deadline for technical questions was November 1, 2024 at noon.
6. Changes to, or clarification of, the bid documents are only made as issued in the addenda.
7. Current Plan Holders list is available online at: [X2333-01 Sewer Renovations Mark Twain State Park: Plan Holders: State of Missouri Office of Administration \(oafmdcplanroom.com\)](https://oafmdcplanroom.com)
8. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd Suite 1C, Columbia MO 65201, 573-446-7768 to order official plans and specifications.
9. 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 rejections of the bid.
10. MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 0% / 0% / 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.

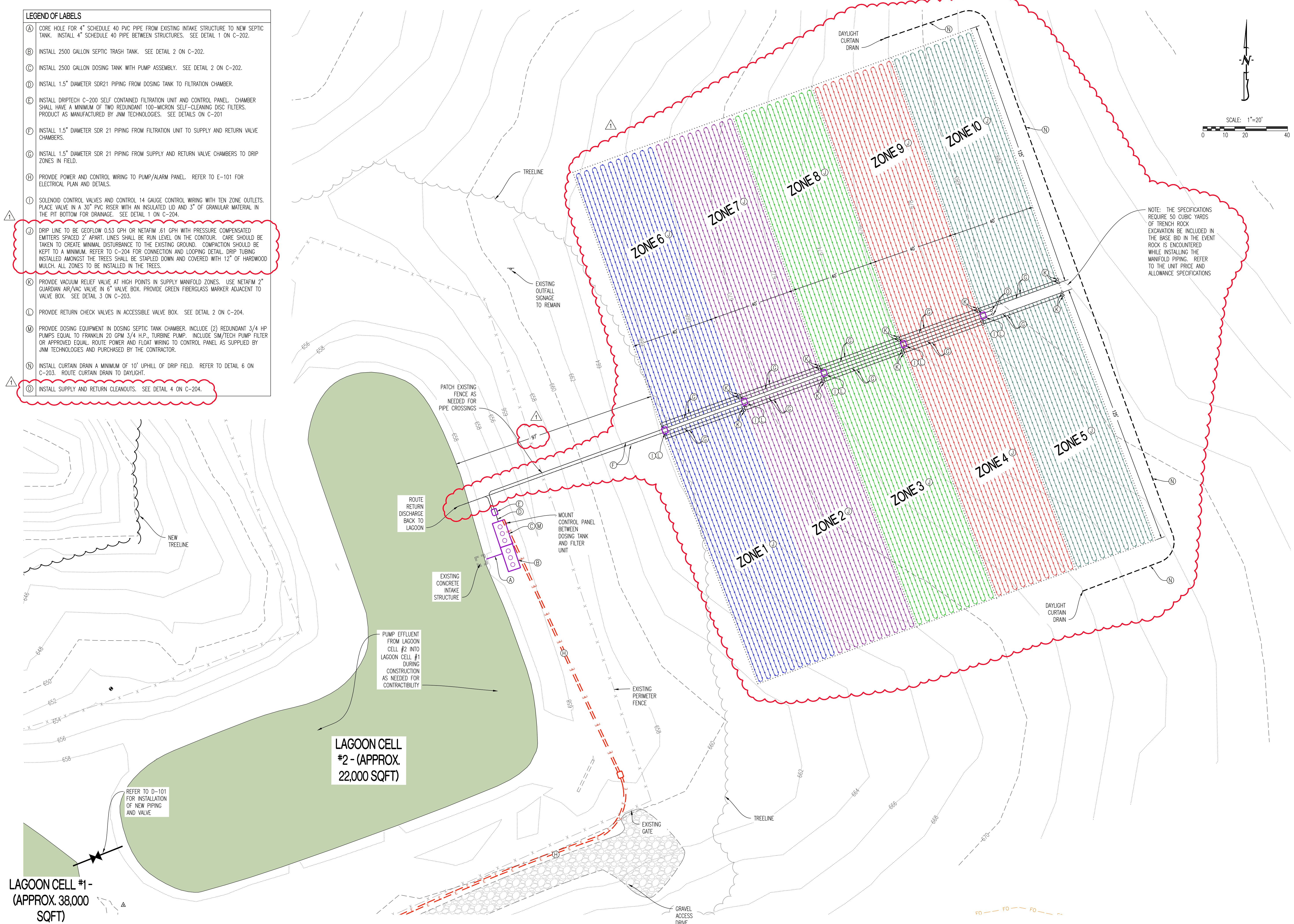
**ATTACHMENTS:**

1. Plan Sheet C-101
2. Plan Sheet C-201
3. Plan Sheet C-203
4. Plan Sheet C-204

**Nov 5, 2024**

**END OF ADDENDUM NO. 2**

- LEGEND OF LABELS**
- (A) CORE HOLE FOR 4" SCHEDULE 40 PVC PIPE FROM EXISTING INTAKE STRUCTURE TO NEW SEPTIC TANK. INSTALL 4" SCHEDULE 40 PIPE BETWEEN STRUCTURES. SEE DETAIL 1 ON C-202.
  - (B) INSTALL 2500 GALLON SEPTIC TRASH TANK. SEE DETAIL 2 ON C-202.
  - (C) INSTALL 2500 GALLON DOSING TANK WITH PUMP ASSEMBLY. SEE DETAIL 2 ON C-202.
  - (D) INSTALL 1.5" DIAMETER SDR21 PIPING FROM DOSING TANK TO FILTRATION CHAMBER.
  - (E) INSTALL DRIPTECH C-200 SELF CONTAINED FILTRATION UNIT AND CONTROL PANEL. CHAMBER SHALL HAVE A MINIMUM OF TWO REDUNDANT 100-MICRON SELF-CLEANING DISC FILTERS. PRODUCT AS MANUFACTURED BY JNM TECHNOLOGIES. SEE DETAILS ON C-201
  - (F) INSTALL 1.5" DIAMETER SDR 21 PIPING FROM FILTRATION UNIT TO SUPPLY AND RETURN VALVE CHAMBERS.
  - (G) INSTALL 1.5" DIAMETER SDR 21 PIPING FROM SUPPLY AND RETURN VALVE CHAMBERS TO DRIP ZONES IN FIELD.
  - (H) PROVIDE POWER AND CONTROL WIRING TO PUMP/ALARM PANEL. REFER TO E-101 FOR ELECTRICAL PLAN AND DETAILS.
  - (I) SOLENOID CONTROL VALVES AND CONTROL 14 GAUGE CONTROL WIRING WITH TEN ZONE OUTLETS. PLACE VALVE IN A 30" PVC RISER WITH AN INSULATED LID AND 3" OF GRANULAR MATERIAL IN THE PIT BOTTOM FOR DRAINAGE. SEE DETAIL 1 ON C-204.
  - (J) DRIP LINE TO BE GEOFLOW 0.53 GPH OR NETAFM .61 GPH WITH PRESSURE COMPENSATED EMITTERS SPACED 2' APART. LINES SHALL BE RUN LEVEL ON THE CONTOUR. CARE SHOULD BE TAKEN TO CREATE MINIMAL DISTURBANCE TO THE EXISTING GROUND. COMPACTION SHOULD BE KEPT TO A MINIMUM. REFER TO C-204 FOR CONNECTION AND LOOPING DETAIL. DRIP TUBING INSTALLED AMONGST THE TREES SHALL BE STAPLED DOWN AND COVERED WITH 12" OF HARDWOOD MULCH. ALL ZONES TO BE INSTALLED IN THE TREES.
  - (K) PROVIDE VACUUM RELIEF VALVE AT HIGH POINTS IN SUPPLY MANIFOLD ZONES. USE NETAFM 2" GUARDIAN AIR/VAC VALVE IN 6" VALVE BOX. PROVIDE GREEN FIBERGLASS MARKER ADJACENT TO VALVE BOX. SEE DETAIL 3 ON C-203.
  - (L) PROVIDE RETURN CHECK VALVES IN ACCESSIBLE VALVE BOX. SEE DETAIL 2 ON C-204.
  - (M) PROVIDE DOSING EQUIPMENT IN DOSING SEPTIC TANK CHAMBER. INCLUDE (2) REDUNDANT 3/4 HP PUMPS EQUAL TO FRANKLIN 20 GPM 3/4 H.P., TURBINE PUMP. INCLUDE SIM/TECH PUMP FILTER OR APPROVED EQUAL. ROUTE POWER AND FLOAT WIRING TO CONTROL PANEL AS SUPPLIED BY JNM TECHNOLOGIES AND PURCHASED BY THE CONTRACTOR.
  - (N) INSTALL CURTAIN DRAIN A MINIMUM OF 10' UPHILL OF DRIP FIELD. REFER TO DETAIL 6 ON C-203. ROUTE CURTAIN DRAIN TO DAYLIGHT.
  - (O) INSTALL SUPPLY AND RETURN CLEANOUTS. SEE DETAIL 4 ON C-204.



NOTE: THE SPECIFICATIONS REQUIRE 50 CUBIC YARDS OF TRENCH ROCK EXCAVATION BE INCLUDED IN THE BASE BID IN THE EVENT ROCK IS ENCOUNTERED WHILE INSTALLING THE MANIFOLD PIPING. REFER TO THE UNIT PRICE AND ALLOWANCE SPECIFICATIONS

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



JESSE RAY STEPHENS  
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& MARK TWAIN BIRTHPLACE

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37352 SHRINE ROAD  
FLORIDA, MO 65283

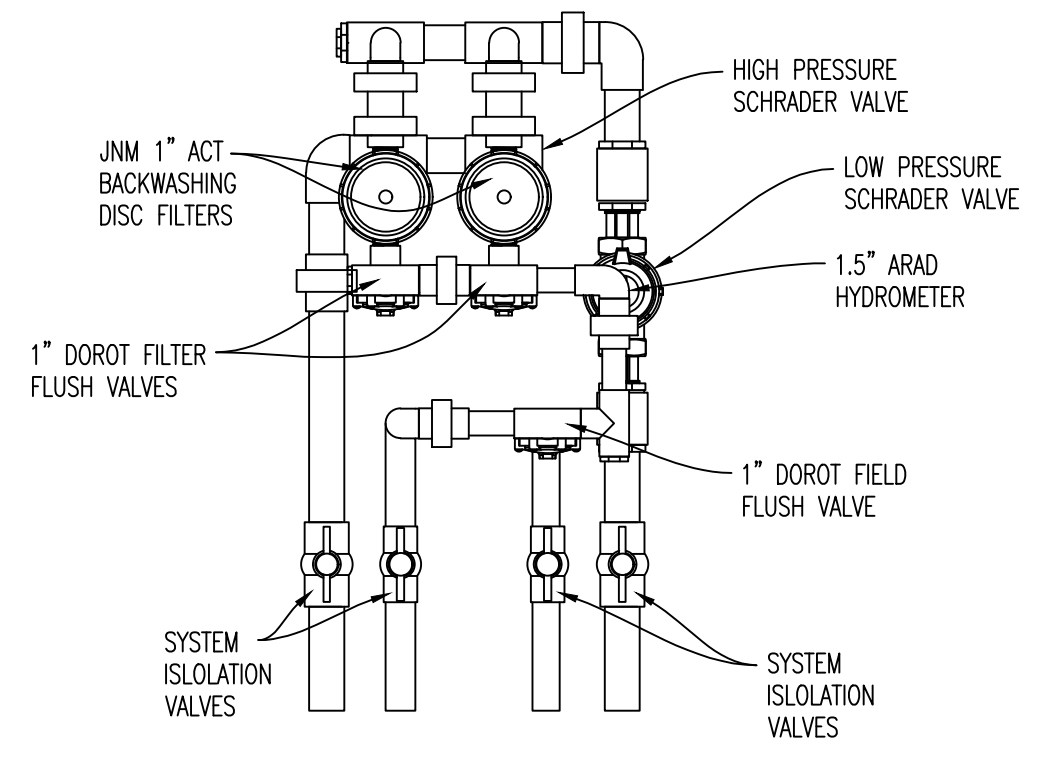
PROJECT # X2333-01  
SITE # 5110  
ASSET # 7815110014

REVISION: ADD. #2  
DATE: 11-4-2024  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 09/27/2024

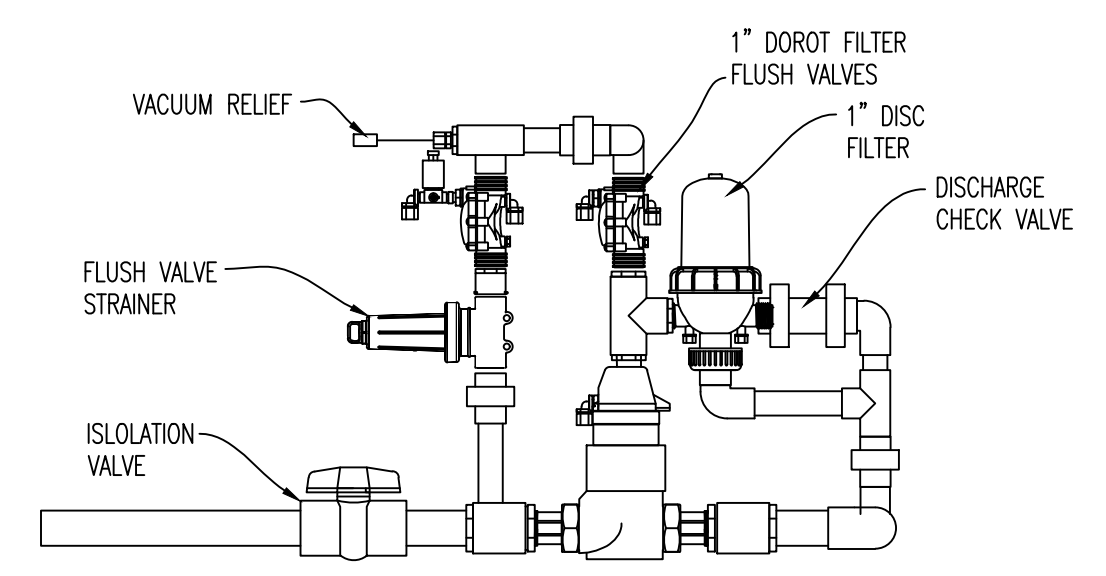
CAD DWG FILE: C-SIT-C101  
DRAWN BY: JRS  
CHECKED BY: ATG  
DESIGNED BY: JRS

SHEET TITLE:  
DRIP IRRIGATION SITE  
PLAN

SHEET NUMBER:  
**C-101**

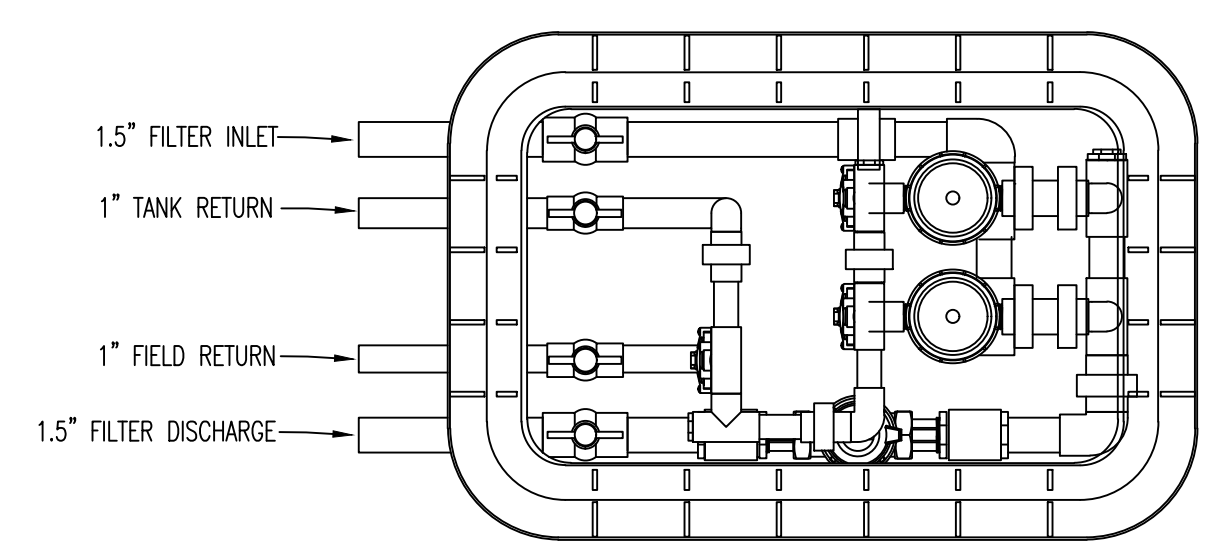


01 DRIP-TECH C200 - PLAN VIEW  
SCALE: NONE

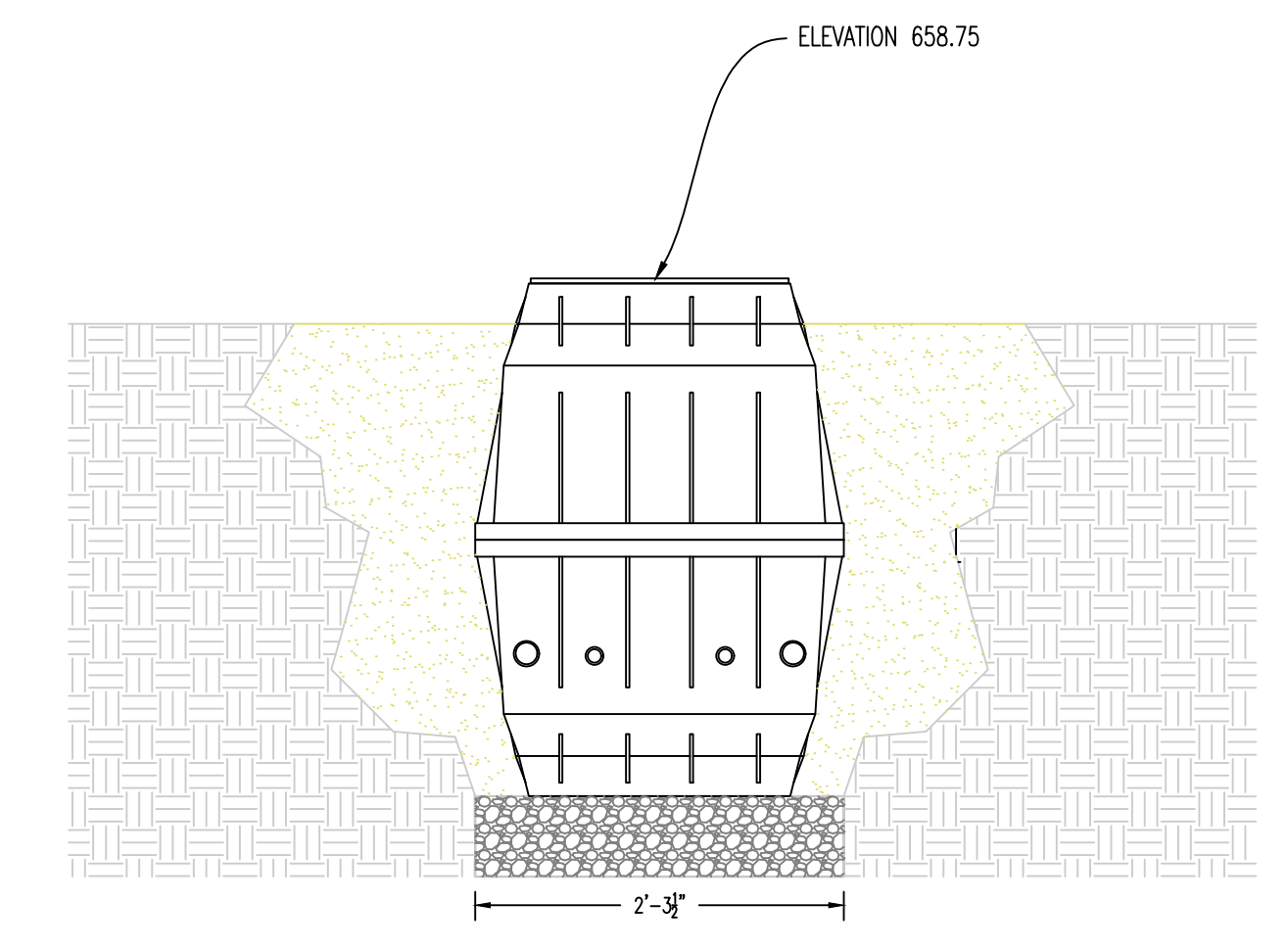


NOTES:  
1) AN EXTRA DISC FILTER ASSEMBLY SHALL BE PROVIDED TO PARK STAFF AS ATTIC STOCK.

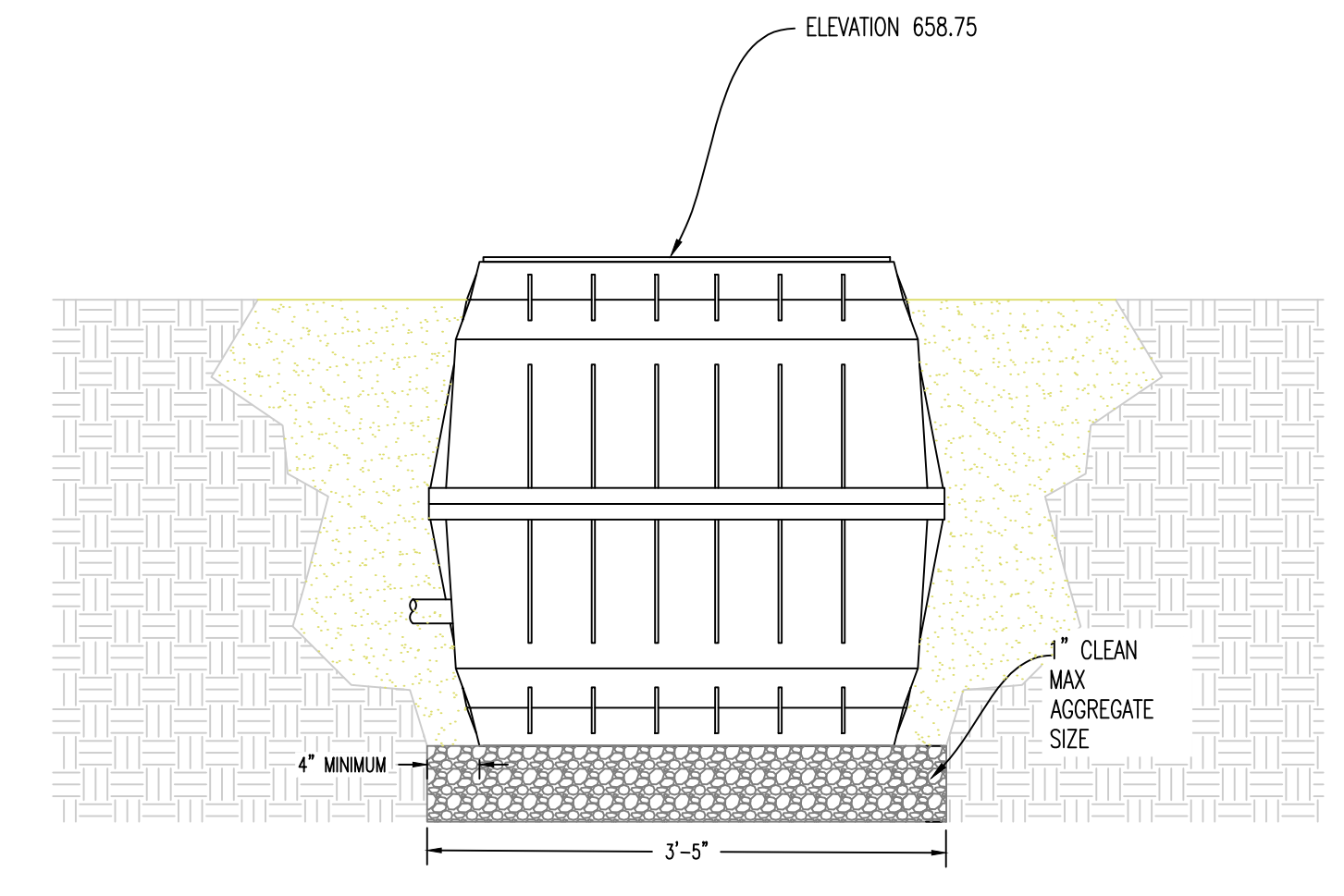
02 DRIP-TECH C200 - PROFILE VIEW  
SCALE: NONE



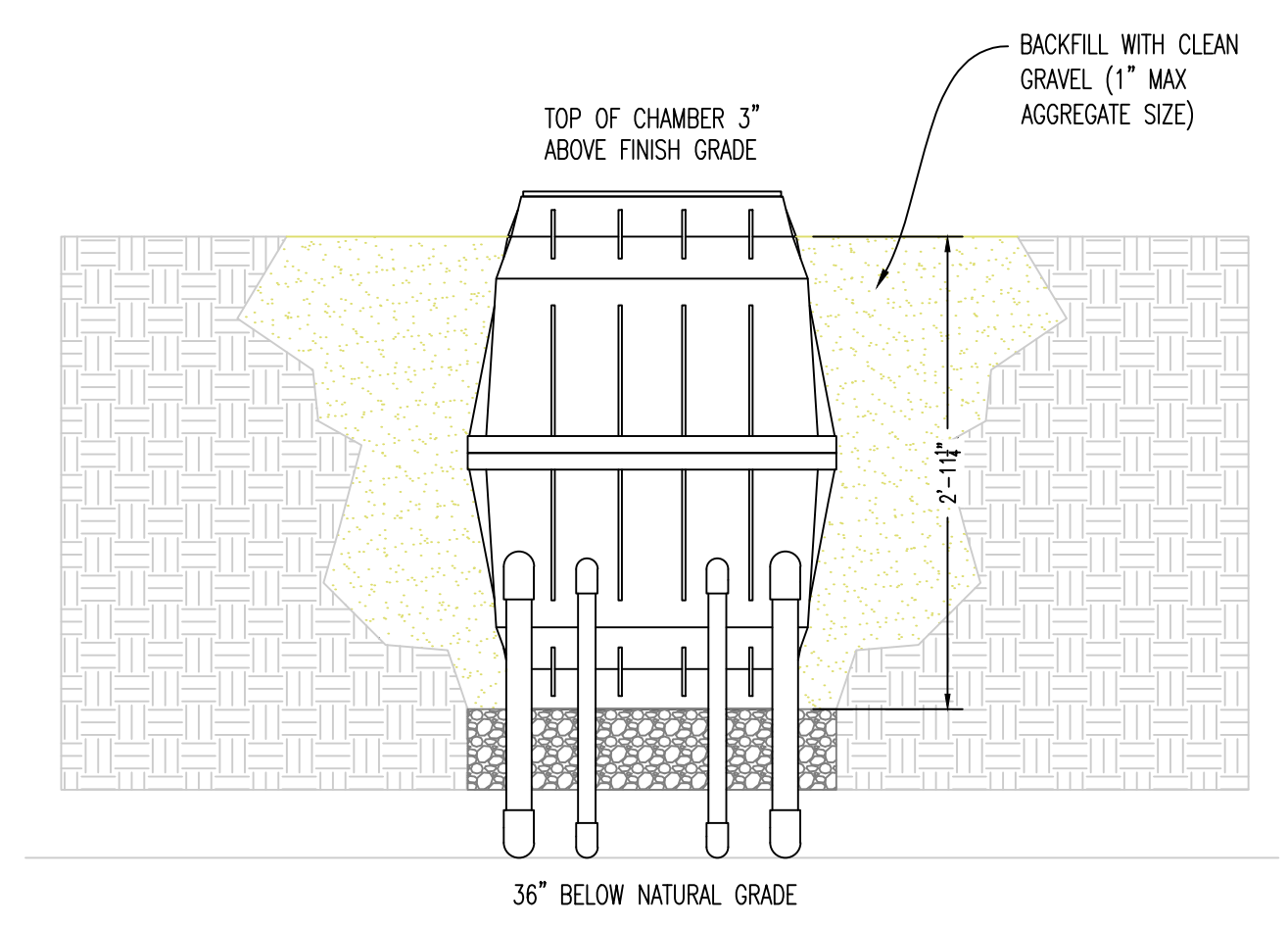
03 DRIP-TECH C200 - ENCLOSURE PLAN VIEW  
SCALE: NONE



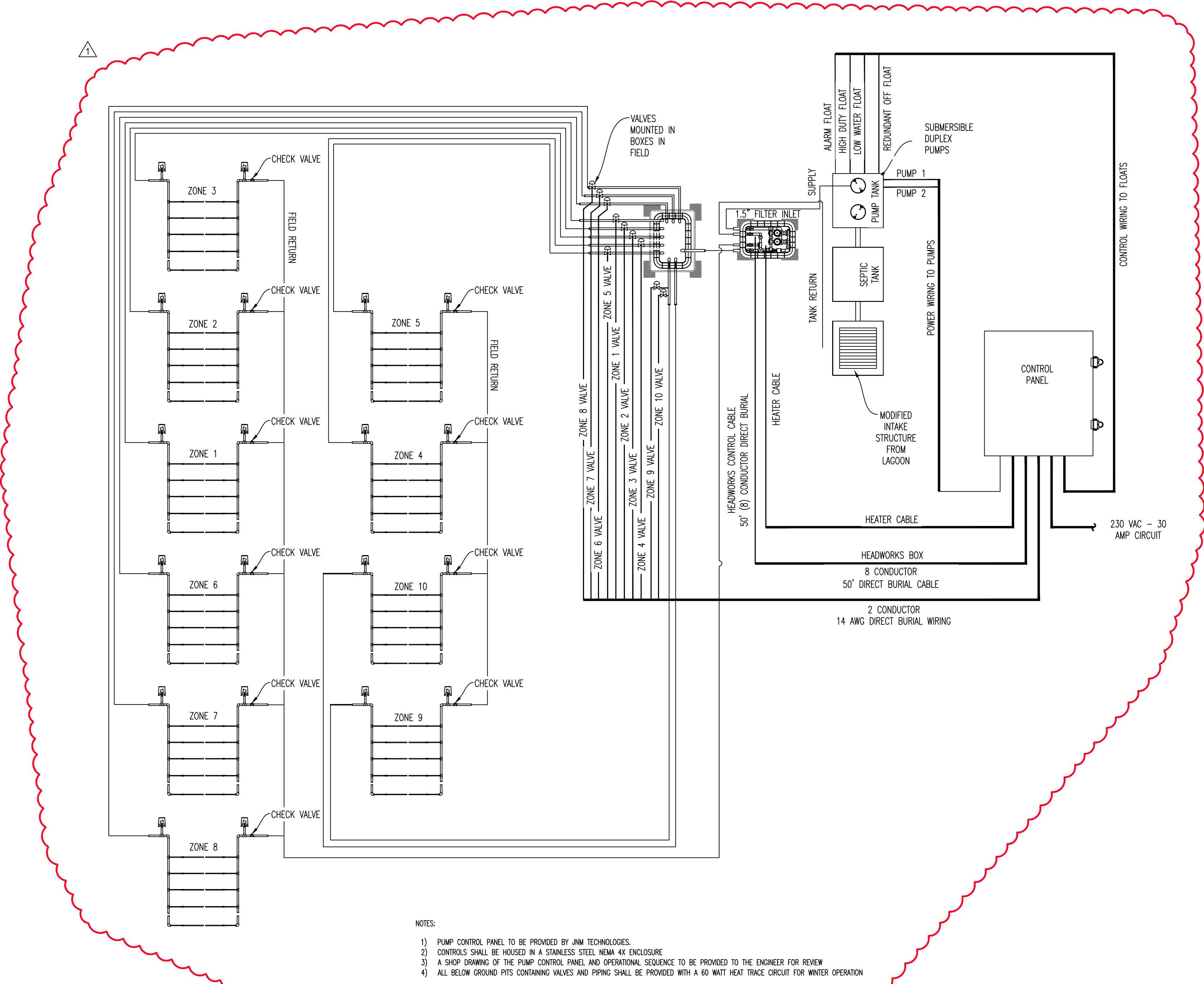
04 DRIP-TECH C200 - ELEVATION #1  
SCALE: NONE



05 DRIP-TECH C200 - ELEVATION #2  
SCALE: NONE



06 DRIP-TECH C200 - ELEVATION #3  
SCALE: NONE



NOTES:  
1) PUMP CONTROL PANEL TO BE PROVIDED BY ANM TECHNOLOGIES.  
2) CONTROLS SHALL BE HOUSED IN A STAINLESS STEEL NEMA 4X ENCLOSURE  
3) A SHOP DRAWING OF THE PUMP CONTROL PANEL AND OPERATIONAL SEQUENCE TO BE PROVIDED TO THE ENGINEER FOR REVIEW  
4) ALL BELOW GROUND PITS CONTAINING VALVES AND PIPING SHALL BE PROVIDED WITH A 60 WATT HEAT TRACE CIRCUIT FOR WINTER OPERATION

07 DRIP-TECH C200 - ZONE SCHEMATIC  
SCALE: NONE



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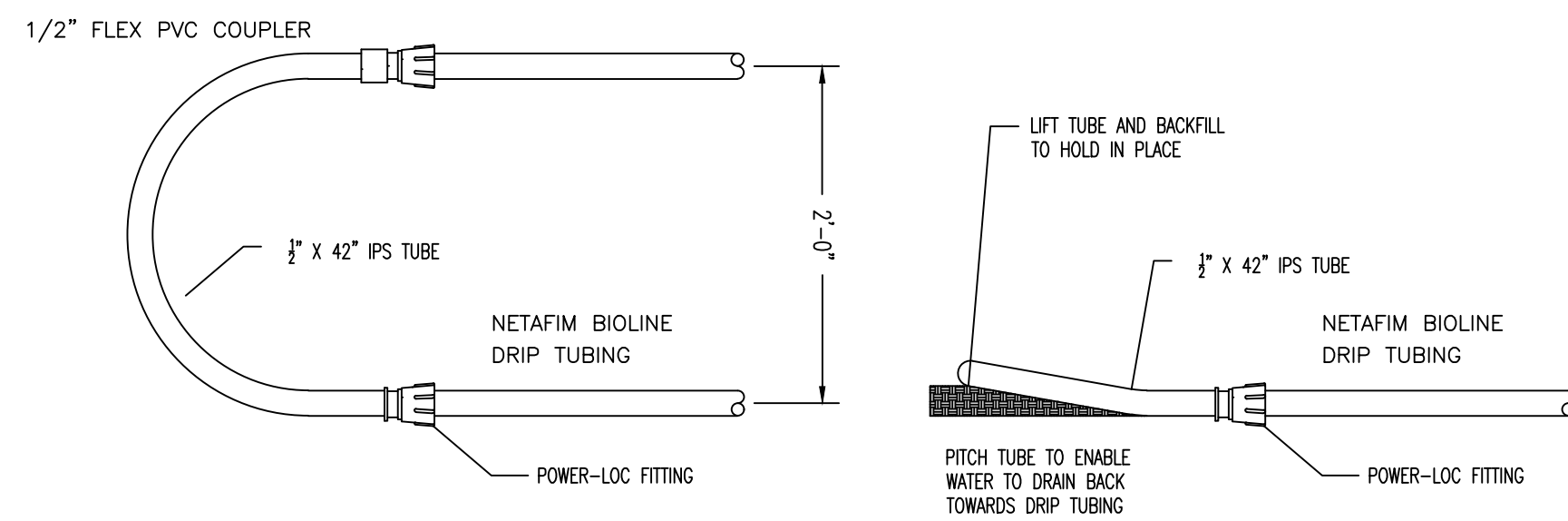
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REVISION: \_\_\_\_\_  
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ISSUE DATE: 09/27/2024

CAD DWG FILE: C-SIT-C201  
DRAWN BY: JRS  
CHECKED BY: ATG  
DESIGNED BY: JRS

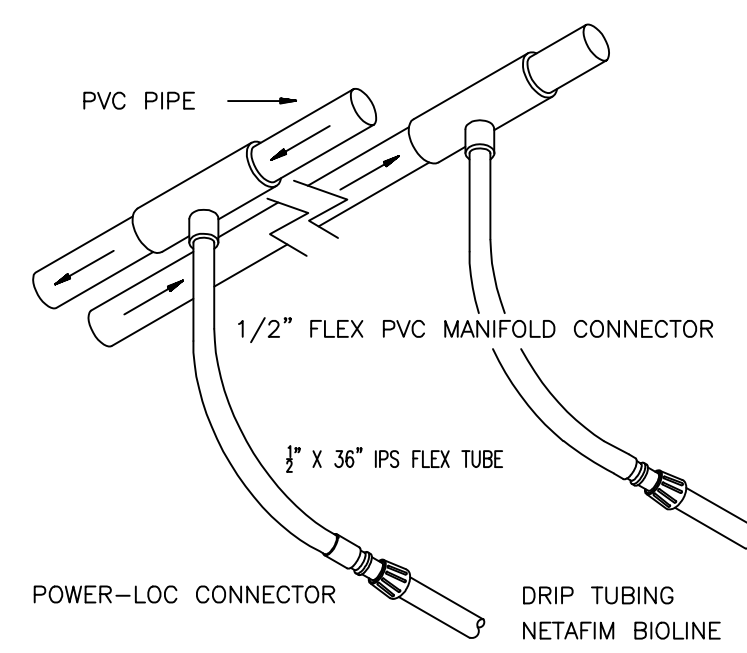
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EQUIPMENT  
DETAILS

SHEET NUMBER:

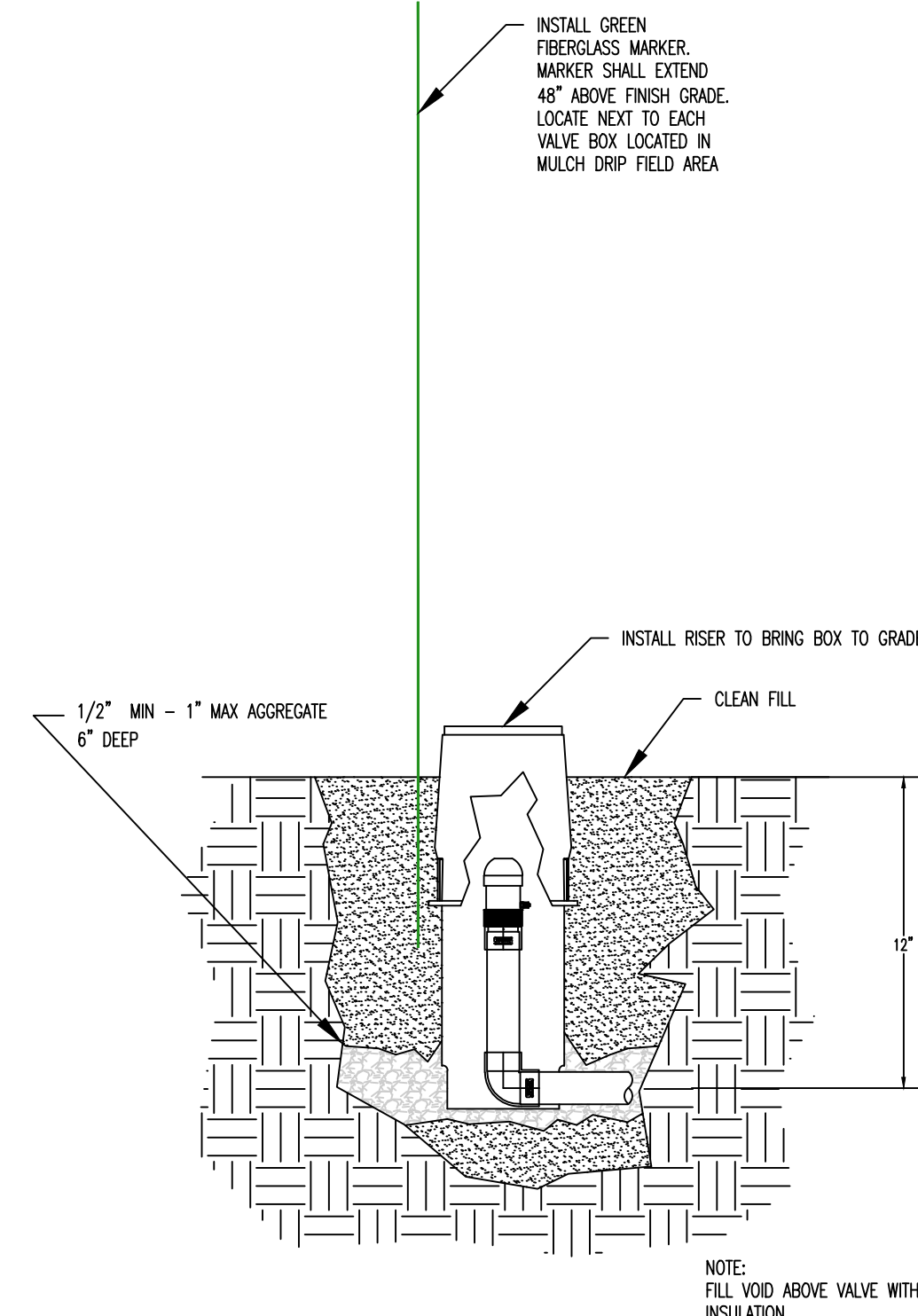
C-201



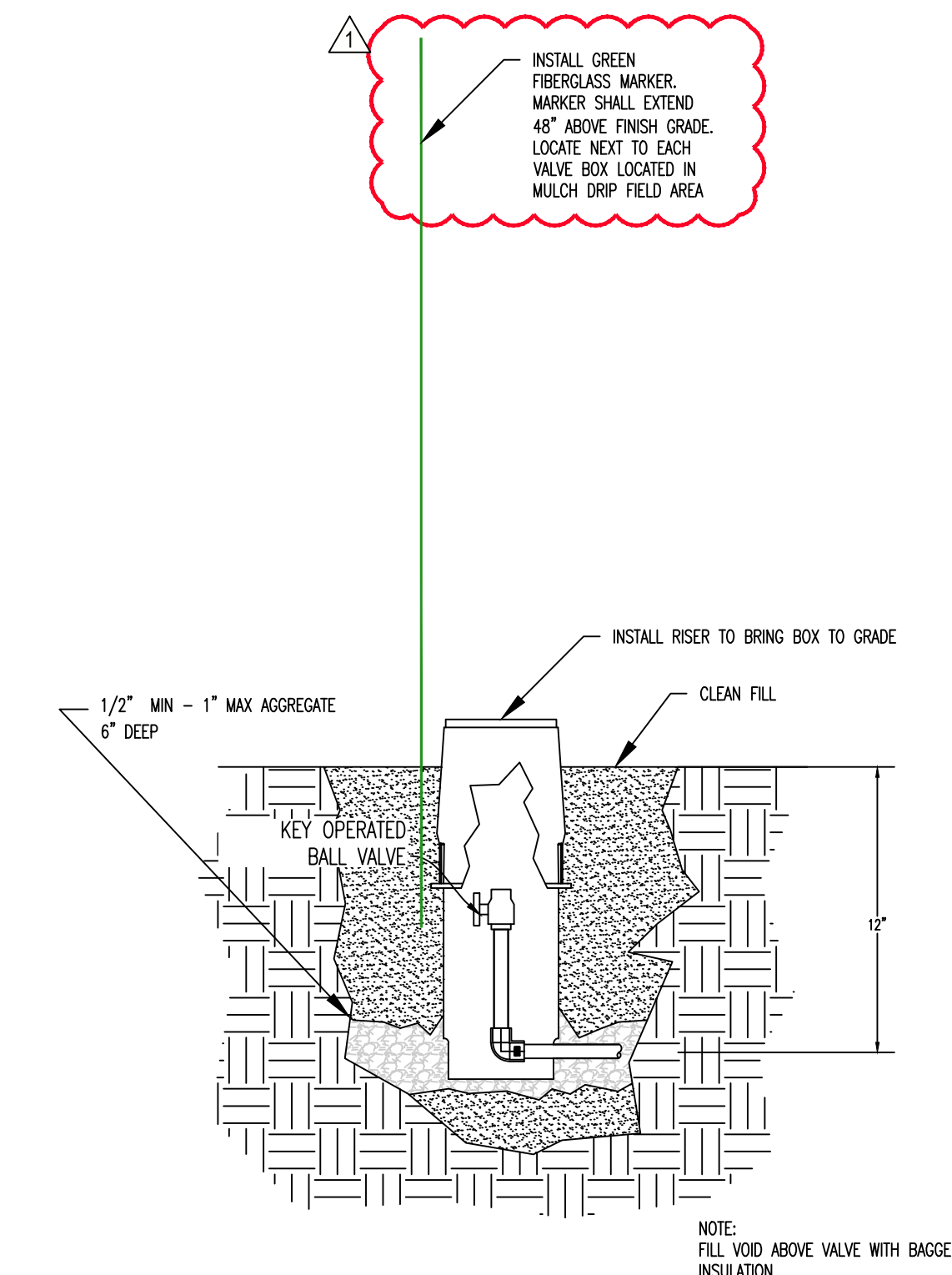
01 TYPICAL 2 FT LOOP INSTALLATION DETAIL  
SCALE: NONE



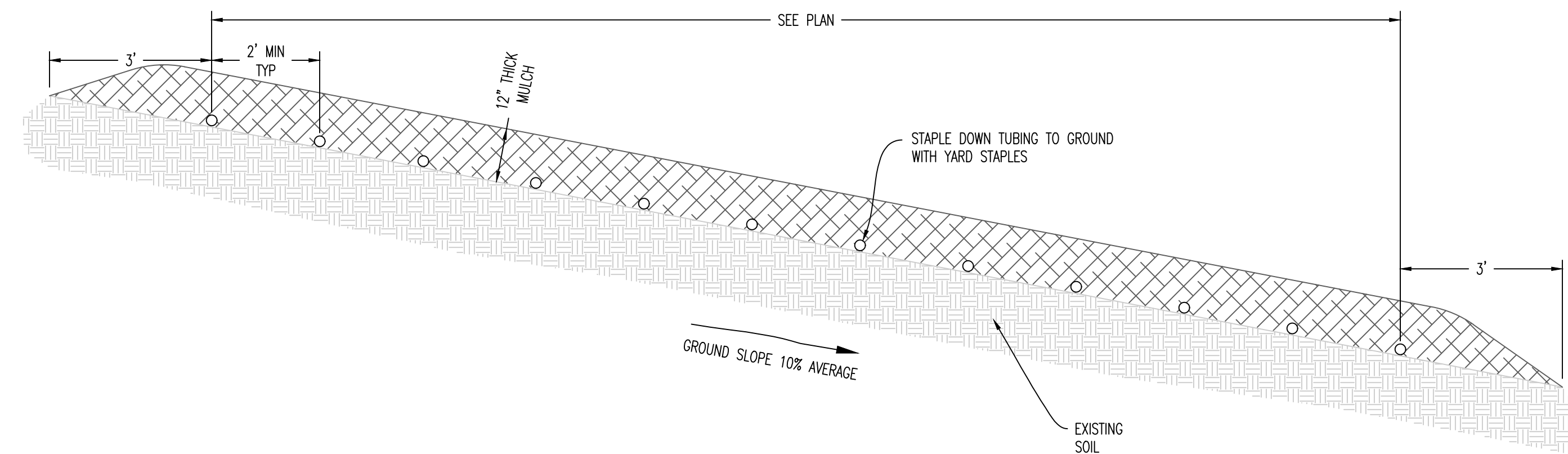
02 MANIFOLD CONNECTION LOOPED FIELD  
SCALE: NONE



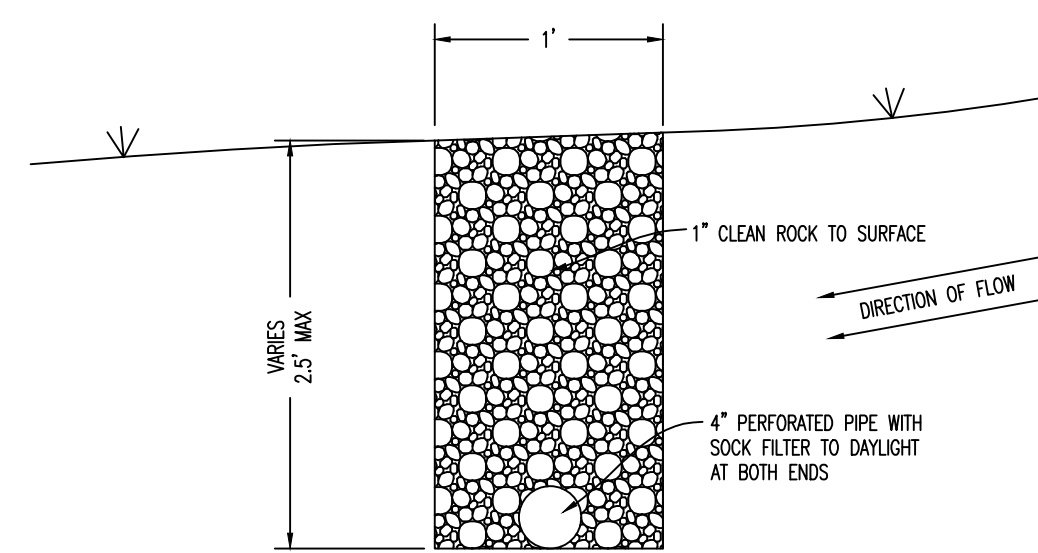
03 2' ARI GUARDIAN AV DETAIL  
SCALE: NONE



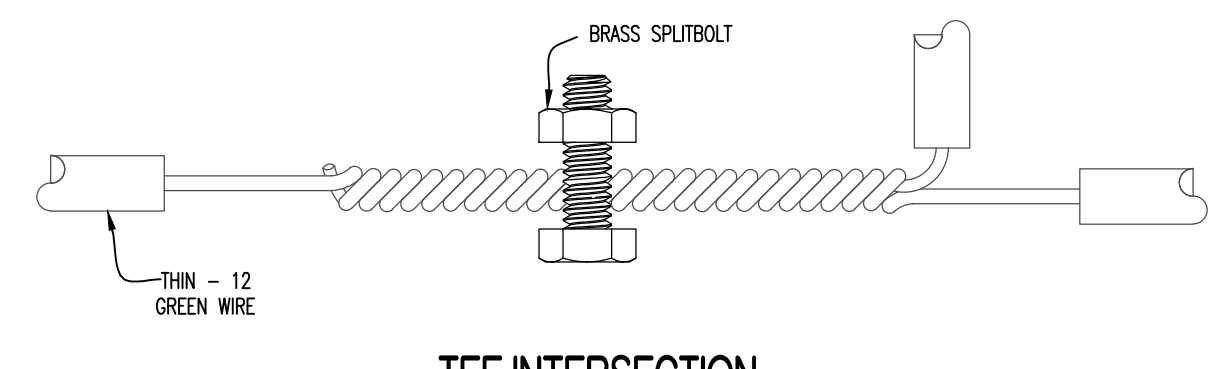
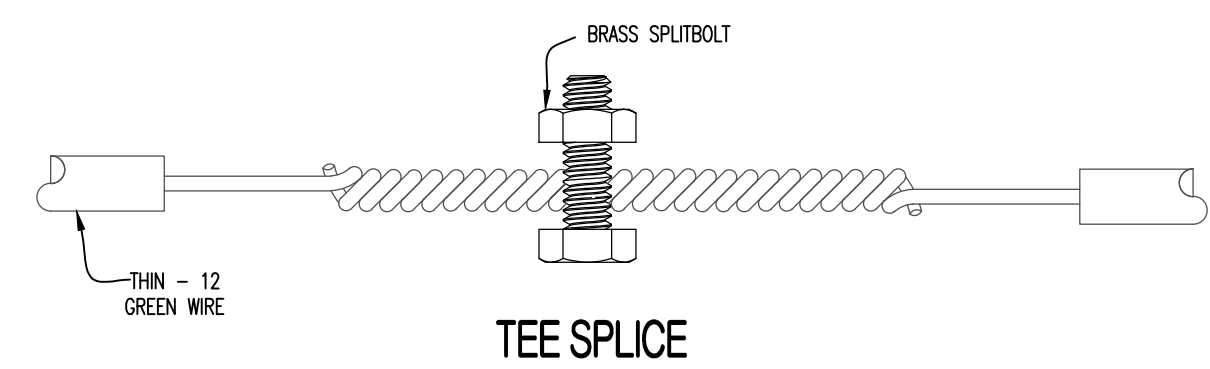
04 CLEAN OUT DETAIL  
SCALE: NONE



05 MULCH COVER DETAIL  
SCALE: NONE

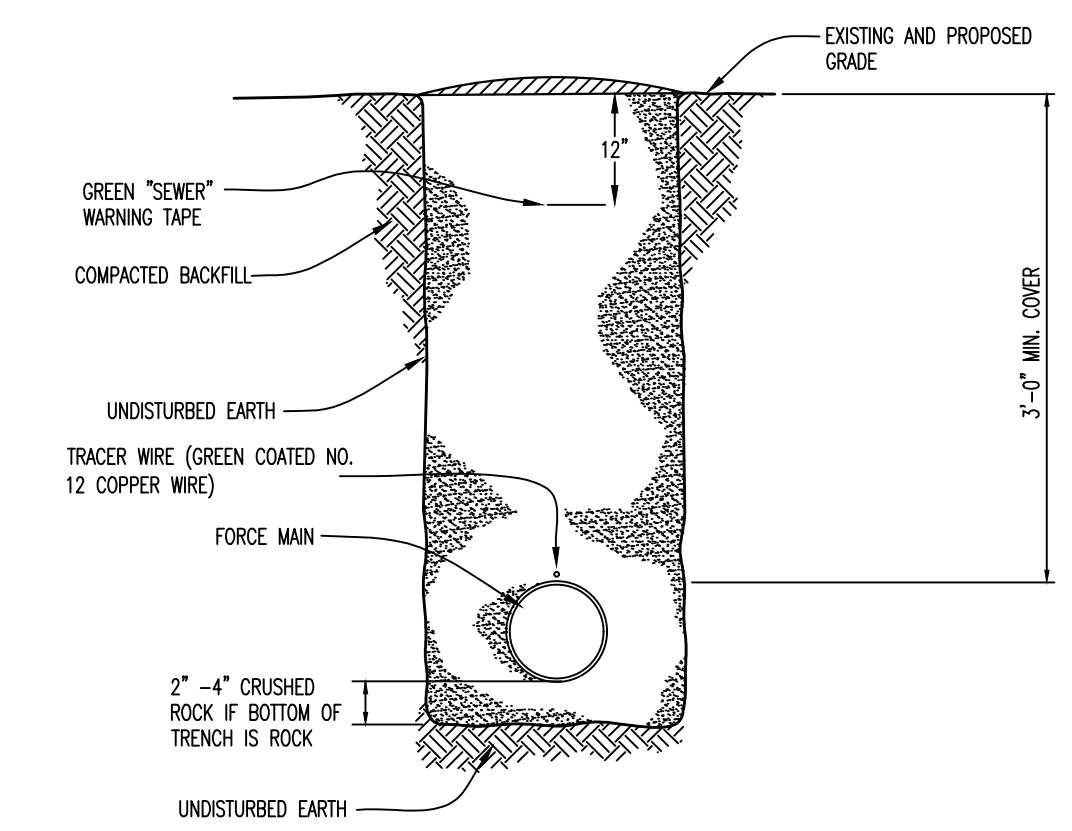


06 CURTIAN DRAIN DETAIL  
SCALE: NONE



NOTE: AT TEE INTERSECTION, REMOVE INSULATION ONLY. DO NOT CUT MAIN LOCATOR WIRE.  
WIRE TO BE 12 GAUGE SOLID COPPER WITH THIN GREEN INSULATION.  
SPLICE OR CONNECTION TO BE DOUBLE WRAP TAPED WITH 3/4\" OVERLAP PER ROUND. APPLY SCOTCHKOTE TO SEAL THE TAPED CONNECTION.

07 TRACER WIRE SPLICING  
SCALE: NONE



08 DISTRIBUTION AND RETURN MAINS TRENCH DETAIL  
SCALE: NONE



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CAD DWG FILE: C-SIT-C203  
DRAWN BY: JRS  
CHECKED BY: ATG  
DESIGNED BY: JRS

SHEET TITLE:

DRIP IRRIGATION  
DETAILS (1 OF 2)

SHEET NUMBER:

C-203



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CAD DWG FILE: C-SIT-C204  
DRAWN BY: JRS  
CHECKED BY: ATG  
DESIGNED BY: JRS

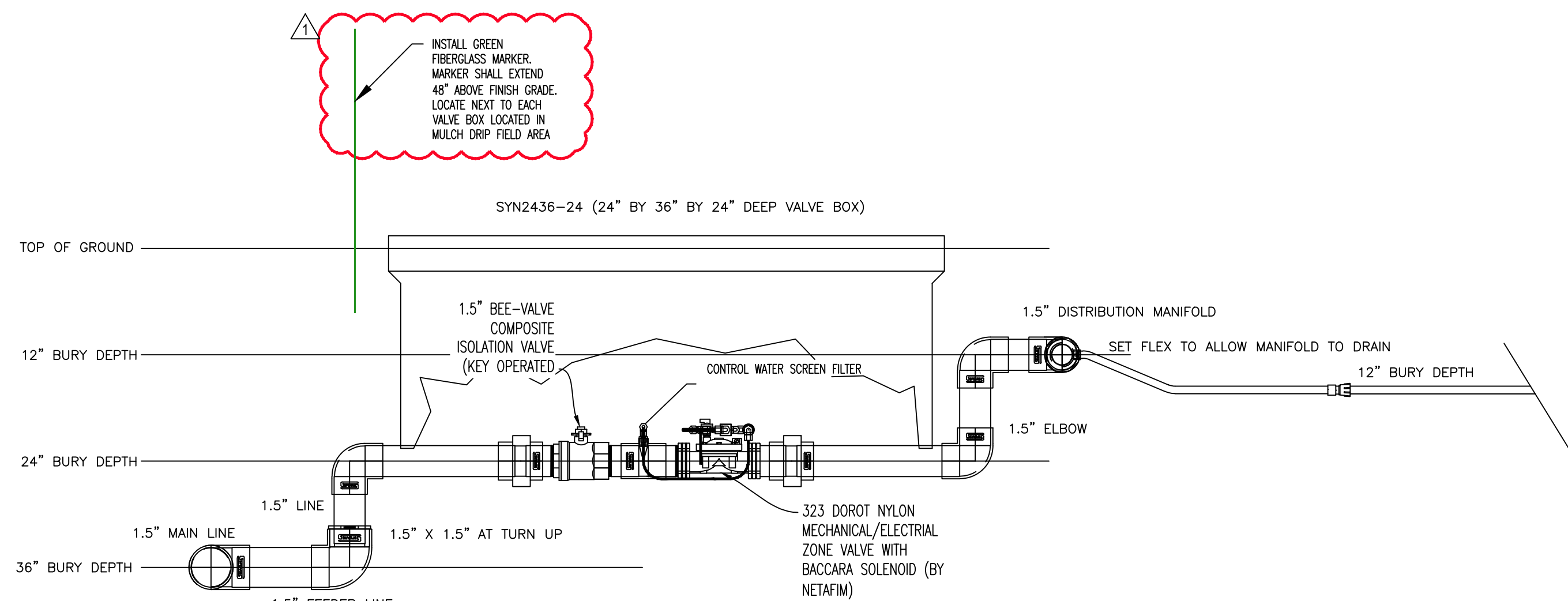
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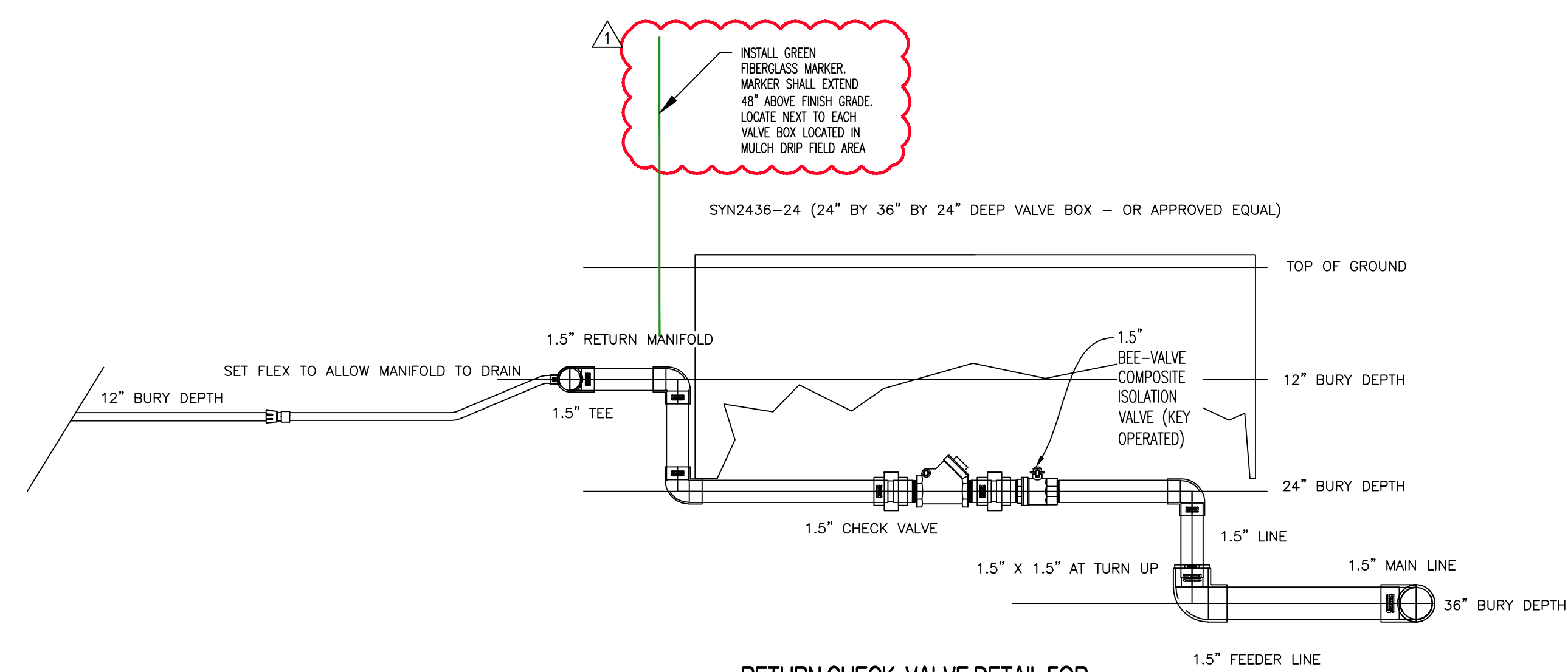
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**C-204**

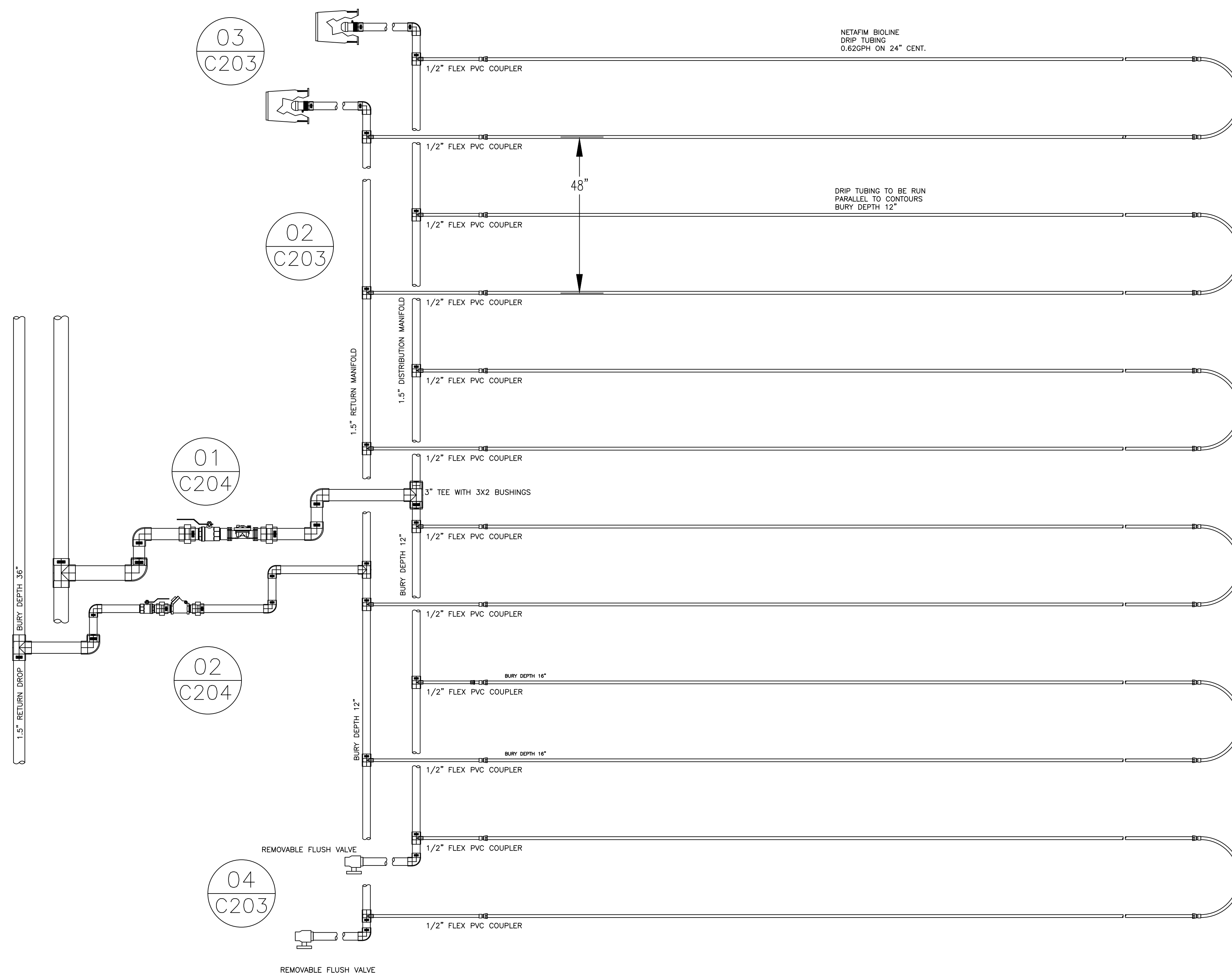
8 of 9 SHEETS



01 SUPPLY VALVE DETAIL FOR  
TYPICAL STANDARD MANIFOLD  
SCALE: NONE



02 RETURN CHECK VALVE DETAIL FOR  
TYPICAL STANDARD MANIFOLD  
SCALE: NONE



03 TYPICAL STANDARD MANIFOLD LOOPE  
SCALE: NONE