

# NEW PREMIUM CAMPSITES WESTON BEND STATE PARK

WESTON, MISSOURI

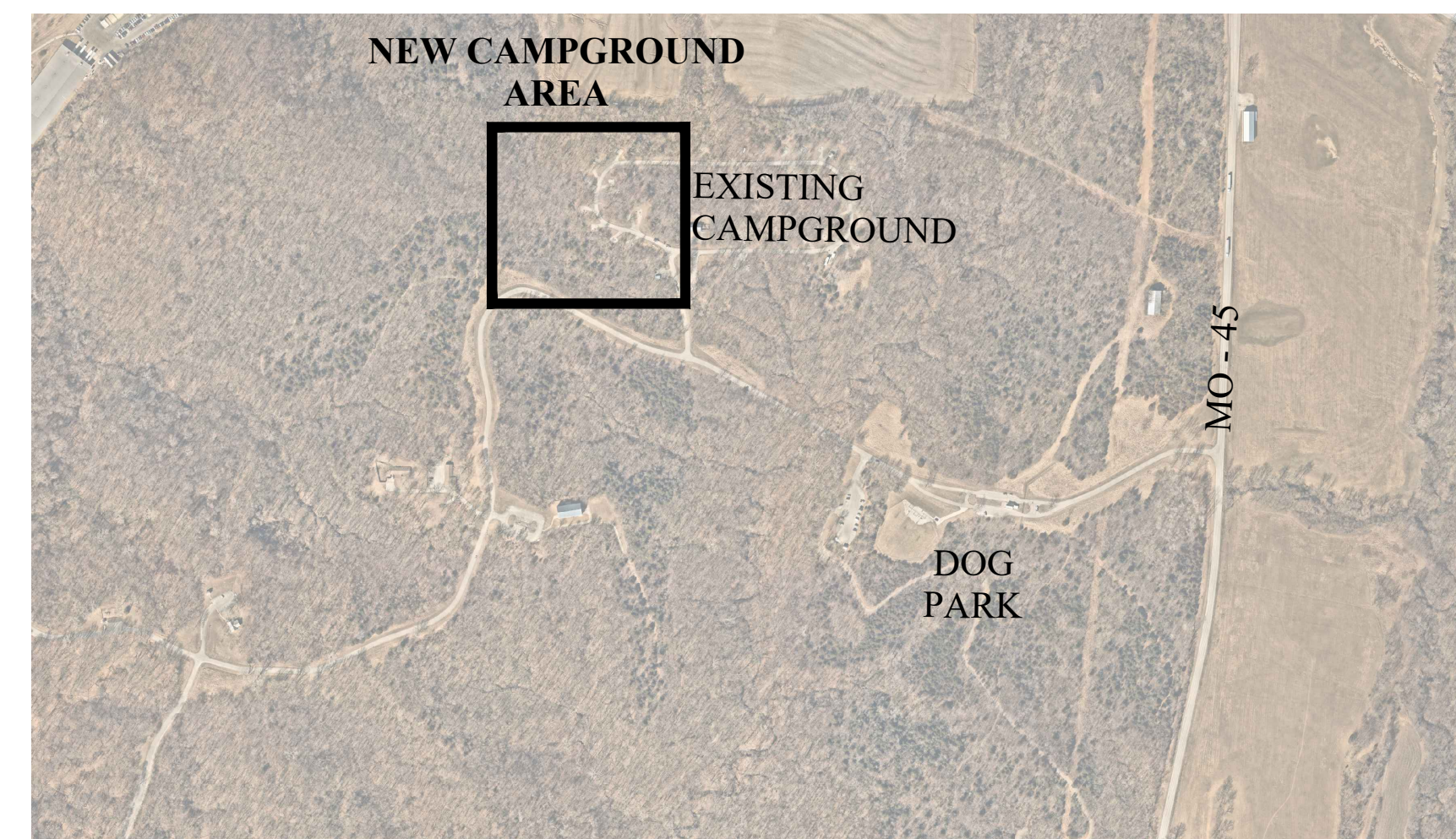
## BID DOCUMENTS

WESTON BEND STATE PARK

16600 MO-45

Weston, MO 64098

SITE NUMBER: 5118 ASSET NUMBER: 7815118006



OWNER: STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR

DEPARTMENT OF  
NATURAL RESOURCES,  
MISSOURI STATE PARKS

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

PROJECT NUMBER: X2221-01

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### LANDSCAPE ARCHITECT:

VIREO  
414 Oak Street, Suite 101  
Kansas City, MO 64106  
Phone: (816) 756-5690



### CIVIL ENGINEER:

RENAISSANCE INFRASTRUCTURE  
CONSULTING  
9653 Penrose Lane  
Lenexa, KS 66219  
Phone: (913) 317-9500



### GEOTECHNICAL ENGINEER:

INTERTEK-PSI  
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### ELECTRICAL ENGINEER:

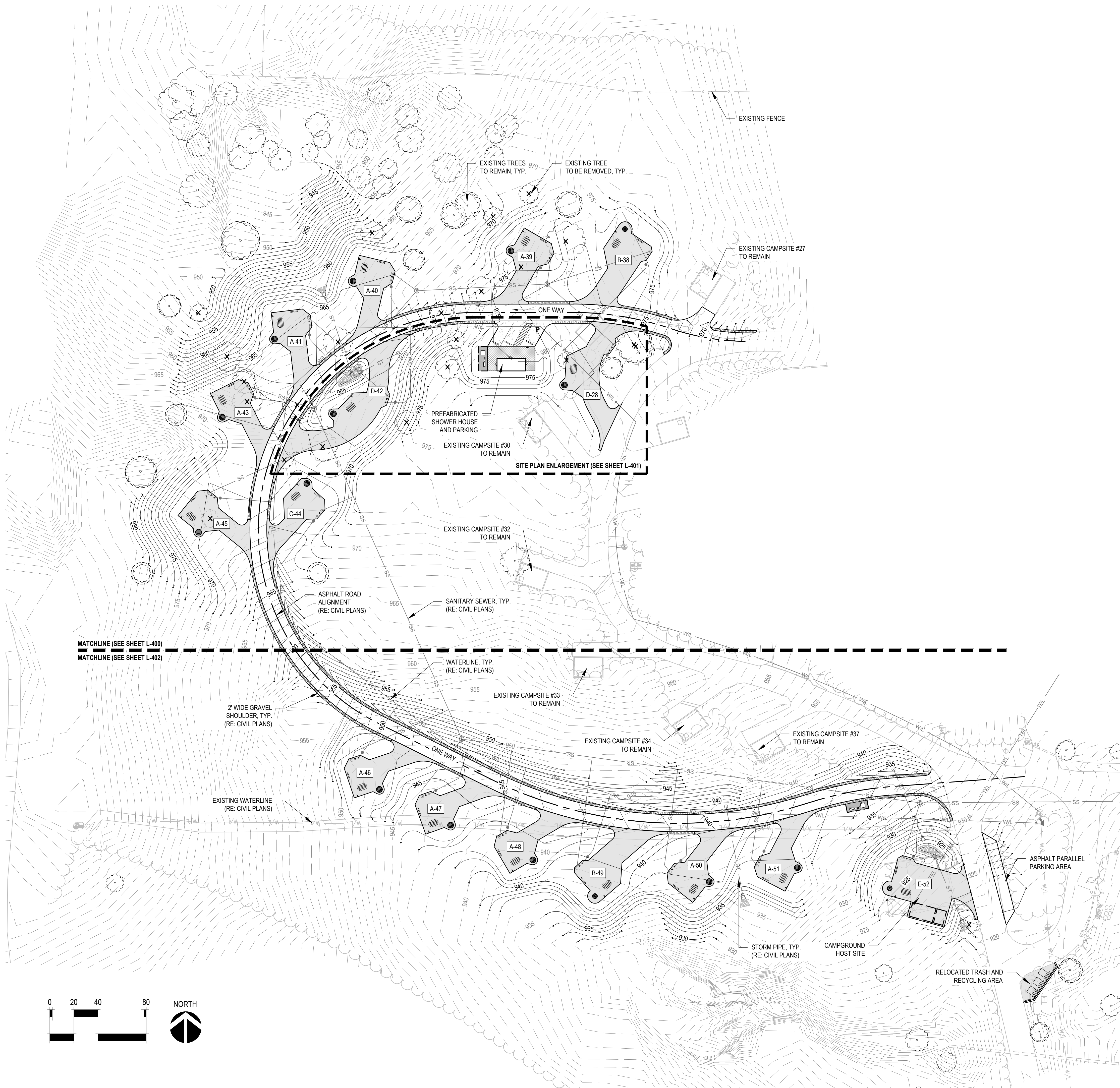
ANTELLA CONSULTING  
ENGINEERS, INC.  
1600 Genessee, Suite 260  
Kansas City, MO 64102  
Phone: (816) 421-0950

SHEET NUMBER:

**G-001**

1 OF 36 SHEETS  
December 12, 2023





**SITE LEGEND**

- POURED-IN-PLACE CONCRETE PAVEMENT - 6" THICK  
RE: DETAIL 01 / L-502 AND SPECIFICATION 321313
- POURED-IN-PLACE CONCRETE PAVEMENT - 4" THICK  
RE: DETAIL 06 / L-502 AND SPECIFICATION 321313
- TREE PROTECTION FENCING  
RE: DETAIL 04 / L-502
- X** EXISTING TREE AND STUMP (18-INCH DIA. AND LARGER)  
TO BE REMOVED (RE: SPECIFICATIONS)

**CAMPSITE LEGEND**

- A#** BACK-IN STANDARD CAMPSITE (RIGHT SIDE)  
RE: 01 / L-500 FOR LAYOUT AND AMENITIES
- B#** BACK-IN ADA STANDARD CAMPSITE  
RE: 01 / L-501 FOR LAYOUT AND AMENITIES
- C#** BACK-IN STANDARD CAMPSITE (LEFT SIDE)  
RE: 02 / L-500 FOR LAYOUT AND AMENITIES
- D#** PULL-THROUGH CAMPSITE
- E#** BACK-IN ADA CAMPGROUND HOST CAMPSITE  
RE: 02 / L-501 FOR LAYOUT AND AMENITIES

**GENERAL NOTES**

1. LANDSCAPE ARCHITECT WILL NOT BE HELD LIABLE FOR DISCREPANCIES BETWEEN SURVEY AND FIELD CONDITIONS. CONTRACTOR SHALL VISIT SITE IN ORDER TO VERIFY EXISTING SITE CONDITIONS FOR ACCURACY OF BID.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES.
3. CONTRACTOR SHALL MAINTAIN DRAINAGE AND EROSION CONTROL DURING CONSTRUCTION AND IS RESPONSIBLE FOR ALL DE-WATERING NECESSARY DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITTING, FOLLOWING LOCAL, STATE AND FEDERAL EROSION AND SEDIMENTATION CONTROL REQUIREMENTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING EROSION CONTROL DEVICES NECESSARY TO CONTROL SOIL LOSS FROM THE SITE.
5. ALL AREAS SHALL BE BROUGHT TO FINAL PLAN CONDITION (PAVED, SODDED, SEEDED OR MULCHED) AS SOON AS POSSIBLE TO MAINTAIN FINISH GRADE CONDITIONS AND PREVENT SOIL LOSS.
6. ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED BY THE CONTRACTOR OFF SITE AT A LOCATION PROVIDED BY THE CONTRACTOR AND IN ACCORDANCE WITH MISSOURI REGULATIONS. THE CONTRACTOR SHALL SATISFY HIMSELF BY JOB-SITE INSPECTION AS TO THE EXTENT OF CLEARING REQUIRED PRIOR TO SUBMITTING A BID.
7. CONTRACTOR IS FULLY RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES ENCOUNTERED DURING THIS PROJECT. UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE DURING DESIGN. THESE UTILITIES ARE NOT REPRESENTED AS ALL INCLUSIVE AS OTHER UTILITIES MAY BE PRESENT. THE CONTRACTOR SHALL HAVE ALL UTILITIES FLAGGED IN THE FIELD FOR INSPECTION PRIOR TO PRECEDING WITH ANY GRADING OPERATIONS. THE CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND WILL BE HELD LIABLE FOR ANY DELAYS CAUSED BY DAMAGE TO UTILITIES OR FAILURE TO LOCATE UTILITIES.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
9. ALL EXISTING UTILITIES AND UTILITY POLES TO REMAIN UNLESS OTHERWISE NOTED. REFER TO CIVIL.
10. THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL INSPECTION SERVICES.
11. DRAWINGS AND SPECIFICATIONS DO NOT INDICATE OR DESCRIBE TOTAL WORK REQUIRED FOR COMPLETION OF WORK AND MAY NOT COVER SOME CONDITIONS WHICH MAY BE REQUIRED.
12. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT DESIGNATED FOR OTHER PLANTINGS SHALL BE SEEDDED WITH DROUGHT TOLERANT TURF-TYPE TALL FESCUE, RE: SPECIFICATIONS.
13. CONTRACTOR SHALL VERIFY TREES TO BE REMOVED WITH OWNER PRIOR TO REMOVAL. OWNER MAY DESIRE TO TRANSPLANT SMALL TREE SPECIES.
14. ONLY EXISTING TREES 18-INCH DIAMETER AND LARGER WERE SURVEYED. EXISTING TREES SHOWN ON PLAN DO NOT CONSTITUTE ALL TREES TO BE REMOVED OR SAVED. NO ADDITIONAL PAYMENTS WILL BE MADE FOR EXISTING TREE REMOVALS UNDER 18-INCH DIAMETER. REFER TO SPECIFICATION SECTION 311000 SITE CLEARING.



LANDSCAPE ARCHITECT:  
**vireo**

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RENAISSANCE INFRASTRUCTURE  
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MEP:  
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GEOTECHNICAL:  
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NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

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DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

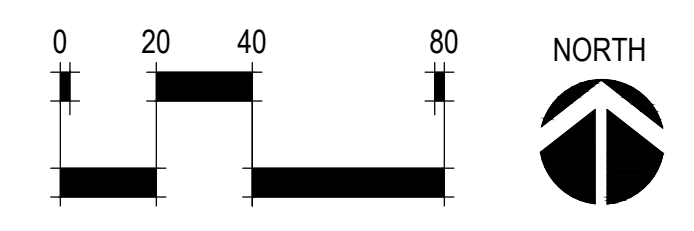
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CHECKED BY: CDP  
DESIGNED BY: AES / CDP

SHEET TITLE:  
**SITE PLAN**

SHEET NUMBER:

**L-100**

SHEET 2 OF 36  
12/12/2023







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414 Oak Street, Suite 101  
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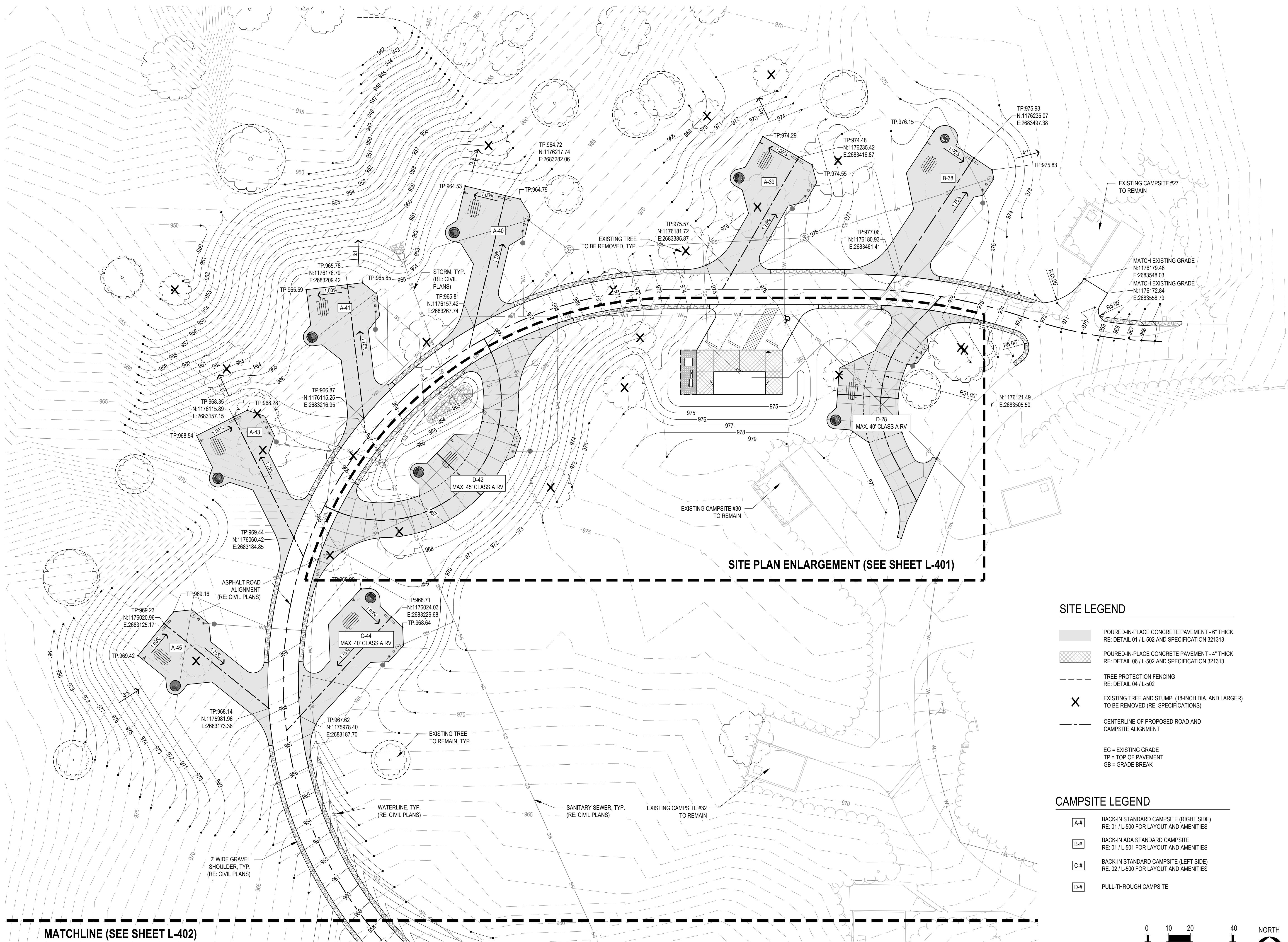
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CHECKED BY: CDP  
DESIGNED BY: AES / CDP

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**SITE PLAN  
ENLARGEMENT**

SHEET NUMBER:

**L-400**

SHEET 3 OF 36  
12/12/2023

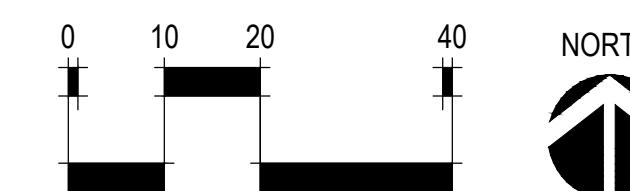


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- CENTERLINE OF PROPOSED ROAD AND  
CAMPSITE ALIGNMENT
- EG = EXISTING GRADE  
TP = TOP OF PAVEMENT  
GB = GRADE BREAK

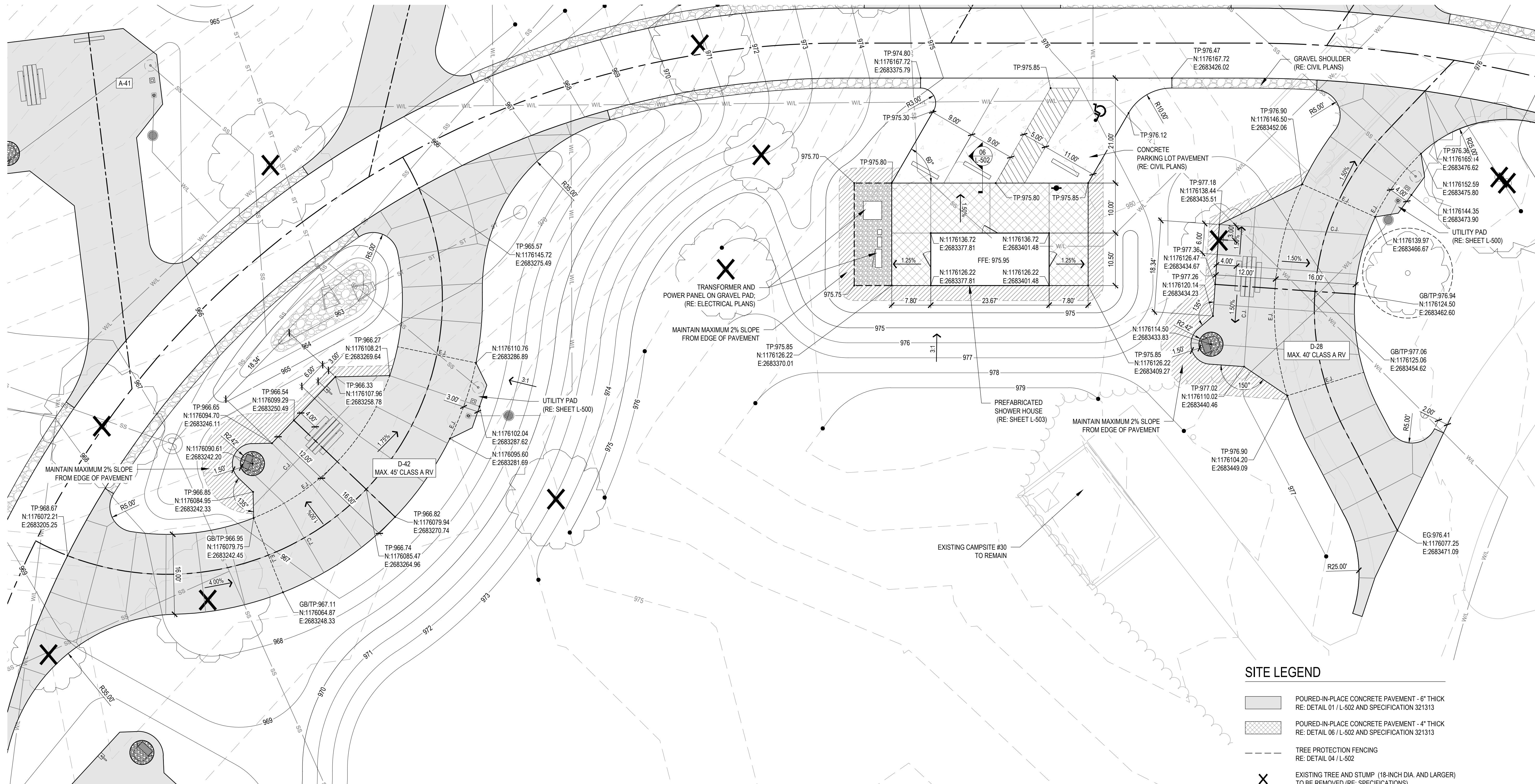
**CAMPSITE LEGEND**

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RE: 01 / L-501 FOR LAYOUT AND AMENITIES
- C-# BACK-IN STANDARD CAMPSITE (LEFT SIDE)  
RE: 02 / L-500 FOR LAYOUT AND AMENITIES
- D-# PULL-THROUGH CAMPSITE



MATCHLINE (SEE SHEET L-402)





**SITE LEGEND**

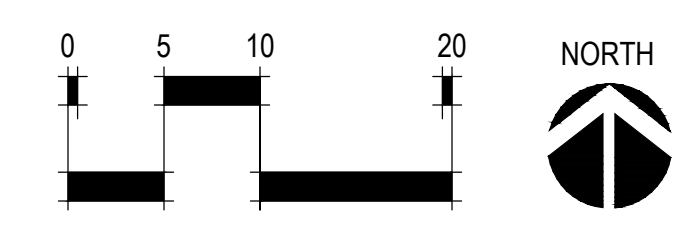
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- PULL-THROUGH CAMPSITE

**PARKING NOTES**

1. ACCESSIBLE PARKING SYMBOL SHALL BE BLUE WITHOUT A BACKGROUND.
2. ALL PARKING STALLS SHALL HAVE A REINFORCED CONCRETE PARKING BUMPER PINNED INTO PAVEMENT; RE: SPECIFICATION 321713.
3. VAN ACCESSIBLE PARKING SIGN SHALL BE CENTERED ON ACCESSIBLE PARKING STALL; RE: DETAIL 07/SHEET L-502.



LANDSCAPE ARCHITECT:  
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MEP:  
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GEOTECHNICAL:  
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16600 MO-45 HWY  
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PROJECT # X2221-01  
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ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: AES  
CHECKED BY: CDP  
DESIGNED BY: AES / CDP

SHEET TITLE:  
**SITE PLAN  
ENLARGEMENT**

SHEET NUMBER:

**L-401**

SHEET 4 OF 36  
12/12/2023





LANDSCAPE ARCHITECT:



LAC# MO-2002023826  
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SHEET TITLE:  
SITE PLAN  
ENLARGEMENT

SHEET NUMBER:

L-402

SHEET 5 OF 36  
12/12/2023

SITE LEGEND

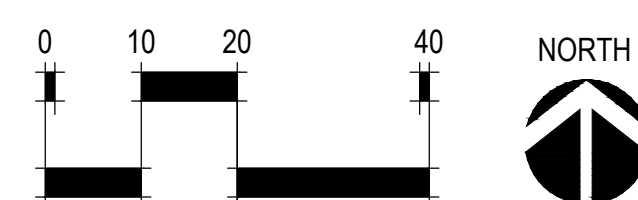
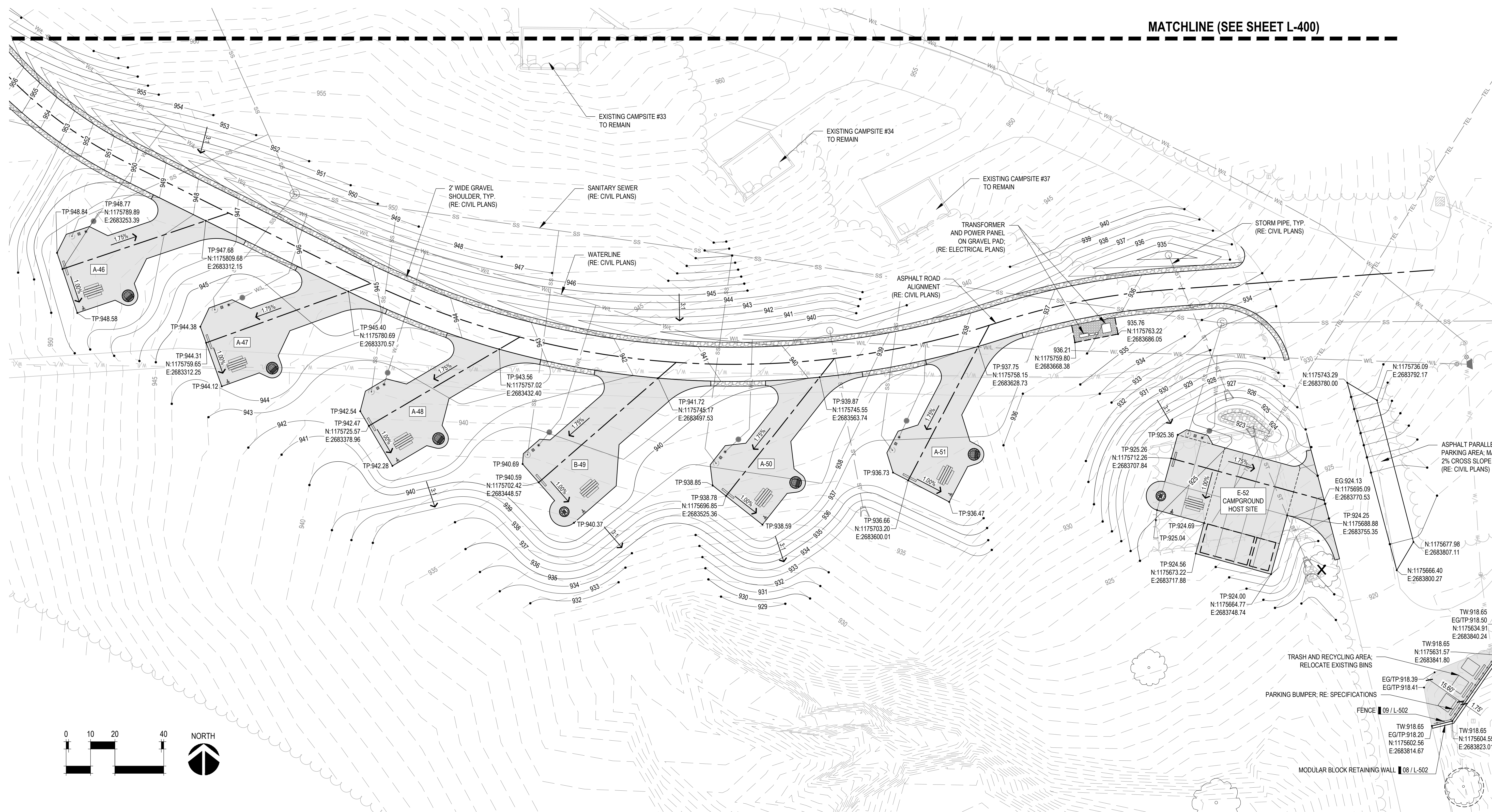
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- D# PULL-THROUGH CAMPSITE
- E# BACK-IN ADA CAMPGROUND HOST CAMPSITE  
RE: 02 / L-501 FOR LAYOUT AND AMENITIES

MATCHLINE (SEE SHEET L-400)







LANDSCAPE ARCHITECT:



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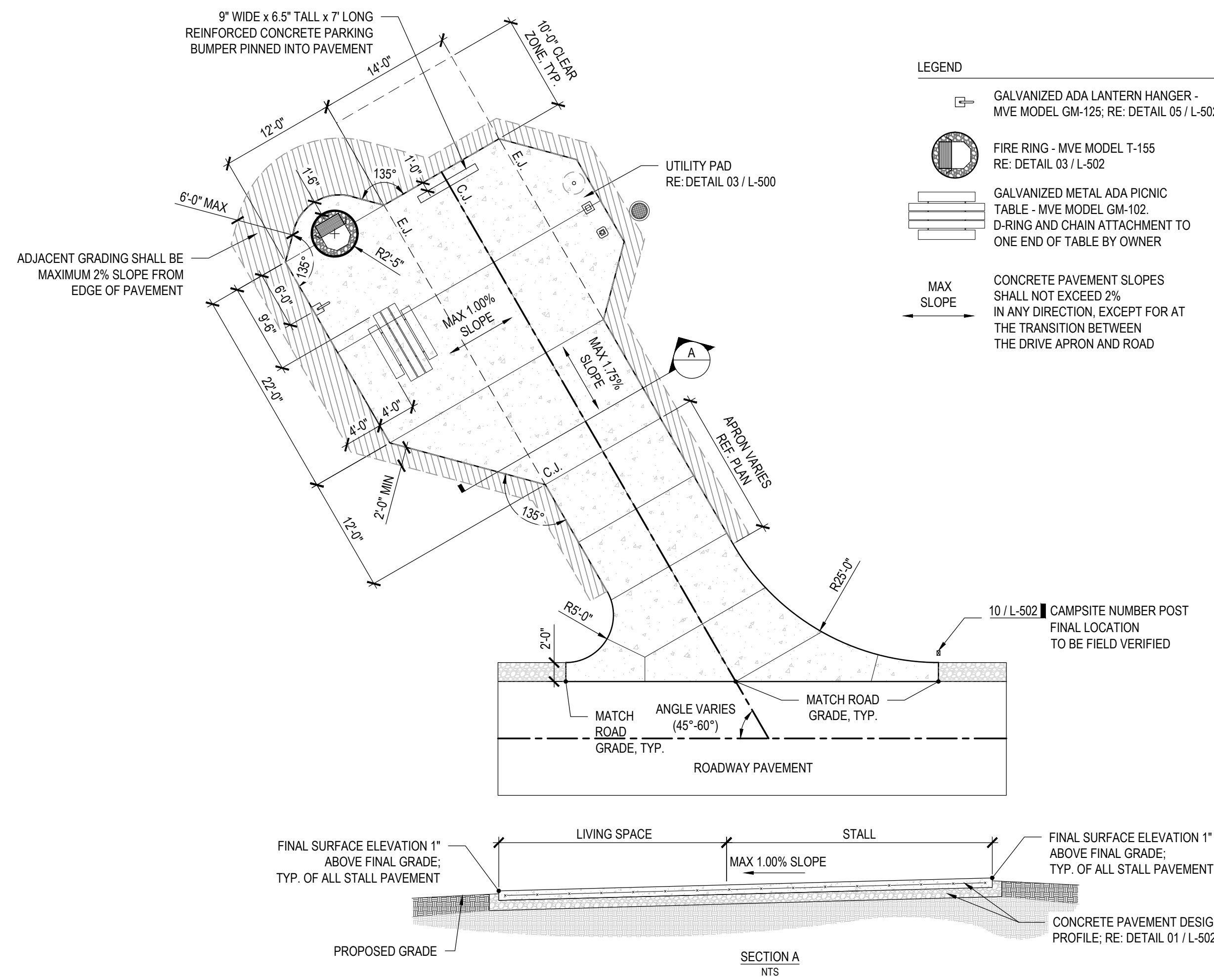
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SITE DETAILS

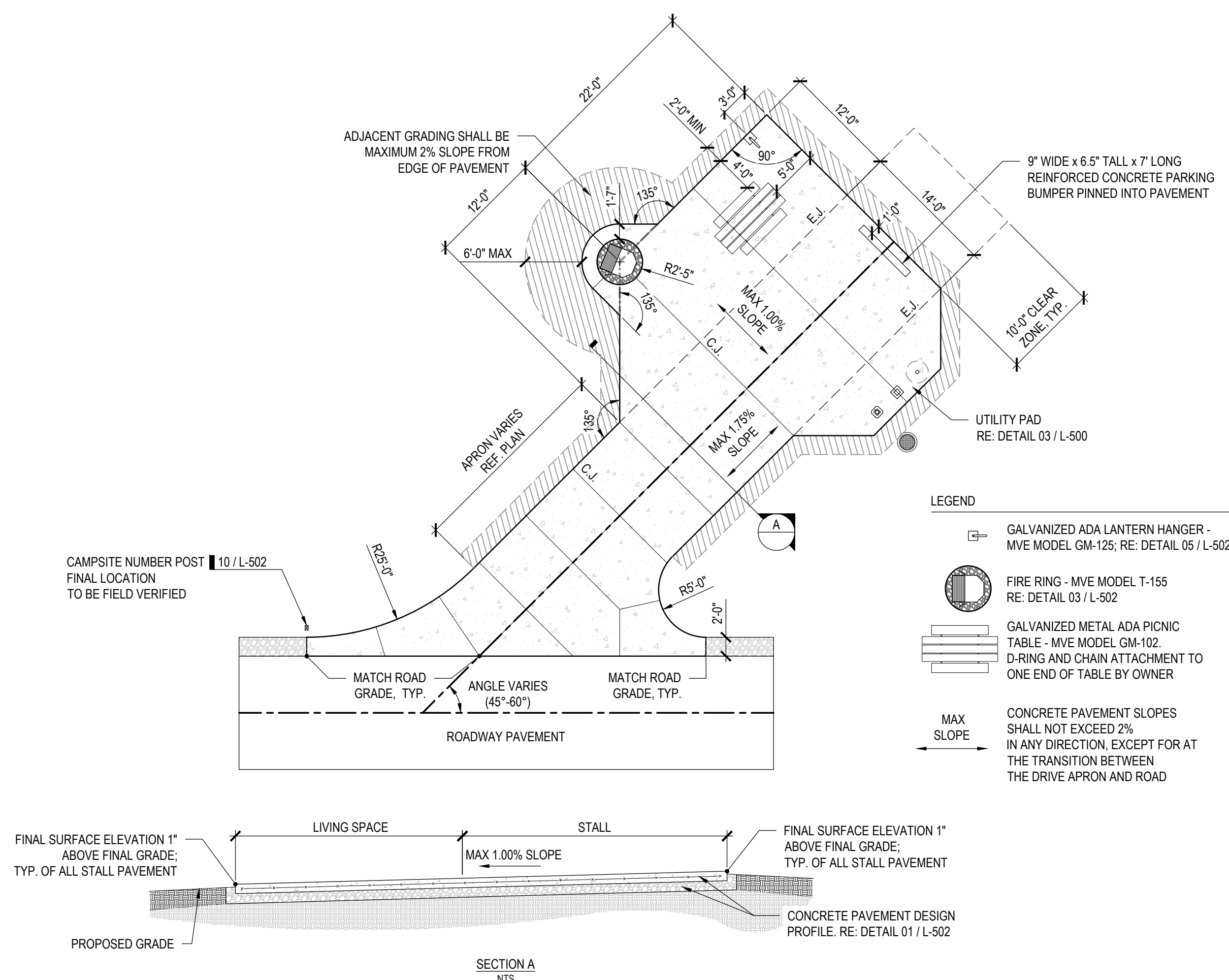
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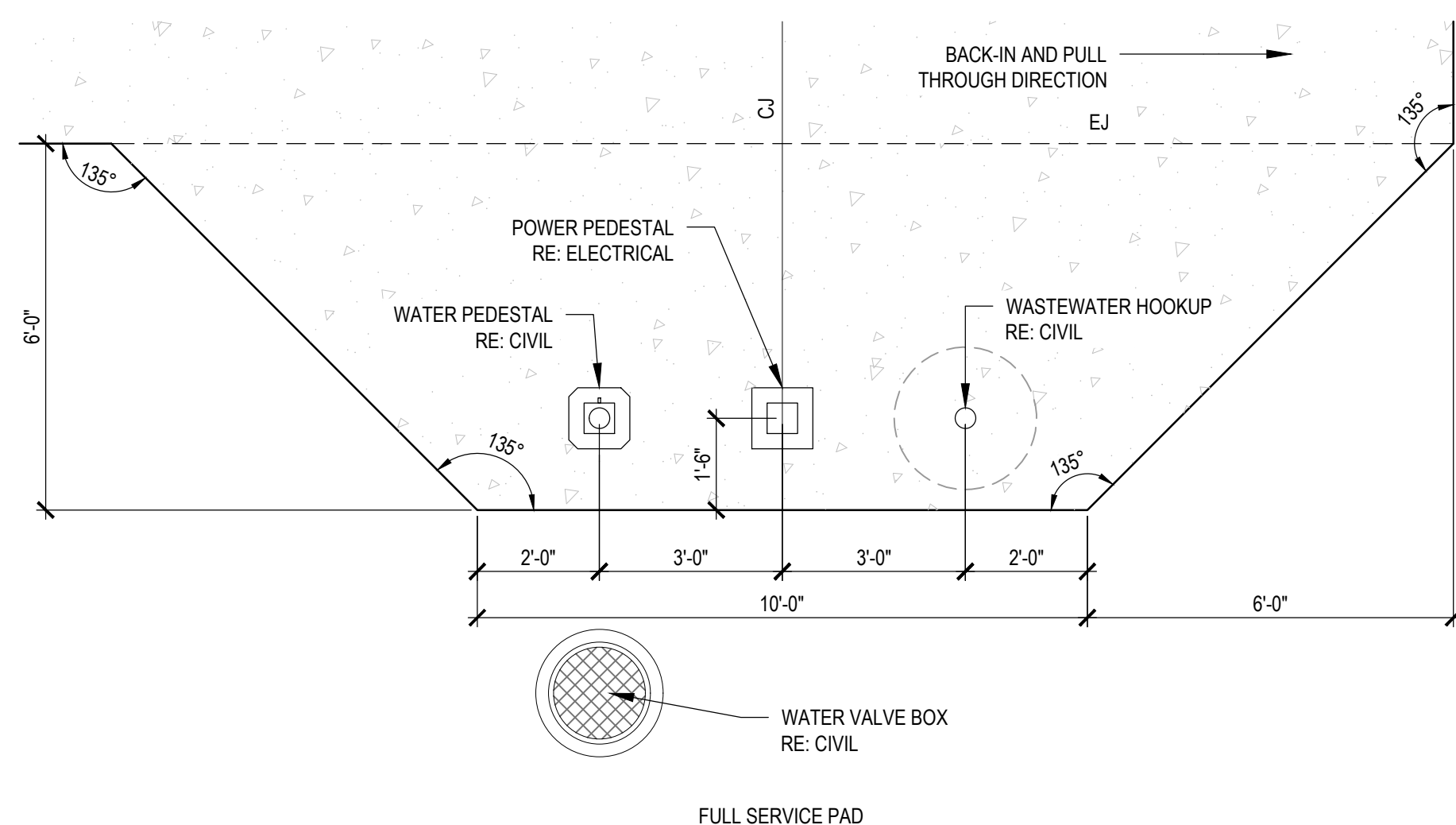
SHEET 6 OF 36  
12/12/2023



STALL STYLE C - BACK-IN STANDARD (LEFT SIDE) 02  
N.T.S.



STALL STYLE A - BACK-IN STANDARD (RIGHT SIDE) 01  
N.T.S.



UTILITY PAD 03  
N.T.S.









LANDSCAPE ARCHITECT:  
**vireo**

LAC# MO-2022023826  
414 Oak Street, Suite 101  
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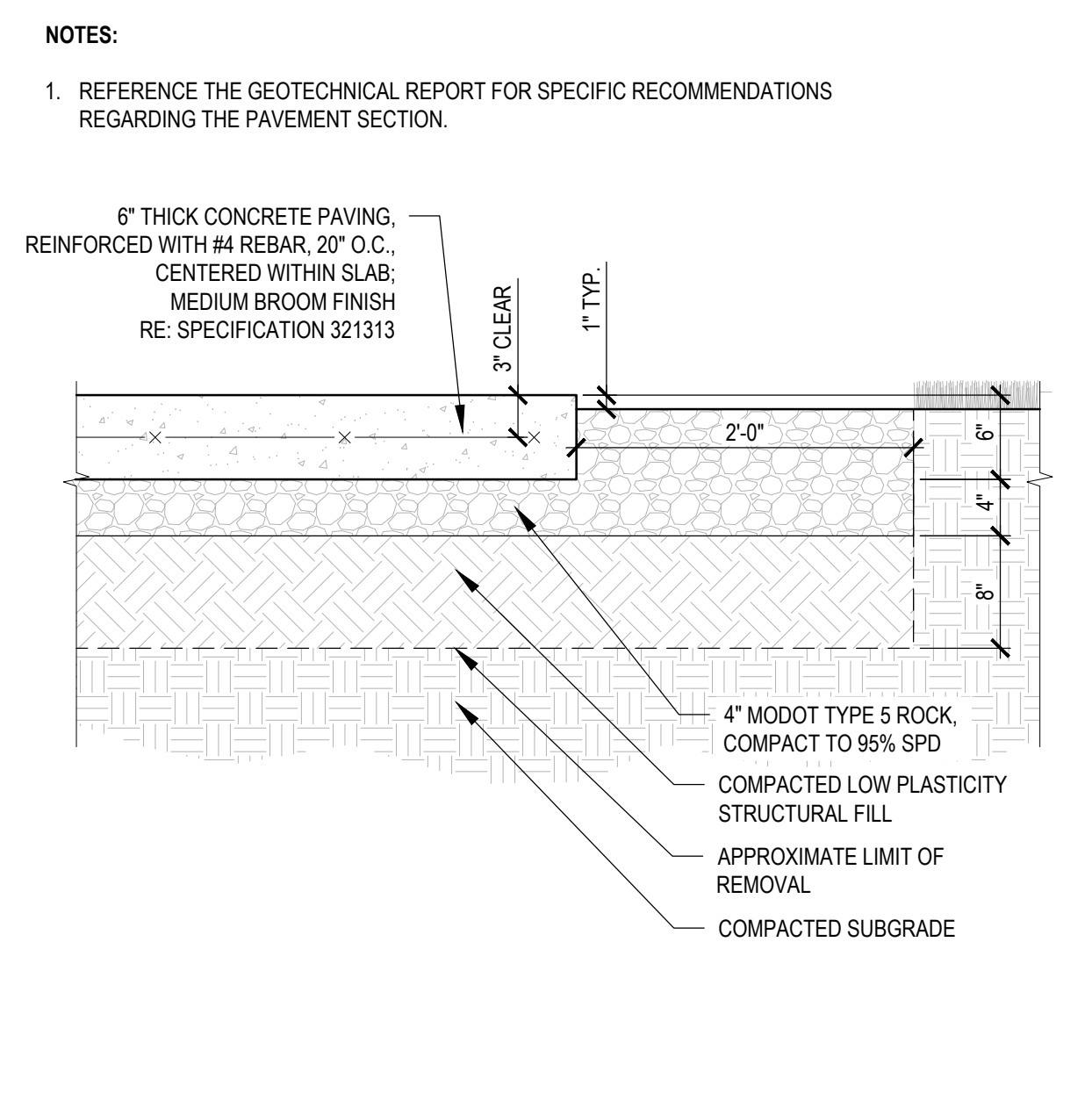
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**SITE DETAILS**

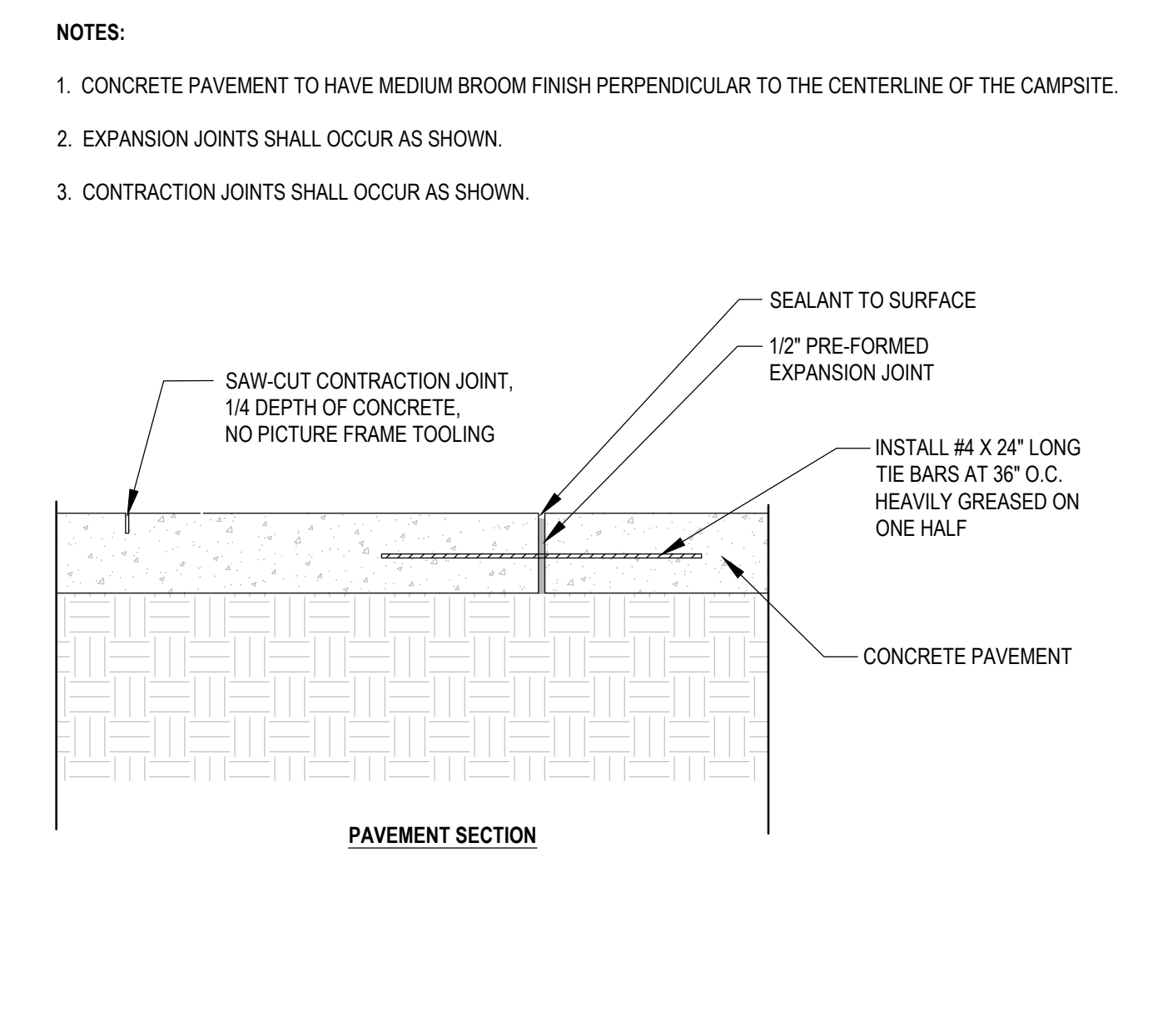
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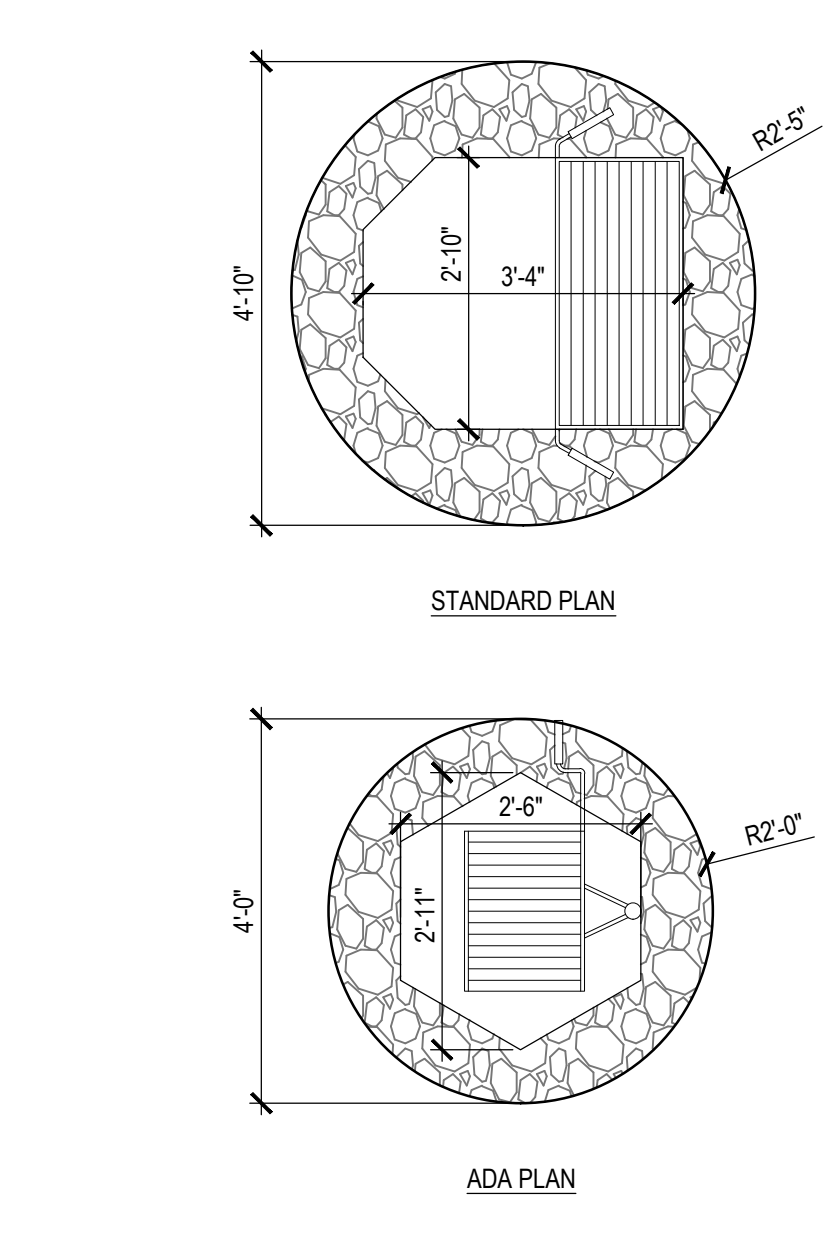
SHEET 8 OF 36  
12/12/2023



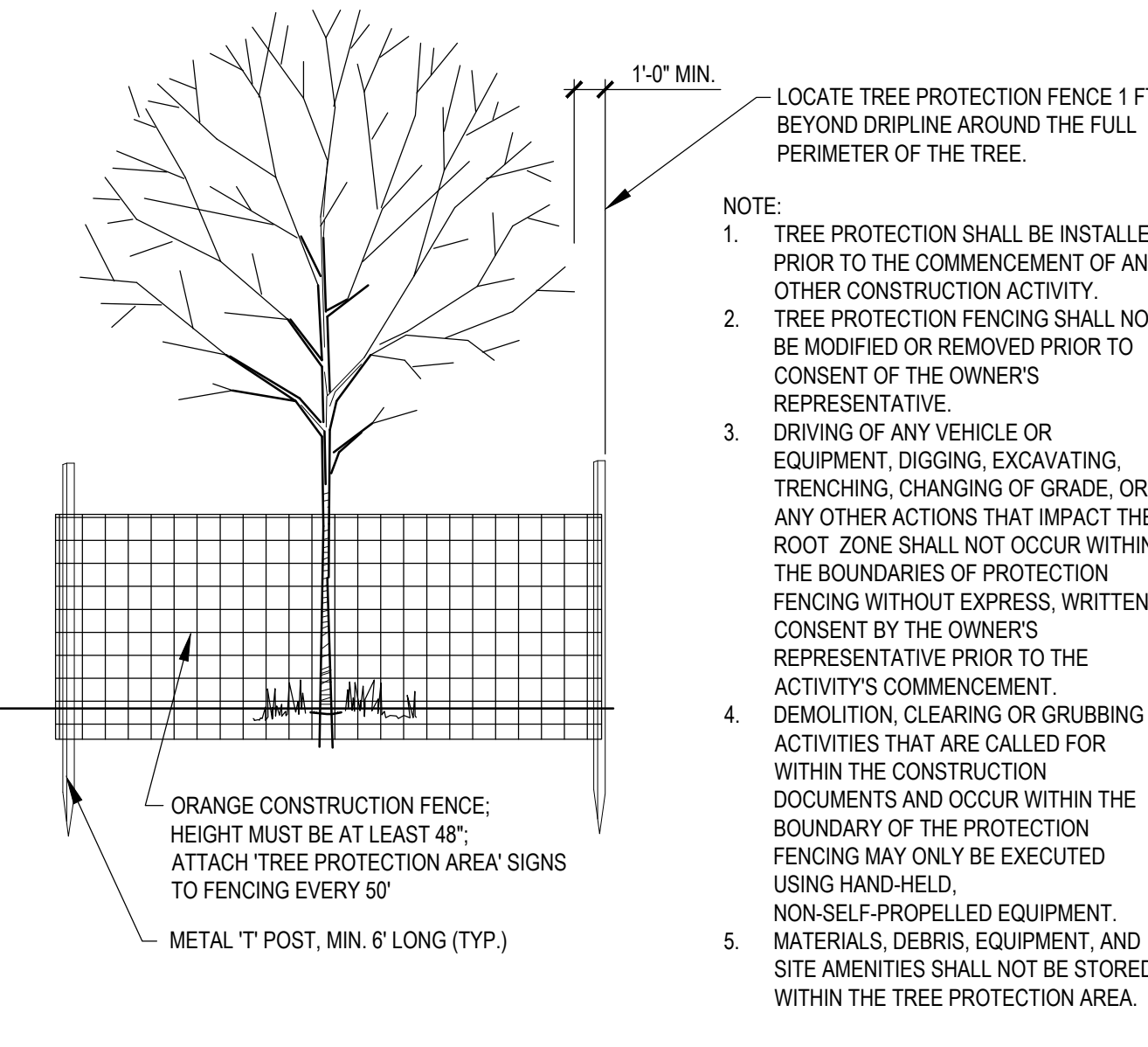
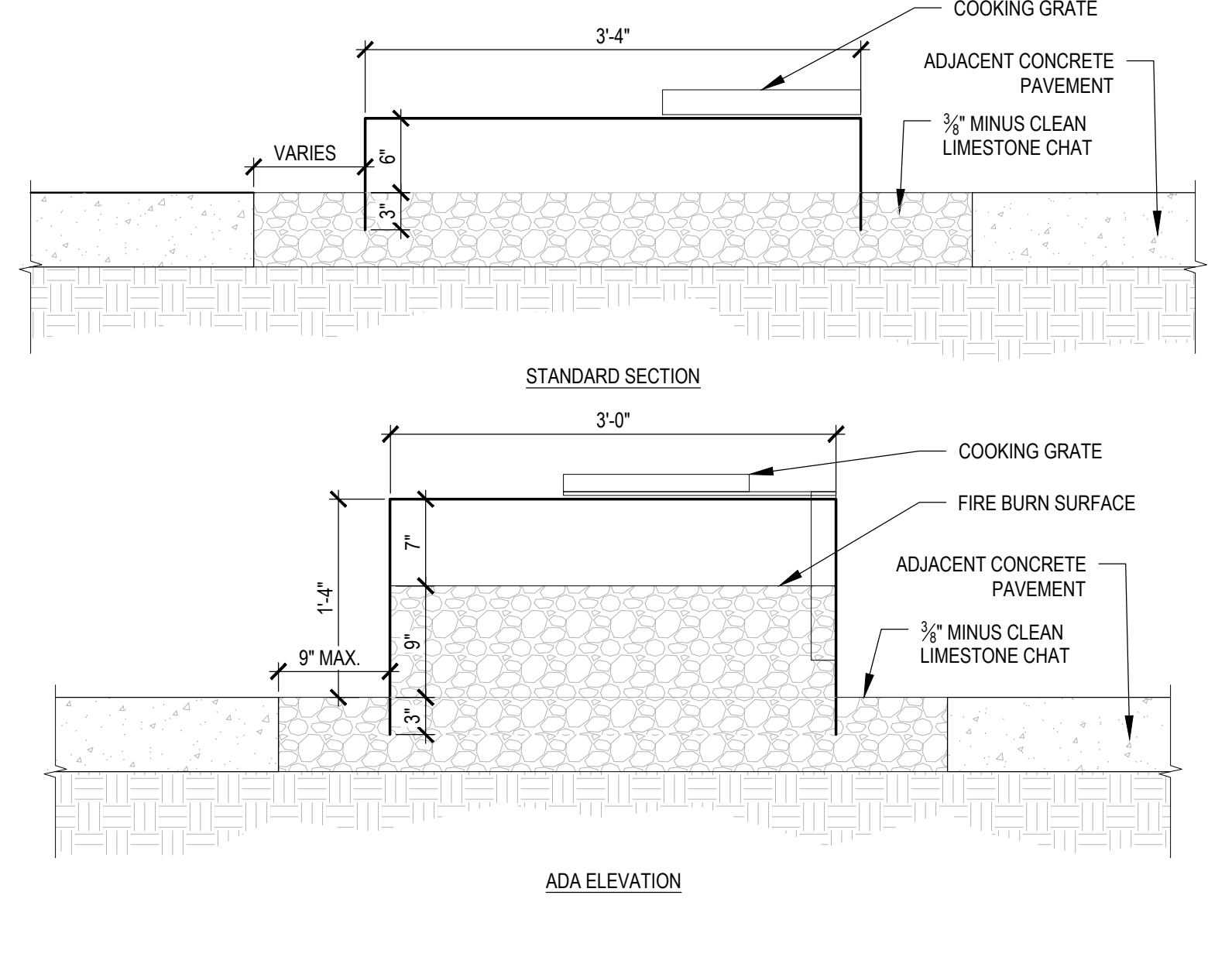
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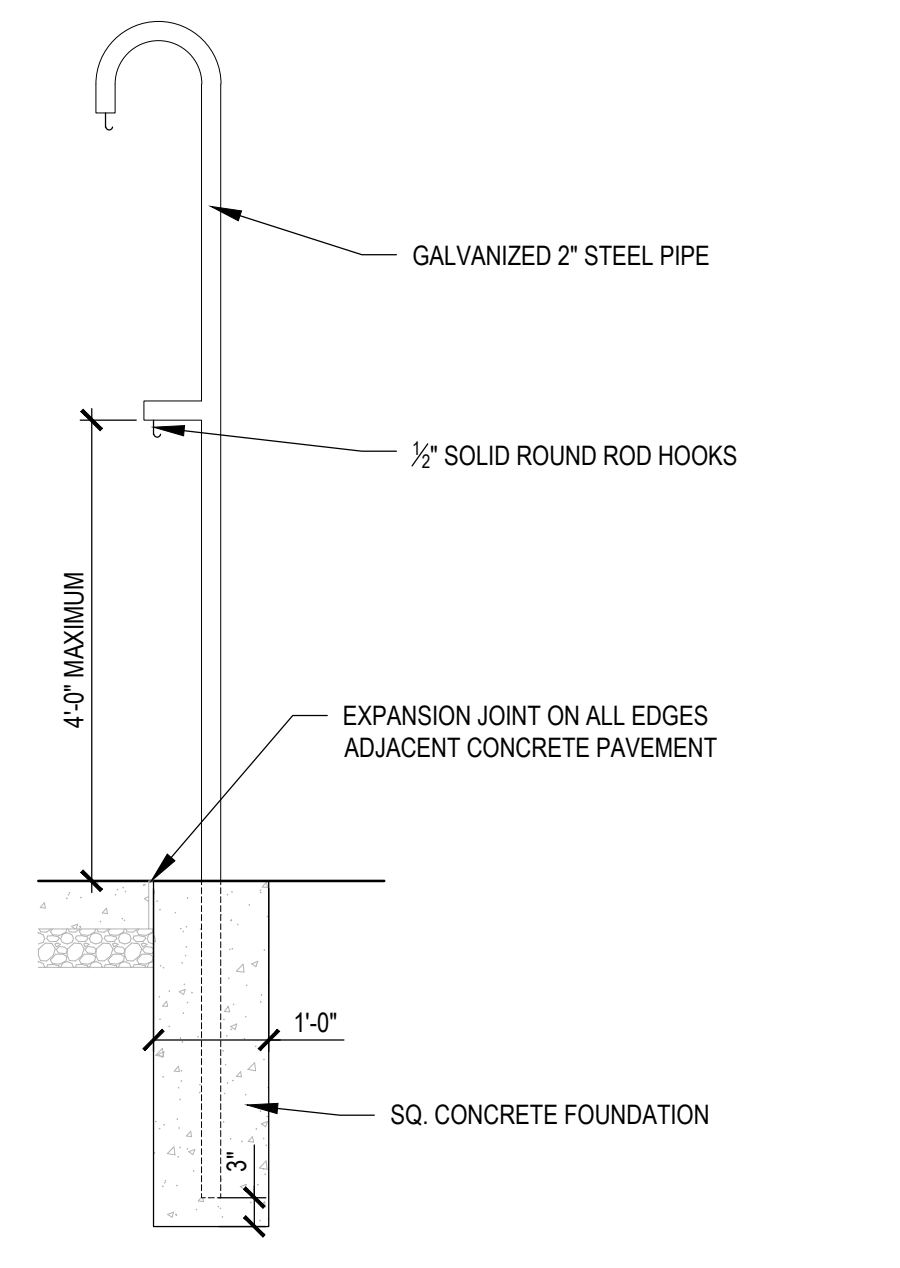
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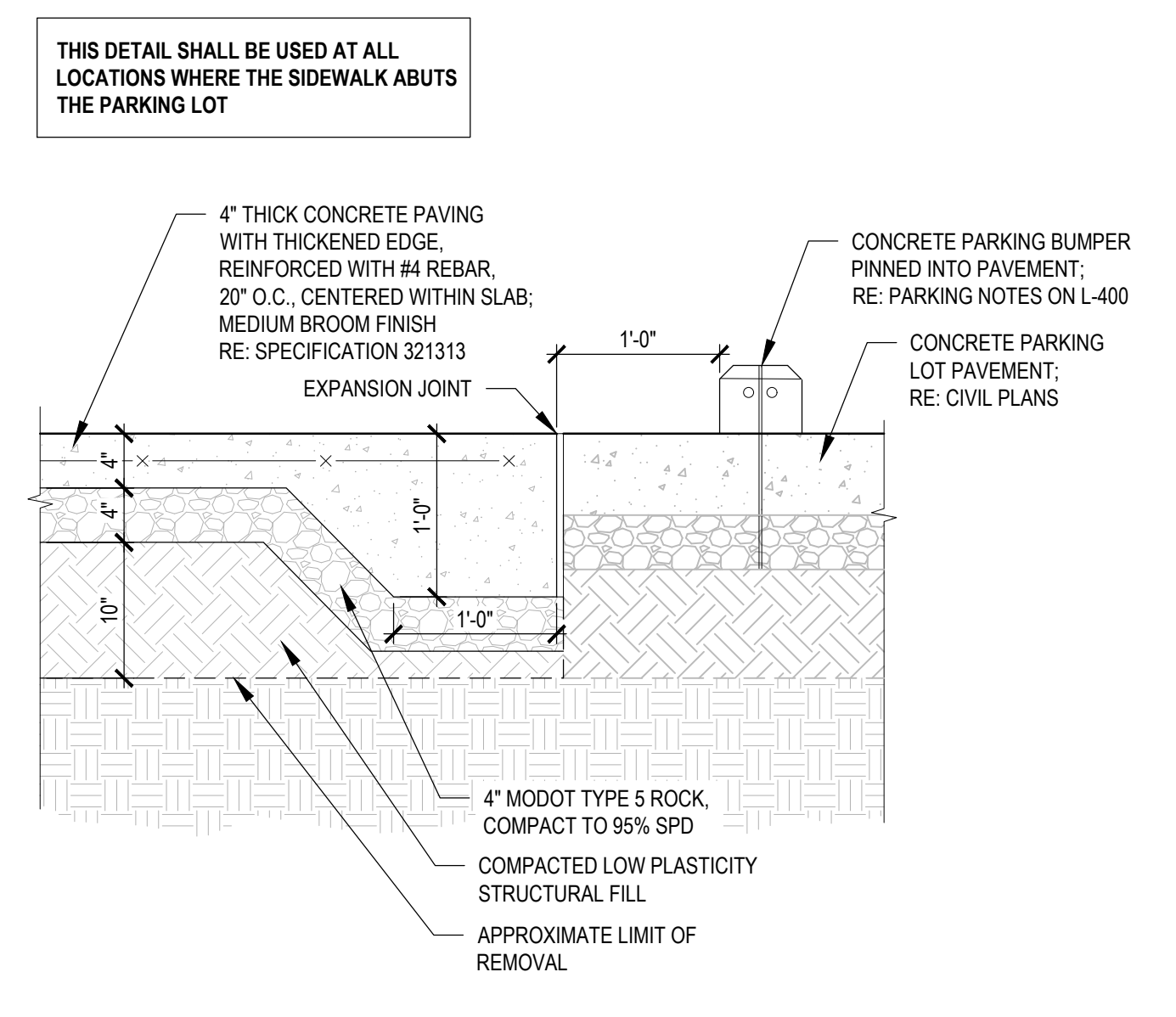
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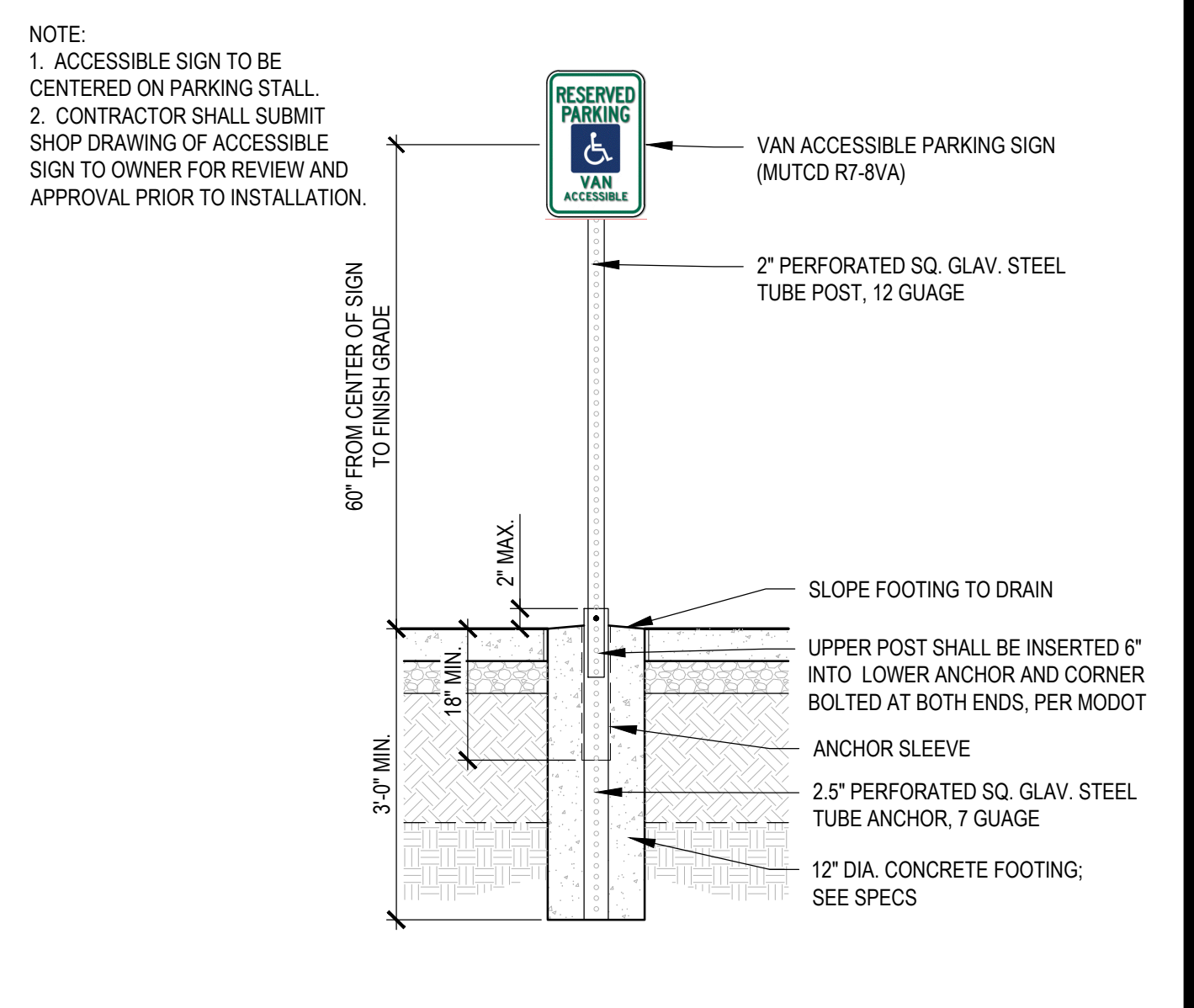
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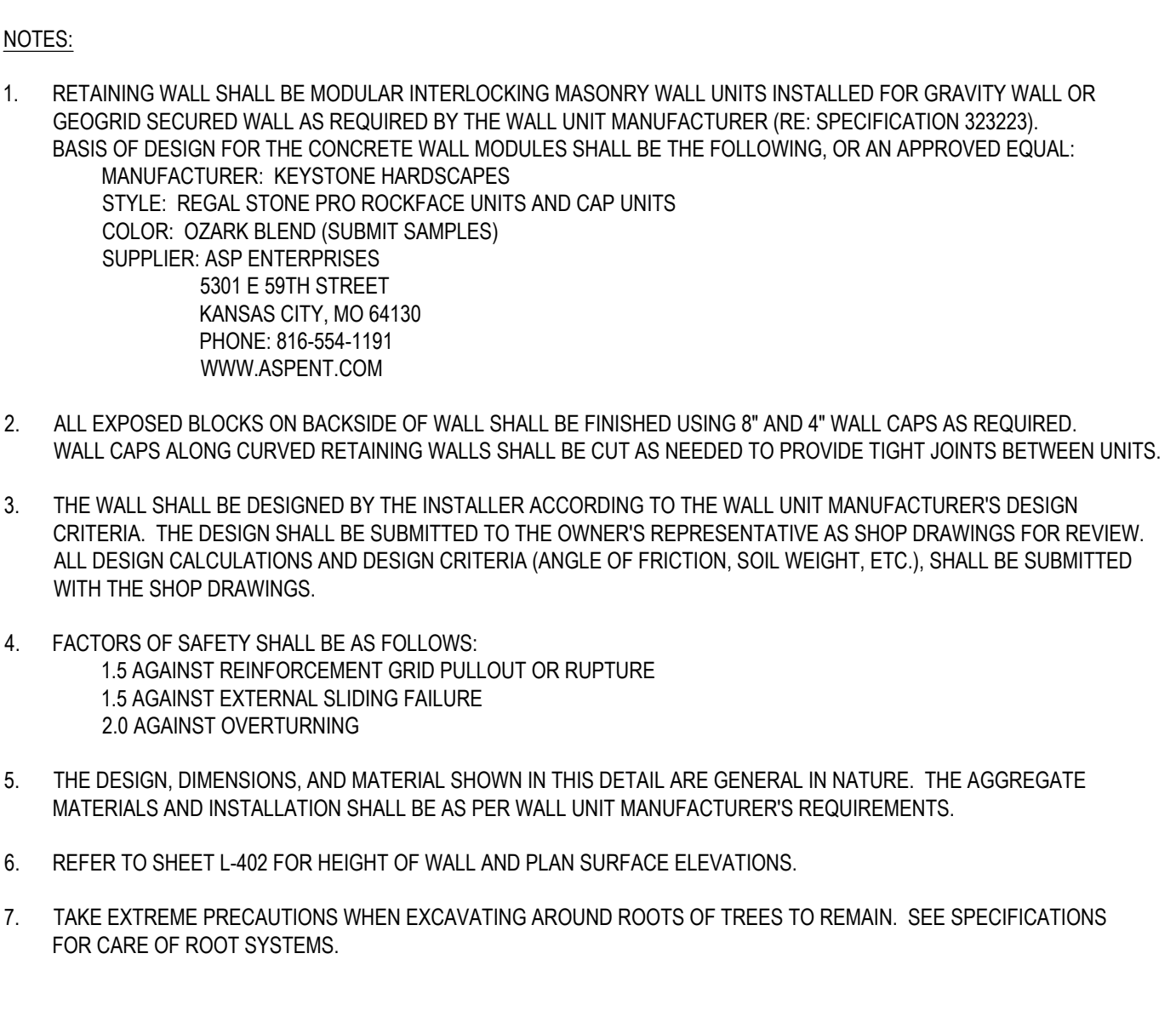
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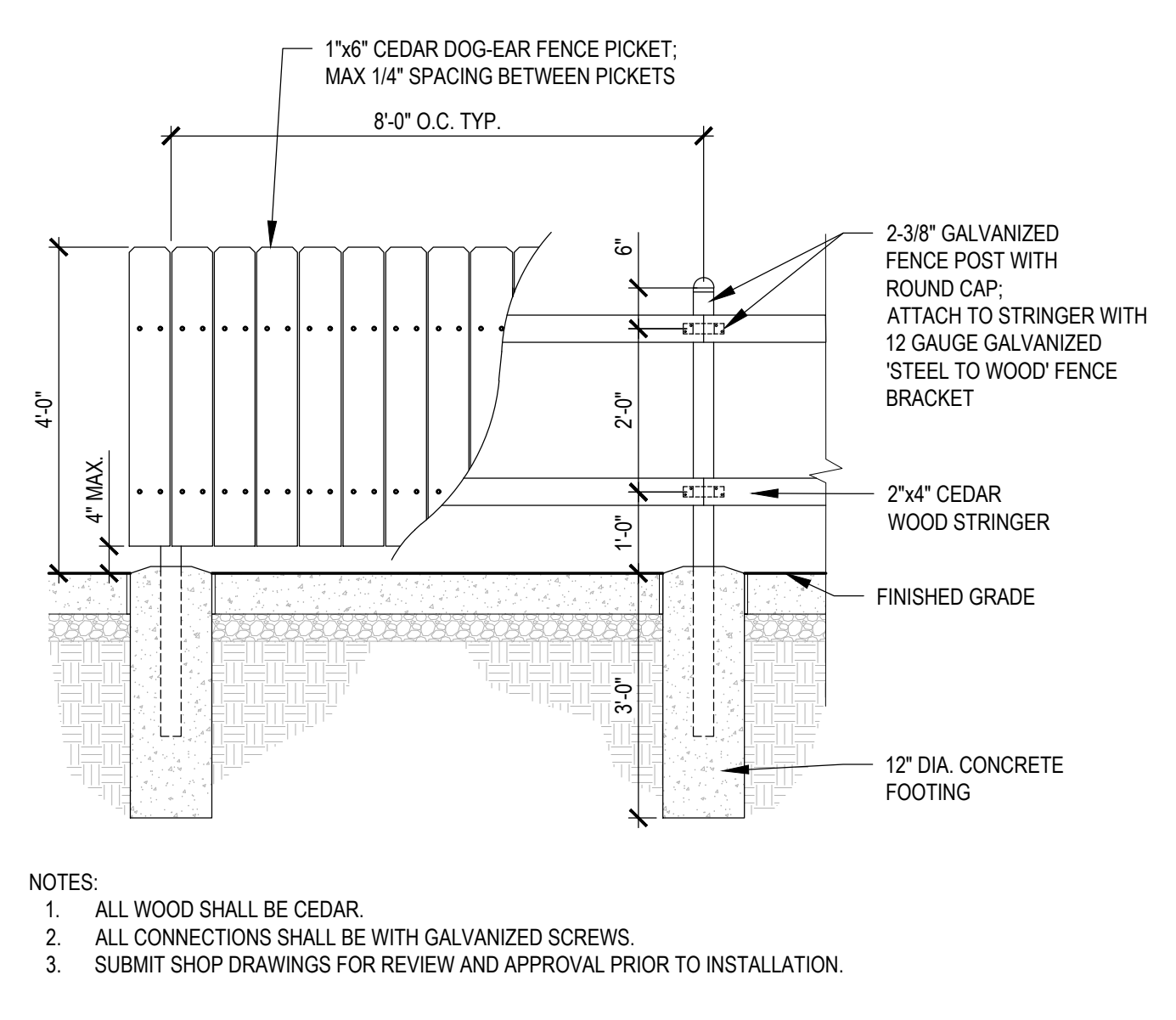
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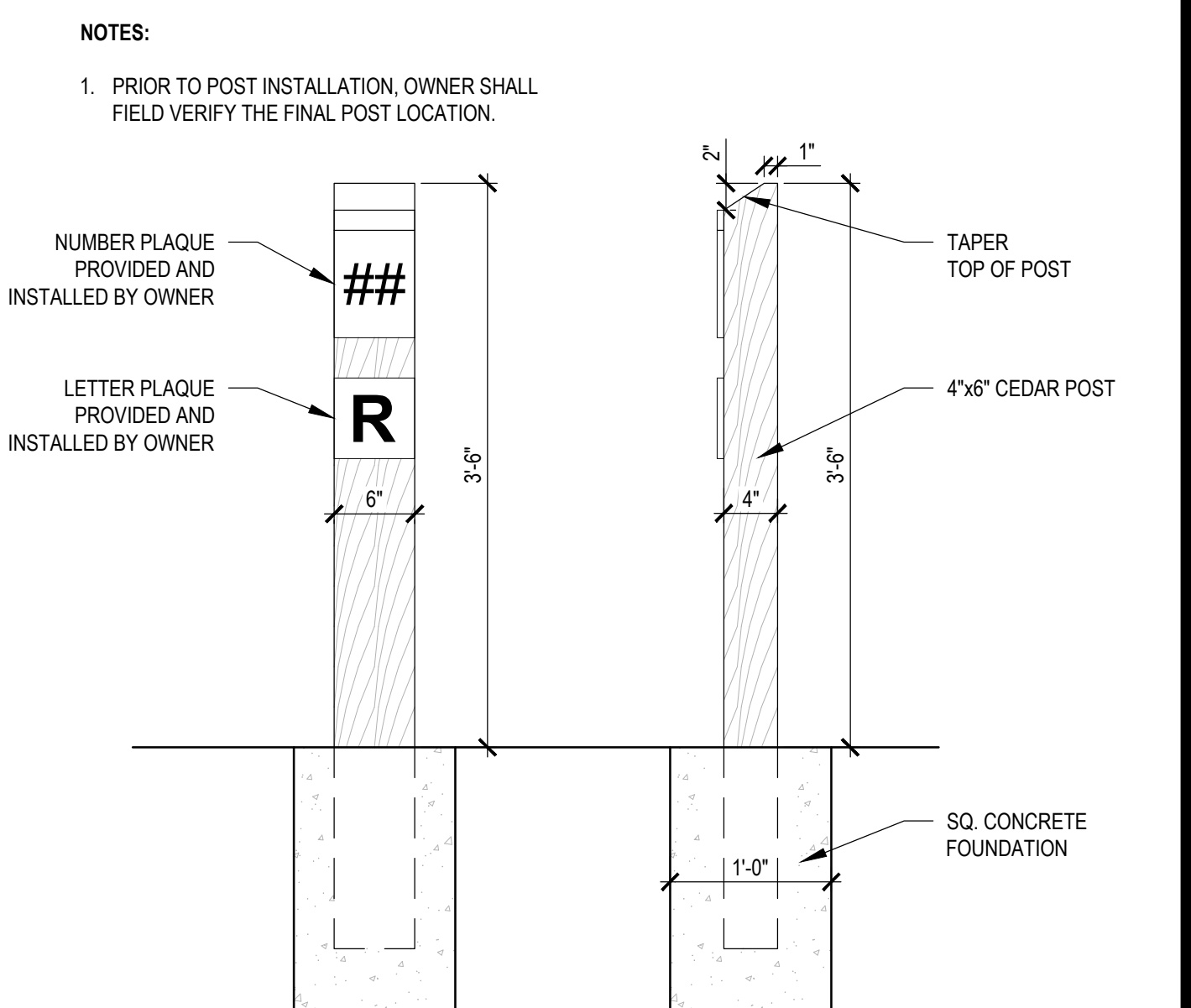
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N.T.S.



**MODULAR BLOCK RETAINING WALL 08**  
N.T.S.



**FENCE 09**  
N.T.S.



**CAMPSITE NUMBER POST 10**  
N.T.S.





LANDSCAPE ARCHITECT:



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OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES,  
MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 12/12/2023

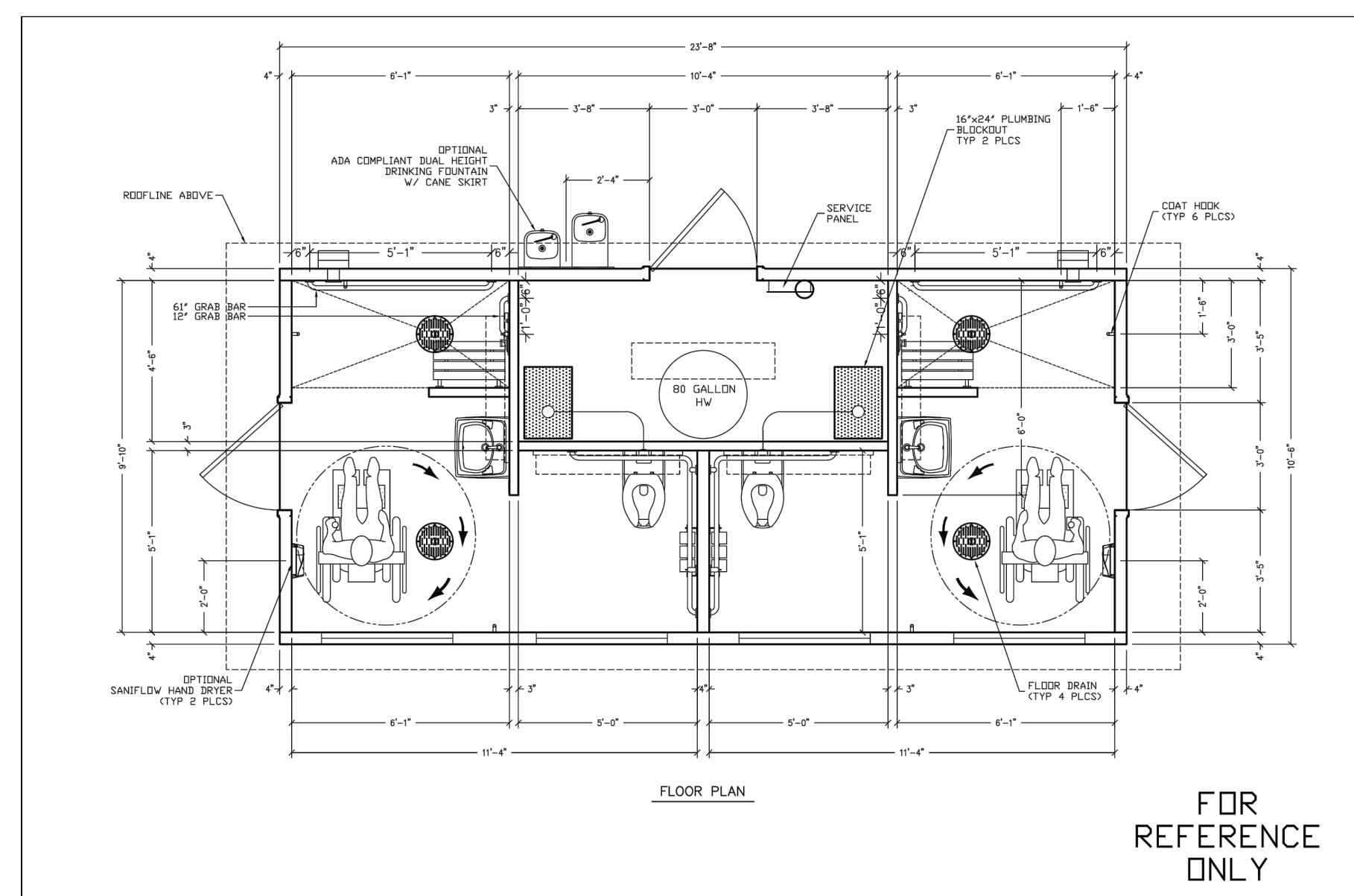
CAD DWG FILE:  
DRAWN BY: AES  
CHECKED BY: CDP  
DESIGNED BY: AES / CDP

SHEET TITLE:  
**SHOWER HOUSE  
DETAILS**

SHEET NUMBER:

**L-503**

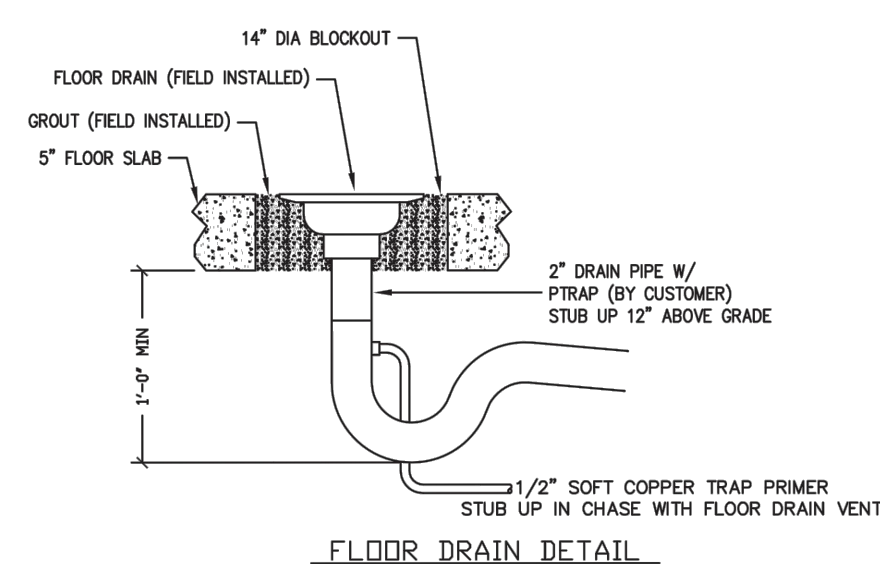
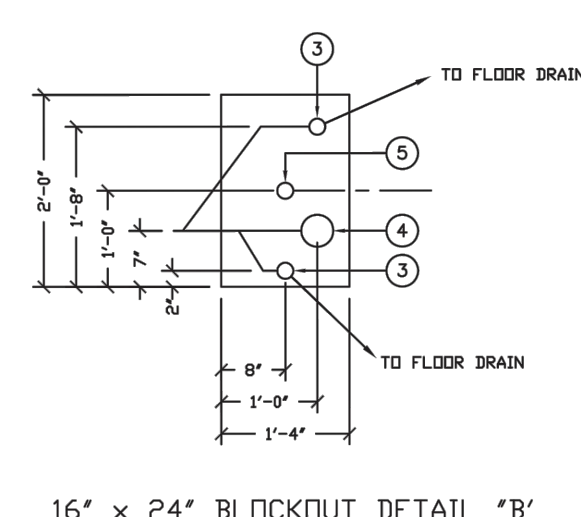
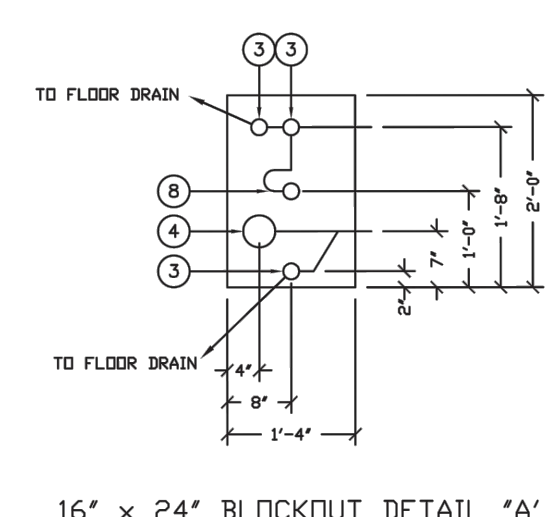
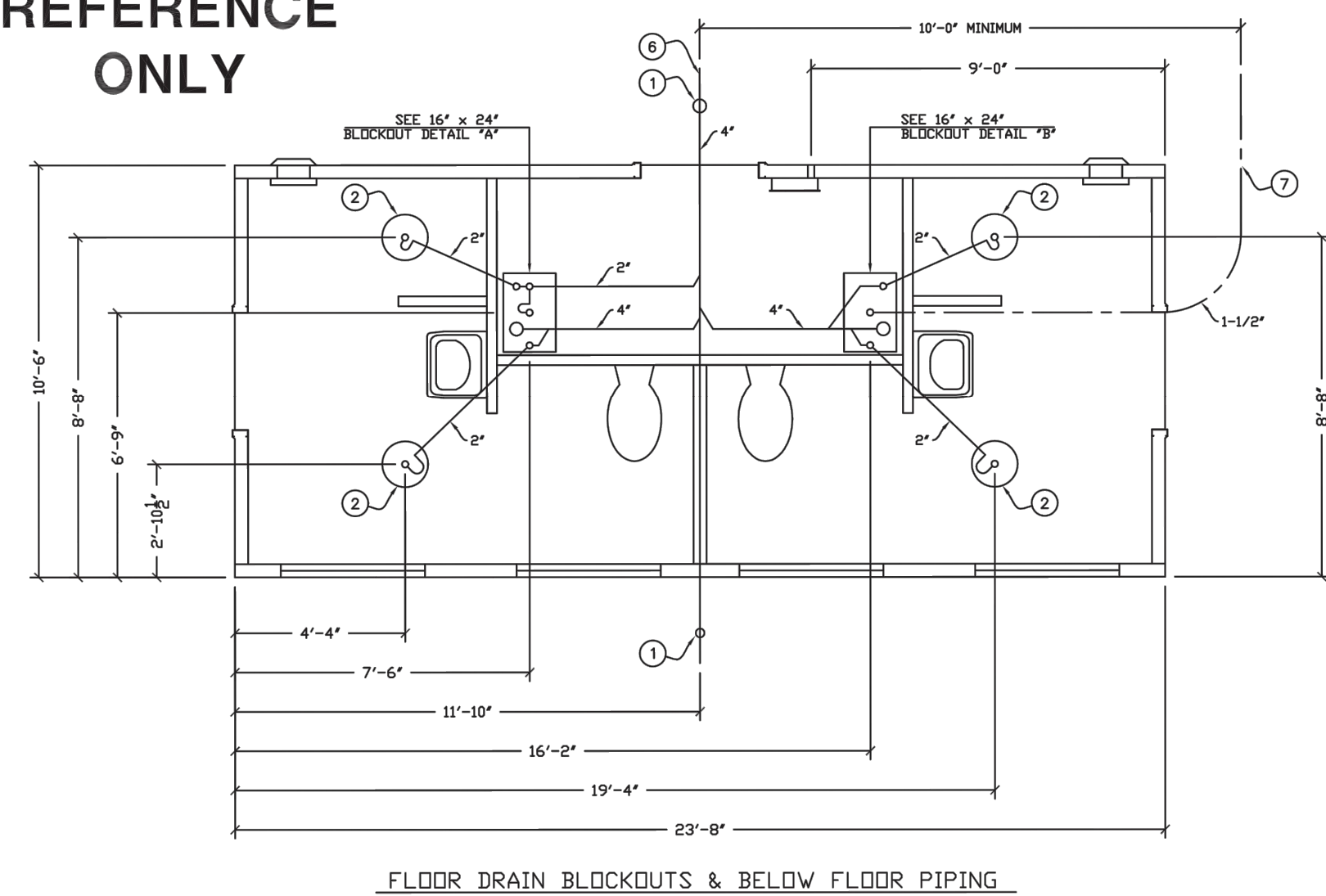
SHEET 9 OF 36  
12/12/2023



- NOTE:
- SHOWER HOUSE TO BE PURCHASED BY OWNER.
  - PROVIDED BY RESTROOM MANUFACTURER:
    - FABRICATION OF RESTROOM
    - DELIVERY TO SITE
    - PLACEMENT ON PREPARED PAD
  - PROVIDED BY CONTRACTOR:
    - PREPARE SHOWER HOUSE FOUNDATION PER DETAIL 02 ON THIS SHEET.
    - INSTALLATION OF ALL NECESSARY SITE UTILITIES AND UTILITIES UNDER RESTROOM PAD. CONTRACTOR SHALL COORDINATE ALL BLOCKOUT LOCATIONS AND REQUIRED UTILITIES WITH SHOWER HOUSE MANUFACTURER.
    - CONTRACTOR SHALL COORDINATE WITH SHOWER HOUSE MANUFACTURER AND MEP PROFESSIONAL LICENSED IN THE STATE OF MISSOURI FOR ALL REQUIRED BELOW FLOOR PIPING INCLUDING, BUT NOT LIMITED TO, FLOOR DRAINS, VENT PIPES, WASTE PIPES, WATER SERVICE AND ELECTRICAL STUBS.
    - AFTER SHOWER HOUSE IS PLACED, CONTRACTOR SHALL PROVIDE CONNECTIONS BY A LICENSED PLUMBER AND ELECTRICIAN.
    - MINIMUM BURY 42-INCHES, OR PER LOCAL REQUIREMENTS, TO PROTECT AGAINST FREEZING AND DAMAGE.

FOR  
REFERENCE  
ONLY

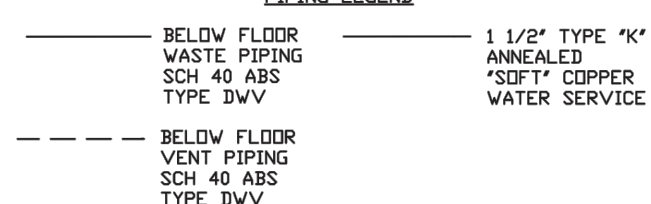
ALL PIPING INDICATED ON  
THIS SHEET IS NOT BY CXT



BELOW FLOOR PIPING - KEY NOTES

- 4" CLEAN OUT TO GRADE.
- 2" FLOOR DRAIN FIELD INSTALLED TRAP PRIMER SYSTEM IF REQUIRED BY AUTHORITY HAVING JURISDICTION (14" DIA BLOCKOUT)
- 2" VENT PIPES EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST FUG (16"x24" BLOCKOUT)
- 4" WASTE PIPE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE TEST FUG (16"x24" BLOCKOUT)
- 1 1/2" TYPE K ANNEALED "SDF" COPPER WATER SERVICE EXTENDED 12" ABOVE FINISHED FLOOR LEVEL, PROVIDE CAP AT END. (16"x24" BLOCKOUT)
- 30" MIN. BURY, PROVIDE TRACER TAPE.
- MIN. BURY PER LOCAL REQUIREMENTS TO PROTECT FROM FREEZING AND DAMAGE.
- 2" FLOOR DRAIN FIELD INSTALLED TRAP PRIMER SYSTEM IF REQUIRED BY AUTHORITY HAVING JURISDICTION (16"x24" BLOCKOUT)

PIPING LEGEND



THIS DRAWING IS SUPPLIED FOR  
REFERENCE ONLY. PLEASE CONTACT  
CXT ENGINEERING DEPARTMENT FOR  
BUILDING SPECIFIC CONTROLLED  
DOCUMENTS PRIOR TO ANY FIELD WORK.

**CXT**  
Precast Products  
6107 E. Parkway Ave. Bldg. 300, Hoop, IL 63067  
901 N. Highway 77, Hickory, TN 37645  
302 Newby Road, Millersville, NY 13097

MANUFACTURED BY:  
RAINER  
CXT STANDARD BUILDING

NOISE

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NO.	DESCRIPTION	DATE	BY	CHKD
1	ISSUED FOR PERMIT	12/12/2023	AES	CDP
2	ISSUED FOR CONSTRUCTION	12/12/2023	AES	CDP

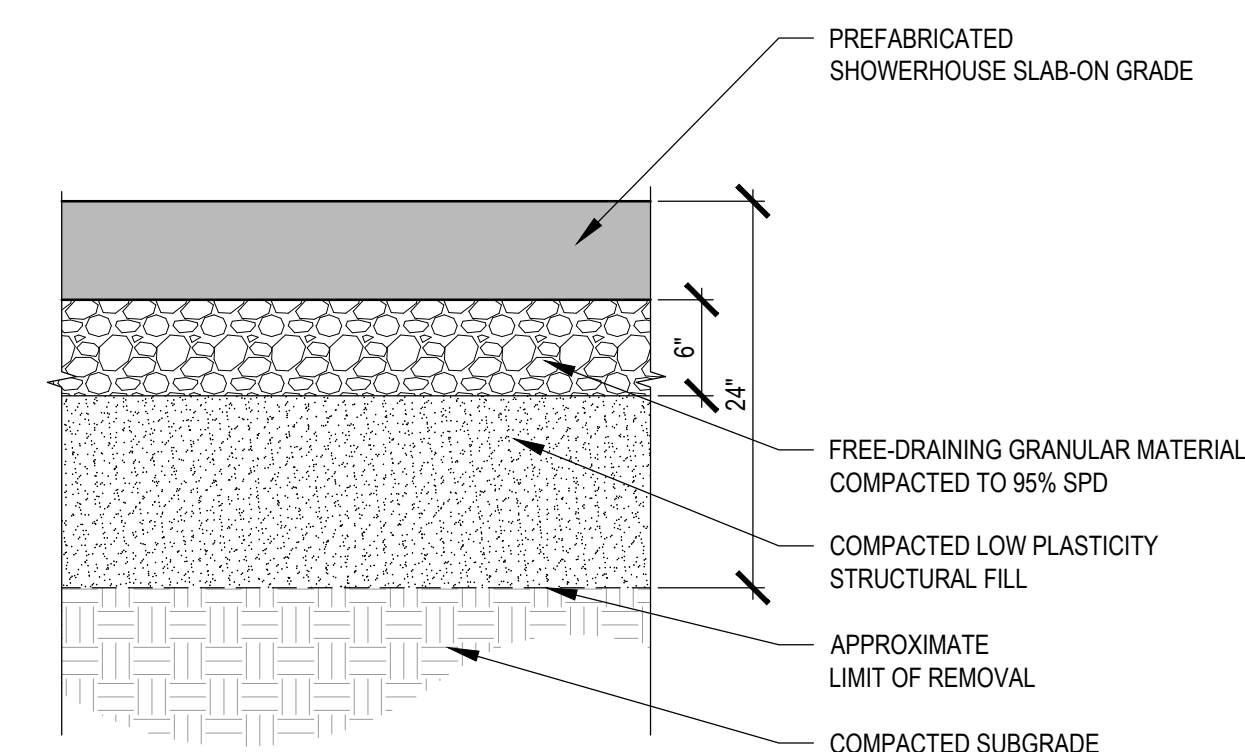
FLOOR DRAIN BLOCKOUTS  
& BELOW FLOOR PIPING

DWG NO. SHEET NO. REV.

RN-19

NOTES:

- PRIOR TO PLACEMENT OF THE BUILDING, A PROPERLY PREPARED SUB-BASE SHALL BE PROVIDED AND APPROVED BY OWNERS REPRESENTATIVE. REFERENCE THE GEOTECHNICAL REPORT AND MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC RECOMMENDATIONS REGARDING SOIL PREPARATION FOR THE SLAB ON GRADE FOUNDATION.
- SUB-BASE SHALL BE A MINIMUM OF 6" THICK AND CONSIST OF 3/4" MINUS CRUSHED ROCK COMPACTED TO 95% OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D1557.
- FINISHED SURFACE OF SUB-BASE SHALL BE UNIFORMLY LEVEL, NOT VARYING MORE THAN 1/2" FROM A TRUE HORIZONTAL PLANE.
- THE EDGES OF COMPACTED FILL SHOULD EXTEND A MINIMUM OF FIVE (5) FEET BEYOND THE BUILDING FOOTPRINT. THE MEASUREMENT SHOULD BE TAKEN FROM THE OUTSIDE EDGE OF THE FOOTING TO THE TOE OF THE EXCAVATION PRIOR TO SLOPING.





#### ADA ACCESSIBLE ROUTE NOTES

- All Accessible route construction shall conform to the latest version of the ADA Standards for Accessible Design published by the Department of Justice and the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way published by the United States Access Board.
- Other than ramps and ramp runs, walking surfaces must have running slopes not steeper than 1:20.
- The cross slope of walking surfaces shall not be steeper than 2%.
- The minimum width for a linear segment of accessible route shall be 36 inches.
- Where the accessible route makes a 180 degree turn around an element which is less than 48 inches wide, clear width shall be 42 inches minimum approaching the turn, 48 inches minimum at the turn and 42 inches leaving the turn.
- An accessible route with a clear width less than 60 inches shall provide passing spaces at intervals of 200 feet maximum. Passing spaces shall be 60 inch by 60 inch minimum.
- Ramp runs shall have a running slope not steeper than 1:12.
- Ramp runs with a rise greater than 6 inches shall have handrails.
- Ramp landings with a maximum slope of 1:48 shall be provided before and after ramp runs.
- The maximum rise of a ramp run shall be 30 inches.
- The maximum counter slope between the pavement and the curb at a curb ramp shall be 1:20.
- Curb ramp landings with a maximum slope of 1:48 shall be provided at the top of curb ramps with a clear width of 60 inches.
- Detectable warning surfaces complying with the latest ADA Standards shall be provided at pedestrian street crossings and refuge islands.
- Passenger loading zones shall be provided adjacent to any ADA Accessible stall and have a 2% maximum slope in all directions.
- Contractor to field verify existing site conditions and contact the engineer if field conditions do not match plan prior to construction.

#### LAYOUT & PAVING NOTES

- All construction shall conform to the Missouri State Parks Dept minimum design standards.
- The contractor shall check existing grades, dimensions, and inverts in the field and report any discrepancies to the architect/engineer prior to beginning work.
- The contractor shall verify the exact location of all existing utilities, take care to protect utilities that are to remain, and repair contractor caused damage according to current local standards and at the contractor's expense. Coordinate all construction with the appropriate utility company.
- The contractor shall comply with all local codes, obtain all permits, and pay all fees prior to beginning work.
- Provide a smooth transition between existing pavement and new pavement. Field adjustment of final grades may be necessary. Adjust all utilities prior to installation of pavement.
- The contractor shall protect all trees to remain, in accordance with the specifications. Do not operate or store heavy equipment, nor handle, nor store materials within the drip lines of trees or outside the limit of grading.
- Concrete walks and pads shall have a broom finish. All concrete shall be 4,000 p.s.i. unless otherwise noted. Curb ramps, sidewalk slopes, and driveway ramps shall be constructed in accordance with all current local requirements. If applicable, the contractor shall request inspection of sidewalk and ramp forms prior to placement of concrete.
- All damage to existing asphalt pavement to remain which results from new construction shall be replaced with like materials at contractor's expense.
- Dimensions are to the back of curb, or edge of concrete, unless otherwise noted.
- Maintain one set of as-built drawings on the job site for distribution to the engineer upon completion.
- For all asphalt pavement, the contractor shall have no more than 30% recycled material in the base course and no recycled material in the surface course.

#### PAVEMENT MARKING AND SIGNAGE NOTES

- Parking stall marking stripes shall be four inch (4") wide white stripes. Handicap stall marking shall be furnished at locations shown on plans.
- Traffic control devices and pavement markings shall conform to the requirements of the "Manual of Uniform Traffic Control Devices."
- Traffic control and pavement markings shall be painted with a white Sherwin Williams TM2125 HOTLINE Fast Dry or approved equal. The pavement marking shall be applied in accordance with manufacturers recommendations. Apply on a clean, dry surface and at a surface temperature of not less than 70°F and the ambient air temperature shall not be less than 60°F and rising. Two coats shall be applied.

#### WRITTEN SEQUENCING

- Implement Pre-Construction Plan:**  
All temporary structural BMP's shown on the BMP plan must be in place before any site disturbance. Clearing necessary to place temporary structural BMP's is the minimum required for installation. Coordinate clearing necessary to place temporary structural BMP's with local weather forecast so that clearing and placement may be completed within a forecast dry period. Stabilize all erosion control measures after installation. Temporary Barrier Fence shall be in Place, around areas not to be disturbed, prior to any construction activities. This area includes Stream Corridor.
- Clear and Stabilize Work Areas:**  
Grade contractor areas and place all-weather surface on contractor areas.
- Clearing and Grubbing:**  
After Phase I BMP's are installed, contractor may clear, grub, and demo required areas as necessary.

#### GRADING NOTES

- All construction shall conform to the Missouri State Parks Dept minimum design standards.
- Spot Grades shown herein shall govern over finished grades.
- The contractor shall provide evidence that his insurance meets the requirements of the Project.
- All traffic control shall be in conformance with the Manual of Uniform Traffic Control Devices (MUTCD).
- The contractor is responsible for the protection of all property corners and section corners. Any property corners and/or section corners disturbed or damaged by construction activities shall be reset by a Registered Land Surveyor licensed in the State of Missouri, at the contractor's expense.
- The contractor is responsible for providing erosion and sediment control BMPs to prevent sediment from reaching paved areas, storm sewer systems, drainage courses and adjacent properties. In the event the prevention measures are not effective, the contractor shall remove any debris, silt, or mud and restore the right-of-way, or adjacent properties to original or better condition.
- All sidewalk ramps constructed will be required to comply with the Americans with Disabilities Act (ADA).
- All work shall be confined within easements and/or construction limits as shown on the plans.
- Curb stakes and hubs shall be provided at all high points, low points, ADA ramp openings, and on each side of all curb inlets when setting string line.
- All National Pollution Discharge Elimination System (NPDES) standards shall be met.
- Public and Private utility facilities shall be moved or adjusted as necessary by the owners to fit the new construction unless otherwise noted on the plans. The Contractor is responsible for the cost of utility relocations unless otherwise indicated on the plans.

#### EARTHWORK NOTES:

- CONTOURS AND ELEVATIONS:** Existing and proposed contours are shown on plans at one foot (1') contour intervals, unless otherwise noted. Proposed contours and elevations shown represent approximate finish grade.
- CLEARING AND GRUBBING:** Prior to the start of grading and earthwork, the areas to be graded shall be stripped of all vegetation, organic matter, and topsoil, to a minimum depth of four inches (4") or as otherwise directed by the Geotechnical Engineer. Stripping materials shall not be incorporated into structural fills. Topsoil materials shall not be used in building and pavement areas.
- TOPSOIL:** Prior to the start of grading, the contractor shall strip all topsoil from areas to be graded and stockpile at a location on or adjacent to the site as directed by the owner. At completion of grading operations and related construction, the contractor will be responsible for redistribution of topsoil over all areas disturbed by the construction activities. Topsoil shall be placed to a minimum depth of six inches (6") and in accordance with specifications for landscaping. Subgrade below turf areas shall have a minimum 6" depth of soil free of rock larger than 3".
- SUBGRADE PREPARATION:** Prior to placement of new fill material, the existing subgrade shall be proof rolled and approved under the direction of the Geotechnical Engineer or his representative.
- proof rolling:** Prior to the placement of new fill material, the existing subgrade shall be proof rolled and approved under the direction of the Geotechnical Engineer. Unsuitable areas identified by the proof rolling areas shall be undercut and replaced with controlled structural fill or treated with fly ash per the Geotechnical report.
- EARTHWORK:**
  - GEOTECHNICAL:** All earthwork shall conform to the recommendations of the Geotechnical report.
  - SURFACE WATER:** Surface water shall be intercepted and diverted during the placement of fill.
  - FILLS:** All fills shall be considered controlled or structural fill and shall be free of vegetation, organic matter, topsoil, and debris. All fill required for project shall be provided by the Contractor. Material Shall be pre-approved by the Engineer prior to placement.
  - EXISTING SLOPES:** Where fill material is to be placed on existing slopes greater than 5:1 (horizontal to vertical), existing slope shall be benched providing a minimum vertical face of twelve inches (12"). Fill material shall be placed and compacted in horizontal lifts not exceeding nine inches (9") (loose fit measurement), unless otherwise approved by the Geotechnical Engineer.
  - COMPACTION REQUIREMENTS:** Earth fill material shall be placed and compacted to a minimum density of ninety five percent (95%) of the material's maximum dry density as determined by ASTM D698 (standard proctor compaction). The moisture content at the time of placement and compaction shall be within a range of -2% to 3% above the optimum moisture content as defined by the standard proctor compaction procedure. The moisture contents shall be maintained within this range until completion of the work. Where compaction of earth fill by a large roller is impractical or undesirable, the earth fill shall be hand compacted with small vibrating rollers or mechanical tampers.
- TESTING AND INSPECTION:** Testing and inspection services required to make tests required by the specifications and to observe the placement of fills and other work performed on this project shall be provided by a commercial testing laboratory (Geotechnical Engineer) selected by the owner. The cost of testing will be the owner's responsibility.
- SEEDING:** All areas disturbed by earthwork operations in the right-of-way shall be seeded.

#### SITE UTILITY NOTES

- The contractor is specifically cautioned that the location and/or elevation of existing utilities as Shown on these plans is based on records of the various utility Companies, and where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The contractor must call the appropriate utility companies at least 48 hours before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to coordinate with and relocate and/or remove all existing utilities which conflict with the proposed improvements shown on the plans.
- The construction of storm sewers on this project shall conform to the requirements of Missouri State Parks Dept Technical Specifications and Design Criteria.
- The contractor shall field verify the exact location and elevation of the existing storm sewer locations and the existing elevations at locations where the proposed storm sewer collects or releases to existing ground. If discrepancies are encountered from the information shown on the plans. The contractor shall contact the design engineer. No pipes shall be laid until direction is received from the design engineer.
- It will be the contractors responsibility to field adjust the top of all manholes and boxes as necessary to match the grade of the adjacent area. Tops of existing manholes shall be raised as necessary to be flush with proposed pavement elevations, and to be 6-inches above finished ground elevations in non-paved areas. No separate or additional compensation will be made to the contractor for making final adjustments to the manholes and boxes.
- Inlet locations, horizontal pipe information and vertical pipe information is shown to the center of the structure. Deflection angles shown for storm sewer pipes are measured from the center of the curb inlets and manholes. The contractor shall adjust the horizontal location of the pipes to go to the face of the boxes.
- The contractor shall be responsible for furnishing and installing all domestic water lines, meters, back flow devices, pits, valves and all other incidentals required for a complete operable domestic water system. Coordinate with the local water department as necessary. All costs associated with the complete water system for the campgrounds shall be the responsibility of the contractor. All work shall conform to the requirements of Missouri State Parks Dept.
- The contractor shall be responsible for furnishing and installing all sanitary sewer service lines from the campground to the main line. All work shall conform to the requirements of Missouri State Parks Dept.
- The contractor is responsible for securing all permits, bonds and insurance required by the contract documents, Missouri State Parks Dept, and all other governing agencies (including local, county, state and federal authorities) having jurisdiction over the work proposed by the construction documents. The cost for all permit bonds and insurance shall be the contractors responsibility and shall be included in the bid for the work.
- By the use of these construction documents the contractor hereby agrees that he/she shall be solely responsible for the safety of the construction workers and the public. The contractor agrees to hold the engineer and owner harmless for any and all injuries, claims, losses or damages related to the project.
- All fill material is to be in place, compacted, and consolidated before installation of proposed utilities. On-site geotechnical engineer shall provide written confirmation that this requirement has been met and that utilities may proceed in the fill areas. All utilities are to be placed in trench conditions.
- Minimum trench width shall be 2 feet.
- Contractor shall maintain a minimum of 42" of cover on all waterlines. All water line joints are to be mechanical joints with thrust blocking as called out in specifications and construction plans. Water mains and service lines shall be constructed in accordance to the Missouri State Parks Dept specifications for commercial services.
- All waterlines shall be kept ten feet (10') apart (parallel) from sanitary sewer lines or manholes. Or when crossing, an 18" vertical clearance (outside edge of pipe to outside edge of pipe) of the waterline above the sewer line is required.
- In the event of a vertical conflict between waterlines, sanitary lines, storm lines and gas lines (existing and proposed), the sanitary line shall be ductile iron pipe with mechanical joints at least 10 feet on both sides of the crossing (or encased in concrete the same distance), the waterline shall have mechanical joints with appropriate thrust blocking as required to provide a minimum of 18" clearance. Meeting requirements ANSI A21.10 or ANSI 21.11 (AWWA C151)(Class 50).
- All necessary inspections and/or certifications required by codes and/or utility service companies shall be performed prior to announced building possession and the final connection of service. Contractor shall coordinate with all utility companies for installation requirements and specifications.
- When a building utility Connection from site utilities leading up to the building cannot be made immediately, temporarily mark all such utility terminations.

#### GENERAL NOTES

- The contractor shall provide evidence that his insurance meets the requirements of Missouri State Parks Dept.
- All traffic control shall be in conformance with the Manual of Uniform Traffic Control Devices (MUTCD).
- The contractor is responsible for the protection of all property corners and section corners. Any property corners and/or section corners disturbed or damaged by construction activities shall be reset by a Registered Land Surveyor licensed in the State of Missouri, at the contractor's expense.
- The contractor shall be responsible for the restoration of the right-of-way and for damaged improvements such as curbs, driveways, sidewalks, street light and traffic signal junction boxes, traffic signal loop lead ins, signal poles, irrigation systems, etc. Damaged improvements shall be repaired in conformance with the latest City and State standards and to the City's and/or State's satisfaction.
- The contractor is responsible for providing erosion and sediment control BMPs to prevent sediment from reaching paved areas, storm sewer systems, drainage courses and adjacent properties. In the event the prevention measures are not effective, the contractor shall remove any debris, silt, or mud and restore the right-of-way, or adjacent properties to original or better condition.
- Excavation for utility work in public street right-of-way requires a Right-of-Way Work Permit from the Public Works Department, in addition to all other permits.
- All work shall be confined within easements and/or construction limits as shown on the plans.
- All existing utilities indicated on the drawings are according to the best information available to the engineer; however, all utilities actually existing may not be shown. The contractor shall be responsible for contacting all utility companies for an exact field location of each utility prior to any construction. All utilities, shown and un-shown, damaged through the negligence of the contractor shall be repaired or replaced by the contractor at his expense.
- The contractor will be responsible for all damages to existing utilities, pavement, fences, structures, and other features not designated for removal. The contractor shall repair all damages at his expense.
- By use of these construction documents the contractor hereby agrees that he shall be solely responsible for the safety of the construction workers and the public. The contractor agrees to hold the engineer and owner harmless for any and all injuries, claims, losses, or damages related to the project.
- The contractor will be responsible for providing all signage, barricades, lighting, etc., as required for temporary traffic control during the construction of this project. Maintenance of the temporary traffic control devices will be the contractor's responsibility.
- Geogrid, footings, or other elements of the retaining wall(s) cannot encroach into the right of way, public easements, or adjacent private property.
- Contractor shall be responsible for obtaining all permits including land disturbance, right-of-way, hauling, etc., prior to construction.
- Contractor shall restore all disturbed right-of-way upon project completion.
- Prior to construction, contractor shall install pre-construction erosion control measures.

#### EROSION CONTROL NOTES

- The contractor shall provide all materials, tools, equipment, and labor as necessary to install and maintain adequate erosion control, keep the streets clean of mud and debris, and prevent soil from leaving the project site. The contractor's erosion control measures shall conform to Missouri State Parks Dept Technical Provisions and Specifications.
- Erosion control plan modifications shall be required if the plan fails to substantially control erosion and offsite sedimentation.
- The contractor shall be responsible for maintaining erosion control devices and removing sediment until a minimum of 70% of permanent vegetation has become established and established. Erosion control devices shall remain in place until the 70% established vegetation is met, or the duration of the project, whichever is the later date.
- The contractor shall temporarily seed and mulch all disturbed areas if there has been no construction activity on them for a period of fourteen (14) calendar days.
- Contractor to install all Phase I erosion control devices prior to construction.
- Contractor shall replace disturbed area with seed or sod, as indicated on the plans, and shall be installed within 14 days after paving completion and final topsoil grading.
- Topsoil replacement shall be 6" thick.
- Straw wattles to be installed in accordance with Missouri State Parks Dept Standard Details.
- Refer to Specifications for good housekeeping and spill measures.
- The Contractor shall inspect erosion control devices every 7 days and within 24 hours of a storm of 0.5 inches or more. The Contractor shall repair damage, clean out sediment, and add additional erosion control devices as needed, as soon as practicable, after inspection. The Contractor shall also inspect and assure that all sediment control devices are in working condition prior to any forecasted rainfall.

## STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR



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## OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

## DEPARTMENT OF NATURAL RESOURCES, MISSOURI STATE PARKS

#### NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:

## GENERAL NOTES

SHEET NUMBER:

# C-001

SHEET 10 OF 36  
12/12/2023





STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



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OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES,  
MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
EXISTING CONDITIONS

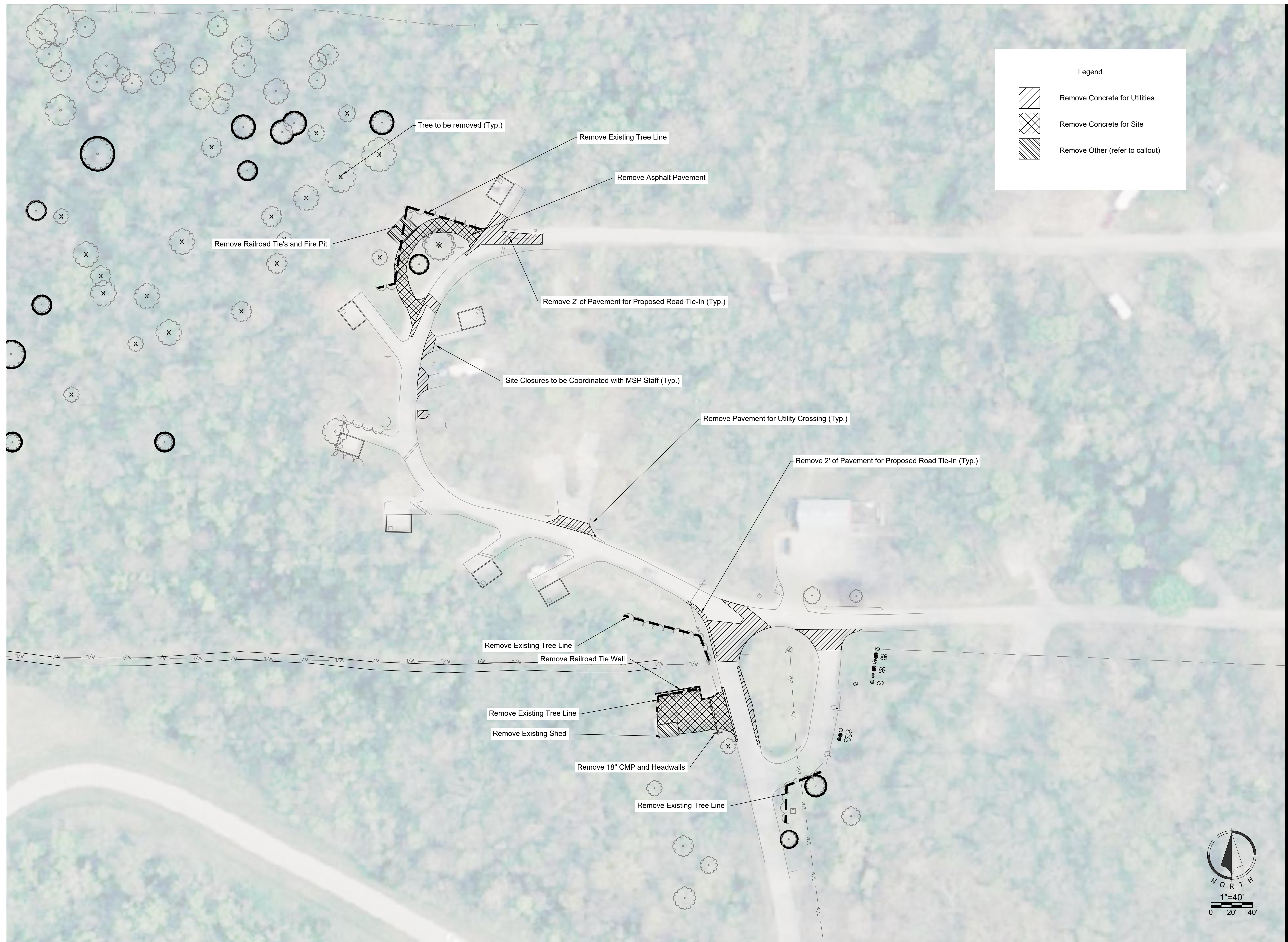
SHEET NUMBER:

**C-002**

SHEET 11 OF 36  
12/12/2023







**Legend**

- Remove Concrete for Utilities
- Remove Concrete for Site
- Remove Other (refer to callout)



STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



LANDSCAPE ARCHITECT:  
**vireo**

LAC# MO-200203826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-736-5890

SURVEYOR & CIVIL ENGINEER:  
RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950



MEP:  
ANTELLA CONSULTING ENGINEERS  
1800 Genessee Street, Suite 260  
Kansas City, Missouri 64102  
P 816-421-0950



GEOTECHNICAL:  
INTERTEK-PSI  
1211 W. Cambridge Circle Drive  
Kansas City, Kansas 66103  
P 913-310-1600



OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES,  
MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
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REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
DEMOLITION PLAN

SHEET NUMBER:

**C-101**

SHEET 12 OF 36  
12/12/2023





STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



LANDSCAPE ARCHITECT:  
**vireo**

LAC# MO-2002023826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-756-5890

SURVEYOR & CIVIL ENGINEER:  
RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950



MEP:  
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1800 Genessee Street, Suite 260  
Kansas City, Missouri 64102  
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GEOTECHNICAL:  
INTERTEK-PSI  
1211 W. Cambridge Circle Drive  
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P 913-310-1600



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WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
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REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
**GENERAL LAYOUT**

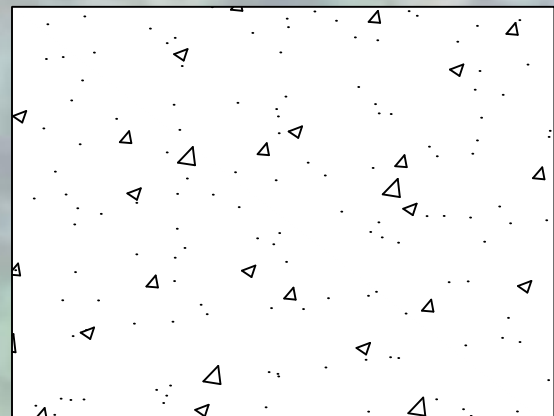
SHEET NUMBER:  
**C-102**

SHEET 13 OF 36  
12/12/2023

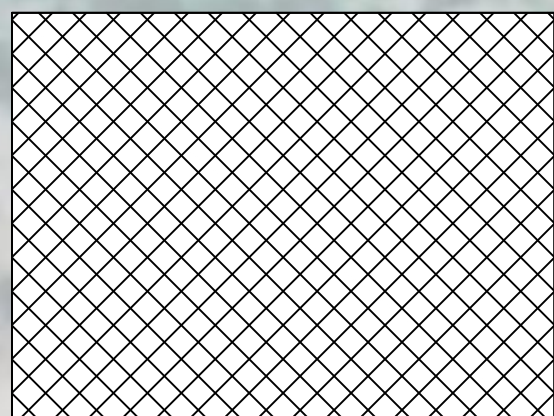




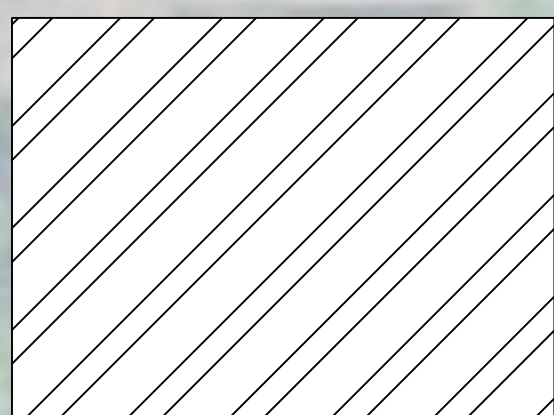
Concrete Pavement



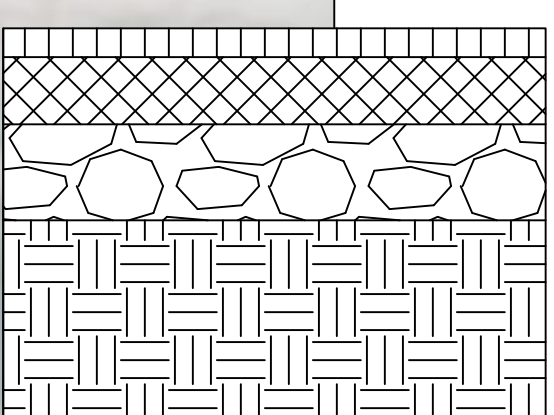
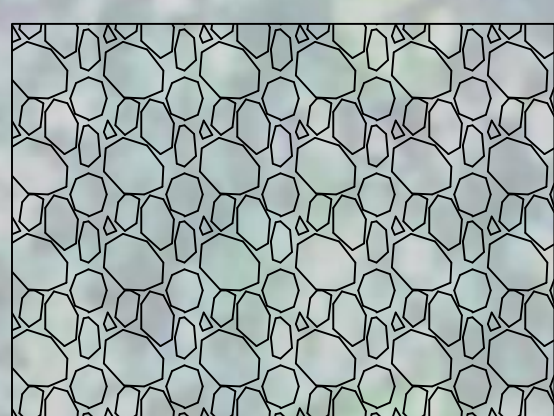
Concrete Sidewalk



Asphalt Pavement



Gravel Shoulder



1.5" min. Asphaltic Surface Course  
 3.5" min. Asphaltic Base Course  
 6" Crushed Stone (3/4" minus)  
 12" Compacted Low Plasticity Subgrade

Note:  
 See Intertek Geotech Report Dated August 2, 2022  
 Pavement Sections are provided for information only, Contractor Shall refer to Intertek PSI Geotech Report Dated August 2, 2022



STATE OF MISSOURI  
 MICHAEL L. PARSON,  
 GOVERNOR



LANDSCAPE ARCHITECT:  
**vireo**

LAC# MO-200203826  
 414 Oak Street, Suite 101  
 Kansas City, Missouri 64108  
 P 816-736-5890

SURVEYOR & CIVIL ENGINEER:  
 RENAISSANCE INFRASTRUCTURE  
 CONSULTING  
 400 E. 17th Street  
 Kansas City, Missouri 64108  
 P 816-800-0950



MEP:  
 ANTELLA CONSULTING ENGINEERS  
 1800 Genessee Street, Suite 260  
 Kansas City, Missouri 64102  
 P 816-421-0950



GEOTECHNICAL:  
 INTERTEK-PSI  
 1211 W. Cambridge Circle Drive  
 Kansas City, Kansas 66103  
 P 913-310-1600



OFFICE OF ADMINISTRATION  
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DEPARTMENT OF  
 NATURAL RESOURCES,  
 MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
 16600 MO-45 HWY  
 WESTON, MO 64098

PROJECT # X2221-01  
 SITE # 5118  
 FACILITY # 7815118006

REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
 DRAWN BY: TCD  
 CHECKED BY: MES  
 DESIGNED BY: ZMM

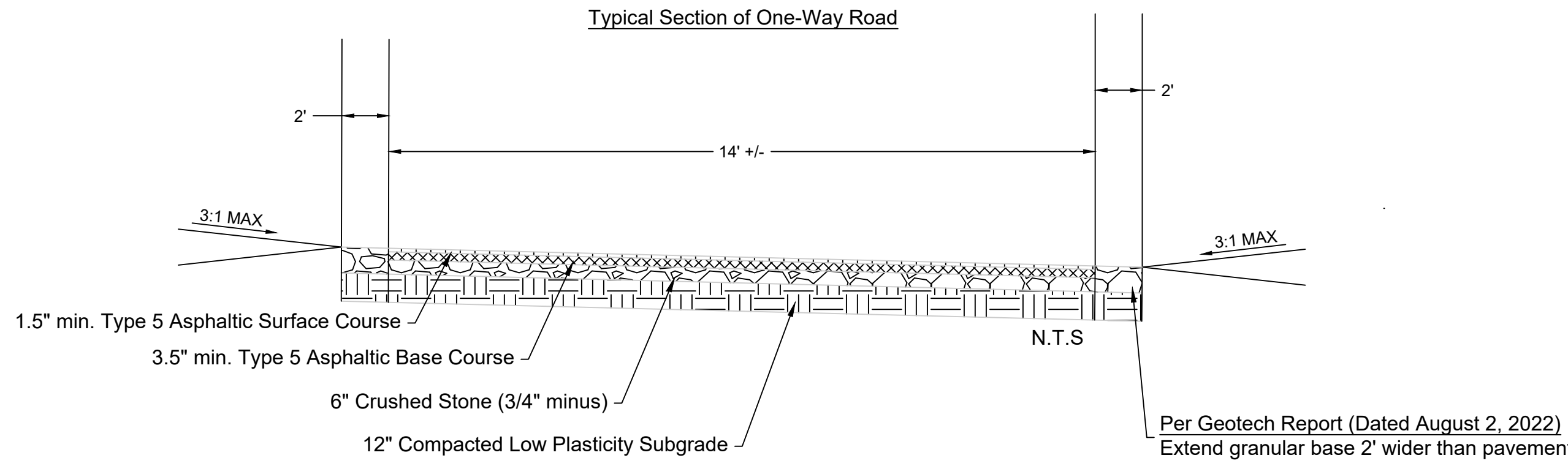
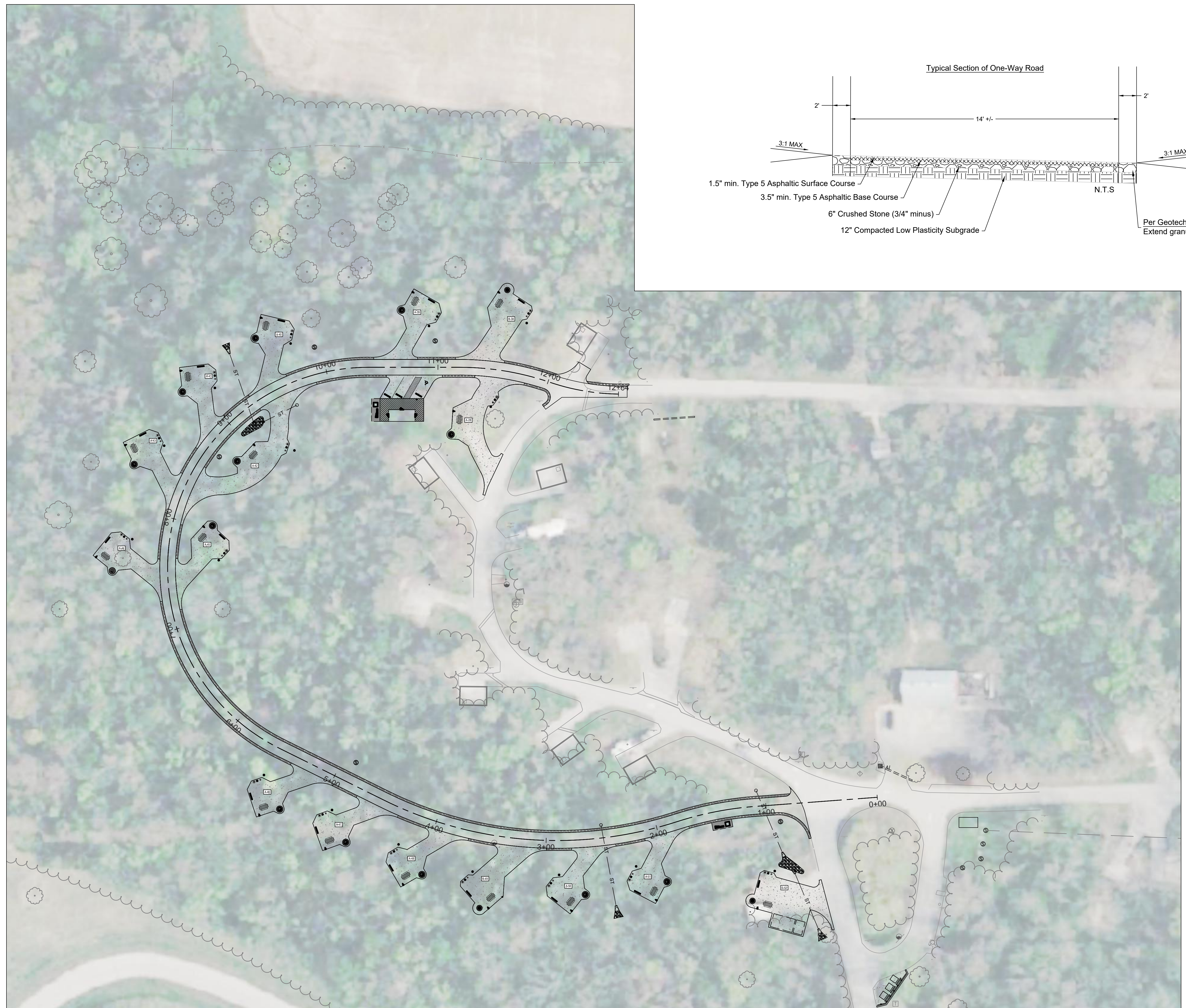
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**PAVEMENT PLAN**

SHEET NUMBER:

**C-103**

SHEET 14 OF 36  
 12/12/2023





Note:  
See Intertek Geotech Report  
Dated August 2, 2022  
Pavement Sections are provided for  
information only, Contractor Shall refer to  
Intertek PSI Geotech Report  
Dated August 2, 2022

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



LANDSCAPE ARCHITECT:  
**vireo**

LAC# MO-2002023826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-786-5890

SURVEYOR & CIVIL ENGINEER:  
RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950



MEP:  
ANTELLA CONSULTING ENGINEERS  
1800 Genessee Street, Suite 260  
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GEOTECHNICAL:  
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WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

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DATE: \_\_\_\_\_  
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DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

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CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
**TYPICAL SECTIONS**

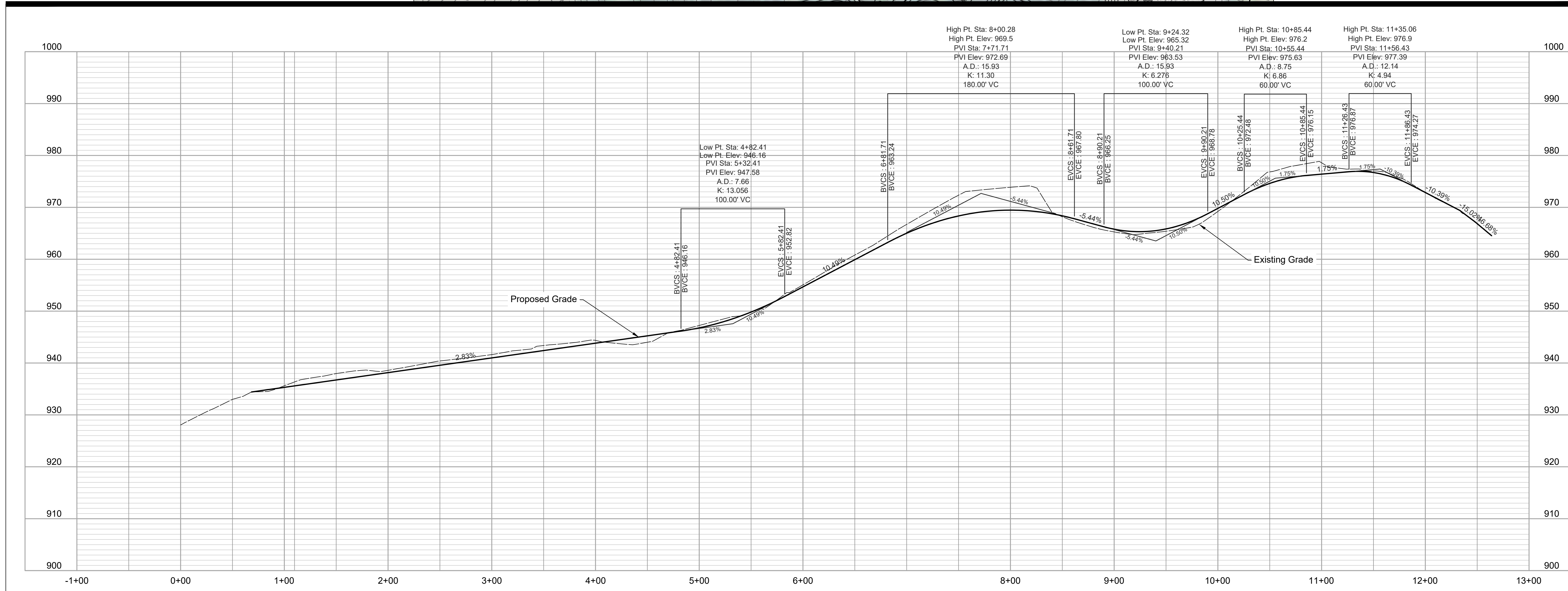
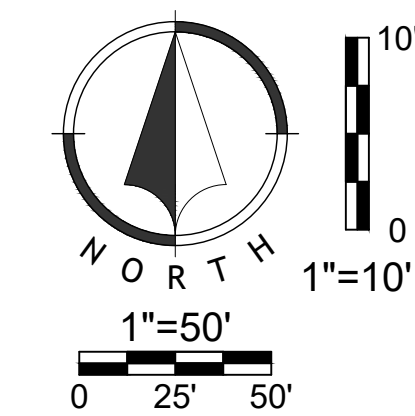
SHEET NUMBER:

**C-104**

SHEET 15 OF 36  
12/12/2023







STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



LANDSCAPE ARCHITECT:  
**vireo**

LAC# MO-200203826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-736-5890

SURVEYOR & CIVIL ENGINEER:  
RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
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MEP:  
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Kansas City, Missouri 64102  
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GEOTECHNICAL:  
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NATURAL RESOURCES,  
MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
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REVISION: \_\_\_\_\_  
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REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
ROAD PLAN & PROFILE

SHEET NUMBER:  
**C-201**  
SHEET 16 OF 36  
12/12/2023





LANDSCAPE ARCHITECT:  
**vireo**

LAC# MO-200203826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-786-5890

SURVEYOR & CIVIL ENGINEER:  
RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950



MEP:  
ANTELLA CONSULTING ENGINEERS  
1800 Genessee Street, Suite 260  
Kansas City, Missouri 64102  
P 816-421-0950



GEOTECHNICAL:  
INTERTEK-PSI  
1211 W. Cambridge Circle Drive  
Kansas City, Kansas 66103  
P 913-310-1600



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WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

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REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

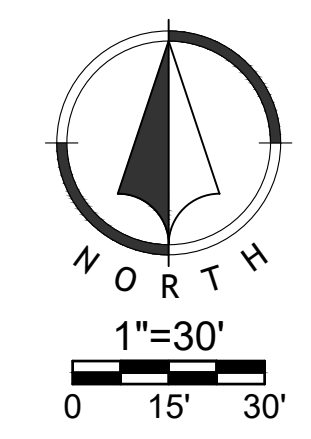
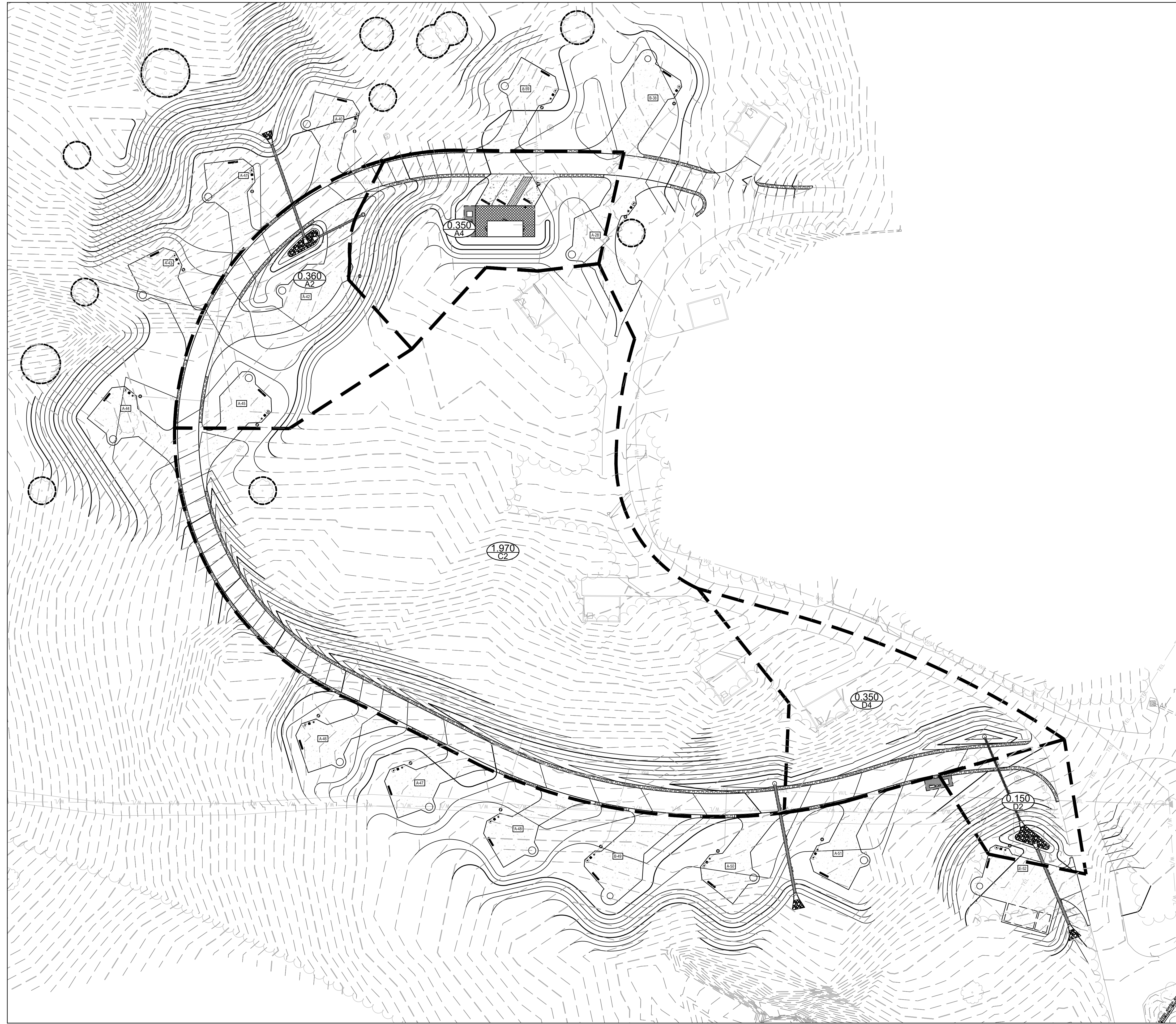
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DESIGNED BY: ZMM

SHEET TITLE:  
**DRAINAGE MAP**

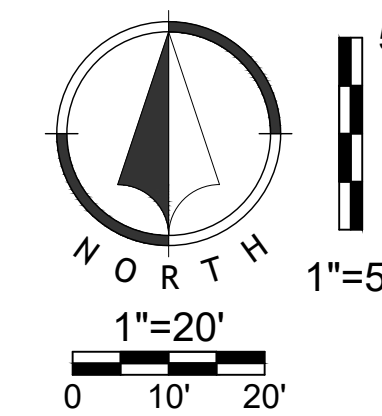
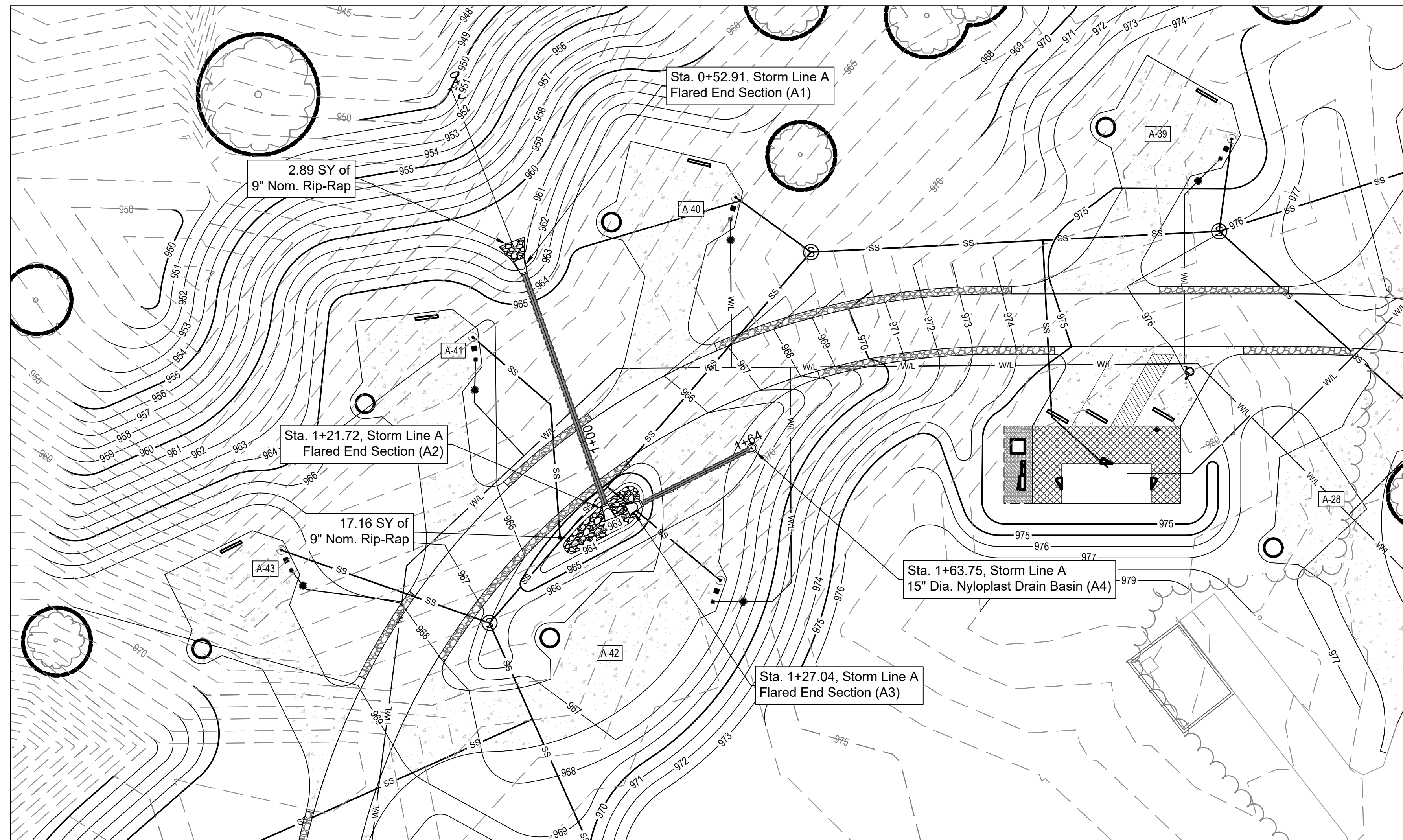
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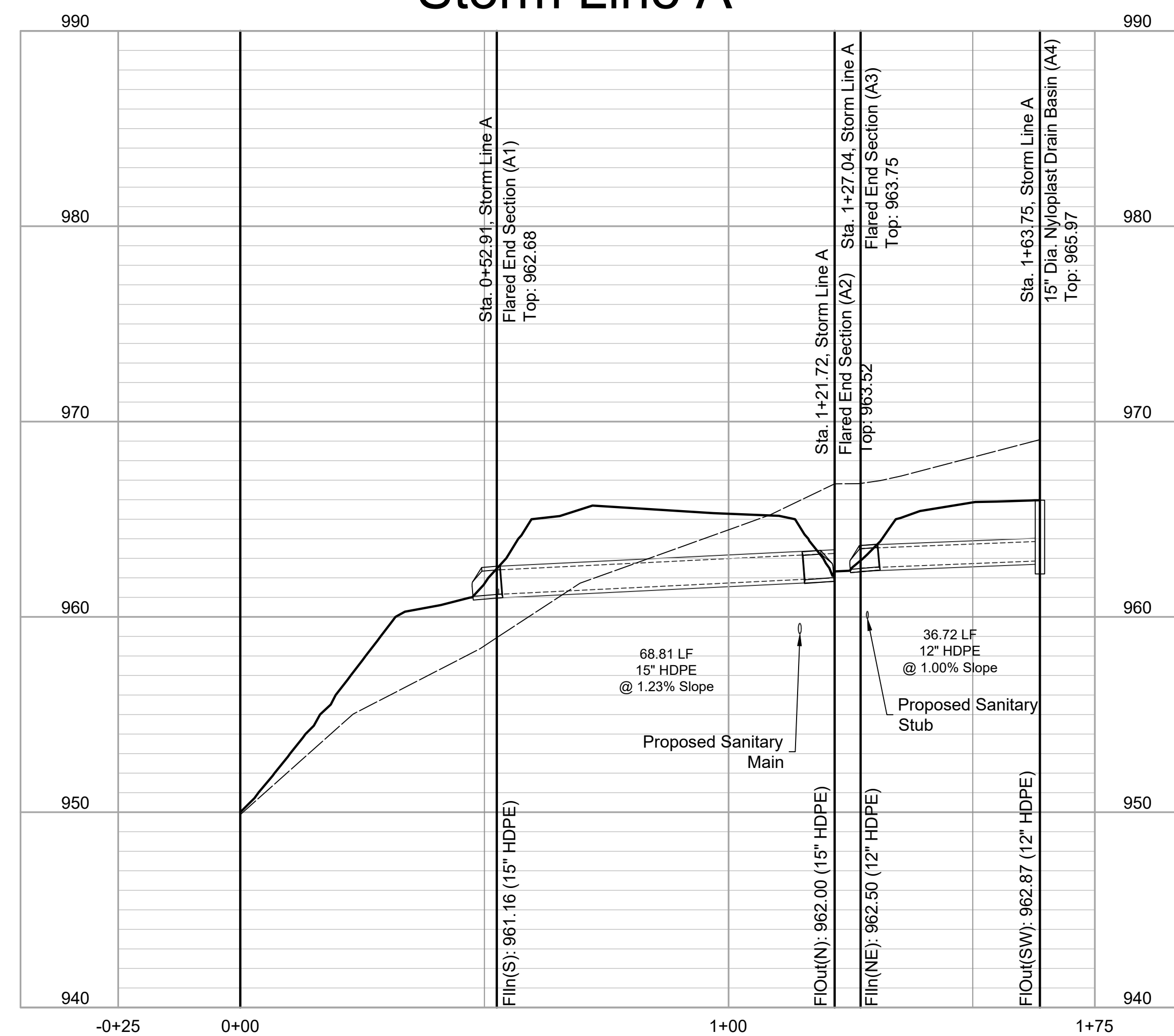
SHEET 17 OF 36  
12/12/2023







### Storm Line A



STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



LANDSCAPE ARCHITECT:  
**vireo**

LAC# MO-200203826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-756-5890

SURVEYOR & CIVIL ENGINEER:  
RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950

MEP:  
ANTELLA CONSULTING ENGINEERS  
1800 Genessee Street, Suite 260  
Kansas City, Missouri 64102  
P 816-421-0950

GEOTECHNICAL:  
INTERTEK-PSI  
1211 W. Cambridge Circle Drive  
Kansas City, Kansas 66103  
P 913-310-1600

OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES,  
MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
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DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
STORM LINES A  
PLAN & PROFILE

SHEET NUMBER:  
**C-402**  
SHEET 18 OF 36  
12/12/2023





LANDSCAPE ARCHITECT:



LAC# MO-2002023826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-736-5890

SURVEYOR & CIVIL ENGINEER:

RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950



MEP:

ANTELLA CONSULTING ENGINEERS  
1800 Genessee Street, Suite 260  
Kansas City, Missouri 64102  
P 816-421-0950



GEOTECHNICAL:

INTERTEK-PSI  
1211 W. Cambridge Circle Drive  
Kansas City, Kansas 66103  
P 913-310-1600



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MANAGEMENT,  
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MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

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REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

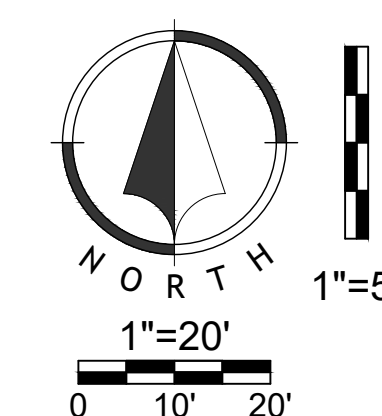
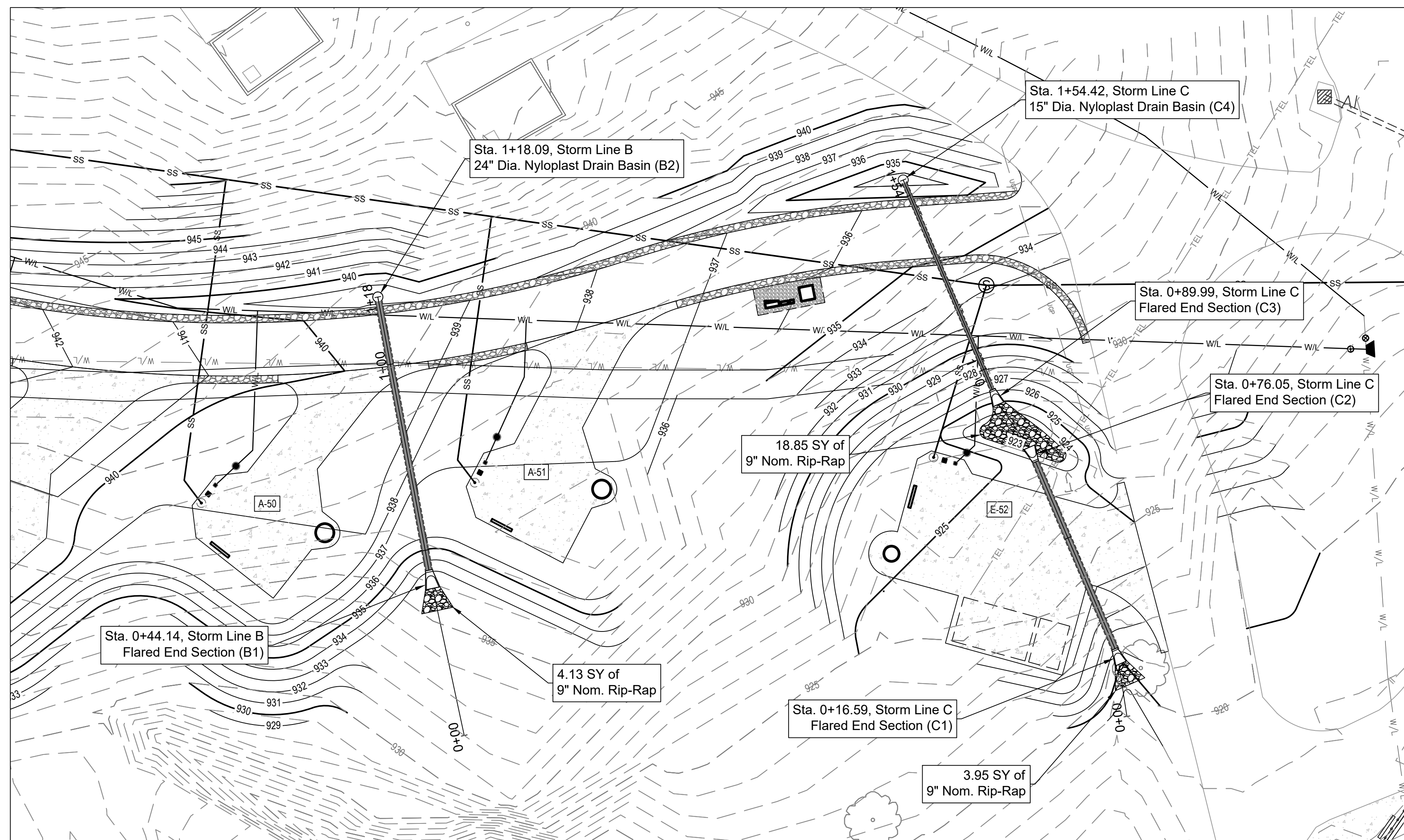
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SHEET TITLE:  
STORM LINES B & C  
PLAN & PROFILE

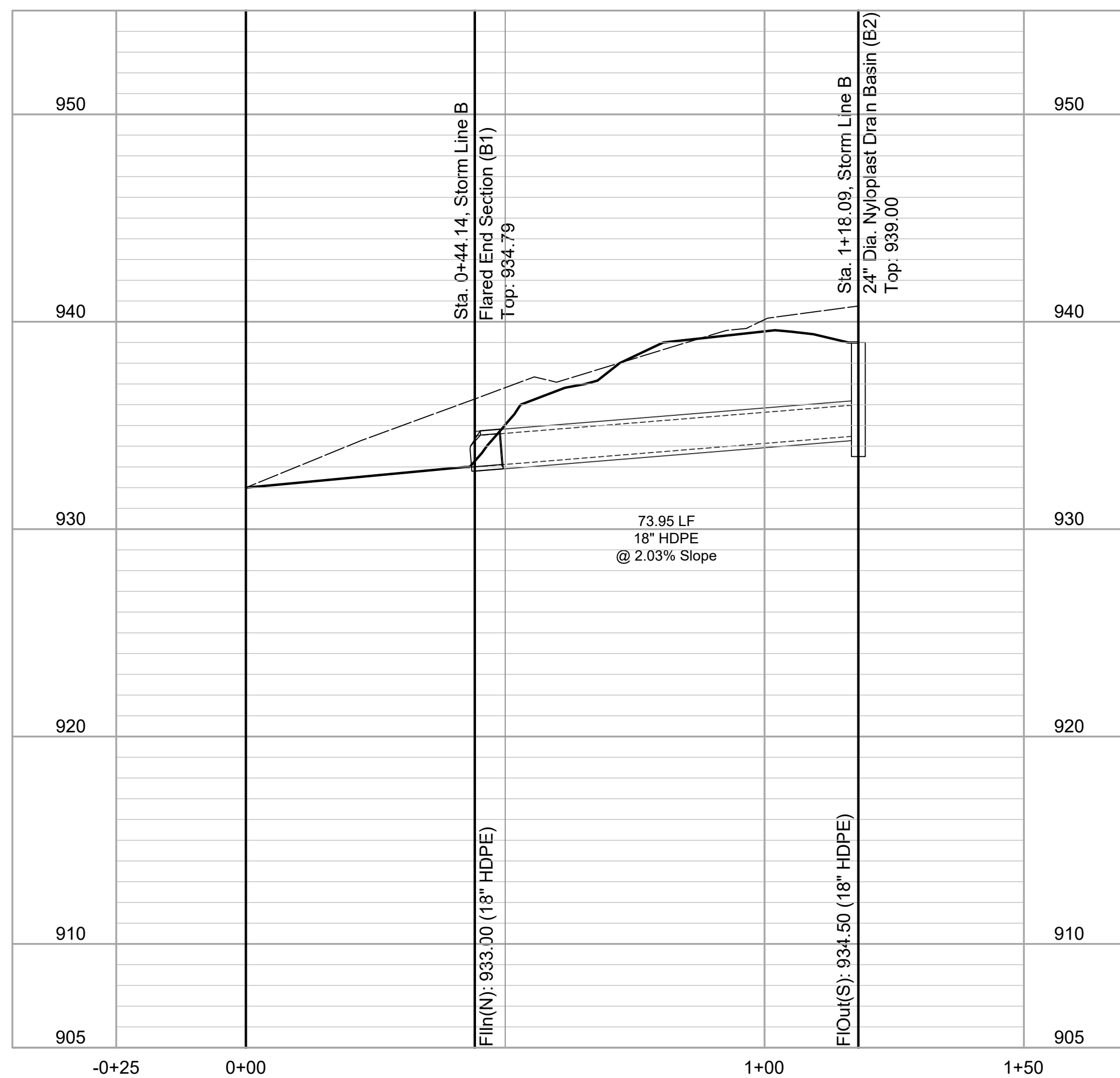
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C-403

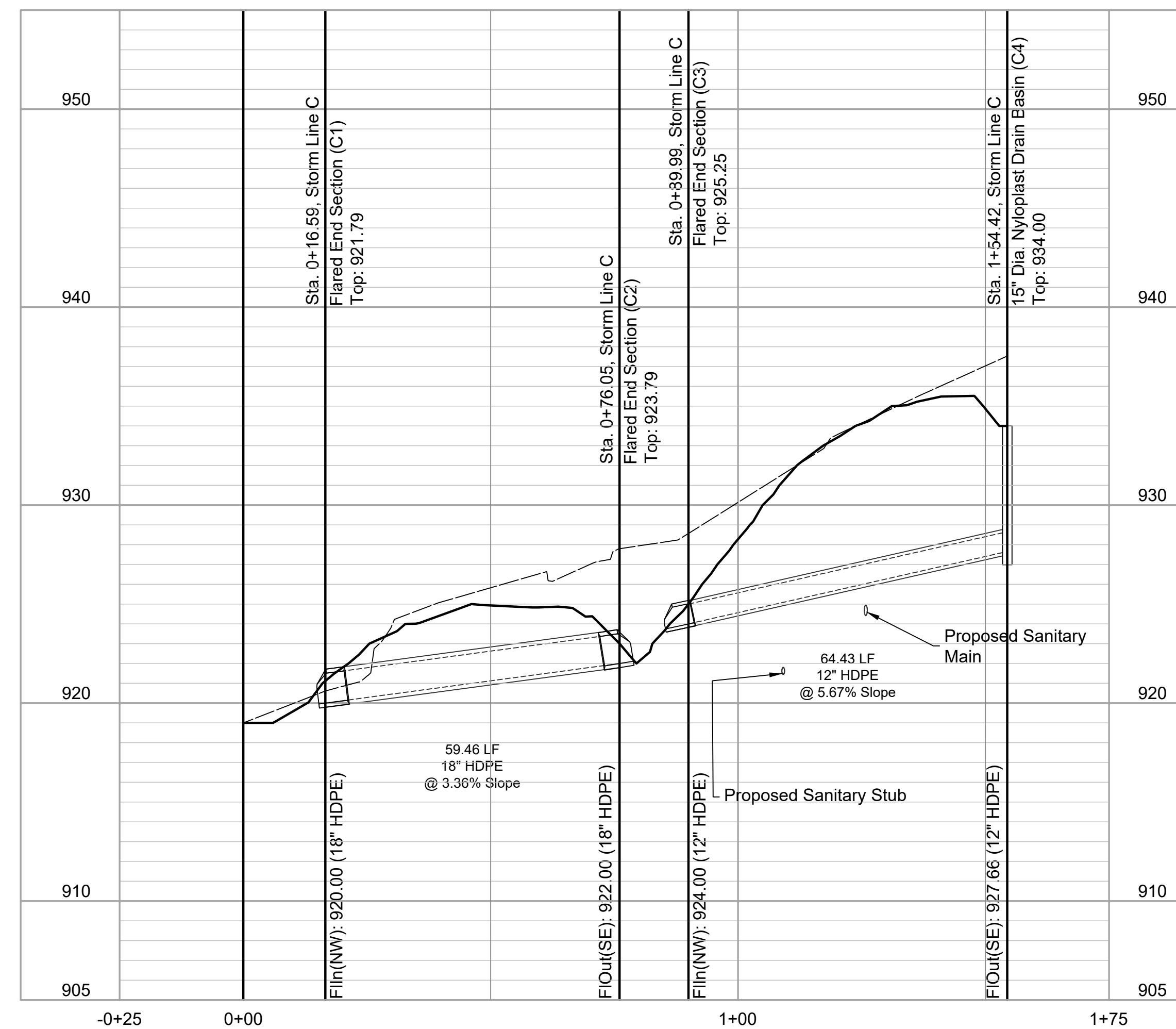
SHEET 19 OF 36  
12/12/2023



Storm Line B



Storm Line C







LANDSCAPE ARCHITECT:



LAC# MO-2002023826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-756-5890

SURVEYOR & CIVIL ENGINEER:

RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950



MEP:

ANTELLA CONSULTING ENGINEERS  
1600 Genessee Street, Suite 260  
Kansas City, Missouri 64102  
P 816-421-0950



GEOTECHNICAL:

INTERTEK-PSI  
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PROJECT # X2221-01  
SITE # 5118  
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REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

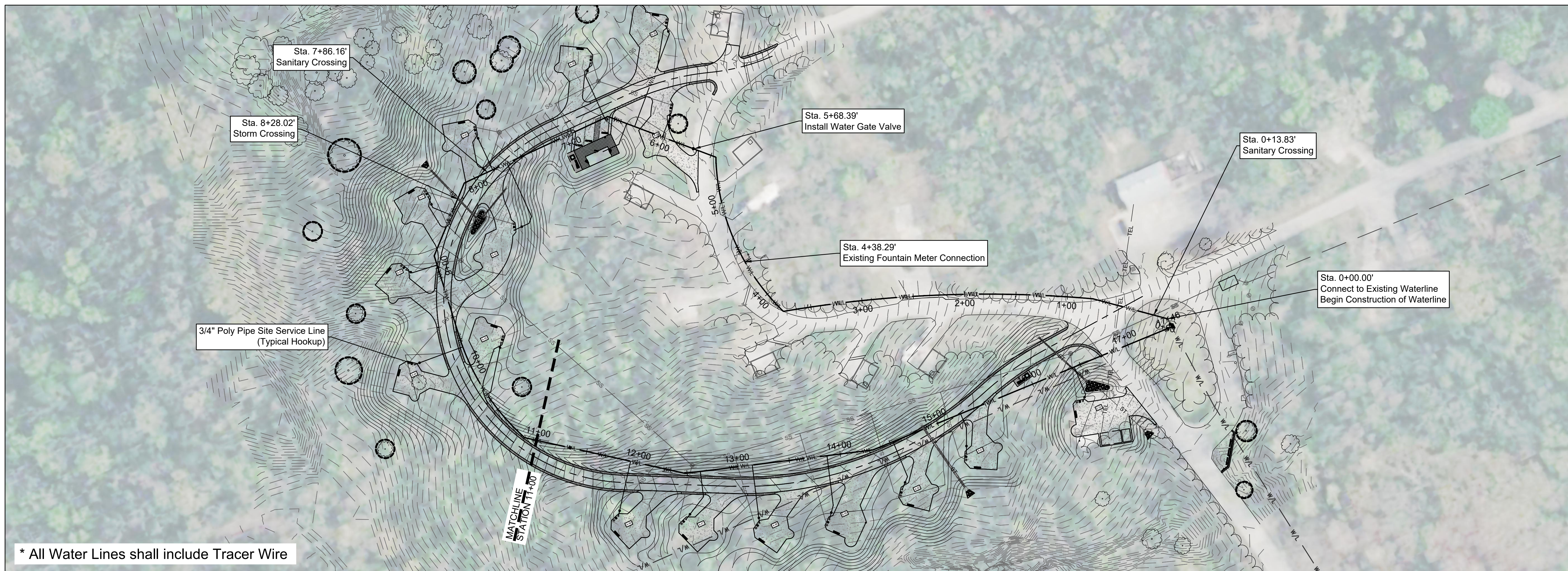
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DESIGNED BY: ZMM

SHEET TITLE:  
WATERLINE PLAN &  
PROFILE I

SHEET NUMBER:

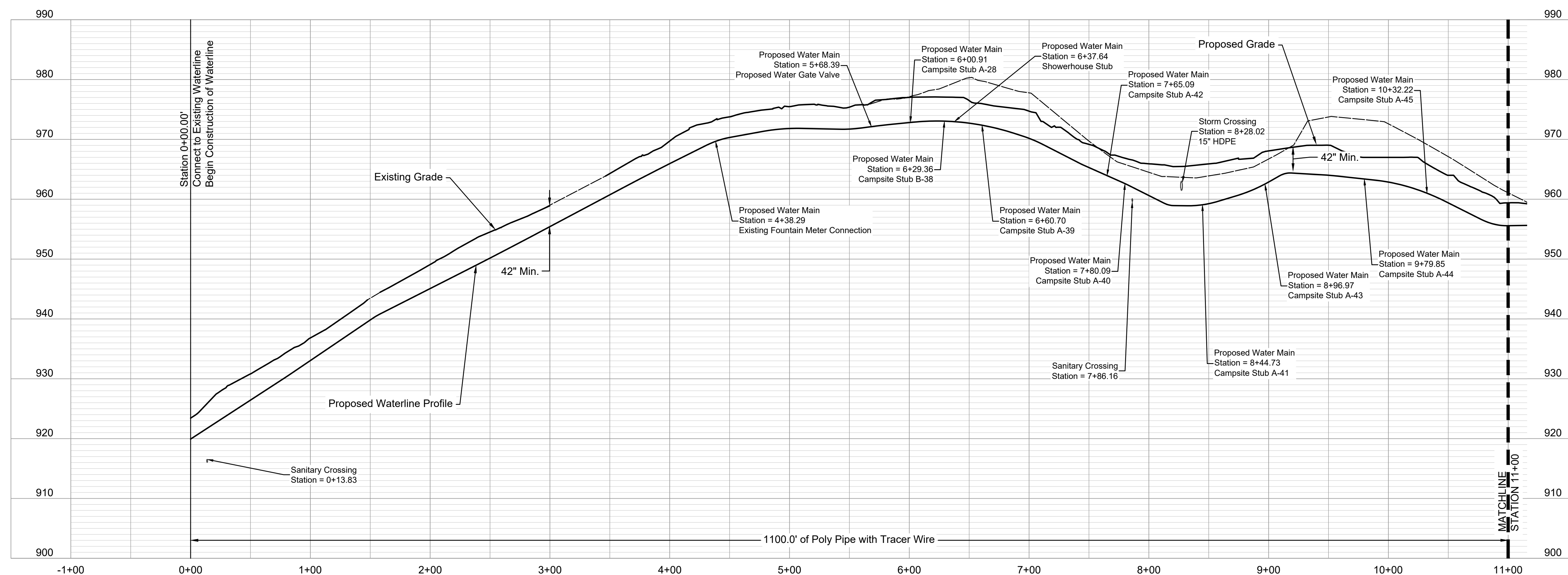
C-404

SHEET 20 OF 36  
12/12/2023



\* All Water Lines shall include Tracer Wire

## Waterline Profile







LANDSCAPE ARCHITECT:



LAC# MO-2002023826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-756-5890

SURVEYOR & CIVIL ENGINEER:

RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950



MEP:

ANTELLA CONSULTING ENGINEERS  
1600 Genessee Street, Suite 260  
Kansas City, Missouri 64102  
P 816-421-0950



GEOTECHNICAL:

INTERTEK-PSI  
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OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
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MISSOURI STATE PARKS

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WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
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REVISION: \_\_\_\_\_  
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REVISION: \_\_\_\_\_  
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ISSUE DATE: 12/12/2023

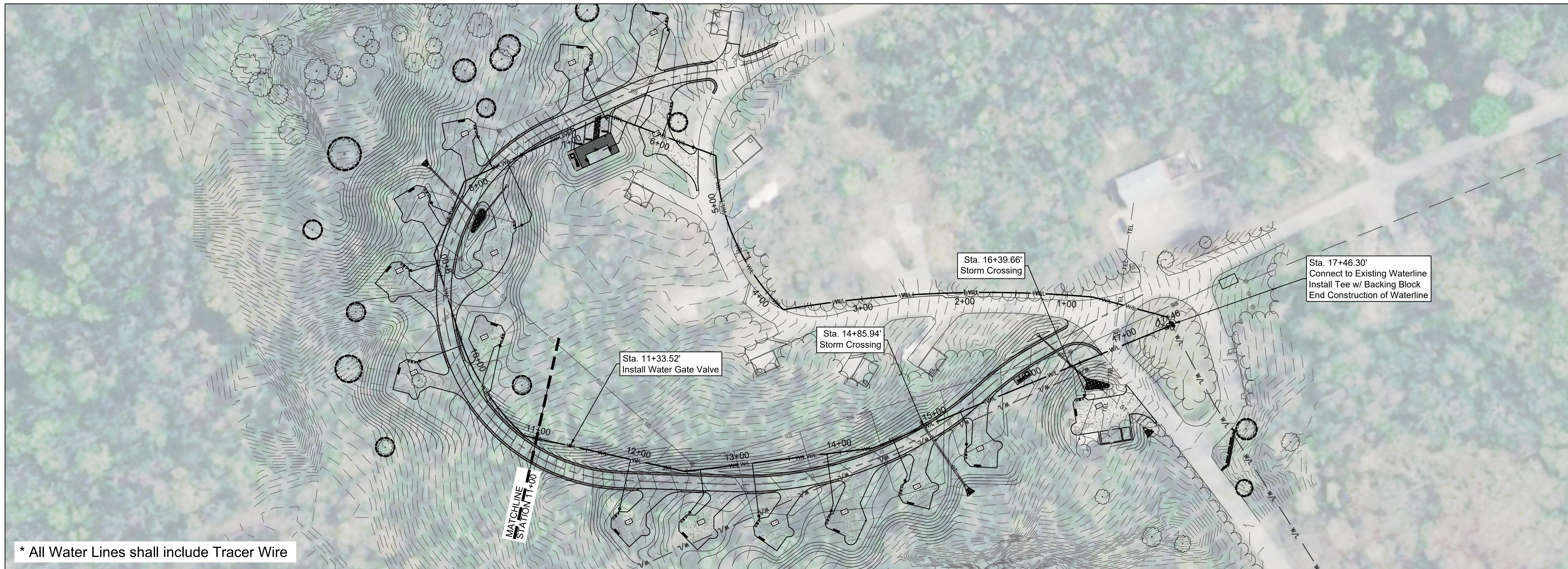
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CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
WATERLINE PLAN &  
PROFILE II

SHEET NUMBER:

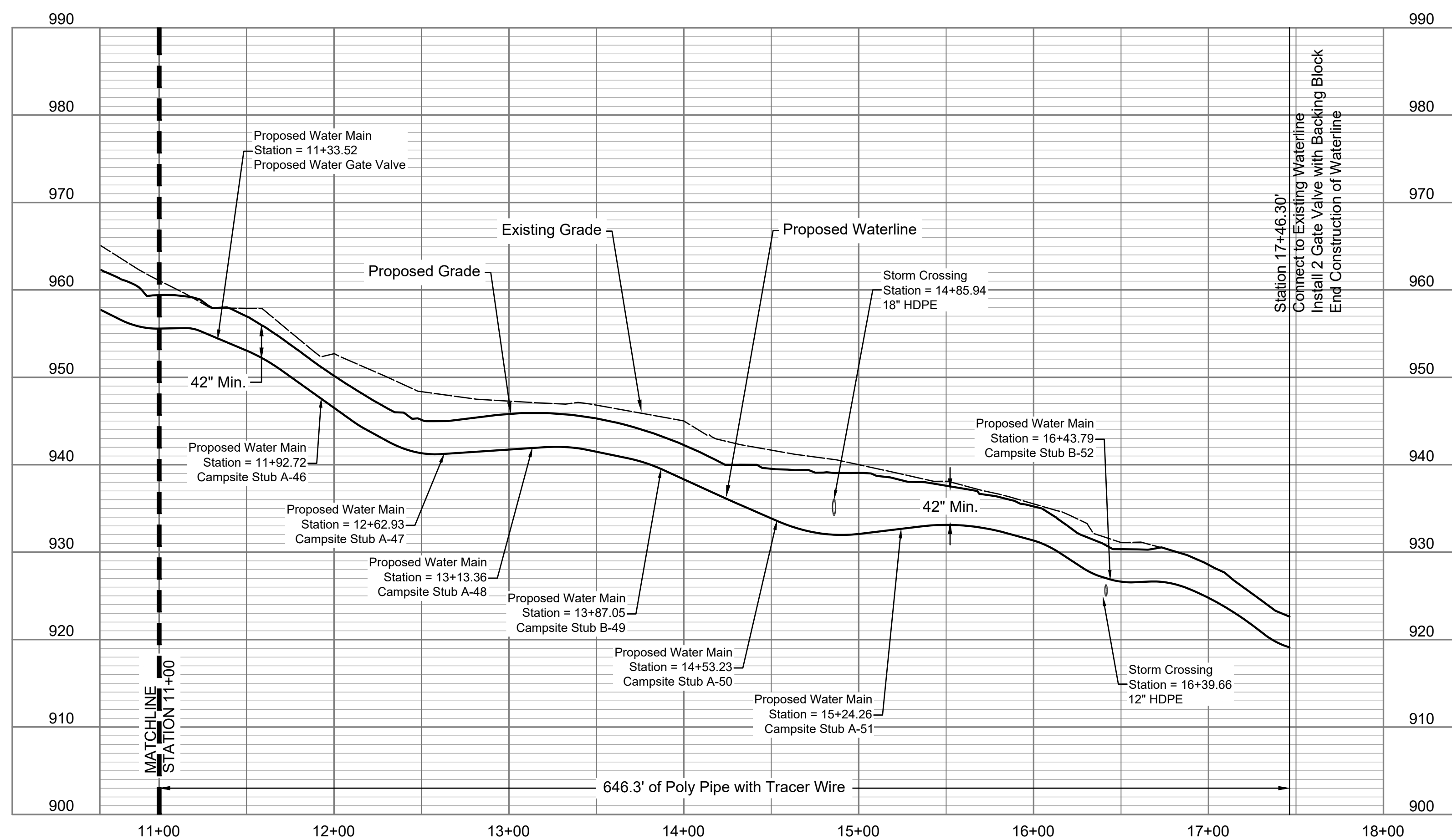
C-405

SHEET 21 OF 36  
12/12/2023

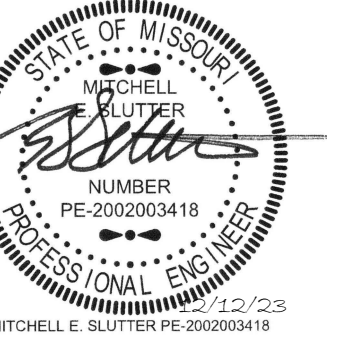


\* All Water Lines shall include Tracer Wire

## Waterline Profile







LANDSCAPE ARCHITECT:



LAC# MO-2002023826  
414 Oak Street, Suite 101  
Kansas City, Missouri 64108  
P 816-766-5890

SURVEYOR & CIVIL ENGINEER:

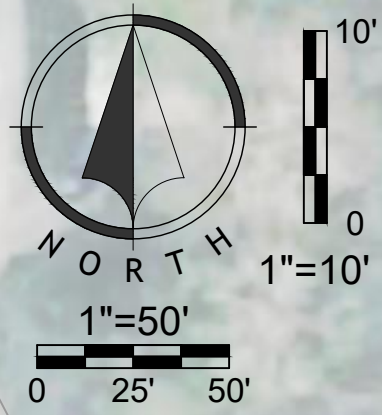
RENAISSANCE INFRASTRUCTURE  
CONSULTING  
400 E. 17th Street  
Kansas City, Missouri 64108  
P 816-800-0950

MEP:

ANTELLA CONSULTING ENGINEERS  
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P 816-421-0950

GEOTECHNICAL:

INTERTEK-PSI  
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Kansas City, Kansas 66103  
P 913-310-1600



OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES,  
MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
ISSUE DATE: 12/12/2023

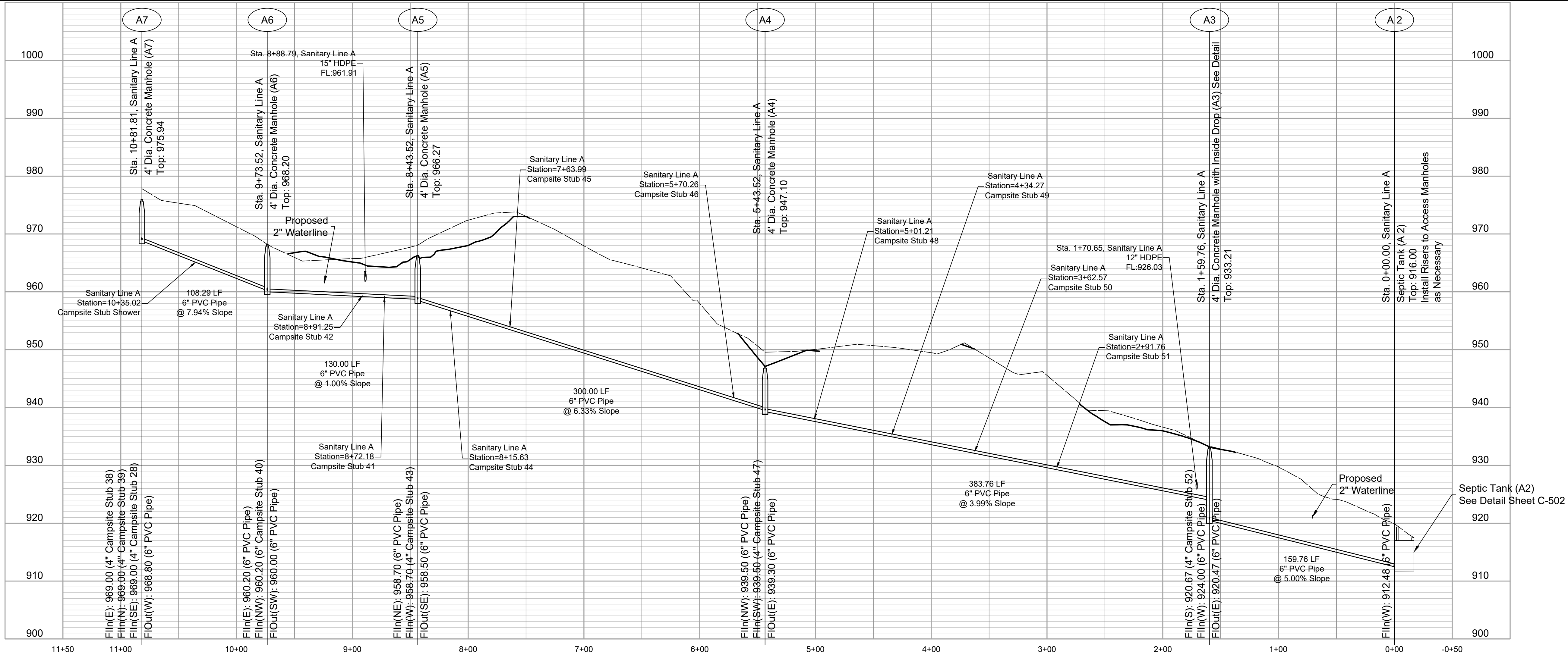
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DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
SANITARY PLAN  
& PROFILE

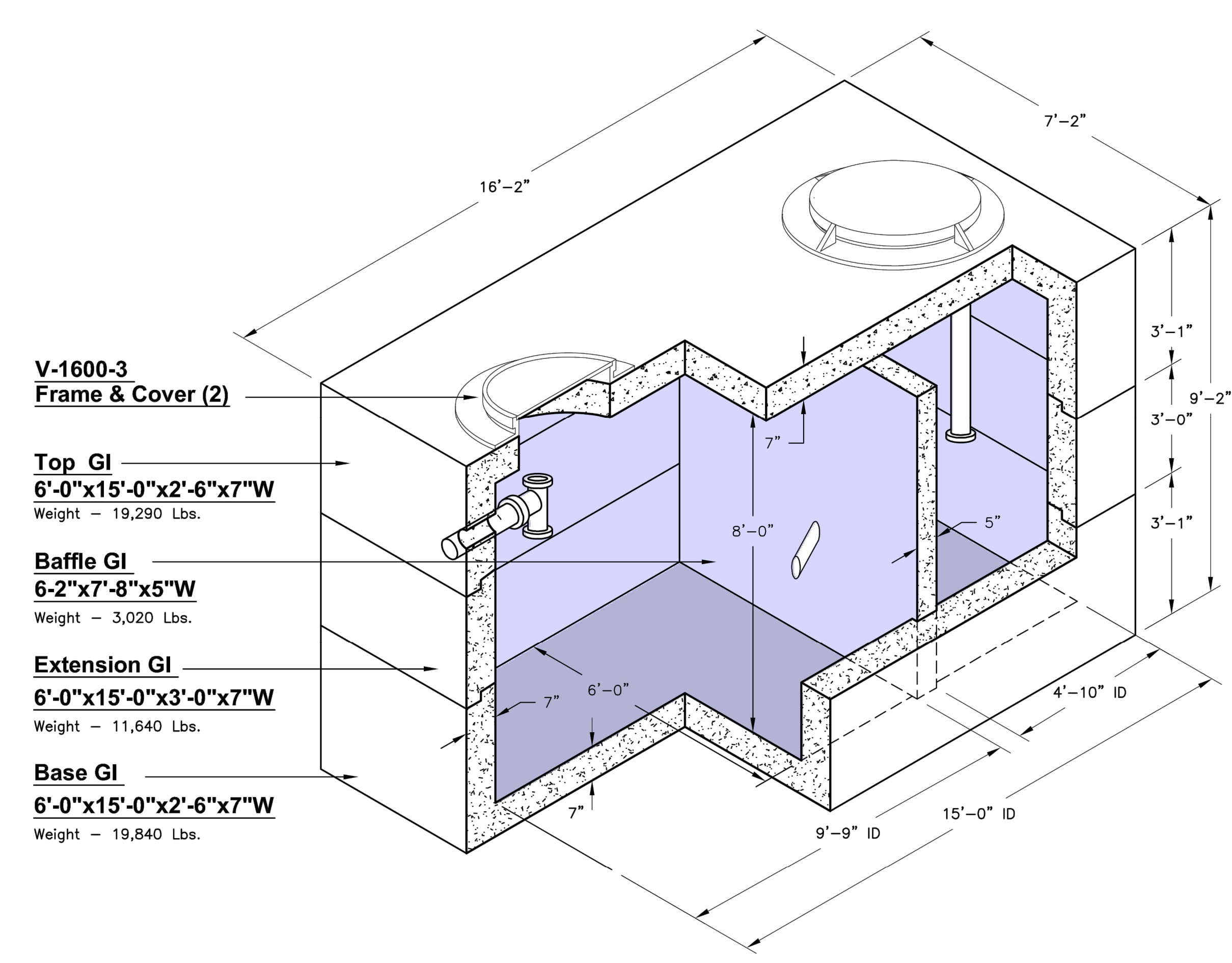
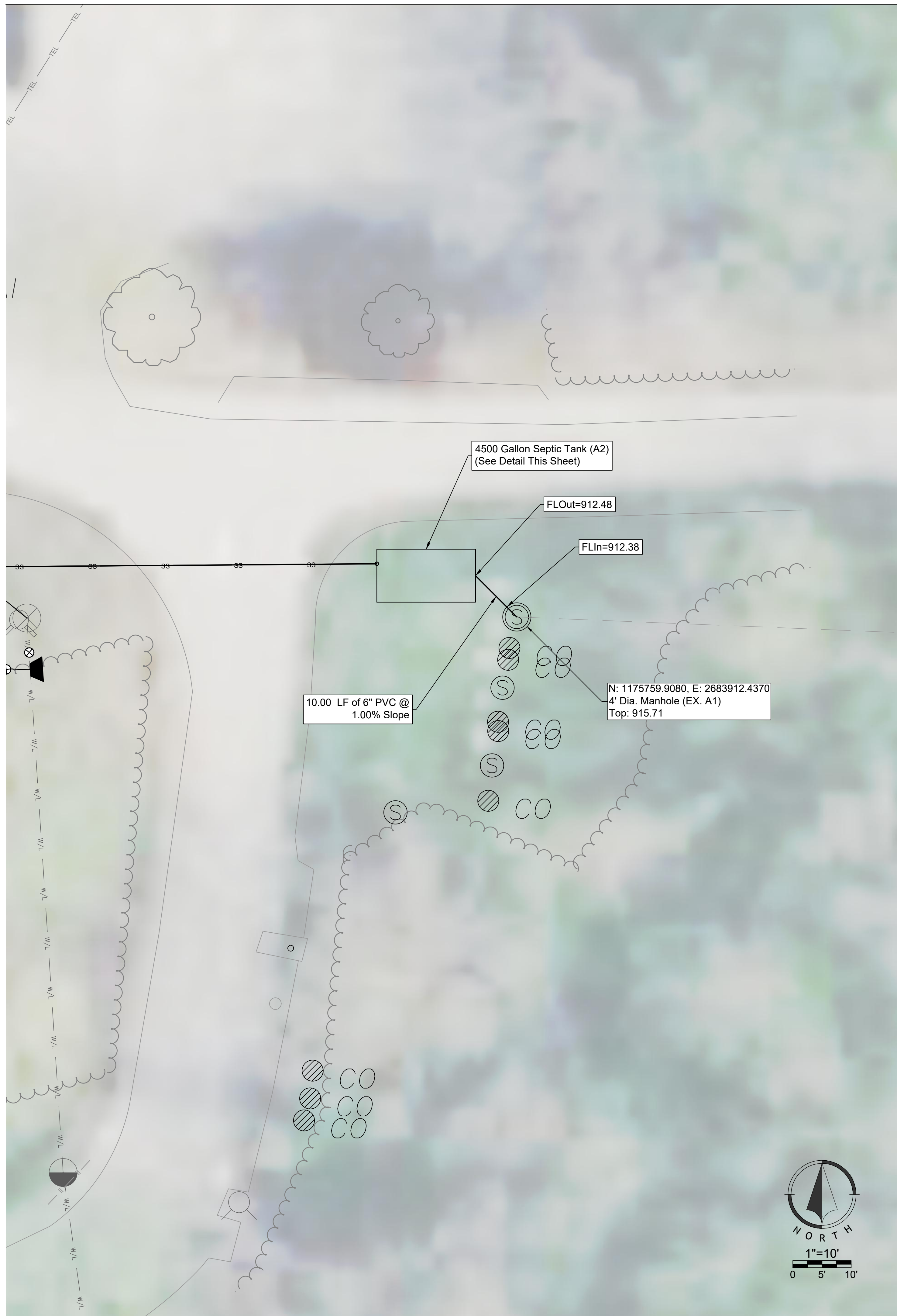
SHEET NUMBER:

C-501

SHEET 22 OF 36  
12/12/2023







**4.500 Gallon Septic Tank Detail**

**SPECIFICATIONS:**

1. Concrete: Design Strength of 5500 PSI at 28 Days.
2. Steel Reinforcement: ASTM A-615 Grade 60.
3. Loading: Designed for HS-20 Loading.
4. C.I. Castings: ASTM A-48 Class 30/35.

**GENERAL NOTES:**

1. Interceptor is Structurally and Hydraulically Engineered Conforming to Uniform Plumbing Code.
2. Liquid Capacity is 4,588 Gallons with Solids Retention Capacity of Approx. 17,200 Pounds.
3. Recommended for Flow Rate up to 70 GAL Per Minute.



LAC# MO-200203826  
414 Oak Street, Suite 101  
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P 816-756-5890

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**MEP:**  
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16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
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ISSUE DATE: 12/12/2023

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SHEET TITLE:  
**SANITARY SEPTIC TANK  
PLAN**

SHEET NUMBER:  
**C-502**  
SHEET 23 OF 36  
12/12/2023



SANITARY STUBS

LINE A													
Campsite Number	Downstream Manhole	Distance Down Stream (LF)	Connection Type	Length of Service Line (LF)	Type of Service Line	Slope of Service Line	FL @ Connection	Tee Offset (T)	Length of Riser (R)	Length of Lateral (L)	Proposed Grade @ EOS +/- (LLC)	Service Line EOS FL Elevation	Vertical Stub (LF)
52	A2	159.76	6"x4" TEE	47.57	4" PVC (SDR-26)	2.00%	920.67	0.50	0.00	47.57	925.37	922.12	3.25
51	A3	131.91	6"x4" TEE	72.48	4" PVC (SDR-26)	2.00%	929.26	0.50	3.00	70.90	937.00	933.73	3.27
50	A3	202.81	6"x4" TEE	87.75	4" PVC (SDR-26)	2.00%	932.09	0.50	2.00	86.70	939.10	936.03	3.07
49	A3	274.51	6"x4" TEE	92.78	4" PVC (SDR-26)	2.00%	934.95	0.50	0.00	92.78	940.80	937.31	3.49
48	A3	341.45	6"x4" TEE	76.02	4" PVC (SDR-26)	2.00%	937.62	0.50	0.00	76.02	942.80	939.64	3.16
47	A3	383.76	6"x4" TEE	59.00	4" PVC (SDR-26)	2.00%	939.51	0.50	0.00	59.00	944.60	941.19	3.41
46	A4	26.74	6"x4" TEE	92.61	4" PVC (SDR-26)	2.00%	941.19	0.50	2.50	91.30	948.80	945.65	3.15
45	A4	220.47	6"x4" TEE	28.39	4" PVC (SDR-26)	2.00%	953.46	0.50	13.00	21.56	968.40	965.45	2.95
44	A4	266.8	6"x4" TEE	110.58	4" PVC (SDR-26)	2.00%	956.39	0.50	8.00	106.38	968.90	965.82	3.08
43	A4	300	6"x4" TEE	58.47	4" PVC (SDR-26)	2.00%	958.69	0.50	5.75	55.45	968.25	965.19	3.06
42	A5	47.73	6"x4" TEE	38.82	4" PVC (SDR-26)	2.00%	959.18	0.50	0.00	38.82	966.35	960.45	5.90
41	A5	28.66	6"x4" TEE	63.52	4" PVC (SDR-26)	2.00%	958.99	0.50	2.50	63.52	966.10	962.88	3.22
40	A5	130	6"x4" TEE	24.67	4" PVC (SDR-26)	2.00%	960.20	0.50	1.00	24.14	965.10	962.03	3.07
SHWR	A6	61.5	6"x4" TEE	66.85	4" PVC (SDR-26)	2.00%	965.08	0.50	5.00	64.22	975.75	971.12	4.63
39	A7	0	6"x4" TEE	24.66	4" PVC (SDR-26)	2.00%	969.00	0.50	2.00	23.61	974.79	971.67	3.12
38	A7	0	6"x4" TEE	89.45	4" PVC (SDR-26)	2.00%	969.00	0.50	1.50	88.66	975.80	972.55	3.25
28	A7	0	6"x4" TEE	74.67	4" PVC (SDR-26)	2.00%	969.00	0.50	3.00	73.09	976.70	973.51	3.19

SANITARY CAPACITY CALCS

Downstream Manhole	Users	Sewer Demand (GPD)	Contributing Flow (GPD)	Total Average Flow (GPD)	Total Average Flow (cfs)	Peak Factor	Total Peak Flow (cfs)	Pipe Size (inches)	Slope %	Full Flow Velocity (fps)	67% Capacity (cfs)	Q	A	n	R	P
Shower House	40	15	600	600	0.0009	3	0.0028	6	7.94%	8.1	1.1	1.58	0.20	0.013	0.13	1.57
A6	3	120	360	960	0.0015	3	0.0045	6	7.94%	8.1	1.1	1.58	0.20	0.013	0.13	1.57
A5	3	120	360	1320	0.0020	3	0.0061	6	1.00%	2.9	0.4	0.56	0.20	0.013	0.13	1.57
A4	4	120	480	1800	0.0028	4	0.0111	6	6.33%	7.2	0.9	1.41	0.20	0.013	0.13	1.57
A3	5	120	600	2400	0.0037	5	0.0186	6	3.99%	5.7	0.8	1.12	0.20	0.013	0.13	1.57
A2	1	120	120	2520	0.0039	6	0.0234	6	5.00%	6.4	0.8	1.25	0.20	0.013	0.13	1.57

Note: Minimum Cleansing Velocity = 2 fps per MDNR Minimum Design Standards for Gravity Sewers

SEPTIC TANK AND LATERAL FIELD CALCS

	Peaking Factor	Daily Sewage Flow (GPD)	Calculated Required Tank Size (GPD)	Tank Size Used (Gallons)
Septic Tank Size:	1.5	2520	4280	4500



LANDSCAPE ARCHITECT:



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414 Oak Street, Suite 101  
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P 816-736-5890

SURVEYOR & CIVIL ENGINEER:

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MEP:

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MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
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ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
SANITARY STUBS &  
CALCS

SHEET NUMBER:

C-503

SHEET 24 OF 36  
12/12/2023





LANDSCAPE ARCHITECT:



LAC# MO-2002023826  
414 Oak Street, Suite 101  
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CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
SANITARY  
DETAILS I

SHEET NUMBER:

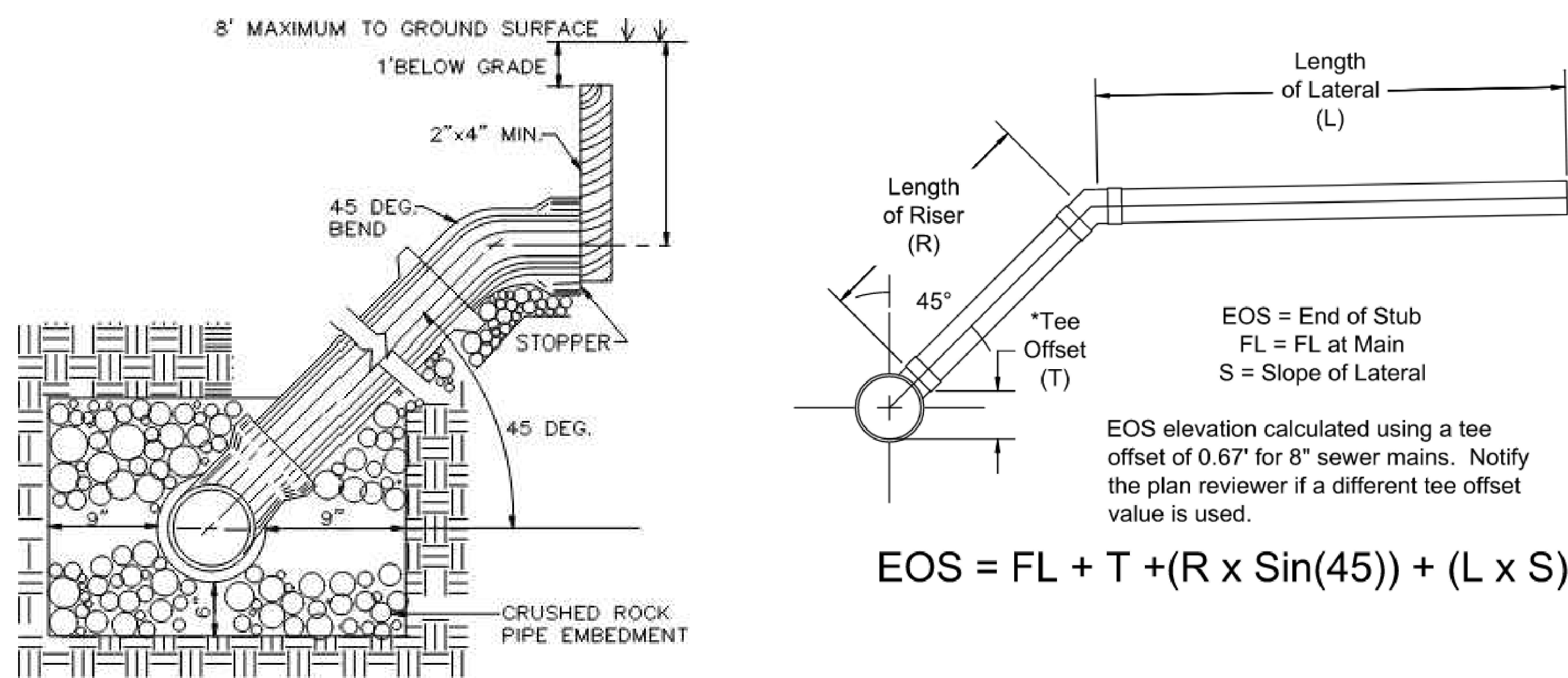
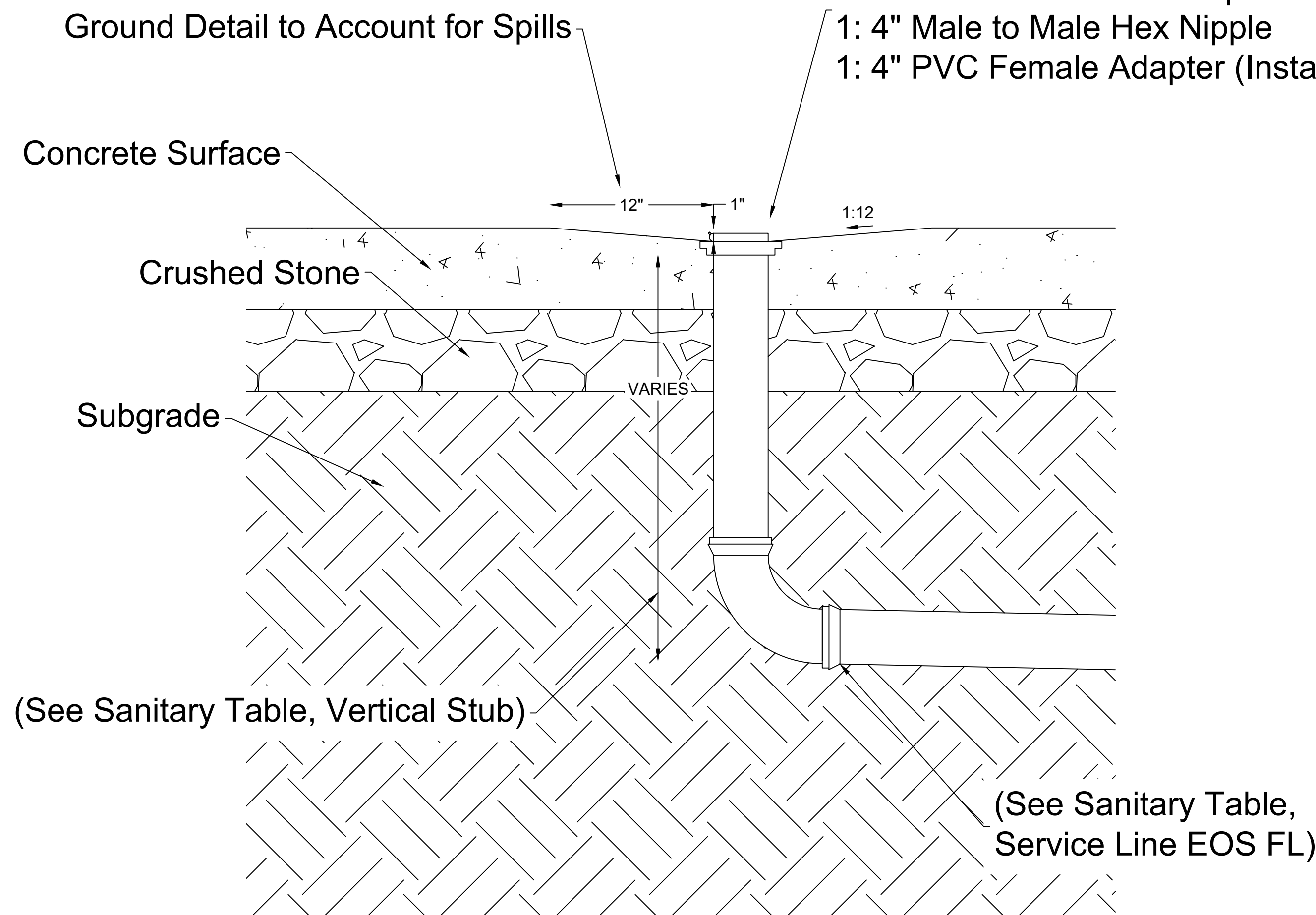
C-504

SHEET 25 OF 36  
12/12/2023

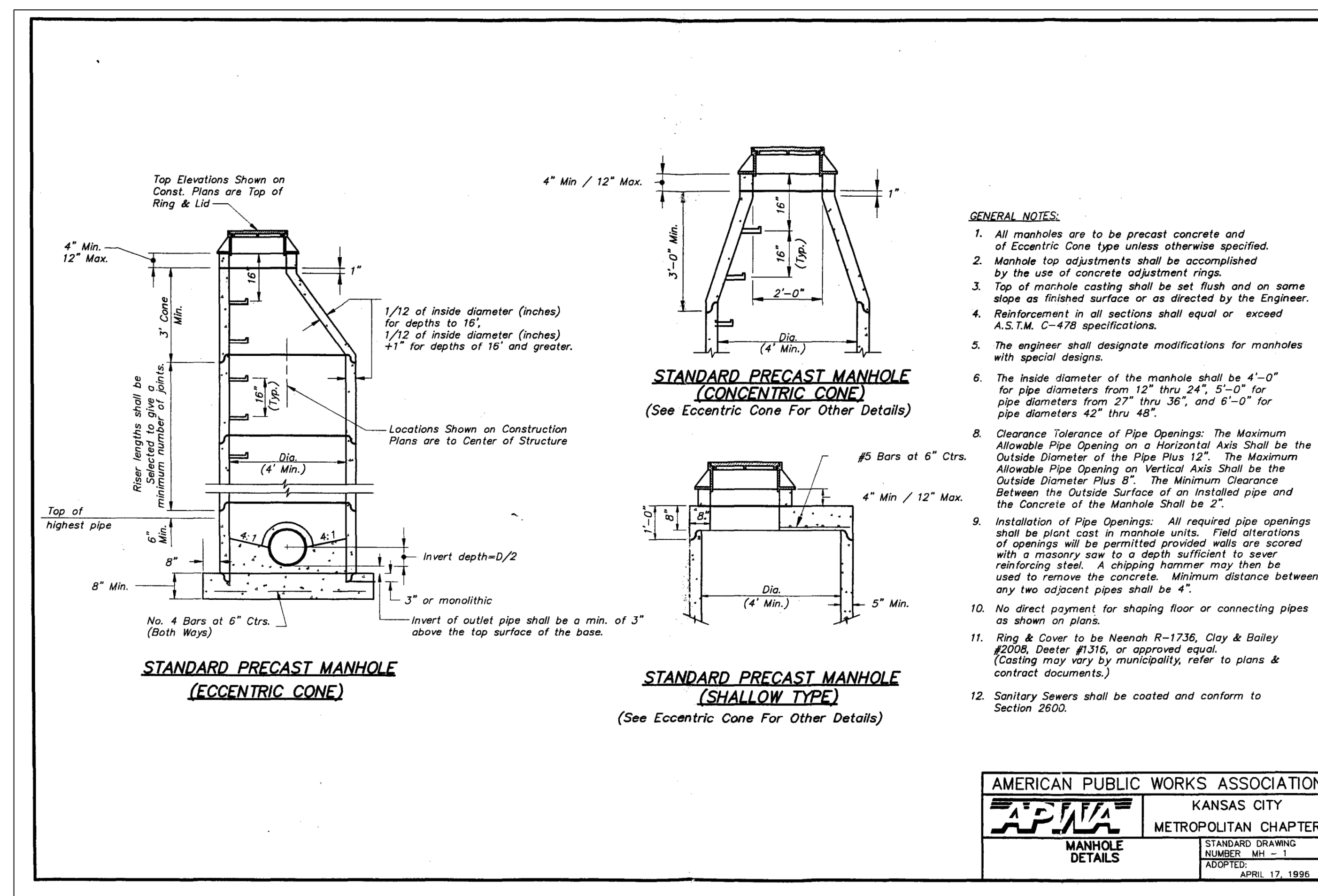
The Tower Company, Inc.  
4" RV Site Sewer Cap, Cast Metal  
(Or approved equal)



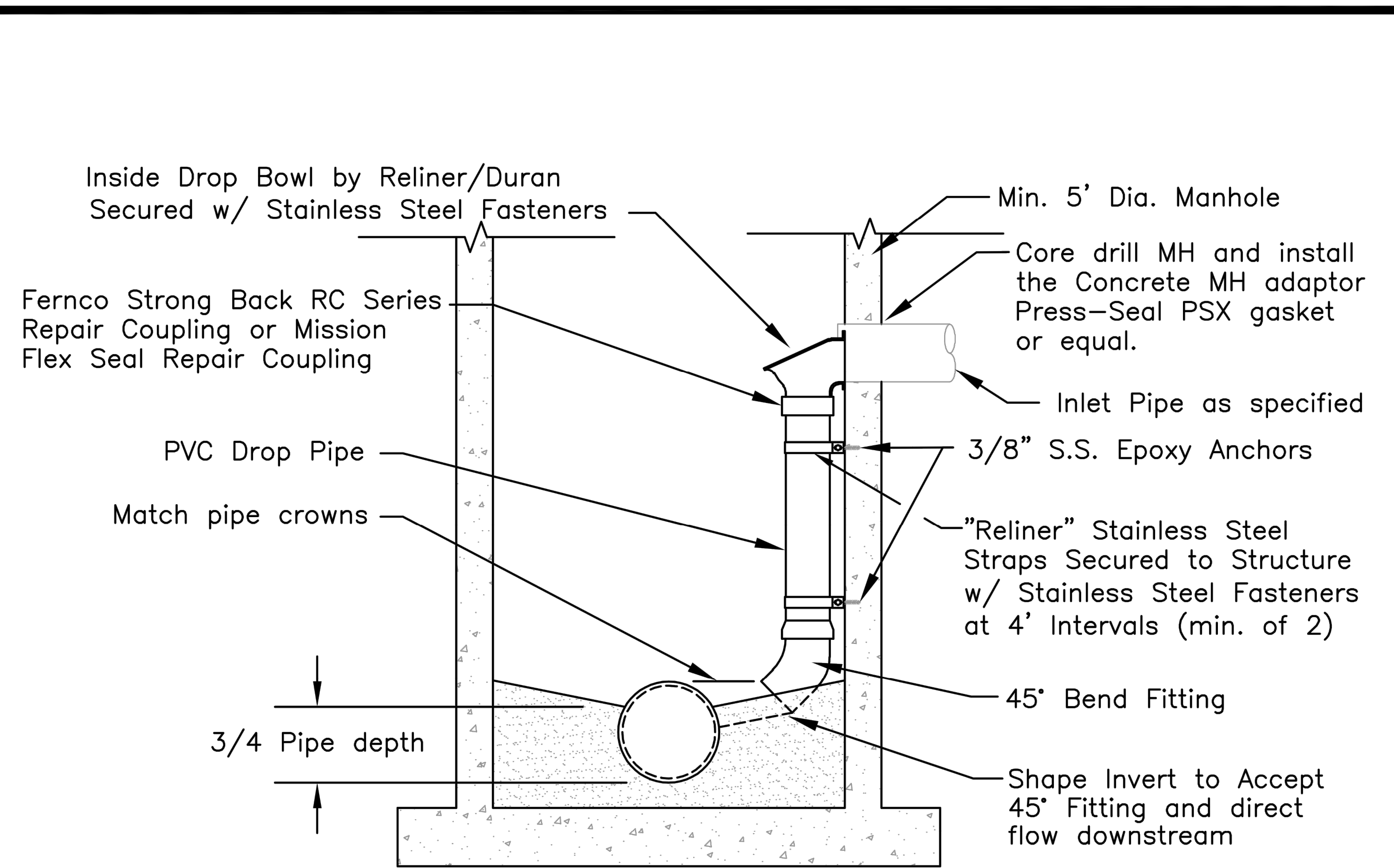
EOS Top Detail, Install:  
1: 4" Cast Metal Sewer Cap  
1: 4" Male to Male Hex Nipple  
1: 4" PVC Female Adapter (Installed flush in concrete)



STANDARD DEEP TRENCH SERVICE RISER  
NOT TO SCALE







Note: Drop pipe shall not conflict with MH steps.

\* Schedule 40 PVC with solvent sealed joints. Solvent shall be the type recommended by manufacture.

INSIDE DROP SELECTION BOWL TABLE		
Inlet Pipe Dia.	Reliner Size	Drop Pipe Dia.
8-INCH	B-8	8-INCH
10-INCH	B-10	10-INCH
12-INCH	24" BOWL	12-INCH
15 to 18-INCH	30" BOWL	18-INCH

**INSIDE DROP BOWL DETAIL**



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16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

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SHEET TITLE:

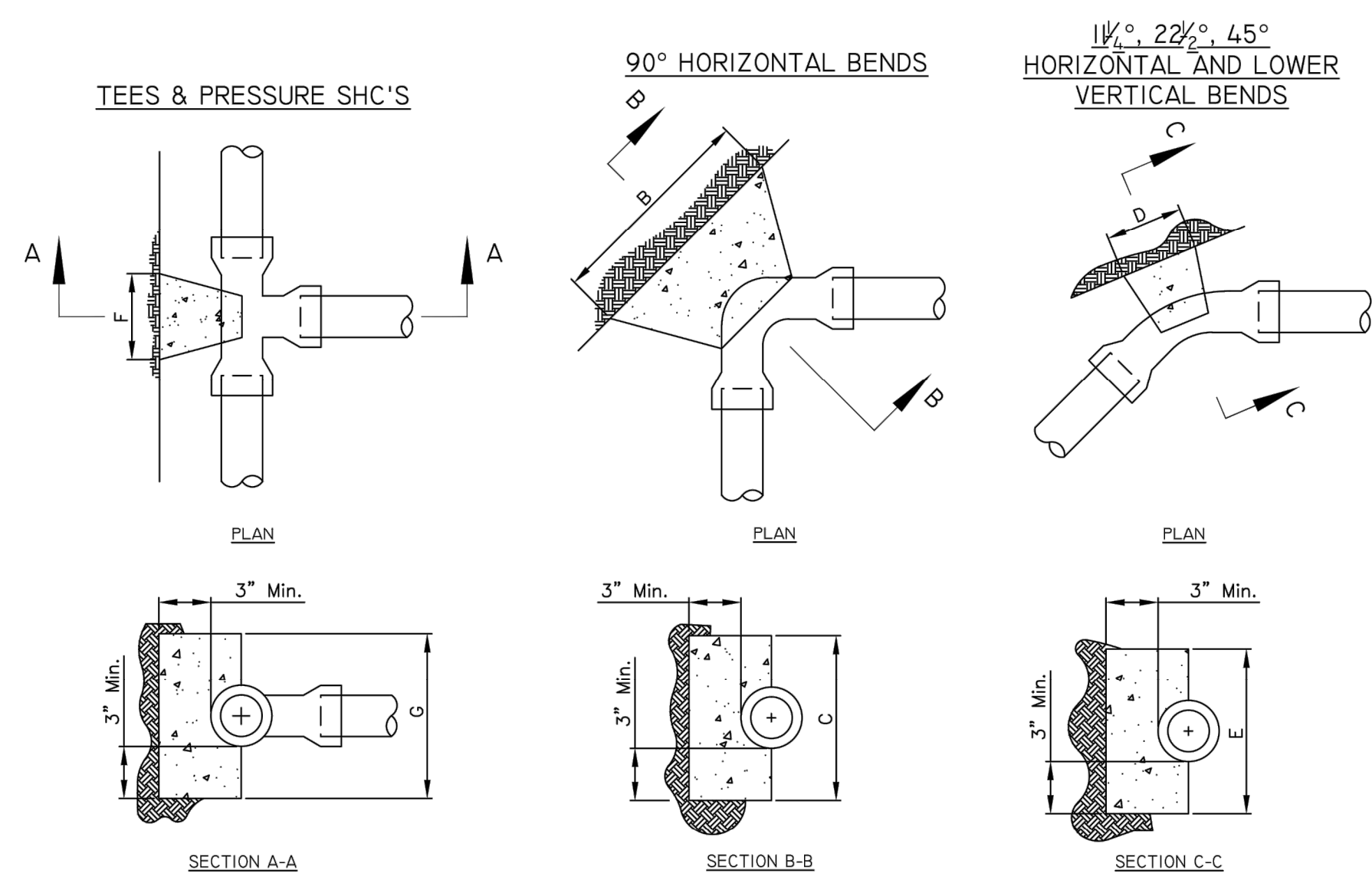
SANITARY  
DETAILS II

SHEET NUMBER:

**C-505**

SHEET 26 OF 36  
12/12/2023



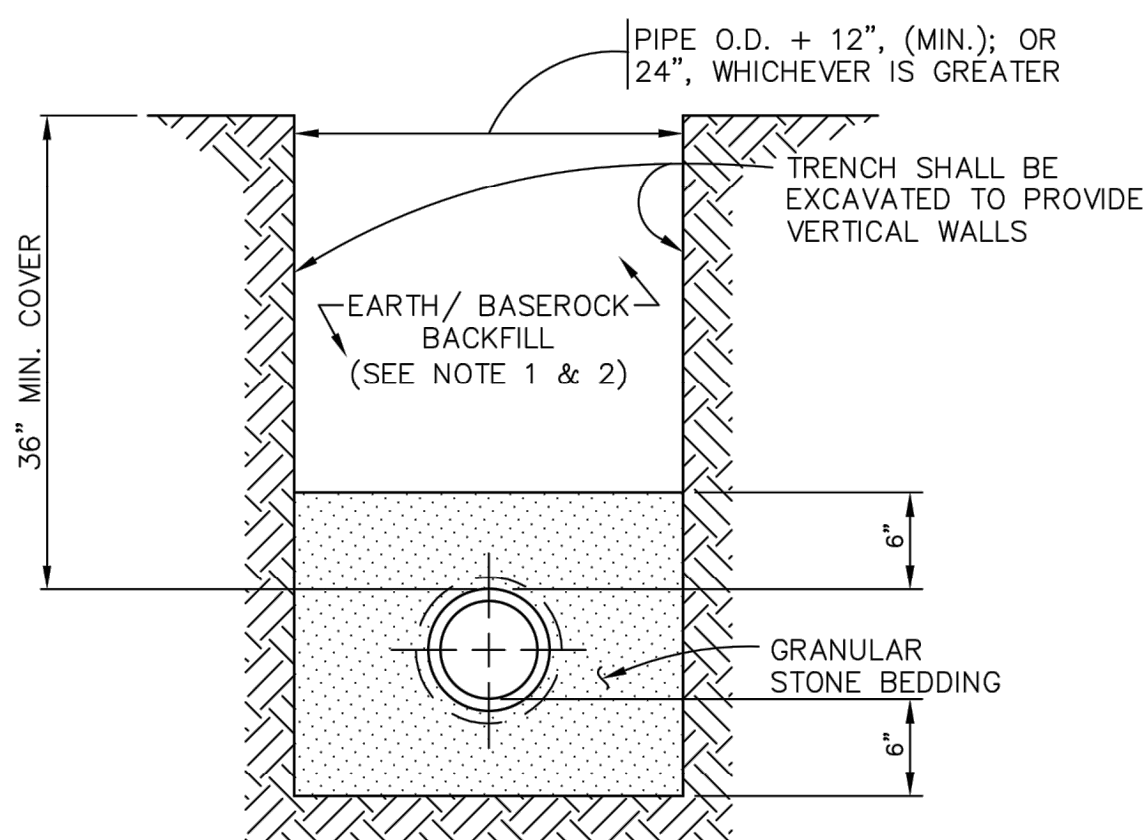


**BLOCKING SCHEDULE**

PIPE SIZE	B	C	D	E	F	G
1" THRU 1 1/2"	8"	8"	10"	5"	6"	6"
2"	10"	10"	14"	7"	10"	10"
2 1/2"	10"	10"	14"	7"	10"	10"
3"	12"	12"	18"	9"	12"	12"
4"	13"	12"	24"	12"	16"	16"

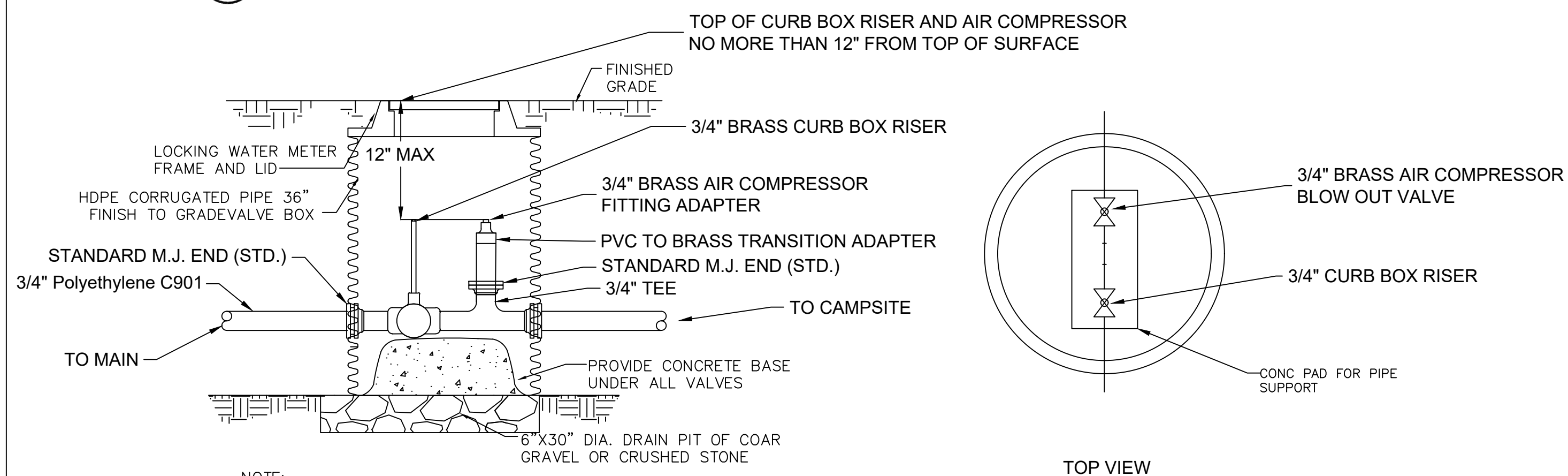
- NOTES:**
- USE TYPE 1 CONCRETE
  - CARRY ALL BEARING SURFACES TO UNDISTURBED GROUND OR FIRM SUBGRADE
  - BUTTRESS SIZED FOR 160 PSI
  - DO NOT ENCASE JOINTS
  - ONLY MIX WITH POTABLE WATER

**3 THRUST BLOCKING**  
C18 NTS



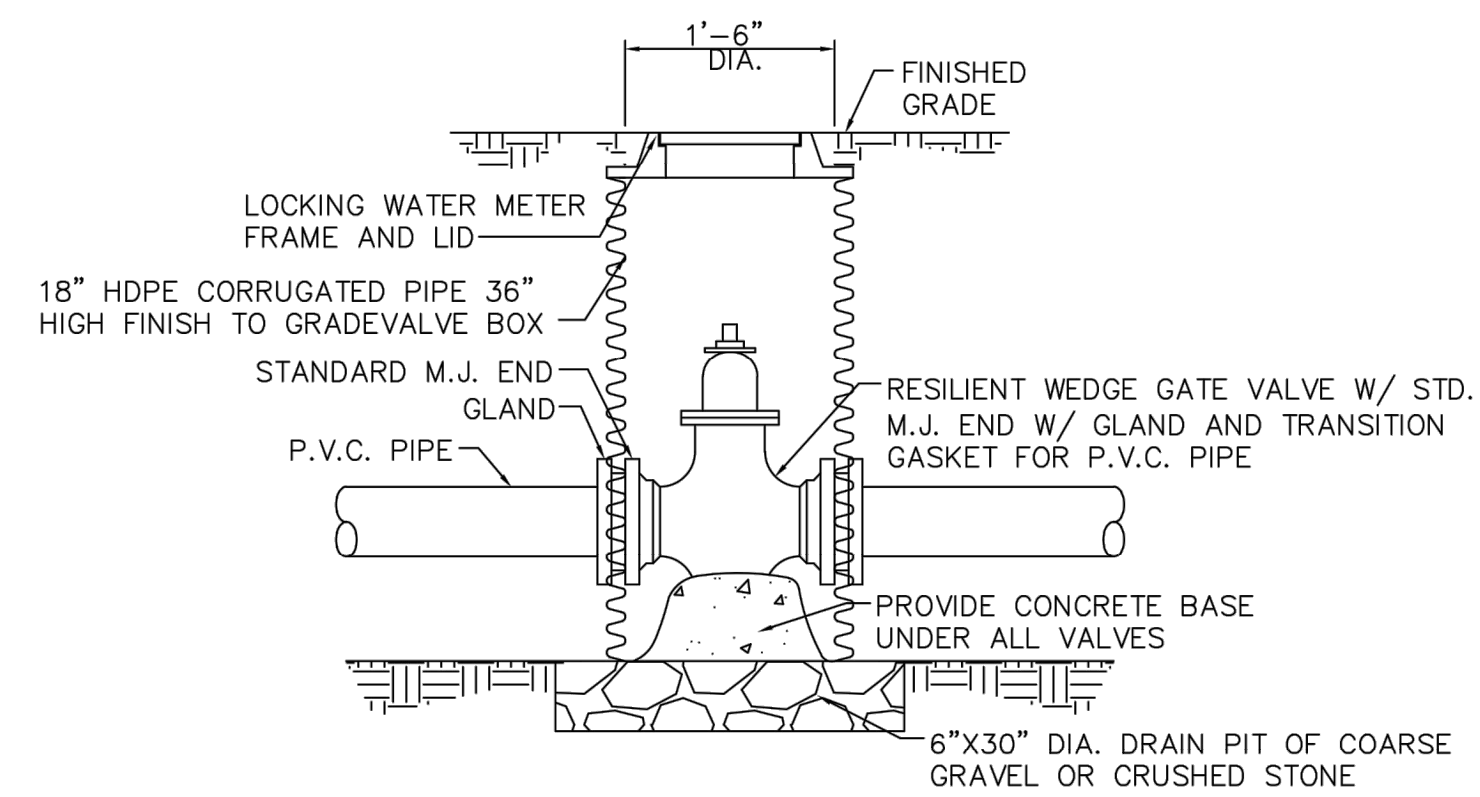
- NOTE:**
- TRENCH SHALL BE BACKFILLED AND COMPACTED FULL DEPTH WITH GRANULAR STONE ON ALL ROAD CROSSINGS.
  - WATER LINES INSTALLED WITHIN ROAD DITCH SHALL REPAIR DITCH WITH A 6" MINIMUM DEPTH OF CLEAN ROCK WITH A NOMINAL DIAMETER OF 4".

**8 WATER LINE TRENCH & BEDDING DETAIL**  
C18 N.T.S.



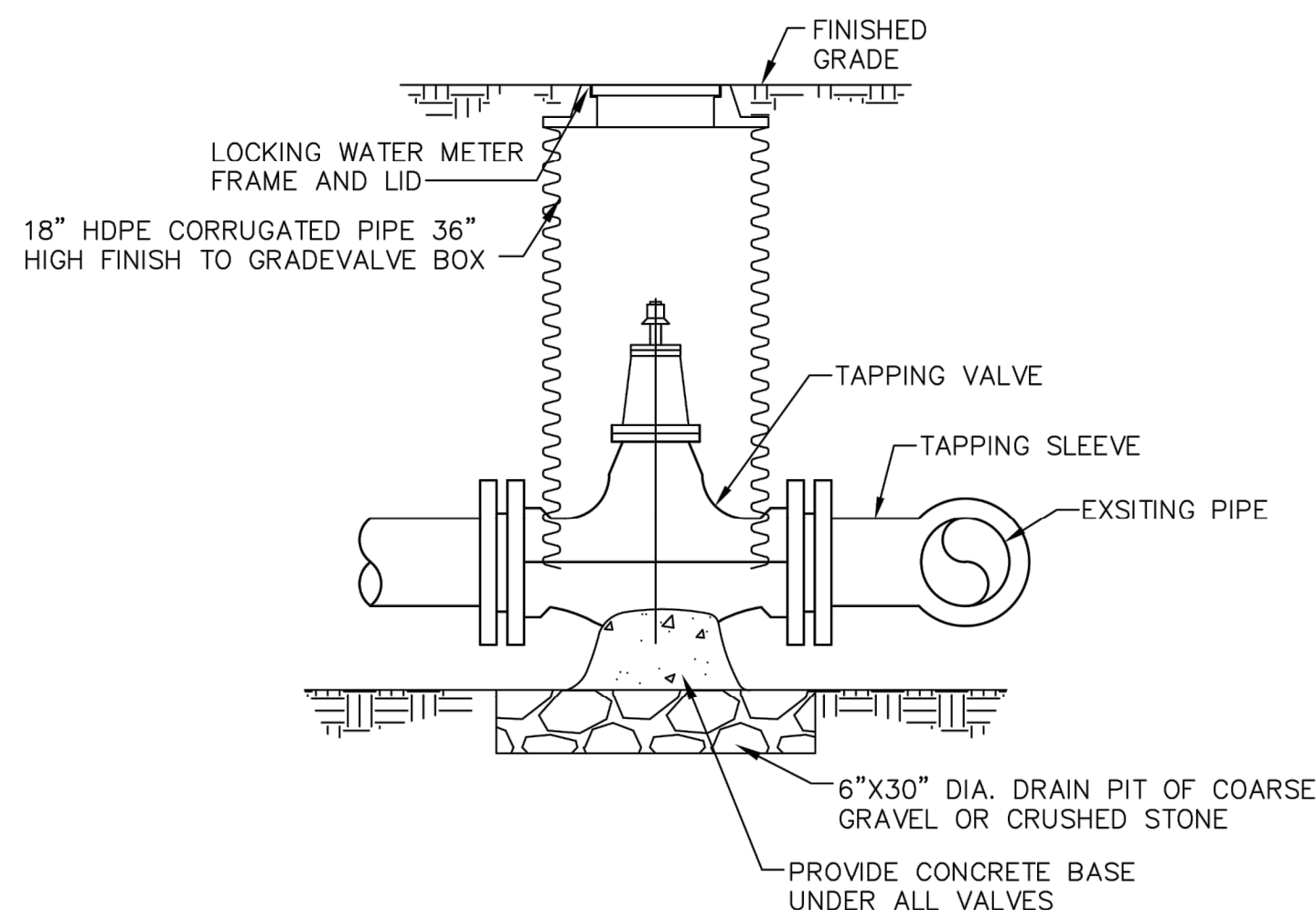
- NOTE:**
- WHEN GATE VALVE IS INSTALLED IN EXISTING DUCTILE OR C.I. PIPE, REPLACE TRANSITION GASKET W/ STANDARD M.J. GASKET.

**2 VALVE BOX - CAMPSITE**  
C18 NTS

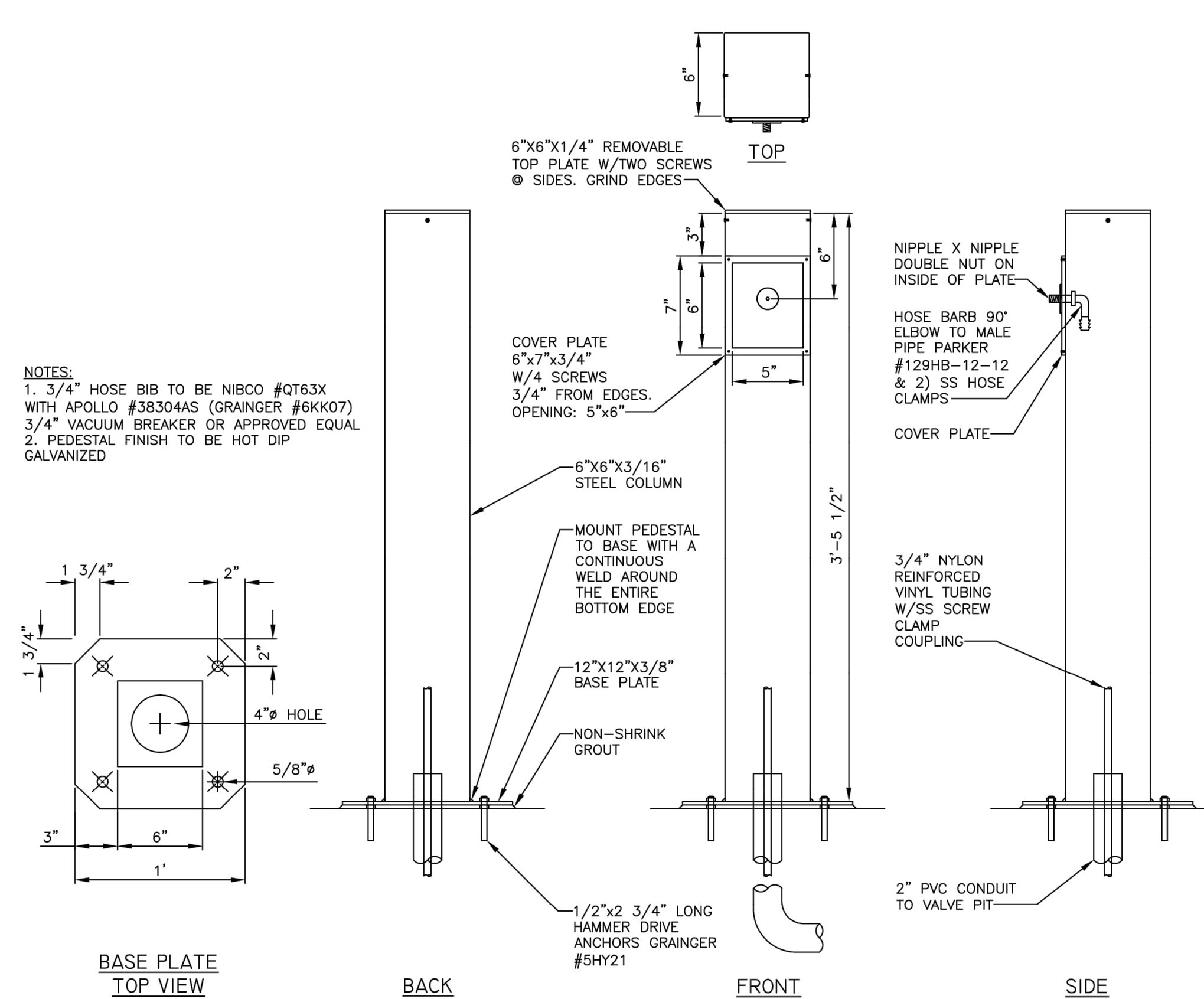


- NOTE:**
- WHEN GATE VALVE IS INSTALLED IN EXISTING DUCTILE OR C.I. PIPE, REPLACE TRANSITION GASKET W/ STANDARD M.J. GASKET.

**5 GATE VALVE INSTALLATION DETAIL**  
C18 NTS

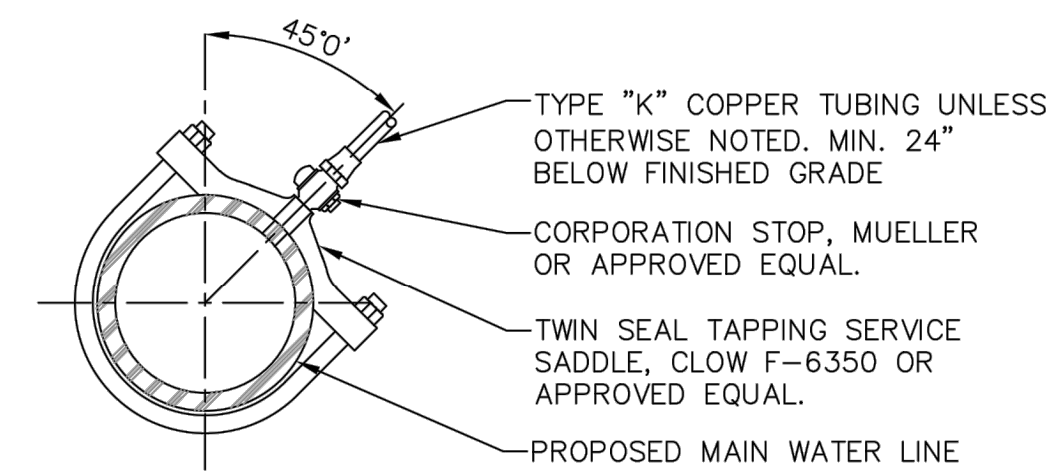


**6 TAPPING VALVE & SLEEVE INSTALLATION**  
C18 NTS



- NOTES:**
- 3/4" HOSE BIB TO BE NIBCO #0T63X WITH APOLLO #38304AS (GRANGER #6KK07) 3/4" VACUUM BREAKER OR APPROVED EQUAL
  - PEDESTAL FINISH TO BE HOT DIP GALVANIZED

**1 WATER PEDESTAL**  
C18 NTS



**4 SERVICE TAP DETAIL**  
C18 NTS



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PROJECT # X2221-01  
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CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
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DESIGNED BY: ZMM

SHEET TITLE:

WATER  
DETAILS

SHEET NUMBER:

C-506

SHEET 27 OF 36  
12/12/2023





LANDSCAPE ARCHITECT:



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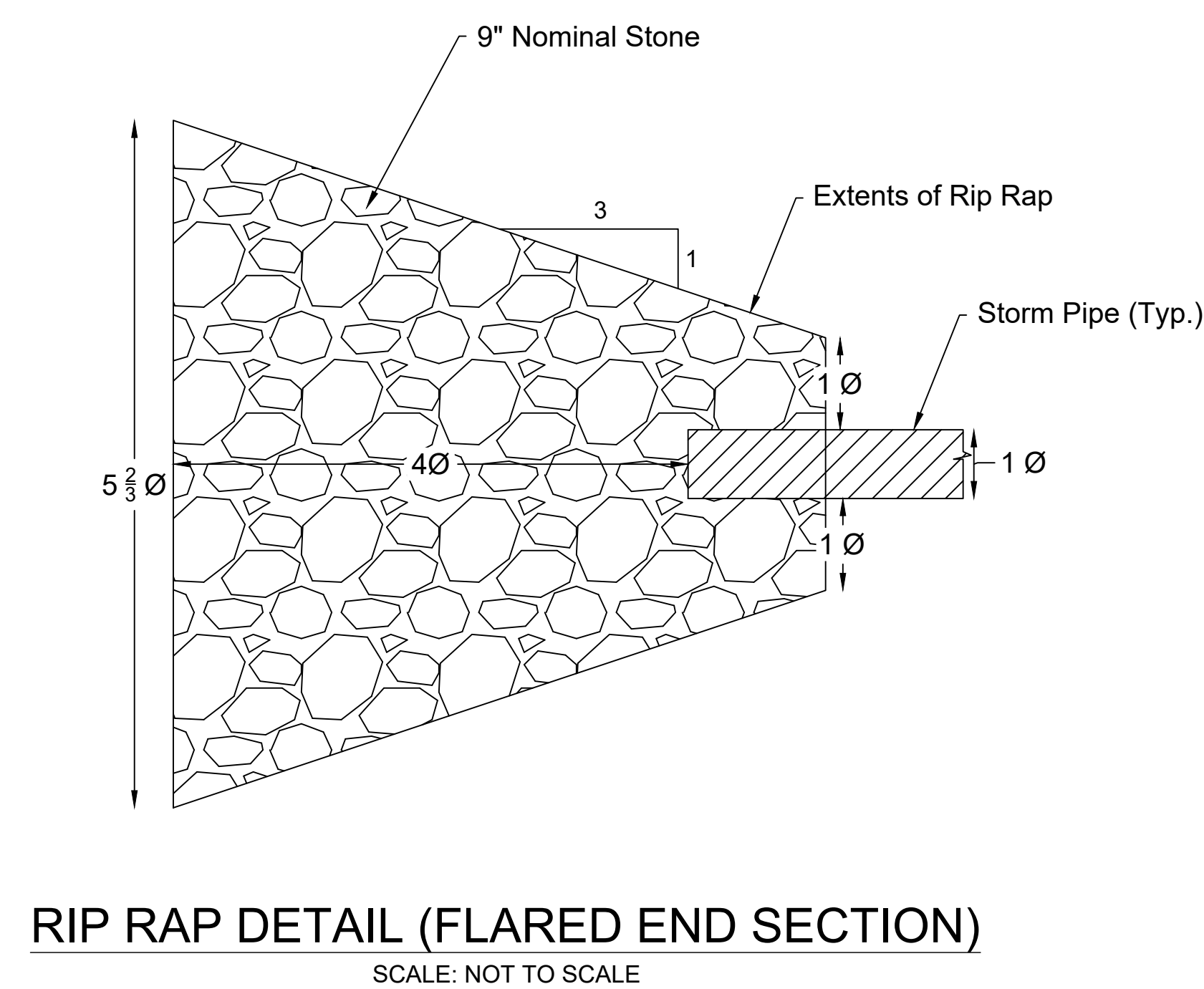
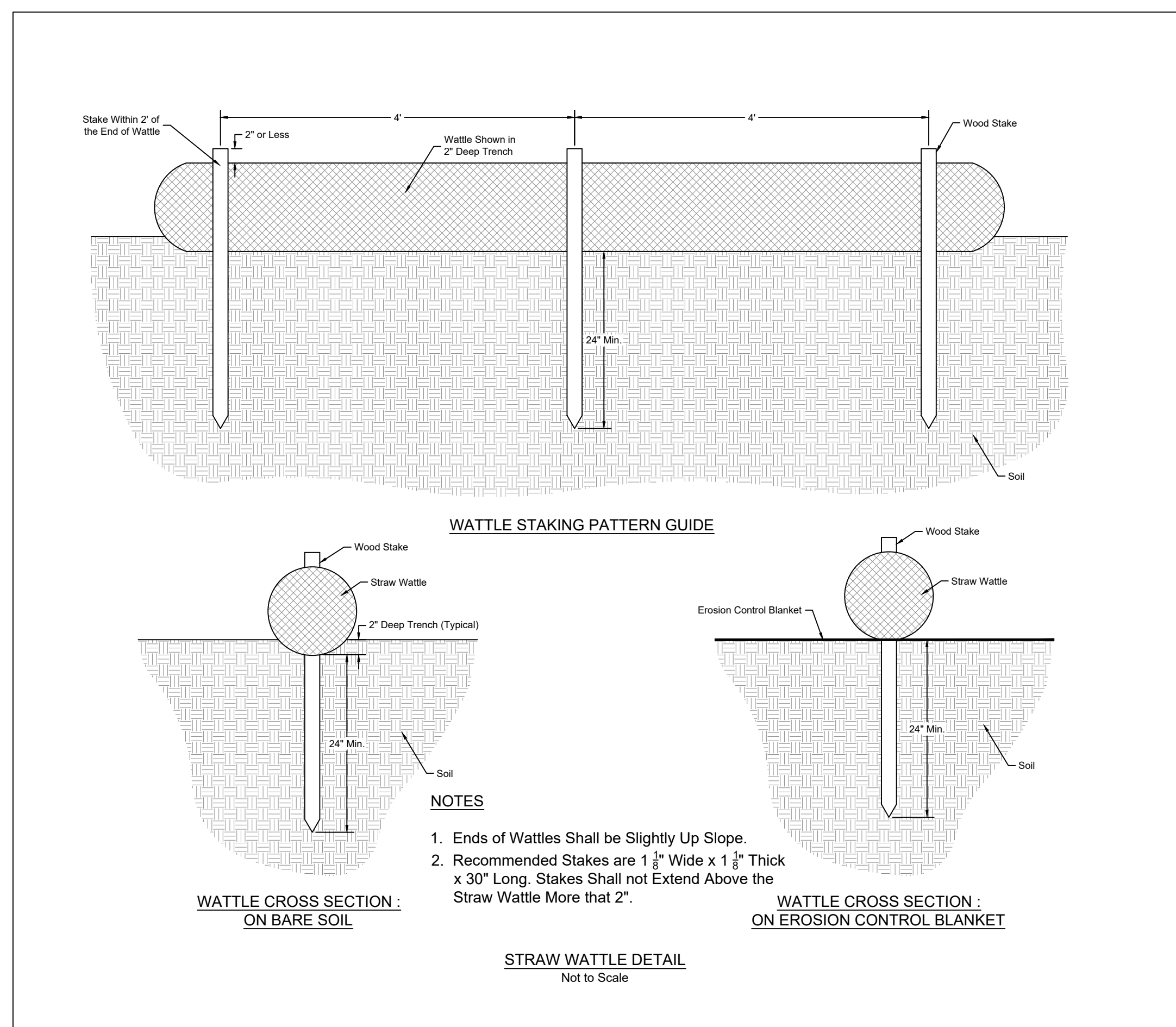
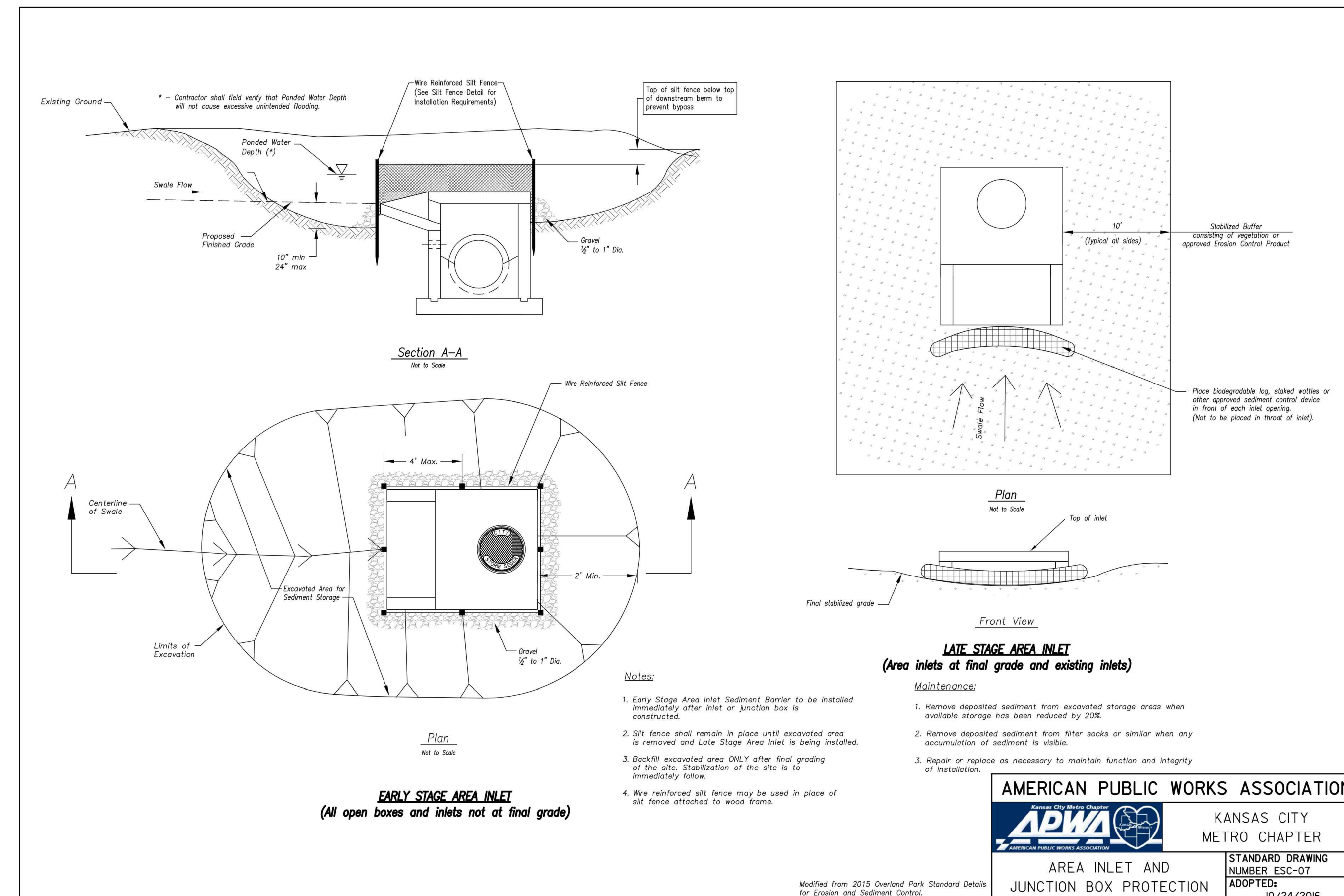
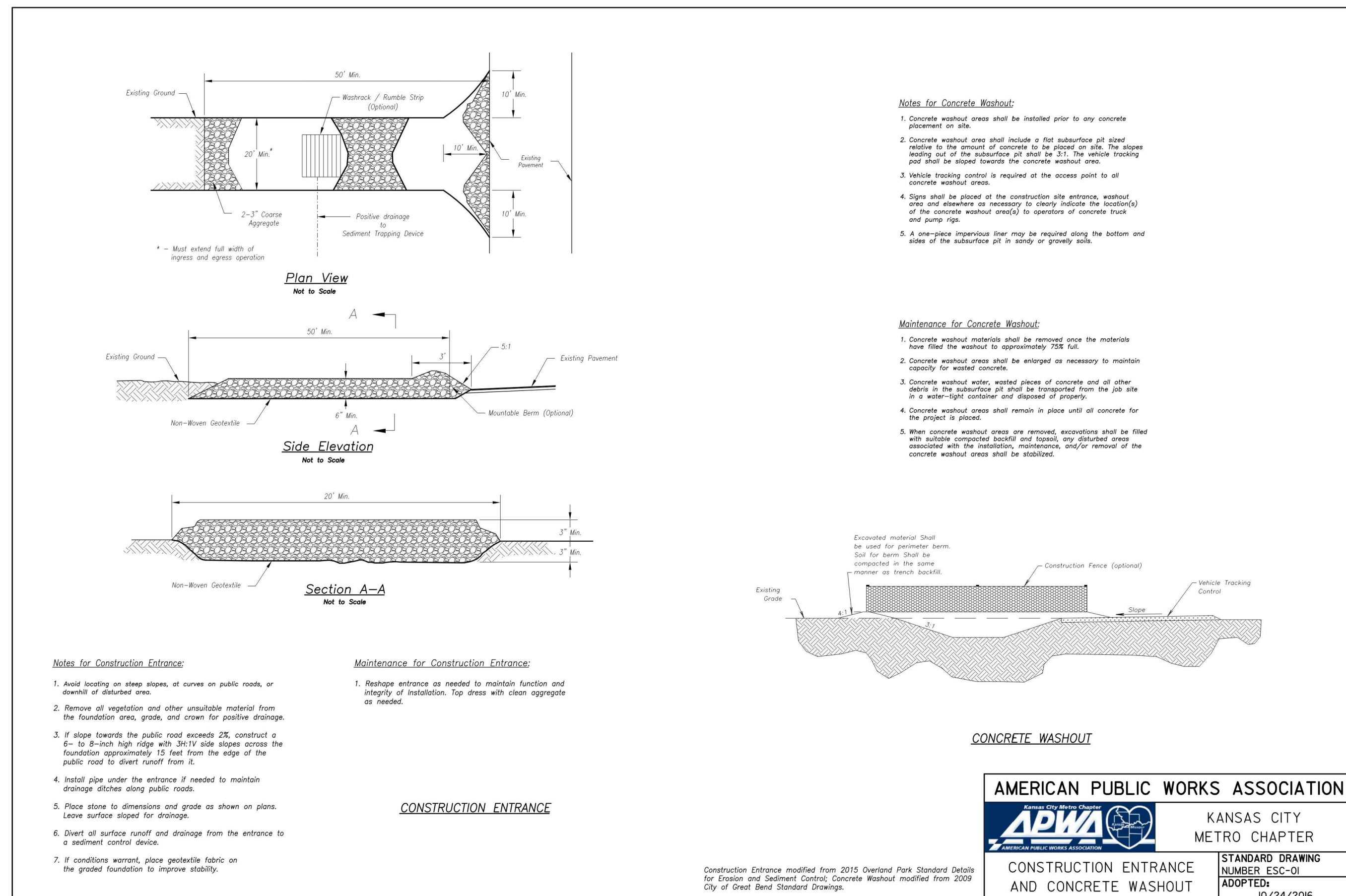
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CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
EROSION  
CONTROL  
DETAILS

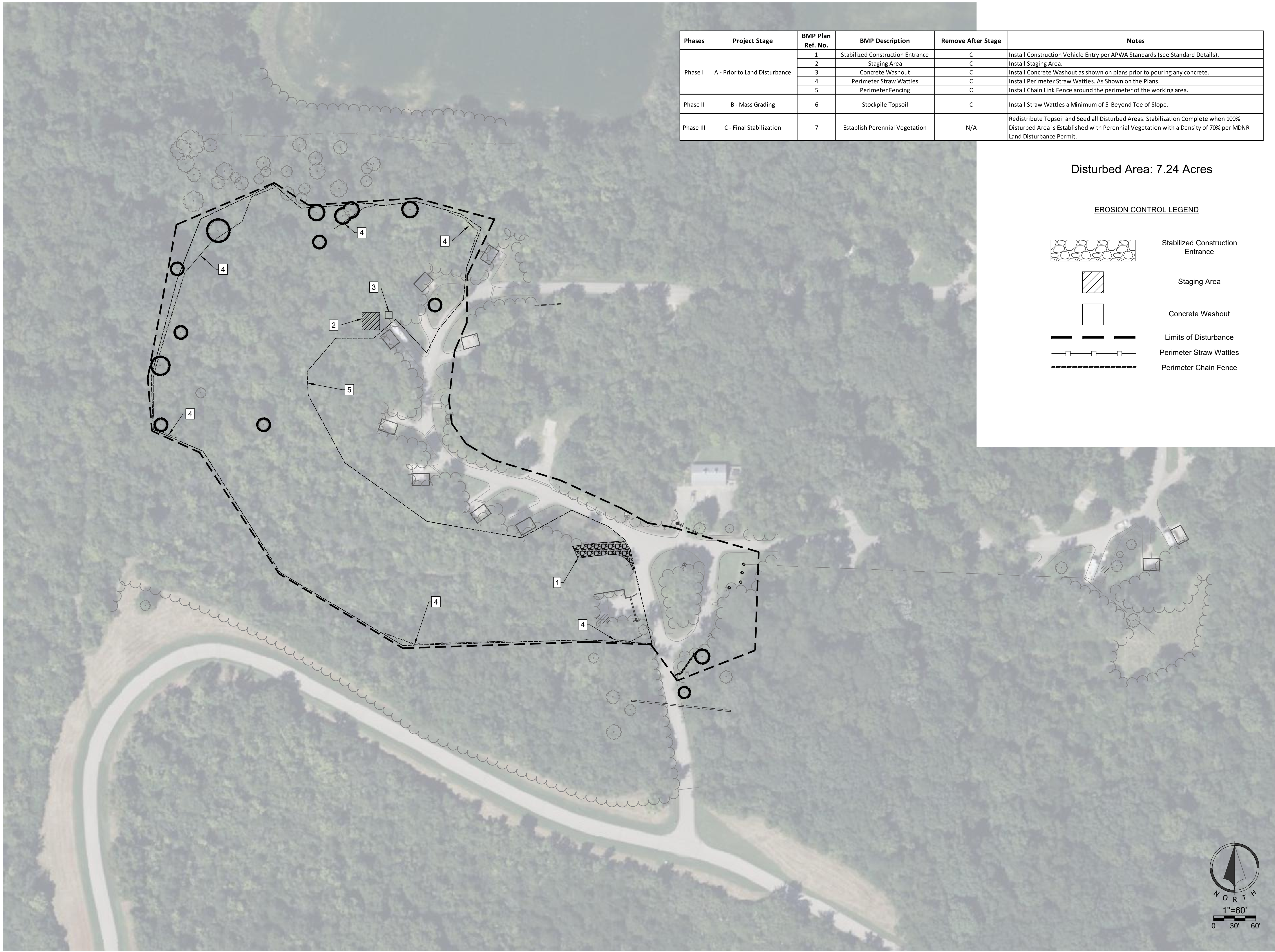
SHEET NUMBER:

C-507

SHEET 28 OF 36  
12/12/2023



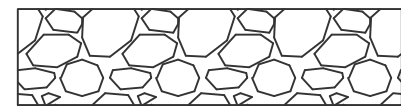
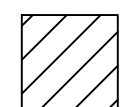
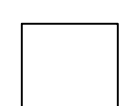

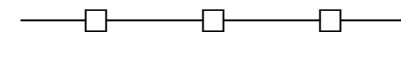





Phases	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage	Notes
Phase I	A - Prior to Land Disturbance	1	Stabilized Construction Entrance	C	Install Construction Vehicle Entry per APWA Standards (see Standard Details).
		2	Staging Area	C	Install Staging Area.
		3	Concrete Washout	C	Install Concrete Washout as shown on plans prior to pouring any concrete.
		4	Perimeter Straw Wattles	C	Install Perimeter Straw Wattles. As Shown on the Plans.
		5	Perimeter Fencing	C	Install Chain Link Fence around the perimeter of the working area.
Phase II	B - Mass Grading	6	Stockpile Topsoil	C	Install Straw Wattles a Minimum of 5' Beyond Toe of Slope.
Phase III	C - Final Stabilization	7	Establish Perennial Vegetation	N/A	Redistribute Topsoil and Seed all Disturbed Areas. Stabilization Complete when 100% Disturbed Area is Established with Perennial Vegetation with a Density of 70% per MDNR Land Disturbance Permit.

Disturbed Area: 7.24 Acres

**EROSION CONTROL LEGEND**

-  Stabilized Construction Entrance
-  Staging Area
-  Concrete Washout
-  Limits of Disturbance
-  Perimeter Straw Wattles
-  Perimeter Chain Fence



STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



LANDSCAPE ARCHITECT:



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OFFICE OF ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND CONSTRUCTION

DEPARTMENT OF  
NATURAL RESOURCES,  
MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
EROSION CONTROL  
PHASE I

SHEET NUMBER:

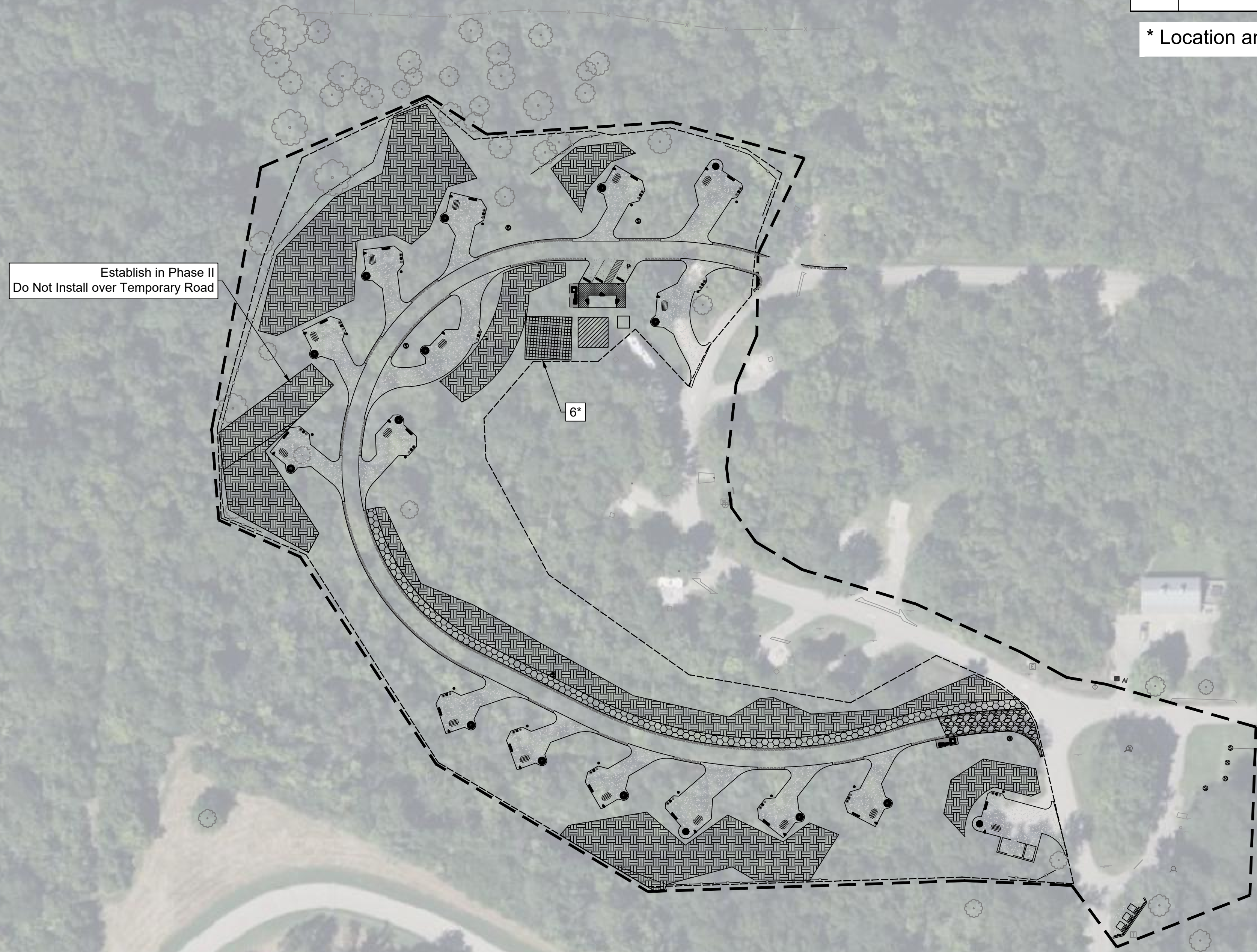
**C-601**

SHEET 29 OF 36  
12/12/2023



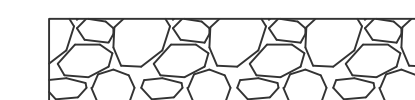
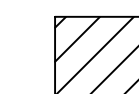
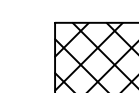
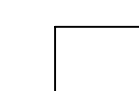

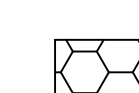

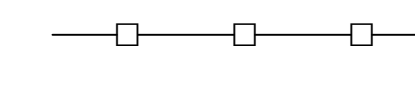

Phases	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage	Notes
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Phase III	C - Final Stabilization	7	Establish Perennial Vegetation	N/A	Redistribute Topsoil and Seed all Disturbed Areas. Stabilization Complete when 100% Disturbed Area is Established with Perennial Vegetation with a Density of 70% per MDNR Land Disturbance Permit.

\* Location and size of stockpile for topsoil to be determined through coordination with MSP Staff.



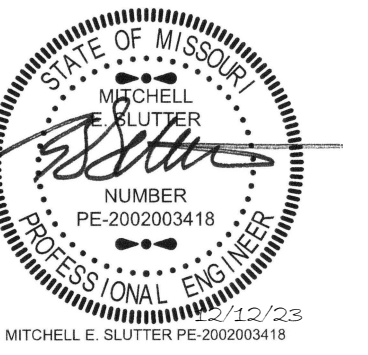
Disturbed Area: 7.24 Acres

**EROSION CONTROL LEGEND**

-  Stabilized Construction Entrance
-  Staging Area
-  Stockpile Area
-  Concrete Washout
-  NAG C700BN
-  Armormax Mat
-  Limits of Disturbance
-  Perimeter Straw Wattles
-  Perimeter Chain Fence



STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



LANDSCAPE ARCHITECT:



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NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_  
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DATE: \_\_\_\_\_  
REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:

EROSION CONTROL  
PHASE II

SHEET NUMBER:

C-602

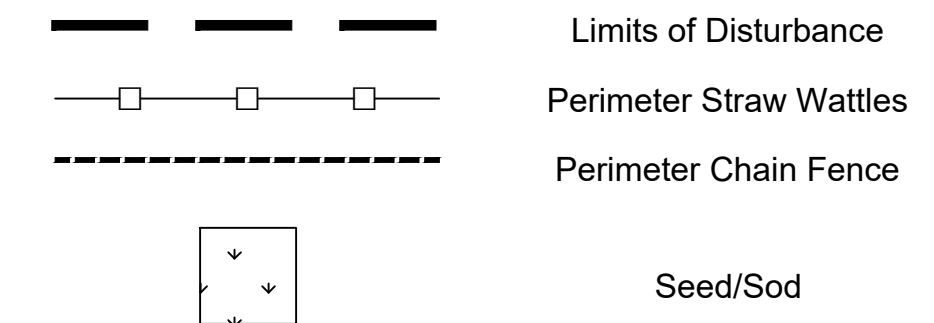
SHEET 30 OF 36  
12/12/2023



Phases	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage	Notes
Phase I	A - Prior to Land Disturbance	1	Stabilized Construction Entrance	C	Install Construction Vehicle Entry per APWA Standards (see Standard Details).
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Disturbed Area: 7.24 Acres

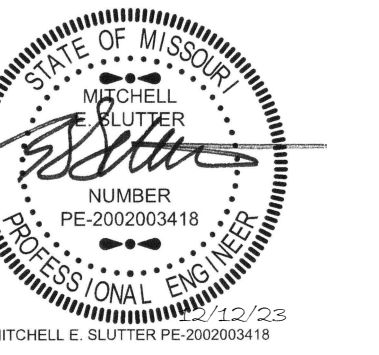
**EROSION CONTROL LEGEND**



Estimate of Area of Disturbance  
Contractor to seed all disturbed land

\*Contractor to keep and maintain erosion control products installed during Phase II.

STATE OF MISSOURI  
MICHAEL L. PARSON,  
GOVERNOR



LANDSCAPE ARCHITECT:



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16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

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REVISION: \_\_\_\_\_  
DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: TCD  
CHECKED BY: MES  
DESIGNED BY: ZMM

SHEET TITLE:  
EROSION CONTROL  
PHASE III

SHEET NUMBER:

C-603

SHEET 31 OF 36  
12/12/2023





## GENERAL NOTES: (TYPICAL ALL SHEETS)

- A) ALL WORK SHALL CONFORM TO THE APPLICABLE PROVISIONS OF THE LATEST NATIONAL ELECTRICAL CODE, UNDERWRITERS LABORATORIES, INC., OCCUPATIONAL SAFETY AND HEALTH ACT, AND ALL STATE, LOCAL, MUNICIPAL, AND STATUTORY REQUIREMENTS.
- B) PEDESTAL FEEDER WIRING TO BE COPPER; XLPE, RHW-2 OR USE-2 TYPE, DIRECT BURIED MINIMUM OF 24 INCHES. ROUTE IN CONDUIT WHERE RUN UNDER GRAVEL OR PAVING AS NOTED IN DETAILS.
- C) ALL SINGLE PHASE, SINGLE POLE LOADS TO HAVE DEDICATED NEUTRALS. LABEL NEUTRAL CONDUCTORS WITH CORRESPONDING CIRCUIT NUMBER AT EACH PULL BOX, JUNCTION BOX, HANDHOLE AND OTHER SPLICE POINTS. USE OF BREAKER TIES IS NOT PERMITTED. SHARING OF NEUTRALS IS NOT PERMITTED.
- D) WHERE ELECTRICAL SITE WORK IS REQUIRED, CONTRACTOR SHALL RESTORE EXISTING SITE TO ITS ORIGINAL CONDITION. INCLUDING BUT NOT LIMITED TO REPLACING VEGETATION, SOFTSCAPE AND HARDSCAPE REQUIRED TO BE DISTURBED DURING INSTALLATION OF ELECTRICAL COMPONENTS.
- E) USE OF 3M SCOTCHLOK CONNECTORS OR PUSH-IN WIRE CONNECTORS (SIMILAR TO WAGO PUSH-IN CONNECTORS) ARE NOT PERMITTED. ALL WIRING CONNECTIONS TO BE DONE WITH WIRE NUT CONNECTORS.
- F) IF CONTRACTOR CHOOSES TO GROUP CIRCUITS FOR HOMERUNS, CONTRACTOR SHALL APPLY ADJUSTMENT FACTORS FOR MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A RACEWAY PER NEC TABLE 310.15(B)(3)(a). CONDUCTORS SHALL BE UPSIZED AS REQUIRED TO MAINTAIN FULL AMPACITY RATING.
- G) ALL EMPTY CONDUITS SHALL BE PROVIDED WITH A PULL WIRE.
- H) ALL PANELBOARDS, SWITCHBOARDS AND LINE VOLTAGE CONTROL EQUIPMENT SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTING, SERVICING OR MAINTENANCE OF EQUIPMENT. MARKING SHALL BE SELF ADHESIVE, COMMERCIAL LABEL CONFORMING TO NEC AND ANSI REQUIREMENTS.
- I) ANY MATERIAL REMOVED THAT OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED FROM PROJECT SITE AND DISPOSED OF BY THE CONTRACTOR.
- J) UPDATED, TYPEWRITTEN PANELBOARD DIRECTORY SHALL BE PROVIDED FOR EACH PANELBOARD THAT CIRCUITS HAVE BEEN ADDED TO OR MODIFIED.

## GENERAL DEMO NOTES:

- A) REMOVE ALL WIRING (CONDUIT, CONDUCTORS, BOXES, ETC.) ABANDONED AS PART OF THIS PROJECT.
- C) ANY EXISTING DEVICE AND/OR CIRCUIT SHOWN ARE INDICATED ONLY FOR INFORMATION PURPOSES. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL CONDITIONS AS THEY EXIST AND SHALL REMOVE, RELOCATE AND/OR REWORK ANY ELECTRICAL EQUIPMENT OR CIRCUITS NECESSARY FOR A COMPLETE REWIRING SYSTEM.
- D) UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH ALL WORK TO BE DONE BY OBSERVATION OF THE SITE. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR PERFORMING ALL WORK NECESSARY TO PROVIDE A WORKMANLIKE INSTALLATION.
- E) THE CONTRACTOR SHALL MAINTAIN ACCURATE RECORDS OF ANY MODIFICATIONS TO THE EXISTING SYSTEMS WHICH ARE TO REMAIN AND SHALL, UPON COMPLETION OF THIS PROJECT, DELIVER "RECORD" DRAWINGS TO THE ARCHITECT INDICATING ALL SUCH CHANGES. THE CONTRACTOR SHALL MAINTAIN IN THE PROJECT OFFICE, AS WORK PROGRESSES, AN UP-TO-DATE NEATLY MARKED COPY OF THESE DRAWINGS FOR REVIEW BY THE APPROPRIATE PARTIES.
- F) WHERE NEW WORK INTERFERES WITH CIRCUITS OTHERWISE UNDISTURBED, EXISTING CIRCUITS SHALL BE REWORKED AS REQUIRED TO MAINTAIN SERVICE.
- G) THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES, THE CONDITION OF EXISTING DEVICES AND MATERIALS, AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SAME DURING THE COURSE OF THIS WORK. EXISTING UTILITIES, EXISTING BUILDING, AND/OR MATERIALS WHICH ARE DAMAGED BY NEGLIGENCE ON THIS CONTRACTOR'S PART OR ANY PARTIES ASSOCIATED WITH THIS CONTRACTOR, SHALL BE REPAIRED OR REPLACED AT THIS CONTRACTOR'S EXPENSE, IN A TIMELY MANNER, AND TO THE ARCHITECT'S AND OWNER'S WRITTEN ACCEPTANCE.
- H) CIRCUIT ROUTINGS SHOWN MAY BE MODIFIED TO SUIT FIELD CONDITIONS, HOWEVER, KEEP CIRCUITS AS INDICATED TO AVOID OVERLOADING OF THE CIRCUIT.
- I) WHERE EXISTING ELECTRICAL DISTRIBUTION PANELBOARDS ARE TO BE REMOVED, THE CONTRACTOR SHALL PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN POWER TO FEEDER CIRCUITS UNTIL A PERMANENT PANEL IS INSTALLED TO RECONNECT THE EXISTING REMAINING CIRCUITS.
- J) MAINTAIN CONTINUITY OF EXISTING CIRCUITS SERVING DEVICES, FIXTURES OR EQUIPMENT TO REMAIN.

## CODE SUMMARY:

INTERNATIONAL BUILDING CODE	2018
NFPA 70 NATIONAL ELECTRICAL CODE	2020

## ELECTRICAL SYMBOLS:

- BRANCH CIRCUIT CONCEALED IN CEILING OR WALL. ARROWS INDICATE HOMERUNS TO PANEL. ALL CONDUCTORS #12 AWG UNLESS NOTED OTHERWISE. EACH SINGLE PHASE CIRCUIT TO HAVE DEDICATED NEUTRAL.
- PHASE CONDUCTORS
- NEUTRAL CONDUCTOR
- GROUND CONDUCTOR
- DENOTES PARTIAL CIRCUIT
- LP1-10 PANEL - BREAKER NUMBER (IDENTIFICATION)
- 1,3; 1,3,5 INDICATES X,X= 2-POLE C.B.; X,X,X = 3-POLE C.B.
- HOMERUN INDICATED LIKE THIS INDICATED THREE SEPARATE SINGLE PHASE CIRCUITS. EACH CIRCUIT TO HAVE DEDICATED NEUTRAL.
- CONDUIT CONCEALED IN CEILING OR WALL WITH THREE CONDUCTORS: 1-PHASE; 1-NEUTRAL; 1-GROUND WIRE, NO.12 AWG UNLESS OTHERWISE SPECIFIED ON DRAWINGS.
- CONDUIT RUN UNDERGROUND OR CONCEALED IN FLOOR SLAB.
- EXISTING UNDERGROUND ELECTRICAL.
- GROUNDING CONDUCTOR NO.12 WIRE EXCEPT AS NOTED.
- MOTOR
- 208Y/120V OR 120/240V PANELBOARD TOP MOUNTED 72" AFF
- SURFACE MOUNTED EQUIPMENT, TYPE AS INDICATED ON DRAWINGS
- CONDUIT UP
- CONDUIT DOWN
- CONDUIT STUBBED THRU WALL WITH BUSHINGS ON BOTH ENDS. SIZE AS NOTED ON PLANS.
- EMPTY CONDUIT STUB-UP INSIDE WALL TO ABOVE ACCESSIBLE CEILING WITH BUSHING ON THE END. SIZE AS NOTED ON DRAWINGS.
- GROUND
- POWER CONNECTION POINT
- DISCONNECT SWITCH, SIZE AND TYPE AS NOTED TOP MOUNTED 60" AFF
- PAD MOUNTED TRANSFORMER.
- PAD MOUNTED POWER PEDESTAL. REFER TO DETAILS/SPECS FOR TYPE.
- GFI DUPLEX RECEPTACLE WITH WEATHERPROOF WHILE-IN-USE COVER. HEIGHT AS NOTED.
- DUPLEX RECEPTACLE W/GROUND FAULT PROTECTION. +18" AFF OR AS NOTED
- OVERHEAD POWER POLE WITH A RISER POLE.
- OVERHEAD POWER POLE WITH POLE MOUNTED TRANSFORMERS.
- WALL MOUNTED OR CEILING MOUNTED JUNCTION BOX.
- INDICATES DEVICE ABOVE RE: DRAWING
- ELECTRICAL EQUIPMENT PROVIDED BY AND INSTALLED BY E.C.
- +48" TOP OF OUTLET BOX ABOVE FINISHED FLOOR
- AFF ABOVE FINISH FLOOR
- ETR EXISTING TO REMAIN
- ER EXISTING RELOCATED
- G GFCI (GROUND FAULT CIRCUIT INTERRUPTER) PROTECTION

## PLAN NOTE LEGEND

TAG VALUE	PLAN NOTE TEXT
ED000	ELECTRICAL DEMOLITION
EP000	POWER

WIRING SCHEDULE-VOLTAGE DROP	
DISTANCE	CONDUCTOR SIZE
120V-20A BRANCH CIRCUIT	
UP TO 100'	#12
100'-150'	#10
150'-250'	#8
250'-OVER	#6
277V-20A BRANCH CIRCUIT	
UP TO 200'	#12
200'-375'	#10
375'-OVER	#8

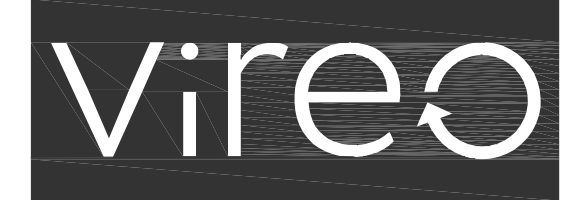
NOTE:  
FOR ALL CIRCUITS WITH #6 CONDUCTORS, REDUCE TO #8 CONDUCTORS AT PANEL FOR FINAL CONNECTION TO CIRCUIT BREAKER.

## STATE OF MISSOURI MICHAEL L. PARSON, GOVERNOR

MO STATE CERTIFICATE OF AUTHORITY #200010590



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## OFFICE OF ADMINISTRATION DIVISION OF FACILITIES MANAGEMENT, DESIGN AND CONSTRUCTION

## DEPARTMENT OF NATURAL RESOURCES, MISSOURI STATE PARKS

## NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
16600 MO-45 HWY  
WESTON, MO 64098

PROJECT # X2221-01  
SITE # 5118  
FACILITY # 7815118006

REVISION: \_\_\_\_\_  
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ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MSS \_\_\_\_\_  
CHECKED BY: MSS \_\_\_\_\_  
DESIGNED BY: MSS \_\_\_\_\_

SHEET TITLE:

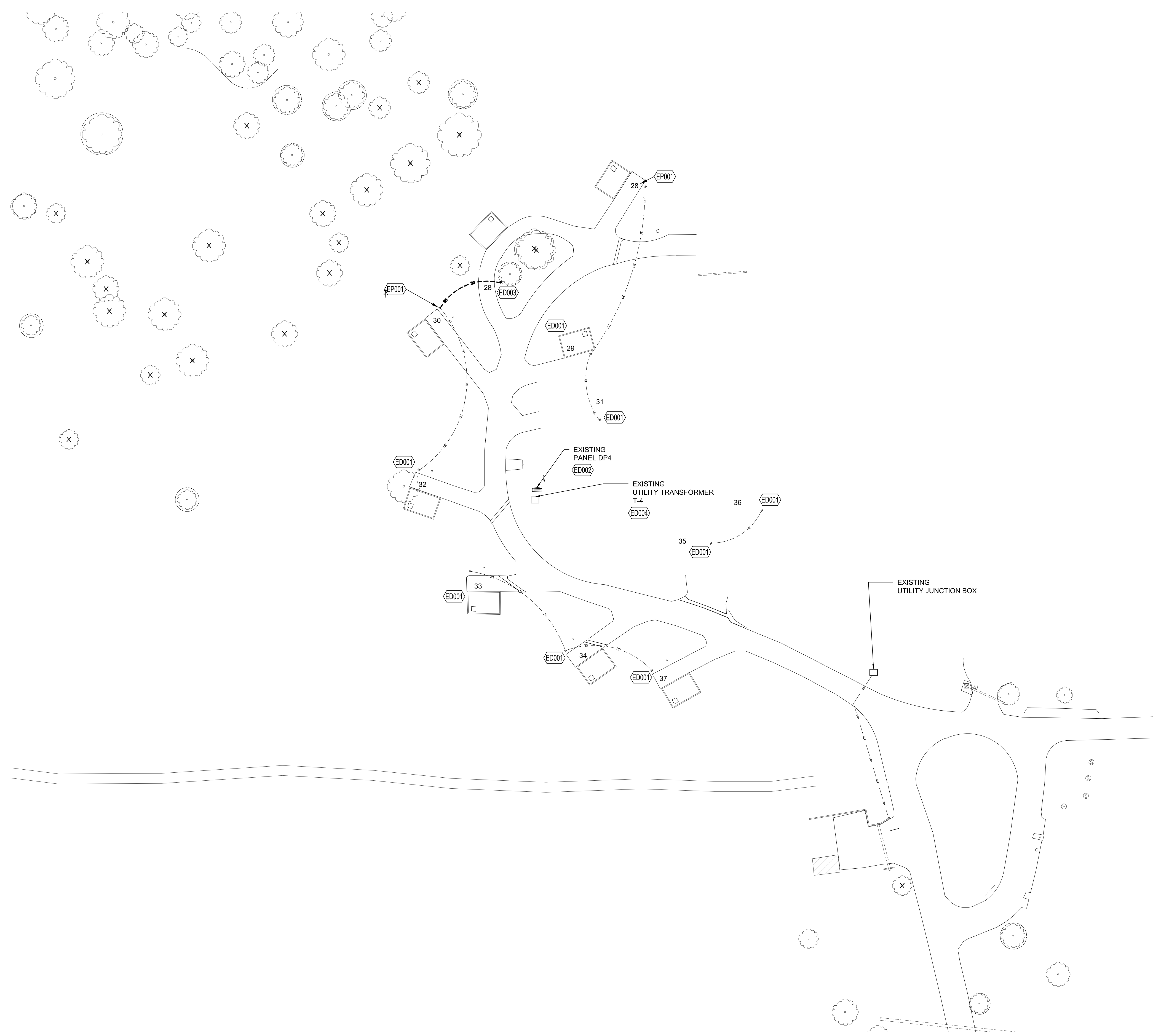
## ELECTRICAL SYMBOLS AND GENERAL NOTES

SHEET NUMBER:

# E-001

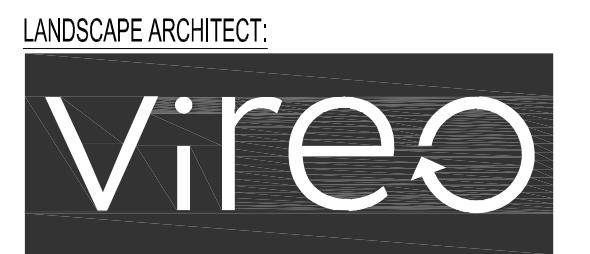
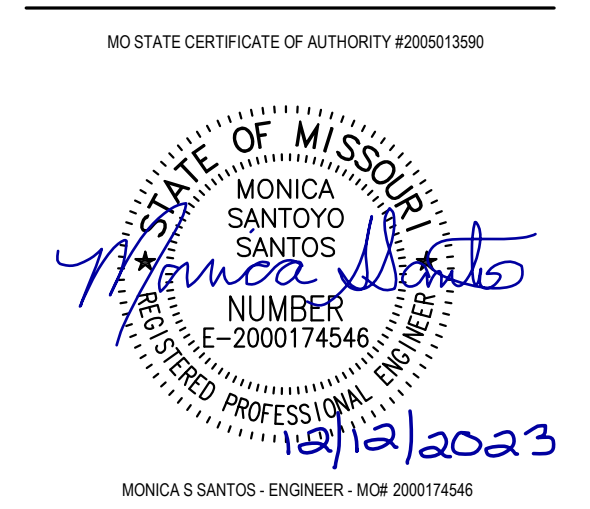
SHEET 32 OF 36  
12/12/2023





GENERAL NOTES	
1	CIRCUIT ROUTING SHOWN IS DIAGRAMMATIC ONLY.
2	CONTRACTOR TO FIELD LOCATE, MAINTAIN AND PROTECT ALL EXISTING UTILITIES UNLESS OTHERWISE NOTED.

DEMOLITION PLAN NOTES	
ED001	EXISTING POWER PEDESTAL TO REMAIN. MAINTAIN CONTINUITY OF CIRCUIT FEEDING PEDESTAL. WIRING SHOWN TO SHOW GROUPING OF PEDESTALS AND FOR REFERENCE ONLY. CONTRACTOR TO PROTECT FEEDS TO EXISTING PEDESTALS TO REMAIN.
ED002	EXISTING PANEL TO REMAIN. MAINTAIN POWER TO CAMPSITES TO REMAIN. UPDATE BREAKER DESCRIPTIONS TO CAPTURE SITES REMOVED.
ED003	EXISTING PEDESTAL TO BE REMOVED. REMOVE ALL ASSOCIATED WIRING BACK TO SOURCE. CONTRACTOR SHALL ENSURE CONTINUITY OF CIRCUIT FEEDING ANY PEDESTALS TO REMAIN.
ED004	EXISTING UTILITY TRANSFORMER TO REMAIN.



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 ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
 DRAWN BY: MSS  
 CHECKED BY: MSS  
 DESIGNED BY: MSS

SHEET TITLE:  
**ELECTRICAL  
 SITE PLAN  
 DEMOLITION**

SHEET NUMBER:  
**E-101**  
 SHEET 33 OF 36  
 12/12/2023





**WESTON BEND SITE PLAN - ELECTRICAL**  
 1"=40'  
 0 40' 80'

### GENERAL NOTES

1	CIRCUIT ROUTING SHOWN IS DIAGRAMMATIC ONLY.
2	CONTRACTOR TO FIELD LOCATE, MAINTAIN AND PROTECT ALL EXISTING UTILITIES UNLESS OTHERWISE NOTED.
3	COORDINATE UTILITY POWER WITH EVERGY. CALL CUSTOMER SERVICE NUMBER 1-888-471-5275 FOR A SERVICE REQUEST. EVERGY MISSOURI WEST REGION. PENDING ASSIGNMENT OF DESIGNER CONTACT.
4	REFER TO SHEET E-501 FOR TRENCH DETAILS AND WHERE CONDUIT SLEEVES ARE REQUIRED.

### NEW WORK PLAN NOTES

EP001	EXISTING PANEL TO REMAIN. MAINTAIN POWER TO CAMPSITE PEDESTAL AFTER DEMOLITION OF ADJACENT SITES.
EP002	MAKE FINAL CONNECTIONS TO SHOWER HOUSE PANEL. SHOWER HOUSE PANEL TO HAVE MAIN BREAKER. CONFIRM SIZE OF MAIN SUPPLIED PRIOR TO ROUGH-IN.
EP003	PROVIDE NEW SINGLE PHASE, 240/120V PANELBOARD IN NEMA 3R ENCLOSURE. SEE ASSOCIATED PANEL SCHEDULE AND RISER DIAGRAM FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
EP004	NEW TRANSFORMER. MAINTAIN PROPER CLEARANCES AS REQUIRED BY EVERGY.
EP005	PROVIDE 3 #250 KCMIL AND 1 #4 GROUND (TYPE CU USE-2/RHW-2/XLPE CABLE) THROUGHOUT FULL LENGTH OF CIRCUIT. DIRECT BURIED A MINIMUM OF 24 INCHES.
EP006	PROVIDE 3 #4 KCMIL AND 1 #6 GROUND (TYPE CU USE-2/RHW-2/XLPE CABLE) THROUGHOUT FULL LENGTH OF CIRCUIT. DIRECT BURIED A MINIMUM OF 24 INCHES. (UPSIZED DUE TO VOLTAGE DROP). TRANSITION TO RIGID CONDUIT ABOVE GROUND.
EP007	PROVIDE 3 #300 KCMIL AND 1 #3 GROUND (TYPE CU USE-2/RHW-2/XLPE CABLE) THROUGHOUT FULL LENGTH OF CIRCUIT. DIRECT BURIED A MINIMUM OF 24 INCHES. (UPSIZED DUE TO VOLTAGE DROP)
EP008	PROVIDE NEW NEMA 3R RATED 100AMP, SINGLE PHASE PANEL, 3 WIRE, WITH 12 POLES TO POWER THE FOLLOWING LOADS: LIGHTING, GENERAL RECEPTACLES AND WINDOW AC UNIT. PROVIDE PANEL WITH 50 AMP MAIN BREAKER. REFER TO PANELBOARD SCHEDULE FOR ADDITIONAL INFORMATION.
EP009	COORDINATE EXACT PLACEMENT OF PANEL WITH OWNER PRIOR TO ROUGH-IN. PROVIDE UNISTRUT SUPPORT OF PANEL AS REQUIRED FOR MOUNTING OFFSET OFF THE CONCRETE PAD. FEEDER TO PANEL NOT TO COME THROUGH THE PAD.
EP010	PROVIDE 3 #1 AWG AND 1 #6 GROUND (TYPE CU USE-2/RHW-2/XLPE CABLE) DIRECT BURIED A MINIMUM OF 24 INCHES. TRANSITION TO RIGID CONDUIT ABOVE GROUND.

STATE OF MISSOURI  
 MICHAEL L. PARSON,  
 GOVERNOR



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MEP:  
 ANTELLA CONSULTING ENGINEERS  
 1800 Genessee Street, Suite 260  
 Kansas City, Missouri 64102  
 P 816-421-0950

GEOTECHNICAL:  
 INTERTEK-PSI  
 1211 W. Cambridge Circle Drive  
 Kansas City, Kansas 66103  
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 MANAGEMENT,  
 DESIGN AND CONSTRUCTION

DEPARTMENT OF  
 NATURAL RESOURCES,  
 MISSOURI STATE PARKS

NEW PREMIUM CAMPSITES

WESTON BEND STATE PARK  
 16600 MO-45 HWY  
 WESTON, MO 64098

PROJECT # X2221-01  
 SITE # 5118  
 FACILITY # 7815118006

REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 REVISION: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 ISSUE DATE: 12/12/2023

CAD DWG FILE: \_\_\_\_\_  
 DRAWN BY: MSS  
 CHECKED BY: MSS  
 DESIGNED BY: MSS

SHEET TITLE:  
**ELECTRICAL  
 SITE PLAN**

SHEET NUMBER:  
**E-201**  
 SHEET 34 OF 36  
 12/12/2023





LANDSCAPE ARCHITECT:



LACH# MO-2002023826  
414 Oak Street, Suite 101  
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DATE: \_\_\_\_\_

ISSUE DATE: 12/12/2023

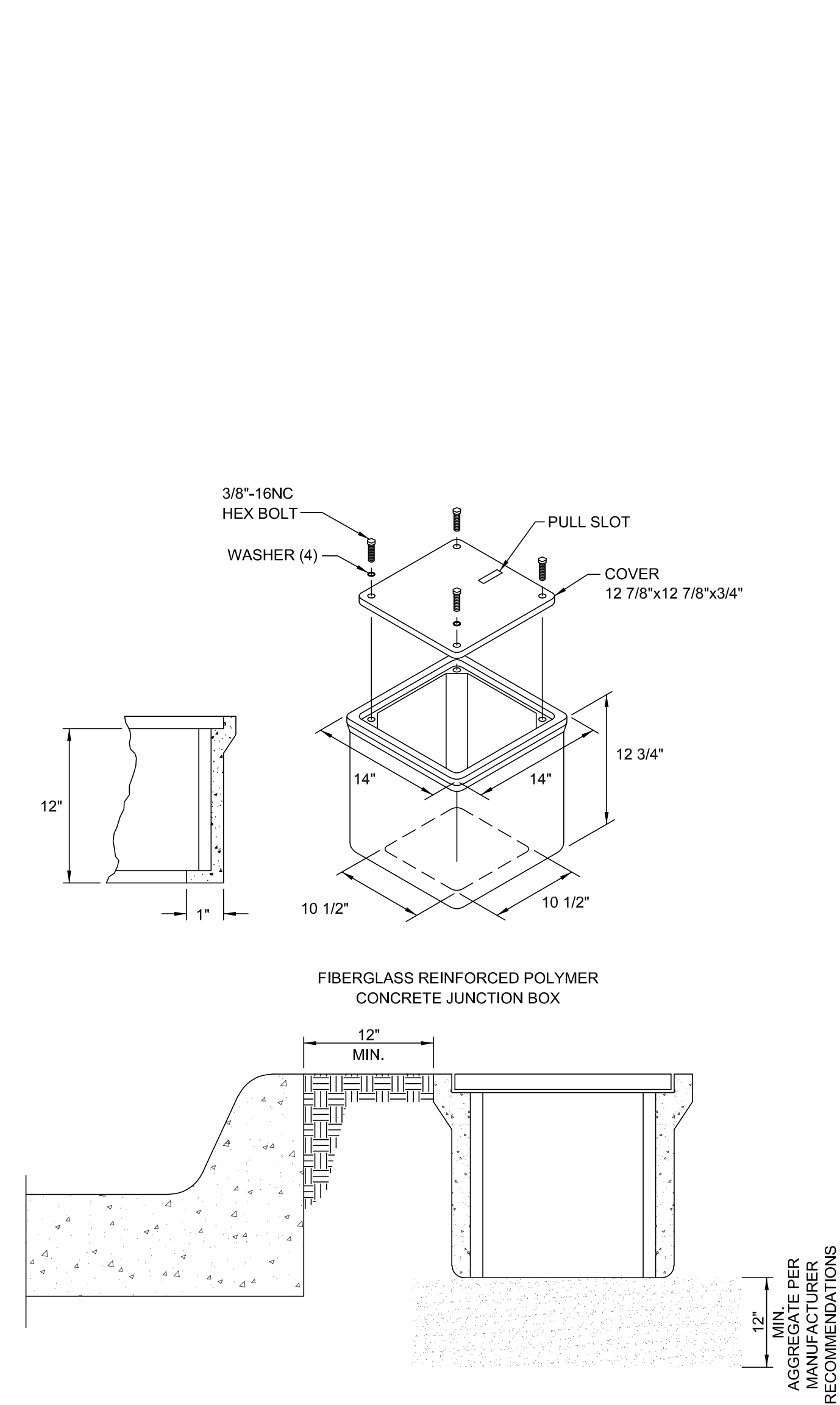
CAD DWG FILE: \_\_\_\_\_  
DRAWN BY: MSS  
CHECKED BY: MSS  
DESIGNED BY: MSS

SHEET TITLE:  
**ELECTRICAL  
DETAILS**

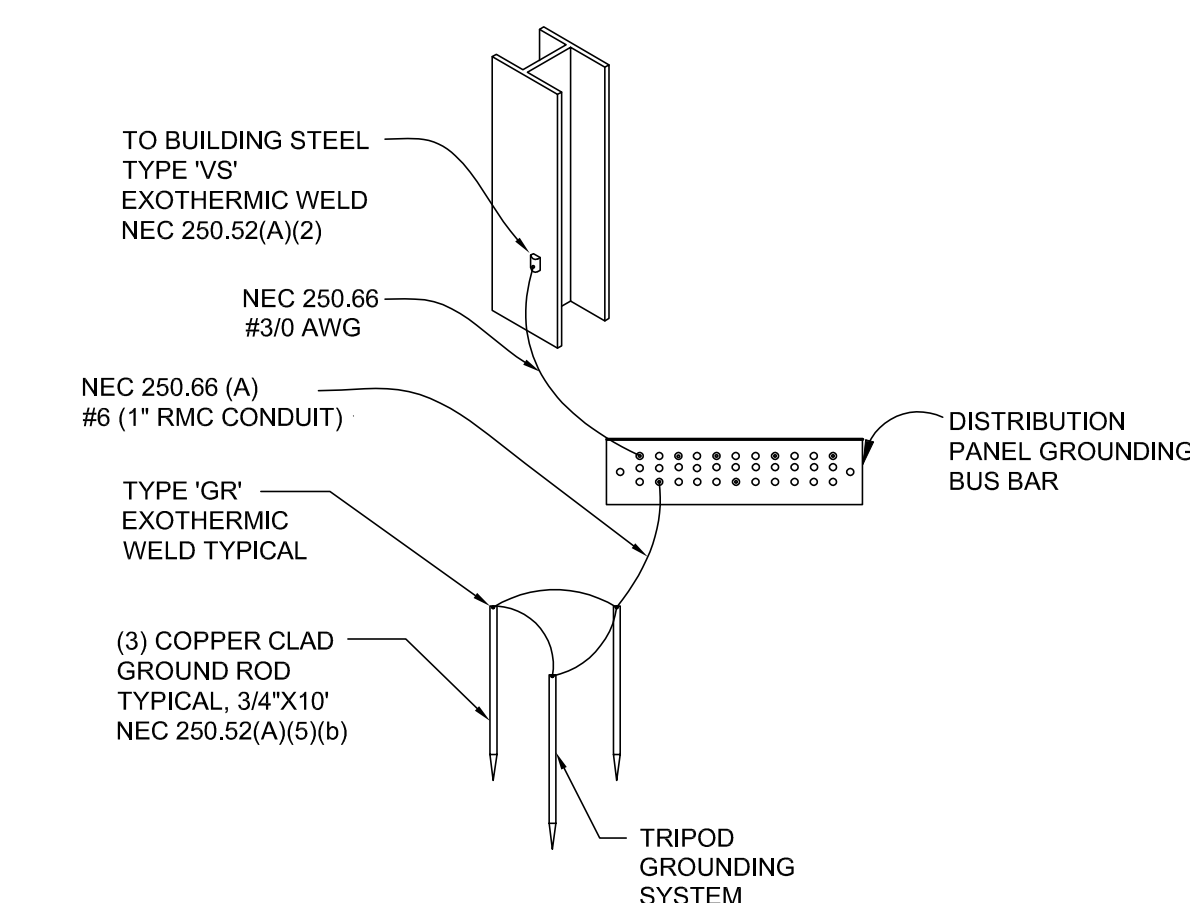
SHEET NUMBER:

**E-501**

SHEET 35 OF 36  
12/12/2023



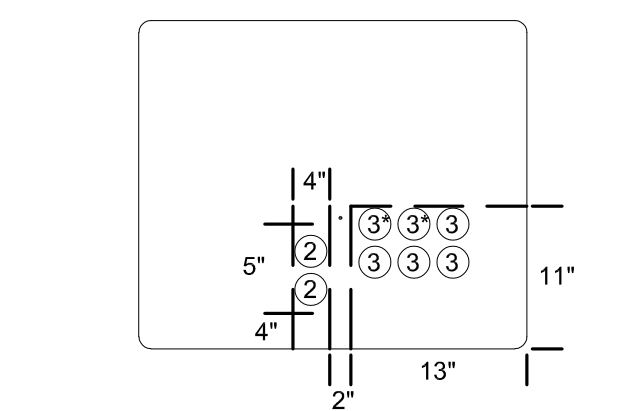
**5 JUNCTION BOX DETAIL**  
NO SCALE



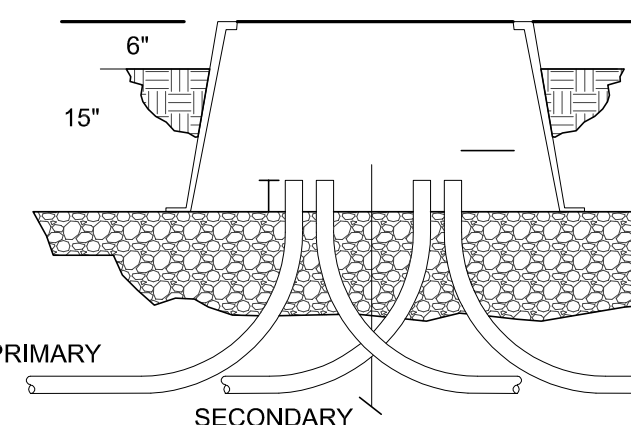
NOTES:

- EXOTHERMIC WELD DESIGNATION INDICATED ABOVE ARE ERICO 'CADWELD'.
- ALL GROUND BUS CONNECTIONS TO BE MADE WITH COPPRESSION TYPE CONNECTORS.
- ALL WIRING TO BE TYPE THHN/THWN-2.
- MAIN GROUP OF RODS ARE TO BE LOCATED AT SERVICE ENTRANCE WITH SIZE AND QUANTITY PER SPECIFICATIONS.
- EACH CABLE TIED TO THE MAIN PANEL GROUNDING BUS TO BE LABELED.
- SIZING AND CODE REFERENCES ARE BASED ON NEC 2020.

**3 MAIN SERVICE GROUNDING**  
NO SCALE



DETAIL A  
\*PREFERRED 4" CONDUIT  
PLACEMENT WHEN REQUIRED.

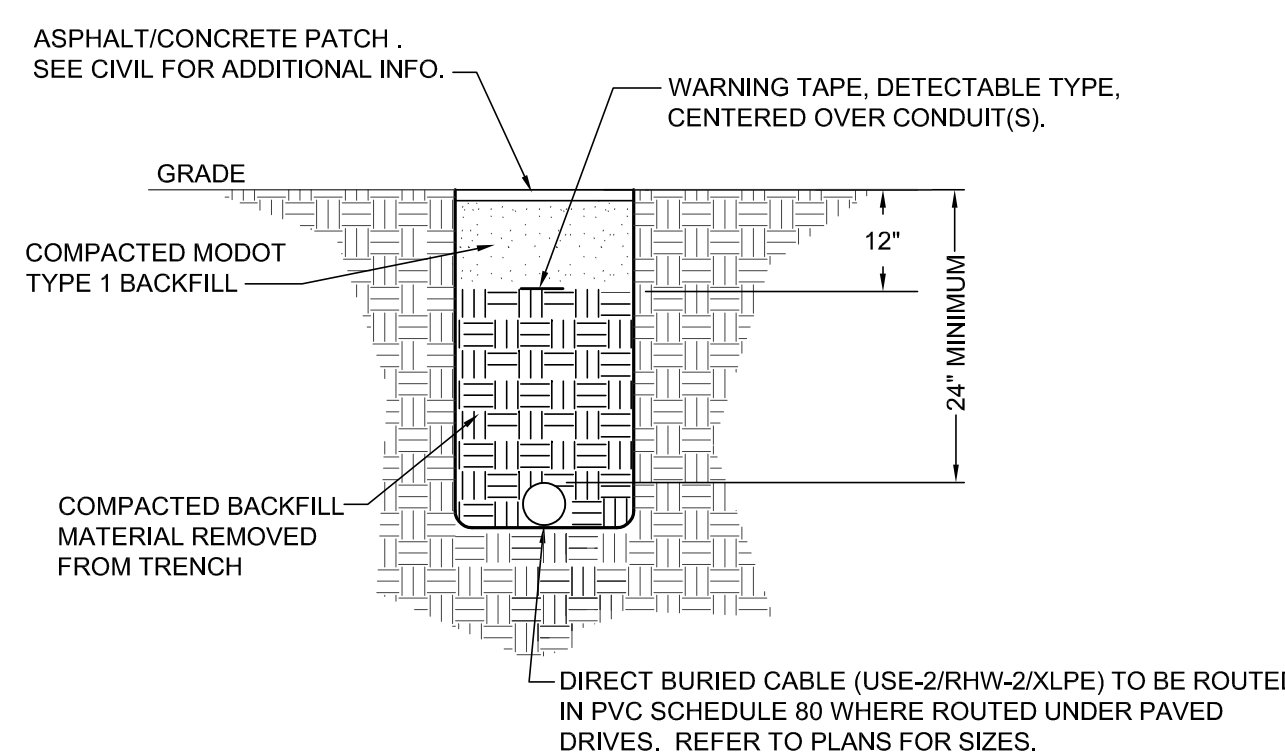


NOTES:

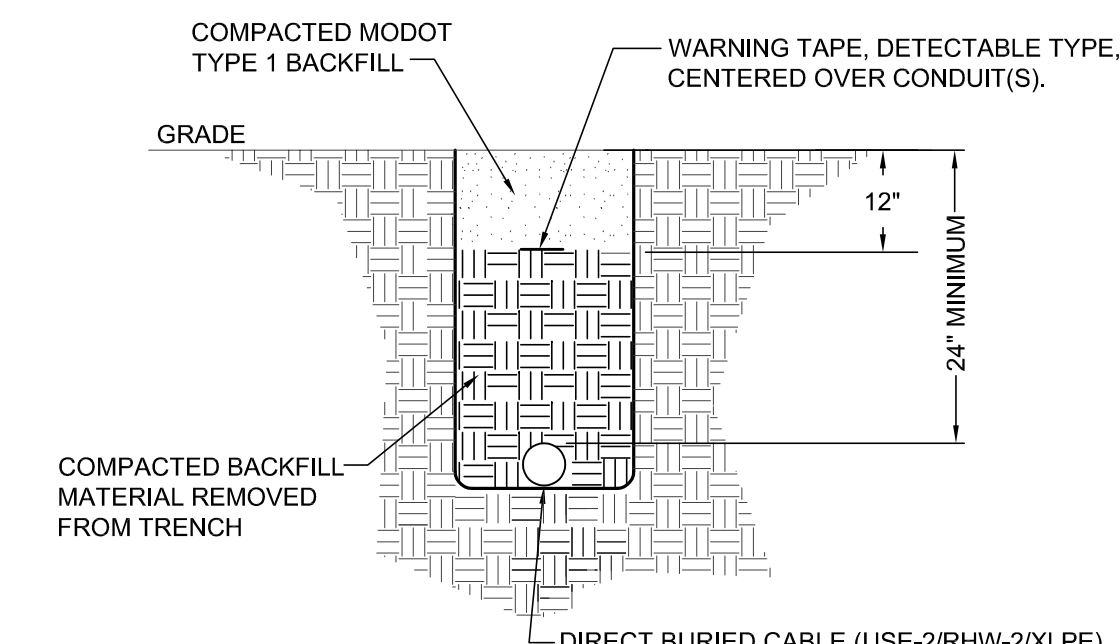
- CONDUIT INSTALLED FOR FUTURE CABLE RUNS SHALL EXTEND AT LEAST 24" BEYOND THE BASE AND BE CAPPED ON BOTH ENDS. ANCHOR BOLT INSERTS ARE POSITIONED FOR TRANSFORMERS.
- A MINIMUM WIDTH OF 10'4" WORKING SPACE BETWEEN STRUCTURES WILL BE REQUIRED FOR TRANSFORMER INSTALLATION AND MAINTENANCE.
- ANY FENCE OR WALL IN FRONT OF TRANSFORMER DOOR LESS THAN 10' AWAY MUST BE REMOVABLE OR OPENABLE.
- COORDINATE WITH EVERYONE. SINGLE PHASE TRANSFORMER "BOX" PAD CONSTRUCTED OF POLYETHYLENE FIBERGLASS, SUPPLIED BY THE COMPANY.
- EXCAVATE 12" DOWN AND 6" WIDER THAN THE FLANGE OF THE BOX PAD BASE.
- PAD SHALL SIT 3" - 6" ABOVE GRADE.
- PAD SHALL BE SET ON FIRM LEVEL UNDISTURBED EARTH OR FIRMLY COMPACTED LEVEL BACKFILL. (THE COMPANY DEFINES THE FIRM LEVEL AND/OR FIRMLY COMPACTED LEVEL BACKFILL AS A PAD SITE TOPPED WITH A MINIMUM OF 6" CRUSHED ROCK). COMPACTION SHALL BE TO 95% OF MAXIMUM DENSITY (PROCTOR - ASTM D698)
- FOR STREET SIDE INSTALLATIONS, PAD AND PRIMARY/SECONDARY CONDUITS SHALL BE ORIENTED SO THAT THE FRONT OF THE PAD, AND THE FRONT OF THE TRANSFORMER AFTER IT IS INSTALLED, FACES THE STREET.

**BOX STYLE SINGLE PHASE TRANSFORMER PAD**

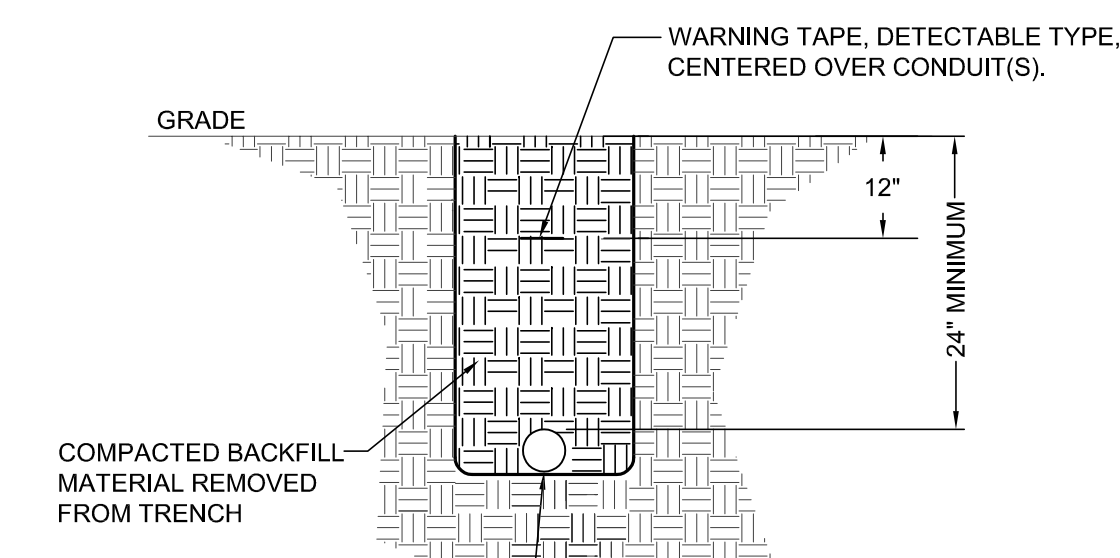
NO SCALE



BELOW PAVEMENT DRIVE



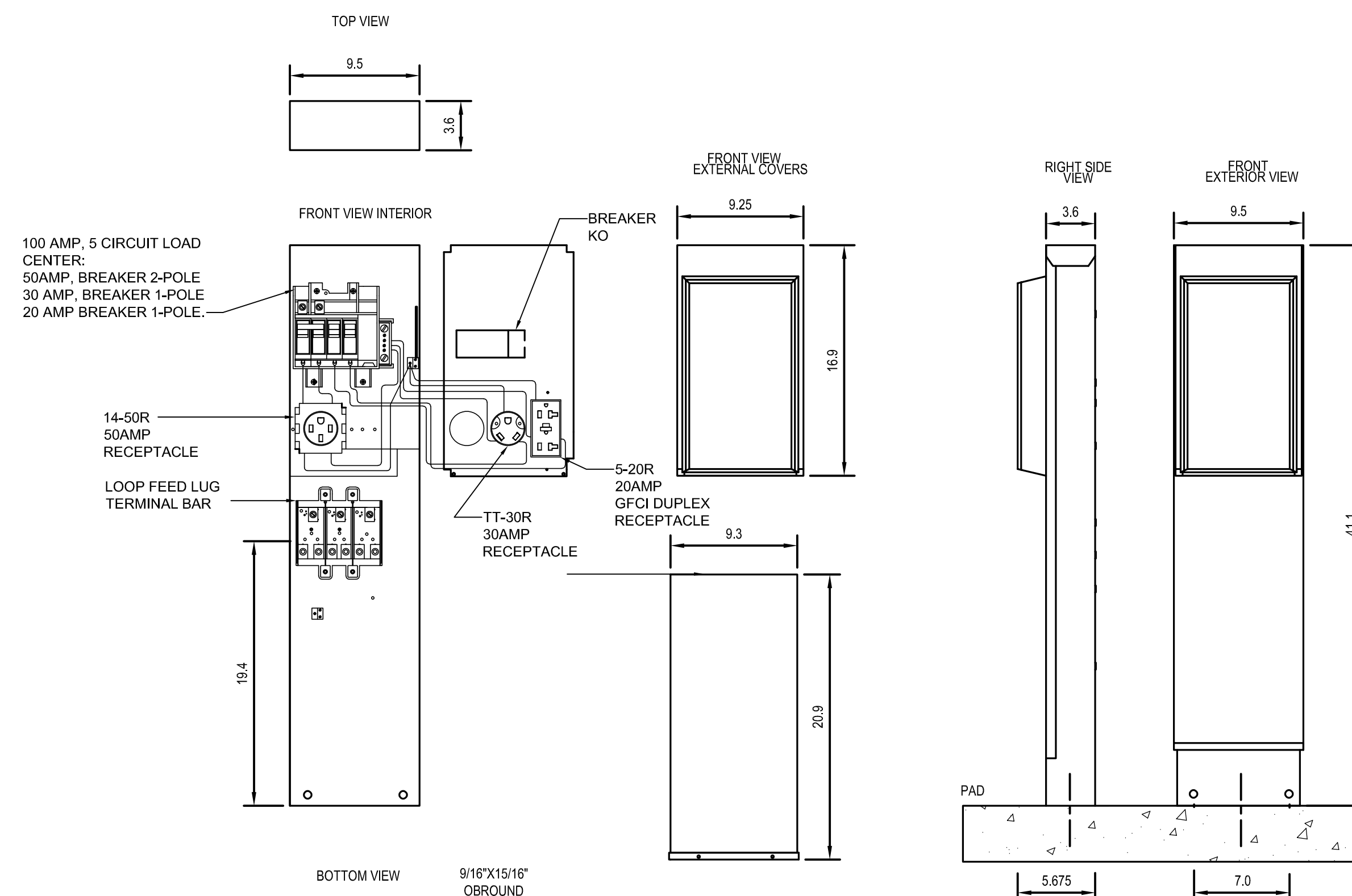
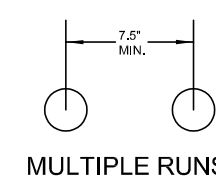
BELOW GRAVEL DRIVE



BELOW GRADE

GENERAL NOTES:

- AT CONTRACTOR'S DISCRETION, CONDUITS MAY BE BORED UTILIZING SCHEDULE 40 HDPE CONDUIT.



9/16"X15/16" OBOUNDRY MOUNTING HOLE (4X)

BOTTOM VIEW

NOTES: PAD MOUNTED POST

WIRE RANGE SIZE

CONNECTOR	COPPER	
	SOLID	STRAND
LINE	14-8	14-8
LOAD	14-10	14-10
NEUTRAL	14-4	14-4
POST LINE CONNECTORS SUITABLE FOR LOOP FEED	#6-350 KCMIL	
EQUIP. GRND POST	14-20	14-20

**1 POWER PEDESTAL DETAIL**  
NO SCALE

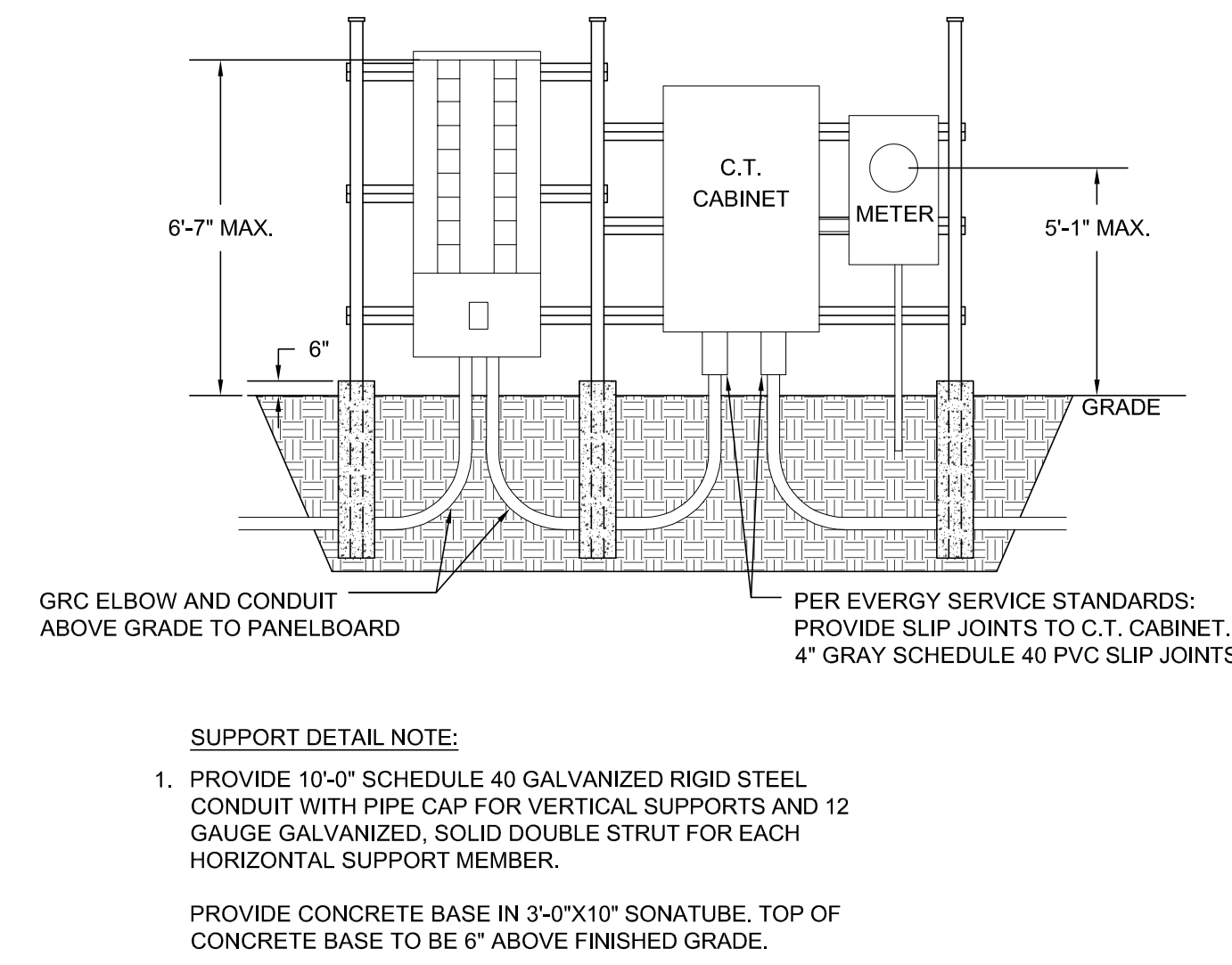
**2 UP TO 600V CONDUIT TRENCH DETAILS**  
NO SCALE



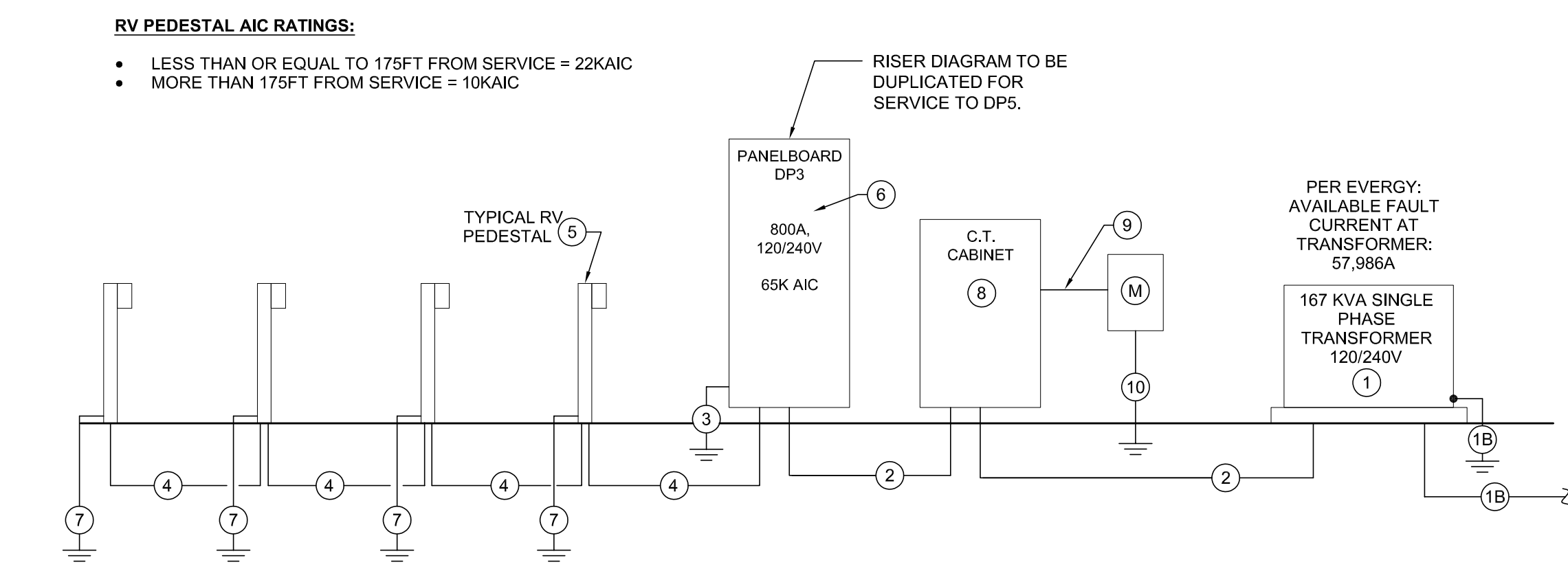
PANELBOARD DP5 (WESTON) SCHEDULE															
SERVICE: 240/120 VOLT, 1-PHASE, 3-WIRE				BUS: COPPER, S/N, GND BUS				RATING: 42000 A.I.C.							
AMP: 800 AMP				LOCATION: WESTON BEND				NEMA 3R							
MANS: MCB / 800 AMP MAIN BREAKER				MOUNTING: SURFACE				PANEL TO BE SERVICE ENTRANCE RATED							
REV NO.	NOTE NO.	LOAD CRT#	DESCRIPTION	BRKR P	AMP	LOAD KVA A	B	LOAD CRT#	DESCRIPTION	BRKR P	AMP	LOAD KVA A	B	NOTE NO.	REV NO.
		1	SITES A-50, A-51, E-52 (HOST)	2	250	24		2	SITES A-46, A-47, A-48, B-49	2	250	24			
		3					12	4					24		
		5	PANEL PP1	2	50	4		6	SPARE	2	250	24			
		7					4	8					24		
		9	SPACE ONLY	2				10	SPACE ONLY	2					
		11						12							
		13	SPACE ONLY	1				14	SPACE ONLY	1					
		15	SPACE ONLY	1				16	SPACE ONLY	1					
		17	SPACE ONLY	1				18	SPACE ONLY	1					
		19	SPACE ONLY	1				20	SPACE ONLY	1					
		21	SPACE ONLY	1				22	SPACE ONLY	1					
		23	SPACE ONLY	1				24	SPACE ONLY	1					
		25	SPACE ONLY	1				26	SPACE ONLY	1					
		27	SPACE ONLY	1				28	SPACE ONLY	1					
		29	SPACE ONLY	1				30	SPACE ONLY	1					
				TOTAL: 28								TOTAL: 48			
												TOTAL: 28			
												TOTAL: 76			
												TOTAL: 633			
												TOTAL: 140.00			
												TOTAL: 583.33			
												TOTAL: 583.33			

PANELBOARD DP3 (WESTON) SCHEDULE															
SERVICE: 240/120 VOLT, 1-PHASE, 3-WIRE				BUS: COPPER, S/N, GND BUS				RATING: 42000 A.I.C.							
AMP: 800 AMP				LOCATION: WESTON BEND				NEMA 3R							
MANS: MCB / 800 AMP MAIN BREAKER				MOUNTING: SURFACE				PANEL TO BE SERVICE ENTRANCE RATED							
REV NO.	NOTE NO.	LOAD CRT#	DESCRIPTION	BRKR P	AMP	LOAD KVA A	B	LOAD CRT#	DESCRIPTION	BRKR P	AMP	LOAD KVA A	B	NOTE NO.	REV NO.
		1	SITES A-40, A-41, A-43, A-45	2	250	24		2	SITES D-28, B-38, A-39	2	250	24			
		3					24	4					24		
		5	SITES D-42, C-44	2	125	12		6	SPARE	2	250	24			
		7						8							
		9	SHOWER HOUSE	2	100	12		10	SPACE ONLY	2					
		11						12							
		13	SPACE ONLY	1				14	SPACE ONLY	1					
		15	SPACE ONLY	1				16	SPACE ONLY	1					
		17	SPACE ONLY	1				18	SPACE ONLY	1					
		19	SPACE ONLY	1				20	SPACE ONLY	1					
		21	SPACE ONLY	1				22	SPACE ONLY	1					
		23	SPACE ONLY	1				24	SPACE ONLY	1					
		25	SPACE ONLY	1				26	SPACE ONLY	1					
		27	SPACE ONLY	1				28	SPACE ONLY	1					
		29	SPACE ONLY	1				30	SPACE ONLY	1					
				TOTAL: 48								TOTAL: 36			
												TOTAL: 48			
												TOTAL: 84			
												TOTAL: 700			
												TOTAL: 188.00			
												TOTAL: 700.00			
												TOTAL: 700.00			

PANELBOARD PP1 (WESTON) SCHEDULE															
SERVICE: 240/120 VOLT, 1-PHASE, 3-WIRE				BUS: COPPER, S/N, GND BUS				RATING: 42000 A.I.C.							
AMP: 100 AMP				LOCATION: WESTON BEND				NEMA 3R							
MANS: MCB / 50 AMP MAIN BREAKER				MOUNTING: SURFACE				PANEL TO BE SERVICE ENTRANCE RATED							
REV NO.	NOTE NO.	LOAD CRT#	DESCRIPTION	BRKR P	AMP	LOAD KVA A	B	LOAD CRT#	DESCRIPTION	BRKR P	AMP	LOAD KVA A	B	NOTE NO.	REV NO.
		1	LTG - SHED	1	20	1		2	WINDOW AC UNIT	1	20	1.2			
		3	REC - SHED	1	20		0.72	4	SPARE	1	20				
		5	SPARE	1	20			6	SPARE	1	20				
		7	SPACE ONLY	1	20			8	SPACE ONLY	1	20				
		9	SPACE ONLY	1	20			10	SPACE ONLY	1	20				
		11	SPACE ONLY	1	20			12	SPACE ONLY	1	20				
				TOTAL: 1								TOTAL: 1.2			
												TOTAL: 1			
												TOTAL: 2.2			
												TOTAL: 18			
												TOTAL: 2.92			
												TOTAL: 12.17			
												TOTAL: 13.21			



2 PANELBOARD SUPPORT DETAIL  
NO SCALE



1 120/240V TYPICAL ELECTRICAL RISER DIAGRAM  
NO SCALE

120/240V FEEDER SCHEDULE				
SYMBOL NUMBER	AMPACITY	NUMBER OF RUNS	FEEDER SIZE/NOTE	TEMP RATING
1			PROVIDE TRANSFORMER PAD PER EVERY DESIGN GUIDELINES. COORDINATE WITH EVERY FOR INSTALLATION OF TRANSFORMER.	
1B			PROVIDE 3\"/>	
2	800	3	(3) #350 KCMIL IN 3\"/>	
3			#30 COPPER GROUNDING CONDUCTOR TO 3/4\"/>	
4	250	1	(3) #250 KCMIL & (1) #4 GROUND IN 2-1/2\"/>	
5			PROVIDE NEW NEMA 3R, SURFACE MOUNTED, 125A, 120/240V, 1 PH, 3 WIRE SINGLE SIDED PEDESTAL (MILBANK U5200-XL-75 SERIES OR APPROVED EQUAL) WITH FULLY RATED LOOP-FEED LUG ASSEMBLY (MIN. #250 KCMIL). TO INCLUDE ONE (1) 20A, 1P, GFCI ONE (1) 30A, 1P AND ONE (1) 50A, 2P BREAKER TO SERVE THE FOLLOWING RECEPTACLES: 20A NEMA 5-20 (WEATHER RESISTANT TYPE), 30A NEMA TT-30 AND 50A, NEMA 14-50R. PEDESTAL TO BE PROVIDED WITH PAD MOUNT KIT.	
6			PANELBOARD TO BE RATED AS NOTED ON SCHEDULE.	
7			#6 COPPER GROUNDING CONDUCTOR TO 3/4\"/>	
8			PROVIDE EVERY APPROVED C.T. CABINET SIZED FOR 800 AMP SERVICE: KCPLM-813UBGX (24W X 48 H X 9 D) OR APPROVED EQUAL. INSTALL C.T.S AS PROVIDED BY EVERY PER EVERY STANDARDS.	
9			EXTEND 1-1/4\"/>	
10			1\"/>	



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ELECTRICAL  
RISER AND  
SCHEDULES

SHEET NUMBER:

E-801

SHEET 36 OF 36  
12/12/2023