

TERRELL HEIGHTS STORM SEWER IMPROVEMENTS PHASE 2 CARTERSVILLE, GEORGIA

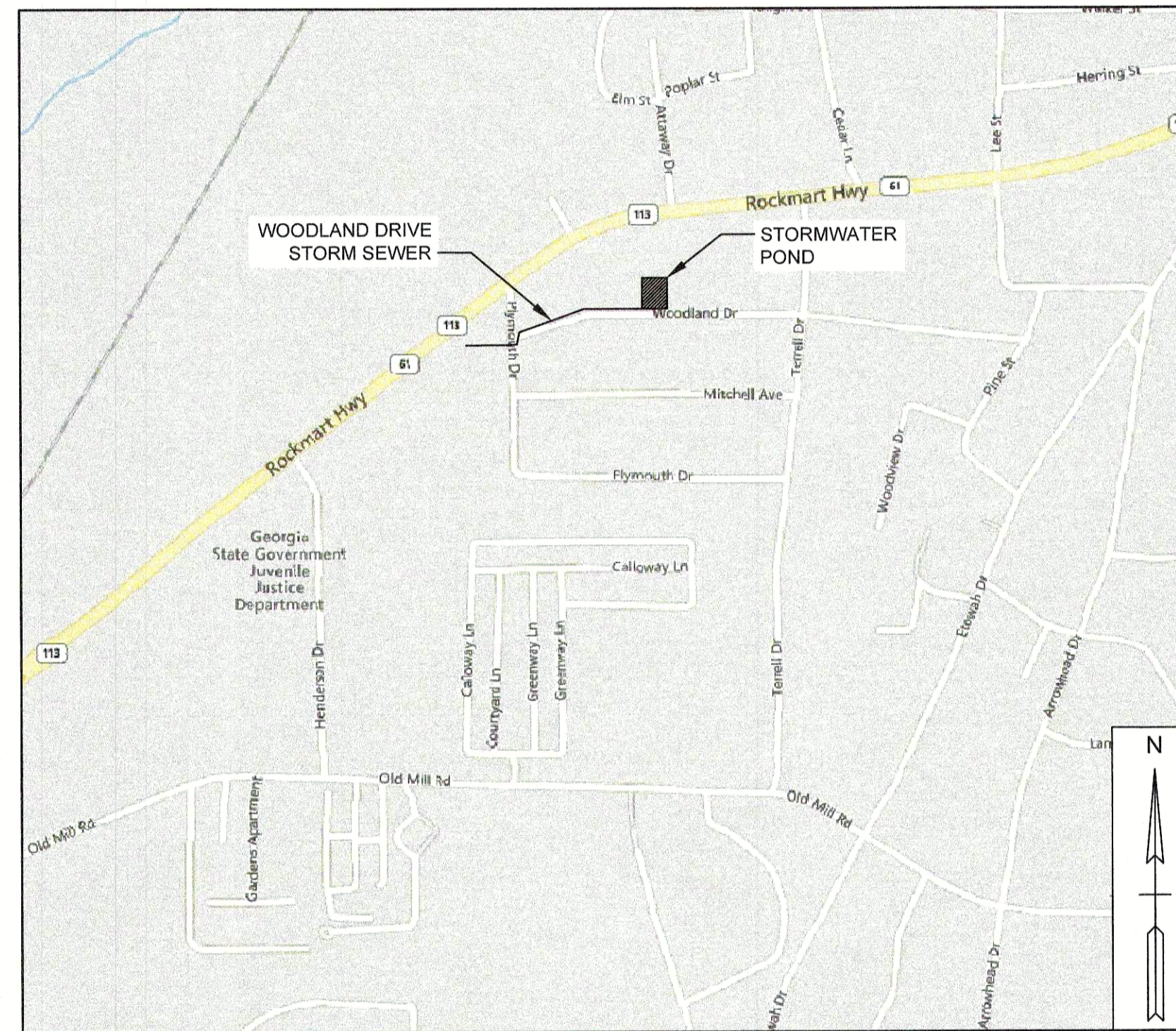
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VICINITY MAP

NOT TO SCALE

FEMA NOTE
THIS PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY NO. 13015C, PANEL NOS. 0262H, 0264H, 0266H AND 0268H, DATED OCTOBER 5, 2018, ZONE "X."

CITY OF CARTERSVILLE
APPROVED
8-22-23
DATE
ELECTRIC SYSTEM

CITY OF CARTERSVILLE
APPROVED
8-22-23
DATE
WATER DEPT.

CITY OF CARTERSVILLE
APPROVED
8-22-23
DATE
PLANNING & DEVELOPMENT

CITY OF CARTERSVILLE
APPROVED
8-22-23
DATE
PUBLIC WORKS

CITY OF CARTERSVILLE
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8-22-23
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APPROVED BY:
[Signature]
CARTERSVILLE FIRE DEPT.
DATE: 8-22-23

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Date: 2023.08.21
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TERRELL HEIGHTS
**STORM SEWER IMPROVEMENTS
PHASE 2**
CARTERSVILLE, GEORGIA

G0.00
PROJECT No.
37697-01

USER:AMBERBER
FILE:1/37/2023/09/07/01/04_CAD/GENL/PHASE 2/G0.00_COVER_PHASE 2.dwg
SAVED:7/31/2023
PLOTTED:8/21/2023

GENERAL NOTES

- THE FOLLOWING NOTES ARE APPLICABLE TO ALL CIVIL DOCUMENTS.
- THE CONTRACTOR SHALL USE MATERIALS AND EMPLOY CONSTRUCTION METHODS IN ORDER TO COMPLY WITH THE DRAWINGS AND SPECIFICATIONS. WHERE A CONFLICT OCCURS, THE STRICTEST DESIGN SHALL GOVERN. ENGINEER'S REVIEW OF SHOP DRAWINGS, PRODUCT DATA, ETC. DOES NOT RELIEVE THE CONTRACTOR FROM COMPLYING WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL INFORM THE OWNER AND ENGINEER IN WRITING OF ANY SPECIFIC DEVIATIONS AND OBTAIN OWNER'S AND ENGINEER'S WRITTEN APPROVAL OF THE SPECIFIC DEVIATION.
- THE CONTRACTOR SHALL CONFORM TO ALL LOCAL CODES AND OBTAIN ALL PERMITS AND BOND, IF REQUIRED, PRIOR TO BEGINNING WORK.
- ALL RADII SHALL BE 5' UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO THE FACE OF CURBS, EDGE OF CONCRETE, OR TO FACE OF BUILDING, UNLESS OTHERWISE NOTED.
- CURBS SHALL BE PARALLEL TO THE CENTERLINE OF DRIVES. THE CURB SHALL BE PLACED ONLY AFTER HAVING ALL BREAK POINTS (PC & PT OF CURVES) LOCATED AT THE FACE OF CURB OR AT A CONSISTENT OFFSET BY A LAND SURVEYOR.
- THE SITE LAYOUT IS BASED ON THE CONTROL POINTS AS NOTED.
- DO NOT SCALE DRAWING AS THEY ARE REPRODUCTION AND SUBJECT TO DISTORTION.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE STARTING ANY WORK. DAMAGES TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED ACCORDING TO LOCAL STANDARDS AND SPECIFICATIONS AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATING, RELOCATION AND TIE-IN TO PUBLIC UTILITIES. ALSO, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL INSPECTORS A MINIMUM 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, VERIFY WITH GOVERNING AGENCY
- PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND NEW PAVEMENT. FIELD ADJUSTMENT OF FINAL GRADES MAY BE NECESSARY. INSTALL ALL UTILITIES PRIOR TO INSTALLATION OF PAVEMENT.
- CONCRETE WALKS AND PADS SHALL HAVE A BROOM FINISH. ALL CONCRETE SHALL BE CLASS "A" (4,000 P.S.I.), UNLESS OTHERWISE NOTED.
- ALL DAMAGE TO EXISTING ASPHALT PAVEMENT TO REMAIN, WHICH RESULTS FROM NEW CONSTRUCTION, SHALL BE REPLACED WITH LIKE MATERIALS AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK, THE CONTRACTOR MUST WORK IN CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRICAL COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES TAKEN.
- IN EASEMENTS AND RIGHTS-OF-WAY, CONTRACTOR SHALL PROTECT AND RESTORE SAID PROPERTY TO A CONDITION SIMILAR OR EQUAL TO THAT EXISTING AT THE COMMENCEMENT OF CONSTRUCTION EXCEPT AS NOTED.
- THESE PLANS, PREPARED BY BARGE DESIGN SOLUTIONS, DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF BARGE DESIGN SOLUTIONS REGISTERED PROFESSIONAL ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREINAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
- THE CONTRACTOR SHALL PROTECT ALL MONUMENTS, IRON PINS, AND PROPERTY CORNERS DURING CONSTRUCTION.
- UNLESS NOTED, SUBMIT SHOP DRAWINGS OF ALL FABRICATED MATERIALS FOR REVIEW. DESIGN DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
- ALL REQUIRED TESTING REPORTS SHALL BE AVAILABLE AT THE JOB SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF TN PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED AND PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES TO EXISTING VEGETATION DURING CONSTRUCTION. THE COST TO REPLACE OR RESTORE VEGETATION SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ON COPY OF THE CURRENT CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED PERMITS.
- ALL PAVING, CONSTRUCTION, MATERIALS AND WORKMANSHIP WITHIN THE STATE ROW SHALL BE IN ACCORDANCE WITH (GDOT'S) SPECIFICATIONS AND STANDARDS (LATEST EDITION).
- ALL PAVING, CONSTRUCTION, MATERIALS AND WORKMANSHIP WITHIN THE CITY OF CARTERSVILLE RIGHT-OF-WAY (ROW) SHALL BE IN ACCORDANCE WITH CITY OF CARTERSVILLE SPECIFICATIONS AND STANDARDS (LATEST EDITION).
- ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
- ANY WELLS DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.

GRADING NOTES

- ALL STORMWATER PIPES, STRUCTURES, AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF CARTERSVILLE STANDARD SPECIFICATIONS AND DETAILS.
- NO TREES ARE TO BE REMOVED AND/OR VEGETATION DISTURBED EXCEPT AS NECESSARY FOR GRADING PURPOSES AND ONLY AS APPROVED BY OWNER'S REPRESENTATIVE AND CITY ENGINEER.
- STRIP ALL TOPSOIL AND OTHER DELETERIOUS MATERIALS AS PER SOIL CONSULTANT'S GEOTECH REPORT, TO ACCOMPLISH GRADING AS INDICATED ON THE PLANS. STOCKPILE TOPSOIL IN AREA(S) DESIGNATED BY THE OWNER FOR REUSE IN LANDSCAPE ISLANDS AND / OR GREEN SPACE AREAS.
- ALL TOPSOIL, FILL MATERIAL, EXISTING FOUNDATIONS, UTILITIES, UNDER GROUND TANKS, PAVEMENT, BASE AND ANY OTHER DELETERIOUS MATERIALS SHALL BE COMPLETELY REMOVED FROM WITHIN THE BEARING ZONE BELOW THE STRUCTURE.
- ADJUST FINAL GRADES TO EXISTING PAVEMENTS TO ASSURE A SMOOTH TRANSITION.
- PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS. SUBGRADE SOFTENED BY PERCHED WATER IN FOUNDATIONS AND PAVEMENT AREAS MUST BE UNDERCUT AND RE-COMPACTED WITH SUITABLE FILL MATERIAL AS DIRECTED BY THE ON-SITE SOIL CONSULTANT.
- FILL ALL PLANTERS/ISLANDS TO TOP OF CONCRETE CURB WITH TOPSOIL. TOPSOIL TO BE CLEAN AND FREE OF DEBRIS, ETC.
- IN NO CASE SHALL SLOPE HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING TRENCH CONSTRUCTION, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL REGULATIONS, SPECIFICALLY THE CURRENT OSHA HEALTH AND SAFETY STANDARDS FOR EXCAVATIONS (29 CFR PART 1926) SHALL BE FOLLOWED
- MINIMUM SLOPE ON ASPHALT OR CONCRETE PAVING SHALL BE 1.0% AND A MINIMUM 0.5% SLOPE ON CURBS. THE MAXIMUM SLOPE IN HANDICAP PARKING OR OTHER ADA DESIGNATED AREAS SHALL BE 2.0%.
- ALL GRADED AREAS, INCLUDING SLOPES, ARE TO BE MULCHED, SEEDED, AND/OR SODDED AS SOON AS POSSIBLE AFTER GRADING IS COMPLETED.
- CONSTRUCT EROSION CONTROL AS SHOWN ON DRAWINGS PRIOR TO BEGINNING GRADING OPERATIONS.
- ALL NEW STRUCTURES AND EXISTING STRUCTURES SHALL HAVE SEDIMENT REMOVED PRIOR TO ACCEPTANCE.
- SILT BARRIERS SHALL BE CLEANED OF ACCUMULATED SEDIMENT WHEN APPROXIMATELY 50% FILLED WITH SUCH SEDIMENT.
- ALL DIMENSIONS AND LOCATIONS OF TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DESIGNATED BY THE OWNER'S REPRESENTATIVE.
- WHEN THE TEMPORARY SOIL EROSION AND WATER POLLUTION DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE IN THE OPINION OF THE OWNER'S REPRESENTATIVE THEY SHALL BE REMOVED.
- REPLACE SILT BARRIERS WHEN CONDITIONS WARRANT AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND CITY ENGINEER.
- CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS PRIOR TO BEGINNING WORK.
- CONTOUR LINES AND SPOT ELEVATIONS ARE BASED ON ESTABLISHED PROJECT BENCHMARK, WHICH THE CONTRACTOR SHALL VERIFY WITH TOPOGRAPHY SURVEY. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THE INTENT OR ANY PROBLEMS WITH CONTINUITY OF GRADES, THE ENGINEER SHOULD BE CONTACTED IMMEDIATELY PRIOR TO BEGINNING WORK.
- ALL UN-SURFACED AREA DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 6 INCHES OF TOPSOIL. ALL SLOPES 3:1 OR STEEPER SHALL BE STABILIZED WITH EROSION CONTROL MATTING INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO MAINTAIN DISTURBED AREAS UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
- ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
- CONSTRUCTION ENTRANCE SHALL BE IN PLACE PRIOR TO ANY COMBUSTIBLES, I.E. CONSTRUCTION TRAILER, LUMBER, ETC. BEING PRESENT ON JOB SITE. IN ADDITION TO THE CONSTRUCTION ENTRANCE, AN ALL WEATHER DRIVE MUST BE IN PLACE AND ACCESSIBLE TO ALL AREAS OF THE CONSTRUCTION SITE THAT WILL CONTAIN COMBUSTIBLES THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROCESS. THE ALL WEATHER DRIVE SHALL BE NO LESS THAN 20 FEET OF UNOBSTRUCTED WIDTH WITH ADEQUATE TURNING RADIUS CAPABLE OF SUPPORTING THE IMPOSED LOADS OF THE FIRE DEPARTMENT PROCESS.
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORMWATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- EXISTING AND PROPOSED GRADE CONTOUR INTERVALS SHOWN AT (1' FOOT).
- THIS GRADING AND DRAINAGE PLAN IS NOT A DETERMINATION OR GUARANTEE OF THE SUITABILITY OF SURFACE CONDITIONS FOR THE WORK INDICATED. DETERMINATION OF THE SUBSURFACE CONDITIONS FOR THE WORK INDICATED IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
- DO NOT DISTURB VEGETATION OR REMOVE ANY EXISTING TREES EXCEPT WHERE DESIGNATED ON THE PLAN.
- TOP OF GRATE ELEVATIONS AND LOCATION OF COORDINATES FOR DRAINAGE STRUCTURES SHALL BE SHOWN ON THE PLAN UNLESS OTHERWISE NOTED. THE GRATES SHALL SLOPE LONGITUDINALLY WITH THE PAVEMENT GRADES.

EROSION CONTROL NOTES

- NO VEGETATION IS TO BE DISTURBED EXCEPT AS NECESSARY FOR GRADING AND UTILITY INSTALLATION PURPOSES.
- TOPSOIL IS TO BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED, AND REDISTRIBUTED OVER GRADED AREAS TO A MINIMUM DEPTH OF 6". THE SOIL IS TO BE STOCKPILED IN THE LOCATIONS AS DESIGNATED BY THE OWNER.
- ALL GRADED AREAS INCLUDING 3:1 SLOPES ARE TO BE MULCHED AND SEEDED/SODDED WITHIN 7 DAYS OF FINAL GRADING. ANY AREAS LEFT UNDISTURBED FOR 7 DAYS SHALL HAVE ADEQUATE STABILIZATION.
- ALL DIMENSIONS AND LOCATIONS OF TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE SUBJECT TO ADJUSTMENT AS DESIGNATED BY THE ENGINEER.
- WHEN THE TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES ARE NO LONGER REQUIRED FOR THE INTENDED PURPOSE, IN THE OPINION OF THE ENGINEER, THEY SHALL BE REMOVED.
- NO WORK IS TO BE STARTED UNTIL MANDATORY PRE-CONSTRUCTION MEETING WITH THE CITY OF CARTERSVILLE.
- INSTALL SILT FENCE AROUND THE BASE OF ANY STOCK PILES.
- CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA, THE EQUIPMENT MAINTENANCE AND CLEANING AREA, CONTRACTOR'S EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, CONCRETE TRUCK WASHOUT AREA, OFFICE TRAILERS, AND TOILET FACILITIES. CONTRACTOR TO COORDINATE EXACT LOCATION WITH PROJECT ENGINEER AND CITY ENGINEER DURING PRECONSTRUCTION MEETING.
- ALL UNDISTURBED AREAS INCLUDING WETLAND/STREAM BUFFERS, SHALL BE FIELD MARKED AND KEPT FREE OF CONSTRUCTION EQUIPMENT.
- CURRENT VERSIONS OF THE STORM WATER POLLUTION PREVENTION PLAN, NOTICE OF INTENT, AND NOTICE OF COVERAGE SHALL BE KEPT ON SITE AND IS TO BE ACCESSIBLE FOR THE DURATION OF THE PROJECT.
- APPLY PERMANENT SEEDING WHENEVER GRADING OPERATIONS ARE COMPLETED AND ALL CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBED AREA. APPLY PERMANENT SEEDING TO ALL NON-CONSTRUCTION AREAS THAT SHOW SIGNS OF EXCESSIVE EROSION.
- MULCH WITH STRAW AT A RATE OF 100 LBS/1000 S.F. OVER THE SEEDED AREAS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH GDOT'S EROSION AND SEDIMENT CONTROL HANDBOOK AND GDOT'S CONSTRUCTION ACTIVITY PERMIT REQUIREMENTS. THE DEVICES SHOWN ON THE DRAWINGS ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION CONTROL DEVICES AS NEEDED.
- CONTRACTOR TO PROVIDE AN AREA FOR CONCRETE WASH DOWN AND EQUIPMENT FUELING IN ACCORDANCE WITH CITY OF CARTERSVILLE STANDARDS, RESPECTIVELY. CONTRACTOR TO COORDINATE EXACT LOCATION WITH NPDES DEPARTMENT DURING PRECONSTRUCTION MEETING. CONTROL OF OTHER SITE WASTES SUCH AS DISCARDED BUILDING MATERIALS, CHEMICALS, LITTER, AND SANITARY WASTES THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY IS ALSO REQUIRED BY THE GRADING PERMITTEE. LOCATION OF AND/OR NOTES REFERRING TO THESE BMP'S SHALL BE SHOWN ON THE EPCS PLAN.
- THE SITE SHALL BE STABILIZED WITHIN 14 DAYS AFTER CONSTRUCTION HAS TEMPORARILY/PERMANENTLY CEASED.
- VEGETATION AND EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT ARE AFFECTED BY CONSTRUCTION SHALL BE REPAIRED OR REPLACED WITHIN 7 DAYS.

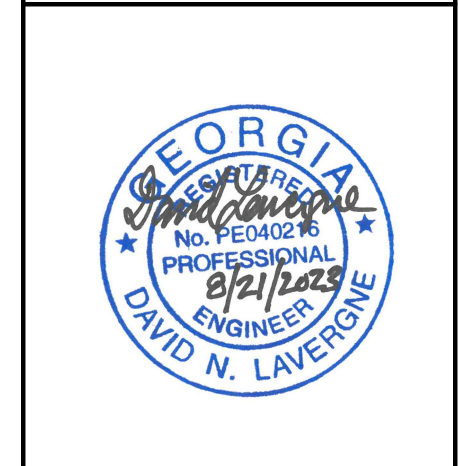
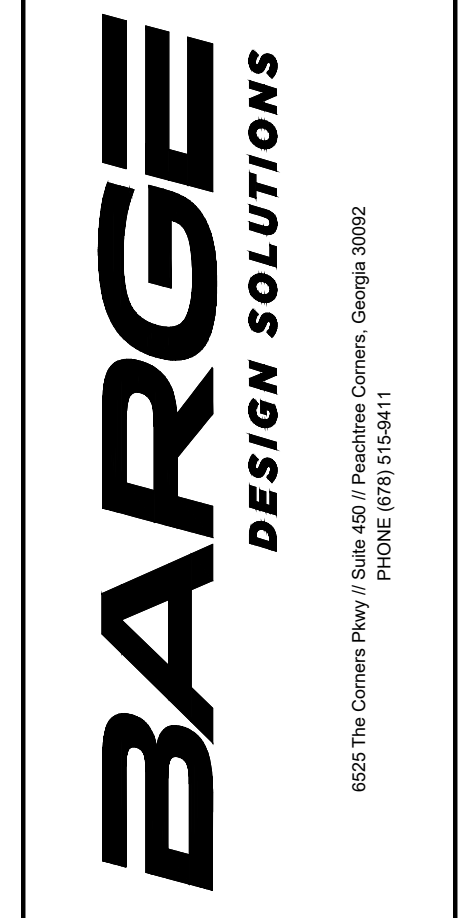
UTILITY NOTES

- ALL WATER AND SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS OF LOCAL UTILITY COMPANY PROVIDER.
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS AND INVERTS OF ALL EXISTING UTILITY LINES AND STRUCTURES (INCLUDING STORM DRAINAGE PIPES OR STRUCTURES) BEFORE THE COMMENCEMENT OF CONSTRUCTION.
- THE PARKING LOT SHALL BE CONSTRUCTED TO SUBGRADE. ALL PROPOSED FILLS SHALL BE INSTALLED AND COMPACTED PRIOR TO CONSTRUCTION OF SANITARY SEWERS.
- SEWER SERVICE LINE CLEAN-OUT ASSEMBLY SHALL BE INSTALLED ACCORDING TO THE SPECIFICATIONS OF LOCAL UTILITY COMPANY PROVIDER.
- ALL PUBLIC AND PRIVATE WATER MAINS SHALL COMPLY WITH NFPA 13 AND 24 UNLESS LOCAL JURISDICTION STATES OTHERWISE.
- CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS, AND PAY ANY APPLICABLE FEES.
- IN THE EVENT OF ANY DISCREPANCIES AND/OR ERRORS FOUND IN THE DRAWINGS, OR IF PROBLEMS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. IF ENGINEER IS NOT NOTIFIED, THE CONTRACTOR SHALL TAKE RESPONSIBILITY FOR THE COST OF ANY REVISION.
- THE CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN, REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE, AND COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN THE USE OF EQUIPMENT IN AND AROUND OVERHEAD AND UNDERGROUND ELECTRICAL WIRES AND SERVICES. IF AT ANY TIME IN THE PURSUIT OF THIS WORK THE CONTRACTOR MUST WORK IN THE CLOSE PROXIMITY OF THE ABOVE NOTED WIRES, THE ELECTRIC COMPANY SHALL BE CONTACTED PRIOR TO SUCH WORK AND THE PROPER SAFETY MEASURES IN THE PROJECT AREA SHOULD BE MADE BY THE CONTRACTOR PRIOR TO THE INITIATION OF CONSTRUCTION.
- THE OWNER AND ENGINEER DO NOT ASSUME RESPONSIBILITY FOR THE POSSIBILITY THAT, DURING CONSTRUCTION, UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED OR THAT ACTUAL LOCATION OF THOSE SHOWN MAY BE DIFFERENT FROM LOCATIONS DESIGNATED ON THE CONTRACT DRAWINGS. IN AREAS WHERE IT IS NECESSARY THAT EXACT LOCATIONS BE KNOWN OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH ALL LABOR AND TOOLS NECESSARY TO EITHER VERIFY AND SUBSTANTIATE OR DEFINITELY ESTABLISH THE POSITION OF UNDERGROUND UTILITY LINES.
- MAINTAIN A MINIMUM OF 18" VERTICAL CLEARANCE BETWEEN ALL SANITARY SEWER AND WATERLINE CROSSINGS, UNLESS LOCAL UTILITY JURISDICTION SPECS STATES OTHERWISE.

SURVEY NOTES

- SURVEYOR'S LIABILITY FOR THE DOCUMENT SHALL BE LIMITED TO THE ORIGINAL PURCHASER AND DOES NOT EXTEND TO ANY UNNAMED PERSON OR ENTITIES WITHOUT AN EXPRESSED RE-CERTIFICATION BY WHOSE SIGNATURE APPEARS ON THIS SURVEY.
- ALL DISTANCES WERE MEASURED WITH E.D.M EQUIPMENT AND HAVE BEEN ADJUSTED FOR TEMPERATURE.
- PRIOR TO ANY CONSTRUCTION, EXCAVATION, OR ANY DISTURBANCE OF THE EXISTING GROUND ELEVATION, THE OWNER AND /OR CONTRACTOR SHOULD ASSUME RESPONSIBILITY OF CONTACTING THE LOCAL UTILITY AUTHORITIES FOR EXACT LOCATION OF UNDERGROUND GAS LINES, TELEPHONE LINES, ELECTRIC CABLES, WATER LINES, ETC. TO AVOID ANY HAZARD OR CONFLICT. IN GEORGIA, IT IS A REQUIREMENT, PER "THE UNDERGROUND UTILITY PREVENTION ACT", THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS, NO LESS THAN THREE (3) NOR MORE THAN (10) WORKING DAYS PRIOR TO THE DATE OF THEIR EXCAVATION TO AVOID ANY POSSIBLE HAZARD OR CONFLICT. DIAL 811 FOR ONE CALL CENTER.
- UTILITIES SHOWN WERE TAKEN FROM FIELD LOCATIONS THAT WERE APPARENT AND COPIED FROM APPROPRIATE GOVERNMENT AGENCIES MAPS AND ARE APPROXIMATE AT BEST. THERE MAY BE UTILITIES, THE EXISTENCE OF WHICH IS UNKNOWN BY THE SURVEYOR.
- TOPOGRAPHIC INFORMATION WAS DERIVED BY RANDOM SHOTS PER FIELD SURVEY; CONTOUR INTERVAL IS 1'. DATUM BASED ON NAVD83.

USER:AABARBER
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SAVED: 7/6/2023
PLOTTED: 8/21/2023



GENERAL NOTES
TERRELL HEIGHTS
STORM SEWER IMPROVEMENTS
PHASE 2
CARTERSVILLE, GEORGIA

REV.	DR.	CHK.	DATE	DESCRIPTION

G0.01
PROJ. NO. 37697-01

LEGEND

- (R/C) IRON ROD (OLD)
- (R/N) IRON ROD (SET)
- PROPERTY LINE
- - - 520 - - - CONTOUR LINE (MAJOR)
- - - 519 - - - CONTOUR LINE (MINOR)
- - - UGE - - - UNDERGROUND ELECTRIC LINE
- - - OH - - - OVERHEAD POWER LINE
- - - 12"SA - - - SANITARY SEWER LINE
- - - 15"ST - - - STORM SEWER LINE
- - - 8"W - - - WATER LINE
- ⊙ ER ELECTRIC RISER
- EBOX ELECTRIC METER / VAULT
- ⊙ UTILITY POLE
- ↑ GUY WIRE
- TBOX TRAFFIC SIGNAL BOX
- ⊙ SANITARY SEWER MANHOLE
- ⊙ STORM SEWER MANHOLE
- ⊙ CURB INLET/CATCH BASIN
- ⊙ CLEANOUT
- ⊙ FIRE HYDRANT
- ⊙ WATER METER
- ⊙ WATER VALVE
- ⊙ SIGN POST
- ⊙ BOLLARD

ABBREVIATIONS

- Ø DIAMETER
- BOC BACK OF CURB
- BFP BACKFLOW PREVENTER
- BFV BUTTERFLY VALVE
- CI CURB INLET
- CL CENTERLINE
- CO CLEAN OUT
- CONC CONCRETE
- CONN CONNECT
- CU COPPER
- CV CHECK VALVE
- DI DROP INLET
- DIP DUCTILE IRON PIPE
- DWCB DOUBLE WING CATCH BASIN
- D/W DRIVEWAY
- EX EXISTING
- ELEC ELECTRICAL SERVICE
- EOP EDGE OF PAVEMENT
- FH FIRE HYDRANT
- GV GATE VALVE
- HDPE HIGH DENSITY POLYETHYLENE
- HORZ HORIZONTAL
- HWY HIGHWAY
- ID INSIDE DIAMETER
- INT INTERSECTION
- LF LINEAR FEET
- MIN MINIMUM
- MH MANHOLE
- NTS NOT TO SCALE
- OD OUTSIDE DIAMETER
- PG PAGE
- PP POWER POLE
- PV PLUG VALVE
- PVC POLYVINYL CHLORIDE
- PVMNT PAVEMENT
- RD ROAD
- RET RETAINER
- RJ RESTRAINED JOINT
- R/W RIGHT-OF-WAY
- SD STORM DRAIN
- SHT SHEET
- SP SIGNAL POLE
- SR STATE ROUTE
- SS SANITARY SEWER
- SAMH SANITARY SEWER MANHOLE
- SSTL STAINLESS STEEL
- STA STATION
- SWMH STORMWATER MANHOLE
- TS&V TAPPING SLEEVE AND VALVE
- TYP TYPICAL
- WL WATER LINE
- WM WATER METER
- WTR WATER
- W/ WITH
- ' FEET
- " INCHES
- ° DEGREE



KEY MAP, LEGEND AND ABBREVIATIONS

TERRELL HEIGHTS

STORM SEWER IMPROVEMENTS

PHASE 2

CARTERSVILLE, GEORGIA

REV.	DR.	CHK.	DATE	DESCRIPTION

G0.02

PROJ. NO. 37697-01

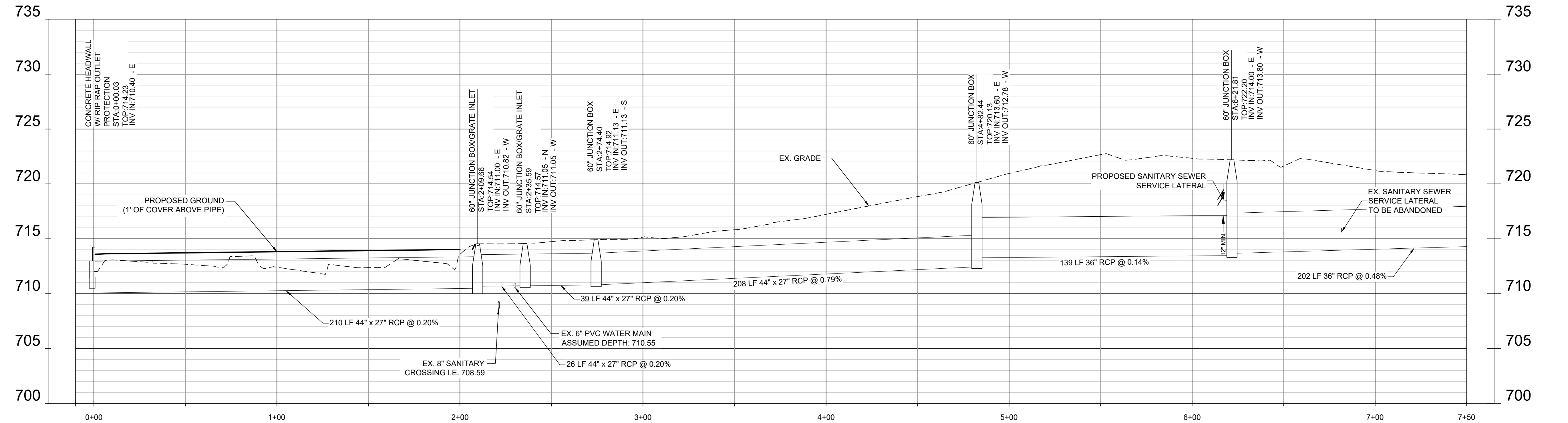
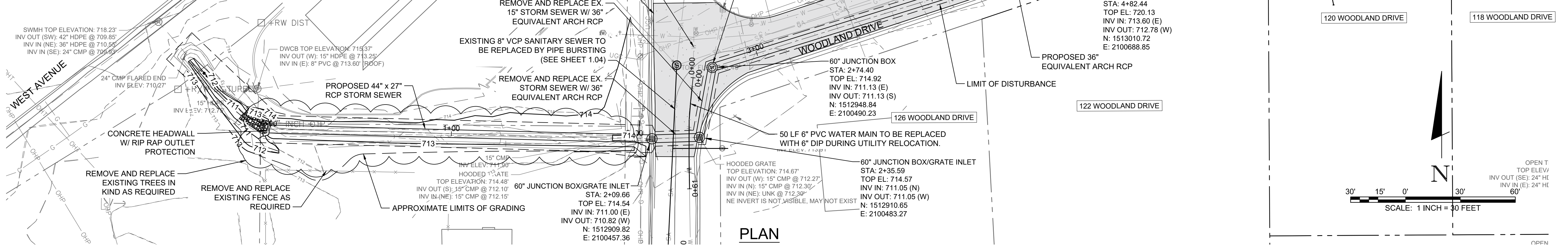
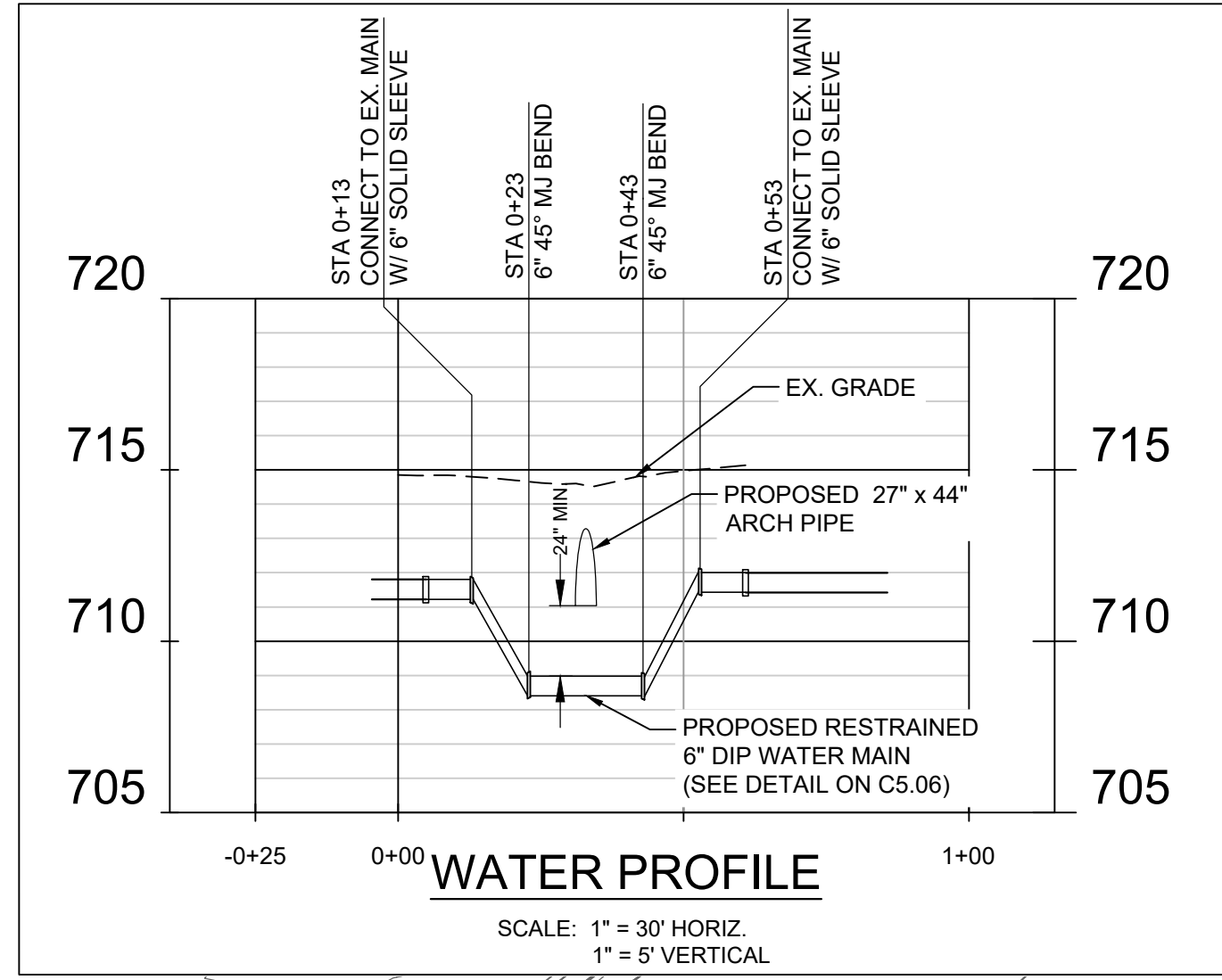
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 SAVER: 8/8/2023
 PLOTTED: 8/21/2023



WATER RELOCATION NOTE: CONTRACTOR TO COORDINATE WITH CITY OF CARTERSVILLE WATER DEPARTMENT TO PROGRESS WITH WATER SERVICE SHUT DOWN.

NOTES:

- 1. PRIOR TO CONSTRUCTION, CONTRACTOR IS TO FIELD VERIFY DEPTH AND LOCATION OF ALL WATER AND SEWER UTILITIES.
2. CONTRACTOR IS TO COORDINATE WATER SERVICE DISRUPTION WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT. SERVICE SHUT DOWN IS TO BE PERFORMED BY CITY PERSONNEL.
3. CONTRACTOR IS TO COORDINATE WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT FOR SANITARY SEWER SERVICE SHUT DOWN. SEWER SERVICE IS TO BE RESTORED WITHIN 12 HOURS OF SHUT DOWN.
4. 24" MINIMUM SEPARATION BETWEEN WATER OR SEWER AND OTHER UTILITIES IS PREFERRED; KEEP THE MAXIMUM SEPARATION BETWEEN UTILITIES AS IS FEASIBLE.
5. CONTRACTOR TO FIELD LOCATED SANITARY SEWER LATERALS PRIOR TO PIPE BURSTING. LATERALS TO BE RECONNECTED AFTER SEWER MAIN IS INSTALLED.



WOODLAND DRIVE PLAN & PROFILE
STA 0+00 TO STA 7+50
TERRELL HEIGHTS
STORM SEWER IMPROVEMENTS
PHASE 2
CARTERSVILLE, GEORGIA

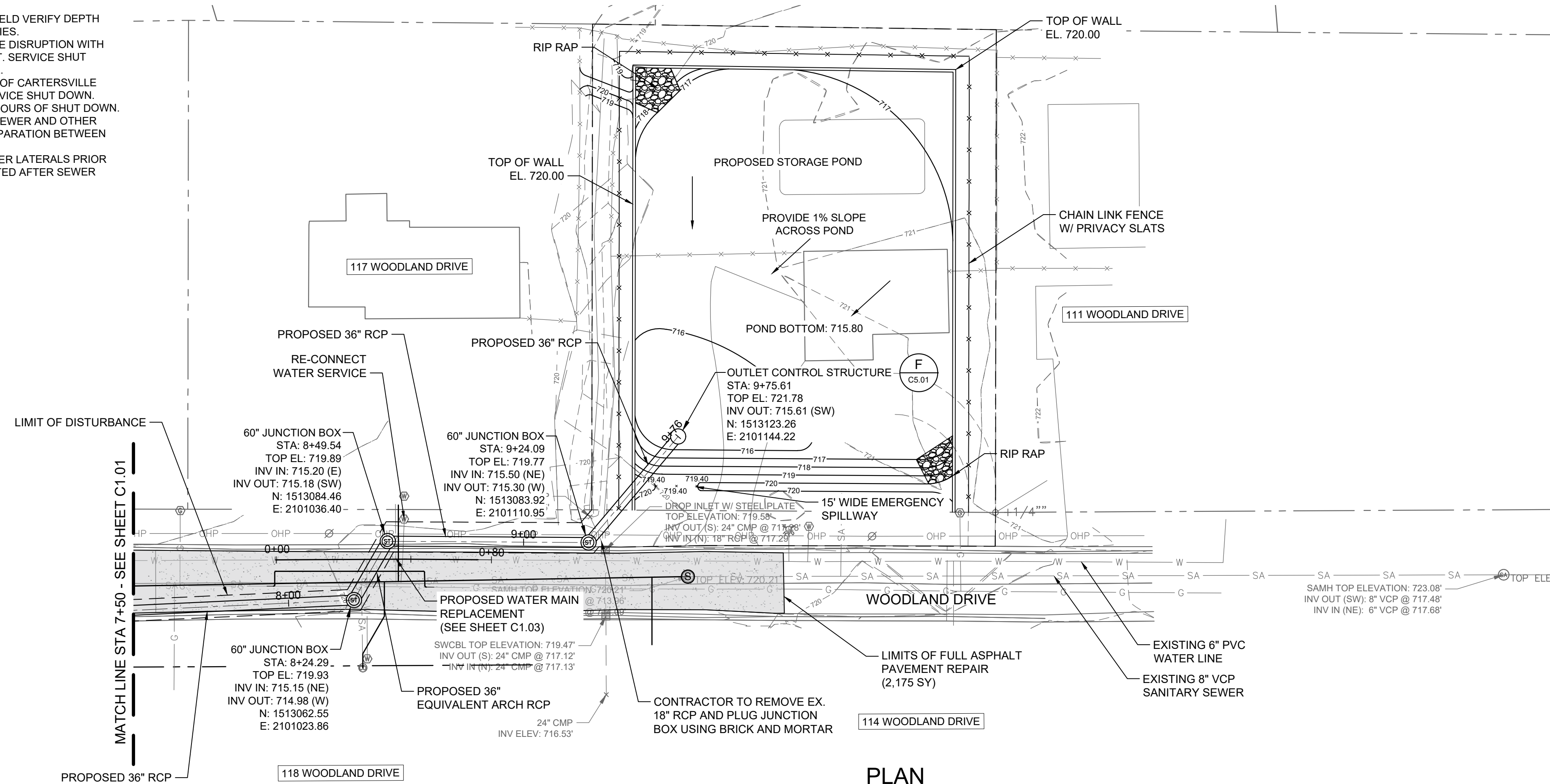
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C1.01
PROJ. NO. 37697-01

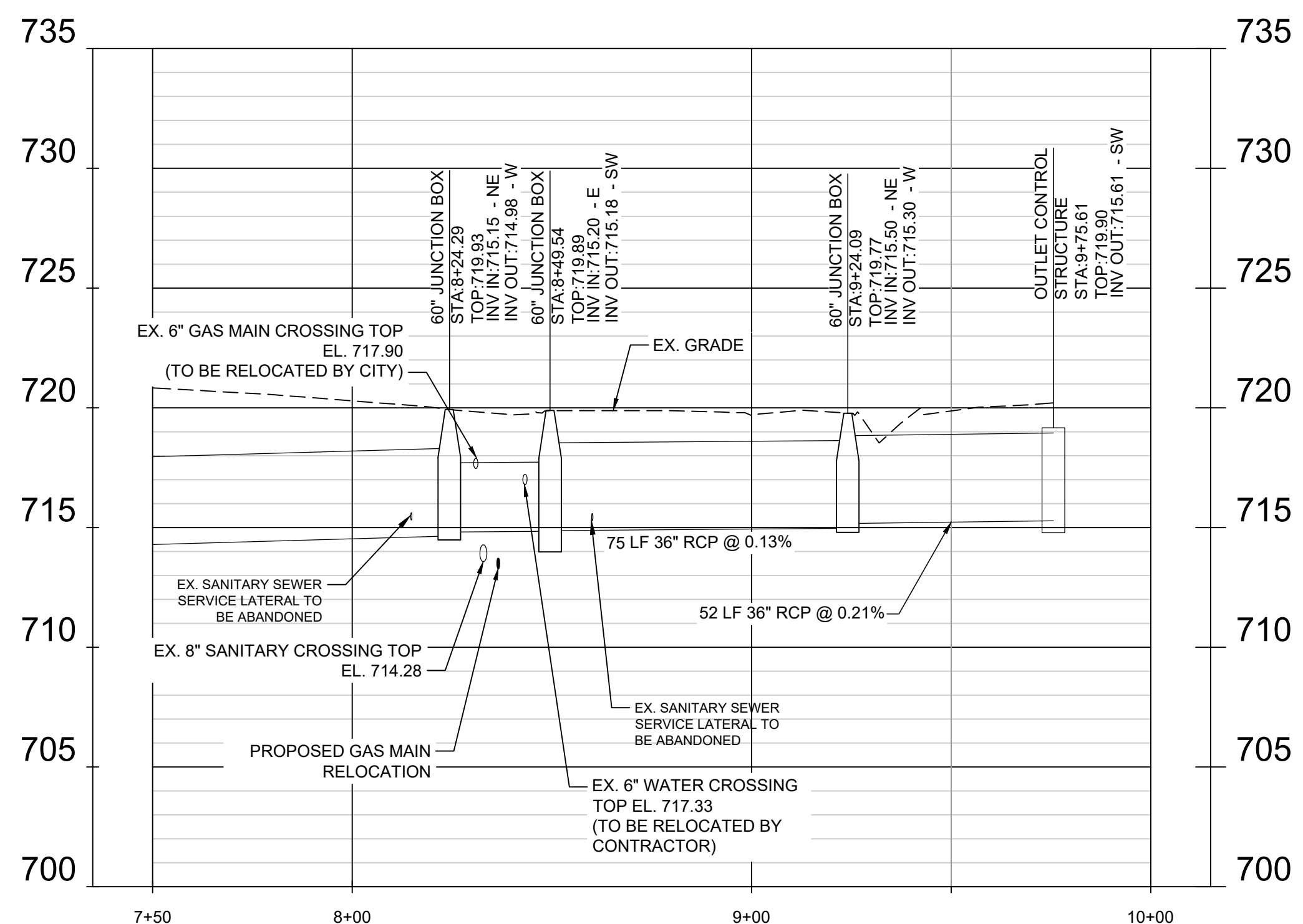
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SAVED: 8/21/2023
PLOTTED: 8/21/2023

NOTES:

1. PRIOR TO CONSTRUCTION, CONTRACTOR IS TO FIELD VERIFY DEPTH AND LOCATION OF ALL WATER AND SEWER UTILITIES.
2. CONTRACTOR IS TO COORDINATE WATER SERVICE DISRUPTION WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT. SERVICE SHUT DOWN IS TO BE PERFORMED BY CITY PERSONNEL.
3. CONTRACTOR IS TO COORDINATE WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT FOR SANITARY SEWER SERVICE SHUT DOWN. SEWER SERVICE IS TO BE RESTORED WITHIN 12 HOURS OF SHUT DOWN.
4. 24" MINIMUM SEPARATION BETWEEN WATER OR SEWER AND OTHER UTILITIES IS PREFERRED. KEEP THE MAXIMUM SEPARATION BETWEEN UTILITIES AS IS FEASIBLE.
5. CONTRACTOR TO FIELD LOCATED SANITARY SEWER LATERALS PRIOR TO PIPE BURSTING. LATERALS TO BE RECONNECTED AFTER SEWER MAIN IS INSTALLED.

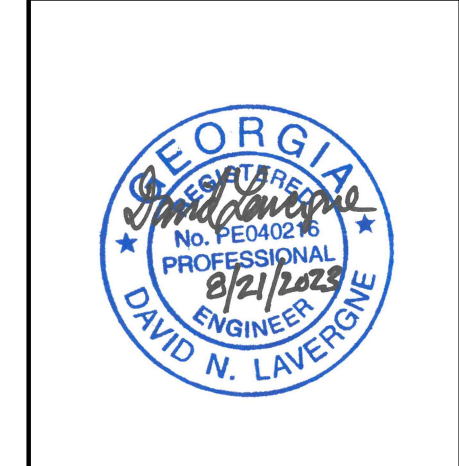
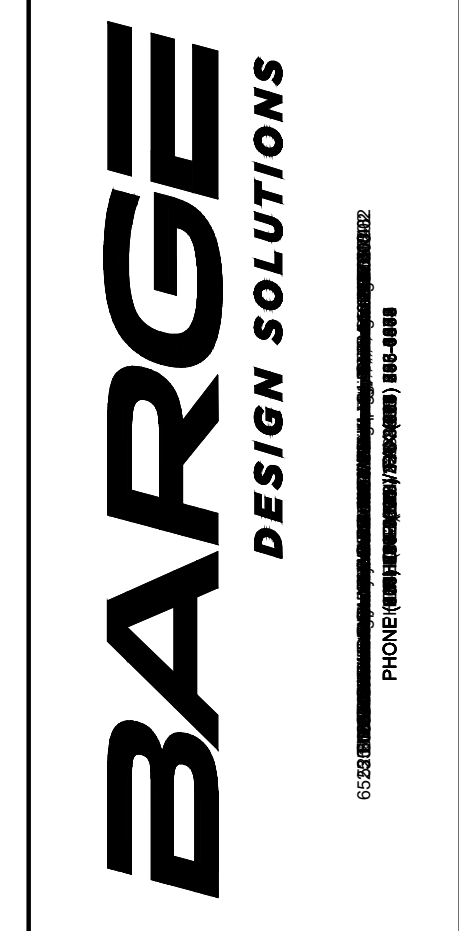


PLAN



PROFILE

SCALE: 1" = 30' HORIZ.
1" = 5' VERTICAL



WOODLAND DRIVE PLAN & PROFILE
STA 7+50 TO E.O.L.
TERRELL HEIGHTS
**STORM SEWER IMPROVEMENTS
PHASE 2**
CARTERSVILLE, GEORGIA

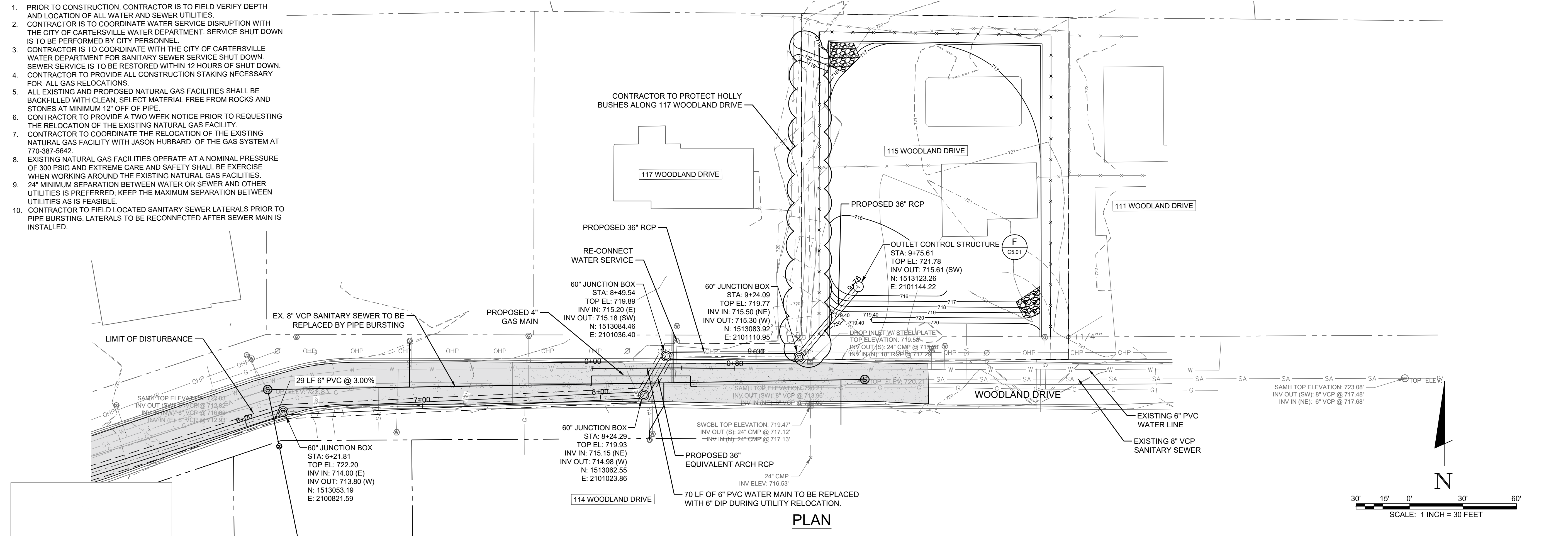
REV.	DR.	CHK.	DATE	DESCRIPTION

C1.02
PROJ. NO. 37697-01

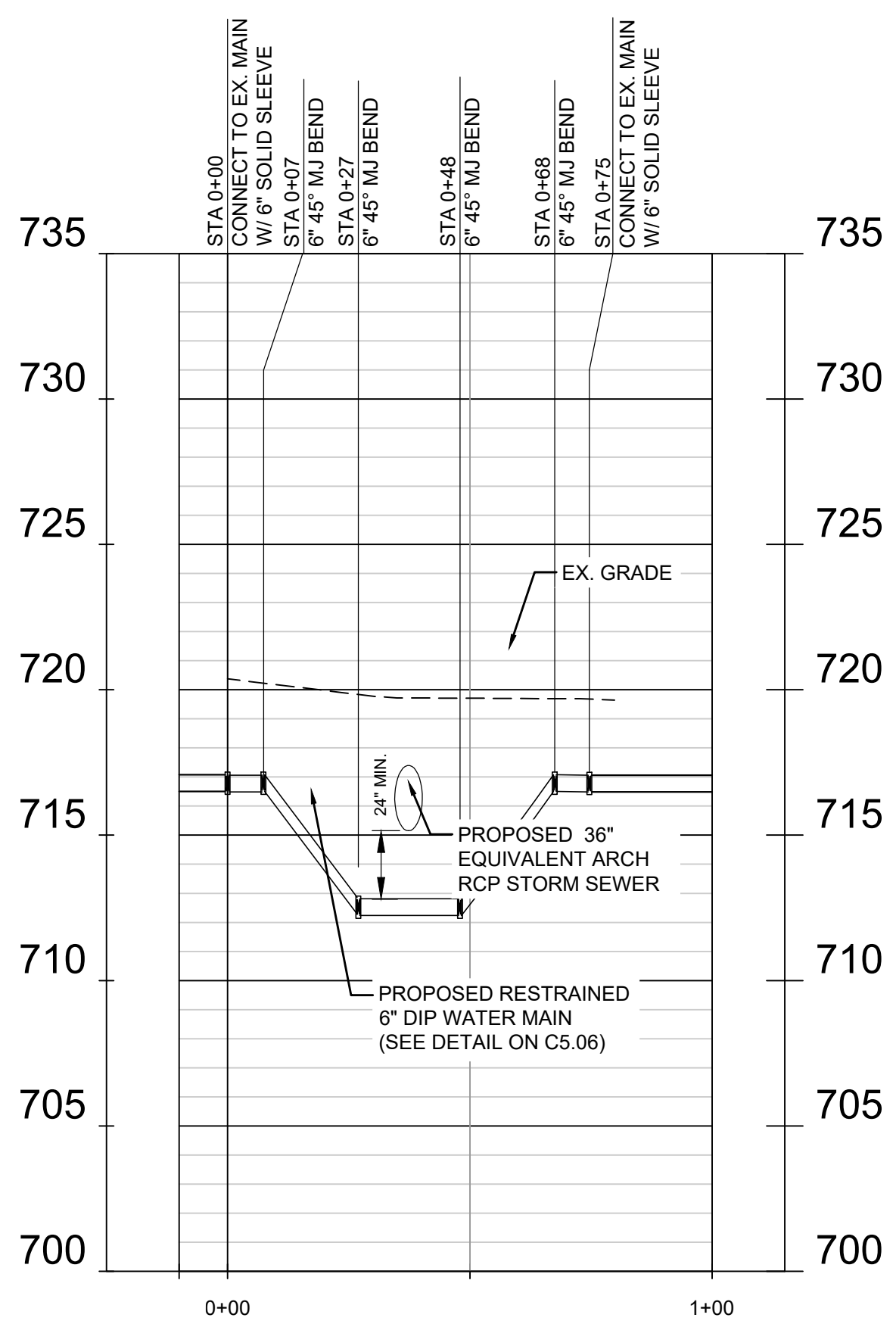
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SAVED: 8/28/2023
PLOTTED: 8/21/2023

NOTES:

1. PRIOR TO CONSTRUCTION, CONTRACTOR IS TO FIELD VERIFY DEPTH AND LOCATION OF ALL WATER AND SEWER UTILITIES.
2. CONTRACTOR IS TO COORDINATE WATER SERVICE DISRUPTION WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT. SERVICE SHUT DOWN IS TO BE PERFORMED BY CITY PERSONNEL.
3. CONTRACTOR IS TO COORDINATE WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT FOR SANITARY SEWER SERVICE SHUT DOWN. SEWER SERVICE IS TO BE RESTORED WITHIN 12 HOURS OF SHUT DOWN.
4. CONTRACTOR TO PROVIDE ALL CONSTRUCTION STAKING NECESSARY FOR ALL GAS RELOCATIONS.
5. ALL EXISTING AND PROPOSED NATURAL GAS FACILITIES SHALL BE BACKFILLED WITH CLEAN, SELECT MATERIAL FREE FROM ROCKS AND STONES AT MINIMUM 12" OFF OF PIPE.
6. CONTRACTOR TO PROVIDE A TWO WEEK NOTICE PRIOR TO REQUESTING THE RELOCATION OF THE EXISTING NATURAL GAS FACILITY.
7. CONTRACTOR TO COORDINATE THE RELOCATION OF THE EXISTING NATURAL GAS FACILITY WITH JASON HUBBARD OF THE GAS SYSTEM AT 770-387-5642.
8. EXISTING NATURAL GAS FACILITIES OPERATE AT A NOMINAL PRESSURE OF 300 PSIG AND EXTREME CARE AND SAFETY SHALL BE EXERCISE WHEN WORKING AROUND THE EXISTING NATURAL GAS FACILITIES.
9. 24" MINIMUM SEPARATION BETWEEN WATER OR SEWER AND OTHER UTILITIES IS PREFERRED; KEEP THE MAXIMUM SEPARATION BETWEEN UTILITIES AS IS FEASIBLE.
10. CONTRACTOR TO FIELD LOCATED SANITARY SEWER LATERALS PRIOR TO PIPE BURSTING. LATERALS TO BE RECONNECTED AFTER SEWER MAIN IS INSTALLED.

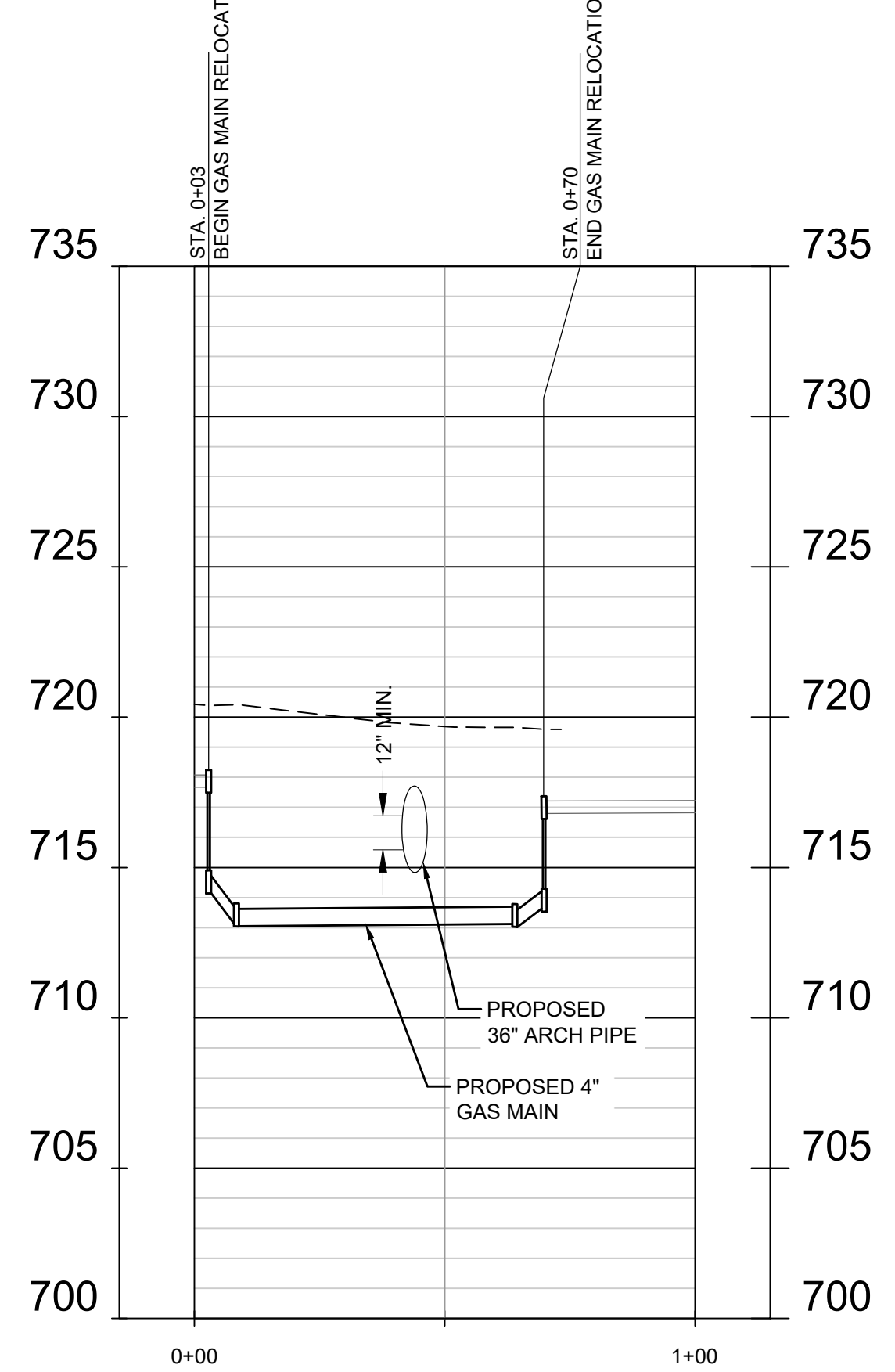


PLAN



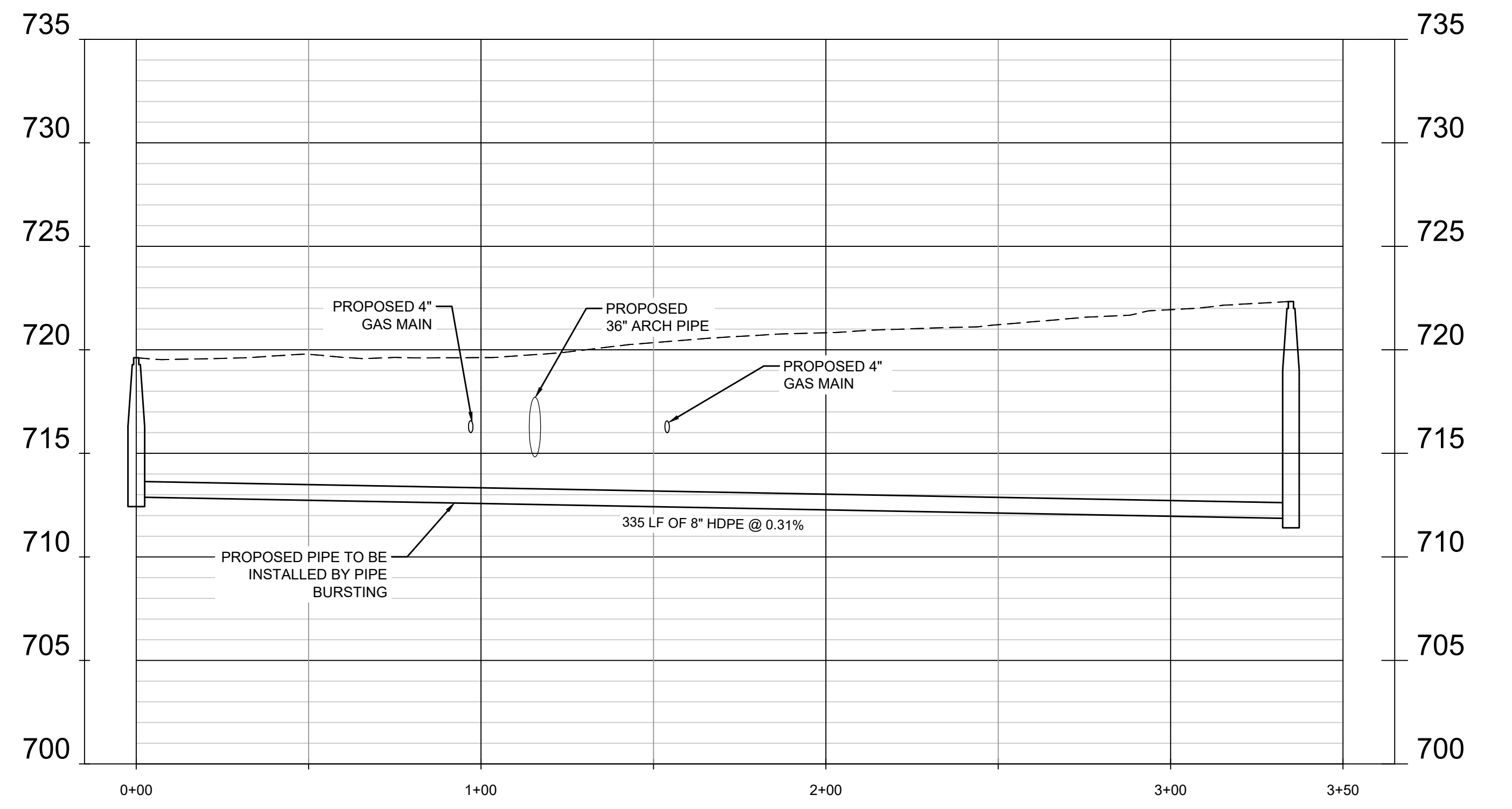
WATER PROFILE

SCALE: 1" = 30' HORIZ
1" = 5' VERTICAL



GAS PROFILE

SCALE: 1" = 30' HORIZ
1" = 5' VERTICAL



SANITARY PROFILE

SCALE: 1" = 30' HORIZ
1" = 5' VERTICAL

WOODLAND DRIVE UTILITY RELOCATIONS
TERRELL HEIGHTS
STORM SEWER IMPROVEMENTS
PHASE 2
CARTERSVILLE, GEORGIA

REV.	DR.	CHK.	DATE	DESCRIPTION

C1.03
PROJ. NO. 37697-01

NOTES:

1. PRIOR TO CONSTRUCTION, CONTRACTOR IS TO FIELD VERIFY DEPTH AND LOCATION OF ALL WATER AND SEWER UTILITIES.
2. CONTRACTOR IS TO COORDINATE WATER SERVICE DISRUPTION WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT. SERVICE SHUT DOWN IS TO BE PERFORMED BY CITY PERSONNEL.
3. CONTRACTOR IS TO COORDINATE WITH THE CITY OF CARTERSVILLE WATER DEPARTMENT FOR SANITARY SEWER SERVICE SHUT DOWN. SEWER SERVICE IS TO BE RESTORED WITHIN 12 HOURS OF SHUT DOWN.
4. 24" MINIMUM SEPARATION BETWEEN WATER OR SEWER AND OTHER UTILITIES IS PREFERRED; KEEP THE MAXIMUM SEPARATION BETWEEN UTILITIES AS IS FEASIBLE.
5. CONTRACTOR TO FIELD LOCATED SANITARY SEWER LATERALS PRIOR TO PIPE BURSTING. LATERALS TO BE RECONNECTED AFTER SEWER MAIN IS INSTALLED.

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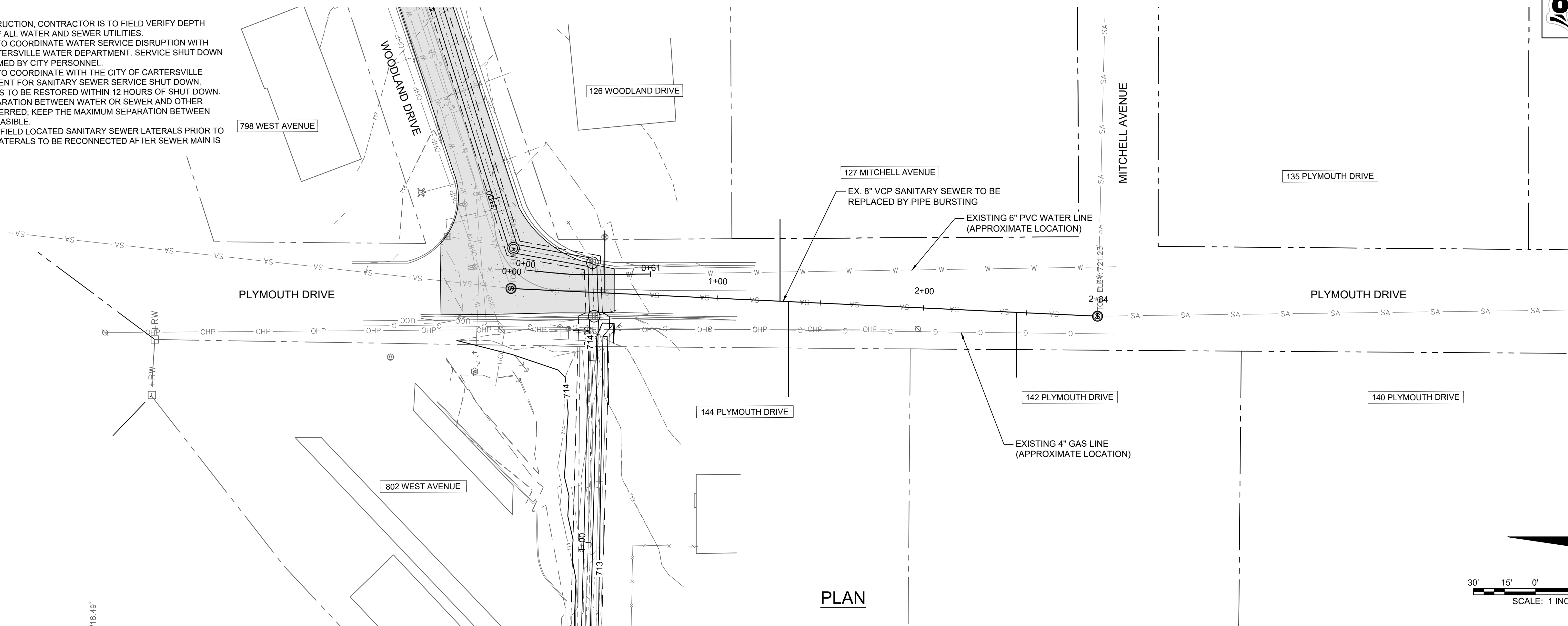
BARGE
DESIGN SOLUTIONS



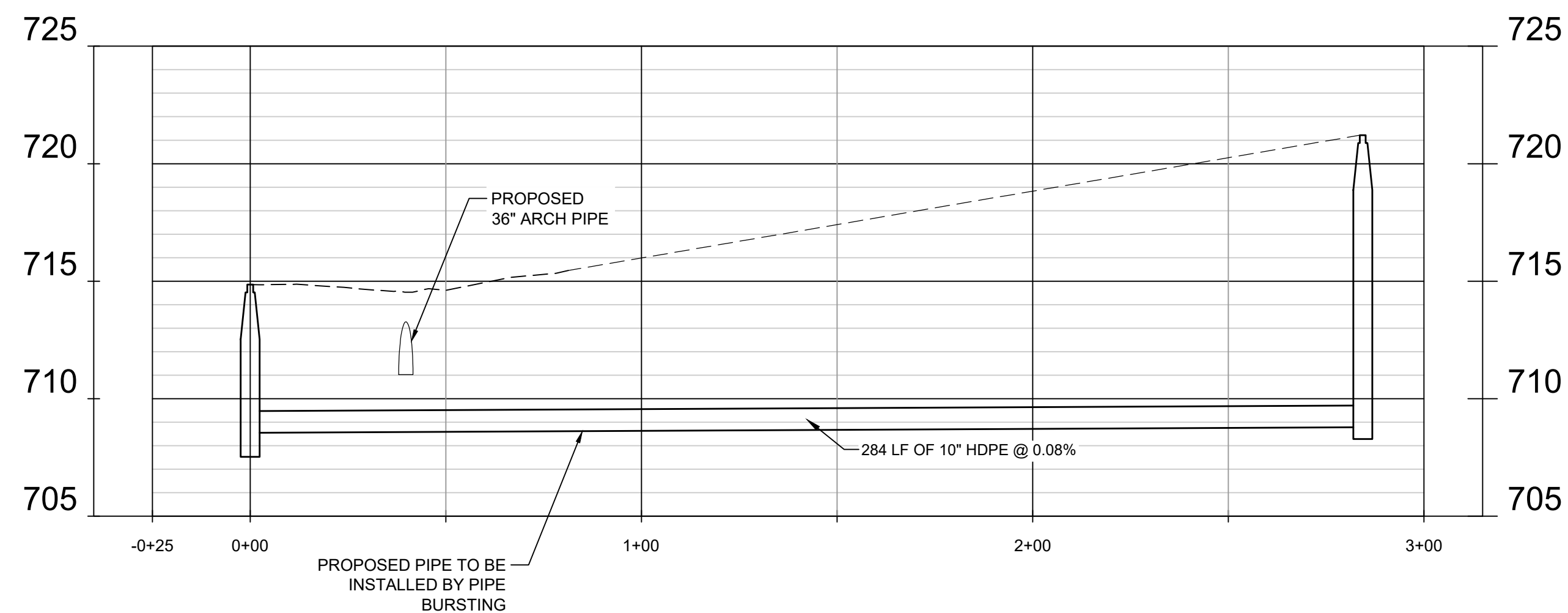
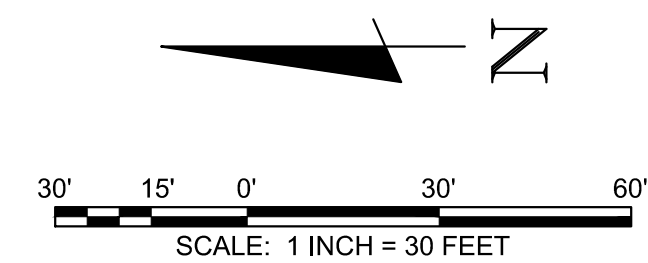
PLYMOUTH DRIVE
SANITARY SEWER PIPE BURSTING
TERRELL HEIGHTS
STORM SEWER IMPROVEMENTS
PHASE 2
CARTERSVILLE, GEORGIA

REV.	DR.	CHK.	DATE	DESCRIPTION

C1.04
PROJ. NO. 37697-01

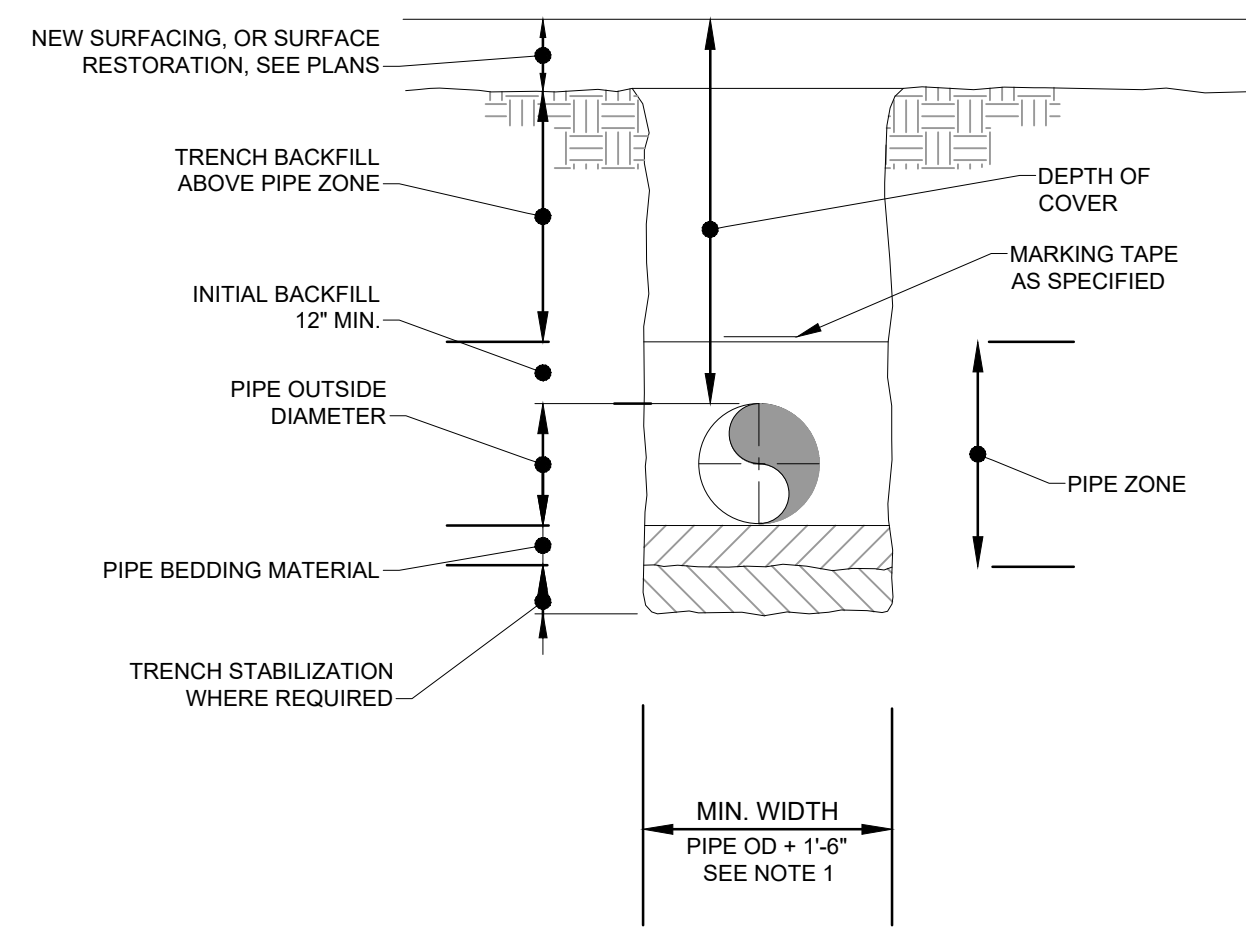


PLAN



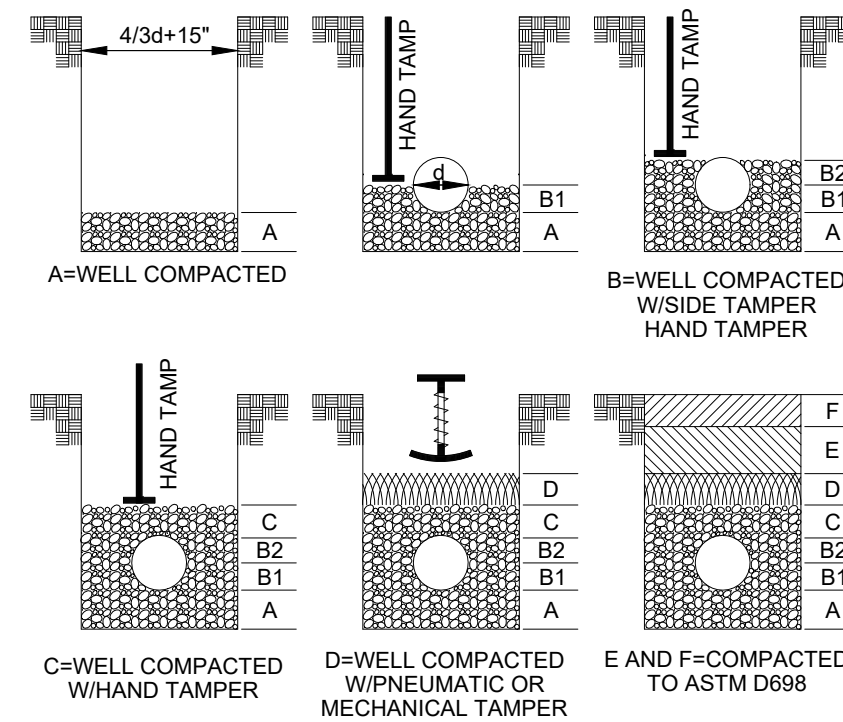
SANITARY PROFILE

SCALE: 1" = 30' HORIZ.
1" = 5' VERTICAL



- NOTES:
- FOR PIPES 36" AND LARGER, TRENCH WIDTH IS PIPE OD + 2'-0".

A TYPICAL TRENCH
C5.01 NTS



LAYER	DEPTH	MATERIAL
A	6" MIN	CLASS [1-4] FOR ALL PIPE (1)(2)
B	VARIES	CLASS [1-4] FOR ALL PIPE TAMPED IN 6" MAXIMUM LAYERS. (2)
C	6"	CLASS [1-4] FOR ALL PIPE (2)
D	6"	SELECTED BACKFILL MATERIAL - CLASS 1-4 FOR ALL PIPE.
E	VARIES	CLASS [1-4] FOR ALL PIPE, 75% OF BACKFILL MATERIAL MAY CONTAIN BROKEN STONES NOT EXCEEDING 6" IN DIAMETER-TAMPED IN 12" MAXIMUM LAYERS.
F	12"	CLASS [3 OR 4] FOR ALL PIPE, FREE OF LARGE CLODS, VEGETABLE MATTER, DEBRIS, STONE AND/OR ANY OTHER OBJECTIONABLE MATTER.

- (1) SEE SPECIFICATION SECTION 31 23 33 FOR SPECIAL FOUNDATION PREPARATION.
(2) (GDOT NO. 57) STONE FOR 6" MIN. STONE ENVELOPE AROUND PVC PIPE

BACKFILLING AND COMPACTION
OF TRENCHES
IN UNIMPROVED AREAS

B TRENCH BACKFILL
C5.01 NTS

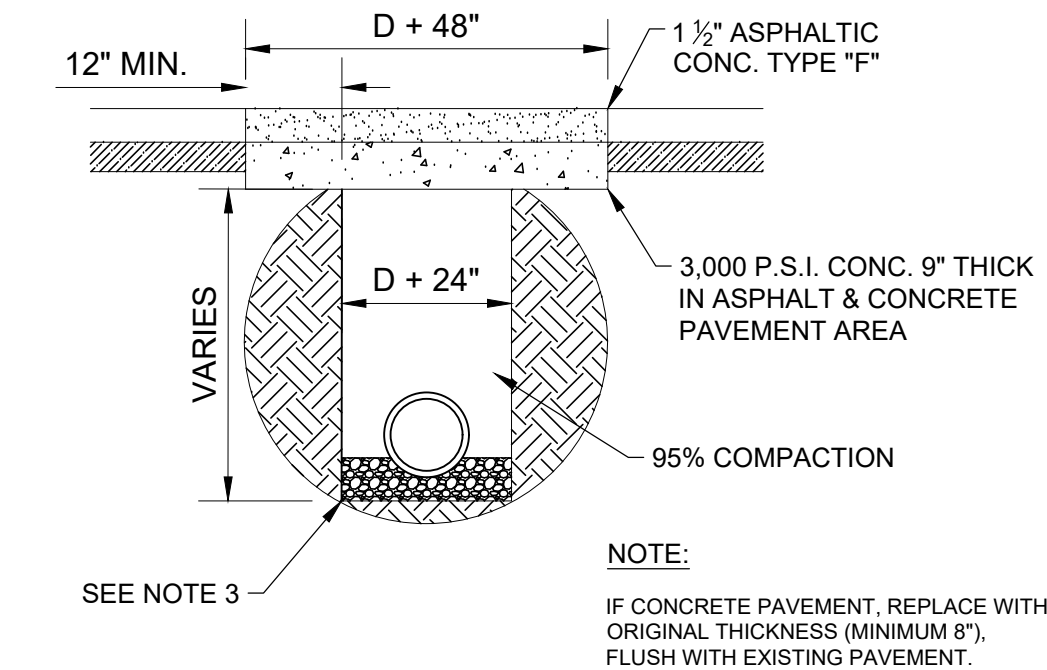
BEDDING AND BACKFILL
MATERIAL CLASSIFICATION

- CLASS 1 MATERIALS: ANGULAR 1/4 TO 1 INCH GRADED STONE INCLUDING A NUMBER OF FILL MATERIALS THAT HAVE REGIONAL SIGNIFICANCE SUCH AS CRUSHED STONE, CINDERS, SLAG AND CRUSHED SHELLS.
- CLASS 2 MATERIALS: COARSE SANDS AND GRAVELS WITH A MAXIMUM PARTICLE DIMENSION OF 1 1/2 INCH INCLUDING VARIOUSLY GRADED SAND AND GRAVELS CONTAINING SMALL PERCENTAGES OF FINES. GENERALLY GRANULAR AND NON-COHESIVE, EITHER WET OR DRY.
- CLASS 3 MATERIAL: FINE SAND AND CLAYEY GRAVELS, INCLUDING FINE SANDS, SAND-CLAY MIXTURES, AND GRAVEL-CLAY MIXTURES.
- CLASS 4 MATERIAL: SILT, SILTY CLAYS AND CLAYS, INCLUDING INORGANIC CLAYS, AND SILTS OF MEDIUM TO HIGH PLASTICITY AND LIQUID LIMITS.
- CLASS 5 MATERIAL: ORGANIC SOILS, AS WELL AS SOIL CONTAINING FROZEN EARTH, DEBRIS, ROCKS LARGER THAN 1 1/2 INCHES AND OTHER FOREIGN MATERIALS.
- CONTRACTOR SHALL NOTE THAT AN EXCEPTION OF THIS BEDDING AND BACKFILL SHALL BE FOR EXISTING AND PROPOSED NATURAL GAS FACILITIES. SEE NOTE #3 ON SHEET C1.03.

LAYER	DEPTH	MATERIAL
A	6" MIN	CLASS [1] FOR ALL RIGID PIPE (1)(2)
B	VARIES	CLASS [1] FOR ALL RIGID PIPE TAMPED IN 6" MAXIMUM LAYERS. (2)
C	6"	CLASS [1] FOR ALL RIGID PIPE (2)
D	6"	CLASS [1] FOR ALL PIPE.
E	VARIES	CLASS [1] FOR ALL PIPE.
F	12"	CLASS [1] FOR ALL PIPE, EXCEPT USE CLASS A, GRADE D CRUSHED STONE ACROSS OR ALONG EXISTING PAVEMENT UNLESS OTHERWISE NOTED

- (1) SEE SPECIFICATION SECTION 31 23 33 FOR SPECIAL FOUNDATION PREPARATION.
(2) (GDOT NO. 57) STONE FOR 6" MIN. STONE ENVELOPE AROUND PVC PIPE

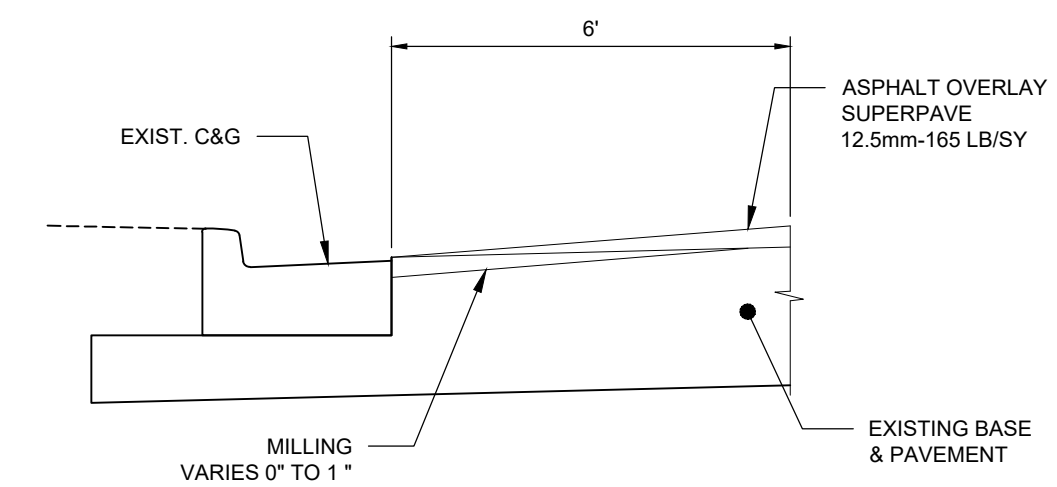
BACKFILLING AND COMPACTION
OF TRENCHES
IN PAVED AREAS



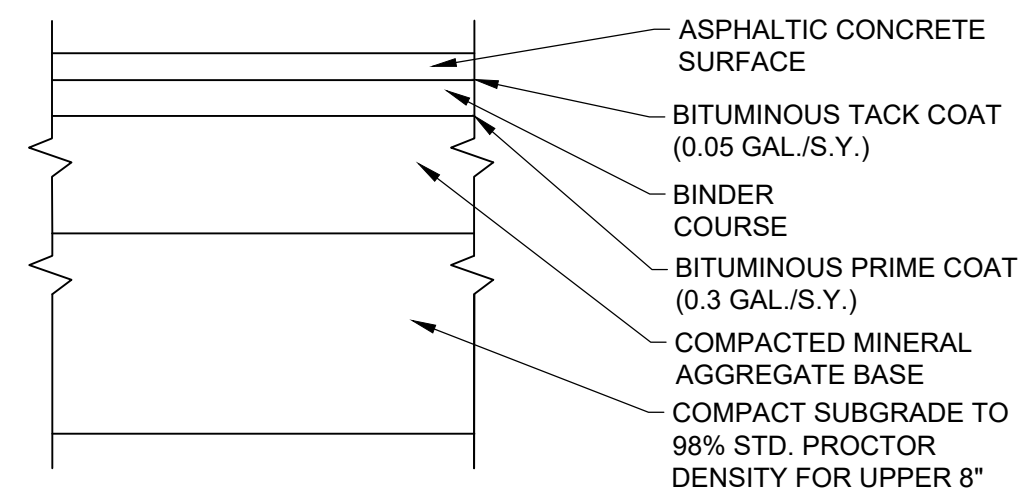
NOTES:

- PERMISSION MUST BE OBTAINED TO OPEN CUT EXISTING ROADS
- ROADWAYS WILL GENERALLY BE BORED OR TUNNELED FROM DITCH LINE TO DITCH LINE.
- BED AS PER APPLICABLE UTILITY SPECIFICATION.

C TYPICAL PAVEMENT REPAIR
C5.01 NTS
CARTERSVILLE STD. DETAIL NO. 3.8.11



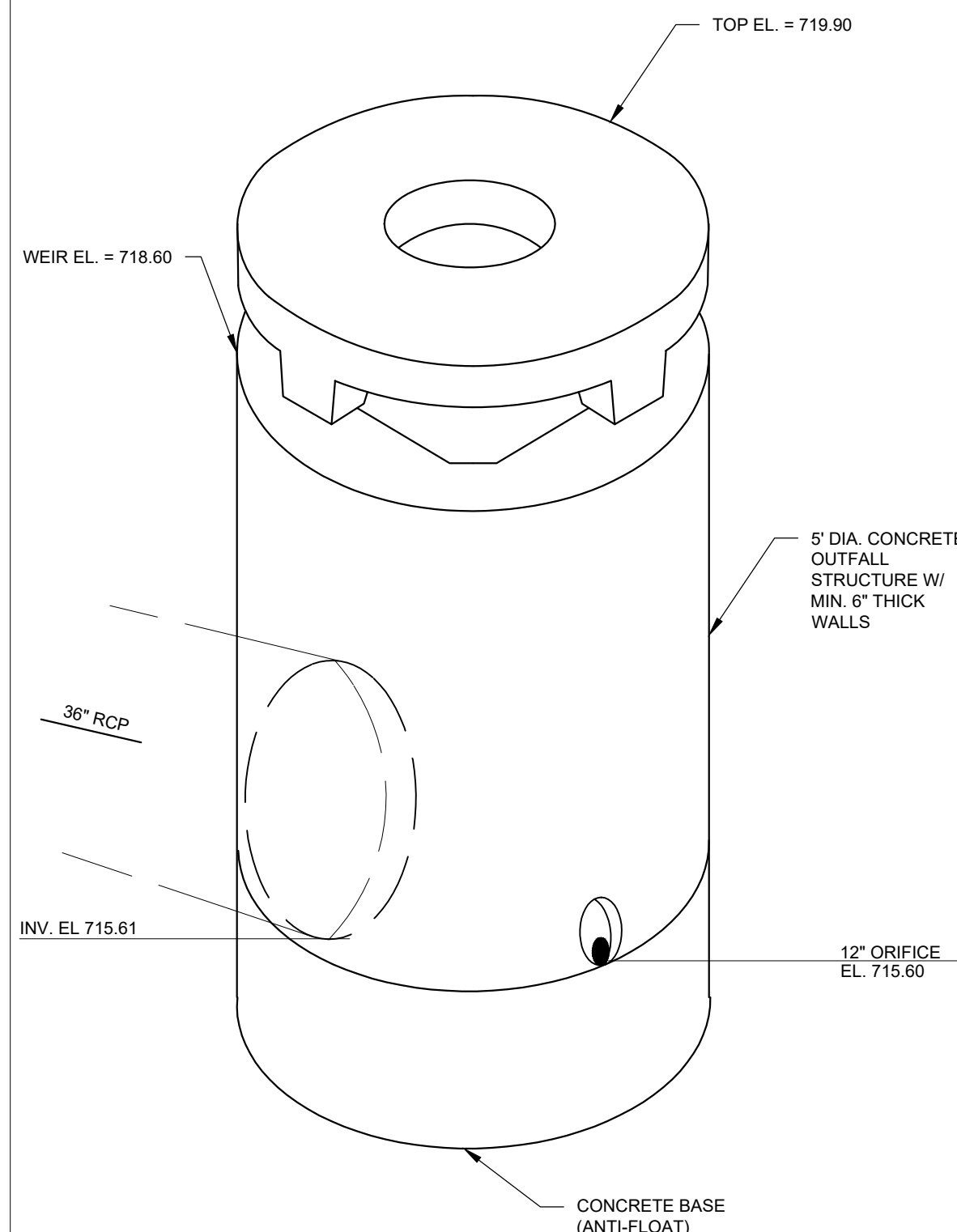
D MILL & FEATHERING
C5.01 NTS



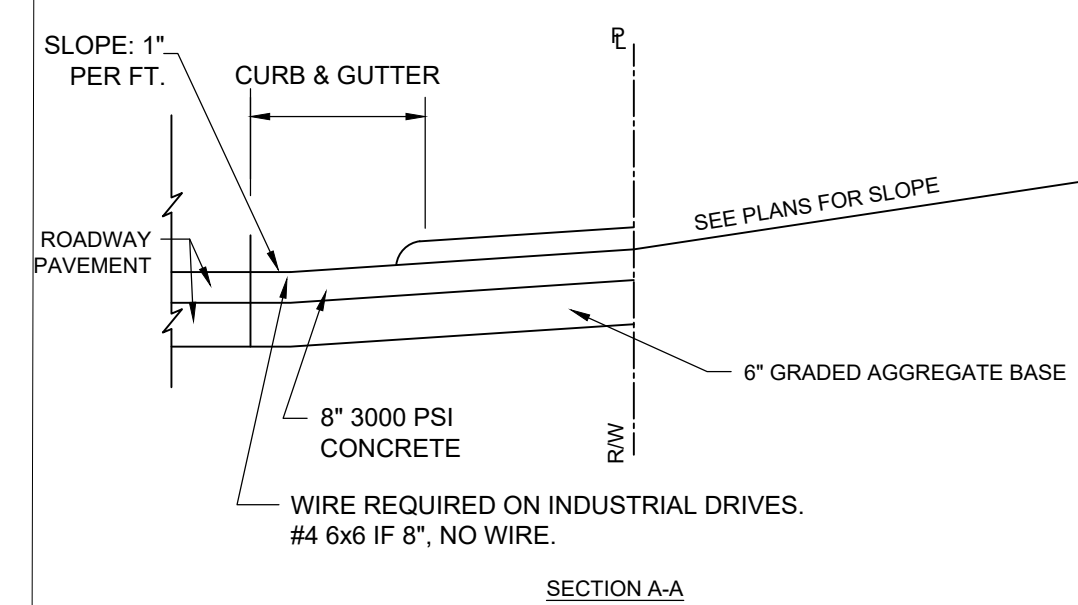
PAVEMENT LAYER	LIGHT DUTY
ASPHALTIC CONCRETE SURFACE (9.5 MM)	1.5"
BINDER COURSE (19 MM)	4"
COMPACTED MINERAL AGGREGATE BASE (GAB)	10"

- NOTES:
- ASPHALTIC CONCRETE SURFACE 9.5 MM (PG64-22). MATERIAL AND INSTALLATION IN ACCORDANCE WITH GDOT STANDARDS.
 - BINDER COURSE 19 MM SHALL BE IN ACCORDANCE WITH GDOT "STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS".
 - DENSITY REQUIREMENTS FOR COMPACTION PER GDOT "STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS".
 - FOR PREPARATION OF PAVEMENT SUBGRADE, FILL PLACED WITHIN 8 INCHES OF FINISHED SUBGRADE ELEVATION IN AREAS TO BE PAVED SHOULD BE COMPACTED TO AT LEAST 98% OF MATERIAL'S MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D698). FILL PLACED BELOW THIS LEVEL SHOULD BE COMPACTED TO AT LEAST 95% OF MATERIAL'S MAXIMUM DRY DENSITY.
 - AFTER PROOFROLLING WITH A LOADED TANDEM AXLE DUMP TRUCK AND REPAIRING DEEP SUBGRADE DEFICIENCIES, ENTIRE SUBGRADE SHOULD BE SCARIFIED TO DEPTH OF 8 INCHES AND UNIFORMLY COMPACTED TO AT LEAST 98% OF STANDARD PROCTOR.
 - GRAVEL BASE COURSE MIXTURES SHOULD CONFORM TO REQUIREMENTS OF GDOT "STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS".
 - ASPHALTIC BINDER COURSE MIXTURES SHALL BE IN ACCORDANCE WITH TYPE REFERENCED IN GDOT "STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS".
 - ASPHALTIC SURFACE COURSE MIXTURES SHALL BE IN ACCORDANCE WITH TYPE REFERENCED IN SECTION 411 OF GDOT "STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS".
 - PROVIDE PRIME COAT AND TACK COAT TO FACE OF CURB WHERE CURB CONTACTS ASPHALT.
 - ALL MATERIALS AND METHODS OF INSTALLATION SHALL COMPLY WITH THE GDOT "STANDARD SPECIFICATIONS CONSTRUCTION OF TRANSPORTATION SYSTEMS", LATEST EDITION.

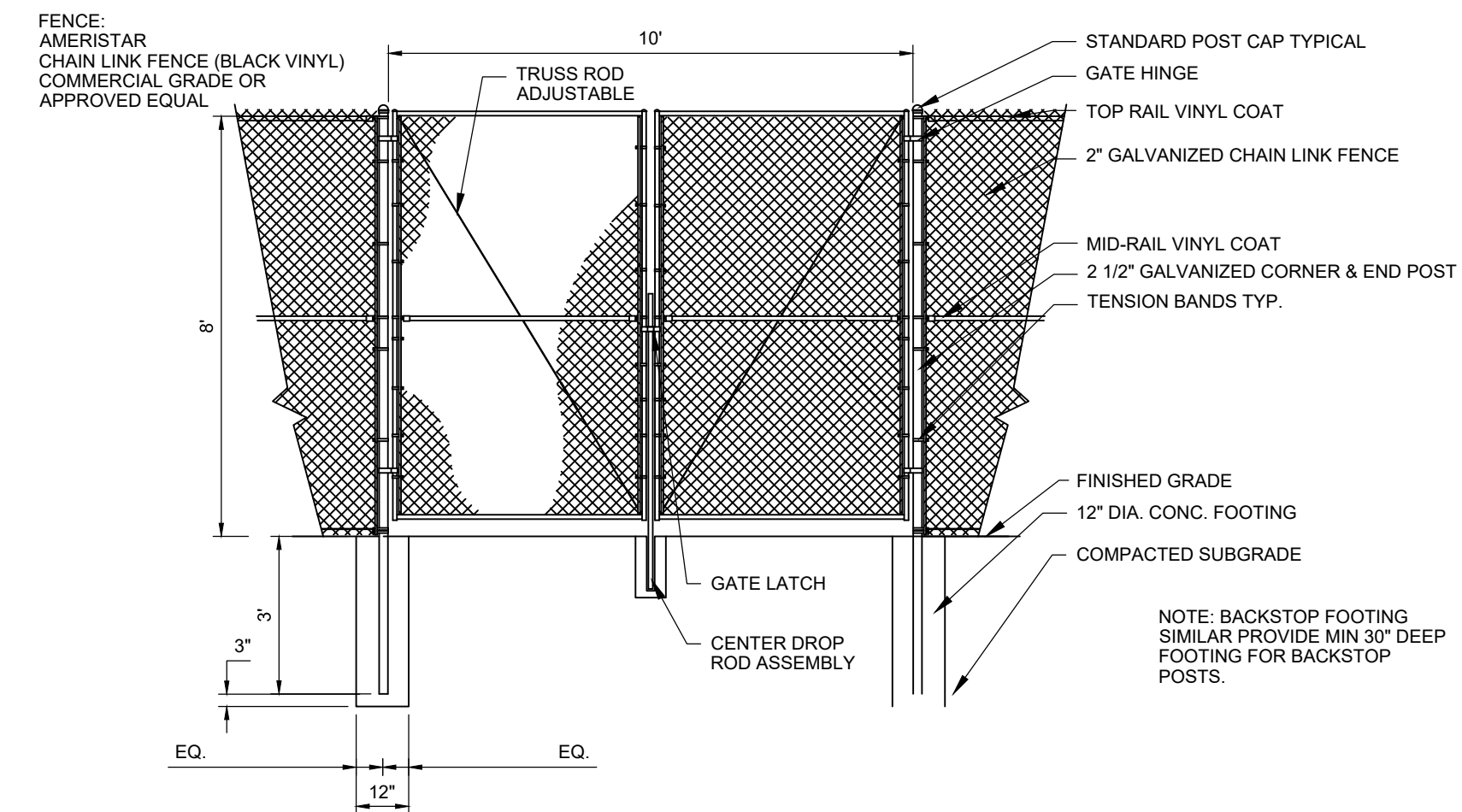
E ASPHALT PAVING
C5.01 NTS



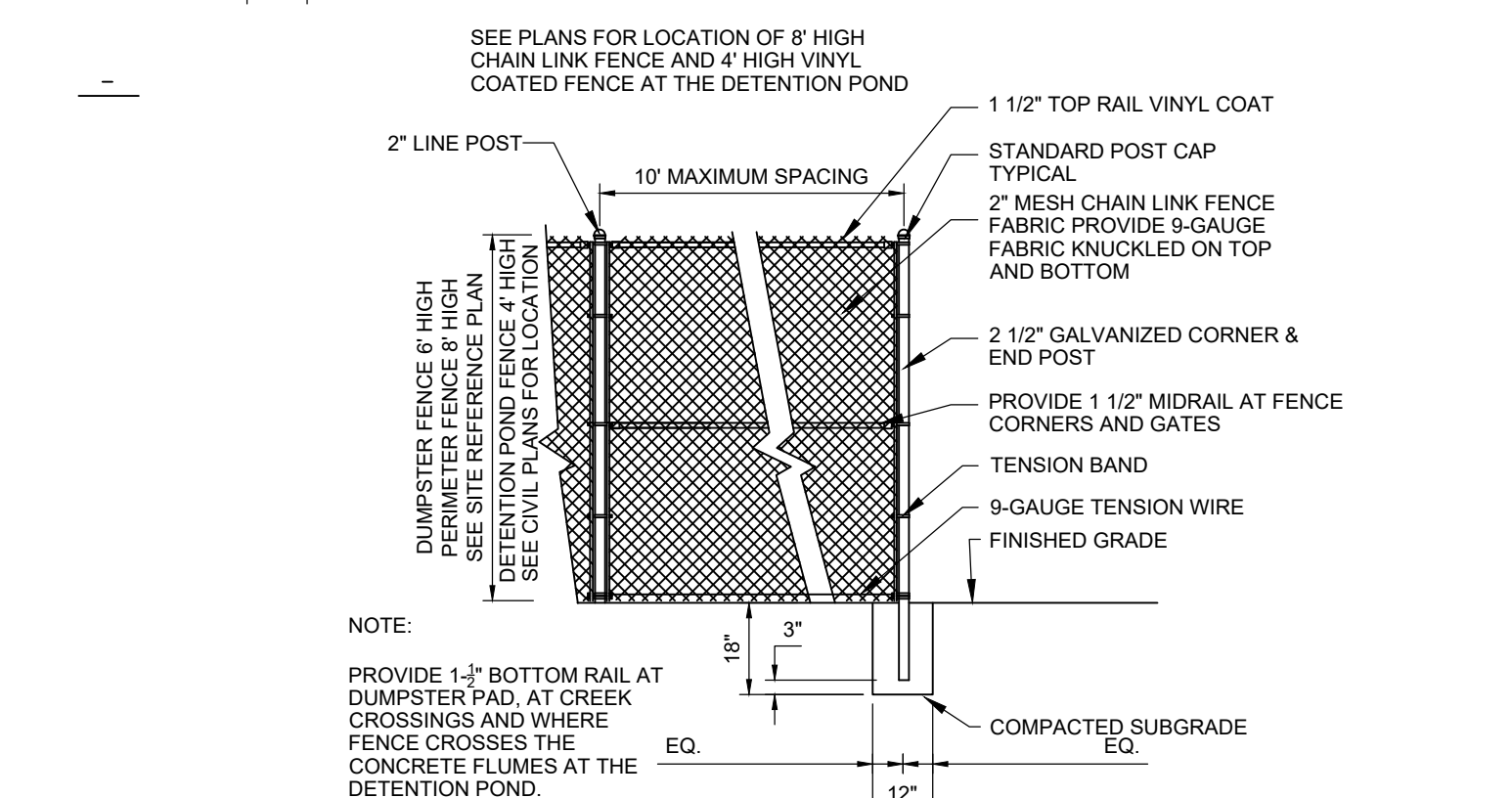
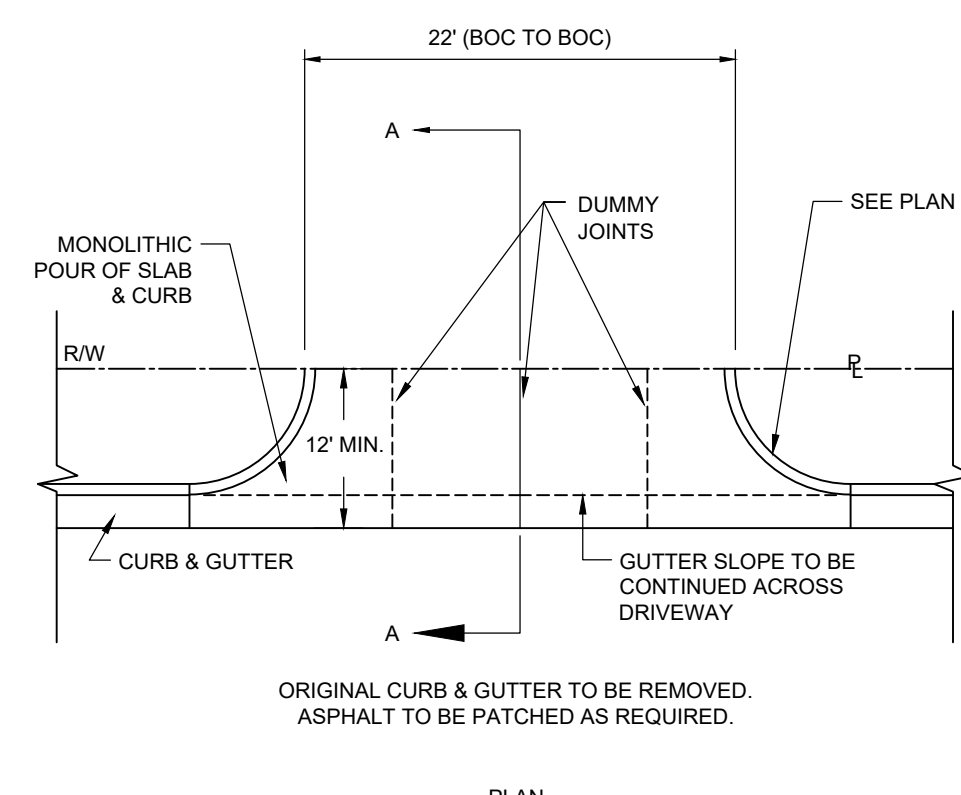
F OUTLET CONTROL STRUCTURE
C5.01 NTS



G CONCRETE DRIVEWAY
C5.01 NTS



H CHAIN LINK FENCE & GATE
C5.01 NTS



REV.	CHK.	DATE	DESCRIPTION

USER: AABARBER
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SAVED: 7/31/2023
PLOTTED: 8/21/2023



STANDARD DETAILS

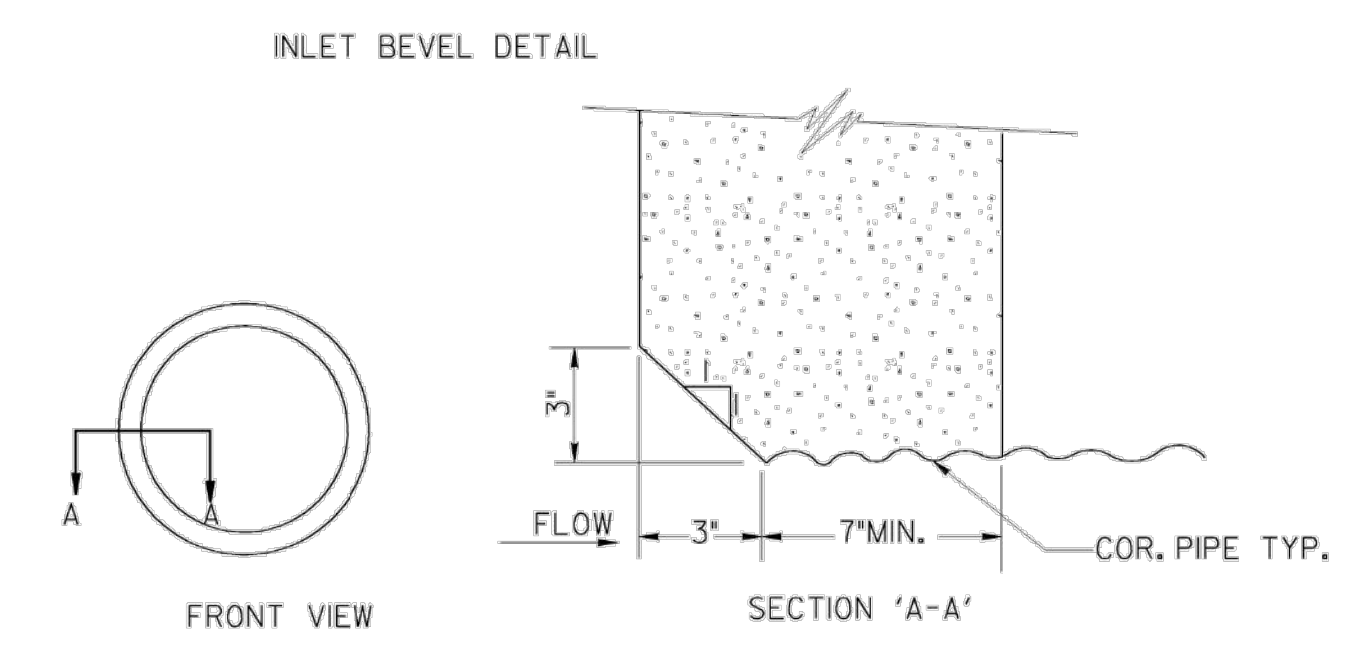
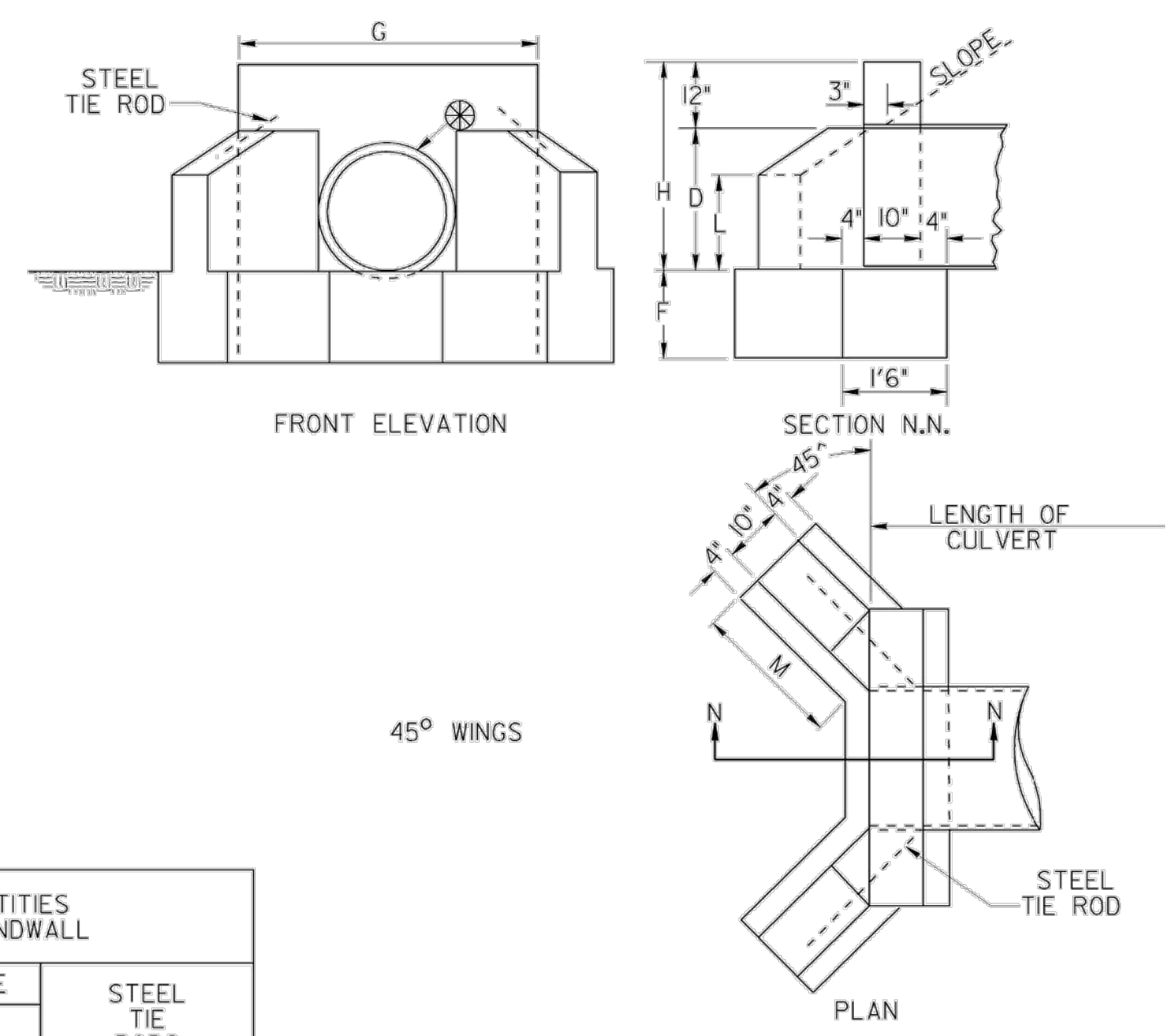
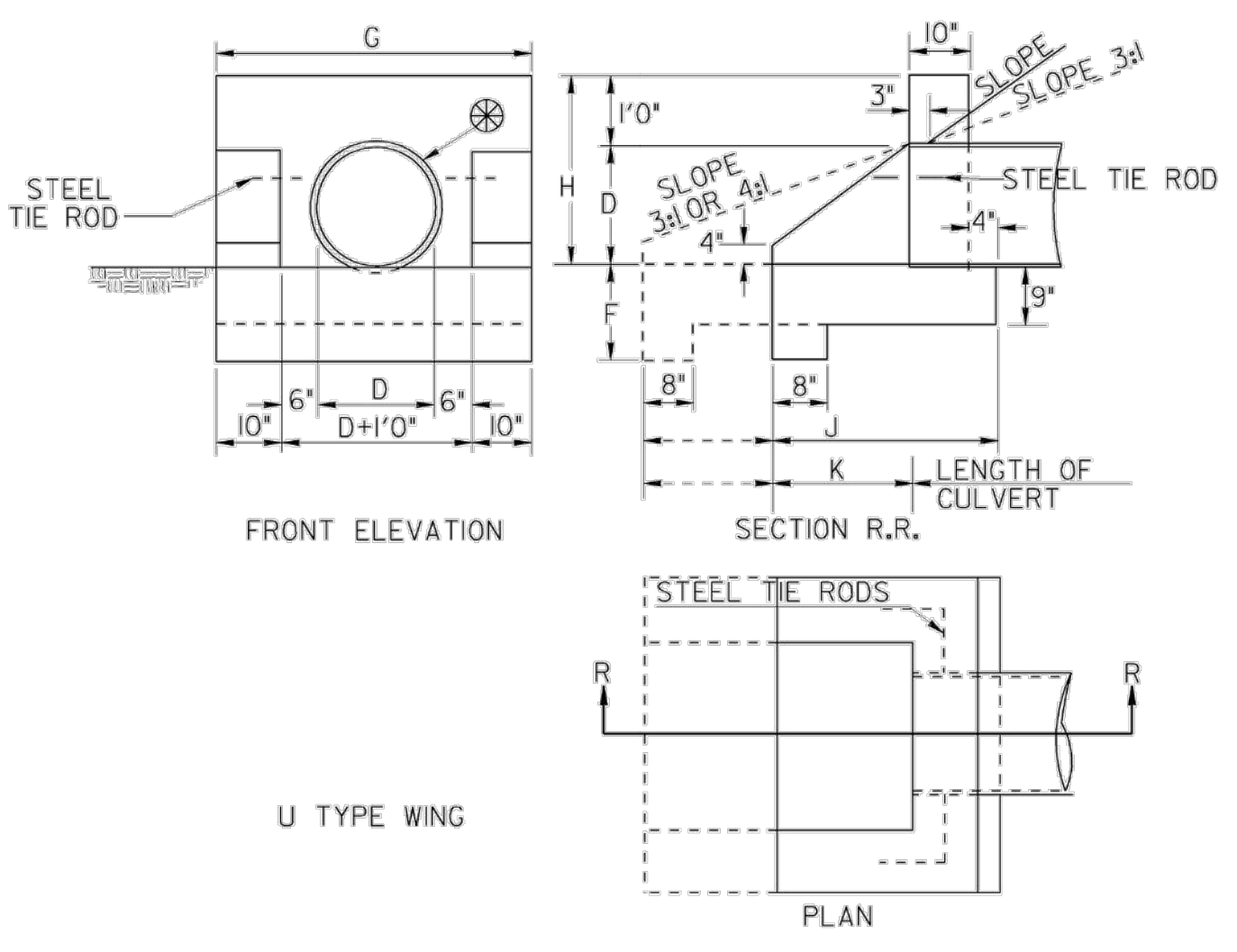
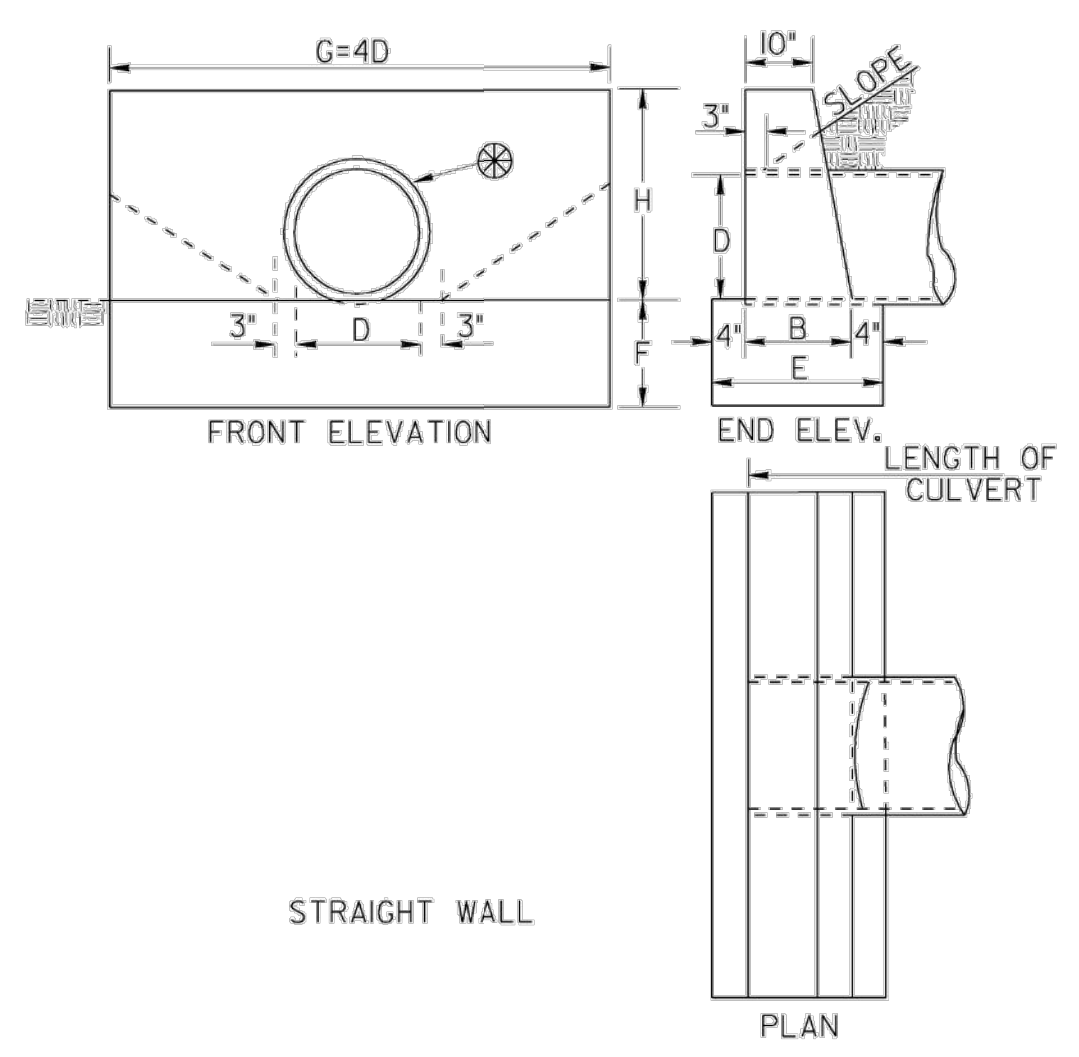
TERRELL HEIGHTS

STORM SEWER IMPROVEMENTS

PHASE 2

CARTERSVILLE, GEORGIA

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

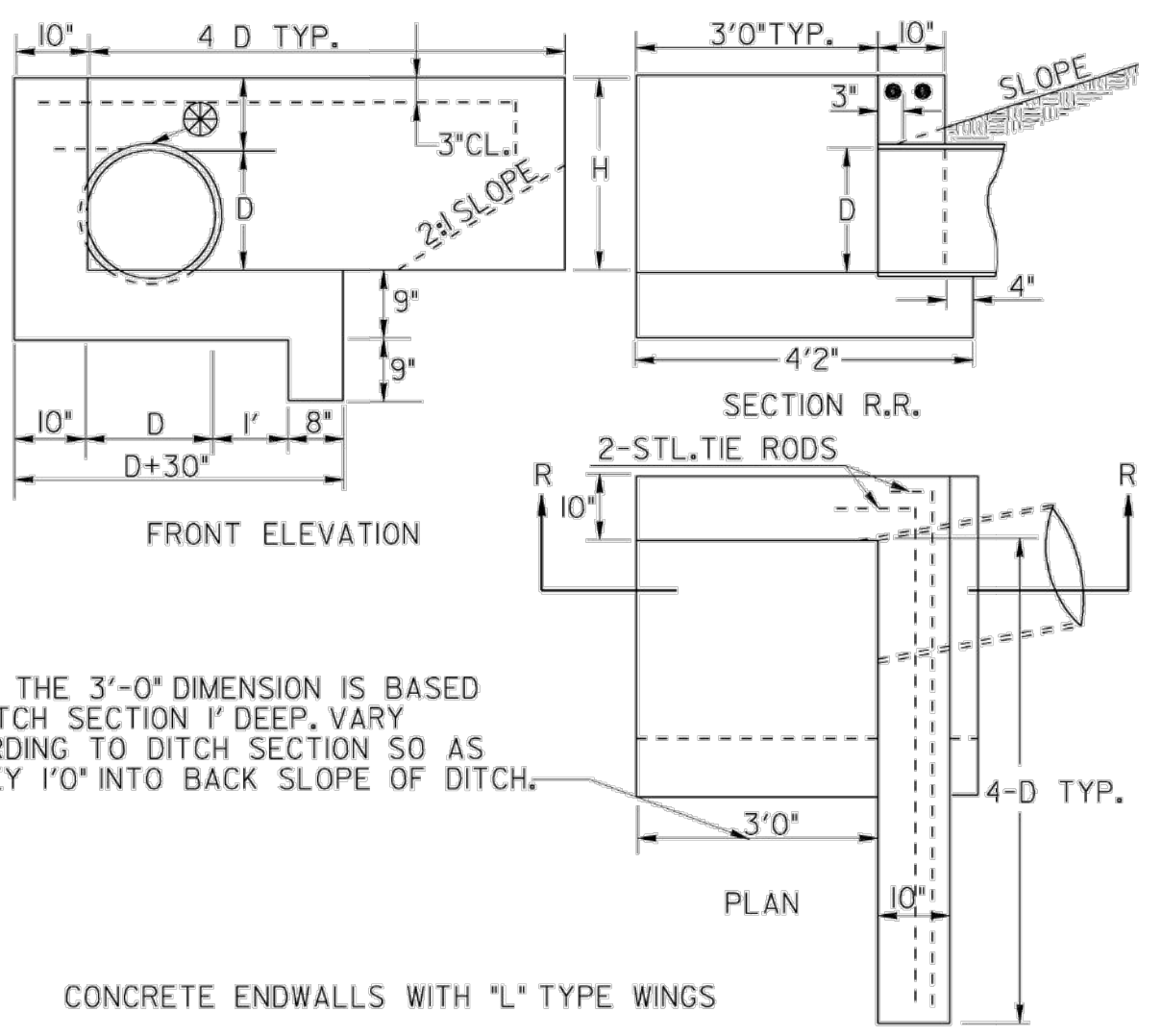


DIMENSIONS						QUANTITIES ONE STRAIGHT ENDWALL				CONC. IN WALL & FILL FOR EACH ADDL. PIPE LINE	
OPENING		WALL		FOOTING		CLASS "B" CONCRETE		TOTAL			
D	AREA SQ. FT.	G	H	B	E	F	CUBIC FEET WALL	CU. FT.	CU. YD.		
12"	0.8	4'0"	2'0"	1'2"	1'0"	1'0"	7.2	7.3	14.5	0.54	0.25
15"	1.2	5'0"	2'3"	1'2"	1'0"	1'2"	9.9	10.7	20.6	0.76	0.36
18"	1.8	6'0"	2'6"	1'3"	1'1"	1'3"	13.6	14.4	28.0	1.04	0.48
24"	3.1	8'0"	3'0"	1'4"	2'0"	1'4"	22.3	21.3	43.6	1.62	0.74
30"	4.9	10'0"	3'6"	1'6"	2'2"	1'6"	34.7	32.5	67.2	2.49	1.13
36"	7.1	12'0"	4'0"	1'8"	2'4"	1'8"	50.5	46.7	97.2	3.60	1.62
42"	9.6	14'0"	4'6"	1'10"	2'6"	2'0"	70.3	70.0	140.3	5.20	2.13
48"	12.6	16'0"	5'0"	2'1"	2'9"	2'0"	96.9	88.0	184.9	6.85	2.58
54"	16.0	18'0"	5'6"	2'4"	3'0"	2'0"	129.4	108.0	237.4	8.79	3.07
60"	19.6	20'0"	6'0"	3'2"	3'0"	2'0"	164.6	126.7	291.3	10.79	3.53

FOR EACH ADDITIONAL PIPE LINE, ADD TO G: OD+ID OR 3 FEET, WHICHEVER IS SMALLER

DIMENSIONS						QUANTITIES ONE "U" ENDWALL				STEEL TIE RODS	
OPENING		WALL		FOOTING		CLASS "B" CONCRETE		TOTAL			
D	AREA SQ. FT.	G	H	K	F	J	CUBIC FEET WALL	FOOT	CU. FT.		CU. YD.
12"	0.8	3'8"	2'0"	1'0"	1'3"	2'2"	6.6	7.3	13.9	0.52	NONE
15"	1.2	3'11"	2'3"	1'5"	1'3"	2'7"	8.3	9.1	17.4	0.64	NONE
18"	1.8	4'2"	2'6"	1'9"	1'3"	2'11"	9.9	10.7	20.6	0.76	NONE
24"	3.1	4'8"	3'0"	2'6"	1'6"	3'8"	13.9	15.5	29.4	1.09	2-3/4" DIA. x 2'0"
30"	4.9	5'2"	3'6"	3'3"	1'6"	4'5"	18.7	20.0	38.7	1.43	2-3/4" DIA. x 2'0"
36"	7.1	5'8"	4'0"	4'0"	1'9"	5'2"	21.2	26.2	50.4	1.87	2-3/4" DIA. x 2'0"
42"	9.6	6'2"	4'6"	4'9"	2'0"	5'11"	30.3	33.2	63.5	2.35	2-3/4" DIA. x 2'6"
48"	12.6	6'8"	5'0"	5'6"	2'0"	6'8"	37.3	39.6	76.9	2.85	2-3/4" DIA. x 3'0"
54"	16.0	7'2"	5'6"	6'3"	2'0"	7'5"	44.2	45.9	90.1	3.33	2-3/4" DIA. x 3'6"
60"	19.6	7'8"	6'0"	7'0"	2'0"	8'2"	51.1	49.1	100.2	3.71	2-3/4" DIA. x 4'0"

DIMENSIONS						QUANTITIES ONE ENDWALL WITH 45° WING WALLS				STEEL TIE RODS	
OPENING		WALL		FOOTING		CLASS "B" CONCRETE		TOTAL			
D	AREA SQ. FT.	H	G	L	M	F	CUBIC FEET WALL	FOOT	CU. FT.		CU. YD.
18"	1.8	2'6"	3'10"	1'2"	1'7"	1'3"	9.3	10.7	20.0	0.74	NONE
24"	3.1	3'0"	4'4"	1'5"	2'1"	1'4"	13.1	14.4	27.5	1.02	2-3/4" DIA. x 2'0"
30"	4.9	3'6"	4'10"	1'9"	2'5"	1'6"	17.4	18.8	36.2	1.34	2-3/4" DIA. x 2'0"
36"	7.1	4'0"	5'4"	2'0"	2'11"	1'8"	22.6	24.6	47.2	1.75	2-3/4" DIA. x 3'0"
42"	9.6	4'6"	5'10"	2'3"	3'6"	2'0"	29.1	34.6	63.7	2.36	2-3/4" DIA. x 3'0"
48"	12.6	5'0"	6'4"	2'6"	4'0"	2'0"	35.9	39.1	75.0	2.78	2-3/4" DIA. x 3'0"
54"	16.0	5'6"	6'10"	2'9"	4'6" 1/4"	2'0"	42.9	46.6	89.5	3.31	2-3/4" DIA. x 3'0"
60"	19.6	6'0"	7'4"	3'0"	5'0" 1/2"	2'0"	51.8	51.1	102.9	3.81	2-3/4" DIA. x 3'0"

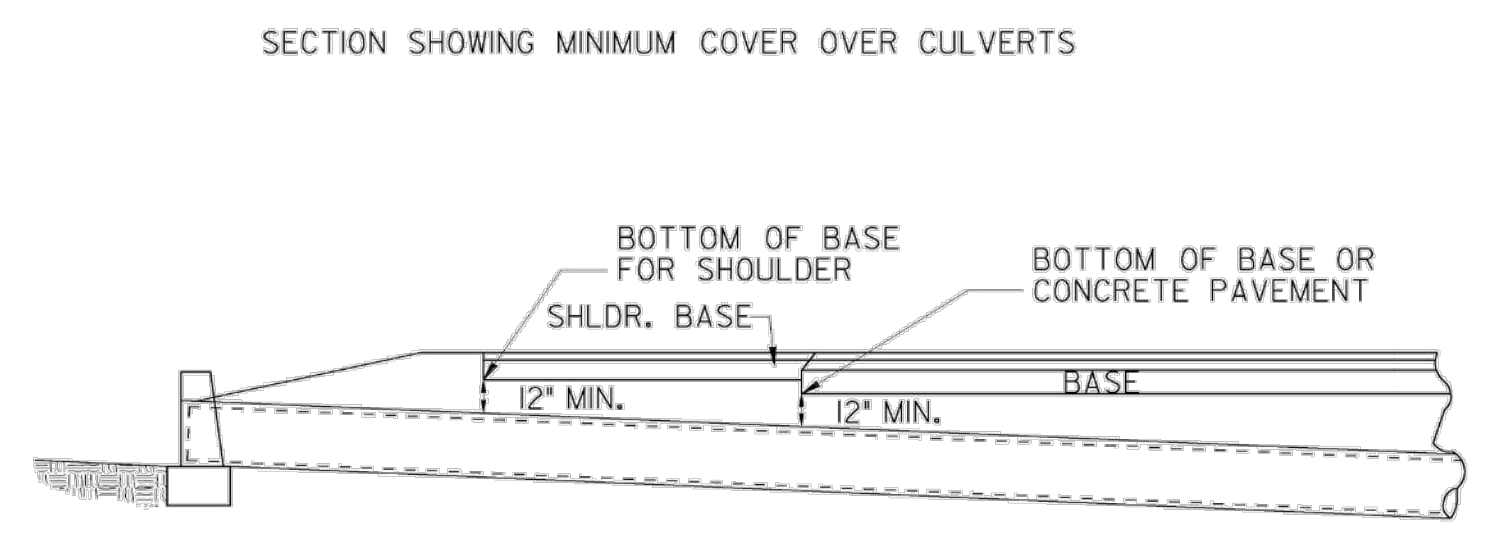


NOTE: THE 3'-0" DIMENSION IS BASED ON DITCH SECTION 1' DEEP. VARY ACCORDING TO DITCH SECTION SO AS TO KEY 1'0" INTO BACK SLOPE OF DITCH.

NOTE: THESE QUANTITIES WILL VARY ACCORDING TO DITCH SECTION AND ARE TO BE USED FOR ESTIMATING PURPOSES ONLY. PAYMENT TO BE MADE ACCORDING TO QUANTITIES MEASURED AS ACTUALLY PLACED.

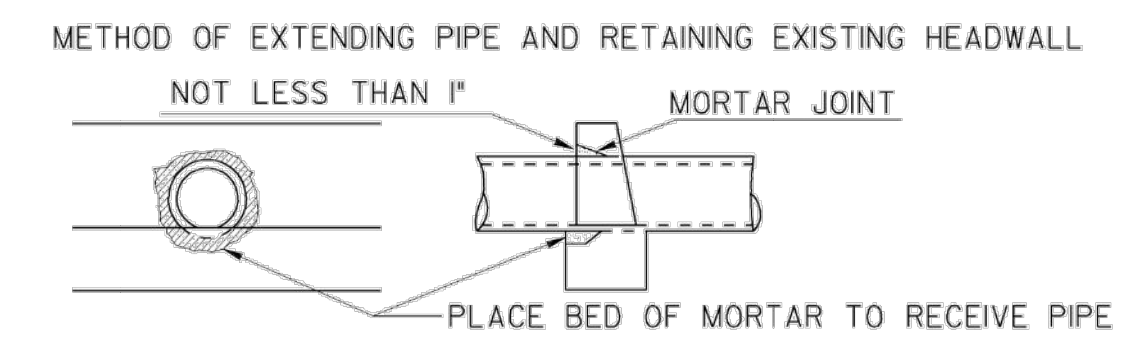
DIMENSIONS					QUANTITIES ONE "L" ENDWALL	
D	AREA SQ. FT.	H MIN.	4D TYP.	D+30 TYP.	CU. YD. CONC.	STEEL TIE RODS
15"	1.2	2'3"	5'0"	3'9"	1.08	2-3/4" DIA. x 5'0"
18"	1.8	2'6"	6'0"	4'0"	1.24	2-3/4" DIA. x 6'0"
24"	3.1	3'0"	8'0"	4'6"	1.59	2-3/4" DIA. x 8'0"
30"	4.9	3'6"	10'0"	5'0"	2.00	2-3/4" DIA. x 10'0"
36"	7.1	4'0"	12'0"	5'6"	2.46	2-3/4" DIA. x 12'0"
42"	9.6	4'6"	14'0"	6'0"	2.98	2-3/4" DIA. x 14'0"
48"	12.6	5'0"	16'0"	6'6"	3.53	2-3/4" DIA. x 16'0"
54"	16.0	5'6"	18'0"	7'0"	4.13	2-3/4" DIA. x 18'0"
60"	19.6	6'0"	20'0"	7'6"	4.85	2-3/4" DIA. x 20'0"

NOTE: QUANTITIES OF CONCRETE ARE BASED ON INSIDE DIAMETER OF PIPE. NO DEDUCTIONS SHALL BE MADE FOR SHELL THICKNESS OR SKEW OF PIPE IN COMPUTING PAY QUANTITIES.



NOTE: GRADE GENERALLY TO FOLLOW SLOPE OF STREAM.

IF PIPE HAS NEITHER A GROOVE NOR A SPIGOT AT ITS INLET, AN INLET BEVEL WILL BE REQ'D.



CONCRETE WITHIN THE HATCHED AREA TO BE REMOVED BY CHIPPING OR IN A MANNER APPROVED BY THE ENGINEER, FORMING A RECESS NO LESS THAN 1" LARGER THAN THE OUTSIDE DIMENSION OF THE PIPE.

NOTE TO DESIGNER

THIS STANDARD IS LIMITED FOR USE ONLY AT SPECIAL CONDITIONS, OTHERWISE, SEE CURRENT STANDARDS I120 & I125. HEADWALLS ARE NOT TO BE PLACED INSIDE THE CLEAR ZONE.

DEPARTMENT OF TRANSPORTATION		STATE OF GEORGIA	
STANDARD PIPE CULVERT CONCRETE HEADWALL			
NO SCALE		REV. & REDR. AUG. 1999	
DESIGNED	(SUBMITTED)	NUMBER	
TRACED	STATE ROAD AIRPORT DESIGN ENGINEER	1001-B	
CHECKED	(APPROVED)	CHIEF ENGINEER	

REV.	CHK.	DATE	DESCRIPTION

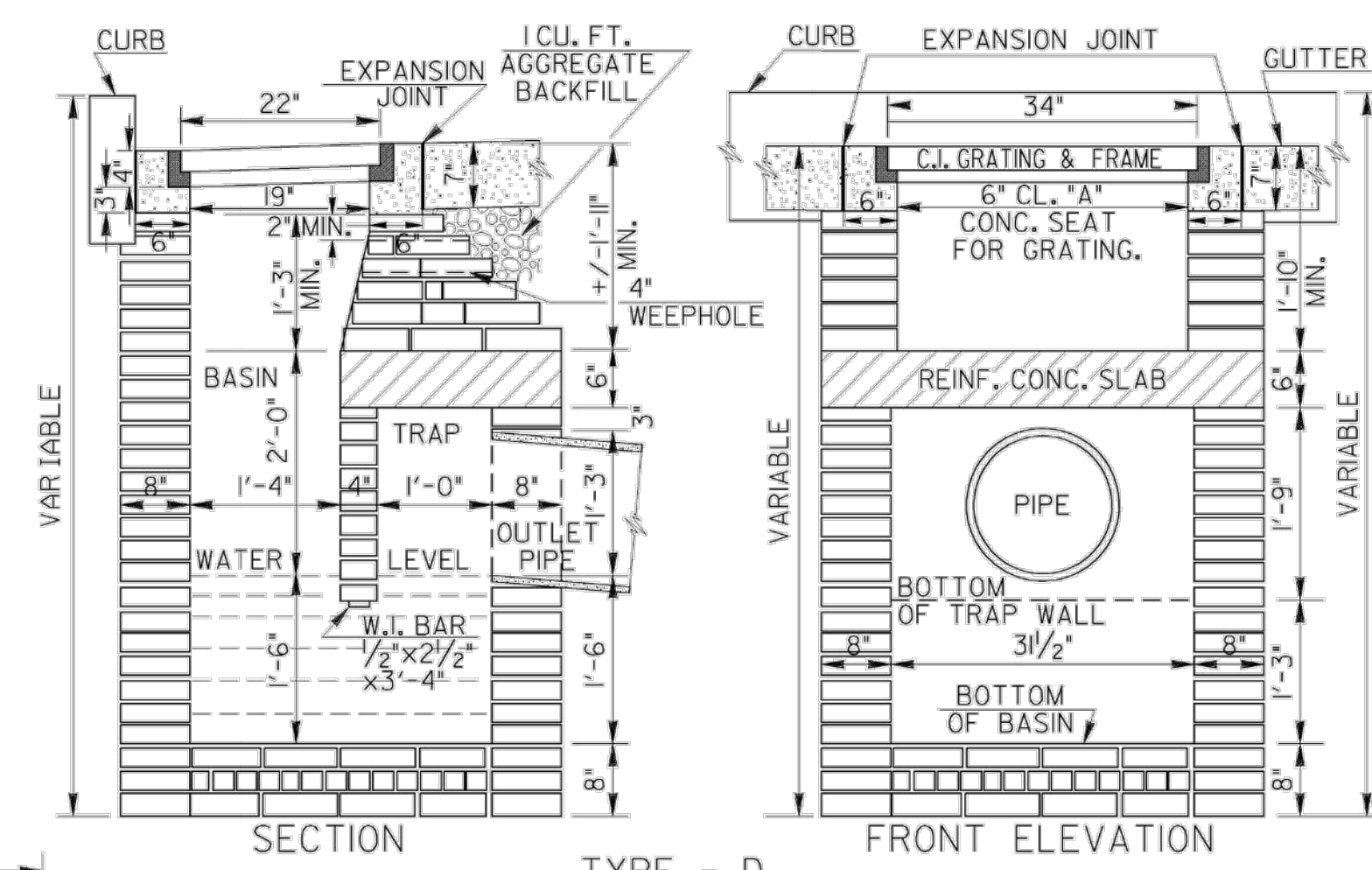
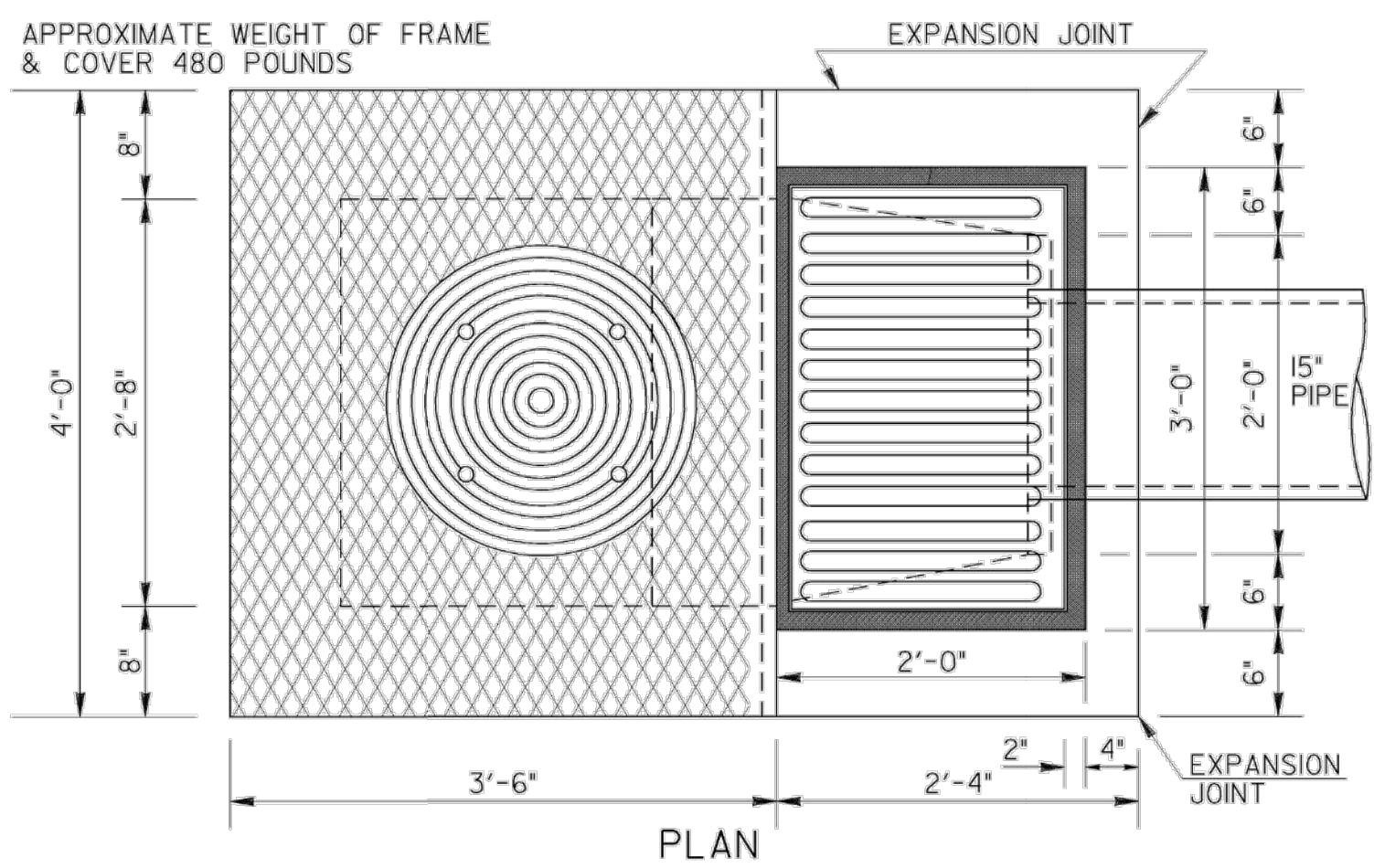


STANDARD DETAILS

TERRELL HEIGHTS STORM SEWER IMPROVEMENTS PHASE 2

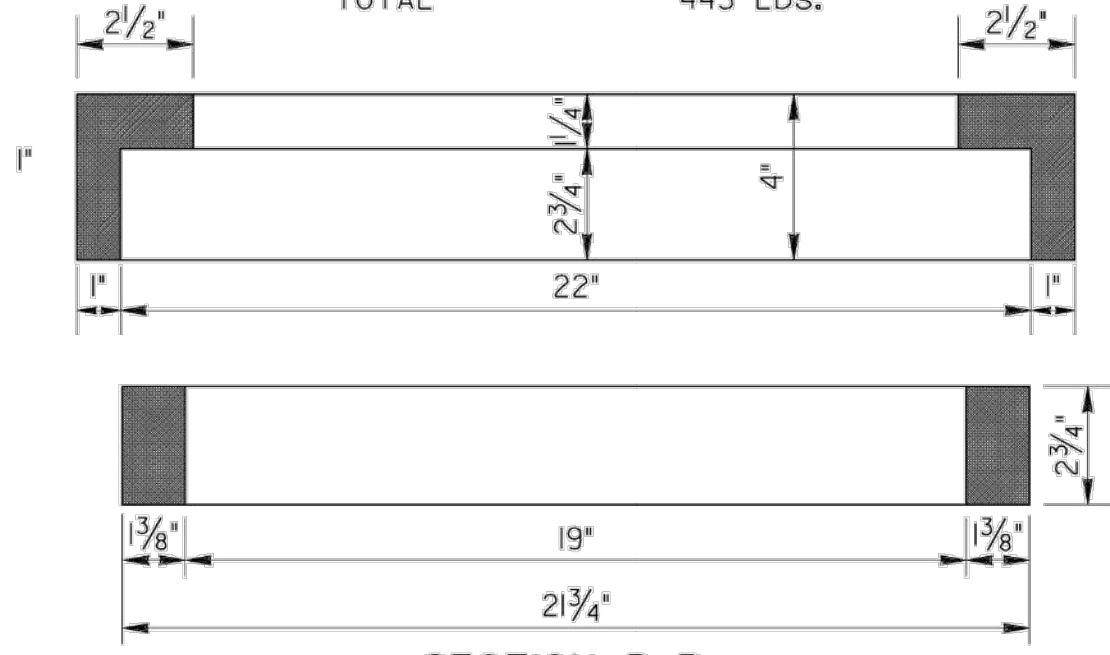
CARTERSVILLE, GEORGIA

APPROXIMATE WEIGHT OF FRAME & COVER 480 POUNDS

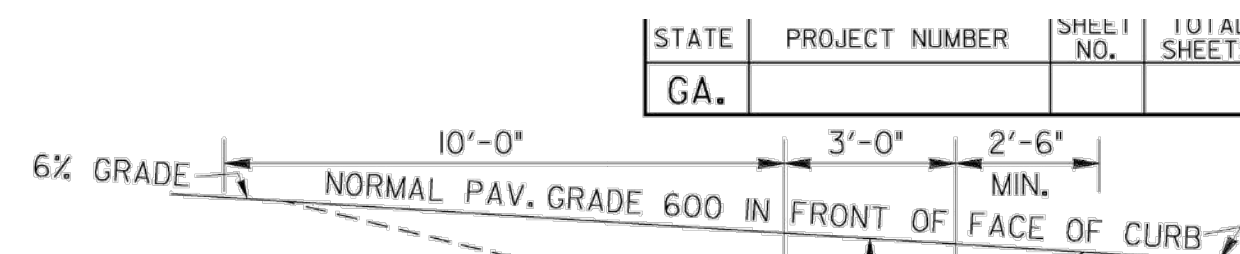


NOTE: ALL CASTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

WEIGHTS
 FRAME ESTIMATED 180 Lbs.
 GRATING ESTIMATED 265 Lbs.
 TOTAL 445 Lbs.

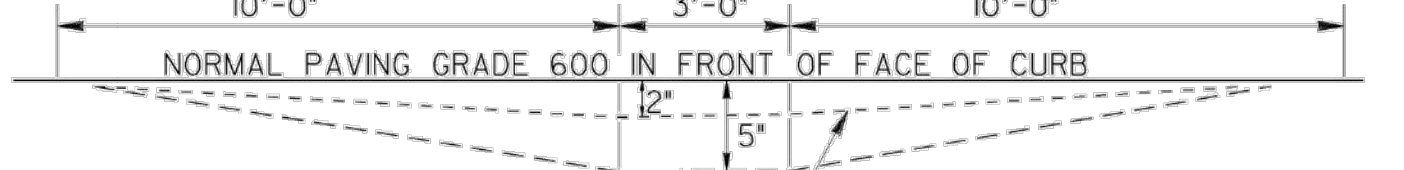


NOTE: CASTINGS ARE CITY OF ATLANTA STD. AND MODIFICATION AS SHOWN FOR SECTION OF FRAME AND COVER.



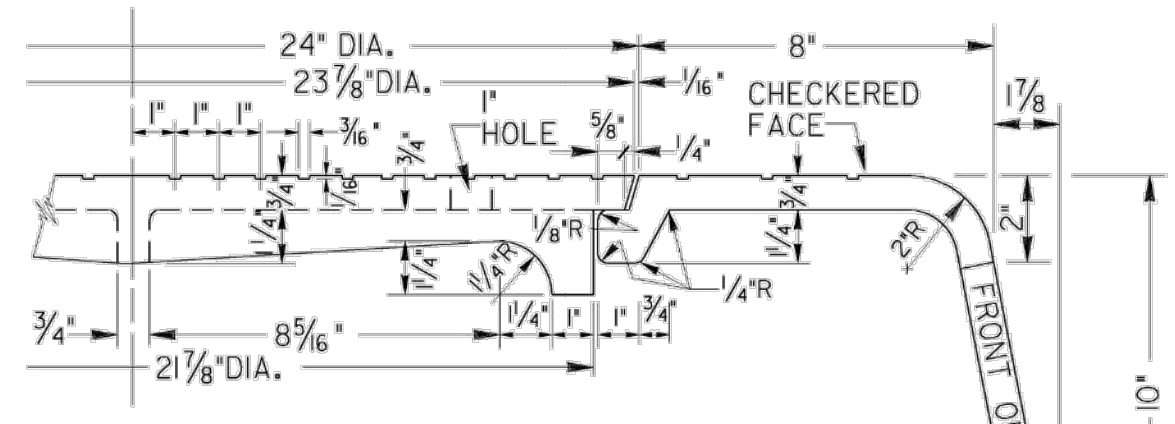
ON GRADES OF 2.0% AND OVER THE SLOPES OF C.B. GRATE TO BE WARPED TO MAXIMUM SLOPE OF 5" IN 24" AND THE TRANSITION OF THE WARPED PAVING AT FACE OF CURB TO BE SHORTENED IN PLACE OF NORMAL 10'-0" TRANSITION ON DOWNGRADE SIDE OF CATCH BASIN.

LONGITUDINAL SECTION SHOWING WARPING OF PAVING TO FIT WARPED SLOPE OF C.B. GRATE ON GRADES OF 2.0% AND OVER-FULL WIDTH PAVING WITH INTERGRAL CURB (NO GUTTER).

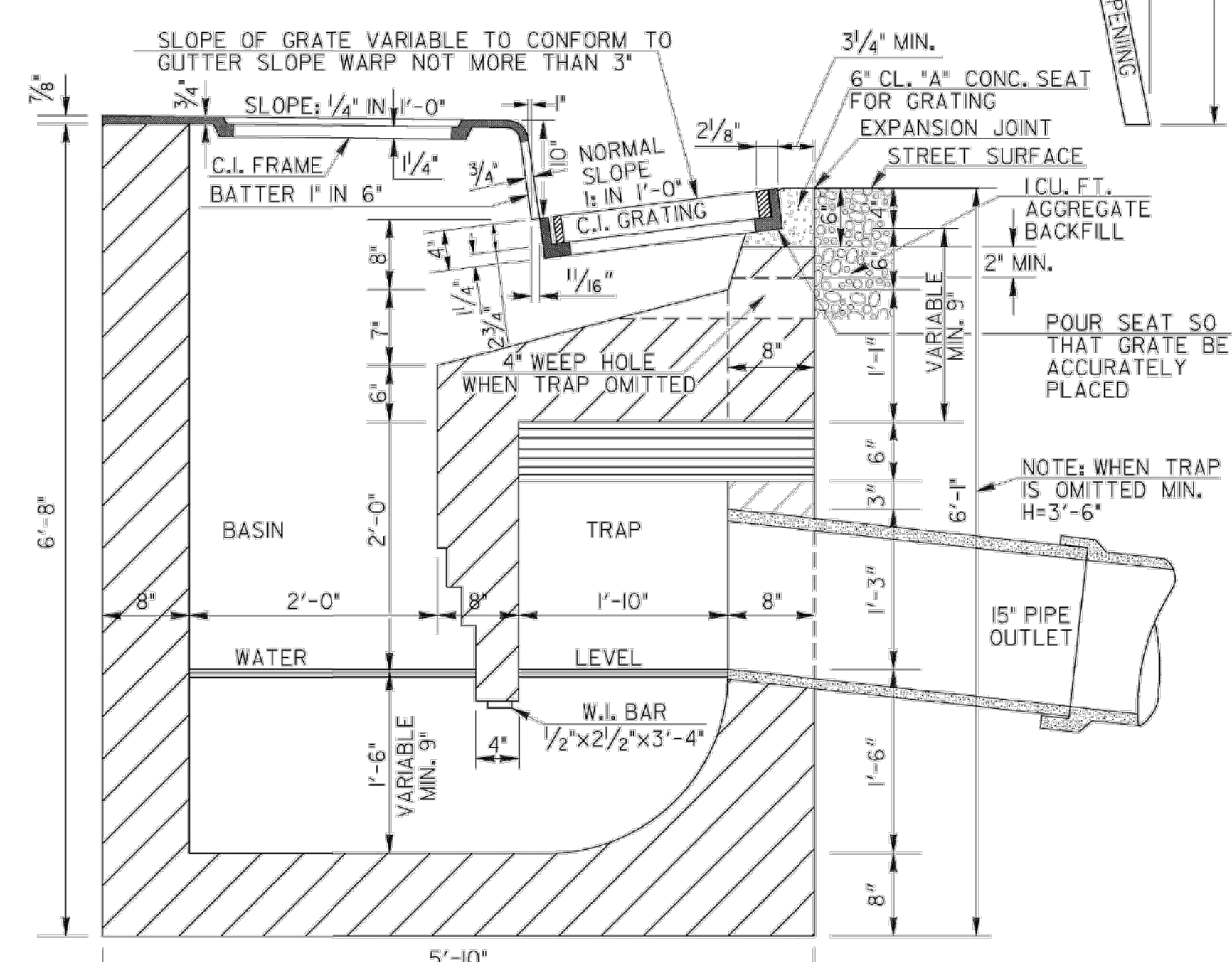


TOP OF WARPED PAV. AT FACE OF CURB SHOWING ADDITIONAL WARPING OF PAV. TO FIT ALLOWABLE 3" WARPING OF GRATE SLOPE.

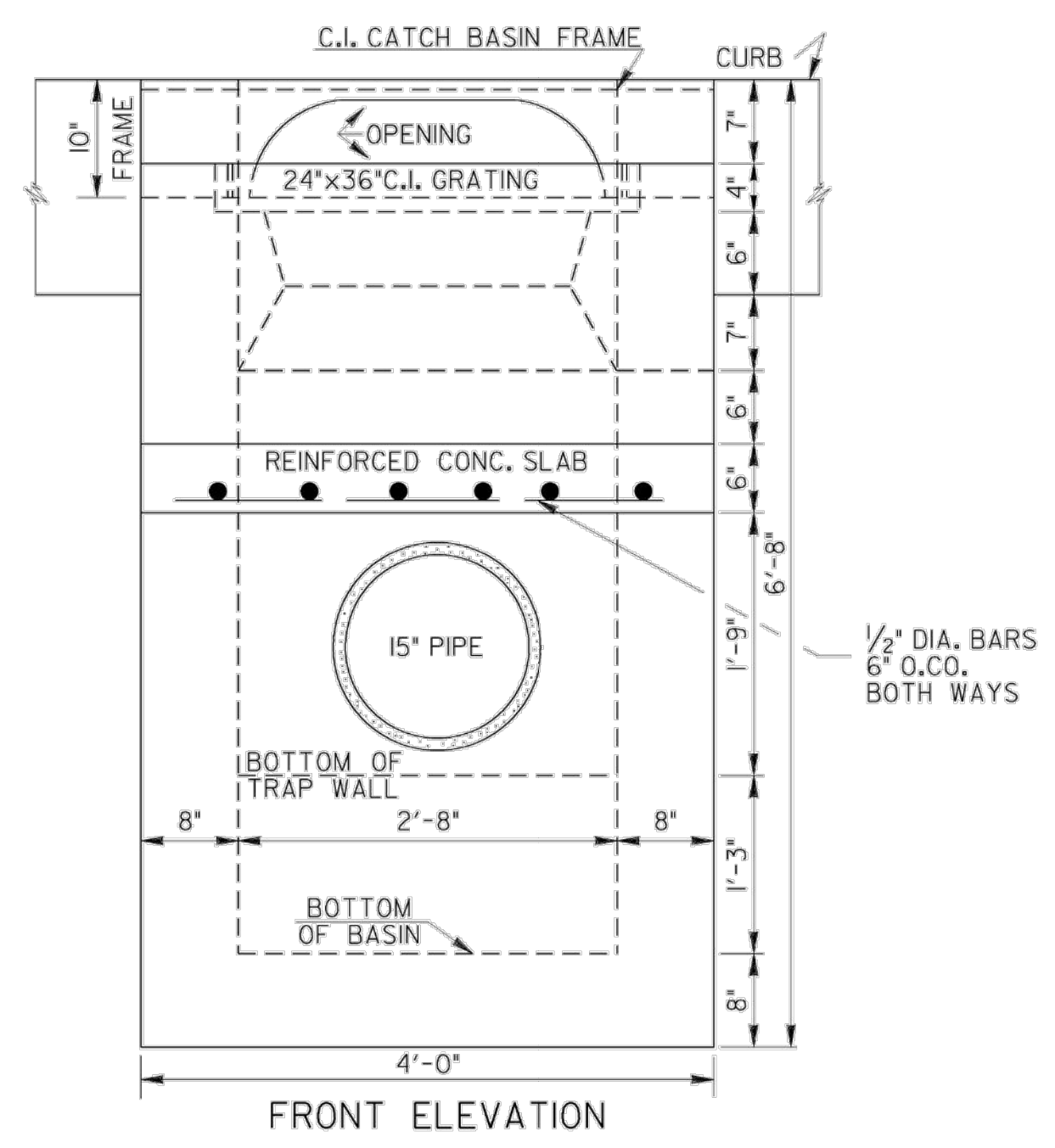
LONGITUDINAL SECTION SHOWING WARPING OF PAVING TO FIT SLOPE OF GRATING WHERE PAVING IS FULL WIDTH WITH INTERGRAL CURB (AND NO GUTTER).



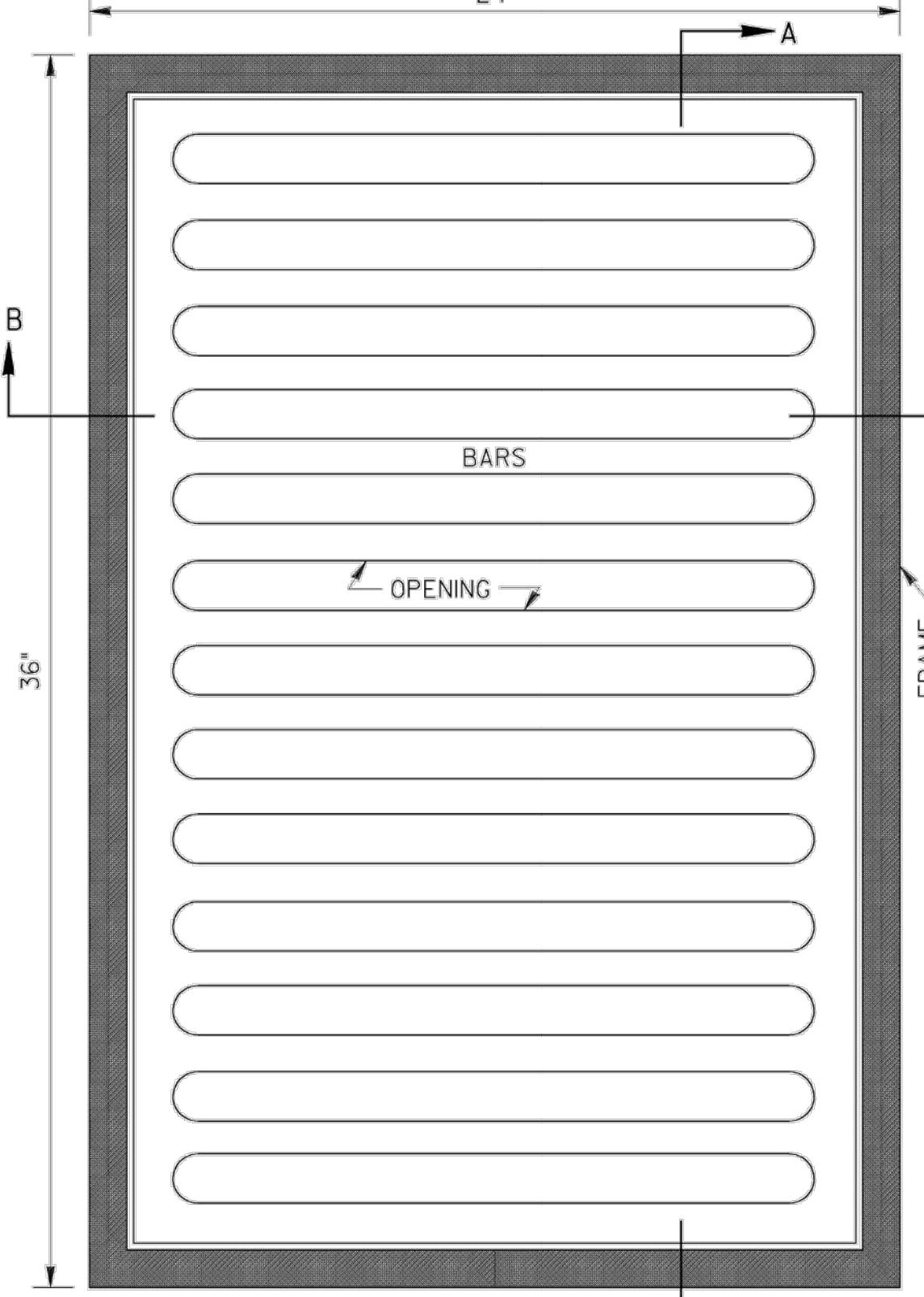
TYPE - D TRAPPED BRICK INLET WITH GRATE SECTION OF FRAME AND COVER



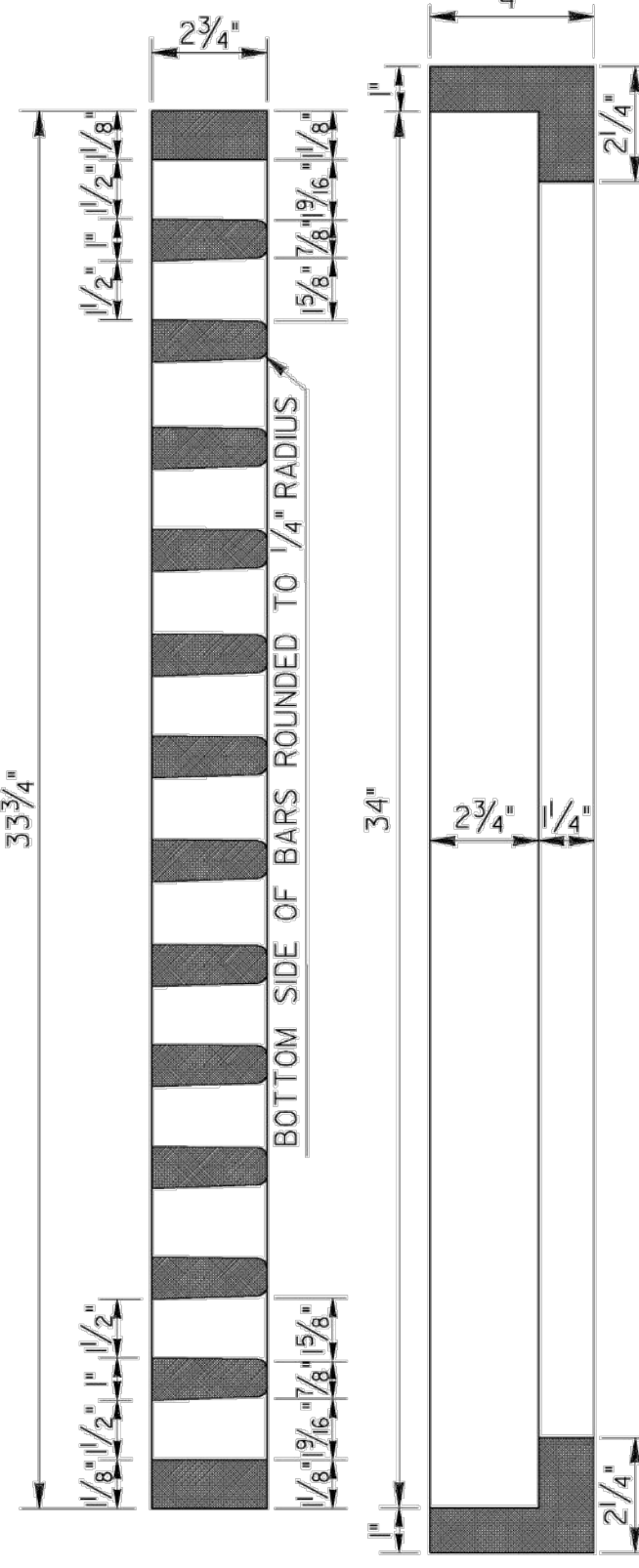
TYPE - A TRAPPED BRICK C.B. WITH HOOD USE SMALL BRICK SIZE 8"x3 3/4"x2 1/8"



FRONT ELEVATION



PLAN



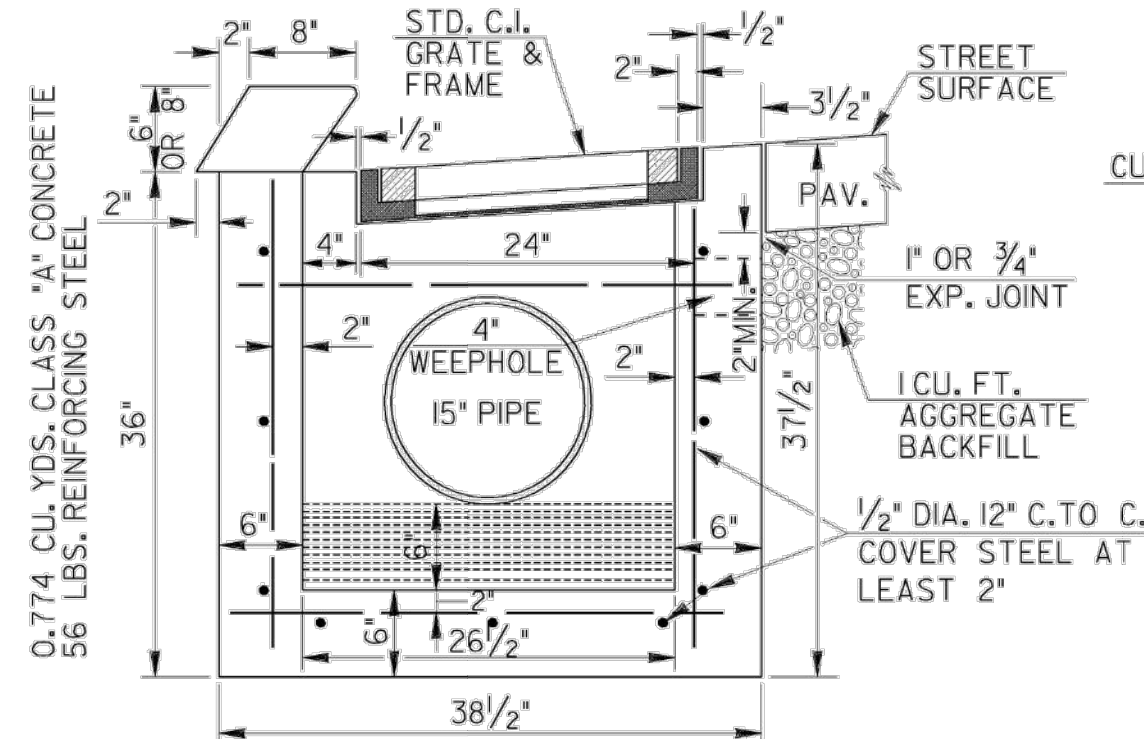
SECTION A-A SCALE: HOR. 1"=3'-0" VERT. 1"=1'-0"

NOTE: WEEPHOLES MAY BE 4" DIA. ROUND OR 4" SQUARE AT THE OPTION OF THE CONTRACTOR. AGGREGATE FOR BACKFILL SHALL CONSIST OF A MIXTURE OF 50% SIZE 57, M-58, 357, OR 467 COARSE AGGREGATE AND 50% SIZE 10 SAND AND SHALL BE PLACED IMMEDIATELY PRIOR TO COMPACTING OF THE BASE MATERIAL.

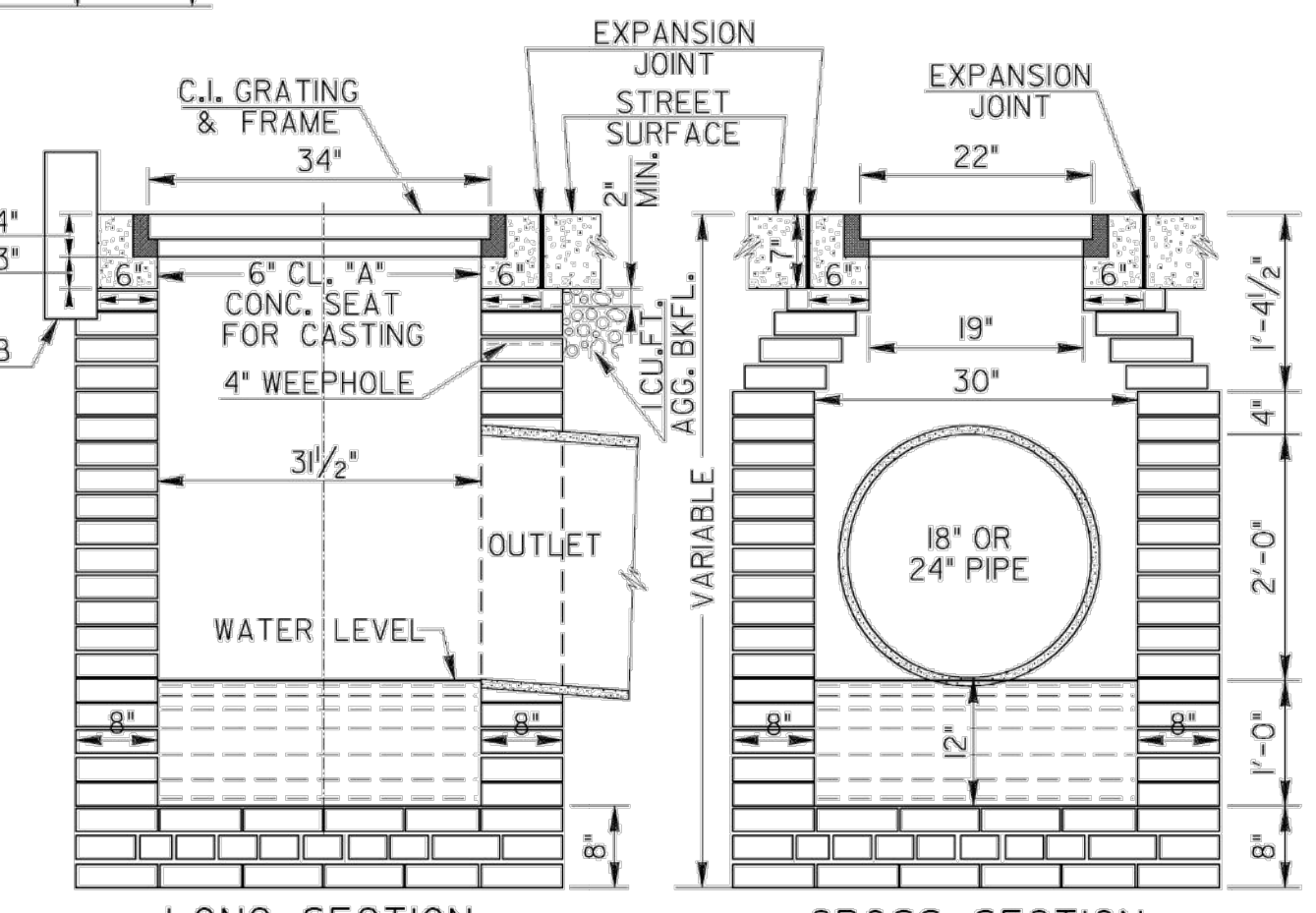
NOTE: OPENINGS IN GRATES SHALL BE PERPENDICULAR TO DIRECTION OF TRAFFIC FOR ALL STRUCTURES.

STD. 1019B GRATE MAY BE SUBSTITUTED FOR IMPROVED HYDRAULIC CAPACITY.

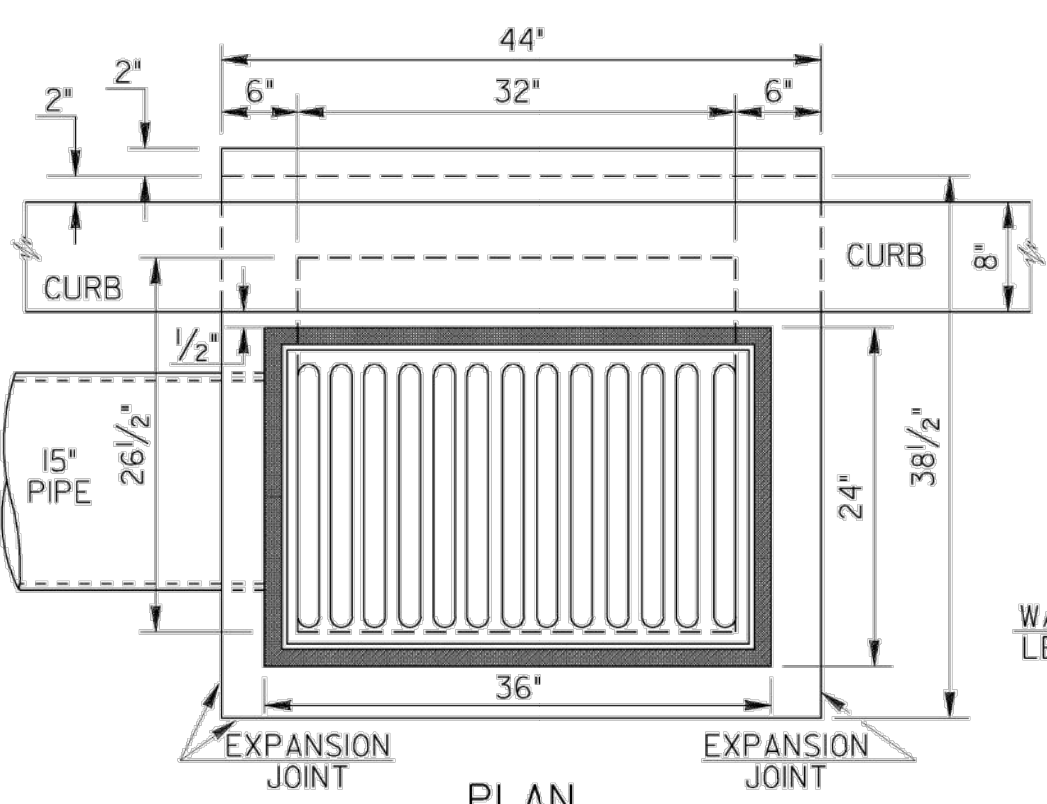
SPECIAL NOTE: THIS STANDARD SHOULD BE USED ONLY IN SAGS OR LOW POINTS. SEE OTHER STANDARDS FOR MORE EFFICIENT DRAINAGE STRUCTURES ON GRADES.



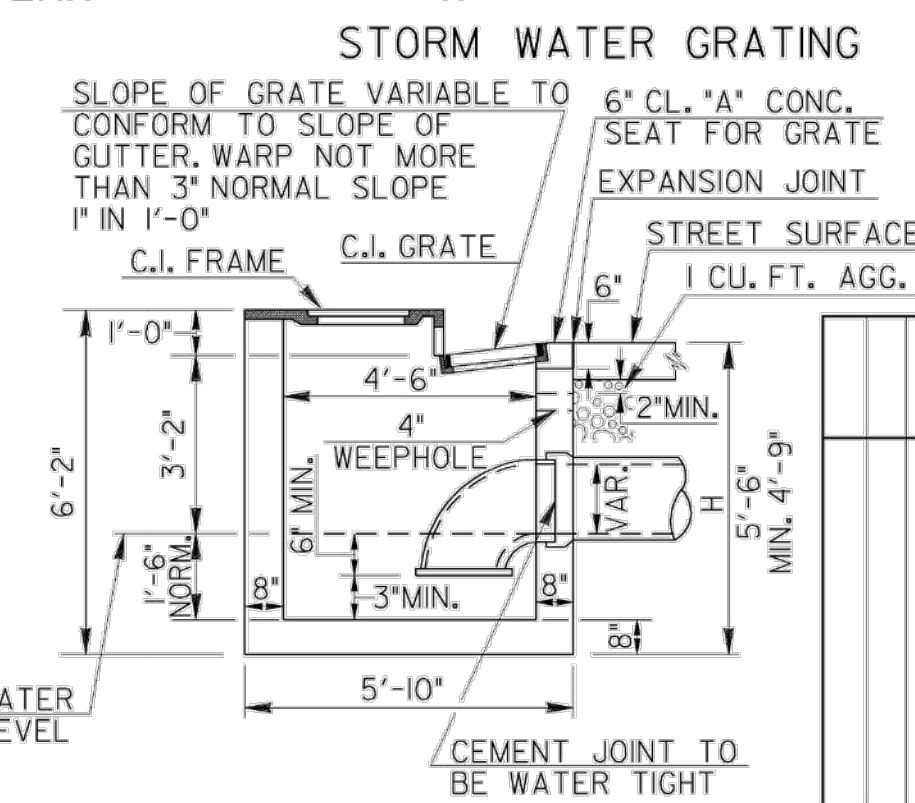
TYPE - B CONC. INLET BASIN



TYPE - C BRICK INLET BASIN



CONC. INLET BASIN



TYPE - A TRAPPED BRICK C.B. WITH HOOD WITH TYPE E TRAP

GENERAL NOTE: ALL TRAPS WILL BE OMITTED UNLESS SHOWN ON PLANS.

DEPARTMENT OF TRANSPORTATION
 STATE OF GEORGIA

STANDARD CATCH BASINS WITH CAST IRON GRATE INLETS

REV. & REDR. SEPT. 1999

REVISION	DATE	DESCRIPTION

DES. (SUBMITTED) *James H. Kennel*
 STATE ROAD & AIRPORT DESIGN ENGINEER
 TRA. (APPROVED) *David L. Felt*
 CHK. (APPROVED) CHIEF ENGINEER

NUMBER 1010

C5.03

PROJ. NO. 37697-01

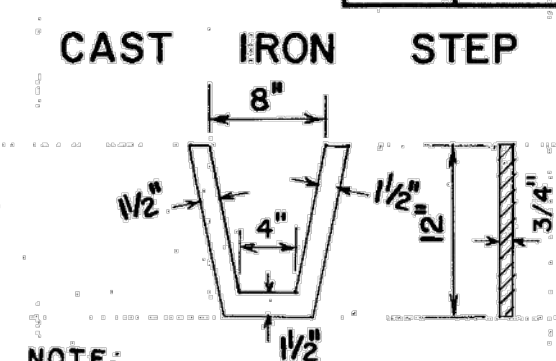


STANDARD DETAILS TERRELL HEIGHTS STORM SEWER IMPROVEMENTS PHASE 2 CARTERSVILLE, GEORGIA

REV.	CHK.	DATE	DESCRIPTION

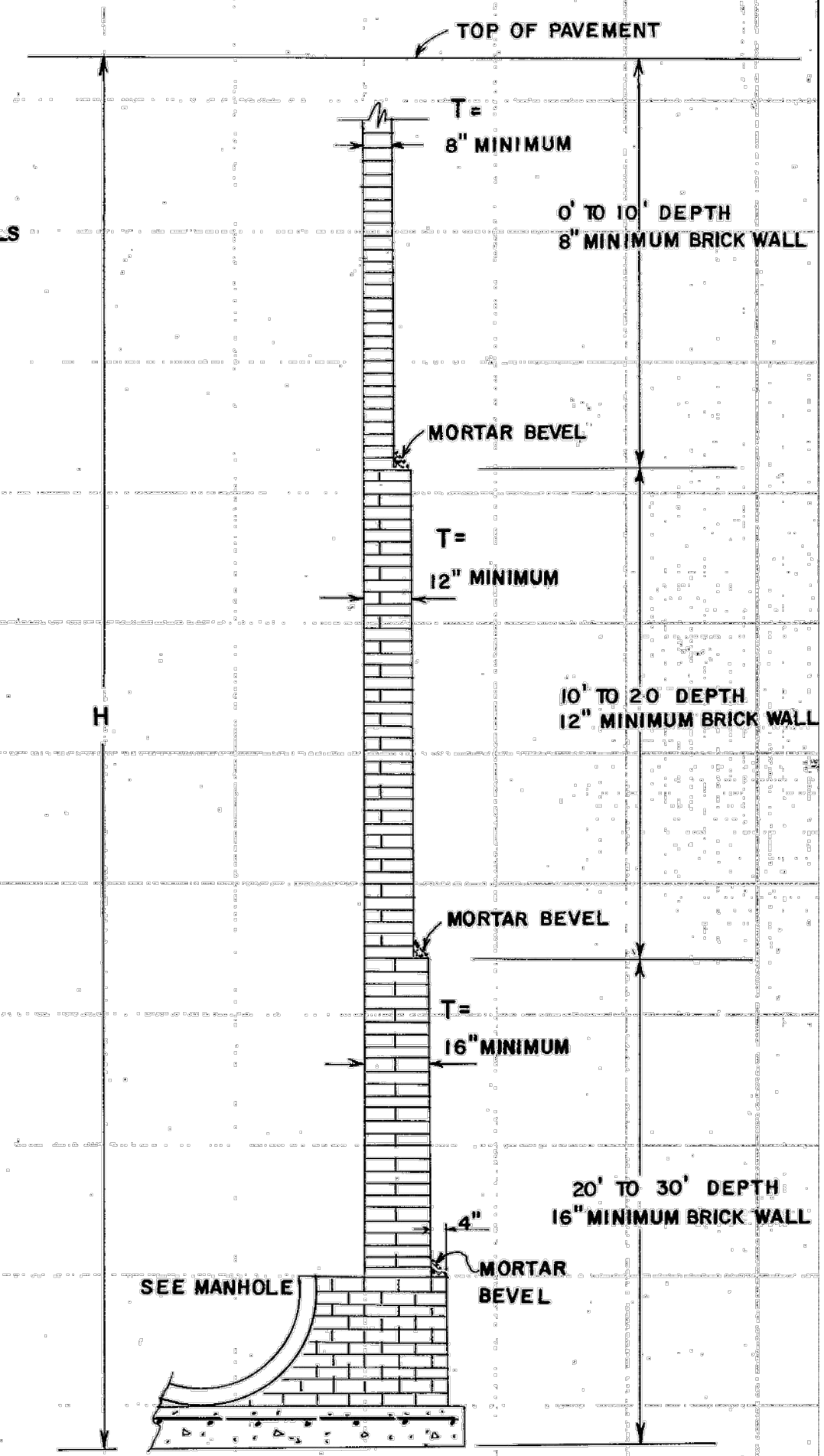
C5.04
 PROJ. NO. 37697-01

STATE	PROJECT NUMBER	NO.	SHEETS
GA.			

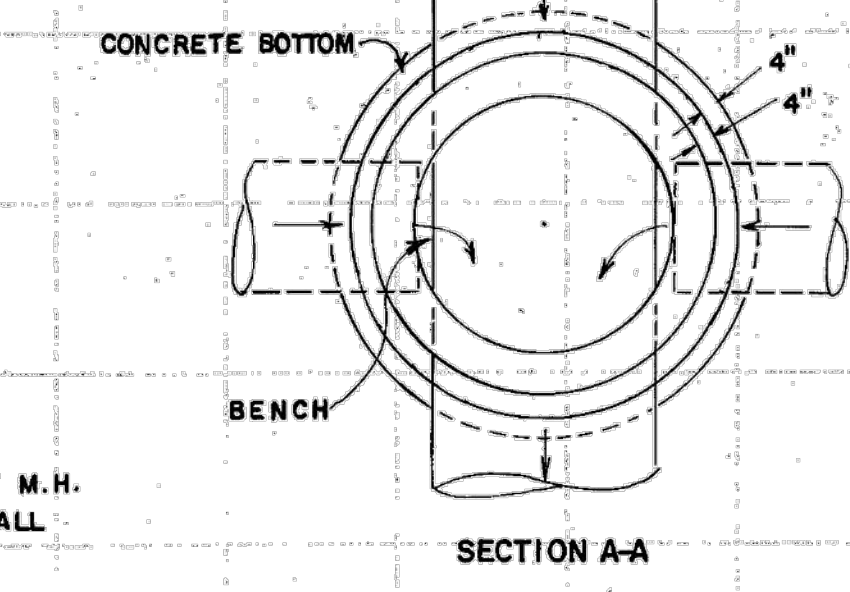
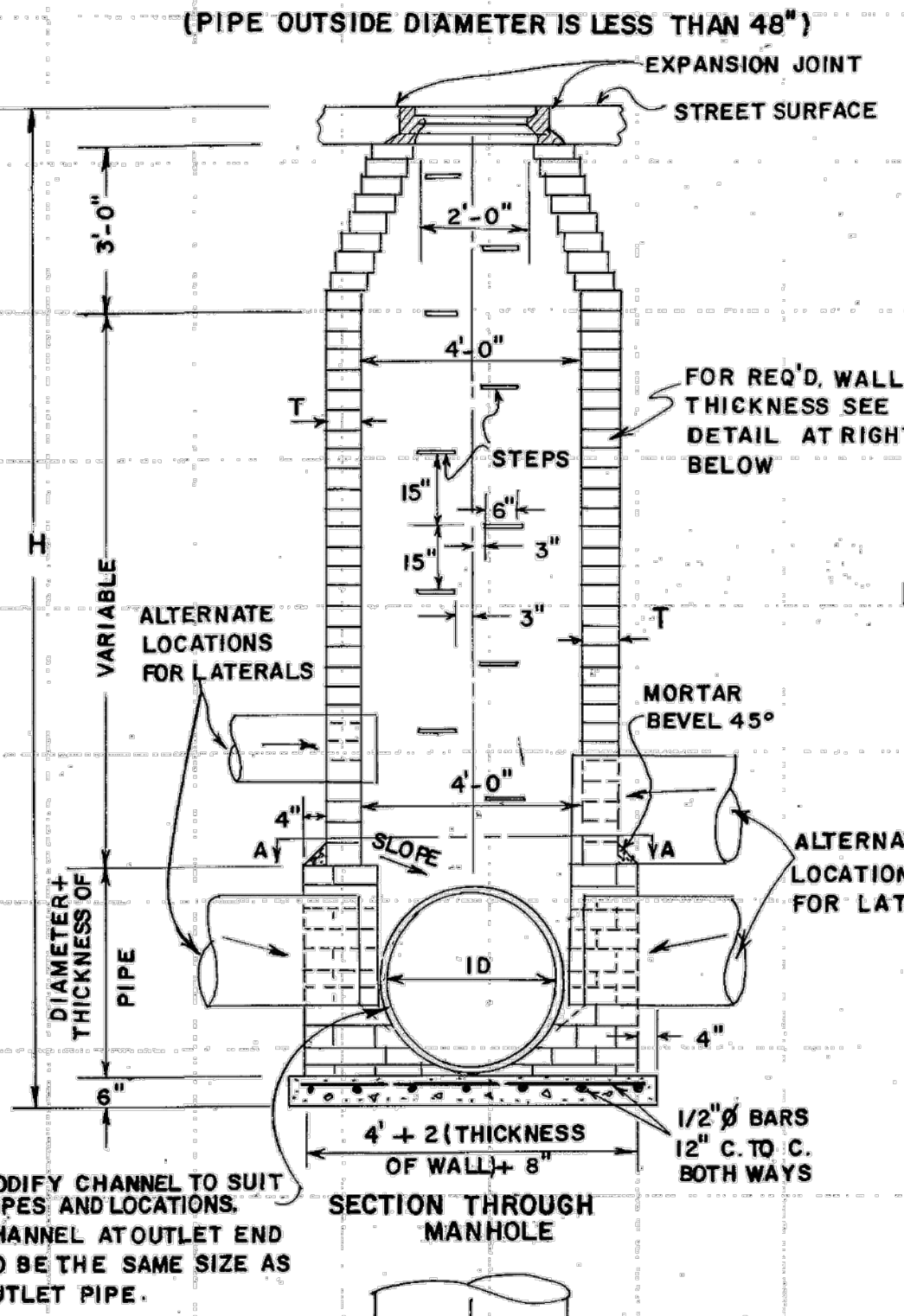


NOTE: STEPS ARE REQUIRED IN ALL MANHOLES WHERE "H" IS GREATER THAN 4'-0". NUMBER AND LOCATION OF STEPS TO BE AS DIRECTED BY THE ENGINEER. PLASTIC OR RUBBER COATED STEPS LISTED IN THE GA. D.O.T. QUALIFIED PRODUCTS MANUAL MAY BE SUBSTITUTED.

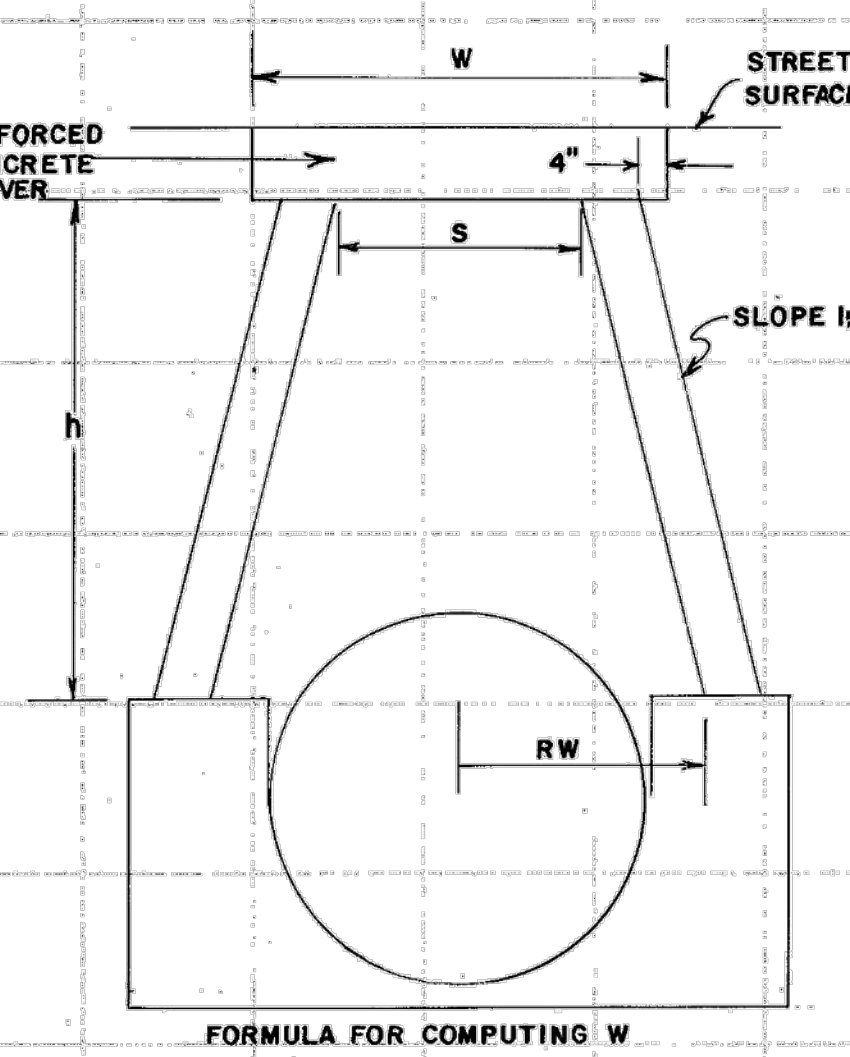
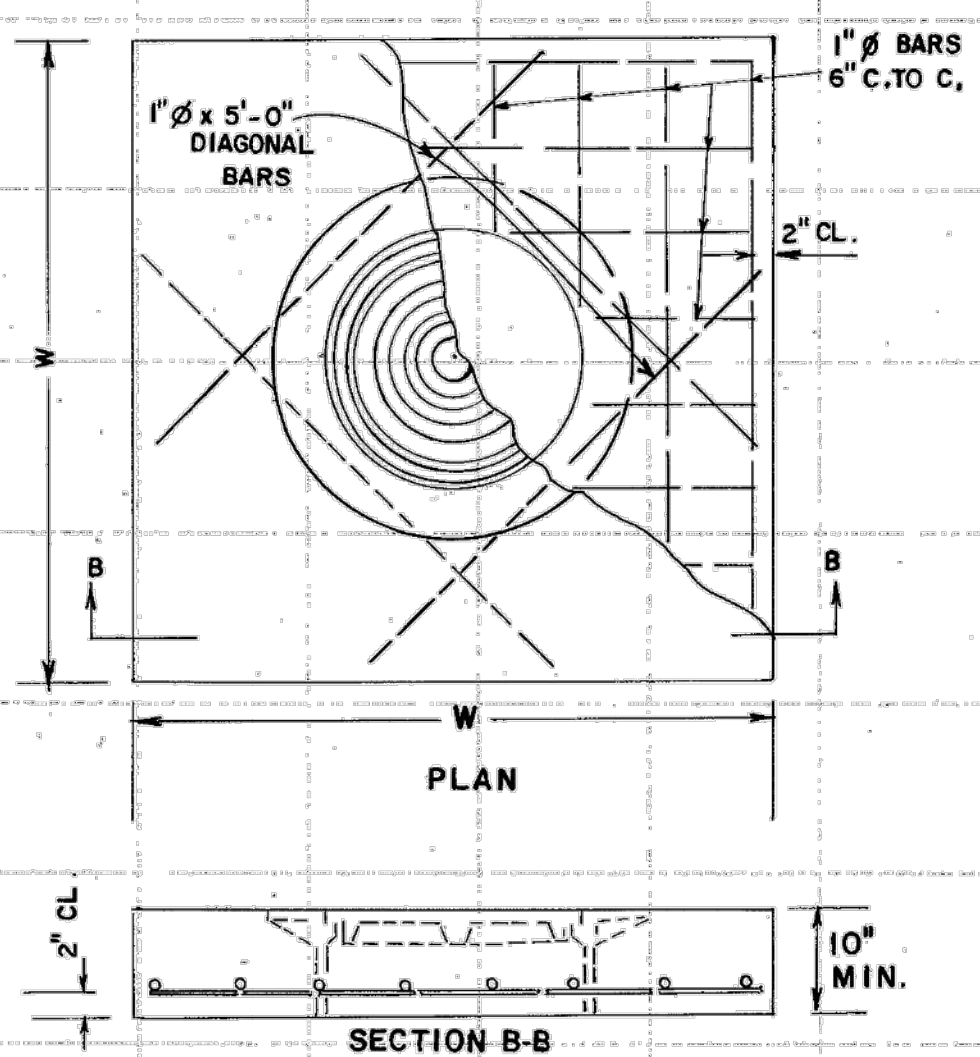
DEPTH LIMITS FOR INCREASING WALL THICKNESS



BRICK MANHOLE SECTION (PIPE OUTSIDE DIAMETER IS LESS THAN 48")



REINFORCED CONCRETE COVER



FORMULA FOR COMPUTING W
 RW = INSIDE RADIUS OF WALL
 $S = 2RW - 1/2$
 $W = S + 24"$

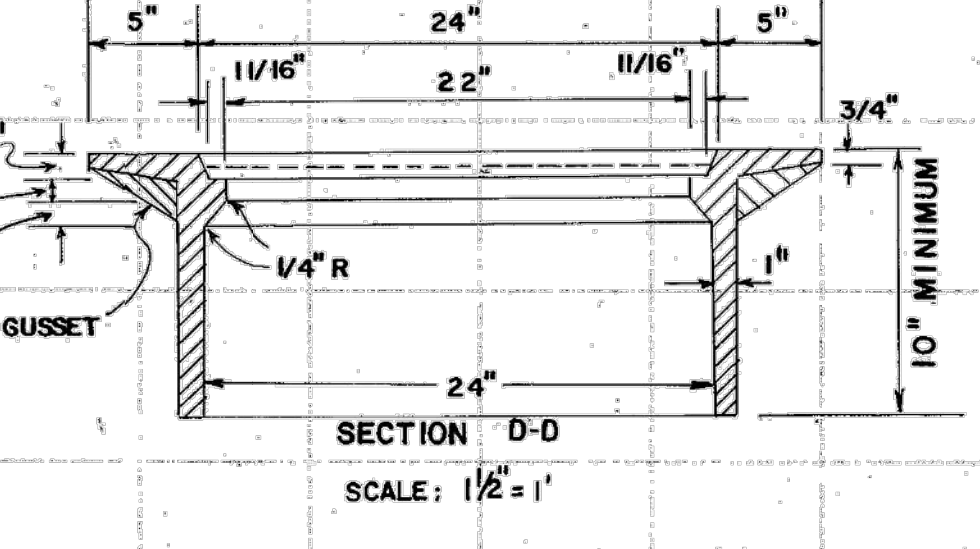
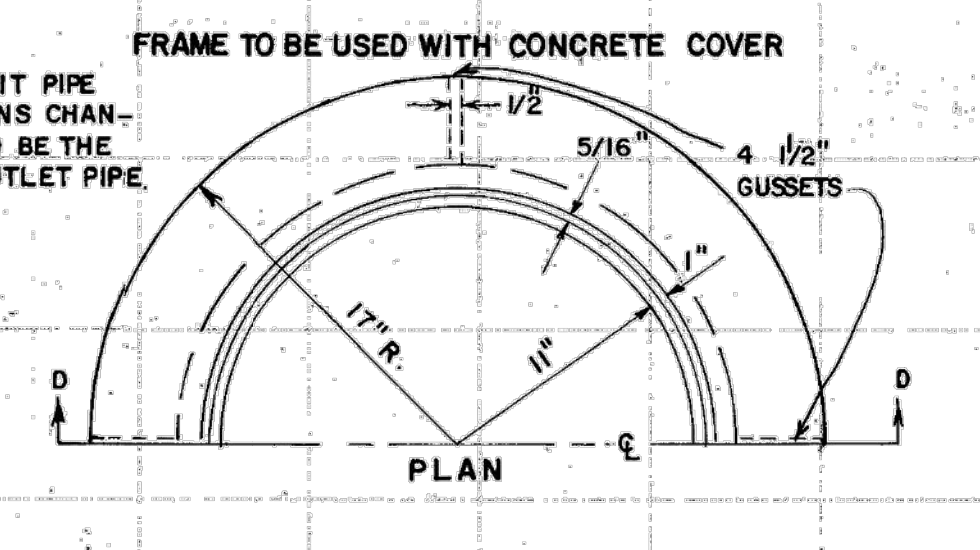
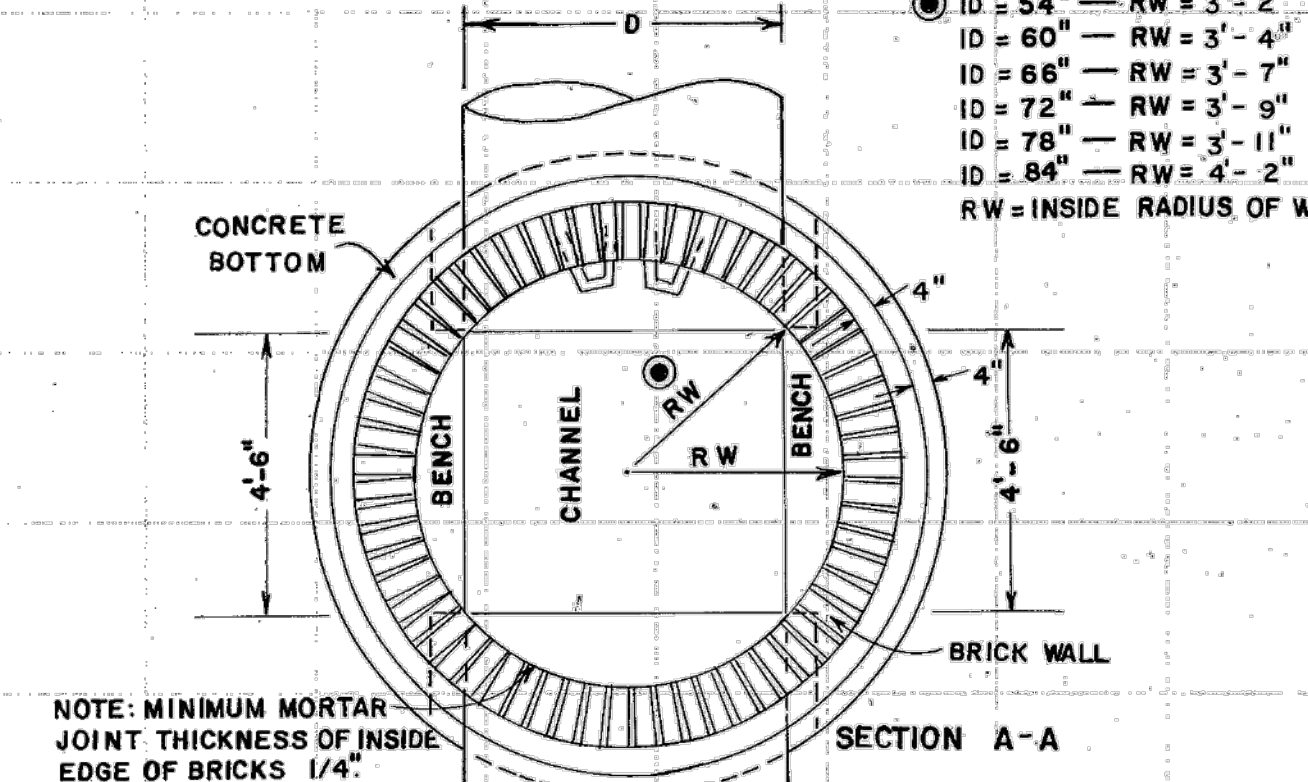
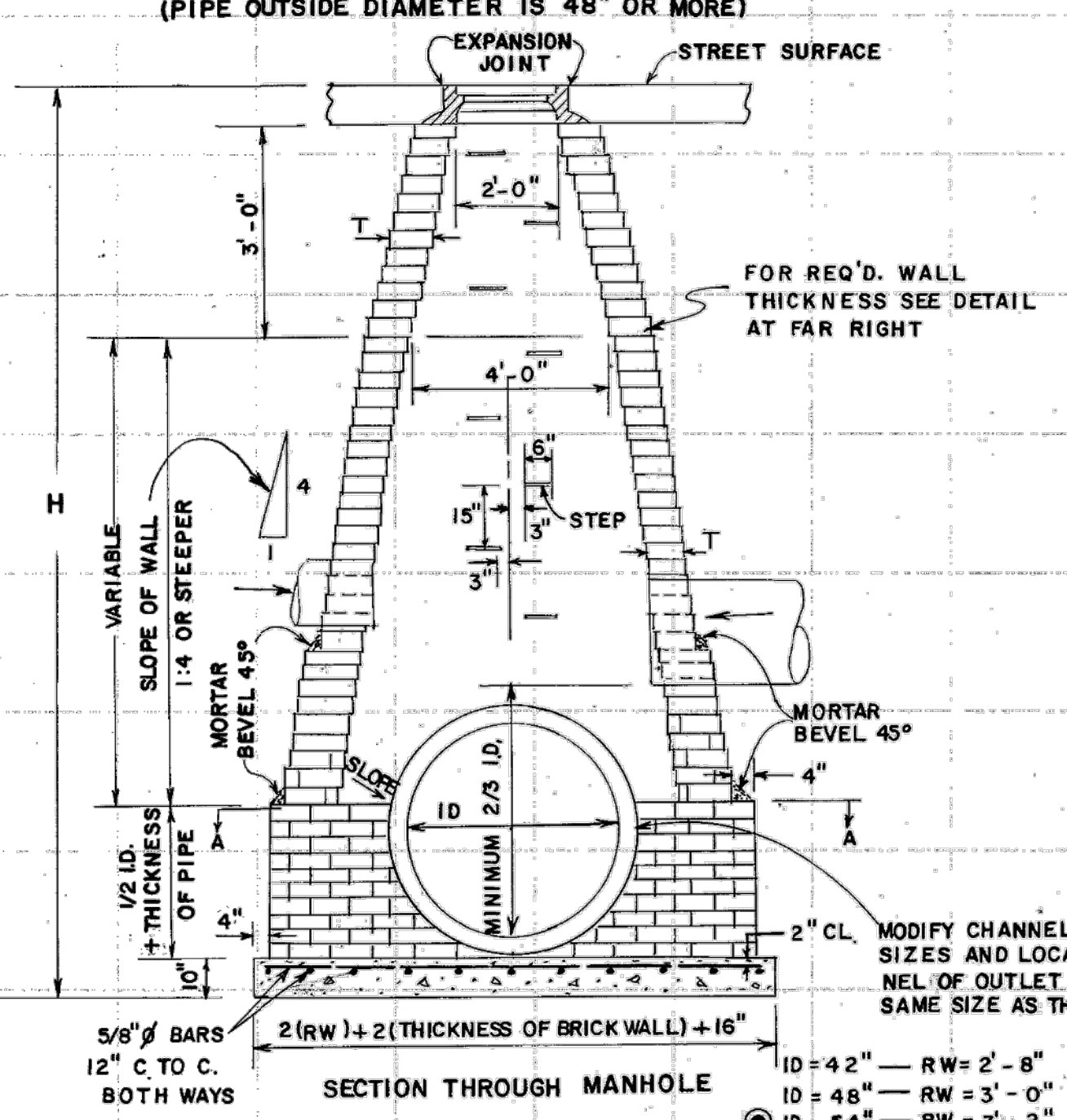
NOTE: USE CONCRETE COVER WITH MANHOLE CASTINGS IF FILL FROM TOP OF PIPE TO FINISHED SURFACE IS LESS THAN:
 4'-6" FOR 42" PIPE
 5'-0" FOR 48" PIPE
 5'-6" FOR 54" PIPE
 6'-0" FOR 60" PIPE
 6'-6" FOR 66" PIPE
 7'-0" FOR 72" PIPE
 7'-6" FOR 78" PIPE
 8'-0" FOR 84" PIPE

THICKNESS OF BRICK WALL (SEE DETAIL AT FAR RIGHT)

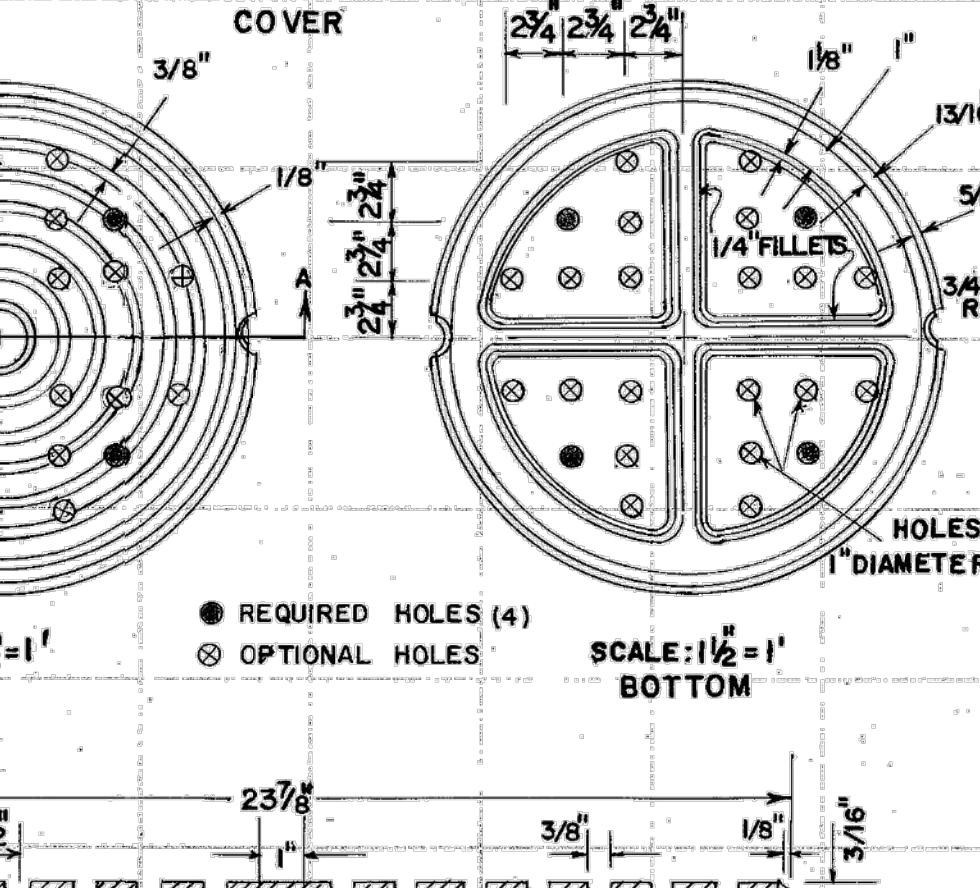
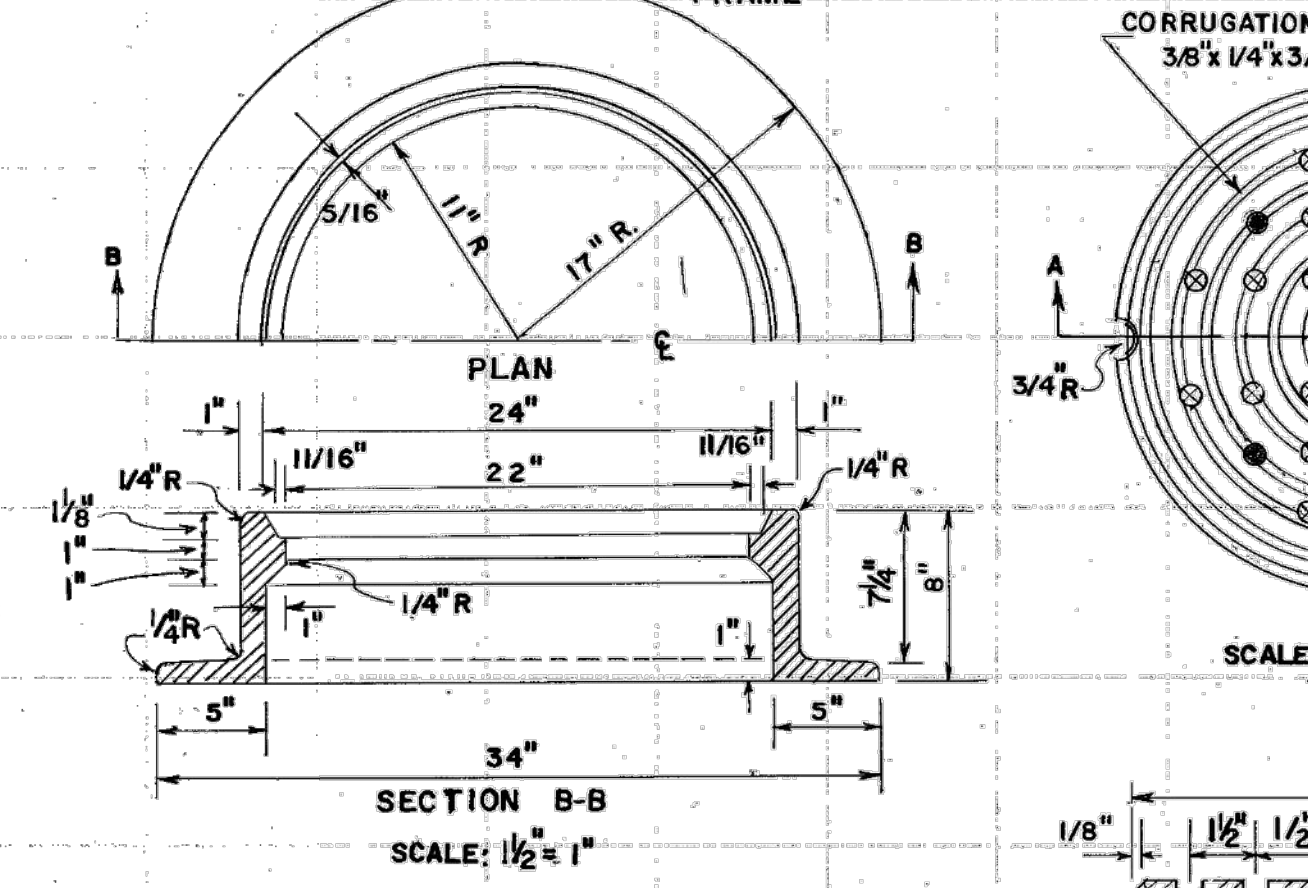
DEPTH	THICKNESS (T)
TO 10'	* 8" MIN.
10' TO 20'	12" MIN.
20' TO 30'	16" MIN.

*FOR COMBINATION BRICK & PRECAST M.H. (SEE BELOW) ONLY 12" OR 16" BRICK WALL THICKNESS IS TO BE USED FOR 'BASE'.

BRICK MANHOLE SECTION (PIPE OUTSIDE DIAMETER IS 48" OR MORE)



MANHOLE CASTINGS

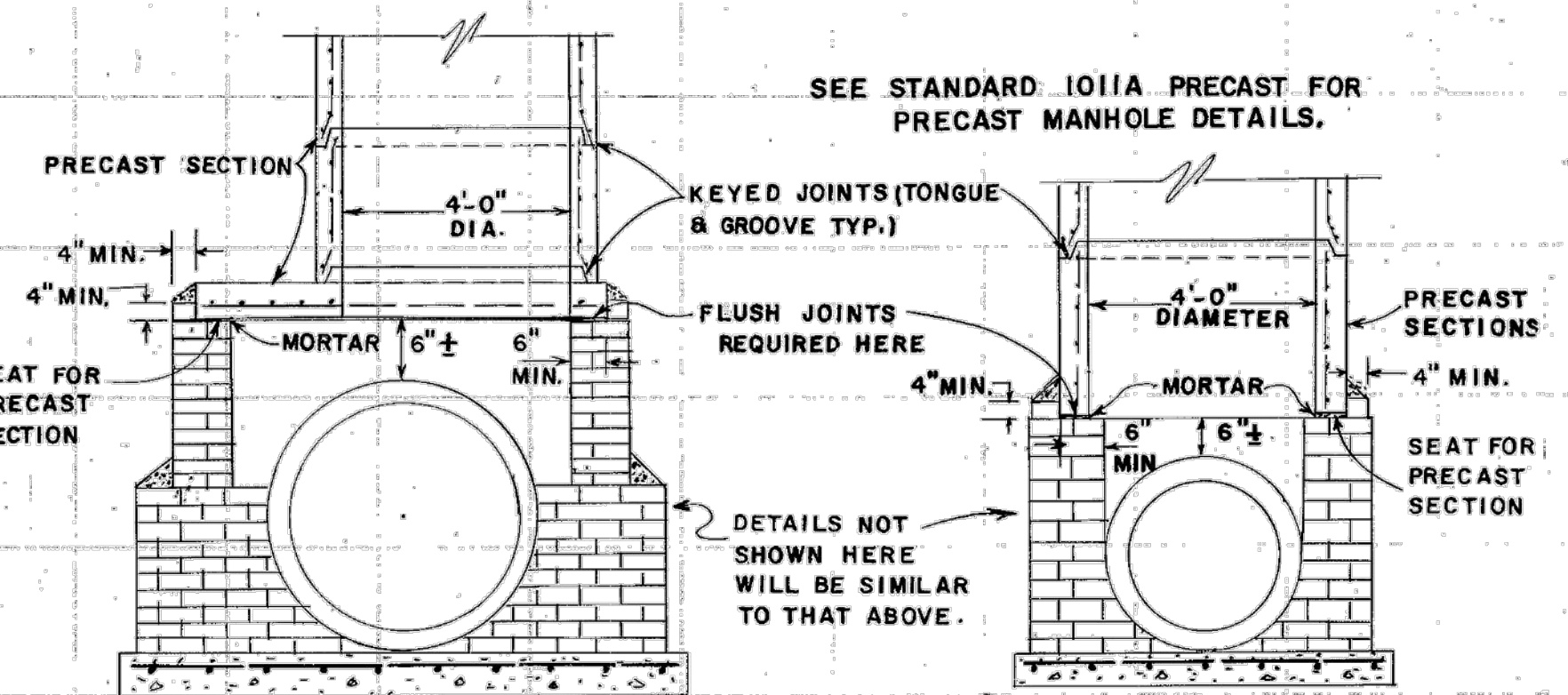


APPROXIMATE WEIGHTS
 C.I. FRAME 282 LBS.
 C.I. COVER 178 LBS.

NOTE: COVER AND FRAME MUST BE FITTED BEFORE LEAVING SHOP. PAINT ACTUAL WEIGHT OF EACH CASTING ON ITS FACE.

ALTERNATE - COMBINATION BRICK & PRECAST MAN HOLES

NOTES FOR COMBINATION MANHOLE:
 - BRICK PORTION OF MANHOLE WILL BE CONSTRUCTED WITH SEAT TO GIVE BEST POSSIBLE FIT FOR PRECAST UNIT. MINIMUM THICKNESS FOR BRICK WALL WILL BE 12" FOR H TO 20 FT. AND 16" FOR H=20 FT. TO 30 FT.
 - PRECAST UNIT WITHOUT TONGUE OR GROOVE AT BOTTOM SHALL BE PLACED IN BRICK SEAT WITH MORTAR IN JOINT ALL AROUND. BRICK BASE SHALL SET FOR 24 HOURS MIN. BEFORE PRECAST SECTIONS ARE INSTALLED.
 - STEPS IN THE BRICK PORTION OF MANHOLE WILL BE IN ALIGNMENT WITH AND MATCH THE STEPS IN THE PRECAST SECTIONS RATHER THAN AS SHOWN FOR THE ALL BRICK MANHOLES.



DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

STANDARD BRICK MANHOLES

SCALE AS SHOWN
 REV. & RED. R. OCTOBER, 1981

DES. 8-58 (SUBMITTED) *Alfred E. Hardy*
 DRW. R.M.U. STATE ROAD & AIRPORT DESIGN ENGR.
 TRA. G.M.E. (APPROVED) *Thomas D. Newland*
 CHK. R.K.C. STATE HIGHWAY ENGINEER

NUMBER
1011A

STANDARD DETAILS

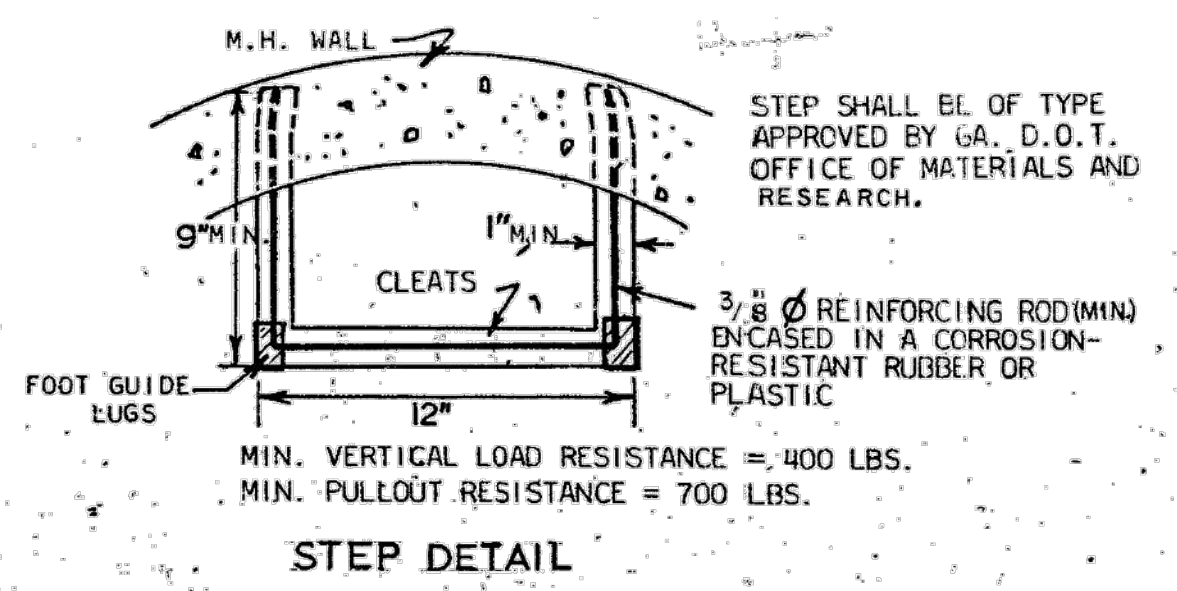
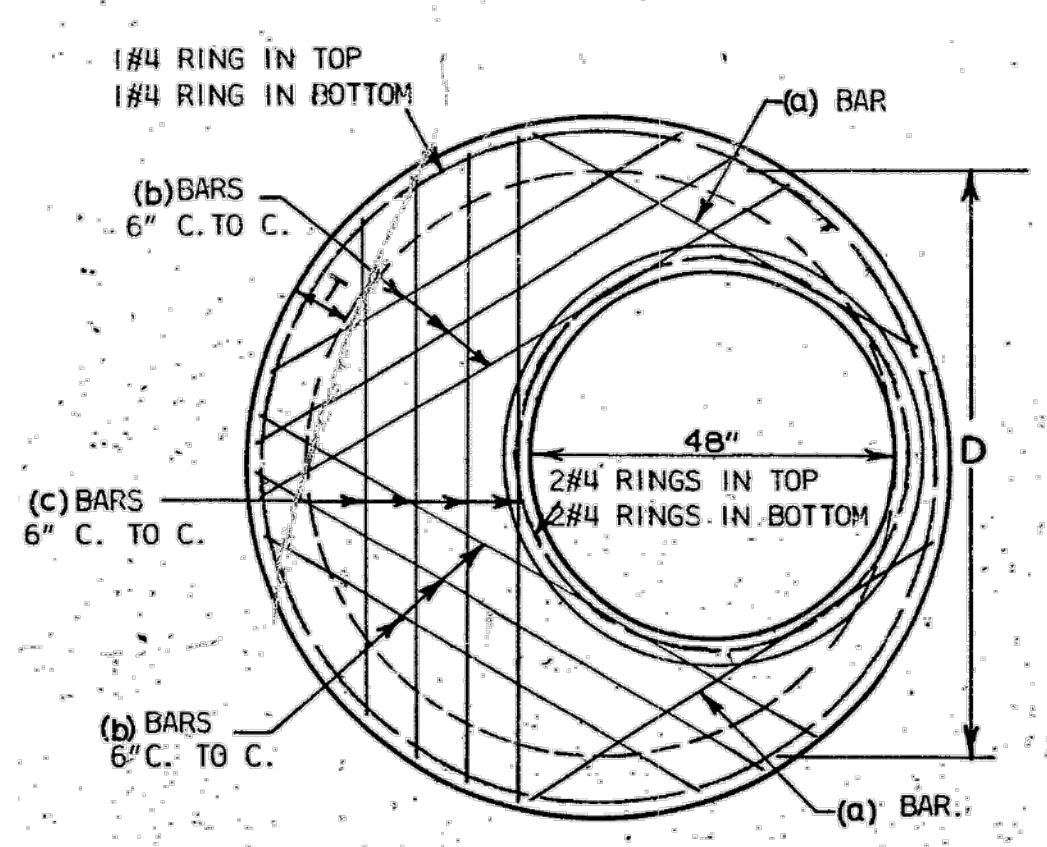
TERRELL HEIGHTS

STORM SEWER IMPROVEMENTS

PHASE 2

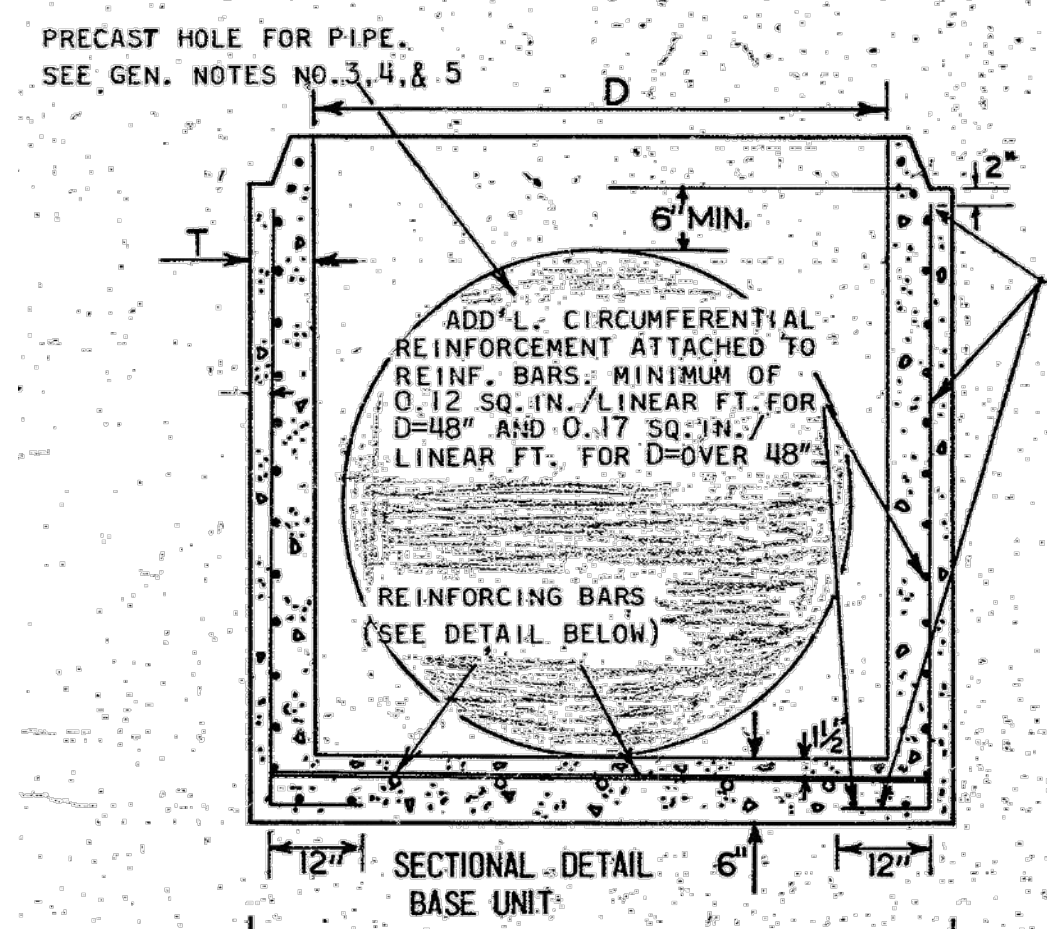
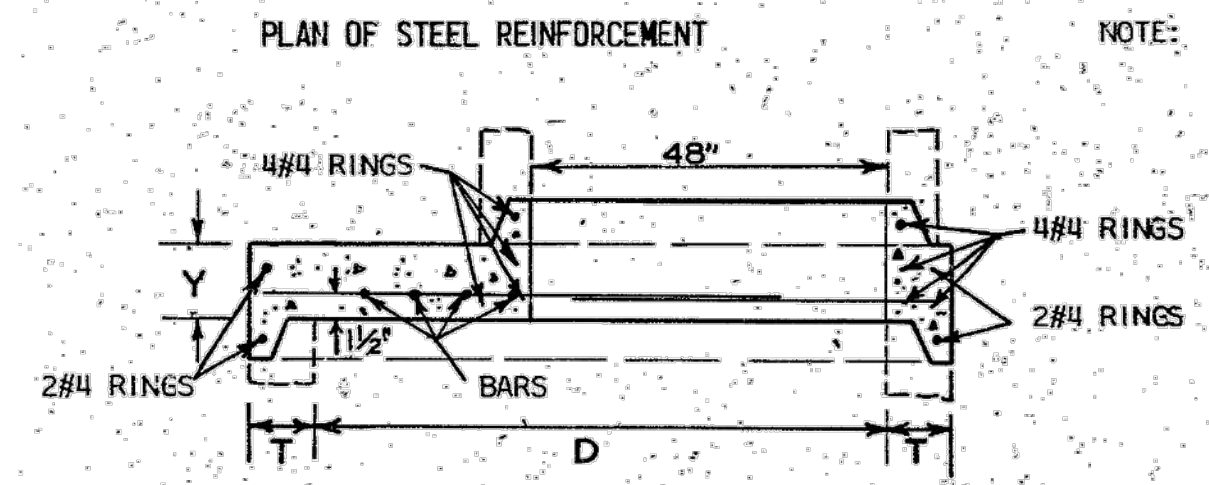
CARTERSVILLE, GEORGIA

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



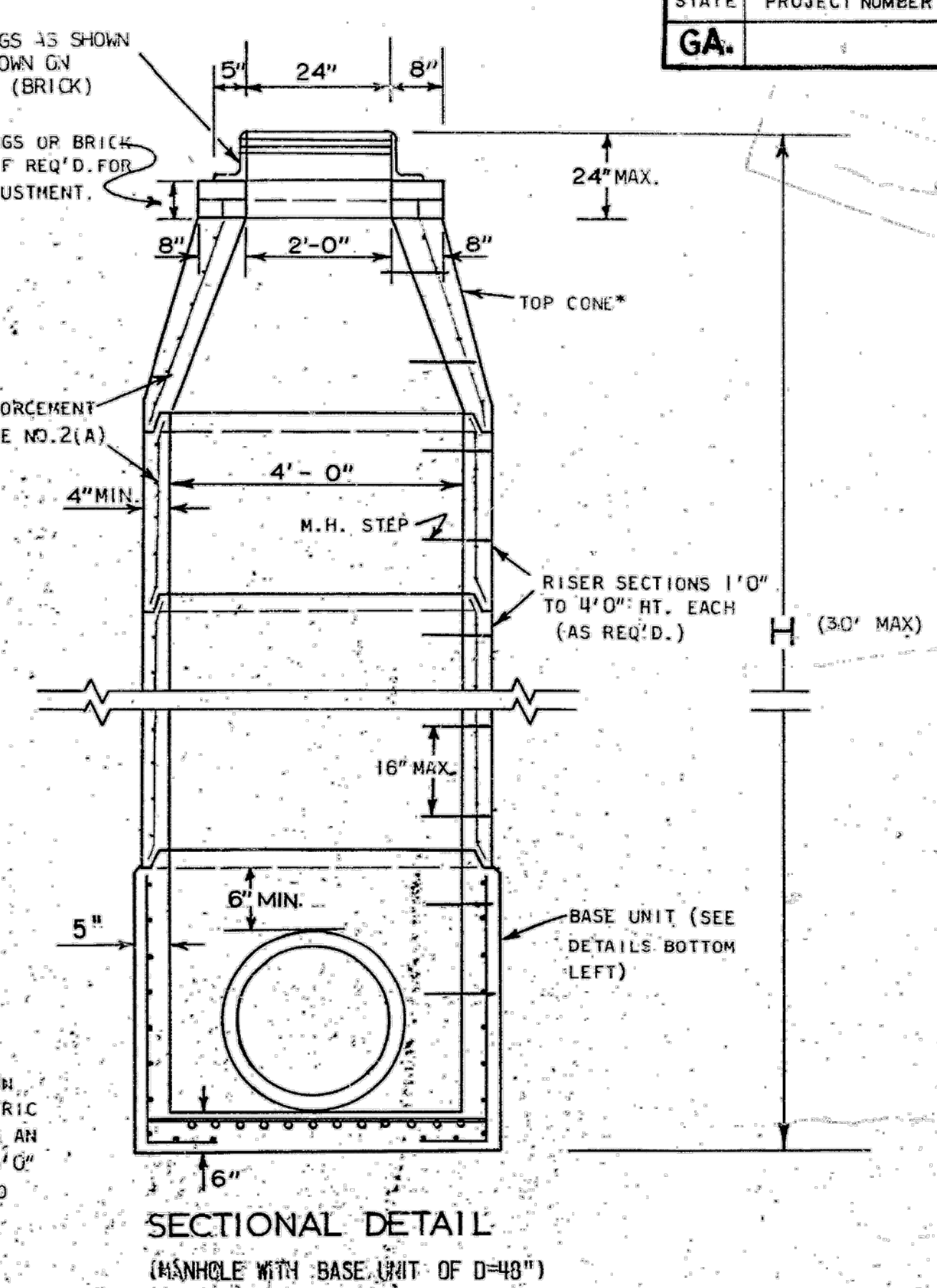
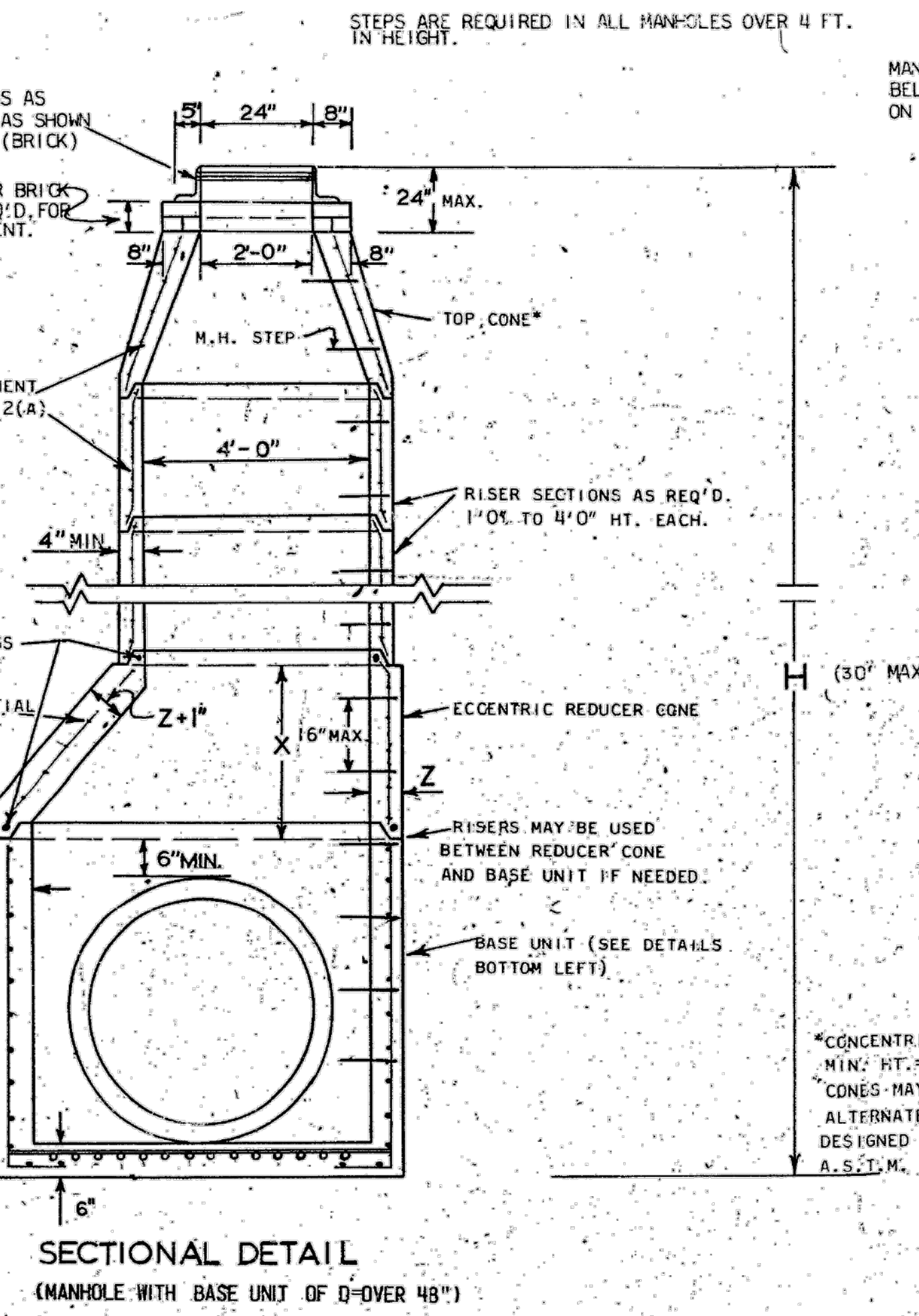
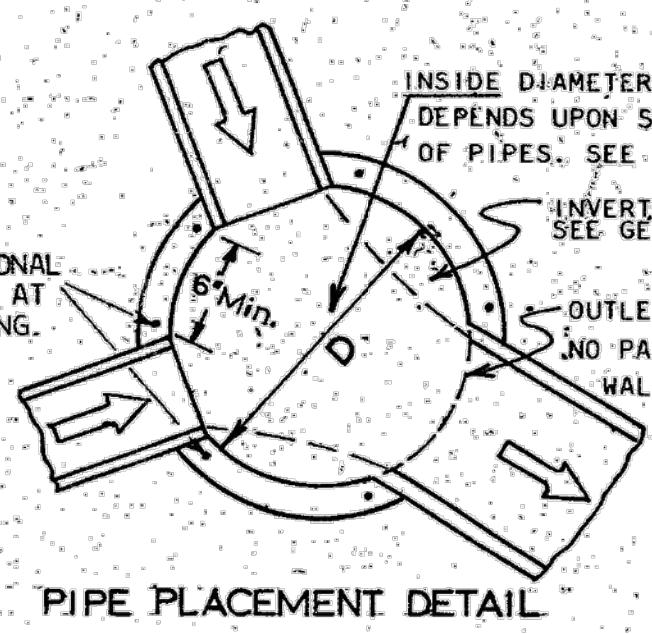
D.	Y	(a) BARS	(b) BARS	(c) BARS
MIN.		No. SIZE	No. SIZE	No. SIZE
60"	8"	2 #6	4 #6	2 #6
72"	9"	2 #6	6 #6	4 #6

NOTE: 10 FT. MAXIMUM ALLOWABLE COVER ABOVE TOP OF REDUCER SLABS. REDUCER CONES TO BE USED WHERE REDUCER SLABS NOT PERMITTED.



NOTE: 25 FT. MAXIMUM ALLOWABLE COVER ABOVE REDUCER CONE.

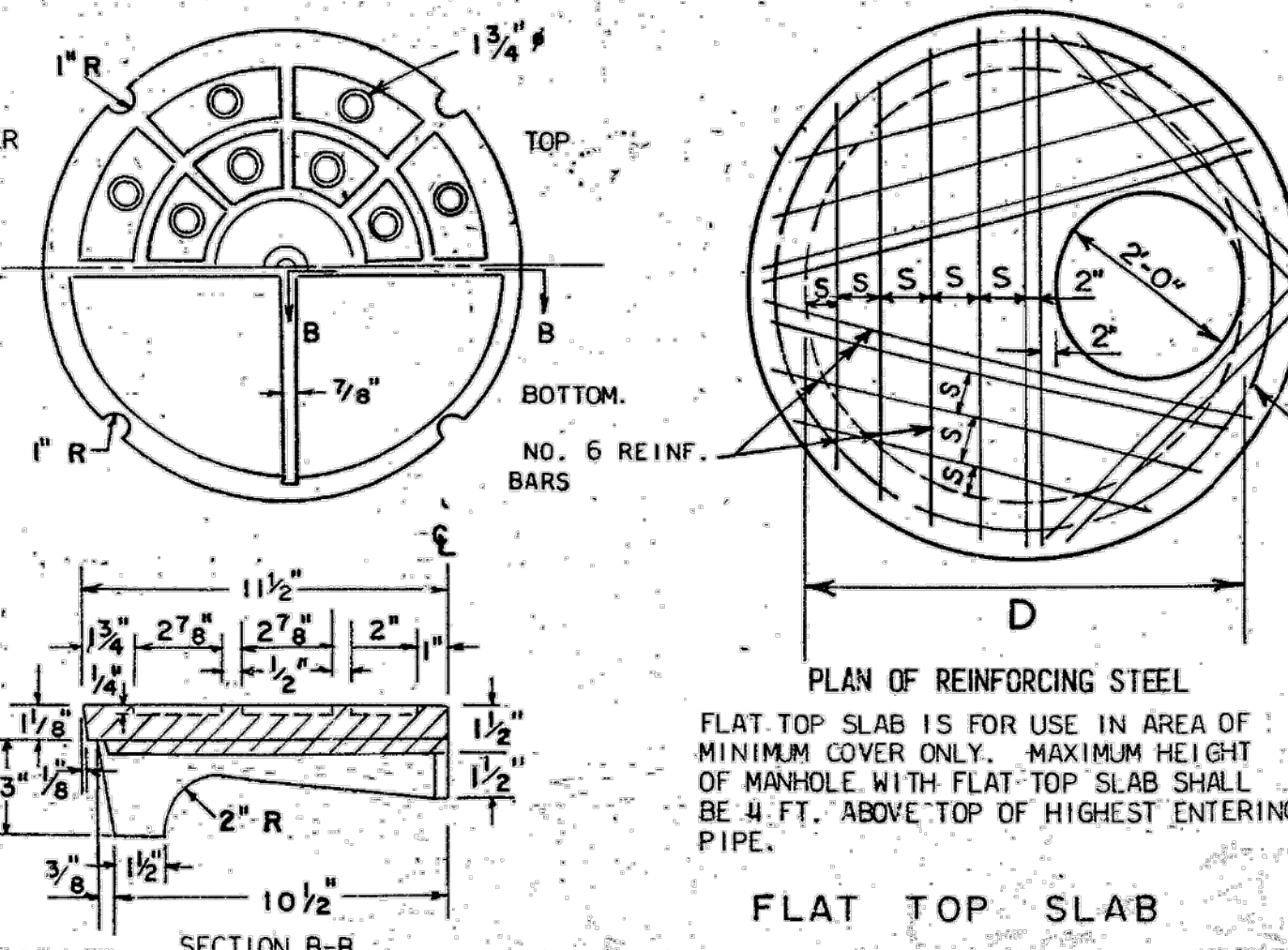
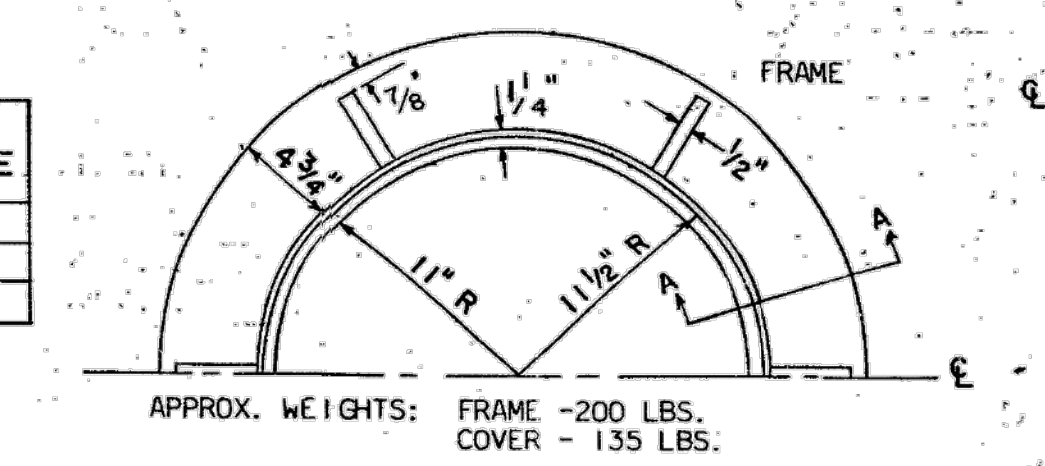
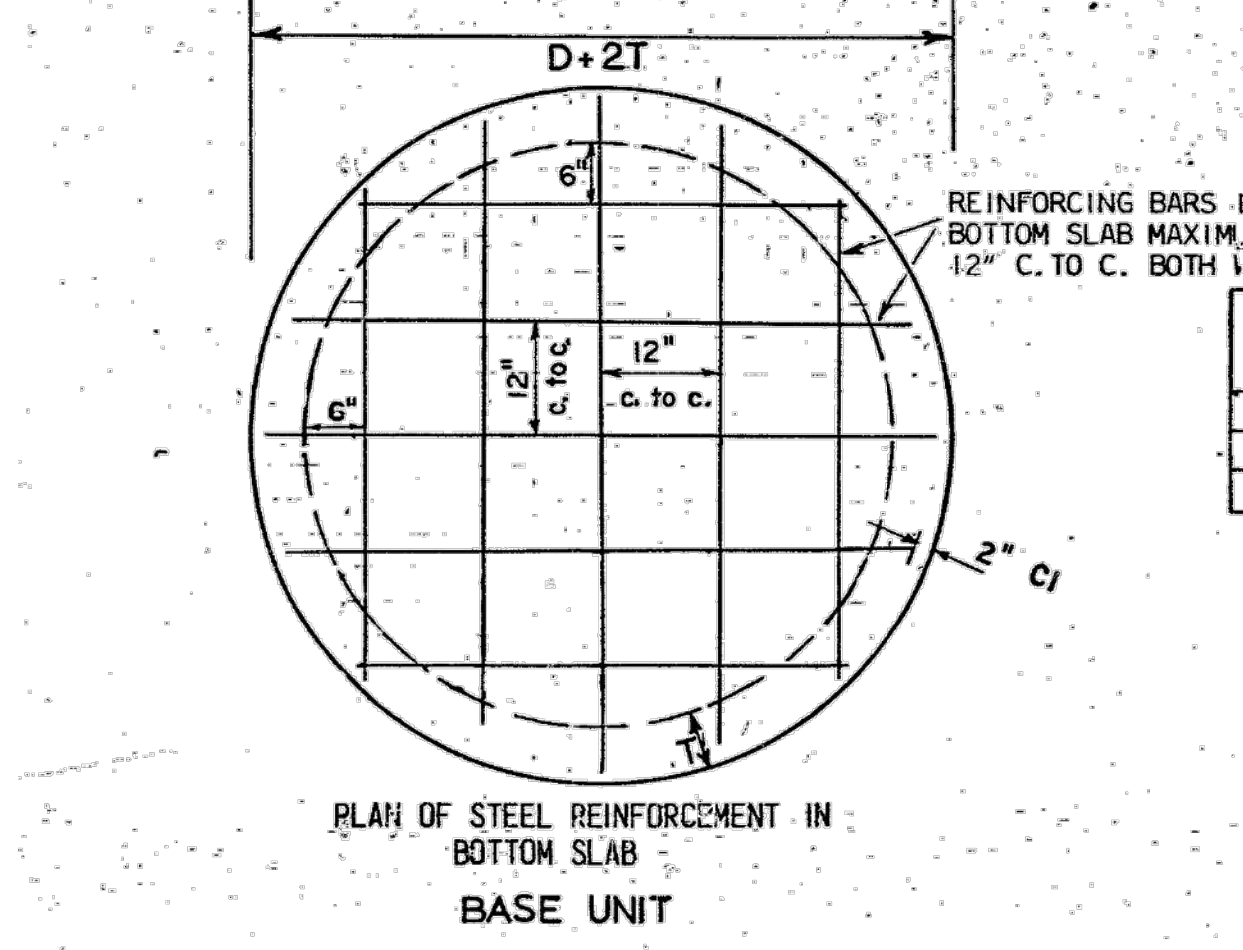
D	X (MIN.)	Z (MIN.)
60"	1'-6"	5"
72"	3'-0"	6"



*CONCENTRIC CONE SHOWN. MIN. HT. = 2'-0". ECCENTRIC CONES MAY BE USED AS AN ALTERNATE. MIN. HT. = 3'-0" DESIGNED ACCORDING TO A.S.T.M. C-478

GENERAL NOTES:

- MATERIALS: ALL CONCRETE, STEEL BARS AND STEEL WIRE REINFORCEMENT SHALL COMPLY WITH SECTION 866.02 OF GEORGIA STANDARD SPECIFICATIONS AND SPECIAL PROVISION WHICH MODIFY SECTION 866.02.
- REINFORCEMENT: (A) PLACEMENT AND DESIGN OF STEEL REINFORCEMENT IN RISER UNITS, CONE SECTIONS, GRADE RINGS AND JOINTS SHALL BE IN COMPLIANCE WITH A.S.T.M. C-478 UNLESS OTHERWISE NOTED. (B) BASE UNITS, REDUCER SLABS AND FLAT TOP SLABS SHALL HAVE STEEL REINFORCEMENT AS SHOWN IN DETAILS AT LEFT.
- OPENINGS FOR PIPES LARGER THAN 6 INCHES IN DIAMETER ARE TO BE PRECAST. A MINIMUM OF 6" ALONG THE INTERCUMFERENCE IS TO REMAIN BETWEEN THE EXTREMITIES OF HOLE FOR ADJACENT PIPE IN ANY SINGLE UNIT. A MINIMUM OF TWO REINF. BARS SHALL REMAIN IN WALL BETWEEN ANY TWO OPENINGS.
- THE CONTRACTOR WILL FURNISH THE FABRICATOR WITH THE ANGLE OF ALIGNMENT AND SIZE OF ALL PIPES TO ENTER MANHOLE AND THE HEIGHT OF STRUCTURE.
- BASE UNITS SHALL HAVE SUFFICIENT HEIGHT TO ALLOW FOR MINIMUM OF 6" OF WALL BETWEEN TOP OF HIGHEST OPENING FOR PIPES AND BOTTOM OF JOINT.
- INVERT CHANNELS: (A) FOR SANITARY SEWER MANHOLES SEE GEORGIA STANDARD SPECIFICATIONS FOR CHANNEL REQUIREMENTS. (B) FOR STORM SEWER MANHOLES, CHANNELS BUILT TO SUIT PIPE SIZES AND LOCATION. HEIGHT OF CHANNEL EQUAL TO 1/2 DIAMETER OF OUTLET PIPE. CHANNEL BUILT FROM GROUT OR CLASS "A" CONCRETE.
- PIPES ARE TO BE EXTENDED INTO STRUCTURE WALL A MINIMUM OF 4" BUT SHOULD NOT EXTEND BEYOND INTERIOR WALL OF STRUCTURE.
- ALL JOINTS, EXCEPT FOR GRADE RINGS AND TOP OF TOP CONE, SHALL HAVE TONGUE AND GROOVE SECTION.



DEPARTMENT OF TRANSPORTATION
 STATE OF GEORGIA

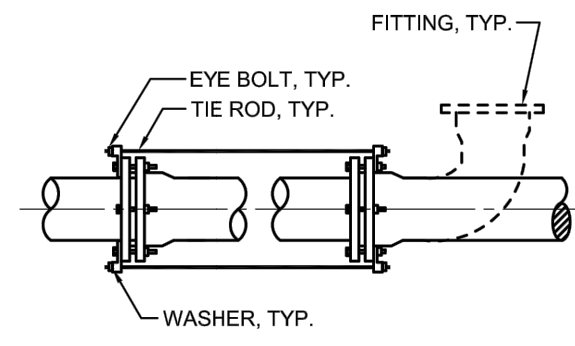
STANDARD PRECAST REINFORCED CONCRETE MANHOLE

NO SCALE

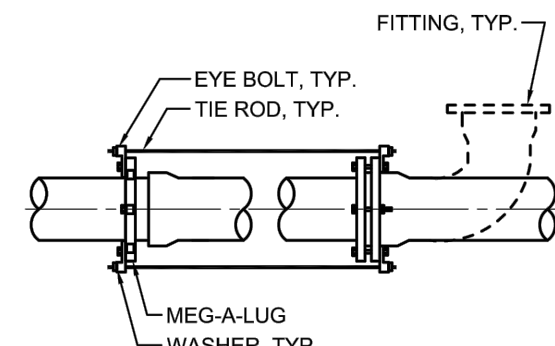
AUGUST, 1973

DESIGNED: GCL	SUBMITTED: J. J. Frutkin	NUMBER
DRAWN: RAL	STAGE ROAD DESIGN ENGINEER	1011A
CHECKED: JEC	APPROVED:	PRECAST

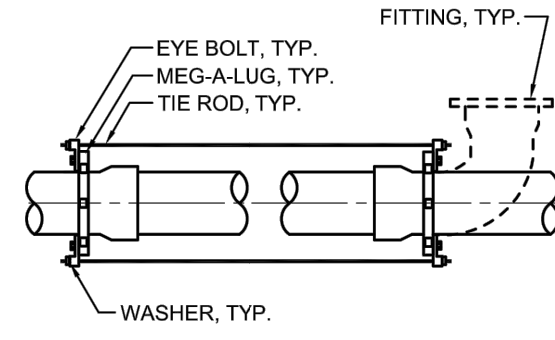
REVISIONS	DATE	DESCRIPTION
BY: A.M.U.	CASTINGS & BASE U.	6-1-78



EYE BOLT TO EYE BOLT
TYPE 1
FITTING RESTRAINT



EYE BOLT TO MEG-A-LUG
TYPE 2
FITTING RESTRAINT



MEG-A-LUG TO MEG-A-LUG
TYPE 3
FITTING RESTRAINT

PIPE SIZE (IN.)	ROD SIZE (IN.)	NO. OF RODS (TEES, PLUGS AND VALVES)	NO. OF RODS (11-1/4" - 22-1/2" BENDS)	NO. OF RODS (45° - 90° BENDS)
6	3/4	3	2	3
8	3/4	3	3	3
10	3/4	4	4	4
12	3/4	4	4	6
14	3/4	6	4	6
16	3/4	6	6	6
20	3/4	6	6	6
24	3/4	8	8	8
30	1	6	6	6
36	1	6	6	6

THRUST RESTRAINT
TIE ROD CHART

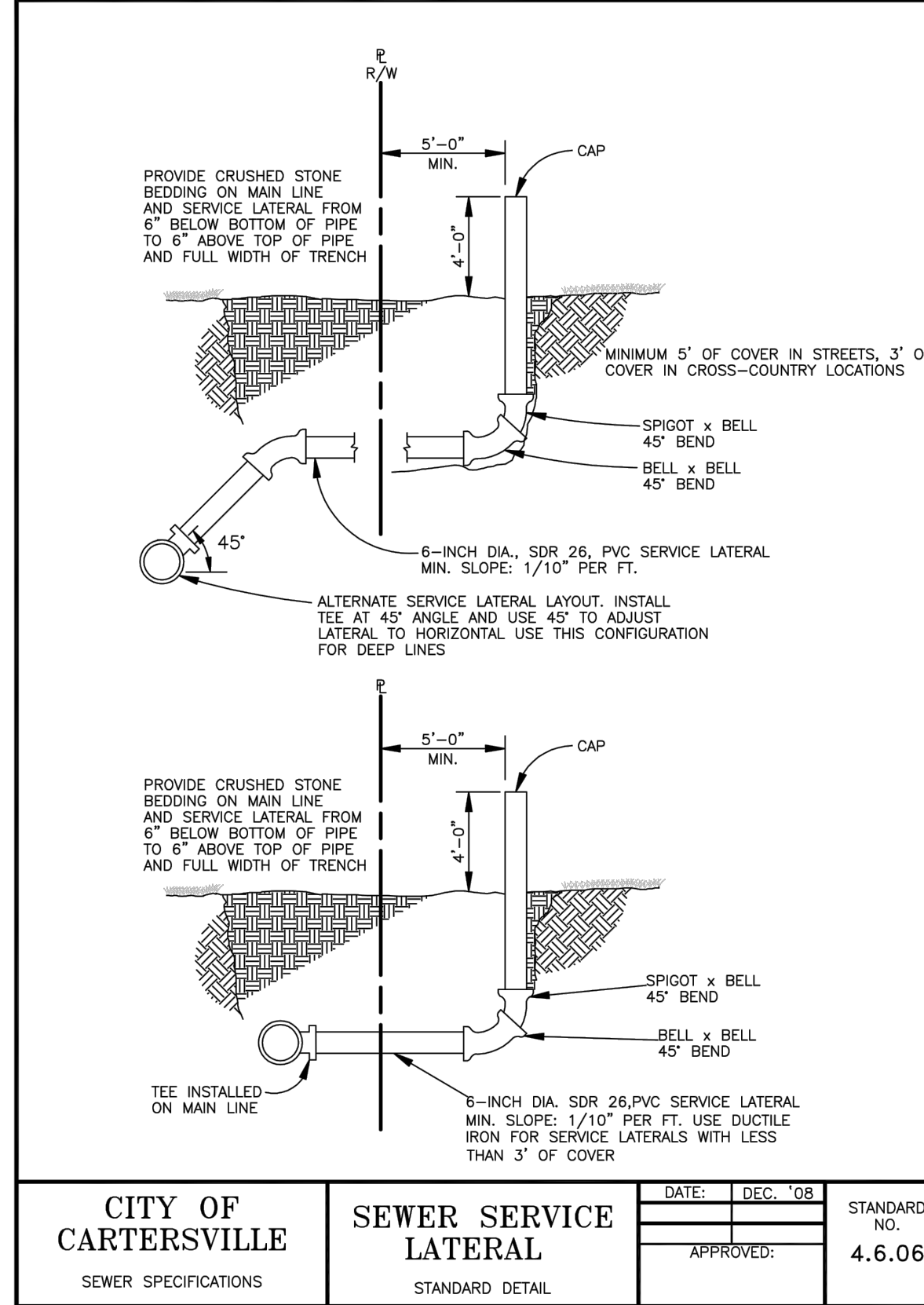
NOTES:

- RODS SHALL BE A MINIMUM 304 S.S. ALL THREAD RODS WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI.
- USE LISTED NUMBER OF RODS AS SHOWN ON TIE ROD CHART (MINIMUM NUMBER SHOWN).
- RODS MUST HAVE A MINIMUM 6" OF THREAD ON EACH END.
- ALL STEEL MUST BE CLEANED AND COATED WITH ROYSTON ROSKOTE, KOPPERS SUPER SERVICE BLACK OR APPROVED EQUAL.
- ALL NUTS USED ON THE RODS MUST HAVE A WASHER.

DESIGN CRITERIA:

- FITTING SHOWN IS REPRESENTATIVE FOR ALL FITTINGS, VALVES, DEAD ENDS AND PLUGS.
- FOR WATER MAINS AT A RATED TEST PRESSURE OF 250 PSI.

A TYPICAL TIE ROD RESTRAINT
C5.06 NTS



CITY OF CARTERSVILLE SEWER SPECIFICATIONS	SEWER SERVICE LATERAL STANDARD DETAIL	DATE: DEC. '08	STANDARD NO. 4.6.06
APPROVED:			

USER:AARBARBER
FILE:I:\37697\37697\CAD\CIVIL\PHASE 2\PLOT\CS.01+C5.06.dwg
SAVED:7/31/2023
PLOTTED:8/21/2023

BARGE
DESIGN SOLUTIONS

615 364 Avenue South, Suite 370, Nashville, Tennessee 37210
PHONE: (615) 284-1800 / FAX: (615) 285-8872



STANDARD DETAILS

TERRELL HEIGHTS
STORM SEWER IMPROVEMENTS
PHASE 2

CARTERSVILLE, GEORGIA

REVISION INFORMATION

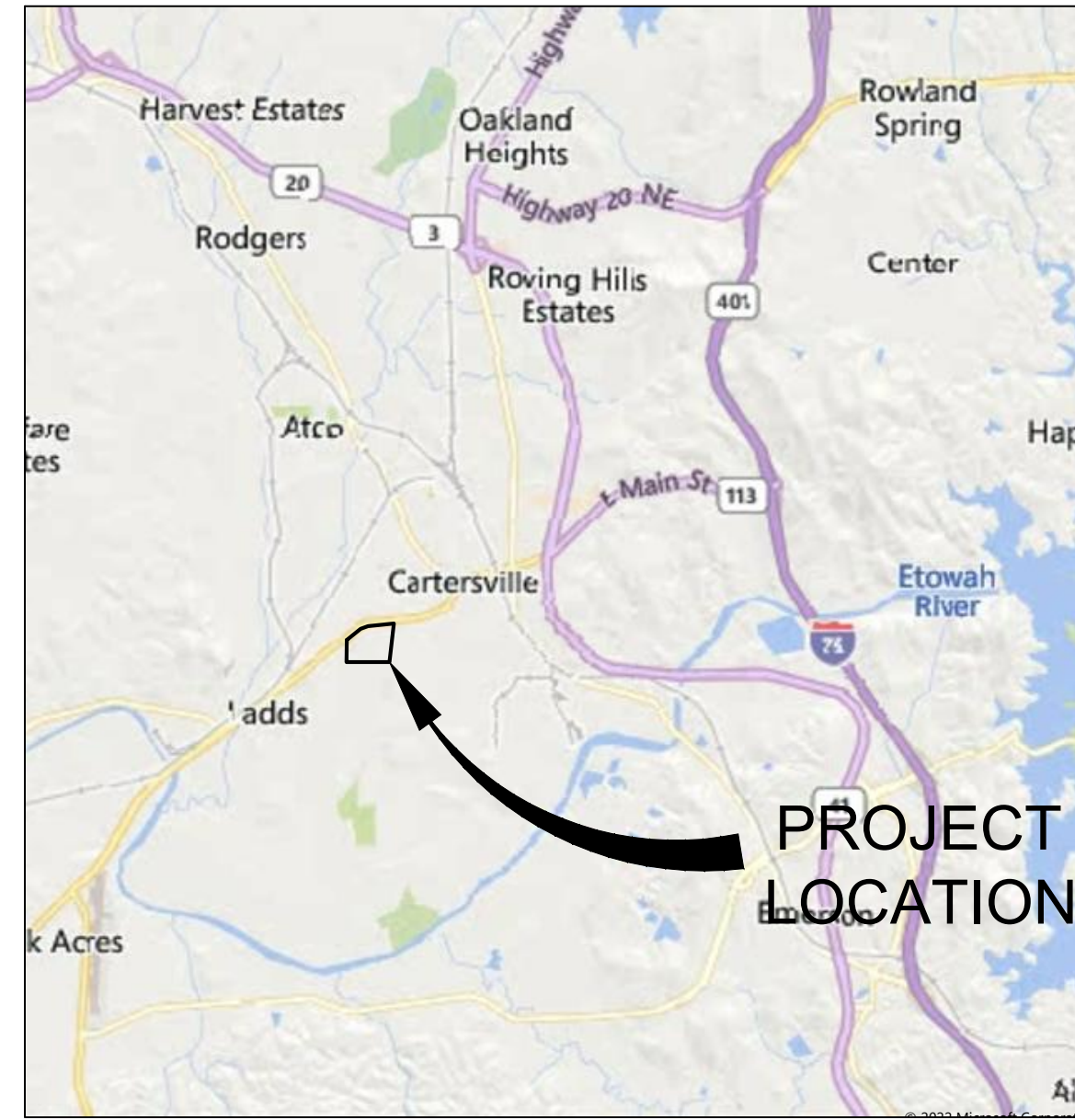
REV.	DR.	CHK.	DATE	DESCRIPTION

C5.06

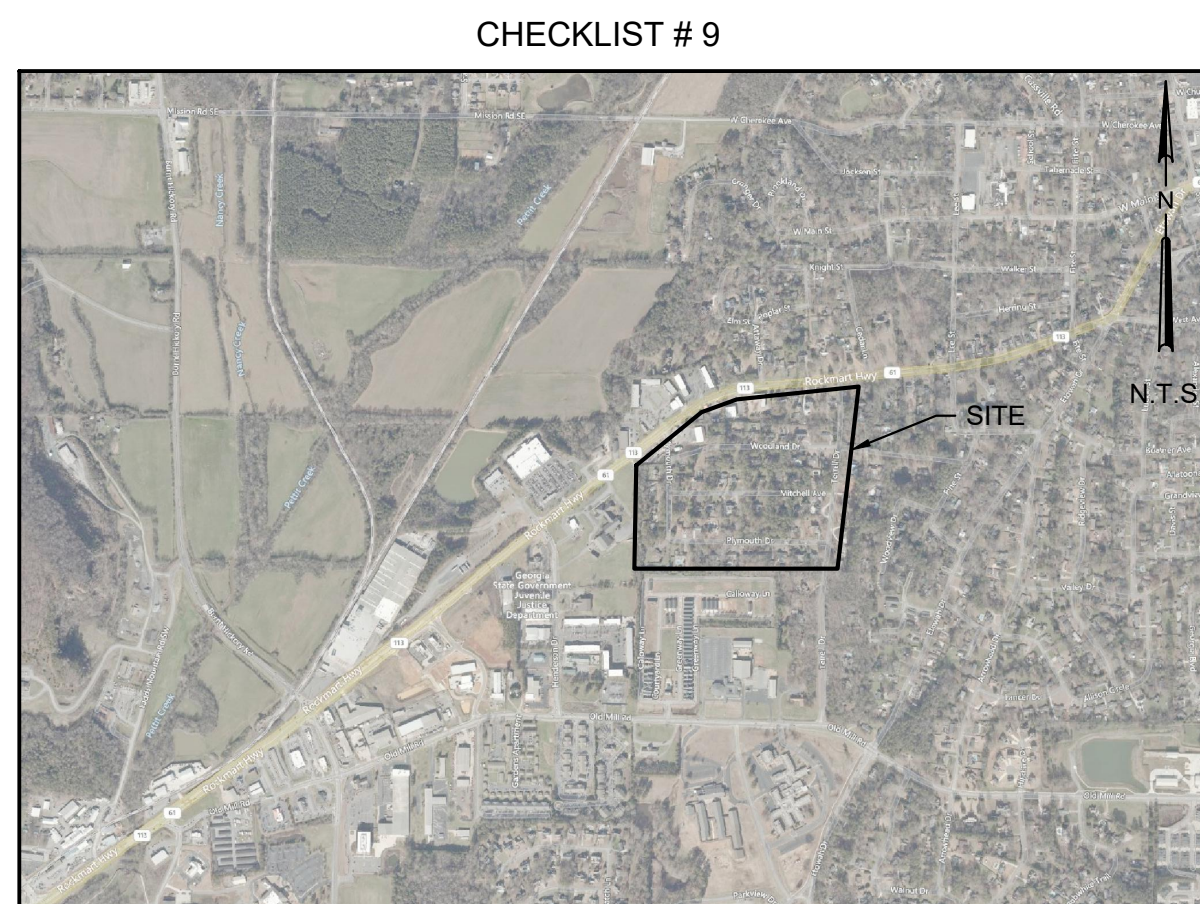
PROJ. NO. 37697-01

EROSION, SEDIMENTATION & POLLUTION CONTROL PLANS

TERRELL HEIGHTS STORM SEWER IMPROVEMENTS CARTERSVILLE, GEORGIA AUGUST 2023



NTS
VICINITY MAP



NTS
LOCATION MAP

- GPS LOCATION OF CONSTRUCTION EXIT, OR BEGINNING AND END OF LINEAR PROJECT:
CONSTRUCTION EXIT: lat 34.157775° lon -84.812279°

CONTACT INFORMATION

PRIMARY PERMITTEE OWNER/DEVELOPER	OPERATOR	DESIGN PROFESSIONAL
OWNER: WADE WILSON, PE CITY OF CARTERSVILLE, PUBLIC WORKS 330 S. ERWIN STREET CARTERSVILLE, GEORGIA 30120 PHONE:	CONTRACTOR # INFO TO BE DETERMINED	PROJECT ENGINEER DAVID LAVERGNE, P.E. BARGE DESIGN SOLUTIONS, INC. 6525 THE CORNERS PKWY, SUITE 450 PEACHTREE CORNERS, GA 30092 PHONE: (678) 515-9415 GSWCC LEVEL II CERT. # 73529 EXPIRES 03/13/2024

24 HOUR CONTACT:
TERRY JORDAN
CELL: (770) 387-5657

SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES

INITIAL PERIMETER AND SEDIMENT STORAGE BMP'S
7-DAY LETTER
CLEARING ACTIVITIES
GRADING AND DRAINAGE ACTIVITIES
MAINTAIN BMP'S
SITE RESTORATION AND CLEANUP
REMOVE TEMPORARY BMP'S
CONSTRUCTION/PROJECT COMPLETION

OVERALL PROJECT SCHEDULE															
MONTHS AFTER BEGINNING CONSTRUCTION															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
INITIAL PERIMETER AND SEDIMENT STORAGE BMP'S	█	█													
7-DAY LETTER			█												
CLEARING ACTIVITIES	█	█	█												
GRADING AND DRAINAGE ACTIVITIES			█	█	█	█									
MAINTAIN BMP'S	█	█	█	█	█	█	█	█	█						
SITE RESTORATION AND CLEANUP	█	█	█	█	█	█	█	█	█						
REMOVE TEMPORARY BMP'S									█						
CONSTRUCTION/PROJECT COMPLETION															◆

INDEX TO DRAWINGS

NO.	NAME
	INDEX
EC0.01	EROSION CONTROL COVER
	EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLANS
EC1.01	EROSION CONTROL PLAN
EC1.02	EROSION CONTROL PLAN
	STANDARD EROSION, SEDIMENTATION & POLLUTION CONTROL DETAILS
EC5.01	ESPC DETAILS
EC5.02	ESPC DETAILS
EC5.03	ESPC DETAILS

PROJECT INFORMATION & DATA

- PROJECT DESCRIPTION:
PROJECT IS LOCATED IN BARTOW COUNTY, GEORGIA. THE PURPOSE OF THE PROJECT IS TO ALLEVIATE LOCALIZED FLOODING CONDITIONS WITHIN THE TERRELL HEIGHTS NEIGHBORHOOD. IMPROVEMENTS INCLUDE: REPLACEMENT OF 24-INCH CORRUGATE METAL PIPE WITH 36" REINFORCED CONCRETE PIPE, AND INSTALLATION OF AN APPROXIMATELY 0.4 ACRE STORAGE POND.

TOTAL SITE AREA: 0.9 ACRES
TOTAL DISTURBED AREA: 0.9 ACRES
- EXISTING CONDITIONS: THE PROJECT IS LOCATED IN THE TERRELL HEIGHTS NEIGHBORHOOD, WITHIN THE CITY OF CARTERSVILLE, BARTOW COUNTY, GEORGIA. THE SITE CONSISTS OF EXISTING STORMWATER PIPING SYSTEM AND STRUCTURES. THE MAJORITY OF THE SITE IS RESIDENTIAL.
- EXISTING CONTOURS OBTAINED BY: TOPOGRAPHIC SURVEY PERFORMED BY BARGE DESIGN SOLUTIONS, INC.
- DISPOSAL OF DEBRIS: ALL DEBRIS WILL BE HAULED OFFSITE TO A STATE APPROVED LANDFILL UNLESS AUTHORIZED OTHERWISE.
- NO PORTION OF THIS PROJECT LIES WITHIN A FLOOD HAZARD ZONE AS PER FIRM MAPS 13015C0262H, 13015C0266H, 13015C0264H, AND 13015C0268H DATED OCTOBER 5, 2018.

PROJECT RECEIVING WATERS
ETOWAH RIVER VIA PETIT CREEK

BARGE
DESIGN SOLUTIONS

615 3rd Avenue South / Suite 700 / Nashville, Tennessee 37210
PHONE (615) 254-1500 / FAX (615) 254-6572

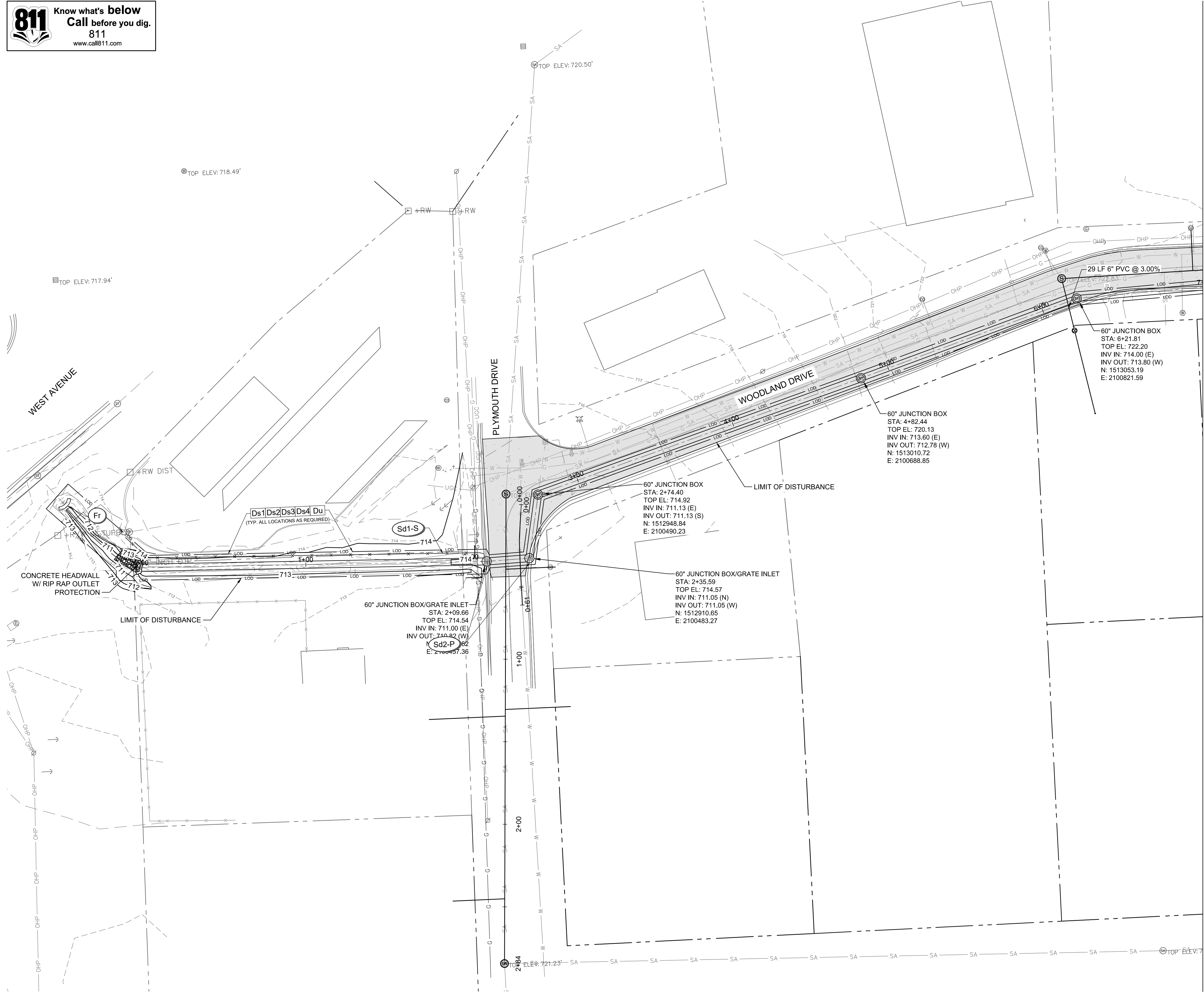


EROSION CONTROL COVER

TERRELL HEIGHTS
STORM SEWER IMPROVEMENTS
PHASE 2
CARTERSVILLE, GEORGIA

REVISION INFORMATION
REV. DR. CHK. DATE DESCRIPTION

EC0.01
PROJ. NO. 37697-01

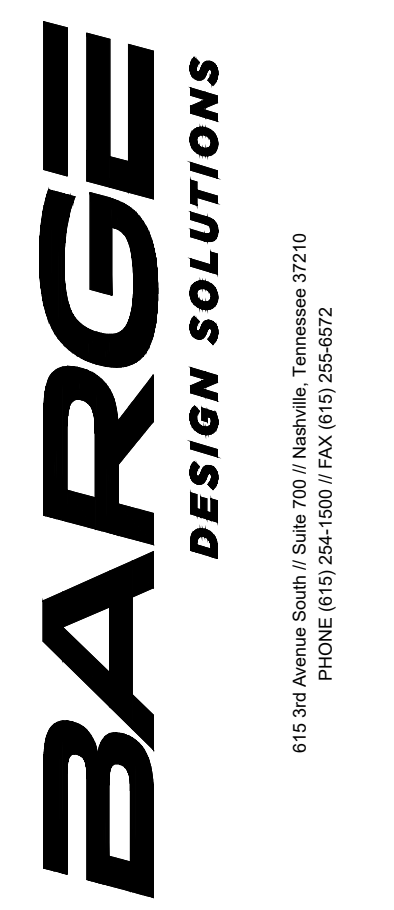
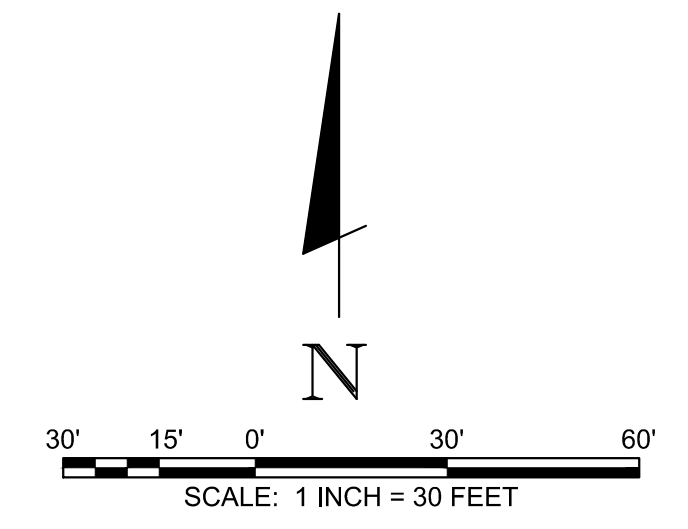


LEGEND:

	LIMITS OF DISTURBANCE
	SOIL TYPE LINE
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED OUTLET PROTECTION
	PROPOSED STORMWATER PIPE
	PROPOSED FLARED END SECTION
	EXISTING DRAINAGE FLOW PATTERN
	PROPOSED GUARD RAIL
	PROPOSED SIGNAGE
	EXISTING OVERHEAD POWERLINE
	EXISTING STORM LINE
	PROPOSED STORM LINE
	PROPOSED SILT FENCE
	TREE PROTECTION FENCING

MATCH LINE - SEE SHEET EC1.02

Symbol	DESCRIPTION	DESCRIPTION
	CONSTRUCTION EXIT	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
	SEDIMENT BARRIER	A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
	STORMDRAIN OUTLET PROTECTION	A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.
	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)	Establishing temporary protection for disturbed areas where seedlings may not have a suitable growing season to produce an erosion retarding cover.
	DISTURBED AREA STABILIZATION (WITH TEMP. SEEDING)	Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.
	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
	DISTURBED AREA STABILIZATION (SOCCERS)	A permanent vegetative cover using sods on highly erodible or critically eroded lands.
	SURF CONTROL ON DISTURBED AREAS	Controlling surface and air movement of dust on construction site, roadways and similar sites.
	SLOPE STABILIZATION	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
	TREE PROTECTION	To protect desirable trees from injury during construction activity.



EROSION AND SEDIMENT CONTROL PLAN
TERRELL HEIGHTS
STORM SEWER IMPROVEMENTS
PHASE 2
 CARTERSVILLE, GEORGIA

REVISION INFORMATION

REV.	DR.	CHK.	DATE	DESCRIPTION

EC1.01
 PROJ. NO. 37697-01

USER: AARBBER
 FILE: I:\37697\37697\01\04_CADD\CIVIL\PHASE 2\PROJECT\EC1.01-EC1.04.dwg
 SAVER: 7/31/2023
 PLOTTED: 8/21/2023

DUST CONTROL

N.T.S.

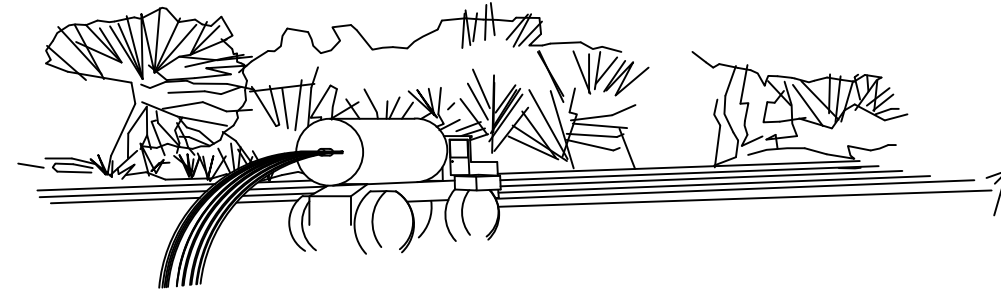
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PERMANENT METHODS:

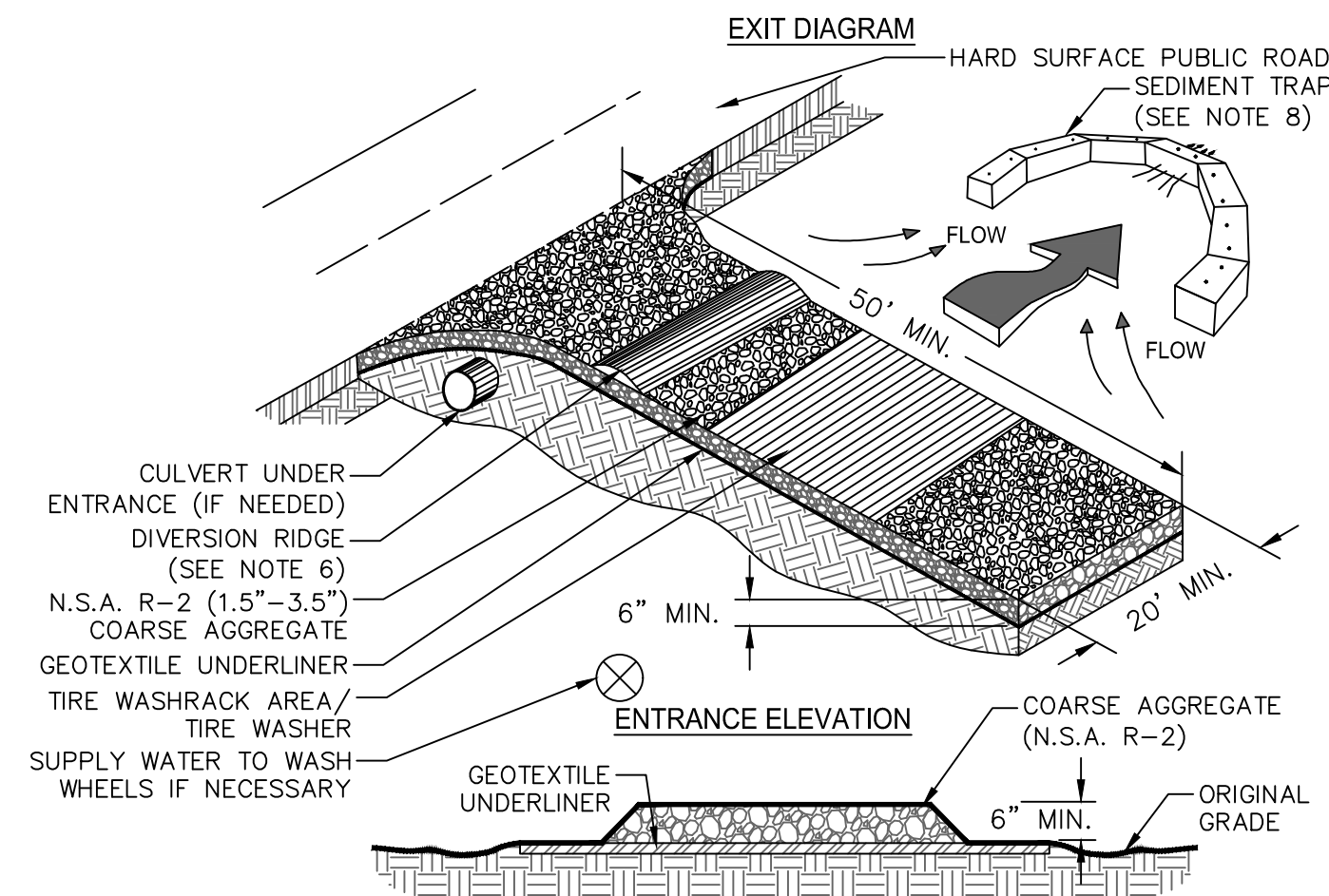
PERMANENT VEGETATION - REFER TO Ds3 (DISTURBED AREA STABILIZATION WITH PERMANENT VEGETATION)
 TOPSOILING - COVERING THE SURFACE WITH A LESS ERODIBLE SOIL MATERIAL
 STONE - SURFACE WITH CRUSHED STONE OR COARSE GRAVEL (SEE C7 - CONSTRUCTION ROAD STABILIZATION)

TEMPORARY METHODS:

MULCHES - REFER TO Ds1 (DISTURBED AREA STABILIZATION)
 VEGETATIVE COVER - REFER TO Ds2 (DISTURBED AREA STABILIZATION WITH TEMPORARY SEEDING)
 TILLAGE - ROUGHEN AND BRING CLODS TO THE SURFACE BY USE OF CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART
 IRRIGATION - SITE SPRINKLED WITH WATER UNTIL WET. REPEAT AS NEEDED
 BARRIERS - FENCES, HAY BALES, AND CRATE WALLS PLACED AT INTERVALS 15 TIMES THEIR HEIGHT AND PERPENDICULAR TO AIR CURRENTS
 CALCIUM CHLORIDE - APPLY TO KEEP SURFACE WET. REPEAT AS NEEDED.



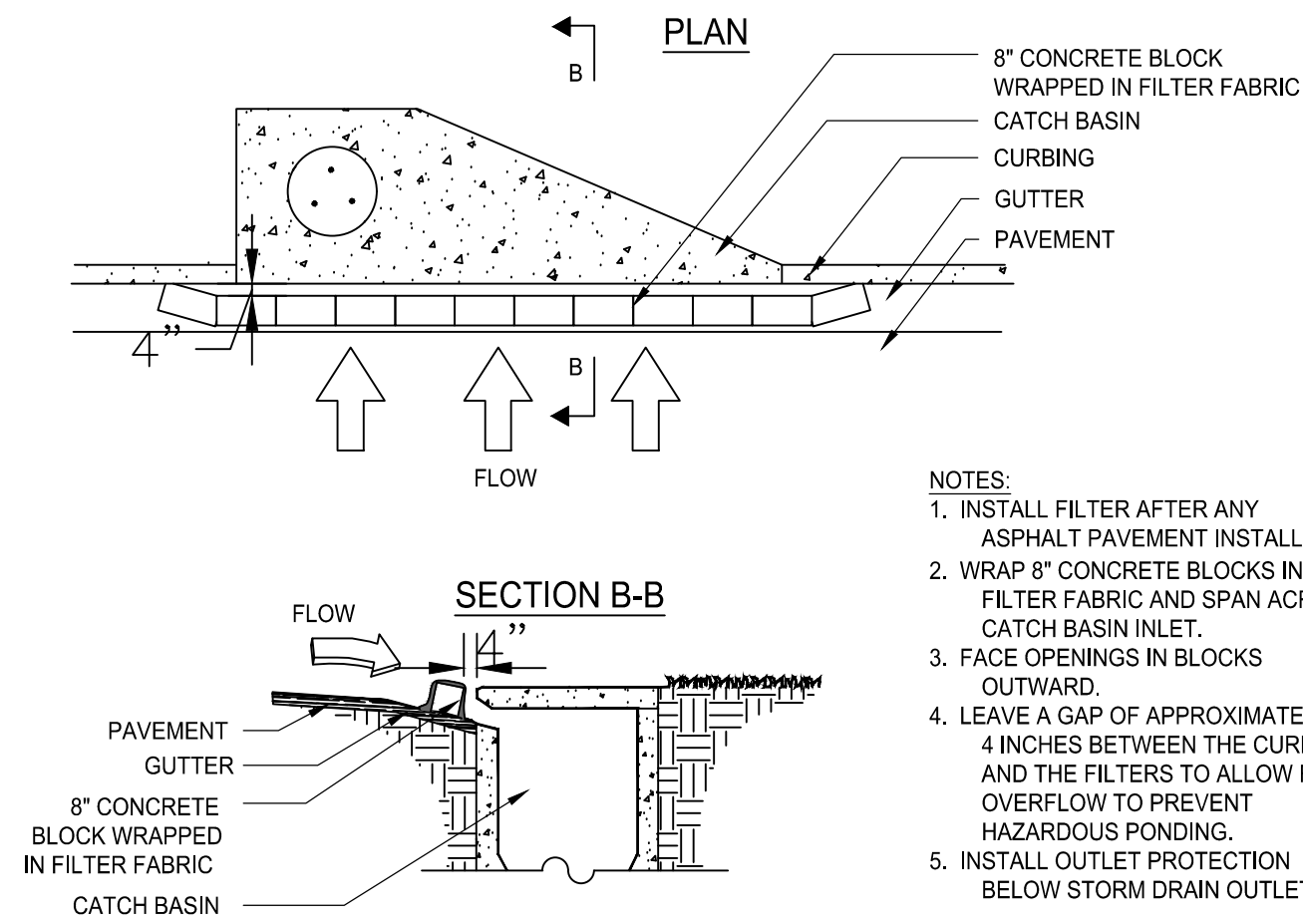
Co CONSTRUCTION EXIT



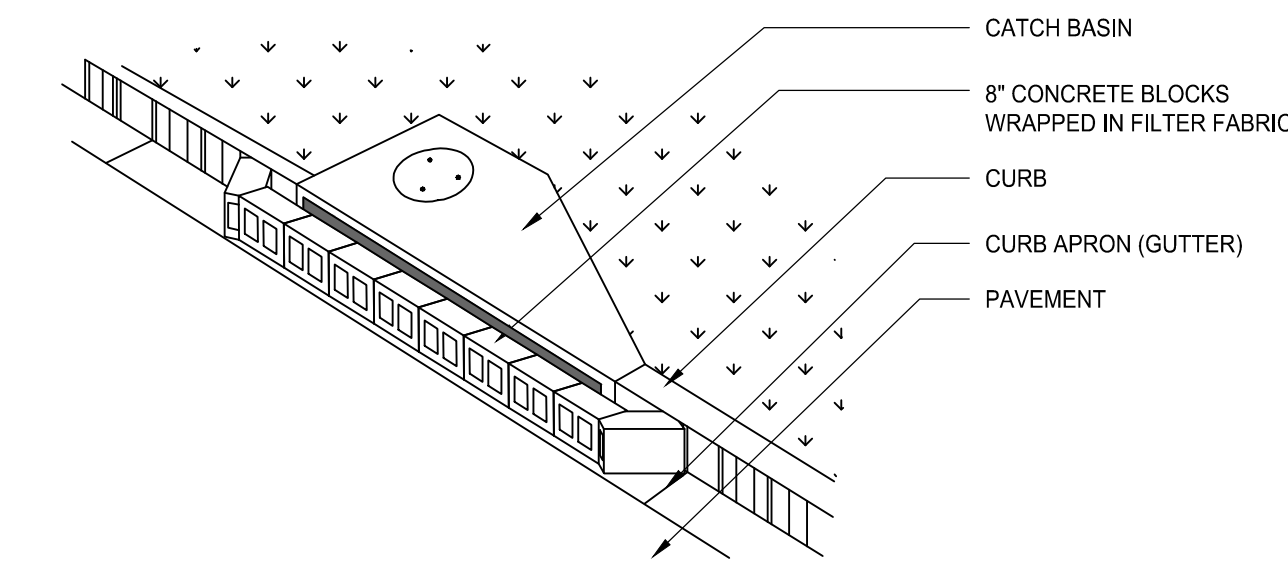
CONSTRUCTION EXIT NOTES:

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONE).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASH RACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASH RACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.

Sd2-P CURB INLET FILTER "PIGS IN BLANKET"

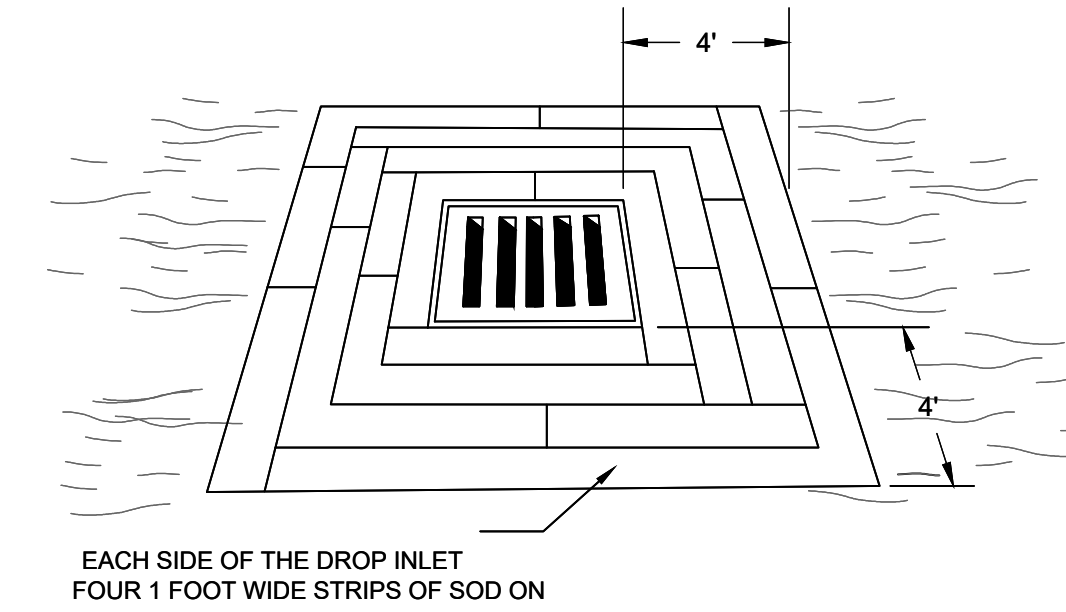


- NOTES:
1. INSTALL FILTER AFTER ANY ASPHALT PAVEMENT INSTALLATION.
 2. WRAP 8" CONCRETE BLOCKS IN FILTER FABRIC AND SPAN ACROSS CATCH BASIN INLET.
 3. FACE OPENINGS IN BLOCKS OUTWARD.
 4. LEAVE A GAP OF APPROXIMATELY 4 INCHES BETWEEN THE CURB AND THE FILTERS TO ALLOW FOR OVERFLOW TO PREVENT HAZARDOUS PONDING.
 5. INSTALL OUTLET PROTECTION BELOW STORM DRAIN OUTLETS.

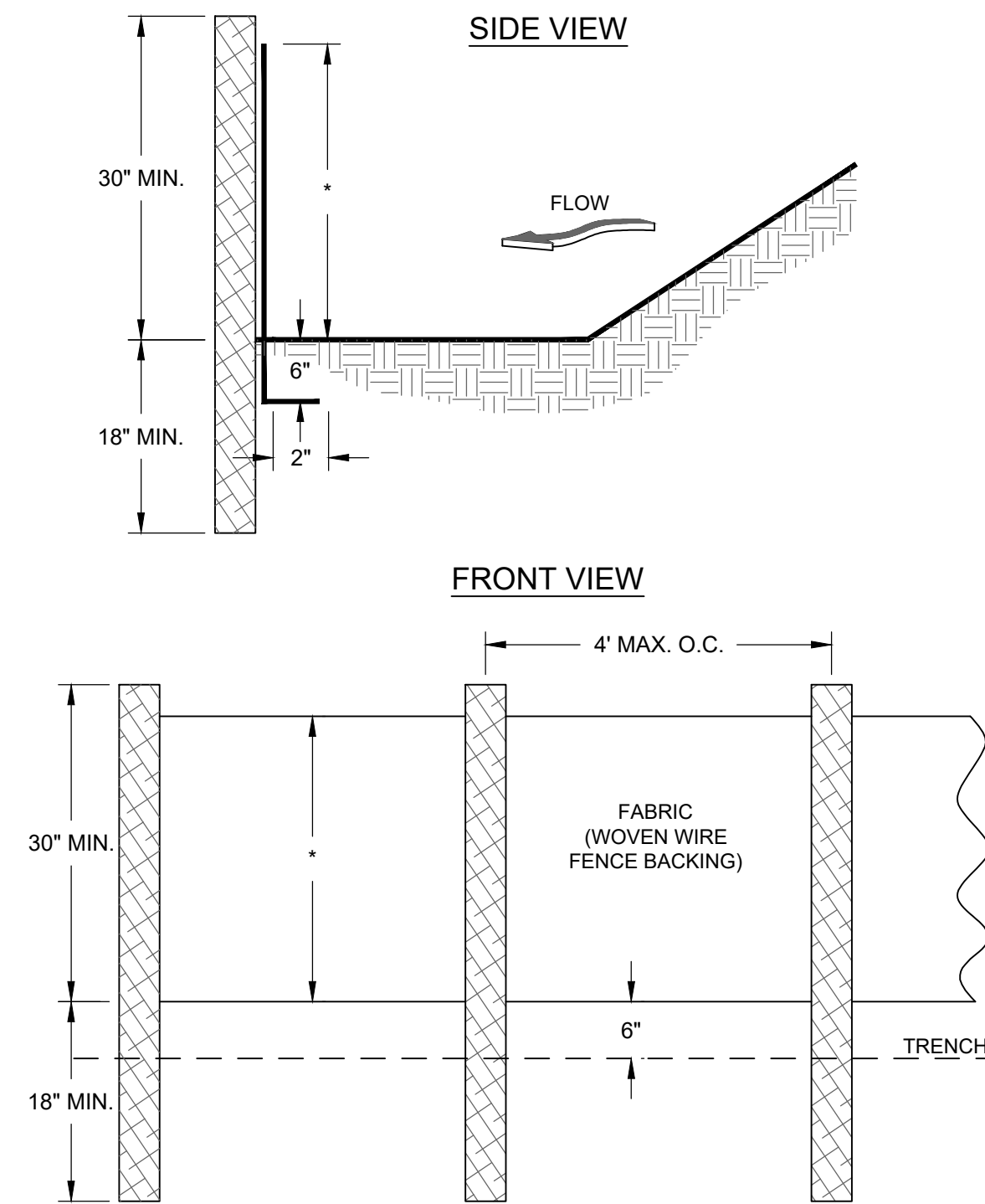


INLET SEDIMENT TRAP

SOD STRIPS PROTECT INLET AREA FROM EROSION (SOURCE: VA SWCC)

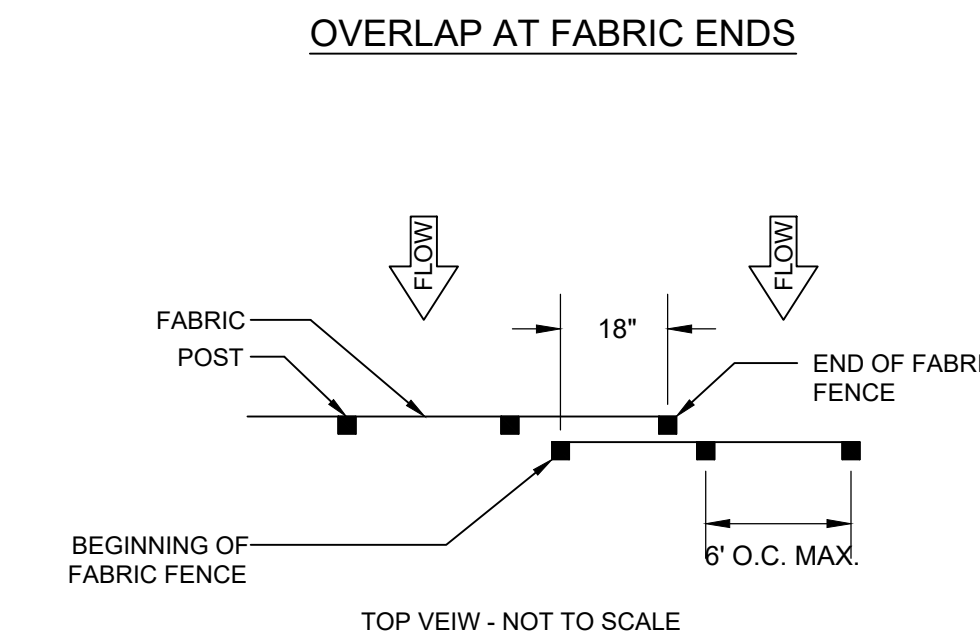


Sd1-S SILT FENCE - TYPE SENSITIVE



- NOTES:
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
 2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

Sd1 FASTENERS FOR SILT FENCES



- NOTES:
1. THE FABRIC AND WIRE SHOULD BE SECURELY FASTENED TO POSTS AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.

REV.	DR.	CHK.	DATE	DESCRIPTION

