

# CIVIL CONSTRUCTION DRAWINGS

FOR

# CULVER'S - BELMONT

## HAWLEY AVE, BELMONT NC 28012

### NOTES:

- ATTENTION IS DRAWN TO THE FACT THAT THE SCALE OF THESE DRAWINGS MAY HAVE BEEN DISTORTED DURING THE REPRODUCTION PROCESS. THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.
- IF ANY CONFLICTS, DISCREPANCIES, OR ANY OTHER UNSATISFACTORY CONDITIONS ARE DISCOVERED, EITHER ON THE CONSTRUCTION DOCUMENTS OR FIELD CONDITIONS, THE CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY AND SHALL NOT COMMENCE FURTHER OPERATION UNTIL THE CONFLICTS, DISCREPANCIES, OR OTHER UNSATISFACTORY CONDITIONS ARE RESOLVED.
- THE APPROVAL OF THESE PLANS AND THE ISSUANCE OF THIS LAND DISTURBANCE PERMIT DOES NOT IN ANY WAY SUGGEST THAT ALL OTHER REQUIREMENTS FOR THE LEGAL OR APPROPRIATE OPERATIONS FOR THIS ACTIVITY, WHICH MAY REQUIRE ADDITIONAL PERMITTING HAVE BEEN MET. THE ONUS IS ON THE OWNER/DEVELOPER/ BUILDER TO DISCOVER WHAT ADDITIONAL PERMITTING OR APPROVALS MAY BE NECESSARY TO OPERATE FROM THIS POINT IN AN APPROPRIATE AND LEGAL MANNER. PLAN APPROVAL OR PERMIT ISSUANCE DOES NOT ABSOLVE THE APPLICANT FROM COMPLYING WITH ALL APPLICABLE LAWS, STANDARDS, OR OTHER PERMITS WHICH MAY BE REQUIRED FOR THIS PROJECT.



### FEMA MAP

THE PROJECT SITE DOES NOT LIE WITHIN A FLOOD HAZARD AREA PER FIRM PANEL 3710359500M DATED 09/02/2015.

### PROJECT CONTACTS

<b>OWNER:</b>	SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA 100 BELMONT MT. HOLLY ROAD BELMONT, NC 28012 PHONE: 414-587-7459 CONTACT: DIMITRI DIMITROPOULOS
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<b>SURVEYOR:</b>	R.B. PHARR & ASSOCIATES, P.A. 969 E. 7TH STREET, SUITE 100 CHARLOTTE, NC 28204 PHONE: 704.376.2186 CONTACT: ANDREW B. BAKER, PLS
<b>24-HR CONTACT:</b>	JAY CAMPBELL CAMPBELL CONSTRUCTION 262.436.4760



### VICINITY MAP

LAND LOT 15,16,17,18,19 - \_\_ND DISTRICT  
PARCEL NO.: 214364, 214365, 214366, 221080 & 221080  
EXISTING ZONING: H-C (HIGHWAY COMMERCIAL)  
PROPOSED ZONING: H-C (HIGHWAY COMMERCIAL)  
CITY OF BELMONT, GASTON COUNTY, NORTH CAROLINA

PROPERTY AREA = 2.47 ACRES  
TOTAL DISTURBED AREA = 1.44 ACRES  
IMPERVIOUS AREA = 1.20 ACRES (48.6%)  
PERVIOUS AREA = 1.27 ACRES (51.4%)  
WATERSHED DESIGNATION: WS-IV-PA

CITY OF BELMONT CASE #: SPR2022.04  
GASTON COUNTY CASE #: AP #  
REFERENCE: COMBINATION - AP #  
USACOE NATIONWIDE PERMIT #: TBD  
STATE BUFFER VARIANCE #: TBD

PROPERTY AREA NOTE  
THIS PROPERTY IS IN THE PROTECTED ZONE. IMPERVIOUS AREA EXCEEDS 24% OF THE SITE.  
WATERSHED DESIGNATION WS-IV-PA

### PROJECT NARRATIVE:

THE PROPOSED PROJECT SCOPE CONSISTS OF A 4,334 SF CULVER'S RESTAURANT. THE PROJECT INCLUDES CONSTRUCTION OF ASSOCIATED ACCESS DRIVES, SURFACE PARKING, UTILITIES, STORMWATER CONTROL MEASURE, AND LANDSCAPING TO FACILITATE THE PLANNED RESTAURANT FACILITY.

THE DISTURBED AREA ON SITE IS 1.44 ACRES, AND THE TOTAL SITE AREA IS 2.47 ACRES INCLUDING PUBLIC ROW.

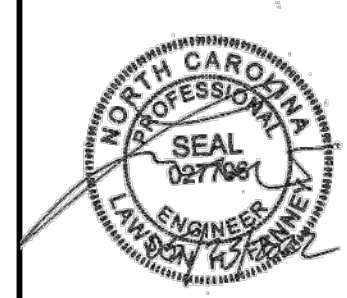
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### NOTE :

THE CITY OF BELMONT REQUIRES THE DEVELOPER TO PROVIDE AS-CONSTRUCTED RECORD DRAWINGS FOR THE WATER, SANITARY SEWER, STORM DRAINAGE, AND WATER QUALITY BMP IMPROVEMENTS. THESE MUST BE PREPARED BY THE DESIGN ENGINEER AND CAN BE BASED ON CONTRACTOR SUPPLIED INFORMATION. THE RECORD DRAWINGS ARE USUALLY PRODUCED BY INDICATING THE CHANGES ON THE ORIGINAL PLANS. THEY MUST SHOW ALL CHANGES TO THE LOCATION OF THE PIPELINES.

NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY







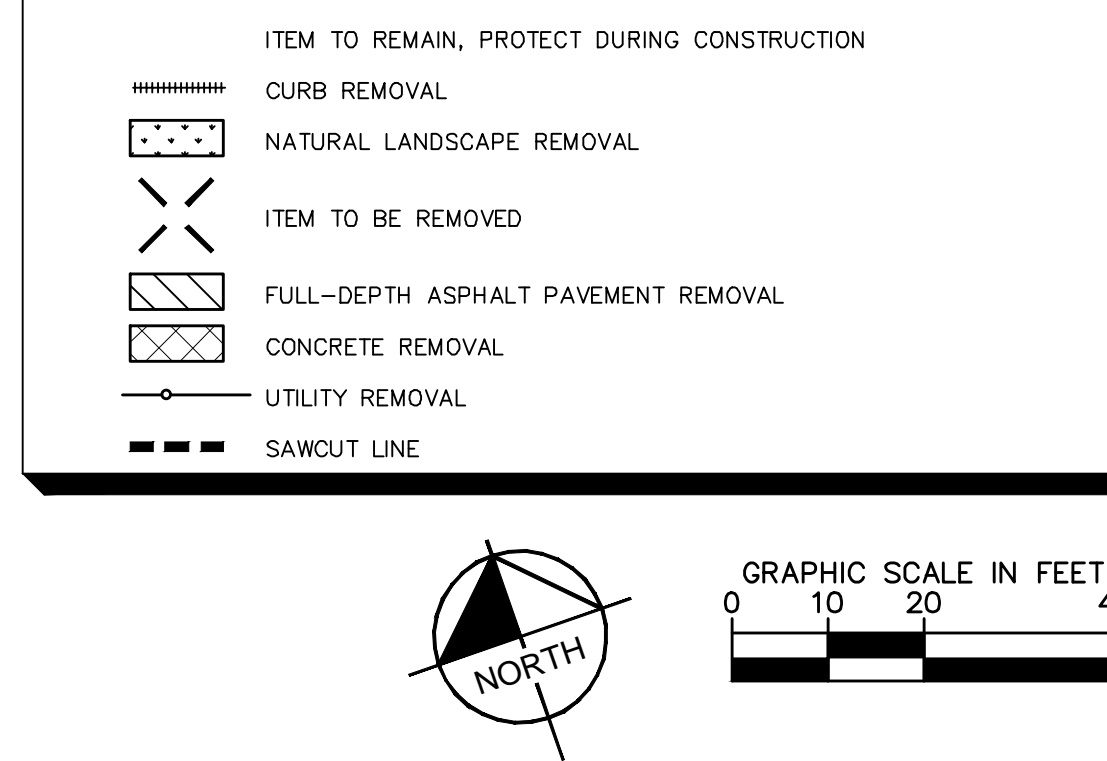
Drawing name: K:\ALP\_PR\014527000\_culvers-belmont.nc\CAD\plansheets\C1-00 DEMOLITION PLAN.dwg C1-00 DEMOLITION PLAN May 23, 2022 3:17pm by: Taylor.Jones



### DEMOLITION NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
- CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
- THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT. CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS SHEET.
- 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 UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
- IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING FDOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.
- CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.
- EROSION CONTROL MUST BE ESTABLISHED PRIOR TO ANY WORK ON SITE INCLUDING DEMOLITION.
- THE EXTENT OF SITE DEMOLITION WORK IS AS SHOWN ON THE CONTRACT DOCUMENTS AND AS SPECIFIED HEREIN.
- CONTRACTOR MUST RECEIVE APPROVAL FROM CIVIL ENGINEER AND GEOTECHNICAL ENGINEER FOR THE MATERIAL TYPE AND USE IF CONTRACTOR DESIRES TO REUSE DEMOLISHED SITE PAVEMENT AS STRUCTURAL FILL.
- EXISTING UTILITIES, WHICH DO NOT SERVICE STRUCTURES BEING DEMOLISHED, ARE TO BE KEPT IN SERVICE AND PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL ARRANGE FOR SHUT-OFF OF UTILITIES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR TURNING OFF, DISCONNECTING, AND SEALING INDICATED UTILITIES BEFORE STARTING DEMOLITION OPERATIONS. EXISTING UTILITIES TO BE ABANDONED ARE TO BE CAPPED AT BOTH ENDS AND FILLED WITH FA-1 OR APPROVED EQUAL. ALL UNDERGROUND UTILITIES TO BE REMOVED ARE TO BE BACKFILLED WITH ENGINEERED FILL OR SELECT EXCAVATED MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER, TO 95% OF MODIFIED PROCTOR DENSITY WITHIN PAVED AREAS AND TO 90% OF MODIFIED PROCTOR DENSITY FOR GREEN SPACE AREAS, IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS. ALL PRIVATE UTILITIES (ELECTRIC, CABLE, TELEPHONE, FIBER OPTIC, GAS) SHALL BE REMOVED AND RELOCATED PER THE UTILITY OWNER AND THE LOCAL MUNICIPALITY'S REQUIREMENTS.
- UNDERGROUND UTILITIES SHOWN ARE BASED ON ATLASES AND AVAILABLE INFORMATION PRESENTED AT THE TIME OF SURVEY. CONTRACTOR SHOULD CALL 811 TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UNDERGROUND AND OVERHEAD UTILITIES DURING CONSTRUCTION. UTILITY PROTECTION SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY OWNER AND AS DIRECTED BY THE GOVERNING MUNICIPALITY. DAMAGED CABLES/CONDUITS SHALL BE REPLACED IMMEDIATELY. ALL EXISTING STRUCTURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS. ALL DAMAGED STRUCTURES SHALL BE REPLACED IN-KIND AND THEIR REPLACEMENT COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. PROPER NOTIFICATION TO THE OWNERS OF THE EXISTING UTILITIES SHALL BE MADE AT LEAST 48 HOURS BEFORE CONSTRUCTION COMMENCES.
- USE WATER SPRINKLING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN THE AIR TO THE LOWEST LEVEL, COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. SEE EROSION CONTROL SHEETS FOR FURTHER EROSION CONTROL REQUIREMENTS.
- COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES TO THE FINAL LINES AND GRADES SHOWN ON THE CONTRACT DOCUMENTS. BACKFILL MATERIAL SHALL BE FDOT APPROVED CRUSHED LIMESTONE OR APPROVED EQUAL. USE SATISFACTORY SOIL MATERIALS CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. PRIOR TO PLACEMENT OF FILL MATERIALS, ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH AND DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 9" IN LOOSE DEPTH. COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF FILL MATERIAL TO 95% OF MODIFIED PROCTOR DENSITY UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED.

### DEMOLITION LEGEND



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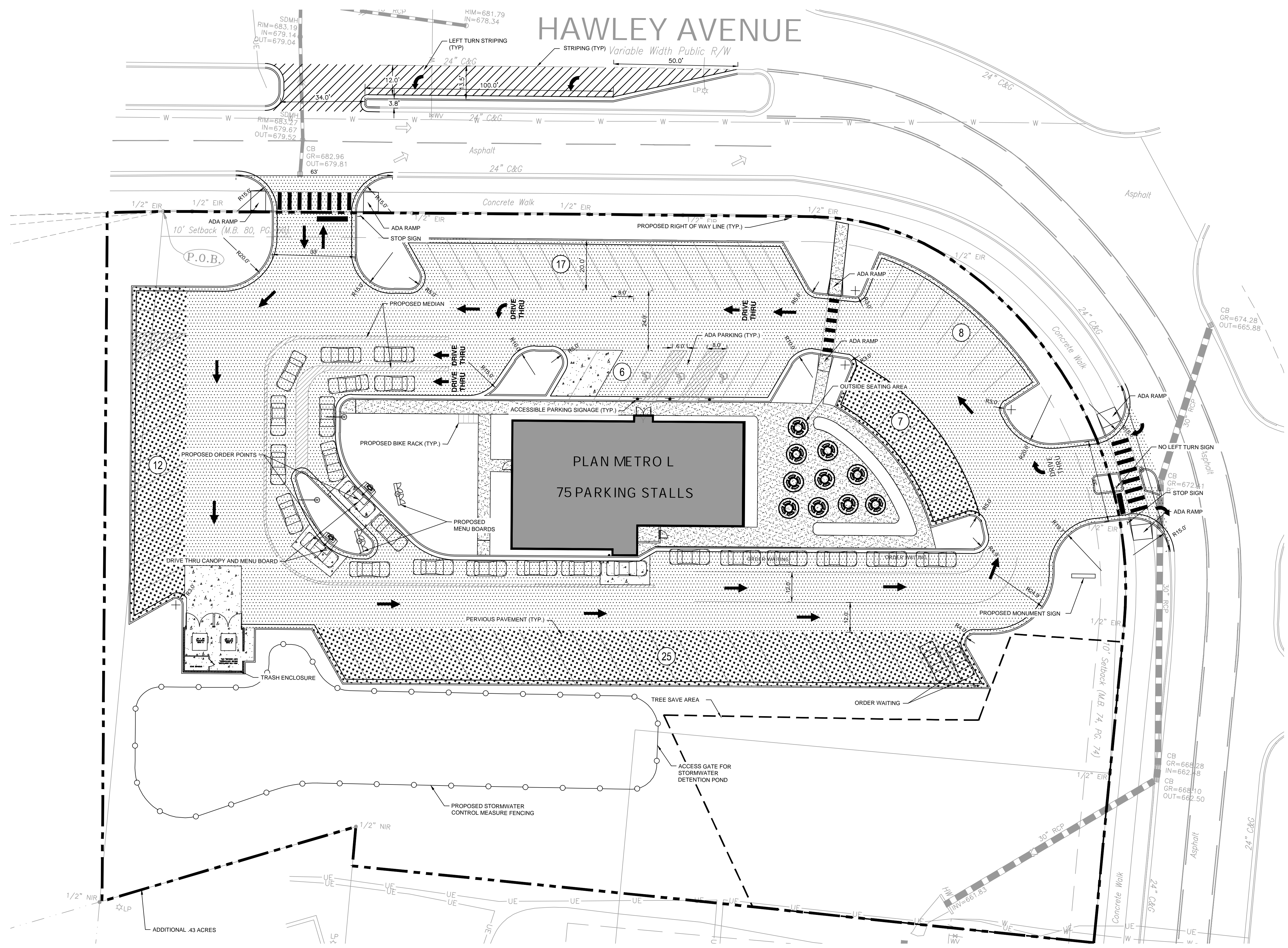
NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S - BELMONT**  
HAWLEY AVE, BELMONT NC 28012  
LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080

05/23/2022

DRAWN BY	KHA
DESIGNED BY	KHA
REVIEWED BY	SAH
DATE	05/23/2022
PROJECT NO.	014527000
TITLE	<b>DEMOLITION PLAN</b>
SHEET NUMBER	<b>C1-00</b>

Drawing name: K:\ALP\_PR\014527000\_culvers-belmont.nc\CAD\plansheets\C2-00 SITE PLAN.dwg C2-00 SITE PLAN May 23, 2022 3:17pm by: Taylor.Jones



### GENERAL NOTES

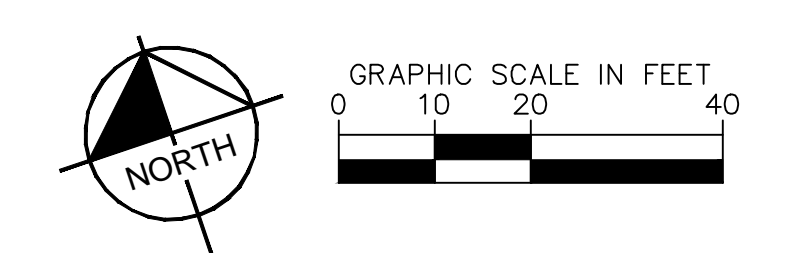
1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3'-FEET, TYPICAL.
5. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

### SITE SUMMARY

ZONING: H-C (HIGHWAY COMMERCIAL)	
BUILDING AREA	= 4,546± SF
FLOOR AREA RATIO	= 0.042
PROPOSED SEATS (TOTAL):	144
INSIDE:	104
OUTSIDE:	40
SITE AREA	= 2.468 ACRES
DISTURBED AREA	= 1.440 ACRES
PROPOSED IMPERVIOUS AREA	= 1.20 ACRES
PROPOSED PERVIOUS AREA (INCLUDES 0.23 ACRES OF PERMEABLE PAVEMENT)	= 1.27 ACRES
STANDARD PARKING SPACES PROVIDED	= 72 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	= 3 SPACES
TOTAL PARKING SPACES PROVIDED	= 75 SPACES

### PAVING LEGEND

	ASPHALT PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
	CONCRETE SIDEWALK SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
	PERVIOUS ASPHALT PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
	HEAVY DUTY CONCRETE PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
	ROAD PAVEMENT MATCH EXISTING PAVEMENT DESIGN



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NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

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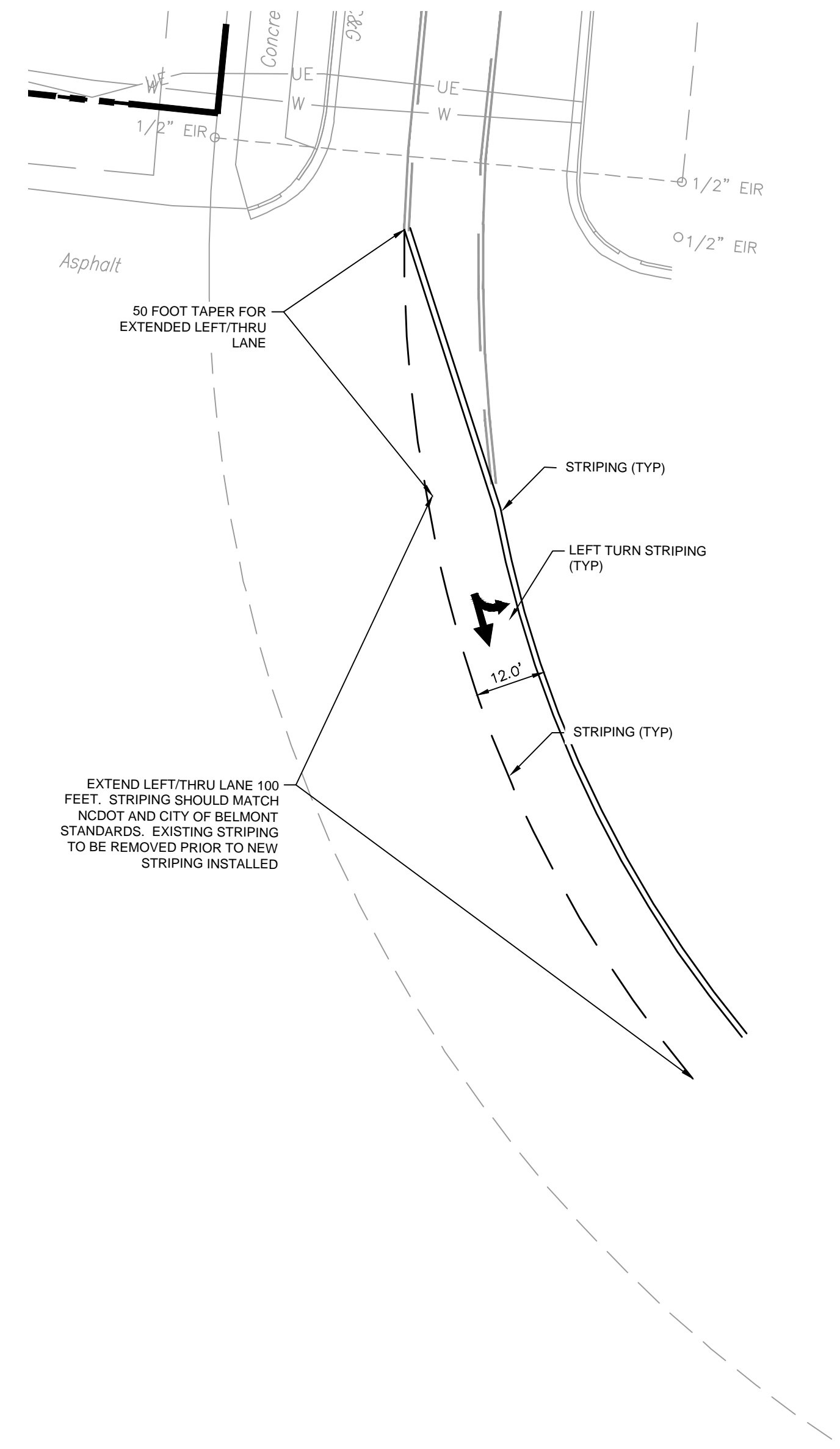
**PROFESSIONAL SEAL**  
TAYLOR JONES  
ENGINEER  
LICENSE NO. 35287

05/23/2022

DRAWN BY	KHA
DESIGNED BY	KHA
REVIEWED BY	SAH
DATE	05/23/2022
PROJECT NO.	014527000
TITLE	<b>SITE PLAN</b>
SHEET NUMBER	<b>C2-00</b>

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Drawing name: K:\ALP\_PR\014527000\_culvers-belmont.nc\CAD\plansheets\C2-00 SITE PLAN.dwg C2-01 HAWLEY AVE RESTRIPIING PLAN May 23, 2022 3:17pm by: Taylor.Jones



### GENERAL NOTES

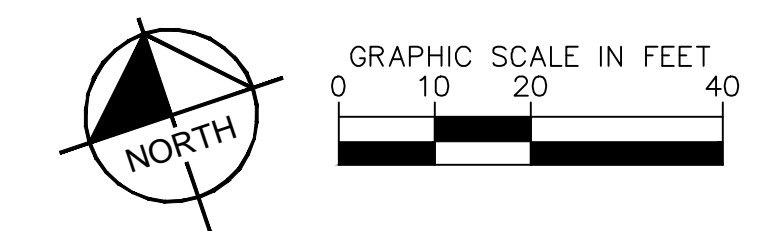
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2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3- FEET, TYPICAL.
5. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

### SITE SUMMARY

ZONING: H-C (HIGHWAY COMMERCIAL)	
BUILDING AREA	= 4,546± SF
FLOOR AREA RATIO	= 0.042
SITE AREA	= 2.468 ACRES
DISTURBED AREA	= 1.440 ACRES
PROPOSED IMPERVIOUS AREA	= 1.20 ACRES
PROPOSED PERVIOUS AREA (INCLUDES 0.23 ACRES OF PERMEABLE PAVEMENT)	= 1.27 ACRES
STANDARD PARKING SPACES PROVIDED	= 73 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	= 3 SPACES
TOTAL PARKING SPACES PROVIDED	= 76 SPACES

### PAVING LEGEND

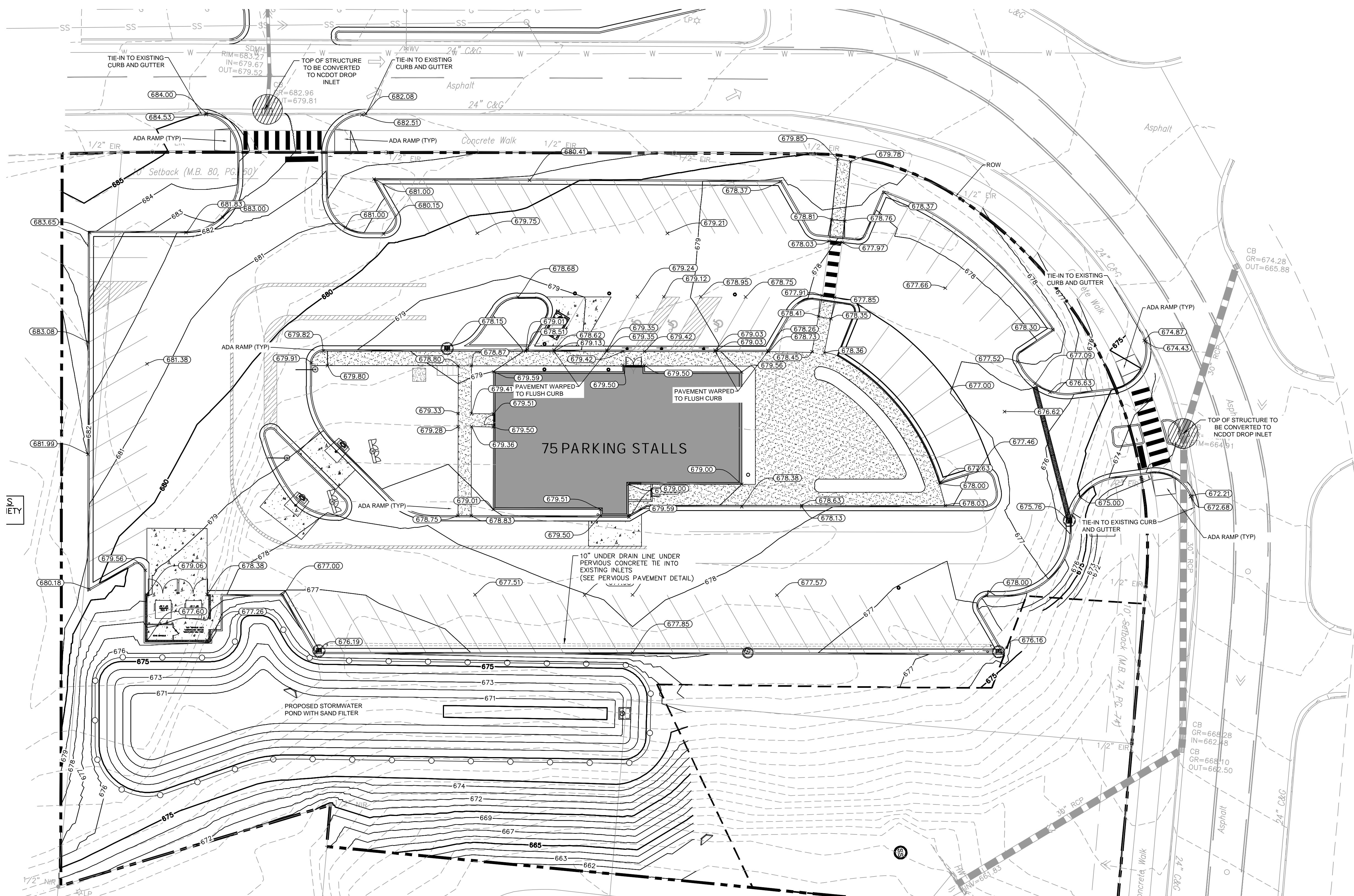
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	HEAVY DUTY CONCRETE PAVEMENT SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION
	ROAD PAVEMENT MATCH EXISTING PAVEMENT DESIGN



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Drawing name: K:\ALP\_PR\014527000\_culvers-belmont.nc\CADD\plansheets\C3-00 GRADING & DRAINAGE PLAN.dwg C3-00 GRADING PLAN May 23, 2022 3:17pm by Taylor Jones



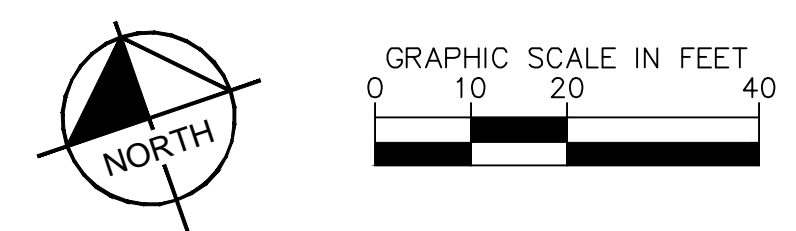
- GRADING & DRAINAGE NOTES:**
- SITE AREA: 2.47 ACRES  
DISTURBED AREA: 1.44 ACRES
  - CRITICAL SPOT GRADES ARE TO PAVEMENT GRADE UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHALL CONSTRUCT ALL SIDEWALKS AND CROSSWALKS WITH A 2.0% MAXIMUM CROSS SLOPE AND A 5.0% MAXIMUM RUNNING SLOPE, UNLESS NOTED AS A RAMP. GRADES WITHIN ADA HANDICAP PARKING AREAS NOT TO EXCEED A 2% MAXIMUM SLOPE IN ANY DIRECTION.
  - ALL ROOF DRAIN PIPING SHALL BE PVC UNLESS OTHERWISE NOTED.
  - ALL ROOF DRAIN CLEANOUTS IN PAVED AREAS SHALL HAVE A BRASS CAP SET FLUSH WITH THE PROPOSED GRADE.
  - ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
  - THIS PROJECT DOES NOT LIE WITHIN A 100 YEAR FLOOD HAZARD ZONE AS DEFINED BY THE F.E.M.A. "FLOOD HAZARD BOUNDARY MAP" COMMUNITY PANEL NUMBER 3710359500M, DATED 09/02/2015.
  - UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL HAVE THE UTILITIES FIELD LOCATED AND COORDINATE WITH THE UTILITY COMPANIES TO HAVE CONFLICTS RELOCATED WHEN NECESSARY OR ADAPTED FOR TIE-INS.
  - CONTRACTOR TO FIELD VERIFY EXISTING INVERT FOR SANITARY SEWER AND STORM DRAINAGE SERVICE CONNECTIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF DISCREPANCY PRIOR TO PROCEEDING.
  - NO GRADED SLOPE SHALL EXCEED 2H:1V
  - ALL WALLS GREATER THAN 30" IN HEIGHT SHALL BE DESIGNED AND PERMITTED BY AN ENGINEER LICENSED IN THE STATE OF GEORGIA.
  - ALL WALLS GREATER THAN 30" IN HEIGHT SHALL HAVE FALL PROTECTION THROUGH FENCING OR HANDRAIL AT A MINIMUM OF 42" TALL. REFERENCE LANDSCAPE PLANS FOR DETAILS.
  - THE INFILTRATION FOR THE STORMWATER SYSTEM IS BASED ON IN-SITU TESTING BY GEOTECHNICAL ENGINEER. THE SYSTEM IS BASED ON OBTAINING INFILTRATION RATES SIMILAR TO THE TESTED VALUES PRE-CONSTRUCTION. AS SUCH, THE AREAS WHERE STORMWATER IS DIRECTED TO INFILTRATE ARE TO REMAIN RESIDUAL SOILS AND COMPACTION IS TO BE LIMITED TO ENSURE THE SOIL CHARACTERISTICS CONTINUE TO FUNCTION AS TESTED PRE-CONSTRUCTION. IF THESE AREAS ARE DISTURBED, COMPACTED, OR FILLED, THE ENGINEER IS TO BE NOTIFIED AS ADDITIONAL TESTING AND COORDINATION WOULD BE REQUIRED TO ENSURE THE PREVIOUSLY RECORDED INFILTRATION RATES CAN BE ACHIEVED.

- GRADING LEGEND:**
- 950 — EXISTING MAJOR CONTOUR
  - 948 — EXISTING MINOR CONTOUR
  - 945 — PROPOSED MAJOR CONTOUR
  - 944 — PROPOSED MINOR CONTOUR
  - X 945.00 — PROPOSED SPOT GRADE
  - X TG-945.00 — PROPOSED TOP GRADE AT WALL
  - X BG-945.00 — PROPOSED BOTTOM GRADE AT WALL
  - X TS-945.00 — PROPOSED TOP OF STAIR GRADE
  - X BS-945.00 — PROPOSED BOTTOM OF STAIR GRADE
  - X HP-945.00 — PROPOSED HIGH POINT GRADE
  - X LP-945.00 — PROPOSED LOW POINT GRADE
  - X TC-945.00 — PROPOSED TOP OF CURB GRADE
  - X BC-945.00 — PROPOSED BOTTOM OF CURB GRADE
  - DRAINAGE FLOW ARROW

**STORM DRAIN NOTES:**

THE CITY WILL NOT MAINTAIN STORM DRAINS ON THIS SITE OR IN HAWLEY AVENUE. ALL DRAINS, INCLUDING THOSE SERVING THE PRIVATE PARKING LOTS SHALL BE AS "PRIVATE".

- STORM DRAINAGE LEGEND:**
- JB — JUNCTION BOX
  - CI — HOODED GRATE CURB INLET (GDOT 1019A, TYPE E)
  - GI — GRATE INLET (GDOT 10191A, TYPE A)
  - SWCB — SINGLE WING CATCH BASIN (GDOT 1033D)
  - DWCB — DOUBLE WING CATCH BASIN (GDOT 1034D)
  - YD — YARD DRAIN (NDS CATCH BASIN OR COMPARABLE)
  - CO — CLEAN OUT
  - WQ — WATER QUALITY DEVICE
  - OCS — OUTLET CONTROL STRUCTURE (CAST-IN-PLACE)
  - TD — TRENCH DRAIN
  - PROPOSED ROOF DRAIN PIPE
  - PROPOSED STORM PIPE

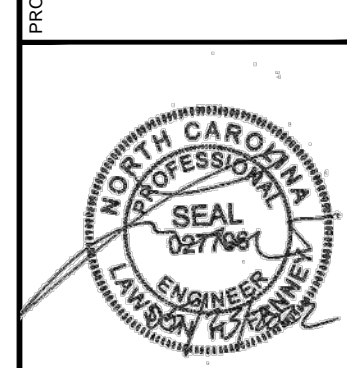


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 PHONE: 414-557-7459

NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

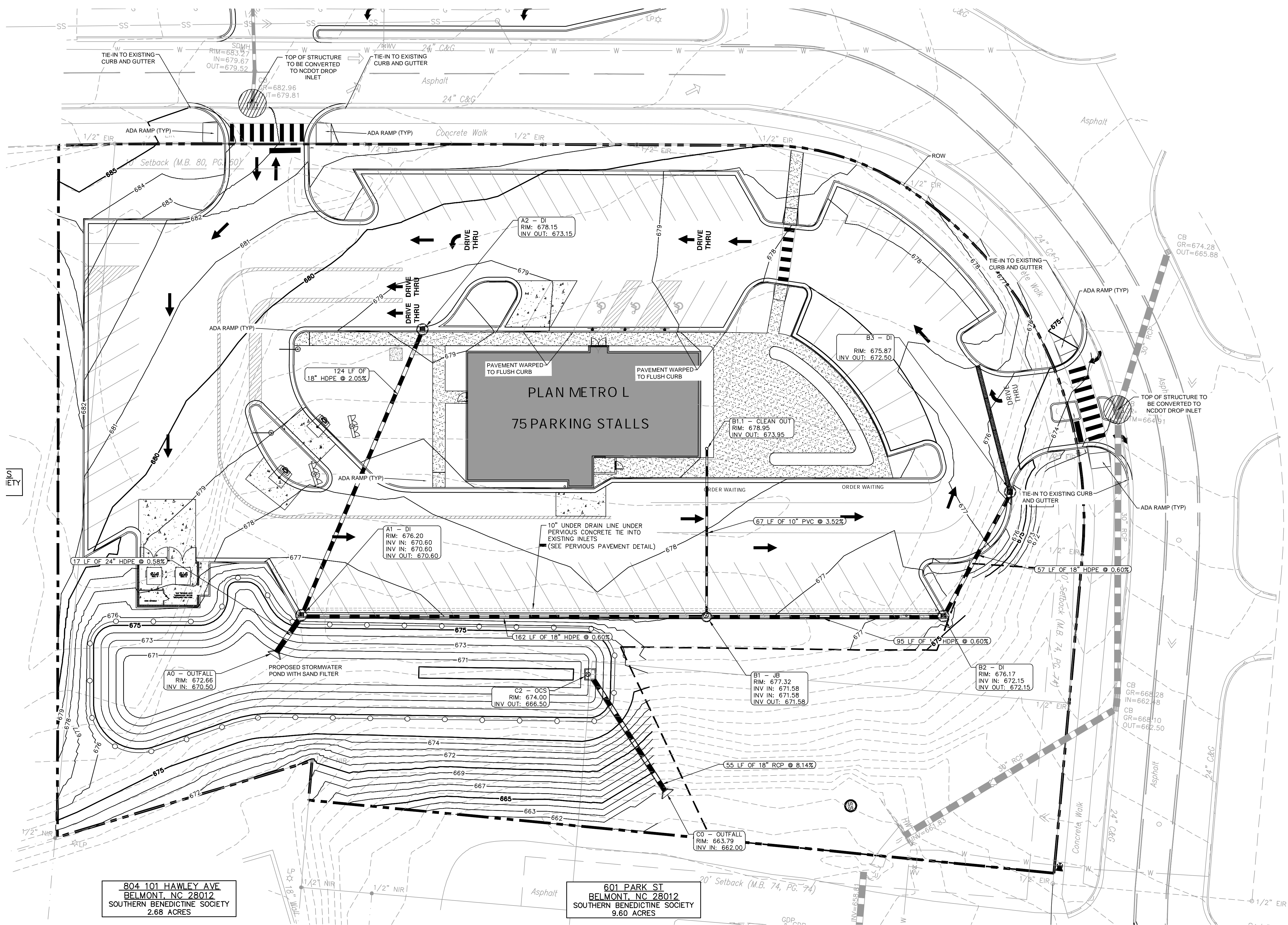
**CULVER'S - BELMONT**  
 HAWLEY AVE. BELMONT NC 28012  
 LAND LOT 15-16-17-18-19, ND DISTRICT  
 PARCEL ID: 214364, 214365, 214366, 221080 & 221080



05/23/2022  
 DRAWN BY: KHA  
 DESIGNED BY: KHA  
 REVIEWED BY: SAH  
 DATE: 05/23/2022  
 PROJECT NO.: 014527000  
 TITLE:

**GRADING PLAN**  
 SHEET NUMBER  
**C3-00**

Drawing name: K:\ALP\_PR\014527000\_culvers-belmont.nc\CAD\plansheets\C3-00 GRADING & DRAINAGE PLAN.dwg C3-01 DRAINAGE PLAN May 23, 2022 3:17pm by: Taylor Jones



804 101 HAWLEY AVE  
BELMONT, NC 28012  
SOUTHERN BENEDICTINE SOCIETY  
2.68 ACRES

601 PARK ST  
BELMONT, NC 28012  
SOUTHERN BENEDICTINE SOCIETY  
9.60 ACRES

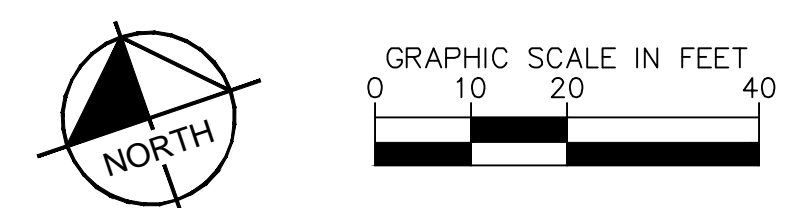
- GRADING & DRAINAGE NOTES:**
- SITE AREA: 2.47 ACRES  
DISTURBED AREA: 1.44 ACRES
  - CRITICAL SPOT GRADES ARE TO PAVEMENT GRADE UNLESS OTHERWISE NOTED.
  - CONTRACTOR SHALL CONSTRUCT ALL SIDEWALKS AND CROSSWALKS WITH A 2.0% MAXIMUM CROSS SLOPE AND A 5.0% MAXIMUM RUNNING SLOPE, UNLESS NOTED AS A RAMP. GRADES WITHIN ADA HANDICAP PARKING AREAS NOT TO EXCEED A 2% MAXIMUM SLOPE IN ANY DIRECTION.
  - ALL ROOF DRAIN PIPING SHALL BE PVC UNLESS OTHERWISE NOTED.
  - ALL ROOF DRAIN CLEANOUTS IN PAVED AREAS SHALL HAVE A BRASS CAP SET FLUSH WITH THE PROPOSED GRADE.
  - ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
  - THIS PROJECT DOES NOT LIE WITHIN A 100 YEAR FLOOD HAZARD ZONE AS DEFINED BY THE F.E.M.A. "FLOOD HAZARD BOUNDARY MAP" COMMUNITY PANEL NUMBER 3710359500M, DATED 09/02/2015.
  - UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL HAVE THE UTILITIES FIELD LOCATED AND COORDINATE WITH THE UTILITY COMPANIES TO HAVE CONFLICTS RELOCATED WHEN NECESSARY OR ADAPTED FOR TIE-INS.
  - CONTRACTOR TO FIELD VERIFY EXISTING INVERT FOR SANITARY SEWER AND STORM DRAINAGE SERVICE CONNECTIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF DISCREPANCY PRIOR TO PROCEEDING.
  - NO GRADED SLOPE SHALL EXCEED 2H:1V
  - ALL WALLS GREATER THAN 30" IN HEIGHT SHALL BE DESIGNED AND PERMITTED BY AN ENGINEER LICENSED IN THE STATE OF GEORGIA.
  - ALL WALLS GREATER THAN 30" IN HEIGHT SHALL HAVE FALL PROTECTION THROUGH FENCING OR HANDRAIL AT A MINIMUM OF 42" TALL. REFERENCE LANDSCAPE PLANS FOR DETAILS.
  - THE INFILTRATION FOR THE STORMWATER SYSTEM IS BASED ON IN-SITU TESTING BY GEOTECHNICAL ENGINEER. THE SYSTEM IS BASED ON OBTAINING INFILTRATION RATES SIMILAR TO THE TESTED VALUES PRE-CONSTRUCTION. AS SUCH, THE AREAS WHERE STORMWATER IS DIRECTED TO INFILTRATE ARE TO REMAIN RESIDUAL SOILS AND COMPACTION IS TO BE LIMITED TO ENSURE THE SOIL CHARACTERISTICS CONTINUE TO FUNCTION AS TESTED PRE-CONSTRUCTION. IF THESE AREAS ARE DISTURBED, COMPACTED, OR FILLED, THE ENGINEER IS TO BE NOTIFIED AS ADDITIONAL TESTING AND COORDINATION WOULD BE REQUIRED TO ENSURE THE PREVIOUSLY RECORDED INFILTRATION RATES CAN BE ACHIEVED.

- GRADING LEGEND:**
- 950 EXISTING MAJOR CONTOUR
  - 948 EXISTING MINOR CONTOUR
  - 945 PROPOSED MAJOR CONTOUR
  - 944 PROPOSED MINOR CONTOUR
  - X 945.00 PROPOSED SPOT GRADE
  - X TG:945.00 PROPOSED TOP GRADE AT WALL
  - X BG:945.00 PROPOSED BOTTOM GRADE AT WALL
  - X TS:945.00 PROPOSED TOP OF STAIR GRADE
  - X BS:945.00 PROPOSED BOTTOM OF STAIR GRADE
  - X HP:945.00 PROPOSED HIGH POINT GRADE
  - X LP:945.00 PROPOSED LOW POINT GRADE
  - X TC:945.00 PROPOSED TOP OF CURB GRADE
  - X BC:945.00 PROPOSED BOTTOM OF CURB GRADE
  - DRAINAGE FLOW ARROW

- STORM DRAINAGE LEGEND:**
- JB JUNCTION BOX
  - CI HOODED GRATE CURB INLET (GDOT 1019A, TYPE E)
  - GI GRATE INLET (GDOT 10191A, TYPE A)
  - SWCB SINGLE WING CATCH BASIN (GDOT 1033D)
  - DWCB DOUBLE WING CATCH BASIN (GDOT 1034D)
  - YD YARD DRAIN (NDS CATCH BASIN OR COMPARABLE)
  - CO CLEAN OUT
  - WQ WATER QUALITY DEVICE
  - OCS OUTLET CONTROL STRUCTURE (CAST-IN-PLACE)
  - TD TRENCH DRAIN
  - PROPOSED ROOF DRAIN PIPE
  - PROPOSED STORM PIPE

**STORM DRAIN NOTES:**

THE CITY WILL NOT MAINTAIN STORM DRAINS ON THIS SITE OR IN HAWLEY AVENUE. ALL DRAINS, INCLUDING THOSE SERVING THE PRIVATE PARKING LOTS SHALL BE AS "PRIVATE".

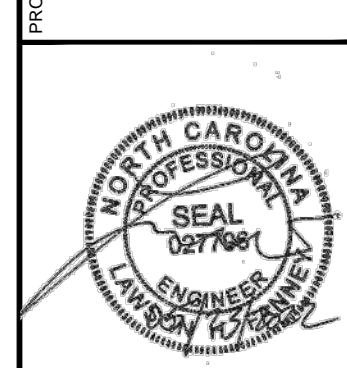


**Kimley-Horn**  
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11720 AMBER PARK DRIVE, SUITE 600  
BELMONT, NC 28012  
PHONE (770) 619-4242  
WWW.KIMLEY-HORN.COM

**SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA**  
100 BELMONT MT. HOLLY ROAD  
BELMONT, NC 28012  
PHONE: 414-557-7459

NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S - BELMONT**  
HAWLEY AVE, BELMONT, NC 28012  
LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080

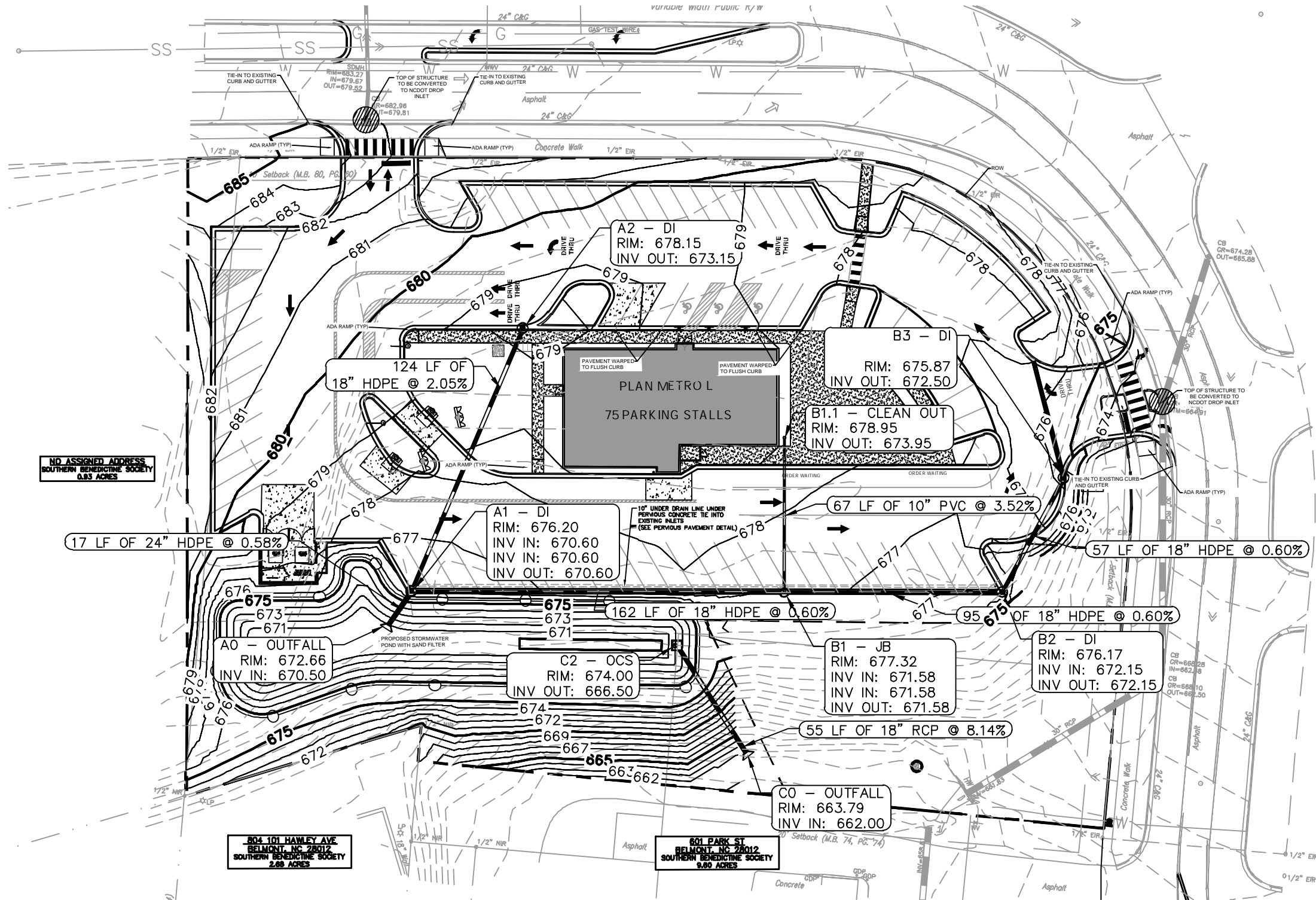


05/23/2022  
DRAWN BY: KHA  
DESIGNED BY: KHA  
REVIEWED BY: SAH  
DATE: 05/23/2022  
PROJECT NO.: 014527000  
TITLE:

**DRAINAGE PLAN**  
SHEET NUMBER  
**C3-01**

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NO ASSIGNED ADDRESS  
SOUTHERN BENEDICTINE SOCIETY  
0.83 ACRES

804 101 HAWLEY AVE  
BELMONT, NC 28012  
SOUTHERN BENEDICTINE SOCIETY  
2.65 ACRES

801 PARK ST  
BELMONT, NC 28012  
SOUTHERN BENEDICTINE SOCIETY  
9.80 ACRES



VICINITY MAP

**SITE NOTES:**  
 SITE AREA: 2.47 ACRES  
 DISTURBED AREA: 1.44 ACRES  
 IMPERVIOUS AREA: 1.20 ACRES  
 PERVIOUS AREA: 1.27 ACRES  
 EXISTING LOTS: 5  
 PROPOSED LOTS: 1  
 BUILDING AREA: 4342 SF  
 WATERSHED DISTRICT DESIGNATION: WS-IV-PA

**GRADING & DRAINAGE NOTES:**

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- ALL ROOF DRAIN CLEANOUTS IN PAVED AREAS SHALL HAVE A BRASS CAP SET FLUSH WITH THE PROPOSED GRADE.
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**GRADING LEGEND:**

- 950 — EXISTING MAJOR CONTOUR
- 948 — EXISTING MINOR CONTOUR
- 945 — PROPOSED MAJOR CONTOUR
- 944 — PROPOSED MINOR CONTOUR
- 675.00 — PROPOSED SPOT GRADE
- TC-945.00 — PROPOSED TOP GRADE AT WALL
- BS-945.00 — PROPOSED BOTTOM GRADE AT WALL
- TS-945.00 — PROPOSED TOP OF STAIR GRADE
- BS-945.00 — PROPOSED BOTTOM OF STAIR GRADE
- HP-945.00 — PROPOSED HIGH POINT GRADE
- LP-945.00 — PROPOSED LOW POINT GRADE
- TC-945.00 — PROPOSED TOP OF CURB GRADE
- BS-945.00 — PROPOSED BOTTOM OF CURB GRADE
- DR — DRAINAGE FLOW ARROW

**STORM DRAINAGE LEGEND:**

- JB — JUNCTION BOX
- CI — HOODED GRATE CURB INLET (GDOT 1019A, TYPE E)
- GI — GRATE INLET (GDOT 10191A, TYPE A)
- SWCB — SINGLE WING CATCH BASIN (GDOT 1033D)
- DWCB — DOUBLE WING CATCH BASIN (GDOT 1034D)
- YD — YARD DRAIN (NDS CATCH BASIN OR COMPARABLE)
- CO — CLEAN OUT
- WQ — WATER QUALITY DEVICE
- OCS — OUTLET CONTROL STRUCTURE (CAST-IN-PLACE)
- TD — TRENCH DRAIN
- PROPOSED ROOF DRAIN PIPE
- PROPOSED STORM PIPE



**Kimley-Horn**  
 11720 AMBER PARK DRIVE, SUITE 600  
 ALPHARETTA, GEORGIA 30009  
 PHONE: (770) 619-4280  
 www.kimley-horn.com

CLIENT:  
**BNC LAND CO, LLC**

TITLE:  
**WATERSHED PROTECTION PERMIT PLAN**

PROJECT:  
**CULVERS - BELMONT**

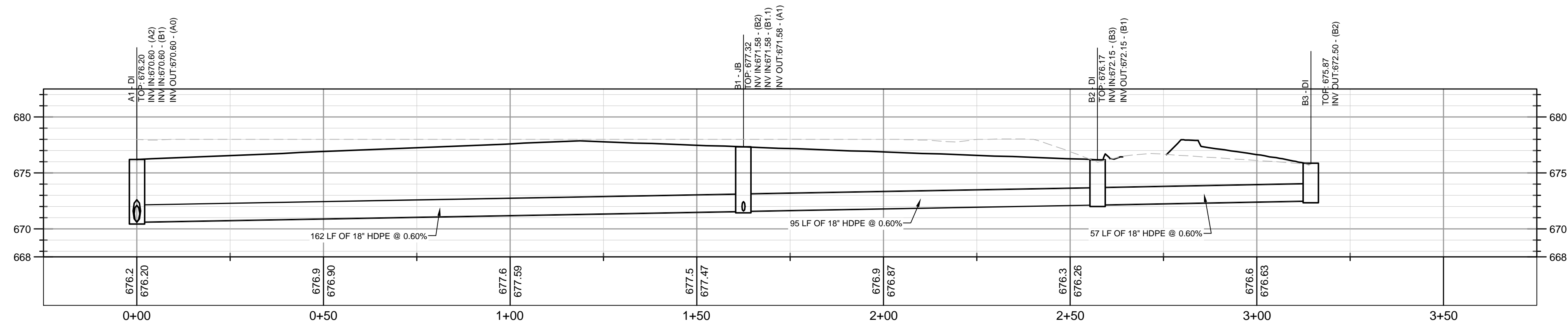
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SCALE: 1" = 50'

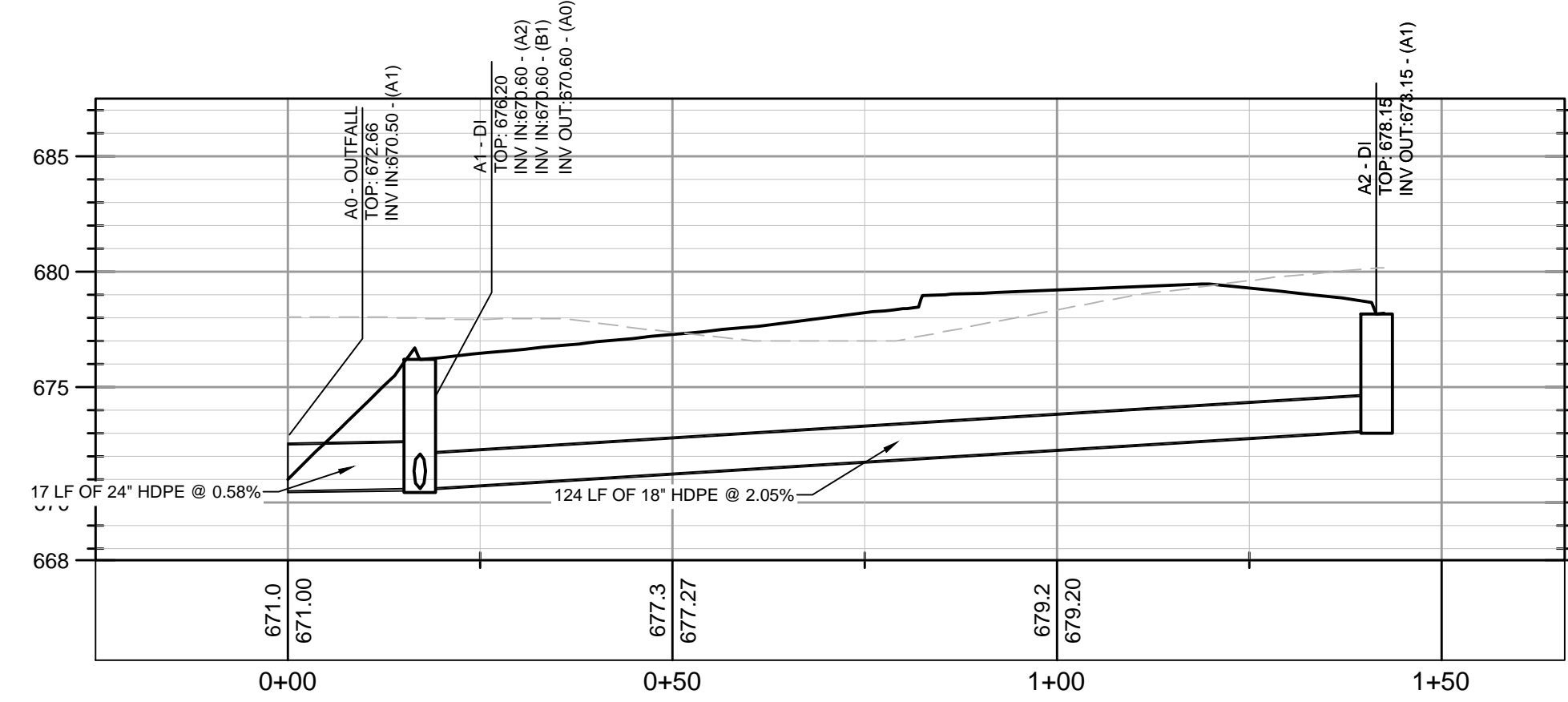
DATE: 05/23/2022

SHEET:  
**C3-02**

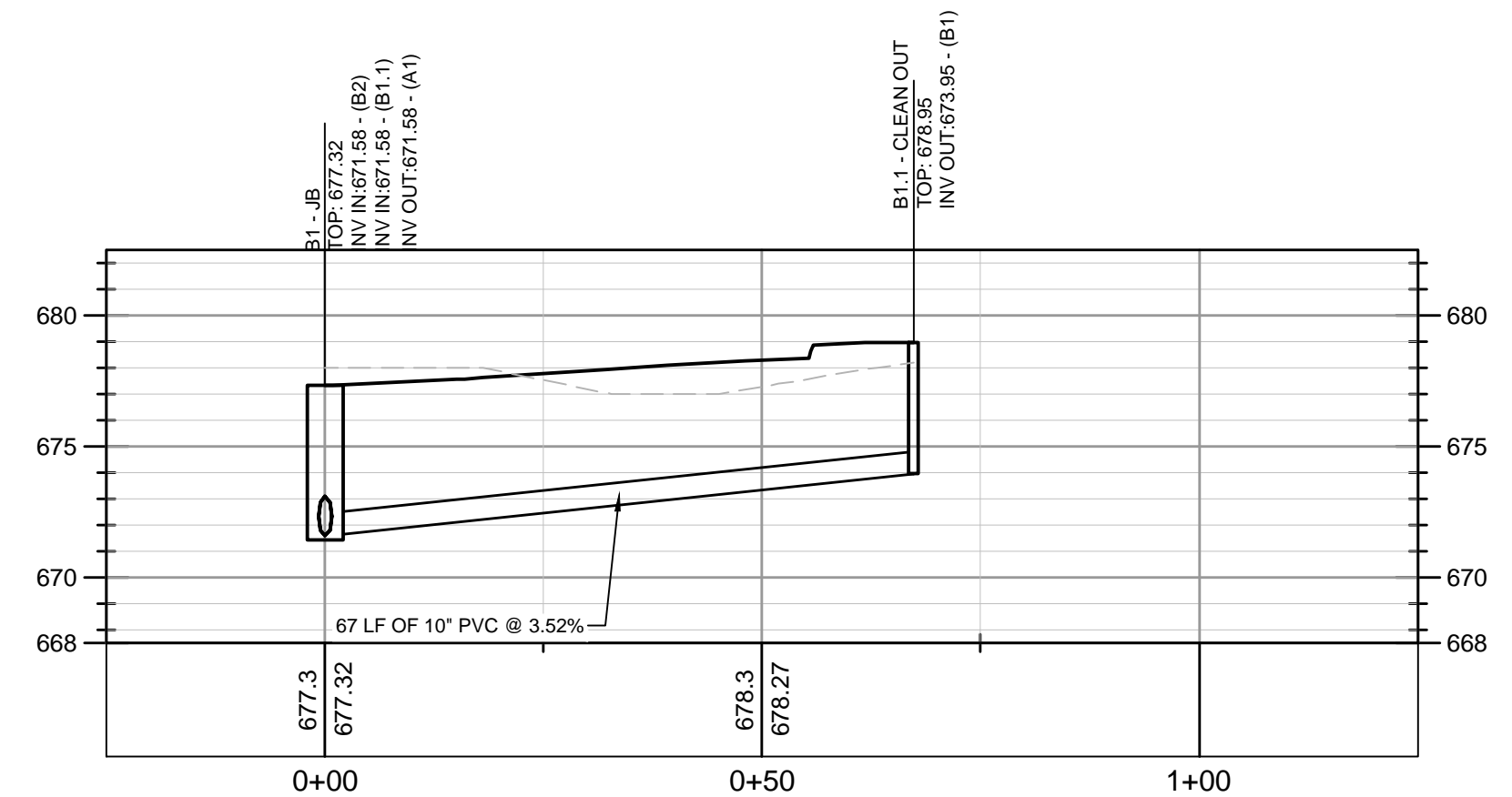
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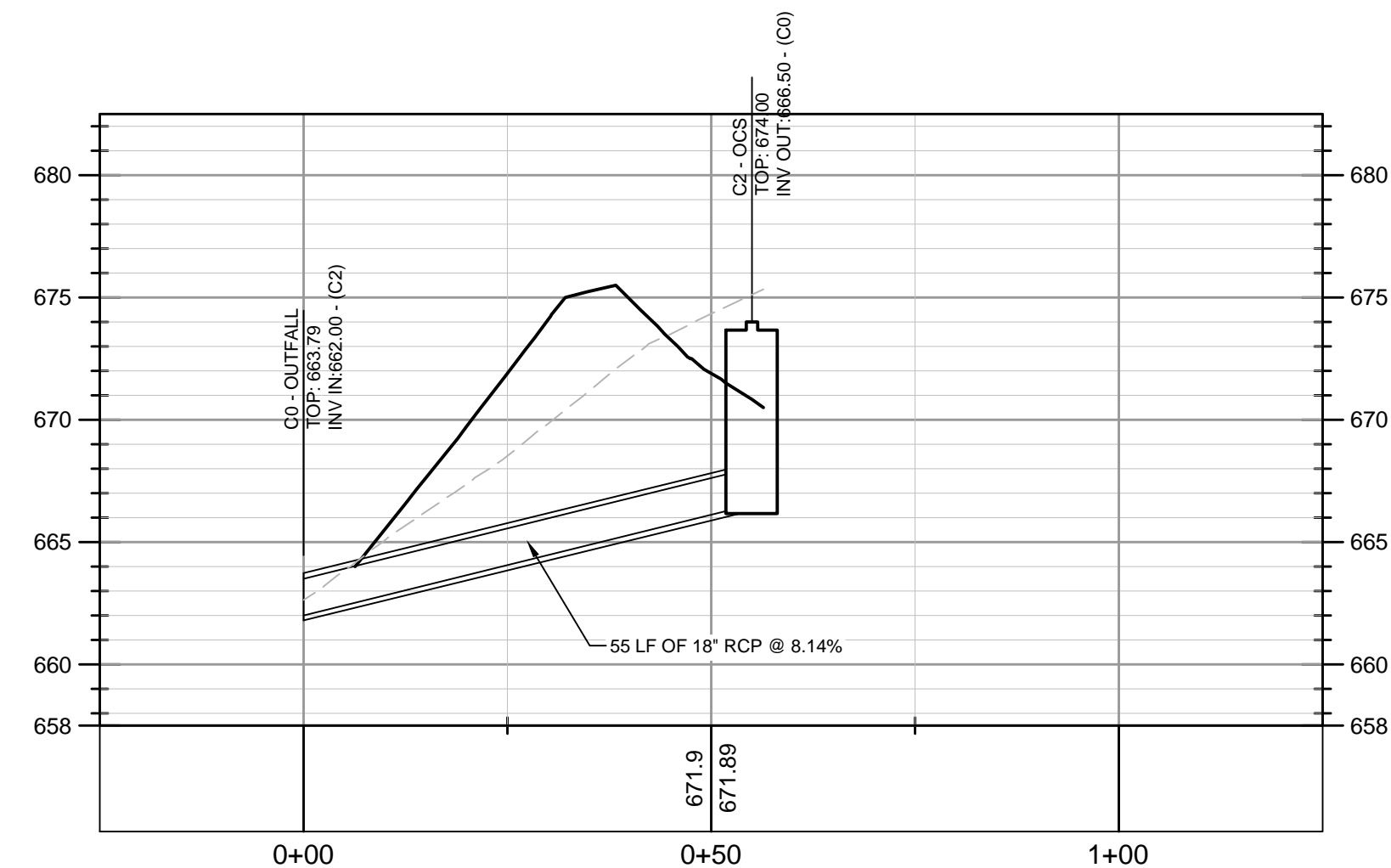
**PROFILE VIEW**  
B3 TO A1  
1" = 20' HORZ.  
1" = 7' VERT.



**PROFILE VIEW**  
STORM A  
1" = 20' HORZ.  
1" = 7' VERT.



**PROFILE VIEW**  
B1.1 TO B1  
1" = 20' HORZ.  
1" = 7' VERT.



**PROFILE VIEW**  
C2 TO C0  
1" = 20' HORZ.  
1" = 7' VERT.

25 YEAR PIPE CHART:

**STORM DRAINAGE PROFILE NOTES:**

1. ALL PIPE LENGTHS SPECIFIED IN THESE PLANS ARE THE HORIZONTAL DISTANCE AND ARE SHOWN FOR REFERENCE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ACTUAL LENGTHS BASED ON PROPOSED PIPE SLOPE. PIPE LENGTHS IN PLANS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. CONTRACTOR TO FIELD VERIFY EXISTING INVERT FOR STORM DRAINAGE SERVICE CONNECTIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF DISCREPANCY PRIOR TO PROCEEDING.
3. ALL STORM PIPE SHALL HAVE BEDDING PER BEDDING DETAILS IN CONSTRUCTION DETAIL SHEETS.
4. ALL STORM PIPING TO BE RCP UNLESS OTHERWISE NOTED. SEE CHART FOR PIPE CLASS.
5. RIM ELEVATIONS GIVEN ARE APPROXIMATE. CONTRACTOR SHALL REFERENCE GRADING PLAN FOR STRUCTURE THROAT / RIM ELEVATIONS.
6. IF ANY CONFLICTS, DISCREPANCIES, OR ANY OTHER UNSATISFACTORY CONDITIONS ARE DISCOVERED, EITHER ON THE CONSTRUCTION DOCUMENTS OR FIELD CONDITIONS, THE CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY AND SHALL NOT COMMENCE FURTHER OPERATION UNTIL THE CONFLICTS, DISCREPANCIES, OR OTHER UNSATISFACTORY CONDITIONS ARE RESOLVED.
7. ALL STORM JOINTS TO BE WATER TIGHT.

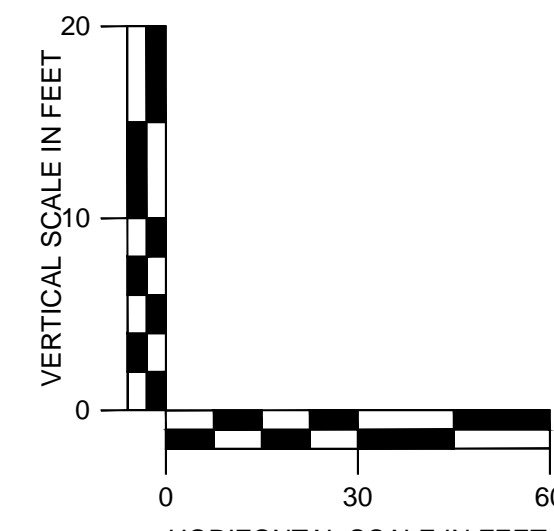
**PROFILE LINE LEGEND:**

- PROPOSED GRADE LINE
- - - EXISTING GRADE LINE
- - - - 25-YR HYDRAULIC GRADE LINE
- - - - 100-YR HYDRAULIC GRADE LINE

**RCP PIPE CLASSIFICATION CHART:**

1-15' CLASS III  
15'-20' CLASS IV  
20'-30' CLASS V

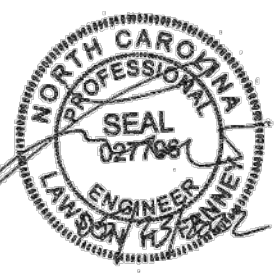
ALL CONCRETE PIPE SHALL BE A MINIMUM CLASS III WITH 12" MINIMUM COVER. REFERENCE NCDOT DETAIL 300.1 FOR ADDITIONAL GUIDANCE.



SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA  
100 BELMONT MT. HOLLY ROAD  
BELMONT, NC 28012  
PHONE: 414-597-7459

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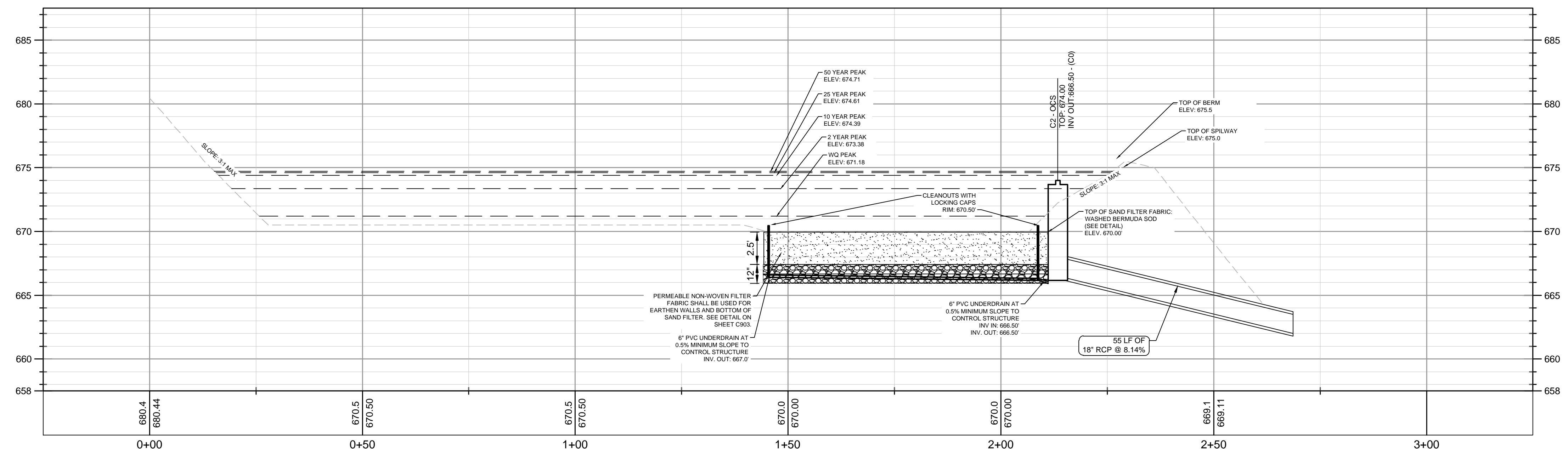
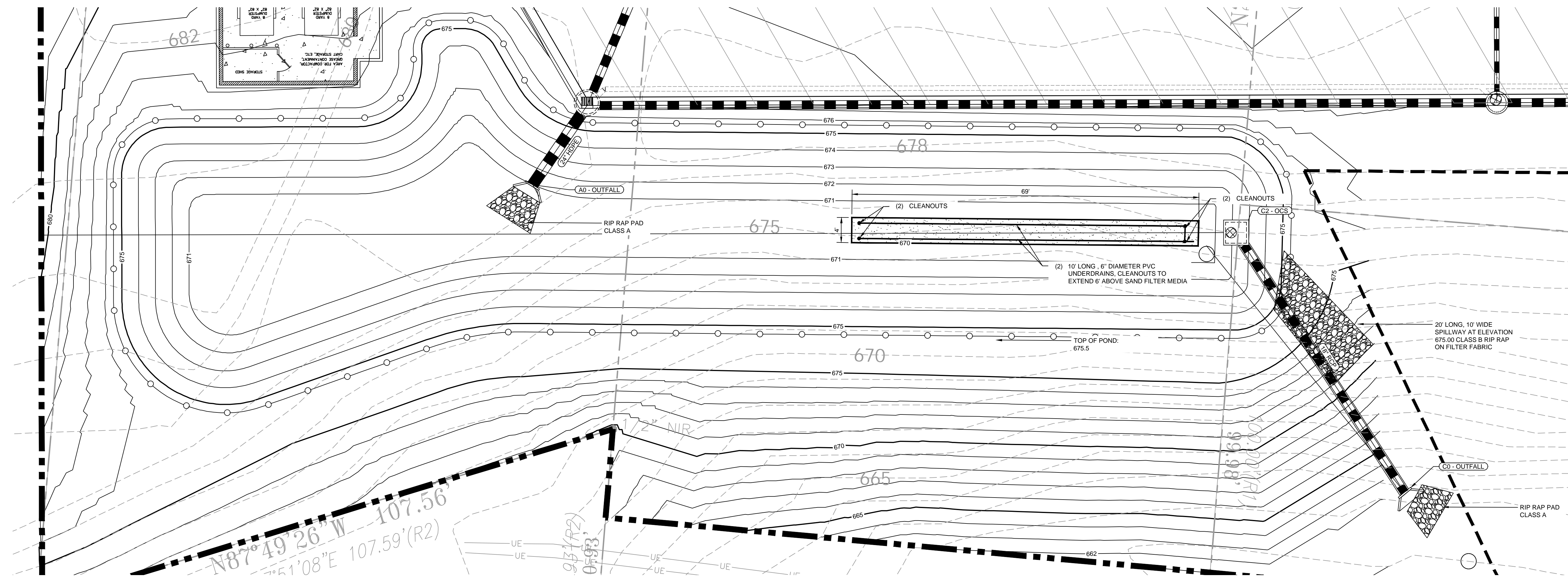
**CULVER'S - BELMONT**  
HAWLEY AVE. BELMONT NC 28012  
LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080



05/23/2022

DRAWN BY	KHA
DESIGNED BY	KHA
REVIEWED BY	SAH
DATE	05/23/2022
PROJECT NO.	014527000
TITLE	STORM SEWER PROFILES
SHEET NUMBER	C3-50

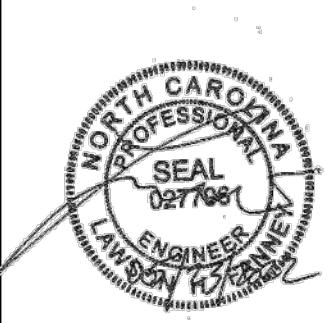
**RUNOFF REDUCTION CALCULATIONS:**



**PROFILE VIEW**  
 Pond  
 1" = 20' HORZ.  
 1" = 7' VERT.

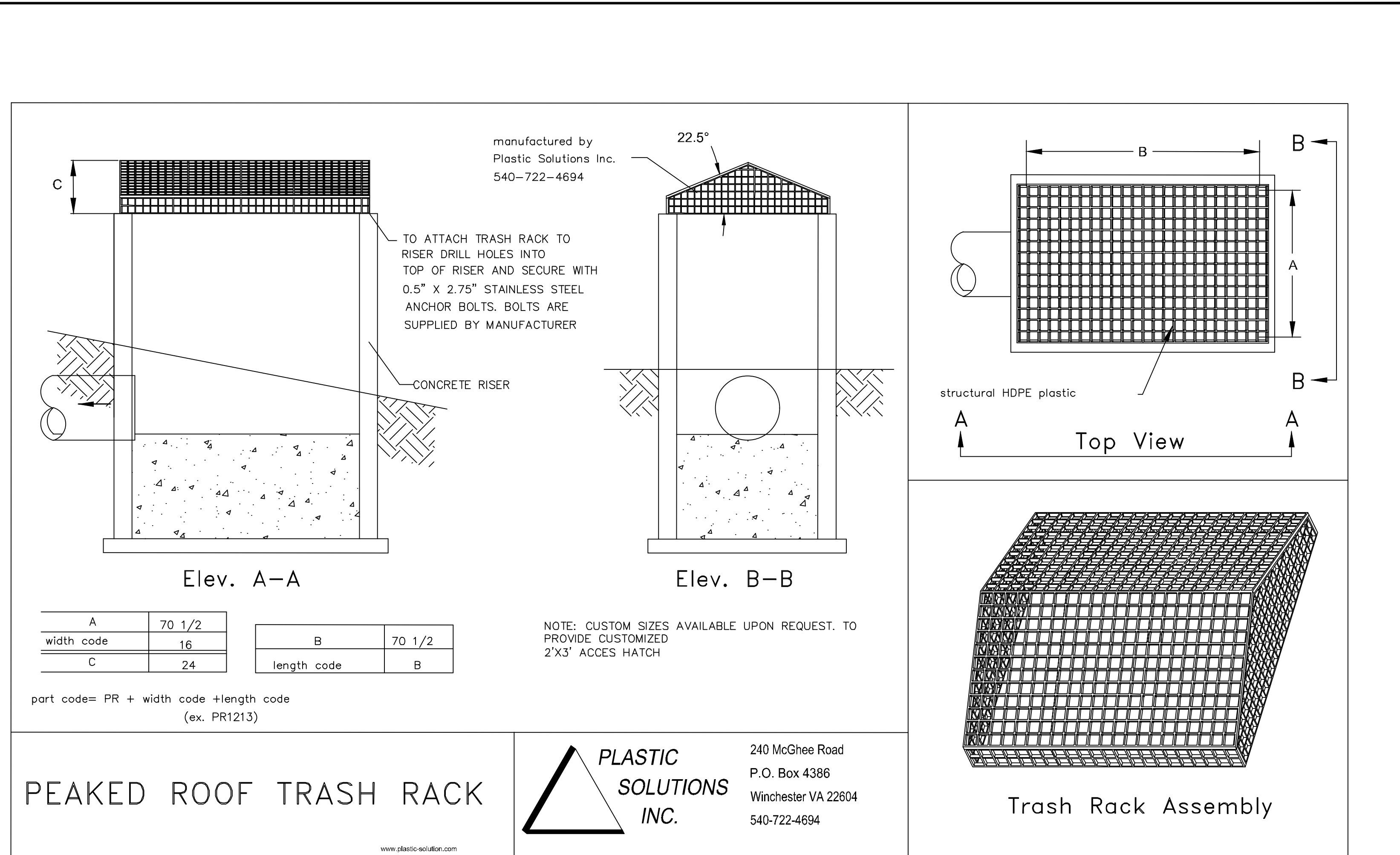
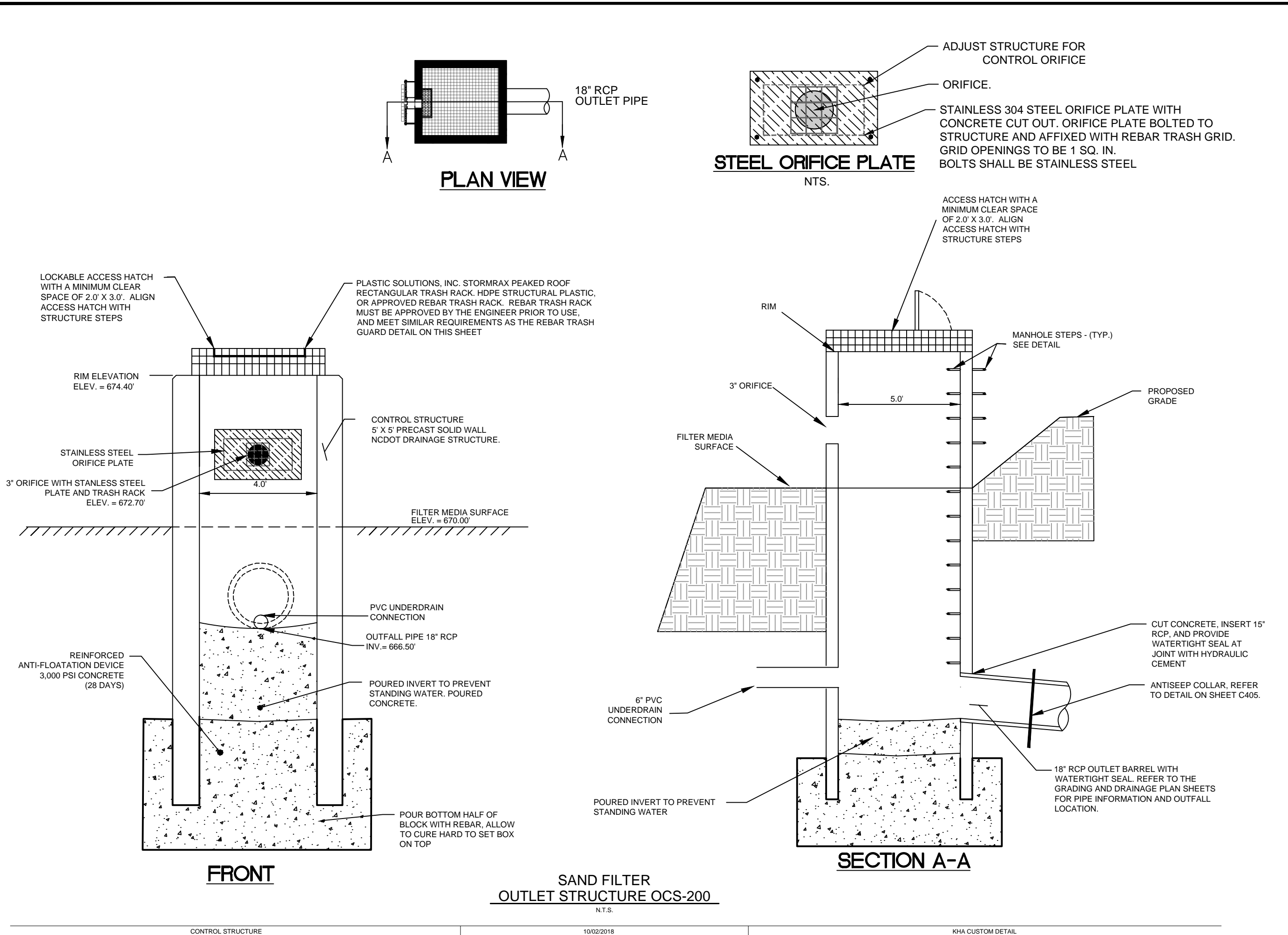
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No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY



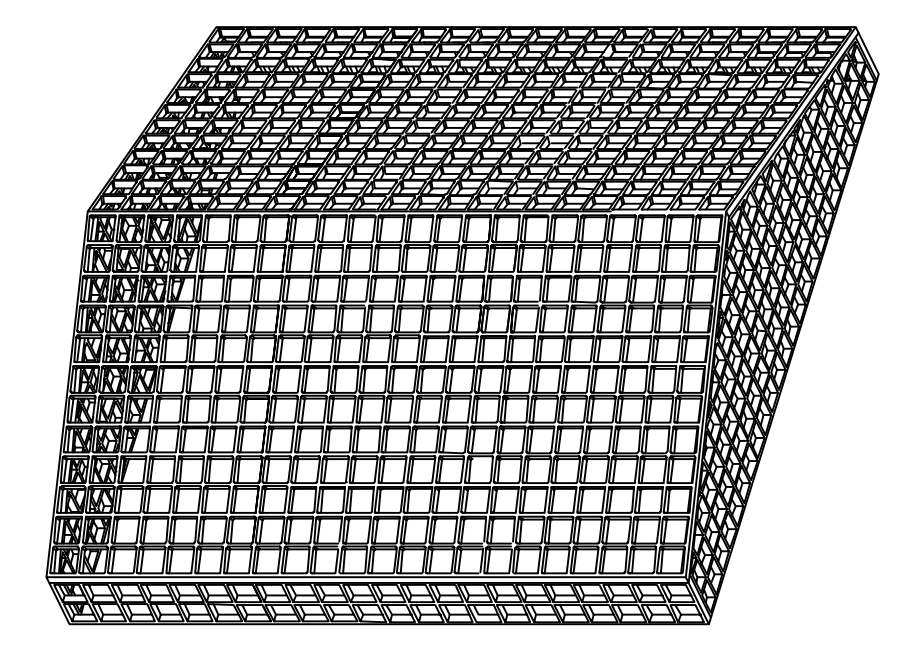
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Drawing name: K:\ALP\_PR\014527000\_culvers-belmont\nc\CAD\plansheets\C3-81 - STORMWATER MANAGEMENT PLAN.dwg May 23, 2022 3:18pm by: Taylor Jones

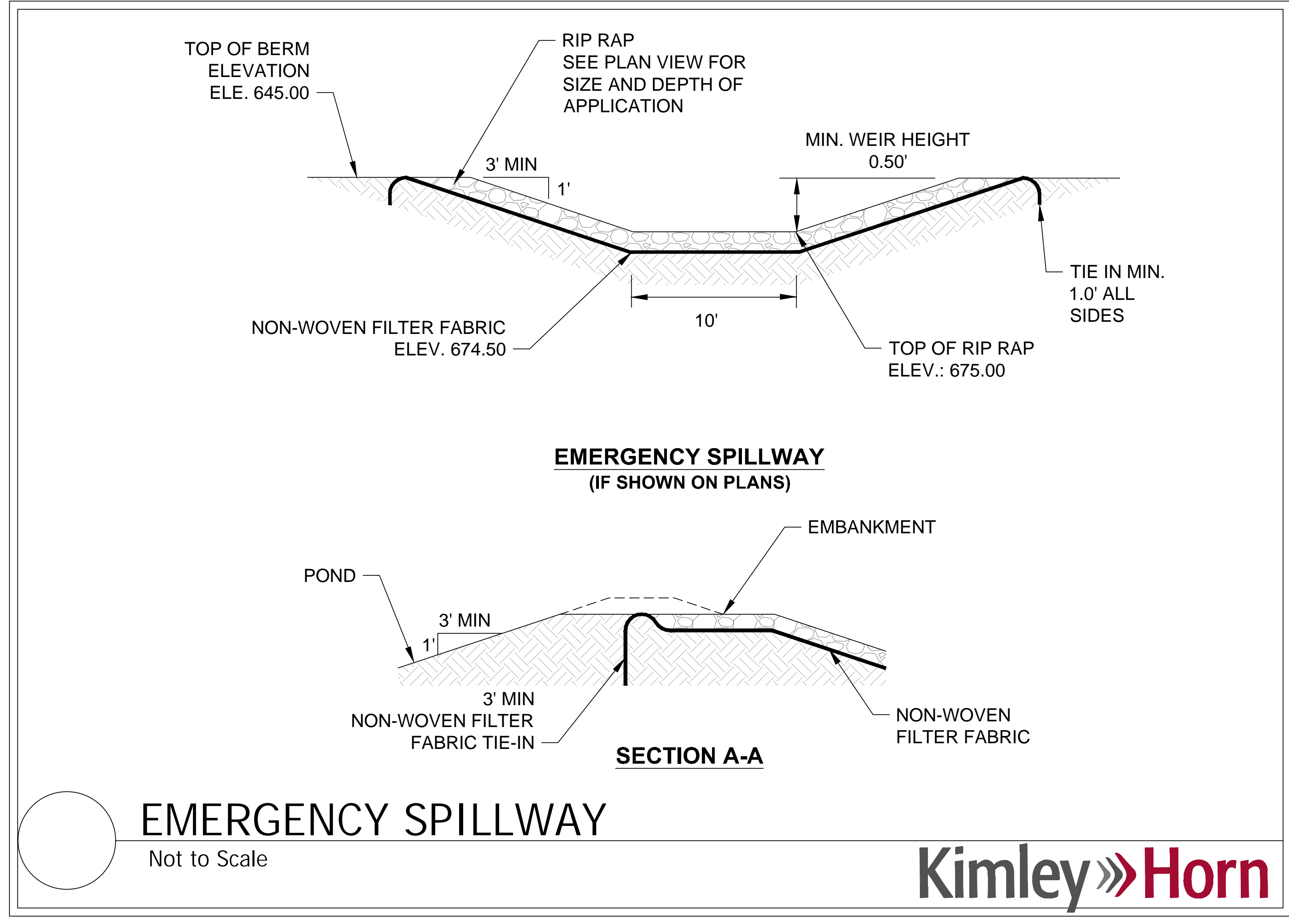


**PEAKED ROOF TRASH RACK**

**PLASTIC SOLUTIONS INC.**  
 240 McGhee Road  
 P.O. Box 4386  
 Winchester VA 22604  
 540-722-4694

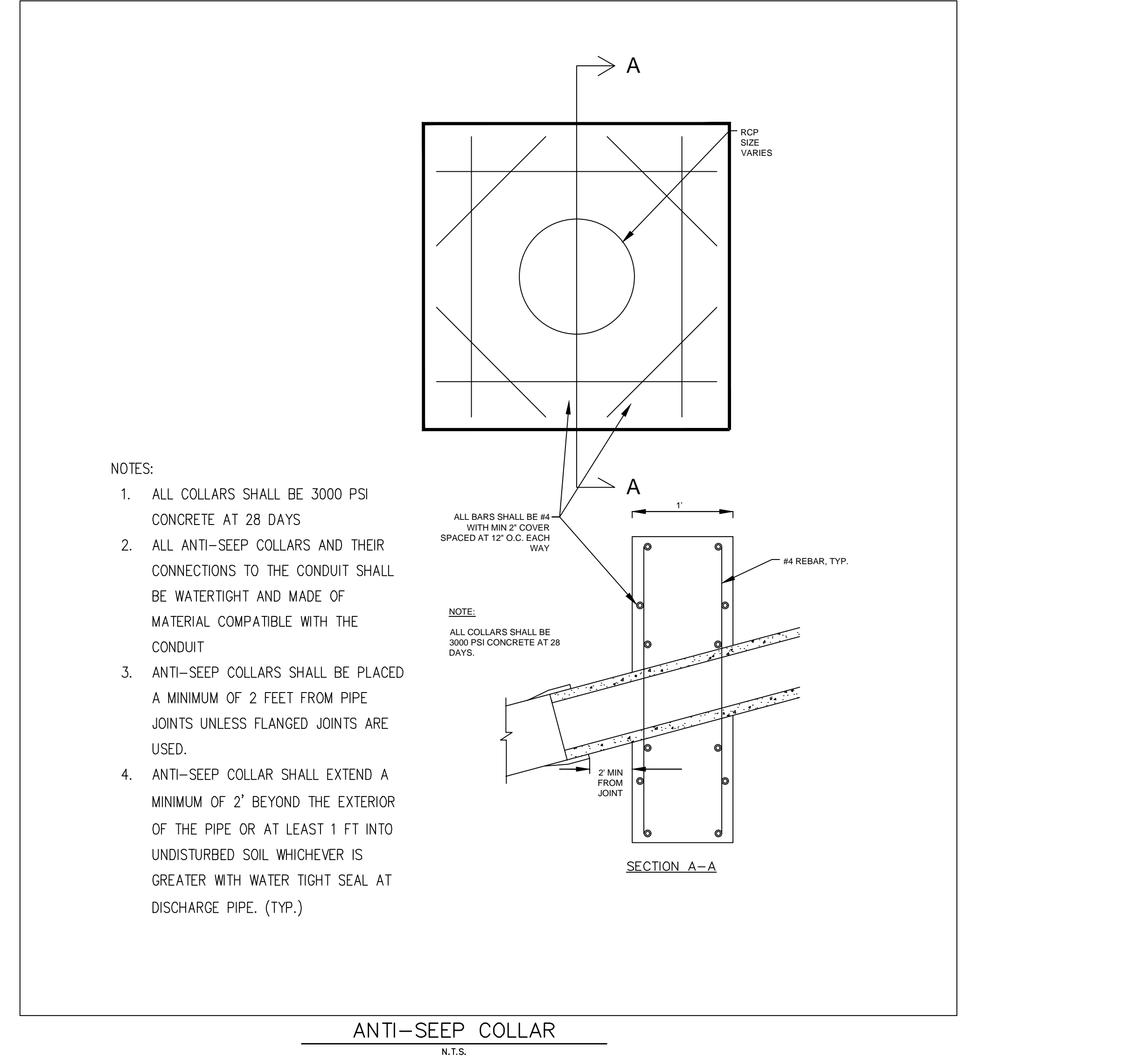


Trash Rack Assembly



**EMERGENCY SPILLWAY**

Not to Scale



- NOTES:
- ALL COLLARS SHALL BE 3000 PSI CONCRETE AT 28 DAYS
  - ALL ANTI-SEEP COLLARS AND THEIR CONNECTIONS TO THE CONDUIT SHALL BE WATERTIGHT AND MADE OF MATERIAL COMPATIBLE WITH THE CONDUIT
  - ANTI-SEEP COLLARS SHALL BE PLACED A MINIMUM OF 2 FEET FROM PIPE JOINTS UNLESS FLANGED JOINTS ARE USED.
  - ANTI-SEEP COLLAR SHALL EXTEND A MINIMUM OF 2' BEYOND THE EXTERIOR OF THE PIPE OR AT LEAST 1 FT INTO UNDISTURBED SOIL WHICHEVER IS GREATER WITH WATER TIGHT SEAL AT DISCHARGE PIPE. (TYP.)

ANTI-SEEP COLLAR  
N.T.S.

**Kimley Horn**  
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 11720 AMBER PARK DRIVE, SUITE 600  
 ALBANY, GA 31707  
 PHONE (770) 619-4282  
 WWW.KIMLEY-HORN.COM

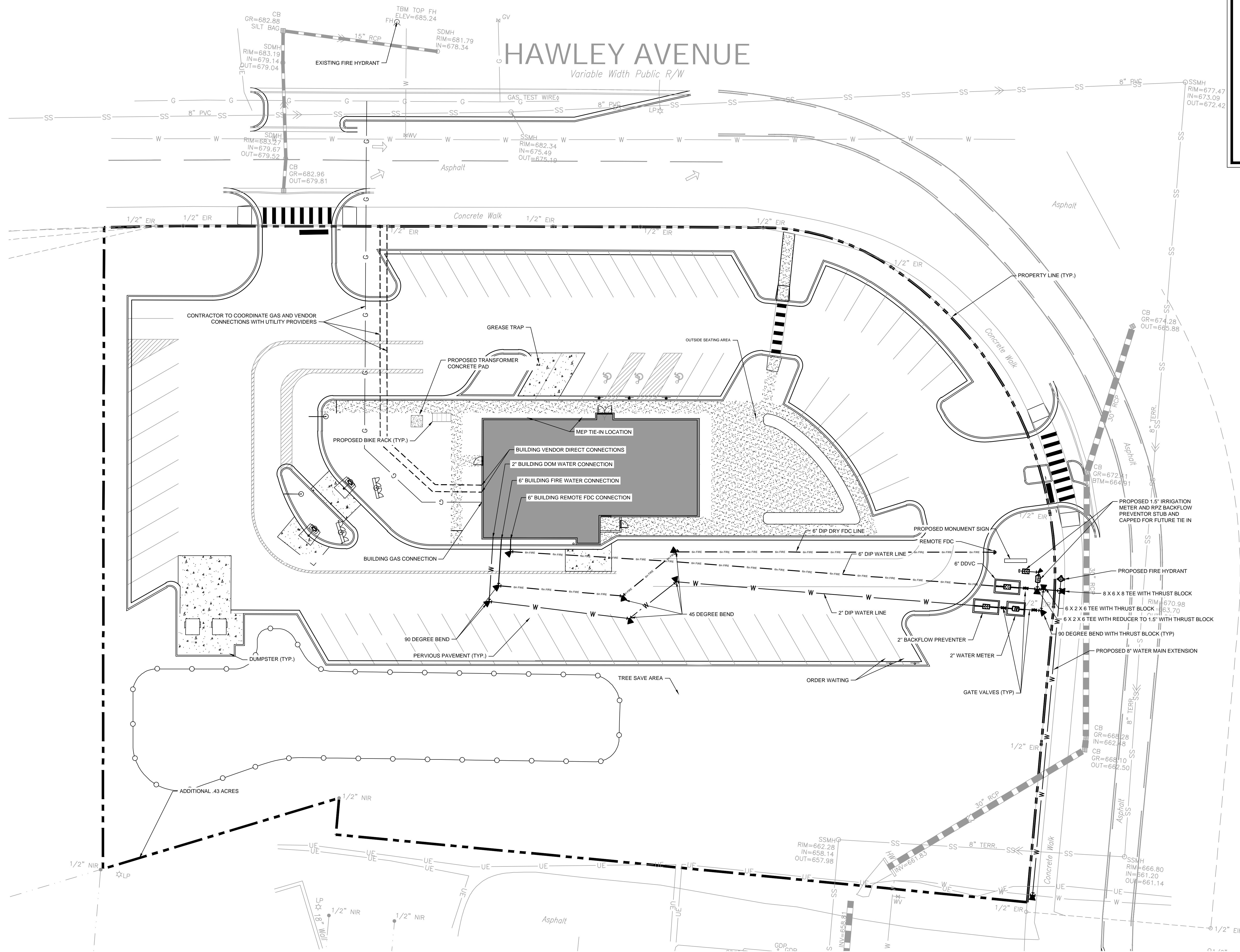
**SOUTHERN SOCIETY OF NORTH CAROLINA**  
 100 BELMONT MT. HOLLY ROAD  
 BELMONT, NC 28012  
 PHONE: 414-557-7459

PROJECT	CULVER'S - BELMONT
DATE	05/23/2022
ISSUANCE AND REVISION DESCRIPTIONS	
NO.	
BY	

**CULVER'S - BELMONT**  
 HAVILEY AVE. BELMONT NC 28012  
 LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
 PARCEL ID: 214384, 214385, 214386, 221080 & 221080

DRAWN BY: KHA  
 DESIGNED BY: KHA  
 REVIEWED BY: SAH  
 DATE: 05/23/2022  
 PROJECT NO.: 014527000  
 TITLE: STORMWATER MANAGEMENT PLAN  
 SHEET NUMBER: C3-81

Drawing name: K:\ALP\_PR\014527000\_culvers-belmont.nc\CAD\plansheets\C4-00 UTILITY PLAN.dwg May 23, 2022 3:18pm by: Taylor Jones



**UTILITY LEGEND:**

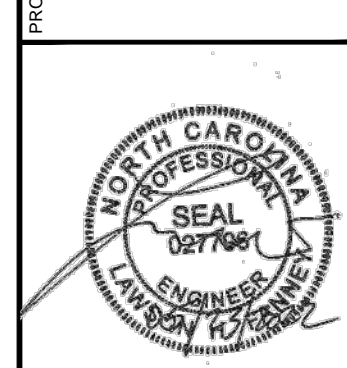
- PROPOSED WATER LINE
- PROPOSED ELECTRIC LINE
- PROPOSED TELEPHONE LINE
- PROPOSED NATURAL GAS LINE
- PROPOSED SANITARY SEWER PIPE
- PROPOSED SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SANITARY SEWER GREASE TRAP
- WATER VALVE
- FIRE DEPARTMENT CONNECTION (FDC)
- FIRE HYDRANT
- POST INDICATOR VALVE (PIV)
- WATER MAIN TAPPING SLEEVE
- WATER CONNECTIONS AND BENDS

**Kimley»Horn**  
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 11720 AMBER PARK DRIVE, SUITE 600  
 BELMONT, NC 28012  
 PHONE: (770) 619-4282  
 WWW.KIMLEY-HORN.COM

PREPARED FOR  
**SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA**  
 100 BELMONT MT. HOLLY ROAD  
 BELMONT, NC 28012  
 PHONE: 414-557-7459

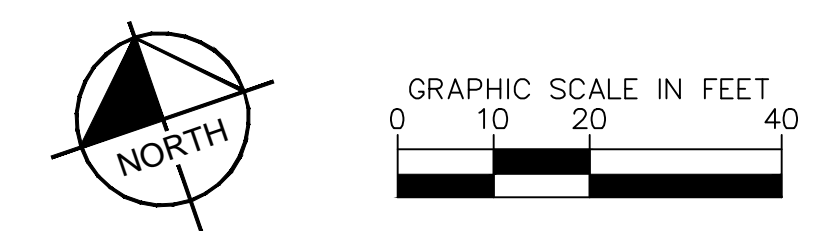
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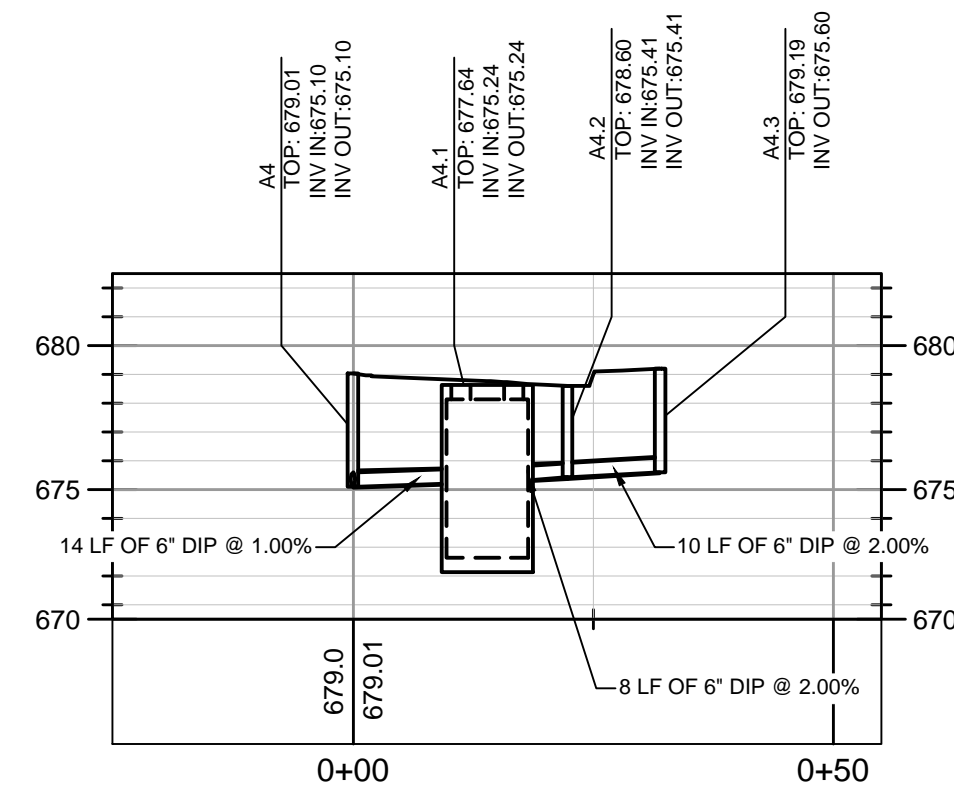
05/23/2022  
 DRAWN BY: KHA  
 DESIGNED BY: KHA  
 REVIEWED BY: SAH  
 DATE: 05/23/2022  
 PROJECT NO.: 014527000  
 TITLE: UTILITY PLAN

SHEET NUMBER  
**C4-00**

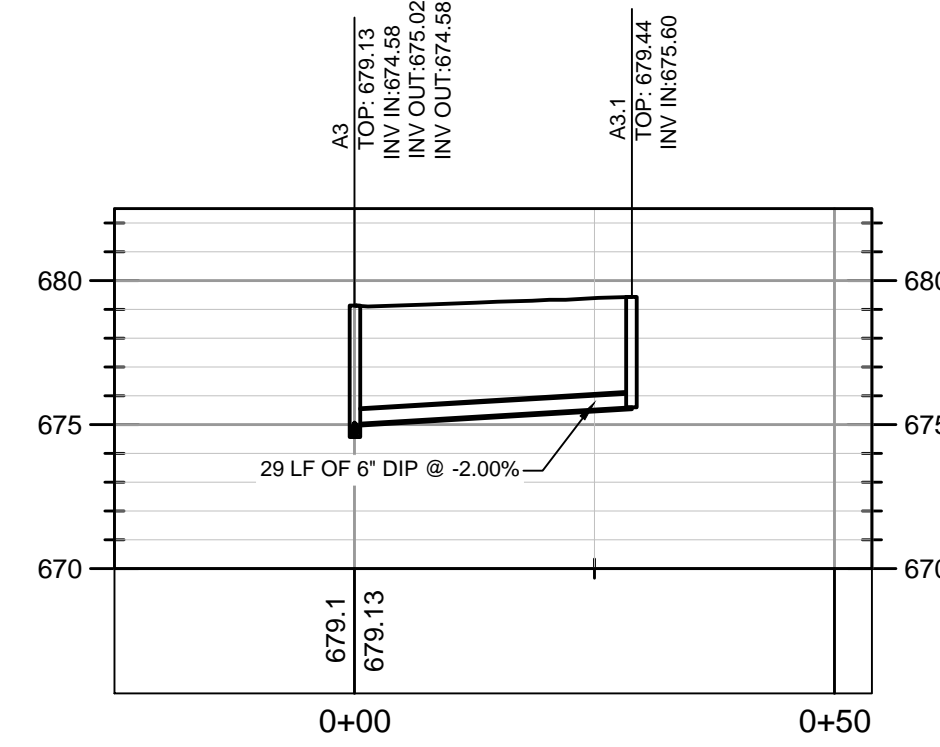


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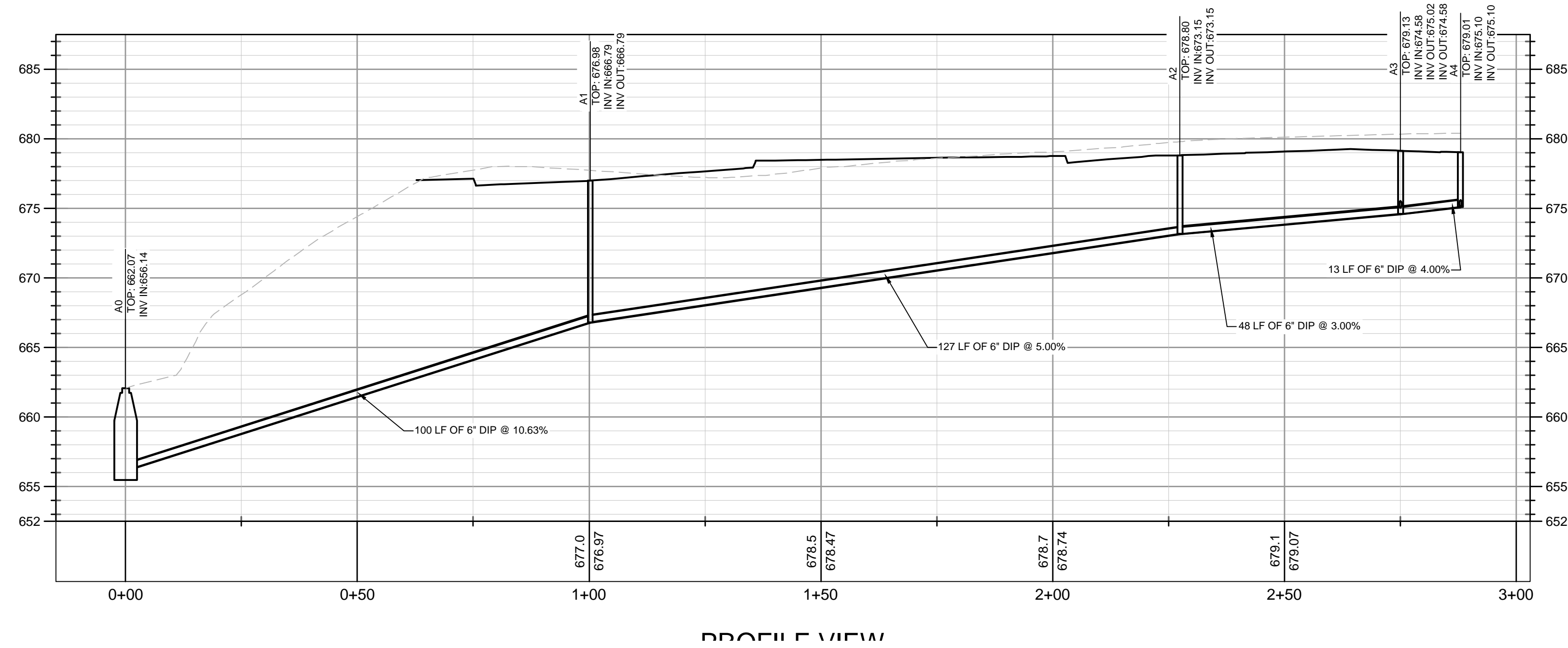
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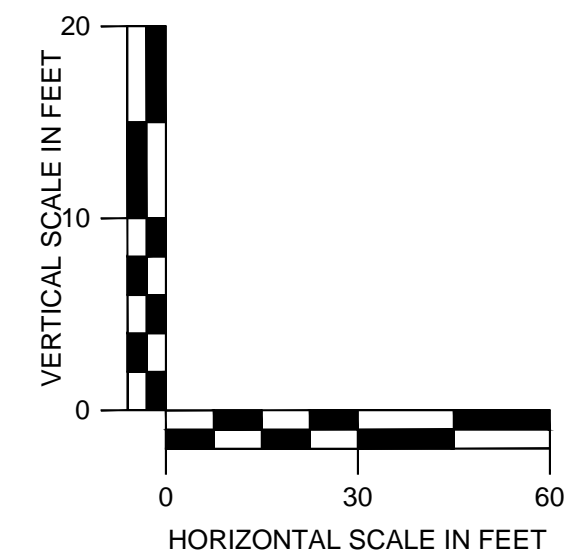
**PROFILE VIEW**  
GREASE TRAP  
1" = 30' HORZ.  
1" = 10' VERT.



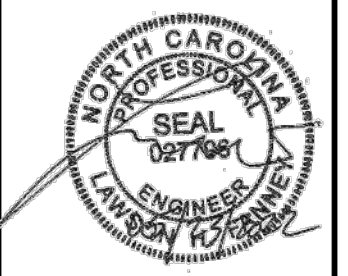
**PROFILE VIEW**  
A3.1 TO A3  
1" = 30' HORZ.  
1" = 10' VERT.



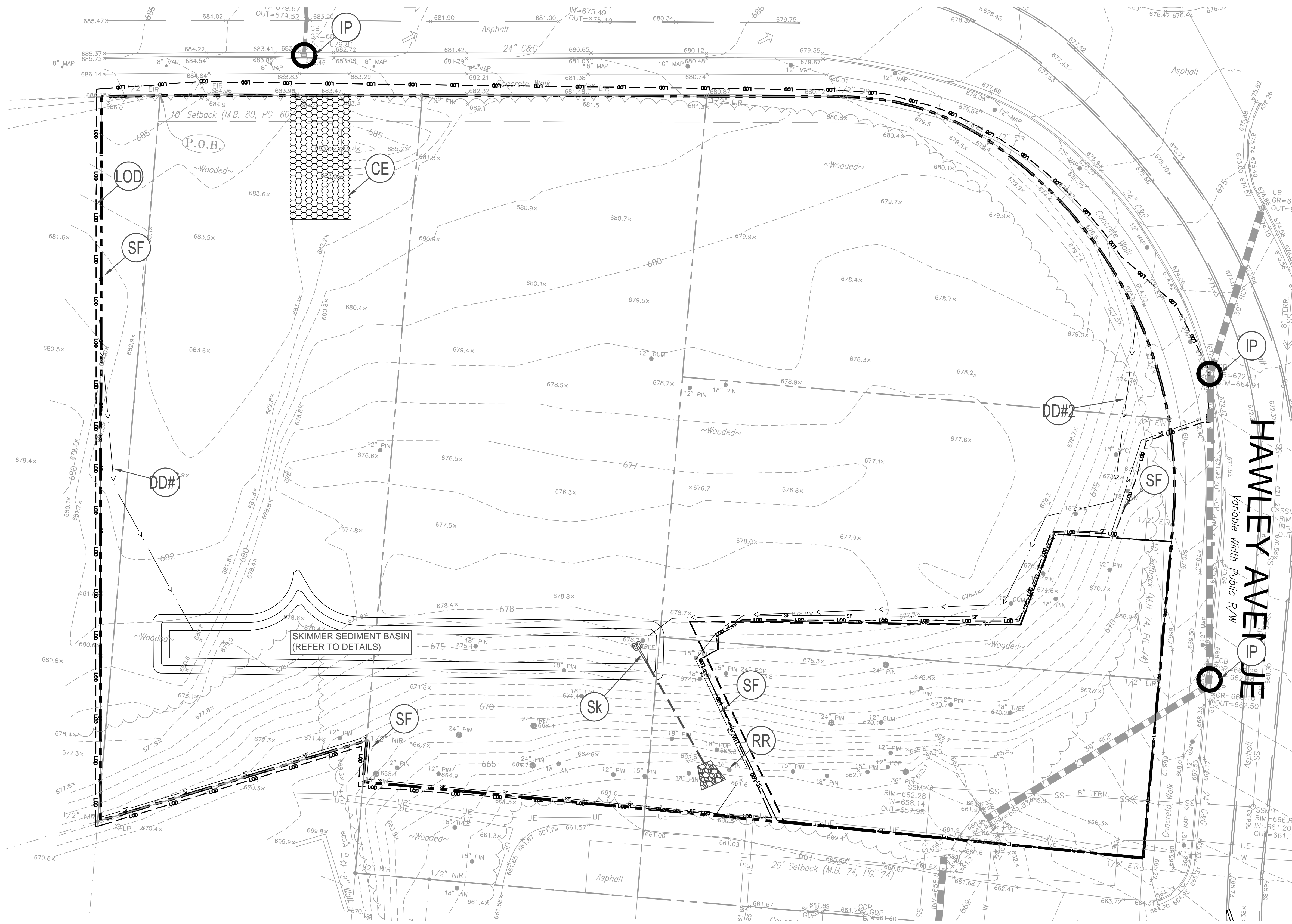
**PROFILE VIEW**



No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY



Drawing name: K:\ALP\_PR\014527000\_culvers-belmont\nc\CD\plansheets\C5-10 EROSION CONTROL PLAN PHASE 1 May 23, 2022 3:16pm by: Taylor.Jones



VICINITY MAP

EROSION CONTROL LEGEND	
(SEE DETAIL SHEETS FOR TYPICAL DETAILS AND GENERAL NOTES THIS SHEET FOR ADDITIONAL NOTES)	
	PROPERTY LINE
	LIMITS OF DISTURBANCE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	DIRECTION OF OVERLAND FLOW
	DRAINAGE AREA
	RIP RAP APRON
	CONSTRUCTION EXIT
	TEMPORARY DIVERSION DITCH OR BERM
	CHECK DAM
	SOIL TYPE
	TEMPORARY HIGH HAZARD SILT FENCE/PROTECTION FENCE
	SOIL TYPE BOUNDARY
	SLOPE DRAIN WITH RIP-RAP APRON
	INLET PROTECTION
	SILT FENCE ROCK OUTLET
	STONE INLET PROTECTION
	TEMPORARY JUTE NETTING BAFFLES (700 GM2 COIR FABRIC OR HEAVIER)
	COIR WATTLE

**GENERAL NOTES**

1. INLET PROTECTION MUST BE CLEANED AFTER EVERY RAINFALL EVENT. CURB AND GUTTER SHOULD BE SWEEP AND KEPT CLEAR.
2. CONTRACTOR TO MAINTAIN ALL EXISTING EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION AND IS SUBJECT TO FINE.
3. CONTRACTOR IS RESPONSIBLE FOR SEEDING AND SOIL PREPARATION. REFER TO SEEDING SCHEDULE AND SEED BED PREPARATION FOR SOLE STABILIZATION.

**CONSTRUCTION SEQUENCE**

THE FOLLOWING CONSTRUCTION SEQUENCE IS FURNISHED AS A GENERAL GUIDE FOR PREPARATION OF A SEQUENCE OF CONSTRUCTION EVENTS. ADDITIONS, DELETIONS, AND MODIFICATIONS SHOULD BE MADE AS APPROPRIATE.

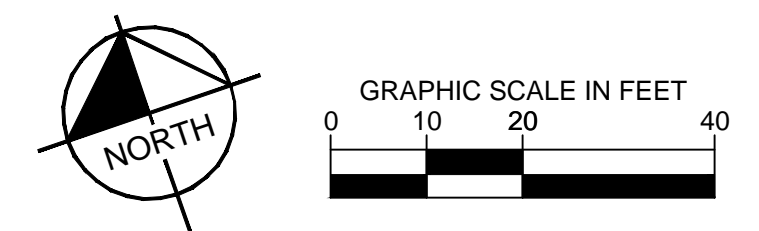
- PHASE 1:
1. CONTRACTOR TO OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM CITY OF BELMONT.
  2. THE CONTRACTOR SHALL SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH CITY OF BELMONT INSPECTOR TO DISCUSS EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION AND IS SUBJECT TO FINE.
  3. CONTRACTOR TO MAINTAIN ALL EXISTING EROSION CONTROL FEATURES AND INSTALL SILT FENCE, CONSTRUCTION EXIT, SLOPE DRAINS, INLET PROTECTION, SEDIMENT TRAP, DIVERSION DITCHES WITH CHECK DAMS, AND OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
  4. SCHEDULE AN ON-SITE INSPECTION BY CITY OF BELMONT INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.
  5. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
  6. ALL EARTH MOVING EQUIPMENT SHALL BE SERVICED PRIOR TO WORK COMMENCING EACH DAY. EQUIPMENT SHALL BE MAINTAINED TO PREVENT FUEL, OIL, AND LUBRICANT SPILLS IN THE VICINITY OF A STREAM.
  7. FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.

**SOIL TYPE LEGEND**

UR URBAN LAND

**PRECONSTRUCTION MEETING REQUIREMENTS**  
 UPON FINAL APPROVAL OF THE PLANS BY THE CITY OF BELMONT, NCDEN EROSION CONTROL DIVISION, NCDEN DIVISION F WATER QUALITY, NCDEN PUBLIC WATER SUPPLY DIVISION, AND NCDOT, THE DESIGN ENGINEER AND DEVELOPER MUST REQUEST A PRECONSTRUCTION MEETING WITH CITY STAFF. THIS MEETING IS MANDATORY AND MUST BE ARRANGED THROUGH THE CITY ENGINEER. IN ATTENDANCE AT THE MEETING SHALL BE THE DEVELOPER, THE CONTRACTOR(S), AND THE DESIGN ENGINEER. NO CONSTRUCTION MAY PROCEED PRIOR TO THIS MEETING AND THE CITY WILL NOT ISSUE A GRADING PERMIT UNTIL AFTER THE MEETING.

**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT**  
 IMPLEMENTING THE DETAILS AND SPECIFICATIONS ON THIS PLAN SHEET WILL RESULT IN THE CONSTRUCTION ACTIVITY BEING CONSIDERED COMPLIANT WITH THE GROUND STABILIZATION AND MATERIALS HANDLING SECTIONS OF THE NCG01 CONSTRUCTION GENERAL PERMIT (SECTIONS E AND F, RESPECTIVELY). THE PERMITEE SHALL COMPLY WITH THE EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE DELEGATED AUTHORITY HAVING JURISDICTION. ALL DETAILS AND SPECIFICATIONS SHOWN ON THIS SHEET MAY NOT APPLY DEPENDING ON SITE CONDITIONS AND THE DELEGATED AUTHORITY HAVING JURISDICTION.



**SITE AREA SUMMARY:**  
 TOTAL SITE AREA = 2.47 ACRES  
 TOTAL DISTURBED AREA = 1.44 ACRES

**Kimley-Horn**  
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 11720 AMBER PARK DRIVE, SUITE 600  
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 WWW.KIMLEY-HORN.COM

**SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA**  
 100 BELMONT MT. HOLLY ROAD  
 BELMONT, NC 28012  
 PHONE: 414-557-7459

NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S - BELMONT**  
 HAWLEY AVE, BELMONT NC 28012  
 LAND LOT 15:16,17,19,19, ND DISTRICT  
 PARCEL ID: 214364, 214365, 221080 & 221080

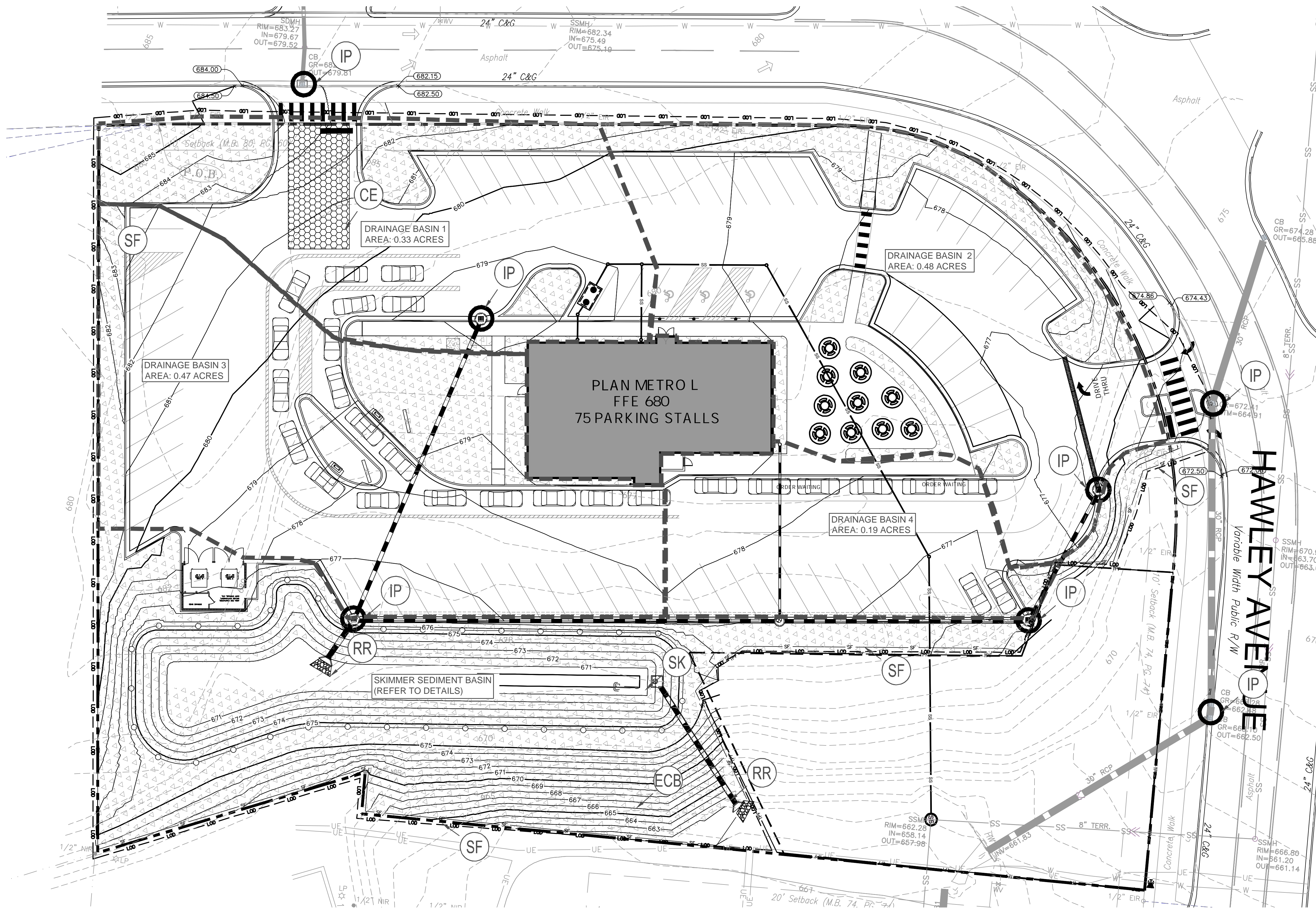
**PROFESSIONAL SEAL**  
 NORTH CAROLINA  
 ENGINEER  
 TAYLOR JONES

05/23/2022

DRAWN BY: KHA  
 DESIGNED BY: KHA  
 REVIEWED BY: SAH  
 DATE: 05/23/2022  
 PROJECT NO.: 014527000

TITLE: **EROSION CONTROL PLAN PHASE 1**  
 SHEET NUMBER: **C5-10**

Drawing name: K:\ALP\_PR\014527000\_culvers-belmont\cCAD\plansheets\C5-10 EROSION CONTROL PLAN PHASE 2 May 23, 2022 3:19pm by: Taylor.Jones



EROSION CONTROL LEGEND (SEE DETAIL SHEETS FOR TYPICAL DETAILS AND GENERAL NOTES THIS SHEET FOR ADDITIONAL NOTES)		
---	---	PROPERTY LINE
LOD	---	LIMITS OF DISTURBANCE
---	---	EXISTING MAJOR CONTOUR
---	---	EXISTING MINOR CONTOUR
---	---	PROPOSED MAJOR CONTOUR
---	---	PROPOSED MINOR CONTOUR
H.V	---	DIRECTION OF OVERLAND FLOW
DA	---	DRAINAGE AREA
RR	---	RIP RAP APRON
CE	---	CONSTRUCTION EXIT
DD	---	TEMPORARY DIVERSION DITCH OR BERM
CD	---	CHECK DAM
Xxx	---	SOIL TYPE
SF	---	TEMPORARY HIGH SAND SILT FENCE/PROTECTION FENCE
---	---	SOIL TYPE BOUNDARY
IP	---	INLET PROTECTION
CW	---	COIR WATTLE
ECB	---	EROSION CONTROL MATTING

**GENERAL NOTES**

1. INLET PROTECTION MUST BE CLEANED AFTER EVERY RAINFALL EVENT. CURB AND GUTTER SHOULD BE SWEEPED AND KEPT CLEAR.
2. PERIMETER SILT FENCE AND TREE PROTECTION FENCE SHOWN FOR GRAPHICAL REFERENCE ONLY. PERIMETER PROTECTION MUST BE AT LEAST 3' FROM TOE OF ADJACENT SLOPE TO ALLOW ROOM FOR ACCESS AND MAINTENANCE.
3. CONTRACTOR IS RESPONSIBLE FOR SEEDING AND SEED PREPARATION. REFER TO SEEDING SCHEDULE AND SEED BED PREPARATION FOR SLOPE STABILIZATION.

**CONSTRUCTION SEQUENCE**

THE FOLLOWING CONSTRUCTION SEQUENCE IS FURNISHED AS A GENERAL GUIDE FOR PREPARATION OF A SEQUENCE OF CONSTRUCTION EVENTS. ADDITIONS, DELETIONS, AND MODIFICATIONS SHOULD BE MADE AS APPROPRIATE.

PHASE 2:

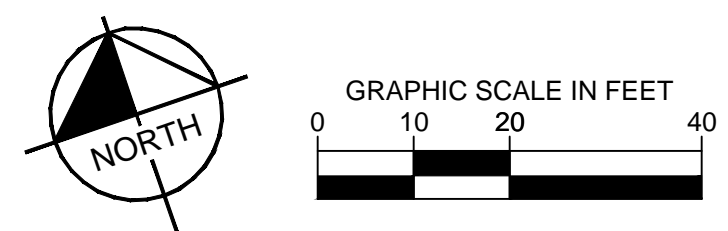
1. BEGIN EARTHWORK/GRADING ACTIVITIES. BEGIN GRADING OF FILL SLOPES. MAINTAIN AND VERTICALLY ADJUST ALL ROCK CHECK DAMS, INLET PROTECTION DEVICES, DITCHES, AND SILT FENCE THROUGHOUT GRADING ACTIVITIES TO MAINTAIN DRAINAGE PATTERNS. CONTRACTOR TO ENSURE ALL EROSION CONTROL MEASURES DO NOT ADVERSELY AFFECT CONSTRUCTIBILITY OF PROJECT PER TRAFFIC CONTROL PLANS.
2. AS EARTHWORK ALLOWS, BEGIN INSTALLING STORM DRAINAGE STRUCTURES. AS STORM DRAINAGE IS INSTALLED, CONTRACTOR SHALL PLACE INLET PROTECTION ON ALL STORM STRUCTURES AND REMOVE ALL INLET PROTECTION WHERE EXISTING STORM DRAINAGE IS REMOVED. NO PIPES SHALL BE LEFT EXPOSED AT THE CLOSE BUSINESS EACH DAY.
3. DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES TO MINIMIZE EROSION. THE CONTRACTOR SHALL MAINTAIN CLOSE CONTACT WITH THE NCDOT INSPECTOR SO THAT PERIODIC INSPECTIONS CAN BE PERFORMED AT APPROPRIATE STAGES OF CONSTRUCTION.
4. GRADED SLOPES AND FILLS ARE TO BE PLANTED OR PROVIDED WITH PROTECTIVE COVER SUFFICIENT TO RESTRAIN EROSION WITHIN 7 CALENDAR DAYS AFTER THE COMPLETION OF ANY PHASE OF GRADING. ALL AREAS UPON WHICH NO FURTHER LAND DISTURBING ACTIVITY WILL BE UNDERTAKEN ARE TO BE PLANTED OR PROVIDED WITH PROTECTIVE COVER WITHIN 14 CALENDAR DAYS.
5. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF BELMONT STANDARDS.
6. AS AREAS ARE BROUGHT TO FINISHED GRADE, CONTRACTOR TO INSTALL FINAL GRASSING AND STABILIZE ALL SLOPES PER THE EROSION CONTROL NOTES AND DETAILS.
7. CONTRACTOR SHALL COORDINATE WITH THE EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.

**SOIL TYPE LEGEND**

UR URBAN LAND



VICINITY MAP



RECEIVING WATERCOURSE:  
CATAWBA RIVER

SITE AREA SUMMARY:  
TOTAL SITE AREA = 2.47 ACRES  
TOTAL DISTURBED AREA = 1.44 ACRES

LAND USE OF SURROUNDING AREAS:  
COMMERCIAL

**PRECONSTRUCTION MEETING REQUIREMENTS**  
UPON FINAL APPROVAL OF THE PLANS BY THE CITY OF BELMONT, NCDOT EROSION CONTROL DIVISION, NCDOT DIVISION OF WATER QUALITY, NCDOT PUBLIC WATER SUPPLY DIVISION, AND NCDOT, THE DESIGN ENGINEER AND DEVELOPER MUST REQUEST A PRECONSTRUCTION MEETING WITH CITY STAFF. THIS MEETING IS MANDATORY AND MUST BE ARRANGED THROUGH THE CITY ENGINEER. IN ATTENDANCE AT THE MEETING SHALL BE THE DEVELOPER, THE CONTRACTOR(S), AND THE DESIGN ENGINEER. NO CONSTRUCTION MAY PROCEED PRIOR TO THIS MEETING AND THE CITY WILL NOT ISSUE A GRADING PERMIT UNTIL AFTER THE MEETING.

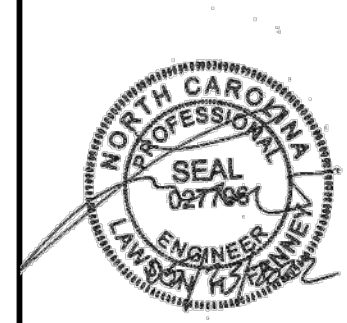
**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCDOT CONSTRUCTION GENERAL PERMIT**  
IMPLEMENTING THE DETAILS AND SPECIFICATIONS ON THIS PLAN SHEET WILL RESULT IN THE CONSTRUCTION ACTIVITY BEING CONSIDERED COMPLIANT WITH THE GROUND STABILIZATION AND MATERIALS HANDLING SECTIONS OF THE NCDOT CONSTRUCTION GENERAL PERMIT (SECTIONS E AND F, RESPECTIVELY). THE PERMITTEE SHALL COMPLY WITH THE EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE DELEGATED AUTHORITY HAVING JURISDICTION. ALL DETAILS AND SPECIFICATIONS SHOWN ON THIS SHEET MAY NOT APPLY DEPENDING ON SITE CONDITIONS AND THE DELEGATED AUTHORITY HAVING JURISDICTION.

**Kimley-Horn**  
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PREPARED FOR  
**SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA**  
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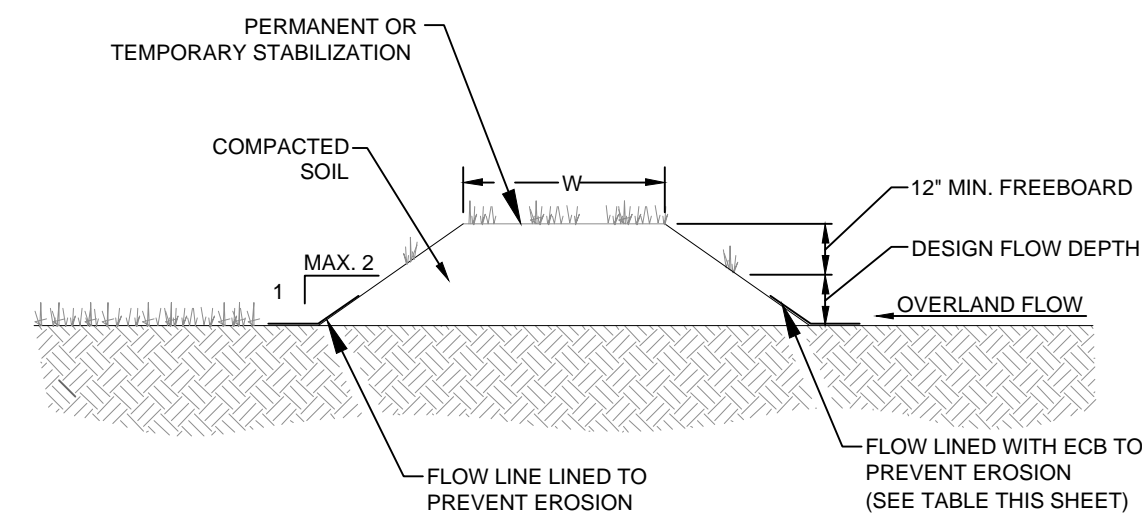
No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S - BELMONT**  
HAWLEY AVE, BELMONT, NC 28012  
LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080



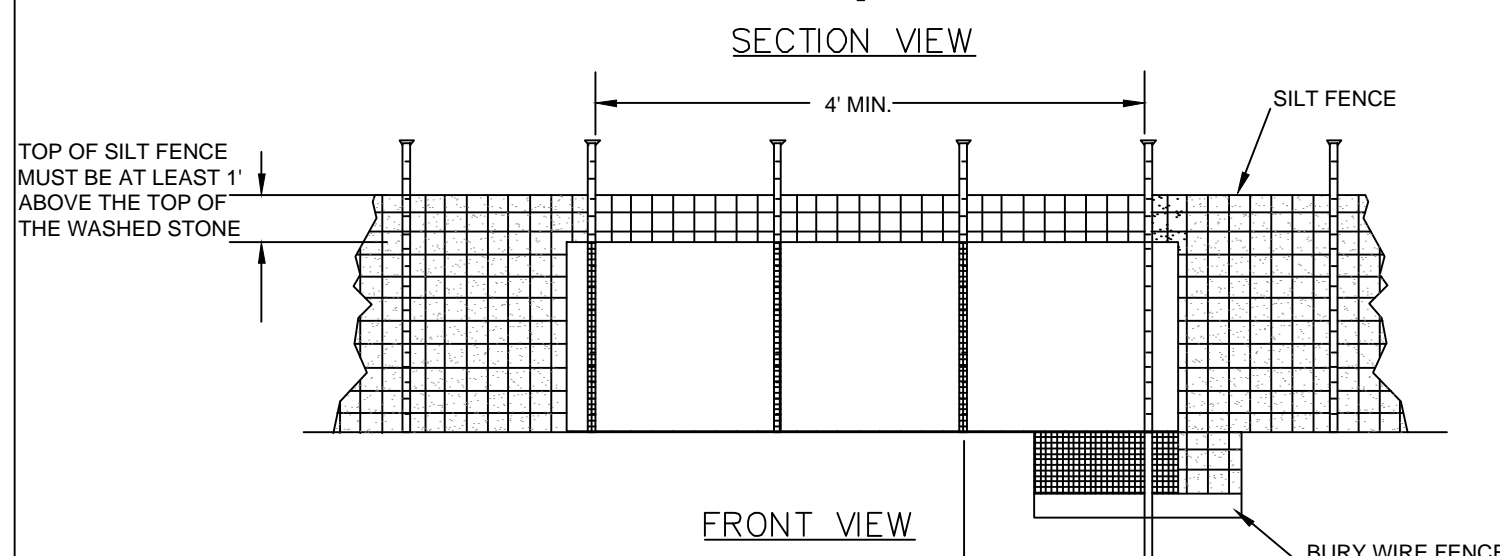
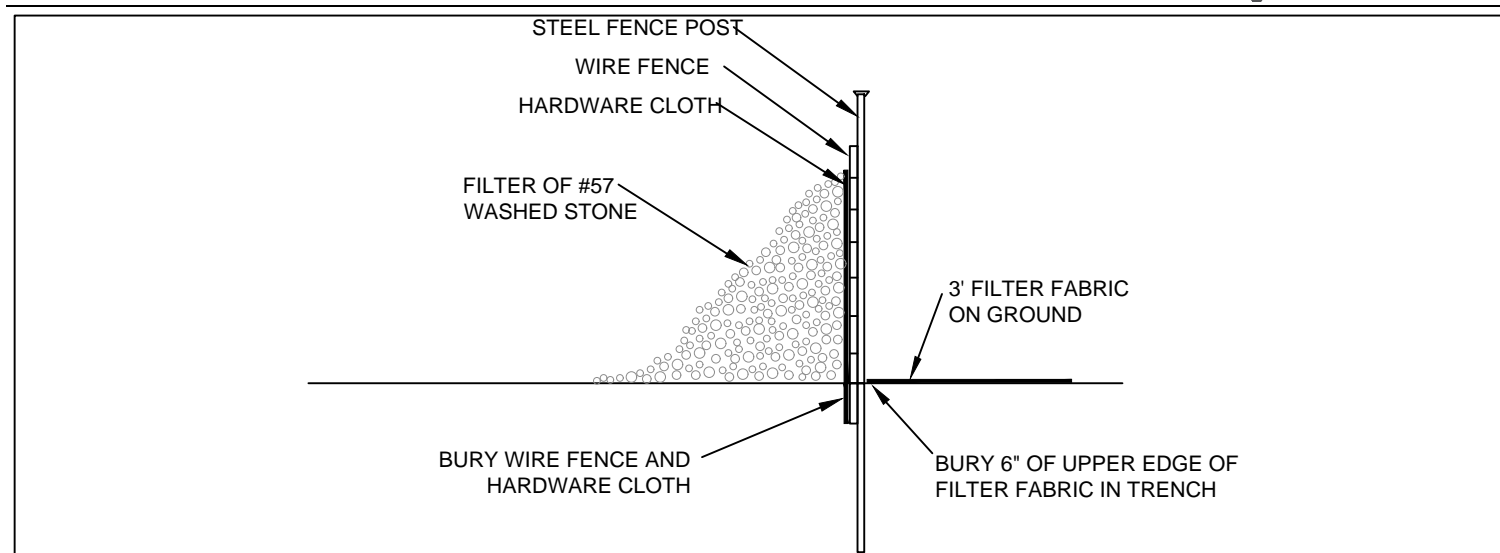
05/23/2022  
DRAWN BY: KHA  
DESIGNED BY: KHA  
REVIEWED BY: SAH  
DATE: 05/23/2022  
PROJECT NO.: 014527000  
TITLE: **EROSION CONTROL PLAN PHASE 2**  
SHEET NUMBER: **C5-20**





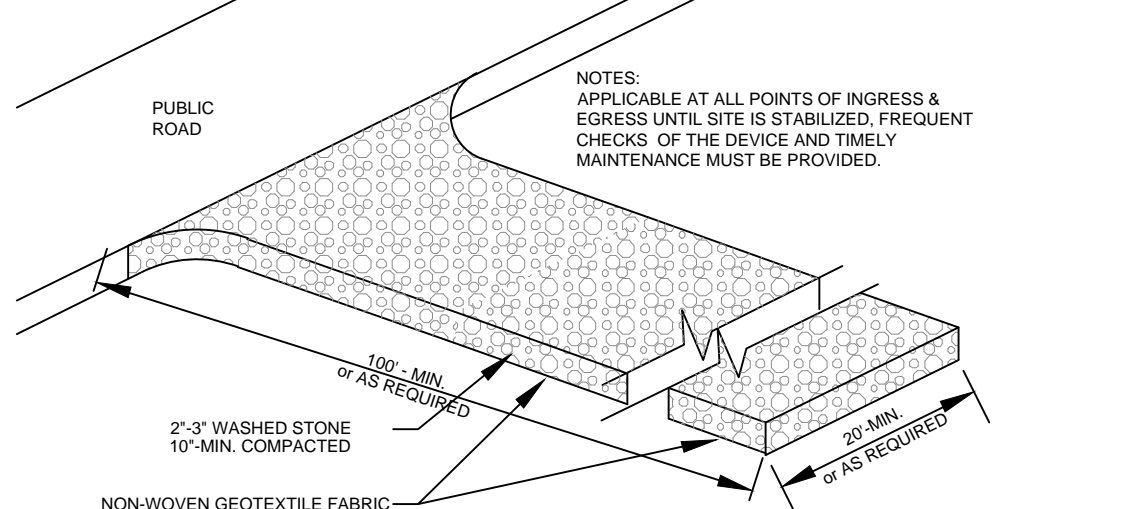
- NOTES:
1. REMOVE ANY EXISTING VEGETATION AND SCARIFY OR BENCH ADJACENT SOILS PRIOR TO PLACING BERM.
  2. BERM MATERIALS MUST BE ADEQUATELY COMPACTED AND IMMEDIATELY STABILIZED.
  3. DIVERSION DITCHES/BERMS MUST BE IMMEDIATELY STABILIZED TO PREVENT EROSION AND TRANSPORT OF SEDIMENT.
- MAINTENANCE: INSPECT DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.

**DB# DIVERSION BERM**  
Not to Scale



- NOTES:
1. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED.
  2. REPLACE STONE AS NEEDED TO ENSURE DEWATERING.
- MAINTENANCE: SEE SILT FENCE THIS SHEET FOR MAINTENANCE INFORMATION.
- SILT FENCE OUTLETS ARE TO BE PROVIDED ALONG ALL LOW POINTS OF SILT FENCE AND AREAS WHERE RUNOFF MAY CONCENTRATE CAUSING DAMAGE TO SILT FENCE. CONTRACTOR TO INSTALL OUTLETS AS NECESSARY TO ENSURE SILT FENCE IS FULLY FUNCTIONAL THROUGHOUT THE DURATION OF CONSTRUCTION.

**SILT FENCE ROCK OUTLET**  
Not to Scale



- NOTES: APPLICABLE AT ALL POINTS OF INGRESS & EGRESS UNTIL SITE IS STABILIZED. FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE MUST BE PROVIDED.
- CONSTRUCTION SPECIFICATIONS:
1. 2" - 3" WASHED STONE SHALL BE USED. PAD TO BE 100' X 20' X 10" D AT A MINIMUM.
  2. TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS IS TO BE PROVIDED.
  3. ENTRANCES SHOULD BE LOCATED TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES.
  4. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOP DRESSING WITH STONE SHALL BE NECESSARY - KEEP SOME HANDY.
  5. ANY MATERIAL WHICH STILL MAKES IT ONTO THE ROAD MUST BE CLEANED UP IMMEDIATELY.
  6. PLACE FRESH STONE ON CONSTRUCTION ENTRANCE WHEN SEDIMENTS AND MUD ACCUMULATE.
  7. ALL SITE ACCESS MUST BE CONFINED TO THE CONSTRUCTION EXIT(S). BARRICADE TO PREVENT USE OF ANY LOCATIONS OTHER THAN THE CONSTRUCTION EXIT(S) WHERE VEHICLES OR EQUIPMENT MAY ACCESS THE SITE.
  8. CONTRACTOR TO LOCATE TEMPORARY CONSTRUCTION FENCING, JERSEY BARRIERS, OR BOTH ALONG THE SIDES OF THE CONSTRUCTION EXIT TO PREVENT CONSTRUCTION TRAFFIC FROM SHORT CIRCUITING BY PASSING THE EXIT.

**CE TEMPORARY CONSTRUCTION ENTRANCE**  
Not to Scale



<b>PROJECT NAME</b>			
PROJECT NO.:	14527000	BY:	KHA
DATE:		T.M.:	
REVISED:		P.M.:	
<b>RIP RAP OUTLET</b>			

**RIP RAP OUTLET PROTECTION**

Project: Culvers Belmont  
 Calculated By: KHA Date: 3/31/2022  
 Revised By: T.M. Date: \_\_\_\_\_  
 Revised By: P.M. Date: \_\_\_\_\_

ID: A-0  $T_w < 0.5 D_o$  Y Use Fig. 8.06a  
 STA: N/A  $T_w \geq 0.5 D_o$  N Use Fig. 8.06b  
 DIA: 18 in  $L_s$  10 ft  
 Q: 11 cfs  $d_{50}$  0.55 ft  
 $d_{max}$  0.825 ft

$D_o = 18$  in  
 $3D_o = 4.5$  ft  
 $L_s = 10$  ft  
 $D_o + L_s = 11.5$  ft

Quantity Calculations  
 Outlet Pad: 80.0 sf  
 Rip Rap: 5.0 tons  
 Filter Fabric: 9 sy

\*Minimum apron thickness of 10" to be used  
 Apron thickness: 1.2375 ft  
 Rip Rap Class: B

<b>PROJECT NAME</b>			
PROJECT NO.:	14527000	BY:	KHA
DATE:		T.M.:	
REVISED:		P.M.:	
<b>RIP RAP OUTLET</b>			

**RIP RAP OUTLET PROTECTION**

Project: Culvers Belmont  
 Calculated By: KHA Date: 3/31/2022  
 Revised By: T.M. Date: \_\_\_\_\_  
 Revised By: P.M. Date: \_\_\_\_\_

ID: C-2  $T_w < 0.5 D_o$  Y Use Fig. 8.06a  
 STA: N/A  $T_w \geq 0.5 D_o$  N Use Fig. 8.06b  
 DIA: 18 in  $L_s$  10 ft  
 Q: 3 cfs  $d_{50}$  0.3 ft  
 $d_{max}$  0.45 ft

$D_o = 18$  in  
 $3D_o = 4.5$  ft  
 $L_s = 10$  ft  
 $D_o + L_s = 11.5$  ft

Quantity Calculations  
 Outlet Pad: 80.0 sf  
 Rip Rap: 2.7 tons  
 Filter Fabric: 9 sy

\*Minimum apron thickness of 10" to be used  
 Apron thickness: 0.675 ft  
 Rip Rap Class: A

**CONSTRUCTION SPECIFICATIONS**

**MATERIALS**

1. USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 661, WHICH IS SHOWN IN PART IN TABLE 6.02B.
2. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120° F.
3. ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1/2 LB/LINEAR FT MINIMUM STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
4. FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

**CONSTRUCTION**

1. CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
2. ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24 INCHES ABOVE THE GROUND SURFACE. (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.)
3. CONSTRUCT THE FILTER FABRIC FROM A CONTINUOUS ROLL CUT TO LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.
4. SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THEN FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
5. WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORT POSTS SHOULD BE DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
6. EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACING DOES NOT REQUIRE WIRE MESH SUPPORT FENCE. SECURELY FASTEN THE FILTER FABRIC DIRECTLY TO POSTS. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
7. EXCAVATE A TRENCH APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
8. PLACE 1/2 INCHES OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
9. BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTON OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
10. DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

**MAINTENANCE**

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

**FRONT VIEW**

**SILT FENCE FABRIC INSTALLED TO SECOND WIRE FROM TOP**

**SIDE VIEW**

STEEL POST  
 WOVEN WIRE FABRIC  
 WIRE MESH SUPPORT FABRIC  
 FILL SLOPE  
 GRADE  
 6" MIN. COVER OVER SKIRT  
 ANCHOR SKIRT AS DIRECTED BY ENGINEER

NOTE: USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW - END OF SILT FENCE - NEEDS TO BE TURNED UPHILL.

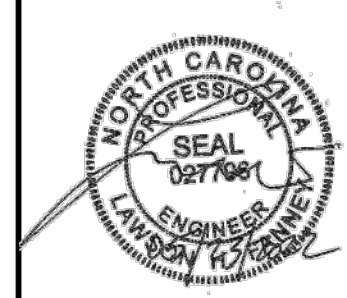
**TEMPORARY SILT FENCE**  
Not to Scale



SOUTHERN SOCIETY OF BENEDICTINE SOCIETY OF NORTH CAROLINA  
 BELMONT, NC 28012  
 100 BELMONT MT. HOLLY ROAD  
 BELMONT, NC 28012  
 PHONE: 414-587-7459

NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S - BELMONT**  
 HAWLEY AVE. BELMONT NC 28012  
 LAND LOT 15 16 17 18 19 ND DISTRICT  
 PARCEL ID: 214364, 214365, 214366, 221080 & 221080

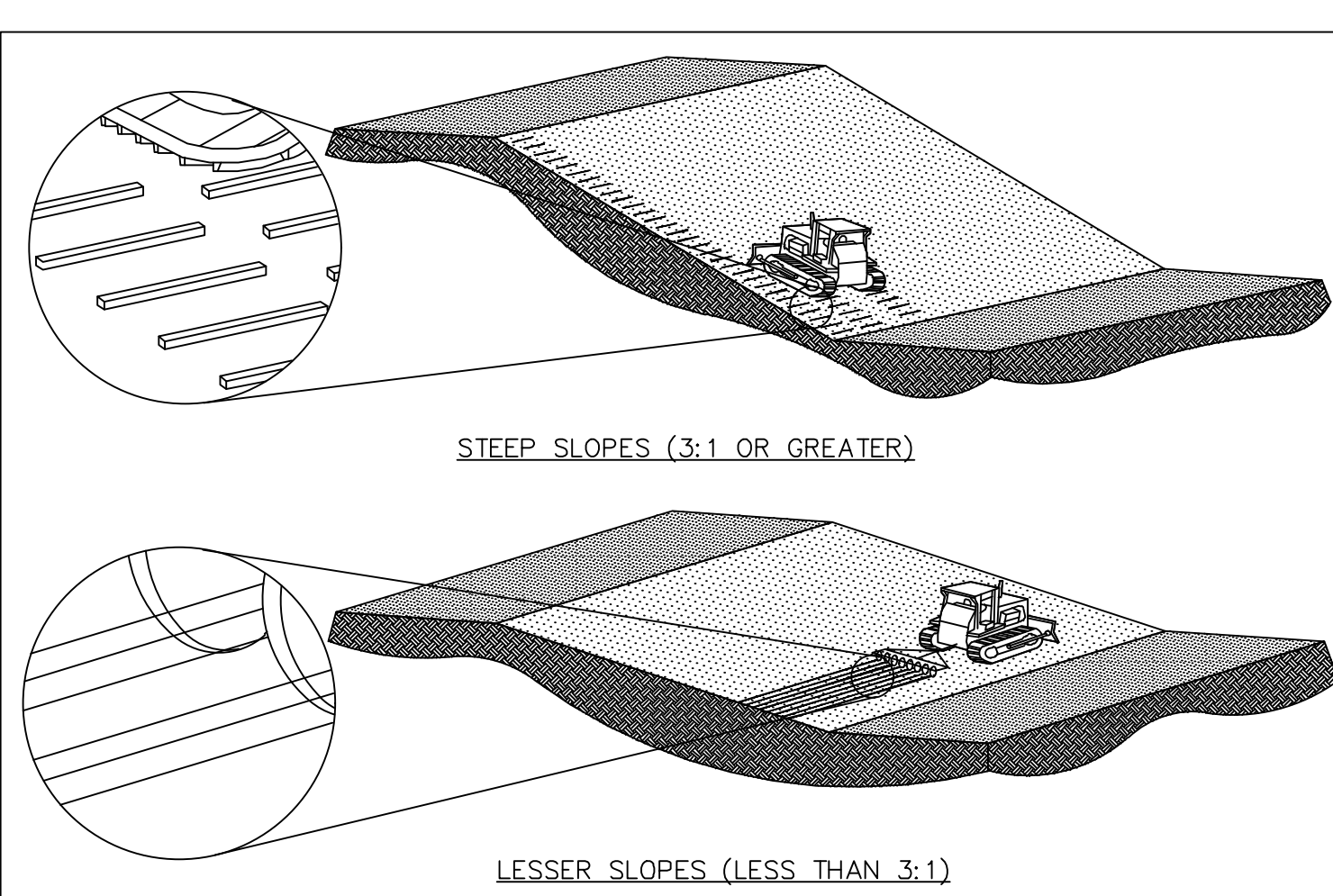


05/23/2022

DRAWN BY:	KHA
DESIGNED BY:	KHA
REVIEWED BY:	SAH
DATE:	05/23/2022
PROJECT NO.:	014527000

TITLE  
**EROSION CONTROL DETAILS**  
 SHEET NUMBER  
**C5-80**

Drawing Name: K:\ALP\_PRR\014527000\_culvers-belmont\nc\CAD\plansheets\C5-80\_EROSION CONTROL DETAILS.dwg, May 23, 2022, 3:19pm, by: Taylor, James, nc\CAD\plansheets\C5-80\_EROSION CONTROL DETAILS.dwg



**PURPOSE:**  
SURFACE ROUGHENING OR SCARIFICATION IS A TECHNIQUE USED FOR CREATING UNEVENNESS ON BARE SOIL TO REDUCE SLOPE EROSION AND THE FORMATION OF RILLS. THE PRIMARY FUNCTIONS OF SURFACE ROUGHENING ARE TO:

- REDUCE EROSION POTENTIAL BY DECREASING RUNOFF VELOCITIES
- TRAP SEDIMENT
- INCREASE INFILTRATION OF WATER INTO THE SOIL
- AID IN THE ESTABLISHMENT OF VEGETATIVE COVER VIA MOISTURE STORAGE

**GENERAL NOTES:**

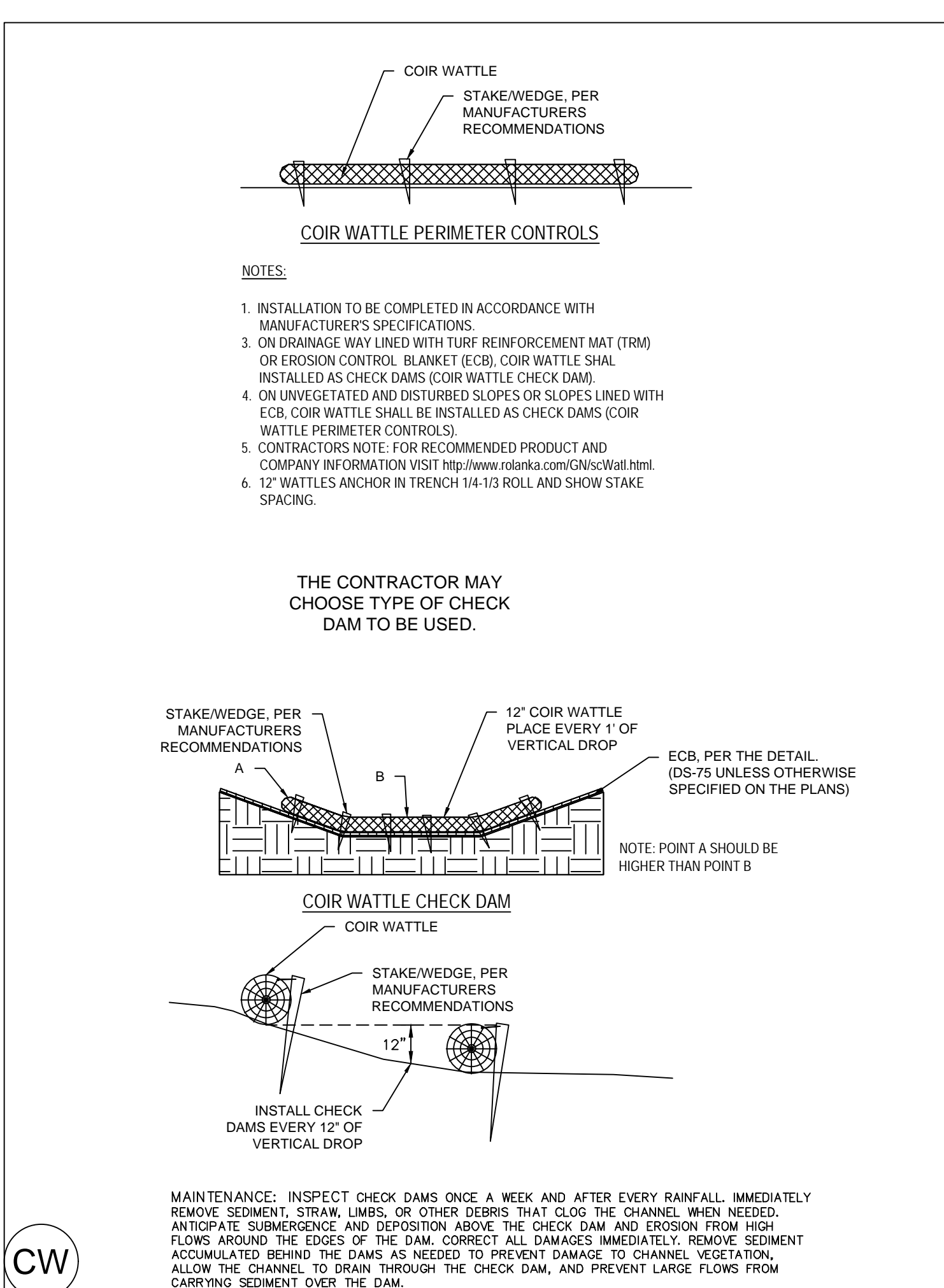
- PROVIDE A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS.
- CAN BE COMPLETED WITH A TILLER OR OTHER EQUIPMENT WITH SIMILAR EFFICIENCY.
- DURING MASS GRADING, MAINTAIN SLOPES IN A ROUGHENED CONDITION WITHOUT FINE GRADING.
- SURFACE ROUGHENING SHOULD BE PERFORMED AFTER FINE GRADING.
- ROUGHENING CANNOT BE USED IF SANDY OR ROCKY SOIL IS PRESENT.
- A FARMING DISC SHALL NOT BE USED FOR SURFACE ROUGHENING.
- FOR STEEP SLOPES (3:1 OR STEEPER), IT IS ACCEPTABLE TO TRACK THE SLOPES, ACCORDING TO THE DETAIL.
- IN ADDITION TO DAILY INSPECTIONS, THE CONTRACTOR SHALL INSPECT THE SURFACE ROUGHENING AT THE FOLLOWING INTERVALS:
  - IMMEDIATELY FOLLOWING INITIAL ROUGHENING.
  - IMMEDIATELY FOLLOWING ANY RAIN EVENT.

**INSTALLATION AND INSPECTION AND MAINTENANCE NOTES:**

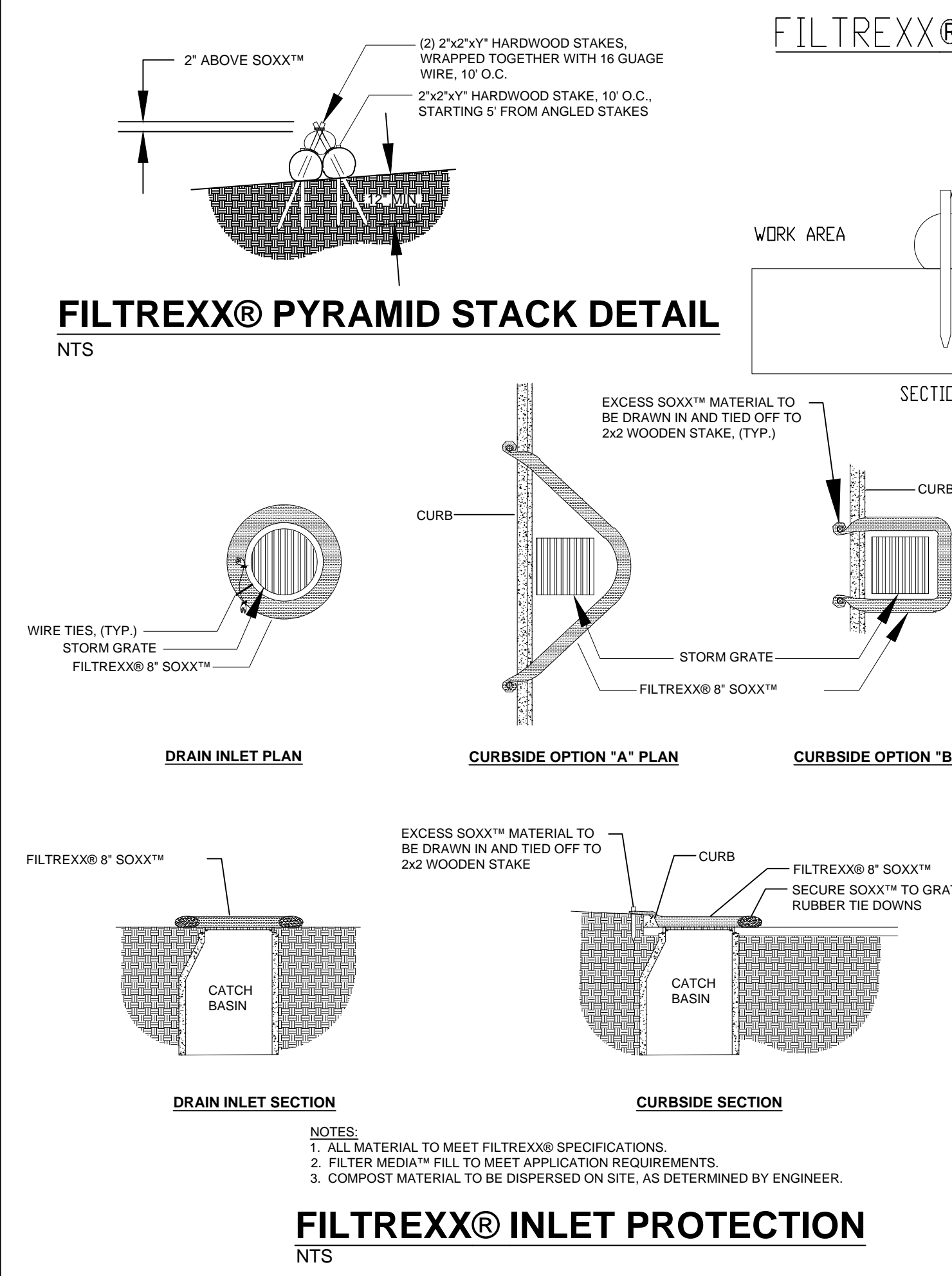
- SEE SITE MAPS FOR LOCATION(S) OF SURFACE ROUGHENING.
- ANY DISTURBED LAND THAT WILL REMAIN INACTIVE FOR MORE THAN 14 CONSECUTIVE DAYS - OR LESS PER APPLICABLE LAWS(S) - MUST RECEIVE SURFACE ROUGHENING IN ADDITION TO THE IMPLEMENTATION OF TEMPORARY OR PERMANENT EROSION CONTROL MEASURES.
- CRESTS AND VALLEYS SHALL BE HORIZONTAL; THAT IS, ALONG THE CONTOUR.
- SOIL SHALL BE ROUGHENED A MINIMUM OF 6 INCHES DEEP USING RIGID SHANKS.
- A FARMING DISC SHALL NOT BE USED FOR SURFACE ROUGHENING.
- FOR STEEP SLOPES (3:1 OR STEEPER), IT IS ACCEPTABLE TO TRACK THE SLOPES, ACCORDING TO THE DETAIL.
- IN ADDITION TO DAILY INSPECTIONS, THE CONTRACTOR SHALL INSPECT THE SURFACE ROUGHENING AT THE FOLLOWING INTERVALS:
  - IMMEDIATELY FOLLOWING INITIAL ROUGHENING.
  - IMMEDIATELY FOLLOWING ANY RAIN EVENT.

**MAINTENANCE:** PERIODICALLY CHECK THE SEEDED SLOPES FOR RILLS AND WASHES. FILL THESE AREAS SLIGHTLY ABOVE THE ORIGINAL GRADE, THEN RESEED AND MULCH AS SOON AS POSSIBLE.

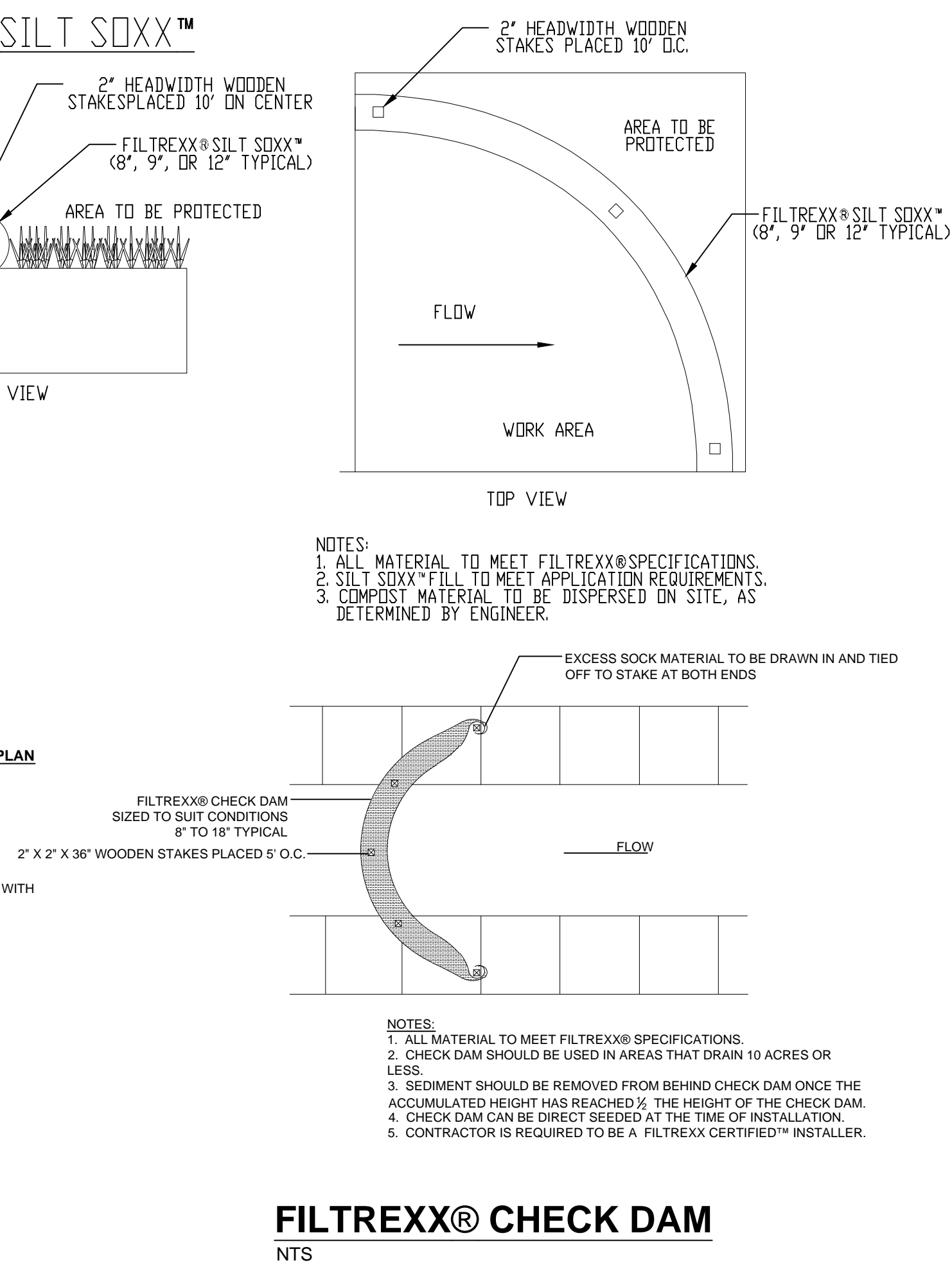
**SURFACE ROUGHENING/SLOPE TRACKING**  
Not to Scale  
**Kimley»Horn**



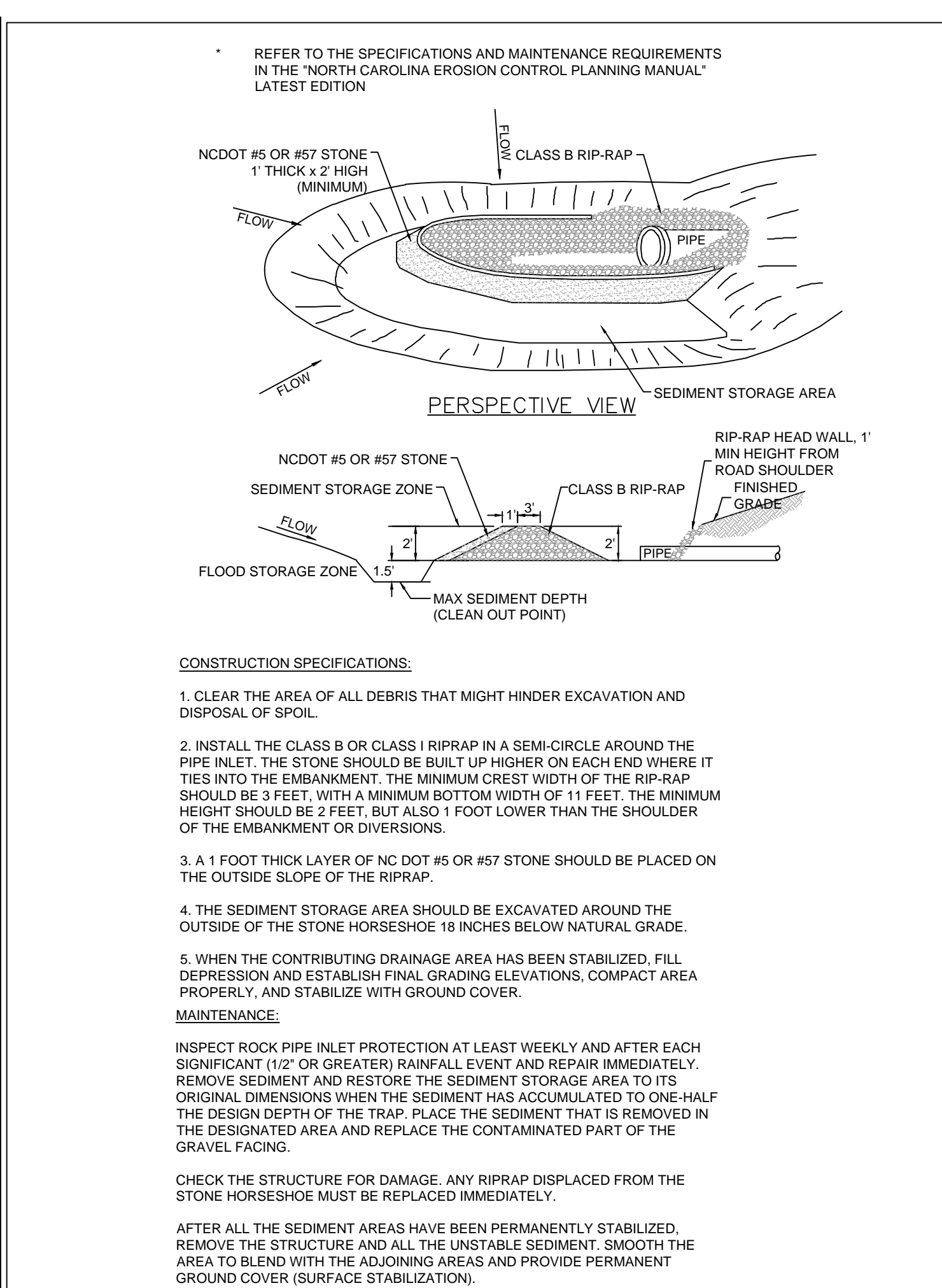
**COIR WATTLE/COIR WATTLE CHECK DAM**  
Not to Scale  
**Kimley»Horn**



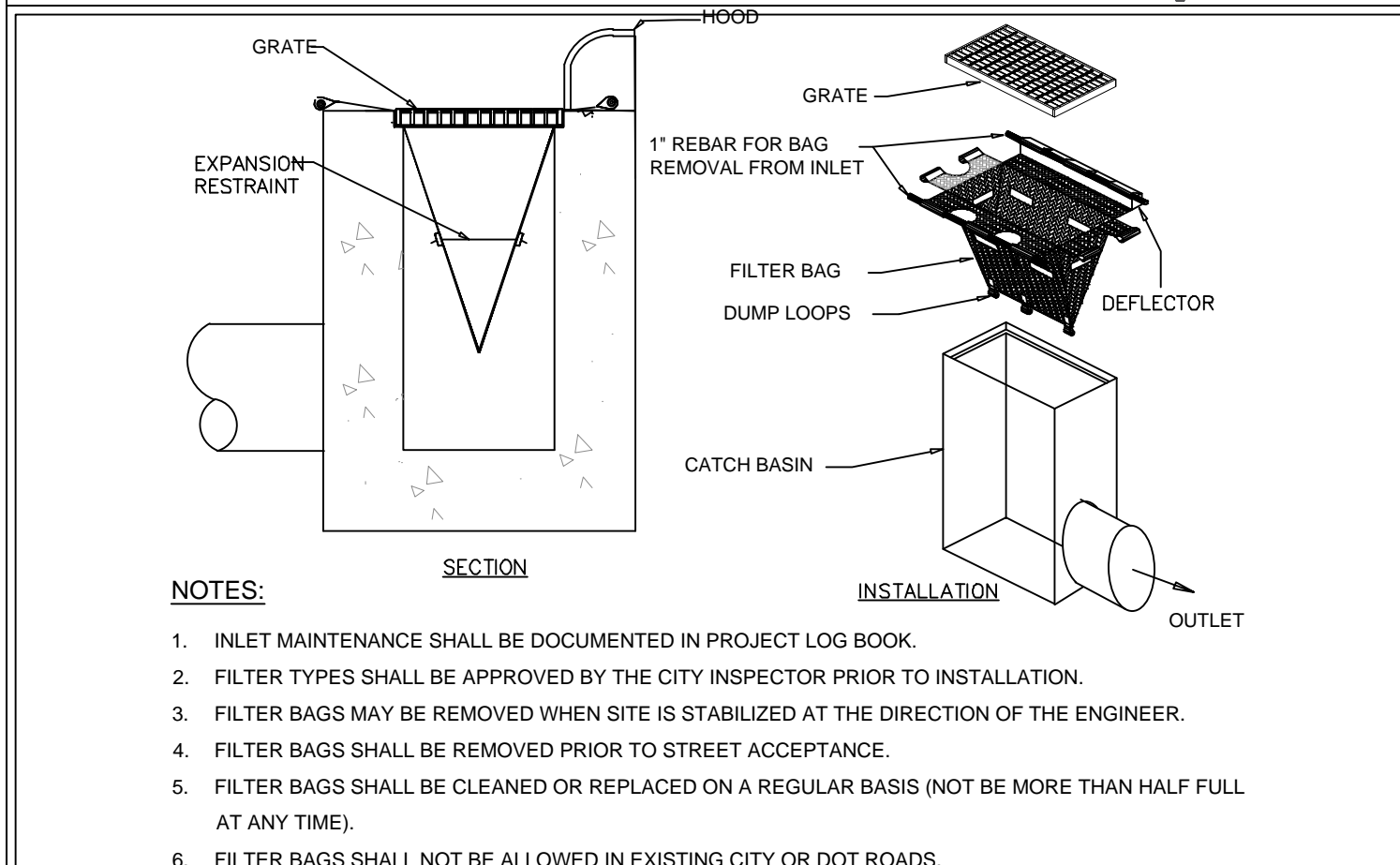
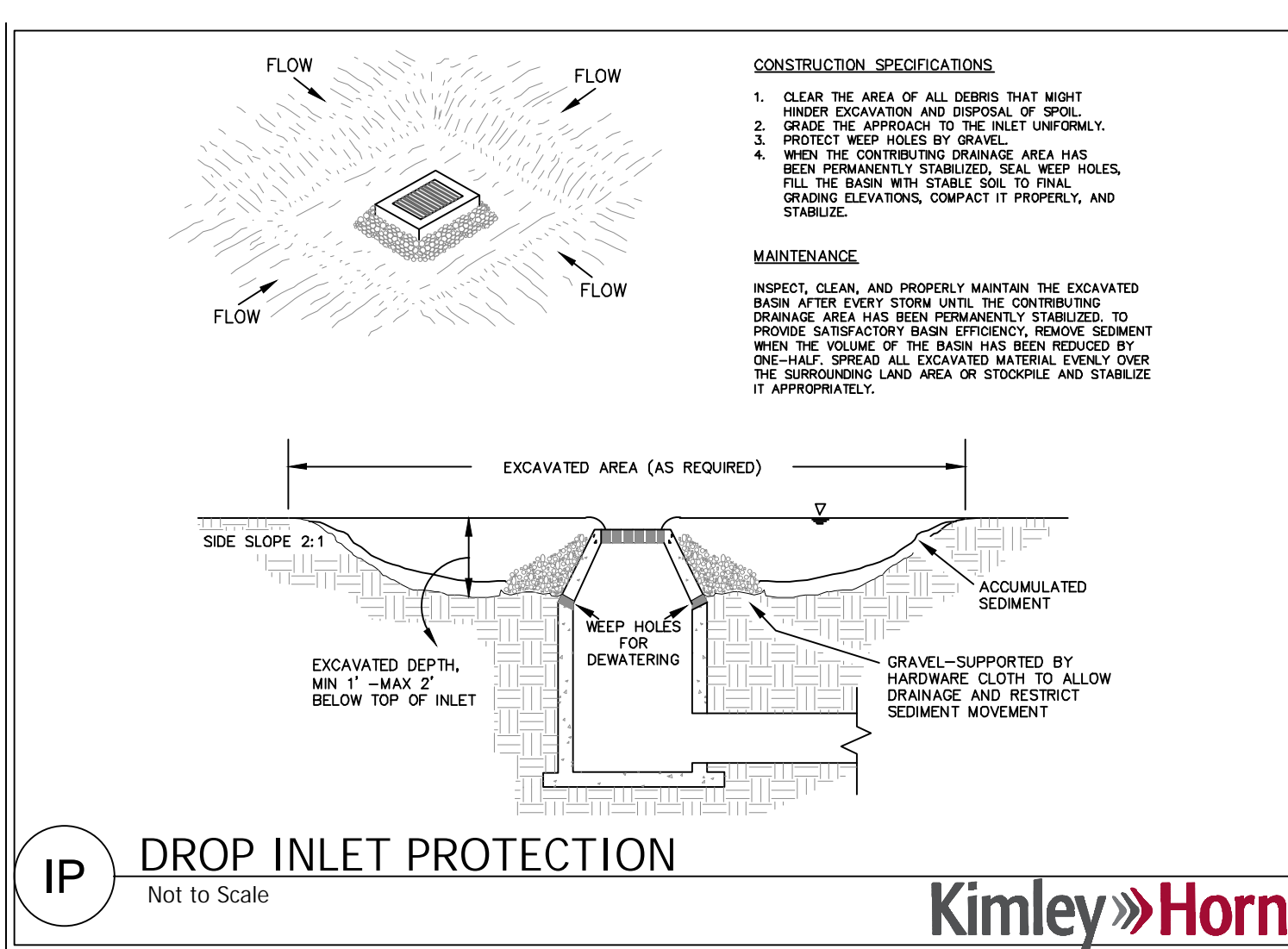
**FILTER SOCK DETAILS**  
Not to Scale  
**Kimley»Horn**



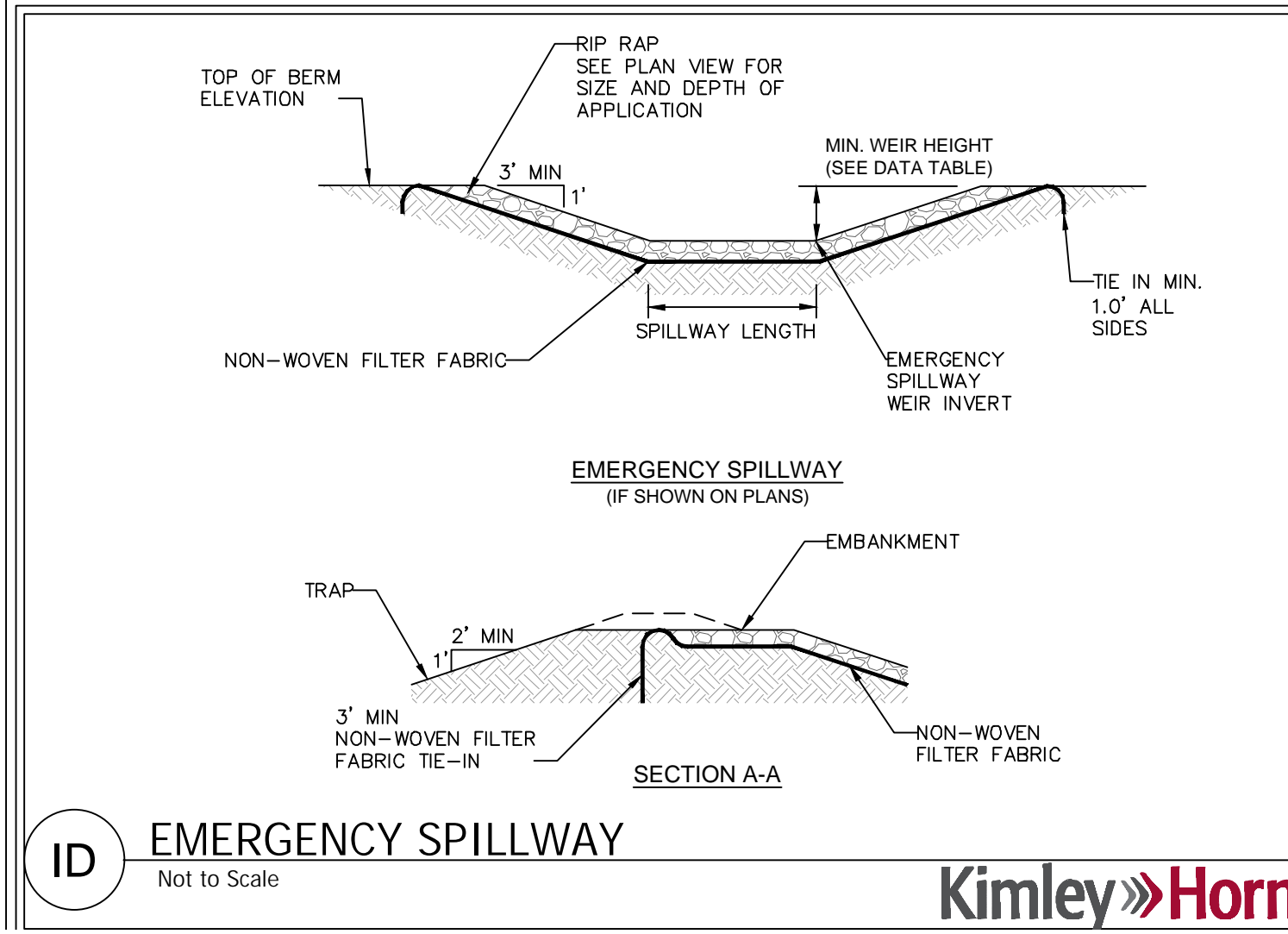
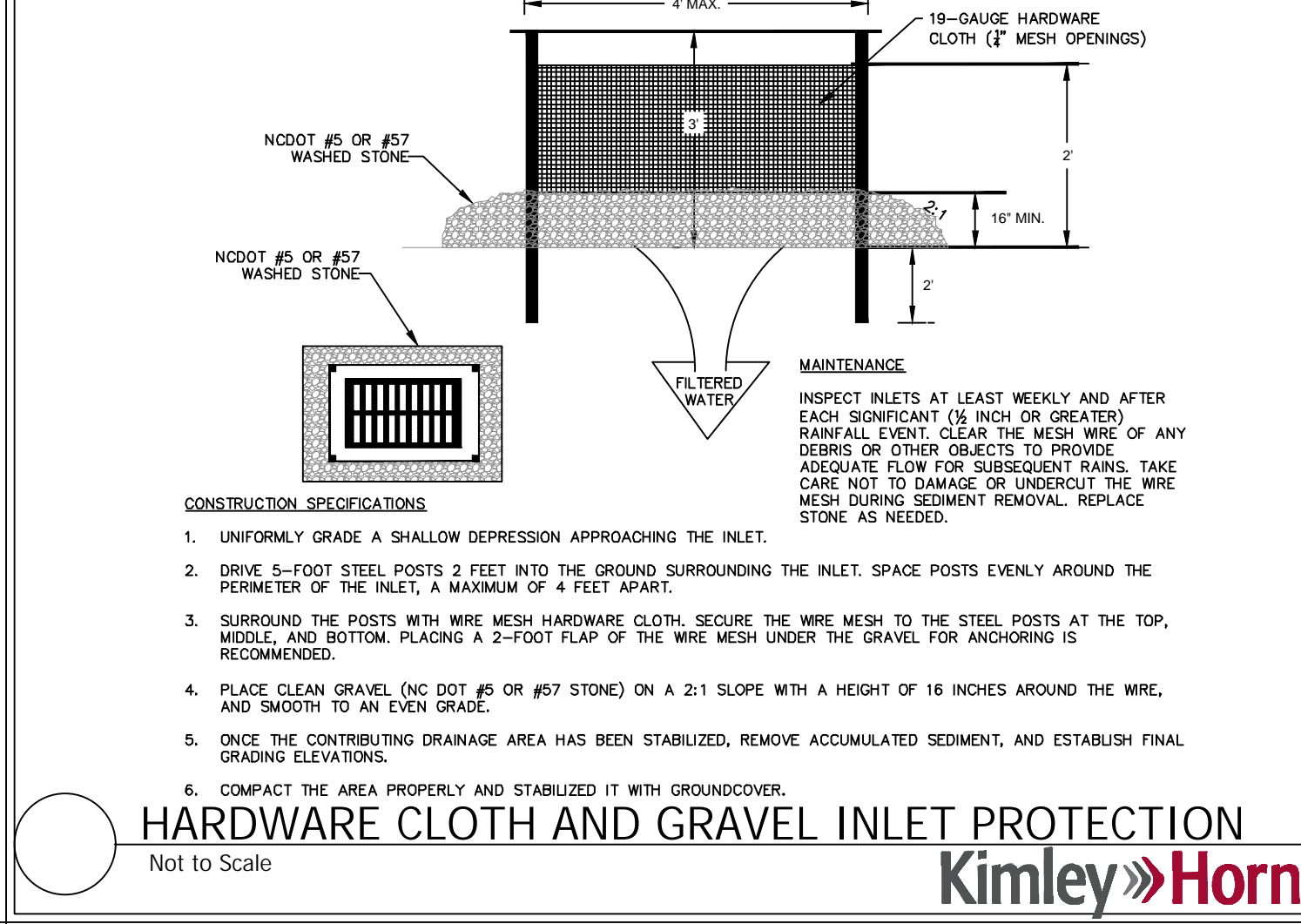
**FILTREXX® CHECK DAM**  
Not to Scale  
**Kimley»Horn**



**ROCK PIPE INLET PROTECTION**  
Not to Scale  
**Kimley»Horn**



**CATCH BASIN INLET PROTECTION**  
Not to Scale  
**Kimley»Horn**



**EMERGENCY SPILLWAY**  
Not to Scale  
**Kimley»Horn**

Drawing name: K:\ALP\_PRR\0414527000\_culvers-belmont\c5-80\_erosion\_control\_details.dwg, 05-31-2022, 2:19pm, by: Taylor, James, not, no, CAD, plan sheet, C5-80, EROSION CONTROL DETAILS.dwg

**Kimley»Horn**

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100 BELMONT MT. HOLLY ROAD  
BELMONT, NC 28012  
PHONE: 414-597-7459

NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S - BELMONT**  
HAWLEY AVE. BELMONT NC 28012  
LAND LOT 15-16-17-18-19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080

PROJECT: **EROSION CONTROL DETAILS**

DRAWN BY: KHA  
DESIGNED BY: KHA  
REVIEWED BY: SAH  
DATE: 05/23/2022  
PROJECT NO: 014527000  
TITLE: **EROSION CONTROL DETAILS**  
SHEET NUMBER: **C5-81**

05/23/2022



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**PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION A: SELF-INSPECTION**  
Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (note this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero". The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event $\geq 1.0$ inch in 24 hours	1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Location of whether the measures were operating properly. 5. Description of maintenance needs for the measure. 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outlets (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event $\geq 1.0$ inch in 24 hours	1. Identification of the discharge outlets inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration. 5. Indication of visible sediment leaving the site. 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event $\geq 1.0$ inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits. 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or off-site (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event $\geq 1.0$ inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item 2(f) of this permit of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment of permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

**PART III  
SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION B: RECORDKEEPING**  
**1. E&SC Plan Documentation**  
The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

Item to Document	Documentation Requirements
(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC Measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

**2. Additional Documentation**  
In addition to the E&SC Plan documents above, the following items shall be kept on the site and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This general permit as well as the certificate of coverage, after it is received.

(b) Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

(c) All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available

**GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT**  
Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

**SECTION E: GROUND STABILIZATION**

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

NOTE: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 30 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

**GROUND STABILIZATION SPECIFICATION**  
Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Roller erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	<ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt or retaining walls</li> <li>Roller erosion control products with grass seed</li> </ul>

**POLYACRYLAMIDES (PAMS) AND FLOCCULANTS**

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the NC DWR List of Approved PAMS/Flocculants.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the NC DWR List of Approved PAMS/Flocculants and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

**EQUIPMENT AND VEHICLE MAINTENANCE**

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

**LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

**PAINT AND OTHER LIQUID WASTE**

- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

**PORTABLE TOILETS**

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

**EARTHEN STOCKPILE MANAGEMENT**

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

**CONCRETE WASHOUTS**

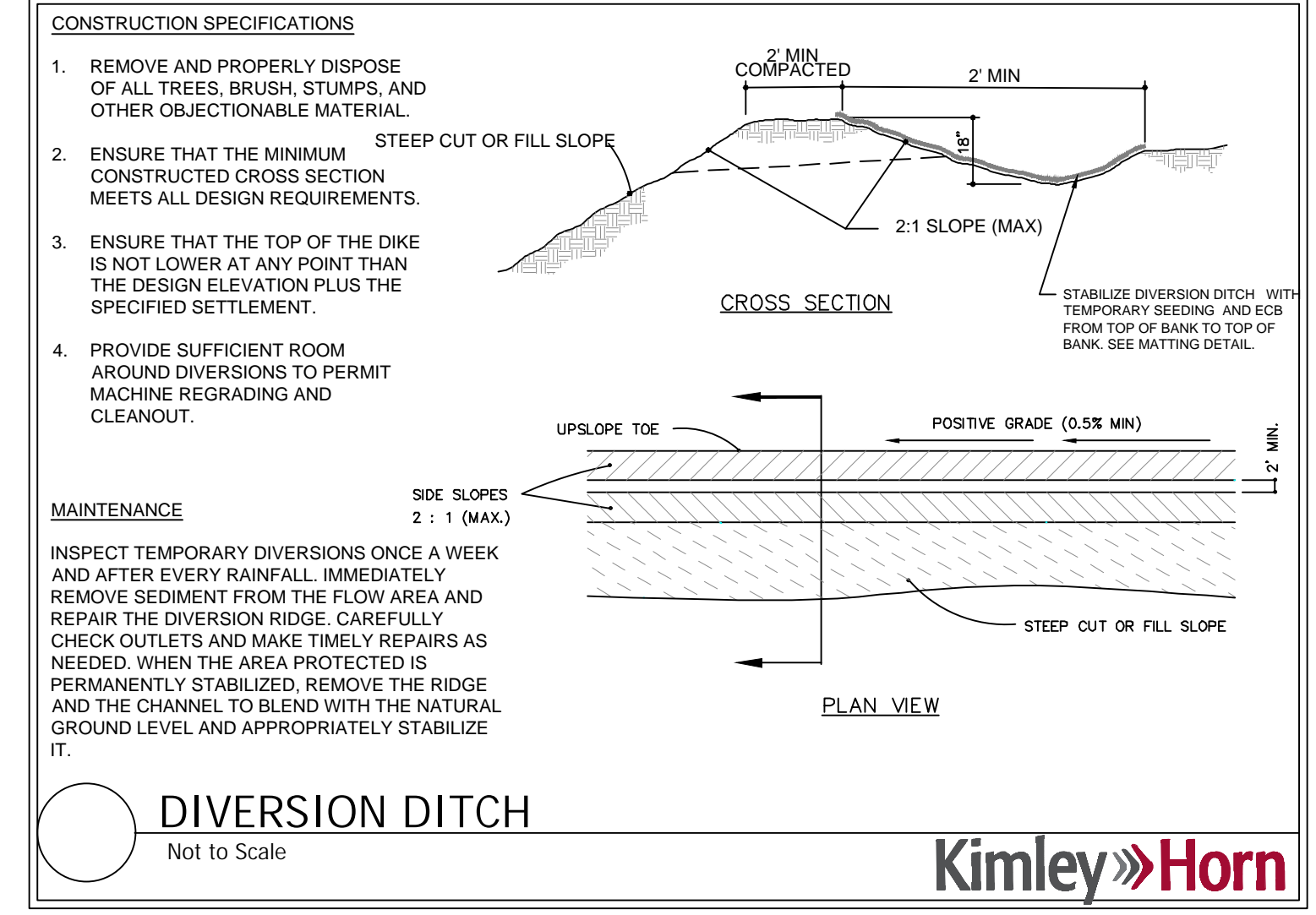
- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

**HERBICIDES, PESTICIDES AND RODENTICIDES**

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

**HAZARDOUS AND TOXIC WASTE**

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.



**DIVERSION DITCH DATA TABLE**

Kimley Horn

Project Information  
Project Name: 014527000 - Culver's Belmont  
KHA Project #: 014527000  
Designed by: BAA Date: 03/15/2022  
Reviewed by: Date:

**TEMPORARY DIVERSION ANALYSIS (PHASE I)**

Approval of this plan sheet does not constitute a final design.

Ditch Item No.	Ditch Dimensions	Side Slopes (H:V)	Bottom Width (ft)	Min. Ditch Gradient (%)	Max. Ditch Gradient (%)	Drainage Area (Ac)	Composite Coefficient	Tc (min)	Intensity (in/hr)	Peak Flow Q <sub>p</sub> (cfs)	Manning's "n"	Max. Depth of Flow" (ft)	Min. Depth of Flow" (ft)	Max. Calculated Velocity" (ft/s)	Check Dam Height (ft)	Phase of Construction Required
DD1	1.5' Deep TRIANGULAR	2:1 & 3:1	N/A	1.00%	4.00%	0.74	0.60	5.00	7.00	3.12	0.03	0.60	0.47	3.50	1.00	1
DD2	1.5' Deep TRIANGULAR	2:1 & 3:1	2.0	1.00%	3.75%	0.73	0.60	6.00	7.00	3.08	0.03	1.02	0.85	6.00	1.00	1

\* From Bentley Flowmaster channel design software.

Ditch Item No.	E&SC Type	Max. Calculated Velocity" (ft/s)	Permissible Velocity" (ft/s)	Min. Depth of Flow" (ft)	Calculated Shear stress" (lb/ft <sup>2</sup> )	Permissible Shear stress" (lb/ft <sup>2</sup> )
DD1	OS100 or Greater	3.50	6.50	0.47	1.17	1.70
DD2	OS100 or Greater	5.50	6.50	0.60	3.09	3.70

\* Permissible velocity and shear stress for temporary ditch liners from Manufacturer Specification Sheet.  
\* From Bentley Flowmaster channel design software.

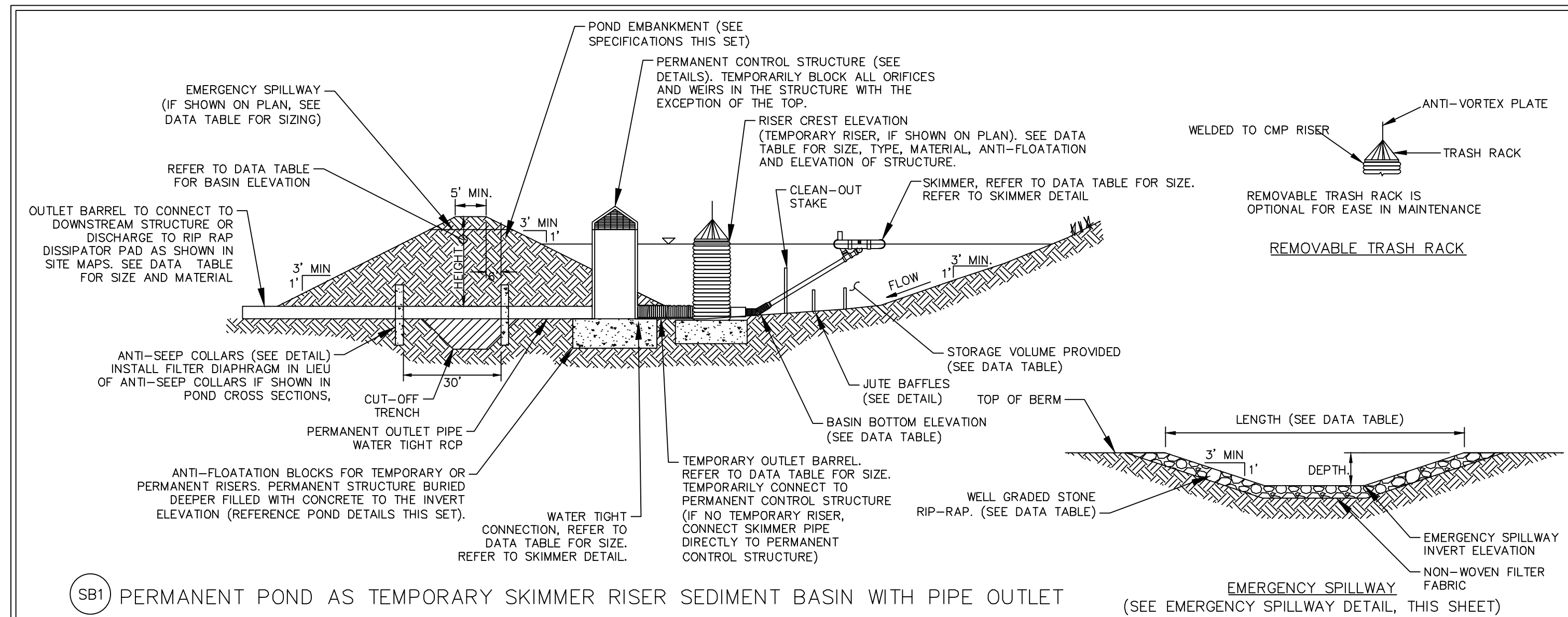
PREPARED BY: **Kimley Horn**  
SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA  
100 BELMONT, NC 28012  
11720 AMBER PARK DRIVE, SUITE 600  
ALBEMONT, NC 27012  
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PROJECT: **CULVER'S - BELMONT**  
HAWLEY AVE, BELMONT NC 28012  
LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080

05/23/2022

DRAWN BY: KHA  
DESIGNED BY: KHA  
REVIEWED BY: SAH  
DATE: 05/23/2022  
PROJECT NO.: 014527000  
TITLE: **EROSION CONTROL DETAILS**  
SHEET NUMBER: **C5-83**

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SB1 PERMANENT POND AS TEMPORARY SKIMMER RISER SEDIMENT BASIN WITH PIPE OUTLET

**GENERAL NOTES:**

1. POND EMBANKMENTS AND ALL ASSOCIATED APPURTENANCES SHALL BE CONSTRUCTED PER THE EMBANKMENT SPECIFICATIONS ON THE STORM DRAINAGE AND POND DETAILS SHEET.
2. REFER TO THE SKIMMER BASIN DATA TABLE THIS SHEET FOR ALL DIMENSIONS AND SIZES.
3. ALL PIPE CONNECTIONS SHALL BE WATERTIGHT.
4. SKIMMER SHOWN IN FLOATING POSITION.
5. SEDIMENT BASINS MUST BE INSPECTED AND MUST BE CLEANED WHEN THE ORIGINAL CAPACITY HAS BEEN REDUCED BY 50 PERCENT OR LESS, AS REQUIRED BY GOVERNING AGENCY.
6. ALL MATERIAL EXCAVATED FROM BEHIND SEDIMENT BARRIERS OR FROM BASINS SHALL BE INCORPORATED INTO ON-SITE SOILS OR SPREAD OUT ON AN UPLAND PORTION OF THE SITE AND STABILIZED IN SUCH A MANNER THAT IT WILL NOT ERODE.
7. VERIFY THAT NO EROSION IS OCCURRING AT DISCHARGE POINTS TO AND FROM IMPOUNDMENTS AND VERIFY THAT BASIN SIDE SLOPES ARE STABILIZED AND SHOW NO SIGNS OF EROSION.
8. OUTLET STRUCTURES IN SEDIMENT BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES.
9. THE BASIN SHALL BE INSPECTED DAILY AND REPAIRS MADE AS NEEDED IN ACCORDANCE WITH THE SWPPP.
10. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
11. CLEANOUT STAKES SHALL BE PLACED IN ALL SEDIMENT BASINS AT THE LOW POINT IN THE BASIN. THE STAKES SHALL BE MARKED SHOWING THE HALF FULL, CLEANOUT POINT, OF THE BASIN.
12. SAFETY FENCING 3' HIGH SHOULD BE PLACED AROUND ALL SEDIMENT BASINS.
13. SEE DESIGN TABLES BELOW FOR INFORMATION REGARDING THE SIZE AND ELEVATION ASSOCIATED WITH THE TEMPORARY RISER AND BARREL.

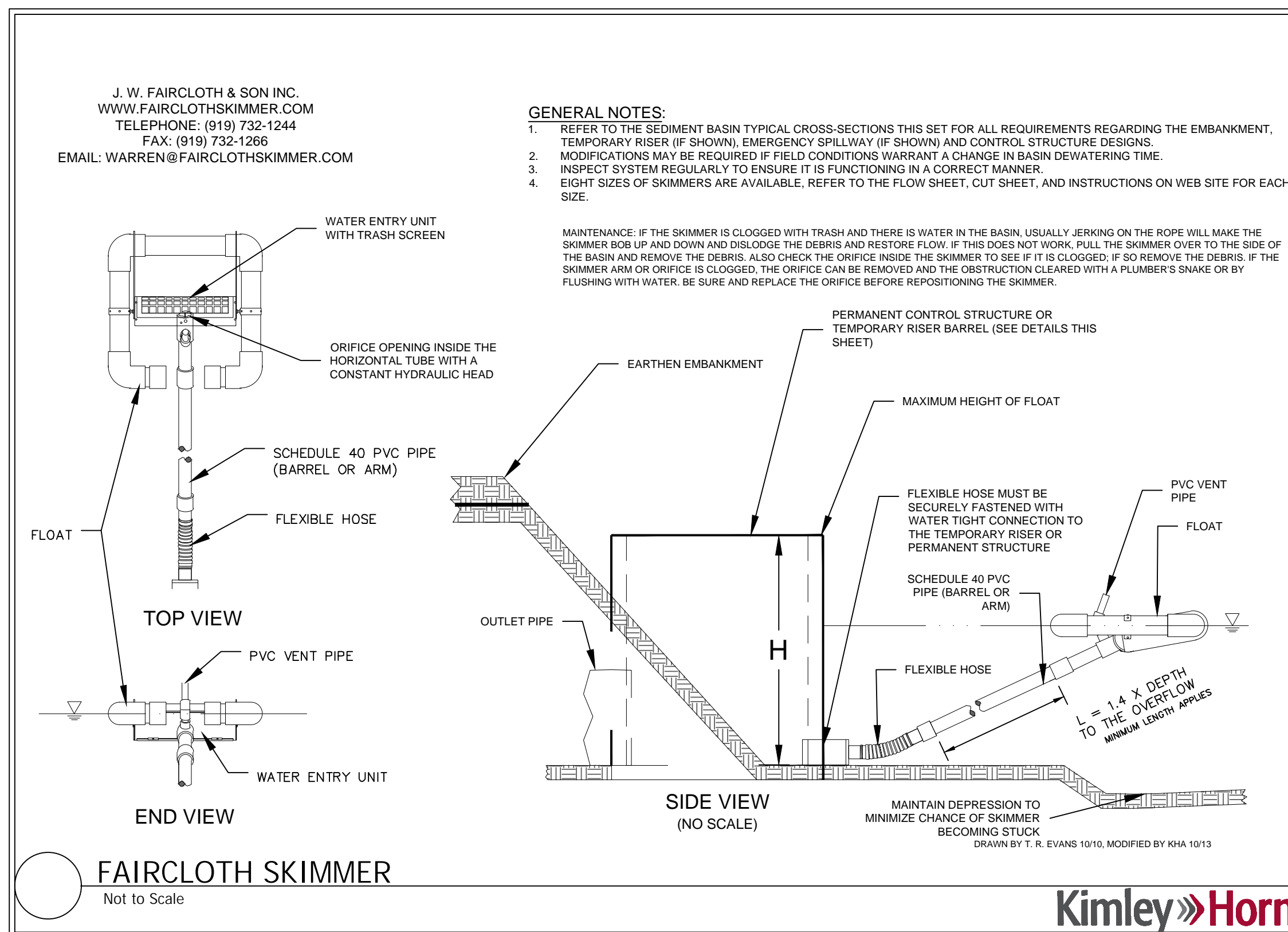
SB TEMPORARY SEDIMENT BASIN

Not to Scale



**SKIMMER SEDIMENT BASIN B DATA TABLE**

Project Information		Project Information	
Project Name: Culver's Belmont		KHA Project #: 014527000	
Designed by: SAH	Date: 3/31/2022	Checked by: SAH	Date: 3/31/2022
Revised by: SAH	Date: 3/31/2022		
Sediment Basin			
Drainage Area (Site) (ac) =	2.47		
Disturbed Area (ac) =	1.44		
Runoff Coefficient (C) =	0.60		
Time of Concentration =	5.00		
Rainfall Intensity (2-yr Storm) "I" (in/hr) =	6.85		
Rainfall Intensity (10-yr Storm) "I" (in/hr) =	9.57		
Flow (Q <sub>s</sub> ) (cfs) =	10.2	(Q=c*I*drainage area)	
Flow (Q <sub>d</sub> ) (cfs) =	14.2	(Q=c*I*drainage area)	
Required Storage (cf) =	5,184.0	(3600 cf per Disturbed Acre)	
Required Surface Area (Trapping Efficiency)(sf) =	6,169.5	(435 s.f. per cfs of Q <sub>s</sub> peak inflow)	
Storage Dimensions:			
Basin Side Slopes (X:1) =	2.0		
Storage Depth "R" (ft) =	1.0		
Bottom Elevation			
Elev (ft)	Area (SF)	Cumulative Volume (CF)	
671.00	2,500	0	
671.00	2,500	0	
671.00	2,500	0	
672.00	3,700	3,100	
673.00	5,100	7,600	
674.00	6,400	13,250	
675.00	7,900	20,400	
Spillway Elevation			
Elev (ft)	Area (SF)	Cumulative Volume (CF)	
672.00	3,700	3,100	
673.00	5,100	7,600	
674.00	6,400	13,250	
675.00	7,900	20,400	
Top of Basin			
Designed Storage Elevation (ft) =	672.00		
Designed Storage Volume (cf) =	7,500		
Designed Surface Area (sf) =	5,100		
		O.K. - Minimum Required Storage NOT O.K. MAKE BASIN LARGER!	



FAIRCLOTH SKIMMER

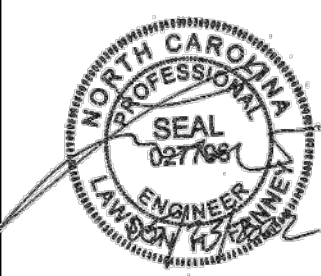
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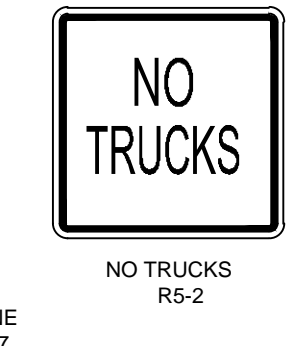
PREPARED FOR  
**SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA**  
 100 BELMONT MT. HOLLY RD.  
 BELMONT, NC 28012  
 PHONE: 414-557-7459  
 WWW.KIMLEY-HORN.COM

No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S - BELMONT**  
 HAWLEY AVE. BELMONT NC 28012  
 LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
 PARCEL ID: 214384, 214385, 214386, 221080 & 221080



05/23/2022
DRAWN BY: KHA
DESIGNED BY: KHA
REVIEWED BY: SAH
DATE: 05/23/2022
PROJECT NO. 014527000
TITLE: <b>EROSION CONTROL DETAILS</b>
SHEET NUMBER: <b>C5-84</b>



STANDARD SITE SIGNAGE  
Not to Scale  
**Kimley»Horn**

**GENERAL NOTES:**

- ALL ACCESSIBLE COMPONENTS CONSTRUCTED AS PART OF THESE PLANS SHALL COMPLY WITH LOCAL AND STATE BUILDING CODE.
- ACCESSIBLE ROUTE TO ACCESSIBLE SPACES, BUILDING ENTRANCES, AND PUBLIC STREETS SHALL NOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE.
- UNLESS OTHERWISE SHOWN ON THE PLANS, THE MINIMUM CLEAR ROUTE SHALL BE 36" WIDE WITH A 60" X 40" PASSING SPACE EVERY 200 FEET.
- ACCESSIBLE ROUTES THROUGH PLANTERS SHALL BE LEVEL WITH THE SURROUNDING PAVEMENT OR PROVIDE CURB RAMPS AT EACH END WITH A MINIMUM 48" LEVEL LANDING IN BETWEEN.
- THE ACCESSIBLE ROUTE IN FRONT OF FULL-IN PARKING SHALL BE A MINIMUM OF 44" WIDE AND NOT REDUCED BY VEHICLE OVERHANGS, CURBING, SIGN POSTS, OR OTHER OBSTRUCTIONS.
- ANY WALK THAT CROSSES OR ADJOINS A VEHICULAR WAY NOT SEPARATED BY CURBS, RAILINGS, OR OTHER ELEMENTS SHALL BE DEFINED BY A CONTINUOUS 36" WIDE DETECTABLE WARNING.
- A CURB RAMP SHALL HAVE A DETECTABLE WARNING COMPLYING WITH SECTION 705 OF THE ACCESS BOARD GUIDELINES AND STANDARDS. THE DETECTABLE WARNING SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR 24 INCHES (610 MM) DEEP MINIMUM MEASURED FROM THE BACK OF THE CURB ON THE RAMP SURFACE. VERIFY LOCAL REQUIREMENTS WITH THE BUILDING DEPARTMENT. IF TRUNCATED DOMES ARE USED, SEE DETAIL THIS SHEET.
- SPECIAL RAMP RULES APPLY FOR ANY RISE GREATER THAN 6" INCLUDING BUT NOT LIMITED TO RESTRICTION ON SLOPE, TOTAL RISE BETWEEN LANDINGS, AND USE OF HANDRAILS, PER F.B.C. 11-4.8.
- PUBLIC SIDEWALK CURB RAMPS CONSTRUCTED WITHIN A PUBLIC RIGHT-OF-WAY, IN ABSENCE OF LOCAL ROADWAY GUIDELINES, SHALL MEET THE REQUIREMENTS OF STATE D.O.T. GUIDELINES.
- WHEN ACCESSIBLE PARKING ADJUTS CURB OR EDGE OF PAVEMENT, PLEASE REFER TO DETAIL FOR STRIPING COLOR, STALL DIMENSIONS AND SLOPE.
- CHANGE IN LEVEL ALONG ACCESSIBLE ROUTE IS NOT TO EXCEED 1/4" WITHOUT A RAMP PER SECTION 11-4.3.2.

**NOTES:**

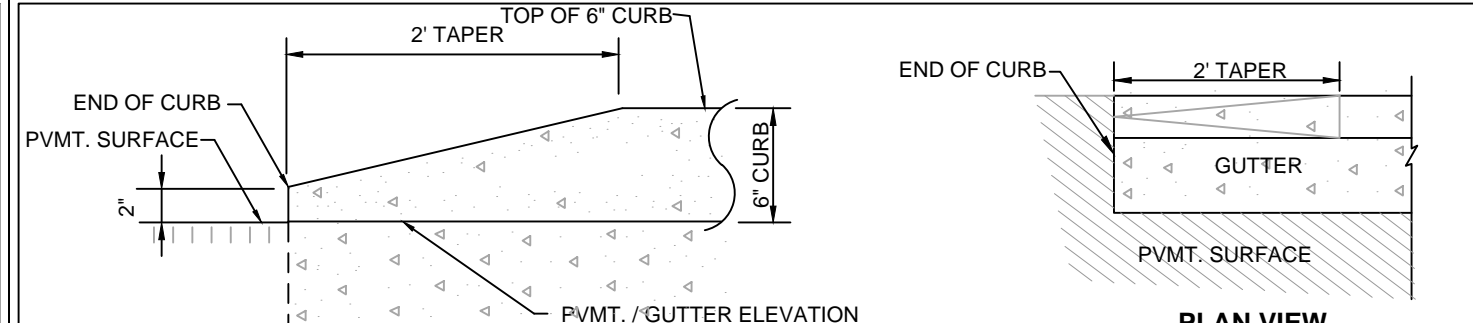
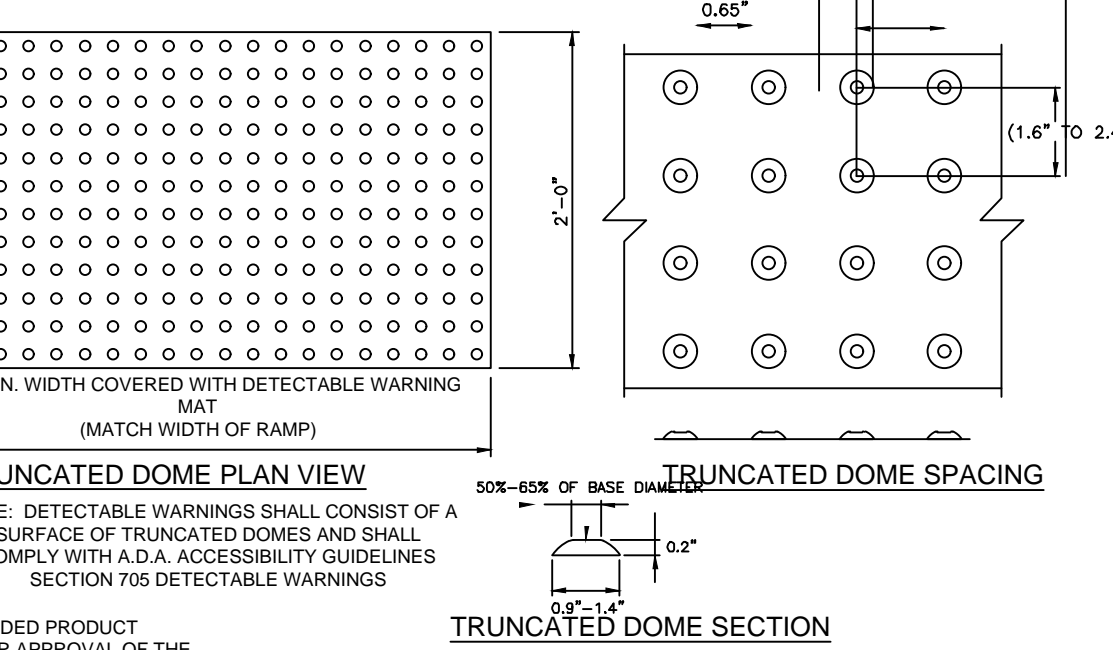
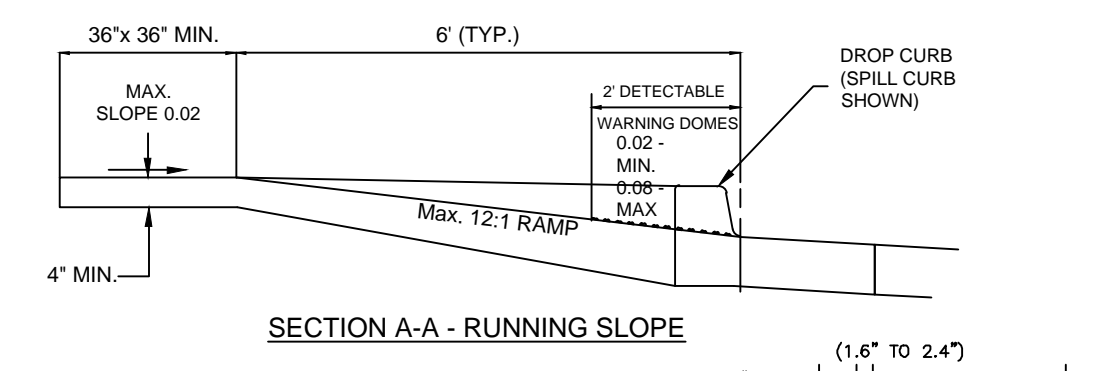
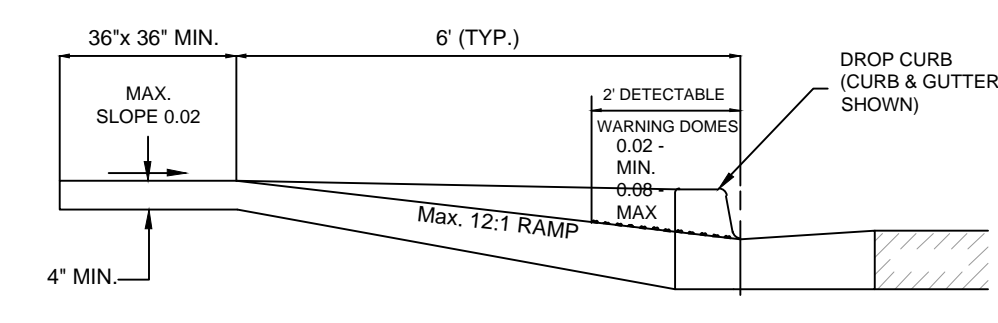
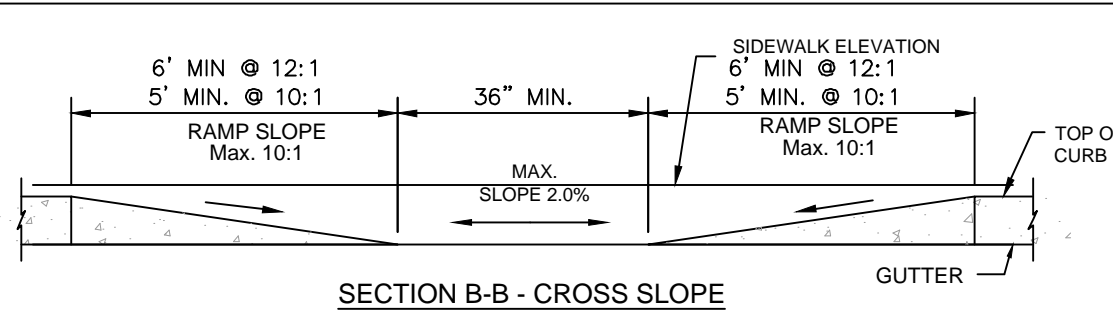
- THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.
- RAMP SIDE SLOPE VARIES UNIFORMLY FROM A MAXIMUM OF UP TO 10% AT CURB TO CONFORM WITH LONGITUDINAL SIDEWALK SLOPE ADJACENT TO TOP OF THE RAMP.
- CONSTRUCT PER A.D.A. STANDARDS.
- REFER TO PLANS FOR ADJACENT SLOPES.
- THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1:50.

RAMP LOCATION	MINIMUM DIMENSION	
	A	B
AT OUTSWING DOOR	44"	60"
AT INSWING/SLIDING DOOR	44"	48"
NO DOORWAY	36"	36"
TOP OF RAMP	60"	60"

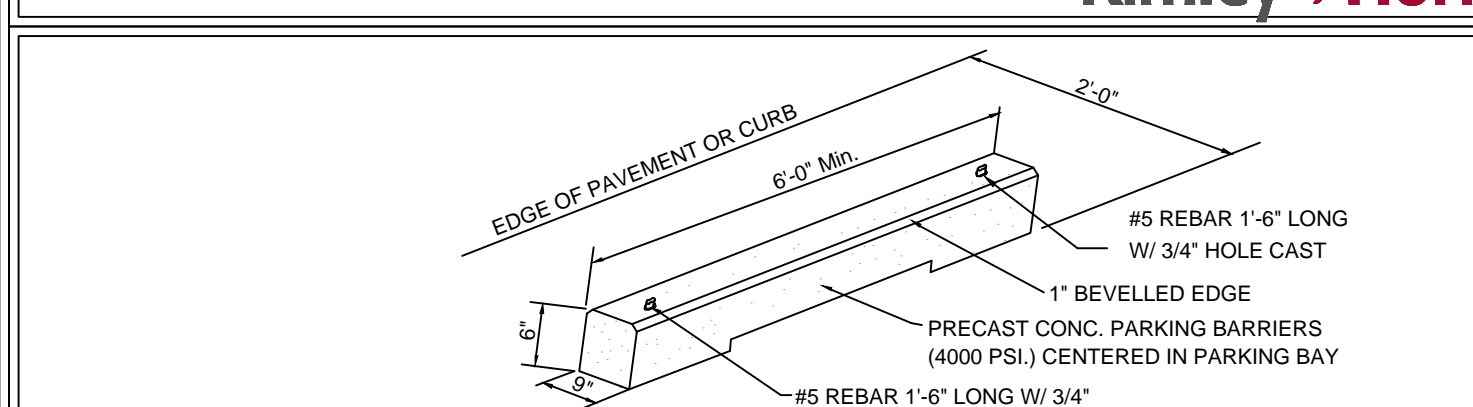
**NOTES:**

- ALL DETECTABLE WARNING DEVICES USED IN NEW CONSTRUCTION SHALL BE OF A RIGID PRECAST OR EMBEDDED PRODUCT APPROVED BY THE CITY ENGINEER. RETRO FIT MATS WILL ONLY BE ALLOWED ON EXISTING RAMPS WITH PRIOR APPROVAL OF THE CITY ENGINEER FOR MATERIAL TYPE AND INSTALLATION (IE: RESURFACING).
- RAMP AND DETECTABLE WARNING AREA SHALL BE A MINIMUM OF 4 FEET IN WIDTH, BUT NOT BE LESS THAN THE WIDTH OF SIDEWALK LEADING TO BACK OF RAMP.
- DETECTABLE WARNING SURFACES SHALL EXTEND 2.0 FT MINIMUM IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- DETECTABLE WARNING AREA CAN BE SQUARE WHERE USED IN A CURB RADIUS.
- THE ROWS OF TRUNCATED DOMES IN DETECTABLE WARNING SURFACES SHOULD BE ALIGNED PERPENDICULAR TO THE GRADE BREAK BETWEEN THE RAMP RUN AND THE STREET. WHERE DETECTABLE WARNING SURFACES ARE PROVIDED ON A SURFACE WITH A SLOPE THAT IS LESS THAN 5 PERCENT, DOME ORIENTATION IS LESS CRITICAL.
- DETECTABLE WARNING AREA SHALL CONTRAST VISUALLY WITH ADJACENT WALKING SURFACES EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
- IF PAVERS ARE TO BE USED, PAVERS SHALL BE 6" THICK AND CAST FROM 5000 PSI CONCRETE.
- MATS ARE TO BE RIGID WITH TURN DOWN EDGES EMBEDDED IN CONCRETE TO ELIMINATE TRIP HAZARD.
- LOCATE ENTIRE WARNING BEHIND CURB LINE TO MINIMIZE VEHICLES RIDING OVER THIS FEATURE.

**E ACCESSIBLE RAMP GENERAL NOTES**  
Not to Scale

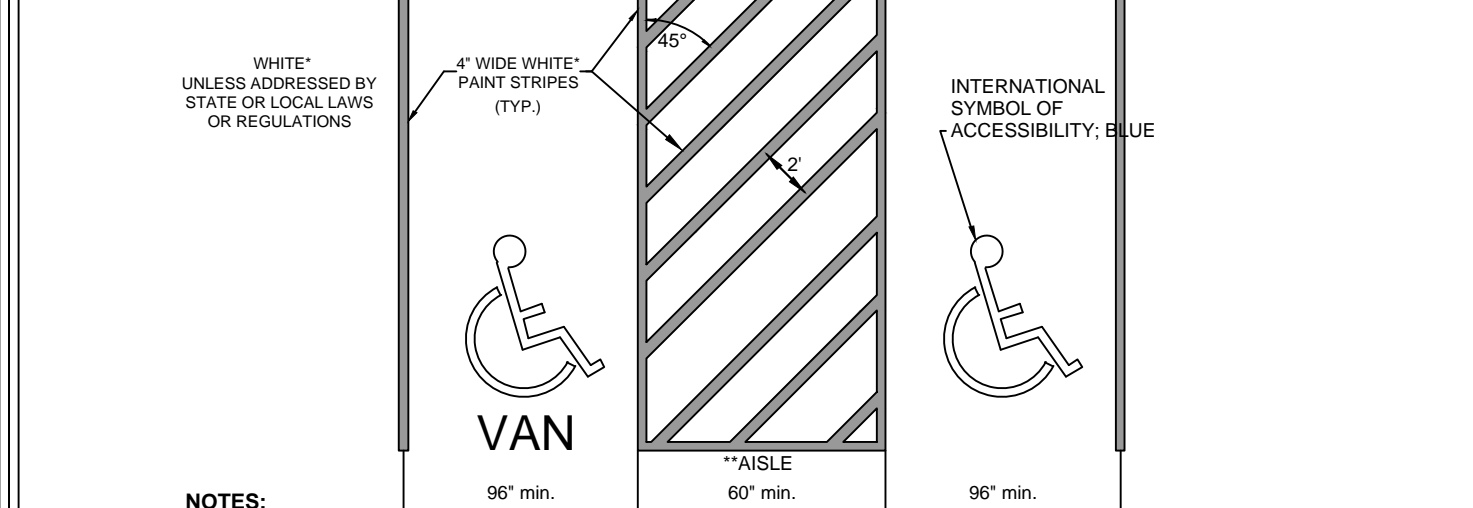


**C CURB END TRANSITION**  
Not to Scale  
**Kimley»Horn**



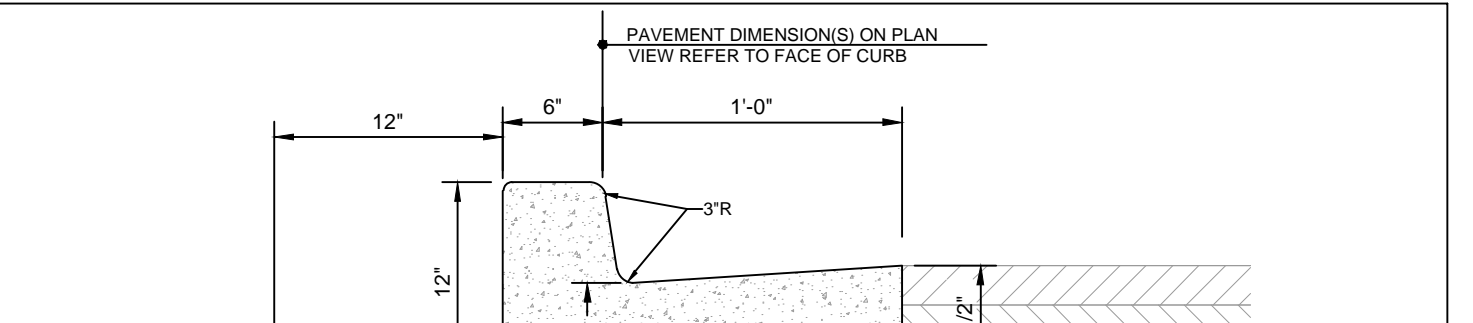
**I CONCRETE WHEEL STOP**  
Not to Scale  
**Kimley»Horn**

ACCESSIBLE PARKING SPACES SHALL BE IDENTIFIED BY A SIGN SHOWING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY COMPLYING WITH ANSI 4.28.8. SIGNS SHALL NOT BE OBTURED BY A VEHICLE PARKED IN THE SPACE.



- NOTES:**
- CONFORM ALL SYMBOLS TO THE FHWA MUTCD CHAPTER 3B PAVEMENT AND CURB MARKINGS. SECTION 3B.19 PARKING SPACE MARKINGS, AND AS PROVIDED IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)".
  - SEE SITE PLAN FOR ACTUAL DIMENSIONS.
  - SEE ACCESSIBLE PARKING AND SIGNAGE STANDARDS DETAIL FOR SIGNAGE AND NOTES.
  - ONE IN EIGHT ACCESSIBLE SPACES SHALL BE VAN ACCESSIBLE, BUT NOT LESS THAN ONE.

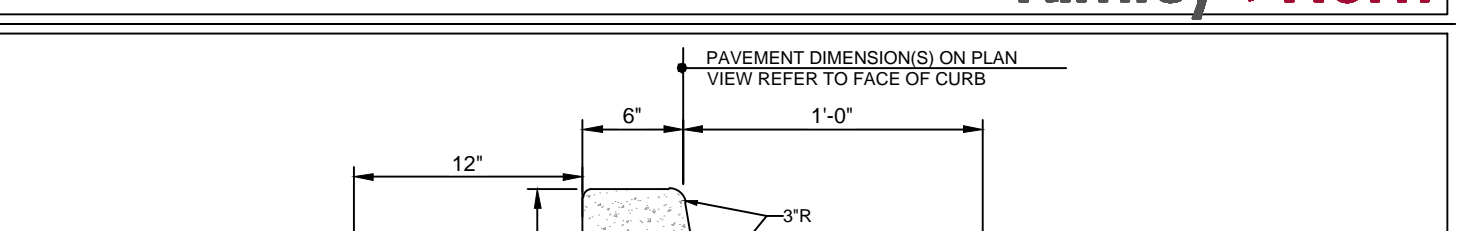
**ID ACCESSIBLE PARKING MARKINGS**  
Not to Scale  
**Kimley»Horn**



**A 18" STANDARD CURB AND GUTTER**  
Not to Scale  
**Kimley»Horn**

- NOTES:**
- CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 P.S.I. @ 28 DAYS.
  - CONSTRUCTION STAKING FOR CURB INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
  - AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
  - CONTRACTION JOINTS SHALL BE PLACED @ 10'-0" O.C. TOOLED 1/4" (±1/16") WIDE, 1" DEEP. EXPANSION JOINTS SHALL BE PLACED @ 40'-0" INTERVALS, MAXIMUM, AND ALL P.C.S.
  - GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.

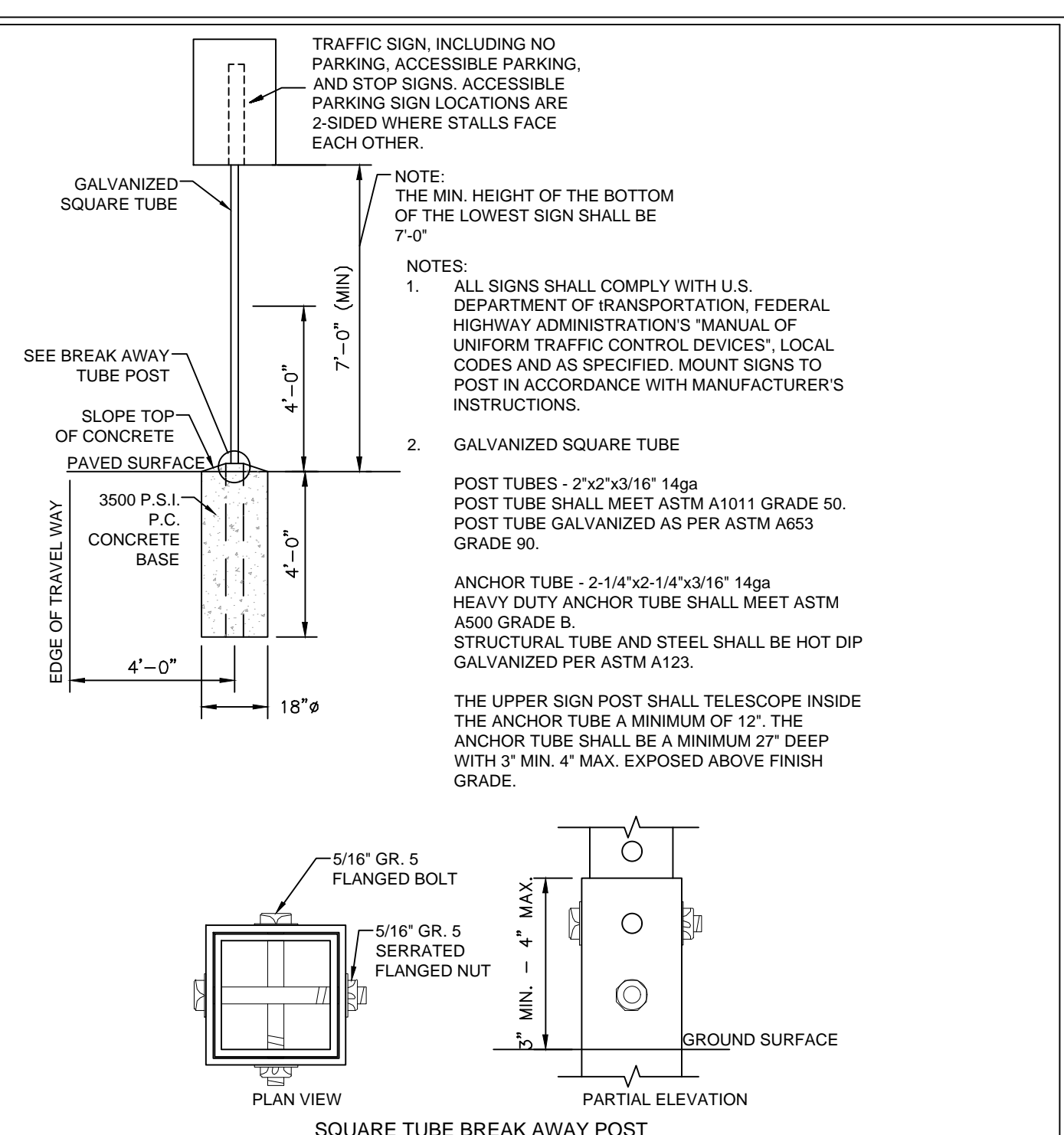
**A 18" STANDARD CURB AND GUTTER**  
Not to Scale  
**Kimley»Horn**



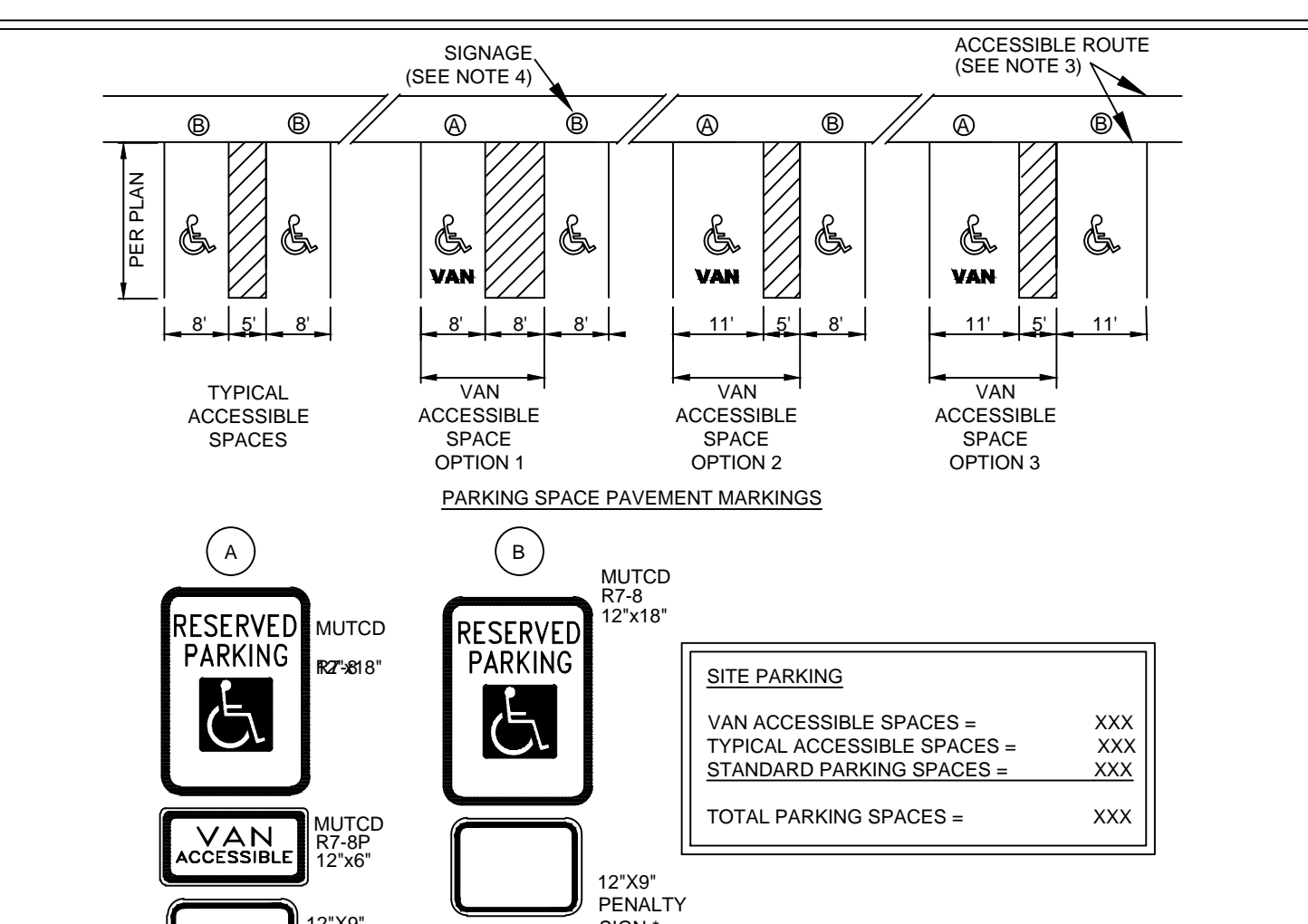
**B 18" SPILL CURB**  
Not to Scale  
**Kimley»Horn**

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  - AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
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  - GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.

**B 18" SPILL CURB**  
Not to Scale  
**Kimley»Horn**



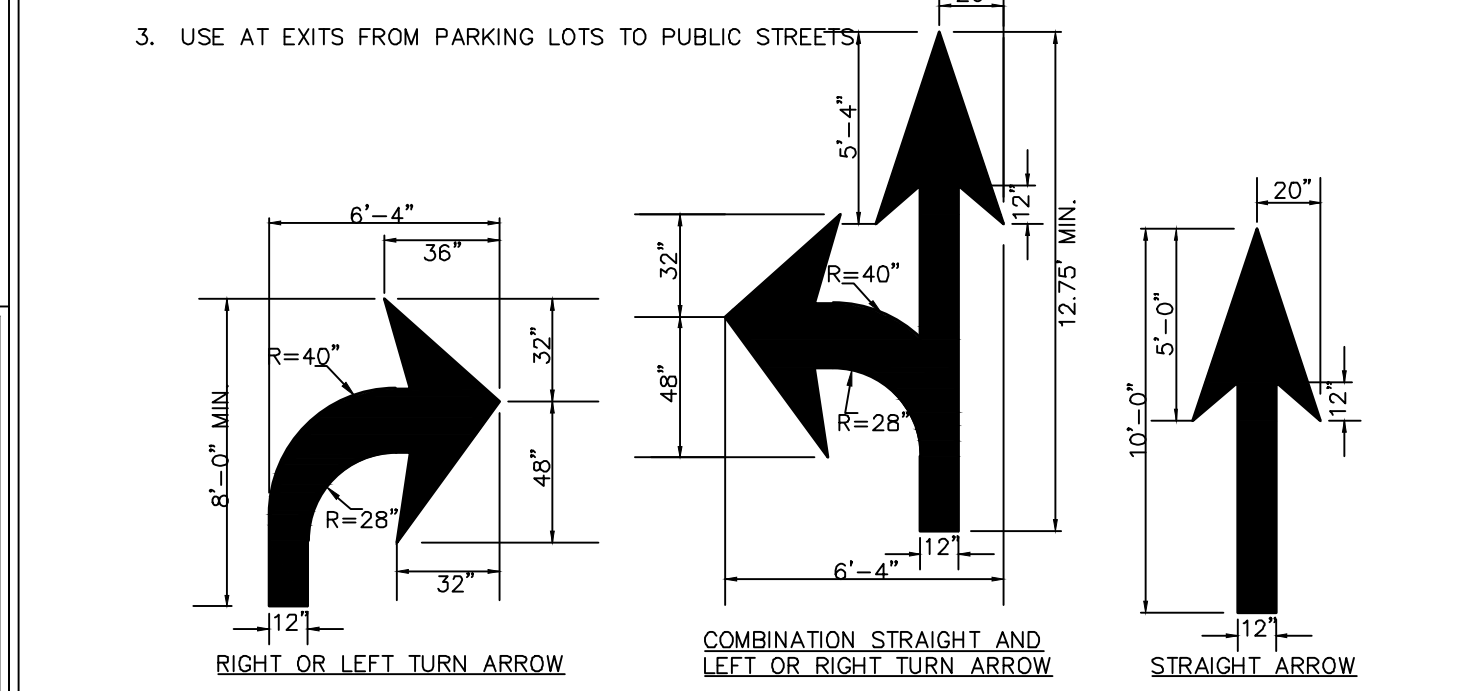
**SINGLE SIGN POST - BREAK AWAY**  
Not to Scale  
**Kimley»Horn**



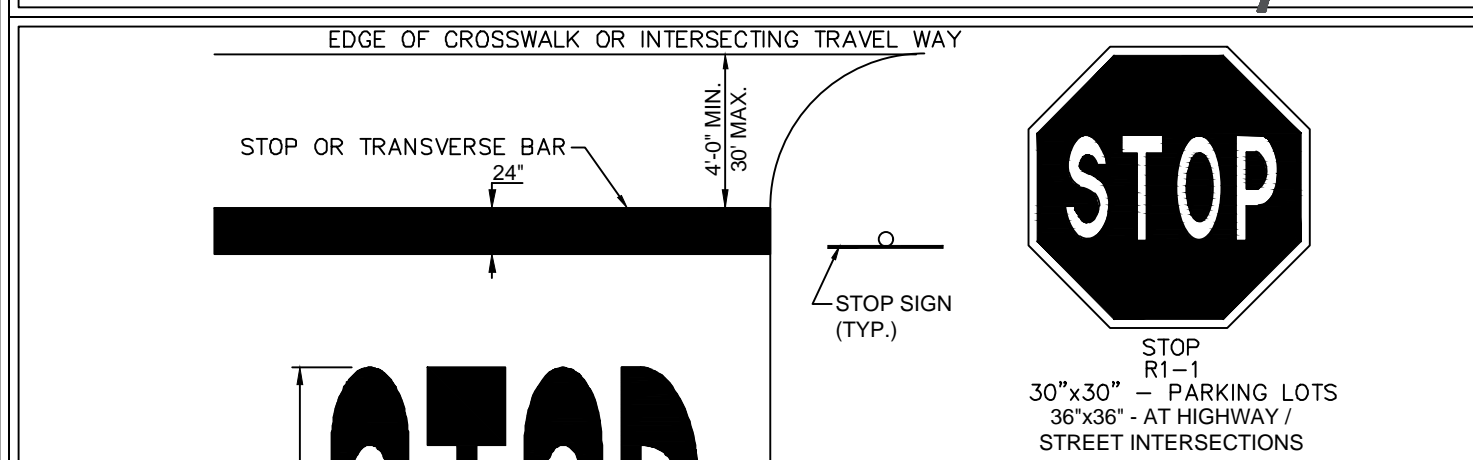
- NOTES:**
- ALL 12"x18" ACCESSIBLE SIGNS (R7-8 & R7-11) SHALL BE MOUNTED AT 7 FEET FROM GRADE TO BOTTOM EDGE OF SIGN FACE (MUTCD), MOUNTING HEIGHT CAN BE REDUCED TO 5 FEET IF PLACED IN AN AREA BETWEEN SIDEWALK AND BUILDING FACE IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
  - REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION AND THE U.S. ACCESS BOARD GUIDELINES AND STANDARDS.
  - IF ACCESSIBLE ROUTE IS A RAISED SIDEWALK AREA, THEN RAMPS ARE REQUIRED AT LOADING ZONE AREA.
  - SIGNAGE MUST NOT OBSTRUCT ACCESSIBLE ROUTE OR RAMPS.
  - ONE OUT OF EVERY EIGHT (8) ACCESSIBLE SPACES, BUT NOT LESS THAN ONE, IS REQUIRED TO BE VAN ACCESSIBLE.

**F2 ACCESSIBLE PARKING AND SIGNAGE STANDARDS**  
Not to Scale  
**Kimley»Horn**

- NOTES:**
- USE THE COLOR WHITE FOR ALL PAVEMENT MARKING SYMBOLS.
  - CONFORM ALL SYMBOLS TO THE FHWA "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS". SYMBOL DIMENSIONS CAN VARY AMONG MANUFACTURERS, THEREFORE SLIGHT VARIANCES ARE ACCEPTABLE.
  - USE AT EXITS FROM PARKING LOTS TO PUBLIC STREETS.

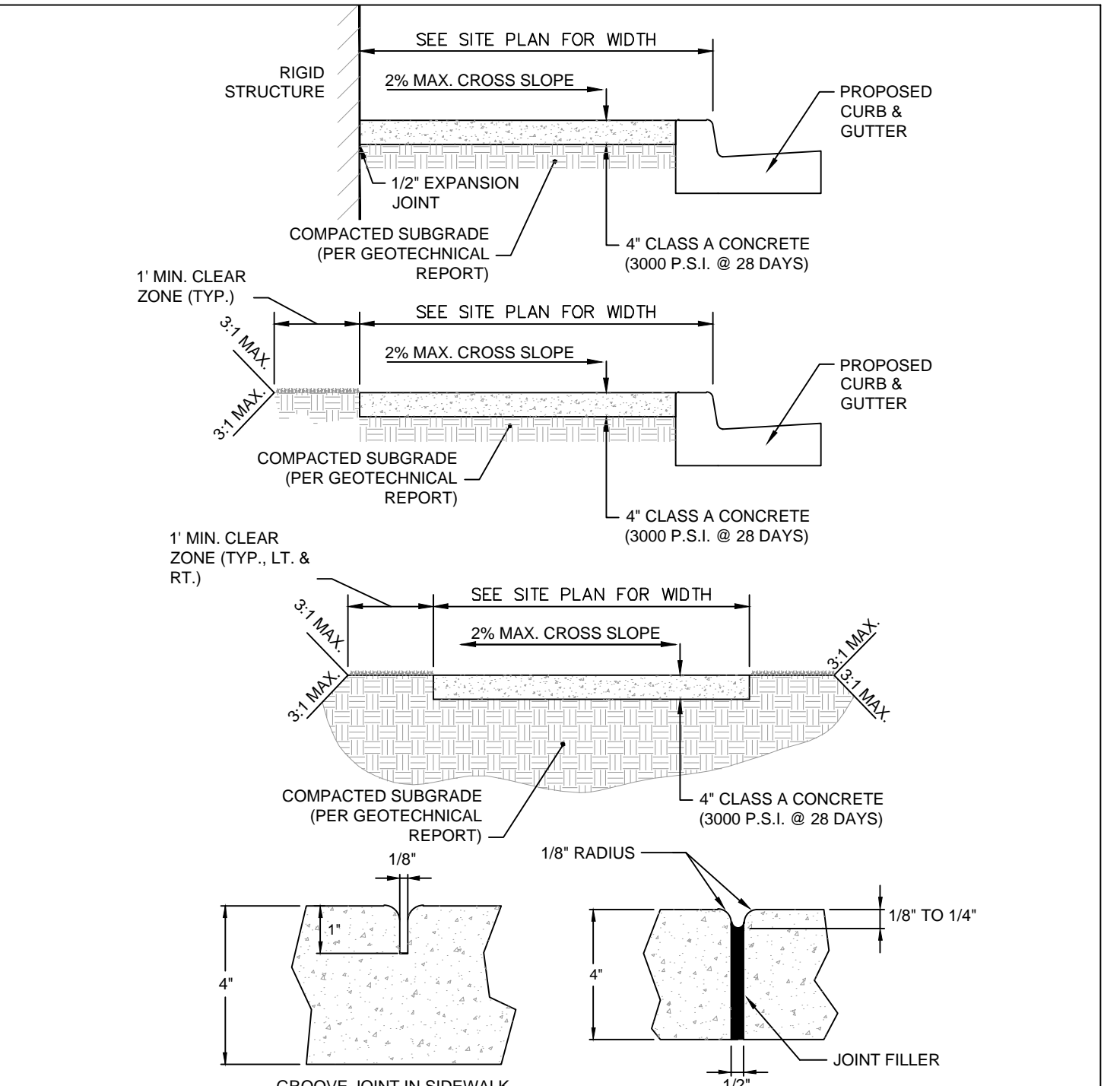


**SOLID PAVEMENT ARROWS**  
Not to Scale  
**Kimley»Horn**



- NOTES:**
- CONFORM ALL SYMBOLS TO THE FHWA MUTCD CHAPTER 3B PAVEMENT AND CURB MARKINGS. SECTION 3B.16 STOP AND YIELD LINES AND 3B.20 PAVEMENT WORD, SYMBOL, AND ARROW MARKINGS.
  - USE THE COLOR WHITE FOR ALL PAVEMENT MARKING SYMBOLS.
  - WORDS ARE CENTERED IN TRAVEL LANE.

**STOP SIGNAGE AND MARKING**  
Not to Scale  
**Kimley»Horn**



- NOTES:**
- A GROOVE JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS NOT TO EXCEED 50' AND MATCHING EXPANSION/CONSTRUCTION JOINT IN ADJACENT CURB. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
  - SIDEWALK AT DRIVEWAY ENTRANCES TO BE 6" THICK.
  - WIDTH OF SIDEWALK ON THOROUGHFARE STREETS SHALL BE A MINIMUM OF 6'. WIDTH OF SIDEWALKS IN THE CENTRAL BUSINESS DISTRICT WILL BE DETERMINED BY THE CDOT.
  - WIDTH OF SIDEWALKS ON NON-THOROUGHFARE STREETS SHALL BE BASED ON TYPICAL STREET SECTION, A MINIMUM OF 5'. SIDEWALK TO BE POURED TO END OF RADIUS AT INTERSECTING STREETS.
  - CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 PSI. IN 28 DAYS.
  - ZONING CONDITIONS MAY REQUIRE ADDITIONAL WIDTH SIDEWALKS WHICH SHALL SUPERSEDE THESE STANDARD DIMENSIONS SHOWN.
  - LIDS FOR JUNCTION BOXES AND UTILITY VAULTS SHALL BE NON-SKID AS SPECIFIED BY ENGINEER.
  - JOINT MATERIALS SHALL LIMIT SHRINK/SWELL SO POST CONSTRUCTION INSTALLATION RESULTS IN A MAXIMUM OF 1/4" FROM FLUSH.

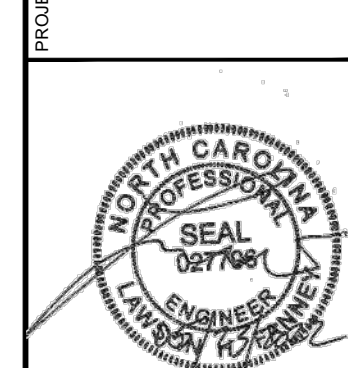
**D CONCRETE SIDEWALKS**  
Not to Scale  
**Kimley»Horn**

**Kimley»Horn**  
11720 AMBER PARK DRIVE, SUITE 900  
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**SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA**  
100 BELMONT MT. HOLLY ROAD  
BELMONT, NC 28012  
PHONE: 414-557-7459

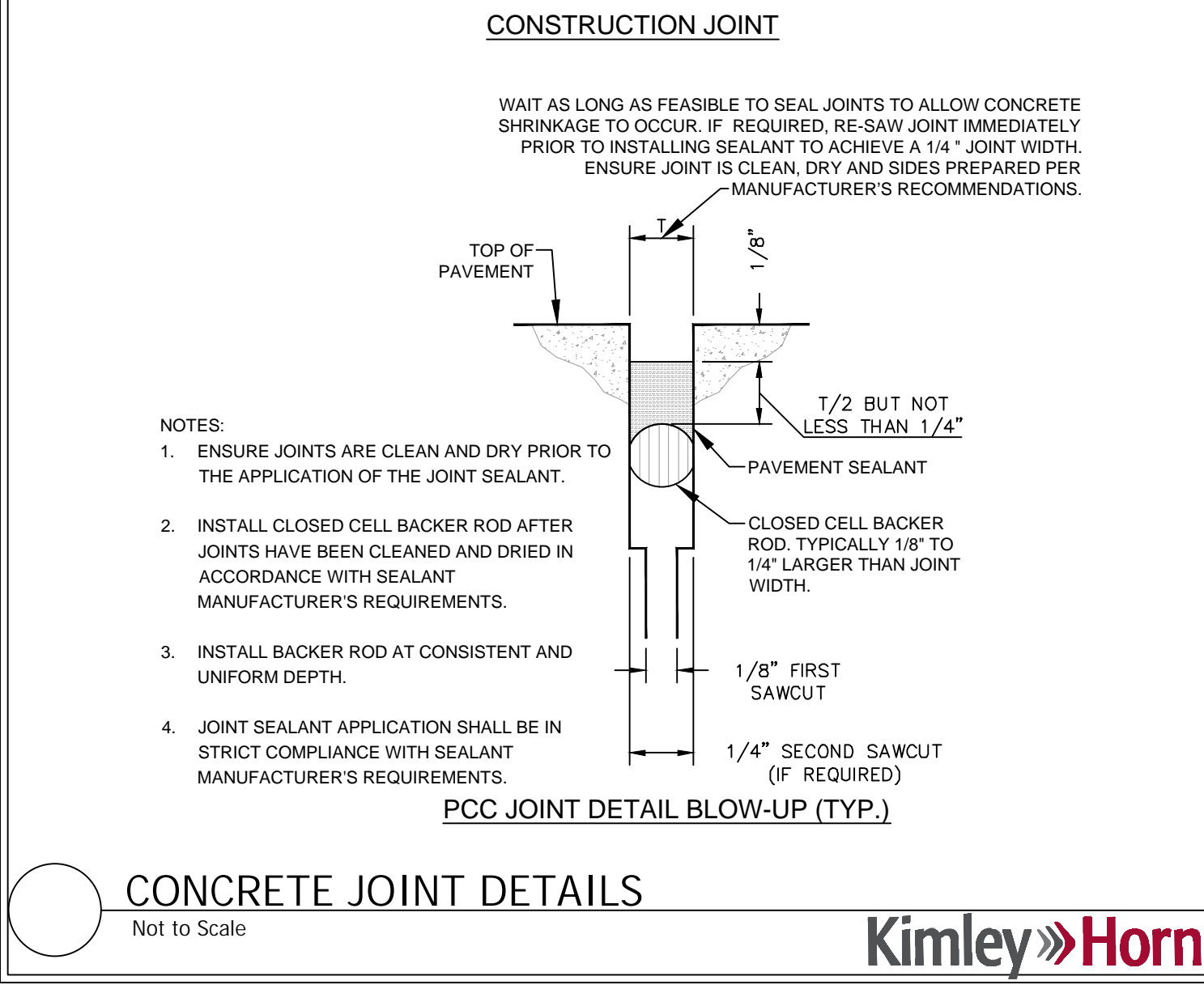
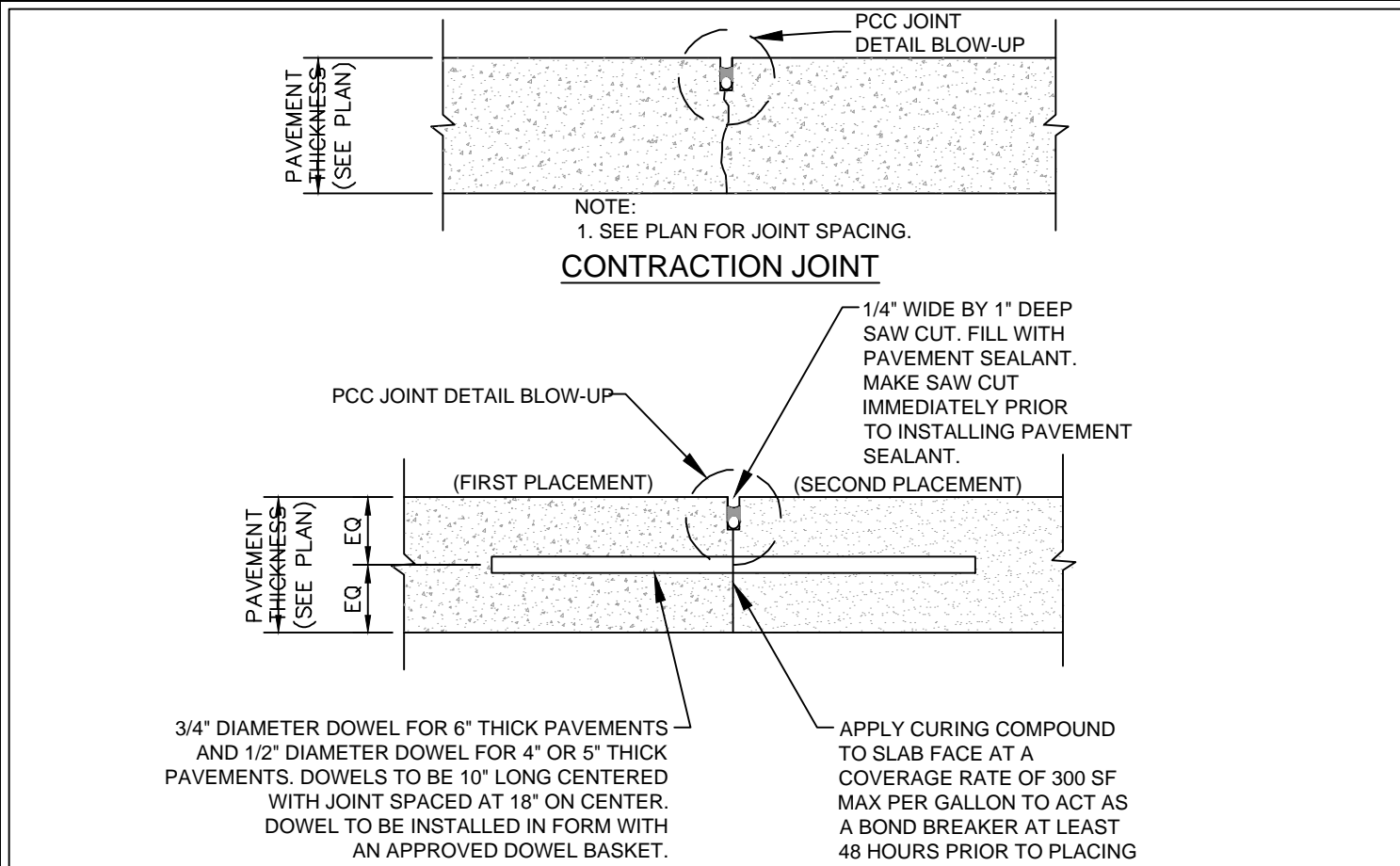
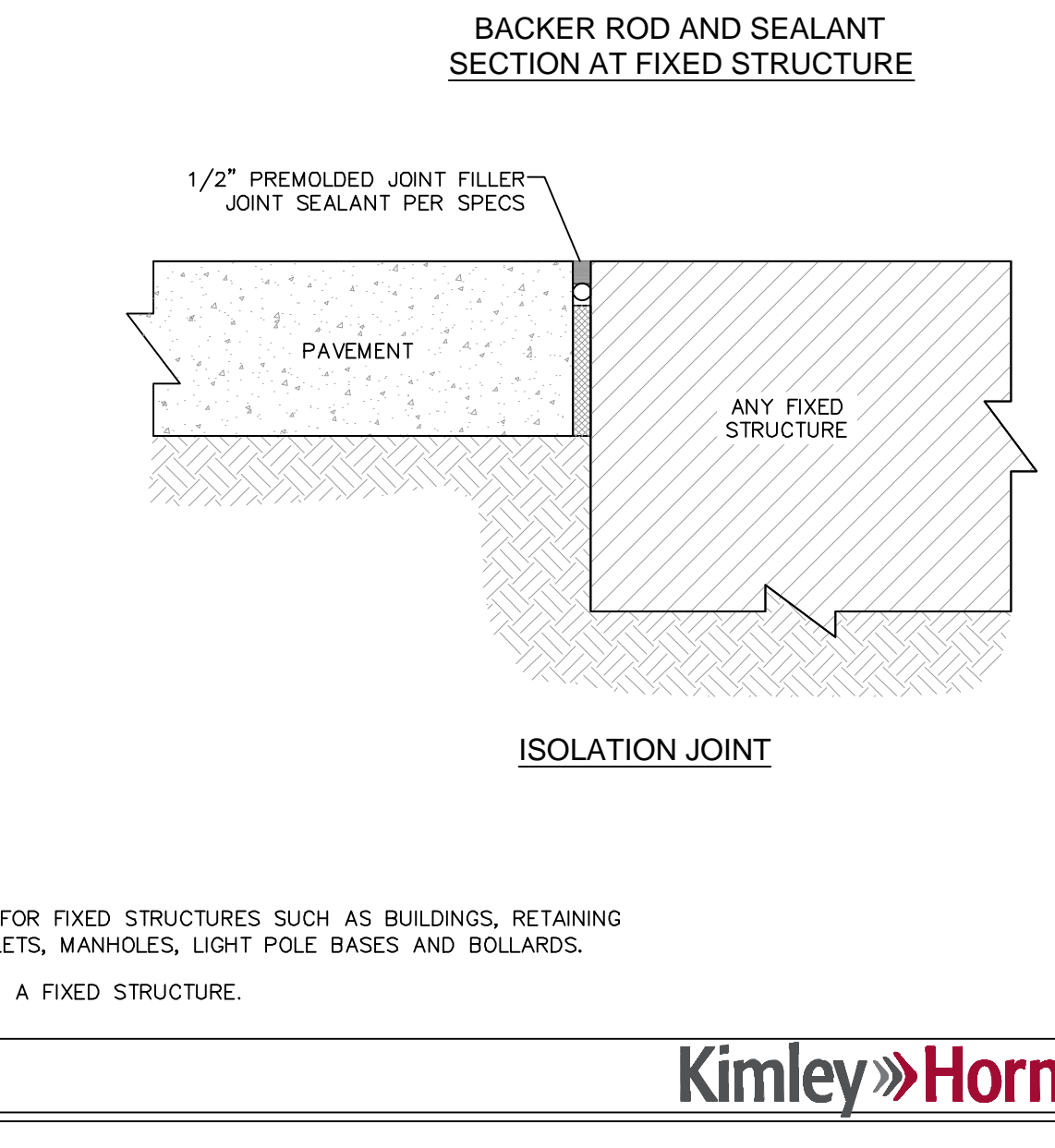
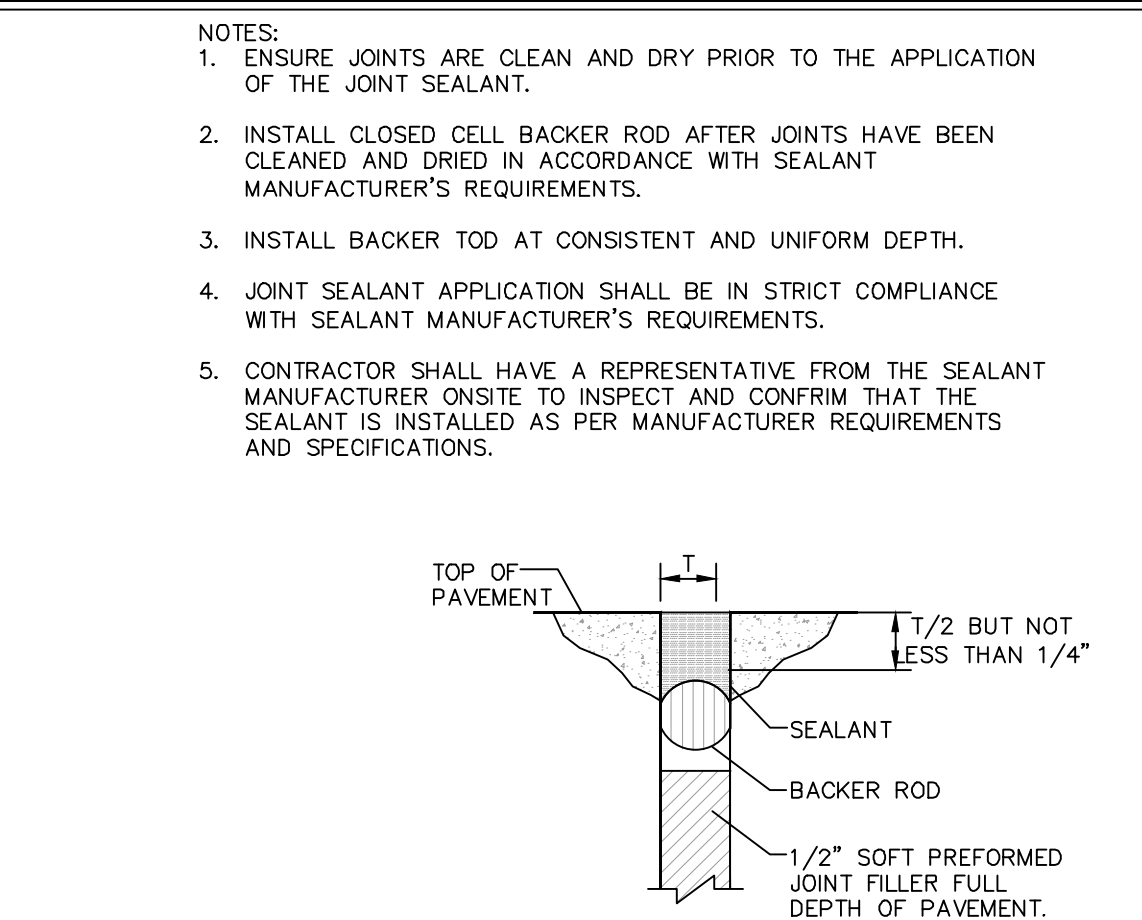
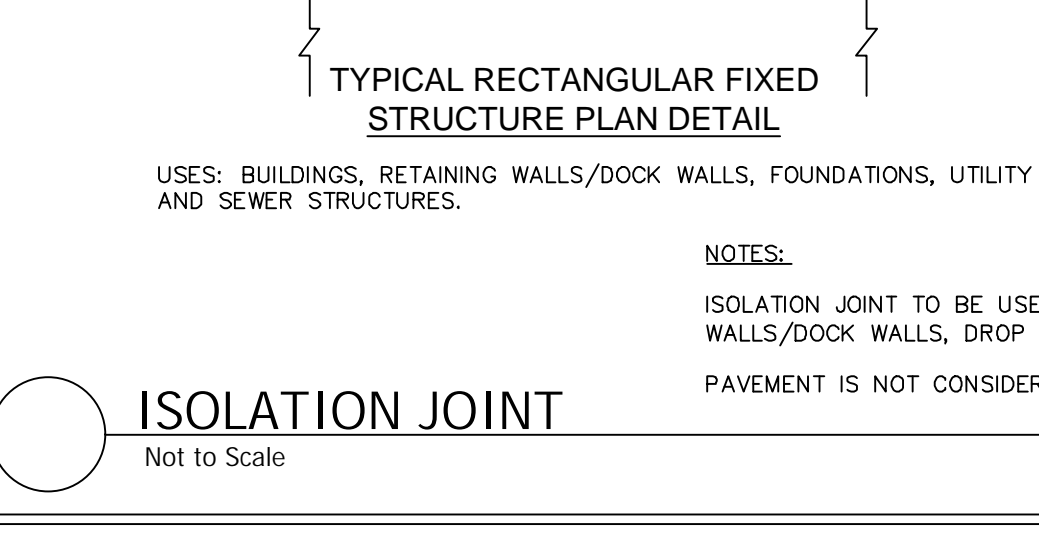
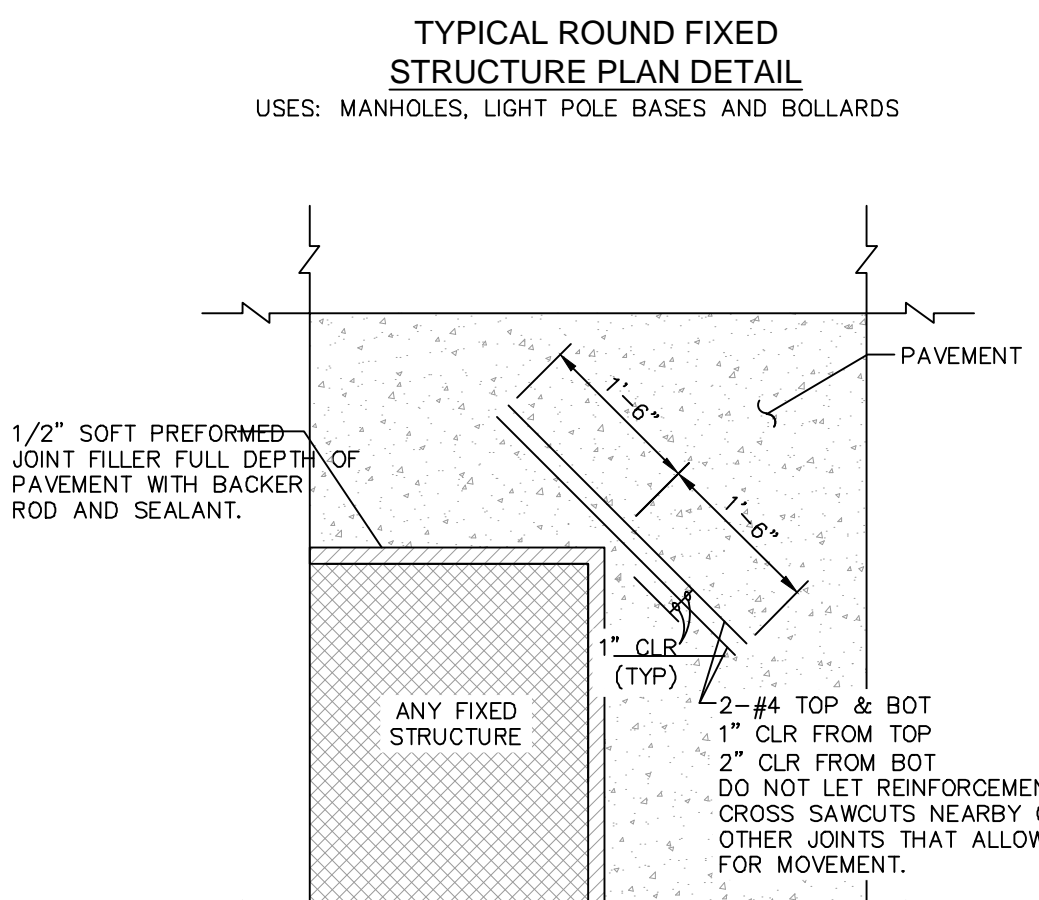
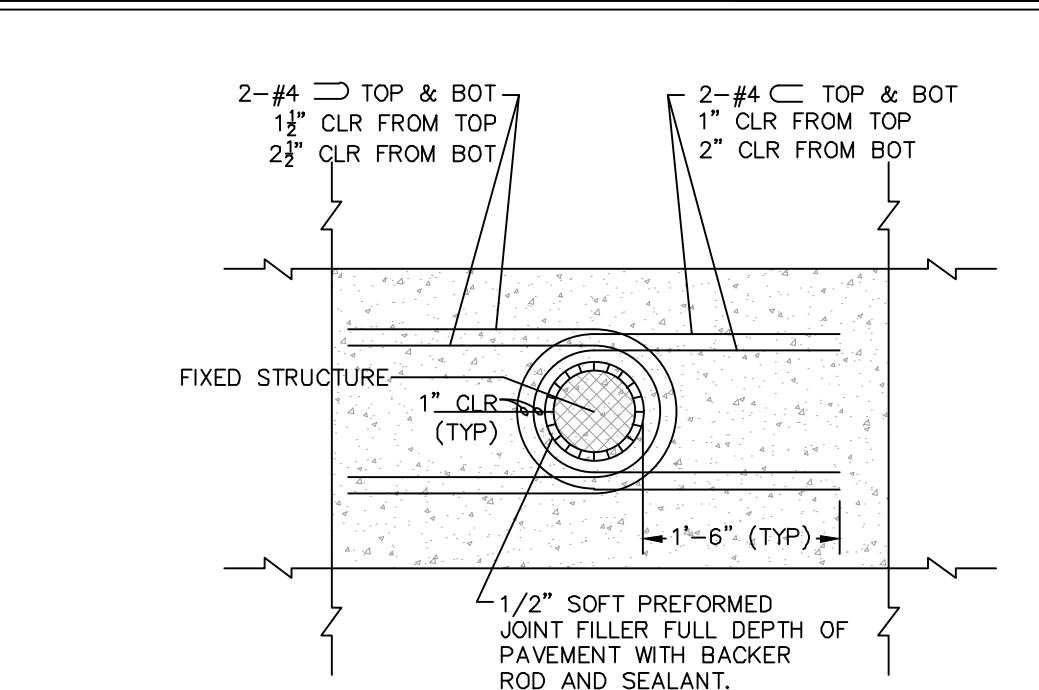
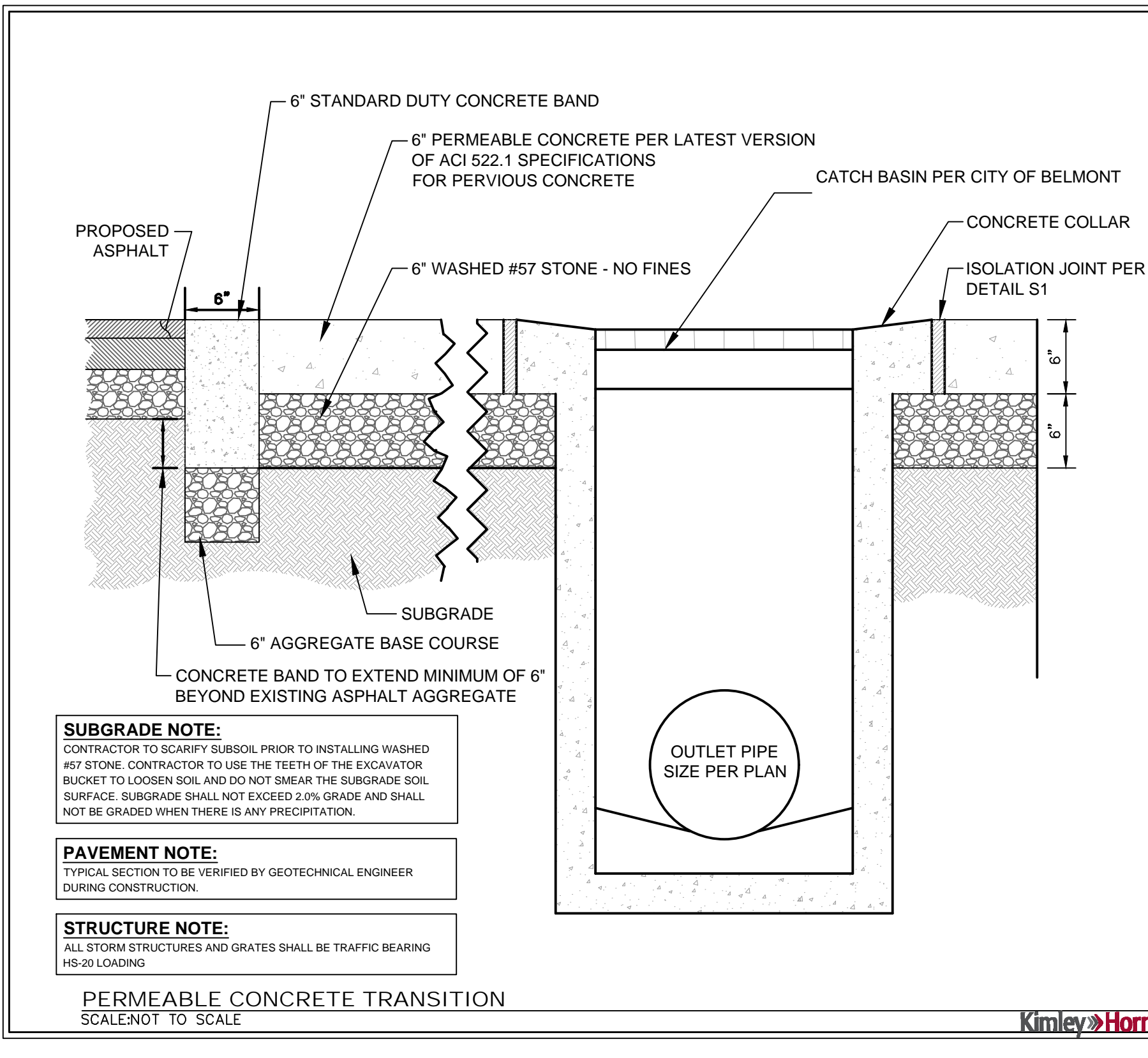
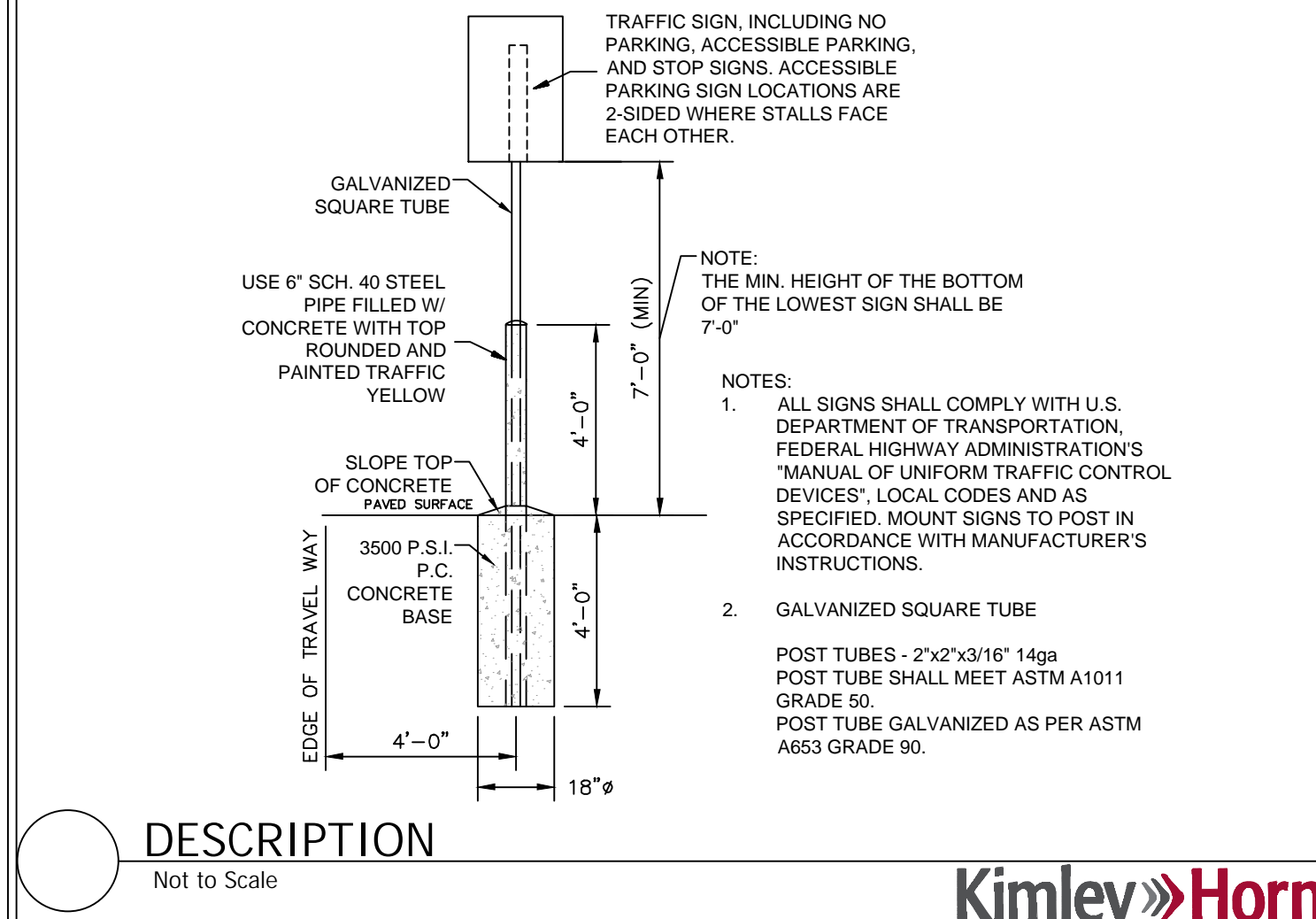
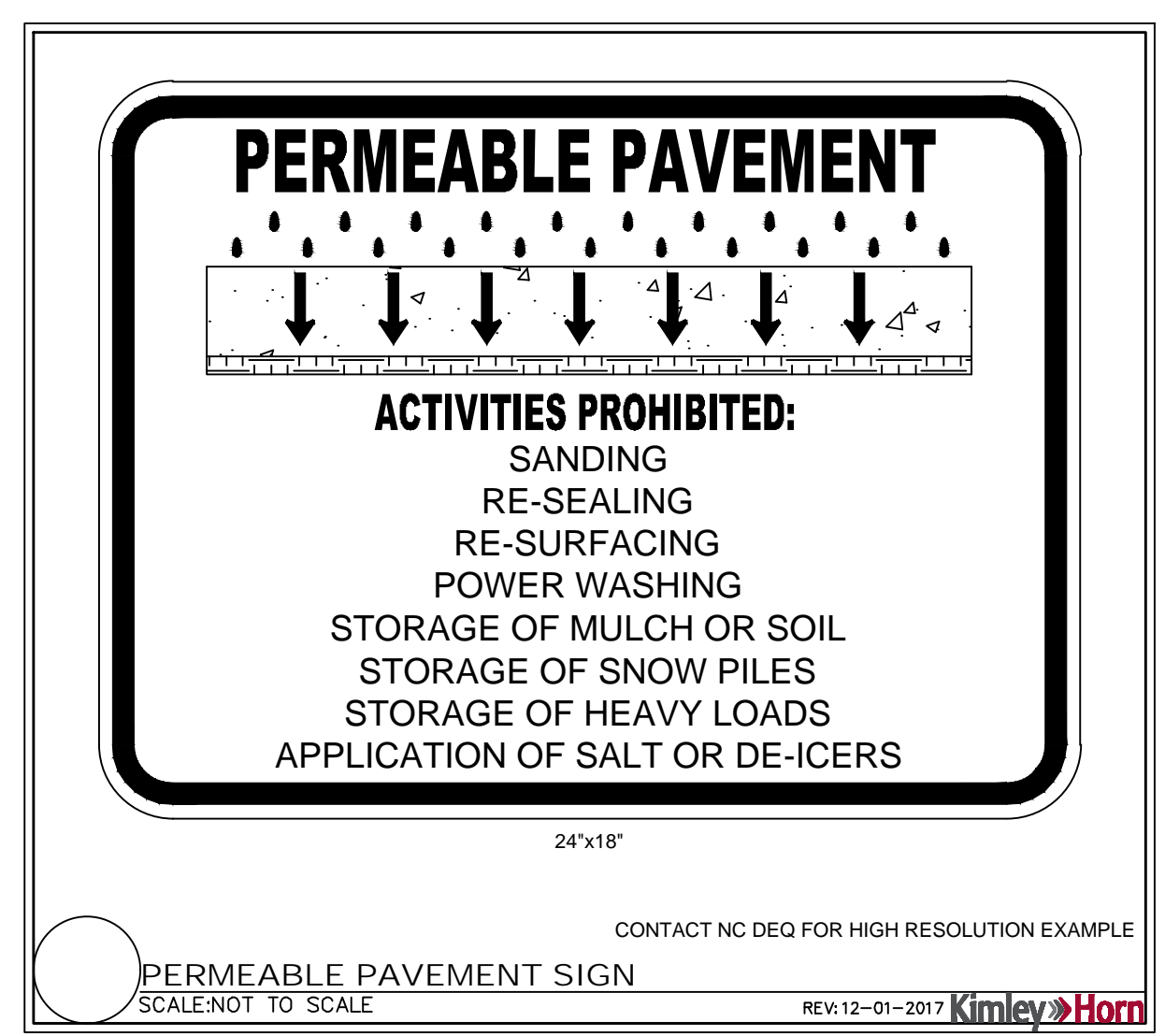
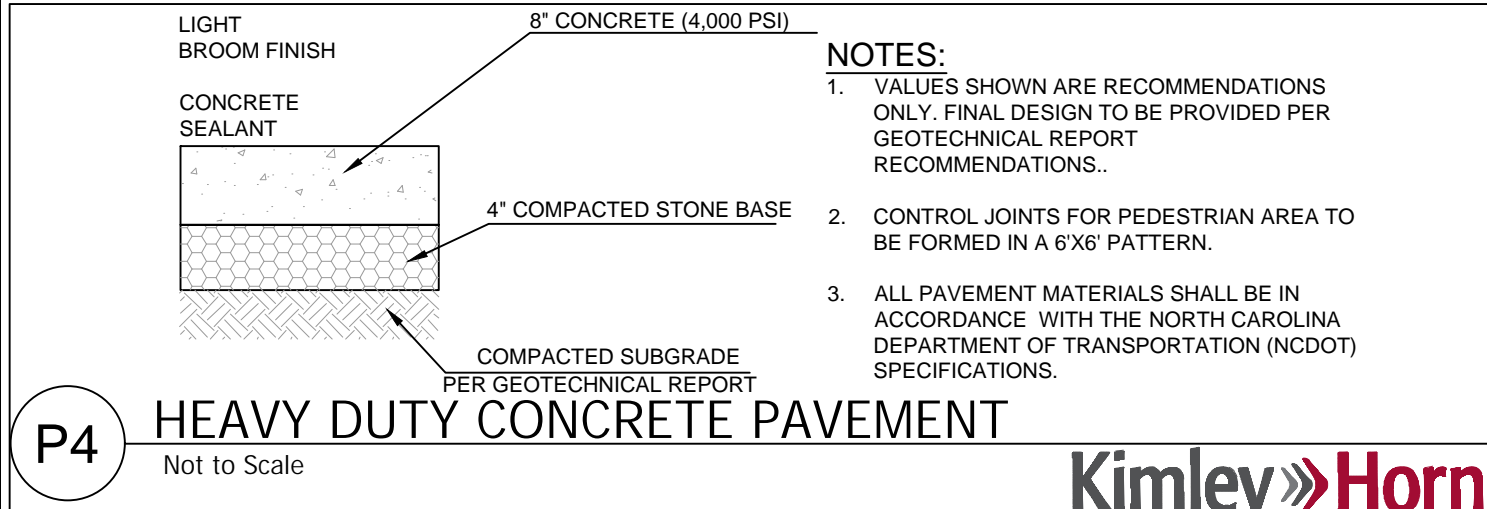
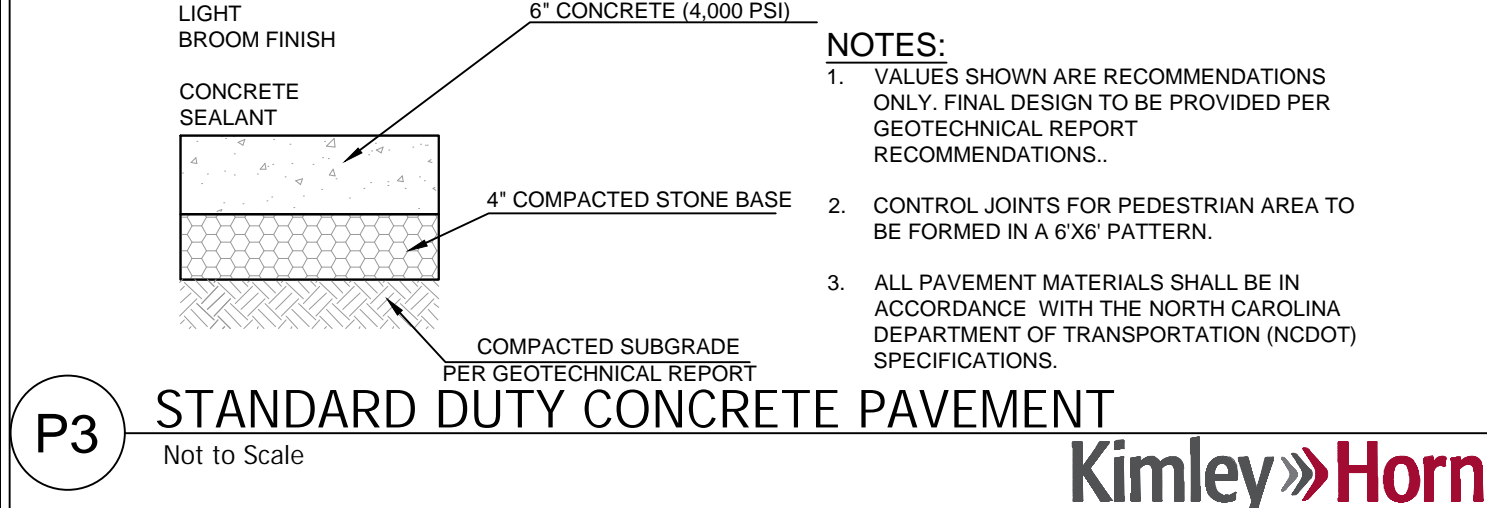
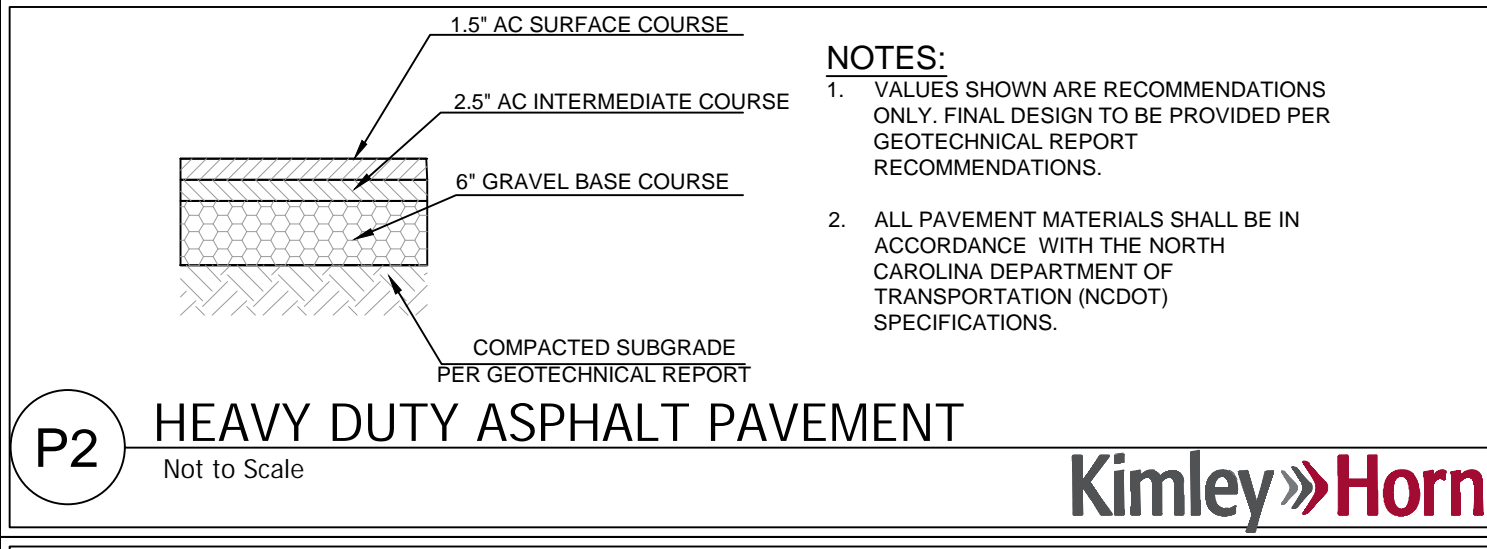
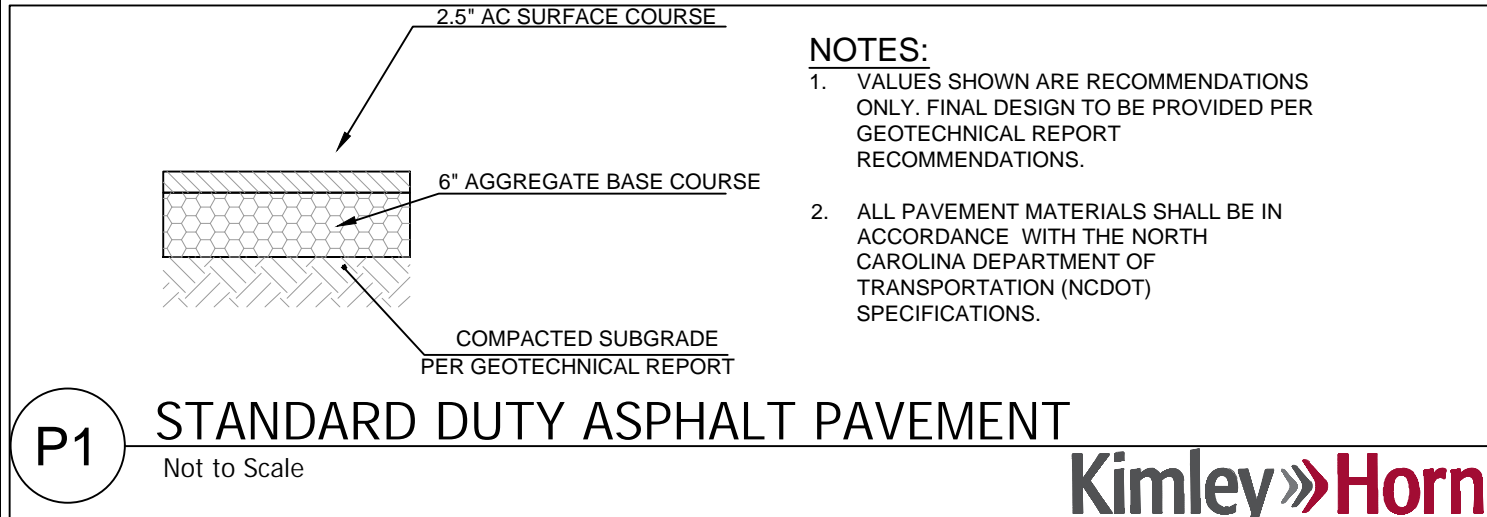
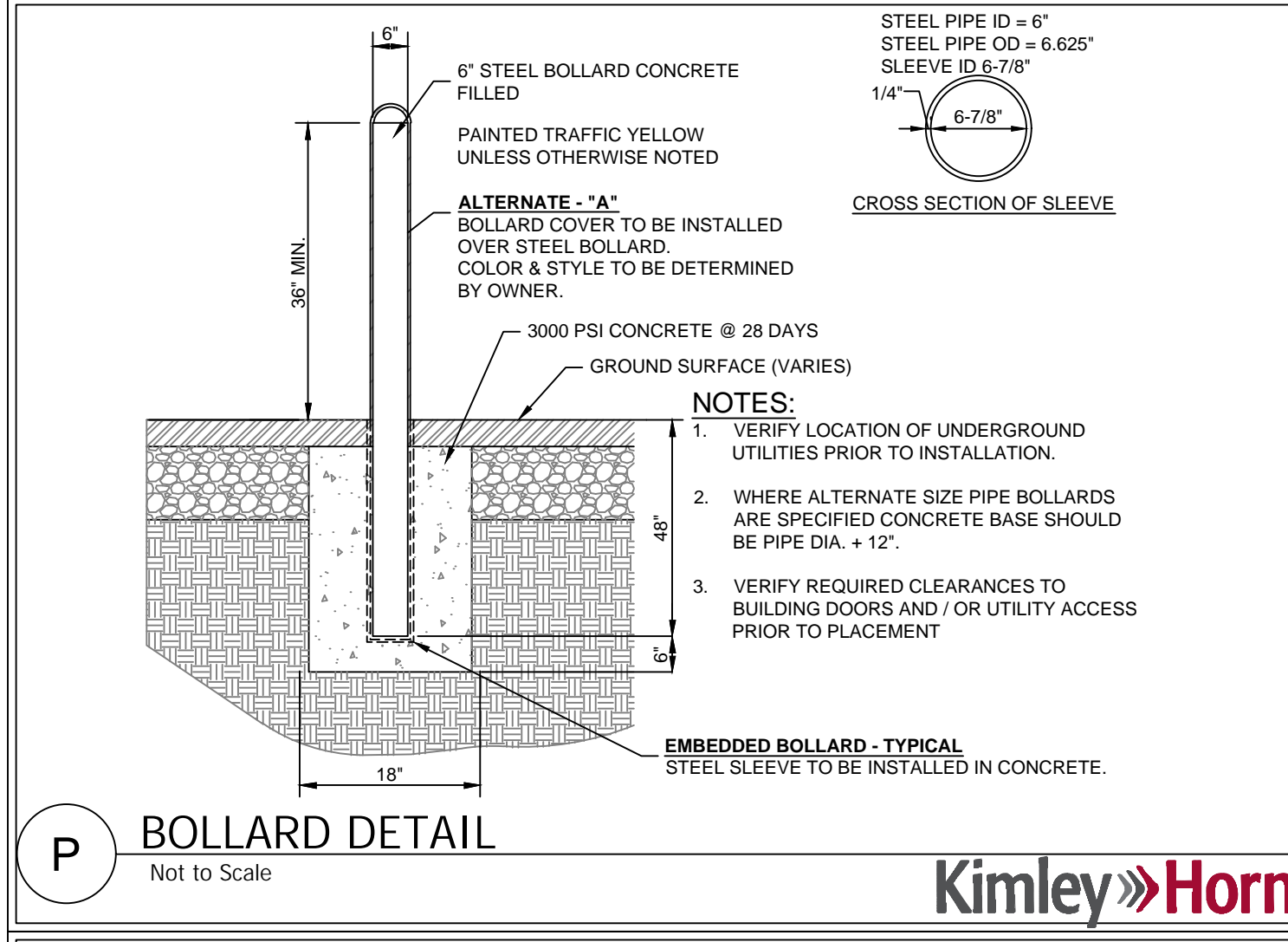
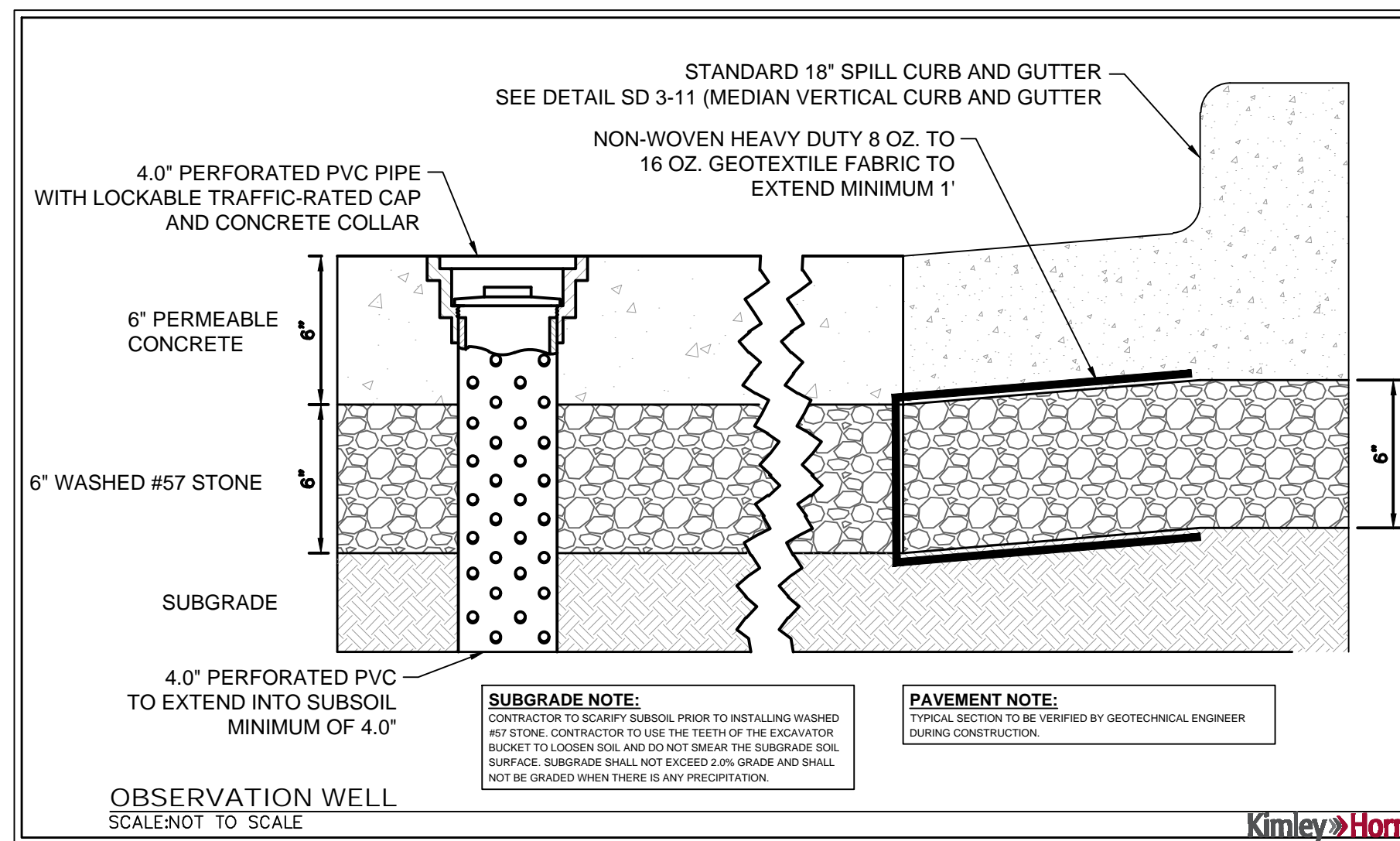
NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S - BELMONT**  
HAWLEY AVE. BELMONT NC 28012  
LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080



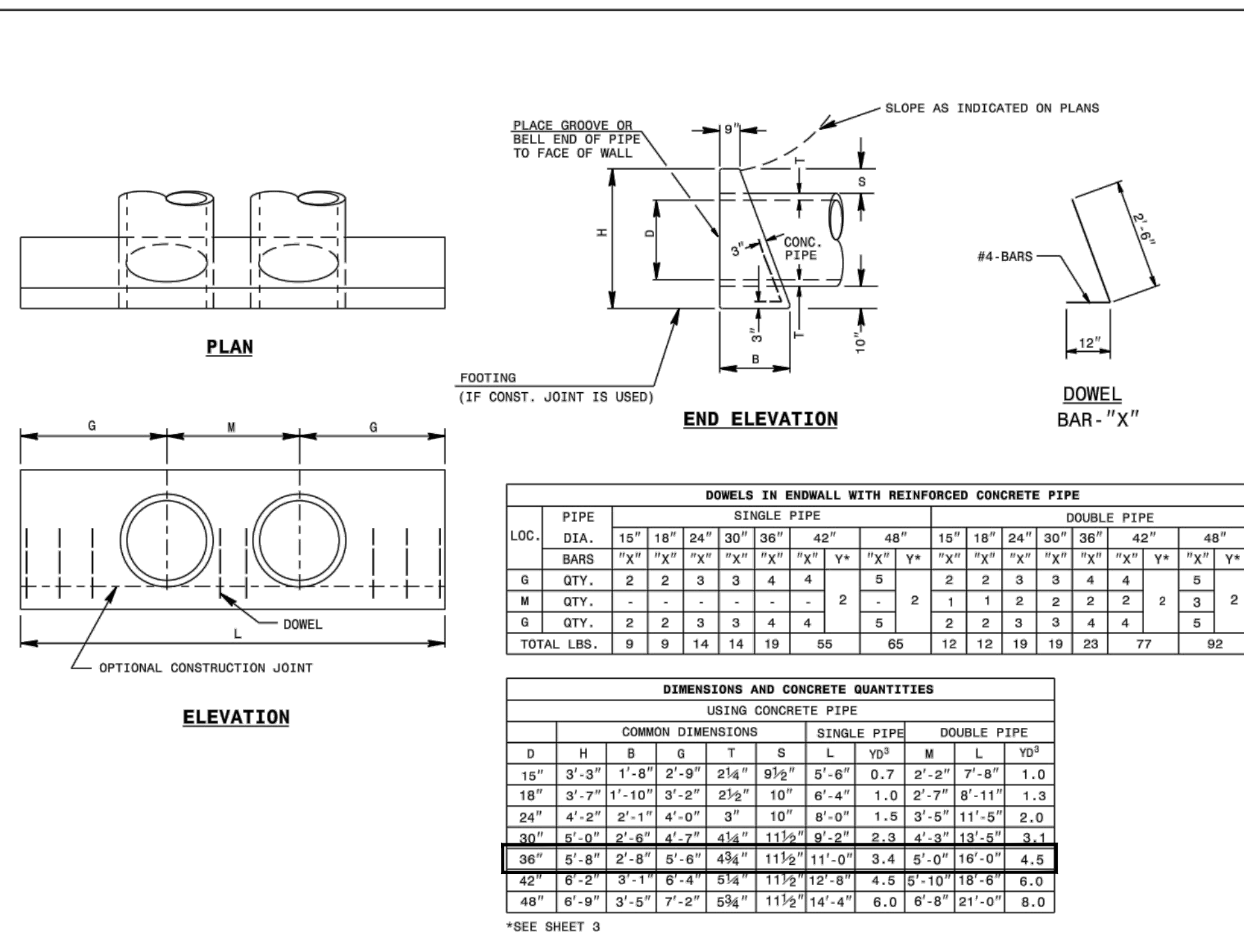
05/23/2022  
DRAWN BY: KHA  
DESIGNED BY: KHA  
REVIEWED BY: SAH  
DATE: 05/23/2022  
PROJECT NO.: 014527000  
TITLE: CONSTRUCTION DETAILS  
SHEET NUMBER: C6-00

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**Kimley»Horn**  
 PREPARED FOR: SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA  
 PROJECT: CULVER'S - BELMONT  
 HAWLEY AVE, BELMONT NC 28012  
 LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
 PARCEL ID: 214364, 214365, 214366, 221080 & 221080  
 DATE: 05/23/2022  
 DRAWN BY: KHA  
 DESIGNED BY: KHA  
 REVIEWED BY: SAH  
 PROJECT NO: 014527000  
 TITLE: CONSTRUCTION DETAILS  
 SHEET NUMBER: C6-01



**GENERAL NOTES:**

CHAMFER ALL CORNERS 1" OR HAVE A RADIUS OF 1".

PLACE 2 #6 "Y" BARS IN THE TOP OF ALL ENDWALL FOR PIPE CULVERTS 42" AND OVER WITH A MINIMUM OF 3" COVER AND A LENGTH OF 6" LESS THAN ENDWALL LENGTH.

CONSTRUCT BOTTOM SLAB WITH FORMS.

DO NOT INTERPRET WALL THICKNESS (T) SHOWN FOR THE THICKNESS ACCEPTABLE, BUT IS USED IN COMPUTING ENDWALL QUANTITIES.

WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE, PLACE BAR "X" DOWELS IN THE BASE AS SHOWN ON PLANS. SPACE BARS APPROXIMATELY ON 12" CENTERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE AND POUR THE BASE SEPARATELY LEAVE THE POUR ROUGH.

USE CLASS "B" CONCRETE.

STATE OF NORTH CAROLINA  
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RALEIGH, N. C.

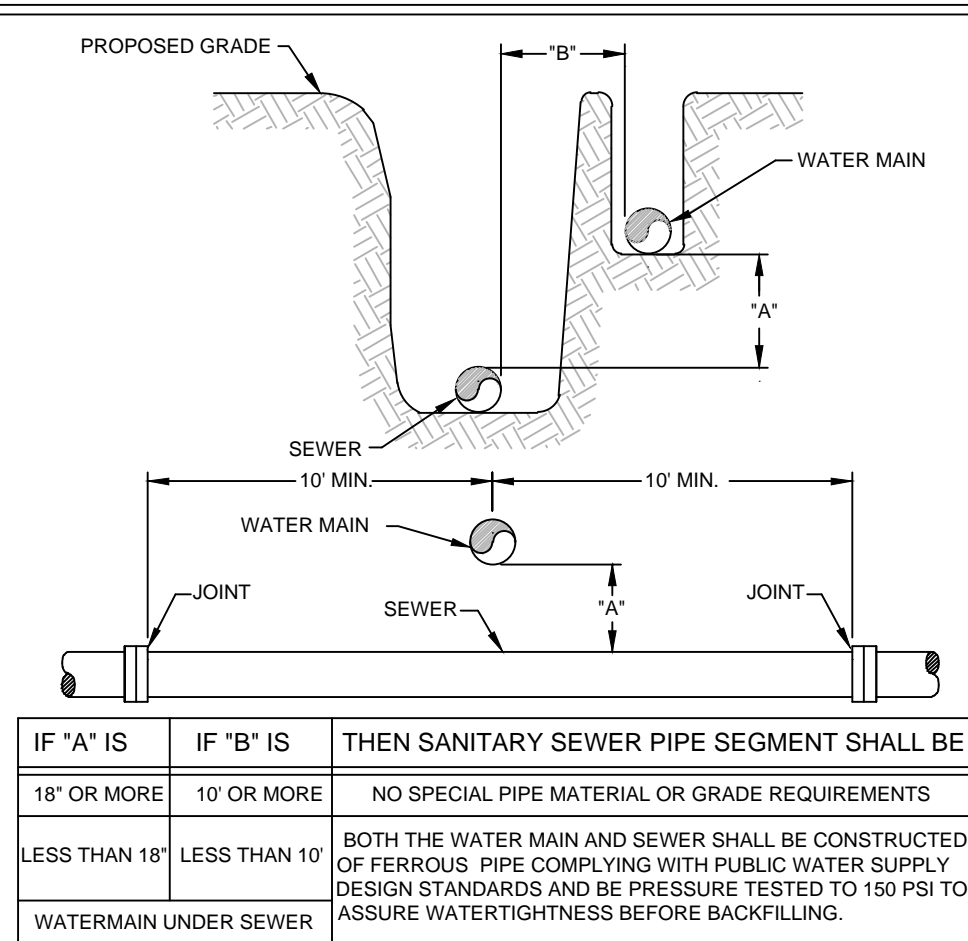
ROADWAY STANDARD DRAWING FOR  
**CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS**  
15" THRU 48" PIPE - 90° SKEW

SHEET 1 OF 3  
**838.01**

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N. C.

ROADWAY STANDARD DRAWING FOR  
**CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS**  
15" THRU 48" PIPE - 90° SKEW

SHEET 3 OF 3  
**838.01**



NOTES:  
WATER AND SEWER CROSSINGS AND SEPARATIONS SHALL BE IN ACCORDANCE WITH NCDNR MINIMUM DESIGN CRITERIA FOR THE PERMITTING OF GRAVITY SEWERS.

THERE SHALL BE NO PHYSICAL CONNECTIONS BETWEEN A PUBLIC OR PRIVATE POTABLE WATER SUPPLY SYSTEM AND A SEWER, OR APPURTENANCE THERE TO WHICH WOULD PERMIT THE PASSAGE OF ANY WASTEWATER OR POLLUTED WATER INTO THE POTABLE SUPPLY. NO PIPE SHALL PASS THROUGH OR COME INTO CONTACT WITH ANY PART OF A SEWER MAHOLE.

**HORIZONTAL AND VERTICAL SEPARATION**

a. SANITARY SEWERS SHALL BE LAID AT LEAST TEN (10) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A TEN (10) FOOT SEPARATION, DWO MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED TO ONE SIDE OF THE SEWER, AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

b. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE OR ANYTIME THE SEWER IS OVER THE WATER MAIN, BOTH THE WATER MAIN AND SEWER MUST BE CONSTRUCTED OF FERROUS PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATERTIGHTNESS BEFORE BACKFILLING.

c. A 24 INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER LINES OR FERROUS PIPE SPECIFIED.

**CROSSINGS**

a. SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF WATER MAIN AND THE OUTSIDE OF THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.

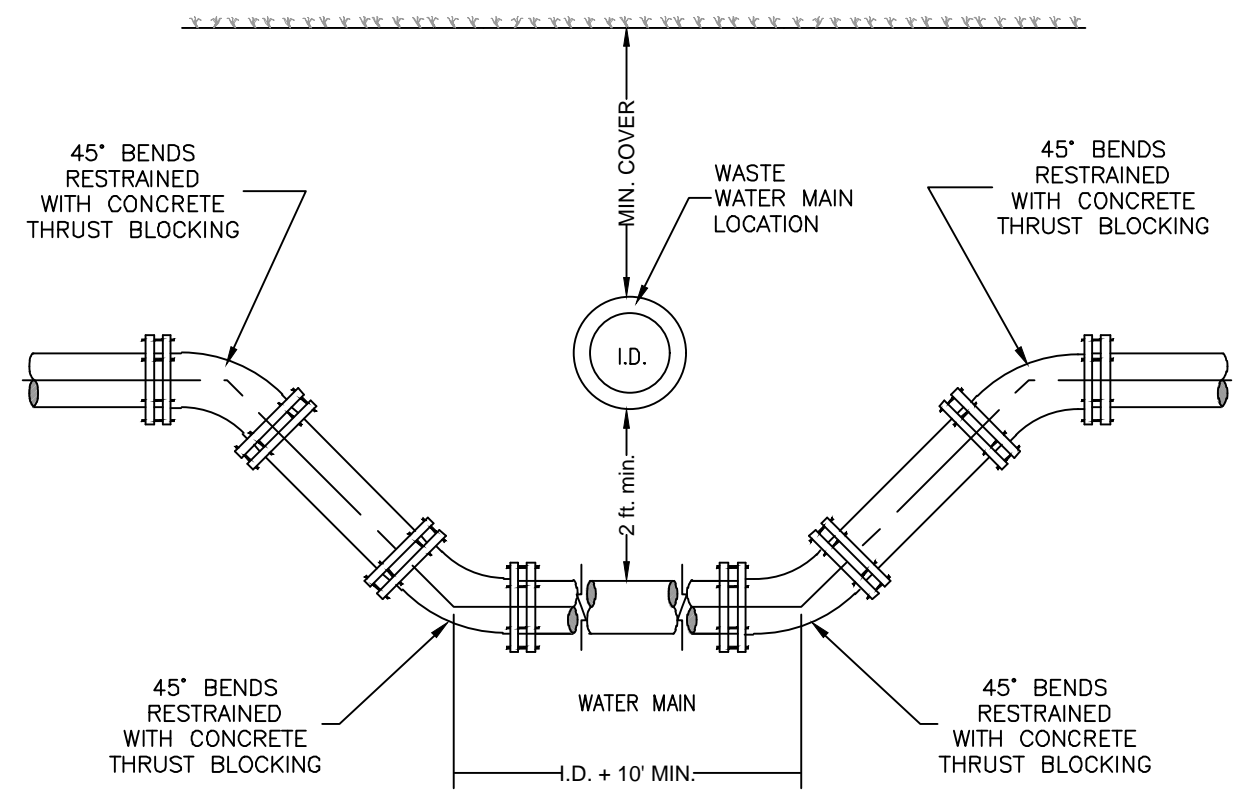
b. WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST BE SPECIFIED:

i. THE SEWER SHALL BE DESIGNED AND CONSTRUCTED OF FERROUS PIPE AND SHALL BE PRESSURE TESTED AT 150 PSI TO ASSURE WATER TIGHTNESS PRIOR TO BACKFILLING, OR

ii. EITHER THE WATER MAIN OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION.

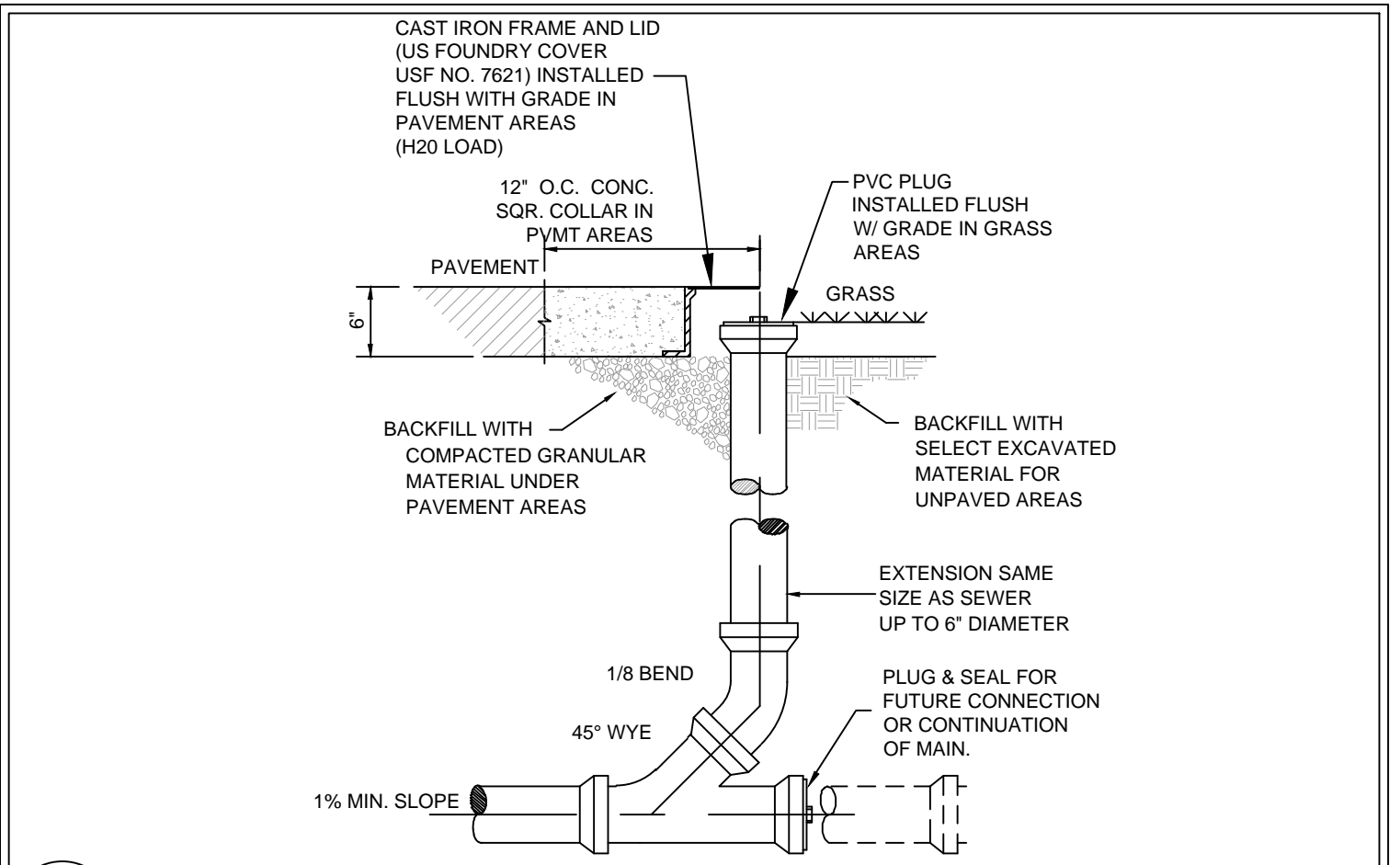
**WATER AND SEWER SEPARATION REQUIREMENTS**

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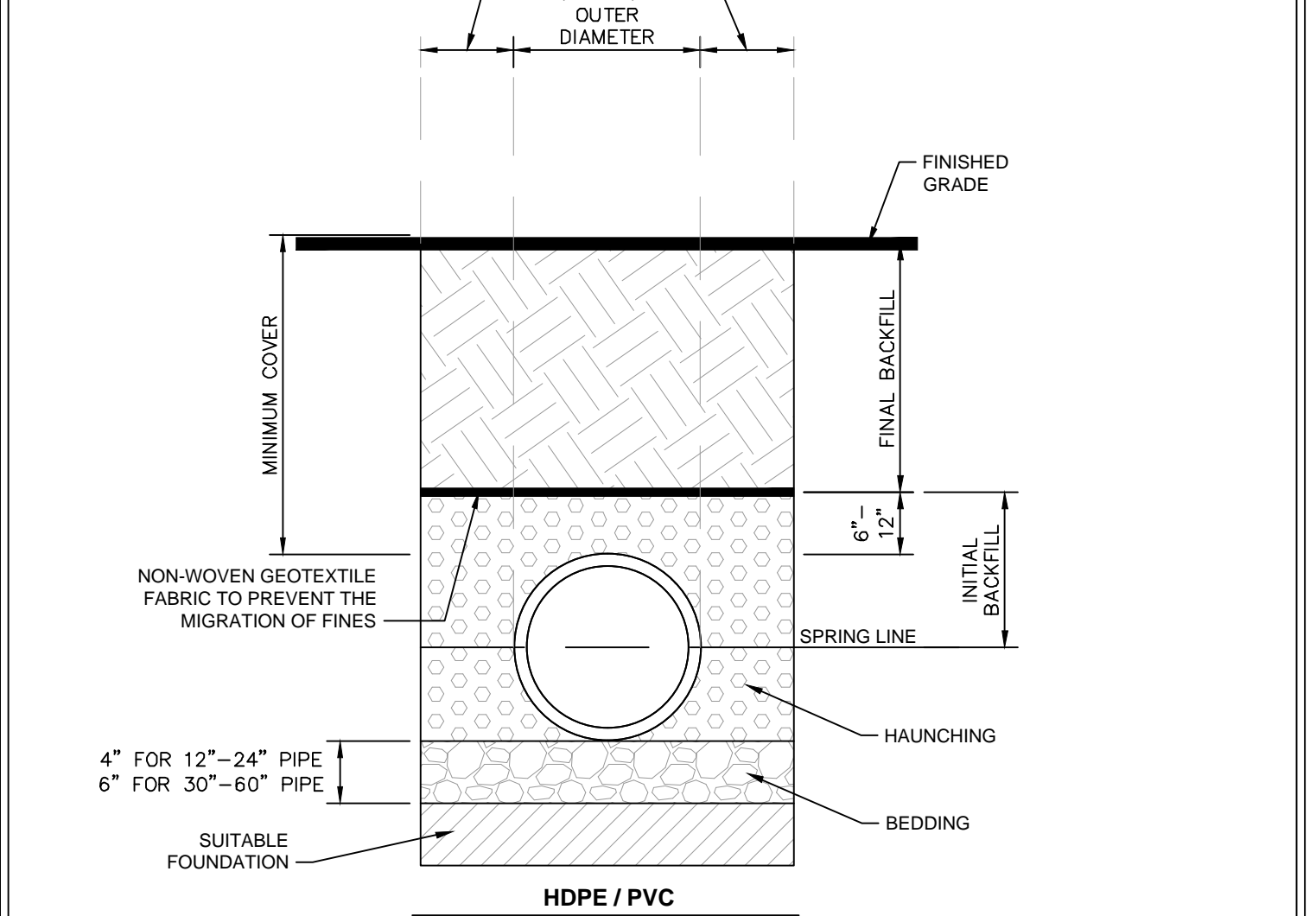
**WATER MAIN VERTICAL OFFSET DETAIL**

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**SEWER CLEANOUT**

Not to Scale

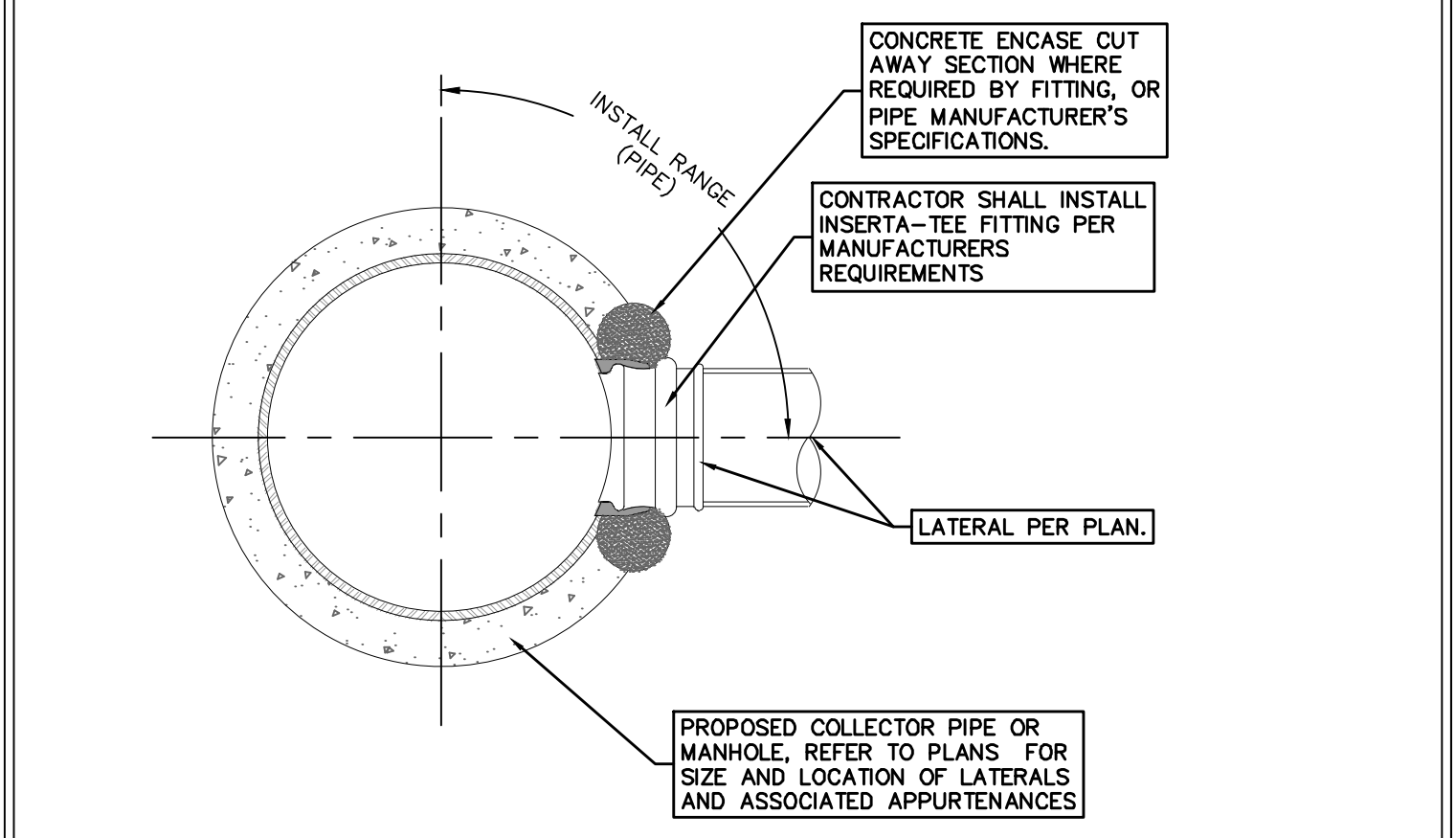


**HDPE NOTES:**

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMO PLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS" - LATEST EDITION.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL WHEN REQUIRED.
- WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE GEOTECHNICAL ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- SUITABLE MATERIAL BEDDING SHALL BE CLASS I WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 95% STANDARD PROCTOR.
- HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I OR CLASS II COMPACTED TO 95% STANDARD PROCTOR.
- INITIAL BACKFILL SHALL BE CLASS I, WORKED BY HAND, OR CLASS II OR CLASS III COMPACTED TO 95% STANDARD PROCTOR.
- INITIAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS II COMPACTED TO 90% STANDARD PROCTOR.
- FINAL BACKFILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3 AND 4.
- FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE IV-A COMPACTED TO 95% STANDARD PROCTOR.
- ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D2321 - LATEST EDITION.
- ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 6' LOOSE LIFTS IN ACCORDANCE WITH ASTM D698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
- FILL SLAVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS ORGANICS AND ROCKS LARGER THAN 3".
- ALL TRENCH EXCAVATIONS SHALL BE SLOPED SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES.
- DITCH CHECKS SHALL BE PLACED 40' O.C. MAX AND AT LEAST ONE BETWEEN EVERY STRUCTURE. CHECKS SHALL CONSIST OF LEAN CONCRETE PLACED UP TO 1' ABOVE THE STONE BACKFILL TO PREVENT THE MIGRATION OF FINES.

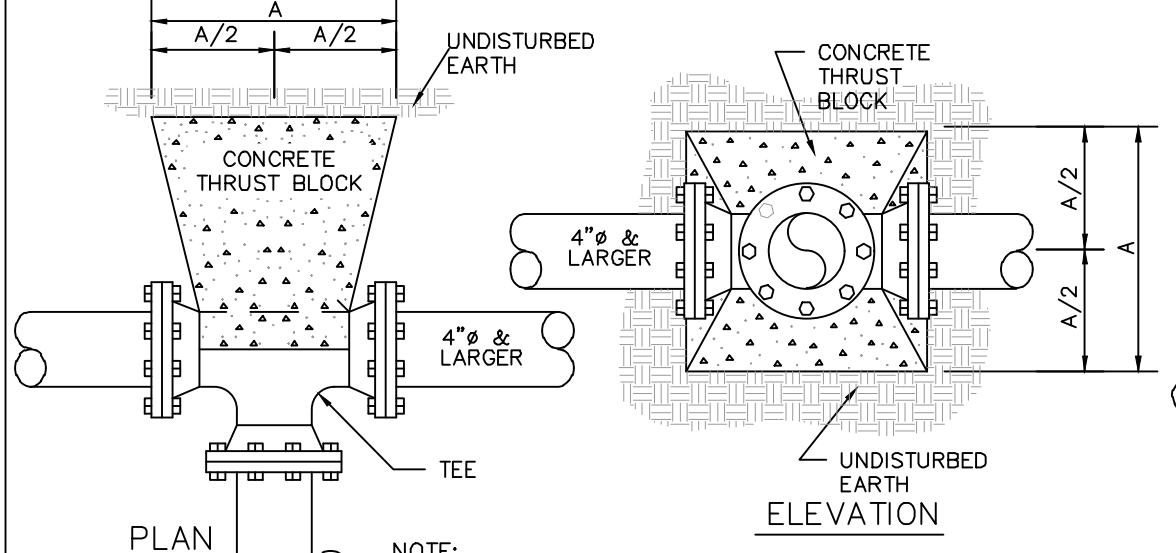
**SANITARY SEWER TRENCHING AND BEDDING**

Not to Scale



**INSERT-A-TEE LATERAL CONNECTOR**

Not to Scale

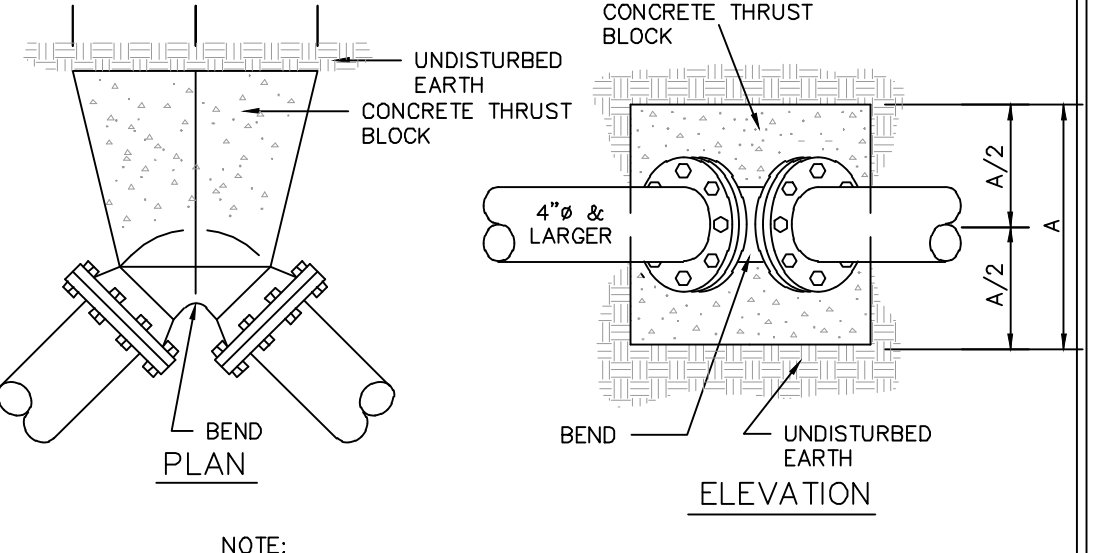


SIZE	11 1/4" BEND	22 1/2" BEND	45" BEND	90" BEND	TEE	PLUG
4	12	12	12	16	16	14
6	12	12	12	16	16	14
8	12	12	12	16	22	18
10	12	14	20	28	28	22
12	12	18	24	32	32	28
14	14	20	28	38	38	32

THRUST BLOCKS - DIMENSION "A"

**TYPICAL THRUST BLOCKS - TEES**

Not to Scale



SIZE	11 1/4" BEND	22 1/2" BEND	45" BEND	90" BEND	TEE	PLUG
4	12	12	12	16	16	14
6	12	12	12	16	16	14
8	12	12	16	22	22	18
10	12	14	20	28	28	22
12	12	18	24	32	32	28
14	14	20	28	38	38	32

THRUST BLOCKS - DIMENSION "A"

**TYPICAL THRUST BLOCKS - BENDS**

Not to Scale

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**SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA**  
100 BELMONT MT. HOLLY ROAD  
BELMONT, NC 28012  
PHONE: 414-557-7459

**CULVER'S - BELMONT**  
HAWLEY AVE, BELMONT NC 28012  
LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080

PREPARED FOR: PROJECT: DATE: BY:

ISSUANCE AND REVISION DESCRIPTIONS

05/23/2022

DRAWN BY: KHA  
DESIGNED BY: KHA  
REVIEWED BY: SAH

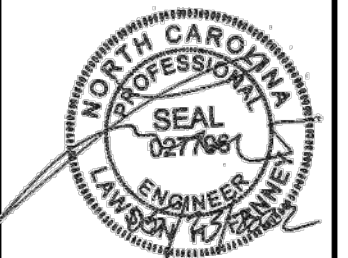
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PROJECT NO. 014527000

TITLE: **CONSTRUCTION DETAILS**

SHEET NUMBER: **C6-02**



No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY



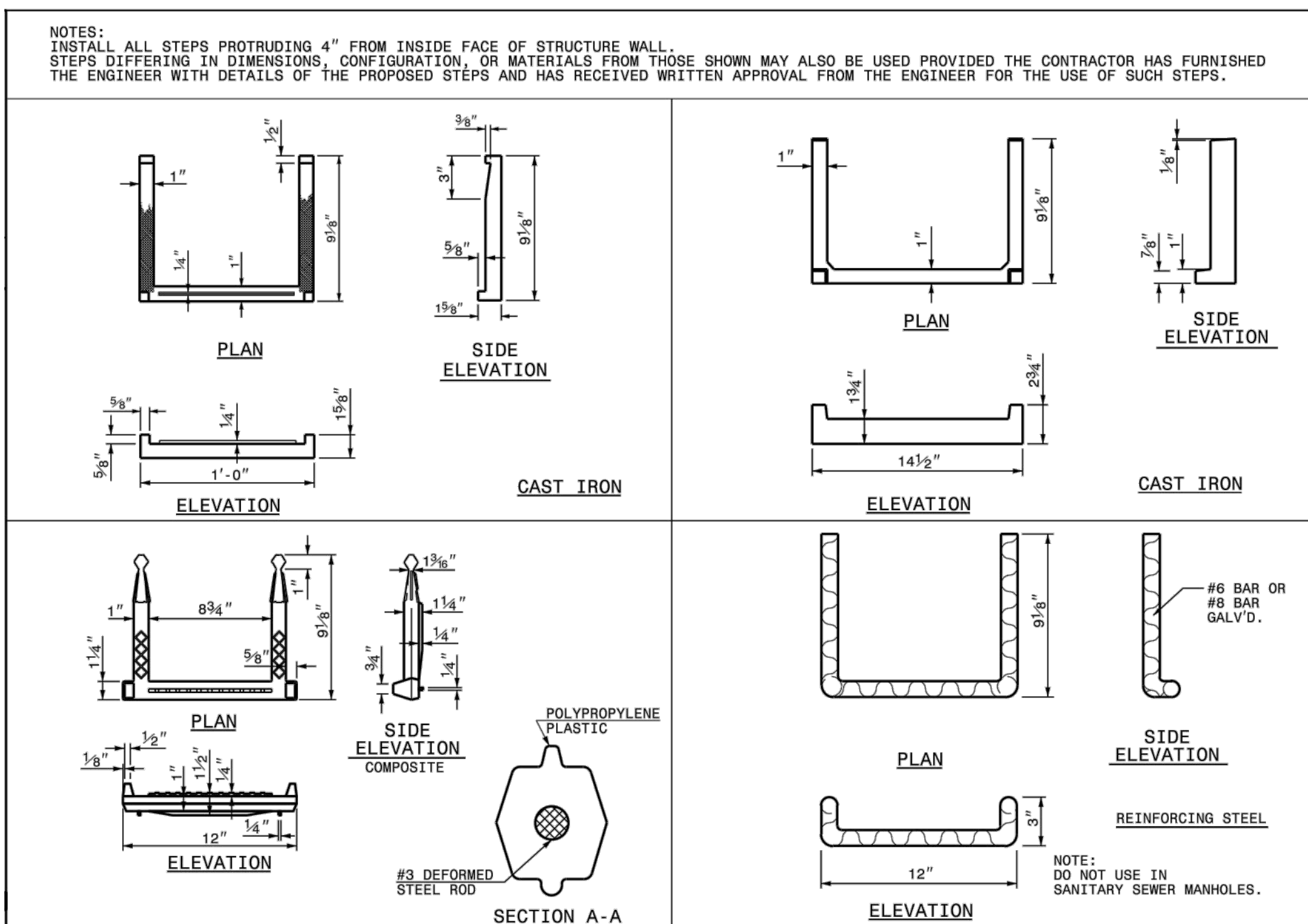
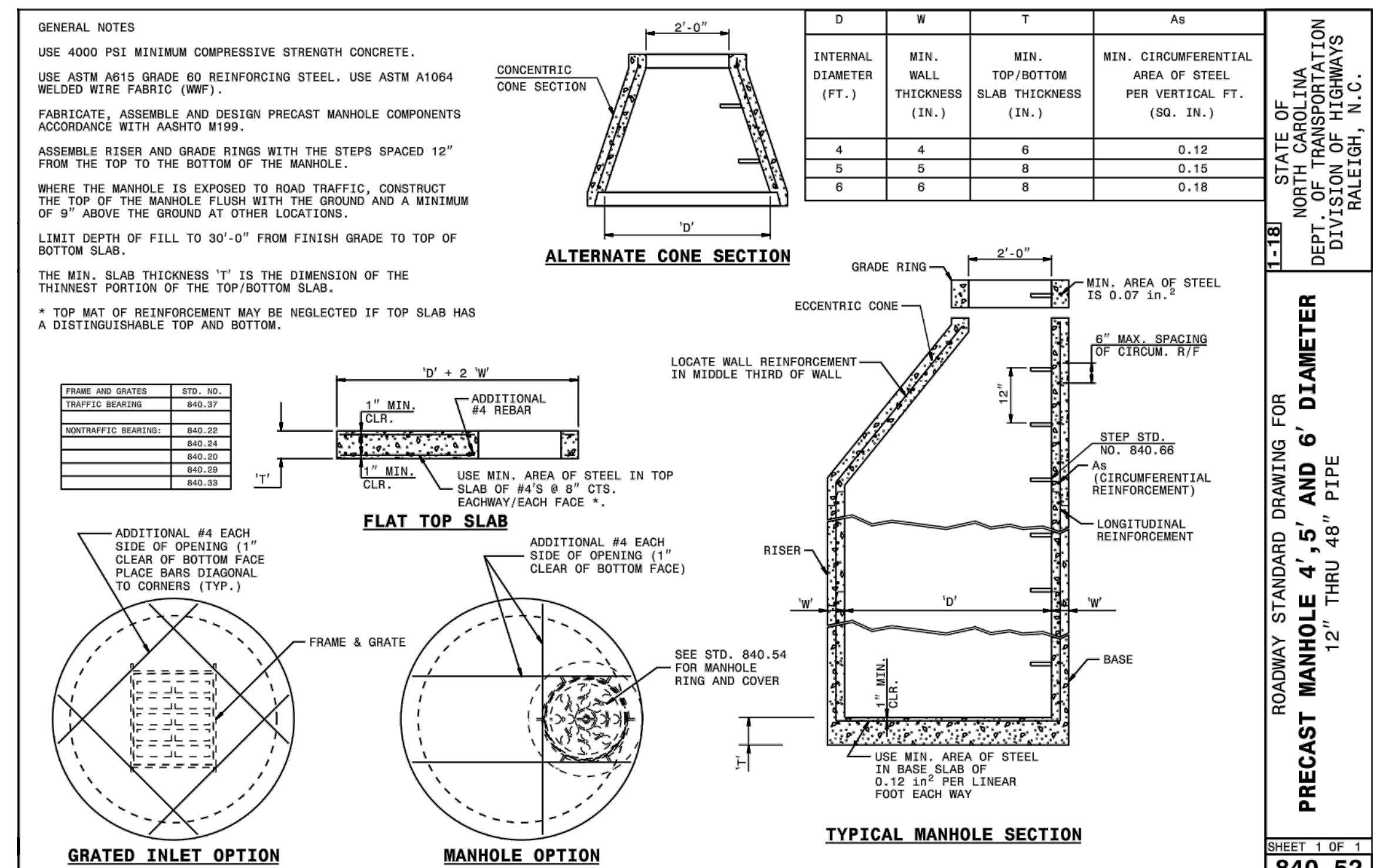
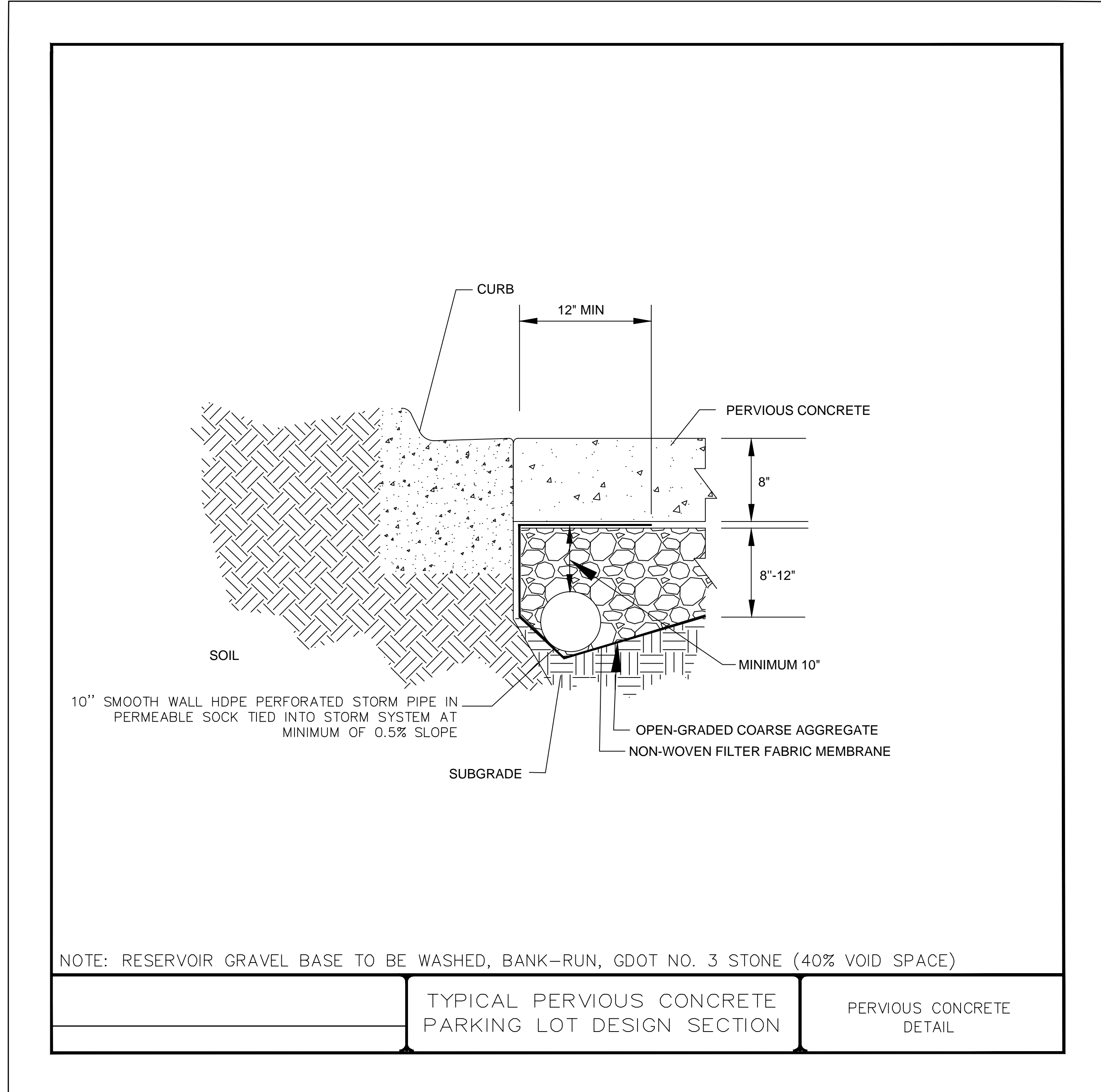
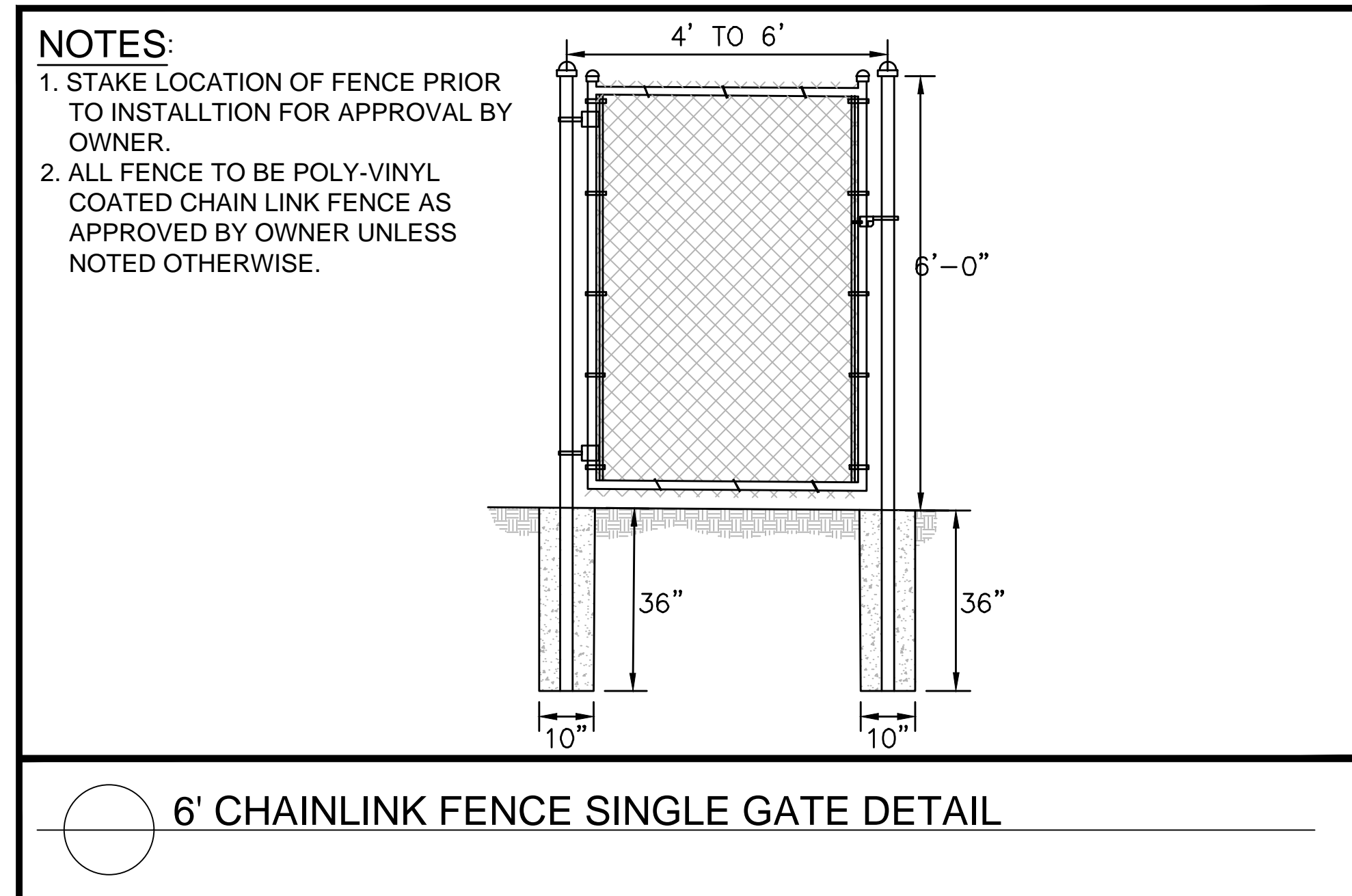
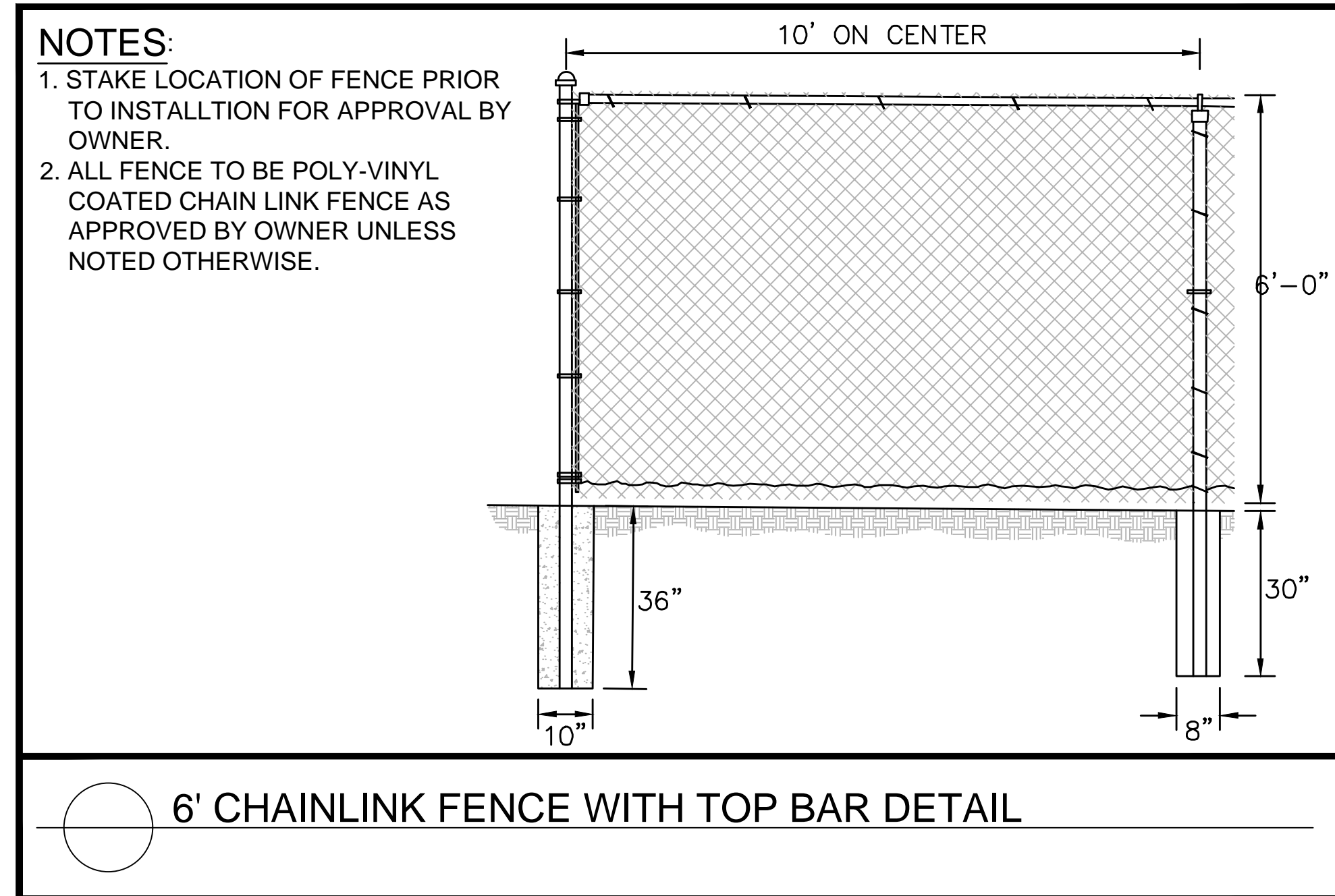
05/23/2022

DRAWN BY: KHA  
 DESIGNED BY: KHA  
 REVIEWED BY: SAH  
 DATE: 05/23/2022  
 PROJECT NO: 014527000

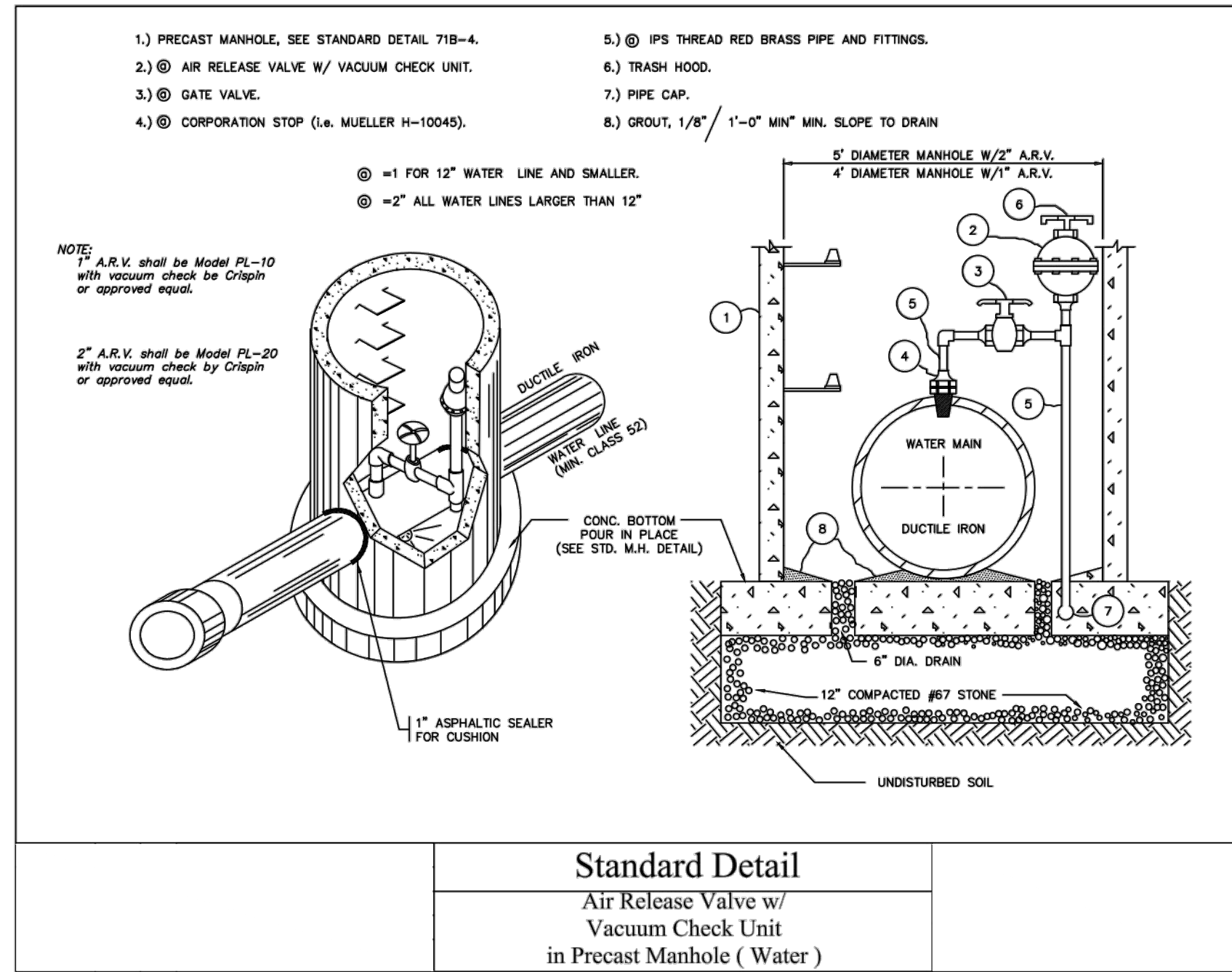
**CONSTRUCTION DETAILS**

SHEET NUMBER  
**C6-03**

STATE OF NORTH CAROLINA  
 DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 RALEIGH, N.C.  
 ROADWAY STANDARD DRAWING FOR  
**DRAINAGE STRUCTURE STEPS**  
 SHEET 1 OF 1  
**840 56**



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STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N. C.

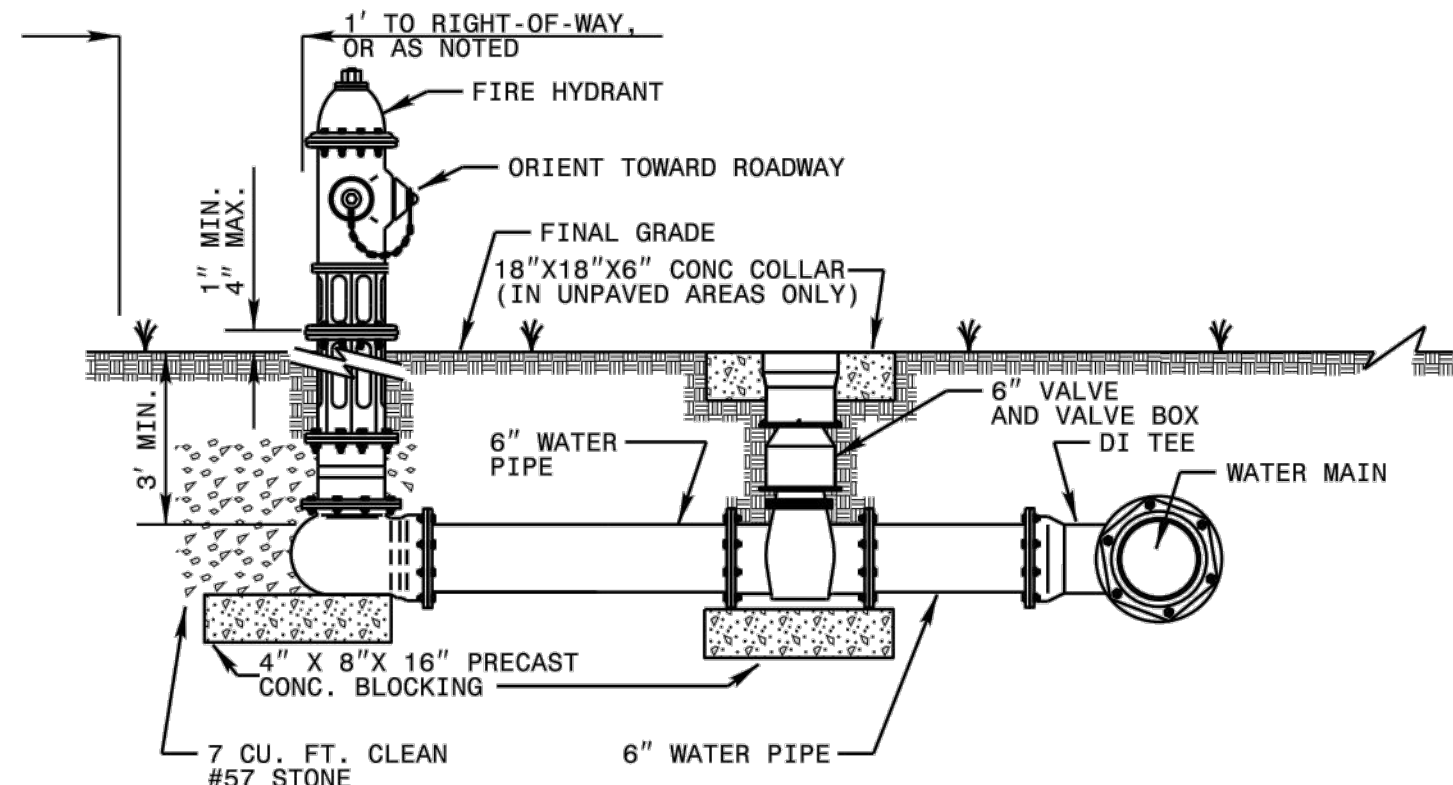
ENGLISH STANDARD DRAWING FOR  
**FIRE HYDRANT**

SHEET 1 OF 1  
**1515.02**

NOTES:

- THIS DETAIL SHOWS THE TYPICAL FINAL FIRE HYDRANT CONFIGURATION AFTER INSTALLATION OF A PROPOSED FIRE HYDRANT, RECONNECTION OF AN EXISTING FIRE HYDRANT, OR RELOCATION OF A FIRE HYDRANT.
- KEEP DRAIN PORTS FREE FROM OBSTRUCTION.
- RESTRAIN ALL PIPE JOINTS AND FITTINGS. ACCEPTABLE TYPES OF RESTRAINT INCLUDE RESTRAINING GLANDS, RESTRAINED, PUSH-ON JOINTS; AND 3/4" BITUMINOUS COATED, ALL-THREAD RESTRAINING RODS. THRUST BLOCKS ARE NOT AN ACCEPTABLE TYPE OF RESTRAINT.
- FOR RELOCATED OR RECONNECTED FIRE HYDRANTS, VERIFY THE VALVE IS RESTRAINED TO THE MAIN. PROVIDE APPROPRIATE RESTRAINT.

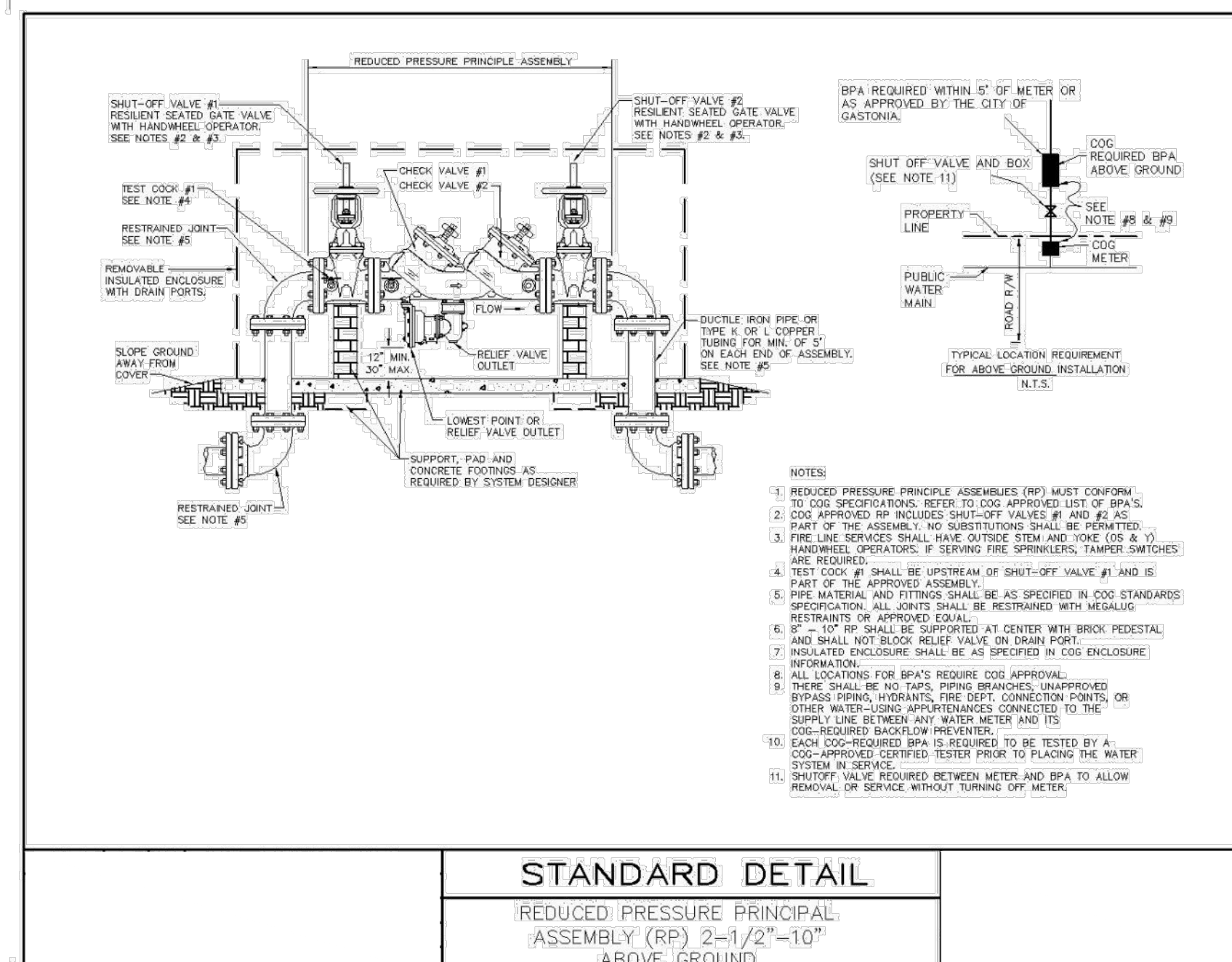
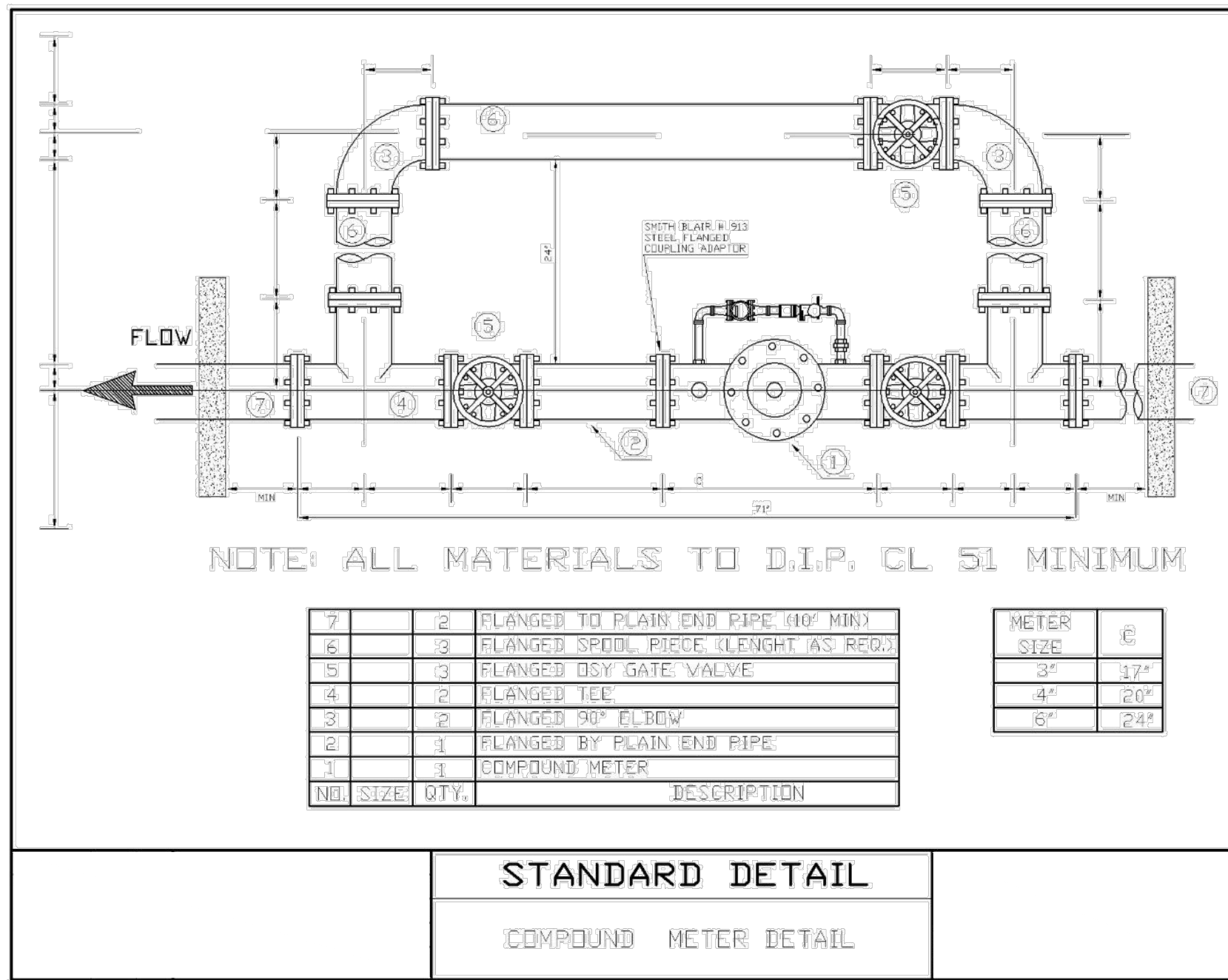
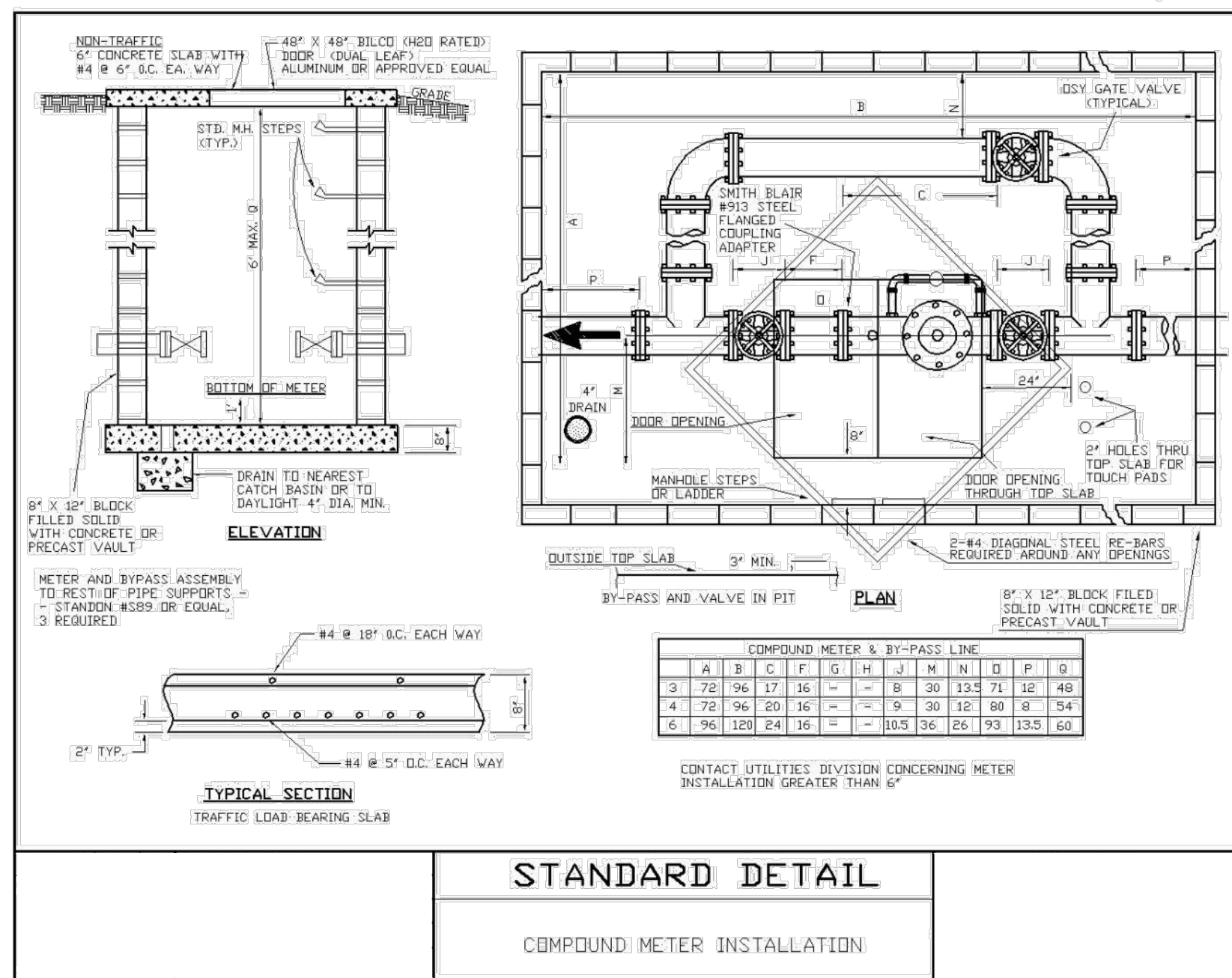
- HYDRANT LOCATION APPLIES TO PROPOSED AND RELOCATED FIRE HYDRANTS.
- LOCATE FIRE HYDRANT WITH 3' HORIZONTAL CLEARANCE FROM ABOVE GROUND OBJECTS.
- PROVIDE A MINIMUM OF 3' COVER OVER ALL SECTIONS OF HORIZONTAL PIPE. USE FITTINGS AS NECESSARY.
- TAPPING SLEEVES MAY BE USED ON EXISTING MAINS IN LIEU OF DI TEES.
- LOCATE FIRE HYDRANT OUTSIDE OF THE VEHICLE RECOVERY AREA, ADJACENT TO THE R/W LINE, OR IN A PROTECTED AREA.



STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N. C.

ENGLISH STANDARD DRAWING FOR  
**FIRE HYDRANT**

SHEET 1 OF 1  
**1515.02**



**Kimley Horn**  
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PREPARED FOR  
**SOUTHERN BENEDICTINE SOCIETY OF NORTH CAROLINA**  
100 BELMONT MT. HOLLY ROAD  
BELMONT, NC 28012  
PHONE: 414-557-7459

PROJECT  
**CULVER'S - BELMONT**  
HAWLEY AVE, BELMONT, NC 28012  
LAND LOT 15, 16, 17, 18, 19, ND DISTRICT  
PARCEL ID: 214364, 214365, 214366, 221080 & 221080

PREPARED BY  
**Kimley Horn**  
NORTH CAROLINA PROFESSIONAL SEAL 05/23/2022  
ENGINEER  
LAWREN KIMLEY

05/23/2022

DRAWN BY: KHA  
DESIGNED BY: KHA  
REVIEWED BY: SAH

DATE: 05/23/2022  
PROJECT NO.: 014527000  
TITLE: CONSTRUCTION DETAILS  
SHEET NUMBER: C6-04

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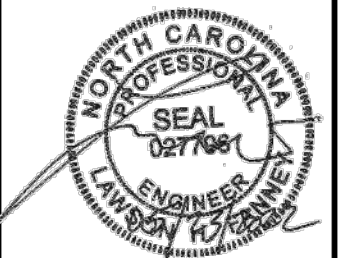
- Notes**
- R3-2 No Left Turn Sign
  - 24"x24"
  - Reflective Sheeting on Aluminum
  - Radius Corners
  - 3/8" Prepunched Holes
  - High Intensity and Diamond Grade
  - Signs Meet DOT and MUTCD State and Federal Guidelines

R2-3 NO LEFT TURN SIGN  
Not to Scale



No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**PROJECT**  
**CULVER'S - BELMONT**  
 HAWLEY AVE, BELMONT NC 28012  
 LAND LOT 15, 16, 17, 18, 19, ... ND DISTRICT  
 PARCEL ID: 214364, 214365, 214366, 221080 & 221080



05/23/2022  
 DRAWN BY: KHA  
 DESIGNED BY: KHA  
 REVIEWED BY: SAH  
 DATE: 05/23/2022  
 PROJECT NO.: 014527000

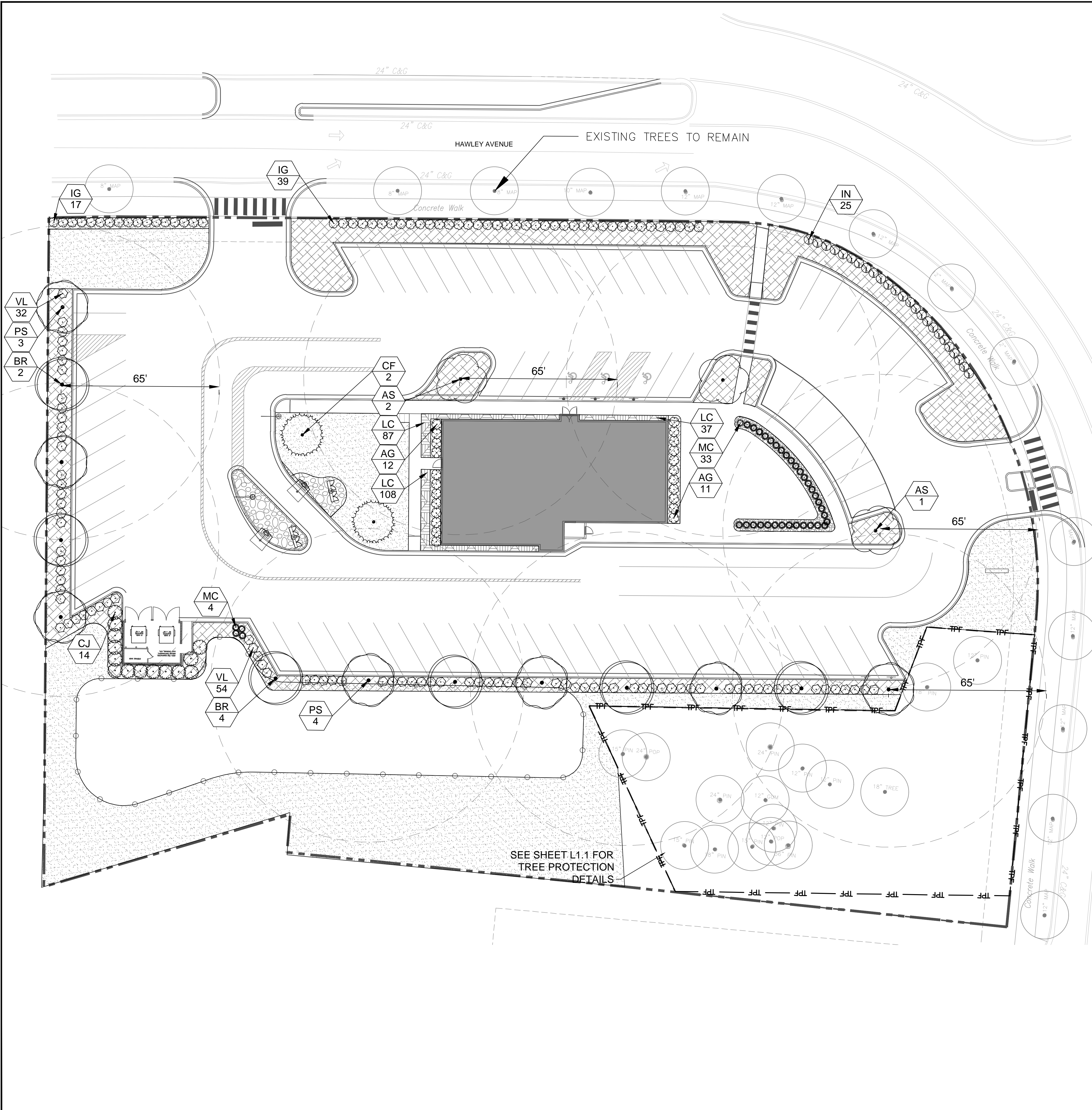
TITLE  
**CONSTRUCTION  
 DETAILS**

SHEET NUMBER  
**C6-05**

PREPARED FOR  
**SOUTHERN  
 BENEDICTINE SOCIETY  
 OF NORTH CAROLINA**  
 100 BELMONT MT. HOLLY ROAD  
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 PHONE: 414-557-7459

PREPARED BY  
**Kimley-Horn**  
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Drawing name: K:\ALP\_PR\014527000\_culvers-belmont.nc\CAD\plansheets\L1.0 LANDSCAPE PLAN.dwg L1-01 LANDSCAPE PLAN May 23, 2022 2:29pm by: Corbin Clemons



## PLANT SCHEDULE

TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	METHOD	SIZE	GA.
	AS	3	SUGAR MAPLE	ACER SACCHARUM	F.G. B & B	10'-12" MIN HEIGHT	2'-3" CAL.
	BR	6	RIVER BIRCH	BETULA NIGRA	F.G. B & B	10'-12" MIN HEIGHT	2'-3" CAL.
	CF	2	FLOWERING DOGWOOD	CORNUS FLORIDA	F.G. B & B	8-10" MIN HEIGHT	2'-3" CAL.
	PS	7	JAPANESE FLOWERING CHERRY	PRUNUS SERRULATA	F.G. B & B	10'-12" MIN HEIGHT	2'-3" CAL.
EVERGREEN SHRUBS	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONTAINER	SPACING	SIZE
	AD	23	GLOSSY ABELIA	ABELIA X GRANDIFLORA	5 GAL.	5' O.C.	20" FULL.
	CJ	14	CAMELLIA	CAMELLIA JAPONICA	7 GAL.	6' O.C.	24" FULL.
	IN	25	DWARF BURFORD HOLLY	ILEX CORNUTA BURFORDIENSIS	5 GAL.	5' O.C.	20" FULL.
	IG	56	INBERRY HOLLY	ILEX GLABRA	5 GAL.	5' O.C.	20" FULL.
	VL	87	LEATHERLEAF VIBURNUM	VIBURNUM RHYTHYDOPHYLLUM	5 GAL.	5' O.C.	20" FULL.
ORNAMENTAL GRASSES	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONTAINER	SPACING	SIZE
	MC	37	PINK MAHLY GRASS	MULLENBERGIA CAPILLARIS	3 GAL.	3' O.C.	20" FULL.
GROUND COVERS	CODE	QTY	COMMON NAME	BOTANICAL NAME	CONTAINER	SPACING	SIZE
	RS	1,119 SF	RIVER STONE	-----	SOD	18" O.C.	12" FULL.
	CD	15,697 SF	BERMUDA GRASS	CYNODON DACTYLON	SOD		
	DA	10,165 SF	HARDWOOD MULCH	DOUBLE SHREDDED HARD WOOD MULCH	MULCH		
	LC	498 SF	CREeping LILY TURF	LIRIOPE SPICATA	3 GAL.	18" O.C.	12" FULL.

### LANDSCAPE REQUIREMENTS

STREET TREE CANOPY REQUIREMENTS (per city code section 11)		
Trees	Required	Provided
Hawley Avenue (510 lf)	1 per 45 ft. O.C. = 12 trees	13 existing trees to remain
PARKING REQUIREMENTS (per city code section 11)		
Parking	Required	Provided
Trees	No parking space may be more than 60' from a tree	16 trees
PARKING LOT INTERIOR PLANTINGS (per city code section 11)		
Trees	Required	Provided
Trees	A tree ceiling over the parking area to provide shelter from sun and rain	16 trees
SEMI OPAQUE SCREEN (per city code section 11)		
Screen	Required	Provided
Shrubs	Semi opaque screen for screening of car lights and glare	Semi opaque screen
TREE SAVE REQUIREMENTS (per city code section 11)		
Site Area	Required	Provided
2.67 acres		
Tree Save	Required	Provided
	10% Tree Save Area = .27 ac.	.32 ac.

--- TPF --- TPF --- TREE PROTECTION FENCE

### LANDSCAPE NOTES:

- ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 3" OF TOPSOIL. DO NOT MOUND MULCH AGAINST ROOT FLARES.
- ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE.
- ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.
- ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.
- ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.
- ANY DISTURBED GRASS AREA IS TO BE REPLANTED. ALL SLOPES 3:1 OR GREATER SHALL BE SEEDED WITH SLOPE MASTER NO-MOW MIX OR OWNER APPROVED EQUAL.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA TO PROTECT ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING TO MAINTAIN HEALTHY PLANT CONDITIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE WARRANTY PERIOD.
- ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED PRIOR TO SUBSTANTIAL COMPLETION SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS WITHIN WARRANTY PERIOD.
- THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR WARRANTY PERIOD. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING THE NORMAL PLANTING SEASON.
- STANDARDS SET FORTH IN 'AMERICAN STANDARD FOR NURSERY STOCK' REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.
- ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES, AND SHALL BE STATE STANDARD OR BETTER.
- ALL INVASIVE / EXOTIC SPECIES AND PROHIBITED TREE SPECIES SHALL BE REMOVED FROM SITE, INCLUDING ROOT BALLS TO THE EXTENT POSSIBLE WITH NO DAMAGE TO ADJACENT EXISTING TREES.
- ALL LANDSCAPE AREAS WILL BE PROVIDED WITH PERMANENT AUTOMATIC IRRIGATION SYSTEM. (SEE IRR PLANS)
- TREE SUPPORT MATERIALS ARE TO BE REMOVED FROM EACH TREE ONCE IT IS 'ESTABLISHED' (AS APPROVED BY THE LANDSCAPE ARCHITECT).
- ALL PLANT SPECIFICATIONS IN THE PLANT SCHEDULE SHALL BE CONSIDERED THE MINIMUM ALLOWABLE SPECIFICATIONS. CONTRACTOR SHALL PROCURE PLANT MATERIALS AND UPSIZE AS NECESSARY TO MEET THE MOST STRINGENT SPECIFICATION.

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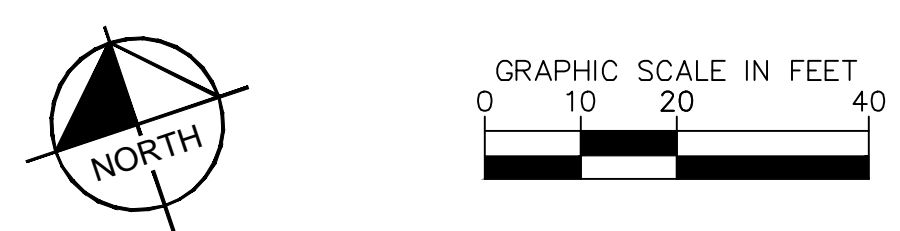
NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S BELMONT, NC**  
HAWLEY AVE., BELMONT NC 28012

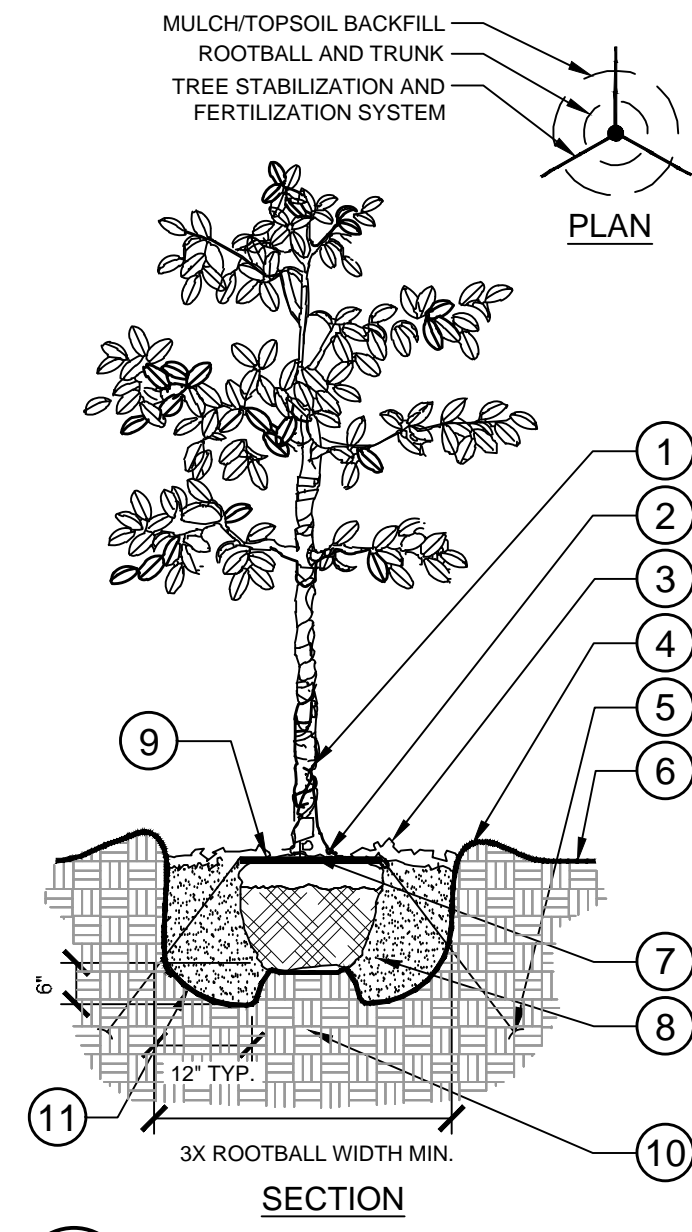
PROJECT: NORTH CAROLINA LANDSCAPE ARCHITECTS ASSOCIATION  
2201  
LURA HANDL ET AL

J. Handlton 05-23-2022

GSWCC NO. (LEVEL II)	0000064358
DRAWN BY	KCW
DESIGNED BY	TML/KCW
REVIEWED BY	TML
DATE	06/11/2021
PROJECT NO.	019566020
TITLE	LANDSCAPE PLAN
SHEET NUMBER	L1-01

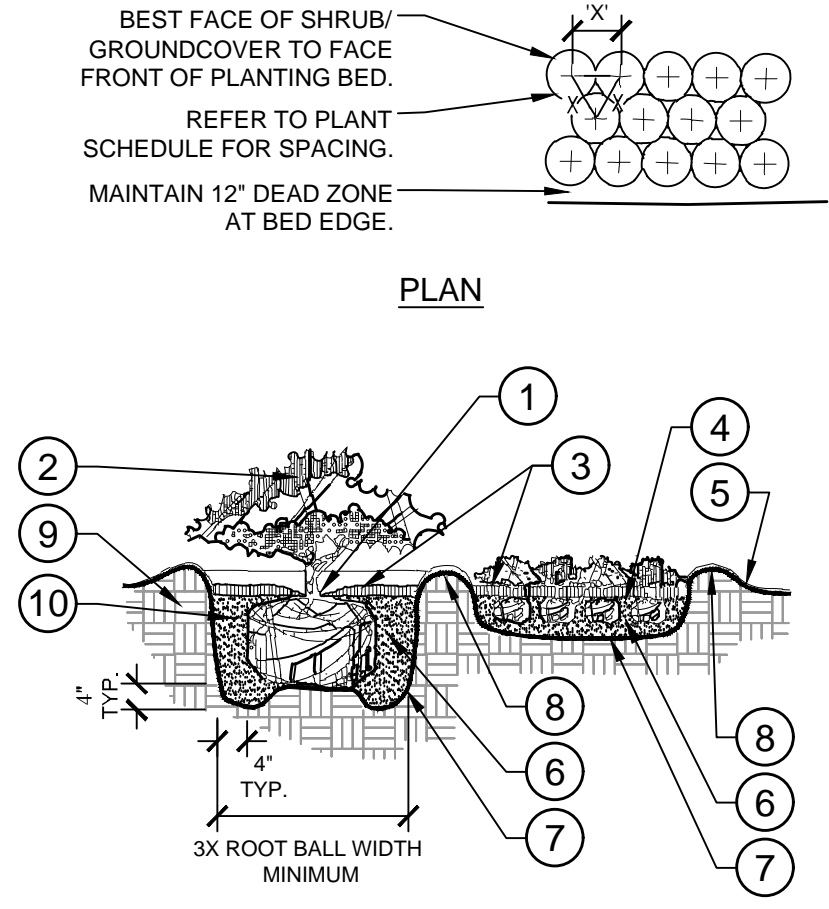


Drawing name: K:\ALP\_PR\014527000\_culvers-belmont\_nc\CAD\plansheets\L1-02 LANDSCAPE PLAN.dwg L1-02 LANDSCAPE DETAILS May 23, 2022 2:28pm by: Corbin Clemons



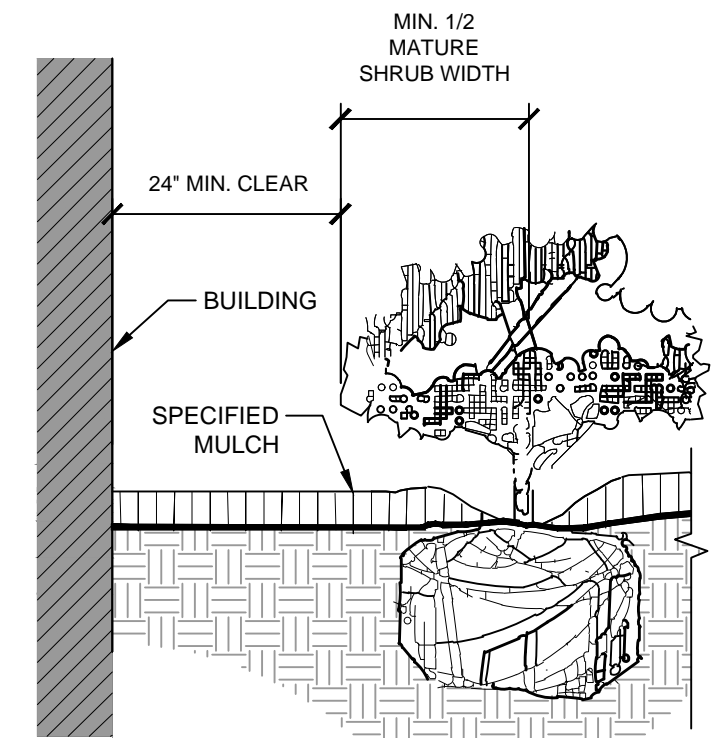
- 1 TRUNK/ROOT BALL TO BE CENTERED AND PLUMB/LEVEL IN PLANTING PIT.
  - 2 6" DIA. CLEAR OF MULCH AT TRUNK FLARE.
  - 3 3" MINIMUM MULCH AS SPECIFIED. WHERE TREES ARE PLACED IN SOIL, MULCH RINGS FOR TREES SHALL BE 6" DIAMETER (MIN.) OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
  - 4 4" HIGH BERM, FIRMLY COMPACTED.
  - 5 TREE FROG ANCHOR SYSTEM INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
  - 6 FINISHED GRADE. (SEE GRADING PLAN)
  - 7 TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE.
  - 8 PREPARED PLANTING SOIL AS SPECIFIED.
  - 9 TOP OF ROOTBALL SHALL BE 1" ABOVE FINISHED GRADE. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING. ROOTBALLS SMALLER THAN 24" IN DIAMETER MAY SIT ON COMPACTED EARTH.
  - 10 UNDISTURBED NATIVE SOIL.
  - 11 SCARIFY BOTTOM AND SIDES OF PLANTING PIT.
- NOTES:
- A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
  - B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
  - C. PRUNE ALL TREES IN ACCORDANCE WITH ANSI A-300.

1 TREE PLANTING SECTION / PLAN NTS



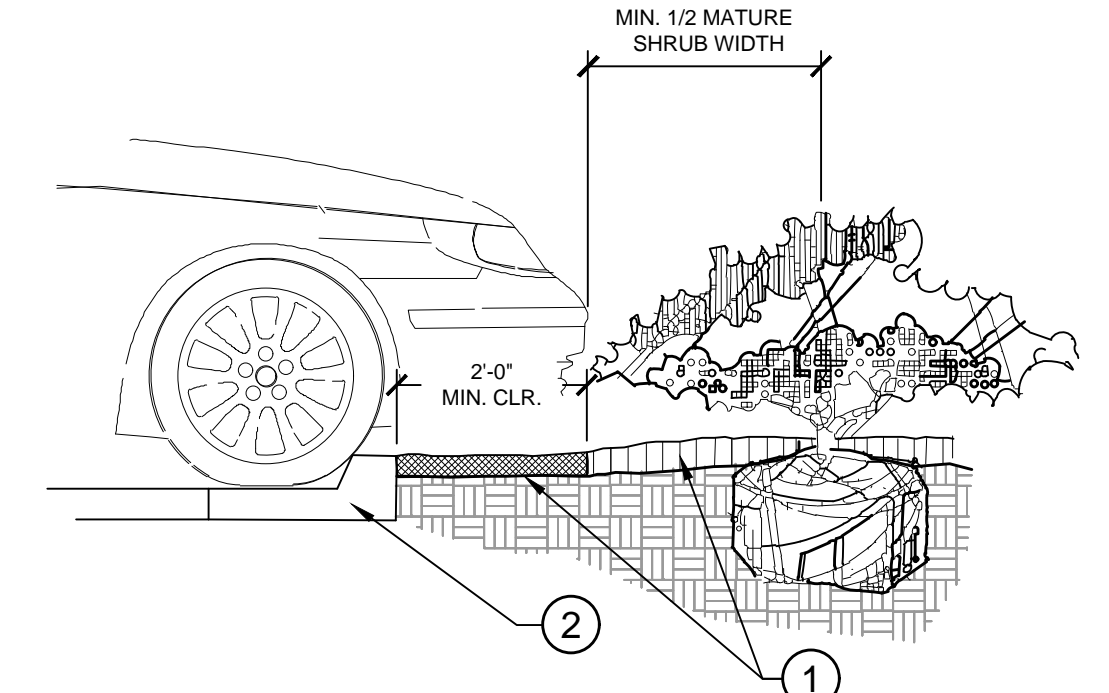
- 1 TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
- 2 PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
- 3 3" MULCH LAYER AS SPECIFIED.
- 4 EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
- 5 FINISHED GRADE (SEE GRADING PLAN).
- 6 PREPARED PLANTING SOIL AS SPECIFIED. (SEE LANDSCAPE NOTES) NOTE: WHEN GROUND-COVERS AND SHRUBS USED IN MASSES, ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
- 7 SCARIFY OF PLANTING PIT SIDES AND BOTTOM.
- 8 4" HIGH BERM FIRMLY COMPACTED.
- 9 UNDISTURBED NATIVE SOIL.
- 10 FERTILIZER TABLETS (MAX 3" DEEP)

2 SHRUB/GROUNDCOVER PLANTING SECTION / PLAN NTS



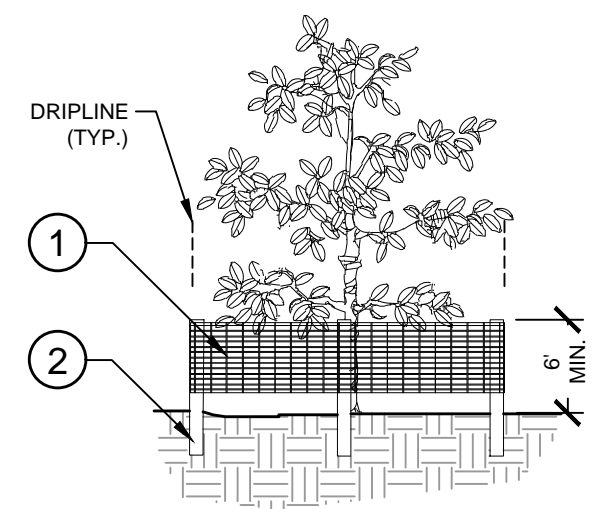
- NOTES:
1. CLEAR ZONE: 36" MIN. FROM BUILDING TO CENTER OF NEAREST SHRUB.
  2. INSTALL SPECIFIED MULCH: 24" MIN. FROM BUILDING. SPECIFIED MULCH TO BE INSTALLED AT A DEPTH OF 3" (MIN.)

3 PLANTINGS ADJACENT TO BUILDINGS SECTION NTS



- 1 INSTALL CONTINUOUS MULCH BED ADJACENT TO PARKING SPACES AS SHOWN. MULCH SHALL BE MIN. 3" DEEP. NO POP-UP IRRIGATION HEADS SHALL BE LOCATED WITHIN 24" OF A PARKING SPACE ON ANY SIDE.
- 2 CURB / PARKING LOT EDGE.

4 PARKING SPACE/CURB PLANTING SECTION NTS



- 1 6H "PERIMETER PLUS" CONSTRUCTION FENCE BY CONWED PLASTICS OR OWNER'S REPRESENTATIVE APPROVED EQUAL. SUBMIT PRODUCT INFORMATION FOR APPROVAL PRIOR TO INSTALLATION.
- 2 8" TALL METAL "T" POSTS OR 2" x 2" x 8' PRESSURE TREATED WOOD POSTS WITH 24" BURIAL BELOW GRADE.

- INSTALLATION NOTES:
- A. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR TREATED WOOD POSTS ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.
  - B. POSTS SHOULD BE DRIVEN INTO THE GROUND TO A DEPTH OF 1/3 OF THE HEIGHT OF THE POST. FOR EXAMPLE, A 6' POST SHOULD BE SET AT LEAST 2' INTO THE GROUND.
  - C. SPACE POSTS EVERY 6' (MIN.) TO 8' (MAX.).
  - D. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

NOTE: IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH FENCE. WIRE MAY DAMAGE FENCE OVER TIME.

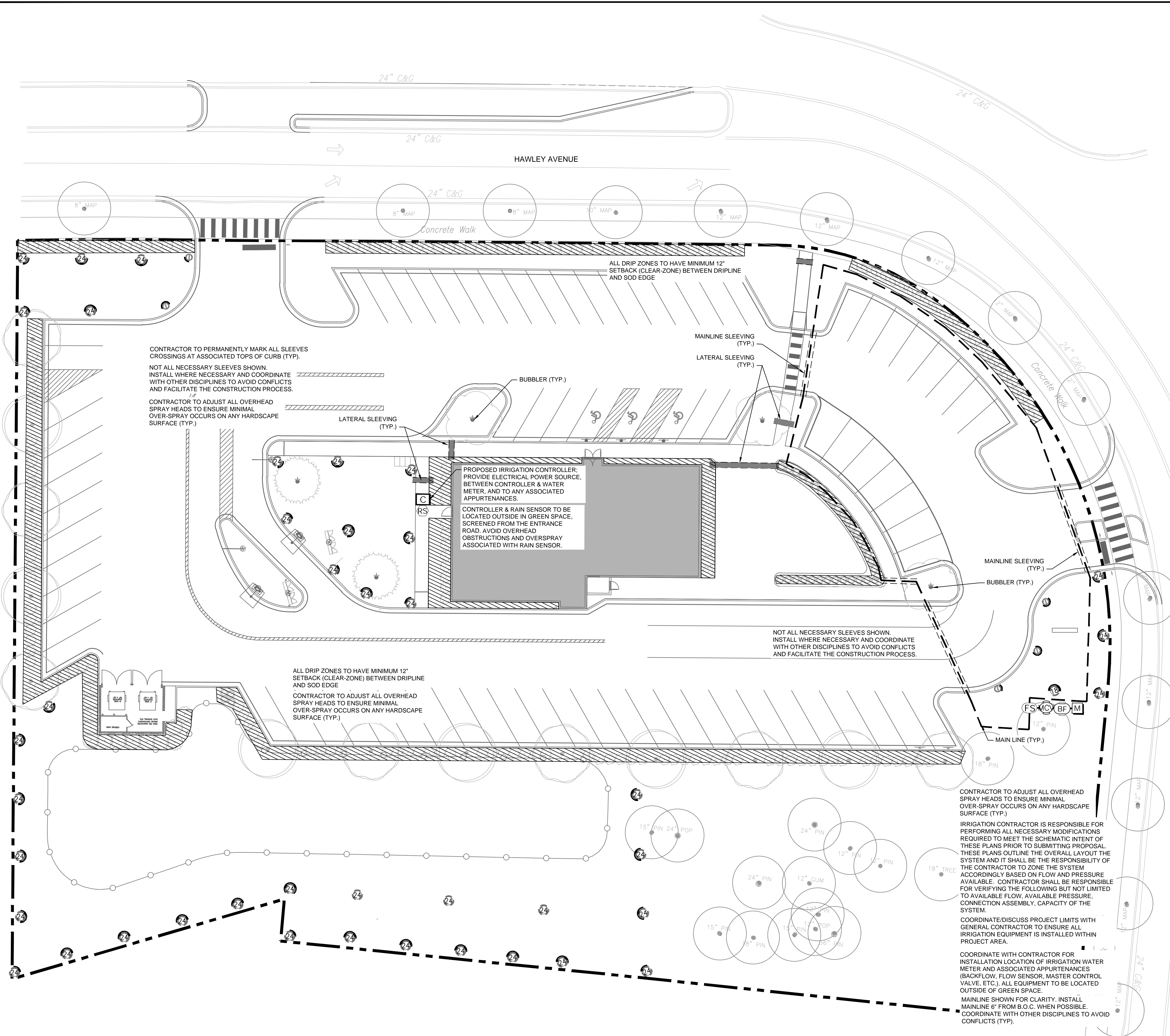
5 TREE PROTECTION FENCING ELEVATION / PLAN NTS

No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY



GSWCC NO. (LEVEL II)	0000064358
DRAWN BY	KCW
DESIGNED BY	TML/KCW
REVIEWED BY	TML
DATE	06/11/2021
PROJECT NO.	019566020

Drawing name: K:\ALP\_PR\014527000\_culvers-belmont\_nc\CAD\plans\sheet\3.0 IRRIGATION PLAN.dwg May 23, 2022 2:30pm by: Corbin Clemons



### IRRIGATION SCHEDULE

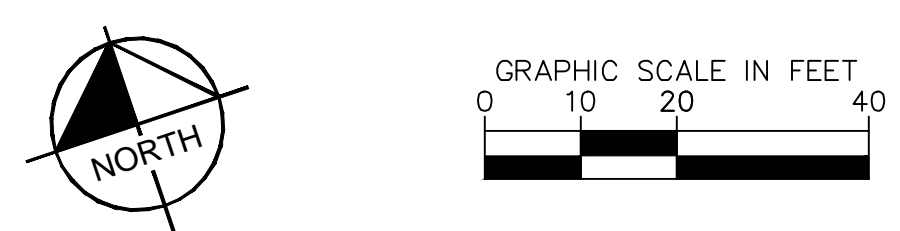
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
14 ADJ 14 F	RAIN BIRD R-VAN14 1806-SAM-P45 TURF ROTARY, 8-14 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6\"/>		
18 ADJ 18 F	RAIN BIRD R-VAN18 1806-SAM-P45 TURF ROTARY, 13-18 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6\"/>		
24 ADJ 24 F	RAIN BIRD R-VAN24 1806-SAM-P45 TURF ROTARY, 17-24 45-270 DEGREES AND 360 DEGREES. HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6\"/>		
1401 1402 1404 1408	RAIN BIRD 1804-PRS-1400 FLOOD 1401 FLOOD BUBBLER 4\"/>		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
[Hatched Area]	AREA TO RECEIVE DRIPLINE RAIN BIRD XFD-09-12 XFD ON-SURFACE PRESSURE COMPENSATING LANDSCAPE DRIPLINE. 0.9 5,622 L.F. GPH EMITTERS AT 12\"/>		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	
[Circle with 'M']	RAIN BIRD 300-BPES-PRS-D GLOBE 3\"/>		
[Circle with 'BF']	FEBCO 825Y 1-1/2\"/>		
[Circle with 'C']	RAIN BIRD ESP4ME3 WITH (1) ESP-SM3 STATION, HYBRID MODULAR OUTDOOR CONTROLLER, FOR RESIDENTIAL OR LIGHT COMMERCIAL USE. LNK W/IFM MODULE AND FLOW SENSOR READY.	1	
[Circle with 'RS']	RAIN BIRD RAINGAUGE RAIN SENSOR FOR MAXICOM OR SITECONTROL. CUSTOMIZES WEATHER DATA BY PROVIDING SITE-SPECIFIC RAINFALL MEASUREMENTS, AND SENDING TO CENTRAL CONTROLLER DAILY.	1	
[Circle with 'M']	WATER METER 1-1/2\"/>		
[Dashed Line]	IRRIGATION MAINLINE: PVC SCHEDULE 40	481.8 L.F.	
[Dotted Line]	PIPE SLEEVE: PVC SCHEDULE 40	109.2 L.F.	

FLOW TOTALS

Area for Dripline:	84.3
Bubbler:	5.0
Turf Rotary:	64.0
Total:	153.3 GPM

### IRRIGATION NOTES

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, ETC. PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS PRIOR TO BEGINNING OR CONTINUING WORK.
- THE CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS. IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
- THIS PLAN IS SCHEMATIC AND DUE TO THE NATURE OF CONSTRUCTION SLIGHT FIELD MODIFICATIONS MAY BE NECESSARY TO IMPLEMENT PLAN.
- CONTRACTOR TO VERIFY ACTUAL AVAILABLE WATER PRESSURE BEFORE BEGINNING INSTALLATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF AVAILABLE WATER PRESSURE WILL NOT ALLOW SYSTEM MODIFICATION TO BE POSSIBLE.
- IRRIGATION SYSTEMS CONNECTED TO POTABLE WATER SUPPLY, SHALL HAVE A BACKFLOW PREVENTER INSTALLED.
- WHERE APPLICABLE IRRIGATION HEADS ARE TO BE ADJUSTED FOR COMPLETE COVERAGE WITH MINIMUM OVER SPRAY BEYOND LANDSCAPE AREAS.
- EXISTING TREES TO REMAIN ARE TO BE PROTECTED FROM DAMAGE. DO NOT TRENCH OR EXCAVATE WITHIN THE CRITICAL ROOT ZONE OF ANY TREE.
- ALL IRRIGATION SLEEVING TO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES.
- IRRIGATION CONTRACTOR SHALL REVIEW WINTERIZATION PROCEDURES FOR IRRIGATION SYSTEM WITH OWNER'S REPRESENTATIVE.
- ALL PLANT MATERIAL IN TREE HOLDING AREAS SHALL BE MANUALLY WATERED/IRRIGATED TO KEEP MOIST UNTIL PLANTED.
- CONTRACTOR TO PROVIDE PERMANENT BENCH-MARKS ON ALL CURB LINES AT RELATED SLEEVE LOCATIONS (TYP).
- THE IRRIGATION SYSTEM SHALL BE DESIGNED AND INSTALLED TO MINIMIZE ROOT DISTURBANCE IN EXISTING TREES.
- IRRIGATION SPRAYS AND ROTORS ARE NOT COMBINED ON THE SAME CONTROL VALVE CIRCUIT - LANDSCAPE BEDS AND TURF ON SEPARATE CIRCUITS.
- MATCH PRECIPITATION RATES WITH ANY HEADS THAT ARE REPLACED.



PREPARED BY  
**Kimley-Horn**

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ISSUANCE AND REVISION DESCRIPTIONS

No.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

PROJECT  
**CULVER'S BELMONT, NC**  
HAWLEY AVE., BELMONT NC 28012

GSWCC NO. (LEVEL II) 0000064358

DRAWN BY KCW

DESIGNED BY TML/KCW

REVIEWED BY TML

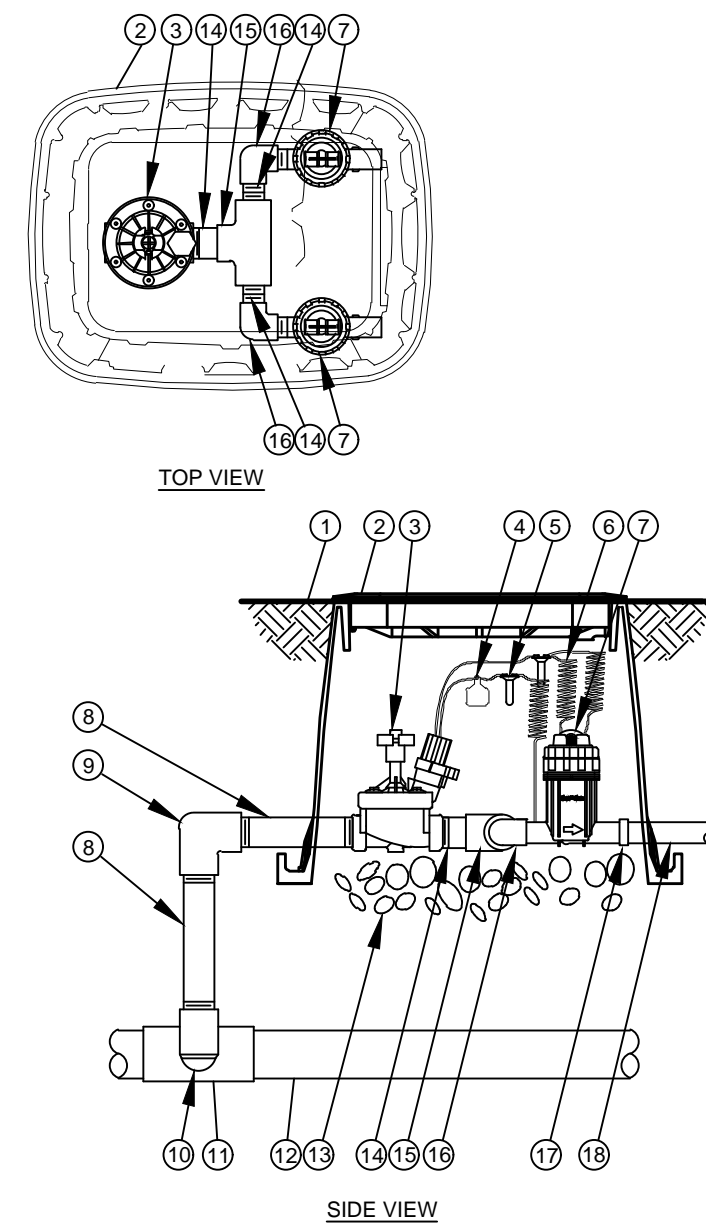
DATE 06/11/2021

PROJECT NO. 019566020

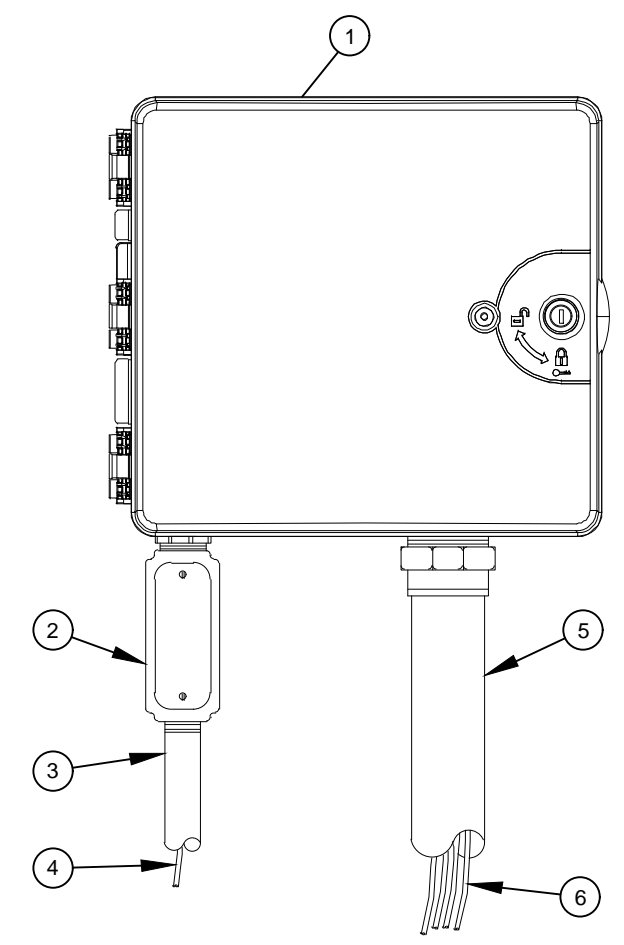
TITLE

**IRRIGATION PLAN**

SHEET NUMBER  
**L2-01**

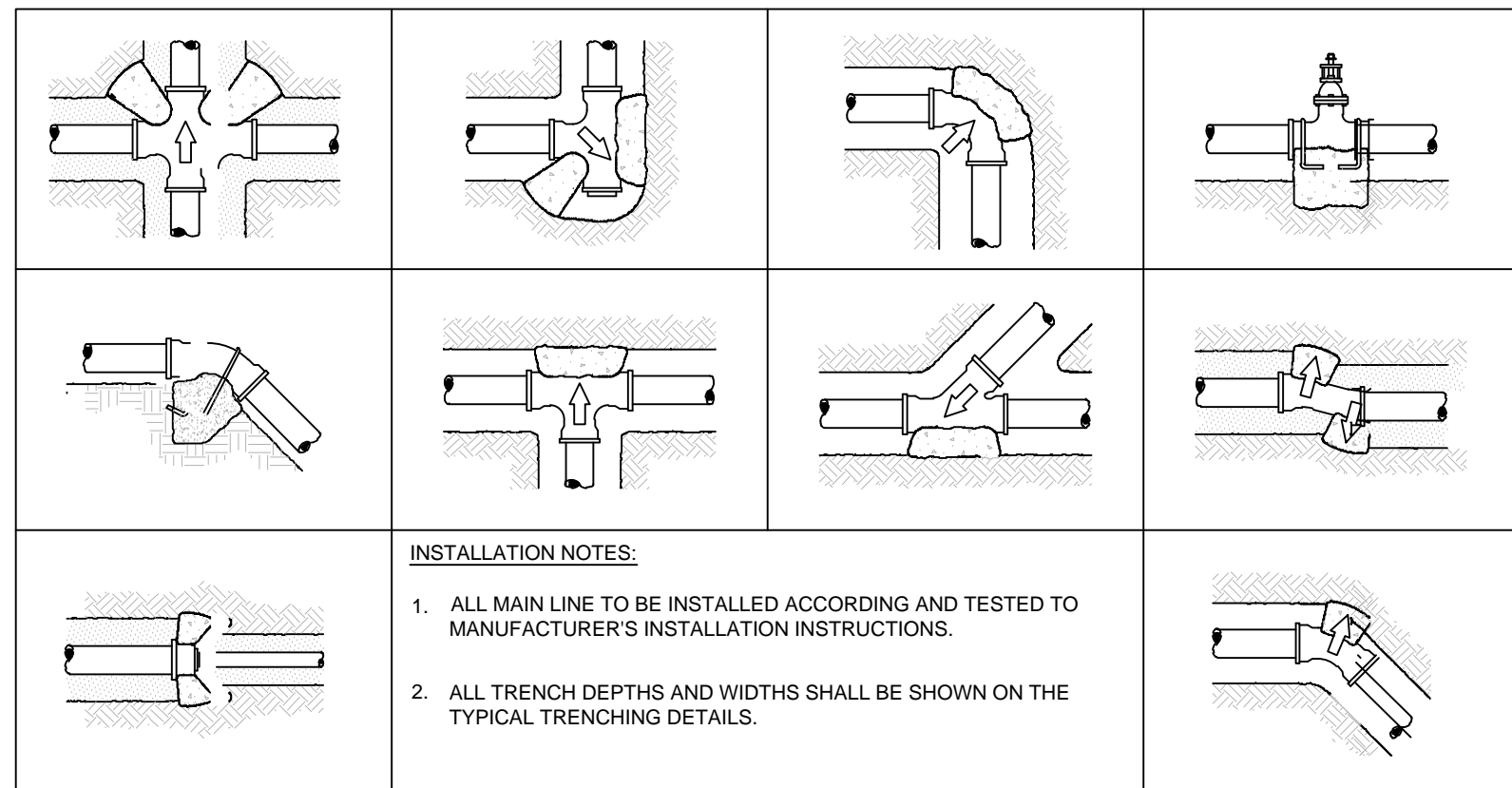


- 1 FINISH GRADE/TOP OF MULCH
- 2 VALVE BOX WITH COVER:
- 3 REMOTE CONTROL VALVE:
- 4 ID TAG
- 5 WATERPROOF CONNECTION:
- 6 30-INCH LINEAR LENGTH OF WIRE, COILED
- 7 PRESSURE REGULATING QUICK CHECK BASKET FILTER:
- 8 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 9 PVC SCH 40 ELL
- 10 PVC SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND PVC SCH 40 ELL
- 11 PVC SCH 40 TEE OR ELL
- 12 MAINLINE PIPE
- 13 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- 14 PVC SCH 80 NIPPLE, CLOSE
- 15 PVC SCH 40 TEE
- 16 PVC SCH 40 ELL
- 17 PVC SCH 40 FEMALE ADAPTOR
- 18 LATERAL PIPE

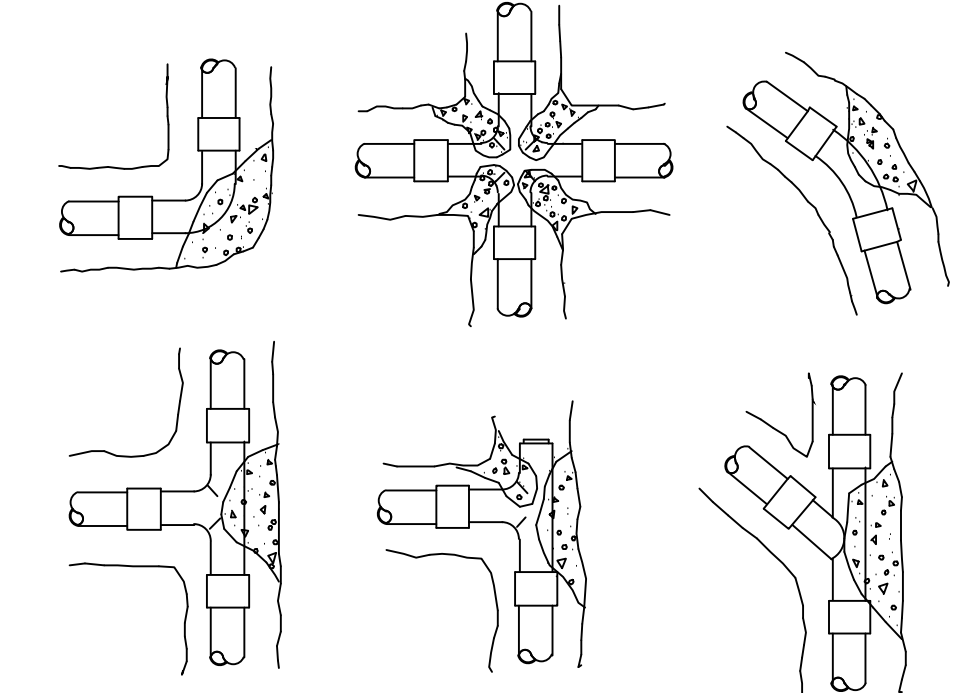


- 1 IRRIGATION CONTROLLER: CONTROLLER (OWNER TO SPECIFY WALL MOUNT OR STAINLESS STEEL PEDESTAL MOUNT). INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- 2 JUNCTION BOX
- 3 1-INCH CONDUIT AND FITTINGS TO POWER SUPPLY
- 4 POWER SUPPLY WIRE
- 5 2-INCH CONDUIT AND FITTINGS FOR STATION WIRES
- 6 WIRES TO REMOTE CONTROL VALVES

- NOTES:
1. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 18 AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
  2. USE STEEL CONDUIT FOR ABOVE GRADE AND SCH 40 PVC CONDUIT FOR BELOW GRADE CONDITIONS.
  3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.



- INSTALLATION NOTES:
1. ALL MAIN LINE TO BE INSTALLED ACCORDING AND TESTED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
  2. ALL TRENCH DEPTHS AND WIDTHS SHALL BE SHOWN ON THE TYPICAL TRENCHING DETAILS.



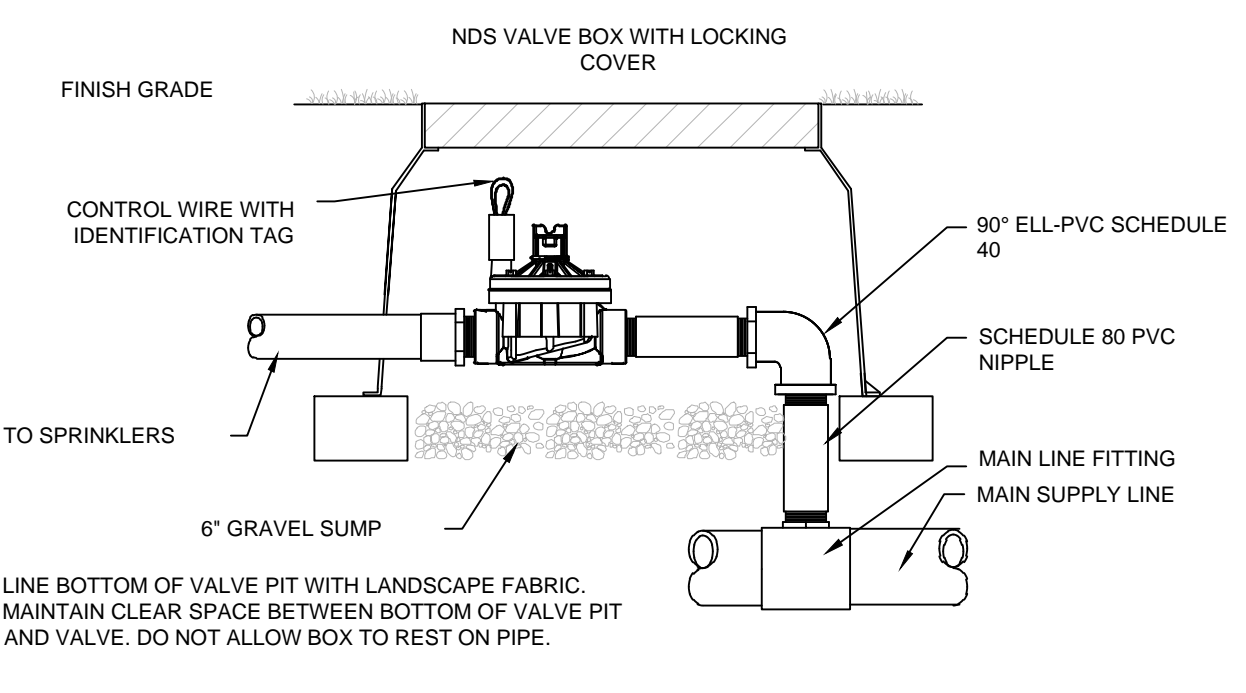
- INSTALLATION NOTES:
1. 3000 PSI CONCRETE OR BETTER IS TO BE USED FOR THRUST BLOCKS.
  2. FOR 45/90° FITTINGS, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.
  3. FOR 22-1/2° FITTINGS, MINIMUM OF 0.5 CUBIC FEET OF CONCRETE TO BE USED.
  4. FOR TEES, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED. THRUST BLOCKS REQUIRED FOR IRRIGATION MAINLINE 2 1/2" AND LARGER.

1 COMMERCIAL CONTROL DRIP ZONE VALVE KIT SECTION / PLAN NTS

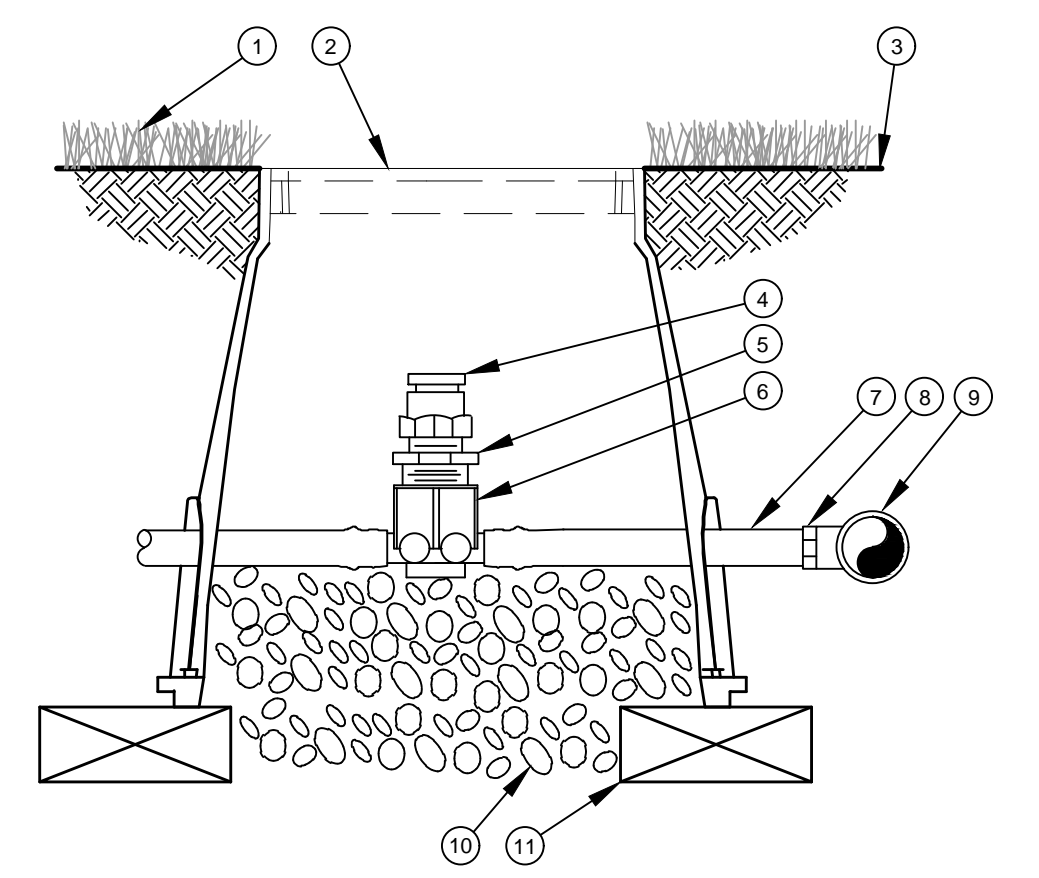
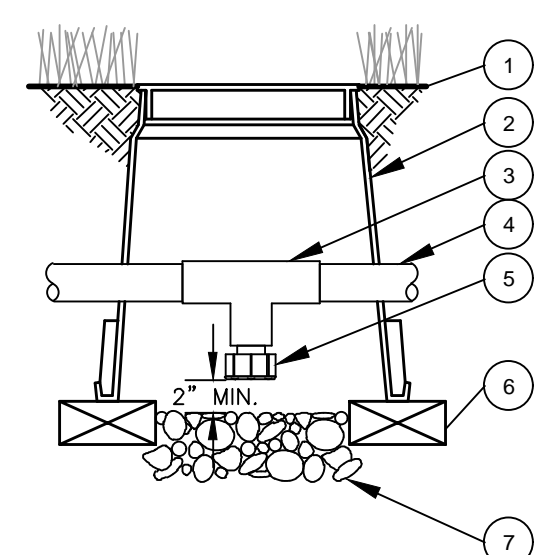
2 TYPICAL CONTROLLER ELEVATION NTS

3 TYPICAL THRUST BLOCK SECTION NTS

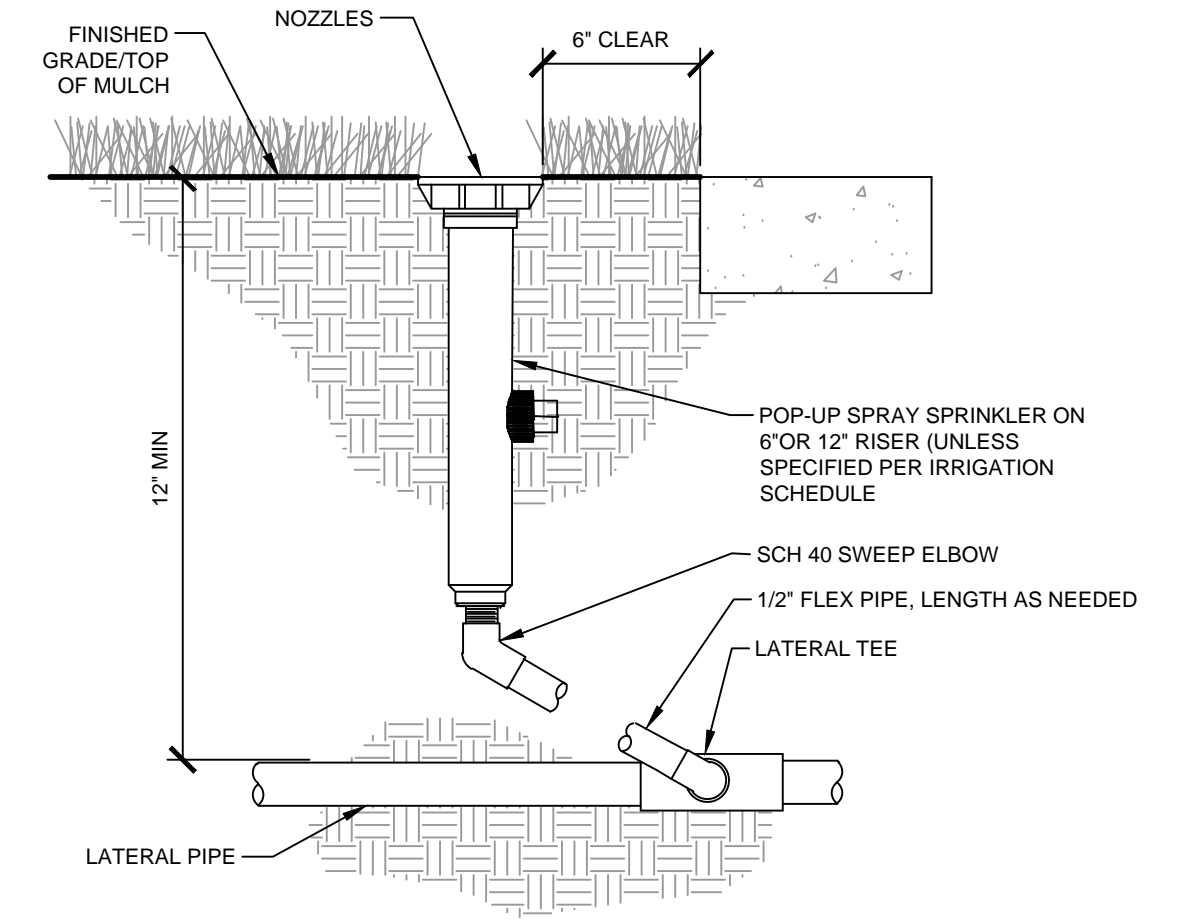
4 THRUST BLOCK REINFORCEMENT SECTION NTS



- 1 FINISH GRADE/TOP OF MULCH
- 2 VALVE BOX WITH COVER:
- 3 PVC SCH 40 TEE
- 4 PVC LATERAL PIPE
- 5 FILTERED DRAIN VALVE:
- 6 BRICK (1 OF 2)
- 7 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL



- 1 TURF GRASS
- 2 VALVE BOX LID
- 3 FINISH GRADE
- 4 1/2" AIR RELIEF VALVE: TO BE INSTALLED AT HIGH POINTS IN DRIP ZONE
- 5 1/2" X 3/4" PVC REDUCER BUSHING
- 6 BARB X FEMALE THREAD CONNECTOR:
- 7 1/2" BLANK DRIPLINE TUBING:
- 8 BARB X MALE THREAD CONNECTOR:
- 9 PVC TEE CONNECTED TO PVC HEADER PIPE
- 10 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL
- 11 BRICK (1 OF 2)

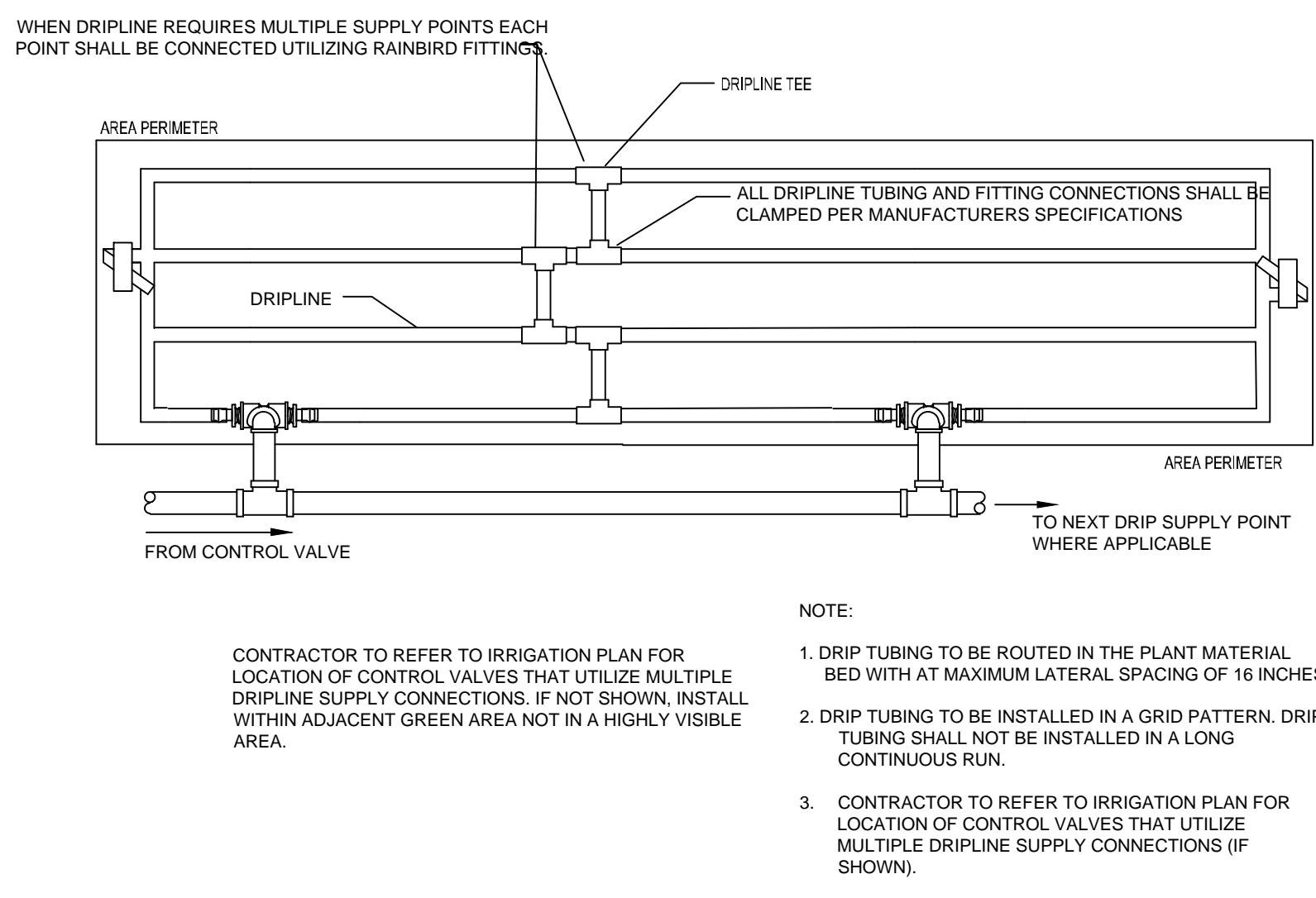


5 TYPICAL CONTROL VALVE SECTION NTS

6 DRAIN VALVE SECTION NTS

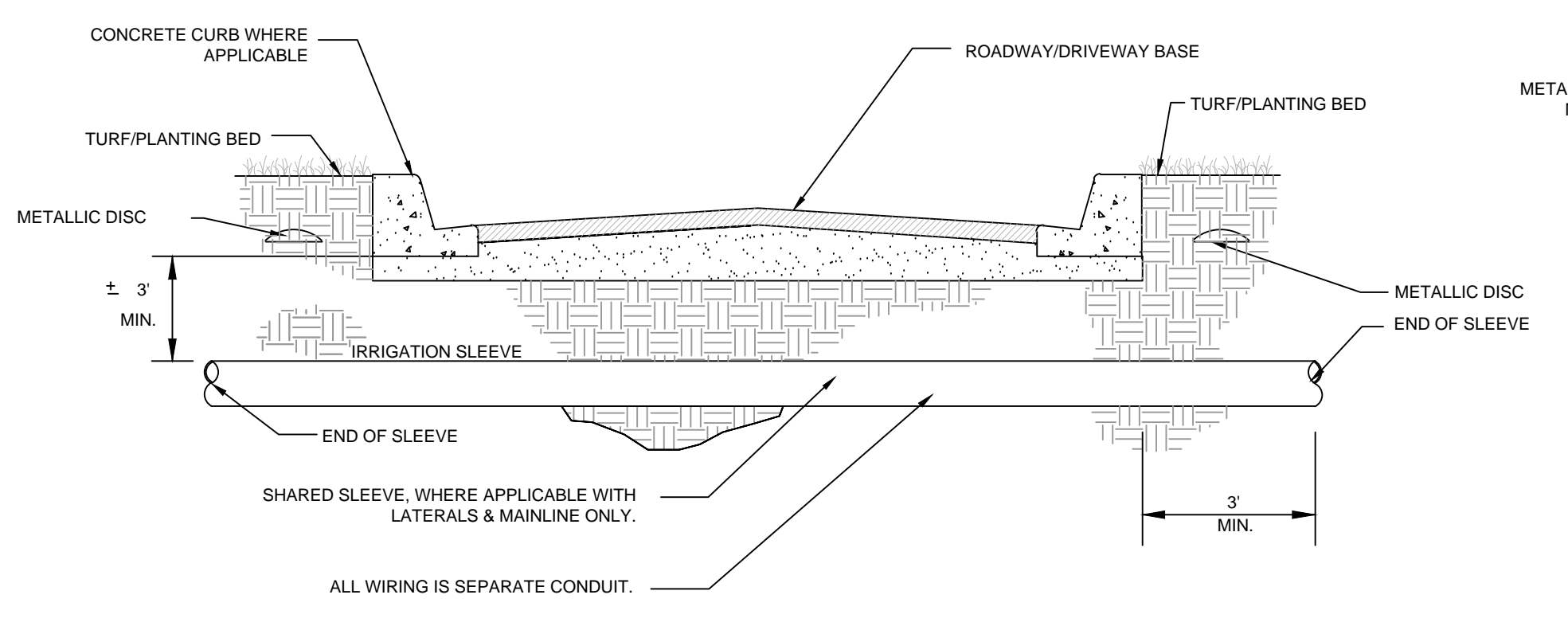
7 AIR RELIEF VALVE IN XFS DRIP LINE SECTION NTS

8 TYPICAL SPRAY / ROTAR HEAD SECTION NTS

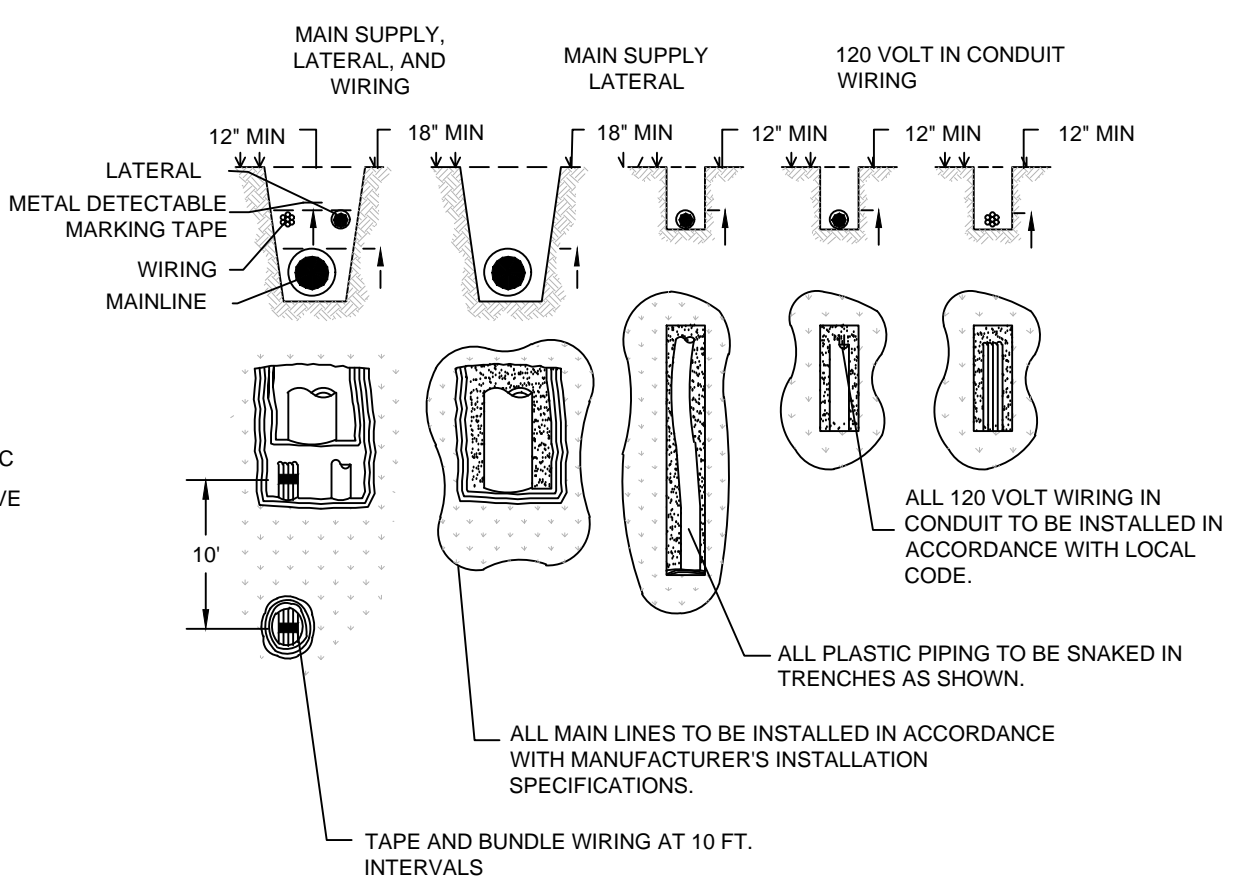


- NOTE:
1. DRIP TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 16 INCHES.
  2. DRIP TUBING TO BE INSTALLED IN A GRID PATTERN. DRIP TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.
  3. CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS (IF SHOWN).

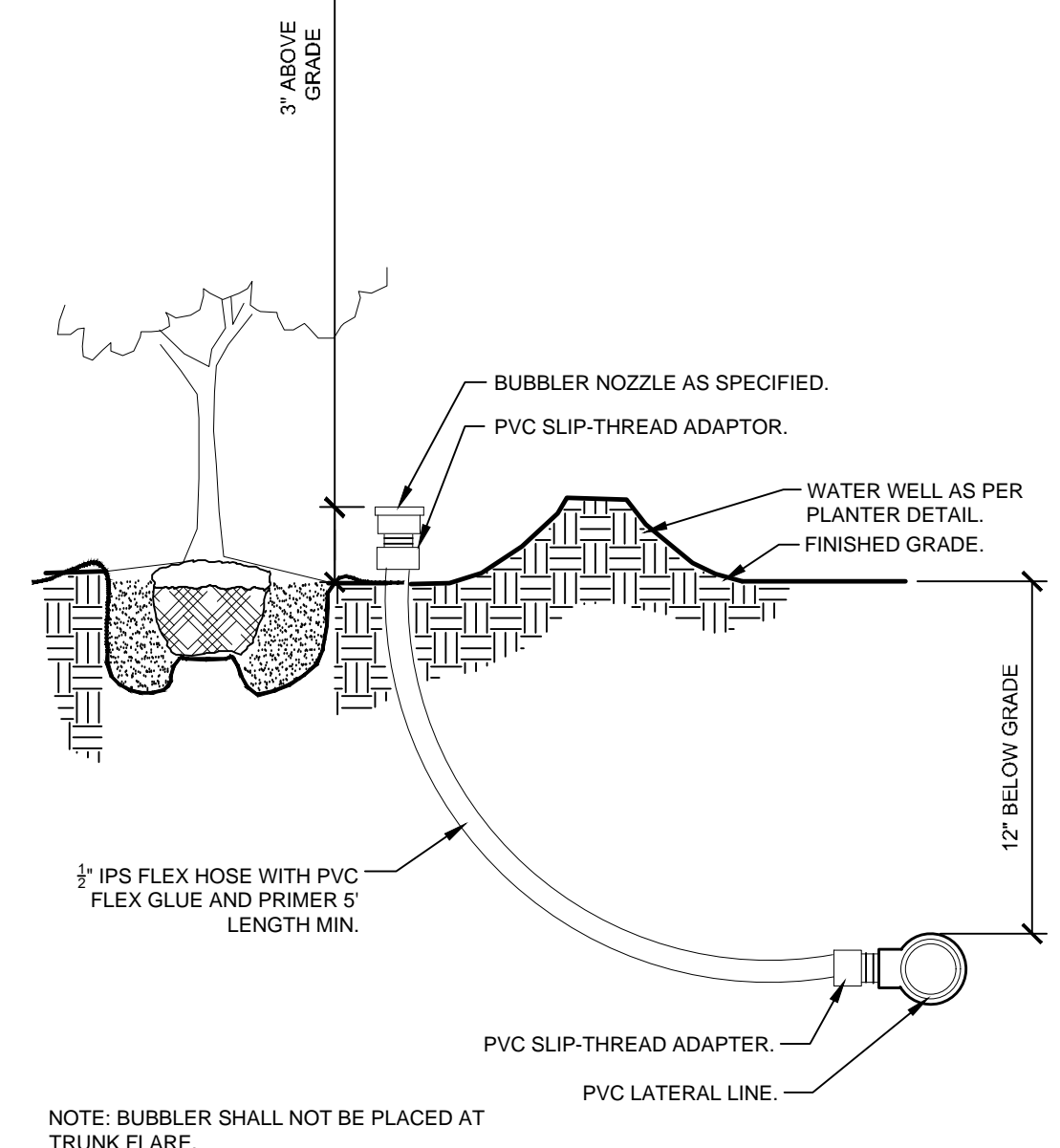
9 TYPICAL DRIP LINE PLAN NTS



10 TYPICAL SLEEVING SECTION NTS



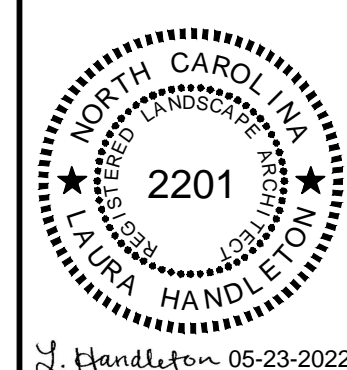
11 TYPICAL TRENCHING SECTION / PLAN NTS



12 TYPICAL BUBBLER SECTION NTS

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NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY



GSWCC NO. 0000064358  
 DRAWN BY KCW  
 DESIGNED BY TML/KCW  
 REVIEWED BY TML  
 DATE 06/11/2021  
 PROJECT NO. 019566020

**IRRIGATION SYSTEM NOTES:**

1. THE IRRIGATION MAINLINE LAYOUT IS DIAGRAMMATIC. ANY CHANGES MADE IN THE IRRIGATION MAINLINE DUE TO FIELD CONDITIONS OR CONTRACTOR'S SUBMITTED DESIGN SHALL BE IN ACCORDANCE WITH THESE STANDARDS.
  2. SET SPRAY HEADS 6" AND ROTORS 12" IN FROM BACK OF CURB OR 24" IF PAVEMENT HAS NO CURB.
  3. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL NECESSARY MODIFICATIONS REQUIRED TO MEET THE SCHEMATIC INTENT OF THESE PLANS PRIOR TO SUBMITTING PROPOSAL. THESE PLANS OUTLINE THE OVERALL LAYOUT THE SYSTEM AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ZONE THE SYSTEM ACCORDINGLY BASED ON FLOW AND PRESSURE AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FOLLOWING BUT NOT LIMITED TO AVAILABLE FLOW, AVAILABLE PRESSURE, CONNECTION ASSEMBLY, CAPACITY OF THE SYSTEM.
  4. CONTRACTOR TO PROVIDE NEW AUTOMATIC CONTROLLER FOR PROPOSED SYSTEM (NO BATTERY OPERATED CONTROLLERS ALLOWED). COORDINATE LOCATION WITH OWNER.
  5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AUTOMATIC RAIN SENSOR. COORDINATE LOCATION W/ OWNER.
  6. IRRIGATION SHALL NOT BE COMBINED ON A SINGLE ZONE AND SHALL BE ZONED ACCORDING TO IRRIGATION TYPE, PRECIPITATION RATE, AND THE SYSTEM'S AVAILABLE WATER / PRESSURE. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO OWNER FOR REVIEW PRIOR TO INSTALLATION.
  7. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.
  8. CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.
  9. INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON-SITE.
  10. CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.
  11. CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.
  12. PRODUCTS SHALL BE AS SPECIFIED OR APPROVED EQUAL.
- PRE-APPROVED MANUFACTURERS:
1. TORO
  2. HUNTER
  3. RAINBIRD
13. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.
  14. LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED WITHIN SCH. 40 PVC 2X SIZE OF PIPE AND FREE OF STONES/DEBRIS. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS.
  15. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.
  16. THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.
  17. ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES.
  18. ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SCH. 40 PVC SLEEVES. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.
  19. NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.
  20. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.
  21. ELECTRIC SERVICE TO THE CONTROLLER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.
  22. ALL 24 VAC WIRING FROM DECODER TO VALVE SHALL BE OF DIRECT BURIAL COPPER WIRE. MAXIMUM LENGTH OF WIRE FROM DECODER TO VALVE SHALL NOT EXCEED 400 FEET. AS FOLLOWS:  
CONTROL WIRES - #14  
COMMON WIRES - #14
  23. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN NDS VALVE BOXES AS FOLLOWS:  
-RECTANGULAR 12"X17" HEAVY DUTY BOX. (PURPLE COVER FOR REUSE TO BE PROVIDED WHERE APPROPRIATE).
  24. ALL IRRIGATION HEADS/DRIP TUBING SHALL BE LOCATED ONE (1) FOOT FROM BACK OF CURB WHEN NEXT TO A ROADWAY. (THIS SHALL NOT INCLUDE PARKING AREAS OR DRIVE AISLES).
  25. HEADS, LATERALS, EMITTERS, AND VALVES ARE NOT SHOWN, BUT ARE NECESSARY FOR A FULLY FUNCTIONING IRRIGATION SYSTEM.
  26. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.
  27. IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.
  28. ALL DRIP ZONES SHALL BE INSTALLED WITH A FLUSH VALVE AND AIR RELIEF VALVE. IN THE EVENT THAT A DRIP ZONE HAS MORE THAN ONE HIGH OR LOW POINT, MORE THAN ONE AIR RELIEF VALVE OR FLUSH VALVE WILL BE REQUIRED FOR THAT ZONE. DRIPLINE SHALL PROVIDE 0.9 GPH EMITTERS, 12" O.C. WITH 12" LINE SPACING AT A MINIMUM.
  29. ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS. IF REQUIRED, ALL WIRING FOR A TWO WIRE PATH SHALL BE WITH RED/BLUE TWISTED PAIR 14 AWG. ELECTRIC CONTROL LINES FROM THE DECODER TO THE SOLENOID VALVES SHALL BE TWISTED PAIR 18 AWG. ALL DECODERS SHALL BE GROUNDED EVERY 1,000 L.F. OR EVERY 10 DEVICES. ALL WIRE SHALL BE FURNISHED IN MINIMUM 2,500' REELS AND SPLICING SHALL BE MINIMIZED. BURY SPLICE KIT. ALL 24 VOLT WIRING SHALL BE DONE IN ACCORDANCE WITH EXISTING CODES. SPLICING SHALL BE IN VALVE BOXES OR CONTROLLERS ONLY. IRRIGATION SYSTEM CONTROL SHALL BE TWO WIRE PATH. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR THIS INSTALLATION. TWO WIRE SYSTEM SHALL HAVE 2-WAY COMMUNICATIONS FIELD PROGRAMMABILITY, STATION SPECIFICATIONS AND INTEGRATED SURGE PROTECTION.
  30. ALL CONTROL WIRE SHALL BE INSTALLED IN A 1 1/2" ELECTRICAL CONDUIT.
  31. SMALLEST DIAMETER LATERAL PIPE SHALL BE 3/4".
  32. IRRIGATION SYSTEM SHALL BE CAPABLE OF SUPPLYING AN AVERAGE OF 1.05" OF WATER PER WEEK WITHIN WATERING RESTRICTIONS AS APPLICABLE.
  33. IRRIGATION SYSTEM SHALL NOT BE INSTALLED THROUGH EXISTING, OR PRESERVED PLANT COMMUNITIES. DO NOT TRENCH THROUGH EXISTING ROOT SYSTEMS OF ANY VEGETATION INTENDED TO BE PRESERVED.
  34. CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.
  35. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO THE CONDITION DENOTED ON THE LANDSCAPE PLAN.
  36. IRRIGATION PIPING INSTALLED UNDER ROADS AND SIDEWALKS SHALL BE IN SCHEDULE 40 PVC SLEEVING AT 2X THE PIPE SIZE. ALL SLEEVING SHALL BE FREE OF STONES AND DEBRIS.
  37. IRRIGATION SOURCE TO BE EITHER WELL, POTABLE, OR NON-POTABLE WATER. IRRIGATION CONTRACTOR TO VERIFY SOURCE PRIOR TO DESIGN.
  38. POINT OF CONNECTION TO BE DETERMINED BY OWNER. IRRIGATION SYSTEM CONNECTIONS TO THE LOCAL JURISDICTION SERVICE SHALL COMPLY WITH ALL APPLICABLE CODES.
  39. IRRIGATION CONNECTION MAY REQUIRE BACKFLOW PREVENTION, VERIFY WITH LOCAL JURISDICTION.
  40. IRRIGATION SYSTEM SHALL COMPLY WITH THE LOCAL JURISDICTION LAND DEVELOPMENT CODE.

BNC LAND CO. LLC

3510 N OAKLAND AVE, SUITE 210  
SHOREWOOD, WI 53211  
PHONE: 414.587.7459

NO.	ISSUANCE AND REVISION DESCRIPTIONS	DATE	BY

**CULVER'S BELMONT, NC**  
HAWLEY AVE., BELMONT NC 28012



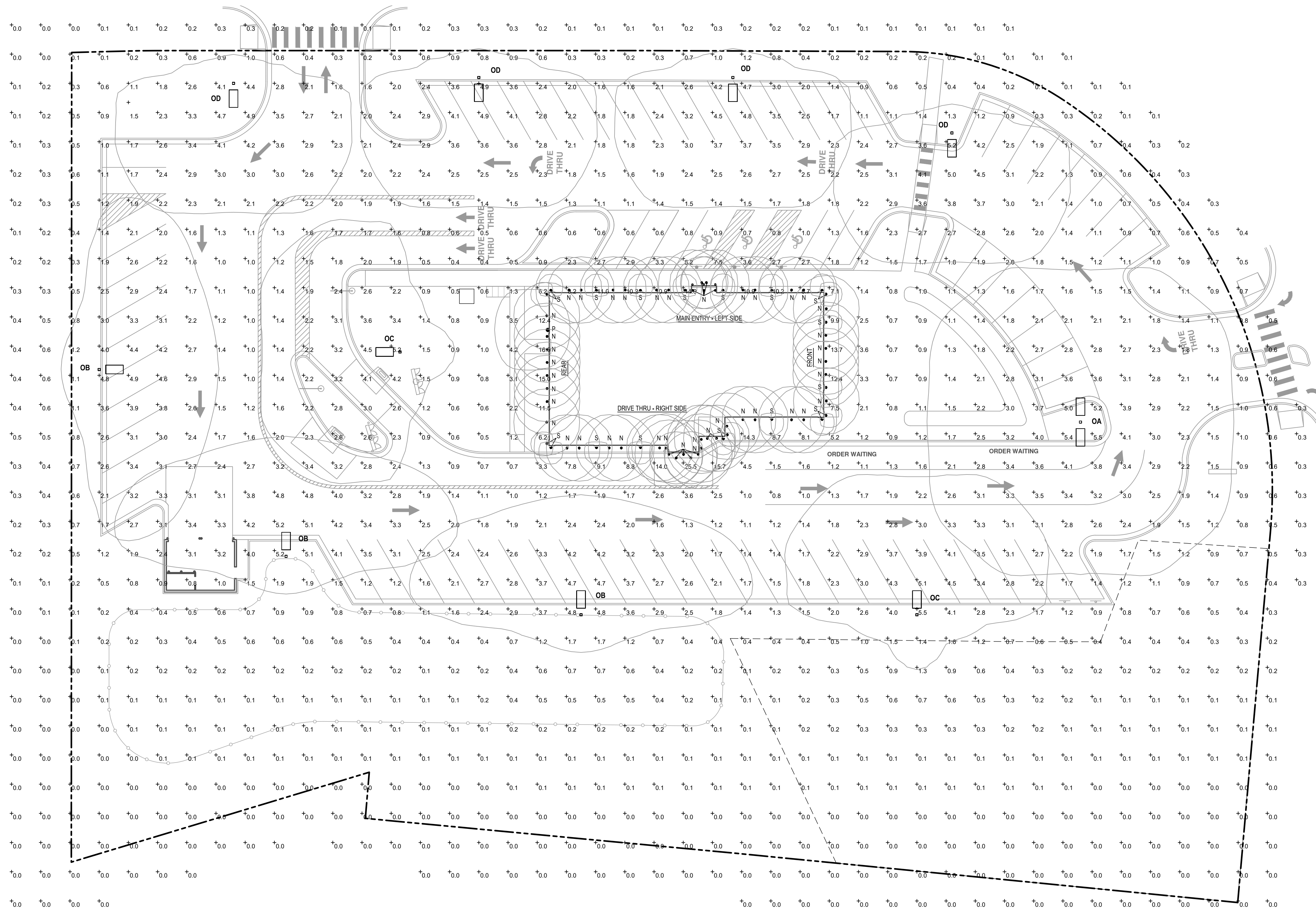
GSWCC NO. (LEVEL II)	0000064358
DRAWN BY	KCW
DESIGNED BY	TML/KCW
REVIEWED BY	TML
DATE	06/11/2021
PROJECT NO.	019566020

TITLE  
**IRRIGATION SPECIFICATIONS**

SHEET NUMBER  
**L2-03**







LUMINAIRE SCHEDULE - SITE LIGHTING				
SYMBOL	LABEL	CATALOGUE NUMBER	LAMP	WATTS
□	OA	(2) DSX1 LED P6 40K TSW MVOLT 20' POLE: POLE BASE @ 6' ABOVE GRADE	LED	326
□	OB	DSX1 LED P6 40K T2M MVOLT 20' POLE: POLE BASE @ 6' ABOVE GRADE	LED	163
□	OC	DSX1 LED P6 40K T4M MVOLT 20' POLE: POLE BASE @ 6' ABOVE GRADE	LED	163
□	OD	DSX1 LED P6 40K T4M MVOLT HS 20' POLE: POLE BASE @ 6' ABOVE GRADE	LED	163

**H3 SITE PHOTOMETRIC PLAN**  
SCALE: 1" = 20'-0"

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**NEW CULVER'S RESTAURANT**  
**Hawley Avenue**  
 Belmont, NC 28012  
 County of GASTON

Culver Franchising System, Inc.  
 1240 Water Street  
 Prairie du Sac, WI 53578  
 608-643-7980

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OWNER:  
 BMC Land Co. LLC  
 3510 N. Oakland Ave STE 210  
 Shorewood, WI 53211  
 Dimitri Dimitropoulos  
 414-597-7459

OLLIMANN ASSOCIATES ARCHITECTS, P.C.  
 200 South State Street  
 Belvidere, Illinois 61008  
 815-544-7790 Phone

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**SITE PHOTOMETRIC PLAN**

Date: 4-18-2022  
 Revision:

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