

# CONSTRUCTION INFRASTRUCTURE DRAWINGS

# BROADMOOR

## SURVEY BENCHMARK

BENCHMARK IS LOCAL TO SITE.  
SEE SHEET C1.03 FOR BENCHMARK INFORMATION.  
VERTICAL DATUM BASED ON NAVD 88-GEOID 18.

CID-YR-XX

1. Revise to  
CID-24-06

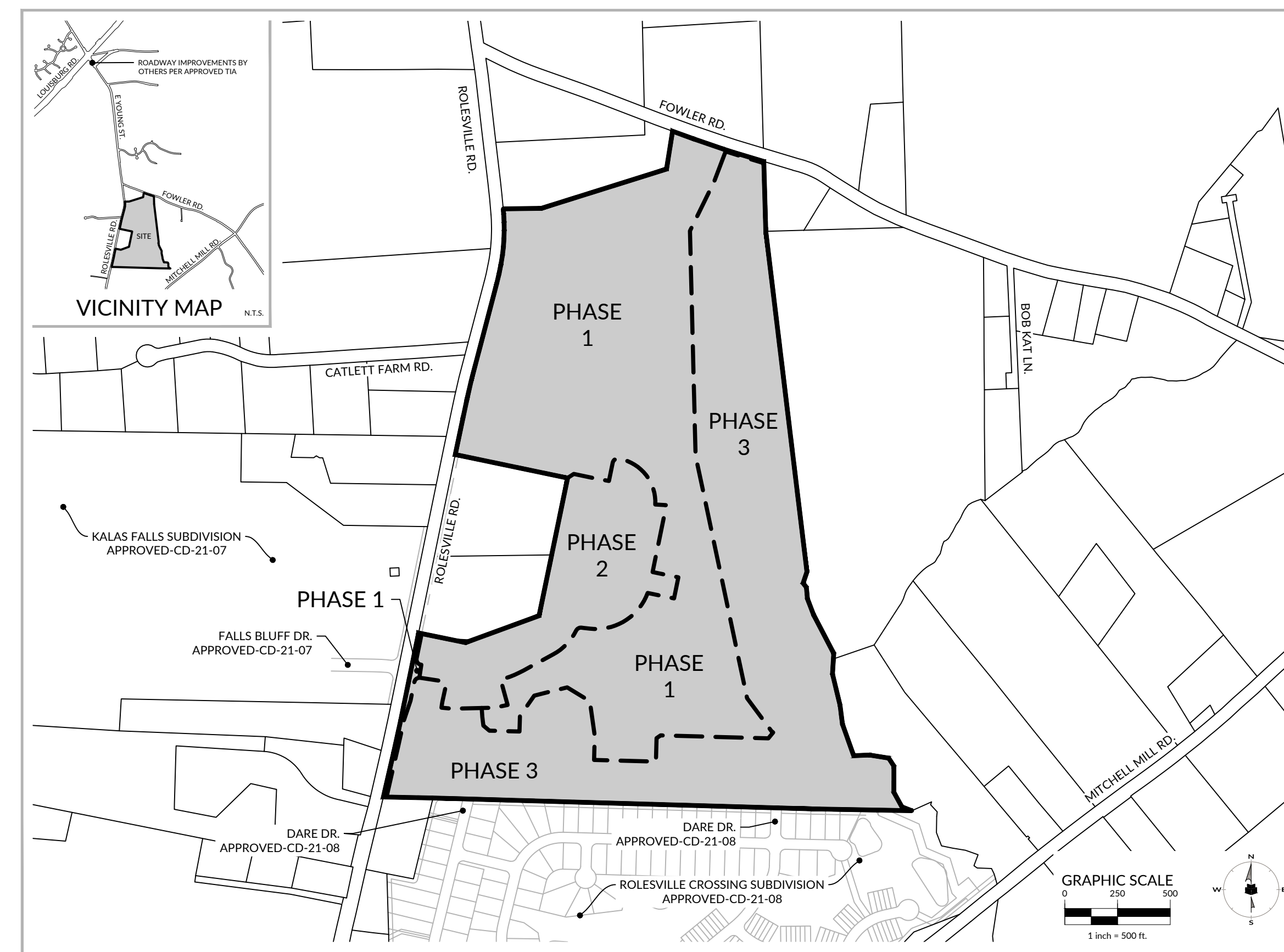
## ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

### PARCEL DATA

PIN:	1768511519 (25.61 AC. PORTION)	PIN:	1768500618
OWNER:	CARLYLE D & ALMA D WOODLIEF	OWNER:	BILLY CRAIG & ELLEN WOODLIEF
ADDRESS:	1321 ROLESVILLE RD, WAKE FOREST, NC 27587-6959	ADDRESS:	5101 OLD MILBURNIE RD, WENDELL, NC 27591-7817
ZONING:	RH-CZ	ZONING:	RH-CZ & RM-CZ
PIN:	1768409261 (11.96 AC. PORTION)	PIN:	1767590716 (13.84 AC. PORTION)
OWNER:	JANICE GAYLE W & HARRELL STALLINGS	OWNER:	DONNIE L & PATSY WOODLIEF
ADDRESS:	1512 ROLESVILLE RD, WAKE FOREST, NC 27587-6961	ADDRESS:	6609 FOWLER RD, ZEBULON, NC 27597-8303
ZONING:	RH-CZ & RM-CZ	ZONING:	RH-CZ & RM-CZ
PIN:	1767590335 (18.42 AC. PORTION)	PIN:	1767580938
OWNER:	BETTY JOYCE WOODLIEF	OWNER:	DWIGHT THOMAS WOODLIEF
ADDRESS:	1501 ROLESVILLE RD, WAKE FOREST, NC 27587-6962	ADDRESS:	6608 FOWLER RD, ZEBULON, NC 27597-8302
ZONING:	RH-CZ & RM-CZ	ZONING:	RM-CZ

### SITE DATA TABLE

TOWN OF ROLESVILLE PROJECT NO.	PSP-24-02
ZONING APPROVAL	REZ-23-02
JURISDICTION	ROLESVILLE TOWN LIMITS (ANX-23-01)
TOTAL PROJECT AREA [AC.]	OVERALL SITE - 105.56 RH-CZ ZONING - 41.54 RM-CZ ZONING - 64.02
WATERSHED	BUFFALO CREEK
RIVER BASIN	NEUSE RIVER
FEMA FLOODPLAIN	FIRM 3720176800K, EFFECTIVE DATE 07/19/2022 FIRM 3720176600K, EFFECTIVE DATE 07/19/2022
EXISTING ZONING PER REZ-23-02	RH-CZ (RESIDENTIAL HIGH DENSITY), RM-CZ (RESIDENTIAL MEDIUM DENSITY)
EXISTING LAND USE	VACANT
PROPOSED NUMBER OF DWELLING UNITS	253
PROPOSED NUMBER OF SINGLE-FAMILY ATTACHED DWELLING UNIT (TOWNHOMES) LOTS	96
PROPOSED NUMBER OF SINGLE-FAMILY DETACHED DWELLING UNIT LOTS	157
REQUIRED OPEN SPACE [AC.]	RH-CZ ZONING - 6.23 (15%) RM-CZ ZONING - 25.61 (40%)
PROPOSED OPEN SPACE [AC.]	RH-CZ ZONING - 32.26 (78%) RM-CZ ZONING - 33.11 (52%)
EXISTING TREE COVERAGE [AC.]	26.16 (25% OF TOTAL PROJECT AREA)



1ST SUBMITTAL: NOVEMBER 1, 2024

### INFRASTRUCTURE DATA TABLE

	PHASE 1	PHASE 2	PHASE 3	TOTALS
UNITS - SINGLE FAMILY DETACHED	29	61	67	157
UNITS - SINGLE FAMILY ATTACHED	96	-	-	96
STREETS [LF.]	3,775	2,624	2,281	8,680
8" WATER MAIN [LF.]	3,968	2,470	2,308	8,746
8" SEWER MAIN [LF.]	8,295	2,424	2,381	13,100
STORM DRAINAGE [LF.]	6,914	3,867	3,921	14,702
SCMs	4	-	-	4
EXISTING IMPERVIOUS SURFACE [SF.]	-	-	-	3,060
PROPOSED IMPERVIOUS SURFACE [SF.]	480,651	282,891	317,145	1,080,687
SIDEWALK [LF.]	7,549	4,948	4,646	17,143
PUBLIC GREENWAY [LF.]	3,699	-	162	3,861

### ZONING DATA TABLE

	RH-CZ	RM-CZ
PROPOSED DENSITY	2.31 UNITS/AC	2.45 UNITS/AC
MINIMUM LOT AREA REQUIRED	2,000 SF (ATTACHED)	5,000 SF*
MINIMUM LOT AREA PROPOSED	2,134 SF (ATTACHED)	5,022 SF*
MINIMUM LOT WIDTH REQUIRED	20' (ATTACHED)	40'
MINIMUM LOT WIDTH PROPOSED	22'	41'
MINIMUM BUILDING SETBACK (FRONT)	20'	20'
MINIMUM BUILDING SETBACK (REAR)	15'	20'
MINIMUM BUILDING SETBACK (SIDE)	0' INTERNAL (ATTACHED)	5"
REQUIRED MINIMUM BUILDING SETBACK (CORNER)	10' END UNIT (ATTACHED)	N/A
MAXIMUM BUILDING HEIGHT	15'	10'
MAXIMUM BUILDING HEIGHT	35'	35'
MINIMUM PARKING SPACES REQUIRED (TOWNHOME USE ONLY)	216	N/A
PROPOSED PARKING SPACES (TOWNHOME USE ONLY)	216	N/A

\*PROJECT REZONING WAS SUBMITTED MARCH 2ND, 2023. THE AREA ZONED RM-CZ IS THEREFORE SUBJECT TO LDO SECTION 3.1.B CLUSTER REQUIREMENTS FOR MINIMUM LOT SIZE, WIDTH, & BUILDING SETBACKS IN PLACE PRIOR TO THE APRIL 4TH, 2023 LDO TEXT AMENDMENT TA-23-02.

### NOTES

- PURSUANT TO N.C.G.S 160D-108, PRELIMINARY SUBDIVISION PLAT AS PROPOSED IS REQUESTED TO BE REVIEWED UNDER THE LAND DEVELOPMENT ORDINANCE (LDO) EFFECTIVE JUNE 1, 2021, AND AMENDED IN DECEMBER, 2021 AND OCTOBER 4, 2022.
- REFERENCE SHEET C2.02 FOR REZ-23-02 CONDITIONS OF APPROVAL

TOWN OF ROLESVILLE APPROVAL:

### CONTACT LIST:

Project Engineer Terrence Cook, P.E. WithersRavenel 167 E. Chatham St., Ste. 210 Cary, NC 27511 919-469-3340 tcook@withersravenel.com	Stormwater Engineer Brandon Miller, P.E. WithersRavenel 167 E. Chatham St., Ste. 210 Cary, NC 27511 919-469-3340 bmill@withersravenel.com	Landscape Architect Daniel Whalley WithersRavenel 167 E. Chatham St., Ste. 210 Cary, NC 27511 919-469-3340 dwhalley@withersravenel.com
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**WithersRavenel**  
167 E. Chatham St. | Suite 210 | Cary, NC 27511  
License #: F-1479 | t: 919.238.0330 | www.withersravenel.com

### PREPARED BY:

### DEVELOPER:

**PULTE HOME COMPANY, LLC**  
1225 CRESCENT GREEN DRIVE, SUITE 250  
CARY, NC 27518  
PHONE #: 919-606-0878  
ATTENTION: KELLY RACE



CONSTRUCTION  
INFRASTRUCTURE DRAWINGS  
BROADMOOR  
CID-YR-XX  
WR PROJECT NO. 23-0045  
TOWN OF ROLESVILLE  
REVISIONS: XXXXX  
PER TOWN COMMENTS  
INITIAL PLAN DATE: 11/01/2024

### INDEX OF SHEETS

NUMBER	TITLE
C0.00	COVER
C0.01	INDEX OF SHEETS
C0.02	GENERAL NOTES & LEGENDS
C0.03	GENERAL NOTES & LEGENDS
C1.00	OVERALL EXISTING CONDITIONS & DEMOLITION PLAN
C1.01	EXISTING CONDITIONS & DEMOLITION PLAN
C1.02	EXISTING CONDITIONS & DEMOLITION PLAN
C1.03	EXISTING CONDITIONS & DEMOLITION PLAN
C1.04	EXISTING CONDITIONS & DEMOLITION PLAN
C1.05	EXISTING CONDITIONS & DEMOLITION PLAN
C1.06	EXISTING CONDITIONS & DEMOLITION PLAN
C1.07	EXISTING CONDITIONS & DEMOLITION PLAN
C2.00	PHASING PLAN
C2.01	OPEN SPACE PLAN
C2.02	APPROVED CONCEPTUAL PLAN (REZ-23-02)
C3.00	OVERALL SITE PLAN
C3.01	SITE PLAN
C3.02	SITE PLAN
C3.03	SITE PLAN
C3.04	SITE PLAN
C3.05	SITE PLAN
C3.06	SITE PLAN
C3.07	SITE PLAN
C3.08	TYPICAL LOTS & ROADWAY SECTIONS
C4.00	OVERALL UTILITY PLAN
C4.01	UTILITY PLAN
C4.02	UTILITY PLAN
C4.03	UTILITY PLAN
C4.04	UTILITY PLAN
C4.05	UTILITY PLAN
C4.06	UTILITY PLAN
C4.07	UTILITY PLAN
C5.00	OVERALL STORM DRAINAGE & GRADING PLAN
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C5.02	STORM DRAINAGE PLAN
C5.03	STORM DRAINAGE PLAN
C5.04	STORM DRAINAGE PLAN
C5.05	STORM DRAINAGE PLAN
C5.06	STORM DRAINAGE PLAN
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C6.04	GRADING PLAN
C6.05	GRADING PLAN
C6.06	GRADING PLAN
C6.07	GRADING PLAN
C7.00	OVERALL EROSION CONTROL PLAN (STAGE 1)
C7.01	EROSION CONTROL PLAN (STAGE 1)
C7.02	EROSION CONTROL PLAN (STAGE 1)
C7.03	EROSION CONTROL PLAN (STAGE 1)
C7.04	EROSION CONTROL PLAN (STAGE 1)
C7.05	EROSION CONTROL PLAN (STAGE 1)
C7.06	EROSION CONTROL PLAN (STAGE 1)
C7.07	EROSION CONTROL PLAN (STAGE 1)
C7.08	OVERALL EROSION CONTROL PLAN (STAGE 2)
C7.09	EROSION CONTROL PLAN (STAGE 2)
C7.10	EROSION CONTROL PLAN (STAGE 2)
C7.11	EROSION CONTROL PLAN (STAGE 2)
C7.12	EROSION CONTROL PLAN (STAGE 2)
C7.13	EROSION CONTROL PLAN (STAGE 2)
C7.14	EROSION CONTROL PLAN (STAGE 2)
C7.15	EROSION CONTROL PLAN (STAGE 2)
C7.16	EROSION CONTROL NOTES & CALCULATIONS
C8.01	PICASSO DRIVE & SEURAT PLACE PLAN & PROFILE
C8.02	RODIN WAY PLAN & PROFILE
C8.03	BEARDEN STREET PLAN & PROFILE
C8.04	SISLEY PLACE PLAN & PROFILE
C8.05	TITIAN AVENUE PLAN & PROFILE (9+50 - 19+00)
C8.06	TITIAN AVENUE PLAN & PROFILE (18+50 - 27+50)
C8.07	DELACROIX DRIVE PLAN & PROFILE (9+50 - 18+50)
C8.08	DELACROIX DRIVE PLAN & PROFILE (18+50 - 27+50)
C8.09	MUNCH DRIVE PLAN & PROFILE (9+50 - 14+50)
C8.10	MUNCH DRIVE PLAN & PROFILE (14+50 - 29+50)
C8.11	DARE DRIVE & WARHOL COURT PLAN & PROFILE
C8.12	GREENWAY 1 PLAN & PROFILE (10+00 - 25+00)
C8.14	GREENWAY 1 PLAN & PROFILE (24+50 - 40+00)
C8.13	GREENWAY 1 PLAN & PROFILE (39+50 - 48+00)
C8.15	GREENWAYS 2 & 3 PLAN & PROFILE
C8.16	SEWER OUTFALL A (10+00 - 25+00) PLAN & PROFILE

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C8.18	SEWER OUTFALL A (39+50 - 52+00) PLAN & PROFILE
C8.19	SEWER OUTFALLS B & C PLAN & PROFILE
C8.20	SEWER OUTFALLS D & E PLAN & PROFILE
C9.01	SCM 1 PLAN & PROFILE
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C9.03	SCM 3 PLAN & PROFILE
C9.04	SCM 4 PLAN & PROFILE
C9.05	SCM DETAILS
C10.00	SITE DETAILS
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C10.02	SEWER DETAILS
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C10.04	WATER DETAILS
C10.05	STORM DRAINAGE DETAILS
C10.06	NCDOT DETAILS
C10.07	NCDOT DETAILS
C10.08	EROSION CONTROL DETAILS
C10.09	EROSION CONTROL DETAILS
C11.01	SIGNAGE & PAVEMENT MARKINGS PLAN
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C11.03	SIGNAGE & PAVEMENT MARKINGS PLAN
C11.04	SIGNAGE & PAVEMENT MARKINGS PLAN
C11.05	SIGNAGE & PAVEMENT MARKINGS PLAN
C11.06	SIGNAGE & PAVEMENT MARKINGS PLAN
C11.07	SIGNAGE & PAVEMENT MARKINGS PLAN
L1.00	OVERALL LANDSCAPE PLAN
L1.01	LANDSCAPE PLAN
L1.02	LANDSCAPE PLAN
L1.03	LANDSCAPE PLAN
L1.04	LANDSCAPE PLAN
L1.05	LANDSCAPE PLAN
L1.06	LANDSCAPE PLAN
L1.07	LANDSCAPE PLAN
L1.08	LANDSCAPE DETAILS
SL1.00	LIGHTING EXHIBIT

2. Update title block



CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR  
 CID-YR-XX**  
 ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY



INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

WR JOB NUMBER 23-0045  
DRN: WR DGN: WR CKD: WR

INDEX OF SHEETS

C0.01

**SURVEY NOTES:**

- THE FOLLOWING INFORMATION WAS USED FOR THE EXISTING SURVEY:
  - COORDINATE SYSTEM: NORTH CAROLINA STATE PLANE FOOT
  - PROJECT HORIZONTAL DATUM: NAD 83/2011
  - VERTICAL DATUM: NAVD 88
  - COORDINATE UNITS: US SURVEY FEET
  - VERTICAL UNITS: US SURVEY FEET
- PROPERTY BOUNDARY SHOWN AS PROVIDED BY MSS LAND CONSULTANTS, DATED 03/07/2023.
- TOPOGRAPHIC SURVEY SHOWN AS PROVIDED BY WITHERSRAVENEL, DATED 04/11/2024.
- WETLANDS, STREAMS, AND RIPARIAN BUFFERS SHOWN AS PROVIDED BY WITHERSRAVENEL ENVIRONMENTAL DEPARTMENT, DATED 01/12/2023, AND APPROVED BY USACE ON 09/28/2023 (SAW-2023-01242) AND NCDWR ON 08/28/2023 (INBR0 #23-170V2).
- TREE SURVEY SHOWN AS PROVIDED BY WITHERSRAVENEL, DATED 12/23/2023.
- PROPERTY DOES FALL WITHIN FEMA FLOODPLAIN PER FEMA FIRM 3720176800K, EFFECTIVE DATE 07/19/2022, AND 3720176600K, EFFECTIVE DATE 07/19/2022.
- NO DETERMINATION HAS BEEN MADE BY THE SURVEYOR AS TO THE FOLLOWING: UNDERGROUND STORAGE FACILITIES, UNDERGROUND UTILITIES, GRAVES, CEMETERIES, BURIAL GROUNDS, HAZARDOUS WASTE DEPOSITS OR MATERIALS.
- THE UNDERGROUND UTILITIES SHOWN HEREON WERE MARKED BY WITHERSRAVENEL ON 03/05/2024 AND THOSE MARKS WERE FIELD LOCATED BY WITHERSRAVENEL ON 03/05/2024. THE ACCURACY OF THE FIELD MARKED UNDERGROUND UTILITIES IS ± 24" INCHES, UNLESS OTHERWISE INDICATED. THE DEPTH OF THESE UTILITIES IS UNKNOWN, UNLESS OTHERWISE INDICATED.
- SURVEY CONTROL POINTS PROVIDED IN NC STATE PLANE COORDINATES. ALL PROPOSED COORDINATES ARE GROUND COORDINATES. THE CONTRACTOR'S SURVEYOR IS RESPONSIBLE FOR ANY CONVERSIONS NEEDED FOR THE STAKEOUT OF THE PROPOSED GROUND COORDINATES SHOWN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING ADDITIONAL CONTROLS THAT MAY BE NEEDED THROUGHOUT THE PROJECT.

**GENERAL NOTES:**

- WORK ON THIS PROJECT SHALL CONFORM TO THE LATEST NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, TOWN OF ROLESVILLE STANDARDS AND SPECIFICATIONS, GEOTECHNICAL REPORTS, AND ANY OTHER APPLICABLE DESIGN STANDARDS AT THE TIME OF PLAN APPROVAL. IN THE EVENT OF CONFLICT BETWEEN ANY OF THESE STANDARDS, SPECIFICATIONS OR PLANS, THE MOST STRINGENT SHALL GOVERN, UNLESS OTHERWISE NOTED IN THESE PLANS.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR HAVING VISITED THE SITE AND HAVING FAMILIARIZED THEMSELVES WITH THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK.
- ANY DISCREPANCIES, INCONSISTENCIES OR AMBIGUITIES FOUND BETWEEN THE DRAWINGS, SPECIFICATIONS, AND SITE CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER IN WRITING, WORK DONE BY THE CONTRACTOR AFTER THE DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES WITHOUT WRITTEN CLARIFICATION FROM THE ENGINEER AND APPROVAL BY OWNER SHALL BE DONE AT THE CONTRACTOR'S RISK AND EXPENSE.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL JOBSITE SAFETY DURING ALL PHASES OF CONSTRUCTION. ALL WORK SHALL COMPLY WITH MUNICIPAL, COUNTY AND STATE REGULATIONS, AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS. CONTRACTOR SHALL COMPLY WITH THE LATEST REVISIONS AND INTERPRETATIONS OF THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OSHA ACT.
- THE CONTRACTOR SHALL CALL "811" FOR PROPER IDENTIFICATION OF EXISTING UTILITIES AT LEAST 72 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY.
- THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING, AND SUBSEQUENTLY PROTECTING, ALL PUBLIC AND PRIVATE UTILITIES (SHOWN OR NOT SHOWN) THAT LIE IN OR ADJACENT TO THE PROJECT SITE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE UNDERGROUND UTILITIES. ALL UTILITIES AND FACILITIES ARE NOT NECESSARILY SHOWN. HAND DIGGING TO PROTECT UTILITIES FROM DAMAGE MAY BE REQUIRED.
- ANY UTILITIES AND EXISTING SITE ELEMENTS (I.E. SIGNS, ROADWAYS, PATHS, STRUCTURES, NATURAL VEGETATION, OTHER EXISTING PROPERTY ITEMS, ETC.) DAMAGED DURING THE PROJECT BY THE CONTRACTOR'S WORKERS OR EQUIPMENT SHALL BE PROMPTLY REPAIRED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER, UTILITY OWNER, REGULATORY AGENCY, AND ENGINEER.
- CONTRACTOR SHALL MAKE EVERY EFFORT TO PRESERVE PROPERTY IRONS, MONUMENTS, OTHER PERMANENT POINTS AND LINES OF REFERENCE AND CONSTRUCTION STAKES. A NORTH CAROLINA LICENSED LAND SURVEYOR SHALL REPLACE, AT THE CONTRACTOR'S EXPENSE, PROPERTY IRONS, MONUMENTS, OTHER PERMANENT POINTS AND LINES OF REFERENCE AND CONSTRUCTION STAKES DESTROYED BY THE CONTRACTOR.
- CONTRACTOR SHALL PLAN AND CONSTRUCT WORK IN ORDER TO CAUSE MINIMUM DISTURBANCE TO THE OWNER, ADJACENT PROPERTIES AND THE PUBLIC. CONTRACTOR SHALL COORDINATE WITH AND OBTAIN APPROVAL FROM STATE AND LOCAL REGULATORY AGENCIES ON TRAFFIC CONTROL PLANS.
- ADJACENT STREETS AND SIDEWALKS SHALL BE MAINTAINED IN AN UNOBSTRUCTED, CLEAN CONDITION, MUD AND DUST-FREE.
- THE CONTRACTOR SHALL HAVE A COMPLETE SET OF CONTRACT DOCUMENTS AS WELL AS ALL PERMIT APPROVALS AND EXECUTED EASEMENTS ON THE JOB SITE AT ALL TIMES.
- CONSTRUCTION STAKEOUT FOR THIS PROJECT MAY BE PERFORMED BY THE CONTRACTOR, USING A DIGITAL (CAD) FILE PROVIDED BY THE ENGINEER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES FOUND BETWEEN THE DIGITAL FILE AND THE CRITICAL STAKING DIMENSIONS SHOWN ON THIS PLAN (I.E. PAVEMENT WIDTHS, CURB RADII, BUILDING SETBACKS, BUILDING FOOTPRINTS, ETC.). ANY MODIFICATIONS MADE BY OTHERS TO THE DIGITAL FILE PROVIDED BY THE ENGINEER SHALL RENDER IT VOID.
- WETLANDS SHOWN WILL HAVE DEED RESTRICTION AND SHALL NOT BE CLEARED, DRAINED, OR OTHERWISE DISTURBED UNLESS SPECIFICALLY PERMITTED BY THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE) OR NC DIVISION OF COASTAL MANAGEMENT (DCM) OR NC DIVISION OF WATER RESOURCES (DWR), AS APPLICABLE.
- ANY WETLANDS THAT ARE TEMPORARILY IMPACTED DUE TO CONSTRUCTION ACTIVITIES SHALL BE RETURNED TO PRE-CONSTRUCTION GRADE AND SEEDED WITH A WETLAND SEED MIX IN ACCORDANCE WITH THE SEDIMENT & EROSION CONTROL PLAN.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES, PARKING STALLS, ACCESSIBLE PARKING SYMBOLS, AND MISCELLANEOUS STRIPING LOT AND AROUND BUILDINGS AS SHOWN ON THE PLANS. ALL PAVEMENT MARKING MATERIALS SHALL ADHERE TO NCDOT STANDARDS, UNLESS NOTED OTHERWISE.
- ACCESSIBLE ROUTES AND PARKING AREAS MUST BE PROVIDED IN ACCORDANCE WITH THE CURRENT NORTH CAROLINA BUILDING CODE AND ADA STANDARDS FOR ACCESSIBLE DESIGN.
- WHERE PROPOSED CURB AND GUTTER TIES TO EXISTING CURB OR CURB AND GUTTER, A TRANSITION OF 10' SHALL BE MADE TO CONFORM TO THE EXISTING HEIGHTS AND SHAPES, UNLESS OTHERWISE SHOWN ON THE PLANS.
- ALL EXPANSION CURB JOINTS SHALL EXTEND THROUGH THE CURB. MINIMUM LENGTH OF OFFSET JOINTS AT RADIUS POINTS IS 1.5', UNLESS OTHERWISE SHOWN ON PLANS. ALL JOINTS SHALL BE SEALED WITH JOINT SEALANT.
- TESTING OF MATERIAL REQUIRED FOR THE CONSTRUCTION OF THE IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS. THE NOMINATION OF THE TESTING LAB AND THE PAYMENT OF EACH TESTING SERVICES SHALL BE MADE BY THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED MEETS THE REQUIREMENT OF THE NCDOT AND MUNICIPAL SPECIFICATIONS.

**DEMOLITION NOTES:**

- CONTRACTOR SHALL COORDINATE WITH THE OWNER AND UTILITY OWNER TO PROPERLY MAINTAIN, REMOVE OR RELOCATE EXISTING SERVICE CONNECTIONS WHEN NECESSARY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING SURROUNDING NEIGHBORS ABOUT ANY POTENTIAL INTERRUPTION TO SERVICE OF ANY KIND.
- EXISTING UTILITIES NOT INTENDED FOR DEMOLITION SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES AND UTILITIES. DAMAGE TO PROPERTIES OF OTHERS DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.
- ALL MATERIAL CLEARED OR DEMOLISHED BY THE CONTRACTOR IN ORDER TO CONSTRUCT THE WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED AND SHALL BE PROPERLY DISPOSED OF OFF-SITE.
- SAW CUTS OF EXISTING PAVEMENTS, CURBS, GUTTERS AND SIDEWALKS SHALL PRODUCE A NEAT VERTICAL EDGE.
- ALL DEMOLITION WORK SHALL BE DONE IN STRICT ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION.
- ALL PERMITS REQUIRED FOR THE DEMOLITION WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PRIOR TO THE START OF DEMOLITION ACTIVITIES.

**STORM DRAINAGE NOTES:**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF ROLESVILLE STANDARDS AND NCDOT STANDARD SPECIFICATIONS AND DETAILS.
- ALL PUBLIC STORM DRAINAGE FRAMES, GRATES, AND HOODS SHALL BE STAMPED WITH "DRAINS TO RIVER" IN ACCORDANCE WITH TOWN OF ROLESVILLE AND NCDOT STANDARDS.
- RIM ELEVATION GIVEN FOR CATCH BASIN (CB) IS TOP OF CURB, YARD INLET (YI) IS OPENING INVERT FOR SLAB TOP, DROP INLET (DI) IS TOP OF GRATE AND JUNCTION BOX (JB) IS TOP OF RIM.
- CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING, BUT NOT LIMITED TO THE HORIZONTAL AND VERTICAL LOCATION OF STRUCTURES AND UTILITIES CROSSING THE STORM SEWER PIPE.

- CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER DRAINAGE SYSTEM.
- ALL STORM SEWER PIPE SHALL BE MINIMUM CLASS III REINFORCED CONCRETE PIPE (RCP), UNLESS OTHERWISE NOTED.
- IF THERE ARE DISCREPANCIES BETWEEN THE PLAN AND FIELD CONDITIONS RELATED TO WHERE THE PROPOSED STORM SEWER PIPING TIES TO EXISTING STRUCTURES, PIPES, SWALES, ETC., THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER. AFTER NOTIFICATION TO THE ENGINEER AND OWNER, THE CONTRACTOR SHALL PERFORM THE AGREED UPON FIELD ADJUSTMENTS TO MATCH THE LOCATIONS OF THESE EXISTING FEATURES.
- ALL STORM SEWER PIPE SHALL HAVE A MINIMUM COVER OF 2 FEET FROM FINISHED SUBGRADE TO THE PIPE CROWN IN TRAFFIC BEARING AREAS, UNLESS APPROVED BY AUTHORITIES HAVING JURISDICTION.
- ALL STORM SEWER PIPE SHALL HAVE A MINIMUM COVER OF 1 FOOT TO THE PIPE CROWN IN NON-TRAFFIC BEARING AREAS.
- THE STORM PIPE LENGTHS AS SHOWN ON THE DRAWINGS REPRESENTS THE DISTANCE FROM CENTER TO CENTER OF THE RESPECTIVE STRUCTURES.
- STORM SEWER UTILITY STRUCTURE TABLES ARE AVAILABLE UPON REQUEST.

**GRADING NOTES:**

- ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE, AND AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. IN ADDITION TO THE MEASURES SHOWN IN THESE PLANS, THE CONTRACTOR SHALL USE INTERIM DIVERSION DITCHES, BERMS, OR OTHER METHODS AS REQUIRED TO DIRECT DRAINAGE AS SHOWN ON THESE PLANS AND TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES, ROADWAYS, AND ENVIRONMENTALLY SENSITIVE AREAS SUCH AS BUFFERS AND WETLANDS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND OWNER IN WRITING OF ANY DISCREPANCIES OR CONCERNS.
- ALL SOILS USED FOR BACKFILL SHALL BE FREE OF UNSATISFACTORY MATERIALS INCLUDING ROCK OR GRAVEL LARGER THAN 3 INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION AND OTHER DELETERIOUS MATTER, ROCK OR GRAVEL LARGER THAN 2 INCHES IN ANY DIMENSION SHALL NOT BE PLACED IN THE FIN IN THE FINAL LIFT (MINIMUM OF 6 INCHES), UNSATISFACTORY MATERIALS ALSO INCLUDE MAN-MADE FILLS AND REFUSE DEBRIS DERIVED FROM ANY SOURCE. REFER TO FINAL GEOTECHNICAL REPORT FOR ANY SPECIAL FILL MATERIAL REQUIRED FOR THIS PROJECT. IF ANY, THE CONTRACTOR SHALL CONSULT WITH THE SITE GEOTECHNICAL ENGINEER PRIOR TO BACKFILL PLACEMENT TO VERIFY BACKFILL MEETS PROJECT REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL SOIL TESTING IS PERFORMED AND THE RESULTS FORWARDED TO THE ENGINEER AND OWNER.
- MATERIALS USED TO CONSTRUCT EMBANKMENTS FOR ANY PURPOSE, BACKFILL AROUND DRAINAGE STRUCTURES, OR IN UTILITY TRENCHES FOR ANY OTHER DEPRESSION REQUIRING FILL OR BACKFILL SHALL MEET THE REQUIREMENTS OF THE PROJECT GEOTECHNICAL ENGINEER RECOMMENDATIONS.
- THE CONTRACTOR SHALL, PRIOR TO ANY OPERATIONS INVOLVING FILLING OR BACKFILLING, SUBMIT TO THE OWNER AND PROJECT GEOTECHNICAL ENGINEER THE RESULTS OF THE PROCTOR TEST TOGETHER WITH A CERTIFICATION THAT THE SOIL TESTED IS REPRESENTATIVE OF THE MATERIALS TO BE USED ON THE PROJECT. TESTS SHALL BE CONDUCTED BY A NORTH CAROLINA CERTIFIED MATERIALS TESTING LABORATORY AND CERTIFICATIONS MADE BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA REPRESENTING THE LABORATORY.
- ALL PAVEMENT SUBGRADES SHALL BE SCARIFIED TO A DEPTH OF 8 INCHES AND COMPACTED TO A MINIMUM DENSITY OF 100 PERCENT OF ASTM D1557 DENSITY AT OPTIMUM MOISTURE CONTENT UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
- RETAINING SYSTEMS PROVIDING A CUMULATIVE VERTICAL RELIEF GREATER THAN FOUR FEET (4') IN HEIGHT WITHIN A HORIZONTAL SEPARATION DISTANCE OF 50 FEET OR LESS, INCLUDING RETAINING WALLS OR MECHANICALLY STABILIZED EARTH WALLS, SHALL BE DESIGNED UNDER THE RESPONSIBLE CHARGE OF A REGISTERED DESIGN PROFESSIONAL. RETAINING WALL SYSTEMS SHALL MEET THE REQUIREMENTS OF THE NC BUILDING CODE AND LOCAL JURISDICTION.
- CONTOURS AND GUTTER GRADIENTS ARE APPROXIMATE. SPOT ELEVATIONS ARE TO BE USED IN CASE OF DISCREPANCY.
- CONTRACTOR SHALL OBTAIN ALL PERMITS AS REQUIRED FOR BLASTING ROCK IF BLASTING ROCK IS REQUIRED. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF AUTHORITIES HAVING JURISDICTION RELATED TO BLASTING AND SAFETY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DEWATERING NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS. DEWATERING SHALL BE INCIDENTAL TO GRADING OPERATIONS.
- MASS GRADING OPERATIONS SHALL BE PHASED TO LIMIT EXPOSED AREAS. PRIOR TO PROCEEDING TO ANOTHER PHASE, THE PRESENT PHASE SHALL BE STABILIZED WITH ADEQUATE GRADE COVER SUFFICIENT TO RESTRAIN EROSION AND HAVE ALL INFRASTRUCTURE INSTALLED. SEE GROUND COVER REQUIREMENTS WITHIN THESE PLANS OR CONSULT THE MUNICIPAL EROSION CONTROL SPECIALIST.
- THE FRAMES AND COVERS OF ALL EXISTING AND PROPOSED DRAINAGE, SANITARY SEWER, WATER MAIN, GAS AND ELECTRIC UTILITY STRUCTURES SHALL BE ADJUSTED TO MATCH PROPOSED FINISHED ELEVATIONS AND SLOPES UNLESS OTHERWISE SHOWN ON THE PLANS.
- BEFORE ANY EARTHWORK COMMENCES, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF CONSTRUCTION AND OTHER ITEMS ESTABLISHED IN THE PLANS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
- ZONE 1 NEUSE RIPARIAN BUFFER SHALL NOT BE DISTURBED DURING CONSTRUCTION, UNLESS OTHERWISE NOTED. ZONE 1 NEUSE RIPARIAN BUFFER SHALL EXTEND 30' FROM TOP OF BANK AS SHOWN ON THE PLANS. ZONE 2 NEUSE RIPARIAN BUFFER SHALL BE CLEARED AND GRUBBED IN THE AREAS SHOWN ON THE PLANS. ZONE 2 NEUSE RIPARIAN BUFFER SHALL EXTEND 20' INLAND FROM THE ZONE 1 NEUSE RIPARIAN PERIMETER (50' FROM TOP OF BANK). CONSTRUCTION ACTIVITY SHALL BE KEPT AT A MINIMUM IN THIS AREA. ALL TREES WITHIN ZONE 2 NEUSE RIPARIAN BUFFER SHALL BE FELLE AWAY FROM ZONE 1 NEUSE RIPARIAN BUFFER.
- THE PLACEMENT OF ANY FILL MATERIAL MUST BE CONDUCTED UNDER THE OBSERVATION OF A QUALIFIED LICENSED GEOTECHNICAL ENGINEER AND UPON COMPLETION OF THE EARTHWORK ACTIVITIES THE OWNER AND JURISDICTION MUST BE PROVIDED WITH A FINAL GRADING REPORT THAT INCLUDES THE CORRESPONDING COMPACTION TEST RESULTS AND CERTIFIES THE TYPE OF FILL MATERIAL AND ITS PROPER PLACEMENT.
- REFERENCE STRUCTURAL DRAWINGS, SPECIFICATIONS, GEOTECHNICAL REPORT, AND/OR DIRECTIVES PROVIDED BY THE PROJECT GEOTECHNICAL ENGINEER FOR BUILDING PAD AND PAVING SUBGRADE INFORMATION.
- ALL PROPOSED SLOPES SHALL BE GRADED TO 3:1 OR FLATTER UNLESS OTHERWISE NOTED.

**GENERAL LANDSCAPE NOTES:**

- THE CONTRACTOR SHALL TAKE PROPER PRECAUTIONS NOT TO DAMAGE EXISTING PLANTS, FACILITIES AND STRUCTURES THAT ARE TO REMAIN. THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO THEIR ORIGINAL CONDITION TO THE SATISFACTION OF THE LANDSCAPE ARCHITECT AND OWNER.
- UTILITIES SHOWN ON THE LANDSCAPE DRAWINGS ARE FOR REFERENCE ONLY. SEE UTILITY DRAWINGS FOR EXISTING AND PROPOSED UTILITY LOCATIONS. SEE UTILITY NOTES FOR ADDITIONAL INFORMATION.
- NO CHANGES TO ANY ASPECT OF APPROVED PLAN, INCLUDING BUT NOT LIMITED TO LANDSCAPING, GRADING, BUILDING ELEVATIONS, LIGHTING, OR UTILITIES SHALL BE MADE WITHOUT THE APPROVAL OF THE GOVERNING MUNICIPALITY, ENGINEER, LANDSCAPE ARCHITECT AND OWNER.
- ALL PLANTS PROVIDED BY THE CONTRACTOR SHALL MEET OR SURPASS THE SPECIFICATIONS GIVEN IN THE PLANT TABLE AND CONFORM TO THE AMERICAN STANDARD OF NURSERY STOCK, ANSI Z601-1973 IN REGARD TO SIZING, GROWING AND BALLED AND BURLAPPED (B&B) SPECIFICATIONS. PLANTS SHALL BE FULL AND HEAVY, AND IN HEALTHY CONDITION AT THE TIME OF PLANTING. LANDSCAPE ARCHITECT SHALL REJECT ANY PLANT NOT MEETING THESE GUIDELINES AND REQUIRE REPLACEMENT.
- ALL PLANTS TO BE FULLY WARRANTED (INCLUDING LABOR AND MATERIALS) FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM FINAL ACCEPTANCE.
- PLANTING SHALL BE INSTALLED DURING THE IDEAL SEASON BASED ON THE TYPE OF PLANT.
- ALL PLANTS THAT ARE UNABLE TO BE IMMEDIATELY PLANTED SHALL BE STORED IN A PROTECTED AREA OUT OF DIRECT SUN AND WIND. PLANTS SHALL BE EVENLY AND CONSISTENTLY WATERED, AS NEEDED, TO PREVENT DRYING OF ROOTS. ROOT BALLS OF B&B STOCK SHALL BE COVERED WITH AT LEAST 4 INCHES OF HARDWOOD MULCH TO MAINTAIN MOISTURE IN ROOTS.
- THE CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES SHOWN ON PLANS AND CLARIFY ANY DISCREPANCIES WITH LANDSCAPE ARCHITECT PRIOR TO PURCHASING PLANTS. CONTRACTOR SHALL TAG ALL TREES (AS DESIGNATED IN THE MASTER PLANT LIST) AT THE NURSERY FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO PURCHASING PLANTS.
- LANDSCAPE ARCHITECT SHALL BE NOTIFIED IN WRITING OF ANY PROPOSED PLANT SUBSTITUTIONS BY THE CONTRACTOR. NO SUBSTITUTIONS SHALL BE MADE UNDER ANY CIRCUMSTANCES WITHOUT PRIOR APPROVAL BY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- ALL PLANTS AND PLANTING BEDS ARE TO BE LOCATED BY SCALED DIMENSIONS FROM BUILDINGS, CURBS, PAVEMENTS, ETC. SPECIFIC ATTENTION SHALL BE GIVEN TO ENSURE THAT PLANTS INDIVIDUALLY SHOWN ON THE PLAN ARE ACCURATELY LOCATED. LOCATION OF ALL PLANTS SHALL BE REVIEWED IN THE FIELD BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR SHALL PROVIDE 48 HOURS NOTICE FOR REVIEW.
- NO PLANTINGS SHALL BE REQUIRED WHEN A PRESERVED WETLAND OR REQUIRED RIPARIAN BUFFER EXISTS WITHIN A REQUIRED BUFFER YARD.
- EXISTING SIGNIFICANT VEGETATION THAT IS PRESERVED WITHIN ANY REQUIRED BUFFER YARD SHALL BE CREDITED TOWARD STANDARDS FOR THE TYPE OF BUFFER REQUIRED AT THE TIME OF MUNICIPAL APPROVALS. IF EXISTING VEGETATION DOES NOT FULLY MEET THE STANDARDS FOR THE TYPE OF BUFFER REQUIRED, SUPPLEMENTAL VEGETATION AND/OR SITE FEATURES (INCLUDING FENCES) SHALL BE PLANTED OR INSTALLED WITHIN THE REQUIRED BUFFER AREA TO MEET MINIMUM STANDARDS.
- A PRE-EMERGENT HERBICIDE SHALL BE APPLIED TO ALL NEW PLANTING BEDS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ALLOWED TO DISSIPATE PRIOR TO INSTALLATION OF ANY PLANT MATERIAL.
- ALL LANDSCAPE AREAS ARE TO BE GRADED FOR POSITIVE DRAINAGE AND TO ENSURE NO STANDING WATER. SEE GRADING PLAN FOR SPECIFIC GRADING INFORMATION. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT AND/OR ENGINEER OF ANY GRADING DISCREPANCIES OR CONCERNS.

- ESTABLISH AND MAINTAIN TOP OF GRADE BELOW ADJACENT CURBS, WALKWAYS AND OTHER HARDSCAPE AREAS TO ALLOW FOR INSTALLATION OF MULCH.
- ALL PLANTING BEDS ARE TO BE COVERED WITH MULCH TO A MINIMUM DEPTH OF 2-3 INCHES, UNLESS INDICATED OTHERWISE. MULCH SHALL BE AS SELECTED BY THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL SUBMIT A SAMPLE FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO PURCHASE AND DELIVERY TO PROJECT SITE.
- FINISH OFF 2-4 FOOT CLEAR ZONE AROUND TREES WITH A 2-3-INCH LAYER OF MULCH, BUT DO NOT PLACE UP AGAINST OR MOUND AROUND THE ROOT FLARE.
- MIXED GROUND COVER AND PLANTS SPECIFIED FOR MASS PLANTINGS SHALL BE PLANTED IN ODD GROUPINGS AND LOCATED AS REQUIRED TO PROVIDE A GENERAL MIXING OF SPECIES. DO NOT PLANT IN ROWS OR REPETITIVE PATTERNS UNLESS OTHERWISE DIRECTED.
- ALL TREES ADJACENT TO PEDESTRIAN WALKWAYS AND IN SIGHT TRIANGLES SHALL BE UNDER-TRIMMED SUFFICIENTLY TO ALLOW CLEAR SIGHT AND PEDESTRIAN ACCESS UP TO 6 FEET ABOVE SIDEWALK ELEVATION. ALL PRUNING SHALL BE PERFORMED BY A CERTIFIED ARBORIST AND ADHERE TO THE ANSI A800 PRUNING STANDARD. PRUNING CUTS ARE TO BE DELIBERATE AND TARGETED ONLY TO THE NECESSARY BRANCHES IN ORDER TO SATISFY SIGHT AND CLEARANCE REQUIREMENTS WHILE MAINTAINING THE INTEGRITY OF THE TREES.
- THE SITE SHALL BE STABILIZED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).
- CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO WATERING, MULCHING, SPRAYING, FERTILIZING, ETC.) OF THE PLANTING AREAS UNTIL FINAL ACCEPTANCE.
- ANY PLANT WHICH DIES, TURNS BROWN OR DEFLORIATES PRIOR TO FINAL ACCEPTANCE OF THE WORK SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, IN ACCORDANCE WITH THE APPROPRIATE PLANTING SEASON; QUANTITY AND SIZE TO MEET PLAN SPECIFICATIONS.

**TREE PROTECTION NOTES:**

- ALL TREES THAT ARE TO REMAIN, WITHIN OR DIRECTLY ADJACENT TO THE LIMITS OF WORK, MUST BE PROTECTED WITH TREE PROTECTION FENCE AS INDICATED ON THE PLANS TO THE EXTENT OF THE TREE BOX OR THE DRIP LINE IN A PLANTING STRIP. THE DRIP LINE IS DEFINED AS THE GROUND AREA UNDER THE CANOPY OF THE TREE. FENCING IS TO BE INSTALLED PRIOR TO CONSTRUCTION, MAINTAINED THROUGHOUT, AND REMOVED ONLY AT THE END OF THE PROJECT.
- NONE OF THE FOLLOWING SHALL OCCUR WITHIN THE ROOT ZONE OF A TREE WITHOUT PERMISSION OF LANDSCAPE ARCHITECT OR PROJECT ARBORIST: ALTERATION OR DISTURBANCE TO EXISTING GRADE; STAGING OR STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT USE, SOIL OR DEBRIS REMOVAL OR STOCKPILING; TRENCHING; OR DISPOSAL OF ANY LIQUIDS.
- APPROVED EXCAVATIONS WITHIN THE DRIP LINE SHALL PROCEED WITH CARE BY USE OF HAND TOOLS OR EQUIPMENT THAT WILL NOT CAUSE INJURY TO TREE TRUNKS, BRANCHES AND ROOTS.
- NO ROOTS GREATER THAN 2 INCHES IN DIAMETER SHALL BE CUT WITHOUT PERMISSION OF LANDSCAPE ARCHITECT OR PROJECT ARBORIST. EXPOSED ROOTS 2 INCHES AND LARGER IN DIAMETER SHALL BE WRAPPED IN BURLAP OR OTHER APPROVED MATERIAL AND KEPT MOIST AT ALL TIMES.
- IF THERE ARE ANY TREE CONFLICTS ON THIS JOB SITE, PERMIT HOLDER MUST SUSPEND ALL WORK THAT CONTRIBUTES TO THE CONFLICT AND IMMEDIATELY CONTACT LANDSCAPE ARCHITECT OR PROJECT ARBORIST FOR DIRECTION AND CLEARANCE TO CONTINUE THE CONFLICTING WORK.
- TREES THAT ARE PROTECTED SHALL BE THOROUGHLY WATERED AS REQUIRED TO KEEP ROOT BALLS FROM DRYING OUT, ESPECIALLY BETWEEN APRIL THROUGH SEPTEMBER.

**UTILITIES NOTES:**

- GENERALLY, FILL MATERIAL SHALL BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- ALL NECESSARY INSPECTIONS, CERTIFICATIONS, AND TESTING REQUIRED BY CODES AND UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO MUNICIPAL APPROVAL FOR THE FINAL CONNECTION OF SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF TESTING SERVICES AND COORDINATION WITH UTILITY OWNER.
- CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE IMPROVEMENTS SHOWN.
- THE CONTRACTOR SHALL REPORT, IN WRITING ANY UTILITY CONFLICTS TO THE ENGINEER IMMEDIATELY UPON DISCOVERING CONFLICTS.
- THE SANITARY SEWER PIPE LENGTHS AS SHOWN ON THE DRAWINGS REPRESENTS THE DISTANCE FROM CENTER TO CENTER OF THE RESPECTIVE STRUCTURES.
- PRIOR TO UTILITY RELOCATION, REMOVAL OR ABANDONMENT, THE CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY PROVIDERS, LOCAL MUNICIPALITY, AND NCDOT.
- THE CONTRACTOR SHALL MAINTAIN A MINIMUM COVER OF 5 FEET MEASURED FROM FINISHED GRADE IN TRAFFIC AREAS TO THE PIPE CROWN UNLESS DUCTILE IRON PIPE IS PROVIDED IN CLASS 1 BEDDING WHERE MINIMUM COVER SHALL BE THREE FEET.
- THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR INSTALLATION OF ALL PROPOSED POWER AND COMMUNICATION LINES AND ASSOCIATED APPURTENANCES.

**WELL ABANDONMENT NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND PAYING APPLICABLE FEES FOR THE ABANDONMENT OF WELLS.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) WELL STANDARDS (15A NCAC 02C 0113). AN ABANDONMENT PERMIT SHALL BE OBTAINED BY A CERTIFIED NC WELL CONTRACTOR FROM THE COUNTY ENVIRONMENTAL HEALTH DIVISION PRIOR TO COMMENCING ABANDONMENT WORK. USE FORM GW-20 PROVIDED BY NCDEQ.

**SEPTIC SYSTEM ABANDONMENT NOTES:**

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND PAYING APPLICABLE FEES FOR THE ABANDONMENT OF SEPTIC TANKS AND SEPTAGE. ALL WORK SHALL BE DONE IN ACCORDANCE WITH AUTHORITIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY CONTAINMENT AND PROPER DISPOSAL OF THE WASTEWATER COMING FROM THE RESIDENCE PRIOR TO DISCONNECTING THE SEPTIC SYSTEM TO BE ABANDONED.
- FOR SEPTIC SYSTEMS CONTAINING A SEPTIC PUMP, THE CONTRACTOR SHALL DISCONNECT THE SEPTIC PUMP PRIOR TO ABANDONING THE SEPTIC SYSTEM. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT NC ELECTRICAL CODE BY A LICENSED ELECTRICAL CONTRACTOR IN THE STATE OF NORTH CAROLINA.
- ALL DEBRIS AND MATERIALS FROM THE ABANDONED SEPTIC SYSTEM ARE TO BE DISPOSED OF PROPERLY IN AN APPROVED OFF-SITE FACILITY AND THE CONSTRUCTION AREA RESTORED TO PRE-CONSTRUCTION CONDITIONS OR BETTER.
- NO SEPTAGE SHALL BE DISCHARGED TO THE EXISTING SEWER SYSTEM.

**RETAINING WALL NOTES:**

- THE CONTRACTOR SHALL ADHERE TO THE HORIZONTAL AND VERTICAL LOCATION OF THE WALLS SHOWN ON THE PLANS. THE STRUCTURAL WALL DESIGN SHALL BE COMPLETED BY OTHERS, UNLESS OTHERWISE NOTED.
- TFW REFERS TO TOP FACE OF WALL ELEVATION. BWV REFERS TO THE BOTTOM FACE OF WALL ELEVATION AT FINISHED GRADE, NOT FINISHING GRADE.
- IF STAKED BY WITHERSRAVENEL INC., BOTTOM OF WALL GRADE AT FINISHED GRADE WILL BE STAKED, ANY DIFFERENCES BETWEEN FOUNDATION OF WALL AS COMPARED TO FINISHED GRADE BOTTOM IS TO BE STATED SO ON RETAINING WALL PLANS BY OTHERS.
- IF WALL CONTRACTOR REQUIRES ADDITIONAL STAKING BEYOND WALL AT FINISHED GRADE, THE ENGINEER MAY PROVIDE A CAD FILE NOTING LOCATION OF THE ITEMS TO BE STAKED. LOCATIONS WHERE WALL BREAKS OR CHANGES IN WALL ANGLES ARE TO BE NOTED ON THE CAD FILE.
- WALL BATTER ASSUMPTIONS
  - 1/4" PER 8" VERTICAL RISE.
  - THE WALL CONTRACTOR OR ENGINEER OF RECORD FOR THE PROPOSED WALL SHALL NOTIFY WITHERSRAVENEL, INC. IF THE RETAINING WALL BATTER MUST DEVIATE FROM THE ABOVE WALL ASSUMPTIONS AT THE TIME OF DESIGN FOR VERIFICATION TO MEET SITE DESIGN CRITERIA.
- PRIOR TO WALL STAKING, A MEETING SHALL BE HELD BY THE SURVEYOR AND WALL CONTRACTOR TO DETERMINE STAKING CRITERIA.
- CONTRACTOR TO INSTALL TEMPORARY FENCING/BARRICADES DURING CONSTRUCTION UNTIL PERMANENT FENCING IS INSTALLED.
- CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES TO PERMANENT FENCING DURING CONSTRUCTION. REPAIR OF DAMAGES SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER AND SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER AND OWNER.

**CITY OF RALEIGH STANDARD UTILITY NOTES:**

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
- UTILITY SEPARATION REQUIREMENTS:
  - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PUBLIC WELL.
  - WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
  - WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE CERTIFIED ARBORIST AND ADHERE TO THE ANSI A800 PRUNING STANDARD. PRUNING CUTS ARE TO BE DELIBERATE AND TARGETED ONLY TO THE NECESSARY BRANCHES IN ORDER TO SATISFY SIGHT AND CLEARANCE REQUIREMENTS WHILE MAINTAINING THE INTEGRITY OF THE TREES.
  - 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER
  - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP STORM DRAIN CROSSINGS; MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL SANITARY SEWER & RCP STORM DRAIN CROSSINGS. WHERE ADEQUATE SEPARATIONS CANNOT BE ACHIEVED SPECIFY DIP MATERIALS & A CONCRETE CRADLE HAVING 6" MIN. CLEARANCE (PER CORPUD DETAILS W-41 & 5-49).
  - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
- ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.
- DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24-HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- SEWER BYPASS PUMPING - A BYPASS PLAN SEALED BY AN NC PROFESSIONAL ENGINEER SHALL BE PROVIDED TO RALEIGH WATER PRIOR TO PUMPING OPERATIONS FOR APPROVAL. THE OPERATIONS AND EQUIPMENT SHALL COMPLY WITH THE PUBLIC UTILITIES HANDBOOK.
- 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- INSTALL 1/4" COPPER WATER SERVICES WITH METERS LOCATED AT ROW OR WITHIN A 2'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW & PRESSURE
- INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDWQ, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
- GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE RW FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A UC AND/OR BUILDING PERMIT. CONTACT (919) 996-4516 OR [FOG@RALEIGHNC.GOV](mailto:FOG@RALEIGHNC.GOV) FOR MORE INFORMATION.
- CROSS-CONNECTION CONTROL PROTECTION DEVICES ARE REQUIRED BASED ON THE DEGREE OF HEALTH HAZARD INVOLVED AS LISTED IN APPENDIX B OF THE RULES GOVERNING PUBLIC WATER SYSTEMS IN NORTH CAROLINA.
- THE DEVICES SHALL MEET THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASAE) STANDARDS AND BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST.
- THE DEVICE AND INSTALLATION SHALL MEET THE GUIDELINES OF APPENDIX A - GUIDELINES AND REQUIREMENTS FOR THE CROSS CONNECTION PROGRAM IN RALEIGH'S SERVICE AREA.
- THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT [CROSS.CONNECTION@RALEIGHNC.GOV](mailto:CROSS.CONNECTION@RALEIGHNC.GOV) FOR MORE INFORMATION.
- NOTICE FOR PROJECTS THAT INVOLVE AN OVERSIZED MAIN OR URBAN MAIN REPLACEMENT, ANY CITY REIMBURSEMENT GREATER THAN \$250,000.00 MUST UNDERGO THE PUBLIC BIDDING PROCESS.

**WithersRavenel**  
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**PULTEGROUP**

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR CID-YR-XX**

1225 CRESCENT GREEN DRIVE, SUITE 200 CARY, NC 27518

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR CID-YR-XX**

ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

**PRELIMINARY NOT APPROVED FOR CONSTRUCTION**



INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

WR JOB NUMBER 23-0045  
 DRN: WR DGN: WR CKD: WR

**GENERAL NOTES & LEGENDS**

**C0.02**

EST. 1989

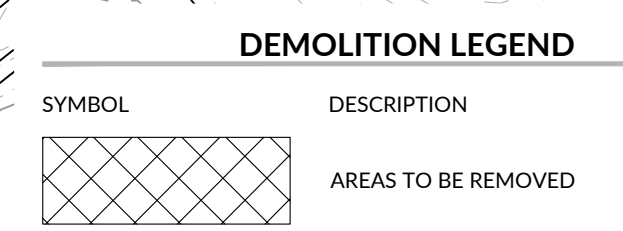
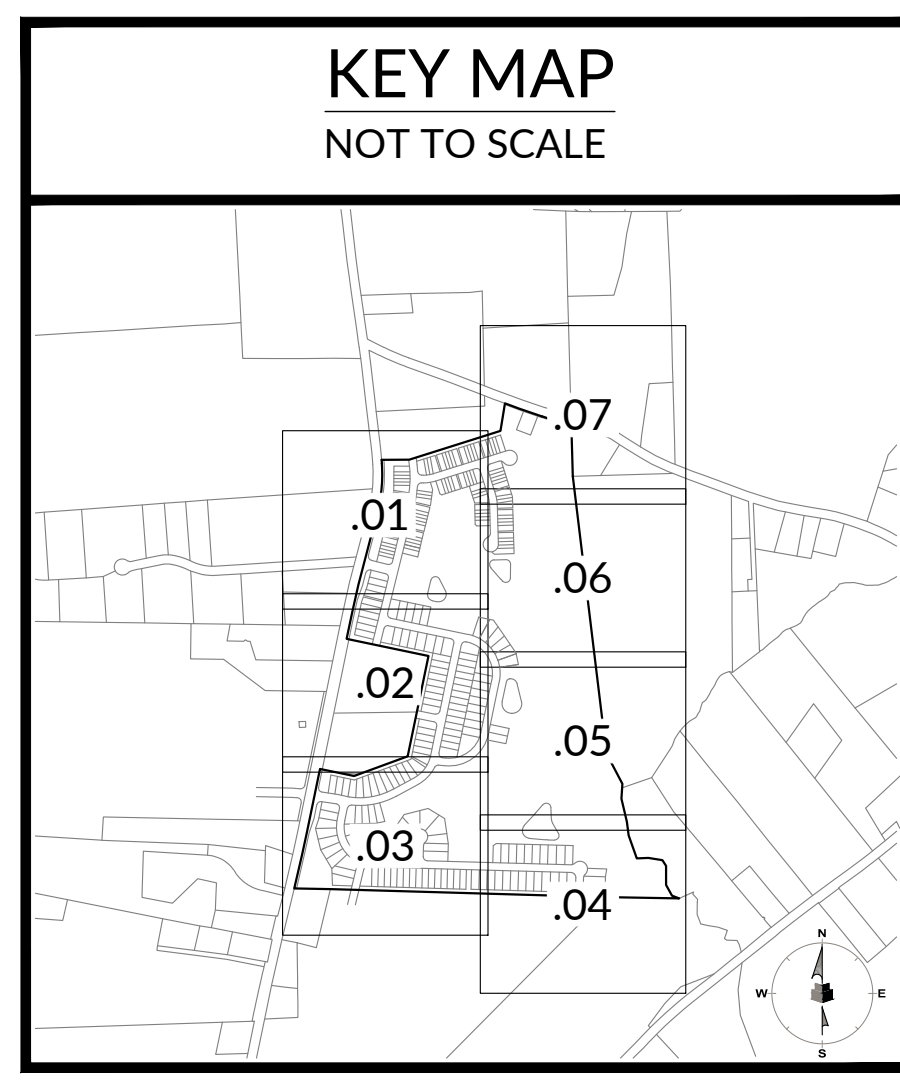




PROPERTY OWNER DATA						
TAG	OWNER	DEED BOOK	PAGE NO.	PIN.	ZONING	DESCRIPTION
1	WILDER, CHRISTIAN C WILDER, CINDY E	10927	1494	1767-39-2260	R-30 (WAKE COUNTY)	RESIDENTIAL-30
2	MALDONADO, RAUL	17784	1955	1767-38-7947	R-30 (WAKE COUNTY)	RESIDENTIAL-30
3	GLOVER, RICO D SR GLOVER, TIFFANY N	17360	1716	1767-38-5949	R-30 (WAKE COUNTY)	RESIDENTIAL-30
4	SHORE, JOHN L SHORE, ANNETTE P	13782	1145	1767-38-0992	R-30 (WAKE COUNTY)	RESIDENTIAL-30
5	RODRIGUEZ, ALECIO MORIN, MARIA OLIVIA LOPEZ	19067	2293	1767-38-5643	R-30 (WAKE COUNTY)	RESIDENTIAL-30
6	CLARK, CHARLES T CLARK, PATRICIA H	4572	246	1767-38-9615	R-30 (WAKE COUNTY)	RESIDENTIAL-30
7	SB-HS LOT OPTION POOL 02 LP	19676	2496	1767-48-3143	R3-CZ (ROLESVILLE)	-
8	SB-HS LOT OPTION POOL 02 LP	19676	2496	1767-58-6083	R3-CZ (ROLESVILLE)	-
9	AGUILAR, NORMA	12647	1286	1767-48-5863	R-30 (WAKE COUNTY)	RESIDENTIAL-30
10	RICHARDS, BARBARA ANN JONES	1730	526	1768-40-2816	R-30 (WAKE COUNTY)	RESIDENTIAL-30
11	ALFORD, SAMUEL JASON	19530	2760	1768-51-8609	R-30 (WAKE COUNTY)	RESIDENTIAL-30
12	WATKINS, CHARLES ZACHARY	17332	2109	1768-52-9682	R-30 (WAKE COUNTY)	RESIDENTIAL-30
13	WOODLIEF, CARLYLE D WOODLIEF, ALMA D	14286	1880	1768-51-1519	R-30 (WAKE COUNTY)	RESIDENTIAL-30
14	WALL, JOSEPH E GUNZ, BETTY R	5178	858	1768-21-6907	RL (ROLESVILLE)	RESIDENTIAL LOW DENSITY
15	POWELL, JEFFERY LOUIS	12-E	3279	1768-31-7240	RL (ROLESVILLE)	RESIDENTIAL LOW DENSITY
16	BURLAGE, LUCAS GABRIEL BURLAGE, LAURA ELENA	15424	810	1768-30-9874	RL (ROLESVILLE)	RESIDENTIAL LOW DENSITY
17	THE STRADER FAMILY TRUST	15137	2468	1768-30-9667	RL (ROLESVILLE)	RESIDENTIAL LOW DENSITY
18	CICERO, KRISTAN CICERO, JOSEPH	19017	1461	1768-30-8414	R-30 (WAKE COUNTY)	RESIDENTIAL-30
19	STALLINGS, HARRELF STALLINGS, GAYLE W	12830	114	1768-30-6321	R-30 (WAKE COUNTY)	RESIDENTIAL-30
20	DR HORTON INC	19008	1446	1767-39-9921	R&PUD-CZ (ROLESVILLE)	-
21	DR HORTON INC	19008	1446	1767-29-3887	R&PUD-CZ (ROLESVILLE)	-
22	ROGERS, WILLIAM L	3626	569	1768-42-7499	R-30 (WAKE COUNTY)	RESIDENTIAL-30
23	GUNZ, BETTY R TEXWEST LLC	10194	2092	1768-32-8863	RL (ROLESVILLE)	RESIDENTIAL LOW DENSITY

CURVE TABLE			
CURVE #	LENGTH	RADIUS	DELTA
C1	180.79	6679.90	1.55°
C2	137.69	1382.59	5.71°
C3	195.33	958.28	11.68°
C4	24.35	3453.77	0.40°
C5	50.77	1298.50	2.24°

LINE TABLE			
LINE #	BEARING	DISTANCE	
L1	S01°36'33"E	331.36	
L2	S06°53'59"E	1627.11	
L3	S18°52'37"W	56.68	
L4	S38°15'12"E	25.09	
L5	S05°12'56"E	54.55	
L6	S21°01'52"E	80.42	
L7	S27°30'18"E	207.75	
L8	S03°37'01"W	97.01	
L9	S13°29'28"E	153.88	
L10	S07°17'46"E	89.26	
L11	S19°33'48"E	159.31	
L12	N87°33'10"E	75.19	
L13	S80°55'53"E	92.15	
L14	S32°50'43"E	45.25	
L15	S00°05'28"E	124.26	
L16	S28°43'30"E	78.63	
L17	S68°30'30"E	50.46	
L18	N88°56'43"W	474.91	
L19	N88°20'38"W	1796.39	
L20	N88°52'07"W	224.55	
L21	N88°52'07"W	10.87	
L22	N13°00'14"E	225.00	
L23	N12°19'14"E	148.01	
L24	N11°36'25"E	422.60	
L25	S78°23'35"E	226.99	
L26	N69°53'25"E	371.57	
L27	N11°41'17"E	666.87	
L28	N78°11'05"W	544.02	
L29	N11°36'25"E	4.65	
L30	N11°51'14"E	175.52	
L31	N14°43'08"E	474.13	
L32	N89°21'38"E	179.92	
L33	N72°34'34"E	623.13	
L34	N09°01'09"E	181.91	
L35	S69°53'15"E	102.86	
L36	S71°01'28"E	153.25	
L37	S73°15'53"E	149.14	



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CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR**  
**CID-YR-XX**  
 ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

FOR THE PROFESSION  
**PRELIMINARY**  
 NOT APPROVED FOR  
 CONSTRUCTION  
 REFERENCE COOK

0 100 200  
 SCALE: 1 inch = 200 ft.

INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

WR JOB NUMBER 23-0045  
 DRN: WR DGN: WR CKD: WR

**OVERALL EXISTING CONDITIONS & DEMOLITION PLAN**

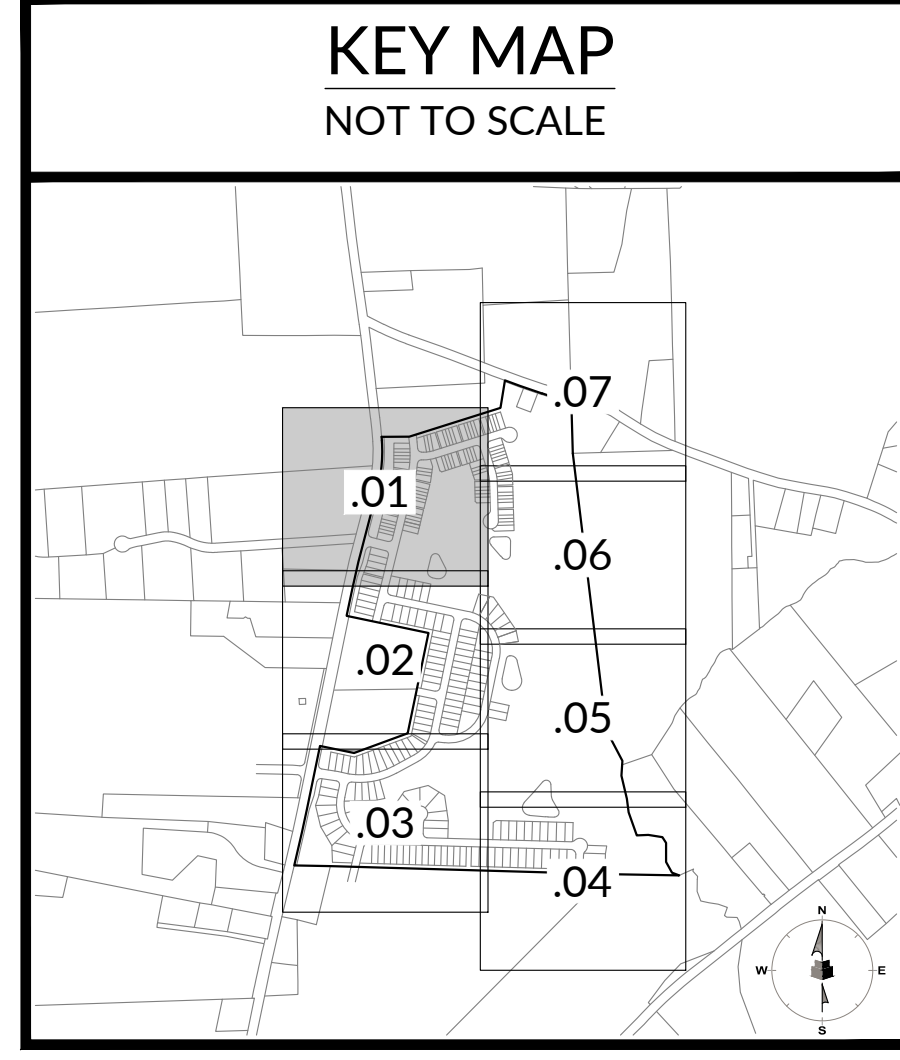
**C1.00**

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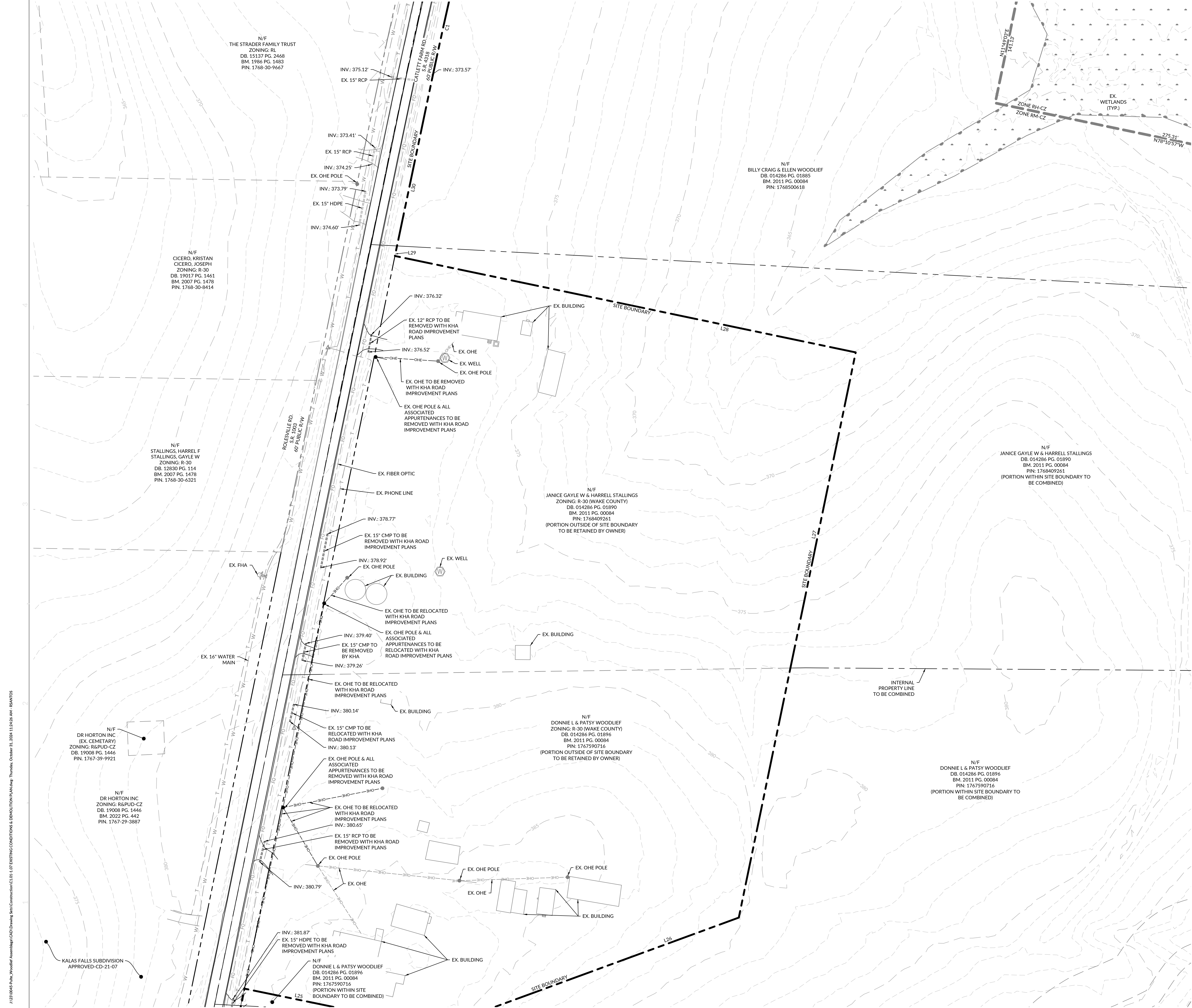


CURVE TABLE				LINE TABLE		
CURVE #	LENGTH	RADIUS	DELTA	LINE #	BEARING	DISTANCE
C1	180.79	6679.90	1.55°	L1	S01°36'33"E	331.36
C2	137.69	1382.59	5.71°	L2	S06°53'59"E	1627.11
C3	195.33	958.28	11.68°	L3	S18°52'37"W	56.68
C4	24.35	3453.77	0.40°	L4	S38°15'12"E	25.09
C5	50.77	1298.50	2.24°	L5	S05°12'56"E	54.55
				L6	S21°01'52"E	80.42
				L7	S27°30'18"E	207.75
				L8	S03°37'01"W	97.01
				L9	S13°29'28"E	153.88
				L10	S07°17'46"E	89.26
				L11	S19°33'48"E	159.31
				L12	N87°33'10"E	75.19
				L13	S80°55'53"E	92.15
				L14	S32°50'43"E	45.25
				L15	S00°05'28"E	124.26
				L16	S28°43'30"E	78.63
				L17	S68°30'30"E	50.46
				L18	N88°56'43"W	474.91
				L19	N88°20'38"W	1796.39
				L20	N88°52'07"W	224.55
				L21	N88°52'07"W	10.87
				L22	N13°00'14"E	225.00
				L23	N12°19'14"E	148.01
				L24	N11°36'25"E	422.60
				L25	S78°23'35"E	226.99
				L26	N69°53'25"E	371.57
				L27	N11°41'17"E	666.87
				L28	N78°11'05"W	544.02
				L29	N11°36'25"E	4.65
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				L31	N14°43'08"E	474.13
				L32	N89°21'38"E	179.92
				L33	N72°34'34"E	623.13
				L34	N09°01'09"E	181.91
				L35	S69°53'15"E	102.86
				L36	S71°01'28"E	153.25
				L37	S73°15'53"E	149.14

DEMOLITION LEGEND	
SYMBOL	DESCRIPTION
	AREAS TO BE REMOVED

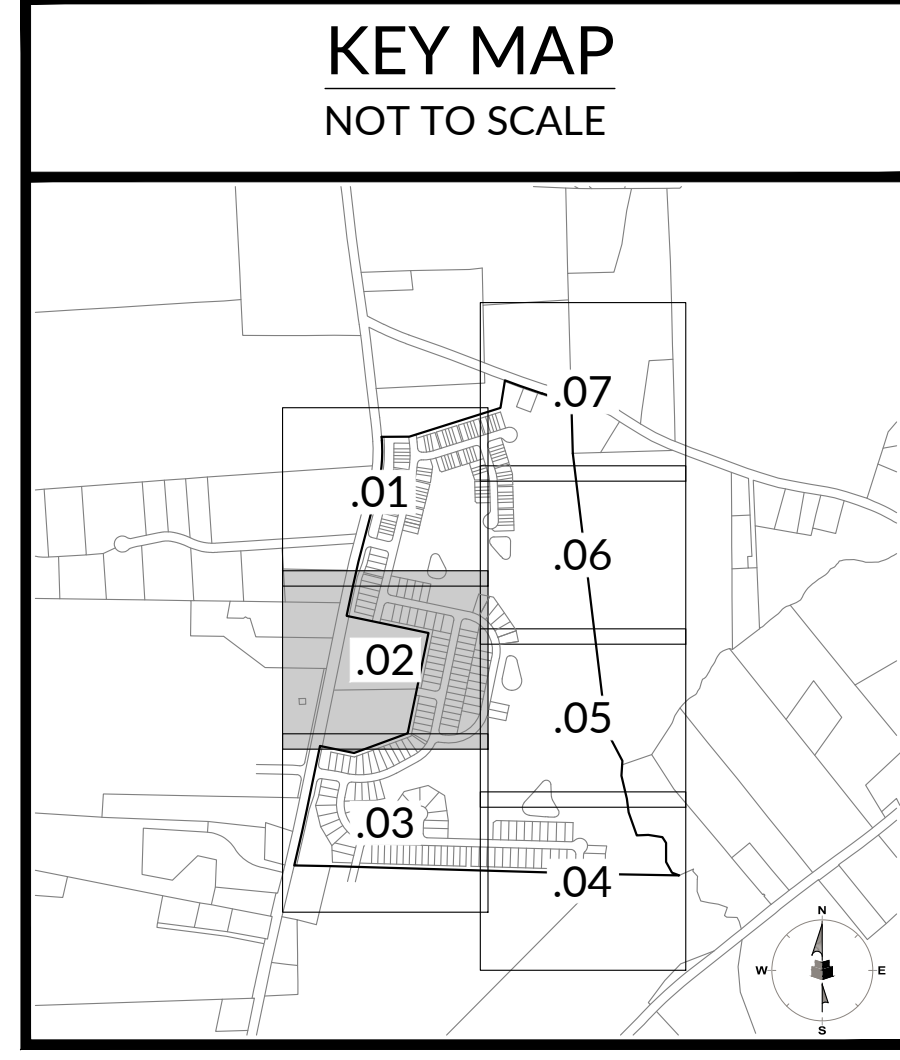
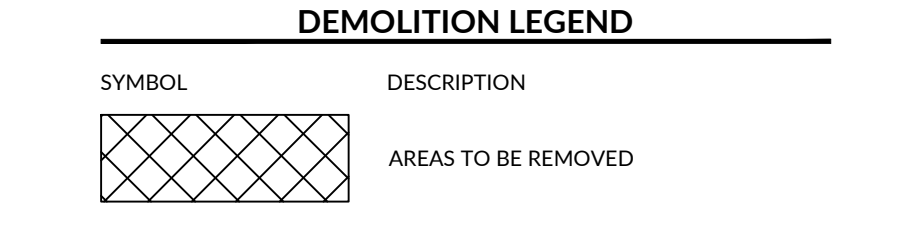


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CURVE TABLE				LINE TABLE		
CURVE #	LENGTH	RADIUS	DELTA	LINE #	BEARING	DISTANCE
C1	180.79	6679.90	1.55°	L1	S01°36'33"E	331.36
C2	137.69	1382.59	5.71°	L2	S06°53'59"E	1627.11
C3	195.33	958.28	11.68°	L3	S18°52'37"W	56.68
C4	24.35	3453.77	0.40°	L4	S38°15'12"E	25.09
C5	50.77	1298.50	2.24°	L5	S05°12'56"E	54.55
				L6	S21°01'52"E	80.42
				L7	S27°30'18"E	207.75
				L8	S03°37'01"W	97.01
				L9	S13°29'28"E	153.88
				L10	S07°17'46"E	89.26
				L11	S19°33'48"E	159.31
				L12	N87°33'10"E	75.19
				L13	S80°55'53"E	92.15
				L14	S32°50'43"E	45.25
				L15	S00°05'28"E	124.26
				L16	S28°43'30"E	78.63
				L17	S68°30'30"E	50.46
				L18	N88°56'43"W	474.91
				L19	N88°20'38"W	1796.39
				L20	N88°52'07"W	224.55
				L21	N88°52'07"W	10.87
				L22	N13°00'14"E	225.00
				L23	N12°19'14"E	148.01
				L24	N11°36'25"E	422.60
				L25	S78°23'35"E	226.99
				L26	N69°53'25"E	371.57
				L27	N11°41'17"E	666.87
				L28	N78°11'05"W	544.02
				L29	N11°36'25"E	4.65
				L30	N11°51'14"E	175.52
				L31	N14°43'08"E	474.13
				L32	N89°21'38"E	179.92
				L33	N72°34'34"E	623.13
				L34	N09°01'09"E	181.91
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				L36	S71°01'28"E	153.25
				L37	S73°15'53"E	149.14

CURVE TABLE				LINE TABLE		
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				L34	N09°01'09"E	181.91
				L35	S69°53'15"E	102.86
				L36	S71°01'28"E	153.25
				L37	S73°15'53"E	149.14



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**CURVE TABLE**

CURVE #	LENGTH	RADIUS	DELTA
C1	180.79	6679.90	1.55°
C2	137.69	1382.59	5.71°
C3	195.33	958.28	11.68°
C4	24.35	3453.77	0.40°
C5	50.77	1298.50	2.24°

**LINE TABLE**

LINE #	BEARING	DISTANCE
L1	S01°36'33"E	331.36
L2	S06°53'59"E	1627.11
L3	S18°52'37"W	56.68
L4	S38°15'12"E	25.09
L5	S05°12'56"E	54.55
L6	S21°01'52"E	80.42
L7	S27°30'18"E	207.75
L8	S03°37'01"W	97.01
L9	S13°29'28"E	153.88
L10	S07°17'46"E	89.26
L11	S19°33'48"E	159.31
L12	N87°33'10"E	75.19
L13	S80°55'53"E	92.15
L14	S32°50'43"E	45.25
L15	S00°05'28"E	124.26
L16	S28°43'30"E	78.63
L17	S68°30'30"E	50.46
L18	N88°56'43"W	474.91
L19	N88°20'38"W	1796.39
L20	N88°52'07"W	224.55
L21	N88°52'07"W	10.87
L22	N13°00'14"E	225.00
L23	N12°19'14"E	148.01
L24	N11°36'25"E	422.60
L25	S78°23'35"E	226.99
L26	N69°53'25"E	371.57
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L35	S69°53'15"E	102.86
L36	S71°01'28"E	153.25
L37	S73°15'53"E	149.14

**DEMOLITION LEGEND**

SYMBOL	DESCRIPTION
	AREAS TO BE REMOVED

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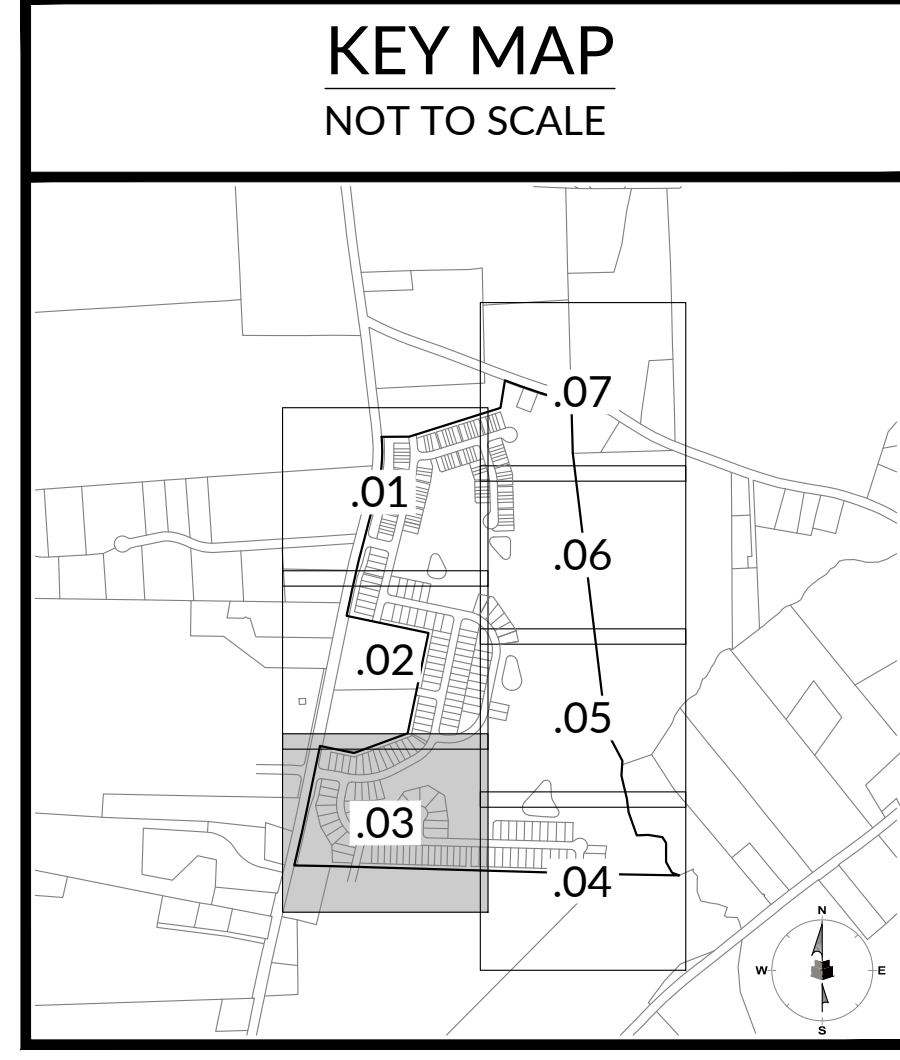
**PULTEGROUP**  
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 CARY, NC 27518

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR**  
**CID-YR-XX**  
 ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

PRELIMINARY  
 NOT APPROVED FOR  
 CONSTRUCTION  
 (LINE WORK)  
 REFERENCE COOK

0 25 50  
 SCALE: 1 inch = 50 ft.

INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:



WR JOB NUMBER 23-0045  
 DRN: WR DGN: WR CKD: WR

**EXISTING CONDITIONS & DEMOLITION PLAN**

**C1.03**

J:\23\0045\Plan\Woodlief\Assemblies\CID\Drawings\Site\Construction\C1.03 - EXISTING CONDITIONS & DEMOLITION PLAN.dwg, Thursday, October 31, 2024 11:52:27 AM - 8/4/2025





**CURVE TABLE**

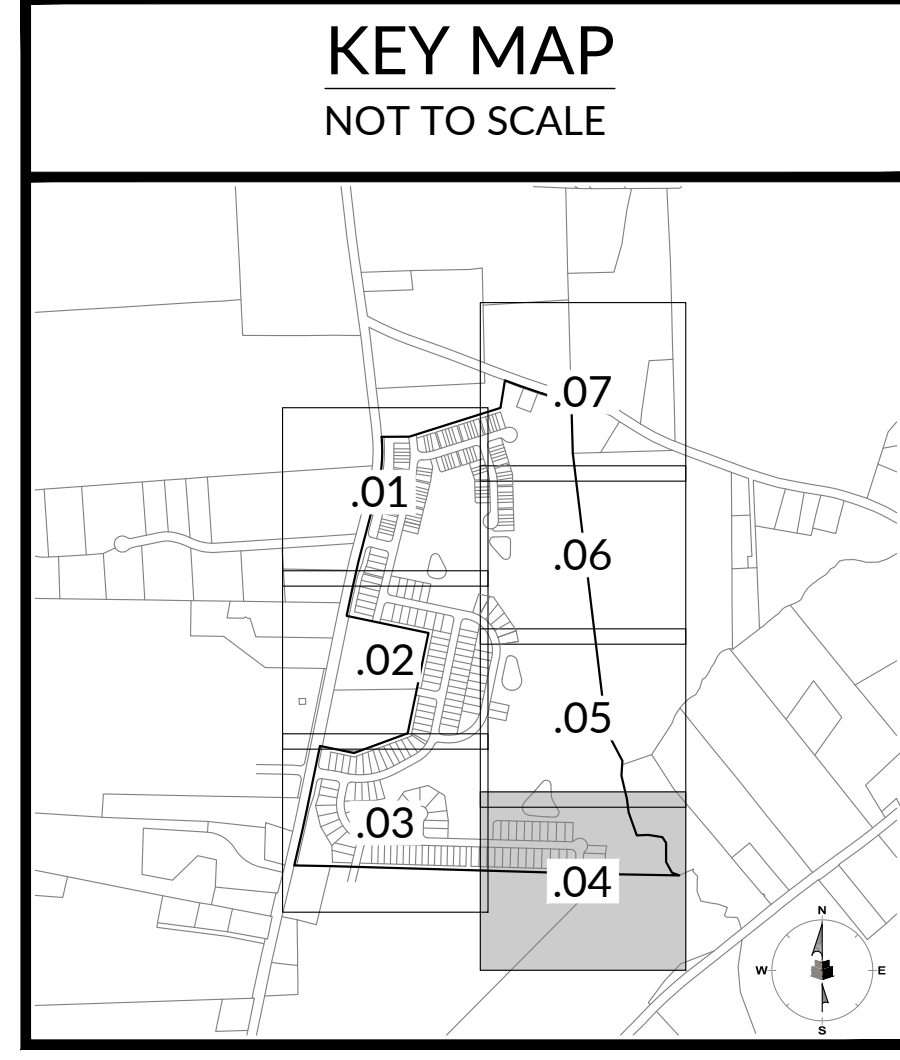
CURVE #	LENGTH	RADIUS	DELTA
C1	180.79	6679.90	1.55°
C2	137.69	1382.59	5.71°
C3	195.33	958.28	11.68°
C4	24.35	3453.77	0.40°
C5	50.77	1298.50	2.24°

**LINE TABLE**

LINE #	BEARING	DISTANCE
L1	S01°36'33"E	331.36
L2	S06°53'59"E	1627.11
L3	S18°52'37"W	56.68
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L11	S19°33'48"E	159.31
L12	N87°33'10"E	75.19
L13	S80°55'53"E	92.15
L14	S32°50'43"E	45.25
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L35	S69°53'15"E	102.86
L36	S71°01'28"E	153.25
L37	S73°15'53"E	149.14

**DEMOLITION LEGEND**

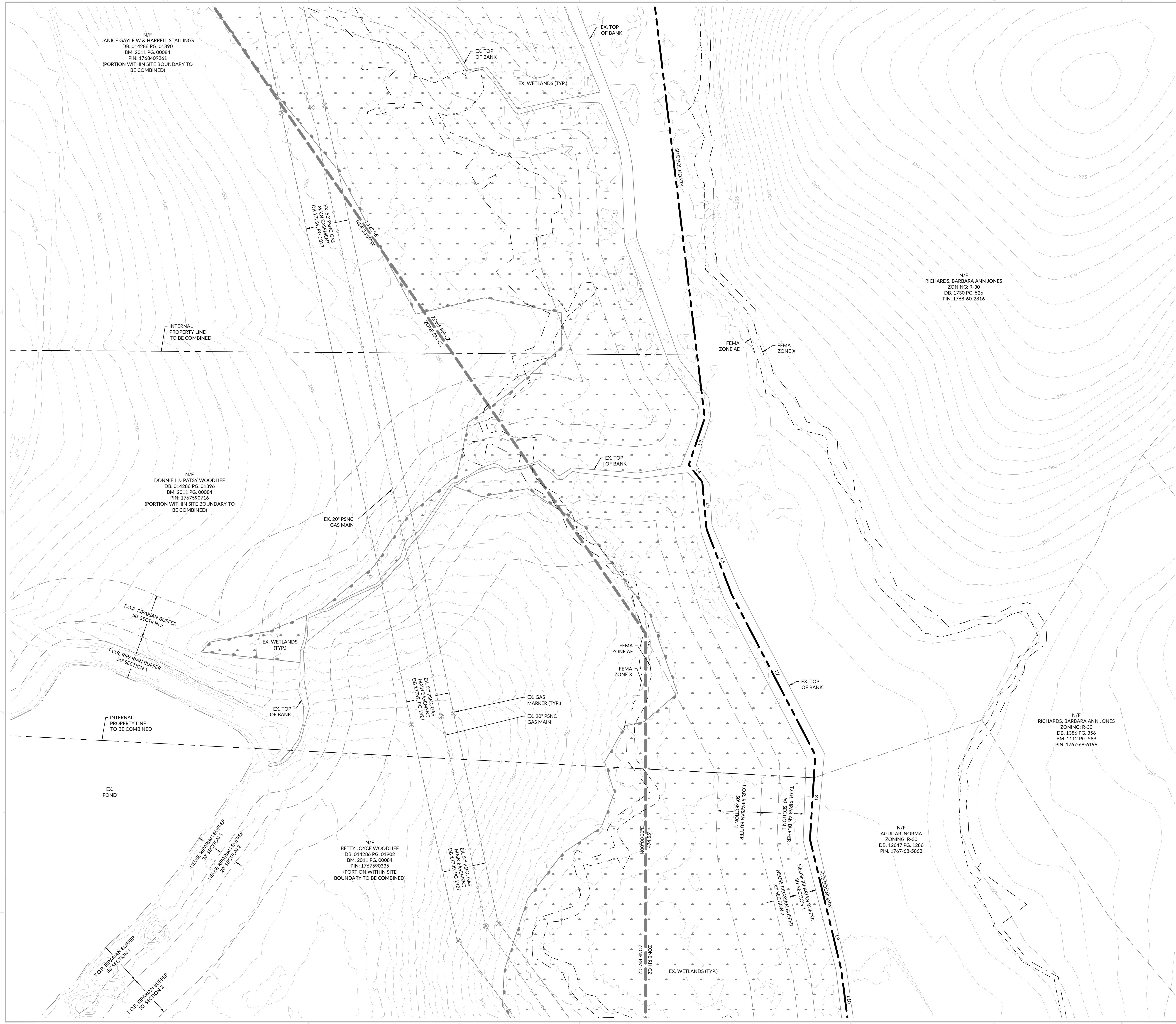
SYMBOL	DESCRIPTION
	AREAS TO BE REMOVED



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EST. 1993

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**CURVE TABLE**

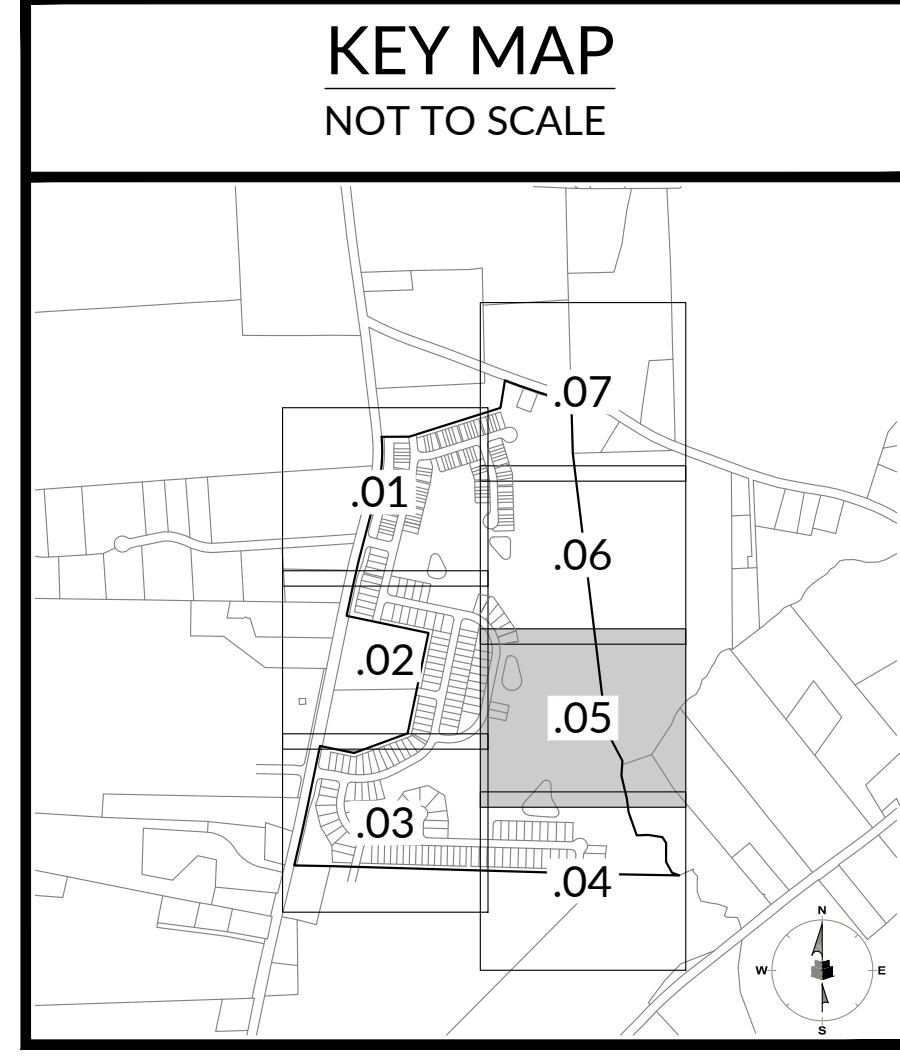
CURVE #	LENGTH	RADIUS	DELTA
C1	180.79	6679.90	1.55°
C2	137.69	1382.59	5.71°
C3	195.33	958.28	11.68°
C4	24.35	3453.77	0.40°
C5	50.77	1298.50	2.24°

**LINE TABLE**

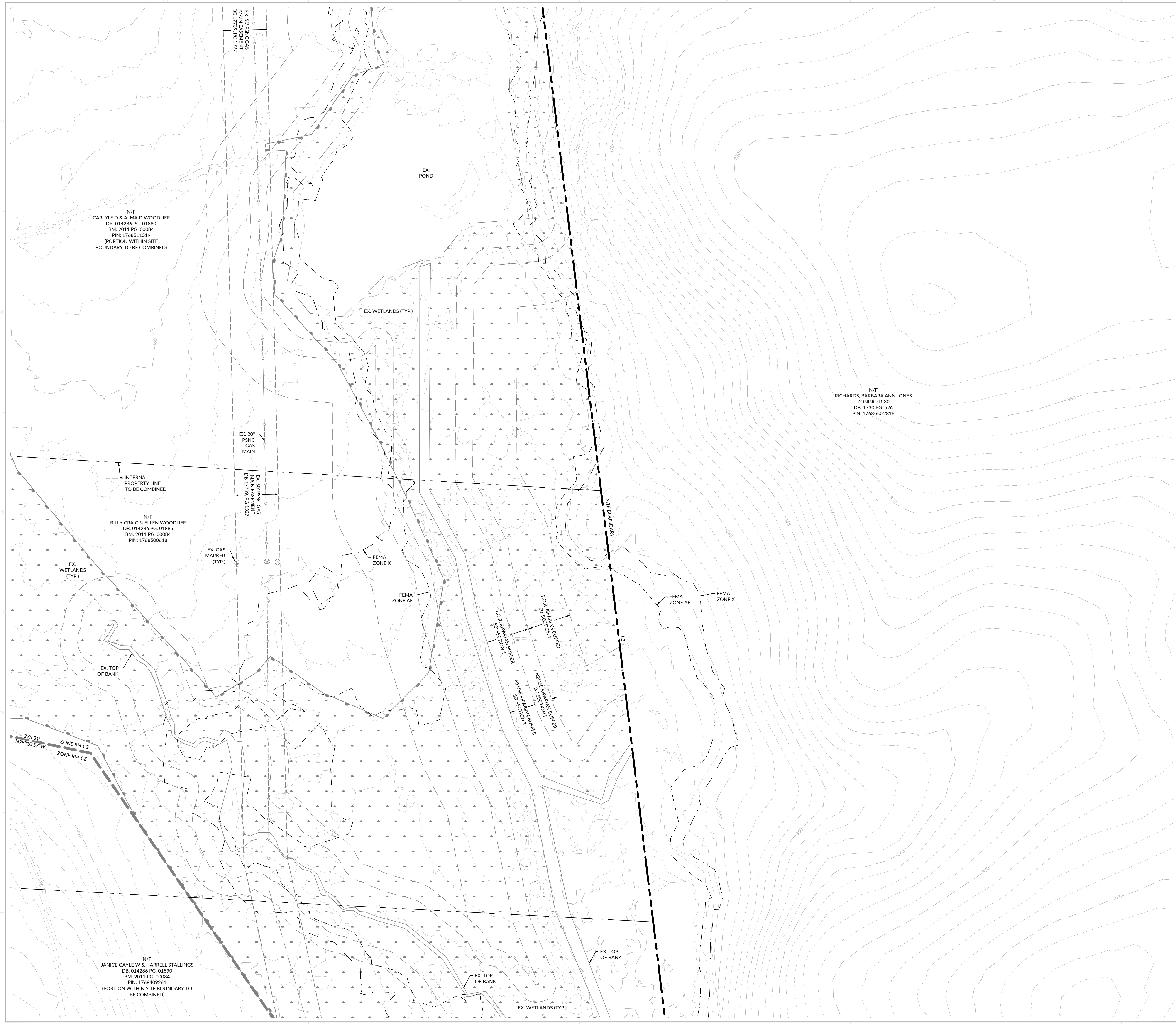
LINE #	BEARING	DISTANCE
L1	S01°36'33"E	331.36
L2	S06°53'59"E	1627.11
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L4	S38°15'12"E	25.09
L5	S05°12'56"E	54.55
L6	S21°01'52"E	80.42
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L16	S28°43'30"E	78.63
L17	S68°30'30"E	50.46
L18	N88°56'43"W	474.91
L19	N88°20'38"W	1796.39
L20	N88°52'07"W	224.55
L21	N88°52'07"W	10.87
L22	N13°00'14"E	225.00
L23	N12°19'14"E	148.01
L24	N11°36'25"E	422.60
L25	S78°23'35"E	226.99
L26	N69°53'25"E	371.57
L27	N11°41'17"E	666.87
L28	N78°11'05"W	544.02
L29	N11°36'25"E	4.65
L30	N11°51'14"E	175.52
L31	N14°43'08"E	474.13
L32	N89°21'38"E	179.92
L33	N72°34'34"E	623.13
L34	N09°01'09"E	181.91
L35	S69°53'15"E	102.86
L36	S71°01'28"E	153.25
L37	S73°15'53"E	149.14

**DEMOLITION LEGEND**

SYMBOL	DESCRIPTION
	AREAS TO BE REMOVED



J:\23\0045\Plan\WithersRavenel\Assemblies\CID\Drawings\Site\Construction\C1.05 - EXISTING CONDITIONS & DEMOLITION PLAN.dwg, Thursday, October 31, 2024, 11:24:38 AM - 80497025



**CURVE TABLE**

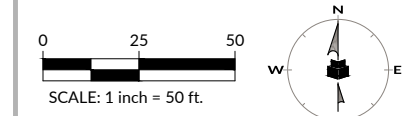
CURVE #	LENGTH	RADIUS	DELTA
C1	180.79	6679.90	1.55°
C2	137.69	1382.59	5.71°
C3	195.33	958.28	11.68°
C4	24.35	3453.77	0.40°
C5	50.77	1298.50	2.24°

**LINE TABLE**

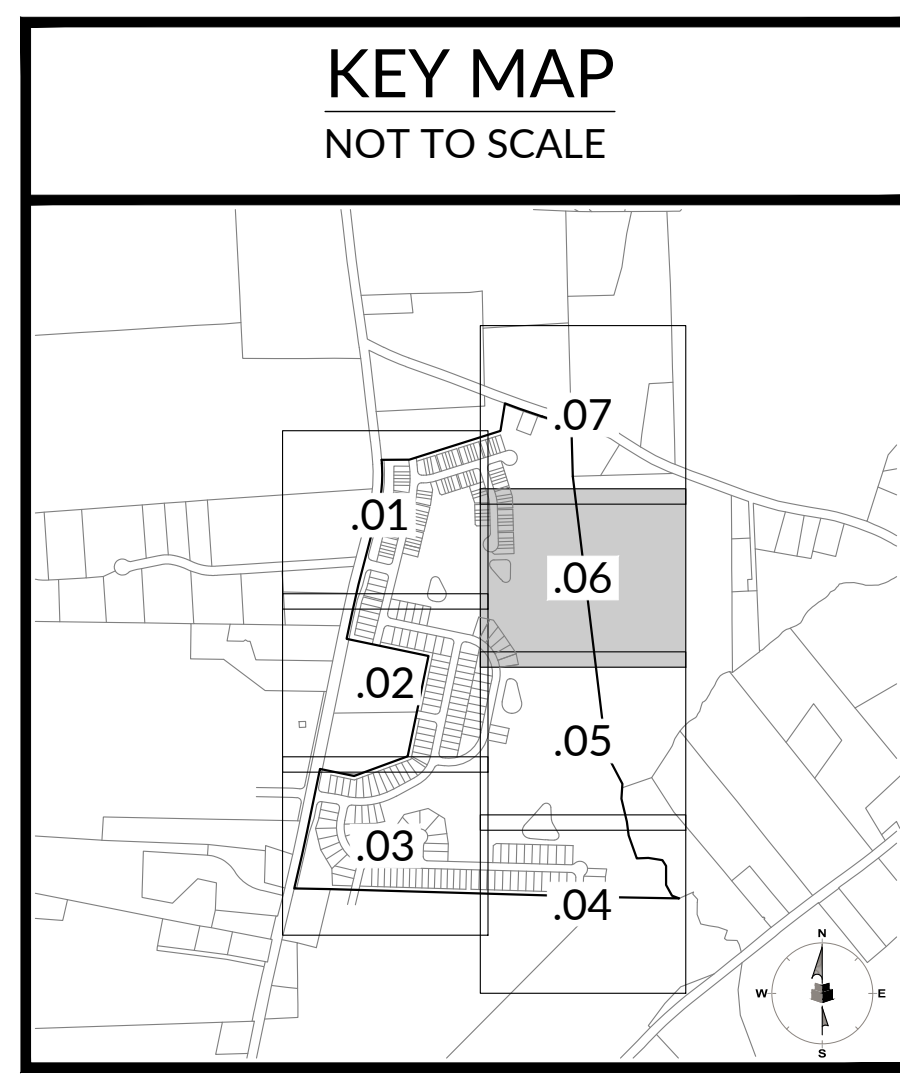
LINE #	BEARING	DISTANCE
L1	S01°36'33"E	331.36
L2	S06°53'59"E	1627.11
L3	S18°52'37"W	56.68
L4	S38°15'12"E	25.09
L5	S05°12'56"E	54.55
L6	S21°01'52"E	80.42
L7	S27°30'18"E	207.75
L8	S03°37'01"W	97.01
L9	S13°29'28"E	153.88
L10	S07°17'46"E	89.26
L11	S19°33'48"E	159.31
L12	N87°33'10"E	75.19
L13	S80°55'53"E	92.15
L14	S32°50'43"E	45.25
L15	S00°05'28"E	124.26
L16	S28°43'30"E	78.63
L17	S68°30'30"E	50.46
L18	N88°56'43"W	474.91
L19	N88°20'38"W	1796.39
L20	N88°52'07"W	224.55
L21	N88°52'07"W	10.87
L22	N13°00'14"E	225.00
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L25	S78°23'35"E	226.99
L26	N69°53'25"E	371.57
L27	N11°41'17"E	666.87
L28	N78°11'05"W	544.02
L29	N11°36'25"E	4.65
L30	N11°51'14"E	175.52
L31	N14°43'08"E	474.13
L32	N89°21'38"E	179.92
L33	N72°34'34"E	623.13
L34	N09°01'09"E	181.91
L35	S69°53'15"E	102.86
L36	S71°01'28"E	153.25
L37	S73°15'53"E	149.14

**DEMOLITION LEGEND**

SYMBOL	DESCRIPTION
	AREAS TO BE REMOVED



INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

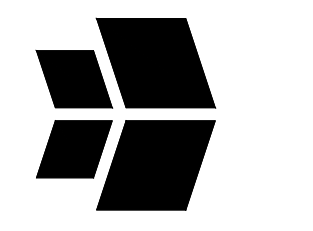


WR JOB NUMBER 23-0045  
DRN: WR DGN: WR CKD: WR

**EXISTING CONDITIONS & DEMOLITION PLAN**

**C1.06**

**WithersRavenel**  
167 E. Chatham St. | Suite 2101 | Cary, NC 27511  
License #: F-1479 | T: 919.238.0330 | www.withersravenel.com

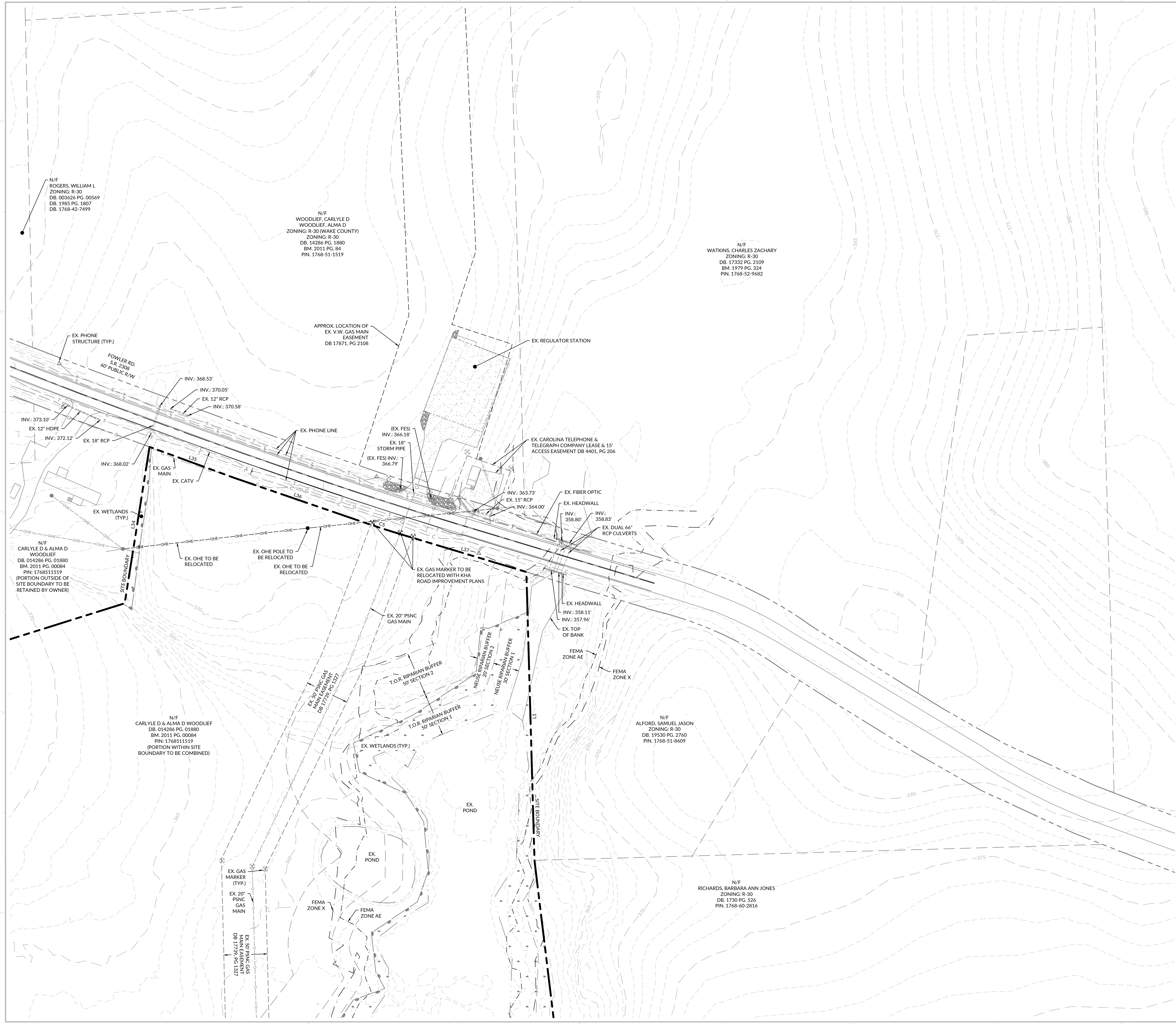


**PULTEGROUP**  
1225 CRESCENT GREEN DRIVE, SUITE 200  
CARY, NC 27518

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR  
CID-YR-XX**  
ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

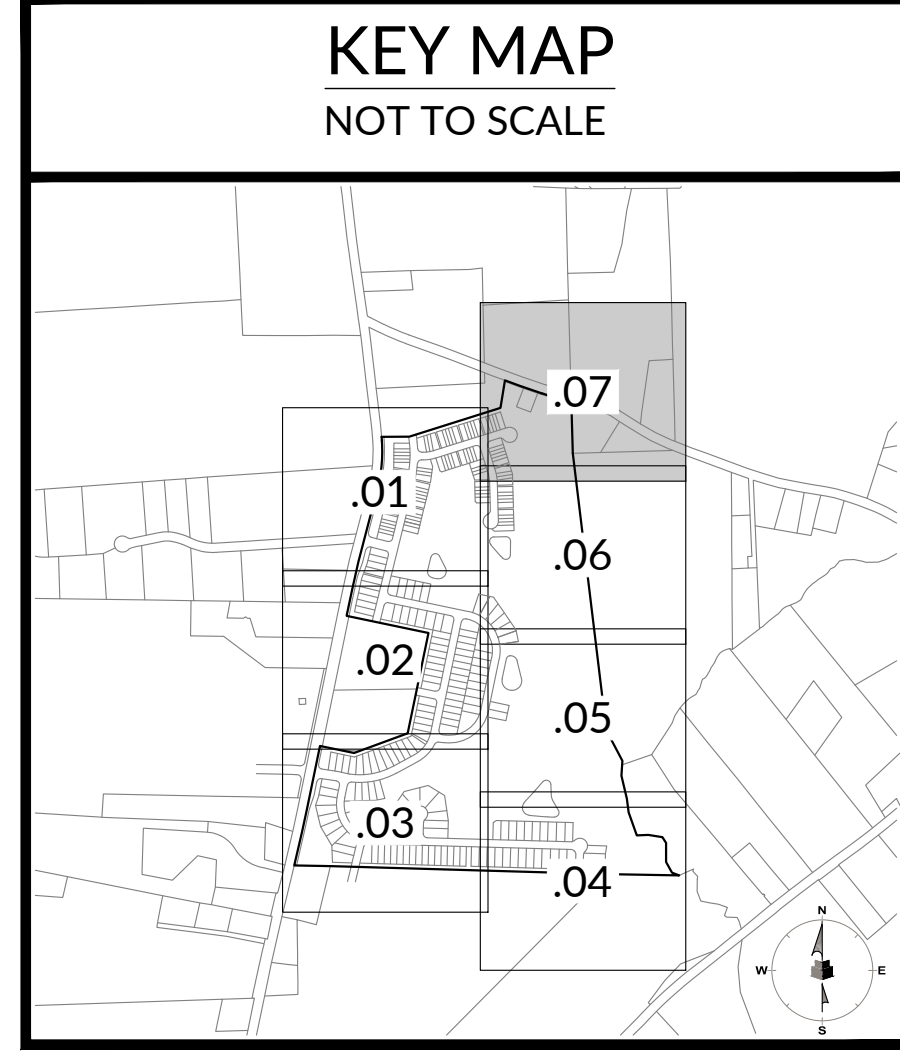
our people • your success

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CURVE TABLE				LINE TABLE		
CURVE #	LENGTH	RADIUS	DELTA	LINE #	BEARING	DISTANCE
C1	180.79	6679.90	1.55°	L1	S01°36'33"E	331.36
C2	137.69	1382.59	5.71°	L2	S06°53'59"E	1627.11
C3	195.33	958.28	11.68°	L3	S18°52'37"W	56.68
C4	24.35	3453.77	0.40°	L4	S38°15'12"E	25.09
C5	50.77	1298.50	2.24°	L5	S05°12'56"E	54.55
				L6	S21°01'52"E	80.42
				L7	S27°30'18"E	207.75
				L8	S03°37'01"W	97.01
				L9	S13°29'28"E	153.88
				L10	S07°17'46"E	89.26
				L11	S19°33'48"E	159.31
				L12	N87°33'10"E	75.19
				L13	S80°55'53"E	92.15
				L14	S32°50'43"E	45.25
				L15	S00°05'28"E	124.26
				L16	S28°43'30"E	78.63
				L17	S68°30'30"E	50.46
				L18	N88°56'43"W	474.91
				L19	N88°20'38"W	1796.39
				L20	N88°52'07"W	224.55
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				L23	N12°19'14"E	148.01
				L24	N11°36'25"E	422.60
				L25	S78°23'35"E	226.99
				L26	N69°53'25"E	371.57
				L27	N11°41'17"E	666.87
				L28	N78°11'05"W	544.02
				L29	N11°36'25"E	4.65
				L30	N11°51'14"E	175.52
				L31	N14°43'08"E	474.13
				L32	N89°21'38"E	179.92
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				L35	S69°53'15"E	102.86
				L36	S71°01'28"E	153.25
				L37	S73°15'53"E	149.14

DEMOLITION LEGEND	
SYMBOL	DESCRIPTION
	AREAS TO BE REMOVED



INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**EXISTING CONDITIONS & DEMOLITION PLAN**

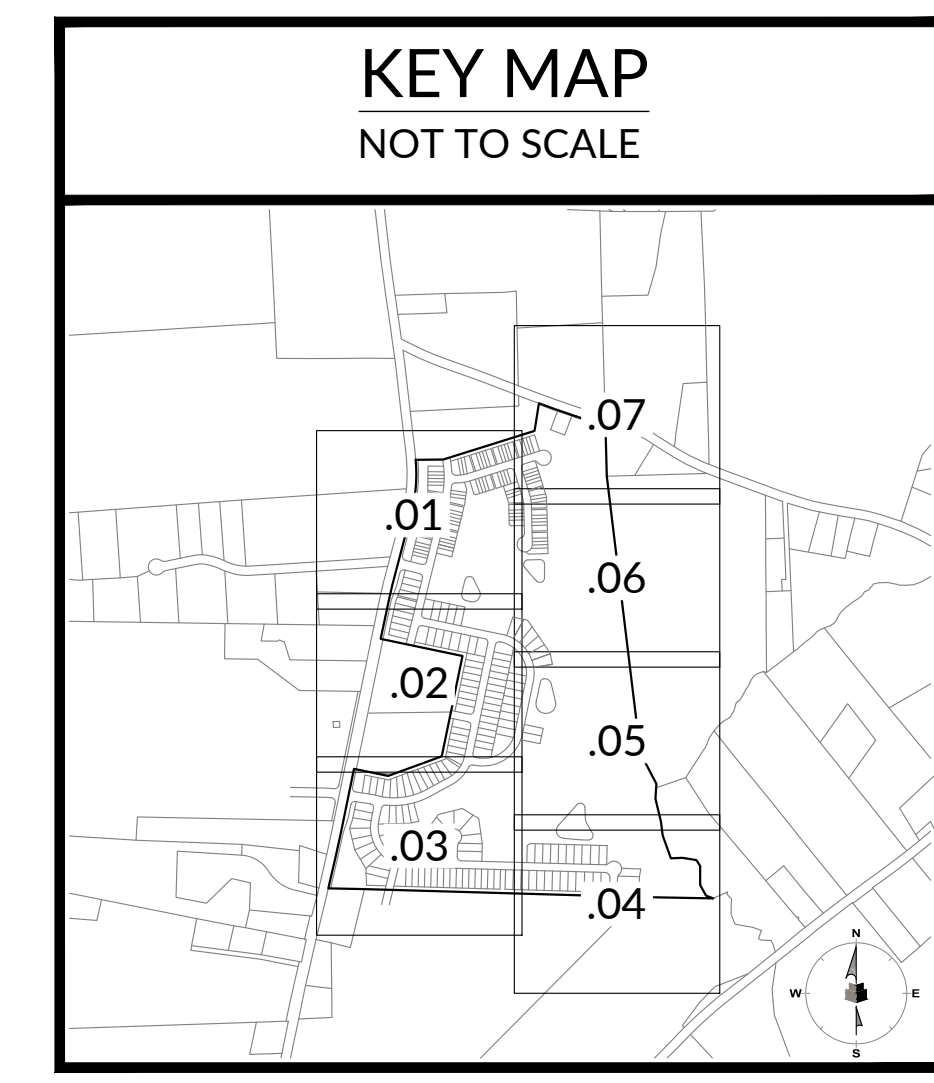
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PHASE AREA SUMMARY										
	PHASE 1		PHASE 2		PHASE 3		PHASE 1		PHASE 3	
	ZONE RH-CZ	ZONE RM-CZ	ZONE RH-CZ	ZONE RM-CZ	ZONE RH-CZ	ZONE RM-CZ	ZONE RH-CZ	ZONE RM-CZ	ZONE RH-CZ	ZONE RM-CZ
	(SF)	(AC)	(SF)	(AC)	(SF)	(AC)	(SF)	(AC)	(SF)	(AC)
TOTAL AREA	934,362	21.45	1,166,532	26.77	536,659	12.32	875,120	20.09	1,085,951	24.93
LOT AREA	276,913	6.36	196,215	4.50	326,750	7.50	0	0.00	473,539	10.87
ROW AREA	118,889	2.73	93,240	2.14	130,801	3.00	0	0.00	120,362	2.76
OPEN SPACE AREA	531,432	12.20	892,109	20.48	65,883	1.51	873,814	20.06	484,387	11.12

LOT SUMMARY			
	TOWNHOMES	SINGLE FAMILY (FRONT LOAD)	TOTAL
PHASE 1	96	31	127
PHASE 2	-	59	59
PHASE 3	-	67	67
TOTAL	96	157	253

**PHASING NOTES**

- IMPROVEMENTS TO ROLESVILLE ROAD, FOWLER ROAD, EAST YOUNG STREET, AND LOUISBURG ROAD SHALL BE CONSTRUCTED PRIOR TO THE 100TH RESIDENTIAL BUILDING PERMIT.
- THE POLLINATION GARDEN SHALL BE CONSTRUCTED PRIOR TO ISSUANCE OF THE 150TH RESIDENTIAL BUILDING PERMIT.
- ONE TOT-LOT AND ONE DOG PARK SHALL BE CONSTRUCTED PRIOR TO ISSUANCE OF THE 150TH RESIDENTIAL BUILDING PERMIT.
- THE AMENITY CENTER SHALL BE CONSTRUCTED PRIOR TO ISSUANCE OF THE 200TH RESIDENTIAL BUILDING PERMIT.
- PHASING IS FOR PLATTING AND CONSTRUCTION ORDERS ONLY. CLEARING AND GRADING OF THE SITE WILL OCCUR ACCORDING TO THE CONSTRUCTION SEQUENCE.



J:\2023\04\Public\WithersRavenel\Assemblies\CID Drawings\Site Construction\CID-20 Broadmoor\PLAN.dwg Thursday, October 31, 2024 11:17:28 AM 10/31/2024

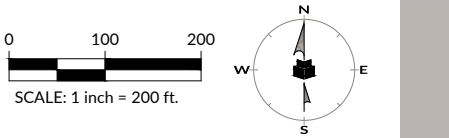


PHASE	PHASE AREA (AC.)	CUMULATIVE PHASE AREA (AC.)	CUMULATIVE OPEN SPACE REQUIRED (AC.)			CUMULATIVE OPEN SPACE PROPOSED (AC.)			CUMULATIVE ACTIVE OPEN SPACE REQUIRED (AC.)			CUMULATIVE ACTIVE OPEN SPACE PROPOSED (AC.)
			RH-CZ 15%	RM-CZ* 40%	TOTAL	RH-CZ 7.5%	RM-CZ 6%	TOTAL	RH-CZ 7.5%	RM-CZ 6%	TOTAL	
PHASE 1	48.23	48.23	3.22	10.71	13.93	32.68	1.61	1.61	3.22		3.41	
PHASE 2	12.32	60.55	3.22	15.64	18.85	34.19	1.61	2.35	3.95		3.97	
PHASE 3	45.01	105.56	6.23	25.61	31.84	65.37	3.12	3.84	6.96		7.85	

\*PROJECT REZONING WAS SUBMITTED MARCH 2ND, 2023. THE AREA ZONED RM-CZ IS THEREFORE SUBJECT TO LDO SECTION 3.1.B CLUSTER REQUIREMENTS FOR MINIMUM LOT SIZE, WIDTH, & BUILDING SETBACKS IN PLACE PRIOR TO THE APRIL 4TH, 2023 LDO TEXT AMENDMENT TA-23-02.

ACTIVE OPEN SPACE SUMMARY			
NAME	TYPE	SIZE CLASSIFICATION PER LDO SECTION 6.2.1	AREA (AC.)
ACTIVE OPEN SPACE #1	GREENWAY WITH EXERCISE FACILITIES	LARGE	2.63
ACTIVE OPEN SPACE #2	POCKET PARK	SMALL	0.53
ACTIVE OPEN SPACE #3	POCKET PARK (DOG PARK)	SMALL	0.34
ACTIVE OPEN SPACE #4	AMENITY CENTER	MEDIUM	1.86
ACTIVE OPEN SPACE #5	POCKET PARK	SMALL	0.29
ACTIVE OPEN SPACE #6	POCKET PARK	SMALL	0.27
ACTIVE OPEN SPACE #7	POCKET PARK	SMALL	0.21
ACTIVE OPEN SPACE #8	POCKET PARK	SMALL	0.55
ACTIVE OPEN SPACE #9	POCKET PARK	MEDIUM	1.17

OPEN SPACE HATCH LEGEND	
	ACTIVE OPEN SPACE
	PASSIVE OPEN SPACE



INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

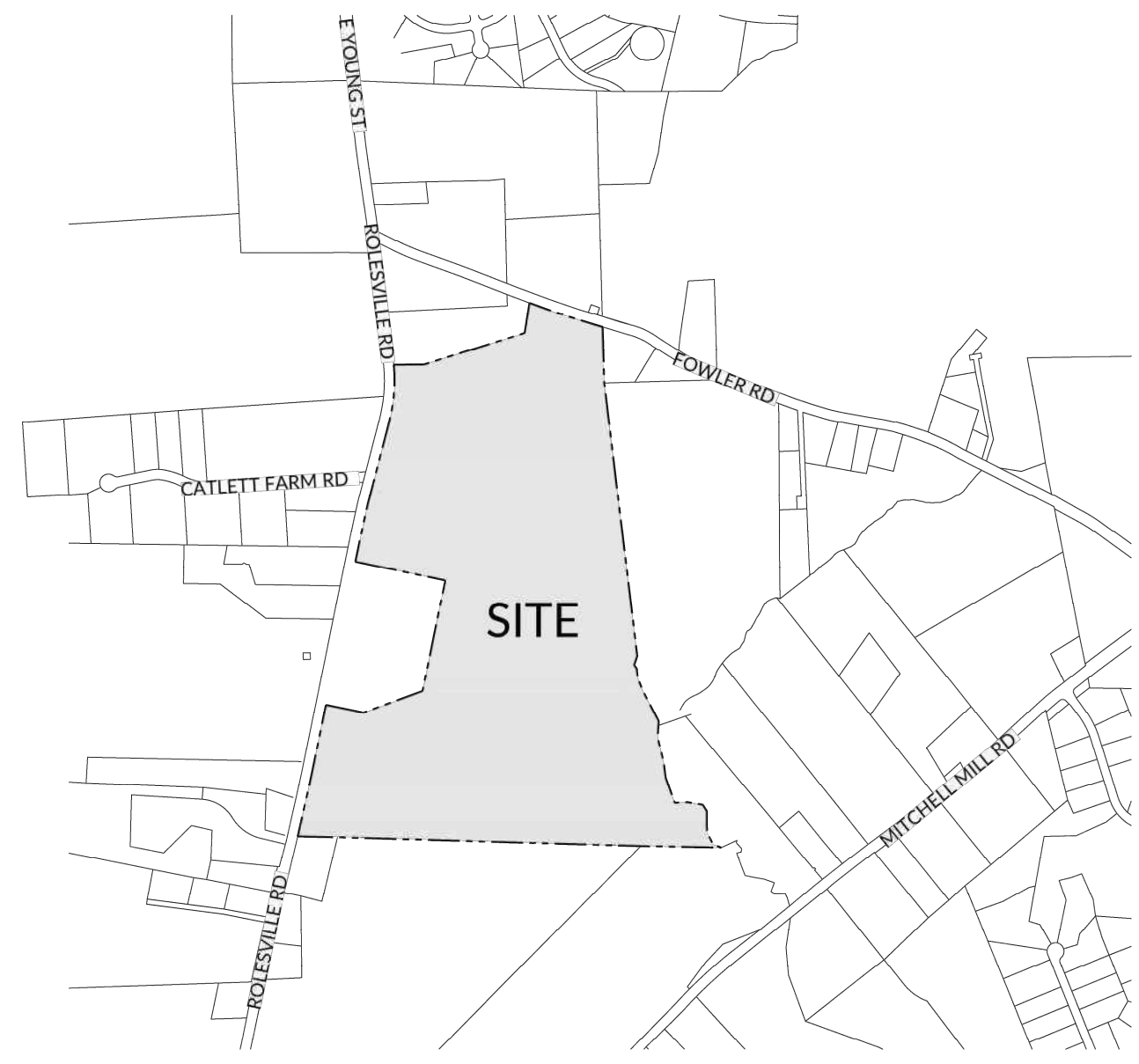
WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**OPEN SPACE PLAN**

**C2.01**

J:\2024\04\04\_Plan\_WithersRavenel\Assemblies\CID Drawings\300 Construction\C2.01\_CID-300\SPICE PLAN.dwg: Thursday, October 31, 2024 11:28:38 AM - R5241025

VICINITY MAP



SCALE = 1" = 1000'

ADJACENT PARCEL DATA

PARCEL NUM	OWNER (N/F)	ZONING	DB.	PG.	BM.	PG.	PIN.
1	WILDER, CHRISTIAN C WILDER, CINDY E	R-30	010927	01494	2019	01188	1767-39-2260
2	MALDONADO, RAUL GLOVER, RICO D SR GLOVER, TIFFANY N	R-30	017784	01955	2022	01097	1767-38-7947
3	SHORE, JOHN L SHORE, ANNETTE P	R-30	017360	01716	2018	02222	1767-38-5999
4	RODRIGUEZ, ALEJO MORIN MARIA OLIVIA LOPEZ	R-30	013782	01145	2004	01971	1767-38-1953
5	CLARK, CHLES T CLARK, PATRICA H	R-30	019067	02293	2018	02222	1767-38-5643
6	AGUILAR, NORMA ALFORD, LARRY W SR ALFORD, BETTY D	R-30	012647	01286	-	-	1767-68-5863
7	ALFORD, LARRY W SR ALFORD, BETTY D	R-30	007081	00072	1985	2003	1768-51-8609

PROJECT SITE PARCEL DATA

PARCEL NUM	OWNER (N/F)	ZONING	DB.	PG.	BM.	PG.	PIN.
1	WOODLIEF, CARLYLE D WOODLIEF, ALMA D	R-30	014289	01880	2011	00084	1768-51-1519
2	WOODLIEF, BILLY CRAIG HOLDING, ELLEN WOODLIEF	R-30	014286	01885	2011	00084	1768-50-0618
3	STALLINGS, JANICE GAYLE W STALLINGS, HARRELL	R-30	014286	01890	2011	00084	1768-40-9261
4	WOODLIEF, DONNIE L WOODLIEF, PATSY	R-30	014286	01896	2011	00084	1767-59-0716
5	WOODLIEF, BETTY JOYCE	R-30	014286	01902	2011	00084	1767-59-0335
6	WOODLIEF, DWIGHT THOMAS	R-30	018654	00863	2011	00084	1767-58-0938

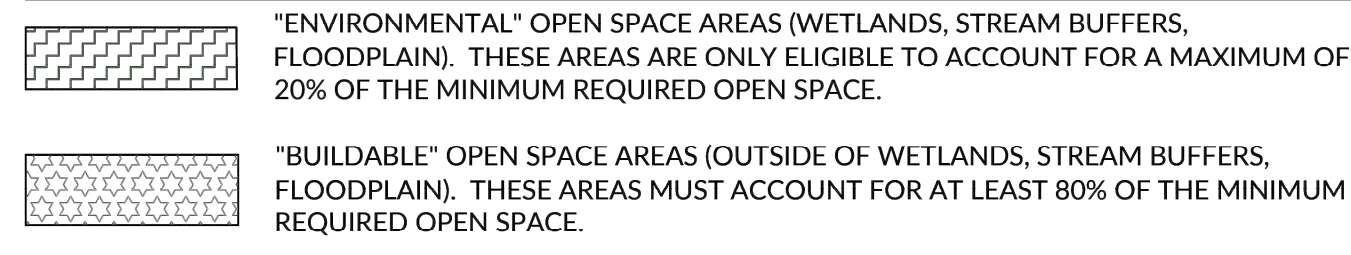
PRELIMINARY SITE DATA

PROJECT SIZE: ±105.5 AC.  
 EXISTING ZONING: R30 (WAKE COUNTY)  
 PROPOSED ZONING: RH & RM  
 ESTIMATED YIELD: ±255 DWELLING UNITS:  
 ± 77 SINGLE-FAMILY LOTS @ 41'X120' TYP.  
 ± 80 SINGLE-FAMILY LOTS @ 51'X120' TYP.  
 ± 98 TOWNHOMES (26' ENDS, 22' INTERIORS, 60' DEEP)  
 PROPOSED DENSITY: ±2.42 D.U./AC.  
 REQUIRED OPEN SPACE:  
 RH ZONING (±41.5 AC.): 15% MIN. (±6.2 AC.)  
 MIN. 80% OF REQUIRED O.S. MUST BE ON BUILDABLE LAND  
 6.2 AC. X 0.8 = MIN. 5.0 AC. OF O.S. MUST BE ON BUILDABLE LAND  
 RM ZONING (±64.0 AC.): 40% MIN. (±25.6 AC.)  
 MIN. 80% OF REQUIRED O.S. MUST BE ON BUILDABLE LAND  
 25.6 AC. X 0.8 = MIN. 20.5 AC. OF O.S. MUST BE ON BUILDABLE LAND  
 PROPOSED OPEN SPACE:  
 RH ZONING  
 BUILDABLE OPEN SPACE (OUTSIDE OF "ENVIRONMENTAL AREAS"): ±9.3 AC.  
 NON-BUILDABLE OPEN SPACE (WETLANDS, STREAM BUFFERS, FLOODPLAIN): ±22.7 AC.  
 TOTAL OPEN SPACE PROPOSED: ±32.0 AC. (±30.7%)  
 RM ZONING  
 BUILDABLE OPEN SPACE (OUTSIDE OF "ENVIRONMENTAL AREAS"): ±21.0 AC.  
 NON-BUILDABLE OPEN SPACE (WETLANDS, STREAM BUFFERS, FLOODPLAIN): ±12.1 AC.  
 TOTAL OPEN SPACE PROPOSED: ±33.1 AC. (±31.5%)  
 TOWNHOME SITE PARKING TABULATION:  
 OFF-STREET PARKING REQUIRED (NOT INCLUDING GARAGES):  
 98 UNITS x 2.25 SP/UNIT = 221 SPACES REQUIRED  
 OFF-STREET PARKING PROVIDED (NOT INCLUDING GARAGES):  
 40 UNITS @ 2-CAR DRIVEWAY = 80 SPACES  
 58 UNITS @ 1-CAR DRIVEWAY = 58 SPACES  
 PARKING LOT IN TOWNHOME AREA = 76 SPACES  
 SURPLUS PARKING AT AMENITY SITE = 7 SPACES  
 TOTAL OFF-STREET PARKING = 221 SPACES

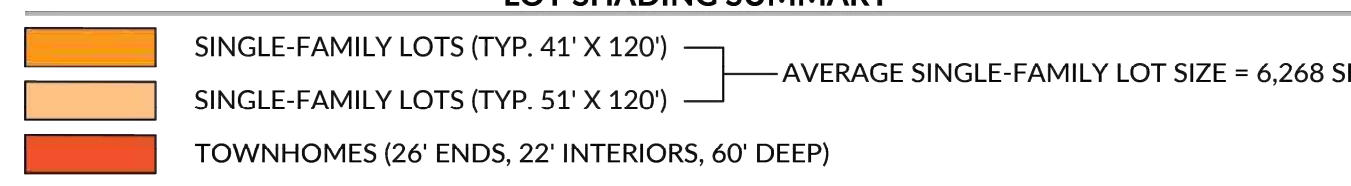
NOTES:

- THIS PLAN HAS BEEN COMPILED FROM A VARIETY OF SOURCES INCLUDING GIS DATA AND IS NOT AN OFFICIAL DESIGN OR SURVEY DOCUMENT.
- THE LAYOUT SHOWN ON THIS PLAN IS PURELY THEORETICAL IN NATURE AND MAY BE SUBJECT TO SIGNIFICANT REVISION UPON FURTHER DUE-DILIGENCE REVIEW AND EVALUATION. THIS PLAN HAS NOT BEEN REVIEWED BY ANY MUNICIPALITY OR OTHER REVIEW AGENCY, AND IS PROVIDED SOLELY FOR ILLUSTRATION AND CONCEPTUAL PLANNING CONSIDERATIONS.
- LIMITS OF THE RIPARIAN BUFFERS, WETLANDS AND STREAMS SHOWN ON THIS PLAN ARE BASED ON PRELIMINARY WETLAND/ BUFFER DELINEATION FIELD EVALUATION AND EXHIBIT PREPARED BY WITHERSRAVENEL, INC DATED 01/17/23.
- ALL STREETS SHOWN AND LABELED ON THIS PLAN SHALL BE 50' PUBLIC RIGHT-OF-WAY
- PURSUANT TO N.C.G.S 160D-108, THIS CONCEPT PLAN AS PROPOSED IS REQUESTED TO BE REVIEWED UNDER THE LAND DEVELOPMENT ORDINANCE (LDO) EFFECTIVE JUNE 1, 2021, AND AMENDED IN DECEMBER, 2021 AND OCTOBER 4, 2022.

OPEN SPACE HATCHING LEGEND



LOT SHADING SUMMARY



CONTACT INFORMATION

**PULTEGROUP, INC.**  
 CONTACT: CHRIS RAUGHLEY  
 ADDRESS: 1225 CRESCENT GREEN DR.  
 SUITE 250  
 CARY NC, 27518  
 PHONE: 919-816-1100  
 EMAIL: Chris.Raughley@pulte.com

**WITHERSRAVENEL**  
 CONTACT: BRYANT INGE, PE  
 PHONE: 919-469-3340  
 EMAIL: bing@withersravenel.com



WOODLIEF ASSEMBLAGE  
 1321 ROLESVILLE RD | ROLESVILLE, NC 27587 | WAKE COUNTY

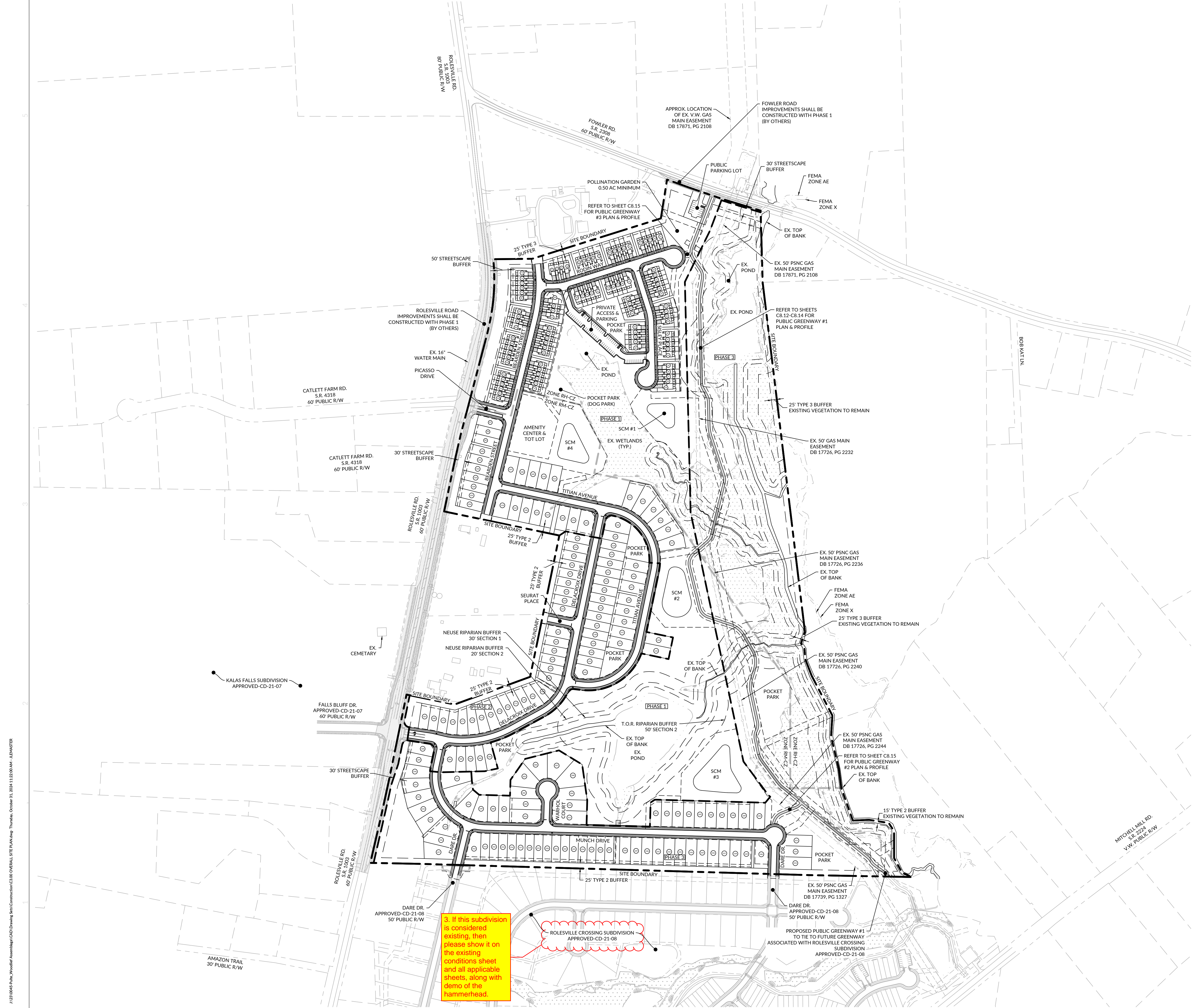


INITIAL PLAN DATE: 03/01/2023  
 REVISIONS:  
 1 08/01/2023 WR PER TOWN COMMENTS  
 2 08/22/2023 WR REVISED PRODUCT MIX  
 3 10/02/2023 WR PER TOWN COMMENTS  
 4 11/20/2023 WR PER TOWN COMMENTS  
 5 12/13/2023 WR PER TOWN COMMENTS

APPROVED CONCEPTUAL PLAN (REZ-23-02)

C2.02

J:\2023\04\14\_Plan\_WithersRavenel\023-0045 PRELIMINARY C2.02 BASE PRELIMINARY 23-0045.dwg - Wednesday, December 13, 2023 4:02:57 PM - BIVCE



3. If this subdivision is considered existing, then please show it on the existing conditions sheet and all applicable sheets, along with demo of the hammerhead.

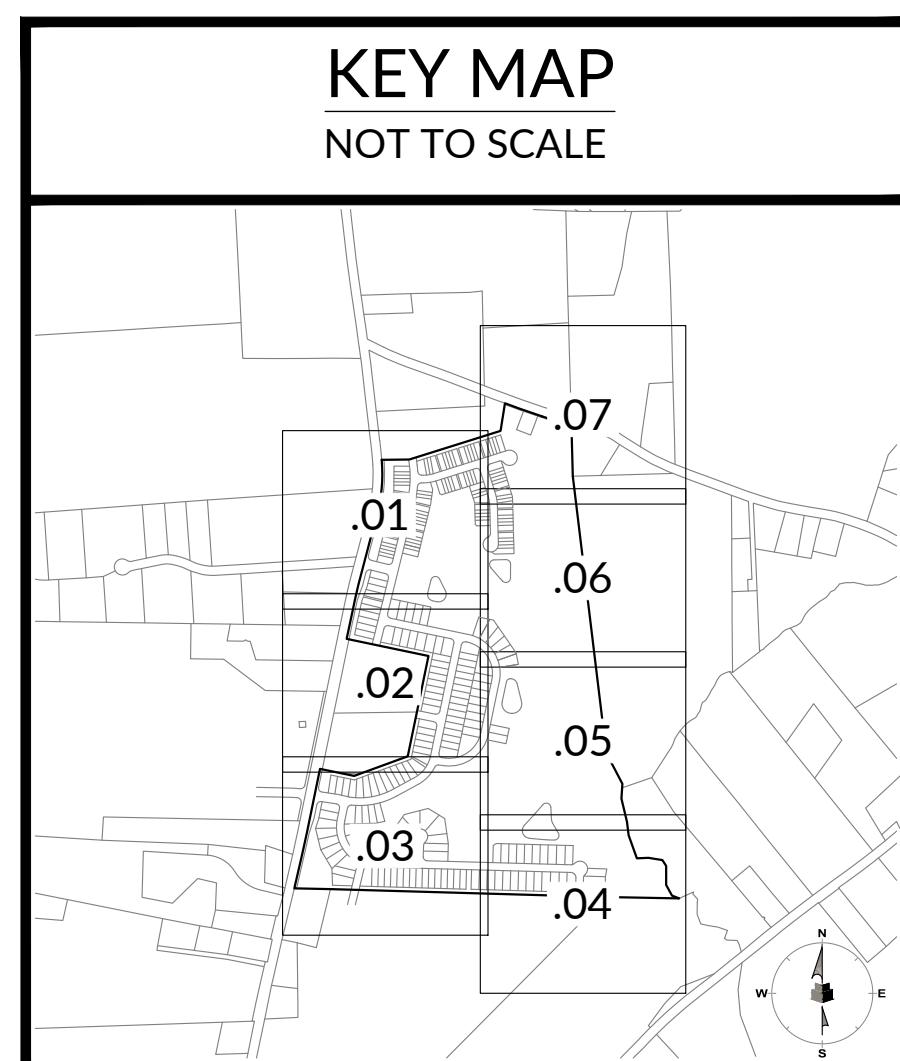
LOT TYPE SUMMARY			
LOT NUMBERS	PHASE	ZONING	LOT TYPE (REFER TO SHEET C3.09)
1-96	PHASE 1	RH-CZ	22' & 26' SINGLE-FAMILY ATTACHED (TOWNHOMES)
97-106	PHASE 1	RM-CZ	41' SINGLE-FAMILY DETACHED
107-125	PHASE 1	RM-CZ	51' SINGLE-FAMILY DETACHED
126-142	PHASE 2	RM-CZ	41' SINGLE-FAMILY DETACHED
143-152	PHASE 2	RM-CZ	51' SINGLE-FAMILY DETACHED
153-186	PHASE 2	RM-CZ	41' SINGLE-FAMILY DETACHED
187-211	PHASE 3	RM-CZ	51' SINGLE-FAMILY DETACHED
212-227	PHASE 3	RM-CZ	41' SINGLE-FAMILY DETACHED
228-253	PHASE 3	RM-CZ	51' SINGLE-FAMILY DETACHED

**TOWNHOME SITE PARKING TABULATION**

**OFF-STREET PARKING REQUIRED (NOT INCLUDING GARAGES):**  
96 UNITS x 2.25 SP/UNIT = 216 SPACES REQUIRED

**OFF-STREET PARKING PROVIDED (NOT INCLUDING GARAGES):**  
38 UNITS @ 2-CAR DRIVEWAY = 76 SPACES  
58 UNITS @ 1-CAR DRIVEWAY = 58 SPACES  
PARKING LOT IN TOWNHOME AREA = 62 SPACES (4 ACCESSIBLE SPACES)  
SURPLUS PARKING IN AMENITY AREA = 20 SPACES

**TOTAL OFF-STREET PARKING = 216 SPACES**



SCALE: 1 inch = 200 ft.

INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

WR JOB NUMBER: 23-0045  
DRN: WR DGN: WR CKD: WR

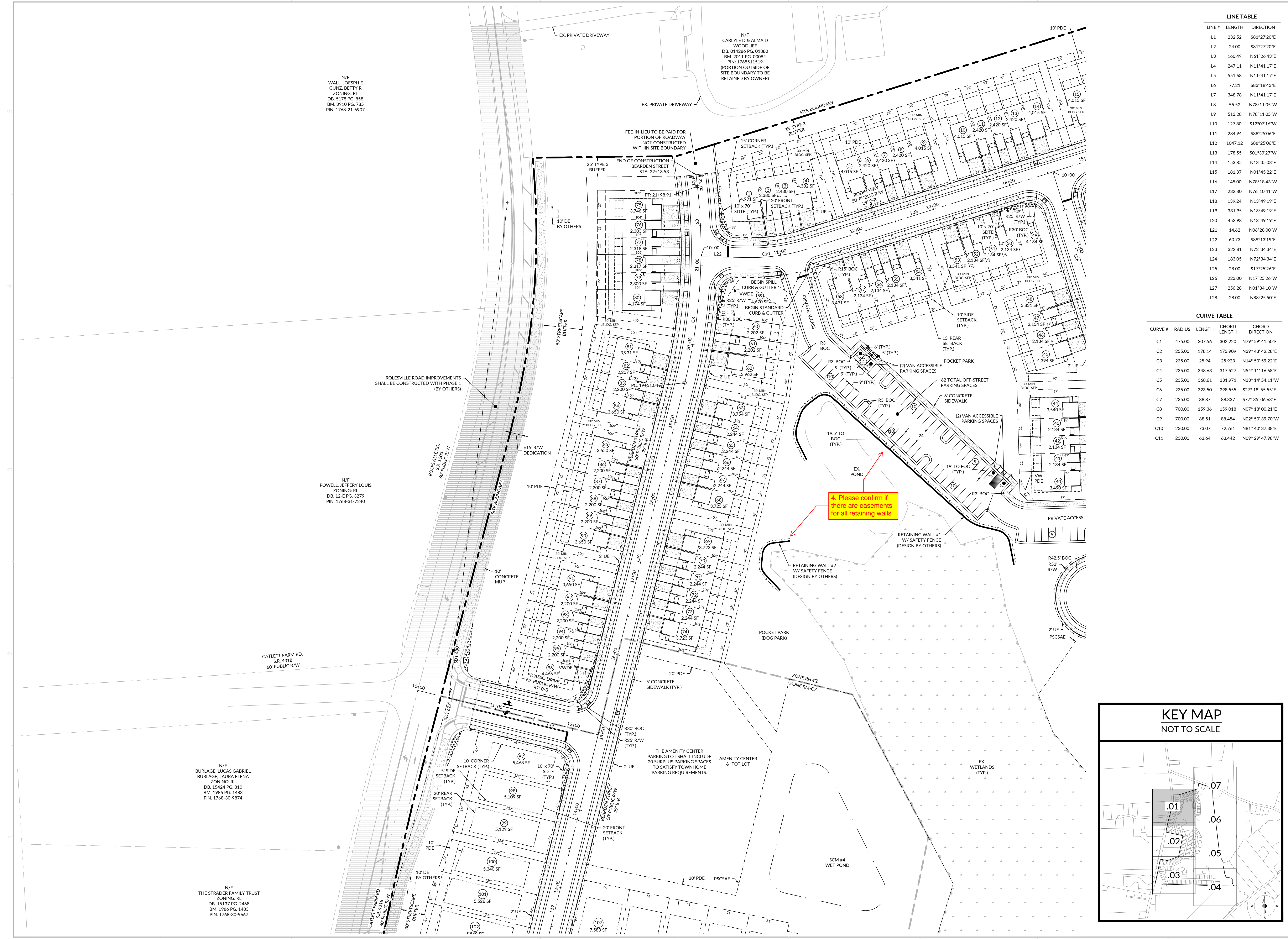
**OVERALL SITE PLAN**

**C3.00**

J:\2024\Projects\WithersRavenel\Asst\Arch\Site\Construction\CID-XX\OVERALL SITE PLAN.dwg Thursday, October 21, 2024 1:22:50 PM - JEH/STG



J:\2024\04\04\Wdr\Wdr\Assest\CID\Drawings\Site\Construction\C3.01\Site Plan.dwg Thursday, October 21, 2024 12:23:58 AM - JHT11



N/F WALL, JOSEPH E  
GUNZ, BETTY R  
ZONING: RL  
DB. 5178 PG. 858  
BM. 3910 PG. 785  
PIN. 1768-21-6907

N/F CARLYLE D & ALMA D  
WOODLIEF  
DB. 014286 PG. 01880  
BM. 2011 PG. 00084  
PIN: 1768511519  
(PORTION OUTSIDE OF  
SITE BOUNDARY TO BE  
RETAINED BY OWNER)

N/F POWELL, JEFFERY LOUIS  
ZONING: RL  
DB. 12-E PG. 3279  
PIN. 1768-31-7240

N/F BURLAGE, LUCAS GABRIEL  
BURLAGE, LAURA ELENA  
ZONING: RL  
DB. 15424 PG. 810  
BM. 1986 PG. 1483  
PIN. 1768-30-9874

N/F THE STRADER FAMILY TRUST  
ZONING: RL  
DB. 15137 PG. 2468  
BM. 1986 PG. 1483  
PIN. 1768-30-9667

LINE TABLE

LINE #	LENGTH	DIRECTION
L1	232.52	S81°27'20"E
L2	24.00	S81°27'20"E
L3	160.49	N61°26'43"E
L4	247.11	N11°41'17"E
L5	551.68	N11°41'17"E
L6	77.21	S83°18'43"E
L7	348.78	N11°41'17"E
L8	55.52	N78°11'05"W
L9	513.28	N78°11'05"W
L10	127.80	S12°07'16"W
L11	284.94	S88°25'06"E
L12	1047.12	S88°25'06"E
L13	178.55	S01°39'27"W
L14	153.85	N13°35'03"E
L15	181.37	N01°45'22"E
L16	145.00	N78°18'43"W
L17	232.80	N76°10'41"W
L18	139.24	N13°49'19"E
L19	331.95	N13°49'19"E
L20	453.98	N13°49'19"E
L21	14.62	N06°28'00"W
L22	60.73	S89°13'19"E
L23	322.81	N72°34'34"E
L24	183.05	N72°34'34"E
L25	28.00	S17°25'26"E
L26	223.00	N17°25'26"W
L27	256.28	N01°34'10"W
L28	28.00	N88°25'50"E

CURVE TABLE

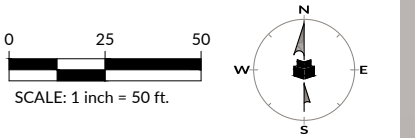
CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C1	475.00	307.56	302.220	N79° 59' 41.50"E
C2	235.00	178.14	173.909	N39° 43' 42.28"E
C3	235.00	25.94	25.923	N14° 50' 59.22"E
C4	235.00	348.63	317.527	N54° 11' 16.68"E
C5	235.00	368.61	331.971	N33° 14' 54.11"W
C6	235.00	323.50	298.555	S27° 18' 55.55"E
C7	235.00	88.87	88.337	S77° 35' 06.63"E
C8	7000.00	159.36	159.018	N07° 18' 00.21"E
C9	7000.00	88.51	88.454	N02° 50' 39.70"W
C10	230.00	73.07	72.761	N81° 40' 37.38"E
C11	230.00	63.64	63.442	N09° 29' 47.98"W

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**PULTEGROUP**  
1225 CRESCENT GREEN DRIVE, SUITE 200  
CARY, NC 27518

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR  
CID-YR-XX**  
ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

PRELIMINARY  
NOT APPROVED FOR  
CONSTRUCTION  
ENGINEER  
TRENCE COOK

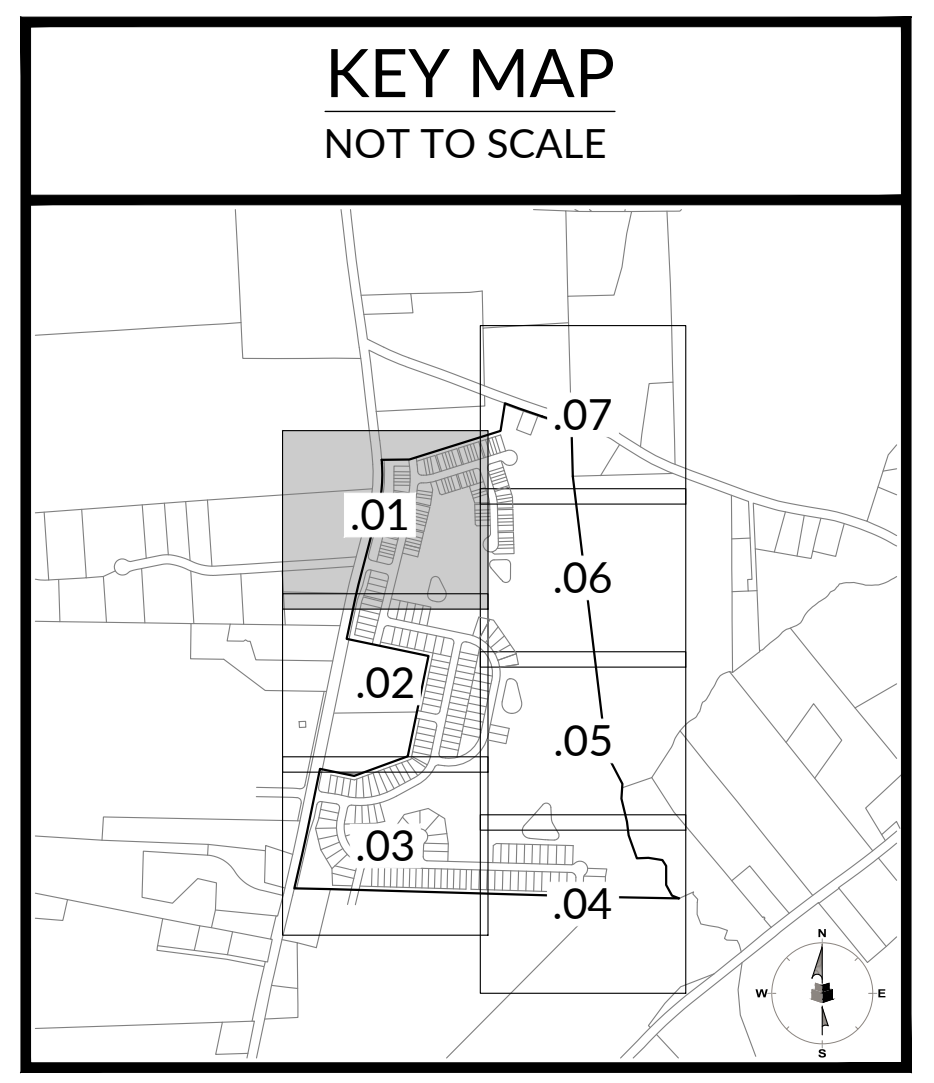


INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

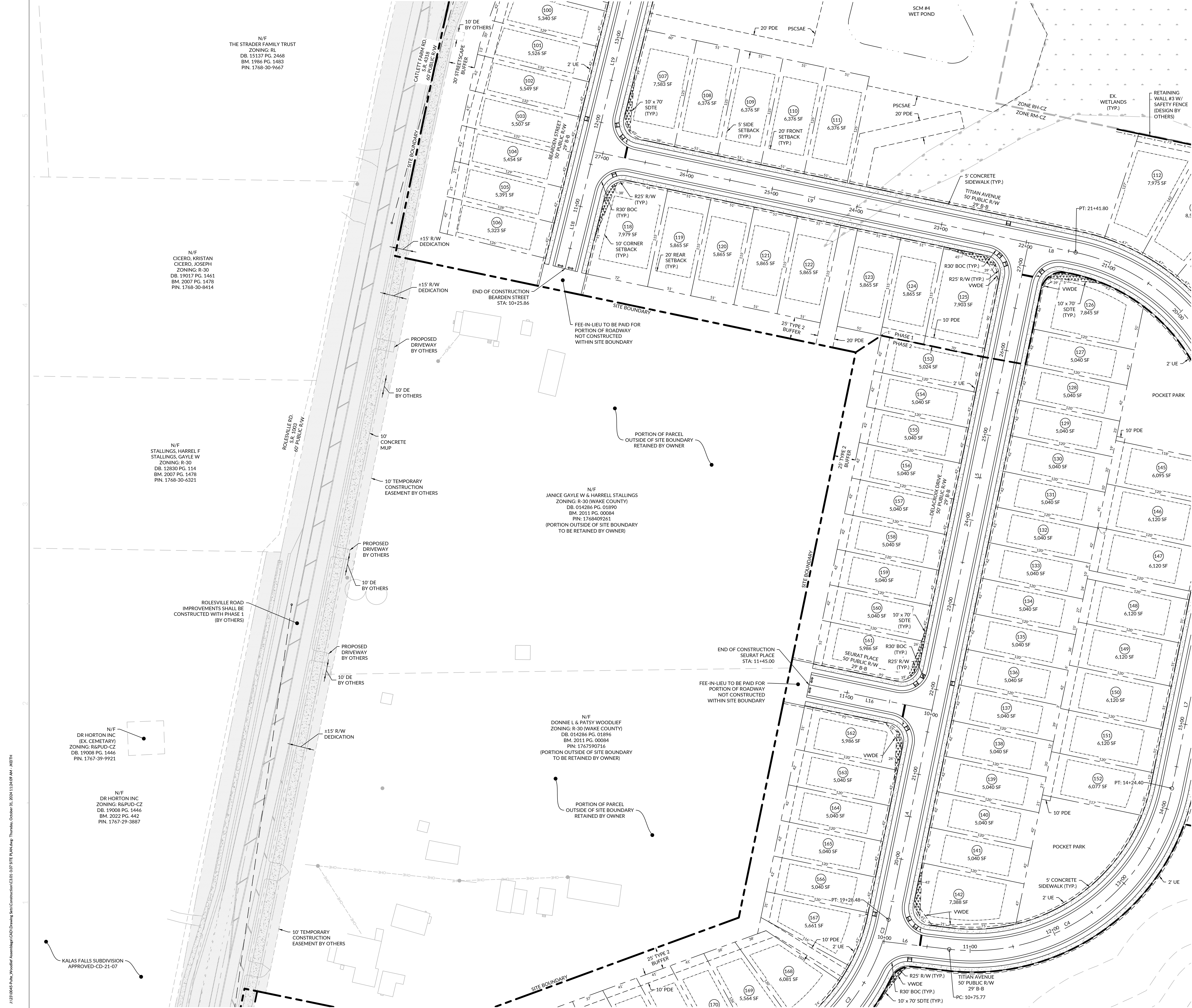
WR JOB NUMBER: 23-0045  
DRN: WR DGN: WR CKD: WR

**SITE PLAN**

**C3.01**



EST: 1993



N/F  
THE STRADER FAMILY TRUST  
ZONING: RL  
DB. 15137 PG. 2468  
BM. 1986 PG. 1483  
PIN. 1768-30-9667

N/F  
CICERO, KRISTAN  
CICERO, JOSEPH  
ZONING: R-30  
DB. 19017 PG. 1461  
BM. 2007 PG. 1478  
PIN. 1768-30-8414

N/F  
STALLINGS, HARREL F  
STALLINGS, GAYLE W  
ZONING: R-30  
DB. 12830 PG. 114  
BM. 2007 PG. 1478  
PIN. 1768-30-6321

N/F  
JANICE GAYLE W & HARRELL STALLINGS  
ZONING: R-30 (WAKE COUNTY)  
DB. 014286 PG. 01890  
BM. 2011 PG. 00084  
PIN. 17684072611  
(PORTION OUTSIDE OF SITE BOUNDARY  
TO BE RETAINED BY OWNER)

N/F  
DANNIE L & PATSY WOODLIEF  
ZONING: R-30 (WAKE COUNTY)  
DB. 014286 PG. 01896  
BM. 2011 PG. 00084  
PIN. 1767590716  
(PORTION OUTSIDE OF SITE BOUNDARY  
TO BE RETAINED BY OWNER)

N/F  
DR HORTON INC  
(EX. CEMETARY)  
ZONING: R&RUD-CZ  
DB. 19008 PG. 1446  
PIN. 1767-39-9921

N/F  
DR HORTON INC  
ZONING: R&RUD-CZ  
DB. 19008 PG. 1446  
BM. 2022 PG. 442  
PIN. 1767-29-3887

KALAS FALLS SUBDIVISION  
APPROVED-CD-21-07

**LINE TABLE**

LINE #	LENGTH	DIRECTION
L1	232.52	S81°27'20"E
L2	24.00	S81°27'20"E
L3	160.49	N61°26'43"E
L4	247.11	N11°41'17"E
L5	551.68	N11°41'17"E
L6	77.21	S83°18'43"E
L7	348.78	N11°41'17"E
L8	55.52	N78°11'05"W
L9	513.28	N78°11'05"W
L10	127.80	S12°07'16"W
L11	284.94	S88°25'06"E
L12	1047.12	S88°25'06"E
L13	178.55	S01°39'27"W
L14	153.85	N13°35'03"E
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L23	322.81	N72°34'34"E
L24	183.05	N72°34'34"E
L25	28.00	S17°25'26"E
L26	223.00	N17°25'26"W
L27	256.28	N01°34'10"W
L28	28.00	N88°25'50"E

**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C1	475.00	307.56	302.220	N79° 59' 41.50"E
C2	235.00	178.14	173.909	N39° 43' 42.28"E
C3	235.00	25.94	25.923	N14° 50' 59.22"E
C4	235.00	348.63	317.527	N54° 11' 16.68"E
C5	235.00	368.61	331.971	N33° 14' 54.11"W
C6	235.00	323.50	298.555	S27° 18' 55.55"E
C7	235.00	88.87	88.337	S77° 35' 06.63"E
C8	700.00	159.36	159.018	N07° 18' 00.21"E
C9	700.00	88.51	88.454	N02° 50' 39.70"W
C10	230.00	73.07	72.761	N81° 40' 37.38"E
C11	230.00	63.64	63.442	N09° 29' 47.98"W

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CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR  
CID-YR-XX**  
ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

PRELIMINARY  
NOT APPROVED FOR  
CONSTRUCTION  
BY  
TERENCE COOK

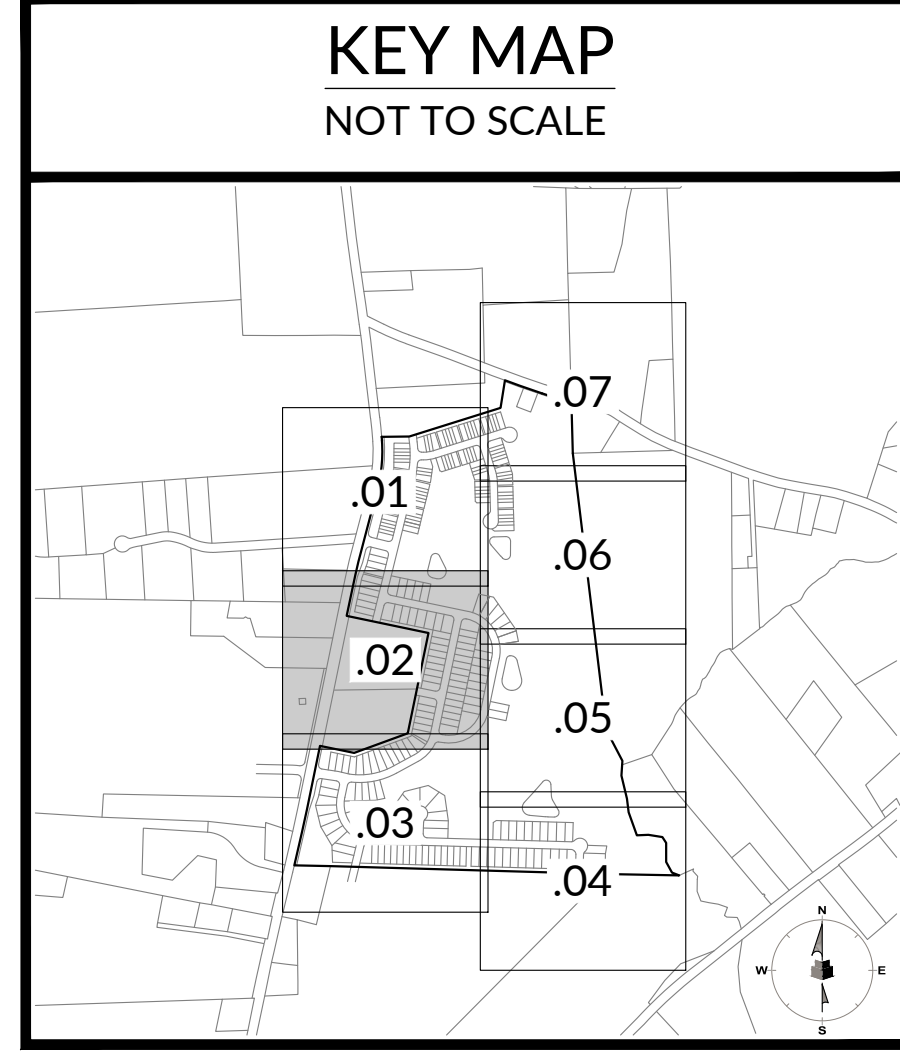
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SCALE: 1 inch = 50 ft.

INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

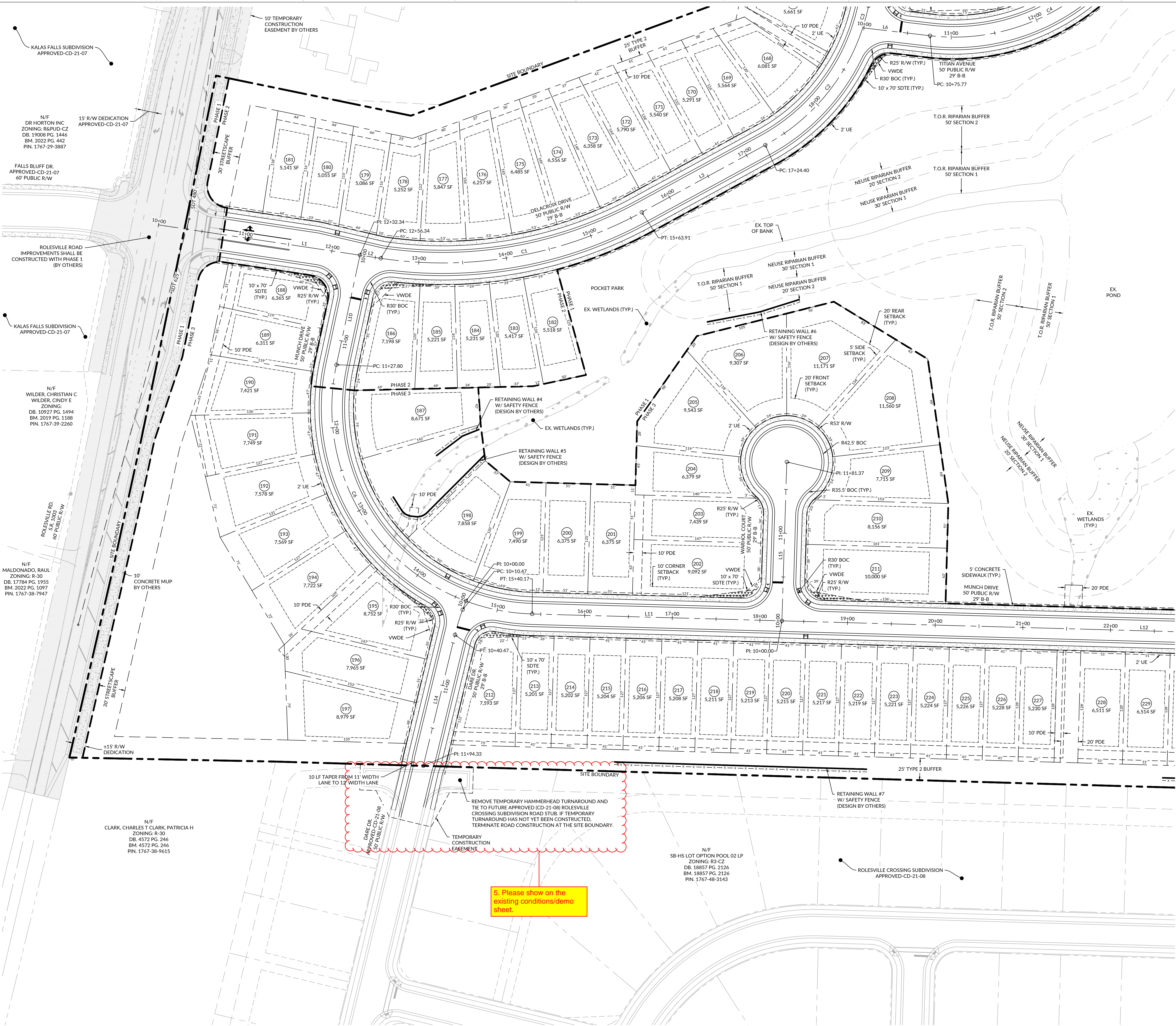
WR JOB NUMBER: 23-0045  
DRN: WR DGN: WR CKD: WR

**SITE PLAN**

**C3.02**



J:\23\0045\Plan\Woodell\Assemblies\CID\Drawings\SiteConstruction\C3.02-300 SITE PLAN.dwg Thursday, October 31, 2024 11:49 AM - JHT11



**LINE TABLE**

LINE #	LENGTH	DIRECTION
L1	232.52	S81°27'20"E
L2	24.00	S81°27'20"E
L3	160.49	N61°26'43"E
L4	247.11	N11°41'17"E
L5	551.68	N11°41'17"E
L6	77.21	S83°18'43"E
L7	348.78	N11°41'17"E
L8	55.52	N78°11'05"W
L9	513.28	N78°11'05"W
L10	127.80	S12°07'16"W
L11	284.94	S88°25'06"E
L12	1047.12	S88°25'06"E
L13	178.55	N01°39'27"W
L14	153.85	N13°35'03"E
L15	181.37	N01°45'22"E
L16	145.00	N78°18'43"W
L17	232.80	N76°10'41"W
L18	139.24	N13°49'19"E
L19	331.95	N13°49'19"E
L20	453.98	N13°49'19"E
L21	14.62	N06°28'00"W
L22	60.73	S89°13'19"E
L23	322.81	N72°34'34"E
L24	183.05	N72°34'34"E
L25	28.00	S17°25'26"E
L26	223.00	N17°25'26"W
L27	256.28	N01°34'10"W
L28	28.00	N88°25'50"E

**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C1	475.00	307.56	302.220	N79°59'41.50"E
C2	235.00	178.14	173.909	N39°43'42.28"E
C3	235.00	25.94	25.923	N14°50'59.22"E
C4	235.00	348.63	317.527	N54°11'16.68"E
C5	235.00	368.61	331.971	N33°14'54.11"W
C6	235.00	323.50	298.555	S27°18'55.55"E
C7	235.00	88.87	88.337	S77°35'06.63"E
C8	700.00	159.36	159.018	N07°18'00.21"E
C9	700.00	88.51	88.454	N02°50'39.70"W
C10	230.00	73.07	72.761	N81°40'37.38"E
C11	230.00	63.64	63.442	N09°29'47.98"W

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 CARY, NC 27518

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR**  
**CID-YR-XX**  
 ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

PRELIMINARY  
 NOT APPROVED FOR  
 CONSTRUCTION  
 (Seal of Professional Engineer)

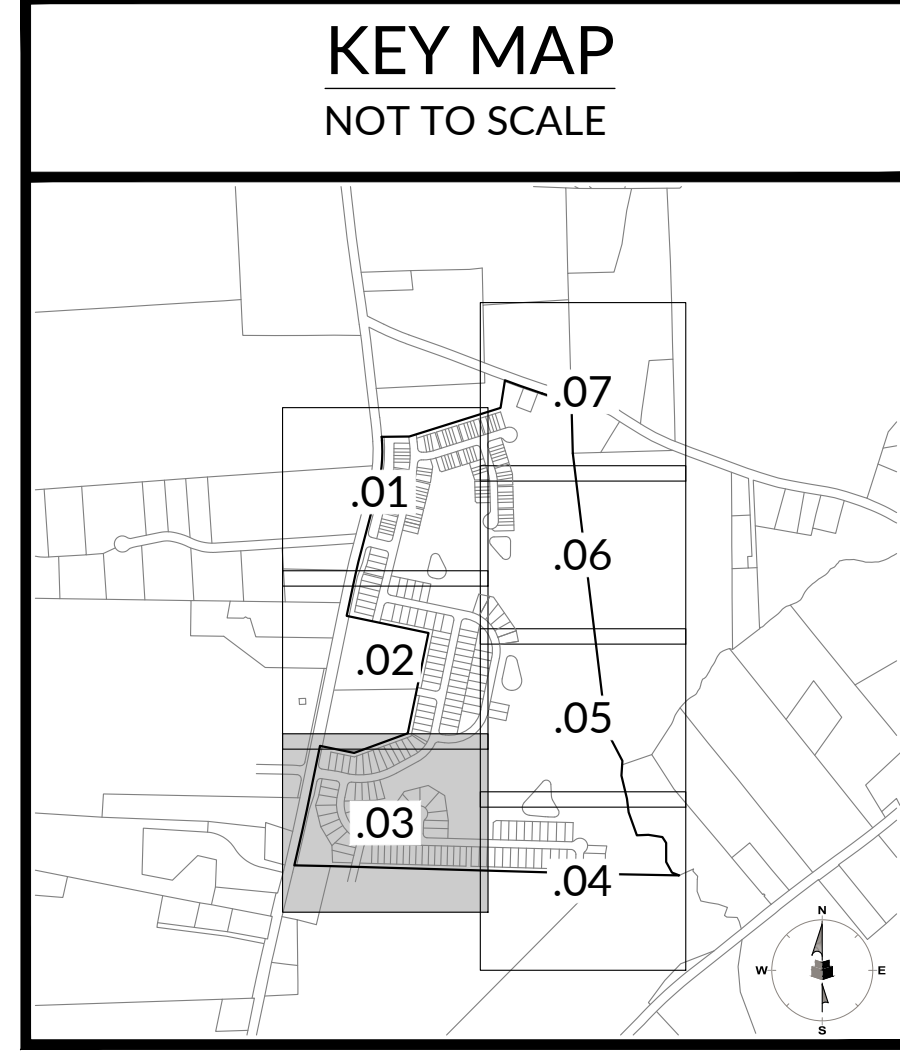
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INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

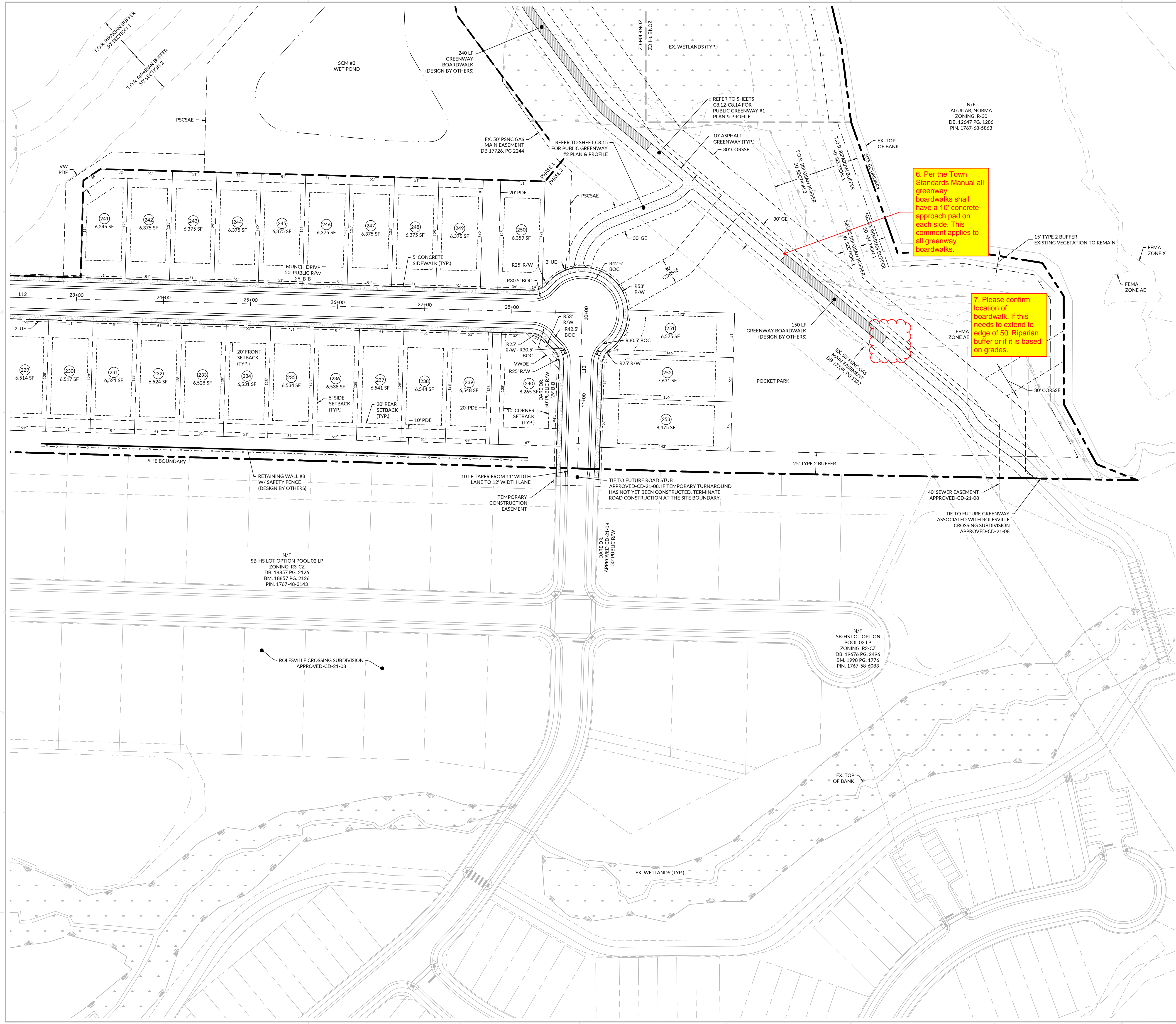
WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**SITE PLAN**

**C3.03**



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6. Per the Town Standards Manual all greenway boardwalks shall have a 10' concrete approach pad on each side. This comment applies to all greenway boardwalks.

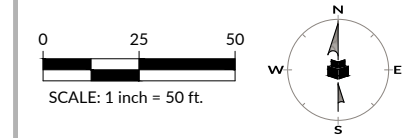
7. Please confirm location of boardwalk. If this needs to extend to edge of 50' Riparian buffer or if it is based on grades.

**LINE TABLE**

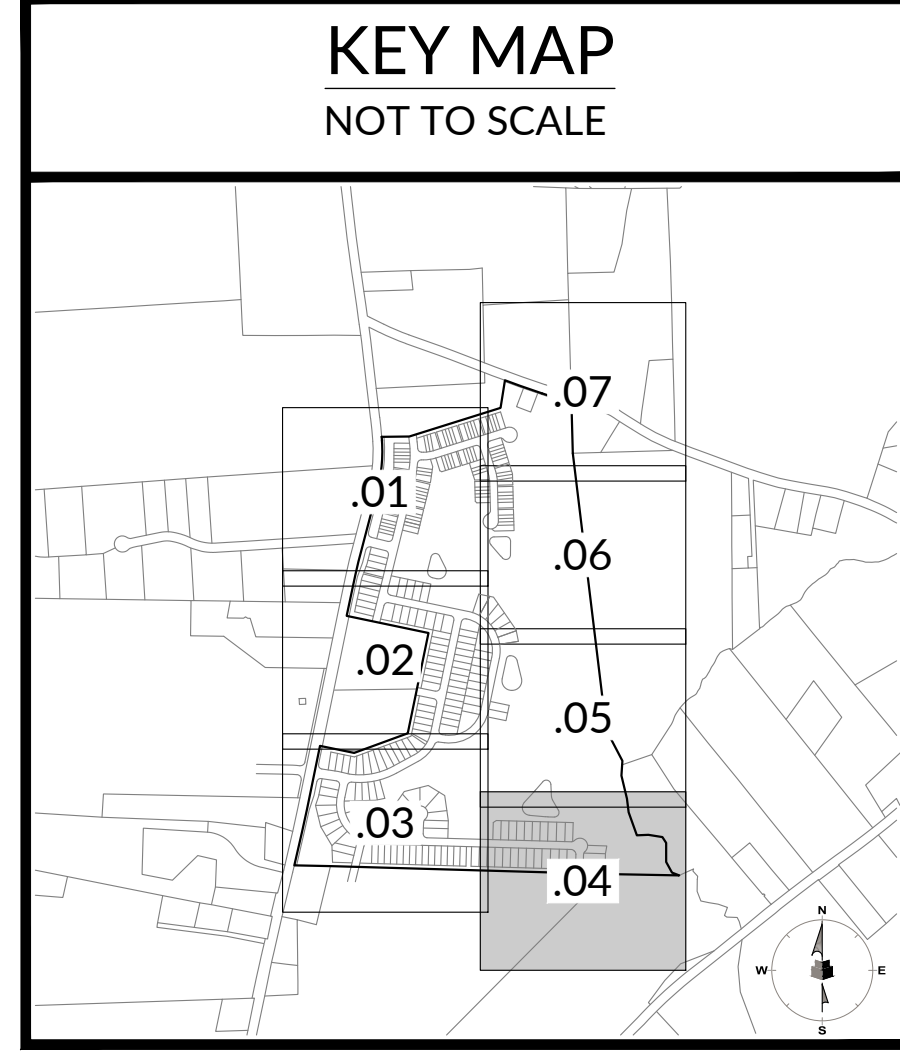
LINE #	LENGTH	DIRECTION
L1	232.52	S81°27'20"E
L2	24.00	S81°27'20"E
L3	160.49	N61°26'43"E
L4	247.11	N11°41'17"E
L5	551.68	N11°41'17"E
L6	77.21	S83°18'43"E
L7	348.78	N11°41'17"E
L8	55.52	N78°11'05"W
L9	513.28	N78°11'05"W
L10	127.80	S12°07'16"W
L11	284.94	S88°25'06"E
L12	1047.12	S88°25'06"E
L13	178.55	S01°39'27"W
L14	153.85	N13°35'03"E
L15	181.37	N01°45'22"E
L16	145.00	N78°18'43"W
L17	232.80	N76°10'41"W
L18	139.24	N13°49'19"E
L19	331.95	N13°49'19"E
L20	453.98	N13°49'19"E
L21	14.62	N06°28'00"W
L22	60.73	S89°13'19"E
L23	322.81	N72°34'34"E
L24	183.05	N72°34'34"E
L25	28.00	S17°25'26"E
L26	223.00	N17°25'26"W
L27	256.28	N01°34'10"W
L28	28.00	N88°25'50"E

**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C1	475.00	307.56	302.220	N79° 59' 41.50"E
C2	235.00	178.14	173.909	N39° 43' 42.28"E
C3	235.00	25.94	25.923	N14° 50' 59.22"E
C4	235.00	348.63	317.527	N54° 11' 16.68"E
C5	235.00	368.61	331.971	N33° 14' 54.11"W
C6	235.00	323.50	298.555	S27° 18' 55.55"E
C7	235.00	88.87	88.337	S77° 35' 06.63"E
C8	700.00	159.36	159.018	N07° 18' 00.21"E
C9	700.00	88.51	88.454	N02° 50' 39.70"W
C10	230.00	73.07	72.761	N81° 40' 37.38"E
C11	230.00	63.64	63.442	N09° 29' 47.98"W



INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:



WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**SITE PLAN**

**C3.04**

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**LINE TABLE**

LINE #	LENGTH	DIRECTION
L1	232.52	S81°27'20"E
L2	24.00	S81°27'20"E
L3	160.49	N61°26'43"E
L4	247.11	N11°41'17"E
L5	551.68	N11°41'17"E
L6	77.21	S83°18'43"E
L7	348.78	N11°41'17"E
L8	55.52	N78°11'05"W
L9	513.28	N78°11'05"W
L10	127.80	S12°07'16"W
L11	284.94	S88°25'06"E
L12	1047.12	S88°25'06"E
L13	178.55	S01°39'27"W
L14	153.85	N13°35'03"E
L15	181.37	N01°45'22"E
L16	145.00	N78°18'43"W
L17	232.80	N76°10'41"W
L18	139.24	N13°49'19"E
L19	331.95	N13°49'19"E
L20	453.98	N13°49'19"E
L21	14.62	N06°28'00"W
L22	60.73	S89°13'19"E
L23	322.81	N72°34'34"E
L24	183.05	N72°34'34"E
L25	28.00	S17°25'26"E
L26	223.00	N17°25'26"W
L27	256.28	N01°34'10"W
L28	28.00	N88°25'50"E

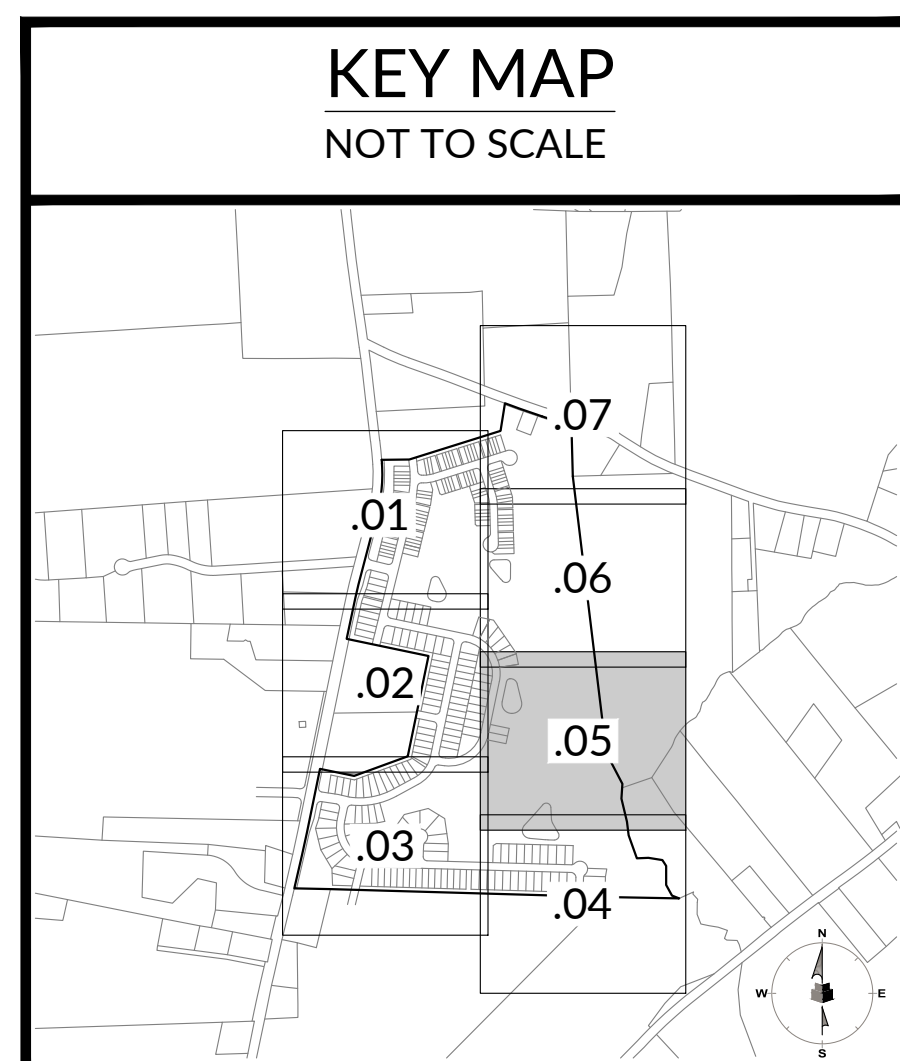
**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C1	475.00	307.56	302.220	N79° 59' 41.50"E
C2	235.00	178.14	173.909	N39° 43' 42.28"E
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C4	235.00	348.63	317.527	N54° 11' 16.68"E
C5	235.00	368.61	331.971	N33° 14' 54.11"W
C6	235.00	323.50	298.555	S27° 18' 55.55"E
C7	235.00	88.87	88.337	S77° 35' 06.63"E
C8	700.00	159.36	159.018	N07° 18' 00.21"E
C9	700.00	88.51	88.454	N02° 50' 39.70"W
C10	230.00	73.07	72.761	N81° 40' 37.38"E
C11	230.00	63.64	63.442	N09° 29' 47.98"W

N/F  
RICHARDS, BARBARA ANN JONES  
ZONING: R-30  
DB. 1730 PG. 526  
PIN. 1768-60-2816

N/F  
RICHARDS, BARBARA ANN JONES  
ZONING: R-30  
DB. 1386 PG. 356  
BM. 1112 PG. 589  
PIN. 1767-69-6199

N/F  
AGUILAR, NORMA  
ZONING: R-30  
DB. 12647 PG. 1286  
PIN. 1767-68-5863



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PRELIMINARY  
NOT APPROVED FOR  
CONSTRUCTION  
TERENCE COOK

0 25 50  
SCALE: 1 inch = 50 ft.

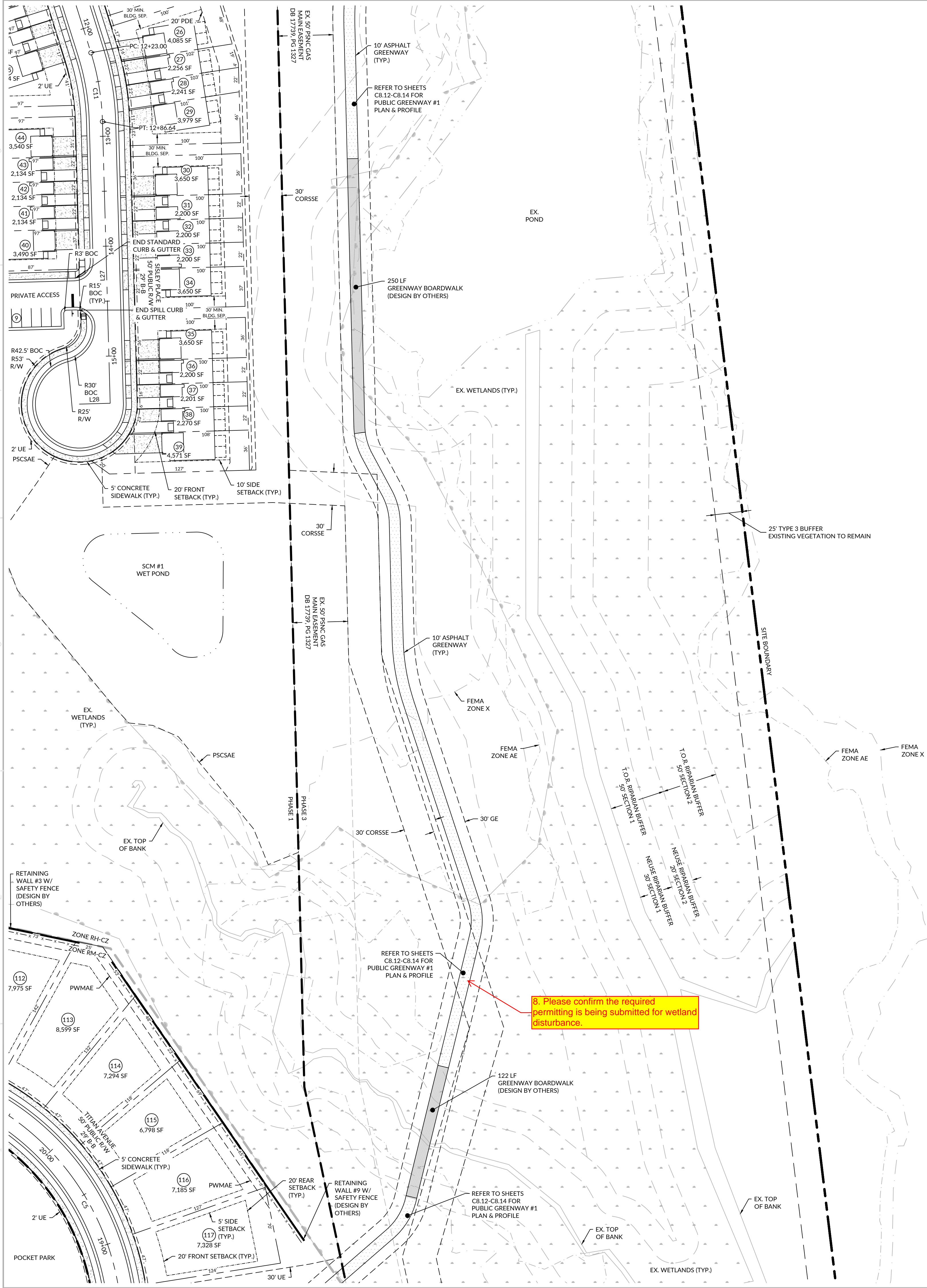
INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

WR JOB NUMBER 23-0045  
DRN: WR DGN: WR CKD: WR

**SITE PLAN**

**C3.05**

J:\2024\04\04\_Plan\_WithersRavenel\Assemblies\CID Drawings\Site Construction\C3.05 - 300 SITE PLAN.dwg Thursday, October 11, 2024 12:42:49 AM - JHT11



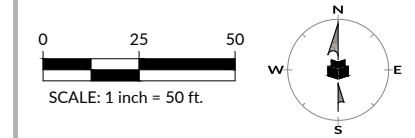
**LINE TABLE**

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L23	322.81	N72°34'34"E
L24	183.05	N72°34'34"E
L25	28.00	S17°25'26"E
L26	223.00	N17°25'26"W
L27	256.28	N01°34'10"W
L28	28.00	N88°25'50"E

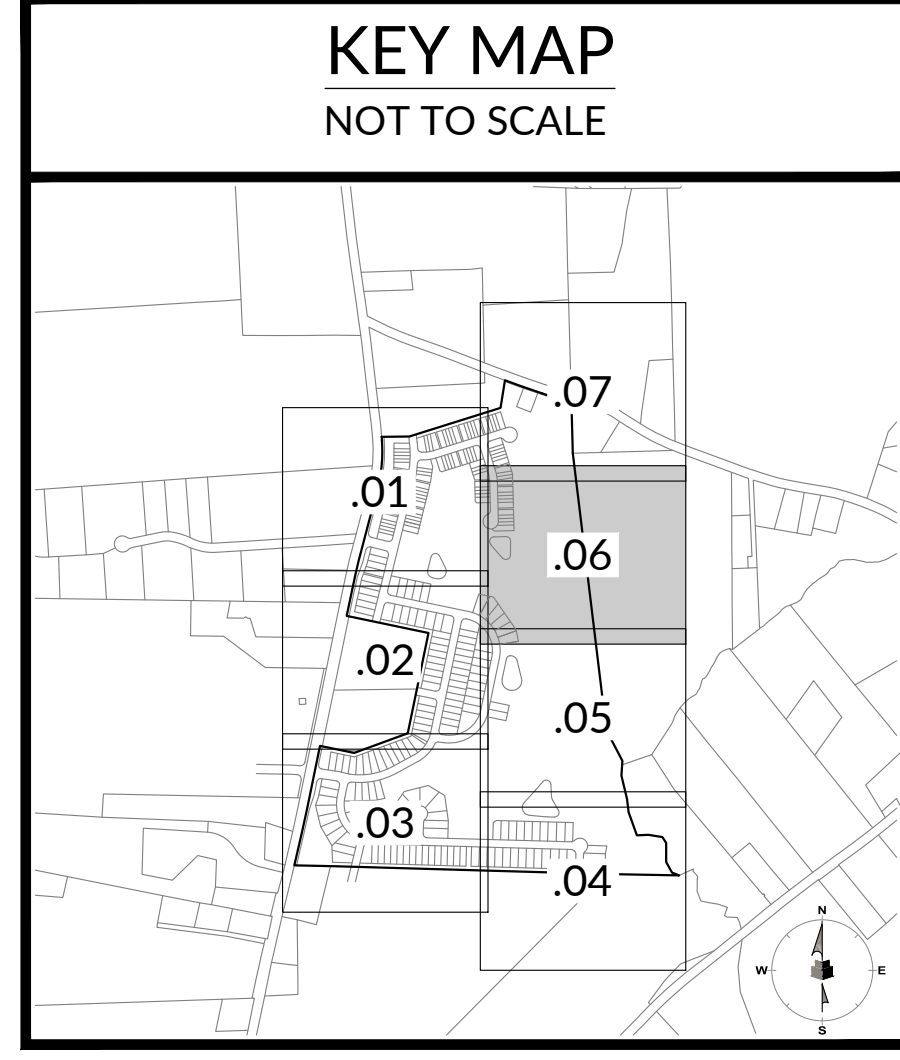
**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
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C10	230.00	73.07	72.761	N81° 40' 37.38"E
C11	230.00	63.64	63.442	N09° 29' 47.98"W

N/F  
 RICHARDS, BARBARA ANN JONES  
 ZONING: R-30  
 DB: 1730 PG. 526  
 PIN: 1768-60-2816



INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

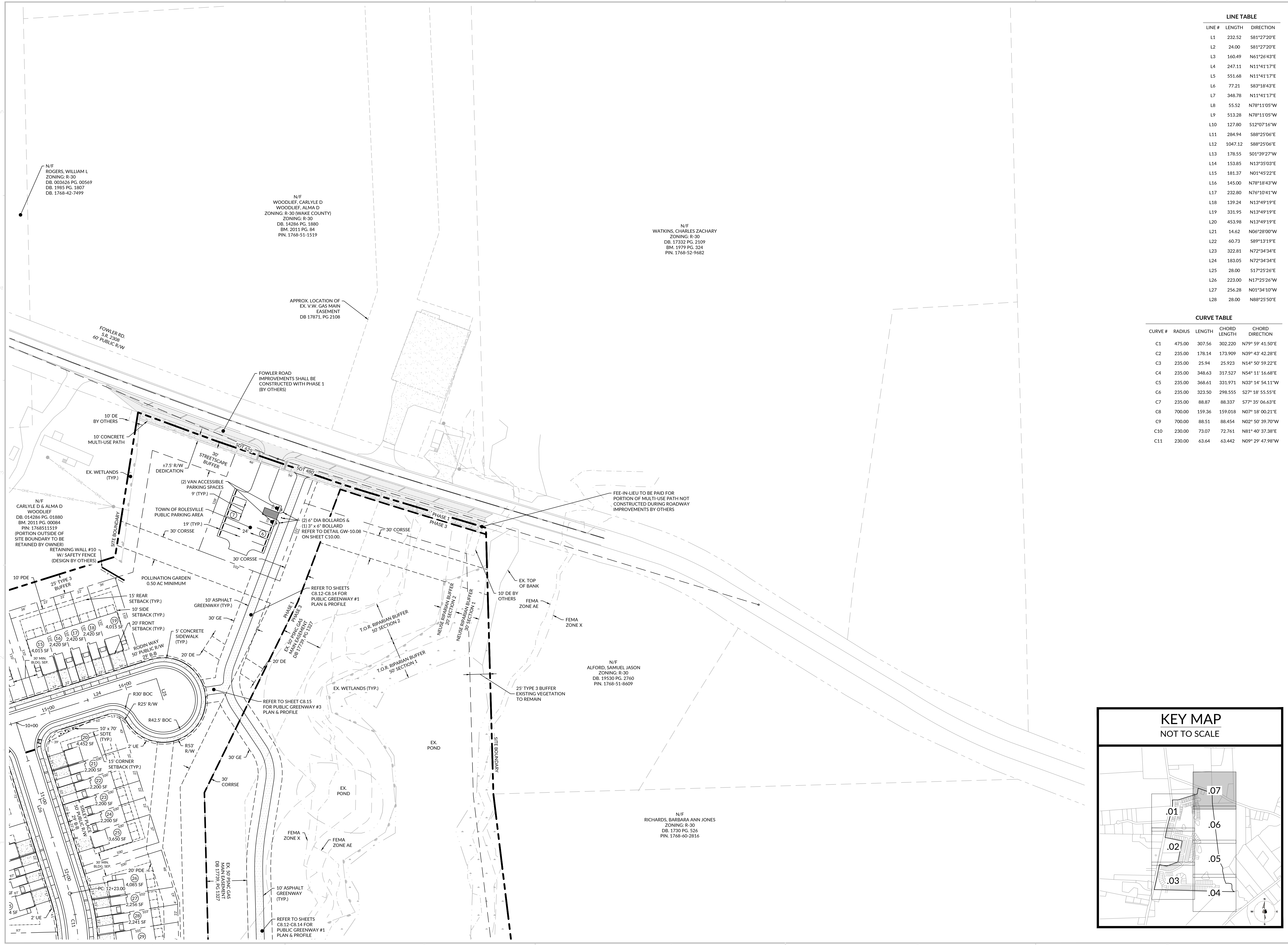


WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**SITE PLAN**

**C3.06**

J:\23\0045\Plan\WithersRavenel\Assemblies\CID\Drawings\SiteConstruction\C3.06\03 SITE PLAN.dwg Thursday, October 31, 2024 1:25:58 PM - JHT11

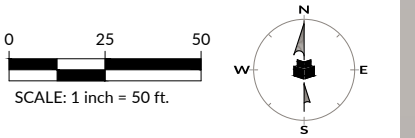
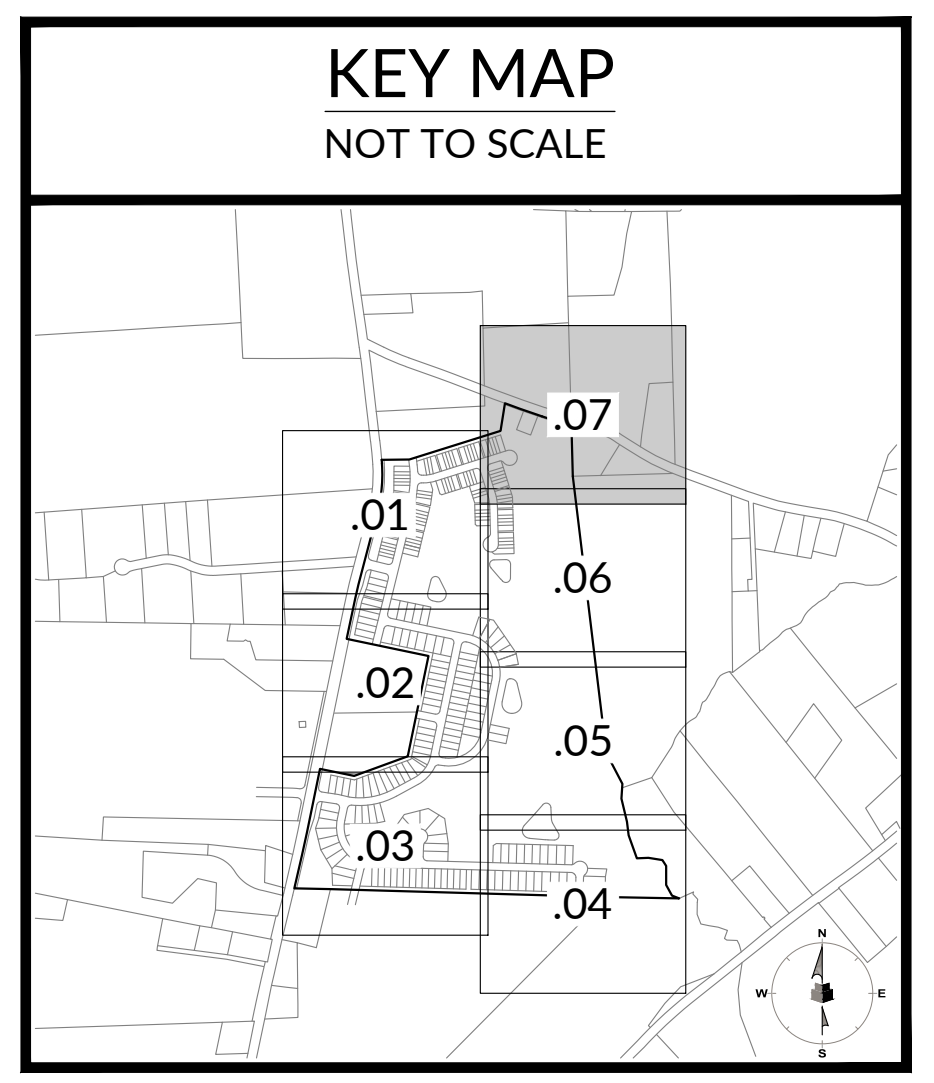


**LINE TABLE**

LINE #	LENGTH	DIRECTION
L1	232.52	S81°27'20"E
L2	24.00	S81°27'20"E
L3	160.49	N61°26'43"E
L4	247.11	N11°41'17"E
L5	551.68	N11°41'17"E
L6	77.21	S83°18'43"E
L7	348.78	N11°41'17"E
L8	55.52	N78°11'05"W
L9	513.28	N78°11'05"W
L10	127.80	S12°07'16"W
L11	284.94	S88°25'06"E
L12	1047.12	S88°25'06"E
L13	178.55	S01°39'27"W
L14	153.85	N13°35'03"E
L15	181.37	N01°45'22"E
L16	145.00	N78°18'43"W
L17	232.80	N76°10'41"W
L18	139.24	N13°49'19"E
L19	331.95	N13°49'19"E
L20	453.98	N13°49'19"E
L21	14.62	N06°28'00"W
L22	60.73	S89°13'19"E
L23	322.81	N72°34'34"E
L24	183.05	N72°34'34"E
L25	28.00	S17°25'26"E
L26	223.00	N17°25'26"W
L27	256.28	N01°34'10"W
L28	28.00	N88°25'50"E

**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C1	475.00	307.56	302.220	N79° 59' 41.50"E
C2	235.00	178.14	173.909	N39° 43' 42.28"E
C3	235.00	25.94	25.923	N14° 50' 59.22"E
C4	235.00	348.63	317.527	N54° 11' 16.68"E
C5	235.00	368.61	331.971	N33° 14' 54.11"W
C6	235.00	323.50	298.555	S27° 18' 55.55"E
C7	235.00	88.87	88.337	S77° 35' 06.63"E
C8	700.00	159.36	159.018	N07° 18' 00.21"E
C9	700.00	88.51	88.454	N02° 50' 39.70"W
C10	230.00	73.07	72.761	N81° 40' 37.38"E
C11	230.00	63.64	63.442	N09° 29' 47.98"W



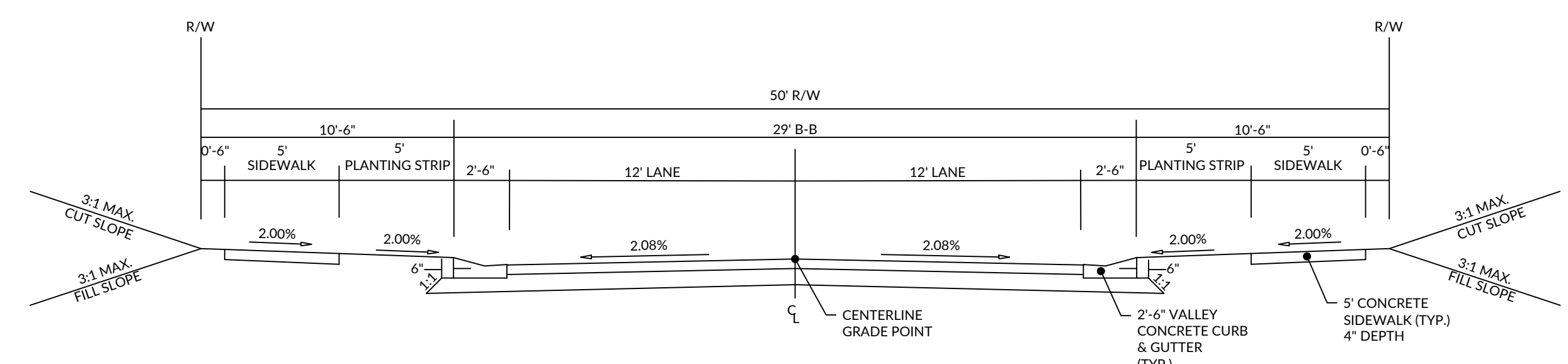
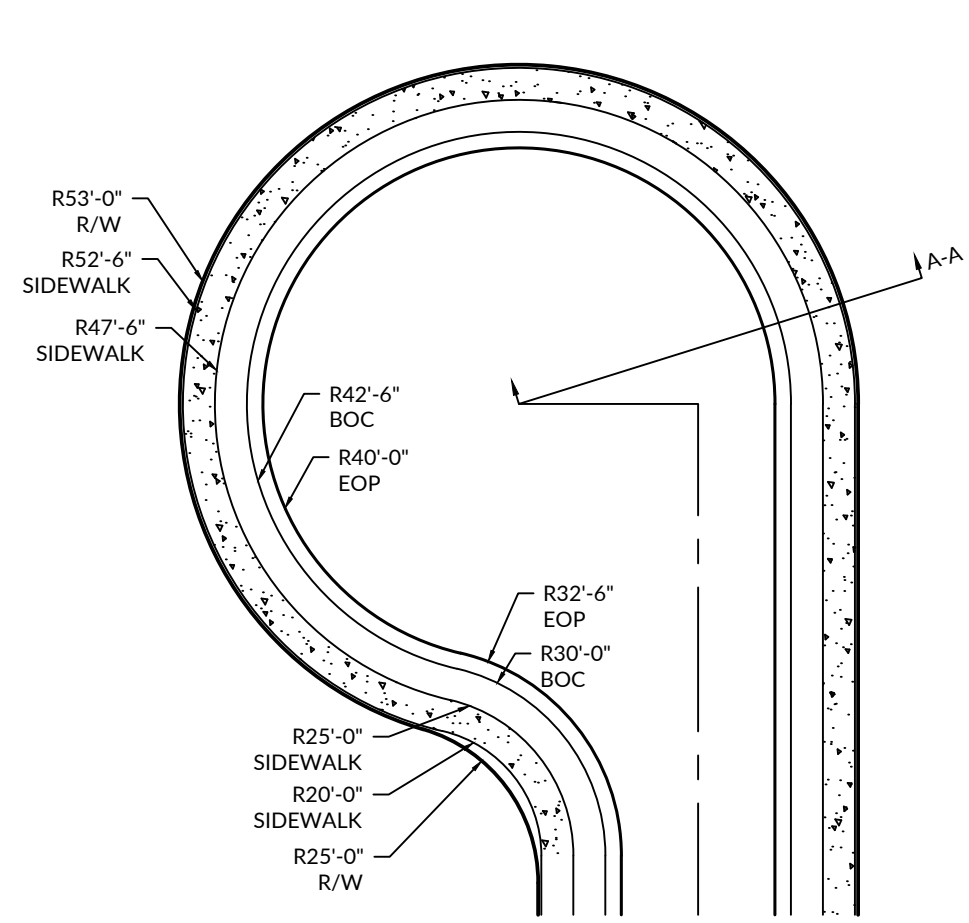
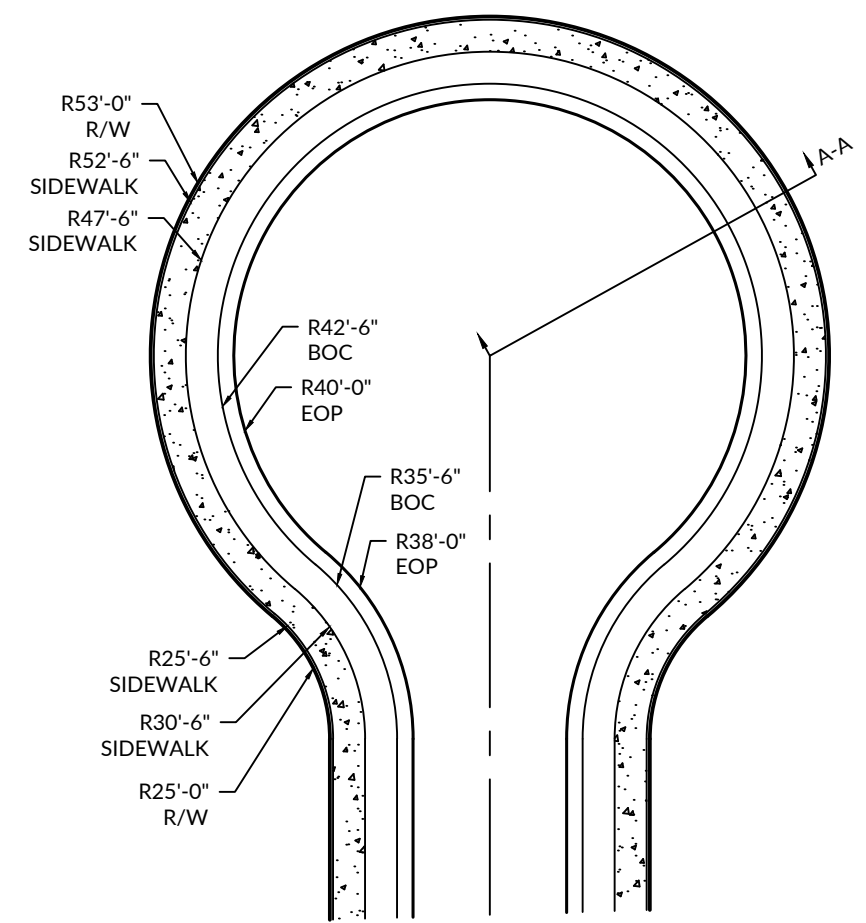
INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

WR JOB NUMBER: 23-0045  
DRN: WR DGN: WR CKD: WR

**SITE PLAN**

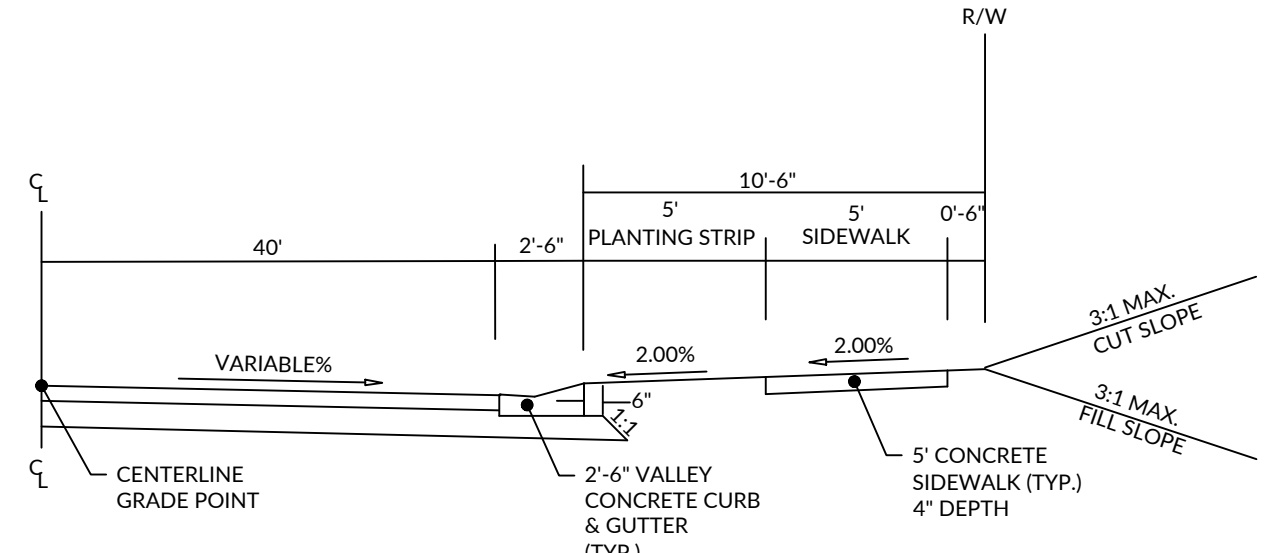
**C3.07**

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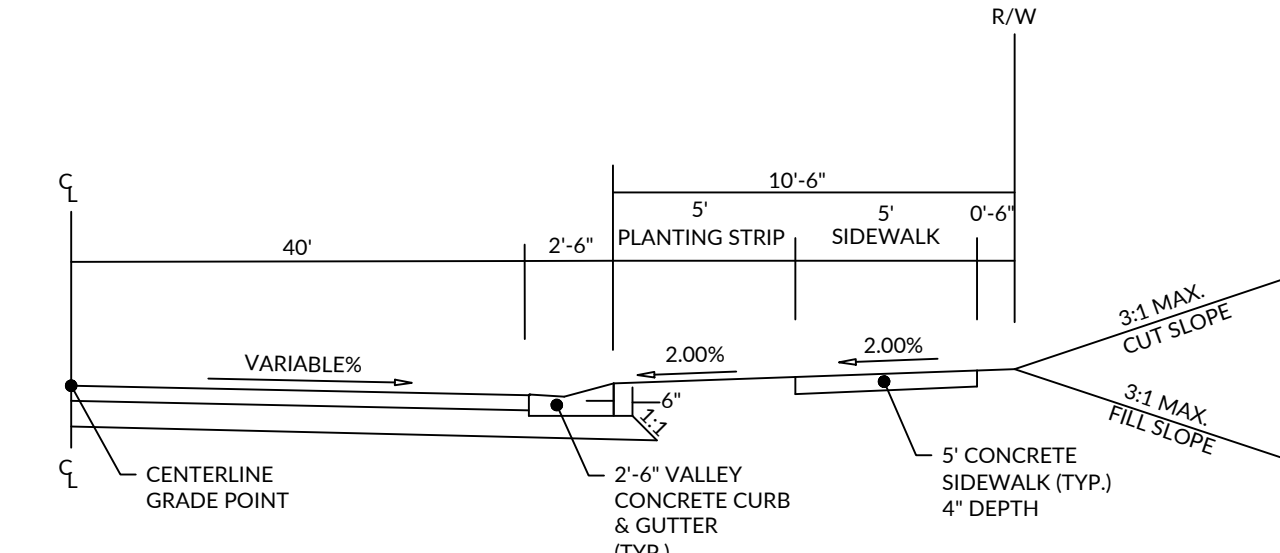
50' PUBLIC R/W, 29' B-B

PAVEMENT DESIGN  
3" 59.5B  
8" ABC



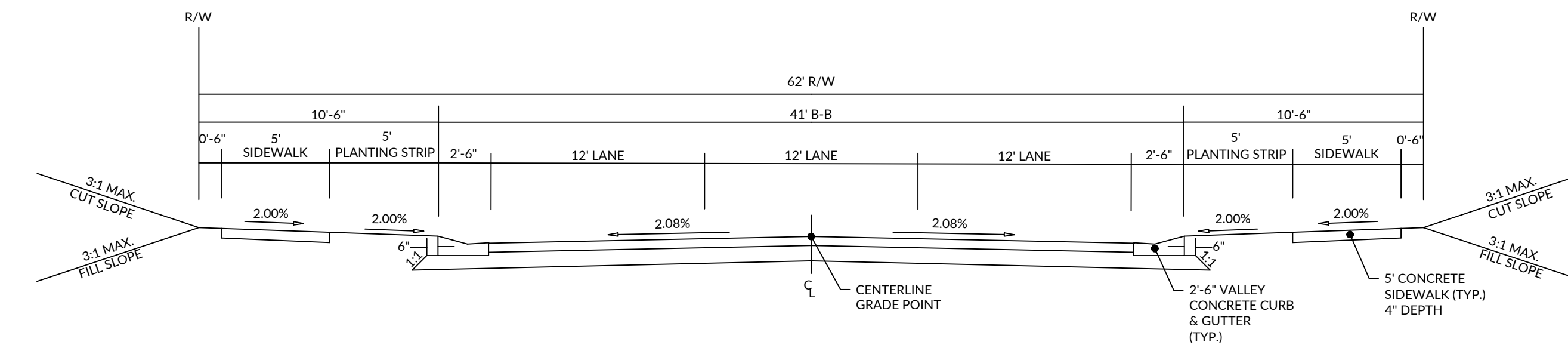
SECTION A-A  
TYPICAL CUL-DE-SAC

PAVEMENT DESIGN  
3" 59.5B  
8" ABC



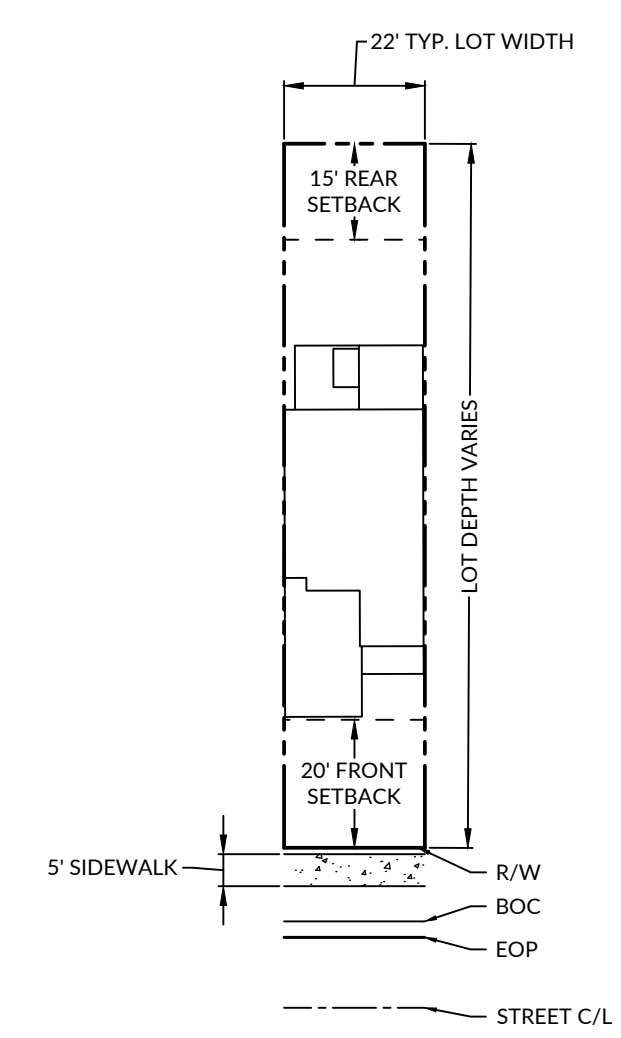
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TYPICAL OFFSET CUL-DE-SAC

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8" ABC

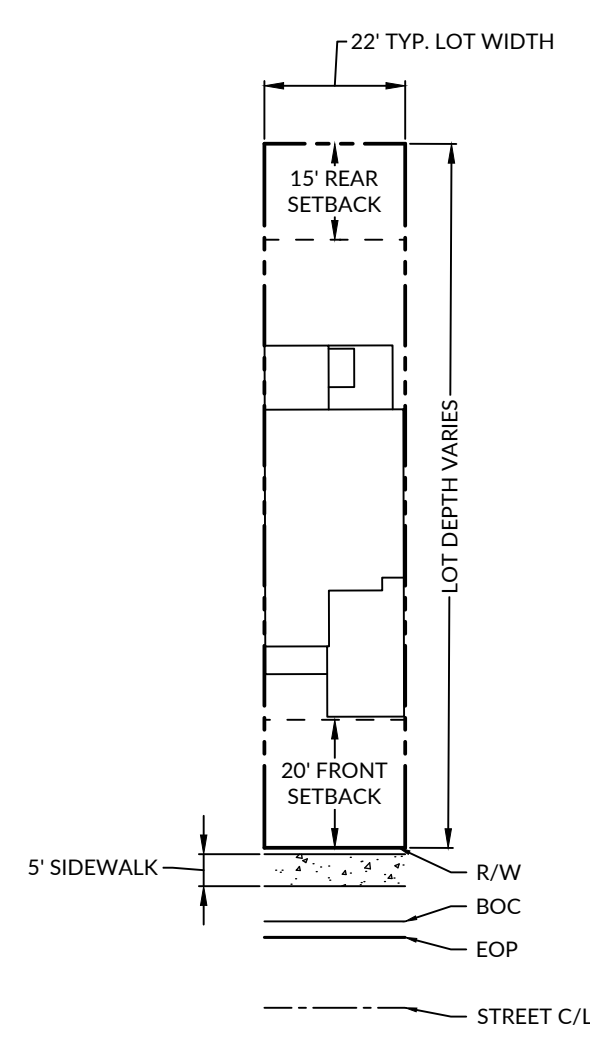


62' PUBLIC R/W, 41' B-B

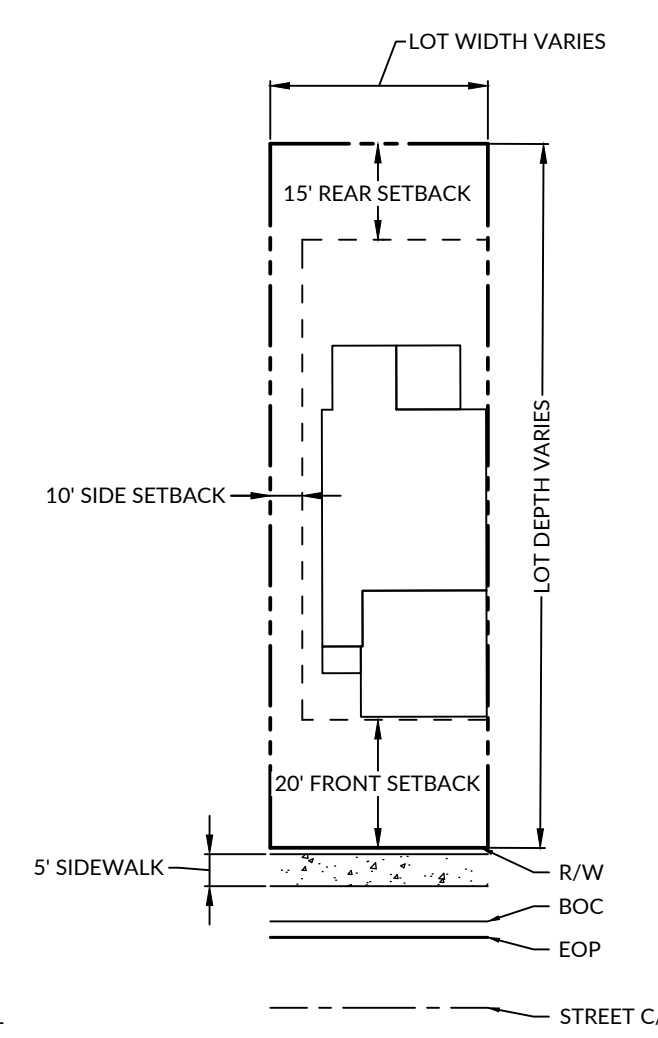
PAVEMENT DESIGN  
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8" ABC



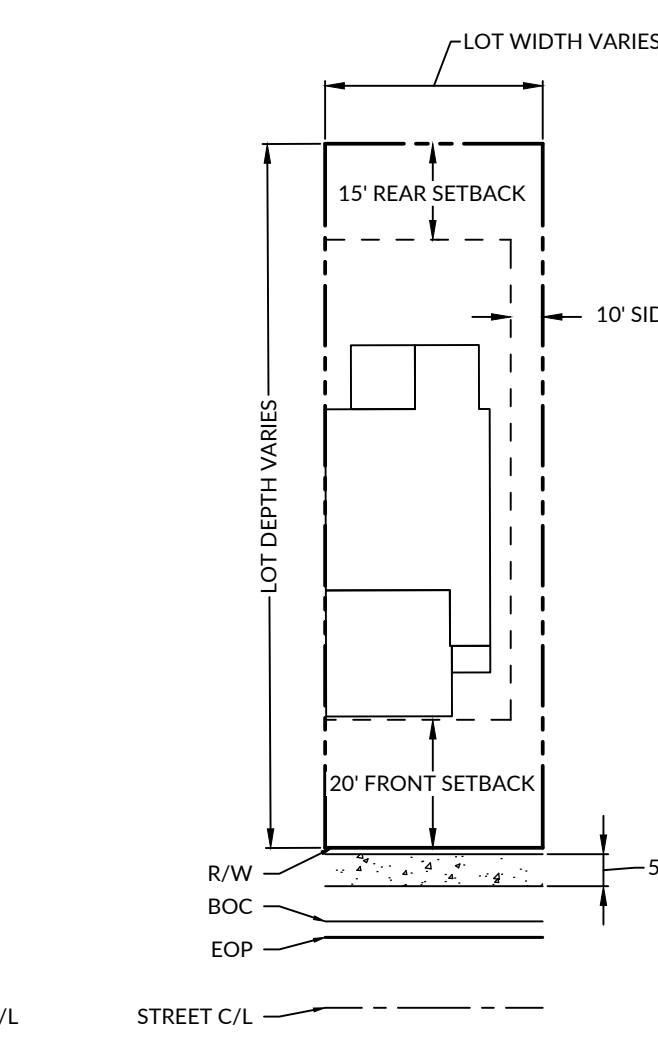
22' TOWNHOME  
(INTERNAL UNIT, LEFT - FRONT LOAD)  
ZONE RH-CZ  
MAXIMUM IMPERVIOUS: 1,700 SF



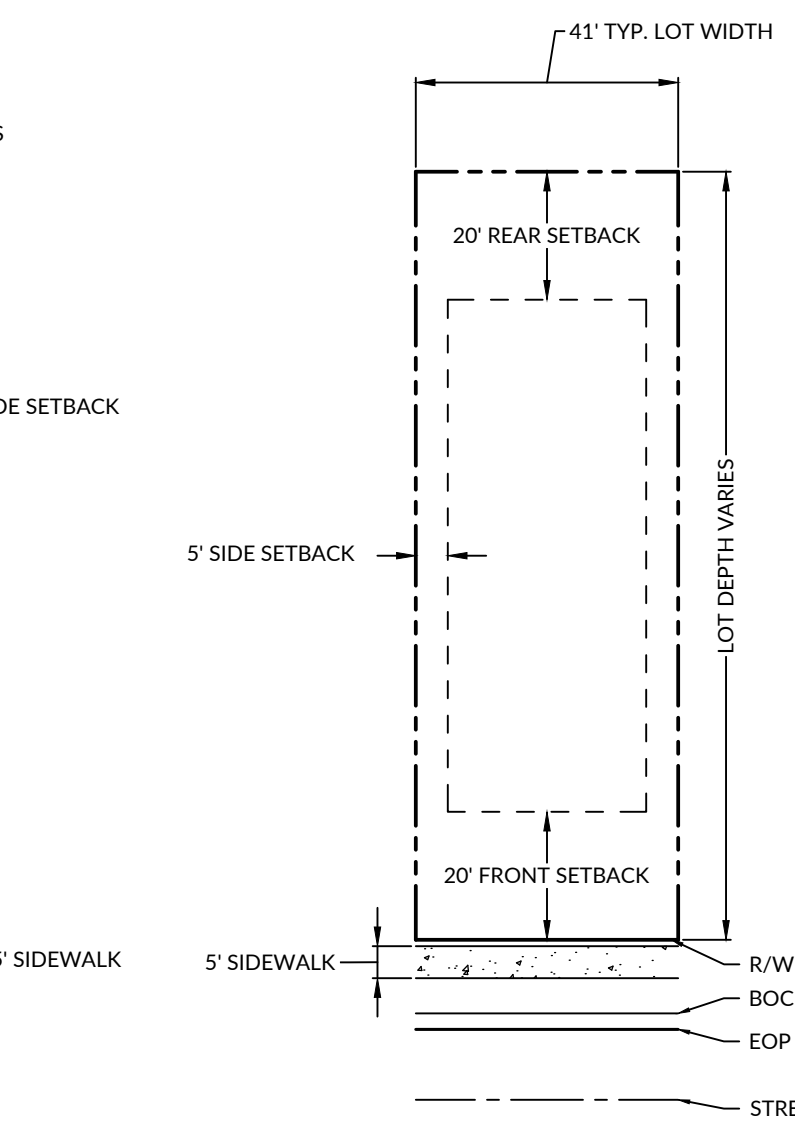
22' TOWNHOME  
(INTERNAL UNIT, RIGHT - FRONT LOAD)  
ZONE RH-CZ  
MAXIMUM IMPERVIOUS: 1,700 SF



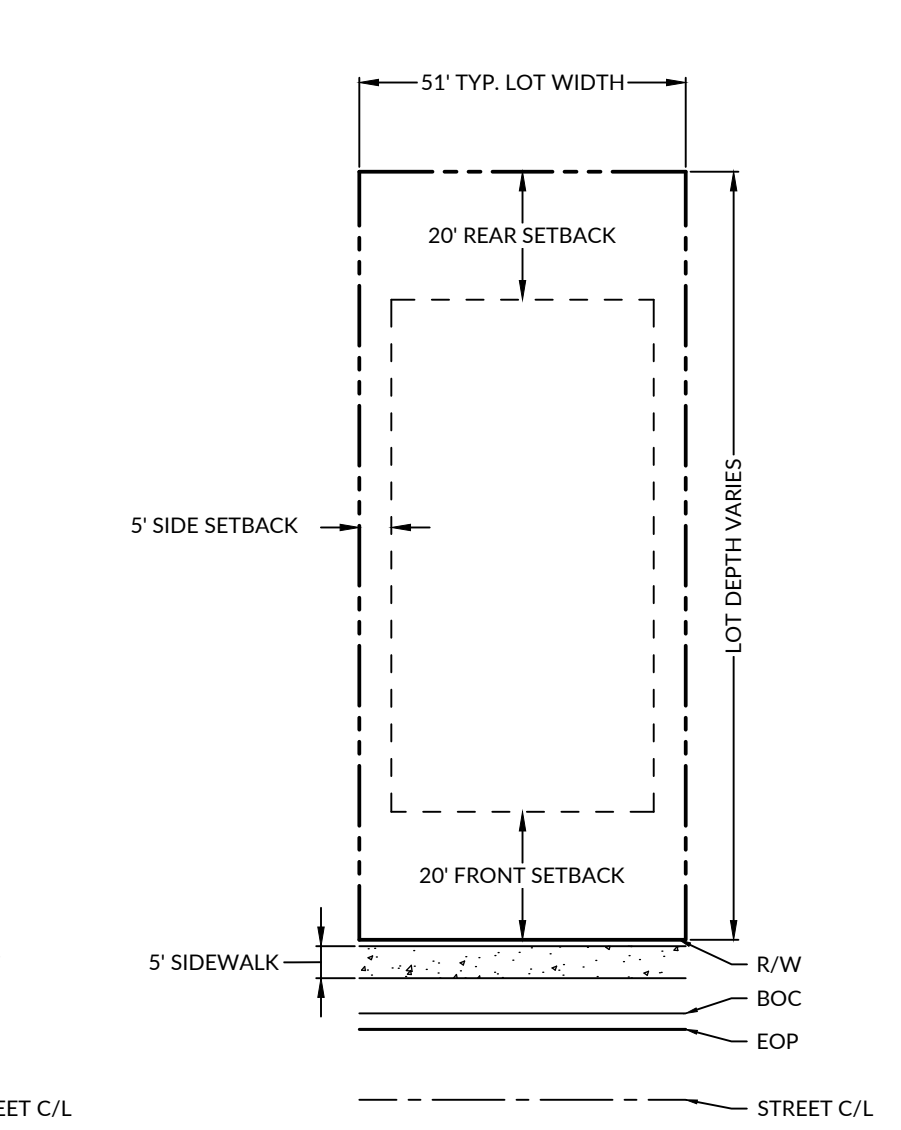
26' TOWNHOME  
(END UNIT, LEFT - FRONT LOAD)  
ZONE RH-CZ  
MAXIMUM IMPERVIOUS: 2,600 SF



26' TOWNHOME  
(END UNIT, RIGHT - FRONT LOAD)  
ZONE RH-CZ  
MAXIMUM IMPERVIOUS: 2,600 SF



41' DETACHED (FRONT LOAD)  
ZONE RM-CZ  
MAXIMUM IMPERVIOUS: 2,600 SF

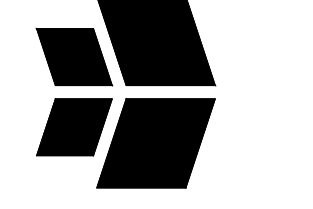


51' DETACHED (FRONT LOAD)  
ZONE RM-CZ  
MAXIMUM IMPERVIOUS: 3,500 SF

NOTE:  
MINIMUM DISTANCE BETWEEN TOWNHOME BUILDINGS SHALL BE 30 FEET.

NOTE:  
PROJECT REZONING WAS SUBMITTED MARCH 2ND, 2023. THE AREA ZONED RM-CZ IS THEREFORE SUBJECT TO LDO SECTION 3.1.B CLUSTER REQUIREMENTS FOR MINIMUM LOT SIZE, WIDTH, & BUILDING SETBACKS IN PLACE PRIOR TO THE APRIL 4TH, 2023 LDO TEXT AMENDMENT TA-23-02.

J:\2024\24045\_Plan\_WithersRavenel\Assemblies\CID\Drawings\301\Construction\CID-301-TYPICAL LOTS & ROADWAY SECTIONS.dwg Thursday, October 31, 2024 11:25:56 AM - 10/31/2024



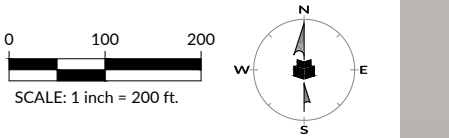
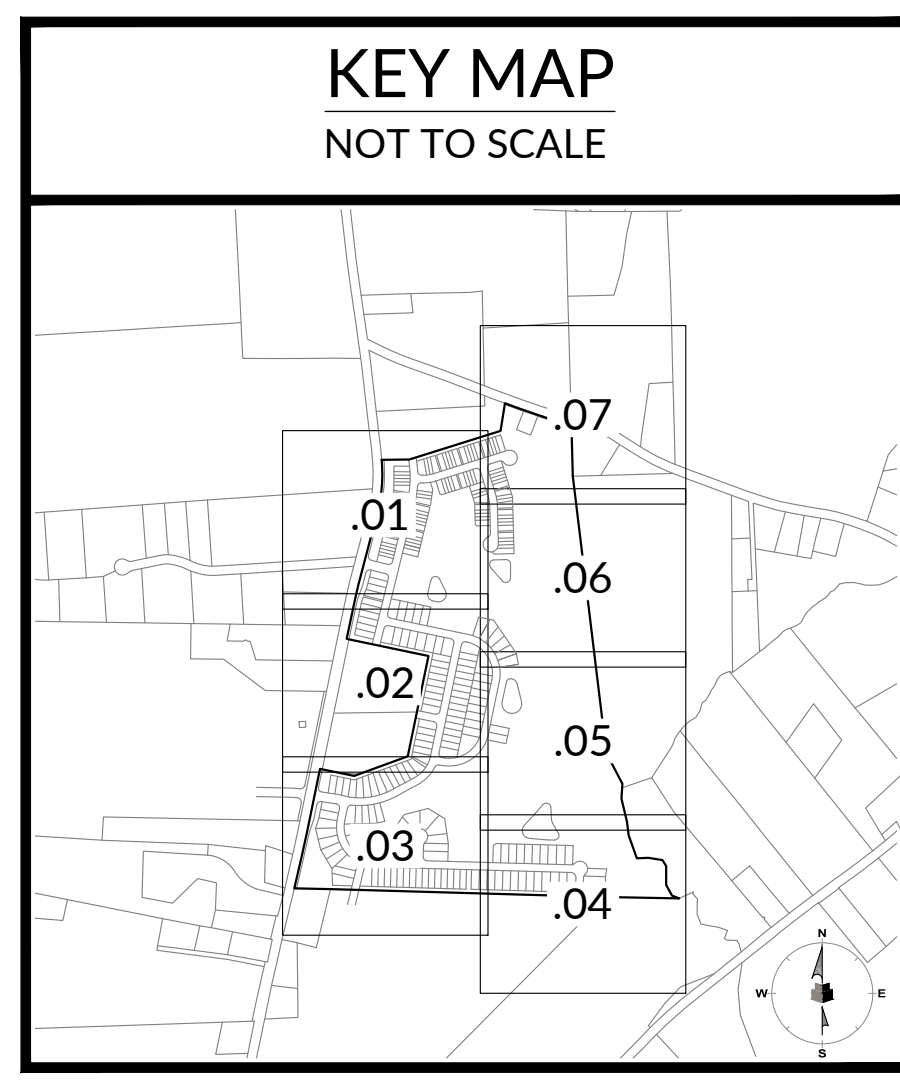
INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

WR JOB NUMBER 23-0045  
DRN: WR DGN: WR CKD: WR

TYPICAL LOTS & ROADWAY SECTIONS

C3.08





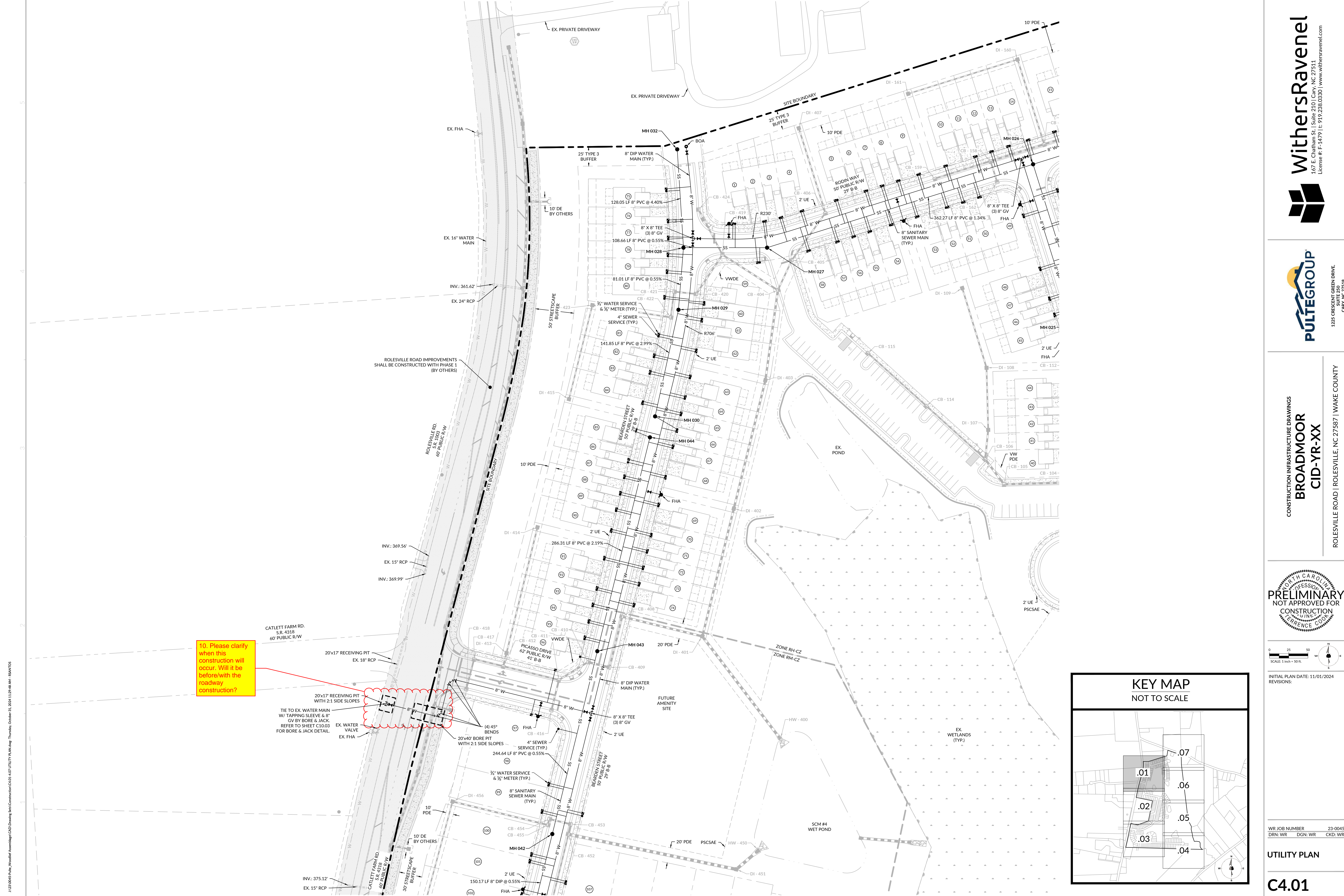
INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

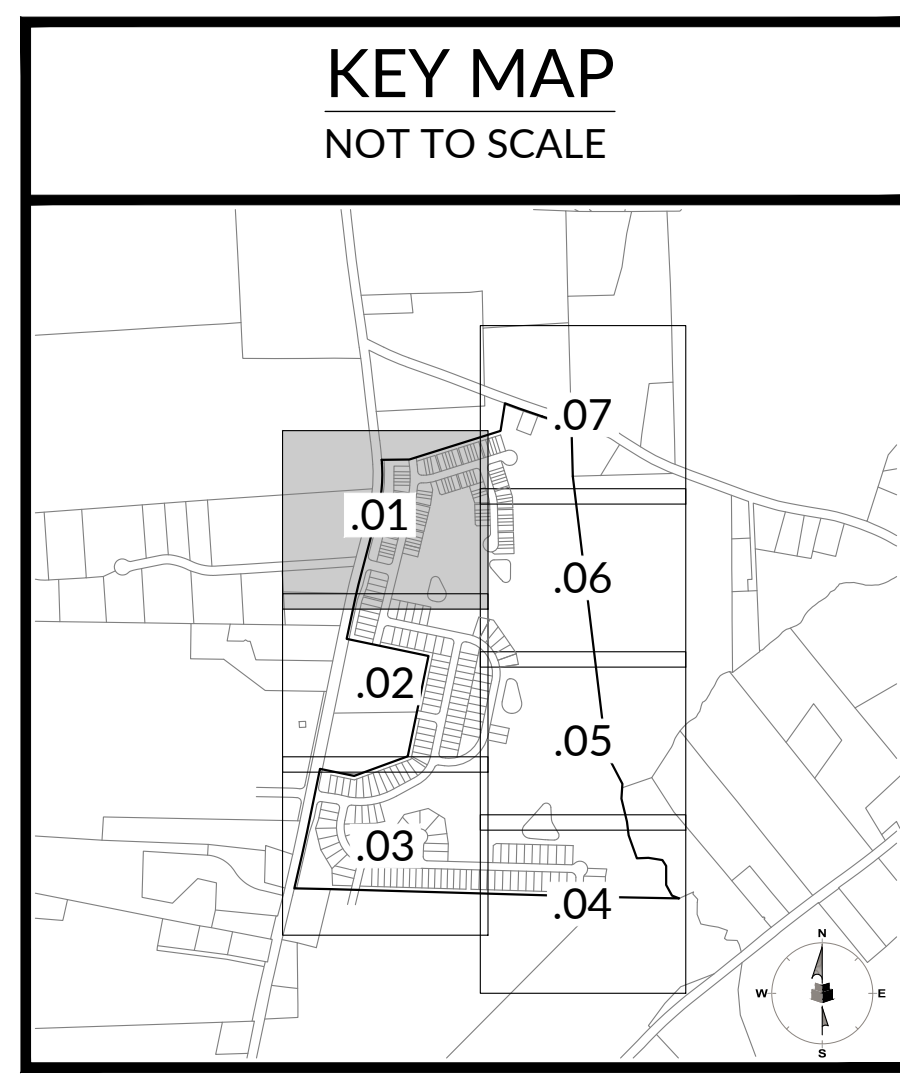
**OVERALL UTILITY PLAN**

**C4.00**

J:\2024\0045\_Pulte\_Woodfield\_Amenities\CID-YR-XX\Drawings\Site\Construction\CID-YR-XX\Utility\Plan\Utility\_Plan.dwg, Thursday, October 31, 2024 11:27:28 AM - R:BNY05



10. Please clarify when this construction will occur. Will it be before/with the roadway construction?



J:\2024\04\15\WatersRavenel\Assemblies\CID Drawings\300 Construction\C4.01 - CID UTILITY PLAN.dwg: Thursday, October 21, 2024 11:29:49 AM - ISBNT05

EST 1993

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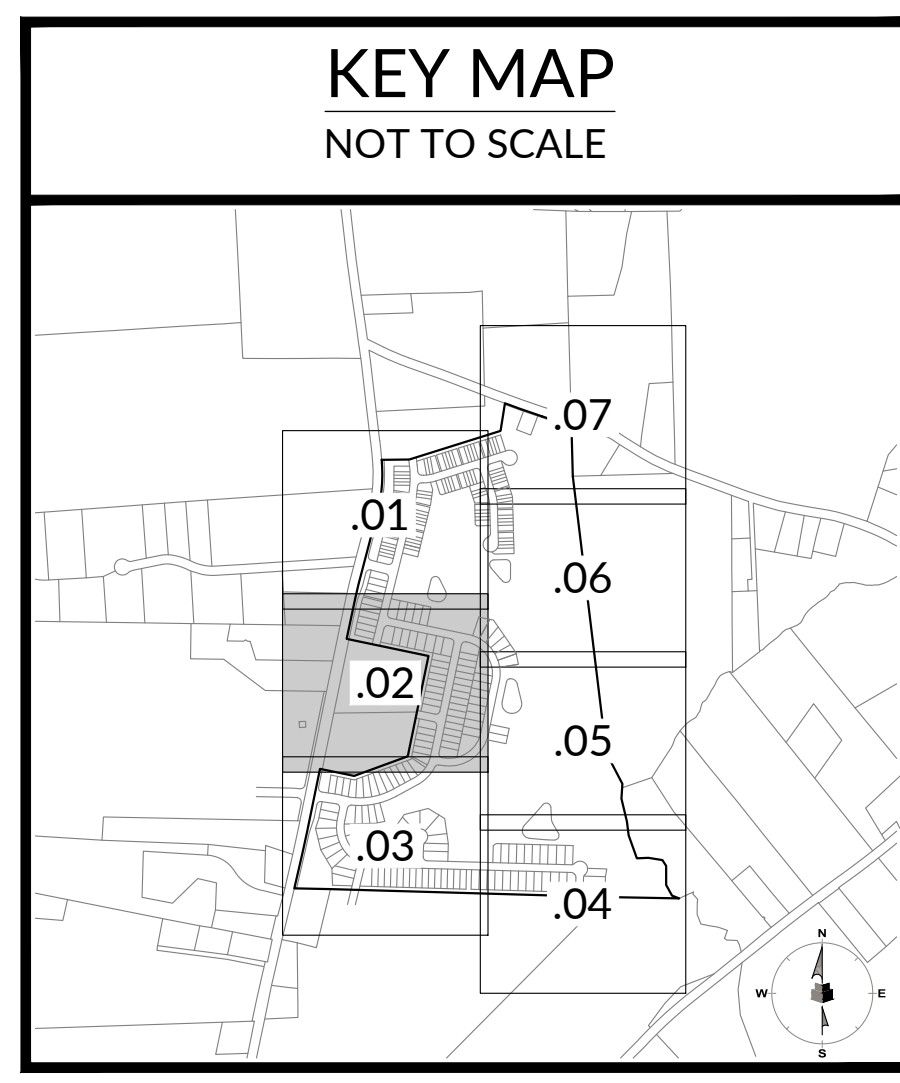
EX. FHA

ROLESVILLE ROAD IMPROVEMENTS SHALL BE CONSTRUCTED WITH PHASE 1 (BY OTHERS)

EX. 16" WATER MAIN

10' DE BY OTHERS

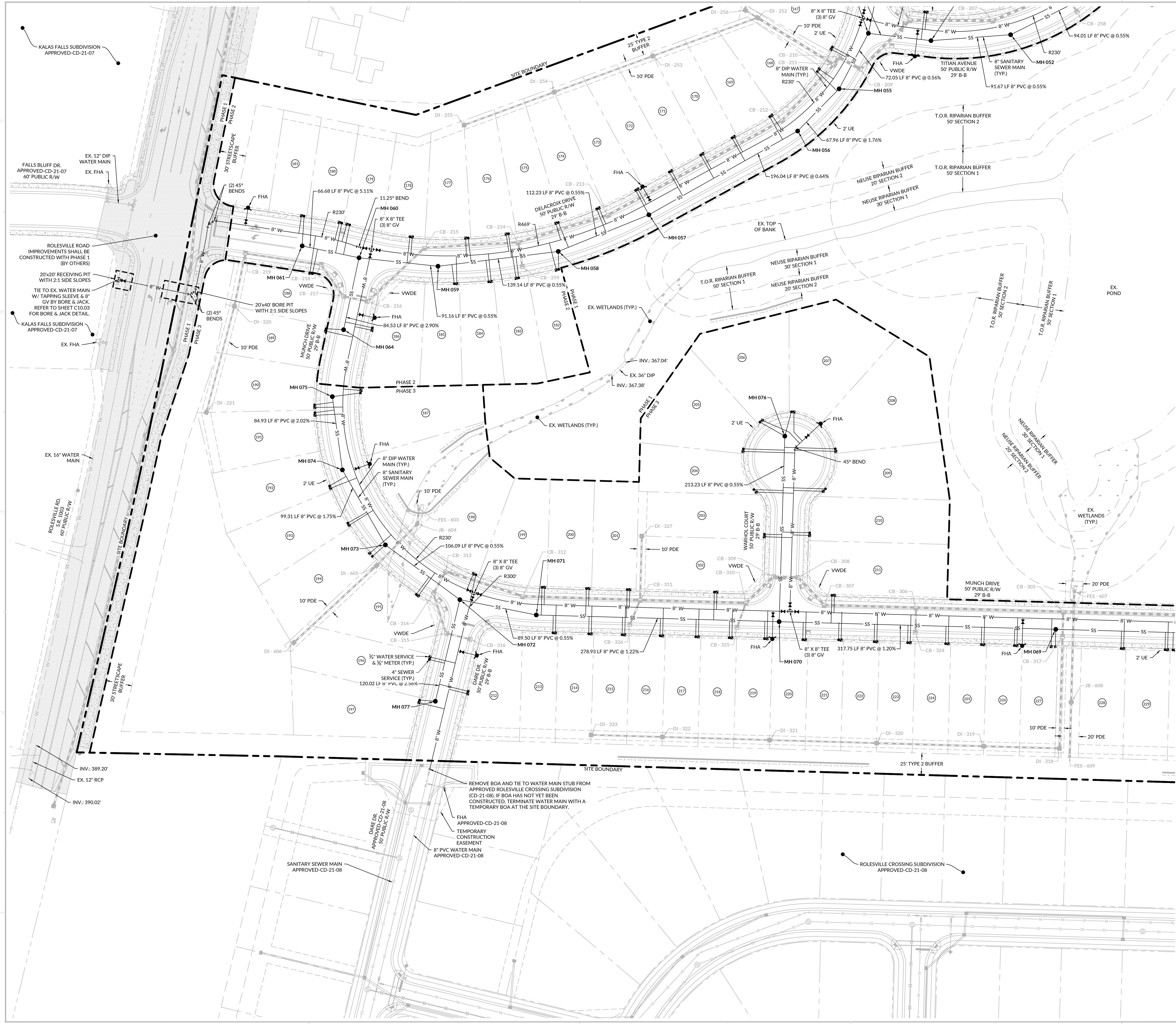
KALAS FALLS SUBDIVISION APPROVED-CD-21-07



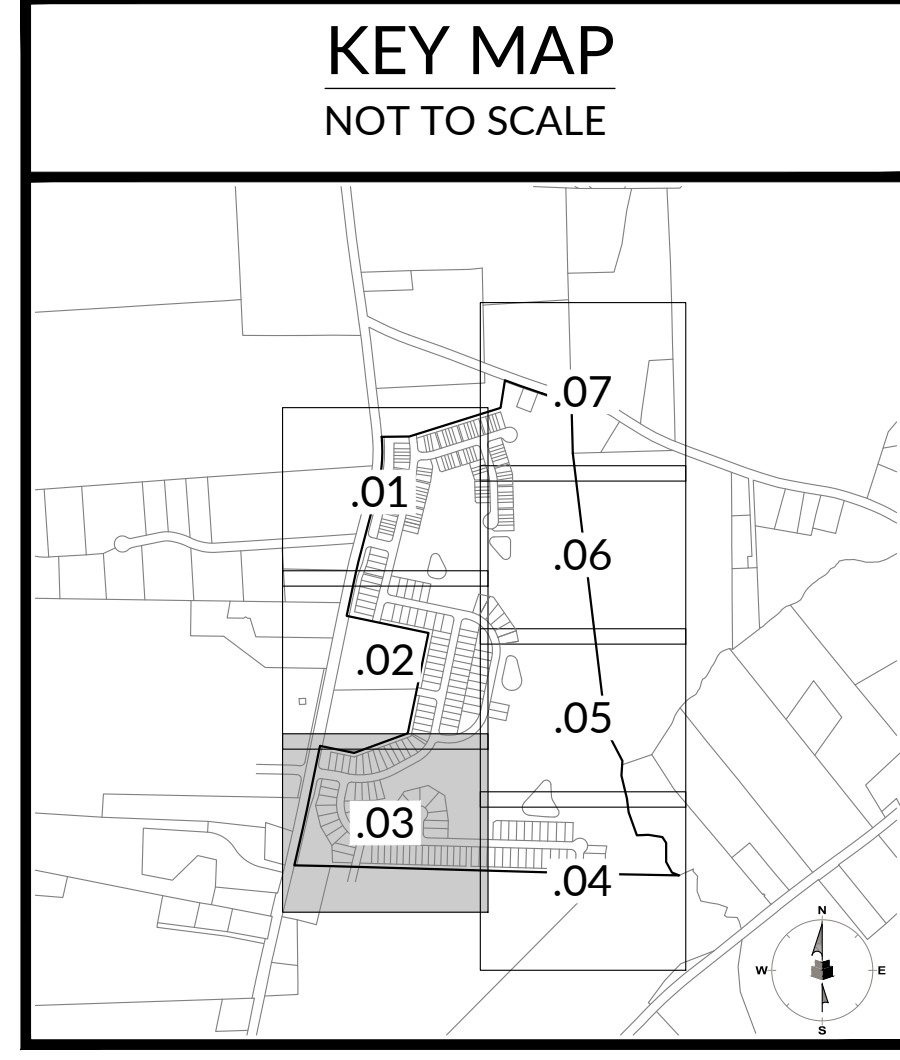
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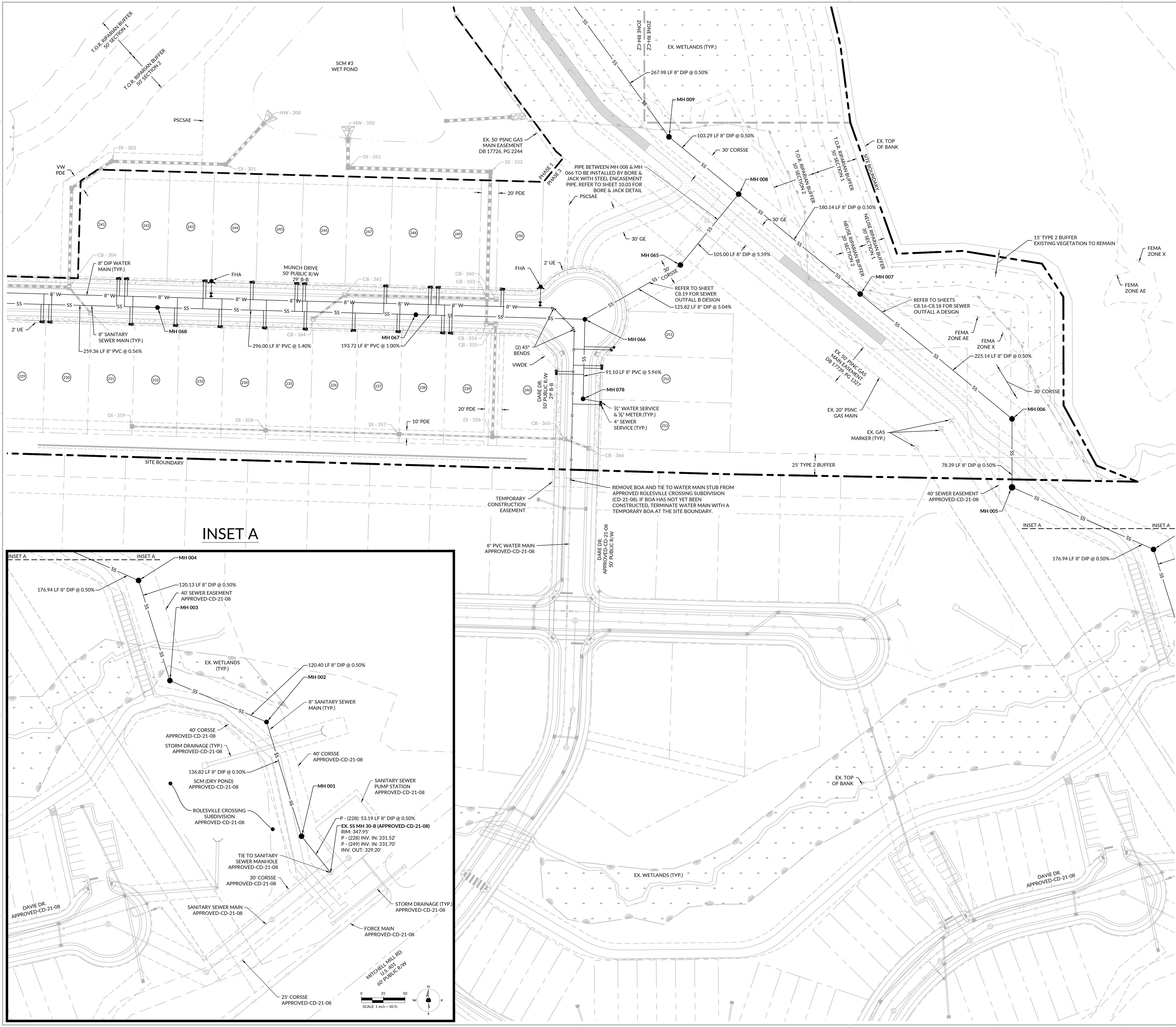
EST. 1993

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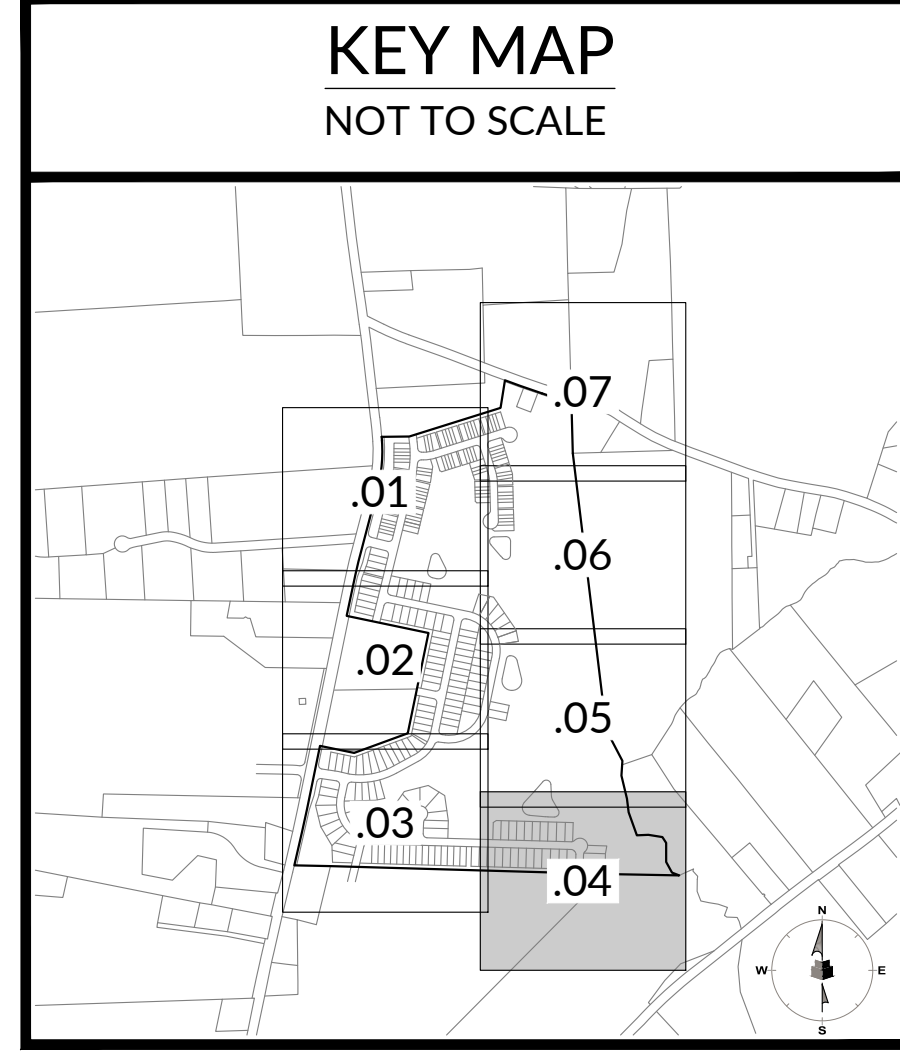
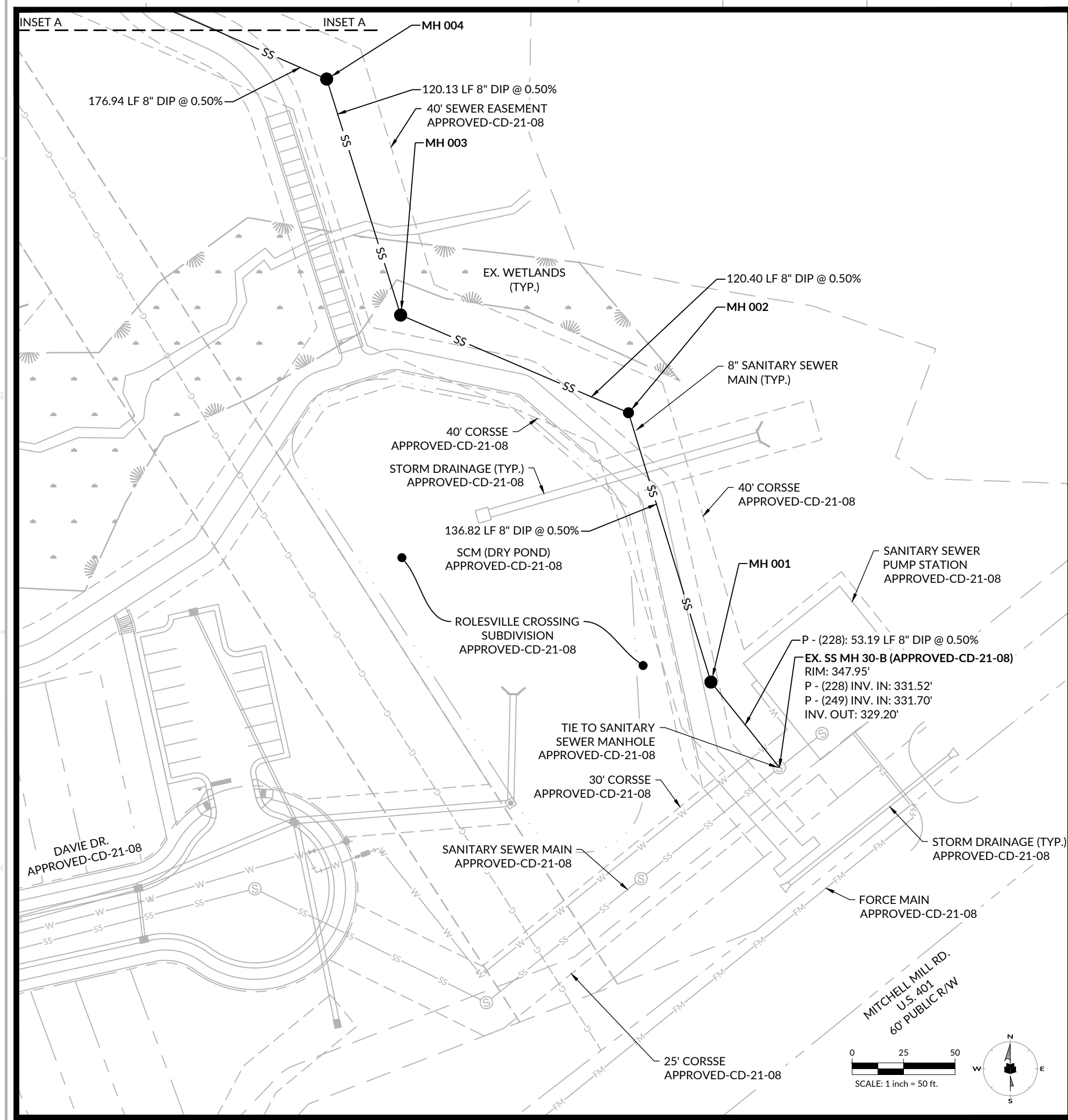


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**INSET A**



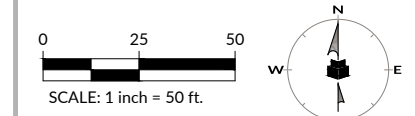
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EST: 1003

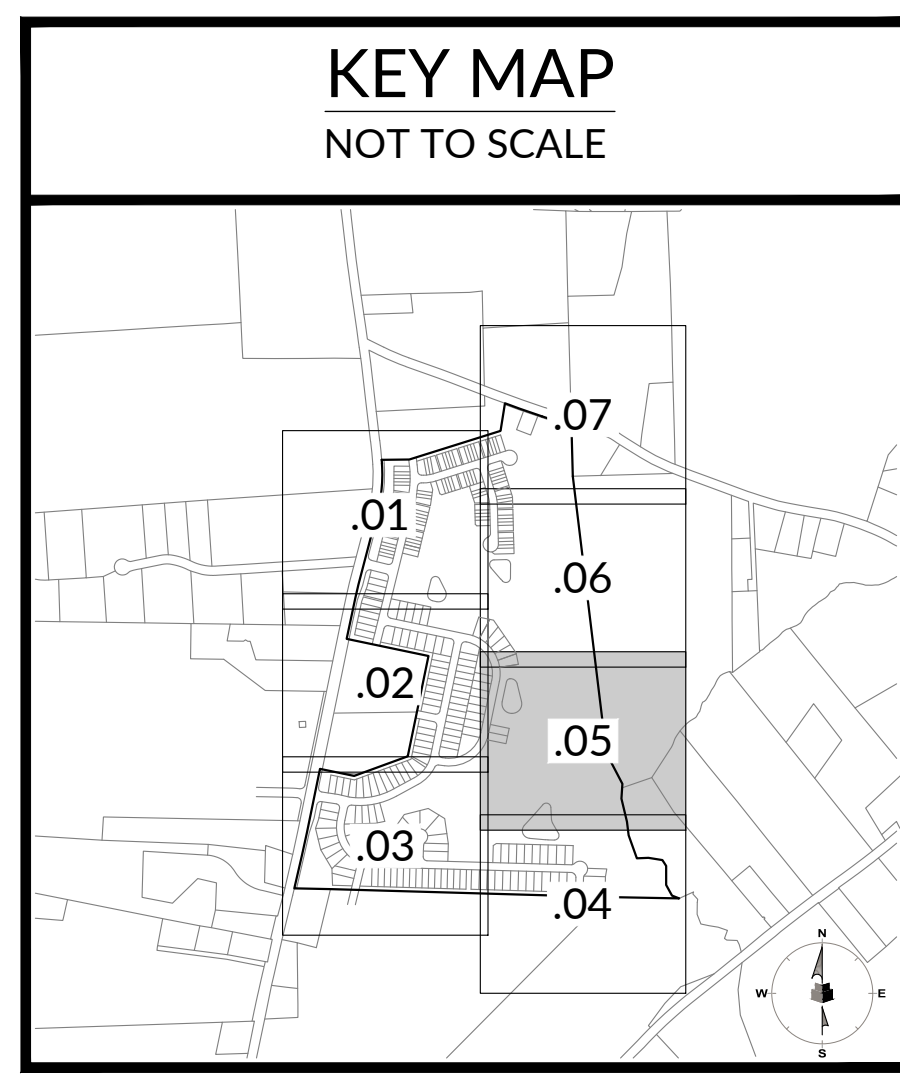
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J:\2024\04\05\Watershed\Assestment\CID Drawings\Site Construction\C4.05 - CID Utility Plan.dwg: Thursday, October 21, 2024 11:30:47 AM - ISBNT05



INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

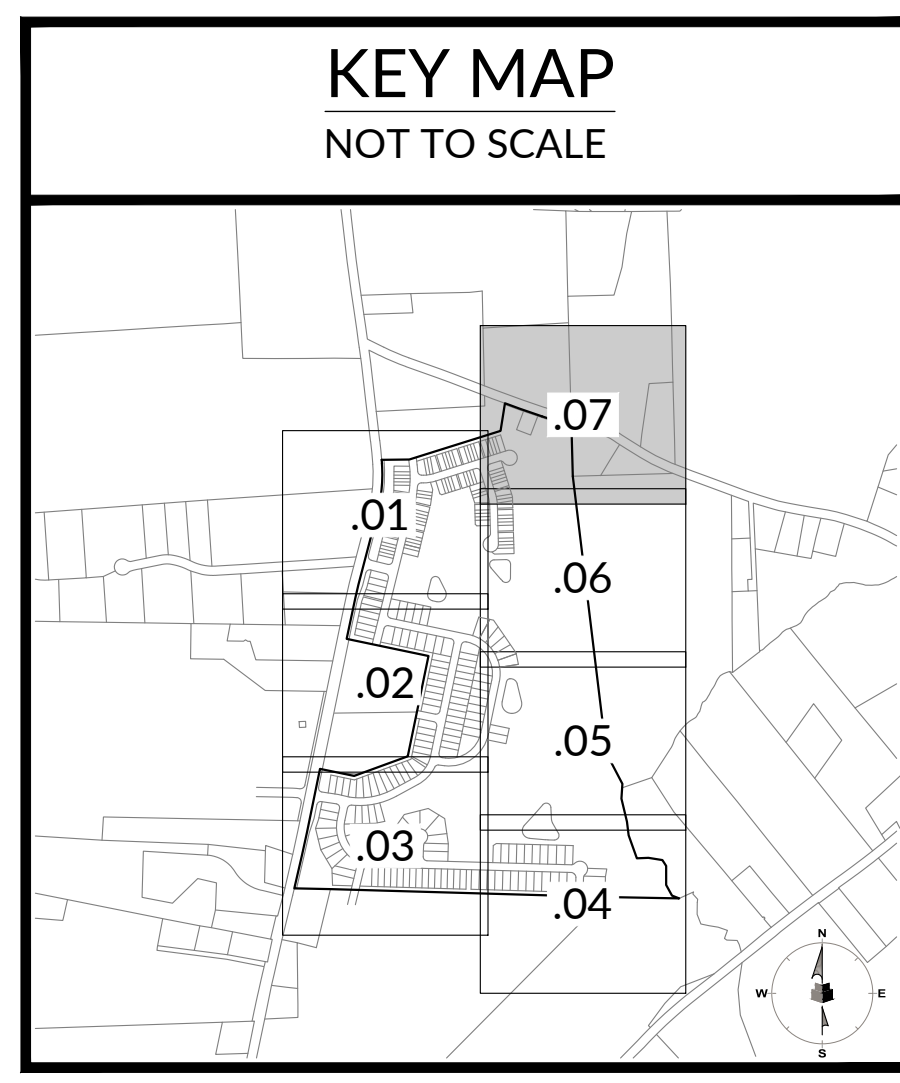
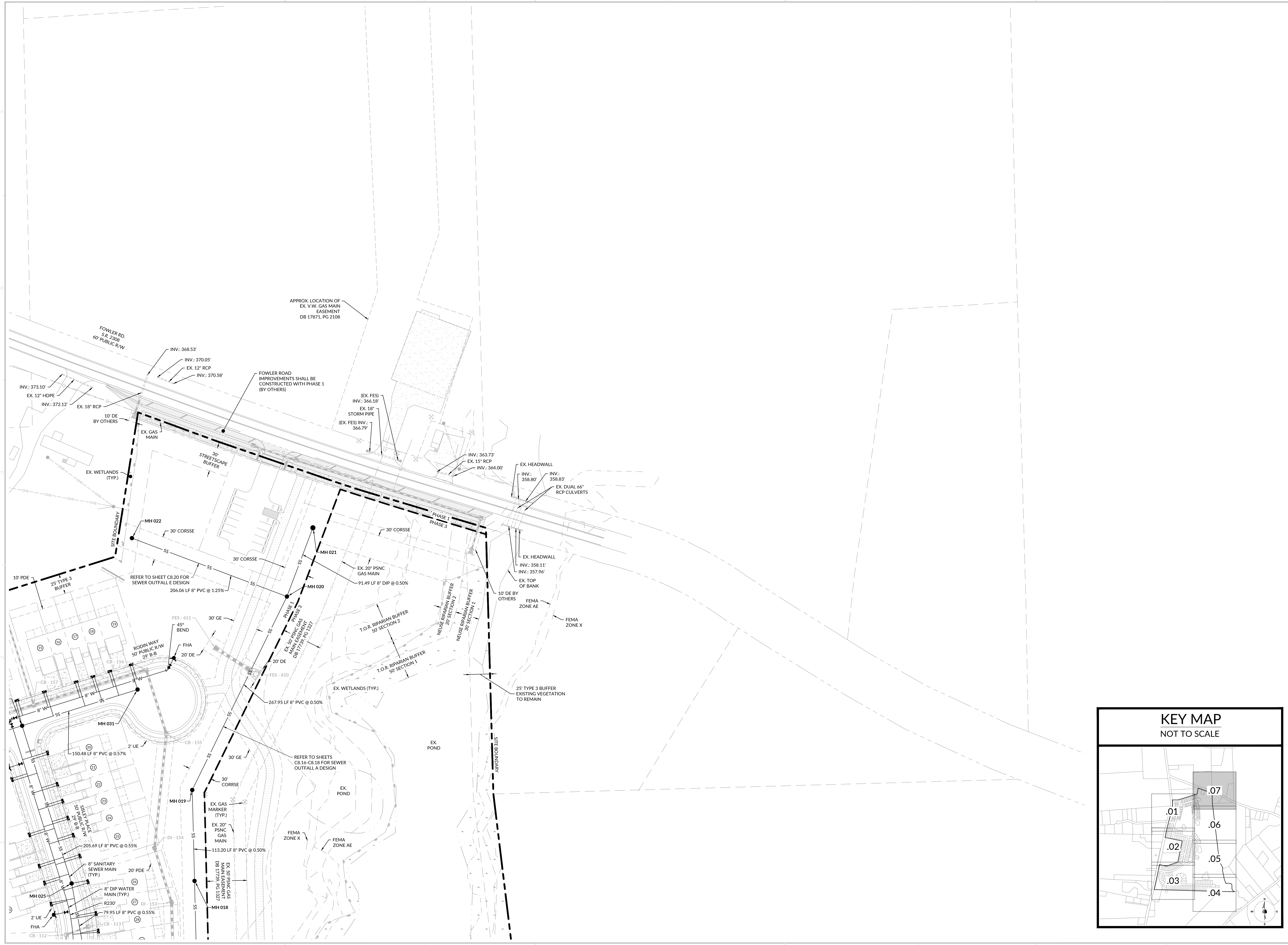


WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**UTILITY PLAN**

**C4.05**



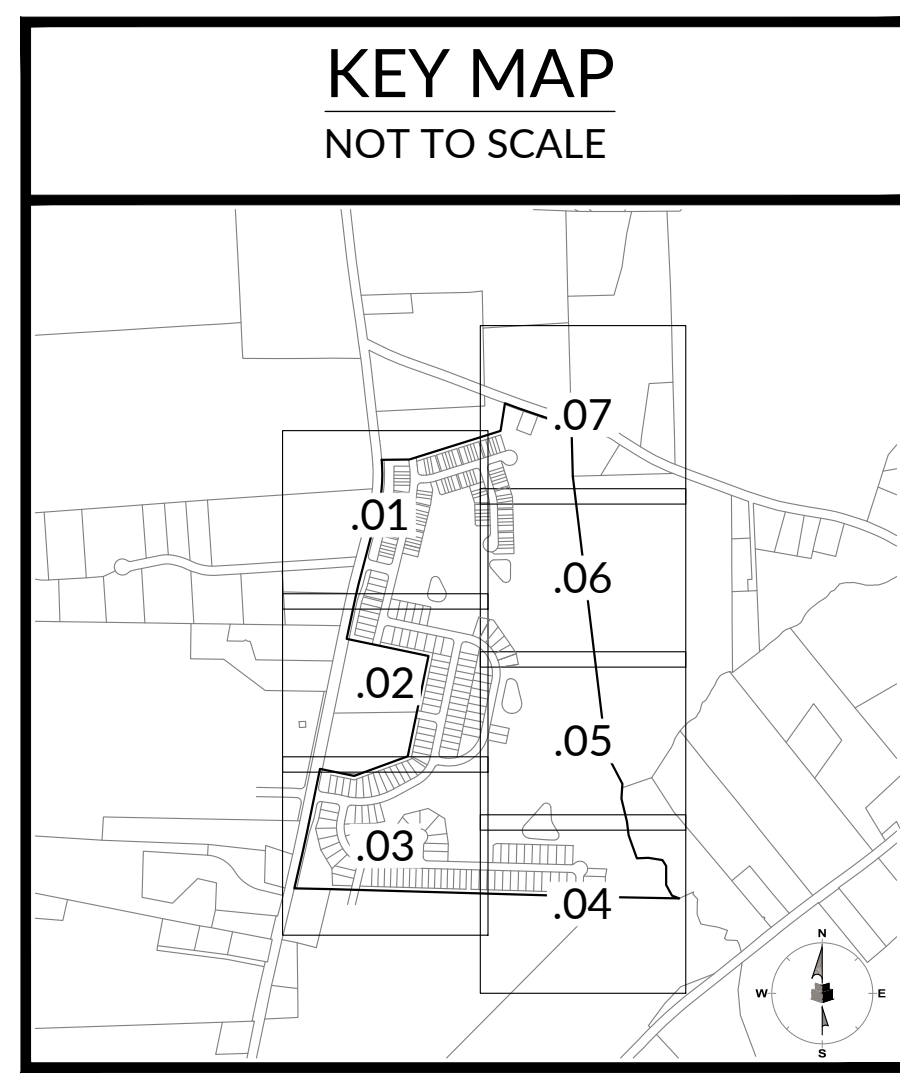


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J:\2024\Projects\Watershed\Assement\GIS\Drawings\GIS\Construction\CD\CD\Overall Storm Drainage - Grading\Plan\DWG - 23-0045 - Storm Drainage - Grading - 11/01/2024 11:23:30 AM - ISMNTS



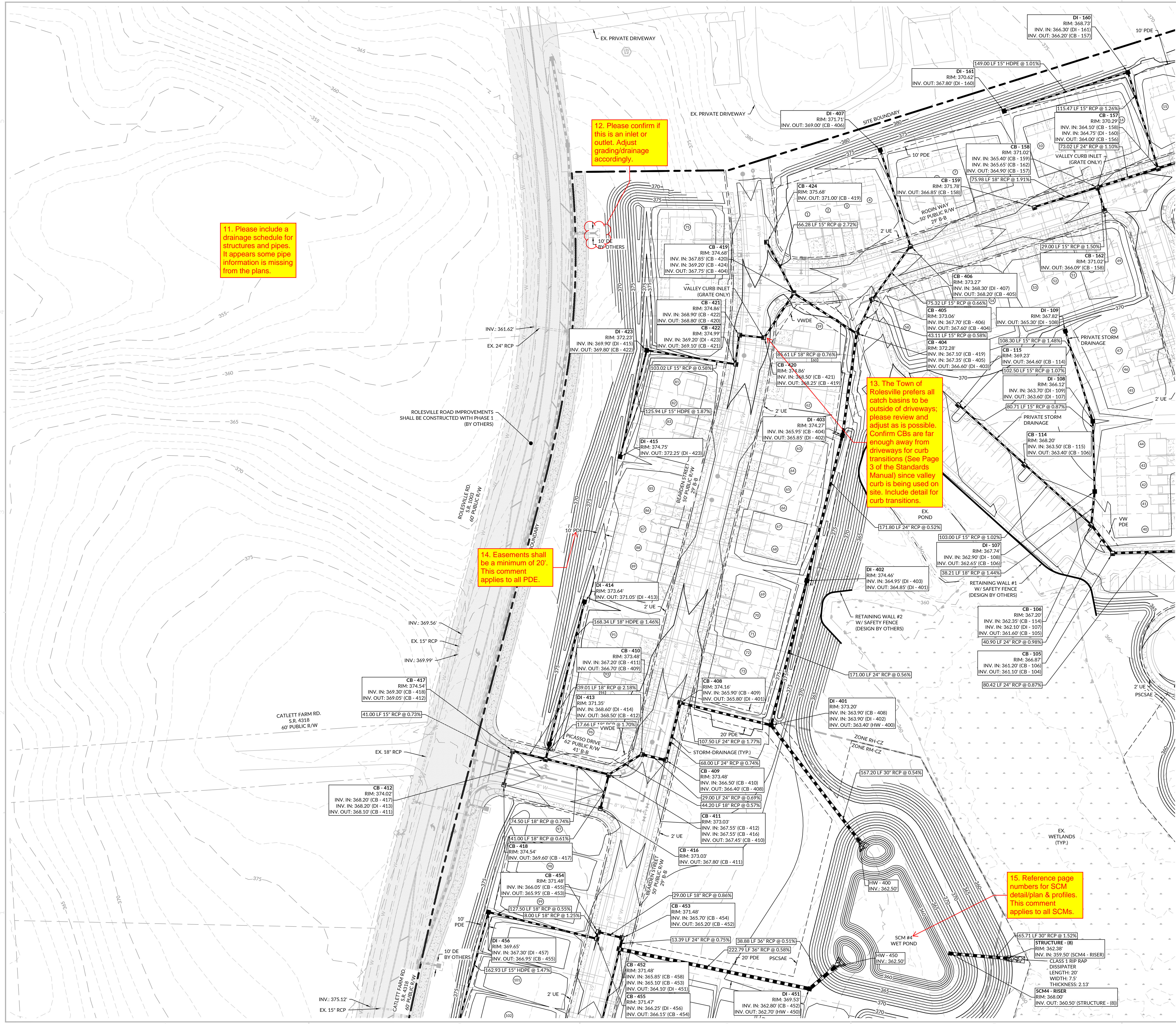
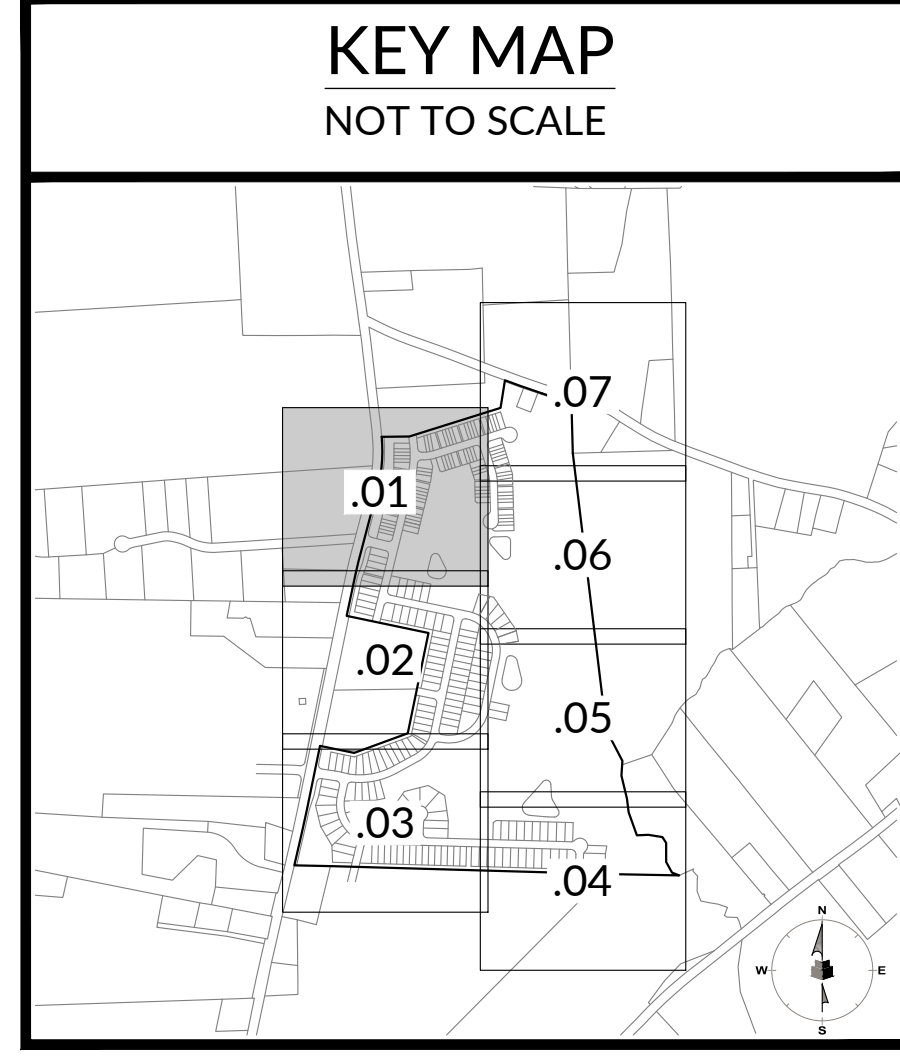
11. Please include a drainage schedule for structures and pipes. It appears some pipe information is missing from the plans.

12. Please confirm if this is an inlet or outlet. Adjust grading/drainage accordingly.

13. The Town of Rolesville prefers all catch basins to be outside of driveways; please review and adjust as is possible. Confirm CBs are far enough away from driveways for curb transitions (See Page 3 of the Standards Manual) since valley curb is being used on site. Include detail for curb transitions.

14. Easements shall be a minimum of 20'. This comment applies to all PDE.

15. Reference page numbers for SCM detail/plan & profiles. This comment applies to all SCMs.

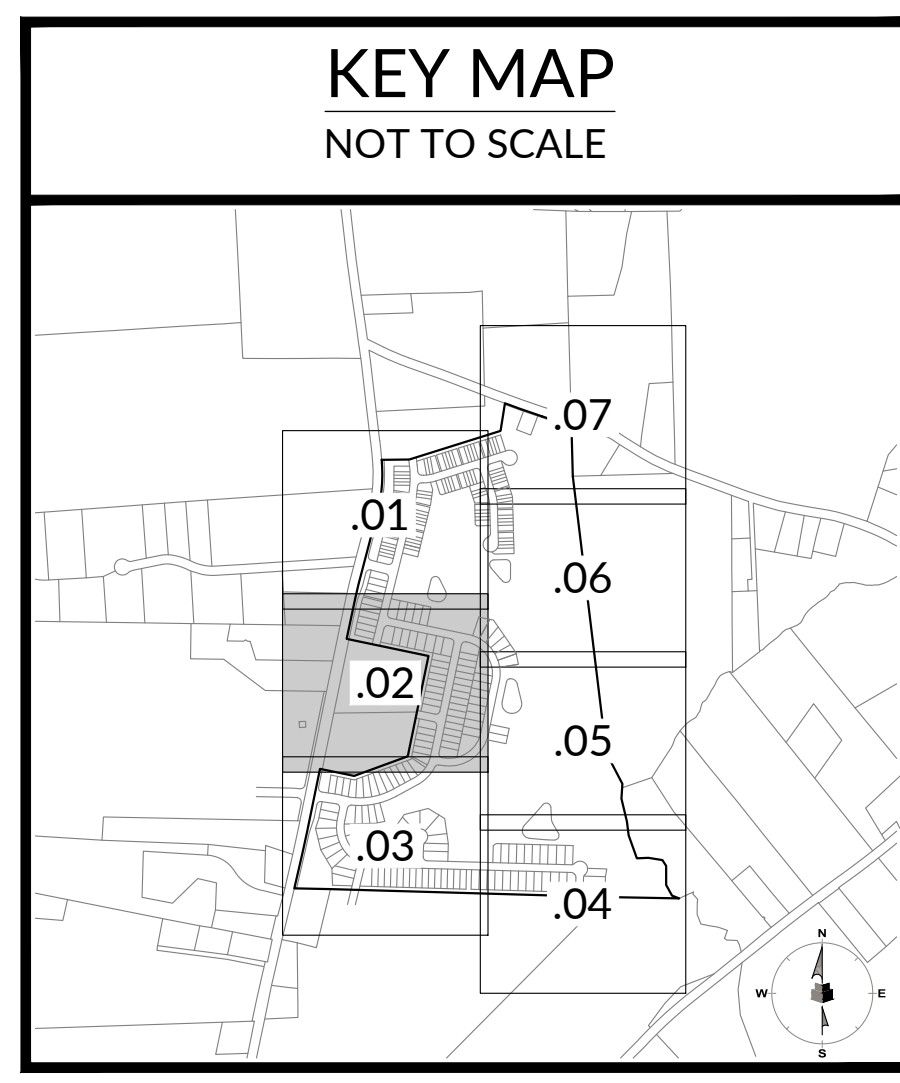


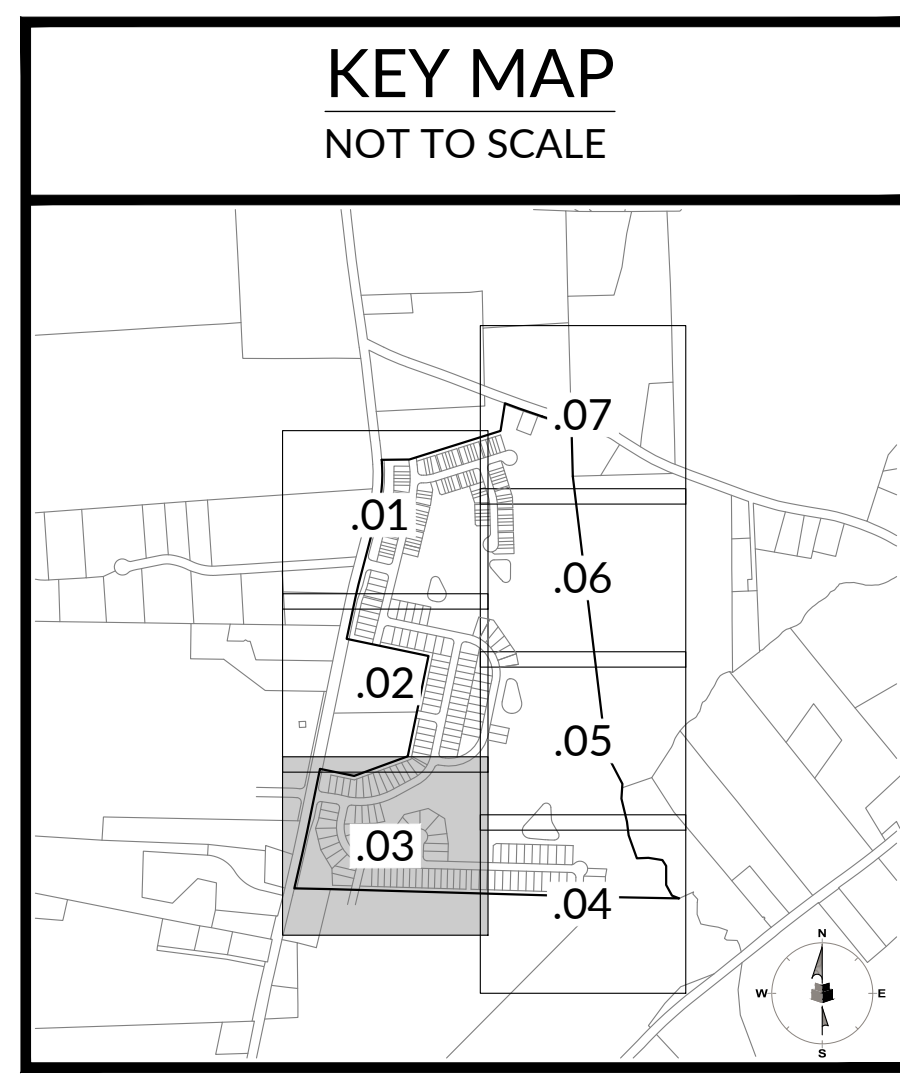
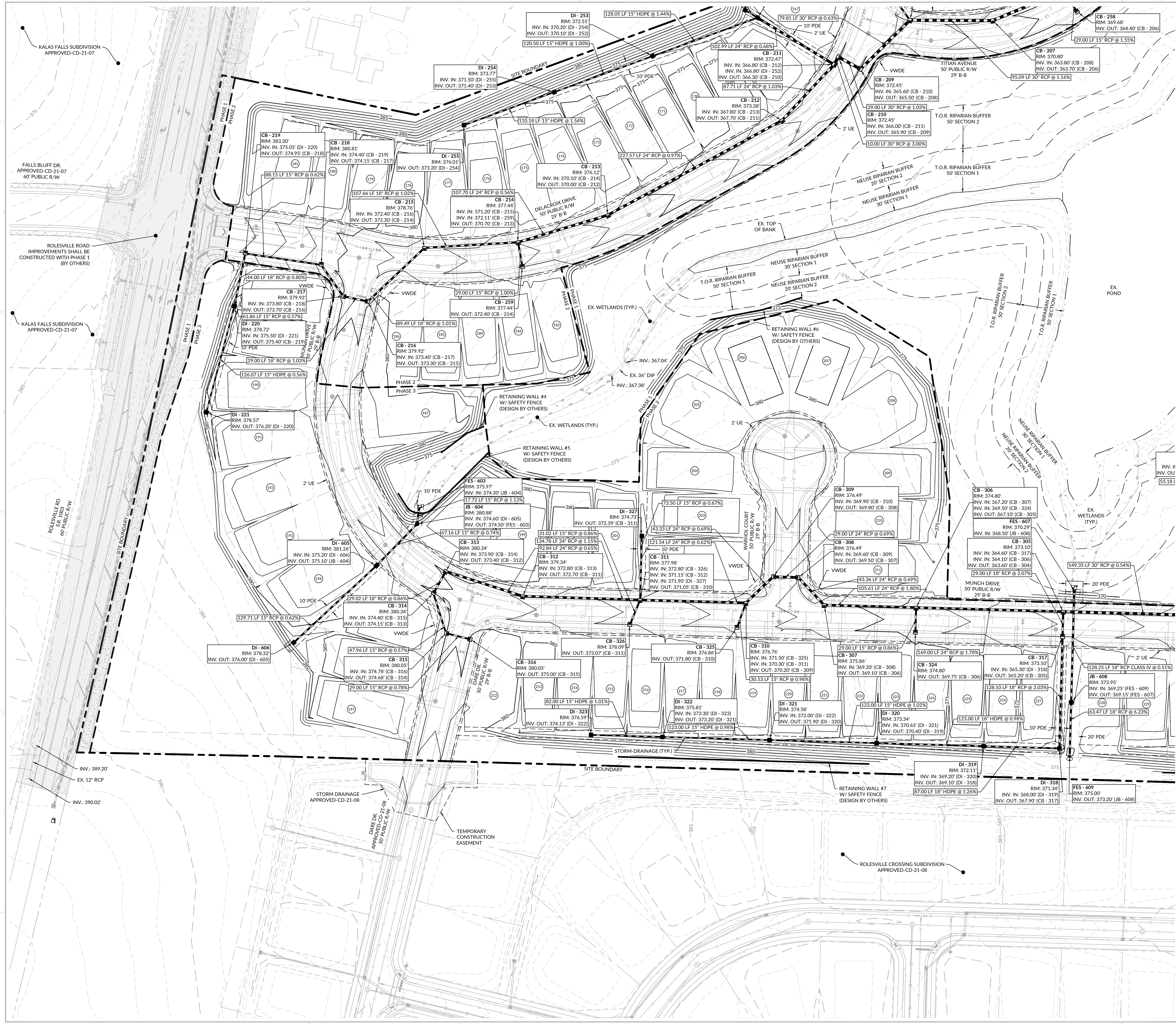
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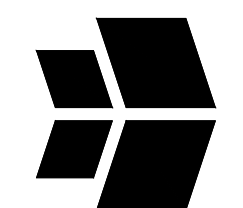
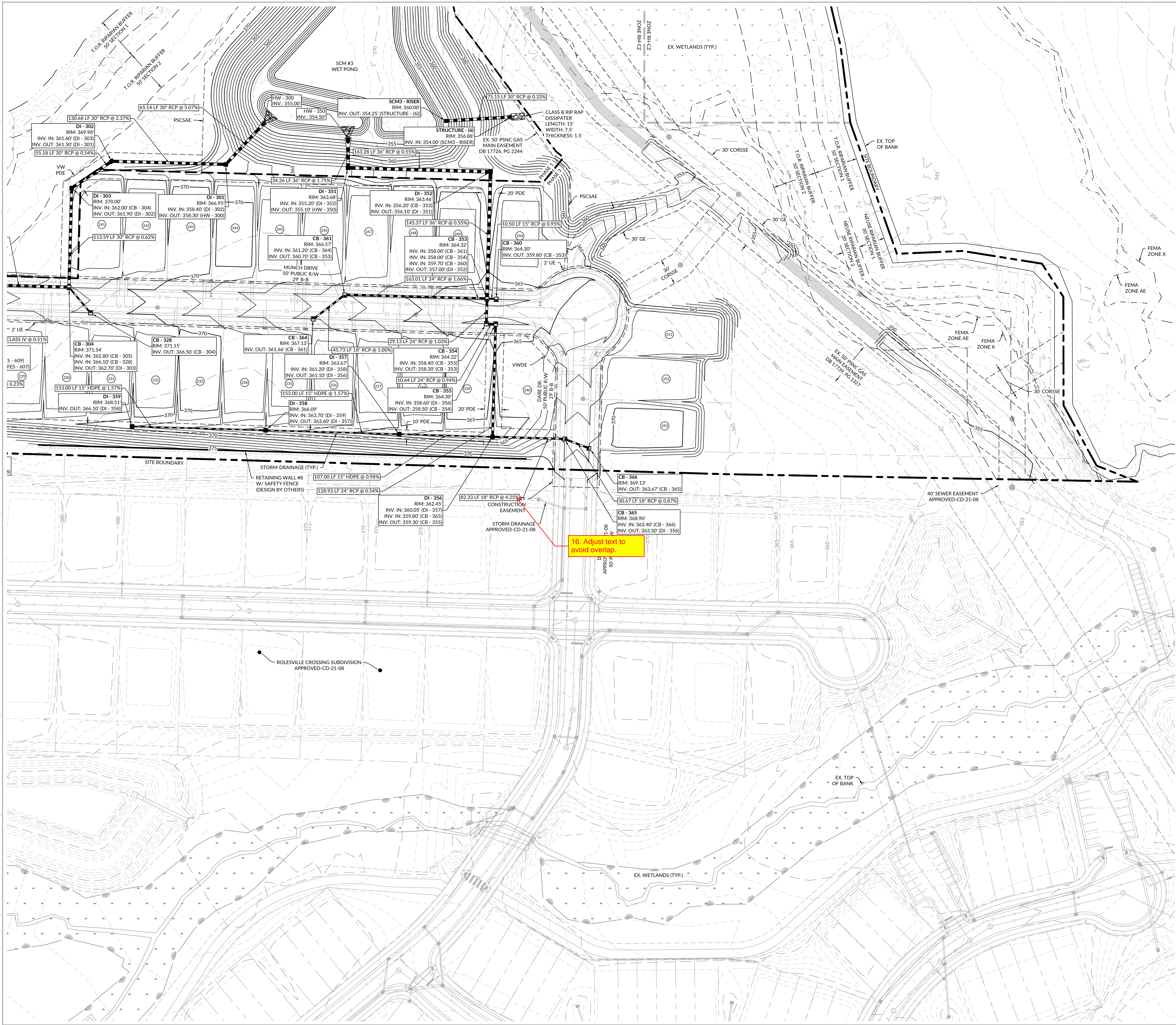
ROLESVILLE ROAD IMPROVEMENTS SHALL BE CONSTRUCTED WITH PHASE 1 (BY OTHERS)

KALAS FALLS SUBDIVISION APPROVED-CD-21-07





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**PRELIMINARY**  
 NOT APPROVED FOR CONSTRUCTION

INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

0 25 50  
 SCALE: 1 inch = 50 ft



WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

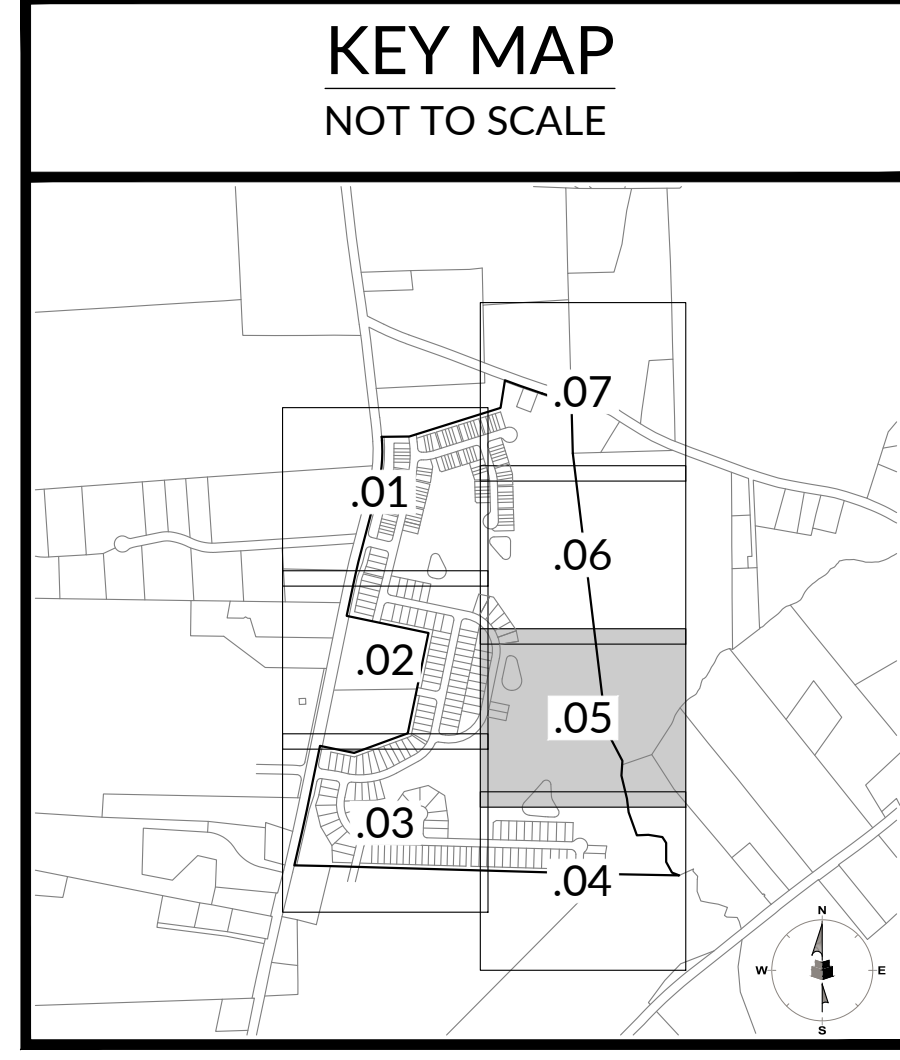
**STORM DRAINAGE PLAN**

**C5.04**

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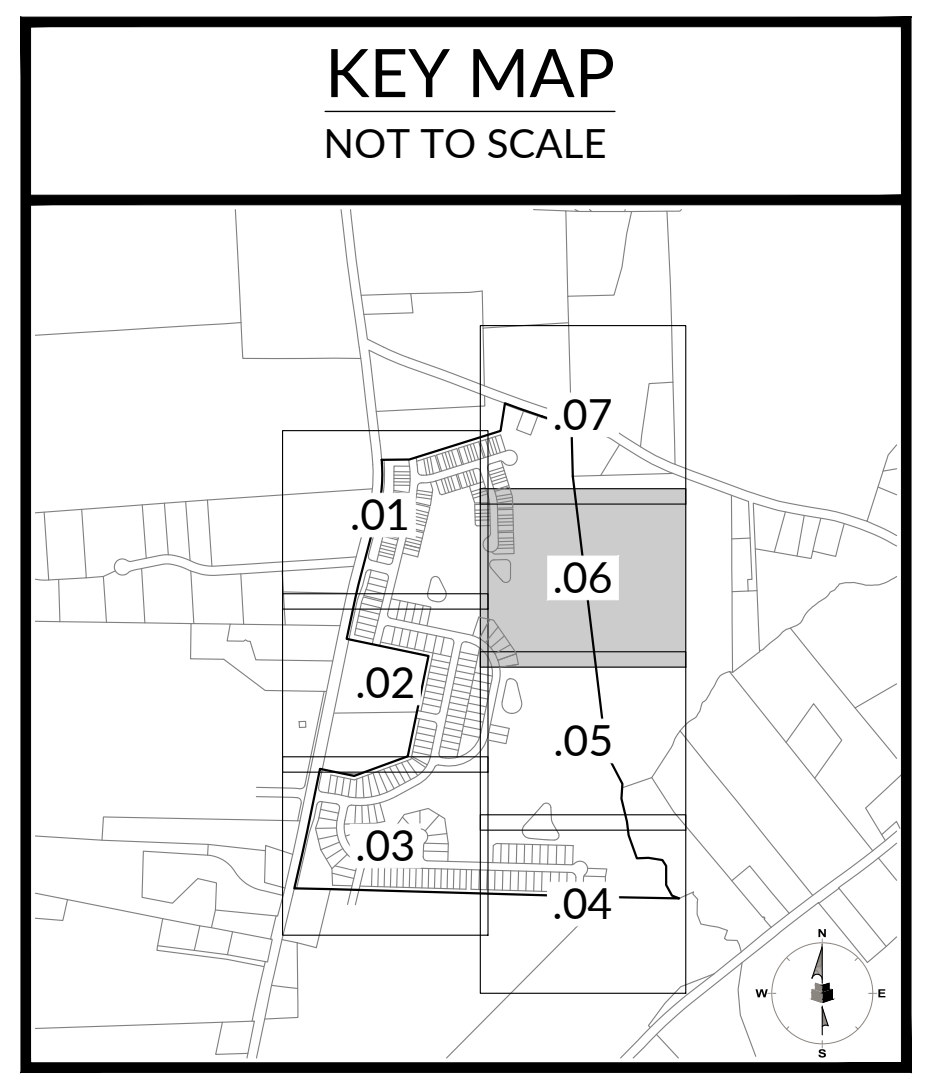
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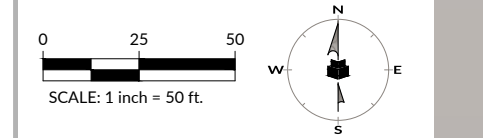
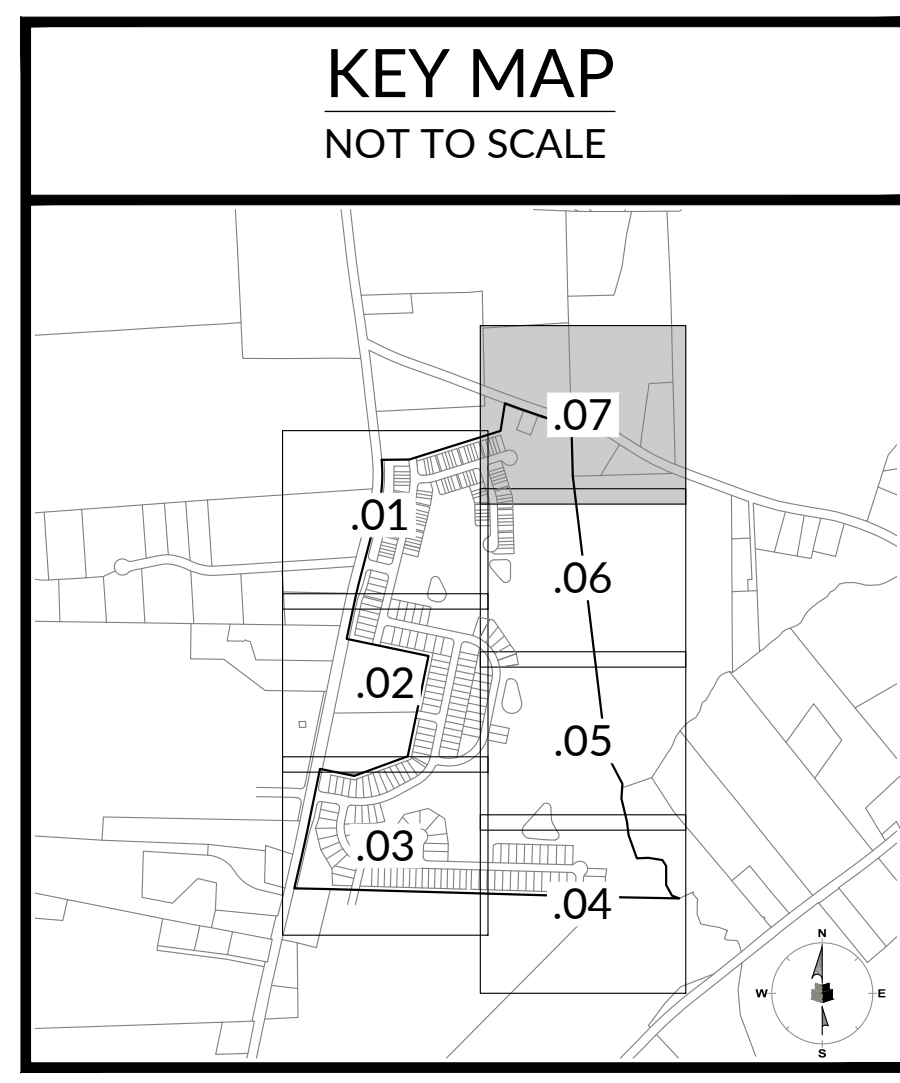
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WR JOB NUMBER	23-0045
DRN: WR	DGN: WR
CKD: WR	





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INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

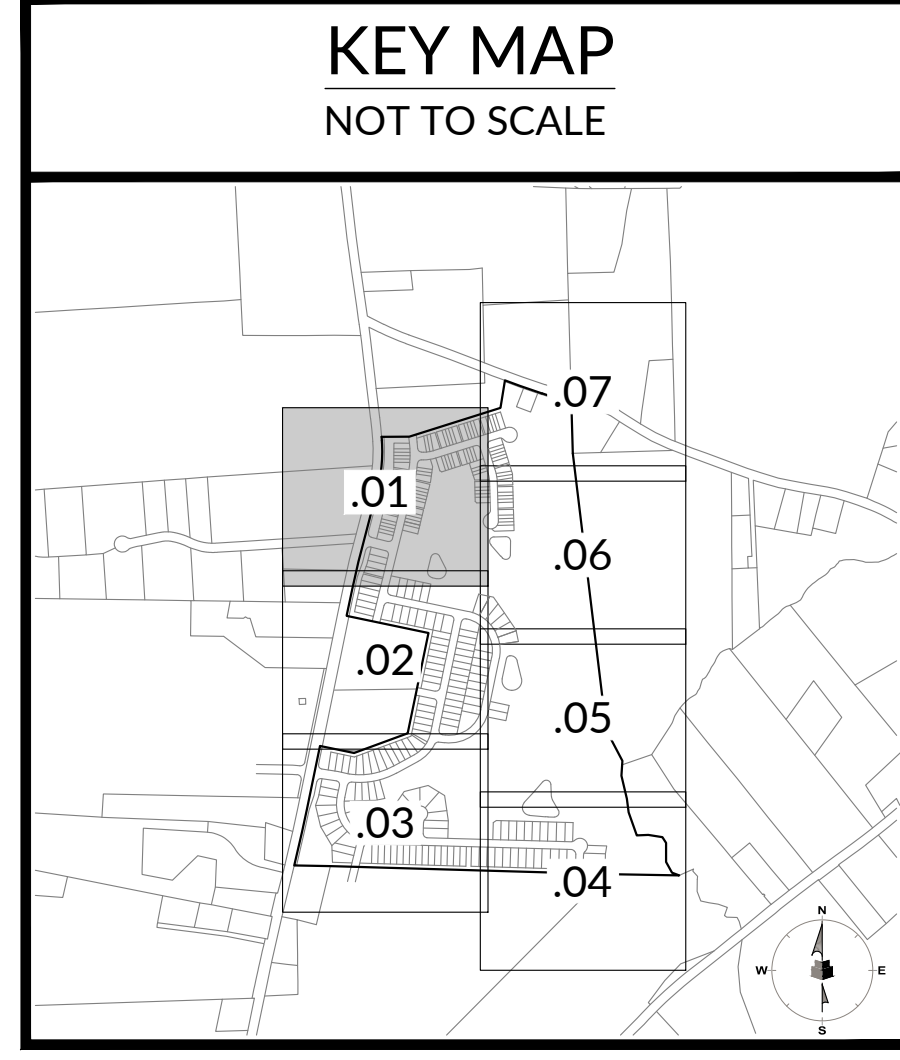
**STORM DRAINAGE PLAN**

**C5.07**



18. Confirm all pedestrian ramps provide ADA compliance with ramps and landings.

ROLESVILLE ROAD IMPROVEMENTS SHALL BE CONSTRUCTED WITH PHASE 1 (BY OTHERS)

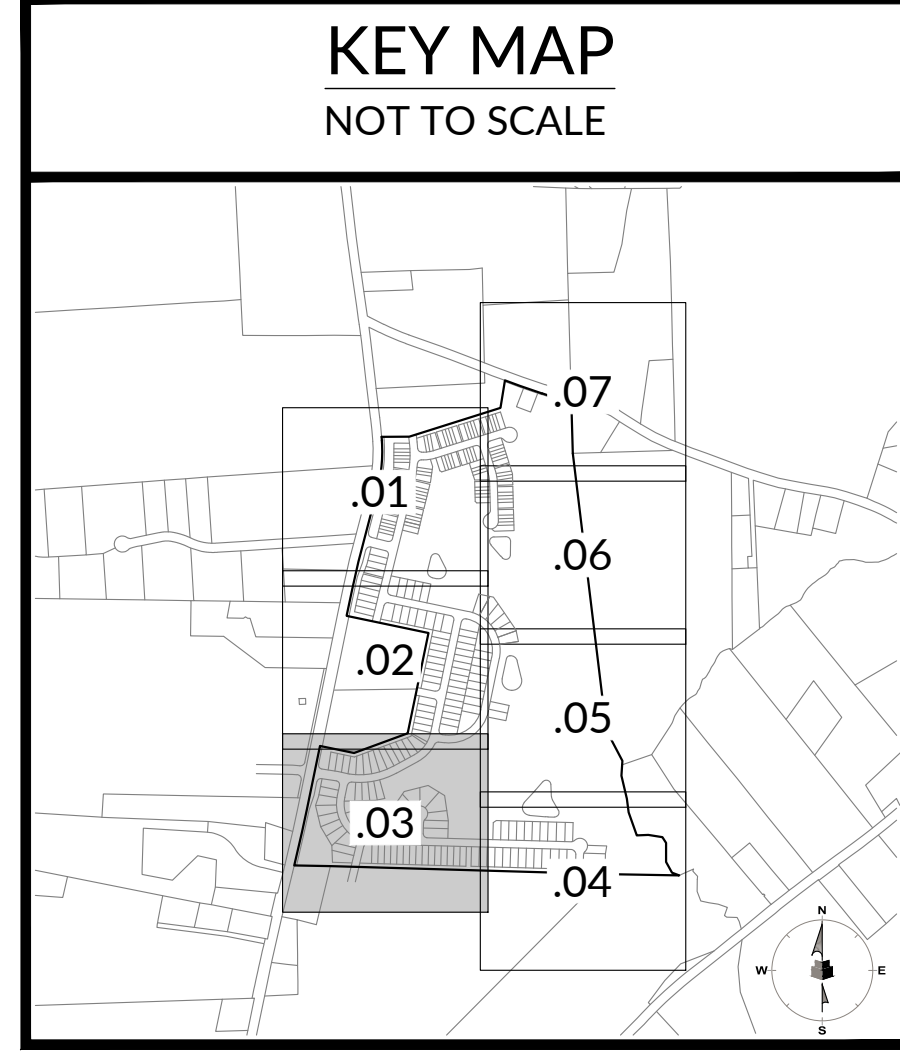


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J:\2024\04\04\04\_Plan\WithersRavenel\Assemblies\CID\Drawings\3603\Construction\C6.03 - C6.03 GRADING PLAN.dwg, Thursday, October 31, 2024, 11:16:57 AM - RHTH



**WithersRavenel**  
 167 E. Chatham St. | Suite 2101 | Cary, NC 27511  
 License #: F-1479 | T: 919.238.0330 | www.withersravenel.com

**PULTEGROUP**  
 1225 CRESCENT GREEN DRIVE, SUITE 200  
 CARY, NC 27518

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR**  
**CID-YR-XX**  
 ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

PRELIMINARY  
 NOT APPROVED FOR  
 CONSTRUCTION  
 ENGINEER'S SEAL  
 REFERENCE CODE

0 25 50  
 SCALE: 1 inch = 50 ft.

INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

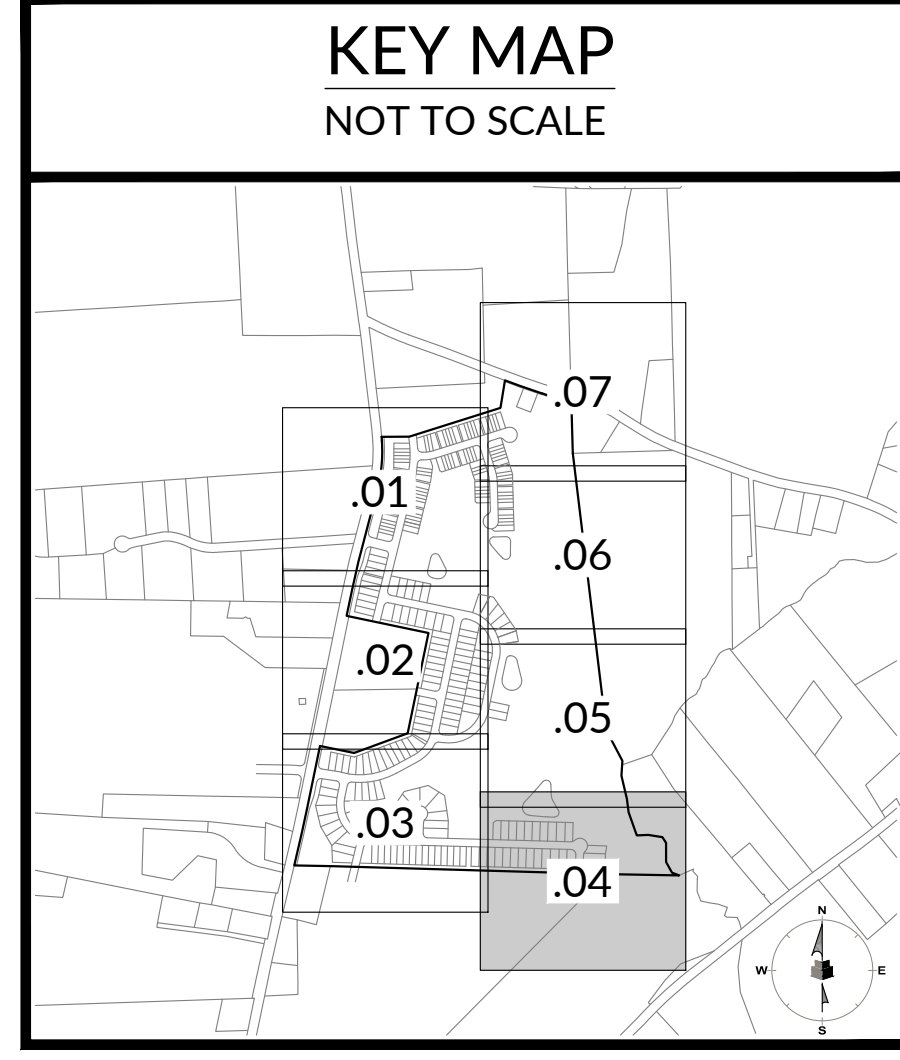
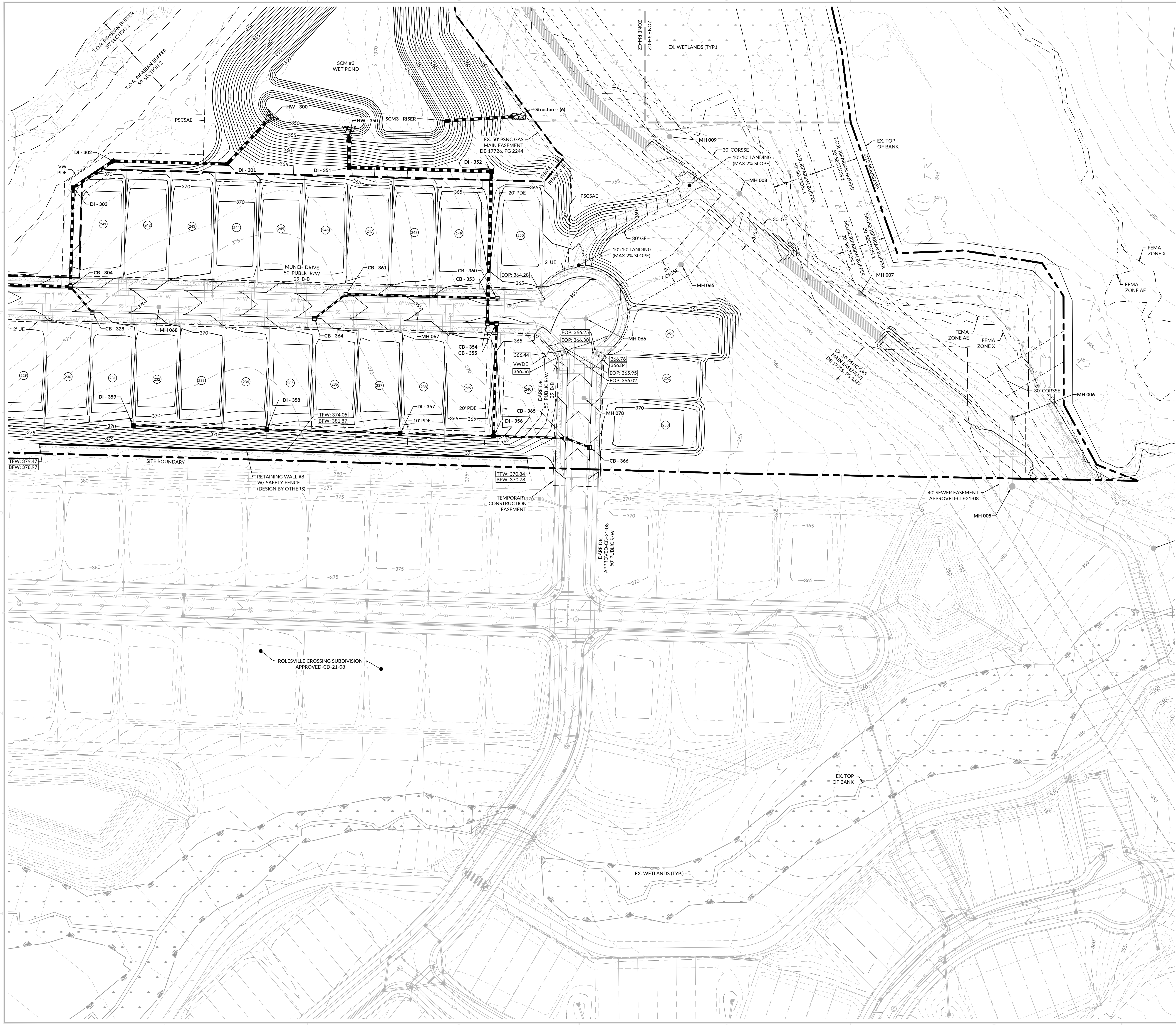
WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**GRADING PLAN**

**C6.03**

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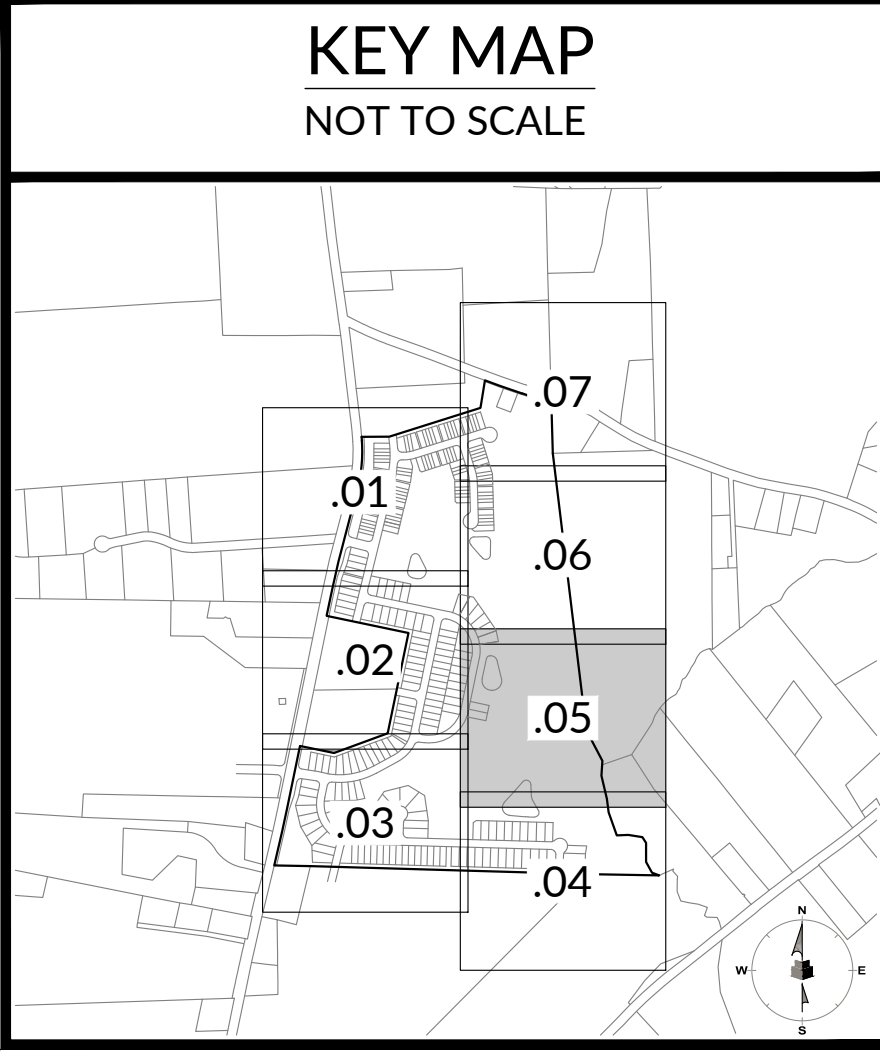
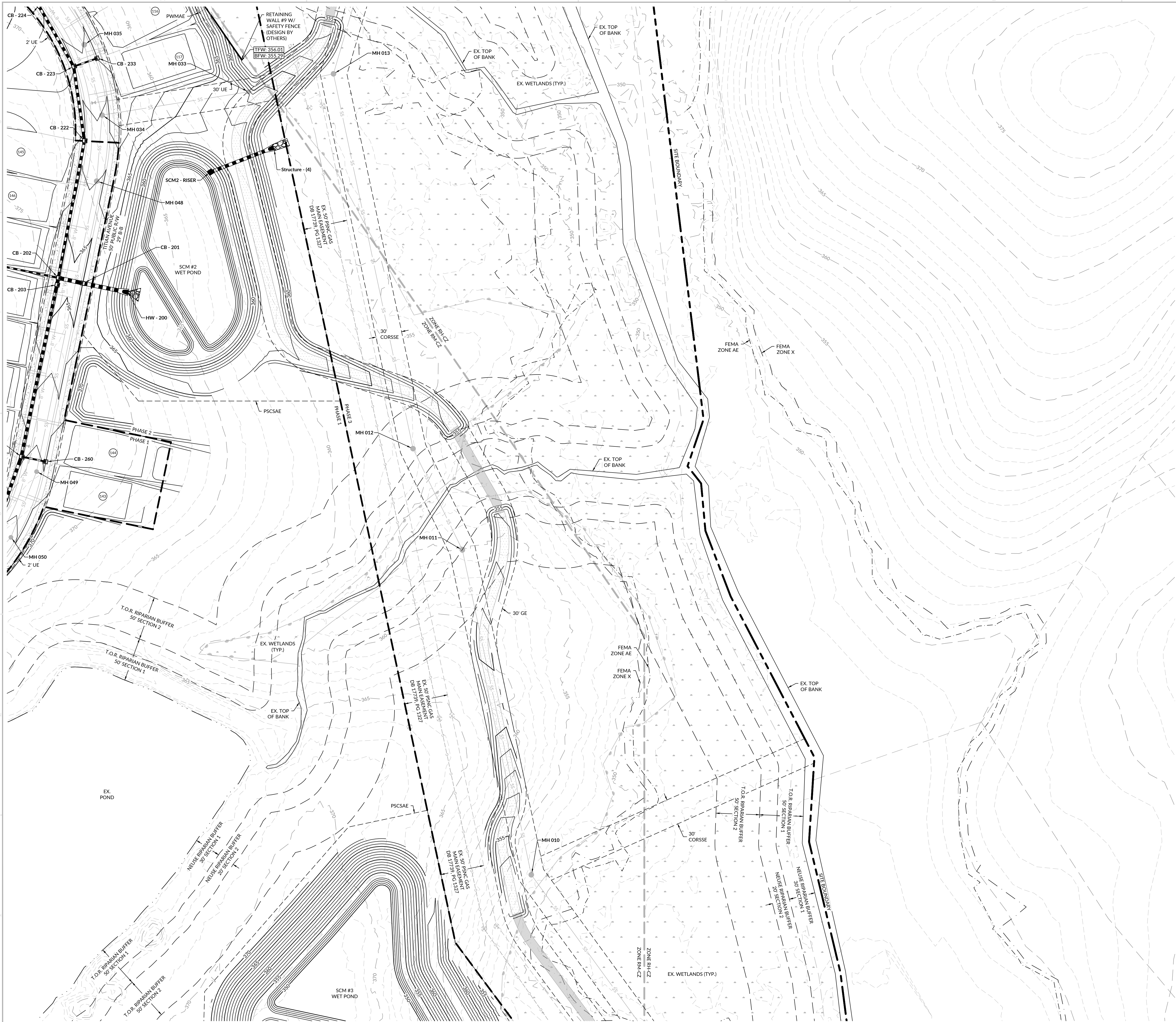
EST. 1983



J:\23\0045\Plan\WithersRavenel\Assemblies\CID\Drawings\304\Construction\C6.04\GRADING PLAN.dwg Thursday, October 31, 2024 11:17:04 AM - RETH

EST. 1993

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**CONSTRUCTION INFRASTRUCTURE DRAWINGS**  
**BROADMOOR**  
**CID-YR-XX**

ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

**PRELIMINARY**  
NOT APPROVED FOR  
CONSTRUCTION

SCALE: 1 inch = 50 ft.

INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

**WithersRavenel**  
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**PULTEGROUP**  
1225 CRESCENT GREEN DRIVE, SUITE 200  
CARY, NC 27518

WR JOB NUMBER: 23-0045  
DRN: WR DGN: WR CKD: WR

**GRADING PLAN**

**C6.05**

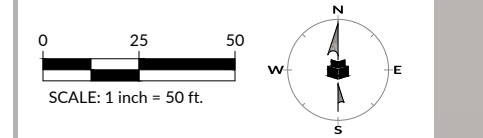
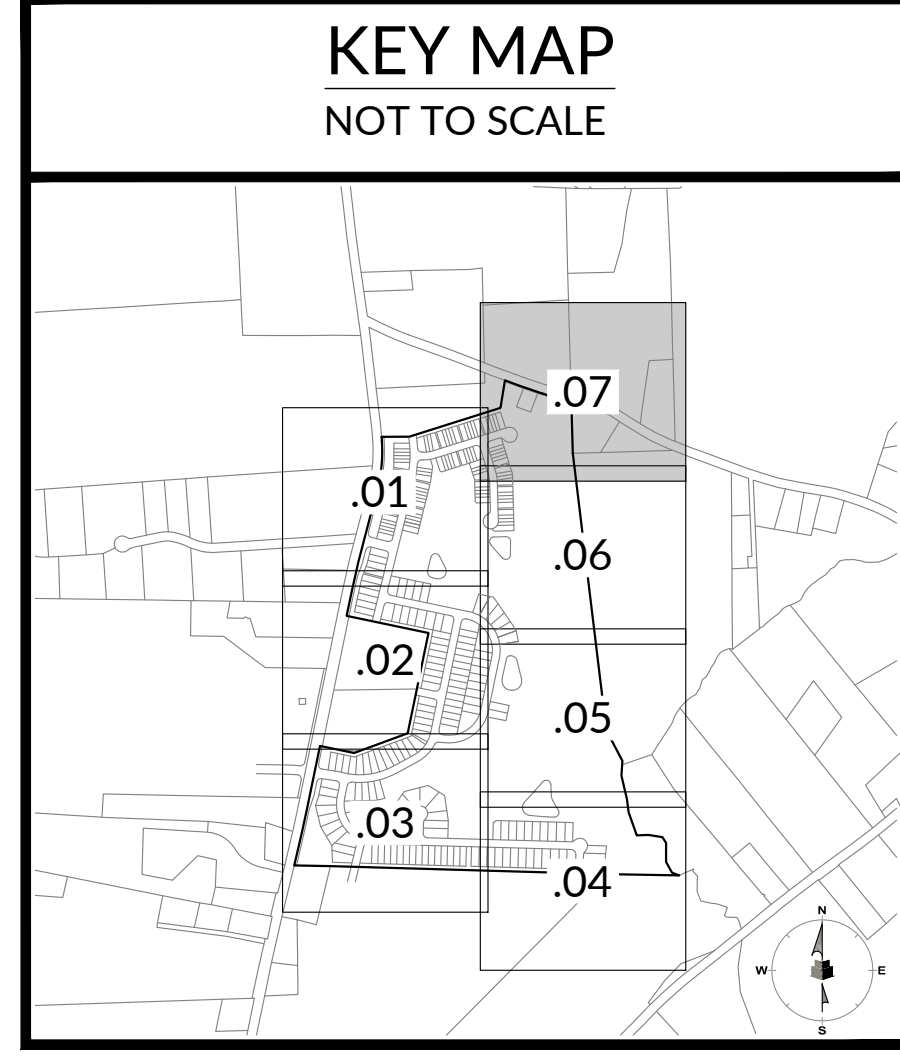
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J:\23\0045\Plan\WithersRavenel\Assemblies\CID\Drawings\300\Construction\C6.05.dwg (D:\GAD\GAD\PLAN.dwg) Thursday, October 31, 2024 11:17:14 AM - RETH





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INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

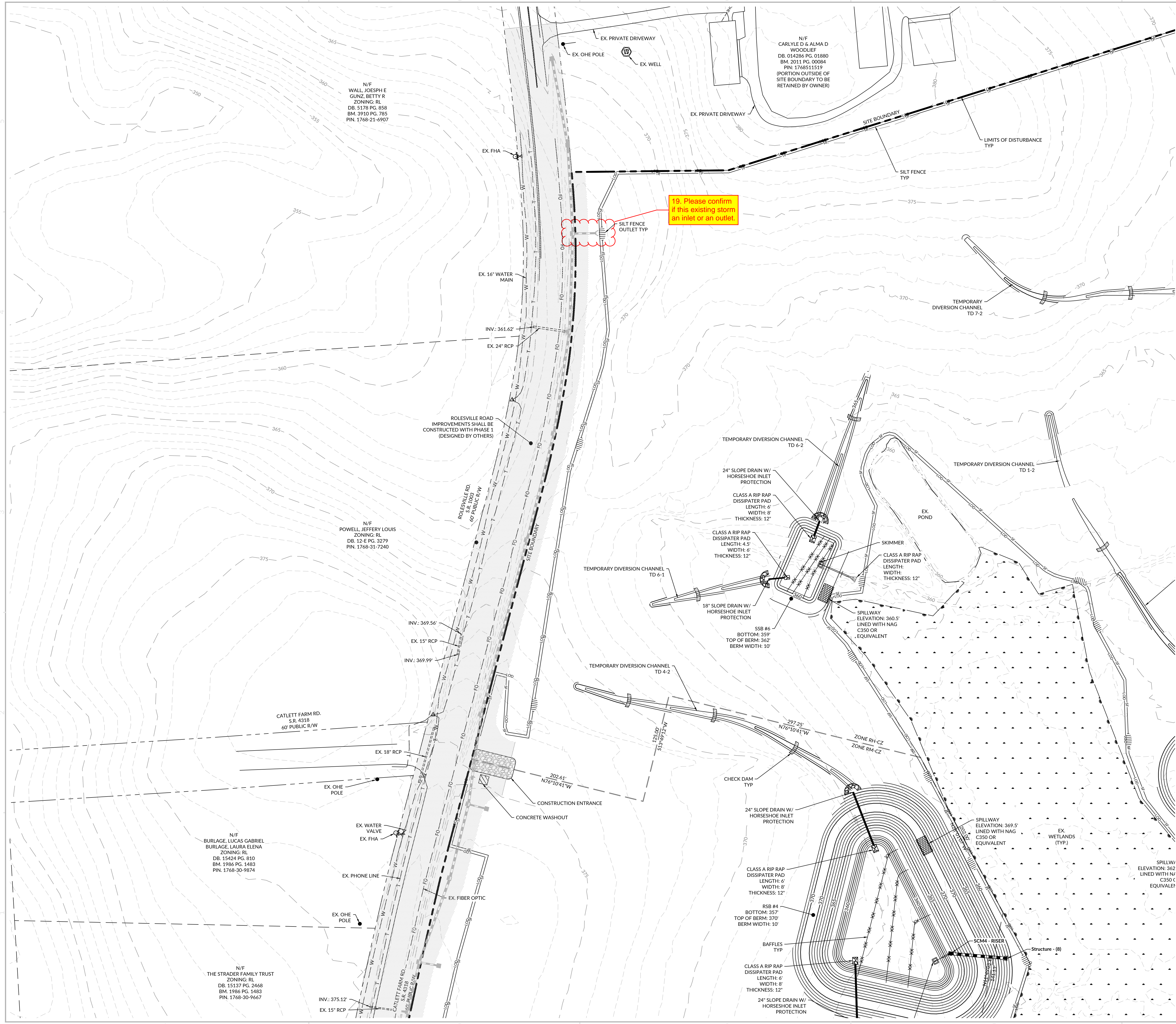
WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**GRADING PLAN**

**C6.07**







N/F WALL, JOSEPH E  
GUNZ, BETTY R  
ZONING: RL  
DB. 5178 PG. 858  
BM. 3910 PG. 785  
PIN. 1768-21-6907

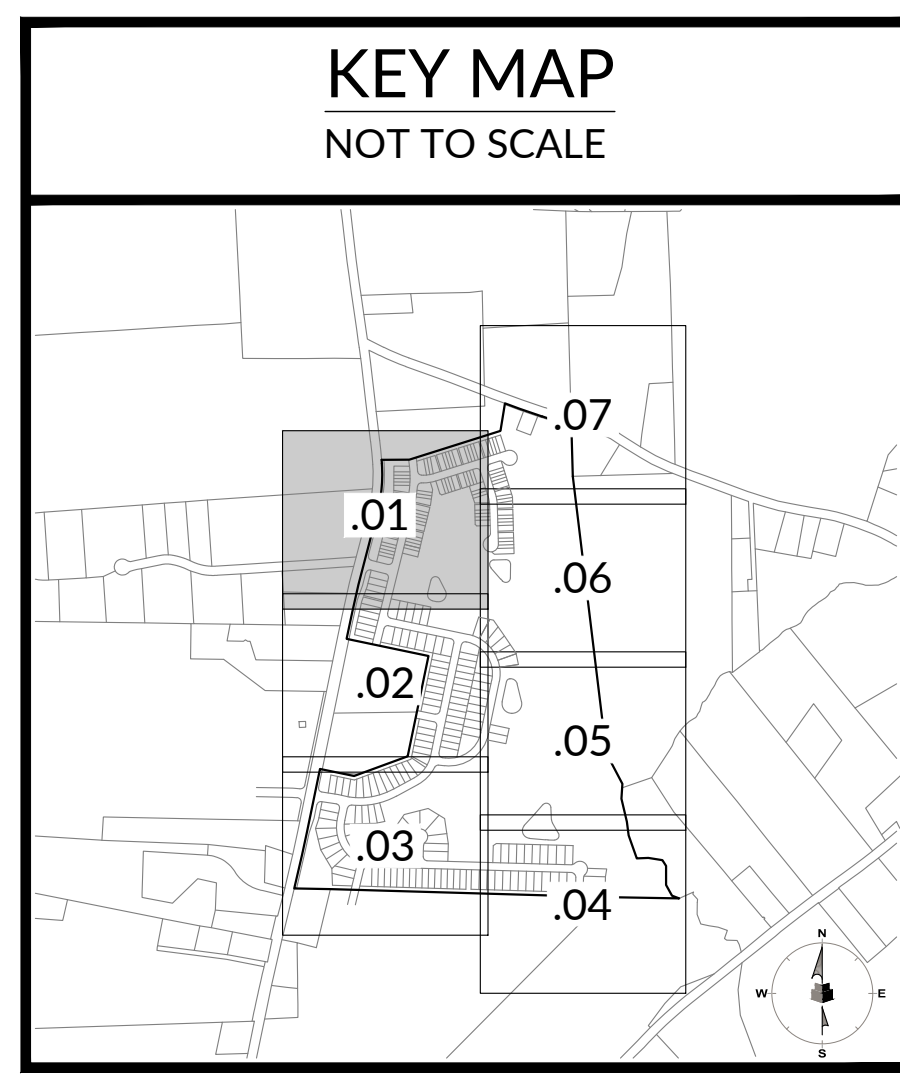
N/F CARLYLE D & ALMA D  
WOODLIEF  
DB. 014286 PG. 01880  
BM. 2011 PG. 00084  
PIN: 1768511519  
(PORTION OUTSIDE OF  
SITE BOUNDARY TO BE  
RETAINED BY OWNER)

N/F POWELL, JEFFERY LOUIS  
ZONING: RL  
DB. 12-E PG. 3279  
PIN. 1768-31-7240

N/F BURLAGE, LUCAS GABRIEL  
BURLAGE, LAURA ELENA  
ZONING: RL  
DB. 15424 PG. 810  
BM. 1986 PG. 1483  
PIN. 1768-30-9874

N/F THE STRADER FAMILY TRUST  
ZONING: RL  
DB. 15137 PG. 2468  
BM. 1986 PG. 1483  
PIN. 1768-30-9667

19. Please confirm  
if this existing storm  
inlet or an outlet.

















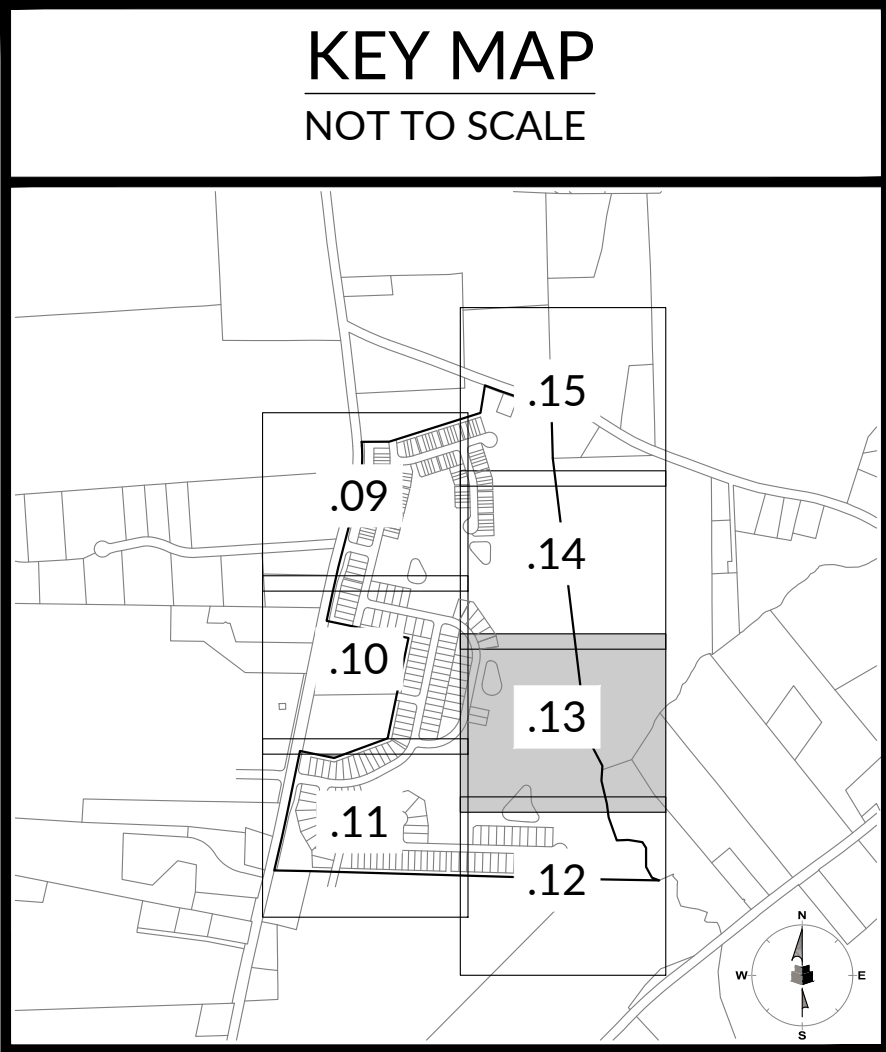




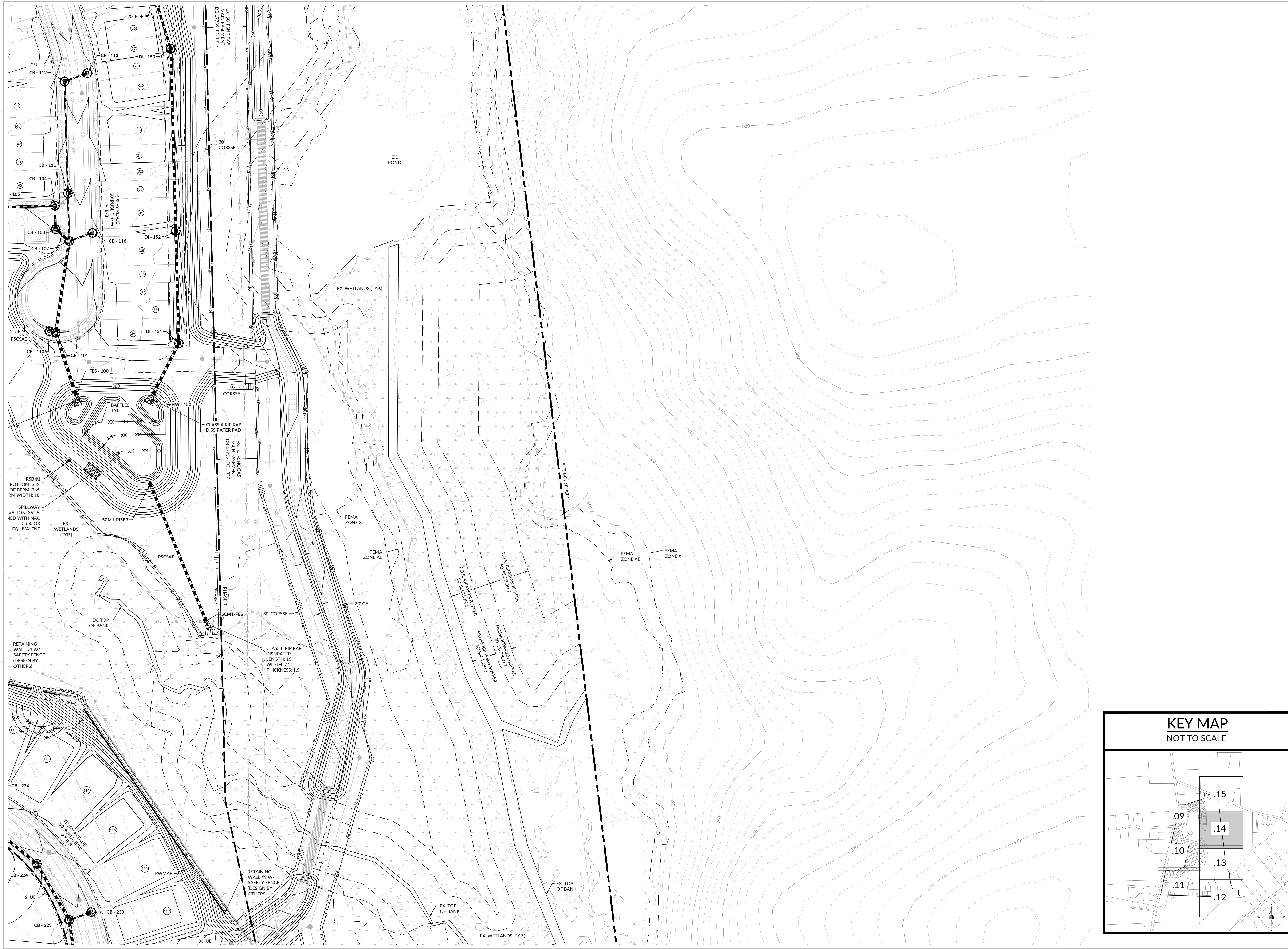




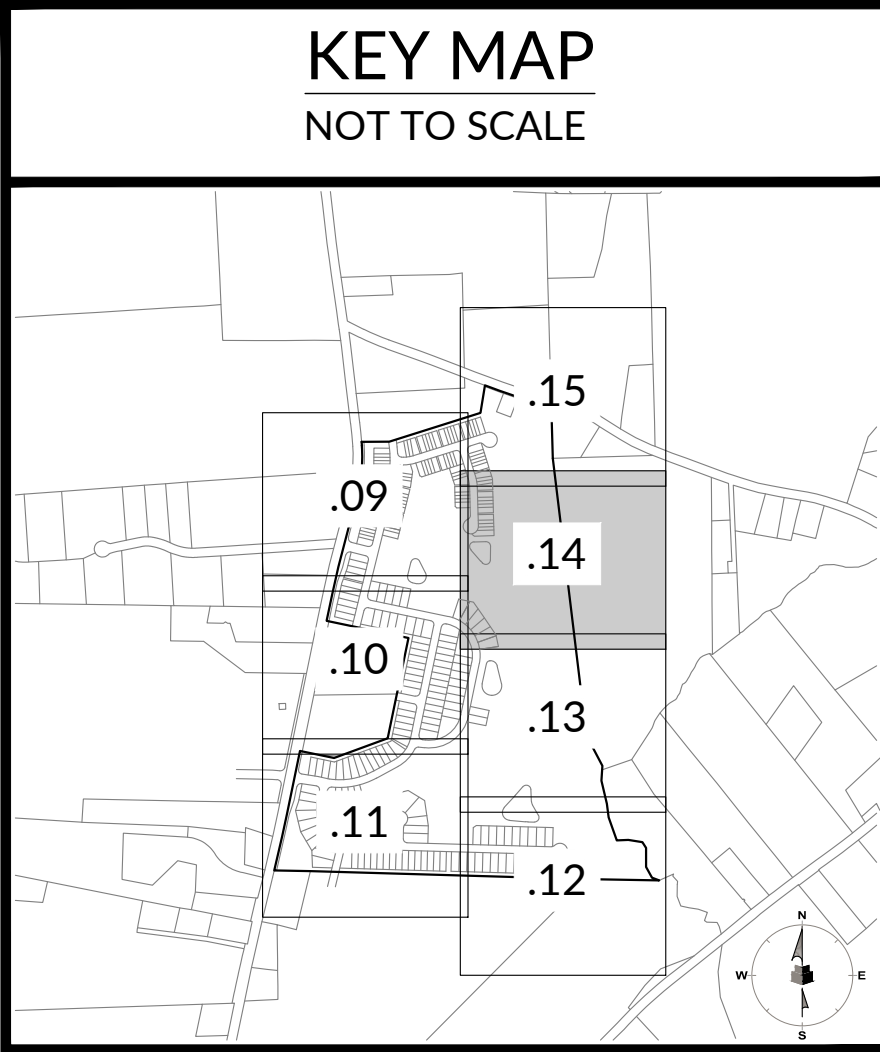




J:\23-0045\p101\withers\_ravenel\working\cadd\c713\EROSION\_CONTROL\_PLAN\_STAGE\_2.dwg Thursday, October 31, 2024 11:21:59 AM J:\BMA\RTS



1/23/2024 10:45 AM, w:\drawing\c714\erosion\_control\plan\stage\_2.dwg, Thursday, October 31, 2024 11:21:17 AM, JLM:WTE





**EROSION CONTROL NOTES:**

- RECEIVING WATERSHED: BUFFALO CREEK
- TOTAL LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE = 66 ACRES.
- ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL STANDARDS AND PRACTICES PRESCRIBED BY THE STATE OF NORTH CAROLINA AND WAKE COUNTY, WHERE STANDARDS AND PRACTICES CONFLICT, THE MORE STRINGENT SHALL APPLY.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM THE TOWN OF ROLESVILLE, NCDWR, USACE, AND/OR FEMA FOR ANY RIPARIAN BUFFER, WETLANDS, AND/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- NCDOT ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK OR GRADING (INCLUDING EXTENSIONS) WITHIN STATE RIGHT-OF-WAY PRIOR TO CONSTRUCTION.
- THIS PROJECT SHALL BE SUBJECT TO MONITORING REQUIREMENTS IN ACCORDANCE WITH SECTION II.B(3) OF THE MOST RECENT NCDENR-DEMLR GENERAL PERMIT NCG 01000.
- THE CONTRACTOR SHALL FAITHFULLY MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO ENSURE THAT NO SILT LEAVES THE PROJECT SITE AND ENTERS ANY NATURAL STREAM OR WATERWAY AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- THE CONTRACTOR IS TO CONDUCT A WEEKLY SITE INSPECTION, AFTER EACH RAINFALL EVENT IN EXCESS OF 1-INCH AND PERFORM ANY NECESSARY MAINTENANCE.
- ANY AREA DISTURBANCES BY THE CONTRACTOR NOT SHOWN ON THE CONSTRUCTION DRAWINGS ARE TO BE PERMITTED THROUGH THE APPROPRIATE PERMITTING AGENCY.
- PURSUANT TO G.S. 113A-57(2), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICE OR STRUCTURE.
- ALL SLOPES 3:1 OR GREATER SHALL BE LINED WITH EROSION CONTROL MATTING.
- NPDES GROUND COVER REQUIREMENTS SHALL BE FOLLOWED IN ADDITION TO STANDARD NCDENR EROSION CONTROL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF VEGETATION ON ALL DISTURBED AREAS AND MEETING ALL NPDES FINAL STABILIZATION REQUIREMENTS.
- PROVIDE A ROLLED EROSION CONTROL PRODUCT (RECP) TO STABILIZE DISTURBED DITCHES IF ANY SIGNS OF SCOURING OR EVIDENT, EVEN IF NO RECP HAS BEEN SHOWN ON THE CONSTRUCTION DRAWINGS.
- NO STOCK OR WASTE PILES ARE ALLOWED WITHIN 50' OF STREAMS OR DRAINAGE STRUCTURES.
- WHERE DEWATERING OF TRENCHES, PITS, AND OTHER EXCAVATIONS BECOMES NECESSARY THE DISCHARGE MUST BE DIVERTED TO A SEDIMENT FILTER BAG BEFORE BEING DISCHARGED TO THE GROUND.
- ADEQUATE EROSION CONTROL MEASURES MUST BE INSTALLED, MAINTAINED, AND ADJUSTED AS NEEDED DURING THE DEMOLITION OR CLEARING AND GRUBBING PHASES AS WELL AS THROUGHOUT THE LIFE OF THE PROJECT AND UNTIL PERMANENT VEGETATION IS ESTABLISHED.
- IN INSTANCES WHERE THE DIFFERENCE IN HEIGHT OF EMERGENCY SPILLWAY AND BOTTOM ELEVATION OF A POND IS GREATER THAN 5 FEET, DOUBLE-HEIGHT BARRIERS ARE REQUIRED.
- CONCRETE WASHOUTS SHOWN FOR CURB & GUTTER AND SIDEWALK USE ONLY.
- EXISTING TEMPORARY SEDIMENT BASIN SHALL BE REPAIRED/MAINTAINED AS NECESSARY TO MEET REQUIREMENTS OF THIS PROJECT.
- SCM FOREBAYS SHALL NOT BE REQUIRED WHILE SCM IS ACTING AS AN EROSION CONTROL DEVICE.
- VELOCITY DISSIPATORS SHALL BE INSTALLED AT THE END OF EACH FENCE AND SHALL HAVE A FILTER FABRIC UNDERLINER.
- THE CONTRACTOR SHALL INSTALL TEMPORARY DIVERSION BERMS ROUTING CONSTRUCTION RUNOFF TO APPROPRIATELY SIZED SLOPE DRAINS WITH INLET/OUTLET PROTECTION WHERE NECESSARY OR AS REQUIRED BY WAKE COUNTY AT TOP OF SLOPES DURING/AFTER SLOPE FORMATION TO PREVENT SLOPE EROSION.

**CONSTRUCTION SEQUENCE:**

- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL CONSULTANT, OBTAIN A LAND DISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEE TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
- CALL ENVIRONMENTAL CONSULTANT FOR AN ONSITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT TO OBTAIN A CERTIFICATE OF COMPLIANCE.
- BEGIN CLEARING AND GRUBBING, MAINTAIN DEVICES AS NEEDED, ROUGH GRADE SITE.
- INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME FRAMES.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL ENVIRONMENTAL CONSULTANT FOR AN INSPECTION.
- IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARRE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
- WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT, OBTAIN A CERTIFICATE OF COMPLETION.

**SEED BED PREPARATION:**

- CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, WITH STOCKPILED TOPSOIL. CONTRACTOR SHALL RESERVE SUFFICIENT TOPSOIL FOR SEEDBED PREPARATION.
- RIP THE ENTIRE AREA TO 6 INCH DEPTH.
- REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPER-PHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW).
- CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
- SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
- MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
- INSPECT ALL SEEDBED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND IS LESS THAN 40% ESTABLISHED, THE ENTIRE AREA SHALL BE RESEEDING ACCORDING TO SPECIFICATIONS USING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
- CONSULT A CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

**\*APPLY:**

AGRICULTURAL LIMESTONE	2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)
FERTILIZER	1,000 LB/ACRE - 10-10-10
SUPER-PHOSPHATE	500 LB/ACRE - 20% ANALYSIS
MULCH	2 TONS/ACRE - SMALL GRASS STRAW
ANCHOR	ASPHALT EMULSION @ 300 GALS/ACRE

**SEEDING AND MULCHING:**

SEEDING AND MULCHING SHALL BE CARRIED OUT IMMEDIATELY BEHIND CONSTRUCTION IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

**SHOULDERS, SIDE DITCHES, SLOPES (3:1 MAX)**

DATE	TYPE	PLANTING/ACRE
AUG 15 - NOV 1	TALL FESCUE	300 LBS.
NOV 1 - MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS.
MAR 1 - APR 15	TALL FESCUE	300 LBS.
APR 15 - JUNE 30	HULLED COMMON BERMU DA GRASS	25 LBS.
JULY 15 - AUG 15	TALL FESCUE AND *** BROWN TOP MILLET OR *** SORGHUM-SUDAN HYBRIDS	35 LBS.

**SLOPES (3:1 TO 2:1)**

DATE	TYPE	PLANTING/ACRE
MAR 1 - APRIL 15	ADD TALL FESCUE AND	120 LBS.
MAR 1 - JUNE 30	ADD WEEPING LOVE GRASS OR	10 LBS.
MAR 1 - JUNE 30	ADD HULLED COMMON BERMU DA GRASS	25 LBS.
JUNE 1 - SEP 1	*** TALL FESCUE AND *** BROWN TOP MILLET OR *** SORGHUM-SUDAN HYBRIDS	35 LBS.
SEP 1 - MAR 1	TALL FESCUE	30 LBS.
NOV 1 - MAR 1	ADD ABRUZZI RYE	120 LBS.
		25 LBS.

\*\*\*TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOWING. OTHERWISE FESCUE MAY BE SHADED OUT.

A CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE SHALL BE CONSULTED FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE. ANY VARIATION FROM THIS LIST SHALL BE PRE-APPROVED BY THE TOWN.

**GROUND STABILIZATION CHART**

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
DIKES, SWALES, DITCHES, AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

**MAINTENANCE PLAN:**

- ALL EROSION AND SEDIMENTATION CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
- SEDIMENT WILL BE REMOVED FROM SEDIMENT TRAP DEVICES WHEN STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERLY.
- SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES APPROXIMATELY 6-INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
- INLET PROTECTION DEVICES SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT. DAMAGED SILT FENCE SHALL BE REPLACED AND GRAVEL SHALL BE CLEANED OR REPLACED WHEN INLET NO LONGER DRAINS PROPERLY.
- ALL SEEDBED AREAS WILL BE FERTILIZED, RE-SEED AS NECESSARY, AND MULCHED ACCORDING TO THE SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

**SEEDING NON-WETLAND AREAS**

**A. TEMPORARY NON-WETLAND SEEDING**

- SEEDING SCHEDULE

TEMPORARY SEEDING OF NON-WETLAND AREAS		
DATES	SEED MIXTURE SPECIES	APPLICATION RATE (LB/ACRE)
JAN 1 - MAY 1	RYE GRAIN	120
MAY 1 - AUG 15	GERMAN MILLET	40
AUG 15 - DEC 30	RYE GRAIN	120

**SOIL AMENDMENTS**

- FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.
- MULCH
    - APPLY 4,000 LB/ACRE STRAW, ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.
  - MAINTENANCE
    - WINTER, EARLY SPRING, AND SUMMER
    - REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE, AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.
  - FALL
    - REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. TEMPORARY SEEDING MUST BE FOLLOWED UP WITH PERMANENT SEEDING AS SOON A PRACTICAL.

**B. PERMANENT NON-WETLAND SEEDING**

- SEED ALL DISTURBED AREAS OF CONSTRUCTION.
- NO SEEDING SHOULD BE UNDERTAKEN IN WINDY OR UNFAVORABLE WEATHER, WHEN THE GROUND IS TOO WET TO RAKE EASILY, WHEN IT IS IN A FROZEN CONDITION, OR TOO DRY.
- THE SUBGRADE OF ALL AREAS TO BE SEEDDED SHALL BE RAKED AND ALL RUBBISH, STICKS, ROOTS, AND STONES LARGER THAN 2 INCHES SHALL BE REMOVED.
- THE SUBGRADE SHALL BE SCARIFIED OR OTHERWISE LOOSENE TO A MINIMUM DEPTH OF 4 INCHES.
- APPLY GROUND AGRICULTURAL LIMESTONE AT A RATE OF 3,000 - 4,000 LB/ACRE.
- APPLY 10-10-10 FERTILIZER AT A RATE OF 1,000 LB/ACRE. FERTILIZER SHALL BE UNIFORMLY SPREAD AND DISKED OR ROTO, TILLED TO A DEPTH OF AT LEAST 4 INCHES.
- PERMANENT SEEDING
  - IMMEDIATELY FOLLOWING THIS PREPARATION, PERMANENT SEED SHALL BE UNIFORMLY APPLIED AND LIGHTLY RAKED INTO THE SURFACE. LIGHTLY ROLL THE SURFACE AND WATER WITH FINE SPRAY. PERMANENT SEED SHALL BE APPLIED AT THE FOLLOWING RATES:

PERMANENT SEEDING OF NON-WETLAND AREAS		
DATES	SEED MIXTURE SPECIES	APPLICATION RATE (LB/ACRE)
APR 15 - JUN 30	BERMU DA GRASS	25
SEP 1 - APR 1	TALL FESCUE	120

- THE BEST SEEDING DATES ARE BETWEEN SEPTEMBER 1 THROUGH SEPTEMBER 30 AND FEBRUARY 15 THROUGH MARCH 20.
- POSSIBLE SEEDING DATES ARE BETWEEN SEPTEMBER 1 THROUGH OCTOBER 31 AND FEBRUARY 15 THROUGH APRIL 30.
- BETWEEN APRIL 15 AND AUGUST 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE OF SUDANGRASS.
- PRIOR TO MAY 1 OR AFTER AUGUST 15 ADD 25 LB/ACRE RYE (GRAIN).
- APPLY MULCH AT A RATE OF 4,000 LB/ACRE.
- APPLY TACKIFIER AT A RATE OF 10 GAL/1,000FT<sup>2</sup>.
- THE CONTRACTOR SHALL KEEP ALL SEEDDED AREAS WATERED AND IN GOOD CONDITION. RESEEDING SHALL BE DONE IF AND WHEN NECESSARY UNTIL A GOOD, HEALTHY, UNIFORM GROWTH IS ESTABLISHED OVER THE ENTIRE AREA SEEDED.
- ON SLOPES, THE CONTRACTOR SHALL PROVIDE AGAINST WASHOUTS BY AN APPROVED METHOD. ANY WASHOUT THAT OCCURS SHALL BE REGRADED AND RESEEDED AT THE CONTRACTOR'S EXPENSE UNTIL GOOD SOD IS ESTABLISHED.

**SEEDING RIPARIAN BUFFER AREAS:**

AREAS WITHIN THE 50' RIPARIAN BUFFER SHALL BE STABILIZED WITH NATIVE SEED MIX, MMF RIPARIAN BUFFER MIX FROM MELLOW MARSH FARM, INC. OR APPROVED EQUAL.

RECOMMENDED APPLICATION RATE: 20 TO 25 LBS. PER ACRE (1LB./2,000 SQ. FT.) - \$21.44 PER POUND		
SPECIES	COMMON NAME	PERCENT
AGROSTIS HYEMALIS	WINTER BENTGRASS	0.50%
AGROSTIS PERENNANS	UPLAND BENTGRASS	0.50%
ANDROPOGON GERARDII	BIG BLUESTEM	15.00%
ANDROPOGON VIRGINICUS	BROOMSEDGE	0.50%
COLEATAENIA ANCEPS	BEAKED PANICGRASS	1.00%
COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS	1.00%
DICHANTHELIUM DICHOTOMIFLORUM	FALL PANICGRASS	0.50%
ELYMUS VIRGINICUS	VIRGINIA WILDRYE	34.00%
JUNCUS EFFUSUS	SOFT RUSH	0.50%
PANICUM VIRGATUM	SWITCHGRASS	13.00%
PHYCANTHEMIUM TENUIFOLIUM	NARROWLEAF MOUNTAINMINT	0.50%
RUDBECKIA HIRTA	BLACKEYED SUSAN	0.50%
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	10.00%
SOLIDAGO SPECIOSA	SHOWY GOLDENROD	0.50%
SORGHASTRUM NUTANS	INDIAN GRASS	7.00%
TRADISCANTIA SUBASPERA	ZIGZAG SPIDERWORT	1.00%
TRIPSAUCUM DACTYLOIDES	EASTERN GAMAGRASS	12.00%
ZIZIA AUREA	GOLDEN ZIZIA	2.00%
		100.00%

**MAINTENANCE REQUIREMENTS:**

- MANY OF THE RECOMMENDED PERMANENT GRASS SPECIES MAY REQUIRE TWO YEARS OF ESTABLISHMENT, DEPENDING ON SITE CONDITIONS. INSPECT SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS, SOIL AMENDMENTS, AND RESEEDINGS. IF WEEDY EXOTIC SPECIES HAVE OVERTAKEN THE AREA AFTER THE FIRST GROWING SEASON, THE INVADING SPECIES MUST BE ERADICATED TO ALLOW NATIVE SPECIES TO GROW. NATIVE VEGETATIONS ARE DIFFICULT TO MANAGE AND TAKE LONGER TO ESTABLISH. MONITOR THE SITE UNTIL LONG TERM STABILITY HAS BEEN ESTABLISHED.

**TOPSOIL WASTE NOTE:**

- EXCESS TOPSOIL/MATERIAL SHALL BE HAULED OFFSITE UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE. IF OWNER DECIDES TO KEEP EXCESS TOPSOIL/MATERIAL ON SITE, COORDINATION WITH OWNER'S REPRESENTATIVE AND TOWN OF WAKE COUNTY EROSION CONTROL STAFF WILL TAKE PLACE BEFORE EXCESS TOPSOIL/MATERIAL IS PLACED.

CHANNEL DESIGN INFORMATION													
CHANNEL I.D.	DRAINAGE AREA (AC)	WEIGHTED 'C' COEFFICIENT	CHANNEL FLOW (CFS)	CHANNEL SLOPE (%)	CHANNEL FLOW DEPTH (FT)	CHANNEL MINIMUM DEPTH (FT)	CHANNEL BOTTOM WIDTH (FT)	CHANNEL SIDE SLOPES	CHANNEL VELOCITY (FPS)	ALLOWABLE VELOCITY (FPS)	CHANNEL SHEAR STRESS (PSF)	ALLOWABLE SHEAR STRESS (PSF)	DITCH LINING
1-1	1.22	0.50	4.39	1.58	0.67	1.50	2.00	2:1	1.98	5.00	0.65	1.60	NAG S75BN OR EQUAL
1-2	1.11	0.50	4.00	1.15	0.69	1.50	2.00	2:1	1.72	5.00	0.49	1.60	NAG S75BN OR EQUAL
2-1	2.14	0.50	7.70	2.00	0.83	1.50	2.00	2:1	2.51	5.00	1.04	1.60	NAG S75BN OR EQUAL
2-2	2.17	0.50	7.81	2.00	0.84	1.50	2.00	2:1	2.52	5.00	1.04	1.60	NAG S75BN OR EQUAL
3-1	2.04	0.50	7.34	2.00	0.81	1.50	2.00	2:1	2.48	5.00	1.01	1.60	NAG S75BN OR EQUAL
3-2	1.11	0.50	4.00	2.00	0.60	1.50	2.00	2:1	2.10	5.00	0.74	1.60	NAG S75BN OR EQUAL
4-1	2.28	0.50	8.21	2.00	0.86	1.50	2.00	2:1	2.55	5.00	1.07	1.60	NAG S75BN OR EQUAL
4-2	1.82	0.50	6.55	2.00	0.77	1.50	2.00	2:1	2.40	5.00	0.95	1.60	NAG S75BN OR EQUAL
5-1	1.21	0.50	4.36	2.00	0.62	1.50	2.00	2:1	2.15	5.00	0.77	1.60	NAG S75BN OR EQUAL
5-2	1.41	0.50	5.08	2.00	0.67	1.50	2.00	2:1	2.24	5.00	0.84	1.60	NAG S75BN OR EQUAL
6-1	0.59	0.50	2.12	2.58	0.40	1.50	2.00	2:1	1.91	5.00	0.63	1.60	NAG S75BN OR EQUAL
6-2	1.82	0.50	6.55	2.10	0.76	1.50	2.00	2:1	2.45	5.00	0.99	1.60	NAG S75BN OR EQUAL
7-1	1.00	0.50	3.60	2.00	0.56	1.50	2.00	2:1	2.04	5.00	0.70	1.60	NAG S75BN OR EQUAL
7-2	0.89	0.50	3.20	2.00	0.53	1.50	2.00	2:1	1.97	5.00	0.66	1.60	NAG S75BN OR EQUAL
8-1	2.30	0.50	8.28	2.00	0.87	1.50	2.00	2:1	2.56	5.00	1.07	1.60	NAG S75BN OR EQUAL
8-2	0.57	0.50	2.05	2.00	0.42	1.50	2.00	2:1	1.73	5.00	0.52	1.60	NAG S75BN OR EQUAL
9-1	1.09	0.50	3.92	2.00	0.59	1.50	2.00	2:1	2.09	5.00	0.73	1.60	NAG S75BN OR EQUAL
9-2	0.57	0.50	2.05	2.00	0.42	1.50	2.00	2:1	1.73	5.00	0.52	1.60	NAG S75BN OR EQUAL
10-1	0.69	0.50	2.48	2.00	0.46	1.50	2.00	2:1	1.83	5.00	0.57	1.60	NAG S75BN OR EQUAL
10-2	0.13	0.50	0.47	2.00	0.18	1.50	2.00	2:1	1.09	5.00	0.22	1.60	NAG S75BN OR EQUAL
11-1	0.52	0.50	1.87	2.00	0.40	1.50	2.00	2:1	1.68	5.00	0.49	1.60	NAG S75BN OR EQUAL
11-2	0.28	0.50	1.01	2.00	0.28	1.50	2.00	2:1	1.39	5.00	0.35	1.60	NAG S75BN OR EQUAL
12-1	1.68	0.50	6.05	2.00	0.74	1.50	2.00	2:1	2.35	5.00	0.92	1.60	NAG S75BN OR EQUAL
12-2	0.50	0.50	1.80	2.00	0.39	1.50	2.00	2:1	1.66	5.00	0.48	1.60	NAG S75BN OR EQUAL

Slope Drain Summary		
Slope Drain ID	Drainage Area (ac)	Pipe Diameter (in)
1-1	1.22	24
1-2	1.11	24
2-1	2.14	24
2-2	2.17	24
3-1	2.04	24
3-2	1.11	18
4-1	2.28	24
4-2	1.82	24
5-1	1.21	24
5-2	1.41	24
6-1	0.59	18
6-2	1.82	24
7-1	1.00	18
7-2	0.89	18
8-1	2.30	24
8-2	0.57	15
9-1	1.09	18
9-2	0.57	15
10-1	0.69	15
10-2	0.13	12
11-1	0.52	15
11-2	0.28	12
12-1	1.68	24
12-2	0.50	12

TEMPORARY SKIMMER BASIN AND ORIFICE DESIGN SUMMARY																
BASIN	TYPE	DRAINAGE AREA	DISTURBED AREA	C VALUE	PEAK FLOW	DEPTH	LENGTH	WIDTH	WEIR LENGTH	VOLUME REQUIRED	VOLUME PROVIDED	SURFACE AREA REQUIRED	SURFACE AREA PROVIDED	SKIMMER SIZE	ORIFICE SIZE	Dewatering Time
		(AC)	(AC)		(CFS)	(FT)	(FT)	(FT)	(FT)	(CF)	(CF)	(SF)				

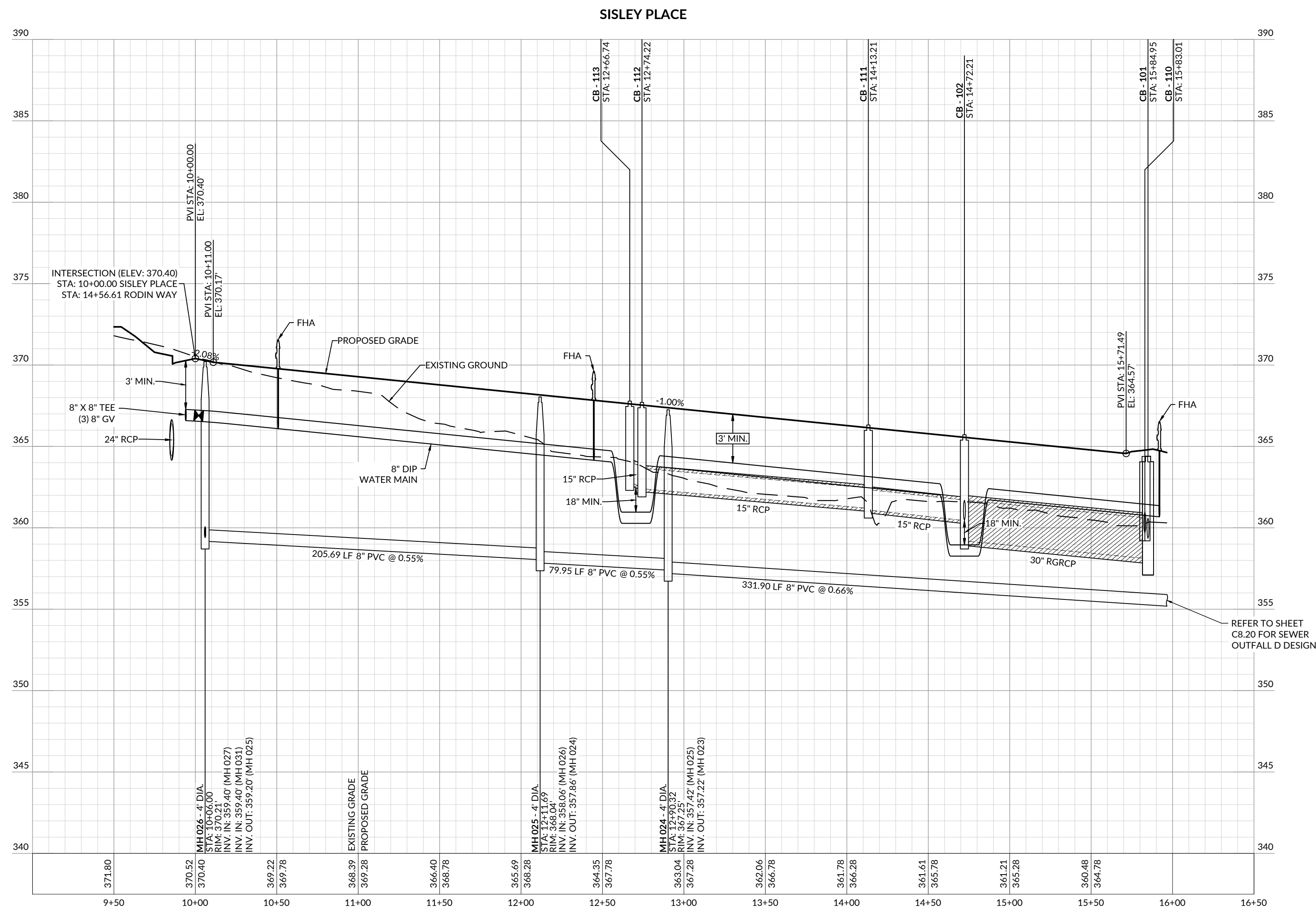
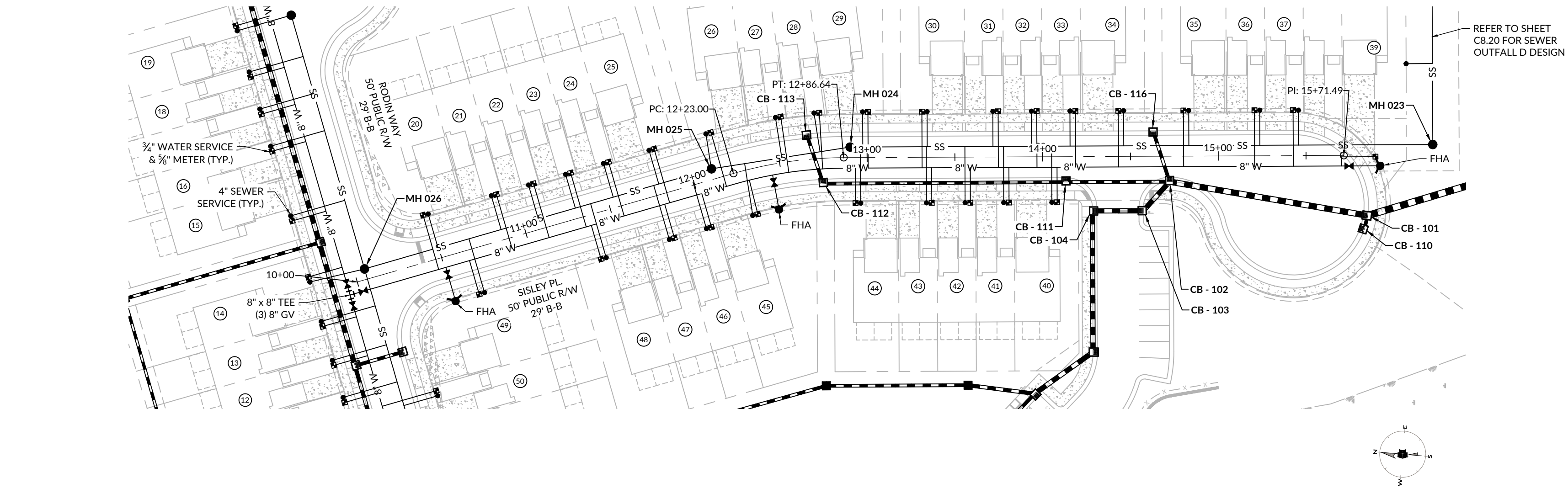








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CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR**  
**CID-YR-XX**  
 ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY



SCALE: 1 inch = 50 ft, H  
 1 inch = 5 ft, V  
 INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

WR JOB NUMBER 23-0045  
 DRN: WR DGN: WR CKD: WR

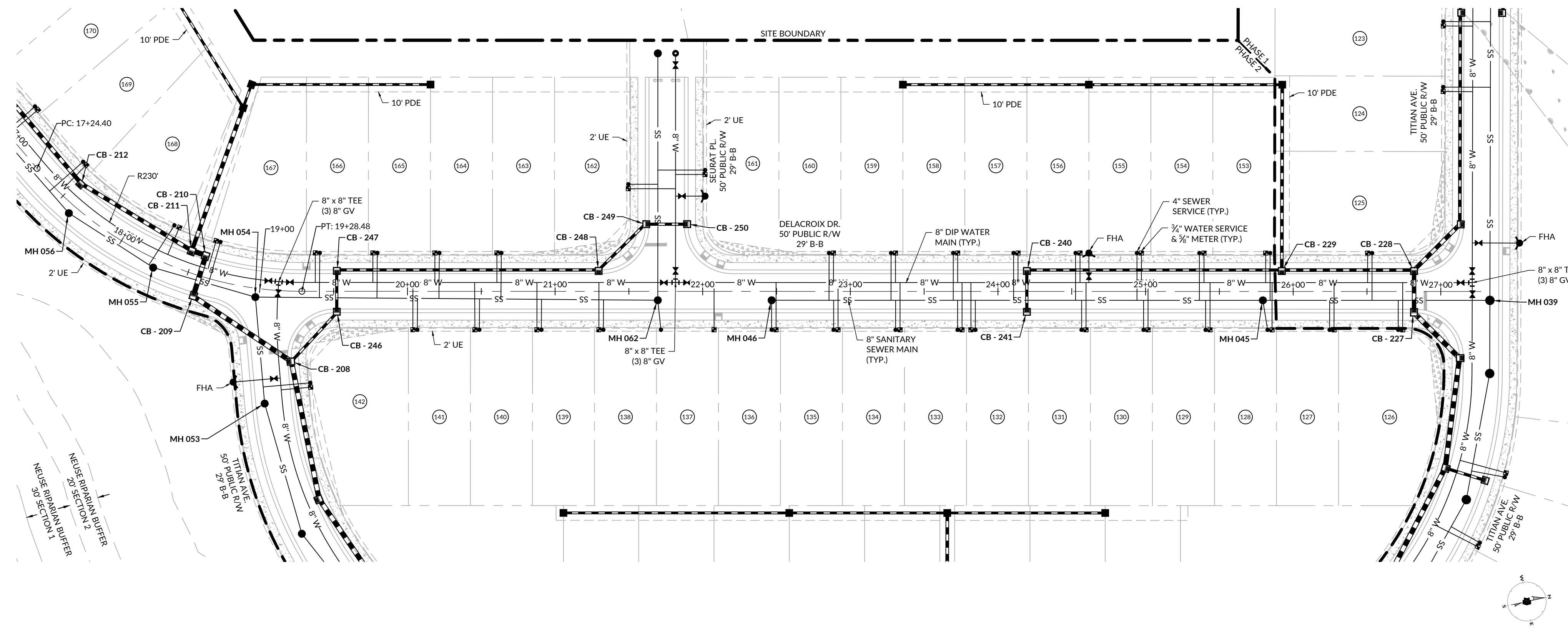
**SISLEY PLACE PLAN & PROFILE**

**C8.04**

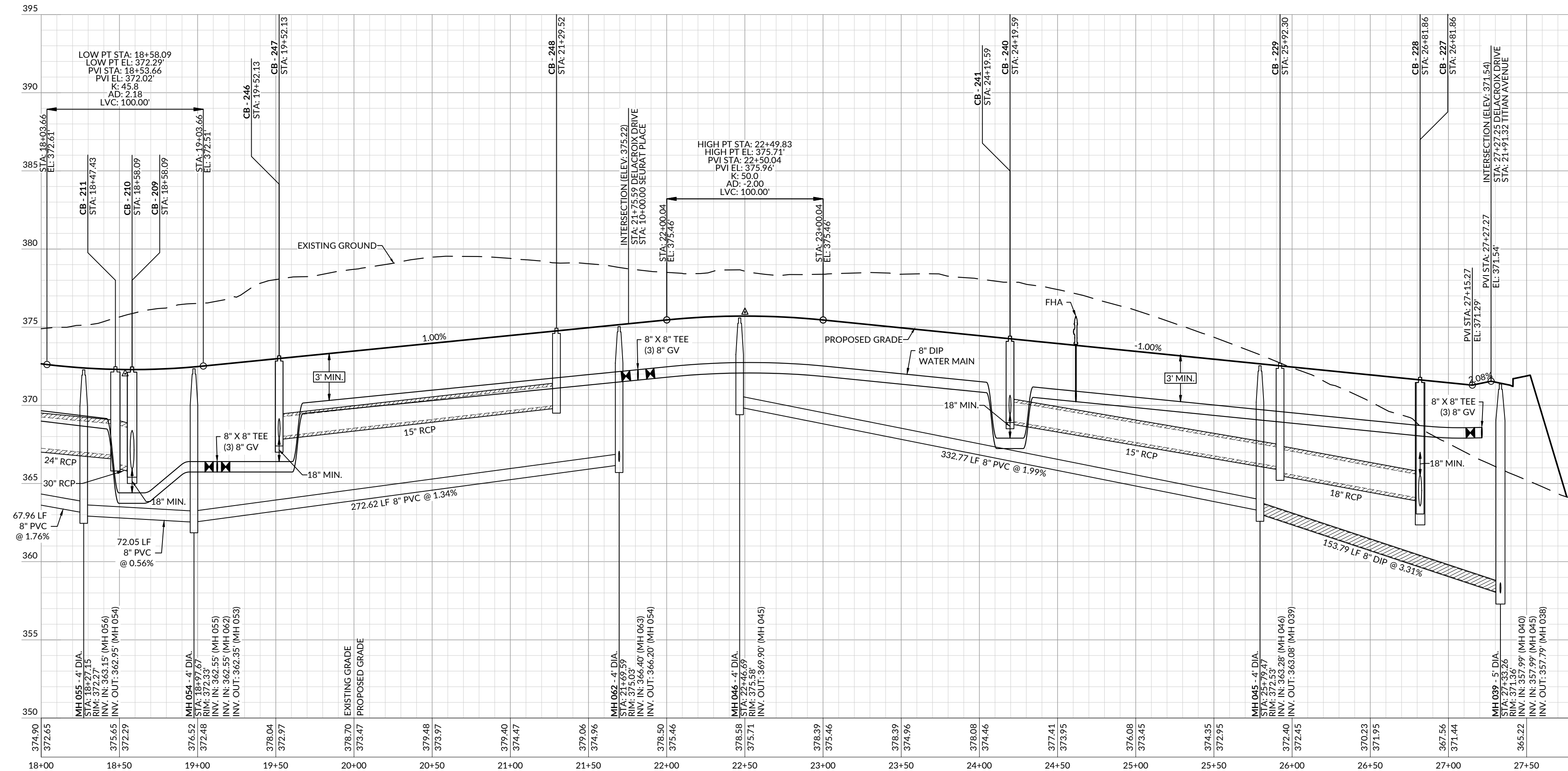








DELACROIX DRIVE (18+00 - 27+50)



CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR**  
**CID-YR-XX**



SCALE: 1 inch = 50 ft. H  
 1 inch = 5 ft. V

INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

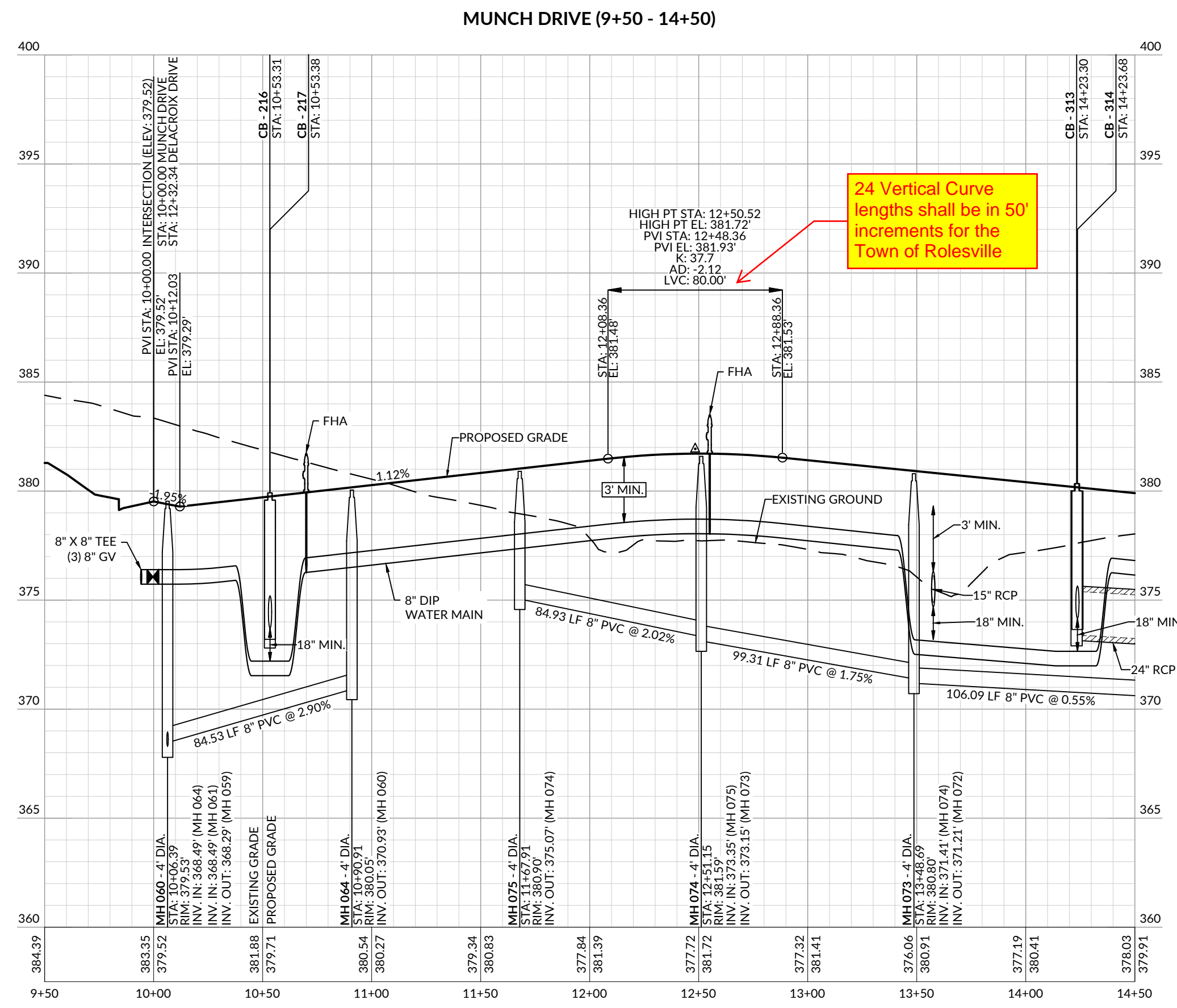
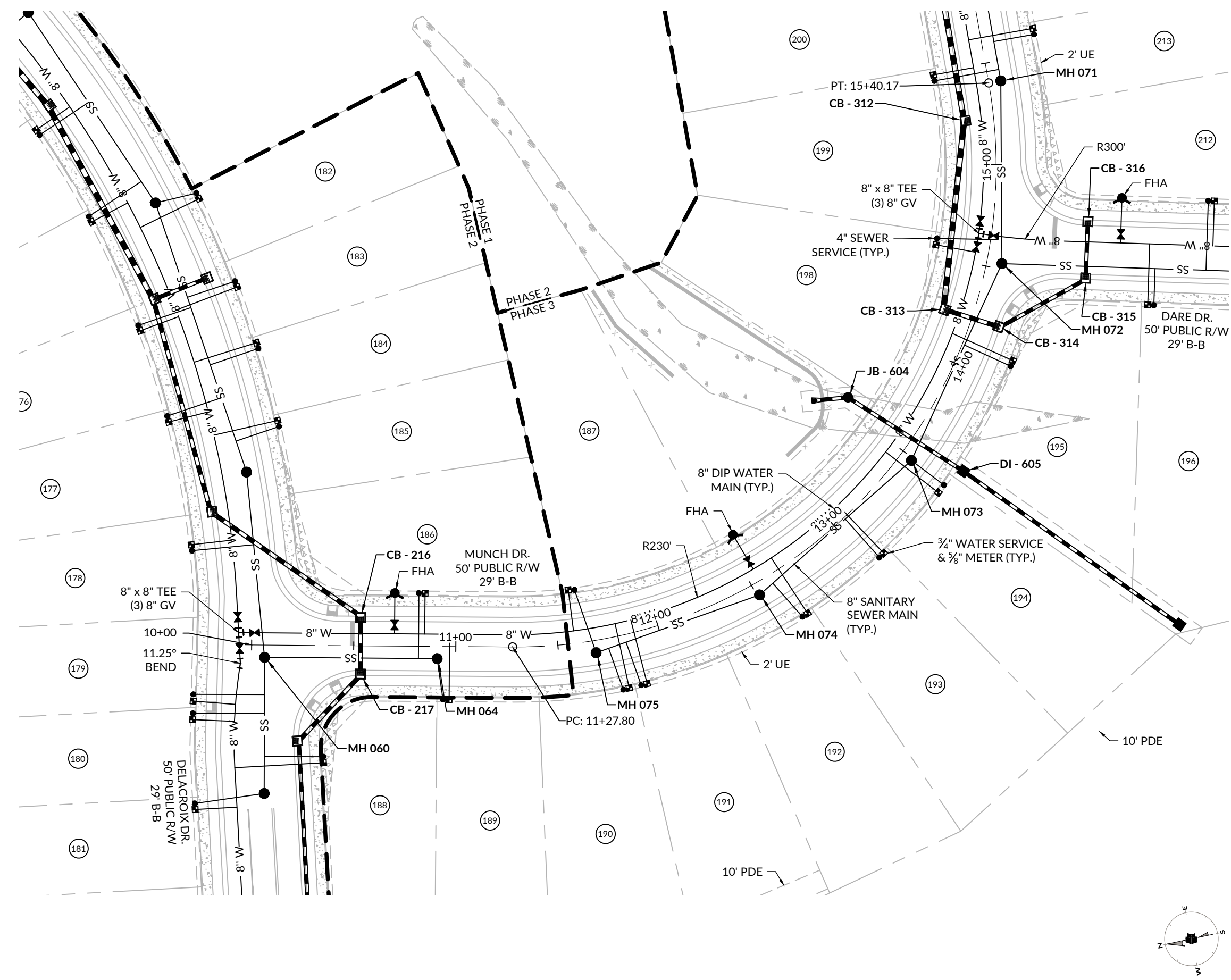
WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**DELACROIX DRIVE**  
**PLAN & PROFILE**  
**(18+50 - 27+50)**

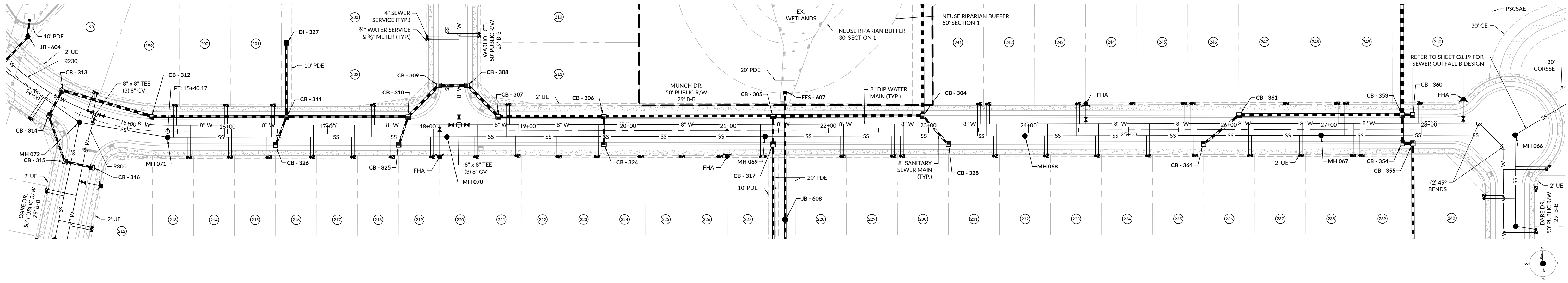
**C8.08**

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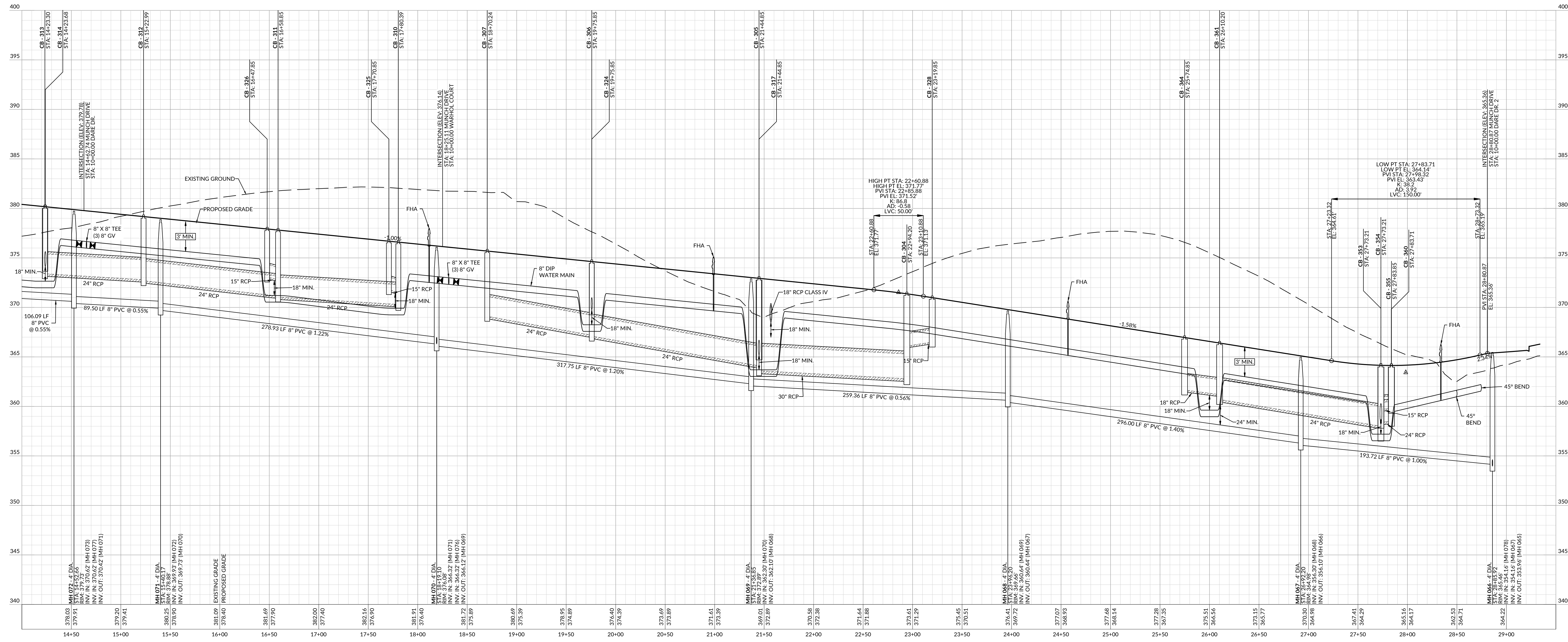




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MUNCH DRIVE (14+00-29+00)

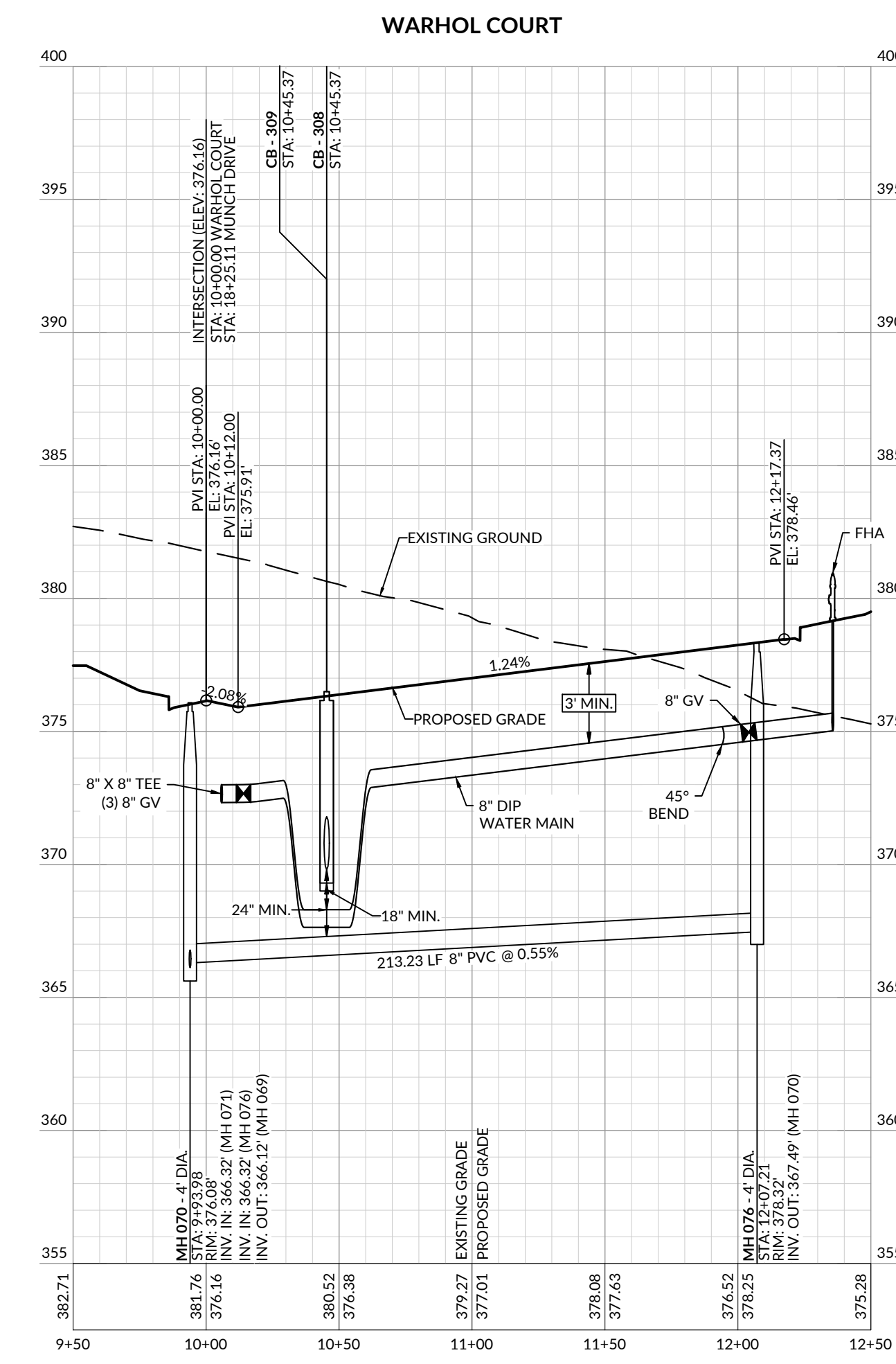
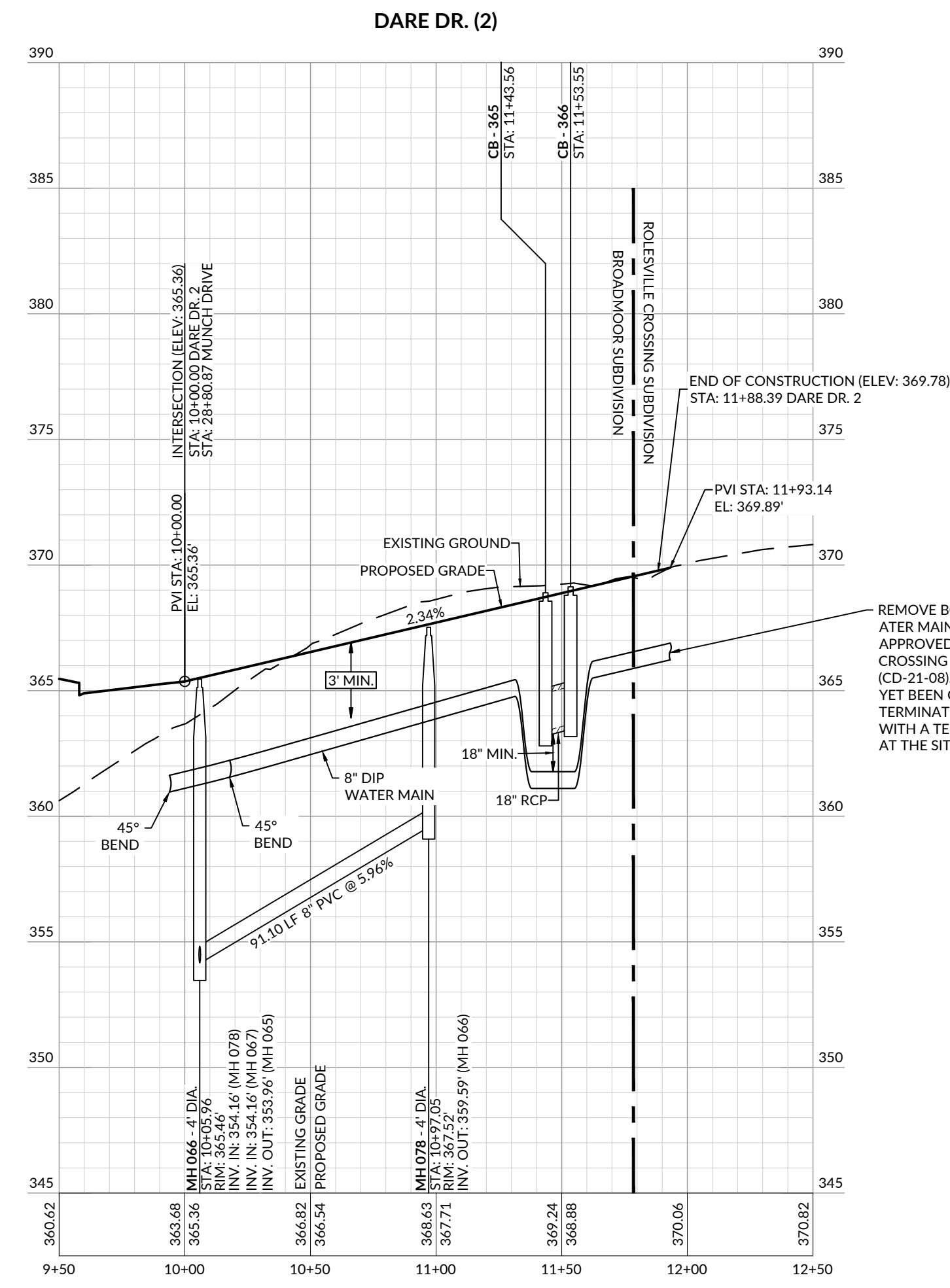
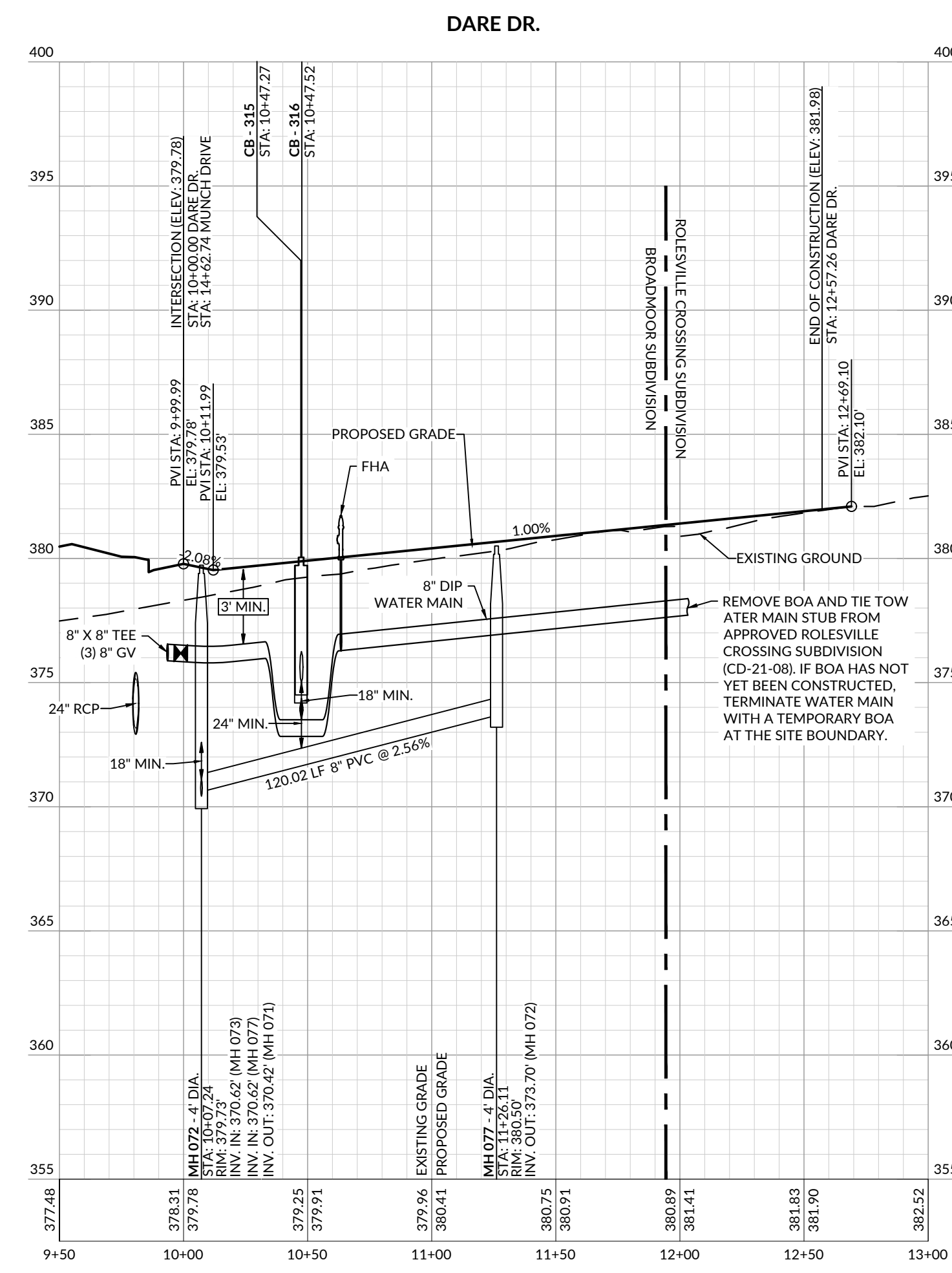
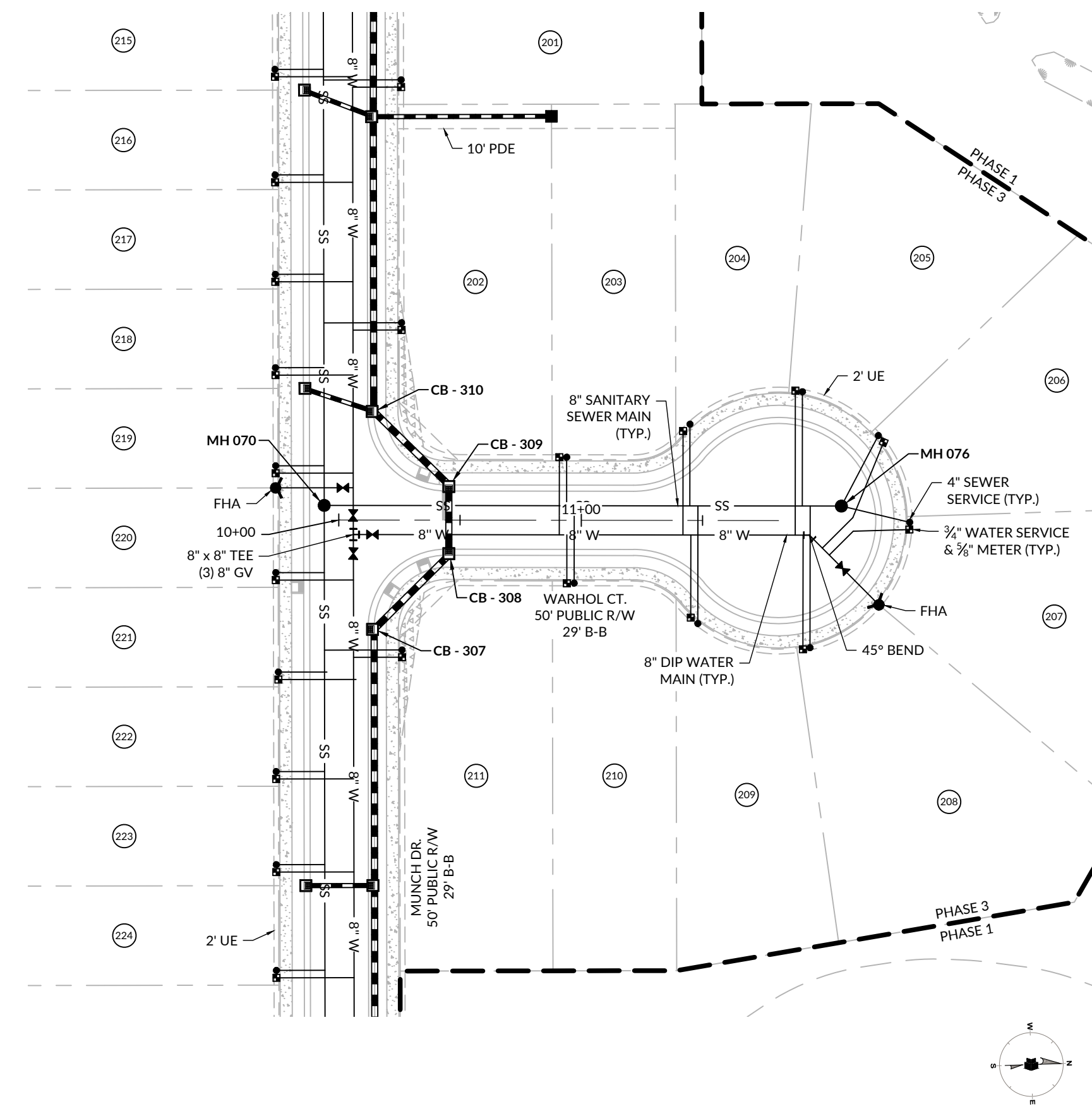
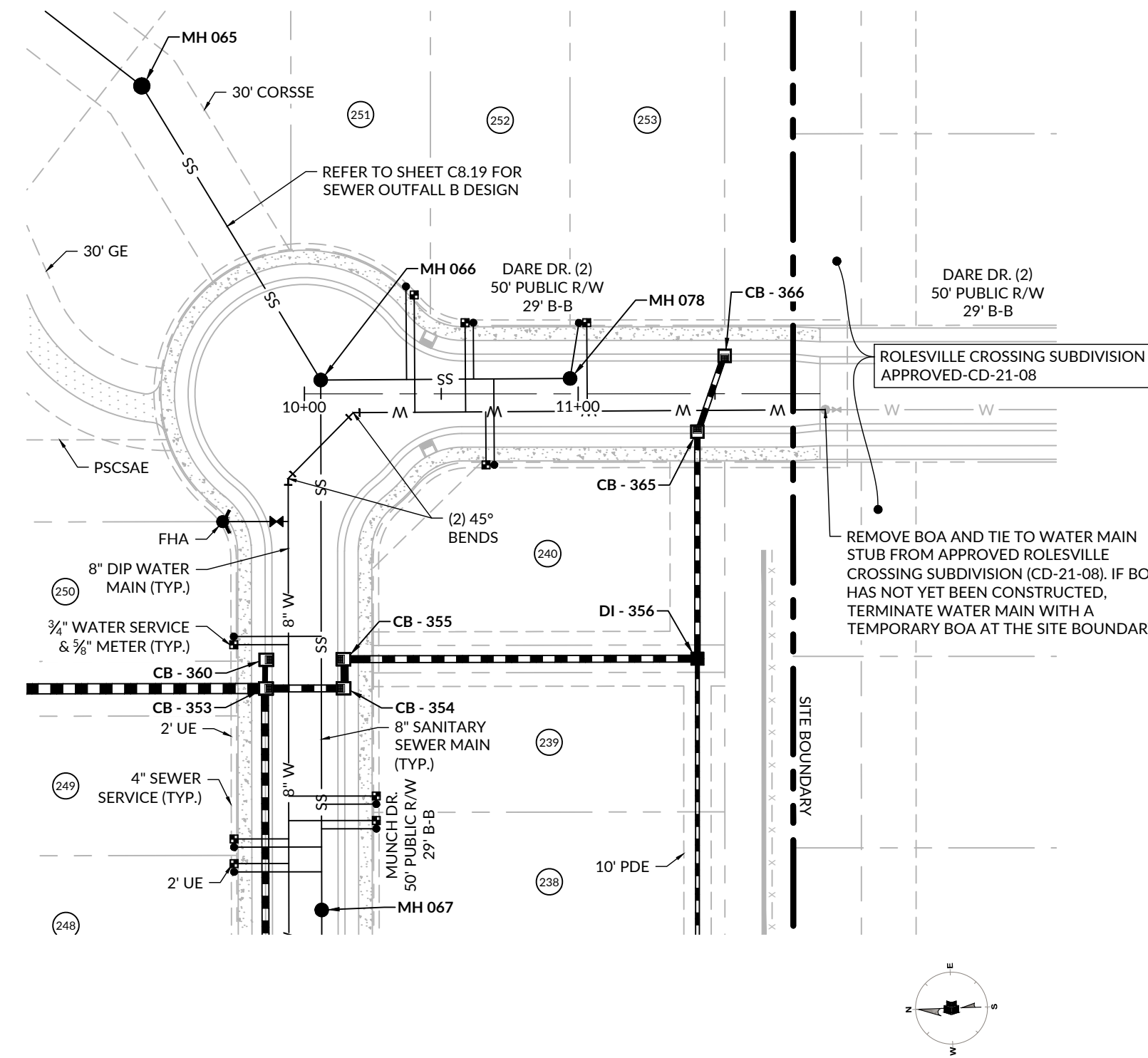
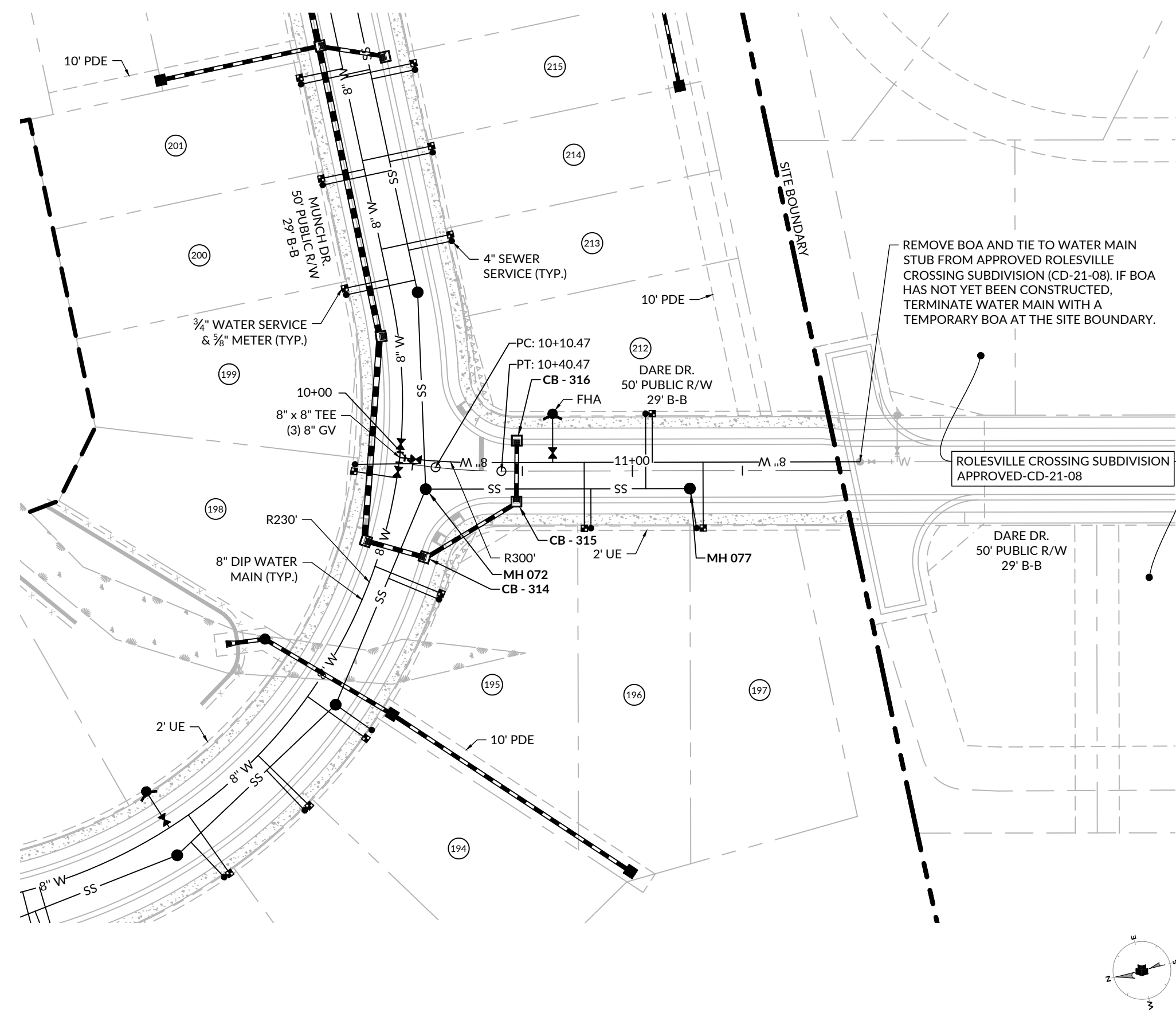


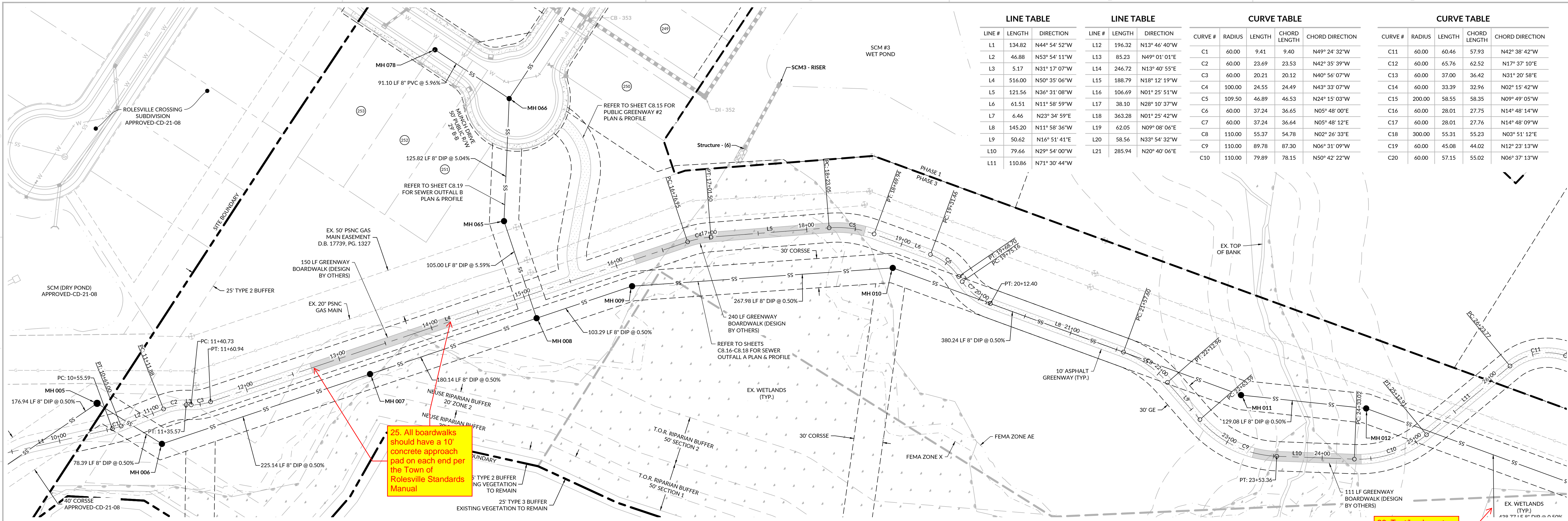
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0 25 50  
 SCALE: 1 inch = 50 ft, H  
 1 inch = 5 ft, V

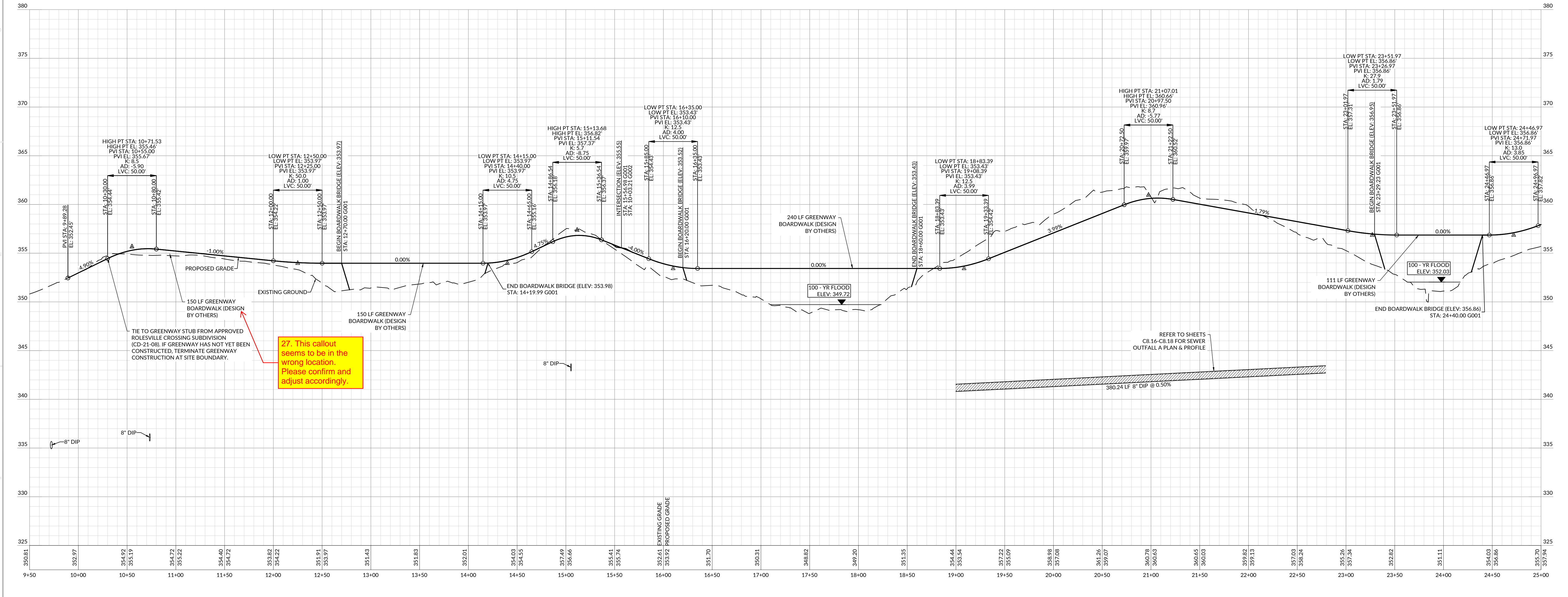
INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:





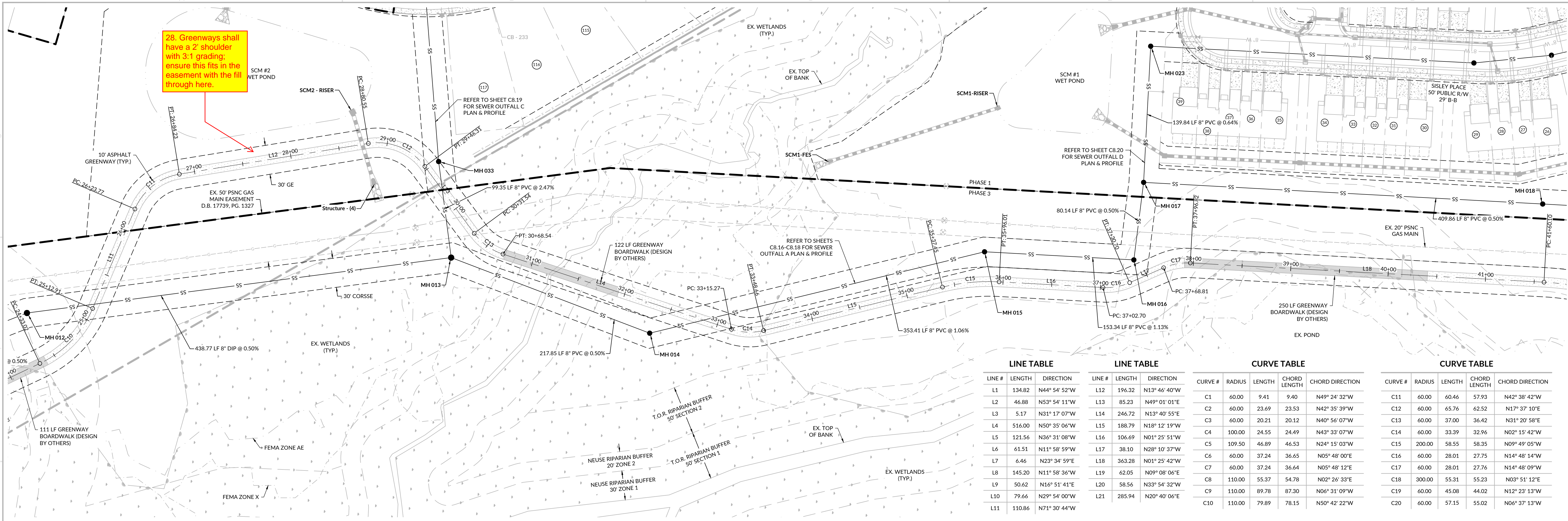
LINE TABLE			LINE TABLE			CURVE TABLE				CURVE TABLE					
LINE #	LENGTH	DIRECTION	LINE #	LENGTH	DIRECTION	CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION	CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
L1	134.82	N44° 54' 52"W	L12	196.32	N13° 46' 40"W	C1	60.00	9.41	9.40	N49° 24' 32"W	C11	60.00	60.46	57.93	N42° 38' 42"W
L2	46.88	N53° 54' 11"W	L13	85.23	N49° 01' 01"E	C2	60.00	23.69	23.53	N42° 35' 39"W	C12	60.00	65.76	62.52	N17° 37' 10"E
L3	5.17	N31° 17' 07"W	L14	246.72	N13° 40' 55"E	C3	60.00	20.21	20.12	N40° 56' 07"W	C13	60.00	37.00	36.42	N31° 20' 58"E
L4	516.00	N50° 35' 08"W	L15	188.79	N18° 12' 19"W	C4	100.00	24.55	24.49	N43° 33' 07"W	C14	60.00	33.39	32.96	N02° 15' 42"W
L5	121.56	N36° 31' 08"W	L16	106.69	N01° 25' 51"W	C5	109.50	46.89	46.53	N24° 15' 03"W	C15	200.00	58.55	58.35	N09° 49' 05"W
L6	61.51	N11° 58' 59"W	L17	38.10	N28° 10' 37"W	C6	60.00	37.24	36.65	N05° 48' 00"E	C16	60.00	28.01	27.75	N14° 48' 14"W
L7	6.46	N23° 34' 59"E	L18	363.28	N01° 25' 42"W	C7	60.00	37.24	36.64	N05° 48' 12"E	C17	60.00	28.01	27.76	N14° 48' 09"W
L8	145.20	N11° 58' 36"W	L19	62.05	N09° 08' 06"E	C8	110.00	55.37	54.78	N02° 26' 33"E	C18	300.00	55.31	55.23	N03° 51' 12"E
L9	50.62	N16° 51' 41"E	L20	58.56	N33° 54' 32"W	C9	110.00	89.78	87.30	N06° 31' 09"W	C19	60.00	45.08	44.02	N12° 23' 13"W
L10	79.66	N29° 54' 00"W	L21	285.94	N20° 40' 06"E	C10	110.00	79.89	78.15	N50° 42' 22"W	C20	60.00	57.15	55.02	N06° 37' 13"W
L11	110.86	N71° 30' 44"W													

GREENWAY 1 (10+00 - 25+00)



26. Text/leader cut off

27. This callout seems to be in the wrong location. Please confirm and adjust accordingly.



28. Greenways shall have a 2' shoulder with 3:1 grading; ensure this fits in the easement with the fill through here.

**LINE TABLE**

LINE #	LENGTH	DIRECTION
L1	134.82	N44° 54' 52"W
L2	46.88	N53° 54' 11"W
L3	5.17	N33° 17' 07"W
L4	516.00	N50° 35' 05"W
L5	121.56	N36° 31' 08"W
L6	61.51	N11° 58' 59"W
L7	6.46	N23° 34' 59"E
L8	145.20	N11° 58' 36"W
L9	50.62	N16° 51' 41"E
L10	79.66	N29° 54' 00"W
L11	110.86	N71° 30' 44"W

**LINE TABLE**

LINE #	LENGTH	DIRECTION
L12	196.32	N13° 46' 40"W
L13	85.23	N49° 01' 01"E
L14	246.72	N13° 40' 55"E
L15	188.79	N18° 12' 19"W
L16	106.69	N01° 25' 51"W
L17	38.10	N28° 10' 37"W
L18	363.28	N01° 25' 42"W
L19	62.05	N09° 08' 06"E
L20	58.56	N33° 54' 32"W
L21	285.94	N20° 40' 06"E

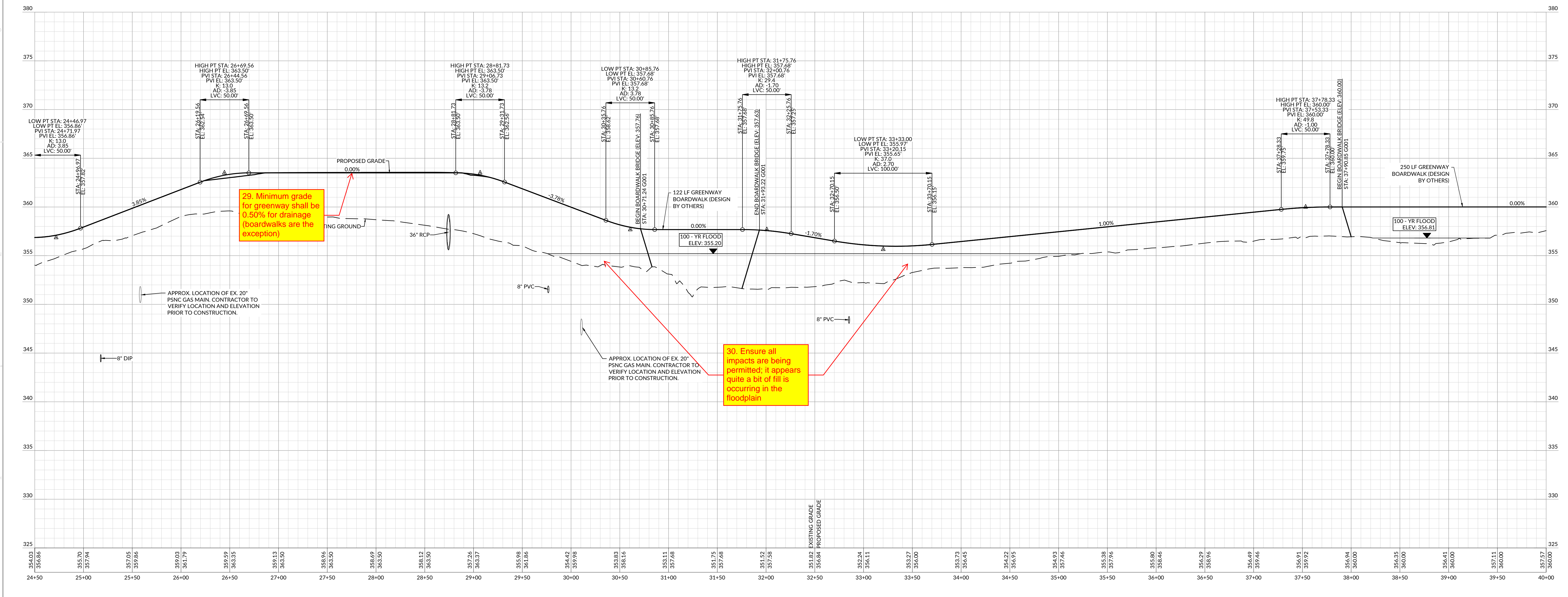
**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C1	60.00	9.41	9.40	N49° 24' 32"W
C2	60.00	23.69	23.53	N42° 35' 39"W
C3	60.00	20.21	20.12	N40° 56' 07"W
C4	100.00	24.55	24.49	N43° 33' 07"W
C5	109.50	46.89	46.53	N24° 15' 03"W
C6	60.00	37.24	36.65	N05° 48' 00"E
C7	60.00	37.24	36.64	N05° 48' 12"E
C8	110.00	55.37	54.78	N02° 26' 33"E
C9	110.00	89.78	87.30	N06° 31' 09"W
C10	110.00	79.89	78.15	N50° 42' 22"W

**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C11	60.00	60.46	57.93	N42° 38' 42"W
C12	60.00	65.76	62.52	N17° 37' 10"E
C13	60.00	37.00	36.42	N31° 20' 58"E
C14	60.00	33.39	32.96	N02° 15' 42"W
C15	200.00	58.55	58.35	N09° 49' 05"W
C16	60.00	28.01	27.75	N14° 48' 14"W
C17	60.00	28.01	27.76	N14° 48' 09"W
C18	300.00	55.31	55.23	N03° 51' 12"E
C19	60.00	45.08	44.02	N12° 23' 13"W
C20	60.00	57.15	55.02	N06° 37' 13"W

GREENWAY 1 (24+50 - 40+00)



29. Minimum grade for greenway shall be 0.50% for drainage (boardwalks are the exception)

30. Ensure all impacts are being permitted; it appears quite a bit of fill is occurring in the floodplain

**WithersRavenel**  
 167 E. Chatham St. | Suite 2101 | Cary, NC 27511  
 License #: F-1479 | T: 919.238.0330 | www.withersravenel.com

**PULTEGROUP**  
 1225 CRESENT GREEN DRIVE, SUITE 250  
 CARY, NC 27518

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR**  
**CID-YR-XX**

ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

PRELIMINARY  
 NOT APPROVED FOR  
 CONSTRUCTION

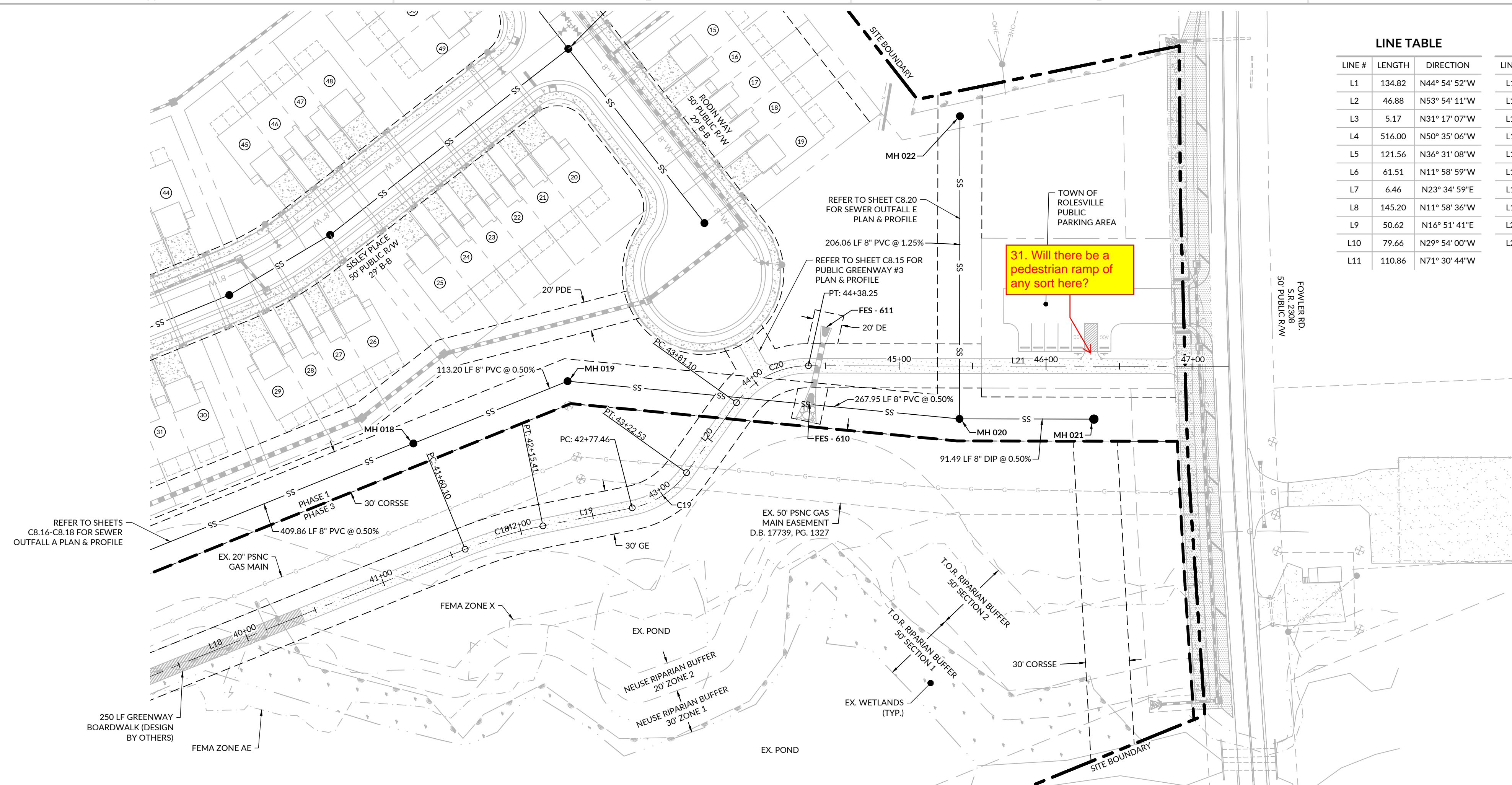
SCALE: 1 inch = 50 ft. H  
 1 inch = 5 ft. V

INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:

WR JOB NUMBER: 23-0045  
 DRN: WR DGN: WR CKD: WR

**GREENWAY 1 PLAN & PROFILE (39+50 - 48+00)**

**C8.13**



**LINE TABLE**

LINE #	LENGTH	DIRECTION
L1	134.82	N44° 54' 52"W
L2	46.88	N53° 54' 11"W
L3	5.17	N31° 17' 07"W
L4	516.00	N50° 35' 06"W
L5	121.56	N36° 31' 08"W
L6	61.51	N11° 58' 59"W
L7	6.46	N23° 34' 59"E
L8	145.20	N11° 58' 36"W
L9	50.62	N16° 51' 41"E
L10	79.66	N29° 54' 00"W
L11	110.86	N71° 30' 44"W

**LINE TABLE**

LINE #	LENGTH	DIRECTION
L12	196.32	N13° 46' 40"W
L13	85.23	N49° 01' 01"E
L14	246.72	N13° 40' 55"E
L15	188.79	N18° 12' 19"W
L16	106.69	N01° 25' 51"W
L17	38.10	N28° 10' 37"W
L18	363.28	N01° 25' 42"W
L19	62.05	N09° 08' 06"E
L20	58.56	N33° 54' 32"W
L21	285.94	N20° 40' 06"E

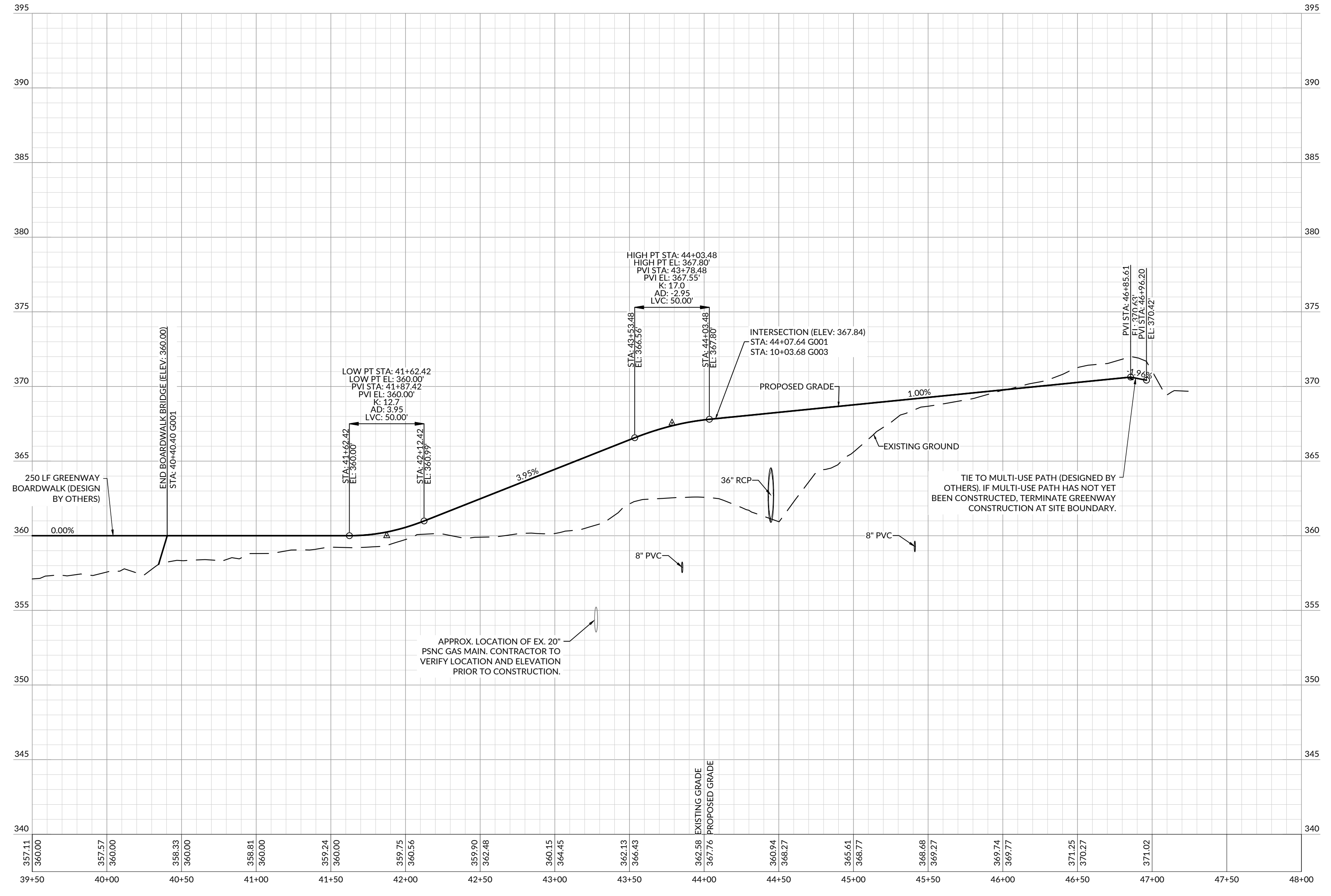
**CURVE TABLE**

CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C1	60.00	9.41	9.40	N49° 24' 32"W
C2	60.00	23.69	23.53	N42° 35' 39"W
C3	60.00	20.21	20.12	N40° 56' 07"W
C4	100.00	24.55	24.49	N43° 33' 07"W
C5	109.50	46.89	46.53	N24° 15' 03"W
C6	60.00	37.24	36.65	N05° 48' 00"E
C7	60.00	37.24	36.64	N05° 48' 12"E
C8	110.00	55.37	54.78	N02° 26' 33"E
C9	110.00	89.78	87.30	N06° 31' 09"W
C10	110.00	79.89	78.15	N50° 42' 22"W

**CURVE TABLE**

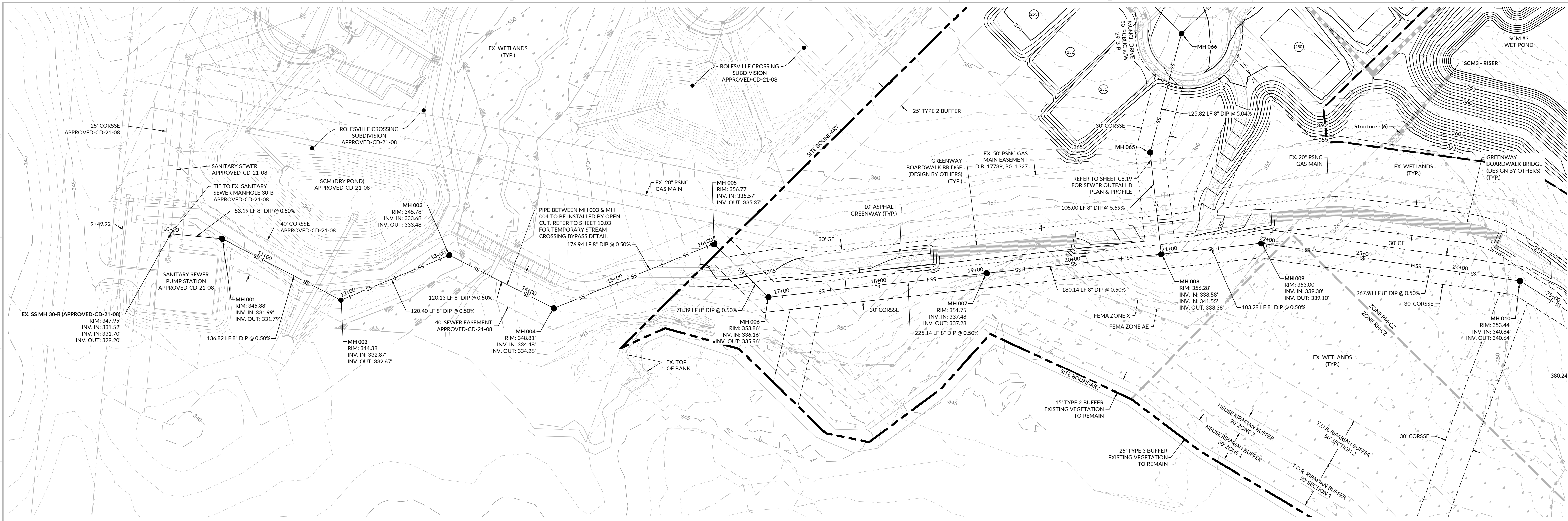
CURVE #	RADIUS	LENGTH	CHORD LENGTH	CHORD DIRECTION
C11	60.00	60.46	57.93	N42° 38' 42"W
C12	60.00	65.76	62.52	N17° 37' 10"E
C13	60.00	37.00	36.42	N31° 20' 58"E
C14	60.00	33.39	32.96	N02° 15' 42"W
C15	200.00	58.55	58.35	N09° 49' 05"W
C16	60.00	28.01	27.75	N14° 48' 14"W
C17	60.00	28.01	27.76	N14° 48' 09"W
C18	300.00	55.31	55.23	N03° 51' 12"E
C19	60.00	45.08	44.02	N12° 23' 13"W
C20	60.00	57.15	55.02	N06° 37' 13"W

**GREENWAY 1 (39+50 - 48+00)**

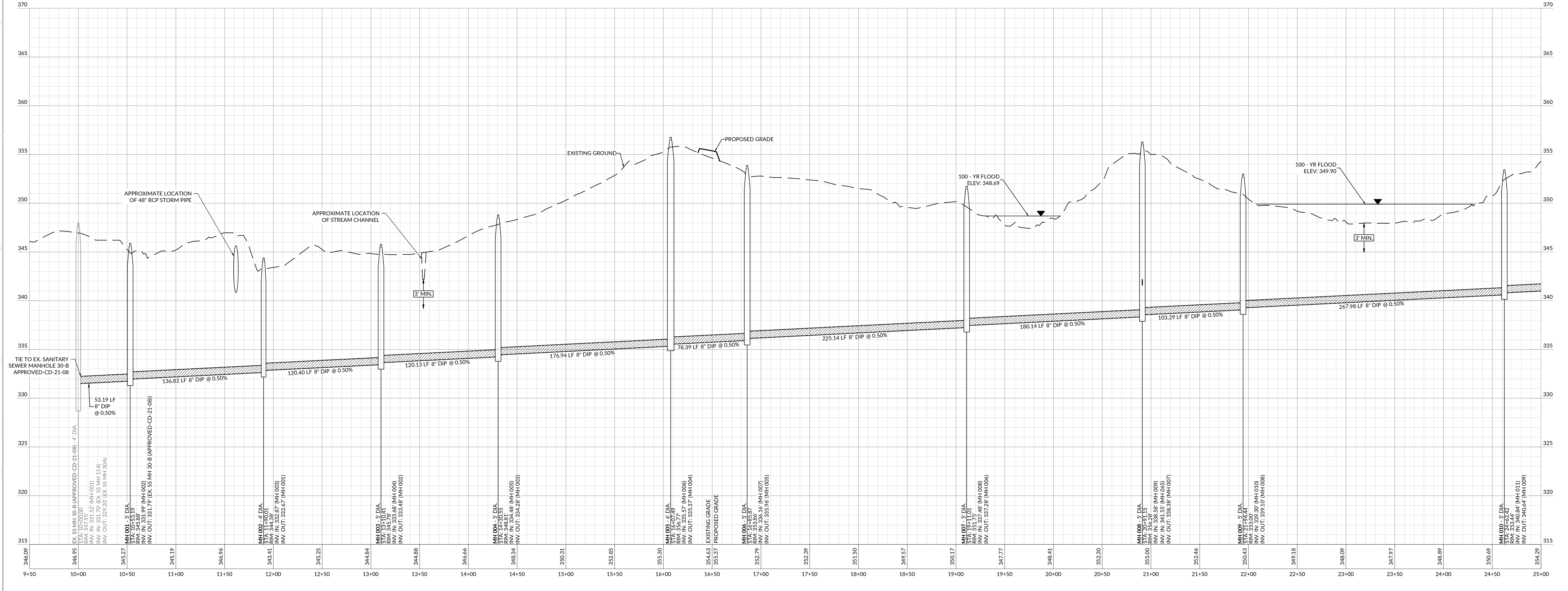


PRELIMINARY  
 NOT APPROVED FOR  
 CONSTRUCTION  
 SCALE: 1 inch = 50 ft, H  
 1 inch = 5 ft, V  
 INITIAL PLAN DATE: 11/01/2024  
 REVISIONS:





SEWER OUTFALL A (10+00 - 25+00)



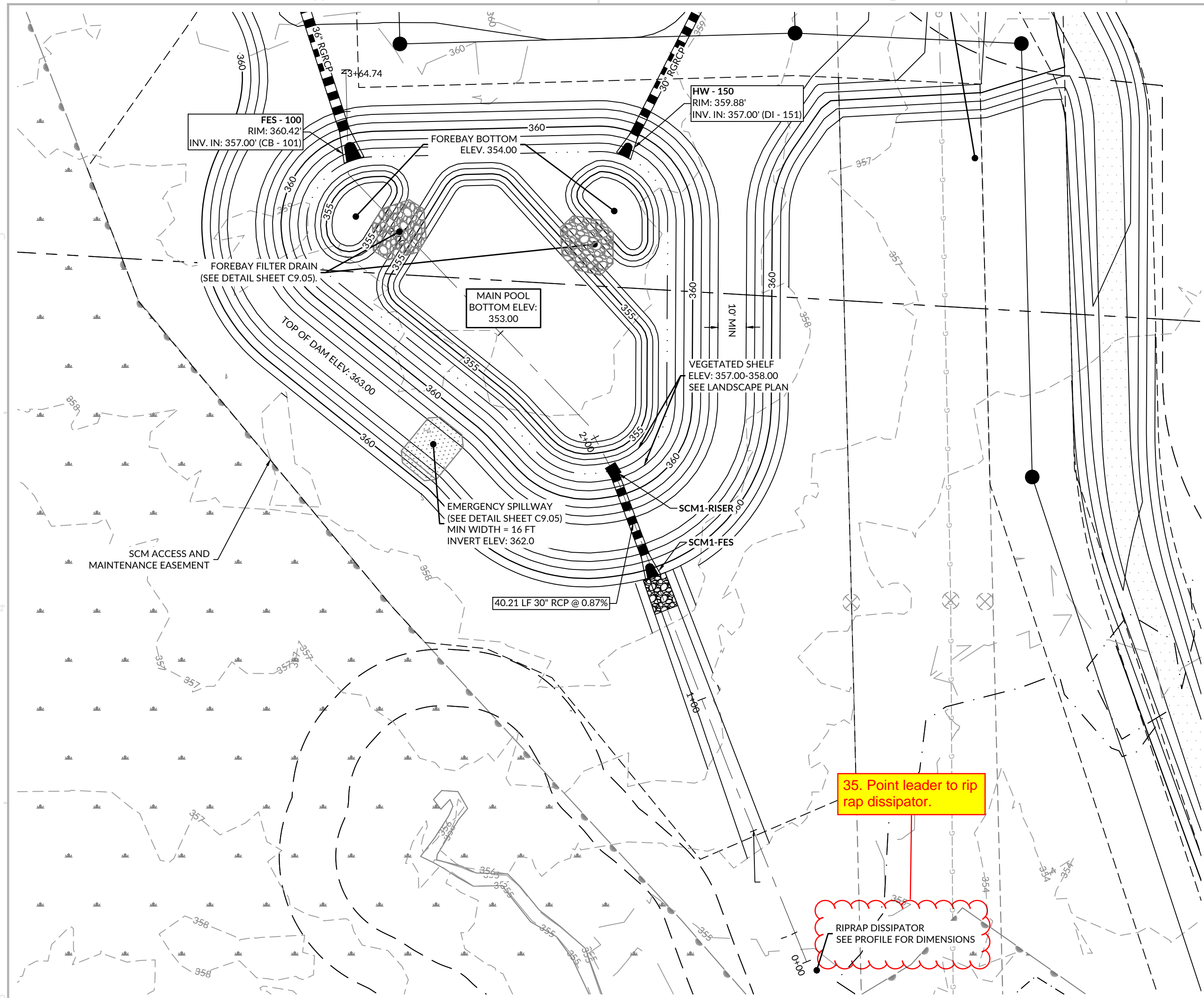




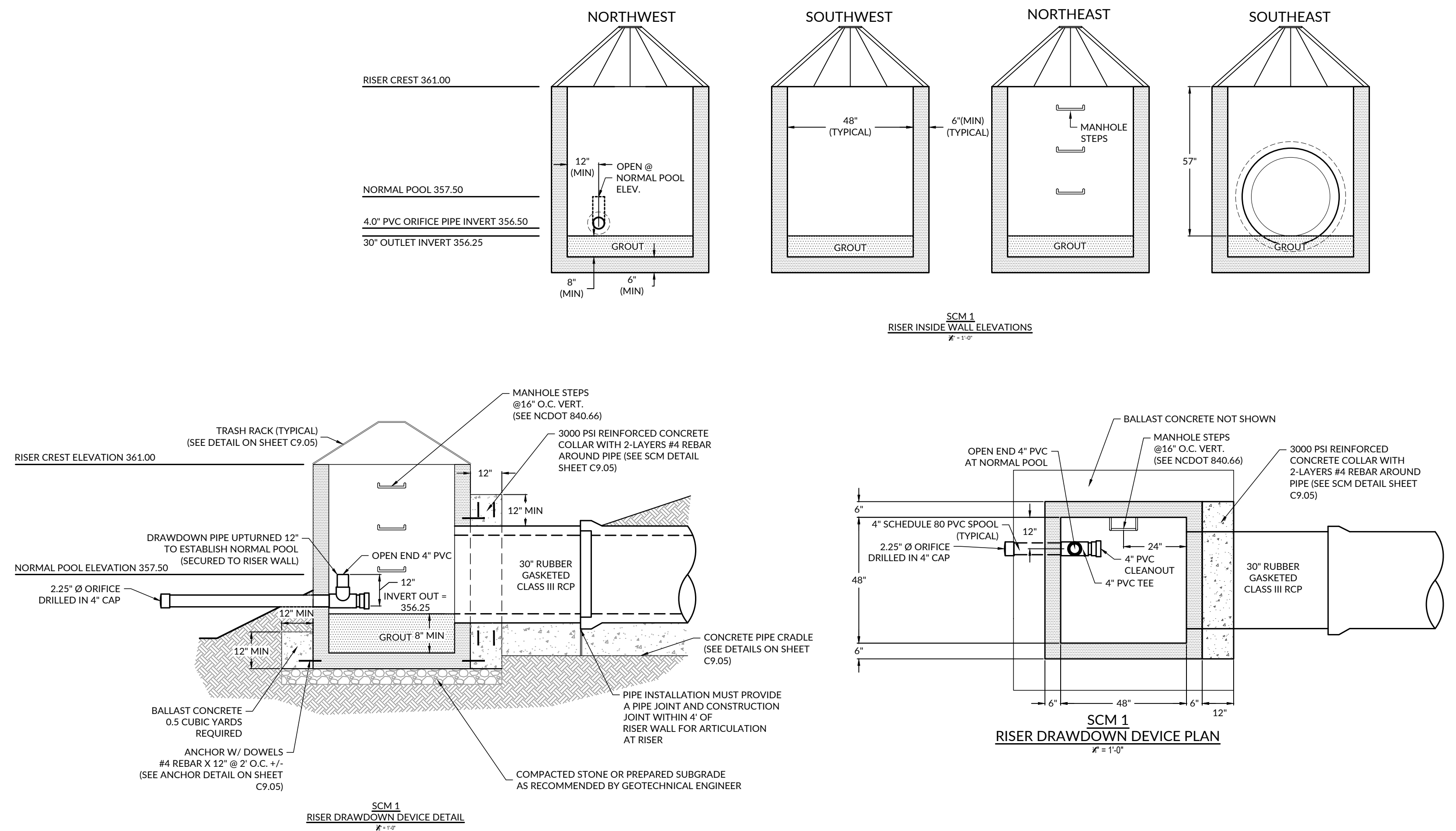




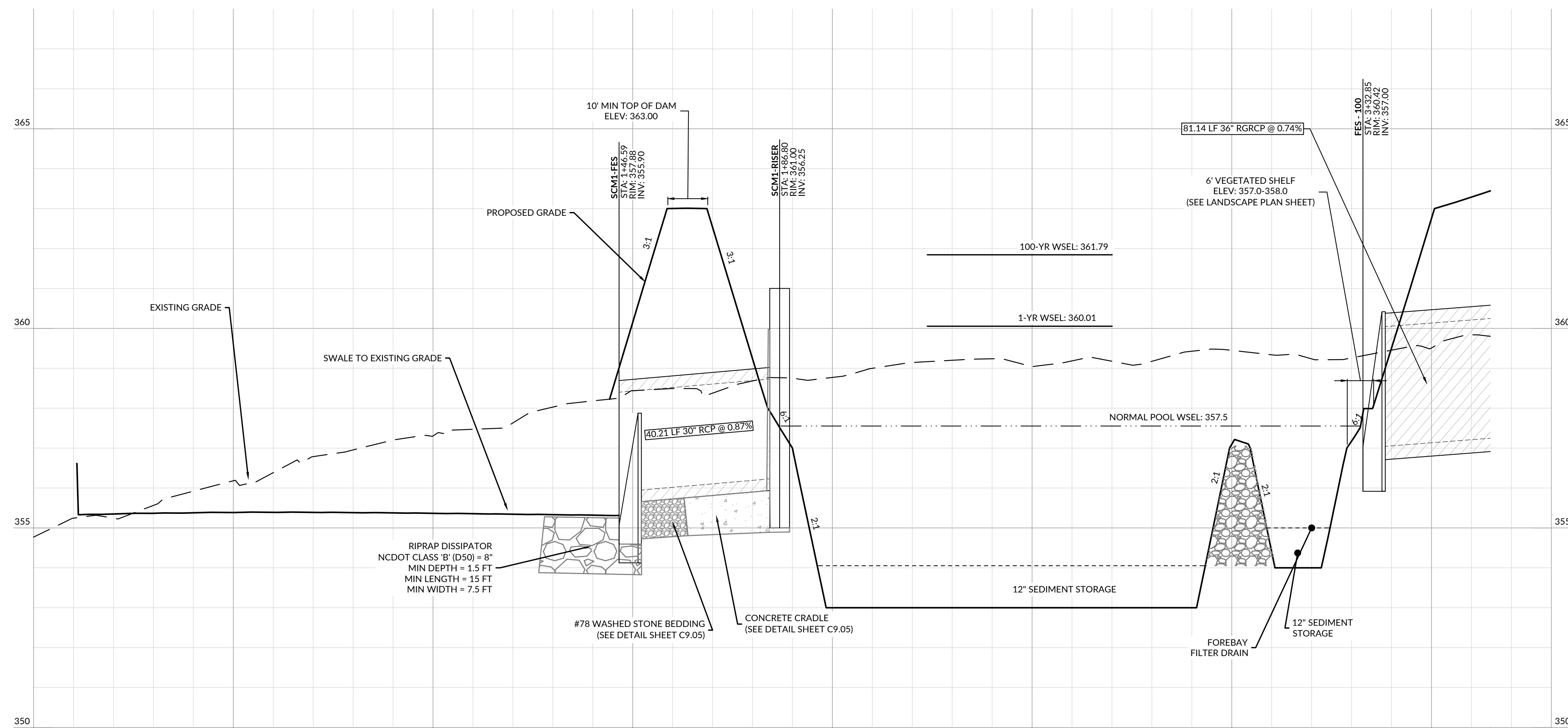




**WET POND SCM #1 PLAN VIEW**  
SCALE: 1" = 30'



**NOTE:**  
RISER AND BALLAST CONCRETE HAVE BEEN SIZED BASED ON BUOYANCY CALCULATIONS. ADJUSTMENTS TO CONCRETE DIMENSIONS ARE NOT PERMITTED WITHOUT PRIOR WRITTEN APPROVAL. ANY DIMENSIONAL CHANGES TO BALLAST CONCRETE BASE AND RISER MUST BE REQUESTED IN WRITING AND MUST BE ACCOMPANIED BY BUOYANCY CALCULATIONS SIGNED AND SEALED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.



**WET POND SCM #1 PROFILE VIEW**  
SCALE: 1" = 20' HORIZONTAL, 1" = 2' VERTICAL

**WET POND STORMWATER CONTROL MEASURE (SCM) GENERAL NOTES:**

- PRIOR TO OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THE PLANS OR SPECIFICATIONS.
- ALL CONSTRUCTION AND MINIMUM DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL STANDARDS AND SPECIFICATIONS, HEREBY INCORPORATED BY REFERENCE.
- UPON COMPLETION OF CONSTRUCTION, CERTIFICATION OF THE SCM BY THE GEOTECHNICAL ENGINEER WILL BE REQUIRED PRIOR TO FINAL SCM ACCEPTANCE.
- THE GEOTECHNICAL ENGINEER SHALL EVALUATE SOILS FOR SUITABILITY OF EMBANKMENT AND SLOPE STABILITY.
- PRIOR TO PLACEMENT OF EMBANKMENT FILL, THE GEOTECHNICAL ENGINEER SHALL SUPERVISE THE FOUNDATION PREPARATION AND APPROVE THE DEPTH AND EXTENT OF THE CUTOFF TRENCH, A MINIMUM OF 1 FOOT SHALL BE EXCAVATED.
- THE DAM AND FOREBAY BERMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS UNLESS SUPERCEDED BY THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  - BORROW MATERIALS FOR USE AS EMBANKMENT FILL SHALL BE FREE OF ORGANICS, ROOTS AND OTHER WOODY VEGETATION OR ORGANIC DEBRIS.
  - FILL MATERIALS SHALL CONSIST OF SOILS WHICH CLASSIFY AS SC, SM, CL, CL-GH AND ML IN ACCORDANCE WITH THE UNIFIED CLASSIFICATION SYSTEM OR AS APPROVED BY THE GEOTECHNICAL ENGINEER.
  - FILL MATERIALS SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3 INCHES IN MEAN DIAMETER.
  - FILL SHALL BE PLACED IN 6 INCH (MAXIMUM) LOOSE LIFTS FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND IN 4 INCH (MAXIMUM) LOOSE LIFTS FOR MATERIAL COMPACTED BY HAND OPERATED TAMPERS UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE. FILL SHALL BE BROUGHT UP BY BENCHING INTO THE EXISTING SLOPE. A MAXIMUM HEIGHT OF 2 FEET SHALL BE USED FOR EACH BENCH LIFT TAKING CARE TO REMOVE ROOT STRUCTURES AS THE FILL PROCEEDS. THE SURFACE OF EACH LIFT SHALL BE SCARIFIED PRIOR TO PLACEMENT OF THE NEXT LIFT IN ORDER TO EFFECTIVELY TIE THE LIFT LIFTS TOGETHER.
  - ALL COMPACTION SHALL BE TESTED BY THE NUCLER METHOD (ASTM D-6938) OR SAND CONE METHOD (ASTM D-1556) AT A RATE OF AT LEAST ONE TEST PER 5,000 SF PER ONE FOOT OF COMPACTED FILL THICKNESS IN GENERAL AREA FILLS AND ONE TEST PER 50 LINEAL FEET PER LIFT ALONG THE BARREL.
  - THE MINIMUM COMPACTION SHALL BE A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-6998) AT MOISTURE CONTENTS VARYING FROM 2 PERCENT BELOW TO 3 PERCENT ABOVE OPTIMUM MOISTURE CONTENT DETERMINED BY STANDARD PROCTOR TEST.
- SUBGRADE FOR THE RISER STRUCTURE AND OUTLET PIPE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT IF THE GEOTECHNICAL ENGINEER REQUIRES ADDITIONAL SUBGRADE PREPARATION. THE ADDITIONAL COST SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
- THE OUTLET PIPE SHALL BE BEDDED IN CONCRETE FOR 2/3 OF THE PIPE LENGTH, BEGINNING AT THE RISER, AND IN #78 STONE FOR 1/3 OF PIPE LENGTH TO THE OUTLET. SEE DETAILS ON SHEET CXX.
- EMBANKMENT AND SIDE SLOPES OF THE BASIN SHALL BE STABILIZED PER SEEDING SCHEDULE ON EROSION CONTROL DETAILS SHEET OR SODDED. SEE LANDSCAPE PLAN ON SHEETS LXX AND LXX FOR FURTHER PLANTING DETAILS.
- IF, DURING CONSTRUCTION, THE SCM IS TO BE USED AS AN EROSION CONTROL MEASURE, THE FOREBAY BERMS SHALL NOT BE INSTALLED DURING THE INITIAL CONSTRUCTION OR WHILE THE SCM IS USED AS AN EROSION CONTROL MEASURE.
- UNLESS OTHERWISE NOTED, ALL PERMANENT STRUCTURES (e.g. RISER/BARREL, WEIR WALLS, ETC) ARE TO BE INSTALLED WITH THE INITIAL DAM CONSTRUCTION.
- FOR SITE BUILT FEATURES (e.g. WEIR WALLS, DROP STRUCTURES, BRIDGES, ETC), THE CONTRACTOR SHALL PROVIDE STRUCTURAL DRAWINGS TO BE SIGNED AND SEALED BY A NC PROFESSIONAL ENGINEER AND TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- PRIOR TO FINAL GRADING OF THE SCM, THE CONTRACTOR SHALL PROVIDE SUFFICIENT AS-BUILT SURVEY INFORMATION TO CONFIRM THAT THE FINISHED SCM WILL MEET THE SPECIFIC DIMENSIONAL REQUIREMENTS APPLICABLE TO THE SCM. THOSE REQUIREMENTS INCLUDE:
  - POND BOTTOM ELEVATION = 353.00 FT
  - DRAWDOWN OVERFLOW ELEVATION (NORMAL POOL) = 357.5 FT
  - MINIMUM SURFACE AREA AT NORMAL POOL ELEVATION = 5,779 SF
  - RISER CREST ELEVATION = 361.00 FT
  - LOW POINT TOP OF EMBANKMENT (AUXILIARY SPILLWAY) = 362.00 FT
  - AVERAGE TOP OF EMBANKMENT = 363.00 FT
- ELEVATIONS SHALL BE WITHIN 0.1 FEET OF THE ABOVE ELEVATIONS FOR EARTHWORK, AND 0.05 FEET FOR OUTLET STRUCTURE. ALL SURFACE AREAS ARE THE MINIMUM AREAS. REQUEST FOR A REDUCTIONS IN THE MINIMUM VALUES WILL BE CONSIDERED ON A CASE BY CASE BASIS.
- ONCE THE PROJECT SITE HAS BEEN STABILIZED, CONTRACTOR SHALL OBTAIN APPROVAL BY EROSION CONTROL INSPECTOR IN ORDER TO REMOVE TEMPORARY EROSION CONTROL DEVICES.
  - ONCE ALL SEDIMENT AND EROSION CONTROL DEVICES HAVE BEEN REMOVED, THE SCM SHALL BE CONVERTED TO A PERMANENT SCM.
  - ALL SEDIMENT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
  - FOREBAY AND VEGETATED SHELF SHALL BE CONSTRUCTED AS SHOWN ON THE PLAN.

- VEGETATED SHELF SHALL BE PLANTED PER PLANT SCHEDULE ON LANDSCAPE PLAN (SEE LITTLE DIVERSIFIED ARCHITECTS).
- FINAL CERTIFICATION OF THE SCM BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED IS REQUIRED.

**CLAY LINER SPECIFICATIONS:**

THE CONTRACTOR SHALL INSTALL A CLAY LINER TO MAINTAIN A PERMANENT POOL AT THE DESIGN ELEVATION. IF THE SITE GEOTECHNICAL ENGINEER DETERMINES THAT THE EXISTING SITE CONDITIONS (SOIL PROPERTIES, EXISTING WATER TABLE, ETC.) INDICATE THAT NORMAL POOL CAN BE MAINTAINED WITHOUT A CLAY LINER, THE GEOTECHNICAL ENGINEER WILL PROVIDE NOTICE IN WRITING TO THE PROJECT ENGINEER THAT THE CLAY LINER IS NOT REQUIRED. IF THE CLAY LINER IS NOT INSTALLED, THE OWNER SHALL RECEIVE A CREDIT FOR THE DELETION OF THE LINER.

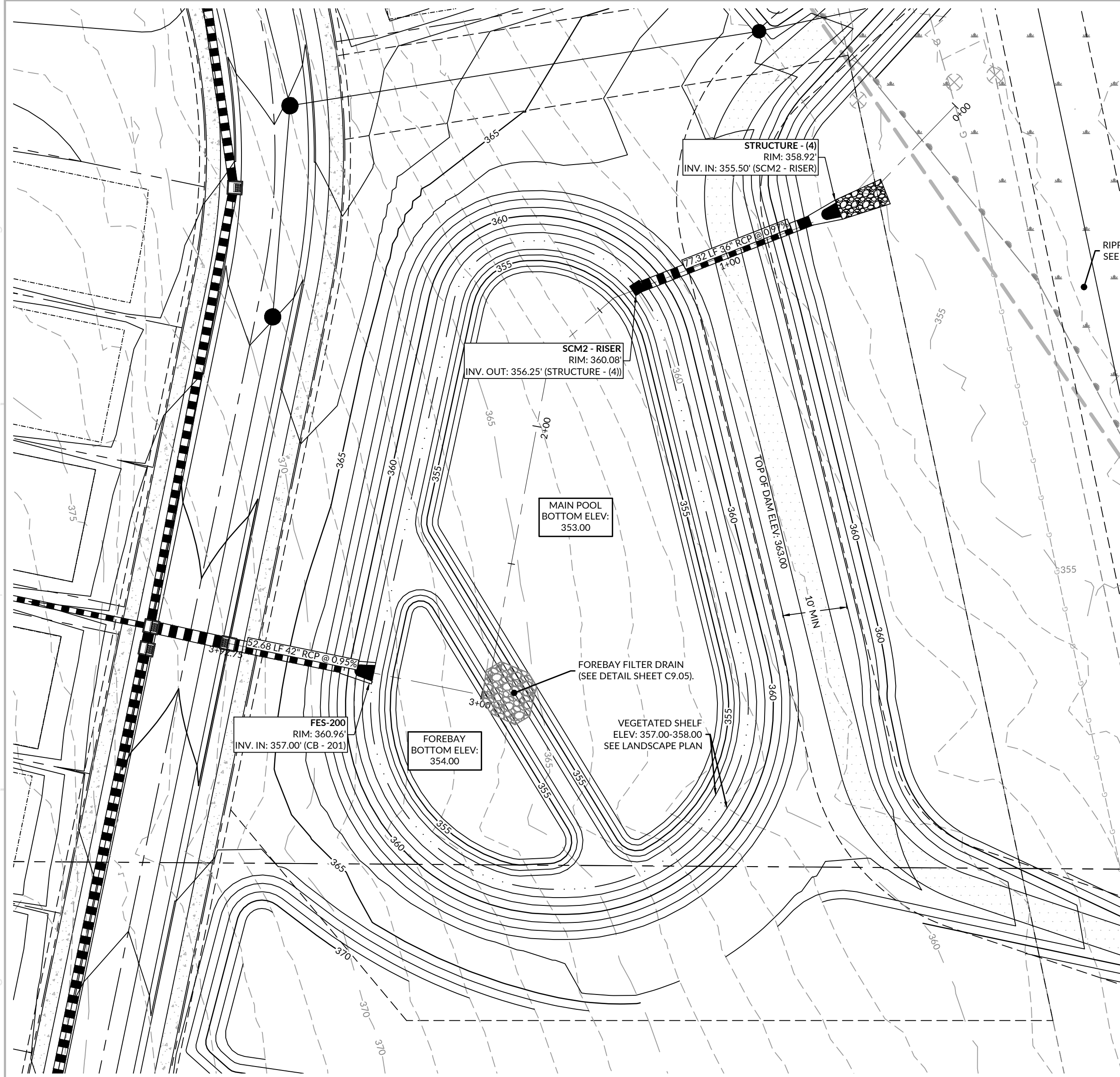
AT A MINIMUM, THE CLAY LINER MATERIAL FOR THE WET POND SHALL MEET THE FOLLOWING SPECIFICATIONS:

- UNIFIED SOIL CLASSIFICATION SYSTEM DESIGNATION OF CL, CH, ML OR SC
- MINIMUM OF 40% PASSING #200 SIEVE
- MINIMUM PLASTICITY INDEX OF 12
- MAXIMUM PERMEABILITY OF  $1 \times 10^{-5}$  cm/sec
- A MINIMUM OF 2 TESTS OF EACH ABOVE PARAMETER SHALL BE PROVIDED FROM AN APPROVED LABORATORY ON THE LINER MATERIAL AND PRESENTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL.
- COMPACTION TO A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698), AND WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT (MINIMUM OF 1 COMPACTION DENSITY TEST PER 2500 SQUARE FEET).
- AN IN-PLACE MAXIMUM INFILTRATION RATE OF 0.01 INCHES PER HOUR.
- RECOMMENDATIONS OF THE SITE GEOTECHNICAL ENGINEER MAY SUPERCEDE THE ABOVE SPECIFICATIONS.

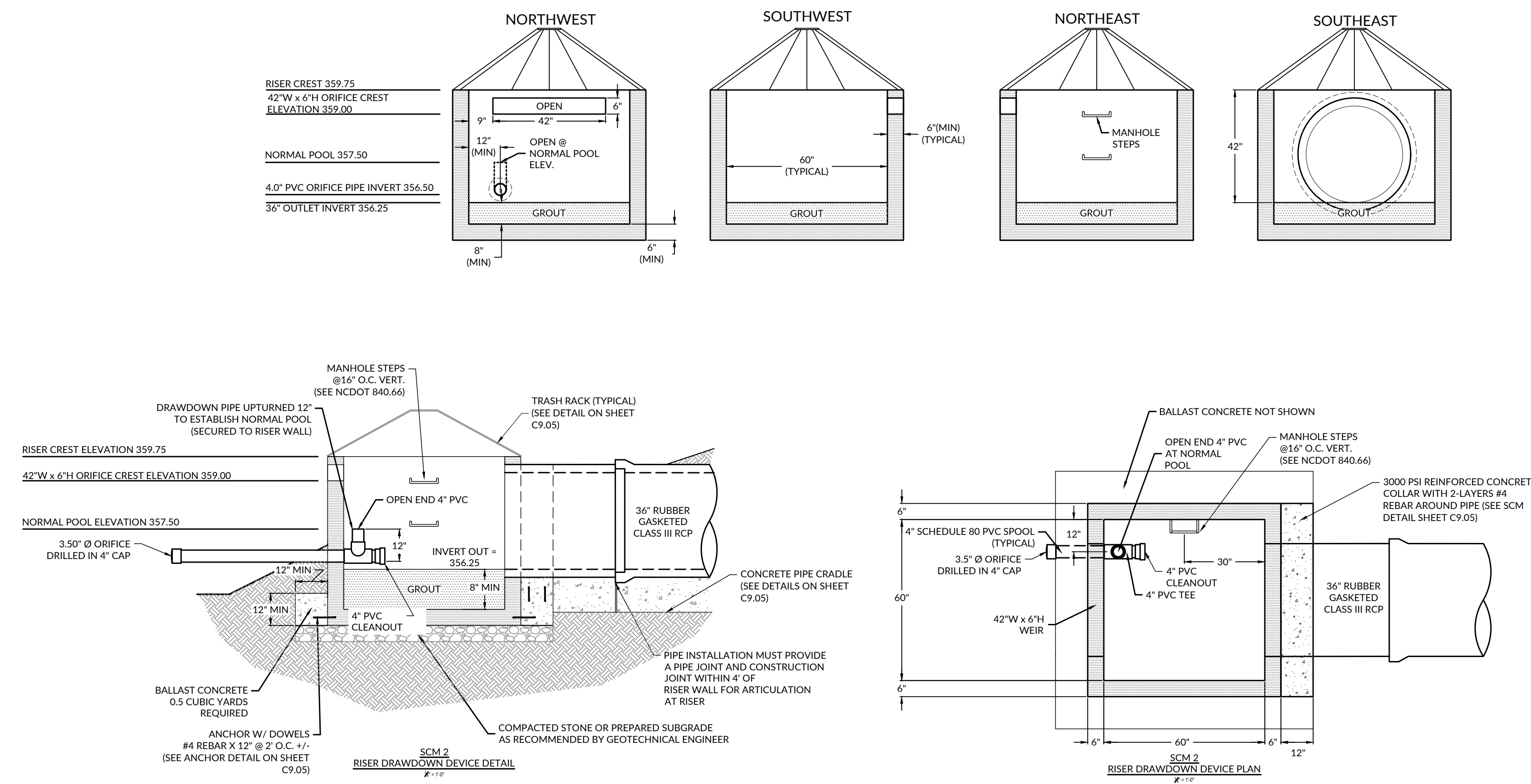
THE CLAY LINER SHALL BE PLACED UNDER THE BOTTOM OF THE SCM PERMANENT POOL TO A MINIMUM THICKNESS OF 8 INCHES. A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE PLACED ABOVE THE CLAY LINER TO THE FINISHED GRADE AS SHOWN ON THE DRAWINGS AND/OR DETAILS. CARE SHALL BE TAKEN WHEN PLACING THE TOPSOIL SO AS NOT TO DAMAGE THE CLAY LINER. A CLAY/SOIL NO ORGANICS MIXTURE MAY BE USED IF THE ABOVE SPECIFICATIONS ARE SATISFIED AND WITH WRITTEN APPROVAL BY THE GEOTECHNICAL ENGINEER.

**PRECAST CONCRETE MATERIALS NOTES:**

- PRECAST CONCRETE STRUCTURES SHALL CONFORM TO ASTM C913 (RECTANGULAR) OR C478 (ROUND).
- ALL REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM C76, CLASS III (UNLESS OTHERWISE NOTED).
  - O-RING JOINTS (RGRCP) SHALL CONFORM TO ASTM C443 & ASTM C361.
  - NON O-RING JOINTS (RCP) SHALL CONFORM TO ASTM C990.

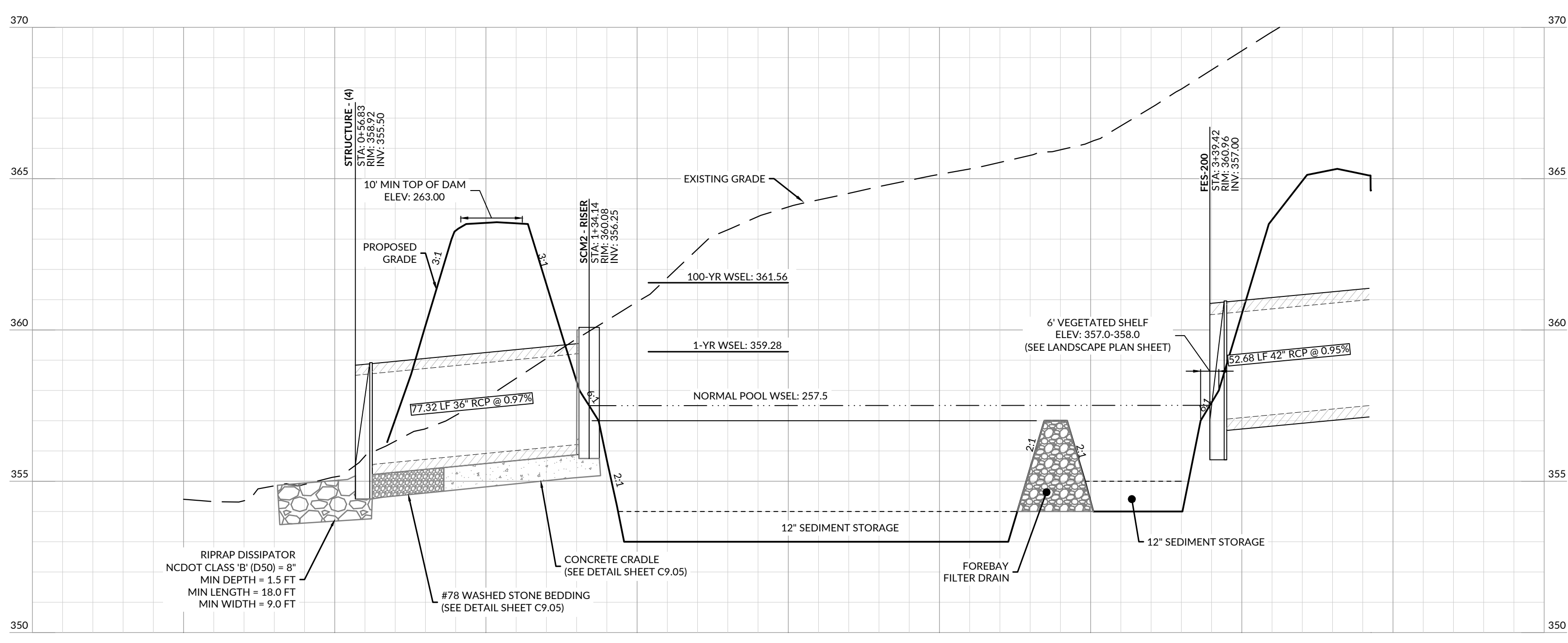


**WET POND SCM #2 PLAN VIEW**  
SCALE: 1" = 30'

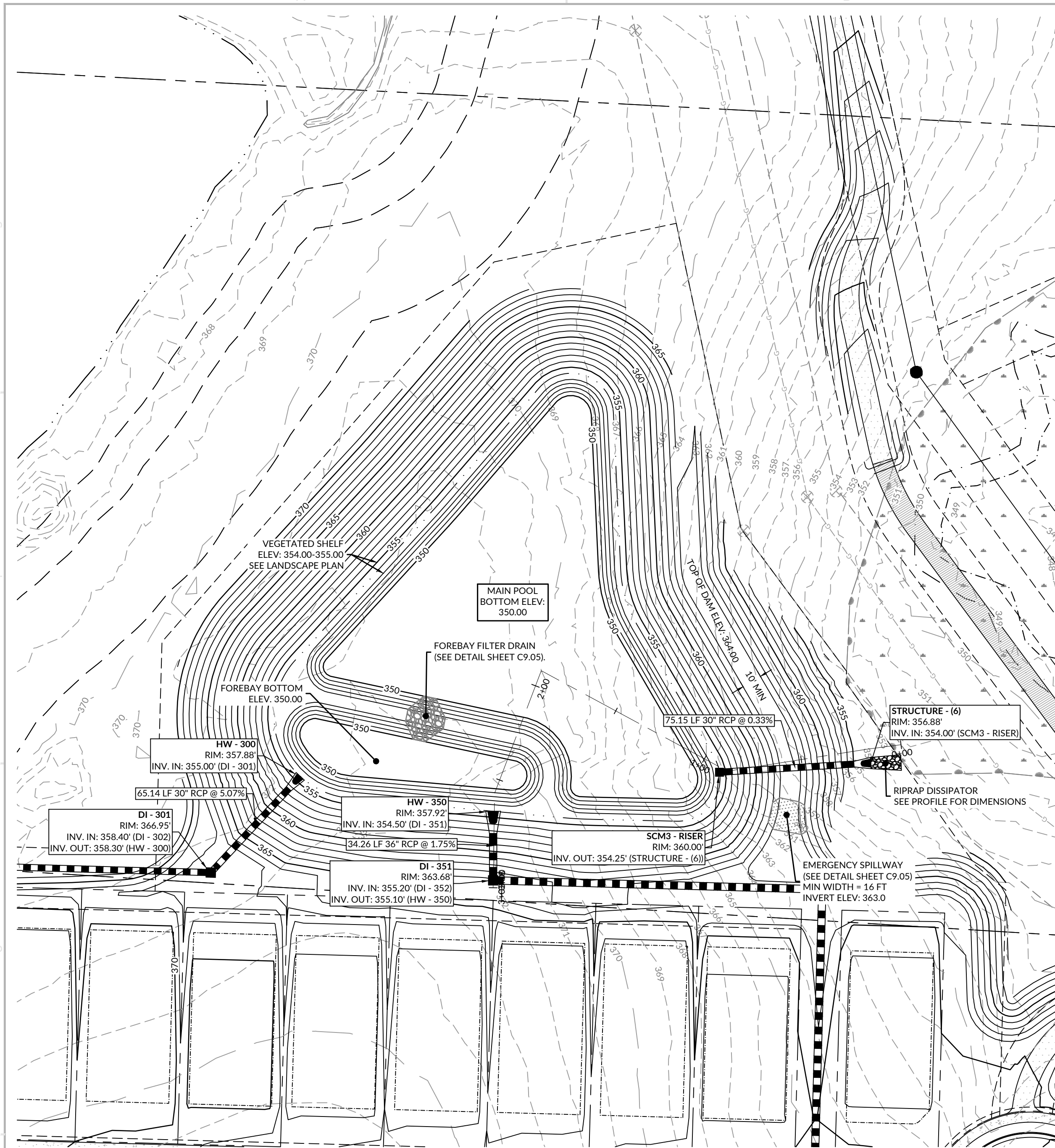


**NOTE:** RISER AND BALLAST CONCRETE HAVE BEEN SIZED BASED ON BUOYANCY CALCULATIONS. ADJUSTMENTS TO CONCRETE DIMENSIONS ARE NOT PERMITTED WITHOUT PRIOR WRITTEN APPROVAL. ANY DIMENSIONAL CHANGES TO BALLAST CONCRETE BASE AND RISER MUST BE REQUESTED IN WRITING AND MUST BE ACCOMPANIED BY BUOYANCY CALCULATIONS SIGNED AND SEALED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.

- WET POND STORMWATER CONTROL MEASURE (SCM) GENERAL NOTES:**
- PRIOR TO OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THE PLANS OR SPECIFICATIONS.
  - ALL CONSTRUCTION AND MINIMUM DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL STANDARDS AND SPECIFICATIONS, HEREBY INCORPORATED BY REFERENCE.
  - UPON COMPLETION OF CONSTRUCTION, CERTIFICATION OF THE SCM BY THE GEOTECHNICAL ENGINEER WILL BE REQUIRED PRIOR TO FINAL SCM ACCEPTANCE.
  - THE GEOTECHNICAL ENGINEER SHALL EVALUATE SOILS FOR SUITABILITY OF DAM CONSTRUCTION AND SLOPE STABILITY.
  - PRIOR TO PLACEMENT OF EMBANKMENT FILL, THE GEOTECHNICAL ENGINEER SHALL SUPERVISE THE FOUNDATION PREPARATION AND APPROVE THE DEPTH AND EXTENT OF THE CUTOFF TRENCH, A MINIMUM OF 1 FOOT SHALL BE EXCAVATED.
  - THE DAM AND FOREBAY BERMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS UNLESS SUPERCEDED BY THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
    - BORROW MATERIALS FOR USE AS EMBANKMENT FILL SHALL BE FREE OF ORGANICS, ROOTS AND OTHER WOODY VEGETATION OR ORGANIC DEBRIS.
    - FILL MATERIALS SHALL CONSIST OF SOILS WHICH CLASSIFY AS SC, SM, CL, CL-CH AND ML IN ACCORDANCE WITH THE UNIFIED CLASSIFICATION SYSTEM OR AS APPROVED BY THE GEOTECHNICAL ENGINEER.
    - FILL MATERIALS SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3 INCHES IN MEAN DIAMETER.
    - FILL SHALL BE PLACED IN 8 INCH (MAXIMUM) LOOSE LIFTS FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND IN 4 INCH (MAXIMUM) LOOSE LIFTS FOR MATERIAL COMPACTED BY HAND OPERATED TAMPERS UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE. FILL SHALL BE BROUGHT UP BY BENCHING INTO THE EXISTING SLOPE. A MAXIMUM HEIGHT OF 2 FEET SHALL BE USED FOR EACH BENCH LIFT TAKING CARE TO REMOVE ROOT STRUCTURES AS THE FILL PROCEEDS. THE SURFACE OF EACH LIFT SHALL BE SCARIFIED PRIOR TO PLACEMENT OF THE NEXT LIFT IN ORDER TO EFFECTIVELY TIE THE FILL LIFTS TOGETHER.
    - ALL COMPACTION SHALL BE TESTED BY THE NUCLEAR METHOD (ASTM D-6938) OR SAND CONE METHOD (ASTM D-1556) AT A RATE OF AT LEAST ONE TEST PER 5,000 SF PER ONE FOOT OF COMPACTED FILL THICKNESS IN GENERAL AREA FILLS AND ONE TEST PER 50 LINEAL FEET PER LIFT ALONG THE BARREL.
    - THE MINIMUM COMPACTION SHALL BE A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698) AT MOISTURE CONTENTS VARYING FROM 2 PERCENT BELOW TO 3 PERCENT ABOVE OPTIMUM MOISTURE CONTENT DETERMINED BY STANDARD PROCTOR TEST.
    - SUBGRADE FOR THE RISER STRUCTURE AND OUTLET PIPE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. IF THE GEOTECHNICAL ENGINEER REQUIRES ADDITIONAL SUBGRADE PREPARATION, THE ADDITIONAL COST SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
  - THE OUTLET PIPE SHALL BE BEDDED IN CONCRETE FOR 2/3 OF THE PIPE LENGTH, BEGINNING AT THE RISER, AND IN 7/8 STONE FOR 1/3 OF PIPE LENGTH TO THE OUTLET. SEE DETAILS ON SHEET C9.05.
  - EMBANKMENT AND SIDE SLOPES OF THE BASIN SHALL BE STABILIZED PER SEEDING SCHEDULE ON EROSION CONTROL DETAILS SHEET OR SOODED. SEE LANDSCAPE PLAN ON SHEETS LXX AND LXX FOR FURTHER PLANTING DETAILS.
  - IF, DURING CONSTRUCTION, THE SCM IS TO BE USED AS AN EROSION CONTROL MEASURE, THE FOREBAY BERMS SHALL NOT BE INSTALLED DURING THE INITIAL CONSTRUCTION OR WHILE THE SCM IS USED AS AN EROSION CONTROL MEASURE.
  - UNLESS OTHERWISE NOTED, ALL PERMANENT STRUCTURES (e.g. RISER, BARREL, WEIR WALLS, ETC.) ARE TO BE INSTALLED WITH THE INITIAL DAM CONSTRUCTION.
  - FOR SITE BUILT FEATURES (e.g. WEIR WALLS, DROP STRUCTURES, BRIDGES, ETC.), THE CONTRACTOR SHALL PROVIDE STRUCTURAL DRAWINGS TO BE SIGNED AND SEALED BY A NC PROFESSIONAL ENGINEER AND TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
  - PRIOR TO FINAL GRADING OF THE SCM, THE CONTRACTOR SHALL PROVIDE SUFFICIENT AS-BUILT SURVEY INFORMATION TO CONFIRM THAT THE FINISHED SCM WILL MEET THE SPECIFIC DIMENSIONAL REQUIREMENTS APPLICABLE TO THE SCM. THOSE REQUIREMENTS INCLUDE:
    - POND BOTTOM ELEVATION = 353.00 FT
    - DRAWDOWN OVERFLOW ELEVATION (NORMAL POOL) = 357.50 FT
    - MINIMUM SURFACE AREA AT NORMAL POOL ELEVATION = 13,963 SF
    - WEIR CREST ELEVATION = 359.00 FT
    - RISER CREST ELEVATION = 359.75 FT
    - LOW POINT TOP OF EMBANKMENT (AUXILIARY SPILLWAY) = 362.00 FT
    - AVERAGE TOP OF EMBANKMENT = 363.00 FT
  - ELEVATIONS SHALL BE WITHIN 0.1 FEET OF THE ABOVE ELEVATIONS FOR EARTHWORK, AND 0.05 FEET FOR OUTLET STRUCTURE. ALL SURFACE AREAS ARE THE MINIMUM AREAS. REQUEST FOR A REDUCTIONS IN THE MINIMUM VALUES WILL BE CONSIDERED ON A CASE BY CASE BASIS.
  - ONCE THE PROJECT SITE HAS BEEN STABILIZED, CONTRACTOR SHALL OBTAIN APPROVAL BY EROSION CONTROL INSPECTOR IN ORDER TO REMOVE TEMPORARY EROSION CONTROL DEVICES.
    - ONCE ALL SEDIMENT AND EROSION CONTROL DEVICES HAVE BEEN REMOVED, THE SCM SHALL BE CONVERTED TO A PERMANENT SCM.
    - ALL SEDIMENT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
    - FOREBAY AND VEGETATED SHELF SHALL BE CONSTRUCTED AS SHOWN ON THE PLAN.
    - VEGETATED SHELF SHALL BE PLANTED PER PLANT SCHEDULE ON LANDSCAPE PLAN (SEE LITTLE DIVERSIFIED ARCHITECTS).
  - FINAL CERTIFICATION OF THE SCM BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED IS REQUIRED.



**WET POND SCM #2 PROFILE VIEW**  
SCALE: 1" = 30' HORIZONTAL, 1" = 3' VERTICAL



### WET POND SCM #3 PLAN VIEW

SCALE: 1" = 40'

#### WET POND STORMWATER CONTROL MEASURE (SCM) GENERAL NOTES:

- PRIOR TO OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THE PLANS OR SPECIFICATIONS.
- ALL CONSTRUCTION AND MINIMUM DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL STANDARDS AND SPECIFICATIONS, HEREBY INCORPORATED BY REFERENCE.
- UPON COMPLETION OF CONSTRUCTION, CERTIFICATION OF THE SCM BY THE GEOTECHNICAL ENGINEER WILL BE REQUIRED PRIOR TO FINAL SCM ACCEPTANCE.
- THE GEOTECHNICAL ENGINEER SHALL EVALUATE SOILS FOR SUITABILITY OF DAM CONSTRUCTION AND STAKE STABILITY.
- PRIOR TO PLACEMENT OF EMBANKMENT FILL, THE GEOTECHNICAL ENGINEER SHALL SUPERVISE THE FOUNDATION PREPARATION AND APPROVE THE DEPTH AND EXTENT OF THE CUTOFF TRENCH, A MINIMUM OF 1 FOOT SHALL BE EXCAVATED.
- THE DAM AND FOREBAY BERMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS UNLESS SUPERCEDED BY THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS:
  - BORROW MATERIALS FOR USE AS EMBANKMENT FILL SHALL BE FREE OF ORGANICS, ROOTS AND OTHER WOODY VEGETATION OR ORGANIC DEBRIS.
  - FILL MATERIALS SHALL CONSIST OF SOILS WHICH CLASSIFY AS SC, SM, CL, CL-CH AND ML IN ACCORDANCE WITH THE UNIFIED CLASSIFICATION SYSTEM OR AS APPROVED BY THE GEOTECHNICAL ENGINEER.
  - FILL MATERIALS SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3 INCHES IN MEAN DIAMETER.
  - FILL SHALL BE PLACED IN 8 INCH [MAXIMUM] LOOSE LIFTS FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND IN 4 INCH [MAXIMUM] LOOSE LIFTS FOR MATERIAL COMPACTED BY HAND OPERATED TAMPERS UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE. FILL SHALL BE BROUGHT UP BY BENCHING INTO THE EXISTING SLOPE. A MAXIMUM HEIGHT OF 2 FEET SHALL BE USED FOR EACH BENCH LIFT TAKING CARE TO REMOVE ROOT STRUCTURES AS THE FILL PROCEEDS. THE SURFACE OF EACH LIFT SHALL BE SCARIFIED PRIOR TO PLACEMENT OF THE NEXT LIFT IN ORDER TO EFFECTIVELY TIE THE FILL LIFTS TOGETHER.
  - ALL COMPACTION SHALL BE TESTED BY THE NUCLEAR METHOD (ASTM D-6938) OR SAND CONE METHOD (ASTM D-1556) AT A RATE OF AT LEAST ONE TEST PER 5,000 SF PER ONE FOOT OF COMPACTED FILL THICKNESS IN GENERAL AREA FILLS AND ONE TEST PER 50 LINEAL FEET PER LIFT ALONG THE BARREL.
  - THE MINIMUM COMPACTION SHALL BE A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698) AT MOISTURE CONTENTS VARYING FROM 2 PERCENT BELOW TO 3 PERCENT ABOVE OPTIMUM MOISTURE CONTENT DETERMINED BY STANDARD PROCTOR TEST.
- SUBGRADE FOR THE RISER STRUCTURE AND OUTLET PIPE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. IF THE GEOTECHNICAL ENGINEER REQUIRES ADDITIONAL SUBGRADE PREPARATION, THE ADDITIONAL COST SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.

- THE OUTLET PIPE SHALL BE BEDDED IN CONCRETE FOR 2/3 OF THE PIPE LENGTH, BEGINNING AT THE RISER, AND IN 878 STONE FOR 1/3 OF PIPE LENGTH TO THE OUTLET. SEE DETAILS ON SHEET C.X.X.
- EMBANKMENT AND SIDE SLOPES OF THE BASIN SHALL BE STABILIZED PER SEEDING SCHEDULE ON EROSION CONTROL DETAILS SHEET OR SODDED. SEE LANDSCAPE PLAN ON SHEETS L.X.X AND L.X.X FOR FURTHER PLANTING DETAILS.
- IF, DURING CONSTRUCTION, THE SCM IS TO BE USED AS AN EROSION CONTROL MEASURE, THE FOREBAY BERMS SHALL NOT BE INSTALLED DURING THE INITIAL CONSTRUCTION OR WHILE THE SCM IS USED AS AN EROSION CONTROL MEASURE.
- UNLESS OTHERWISE NOTED, ALL PERMANENT STRUCTURES (e.g. RISER, BARREL, WEIR WALLS, ETC.) ARE TO BE INSTALLED WITH THE INITIAL DAM CONSTRUCTION.
- FOR SITE BUILT FEATURES (e.g. WEIR WALLS, DROP STRUCTURES, BRIDGES, ETC.), THE CONTRACTOR SHALL PROVIDE STRUCTURAL DRAWINGS TO BE SIGNED AND SEALED BY A NC PROFESSIONAL ENGINEER AND TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- PRIOR TO FINAL GRADING OF THE SCM, THE CONTRACTOR SHALL PROVIDE SUFFICIENT AS-BUILT SURVEY INFORMATION TO CONFIRM THAT THE FINISHED SCM WILL MEET THE SPECIFIC DIMENSIONAL REQUIREMENTS APPLICABLE TO THE SCM. THOSE REQUIREMENTS INCLUDE:
  - POND BOTTOM ELEVATION = 350.00 FT
  - DRAWDOWN OVERFLOW ELEVATION (NORMAL POOL) = 354.5 FT
  - MINIMUM SURFACE AREA AT NORMAL POOL ELEVATION = 9,722 SF
  - WEIR CREST ELEVATION = 357.25 FT
  - RISER CREST ELEVATION = 360.00 FT
  - LOW POINT TOP OF EMBANKMENT (AUXILIARY SPILLWAY) = 363.00 FT
  - AVERAGE TOP OF EMBANKMENT = 364.00 FT
- ELEVATIONS SHALL BE WITHIN 0.1 FEET OF THE ABOVE ELEVATIONS FOR EARTHWORK, AND 0.05 FEET FOR OUTLET STRUCTURE. ALL SURFACE AREAS ARE THE MINIMUM AREAS. REQUEST FOR A REDUCTIONS IN THE MINIMUM VALUES WILL BE CONSIDERED ON A CASE BY CASE BASIS.
- ONCE THE PROJECT SITE HAS BEEN STABILIZED, CONTRACTOR SHALL OBTAIN APPROVAL BY EROSION CONTROL INSPECTOR IN ORDER TO REMOVE TEMPORARY EROSION CONTROL DEVICES.
  - ONCE ALL SEDIMENT AND EROSION CONTROL DEVICES HAVE BEEN REMOVED, THE SCM SHALL BE CONVERTED TO A PERMANENT SCM.
  - ALL SEDIMENT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
  - FOREBAY AND VEGETATED SHELF SHALL BE CONSTRUCTED AS SHOWN ON THE PLAN.
  - VEGETATED SHELF SHALL BE PLANTED PER PLANT SCHEDULE ON LANDSCAPE PLAN (SEE LITTLE DIVERSIFIED ARCHITECTS).
- FINAL CERTIFICATION OF THE SCM BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED IS REQUIRED.

#### CLAY LINER SPECIFICATIONS:

THE CONTRACTOR SHALL INSTALL A CLAY LINER TO MAINTAIN A PERMANENT POOL AT THE DESIGN ELEVATION. IF THE SITE GEOTECHNICAL ENGINEER DETERMINES THAT THE EXISTING SITE CONDITIONS (SOIL PROPERTIES, EXISTING WATER TABLE, ETC.) INDICATE THAT NORMAL POOL CAN BE MAINTAINED WITHOUT A CLAY LINER, THE GEOTECHNICAL ENGINEER WILL PROVIDE NOTICE IN WRITING TO THE PROJECT ENGINEER THAT THE CLAY LINER IS NOT REQUIRED. IF THE CLAY LINER IS NOT INSTALLED, THE OWNER SHALL RECEIVE A CREDIT FOR THE DELETION OF THE LINER.

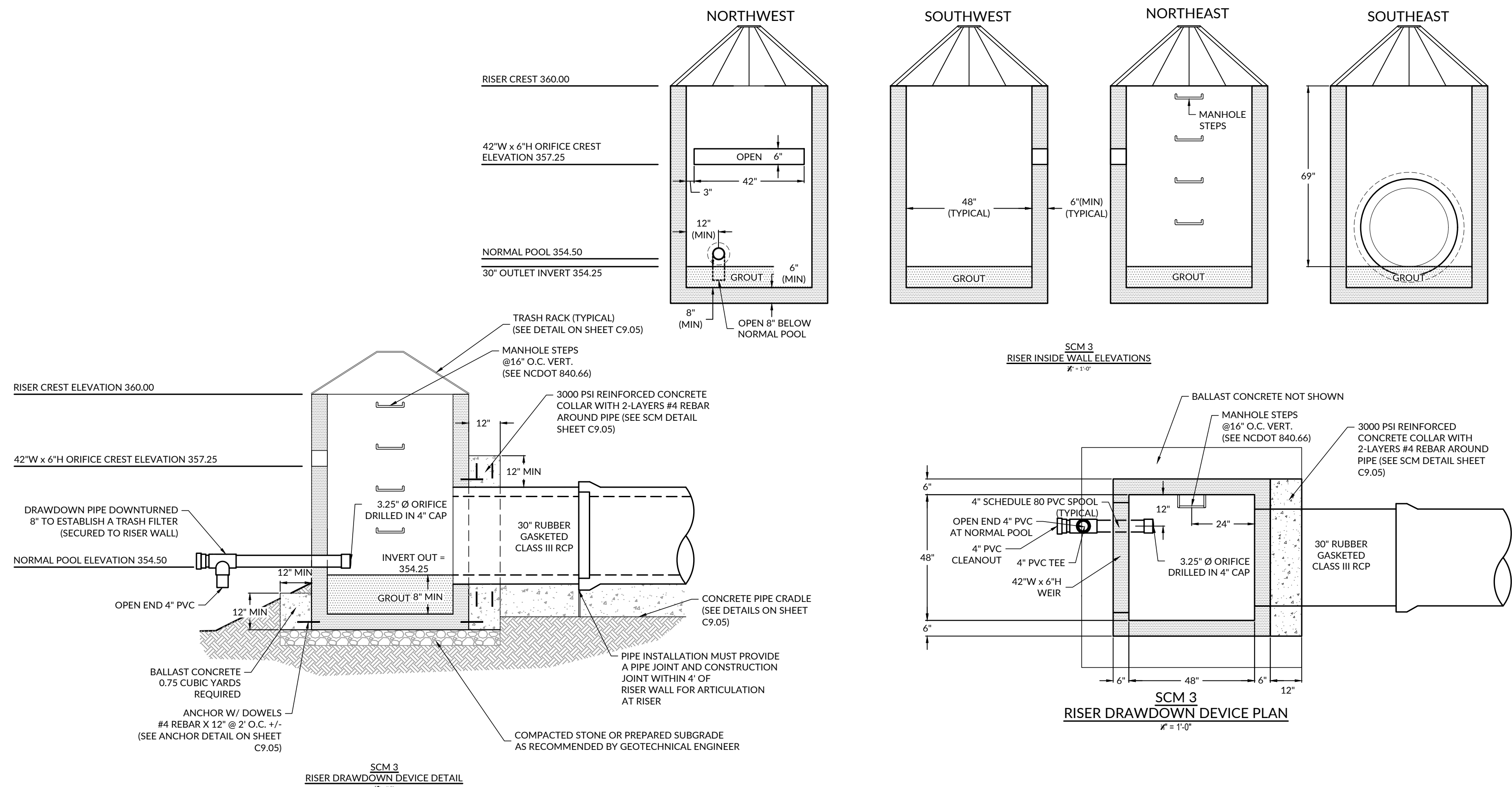
AT A MINIMUM, THE CLAY LINER MATERIAL FOR THE WET POND SHALL MEET THE FOLLOWING SPECIFICATIONS:

- UNIFIED SOIL CLASSIFICATION SYSTEM DESIGNATION OF CL, CH, ML, OR SC
- MINIMUM OF 40% PASSING #200 SIEVE
- MINIMUM PLASTICITY INDEX OF 12
- MAXIMUM PERMEABILITY OF  $1 \times 10^{-5}$  cm/sec
- A MINIMUM OF 2 TESTS OF EACH ABOVE PARAMETER SHALL BE PROVIDED FROM AN APPROVED LABORATORY ON THE LINER MATERIAL AND PRESENTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL.
- COMPACTION TO A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698), AND WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT (MINIMUM OF 1 COMPACTION DENSITY TEST PER 2500 SQUARE FEET).
- AN IN-PLACE MAXIMUM INFILTRATION RATE OF 0.01 INCHES PER HOUR.
- RECOMMENDATIONS OF THE SITE GEOTECHNICAL ENGINEER MAY SUPERCEDE THE ABOVE SPECIFICATIONS.

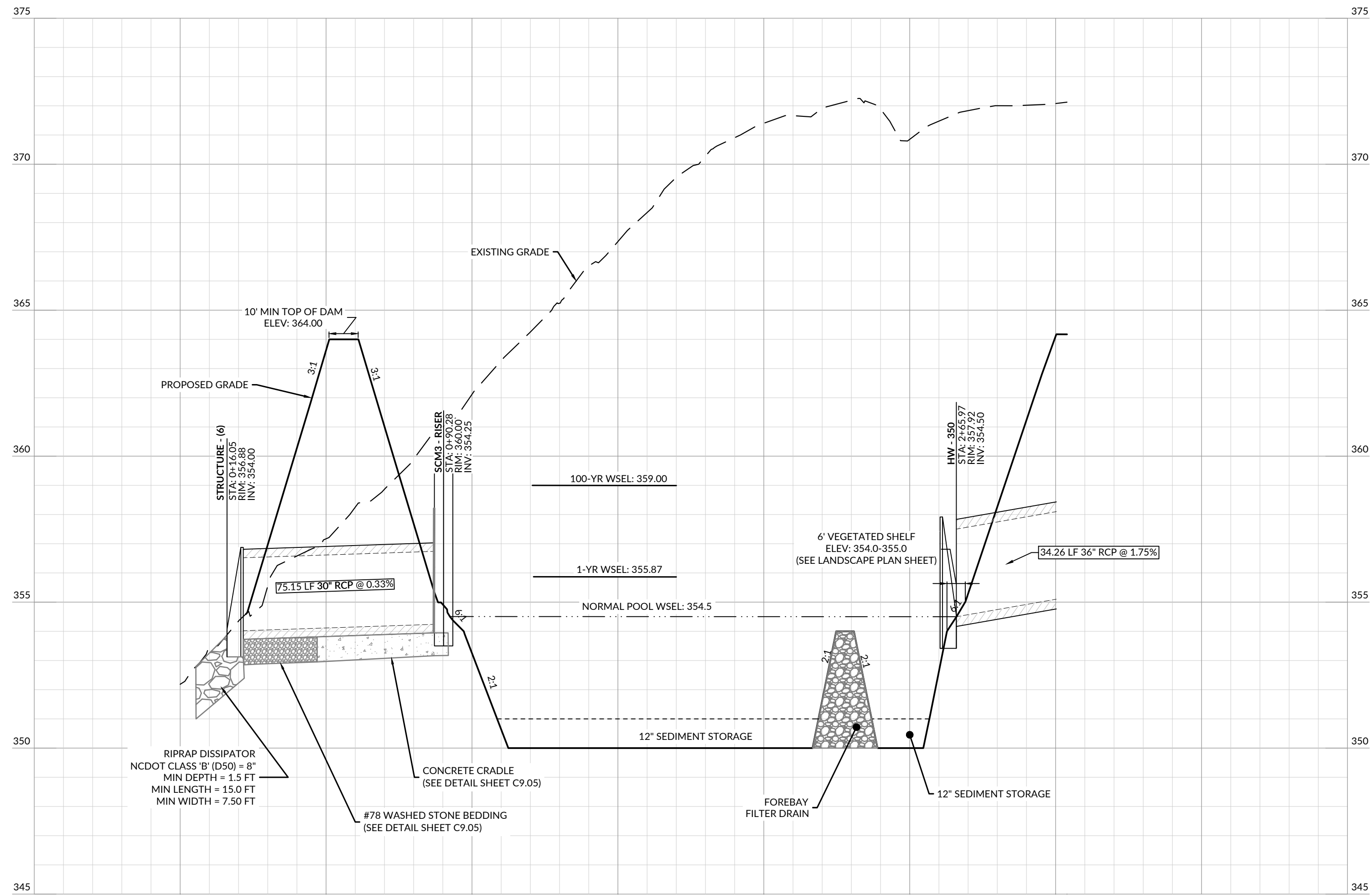
THE CLAY LINER SHALL BE PLACED UNDER THE BOTTOM OF THE SCM PERMANENT POOL TO A MINIMUM THICKNESS OF 8 INCHES. A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE PLACED ABOVE THE CLAY LINER TO THE FINISHED GRADE AS SHOWN ON THE DRAWINGS AND/OR DETAILS. CARE SHALL BE TAKEN WHEN PLACING THE TOPSOIL, SO AS NOT TO DAMAGE THE CLAY LINER. A CLAY/SOIL, NO ORGANICS, MIXTURE MAY BE USED IF THE ABOVE SPECIFICATIONS ARE SATISFIED AND WITH WRITTEN APPROVAL BY THE GEOTECHNICAL ENGINEER.

#### PRECAST CONCRETE MATERIALS NOTES:

- ALL PRECAST CONCRETE STRUCTURES SHALL CONFORM TO ASTM C913 (RECTANGULAR) OR C478 (ROUND).
- ALL REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM C76, CLASS III (UNLESS OTHERWISE NOTED).
  - O-RING JOINTS (RGRC) SHALL CONFORM TO ASTM C443 & ASTM C361.
  - NON O-RING JOINTS (RCP) SHALL CONFORM TO ASTM C390

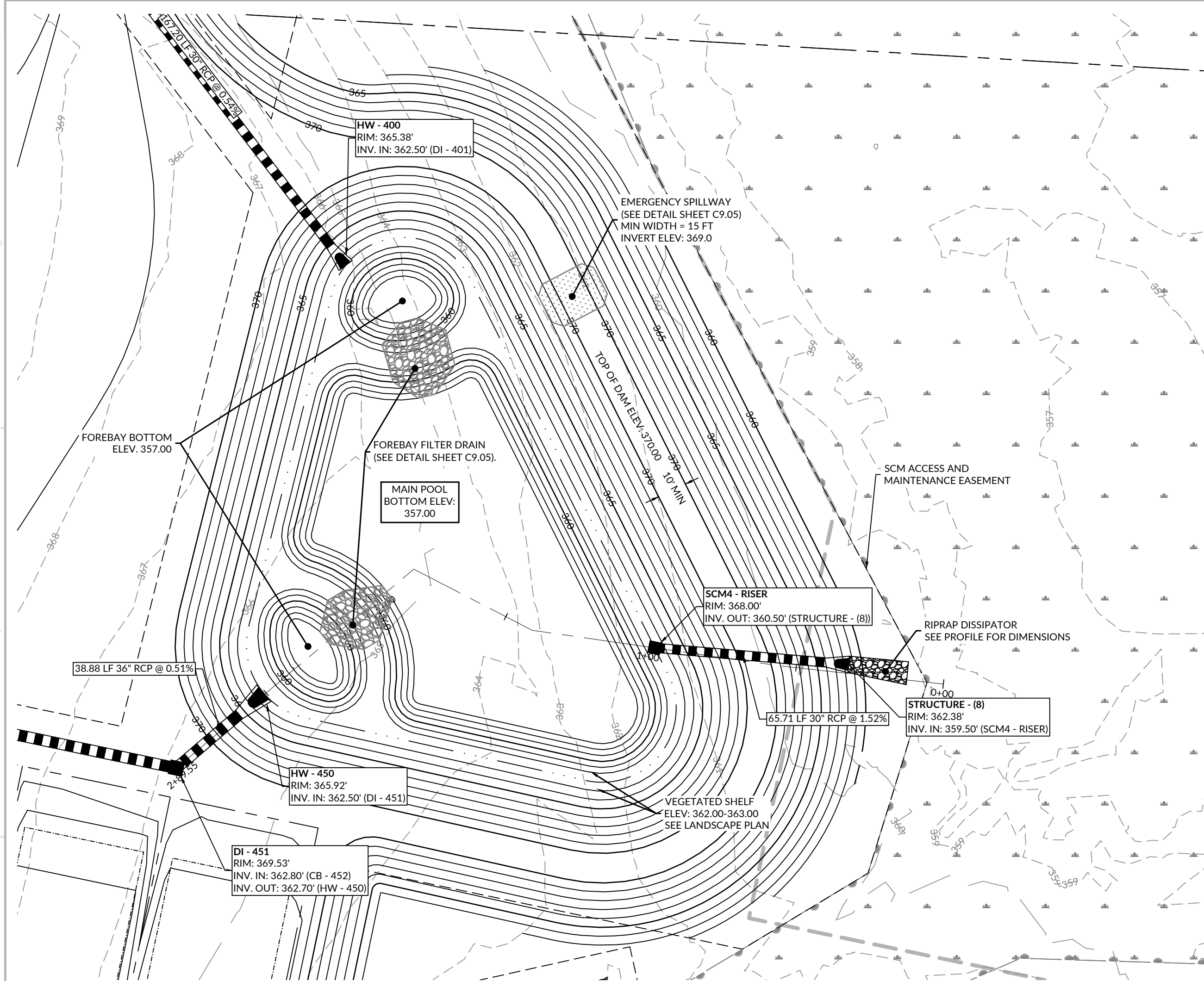


NOTE: RISER AND BALLAST CONCRETE HAVE BEEN SIZED BASED ON BUOYANCY CALCULATIONS. ADJUSTMENTS TO CONCRETE DIMENSIONS ARE NOT PERMITTED WITHOUT PRIOR WRITTEN APPROVAL. ANY DIMENSIONAL CHANGES TO BALLAST CONCRETE BASE AND RISER MUST BE REQUESTED IN WRITING AND MUST BE ACCOMPANIED BY BUOYANCY CALCULATIONS SIGNED AND SEALED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.

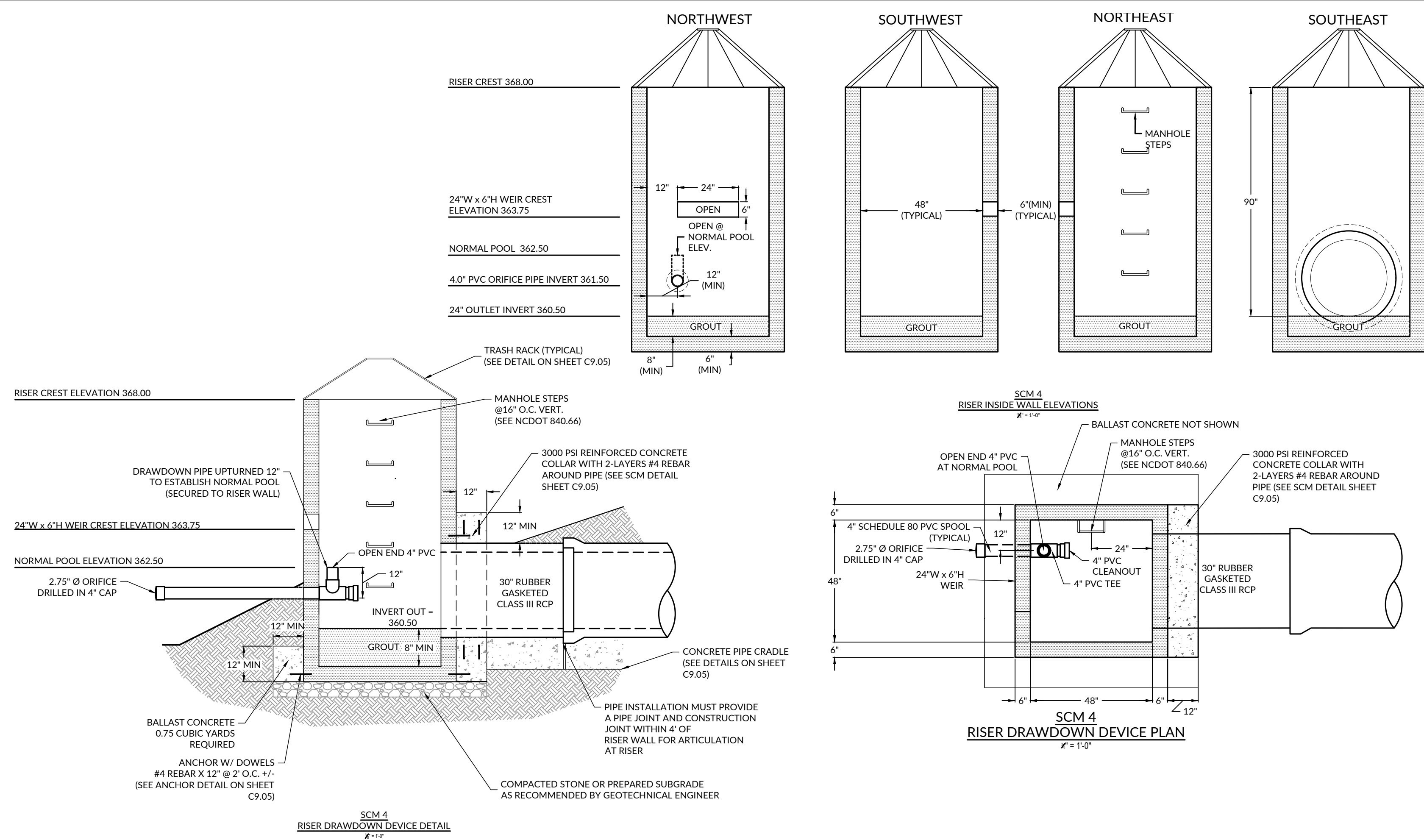


### WET POND SCM #3 PROFILE VIEW

SCALE: 1" = 30' HORIZONTAL, 1" = 3' VERTICAL



**WET POND SCM #4 PLAN VIEW**  
SCALE: 1" = 30'



**NOTE:**  
RISER AND BALLAST CONCRETE HAVE BEEN SIZED BASED ON BUOYANCY CALCULATIONS. ADJUSTMENTS TO CONCRETE DIMENSIONS ARE NOT PERMITTED WITHOUT PRIOR WRITTEN APPROVAL. ANY DIMENSIONAL CHANGES TO BALLAST CONCRETE BASE AND RISER MUST BE REQUESTED IN WRITING AND MUST BE ACCOMPANIED BY BUOYANCY CALCULATIONS SIGNED AND SEALED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.

**WET POND STORMWATER CONTROL MEASURE (SCM) GENERAL NOTES:**

- PRIOR TO OR DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THE PLANS OR SPECIFICATIONS.
- ALL CONSTRUCTION AND MINIMUM DESIGN CRITERIA SHALL BE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL STANDARDS AND SPECIFICATIONS, HEREBY INCORPORATED BY REFERENCE.
- UPON COMPLETION OF CONSTRUCTION, CERTIFICATION OF THE SCM BY THE GEOTECHNICAL ENGINEER WILL BE REQUIRED PRIOR TO FINAL SCM ACCEPTANCE.
- THE GEOTECHNICAL ENGINEER SHALL EVALUATE SOILS FOR SUITABILITY OF DAM CONSTRUCTION AND SLOPE STABILITY.
- PRIOR TO PLACEMENT OF EMBANKMENT FILL, THE GEOTECHNICAL ENGINEER SHALL SUPERVISE THE FOUNDATION PREPARATION AND APPROVE THE DEPTH AND EXTENT OF THE CUTOFF TRENCH. A MINIMUM OF 1 FOOT SHALL BE EXCAVATED.
- THE DAM AND FOREBAY BERMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS UNLESS SUPERCEDED BY THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
  - BORROW MATERIALS FOR USE AS EMBANKMENT FILL SHALL BE FREE OF ORGANICS, ROOTS AND OTHER WOODY VEGETATION OR ORGANIC DEBRIS.
  - FILL MATERIALS SHALL CONSIST OF SOILS WHICH CLASSIFY AS SC, SM, CL, CL-CH AND ML IN ACCORDANCE WITH THE UNIFIED CLASSIFICATION SYSTEM OR AS APPROVED BY THE GEOTECHNICAL ENGINEER.
  - FILL MATERIALS SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3 INCHES IN MEAN DIAMETER.
  - FILL SHALL BE PLACED IN 8 INCH (MAXIMUM) LOOSE LIFTS FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND IN 4 INCH (MAXIMUM) LOOSE LIFTS FOR MATERIAL COMPACTED BY HAND OPERATED TAMPERS UNDER THE SUPERVISION OF THE GEOTECHNICAL ENGINEER OR THEIR REPRESENTATIVE. FILL SHALL BE BROUGHT UP BY BENCHING INTO THE EXISTING SLOPE. A MAXIMUM HEIGHT OF 2 FEET SHALL BE USED FOR EACH BENCH LIFT TAKING CARE TO REMOVE ROOT STRUCTURES AS THE FILL PROCEEDS. THE SURFACE OF EACH LIFT SHALL BE SCARIFIED PRIOR TO PLACEMENT OF THE NEXT LIFT IN ORDER TO EFFECTIVELY TIE THE FILL LIFTS TOGETHER.
  - ALL COMPACTION SHALL BE TESTED BY THE NUCLEAR METHOD (ASTM D-6938) OR SAND CONE METHOD (ASTM D-1556) AT A RATE OF AT LEAST ONE TEST PER 5,000 SF PER ONE FOOT OF COMPACTED FILL THICKNESS IN GENERAL AREA FILLS AND ONE TEST PER 50 LINEAL FEET PER LIFT ALONG THE BARREL.
  - THE MINIMUM COMPACTION SHALL BE A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698) AT MOISTURE CONTENTS VARYING FROM 2 PERCENT BELOW TO 3 PERCENT ABOVE OPTIMUM MOISTURE CONTENT DETERMINED BY STANDARD PROCTOR TEST.
- SUBGRADE FOR THE RISER STRUCTURE AND OUTLET PIPE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. IF THE GEOTECHNICAL ENGINEER REQUIRES ADDITIONAL SUBGRADE PREPARATION, THE ADDITIONAL COST SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
- THE OUTLET PIPE SHALL BE BEDDED IN CONCRETE FOR 2/3 OF THE PIPE LENGTH BEGINNING AT THE RISER, AND IN #75 STONE FOR 1/3 OF PIPE LENGTH TO THE OUTLET. SEE DETAILS ON SHEET CXX.
- EMBANKMENT AND SIDE SLOPES OF THE BASIN SHALL BE STABILIZED PER SEEDING SCHEDULE ON EROSION CONTROL

- IF DURING CONSTRUCTION, THE SCM IS TO BE USED AS AN EROSION CONTROL MEASURE, THE FOREBAY BERMS SHALL NOT BE INSTALLED DURING THE INITIAL CONSTRUCTION OR WHILE THE SCM IS USED AS AN EROSION CONTROL MEASURE.
- UNLESS OTHERWISE NOTED, ALL PERMANENT STRUCTURES (E.G. RISER/BARREL, WEIR WALLS, ETC.) ARE TO BE INSTALLED WITHIN THE INITIAL DAM CONSTRUCTION.
- FOR SITE BUILT FEATURES (E.G. WEIR WALLS, DROP STRUCTURES, BRIDGES, ETC.), THE CONTRACTOR SHALL PROVIDE STRUCTURAL DRAWINGS TO BE SIGNED AND SEALED BY A NC PROFESSIONAL ENGINEER AND TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- PRIOR TO FINAL GRADING OF THE SCM, THE CONTRACTOR SHALL PROVIDE SUFFICIENT AS-BUILT SURVEY INFORMATION TO CONFIRM THAT THE FINISHED SCM WILL MEET THE SPECIFIC DIMENSIONAL REQUIREMENTS APPLICABLE TO THE SCM. THOSE REQUIREMENTS INCLUDE:
  - POND BOTTOM ELEVATION = 357.00 FT
  - DRAWDOWN OVERFLOW ELEVATION (NORMAL POOL) = 362.5 FT
  - MINIMUM SURFACE AREA AT NORMAL POOL ELEVATION = 7,114 SF
  - WEIR CREST ELEVATION = 363.75 FT
  - RISER CREST ELEVATION = 368.00 FT
  - LOW POINT TOP OF EMBANKMENT (AUXILIARY SPILLWAY) = 369.00 FT
  - AVERAGE TOP OF EMBANKMENT = 370.00 FT
- ELEVATIONS SHALL BE WITHIN 0.1 FEET OF THE ABOVE ELEVATIONS FOR EARTHWORK, AND 0.05 FEET FOR OUTLET STRUCTURE. ALL SURFACE AREAS ARE THE MINIMUM AREAS. REQUEST FOR A REDUCTIONS IN THE MINIMUM VALUES WILL BE CONSIDERED ON A CASE BY CASE BASIS.
- ONCE THE PROJECT SITE HAS BEEN STABILIZED, CONTRACTOR SHALL OBTAIN APPROVAL BY EROSION CONTROL INSPECTOR IN ORDER TO REMOVE TEMPORARY EROSION CONTROL DEVICES.
  - ONCE ALL SEDIMENT AND EROSION CONTROL DEVICES HAVE BEEN REMOVED, THE SCM SHALL BE CONVERTED TO A PERMANENT SCM.
  - ALL SEDIMENT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
  - FOREBAY AND VEGETATED SHELF SHALL BE CONSTRUCTED AS SHOWN ON THE PLAN.
  - VEGETATED SHELF SHALL BE PLANTED PER PLANT SCHEDULE ON LANDSCAPE PLAN (SEE LITTLE DIVERSIFIED ARCHITECTS).
- FINAL CERTIFICATION OF THE SCM BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED IS REQUIRED.

**CLAY LINER SPECIFICATIONS:**  
THE CONTRACTOR SHALL INSTALL A CLAY LINER TO MAINTAIN A PERMANENT POOL AT THE DESIGN ELEVATION. IF THE SITE GEOTECHNICAL ENGINEER DETERMINES THAT THE EXISTING SITE CONDITIONS (SOIL PROPERTIES, EXISTING WATER TABLE, ETC.) INDICATE THAT NORMAL POOL CAN BE MAINTAINED WITHOUT A CLAY LINER, THE GEOTECHNICAL ENGINEER WILL PROVIDE NOTICE IN WRITING TO THE PROJECT ENGINEER THAT THE CLAY LINER IS NOT REQUIRED. IF THE CLAY LINER IS NOT INSTALLED, THE OWNER SHALL RECEIVE A CREDIT FOR THE DELETION OF THE LINER.

- AT A MINIMUM, THE CLAY LINER MATERIAL FOR THE WET POND SHALL MEET THE FOLLOWING SPECIFICATIONS:
- UNIFIED SOIL CLASSIFICATION SYSTEM DESIGNATION OF CL, CH, ML, OR SC
  - MINIMUM OF 40% PASSING #200 SIEVE
  - MINIMUM PLASTICITY INDEX OF 12
  - MAXIMUM PERMEABILITY OF  $1 \times 10^{-5}$  cm/sec
  - A MINIMUM OF 2 TESTS OF EACH ABOVE PARAMETER SHALL BE PROVIDED FROM AN APPROVED LABORATORY ON THE LINER MATERIAL AND PRESENTED TO THE ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL.
  - COMPACTION TO A MINIMUM OF 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698), AND WITHIN 3% OF THE OPTIMUM MOISTURE CONTENT (MINIMUM OF 1 COMPACTION DENSITY TEST PER 2500 SQUARE FEET).
  - AN IN-PLACE MAXIMUM INFILTRATION RATE OF 0.01 INCHES PER HOUR.
  - RECOMMENDATIONS OF THE SITE GEOTECHNICAL ENGINEER MAY SUPERCEDE THE ABOVE SPECIFICATIONS.

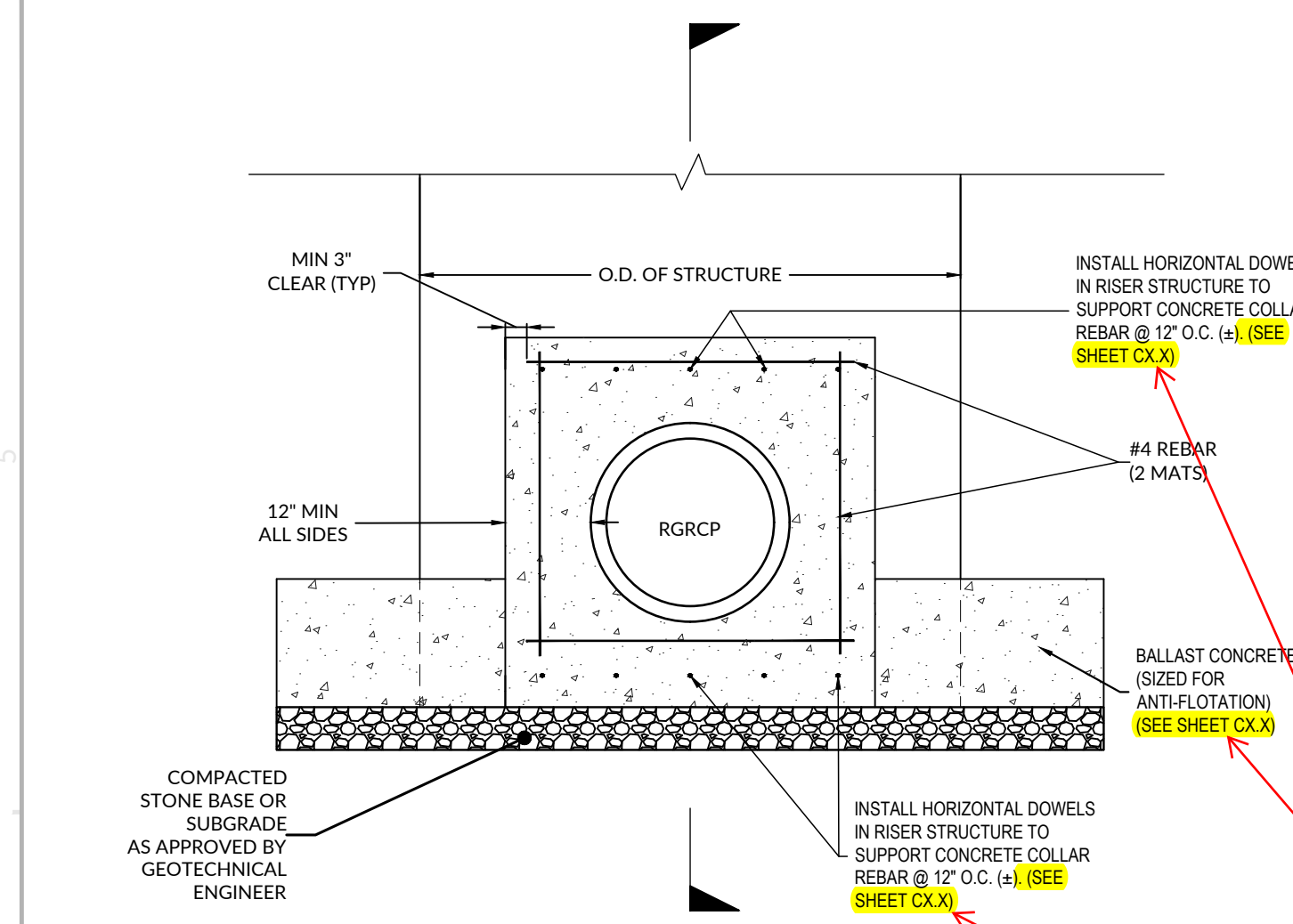
THE CLAY LINER SHALL BE PLACED UNDER THE BOTTOM OF THE SCM PERMANENT POOL TO A MINIMUM THICKNESS OF 8 INCHES. A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE PLACED ABOVE THE CLAY LINER TO THE FINISHED GRADE AS SHOWN ON THE DRAWINGS AND/OR DETAILS. CARE SHALL BE TAKEN WHEN PLACING THE TOPSOIL SO AS NOT TO DAMAGE THE CLAY LINER. A CLAY/SOIL, NO ORGANICS, MIXTURE MAY BE USED IF THE ABOVE SPECIFICATIONS ARE SATISFIED AND WITH WRITTEN APPROVAL BY THE GEOTECHNICAL ENGINEER.

**PRECAST CONCRETE MATERIALS NOTES:**

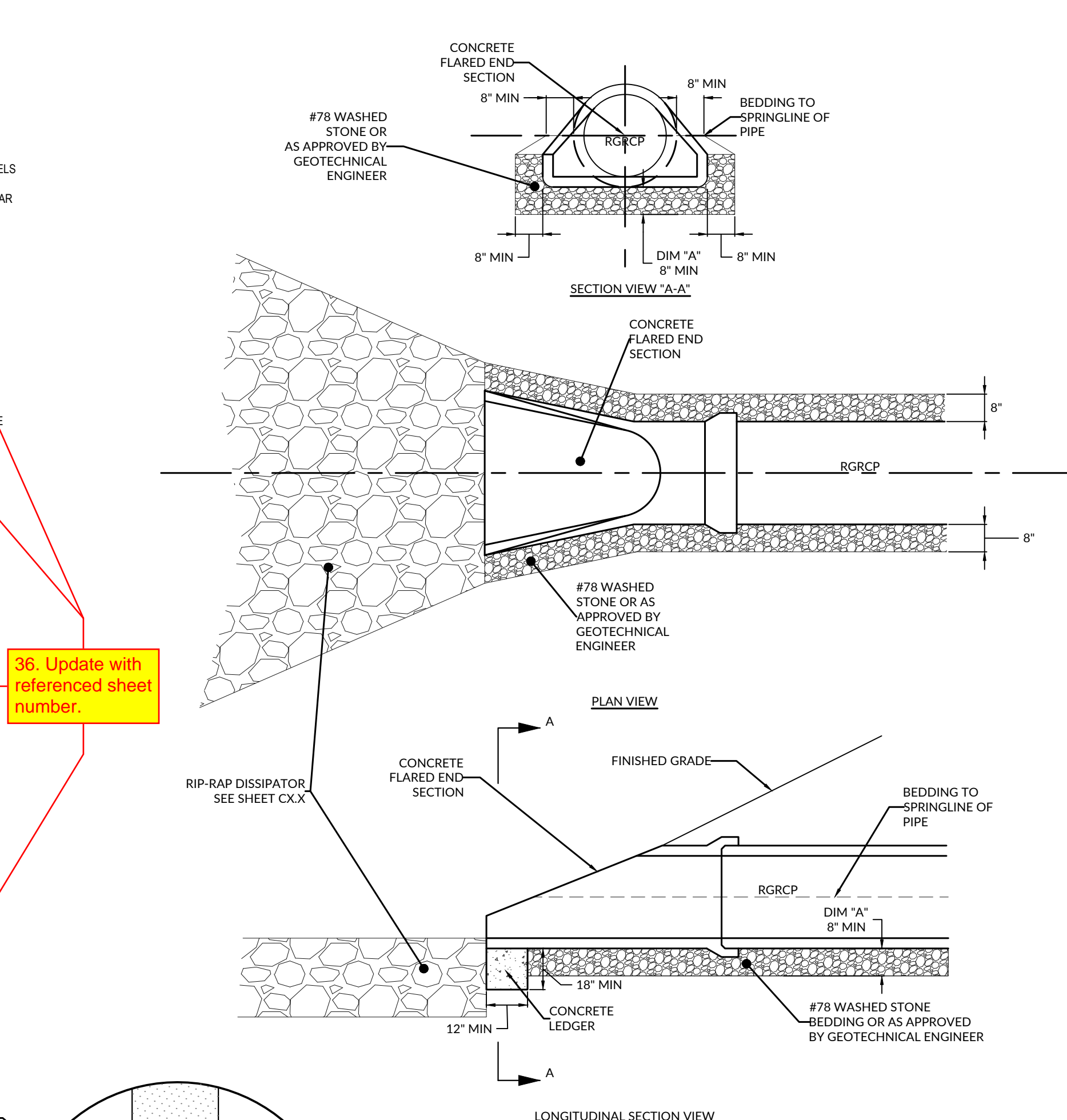
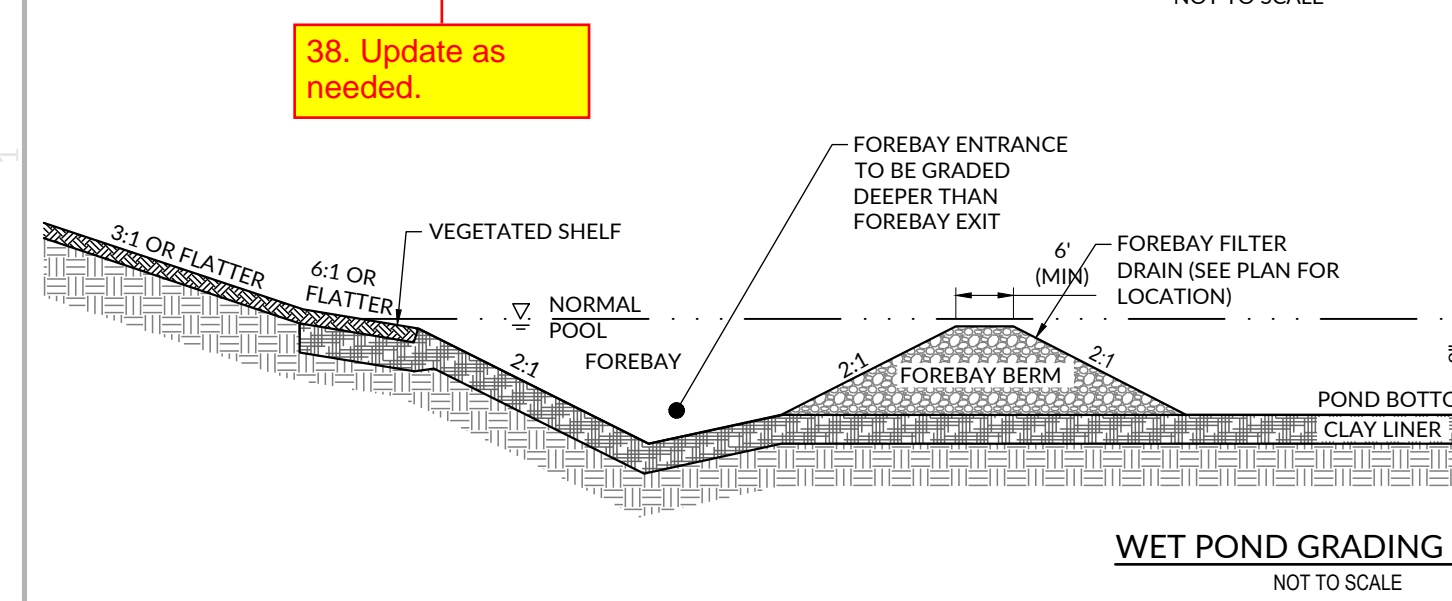
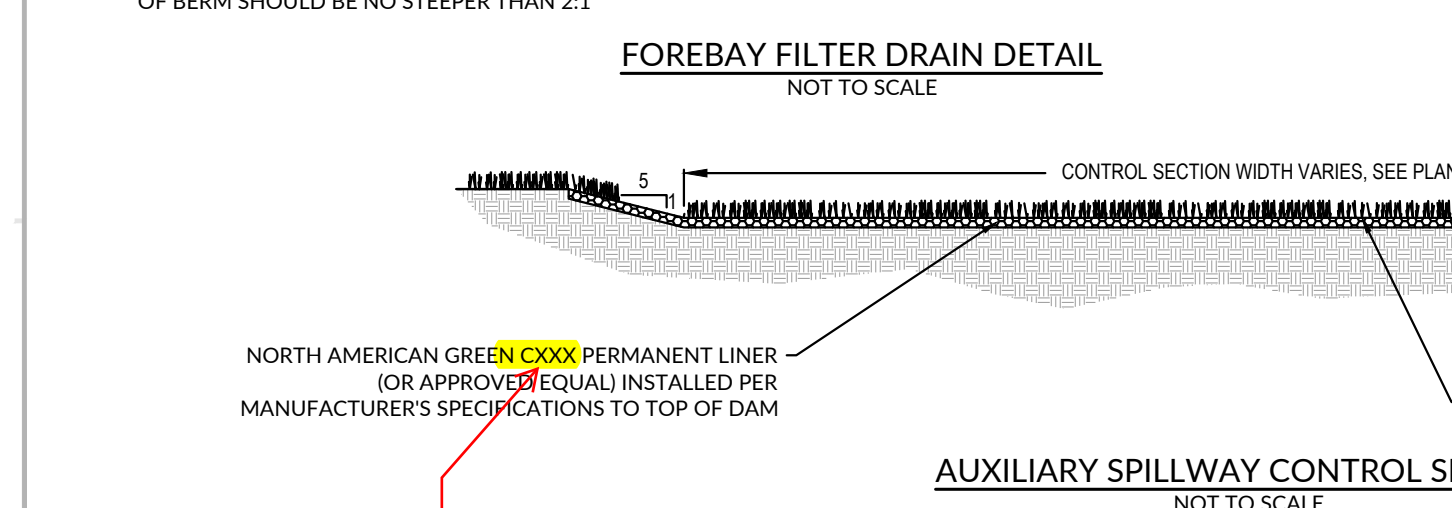
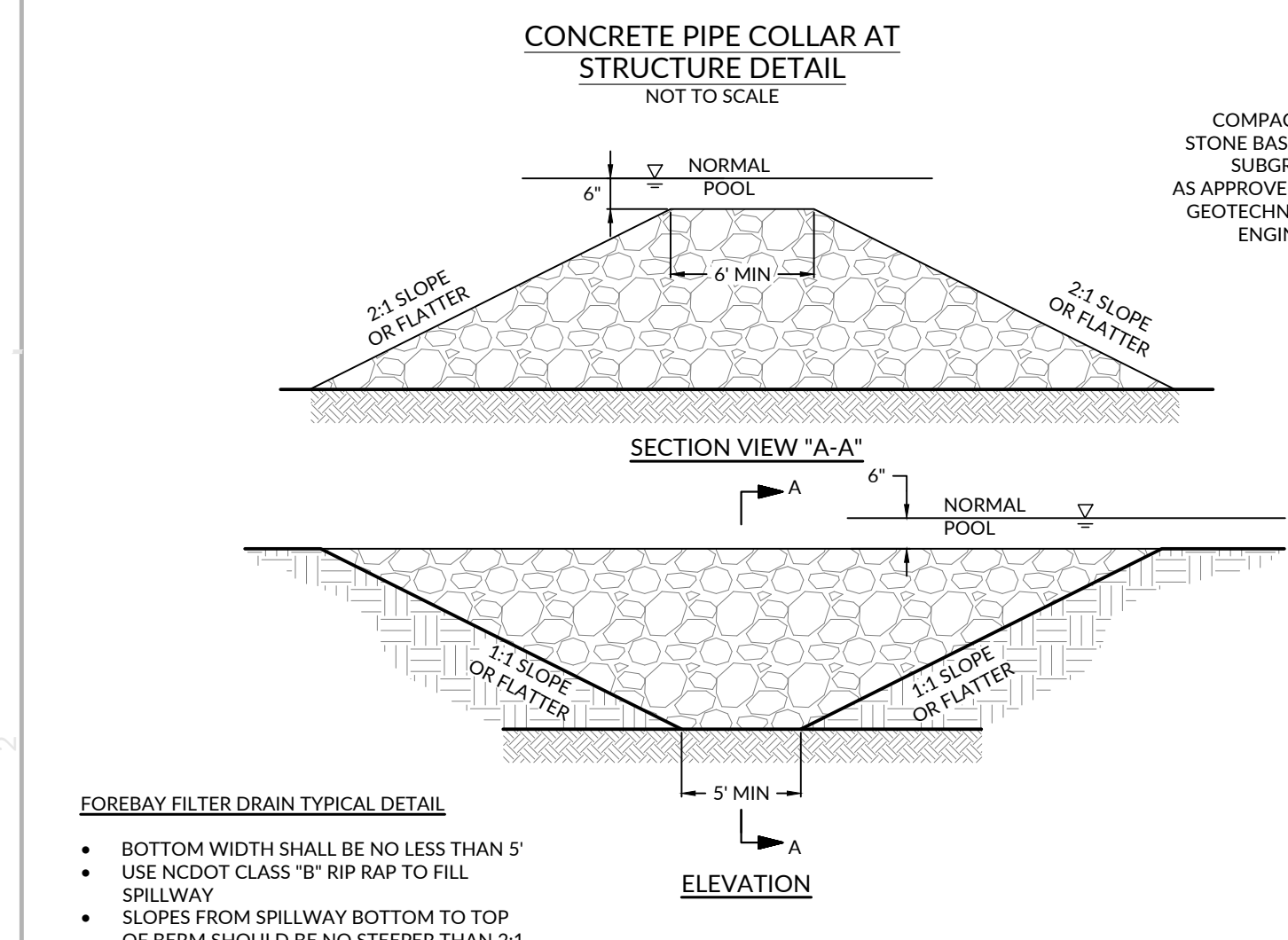
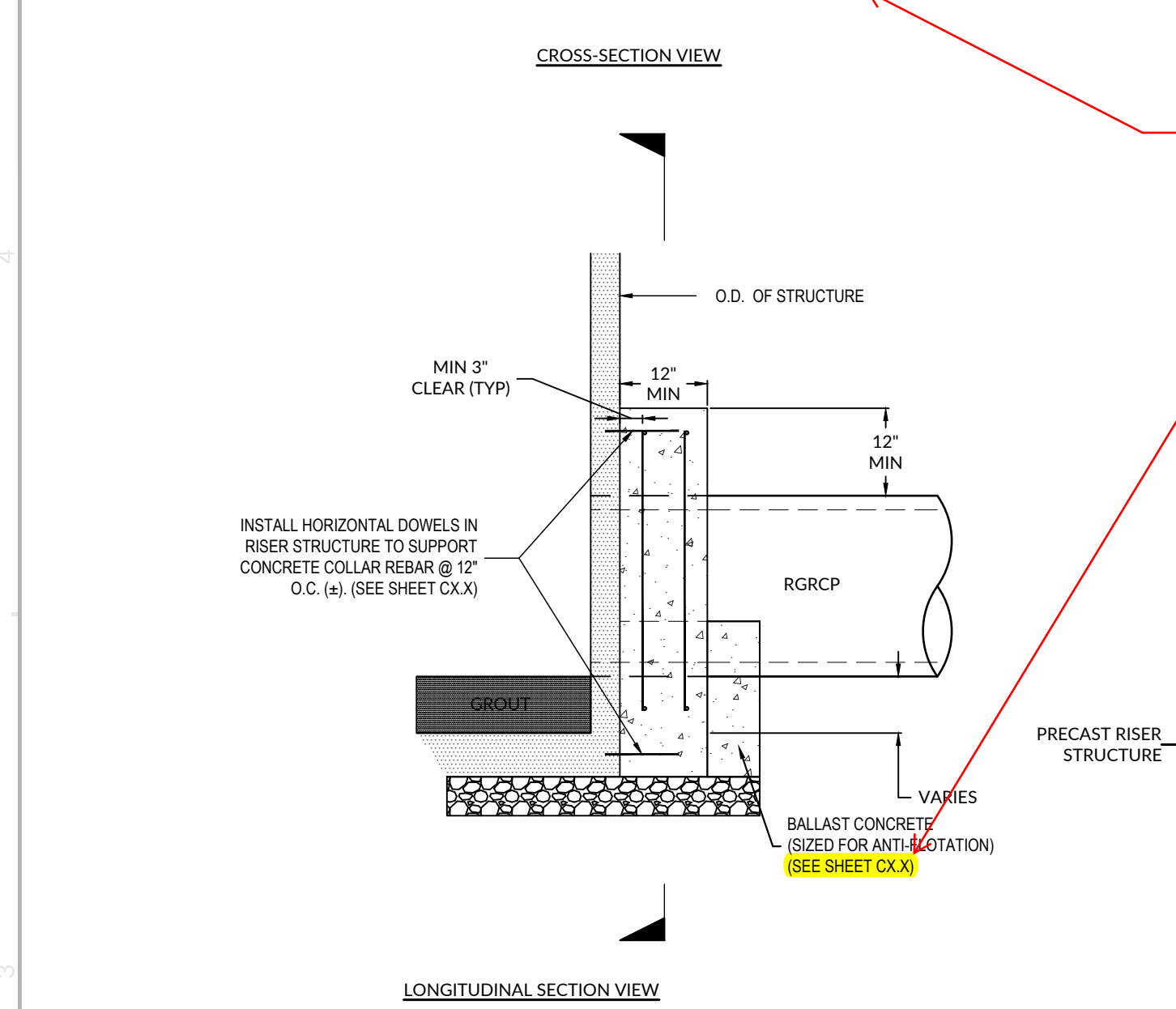
- ALL PRECAST CONCRETE STRUCTURES SHALL CONFORM TO ASTM C913 (RECTANGULAR) OR C478 (ROUND).
- ALL REINFORCED CONCRETE PIPE SHALL CONFORM TO ASTM C76, CLASS III (UNLESS OTHERWISE NOTED).
  - O-RING JOINTS (IRGCP) SHALL CONFORM TO ASTM C443 & ASTM C361.
  - NON O-RING JOINTS (RCP) SHALL CONFORM TO ASTM C990

J:\2024\04\04\_Pulte\_WetPond\Assemblies\CID Drawings\SCM Construction\C9.04 SCM 4 Plan and Profile.dwg, Thursday, October 31, 2024 2:10:27 PM - 187016

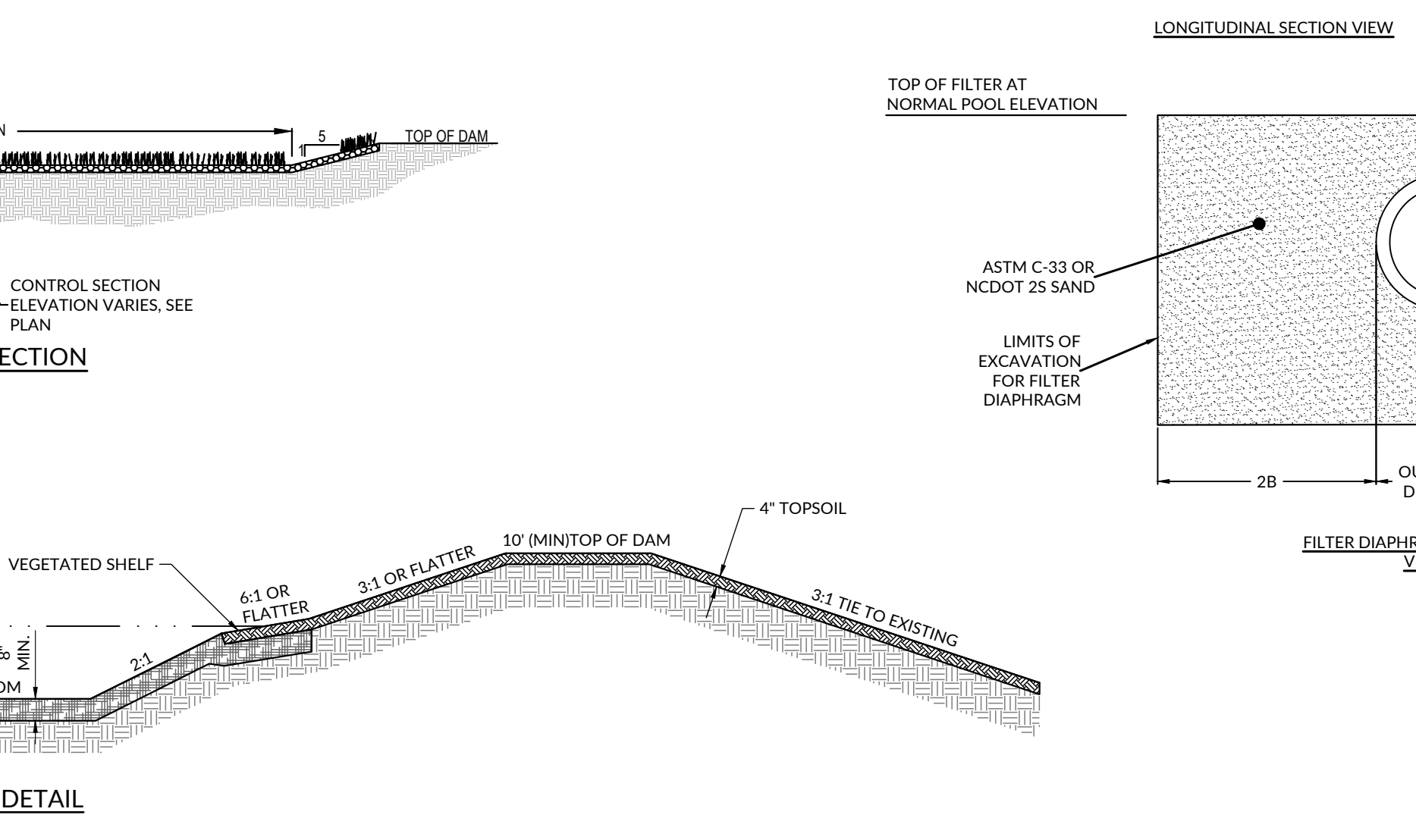
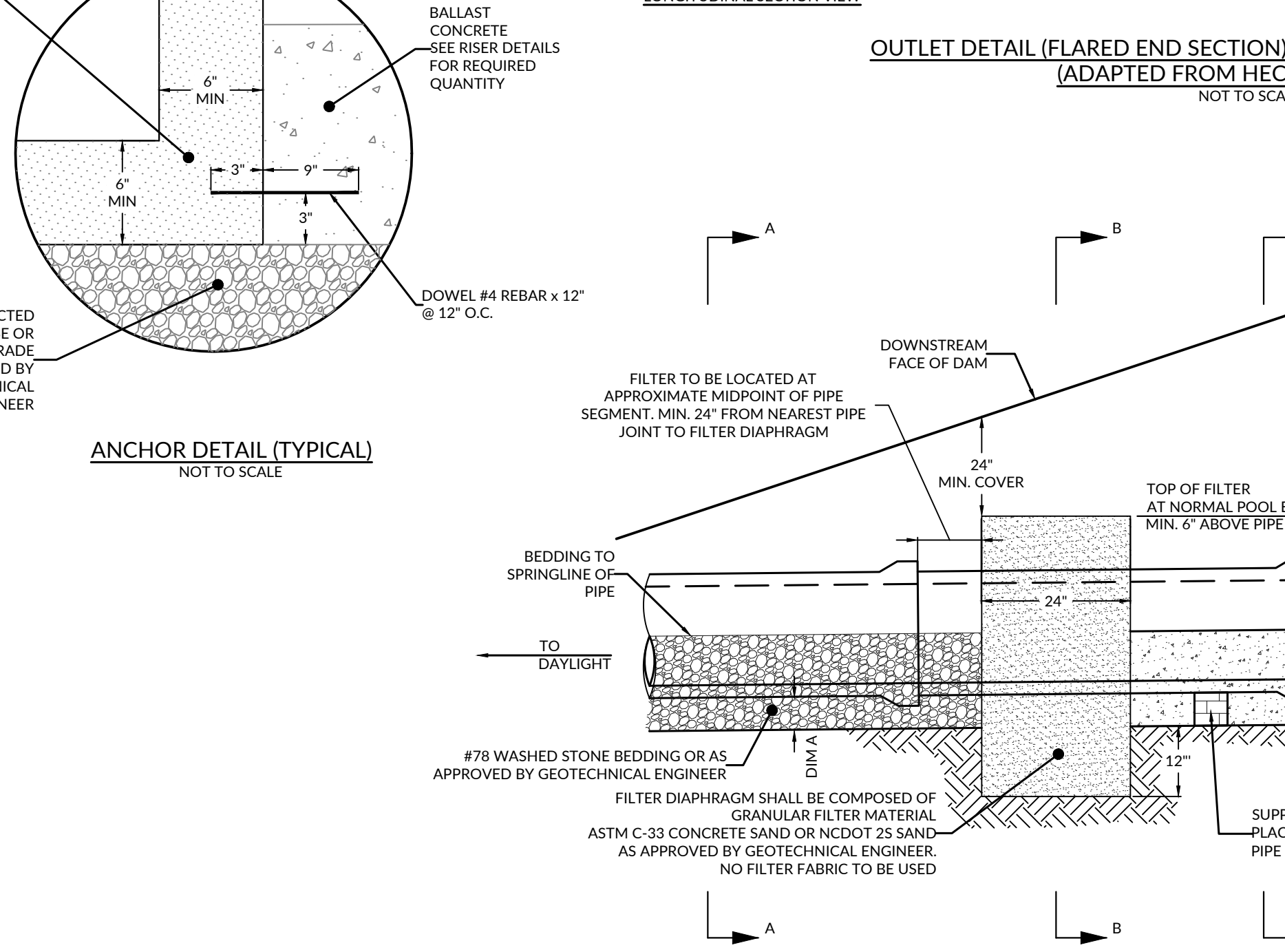




36. Update with referenced sheet number.



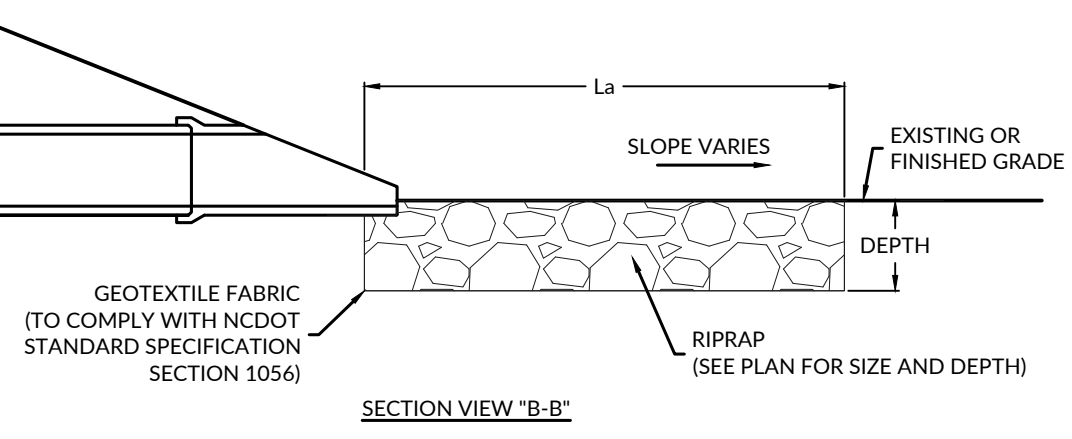
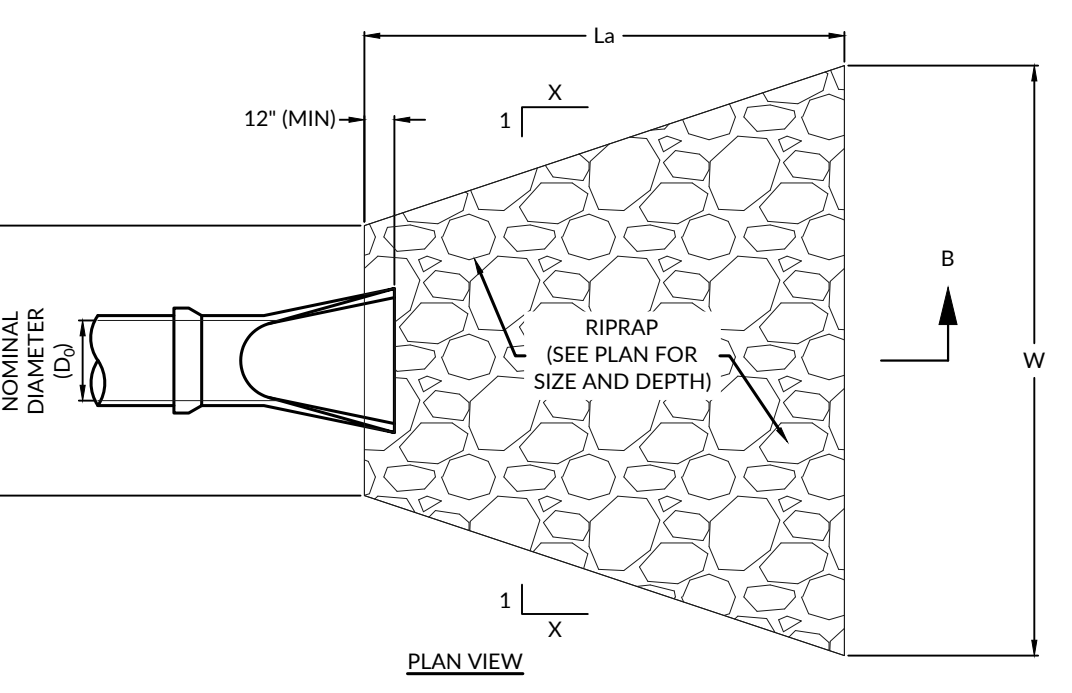
OUTLET DETAIL (FLARED END SECTION) & RIPRAP VELOCITY DISSIPATOR (ADAPTED FROM HEC-14 & NYSDOT) NOT TO SCALE



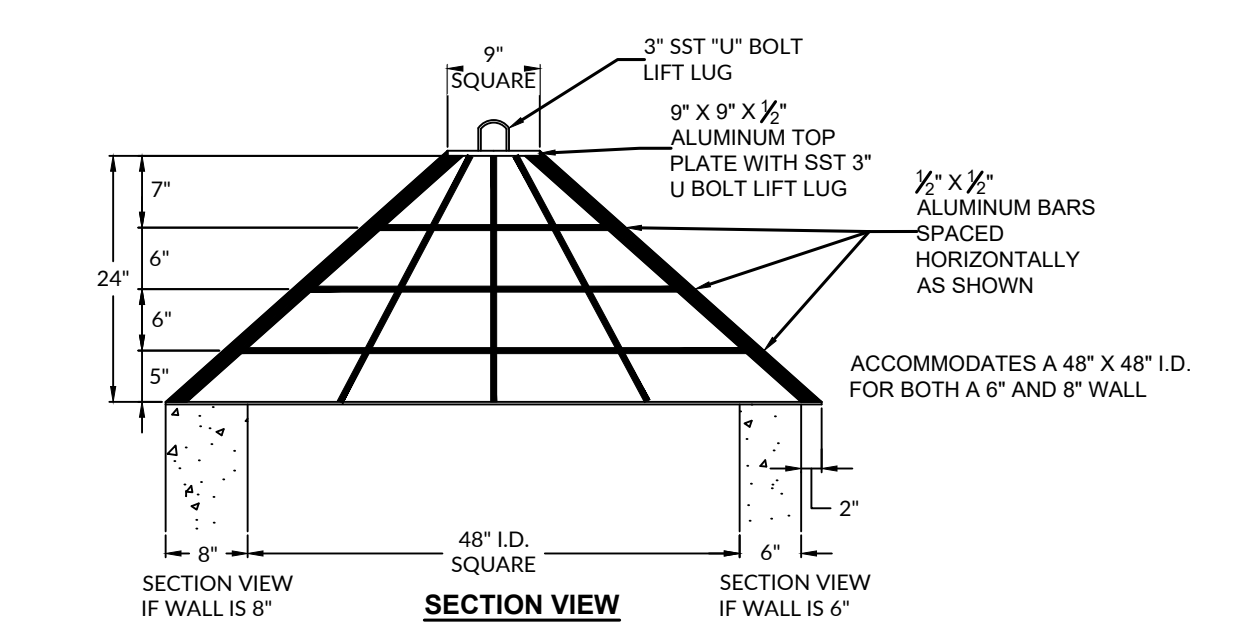
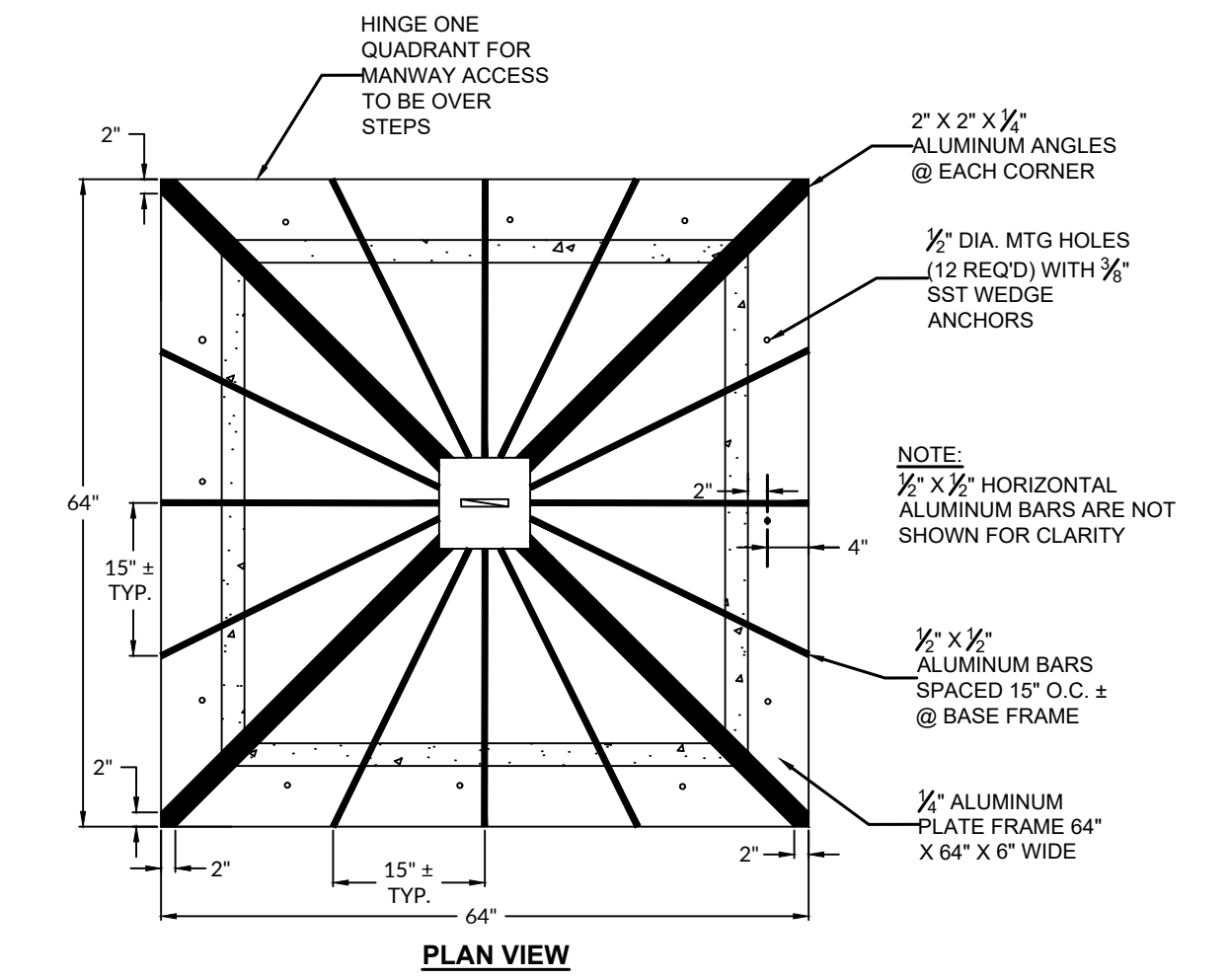
37. Need headwall detail also if SCM#4 outfall needs to change

NOMINAL PIPE SIZE	DIM A* (Ø D)	DIM B (PIPE ID)	DIM C (DIM A + 12")	SCM #
18	8	18	20	1, 3, & 4
24	8	24	20	
30	10	30	22	2
36	12	36	24	
42	14	42	26	
48	16	48	28	

ALL DIMENSIONS IN INCHES  
DIM A = 8" MINIMUM  
18" MINIMUM PIPE DIAMETER

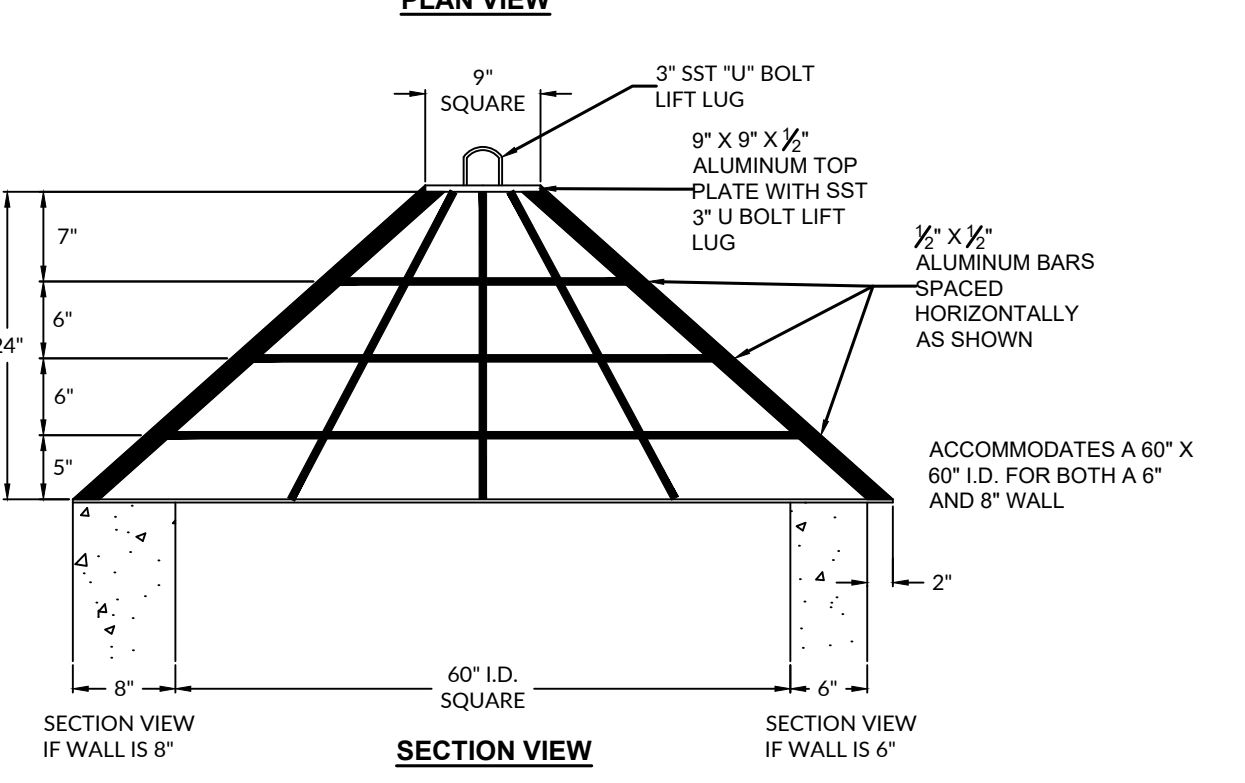
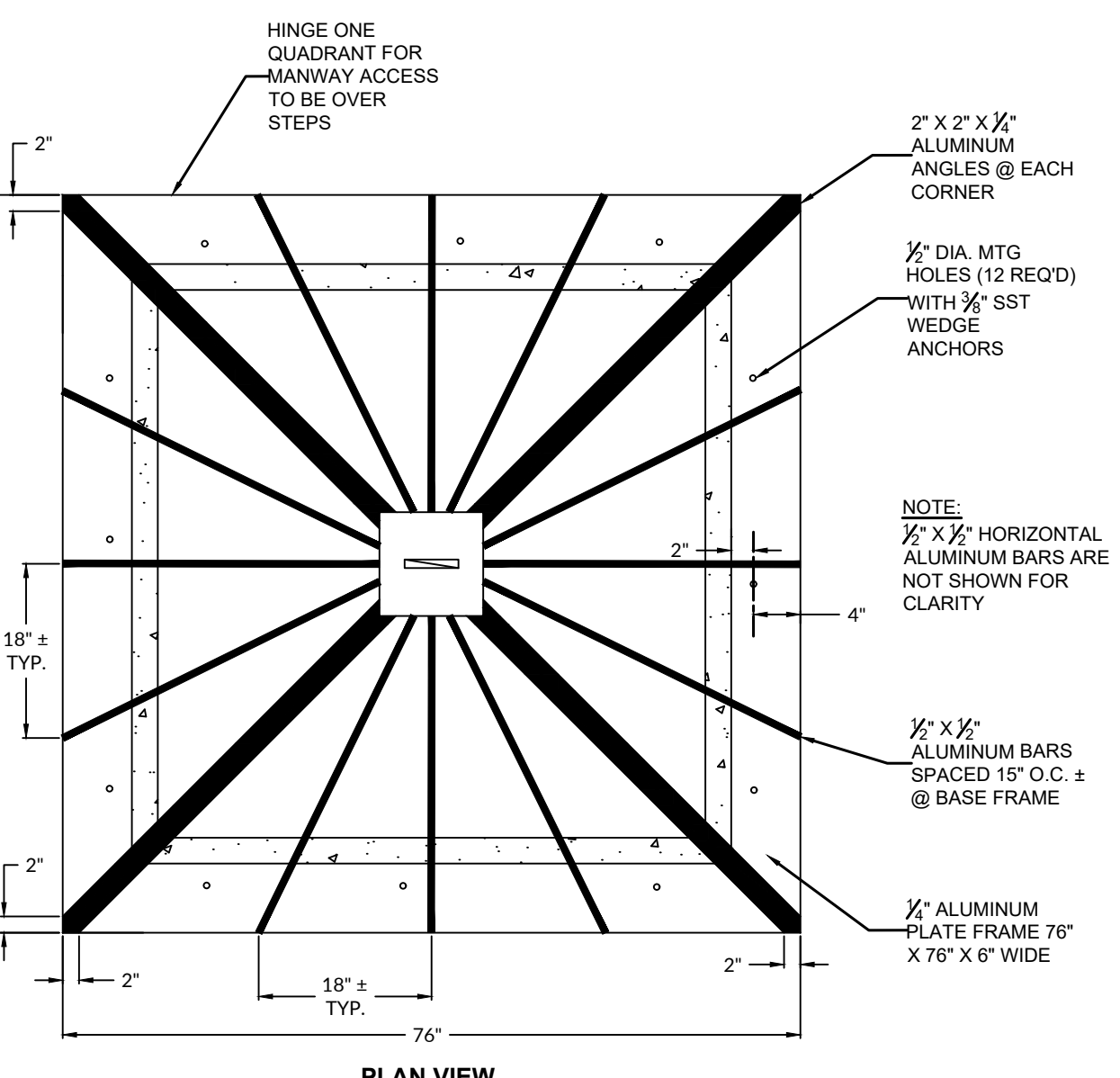


ALL DIMENSIONS IN INCHES  
DIM A = 8" MINIMUM  
18" MINIMUM PIPE DIAMETER



- NOTES
- TRASH RACK DETAIL BASED ON POMONA PIPE PRODUCTS "STANDARD ALUMINUM BAR & ANGLE PEAKED ROOF" TRASH RACK WITH ONE QUADRANT HINGED FOR MANWAY ACCESS TO FIT 48"x48" I.D. CONCRETE RISER WITH 6" OR 8" THICK WALLS.
  - TRASH RACK TO BE POWDER-COATED BLACK.
  - REQUIRES SS HARDWARE TO ATTACH TO RISER.

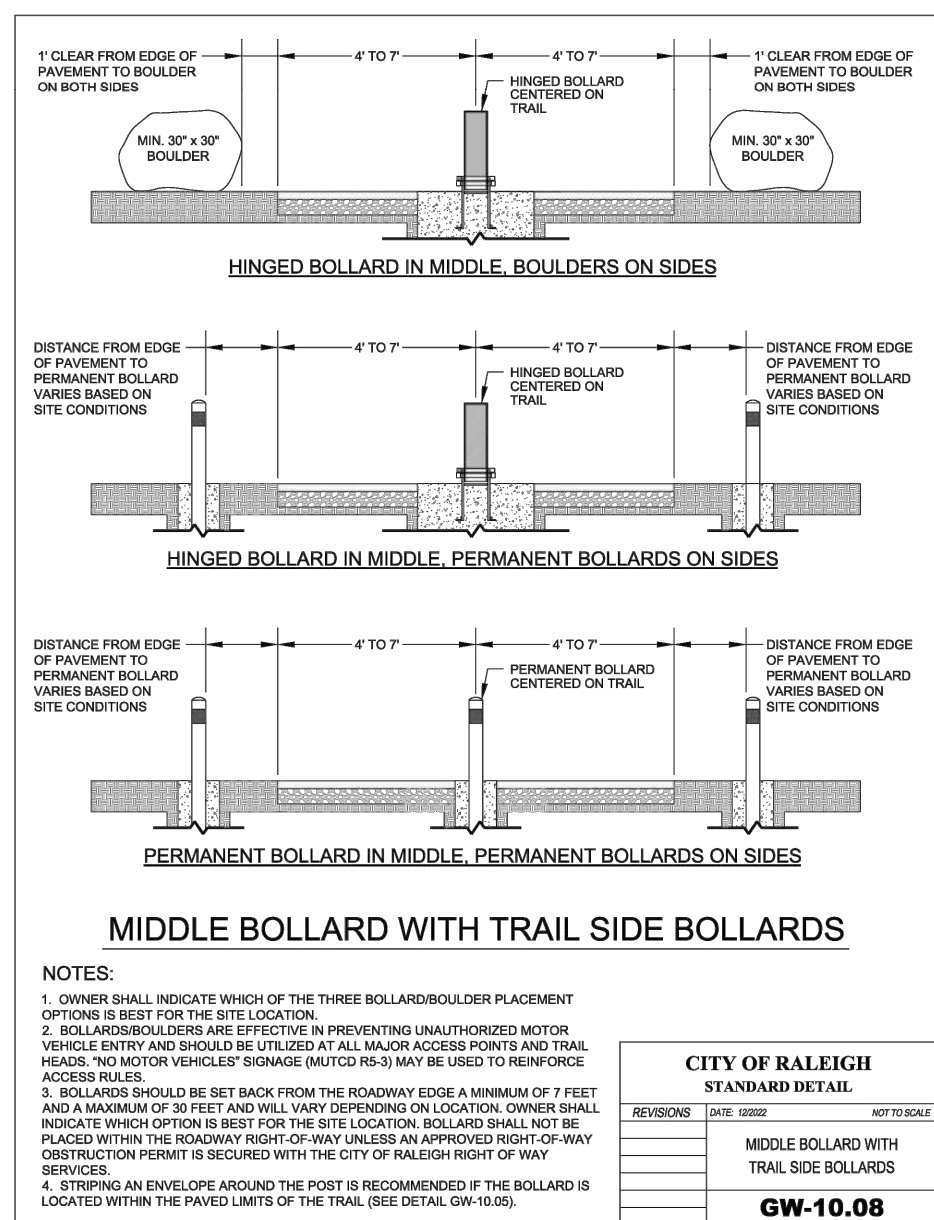
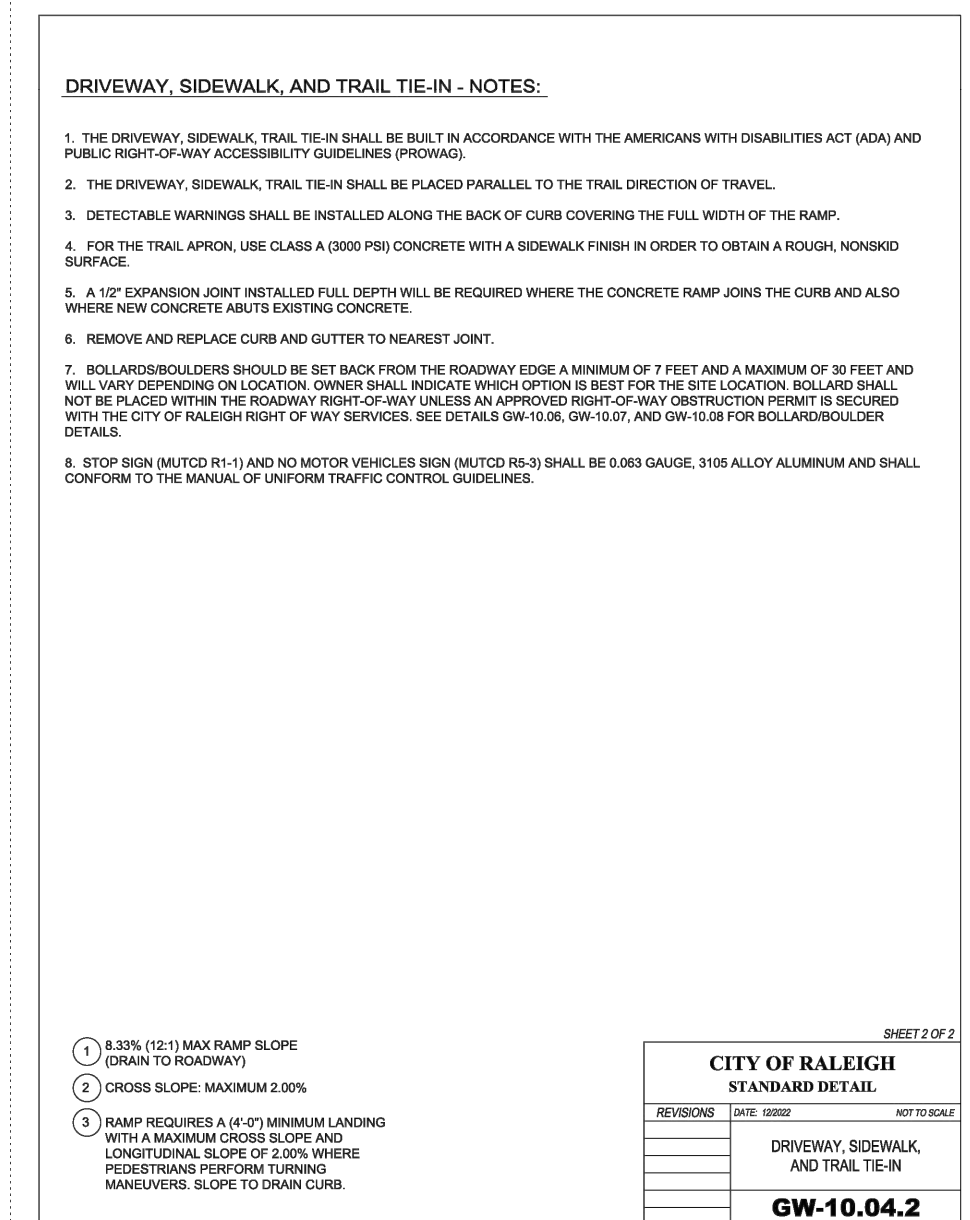
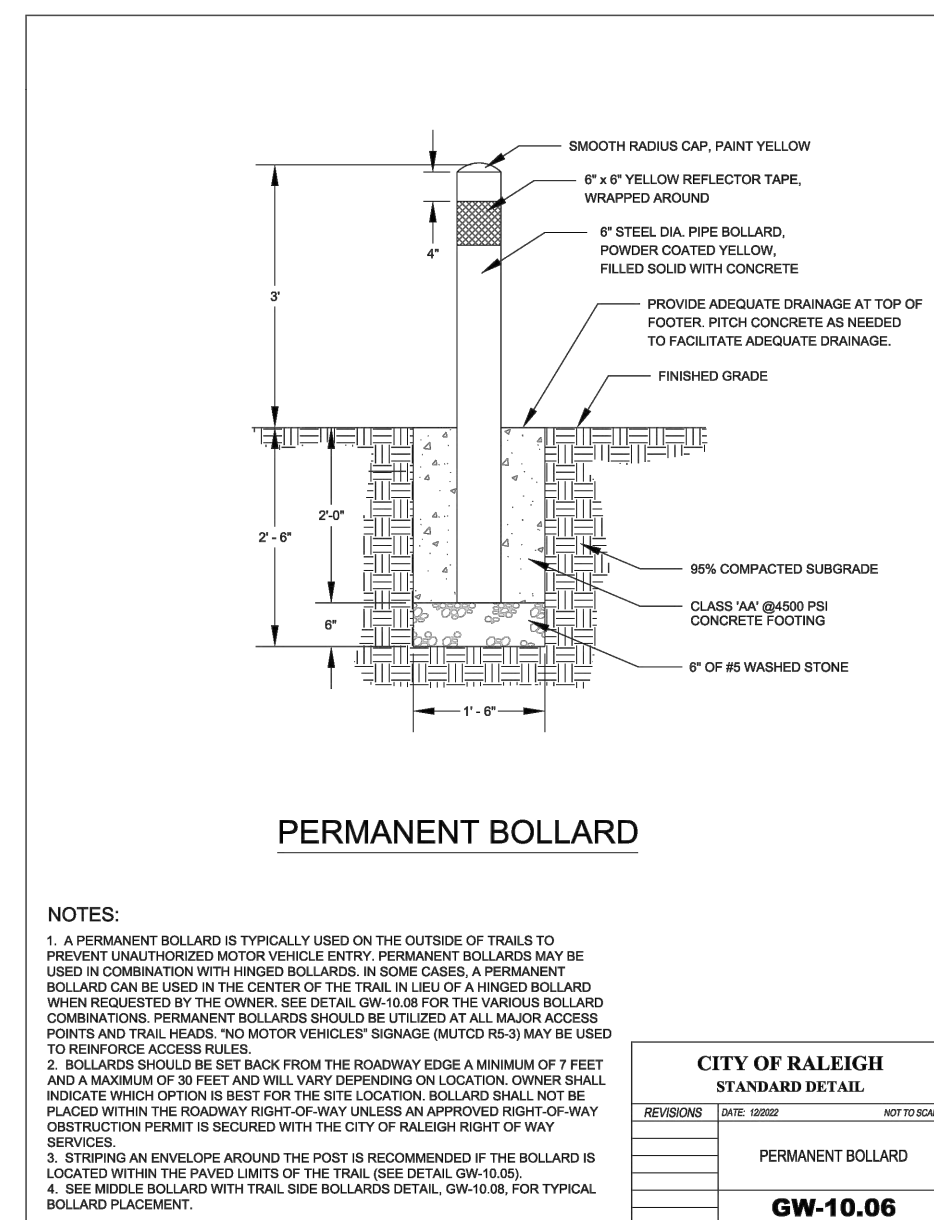
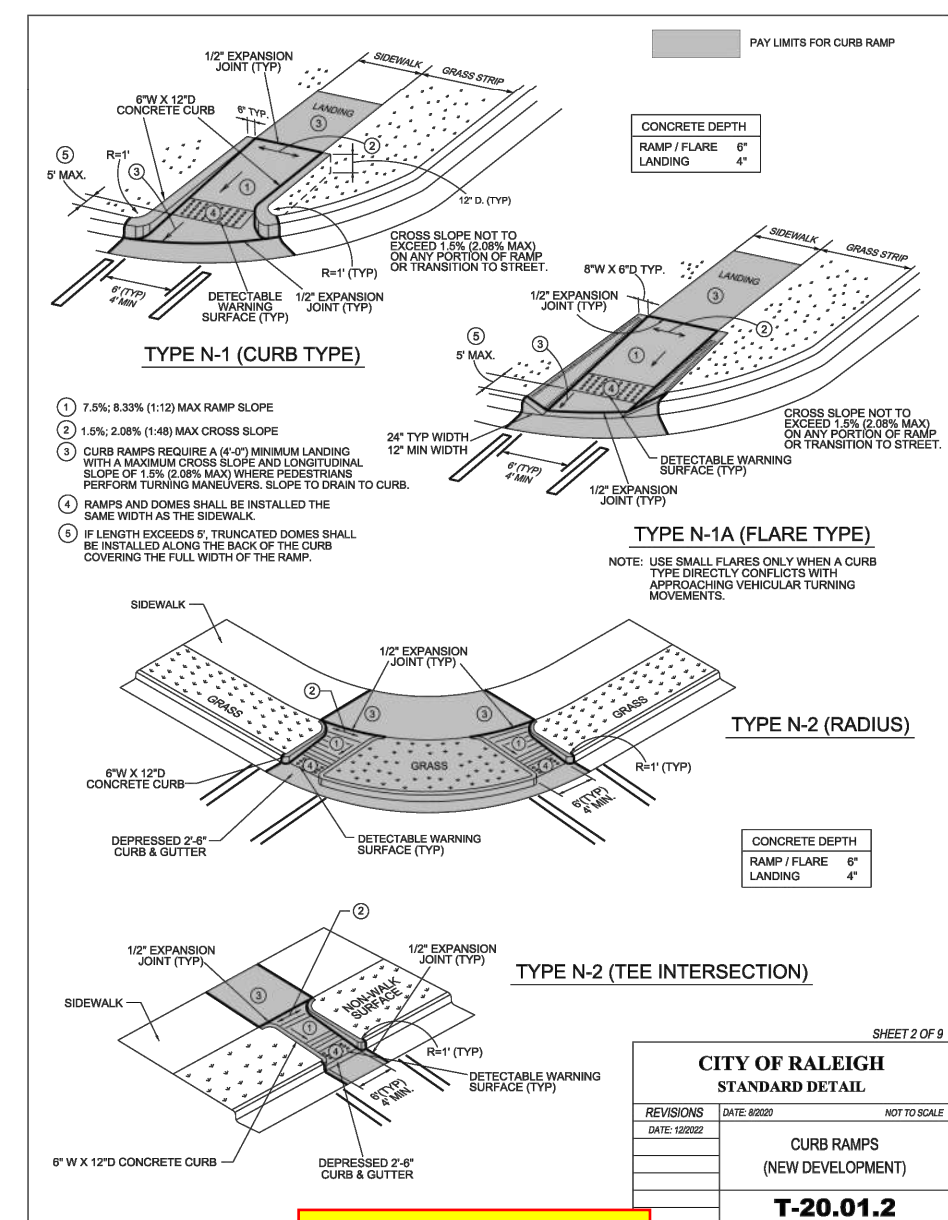
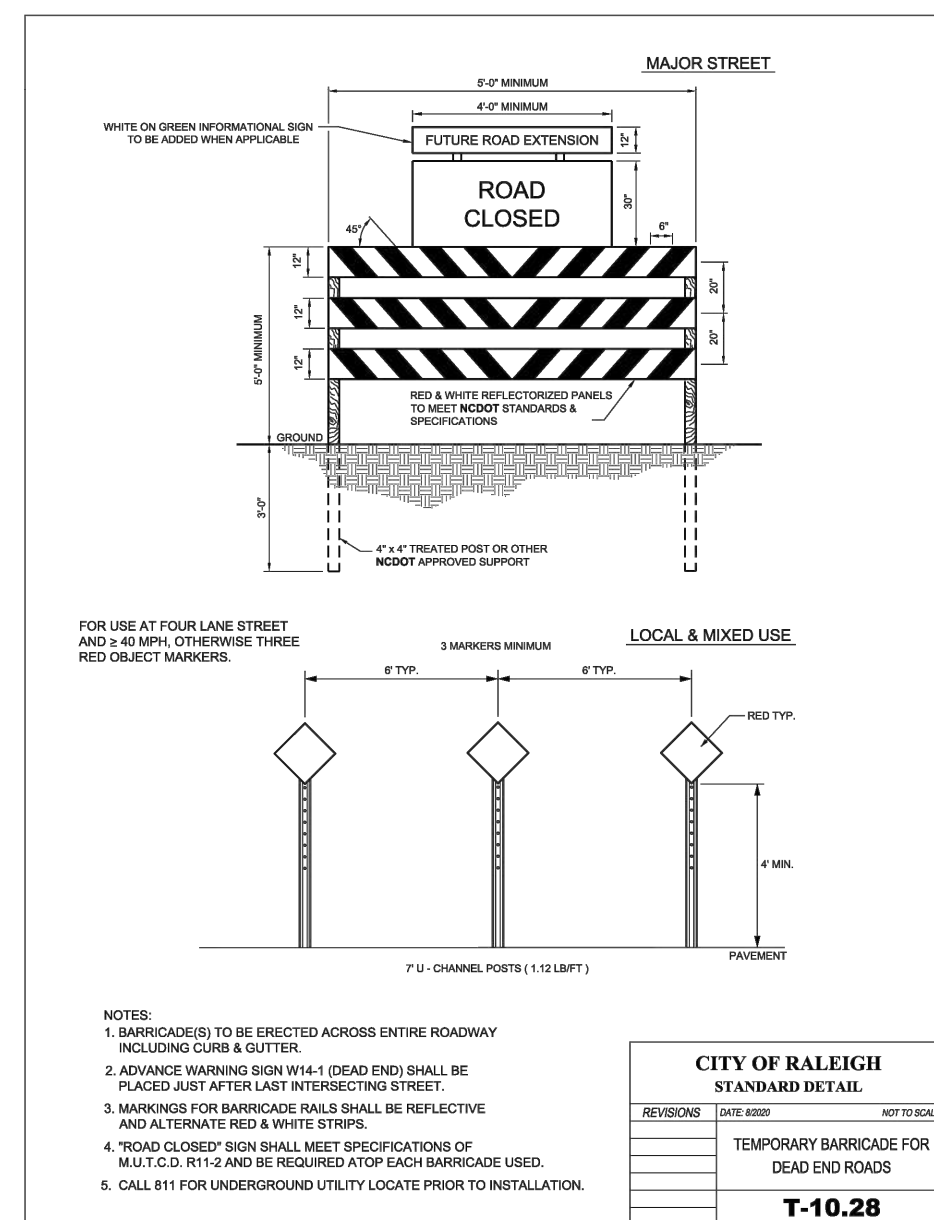
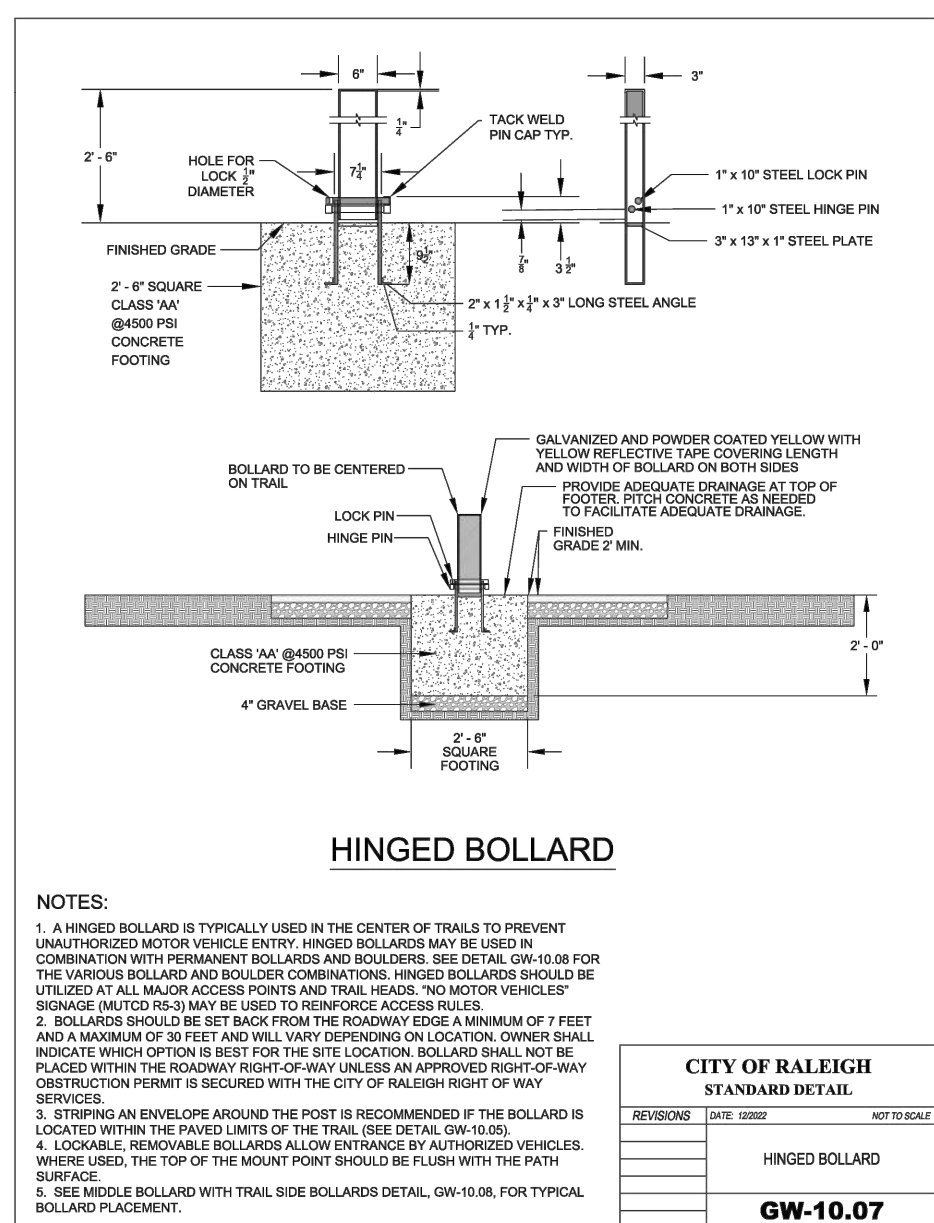
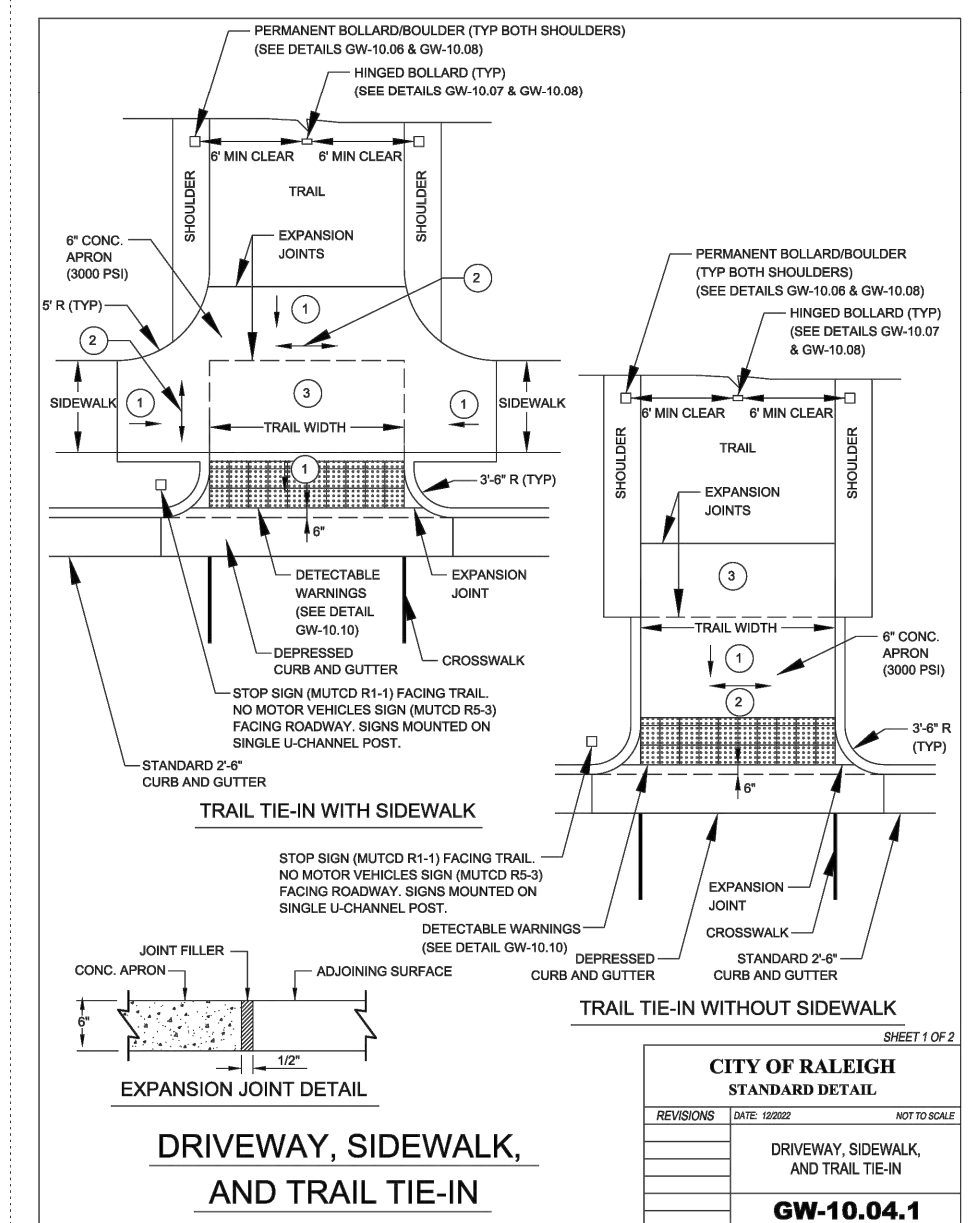
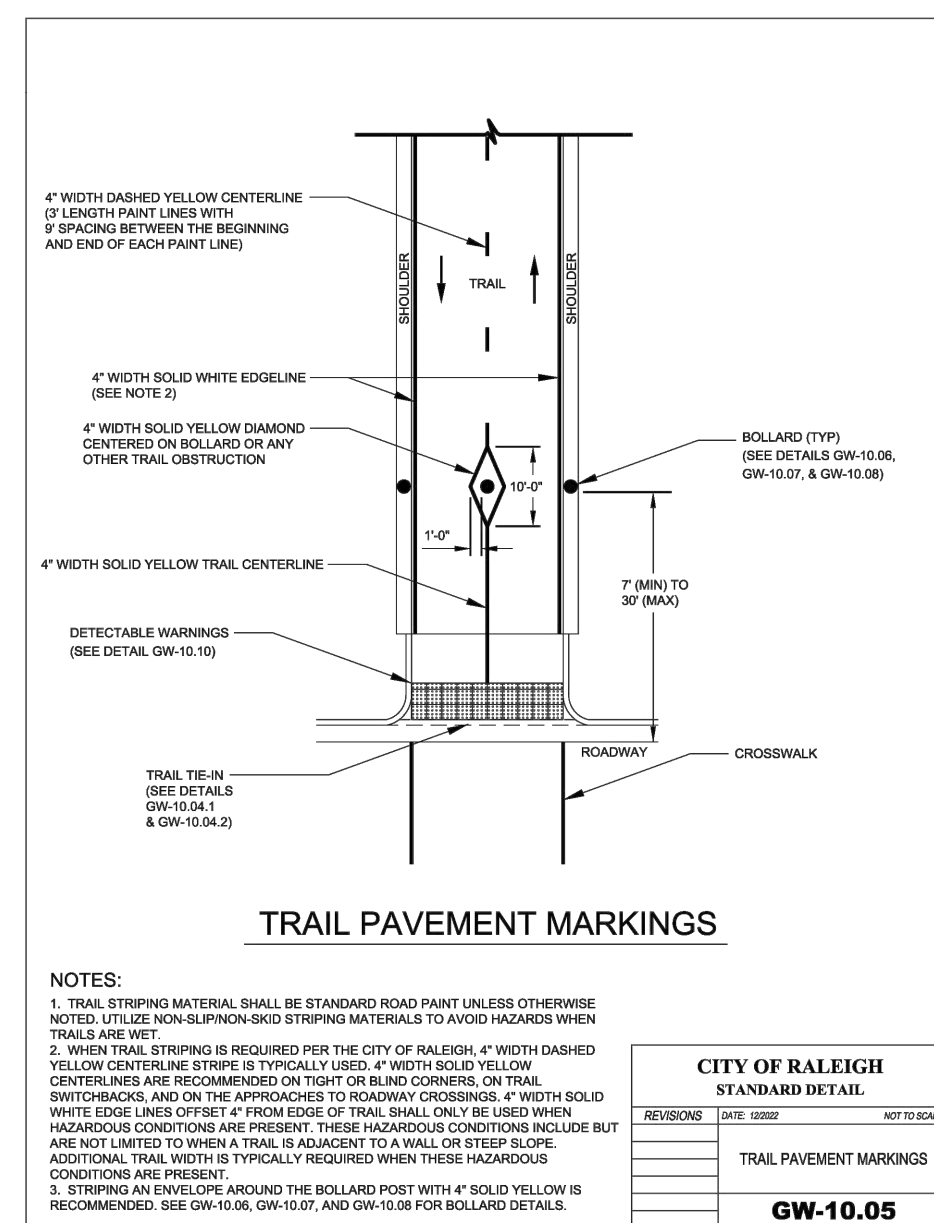
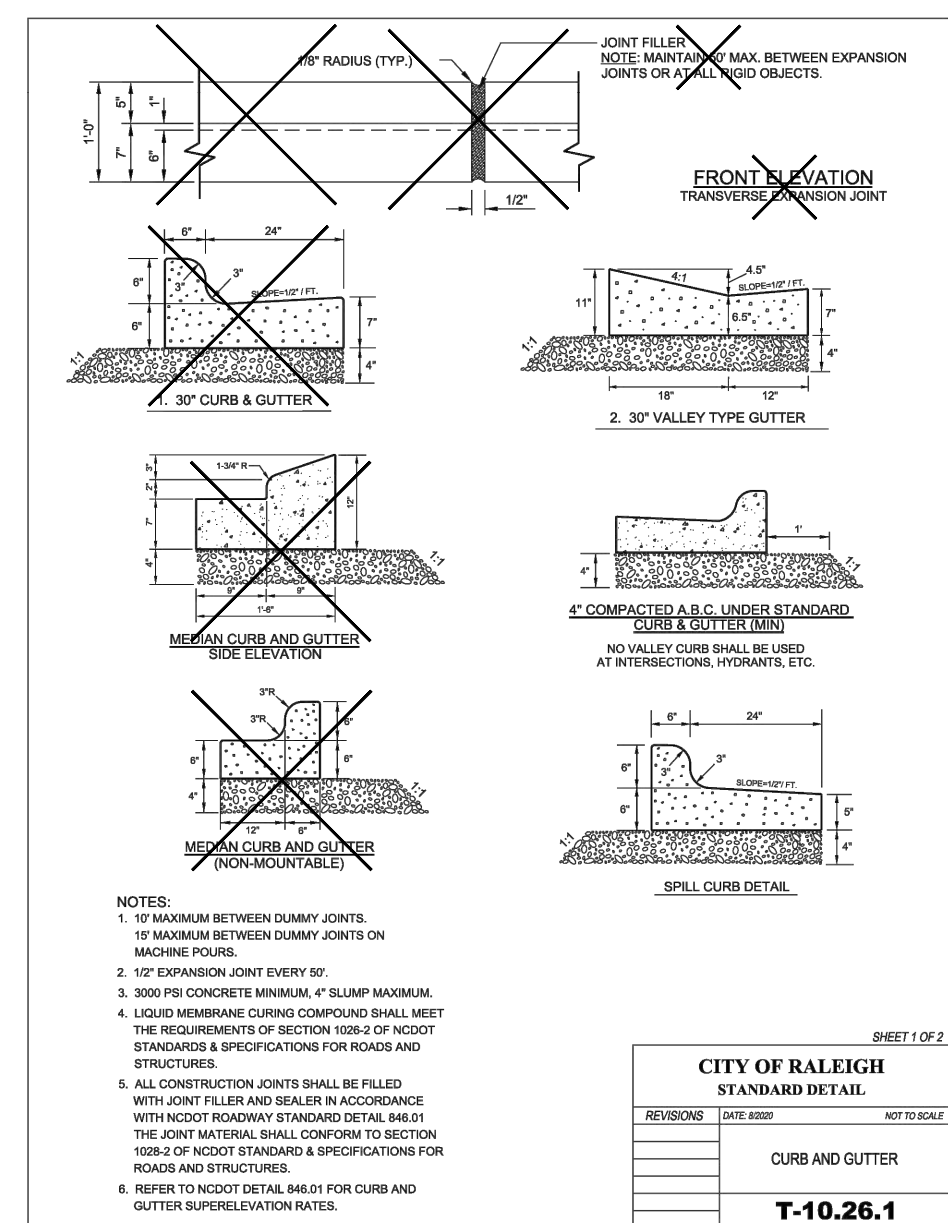
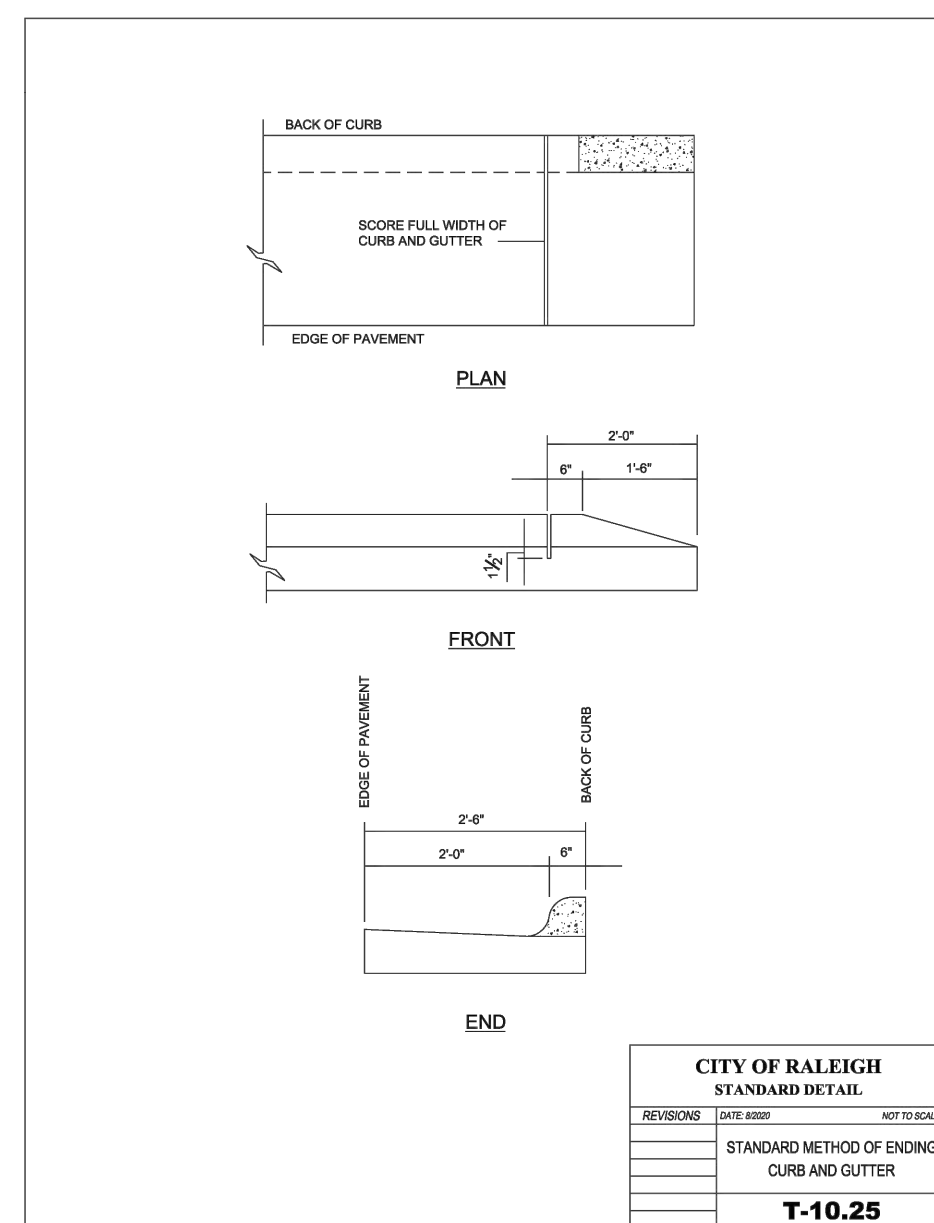
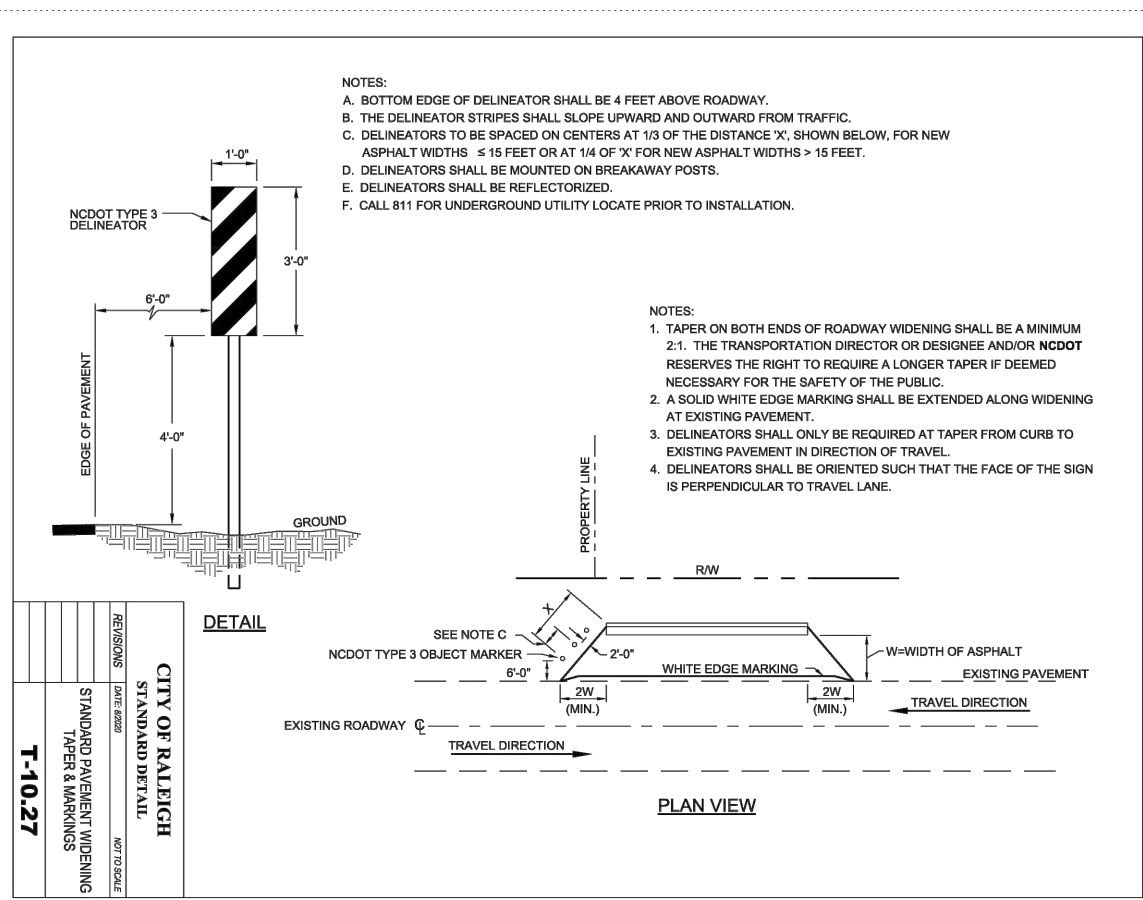
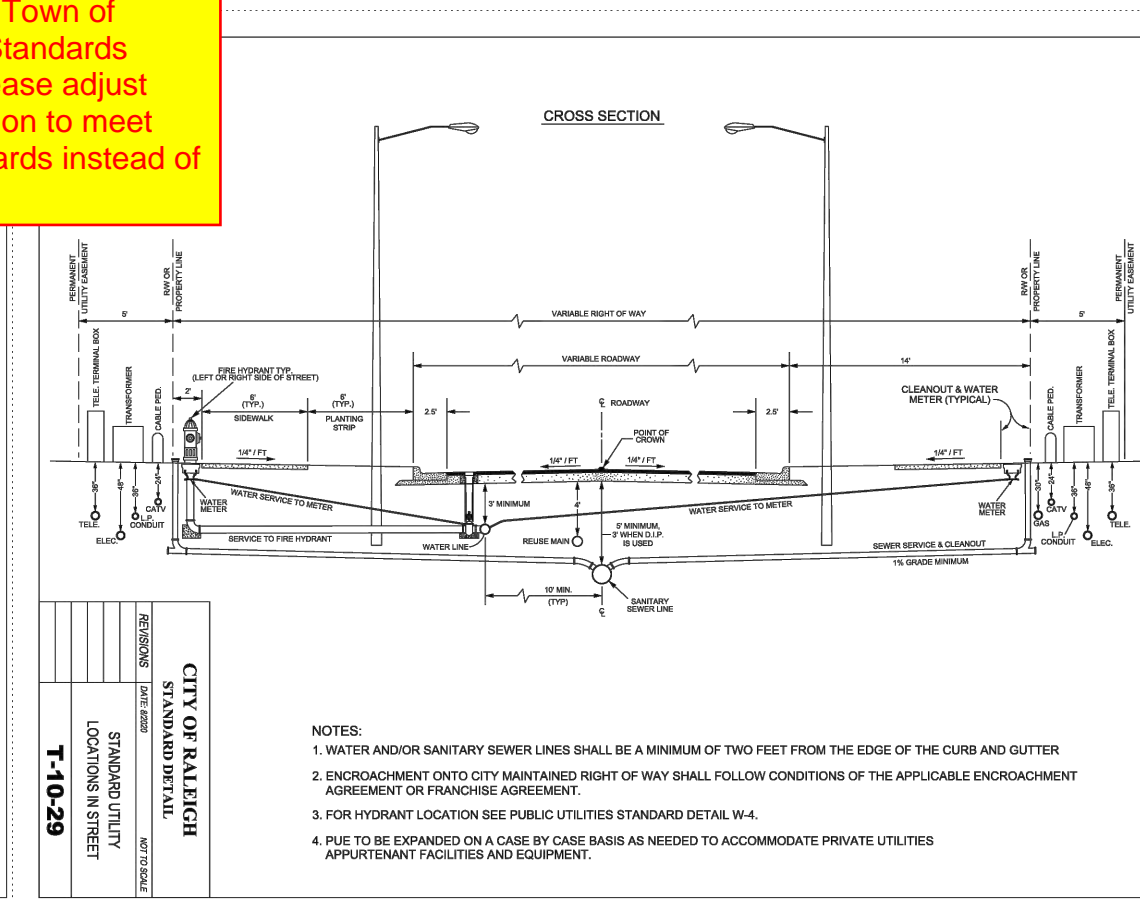
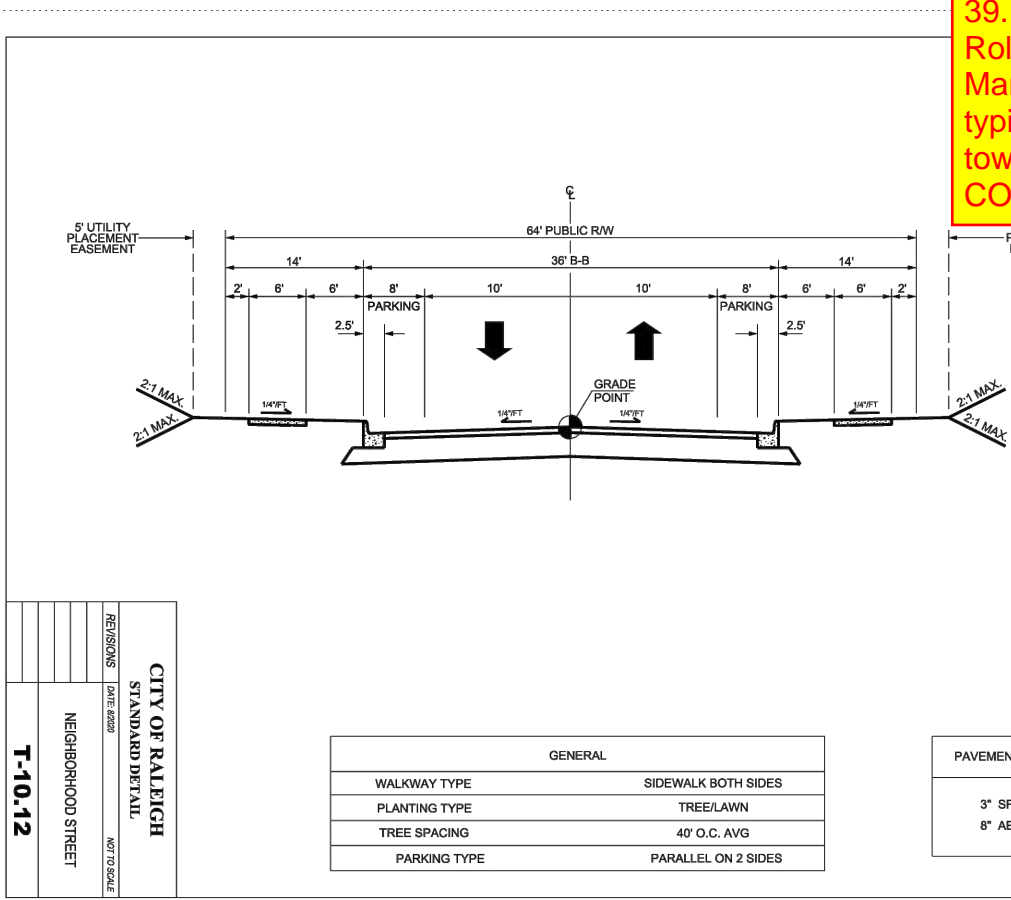
4' TRASH RACK NOT TO SCALE



- NOTES
- TRASH RACK DETAIL BASED ON POMONA PIPE PRODUCTS "STANDARD ALUMINUM BAR & ANGLE PEAKED ROOF" TRASH RACK WITH ONE QUADRANT HINGED FOR MANWAY ACCESS TO FIT 60"x60" I.D. CONCRETE RISER WITH 6" OR 8" THICK WALLS.
  - TRASH RACK TO BE POWDER-COATED BLACK.
  - REQUIRES SS HARDWARE TO ATTACH TO RISER.

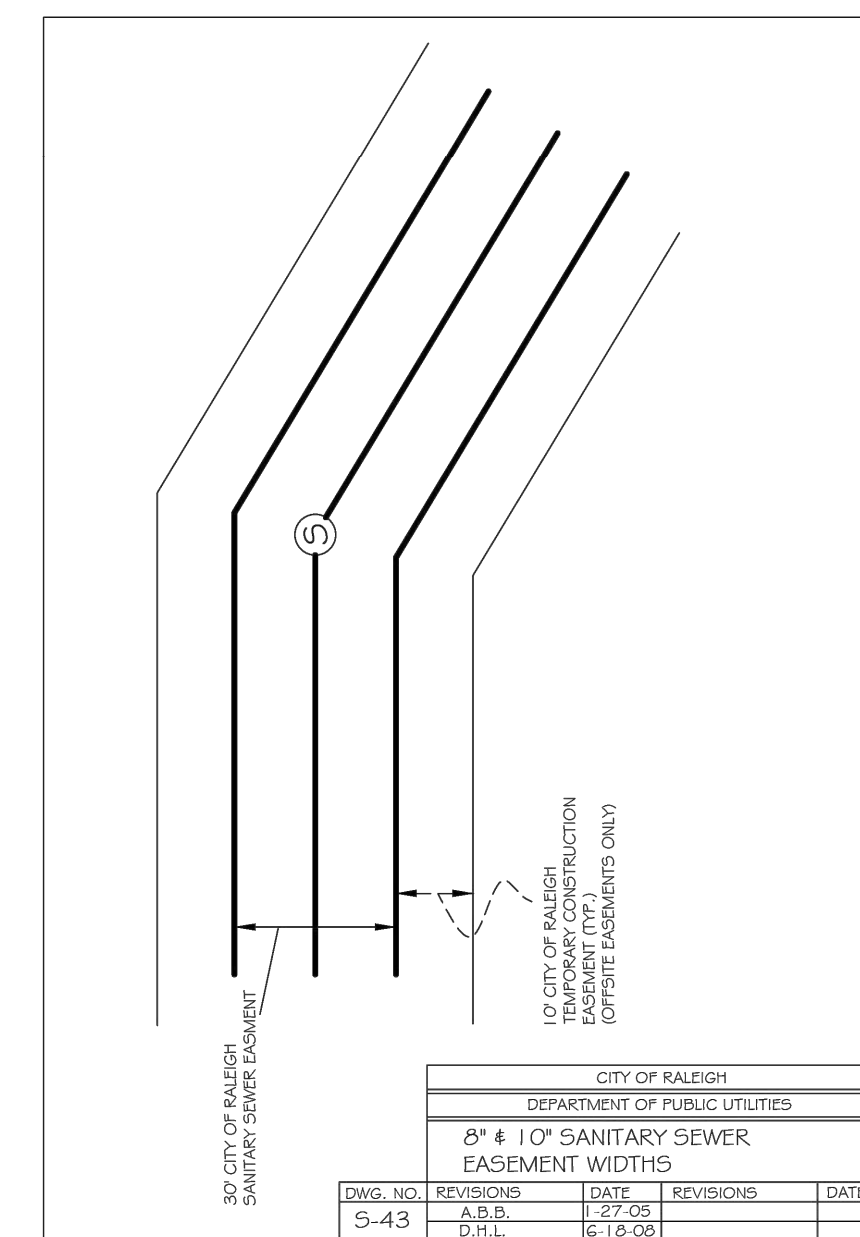
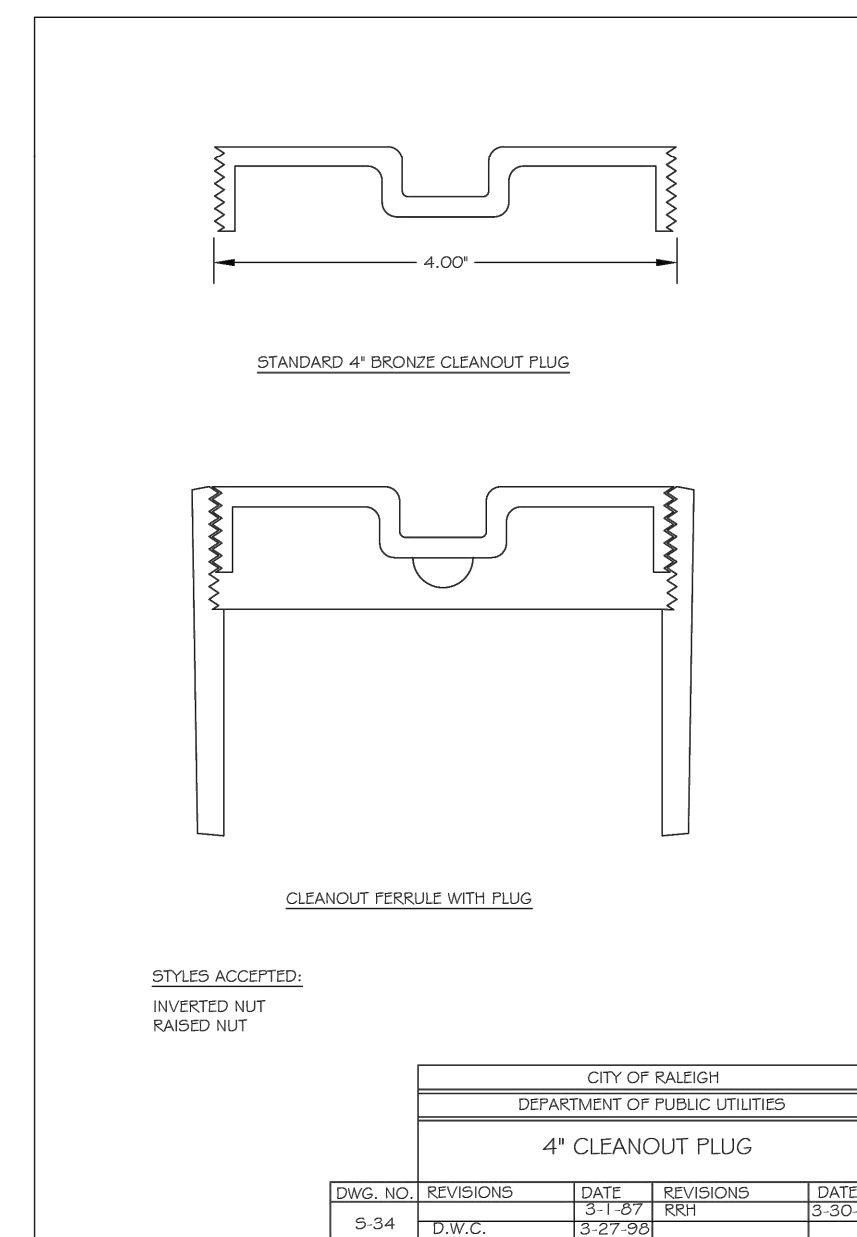
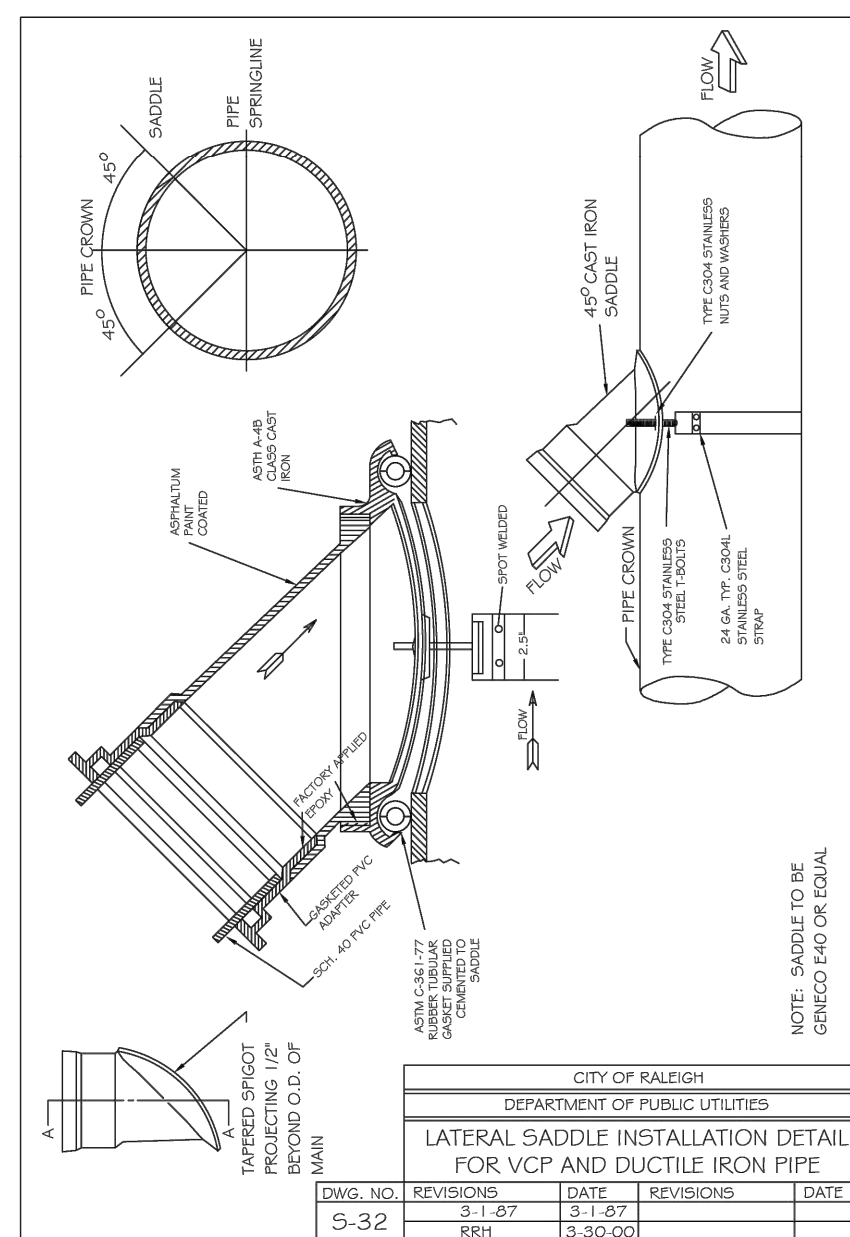
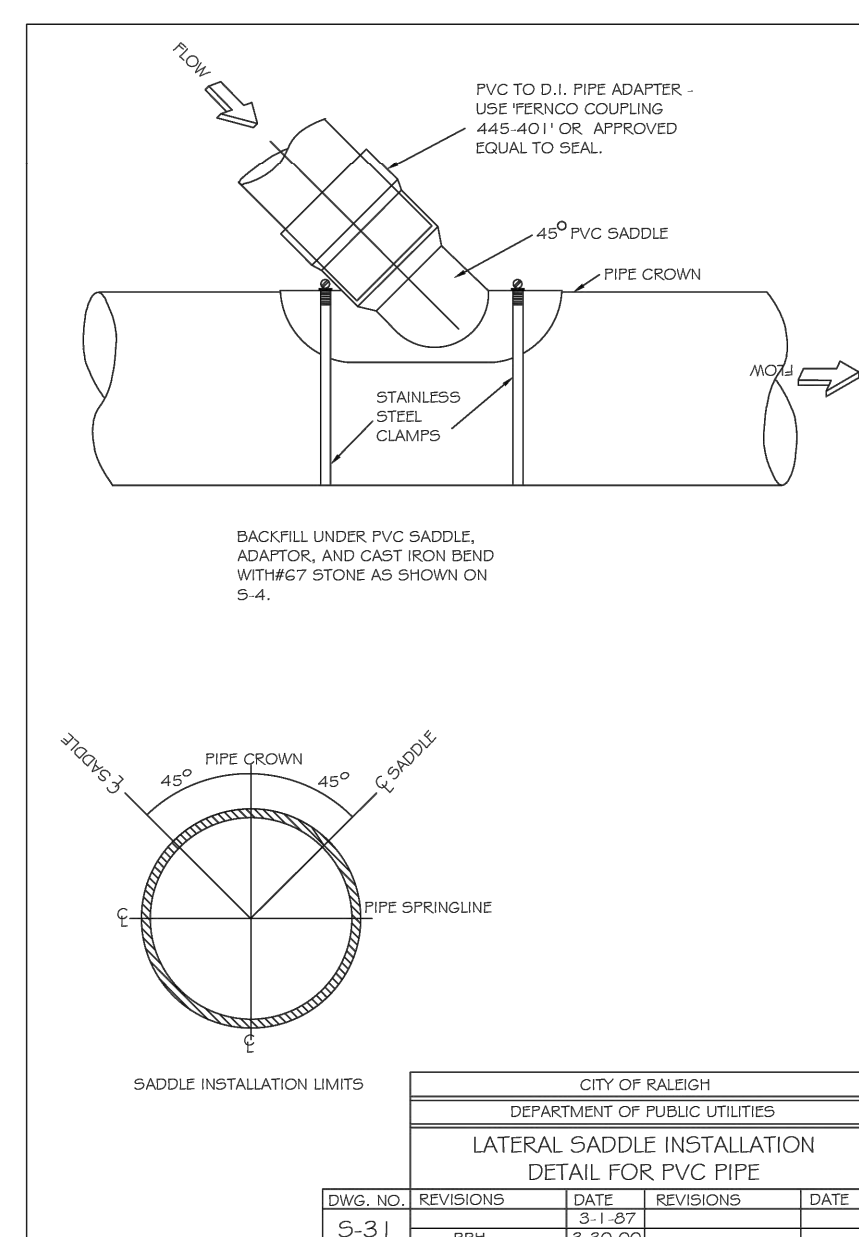
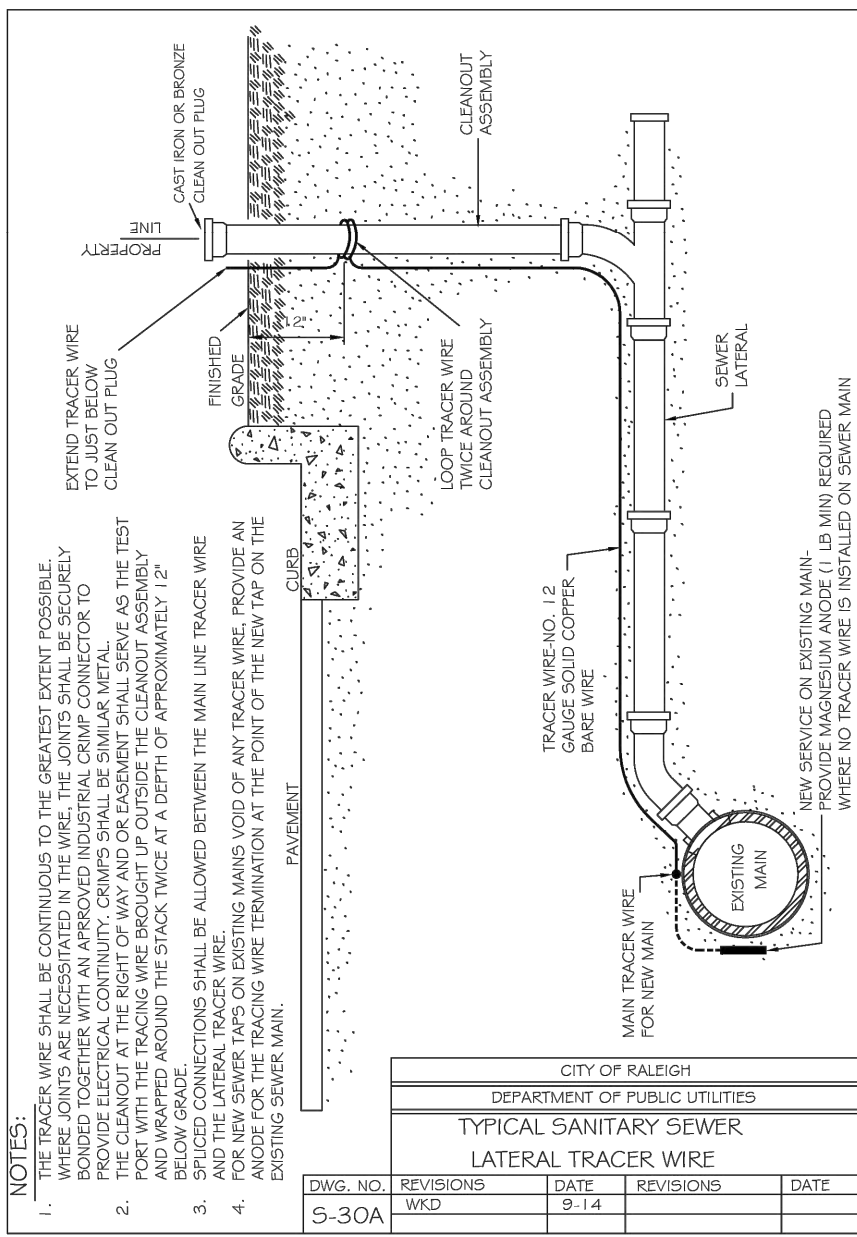
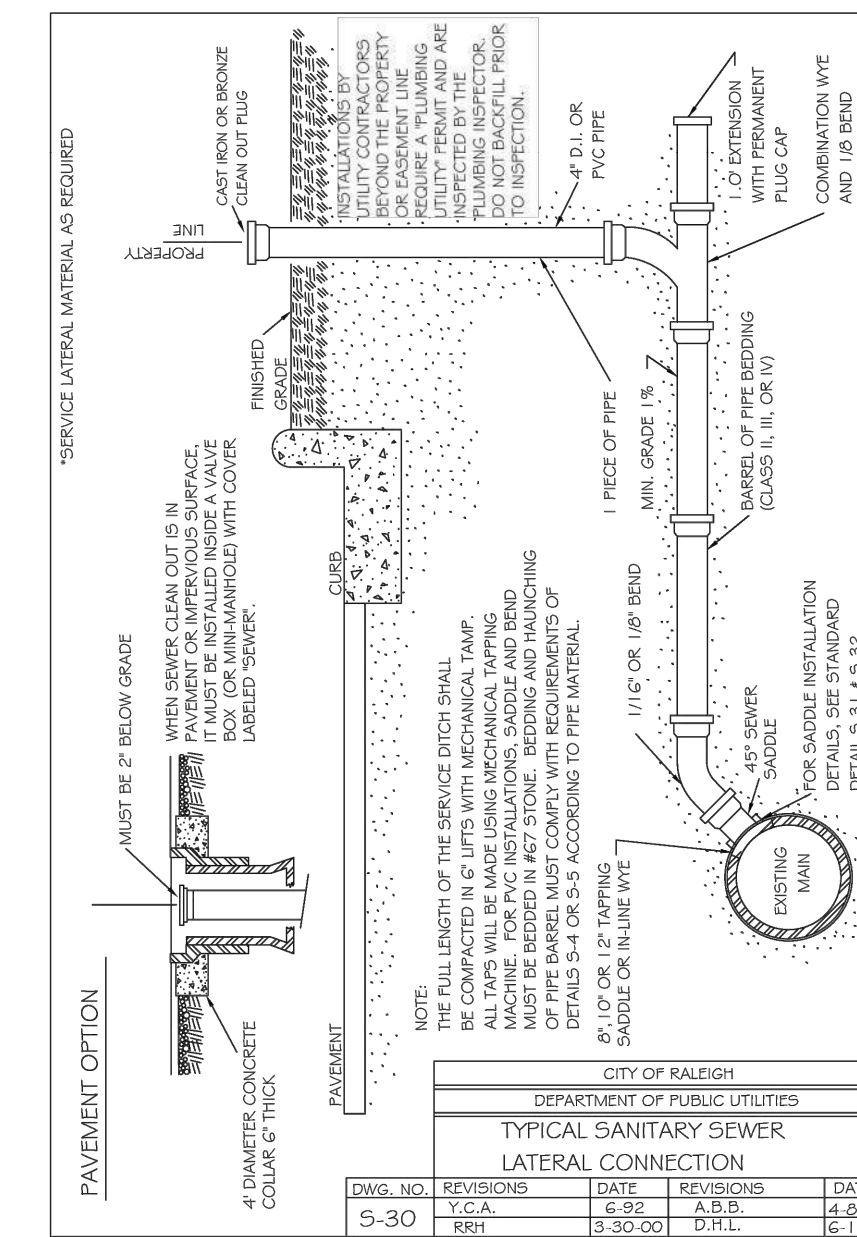
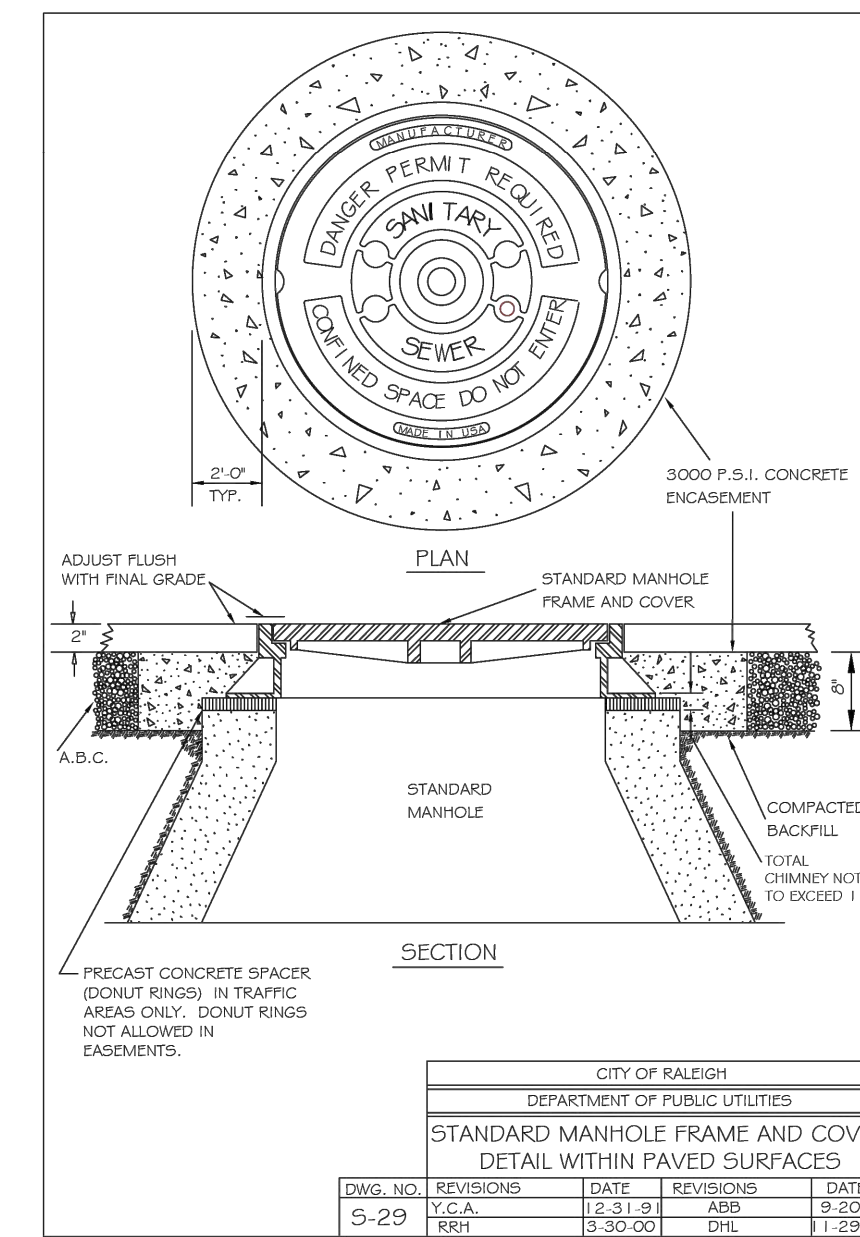
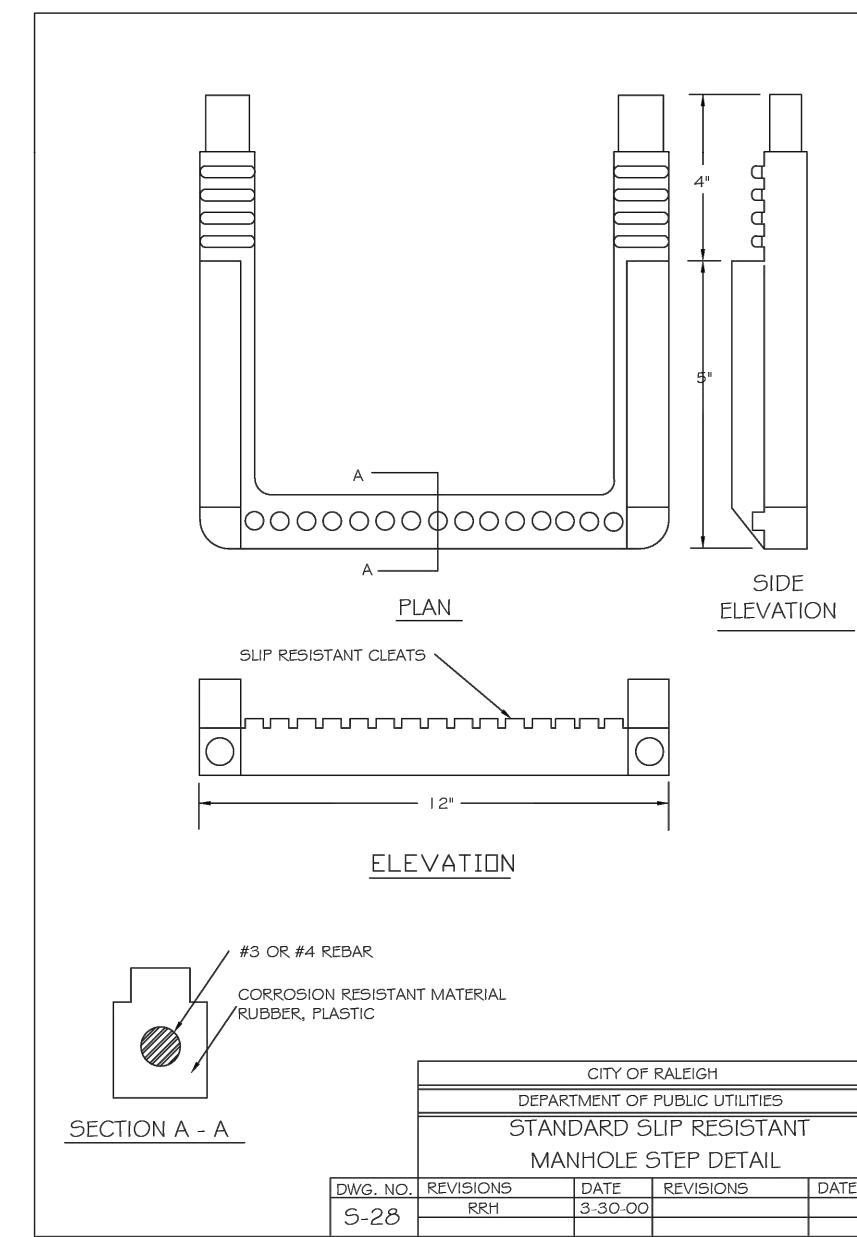
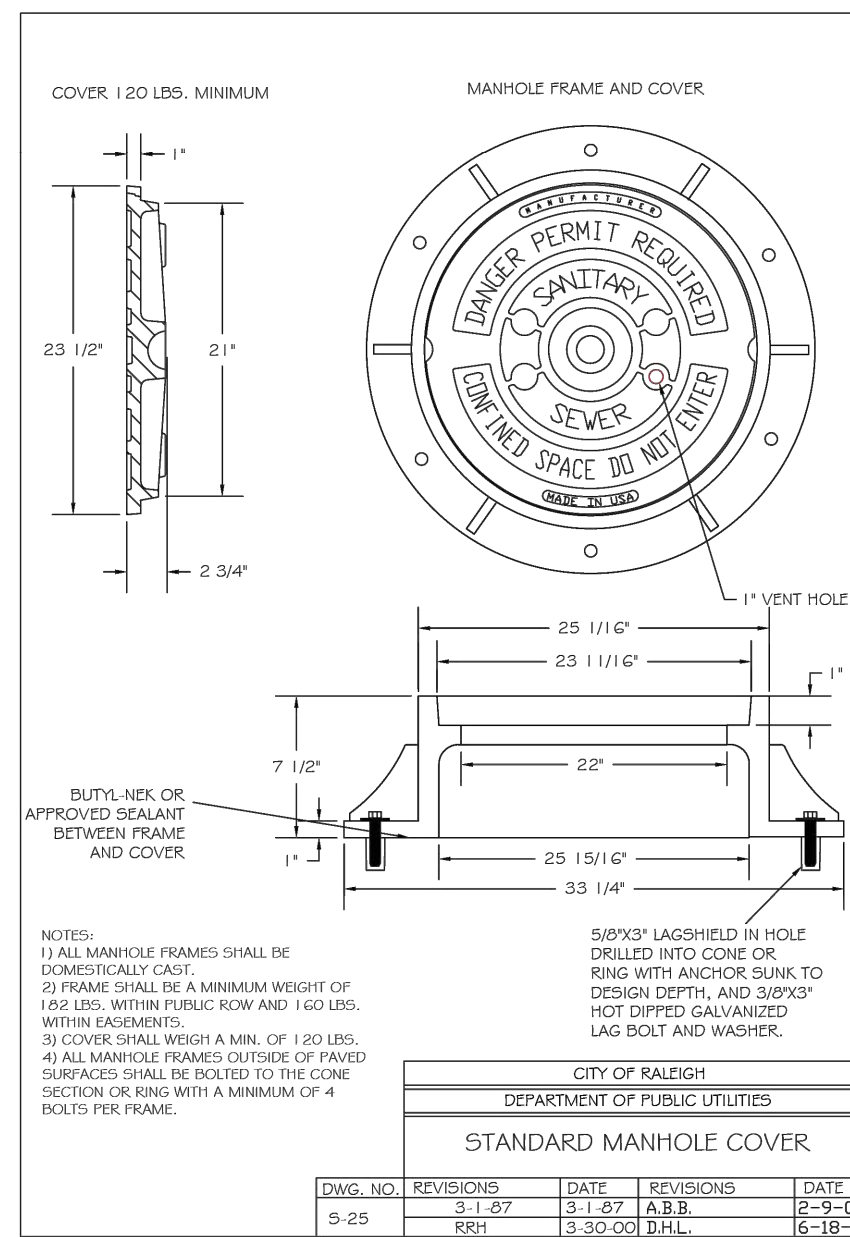
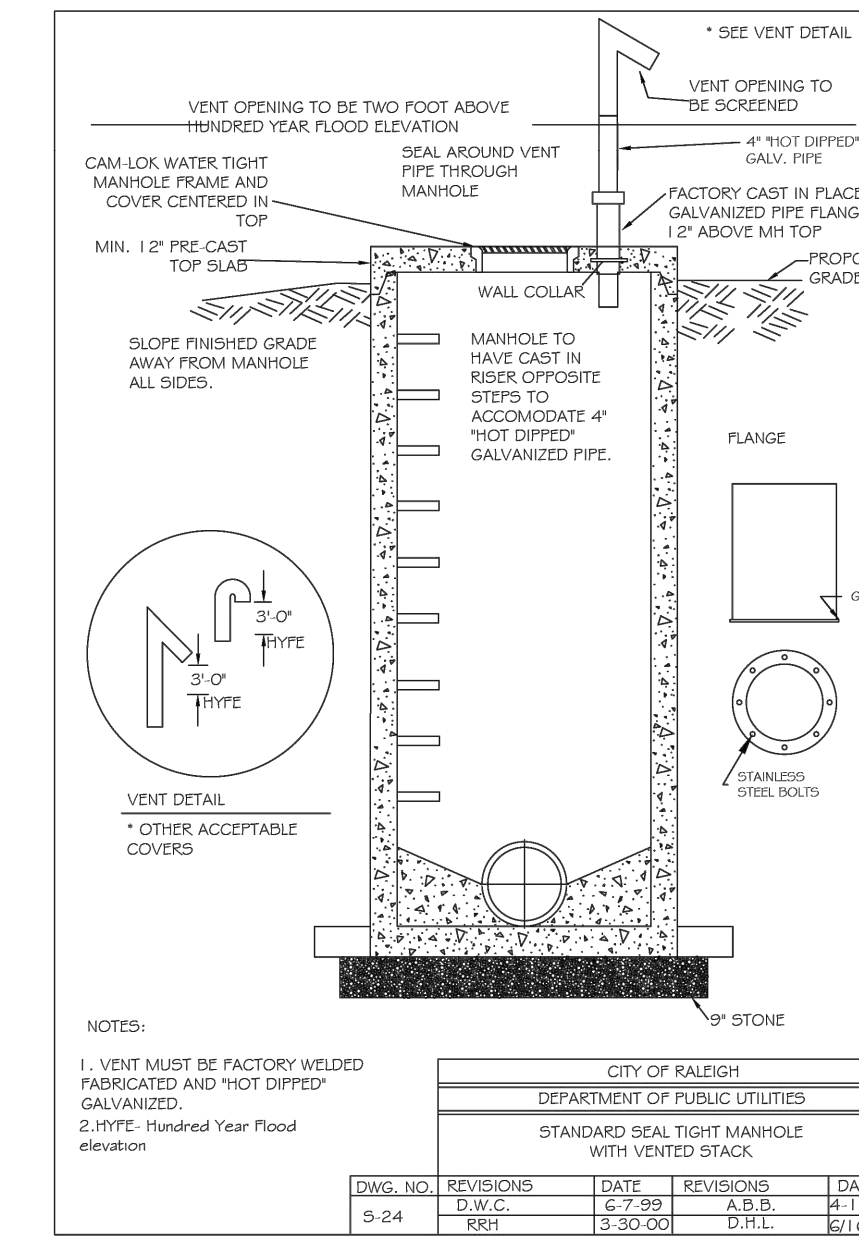
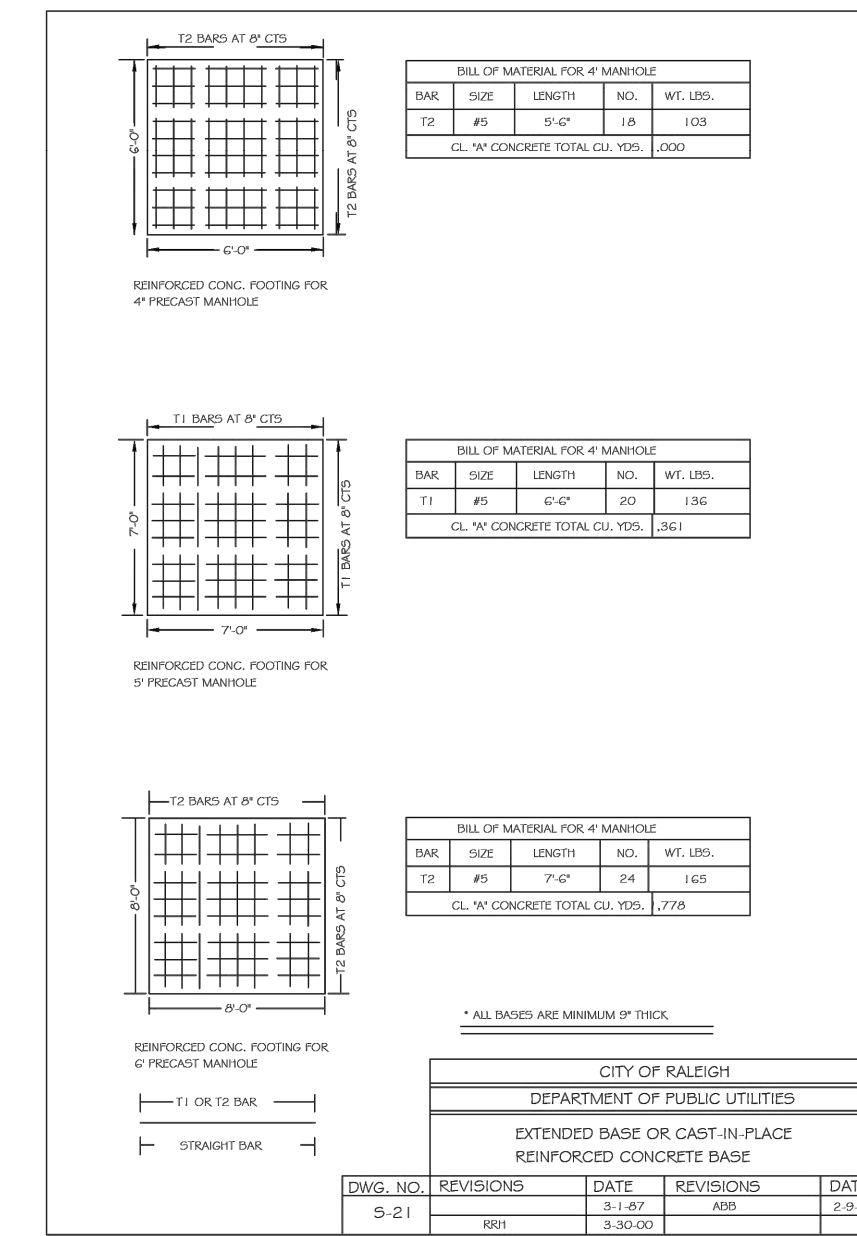
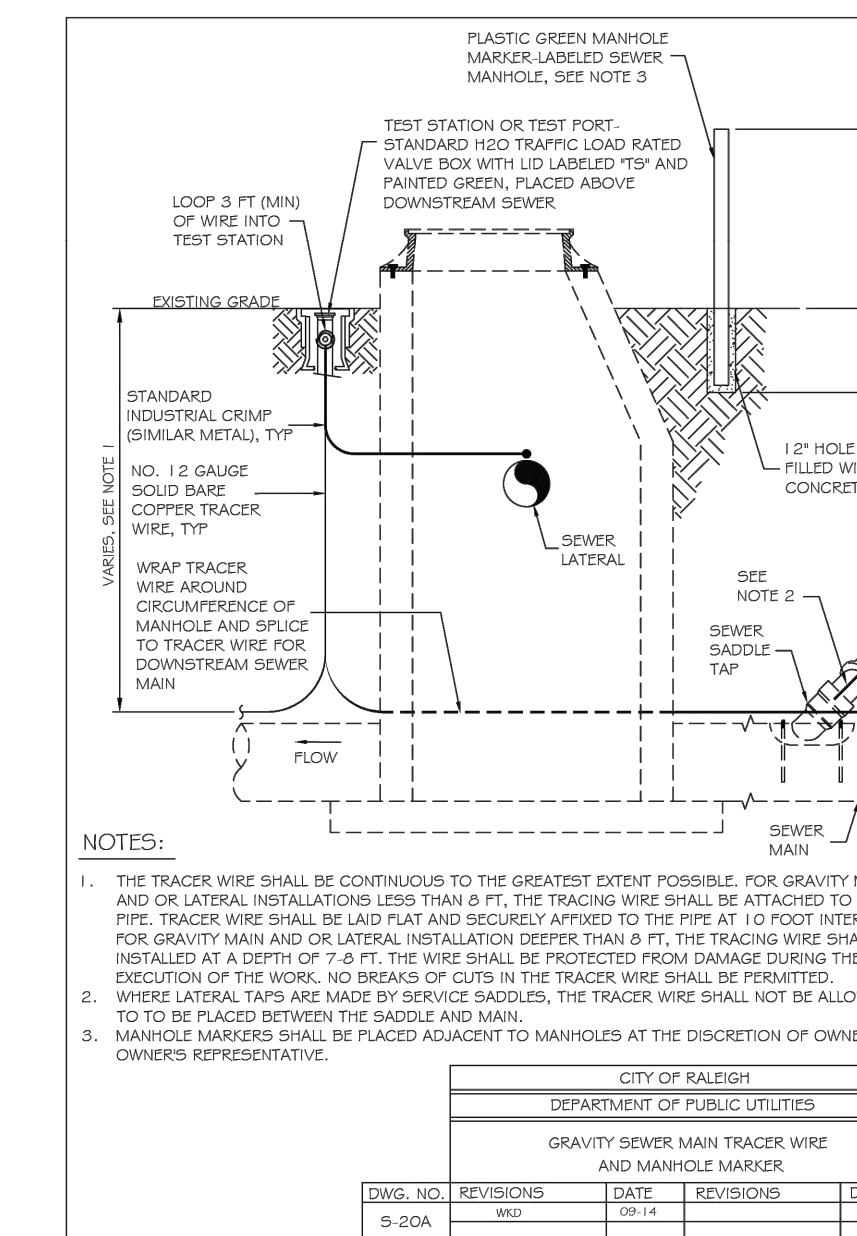
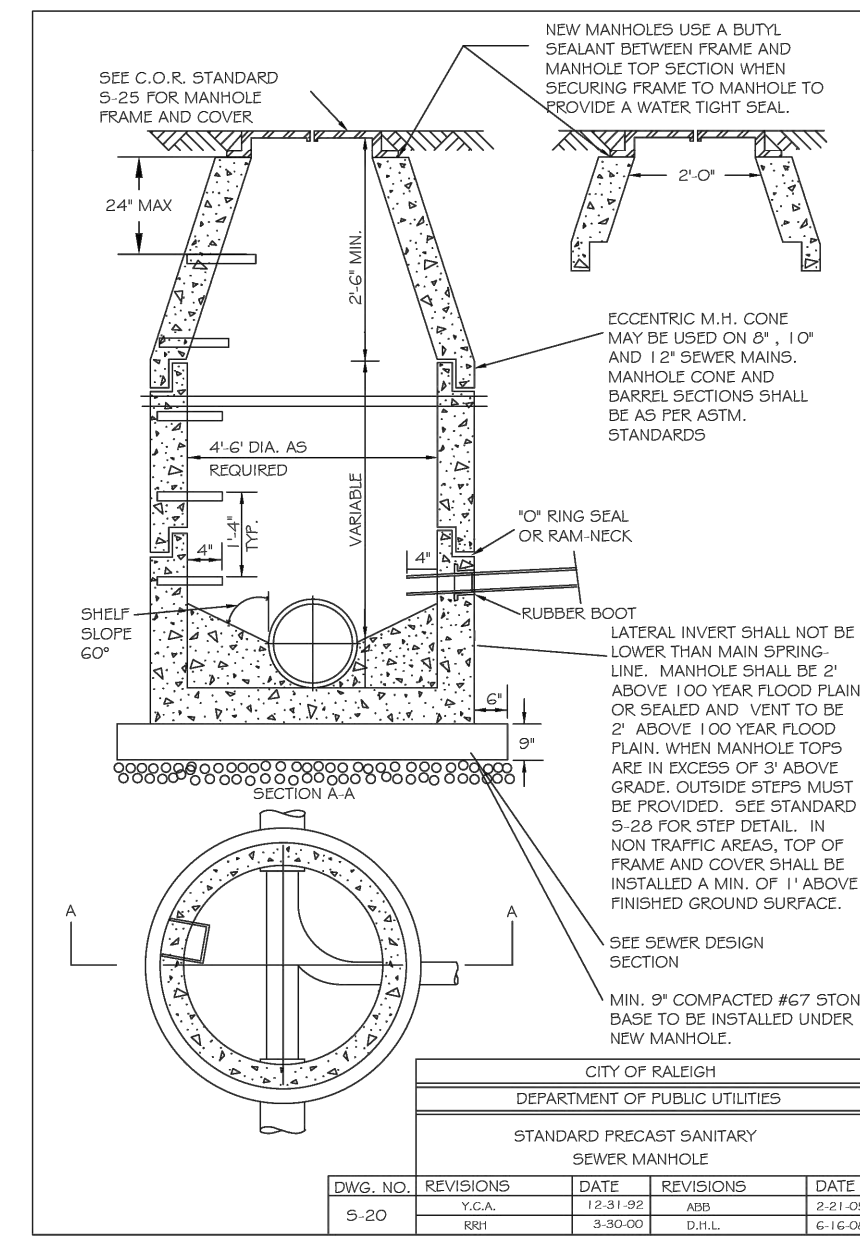
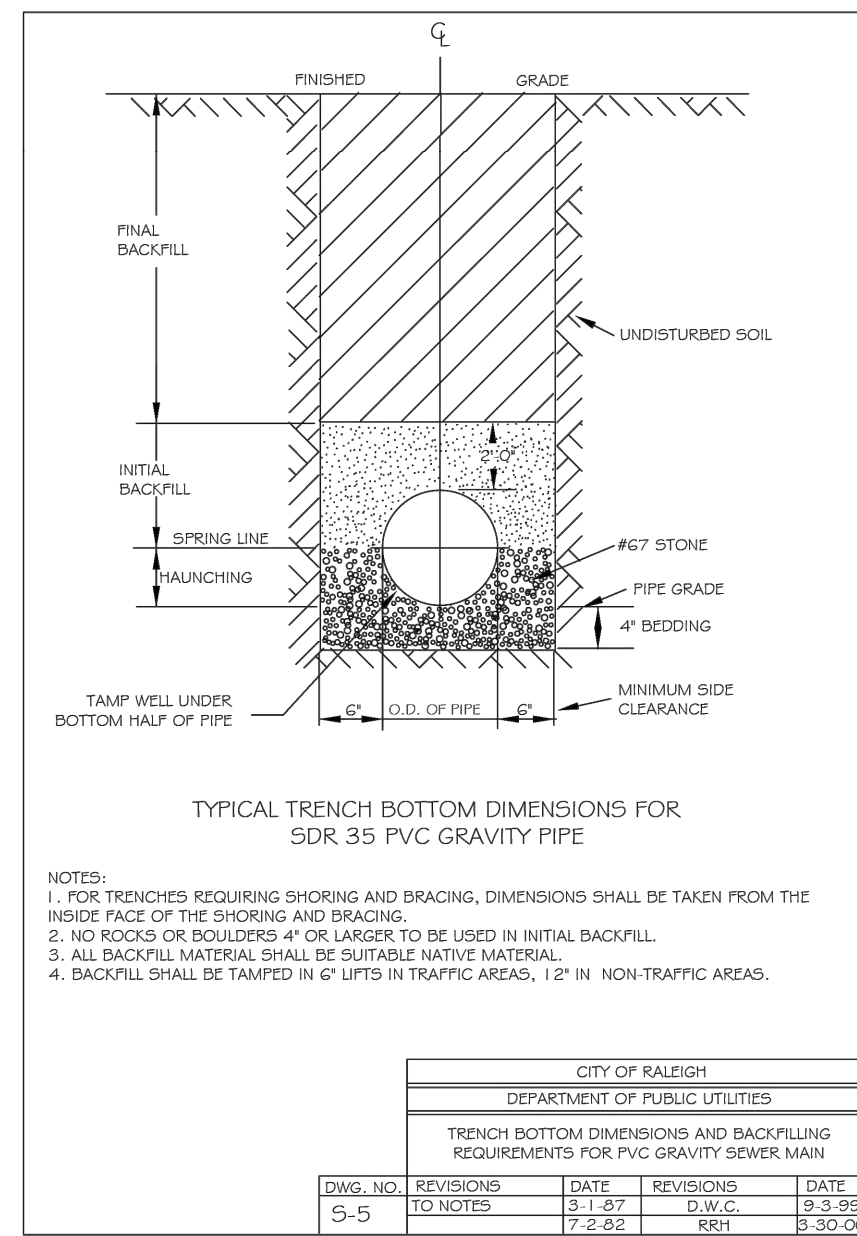
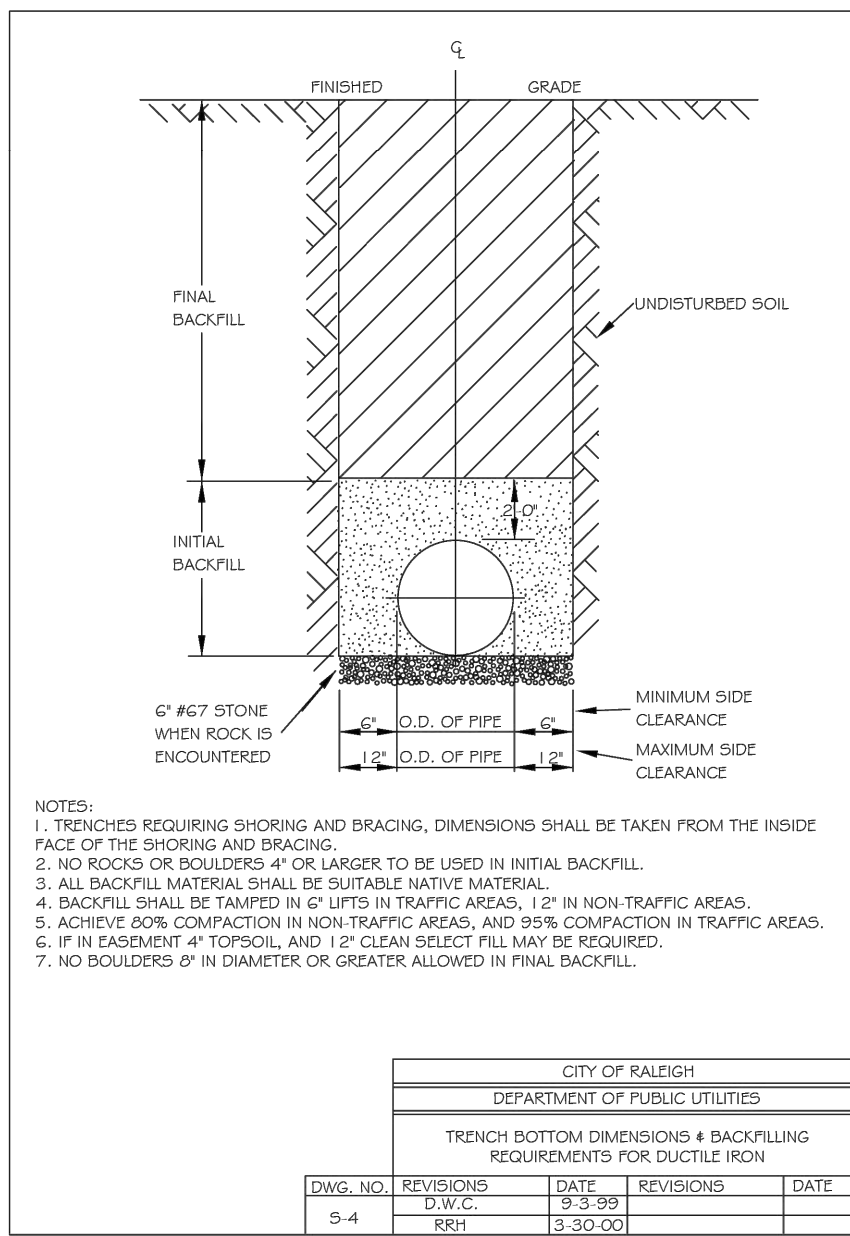
5' TRASH RACK NOT TO SCALE

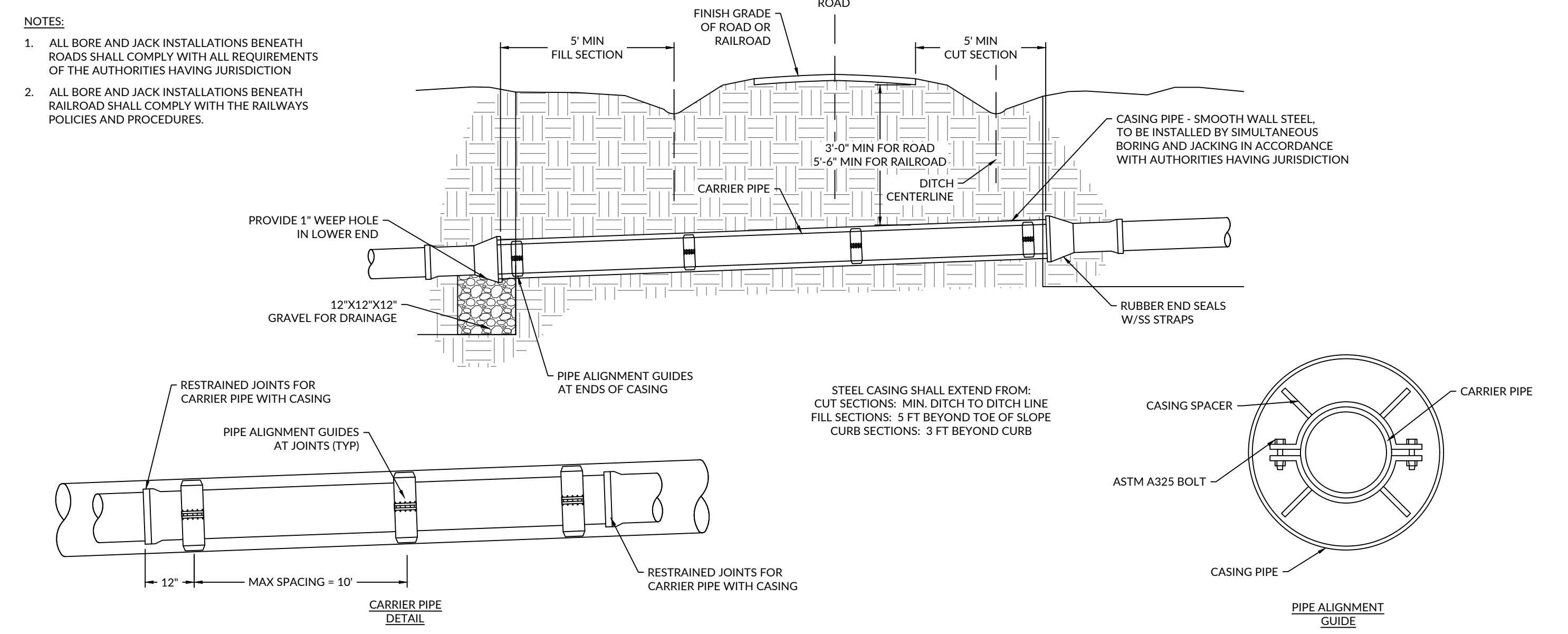
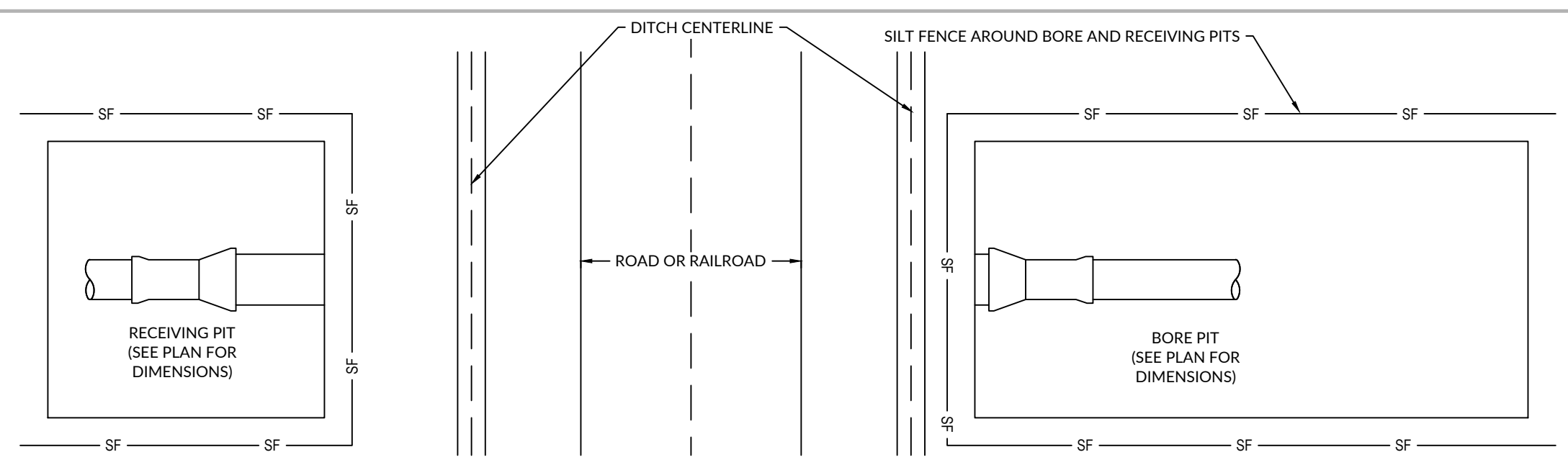
39. Per the Town of Rolesville Standards Manual, please adjust typical section to meet town standards instead of COR.



40. Pedestrian ramps should follow NCDOT standard details

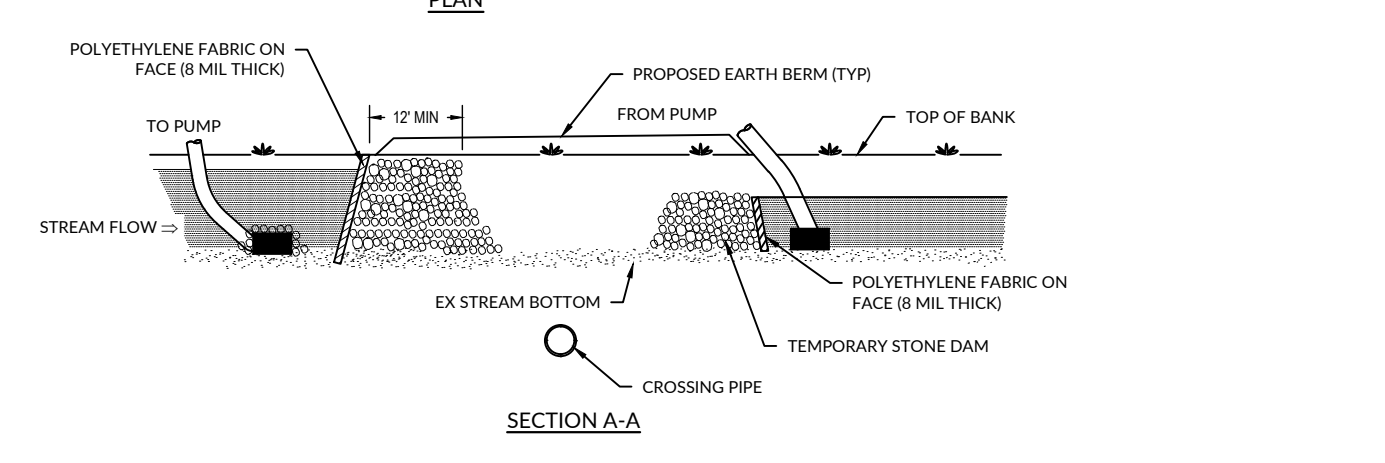
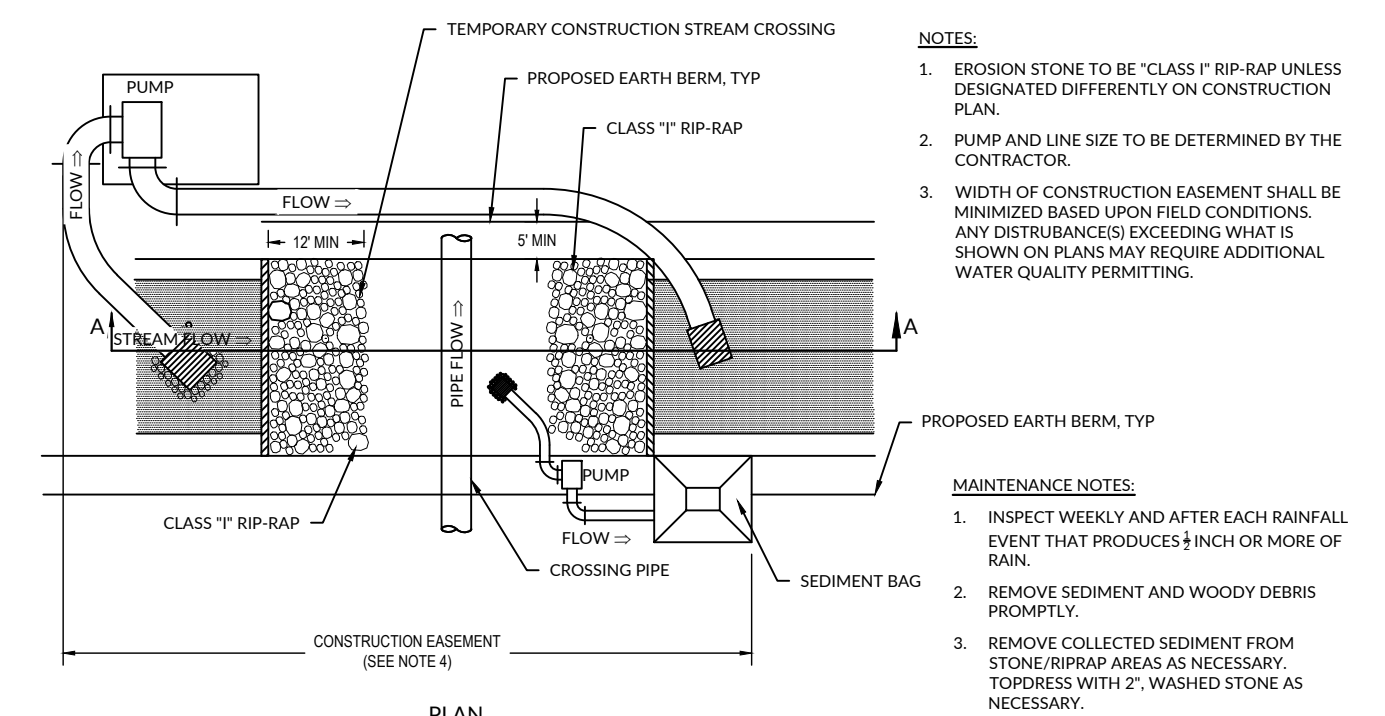






**BORE AND JACK**  
Scale:NTS

UTILITY TRENCHES  
C5051



- CONSTRUCTION SEQUENCE**
1. INSTALL PUMPS UPSTREAM OF TEMPORARY STREAM CROSSING AND PUMP TO AREA DOWNSTREAM OF CONSTRUCTION AREA. BEGIN PUMPING AND CONTINUE PUMPING WHILE WORKING WITHIN THE STREAM.
  2. INSTALL UPSTREAM DAM AND DOWNSTREAM DAM WITH POLYETHYLENE FACING.
  3. INSTALL EARTH BERMS ALONG TOP OF BANK ON EACH SIDE OF STREAM IN THE CONSTRUCTION AREA.
  4. INSTALL SEDIMENT FILTER BAG AT TOP OF BANK. DEWATER CONSTRUCTION AREA BETWEEN STONE DAM USING THE FILTER BAG.
  5. INSTALL THE NEW PIPELINE.
  6. UPON CONSTRUCTION COMPLETION, REMOVE TEMPORARY DAMS, POLYETHYLENE, AND TEMPORARY CMP. DEPRESS TEMPORARY DAM BOTTOMS INTO STREAM BED UNTIL TOP OF RIP RAP IS LEVEL WITH STREAM BOTTOM.
  7. REMOVE TEMPORARY EARTH BERM AND SEDIMENT BAGS AND STABILIZE AREAS AS INDICATED ON DRAWINGS.

**TEMPORARY STREAM CROSSING BYPASS**  
Scale:NTS

RESIDENTIAL  
C5070

J:\2024\Projects\WasteWater\Assemblies\CAD Drawings\Site Construction\C5051.dwg, Thursday, October 31, 2024 11:51:08 AM - LENDWATER



INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

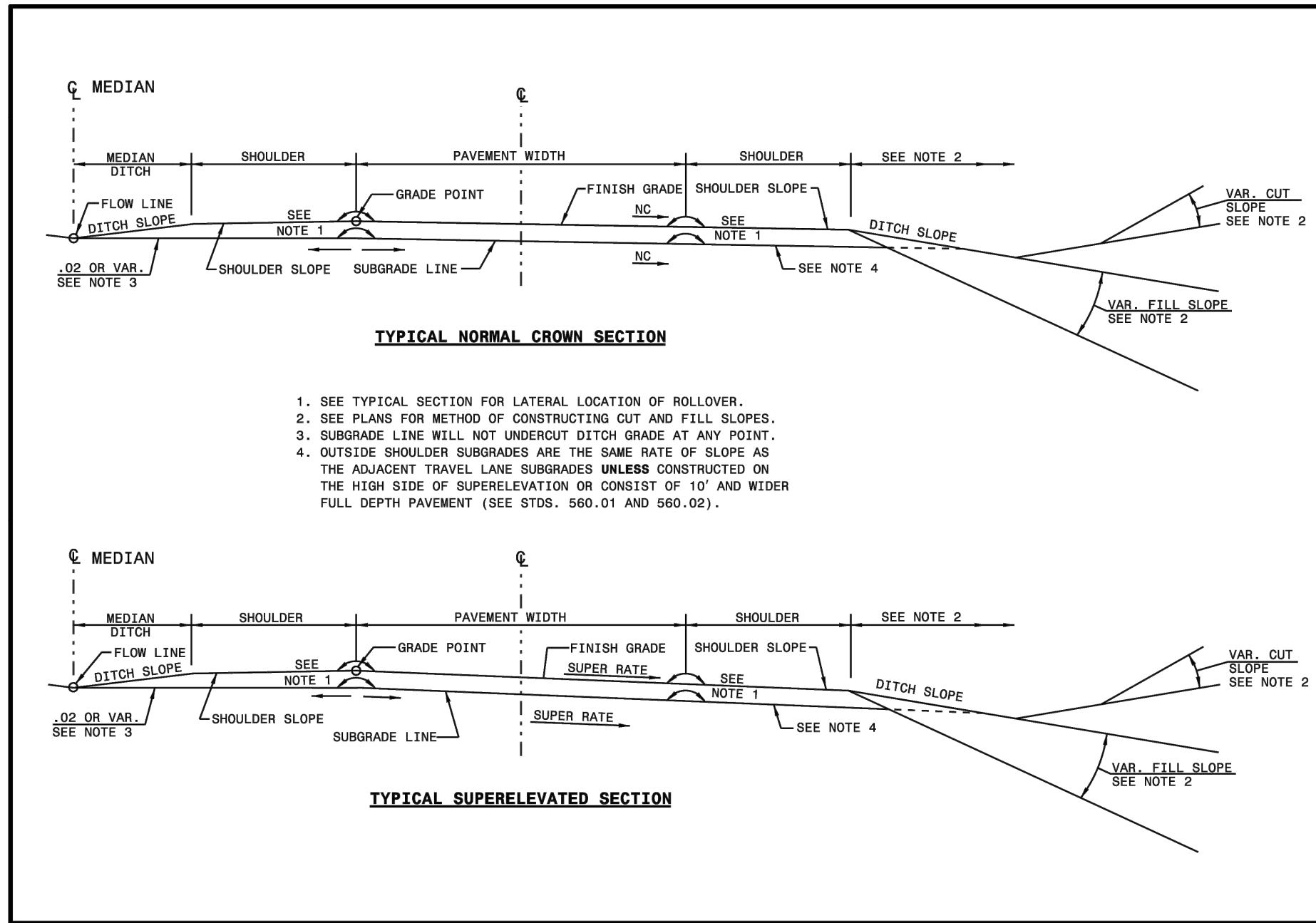
WR JOB NUMBER 23-0045  
DRN: WR DGN: WR CKD: WR

**SEWER DETAILS**

**C10.03**



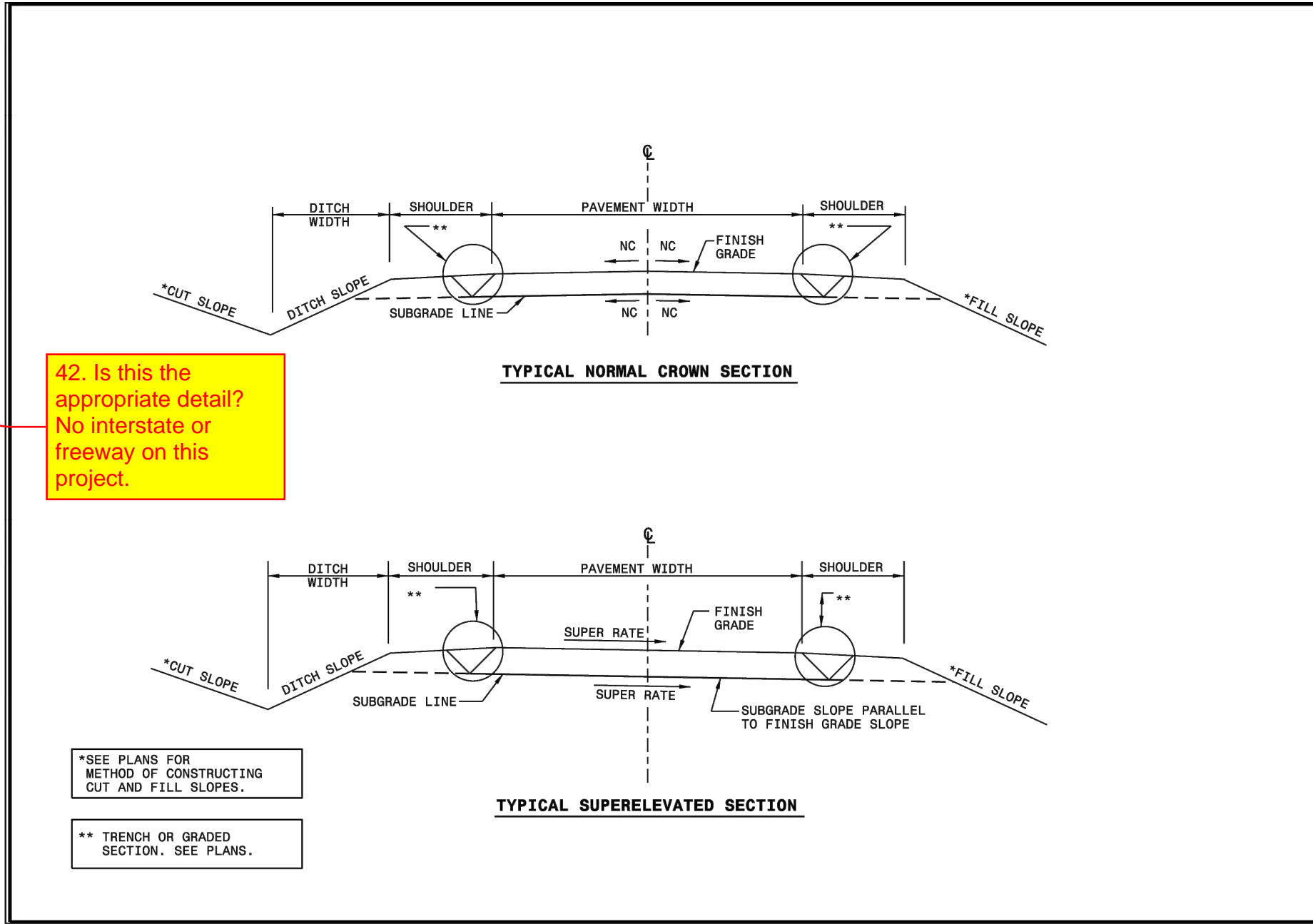




STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**GUIDE FOR GRADING SUBGRADE INTERSTATE AND FREEWAY**

SHEET 1 OF 1  
**225.01**

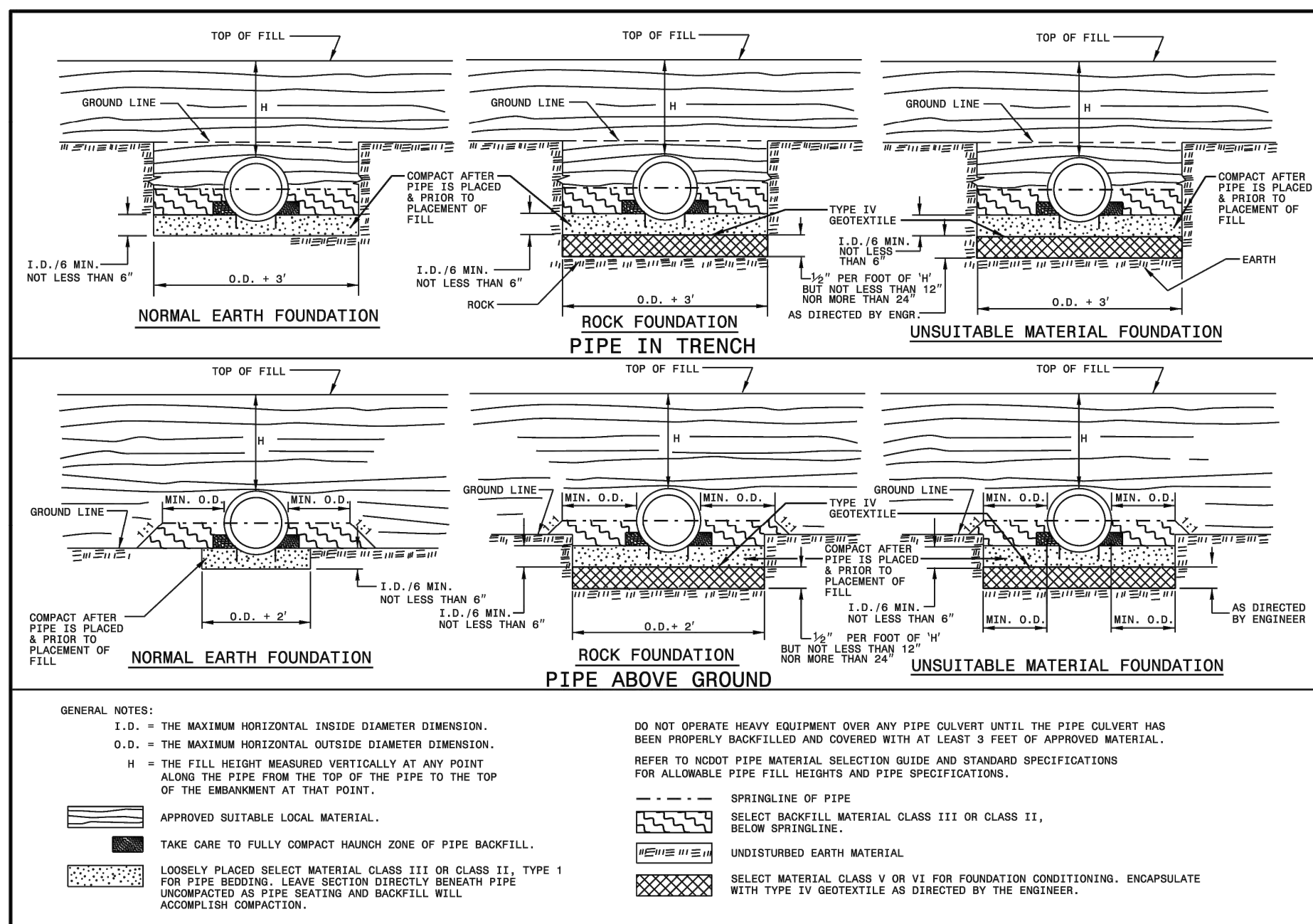


STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR  
**GUIDE FOR GRADING SUBGRADE SECONDARY AND LOCAL**

SHEET 1 OF 1  
**225.02**

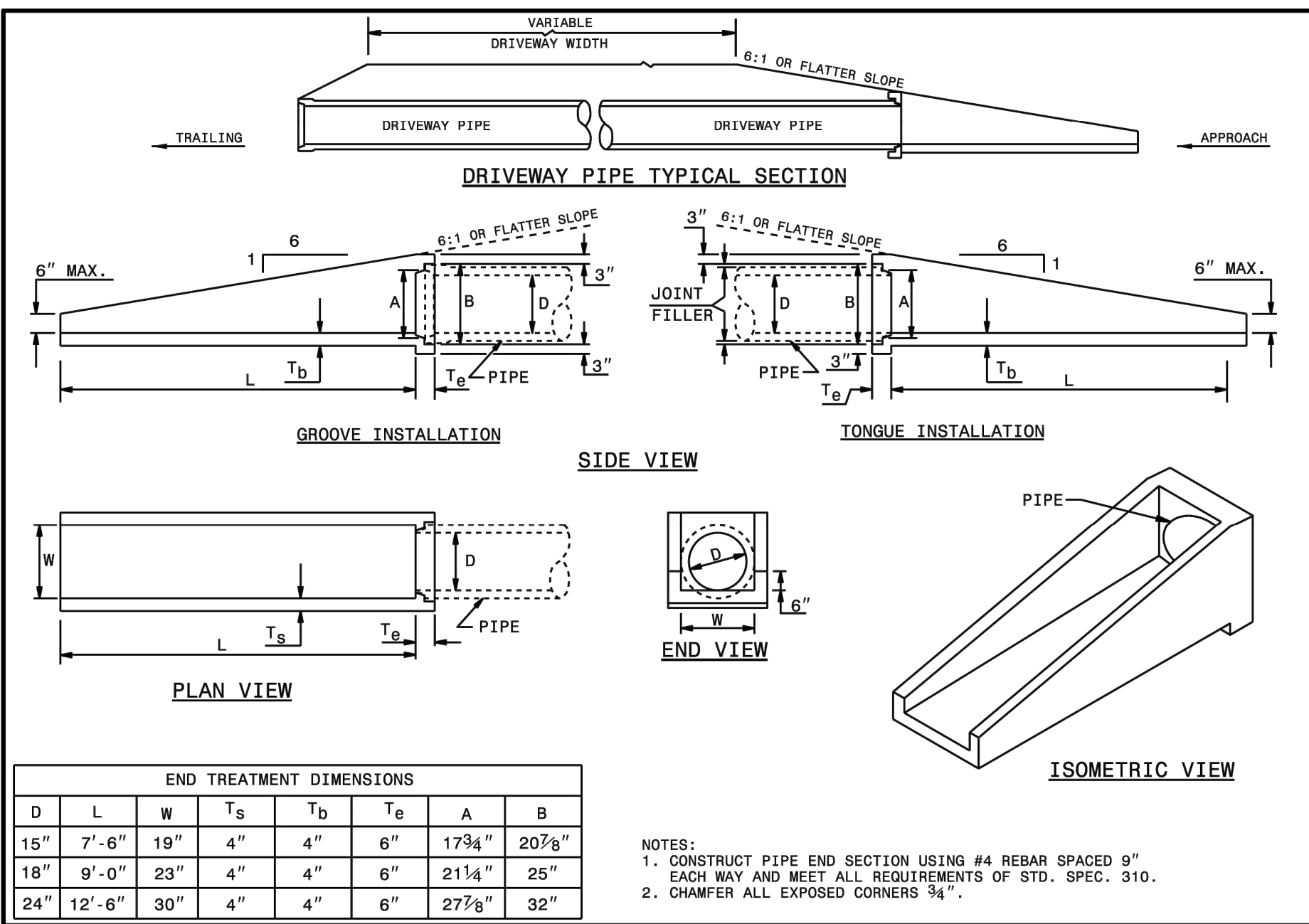
42. Is this the appropriate detail? No interstate or freeway on this project.



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

ROADWAY STANDARD DRAWING FOR  
**METHOD OF PIPE INSTALLATION RIGID PIPE**

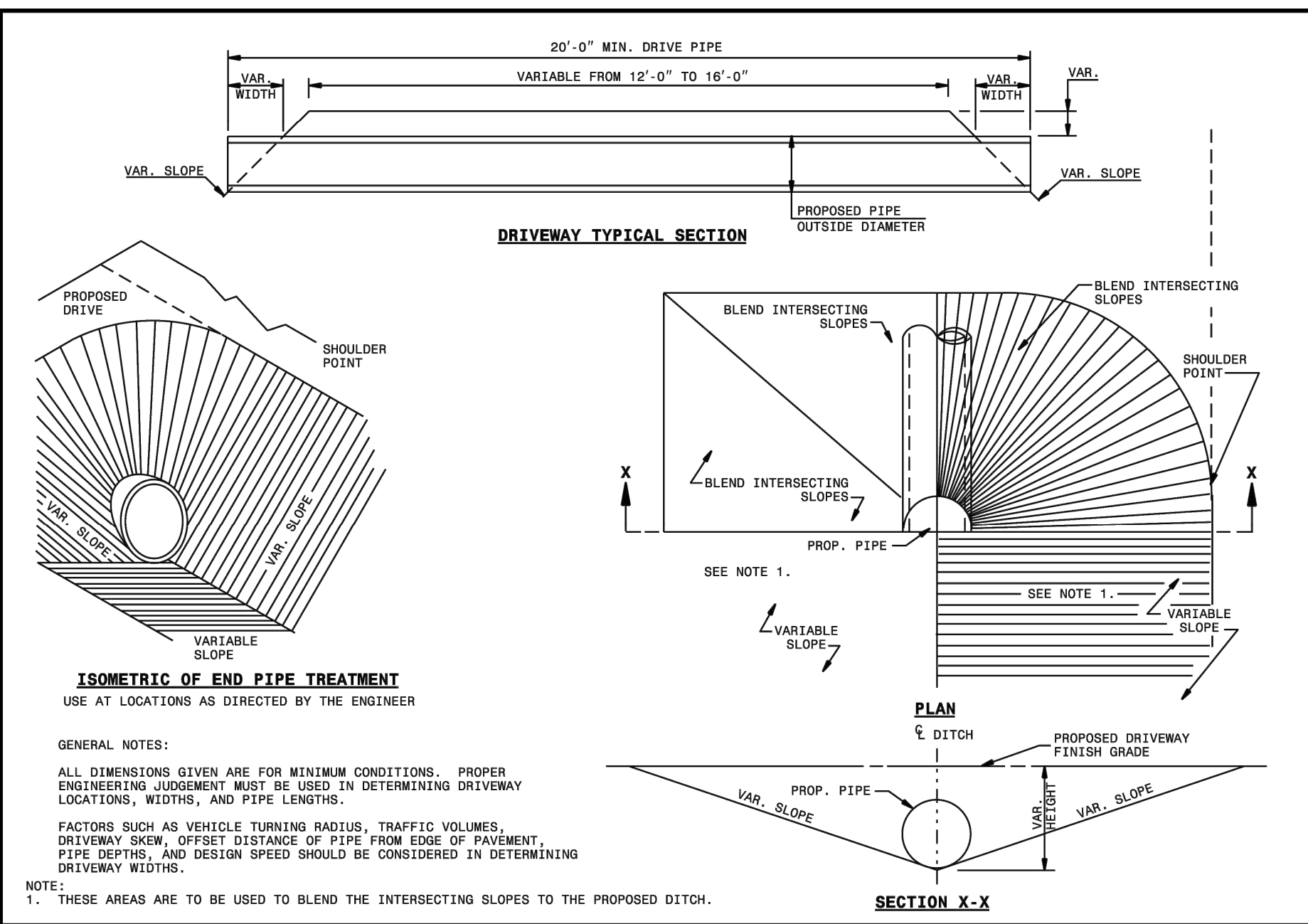
SHEET 2 OF 2  
**300.01**



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

ROADWAY STANDARD DRAWING FOR  
**PARALLEL PIPE END SECTION PRECAST CONCRETE SECTION FOR 15" TO 24" PIPE**

SHEET 1 OF 1  
**310.02**



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

ROADWAY STANDARD DRAWING FOR  
**DRIVEWAY PIPE CONSTRUCTION USING NO SPECIAL END SECTIONS**

SHEET 1 OF 1  
**310.10**

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**GENERAL NOTES:**  
 USE CLASS "B" CONCRETE THROUGHOUT.  
 PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.  
 OPTIONAL CONSTRUCTION - HOLLOW-TYPE FROM 3" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.  
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.  
 IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.  
 MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12'-0". STD. DWG. 840.45 OR 840.46 CONTROLS MAXIMUM DEPTH IF PRECAST BOX IS USED.  
 CONSTRUCT WITH PIPE CROWS MATCHING.  
 SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.  
 INSTALL 2" WEEPHOLES AS DIRECTED BY THE ENGINEER.  
 INSTALL STONE DRAINS, OF A MINIMUM OF 1 CURB FOOT OF NO. 78M STONE IN A POROUS FABRIC BAG OR BASK, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.  
 CHAMFER ALL EXPOSED CORNERS 1".  
 DRAWING NOT TO SCALE.

**PLAN**  
WITH GRATE & FRAME REMOVED

**SECTION X-X**

**SECTION Y-Y**

**DOWEL**

**SECTION G-G**

**SECTION H-H**

**PLAN OF GRATING**  
CAST IRON

**SECTION E-E**

**SECTION F-F**

**PLAN OF FRAME**  
CAST IRON

PIPE	SPAN	WIDTH	MIN. HEIGHT	BOTTOM SLAB	WALL	PER. CONC.	CONC. IN BOX	DEDUCTIONS FOR ONE PIPE
D	A	B	H	FT.	HT.	CONC.	C.M.	R.C.
12"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.592	0.015	0.026
15"	3'-0"	2'-3"	2'-3"	0.648	0.093	0.036		
18"	3'-0"	2'-6"	2'-6"	0.703	0.093	0.048		
24"	3'-0"	3'-0"	3'-0"	0.814	0.059	0.085		
30"	3'-0"	3'-0"	3'-6"	0.222	0.222	0.925	0.092	0.127

STATE OF NORTH CAROLINA  
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ROADWAY STANDARD DRAWING FOR  
**CONCRETE DROP INLET**  
 12" THRU 30" PIPE

SHEET 1 OF 1  
**840.14**

**GENERAL NOTES:**  
 THIS PRECAST BOX MAY BE USED FOR THE FOLLOWING STANDARDS: 840.01, 840.02, 840.04, 840.05, 840.13, 840.14, 840.15, 840.17, 840.18, 840.19, 840.26, 840.27, 840.28, 840.31, 840.32 AND 840.41.  
 INSTALL PRECAST DRAINAGE STRUCTURES AND PAY FOR IN ACCORDANCE WITH SPECIFICATION SECTION 840.  
 DO NOT PLACE PRECAST DRAINAGE STRUCTURES UNDER TRAFFIC OR WHERE TRAFFIC WILL BE DETOURED.  
 USE 4000 PSI CONCRETE.  
 PROVIDE ALL REINFORCING STEEL WHICH MEETS ASTM A615 FOR GRADE 60 AND WELDED WIRE FABRIC CONFORMING TO ASTM A1064.  
 LIMIT MAXIMUM DEPTH TO TOP OF BOTTOM SLAB FOR WAFFLE WALL STRUCTURE TO 10'-0"; LIMIT SOLID WALL STRUCTURE TO 15'-0".  
 PLACE LIFT HOLES OR PINS IN ACCORDANCE WITH OSHA STANDARD 1926.704.  
 CUT OR FORM OPENINGS FOR PIPE TO PROVIDE REQUIRED SIZE AND LOCATION. ORIENT WAFFLE WALL STRUCTURES SO THAT PIPES ENTER THROUGH THE KNOCKOUT/WAFFLE PANELS ONLY. PIPES MAY ENTER THROUGH THE CORNERS OF SOLID WALL BOXES IF A MINIMUM OF 6" OF WALL IS PROVIDED ABOVE THE HOLE.  
 ALL ELEMENTS PRECAST TO MEET ASTM C913.  
 FRAME AND GRATE HEIGHT MAY BE ADJUSTED WITH CONCRETE OR BRICK IN ACCORDANCE WITH STANDARD 840.25.  
 PROVIDE PRECAST STRUCTURES OVER 3'-6" IN DEPTH WITH STEPS AS DIRECTED BY THE ENGINEER.  
 WELDED WIRE FABRIC MAY BE SUBSTITUTED FOR REBAR AS LONG AS THE SAME AREA OF STEEL IS PROVIDED.  
 SEAL JOINTS WITH A FLEXIBLE BUTYL RUBBER BASE CONFORMING TO FEDERAL SPECIFICATION SS-S-21A, AASHTO M-198, TYPE B - BUTYL RUBBER.  
 LIMIT MAXIMUM STRUCTURE SIZE TO INSIDE CLEAR DIMENSIONS OF 5'-0" X 5'-0".  
 THE OUTSIDE PIPE DIAMETER PLUS 2" OR THE OPENING REQUIRED FOR FRAME AND GRATE IS THE MINIMUM STRUCTURE SIZE WHICHEVER IS GREATER.  
 USE MANHOLE FRAME AND COVER AS INDICATED ON THE PLANS. REINFORCE OPENING AS SHOWN ON THIS SHEET.

**SECTION C-C**

**PLAN TOP SLAB**

**CORNER CUT DETAIL**  
(SOLID WALL BOX)

**PRECAST RISER PLAN**

**SECTION VIEW**

**OPTIONAL JOINT DETAILS**

STATE OF NORTH CAROLINA  
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ROADWAY STANDARD DRAWING FOR  
**PRECAST DRAINAGE STRUCTURE**  
 (GENERAL NOTES AND DETAILS)

SHEET 2 OF 2  
**840.45**

**ISOMETRIC VIEW**

**SECTION A-A**

**SECTION B-B**

**PLAN VIEW**

STATE OF NORTH CAROLINA  
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ROADWAY STANDARD DRAWING FOR  
**CURB RAMP**  
 PROPOSED CURB AND GUTTER

SHEET 1 OF 13  
**848.06**

**ISOMETRIC VIEW**

**SECTION A-A**

**SECTION B-B**

**PLAN VIEW**

A	B	X	B
0'-0" to 0'-2"	0'-0" to 0'-2"	0'-0" to 0'-2"	0'-0" to 0'-2"
0'-2" to 0'-4"	0'-2" to 0'-4"	0'-2" to 0'-4"	0'-2" to 0'-4"
0'-4" to 0'-6"	0'-4" to 0'-6"	0'-4" to 0'-6"	0'-4" to 0'-6"
0'-6" to 0'-8"	0'-6" to 0'-8"	0'-6" to 0'-8"	0'-6" to 0'-8"
0'-8" to 0'-10"	0'-8" to 0'-10"	0'-8" to 0'-10"	0'-8" to 0'-10"
0'-10" to 0'-12"	0'-10" to 0'-12"	0'-10" to 0'-12"	0'-10" to 0'-12"
0'-12" to 0'-14"	0'-12" to 0'-14"	0'-12" to 0'-14"	0'-12" to 0'-14"
0'-14" to 0'-16"	0'-14" to 0'-16"	0'-14" to 0'-16"	0'-14" to 0'-16"
0'-16" to 0'-18"	0'-16" to 0'-18"	0'-16" to 0'-18"	0'-16" to 0'-18"
0'-18" to 0'-20"	0'-18" to 0'-20"	0'-18" to 0'-20"	0'-18" to 0'-20"

STATE OF NORTH CAROLINA  
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ROADWAY STANDARD DRAWING FOR  
**DETECTABLE WARNING SURFACE**

SHEET 1 OF 13  
**848.06**

**WAFFLE WALL ISOMETRIC VIEW**

**SOLID WALL ISOMETRIC VIEW**

**SECTION A-A**

**SECTION B-B**

**WAFFLE WALL PLAN VIEW**

**SOLID WALL PLAN VIEW**

**SECTION C-C**

**SECTION D-D**

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

ROADWAY STANDARD DRAWING FOR  
**PRECAST DRAINAGE STRUCTURE**  
 (SOLID AND WAFFLE WALL)

SHEET 1 OF 2  
**840.45**

**TYPE III BARRICADE**

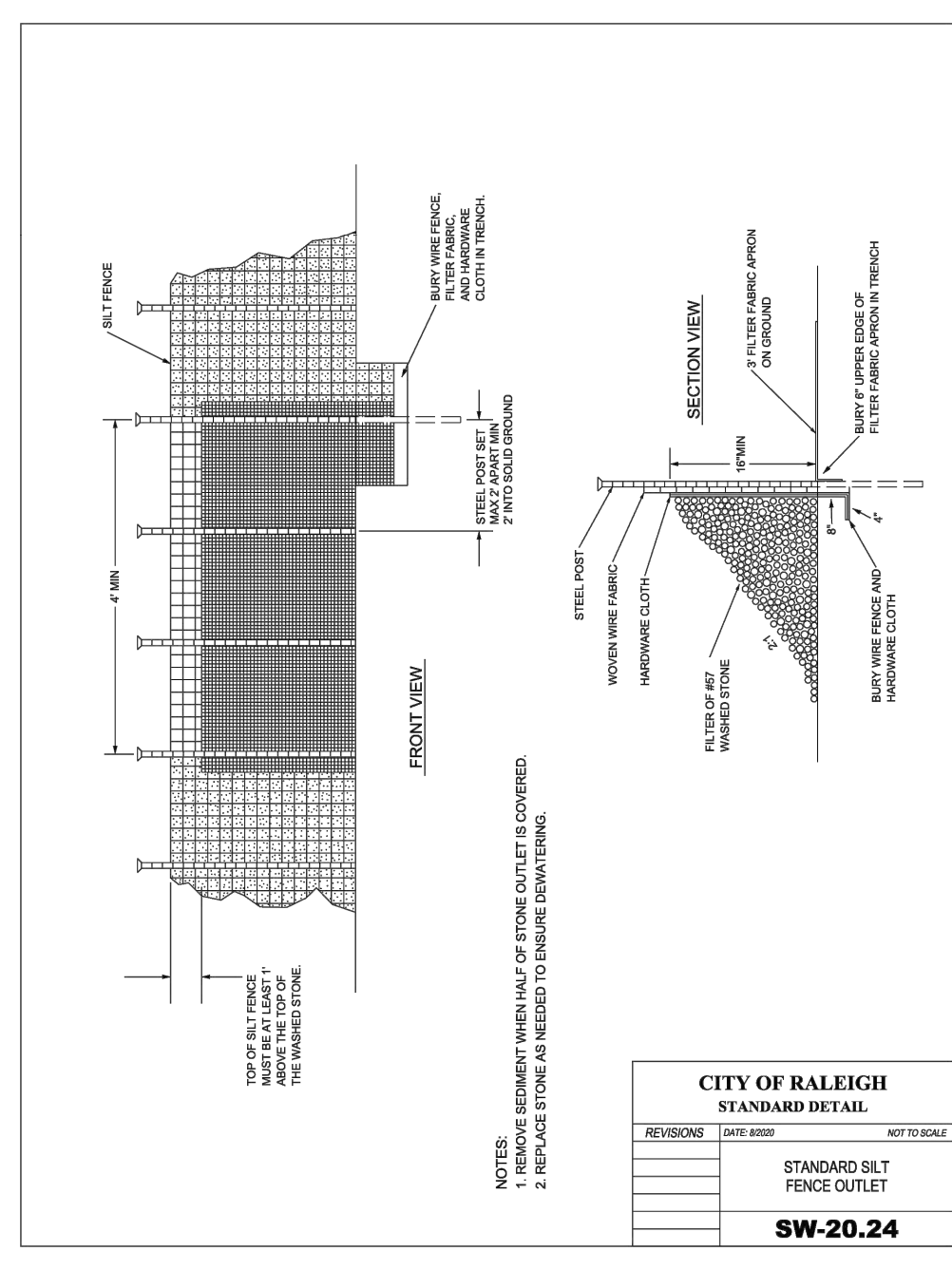
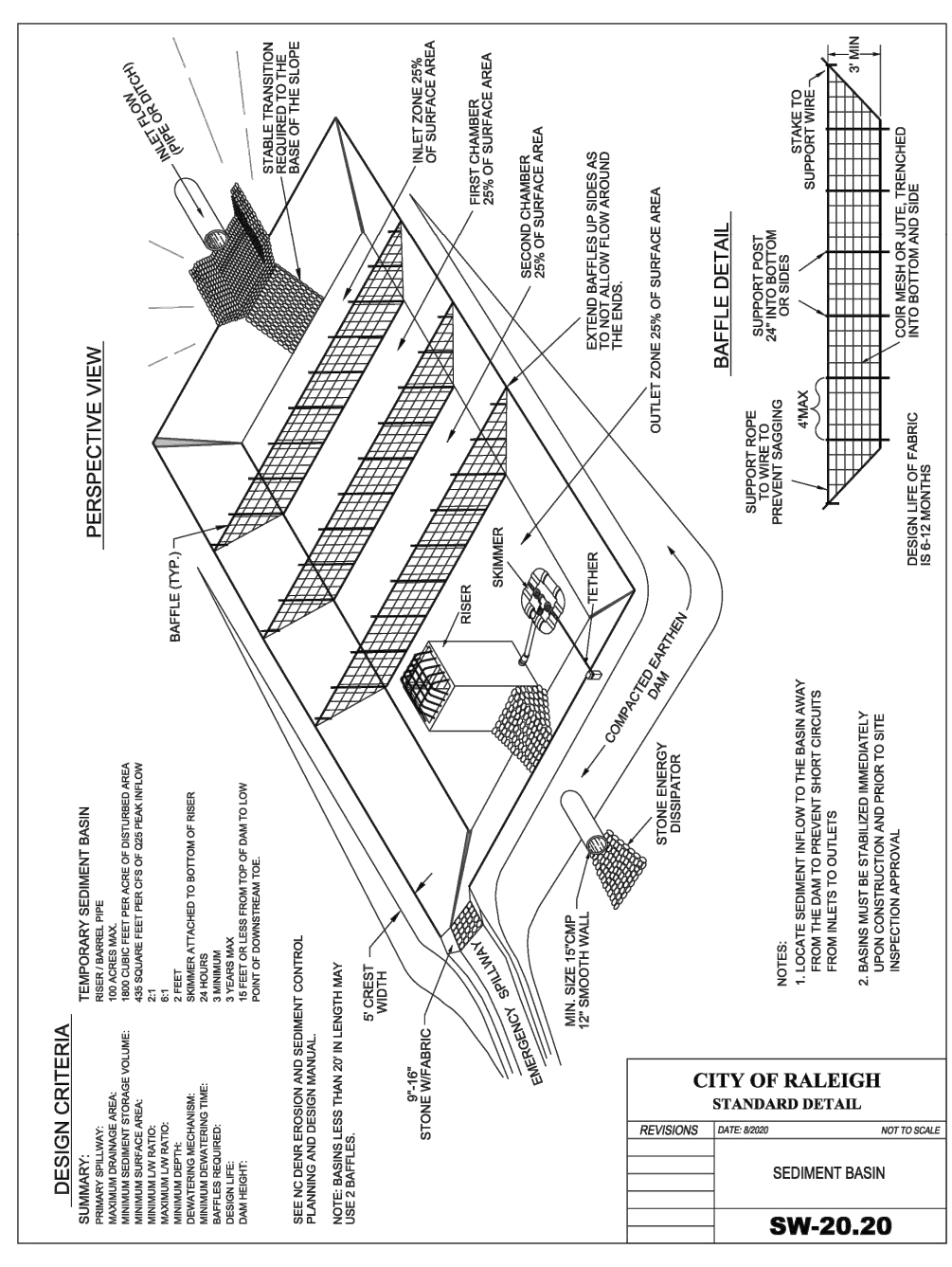
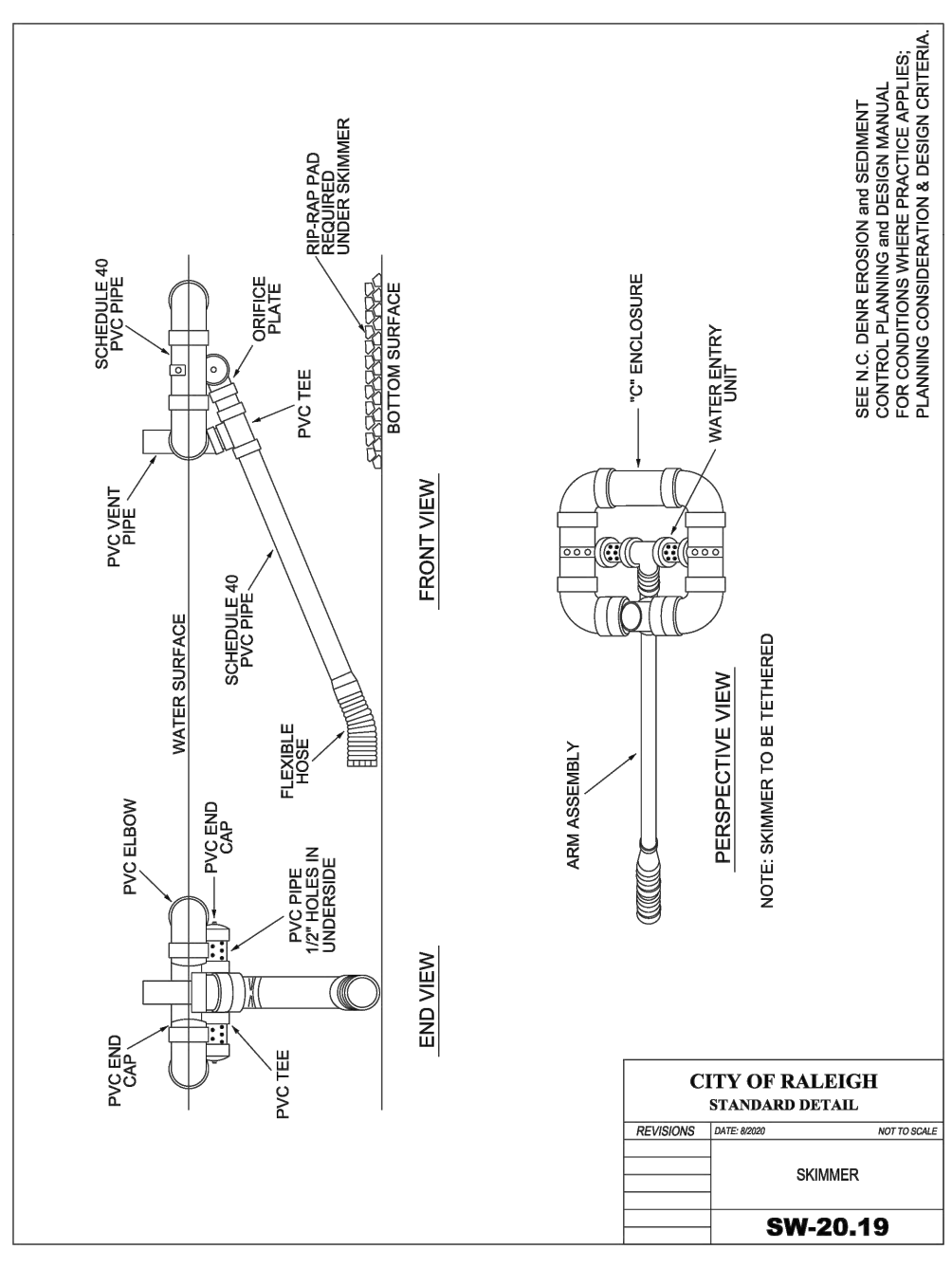
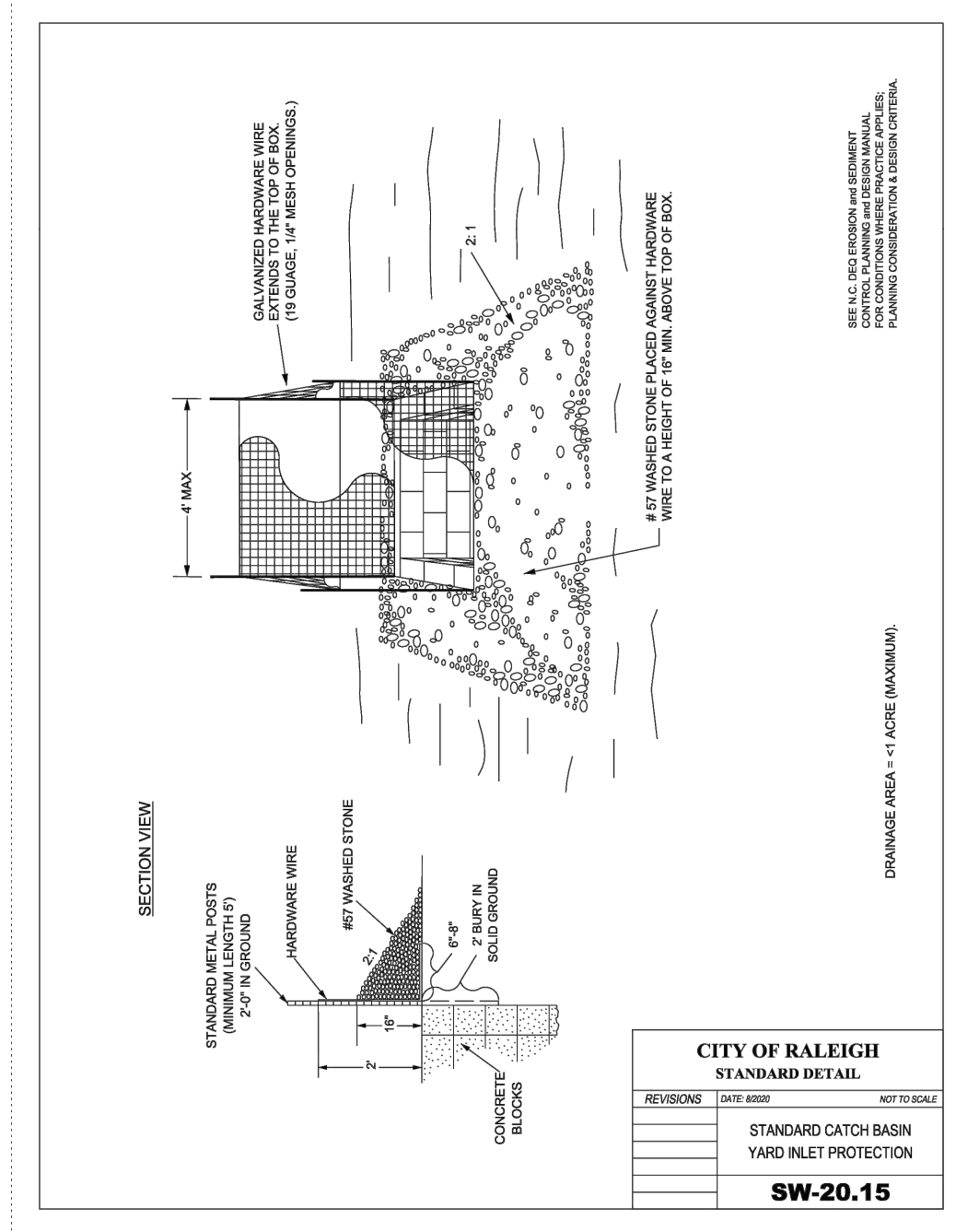
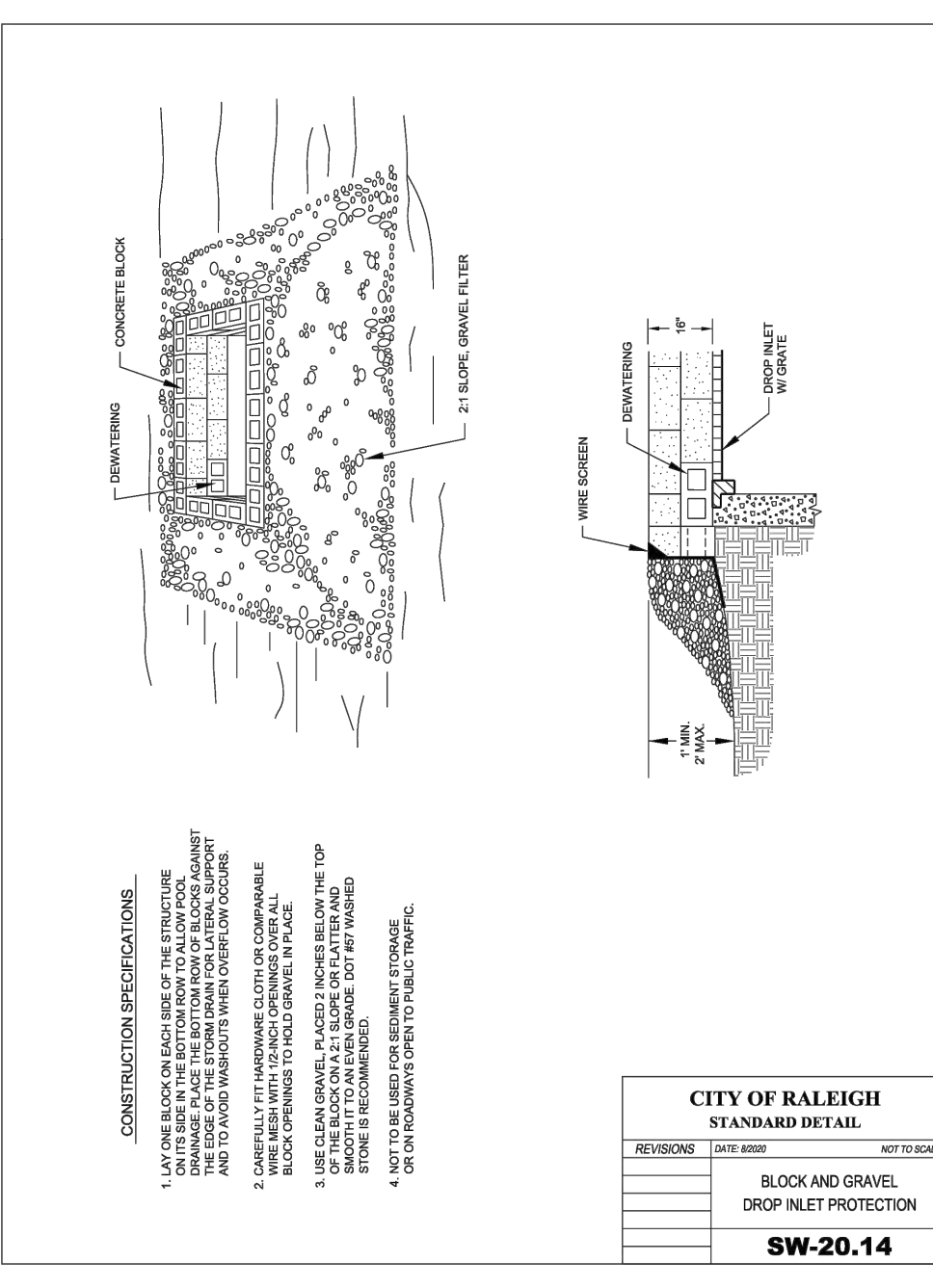
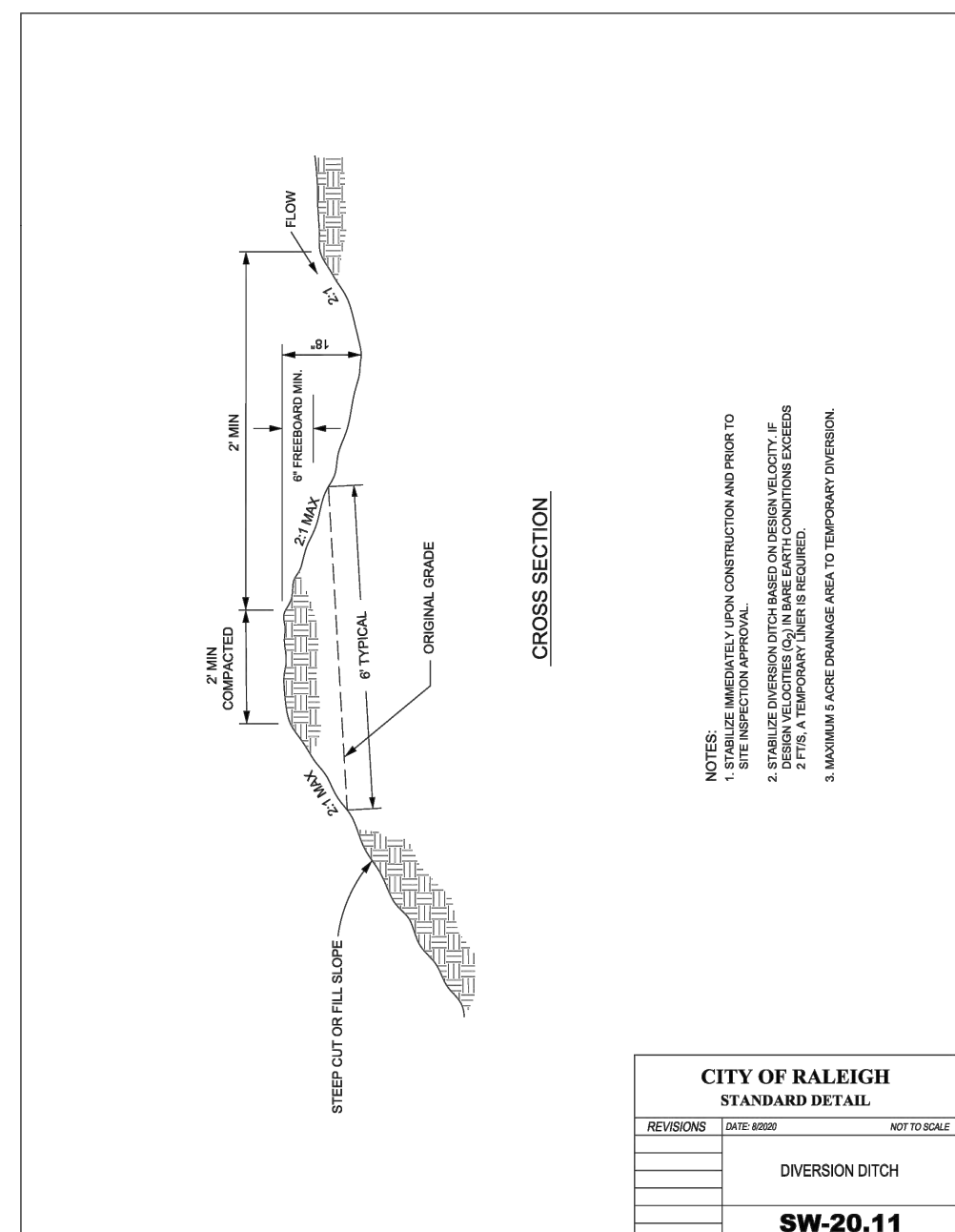
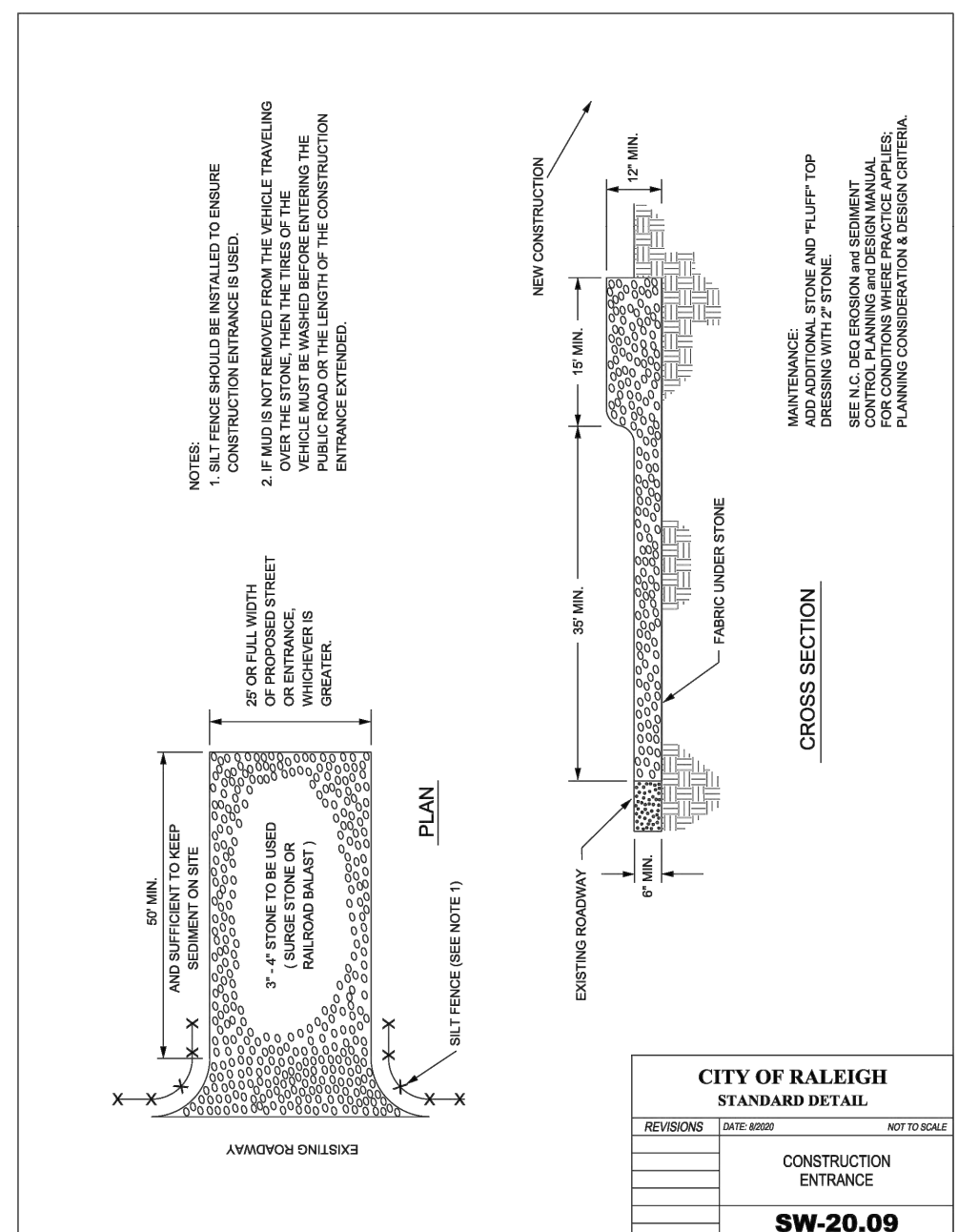
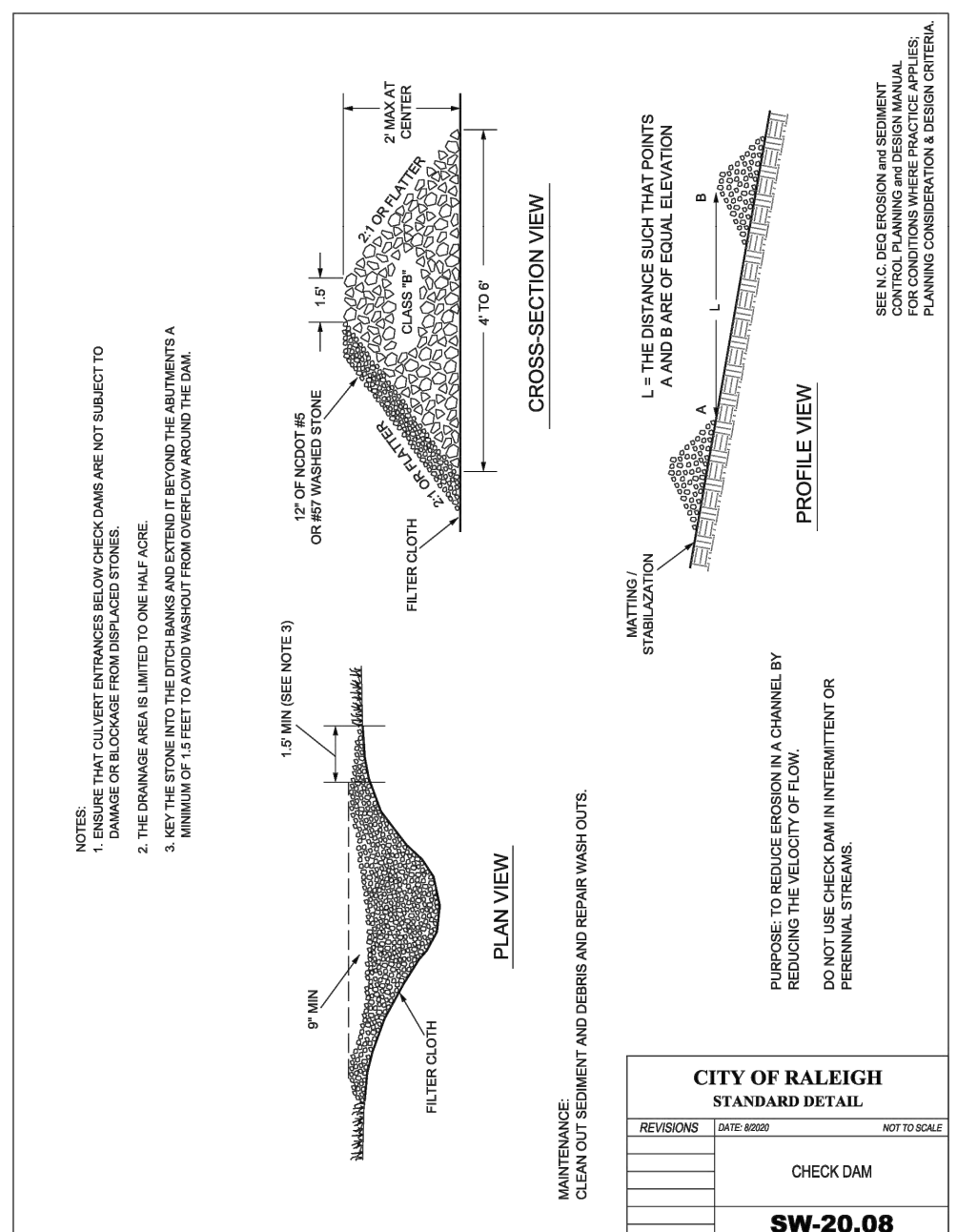
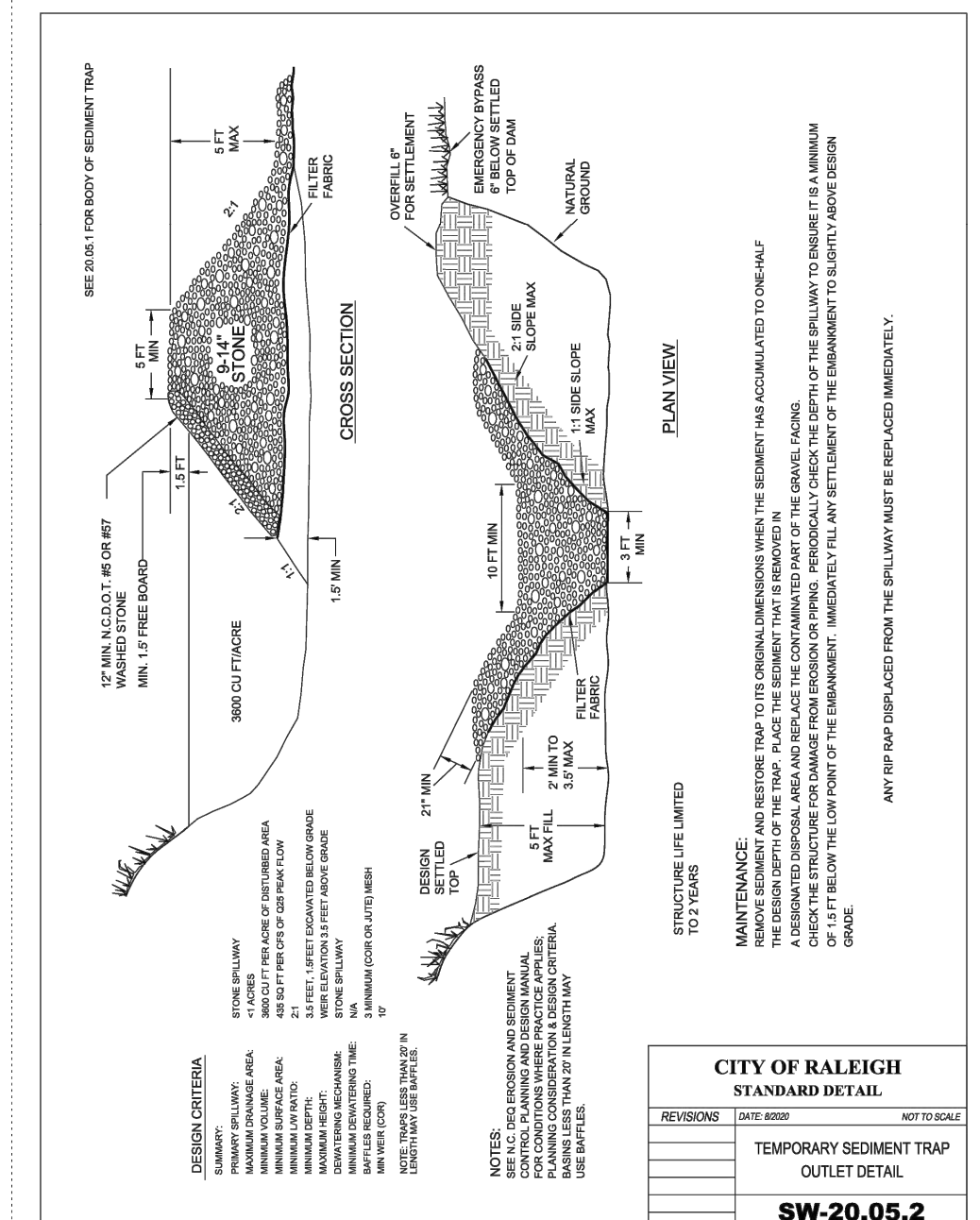
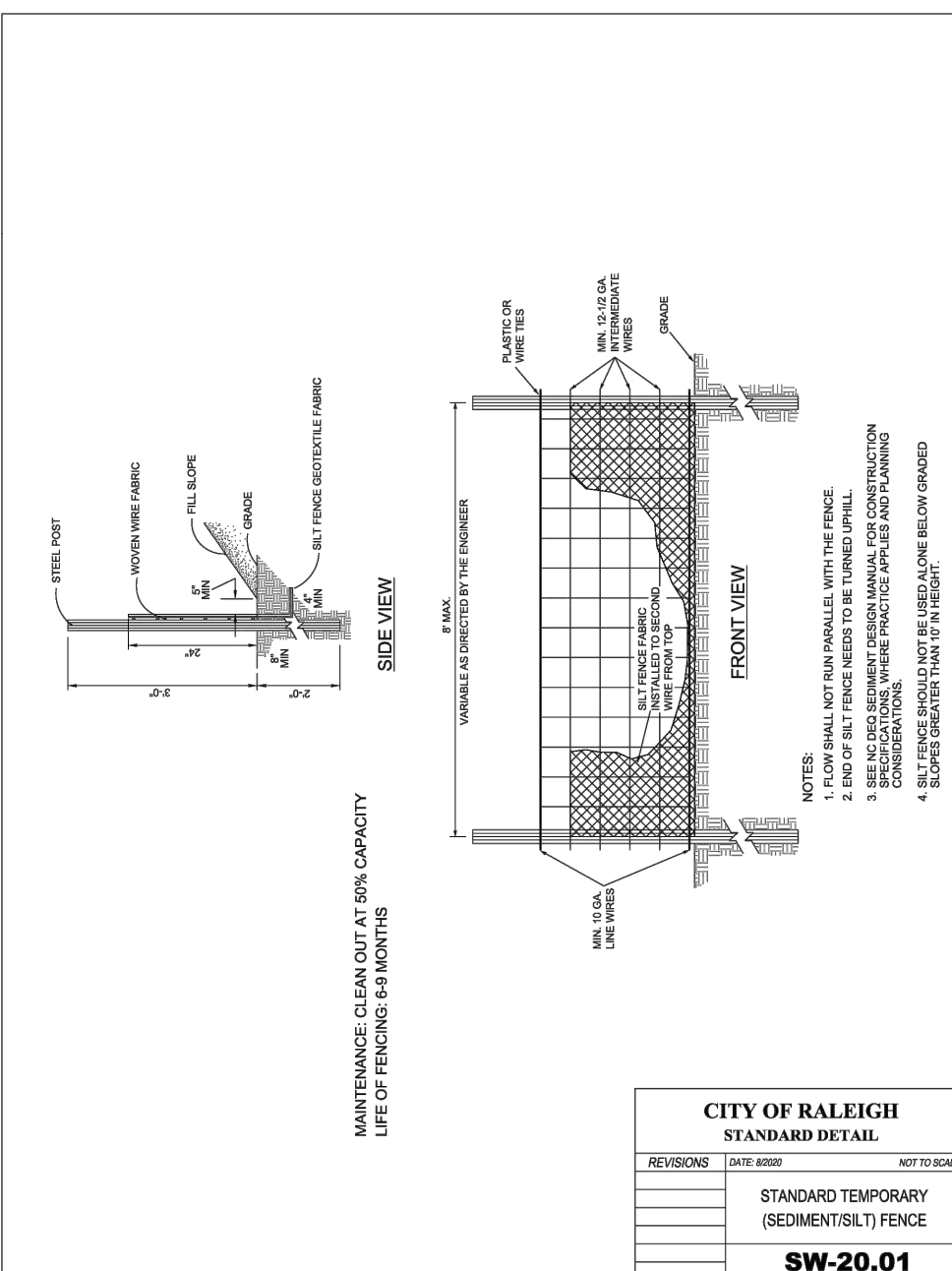
**TYPE III BARRICADE**

**GENERAL NOTES:**  
 1- HORIZONTAL RAILS FOR BARRICADES MAY BE CONSTRUCTED OF APPROVED COMPOSITE, HOLLOW/ CORRUGATED EXTRUDED RIGID POLYOLEFIN, HIGH DENSITY POLYETHYLENE, OR OTHER MCDOT APPROVED MATERIAL.  
 2- BARRICADE SHALL BE LIMITED TO A MAXIMUM LENGTH OF 8 FT UNLESS MCDOT APPROVED.  
 3- ONLY MCDOT APPROVED COMPOSITE AND ROLL-UP SIGNS MAY BE MOUNTED ON THE BARRICADE RAILS. MOUNT SIGNS TO BARRICADE RAILS TO ENSURE SIGN WILL NOT BECOME DETACHED UNDER NORMAL WIND AND TRAFFIC CONDITIONS.  
 4- SIGNS SHALL BE MOUNTED A MINIMUM OF 1 FOOT FROM THE GROUND TO THE BOTTOM OF THE SIGN UNLESS SIGN R11-3 IS REQUIRED BY THE PLANS OR DIRECTED BY THE ENGINEER.  
 5- ASSEMBLY OF THE GENERIC BARRICADES MUST BE SELF CERTIFIED BY THE ASSEMBLER.  
 6- BARRICADES USED TO CLOSE A ROADWAY SHALL EXTEND ACROSS THE ENTIRE ROADWAY, WHERE LOCAL TRAFFIC MUST BE MAINTAINED, THEY MAY BE PLACED IN A STAGGERED PATTERN.  
 7- STRIPES ON WORK ZONE BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE RETROREFLECTIVE STRIPES, SLOPED DOWNWARD TOWARDS THE SIDE WHICH TRAFFIC IS TO PASS OR TURN IN RETURNING, WHERE NO TURNS ARE INTENDED, THE STRIPES SHOULD SLOPE DOWNWARD TOWARD THE CENTER OF THE BARRICADE OR BARRICADES.  
 8- USE RED AND WHITE STRIPES FOR PERMANENT BARRICADES.  
 9- ALL BARRICADES MUST BE LISTED ON THE DEPARTMENT'S APPROVED PRODUCTS LIST.  
 10- PLACE SANDBAGS OR OTHER APPROVED BALLASTING METHODS ON THE FEET OF THE FRAME. DO NOT PLACE SANDBAGS ON TOP OF A STRIPED RAIL OR STABILIZER BAR. DO NOT BALLAST BARRICADES BY HEAVY OBJECTS SUCH AS ROCKS, CHUNKS OF CONCRETE OR OTHER ITEMS THAT WOULD CAUSE DAMAGE IF THE BARRICADE IS STRUCK BY A VEHICLE.

STATE OF NORTH CAROLINA  
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ROADWAY STANDARD DRAWING FOR  
**BARRICADES**  
 TYPE-III

SHEET 1 OF 1  
**1145.01**



43. Erosion Control should be Wake County details

**PERMANENT SEEDING - SHOULDERS, SIDE DITCHES, SLOPES (MAX. 3:1)**

DATE	TYPE	PLANTING RATE
AUG. 15 - NOV. 1	TALL FESCUE	200 LBS./ACRE
NOV. 1 - MAR. 1	TALL FESCUE AND CERISEA LESPEDEZA (UNHULLED, UNSCARIFIED)	200 LBS./ACRE
MAR. 1 - APR. 15	TALL FESCUE AND ABRUZIZ RYE ("NURSE CROP")	25 LBS./ACRE
APR. 15 - JUN. 30	HULLED COMMON BERMOUDAGRASS	200 LBS./ACRE

**PERMANENT SEEDING - SLOPES (3:1 TO 2:1)**

DATE	TYPE	PLANTING RATE
AUG. 15-NOV. 1	TALL FESCUE	200 LBS./ACRE
NOV. 1-MAR. 1	TALL FESCUE AND CERISEA LESPEDEZA (UNHULLED, UNSCARIFIED)	200 LBS./ACRE
MAR. 1-JUNE 1	TALL FESCUE AND ABRUZIZ RYE ("NURSE CROP")	25 LBS./ACRE
MAR. 15-JUNE 30	TALL FESCUE AND CERISEA LESPEDEZA (SCARIFIED)	40 TO 50 LBS./ACRE
MAR. 15-JUNE 30	WEEPING LOVEGRASS	10 LBS./ACRE
MAR. 15-JUNE 30	HULLED COMMON BERMOUDAGRASS	40 TO 50 LBS./ACRE
MAR. 15-JUNE 30	AND CERISEA LESPEDEZA (SCARIFIED)	15 LBS./ACRE

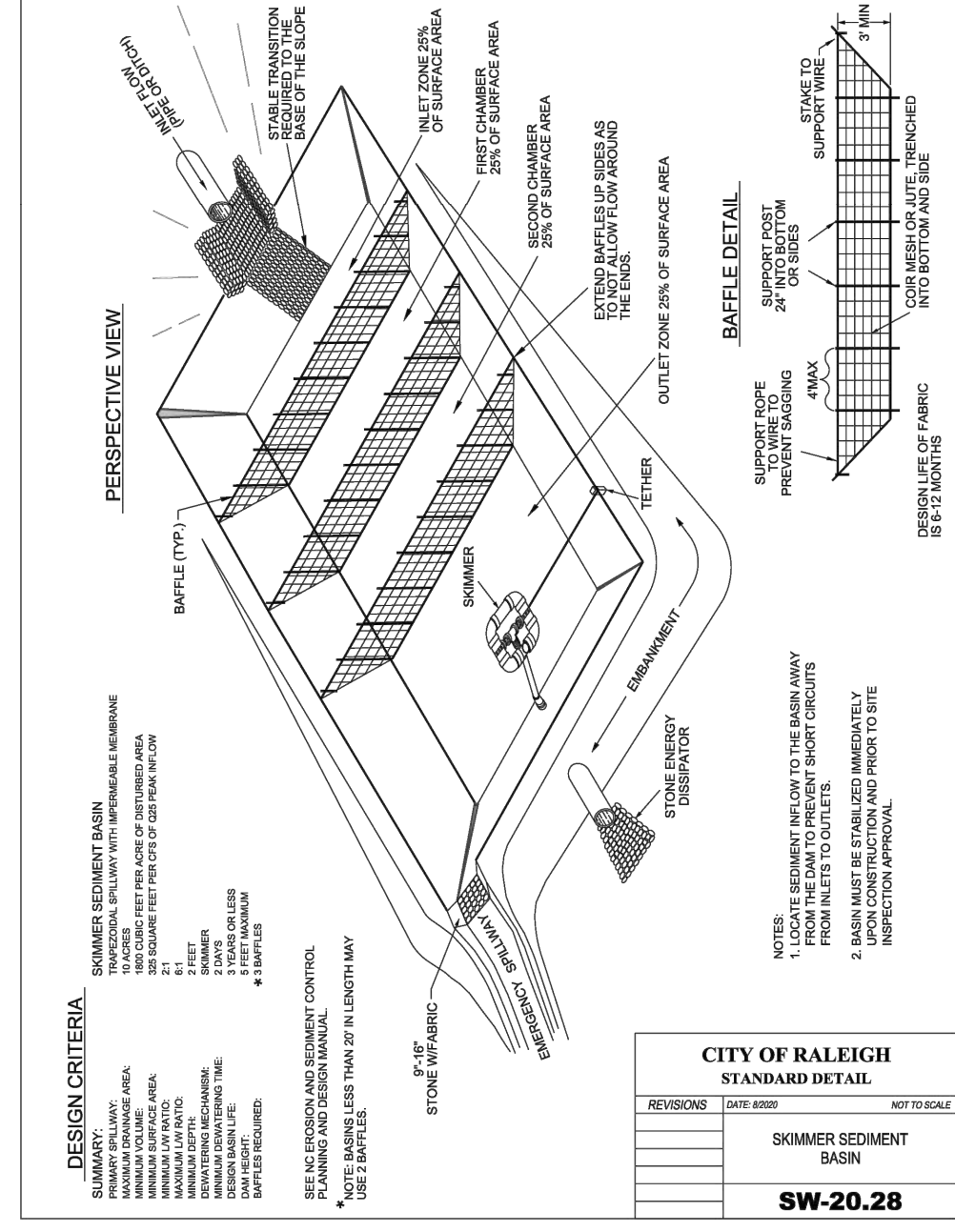
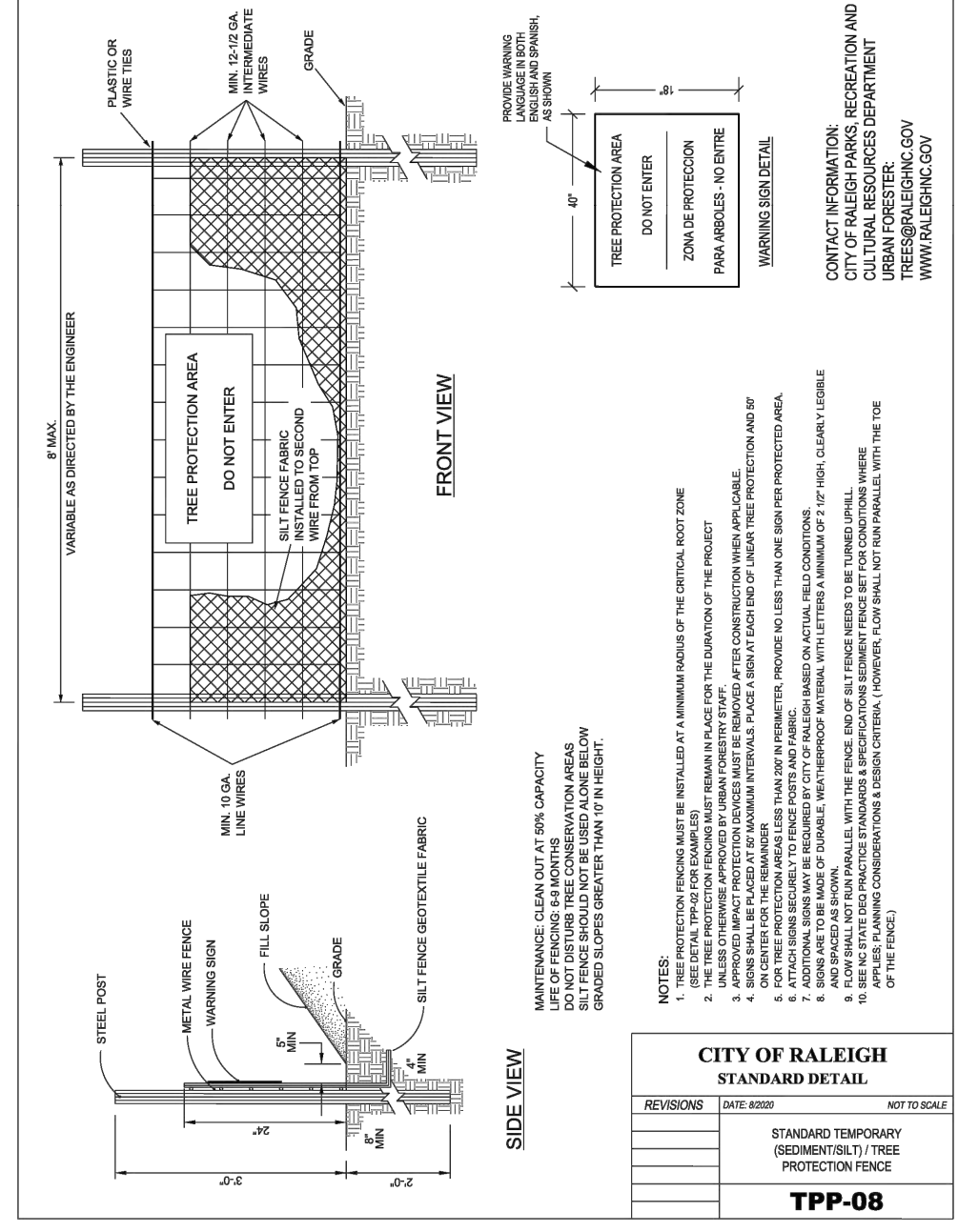
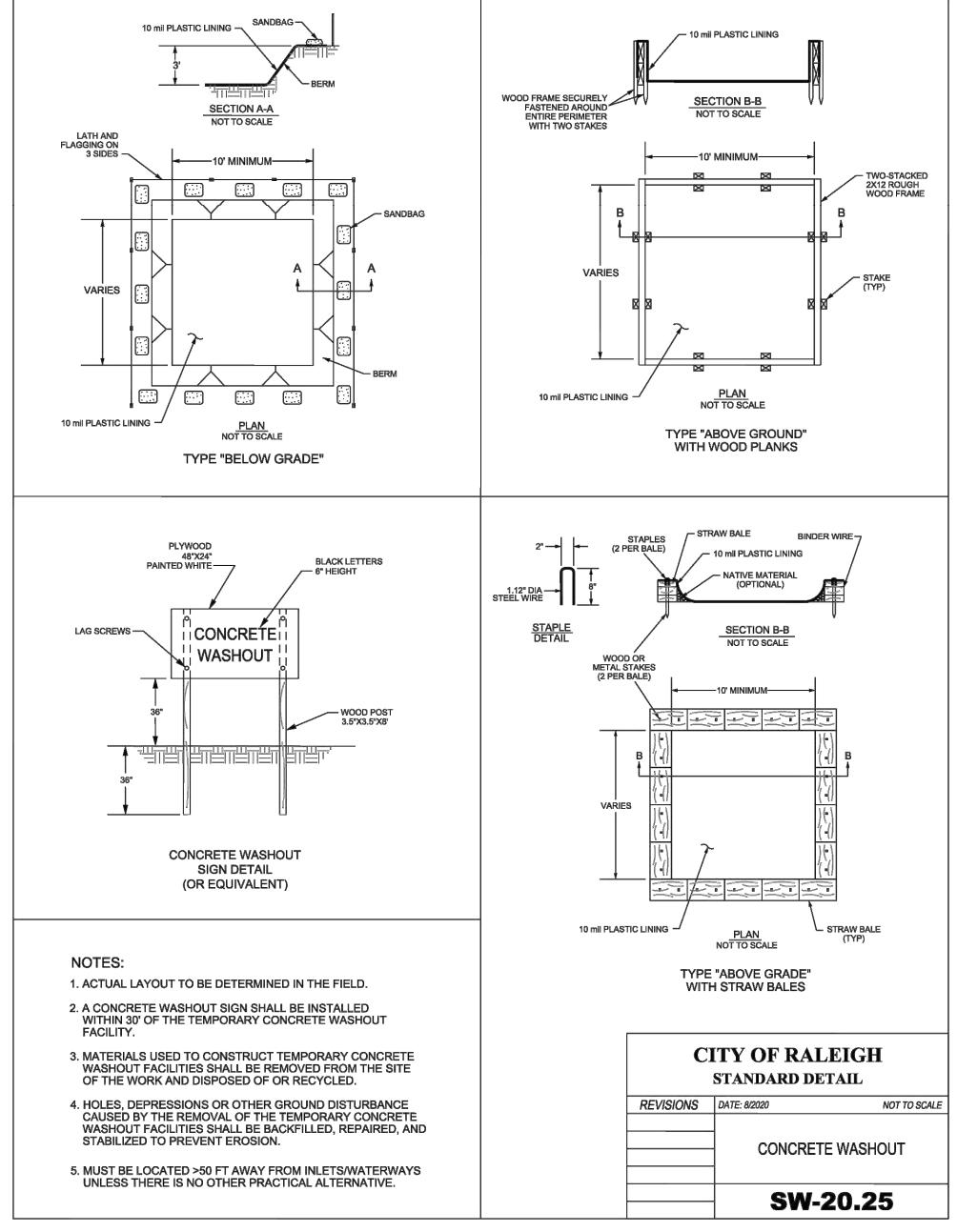
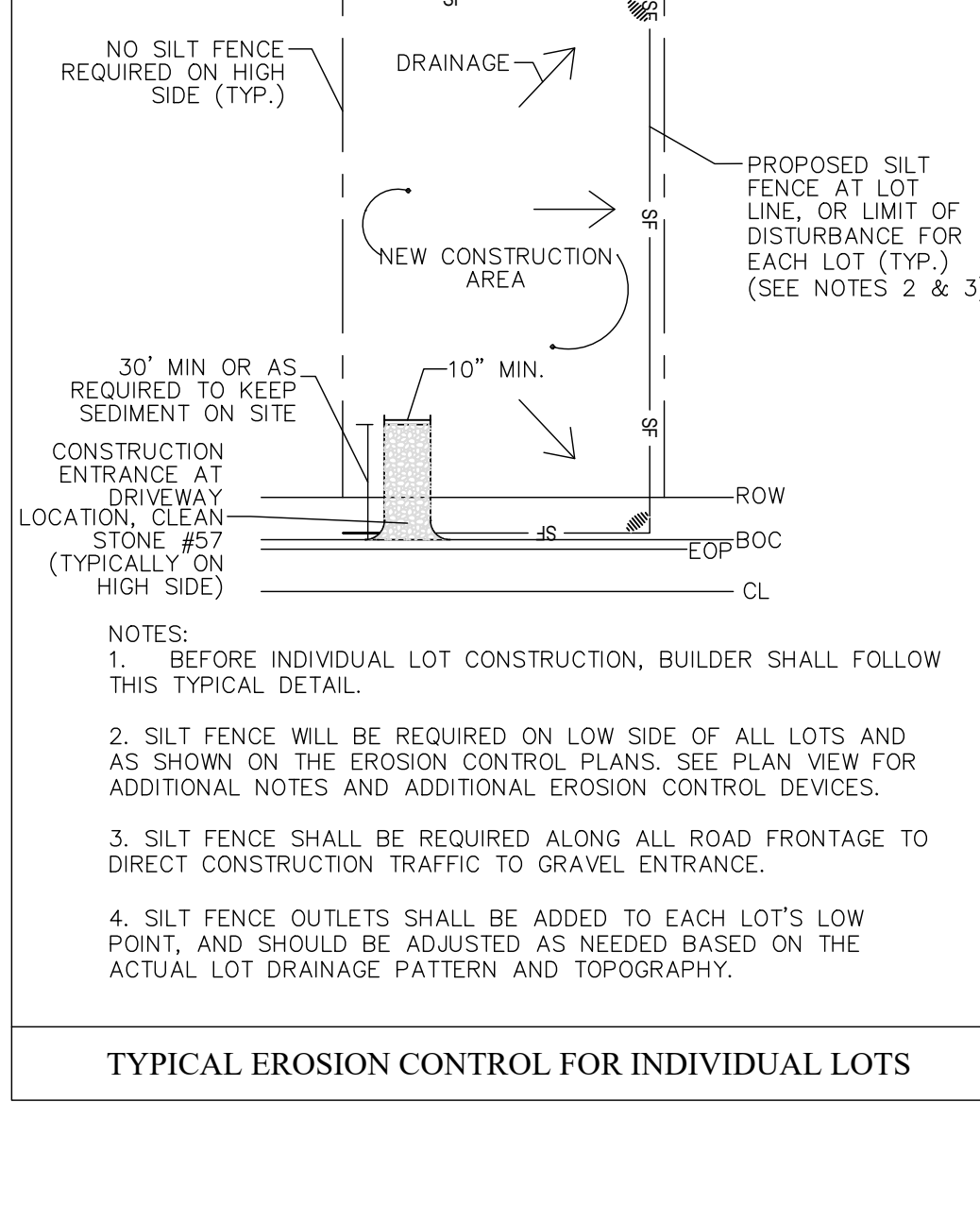
**TEMPORARY SEEDING**

DATE	TYPE	PLANTING RATE
JUNE 1-SEPT. 1	TALL FESCUE	200 LBS./ACRE
JUNE 1-SEPT. 1	AND BROWN TOP MILLET ("NURSE CROP")	35 LBS./ACRE
JUNE 1-SEPT. 1	OR SORGHUM-SUDAN HYBRIDS ("NURSE CROP")	30 LBS./ACRE

**CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENIED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS. OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.**

**"NURSE CROPTEMPORARY" RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.**

MULCH WITH WHEAT STRAW AT 2,000 LBS./AC.



# NCG01-DETAIL GROUND STABILIZATION AND HANDLING PLAN

EFFECTIVE: 04/01/19

**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

Required Ground Stabilization Timeframes		
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 90 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.

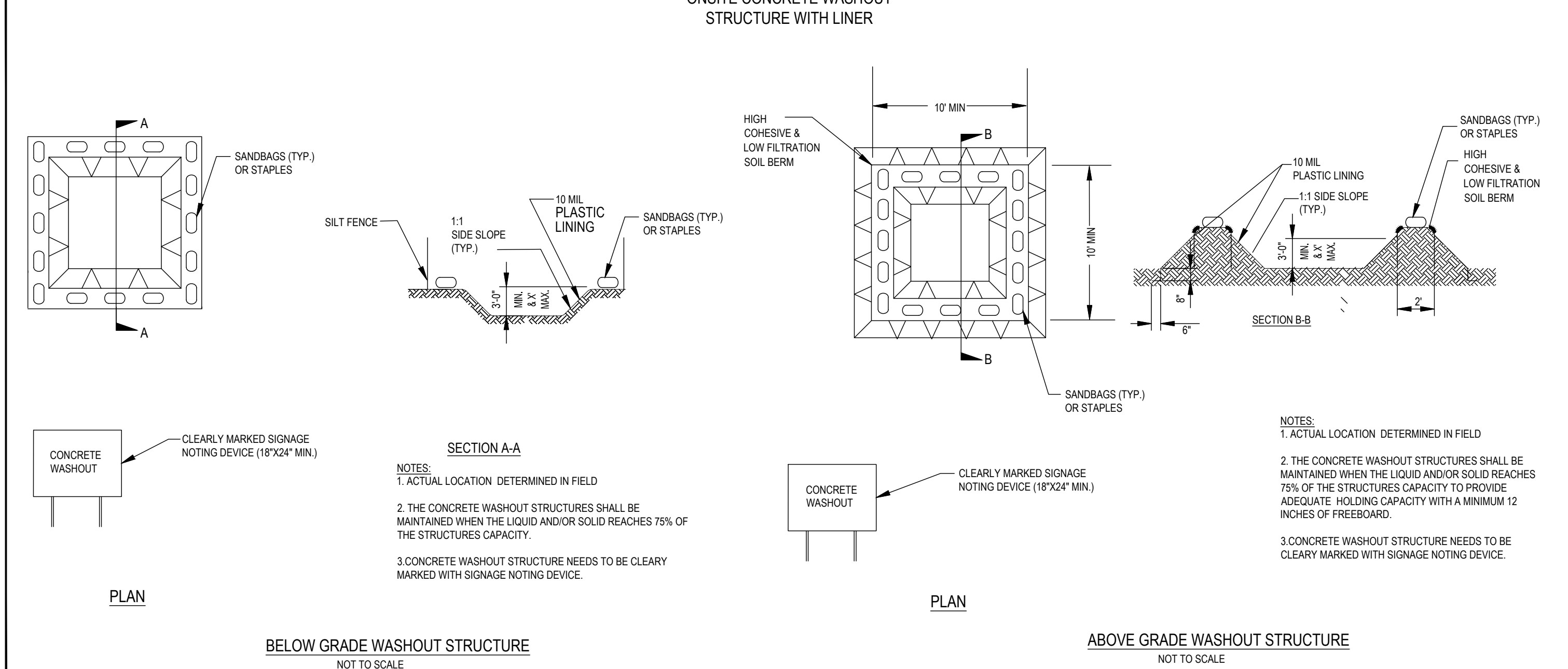
## HERBICIDES, PESTICIDES AND RODENTICIDES

- 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.

## ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



# NCG01-SELF INSPECTION, RECORDKEEPING & REPORTING

EFFECTIVE: 05/17/19

## 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 (and 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&S 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. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measures, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (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 outfalls 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 offsite (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 II, Section C, Item 2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&S measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, 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&S Plan Documentation

The approved E&S plan as well as any approved deviation shall be kept on the site. The approved E&S plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&S plan shall be kept onsite and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&S Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&S Plan.	Initial and date each E&S Measure on a copy of the approved E&S Plan or complete, date and sign an inspection report that lists each E&S Measure shown on the approved E&S Plan. This documentation is required upon the initial installation of the E&S Measures or if the E&S Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&S 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&S Plan.	Initial and date a copy of the approved E&S 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&S Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&S Measures.	Initial and date a copy of the approved E&S Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

#### 2. Additional Documentation to be Kept Onsite

In addition to the E&S 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:

- This general permit as well as the certificate of coverage, after it is received.
  - Records of inspections made during the previous twelve months. 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.
- 3. Documentation to be Retained for Three Years**  
All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

## PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

### SECTION C: REPORTING

#### 1. Occurrences that must be reported

- Permittees shall report the following occurrences:
- Visible sediment deposition in a stream or wetland.
  - Oil spills if:
    - They are 25 gallons or more.
    - They are less than 25 gallons but cannot be cleaned up within 24 hours,
    - They cause sheen on surface waters (regardless of volume), or
    - They are within 100 feet of surface waters (regardless of volume).
  - Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
  - Anticipated bypasses and unanticipated bypasses.
  - Noncompliance with the conditions of this permit that may endanger health or the environment.

#### 2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response

personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> <li><b>Within 24 hours</b>, an oral or electronic notification.</li> <li><b>Within 7 calendar days</b>, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.</li> <li>If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.</li> </ul>
(b) Oil spills and release of hazardous substances per item 1)(b)-(c) above	<ul style="list-style-type: none"> <li><b>Within 24 hours</b>, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.</li> </ul>
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <li><b>A report at least ten days before the date of the bypass, if possible.</b> The report shall include an evaluation of the anticipated quality and effect of the bypass.</li> </ul>
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> <li><b>Within 24 hours</b>, an oral or electronic notification.</li> <li><b>Within 7 calendar days</b>, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)]	<ul style="list-style-type: none"> <li><b>Within 24 hours</b>, an oral or electronic notification.</li> <li><b>Within 7 calendar days</b>, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(l)(6)].</li> <li>Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>

## PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- The E&S plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&S plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part II, Section C, Item 2)(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

N/F WALL, JOSEPH E  
GUNZ, BETTY R  
ZONING: RL  
DB. 5178 PG. 858  
BM. 3910 PG. 785  
PIN. 1768-21-6907

N/F CARLYLE D & ALMA D  
WOODLIEF  
DB. 014286 PG. 01880  
BM. 2011 PG. 00084  
PIN. 1768511519  
(PORTION OUTSIDE OF  
SITE BOUNDARY TO BE  
RETAINED BY OWNER)

N/F POWELL, JEFFERY LOUIS  
ZONING: RL  
DB. 12-E PG. 3279  
PIN. 1768-31-7240

N/F BURLAGE, LUCAS GABRIEL  
BURLAGE, LAURA ELENA  
ZONING: RL  
DB. 15424 PG. 810  
BM. 1986 PG. 1483  
PIN. 1768-30-9874

N/F THE STRADER FAMILY TRUST  
ZONING: RL  
DB. 15137 PG. 2468  
BM. 1986 PG. 1483  
PIN. 1768-30-9667

44. Please confirm  
the intent for  
crosswalk striping.  
Please see the Town  
of Rolesville  
Standards Manual for  
crosswalk  
requirements, as they  
apply.

### PAVEMENT MARKING LEGEND

PAVEMENT MARKING SYMBOLS	
	4" WHITE LANE LINE
	4" WIDE DOUBLE YELLOW SOLID LINE
	24" WHITE STOP BAR (MIN 4' BEHIND CROSSWALK)
	4" WHITE PARKING SPACE LINE

### STRIPING NOTES:

- ALL MARKINGS AND SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH MUTCD STANDARDS, INCLUDING COLOR, LETTER HEIGHT, AND LETTER CASE OF THE STREET NAME SIGNS.
- ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
- ANY EXISTING PAVEMENT STRIPING THAT IS IN CONFLICT WITH THE PROPOSED STRIPING SHOWN ON THIS PLAN SHALL BE REMOVED.

### KEY MAP NOT TO SCALE



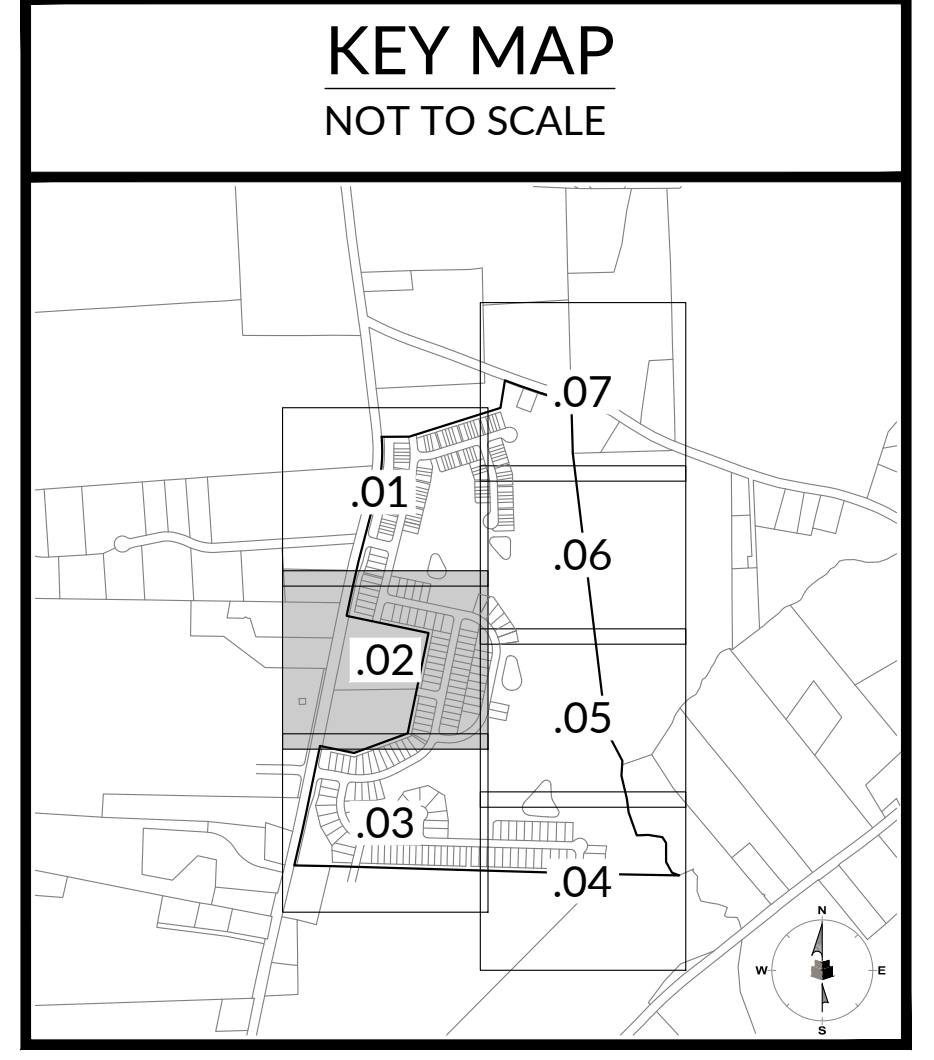
J:\2024\04\04\Wdr\Wdr\Asse\Sign\Wdr\Sign\Construction\CID\Drawings\Sign\Construction\CID\11.02\_SIGNAGE & PAVEMENT MARKINGS PLAN.dwg Thursday, October 31, 2024 11:17:52 AM - T:\DCK



**PAVEMENT MARKING LEGEND**

Symbol	Description
(A)	4" WHITE LANE LINE
(C)	4" WIDE DOUBLE YELLOW SOLID LINE
(D)	24" WHITE STOP BAR (MIN 4' BEHIND CROSSWALK)
(G)	4" WHITE PARKING SPACE LINE

- STRIPING NOTES:**
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  - ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
  - ANY EXISTING PAVEMENT STRIPING THAT IS IN CONFLICT WITH THE PROPOSED STRIPING SHOWN ON THIS PLAN SHALL BE REMOVED.



**WithersRavenel**  
167 E. Chatham St. | Suite 2101 | Cary, NC 27511  
License #: F-1479 | T: 919.238.0330 | www.withersravenel.com

**PULTEGROUP**  
1225 CRESCENT GREEN DRIVE, SUITE 200, CARY, NC 27518

CONSTRUCTION INFRASTRUCTURE DRAWINGS  
**BROADMOOR CID-YR-XX**  
ROLESVILLE ROAD | ROLESVILLE, NC 27587 | WAKE COUNTY

**PRELIMINARY NOT APPROVED FOR CONSTRUCTION**  
WAKE COUNTY PROFESSIONAL SEAL  
TERRY COOK, LICENSED PROFESSIONAL ENGINEER  
NO. 10077

0 25 50  
SCALE: 1 inch = 50 ft.

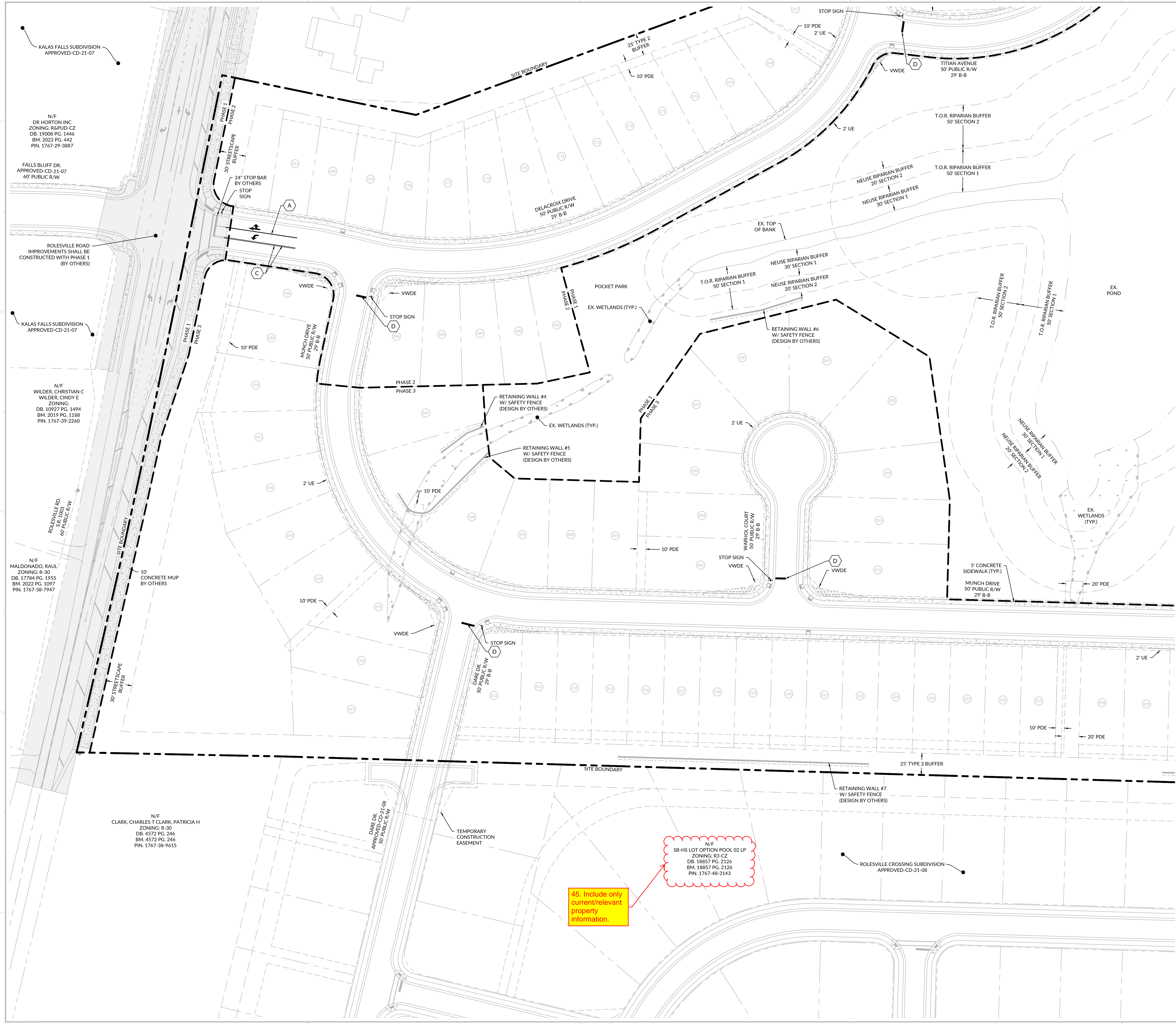
INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

WR JOB NUMBER 23-0045  
DRN: WR DGN: WR CKD: WR

**SIGNAGE & PAVEMENT MARKINGS PLAN**

**C11.02**

our people • your success



N/F  
DR HORTON INC  
ZONING: R&PD-CZ  
DB. 19008 PG. 1446  
BM. 2022 PG. 442  
PIN. 1767-29-3887

FALLS BLUFF DR.  
APPROVED-CD-21-07  
60' PUBLIC R/W

ROLESVILLE ROAD  
IMPROVEMENTS SHALL BE  
CONSTRUCTED WITH PHASE 1  
(BY OTHERS)

KALAS FALLS SUBDIVISION  
APPROVED-CD-21-07

N/F  
WILDER, CHRISTIAN C  
WILDER, CINDY E  
ZONING:  
DB. 10927 PG. 1494  
BM. 2019 PG. 1188  
PIN. 1767-39-2260

ROLESVILLE RD  
S.R. 1003  
60' PUBLIC R/W

N/F  
MALDONADO, RAUL  
ZONING: R-30  
DB. 17704 PG. 1935  
BM. 2022 PG. 1097  
PIN. 1767-38-7947

N/F  
CLARK, CHARLES T CLARK, PATRICIA H  
ZONING: R-30  
DB. 4572 PG. 246  
BM. 4572 PG. 246  
PIN. 1767-38-9615

DARE DR  
APPROVED-CD-21-08  
50' PUBLIC R/W

N/F  
SB-HS LOT OPTION POOL 02 LP  
ZONING: R3-CZ  
DB. 18857 PG. 2126  
BM. 18857 PG. 2126  
PIN. 1767-48-3143

45. Include only  
current/relevant  
property  
information.

ROLESVILLE CROSSING SUBDIVISION  
APPROVED-CD-21-08

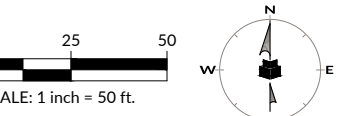
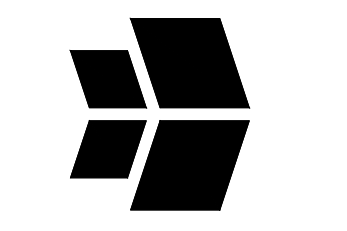
**PAVEMENT MARKING LEGEND**

PAVEMENT MARKING SYMBOLS	
	4" WHITE LANE LINE
	4" WIDE DOUBLE YELLOW SOLID LINE
	24" WHITE STOP BAR (MIN 4' BEHIND CROSSWALK)
	4" WHITE PARKING SPACE LINE

**STRIPING NOTES:**

1. ALL MARKINGS AND SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH MUTCD STANDARDS, INCLUDING COLOR, LETTER HEIGHT, AND LETTER CASE OF THE STREET NAME SIGNS.
2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
3. ANY EXISTING PAVEMENT STRIPING THAT IS IN CONFLICT WITH THE PROPOSED STRIPING SHOWN ON THIS PLAN SHALL BE REMOVED.

**KEY MAP  
NOT TO SCALE**



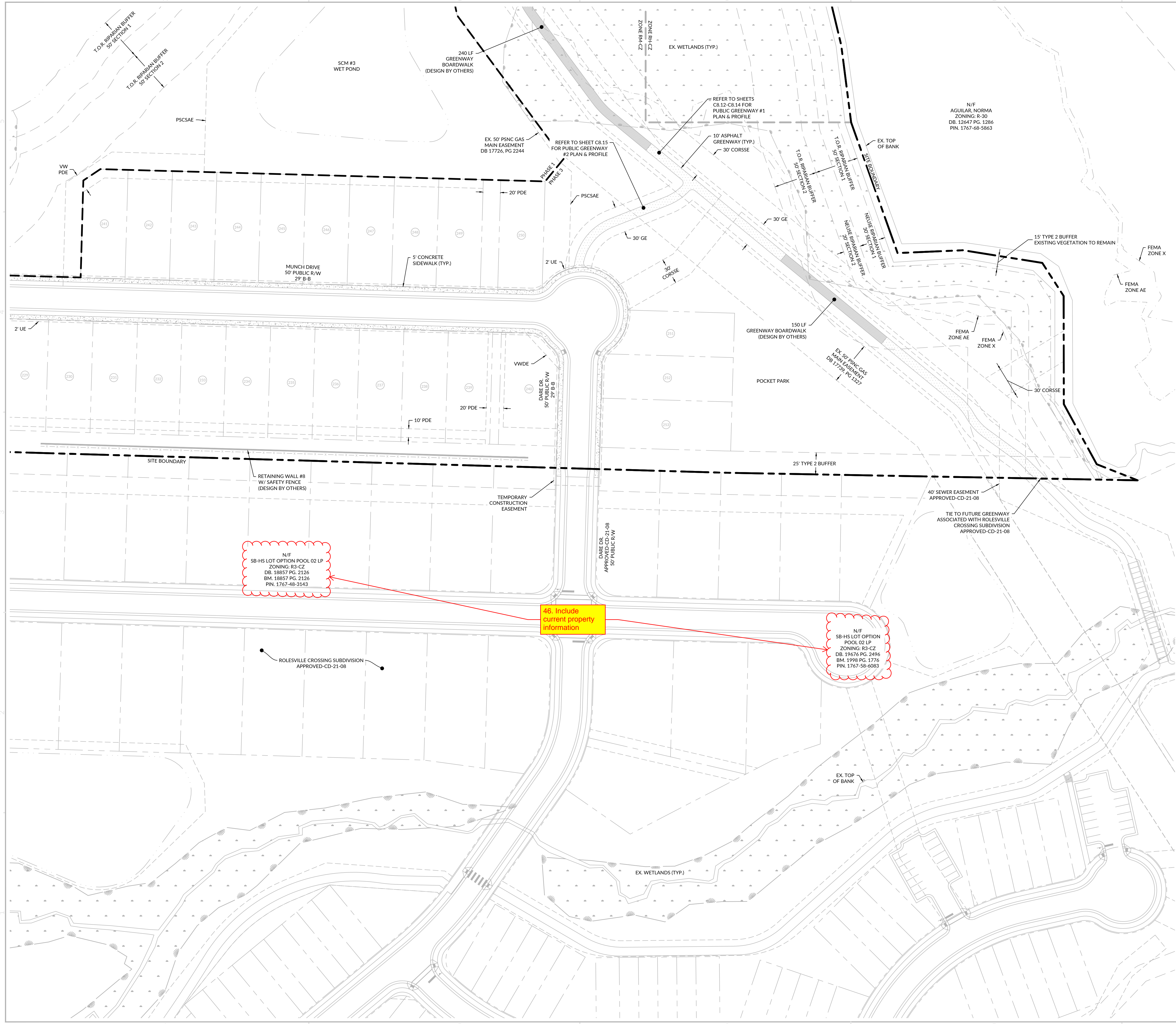
INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

WR JOB NUMBER 23-0045  
DRN: WR DGN: WR CKD: WR

**SIGNAGE &  
PAVEMENT  
MARKINGS PLAN**

**C11.03**

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N/F  
SB-HS LOT OPTION POOL 02 LP  
ZONING: R3-CZ  
DB: 18857 PG. 2126  
BM: 18857 PG. 2126  
PIN: 1767-48-3143

46. Include current property information

N/F  
SB-HS LOT OPTION  
POOL 02 LP  
ZONING: R3-CZ  
DB: 19676 PG. 2496  
BM: 1998 PG. 1776  
PIN: 1767-58-0083

**PAVEMENT MARKING LEGEND**

PAVEMENT MARKING SYMBOLS	
(A)	4" WHITE LANE LINE
(B)	4" WIDE DOUBLE YELLOW SOLID LINE
(C)	24" WHITE STOP BAR (MIN 4' BEHIND CROSSWALK)
(D)	4" WHITE PARKING SPACE LINE

**STRIPING NOTES:**

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2. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC.
3. ANY EXISTING PAVEMENT STRIPING THAT IS IN CONFLICT WITH THE PROPOSED STRIPING SHOWN ON THIS PLAN SHALL BE REMOVED.

**KEY MAP  
NOT TO SCALE**



PRELIMINARY  
NOT APPROVED FOR  
CONSTRUCTION  
JEFFREY C. COOK  
ENGINEER

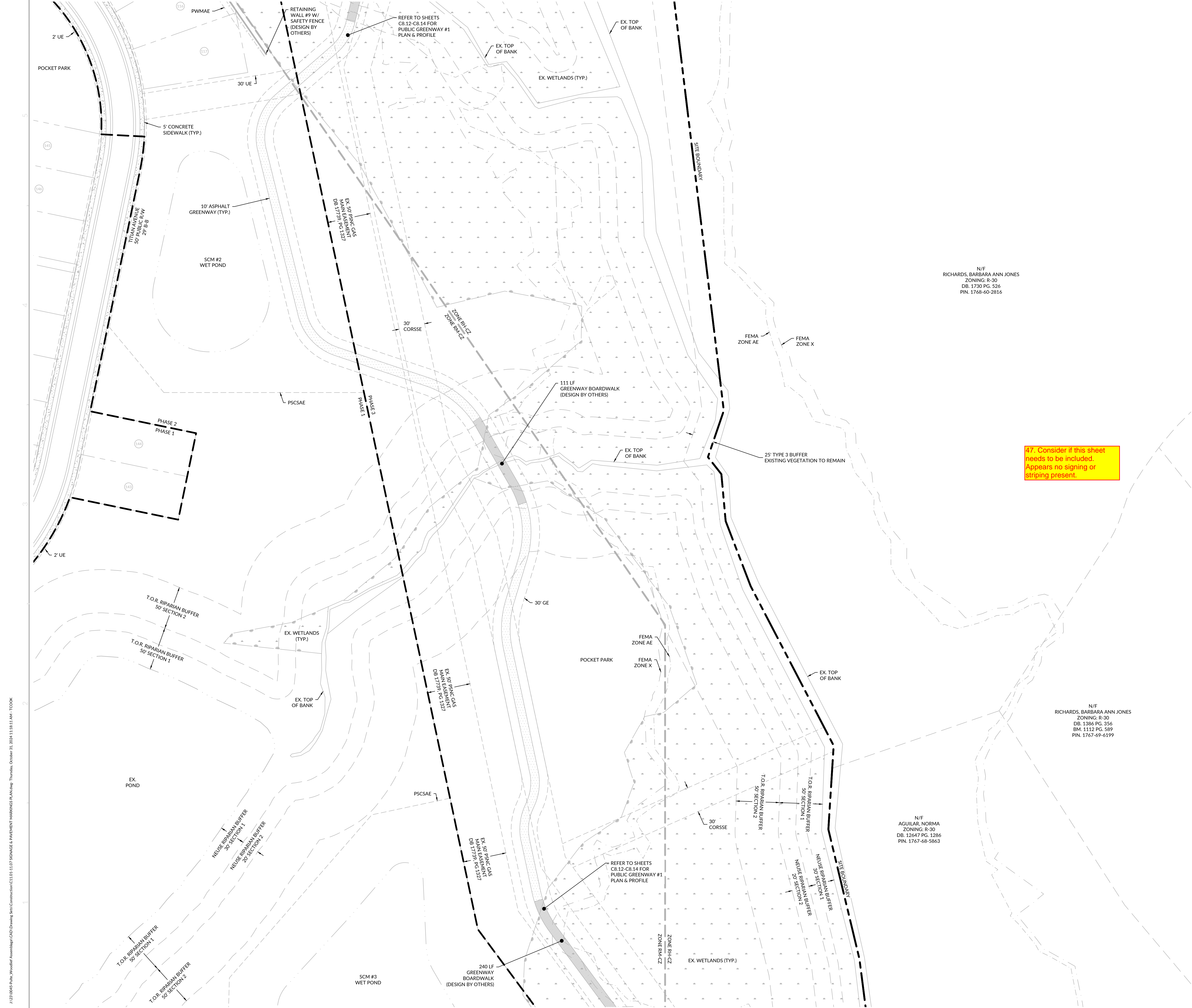
INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

WR JOB NUMBER: 23-0045  
DRN: WR DGN: WR CKD: WR

**SIGNAGE & PAVEMENT MARKINGS PLAN**

**C11.04**

J:\2024\04\04\_Pulte\_Widefield\_Amenities\CID Drawings\Site Construction\CID-11.04\_SIGNAGE & PAVEMENT MARKINGS PLAN.dwg Thursday, October 31, 2024 11:18:06 AM 1:100x



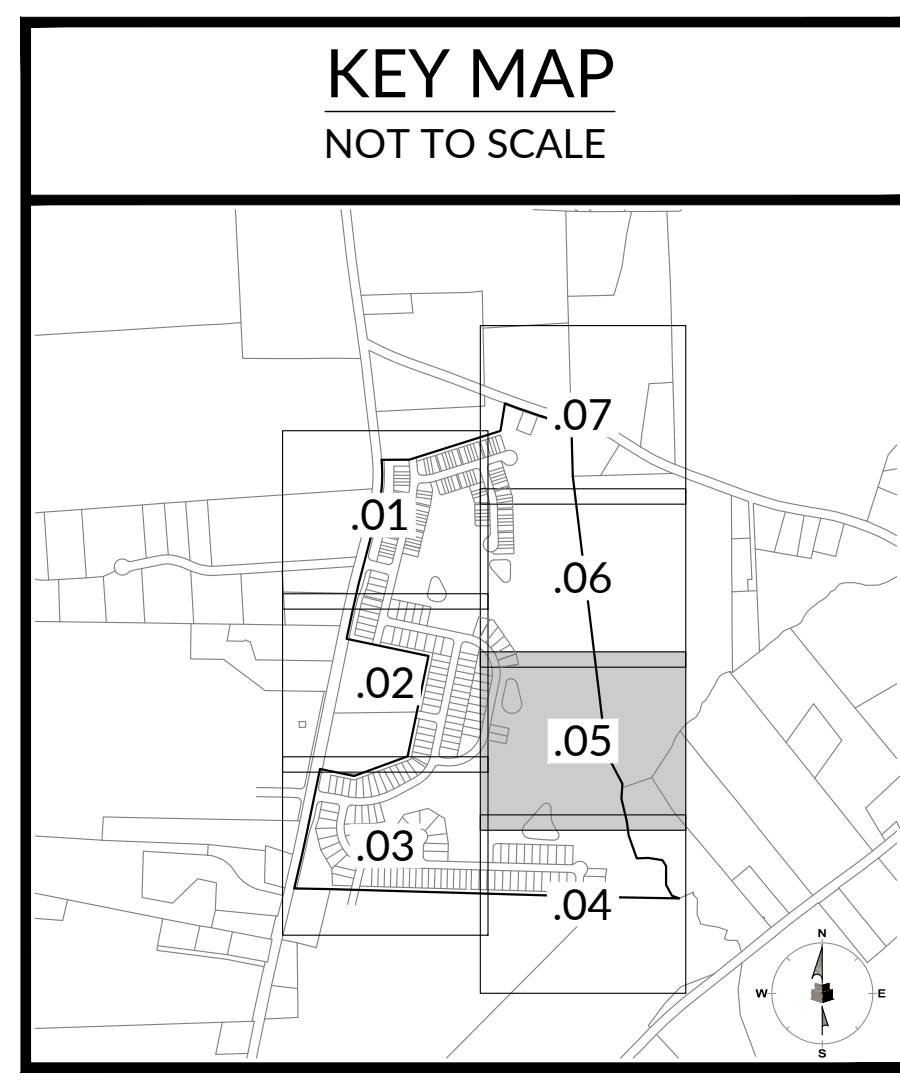
47. Consider if this sheet needs to be included. Appears no signing or striping present.

**PAVEMENT MARKING LEGEND**

PAVEMENT MARKING SYMBOLS	
A	4" WHITE LANE LINE
C	4" WIDE DOUBLE YELLOW SOLID LINE
D	24" WHITE STOP BAR (MIN 4' BEHIND CROSSWALK)
G	4" WHITE PARKING SPACE LINE

**STRIPING NOTES:**

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N/F  
RICHARDS, BARBARA ANN JONES  
ZONING: R-30  
DB. 1386 PG. 356  
BM. 1112 PG. 589  
PIN. 1767-69-6199

N/F  
AGUILAR, NORMA  
ZONING: R-30  
DB. 12647 PG. 1286  
PIN. 1767-68-5863



0 25 50  
SCALE: 1 inch = 50 ft.  
INITIAL PLAN DATE: 11/01/2024  
REVISIONS:

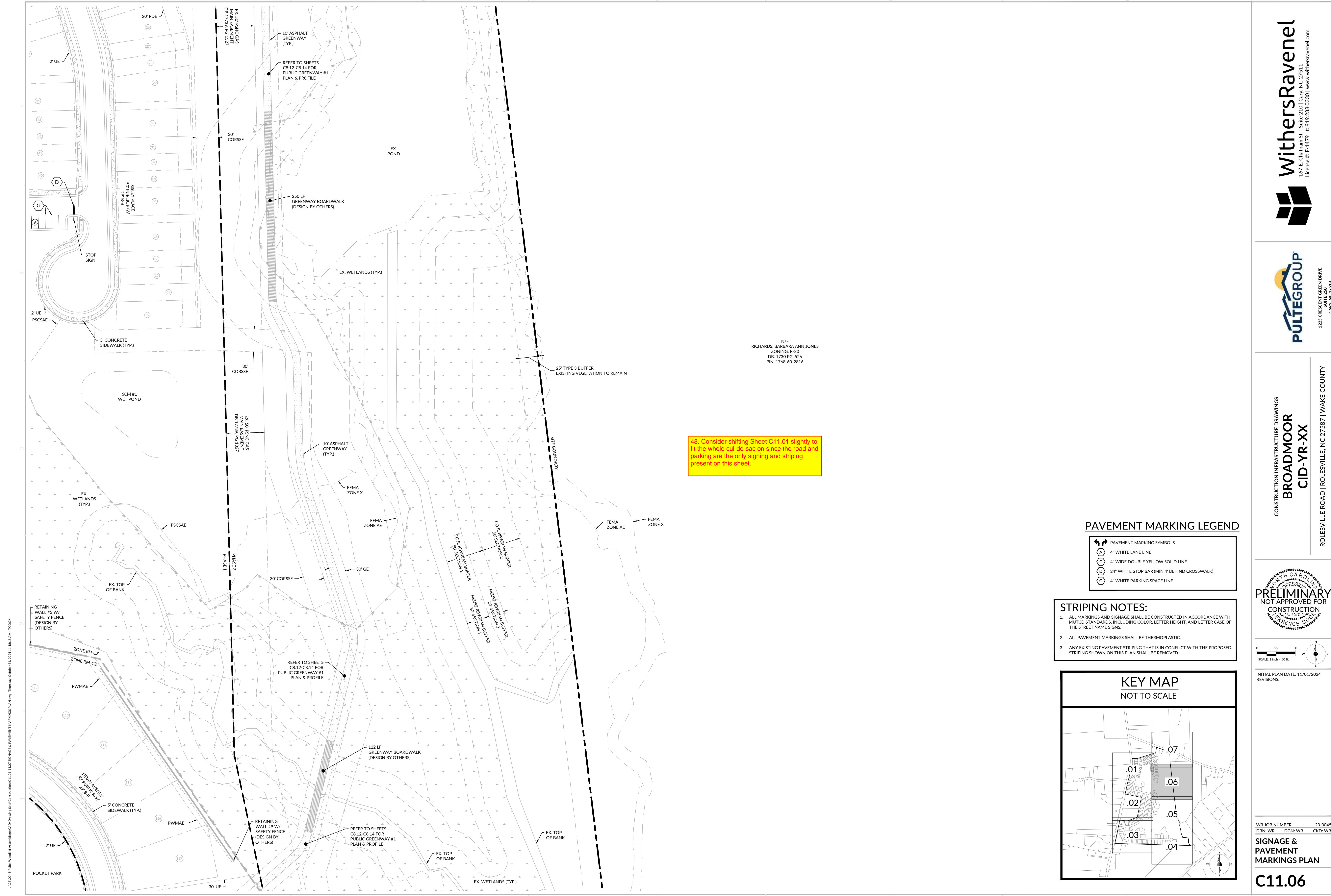
WR JOB NUMBER 23-0045  
DRN: WR DGN: WR CKD: WR

**SIGNAGE & PAVEMENT MARKINGS PLAN**

**C11.05**

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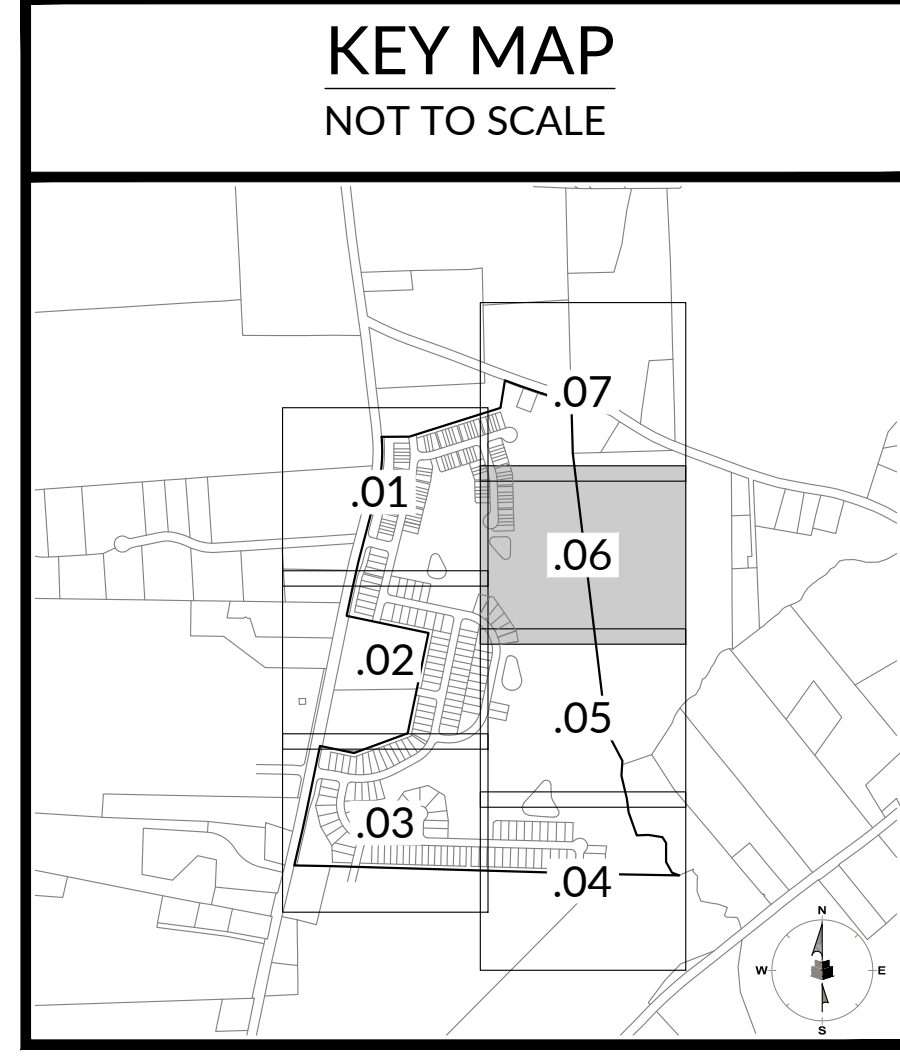
48. Consider shifting Sheet C11.01 slightly to fit the whole cul-de-sac on since the road and parking are the only signing and striping present on this sheet.

**PAVEMENT MARKING LEGEND**

PAVEMENT MARKING SYMBOLS	
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(D)	24" WHITE STOP BAR (MIN 4' BEHIND CROSSWALK)
(G)	4" WHITE PARKING SPACE LINE

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J:\23\2045-Pulte-Woodfield-Asheboro\CID-Drawing-Set\Construction\CID-11-07-DWG-06-PAVEMENT MARKINGS PLAN.dwg Thursday, October 31, 2024 11:18:18 AM T:DOCK

