

1751 DOBBINS DRIVE

ECE GENERAL NOTES

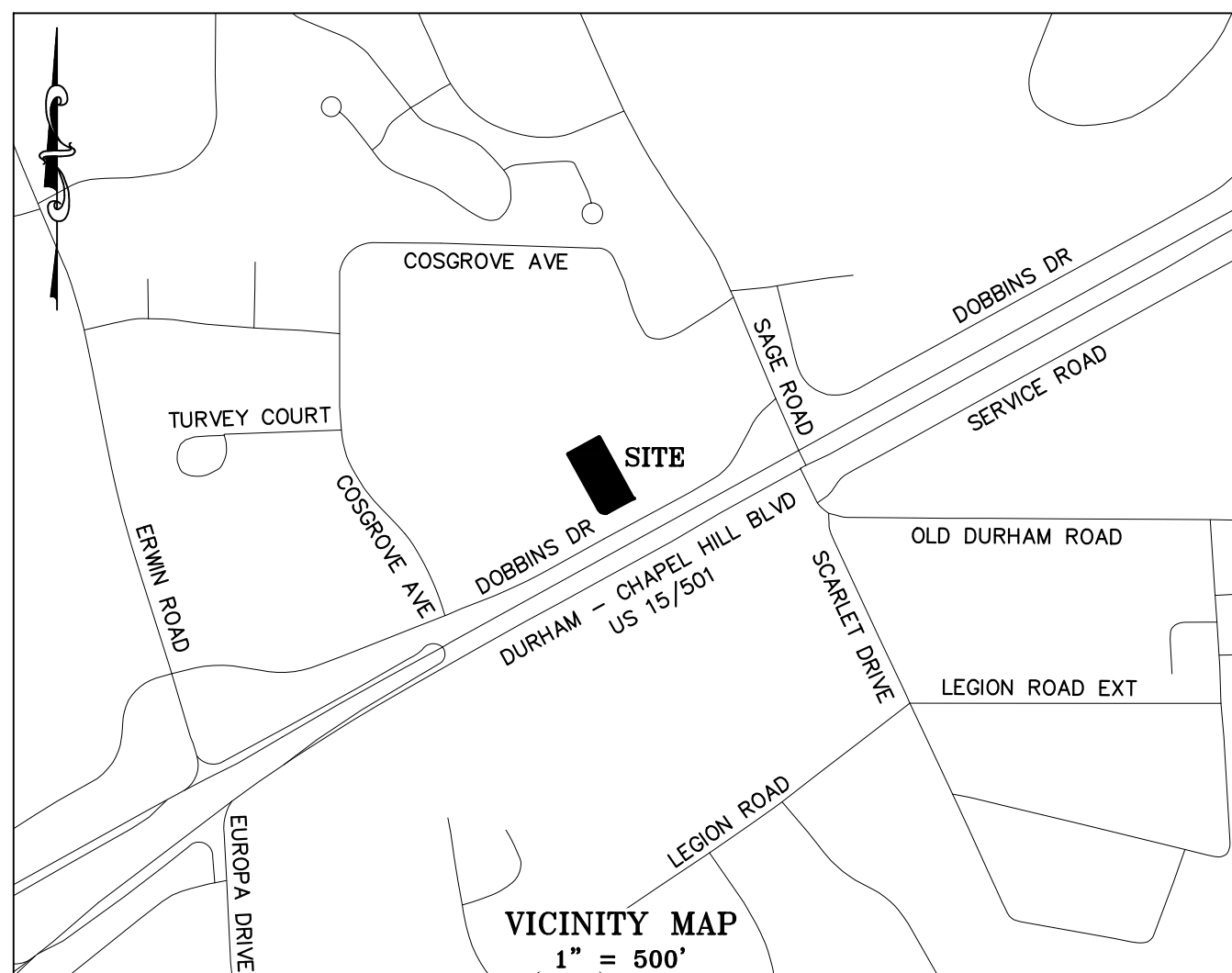
GENERAL NOTES

- EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY DATA SUPPLIED BY THOMAS L. RAMSEY, PLS L-2871, 604 YORKTOWN DRIVE, CHAPEL HILL, NC, 919-967-5037
- WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK W/IN PUBLIC R/W PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE N.C. SUPPLEMENT TO THE MUTCD, AND LOCAL INSPECTOR'S DIRECTION.
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS, LOCAL STANDARD DETAILS AND CONSTRUCTION STANDARDS, STATE CONSTRUCTION STANDARDS, AND OTHER APPLICABLE CONTRACT DOCUMENTS.
- CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING ALL APPROPRIATE PARTIES AND ASSURING THAT UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL NC ONE CALL (PREVIOUSLY ULOCO) AT 1-800-632-4949 FOR UTILITY LOCATING SERVICES 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- UNDERGROUND UTILITIES SHOWN USING BEST AVAILABLE INFORMATION. ALL LOCATIONS SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE MORE UNDERGROUND UTILITIES THAN ARE SHOWN HEREON. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.
- ALL CLEARING, GRUBBING AND UNSUITABLE FILL MATERIAL SHALL BE DISPOSED OF LEGALLY.
- ALL PAVEMENT, CURB, STORM DRAINAGE PIPE, AND STRUCTURES TO BE REMOVED SHALL BE HAULED OFFSITE AND DISPOSED OF LEGALLY.
- SIGNAGE SHALL BE LOCATED AS SHOWN. SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL STANDARDS.
- SITE LIGHTING SHALL AS SHOWN, AND SHALL BE SUFFICIENT TO PROPERLY ILLUMINATE THE SITE IN ACCORDANCE WITH LOCAL STANDARDS.
- LANDSCAPING SHALL BE INSTALLED IN THE PROVIDED YARDS, IN ACCORDANCE WITH LOCAL STANDARDS.
- NO SIGHT OBSTRUCTING OR PARTIALLY OBSTRUCTING WALL, FENCE, FOLIAGE, BERMING, PARKED VEHICLES OR SIGNS BETWEEN THE HEIGHT OF TWENTY-FOUR (24) INCHES AND EIGHT (8) FEET ABOVE THE CURB LINE ELEVATION, OR NEAREST TRAVELED WAY IF NO CURBING EXISTS, SHALL BE PLACED WITHIN A SIGHT TRIANGLE OF A PUBLIC STREET, PRIVATE STREET OR DRIVEWAY CONTAINED ON THE PROPERTY OR ON AN ADJOINING PROPERTY.

CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS TO THE APPROVED DRAWINGS WITHOUT PRIOR APPROVAL OF BOTH THE DESIGN ENGINEER AND LOCAL INSPECTOR.

GRADING & STORM DRAINAGE NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL CONSTRUCTION STANDARDS, SPECIFICATIONS, AND PROCEDURES AND THE NCDENR'S SEDIMENTATION AND EROSION CONTROL STANDARDS, SPECS., AND PROCEDURES.
- CONTRACTOR SHALL VERIFY THAT ALL APPLICABLE STATE AND LOCAL PERMITS REQUIRED FOR THE COMMENCEMENT OF GRADING OPERATIONS HAVE BEEN OBTAINED PRIOR TO START OF GRADING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF DEMOLITION AND/OR CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL CONSTRUCTION ACTIVITIES.
- ALL STORMWATER MANAGEMENT FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO MEET ALL STATE AND LOCAL REQUIREMENTS, INCLUDING THE STATE STANDARDS FOR WATER QUALITY AND DETENTION FACILITIES (CURRENT EDITION).
- EROSION CONTROL MEASURES ARE PERFORMANCE BASED AND SHALL BE PROVIDED PER THE EROSION CONTROL PLANS AND AS NEEDED TO PROTECT ADJACENT PROPERTIES.
- CONTRACTOR SHALL PROVIDE ALL STAKING, FLAGGING AND/OR FENCING NECESSARY TO PROVIDE PROPER PROTECTION OF THE STREAM BUFFER.



ECE LEGEND

	NEW	EXISTING
PROPERTY LINE (P/L)	---	---
ADJACENT PROPERTY LINE	---	---
EASEMENT (ESMT)	---	---
SETBACK (S/B)	---	---
RIGHT-OF-WAY (R/W)	---	---
CENTERLINES (C/L)	---	---
CURB & GUTTER	---	---
EDGE OF PAVEMENT (EOP)	---	---
SIDEWALK	---	---
CREEK	---	---
CATCH BASIN (CB)		
YARD INLET (YI)		
STORM DRAINAGE JUNCTION BOX (JB)		
CURB INLET (CI)		
SANITARY SEWER MANHOLE (MH)		
SANITARY SEWER CLEANOUT (CO)		
METER BOX		
VALVE		
FIRE HYDRANT (FH)		
FIRE DEPARTMENT CONNECTION (FDC)		
LIGHT POLE (LP)		
UTILITY POLE (PP) & GUY WIRE		
CABLE TV LINE		
ELECTRIC LINE & TRANSFORMER		
FIBER OPTIC CABLE		
GAS LINE		
OVERHEAD UTILITY LINE		
SANITARY SEWER (SS)		
STORM DRAIN PIPE (SD)		
TELEPHONE		
WATER LINE (WL)		
GRADE CONTOUR		
FINISHED GRADE SPOT ELEVATION		
CLEARING LIMIT/TREE LINE		
LIMITS OF DISTURBANCE		
DITCH OR SWALE FLOWLINE		
TREE PROTECTION FENCE (TPF)		
SILT FENCE (SF)		
FENCE		
RIP RAP APRON		
CHECK DAM		
SEDIMENT FENCE OUTLET		
INLET PROTECTION		
CONCRETE MONUMENT / STONE FOUND		
		EXISTING IRON PIPE (EIP)
		EXISTING IRON ROD (EIR)
		5/8" REBAR SET (IPS)
		PK NAIL SET (PKS)
		COMPUTED POINT (CP)

SITE DATA

PIN NUMBER: 9799-58-6643
 STREET ADDRESS: 1751 DOBBINS DRIVE, CHAPEL HILL
 OWNER / DEVELOPER: JANICE C BRIGGS
 9323 LAUREL SPRINGS ROAD
 CHAPEL HILL, NC 27518

NET ACREAGE: 0.45 ACRES±, 19,793 SF
 GROSS LAND AREA: 0.50 ACRES±, 21,772 SF
 PLAT REFERENCE: PB 70-70 & PB 102-151

EXISTING ZONING: R-4
 ZONING OVERLAY: NONE
 PROPOSED ZONING: OI-2-CZ
 ADJACENT ZONES: OI-2-C TO THE EAST
 R-4 ALL OTHER SIDES

FEMA: 371097900L, 01/19/2019
 NO HAZARDS ON SITE
 SOILS: WB8 - WHITE STORE - GROUP D
 RIVER BASIN: CAPE FEAR
 ENVIRONMENTAL: NO STREAMS, STREAM BUFFERS, RCD OR WETLANDS ON SITE

EXISTING USE: SINGLE-FAMILY HOME (USE GROUP A)
 HOME BUILT - 1960
 PROPOSED USE: OFFICE BUILDING (USE GROUP D)

STREET SETBACK: 22' MIN REQ. // 20' REQUESTED
 INTERIOR SETBACK: 8' MIN REQ. // 5' REQUESTED ON EAST SIDE
 SOLAR (NORTH) SETBACK: 9' MIN REQ. AND PROVIDED
 MINIMUM HEIGHT: 34' PRIMARY, 60' SECONDARY

BUILDING SF: 2-STORY FRONT BUILDING = 3,800 SF
 1-STORY REAR BUILDING = 1,700 SF
 CONNECTED VIA A 245 SF ENTRY CORE
 TOTAL FLOOR AREA = 5,500 SF
 0.264 MAX OR 5,747 SF MAX.

FLOOR AREA RATIO: BETWEEN 16 & 22 SPACES (1 HANDICAP)
 VEHICLE PARKING REQ: 18 STANDARD (9' X 18')
 VEHICLE PARKING PRO: 2 ADA ACCESSIBLE VAN (8' X 18' W/ 8' ISLE)
 BICYCLE PARKING REQ: 7 SPACES
 BICYCLE PARKING PRO: 8 SPACES

NOTES: BENCHMARK (BM) IS TOP OF IRON PIPE AT NORTHWEST CORNER, ELEVATION IS 332.0 (ASSUMED)

19-011 - 1751 Dobbins Drive (2019/09/03)		
	Existing	Proposed
Net Land Area (NLA):	19,793	19,793
Gross Land Area (GLA):	21,772	21,772
Impervious Area		
Roof	1,918	4,142
Roadway	0	0
Parking / Driveway	2,549	8,816
Sidewalk / Other*	289	1,244
Pervious Area		
Landscaping / Other Pervious	15,037	5,591
Protected Forest	0	0
Other Areas		
Custom Land Cover	0	0
Land Taken Up by SCM	0	0
Net Total All Areas:	19,793	19,793
Total Impervious Area:	4,756	14,202
Total Impervious % by NLA	24.03%	71.75%
Total Impervious % by GLA	21.84%	65.23%

* Includes 250sf allowance for overages during construction

OWNER:
 JANICE C BRIGGS
 9323 LAUREL SPRINGS RD
 CHAPEL HILL, NC 27518

ENGINEER:
 CHARLES P. KOCH P.E.
 EARTHCENTRIC ENGINEERING, INC.
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 MEBANE, NC 27302
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 FAX: 919-304-3234
 PHIL.KOCH@EARTHCENTRIC.COM

ARCHITECT & SITE DESIGN:
 KEITH SHAW
 SHAW DESIGN ASSOCIATES, P.A.
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 SUITE #8
 CHAPEL HILL, NC 27514
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 FAX: 919-401-1905
 KEITH@SHAWDESIGN.US

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 T.RAMSEY5252@GMAIL.COM

- INDEX OF DRAWINGS:**
- C1.0 COVER SHEET
 - C2.0 EXISTING CONDITIONS & DEMO. PLAN
 - C2.1 CONSTRUCTION MANAGEMENT PLAN: DEMOLITION & INITIAL CONSTRUCTION
 - C2.2 CONSTRUCTION MANAGEMENT PLAN: SITE CONSTRUCTION
 - C3.0 SITE & SOLID WASTE PLAN
 - C4.0 EROSION CONTROL & LANDSCAPE PROTECTION PLAN
 - C5.0 GRADING & STORM DRAINAGE PLAN
 - C5.1 STEEP SLOPE PLAN
 - C6.0 UTILITY PLAN
 - C7.0 LANDSCAPE & PLANTING PLAN

- D1.0 EROSION & SEDIMENT CONTROL DETAILS
- D2.0 STORMFILTER SYSTEM DETAILS
- D2.1 STORMFILTER SYSTEM DETAILS
- D5.0 SITE DETAILS
- D5.1 SITE DETAILS

A201 ARCHITECTURAL ELEVATIONS

CALL BEFORE YOU DIG... IT'S THE LAW.
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 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST
 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.
 NORTH CAROLINA GENERAL STATUTE 87-102

APPROVAL STAMP

EarthCentric Engineering, Inc.
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 E-Mail: Phil.Koch@EarthCentric.com

PRINCIPAL ENGINEER
 PHIL KOCH - NCPPE #22634

COVER SHEET

1751 DOBBINS DRIVE
 1751 DOBBINS DRIVE, CHAPEL HILL, NC 27514

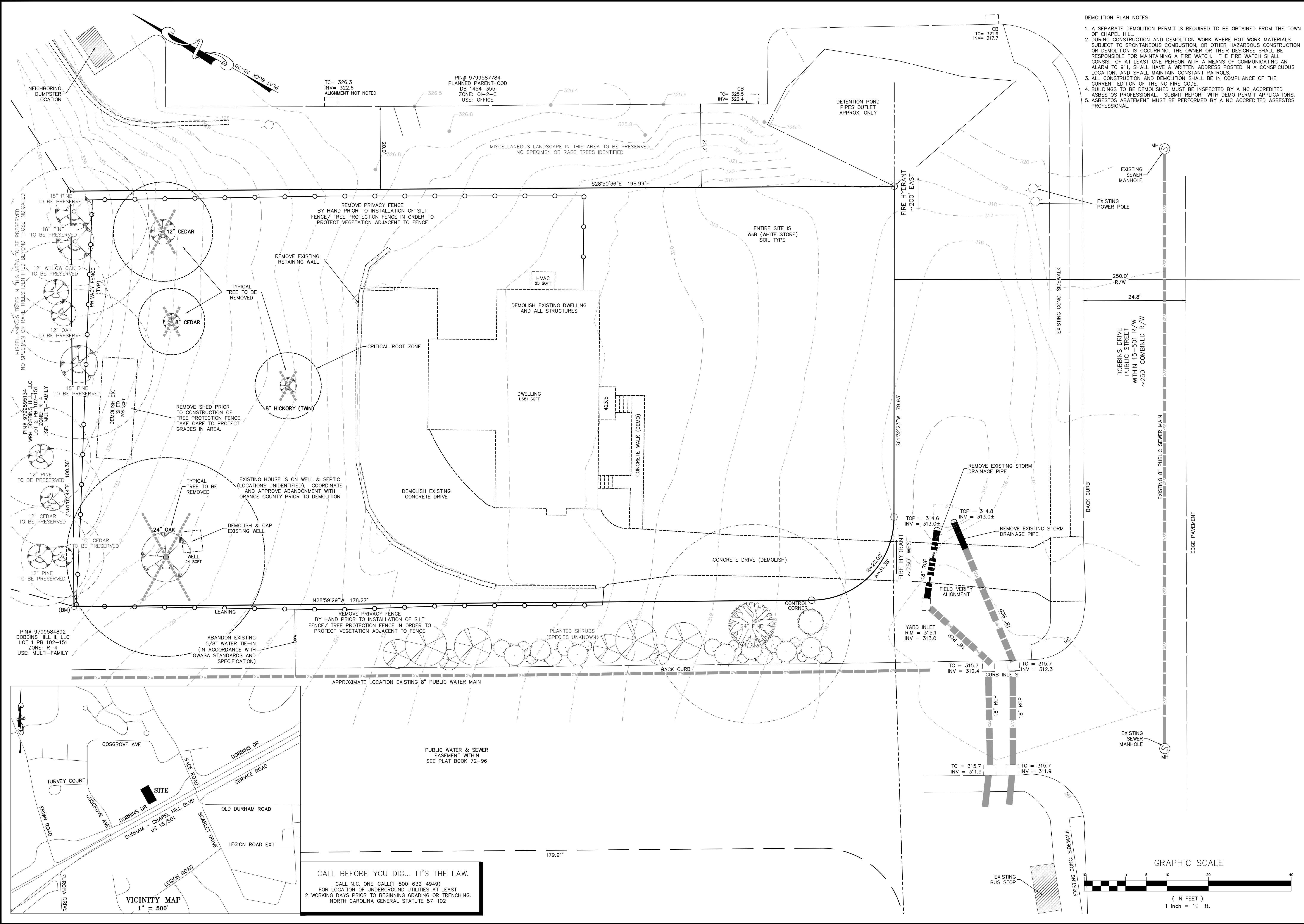
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 VERTICAL SCALE: N/A
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 DRAWING NAME: 19-011 REVIEW

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SHEET NO.
C1.0
 PRELIMINARY SITE PLAN



- DEMOLITION PLAN NOTES:
1. A SEPARATE DEMOLITION PERMIT IS REQUIRED TO BE OBTAINED FROM THE TOWN OF CHAPEL HILL.
 2. DURING CONSTRUCTION AND DEMOLITION WORK WHERE HOT WORK MATERIALS SUBJECT TO SPONTANEOUS COMBUSTION, OR OTHER HAZARDOUS CONSTRUCTION OR DEMOLITION IS OCCURRING, THE OWNER OR THEIR DESIGNEE SHALL BE RESPONSIBLE FOR MAINTAINING A FIRE WATCH. THE FIRE WATCH SHALL CONSIST OF AT LEAST ONE PERSON WITH A MEANS OF COMMUNICATING AN ALARM TO 911, SHALL HAVE A WRITTEN ADDRESS POSTED IN A CONSPICUOUS LOCATION, AND SHALL MAINTAIN CONSTANT PATROLS.
 3. ALL CONSTRUCTION AND DEMOLITION SHALL BE IN COMPLIANCE OF THE CURRENT EDITION OF THE NC FIRE CODE.
 4. BUILDINGS TO BE DEMOLISHED MUST BE INSPECTED BY A NC ACCREDITED ASBESTOS PROFESSIONAL. SUBMIT REPORT WITH DEMO PERMIT APPLICATIONS.
 5. ASBESTOS ABATEMENT MUST BE PERFORMED BY A NC ACCREDITED ASBESTOS PROFESSIONAL.

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EXISTING CONDITIONS & DEMOLITION PLAN

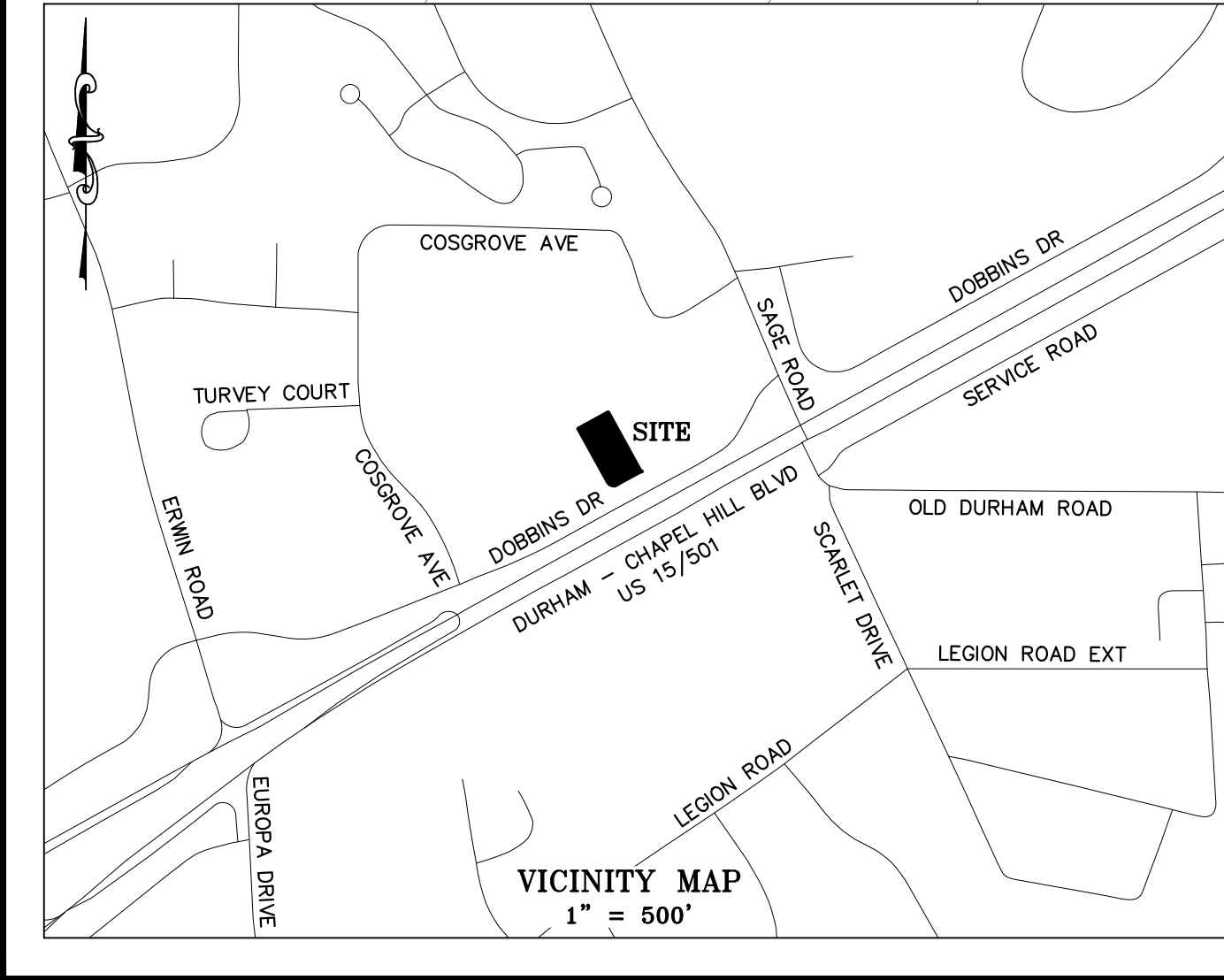
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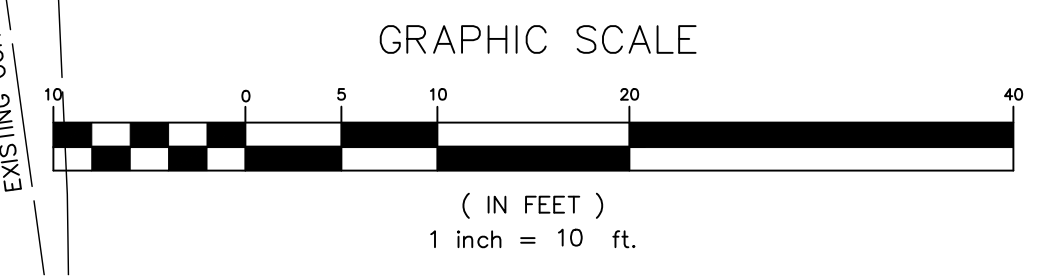
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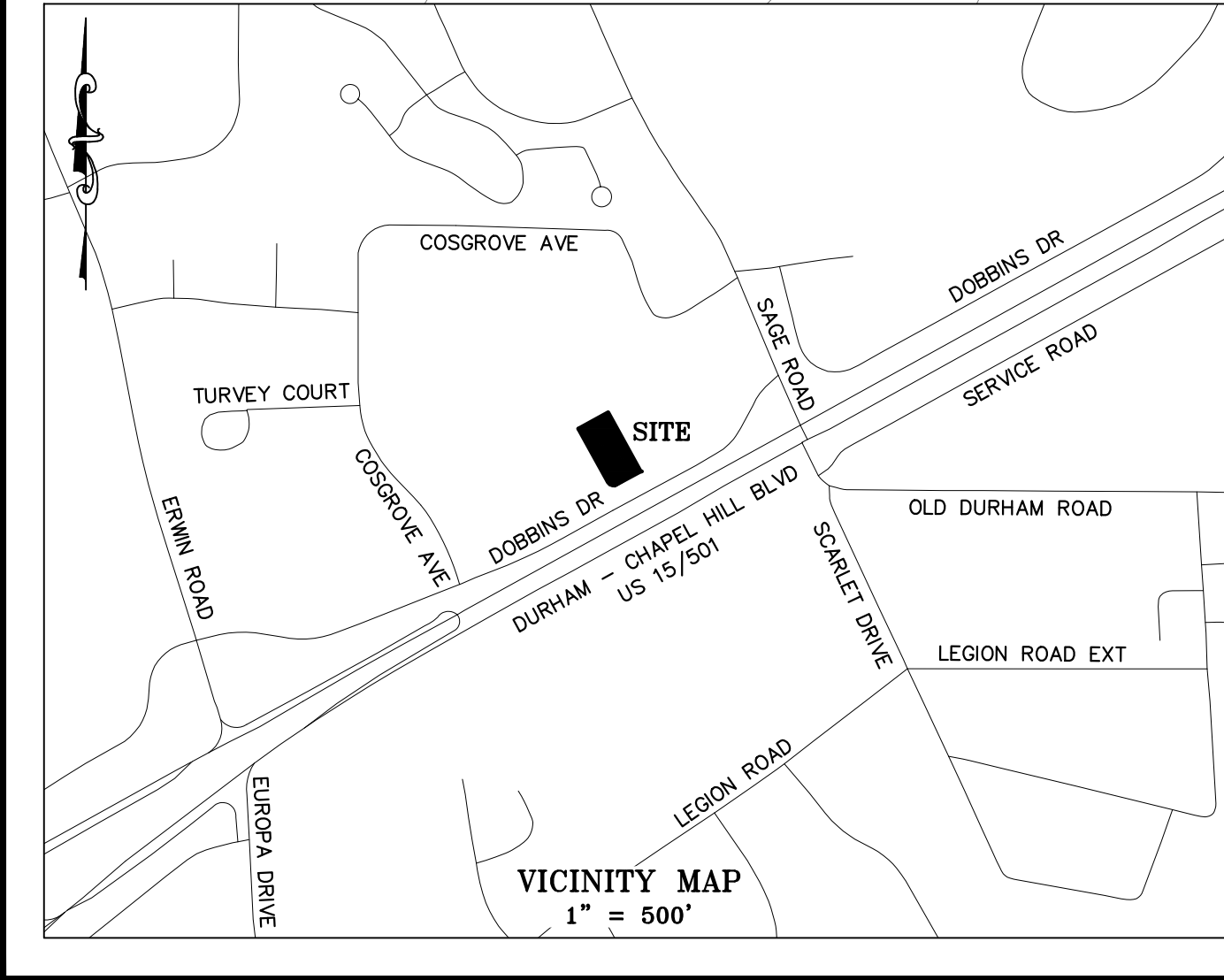
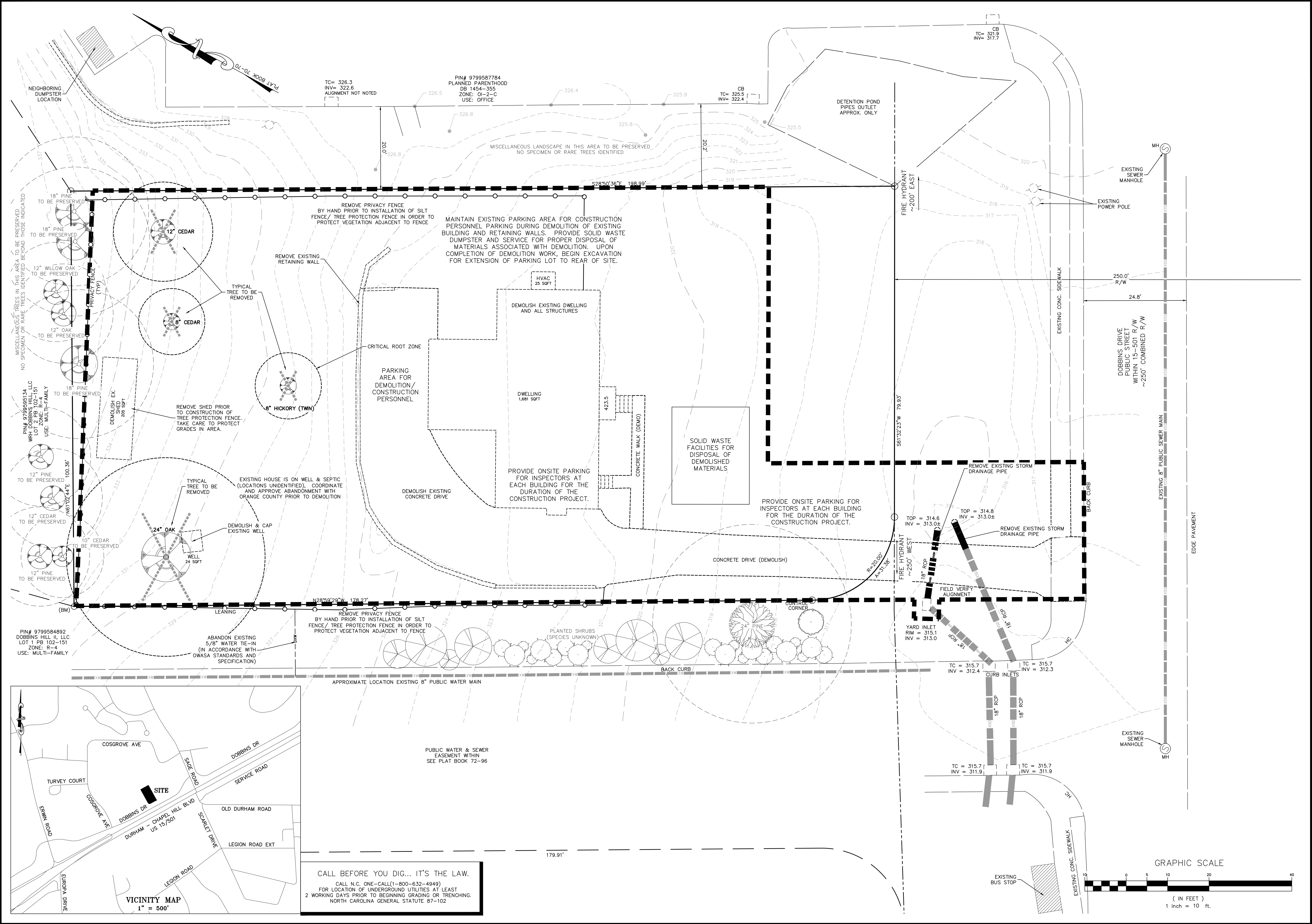
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SHEET NO.
C2.0
 PRELIMINARY SITE PLAN

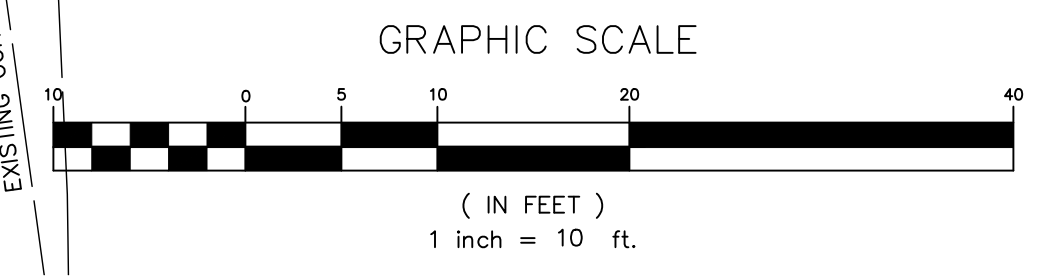


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 CALL N.C. ONE-CALL(1-800-632-4949)
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.
 NORTH CAROLINA GENERAL STATUTE 87-102





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1751 DOBBINS DRIVE
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CONSTRUCTION MANAGEMENT PLAN
DEMOLITION & INITIAL CONSTRUCTION

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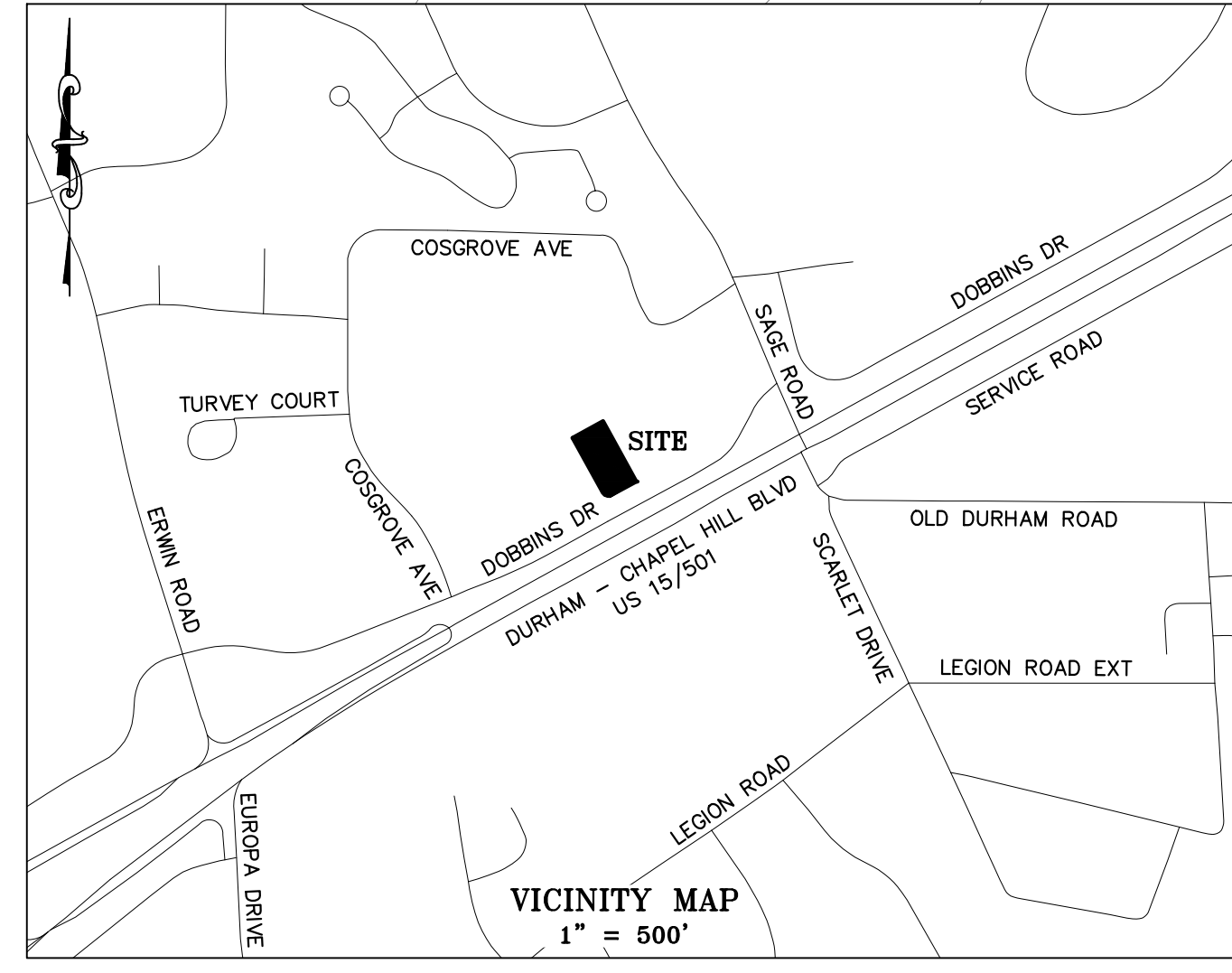
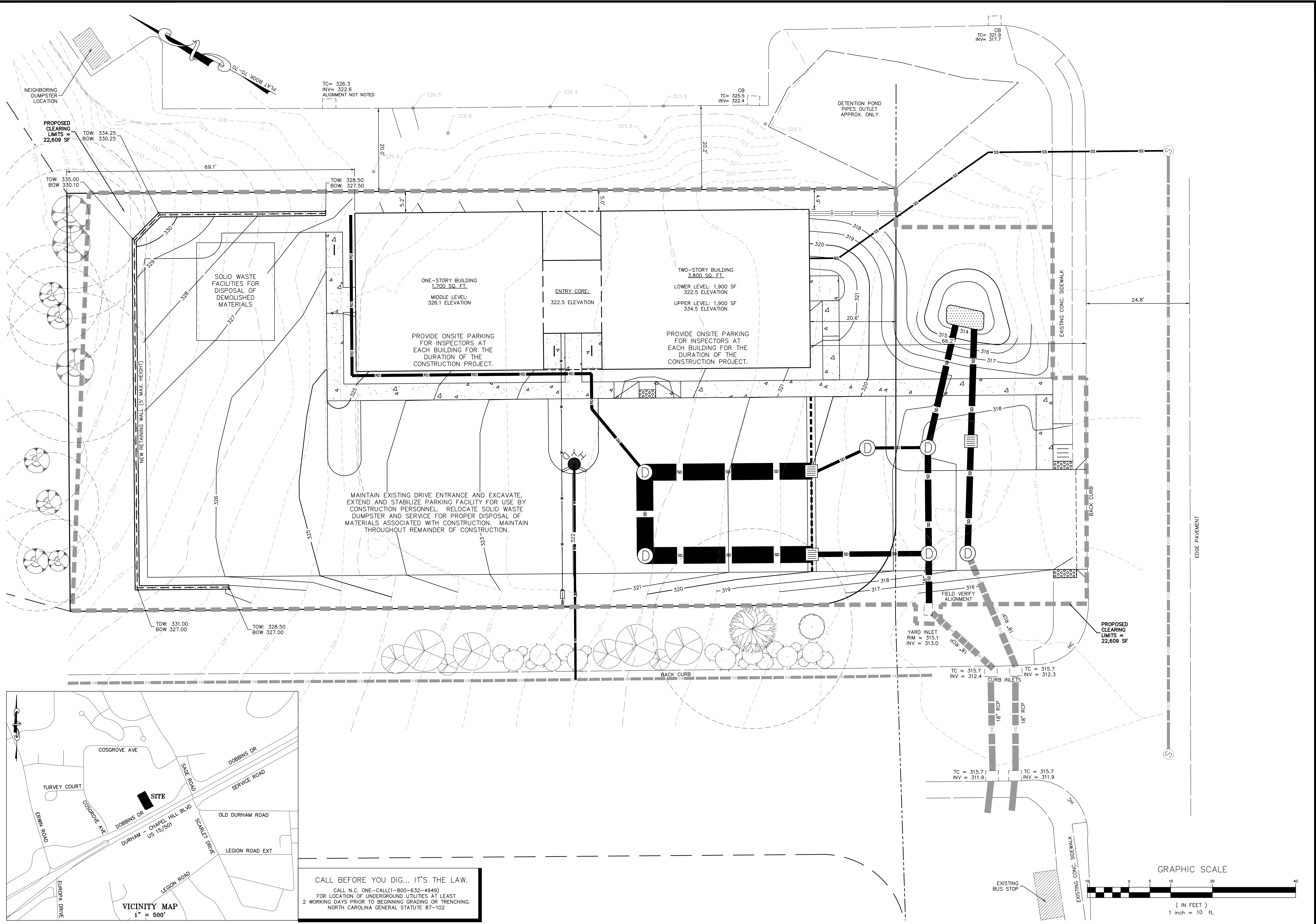
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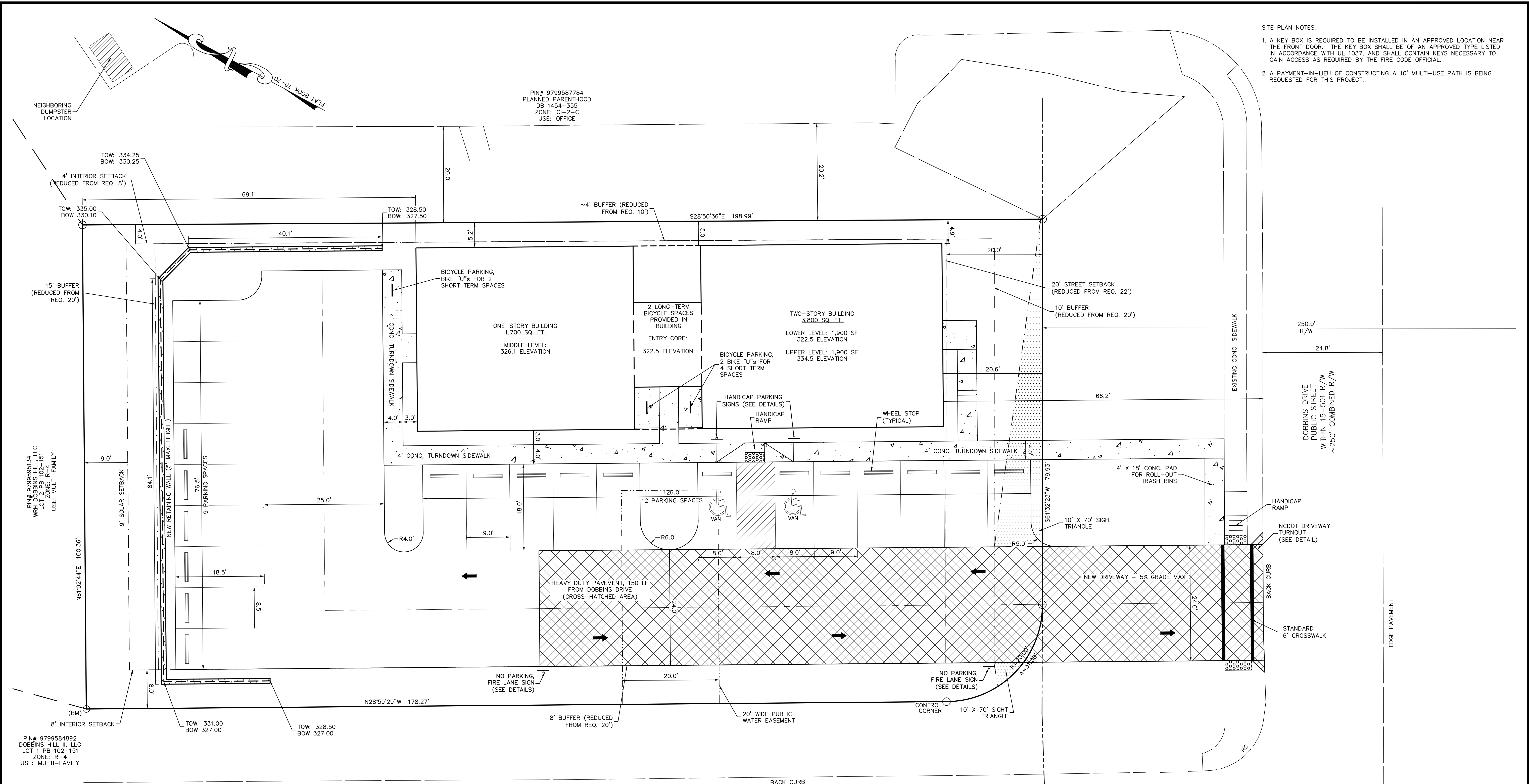
CONSTRUCTION MANAGEMENT PLAN:
SITE CONSTRUCTION

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 SHEET NO. C2.2
 PRELIMINARY SITE PLAN





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 N.C. PROFESSIONAL ENGINEER
 077534
 CHARLES E. SPENCER
 PRINCIPAL ENGINEER
 PHIL KOCH - NCPPE #22634

1751 DOBBINS DRIVE
 1751 DOBBINS DRIVE, CHAPEL HILL, NC 27514
SITE & SOLID WASTE PLAN

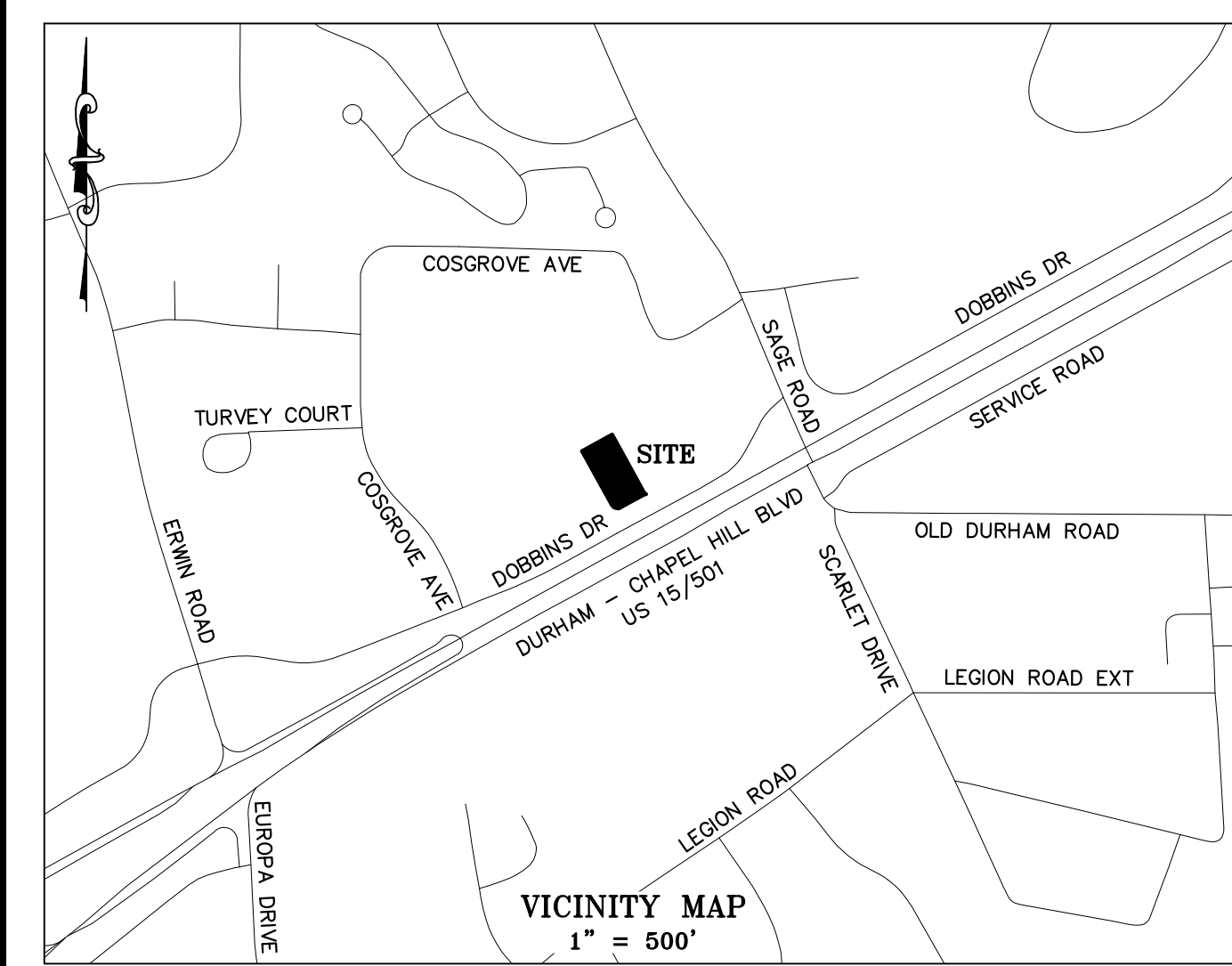
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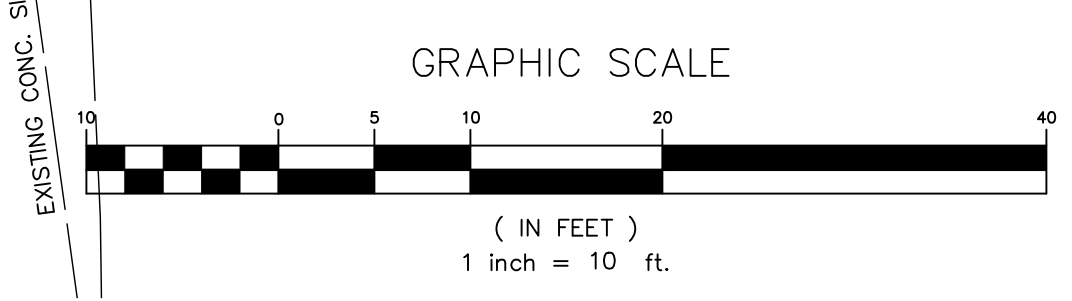
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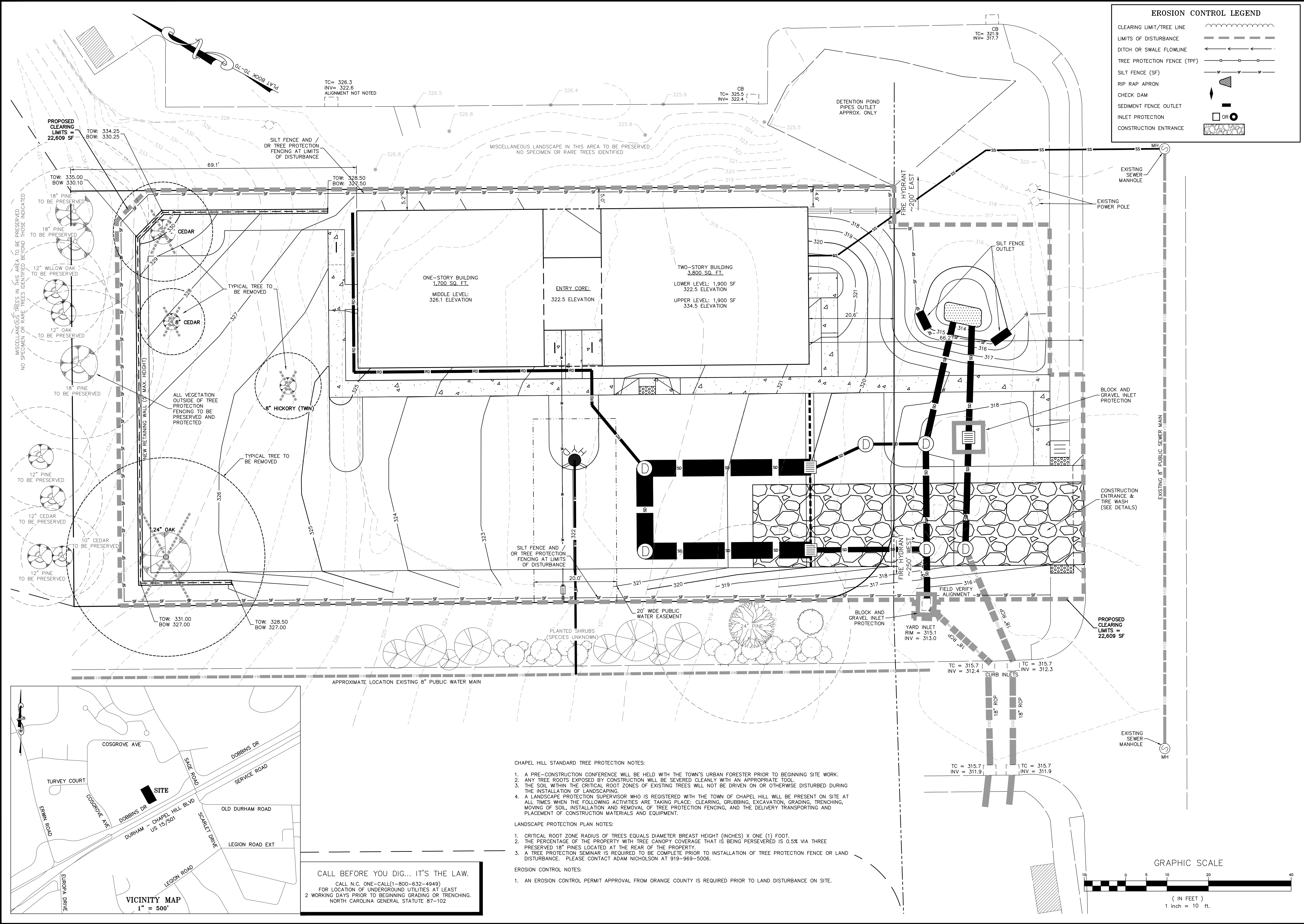
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SHEET NO.
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 PRELIMINARY SITE PLAN



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PHIL KOCH - NCPE #22634
 H. CAROL...
 CHARLES...
 PRINCIPAL ENGINEER

1751 DOBBINS DRIVE
 1751 DOBBINS DRIVE, CHAPEL HILL, NC 27514
**EROSION, SEDIMENT CONTROL
 & LANDSCAPE PROTECTION PLAN**

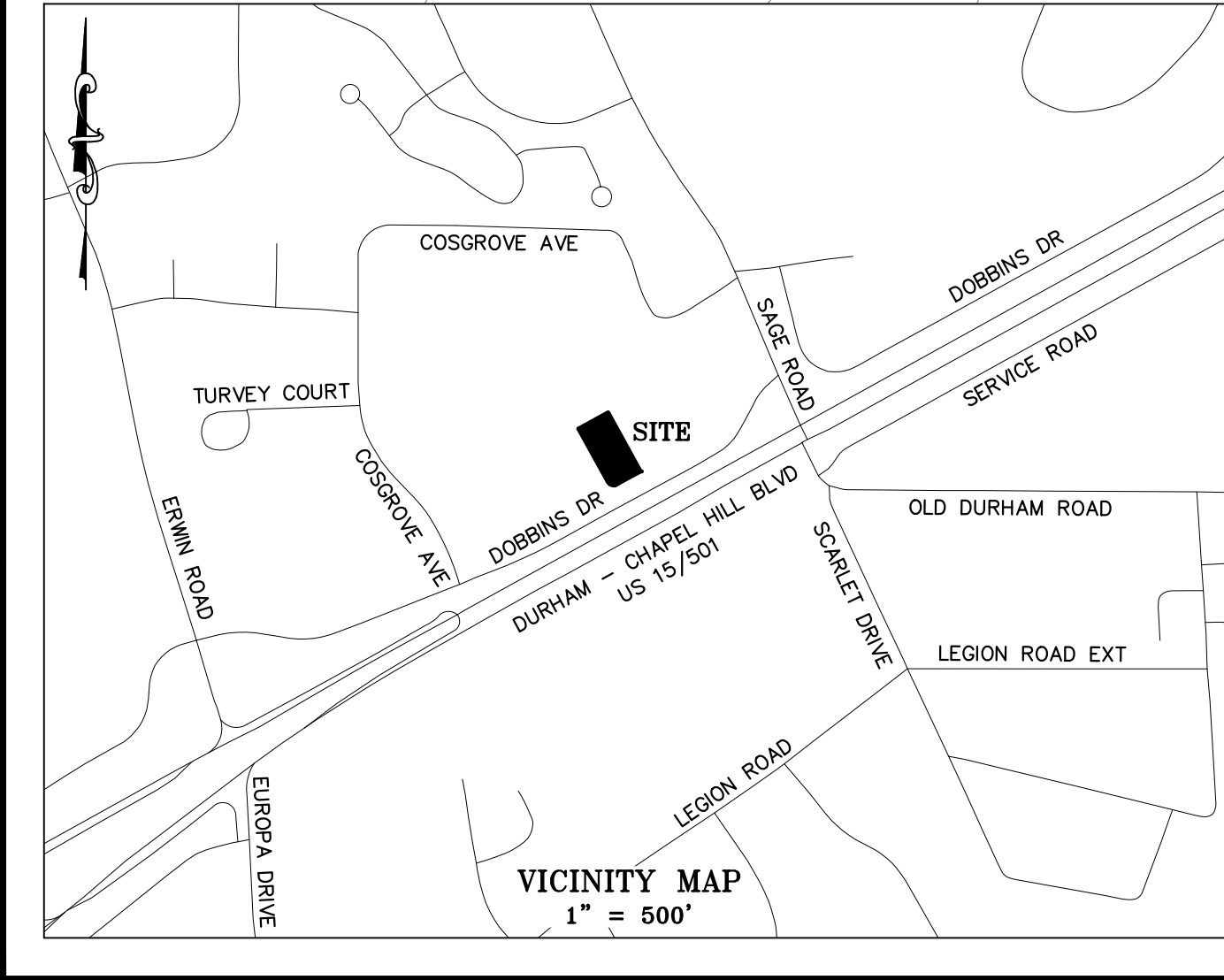
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SHEET NO.
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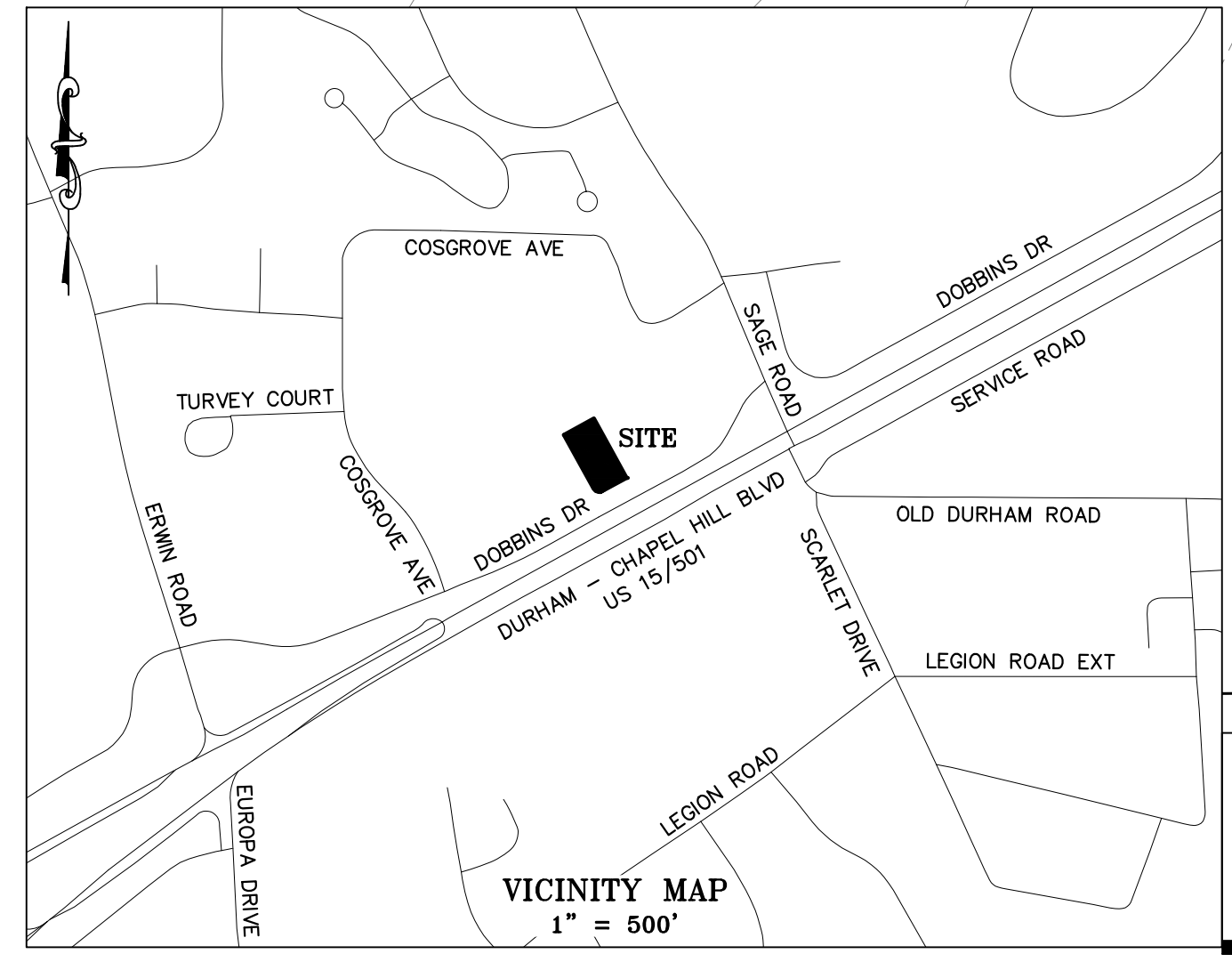
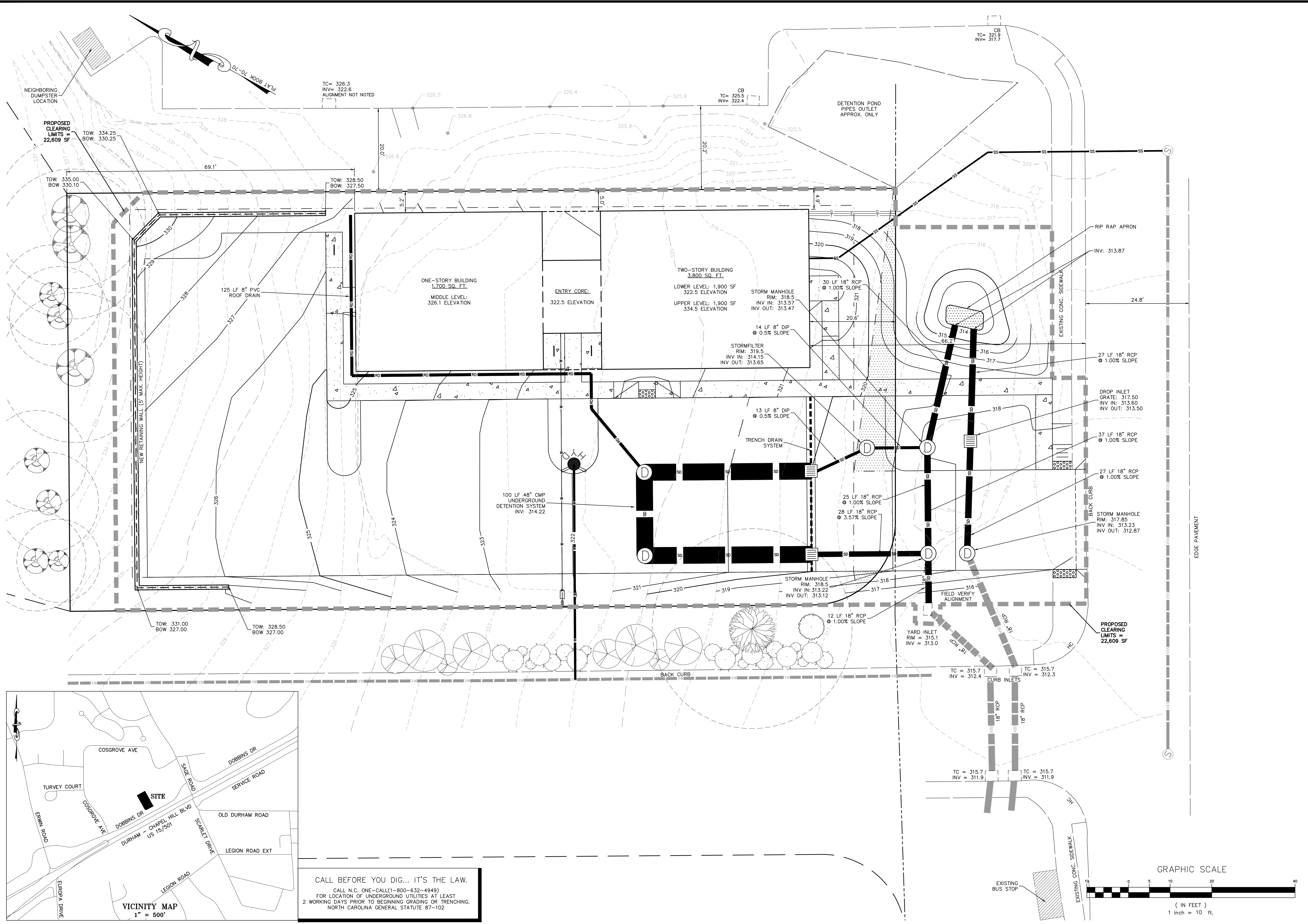
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GRADING & STORM DRAINAGE PLAN

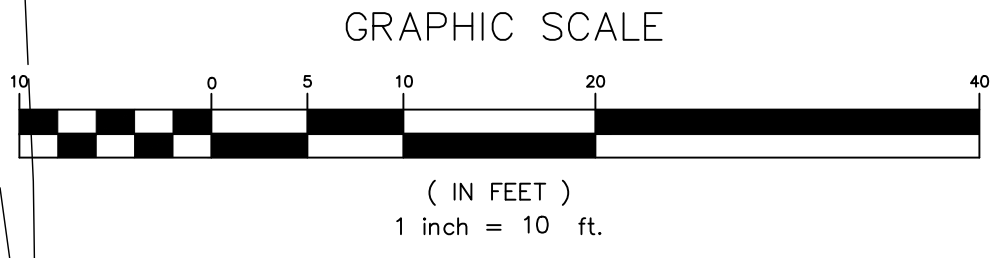
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 SHEET NO. C5.0
 PRELIMINARY SITE PLAN

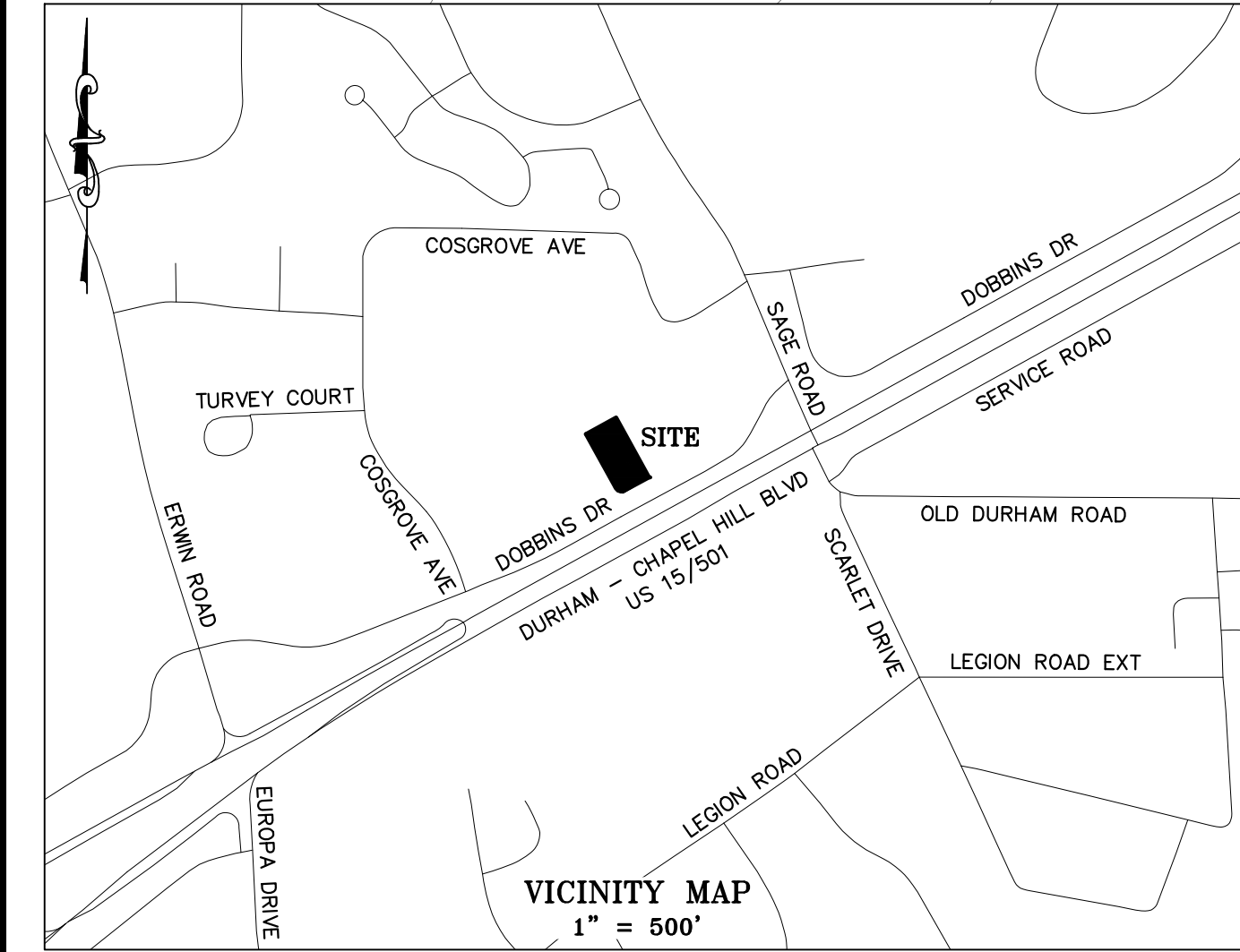
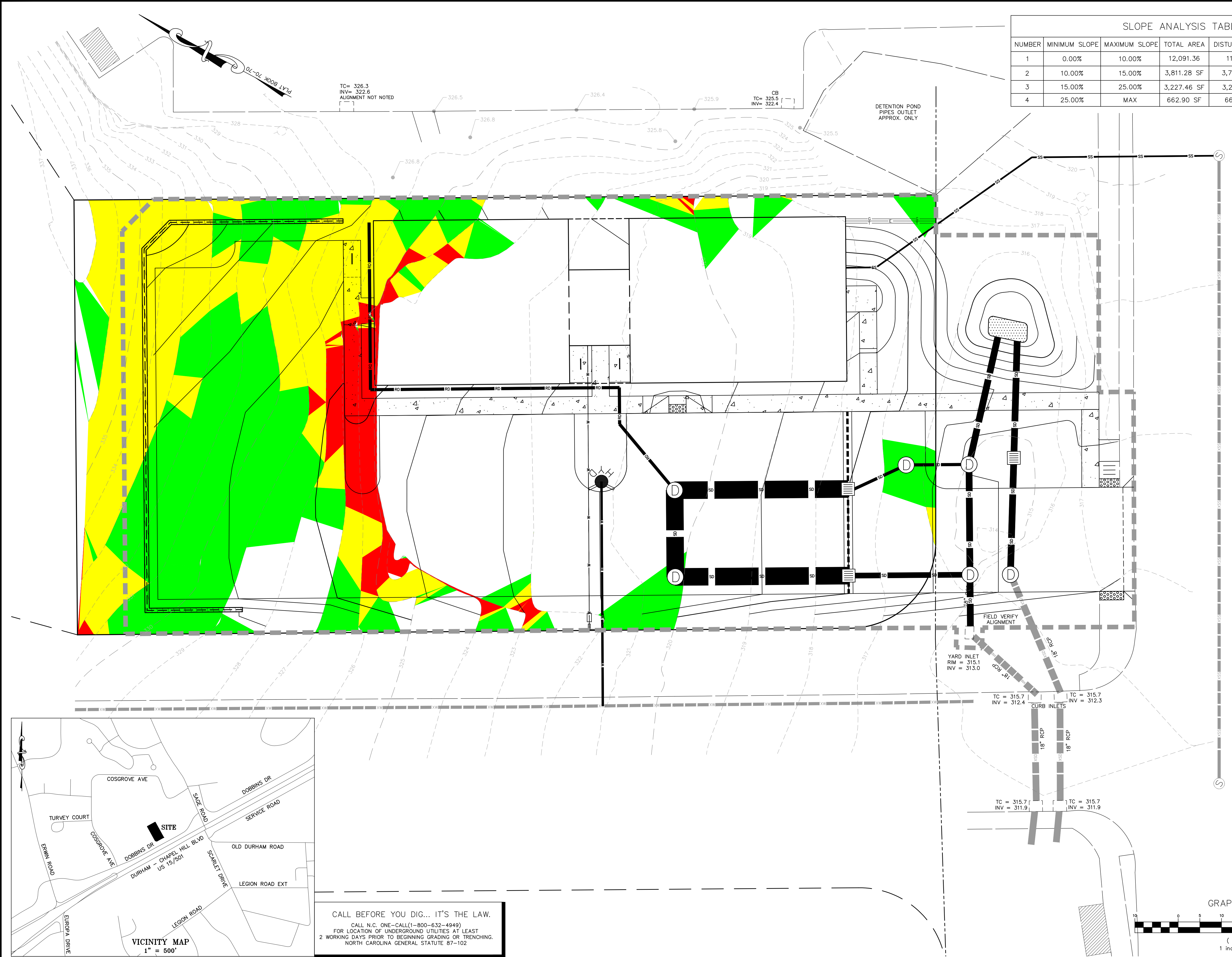


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 NORTH CAROLINA GENERAL STATUTE 87-102

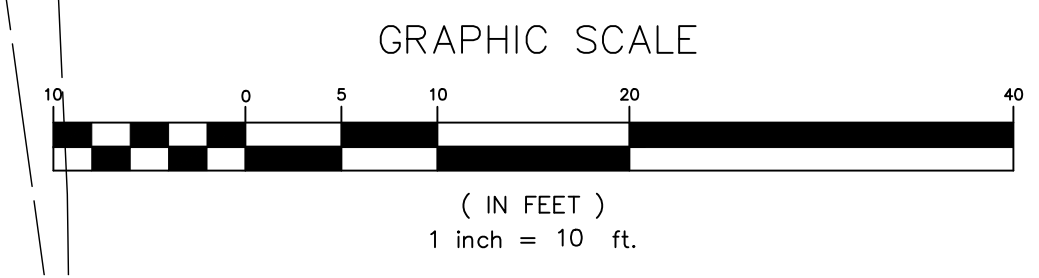


SLOPE ANALYSIS TABLE						
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	TOTAL AREA	DISTURBED AREA	% DISTURBED	COLOR
1	0.00%	10.00%	12,091.36	11,839.50	97.92%	White
2	10.00%	15.00%	3,811.28 SF	3,772.40 SF	98.98%	Green
3	15.00%	25.00%	3,227.46 SF	3,210.96 SF	99.49%	Yellow
4	25.00%	MAX	662.90 SF	660.93 SF	99.70%	Red

STEEP SLOPE PLAN NOTES:
 1. DUE TO THE PARCEL SIZE IT IS NOT FEASIBLE TO MAINTAIN EXISTING STEEP SLOPES ON SITE



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PHIL KOCH - NCPE #22634
 PRINCIPAL ENGINEER

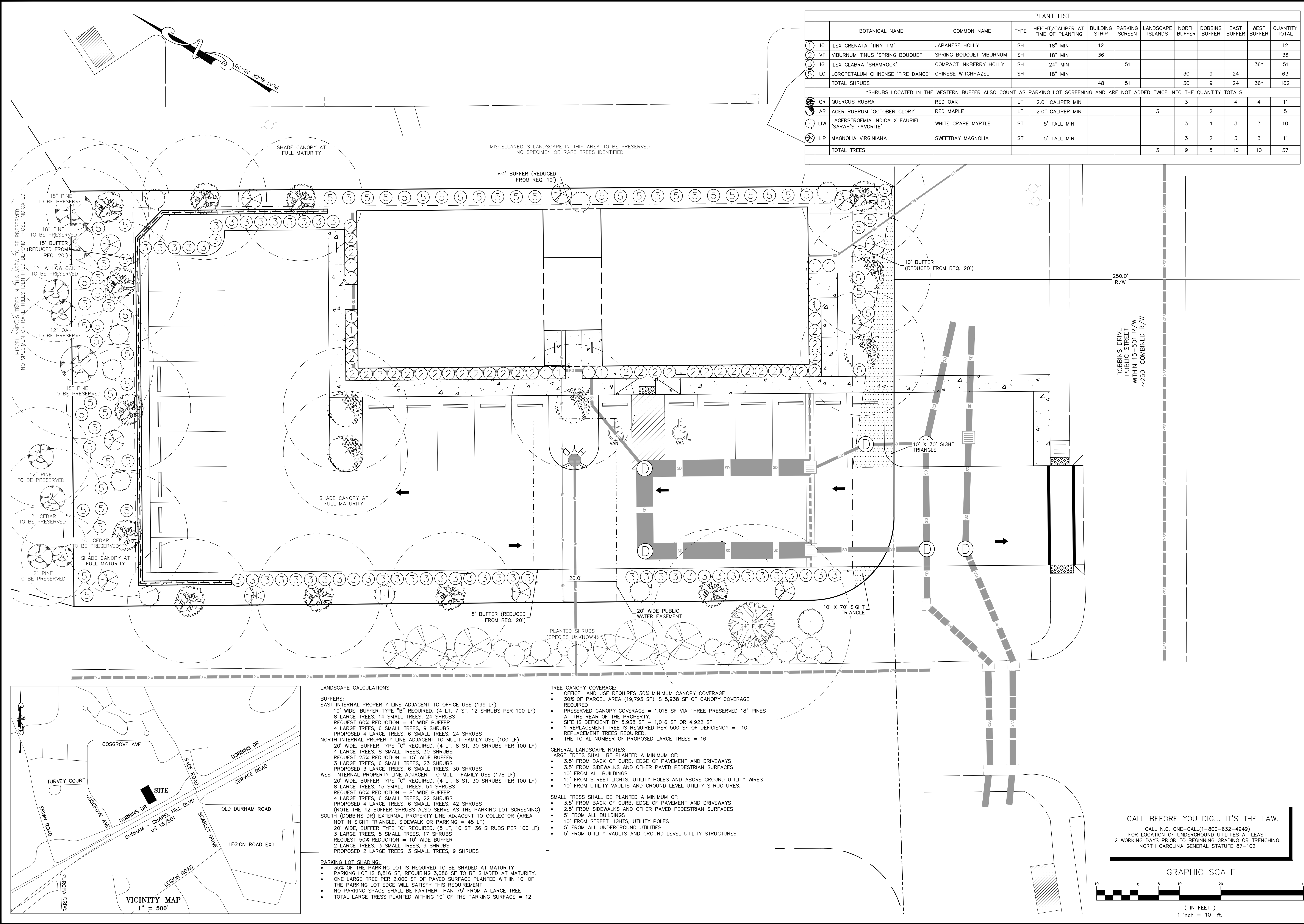
1751 DOBBINS DRIVE
 1751 DOBBINS DRIVE, CHAPEL HILL, NC 27514
STEEP SLOPE PLAN

REV.	DATE	DESCRIPTION	BY
1	09/03/2019	PER CITY REVIEW COMMENTS	CPK

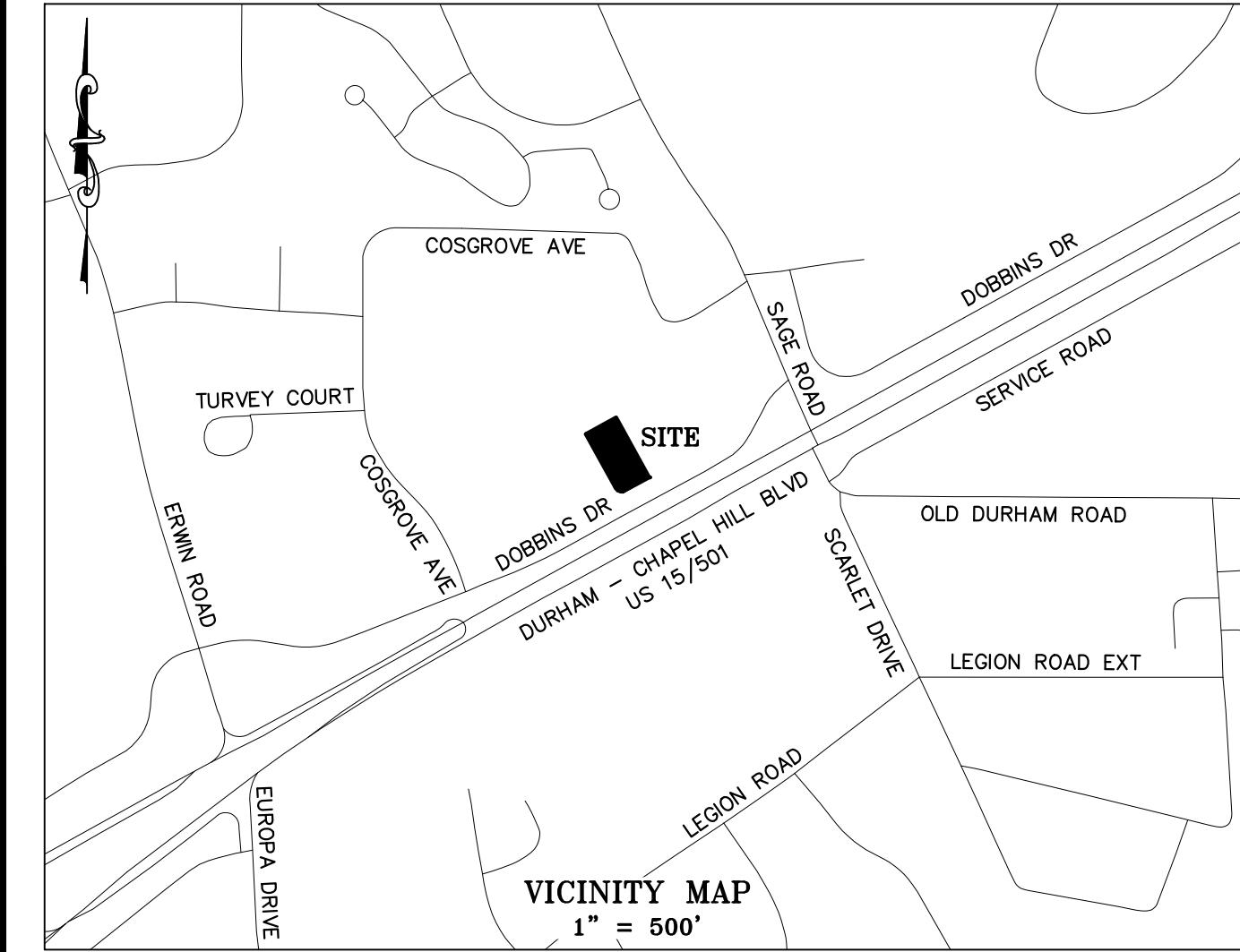
DATE: JULY 24, 2019
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: N/A
 PROJECT MANAGER: CPK
 DRAWN BY: CPK
 PROJECT NO.: 19-211
 DRAWING NAME: 19-011 REVIEW

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SHEET NO.
C5.1
 PRELIMINARY SITE PLAN



PLANT LIST												
	BOTANICAL NAME	COMMON NAME	TYPE	HEIGHT/CALIPER AT TIME OF PLANTING	BUILDING STRIP	PARKING SCREEN	LANDSCAPE ISLANDS	NORTH BUFFER	DOBBINS BUFFER	EAST BUFFER	WEST BUFFER	QUANTITY TOTAL
1	IC ILEX CRENATA 'TINY TIM'	JAPANESE HOLLY	SH	18" MIN	12							12
2	VT VIBURNUM TINUS 'SPRING BOUQUET'	SPRING BOUQUET VIBURNUM	SH	18" MIN	36							36
3	IG ILEX GLABRA 'SHAMROCK'	COMPACT INKBERRY HOLLY	SH	24" MIN		51					36*	51
5	LC LOROPETALUM CHINENSE 'FIRE DANCE'	CHINESE WITCHHAZEL	SH	18" MIN				30	9	24		63
TOTAL SHRUBS					48	51		30	9	24	36*	162
*SHRUBS LOCATED IN THE WESTERN BUFFER ALSO COUNT AS PARKING LOT SCREENING AND ARE NOT ADDED TWICE INTO THE QUANTITY TOTALS												
OR	QUERCUS RUBRA	RED OAK	LT	2.0" CALIPER MIN				3		4	4	11
AR	ACER RUBRUM 'OCTOBER GLORY'	RED MAPLE	LT	2.0" CALIPER MIN			3		2			5
LW	LAGERSTROEMIA INDICA X FAURIEI 'SARAH'S FAVORITE'	WHITE CRAPE MYRTLE	ST	5' TALL MIN				3	1	3	3	10
LIP	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	ST	5' TALL MIN				3	2	3	3	11
TOTAL TREES							3	9	5	10	10	37



LANDSCAPE CALCULATIONS

BUFFERS:

EAST INTERNAL PROPERTY LINE ADJACENT TO OFFICE USE (199 LF)
10' WIDE BUFFER TYPE "B" REQUIRED. (4 LT, 7 ST, 12 SHRUBS PER 100 LF)
8 LARGE TREES, 14 SMALL TREES, 24 SHRUBS
REQUEST 60% REDUCTION = 4" WIDE BUFFER
4 LARGE TREES, 6 SMALL TREES, 9 SHRUBS

NORTH INTERNAL PROPERTY LINE ADJACENT TO MULTI-FAMILY USE (100 LF)
20' WIDE BUFFER TYPE "C" REQUIRED. (4 LT, 8 ST, 30 SHRUBS PER 100 LF)
4 LARGE TREES, 8 SMALL TREES, 30 SHRUBS
REQUEST 25% REDUCTION = 15' WIDE BUFFER
3 LARGE TREES, 6 SMALL TREES, 23 SHRUBS
PROPOSED 3 LARGE TREES, 6 SMALL TREES, 30 SHRUBS

WEST INTERNAL PROPERTY LINE ADJACENT TO MULTI-FAMILY USE (178 LF)
20' WIDE BUFFER TYPE "C" REQUIRED. (4 LT, 8 ST, 36 SHRUBS PER 100 LF)
8 LARGE TREES, 15 SMALL TREES, 54 SHRUBS
REQUEST 60% REDUCTION = 8" WIDE BUFFER
4 LARGE TREES, 6 SMALL TREES, 22 SHRUBS
PROPOSED 4 LARGE TREES, 6 SMALL TREES, 42 SHRUBS
(NOTE THE 42 BUFFER SHRUBS ALSO SERVE AS THE PARKING LOT SCREENING)

SOUTH (DOBBINS DR) EXTERNAL PROPERTY LINE ADJACENT TO COLLECTOR (AREA NOT IN SIGHT TRIANGLE, SIDEWALK OR PARKING = 45 LF)
20' WIDE BUFFER TYPE "C" REQUIRED. (5 LT, 10 ST, 36 SHRUBS PER 100 LF)
3 LARGE TREES, 6 SMALL TREES, 17 SHRUBS
REQUEST 50% REDUCTION = 10' WIDE BUFFER
2 LARGE TREES, 3 SMALL TREES, 9 SHRUBS
PROPOSED 2 LARGE TREES, 3 SMALL TREES, 9 SHRUBS

PARKING LOT SHADING:

- 35% OF THE PARKING LOT IS REQUIRED TO BE SHADED AT MATURITY
- PARKING LOT IS 8,816 SF, REQUIRING 3,086 SF TO BE SHADED AT MATURITY.
- ONE LARGE TREE PER 2,000 SF OF PAVED SURFACE PLANTED WITHIN 10' OF THE PARKING LOT EDGE WILL SATISFY THIS REQUIREMENT
- NO PARKING SPACE SHALL BE FARTHER THAN 75' FROM A LARGE TREE
- TOTAL LARGE TREES PLANTED WITHIN 10' OF THE PARKING SURFACE = 12

TREE CANOPY COVERAGE:

- OFFICE LAND USE REQUIRES 30% MINIMUM CANOPY COVERAGE
- 30% OF PARCEL AREA (19,793 SF) IS 5,938 SF OF CANOPY COVERAGE REQUIRED
- PRESERVED CANOPY COVERAGE = 1,016 SF VIA THREE PRESERVED 18" PINES AT THE REAR OF THE PROPERTY.
- SITE IS DEFICIENT BY 5,938 SF - 1,016 SF OR 4,922 SF
- 1 REPLACEMENT TREE IS REQUIRED PER 500 SF OF DEFICIENCY = 10 REPLACEMENT TREES REQUIRED.
- THE TOTAL NUMBER OF PROPOSED LARGE TREES = 16

GENERAL LANDSCAPE NOTES:

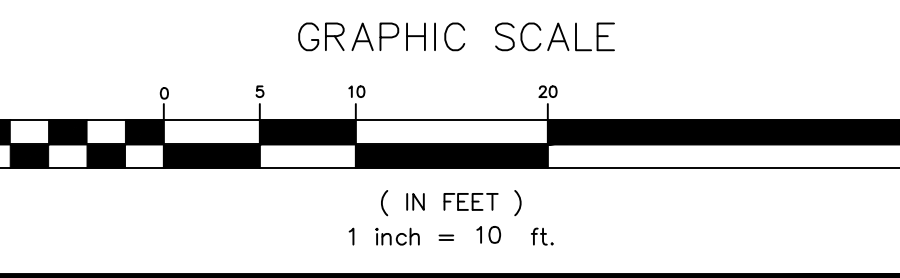
LARGE TREES SHALL BE PLANTED A MINIMUM OF:

- 3.5' FROM BACK OF CURB, EDGE OF PAVEMENT AND DRIVEWAYS
- 3.5' FROM SIDEWALKS AND OTHER PAVED PEDESTRIAN SURFACES
- 10' FROM ALL BUILDINGS
- 15' FROM STREET LIGHTS, UTILITY POLES AND ABOVE GROUND UTILITY WIRES
- 10' FROM UTILITY VAULTS AND GROUND LEVEL UTILITY STRUCTURES.

SMALL TREES SHALL BE PLANTED A MINIMUM OF:

- 3.5' FROM BACK OF CURB, EDGE OF PAVEMENT AND DRIVEWAYS
- 2.5' FROM SIDEWALKS AND OTHER PAVED PEDESTRIAN SURFACES
- 5' FROM ALL BUILDINGS
- 10' FROM STREET LIGHTS, UTILITY POLES
- 5' FROM ALL UNDERGROUND UTILITIES
- 5' FROM UTILITY VAULTS AND GROUND LEVEL UTILITY STRUCTURES.

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1751 DOBBINS DRIVE
1751 DOBBINS DRIVE, CHAPEL HILL, NC 27514
LANDSCAPE & PLANTING
PLAN

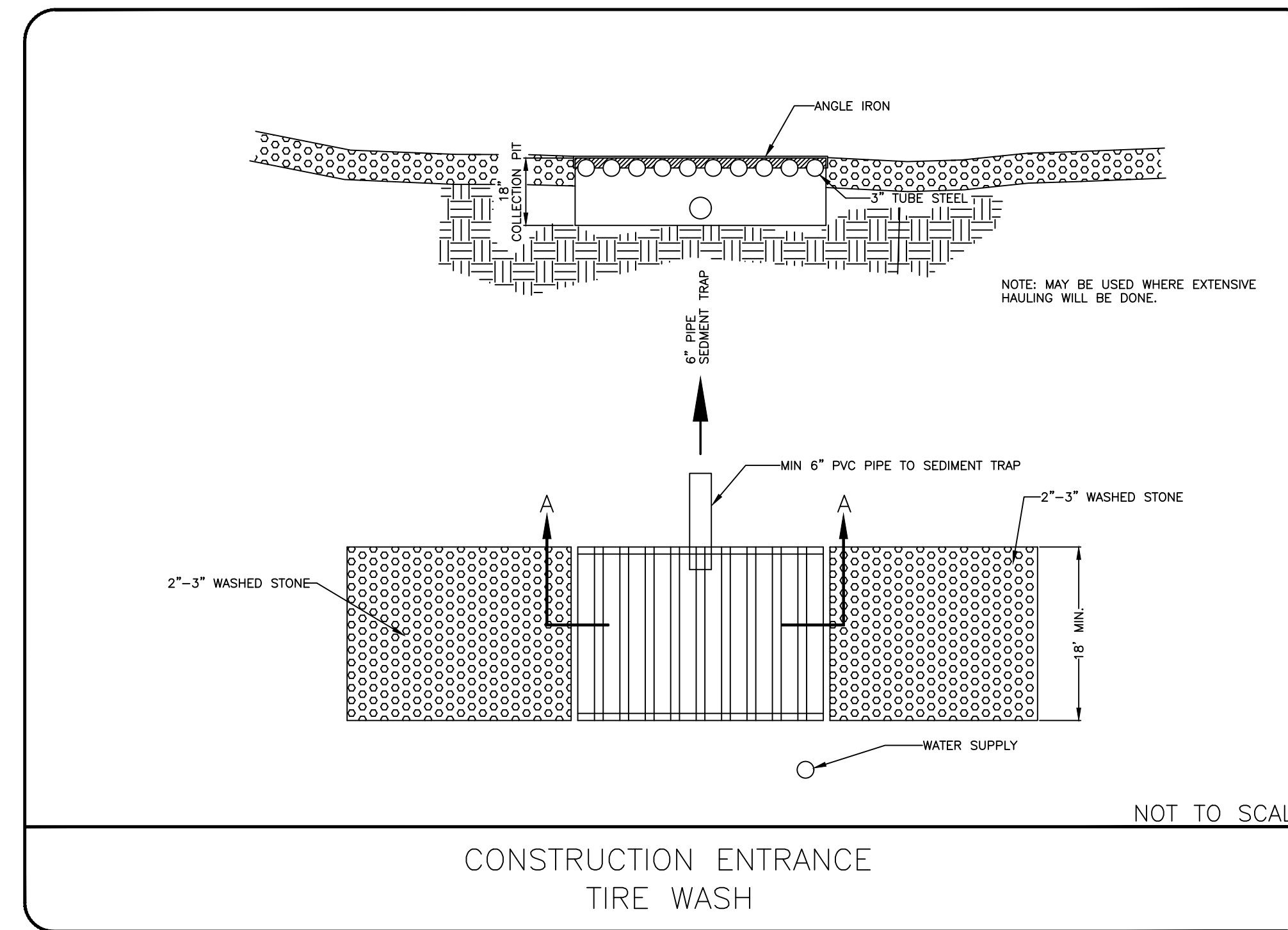
REV.	DATE	DESCRIPTION	BY
1	09/03/2019	PER CITY REVIEW COMMENTS CPK	

DATE: JULY 24, 2019
HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: N/A
PROJECT MANAGER: CPK
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PROJECT NO.: 19-211
DRAWING NAME: 19-011 REVIEW

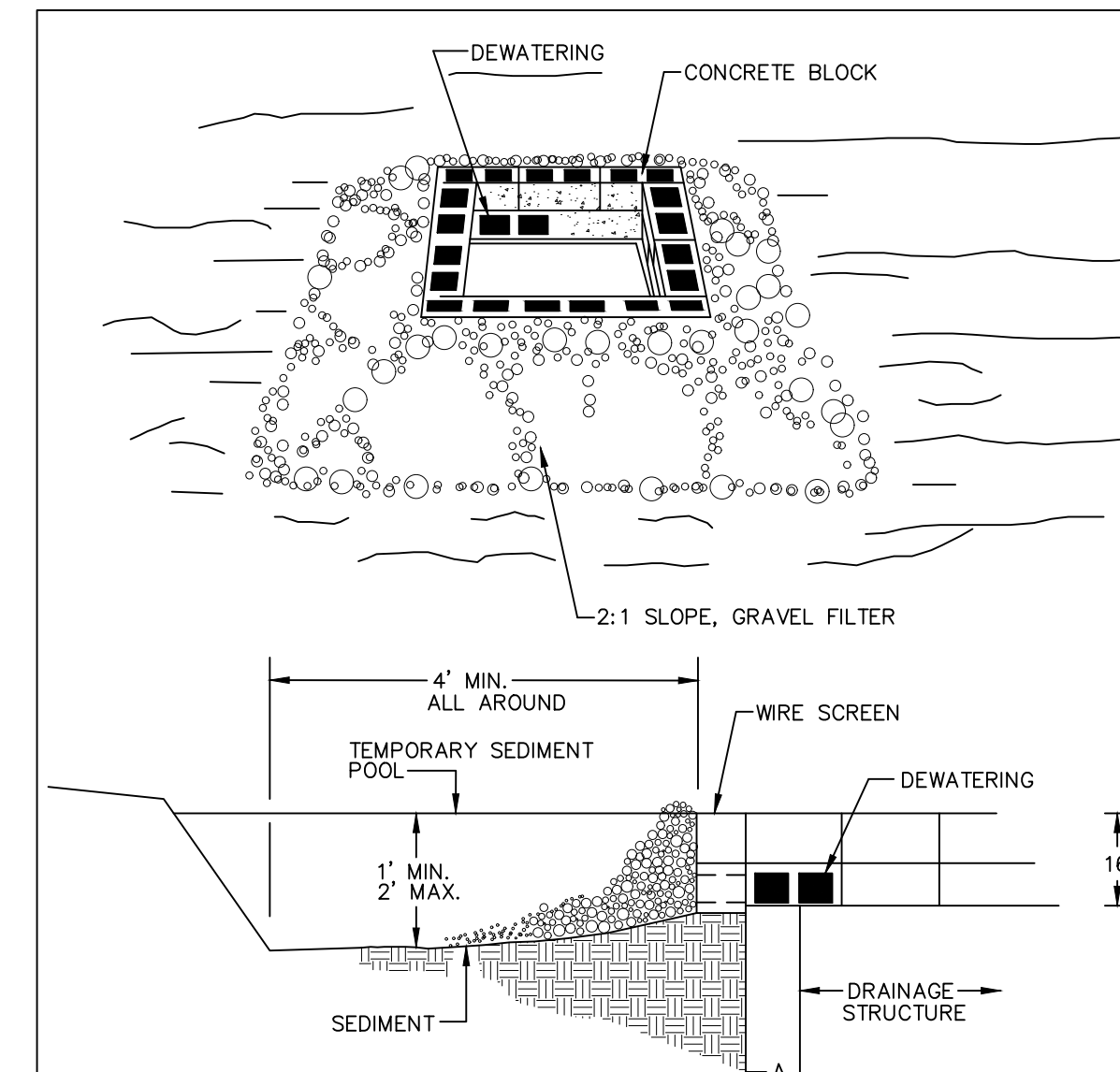
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SHEET NO.
C7.0
PRELIMINARY SITE PLAN



CONSTRUCTION ENTRANCE
TIRE WASH



CONSTRUCTION SPECIFICATIONS

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 X 4 WOOD STUDS THROUGH BLOCK OPENINGS.

2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN PLACE.

3. USE CLEAN GRAVEL, 3/4- TO 1/2-INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. DOT #57 WASHED STONE IS RECOMMENDED.

4. IF ONLY STONE AND GRAVEL ARE USED, KEEP THE SLOPE TOWARD THE INLET NO STEEPER THAN 3:1. LEAVE A MINIMUM 1-FT WIDE LEVEL STONE AREA BETWEEN THE STRUCTURE AND AROUND THE INLET TO PREVENT GRAVEL FROM ENTERING INLET. ON THE SLOPE TOWARD THE INLET, USE STONE 3 INCHES IN DIAMETER OR LARGER. ON THE SLOPE AWAY FROM THE INLET USE 1/2 - 3/4-INCH GRAVEL (NODOT #57 WASHED STONE) AT A MINIMUM THICKNESS OF 1 FT.

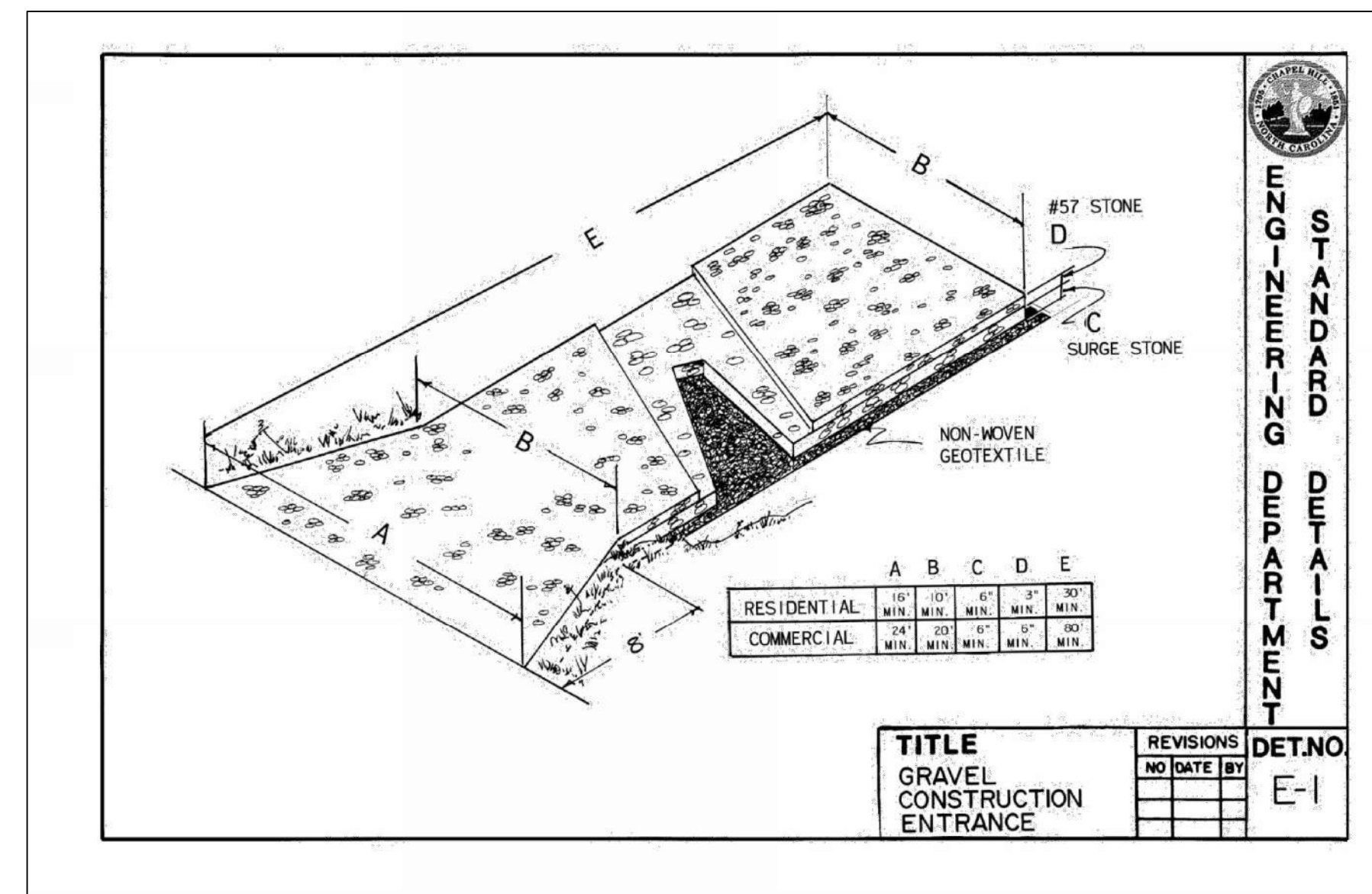
MAINTENANCE

INSPECT THE BARRIER AFTER EACH RAIN AND MAKE REPAIRS AS NEEDED.

REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS.

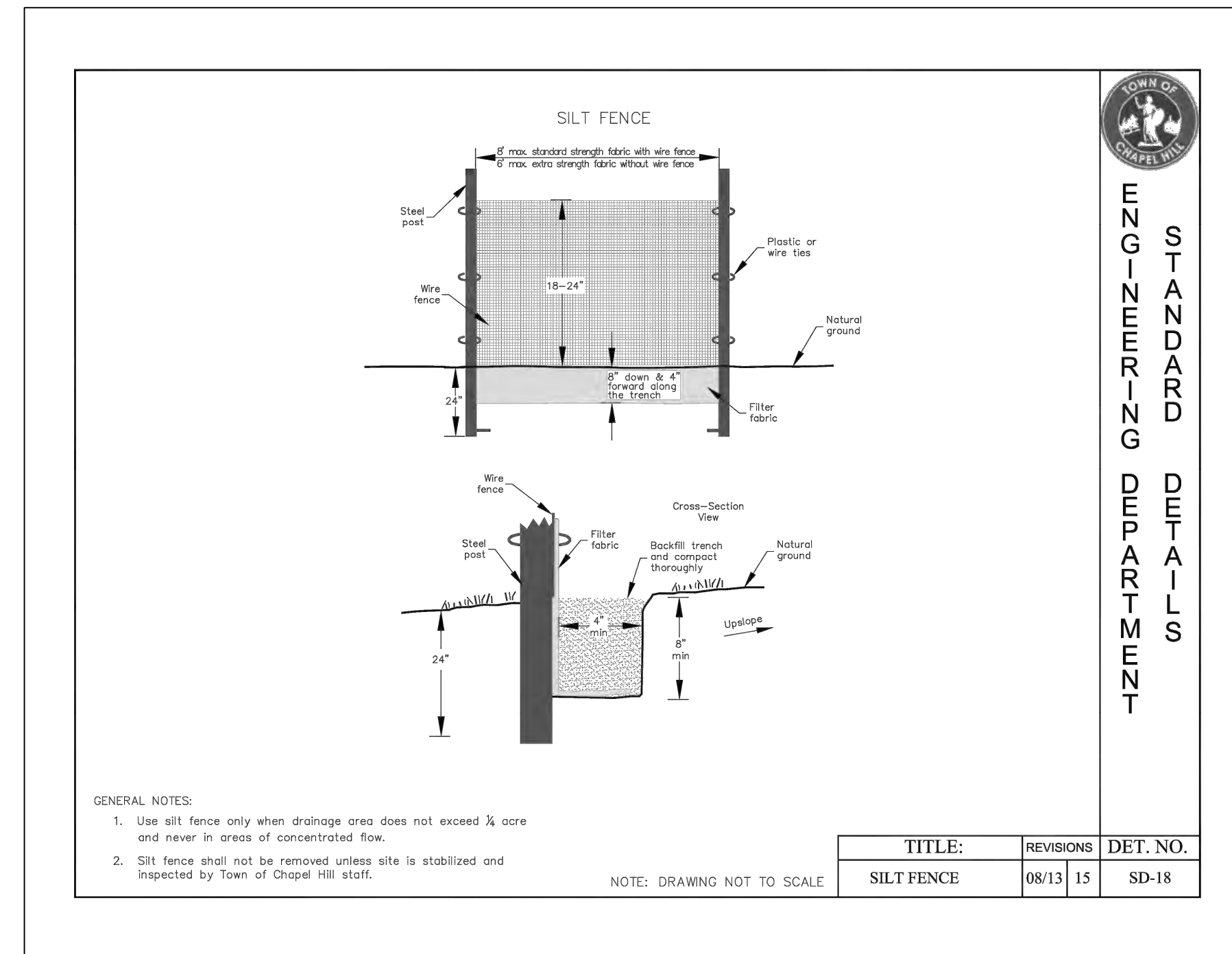
WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET.

**BLOCK AND GRAVEL
INLET PROTECTION**
NTS



TITLE
GRAVEL
CONSTRUCTION
ENTRANCE

REVISIONS	NO	DATE	BY	DET. NO.
				E-1

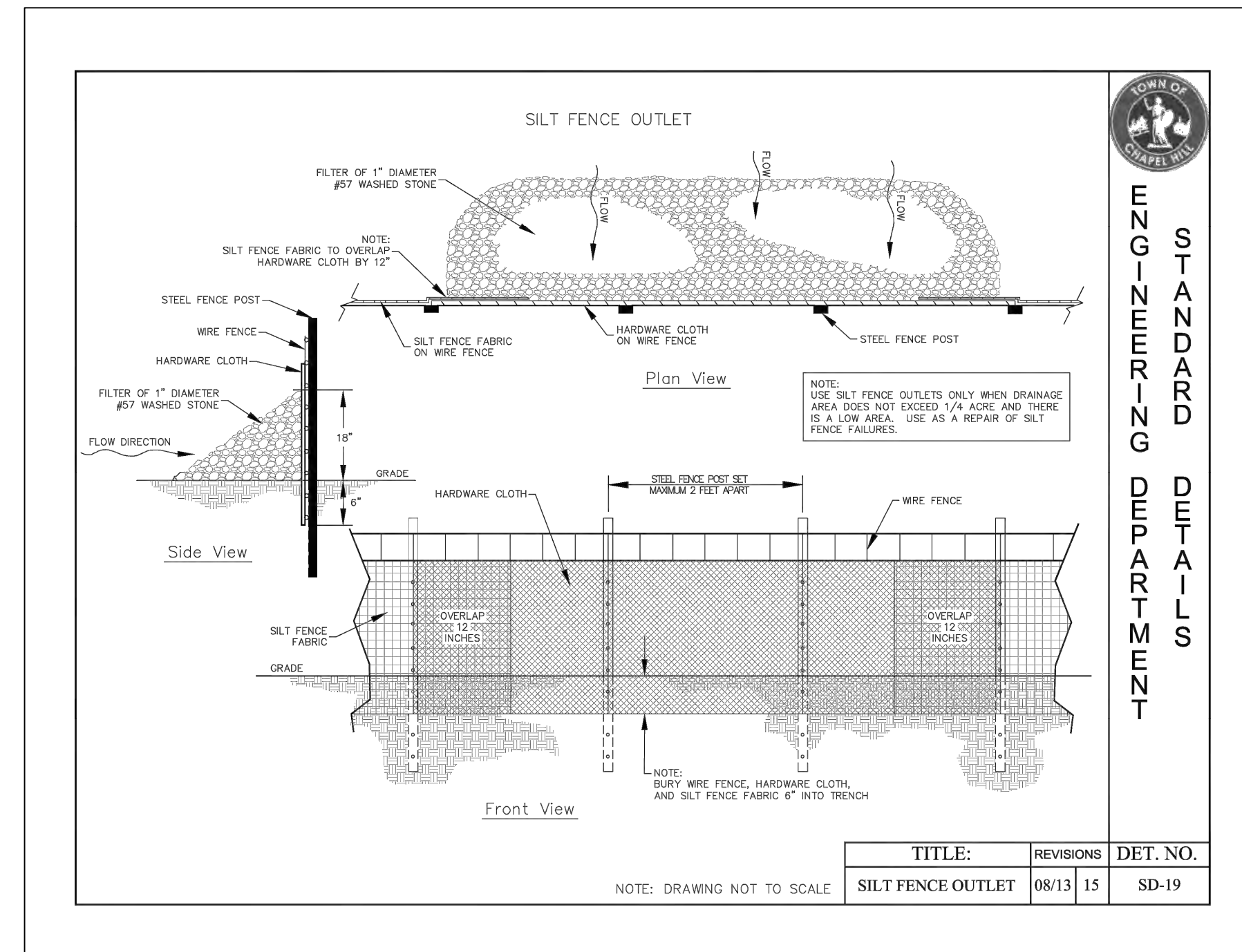


GENERAL NOTES:

1. Use silt fence only when drainage area does not exceed 1/4 acre and never in areas of concentrated flow.
2. Silt fence shall not be removed unless site is stabilized and inspected by Town of Chapel Hill staff.

NOTE: DRAWING NOT TO SCALE

TITLE	REVISIONS	DET. NO.
SILT FENCE	08/13 15	SD-18



NOTE: DRAWING NOT TO SCALE

TITLE	REVISIONS	DET. NO.
SILT FENCE OUTLET	08/13 15	SD-19

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PHIL KOCH - NCPE #22634

1751 DOBBINS DRIVE
 1751 DOBBINS DRIVE, CHAPEL HILL, NC 27514
EROSION & SEDIMENT CONTROL DETAILS

REV.	DATE	DESCRIPTION	BY
1	09/03/2019	PER CITY REVIEW COMMENTS CPK	

DATE: JULY 24, 2019
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: N/A
 PROJECT MANAGER: CPK
 DRAWN BY: CPK
 PROJECT NO.: 19-011
 DRAWING NAME: 19-011 REVIEW

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SHEET NO.
D1.0
 PRELIMINARY SITE PLAN

STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
#10 STUB A1	317.55	314.22

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
30" RISER B3	322.50	314.22
30" RISER C2	320.00	314.22

ASSEMBLY
SCALE: 1" = 10'
PIPE STORAGE: 1,270 CF
LOADING: H20
PIPE INV. = 314.22±

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE.
- ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD (EOR) PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A886.
- ALL RISERS AND STUBS ARE 20' x 20' CORRUGATION AND 18 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE AS REQUIRED, BY CONTRACTOR.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL ACCESS CASTINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT SUPPLIED BY CONTECH.

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (5) PAGES INCLUDING THE FOLLOWING:

- PIPE STORAGE = 1,270 CF
- MAINLINE PIPE GAGE = 14
- WALL TYPE = SOLID
- DIAMETER = 48"
- FINISH = ALT2
- CORRUGATION = 2 2/3x12

CUSTOMER _____ DATE _____

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7337 Ridge Road, Hanover, MD 21076
866-740-3319 410-799-8500 866-379-6111 FAX

CONTECH
CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

48"Ø UNDERGROUND DETENTION SYSTEM - 627606-020
1751 DOBBINS DRIVE
CHAPEL HILL, NC
SITE DESIGNATION: UDS

PROJECT NO.	627606	REV. NO.	020	DATE	8/23/2019
DESIGNED BY	JMR	DRAWN BY	JMR	CHECKED BY	APPROVED BY
SHEET NO.	P1	OF	5		

PLAN VIEW
CARTRIDGES AND FLOW KIT NOT SHOWN

SECTION A-A

OUTLET DETAIL
(ILLUSTRATION ONLY)

MATERIAL LIST (PROVIDED BY CONTECH)

COUNT	DESCRIPTION	INSTALLED BY
2	2" PERLITE CARTRIDGE	CONTECH
3	3" VOLUME GPM RESTRICTOR DISK (PRP)	CONTECH
1	2" PVC SLIP PLUG	CONTECH
1	40A FLOWKIT	CONTECH
1	5F ACTIVATION DISK	CONTECH
1	SEALED OUTLET RISER	CONTECH
4	STEPS, P10CTS, LANE LADDER, OR EQUIV.	CONTECH
1	SEALANT FOR JOINTS (BY PRECASTER)	CONTRACTOR
1	30"Ø x 4" FRAME & COVER, ENH4600484, OR EQUIV.	CONTRACTOR

PERFORMANCE SPECIFICATION
FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON-ACTUATED, RADIAL FLOW, AND SELF-CLEANING. RADIAL MEDIA DEPTH SHALL BE 7 INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
SPECIFIC FLOW RATE SHALL BE 1 GPM/SF (MAXIMUM). SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM) DIVIDED BY THE MEDIA SURFACE CONTACT AREA (SF). MEDIA VOLUMETRIC FLOW RATE SHALL BE 6 GPM/CF OF MEDIA (MAXIMUM).

GENERAL NOTES

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
- STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 5' AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M508 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
- STORMFILTER STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES

- ANY SUBBASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE.
- CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET PIPES. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- CONTRACTOR TO PROVIDE AND INSTALL CONNECTOR TO THE OUTLET RISER STUB. STORMFILTER EQUIPPED WITH A DUAL DIAMETER OUTLET STUB. IF OUTLET PIPE IS LARGER THAN 8 INCHES, CONTRACTOR TO REMOVE THE 8 INCH OUTLET STUB AT MOLDED IN CUT LINE. COUPLING BY FERROD OR EQUAL AND PROVIDED BY CONTRACTOR.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
- CONTRACTOR TO INSTALL SUPPLIED PLUG IN CONSTRUCTION FLOW BYPASS WHEN SYSTEM IS BROUGHT ON LINE (PRESSURE FIT ONLY, DO NOT GLUE).

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 5000 LBS. OF 3 PIECES
BASE SECTION SHIPPED WITH CARTRIDGES INSTALLED
MAX FOOTPRINT = 84" x 10"

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CONTECH
CMP DETENTION SYSTEMS
CONTECH PROPOSAL DRAWING

48"Ø UNDERGROUND DETENTION SYSTEM - 627606-020
1751 DOBBINS DRIVE
CHAPEL HILL, NC
SITE DESIGNATION: UDS

PROJECT NO.	627606	REV. NO.	020	DATE	8/23/2019
DESIGNED BY	JMR	DRAWN BY	JMR	CHECKED BY	APPROVED BY
SHEET NO.	P1	OF	5		

CONTECH PROPOSAL DRAWING

KNB930 LAYOUT 1A 8/14/KNSSMV

CONTECH PROPOSAL DRAWING

SEQUENCE NO. 10

1 OF 1

TYPICAL SECTION VIEW
NOT TO SCALE

TYPICAL NORTH CAROLINA BACKFILL DETAIL
NOT TO SCALE

BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

- MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE MINIMUM TRENCH WIDTH (12.6.6.1):
PIPE ≤ 12" D = 18"
PIPE = 12" D = 12"
- MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
PIPE ≤ 24" D = 3'0"
PIPE 24" - 144" D = 4'0"
PIPE > 144" D = 10'0"
- THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).
- BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE FROM SPRINGLINE OF PIPE TO 4" BELOW BOTTOM OF PIPE.
- CORRUGATED STEEL PIPE (CSP / HEL-COR).
- HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELLED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).
- GEOTEXTILE SHALL BE USED IF REQUIRED BY ENGINEER TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES.
- BACKFILL PLACED ABOVE SPRINGLINE TO MEET AASHTO 145, A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (T 99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).
- INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.
- TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).
- FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

NOTES:

- FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA/2 BUT NO LESS THAN 12" OR 36" FOR PIPE DIAMETERS 72" AND LARGER. CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.1-1).

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SITE DESIGNATION: UDS

PROJECT NO.	627606	REV. NO.	020	DATE	8/23/2019
DESIGNED BY	JMR	DRAWN BY	JMR	CHECKED BY	APPROVED BY
SHEET NO.	P2	OF	5		

CONTECH PROPOSAL DRAWING

SEQUENCE NO. 10

1 OF 1

CONTECH
ENGINEERED SOLUTIONS

Design Engineer: LRS
Date: 8/23/2019

Blue Cells = Input
Black Cells = Calculation

Site Information

Project Name: 1751 Dobbins Road
Project State: North Carolina
Project Location: Chapel Hill

Drainage Area, Ad: 0.34 ac
Impervious Area, Ai: 0.30 ac
Previous Area, Ap: 0.04 ac
% Impervious: 88%
Runoff Coefficient, Rv: 0.84 = 0.05 + 0.9(Ai/Ad)

Water Quality Volume Calculations

Design storm rainfall depth, Rd: 1.0 in
Water quality volume, WQV: 1041.8 ft³ = Ad * Rv * Rd * (43560/12)

Storage Component Calculations

Capture 75% of WQV: 781.4 ft³ = 0.75 * WQV
Pretreatment credit (estimated or calculated), %pre: 30%

Mass loading calculations

Mean Annual Rainfall, P: 46 in
Agency required % removal: 85%
Percent Runoff Capture (% capture): 90%
Mean Annual Runoff, V_i: 43,131 ft³ = P * Ad * Rv * (43560/12) * %capture
Event Mean Concentration of Pollutant, EMC: 70.0 mg/l (Suggestion: Use 60 for residential, 70 for Commercial, 100 for Industrial)
Annual Mass Load, M_{total}: 188.37 lbs = EMC * V_i * (28.3) * (0.000001) * (2.2046)

Filter System

Filteration brand: StormFilter
Cartridge height: 27 in

Cartridge Quantity Calculation

Mass removed by pretreatment system, M_{pre}: 57 lbs = Mtotal * %removal
Mass load to filters after pretreatment, M_{mass1}: 132 lbs = Mtotal - Mpre
Estimate the required filter efficiency, E_{filter}: 79% = 1 + (%removal - 1) / (1 - %pre)
Mass to be captured by filters, M_{filter}: 104 lbs = Mmass1 * Efilter
Maximum Cartridge Flow rate, Q_{car1}: 7.5 gpm = q * (7.5 ft²/cartridge)
Mass load per cartridge, M_{car1} (lbs): 54 lbs = lookup mass load per cartridge
Number of Cartridges required, N_{mass}: 2 = ROUNDUP(Mfilter/Mcar1, 0)
Maximum Treatment Capacity: 0.03 = Nmass * (Qcar1/449)

SUMMARY

Maximum Treatment Flow Rate, cfs	0.03	Target Pollutant:	TSS
Cartridge Flow Rate, gpm	7.5	Media:	Perlite
Number of Cartridges	2		

REV. DATE DESCRIPTION PER CITY REVIEW COMMENTS CPK

1	09/03/2019		
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DATE: JULY 24, 2019

HORIZONTAL SCALE: 1" = 10'

VERTICAL SCALE: NA

PROJECT MANAGER: CPK

DRAWN BY: CPK

PROJECT NO.: 19-211

DRAWING NAME: 19-011 REVIEW

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SHEET NO. D2.0 PRELIMINARY SITE PLAN

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ECE
INCORPORATED

PHIL KOCH
P.E.
REGISTERED PROFESSIONAL ENGINEER
STATE OF NORTH CAROLINA
EXPIRES 07/31/2024

PHIL KOCH - NCPE #22634

1751 DOBBINS DRIVE
CHAPEL HILL, NC 27514

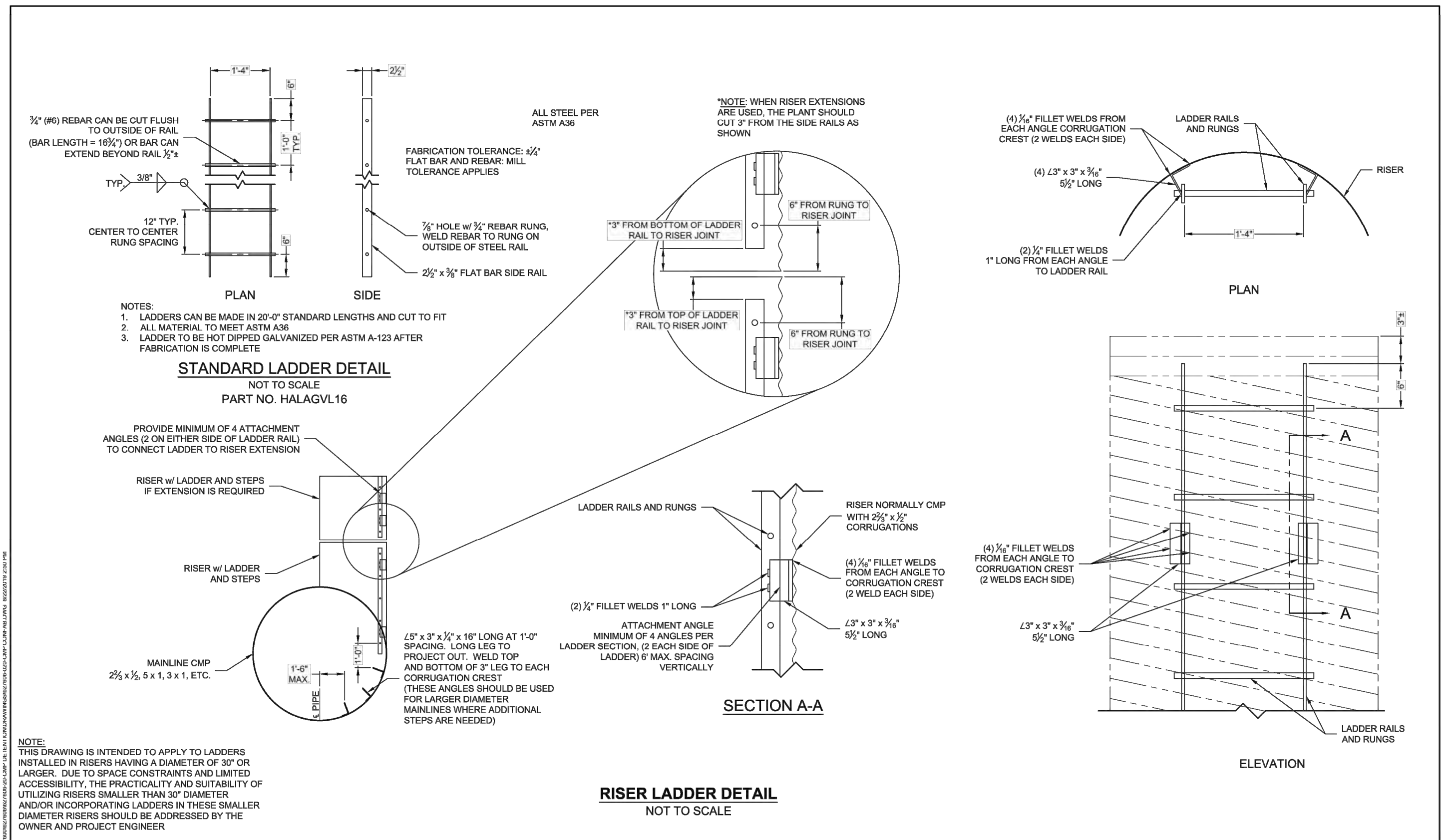
STORMFILTER SYSTEM DETAILS



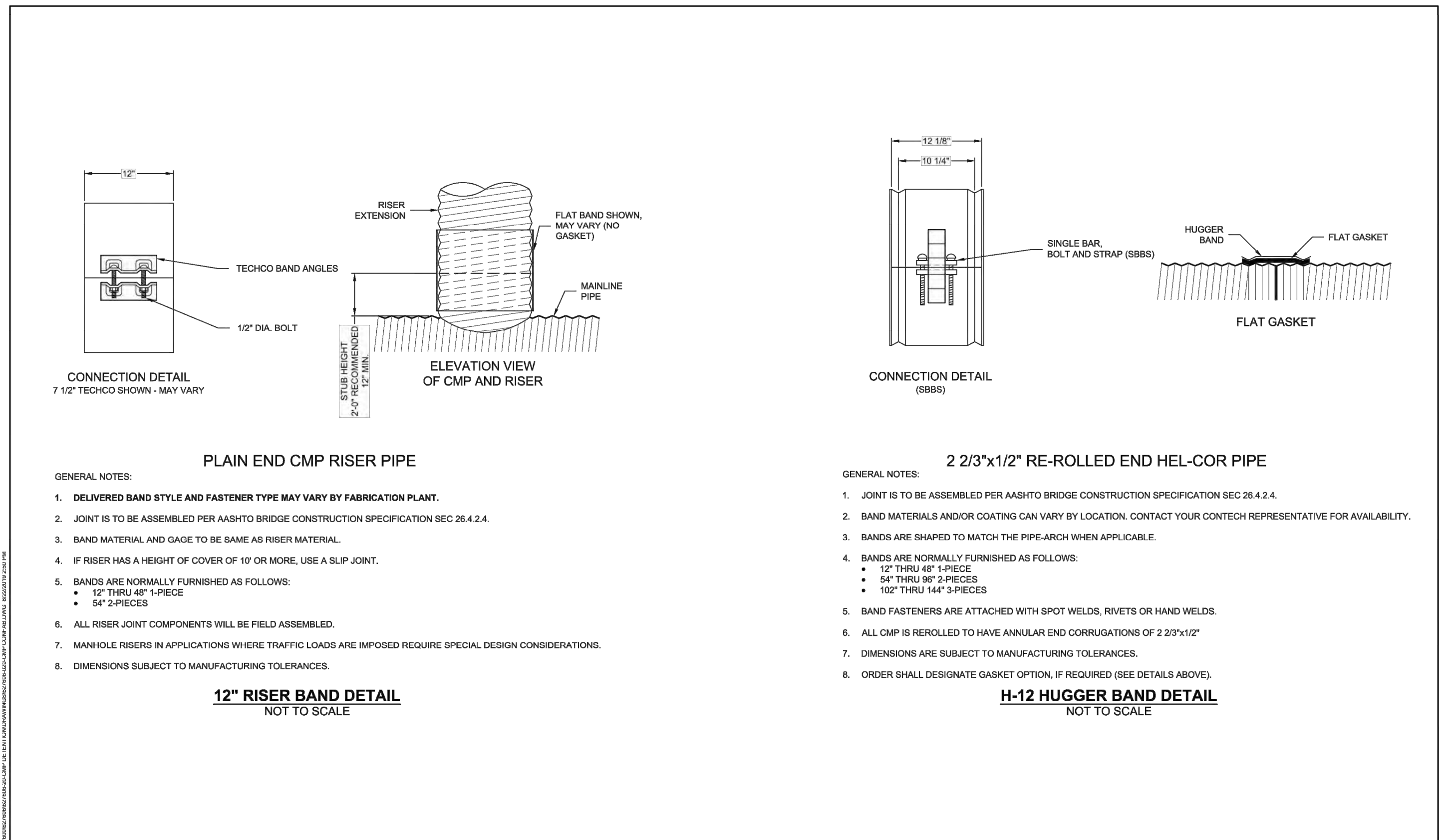
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1	09/03/2019			

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 VERTICAL SCALE: N/A
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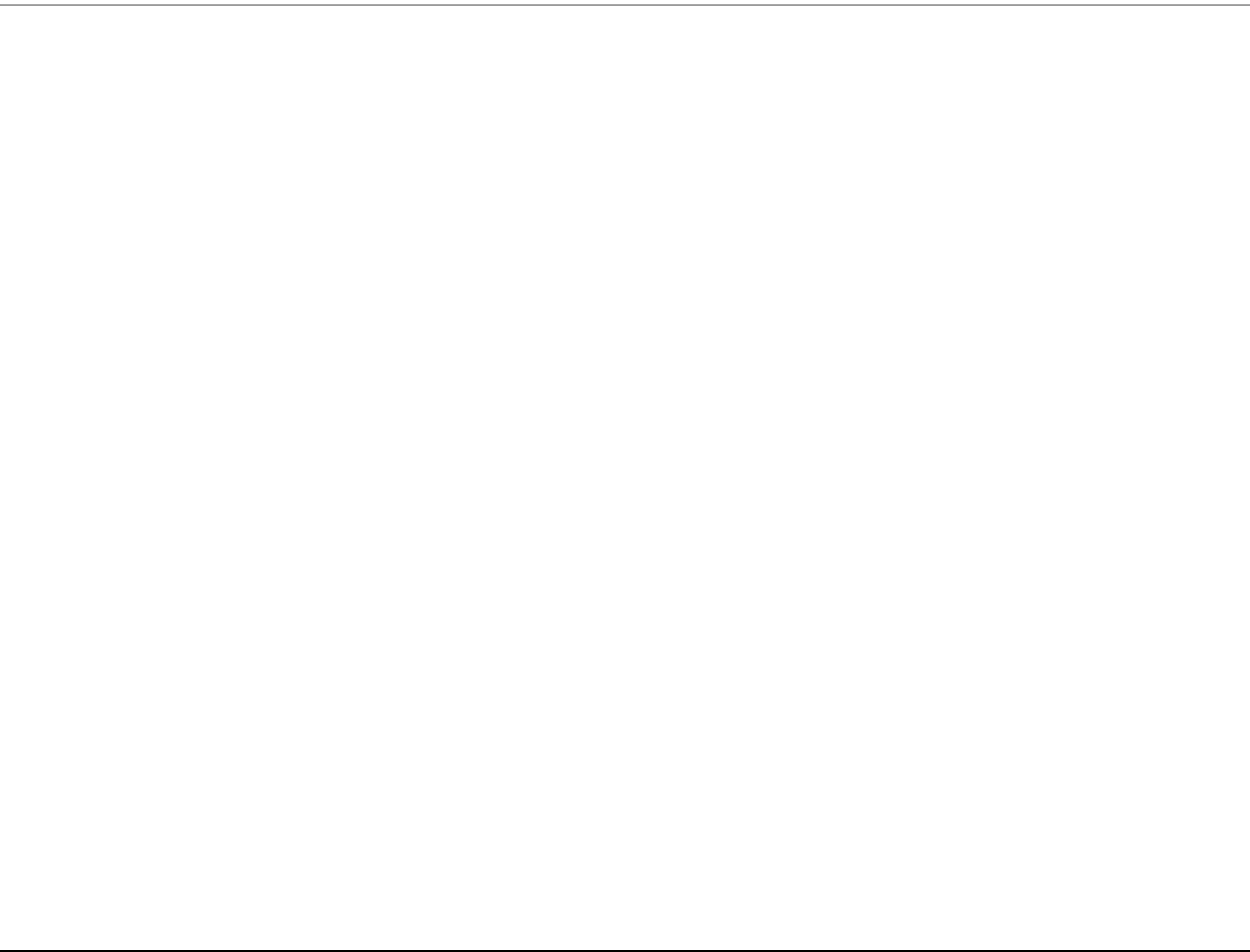
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SHEET NO. D2.1
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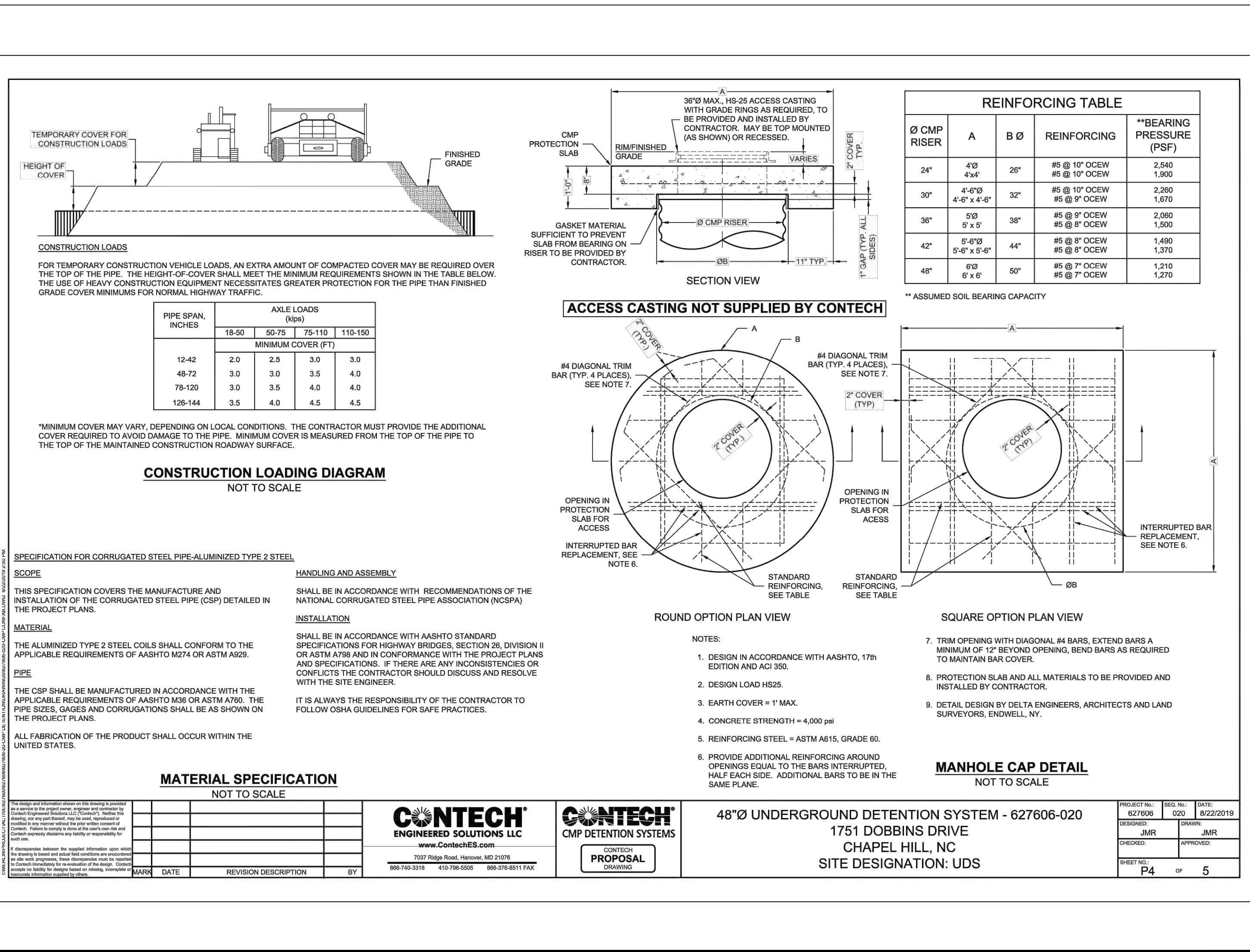
PROJECT NO.	627606	ISS. NO.	020	DATE	8/22/2019
DESIGNED BY	JMR	DRAWN BY	JMR	CHECKED BY	APPROVED BY
SHEET NO.	P5	OF	5		



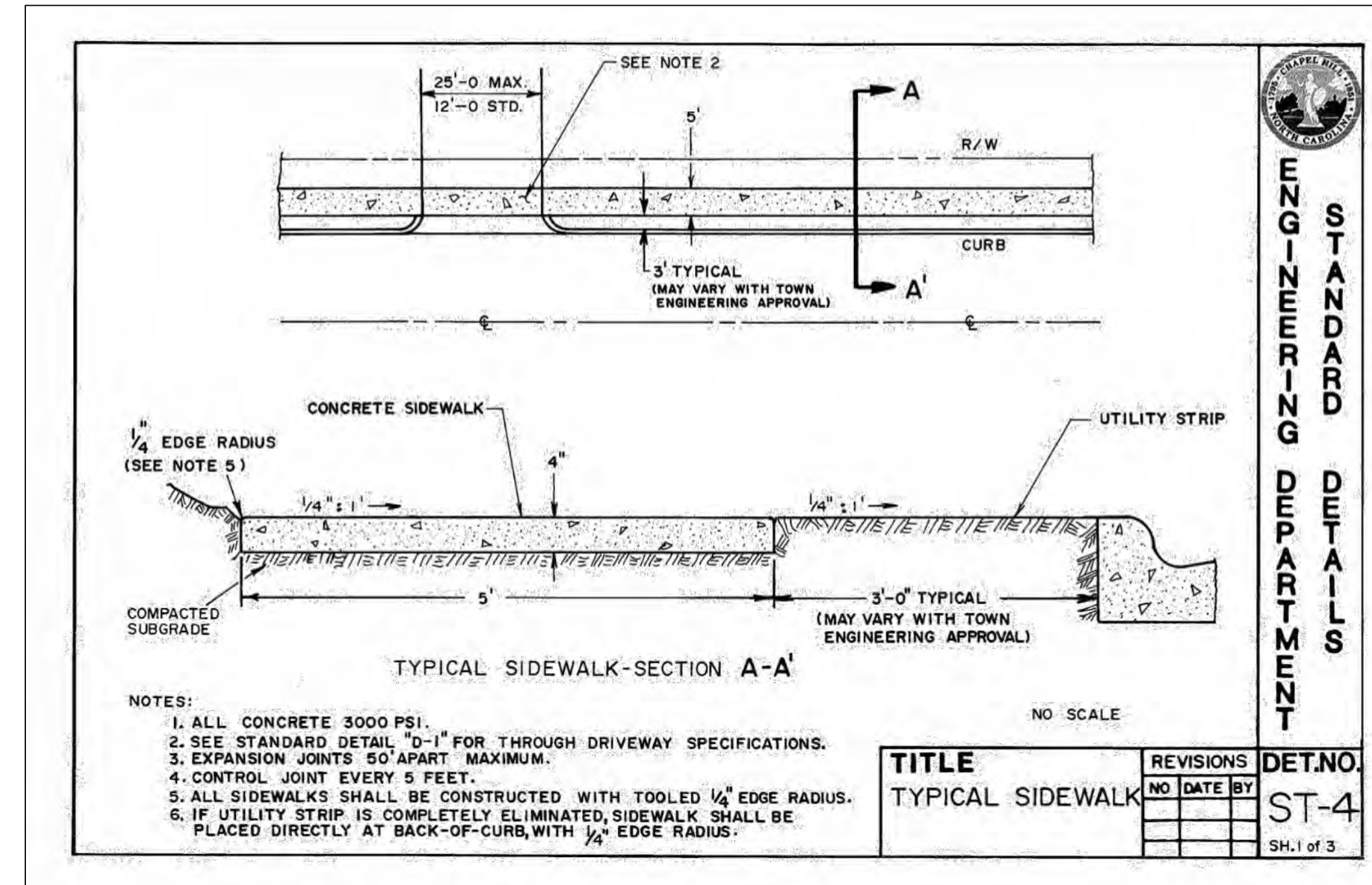
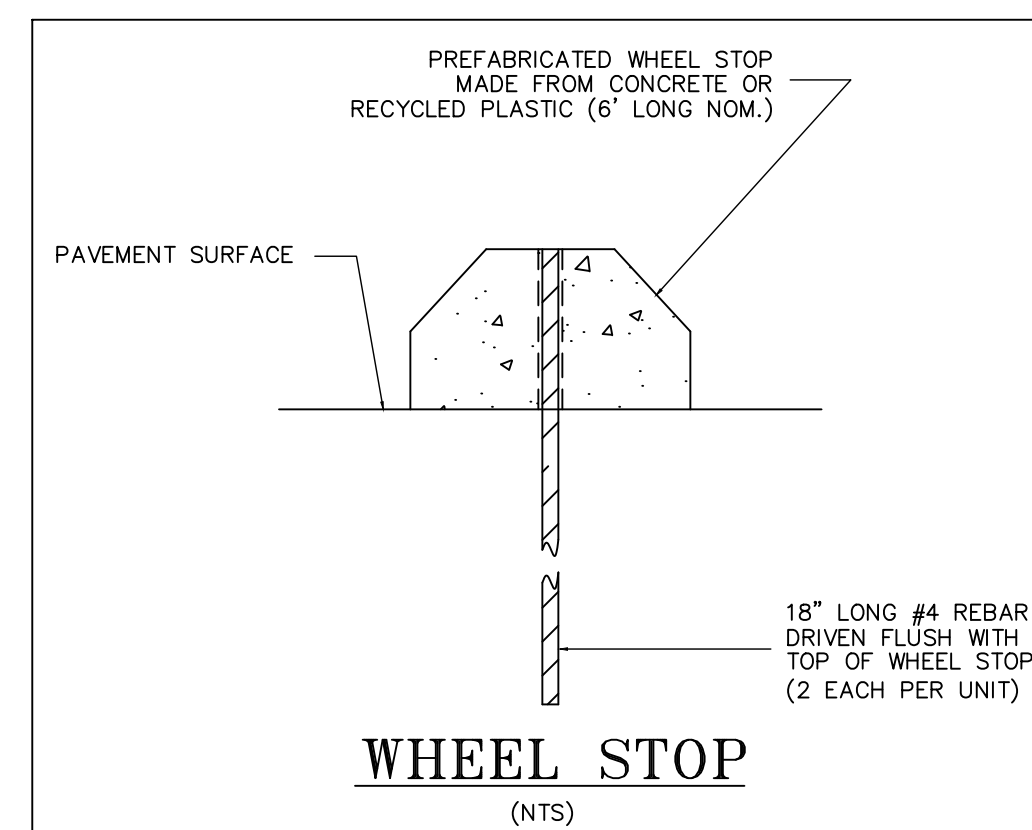
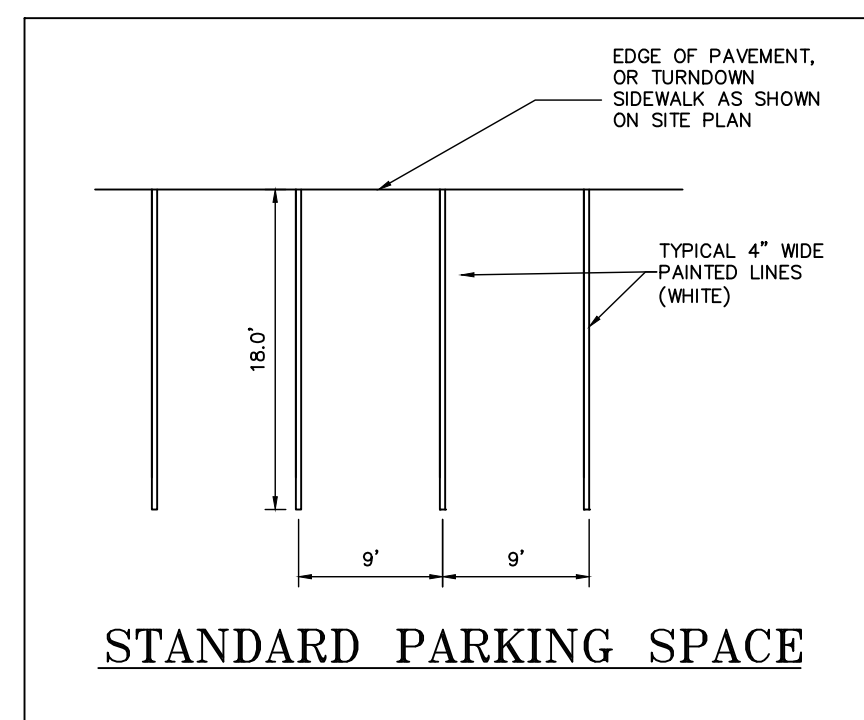
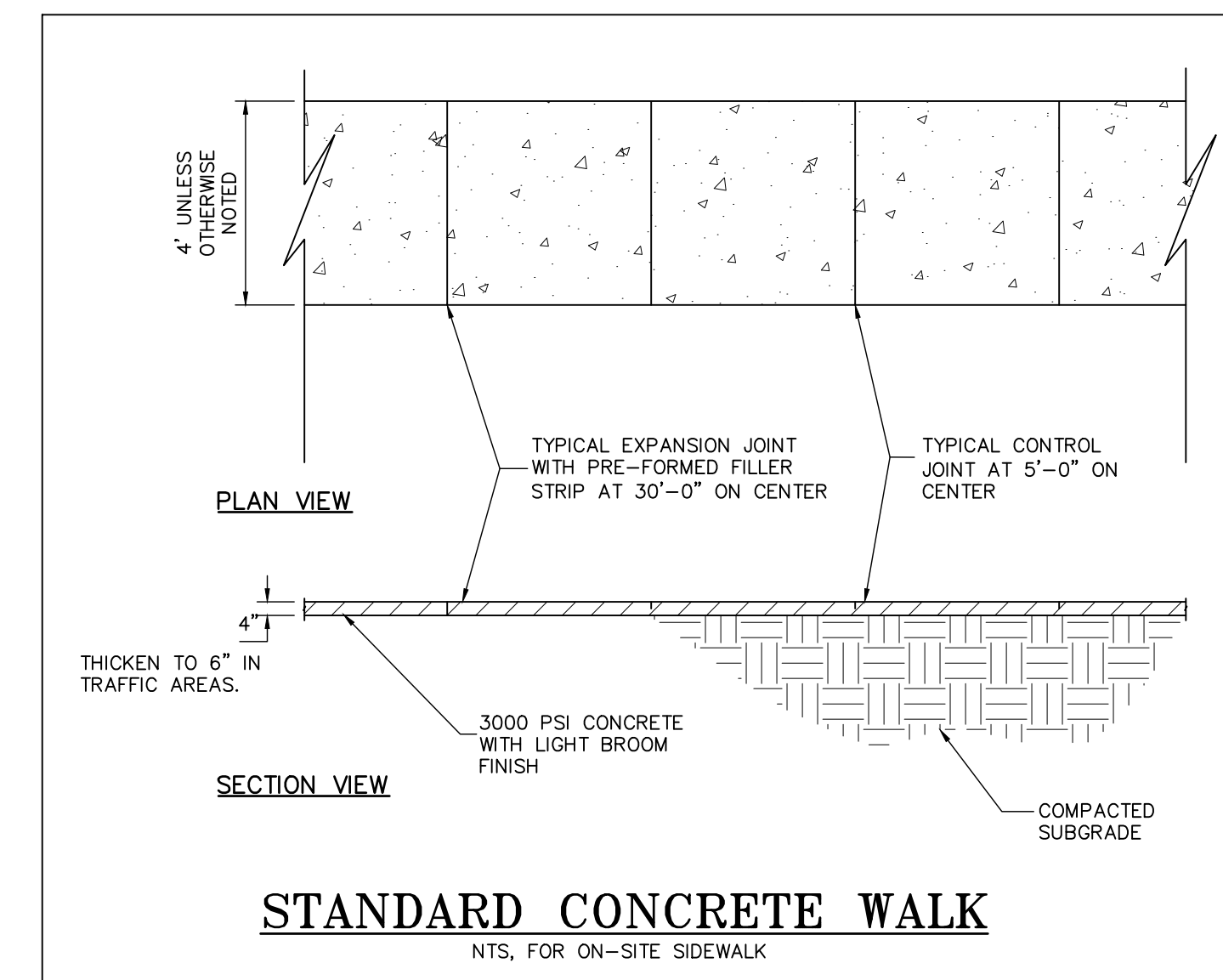
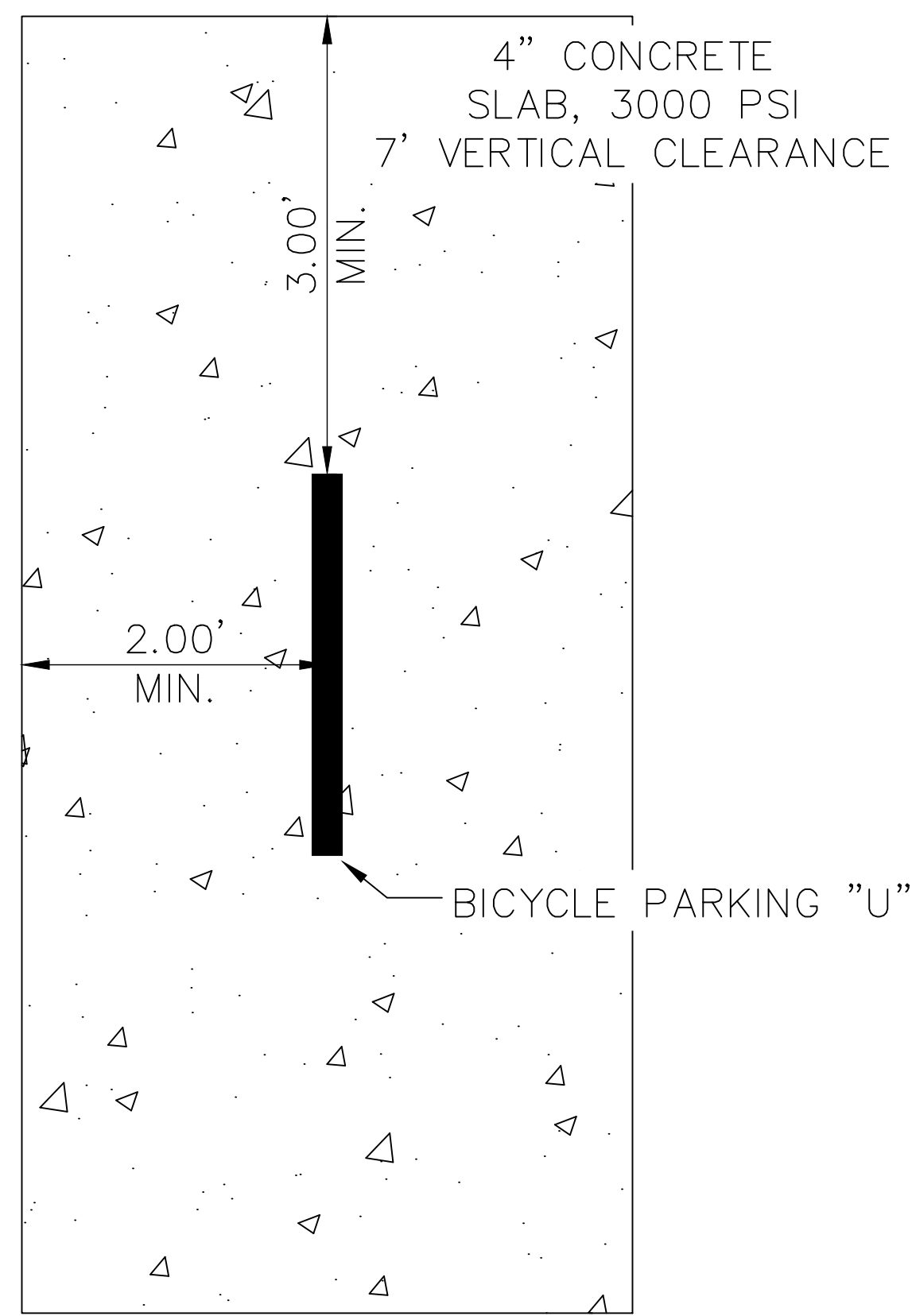
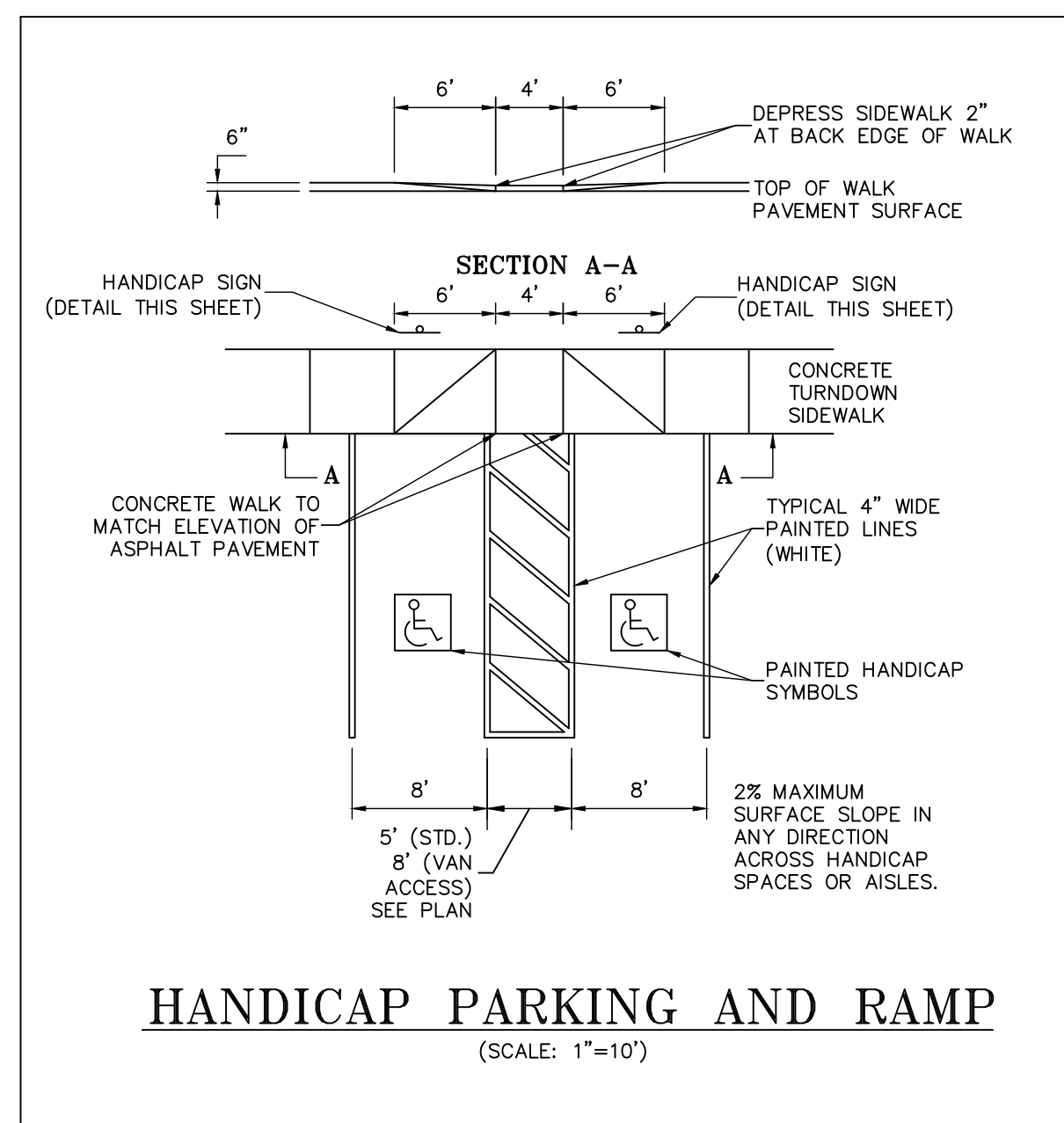
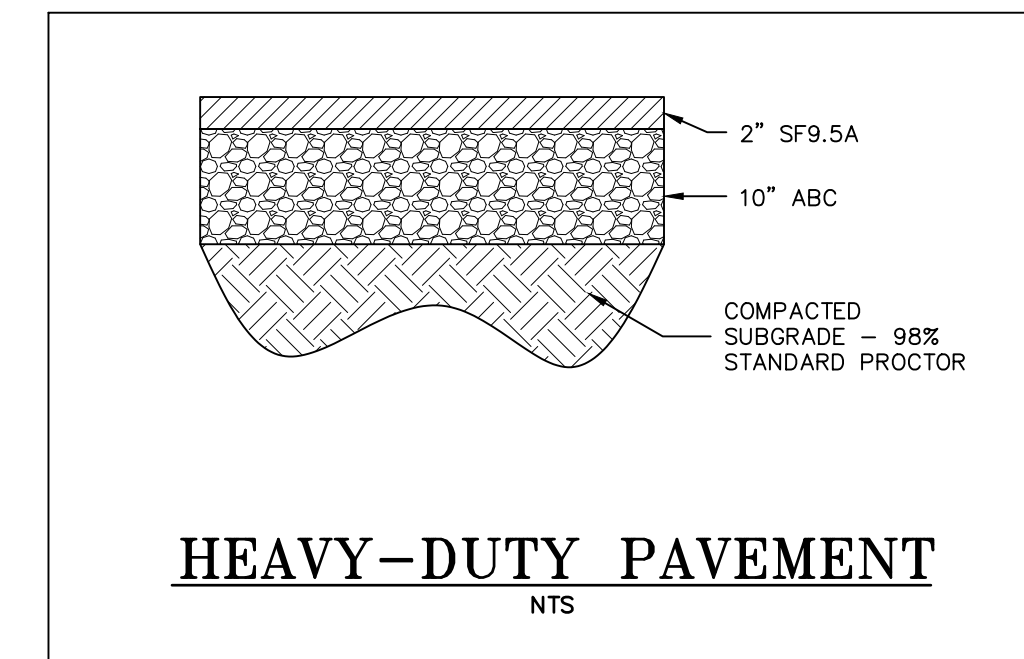
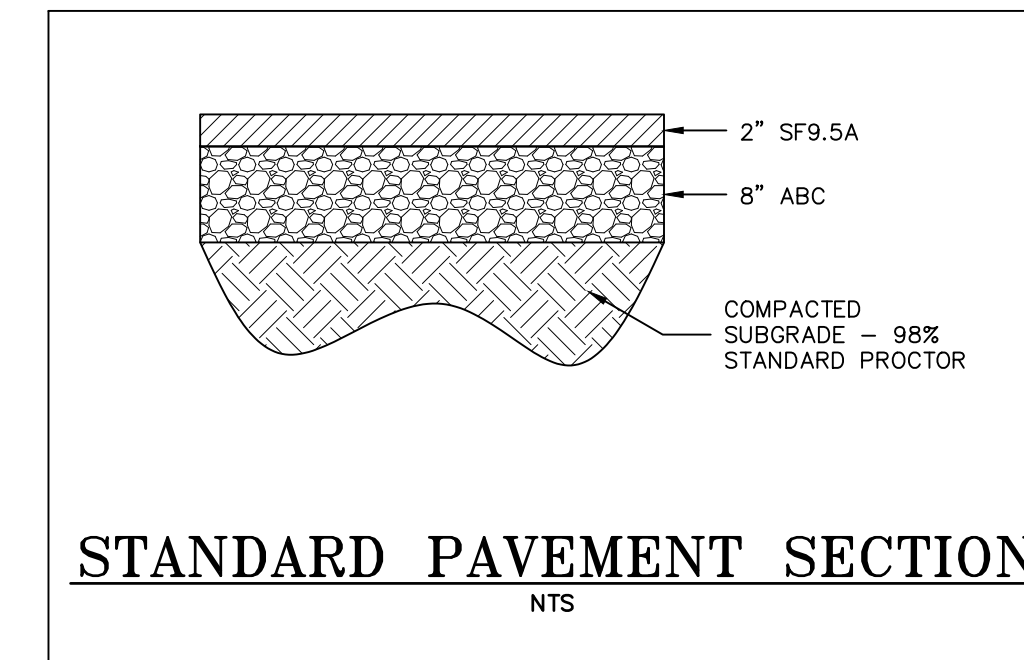
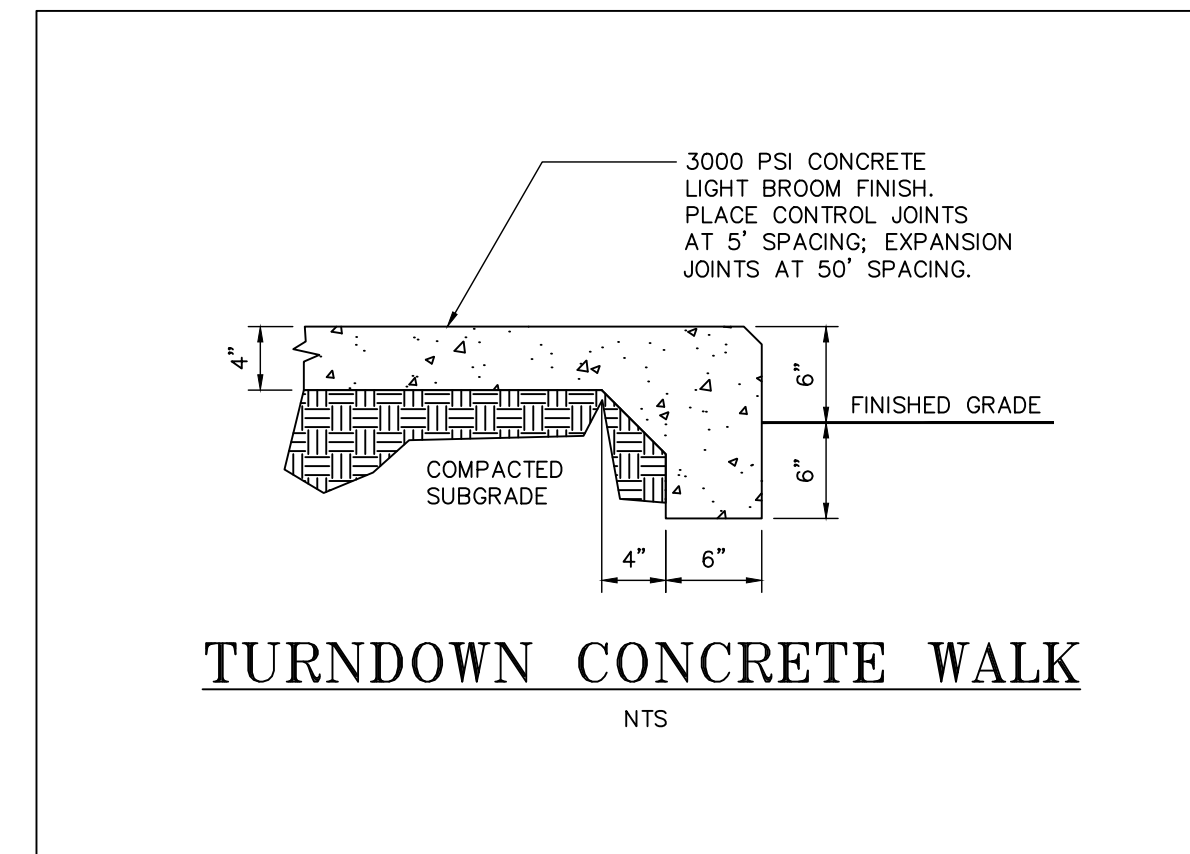
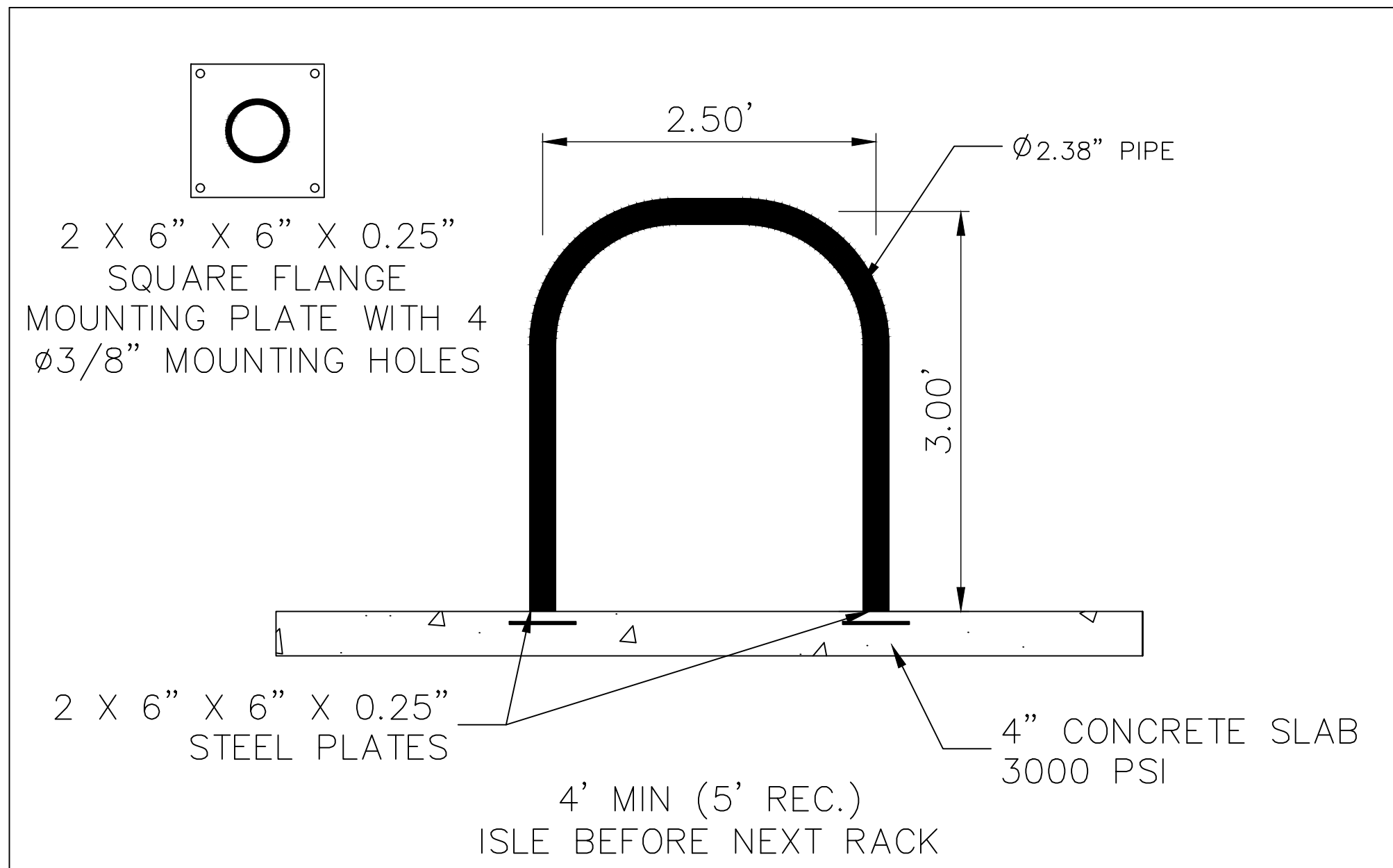
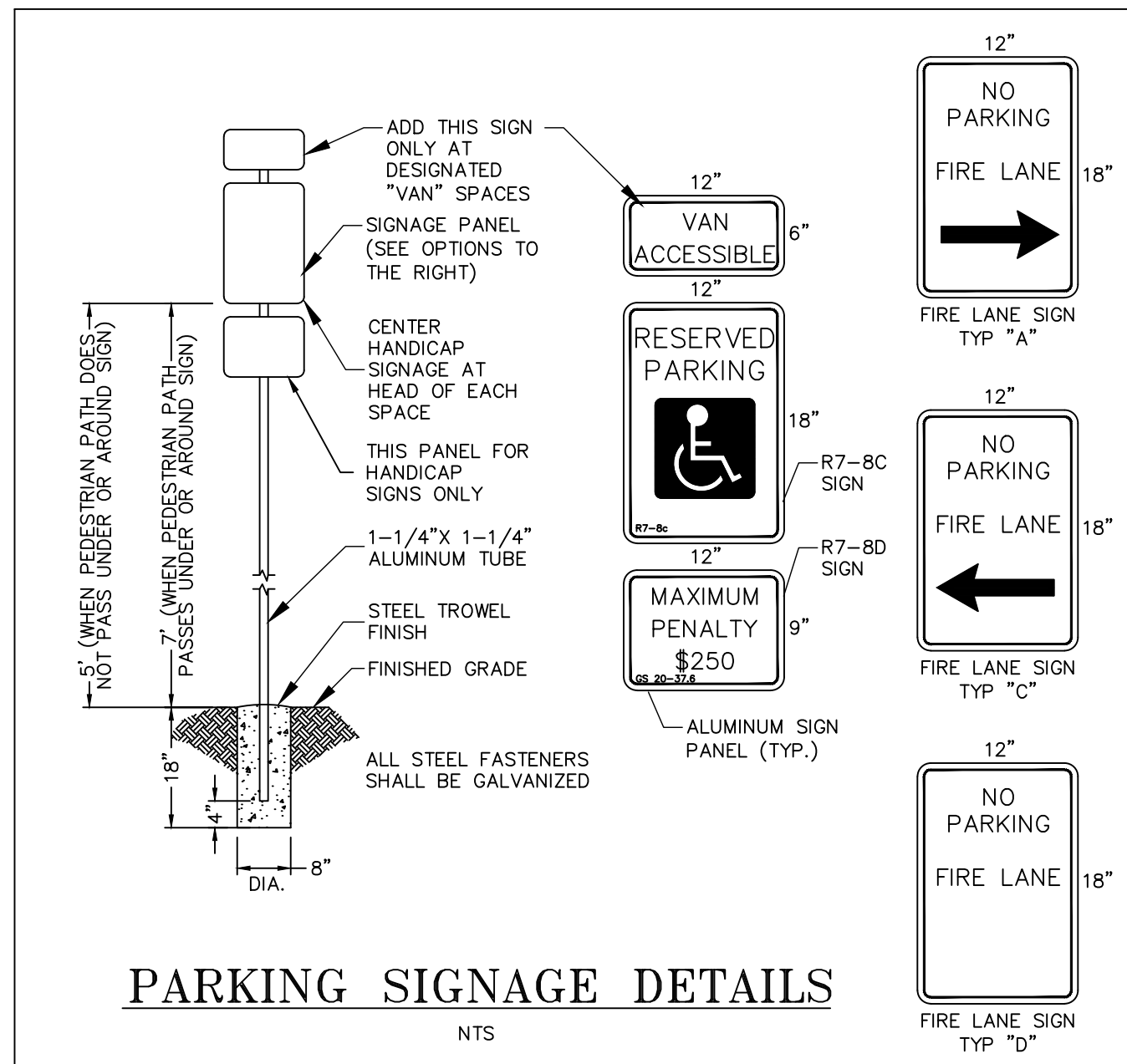
PROJECT NO.	627606	ISS. NO.	020	DATE	8/22/2019
DESIGNED BY	JMR	DRAWN BY	JMR	CHECKED BY	APPROVED BY
SHEET NO.	P3	OF	5		



PROJECT NO.	627606	ISS. NO.	020	DATE	8/22/2019
DESIGNED BY	JMR	DRAWN BY	JMR	CHECKED BY	APPROVED BY
SHEET NO.	P4	OF	5		



PROJECT NO.	627606	ISS. NO.	020	DATE	8/22/2019
DESIGNED BY	JMR	DRAWN BY	JMR	CHECKED BY	APPROVED BY
SHEET NO.	P4	OF	5		



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PHIL KOCH - NCPE #22634
 PRINCIPAL ENGINEER

1751 DOBBINS DRIVE
 1751 DOBBINS DRIVE, CHAPEL HILL, NC 27514

SITE DETAILS

REV.	DATE	DESCRIPTION	PER CITY REVIEW COMMENTS	CPK
1	09/03/2019			

DATE: JULY 24, 2019
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: N/A
 PROJECT MANAGER: CPK
 DRAWN BY: CPK
 PROJECT NO: 19-211
 DRAWING NAME: 19-011 REVIEW

STANDARD ENGINEERING DEPARTMENT

TITLE: TYPICAL SIDEWALK
 REVISIONS: NO DATE BY
 DET. NO: ST-4
 SH. 1 OF 3

SHEET NO. **D5.0**
 PRELIMINARY SITE PLAN

PERMANENT SEEDING SCHEDULE:

SEEDING MIXTURE:	
SPECIES	RATE (LB/AC)
TALL FESCUE	80
SERICEA LESPEDEZA	20
KOBE LESPEDEZA	10

- SEEDING NOTES:**
- AFTER AUGUST 15, USE UN-SCARIFIED SERICEA SEED.
 - WHERE PERIODIC MOWING IS PLANNED OR A NEAT APPEARANCE IS DESIRED, OMIT SERICEA AND INCREASE KOBE LESPEDEZA TO 40 LB/ACR.
 - TO EXTEND SPRING SEEDING DATES INTO JUNE, ADD 15 LB/ACR HULLED BERMUDA GRASS. HOWEVER, AFTER MID-APRIL IT IS PREFERABLE TO SEED TEMPORARY COVER.

NURSE PLANTS:
BETWEEN MAY 1 AND AUG. 15, ADD 10 LB/ACR GERMAN MILLET OF 15 LB/ACR SUDAN GRASS. PRIOR TO MAY 1 OR AFTER AUG. 15 ADD 40 LB/ACR RYE (GRAIN).

SEEDING DATES:

FALL:	BEST	POSSIBLE
AUG. 25 - SEPT. 15	AUG. 20 - OCT. 25	
LATE WINTER:	FEB. 15 - MAR. 21	FEB. 1 - APR. 15

FALL IS BEST FOR TALL FESCUE AND LATE WINTER FOR LESPEDEZAS.

SOIL AMENDMENTS:
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 4,000 LB/ACR GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACR 10-10-10 FERTILIZER, EXCEPT, APPLY NO FERTILIZER TO AREAS WITHIN THE NEUSE RIVER RIPARIAN BUFFERS.

MULCH:
APPLY 4,000 LB/ACR STRAW OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCH. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR ROVING OR BY CRIMPING WITH A MULCH ANCHORING TOOL. A DISK WITH BLADES NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

TEMPORARY SEEDING SCHEDULES

TABLE 6-10A:
TEMPORARY SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

SEEDING MIXTURE:	
SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120
ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)	50

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

SEEDING DATES:
MOUNTAINS - ABOVE 2500 FT: FEB. 15 - MAY 15
BELOW 2500 FT: FEB. 1 - MAY 1
PIEDMONT - JAN. 1 - MAY 1
COASTAL PLAIN - DEC. 1 - APR. 15

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACR GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACR 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB/ACR 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:
RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE-FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TABLE 6.10B
TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER

SEEDING MIXTURE:	
SPECIES	RATE (LB/ACRE)
GERMAN MILLET	40

IN THE PIEDMONT AND MOUNTAINS, A SMALL-STEMMED SUDAN GRASS MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACR.

SEEDING DATES:
MOUNTAINS - MAY 15 - AUG. 15
PIEDMONT - MAY 1 - AUG. 15
COASTAL PLAIN - APR. 15 - AUG. 15

SOIL AMENDMENTS:
FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACR GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACR 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB/ACR 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:
RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, RE-FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TABLE 6.10C
TEMPORARY SEEDING RECOMMENDATIONS FOR FALL

SEEDING MIXTURE:	
SPECIES	RATE (LB/ACRE)
RYE (GRAIN)	120

SEEDING DATES:
MOUNTAINS - AUG. 15 - DEC. 15
COASTAL PLAIN AND PIEDMONT - AUG. 15- DEC. 30

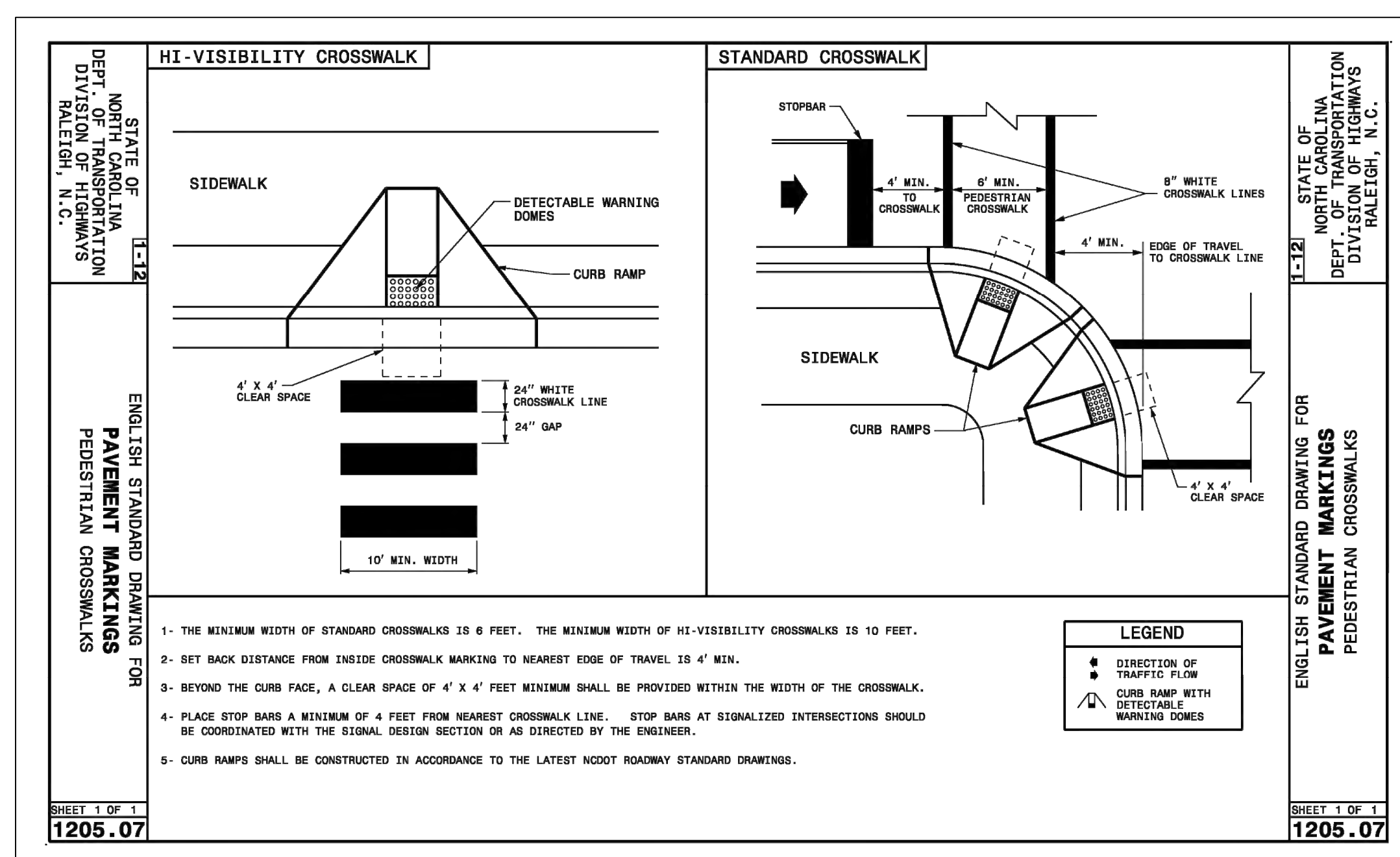
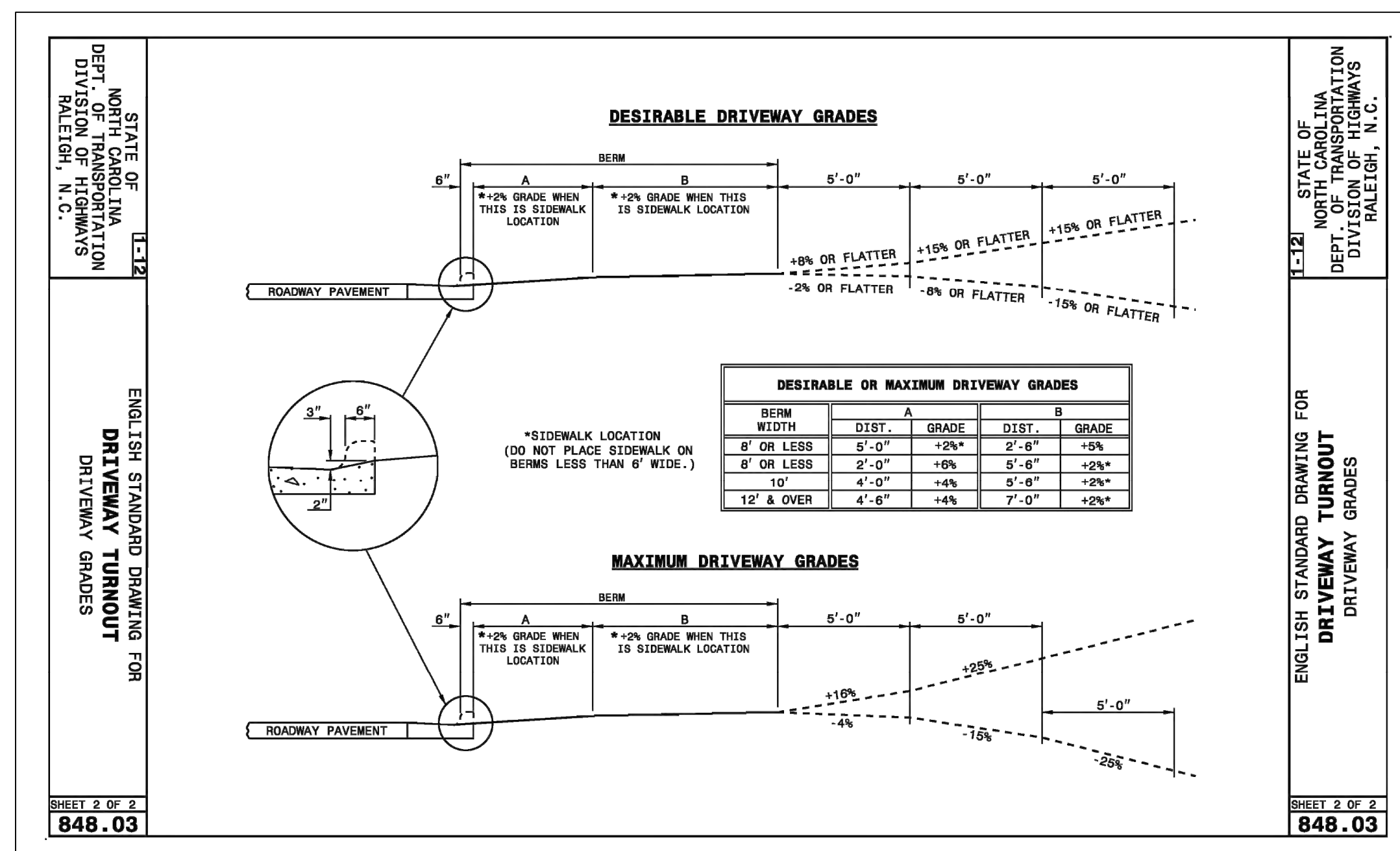
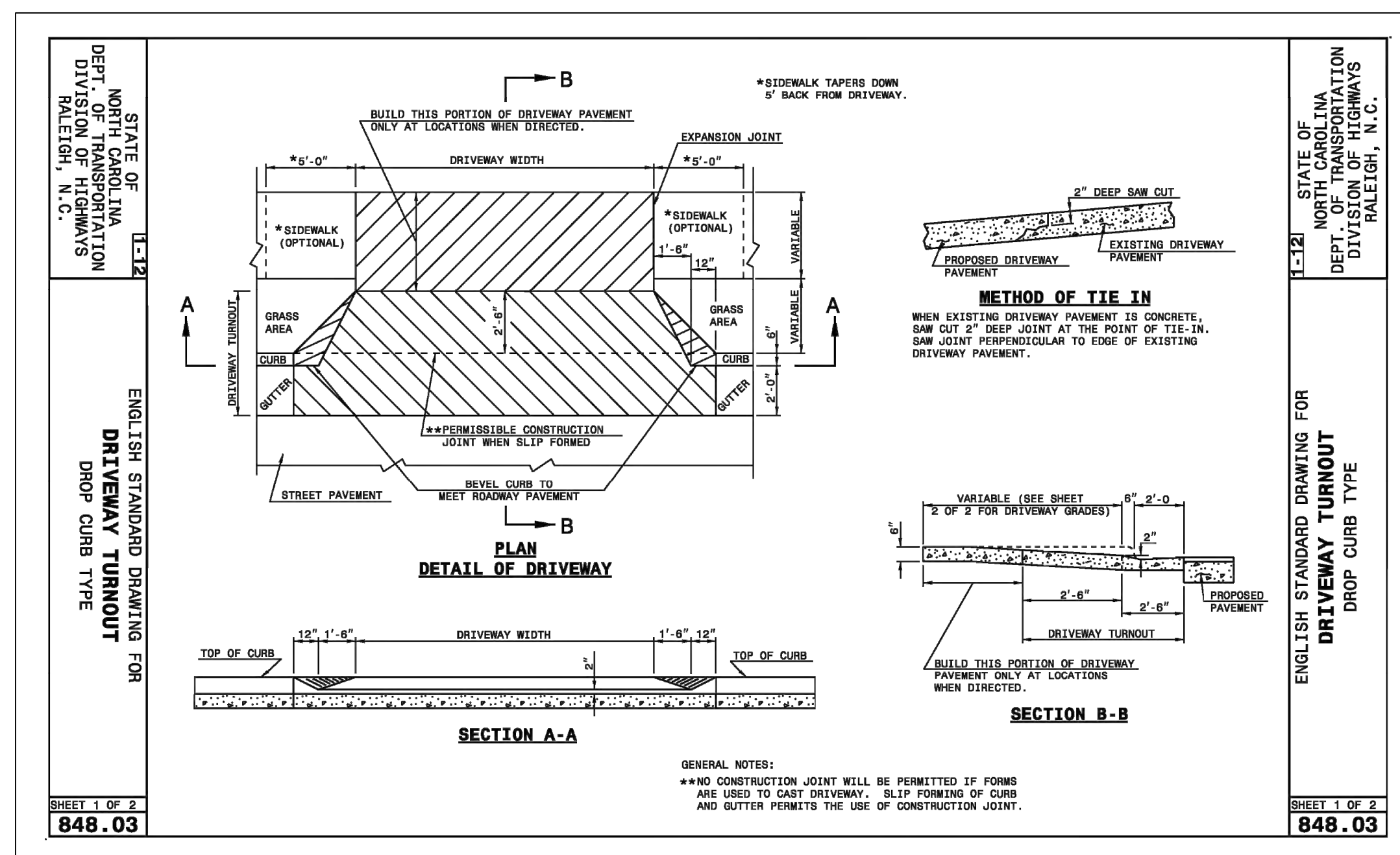
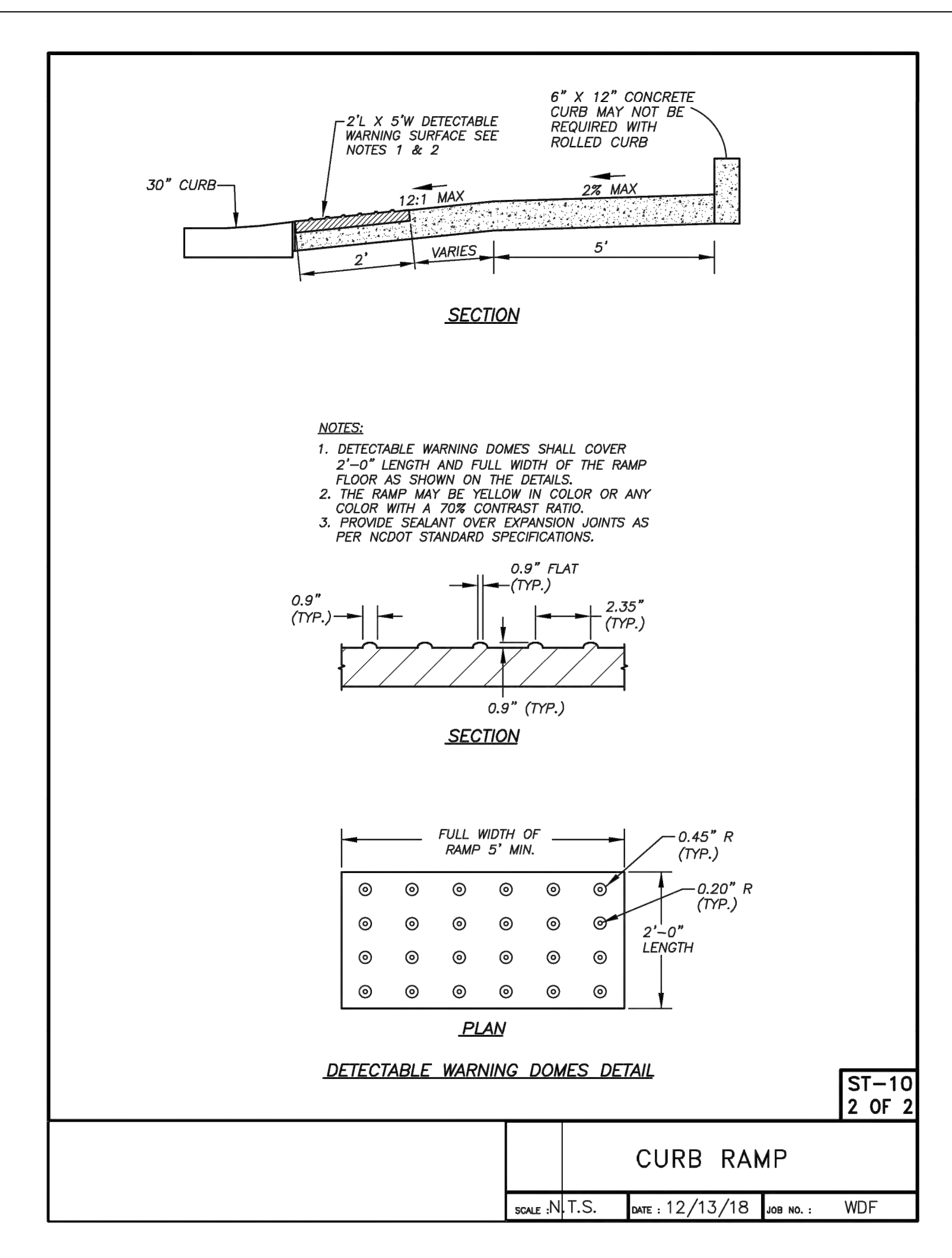
SOIL AMENDMENTS:
FOLLOW SOIL TESTS OR APPLY 2,000 LB/ACR GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACR 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 LB/ACR 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:
REPAIR AND RE-FERTILIZE DAMAGED AREAS IMMEDIATELY. TOP-DRESS WITH 50 LB/ACR OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVER-SEED WITH 50 LB/ACR KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

STABILIZATION TIME TABLE

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



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1751 DOBBINS DRIVE
1751 DOBBINS DRIVE, CHAPEL HILL, NC 27514
SITE DETAILS

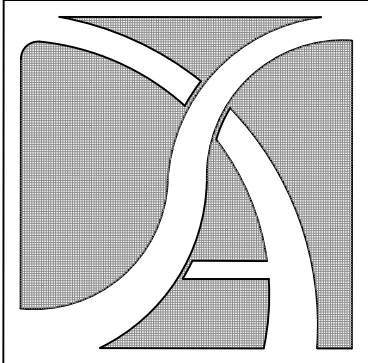
REV.	DATE	DESCRIPTION	BY
1	09/03/2019	PER CITY REVIEW COMMENTS CPK	

DATE: JULY 24, 2019
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DRAWING NAME: 19-011 REVIEW

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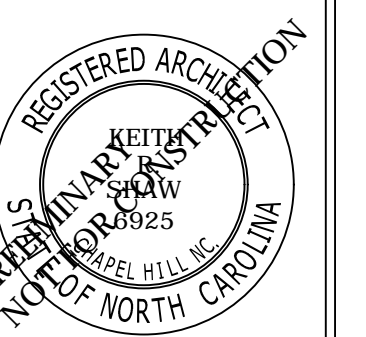
SHEET NO.
D5.1
PRELIMINARY SITE PLAN



SHAW DESIGN ASSOCIATES, P.A.
 DESIGN PLANNING GRAPHICS
 180 PROVIDENCE RD SUITE #8
 CHAPEL HILL, NC 27514
 (919) 493-0528

APPROVED: 2/13/2019 SHAW DESIGN ASSOCIATES, P.A.
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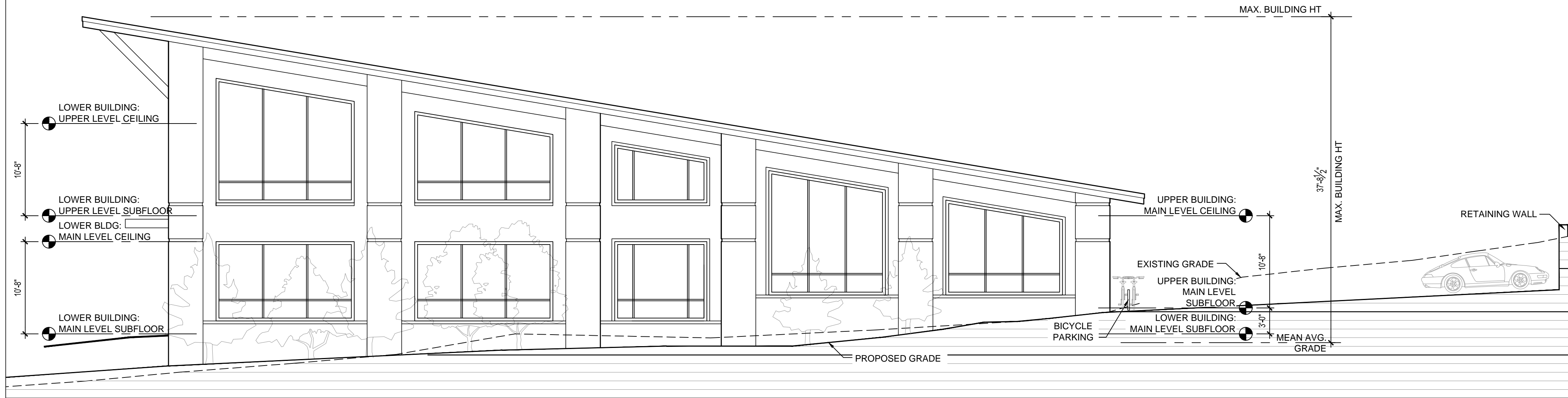
EXTERIOR ELEVATIONS
DOBBINS DRIVE OFFICE BUILDING
 1751 DOBBINS DRIVE
 CHAPEL HILL, NORTH CAROLINA



REVISIONS

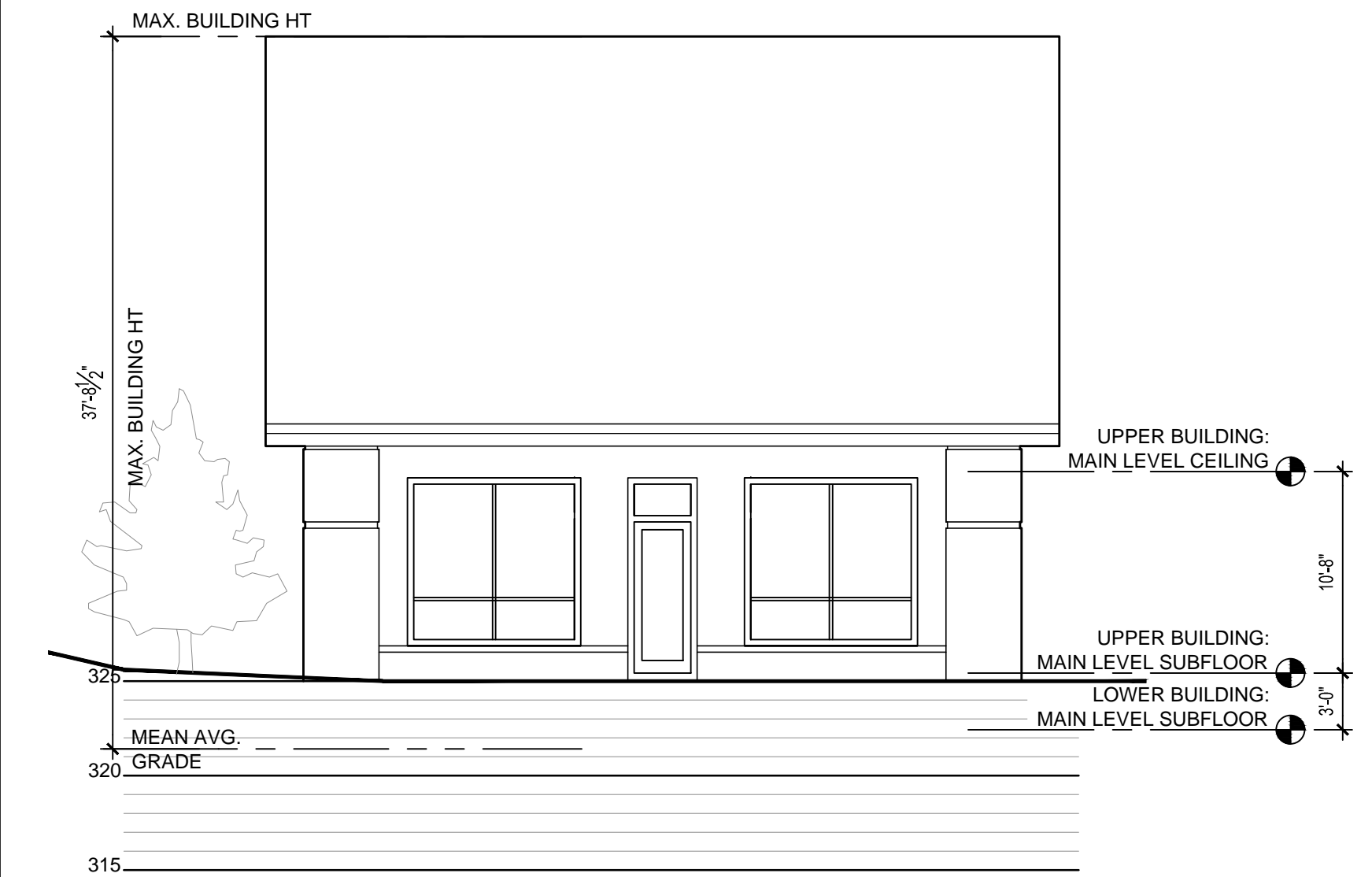
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 FILE # 1826

A201
 SHEET - OF -



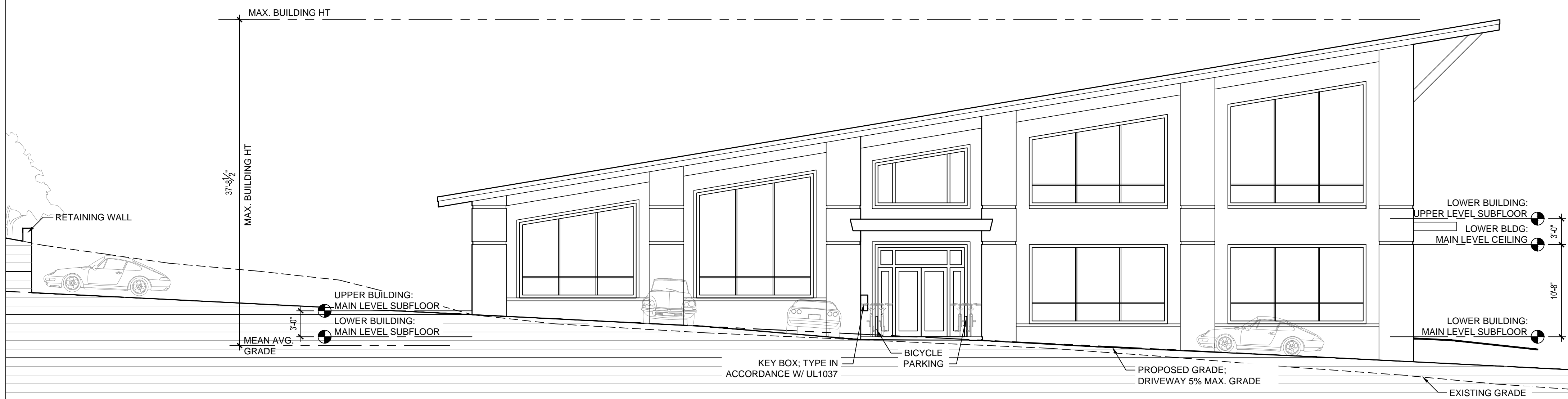
2-A201 LEFT ELEVATION (FACING COMMERCIAL PARKING LOT)

1/8" = 1'-0"



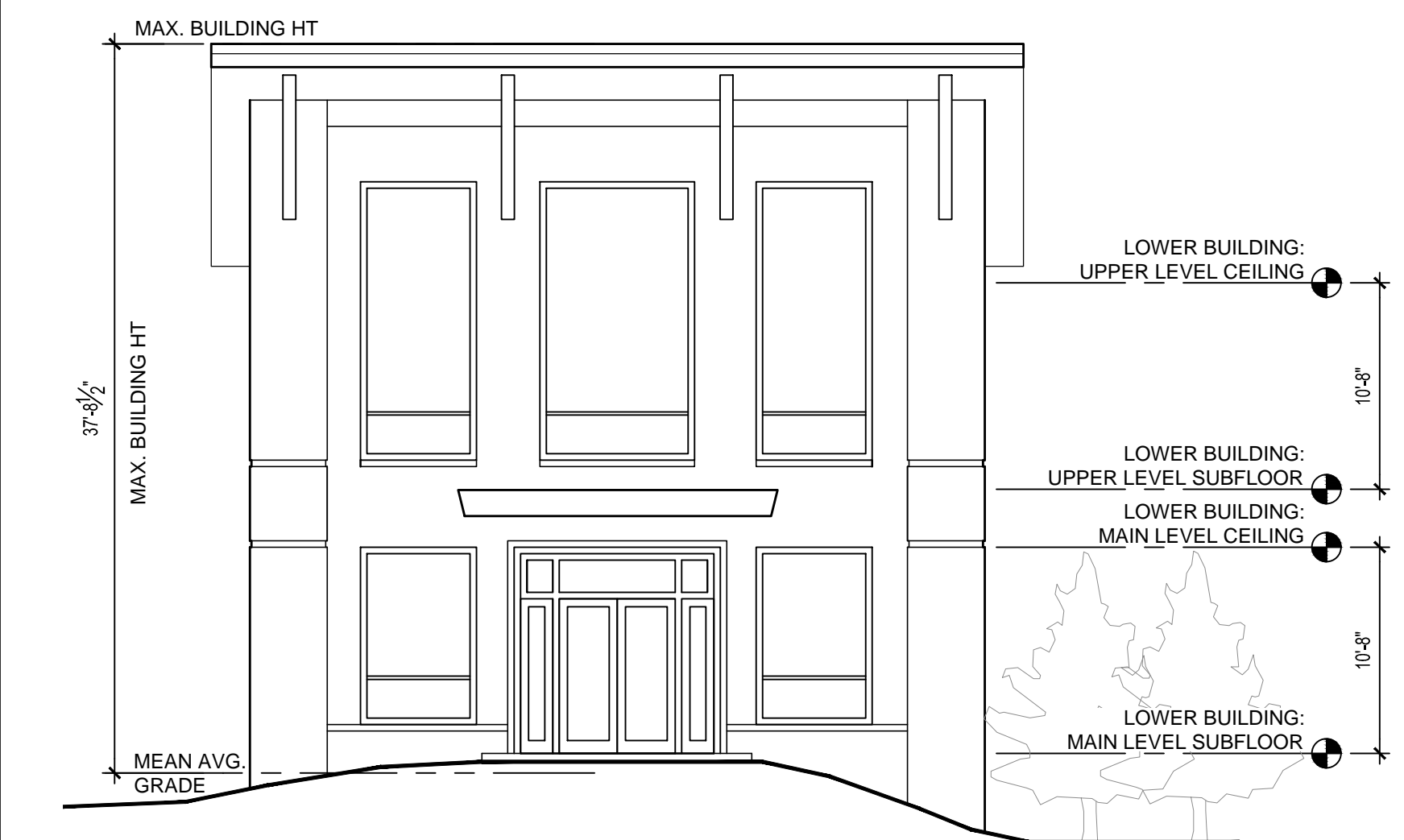
3-A201 REAR ELEVATION

1/8" = 1'-0"



2-A201 LEFT ELEVATION (FACING PRIVATE DR.)

1/8" = 1'-0"



1-A201 FRONT ELEVATION (FACING DOBBINS DR.)

1/8" = 1'-0"