

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

Name	Date
Planning	_____
Traffic	_____
Fire	_____

NCDENR PWSS WATER PERMIT # _____
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT # _____
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

PARCEL ADDRESS: 1202 EASTWOOD ROAD
 PARCEL ID#: R05000-004-147-000
 MAP ID#: 314708.97.1975.000
 PARCEL OWNER: TRASK D WEBSTER REVOCABLE TRUST
 PARCEL AREA: 73.37 ACRES (3,196,000 SF)
 ZONING: MX/R15/SHOD
 SOIL TYPES: Le, Ly, Be, Se, Jo, W
 CAMA LAND USE: WATERSHED RESOURCE PROTECTION
 WETLANDS: SEE PLAN
 NO CAMA AEG OR SETBACKS WITHIN SITE AREA

HISTORICAL SITE: NONE
 CEMETERY: NONE
 FORESTED AREA: SEE PLAN FOR TREE SURVEY
 ENDANGERED SPECIES/HABITAT: NONE REPORTED

SITE INVENTORY PLAN
 AUTUMN HALL COMMERCIAL PH I
 1202 EASTWOOD ROAD
 WILMINGTON, NC
 NEW HANOVER COUNTY

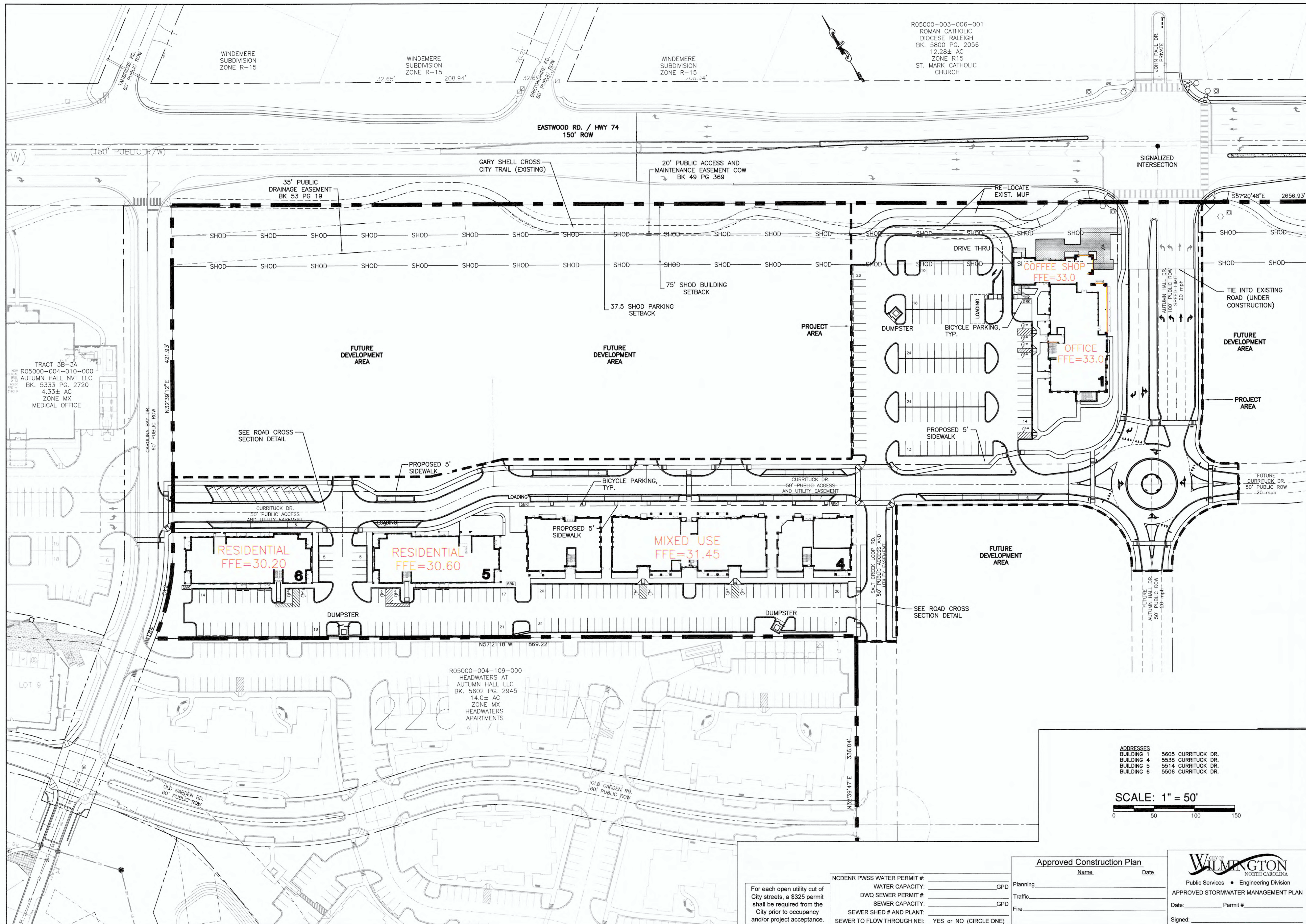
DEVELOPER
 WEB TRASK C/O MIKE BROWN
 CAPE FEAR COMMERCIAL LLC
 1051 MILITARY CUTOFF RD.,
 SUITE 200
 WILMINGTON, NC 28405
 344-1010 (P) 622-4657 (CELL)

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1429 ASH-LITTLE RIVER RD. NW
 WILMINGTON, NC 28403
 PHONE (910) 343-9653

Licence #C-3641
18128
 DES. JST
 CKD. JPN
 DRWN. NKS
 DATE 7/26/19



11



OVERALL SITE PLAN
AUTUMN HALL COMMERCIAL PH I
1202 EASTWOOD ROAD
WILMINGTON, NC
NEW HANOVER COUNTY

DEVELOPER
WEB TRASK/O MIKE BROWN
CAPE FEAR COMMERCIAL, LLC
1051 MILITARY CUTOFF RD.,
SUITE 200
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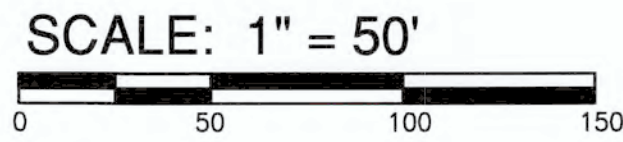
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CONSULTING ENGINEERS P.C.
1900 EASTWOOD RD., SUITE #11
WILMINGTON, NC 28403
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ASH, NC 28420
PHONE (910) 343-9653
PHONE (910) 287-5900

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C1.1

ADDRESSES
BUILDING 1 5605 CURRITUCK DR.
BUILDING 4 5538 CURRITUCK DR.
BUILDING 5 5514 CURRITUCK DR.
BUILDING 6 5506 CURRITUCK DR.

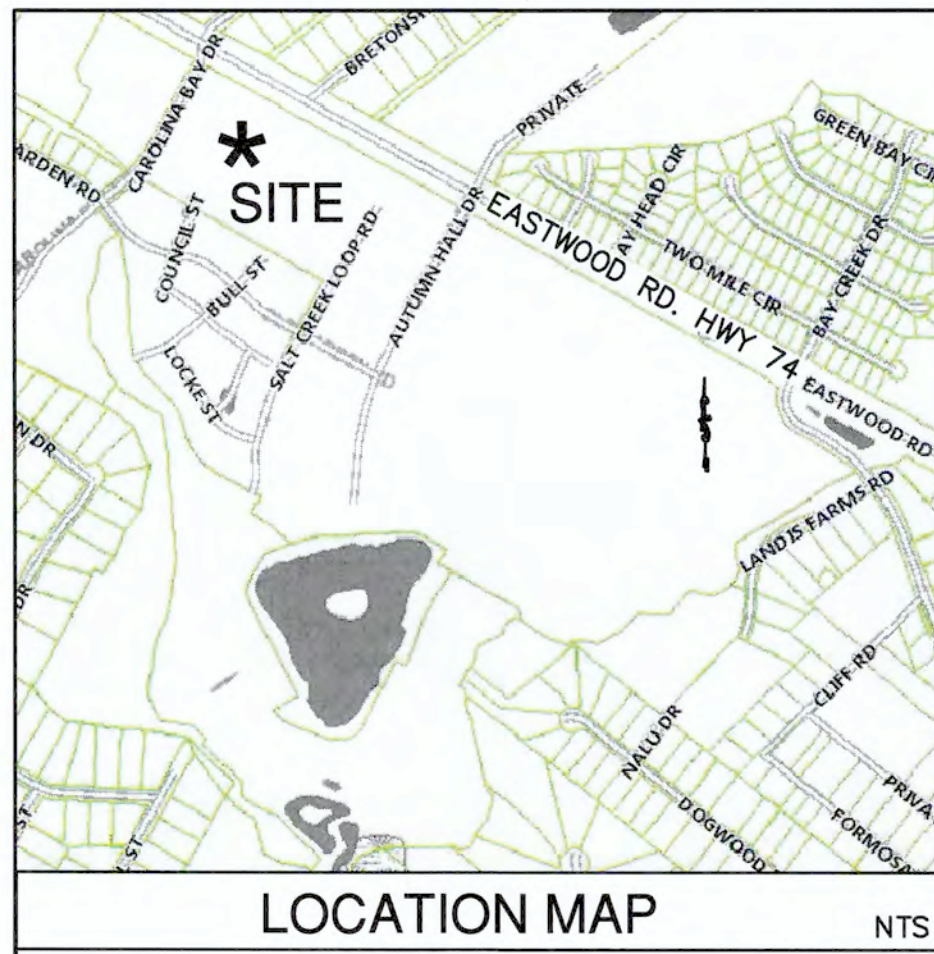


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PRELIMINARY



BUILDING DATA PHASE I													
#	BUILDING	USE	STORIES	UNITS	GROUND FLOOR (SF)	2ND FLOOR (SF)	3RD FLOOR (SF)	4TH FLOOR (SF)	GBA (SF)	FOOTPRINT (SF)	# OF BUILDINGS	HEIGHT	CONSTRUCTION TYPE
1	COFFEE SHOP/OFFICE	RESTAURANT/OFFICE	2		11,020	9,995			21,015	13,070	1	21'-6"/44'-8"/68'-0"	V-A
4	MIXED USE	RETAIL/RESIDENTIAL	4	60	23,873**	24,714***	24,714***	24,714***	98,015	27,500	1	14'-8"/63'-0"	V-A
5,6	RESIDENTIAL	RESIDENTIAL	4	56	7,940	7,493	7,493	7,493	30,419	8,600	2	64'-8"	V-A
TOTAL				116	-	-	-	-	179,868	57,770	4		

* RESTAURANT/BAR SPACE ALLOCATION
 ** RETAIL
 *** RESIDENTIAL

OFFICE: 18,778 SF
 RETAIL: 23,873 SF
 RESTAURANT: 2,237 SF
 RESIDENTIAL: 134,980 SF
 TOTAL: 179,868 SF

PARKING DATA PHASE I												
#	BUILDING	USE	SF RESTAURANT	SF OFFICE	SF RETAIL	1 BR UNITS	2 BR UNITS	MAX. PARKING REQD.	MIN. PARKING REQD.	PARKING PROVD.	HC ACCESSIBLE PARKING	TOTAL PARKING
1	COFFEE SHOP/OFFICE	RESTAURANT/OFFICE	2,237±(1,500)	18,778				23/94 (117)	19/63 (82)	98	5	
4	MIXED USE	RETAIL/RESIDENTIAL			23,873	30	30	119/75/75 (269)	60/45/60 (165)	34 RET./111	10	
5,6	RESIDENTIAL	RESIDENTIAL				24	32	60/80 (140)	30/64 (94)	94	4	
	BICYCLE PARKING									(45)		
TOTAL						54	62	526	341	337	19	355

PARKING REQUIREMENTS

PARKING REQUIREMENT PER USE, NO MINIMUM REQUIREMENT IN MX ZONE

OFFICE: 1 PER 200 SF GFA MAX.
 1 PER 300 SF GFA MIN.
 RETAIL: 1 PER 200 SF GFA MAX.
 1 PER 400 SF GFA MIN.

RESTAURANT: 1 PER 2.5 SEATS OR 1 PER 65 SQ FT GFA EXCLUSIVE OF KITCHEN AND RESTROOM FACILITIES MAX.
 1 PER 4 SEATS OR 1 PER 80 SQ FT GFA EXCLUSIVE OF KITCHEN RESTROOM FACILITIES MIN.

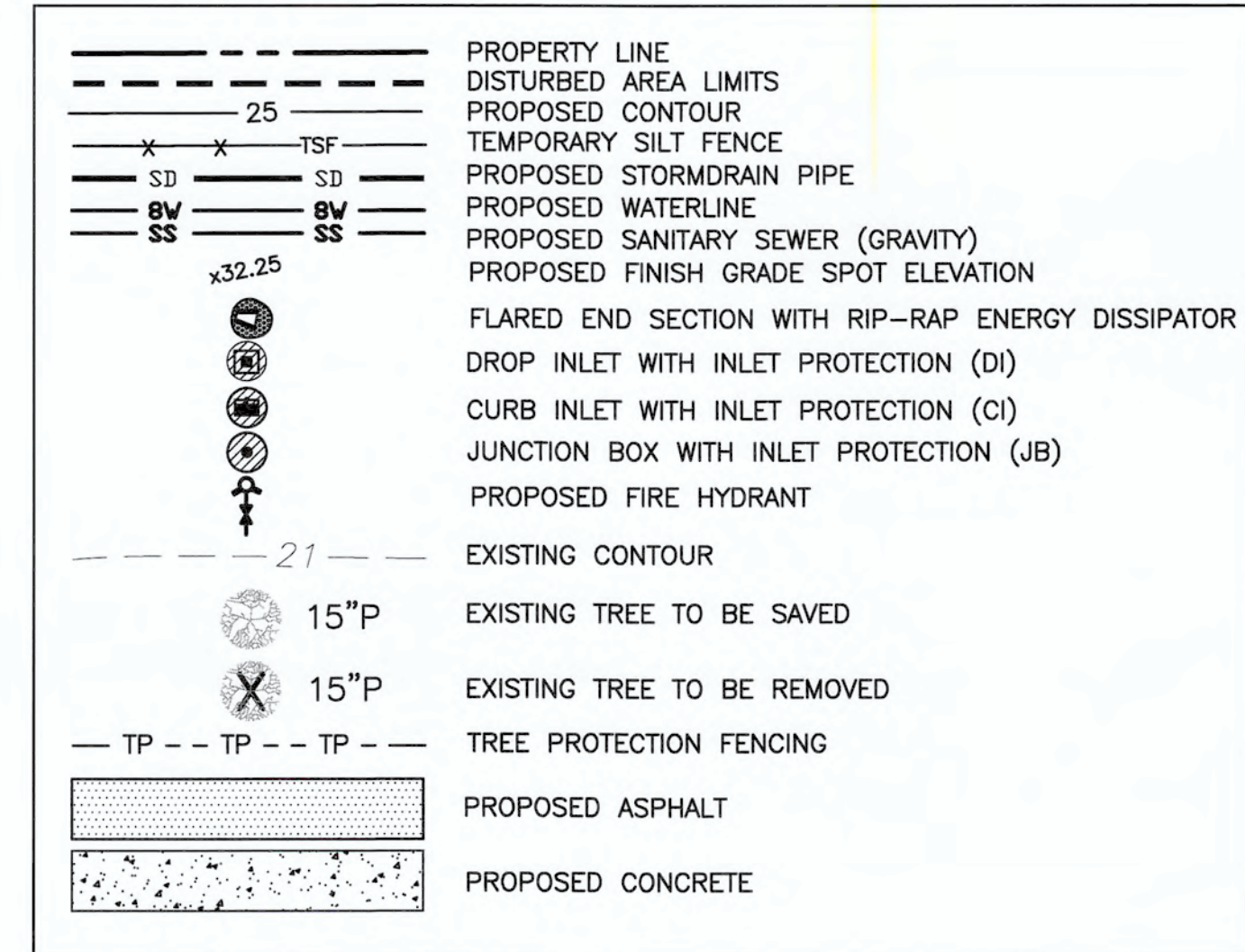
RESIDENTIAL: 2.5 SPACES PER UNIT MAX.
 1.5 SPACE PER UNIT MIN. (1 BR)
 2.0 SPACES PER UNIT MIN. (2 BR)
 2.25 SPACES PER UNIT MIN. (3+ BR)

BICYCLE PARKING: 5 BICYCLE PARKING FOR THE FIRST 25 CAR PARKING SPACES. EACH ADDITIONAL ONE HUNDRED (100) AUTOMOBILE PARKING SPACES ABOVE THE TWENTY-FIVE (25) MINIMUM SHALL REQUIRE PROVISIONS FOR PARKING AN ADDITIONAL FIVE (5) BICYCLES UP TO A BICYCLE PARKING SYSTEM THAT CAN ACCOMMODATE A MAXIMUM OF TWENTY (20) BICYCLES.

SITE DATA TABLE	
USE:	OFFICE/RETAIL/RESTAURANT/RESIDENTIAL
PARCEL AREA:	73.37 ACRES (3,196,000 SF)
PARCEL ID#:	R05900-004-147-000
PARCEL OWNER:	TRASK D WEBSTER REVOCABLE TRUST
MAP ID#:	314708.97.1975.000
ADDRESS:	1202 EASTWOOD ROAD
ZONING:	MX/SHOD
CAMA LAND USE:	WATERSHED RESOURCE PROTECTION
BUILDING SETBACKS MX: (REQUIRED)	20' MIN. FROM MX BOUNDARY 50' MIN. FROM US AND NC HIGHWAYS AND MAJOR THOROUGHFARES INTERIOR: NO MINIMUM, WITHIN 10' OF INTERNAL STREET R/W PREFERRED.
BUILDING SETBACKS: (PROPOSED)	75' MIN. WITH 25% SHOD REDUCTION
SHOD SETBACKS:	BUILDING: 100' (75' MIN. WITH 25% SHOD REDUCTION) PARKING: 50' (37.5' MIN. WITH 25% SHOD REDUCTION) INTERIOR SIDE: 20' *ADDITIONAL STREETYARD PLANTINGS ARE REQUIRED WHEN TAKING THE SHOD 25% REDUCTION
PROJECT AREA PHASE I:	356,943 SF (8.19 AC)
BUILDING LOT COVERAGE:	16.18% ±
LANDSCAPING:	SEE PLANS BY MIHALY LAND DESIGN -FOUNDATION PLANTINGS (12%) -LANDSCAPING REQ'D INTERIOR (AS PER O&M REGULATIONS): -STREET TREES ARE REQUIRED ALONG ALL STREETS AND SHALL BE A MIN. 3" CALIPER LOCATED AT MIN. 50' O.C.
OPEN SPACE FOR MX DEVELOPMENT:	35% (10% COMMON/25% OPEN)
TRASH SERVICE:	DUMPSTER/HANDCART
DISTURBED AREA LIMITS:	8.78 ACRES
WATER/SEWER DEMANDS	
COFFEE/OFFICE/RESTAURANT =	6,721 GPD
OFFICE 9,995 SF (100 GPD/1,000 SF)=	1,000 GPD
OFFICE 6,020 SF (100 GPD/1,000 SF)=	602 GPD
RESTAURANT 5,000 SF WITH 100 SEATS (40 GPD/SEAT)=	4,000 GPD
COFFEE 2,237 SF (50 GPD/100 SF)=	1,119 GPD
MIXED USE =	16,787 GPD
RESIDENTIAL: 60 UNITS 1&2 BEDROOM (240 GPD/UNIT)=	14,400 GPD
RETAIL: 23,873 SF (100 GPD/1,000 SF)=	2,387 GPD
RESIDENTIAL =	13,440 GPD
56 UNITS 1&2 BEDROOM (240 GPD/UNIT)=	13,440 GPD
TOTAL =	36,948 GPD

Autumn Hall Commercial Phase I	
Total Project Area:	356,943 SF
Existing Impervious	
MUP:	3030 SF
Sidewalk:	950 SF
Asphalt C&G:	6700 SF
Total	10,680 SF
Existing Impervious to Remain	
MUP:	660 SF
Total:	660 SF
NEW Impervious Area	
Buildings:	54,583 SF
Sidewalk, C&G:	70,651 SF
Asphalt:	144,872 SF
TOTAL NEW IMP	270,106 SF
TOTAL IMPERVIOUS	270,766
(NEW AND EXISTING TO REMAIN)	
	75.9% IMPERVIOUS
New IMP Off-Site:	5375 SF

LEGEND



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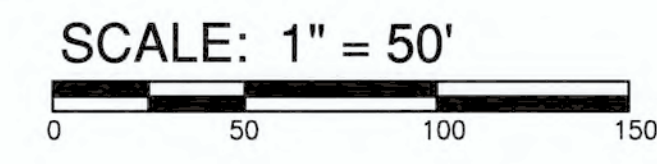
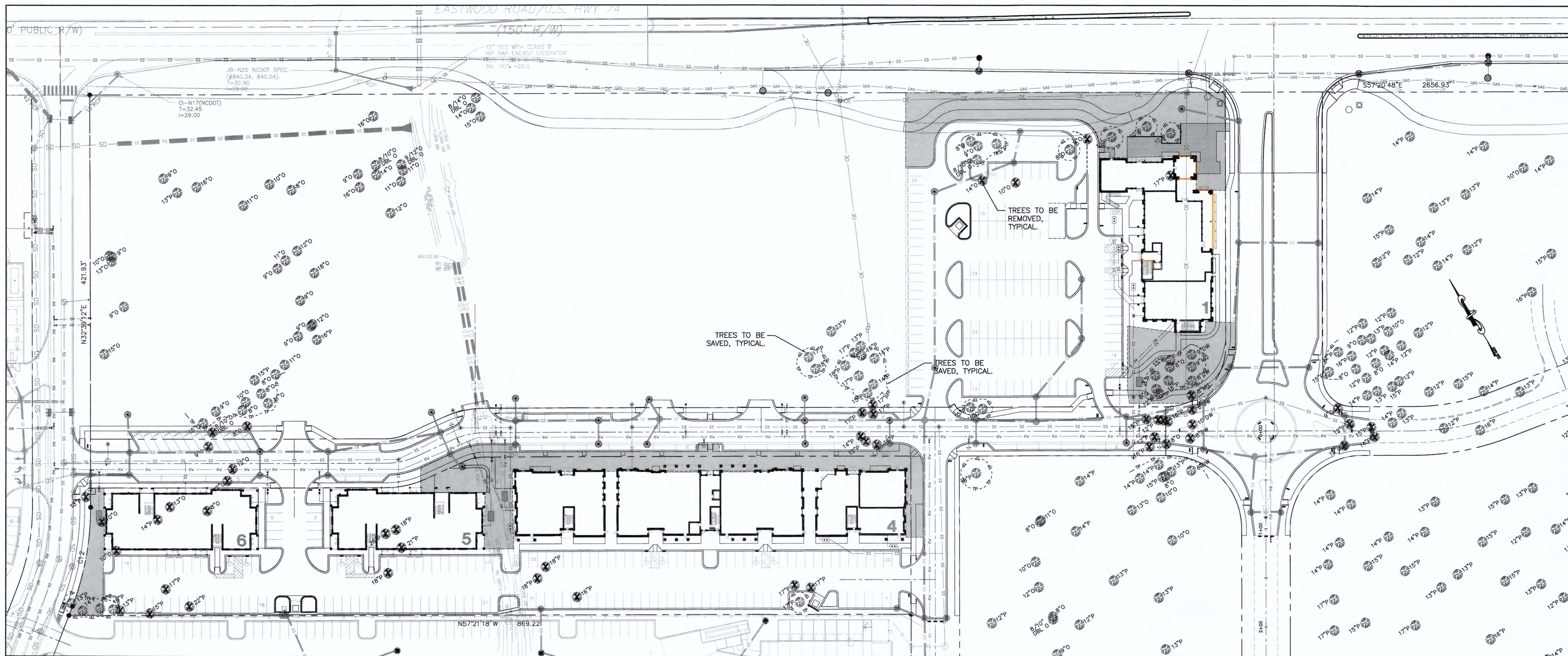
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C1.2



TREE REMOVAL TABLE - REGULATED

REGULATED PINES	REGULATED OAKS	REGULATED DOGWOOD
12" (3)	8" (4)	6" (1)
13" (2)	9" (3)	
14" (3)	10" (6)	
15" (4)	12" (2)	
16" (4)	13" (1)	
17" (7)	14" (1)	
18" (4)		
21" (1)		
22" (1)		

TREE REMOVAL TABLE - SIGNIFICANT

SIGNIFICANT PINES	SIGNIFICANT DOGWOODS	SIGNIFICANT MAGNOLIA
26" (1)	8" (1)	8" (1)
	10" (1)	

LEGEND

- 15" P EXISTING TREE TO BE SAVED
- 15" P EXISTING TREE TO BE REMOVED
- PRELIMINARY OPEN SPACE AREA AVAILABLE FOR DESIGNATION AS ACTIVE OR PASSIVE RECREATION AREAS AND OPEN SPACE. (1.00 AC±)

TREE REMOVAL PLAN AND OPEN SPACE
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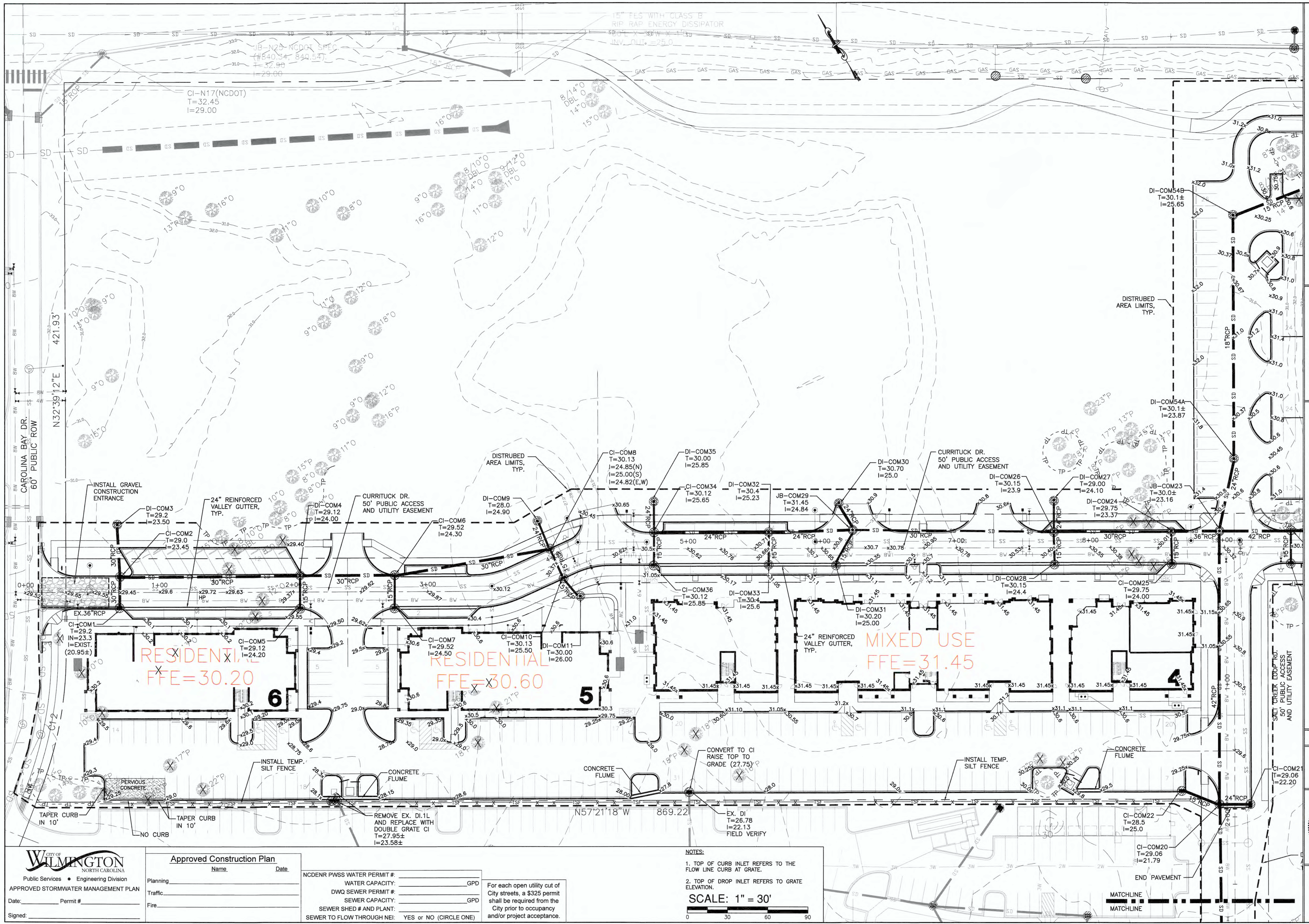
C1.3

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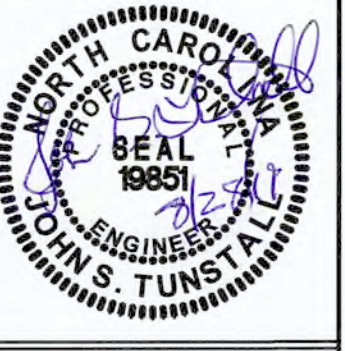


GRADING, DRAINAGE AND EROSION CONTROL PLAN
AUTUMN HALL COMMERCIAL PH I
 1202 EASTWOOD ROAD
 WILMINGTON, NC
 NEW HANOVER COUNTY

DEVELOPER
 WEB TRASK CO MIKE BROWN
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C2.1

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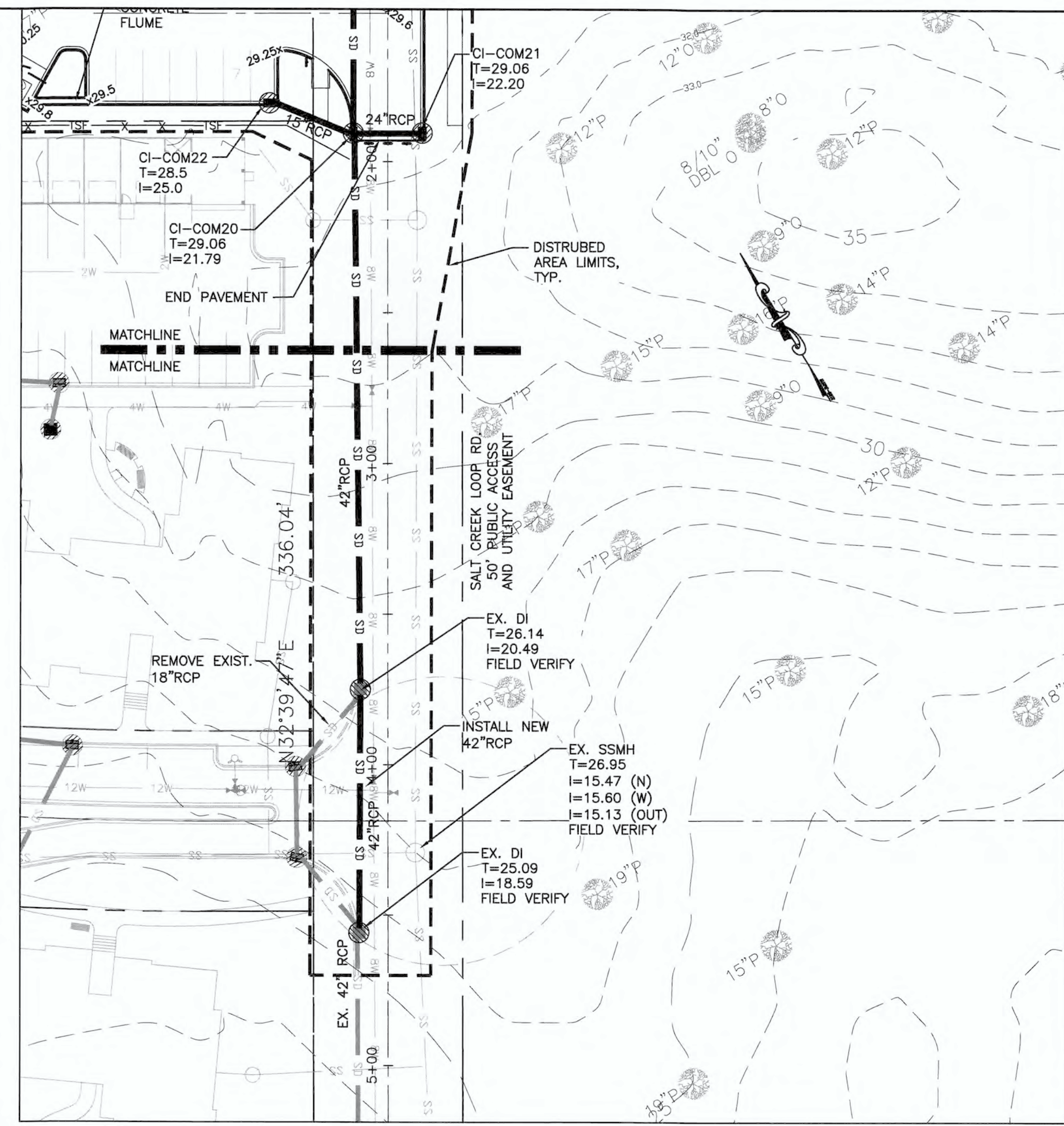
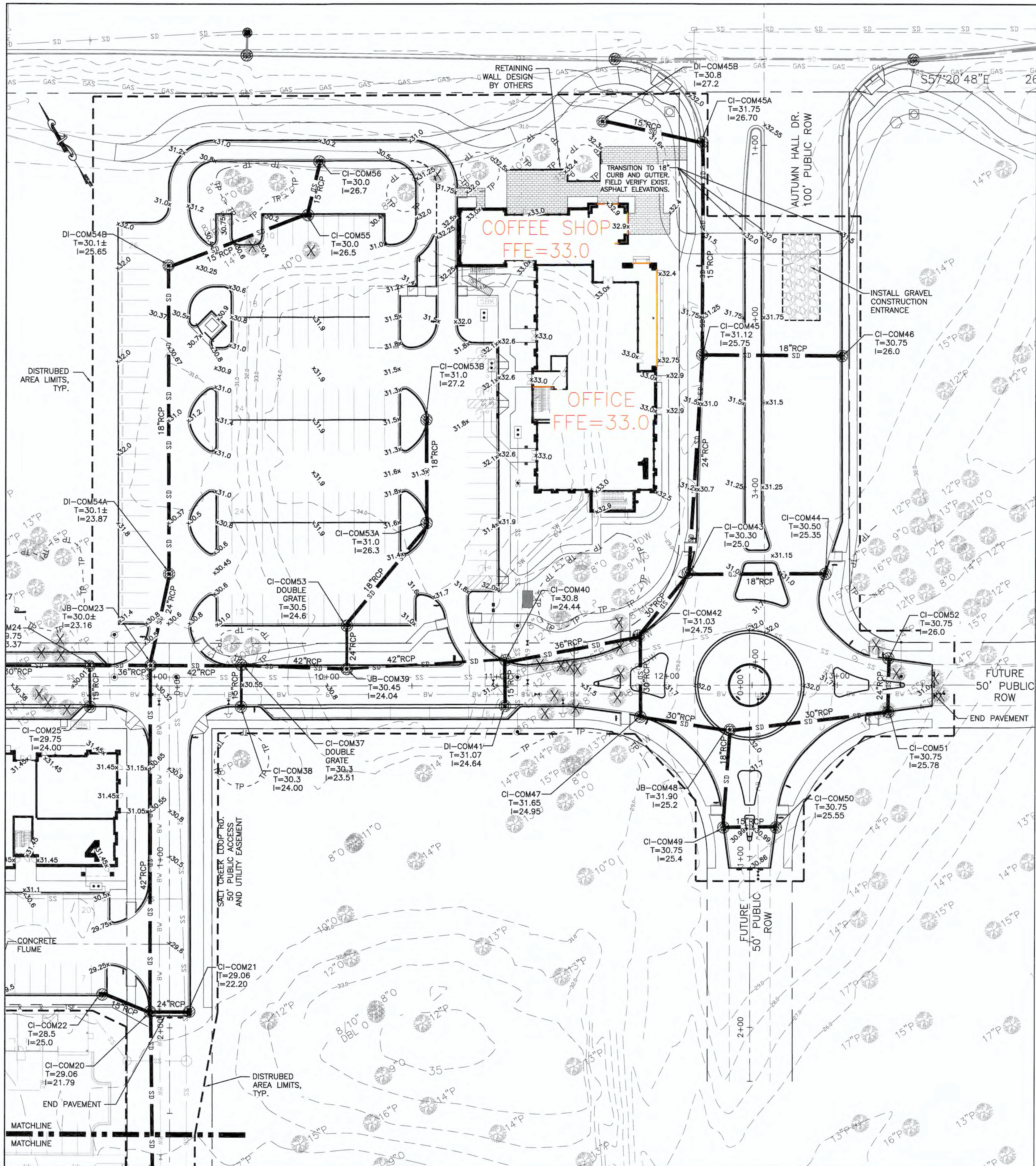
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NOTES:
 1. TOP OF CURB INLET REFERS TO THE FLOW LINE CURB AT GRATE.
 2. TOP OF DROP INLET REFERS TO GRATE ELEVATION.
SCALE: 1" = 30'
 0 30 60 90

PRELIMINARY



NOTES:
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 2. TOP OF DROP INLET REFERS TO GRATE ELEVATION.

SCALE: 1" = 30'
 0 30 60 90

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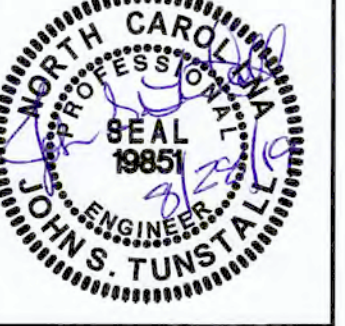
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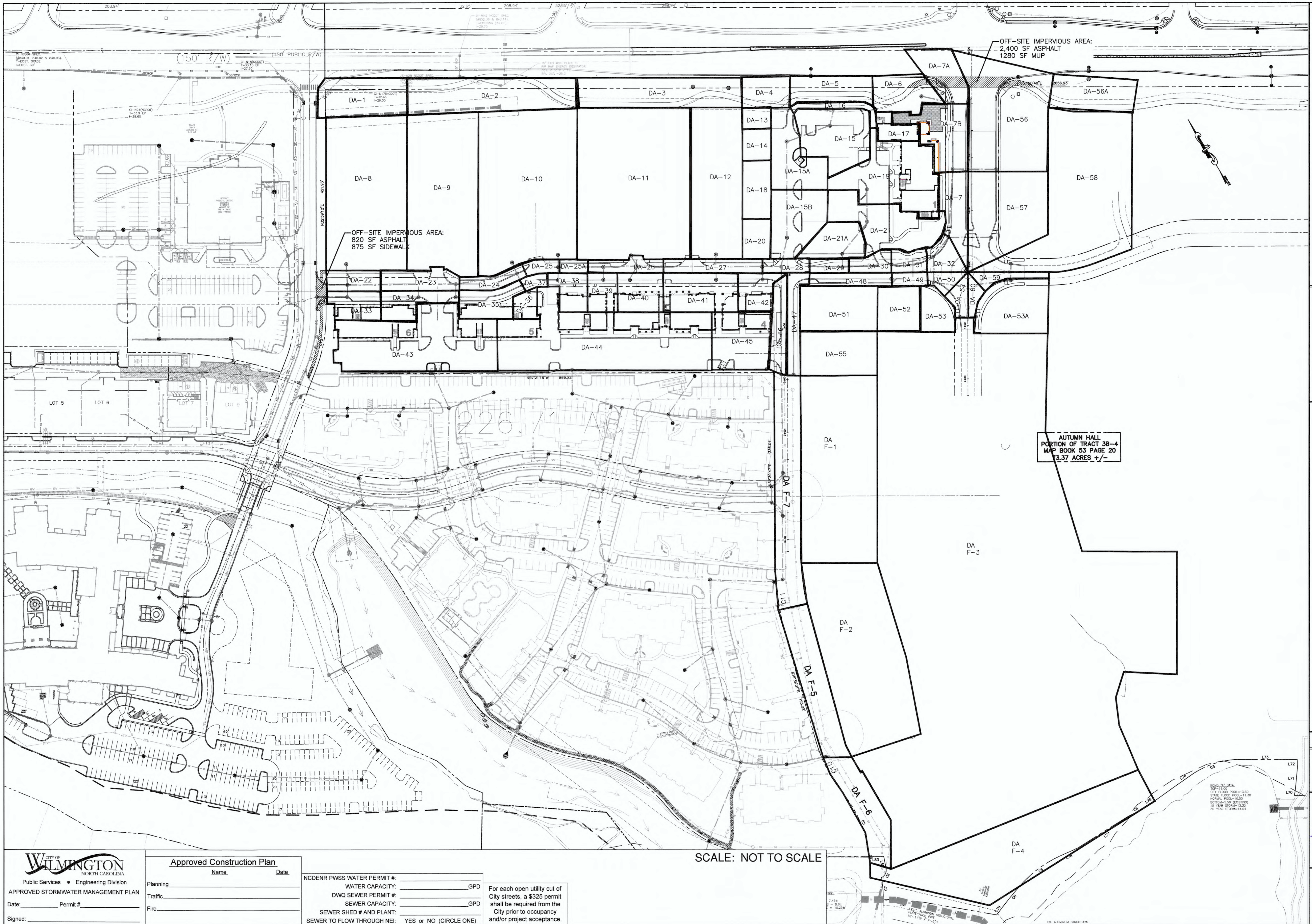
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C2.2



DRAINAGE AREA PLAN
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C2.3

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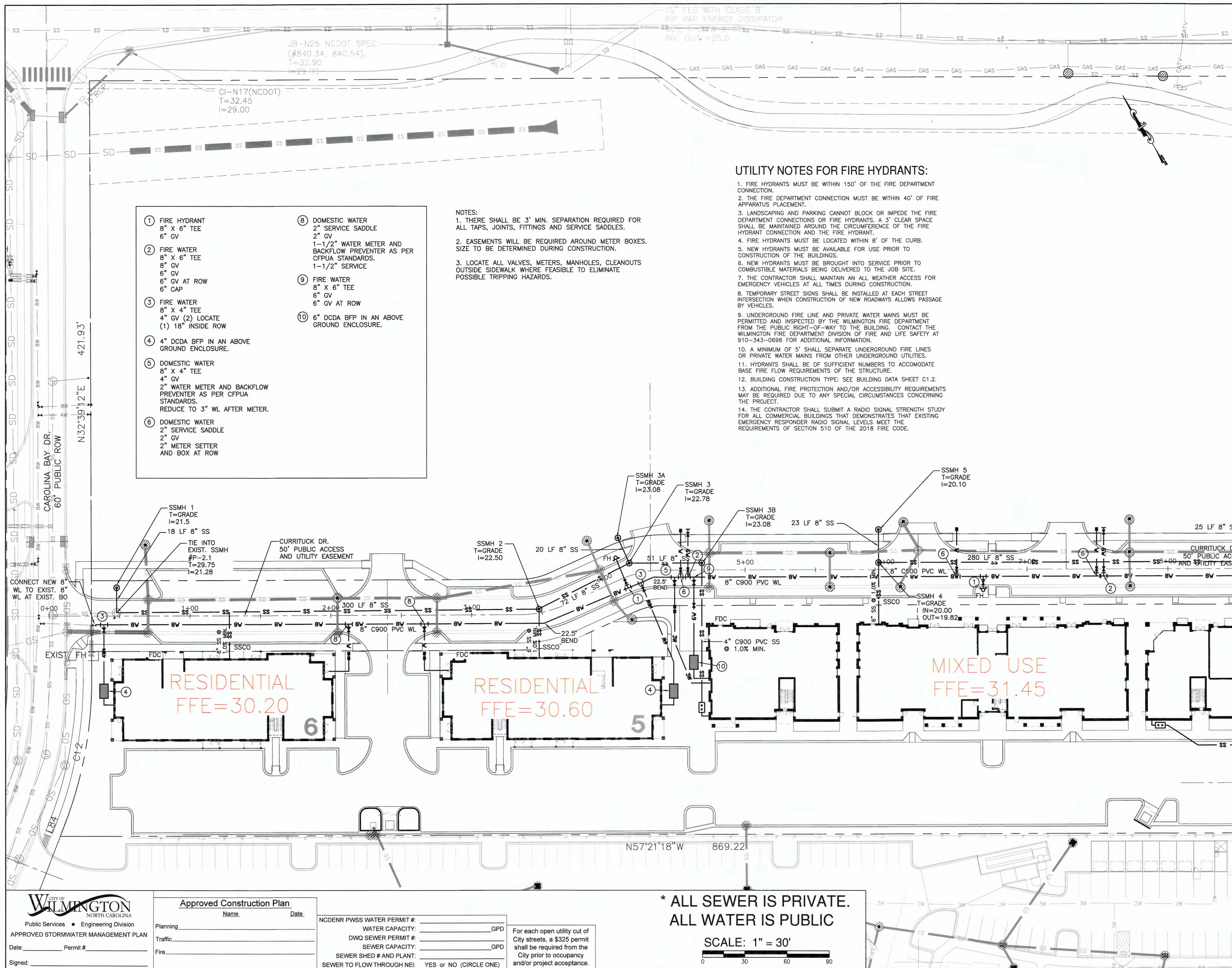
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SCALE: NOT TO SCALE

PRELIMINARY



UTILITY NOTES FOR FIRE HYDRANTS:

1. FIRE HYDRANTS MUST BE WITHIN 150' OF THE FIRE DEPARTMENT CONNECTION.
2. THE FIRE DEPARTMENT CONNECTION MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
3. LANDSCAPING AND PARKING CANNOT BLOCK OR IMPEDE THE FIRE DEPARTMENT CONNECTIONS OR FIRE HYDRANTS. A 3' CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE FIRE HYDRANT CONNECTION AND THE FIRE HYDRANT.
4. FIRE HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
5. NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDINGS.
6. NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING DELIVERED TO THE JOB SITE.
7. THE CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
8. TEMPORARY STREET SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES.
9. UNDERGROUND FIRE LINE AND PRIVATE WATER MAINS MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
10. A MINIMUM OF 5' SHALL SEPARATE UNDERGROUND FIRE LINES OR PRIVATE WATER MAINS FROM OTHER UNDERGROUND UTILITIES.
11. HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMMODATE BASE FIRE FLOW REQUIREMENTS OF THE STRUCTURE.
12. BUILDING CONSTRUCTION TYPE: SEE BUILDING DATA SHEET C1.2.
13. ADDITIONAL FIRE PROTECTION AND/OR ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
14. THE CONTRACTOR SHALL SUBMIT A RADIO SIGNAL STRENGTH STUDY FOR ALL COMMERCIAL BUILDINGS THAT DEMONSTRATES THAT EXISTING EMERGENCY RESPONDER RADIO SIGNAL LEVELS MEET THE REQUIREMENTS OF SECTION 510 OF THE 2018 FIRE CODE.

- | | |
|---|--|
| <ol style="list-style-type: none"> 1 FIRE HYDRANT
8" X 6" TEE
6" GV 2 FIRE WATER
8" X 6" TEE
8" GV
6" GV
6" GV AT ROW
6" CAP 3 FIRE WATER
8" X 4" TEE
4" GV (2) LOCATE
(1) 18" INSIDE ROW 4 4" DCDA BFP IN AN ABOVE
GROUND ENCLOSURE. 5 DOMESTIC WATER
8" X 4" TEE
4" GV
2" WATER METER AND BACKFLOW
PREVENTER AS PER CFPWA
STANDARDS.
REDUCE TO 3" WL AFTER METER. 6 DOMESTIC WATER
2" SERVICE SADDLE
2" GV
2" METER SETTER
AND BOX AT ROW | <ol style="list-style-type: none"> 8 DOMESTIC WATER
2" SERVICE SADDLE
2" GV
1-1/2" WATER METER AND
BACKFLOW PREVENTER AS PER
CFPUA STANDARDS.
1-1/2" SERVICE 9 FIRE WATER
8" X 6" TEE
6" GV
6" GV AT ROW 10 6" DCDA BFP IN AN ABOVE
GROUND ENCLOSURE. |
|---|--|

NOTES:

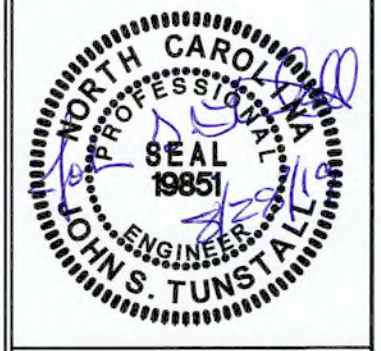
1. THERE SHALL BE 3' MIN. SEPARATION REQUIRED FOR ALL TAPS, JOINTS, FITTINGS AND SERVICE SADDLES.
2. EASEMENTS WILL BE REQUIRED AROUND METER BOXES. SIZE TO BE DETERMINED DURING CONSTRUCTION.
3. LOCATE ALL VALVES, METERS, MANHOLES, CLEANOUTS OUTSIDE SIDEWALK WHERE FEASIBLE TO ELIMINATE POSSIBLE TRIPPING HAZARDS.

UTILITY PLAN
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Licence #C-3641
18128
 DES. JST
 CKD. JPN
 DRWN. NKS
 DATE 8/28/19



C3.1

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

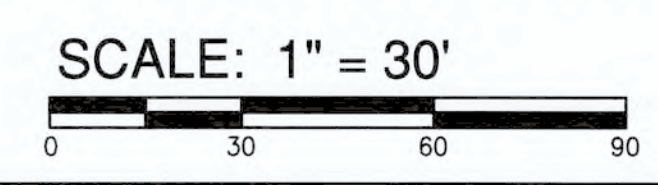
Approved Construction Plan

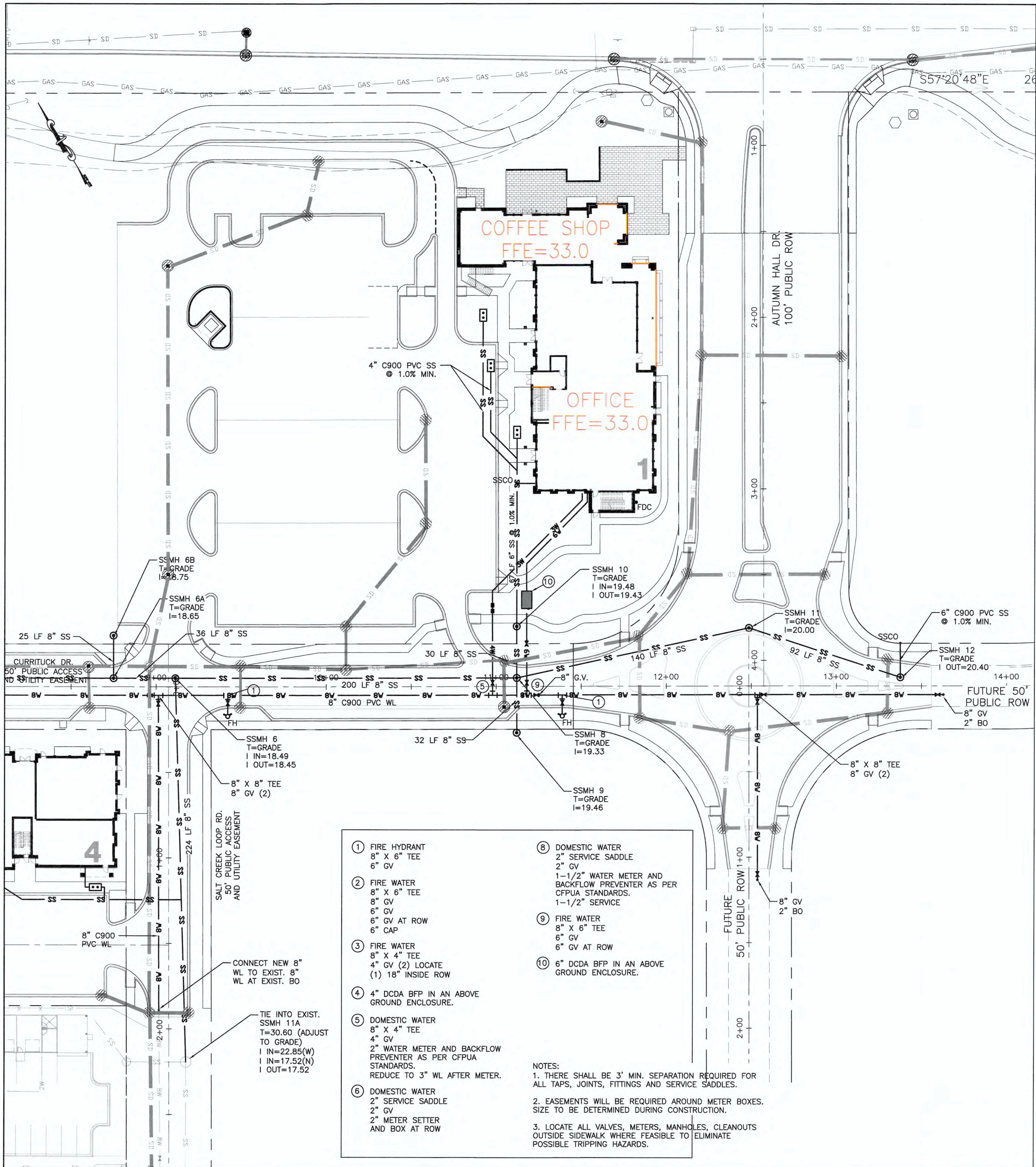
Name	Date
Planning	_____
Traffic	_____
Fire	_____

NCDENR PWSS WATER PERMIT #: _____
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT #: _____
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

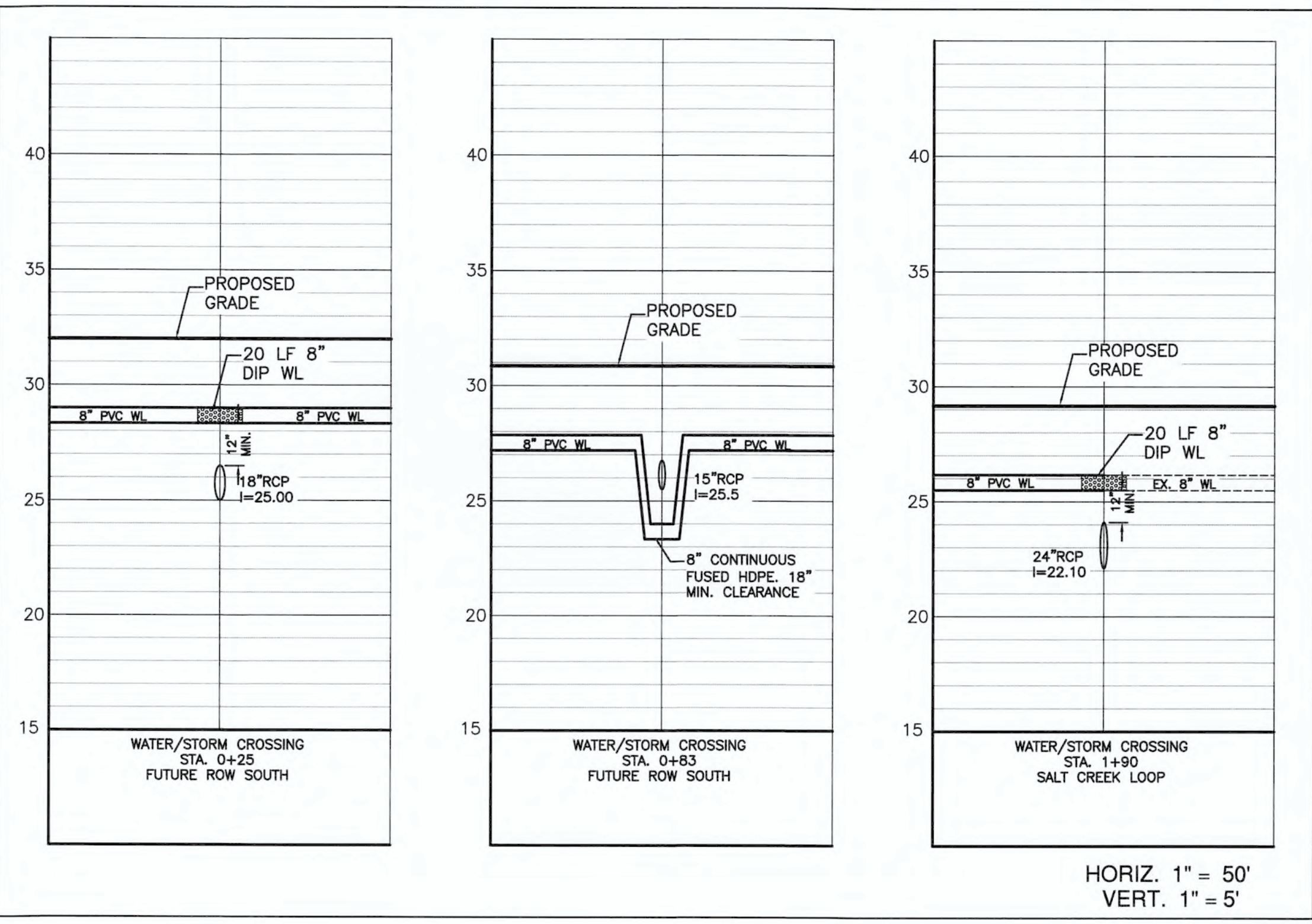
*** ALL SEWER IS PRIVATE.
 ALL WATER IS PUBLIC**





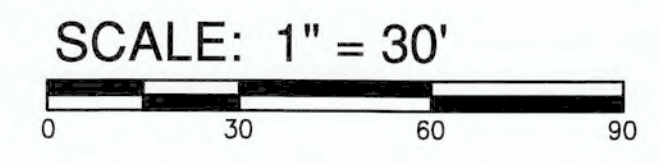
- ① FIRE HYDRANT
8" X 6" TEE
6" GV
- ② FIRE WATER
8" X 6" TEE
8" GV
6" GV
6" GV AT ROW
6" CAP
- ③ FIRE WATER
8" X 4" TEE
4" GV (2) LOCATE
(1) 18" INSIDE ROW
- ④ 4" DCDA BFP IN AN ABOVE GROUND ENCLOSURE.
- ⑤ DOMESTIC WATER
8" X 4" TEE
4" GV
2" WATER METER AND BACKFLOW PREVENTER AS PER CFPWA STANDARDS.
REDUCE TO 3" WL AFTER METER.
- ⑥ DOMESTIC WATER
2" SERVICE SADDLE
2" GV
2" METER SETTER AND BOX AT ROW
- ⑦ DOMESTIC WATER
2" SERVICE SADDLE
2" GV
1-1/2" WATER METER AND BACKFLOW PREVENTER AS PER CFPWA STANDARDS.
1-1/2" SERVICE
- ⑧ FIRE WATER
8" X 6" TEE
6" GV
6" GV AT ROW
- ⑨ 6" DCDA BFP IN AN ABOVE GROUND ENCLOSURE.

NOTES:
 1. THERE SHALL BE 3' MIN. SEPARATION REQUIRED FOR ALL TAPS, JOINTS, FITTINGS AND SERVICE SADDLES.
 2. EASEMENTS WILL BE REQUIRED AROUND METER BOXES. SIZE TO BE DETERMINED DURING CONSTRUCTION.
 3. LOCATE ALL VALVES, METERS, MANHOLES, CLEANOUTS OUTSIDE SIDEWALK WHERE FEASIBLE TO ELIMINATE POSSIBLE TRIPPING HAZARDS.



HORIZ. 1" = 50'
VERT. 1" = 5'

*** ALL SEWER IS PRIVATE.
ALL WATER IS PUBLIC**



PRELIMINARY

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

NCDENR PWSS WATER PERMIT #: _____
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT #: _____
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____

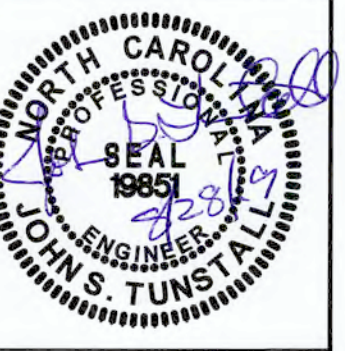
CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit #: _____
 Signed: _____

UTILITY PLAN
AUTUMN HALL COMMERCIAL PH I
 1202 EASTWOOD ROAD
 WILMINGTON, NC
 NEW HANOVER COUNTY

DEVELOPER
 WEB TRASK C/O MIKE BROWN
 CAPE FEAR COMMERCIAL, LLC
 1051 MILITARY CUTOFF RD.,
 SUITE 200
 WILMINGTON, NC 28405
 344-1010 (P) 622-4657 (CELL)

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1900 EASTWOOD RD., SUITE #11
 WILMINGTON, NC 28405
 PHONE (910) 343-9635
 1429 ASH-LITTLE RIVER RD., NW
 ASH, NC 28620
 PHONE (910) 287-5900

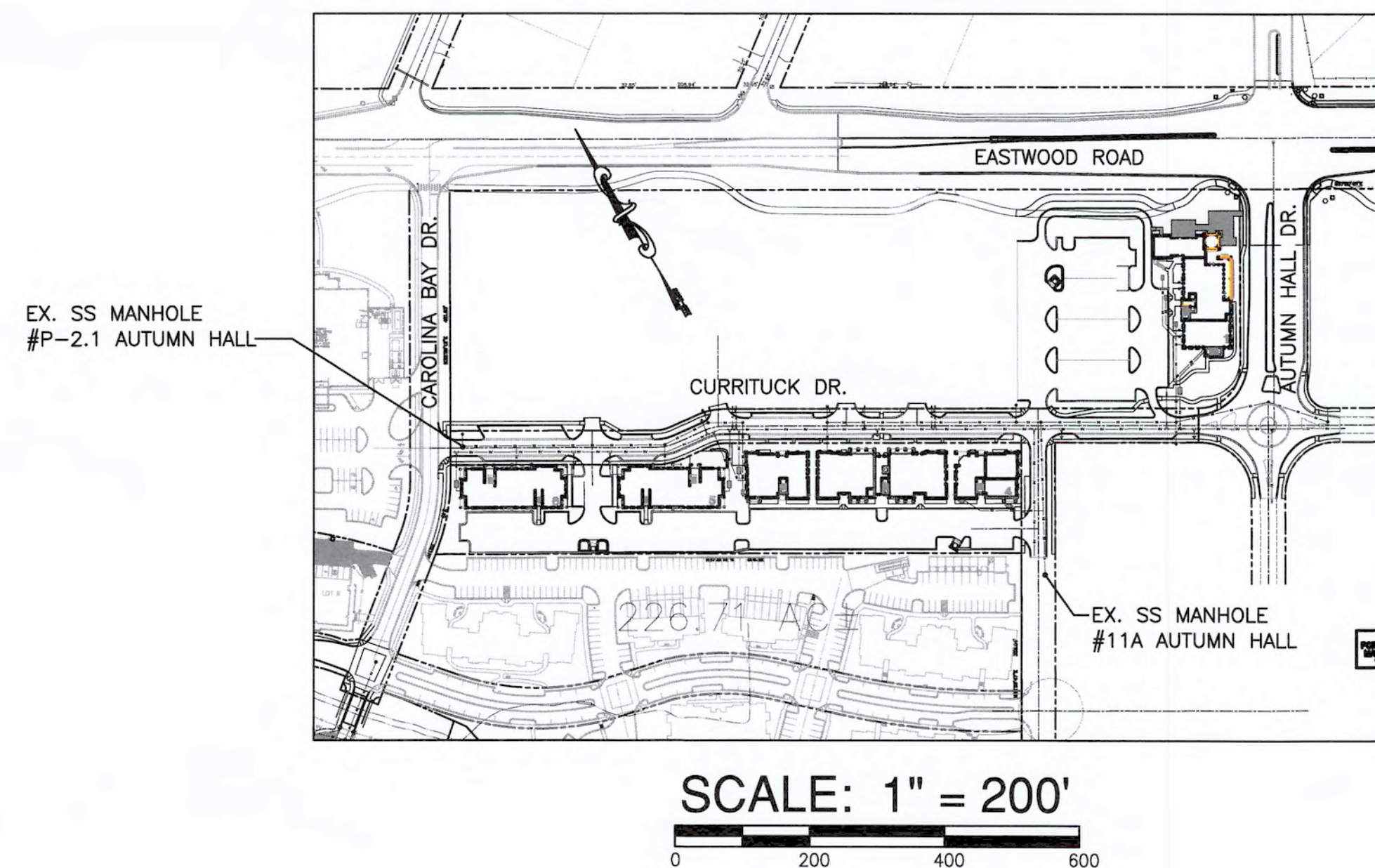
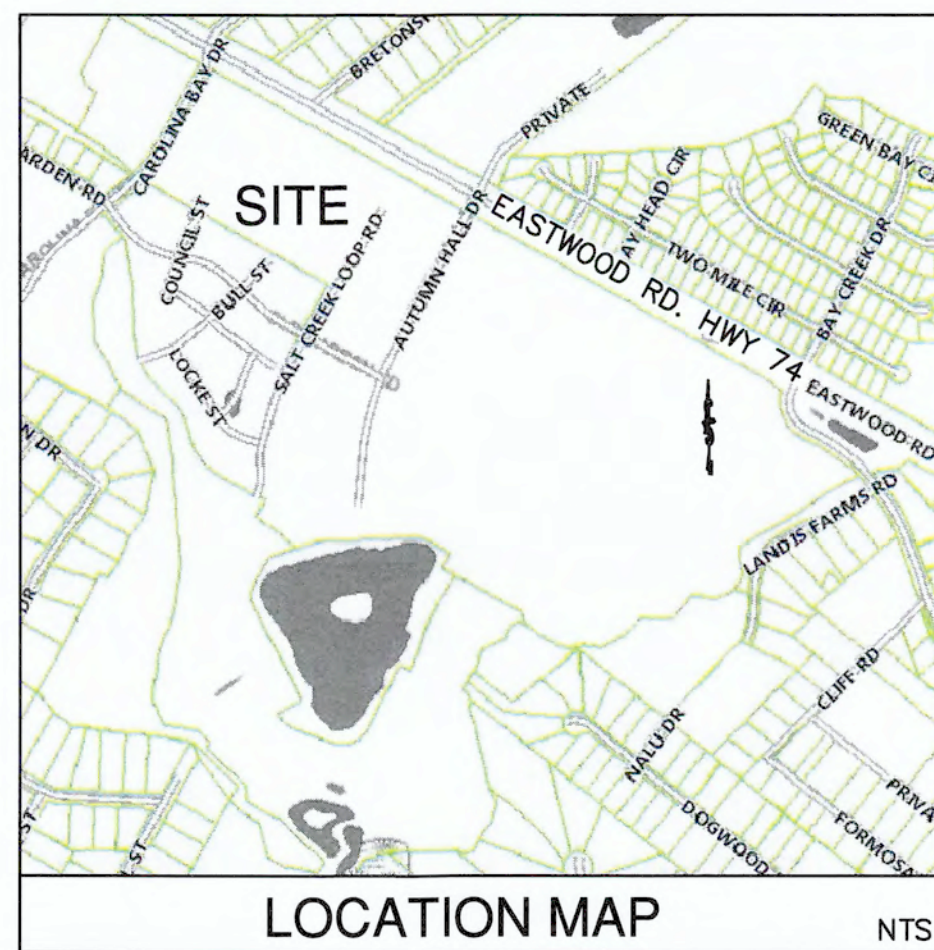
License #C-3641
18128
 DES. JST
 CKD. JPN
 DRWN. NKS
 DATE 8/28/19



C3.2

AUTUMN HALL COMMERCIAL PH 1

WATER AND SANITARY SEWER
 WILMINGTON, NC
 NEW HANOVER COUNTY
 07/26/19



INDEX OF SHEETS

- COVER SHEET
- PR1 WATER AND SEWER PLAN AND PROFILE
- PR2 WATER AND SEWER PLAN AND PROFILE
- SS1: UTILITY DETAILS - SEWER
- SS2: UTILITY DETAILS - SEWER
- W1: UTILITY DETAILS - WATER
- W2: UTILITY DETAILS - WATER
- WS1: UTILITY DETAILS TYPICAL WATER AND SEWER
- WS2: UTILITY DETAILS TYPICAL WATER AND SEWER

WATER/SEWER DEMANDS

COFFEE/OFFICE/RESTAURANT = 6,721 GPD
 OFFICE 9,995 SF (100 GPD/1,000 SF)=1,000 GPD
 OFFICE 6,020 SF (100 GPD/1,000 SF)=602 GPD
 RESTAURANT 5,000 SF WITH 100 SEATS (40 GPD/SEAT)=4,000 GPD
 COFFEE 2,237 SF (50 GPD/100 SF)=1,119 GPD
 MIXED USE = 16,787 GPD
 RESIDENTIAL: 60 UNITS 1&2 BEDROOM (240 GPD/UNIT)=14,400 GPD
 RETAIL: 23,873 SF (100 GPD/1,000 SF)=2,387 GPD
 RESIDENTIAL = 13,440 GPD
 56 UNITS 1&2 BEDROOM (240 GPD/UNIT)=13,440 GPD
 TOTAL = 36,948 GPD

QUANTITIES

	SIZE	LENGTH
SEWER (PRIVATE)	8"	1,547 LF
WATER (PUBLIC)	8"	1,660 LF
	6" FH	35 LF

ALL SANITARY SEWER LINE IS PRIVATE
 ALL WATER LINE IS PUBLIC
 NOT PART OF A PHASED PROJECT

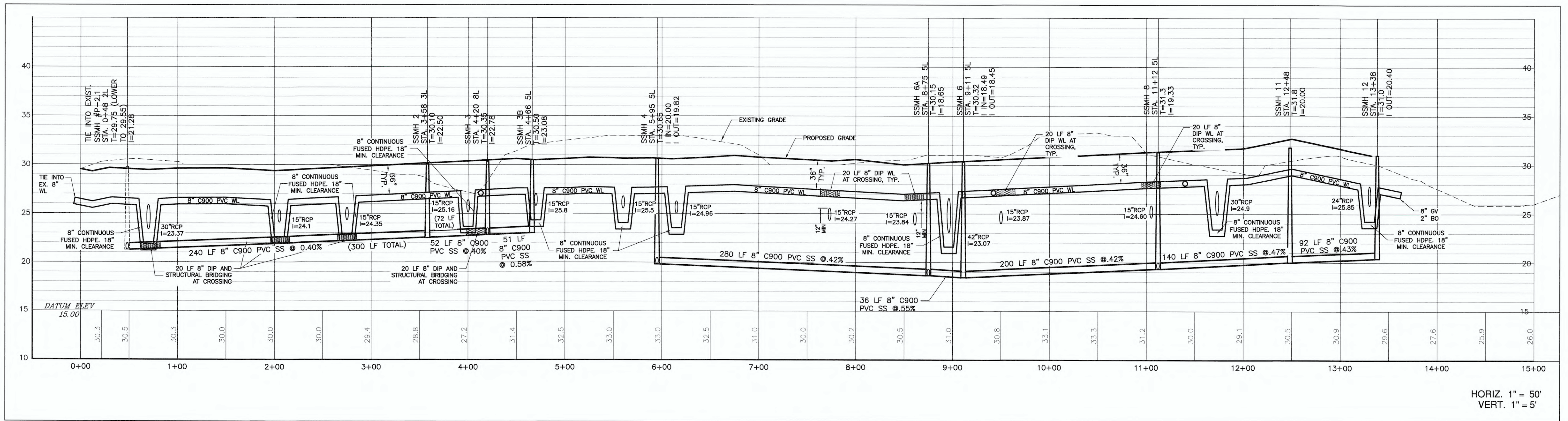
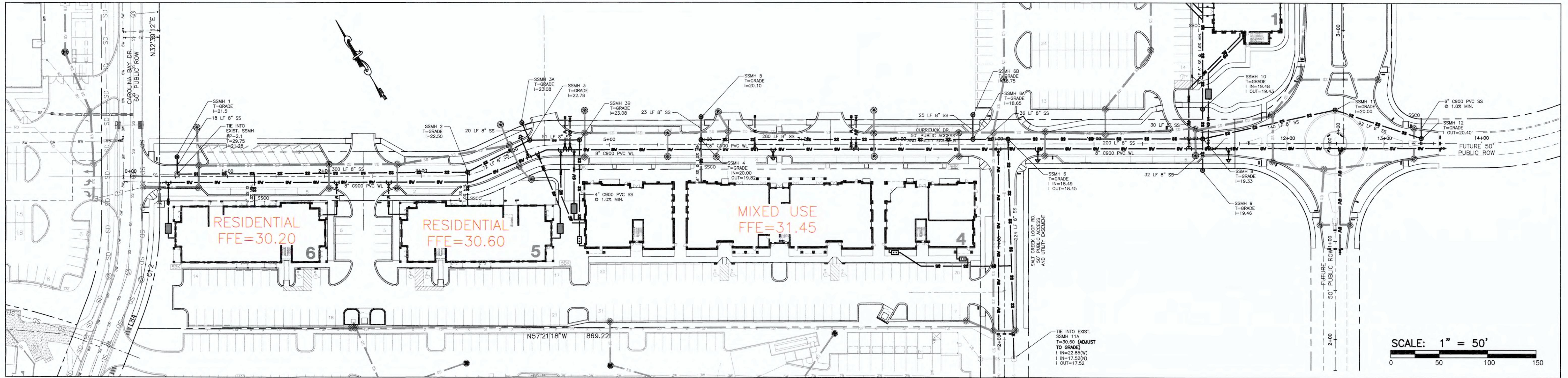
NORRIS & TUNSTALL

CONSULTING ENGINEERS P.C.

1900 EASTWOOD RD., SUITE #11 WILMINGTON, NC 28403
 1429 ASH-LITTLE RIVER RD. NW ASH, NC 28420
 PHONE (910) 343-9653 PHONE (910) 287-5900

DEVELOPER
 WEB TRASK C/O MIKE BROWN
 CAPE FEAR COMMERCIAL, LLC
 1051 MILITARY CUTOFF RD.,
 SUITE 200
 WILMINGTON, NC 28405
 344-1010 (P) 622-4657 (CELL)





CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
- WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE.
- ALL SEWER SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL ALSO BE CONSTRUCTED OF DIP.
- MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
- NO FLEXIBLE COUPLINGS SHALL BE USED.
- ALL STAINLESS STEEL FASTENERS SHALL BE TYPE 316.
- CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.
- WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.
- UNUSED SERVICES SHALL BE ABANDONED. ABANDONED WATER SERVICES SHALL BE DISCONNECTED FROM MAIN.
- A MINIMUM OF 10' OF MAIN LINE SHALL BE REPLACED FOR NEW CONNECTIONS TO EXISTING CLAY GRAVITY SEWER MAINS.

* ALL SEWER IS PRIVATE.
ALL WATER IS PUBLIC

REV. NO.	DESCRIPTION	DATE



NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
100 EASTWOOD RD., SUITE #11
WILMINGTON, NC 28403
PHONE 910 343 9435

1409 ASH LITTLE
RIVER RD. NW
ASH, NC 28402
PHONE 910 201 5900

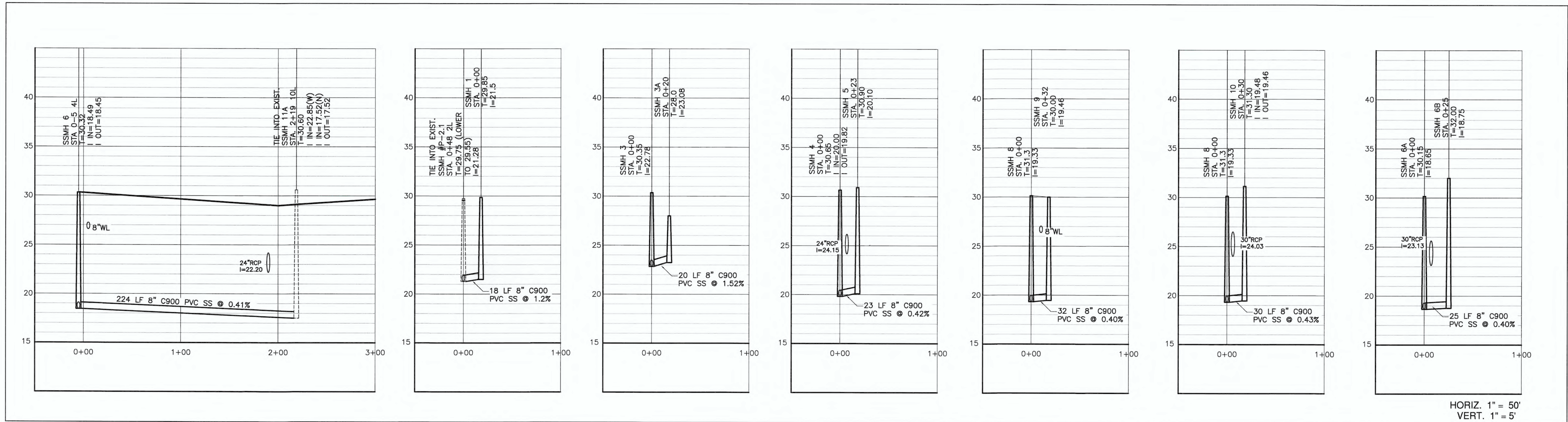
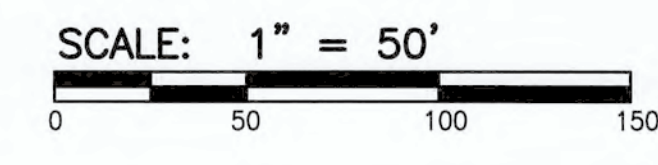
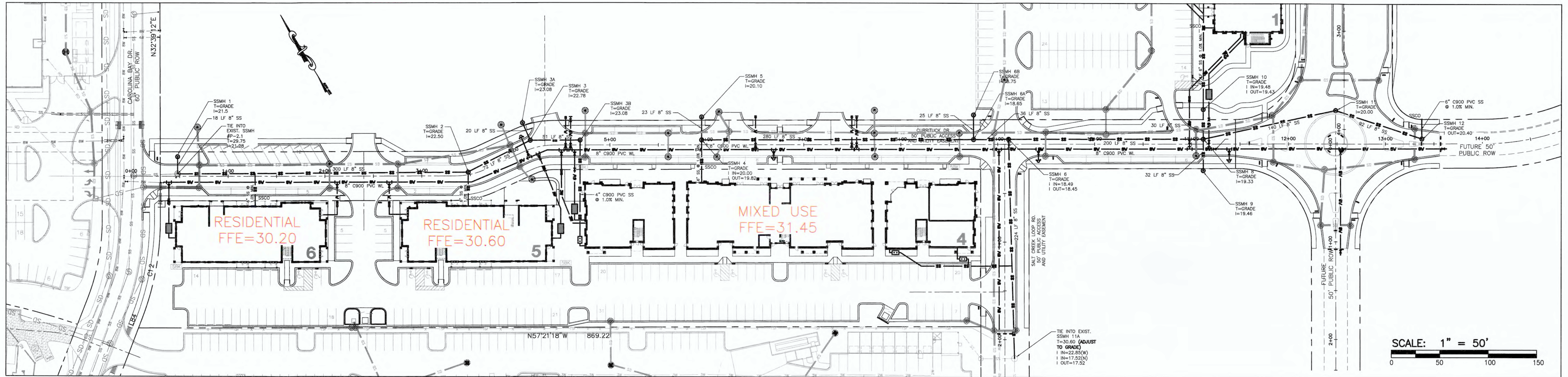
AUTUMN HALL COMMERCIAL PH 1
WATERLINE LAYOUT AND SANITARY SEWER
PLAN & PROFILE

DATE: 6/28/19
SCALE: 1" = 50'
1" = 5'

DRAWN: NKS
CHECKED: JST
PROJECT NO: 18028

CURRITUCK DR.

SHEET NO:
PR1



HORIZ. 1" = 50'
VERT. 1" = 5'

- CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:
- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
 - WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE 18" INSIDE RIGHT-OF-WAY LINE.
 - ALL SEWER SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL ALSO BE CONSTRUCTED OF DIP.
 - MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
 - NO FLEXIBLE COUPLINGS SHALL BE USED.
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 - CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.
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 - UNUSED SERVICES SHALL BE ABANDONED. ABANDONED WATER SERVICES SHALL BE DISCONNECTED FROM MAIN.
 - A MINIMUM OF 10' OF MAIN LINE SHALL BE REPLACED FOR NEW CONNECTIONS TO EXISTING CLAY GRAVITY SEWER MAINS.

* ALL SEWER IS PRIVATE.
ALL WATER IS PUBLIC

REV. NO.	DESCRIPTION	DATE



NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1700 EASTWOOD RD., SUITE 411
WILMINGTON, NC 28403
PHONE: 910-343-9653

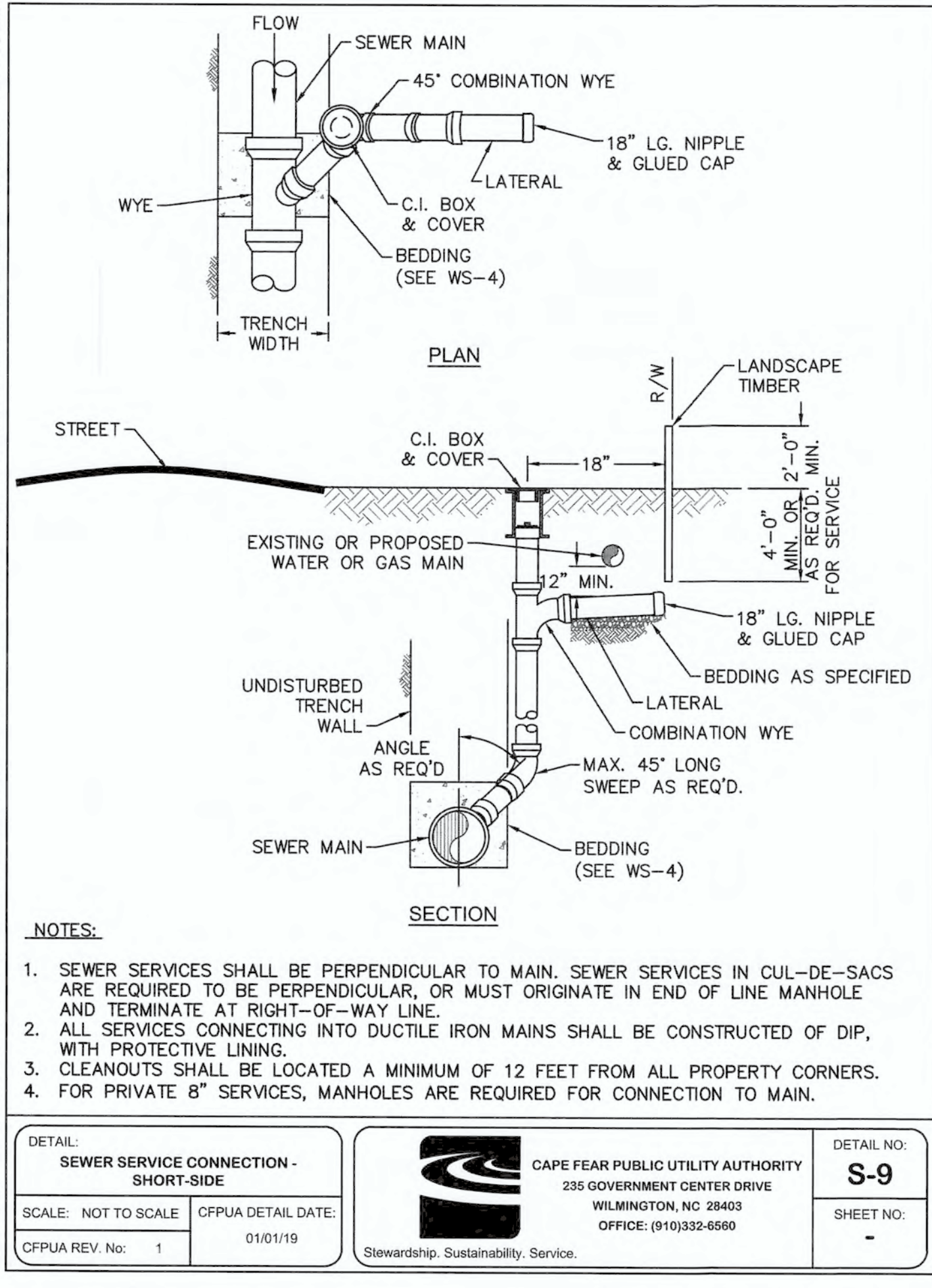
1429 ASH LITTLE RIVER RD. SW
ASH, NC 28402
PHONE: 910-37-2900

AUTUMN HALL COMMERCIAL PH 1
WATERLINE LAYOUT AND SANITARY SEWER
PLAN & PROFILE

DATE: 8/28/19
SCALE: 1" = 50'
1" = 50'

DRAWN: NKS
CHECKED: JST
PROJECT NO: 18028

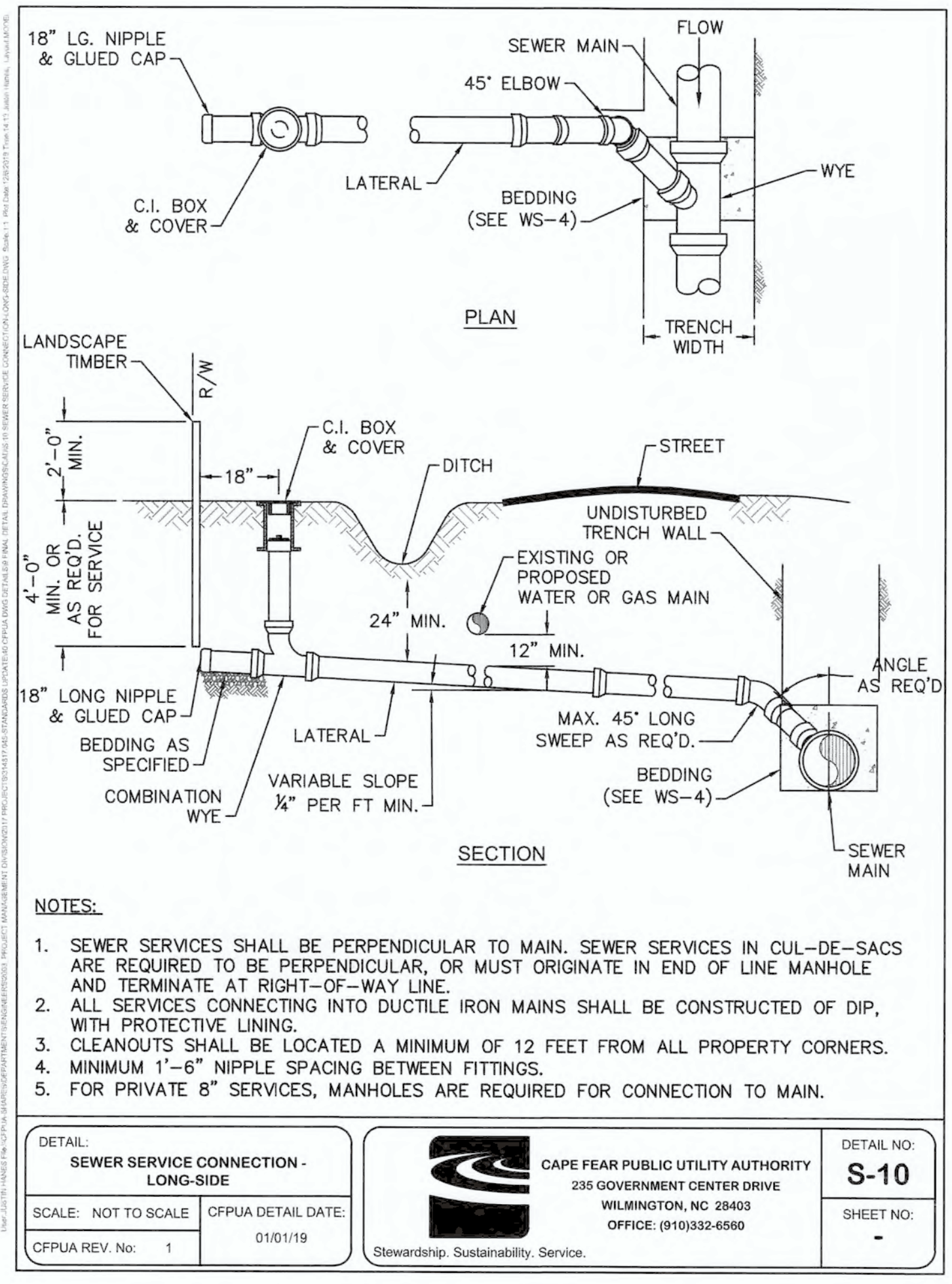
CURRITUCK DR.
SHEET NO:
PR2



NOTES:

- SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
- ALL SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF DIP, WITH PROTECTIVE LINING.
- CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.
- FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR CONNECTION TO MAIN.

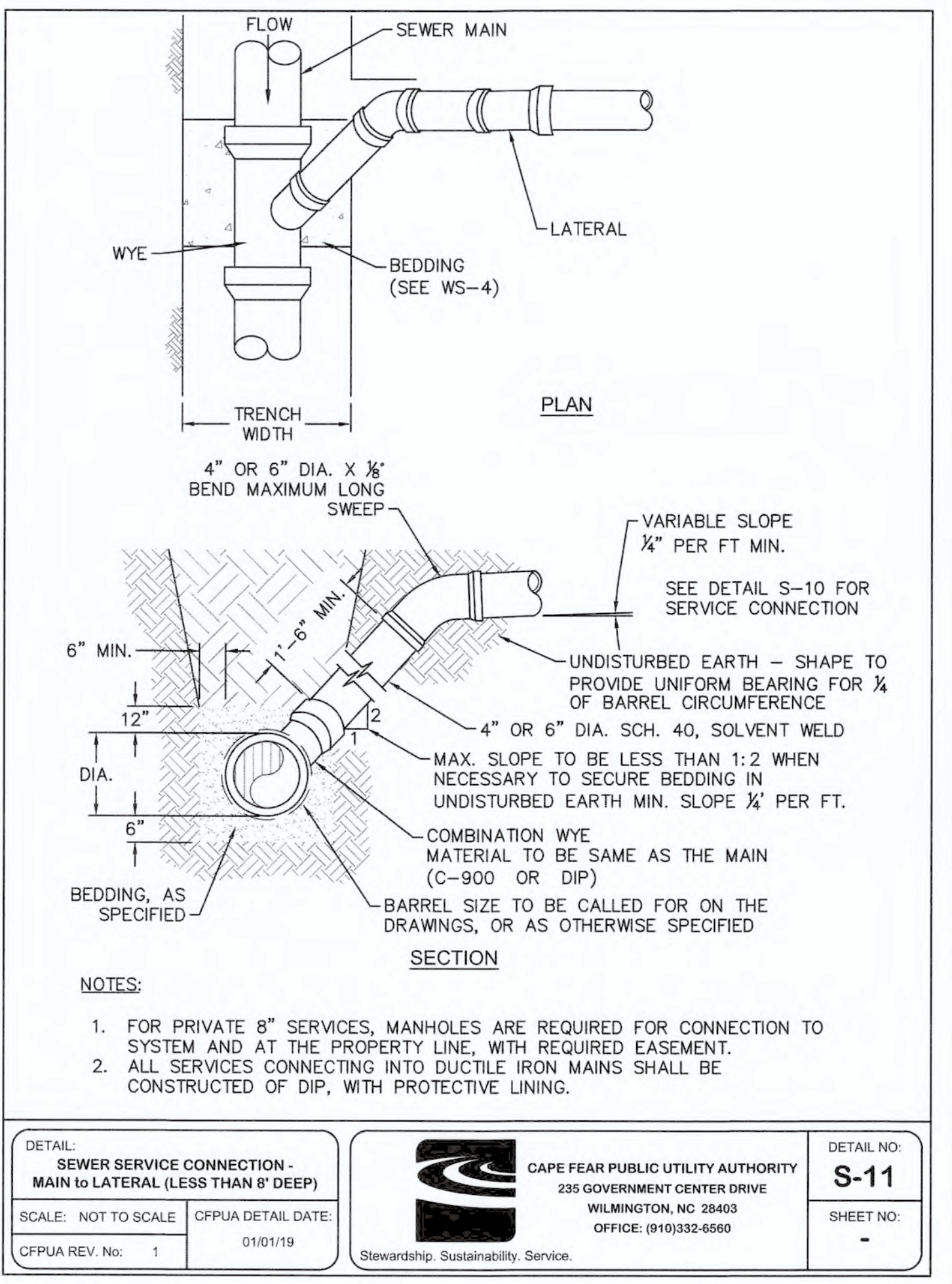
DETAIL: SEWER SERVICE CONNECTION - SHORT-SIDE	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-9
SCALE: NOT TO SCALE CFPUA REV. No: 1 CFPUA DETAIL DATE: 01/01/19	Stewardship, Sustainability, Service.	SHEET NO: -



NOTES:

- SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
- ALL SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF DIP, WITH PROTECTIVE LINING.
- CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.
- MINIMUM 1'-6" NIPPLE SPACING BETWEEN FITTINGS.
- FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR CONNECTION TO MAIN.

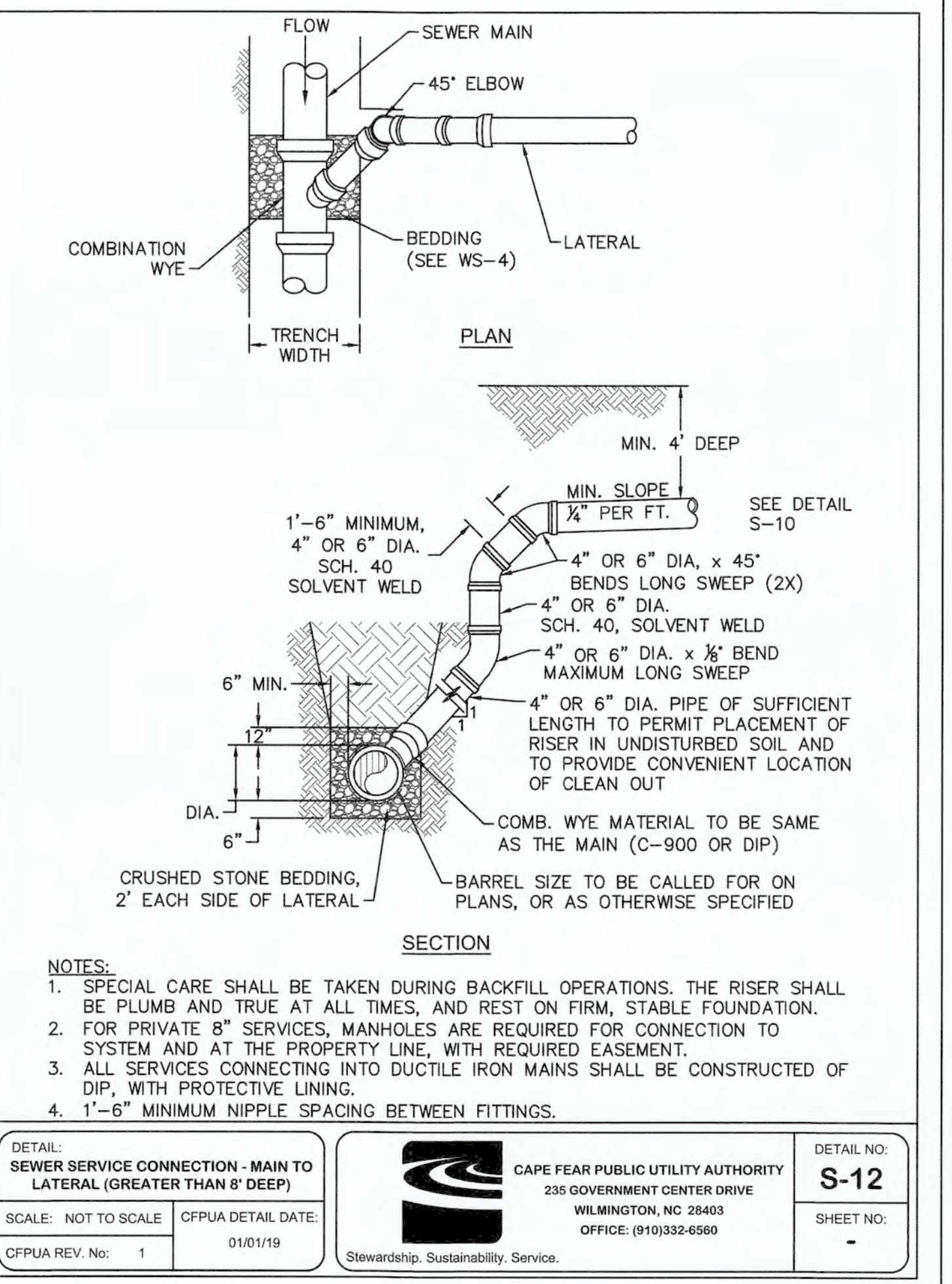
DETAIL: SEWER SERVICE CONNECTION - LONG-SIDE	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-10
SCALE: NOT TO SCALE CFPUA REV. No: 1 CFPUA DETAIL DATE: 01/01/19	Stewardship, Sustainability, Service.	SHEET NO: -



NOTES:

- FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR CONNECTION TO SYSTEM AND AT THE PROPERTY LINE, WITH REQUIRED EASEMENT.
- ALL SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF DIP, WITH PROTECTIVE LINING.

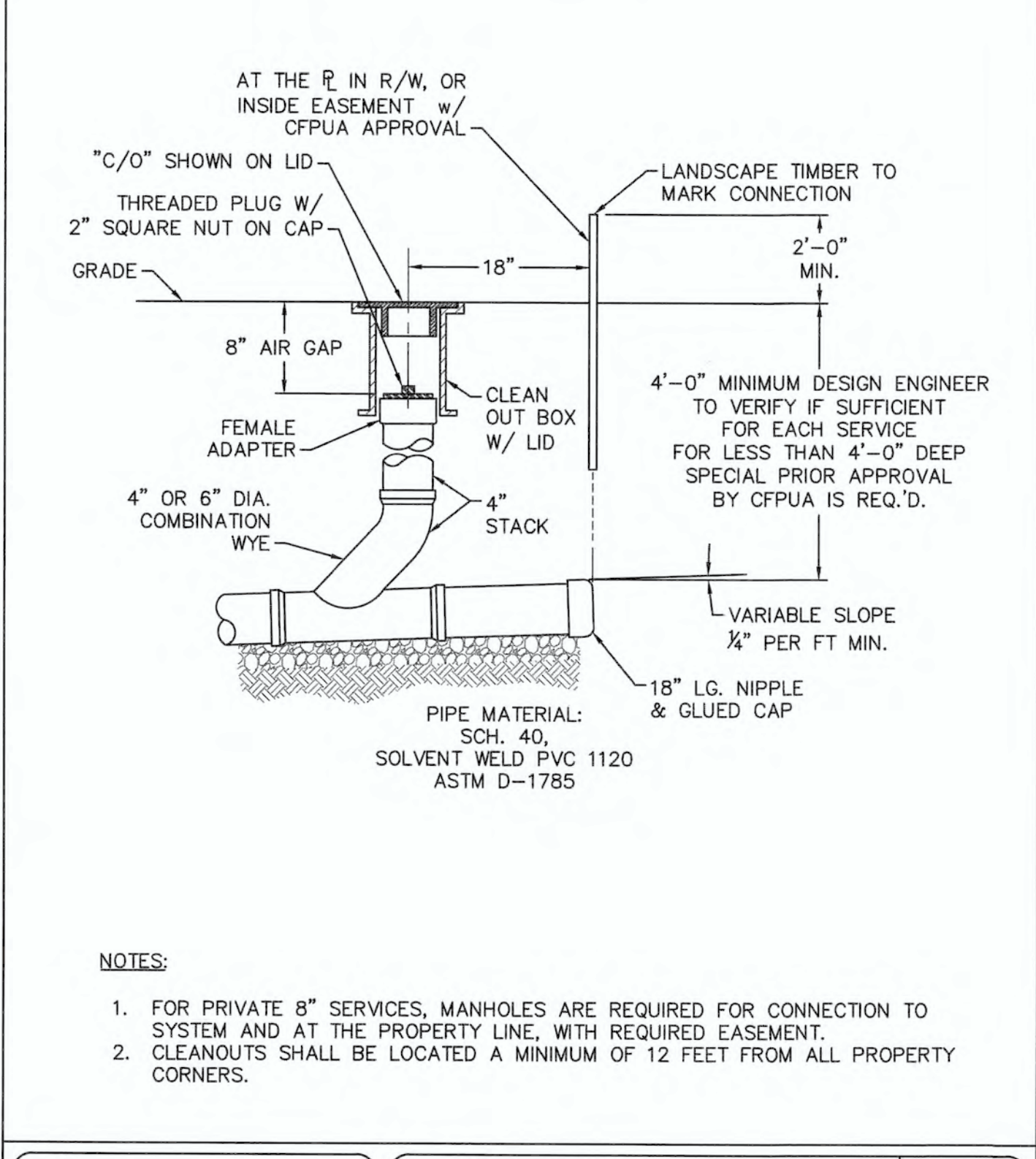
DETAIL: SEWER SERVICE CONNECTION - MAIN TO LATERAL (LESS THAN 8' DEEP)	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-11
SCALE: NOT TO SCALE CFPUA REV. No: 1 CFPUA DETAIL DATE: 01/01/19	Stewardship, Sustainability, Service.	SHEET NO: -



NOTES:

- SPECIAL CARE SHALL BE TAKEN DURING BACKFILL OPERATIONS. THE RISER SHALL BE PLUMB AND TRUE AT ALL TIMES, AND REST ON FIRM, STABLE FOUNDATION.
- FOR PRIVATE 8" SERVICES, MANHOLES ARE REQUIRED FOR CONNECTION TO SYSTEM AND AT THE PROPERTY LINE, WITH REQUIRED EASEMENT.
- ALL SERVICES CONNECTING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF DIP, WITH PROTECTIVE LINING.
- 1'-6" MINIMUM NIPPLE SPACING BETWEEN FITTINGS.

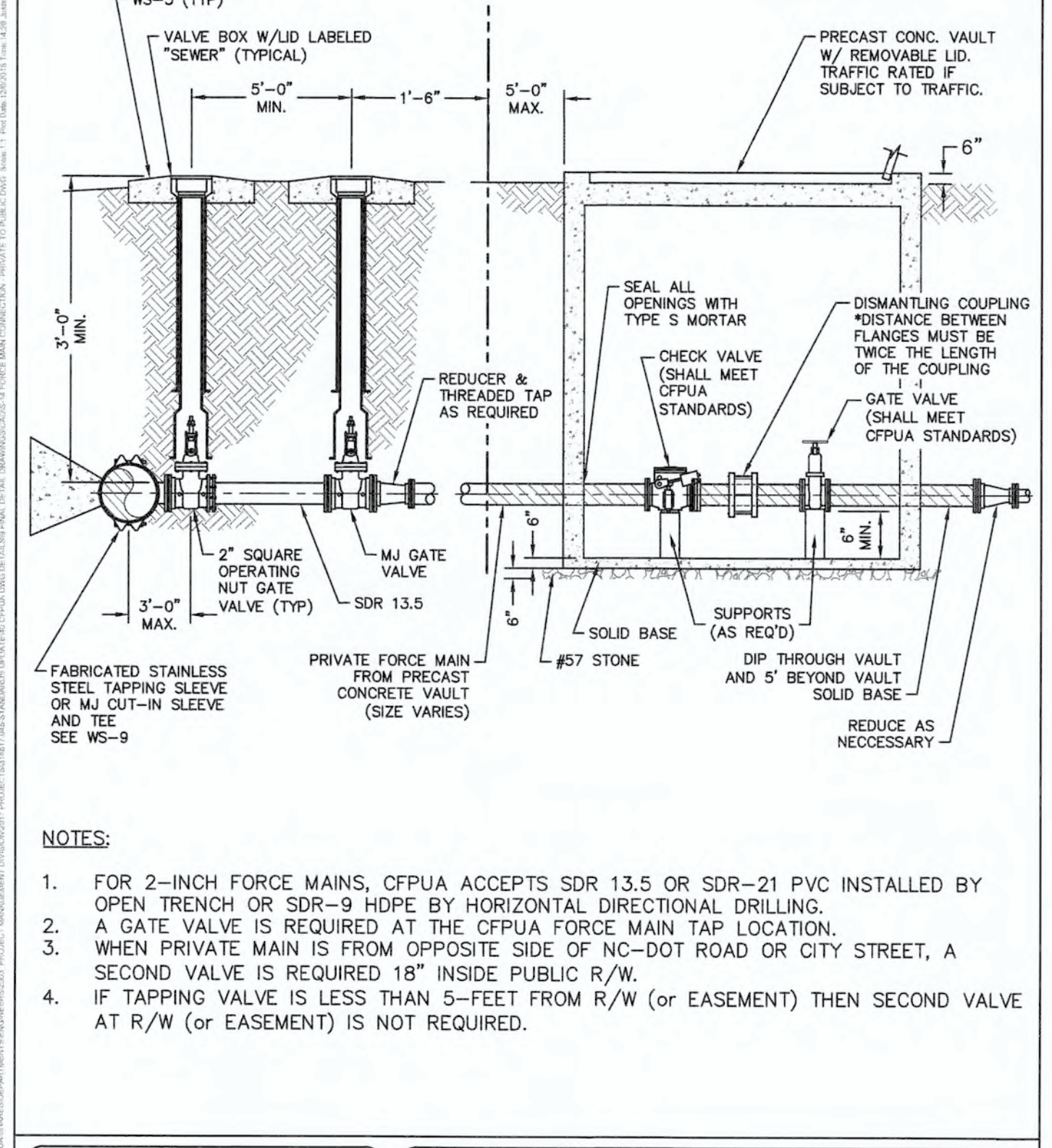
DETAIL: SEWER SERVICE CONNECTION - MAIN TO LATERAL (GREATER THAN 8' DEEP)	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-12
SCALE: NOT TO SCALE CFPUA REV. No: 1 CFPUA DETAIL DATE: 01/01/19	Stewardship, Sustainability, Service.	SHEET NO: -



NOTES:

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- CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS.

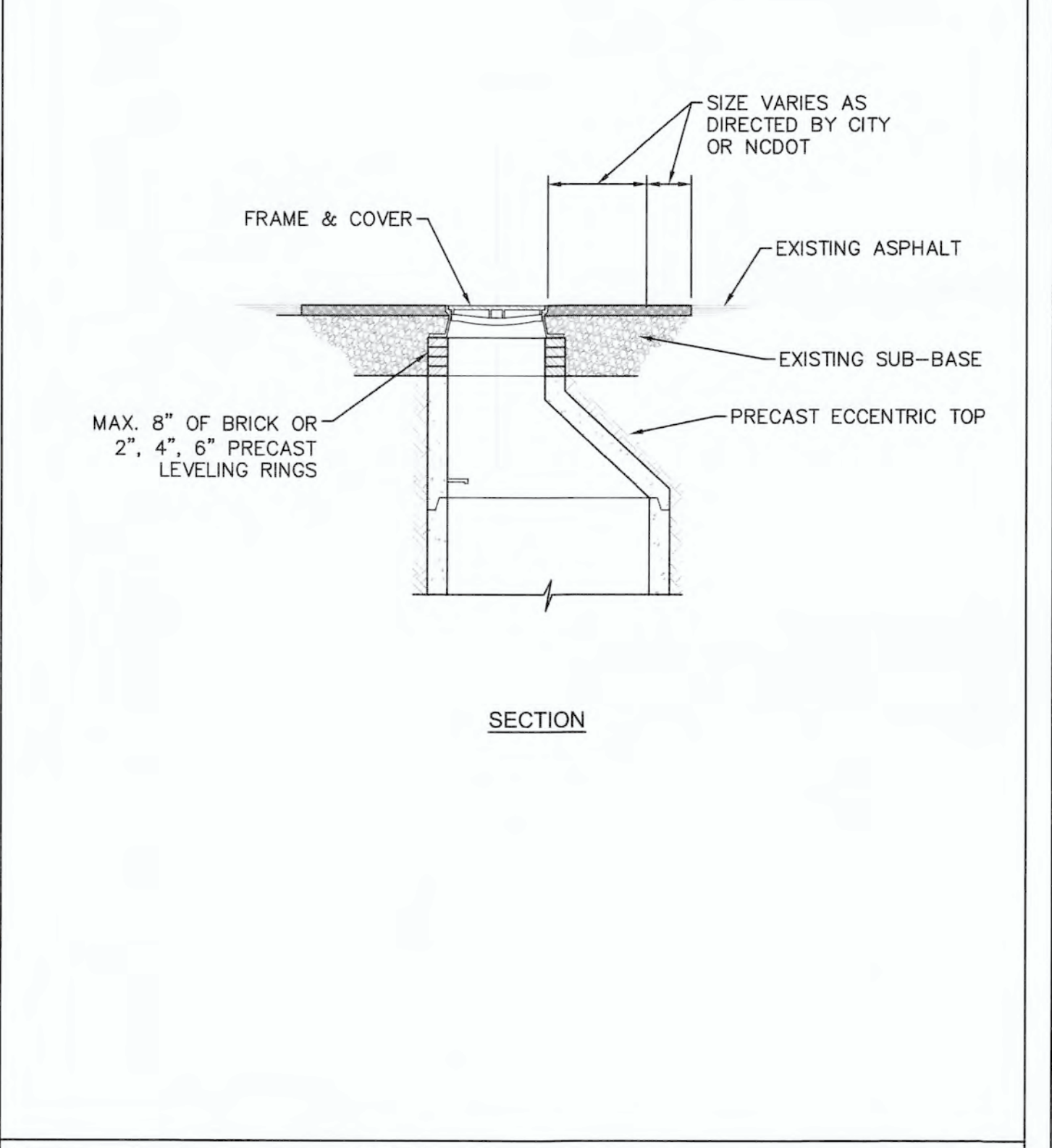
DETAIL: SEWER SERVICE CONNECTION - TYPICAL CLEAN-OUT	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-13
SCALE: NOT TO SCALE CFPUA REV. No: 1 CFPUA DETAIL DATE: 01/01/19	Stewardship, Sustainability, Service.	SHEET NO: -



NOTES:

- FOR 2-INCH FORCE MAINS, CFPWA ACCEPTS SDR 13.5 OR SDR-21 PVC INSTALLED BY OPEN TRENCH OR SDR-9 HDPE BY HORIZONTAL DIRECTIONAL DRILLING.
- A GATE VALVE IS REQUIRED AT THE CFPWA FORCE MAIN TAP LOCATION.
- WHEN PRIVATE MAIN IS FROM OPPOSITE SIDE OF NC-DOT ROAD OR CITY STREET, A SECOND VALVE IS REQUIRED 18" INSIDE PUBLIC R/W.
- IF TAPPING VALVE IS LESS THAN 5'-FEET FROM R/W (OR EASEMENT) THEN SECOND VALVE AT R/W (OR EASEMENT) IS NOT REQUIRED.

DETAIL: FORCE MAIN CONNECTION - PRIVATE TO PUBLIC	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-14
SCALE: NOT TO SCALE CFPUA REV. No: 1 CFPUA DETAIL DATE: 01/01/19	Stewardship, Sustainability, Service.	SHEET NO: -



NOTES:

- SIZE VARIES AS DIRECTED BY CITY OR NCDOT

DETAIL: MANHOLE RIM ADJUSTMENTS	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: S-15
SCALE: NOT TO SCALE CFPUA REV. No: 1 CFPUA DETAIL DATE: 01/01/19	Stewardship, Sustainability, Service.	SHEET NO: -

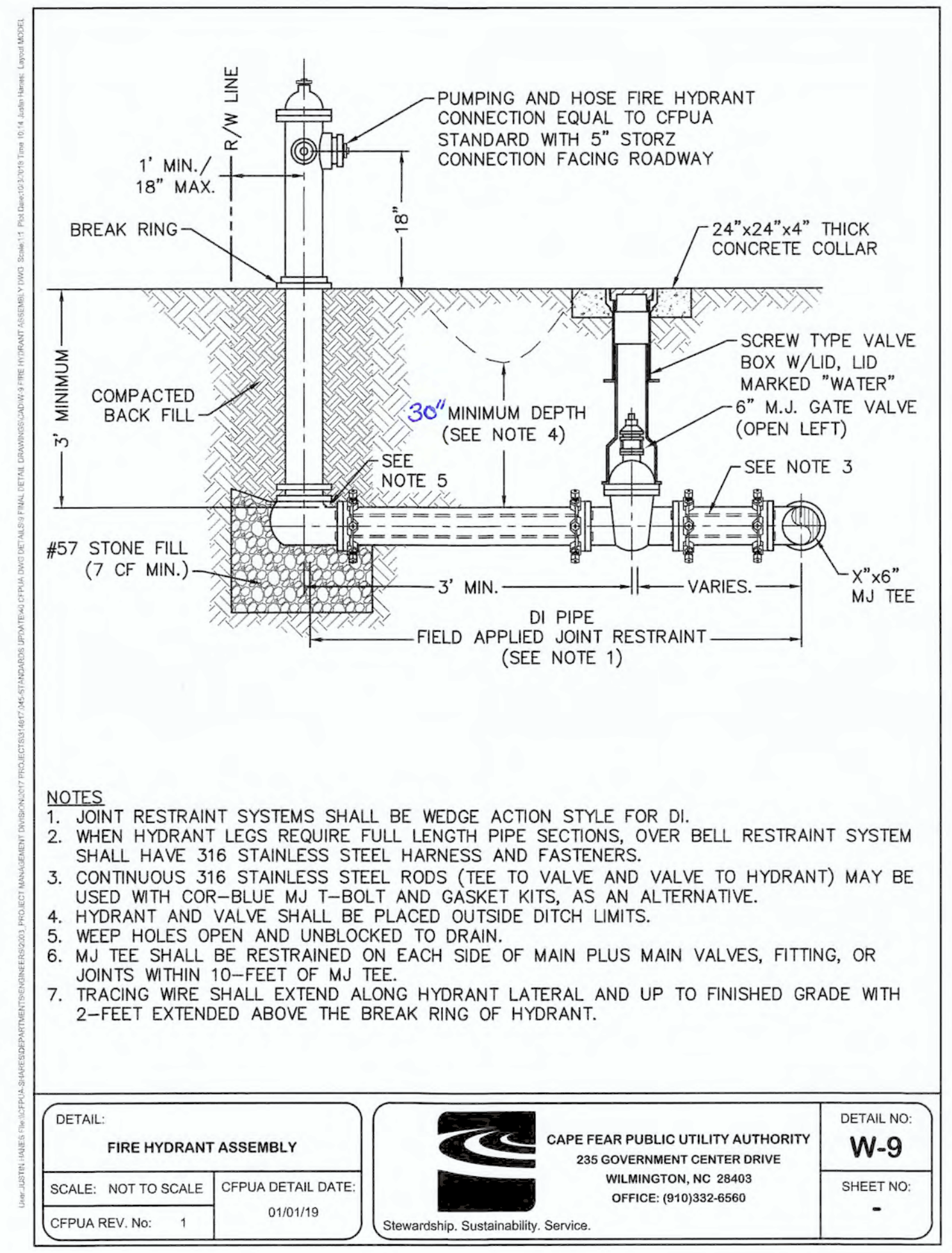
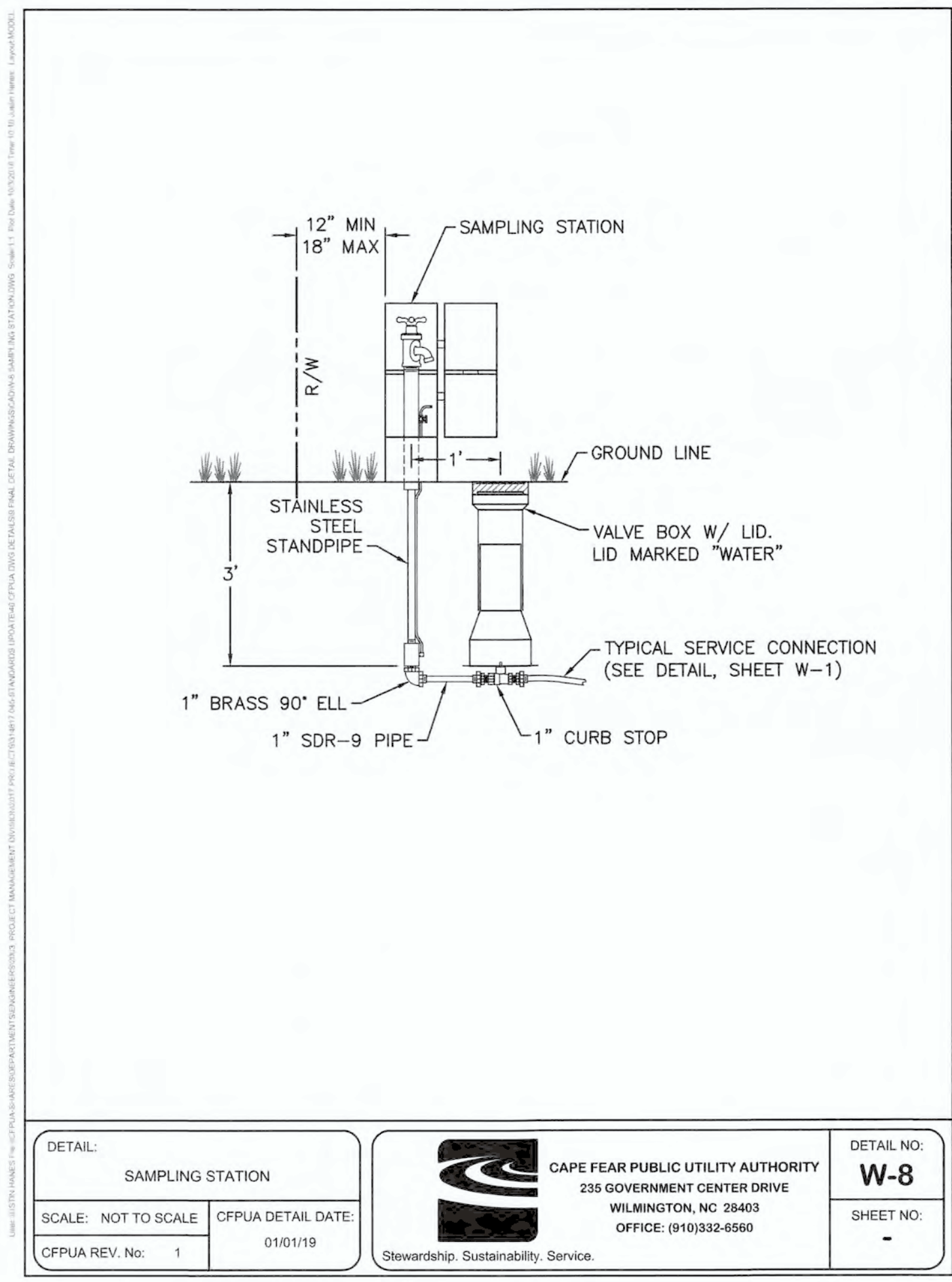
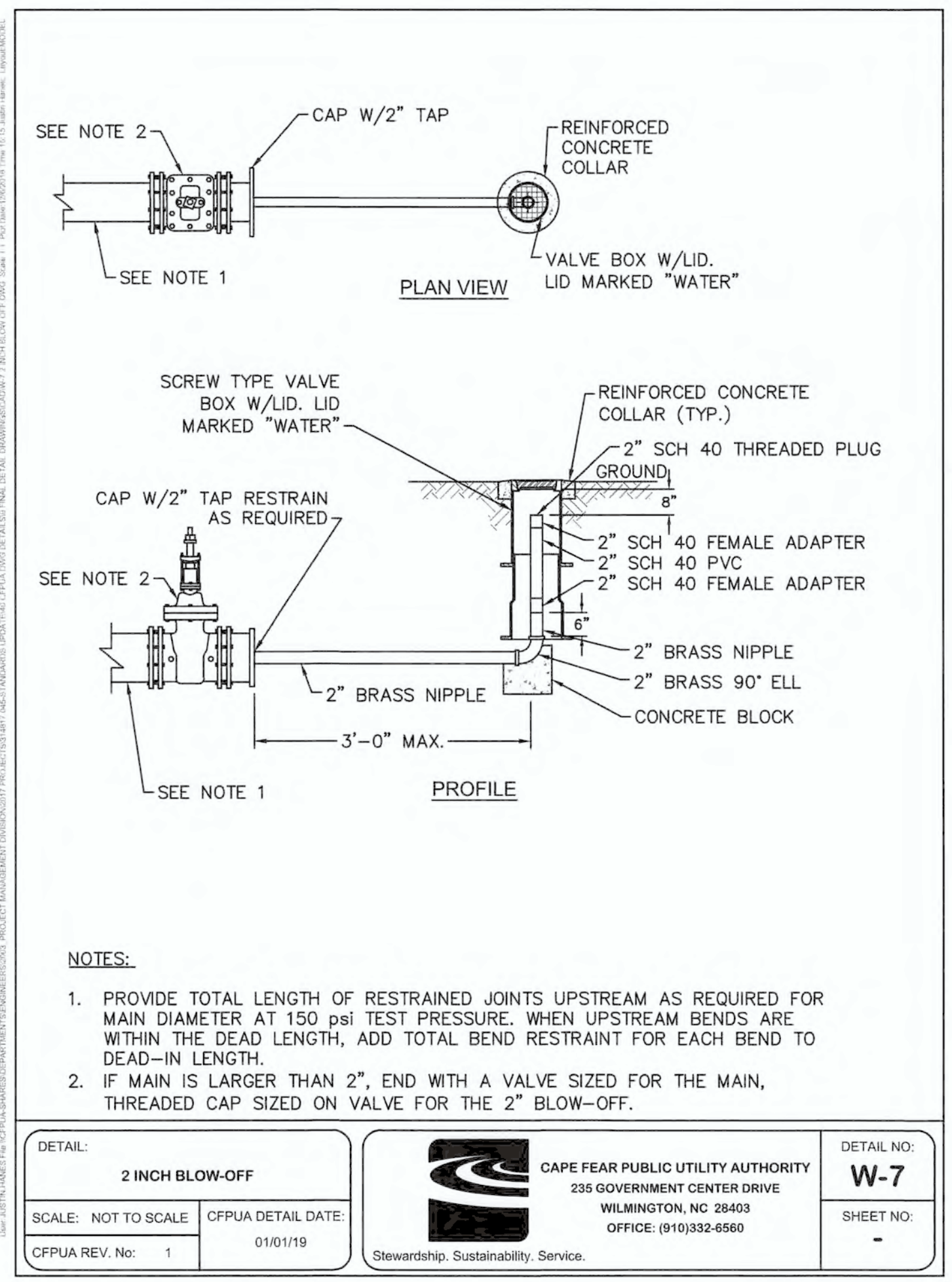
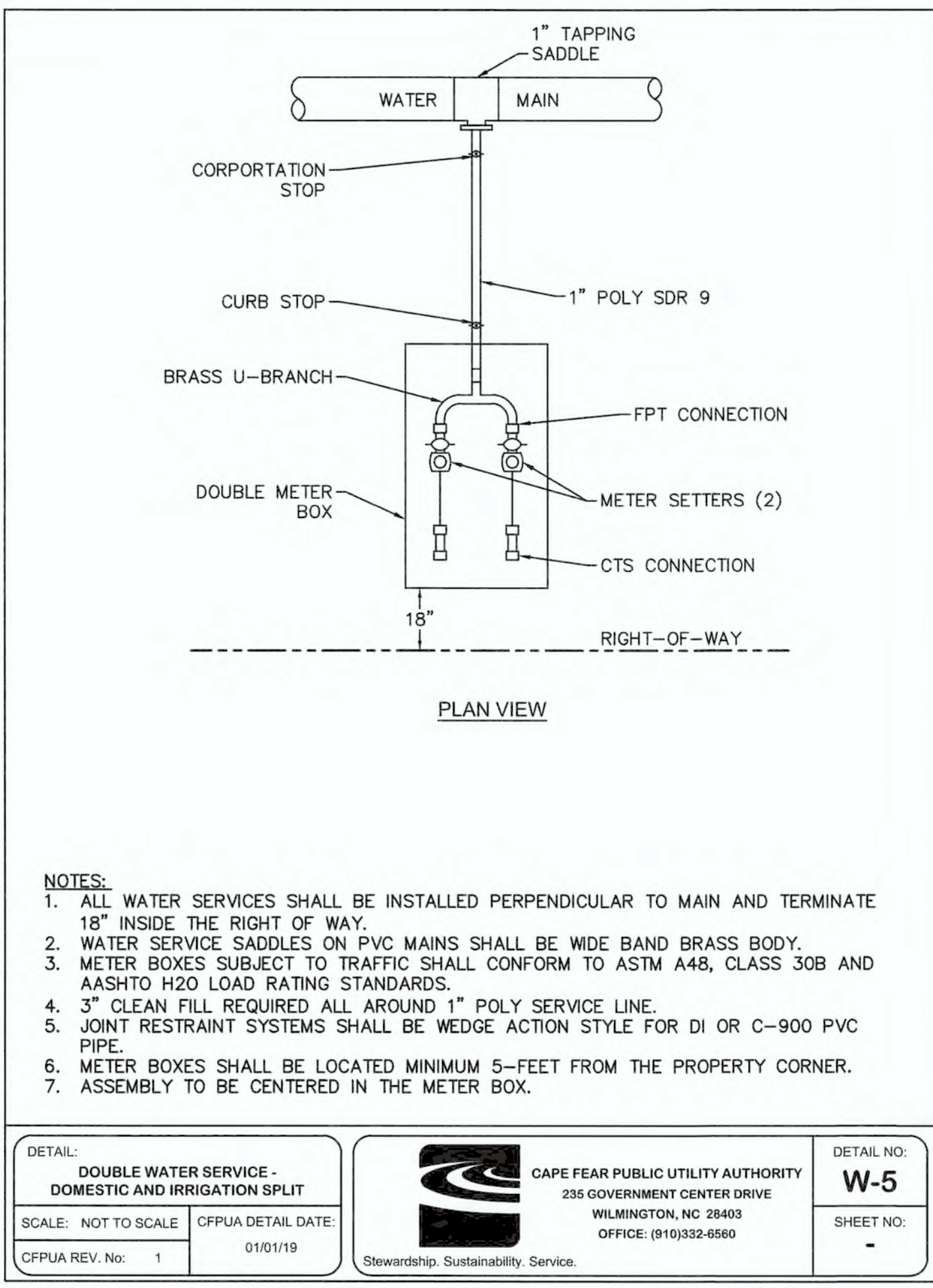
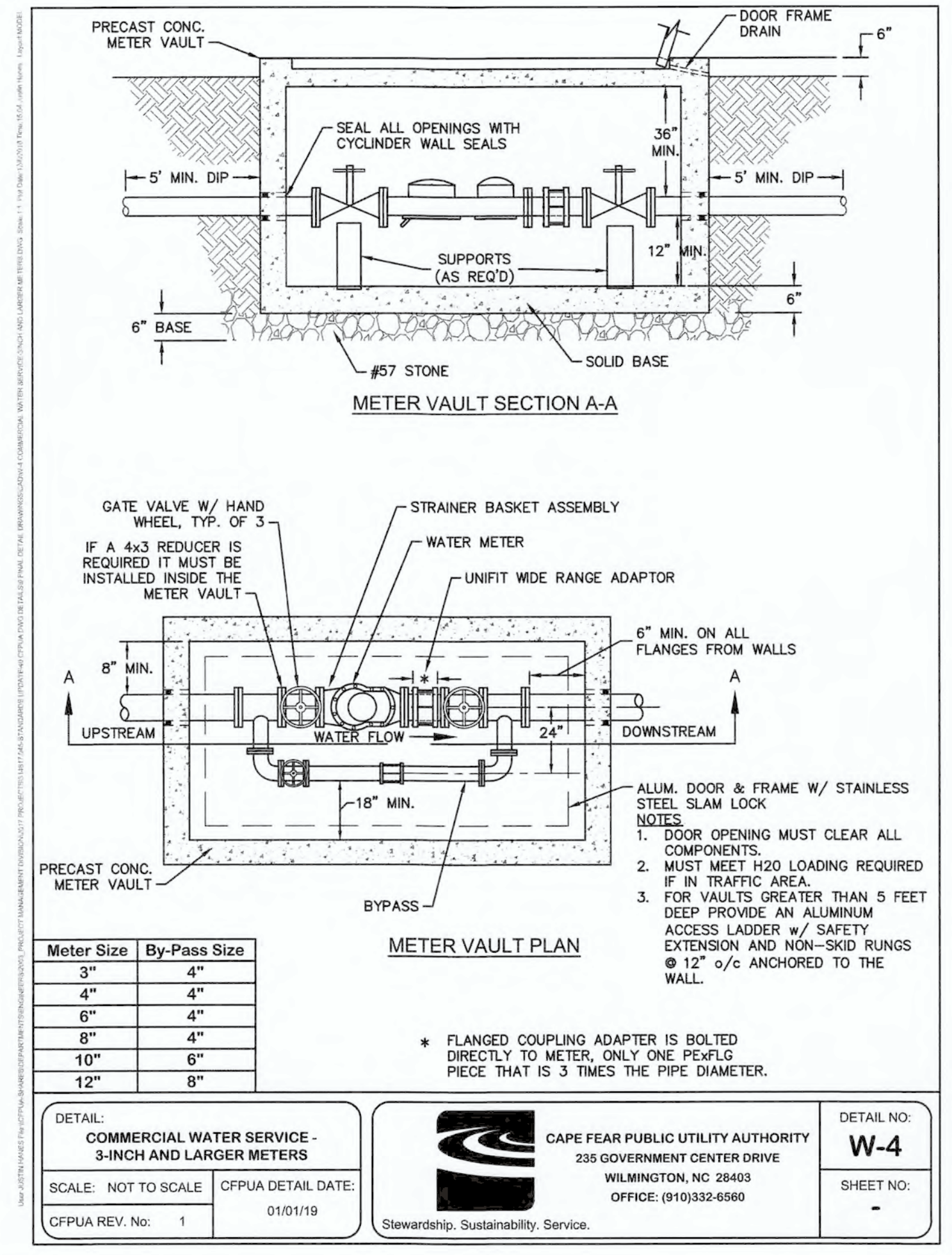
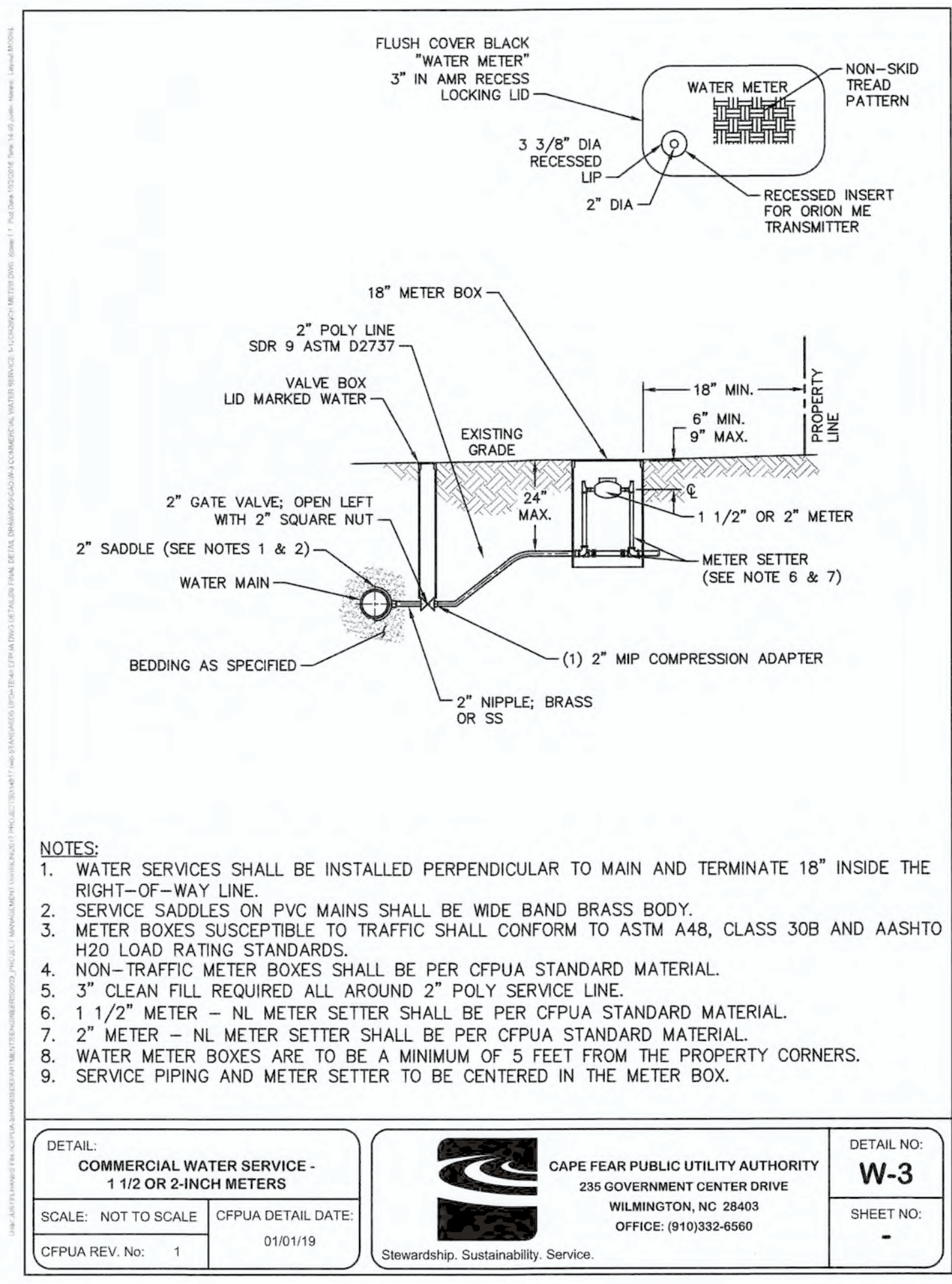
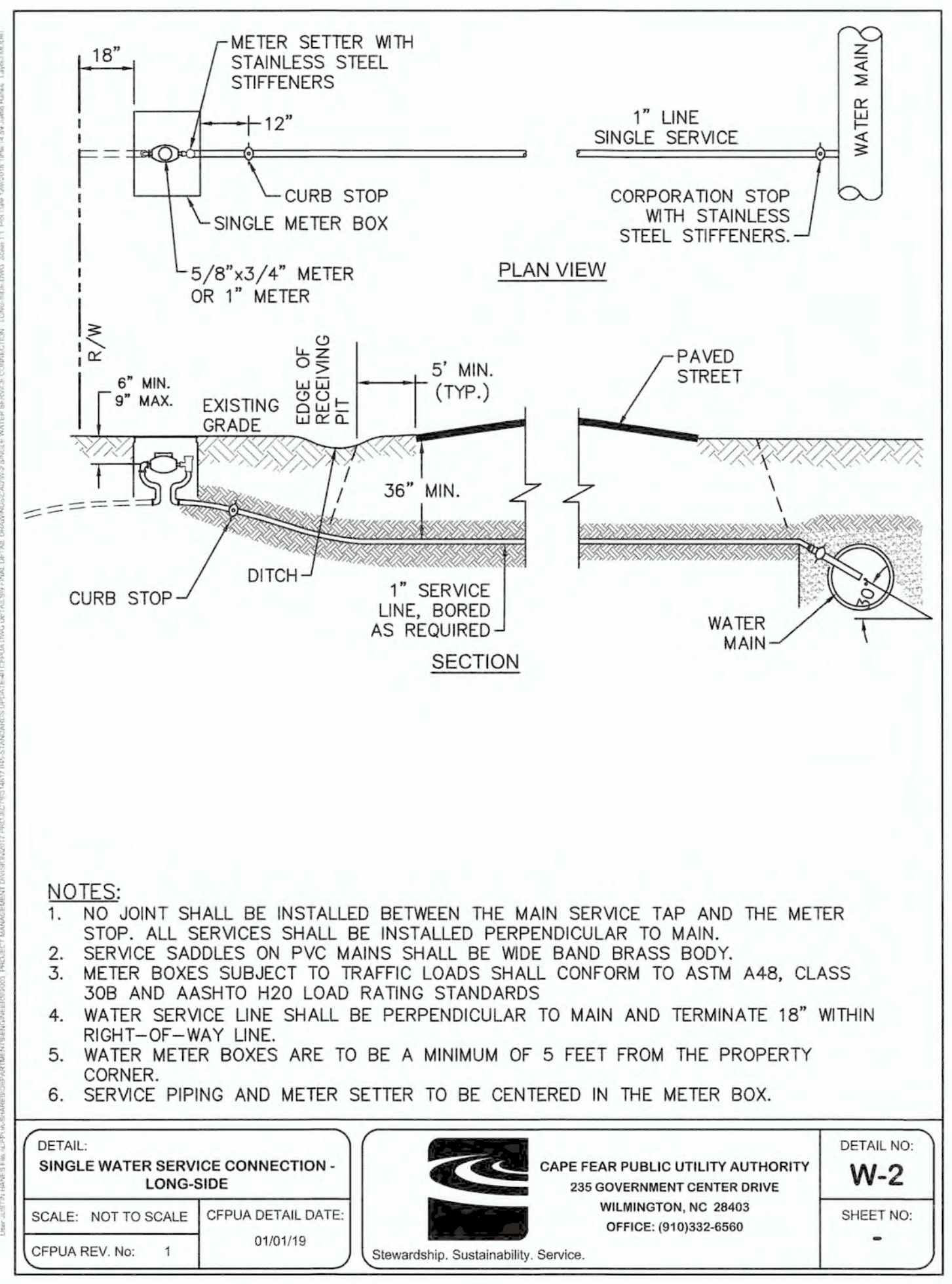
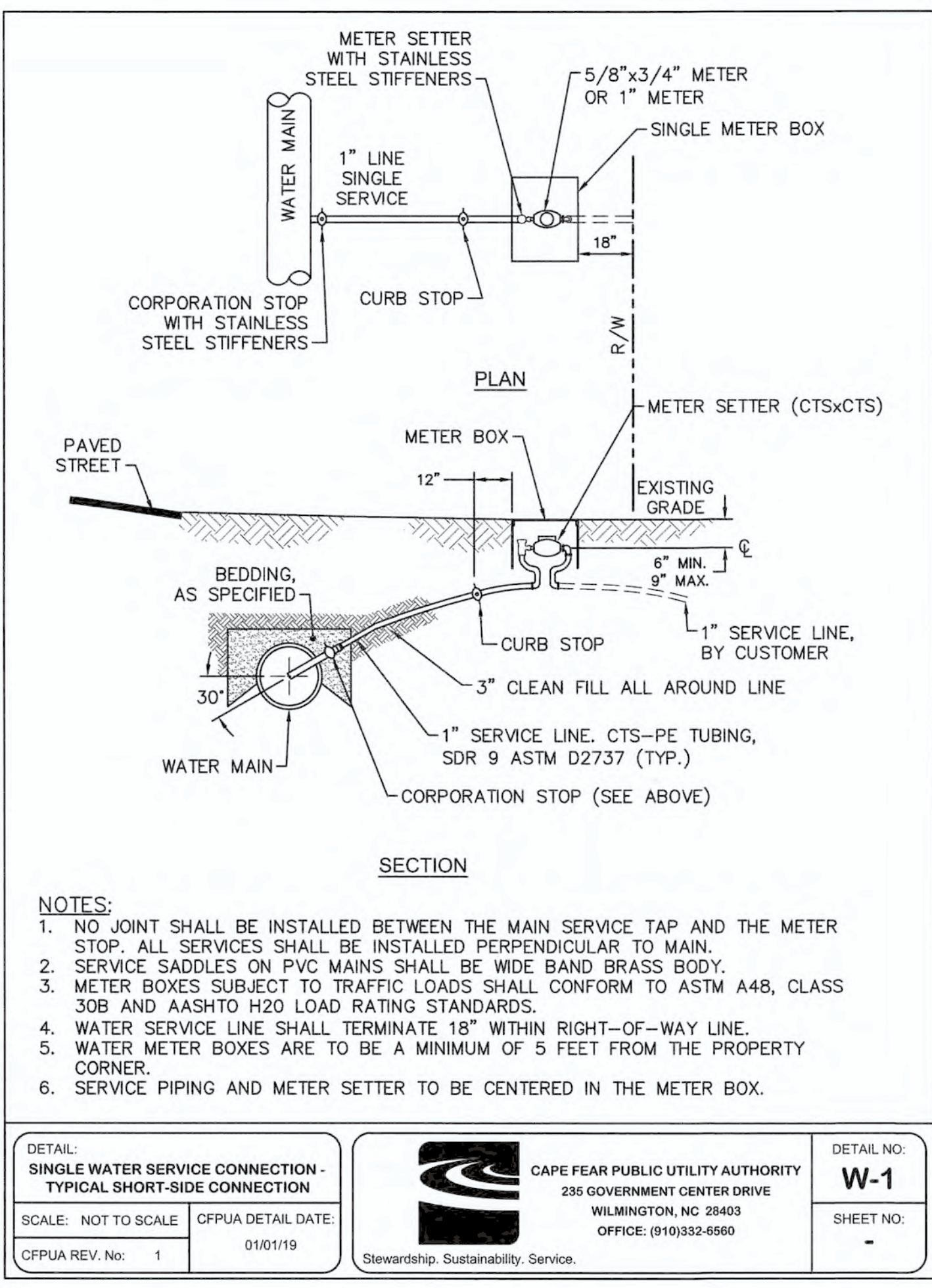
UTILITY DETAILS - SEWER
CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1900 EASTWOOD RD., SUITE #11
WILMINGTON, NC 28405
PHONE: (910) 343-9655

Licence #C-3641
18128
DES. JST
CHK. JPN
DRWL. NKS
DATE 5.13.19



SS2



UTILITY DETAILS - WATER
CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403

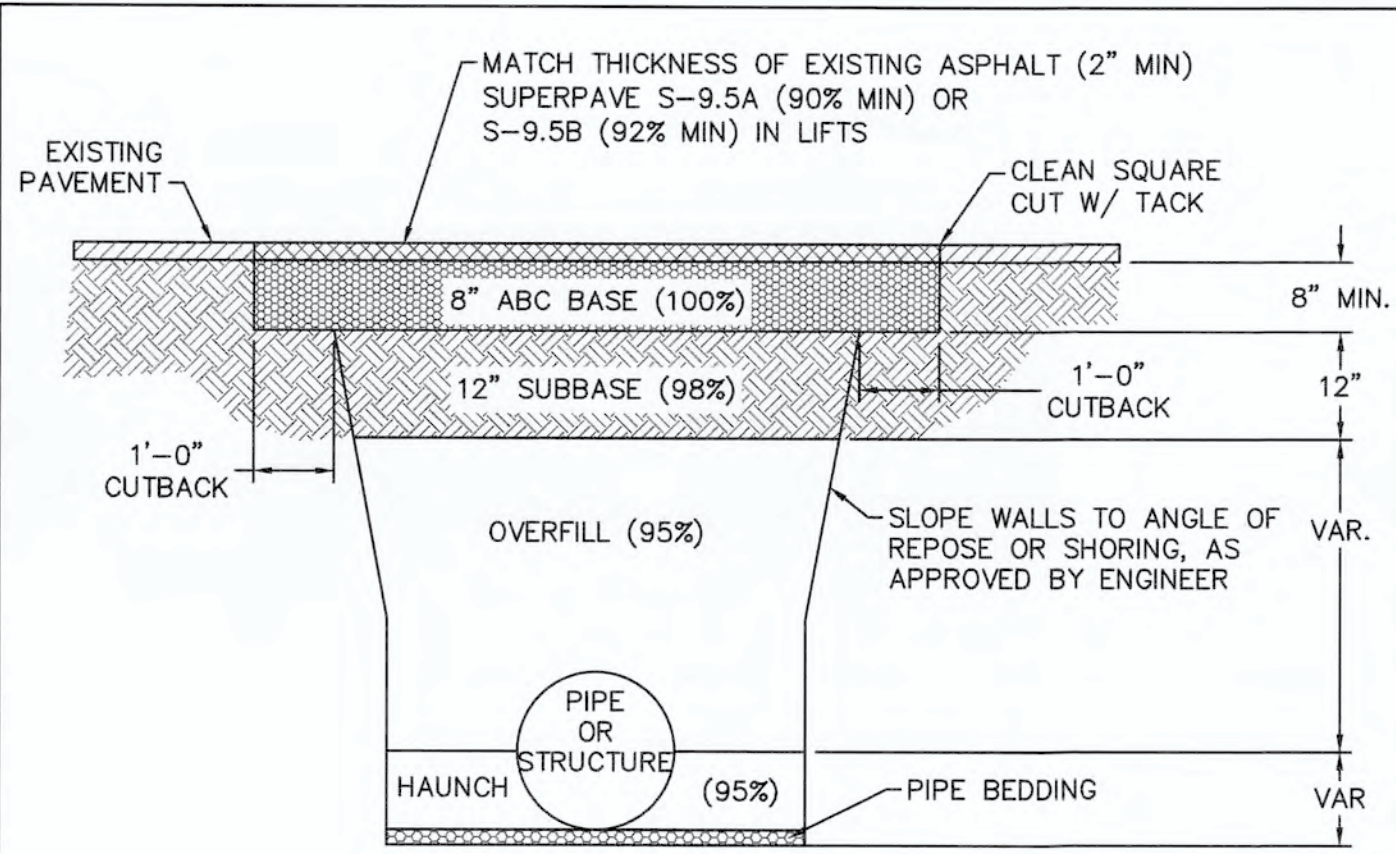
DISCLAIMER:
THESE DETAILS ARE A WORK OF CFPJA FOR UTILITY SYSTEMS AND DESIGN AND CONSTRUCTION AND HAVE BEEN REVIEWED AND APPROVED FOR CONTENT AND GENERAL CONFORMANCE WITH THE CFPJA DESIGN FOR THIS PROJECT.

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1900 EASTWOOD RD., SUITE #11
WILMINGTON, NC 28403
PHONE: (910) 345-9663

18128
DES: JST
CHK: JPN
DRWN: NKS
DATE: 5.13.19

1985
JOHN S. TUNSTALL

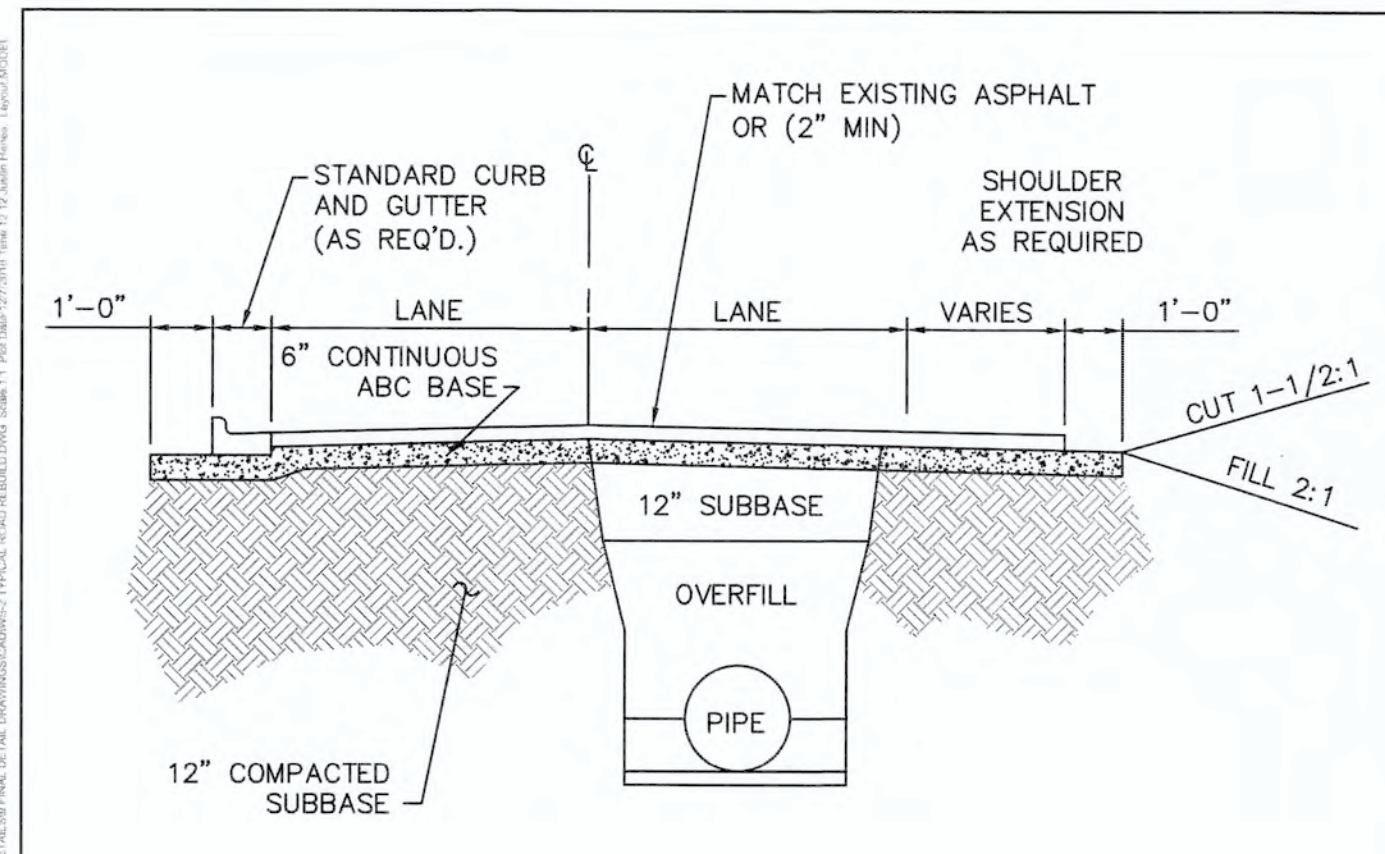
W1



- NOTES:**
- CONTRACTOR SHALL ENSURE BOTTOM OF TRENCH IS SUITABLE FOR INSTALLATION AND DOES NOT REQUIRE FOUNDATION CONDITIONING STONE.
 - FILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBOS, DEBRIS, ORGANICS AND LITTLE TO NO EXCESSIVE MOISTURE.
 - SELECT BACKFILL MAY BE SUBSTITUTED OR REQUIRED BY CITY TO ACHIEVE COMPACTION, (I.E. #57 STONE, ABC, CRUSHED LIMESTONE, CLEAN SAND, FLOWABLE FILL, ETC.).
 - SOIL SHALL BE INSTALLED IN 6"-8" LIFTS AND COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK). HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
 - ALL APPROVED CASTINGS SHALL BE SET FLUSH TO GRADE AND SUPPORTED IF APPLICABLE.
 - COMPACT MATERIALS TO MINIMUM % DENSITY SHOWN IN DIAGRAM AS DETERMINED BY THE STANDARD PROCTOR METHOD ASTM D-698-A FOR SOILS, AND ASTM D-698-C FOR ABC STONE, AND BY NUCLEAR GAGE OR CORE SAMPLE FOR ASPHALT.
 - CUTBACKS OF ASPHALT SHALL BE PREPARED ON EDGE OF EXCAVATION OVER TOP OF UNDISTURBED SOIL.

(FOR PRIVATE ROADS AND PAVED AREAS, CONTRACTOR TO MEET MINIMUM REQUIREMENTS AS DEFINED BY RIGHT-OF-WAY OWNER FOR PUBLIC ROAD REPAIRS)

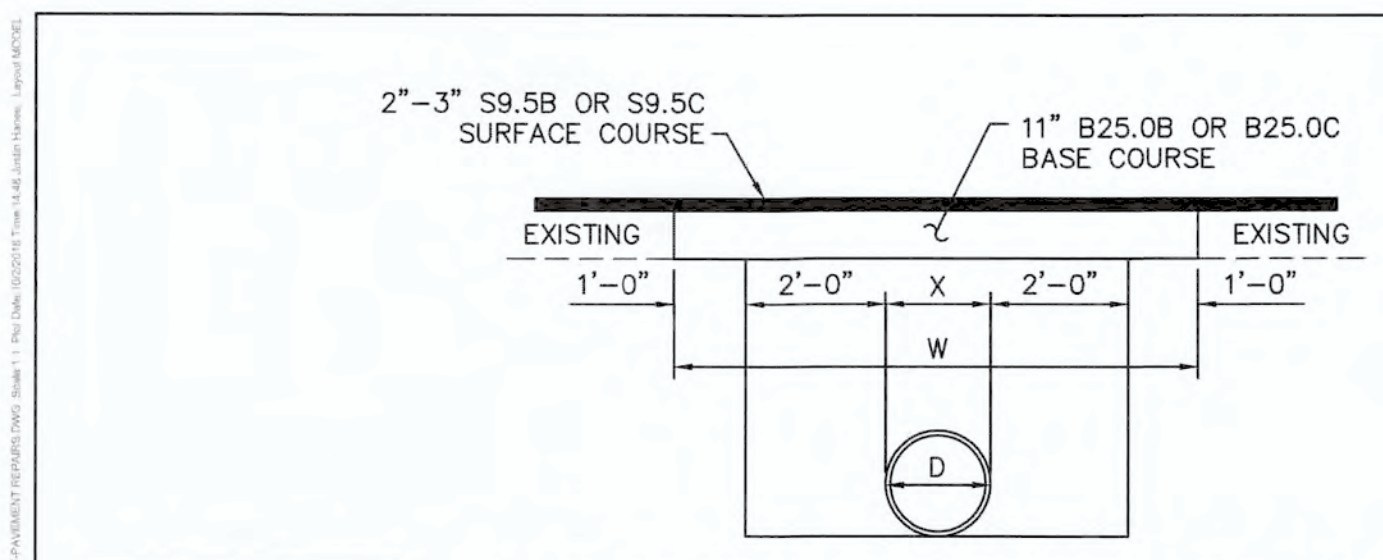
DETAIL: CITY OF WILMINGTON PAVEMENT REPAIRS-UTILITY CUTS	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-1
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/19	SHEET NO: -
CFPUA REV. No: 1		



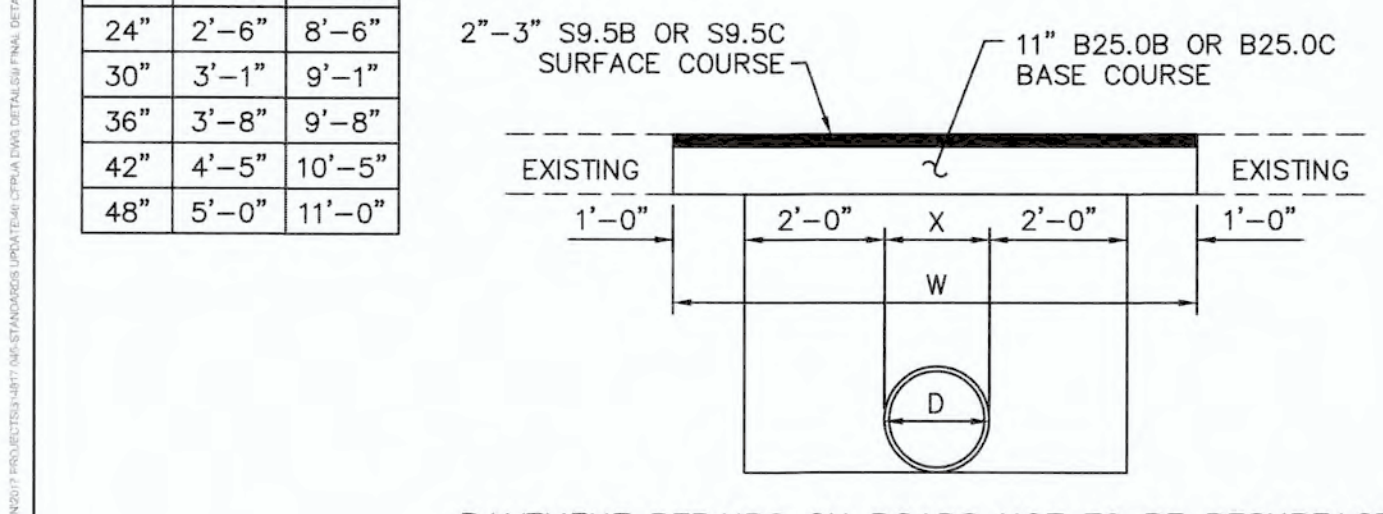
- NOTES:**
- PAVEMENT RESTORATION DESIGN IS DEPENDENT ON CITY OF WILMINGTON STREET CUT POLICY AND PERMITTED CONDITIONS.
 - PIPE TRENCH AND COMPACTION REQUIREMENTS PER SPECIFICATIONS. SEE WS-1.

(FOR PRIVATE ROADS AND PAVED AREAS, CONTRACTOR TO MEET MINIMUM REQUIREMENTS AS DEFINED BY RIGHT-OF-WAY OWNER FOR PUBLIC ROAD REPAIRS)

DETAIL: CITY OF WILMINGTON TYPICAL ROAD REBUILD	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-2
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/19	SHEET NO: -
CFPUA REV. No: 1		



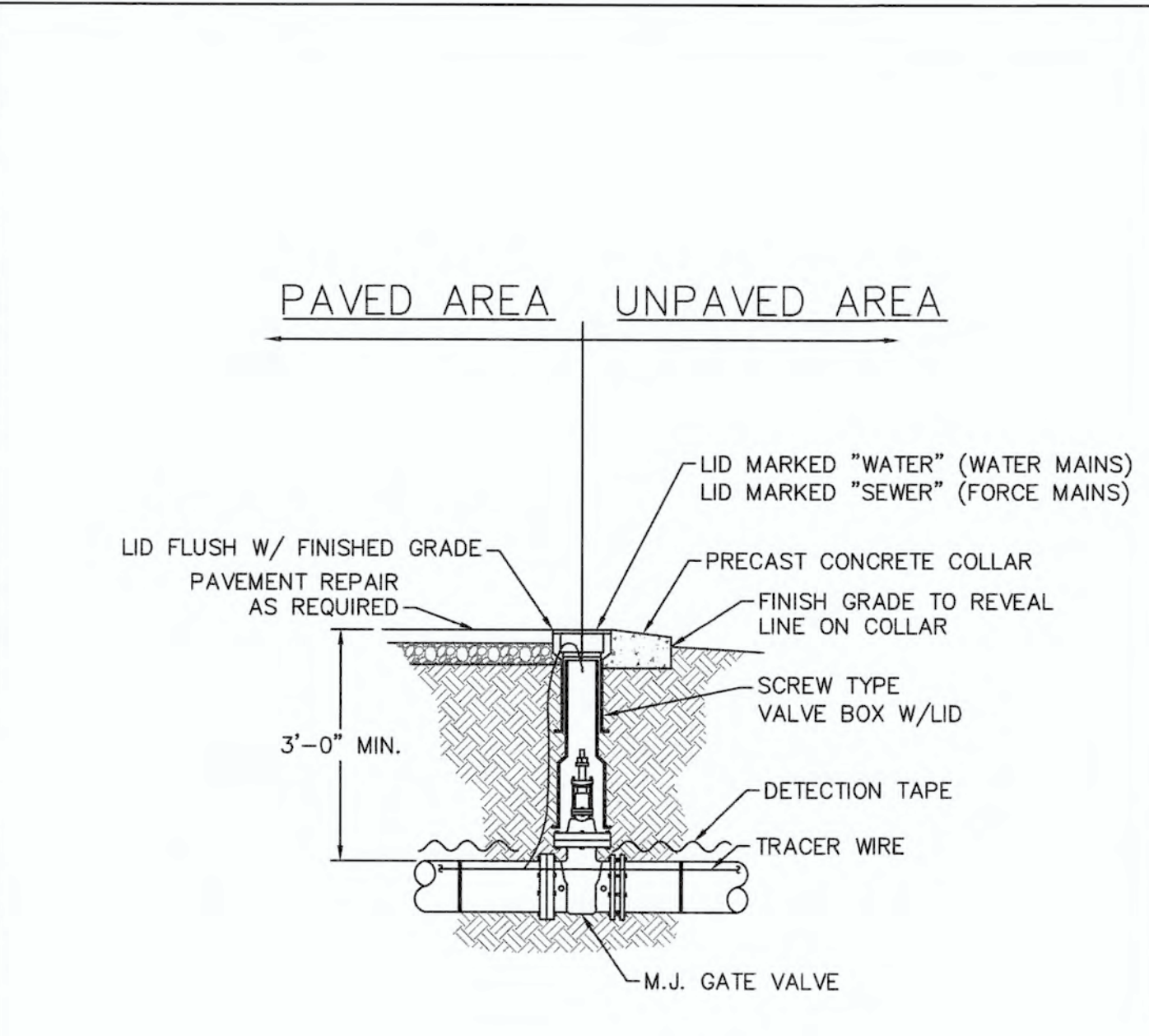
PAVEMENT REPAIRS ON ROADS TO BE RESURFACED (PIPE IS PLACED UNDER EXISTING PAVEMENT)



PAVEMENT REPAIRS ON ROADS NOT TO BE RESURFACED (PIPE IS PLACED UNDER EXISTING PAVEMENT)

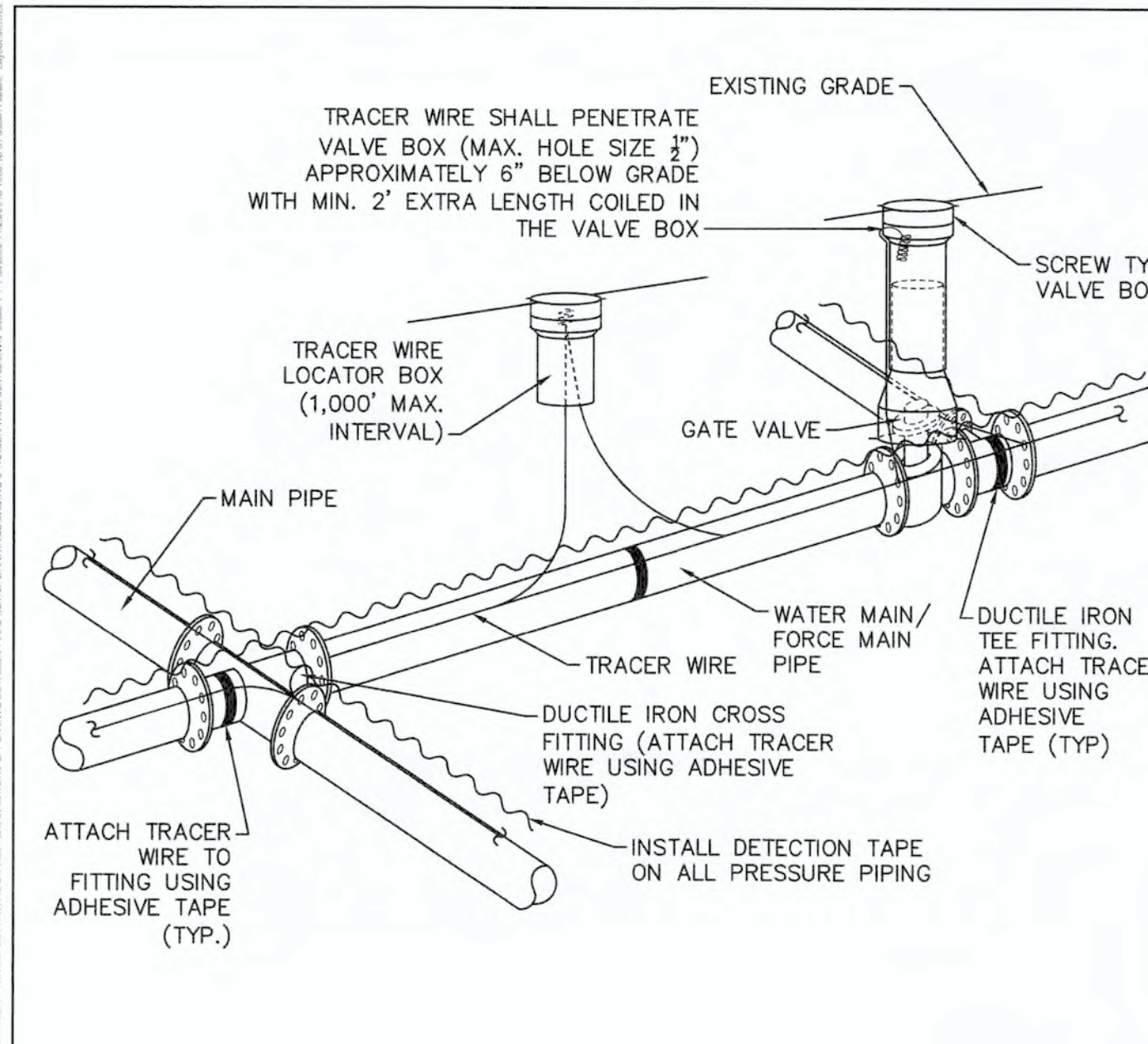
- NOTE:**
- FOR REFERENCE, SEE NCDOT STANDARD 654.01

DETAIL: NCDOT-PAVEMENT REPAIRS	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-3
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/19	SHEET NO: -
CFPUA REV. No: 1		



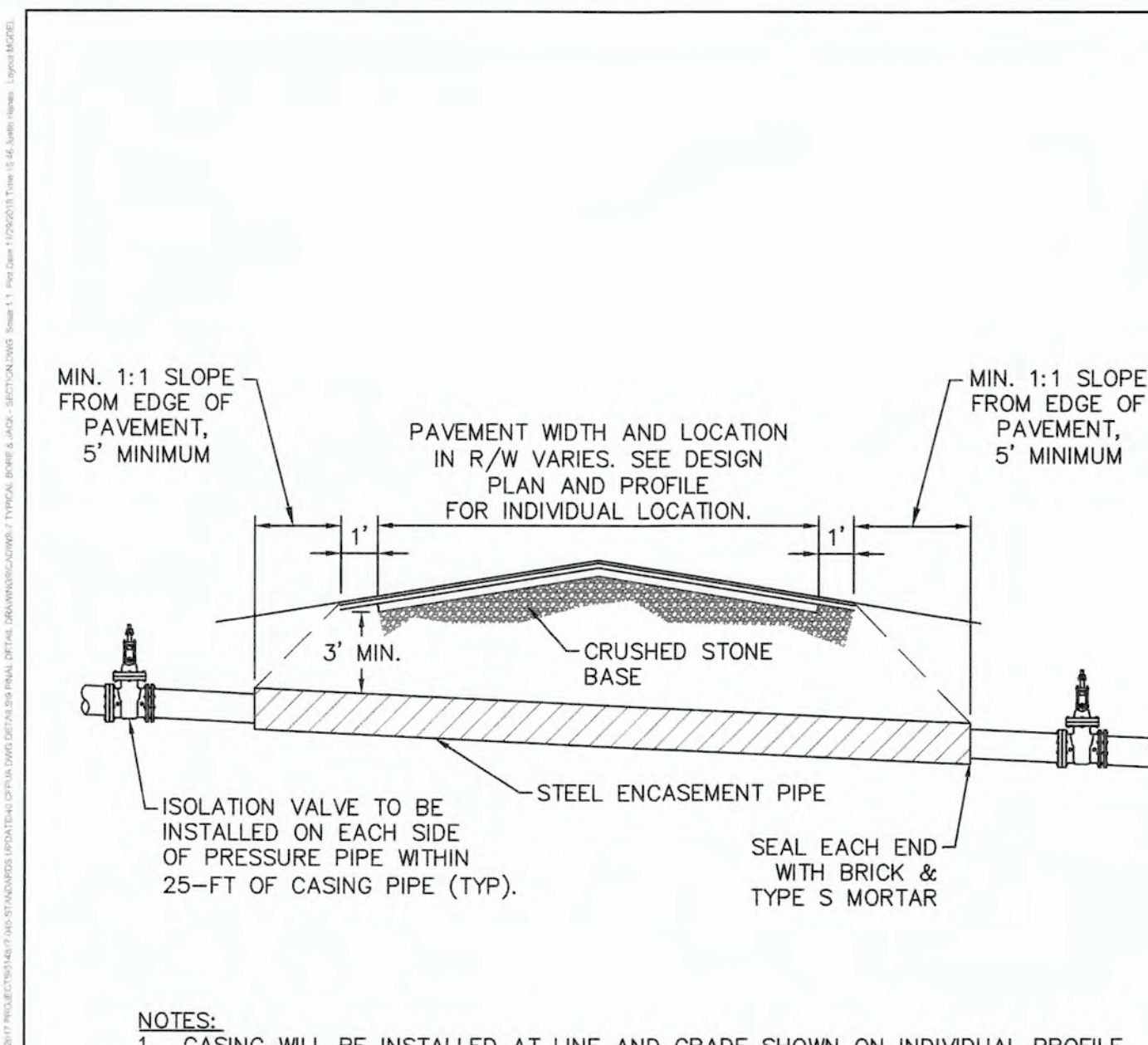
- NOTES:**
- TRACER WIRE SHALL PENETRATE VALVE BOX THROUGH DRILLED HOLE APPROX. 6" BELOW GRADE WITH MINIMUM 2-FEET EXTRA LENGTH COILED IN THE VALVE BOX. SEE WS-6.

DETAIL: VALVE DETAIL	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-5
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/19	SHEET NO: -
CFPUA REV. No: 1		



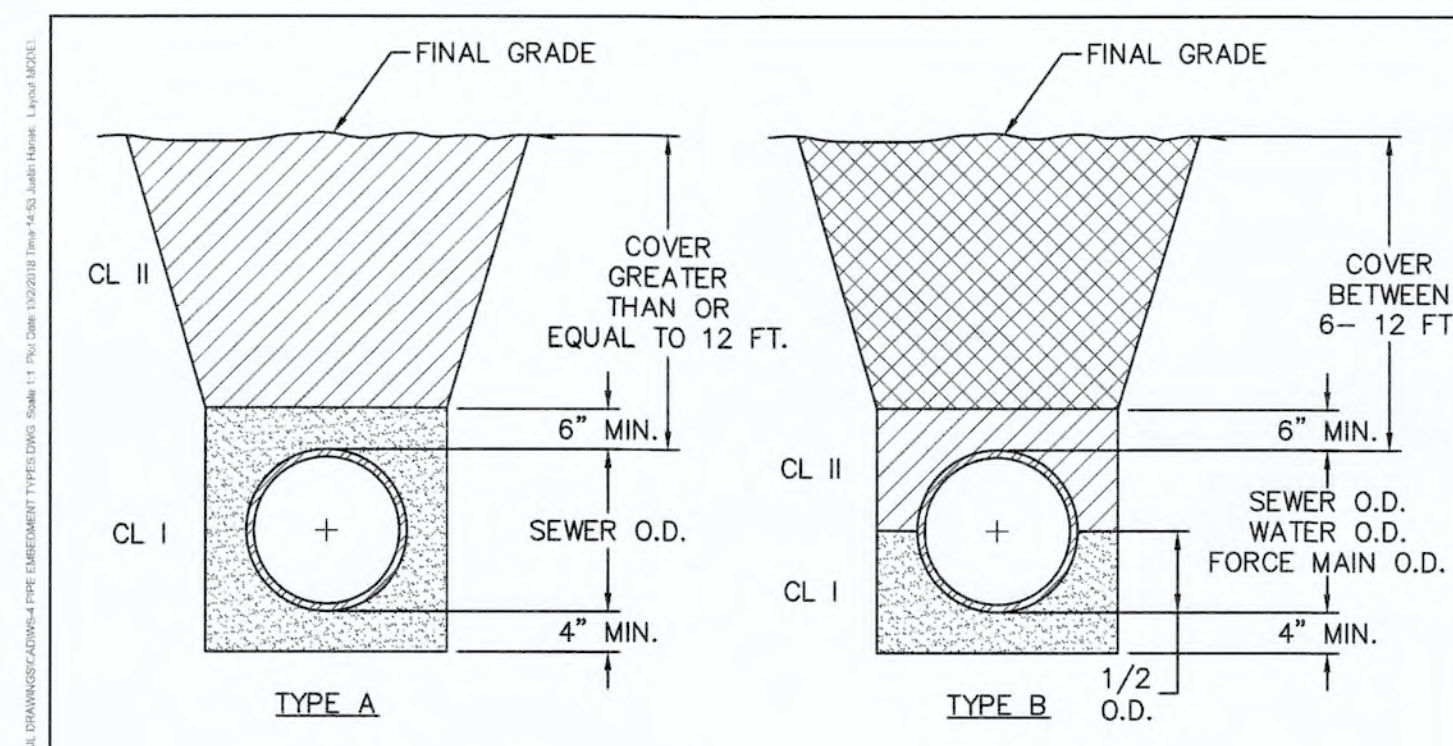
- NOTES:**
- TRACER WIRE SHALL BE #10 COPPER SOLID CORE COPPER WIRE WITH GAS AND OIL RESISTANT INSULATION AND DIRECT BURY RATING.
 - WIRE SHALL BE STRAPPED TO ALL PVC PIPING WITH ADHESIVE TAPE AT 12 FOOT INTERVALS.
 - SECURE WIRE TO ALL TEE AND CROSS FITTINGS WITH ADHESIVE TAPE.
 - ALL SPLICES IN THE WIRE SHALL BE MADE WITH 3M DBR DIRECT BURY SPLICE KITS.

DETAIL: TRACER WIRE DETAIL	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-6
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/19	SHEET NO: -
CFPUA REV. No: 1		

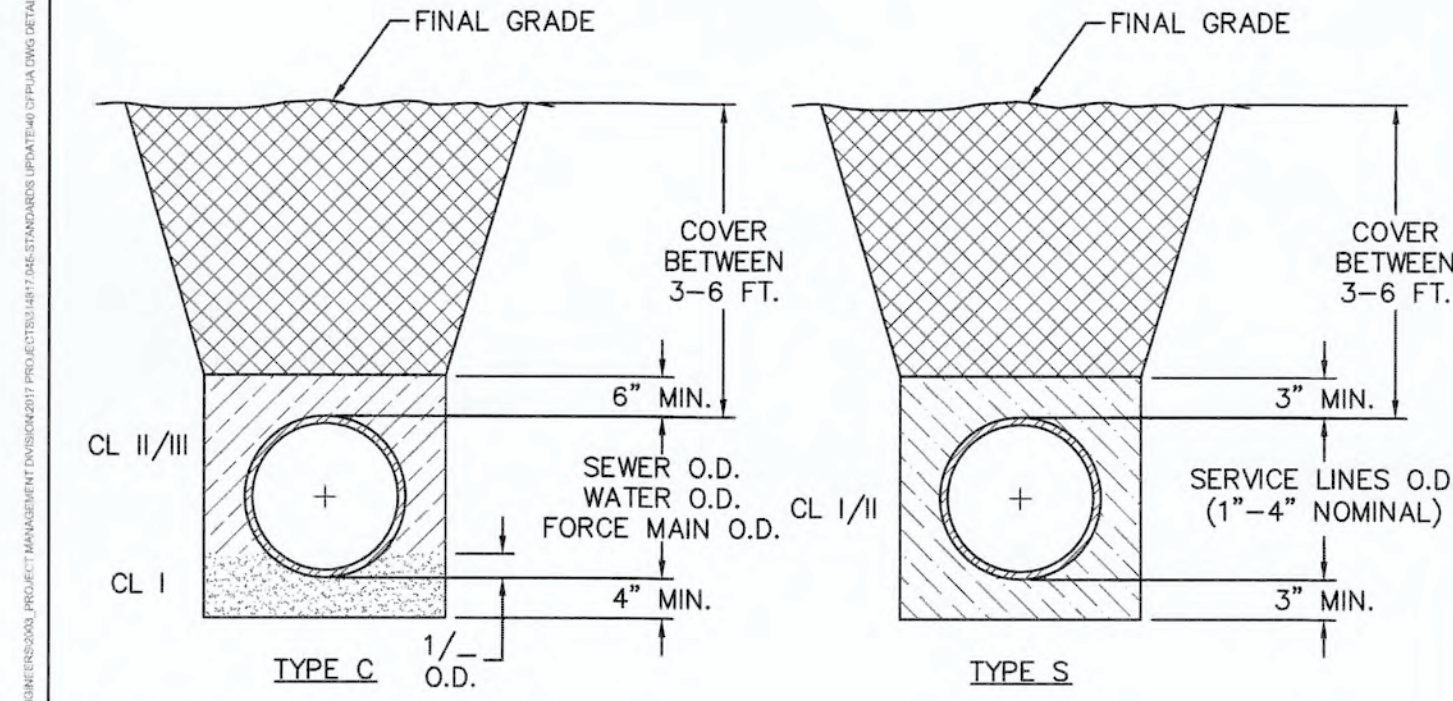


- NOTES:**
- CASING WILL BE INSTALLED AT LINE AND GRADE SHOWN ON INDIVIDUAL PROFILE FOR EACH CROSSING. BORING/JACKING TO LINE AND GRADE IS REQUIRED.
 - TRACER WIRE SHALL BE TAPED AT 12' INTERVALS THROUGHOUT THE CASING.
 - PIPING THROUGH CASING SHALL BE RESTRAINED JOINT.
 - SEE DETAIL WS-8 FOR PIPE CASING SUPPORT DETAILS.

DETAIL: TYPICAL BORING & JACKING DETAIL	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-7
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/19	SHEET NO: -
CFPUA REV. No: 1		



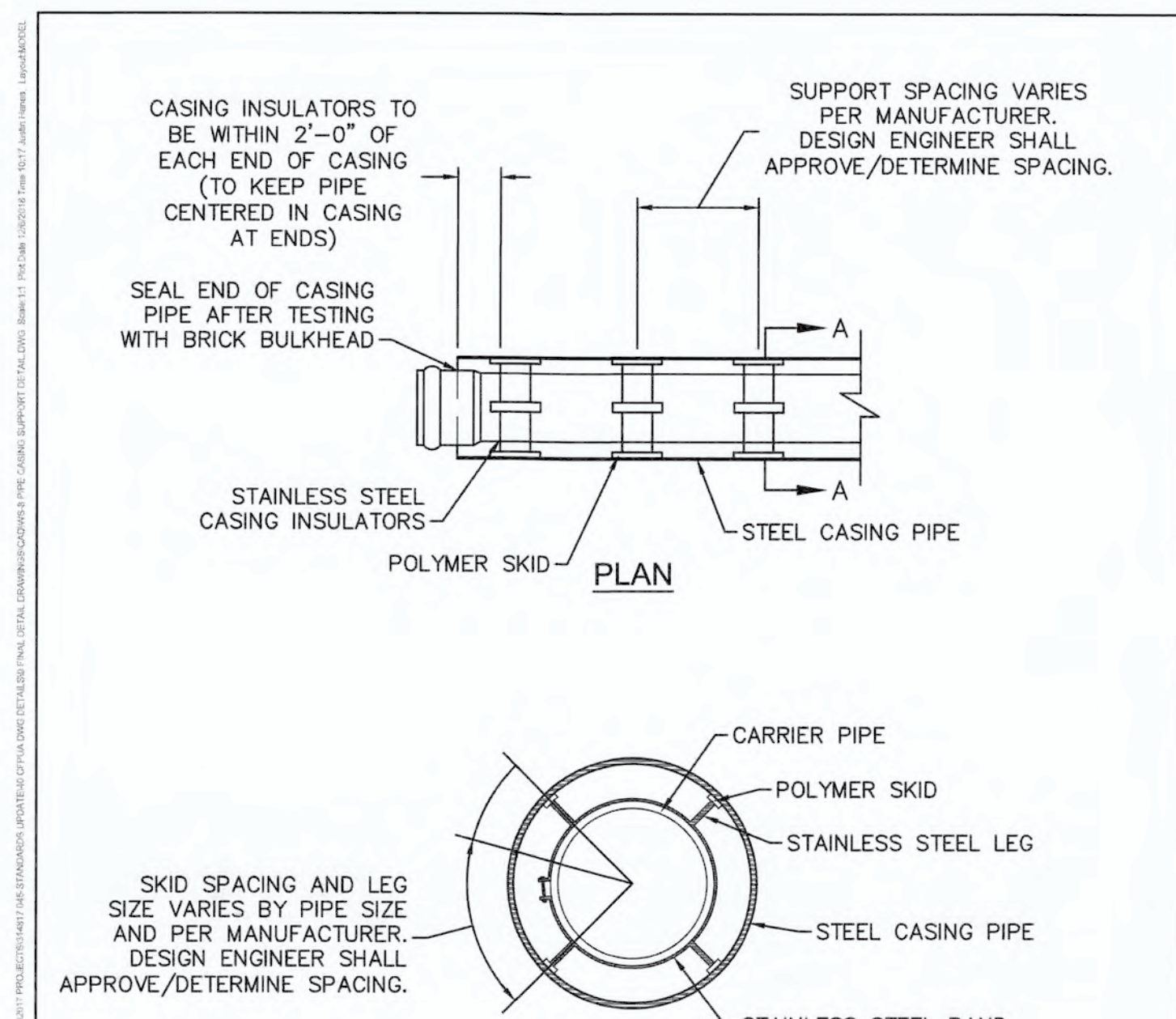
PIPE CASING SUPPORT DETAIL



PIPE CASING SUPPORT DETAIL

- COMPACTION NOTES:**
- ALL ZONES: 95% STD EFFORT PER ASTM D698, EXCEPT AS STATED IN COMPACTION NOTE 2.
 - 12" SUBGRADE UNDER PAVEMENT: 98% STD EFFORT PER ASTM D698.

DETAIL: PIPE EMBEDMENT TYPES	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-4
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/19	SHEET NO: -
CFPUA REV. No: 1		



PIPE CASING SUPPORT DETAIL

- NOTES:**
- PIPE SUPPORTS TO BE PLACED TO PROVIDE PROPER SPACING, ALIGNMENT, AND GRADE AS SPECIFIED. OIL, GREASE, OR PETROLEUM PRODUCT MAY NOT BE USED AS LUBRICANT.

DETAIL: PIPE CASING SUPPORT DETAIL	CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560	DETAIL NO: WS-8
SCALE: NOT TO SCALE	CFPUA DETAIL DATE: 01/01/19	SHEET NO: -
CFPUA REV. No: 1		

UTILITY DETAILS
TYPICAL WATER AND SEWER
CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403

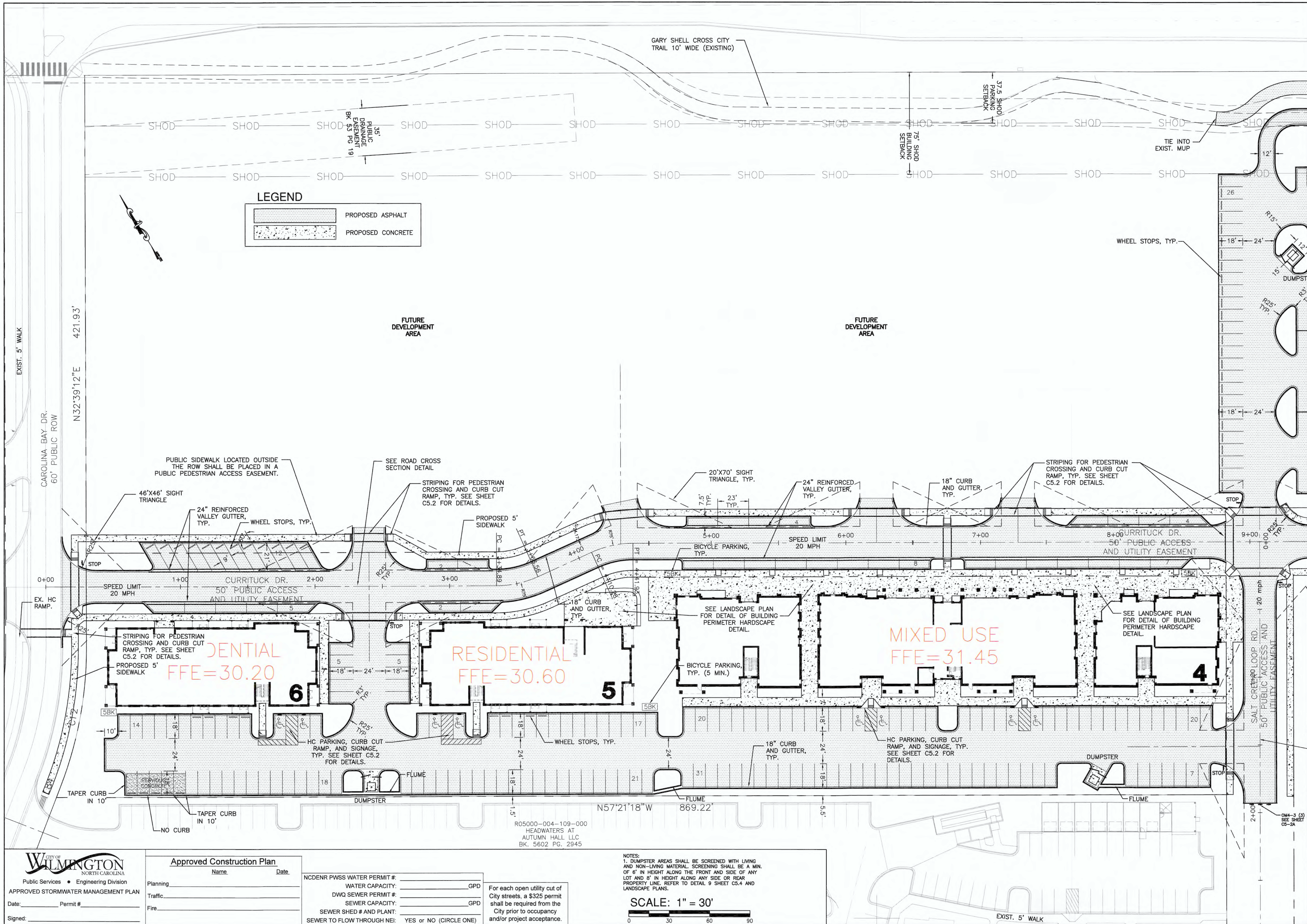
DISCLAIMER:
THESE DETAILS ARE A WORK OF
DESIGN FOR UTILITY SYSTEMS
AND CONSTRUCTION AND
HAVE BEEN REVIEWED AND
APPROVED FOR CONTENT AND
APPLICABLE CODES AND
THESE DETAILS ARE THE
PROPERTY OF THE
ENGINEER DESIGNING THIS
PROJECT.

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1429 ASH-LITTLE RIVER RD. NW
WILMINGTON, NC 28405
PHONE: (910) 343-9653

Licence #C-3641
18128
DES. JST
CHK. JPN
DRWN. NKS
DATE 5.13.19



WS1



LAYOUT PLAN
 AUTUMN HALL COMMERCIAL PH I
 1202 EASTWOOD ROAD
 WILMINGTON, NC
 NEW HANOVER COUNTY

DEVELOPER
 WEB TRASK C/O MIKE BROWN
 CAPE FEAR COMMERCIAL, LLC
 1051 MILITARY CUTOFF RD.,
 SUITE 200
 WILMINGTON, NC 28405
 344-1010 (P) 622-4657 (CELL)

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1900 EASTWOOD RD., SUITE #11
 WILMINGTON, NC 28405
 ASH, NC 28420
 PHONE (910) 343-9653
 PHONE (910) 287-5900

Licence #C-3641
18128
 DES. JST
 CKD. JPN
 DRWN. NKS
 DATE 8/28/19



C4.1

PRELIMINARY

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____

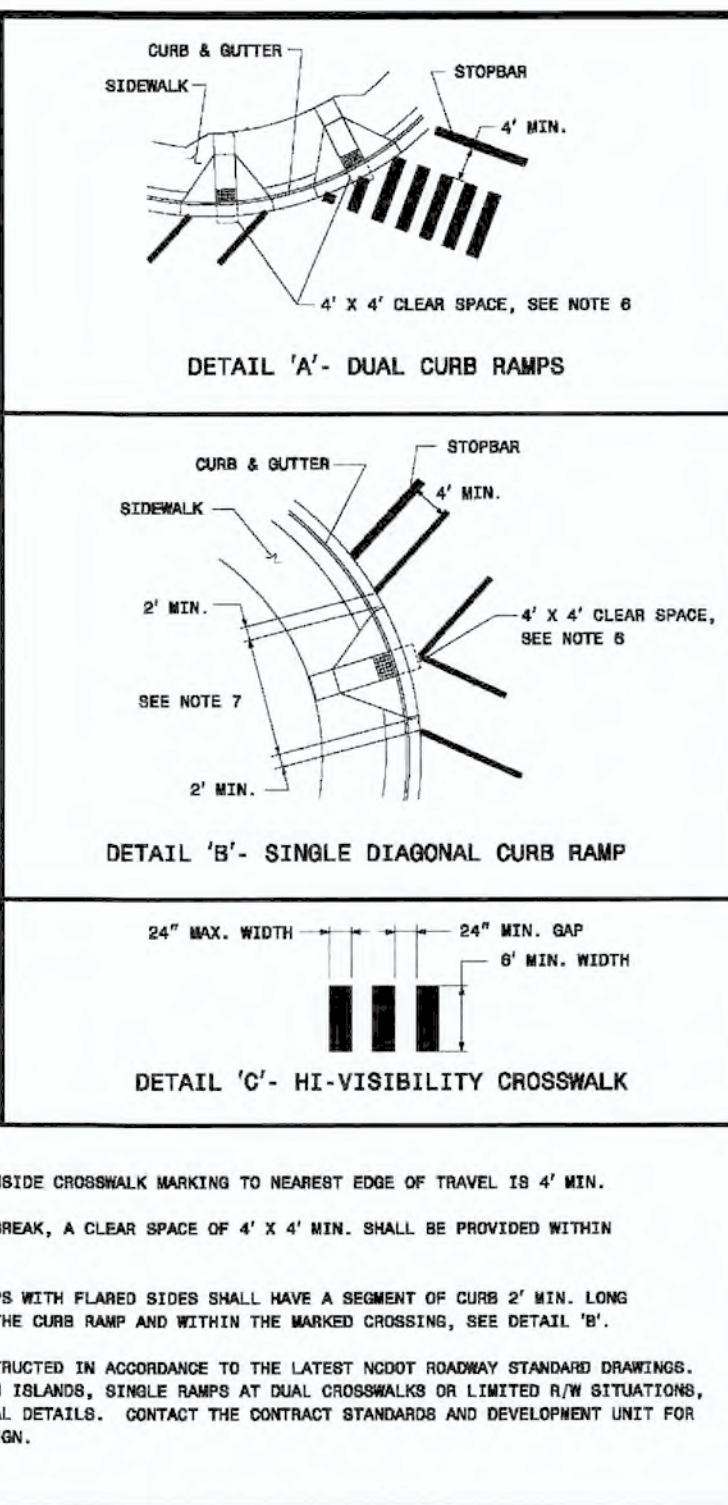
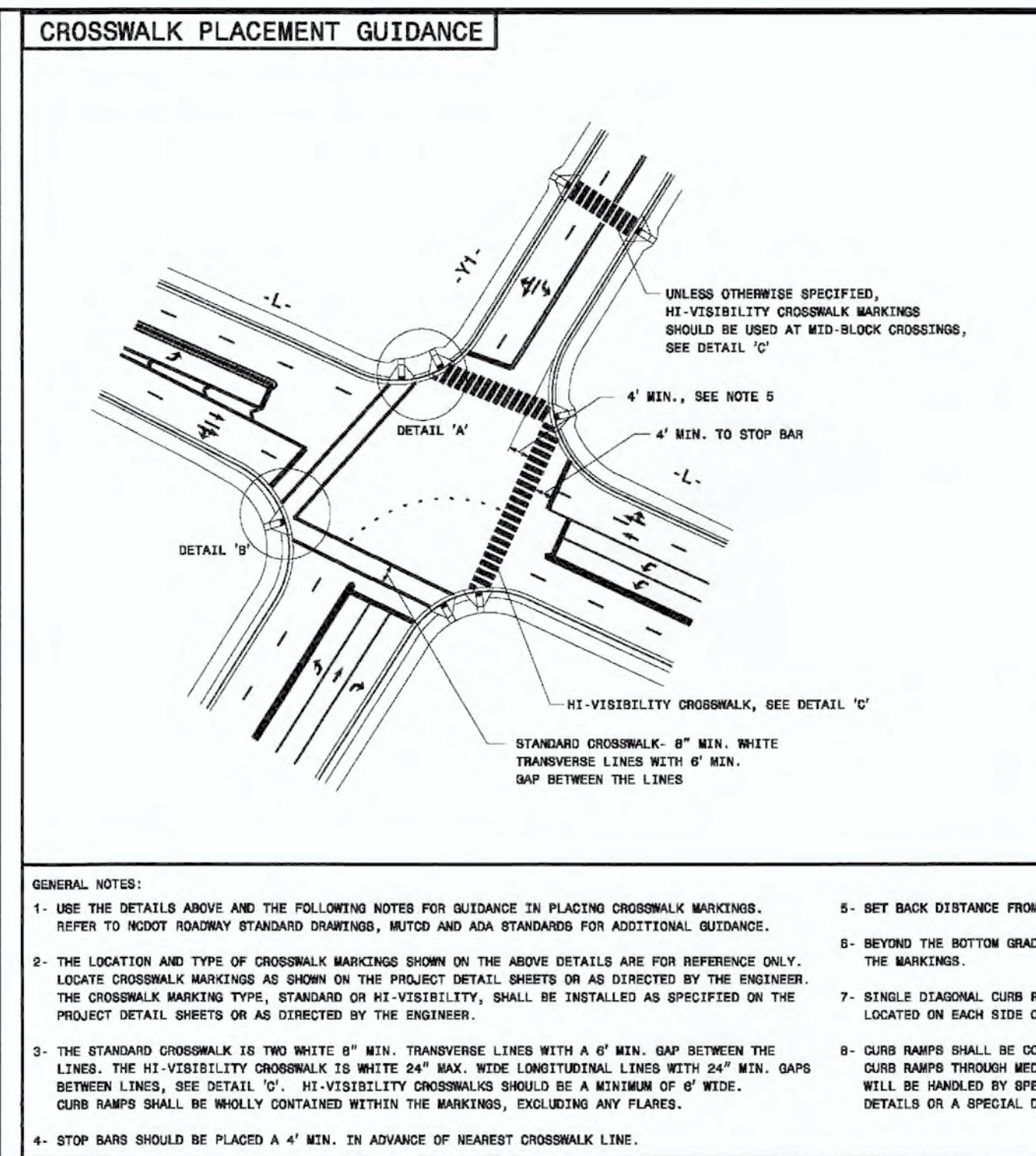
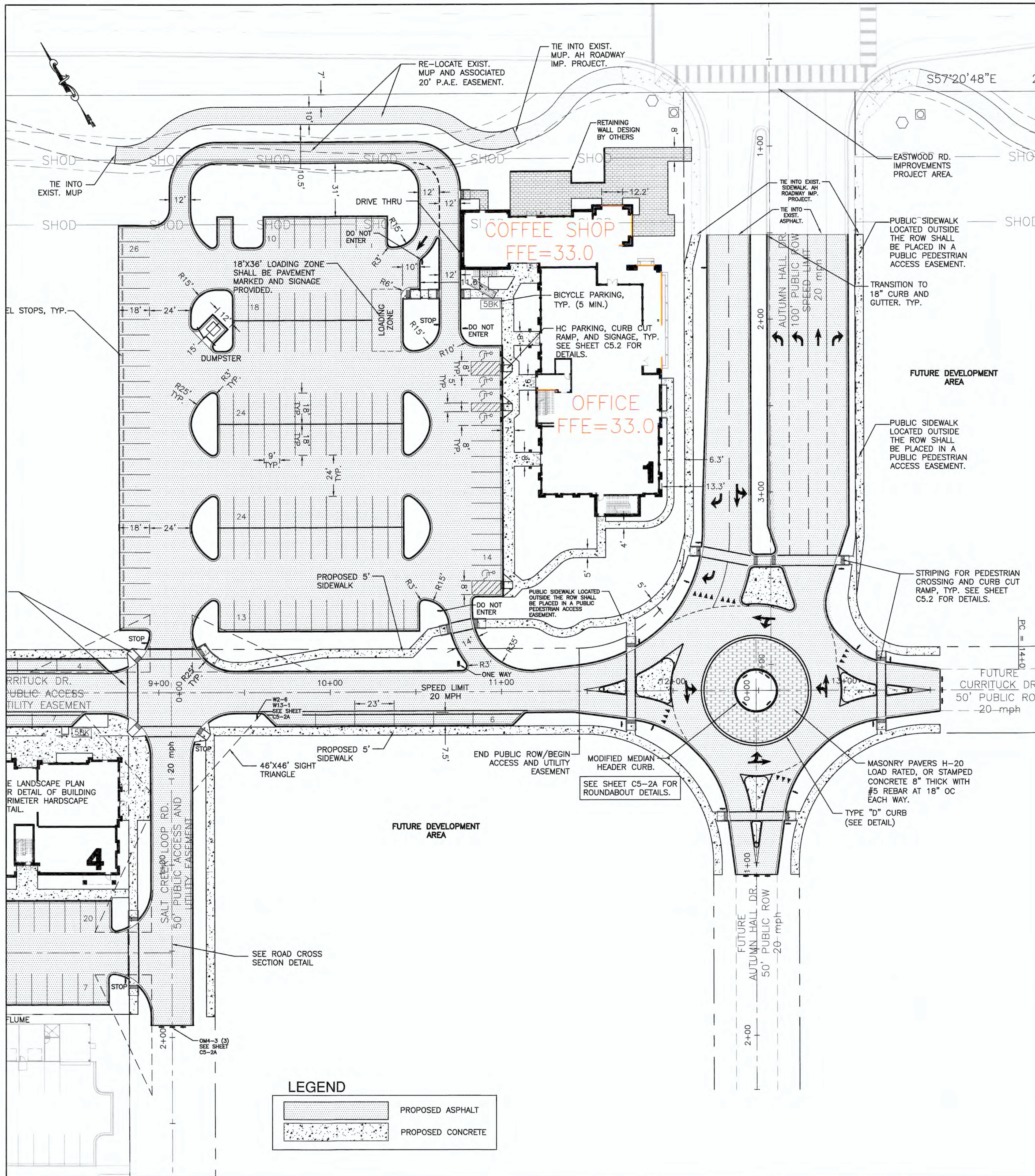
NCDENR PWSS WATER PERMIT #: _____
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT #: _____
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

NOTES:
 1. DUMPSTER AREAS SHALL BE SCREENED WITH LIVING AND NON-LIVING MATERIAL. SCREENING SHALL BE A MIN. OF 6' IN HEIGHT ALONG THE FRONT AND SIDE OF ANY LOT AND 8' IN HEIGHT ALONG ANY SIDE OR REAR PROPERTY LINE. REFER TO DETAIL 9 SHEET C5.4 AND LANDSCAPE PLANS.

SCALE: 1" = 30'

R05000-004-109-000
 HEADWATERS AT
 AUTUMN HALL LLC
 BK. 5602 PG. 2945



GENERAL NOTES:
 1. USE THE DETAILS ABOVE AND THE FOLLOWING NOTES FOR GUIDANCE IN PLACING CROSSWALK MARKINGS. REFER TO NCDOT ROADWAY STANDARD DRAWINGS, MUTCD AND ADA STANDARDS FOR ADDITIONAL GUIDANCE.
 2. THE LOCATION AND TYPE OF CROSSWALK MARKINGS SHOWN ON THE ABOVE DETAILS ARE FOR REFERENCE ONLY. LOCATE CROSSWALK MARKINGS AS SHOWN ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER. THE CROSSWALK MARKING TYPE, STANDARD OR HI-VISIBILITY, SHALL BE INSTALLED AS SPECIFIED ON THE PROJECT DETAIL SHEETS OR AS DIRECTED BY THE ENGINEER.
 3. THE STANDARD CROSSWALK IS TWO WHITE 8" MIN. TRANSVERSE LINES WITH A 4" MIN. GAP BETWEEN THE LINES. THE HI-VISIBILITY CROSSWALK IS WHITE 24" MAX. WIDE LONGITUDINAL LINES WITH 24" MIN. GAPS BETWEEN LINES. SEE DETAIL 'C'. HI-VISIBILITY CROSSWALKS SHOULD BE A MINIMUM OF 6' WIDE. CURB RAMP SHALL BE FULLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLANGES.
 4. STOP BARS SHOULD BE PLACED A 4' MIN. IN ADVANCE OF NEAREST CROSSWALK LINE.

5. SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL TO 4' MIN. THE MARKINGS.
 6. BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE OF 4' X 4' MIN. SHALL BE PROVIDED WITHIN THE MARKINGS.
 7. SINGLE DIAGONAL CURB RAMP WITH FLARED SIDES SHALL HAVE A SEGMENT OF CURB 2' MIN. LONG LOCATED ON EACH SIDE OF THE CURB RAMP AND WITHIN THE MARKED CROSSING, SEE DETAIL 'B'.
 8. CURB RAMP SHALL BE CONSTRUCTED IN ACCORDANCE TO THE LATEST NCDOT ROADWAY STANDARD DRAWINGS. CURB RAMP THROUGH MEDIAN ISLANDS, SINGLE RAMP AT DUAL CROSSWALKS OR LIMITED R/W SITUATIONS, WILL BE HANDLED BY SPECIAL DETAILS. CONTACT THE CONTRACT STANDARDS AND DEVELOPMENT UNIT FOR DETAILS ON A SPECIAL DESIGN.

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.
 ROADWAY STANDARD DRAWINGS FOR PAVEMENT MARKINGS PEDESTRIAN CROSSWALKS
 SHEET 1 OF 1
 1205.07

LAYOUT PLAN
 AUTUMN HALL COMMERCIAL PH I
 1202 EASTWOOD ROAD
 WILMINGTON, NC
 NEW HANOVER COUNTY

DEVELOPER
 WEB TRASK C/O MIKE BROWN
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 344-1010 (P) 622-4657 (CELL)

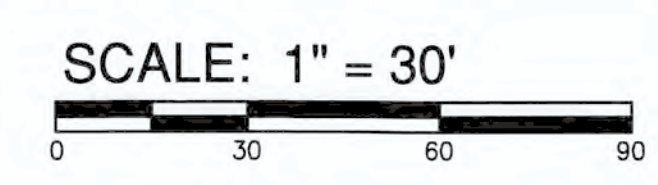
NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1900 EASTWOOD RD., SUITE #11 1429 ASH-LITTLE RIVER RD. NW
 WILMINGTON, NC 28403 ASH, NC 28420
 PHONE (910) 343-9653 PHONE (910) 287-5900

Licence #C-3641
 18128
 DES. JST
 CKD. JPN
 DRWN. NKS
 DATE 8/28/19



C4.2

NOTES:
 1. DUMPSTER AREAS SHALL BE SCREENED WITH LIVING AND NON-LIVING MATERIAL. SCREENING SHALL BE A MIN. OF 6' IN HEIGHT ALONG THE FRONT AND SIDE OF ANY LOT AND 8' IN HEIGHT ALONG ANY SIDE OR REAR PROPERTY LINE. REFER TO DETAIL 9 SHEET C5.4 AND LANDSCAPE PLANS.



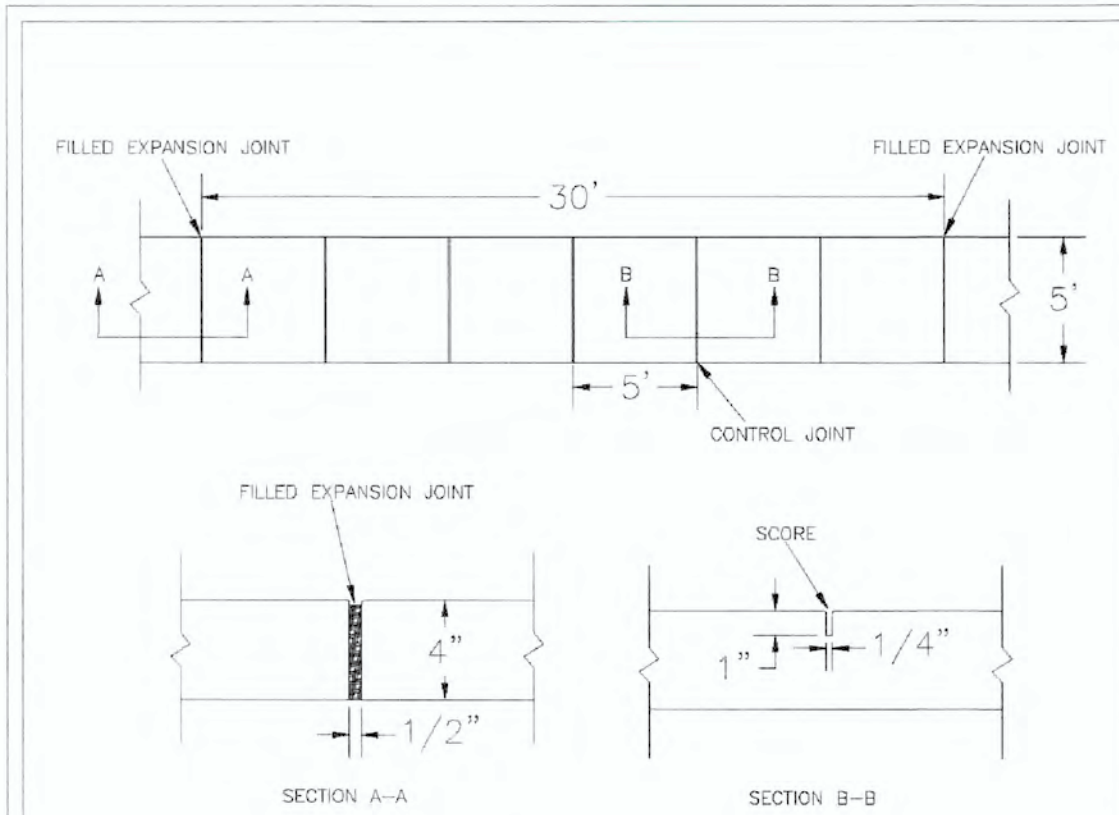
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____
 NCDENR PWSS WATER PERMIT #: _____
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT #: _____
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____
 NCDENR PWSS WATER PERMIT #: _____
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT #: _____
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

City of WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

PRELIMINARY



NOTES:

1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
2. SANITARY SEWER CLEAN-OUTS, WATER METERS, MANHOLES, AND VALVE LIDS TO BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM IF PLACED AT BACK OF CURB.
4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAIN WITHIN A DRIVEWAY APRON) SHALL BE CLASS "A" - 3,000 PSI.
5. MINIMUM REPLACEMENT FOR REPAIRS IS A 5' X 5' PANEL.
6. 4" STONE BASE MAY BE REQUIRED FOR POOR SOIL CONDITIONS.
7. MINIMUM DEPTH FOR TUNNELING BELOW SIDEWALK IS 12".
8. MAX ADJACENT GROUND SLOPE WITHOUT RAILING IS 2:1.
9. MIN GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1 DIRECTION. MAX CROSS SLOPE IS 2% MAX LONGITUDINAL SLOPE IS 0.3%, 10% IF LIMITED BY EXISTING CONDITIONS, OR NO GREATER THAN THE SLOPE OF THE EXISTING ADJACENT ROAD.

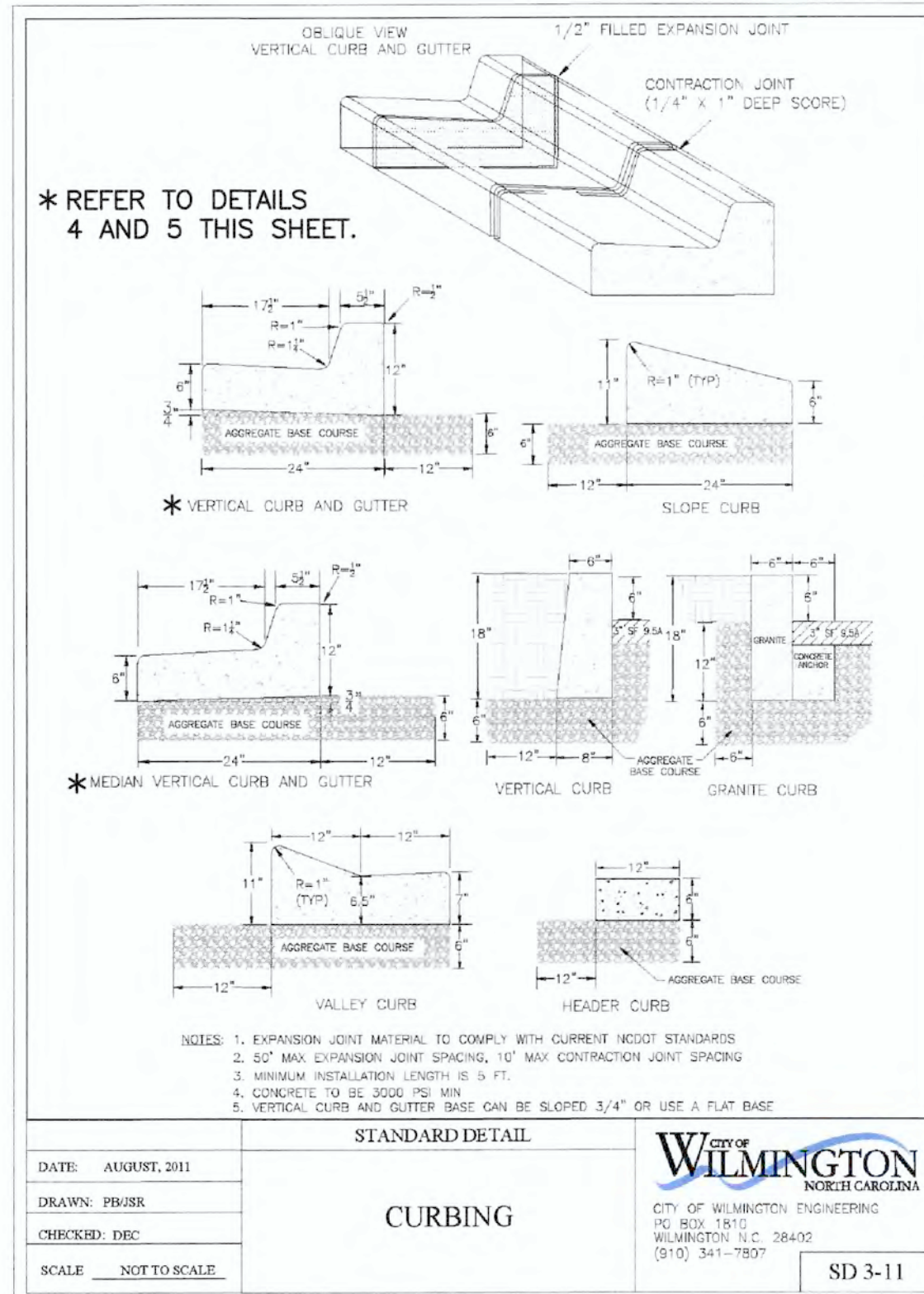
STANDARD DETAIL
DATE: OCTOBER, 2010
DRAWN: PDR
CHECKED: DEC
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, N.C. 28402
(910) 341-7807

SIDEWALK

SD 3-10

NOT TO SCALE



* REFER TO DETAILS 4 AND 5 THIS SHEET.

* VERTICAL CURB AND GUTTER

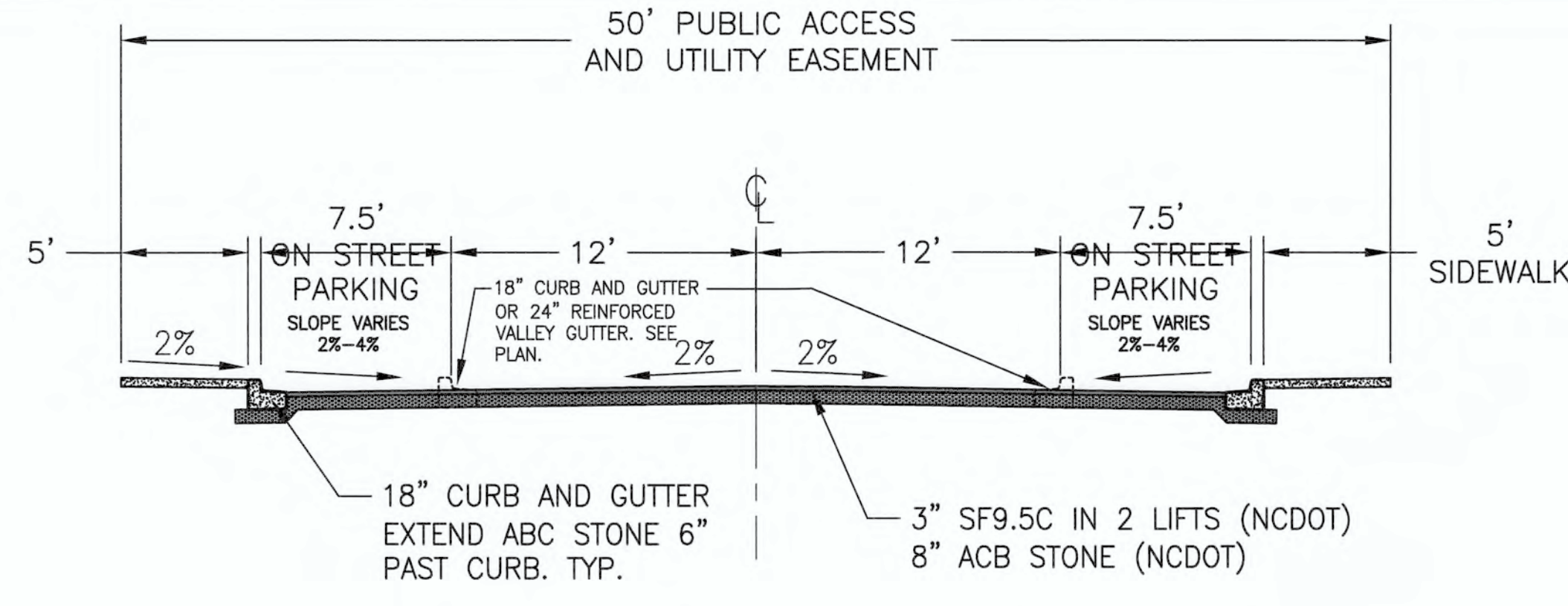
* MEDIAN VERTICAL CURB AND GUTTER

STANDARD DETAIL
DATE: AUGUST, 2011
DRAWN: PDR
CHECKED: DEC
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, N.C. 28402
(910) 341-7807

CURBING

SD 3-11

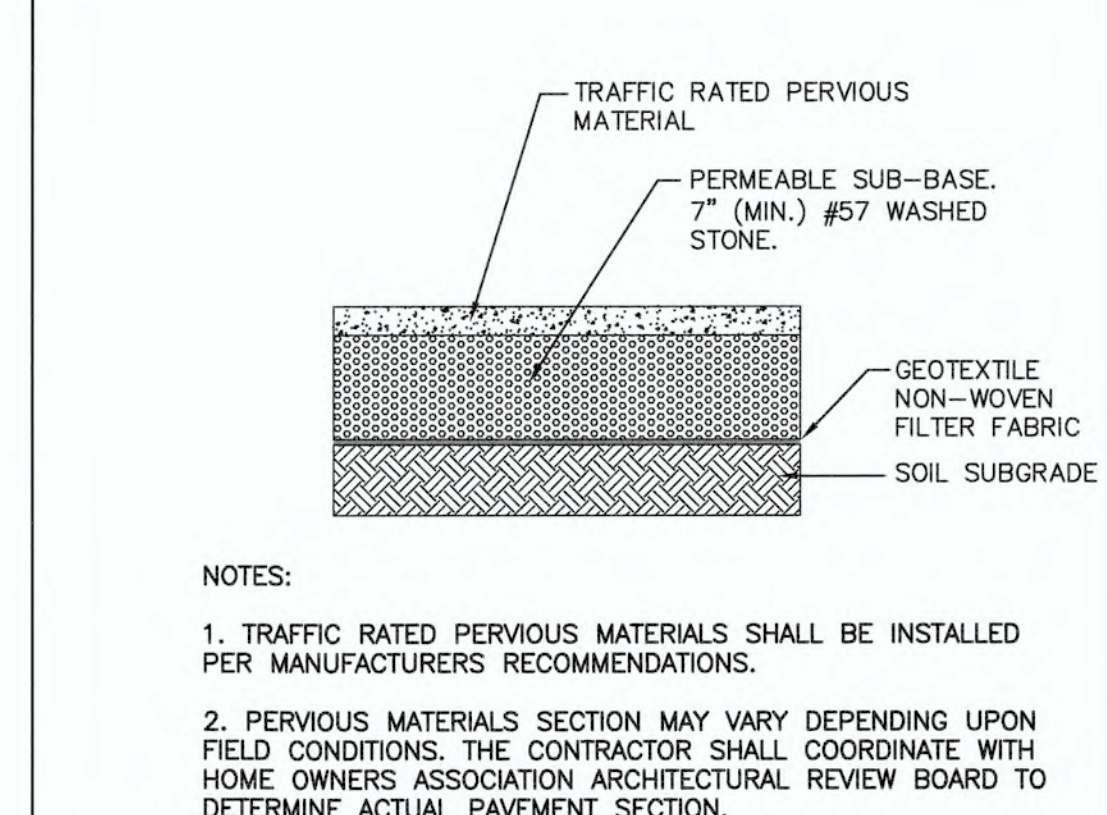


NOTE: ON STREET PARKING VARIES, SEE PLAN.

CURRITUCK DRIVE SECTION

NOTE: ON STREET PARKING VARIES, SEE PLAN.

SALT CREEK LOOP ROAD SECTION



NOTES:

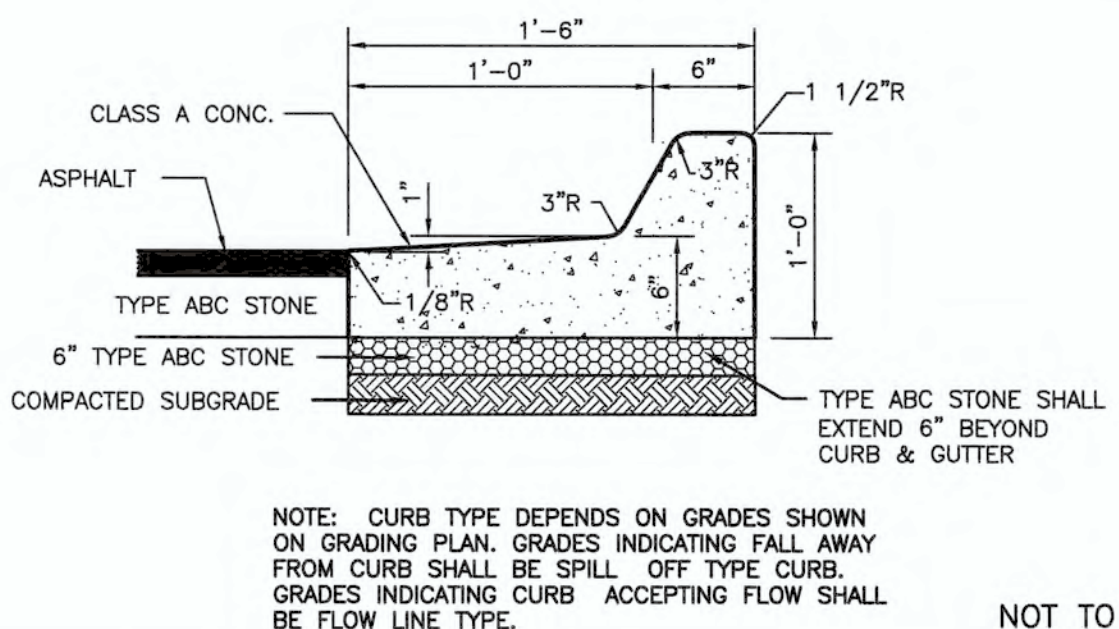
1. TRAFFIC RATED PERVIOUS MATERIALS SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
2. PERVIOUS MATERIALS SECTION MAY VARY DEPENDING UPON FIELD CONDITIONS. THE CONTRACTOR SHALL COORDINATE WITH HOME OWNERS ASSOCIATION ARCHITECTURAL REVIEW BOARD TO DETERMINE ACTUAL PAVEMENT SECTION.

7 PERVIOUS PAVEMENT SECTION

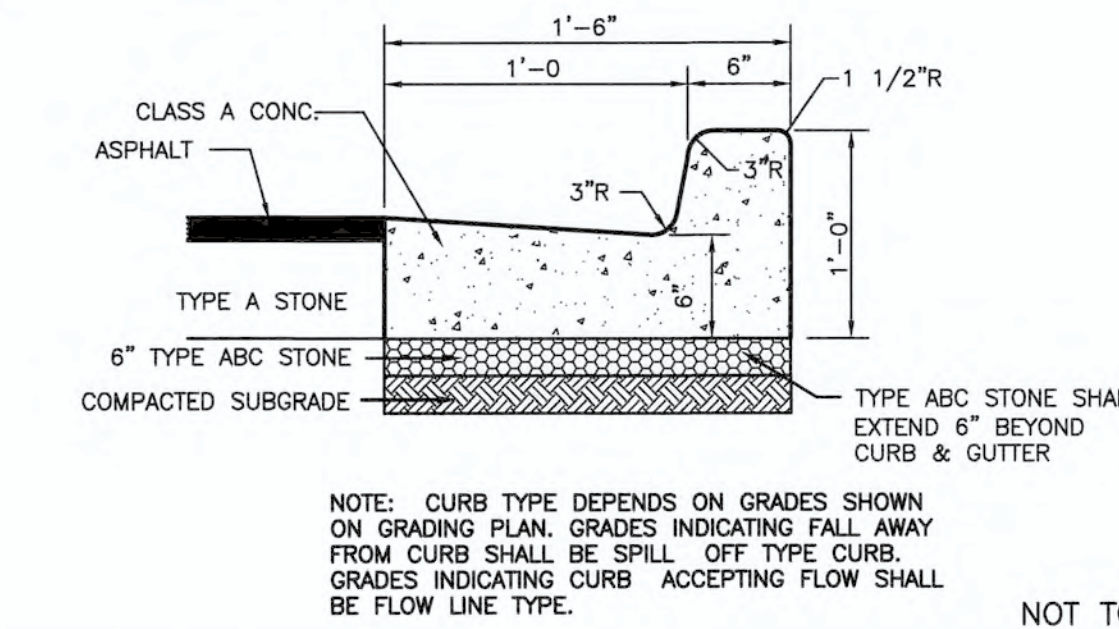
6 REINFORCED VALLEY GUTTER DETAIL

1 C.O.W. STANDARD SIDEWALK DETAIL

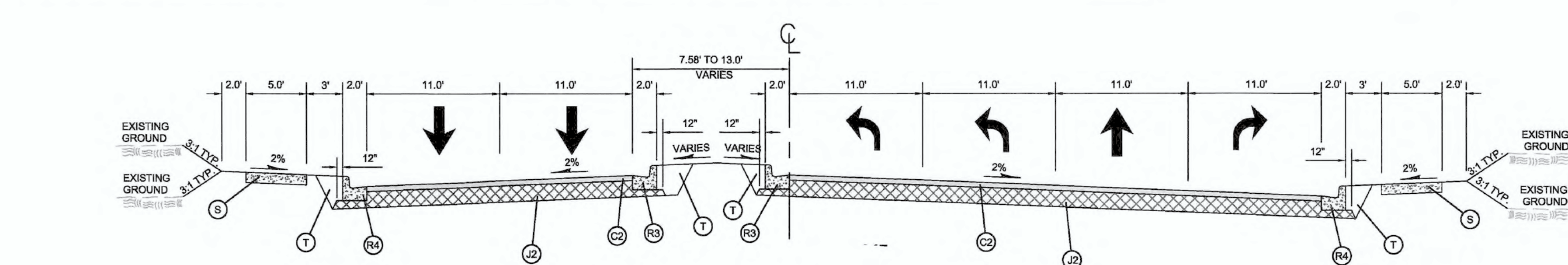
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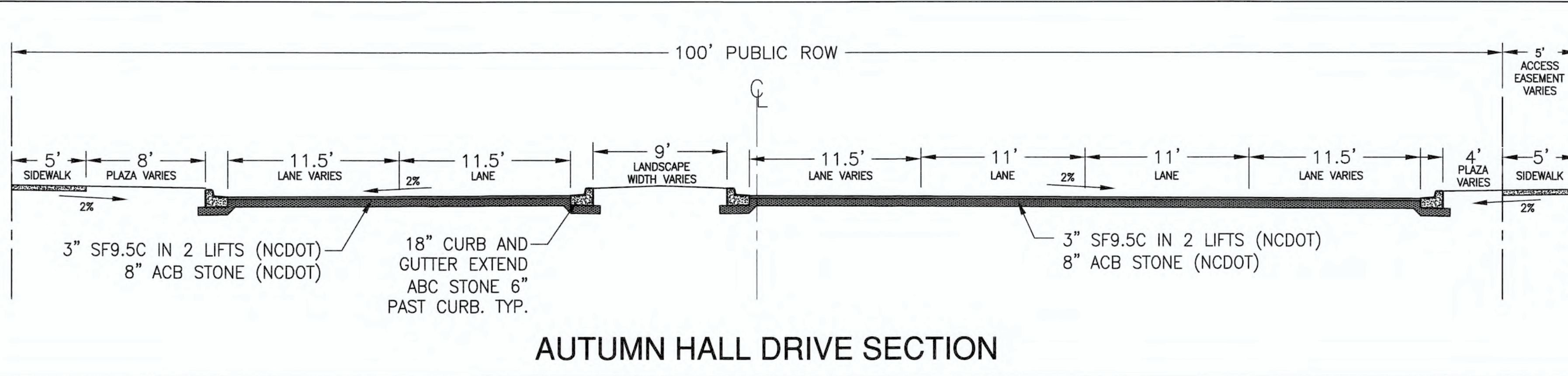
4 SPILL-OFF CURB SECTION



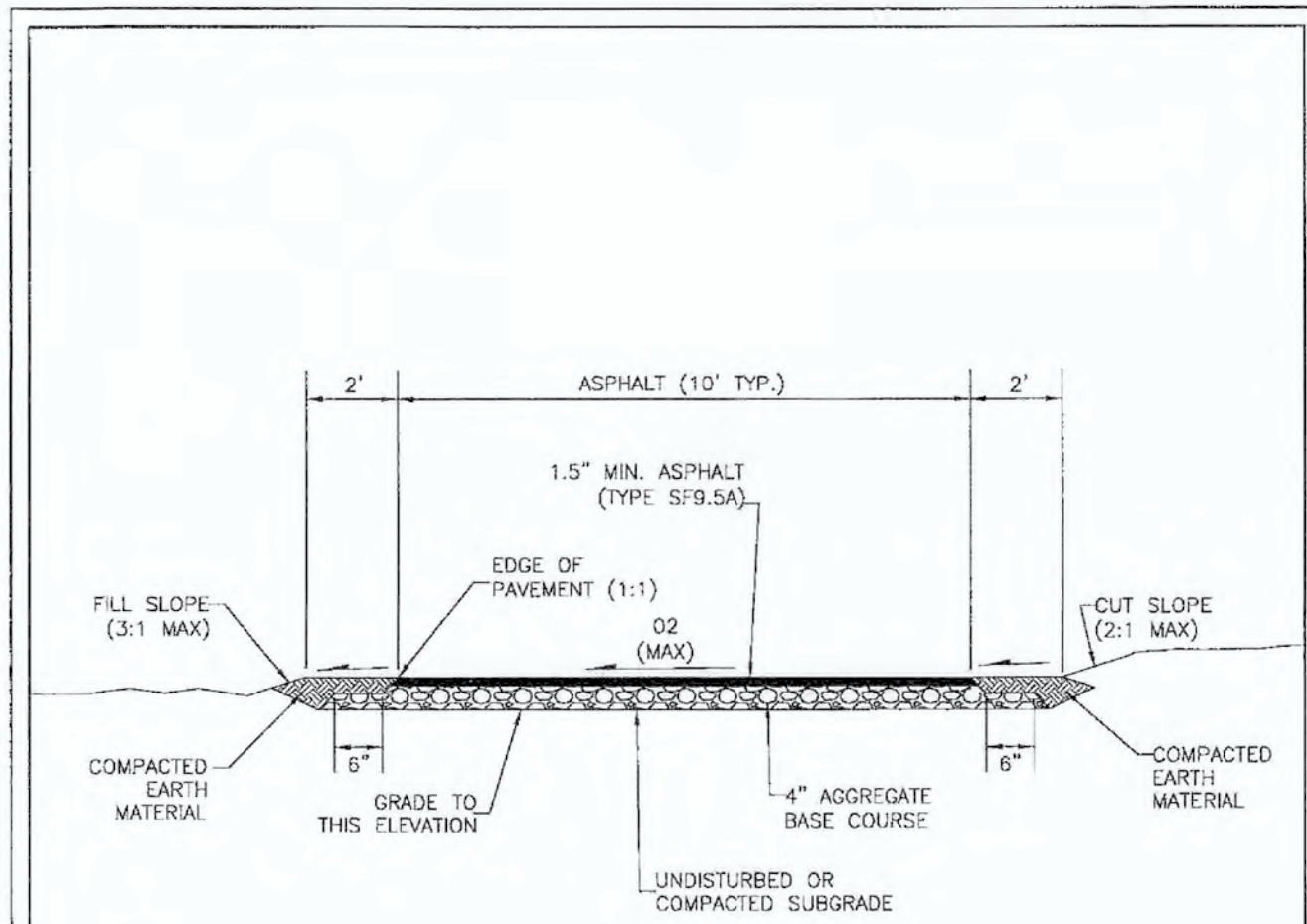
5 FLOW LINE CURB SECTION



AUTUMN HALL DRIVE ENTRANCE SECTION (EXISTING)
NOTE: DESIGN BY OTHERS AS PART OF EASTWOOD ROAD IMPROVEMENTS PROJECT.



AUTUMN HALL DRIVE SECTION



NOTE: PAVEMENT SECTION MAY VARY DEPENDING UPON FIELD CONDITIONS. CONTRACTOR SHALL COORDINATE WITH OWNER & GEOTECHNICAL ENGINEER TO DETERMINE ACTUAL PAVEMENT SECTION.

TYPICAL PARKING LOT PAVEMENT SECTION
NOT TO SCALE

NOTES:

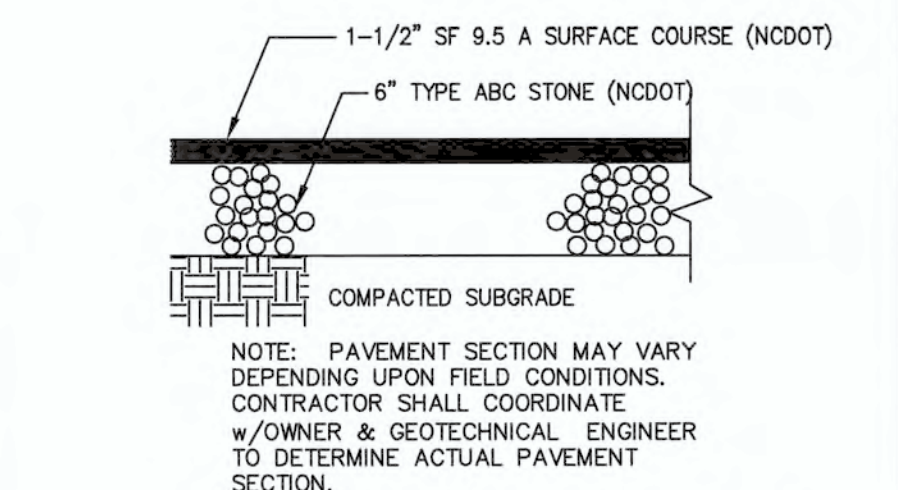
1. SEE PLANS FOR SPECIFIC MULTI-USE PATH LOCATIONS AND SUPERELEVATION (2% MAX) AND TRANSITIONS.
2. REFER TO CITY MATERIALS TESTING POLICY, M.U.P. CURB RAMP DETAIL AND CROSSWALK MARKING DETAIL WHERE NEEDED.
3. MULTI-P SHALL BE 2" ASPHALT AND 8" ABC WHERE VEHICLE TRAFFIC AND CROSSINGS ARE EXPECTED. SEE PLANS FOR LOCATIONS.

STANDARD DETAIL
MULTI-USE PATH

DATE: APRIL, 2017
DRAWN BY: JSR
CHECKED BY: D.E.C./P.E.
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, N.C. 28402 DRAFT
(910) 341-7807

SD X-XX



NOTE: PAVEMENT SECTION MAY VARY DEPENDING UPON FIELD CONDITIONS. CONTRACTOR SHALL COORDINATE WITH OWNER & GEOTECHNICAL ENGINEER TO DETERMINE ACTUAL PAVEMENT SECTION.

TYPICAL PARKING LOT PAVEMENT SECTION
NOT TO SCALE

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

City of Wilmington
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____

Planning _____
Traffic _____
Fire _____

NCDENR PWSS WATER PERMIT # _____
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT # _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

NOTES AND DETAILS
AUTUMN HALL COMMERCIAL PH I
1202 EASTWOOD ROAD
WILMINGTON, NC
NEW HANOVER COUNTY

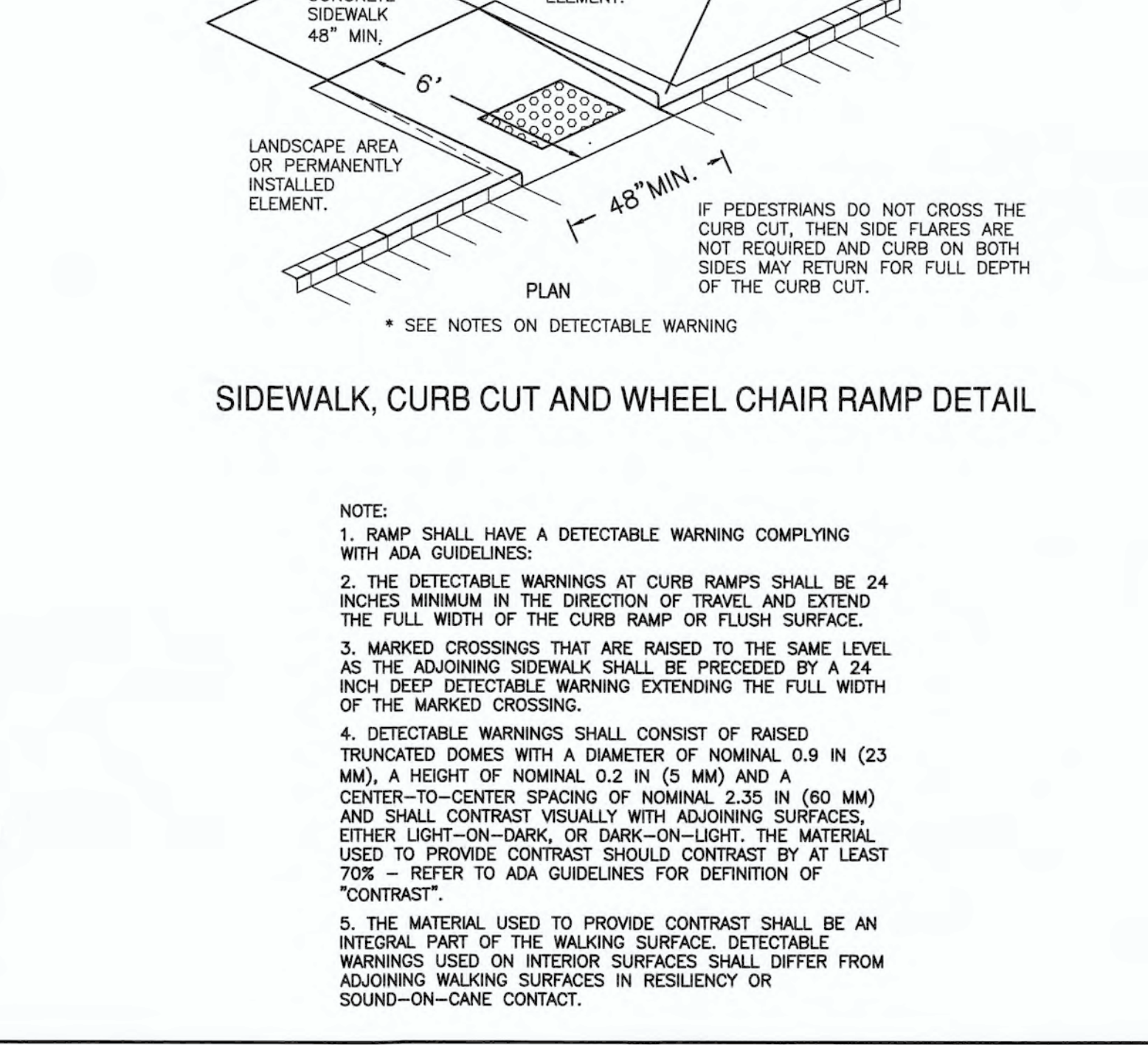
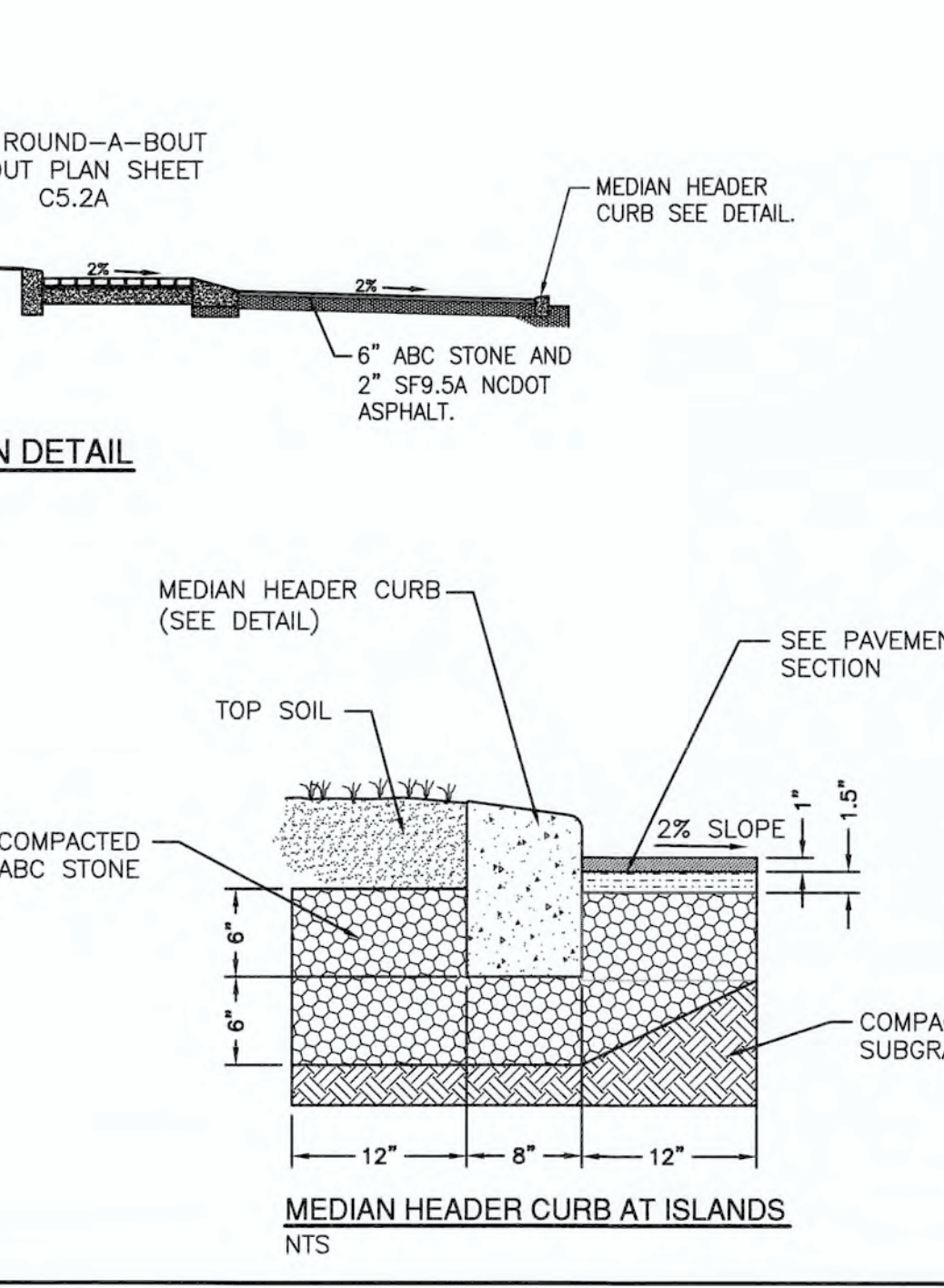
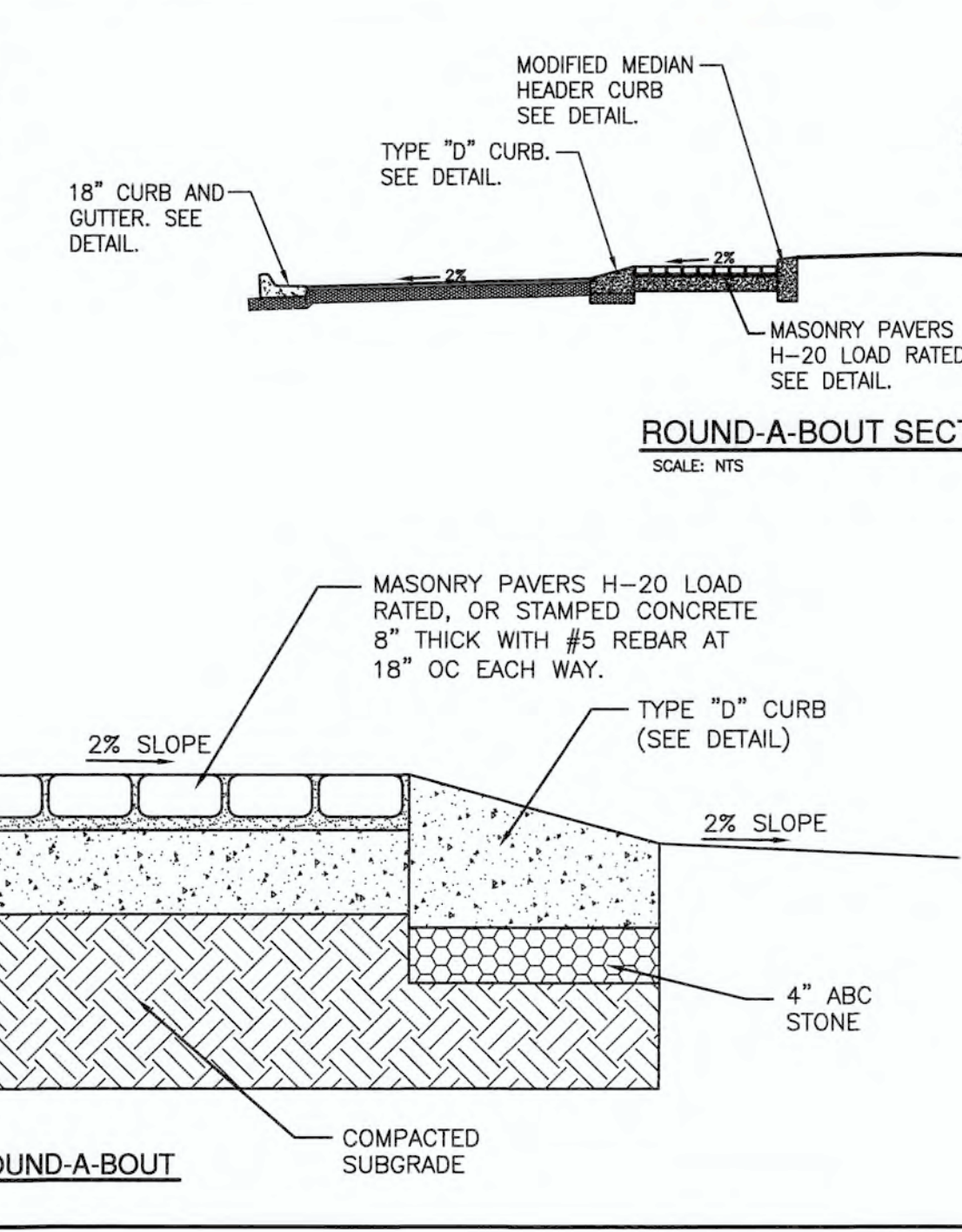
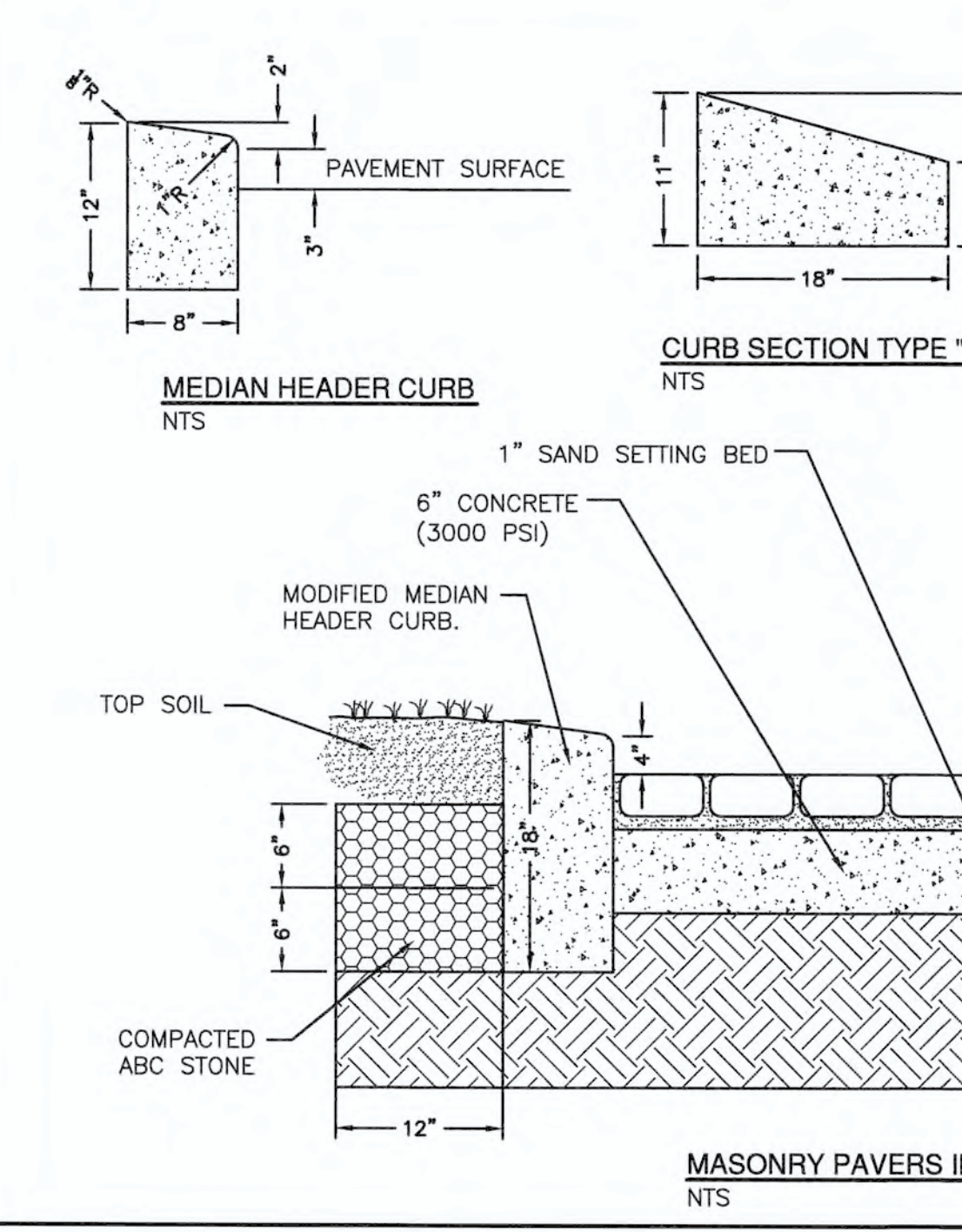
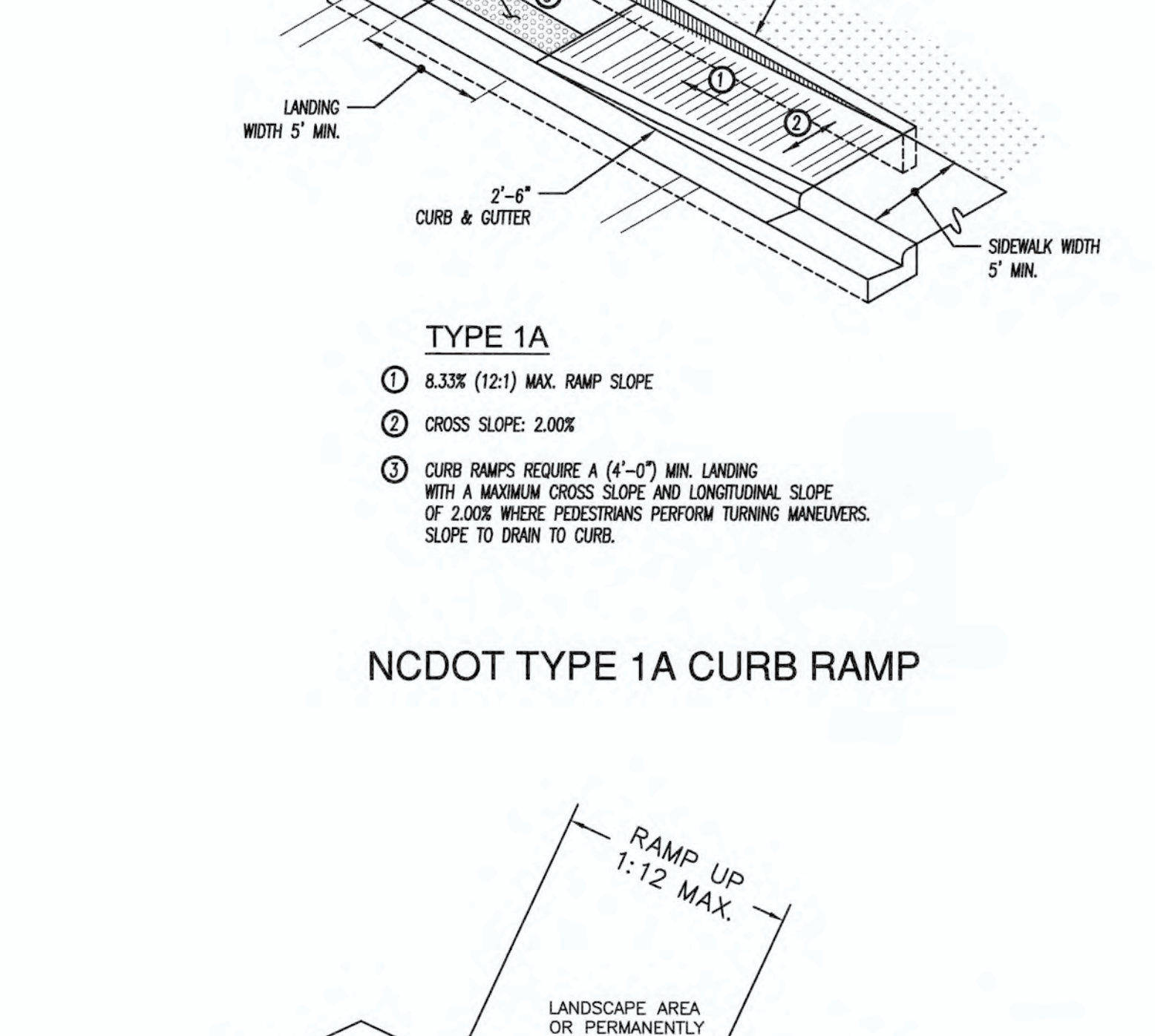
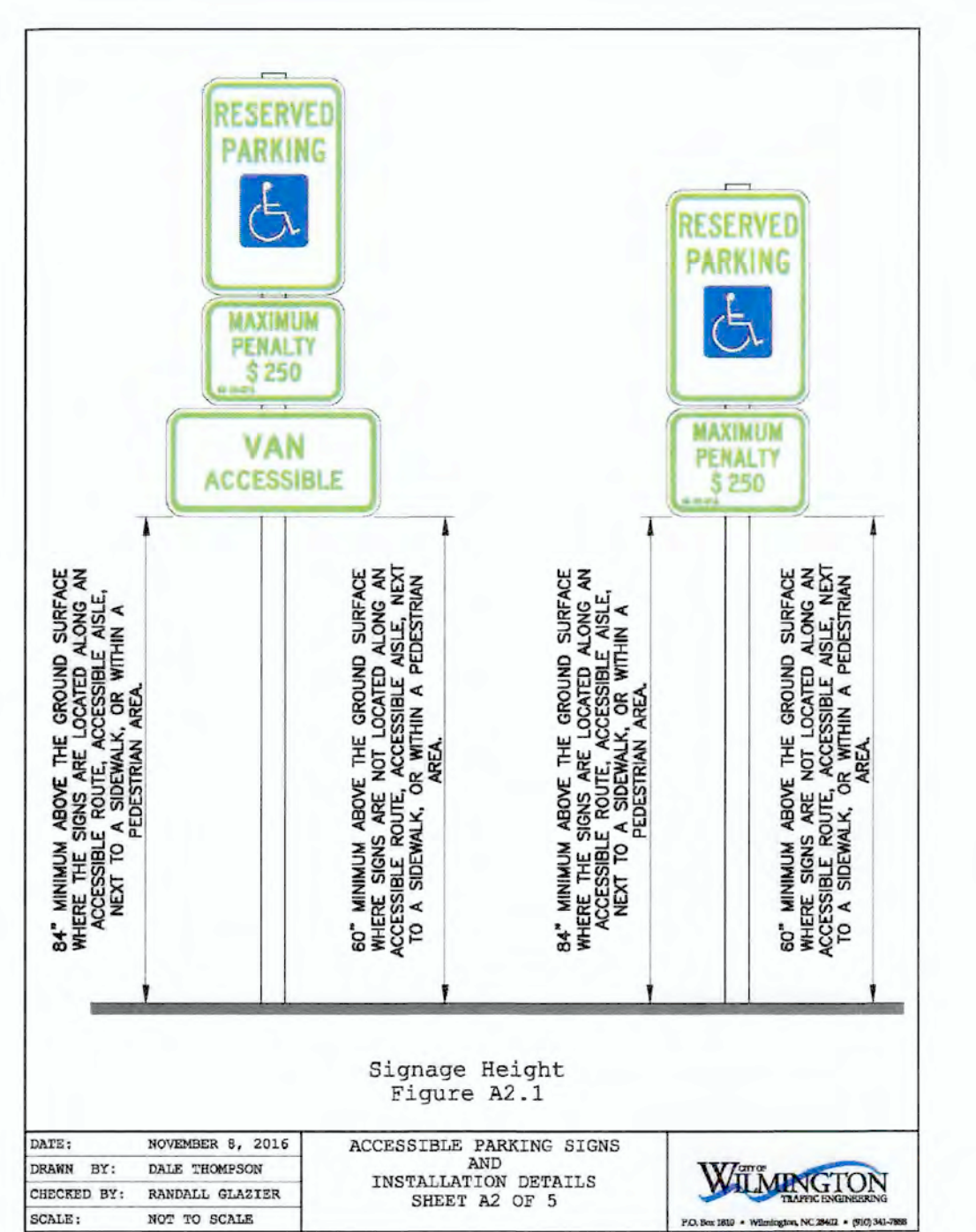
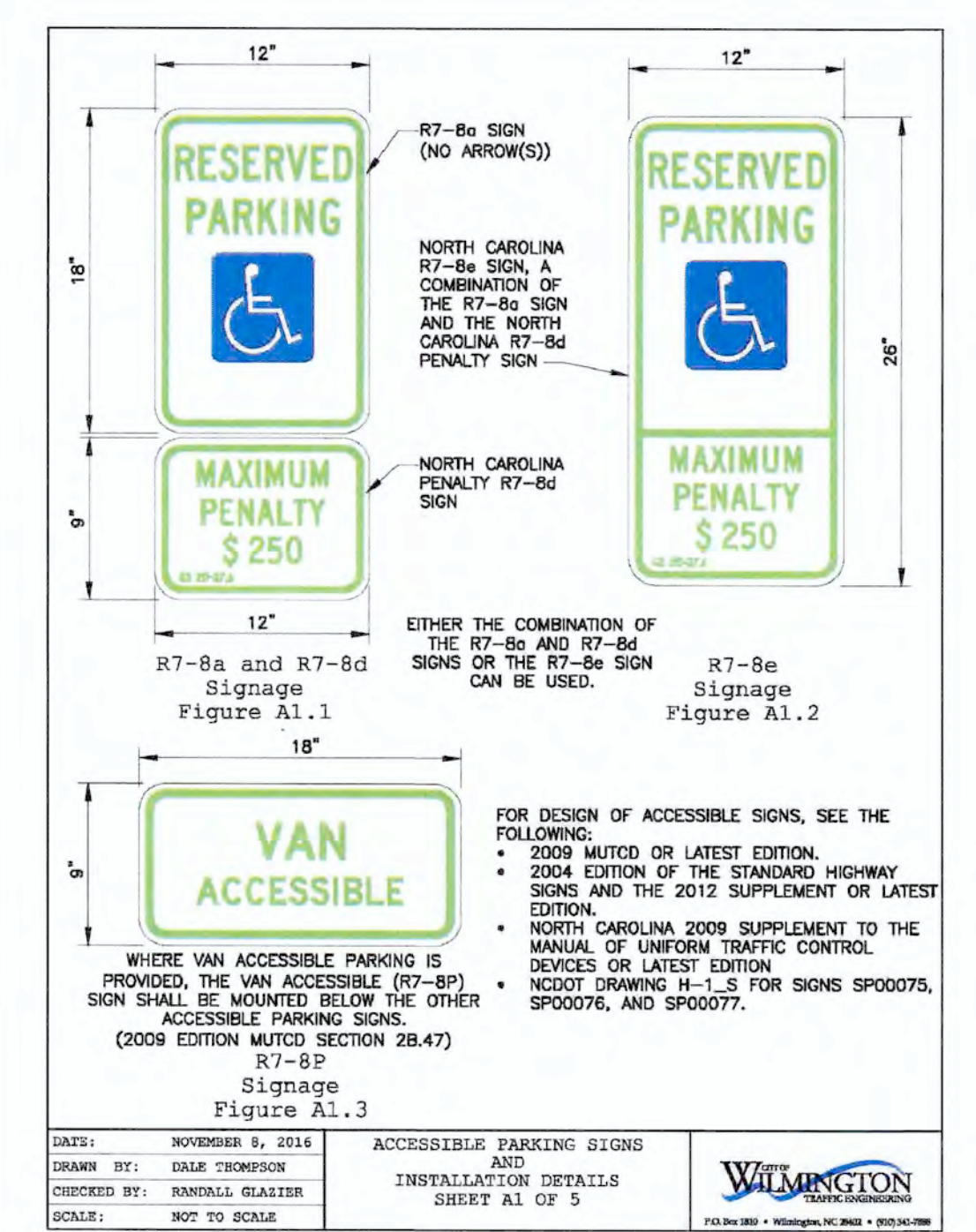
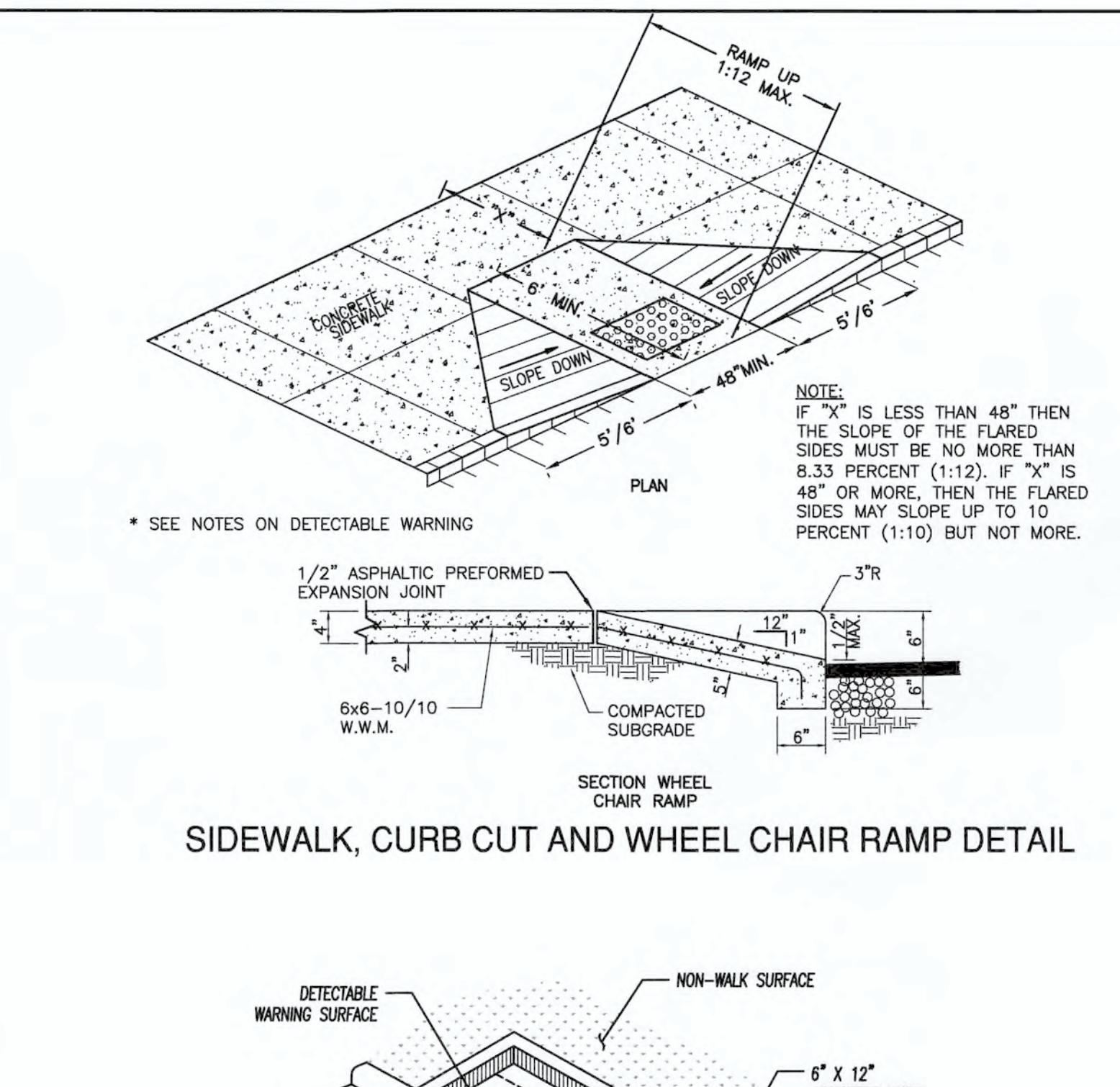
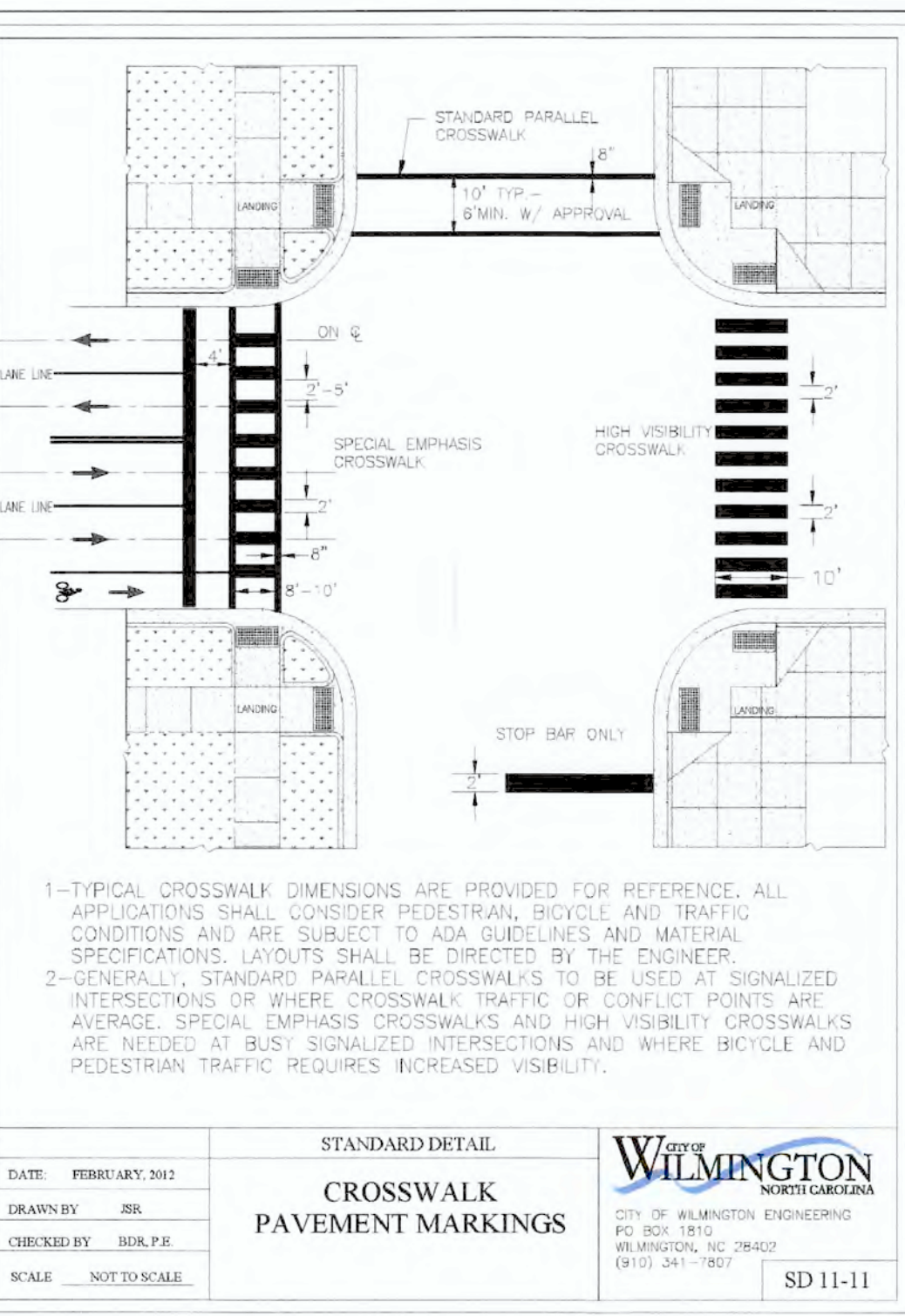
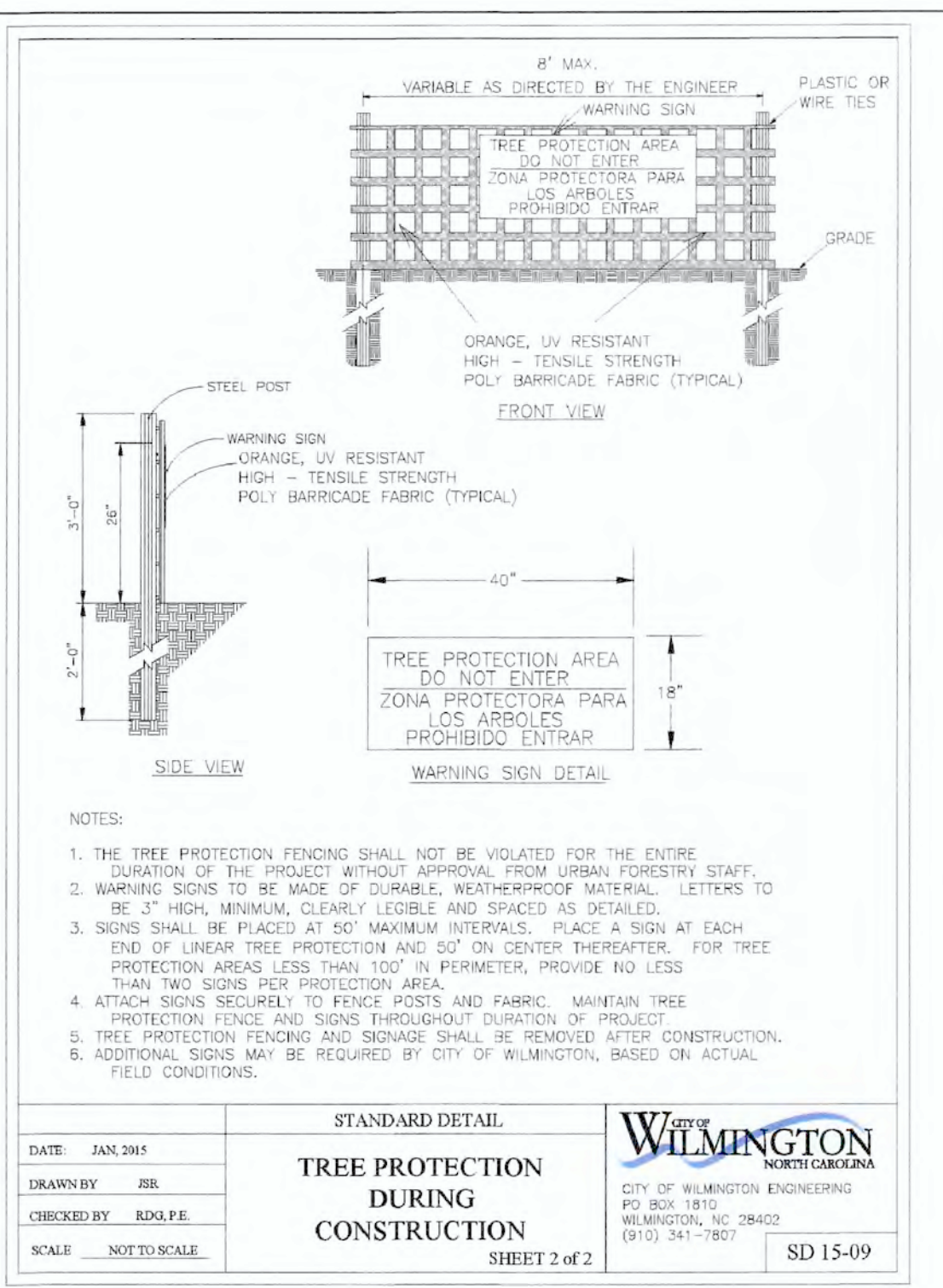
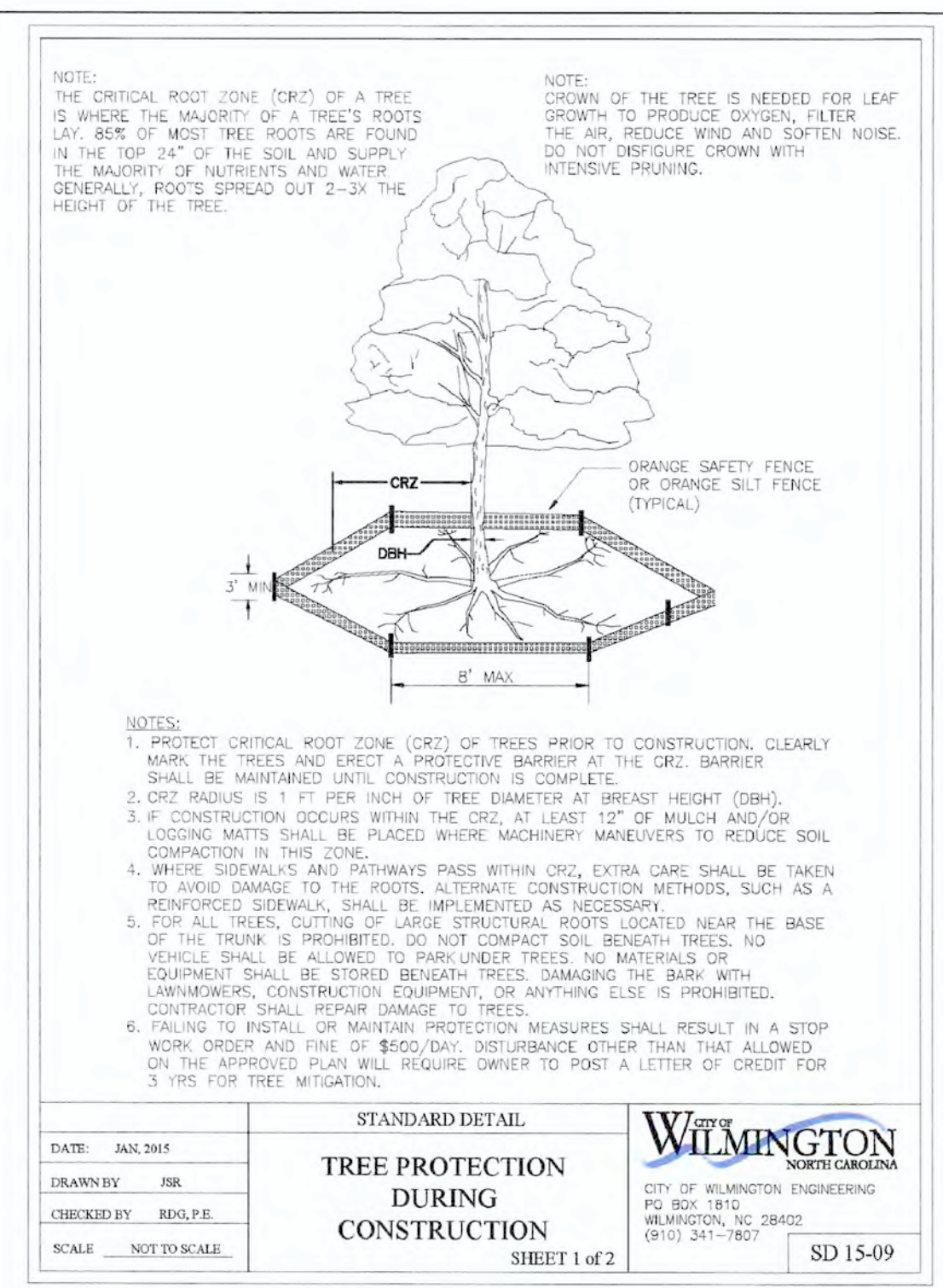
DEVELOPER
WEB TRASK C/O MIKE BROWN
CAPE FEAR COMMERCIAL, LLC
1051 MILITARY CUTOFF RD.,
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344-1010 (P) 622-4657 (CELL)

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1429 ASH-LITTLE RIVER RD., NW
ASH, NC 28620
PHONE (910) 287-5900

License #C-3641
18128
DES. JST
CKD. JPN
DRWN. NKS
DATE 8/28/19

C5.1

PRELIMINARY



CITY OF WILMINGTON STANDARD NOTES:

- CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING ANY DIGGING AT 1-800-632-4949.
- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
- IT SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBDIVIDER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBDIVIDER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. POSTED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS, AND CURBING WILL BE REPLACED.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- PROJECT SHALL COMPLY WITH CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 343-3910 FOR INFORMATION.
- IF THE CONTRACTOR DESIRES CFPWA WATER FOR CONSTRUCTION HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
- ANY IRRIGATION SYSTEM SUPPLIED BY CFPWA WATER SHALL COMPLY WITH CFPWA CROSS CONNECTION CONTROL REGULATIONS. CALL 332-6558 FOR INFORMATION.
- ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPWA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCOCHR OR ASSE.
- WHEN PVC WATER MAINS AND/OR POLYETHYLENE SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED SINGLE STRAND COPPER WIRE INSTALLED THE ENTIRE LENGTH AND SECURED TO ALL VALVES. THIS WIRE IS TO BE ACCESSIBLE AT ALL FIRE HYDRANTS AND WATER METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
- THE NUMBER AND SPACING OF DRIVEWAYS FOR ALL INTERCONNECTED SITES WILL BE DETERMINED BY THE COMBINED FRONTAGE OF THE INTERCONNECTED PROPERTIES.
- UNDERGROUND FIRE LINE MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC ROW TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
- A LANDSCAPE PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEER DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT.
- IF AN IRRIGATION SYSTEM IS PLANNED FOR THE SITE, UTILIZE MOISTURE SENSORS.
- ALL PROPOSED VEGETATION WITHIN THE SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10'.
- PLEASE CONSIDER INCORPORATING XERIC LANDSCAPING FOR ALL NEW LANDSCAPING.
- THE CONTRACTOR WILL MAINTAIN ALL-WEATHER EMERGENCY ACCESS TO CONSTRUCTION SITE AT ALL TIMES.

NOTES AND DETAILS
AUTUMN HALL COMMERCIAL PH I
1202 EASTWOOD ROAD
WILMINGTON, NC
NEW HANOVER COUNTY

DEVELOPER
WEB TRASK CO MIKE BROWN
CAPE FEAR COMMERCIAL, LLC
1051 MILITARY CUTOFF RD.
SUITE 200
WILMINGTON, NC 28405
344-1010 (P) 622-4657 (CELL)

CONTRACTOR
NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1429 ASH-LITTLE RIVER RD. NW
WILMINGTON, NC 28405
PHONE (910) 343-9635

DATE: NOVEMBER 9, 2016
DRAWN BY: DALE THOMPSON
CHECKED BY: RANDALL GLAZIER
SCALE: NOT TO SCALE

STANDARD DETAIL
ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS
 SHEET A2 OF 5
SD 15-09

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

Name: _____ Date: _____

Planning: _____
 Traffic: _____
 Fire: _____

NODENR PWSS WATER PERMIT #: _____
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT #: _____
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

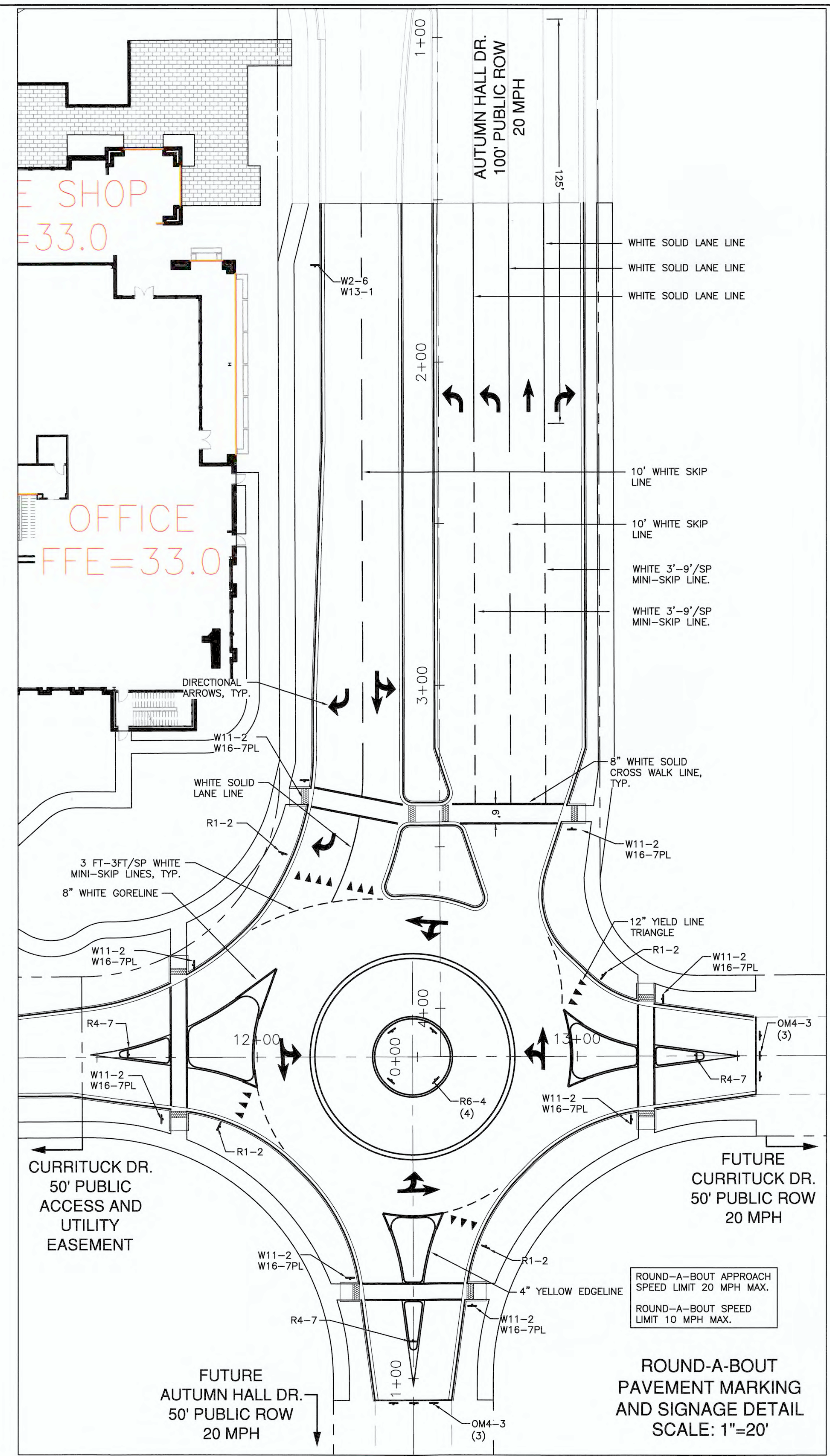
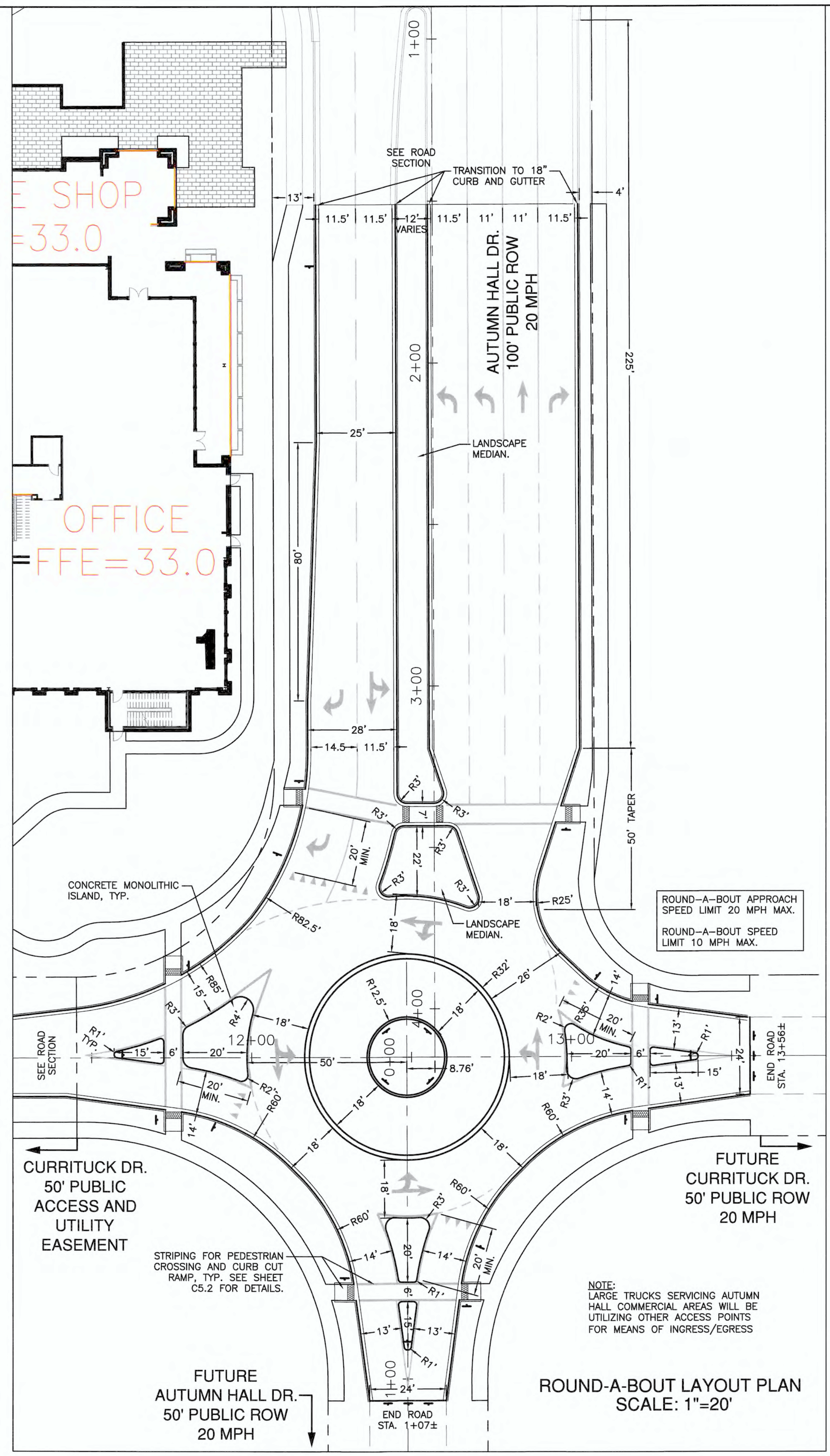
18128
 DES. JST
 CKD. JPN
 DRWN. NKS

DATE: 8/28/19

NOTICE TO CONTRACTOR
 NORTH CAROLINA
 STATE SEAL
 19851
 ENGINEER
 JOHN S. TUNSTALL

C5.2

PRELIMINARY



SIGNAGE LEGEND

	W2-6
	W13-1
	R1-2
	R4-7
	R6-4
	W11-2
	W16-7PL
	OM4-3

NOTE: A PRE-MARK LAYOUT INSPECTION SHALL BE REQUIRED PRIOR TO STRIPING.

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
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Approved Construction Plan
Name _____ Date _____

Planning _____
Traffic _____
Fire _____

NC DENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

NOTES AND DETAILS
AUTUMN HALL COMMERCIAL PH I
1202 EASTWOOD ROAD
WILMINGTON, NC

DEVELOPER
WEB TRASK C/O MIKE BROWN
CAPE FEAR COMMERCIAL, LLC
1051 MILITARY CUTOFF RD.,
SUITE 200
WILMINGTON, NC 28405
344-1010 (P) 622-4657 (CELL)

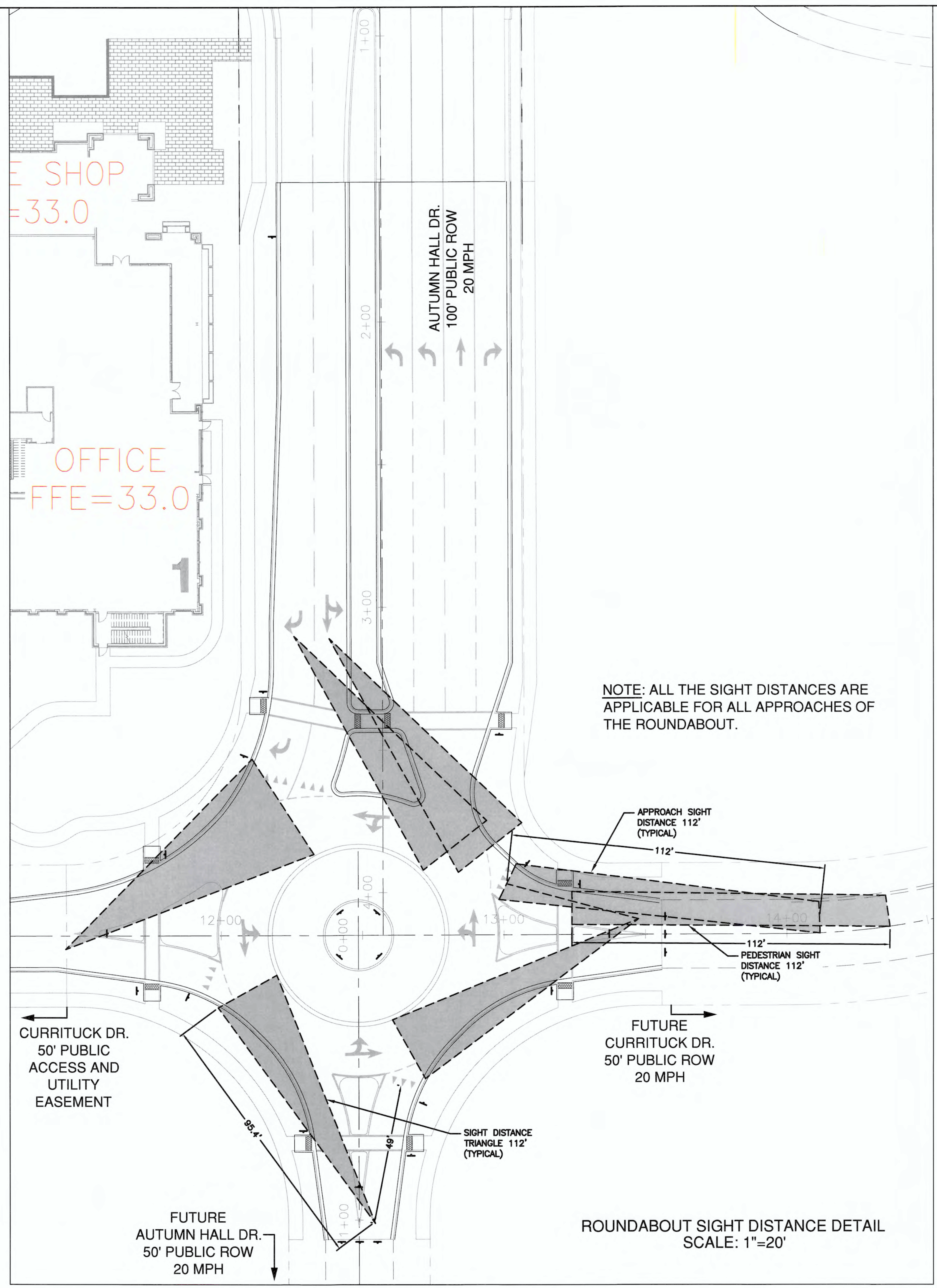
NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1900 EASTWOOD RD., SUITE #11
WILMINGTON, NC 28403
PHONE (910) 343-9633
1429 ASH-LITTLE RIVER RD., NW
ASH, NC 28420
PHONE (910) 287-5900

License #C-3641
18128
DES. JST
CHKD. JPN
DRWN. NKS
DATE 8/28/19



C5.2A

PRELIMINARY



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____

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Fire _____

NC DENR PWSS WATER PERMIT #: _____

WATER CAPACITY: _____ GPD

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SEWER CAPACITY: _____ GPD

SEWER SHED # AND PLANT: _____

SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

NOTES AND DETAILS
AUTUMN HALL COMMERCIAL PH I
1202 EASTWOOD ROAD
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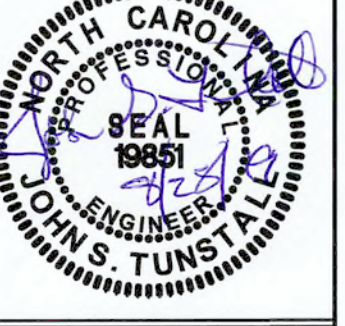
1429 ASH-LITTLE RIVER RD., NW
ASH, NC 28420
PHONE (910) 287-5900

Licence #C-3641

18128

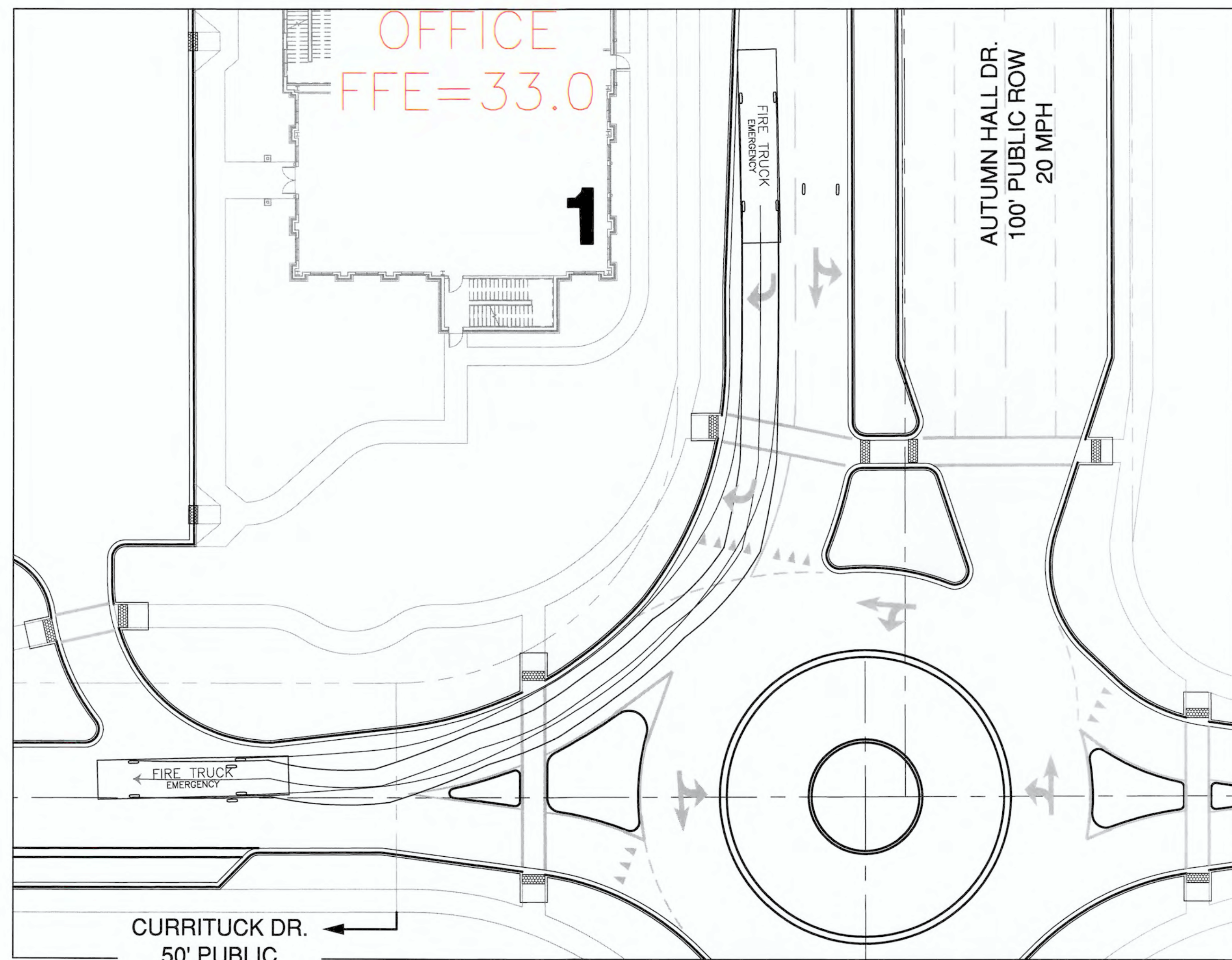
DES. JST
CHK. JPN
DRWN. NKS

DATE 8/28/19

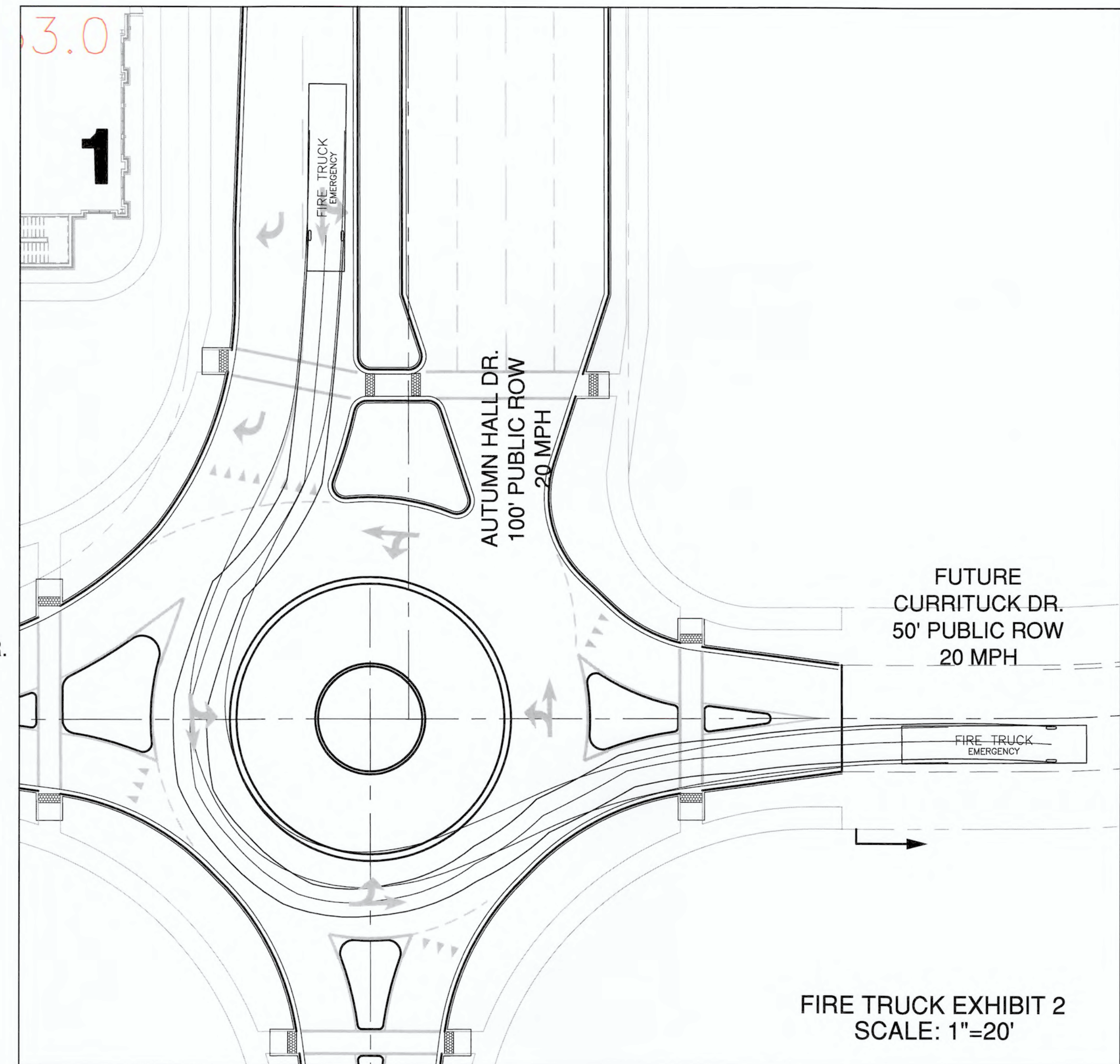


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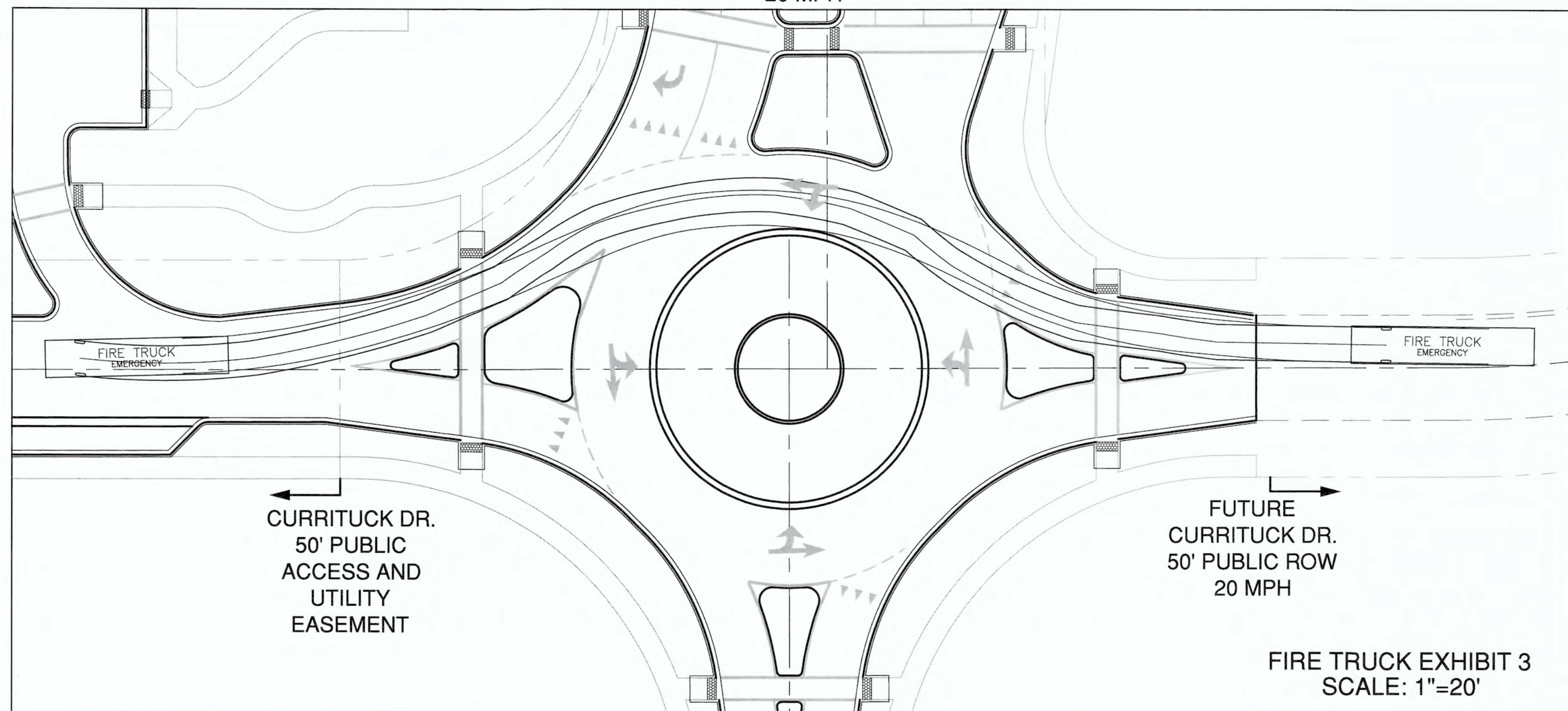
PRELIMINARY



FIRE TRUCK EXHIBIT 1
SCALE: 1"=20'



FIRE TRUCK EXHIBIT 2
SCALE: 1"=20'



FIRE TRUCK EXHIBIT 3
SCALE: 1"=20'

FUTURE
AUTUMN HALL DR.
50' PUBLIC ROW
20 MPH

For each open utility out of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____

Traffic _____

Fire _____

NODENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

NOTES AND DETAILS
AUTUMN HALL COMMERCIAL PH I
1202 EASTWOOD ROAD
WILMINGTON, NC
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DEVELOPER
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NORRIS & TUNSTALL
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WILMINGTON, NC 28403
PHONE (910) 343-9653

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ASH, NC 28420
PHONE (910) 287-5900

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18128

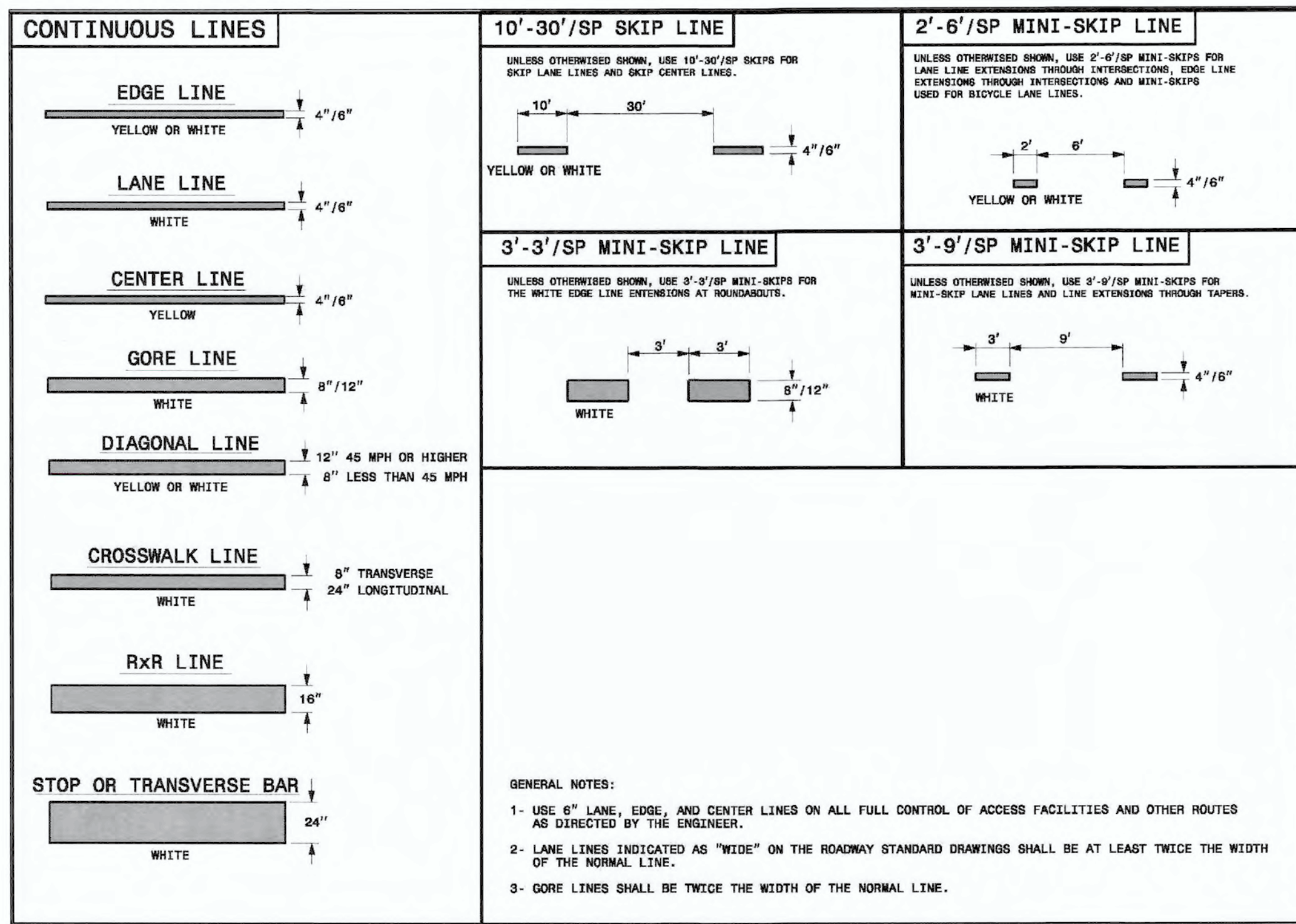
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CHK. JPN
DRWN. NKS

DATE 8/28/19



C5.2C

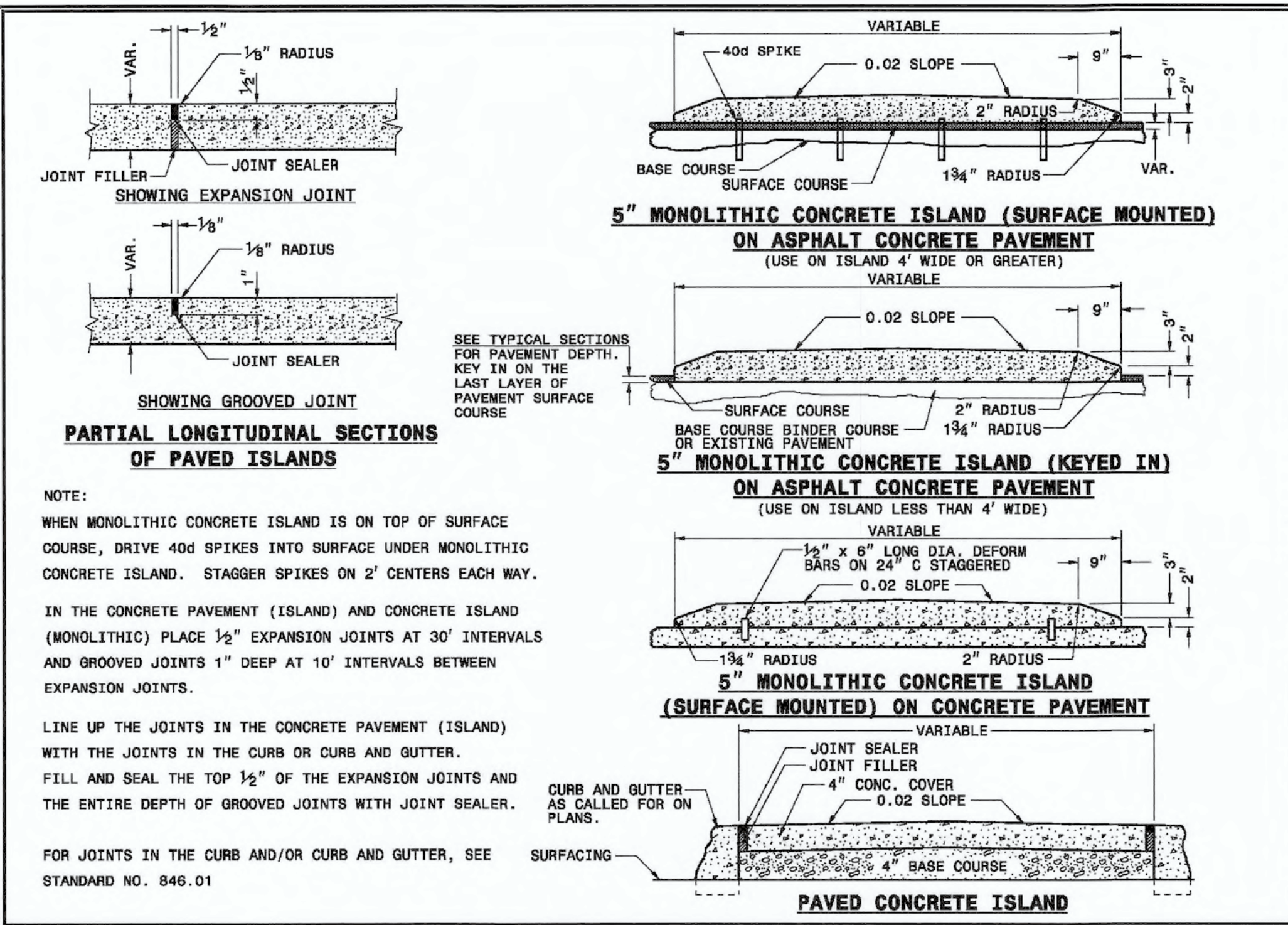
PRELIMINARY



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

ROADWAY STANDARD DRAWING FOR
PAVEMENT MARKINGS
LINE TYPES AND OFFSETS

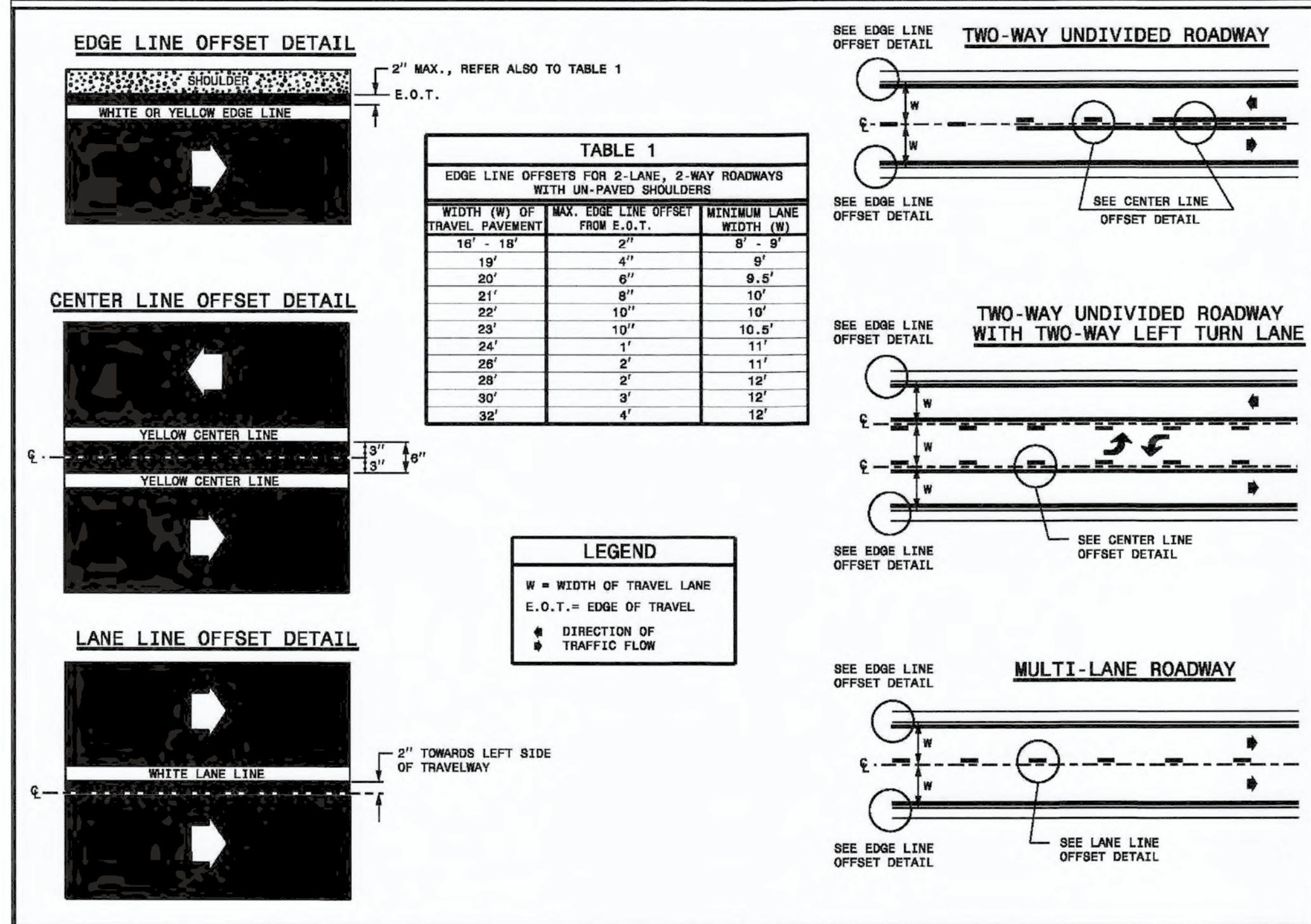
SHEET 1 OF 2
1205.01



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

ROADWAY STANDARD DRAWING FOR
CONCRETE ISLANDS

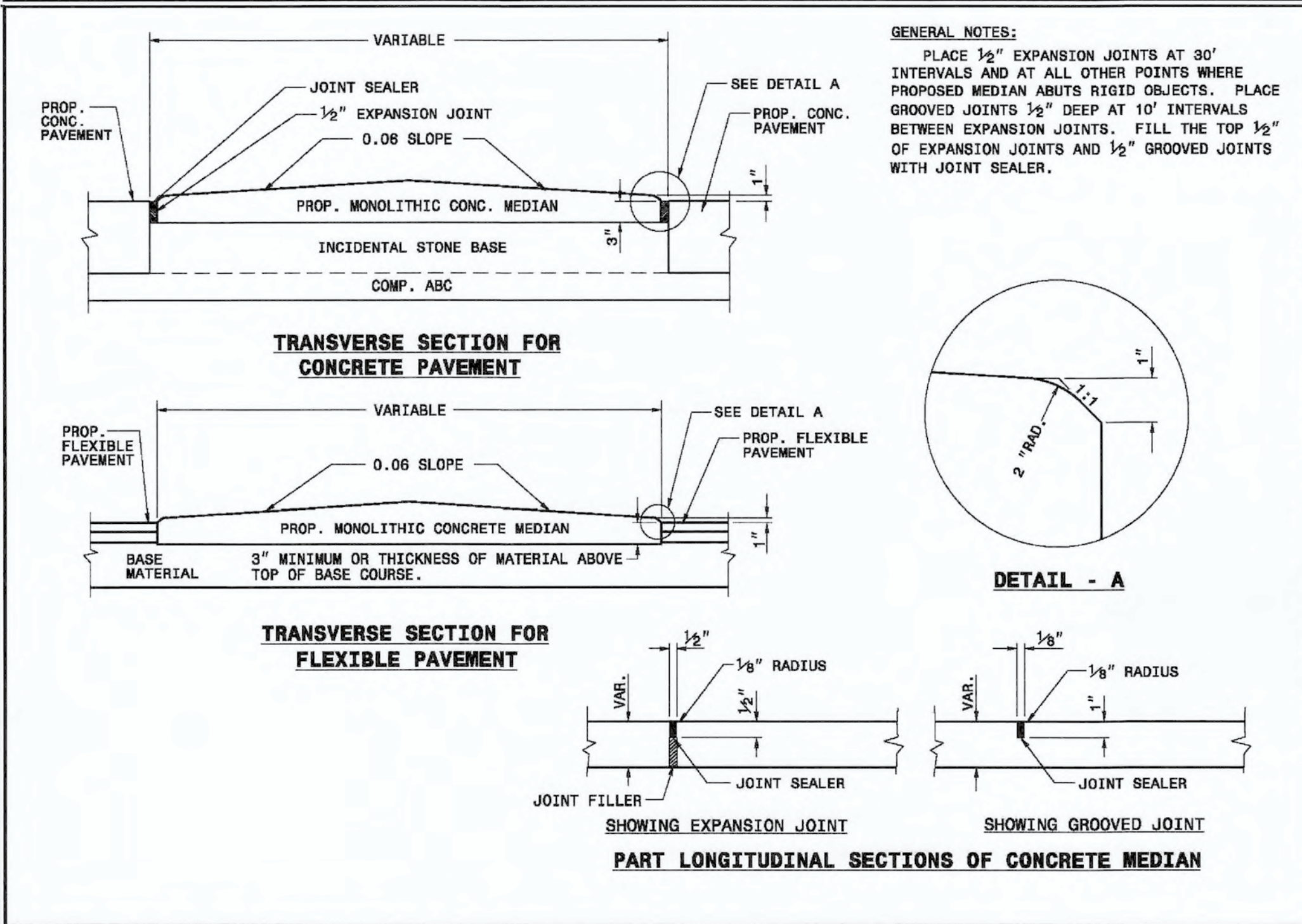
SHEET 1 OF 2
852.01



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

ROADWAY STANDARD DRAWING FOR
PAVEMENT MARKINGS
LINE TYPES AND OFFSETS

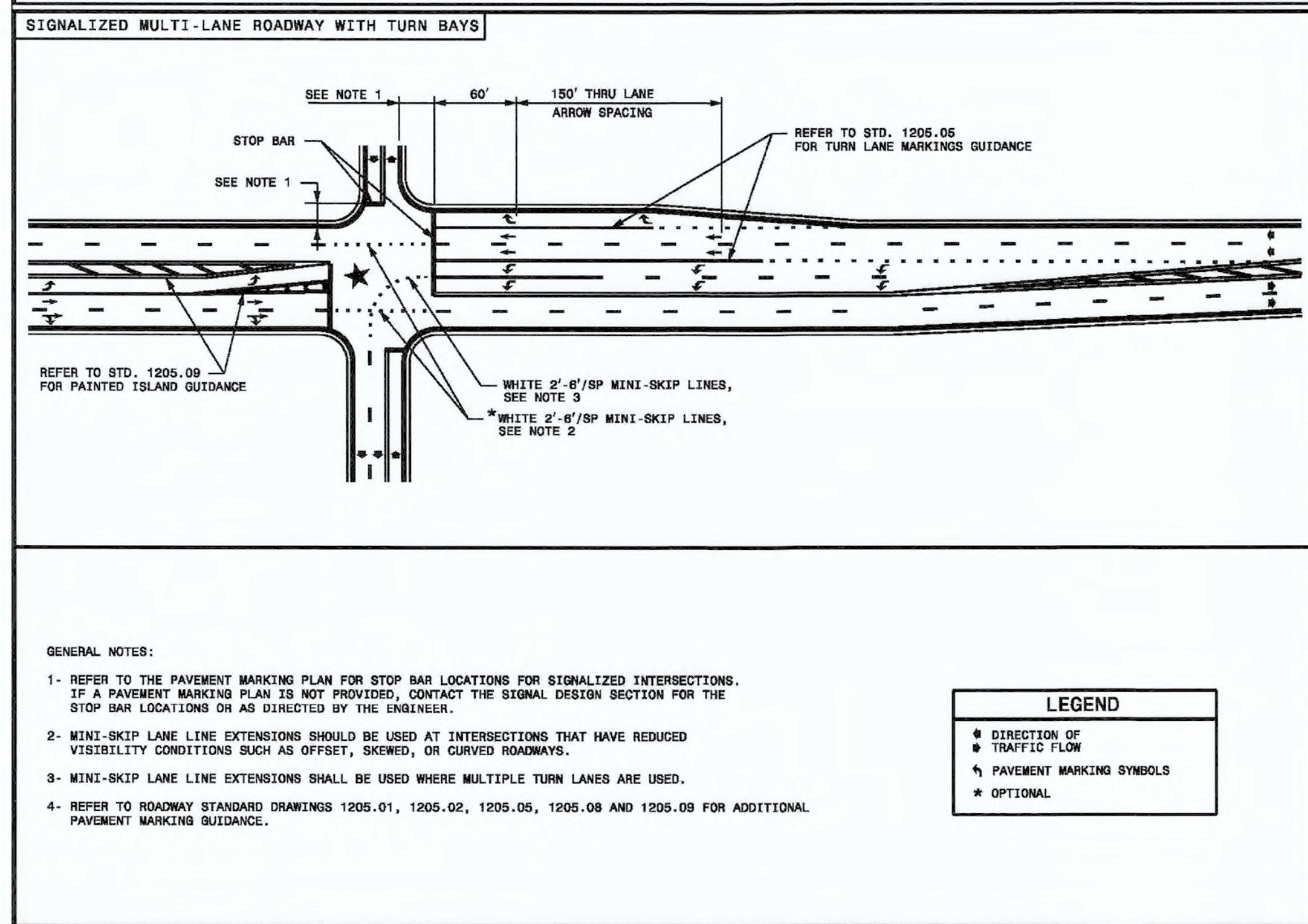
SHEET 2 OF 2
1205.01



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

ROADWAY STANDARD DRAWING FOR
CONCRETE MOUNTABLE MEDIAN
FOR USE WITH RIGID OR FLEXIBLE PAVEMENT

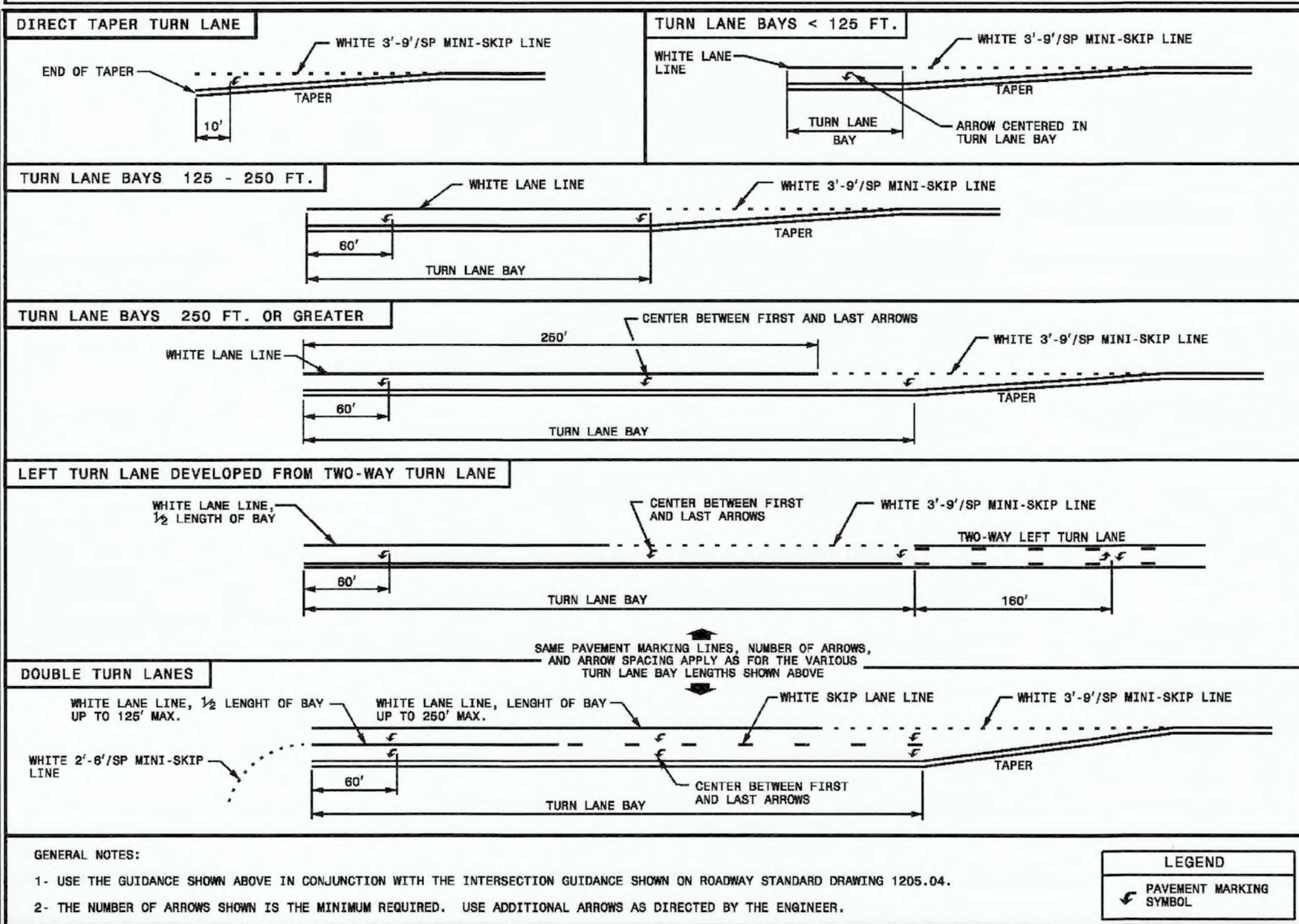
SHEET 1 OF 2
852.02



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

ROADWAY STANDARD DRAWING FOR
PAVEMENT MARKINGS
INTERSECTIONS

SHEET 1 OF 2
1205.04



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

ROADWAY STANDARD DRAWING FOR
PAVEMENT MARKINGS
TURN LANES

SHEET 1 OF 1
1205.05

NOTES AND DETAILS
AUTUMN HALL COMMERCIAL PH I
1202 EASTWOOD ROAD
WILMINGTON, NC
NEW HANOVER COUNTY

DEVELOPER
WEB TRASK CO MIKE BROWN
CAPE FEAR COMMERCIAL, LLC
1051 MILITARY CUTOFF RD.,
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WILMINGTON, NC 28405
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NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.

1990 EASTWOOD RD., SUITE #11
WILMINGTON, NC 28403
PHONE (910) 343-9633

1429 ASH-LITTLE RIVER RD. NW
ASH, NC 28420
PHONE (910) 287-5900

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

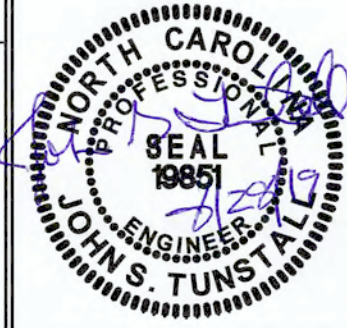
City of WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: 8/28/19
Signed: _____
Name: _____ Date: _____

Approved Construction Plan

Planning _____
Traffic _____
Fire _____

NC DENR PWSS WATER PERMIT # _____ GPD
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT # _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)



C5.2D

PRELIMINARY

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

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

SECTION E: GROUND STABILIZATION

Site Area Description	Required Ground Stabilization Timeframes	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

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

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.

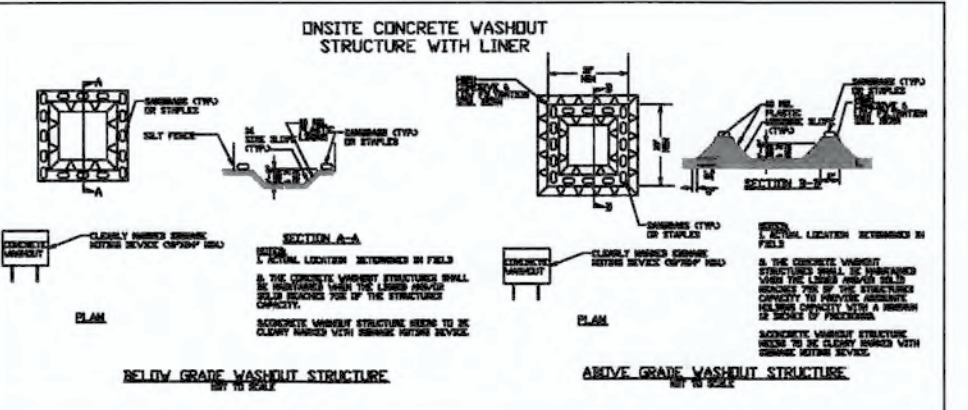
- EQUIPMENT AND VEHICLE MAINTENANCE**
- Maintain vehicles and equipment to prevent discharge of fluids.
 - Provide drip pans under any stored equipment.
 - Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
 - Collect all spent fluids, store in separate containers 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 base 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.

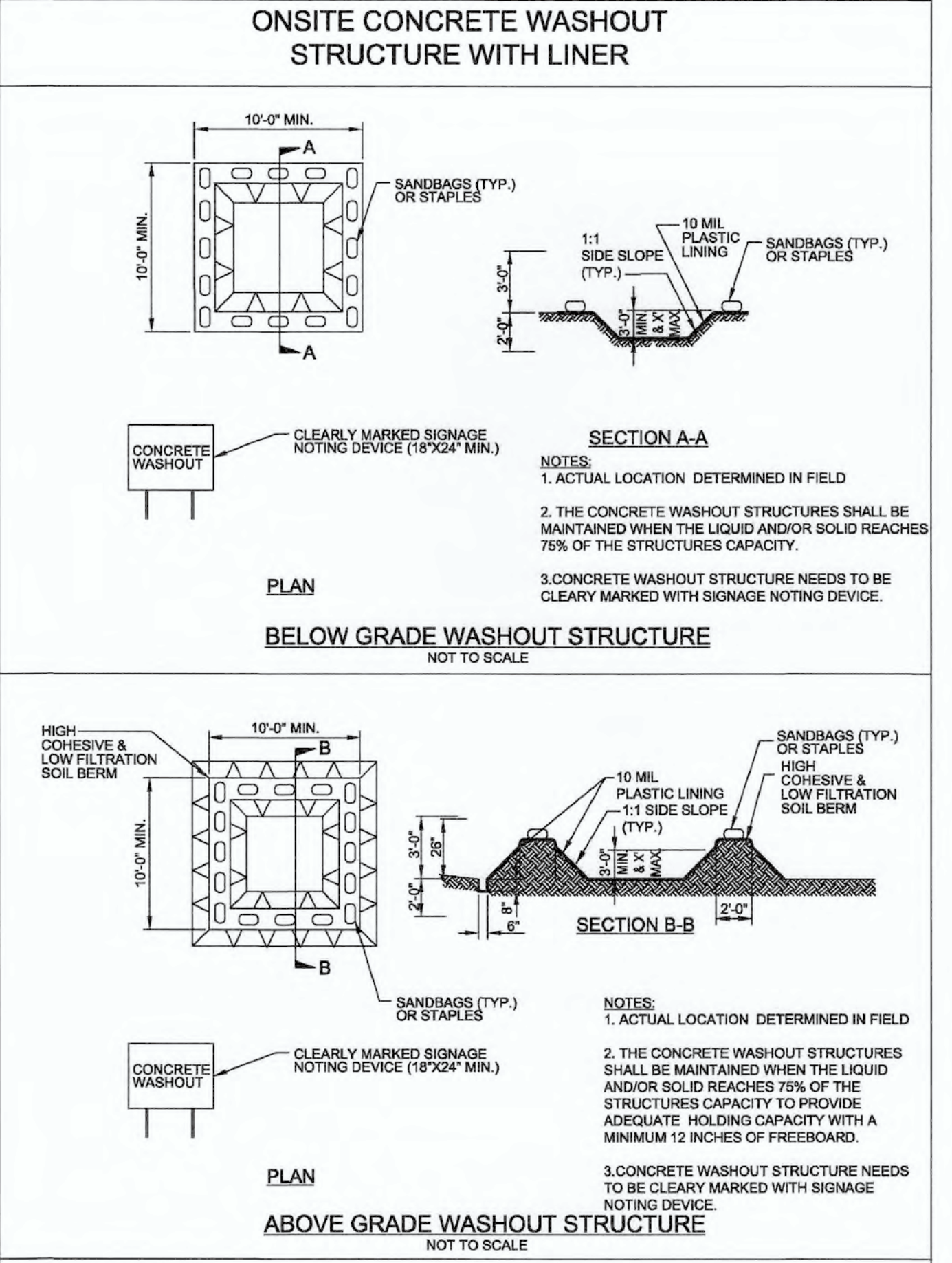


- CONCRETE WASHOUTS**
- Do not discharge concrete or cement slurry from the site.
 - Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
 - Manage washout from mortar mixers in accordance with the above item 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 and 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.

WITH LINER, NO GRAVEL APPROACH



NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

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-measuring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 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. Indicators of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater outfalls (SFOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 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 ≥ 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 on or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item 2(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (distillation of perimeter E&SC 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 timeframes 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

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

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

2. Additional Documentation

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

- This general permit as well as the certificate of coverage, after it is received.
- Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available 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) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, 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. If the stream is named on the NC Stream 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.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release. A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass. Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass. Within 24 hours, an oral or electronic notification. Within 7 calendar days, 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(i)(6)]. Division staff may waive the requirement for a written report on a case-by-case basis.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass. Within 24 hours, an oral or electronic notification. Within 7 calendar days, 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(i)(6)]. Division staff may waive the requirement for a written report on a case-by-case basis.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass. Within 24 hours, an oral or electronic notification. Within 7 calendar days, 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(i)(6)]. Division staff may waive the requirement for a written report on a case-by-case basis.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(i)(7)]	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, 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(i)(6)]. Division staff may waive the requirement for a written report on a case-by-case basis.

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

City of WILMINGTON, NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
Fire _____

NCDENR PWSS WATER PERMIT #: _____ GPD
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

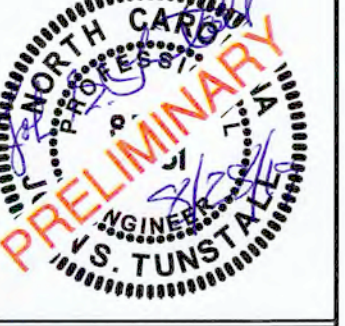
NOTES AND DETAILS
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WILMINGTON, NC
NEW HANOVER COUNTY

DEVELOPER
WEB TRASK O' MIKE BROWN
CAPE FEAR COMMERCIAL, LLC
1051 MILITARY CUTOFF RD.,
SUITE 200
WILMINGTON, NC 28405
344-1010 (P) 622-4657 (CELL)

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CONSULTING ENGINEERS P.C.
1900 EASTWOOD RD., SUITE #11
WILMINGTON, NC 28403
PHONE (910) 343-9653
1429 ASH-LITTLE RIVER RD., NW
ASH, NC 28420
PHONE (910) 287-5900

Licence #C-3641
18128
DES. JPN
CKD. JST
DRWN. NKS

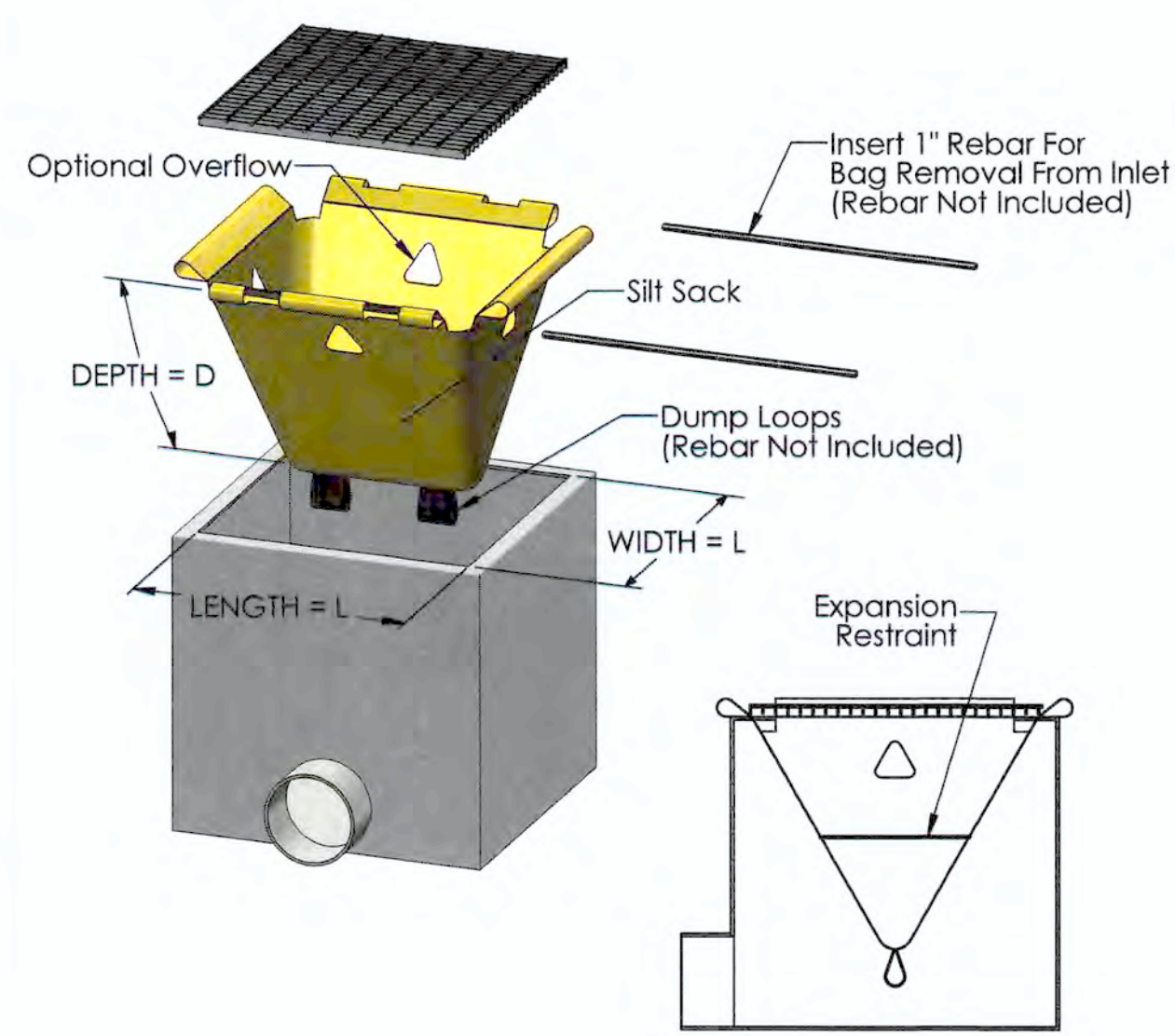
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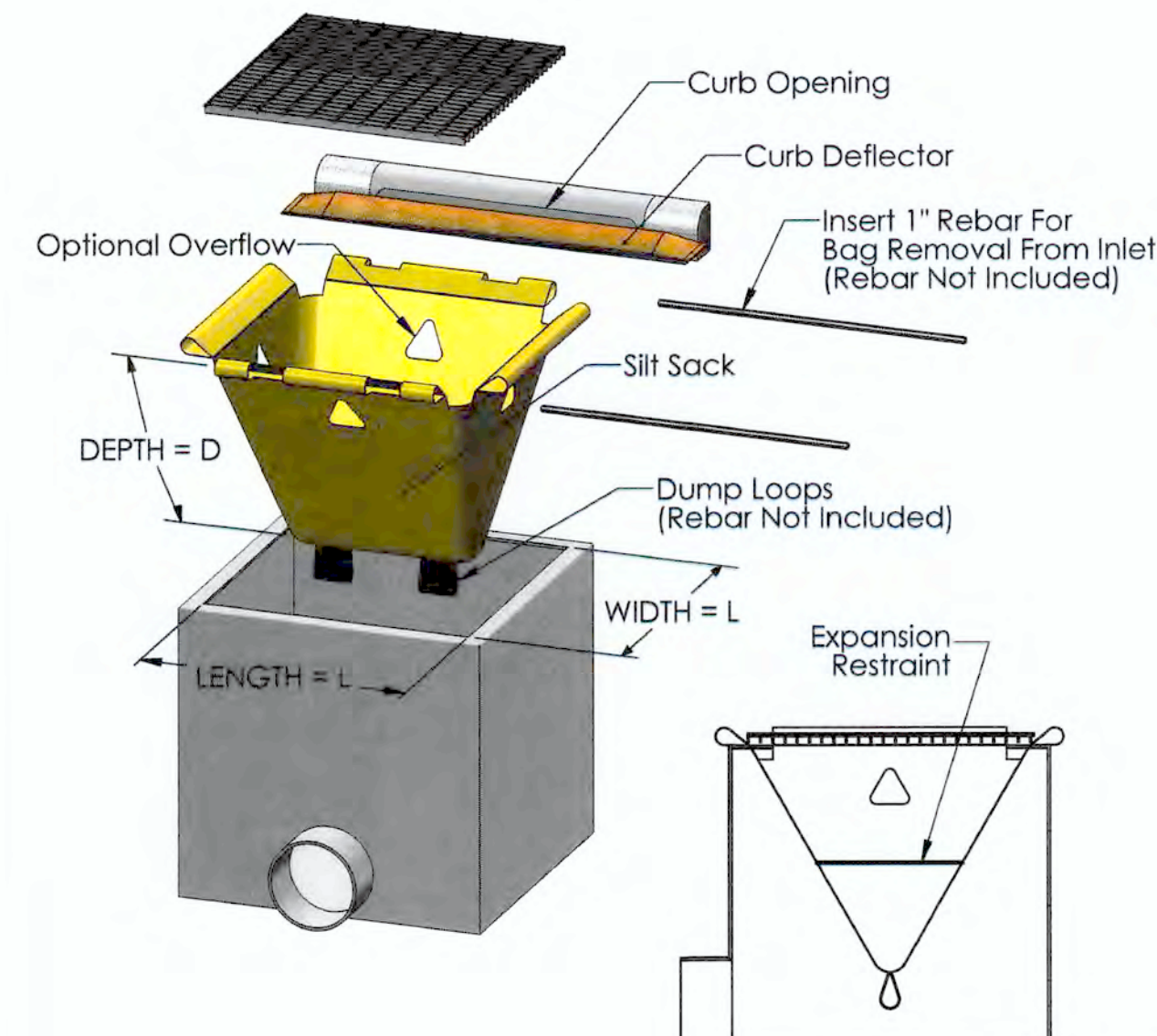
C5.4



NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19



NOT TO SCALE



NOT TO SCALE

NOTES:

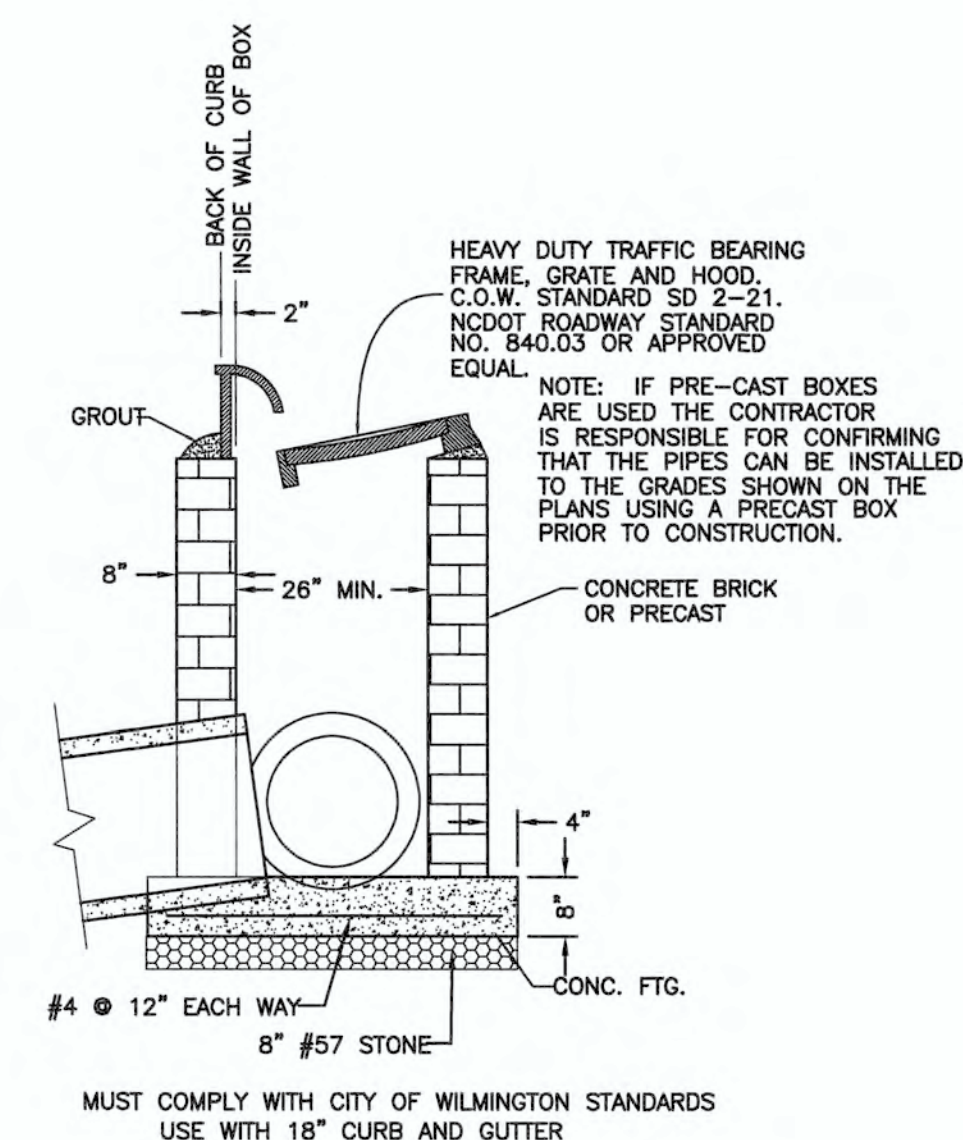
1. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE OPENING SIZE OF THE EXISTING OR PROPOSED CATCH BASIN OR DROP INLET. THE SILTSACK WILL BE MANUFACTURED TO FIT THE OPENING OF THE EXISTING OR PROPOSED CATCH BASIN OR DROP INLET.
2. TO INSTALL THE SILTSACK IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING. HOLD OUT APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME. THIS IS THE AREA OF THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
3. THE SILTSACK IS FULL AND SHOULD BE EMPTIED WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE.
4. TO REMOVE THE SILTSACK, TAKE TWO PIECES OF 1\"/>

NOT TO SCALE

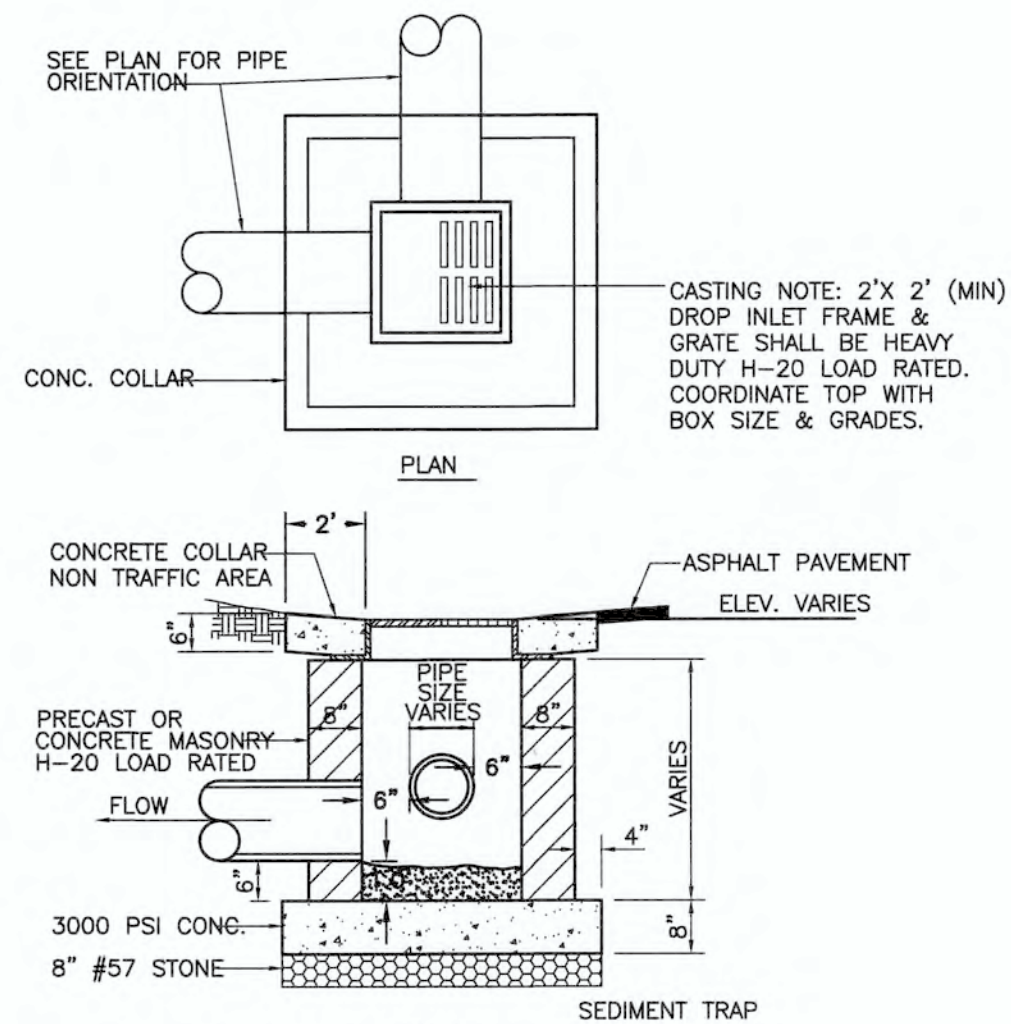
1 SILT SACK DETAIL FOR DROP INLETS

2 SILT SACK DETAIL FOR CURB INLETS

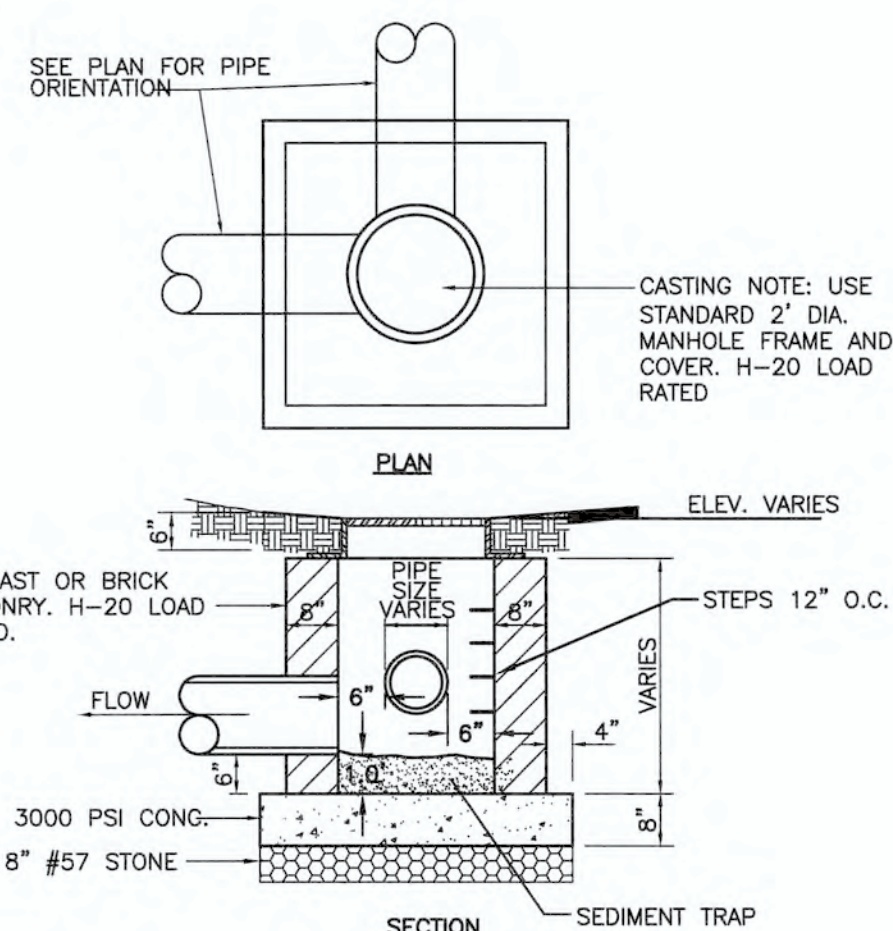
3 SILT SACK NOTES



NOT TO SCALE



MUST COMPLY WITH CITY OF WILMINGTON STANDARDS

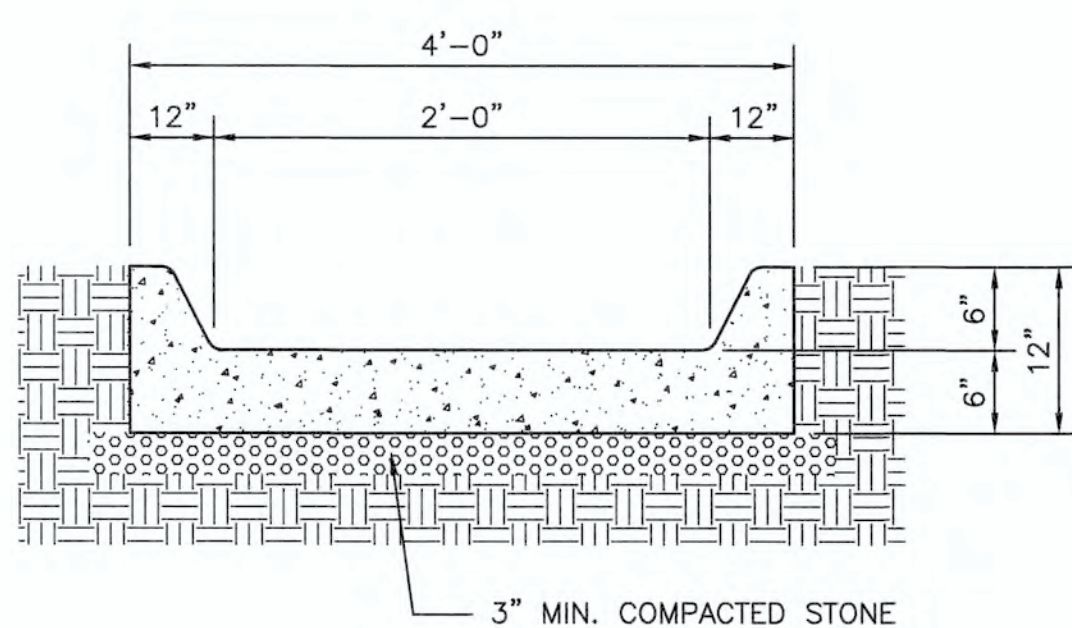


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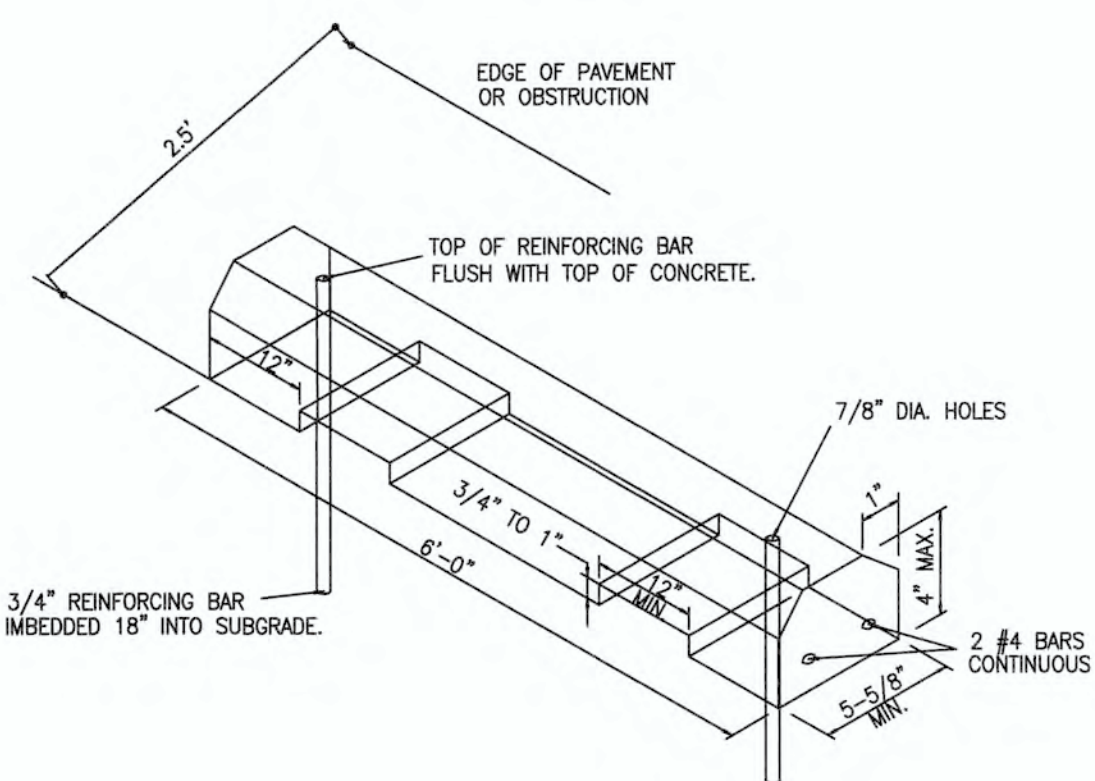
4 TYPICAL CATCH BASIN

5 TYPICAL DROP INLET

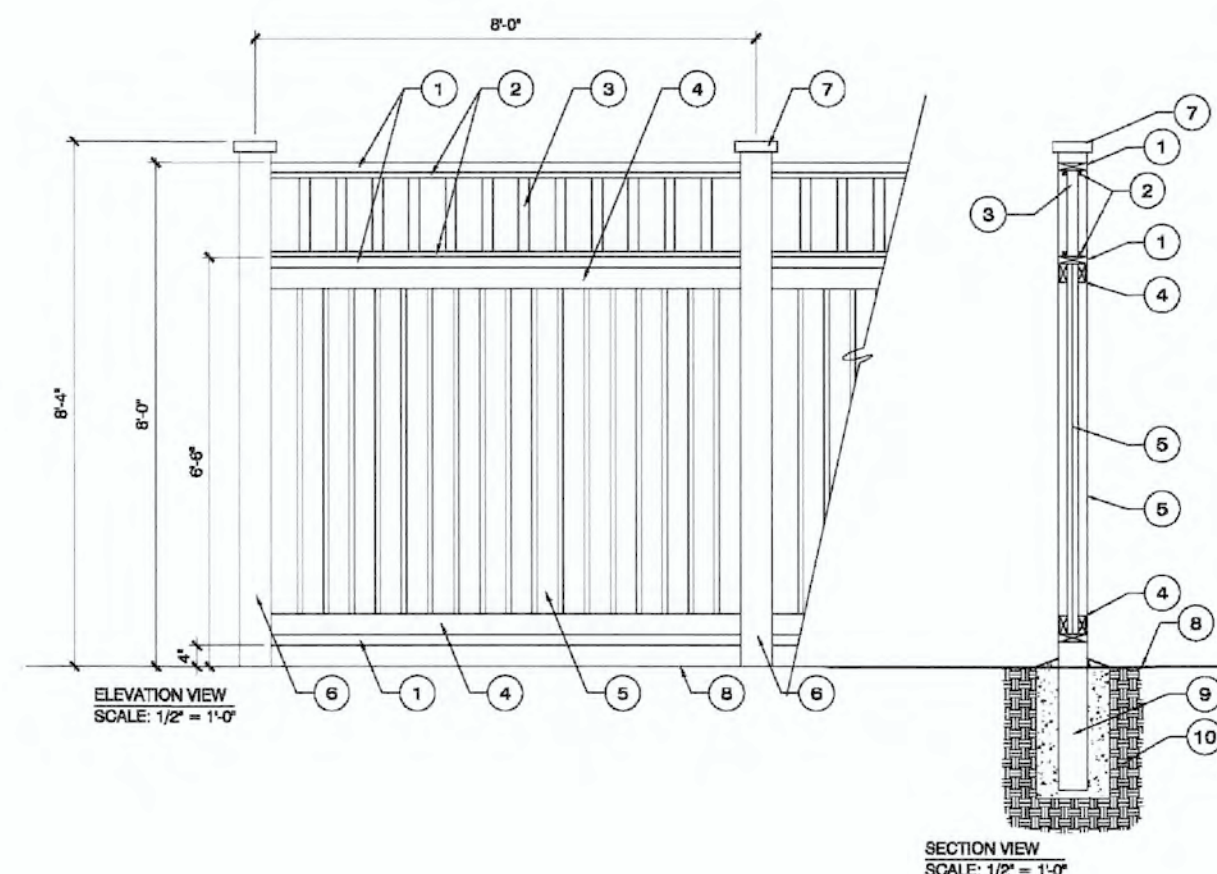
6 TYPICAL JUNCTION BOX



NOT TO SCALE



NOT TO SCALE



NOTE: DETAIL SHOWN FOR THE INTENTION OF COMPLIANCE WITH COW CODE. ACTUAL SCREENING USED MAY VARY.

7 CONCRETE FLUME SECTION

8 CONCRETE WHEEL STOPS

9 TYPICAL DUMPSTER SCREENING DETAIL

SITE WORK NOTES:

1. THE CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH FIELD CONSTRUCTION CONDITIONS.
2. CONTRACTOR SHALL COORDINATE WORK WITHIN NCDOT AND LOCAL RIGHT OF WAYS WITH PROPER AUTHORITIES AND SHALL MEET ANY REQUIREMENTS AS TO TRAFFIC CONTROL AND CONNECTION TO EXISTING STREETS.
3. CLEARING AND GRUBBING: REMOVE ALL TREES AS REQUIRED UNLESS OTHERWISE NOTED TO REMAIN, STUMPS, ROOTS, SHRUBBERY, ASPHALT, CONCRETE, STRUCTURES, BURIED UTILITIES, STORAGE TANKS, ETC. WITHIN LIMITS OF CONSTRUCTION.
4. STRIPPING: BEFORE EXCAVATING OR FILLING, REMOVE ALL TOPSOIL, WOOD, LEAVES, AND ANY OTHER UNSUITABLE MATERIAL.
5. MUCKING: REMOVE ANY SOFT, ORGANIC SILT MATERIALS AND EXISTING BURIED CONSTRUCTION DEBRIS AS REQUIRED AND FILL TO SUBGRADE ELEVATIONS WITH A CLEAN SELECT-FILL COMPACTED AS SPECIFIED.
6. DISPOSAL: CLEARED, GRUBBED, STRIPPED OR EXCAVATED SPOIL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES.
7. BORROW MATERIAL: THE CONTRACTOR SHALL FURNISH BORROW MATERIAL REQUIRED FROM OFF SITE AND OBTAIN ALL REQUIRED PERMITS ASSOCIATED WITH BORROW OPERATIONS.
8. FILL AND COMPACTION: AFTER STRIPPING THOSE AREAS DESIGNATED TO RECEIVE FILL SHOULD BE PROOFROLLED. THE TOP 8\"/>

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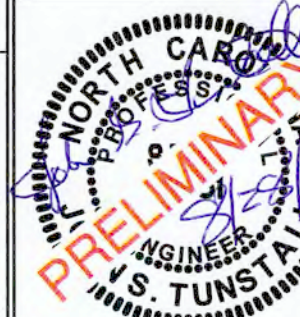
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Approved Construction Plan
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DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)



C5.5

