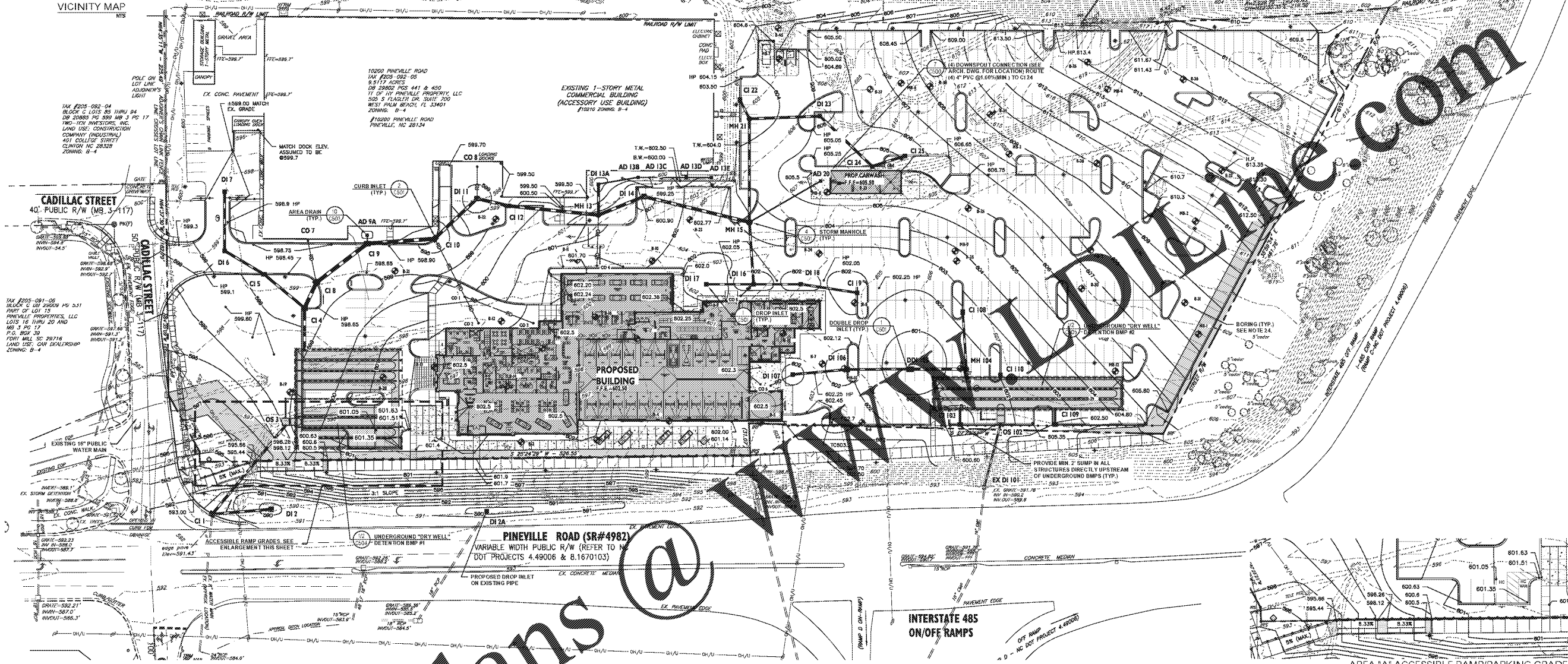


**SOUTHERN RAILWAY - 130' R/W**  
 SEE NC DOT PLANS FOR PROJECT 4.49006 RECORDED IN STATE HWY BOOK 2 PAGES 403 AND 404.



**STORM SEWER STRUCTURE & PIPE SCHEDULE**

UPSTREAM STR.	UPSTREAM RM. ELEV.	INVERT(S) IN	INVERT OUT	DOWNSTREAM STR.	D.S. PIPE LENGTH (FT)	D.S. PIPE DIA (IN)	D.S. PIPE MATERIAL	D.S. PIPE SLOPE (FT/FT)
CD 8	589.30		596.20	DI 11	31	12	HDPE	0.01
CD 7	589.30		596.20	CI 8	41	8	HDPE	0.028
CD 4	589.93		599.00	MH 13	48	10	HDPE	0.010
CD 3	600.37		599.00	CD 1	70	8	HDPE	0.011
CD 1	600.65	598.25 (16" - CD 3) 598.25 (16" - CD 2)	598.25	CI 10	85	16	HDPE	0.064
CD 2	601.60		599.00	CD 1	21	8	HDPE	0.028
CD 6	602.40		599.00	DI 127	23	18	HDPE	0.028
CD 5	602.40		599.00	DI 16	18	18	HDPE	0.010
CI 1	581.40	584.80 (18" - DI 2) 584.80 (24" - OS 3)	584.77	CI 2	32	24	RCP	0.008
DI 2A	586.50		585.10	CI 1	1	18	RCP	0.005
DI 2	589.50		585.10	CI 1	1	18	RCP	0.005
OS 3	591.31		599.20	CI 1	110	24	CMP	0.040
CI 4	588.40	593.35 (18" - CI 3) 593.35 (30" - CI 8)	593.25	CI 1	41	30	CMP	0.008
CI 5	598.10	594.30 (18" - DI 6)	594.20	CI 4	51	18	RCP	0.017
DI 6	598.50	594.66 (18" - DI 7)	595.00	CI 5	44	18	RCP	0.008
DI 7	598.50		595.00	CI 6	57	18	RCP	0.008
CI 8	598.19	595.15 (18" - CD 7) 595.08 (30" - CI 9)	593.48	CI 4	27	30	Class IV RCP	0.008
CI 9	598.15	593.99 (30" - CI 10) 594.91 (6" - AD 9A)	593.98	CI 8	81	30	Class IV RCP	0.005
AD 9A	598.50		595.00	CI 8	8	8	HDPE	0.011
CI 10	597.85	594.41 (24" - DI 11) 594.21 (12" - CD 1)	594.31	CI 9	65	30	Class IV RCP	0.008
DI 11	598.50	594.78 (24" - CI 12) 595.79 (12" - CD 8)	594.68	CI 10	56	24	Class IV RCP	0.008
CI 12	599.05	595.28 (24" - MH 13)	595.16	DI 11	31	24	RCP	0.013
DI 13A	598.50	596.36 (6" - AD 13B)	596.38	MH 13	30	18	RCP	0.009
AD 13E	598.00		597.02	AD 13D	24	6	HDPE	0.006
AD 13D	598.00	596.88 (6" - AD 13C)	596.86	AD 13C	24	6	HDPE	0.006
AD 13C	598.00	596.74 (6" - AD 13B)	596.74	AD 13B	22	6	HDPE	0.006

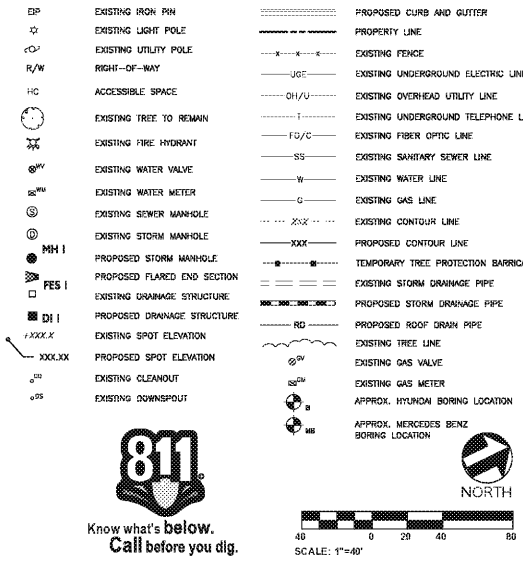
**STORM SEWER STRUCTURE & PIPE SCHEDULE**

UPSTREAM STR.	UPSTREAM RM. ELEV.	INVERT(S) IN	INVERT OUT	DOWNSTREAM STR.	D.S. PIPE LENGTH (FT)	D.S. PIPE DIA (IN)	D.S. PIPE MATERIAL	D.S. PIPE SLOPE (FT/FT)
AD 13B	598.00	596.81 (6" - AD 13C)	596.81	CI 13A	39	6	HDPE	0.008
MH 13	601.30	595.90 (24" - DI 14) 596.20 (18" - DI 13A) 596.90 (10" - CD 4)	595.80	CI 12	87	24	RCP	0.008
DI 14	600.80	596.28 (24" - MH 15)	596.18	MH 13	47	24	RCP	0.008
MH 15	603.35	598.11 (18" - MH 21) 597.00 (18" - DI 16) 598.00 (6" - AD 20)	598.90	DI 14	104	24	RCP	0.008
DI 16	601.70	597.40 (18" - DI 17) 597.40 (15" - DI 18) 598.83 (6" - CD 5)	597.30	MH 15	59	18	RCP	0.006
DI 17	601.40		597.73	DI 16	45	15	RCP	0.007
DI 18	601.70	597.73 (15" - CI 19)	597.83	DI 16	45	15	RCP	0.005
CI 19	601.40		598.00	DI 18	85	15	RCP	0.008
AD 20	605.25		601.25	MH 15	78	6	HDPE	0.029
MH 21	603.45	599.98 (18" - DI 23) 598.95 (15" - CI 22)	598.70	MH 15	99	18	RCP	0.008
CI 22	603.00		598.90	MH 21	20	15	RCP	0.002
DI 23	604.80	600.46 (18" - CI 24)	600.38	MH 21	67	18	RCP	0.008
CI 24	604.50	601.00 (18" - CI 25)	600.90	DI 23	69	18	RCP	0.008
CI 25	606.20		601.20	CI 24	33	18	RCP	0.008
EX DI 101	609.78	589.70 (18" - OS 102)	588.80	CI 24	76	24	CMP	0.012
OS 102	602.48		591.80	EX DI 101	84	18	CMP	0.033
CI 103	600.50		594.00	BMP #2	16	18	CMP	0.062
MH 104	601.50	594.50 (24" - DI 106) 595.00 (15" - CI 108)	593.50	BMP #2	10	24	CMP	0.050
DI 105	600.30	595.85 (18" - DI 106)	595.10	MH 104	54	24	RCP	0.011
DI 106	601.50	595.50 (18" - DI 107)	596.30	DI 105	60	15	RCP	0.009
CI 108	602.45		597.30	DI 106	53	15	RCP	0.018
CI 110	602.05		597.45	MH 104	55	15	RCP	0.043
CI 109	602.45		593.15	BMP #2	4	15	CMP	0.033
			594.00	BMP #2	16	15	CMP	0.082

**GRADING AND DRAINAGE NOTES - MECKLENBURG COUNTY**

- COORDINATE ALL CURB AND STREET GRADES IN INTERSECTION WITH INSPECTOR.
- ALL ROAD IMPROVEMENTS AT CADILLAC STREET ARE TO BE COORDINATED WITH THE TOWN OR COUNTY LUESA PRIOR TO CONSTRUCTION.
- DEVELOPER SHALL PROVIDE STREET NAME SIGNS PER MCDMS#50.09 (8" SIGNS ONLY).
- SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED.
- DIRECT VEHICULAR ACCESS TO PINEVILLE ROAD IS PROHIBITED.
- IN ROLLING AND HILLY TERRAINS, SWEEPINGS OF THE STONE BASE AND/OR APPLICATION OF A TRUCK COAT MAY BE REQUIRED NEAR INTERSECTIONS. THESE REQUIREMENTS WILL BE ESTABLISHED BY THE INSPECTOR AND BASED ON FIELD CONDITIONS.
- APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
- HANDRAILS MAY BE REQUIRED BY A REPRESENTATIVE OF THE COUNTY, IF WARRANTED BY FIELD CONDITIONS (MCDMS 93.64 A,B).
- IN ORDER TO ENSURE PROPER DRAINAGE, KEEP A MINIMUM OF 0.1% SLOPE ON THE CURB.
- SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE INSPECTOR.
- THE PURPOSE OF THE STORM DRAINAGE EASEMENT (SDE) IS TO PROVIDE STORM WATER CONVEYANCE. BUILDINGS ARE NOT PERMITTED IN THE EASEMENT AREA. ANY OTHER OBJECTS WHICH IMPED STORM WATER FLOW OR SYSTEM MAINTENANCE ARE ALSO PROHIBITED. (PROPERTY OWNER IS RESPONSIBLE FOR THE EASEMENT).
- PRIOR TO INSTALLATION, PE SEALED SHOP DRAWINGS FOR UNDERGROUND DETENTION SYSTEMS AND OUTLET RESTRICTION DEVICES MUST BE FURNISHED TO USUA FOR APPROVAL.
- BE APPROVED BY PUBLIC WORKS REPRESENTATIVE FROM THE TOWN PRIOR TO GETTING PLAN APPROVAL.
- BE APPROVED BY THE COUNTY'S INSPECTOR PRIOR TO ANY BACKFILL BEING PLACED.
- BACKFILL MATERIAL MUST BE APPROVED BY THE COUNTY INSPECTOR PRIOR TO PLACEMENT OF THE MATERIAL WITHIN THE PUBLIC STREET RIGHT OF WAY.
- IF TOWN PUBLIC WORKS AGREE TO HAVE THE PIPE INSTALLED THERE SHALL BE AN APPROVED RECORDING DETAIL AND A THIRD PARTY INSPECTOR SHALL VERIFY COMPACTION AND SUPPLY WRITTEN EVIDENCE OF COMPACTION RESULTS.
- THE DEVELOPER SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWATER CHANNEL IN AN UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TWIGS, LIMB AND OTHER ACCUMULATIONS.
- ANY BUILDING WITHIN THE 100' BUILDING RESTRICTION FLOODLINE IS SUBJECT TO THE RESTRICTIONS OF THE ORDINANCE IN THE GOVERNING JURISDICTION.
- ANY CONSTRUCTION OR USE WITHIN THE AREA DELINEATED AS COMMUNITY ENCROACHMENT (CE1) FLOODWAY ENCROACHMENT AREA IS SUBJECT TO THE RESTRICTIONS IMPOSED BY THE FLOODWAY REGULATIONS OF THE NORTHERN TOWNS AND MECKLENBURG COUNTY.
- RETAINING WALLS 4 FT (RESIDENTIAL) OR 5 FT (COMMERCIAL) IN HEIGHT REQUIRES A PERMIT FROM CODE ENFORCEMENT PRIOR TO CONSTRUCTION. THE ENGINEER OF RECORD FOR THE RETAINING WALL(S) MUST CERTIFY THAT THE WALL(S) IS (ARE) CONSTRUCTED TO SPECIFICATIONS PRIOR TO ISSUANCE OF C.O.
- RETAINING WALLS INVOLVING A CULVERT OR LOCATED WITHIN THE INFLUENCE OF A ROAD MUST BE REVIEWED AND APPROVED BY LAND DEVELOPMENT. CULVERTS MUST HAVE HEADWALLS OR BE COLLARED.
- CONSTRUCTION OF RETAINING WALL(S) CANNOT BEGIN UNTIL ALL NECESSARY PERMITS ARE ACQUIRED.
- "AS-BUILT" DRAWINGS AND PLANS OF THE STORM DRAINAGE SYSTEM, INCLUDING DESIGNED DETENTION, MUST BE SUBMITTED PRIOR TO SUBDIVISION FINAL INSPECTION TO THE COUNTY ENGINEERING DEPARTMENT IN ACCORDANCE WITH THE SUBDIVISION ORDINANCE.
- "AS-BUILT" DRAWINGS FOR ALL APPLICABLE DETENTION STRUCTURES AND BMP MEASURES ARE REQUIRED. AS-BUILT'S ARE TO INCLUDE LATITUDE AND LONGITUDE FOR CENTER OF MEASURE, AND INLETS AND OUTLETS OF ALL STRUCTURES. ELEVATIONS ARE REQUIRED FOR ALL MEASURES AS WELL AS DIMENSIONS OF ALL MEASURES.
- PRIOR TO INSTALLATION, PE SEALED SHOP DRAWINGS FOR UNDERGROUND DETENTION SYSTEMS AND OUTLET RESTRICTION DEVICES MUST BE FURNISHED TO USUA FOR APPROVAL.
- PRIOR TO CO, SURVEYOR RESEALED AS-BUILT DRAWINGS OF UNDERGROUND DETENTION SYSTEMS MUST BE PROVIDED.
- NON-STANDARD ITEMS (E.G. PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY REQUIRE A RIGHT-OF-WAY ENCROACHMENT AGREEMENT WITH THE TOWN/NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BEFORE INSTALLATION.
- BORING LOCATIONS SHOWN ARE APPROXIMATE AND ARE SHOWN FOR THE CONTRACTOR'S BENEFIT.

**LEGEND**



**benesch**  
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Seals  
  
 Corp. NC License: F-1320

**Hyundai of South Charlotte**  
 10518 Cadillac Street  
 Pineville, North Carolina

Project No: 17000070.02  
 Date: 03.04.2020  
 Revisions:  
 Sheet Title:  
**Grading and Drainage Plan**  
 Sheet No:  
**C302**

**811**  
 Know what's below.  
 Call before you dig.  
 SCALE: 1"=40'