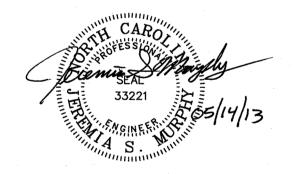


LOCATION MAP

E A G L E ENGINEERING

2013 Van Buren Avenue Indian Trail, NC 28079 Phone: (704) 882-4222 FAX: (704)882-4232 www.eagleonline.net

Project Engineer: Jeremia S. Murphy



Prepared for: Pulte Group 1121 Carmel Commons Blvd., Suite 450 Charlotte, NC 28226 Phone: (704) 414-7007

Gardens at Wendover

REVISIONS PER REZONING PETITION 2013-016

ROADWAY, GRADING, DRAINAGE &

EROSION CONTROL PLANS

CITY OF CHARLOTTE, NORTH CAROLINA



SDRMFR-2013-00015



CONSTRUCTION

STREETS AND DRIVEWAY ENTRANCE HAVE BEEN CONSTRUCTED IN GENERAL ACCORDANCE WITH THE APPROVED DRAWINGS. THE REVISIONS PER REZONING PETITION 2013-016 ARE TO THE

UN-BUILT BUILDING PADS & DIXTER LANE / BOURTON HOUSE DRIVE.

INDEX OF SHEET:

C-0.0 COVER SHEET

C-1.0 EXISTING CONDITIONS

C-1.1 DEMOLITION PLAN

C-2.0 SITE PLAN

C-3.0 GRADING & DRAINAGE

C-3.1 EROSION CONTROL PHASE 2

C-3.2 DETENTION PONDS AS-BUILT

C-3.3 CONSTRUCTION NOTES & SCHEDULES

C-3.4 ONSITE DRAINAGE MAP

C-3.5 POST DEVELOPED DRAINAGE MAP

C-4.0 & 4.1 ROADWAY PLAN & PROFILES

C-5.0 MASTER UTILITY AS-BUILT

C-6.0 LANDSCAPING PLAN

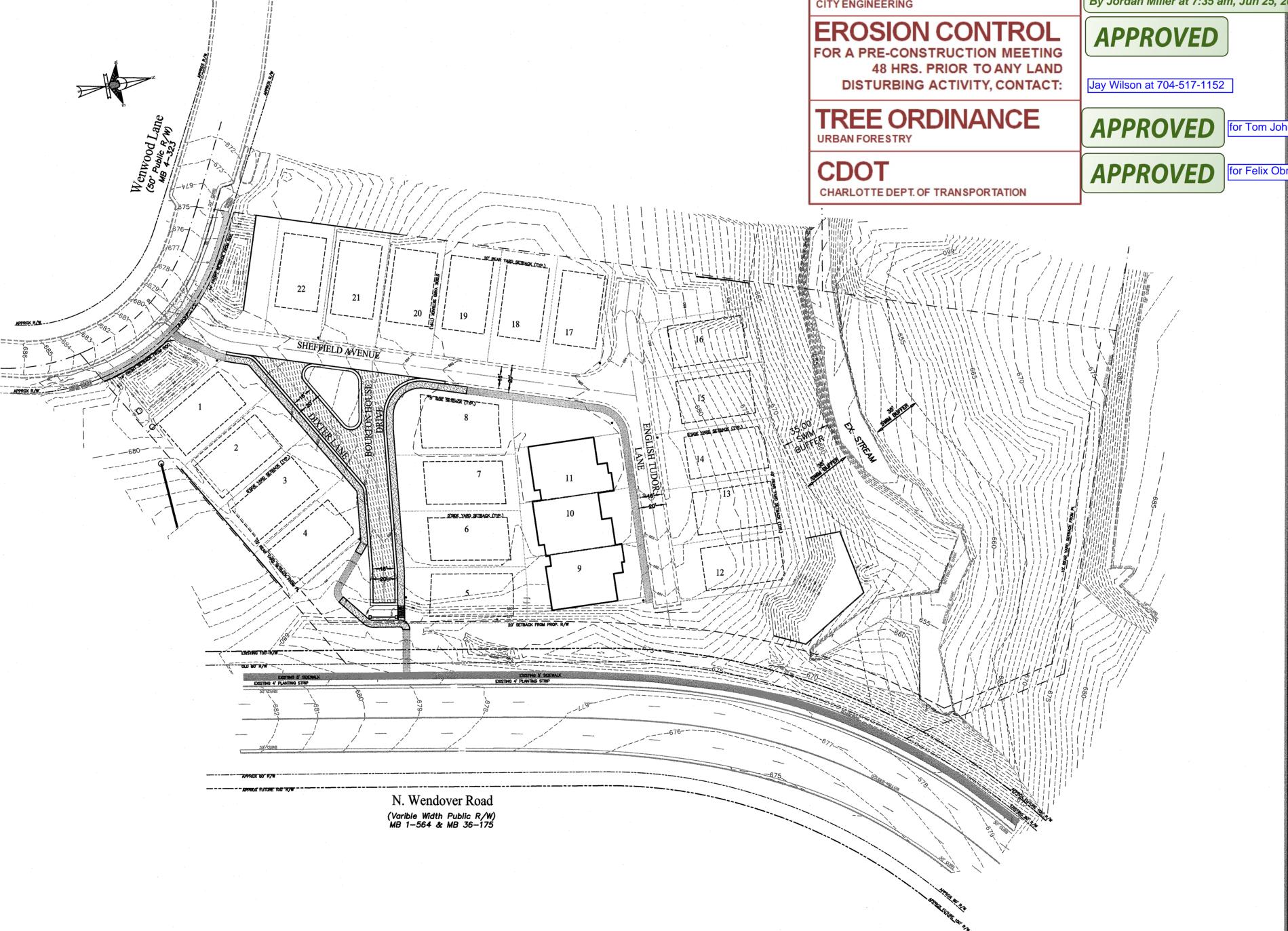
C-7.0 - 7.2 DETAILS & GENERAL NOTES

*C-2.0 REZONING SITE PLAN



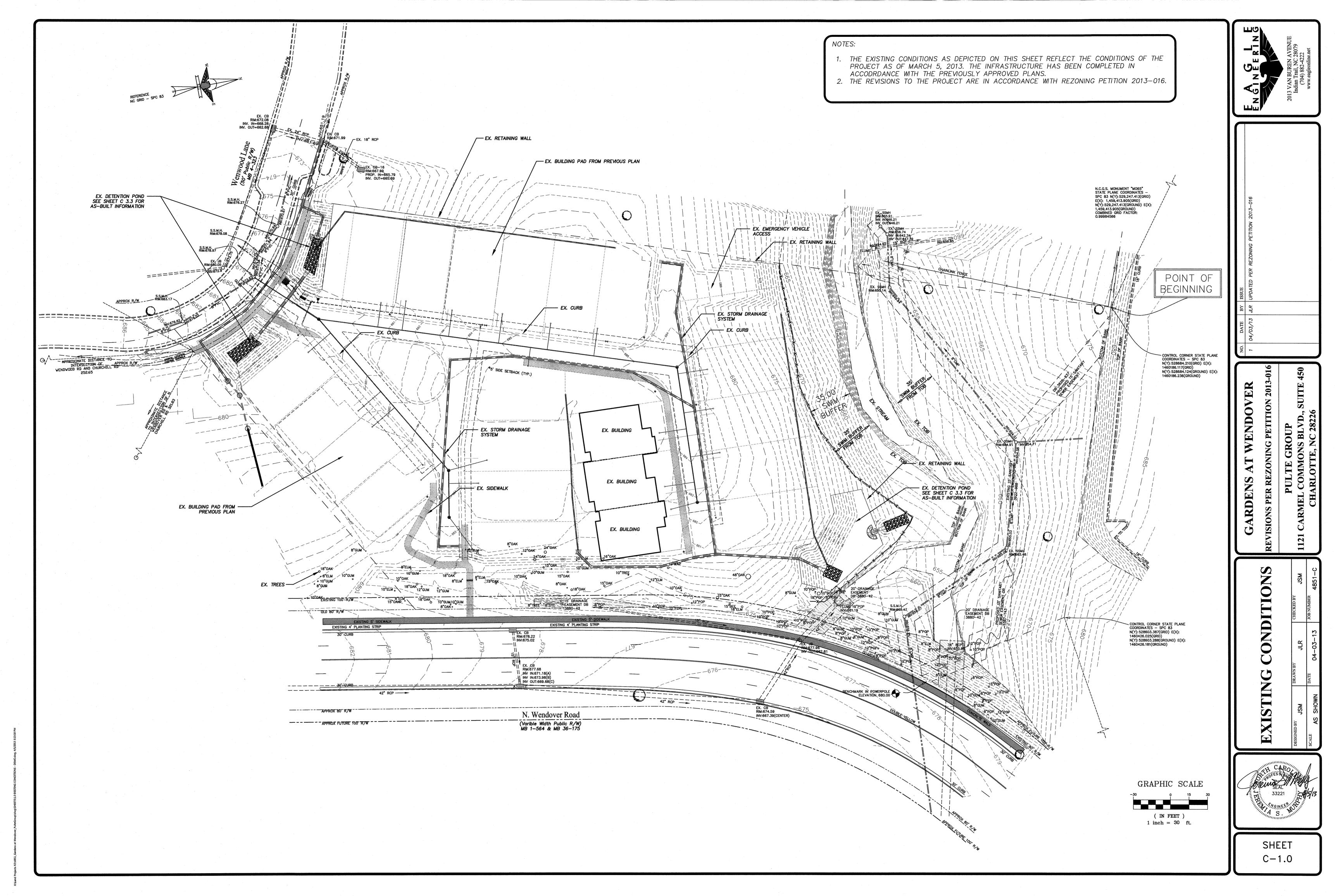
COMPLETION TIMEFRAME:

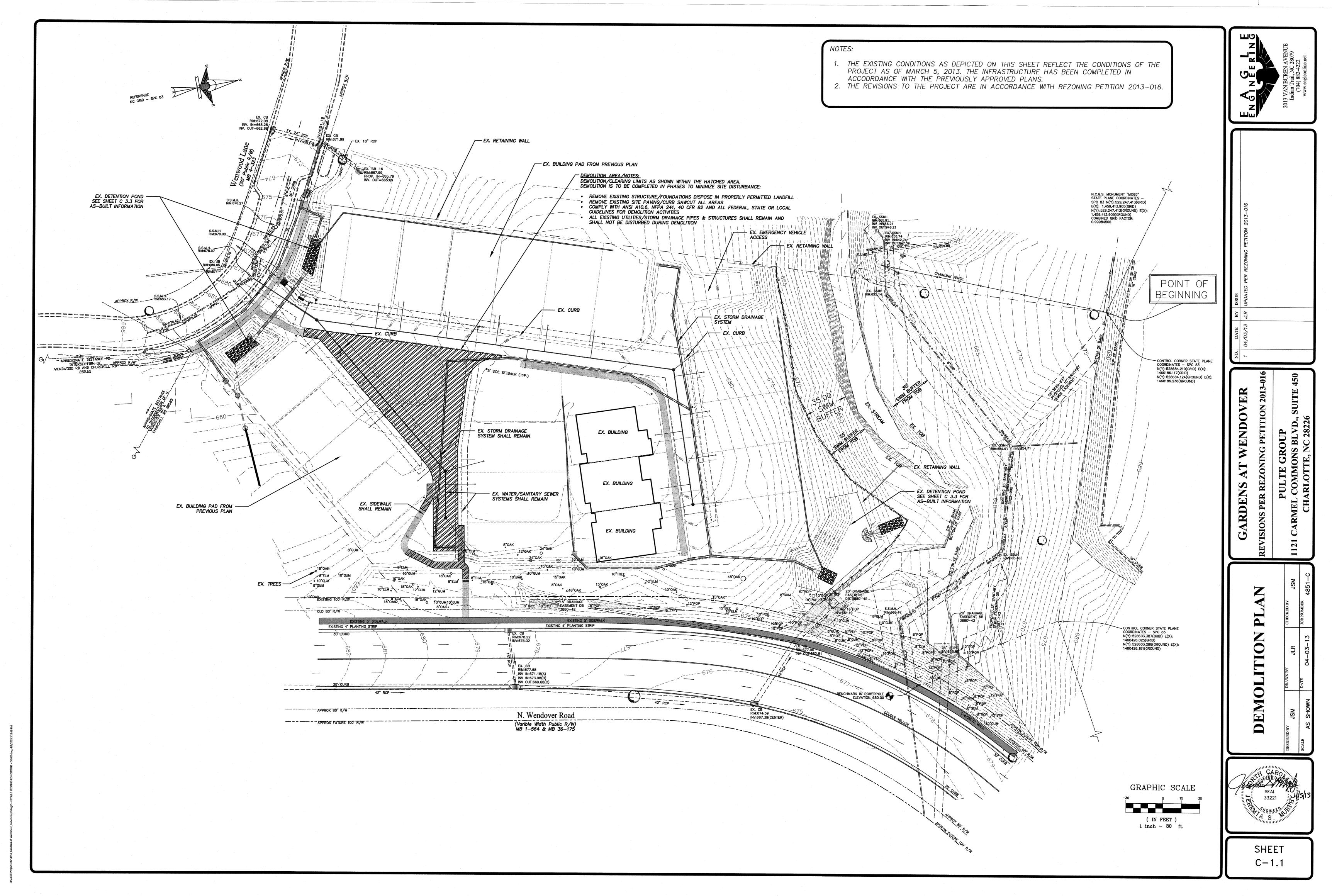
THE PROPOSED SITE IMPROVEMENTS PER REZONING PETITION 2013-016 TO THE UN-BUILT BUILDING PADS & DIXTER LANE / BOURTON HOUSE DRIVE ARE ANTICIPATED TO BE COMPLETED WITHIN 90 DAYS OF THE AUTHORIZATION TO CONSTRUCT.

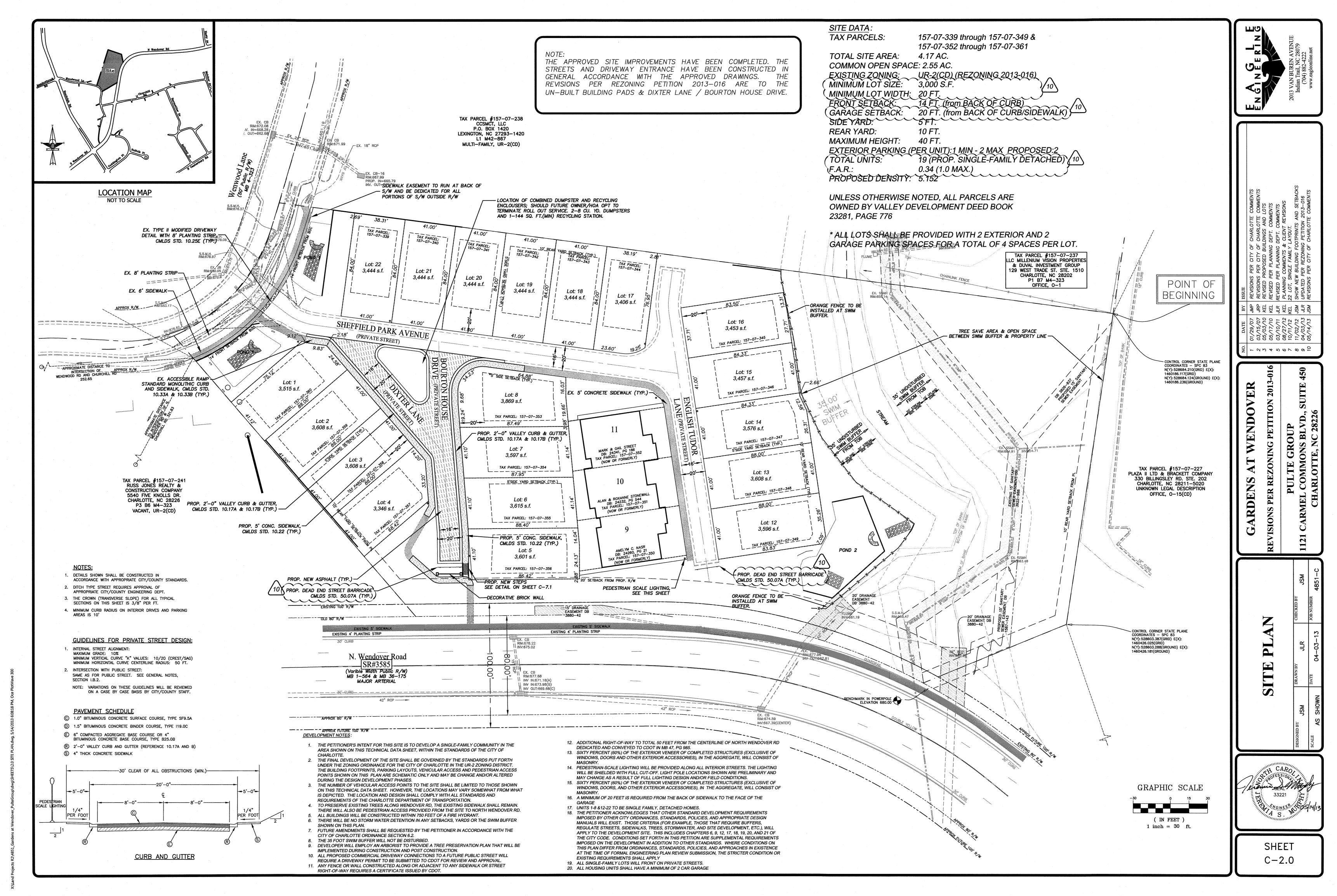


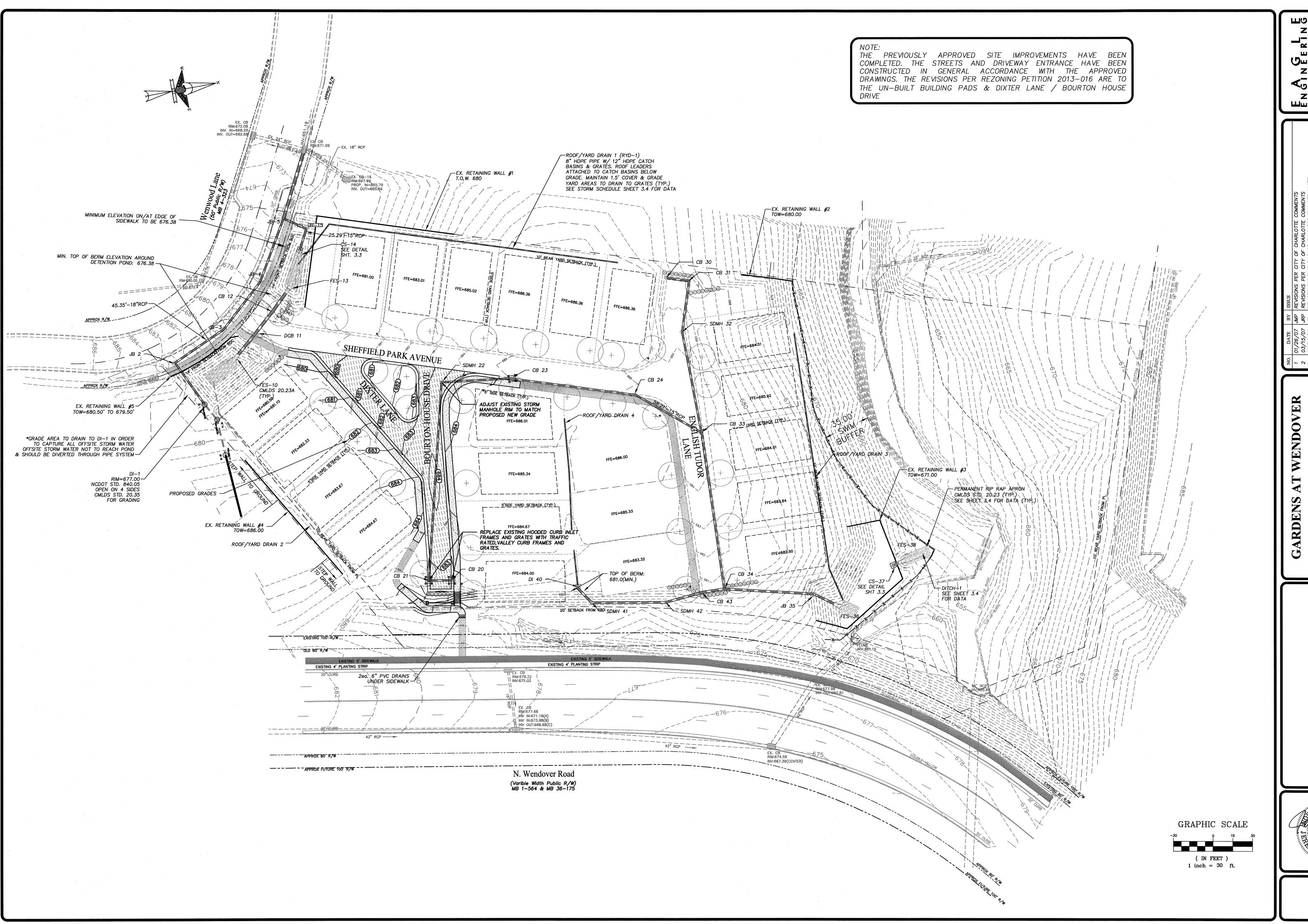
VICINITY MAP NOT TO SCALE

EEI Project Number: 4851-C











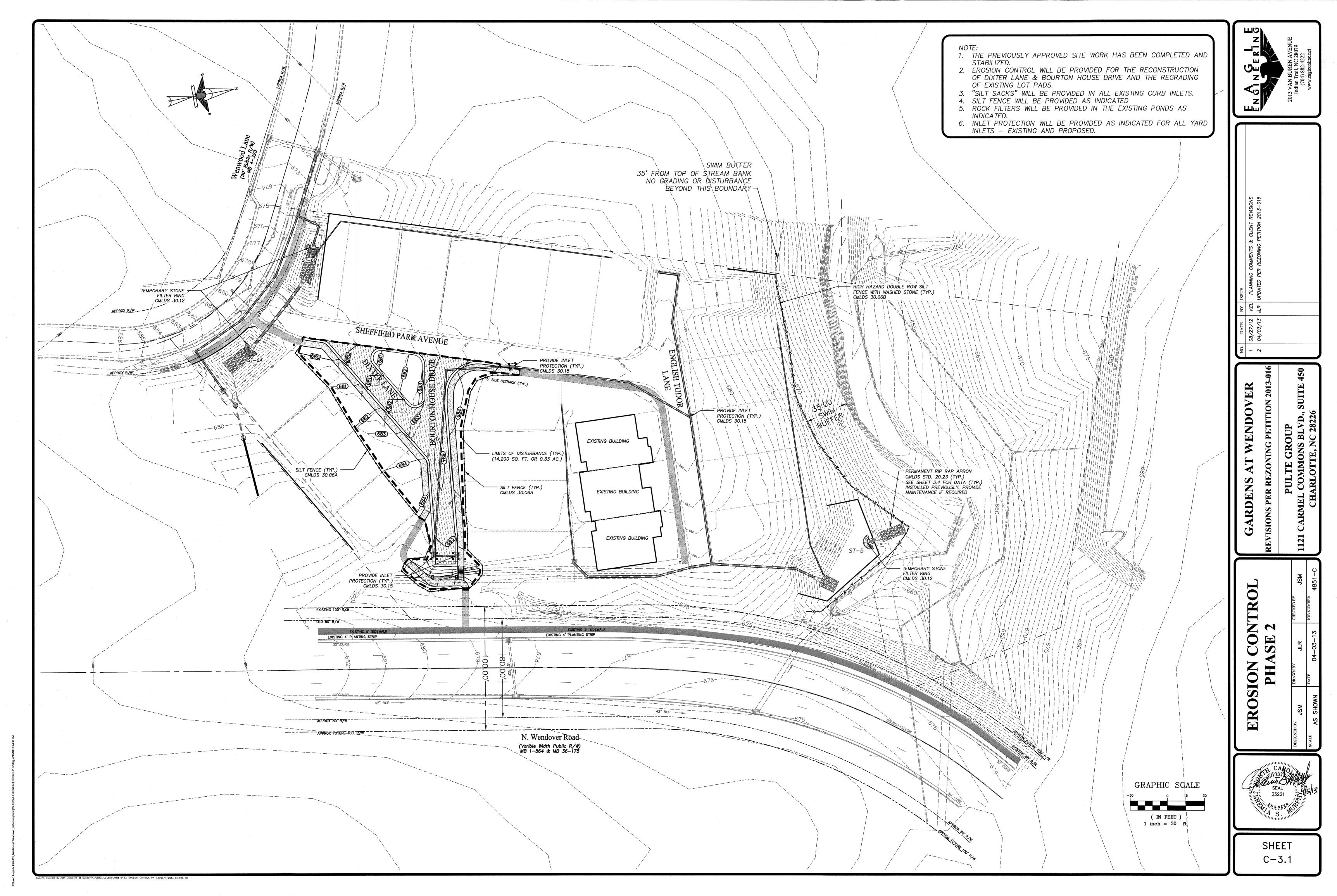
GARDENS AT WENDOVER

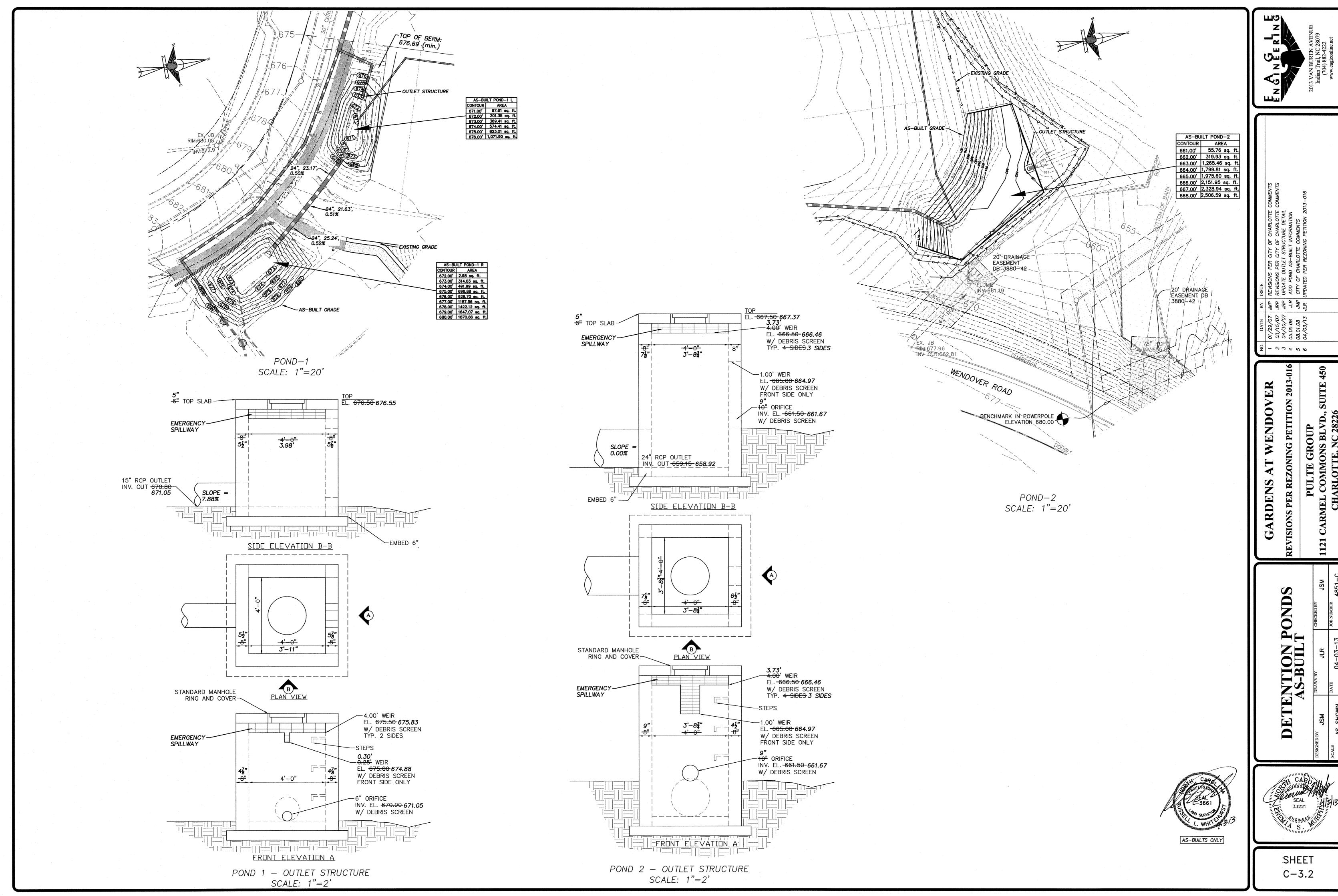
1 01/2
2 03/1
5 08/0
EVISIONS PER REZONING PETITION 2013-016
5 04/0

RADING & DRAINAGE

AR OTHER SEAL STATE OF THE SEA

SHEET C-3.0





INSTALLATION

CATCH BASIN INLET PROTECTION

NOT TO SCALI

STD. NO. REV. 30.15

SECTION

CITY OF CHARLOTTE

INCLUDES CHARLOTTE ETJ

CHARLOTTE

AND DEVELOPMENT STANDARDS

CONSTRUCTION SEQUENCE:

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EROSION IS MINIMIZED AND THAT COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, AND ORDINANCES IS MAINTAINED THROUGHOUT EXECUTION OF THIS

OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT.

2. SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH EROSION CONTROL INSPECTOR OF THE CITY ENGINEERING DEPARTMENT TO DISCUSS EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH A CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION OF CHAPTER 17 OF THE CITY CODE AND IS SUBJECT TO FINE.

INSTALL SILT FENCE, INLET PROTECTION, SEDIMENT TRAPS, DIVERSION DITCHES, TREE PROTECTION, AND OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.

4. CALL FOR ON-SITE INSPECTION BY INSPECTOR, WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.

BEGIN DEMOLITION AND GENERAL EXCAVATION ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PHASE/STAGE EROSION CONTROL TO ALLOW FOR CONSTRUCTION. CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES. NOTE: CONTRACTOR SHALL INSPECT AND REPAIR ALL EROSION DEVICES AT LEAST ONCE A WEEK AND AFTER EVERY RAINFALL. GRADING ACTIVITY SHALL BE PROHIBITED IN THE AREAS OF THE SEDIMENT CONTROL DEVICES/SEDIMENT TRAPS UNTIL THE AREAS UPSTREAM OF THESE DEVICES

6. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC.. SEED AND MULCH DENUDED AREAS WITHIN FOURTEEN (14) CALENDAR DAYS OF COMPLETION OF ANY PHASE OF NOTE: THE CONTRACTOR SHALL ENSURE THAT THE EROSION CONTROL DEVICES REMAIN UNDISTURBED DURING CONSTRUCTION OF THE BUILDING PADS AND ASSOCIATED PARKING/DRIVE AREAS ADJACENT TO THESE DEVICES UNTIL THE CONTRIBUTING UPSTRÉAM AREAS HAVE BEEN STABILIZED AND

COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.

8. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N. C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, U. S. DEPT. OF AGRICULTURE, CITY OF CHARLOTTE EROSION CONTROL ORDINANCE, AND THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL.

EROSION CONTROL NOTES:

1. CONTRACTOR SHALL STABILIZE EXPOSED GROUND AS SOON AS INDIVIDUAL AREAS ARE COMPLETED.

3. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE SHOWN ON THE PLAN. ALL GRADED SLOPES MUST BE SEEDED AND MULCHED WITHIN 14 CALENDAR DAYS AND WITHIN 7 CALENDAR DAYS FOR ANY STEEP SLOPES >3:1 AND PERIMETER AREAS. ALL OTHER AREAS, 21 CALENDAR DAYS.

2. CONTRACTOR SHALL NOT REMOVE ANY BASIN UNTIL ALL SEDIMENT-PRODUCING AREAS UPSTREAM HAVE BEEN PERMANENTLY STABILIZED.

4. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE EROSION CONTROL INSPECTOR (CITY OF

5. NO SLOPES SHALL EXCEED 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING.

6. ALL SILT FENCE SHALL HAVE WIRE AND WASHED STONE.

7. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE ZONING ADMINISTRATOR.

8. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE CITY/COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO

9. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF NC LAW AND IS SUBJECT TO A FINE.

10. A GRADING PLAN MUST BE SUBMITTED FOR ANY LOT GRADING EXCEEDING ONE ACRE THAT WAS NOT PREVIOUSLY APPROVED.

11. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF—SITE GRADING, PERMISSION MUST BE OBTAINED FROM AFFECTED PROPERTY OWNERS.

> ADJUST EXISTING STORM MANHOLE RIM TO MATCH PROPOSED NEW GRADE

REGULATIONS ADOPTED BY THE US ENVIRONMENTAL PROTECTION AGENCY (US EPA) AND BY THE NORTH CAROLINA DIVISION OF WATER QUALITY REQUIRE THAT A NATURAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT BE OBTAINED FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES WITH LAND DISTURBANCE OF 1 ACRE OR MORE.

CONTRACTOR SHALL CHECK EROSION CONTROL MEASURES WEEKLY AND/OR AFTER A 1/2" OR MORE RAIN. CONTRACTOR SHALL KEEP RECORDS OF EVERY INSPECTION.

MAINTENANCE PLAN

1. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNATED.

2. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES ABOUT 0.5 FT DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.

3. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

REVISION NOTES:

THE SITE INFRASTRUCTURE HAS BEEN COMPLETED IN GENERAL ACCORDANCE WITH THE PREVIOUSLY APPROVED

THE REVISIONS WHICH ARE PART OF REZONING PETITION 2013-016 ARE SPECIFIC TO REVISING STREETS TO ACCOMMODATE SINGLE-FAMILY LOTS .

THE EROSION CONTROL WILL BE SPECIFIC TO THE PROPOSED SITE REVISIONS AND THE EROSION CONTROL NOTES HAVE BEEN REVISED ACCORDINGLY. THE STORM WATER SYSTEM HAS BEEN INSTALLED AND

STORM STRUCTURE SCHEDULE

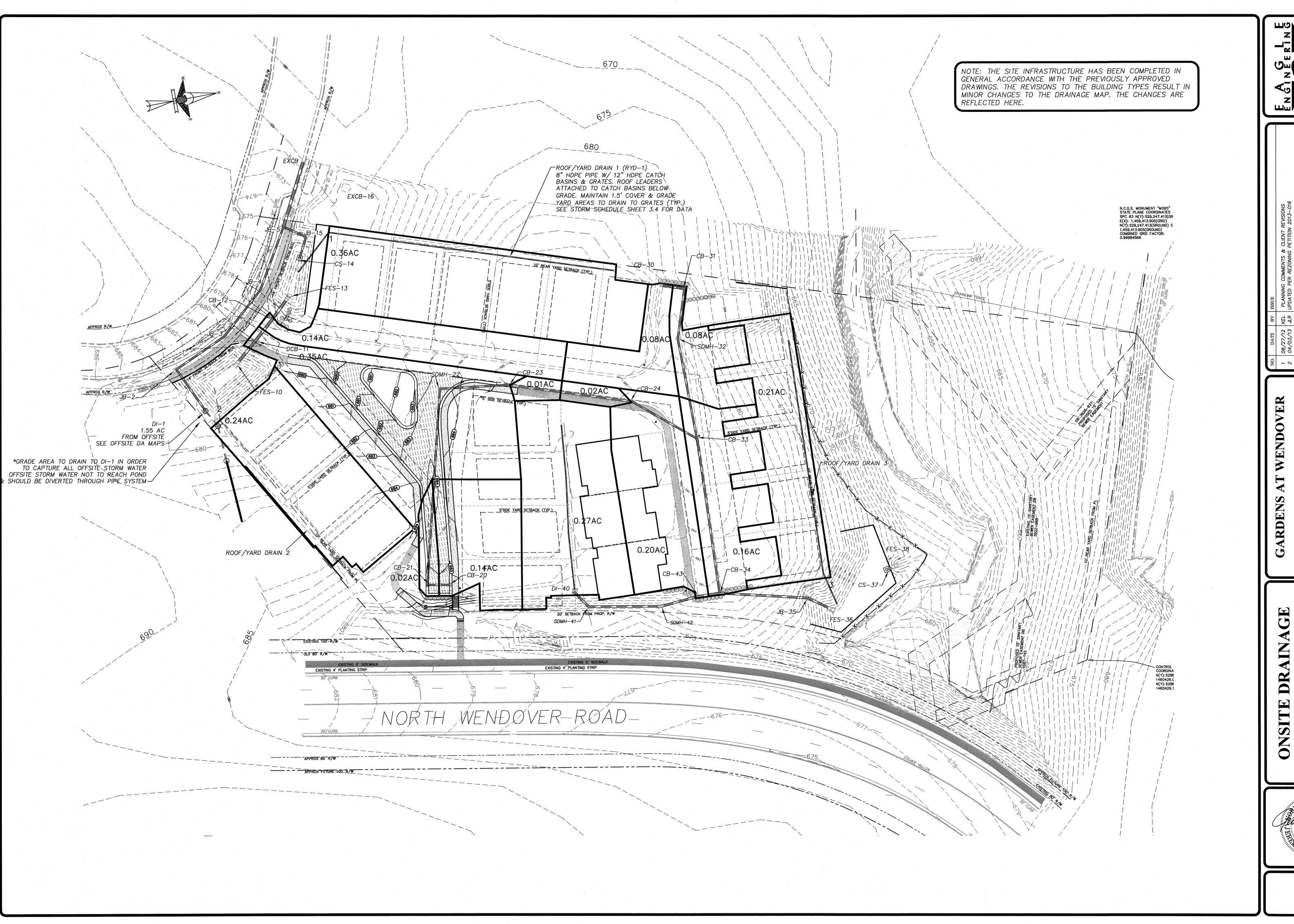
		Length	Pipe Diameter (in.)	Slope (ft/ft	Rim Elev.	Inv. UP	Inv. DWN		
DI-1	JB-2	38.68	18	0.0101	677.00	673.75	673.36		
JB-2	JB-3	45.35	18	0.0390	683.25	673.26	671.49		
JB-3	JB-4	45.28	18	0.0102	680.25	671.39	670.93		
JB-4	JB-5	51.65	18	0.0101	678.00	670.83	670.31		
FES-10	DCB-11	25.24	24	0.0052	-	671.56	671.43		
DCB-11	CB-12	21.63	24	0.0051	678.78	671.33	671.22		
CB-12	FES-13	23.17	24	0.0052	678.78	671.12	671.00		
CS-14	JB-15	22.00	15	0.0364	-	670.80	670.00		
JB-15	JB-5	19.03	15	0.0315	676.00	669.80	669.20		
JB-5	EXCB	52.00	18	0.0769	675.00	669.00	665.00		
CB-20	CB-21	17.00	15	0.0100	682.33	678.33	678.16		
CB-21	MH-22	150.73	15	0.0050	682.33	678.06	677.30		
MH-22	CB-23	53.61	15	0.0050	683.47	677.20	676.93		
CB-23	CB-24	93.23	15	0.0050	685.00	676.83	676.36		
CB-24	CB-33	58.21	15	0.0050	684.72	676.26	675.97		
CB-30	CB-31	17.00	15	0.0100	682.56	678.56	678.39		
CB-31	MH-32	38.94	15	0.0100	682.56	678.29	677.90		
MH-32	CB-33	77.47	15	0.0223	683.50	677.70	675.97		
CB-33	CB-34	120.44	15	0.0244	684.48	675.87	672.93		
DI-40	MH-41	15.00	18	0.0100	680.00	673.65	673.50		
MH-41	MH-42	55.99	18	0.0100	677.00	673.40	672.84		
MH-42	CB-43	28.57	18	0.0102	677.50	672.74	672.45		
CB-43	CB-34	17.00	24	0.0100	680.50	672.35	672.18		
CB-34	JB-35	67.76	24	0.0086	680.50	672.08	671.50		
JB-35	FES-36	17.00	24	0.0100	680.50	662.58	662.41		
CS-36	FES-37	9.60	24	0.0156	***	659.15	659.00		
Roof Drair	ns								
RYD-1	Pond-1	259.00	8	0.0454	-	683.00	671.25		
RYD-2	Pond-1	168.00	8	0.0670	-	683.50	672.25		
	Pond-2			0.0145	-		664.00		
RYD-4	DI-40	129.05	8	0.0775	-	684.00	674.00		
*All pipes are Class III RCP, unless noted otherwise.									
**CB Rim E	levations at	E.O.P.			V				
***HDPE Pip	е								
	JB-2 JB-3 JB-4 FES-10 DCB-11 CB-12 CS-14 JB-15 JB-5 CB-20 CB-21 MH-22 CB-23 CB-23 CB-24 CB-30 CB-31 MH-32 CB-33 DI-40 MH-41 MH-42 CB-43 CB-43 CB-34 JB-35 CS-36 Roof Drair RYD-1 RYD-2 RYD-3 RYD-4 *All pipes at the control of the con	JB-2 JB-3 JB-4 JB-5 FES-10 DCB-11 DCB-11 CB-12 CB-12 FES-13 CS-14 JB-15 JB-15 JB-5 JB-5 EXCB CB-20 CB-21 CB-21 MH-22 MH-22 CB-23 CB-23 CB-24 CB-24 CB-33 CB-30 CB-31 CB-31 MH-32 MH-32 CB-33 CB-30 CB-31 CB-31 MH-32 MH-32 CB-33 CB-34 CB-34 DI-40 MH-41 MH-41 MH-42 MH-42 CB-43 CB-43 CB-43 CB-34 JB-35 JB-35 FES-36 CS-36 FES-37 Roof Drains RYD-1 Pond-1 RYD-2 Pond-1 RYD-2 Pond-1 RYD-3 Pond-2 RYD-4 DI-40	JB-2 JB-3 45.35 JB-3 JB-4 45.28 JB-4 JB-5 51.65 FES-10 DCB-11 25.24 DCB-11 CB-12 21.63 CB-12 FES-13 23.17 CS-14 JB-15 22.00 JB-15 JB-5 19.03 JB-5 EXCB 52.00 CB-20 CB-21 17.00 CB-21 MH-22 150.73 MH-22 CB-23 53.61 CB-23 CB-24 93.23 CB-24 CB-33 58.21 CB-30 CB-31 17.00 CB-31 MH-32 38.94 MH-32 CB-33 77.47 CB-33 CB-34 120.44 DI-40 MH-41 15.00 MH-41 MH-42 55.99 MH-42 CB-43 28.57 CB-43 CB-34 17.00 CB-34 JB-35 67.76 JB-35 FES-36 17.00 CS-36 FES-37 9.60 RYD-2 Pond-1 259.00 RYD-2 Pond-1 168.00 RYD-3 Pond-2 207.00 RYD-4 DI-40 129.05	JB-2 JB-3 45.35 18 JB-3 JB-4 45.28 18 JB-4 JB-5 51.65 18 FES-10 DCB-11 25.24 24 DCB-11 CB-12 21.63 24 CB-12 FES-13 23.17 24 CB-12 FES-13 23.17 24 CS-14 JB-15 22.00 15 JB-15 JB-5 19.03 15 JB-5 EXCB 52.00 18 CB-20 CB-21 17.00 15 CB-21 MH-22 150.73 15 CB-21 MH-22 150.73 15 CB-23 CB-23 53.61 15 CB-23 CB-23 58.21 15 CB-30 CB-31 17.00 15 CB-31 MH-32 38.94 15 MH-32 CB-33 77.47 15 CB-33 CB-34 120.44 15	JB-2 JB-3 45.35 18 0.0390 JB-3 JB-4 45.28 18 0.0102 JB-4 JB-5 51.65 18 0.0101 FES-10 DCB-11 25.24 24 0.0052 DCB-11 CB-12 21.63 24 0.0051 CB-12 FES-13 23.17 24 0.0052 CS-14 JB-15 22.00 15 0.0364 JB-15 JB-5 19.03 15 0.0364 JB-15 JB-5 19.03 15 0.0364 JB-15 JB-5 19.03 15 0.0364 JB-5 EXCB 52.00 18 0.0769 CB-20 CB-21 17.00 15 0.0100 CB-21 MH-22 150.73 15 0.0050 CB-23 CB-23 53.61 15 0.0050 CB-24 CB-33 58.21 15 0.0050 CB-31 MH-32 38.	DI-1 JB-2 38.68 18 0.0101 677.00 JB-2 JB-3 45.35 18 0.0390 683.25 JB-3 JB-4 45.28 18 0.0102 680.25 JB-4 JB-5 51.65 18 0.0101 678.00 FES-10 DCB-11 25.24 24 0.0052 - DCB-11 CB-12 21.63 24 0.0051 678.78 CB-12 FES-13 23.17 24 0.0052 678.78 CS-14 JB-15 22.00 15 0.0364 - JB-15 JB-5 19.03 15 0.0315 676.00 JB-5 EXCB 52.00 18 0.0769 675.00 CB-20 CB-21 17.00 15 0.0100 682.33 CB-21 MH-22 150.73 15 0.0050 682.33 MH-22 CB-23 53.61 15 0.0050 683.47 CB-23 CB-24 93.23 15 0.0050 685.00 CB-24 CB-33 58.21 15 0.0050 684.72 CB-30 CB-31 17.00 15 0.0100 682.56 CB-31 MH-32 38.94 15 0.0100 682.56 CB-31 MH-32 38.94 15 0.0100 682.56 CB-33 CB-34 120.44 15 0.0244 684.48 DI-40 MH-41 15.00 18 0.0100 680.00 MH-41 MH-42 55.99 18 0.0100 680.00 MH-41 MH-42 55.99 18 0.0100 680.50 CB-34 CB-34 17.00 24 0.0100 680.50 CB-35 FES-36 17.00 24 0.0100 680.50 CB-36 FES-37 9.60 24 0.0156 - ROOf Drains RYD-1 Pond-1 259.00 8 0.0454 - RYD-2 Pond-1 168.00 8 0.0454 - RYD-3 Pond-2 207.00 8 0.0145 - RYD-4 DI-40 129.05 8 0.0775 - *All pipes are Class III RCP, unless noted otherwise. **CB Rim Elevations at EO.P.	DI-1 JB-2 38.68 18 0.0101 677.00 673.75 JB-2 JB-3 45.35 18 0.0390 683.25 673.26 JB-3 JB-4 45.28 18 0.0102 680.25 671.39 JB-4 JB-5 51.65 18 0.0101 678.00 670.83 FES-10 DCB-11 25.24 24 0.0052 - 671.56 DCB-11 CB-12 21.63 24 0.0051 678.78 671.33 CB-12 FES-13 23.17 24 0.0052 678.78 671.12 CS-14 JB-15 22.00 15 0.0364 - 670.80 JB-15 JB-5 19.03 15 0.0315 676.00 669.80 JB-15 EXCB 52.00 18 0.0769 675.00 669.00 CB-20 CB-21 17.00 15 0.0050 682.33 678.33 CB-21 MH-22 150.73 15 0.0050 682.33 678.06 MH-22 CB-23 53.61 15 0.0050 683.47 677.20 CB-23 CB-24 93.23 15 0.0050 684.72 676.26 CB-30 CB-31 17.00 15 0.0100 682.56 678.56 CB-31 MH-32 38.94 15 0.0050 682.56 678.29 MH-32 CB-33 77.47 15 0.0224 684.48 675.87 DI-40 MH-41 15.00 18 0.0100 680.00 673.65 MH-41 MH-42 55.99 18 0.0100 680.00 673.65 MH-41 MH-42 55.99 18 0.0100 680.50 672.74 CB-43 CB-34 120.44 15 0.0244 684.48 675.87 DI-40 MH-41 15.00 18 0.0100 680.50 672.35 CB-34 JB-35 67.76 24 0.0086 680.50 672.35 CB-34 JB-35 67.76 24 0.0086 680.50 672.35 CR-36 FES-37 9.60 24 0.0100 680.50 662.58 CS-36 FES-37 9.60 24 0.0100 680.50 662.58 CR-36 FES-37 9.60 24 0.0100 680.50 662.58 CR-37 Pond-2 207.00 8 0.0145 - 659.15 **CB FIM Elevations at E.O.P.		

03.03

- 0 M 4 W

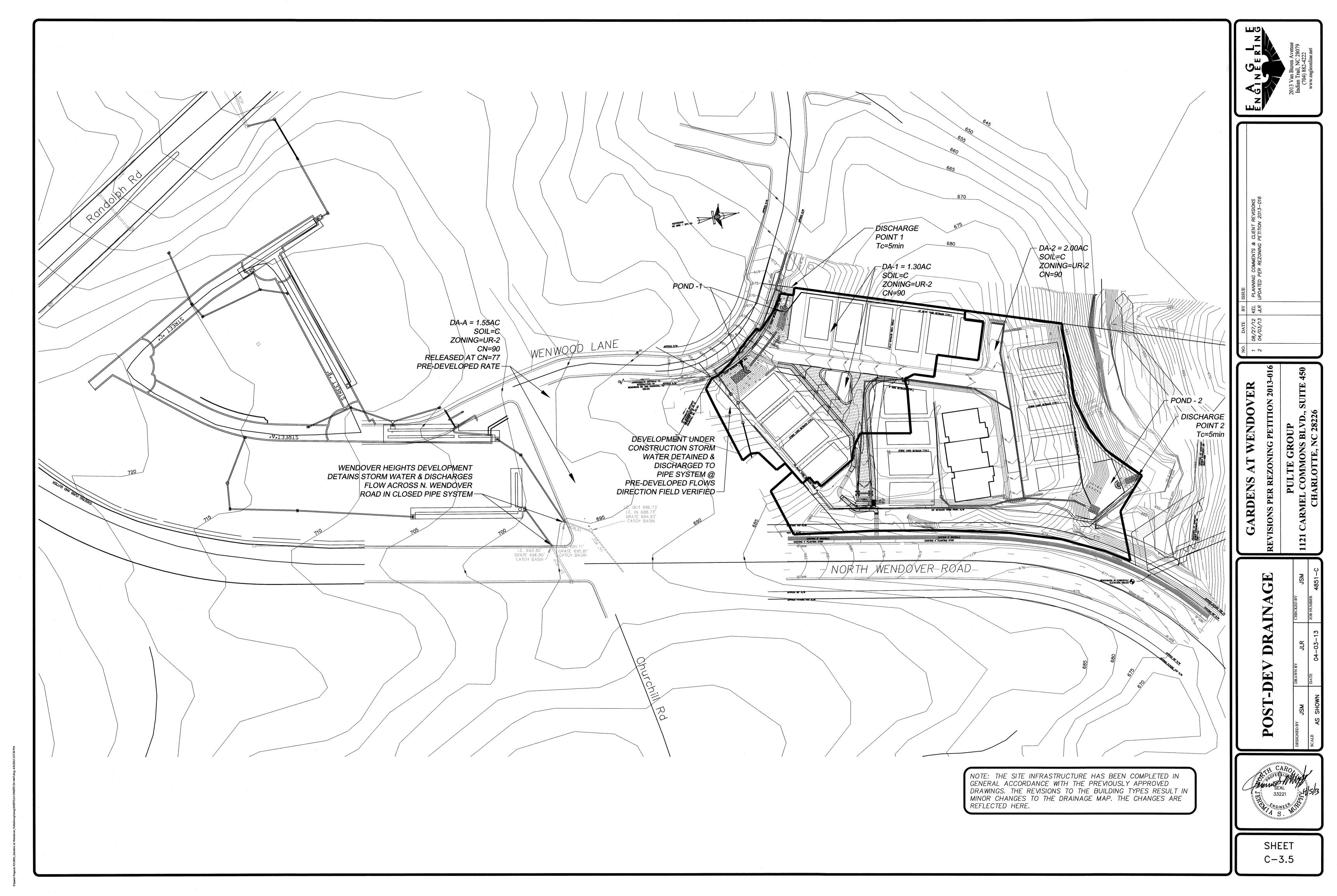
PETITION GROUP ONS BLVD., S FE, NC 28226)NING PER REZO

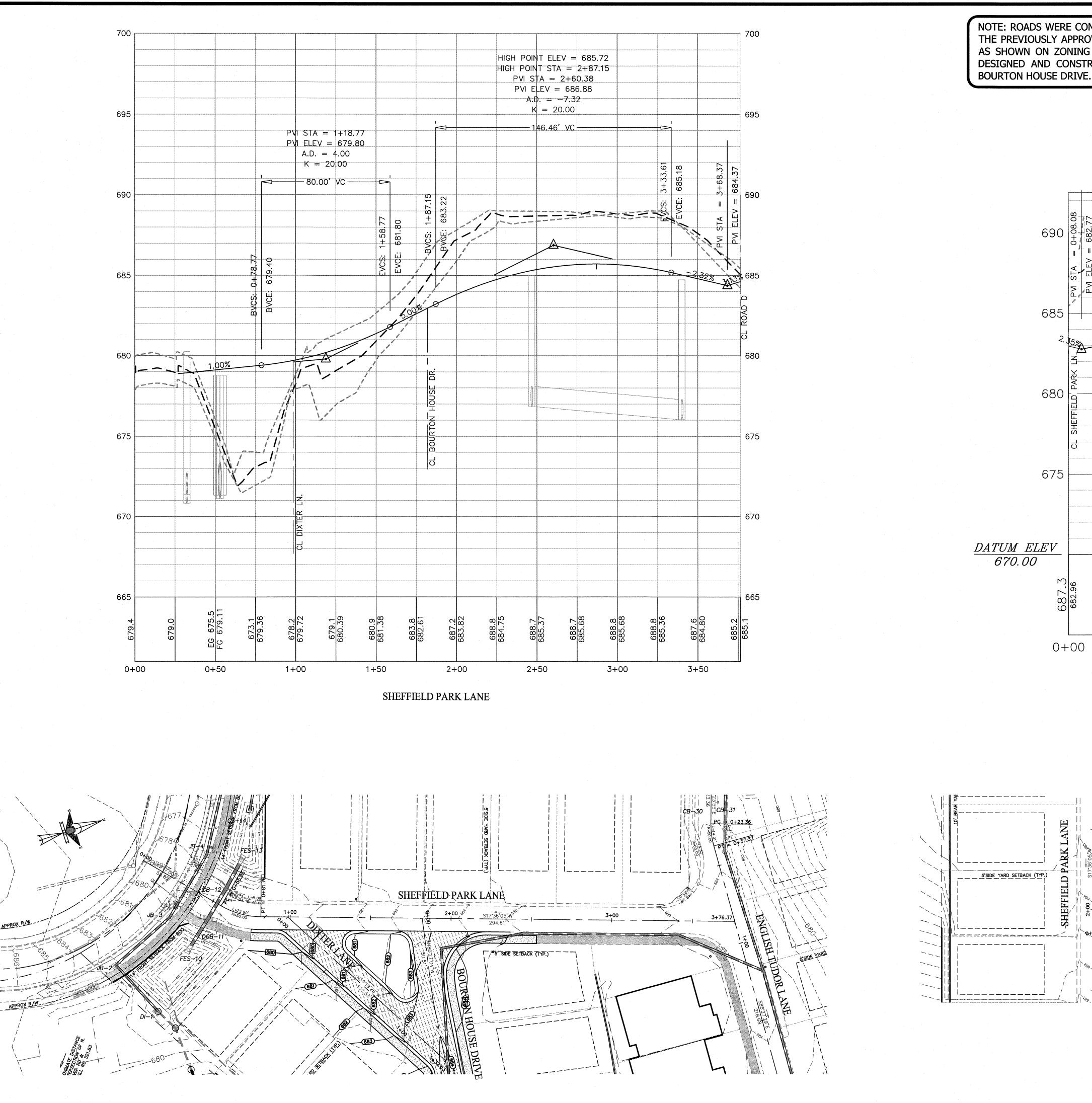
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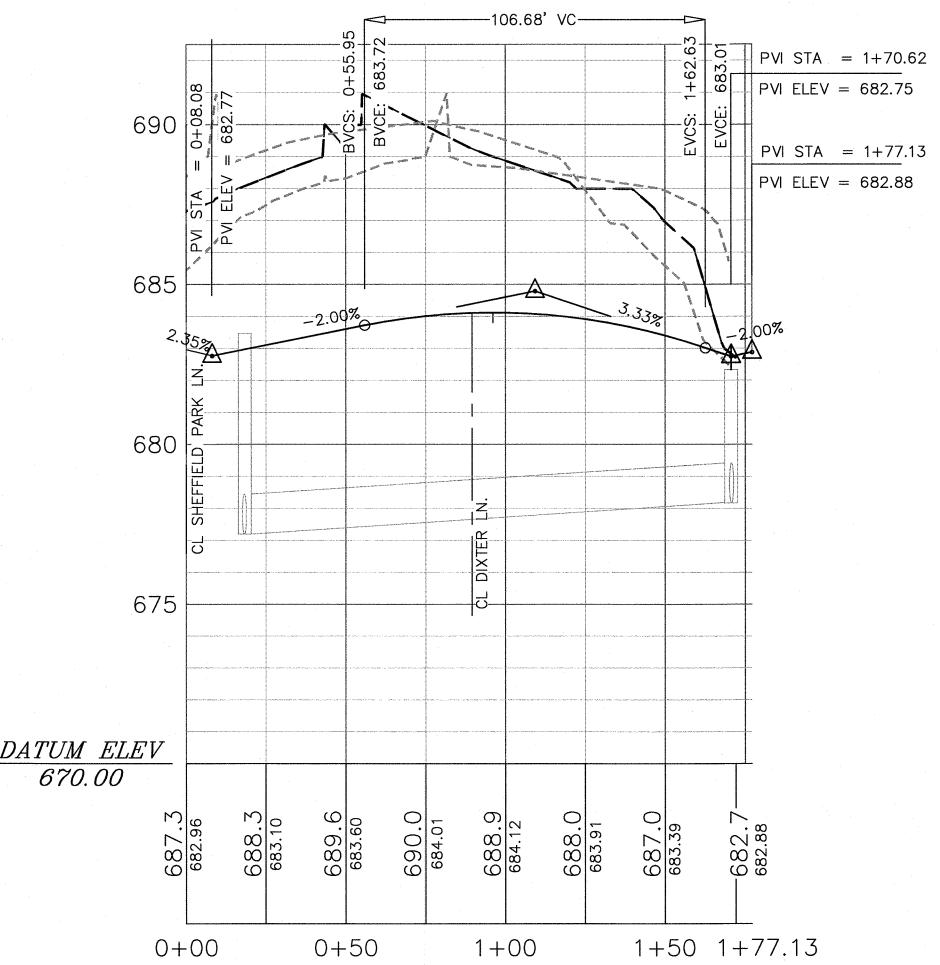
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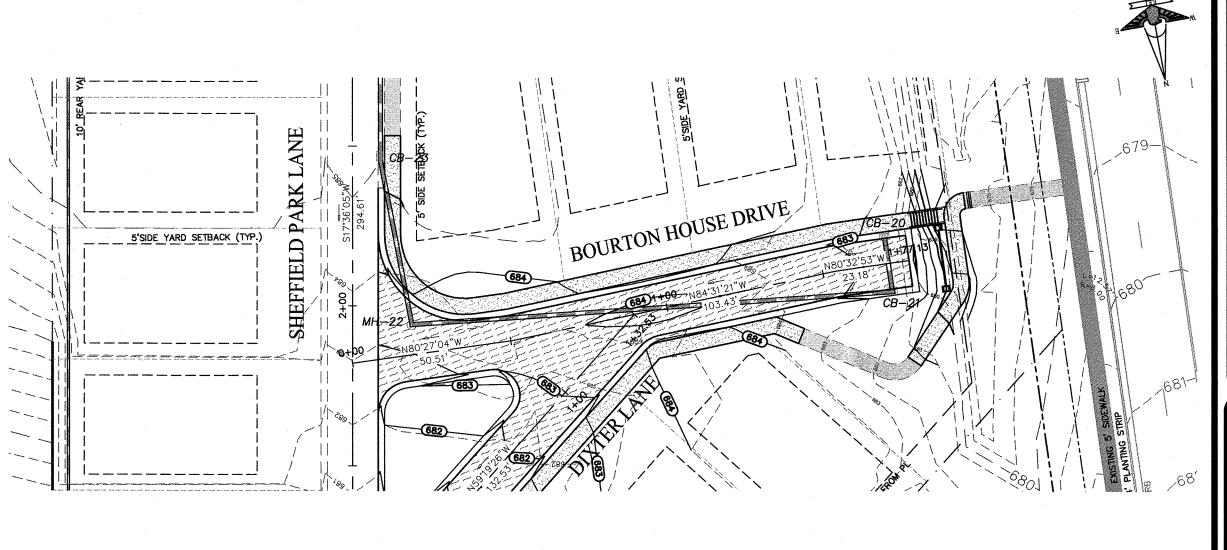


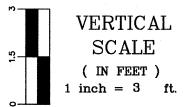
NOTE: ROADS WERE COMPLETED IN GENERAL ACCORDANCE WITH THE PREVIOUSLY APPROVED DRAWINGS. THE REVISED SITE PLAN AS SHOWN ON ZONING PETITION 2013-016 ONLY AFFECTS THE DESIGNED AND CONSTRUCTED CONDITION OF DIXTER LANE & BOURTON HOUSE DRIVE. ALL OTHER STREETS SHALL REMAIN.

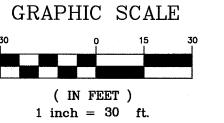
HIGH POINT ELEV = 684.12HIGH POINT STA = 0+95.96PVI STA = 1+09.29PVI ELEV = 684.79A.D. = -5.33K = 20.00



BOURTON HOUSE DRIVE







2013 VAN BUREN AVENUE Indian Trail, NC 28079 (704) 882-4222 www.eagleonline.net

NO. DATE BY ISSUE

1 08/27/12 KEL PLANNING COMMENTS & CLIENT REVISIONS

2 04/03/13 JLR UPDATED PER REZONING PETITION 2013-016

REVISIONS PER REZONING PETITION 2013-PULTE GROUP
1121 CARMEL COMMONS BLVD., SUITE

AD PLAN & PROFILE

JSM DRAWN BY JLR CHECKED BY JSM

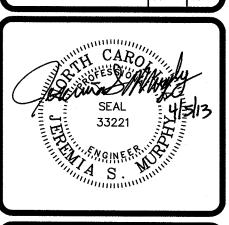
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DATE

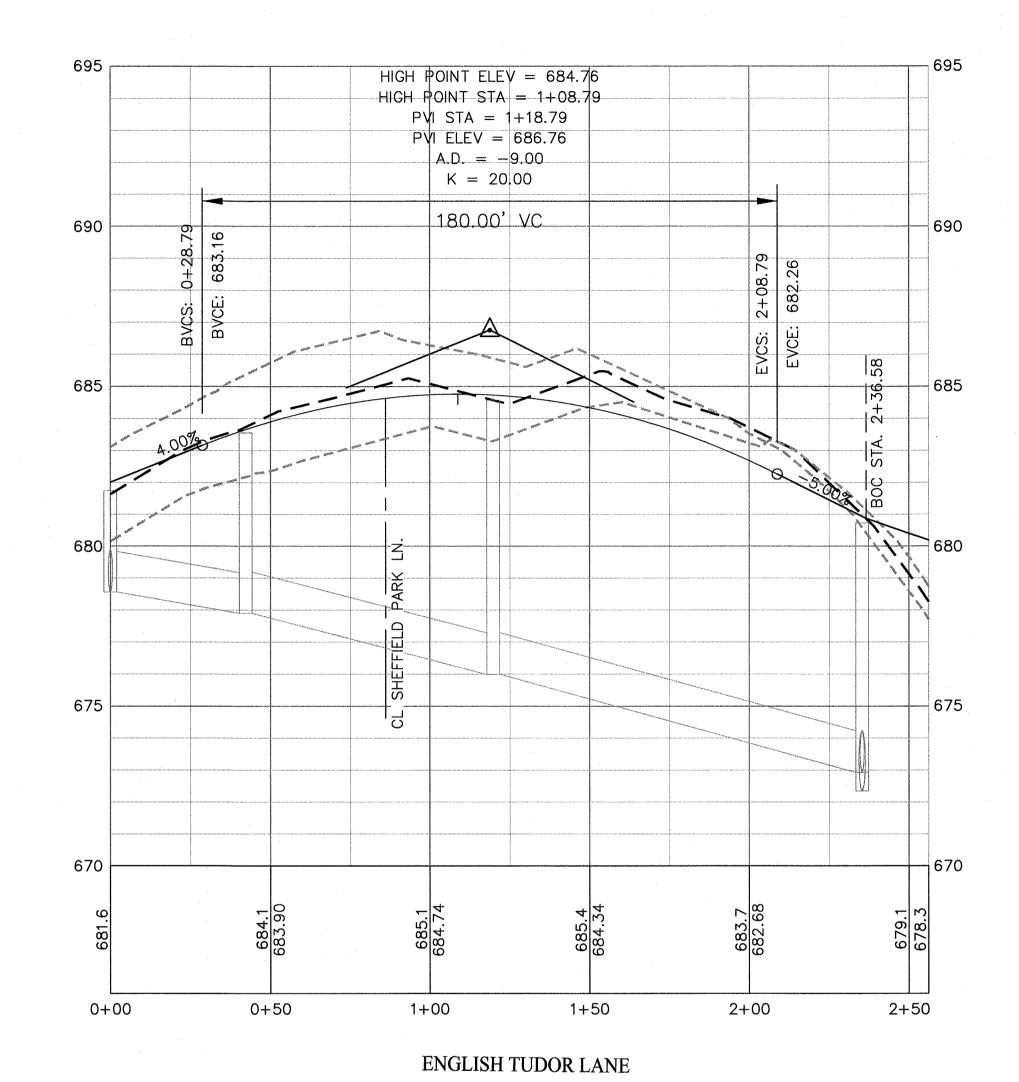
JOB NUMBER

JOB NUMB



SHEET C-4.0

NOTE: ROADS WERE COMPLETED IN GENERAL ACCORDANCE WITH THE PREVIOUSLY APPROVED DRAWINGS. THE REVISED SITE PLAN AS SHOWN ON ZONING PETITION 2013-016 ONLY AFFECTS THE DESIGNED AND CONSTRUCTED CONDITION OF DIXTER LANE & BOURTON HOUSE DRIVE. ALL OTHER STREETS SHALL REMAIN.





690

670

0+00

0+50

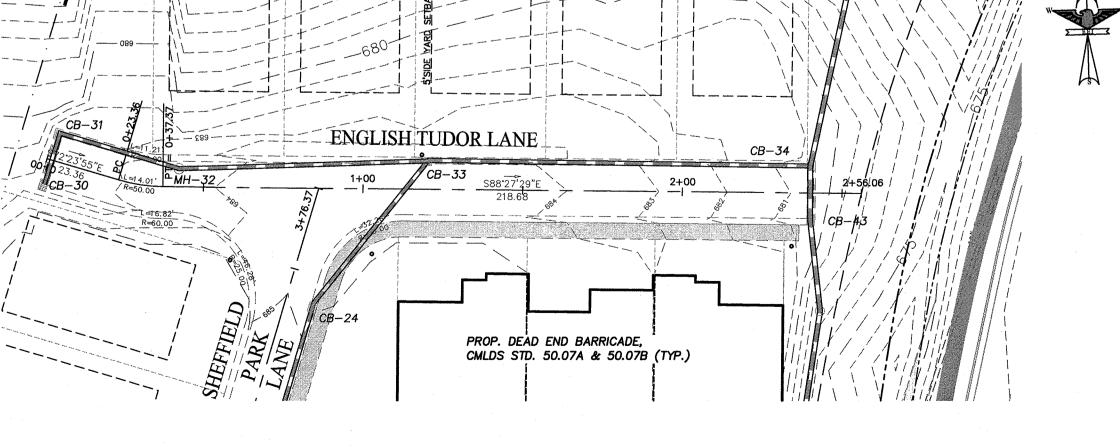
DIXTER LANE

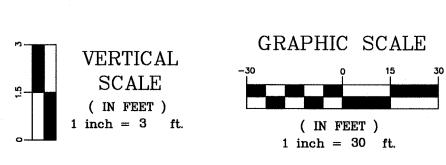
TO 4E' LT C7C7 | C7C 0 | C0C 0 | C0E 0 | C0C 7 | C0C 0 |

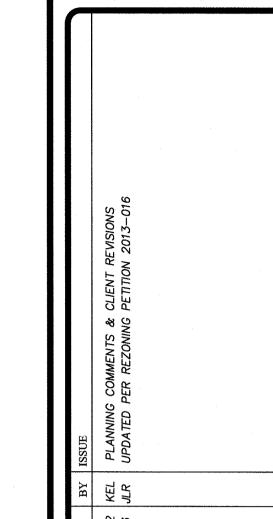
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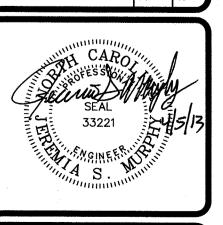
1+00 1+32.53

PVI ELEV = 684.11

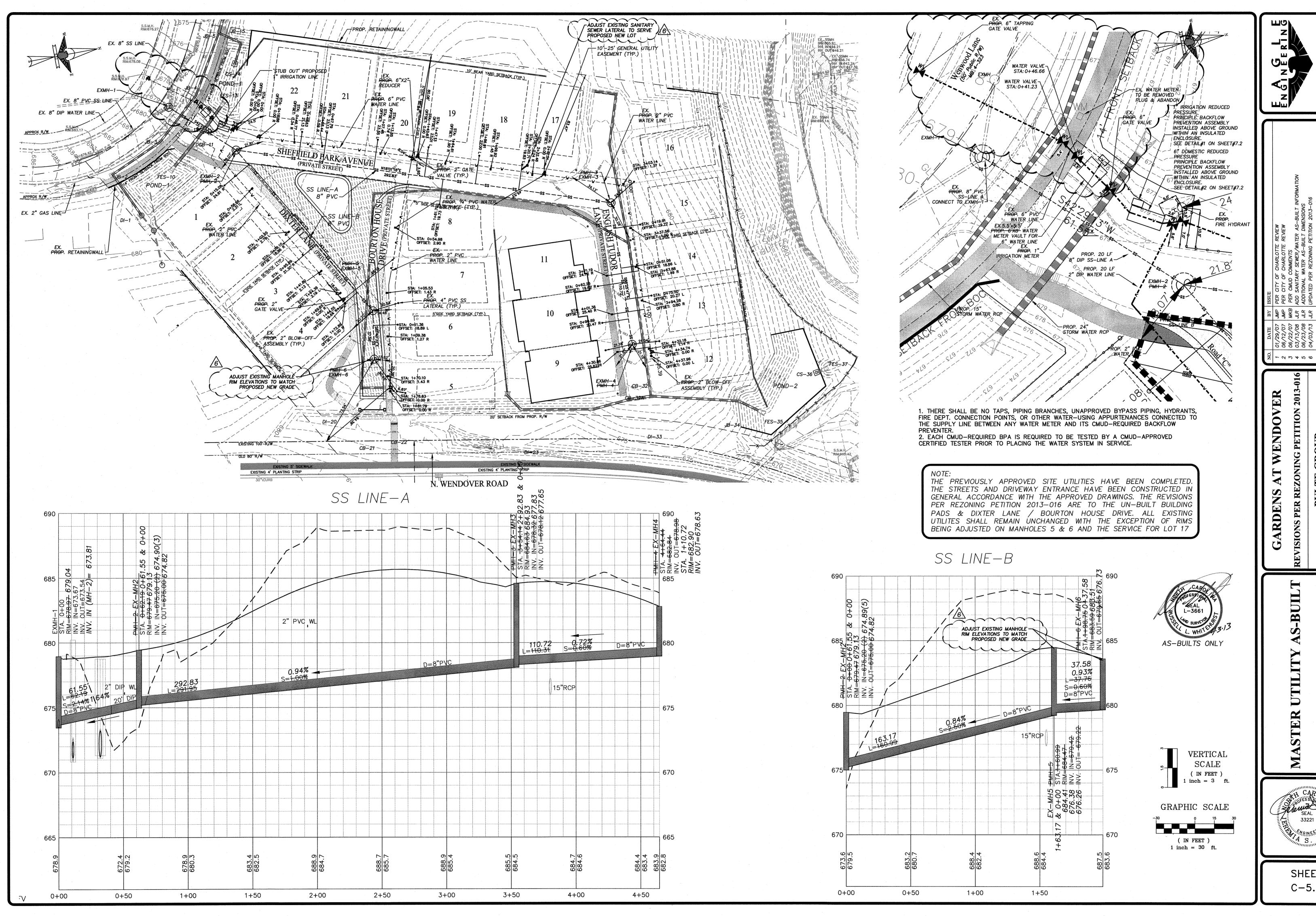








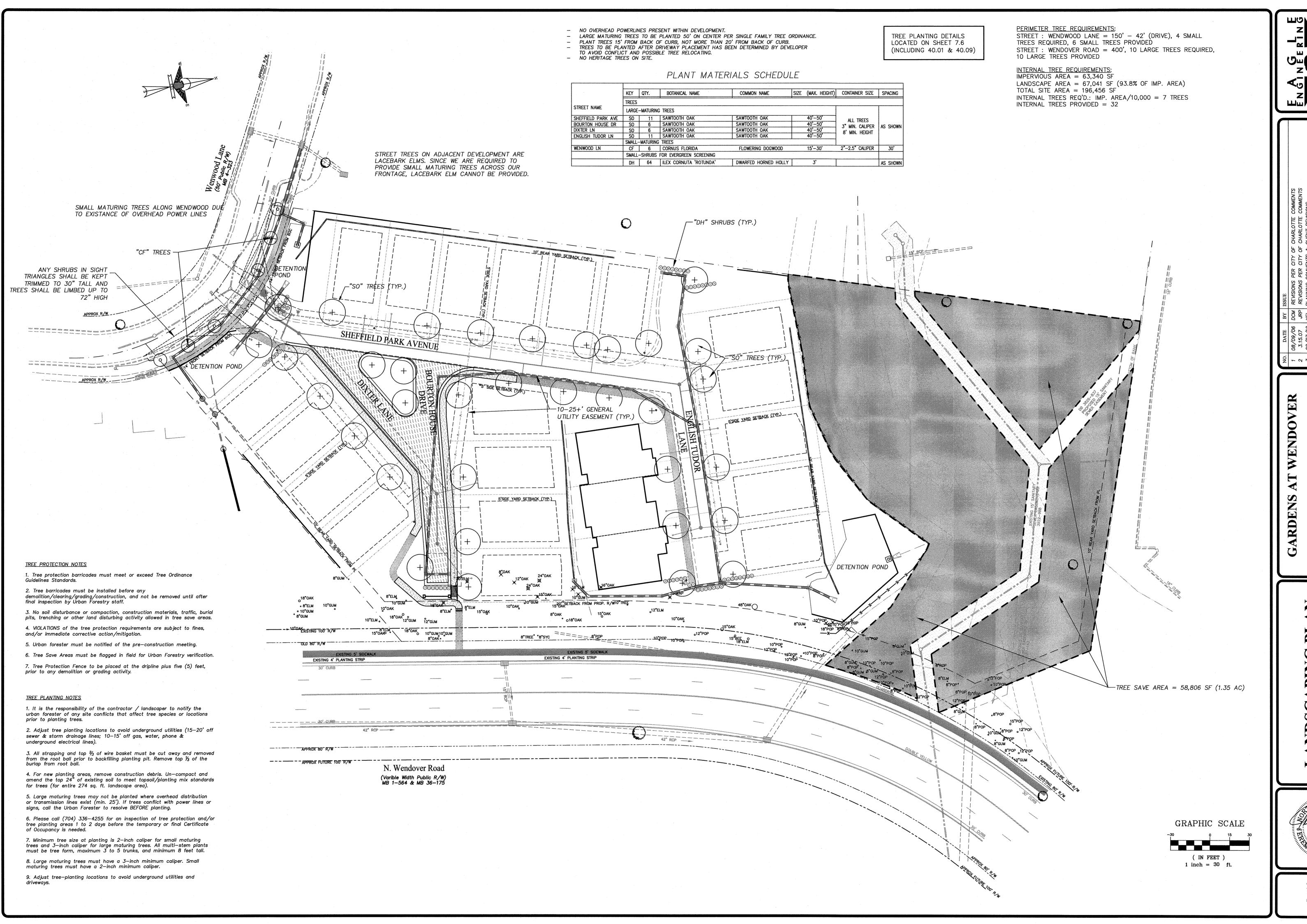
SHEET C - 4.1



-BUILT

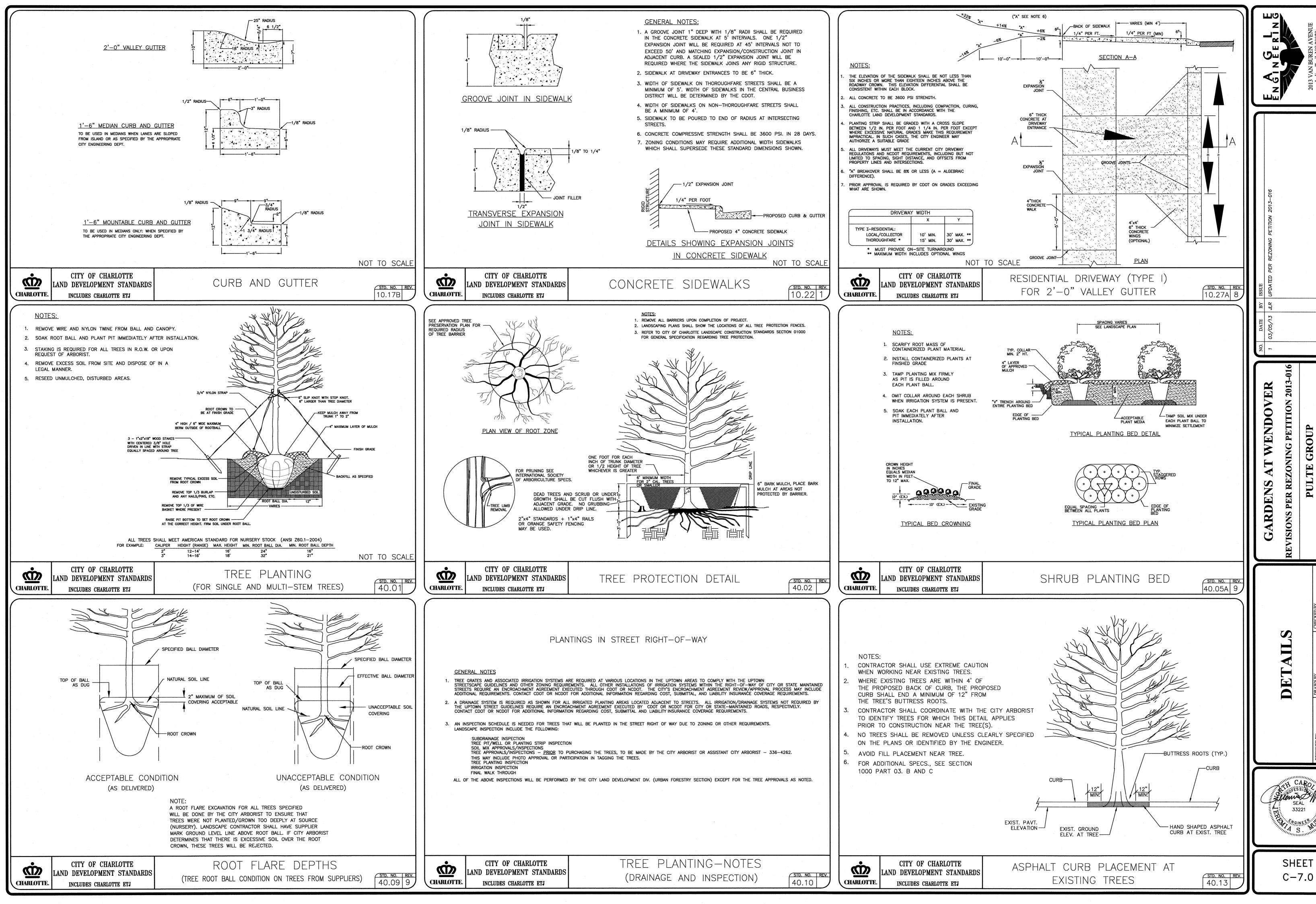
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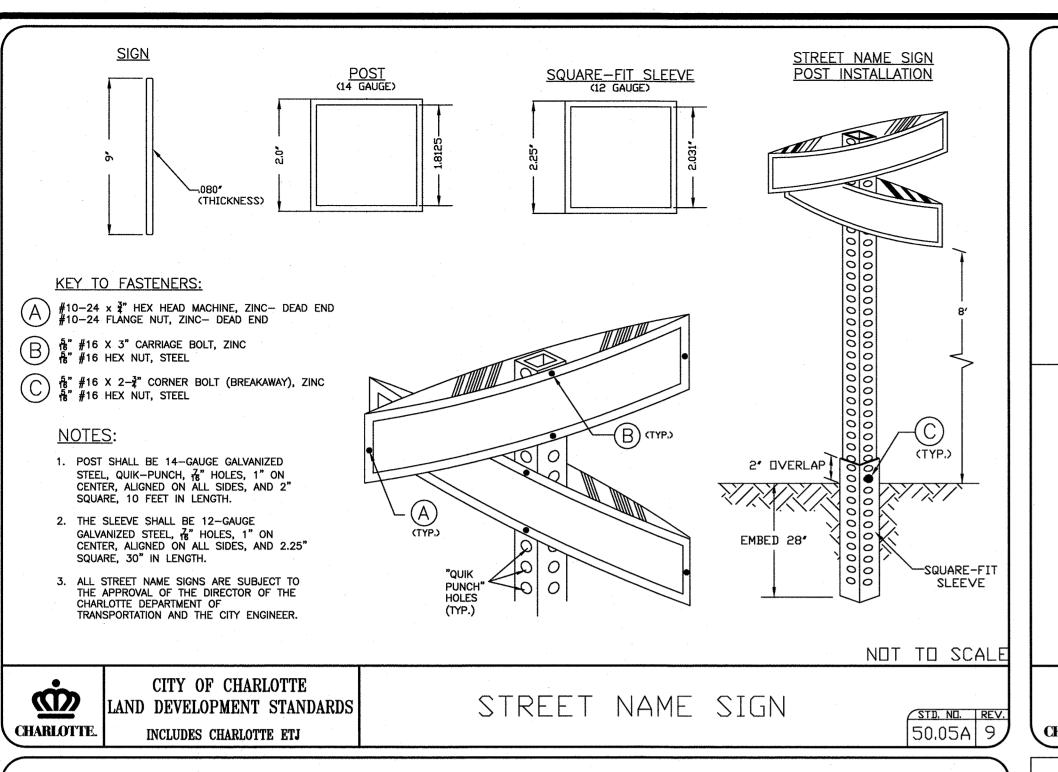
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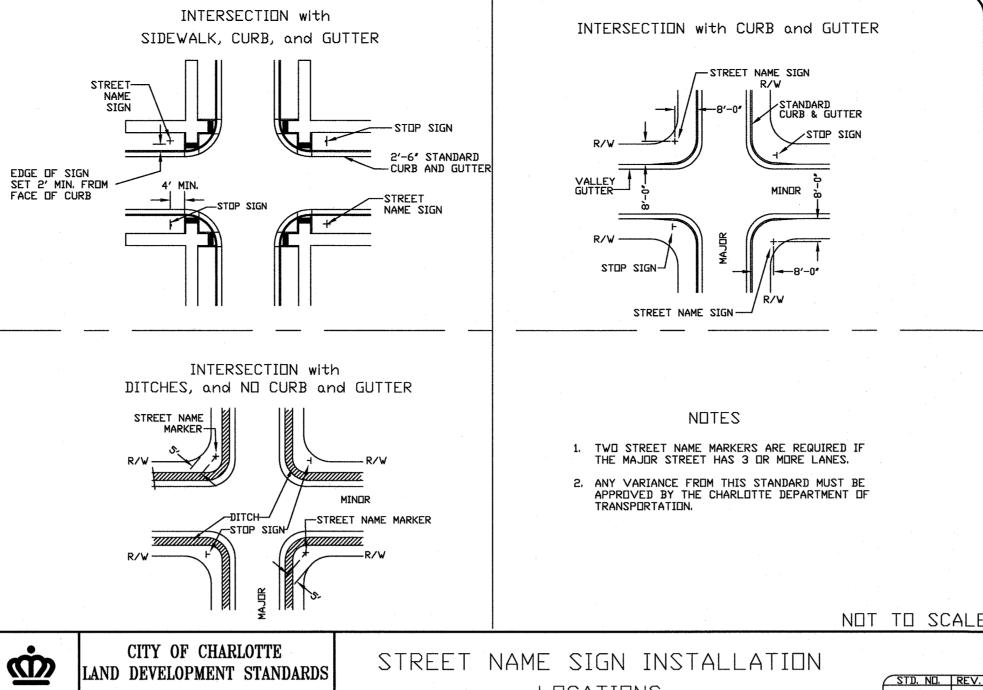
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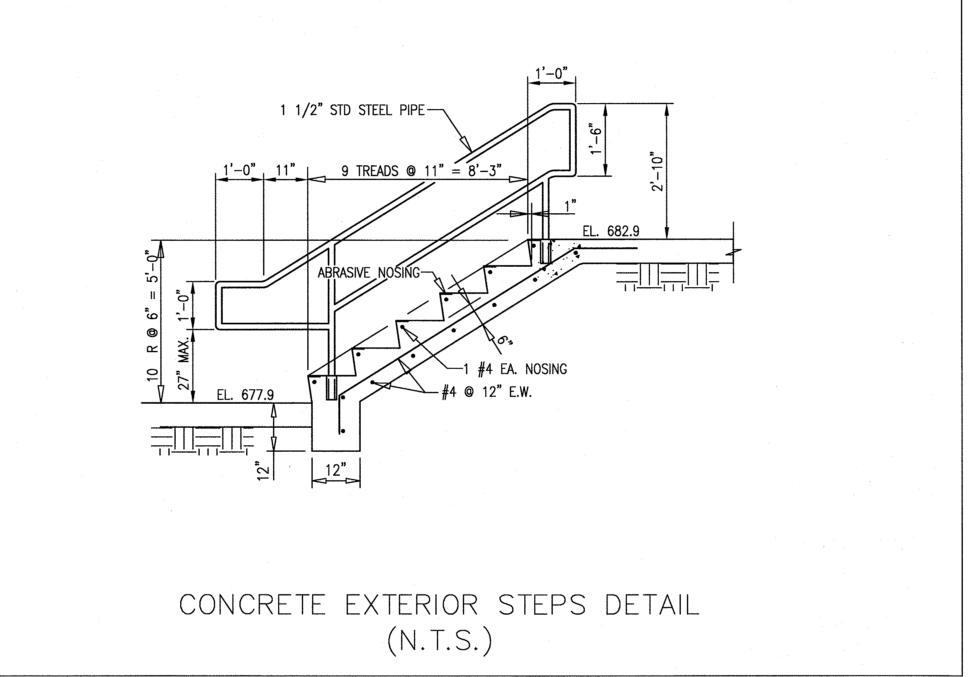
SHEET C - 6.0





CHARLOTTE INCLUDES CHARLOTTE ETJ



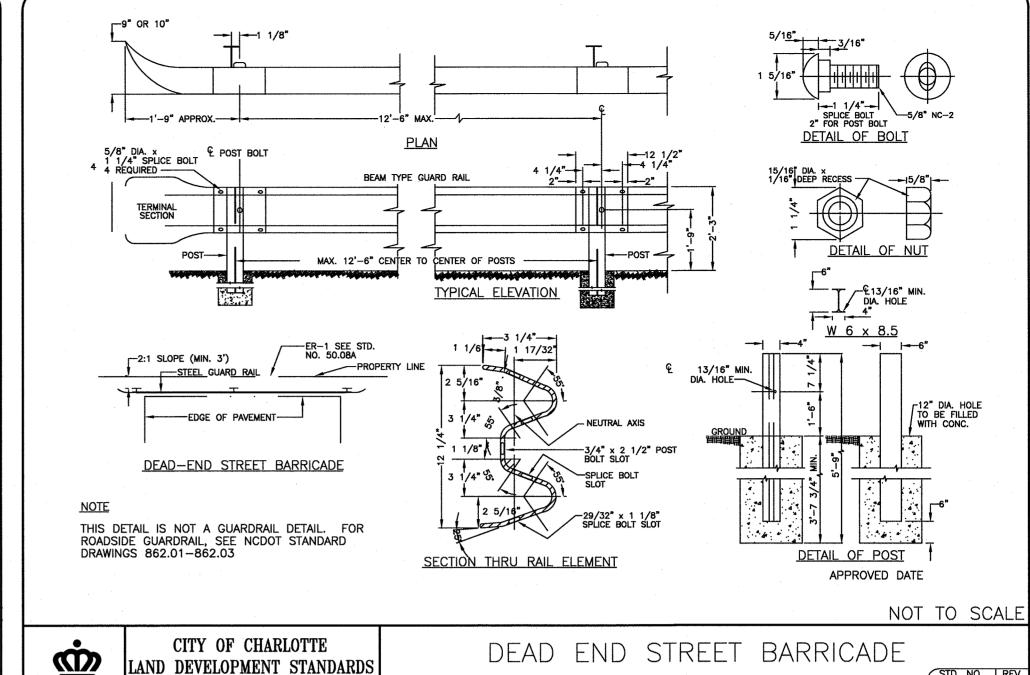


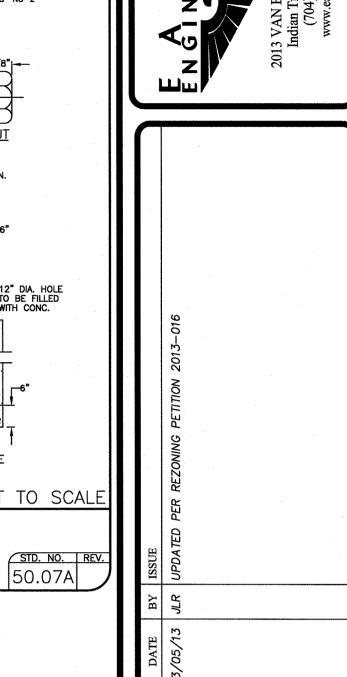
LOCATIONS

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CHARLOTTE.

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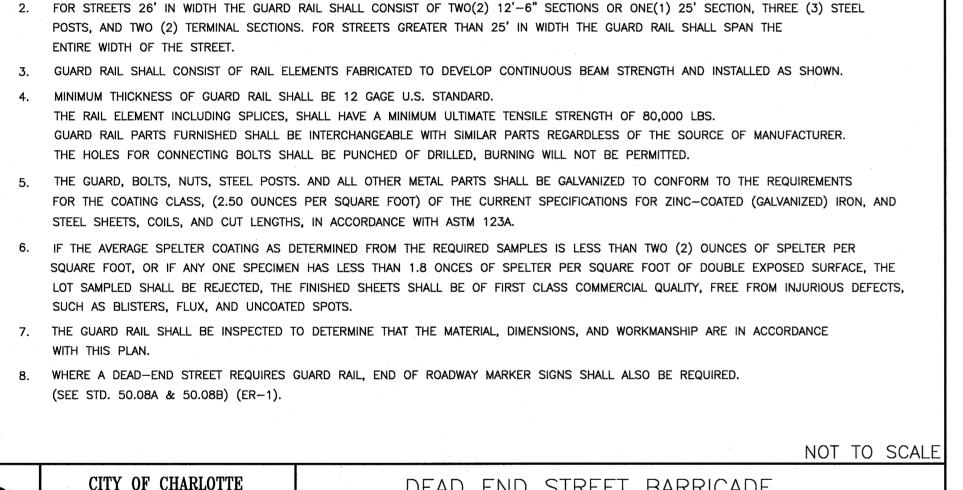


WENDOVER

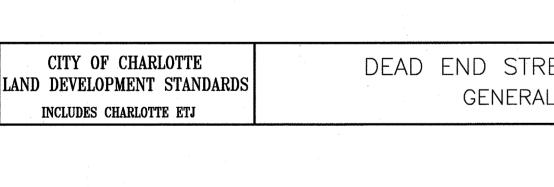
GARDENS

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SHEET C - 7.1



1. STEEL BEAM TYPE GUARD RAILS SHALL BE INSTALLED AT THE END OF ALL DEAD-END STREETS, EXCEPT CUL-DE-SAC STREETS



GENERAL NOTES:

CHARLOTTE.

WHICH HAVE BEEN IMPROVED WITH A PERMANENT TURN-AROUND.

DEAD END STREET BARRICADE GENERAL NOTES

STD. NO. REV. 50.07B

MISCELLANEOUS

- A. CURRENT EDITIONS OF THE NCDOT ROADWAY STANDARD DRAWINGS AND SPECIFICATIONS MANUAL SHALL BE CONSIDERED PART OF THESE PLANS.
- B. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES. THE ENGINEER. AND THE ARCHITECT. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SHALL SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY
- C. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION.
- D. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK

PROTECTION OF EXISTING UTILITIES

THE CONTRACTOR SHALL CONTACT THE APPROPRIATE AGENCY FOR THE EXACT FIELD LOCATIONS OF ALL WATER, SEWER, ELECTRIC, TELEPHONE, TELEVISION AND ANY OTHER UNDERGROUND AND OVERHEAD UTILITY BEFORE STARTING CONSTRUCTION.

THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATION ON THE CONTRACT DRAWINGS IS NOT TO BE CONSIDERED AS THE NON-EXISTANCE OF OR A DEFINITE LOCATION OF EXISTING UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF WORK.

THE FOLLOWING LISTING OF UTILITY COMPANIES (WHICH MAY OR MAY NOT BE COMPLETE) MAY HAVE EXISTING UNDERGROUND OR OVERHEAD UTILITIES IN THE CONTRACT VICINITY.

- 1. PIEDMONT NATURAL GAS DISTRICT OFF. (704) 525-5585 EMERGENCY (704) 2. CHARLOTTE-MECKLENBURG UTILITY DEPT. (WATER&SEWER)..(704) 296-4210 3. N.C. DEPT. OF TRANSPORTATION......(704) 596-6900 4. BELL SOUTH TELEPHONE...
- 5. US SPRINT... ..(800) 521-0579 ..(800) 632-4949 6. AT&T... ..(803) 548-0482. (800)868-5303 7. TELECOM USA... 8. M.C.I. ..(800) 288-6295, (800)624-9675 9. TIME WARNER... ..(704) 938-5156 ...(704) 289-3145 10. DUKE....

NOTE: SOME OF THE ABOVE COMPANIES DO NOT SUBSCRIBE TO CAROLINA ONE CALL CAROLINA

ONE CALL.... .,,(800) 632-4949

II. SAFETY

- A. DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS SHALL BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
- B. THE CONTRACTOR'S MAINTENANCE OF TRAFFIC PLAN MUST BE SUBMITTED AND APPROVED BY CDOT AND EAGLE ENGINEERING PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES.
- C. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
- D. CONTRACTOR SHALL PROVIDE AND MAINTAIN HIS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH HIS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUB CONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUB CONTRACTORS AND SUB CONTRACTOR'S EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
- E. ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 CFR PART 1926, SUBPART P.
- F. THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (U.S. DOT) SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTÉNANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
- G. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
- H. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.

I. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES.

- J. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES. ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN
- K. ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.

III. SITE PLAN AND COORDINATE GEOMETRY

- A. DESIGN DATA PREPARED BY EAGLE ENGINEERING AND SURVEYING
- ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY. ANY DISCREPENCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN
- C. MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT HIS OWN EXPENSE
- D. ALL ELEVATIONS REFER TO THE NATIONAL GEODETIC VERTICAL DATUM.
- E. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.
- F. ALL DIMENSIONS SHOWN ON PLAN ARE TO BACK OF CURB, EDGE OF PAVEMENT, CENTERLINE OF STRUCTURE, OR END OF PIPE UNLESS NOTED

IV. CLEARING/DEMOLITION

- A. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED. SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
- B. THE TOP 6" OF GROUND REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER OR THE OWNER'S ENGINEER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING EXCESS EARTHWORK FROM THE SITE.
- ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS OR AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER.

V. PAVING AND GRADING

- A. ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER OR THE OWNER'S ENGINEER. EXCAVATED AREAS TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY. DEWATERING METHODS SHALL BE USED AS REQUIRED TO KEEP TRENCHES DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED.
- C. ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS OR THE REFERENCED SOILS REPORT.
- E. PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
- CONTRACTOR SHALL PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS.
- G. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
- H. THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD OR OTHER APPROVED MATERIALS AS REQUIRED BY ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER.
- ENGINEERED FILL MATERIAL SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE
- J. IMPORTED SOILS FOR USE AS ENGINEERED FILL AND SHALL NOT CONTAIN ROCKS OR HARD LUMPS GREATER THAN 3 INCHES IN MAXIMUM DIMENSIONS AND SHALL BE FREE OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS.
- K. AGGREGATE BASE MATERIAL SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS.

SIEVE SIZE (PER ASTM D422)	PERCENT PASSING BY WEIGHT	
1 INCH	100	
3/4	90-100	
NO. 8	35-55	
NO. 200	0-8	

- . ALL AREAS TO RECEIVE FILL, AND AREAS OF STRUCTURES AND PAVEMENTS, SHALL BE STRIPPED OF VEGETATION, ORGANIC MATTER, DEBRIS, RUBBLE, AND OTHER UNSUITABLE MATERIALS. STRIPPED SOILS SHALL NOT BE USED IN ENGINEERED FILL, BUT MAY BE USED IN LANDSCAPE AREAS. ·
- M. ENGINEERED FILL MATERIAL SHALL BE COMPACTED TO AT LEAST THE FOLLOWING PERCENTAGES OF MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT, PER ASTM D1557 (MODIFIED PROCTOR):

ENGINEERED FILL MATERIAL	MINIMUM PERCENT COMPACTION	MDISTURE CONTENT (RANGE)
NATIVE SOIL	92%	OPTIMUM TO OPTIMUM PLUS 3%
ENGINEERED FILL UNDER STRUCTURES & BEHIND RETAINING WALLS	95%	OPTIMUM TO OPTIMUM PLUS 3%
ENGINEERED FILL UNDER PAVEMENTS	100%	OPTIMUM PLUS OR MINUS 2%
FILL IN LANDSCAPE AREAS	92%	2 TO 5% ABOVE OPTIMUM
AGGREGATE BASE MATERIAL OR IMPORTED GRANULAR SOIL IN BUILDING AND PAVEMENT AREAS	100%	OPTIMUM PLUS OR MINUS 2%
	· · · · · · · · · · · · · · · · · · ·	

NOTE: MOISTURE CONTENT OF ENGINEERED FILL MATERIAL MAY REQUIRE ADJUSTMENT DURING CONSTRUCTION TO PREVENT SOIL PUMPING.

- ENGINEERED FILL SHALL BE PLACED IN LIFTS NO GREATER THAN 8 INCHES THICK (LOOSE).
- O. THE TOP 8 INCHES OF SOIL EXPOSED AT THE BOTTOM OF EXCAVATIONS SHALL BE COMPACTED, SCARIFIED AND COMPACTED AS ENGINEERED FILL PRIOR TO PLACEMENT OF ADDITIONAL FILL. IF SOFT OR LOOSE SOIL IS PRESENT AT THE BASE OF EXCAVATIONS, IT SHALL BE EXCAVATED AND/OR COMPACTED AS ENGINEERED FILL OR AS RECOMMENDED BY THE ENGINEER'S FIELD REPRESENTATIVE.
- IF SUBGRADE SOILS EXHIBIT PUMPING DURING COMPACTION, THE AREA SHALL BE ALLOWED TO DRY UNTIL THE SOILS BECOME WORKABLE WITHOUT PUMPING. THE MOISTURE CONTENT OF THE SOILS SHALL BE ADJUSTED TO PREVENT PUMPING.
- Q. EXPOSURE TO THE ENVIRONMENT MAY REDUCE THE STRENGTH OF SOILS IN FOOTING, FLOOR SLAB, AND PAVED AREAS. IF THIS OCCURS, THE SOFTENED SOILS SHALL BE REMOVED AND REWORKED IMMEDIATELY PRIOR TO CONCRETE PLACEMENT. IF RAINFALL IS EXPECTED AT A TIME WHEN BEARING SOILS IN FOOTING AREAS ARE EXPOSED, A 2 TO 4 INCH THICK LAYER OF LEAN CONCRETE MAY BE PLACED IN SUCH AREAS.
- R. THE SITE SHALL BE GRADED TO TRANSPORT SURFACE RUNOFF AWAY FROM THE STRUCTURES AND PAVED AREAS. WATER SHALL NOT BE ALLOWED TO ACCUMULATE (POND) AROUND THE BUILDING PERIMETER OR

GENERAL ROCK EXCAVATION:

ROCK SHALL BE DEFINED AS ANY MATERIAL WHICH CANNOT BE EXCAVATED WITH A SINGLE- TOOTH RIPPER DRAWN BY A CRAWLER TRACTOR HAVING A MINIMUM DRAW BAR PULL RATED AT NOT LESS THAN 56,000 POUNDS (CATERPILLAR D 8K OR EQUIVALENT).

THE VOLUME OF ROCK EXCAVATION SHALL BE DETERMINED BY A LICENSED SURVEYOR BY THE AVERAGE END AREA METHOD. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SCALED PLAN WITH SUFFICIENT ELEVATION POINTS TO ACCURATELY DEFINE THE VOLUME OF ROCK EXCAVATED.

THE DEPTH OF ROCK SHALL BE DEFINED AS FROM TOP OF ROCK TO THE CONTRACT SPECIFIED ELEVATION FOR EXCAVATION.

CONTRACTOR SHALL BE COMPENSATED FOR ROCK EXCAVATION AS DEFINED HEREIN IN ACCORDANCE WITH CONTRACT UNIT PRICES. TRENCH ROCK EXCAVATION:

TRENCH ROCK SHALL BE DEFINED AS ANY MATERIAL WHICH CANNOT BE EXCAVATED WITH A BACKHOE HAVING A BUCKET CURLING FORCE RATE AT NOT LESS THAN 24,700 POUNDS (CATERPILLAR MODEL 225 OR EQUIVALENT). BASIS OF PAYMENT FOR TRENCH ROCK EXCAVATION:

PIPE TRENCH: THAT VOLUME DEFINED BY THE PIPE DIAMETER PLUS 18" AND THE DEPTH FROM TOP OF ROCK TO BOTTOM OF PIPE PLUS 6" MULTIPLIED BY THE ACTUAL LENGTH.

WALL FOOTING, PIT: THAT VOLUME DEFINED BY THE WIDTH OF FOOTING PLUS 12" AND THE DEPTH FROM TOP OF ROCK TO BOTTOM OF FOOTING MULTIPLIED BY THE ACTUAL LENGTH OF WALL.

COLUMN FOOTING: THE AREA OF THE COLUMN FOOTING MULTIPLIED BY THE DEPTH FROM TOP OF ROCK TO BOTTOM OF FOOTING.

CONTRACTOR SHALL BE COMPENSATED FOR ROCK EXCAVATION AS DEFINED HEREIN IN ACCORDANCE WITH CONTRACT UNIT PRICES.

- S. BACKFILL AND FILL SHALL CONFORM TO THE GENERAL REQUIREMENTS FOR SOIL MATERIALS ABOVE AND SHALL BE CLASSIFIED AS GW, GP, GM, GC, SW, SP, SM, SC, ML, CL BY ASTM D2487 AND SHALL CONFORM TO THE
- 1. SHALL BE CAPABLE OF BEING COMPACTED TO THE SPECIFIED DEGREE OF COMPACTION WHEN THE MOISTURE CONTENT IS WITHIN 3 PERCENTAGE POINTS OF THE OPTIMUM PERCENT MOISTURE.
- 2. LIQUID LIMIT SHOULD NOT EXCEED 40 PERCENT WHEN TESTED IN
- ACCORDANCE WITH ASTM D4318. 3. PLASTICITY INDEX SHOULD NOT BE GREATER THAN 30 PERCENT WHEN TESTED IN ACCORDANCE WITH ASTM D4318.
- 4. NO MORE THAN 75 PERCENT BY WEIGHT SHALL BE FINER THAN NO. 200 SIEVE WHEN TESTED IN ACCORDANCE WITH ASTM D1140.
- T. UNSUITABLE SOIL: SHALL BE ANY SOIL MATERIALS DETERMINED BY THE INDEPENDENT GEOTECHNICAL LABORATORY AS NOT CONFORMING TO THE REQUIREMENTS DESCRIBED ABOVE FOR BACKFILL AND FILL. A MOISTURE CONTENT WHICH IS MORE THAN 3 PERCENTAGE POINTS FROM OPTIMUM SHALL NOT BE CONSIDERED UNSUITABLE IF SUCH MATERIALS WOULD OTHERWISE BE SUITABLE IF THE MOISTURE CONTENT WERE ADJUSTED. ADJUSTMENTS TO THE SOIL MOISTURE CONTENT BY DRYING, MIXING, ADDING WATER, OR OTHER MEANS SHALL BE THE RESPONSIBILITY OF THE
- U. MEASUREMENT OF UNSUITABLE MATERIAL: THE VOLUME OF UNSUITABLE MATERIAL EXCAVATION SHALL BE DETERMINED BY A LICENSED SURVEYOR BY THE AVERAGE END AREA METHOD. THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT A SCALED PLAN WITH SUFFICIENT ELEVATION POINTS TO ACCURATELY DEFINE THE VOLUME OF UNSUITABLE MATERIAL EXCAVATED. THE EXTENT OF UNSUITABLE MATERIAL EXCAVATION SHALL BE DETERMINED BY THE INDEPENDENT GEOTECHNICAL LABORATORY.

VI. EROSION/TURBIDITY CONTROL

- A. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.
- B. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS OR HAY BALES TO PREVENT EROSION. FLOATING TURBIDITY CURTAINS SHALL BE USED IN OPEN WATER SITUATIONS. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORM WATER RUNOFF FROM BEING DISCHARGED TO WETLANDS OR OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES AND OTHER EROSION/TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.
- C. CONSTRUCTION OPERATIONS IN OR ADJACENT TO WETLANDS SHALL BE RESTRICTED TO THOSE AREAS IDENTIFIED IN THE PLANS AND IN THE
- D. EXCEPT AS NECESSARY FOR CONSTRUCTION, EXCAVATED MATERIAL SHALL NOT BE DEPOSITED IN THE WETLANDS OR IN A POSITION CLOSE ENOUGH THERETO TO BE WASHED AWAY BY HIGH WATER OR RUNOFF.
- E. THE CONTRACTOR SHALL SCHEDULE HIS OPERATIONS SUCH THAT THE AREA OF UNPROTECTED ERODIBLE EARTH EXPOSED AT ANY ONE TIME IS NOT LARGER THAN THE MINIMUM AREA NECESSARY FOR EFFICIENT CONSTRUCTION OPERATIONS. AND THE DURATION OF EXPOSED. UNCOMPLETED CONSTRUCTION TO THE ELEMENTS SHALL BE AS SHORT AS PRACTICABLE. CLEARING AND GRUBBING SHALL BE SO SCHEDULED AND PFRFORMED THAT GRADING OPERATIONS CAN FOLLOW IMMEDIATELY THEREAFTER, AND GRADING OPERATIONS SHALL BE SCHEDULED AND PERFORMED THAT PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER IF CONDITIONS ON THE PROJECT PERMIT.
- F. THE CONTRACTOR AND/OR OWNER'S REPRESENTATIVE SHALL PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL DISTURBED SOILS ARE STABILIZED.



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