

VICINITY MAP

# The Cottages at Sardis Lane

412 Sardis Ln Charlotte NC 28270

# **GENERAL NOTES:**

. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE CHARLOTTE LAND DEVELOPMENT

2. ALL WORK AND MATERIALS SHALL CONFORM TO THE LATEST EDITION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES UNLESS OTHERWISE SPECIFIED IN THE CHARLOTTE-MECKLENBURG LAND DEVELOPMENT STANDARDS MANUAL.

3. ALL PUBLIC STREETS WITHIN THE DEVELOPMENT WILL BE CONSTRUCTED TO THE CITY OF CHARLOTTE STANDARDS IN ORDER TO BE DEDICATED PUBLIC RIGHT OF WAYS.

4. ALL CURBS SHALL HAVE A 4'-6" RADIUS AT THE BACK OF CURB UNLESS OTHERWISE NOTED. ALL R/W SHALL HAVE A 20' RADIUS UNLESS OTHERWISE NOTED.

5. DEVELOPER WILL PROVIDE STREET SIGNS PER CLDSM #50.05A OR #50.05B. SIGNS SHOULD BE LOCATED PER CLDSM

6. LAND DEVELOPMENT ENGINEER SHALL BE GIVEN 48 HOURS NOTICE PRIOR TO CONSTRUCTION.

7. SIGHT TRIANGLES SHOWN ARE THE MINIMUM REQUIRED. FURTHER REQUIREMENTS MAY BE MADE BY THE CITY OF CHARLOTTE DEPARTMENT OF TRANSPORTATION (CDOT).

8. NON-STANDARD ITEMS (I.E.: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT OF WAY REQUIRE A RIGHT OF WAY ENCROACHMENT AGREEMENT WITH THE CHARLOTTE DEPARTMENT OF TRANSPORTATION/NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BEFORE INSTALLATION. FOR CITY OF CHARLOTTE MAINTAINED STREETS, CONTACT CDOT AT (707)

9. ANY BUILDING WITHIN THE 100+1 BUILDING RESTRICTION FLOODLINE IS SUBJECT TO THE RESTRICTIONS OF THE CITY OF CHARLOTTE SUBDIVISION ORDINANCE, SECTION 20-25(f)

10. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3600 P.S.I. AT 28 DAYS AND SHALL COMPLY WITH

11. ALL CONCRETE SHALL BE CURED WITH 100% RESIN BASE, WHITE PIGMENTED CURING COMPOUND WHICH MEETS A.S.T.M. SPECIFICATIONS C-309, TYPE 1, APPLIED AT ONE GALLON TO 400 SF WITHIN 24 HOURS OF PLACEMENT OF CONCRETE.

12. ALL CURB AND GUTTER SHALL BE BACKFILLED WITH SOIL APPROVED BY THE INSPECTOR 48 HOURS AFTER

13. ALL BACKFILL SHALL BE NON-PLASTIC IN NATURE, FREE FROM ROOTS, VEGETATIVE MATTER, WASTE, CONSTRUCTION MATERIAL, OR OTHER OBJECTIONABLE MATERIAL SAID MATERIAL SHALL BE CAPABLE OF BEING COMPACTED BY MECHANICAL MEANS AND THE MATERIAL SHALL HAVE NO TENDENCY TO FLOW OR BEHAVE IN A PLASTIC MANNER UNDER THE TAMPING

14. ALL TRENCHES IN THE STREET RIGHT OF WAY SHALL BE BACKFILLED WITH SUITABLE MATERIAL IMMEDIATELY AFTER THE 15. ALL SUBGRADE FOR ROADS SHALL BE COMPACTED TO 100% OF THE MAXIMUM DENSITY OBTAINABLE WITH THE

16. ALL TESTS SHALL BE PERFORMED BY THE DEVELOPER AT NO COST TO THE CITY.

17. CONTRACTOR SHALL MAINTAIN TWO WAY TRAFFIC AT ALL TIMES WHEN WORKING WITHIN EXISTING STREETS. THE CONTRACTOR SHALL PLACE AND MAINTAIN SIGNS, DANGER LIGHTS, BARRICADES, AND FURNISH WATCHMEN OR FLAGMEN TO DIRECT TRAFFIC IN ACCORDANCE WITH THE WORK AREA TRAFFIC CONTROL HANDBOOK (W.A.T.C.H.).

18. SIDEWALKS SHALL BE CONSTRUCTED OF NOT LESS THAN 3600 PSI CONCRETE AND SHALL BE FOUR (4) INCHES THICK, CONSTRUCTED ON AN ADEQUATELY GRADED BASE, EXCEPT WHERE A SIDEWALK CROSSES A DRIVEWAY IT SHALL BE SIX (6)

19. SUBGRADE FOR SIDEWALKS SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY OBTAINABLE WITH THE STANDARD PROCTER TEST. THE SURFACE OF THE SIDEWALK SHALL BE STEEL TROWEL AND LIGHT BROOM FINISHED AND CURED WITH AN ACCEPTABLE CURING COMPOUND. TOOLED JOINTS SHALL BE PROVIDED AT AN INTERVAL NOT LESS THAN FIVE (5) FEET AND EXPANSION JOINTS AT INTERVALS NOT MORE THAN 45 FEET. THE SIDEWALK SHALL HAVE A LATERAL SLOPE OF 1/4"

20. THE ELEVATION OF THE SIDEWALK SHALL BE RELATED TO THE ELEVATION OF THE CROWN OF THE ADJACENT ROADWAY. THE SIDEWALK SHALL BE NO LESS THAN SIX (6) INCHES OR MORE THAN 18 INCHES ABOVE THE ROADWAY CROWN, EXCEPT THAT THE CROSSWALK ELEVATIONS SHALL BE PROPERLY RELATED TO THE EXISTING OR PROPOSED ROADWAY CURB.

21. IN ROLLY AND HILLY TERRAINS, SWEEPING OF THE STONE BASE AND/OR APPLICATION OF A TACK COAT MAY BE REQUIRED NEAR INTERSECTIONS. THESE REQUIREMENTS WILL BE ESTABLISHED BY THE INSPECTOR BASED ON FIELD

22. UTILITY INSTALLATIONS MAY ONLY CROSS BUFFER AREAS AT INTERIOR ANGLES MEASURED AT PROPERTY LINES WHICH ARE NOT LESS THAN 75 DEGREES AND, TO THE EXTENT POSSIBLE, PATHS CLEARED FOR SUCH UTILITY LINES SHALL BE REPLANTED WITH PLANT MATERIALS FROM THE ORDINANCES APPROVED PLANT LIST.

23. NO BUILDINGS, PARKING SPACES OR MANEUVERING AREAS MAY BE LOCATED WITHIN ANY BUFFER AREAS.

24. THE DEVELOPER SHALL MAKE A DILIGENT EFFORT TO PRESERVE AREAS OF REQUIRED BUFFERS WHERE SIGNIFICANT VEGETATION EXISTS. THESE AREAS SHALL REMAIN UNDISTURBED EXCEPT TO THE EXTENT NECESSARY TO ACCOMMODATE

25. UNDER DRAINAGE SHALL BE PROVIDED AS DIRECTED BY GEO-TECHNICAL ENGINEER. DETERMINATION SHALL BE MADE IN THE FIELD. DRAINS TO BE INSTALLED PER CLDSM #30.05.

26. SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT-OF-WAY IF DEEMED NECESSARY BY THE

27. "AS-BUILT" DRAWINGS AND PLANS OF THE STORM DRAINAGE SYSTEM, INCLUDING DESIGNED DITCHES, MUST BE SUBMITTED PRIOR TO SUBDIVISION FINAL INSPECTION TO THE CITY/COUNTY ENGINEERING DEPARTMENT IN ACCORDANCE WITH THE CITY/COUNTY SUBDIVISION ORDINANCE.

28. CURB AND GUTTER ON THE PLANS MAY BE ADJUSTED BASED ON FIELD STAKING BY CITY ENGINEERING. ASSOCIATED STORM DRAINAGE MAY ALSO REQUIRE MODIFICATION BASED UPON FIELD CONDITIONS.

29. THE PURPOSE OF THE STORM DRAINAGE EASEMENT (SDE) IS TO PROVIDE STORM WATER CONVEYANCE AND ANY STRUCTURES AND/OR OBSTRUCTION TO STORM WATER FLOW IS PROHIBITED.

31. ALL ROAD IMPROVEMENTS ON SARDIS LANE ARE TO BE COORDINATED WITH THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.

32. CONTACT THE UTILITY COMPANY TO RELOCATE ANY EXISTING UTILITY POLES. ALL EXISTING FACILITIES WHICH CONFLICT WITH THE IMPROVEMENTS UNDER THE SCOPE OF THIS PROJECT MUST BE RELOCATED AT THE EXPENSE OF THE

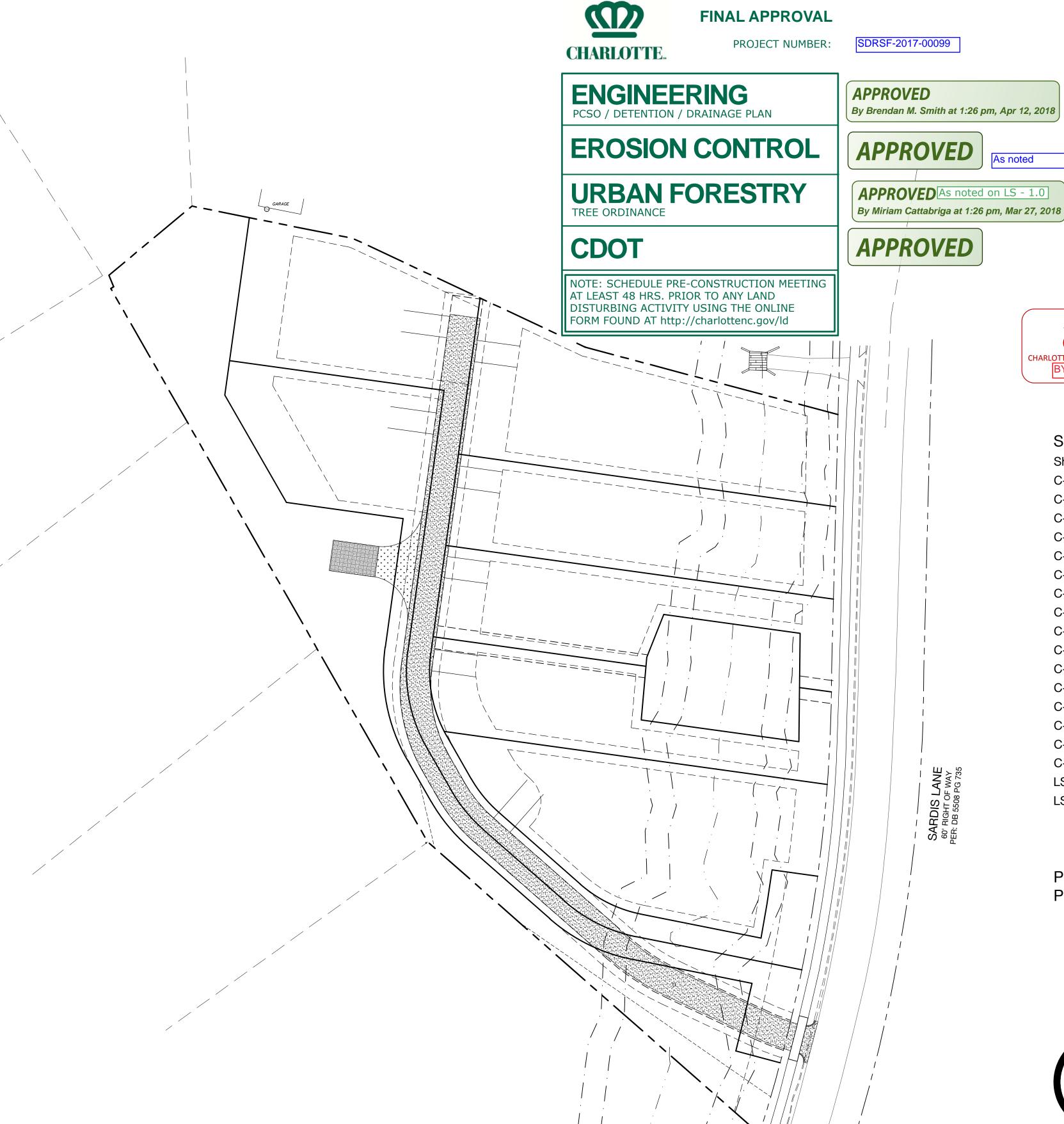
33. TREES WITHIN THE STREET RIGHT-OF-WAY ARE PROTECTED BY LAW. PERMIT REQUIRED FOR REMOVAL BY CITY OF CHARLOTTE LANDSCAPE MANAGEMENT AT 704-336-4262. ALL TREES OVER 8-INCHES IN DIAMETER (4.5-FT ABOVE GROUND) IN SETBACK AREA ARE PROTECTED BY LAW. PERMIT REQUIRED FOR REMOVAL BY CITY ENGINEERING AT

34. THERE WILL BE NO DEMOLITION LANDFILL ON SITE.

35. ANY WORK WITHIN THE CITY'S RIGHT-OF-WAY THAT REQUIRES CLOSURE OF A SIDEWALK OR TRAVEL LANE MUST BE APPROVED BY CDOT AND WILL REQUIRE A RIGHT-OF-WAY USE PERMIT OR RIGHT-OF-WAY LEASE DEPENDING UPON THE PROPOSED DURATION OF CLOSURE. THESE APPROVALS ARE IN ADDITION TO SITE APPROVALS AND SHOULD BE COORDINATED WITH CDOT PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CONTACT CDOT AT (704) 432-1562 AT LEAST 5 BUSINESS DAYS PRIOR TO BEGINNING WORK FOR IMPACTS LESS THAN 30 DAYS. EVERY EFFORT SHALL BE MADE TO CONSTRUCT IMPROVEMENTS WITH MINIMAL IMPACT TO DRIVERS AND PEDESTRIANS.

36. THE DEVELOPER SHALL CONTACT THE CHARLOTTE DEPARTMENT OF TRANSPORTATION (GUS JORDI, 704-336-7086) TO IDENTIFY ANY CONFLICTS WITH TRAFFIC SIGNALIZATION EQUIPMENT. 60-90 DAYS WILL BE REQUIRED TO COORDINATE RELOCATION. DEVELOPER SHALL BE RESPONSIBLE FOR ALL RELATED RELOCATION COST AND/OR ANY REPAIR COST CAUSED BY THE CONTRACTOR/DEVELOPER.

37. DEVELOPER TO CONTACT CDOT (ANTHONY MENDEZ: 704-336-4971) DURING SITE PLAN PREPARATION TO DISCUSS STREET LIGHTING REQUIREMENTS, IF ANY, FOR THIS PROJECT. COORDINATE WITH DUKE ENERGY AND CDOT AS NECESSARY TO DETERMINE LIGHTING LEVELS, LIGHTING LAYOUT AND REQUIREMENTS FOR INSTALLATION.



# CONTACT INFORMATION

**COLTRANE DEVELOPMENT COMPANY** CONTACT: PANCHALI SAU ADDRESS: 1233 THE PLAZA, UNIT 5492 CHARLOTTE, NC 28202

CIVIL ENGINEER & LANDSCAPE ARCHITECT URBAN DESIGN PARTNERS CONTACT: BRIAN D. SMITH, PE

PHONE: 704-649-5628

ADDRESS: 1318-E6 CENTRAL AVENUE CHARLOTTE, NC 28205 PHONE: 704-334-3303 FAX: 704-334-3305

# APPROVED FOR **CONSTRUCTION**

Y: Joshua Weaver 4-12-2018

### Sheet Index

C-7.0

C-7.1

LS-2.0

Sheet Number Sheet Title Cover Sheet **Existing Conditions** C-3.1 Open Space Plan Grading & Storm Drainage Plan C-4.0 Road Profile - Private Driveway Storm Drainage Area Plan C-4.2 C-5.0 Utility Plan Sanitary Sewer Profile C-5.1 C-6.0 Erosion Control - Phase 1 Erosion Control - Phase 2

PROJECT START DATE: 01/01/2018 PROJECT END DATE: 08/17/2018

Erosion Control - Phase 3

**Erosion Control Details** 

Turning Movement

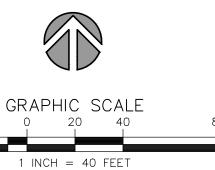
Landscape Details

Landscape Plan

Site Specifications & Details

Intersection Sight Distance



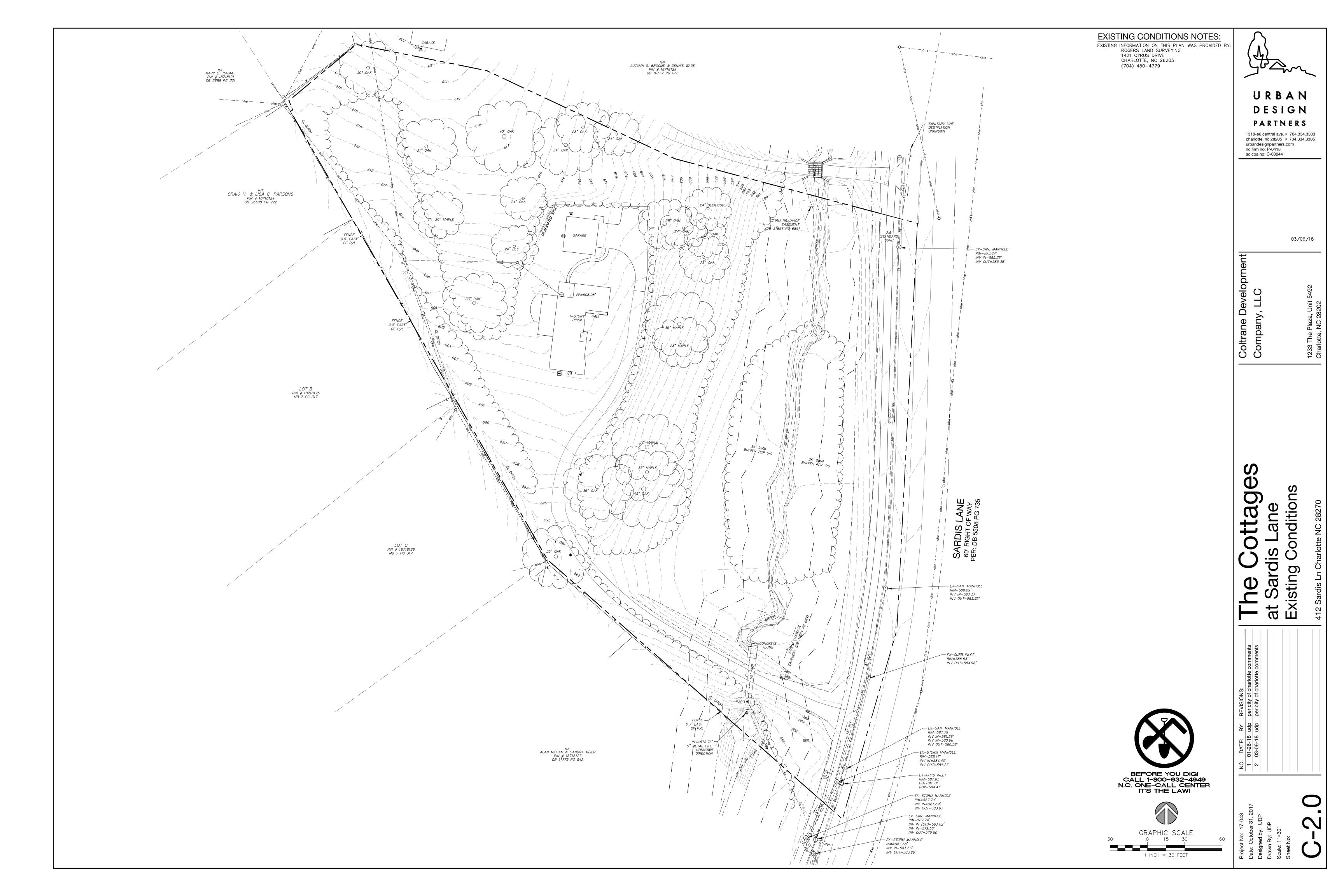


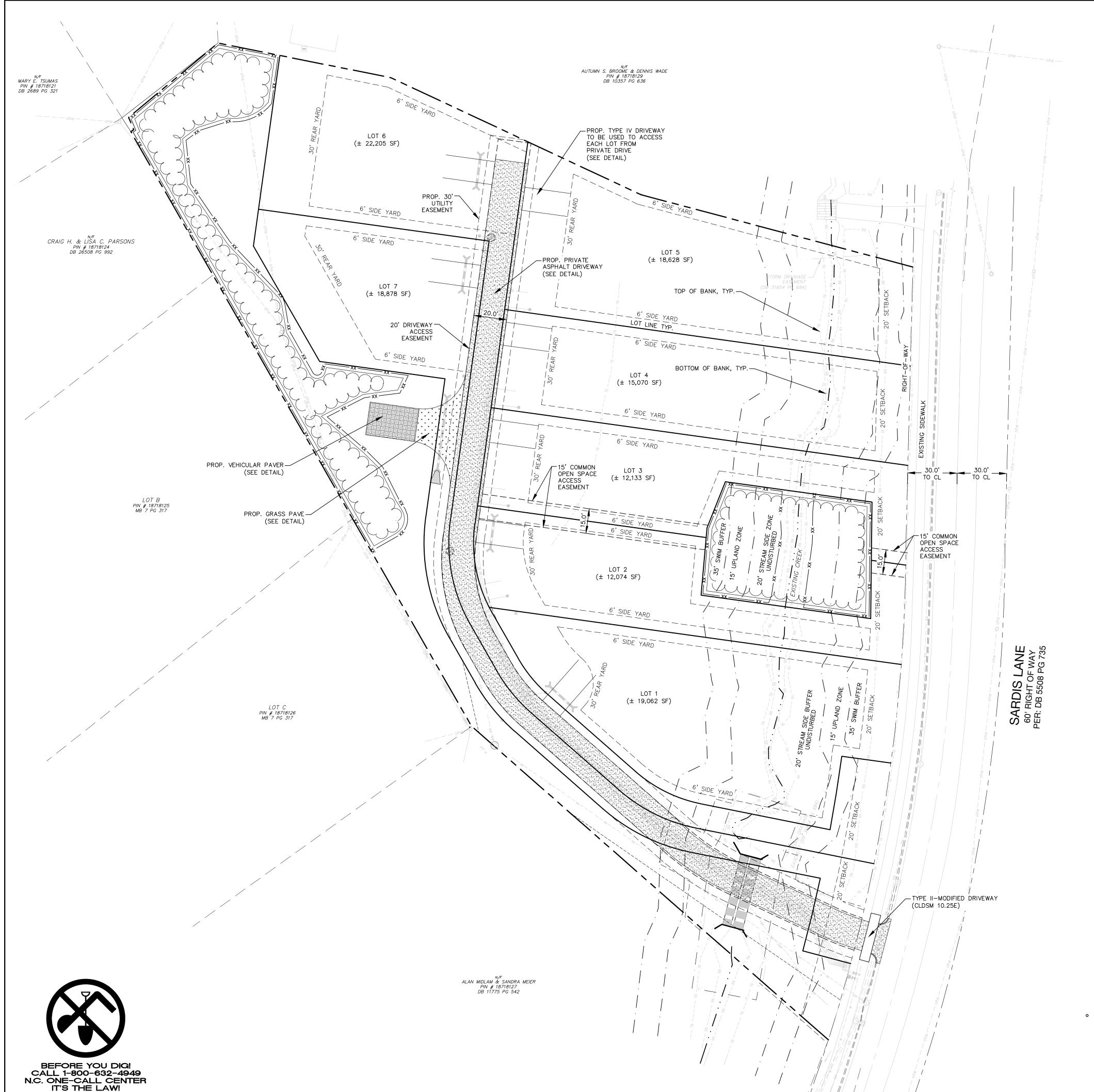


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### LOT BUA SUMMARY

		Area Breakdown				
		Lot Built-Upon Area Breakdown				
Lot No:	Max. Impervious Allowed (sf)	Lot area (sf)	Lot BUA			
1	3,526	19,062	18%			
2	3,526	12,074	29%			
3	3,526	12,133	29%			
4	3,526	15,070	23%			
5	3,526	18,628	19%			
6	3,526	22,205	16%			
7	3,526	18,878	19%			

DEVELOPMENT SUM	MARY
TAX PARCEL ID #:	187-181-28
TOTAL SITE AREA:	155,509 SF (3.57 AC)
EXISTING ZONING:	R-3 (CLUSTER PROVISIONS)
SETBACKS: FRONT: SIDE: REAR:	20 FT 6 FT 30 FT
MIN. LOT SIZE:	12,000 SF
MAX. BUILDING HEIGHT:	40 FT
PROPOSED USE:	RESIDENTIAL
TREE SAVE AREA: REQUIRED: PROPOSED:	15,551 SF (155,509 SF @ 10%) 28,301SF (18% OF SITE)
COMMON OPEN SPACE: REQUIRED: PROPOSED:	15,551 SF (155,509 SF @ 10%) 26,414 SF (17% OF SITE)

### NOTES:

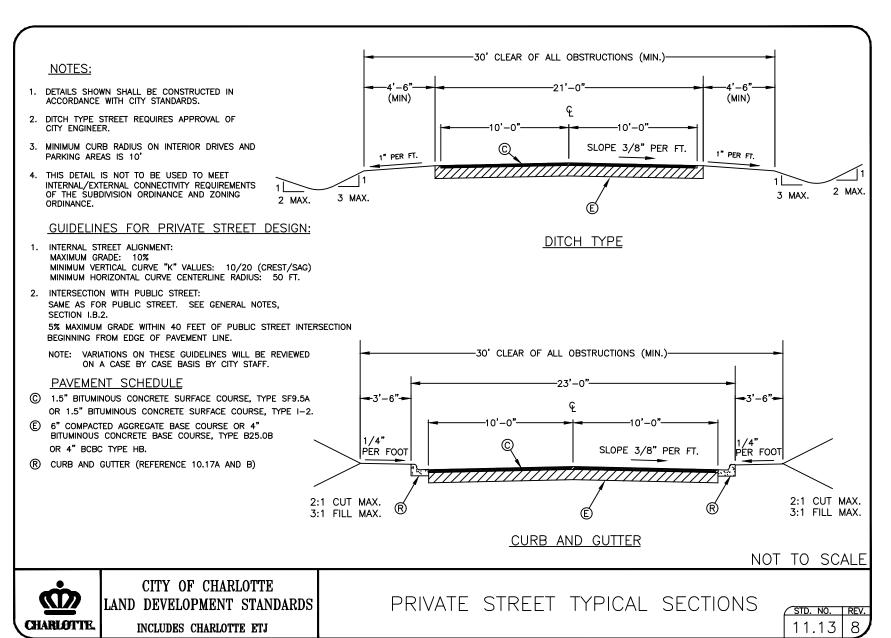
1. BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY:
ROGERS LAND SURVEYING
1421 CYRUS DRIVE CHARLOTTE, NC 28205 (704) 450-4779

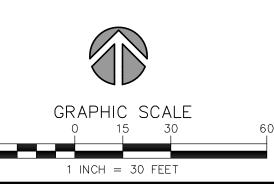
2. CONTACT THE UTILITY COMPANY TO RELOCATE ANY EXISTING UTILITY POLES. ALL EXISTING FACILITIES WHICH CONFLICT WITH THE IMPROVEMENTS UNDER THE SCOPE OF THIS PROJECT MUST BE RELOCATED AT THE EXPENSE OF THE APPLICANT.

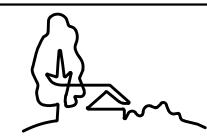
3. ALL DEVELOPMENT CREATING A TOTAL 20,000 SQUARE FEET OF IMPERVIOUS AREA SINCE SEPTEMBER 1978 WILL REQUIRE STORM DRAINAGE DETENTION.

4. TREES WITHIN THE STREET RIGHT-OF-WAY ARE PROTECTED BY LAW. PERMIT REQUIRED FOR REMOVAL BY CITY OF CHARLOTTE LANDSCAPE MANAGEMENT AT 704-336-4262. ALL TREES OVER 8-INCHES IN DIAMETER (4.5-FT ABOVE GROUND) IN SETBACK AREA ARE PROTECTED BY LAW. PERMIT REQUIRED FOR REMOVAL BY CITY ENGINEERING AT 704-336-6692.

5. TYPE IV DRIVEWAYS SHALL BE INSTALLED FOR FUTURE PRIVATE LOT DRIVEWAY ENTRIES. REFER TO DETAIL CLDSM: 10.25F ON SHEET C-7.0.







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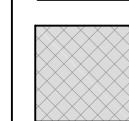


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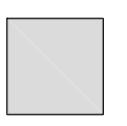
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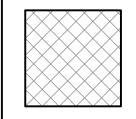




COMMON OPEN SPACE, TREE SAVE AREA & PCO NATURAL AREA (17,520 SF) = 11%



COMMON OPEN SPACE (14,611 SF) = 10%



PCO NATURAL AREA (22,716 SF) = 15%

TREE SAVE: 3.57 AC - TOTAL SITE ACREAGE

10% REQUIRED = 0.36 AC (15,550 SF)
0.40 AC (17,520 SF) PROVIDED
IF ANY PORTION OF THE TSA CANNOT BE PROTECTED, 1.5 ACRES
MUST BE PROVIDED FOR TREES TO BE REPLANTED AT THE RATE OF
36 TREES PER ACRE.

NATURAL AREA: 3.57 AC - TOTAL SITE ACREAGE 25% REQUIRED = 0.89 AC (38,877 SF) 0.92 AC (40,236 SF) PROVIDED

COMMON OPEN SPACE: 3.57 AC - TOTAL SITE ACREAGE 10% REQUIRED = 0.36 AC (15,550 SF) 0.74 AC (32,131 SF) PROVIDED



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ottage

1 INCH = 30 FEET

# GRADING AND STORM DRAINAGE NOTES:

1. ON-SITE BURIAL PITS REQUIRE A PERMIT.

2. ANY GRADING DONE BEYOND THE DENUDED LIMITS INDICATED ON THE CONSTRUCTION DOCUMENTS IS A VIOLATION AND IS SUBJECT TO A FINE.

3. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION AND IS SUBJECT TO A FINE.

4. ALL FINAL CURB AND STREET GRADES AT INTERSECTIONS SHALL BE COORDINATED WITH INSPECTOR.

5. SIGHT TRIANGLES INDICATED ARE THE MINIMUM REQUIRED.

6. APPROVAL OF CONSTRUCTION DOCUMENTS IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION SHALL BE OBTAINED BY CONTRACTOR FROM THE AFFECTED PROPERTY OWNERS.

7. IN ORDER TO ENSURE PROPER DRAINAGE, CONTRACTOR SHALL MAINTAIN A MINIMUM OF 0.5% SLOPE ON THE CURB.

8. SUBSURFACE DRAINAGE FACILITIES MAY BE REQUIRED IN THE STREET RIGHT OF WAY IF DEEMED NECESSARY BY THE INSPECTOR.

9. THE CONTRACTOR SHALL MAINTAIN EACH STREAM, CREEK OR BACKWASH CHANNEL IN AN UNOBSTRUCTED CONDITION AND SHALL REMOVE FROM THESE AREAS ALL DEBRIS, LOGS, TIMBER, TRASH, JUNK AND OTHER ACCUMULATIONS. 10. ANY CONSTRUCTION OR USE WITHIN THE AREAS DELINEATED AS FLOODWAY DISTRICT FRINGE BOUNDARY LINE OR FLOODWAY DISTRICT ENCROACHMENT BOUNDARY LINE IS SUBJECT TO THE RESTRICTIONS IMPOSED BY THE FLOODWAY

11. THE LOCAL ENGINEERING DEPARTMENT HAS NOT REVIEW AND DOES NOT ASSUME RESPONSIBILITY FOR THE STRUCTURAL STABILITY OF ANY EXISTING OR PROPOSED RETAINING WALLS ON THE SITE.

12. NON-STANDARD ITEMS (I.E.: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT OF WAY REQUIRE A LOCAL OR STATE ENCROACHMENT AGREEMENT PRIOR

13. ALL "CLDSM" NUMBERS REFER TO THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL.

14. ALL SIDEWALKS, STOOPS, TERRACES AND OTHER PAVED AREAS SHALL SLOPE AWAY FROM BUILDING(S) AT A MINIMUM OF 2%.

15. CONTRACTOR SHALL CONTACT INSPECTOR 48 HOURS BEFORE

16. STABILIZE ALL SLOPES GREATER THAN 3:1 WITH JUTE MESH. 17. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK WHICH MUST BE

VERIFIED BY THE CONTRACTOR PRIOR TO STARTING CONSTRUCTION.

18. ALL CONTOURS AND SPOT ELEVATIONS REFLECT FINISHED GRADES. REFER TO PAVEMENT CROSS—SECTION DATA TO ESTABLISH CORRECT SUB—BASE, AGGREGATE BASE COURSE ELEVATIONS TO BE COMPLETED UNDER THIS

19. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY WITH EXISTING CONTOURS.

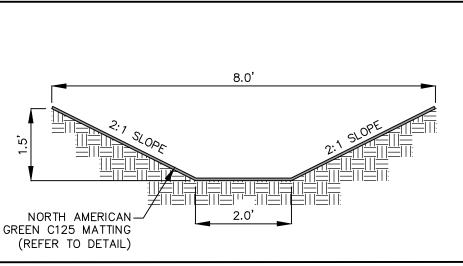
IF ANY DISCREPANCY IN ELEVATION, AS NOTED ON THE GRADING PLAN, OCCURS ON SITE DURING CONSTRUCTION THE GENERAL CONTRACTOR IS TO CONTACT THE LANDSCAPE ARCHITECT AND CIVIL ENGINEER IMMEDIATELY.

DRIVEWAYS AND CROSS-PIPE LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS TO BE DETERMINED IN THE FIELD WITH CONSTRUCTION OF THE HOUSE

## LOT BUA SUMMARY

Lot Built-Upon Area Breakdown					
Lot No:	Max. Impervious Allowed (sf)	Lot area (sf)	Lot BUA		
1	3,526	19,062	18%		
2	3,526	12,074	29%		
3	3,526	12,133	29%		
4	3,526	15,070	23%		
5	3,526	18,628	19%		
6	3,526	22,205	16%		
7	3,526	18,878	19%		

PIPE TABLE								
PiPE	SIZE	LENGTH	SLOPE	INV. OUT	INV. IN			
Lot 7	15	20	1.10%	610.80	610.58			
Lot 6	15	20	2.20%	608.00	607.56			
Lot 2	15	20	5.25%	599.00	597.95			
Lot 1	15	20	4.75%	590.00	589.05			
Drive Turn around	15	44	4.70%	603.80	601.71			



POST CONSTRUCTION SUMMARY TAX PARCEL NUMBER: 187-181-28 DEVELOPMENT TYPE: SINGLE-FAMILY SUBJECT TO PCCO: YES CENTRAL CATAWBA POST CONSTRUCTION DISTRICT: \_ \_ \_ ohe \_ \_ \_ \_ DISTURBED AREA: 1.52 AC N/F AUTUMN S. BROOME & DENNIS WADE DRAINAGE AREA: 3.57 AC - DENUDED LIMITS **EXISTING IMPERVIOUS:** HOUSE: 1,993 SF GARAGE: 744 SF GRAVEL ROAD: 4,320 SF CONCRETE: 1,678 SF TOTAL IMPERVIOUS: 8,736 (0.20 AC) LOT 6 ± (± 22,205 SF) **EXISTING BUILT-UPON AREA:** 6% CLEARING AND SILT FENCE TO BE INSTALLED DURING PROPOSED IMPERVIOUS: HOUSE CONSTRUCTION COMBINED ALLOWED LOT IMP.: 24,679 SF (3,727 SF/LOT) PRIVATE DRIVE: 10,688 SF TOTAL IMPERVIOUS: 35,367 SF (0.84 AC) PROPOSED BUILT-UPON-AREA: 23.6% DENSITY: LOW (< 24% BUA) & LÏŜA C. PARSONS **DEVELOPMENT OR REDEVELOPMENT:** DEVELOPMENT NATURAL AREA REQUIRED: 0.89 AC (25%) (± 18,6/28/SF) NATURAL AREA PROVIDED: 0.94 AC (26.3 %) SWPE: 590.60 UNDISTURBED TREED NATRUAL AREA 20,812 SF (0.47 AC) (± 18,878 SF) PRESERVED: STREAM BUFFER PROTECTED ONSITE: 38,797 SF (0.89 AC) PROP. TREE PROTECTION-PROP. DRAINAGE SWALE -FENCING ALONG 35' TRANSIT STATION: TO BE MATTED WITH STREAM BUFFER NORTH AMERICAN GREEN C125 (CLDSM: 40.02) (REFER TO DETAIL) DISTRESSED BUSINESS DISTRICT: · EI、 MITIGATION TYPE: (± 15,070 SF) NATURAL AREA MITIGATION: NO SWPE: 590.60 **BUFFER MITIGATION:** TOTAL PHOSPHORUS MITIGATION: NO 

CULVERT REPLACEMENT BY CITY OF CHARLOTTE "SARDIS LANE STORM WATER PROJECT" (NO: SWDES-00164)

RIM=588.53' INV OUT=584.96'

RIM=588.17' INV IN=584.40'

 $(\pm 1/2,13/3 \text{ SF})$ 

PROP. DRAINAGE SWALE

(± 12,074 \$F) SWPE: 590.60

(REFER TO DETAIL)

TO BE MATTED WITH NORTH AMERICAN GREEN C125

Coltran Plan rair (1)

URBAN

DESIGN

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charlotte, nc 28205 F 704.334.3305

03/06/18

urbandesignpartners.com

nc firm no: P-0418

sc coa no: C-03044



GRAPHIC SCALE

1 INCH = 30 FEET

BEFORE YOU DIG! CALL 1-800-632-4949 N.C. ONE-CALL CENTER IT'S THE LAW!

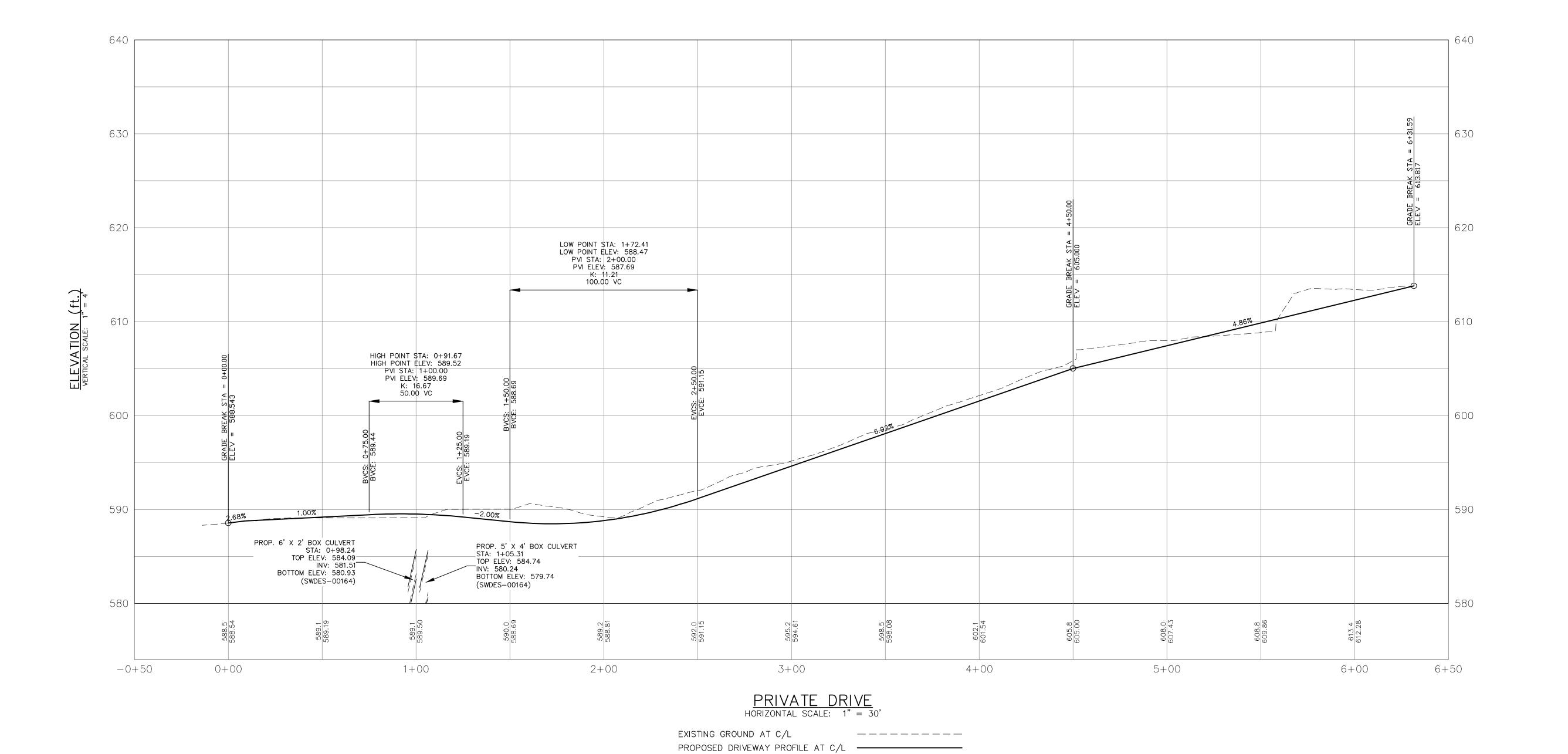
- EX-CURB INLET RIM=587.65' BOTTOM OF BOX=584.41' - EX-STORM MANHOLE RIM=587.79' TYPICAL DRAINAGE SWALE

N/F ALAN MIDLAM & SANDRA MEIER PIN # 18718127 DB 11775 PG 542

DENUDED LIMITS — (± 1.13 AC)

LOT C PIN # 18718126 MB 7 PG 317

DENUDED LIMITS -1.91 AC



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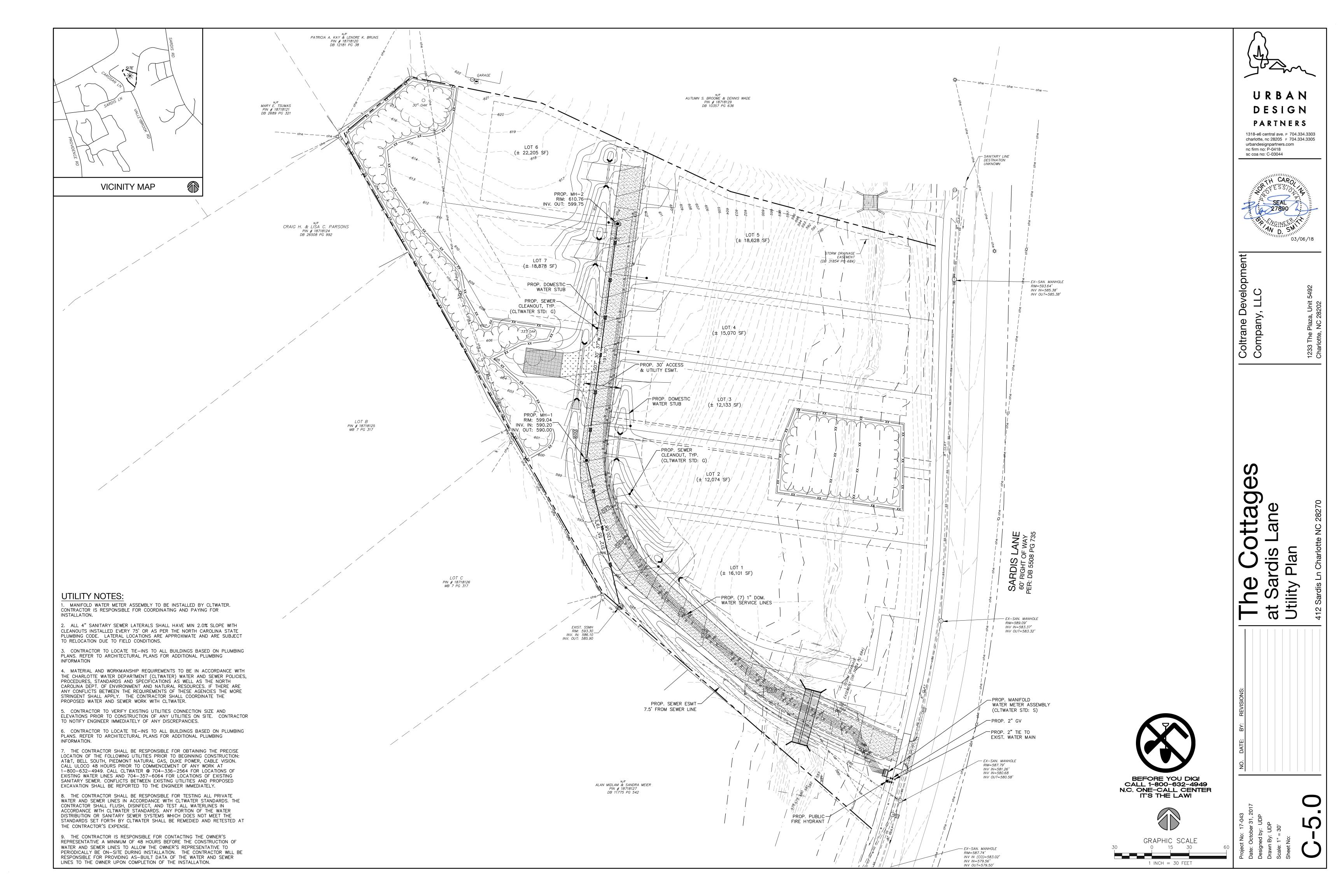
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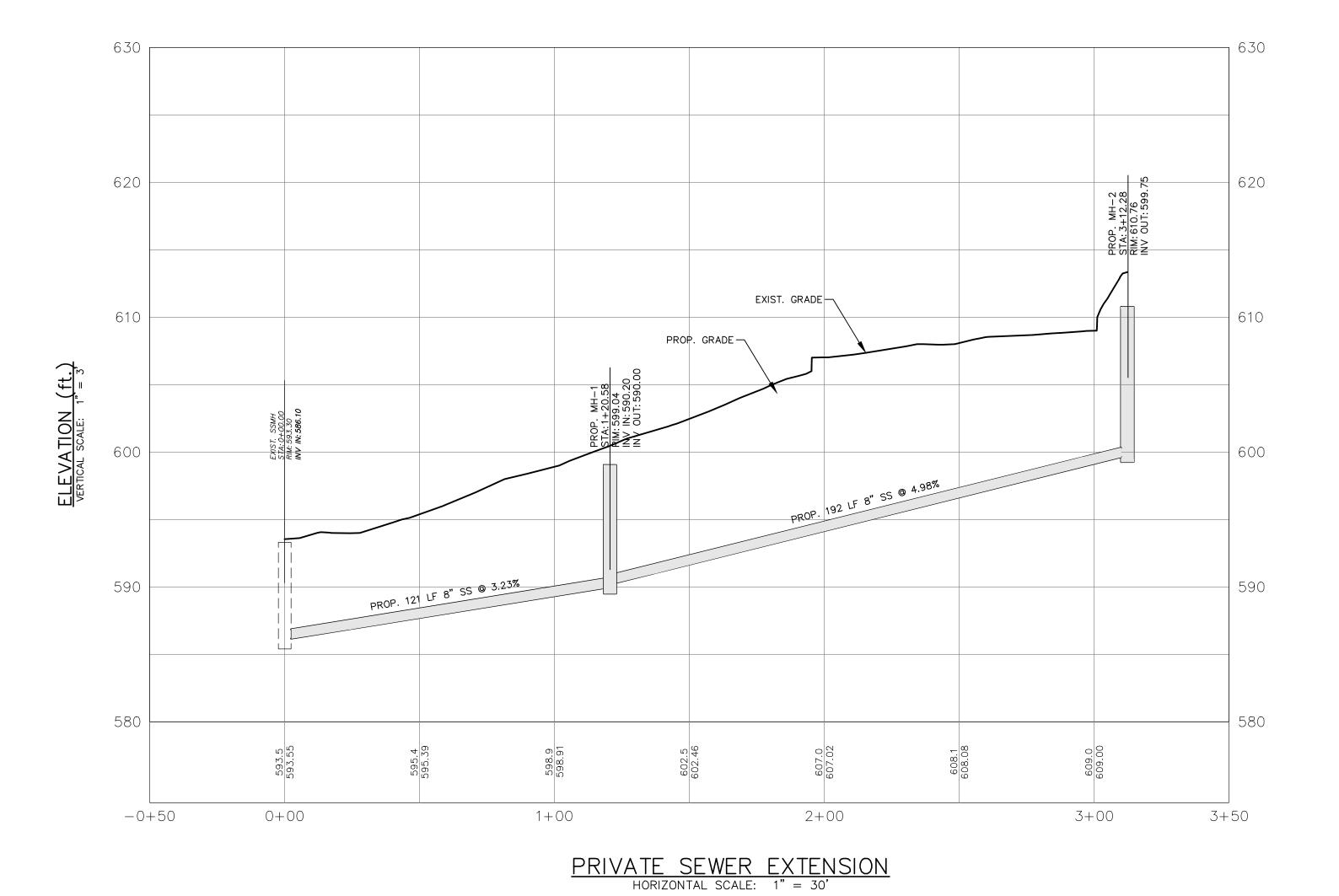
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EXISTING GROUND ——————— PROPOSED GROUND ----

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URBAN

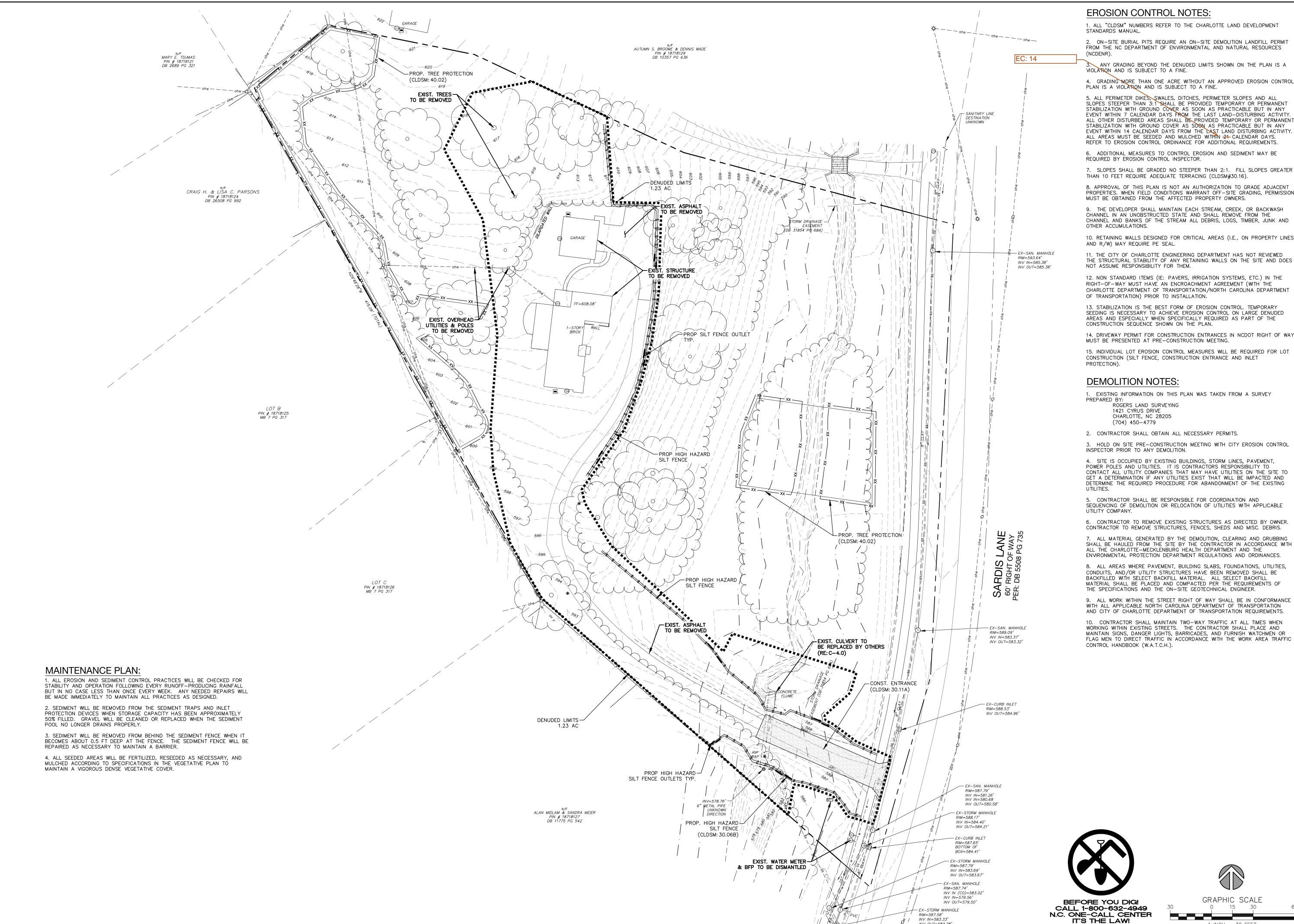
DESIGN

PARTNERS

Coltrane Development Company, LLC

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### **EROSION CONTROL NOTES:**

1. ALL "CLDSM" NUMBERS REFER TO THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL.

2. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE NC DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES

3. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION AND IS SUBJECT TO A FINE.

4. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION AND IS SUBJECT TO A FINE.

5. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1 SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY. ALL AREAS MUST BE SEEDED AND MULCHED WITHIN 21 CALENDAR DAYS. REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.

6. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY EROSION CONTROL INSPECTOR.

7. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10 FEET REQUIRE ADEQUATE TERRACING (CLDSM#30.16). 8. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT

9. THE DEVELOPER SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN AN UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TIMBER, JUNK AND OTHER ACCUMULATIONS.

10. RETAINING WALLS DESIGNED FOR CRITICAL AREAS (I.E., ON PROPERTY LINES AND R/W) MAY REQUIRE PE SEAL.

11. THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT HAS NOT REVIEWED THE STRUCTURAL STABILITY OF ANY RETAINING WALLS ON THE SITE AND DOES NOT ASSUME RESPONSIBILITY FOR THEM.

12. NON STANDARD ITEMS (IE: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY MUST HAVE AN ENCROACHMENT AGREEMENT (WITH THE CHARLOTTE DEPARTMENT OF TRANSPORTATION/NORTH CAROLINA DEPARTMENT OF TRANSPORTATION) PRIOR TO INSTALLATION.

13. 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.

14. DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING.

15. INDIVIDUAL LOT EROSION CONTROL MEASURES WILL BE REQUIRED FOR LOT CONSTRUCTION (SILT FENCE, CONSTRUCTION ENTRANCE AND INLET

### **DEMOLITION NOTES:**

1. EXISTING INFORMATION ON THIS PLAN WAS TAKEN FROM A SURVEY ROGERS LAND SURVEYING 1421 CYRUS DRIVE CHARLOTTE, NC 28205 (704) 450-4779

2. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS.

3. HOLD ON SITE PRE-CONSTRUCTION MEETING WITH CITY EROSION CONTROL INSPECTOR PRIOR TO ANY DEMOLITION.

4. SITE IS OCCUPIED BY EXISTING BUILDINGS, STORM LINES, PAVEMENT, POWER POLES AND UTILITIES. IT IS CONTRACTORS RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES THAT MAY HAVE UTILITIES ON THE SITE TO GET A DETERMINATION IF ANY UTILITIES EXIST THAT WILL BE IMPACTED AND DETERMINE THE REQUIRED PROCEDURE FOR ABANDONMENT OF THE EXISTING

5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND SEQUENCING OF DEMOLITION OR RELOCATION OF UTILITIES WITH APPLICABLE

6. CONTRACTOR TO REMOVE EXISTING STRUCTURES AS DIRECTED BY OWNER.

7. ALL MATERIAL GENERATED BY THE DEMOLITION, CLEARING AND GRUBBING SHALL BE HAULED FROM THE SITE BY THE CONTRACTOR IN ACCORDANCE WITH ALL THE CHARLOTTE-MECKLENBURG HEALTH DEPARTMENT AND THE ENVIRONMENTAL PROTECTION DEPARTMENT REGULATIONS AND ORDINANCES.

8. ALL AREAS WHERE PAVEMENT, BUILDING SLABS, FOUNDATIONS, UTILITIES, CONDUITS, AND/OR UTILITY STRUCTURES HAVE BEEN REMOVED SHALL BE BACKFILLED WITH SELECT BACKFILL MATERIAL. ALL SELECT BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED PER THE REQUIREMENTS OF THE SPECIFICATIONS AND THE ON-SITE GEOTECHNICAL ENGINEER.

9. ALL WORK WITHIN THE STREET RIGHT OF WAY SHALL BE IN CONFORMANCE WITH ALL APPLICABLE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND CITY OF CHARLOTTE DEPARTMENT OF TRANSPORTATION REQUIREMENTS.

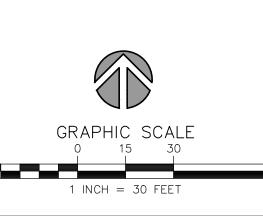
10. CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES WHEN WORKING WITHIN EXISTING STREETS. THE CONTRACTOR SHALL PLACE AND MAINTAIN SIGNS, DANGER LIGHTS, BARRICADES, AND FURNISH WATCHMEN OR FLAG MEN TO DIRECT TRAFFIC IN ACCORDANCE WITH THE WORK AREA TRAFFIC

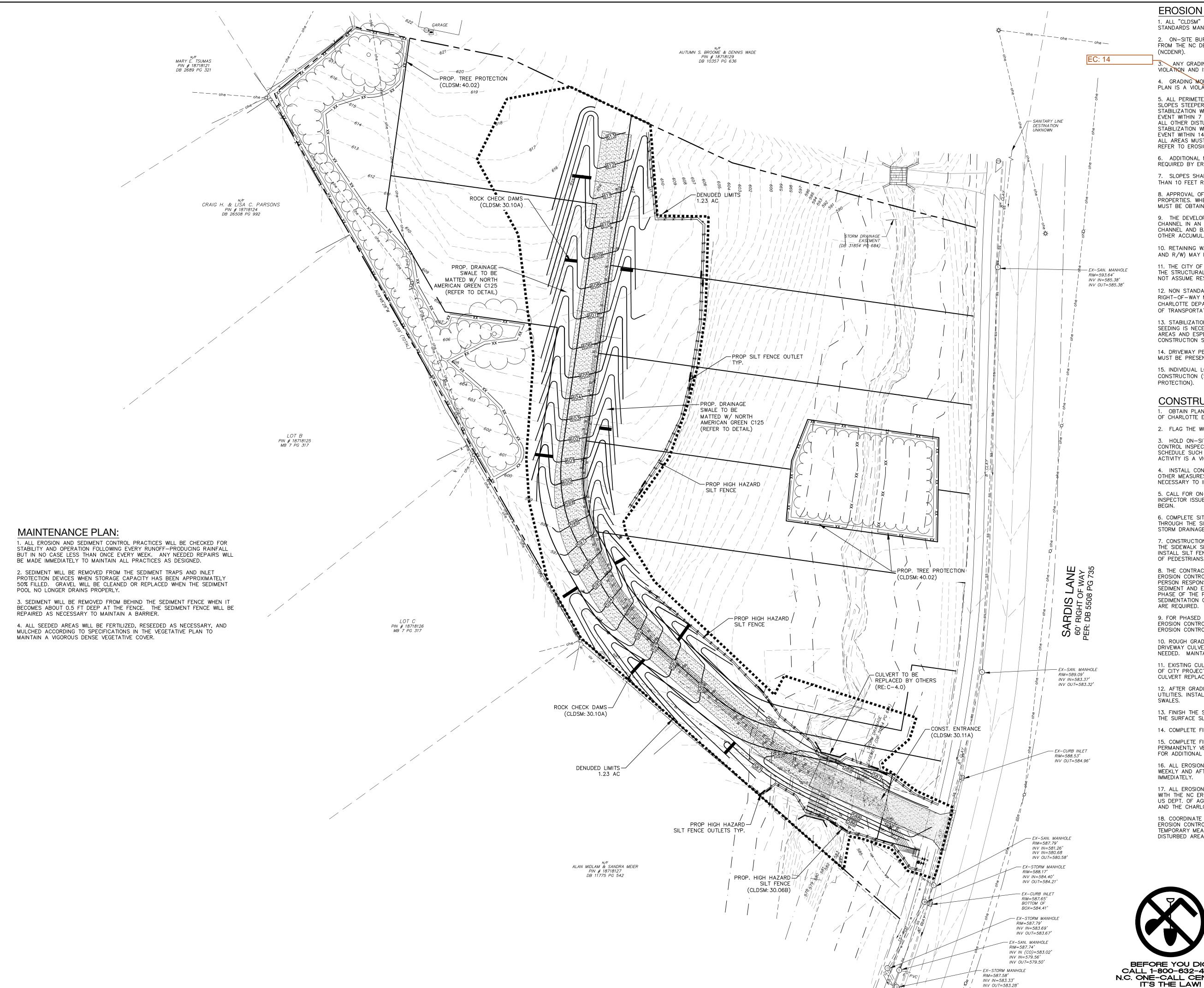


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### **EROSION CONTROL NOTES:**

1. ALL "CLDSM" NUMBERS REFER TO THE CHARLOTTE LAND DEVELOPMENT

2. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE NC DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES

3. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION AND IS SUBJECT TO A FINE.

4. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION AND IS SUBJECT TO A FINE.

5. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1 SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY.

6. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY EROSION CONTROL INSPECTOR.

ALL AREAS MUST BE SEEDED AND MULCHED WITHIN 21 CALENDAR DAYS.

REFER TO EROSION CONTROL ORDINANCE FOR ADDITIONAL REQUIREMENTS.

7. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10 FEET REQUIRE ADEQUATE TERRACING (CLDSM#30.16).

8. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION

9. THE DEVELOPER SHALL MAINTAIN EACH STREAM, CREEK, OR BACKWASH CHANNEL IN AN UNOBSTRUCTED STATE AND SHALL REMOVE FROM THE CHANNEL AND BANKS OF THE STREAM ALL DEBRIS, LOGS, TIMBER, JUNK AND OTHER ACCUMULATIONS.

MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.

10. RETAINING WALLS DESIGNED FOR CRITICAL AREAS (I.E., ON PROPERTY LINES AND R/W) MAY REQUIRE PE SEAL.

11. THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT HAS NOT REVIEWED THE STRUCTURAL STABILITY OF ANY RETAINING WALLS ON THE SITE AND DOES NOT ASSUME RESPONSIBILITY FOR THEM.

12. NON STANDARD ITEMS (IE: PAVERS, IRRIGATION SYSTEMS, ETC.) IN THE RIGHT-OF-WAY MUST HAVE AN ENCROACHMENT AGREEMENT (WITH THE CHARLOTTE DEPARTMENT OF TRANSPORTATION/NORTH CAROLINA DEPARTMENT OF TRANSPORTATION) PRIOR TO INSTALLATION.

13. 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. 14. DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING.

15. INDIVIDUAL LOT EROSION CONTROL MEASURES WILL BE REQUIRED FOR LOT CONSTRUCTION (SILT FENCE, CONSTRUCTION ENTRANCE AND INLET PROTECTION).

### **CONSTRUCTION SCHEDULE:**

STORM DRAINAGE PIPES.

. OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS FROM THE CITY OF CHARLOTTE EROSION CONTROL DEPARTMENT.

2. FLAG THE WORK LIMITS AND BUFFER AREAS FOR PROTECTION.

3. HOLD ON-SITE PRE-CONSTRUCTION CONFERENCE WITH CITY EROSION CONTROL INSPECTOR TO DISCUSS EROSION CONTROL MEASURES. FAILURE TO SCHEDULE SUCH CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION CODE AND IS SUBJECT TO A FINE.

4. INSTALL CONSTRUCTION ENTRANCE, SILT FENCE, TREE PROTECTION AND OTHER MEASURES AS SHOWN ON PLANS, COMPLETE DEMOLITION ONLY AS NECESSARY TO INSTALL THESE DEVICES.

5. CALL FOR ON-SITE INSPECTION BY INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND DEMOLITION MAY

6. COMPLETE SITE CLEARING. REMOVE OR RE-ROUTE EXISTING UTILITIES THROUGH THE SITE INCLUDING LIGHT POLES, UNDERGROUND UTILITIES AND

7. CONSTRUCTION ALONG SARDIS LANE SHALL BE HELD UNTIL LATER PHASES. THE SIDEWALK SHALL REMAIN OPEN FOR PEDESTRIANS. CONTRACTOR SHALL INSTALL SILT FENCE AND OTHER BARRIERS AS NEEDED TO ENSURE THE SAFETY

8. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL

EROSION CONTROL DEVICES AND STRUCTURES. EFFECTIVE OCTOBER 1, 2010 PERSON RESPONSIBLE FOR LAND DISTURBING ACTIVITIES MUST INSPECT THE SEDIMENT AND EROSION CONTROL MEASURES ON A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. SELF-INSPECTION REPORTS ARE REQUIRED.

9. FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.

10. ROUGH GRADE SITE, STOCKPILE TOPSOIL, CONSTRUCT CHANNELS, INSTALL DRIVEWAY CULVERTS, OUTLET PROTECTION, AND INSTALL SEDIMENT FENCE AS NEEDED. MAINTAIN DIVERSIONS ALONG TOP OF FILL SLOPES DAILY.

11. EXISTING CULVERT TO BE REPLACED BY THE CITY OF CHARLOTTE AS PART OF CITY PROJECT NUMBER SWDES-00164. CONTRACTOR TO COORDINATE CULVERT REPLACEMENT WITH THE CITY.

12. AFTER GRADING IS COMPLETE INSTALL STORM DRAINAGE AND OTHER UTILITIES. INSTALL MATTING AND ROCK CHECK DAMS IN PERMANENT DRAINAGE

13. FINISH THE SLOPES AS SOON AS ROUGH GRADING IS COMPLETE. LEAVE THE SURFACE SLIGHTLY ROUGHENED AND VEGETATE AND MULCH IMMEDIATELY.

15. COMPLETE FINAL GRADING OF GROUNDS, TOPSOIL CRITICAL AREAS, AND PERMANENTLY VEGETATE, LANDSCAPE, AND MULCH. REFER TO LANDSCAPE PLAN FOR ADDITIONAL INFORMATION.

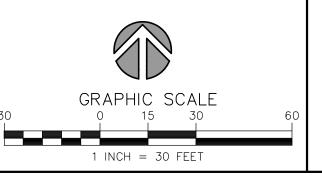
16. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER RAINFALL EVENTS. NEEDED REPAIRS WILL BE MADE

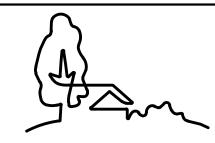
14. COMPLETE FINAL GRADING FOR STREETS AND STABILIZE WITH GRAVEL.

17. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NC EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL, US DEPT. OF AGRICULTURE, CITY OF CHARLOTTE EROSION CONTROL ORDINANCE, AND THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL.

18. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS PER THE LANDSCAPE PLAN.







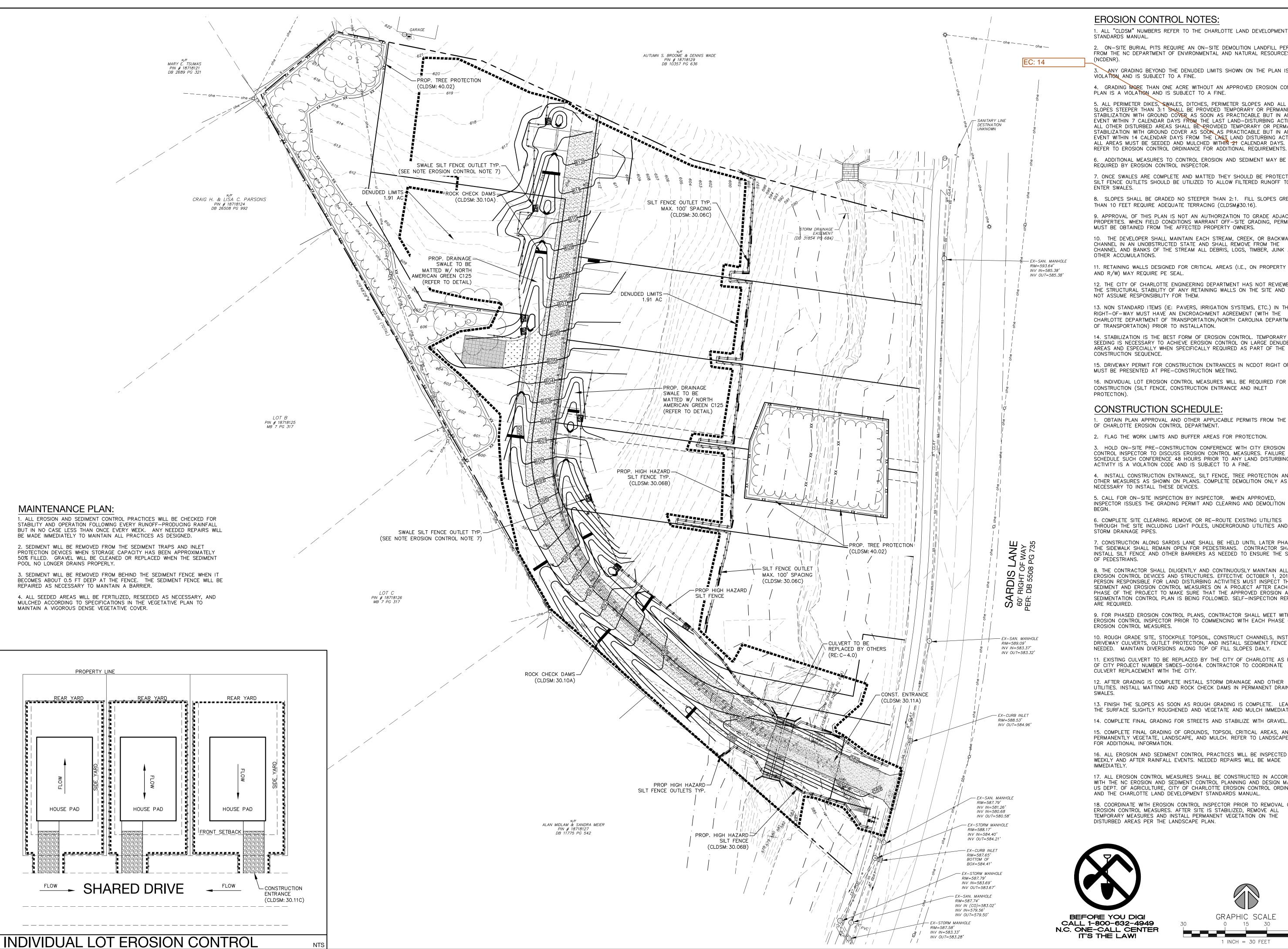
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### **EROSION CONTROL NOTES:**

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6. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY EROSION CONTROL INSPECTOR.

7. ONCE SWALES ARE COMPLETE AND MATTED THEY SHOULD BE PROTECTED. SILT FENCE OUTLETS SHOULD BE UTILIZED TO ALLOW FILTERED RUNOFF TO

8. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10 FEET REQUIRE ADEQUATE TERRACING (CLDSM#30.16).

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## CONSTRUCTION SCHEDULE:

OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS FROM THE CITY OF CHARLOTTE EROSION CONTROL DEPARTMENT.

2. FLAG THE WORK LIMITS AND BUFFER AREAS FOR PROTECTION.

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6. COMPLETE SITE CLEARING. REMOVE OR RE-ROUTE EXISTING UTILITIES THROUGH THE SITE INCLUDING LIGHT POLES, UNDERGROUND UTILITIES AND STORM DRAINAGE PIPES.

7. CONSTRUCTION ALONG SARDIS LANE SHALL BE HELD UNTIL LATER PHASES. THE SIDEWALK SHALL REMAIN OPEN FOR PEDESTRIANS. CONTRACTOR SHALL INSTALL SILT FENCE AND OTHER BARRIERS AS NEEDED TO ENSURE THE SAFETY OF PEDESTRIANS.

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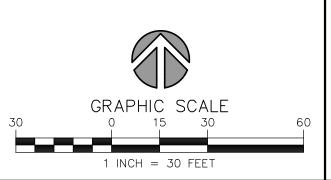
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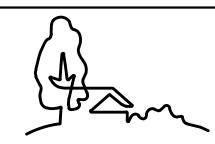
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18. COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES. AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS PER THE LANDSCAPE PLAN.

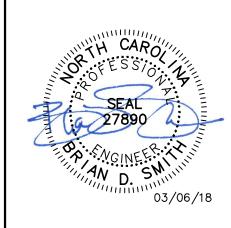






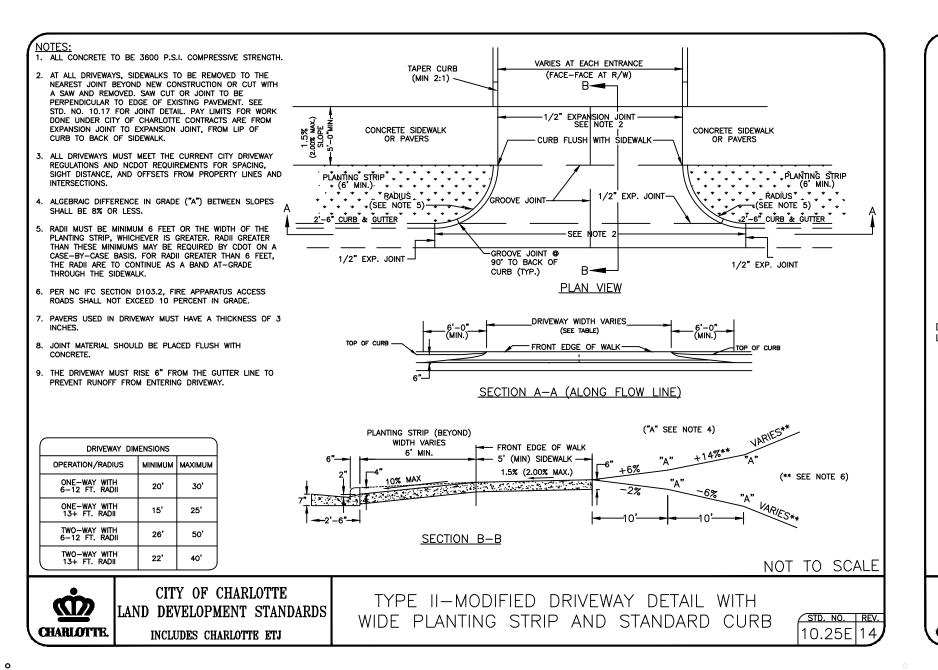
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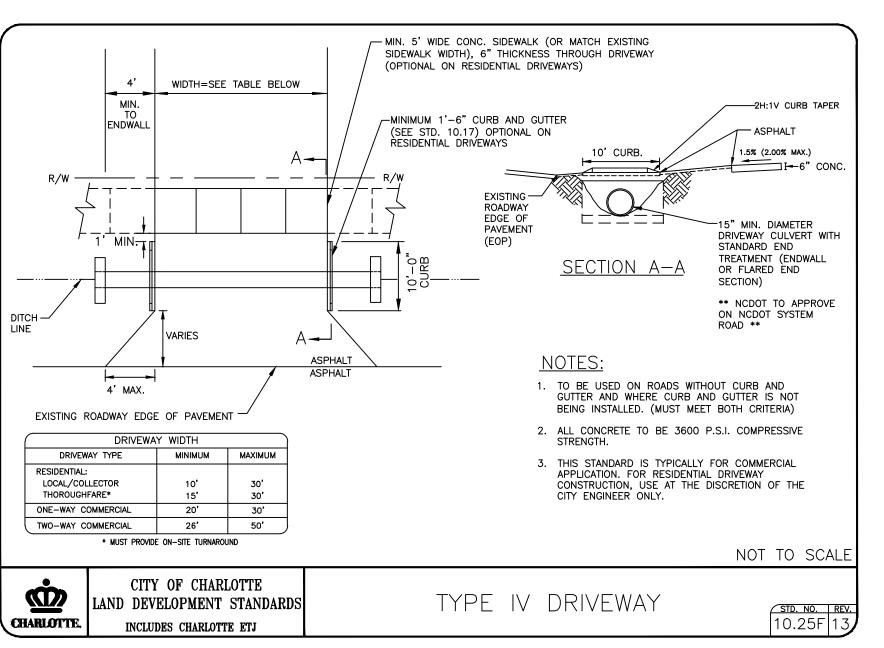
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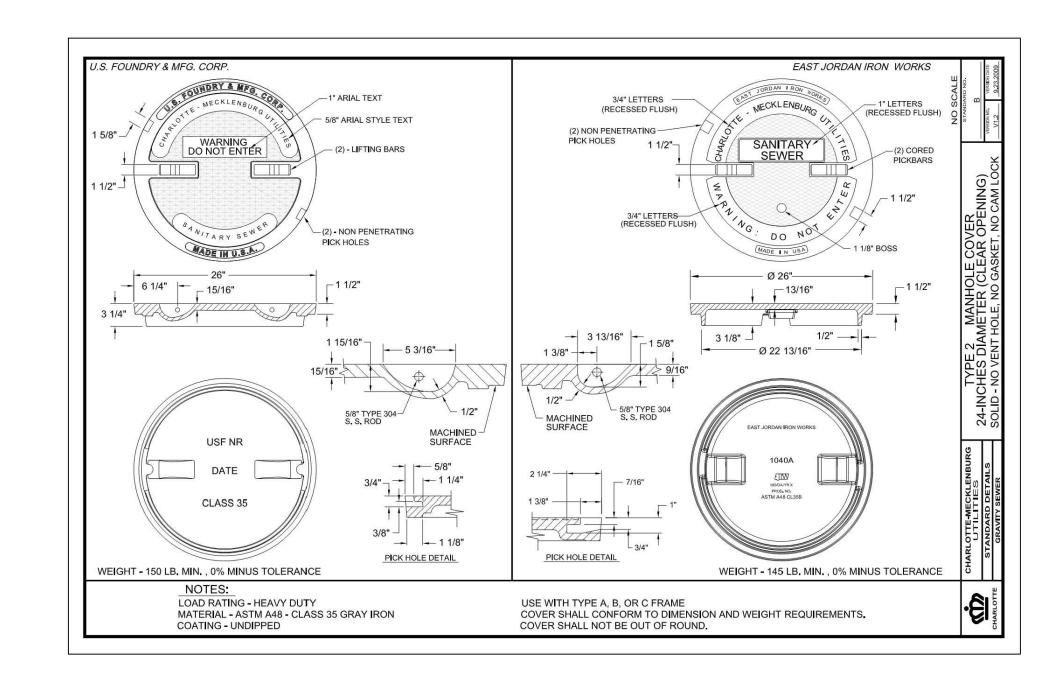


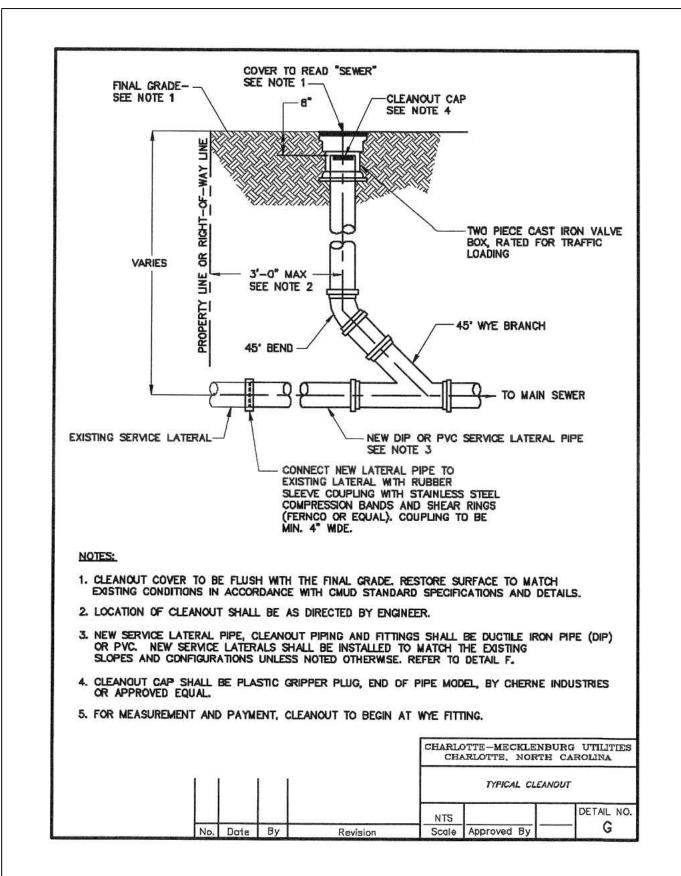
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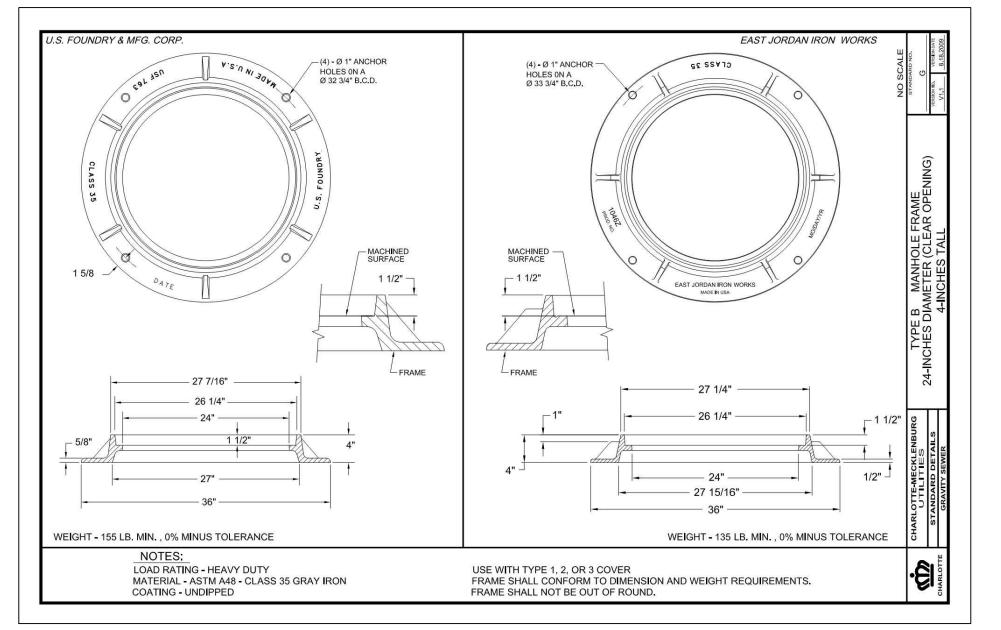
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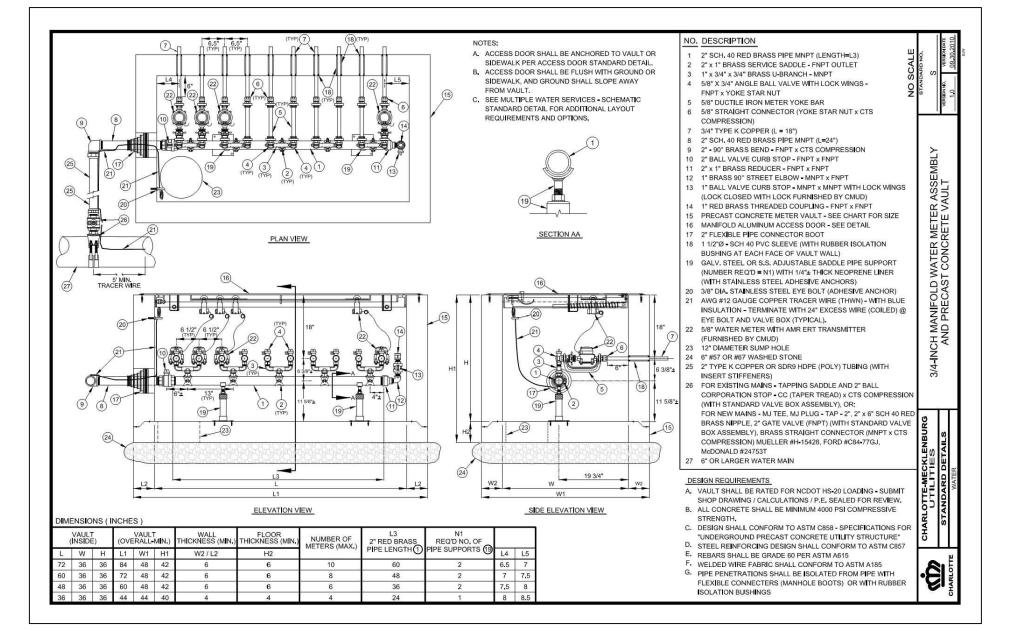


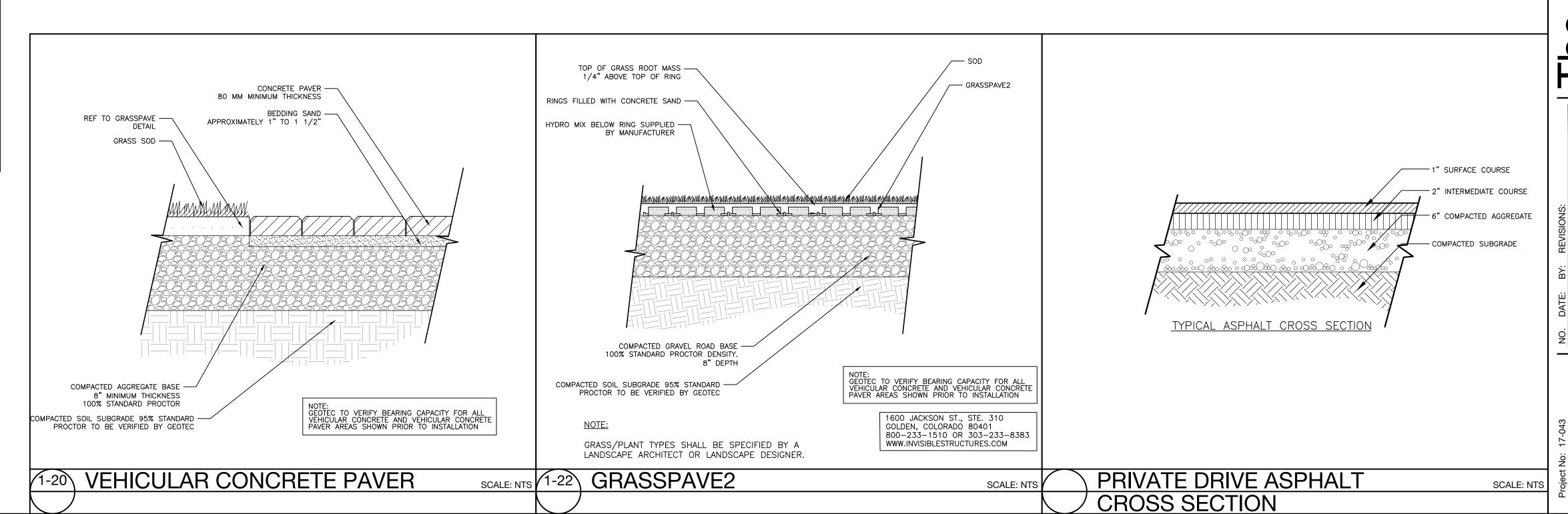












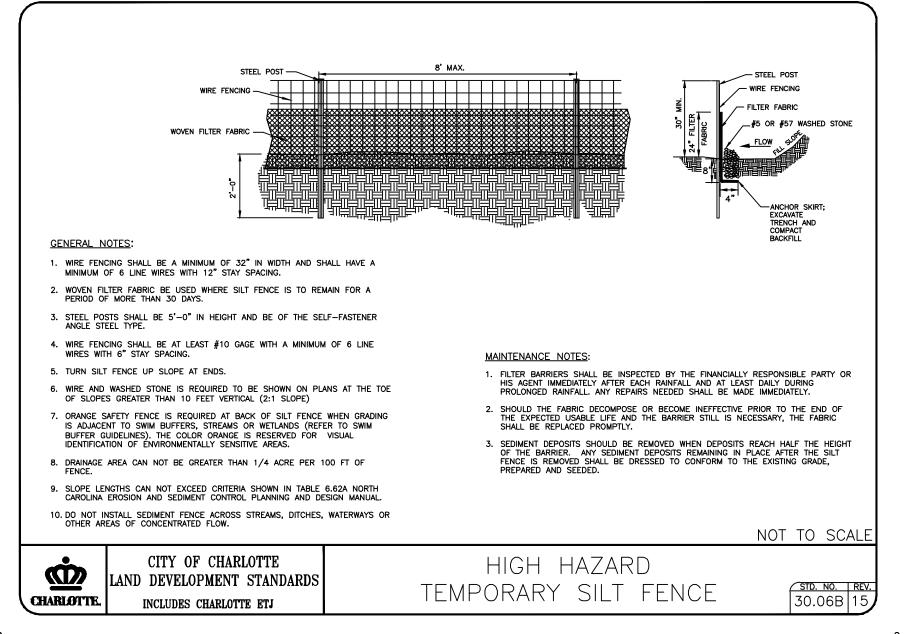


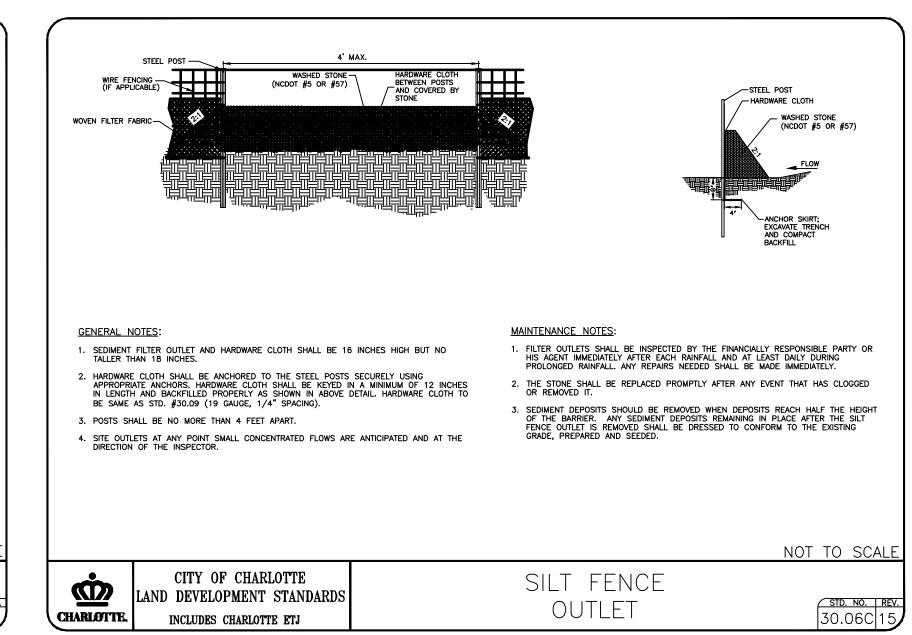
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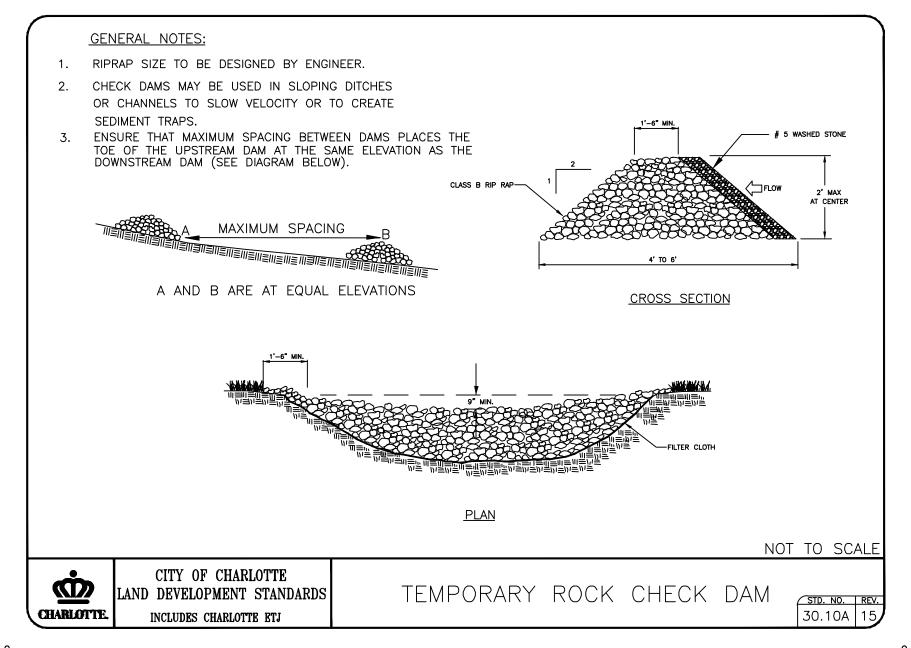
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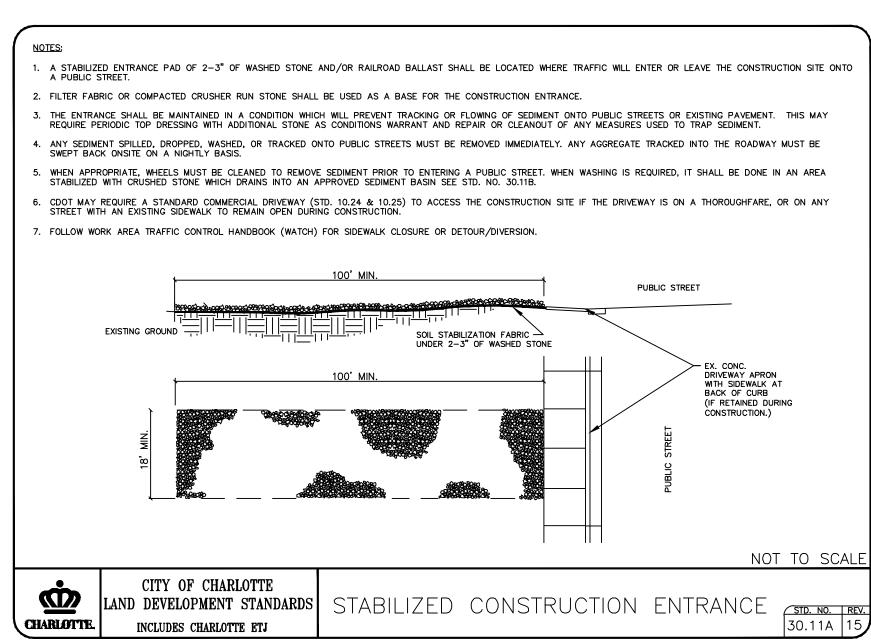
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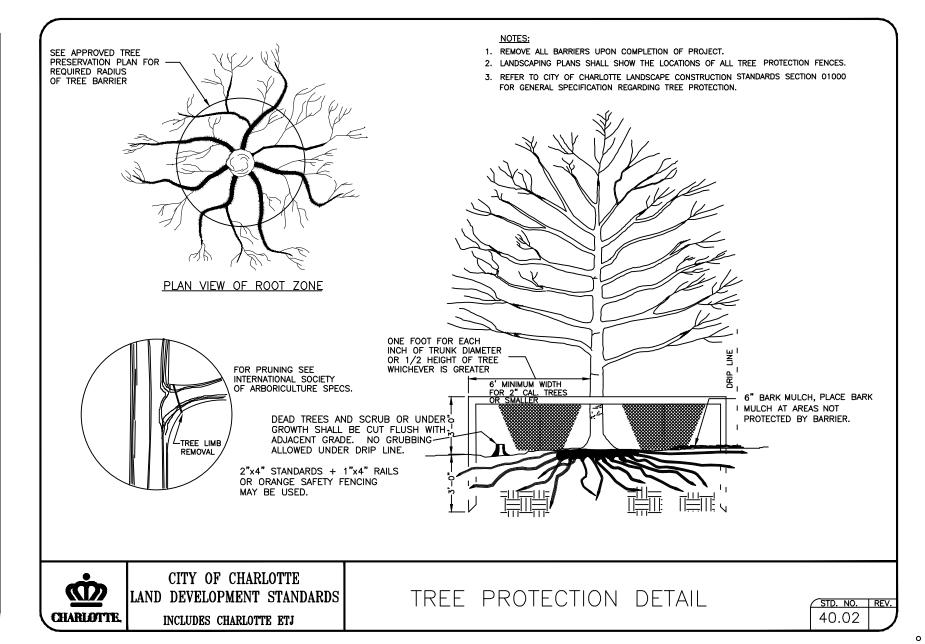
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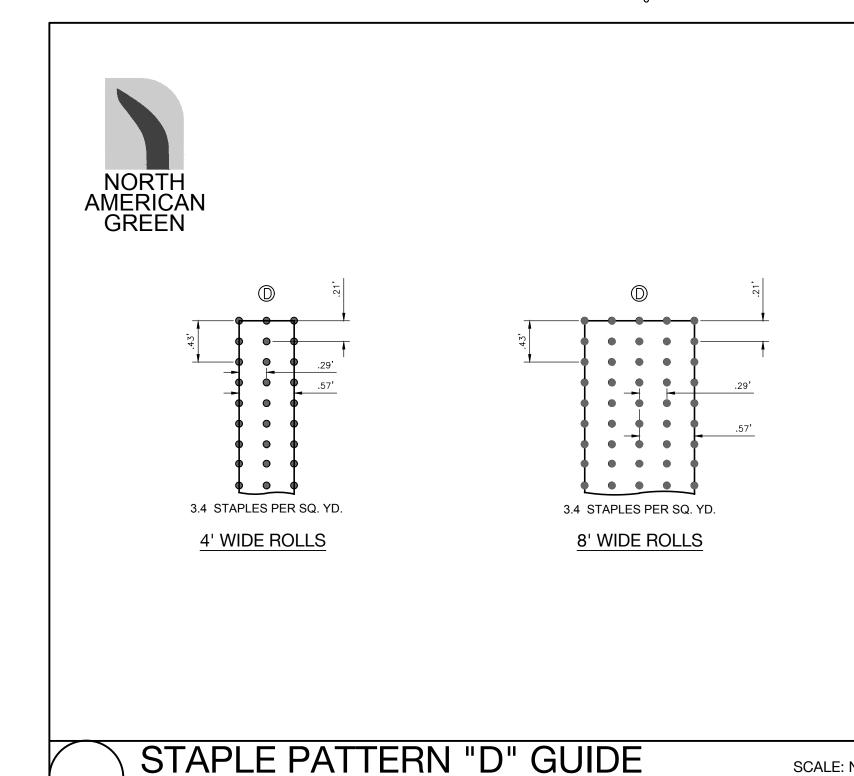


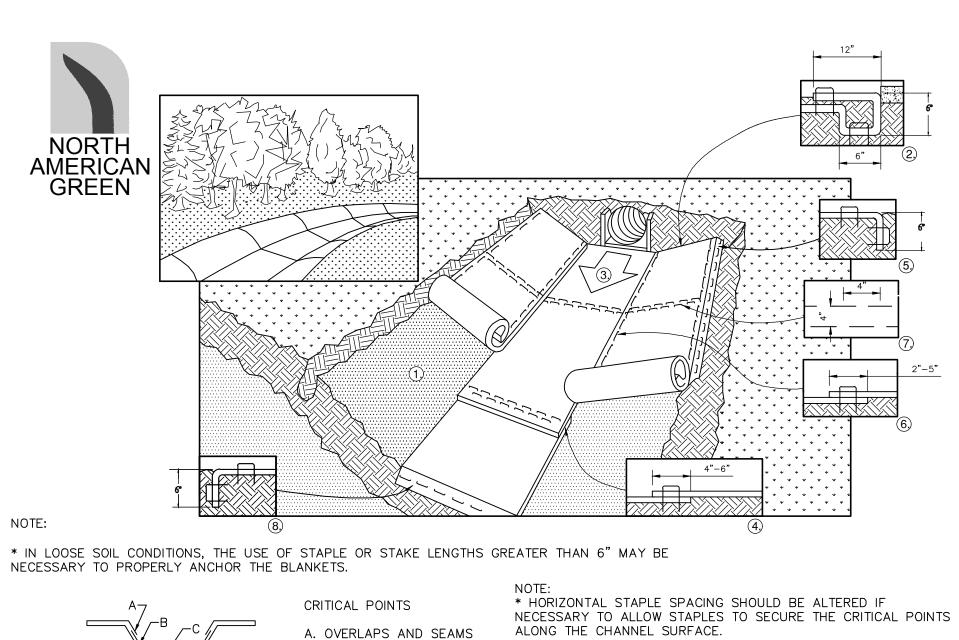












B. PROJECTED WATER LINE \*\* IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE C. CHANNEL BOTTOM/SIDE

LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

NOTE: 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMAPCT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS

3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE

5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (DEPENDING ON

BLANKET TYPE) AND STAPLED. 7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4"

ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL. 8. THE TERMINAL END OF THE BLANKETS MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL

AND COMPACT THE TRENCH AFTER STAPLING.

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DESIGN

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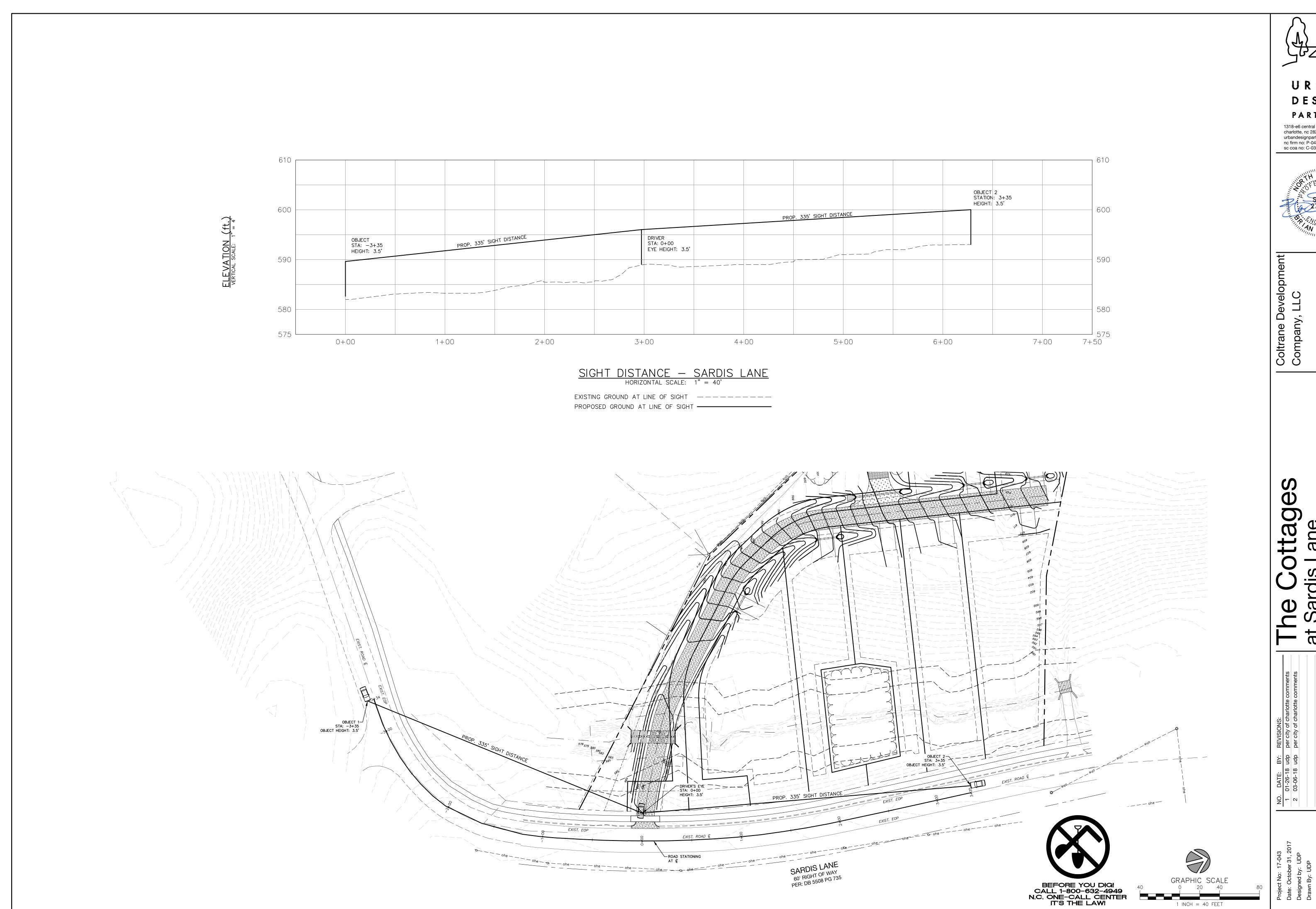
nc firm no: P-0418 sc coa no: C-03044

DRAINAGE SWALE LINER CHANNEL INSTALLATION

SCALE: NTS

SLOPE VERTICES

SCALE: NTS



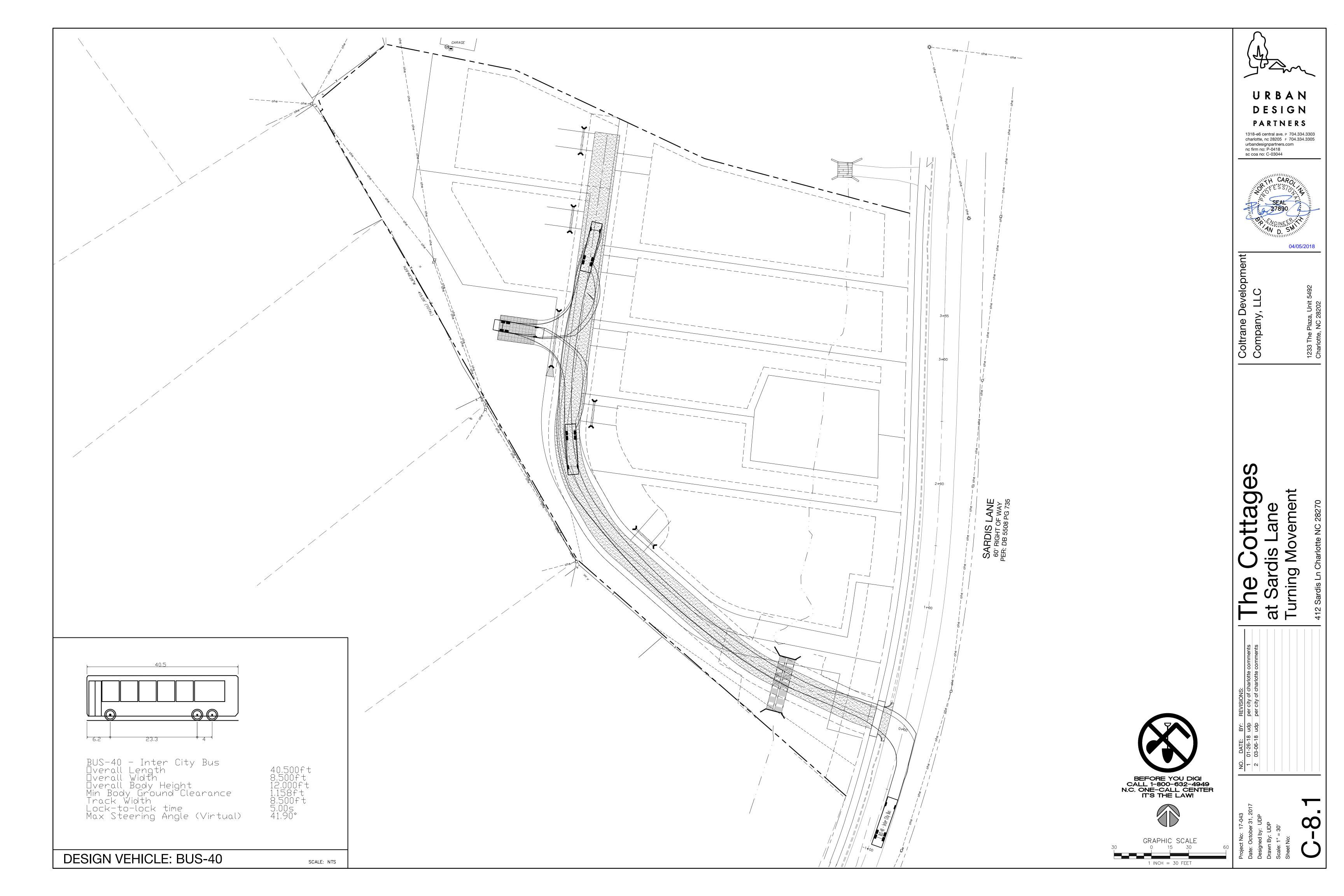
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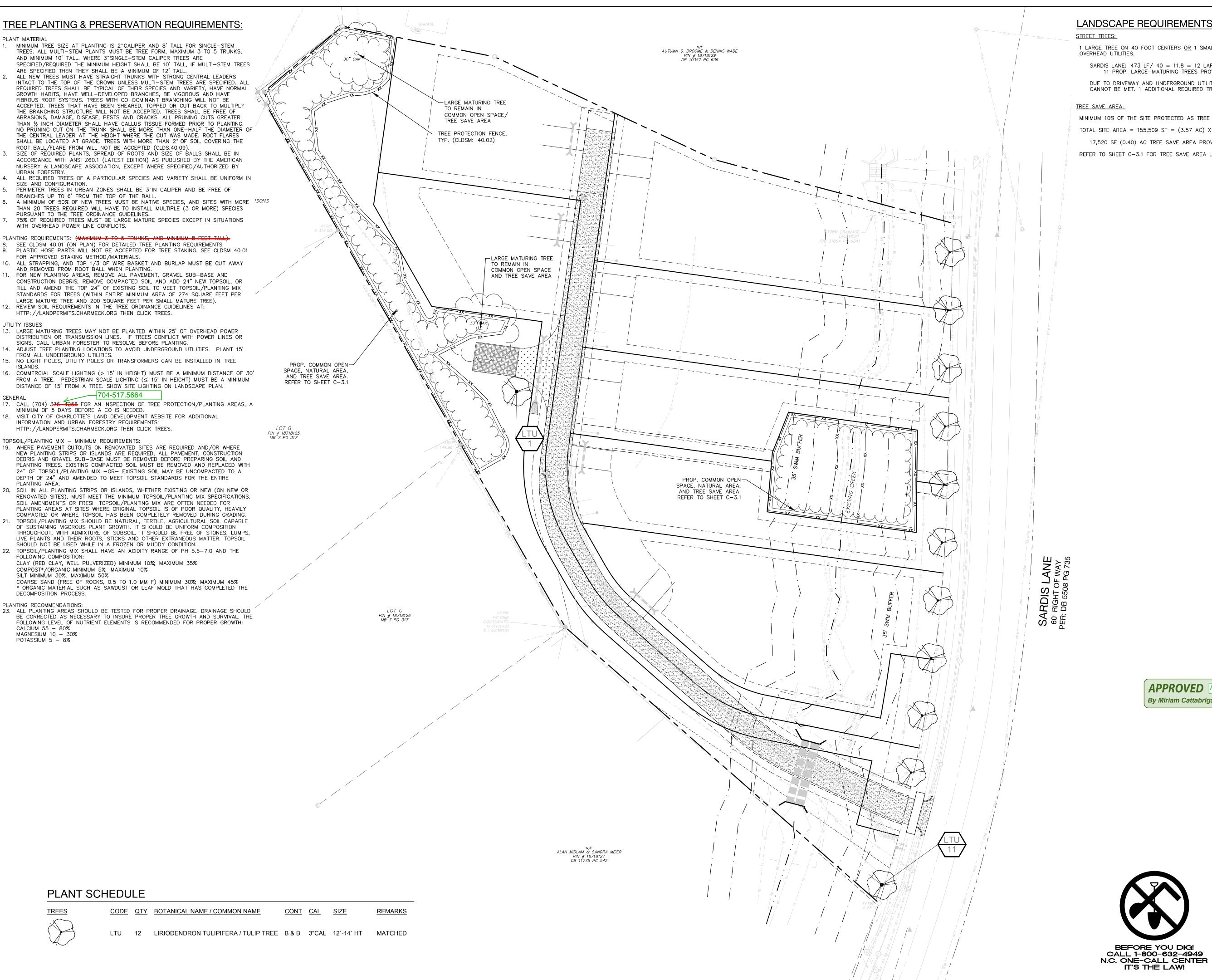
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ance

1 INCH = 40 FEET





### LANDSCAPE REQUIREMENTS:

1 LARGE TREE ON 40 FOOT CENTERS OR 1 SMALL TREE ON 30 FOOT CENTERS WHERE THERE ARE

SARDIS LANE: 473 LF/ 40 = 11.8 = 12 LARGE-MATURING TREES REQ'D | inside the 11 PROP. LARGE-MATURING TREES PROVIDED 🚄 .....

DUE TO DRIVEWAY AND UNDERGROUND UTILITY LOCATIONS THE MINIMUM STREET TREE REQUIREMENT CANNOT BE MET. 1 ADDITIONAL REQUIRED TREE SHALL BE PLANTED ON SITE.

MINIMUM 10% OF THE SITE PROTECTED AS TREE SAVE.

TOTAL SITE AREA = 155,509 SF = (3.57 AC) X 10% = 15,551 SF (0.36 AC) TREE SAVE AREA REQUIRED 17,520 SF (0.40) AC TREE SAVE AREA PROVIDED

REFER TO SHEET C-3.1 FOR TREE SAVE AREA LOCATIONS AND CALCULATIONS.



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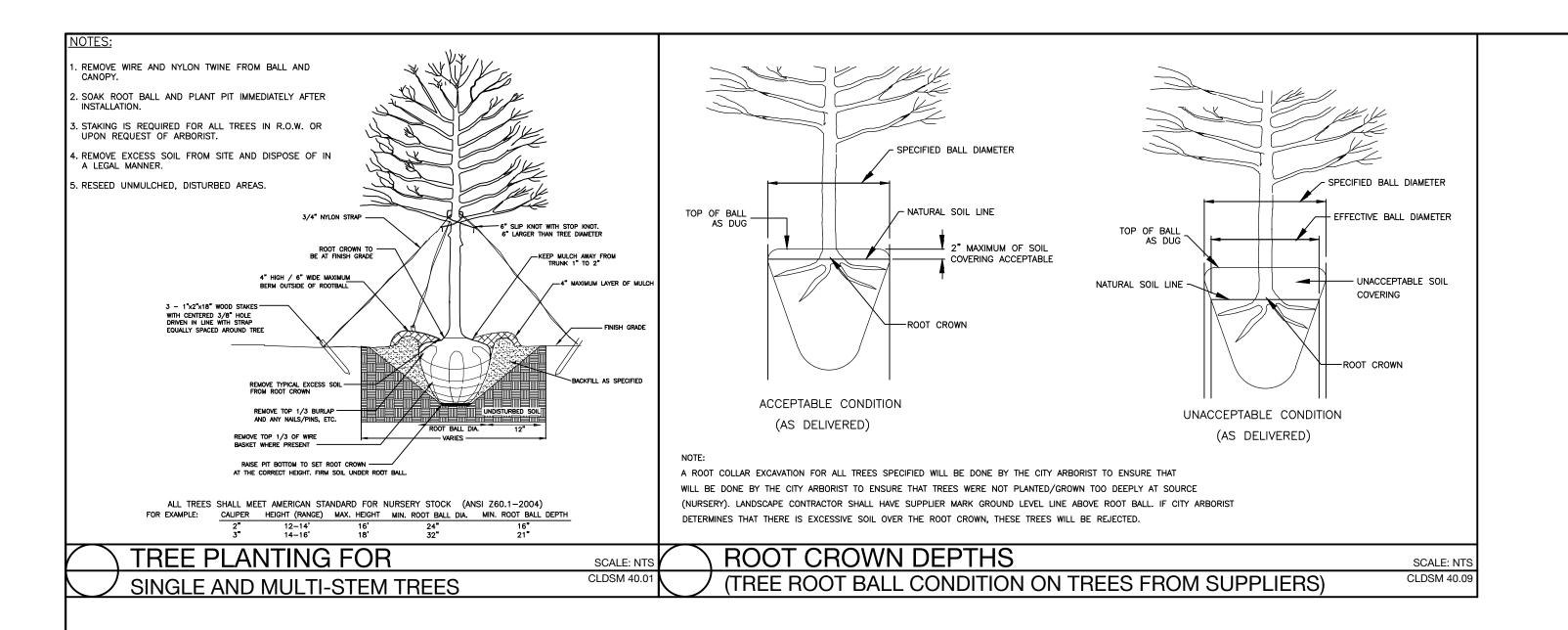


Coltrane Company

(1)

1 INCH = 30 FEET

APPROVED As noted on LS - 1.0 By Miriam Cattabriga at 1:22 pm, Mar 27, 2018



### TREE PLANTING & PRESERVATION REQUIREMENTS:

MINIMUM TREE SIZE AT PLANTING IS 2" CALIPER AND 8' TALL FOR SINGLE-STEM TREES. ALL MULTI-STEM PLANTS MUST BE TREE FORM, 13. MINIMUM TREE SIZE AT PLANTING IS 2-INCH CALIPER (FOR SINGLE STEM TREES). ALL MULTI-STEM PLANTS MUST BE TREE FORM, MAXIMUM 3 TO 5 TRUNKS, AND MINIMUM 10' TALL. WHERE 3" SINGLE-STEM CALIPER TREES ARE SPECIFIED/REQUIRED THE MINIMUM HEIGHT SHALL BE 10' TALL, IF MULTI-STEM TREES ARE SPECIFIED THEN THEY SHALL BE A MINIMUM OF 12' TALL.

- 2. ALL NEW TREES MUST HAVE <u>STRAIGHT TRUNKS WITH STRONG CENTRAL LEADERS INTACT TO THE TOP OF THE CROWN</u> UNLESS MULTI-STEM TREES ARE SPECIFIED. ALL REQUIRED TREES SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, HAVE WELL-DEVELOPED BRANCHES, BE VIGOROUS AND HAVE FIBROUS ROOT SYSTEMS. TREES WITH MAJOR GIRDLING ROOTS WILL NOT BE ACCEPTED. TREES WITH CO-DOMINANT BRANCHING WILL NOT BE ACCEPTED. TREES THAT HAVE BEEN SHEARED, TOPPED OR CUT BACK TO MULTIPLY THE BRANCHING STRUCTURE WILL NOT BE ACCEPTED. TREES SHALL BE FREE OF ABRASIONS, DAMAGE, DISEASE, PESTS AND CRACKS, ALL PRUNING CUTS GREATER THAN 1/2 INCH DIAMETER SHALL HAVE CALLUS TISSUE FORMED PRIOR TO PLANTING. NO PRUNING CUT ON THE TRUNK SHALL BE MORE THAN ONE-HALF THE DIAMETER OF THE CENTRAL LEADER AT THE HEIGHT WHERE THE CUT WAS MADE. ROOT FLARES SHALL BE LOCATED AT GRADE. TREES WITH MORE THAN 2" OF SOIL COVERING THE
- ROOT BALL/FLARE FROM WILL NOT BE ACCEPTED (CLDS.40.09) 3. SIZE OF REQUIRED PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI Z60.1 (LATEST EDITION) AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION, EXCEPT WHERE SPECIFIED/AUTHORIZED BY URBAN FORESTRY.
- 4. ALL REQUIRED TREES OF A PARTICULAR SPECIES AND VARIETY SHALL BE UNIFORM IN SIZE AND CONFIGURATION.
- 5. PERIMETER TREES IN URBAN ZONES SHALL BE 3" IN CALIPER AND BE FREE OF BRANCHES UP TO 6' FROM THE TOP OF ROOT CROWN (BALL). 6. A MINIMUM OF 50% OF NEW TREÉS MUST BE NATIVE SPECIES, AND SITES WITH MORE THAN 20 TREES
- REQUIRED WILL HAVE TO INSTALL MULTIPLE (3 OR MORE) SPECIES PURSUANT TO THE TREE ORDINANCE 7. 75% OF REQUIRED TREES MUST BE LARGE MATURE SPECIES EXCEPT IN SITUATIONS WITH OVERHEAD POWER

PLANTING REQUIREMENTS MAXIMUM 3 TO 5 TRUNKS, AND MINIMUM 8 FEET TALL.

- 8. SEE CLDS 40.01 & 40.09 (ON PLAN) FOR DETAILED TREE PLANTING REQUIREMENTS. PLASTIC HOSE PARTS WILL NOT BE ACCEPTED FOR TREE STAKING. SEE CLDS 40.01 FOR APPROVED STAKING METHOD/MATERIALS.
- 10. ALL STRAPPING, AND TOP 1/3 OF WIRE BASKET AND BURLAP MUST BE CUT AWAY AND REMOVED FROM ROOT BALL WHEN PLANTING. 11. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS; REMOVE COMPACTED SOIL AND ADD 18" NEW TOPSOIL, OR TILL AND AMEND THE TOP 18" OF EXISTING SOIL TO MEET TOPSOIL/PLANTING MIX STANDARDS FOR TREES (WITHIN ENTIRE MINIMUM AREA OF 274 SQUARE
- 12. TREES PLANTED ON PUBLIC PROPERTY WILL NEED APPROVAL FROM THE CITY ARBORIST AND/OR NCDOT. 13. REVIEW SOIL REQUIREMENTS IN THE TREE ORDINANCE GUIDELINES AT: http://charlottenc.gov/ld then

### UTILITY ISSUES

LINE CONFLICTS.

- 14. IF ANY UTILITY IS BEING INSTALLED IN OR NEAR ANY REQUIRED TREE(S) OR TREE SAVE AREA(S), CALL URBAN FORESTRY SPECIALIST TO RESOLVE PRIOR TO UTILITY INSTALLATION. 15. LARGE MATURING TREES MAY NOT BE PLANTED WITHIN 25' OF OVERHEAD POWER DISTRIBUTION OR
- TRANSMISSION LINES. 16. IF TREES CONFLICT WITH ANY UTILITIES OR SIGNS; CALL URBAN FORESTER TO RESOLVE BEFORE PLANTING. 17. ADJUST TREE PLANTING LOCATIONS TO AVOID EXISTING UNDERGROUND UTILITIES. PLANT 15' FROM ALL
- UNDERGROUND UTILITIES. 18. NO LIGHT POLES, UTILITIES OR TRANSFORMERS CAN BE INSTALLED IN TREE ISLANDS.
- 19. COMMERCIAL SCALE LIGHTING (> 15' IN HEIGHT) MUST BE A MINIMUM DISTANCE OF 30' FROM A TREE.
- PEDESTRIAN SCALE LIGHTING (\$\leq 15' IN HEIGHT) MUST BE A MINIMUM DISTANCE OF 15' FROM A TREE. SHOW SITE LIGHTING ON LANDSCAPE PLAN.

### TREE SAVE AND PRESERVATION 20. TREE PROTECTION MUST BE INSTALLED AND VERIFIED BY URBAN FORESTRY PRIOR TO STARTING ANY

- CONSTRUCTION ACTIVITY.
  SHOW TREE PROTECTION AND TREES SAVE AREAS ON EROSION CONTROL, GRADING AND LANDSCAPE PLAN
- 22. COMMERCIAL TREE SAVE AREAS MUST BE RECORDED ON A FINAL PLAT WITH THE MECKLENBURG COUNTY REGISTER OF DEEDS BEFORE URBAN FORESTRY HOLDS CAN BE RELEASED. A 10' NO BUILD ZONE AROUND
- TREE SAVE AREAS MUST BE REFERENCED ON THE PLAT. 23. TREE SAVE AREAS SHALL BE FREE OF INVASIVE PLANT SPECIES. IF AN AREA PROPOSED FOR TREE SAVE CONTAINS INVASIVE PLANT SPECIES AT TIME OF PROPOSAL, SUCH INVASIVE PLANT SPECIES SHALL BE REMOVED PRIOR TO FINAL CO.
- 24. THE AREA OF ANY EASEMENTS (WATER, SEWER, UTILITY, ETC.) CAN NOT BE COUNTED TOWARD THE TREE SAVE REQUIREMENT.
- 25. ANY ALTERATIONS TO TREE SAVE AREAS MUST BE ACCOMPLISHED WITHOUT MECHANIZED EQUIPMENT. 26. NO STRUCTURE WILL BE ALLOWED WITHIN 10' OF TREE SAVE AREAS UNLESS APPROVED BY URBAN
- FORESTRY. 27. ALL TREES ON PUBLIC PROPERTY ARE PROTECTED AND REMOVAL MUST BE PERMITTED BY THE CITY
- ARBORIST (704)336-4262. 28. CONTACT URBAN FORESTRY SPECIALIST PRIOR TO ANY CRANE SET-UP, MACHINERY OPERATION OR TEMPORARY BUILDING ERECTION THAT MAY IMPACT CHARLOTTE TREE ORDINANCE PROTECTED TREES OR TREE SAVE AREAS, INCLUDING TREES LOCATED IN STREET RIGHT OF WAY. IMPACTS MAY INCLUDE BUT ARE NOT LIMITED TO: ENCROACHING WITHIN TREE DRIP-LINES, EXCAVATION, SOIL COMPACTION, TREE TRIMMING,

29. SUBMIT REQUIRED CO/HOLD RELEASE FORM AT HTTP://CHARLOTTENC.GOV/LD FOR AN INSPECTION OF TREE PROTECTION/PLANTING AREAS, A MINIMUM OF 5 DAYS BEFORE THE CO/HOLD RELEASE IS NEEDED.

30. VISIT CITY OF CHARLOTTE'S LAND DEVELOPMENT WEBSITE FOR ADDITIONAL INFORMATION AND URBAN FORESTRY REQUIREMENTS: <a href="http://charlottenc.gov/ld">http://charlottenc.gov/ld</a> THEN CLICK TREES.

### TOPSOIL/PLANTING MIX - MINIMUM REQUIREMENTS:

ERECTING AND DISMANTLING OF CONSTRUCTION CRANES.

- 31. WHERE PAVEMENT CUTOUTS ON RENOVATED SITES ARE REQUIRED AND/OR WHERE NEW PLANTING STRIPS OR ISLANDS ARE REQUIRED, ALL PAVEMENT, CONSTRUCTION DEBRIS AND GRAVEL SUB-BASE MUST BE REMOVED BEFORE PREPARING SOIL AND PLANTING TREES. EXISTING COMPACTED SOIL MUST BE REMOVED AND REPLACED WITH 24" OF TOPSOIL/PLANTING MIX -OR- EXISTING SOIL MAY BE UNCOMPACTED TO A DEPTH OF 24" AND AMENDED TO MEET TOPSOIL STANDARDS FOR THE ENTIRE PLANTING AREA.
- 32. SOIL IN ALL PLANTING STRIPS OR ISLANDS, WHETHER EXISTING OR NEW(ON NEW OR RENOVATED SITES), MUST MEET THE MINIMUM TOPSOIL/PLANTING MIX SPECIFICATIONS. SOIL AMENDMENTS OR FRESH TOPSOIL/PLANTING MIX ARE OFTEN NEEDED FOR PLANTING AREAS AT SITES WHERE ORIGINAL TOPSOIL IS OF POOR QUALITY, HEAVILY COMPACTED OR WHERE TOPSOIL HAS BEEN COMPLETELY REMOVED DURING
- 33. TOPSOIL/PLANTING MIX SHOULD BE NATURAL, FERTILE, AGRICULTURAL SOIL CAPABLE OF SUSTAINING VIGOROUS PLANT GROWTH, IT SHOULD BE UNIFORM COMPOSITION THROUGHOUT, WITH ADMIXTURE OF SUBSOIL. IT SHOULD BE FREE OF STONES, LUMPS, LIVE PLANTS AND THEIR ROOTS, STICKS AND OTHER
- EXTRANEOUS MATTER. TOPSOIL SHOULD NOT BE USED WHILE IN A FROZEN OR MUDDY CONDITION. 34. TOPSOIL/PLANTING MIX SHALL HAVE AN ACIDITY RANGE OF PH 5.5-7.0 AND THE FOLLOWING COMPOSITION: CLAY (RED CLAY, WELL PULVERIZED) MINIMUM 10%; MAXIMUM 35% COMPOST\*/ORGANIC MINIMUM 5%; MAXIMUM 10%
- SILT MINIMUM 30%; MAXIMUM 50% COARSE SAND (FREE OF ROCKS, 0.5 TO 1.0 MM F) MINIMUM 30%: MAXIMUM 45% \*ORGANIC MATERIAL SUCH AS SAWDUST OR LEAF MOLD THAT HAS COMPLETED THE DECOMPOSITION

## PLANTING RECOMMENDATIONS:

35. ALL PLANTING AREAS SHOULD BE TESTED FOR PROPER DRAINAGE. DRAINAGE SHOULD BE CORRECTED AS NECESSARY TO INSURE PROPER TREE GROWTH AND SURVIVAL. THE FOLLOWING LEVEL OF NUTRIENT ELEMENTS IS RECOMMENDED FOR PROPER GROWTH: CALCIUM 55 - 80%

MAGNESIUM 10 - 30% POTASSIUM 5 - 8%

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