

SPRING HILL SUITES HOTEL

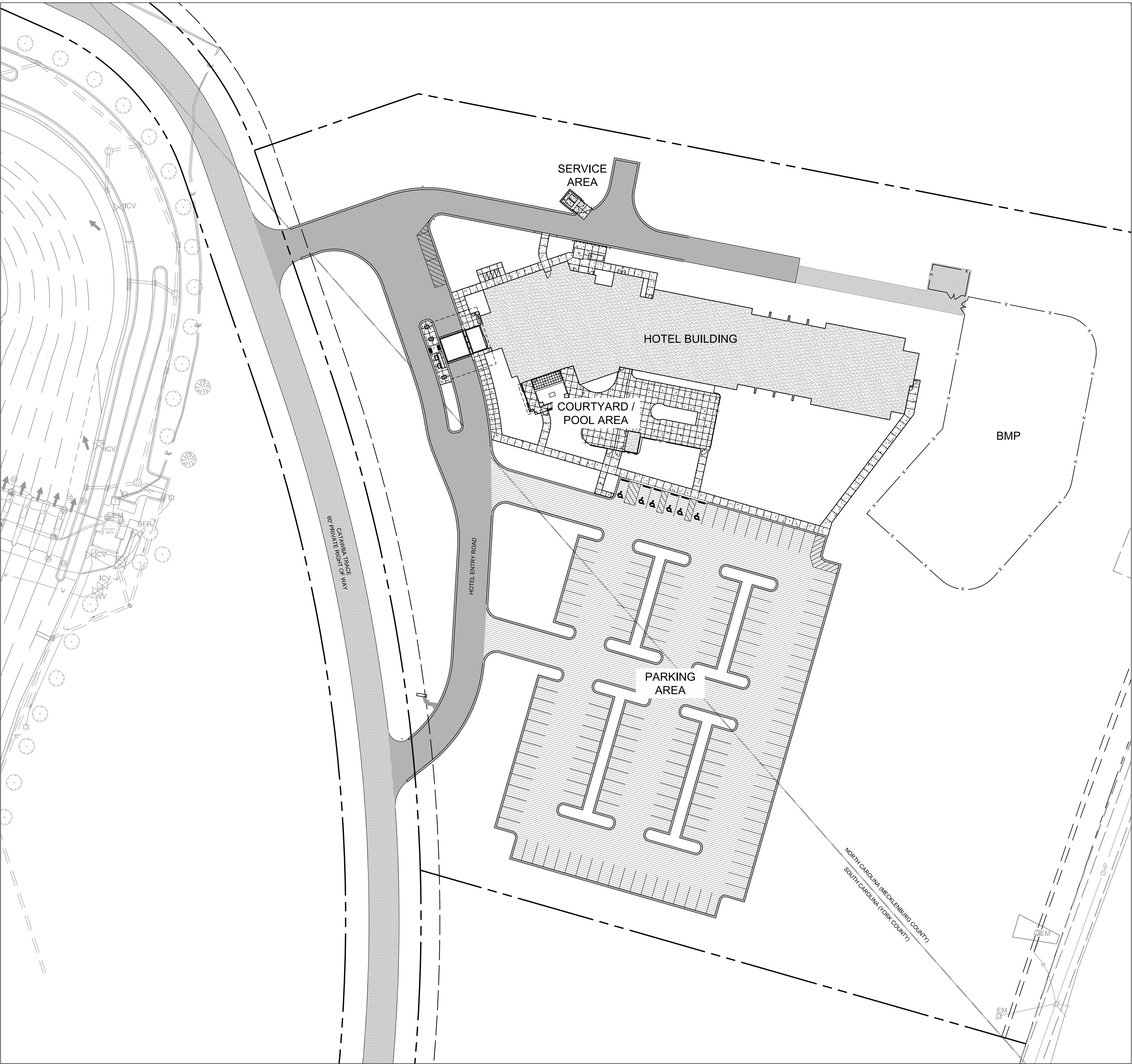
14500 BEST DAY BOULEVARD
MECKLENBURG COUNTY, NORTH CAROLINA
YORK COUNTY, SOUTH CAROLINA

FEBRUARY 9, 2018

LICENSED PROFESSIONAL
JEFF ODEN
101 N. TRYON STREET, SUITE 1400
CHARLOTTE, NC 28202
704.909.3506

OWNER
CAROWINDS LLC
14523 CAROWINDS BLVD
CHARLOTTE, NC 28273
704.588.2600

PROJECT DESCRIPTION
THIS PROJECT INCLUDES THE DEVELOPMENT OF A 130 ROOM HOTEL WITH ASSOCIATED PARKING, OUTDOOR AMENITY AREA, SERVICE AREA, AND PRIVATE ROAD RE-ALIGNMENT. IT IS PART OF THE OVERALL DEVELOPMENT OF THE CAROWINDS ENTERTAINMENT DISTRICT. THE SITE STRADDLES THE NC/SC STATE LINE. THE ENTIRE BUILDING IS LOCATED IN NC AND THE SITE AS A WHOLE WILL BE COLLECTED / PIPED / TREATED WITHIN A BMP LOCATED IN NC AND DESIGNED PER NC REGULATIONS.



FINAL APPROVAL

PROJECT NUMBER:

ENGINEERING

PCSO / DETENTION / DRAINAGE PLAN

EROSION CONTROL

URBAN FORESTRY

TREE ORDINANCE

CDOT

NOTE: THIS PLAN APPROVAL DOES NOT INCLUDE CHARLOTTE WATER. FOR MORE INFORMATION, PLEASE CALL 704-336-5499 OR VISIT <http://charlottewater.org>

NOTE: THIS PLAN APPROVAL DOES NOT INCLUDE COMMERCIAL ZONING. ALL BUILDING PERMITS AND ZONING APPROVALS CAN BE OBTAINED AT MECKLENBURG COUNTY CODE ENFORCEMENT. PLEASE CALL CTAC AT 704-314-CODE(2633) FOR MORE INFORMATION.

NOTE: SCHEDULE PRE-CONSTRUCTION MEETING AT LEAST 48 HRS. PRIOR TO ANY LAND DISTURBING ACTIVITY USING THE ONLINE FORM FOUND AT <http://charlottenc.gov/ld>

APPROVED

APPROVED

APPROVED
By H. Kunzig at 11:59 am, Feb 12, 2018

APPROVED

As noted

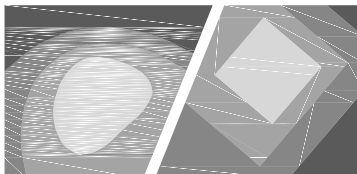
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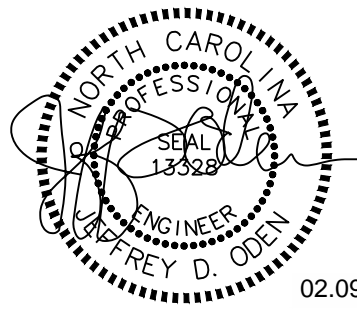
CONSULTANT



STEWART

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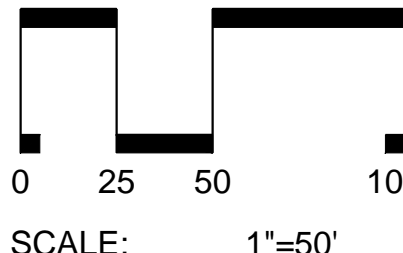
FIRM LICENSE # C-1051
www.stewartnc.com
PROJECT # X17017.00



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SPRINGHILL
SUITES HOTEL

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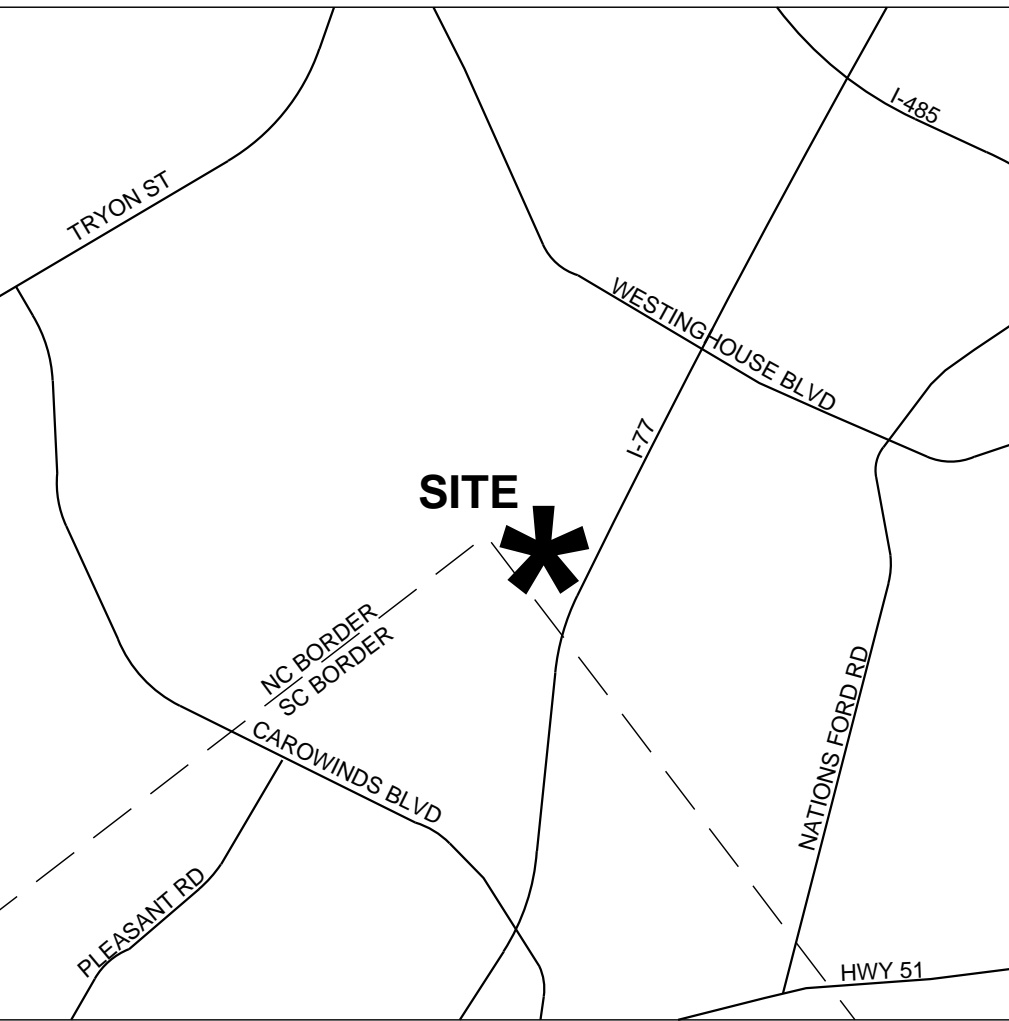
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SHEET TITLE

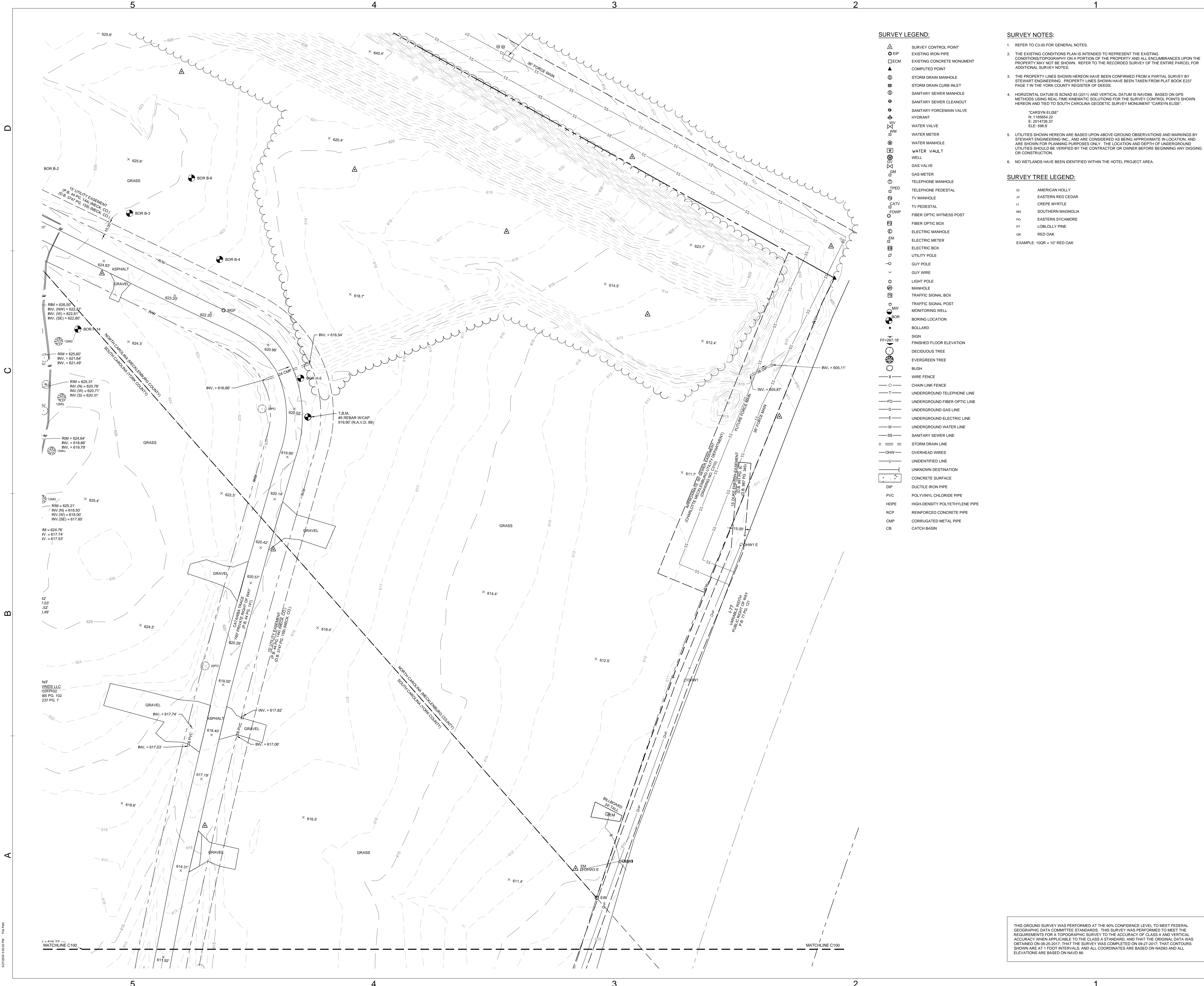
COVER

SHEET IDENTIFIER

C000



VICINITY MAP



SURVEY LEGEND:

- △ SURVEY CONTROL POINT
- EIP EXISTING IRON PIPE
- ECM EXISTING CONCRETE MONUMENT
- ▲ COMPUTED POINT
- ⊙ SORM DRAIN MANHOLE
- ⊙ SORM DRAIN CURB INLET
- ⊙ SANITARY SEWER MANHOLE
- ⊙ SANITARY SEWER CLEANOUT
- ⊙ SANITARY FORCEMAIN VALVE
- ⊙ HYDRANT
- ⊙ WATER VALVE
- ⊙ WATER METER
- ⊙ WATER MANHOLE
- ⊙ WATER VAULT
- ⊙ WELL
- ⊙ GAS VALVE
- ⊙ GAS METER
- ⊙ TELEPHONE MANHOLE
- ⊙ TELEPHONE PEDESTAL
- ⊙ TV MANHOLE
- ⊙ TV PEDESTAL
- ⊙ FIBER OPTIC WITNESS POST
- ⊙ FIBER OPTIC BOX
- ⊙ ELECTRIC MANHOLE
- ⊙ ELECTRIC METER
- ⊙ ELECTRIC BOX
- ⊙ UTILITY POLE
- ⊙ GUY POLE
- ⊙ GUY WIRE
- ⊙ LIGHT POLE
- ⊙ MANHOLE
- ⊙ TRAFFIC SIGNAL BOX
- ⊙ TRAFFIC SIGNAL POST
- ⊙ MONITORING WELL
- ⊙ BORING LOCATION
- ⊙ BOLLARD
- ⊙ SIGN
- ⊙ FINISHED FLOOR ELEVATION
- ⊙ DECIDUOUS TREE
- ⊙ EVERGREEN TREE
- ⊙ BUSH
- ⊙ WIRE FENCE
- ⊙ CHAIN LINK FENCE
- ⊙ UNDERGROUND TELEPHONE LINE
- ⊙ UNDERGROUND FIBER OPTIC LINE
- ⊙ UNDERGROUND GAS LINE
- ⊙ UNDERGROUND ELECTRIC LINE
- ⊙ UNDERGROUND WATER LINE
- ⊙ SANITARY SEWER LINE
- ⊙ STORM DRAIN LINE
- ⊙ OVERHEAD WIRES
- ⊙ UNIDENTIFIED LINE
- ⊙ UNKNOWN DESTINATION
- ⊙ CONCRETE SURFACE
- ⊙ DUCTILE IRON PIPE
- ⊙ PVC POLYVINYL CHLORIDE PIPE
- ⊙ HDPE HIGH-DENSITY POLYETHYLENE PIPE
- ⊙ RCP REINFORCED CONCRETE PIPE
- ⊙ CMP CORRUGATED METAL PIPE
- ⊙ CB CATCH BASIN

SURVEY NOTES:

- REFER TO C3.00 FOR GENERAL NOTES.
- THE EXISTING CONDITIONS PLAN IS INTENDED TO REPRESENT THE EXISTING CONDITION TOPOGRAPHY ON A PORTION OF THE PROPERTY AND ALL ENCUMBRANCES UPON THE PROPERTY MAY NOT BE SHOWN. REFER TO THE RECORDED SURVEY OF THE ENTIRE PARCEL FOR ADDITIONAL SURVEY NOTES.
- THE PROPERTY LINES SHOWN HEREON HAVE BEEN CONFIRMED FROM A PARTIAL SURVEY BY STEWART ENGINEERING. PROPERTY LINES SHOWN HAVE BEEN TAKEN FROM PLAT BOOK E237 PAGE 7 IN THE YORK COUNTY REGISTER OF DEEDS.
- HORIZONTAL DATUM IS SCNAD 83 (2011) AND VERTICAL DATUM IS NAVD88. BASED ON GPS METHODS USING REAL-TIME KINEMATIC SOLUTIONS FOR THE SURVEY CONTROL POINTS SHOWN HEREON AND TIED TO SOUTH CAROLINA GEODETIC SURVEY MONUMENT "CARSVN ELISE".
- UTILITIES SHOWN HEREON ARE BASED UPON ABOVE-GROUND OBSERVATIONS AND MARKINGS BY STEWART ENGINEERING INC. AND ARE CONSIDERED AS BEING APPROXIMATE IN LOCATION, AND ARE SHOWN FOR PLANNING PURPOSES ONLY. THE LOCATION AND DEPTH OF UNDERGROUND UTILITIES SHOULD BE VERIFIED BY THE CONTRACTOR OR OWNER BEFORE BEGINNING ANY DIGGING OR CONSTRUCTION.
- NO WETLANDS HAVE BEEN IDENTIFIED WITHIN THE HOTEL PROJECT AREA.

SURVEY TREE LEGEND:

- ⊙ AMERICAN HOLLY
- ⊙ EASTERN RED CEDAR
- ⊙ CREPE MYRTLE
- ⊙ SOUTHERN MAGNOLIA
- ⊙ EASTERN SYCAMORE
- ⊙ LORLOLLY PINE
- ⊙ RED OAK
- EXAMPLE: 100R = 10' RED OAK

THIS GROUND SURVEY WAS PERFORMED AT THE 90% CONFIDENCE LEVEL TO MEET FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS. THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS FOR A TOPOGRAPHIC SURVEY TO THE ACCURACY OF CLASS A AND VERTICAL ACCURACY WHEN APPLICABLE TO THE CLASS A STANDARD, AND THAT THE ORIGINAL DATA WAS OBTAINED ON 08-25-2017, THAT THE SURVEY WAS COMPLETED ON 08-27-2017; THAT CONTOURS SHOWN ARE AT 1 FOOT INTERVALS; AND ALL COORDINATES ARE BASED ON NAD83 AND ALL ELEVATIONS ARE BASED ON NAVD 88.

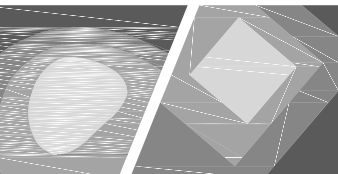
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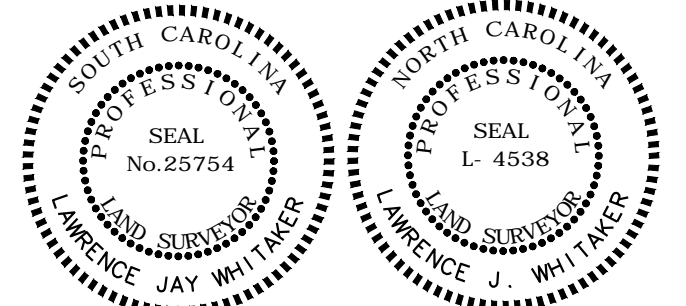


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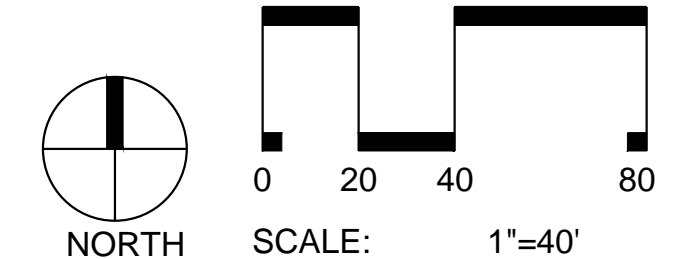
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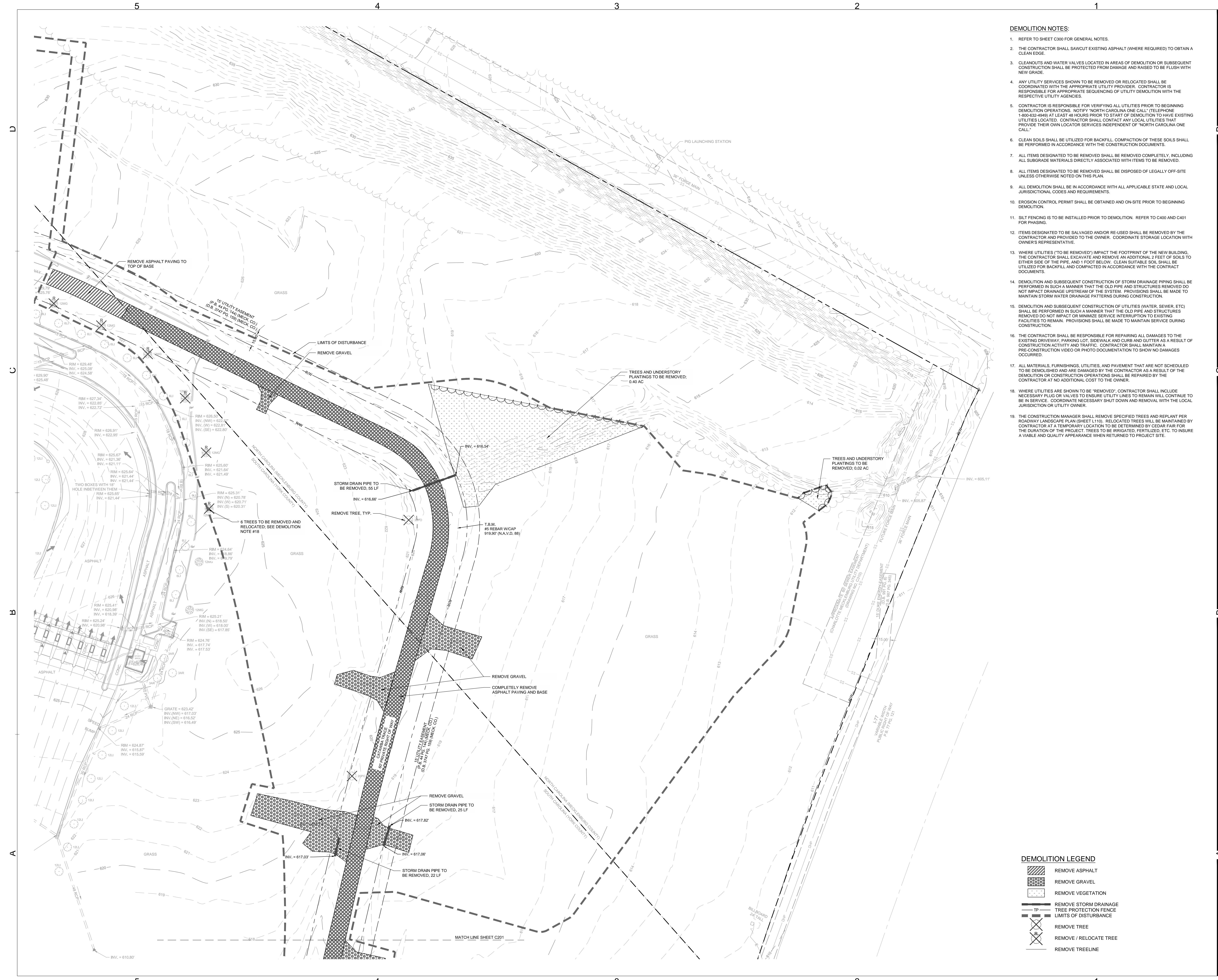
EXISTING
CONDITIONS
SURVEY

SHEET IDENTIFIER

C100



NOTE:
SHEET IS ROTATED TO ORIENT WITH
ROADWAY IMPROVEMENTS PACKAGE.



- DEMOLITION NOTES:**
- REFER TO SHEET C300 FOR GENERAL NOTES.
 - THE CONTRACTOR SHALL SAWCUT EXISTING ASPHALT (WHERE REQUIRED) TO OBTAIN A CLEAN EDGE.
 - CLEANOUTS AND WATER VALVES LOCATED IN AREAS OF DEMOLITION OR SUBSEQUENT CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE AND RAISED TO BE FLUSH WITH NEW GRADE.
 - ANY UTILITY SERVICES SHOWN TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY PROVIDER. CONTRACTOR IS RESPONSIBLE FOR APPROPRIATE SEQUENCING OF UTILITY DEMOLITION WITH THE RESPECTIVE UTILITY AGENCIES.
 - CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES PRIOR TO BEGINNING DEMOLITION OPERATIONS. NOTIFY "NORTH CAROLINA ONE CALL" (TELEPHONE 1-800-632-4849) AT LEAST 48 HOURS PRIOR TO START OF DEMOLITION TO HAVE EXISTING UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENT OF "NORTH CAROLINA ONE CALL."
 - CLEAN SOILS SHALL BE UTILIZED FOR BACKFILL. COMPACTION OF THESE SOILS SHALL BE PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
 - ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE REMOVED COMPLETELY, INCLUDING ALL SUBGRADE MATERIALS DIRECTLY ASSOCIATED WITH ITEMS TO BE REMOVED.
 - ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF LEGALLY OFF-SITE UNLESS OTHERWISE NOTED ON THIS PLAN.
 - ALL DEMOLITION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL JURISDICTIONAL CODES AND REQUIREMENTS.
 - EROSION CONTROL PERMIT SHALL BE OBTAINED AND ON-SITE PRIOR TO BEGINNING DEMOLITION.
 - SILT FENCING IS TO BE INSTALLED PRIOR TO DEMOLITION. REFER TO C400 AND C401 FOR PHASING.
 - ITEMS DESIGNATED TO BE SALVAGED AND/OR RE-USE SHALL BE REMOVED BY THE CONTRACTOR AND PROVIDED TO THE OWNER. COORDINATE STORAGE LOCATION WITH OWNER'S REPRESENTATIVE.
 - WHERE UTILITIES ("TO BE REMOVED") IMPACT THE FOOTPRINT OF THE NEW BUILDING, THE CONTRACTOR SHALL EXCAVATE AND REMOVE AN ADDITIONAL 2 FEET OF SOILS TO EITHER SIDE OF THE PIPE, AND 1 FOOT BELOW. CLEAN SUITABLE SOIL SHALL BE UTILIZED FOR BACKFILL AND COMPACTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - DEMOLITION AND SUBSEQUENT CONSTRUCTION OF STORM DRAINAGE PIPING SHALL BE PERFORMED IN SUCH A MANNER THAT THE OLD PIPE AND STRUCTURES REMOVED DO NOT IMPACT OR MINIMIZE SERVICE INTERRUPTION TO EXISTING FACILITIES TO REMAIN. PROVISIONS SHALL BE MADE TO MAINTAIN SERVICE DURING CONSTRUCTION.
 - DEMOLITION AND SUBSEQUENT CONSTRUCTION OF UTILITIES (WATER, SEWER, ETC) SHALL BE PERFORMED IN SUCH A MANNER THAT THE OLD PIPE AND STRUCTURES REMOVED DO NOT IMPACT OR MINIMIZE SERVICE INTERRUPTION TO EXISTING FACILITIES TO REMAIN. PROVISIONS SHALL BE MADE TO MAINTAIN SERVICE DURING CONSTRUCTION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DAMAGES TO THE EXISTING DRIVEWAY, PARKING LOT, SIDEWALK AND CURB AND GUTTER AS A RESULT OF CONSTRUCTION ACTIVITY AND TRAFFIC. CONTRACTOR SHALL MAINTAIN A PRE-CONSTRUCTION VIDEO OR PHOTO DOCUMENTATION TO SHOW NO DAMAGES OCCURRED.
 - WHERE UTILITIES ARE SHOWN TO BE "REMOVED", CONTRACTOR SHALL INCLUDE NECESSARY PLUG OR VALVES TO ENSURE UTILITY LINES TO REMAIN WILL CONTINUE TO BE IN SERVICE. COORDINATE NECESSARY SHUT DOWN AND REMOVAL WITH THE LOCAL JURISDICTION OR UTILITY OWNER.
 - THE CONSTRUCTION MANAGER SHALL REMOVE SPECIFIED TREES AND REPLANT PER ROADWAY LANDSCAPE PLAN (SHEET L110). RELOCATED TREES WILL BE MAINTAINED BY CONTRACTOR AT A TEMPORARY LOCATION TO BE DETERMINED BY CEDAR FAIR FOR THE DURATION OF THE PROJECT. TREES TO BE IRRIGATED, FERTILIZED, ETC. TO INSURE A VIABLE AND QUALITY APPEARANCE WHEN RETURNED TO PROJECT SITE.

DEMOLITION LEGEND

	REMOVE ASPHALT
	REMOVE GRAVEL
	REMOVE VEGETATION
	REMOVE STORM DRAINAGE
	TREE PROTECTION FENCE
	LIMITS OF DISTURBANCE
	REMOVE TREE
	REMOVE / RELOCATE TREE
	REMOVE TREELINE

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PROJECT # X17017.00

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**SPRINGHILL
SUITES HOTEL**

14500 BEST DAY BOULEVARD
CHARLOTTE, NC

NORTH

0 20 40 80
SCALE: 1"=40'

REVISION	DATE	DESCRIPTION
ADDENDA OR MODIFICATION		
SD	09/08/2017	SCHEMATIC DESIGN
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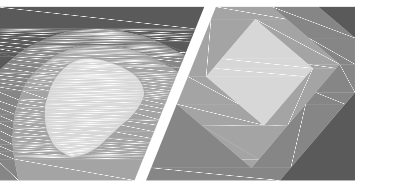
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SHEET TITLE

**DEMOLITION
PLAN**

SHEET IDENTIFIER

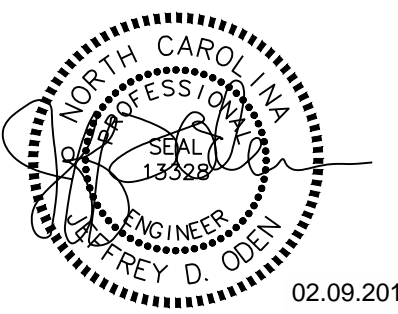
C200



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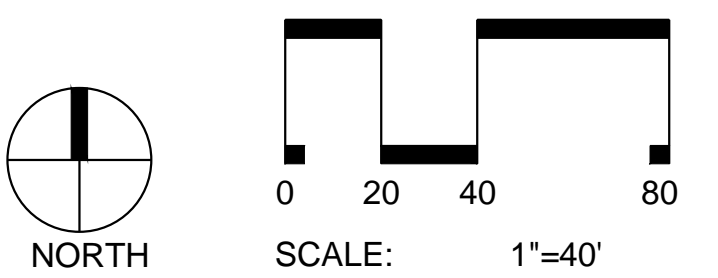


09.2018

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P MGR. TAD

P ENGR. JDO

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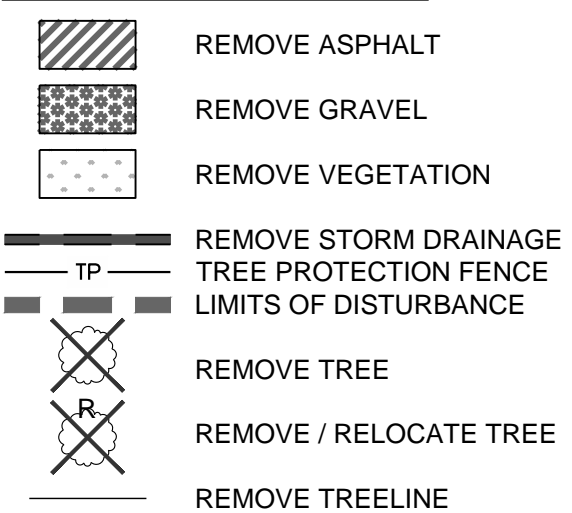
DEMOLITION
PLAN

SHEET IDENTIFIER

C201



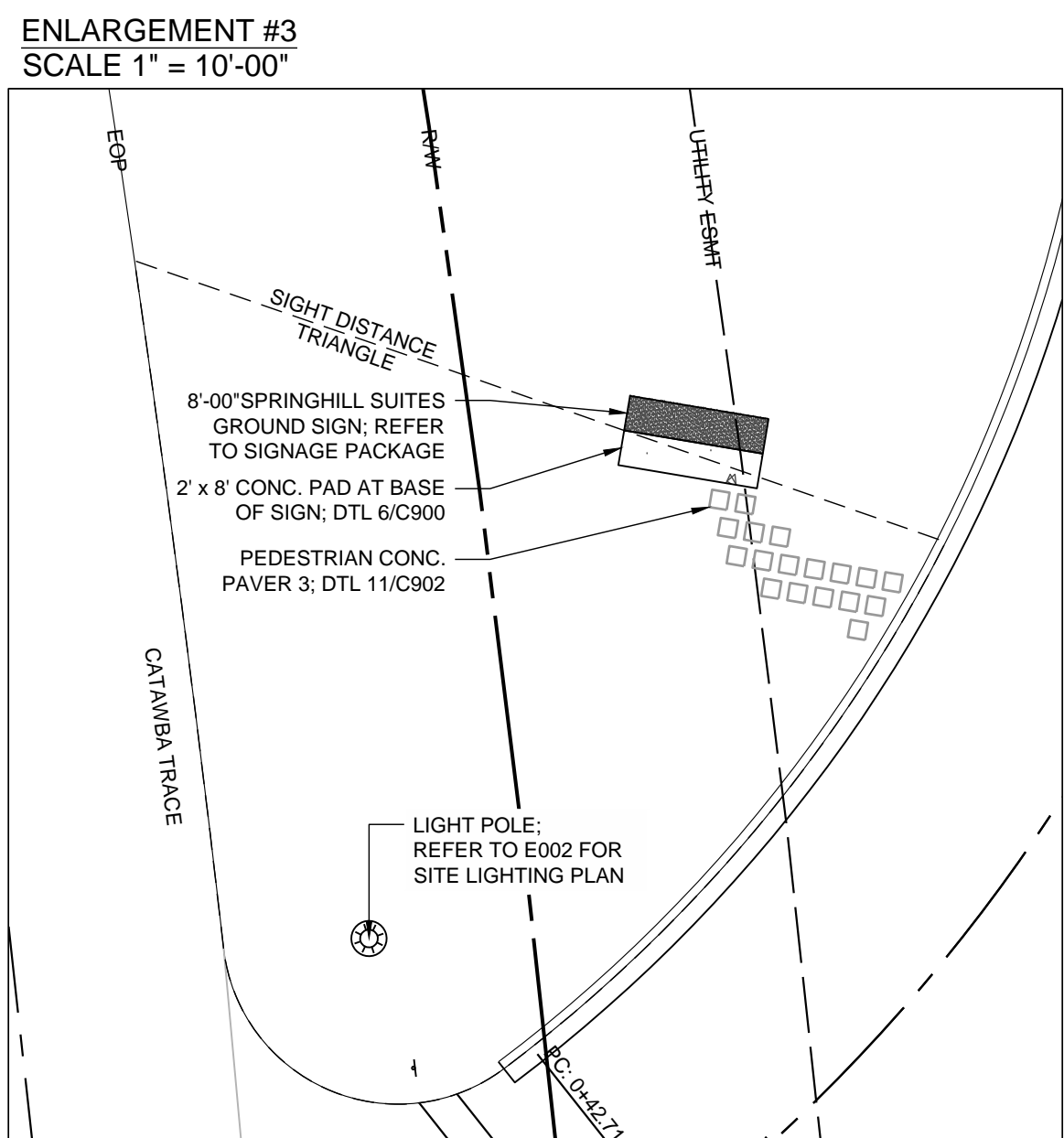
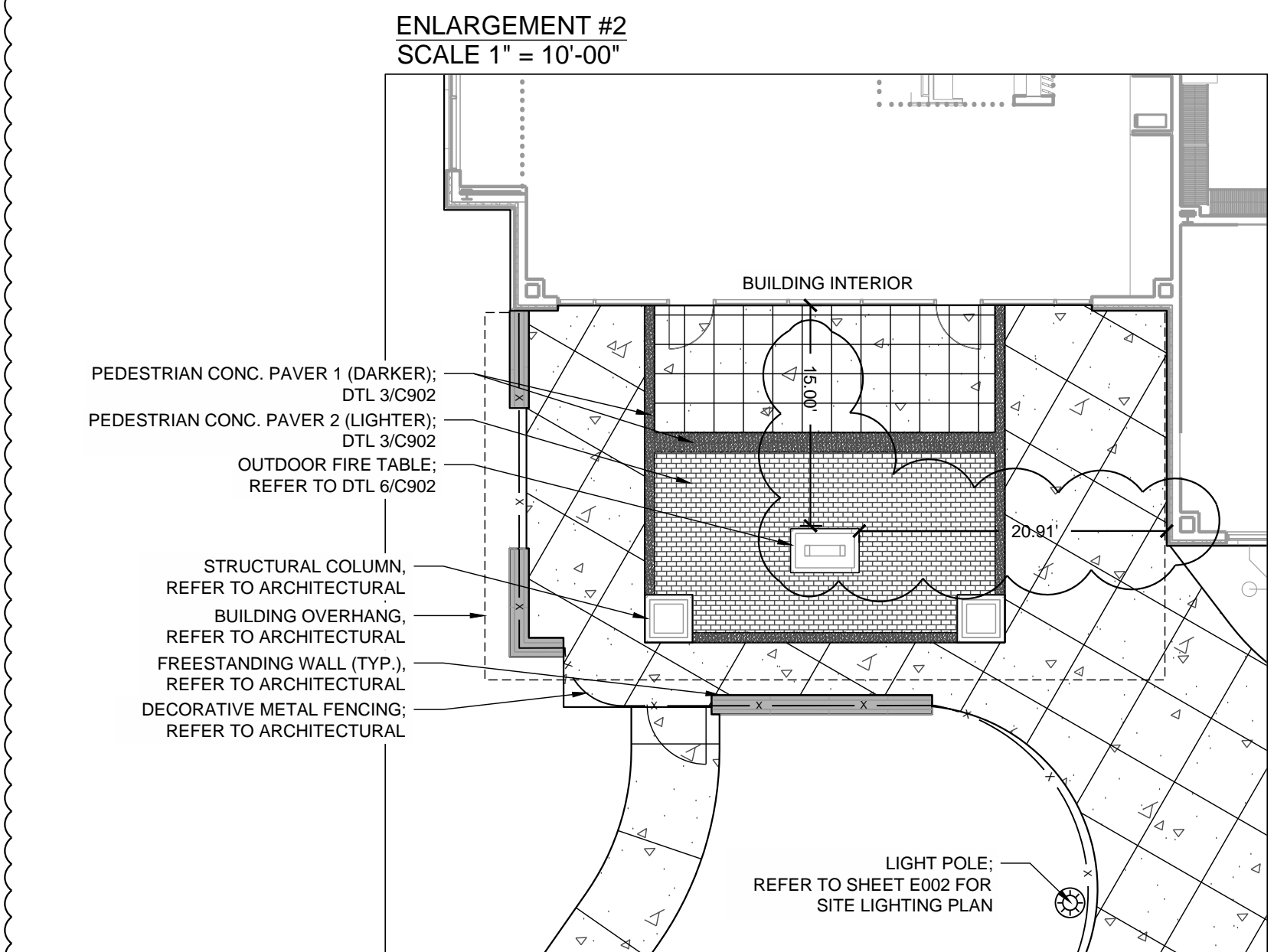
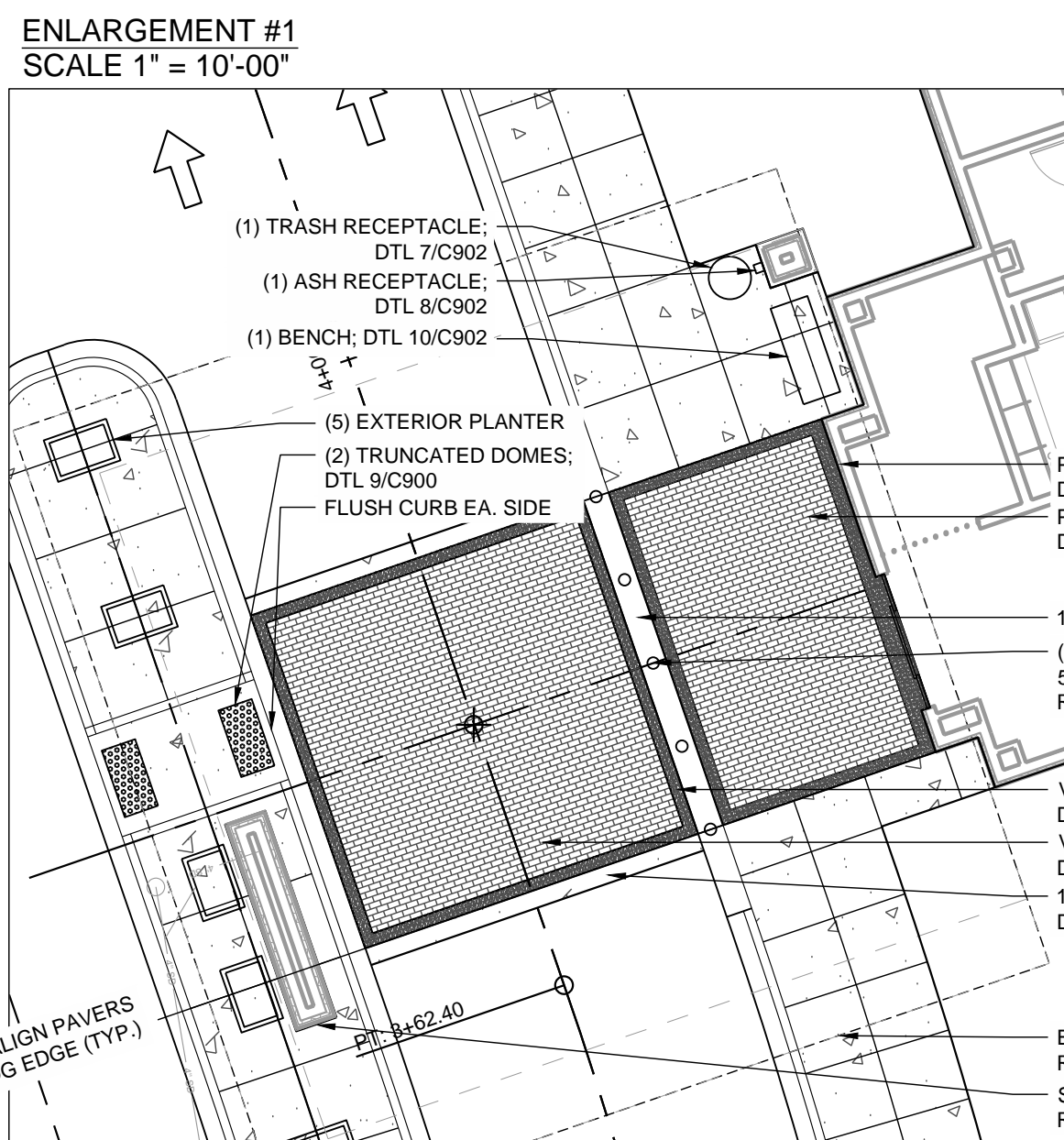
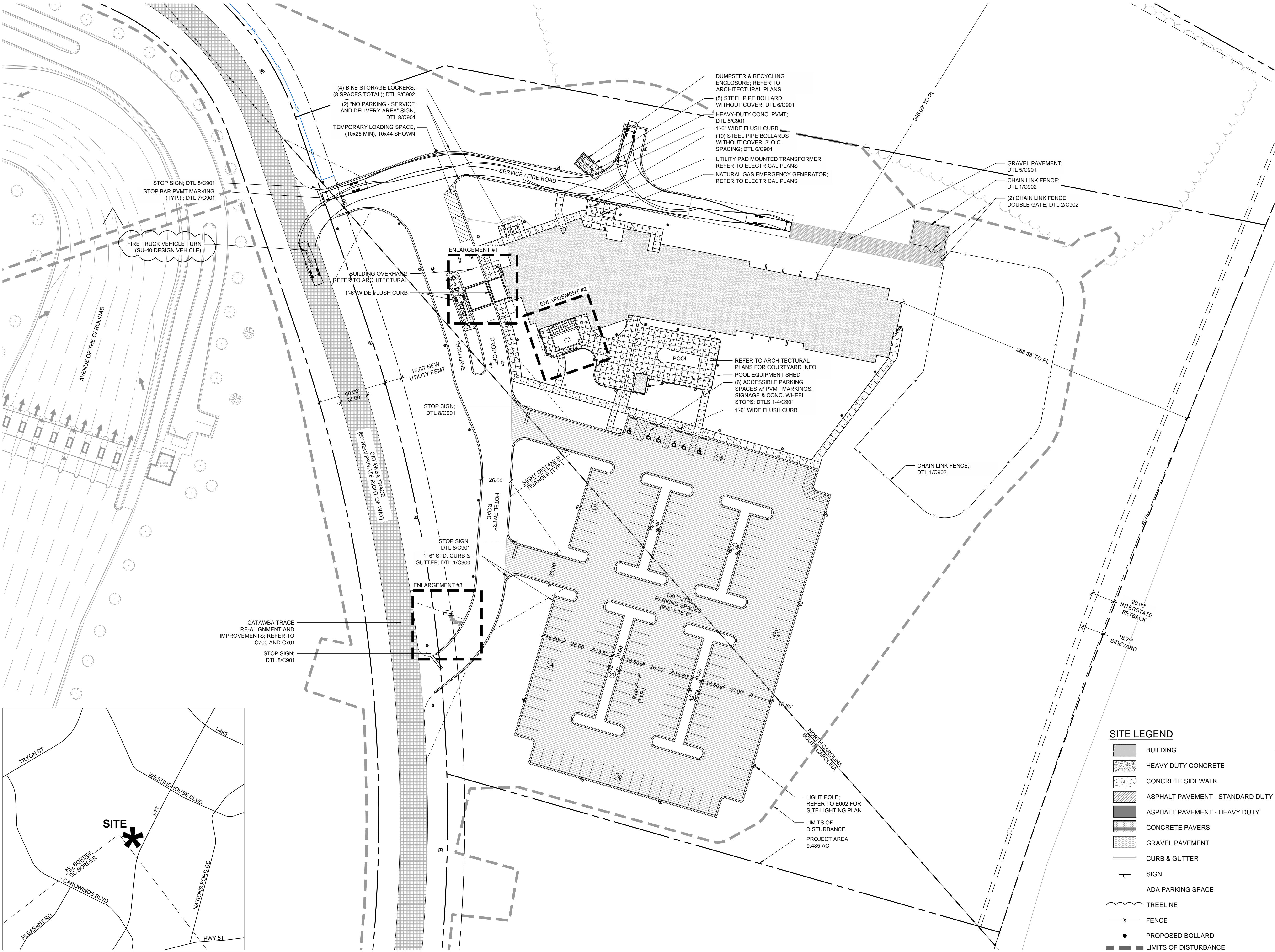
DEMOLITION LEGEND



NOTE:

1. REFER TO SHEET C200 FOR DEMOLITION NOTES.

5 4 3 2 1



GENERAL NOTES:

1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN COMPLIANCE WITH NCDEQ AND ALL OTHER APPLICABLE LOCAL, STATE AND FEDERAL GUIDELINES. ALL UTILITY CONSTRUCTION SHALL COMPLY WITH APPLICABLE LOCAL JURISDICTIONAL STANDARDS AND SPECIFICATIONS.
2. EXISTING SURVEY INFORMATION INCLUDING TOPOGRAPHIC INFORMATION PROVIDED BY STEWART, UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL PROVIDE NOTICE OF EXCAVATION TO NOTIFICATION CENTER AND FACILITY OWNERS (PER NC STATUTE) NO LESS THAN 3 BUSINESS DAYS AND NO MORE THAN 15 WORKING DAYS PRIOR TO BEGINNING DEMOLITION, EXCAVATION OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS. NO EXCAVATION OR DEMOLITION SHALL BE STARTED WITHOUT ALL UTILITIES BEING LOCATED.
4. ALL SUB-SURFACE UTILITIES IDENTIFIED ON THE CONSTRUCTION DOCUMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATION BASED ON SURVEY INFORMATION GATHERED FROM FIELD INSPECTION AND/OR ANY OTHER APPLICABLE RECORD DRAWINGS WHICH MAY BE AVAILABLE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
5. EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COORDINATING PERMITS, INSPECTIONS, CERTIFICATIONS AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT.
7. THE CONTRACTOR SHALL MAINTAIN 'AS-BUILT' DRAWINGS TO RECORD THE ACTUAL LOCATION OF ALL PIPING PRIOR TO CONCEALMENT, VALVE AND MANHOLE CHANGES, AND HARDSCAPE OR LANDSCAPE CHANGES. DRAWINGS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE AT REGULAR INTERVALS, OR AS REQUESTED THROUGHOUT THE PROJECT FOR RECORD KEEPING.
8. IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THERE OF SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY EXISTING UTILITY LINES REQUIRED TO COMPLETE ANY PORTION OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE COORDINATION AND COSTS OF THE RELOCATION AND ASSOCIATED WORK.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIALS AND RUBBISH CAUSED BY THE CONTRACTOR. ALL DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE ON A DAILY BASIS.
11. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
12. ROADWAYS TEMPORARY OR PERMANENT MUST BE CAPABLE OF SUPPORTING FIRE FIGHTING APPARATUS (65,000 LBS) DURING ALL PHASES OF CONSTRUCTION ONCE VERTICAL CONSTRUCTION HAS BEGUN.

SITE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE CONSTRUCTION LAYDOWN AREA, PERMETER FENCE, AND ASSOCIATED GATES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE REMOVAL OF THE CONSTRUCTION LAYDOWN AREA PERMETER FENCE AND ASSOCIATED GATES AT THE COMPLETION OF THE PROJECT.
2. THE CONTRACTOR SHALL REFERENCE THE ARCHITECTURAL PLANS FOR DIMENSIONS, JOINTS AND INLAY SPECIFICATIONS NEAR THE BUILDING. THE CONTRACTOR SHALL PROVIDE JOINTS IN WALKWAYS EVERY TEN (10) FEET MAXIMUM, OR AS INDICATED ON ARCHITECTURAL PLANS AND SHEETS.
3. ALL CONSTRUCTION TRAFFIC SHALL ENTER SITE FROM CATAWBA TRACE UNLESS OTHERWISE APPROVED IN WRITING FROM THE OWNER'S REPRESENTATIVE FOR AN ALTERNATE POINT OF ACCESS.
4. REFER TO ARCHITECTURAL PLANS FOR BUILDING INFORMATION.
5. ALL DIMENSIONS ARE IN DECIMAL FEET TO OUTSIDE FACE OF BUILDINGS, TO CENTERLINES, AND/OR FACE OF CURB UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATES AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO ANY CONSTRUCTION.
7. ALL WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE FROM DRAWINGS.
8. ALL UTILITIES WITH SURFACE ACCESS SHALL BE LOCATED WITHIN THE PAVING PATTERN AND SHALL BE COORDINATED WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION. REFER TO LAYOUT DRAWINGS.
9. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
10. ALIGN ALL JOINTS, CORNERS, AND EDGES AS SHOWN.
11. CONTRACTOR SHALL REFER TO AND COORDINATE WITH ARCHITECTURAL, STRUCTURAL, AND MEP DRAWINGS AT ALL TIMES PRIOR TO AND DURING CONSTRUCTION.
12. ALL CURB TAPERS ARE SIX (6) FEET LONG UNLESS OTHERWISE SHOWN ON PLAN.
13. WHERE NEW SIDEWALK ADJOINS EXISTING WALK, PROVIDE EXPANSION JOINT BY DRILLING INTO THE FACE OF THE EXISTING WALK FOR PLACEMENT OF DOWELS. TIE NEW SIDEWALKS INTO NEAREST EXISTING PAVEMENT JOINT; MATCH WIDTH OF EXISTING WALKWAY.
14. WHERE SIDEWALK OR WALKWAYS ARE ADJACENT TO PARKING SPACES THE WALKWAY SHALL BE A MINIMUM 6.5' WIDE AS MEASURED FROM THE FACE OF CURB.
15. MAXIMUM RUNNING SLOPE FOR WALKING SURFACES CANNOT BE GREATER THAN 1:20 AND CROSS SLOPES CANNOT BE GREATER THAN 1:48. HANDICAP SPACES SURFACE SLOPES SHALL NOT EXCEED 1:48 IN ALL DIRECTIONS.
16. SIGHT TRIANGLES - NOTHING OVER 30' HIGH SHALL BE ALLOWED WITHIN THE SIGHT DISTANCE TRIANGLES.
17. THE SITE SHALL BE FULLY STABILIZED (80% COVERAGE) PRIOR TO ISSUANCE OF A BUILDING CERTIFICATE OF OCCUPANCY OR PROJECT APPROVAL.
18. HANDICAP RAMPS SHALL BE INSTALLED PER LATEST EDITION OF THE NC BUILDING CODE AND ANSI 117.11 WITH DETECTABLE WARNING DOMES WITH A COLOR CONTRAST OF 70% MINIMUM. SEE DETAILS AND GRADING SPOT ELEVATIONS. IF THE EXISTING CONDITIONS PRECLUDE THE ABILITY TO PROVIDE A MAXIMUM SLOPE 1:12 FOR 6 FEET OR A MAXIMUM CROSS SLOPE OF 1:48 AND A 36" MINIMUM LANDING, THE CONTRACTOR SHALL NOTIFY ENGINEER OR OWNER REPRESENTATIVE PRIOR TO INSTALLATION.
19. FIRE DEPARTMENT ACCESS ROAD SHALL BE CAPABLE OF SUPPORTING 80,000 LBS.

SITE LEGEND

- BUILDING
- HEAVY DUTY CONCRETE
- CONCRETE SIDEWALK
- ASPHALT PAVEMENT - STANDARD DUTY
- ASPHALT PAVEMENT - HEAVY DUTY
- CONCRETE PAVERS
- GRAVEL PAVEMENT
- CURB & GUTTER
- SIGN
- ADA PARKING SPACE
- TREELINE
- FENCE
- PROPOSED BOLLARD
- LIMITS OF DISTURBANCE

IMPERVIOUS AREA SUMMARY:

NORTH CAROLINA		SOUTH CAROLINA	
EXISTING IMPERVIOUS AREA	= 0.32 AC	IMPERVIOUS AREA REMOVED	= 0.96 AC
IMPERVIOUS AREA REMOVED	= 0.32 AC	PROPOSED IMPERVIOUS AREA	= 2.10 AC
PROPOSED IMPERVIOUS AREA	= 1.98 AC	HOTEL = 1.035 AC	ROAD IMPROVEMENTS = 1.065 AC
HOTEL = 1.915 AC			
ROAD IMPROVEMENTS = 0.065 AC			
DISTURBED AREA	= 5.41 AC	DISTURBED AREA:	= 5.01 AC
TOTAL IMPERVIOUS AREA REMOVED	= 1.28 AC		
TOTAL PROPOSED IMPERVIOUS AREA	= 4.28 AC	(HOTEL + 2.95 AC / ROADWAY = 1.13 AC)	
TOTAL DISTURBED AREA	= 10.42 AC		
HOTEL PROJECT AREA	= 9.485 AC		

ZONING CODE SUMMARY:

PROJECT NAME: SPRINGHILL SUITES HOTEL
ADDRESS: 14500 BEST DAY BOULEVARD
OWNER: CAROWINDS, LLC
PLANS PREPARED BY: STEWART, INC.
ZONING: NC PARCELS = I-1 LIGHT INDUSTRIAL (REZONED)
PROPOSED USE: HOTEL
BUILDING HEIGHT: 63 Feet
BUILDING COVERAGE: 22,850 Sq. Ft.
LOT SIZE: NC 20317102 24.16 Acres
OPEN SPACE REQ.: N/A %
YARD REQUIREMENTS:
Setback: 20 ft. from R/W
Side Yard: 18.7 ft.
Rear Yard: 10 ft.
Building Separation: N/A ft. min.
REQUIRED BUFFERS:
Front: (No) Yes ft. Rear: (No) Yes ft.
Side (L) (No) Yes ft. Side (R) (No) Yes ft.
REQUIRED SCREENING:
Front: (No) Yes ft. Rear: (No) Yes ft.
Side (L) (No) Yes ft. Side (R) (No) Yes ft.
Parking Only: (Yes) No
VEHICULAR PARKING DATA
TOTAL CODE REQUIRED PARKING = 140 SPACES
1 SPACE PER ROOM = 130
PLUS 1 SPACE PER 4 SEATS IN MEETING ROOM = 4 (14 SEATS)
PLUS 1 SPACE PER 250 SF IN EATING DRINKING ENTERTAINMENT AREA = 6 (1304 SF)
TOTAL HOTEL REQUIRED PARKING = 156 (1/2 PER ROOM)
PROVIDED PARKING = 159
ACCESSIBLE SPACES = 6 REQUIRED (1 TO BE VAN ACCESSIBLE)
BICYCLE PARKING:
SHORT TERM REQUIRED / PROVIDED = 0
LONG TERM REQUIRED = 7
1 SPACE PER 20 RENTABLE ROOMS
LONG TERM PROVIDED = 8
GARBAGE COLLECTION: ON-SITE DUMPSTERS AND RECYCLING WITHIN ENCLOSURE

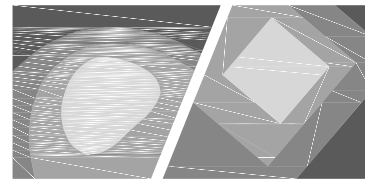
ODELL

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CHARLOTTE, NC

RICHMOND, VA

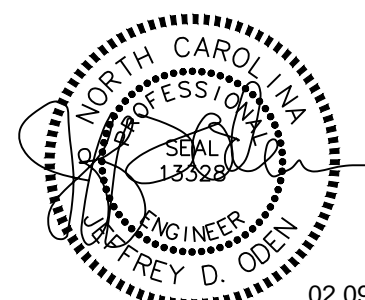
CONSULTANT



STEWART

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CHARLOTTE, NC 28202
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FIRM LICENSE # C-1091
www.stewartinc.com
PROJECT # X17017.00

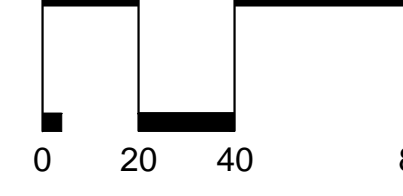


02.09.2018

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SPRINGHILL SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



NORTH

SCALE: 1"=40'

REVISION	DATE	DESCRIPTION
SD	09/09/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/09/2018	
02/09/2018	ACCELALUEA REVISIONS	
ISSUE	DATE	DESCRIPTION

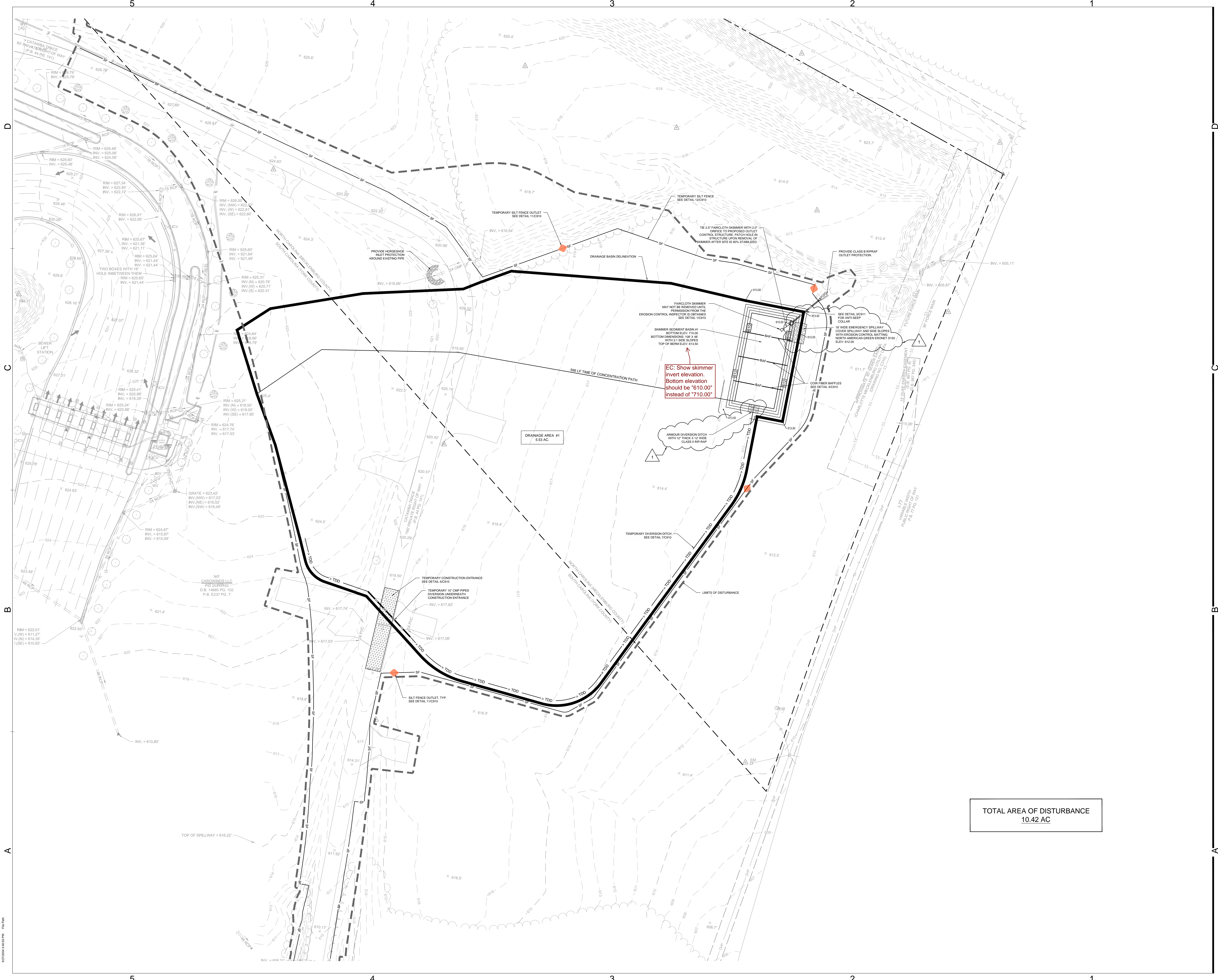
PROJECT NO:	X17017.00
P.I.C.R.	TAD / JDO
P.MGR.	TAD
P.ENGR.	JDO
DESIGN BY	DLS / MRB

SHEET TITLE

SITE PLAN

SHEET IDENTIFIER

C300



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FIRM LICENSE # C-1051
www.stewartinc.com
PROJECT # X17017.00



02.09.2018

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SPRINGHILL
SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



1 02/01/2018 ACCELA REVISIONS



NORTH

SCALE: 1"=40'

REVISION	DATE	DESCRIPTION
SD	09/09/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
1	02/09/2018	ACCELA/UESA REVISIONS

FULL SET ISSUES

PROJECT NO:

X17017.00

P.I.C.

TAD / JDO

P.MGR.

TAD

P.ENGR.

JDO

DESIGN BY

DLS / MRB

SHEET TITLE

SEDIMENTATION
AND EROSION
CONTROL PLAN
PHASE 1

SHEET IDENTIFIER

C400



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PROJECT # X17017.00



02/09/2018

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SPRINGHILL
SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



1

02/01/2018

ACCELA REVISIONS



NORTH



SCALE: 1"=40'

REVISION	DATE	DESCRIPTION
ADDENDA OR MODIFICATION		
SD	09/09/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
1	02/09/2018	ACCELA/UESA REVISIONS
ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO:

X17017.00

P.I.C.

TAD / JDO

P.MGR.

TAD

P.ENGR.

JDO

DESIGN BY

DLS / MRB

SHEET TITLE

SEDIMENTATION
AND EROSION
CONTROL PLAN
PHASE 2

SHEET IDENTIFIER

C401

A

B

C

D

SCDHEC STANDARD NOTES:

- IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS. IN ADDITION TO HYDROSEEDING, IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
- STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED BELOW.
WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
- ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
- PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
- RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET SEQ. AND SCR100000.
- TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT-LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
- ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WOS.
- LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.
- A COPY OF THE SWPPP, INSPECTIONS RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.
- INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
- MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING. WHEEL WASH WATER AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
- MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPs (SEDIMENT BASIN, FILTER BAG, ETC.).
- THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED: WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL; WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS; FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.
- IF EXISTING BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC's WATER QUALITY STANDARDS, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPs MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE.
- A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE, THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.

SEEDBED PREPARATION:

- CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS.
- RIP THE ENTIRE AREA TO 6 INCHES DEPTH AND SPREAD TOPSOIL 3 INCHES DEEP.
- REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- APPLY ALL AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE ADMIXTURES BELOW).
- CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM, REASONABLY UNIFORM 4 TO 6 INCHES DEEP SEEDBED IS PREPARED.
- SEED ON A FRESHLY PREPARED SEED BED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
- MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
- INSPECT ALL SEEDBED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDING WITHIN THE PLANTING SEASON. IF POSSIBLE, IF STAND SHOULD BE OVER 50% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
- SEE LANDSCAPING PLANS FOR PERMANENT SEEDING, MULCHING, AND FERTILIZING RATES. ALL AREAS NOT DESIGNATED TO RECEIVE PLANTS SHALL BE SEEDBED PER THE LANDSCAPING PLANS.

ADMIXTURES:

AGRICULTURAL LIMESTONE: 2 TONS/ACRE

FERTILIZER: 1,000 LBS/ACRE - 10-10-10

SUPERPHOSPHATE: 500 LBS/ACRE - 20% ANALYSIS

MULCH: 2 TONS/ACRE - SMALL GRAM STRAW

ANCHOR: ASPHALT EMULSION AT 300 GALS/ACRE

SEEDING SCHEDULE

SHOULDERS, SIDE DITCHES, SLOPES (Max 3:1)

DATE	TYPE	PLANTING RATE
AUG 15 - NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1 - MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE
MAR 1 - APR 15	TALL FESCUE	300 LBS/ACRE
APR 15 - JUN 30	HAILED COMMON BERMUDAGRASS	25 LBS/ACRE
JUL 1 - AUG 15	TALL FESCUE AND ***BROWNTOP MILLET ***OR SORGHUM SUDAN HYBRIDS	120 LBS/ACRE 30 LBS/ACRE

SLOPES (3:1 to 2:1)

DATE	TYPE	PLANTING RATE
MAR 1 - JUN 1	***BROWNTOP MILLET	50 LBS/ACRE
(MAR 1 - APR 15)	OR ADD TALL FESCUE	120 LBS/ACRE (MAR 1 - JUN 30)
JUN 1 - SEP 1	OR ADD HAILED COMMON BERMUDAGRASS	25 LBS/ACRE
	***TALL FESCUE AND	120 LBS/ACRE
	***BROWNTOP MILLET	50 LBS/ACRE
	***OR SORGHUM SUDAN HYBRIDS	30 LBS/ACRE
SEP 1 - MAR 1	ANNUAL RYE AND TALL FESCUE AND ABRUZZI RYE	70 LBS/ACRE 120 LBS/ACRE (NOV 1 - MAR 1) 25 LBS/ACRE

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS. OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

***TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.

EROSION CONTROL NOTES:

- REFER TO C3.00 FOR GENERAL NOTES.
- ALL EROSION CONTROL MEASURES SHALL BE INSTALLED IN BEST LOCATION BASED ON FIELD CONDITIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF CONSTRUCTION ENTRANCES AS NECESSARY TO PREVENT THE TRACKING OF SEDIMENT OFF-SITE.
- APPROVAL OF THIS EROSION AND SEDIMENTATION CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- THE IMPLEMENTATION OF THESE ESC FACILITIES AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR AND ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
- DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE LIMITS OF DISTURBANCE (L.O.D.) SHALL BE PERMITTED. THE L.O.D. SHALL BE MAINTAINED BY THE ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. COPIES OF THE WRITTEN INSPECTION REPORTS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE TWICE PER WEEK AND AFTER RAINS OF GREATER THAN 0.5" RAIN GAUGE REQUIRED ON SITE.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY EIGHT (48) HOURS FOLLOWING A STORM EVENT.
- AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAYING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE 2 - 3 INCHES THICK.
- THE SURFACE OF AREAS SLOPES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL THAT ARE TO RECEIVE INTERIM FILL SHALL BE PLOWED, FURROWED, TILLED OR BROKEN UP PRIOR TO PLACING FILL SO THAT FILL MATERIAL WILL BOND WITH THE EXISTING SURFACE. INTERIM FILL SHALL BE PLACED AS SPECIFIED FOR PERMANENT FILLS AND IN LIFTS NOT GREATER THAN 6".
- PROVIDE DUST CONTROL MEASURES INCLUDING, BUT NOT LIMITED TO, WETTING DOWN TO CONTROL DUST ON SITE, IN ORDER TO PREVENT ANNOYANCE/AND OR DAMAGE TO ADJACENT SITES. CALCIUM CHLORIDE OR ANY OTHER CHEMICAL MATERIAL MAY NOT BE USED ON SUBGRADES OF AREAS TO BE SEEDDED OR PLANTED.
- SEDIMENT LADEN RUNOFF FROM EXCAVATIONS SHALL NOT BE PUMPED DIRECTLY TO STORM DRAINAGE.
- ANY AREAS OF EXPOSED SOILS THAT WILL NOT BE DISTURBED FOR FOURTEEN DAYS SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
- INTERIM SLOPES MAY BE GRADED TO A MAXIMUM SLOPE OF 2:1 (HORIZONTAL: VERTICAL); CUT SLOPES SHALL BE LIMITED TO A MAXIMUM OF 1.5:1.
- INSPECTOR REFERS TO LOCAL JURISDICTIONAL (NC DENR OR LOCAL) LAND QUALITY INSPECTOR OR HIS REPRESENTATIVE. FIELD INSPECTIONS MAY REQUIRE ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS DEEMED NECESSARY BY THE INSPECTOR.
- CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF EROSION CONTROL METHODS DURING CONSTRUCTION, AND THE OWNER IS RESPONSIBLE FOR MAINTENANCE OF ALL PERMANENT EROSION CONTROL METHODS AFTER CONSTRUCTION IS COMPLETE, IF ANY PERMANENT METHODS ARE REQUIRED.
- NOTIFICATION OF LAND RESOURCES SEDIMENT AND EROSION CONTROL SELF-INSPECTION PROGRAM: THE PERSON RESPONSIBLE FOR LAND-DISTURBING ACTIVITIES IS REQUIRED TO INSPECT THE PROJECT AFTER EACH PHASE OF THE PROJECT AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED IN ACCORDANCE WITH NCQS 113A-54.1 AND 15A NCAC 4B.0131 TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED. THE SELF-INSPECTION REPORT FORM IS AVAILABLE AS AN EXCEL SPREADSHEET FORM HTTP://WWW.DLR.ENR.STATE.NC.US/PAGES/SEDIMENTATION_NEW.HTML.

CITY OF CHARLOTTE SEQUENCE OF CONSTRUCTION ACTIVITIES:

- OBTAIN GRADING/EROSION CONTROL PLAN APPROVAL FROM THE CITY OF CHARLOTTE ENGINEERING DEPARTMENT.
- DETERMINE AND MARK LIMITS OF DISTURBANCE.
- 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 CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS A VIOLATION OF CHAPTER 17 OF THE CITY CODE AND IS SUBJECT TO FINE. ARCHITECT, ENGINEER, AND CONTRACTOR SHALL BE PRESENT TO SATISFY REQUIREMENTS.
- INSTALL CONSTRUCTION ENTRANCE, SILT FENCE, INLET PROTECTION, AND OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
- CALL FOR ON-SITE INSPECTION BY INSPECTOR. WHEN APPROVED, INSPECTOR ISSUES THE GRADING PERMIT AND CLEARING AND GRUBBING MAY BEGIN.
- THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
- FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.
- STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
- COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURE.
- 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.
- ALL STREETS SURROUNDING THE PROJECT SHALL BE KEPT CLEAN AT ALL TIMES.
- PLACE TEMPORARY SEEDING ON ALL DISTURBED AREAS THAT WILL BE IDLE 14 DAYS OR LONGER.
- CLEAN SEDIMENT BASINS/TRAPS WHEN ONE-HALF FULL.
- PERMANENT SURFACE STABILIZATION SHALL BE INSTALLED FOR ALL AREAS WITHIN 14 DAYS AFTER FINAL GRADE HAS BEEN REACHED. AS NECESSARY, FERTILIZE, WATER AND RESEED AS REQUIRED TO ESTABLISH AND MAINTAIN A VIGOROUS STAND OF GRASS.
- AFTER COMPLETION OF CONSTRUCTION AND THE SITE IS STABILIZED, REMOVE ALL ACCUMULATED SEDIMENT FROM SEDIMENT TRAPPING MEASURES AND DISPOSE BY MEANS DEEMED ACCEPTABLE BY THE ENGINEER. SCHEDULE SITE INSPECTION. UPON APPROVAL BY THE EROSION CONTROL INSPECTOR, REMOVE TEMPORARY EROSION CONTROL MEASURES, SMOOTH AREA AND APPLY APPROPRIATE STABILIZATION.
- STORMWATER PERMIT INSPECTION REPORTS SHALL BE PERFORMED BY THE CONTRACTOR UNTIL NOTIFIED OTHERWISE BY THE EROSION CONTROL INSPECTOR.

CITY OF CHARLOTTE EROSION CONTROL NOTES:

- ALL "STD." NUMBERS REFER TO THE CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL.
- ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE ZONING ADMINISTRATOR.
- ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE CITY/COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
- GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE CITY/COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
- ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (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.
- ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY ENGINEERING DEPARTMENT.
- SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING (CLDS 30.16).
- A GRADING PLAN MUST BE SUBMITTED FOR ANY LOT GRADING EXCEEDING ONE ACRE THAT WAS NOT PREVIOUSLY APPROVED.
- DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING.

SEDIMENT BASIN DECOMMISSIONING NOTES:

- CALL FOR AN ON-SITE DETERMINATION MEETING WHEN REQUESTING TO DECOMMISSION PHASE OUT A TEMPORARY SEDIMENT BASIN/TRAP.
- DETERMINATION CAN ONLY BE MADE BY THE INSPECTOR OR HIS/HER DESIGNEE.
- ONCE IT HAS BEEN AGREED THAT THE TEMPORARY SEDIMENT BASIN/TRAP CAN COME OUT, IT MUST BE MARKED AND INITIALED BY THE MECKLENBURG COUNTY LUESA WATER INSPECTOR ON THE APPROVED SET OF EROSION CONTROL PLANS.
- IF SEDIMENT BASIN HAS WATER IN IT, THE WATER MUST BE PUMPED OUT FROM THE SURFACE INTO A FILTER BAG ON A LEVEL AREA FREE OF DEBRIS OR ANOTHER APPROVED METHOD AT NON-EROSIVE PROPERTIES.
- REMOVE SKIMMER AND PLUG ANY HOLES IN THE RISER, REMOVE ALL BAFFLE MATERIALS.
- IF THERE IS A LOT OF SEDIMENT/SILT IN BOTTOM OF THE BASIN AND MUST BE HAULED OFF, MIX WITH DRY MATERIAL OR SET ASIDE TO DRY THEN HAUL OFF.
- FILL OR CONVERT BASIN TO THE APPROVED ELEVATION OR PRODUCT ON THE APPROVED PLANS.
- AFTER FINAL GRADING HAS BEEN COMPLETED, THE AREA MUST BE STABILIZED WITH LIME, SEED, FERTILIZER, STRAW AND TACK ACCORDING TO THE SEEDING SCHEDULE SHOWN ON THE APPROVED PLANS. SEEDING MUST BE COMPLETED WITHIN 7 DAYS OF GRADING ON SLOPES STEEPER THAN 3:1 AND 14 DAYS FOR ALL OTHERS.

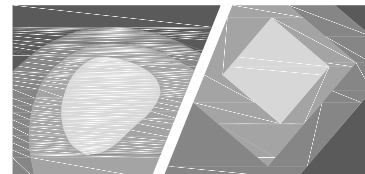
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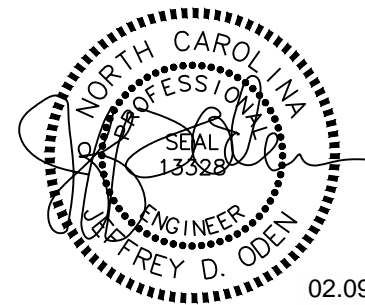
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REVISION	DATE	DESCRIPTION
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SD	09/09/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO: X17017.00

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P.MGR. TAD

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SHEET TITLE

SEDIMENTATION
AND EROSION
CONTROL
NOTES

SHEET IDENTIFIER

C402

D
C
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A

5

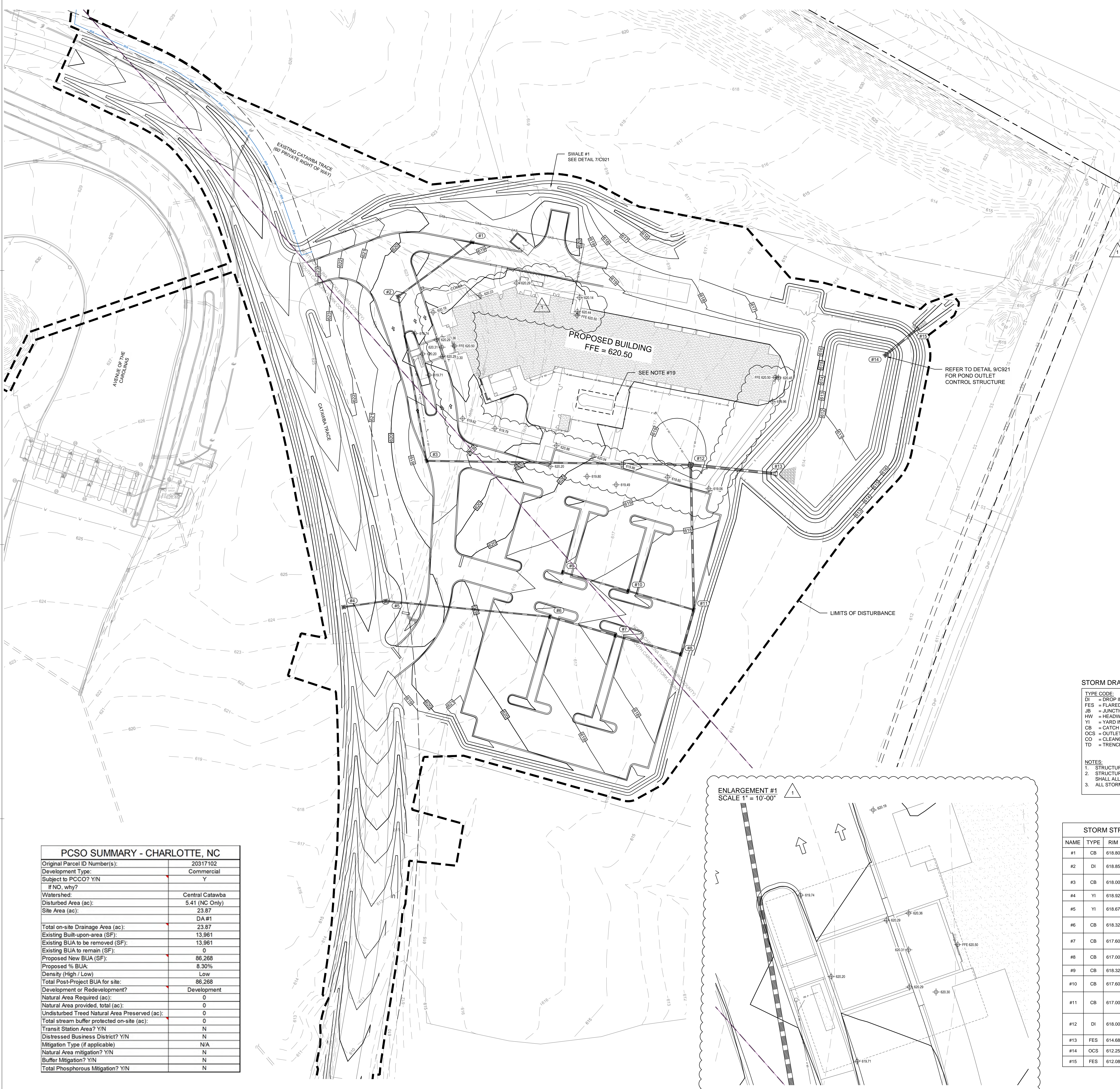
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2

1

PCSO SUMMARY - CHARLOTTE, NC	
Original Parcel ID Number(s):	20317102
Development Type:	Commercial
Subject to PCCOT? Y/N	Y
If NO, why?	
Watershed:	Central Catawba
Disturbed Area (ac):	5.41 (NC Only)
Site Area (ac):	23.87
DA#1	
Total on-site Drainage Area (ac):	23.87
Existing Built-upon-area (SF):	13,961
Existing BUA to be removed (SF):	13,961
Existing BUA to remain (SF):	0
Proposed New BUA (SF):	86,268
Proposed % BUA:	8.30%
Density (High / Low)	Low
Total Post-Project BUA for site:	86,268
Development or Redevelopment?	Development
Natural Area Required (ac):	0
Natural Area provided, total (ac):	0
Undisturbed Treed Natural Area Preserved (ac):	0
Total stream buffer protected on-site (ac):	0
Transit Station Area? Y/N	N
Distressed Business District? Y/N	N
Mitigation Type (if applicable)	N/A
Natural Area mitigation? Y/N	N
Buffer Mitigation? Y/N	N
Total Phosphorous Mitigation? Y/N	N



- GRADING & STORM DRAINAGE NOTES:**
- REFER TO SHEET C300 FOR GENERAL NOTES.
 - CONTRACTOR SHALL REPORT ANY GRADE DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING CONSTRUCTION OPERATIONS.
 - THE MAXIMUM SLOPE ALONG ANY HANDICAP ACCESSIBLE PATHWAY SHALL NOT EXCEED 5.0% AND SHALL NOT EXCEED A 2.0% CROSS SLOPE. HANDICAP RAMPS INDICATED ON PLANS SHALL BE A MAXIMUM OF 1:12 SLOPES WITH A MAXIMUM RISE OF 30" BETWEEN LANDINGS. NON-CURB CUT RAMPS SHALL HAVE HANDRAILS AND GUARDS PER DETAILS WITH 5' LANDINGS AT THE BOTTOM AND TOP OF RAMP.
 - ALL PROPOSED ELEVATIONS SHOWN ARE EDGE OF PAVEMENT ELEVATIONS UNLESS OTHERWISE SPECIFIED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL NEWLY CONSTRUCTED STORM DRAINAGE IMPROVEMENTS AND RECEIVING STORM DRAINAGE SYSTEMS REMAIN CLEAN OF SEDIMENT AND DEBRIS.
 - PRIOR TO ISSUANCE OF A BUILDING CERTIFICATE OF OCCUPANCY THE CONTRACTOR SHALL PROVIDE THE OWNER WITH THE VIDEO INSPECTION OF THE STORM SEWER SYSTEM. (BOTH PUBLIC AND PRIVATE). THIS SUBMITTAL MAY NEED TO BE REVIEWED AND ACCEPTED BY THE LOCAL JURISDICTION PRIOR TO THE ISSUANCE OF THE BUILDING CO.
 - REFER TO THE EROSION CONTROL PLAN FOR THE SEQUENCE OF CONSTRUCTION.
 - INTERIM GRADING SHALL BE PROVIDED THAT ENSURES THE PROTECTION OF STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, AND WASHOUT.
 - INTERIM GRADING SHALL BE PROVIDED TO DIRECT WATER AWAY FROM BUILDINGS AND PREVENT PONDING.
 - THE ROOF LEADERS TO UNDERGROUND STORM SYSTEM. CONTRACTOR TO FIELD VERIFY, LOCATE AND INSTALL AS SHOWN ON PLANS. REFER TO PLUMBING PLANS FOR UNDERSLAB ROOF DRAIN LOCATIONS, SIZE AND ELEVATION.
 - ROOF DRAIN PIPING SHALL BE CORRUGATED DUAL WALL HDPE WITH SMOOTH INTERIOR, INSTALLED AT 2% SLOPE. JUNCTION BOXES SHALL BE 18" DIAMETER NYOPLAST LIGHT DUTY IN-LINE DRAINAGE STRUCTURES WITH 18" CAST IRON COVERS.
 - MAXIMUM SLOPE ACROSS ANY HANDICAPPED PARKING SPACE AND AISLE SHALL NOT EXCEED 2% IN ANY DIRECTION.
 - PROPOSED CONTOURS ARE APPROXIMATE. SPOT ELEVATIONS AND ROADWAY PROFILES SHALL BE USED IN CASE OF DISCREPANCY.
 - PLACE BACKFILL AND FILL MATERIALS IN LAYER NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. PLACE BACKFILL AND FILL MATERIALS EVENLY ON ALL SIDES TO REQUIRED ELEVATIONS, AND UNIFORMLY ALONG THE FULL LENGTH OF EACH STRUCTURE. COMPACT SOIL TO NOT LESS THAN 95 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 FOR EACH LAYER OF BACKFILL OR FILL MATERIAL UP TO TWO FEET OF FINISHED GRADE. COMPACT SOIL TO NOT LESS THAN 98 PERCENT OF MAXIMUM DRY UNIT WEIGHT ACCORDING TO ASTM D 698 FOR EACH LAYER OF BACKFILL OR FILL MATERIAL FOR THE FINAL TWO FEET.
 - SITE GRADING IMMEDIATELY ADJACENT TO FOUNDATION OF BUILDING SHALL SLOPE NOT LESS THAN 1/20 AWAY FOR MINIMUM DISTANCE OF 10 FEET. ALTERNATIVE METHOD SHALL BE PROVIDED TO DIVERT WATER AWAY FROM FOUNDATION VIA SWALES SLOPED AT A MINIMUM OF 2% OR IMPERVIOUS SURFACES SLOPED AWAY A MINIMUM OF 2% AWAY FROM BUILDING.
 - CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF EXISTING MANHOLES, METERS, VALVES, ETC. AS REQUIRED TO MEET NEW FINISHED GRADES.
 - CONTRACTOR SHALL SLOPE GRADES TO ASSURE POSITIVE STORMWATER FLOW TO KEEP WATER FROM POOLING ALONG CURBS AND WALLS.
 - TOP OF WALL ELEVATIONS INDICATE THE ELEVATION AT THE TOP OF THE CAP, UNLESS OTHERWISE NOTED.
 - BOTTOM OF WALL ELEVATIONS INDICATE THE ELEVATION OF THE FINISHED GRADE.
 - POOL DESIGNED BY OTHERS. DESIGN SHALL INCLUDE POOL DECK GRADES, PUMP AND RECIRCULATION SYSTEM, FILTRATION SYSTEM, DISINFECTION EQUIPMENT, AND DRAIN LINES. TRENCH DRAIN SHOWN FOR REFERENCE AND SHALL BE INCLUDED IN POOL DESIGN. CONNECT TRENCH DRAIN TO STORM DRAINAGE SYSTEM AS SHOWN.

GRADING LEGEND

- 200 — PROPOSED MAJOR CONTOUR
- 200 — PROPOSED MINOR CONTOUR
- 200 — EXISTING MAJOR CONTOUR
- 200 — EXISTING MINOR CONTOUR
- PROPOSED STORM DRAINAGE PIPE
- PROPOSED CATCH BASIN (CB)
- PROPOSED JUNCTION BOX (JB)
- PROPOSED DROP INLET (DI)
- 44.50 — PROPOSED SPOT ELEVATION
- TC 44.50
BC 44.00 — TOP/BOTTOM OF CURB
- TW 46.00
BW 44.00 — TOP/BOTTOM OF WALL
- RIPRAP DISSIPATOR
- FLOW DIRECTION
- LIMITS OF DISTURBANCE

STORM DRAINAGE NETWORK

TYPE CODE:
DI = DROP INLET
FES = FLARED END SECTION
JB = JUNCTION BOX
HW = HEADWALL
YI = YARD INLET
CB = CATCH BASIN
OCS = OUTLET CONTROL STRUCTURE
CO = CLEANOUT
TD = TRENCH DRAIN

NOTES:
1. STRUCTURES WITHIN NCDOT RIGHT-OF-WAY SHALL BE TO NCDOT STANDARDS.
2. STRUCTURES NOT WITHIN RIGHT OF WAY SHALL EITHER ALL BE TO NCDOT STANDARDS OR SHALL ALL BE TO LOCAL JURISDICTIONAL STANDARDS.
3. ALL STORM PIPES TO BE CLASS III RCP UNLESS OTHERWISE NOTED.

UPSTREAM STRC
UPSTREAM GRD. ELEV.
DOWNSTREAM STRC
DOWNSTREAM GRD. ELEV.
FLOW
UPSTREAM INVERT
DOWNSTREAM INVERT

STORM STRUCTURE TABLE				
NAME	TYPE	RIM	INVERTS	
#1	CB	618.80	INV IN: 615.80 15" RCP (#2)	INV OUT: 615.30 15" RCP (#3)
#2	DI	618.85	INV IN: 615.30 15" RCP (#1)	INV OUT: 615.30 15" RCP (#3)
#3	CB	618.00	INV IN: 614.40 15" RCP (#2)	INV OUT: 614.15 18" RCP (#12)
#4	YI	618.92	INV OUT: 616.00 15" RCP (#5)	
#5	YI	618.67	INV IN: 615.75 15" RCP (#4)	INV OUT: 615.75 15" RCP (#6)
#6	CB	618.32	INV IN: 614.85 15" RCP (#5)	INV IN: 614.61 18" RCP (#7)
#7	CB	617.60	INV IN: 614.25 18" RCP (#6)	INV OUT: 614.25 18" RCP (#8)
#8	CB	617.00	INV IN: 613.75 18" RCP (#7)	INV OUT: 613.25 24" RCP (#11)
#9	CB	618.32	INV OUT: 615.25 15" RCP (#10)	
#10	CB	617.60	INV IN: 614.50 15" RCP (#9)	INV OUT: 614.50 15" RCP (#11)
#11	CB	617.00	INV IN: 613.00 24" RCP (#8)	INV IN: 613.75 15" RCP (#10)
#12	DI	618.00	INV IN: 612.75 18" RCP (#3)	INV IN: 612.25 24" RCP (#11)
#13	FES	614.68	INV IN: 611.80 30" RCP (#12)	
#14	OCS	612.25	INV OUT: 610.00 24" RCP (#15)	
#15	FES	612.08	INV IN: 609.75 24" RCP (#14)	

STORM PIPE TABLE				
FROM	TO	SIZE	MAT.	LENGTH
#1	#2	15"	RCP	97.2'
#2	#3	15"	RCP	176.5'
#3	#12	18"	RCP	279.6'
#4	#5	15"	RCP	45.0'
#5	#6	15"	RCP	174.9'
#6	#7	18"	RCP	72.0'
#7	#8	18"	RCP	72.0'
#8	#11	24"	RCP	49.0'
#9	#10	15"	RCP	72.0'
#10	#11	15"	RCP	72.0'
#11	#12	24"	RCP	153.5'
#12	#13	30"	RCP	85.9'
#14	#15	24"	RCP	40.1'

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SPRINGHILL SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC

Cedar Fair
Entertainment Company

NORTH

0 20 40 80

SCALE: 1"=40'

REVISION	DATE	DESCRIPTION
SD	09/09/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
1	02/09/2018	ACCELA/LUESA REVISIONS
ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO: X17017.00

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P.MGR. TAD

P.ENGR. JDO

DESIGN BY: DLS / MRB

SHEET TITLE

GRADING PLAN

SHEET IDENTIFIER

C500

5

4

3

2

1

5

4

3

2

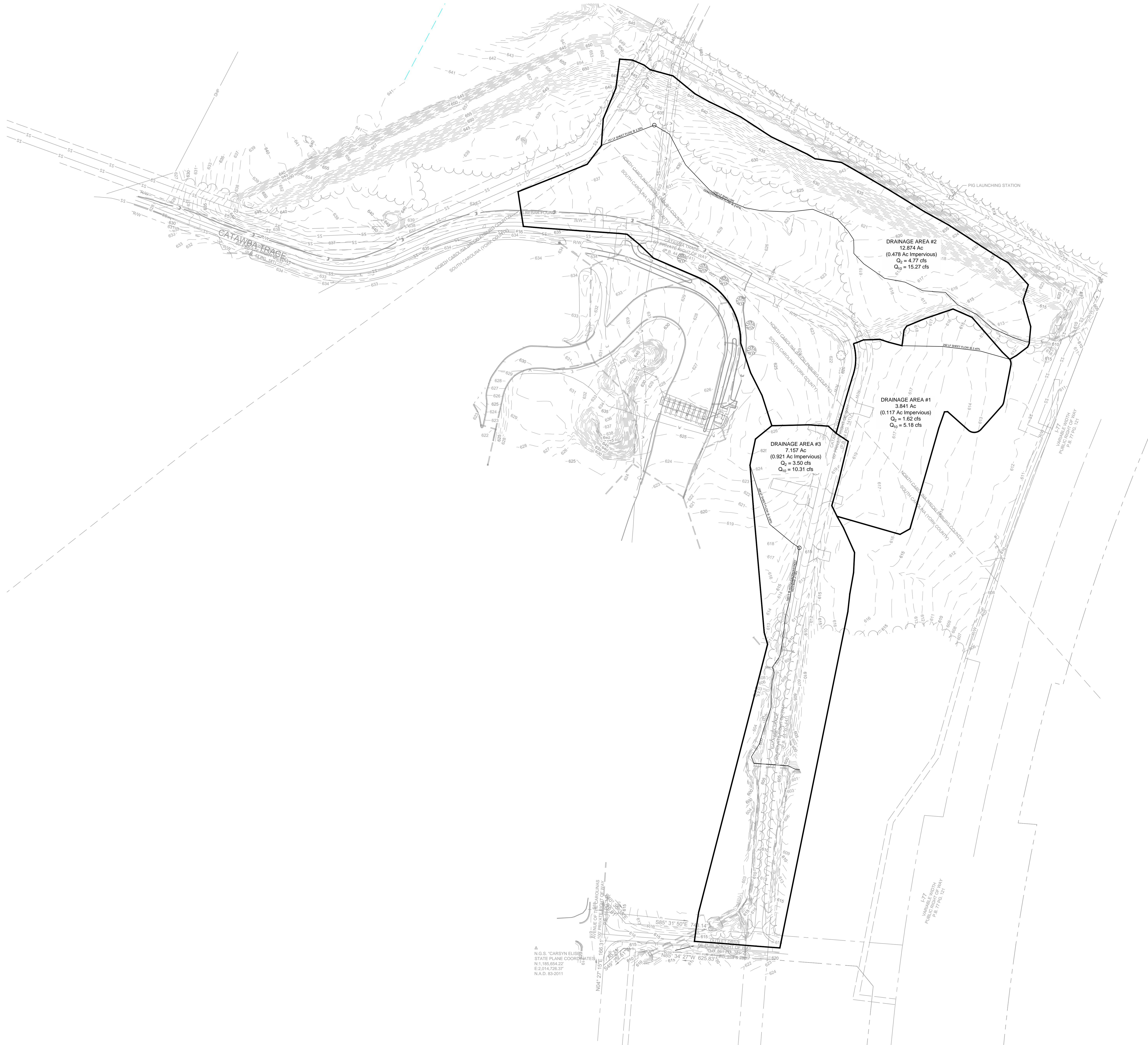
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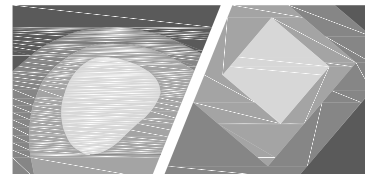
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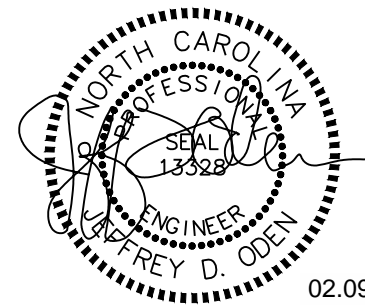
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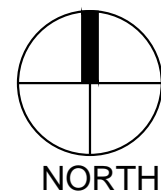


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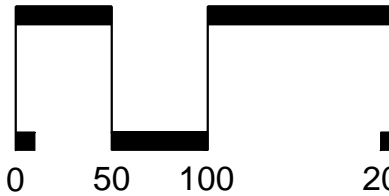
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NORTH



SCALE: 1"=100'

REVISION	DATE	DESCRIPTION
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FULL SET ISSUES		

PROJECT NO: X17017.00

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P.MGR. TAD

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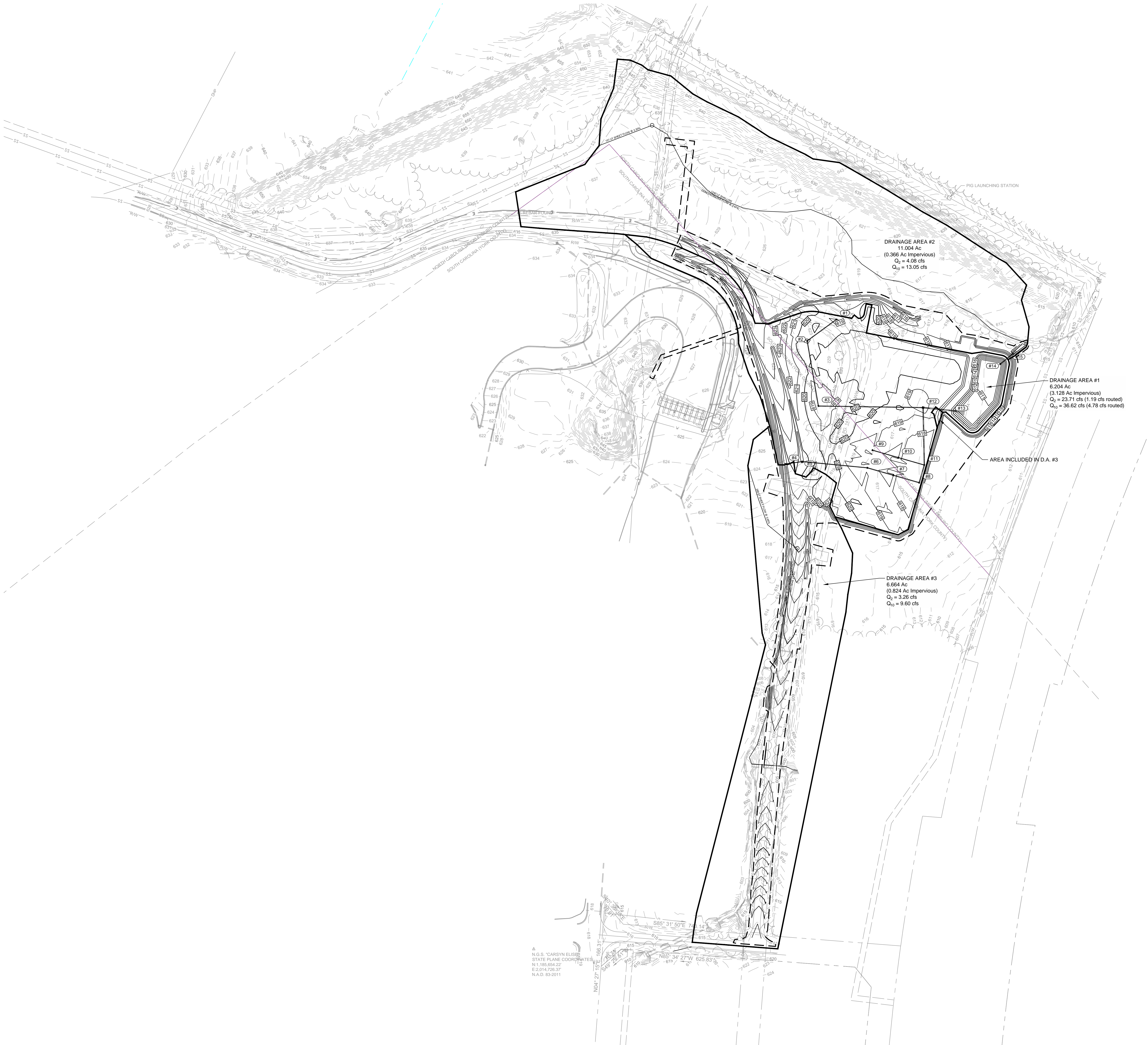
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SHEET TITLE

PRE-DEVELOPMENT
DRAINAGE AREA MAP

SHEET IDENTIFIER

C510



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NORTH



0 50 100 200
SCALE: 1"=100'

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FULL SET ISSUES		

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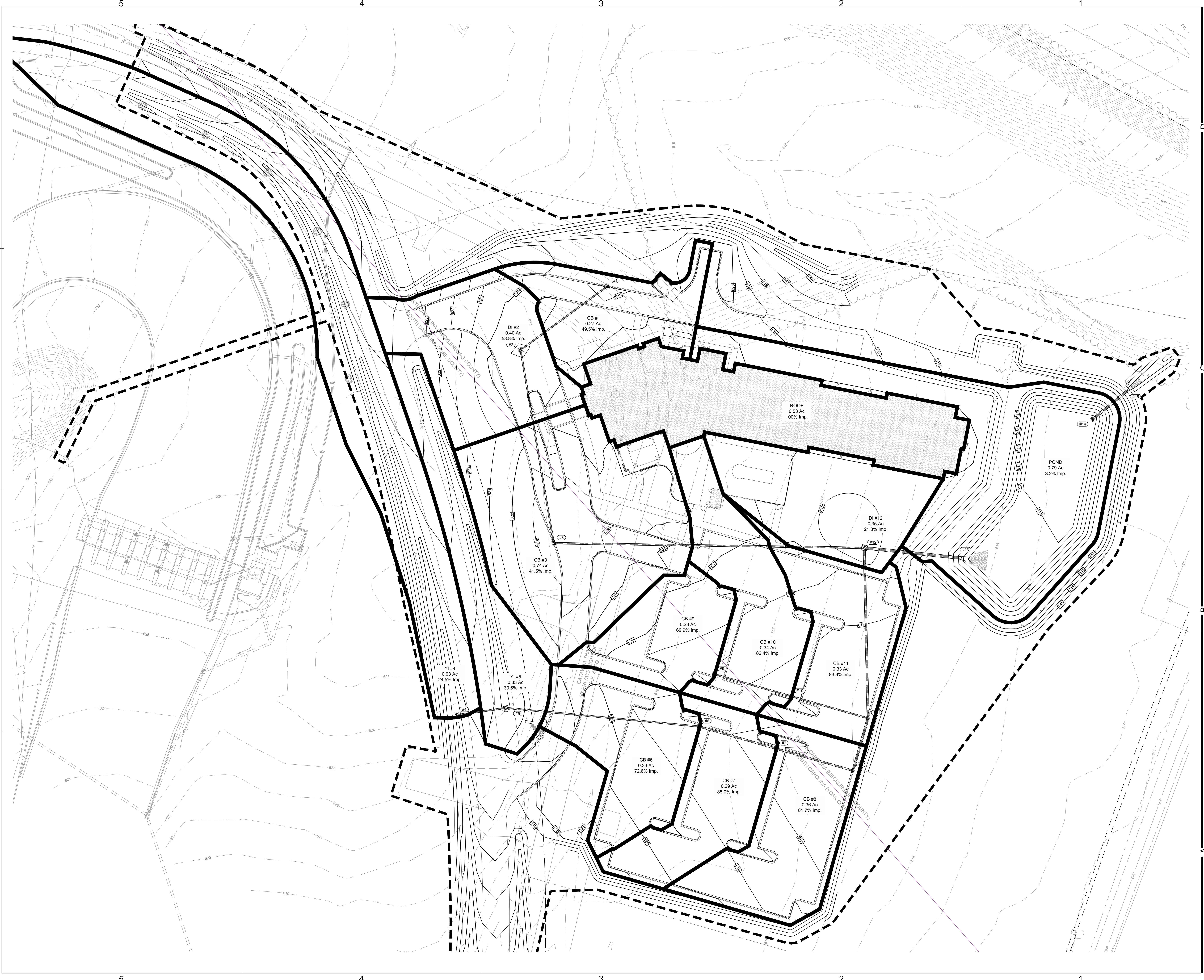
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SHEET TITLE

POST-DEVELOPMENT
DRAINAGE AREA MAP

SHEET IDENTIFIER

C511



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CHARLOTTE, NC





NORTH



SCALE: 1"=30'

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30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	

ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO:

X17017.00

P.I.C.

TAD / JDO

P.MGR.

TAD

P.ENGR.

JDO

DESIGN BY

DLS / MRB

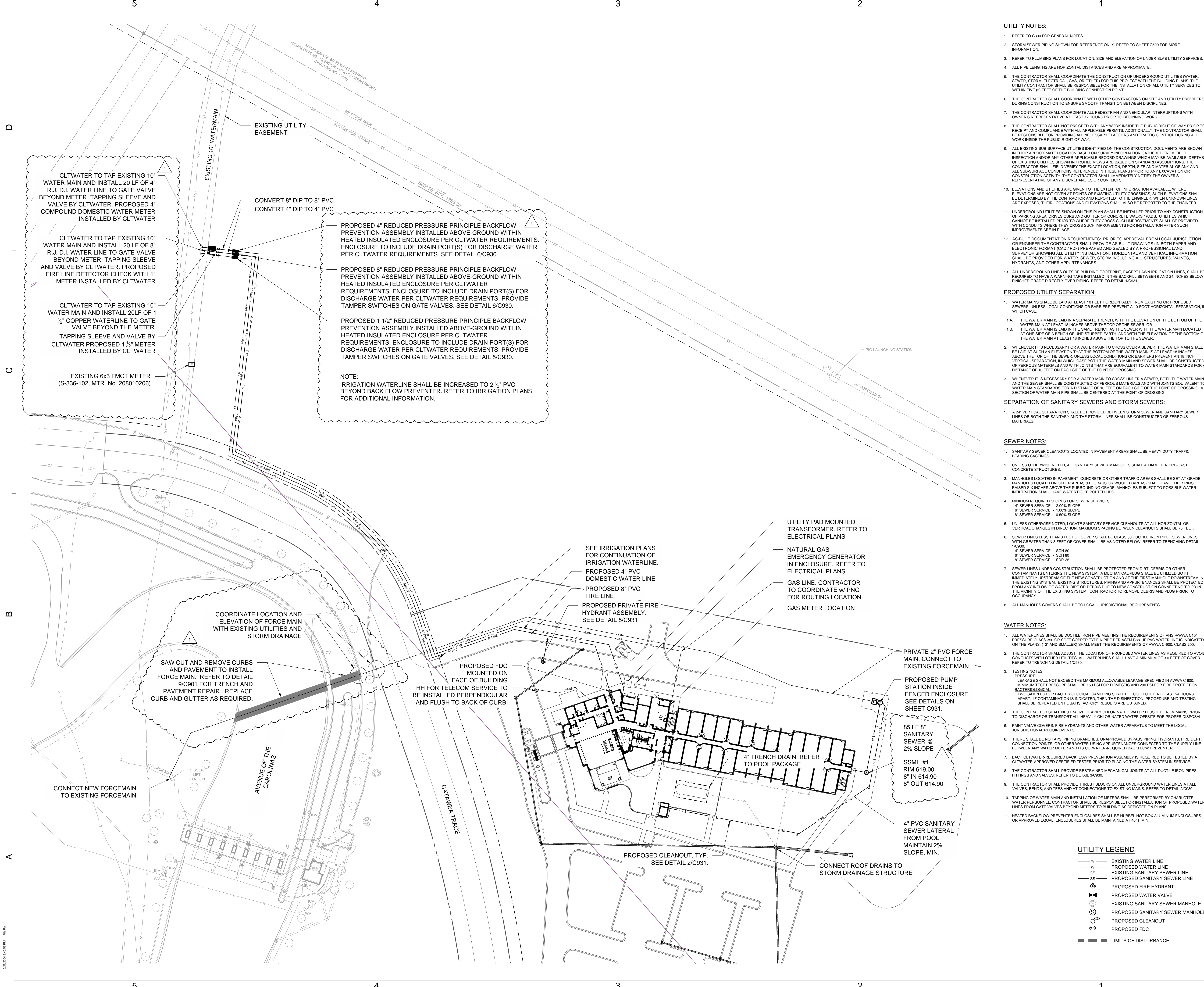
SHEET TITLE

INLET AREA MAP

SHEET IDENTIFIER

C512

5/27/2018 3:45:53 PM File Path



- UTILITY NOTES:**
1. REFER TO C300 FOR GENERAL NOTES.
 2. STORM SEWER PIPING SHOWN FOR REFERENCE ONLY. REFER TO SHEET C500 FOR MORE INFORMATION.
 3. REFER TO PLUMBING PLANS FOR LOCATION, SIZE AND ELEVATION OF UNDER SLAB UTILITY SERVICES.
 4. ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
 5. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF UNDERGROUND UTILITIES (WATER, SEWER, STORM ELECTRICAL, GAS, OR OTHER) FOR THIS PROJECT WITH THE BUILDING PLANS. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL UTILITY SERVICES TO WITHIN FIVE (5) FEET OF THE BUILDING CONNECTION POINT.
 6. THE CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTORS ON SITE AND UTILITY PROVIDERS DURING CONSTRUCTION TO ENSURE SMOOTH TRANSITION BETWEEN DISCIPLINES.
 7. THE CONTRACTOR SHALL COORDINATE ALL PEDESTRIAN AND VEHICULAR INTERRUPTIONS WITH OWNER'S REPRESENTATIVE AT LEAST 72 HOURS PRIOR TO BEGINNING WORK.
 8. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INSIDE THE PUBLIC RIGHT OF WAY PRIOR TO RECEIPT AND COMPLIANCE WITH ALL APPLICABLE PERMITS. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY FLAGGERS AND TRAFFIC CONTROL DURING ALL WORK INSIDE THE PUBLIC RIGHT OF WAY.
 9. ALL EXISTING SUB-SURFACE UTILITIES IDENTIFIED ON THE CONSTRUCTION DOCUMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATION BASED ON SURVEY INFORMATION GATHERED FROM FIELD INSPECTION AND/OR ANY OTHER APPLICABLE RECORD DRAWINGS WHICH MAY BE AVAILABLE. DEPTHS OF EXISTING UTILITIES SHOWN IN PROFILE VIEWS ARE BASED ON STANDARD ASSUMPTIONS. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION, DEPTH, SIZE AND MATERIAL OF ANY AND ALL SUB-SURFACE CONDITIONS REFERENCED IN THESE PLANS PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
 10. ELEVATIONS AND UTILITIES ARE GIVEN TO THE EXTENT OF INFORMATION AVAILABLE. WHERE ELEVATIONS ARE NOT GIVEN AT POINTS OF EXISTING UTILITY CROSSINGS, SUCH ELEVATIONS SHALL BE DETERMINED BY THE CONTRACTOR AND REPORTED TO THE ENGINEER. WHEN UNKNOWN LINES ARE EXPOSED, THEIR LOCATIONS AND ELEVATIONS SHALL ALSO BE REPORTED TO THE ENGINEER.
 11. UNDERGROUND UTILITIES SHOWN ON THIS PLAN SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION OF PARKING AREA, DRIVES CURB AND GUTTER OR CONCRETE WALKS / PADS. UTILITIES WHICH CANNOT BE INSTALLED PRIOR TO WHERE THEY CROSS SUCH IMPROVEMENTS SHALL BE PROVIDED WITH CONDUITS WHERE THEY CROSS SUCH IMPROVEMENTS FOR INSTALLATION AFTER SUCH IMPROVEMENTS ARE IN PLACE.
 12. AS-BUILT DOCUMENTATION REQUIREMENTS: PRIOR TO APPROVAL FROM LOCAL JURISDICTION OR ENGINEER THE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS (IN BOTH PAPER AND ELECTRONIC FORMAT) (C/D / PDF) PREPARED AND SEALED BY A PROFESSIONAL AND SURVEYOR SHOWING ALL UTILITY INSTALLATION. HORIZONTAL AND VERTICAL INFORMATION SHALL BE PROVIDED FOR WATER, SEWER, STORM INCLUDING ALL STRUCTURES, VALVES, HYDRANTS, AND OTHER APPURTENANCES.
 13. ALL UNDERGROUND LINES OUTSIDE BUILDING FOOTPRINT, EXCEPT LAWN IRRIGATION LINES, SHALL BE REQUIRED TO HAVE A WARNING TAPE INSTALLED IN THE BACKFILL BETWEEN 6 AND 24 INCHES BELOW FINISHED GRADE DIRECTLY OVER PIPING. REFER TO DETAIL 1/C931.
- PROPOSED UTILITY SEPARATION:**
1. WATER MAINS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM EXISTING OR PROPOSED SEWERS, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10-FOOT HORIZONTAL SEPARATION. IN WHICH CASE:
 - A. THE WATER MAIN IS LAID IN A SEPARATE TRENCH, WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
 - B. THE WATER MAIN IS LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE OF THE TRENCH OF UNDISTURBED EARTH AT LEAST 18 INCHES ABOVE THE BOTTOM OF THE WATER MAIN AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
 2. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS PREVENT AN 18 INCH VERTICAL SEPARATION, IN WHICH CASE BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING.
 3. WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
- SEPARATION OF SANITARY SEWERS AND STORM SEWERS:**
1. A 24" VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER LINES OR BOTH THE SANITARY AND THE STORM LINES SHALL BE CONSTRUCTED OF FERROUS MATERIALS.

- SEWER NOTES:**
1. SANITARY SEWER CLEANOUTS LOCATED IN PAVEMENT AREAS SHALL BE HEAVY DUTY TRAFFIC BEARING CASTINGS.
 2. UNLESS OTHERWISE NOTED, ALL SANITARY SEWER MANHOLES SHALL 4" DIAMETER PRE-CAST CONCRETE STRUCTURES.
 3. MANHOLES LOCATED IN PAVEMENT, CONCRETE OR OTHER TRAFFIC AREAS SHALL BE SET AT GRADE. MANHOLES LOCATED IN OTHER AREAS (I.E. GRASS OR WOODED AREAS) SHALL HAVE THEIR RIMS RAISED SIX INCHES ABOVE THE SURROUNDING GRADE. MANHOLES SUBJECT TO POSSIBLE WATER INFILTRATION SHALL HAVE WATERTIGHT, BOLTED JOINTS.
 4. MINIMUM REQUIRED SLOPES FOR SEWER SERVICES:
 - 4" SEWER SERVICE - 2.00% SLOPE
 - 6" SEWER SERVICE - 1.00% SLOPE
 - 8" SEWER SERVICE - 0.50% SLOPE
 5. UNLESS OTHERWISE NOTED, LOCATE SANITARY SERVICE CLEANOUTS AT ALL HORIZONTAL OR VERTICAL CHANGES IN DIRECTION. MAXIMUM SPACING BETWEEN CLEANOUTS SHALL BE 75 FEET.
 6. SEWER LINES LESS THAN 3 FEET OF COVER SHALL BE CLASS 50 DUCTILE IRON PIPE. SEWER LINES WITH GREATER THAN 3 FEET OF COVER SHALL BE AS NOTED BELOW. REFER TO TRENCHING DETAIL 1/C930.
 - 4" SEWER SERVICE - SCH 80
 - 6" SEWER SERVICE - SCH 80
 - 8" SEWER SERVICE - SCH 35
 7. SEWER LINES UNDER CONSTRUCTION SHALL BE PROTECTED FROM DIRT, DEBRIS OR OTHER CONTAMINANTS ENTERING THE NEW SYSTEM. A MECHANICAL PLUG SHALL BE UTILIZED BOTH IMMEDIATELY UPSTREAM OF THE NEW CONSTRUCTION AND AT THE FIRST MANHOLE DOWNSTREAM IN THE EXISTING SYSTEM. EXISTING STRUCTURES, PIPING AND APPURTENANCES SHALL BE PROTECTED FROM ANY INFLOW OF WATER, DIRT OR DEBRIS DUE TO NEW CONSTRUCTION CONNECTING TO OR IN THE VICINITY OF THE EXISTING SYSTEM. CONTRACTOR TO REMOVE DEBRIS AND PLUG PRIOR TO OCCUPANCY.
 8. ALL MANHOLES COVERS SHALL BE TO LOCAL JURISDICTIONAL REQUIREMENTS.

- WATER NOTES:**
1. ALL WATERLINES SHALL BE DUCTILE IRON PIPE MEETING THE REQUIREMENTS OF ANSI-AWWA C151 PRESSURE CLASS 300 OR SOFT COPPER TYPE K PIPE PER ASTM B88. IF PVC WATERLINE IS INDICATED ON THE PLANS, (12" AND SMALLER) SHALL MEET THE REQUIREMENTS OF AWWA C-900, CLASS 200.
 2. THE CONTRACTOR SHALL ADJUST THE LOCATION OF PROPOSED WATER LINES AS REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES. ALL WATERLINES SHALL HAVE A MINIMUM OF 3.0 FEET OF COVER. REFER TO TRENCHING DETAIL 1/C930.
 3. TESTING NOTES:
 - PRESSURE: LEAKAGE SHALL NOT EXCEED THE MAXIMUM ALLOWABLE LEAKAGE SPECIFIED IN AWWA C 600. MINIMUM TEST PRESSURE SHALL BE 150 PSI FOR DOMESTIC AND 200 PSI FOR FIRE PROTECTION.
 - BACTERIOLOGICAL: TWO SAMPLES FOR BACTERIOLOGICAL SAMPLING SHALL BE COLLECTED AT LEAST 24 HOURS APART. IF CONTAMINATION IS INDICATED, THEN THE DISINFECTION PROCEDURE AND TESTING SHALL BE REPEATED UNTIL SATISFACTORY RESULTS ARE OBTAINED.
 4. THE CONTRACTOR SHALL NEUTRALIZE HEAVILY CHLORINATED WATER FLUSHED FROM MAINS PRIOR TO DISCHARGE OR TRANSPORT ALL HEAVILY CHLORINATED WATER OFFSITE FOR PROPER DISPOSAL.
 5. PAINT VALVE COVERS, FIRE HYDRANTS AND OTHER WATER APPARATUS TO MEET THE LOCAL JURISDICTIONAL REQUIREMENTS.
 6. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS, OR OTHER WATER-USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS CLT-WATER-REQUIRED BACKFLOW PREVENTER.
 7. EACH CLT-WATER-REQUIRED BACKFLOW PREVENTION ASSEMBLY IS REQUIRED TO BE TESTED BY A CLT-WATER-APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE.
 8. THE CONTRACTOR SHALL PROVIDE RESTRAINED MECHANICAL JOINTS AT ALL DUCTILE IRON PIPES, FITTINGS AND VALVES. REFER TO DETAIL 3/C930.
 9. THE CONTRACTOR SHALL PROVIDE THRUST BLOCKS ON ALL UNDERGROUND WATER LINES AT ALL VALVES, BENDS, AND TEES AND AT CONNECTIONS TO EXISTING MAINS. REFER TO DETAIL 2/C930.
 10. TAPPING OF WATER MAIN AND INSTALLATION OF METERS SHALL BE PERFORMED BY CHARLOTTE WATER PERSONNEL. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF PROPOSED WATER LINES FROM GATE VALVES BEYOND METERS TO BUILDING AS DEPICTED ON PLANS.
 11. HEATED BACKFLOW PREVENTER ENCLOSURES SHALL BE HUBBEL HOT BOX ALUMINUM ENCLOSURES OR APPROVED EQUAL. ENCLOSURES SHALL BE MAINTAINED AT 40°F MIN.

- UTILITY LEGEND**
- W — EXISTING WATER LINE
 - W — PROPOSED WATER LINE
 - SS — EXISTING SANITARY SEWER LINE
 - SS — PROPOSED SANITARY SEWER LINE
 - ⊕ PROPOSED FIRE HYDRANT
 - ⊙ PROPOSED WATER VALVE
 - ⊙ EXISTING SANITARY SEWER MANHOLE
 - ⊙ PROPOSED SANITARY SEWER MANHOLE
 - ⊙ PROPOSED CLEANOUT
 - ⊙ PROPOSED FDC
 - — — LIMITS OF DISTURBANCE

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PROJECT # X17017.00

02.09.2018

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**SPRINGHILL
SUITES HOTEL**

14500 BEST DAY BOULEVARD
CHARLOTTE, NC

NORTH

SCALE: 1"=40'

REVISION	DATE	DESCRIPTION
SD	09/09/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
1	02/09/2018	ACCELA LUESA REVISIONS

ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO: X17017.00

P.I.C. TAD / JDO

P.MGR. TAD

P. ENGR. JDO

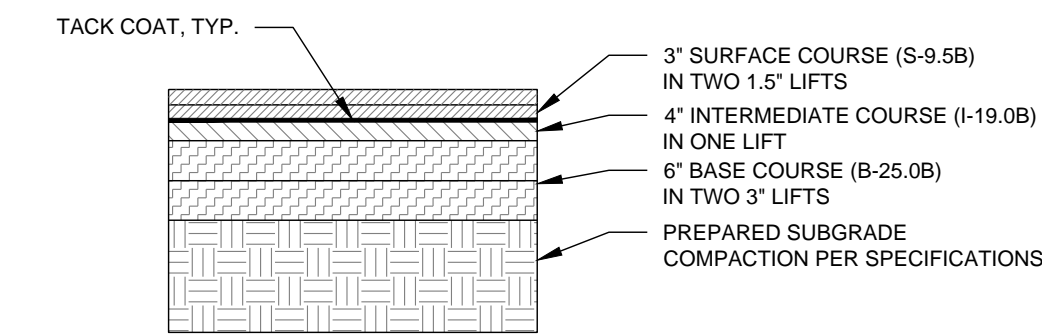
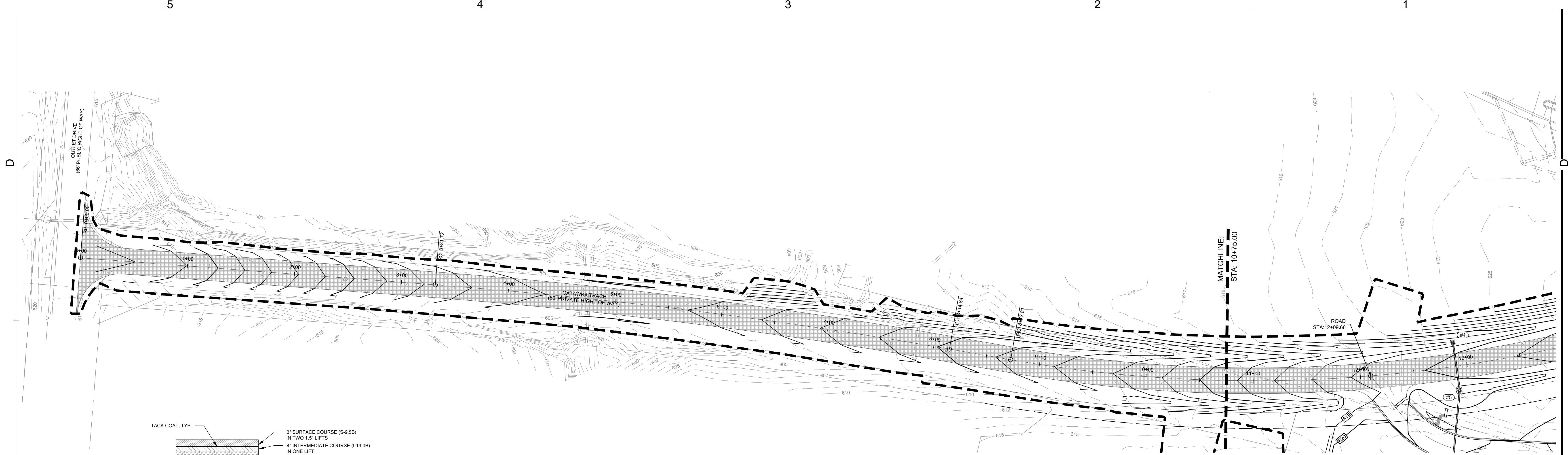
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SHEET TITLE

UTILITY PLAN

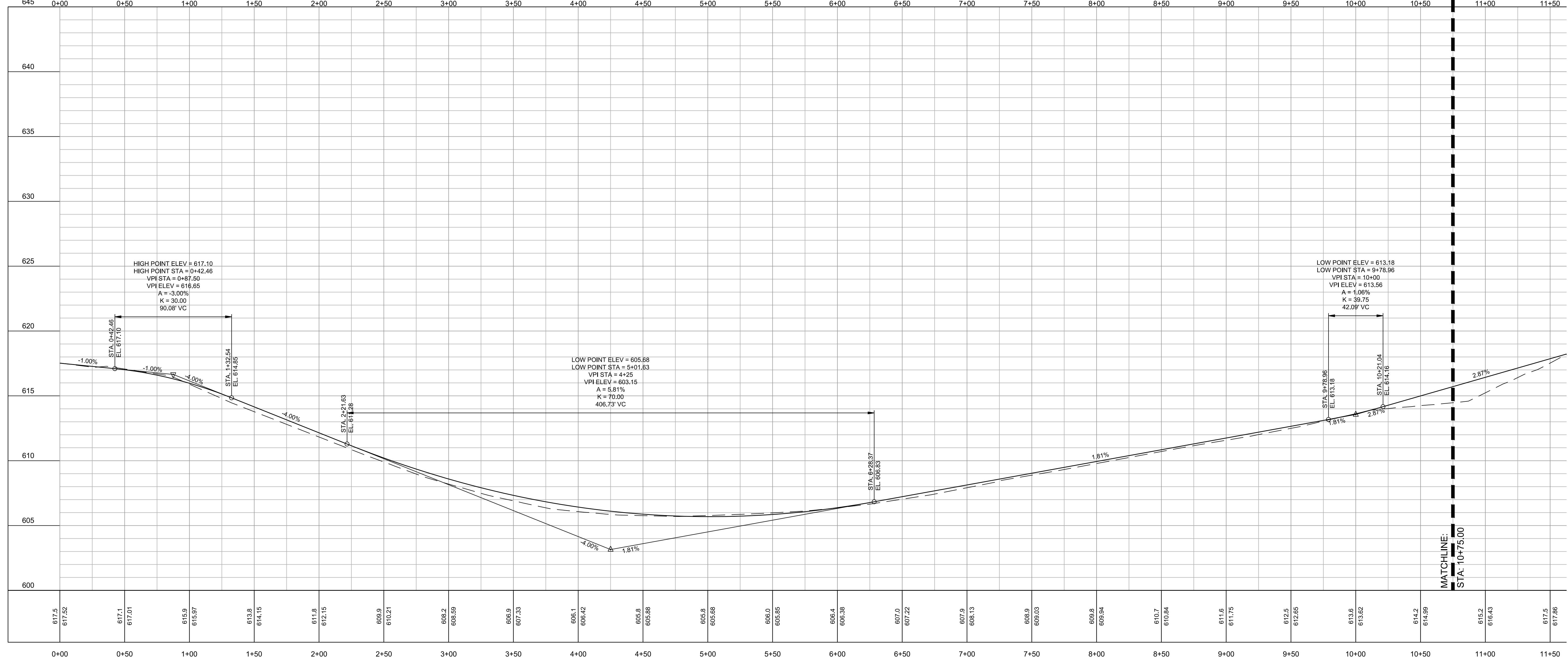
SHEET IDENTIFIER

C600



PAVEMENT CROSS-SECTION

ROAD PROFILE
SCALE: HOR: 1"=40', VERT: 1"=4'



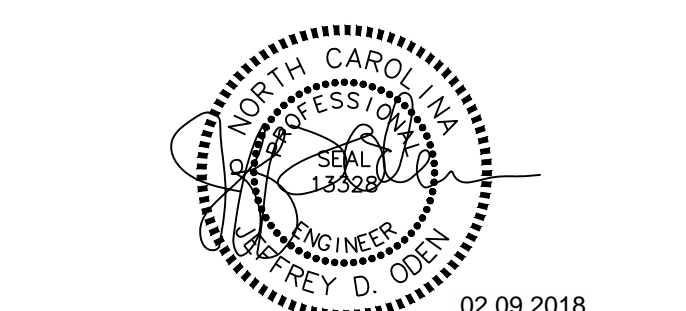
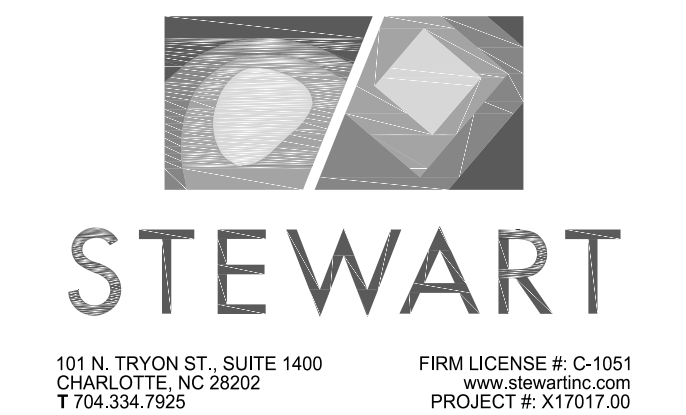
NOTE:
SHEET IS ROTATED TO ORIENT WITH
ROADWAY IMPROVEMENTS PACKAGE.

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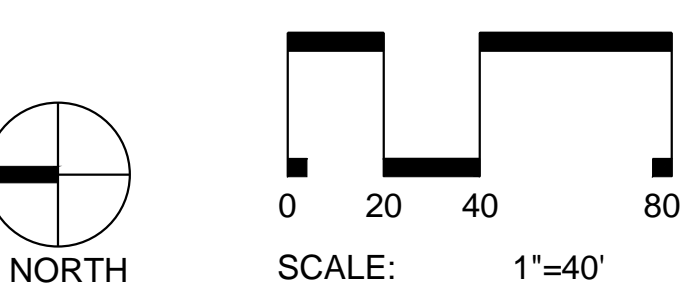
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SPRINGHILL
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14500 BEST DAY BOULEVARD
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FULL SET ISSUES		

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P.ENGR.	JDO
DESIGN BY	DLS / MRB

SHEET TITLE

ROADWAY
IMPROVEMENTS
PLAN

SHEET IDENTIFIER

C700

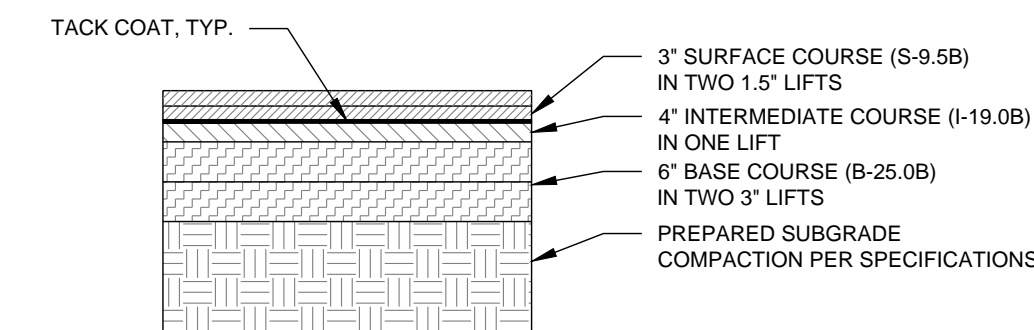
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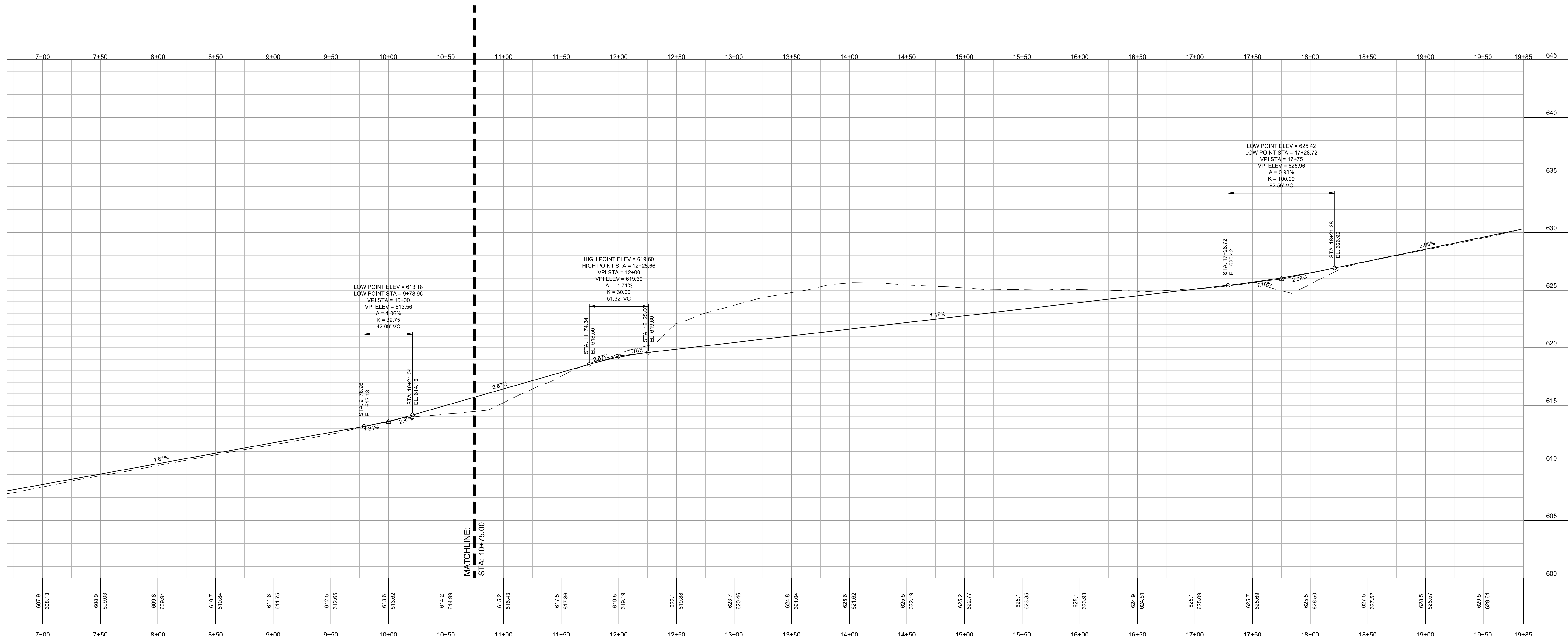
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PAVEMENT CROSS-SECTION



NOTE:
SHEET IS ROTATED TO ORIENT WITH
ROADWAY IMPROVEMENTS PACKAGE.

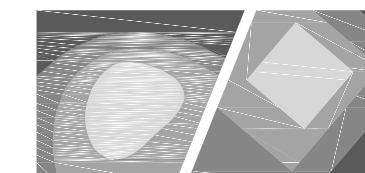
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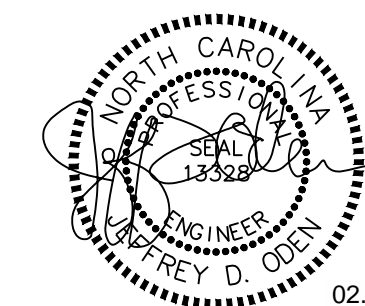
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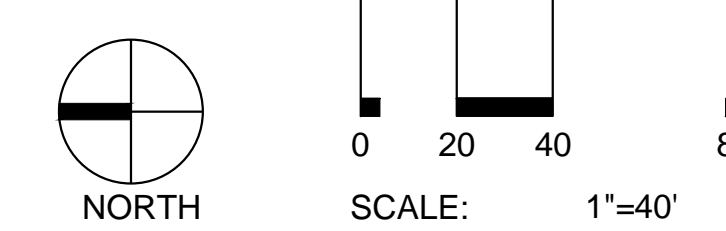


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CHARLOTTE, NC



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CD	01/08/2018	

ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

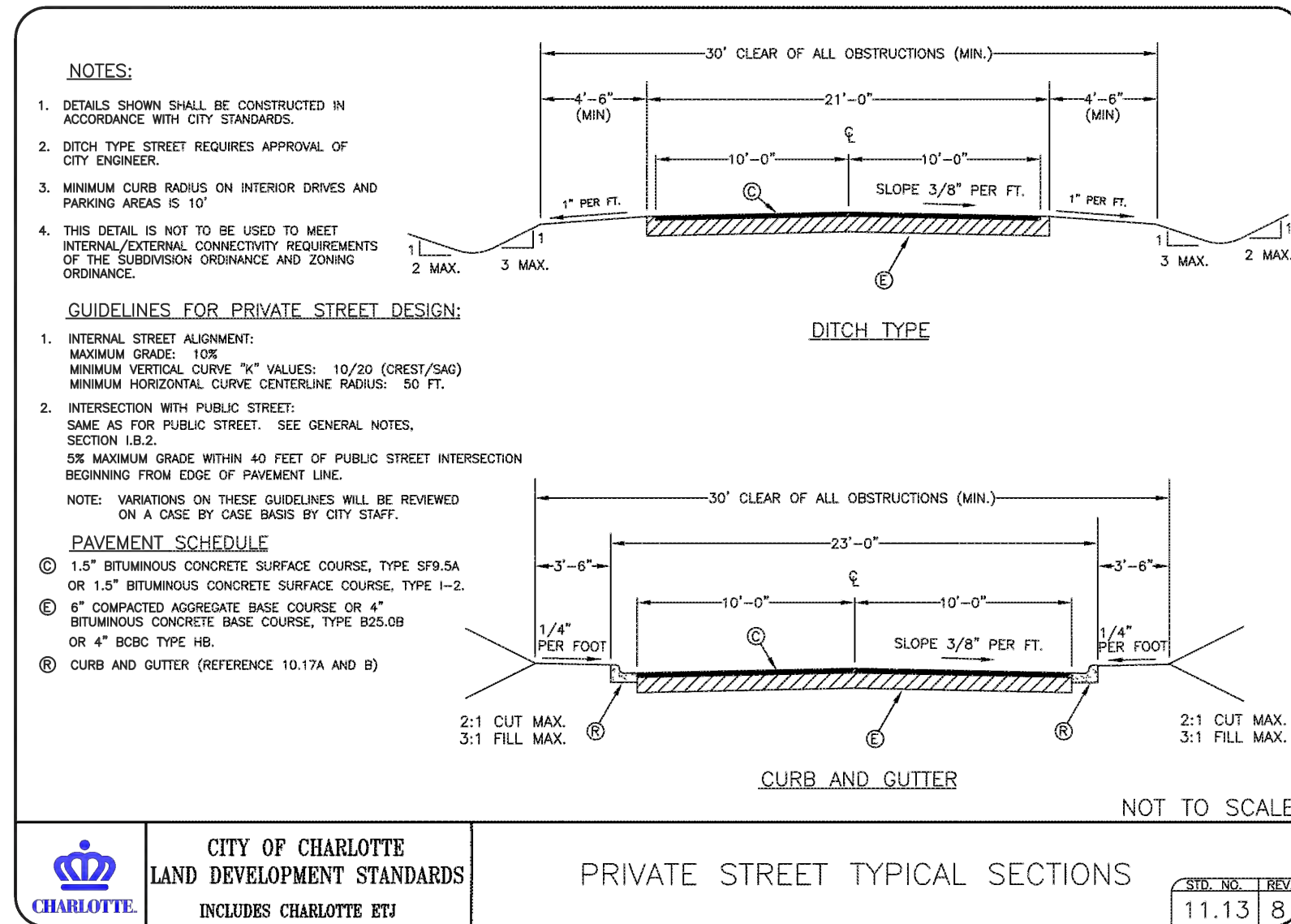
PROJECT NO: X17017.00
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P.MGR. TAD
P.ENGR. JDO
DESIGN BY: DLS / MRB

SHEET TITLE

ROADWAY
IMPROVEMENTS
PLAN

SHEET IDENTIFIER

C701



PRIVATE STREET CROSS SECTION

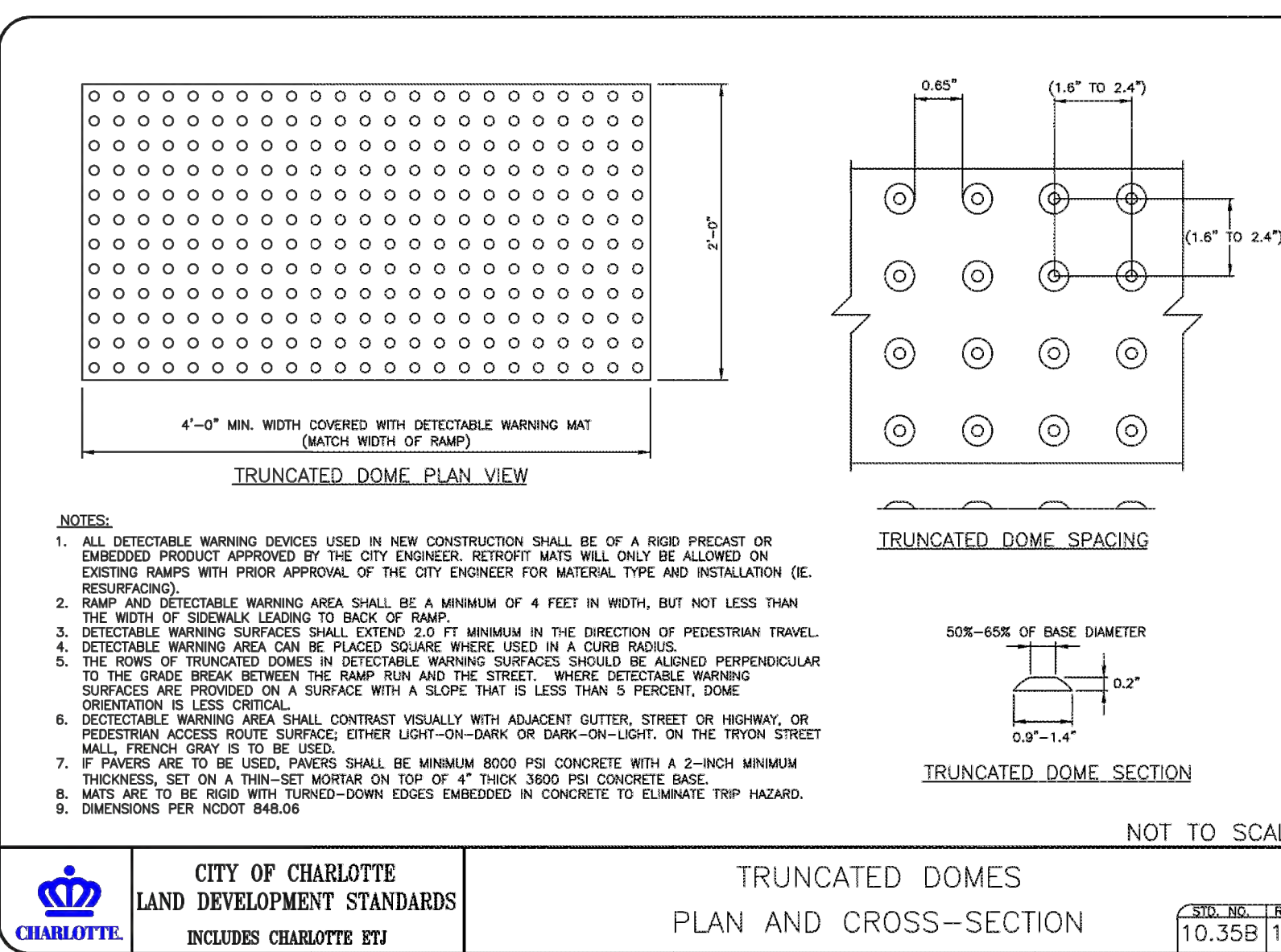
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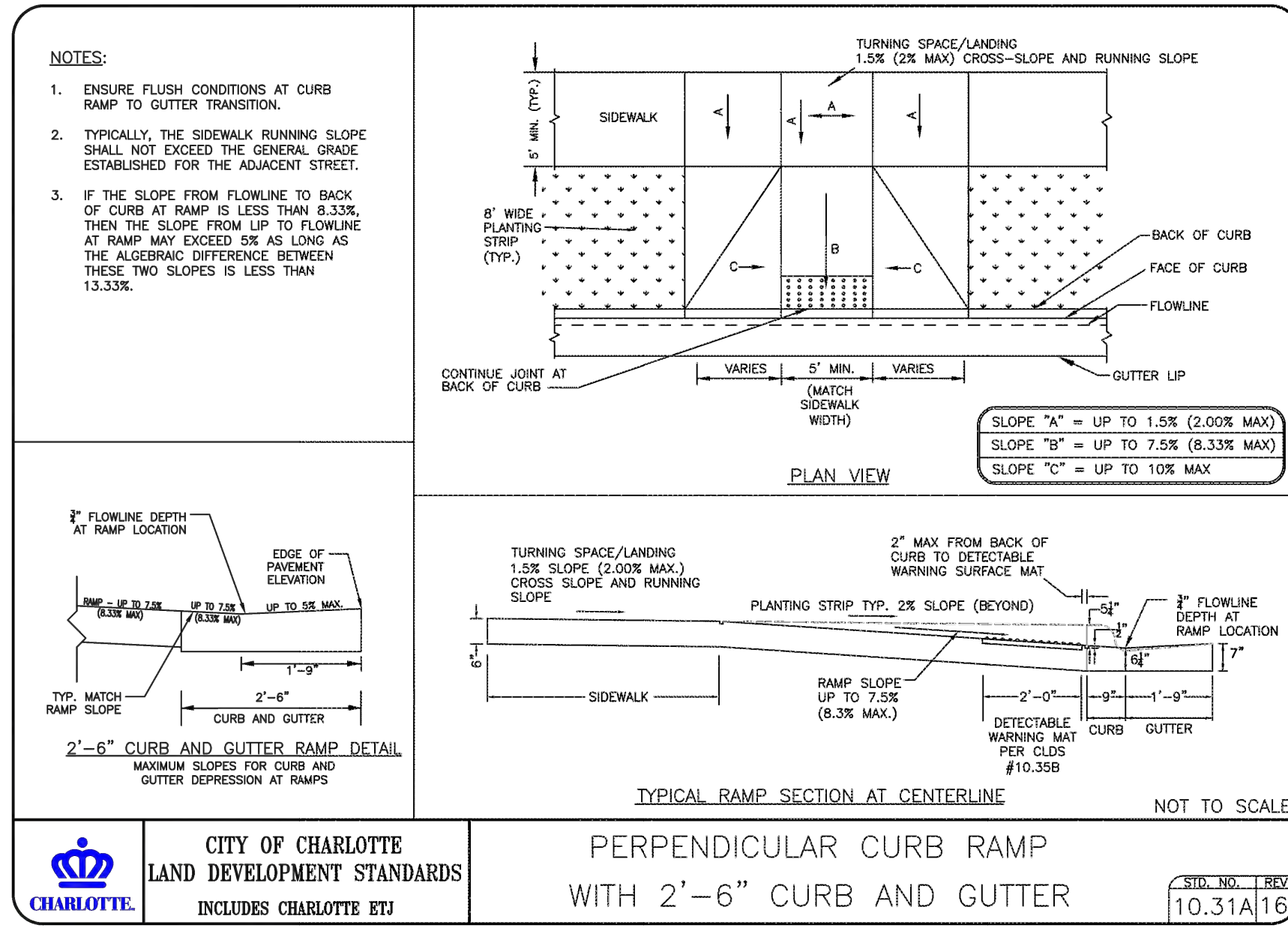
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TRUNCATED DOMES

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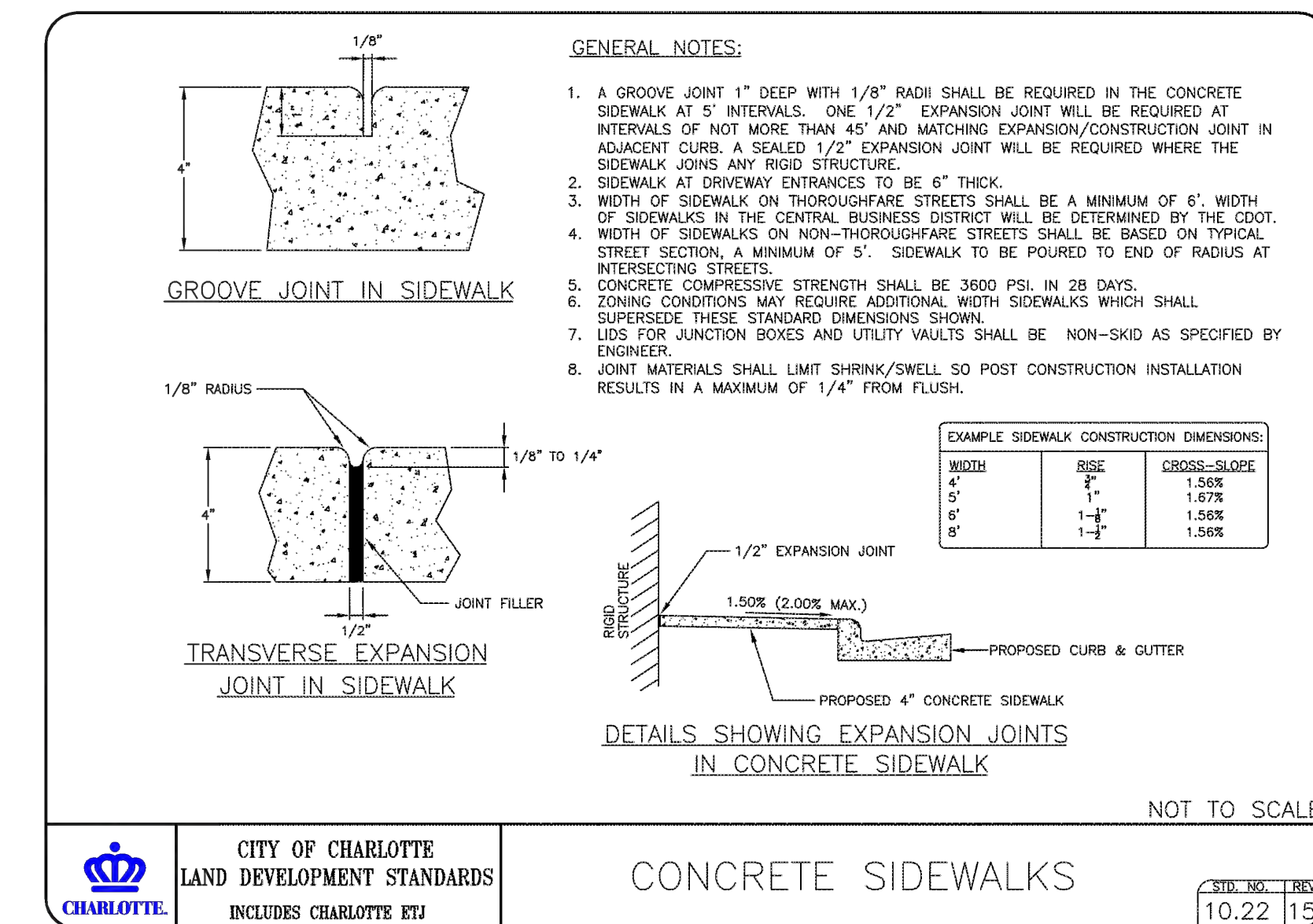


PERPENDICULAR CURB RAMP

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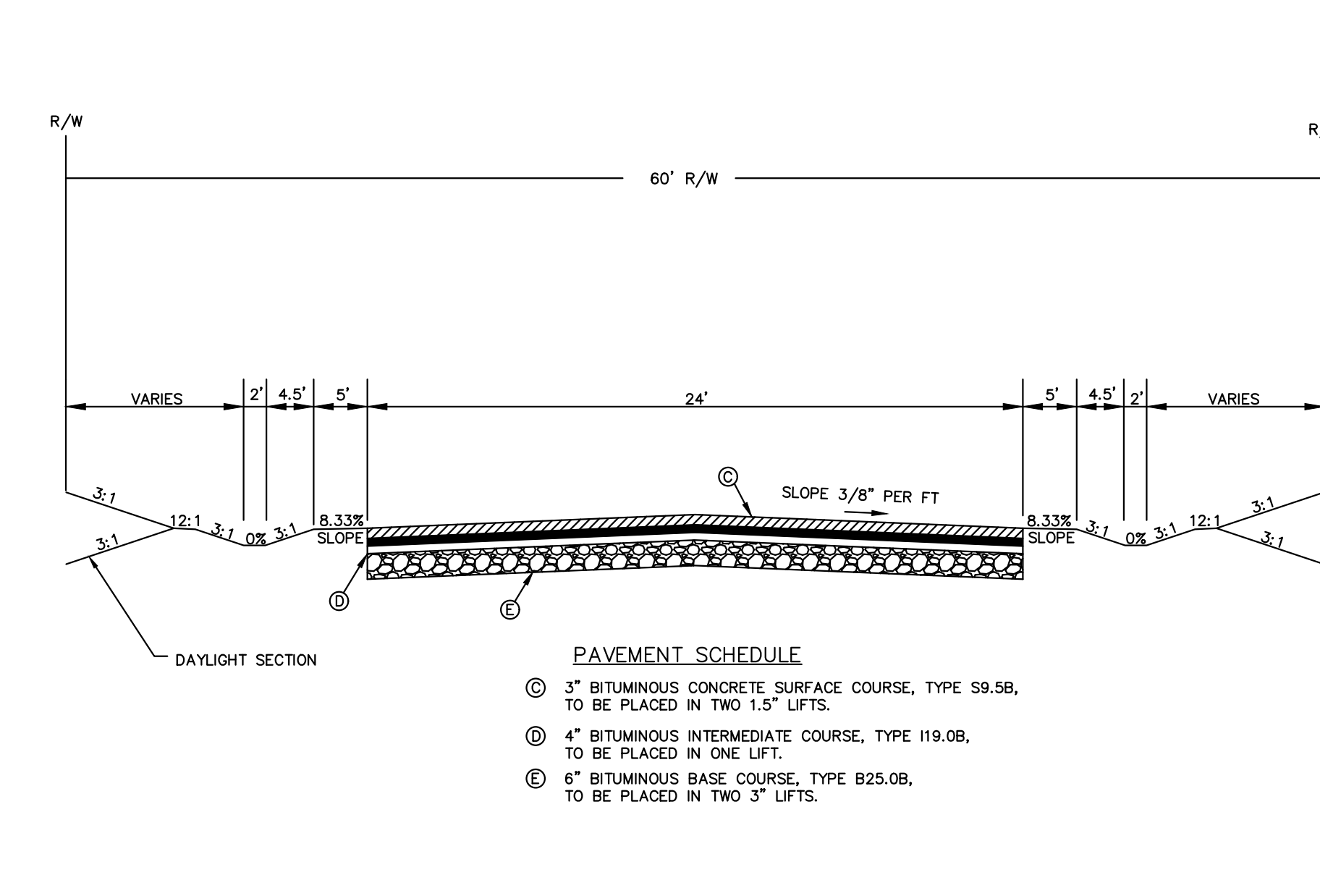


CONCRETE SIDEWALKS

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CURB TRANSITION

NTS

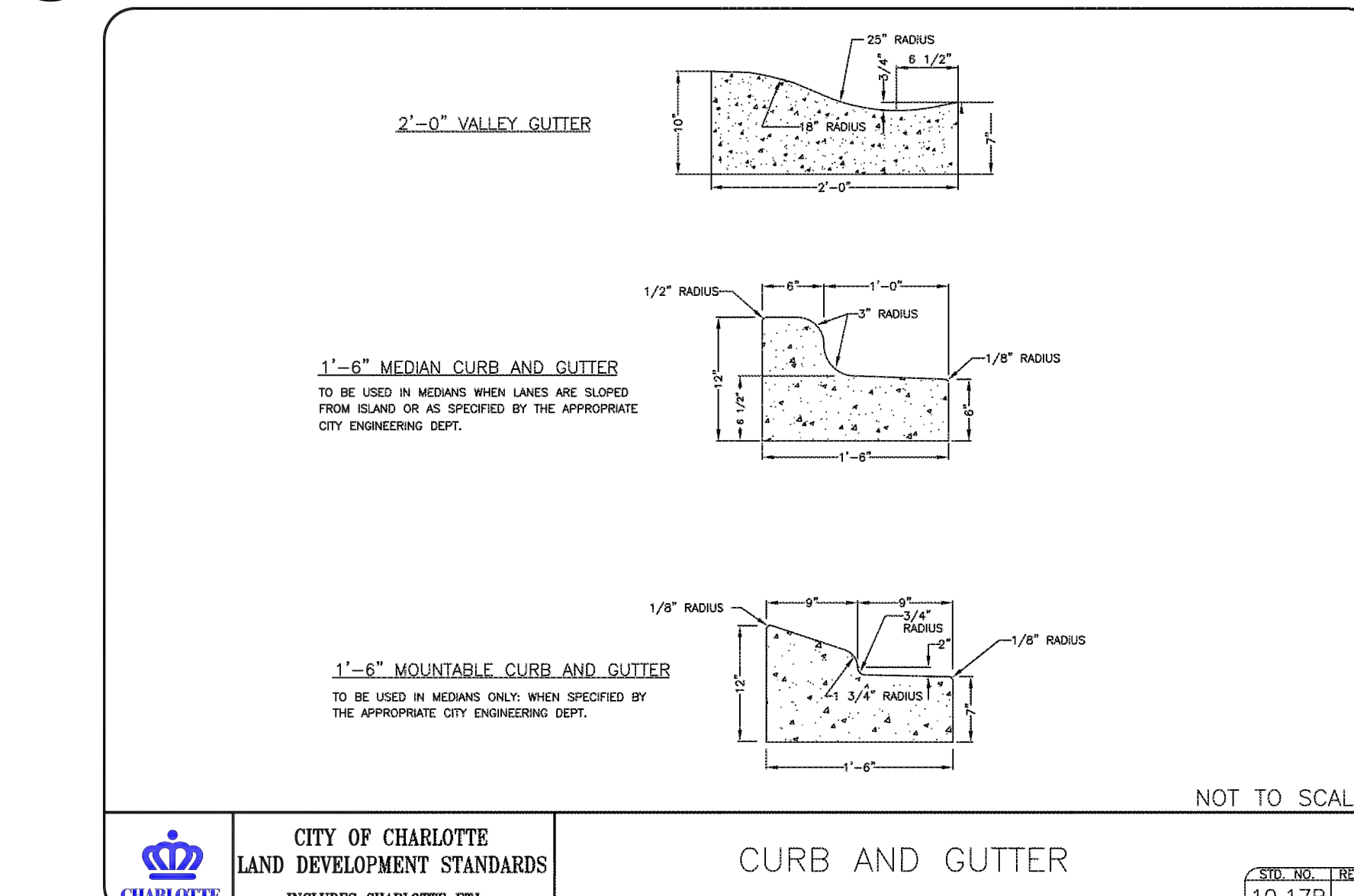


TYPICAL SECTION

NTS

CURB AND GUTTER

NTS

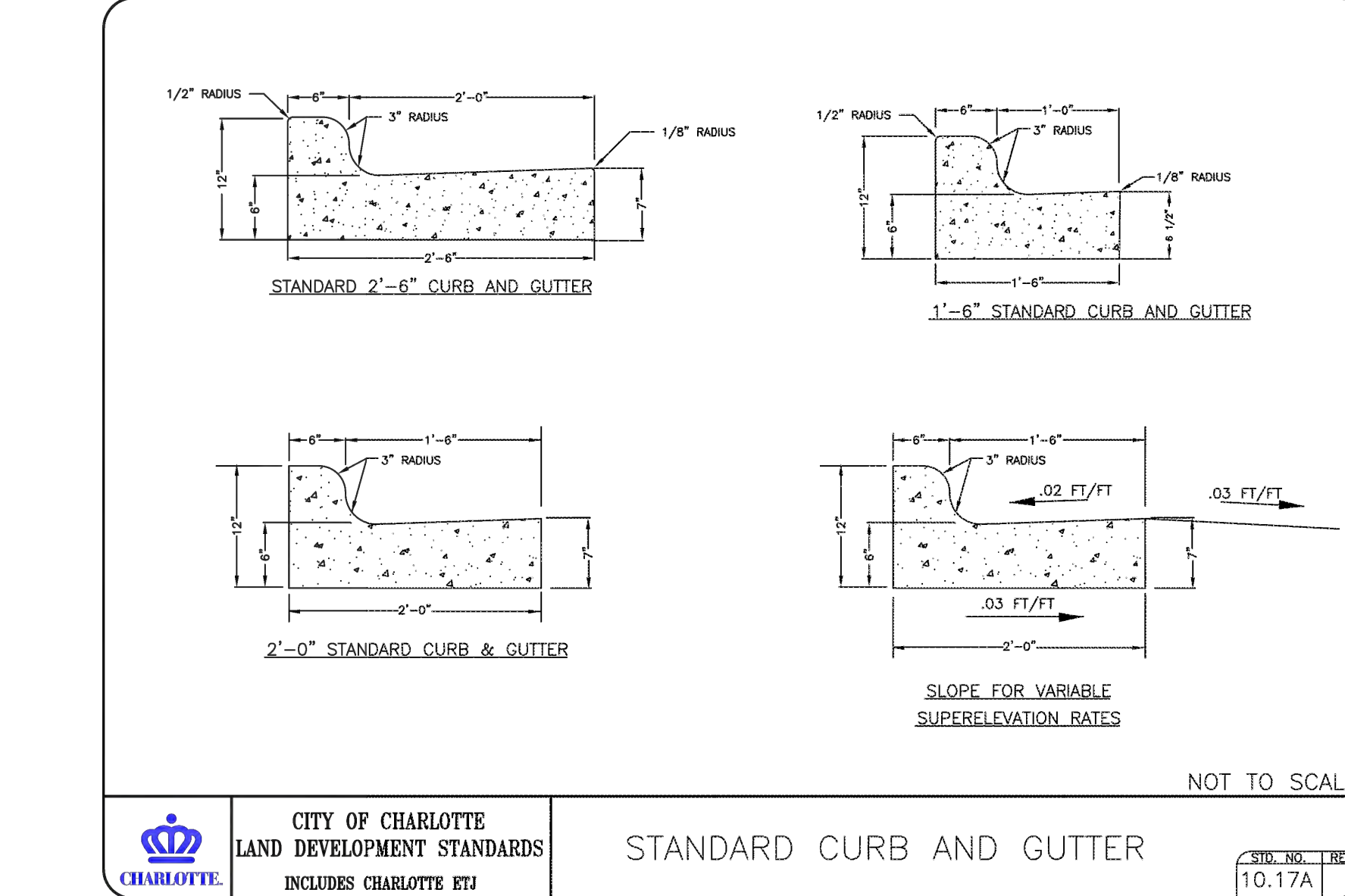


CURB AND GUTTER

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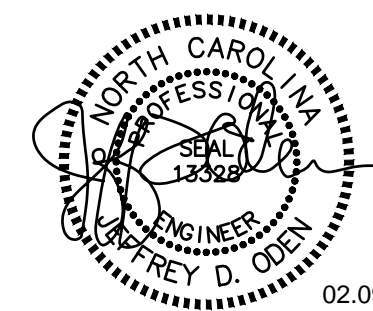
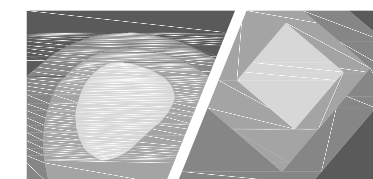
CURB AND GUTTER

NTS



CURB AND GUTTER

NTS



02.09.2018

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SPRINGHILL SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



REVISION	DATE	DESCRIPTION
ADDENDUM OR MODIFICATION		
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PROJECT NO: X17017.00

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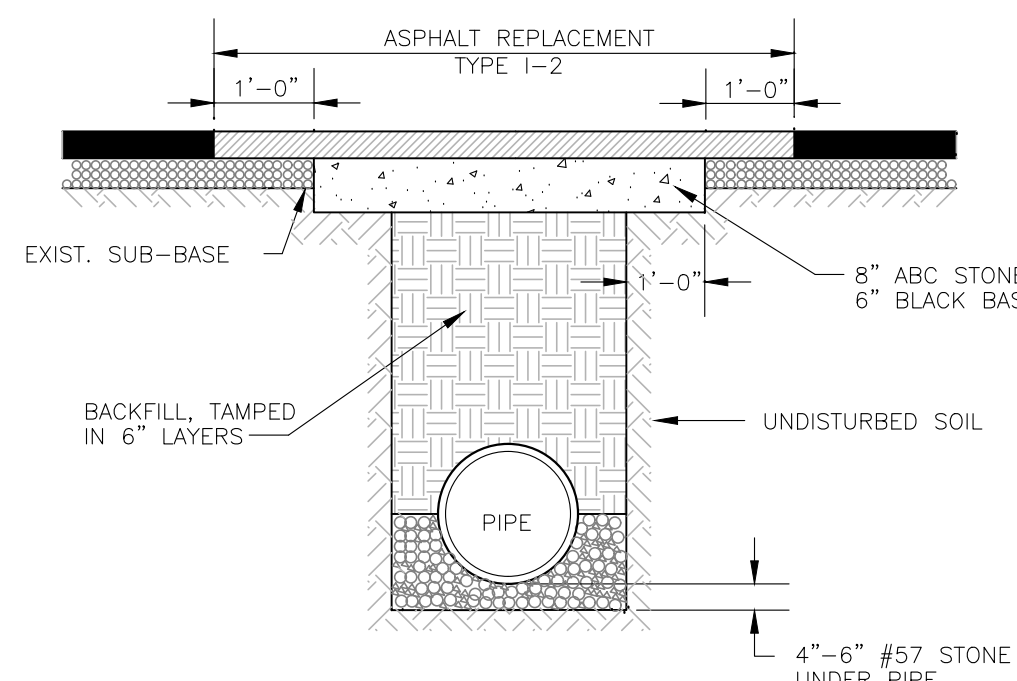
DESIGN BY DLS / MRB

SHEET TITLE

SITE DETAILS

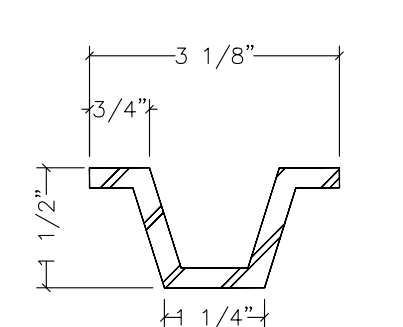
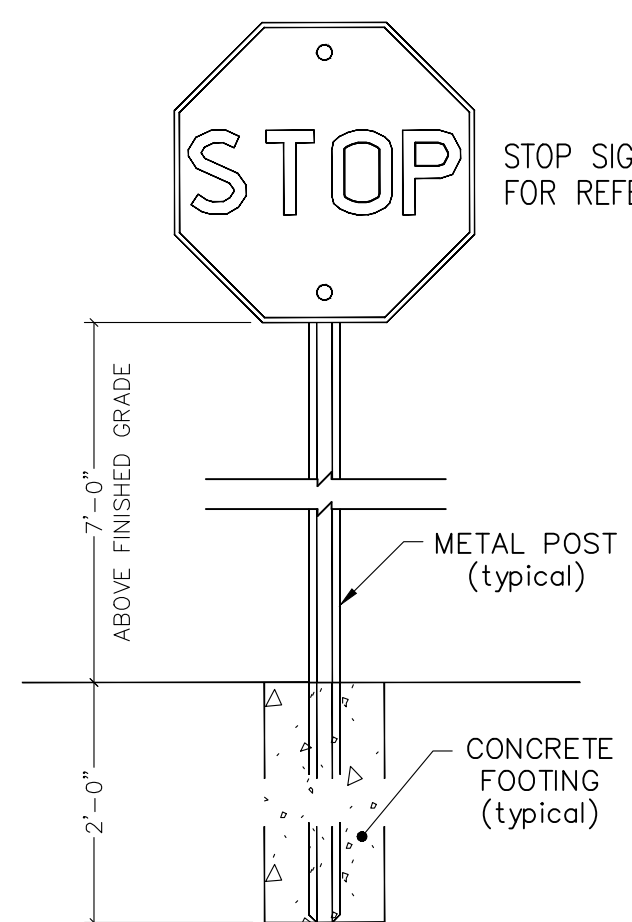
SHEET IDENTIFIER

C900



9 PAVEMENT REPAIR AT FORCEMAIN TRENCH

NTS



NOTES:

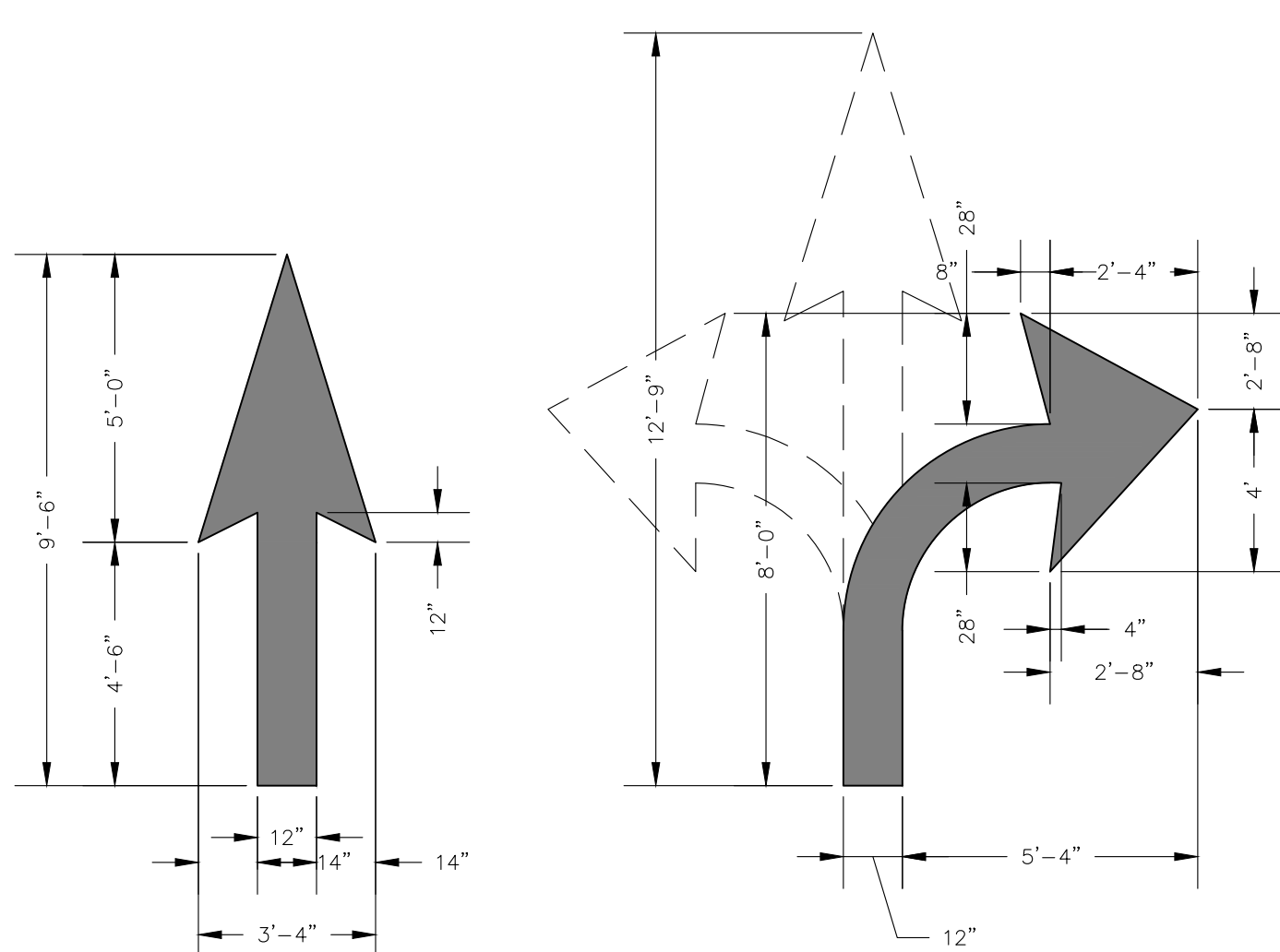
1. METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS, AND SCREWS MUST BE RUSTPROOF. SIGNS SHALL HAVE 3/4" HOLES FOR ALIGNMENT WITH HOLES IN METAL POST. MOUNT WITH 3/16" x 2-1/4" BOLTS, TOP AND BOTTOM OF SIGN.
2. CONCRETE FOR FOOTING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI.
3. SIGNS WILL BE FABRICATED BY USING A REFLECTING COATING IN THE SYMBOL, MESSAGE, AND BORDERS APPLIED TO A SHEET ALUMINUM BACKING (.080) IN THICKNESS.
4. SIGN LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS PROVIDED ADJUSTMENTS ARE APPROVED BY THE ENGINEER.
5. ALL SIGNS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE PLAN DETAILS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE SPECIFICATIONS.

8 SIGN MOUNTING

NTS



STOP BAR



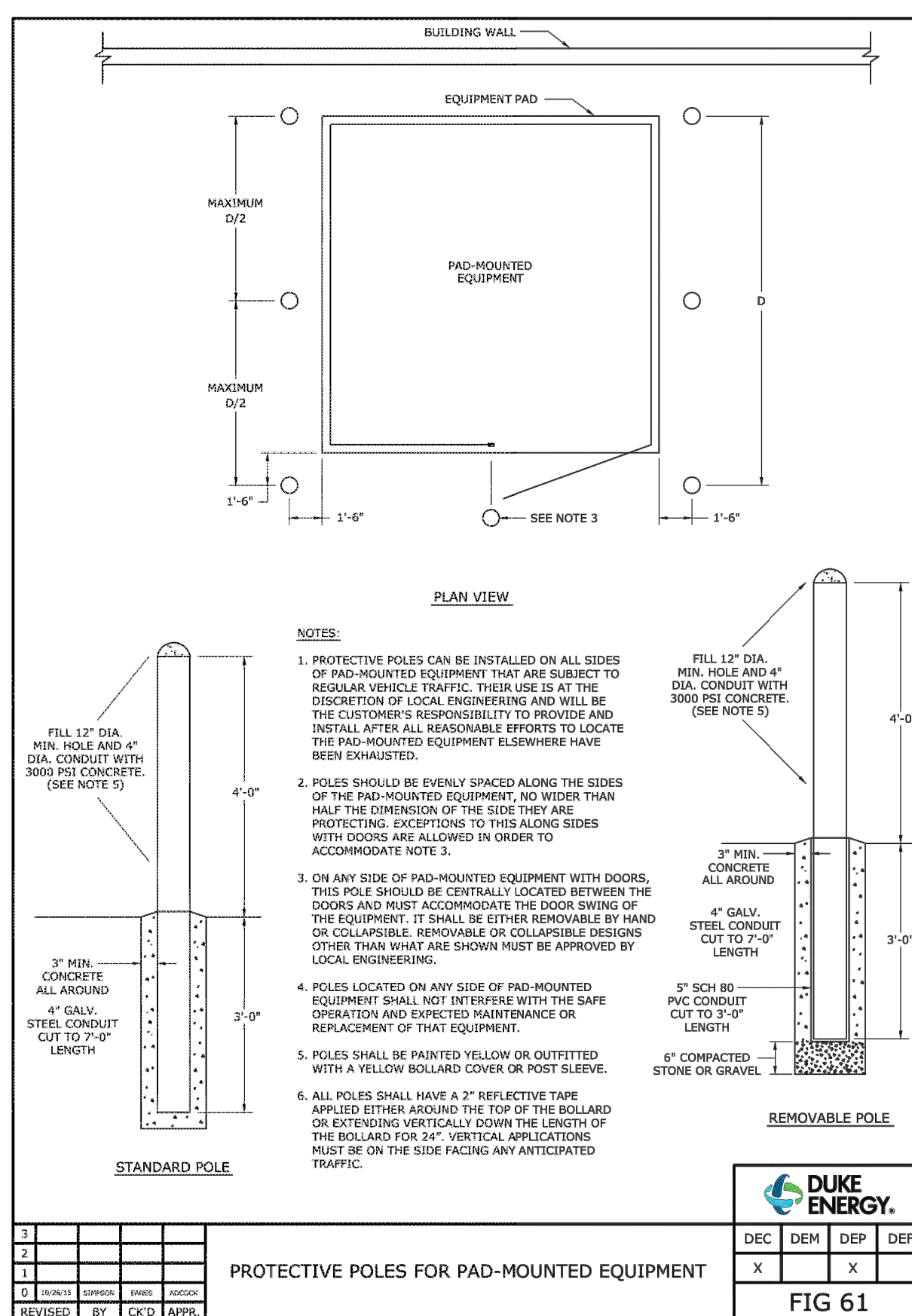
DIRECTIONAL ARROWS

NOTES:

1. ALL PAVEMENT MARKINGS EXCEPT CENTER LINE STRIPING SHALL BE COLORED WHITE. CENTER LINE STRIPING SHALL CONSIST OF TWO 6" WIDE SOLID YELLOW LINES SPACED 6" APART.

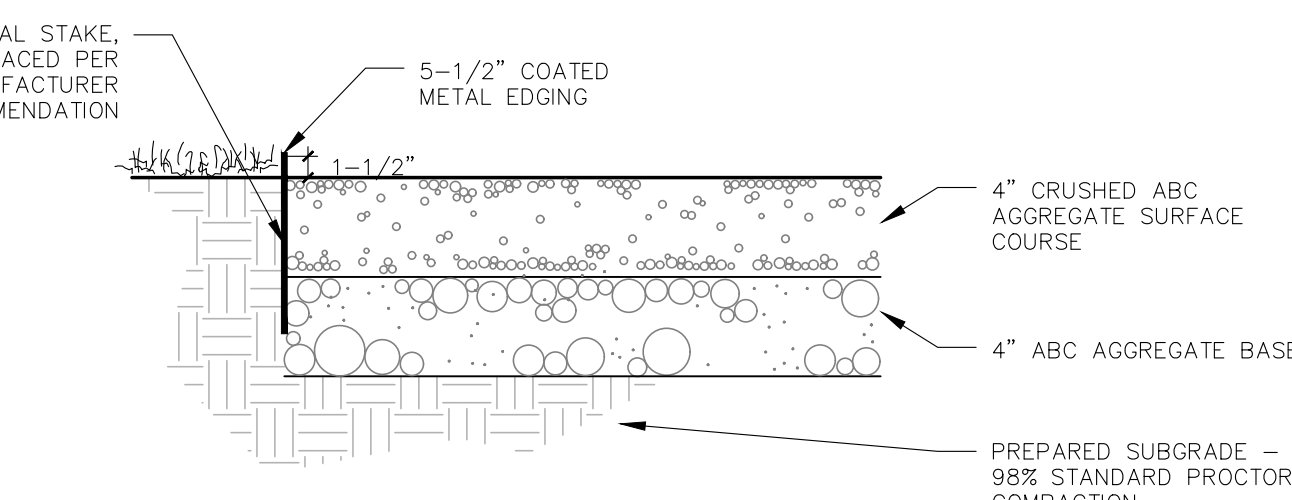
7 PAVEMENT MARKINGS

NTS



6 STEEL PIPE BOLLARD

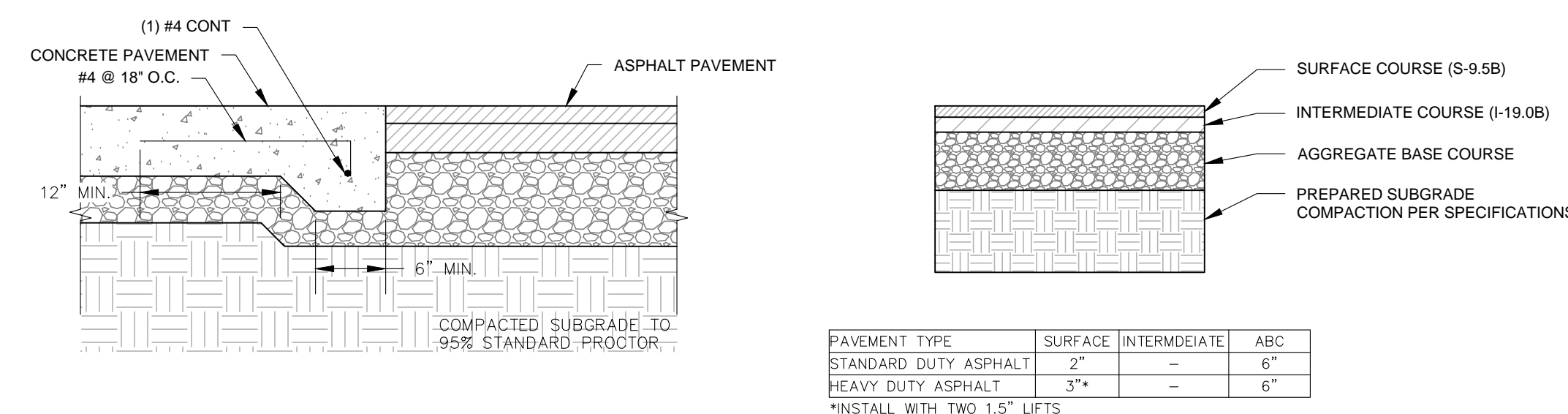
1/2" = 1'-0"



CRUSHED ABC TYPICAL GRADATION					
SEVE DESIGNATION	1"	3/8"	#4	#10	#40
PERCENT PASSING	100	60-100	50-85	40-70	24-45

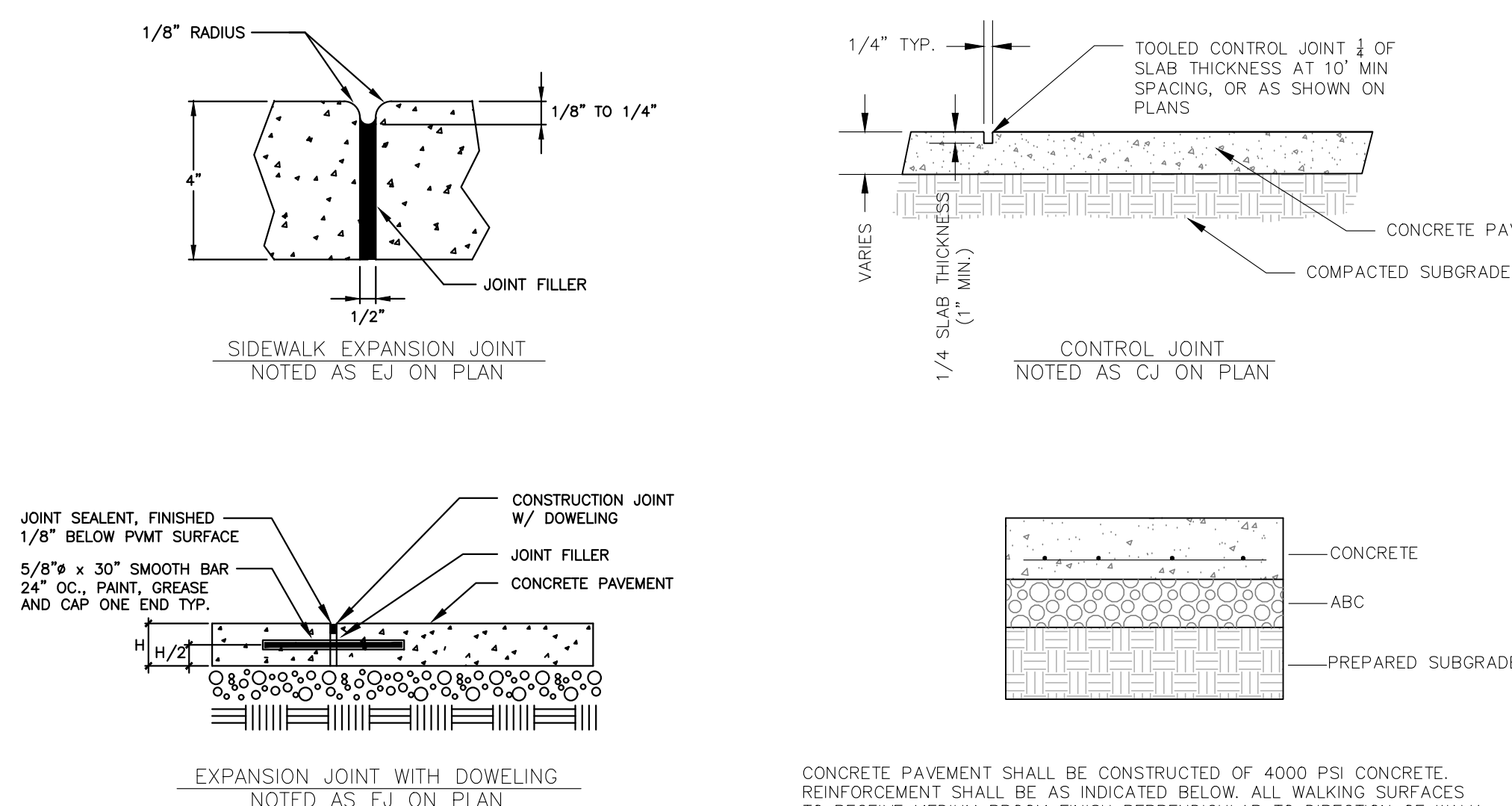
ABC TYPICAL GRADATION					
SEVE DESIGNATION	1 1/2"	1"	3/8"	#4	#10
PERCENT PASSING	100	75-97	55-80	35-55	25-45

LIGHT DUTY GRAVEL PAVING



ASPHALT TO CONCRETE TRANSITION

ASPHALT PAVING



NOTE:

1. A CONTROL JOINT 1" DEEP WITH 1/8" RADII SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS IN THE CONCRETE SIDEWALK AND MATCHING EXPANSION/CONSTRUCTION JOINT IN ADJACENT CURB. A SEALED 1/2" BITUMINOUS EXPANSION JOINT WILL BE REQUIRED WHERE THE PAVEMENT JOINS ANY ROAD STRUCTURE. CONCRETE SLABS SHOULD NOT EXCEED 15'x15' WITHOUT DOVELED EXPANSION JOINT.

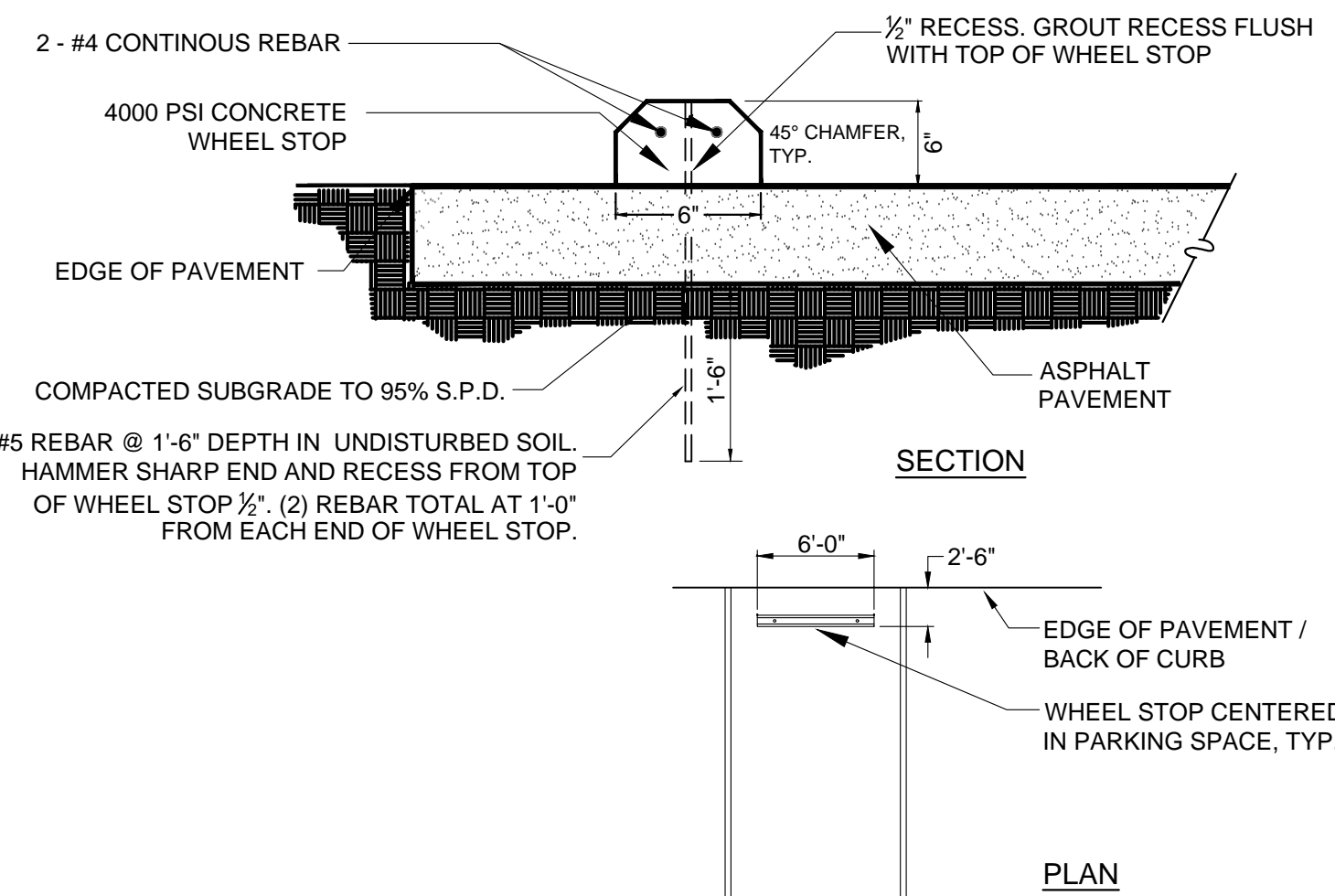
2. ALL CONCRETE TO HAVE A STIFF BROOM FINISH, WITH A MINIMUM SLIP RESISTANCE OF 0.60.

CONCRETE PAVING

PAVEMENT TYPE	ABC	CONCRETE	REINF.
HEAVY DUTY CONCRETE PAVEMENT	6"	6"	#3 REBAR SPACED 12" O.C. BOTH WAYS
SIDEWALK	-	4"	-

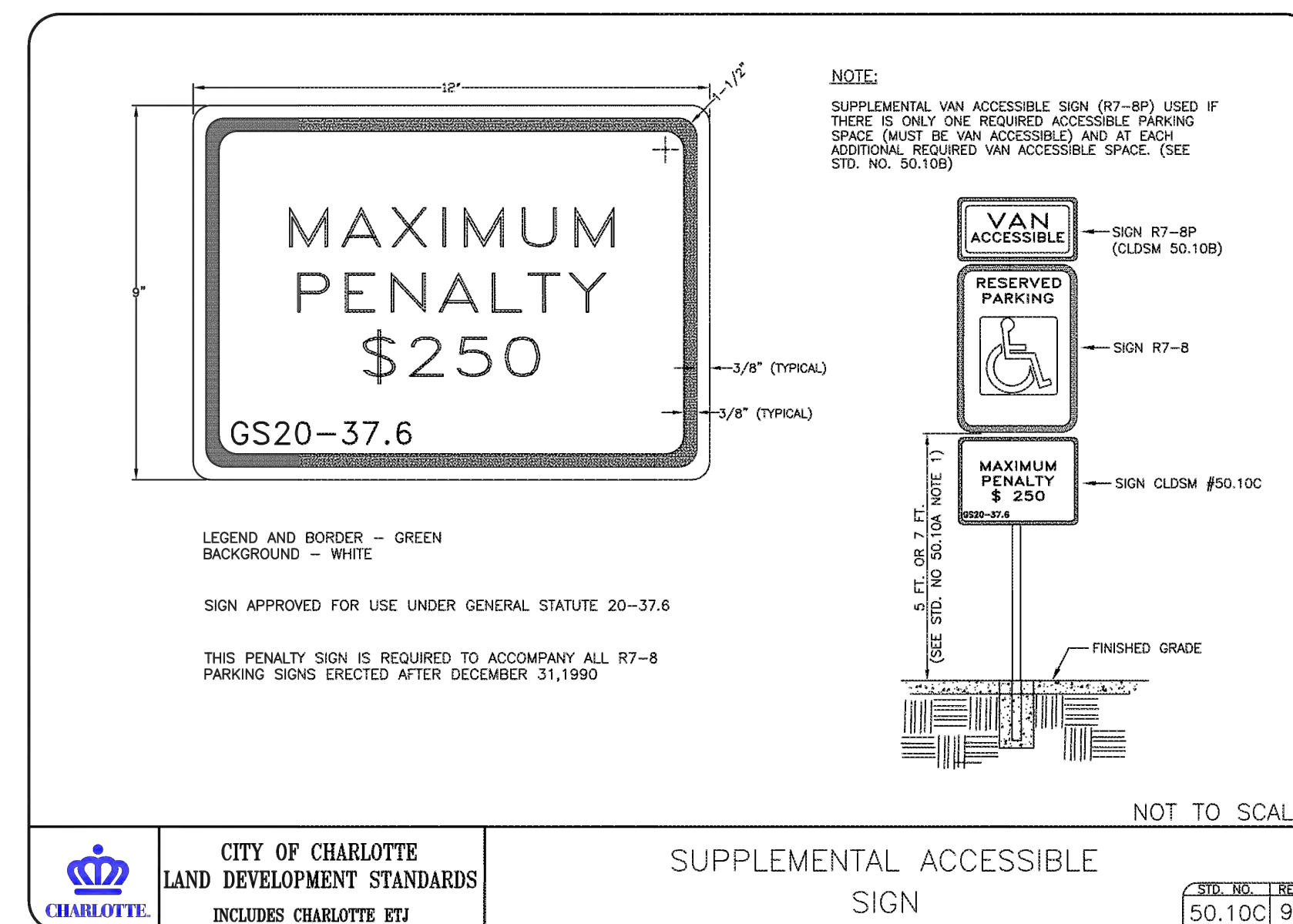
5 PAVEMENT DETAILS

NTS



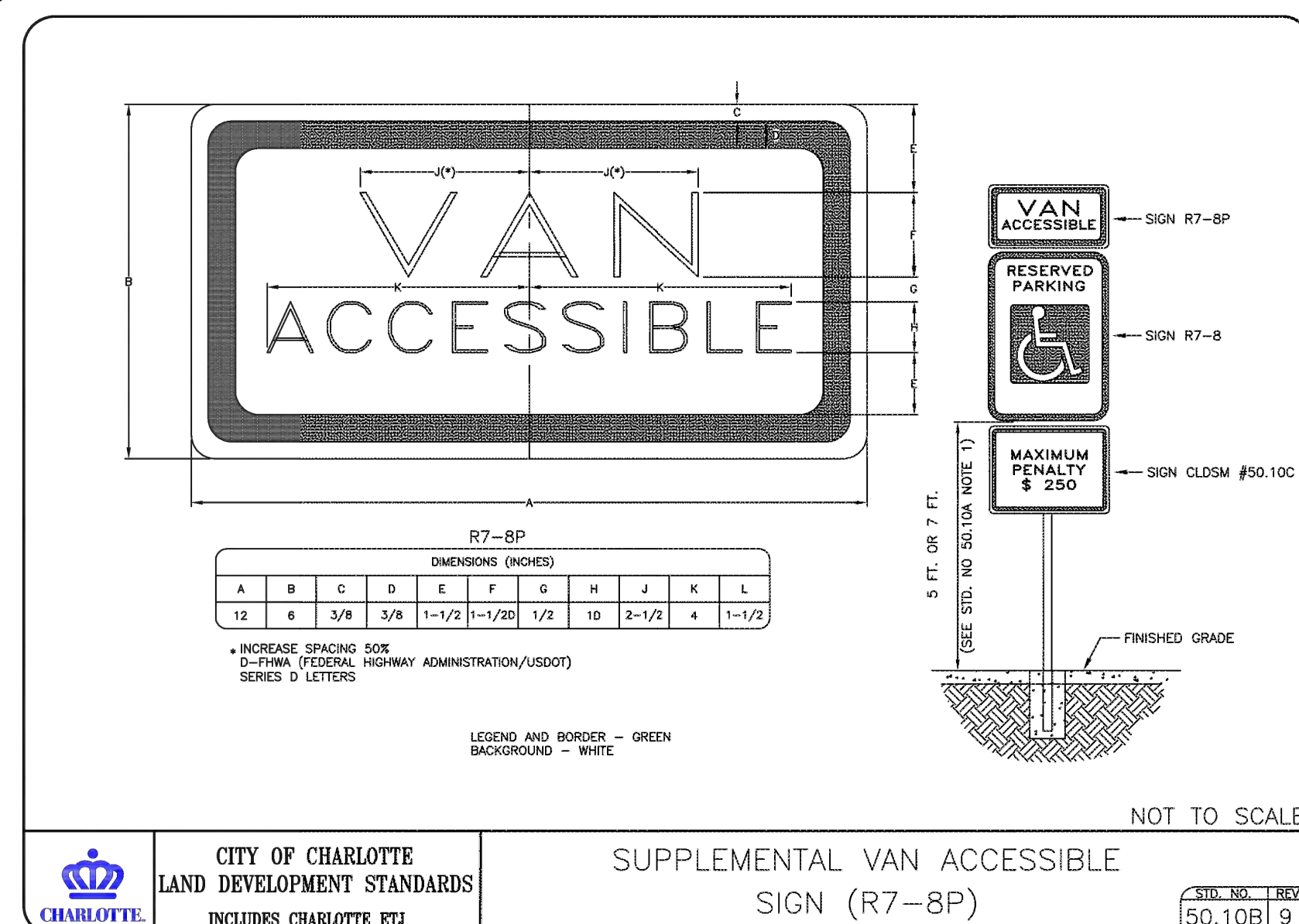
4 CONCRETE WHEEL STOP

NTS



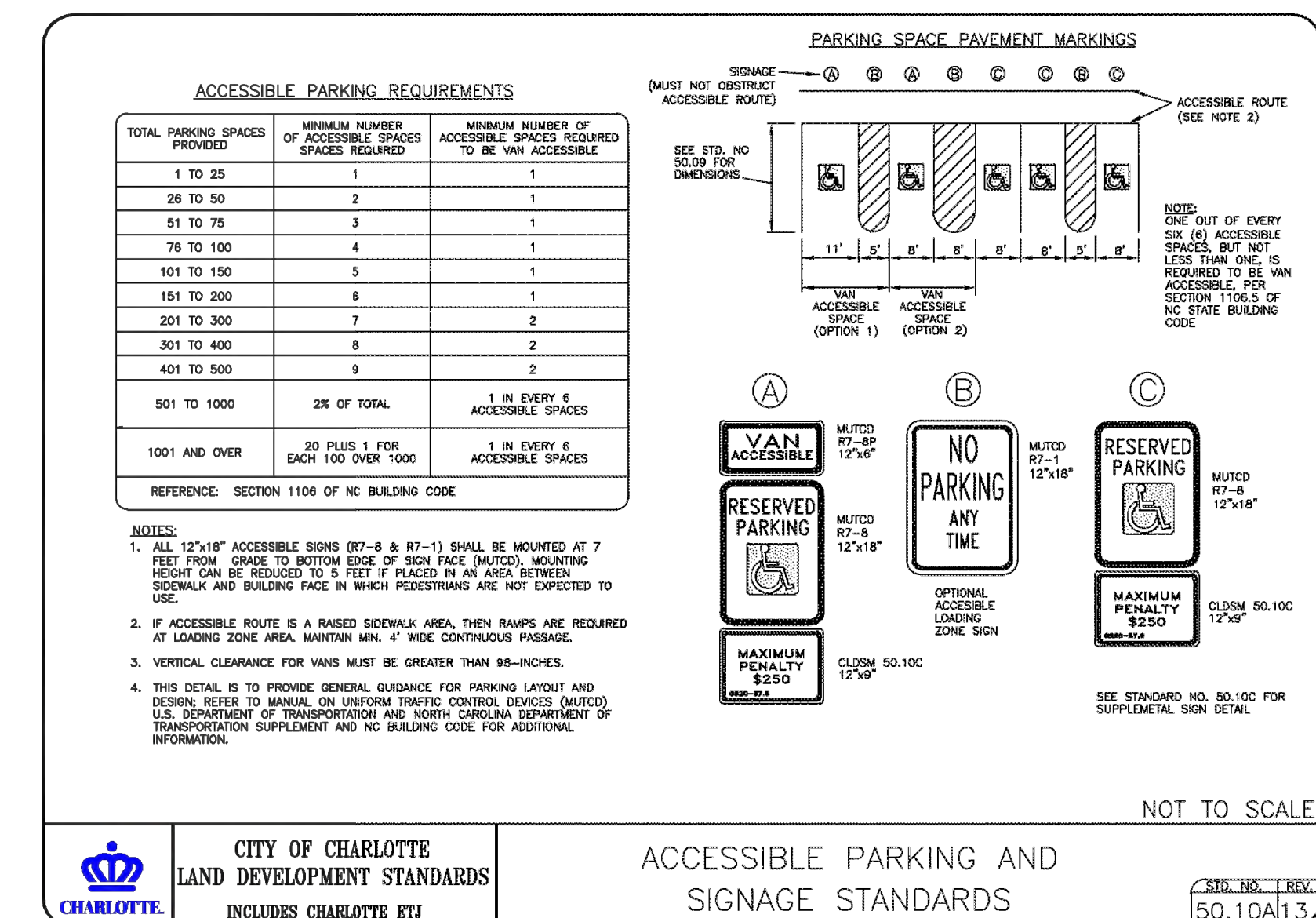
3 ACCESSIBLE PARKING SIGNAGE

NTS



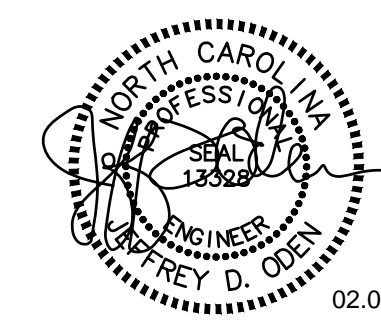
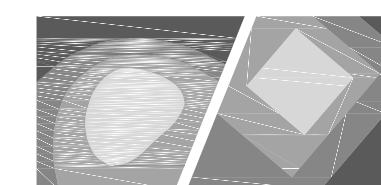
2 VAN ACCESSIBLE SIGNAGE

NTS



1 ACCESSIBLE PARKING

NTS



02.09.2018

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SPRINGHILL SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



REVISION	DATE	DESCRIPTION
SD	09/08/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
1	02/09/2018	ACCELA LUESA REVISIONS
ISSUE	DATE	DESCRIPTION
		FULL SET ISSUES

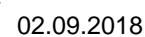
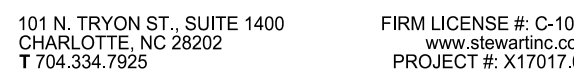
PROJECT NO:	X17017.00
P.I.C.	TAD / JDO
P.MGR.	TAD
P. ENGR.	JDO
DESIGN BY	DLS / MRB

SHEET TITLE

SITE DETAILS

SHEET IDENTIFIER

C901



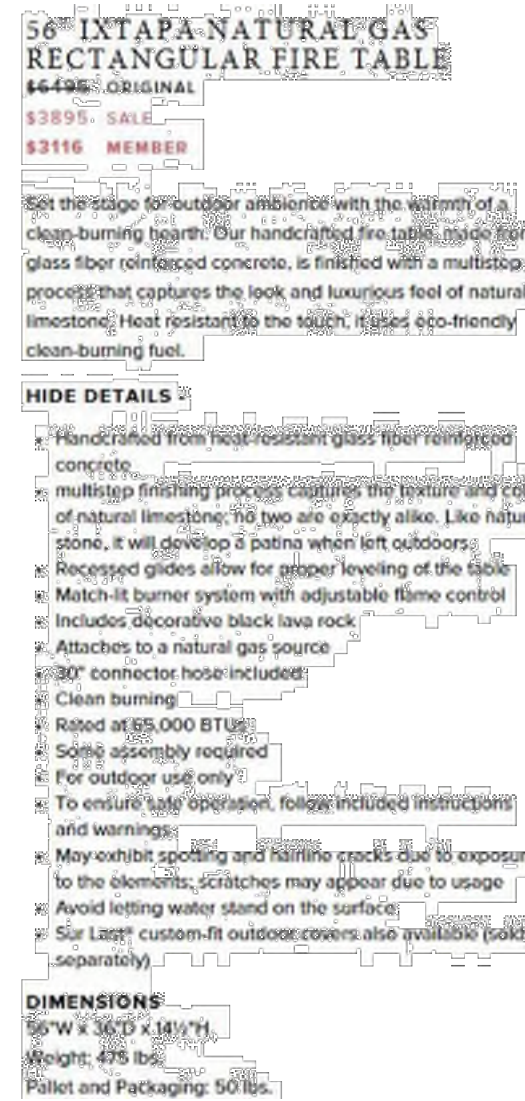
14500 BEST DAY BOULEVARD
CHARLOTTE, NC



NTS

NTS

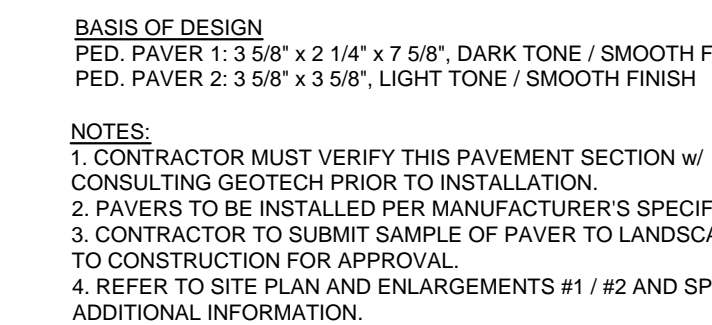
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$$\overline{E}$$
$$\frac{3}{4}'' = 1'-0''$$

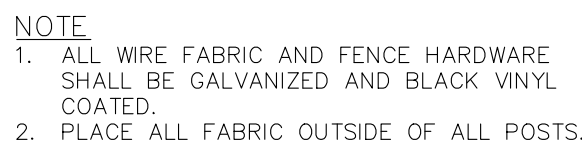
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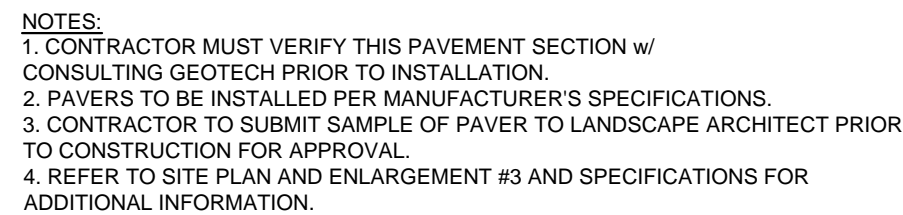


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NTS

12




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11

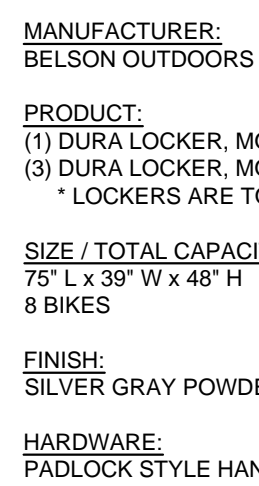
$$\frac{3}{4}'' = 1'-0''$$

Designed by Santa & Cole

BACKED	STYLE	DEPTH	WIDTH	HEIGHT	PRODUCT WEIGHT
	24"	25.5"	24"	31"	47 lb
	60"	25.5"	60"	31"	98 lb
	118"	25.5"	118"	31"	152 lb
	118" w/ center arm	25.5"	118"	31"	152 lb

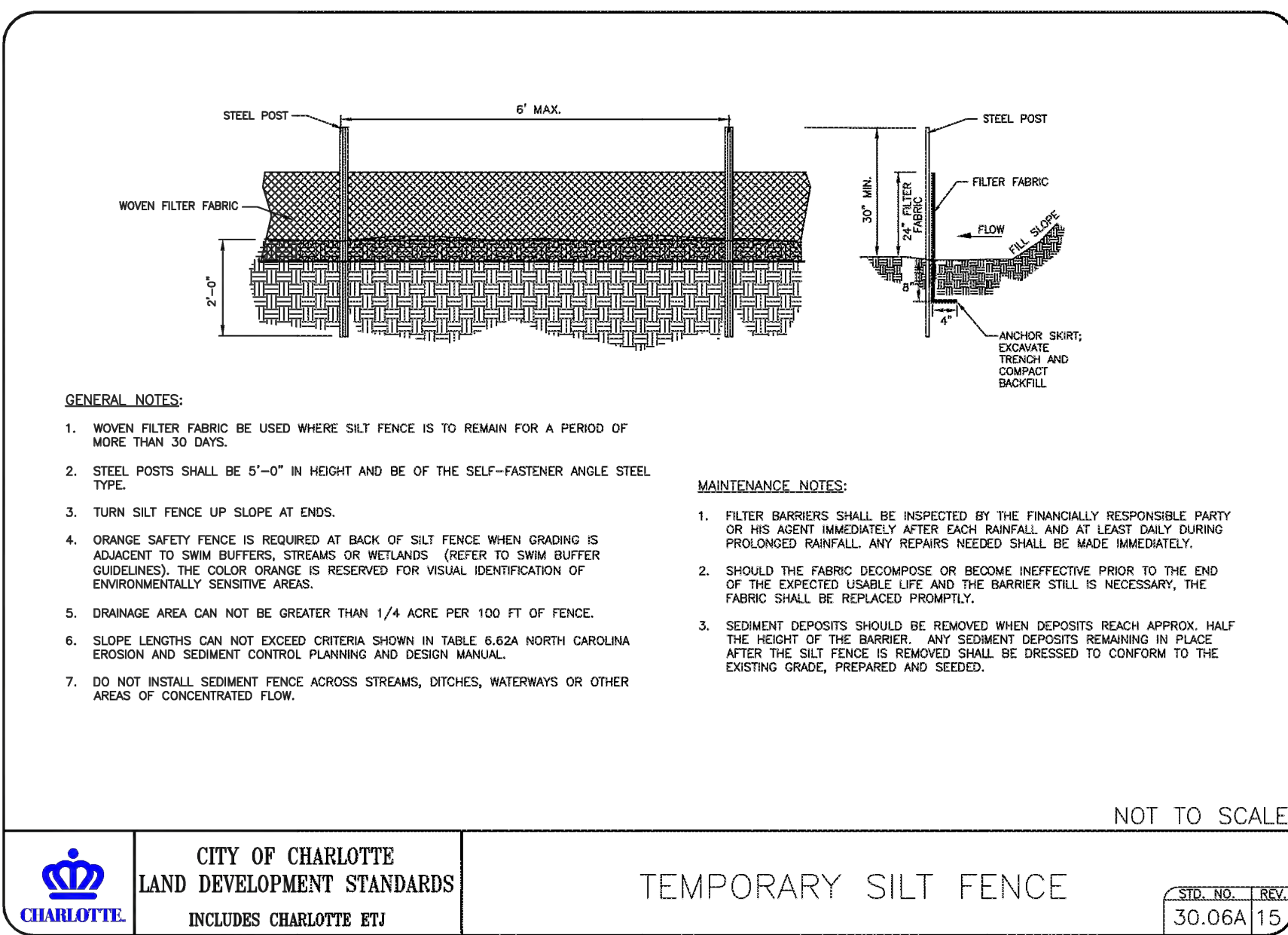
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NTS



12 NOT USED

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NTS

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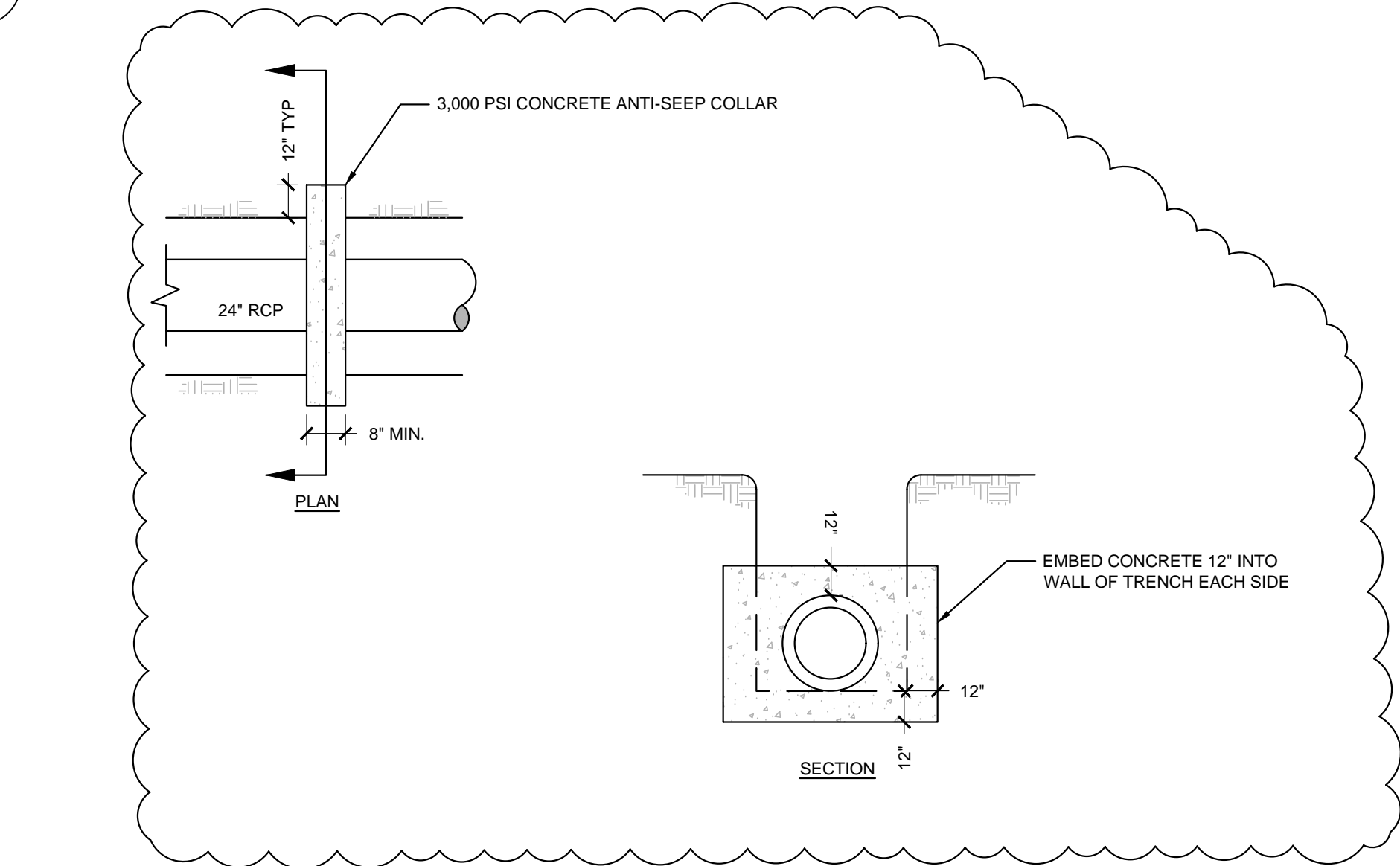
NTS

7 NOT USED

NTS

4 NOT USED

NTS



BAGIN NO.	DRAINAGE AREA (ACRES)	DESIGN VOLUME (ACF)	DATA BLOCK		DESIGN SURFACE AREA (SQ. FT.)	CLEAROUT WIDTH (FT.)	C (FEET)
			DESIGN VOLUME (CU. YD.)	DESIGN FLOW (MGD)			

PERSPECTIVE VIEW

* VOLUME = 3000 FT. PER ACRE OBSERVED TO TOP OF BERM ELEVATION.
SURFACE AREA REQ'D = 435 SQ. FT. PER OPS 010

SECTION

* VOLUME = 3000 FT. PER ACRE OBSERVED TO TOP OF BERM ELEVATION.
SURFACE AREA REQ'D = 435 SQ. FT. PER OPS 010

FOR LATE WINTER AND EARLY SPRING:	SOW ADJUSTMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.
SEEDING METHOD: RYE (GRAN) = 120 LB/ACRE CRIMSON CLOVER = 50 LB/ACRE (CMT ANNUAL SEEDING METHOD DURATION BEYOND 30 DAYS) CRIMSON COVER IS NOT TO EXCEED (BENT JUNE)	MULCH: APPLY 4,200 LB/ACRE STRAW, ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.
SEEDING DATES: MAY 1 – MAY 1	MAINTENANCE: REINTERPRET IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.
FOR SUMMER:	SOW ADJUSTMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER.
SEEDING METHOD: GERMAN MILLET = 40 LB/ACRE (A SMALL-STEMMED SUBPARAGRAPH MAY BE SUBSTITUTED AT A RATE OF 50 LB/ACRE)	MULCH: APPLY 4,200 LB/ACRE STRAW, ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.
SEEDING DATES: MAY 1 – AUG. 15	MAINTENANCE: REINTERPRET IF GROWTH IS NOT FULLY ADEQUATE. RESEED, FERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.
FOR FALL:	SOW ADJUSTMENTS: FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 1,000 LB/ACRE 10-10-10 FERTILIZER.
SEEDING METHOD: RYE (GRAN) = 120 LB/ACRE CRIMSON CLOVER = 50 LB/ACRE	MULCH: APPLY 4,200 LB/ACRE STRAW, ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.
SEEDING DATES: MAY 15 – DEC. 30	MAINTENANCE: REPAIR AND REINTERPRET DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 LB/ACRE OF NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, TOPDRESS WITH 50 LB/ACRE KNOX LEPESDEZA IN LATE FEBRUARY OR EARLY MARCH.

TEMPORARY SEEDING SCHEDULE

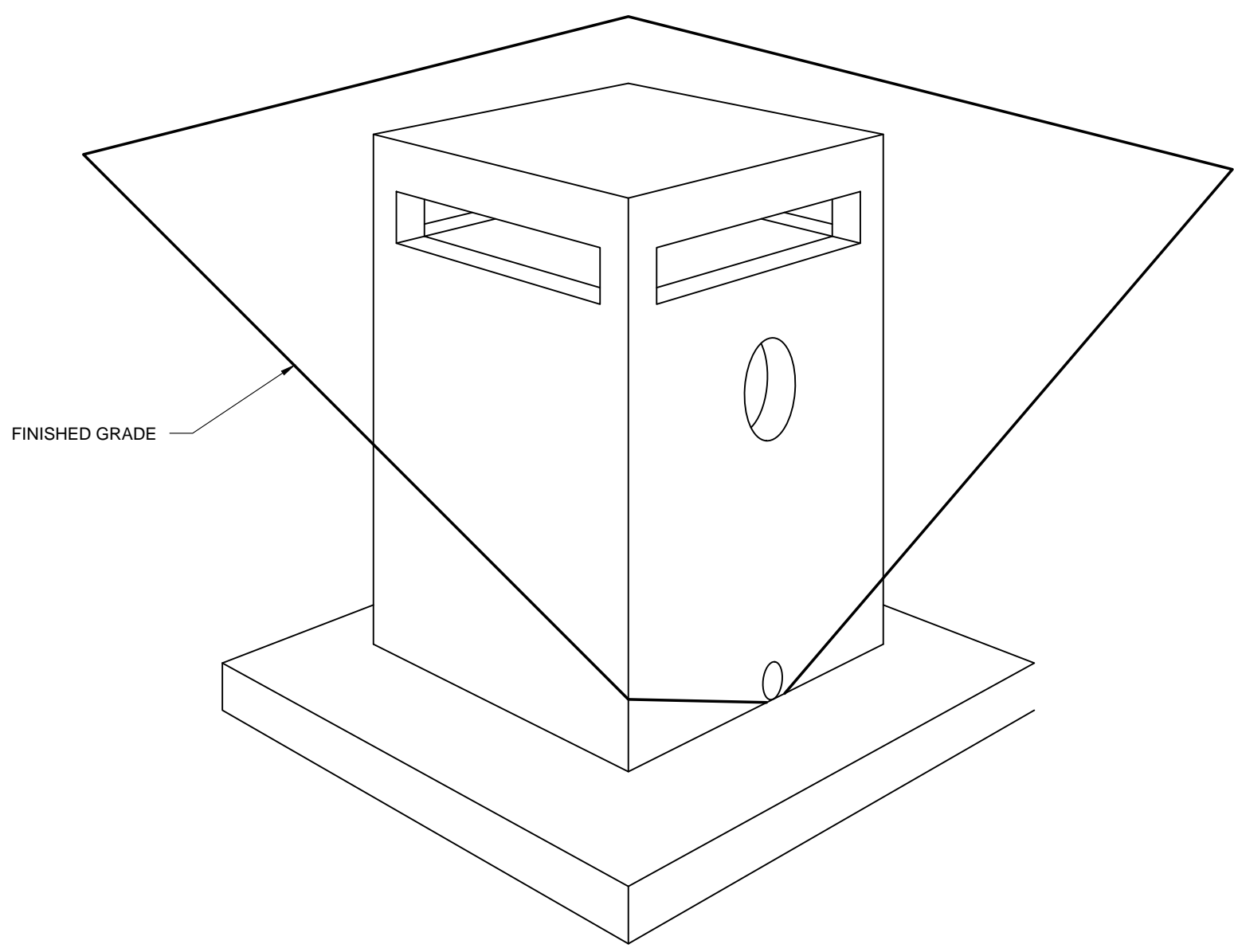
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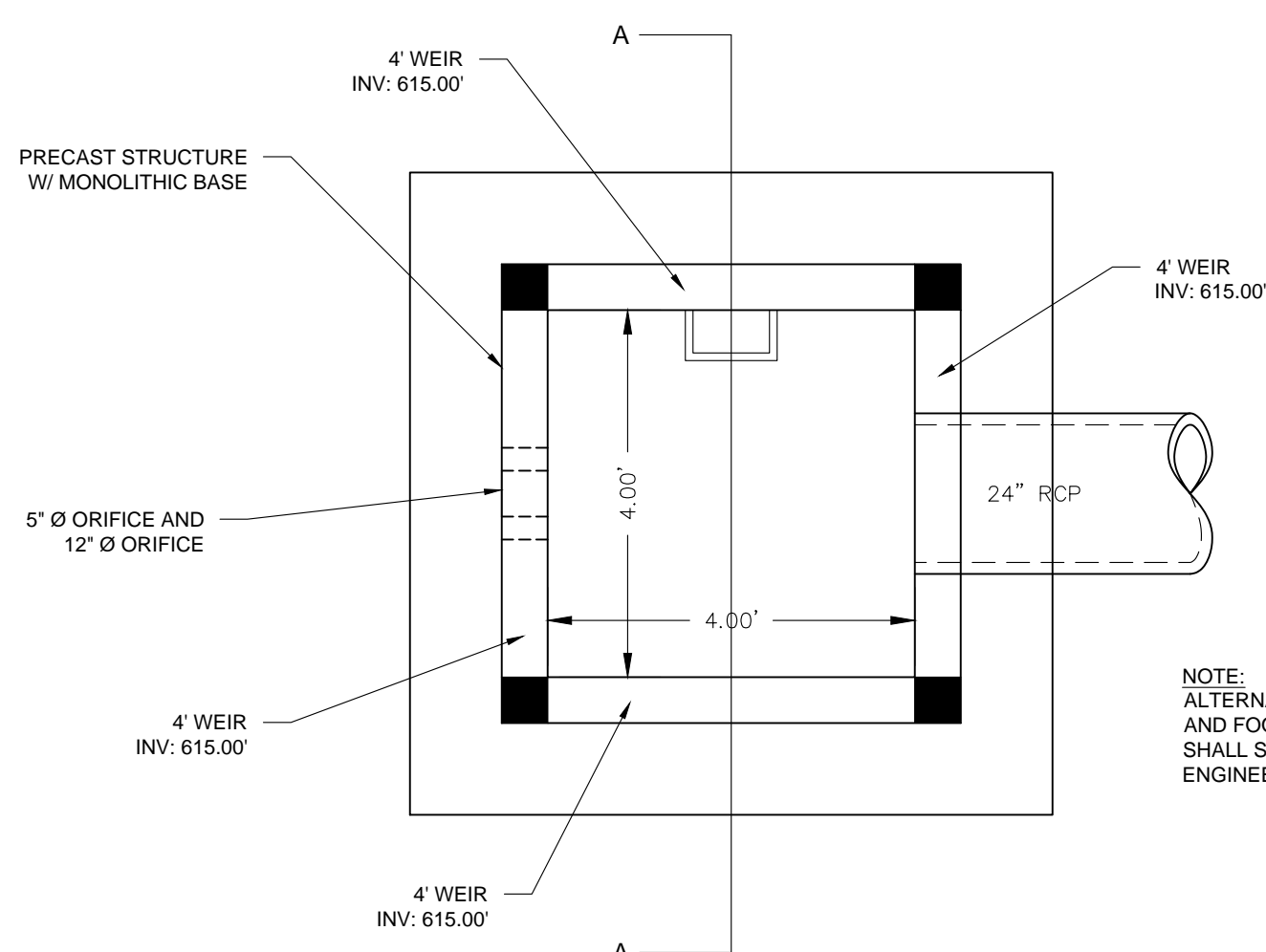
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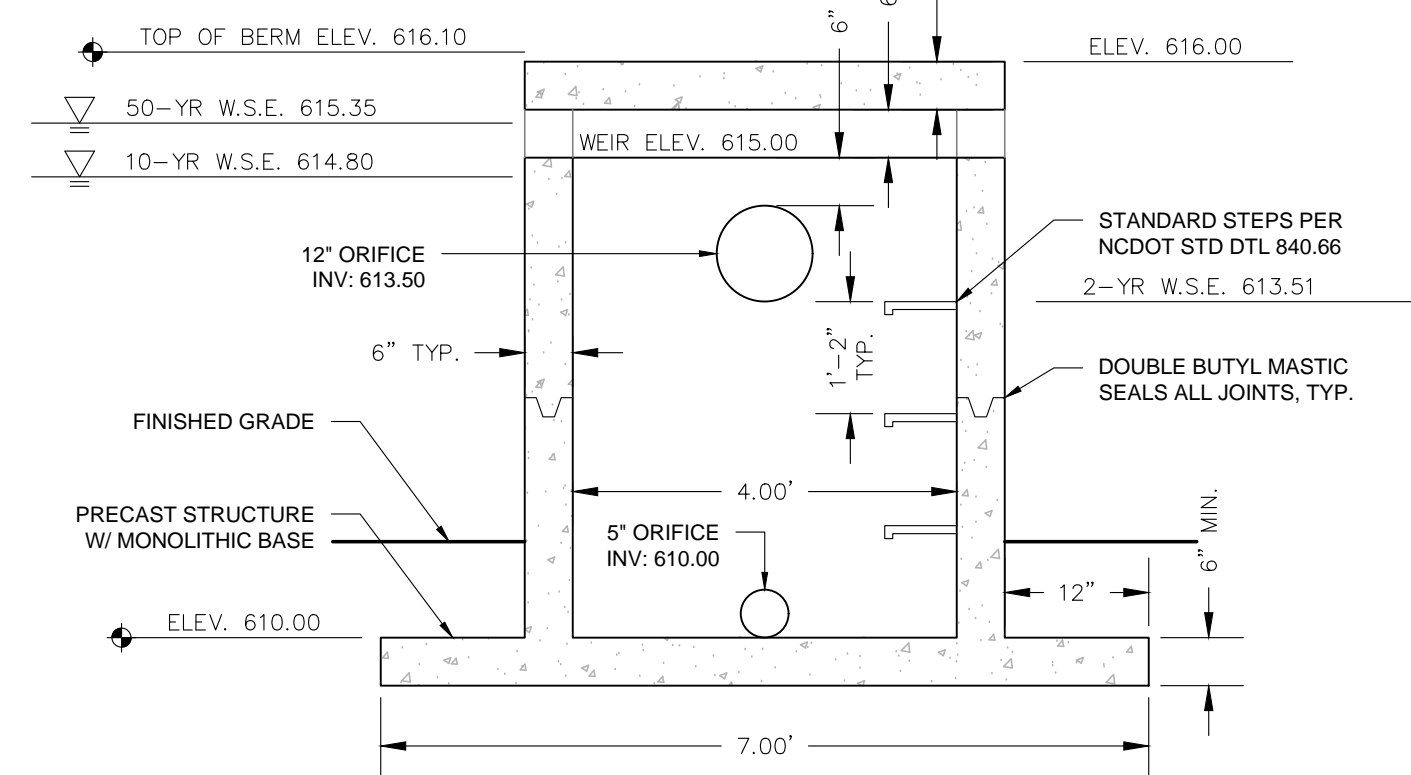
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PERSPECTIVE

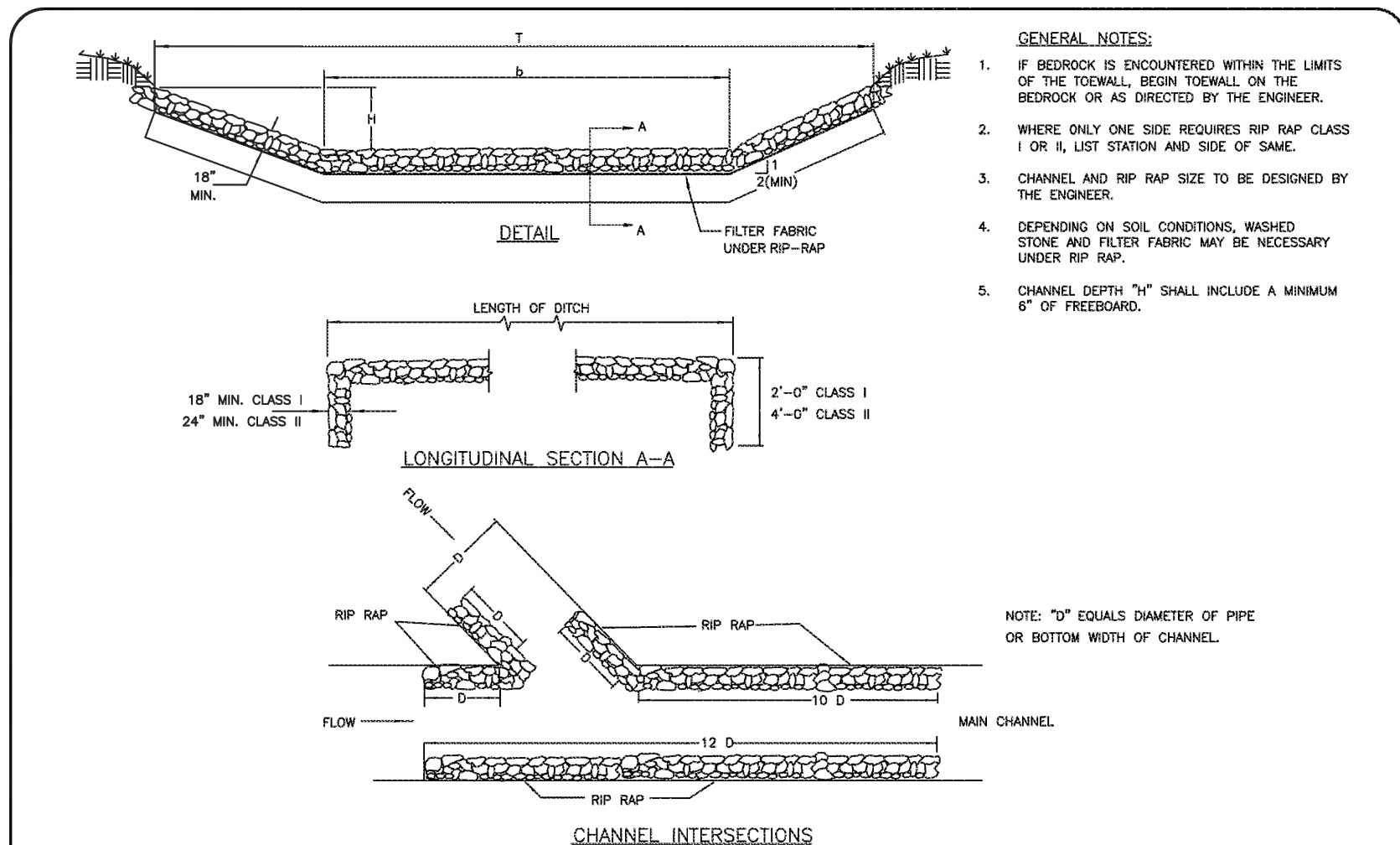


PLAN



SECTION A-A

9 OUTLET CONTROL STRUCTURE #14



NOT TO SCALE

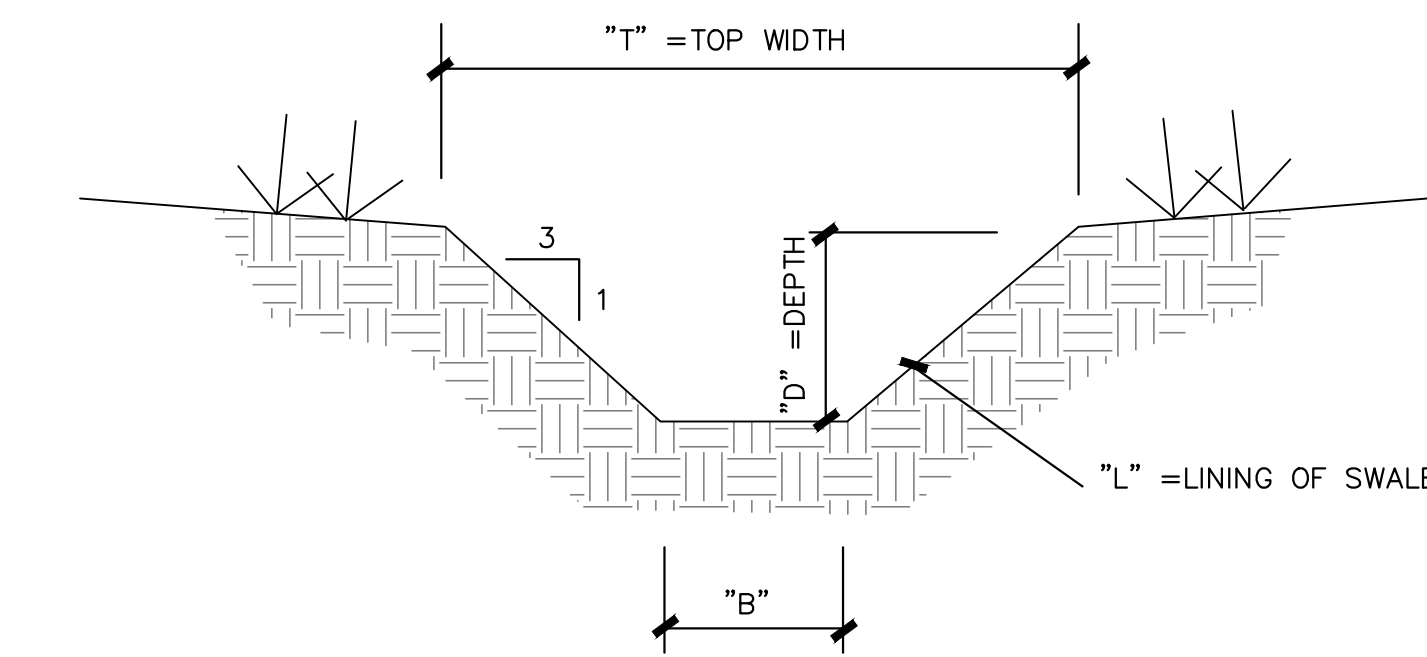
CITY OF CHARLOTTE
LAND DEVELOPMENT STANDARDS
INCLUDES CHARLOTTE ETV

RIP RAP DITCHES

20.27

8 RIP RAP DITCH

NTS



SWALE NO.	Q ₁₀ (cfs)	VELOCITY (fps)	D	B	T	LINING (L)
#1	13.05	5.0	1.5'	2'	11'	COCONUT REINF. MAT

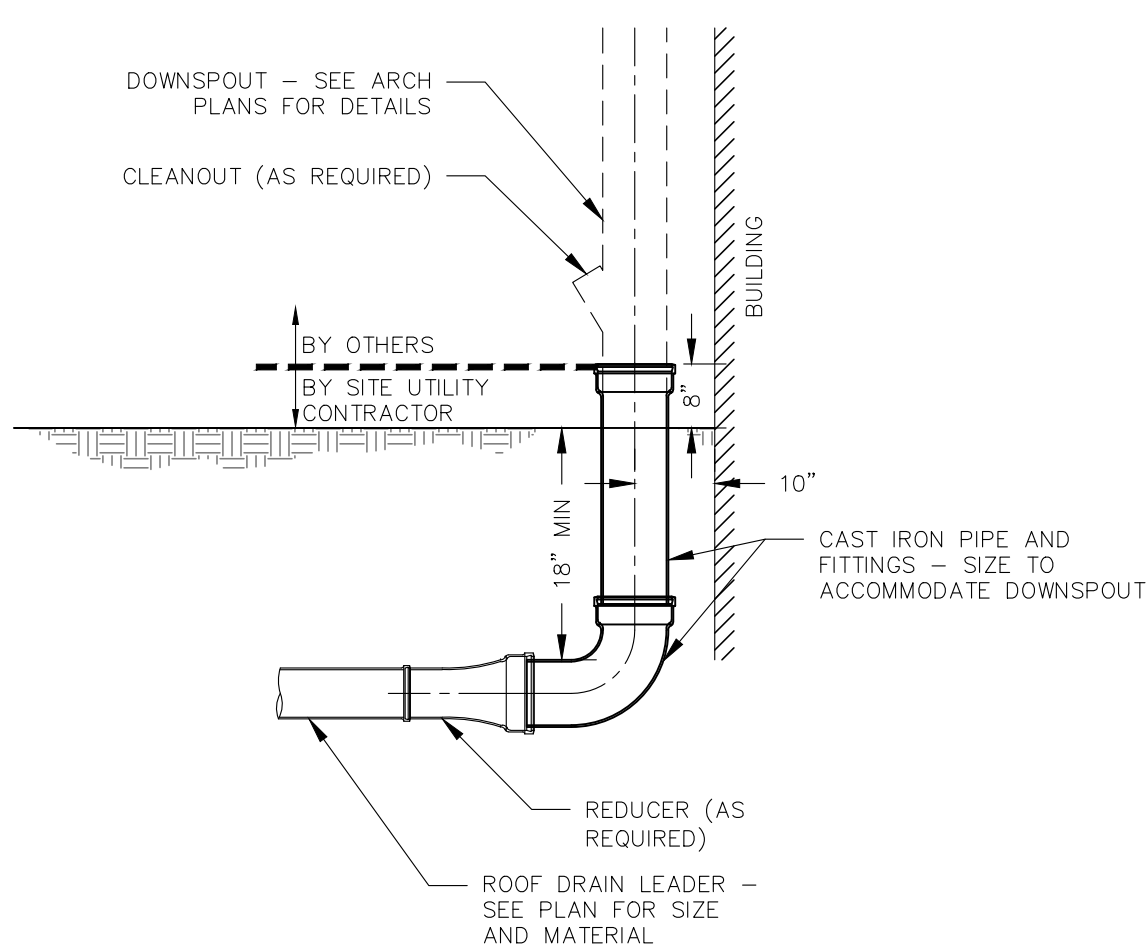
7 SWALE SECTIONS

NTS

- NOTES:
- IF VEHICULAR LOADS ARE EXPECTED, A MINIMUM OF 12-INCHES OF COVER IS REQUIRED OVER THE TOP OF THE PIPE.
 - ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D221, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS," LATEST EDITION.
 - MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE PINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
 - FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 - BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6' ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4'-24" (100mm-600mm); 6" (150mm) FOR 30'-60" (750mm-600mm).
 - INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6' ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D221, LATEST EDITION.
 - MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 48" DIAMETER PIPE MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
 - TOP OF PERFORATED PIPE MUST BE AT OR BELOW THE TOP OF FOOTING.
 - BACKFILL MUST BE SIZED AT LEAST ONE SIEVE SIZE (ROCK SIZE) LARGER THAN DIMENSIONS OF PERFORATIONS, OTHERWISE A GEOTEXTILE WRAP AROUND THE PIPE IS REQUIRED.
 - FOR NATIVE SOIL WITH HIGH SAND CONTENT, A GEOTEXTILE BETWEEN THE BACKFILL AND NATIVE SOIL SHOULD BE USED. FOR NATIVE SOIL WHERE THE CLAY CONTENT EXCEEDS 50% OR THE SILT CONTENT EXCEEDS 40%, A GEOTEXTILE IS NOT REQUIRED AROUND THE PIPE. FOR NATIVE SOIL WITH LESS THAN 50% PASSING THE NO. 200 SIEVE, THE PERFORATED OPENING SIZE AND THE FABRIC SHOULD BE AT LEAST A NO. 30 SIEVE. FOR NATIVE SOIL WITH MORE THAN 50% PASSING THE NO. 200 SIEVE, THE JOBS OF THE FABRIC SHOULD BE AT LEAST A NO. 50 SIEVE.

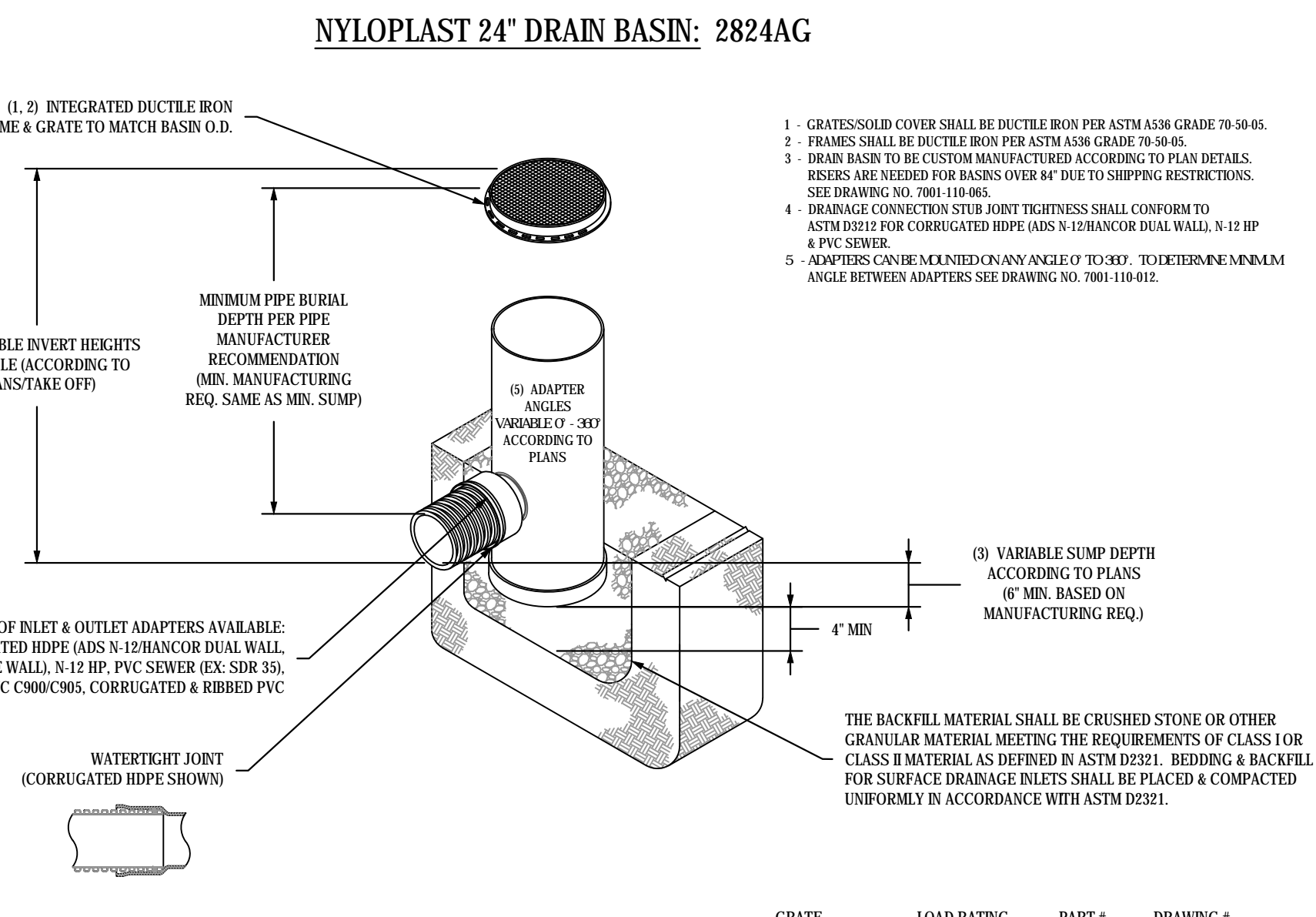
6 FOUNDATION DRAIN (FD)

NTS



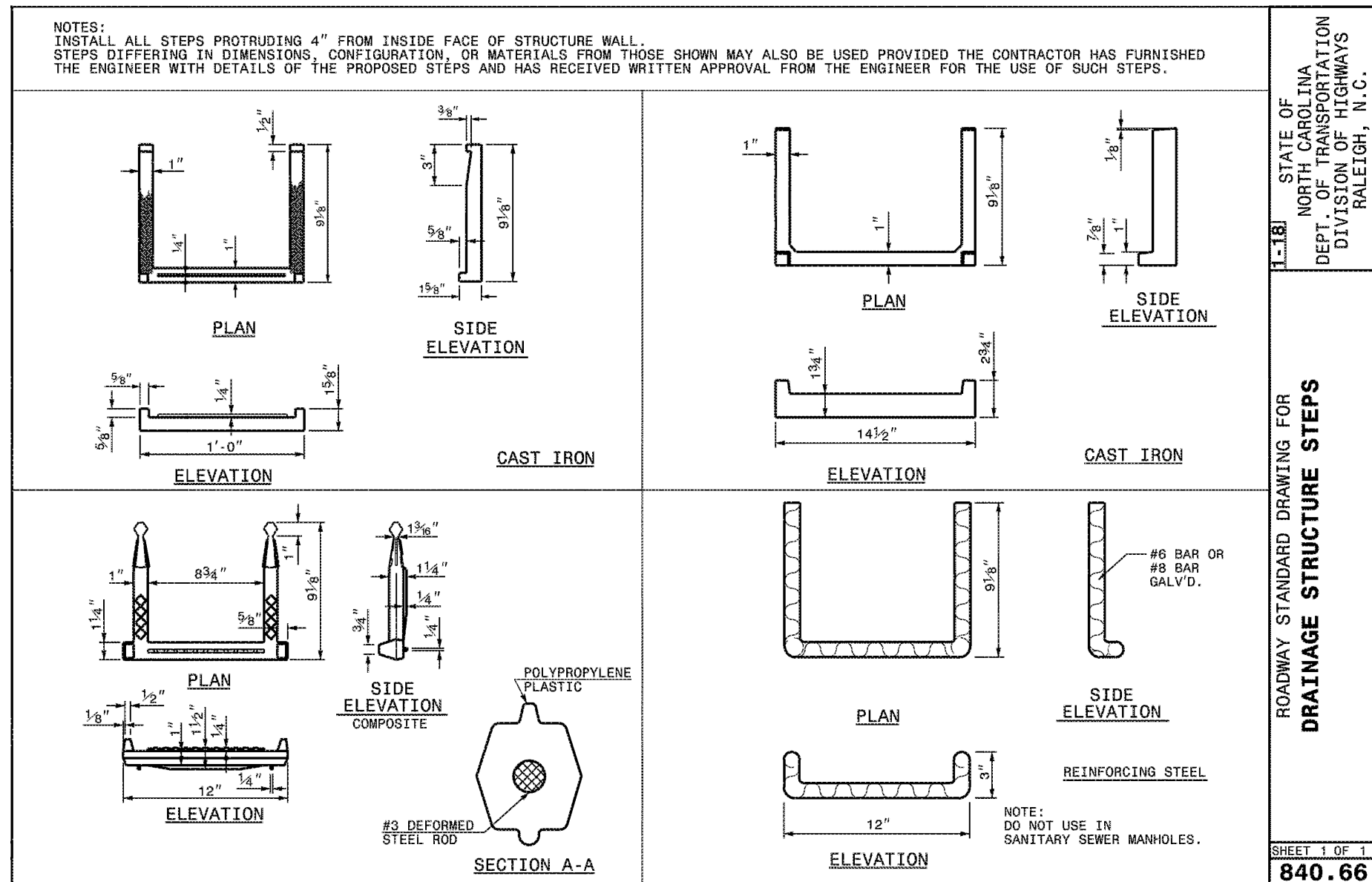
5 DOWNSPOUT ADAPTER

NTS



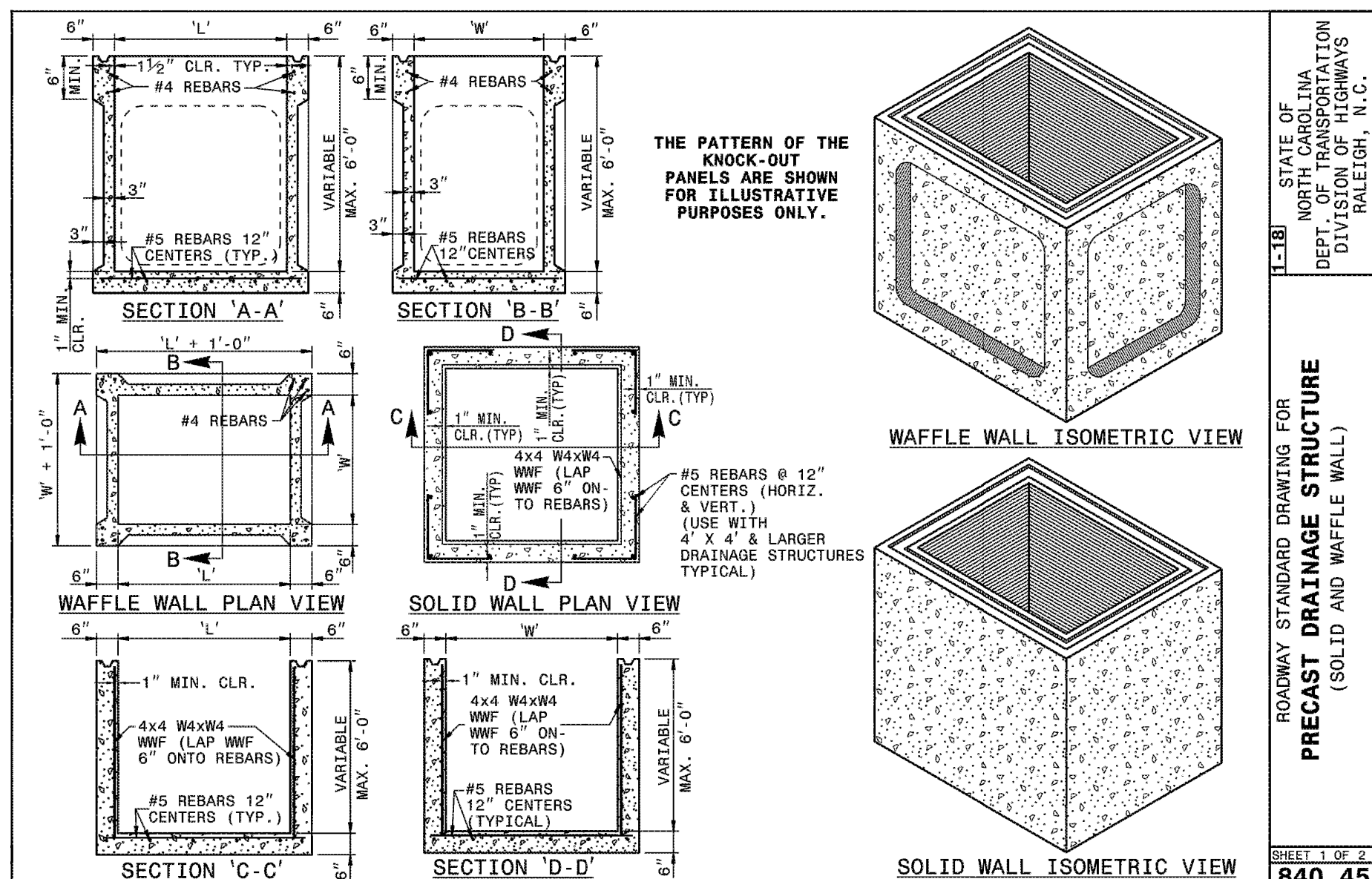
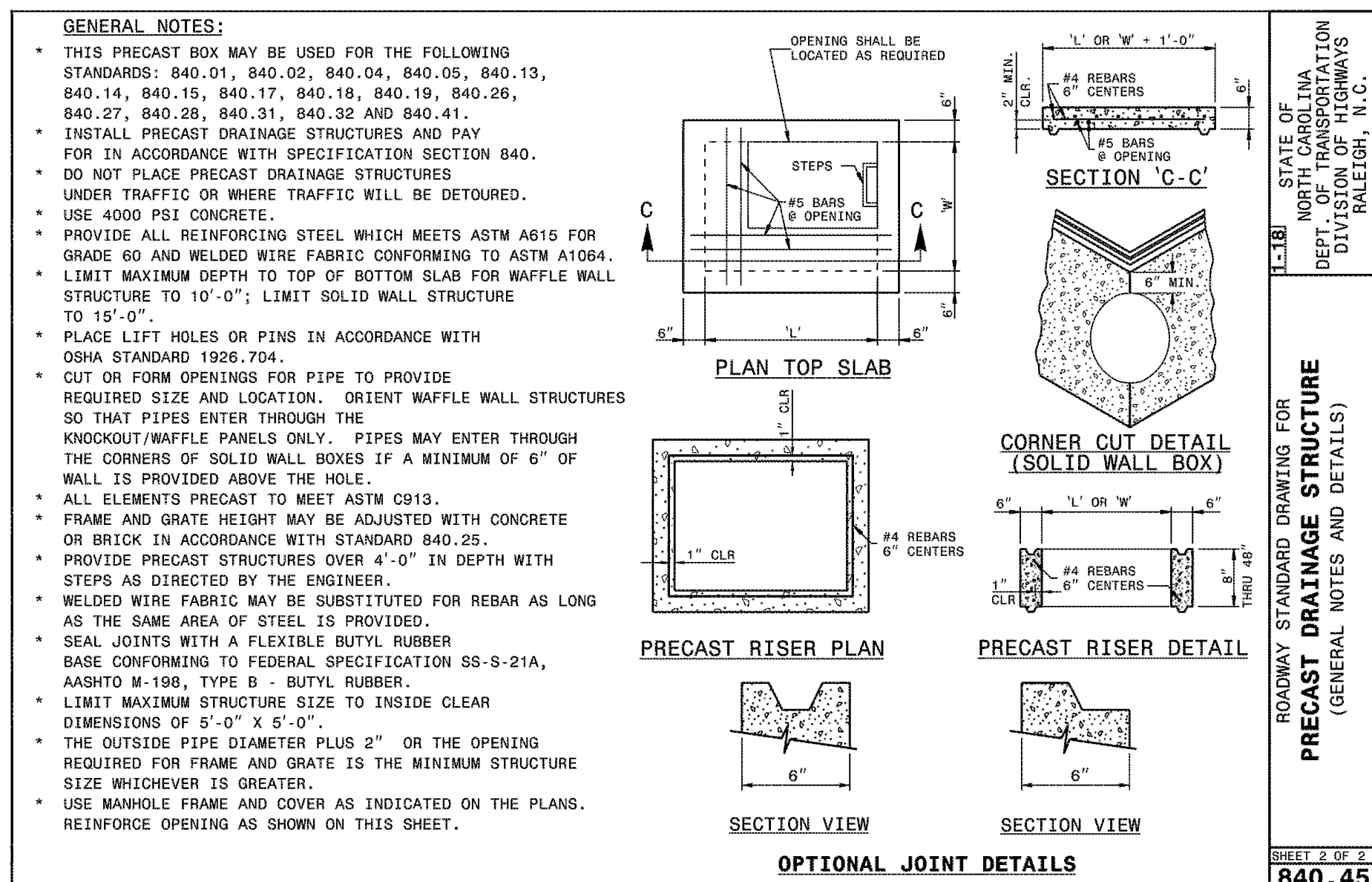
4 DRAIN BASIN (DB)

NTS



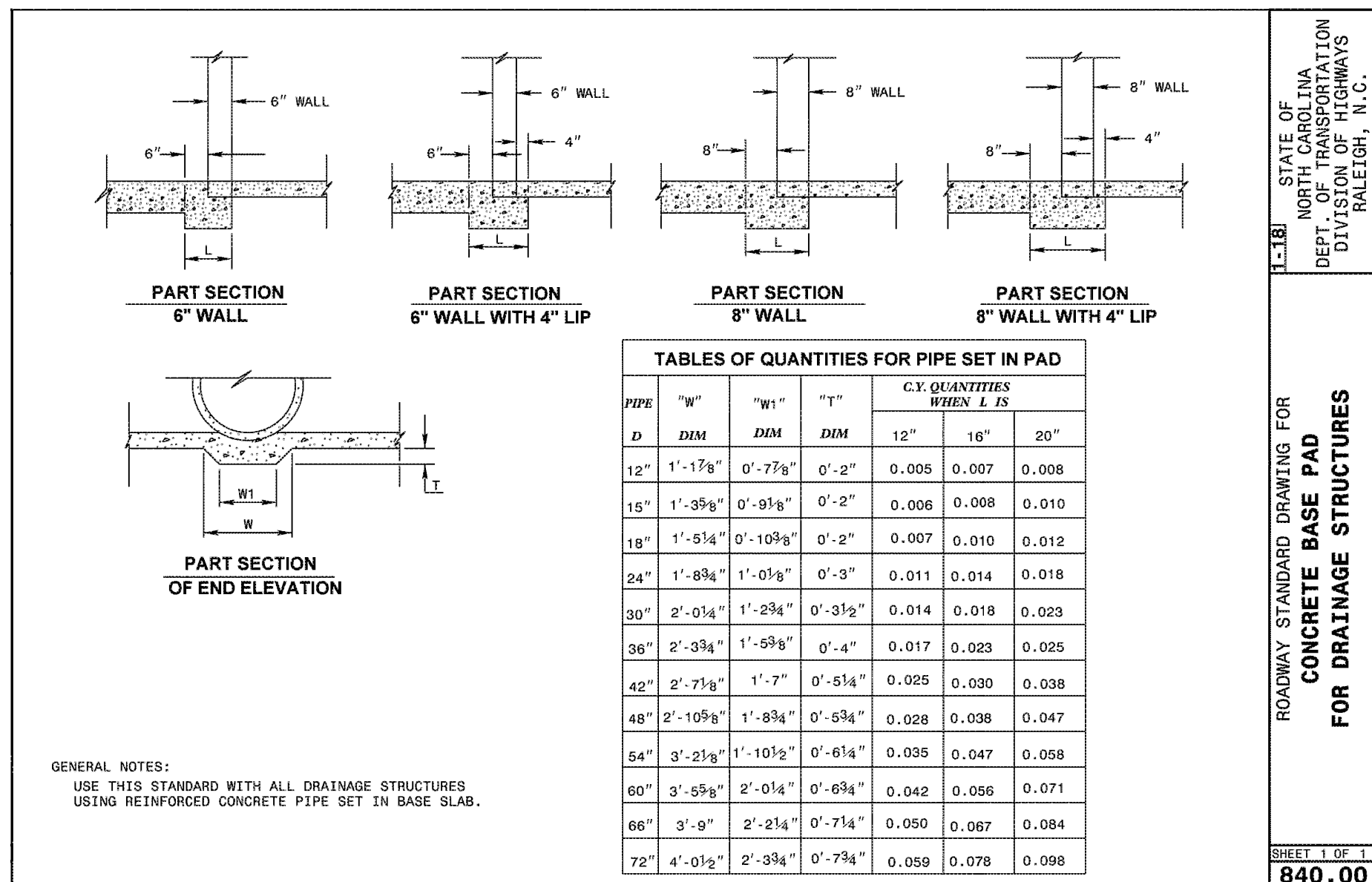
3 DRAINAGE STRUCTURE STEPS

NTS



2 PRECAST DRAINAGE STRUCTURE

NTS



1 DRAINAGE STRUCTURE BASE PAD

NTS

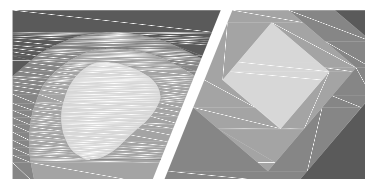
ODELL

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CHARLOTTE, NC

RICHMOND, VA

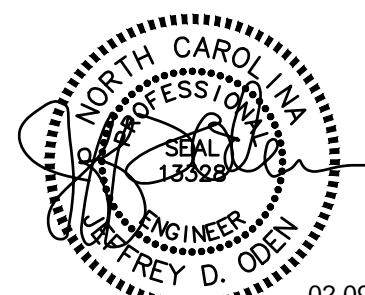
CONSULTANT



STEWART

101 N. TRYON ST., SUITE 1400
CHARLOTTE, NC 28202
T 704.334.7955

FIRM LICENSE # C-1001
www.stewartinc.com
PROJECT # X17017.00



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SPRINGHILL SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



REVISION	DATE	DESCRIPTION
SD	09/08/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO: X17017.00

P.I.C. TAD / JDO

P.MGR. TAD

P.ENGR. JDO

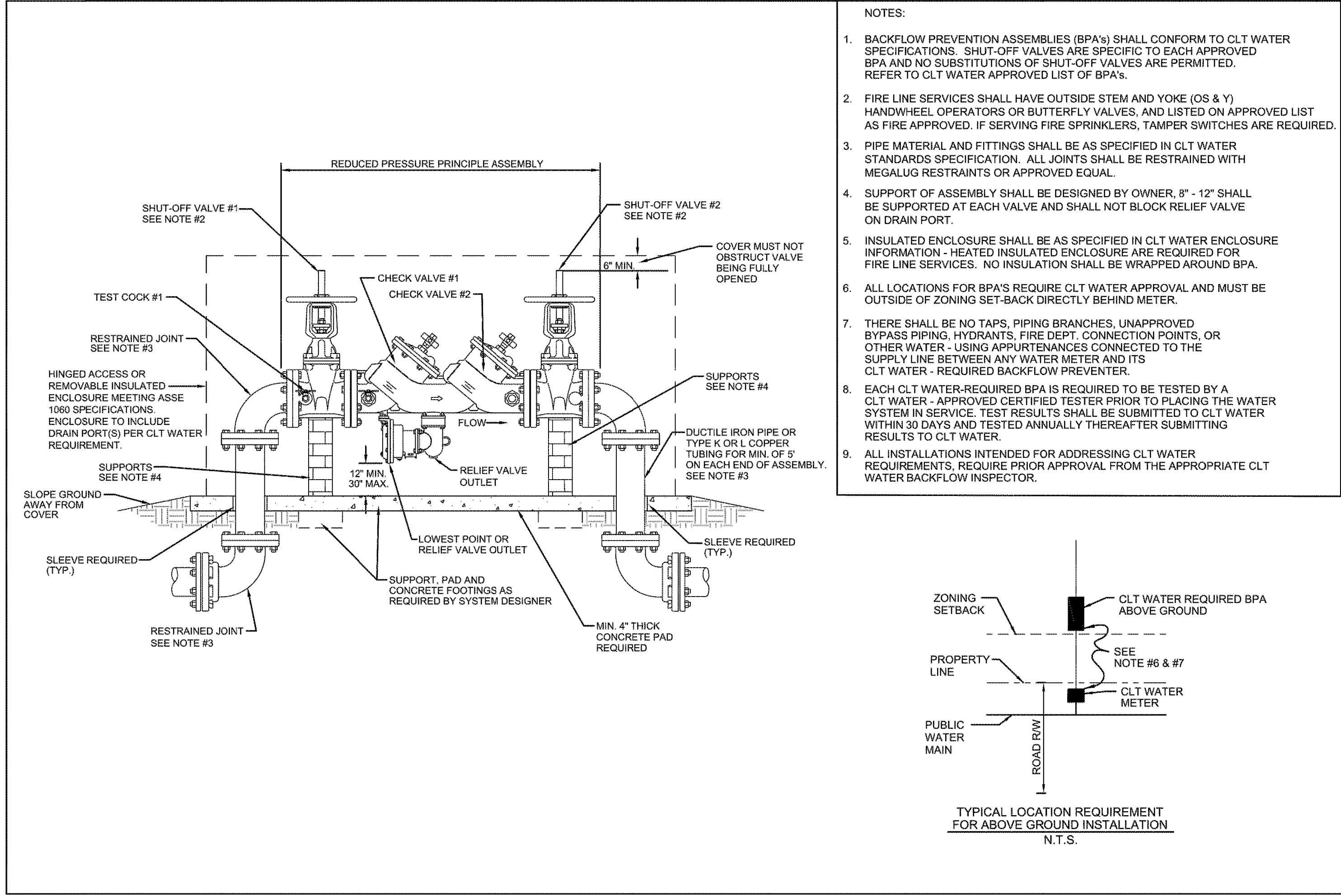
DESIGN BY DLS / MRB

SHEET TITLE

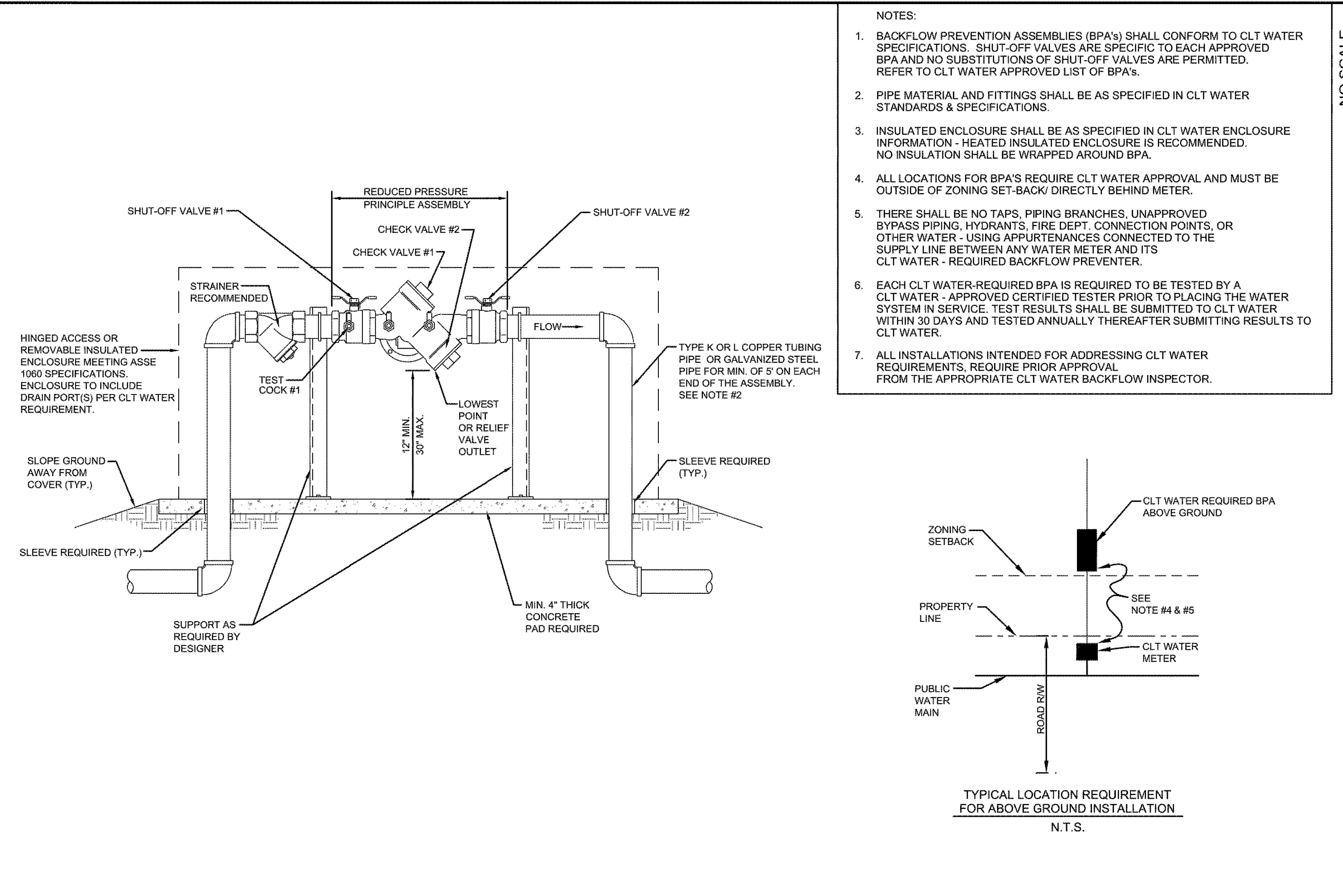
STORM DRAINAGE DETAILS

SHEET IDENTIFIER

C921



6 4" & 8" RPZ BACKFLOW PREVENTION ASSEMBLY NTS



5 1.5" RPZ BACKFLOW PREVENTION ASSEMBLY NTS

NO SCALE

STANDARD

2

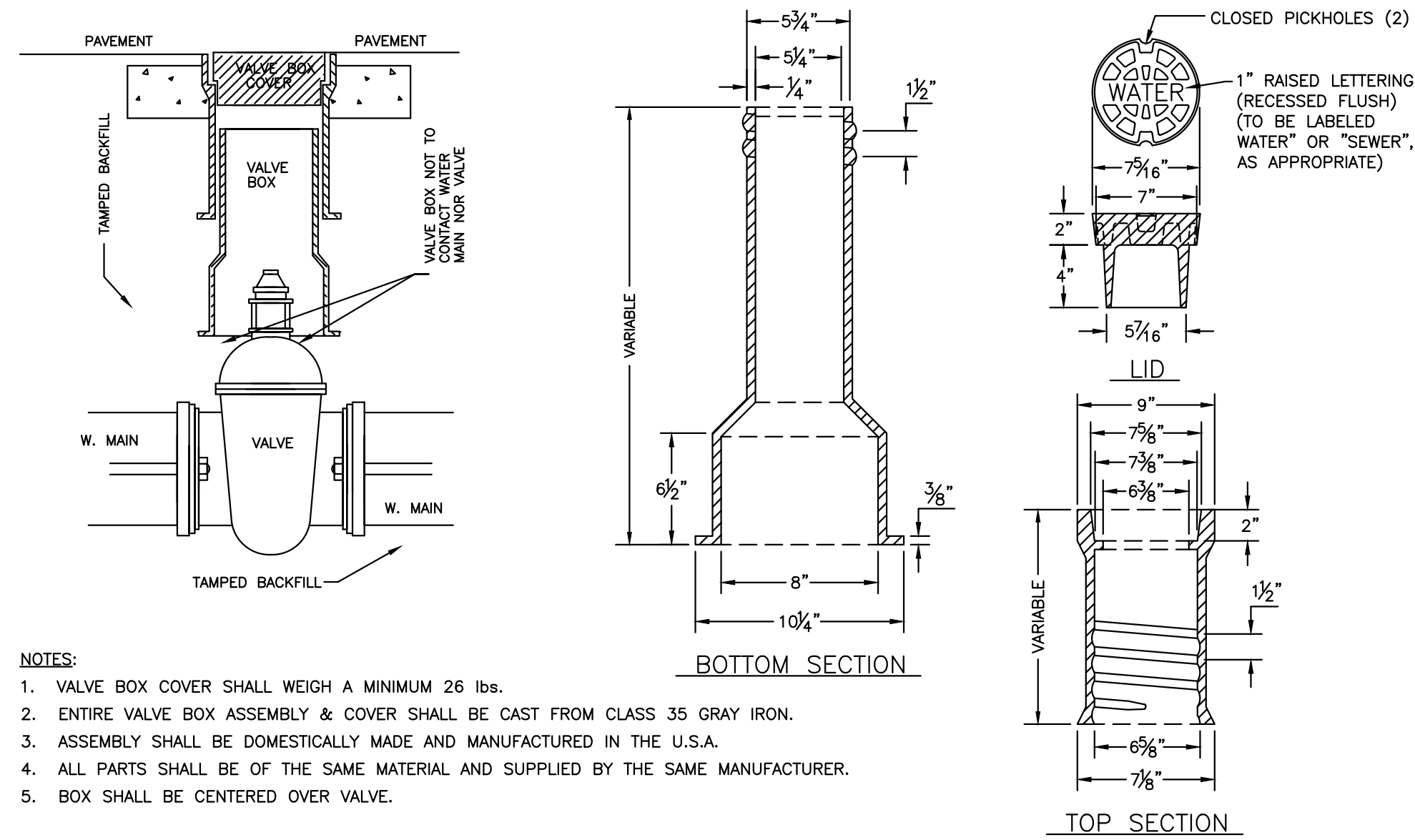
1.2

6.3/2016

REDUCED PRESSURE PRINCIPLE ASSEMBLY (RP) 2 1/2" - 12" ABOVE GROUND

CHARLOTTE WATER STANDARD DETAILS BACKFLOW PREVENTION

CHARLOTTE WATER



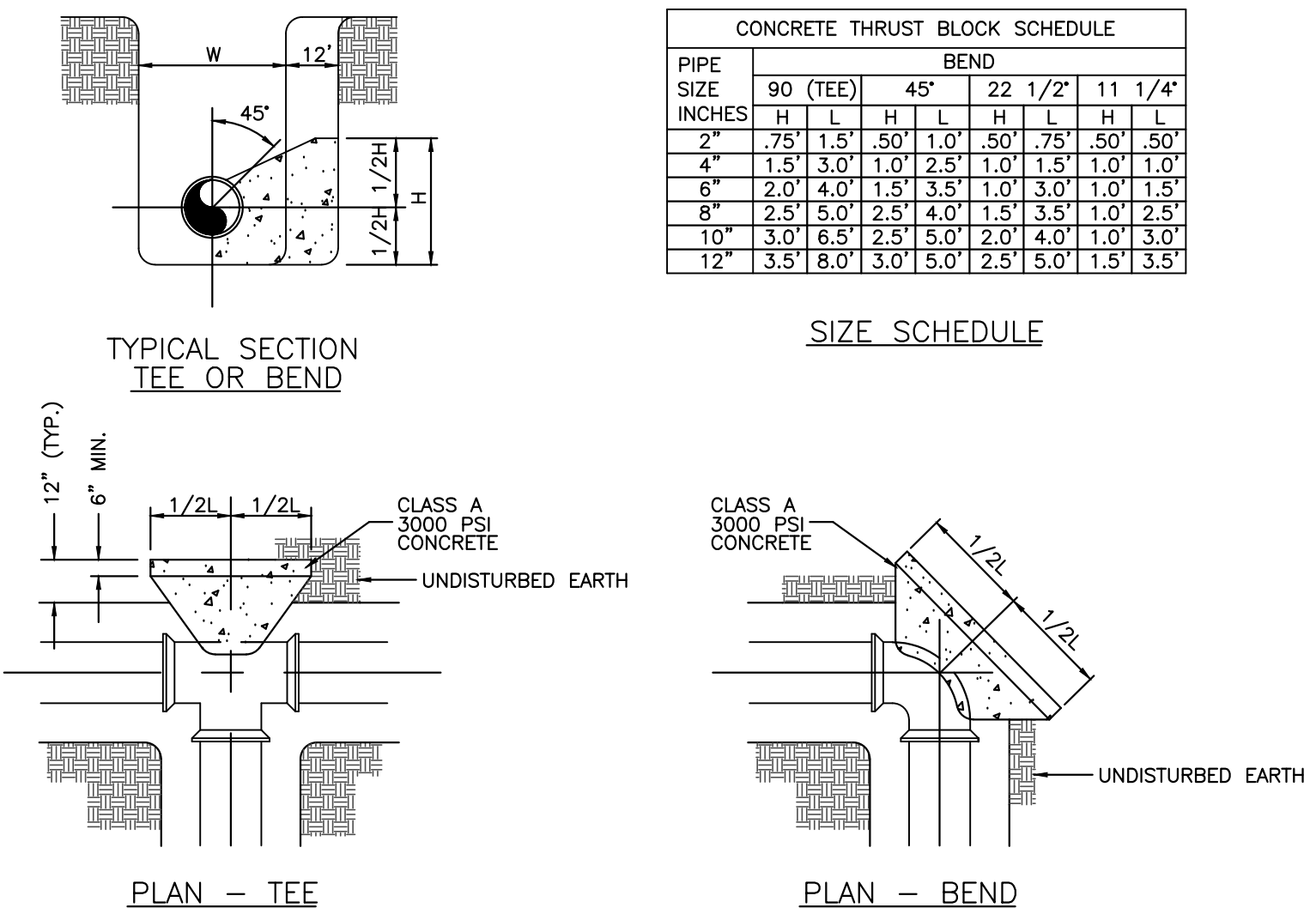
4 VALVE BOX AND COVER NTS

PIPE SIZE	4"	6"	8"	10"
FITTING	L	L	L	L
90° BEND	33'	47'	62'	75'
VALVE, TEE, PLUG	29'	41'	55'	67'
45° BEND	14'	20'	26'	31'
22 1/2° BEND	7'	10'	13'	15'
11 1/4° BEND	4'	5'	7'	8'

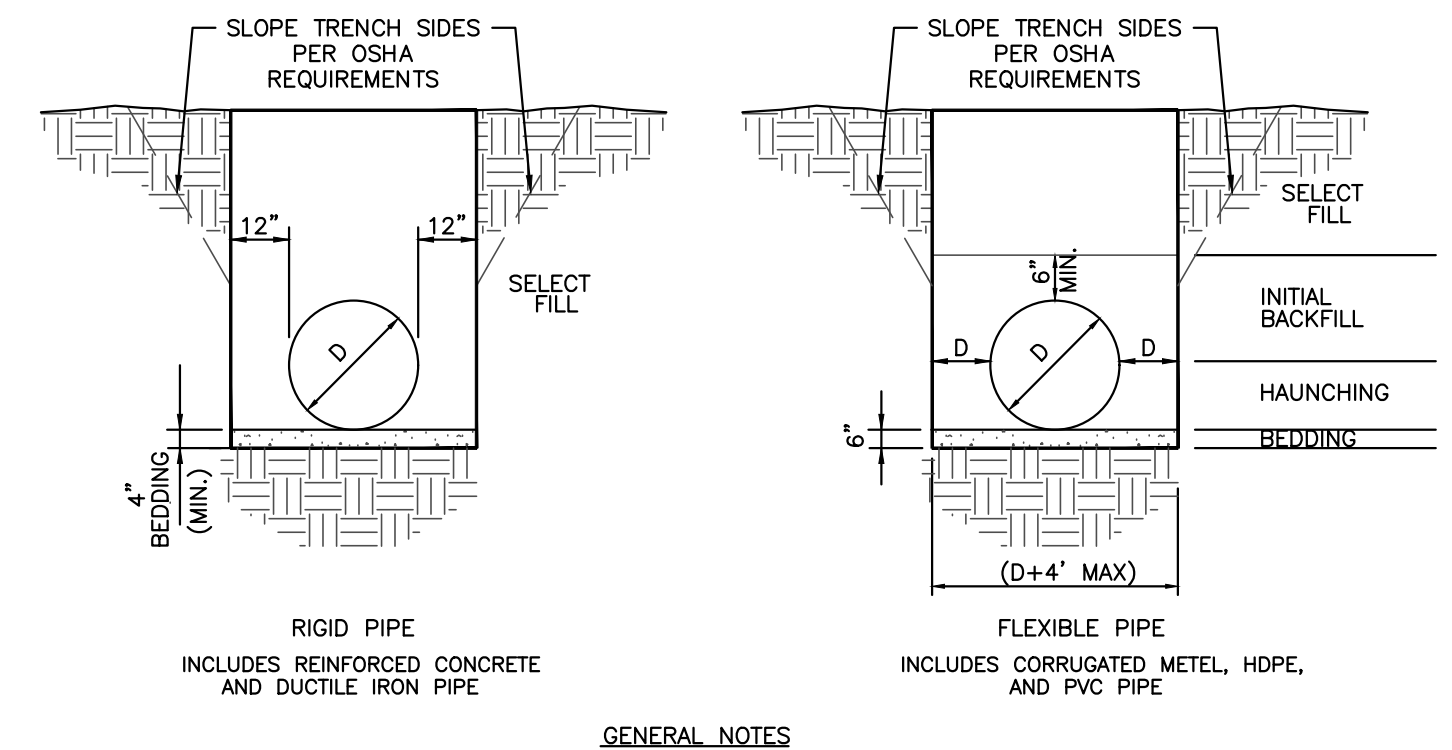
NOTES:

- LENGTH OF RESTRAINED PIPE MEASURED EACH WAY FROM VALVES AND BENDS.
- L=LENGTH
- MIN 3" GROUND COVER RECD.
- BASED ON 200 PSI INTERNAL PRESSURE.
- LENGTH REFERS TO THE AMOUNT OF PIPE WHICH MUST BE RESTRAINED TOGETHER.
- LENGTH OF RESTRAINED PIPE CHART IS FOR THE LENGTH OF JOINT RESTRAINT FOR MEGALUGS, OR APPROVED EQUAL.
- CROSSES MUST BE RESTRAINED IN ALL APPLICABLE DIRECTIONS.
- 12" AND SMALLER IN LINE VALVES AND TEES SHALL HAVE A MECHANICAL JOINT RESTRAINT DEVICE ON EACH SIDE OF THE FITTING OR VALVE.
- A SECOND VALVE WILL BE REQD TO BE CLOSED WHEN EXCAVATING NEXT TO A EXIST VALVE.
- ON PLUGS, TEES AND BENDS, A CONCRETE ANCHOR SHALL BE USED IN ADDITION TO RESTRAINT.
- WHEN REDUCERS ARE USED ON VALVE INSTALLATIONS THE LENGTH OF RESTRAINT SHALL BE BASED ON THE SIZE OF THE PIPE NOT THE SIZE OF THE VALVE.

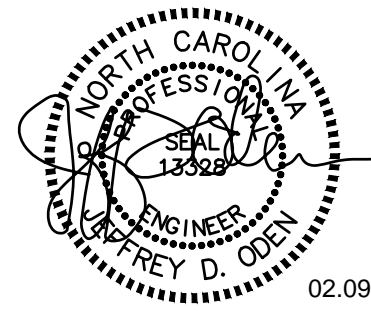
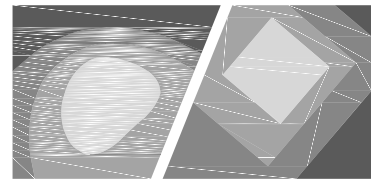
3 MECHANICAL JOINT RESTRAINT NTS



2 THRUST BLOCKING NTS



1 WATER AND SEWER TRENCHING NTS



REVISION	DATE	DESCRIPTION
ADDENDA OR MODIFICATION		
SD	09/08/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
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PROJECT NO:	X17017.00
P.I.C.	TAD / JDO
P.MGR.	TAD
P.ENGR.	JDO
DESIGN BY	DLS / MRB

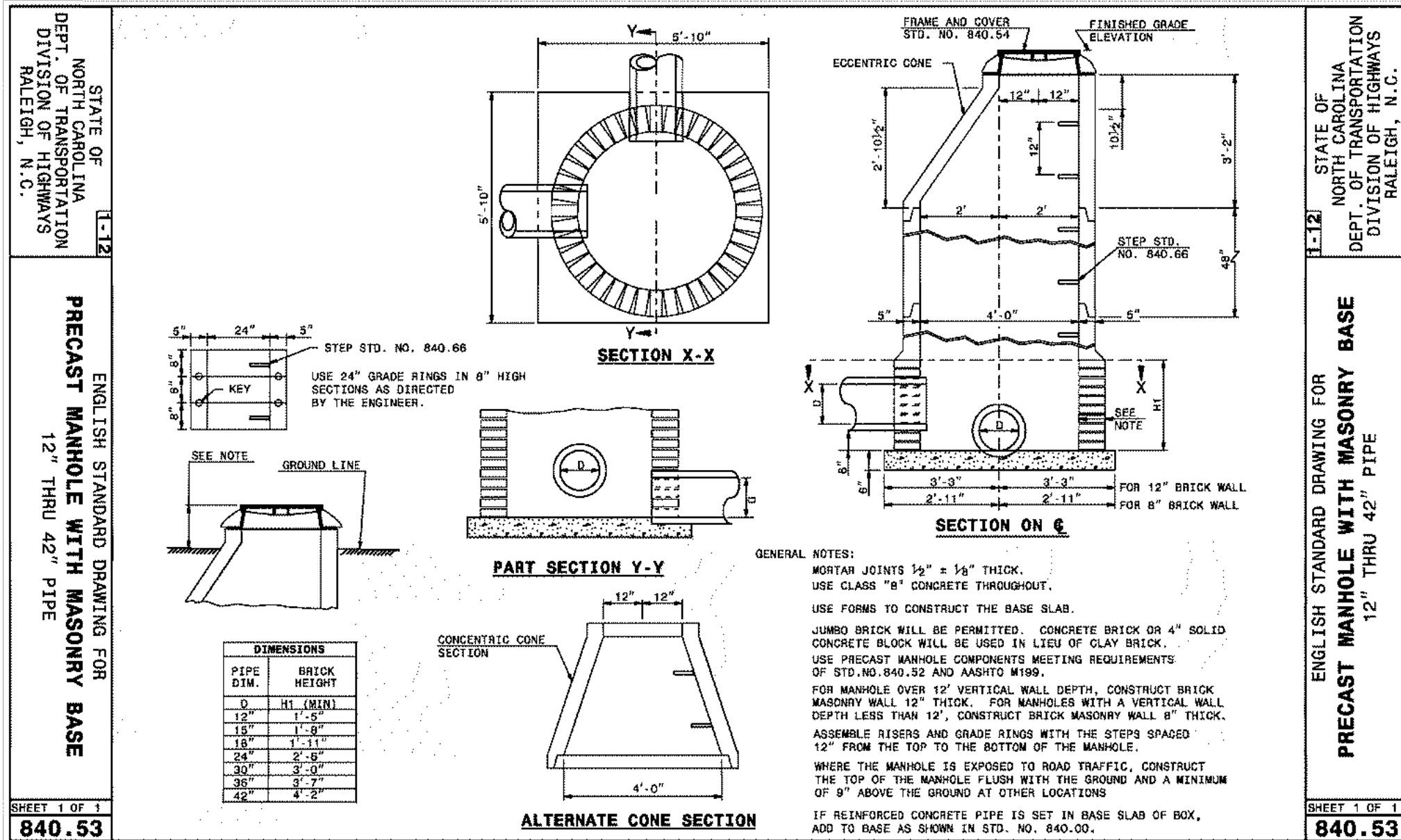
6 NOT USED NTS

7 NOT USED NTS

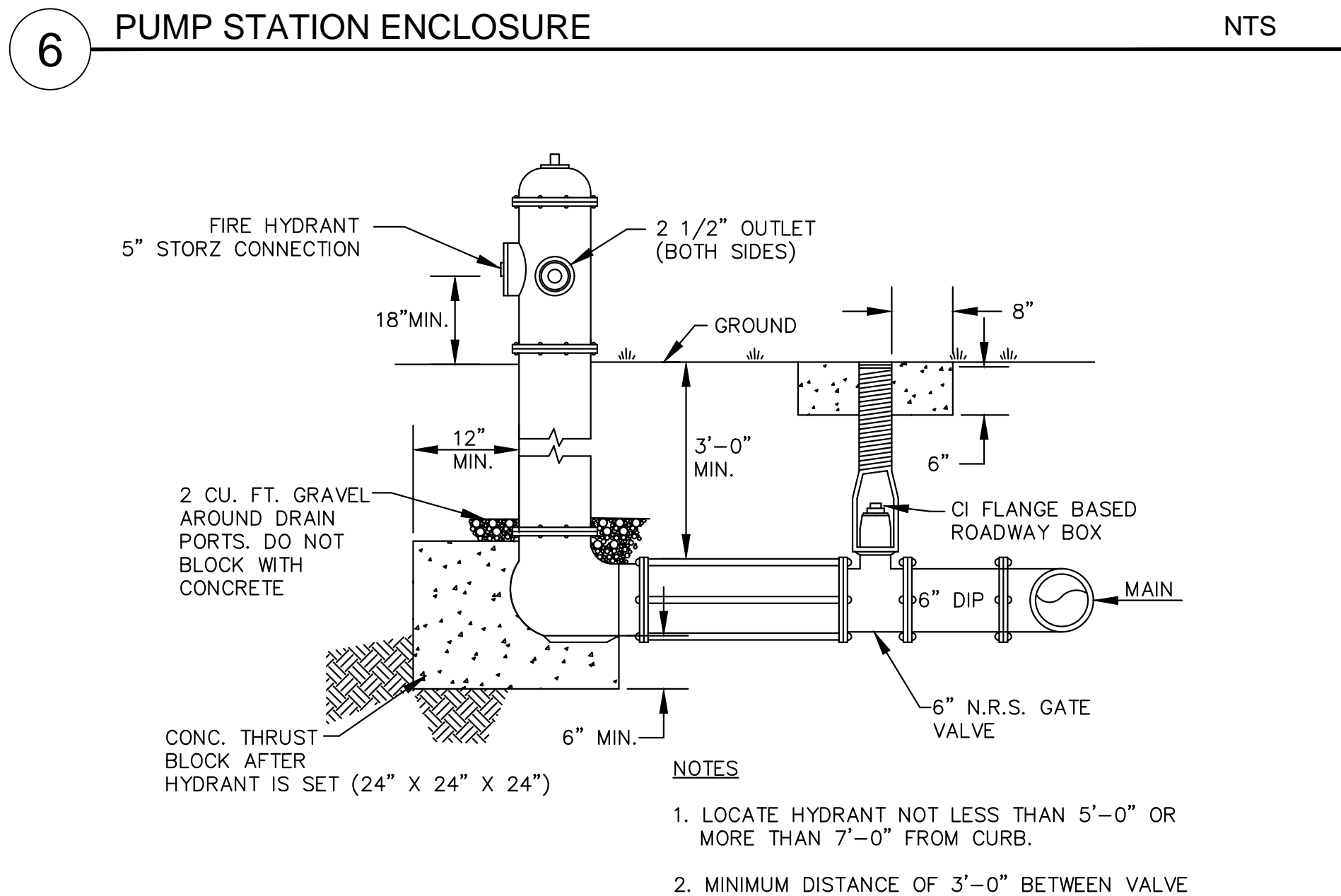
8 NOT USED NTS

9 NOT USED NTS

4 SANITARY SEWER MANHOLE NTS

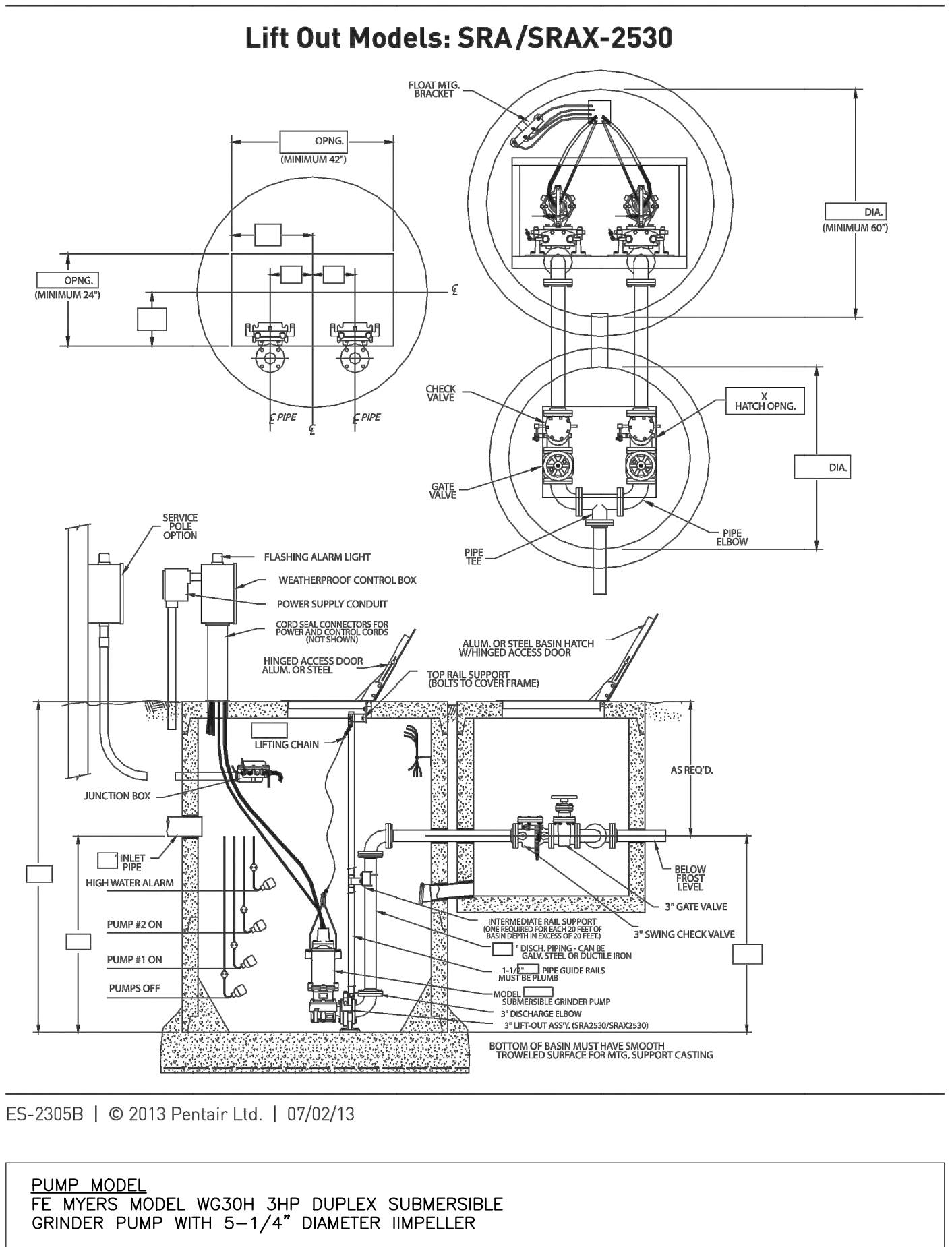
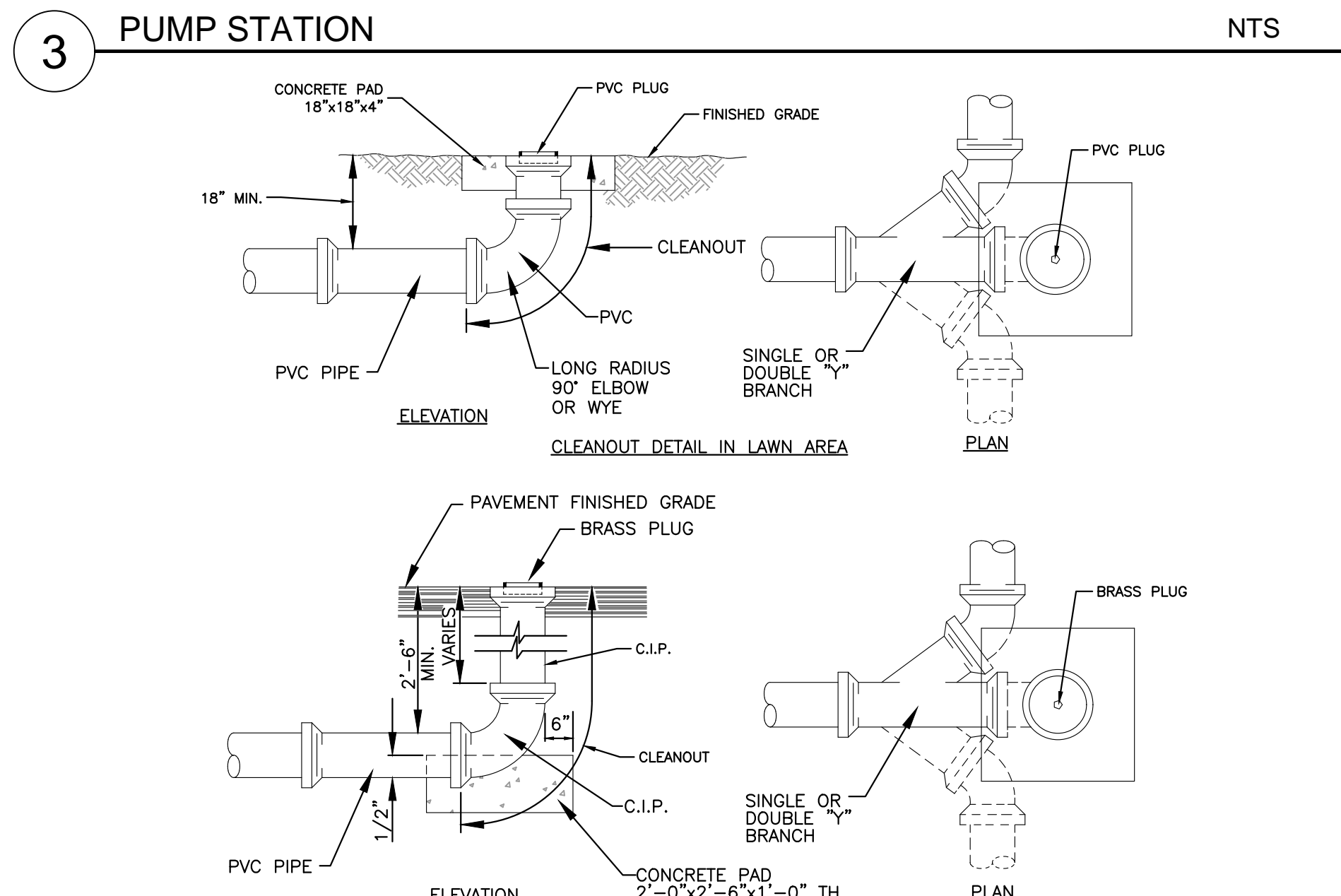
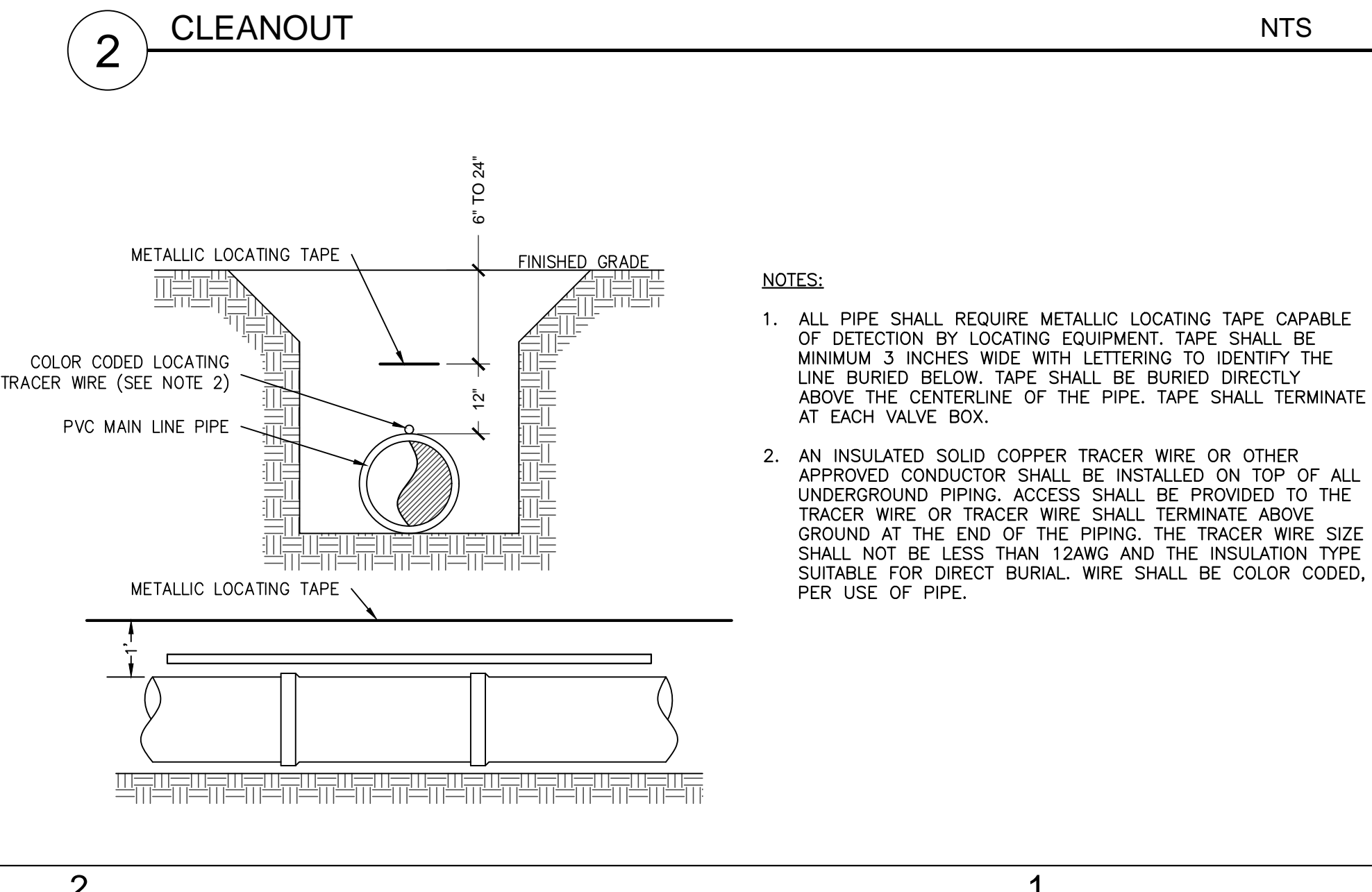


5 FIRE HYDRANT ASSEMBLY NTS



6 PUMP STATION ENCLOSURE NTS

1 DETECTABLE LOCATING TAPE NTS



PENTAIR

MYERS

Typical Installation
WG30/50, WG30H/50, WG30H and WG30H
Duplex Submersible Grinder

SHEET IDENTIFIER

UTILITY DETAILS

REVISION	DATE	DESCRIPTION
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PROJECT NO: X17017.00

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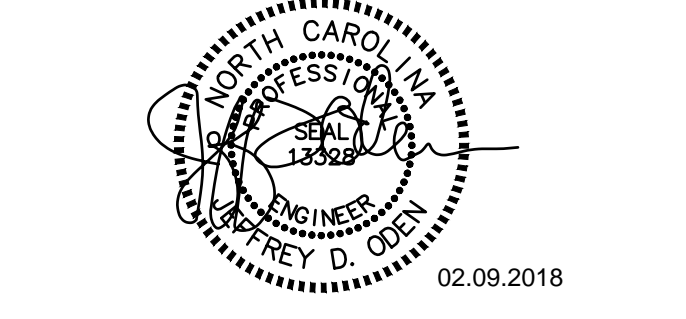
P MGR. TAD

P ENGR. JDO

DESIGN BY DLS / MRB

SHEET TITLE

101 N. TRYON ST., SUITE 1400	FIRM LICENSE # C-1051
CHARLOTTE, NC 28202	www.stewartinc.com
T 704-334-7525	PROJECT # X17017.00



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SPRINGHILL SUITES HOTEL

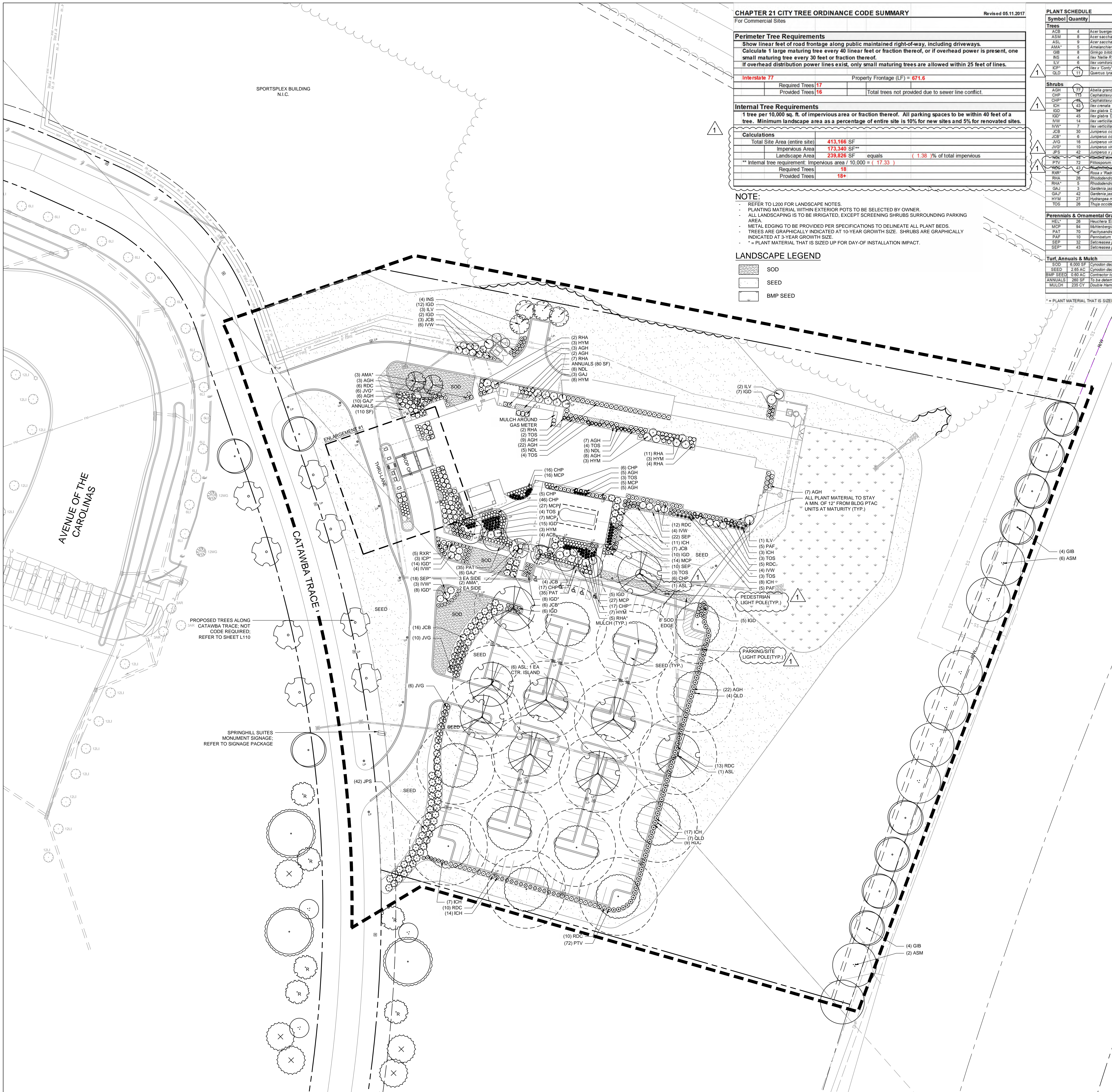
14500 BEST DAY BOULEVARD
CHARLOTTE, NC



212 S. Tryon Street
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www.odeil.com

CHARLOTTE, NC RICHMOND, VA

CONSULTANT



CHAPTER 21 CITY TREE ORDINANCE CODE SUMMARY

Revised 05.11.2017

For Commercial Sites

Perimeter Tree Requirements

Show linear feet of road frontage along public maintained right-of-way, including driveways.
Calculate 1 large maturing tree every 40 linear feet or fraction thereof, or if overhead power is present, one small maturing tree every 30 feet or fraction thereof.
If overhead distribution power lines exist, only small maturing trees are allowed within 25 feet of lines.

Interstate 77	Property Frontage (LF) = 671.6
Required Trees 17	
Provided Trees 16	
Total trees not provided due to sewer line conflict.	

Internal Tree Requirements

1 tree per 10,000 sq. ft. of impervious area or fraction thereof. All parking spaces to be within 40 feet of a tree. Minimum landscape area as a percentage of entire site is 10% for new sites and 5% for renovated sites.

Calculations	
Total Site Area (entire site)	413,166 SF
Impervious Area	173,340 SF**
Landscape Area	239,826 SF
Internal tree requirement: Impervious area / 10,000 = (17.33)	
Required Trees	18
Provided Trees	16*

NOTE:

- * REFER TO L200 FOR LANDSCAPE NOTES.
- * PLANTING MATERIAL WITHIN EXTERIOR POTS TO BE SELECTED BY OWNER.
- * ALL LANDSCAPING IS TO BE IRRIGATED, EXCEPT SCREENING SHRUBS SURROUNDING PARKING AREA.
- * METAL EDGING TO BE PROVIDED PER SPECIFICATIONS TO DELINEATE ALL PLANT BEDS.
- * TREES ARE GRAPHICALLY INDICATED AT 10-YEAR GROWTH SIZE. SHRUBS ARE GRAPHICALLY INDICATED AT 3-YEAR GROWTH SIZE.
- * * PLANT MATERIAL THAT IS SIZED UP FOR DAY-OF INSTALLATION IMPACT.

LANDSCAPE LEGEND

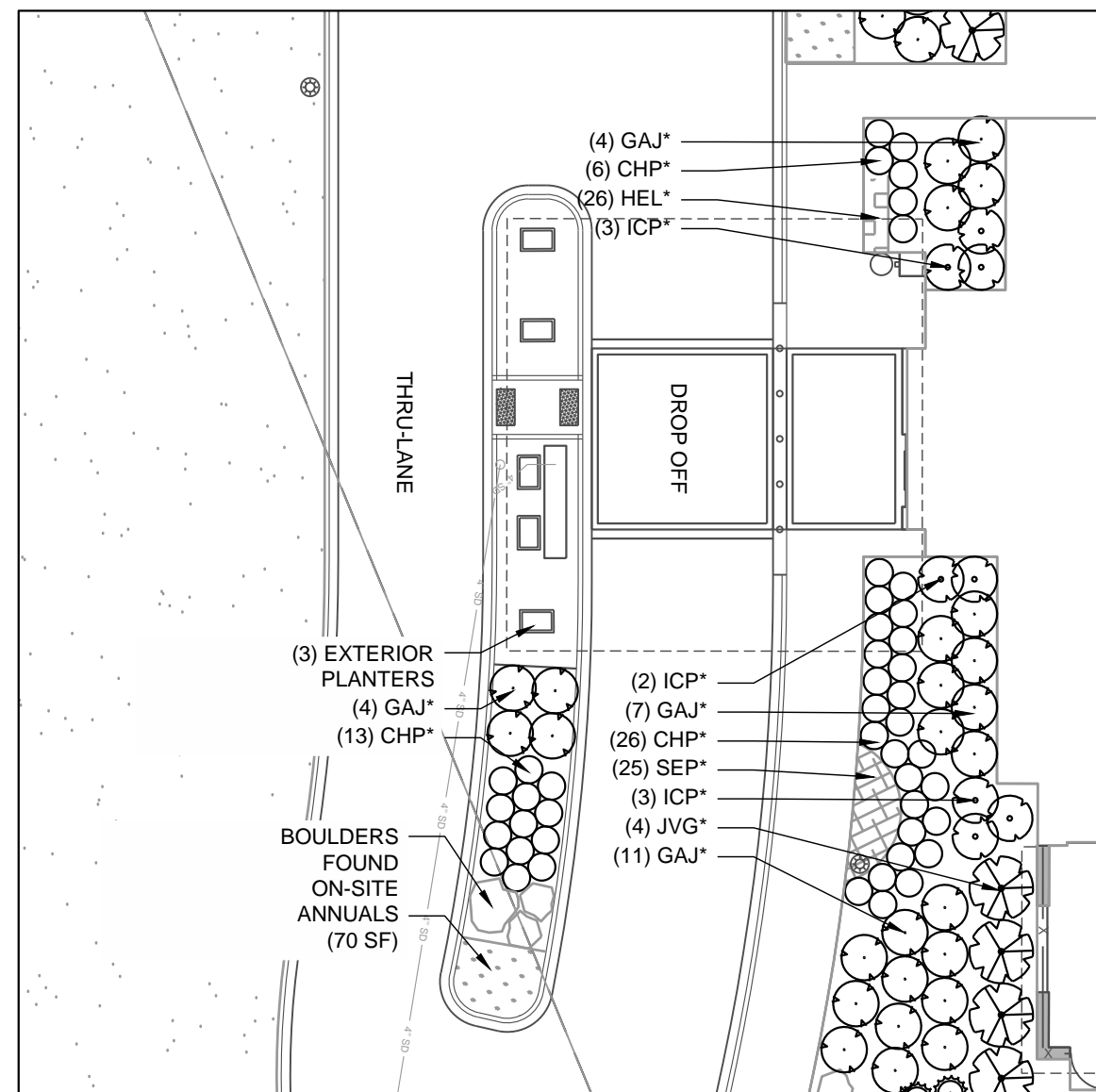
	SOD
	SEED
	BMP SEED

PLANT SCHEDULE

Symbol	Quantity	Botanical Name	Common Name	Specifications
Trees				
ACB	4	Acer buergerianum	Flowering Maple	3" cal. 10' hgt. min. spacing as shown
ASM	8	Acer saccharum	Sugar Maple	3" cal. 10' hgt. min. spacing as shown
ASL	9	Acer saccharum 'Legacy'	Legacy Sugar Maple	3" cal. 10' hgt. min. spacing as shown
AMA*	5	Amelanchier arborea	Amelanchier Tree	3-5 stems, spacing as shown
GIB	8	Ginkgo biloba	Ginkgo Tree	3" cal. 10' hgt. min. spacing as shown
INS	4	Ilex 'Nelle R. Stevens'	Nelle R. Stevens Holly	FO 8' spacing as shown
ILV	8	Ilex verticillata	Upright Yarrow Holly	2" cal. 8' hgt. min. 12' o.c. spacing till stated otherwise
ICP*	14	Ilex 'Cody' Plant #12,009	Liberty Holly	FO 8' 5" o.c. spacing
QLD	11	Quercus lyrata 'Darltona' PPAF	Green Spring Overcup Oak	3" cal. 10' hgt. min. 8-8' spacing as shown
Shrubs				
AGH	17	Abelia grandiflora hybrid	Miss Lemon Abelia	3 gal. 5' o.c. spacing, unless stated otherwise
CHP*	26	Cephaelis xanthophylla 'Prostrata'	Spreading Japanese Plumb Yew	1 gal. 5' o.c. spacing
CHP*	26	Cephaelis xanthophylla 'Prostrata'	Spreading Japanese Plumb Yew	3 gal. 5' o.c. spacing
CHP*	26	Cephaelis xanthophylla 'Prostrata'	Spreading Japanese Plumb Yew	3 gal. 5' o.c. spacing
IGD	45	Ilex glabra 'Densa'	Densa Inkberry Holly	3 gal. 4' o.c. spacing
IGD*	45	Ilex glabra 'Densa'	Densa Inkberry Holly	5 gal. 4' o.c. spacing
IVV	14	Ilex verticillata	Winterberry	3 gal. 5' o.c. spacing, 1 male to be placed in each bed
IVV*	7	Ilex verticillata	Winterberry	5 gal. 5' o.c. spacing, 1 male to be placed in each bed
JCB	30	Juniperus conferta 'Blue Pacific'	Shore Juniper	3 gal. 5' o.c. spacing
JCB*	6	Juniperus conferta 'Blue Pacific'	Shore Juniper	5 gal. 5' o.c. spacing
JVG	16	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	3 gal. 5' o.c. spacing
JVG*	10	Juniperus virginiana 'Grey Owl'	Grey Owl Juniper	5 gal. 5' o.c. spacing
JPS	42	Juniperus x pfitzeriana 'Sea Green'	Sea Green Juniper	3 gal. 5' o.c. spacing
NOL	16	Nandina domestica 'Heavenly Blue'	Heavenly Blue Nandina	2" cal. 10' hgt. min. 8-8' spacing
PTV	72	Photinia viburnifolia 'Variegatum'	Variegated Japanese Mock Orange	5 gal. 5' o.c. spacing
RHA	28	Rhododendron 'Alakata'	Knock Out Rose	5 gal. 5' o.c. spacing
RHA*	5	Rhododendron 'Alakata'	Knock Out Rose	5 gal. 5' o.c. spacing
GAJ	3	Gardenia jasminoides	Evergreen Azalea	3 gal. 4' o.c. spacing
GAJ*	3	Gardenia jasminoides	Evergreen Azalea	5 gal. 4' o.c. spacing
HYM	27	Hydrangea macrophylla	Gardenia	3 gal. 5' o.c. spacing
TOS	26	Thuja occidentalis 'Smaragd'	Hydrangea	5 gal. 5' o.c. spacing
TOS*	26	Thuja occidentalis 'Smaragd'	American Arborvitae	5 gal. 4' o.c. spacing
Perennials & Ornamental Grasses				
HEL*	26	Heuchera 'Electric Lime' Plant Patent #21,872	Electric Lime Heuchera	4" pot, 12" o.c. spacing
MCP	84	Malva sylvestris 'Triple Chiffon'	Pink Malvagrass	3" gal. 5' o.c. spacing
PAT	10	Pachysandra terminalis	Japanese Pachysandra	4" pot, 24" o.c. spacing
PAF	10	Pendula alba 'Pendula'	Prunella	3" gal. 5' o.c. spacing
SEP*	32	Setcreasea pallida	Purple Heart	4" pot, 18" o.c. spacing
SEP*	43	Setcreasea pallida	Purple Heart	4" pot, 12" o.c. spacing
Turf, Annuals & Mulch				
SOD	1,800 SF	Cynodon dactylon 'Sahara'	Sod - Sahara Bermudagrass	Sod, over 2" topsoil
SEED	2.65 AC	Cynodon dactylon 'Sahara'	Turf - Sahara Bermudagrass	Seed, over 2" topsoil
BMP SEED	0.85 AC	Contractor to provide seed options to be approved by LA	n/a	Seed, over 2" topsoil
ANNUALS	360 SF	To be determined by Owner based on season	n/a	Seed, over 2" topsoil
MULCH	235 CY	Double Hammered Hardwood Mulch	Mulch	3" depth, Clean, Free of cones, twigs, lumps

* PLANT MATERIAL THAT IS SIZED UP FOR DAY-OF INSTALLATION IMPACT.

APPROVED
By H. Kunzig at 11:59 am, Feb 12, 2018

ENLARGEMENT #1
SCALE: 1" = 20'-00"

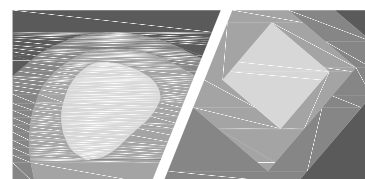
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212 S. Tryon Street
Suite 980
Charlotte, NC 28208
(T) 704-414-1000 (F) 704-414-1111
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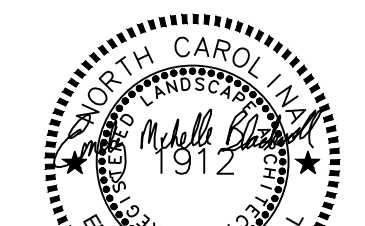
CONSULTANT



STEWART

101 N. TRYON ST., SUITE 1400
CHARLOTTE, NC 28202
T 704.334.7855

FIRM LICENSE # C-1051
www.stewartnc.com
PROJECT # X17017.00

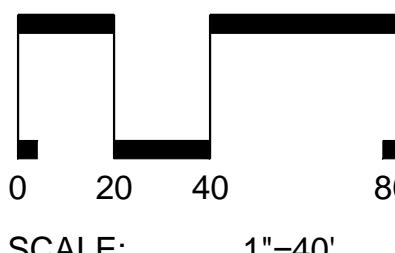
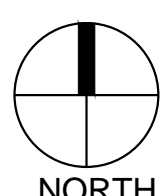


02.09.2018

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SPRINGHILL
SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



NORTH

SCALE: 1"=40'

REVISION	DATE	DESCRIPTION
SD	09/06/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
1	02/09/2018	ACCELA/LUESA REVISIONS
ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO: X17017.00

P.I.C. TAD / JDO

P.MGR. TAD

P.ENGR. JDO

DESIGN BY: DLS / MRB

SHEET TITLE

CODE
COMPLIANT
LANDSCAPE PLAN

SHEET IDENTIFIER

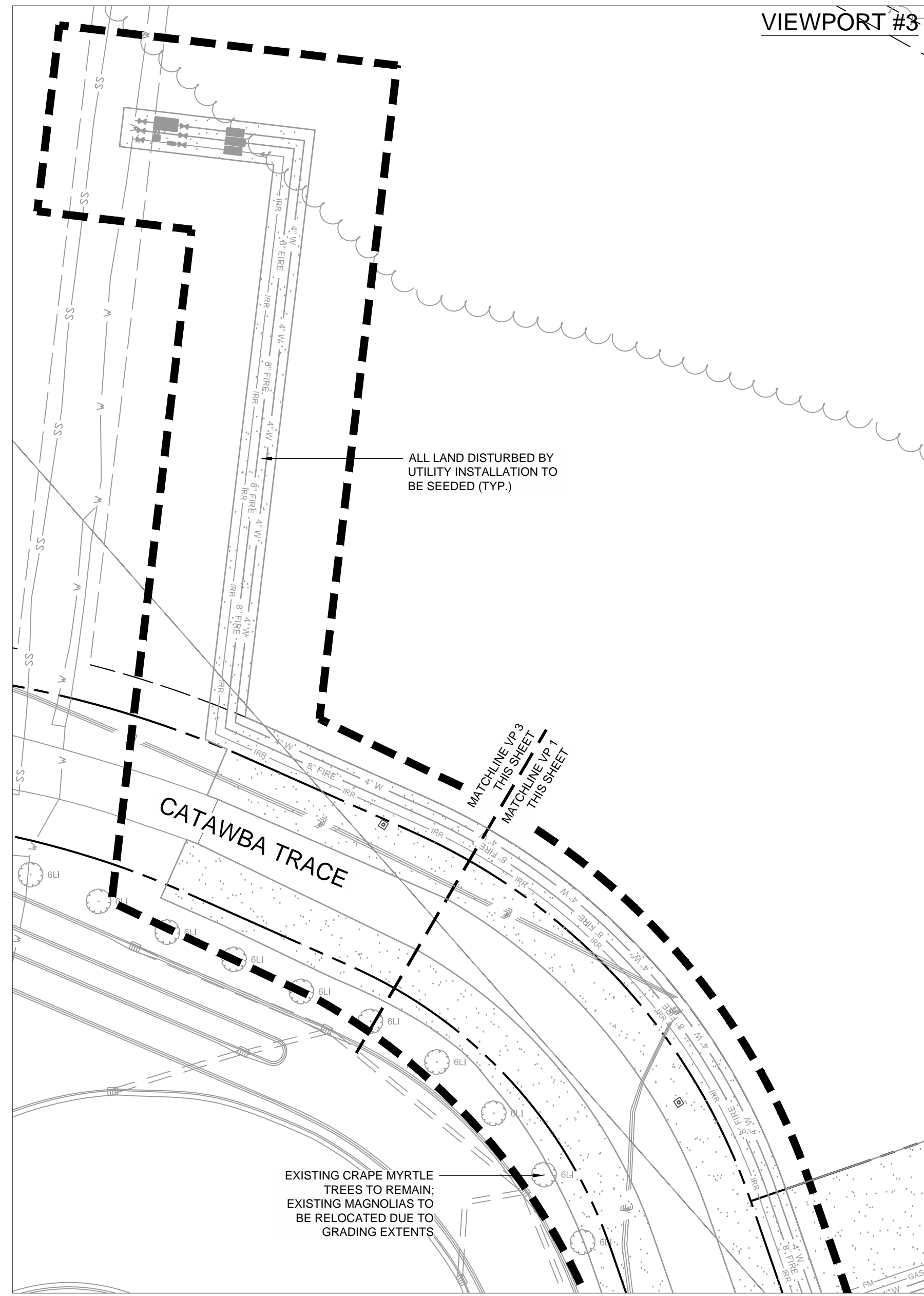
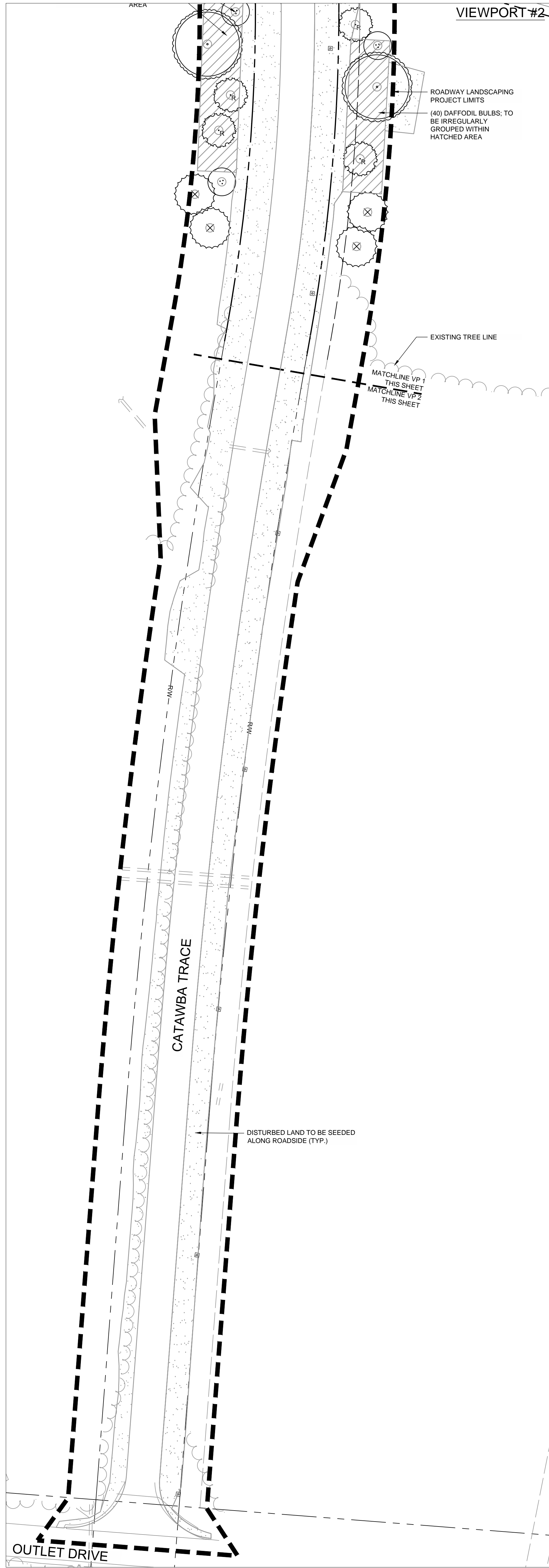
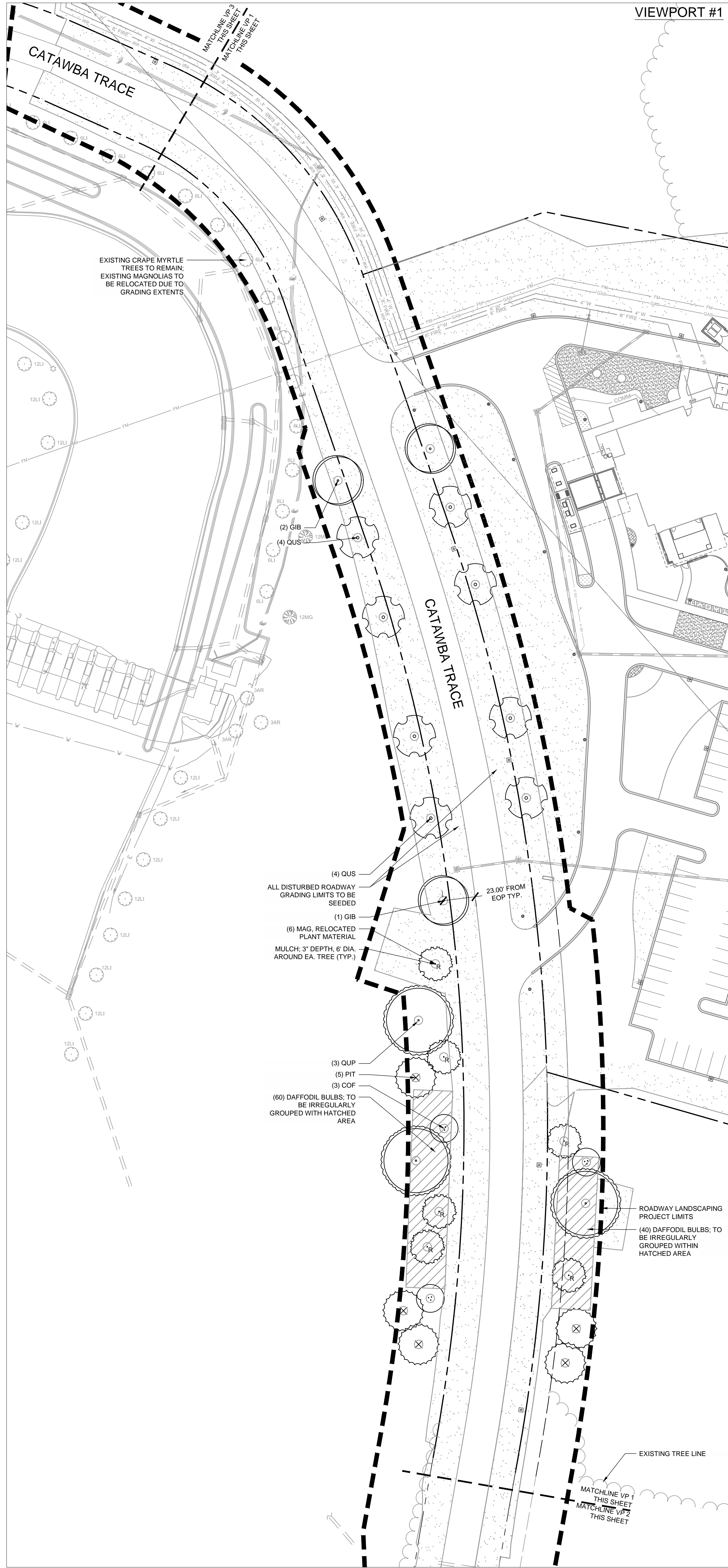
L100

A

B

C

D

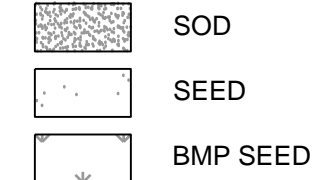


PLANT SCHEDULE				
Symbol	Quantity	Botanical Name	Common Name	Specifications
Trees				
COF	3	Cornus florida	Dogwood	2" cal., spacing as shown
GIB	3	Ginkgo biloba	Ginkgo Tree	3" cal., spacing as shown
MAG	6	Magnolia grandiflora	Magnolia	Existing plant material to be RELOCATED
PIT	5	Pinus taeda	Loblolly Pine	3" cal., spacing as shown
QUP	3	Quercus palustris	Pin Oak	3" cal., spacing as shown
QUS	8	Quercus shumardii	Shumard Oak	3" cal., spacing as shown
Shrubs				
Perennials & Ornamental Grasses				
-	100	Narcissus	Daffodils (yellow)	Bulbs
Turf & Mulch				
SEED	2.25 AC	Cynodon dactylon 'Sahara'	Turf - Sahara Bermudagrass	Seed, over 2" topsoil
MULCH	8 CY	Double Hammered Hardwood Mulch	Mulch	3" depth, Clean, Free of cones, twigs, tung

NOTE:

- REFER TO L200 FOR LANDSCAPE NOTES
- ROADWAY LANDSCAPING ALONG THIS STREET IS NOT TO BE PERMANENTLY IRRIGATED.
- NO METAL EDGING IS TO BE PROVIDED FOR ROADWAY LANDSCAPING.
- TREES ARE GRAPHICALLY INDICATED AT 10-YEAR GROWTH SIZE.

LANDSCAPE LEGEND



NOTE: THIS SHEET IS FOR REFERENCE PURPOSES ONLY. PLANTINGS ASSOCIATED WITH ROADWAY LANDSCAPE ARE NOT REQUIRED BY CODE.

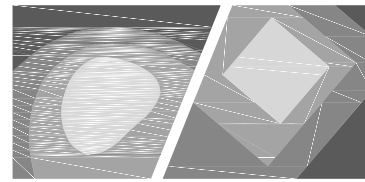
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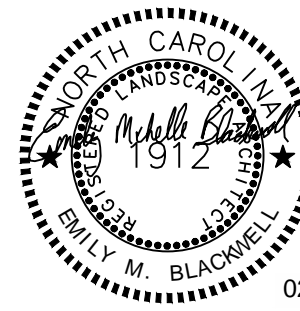
CONSULTANT



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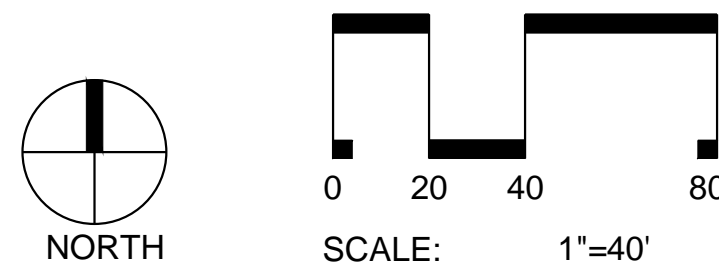
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SPRINGHILL
SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



REVISION	DATE	DESCRIPTION
ADDENDA OR MODIFICATION		
SD	09/09/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
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ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO: X17017.00

P.I.C. TAD / JDO

P.MGR. TAD

P.ENGR. JDO

DESIGN BY DLS / MRB

SHEET TITLE

ROADWAY
LANDSCAPE PLAN

SHEET IDENTIFIER

L110

GENERAL LANDSCAPE NOTES

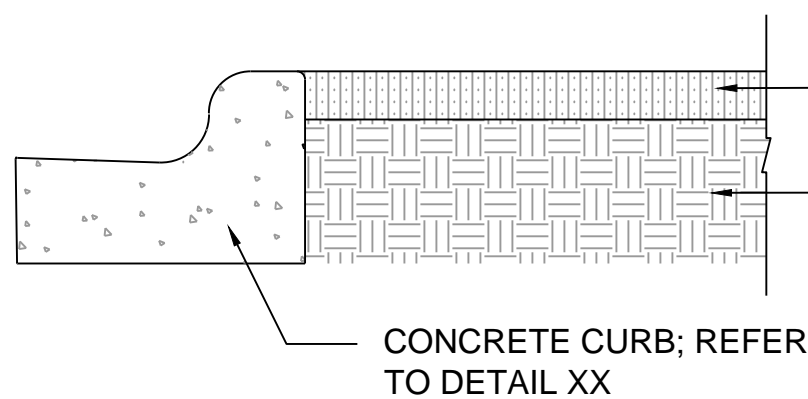
- PRIOR TO ANY EARTH DISTURBING ACTIVITY, THE CONTRACTOR SHALL NOTIFY NORTH CAROLINA 811 (PHONE: 811 OR 1-800-632-4949) TO ASCERTAIN LOCATIONS OF ALL UNDERGROUND UTILITIES WITHIN THE WORK AREA. UTILITIES NOT GENERALLY LOCATED BY NORTH CAROLINA 811 WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY AND LOCATE.
- NOTIFY THE LANDSCAPE ARCHITECT SHOULD ANY SUBSURFACE IMPROVEMENTS PRESENT AN OBSTRUCTION IN LOCATIONS DESIGNATED FOR PLANTING. IN SUCH SITUATIONS, PROCEED ONLY AFTER THE OWNER AND THE LANDSCAPE ARCHITECT HAVE APPROVED AN ALTERNATE LOCATION.
- DAMAGE TO ANY UTILITY INCURRED BY THE CONTRACTOR AND NOT SPECIFIED ON THE PLANS FOR DEMOLITION, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR IN A TIMELY MANNER, TO THE SATISFACTION OF THE OWNER, AND AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL REMOVE ALL TRASH, DEBRIS AND EXCESS MATERIALS FROM THE WORK AREA DAILY.
- THE CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL VERIFY ALL EASEMENTS AND LIMITS OF DISTURBANCE PRIOR TO PLANT INSTALLATION.
- THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO ENSURE THAT NO DAMAGE OCCURS TO EXISTING CURB AND GUTTER OR PAVEMENT UNLESS SPECIFIED ON THE PLANS FOR DEMOLITION. ALL TREE MARKS SHALL BE CLEANED FROM PAVEMENT. ANY BROKEN CURB AND GUTTER SHALL BE REPLACED AT THE CONTRACTORS EXPENSE AND TO THE SATISFACTION OF THE OWNER AND LANDSCAPE ARCHITECT.
- ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN HEALTHY CONDITION FOR ONE YEAR AFTER ACCEPTANCE BY THE OWNER. THE GUARANTEE SHALL COVER ALL MATERIAL, LABOR AND EXPENSES FOR REMOVAL OF UNHEALTHY PLANTS AND INSTALLATION OF NEW PLANTS AS SPECIFIED IN THE PLANS AND DETAILS.
- DURING THE ONE YEAR GUARANTEE PERIOD, THE CONTRACTOR SHALL REPLACE ANY DEAD OR VISUALLY UNHEALTHY PLANT MATERIAL WITHIN 7 DAYS OF NOTIFICATION OF LANDSCAPE ARCHITECT. CONTRACTOR SHALL MAINTAIN AN UPDATED, COMPREHENSIVE LIST OF ALL DEAD MATERIALS REMOVED AND PRESENT A COPY OF THE LIST TO THE OWNER AT THE END OF EVERY MONTH DURING THE CONTRACT PERIOD.
- UNIT PRICES FOR ALL MATERIAL SHALL BE SUPPLIED TO THE OWNER AND WILL BE USED TO DETERMINE VALUE OF ADDITIONS OR DELETIONS IN THE CONTRACT. UNIT BID PRICING SHALL INCLUDE MATERIAL COSTS, SHIPPING, INSTALLATION LABOR, ALL GUARANTEES, SOIL AMENDMENTS, STAKING AND ALL COSTS ASSOCIATED WITH INSTALLING THE MATERIAL AS SHOWN IN THE PLANTING DETAILS.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING QUANTITY OF PLANT MATERIAL SHOWN ON PLANS. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN PLANT QUANTITY NOTES, THE PLANT SCHEDULE, AND/OR THOSE SHOWN IN GRAPHIC FORM. ANY FIELD ADJUSTMENTS OR QUANTITY ADJUSTMENTS MUST BE AUTHORIZED PRIOR TO PLANTING.
- SIZES SPECIFIED IN THE PLANT SCHEDULE ARE MINIMUM SIZES TO WHICH THE PLANTS ARE TO BE JUDGED. FAILURE TO MEET MINIMUM SIZE ON ANY PLANT WILL RESULT IN REJECTION OF THAT PLANT.
- PLANT MATERIAL SUBSTITUTION REQUESTS SHALL BE SUBMITTED IN WRITING TO THE LANDSCAPE ARCHITECT FOR REVIEW. THE CONTRACTOR SHALL NOT PURCHASE OR INSTALL ANY PLANTS THAT HAVE NOT BEEN APPROVED.

LANDSCAPING NOTES

- ALL TREES TO BE A MINIMUM OF 4" IN CALIPER AND MUST MEET THE AMERICAN STANDARD FOR NURSERY STOCK.
- THE CONTRACTOR SHALL STAKE THE LOCATIONS OF ALL PROPOSED TREES AND OBTAIN APPROVAL FROM THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- ALL PLANT BED AREAS ARE TO RECEIVE A MINIMUM OF 6" OF APPROVED TOPSOIL. ALL DEBRIS, ROCKS, ETC. LARGER THAN 5" ARE TO BE REMOVED. ALL LARGE CONCENTRATIONS OF GRAVEL & DEBRIS REGARDLESS OF SIZE ARE TO BE REMOVED PRIOR TO PLANTING.
- SOIL SHOULD BE TESTED AND AMENDED WITH LIME AND FERTILIZER FOR HARDWOOD TREES ACCORDING TO NCDA PROCEDURES. SCARIFY PLANT PIT WALLS. CONSULT LANDSCAPE ARCHITECT FOR ALTERNATE COMPLIANCE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PLANTING PITS PERCOLATE PROPERLY PRIOR TO PLANTING INSTALLATION.
- SHREDDED HARDWOOD MULCH 3" DEEP EXCEPT AT CROWN OF PLANT UNLESS OTHERWISE NOTED. FLARE AT CROWN SHOULD BE REVEALED. BACKFILL CONSISTS OF THOROUGHLY BROKEN UP NATIVE SOIL. TOTAL VOLUME OF BACKFILL SHOULD BE AMENED WITH UP TO ONE THIRD PINE BARK MULCH. PIECES SHOULD BE NO LARGER THAN WHAT PASSES THROUGH A ONE INCH SCREEN. IF ADDITIONAL SOIL IS REQUIRED FOR BACKFILL DUE TO DETRIMENTAL SUBSOIL DRAINAGE CONDITIONS, USE SOIL SIMILAR TO EXISTING NATIVE SOIL. ADDITIONAL SOIL TO BE APPROVED BY LANDSCAPE ARCHITECT. MAXIMUM SAUCER HEIGHT IS 8 INCHES.
- TOP OF ROOTBALL TO BE RAISED 2-3 INCHES ABOVE EXISTING GRADE.
- FOR BAB PLANTS, NATURAL FIBER BURLAP SHOULD BE TURNED DOWN BY 1/3 TOTAL HEIGHT OF ROOT BALL. PLASTIC FIBER BURLAP AND WIRE BASKETS SHOULD BE REMOVED TO 2/3'S OF TOTAL HEIGHT OF ROOT BALL.
- THE CONTRACTOR SHALL ENSURE THAT TREES REMAIN PLUMB AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD. STAKING OF TREES IS AT THE CONTRACTOR'S DISCRETION AND IF NEEDED, SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER. WHERE INSTALLED, STAKES SHALL BE CONSTRUCTED OF UNTREATED PINE. GUYS SHALL BE OF FABRIC MATERIAL. THE CONTRACTOR SHALL REMOVE ALL STAKING MATERIALS AT THE END OF THE GUARANTEE PERIOD OR AS DIRECTED BY GROUNDS MANAGEMENT.
- USE STANDARD "GATOR" BAGS FOR WATERING TREES IN AREAS NOT UNDER IRRIGATION. INCORPORATE TERRA-SORB (OR EQUAL) AS PER MANUFACTURER'S RECOMMENDATIONS, FOR AREAS NOT UNDER IRRIGATION.
- USE "BIO-BARRIER" OR EQUIVALENT ACCORDING TO MANUFACTURER'S RECOMMENDATION FOR TREES THAT WILL BE PLANTED WITHIN 10' OF PAVEMENT.
- LANDSCAPING C.O. STANDARDS NOTE: ALL LANDSCAPING MUST BE IN PLACE PRIOR TO REQUEST FOR A CERTIFICATE OF COMPLIANCE.
- ALL PLANTING AREAS AND TREE PITS TO BE IRRIGATED. SEE MAIN IRRIGATION LINES AS DEPICTED ON SHEET 02.00. FINAL IRRIGATION DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR.

SHRUB INSTALLATION NOTES

- CUT ROOTS AS NECESSARY IN CONTAINERIZED PLANTS THAT ARE POT BOUND. REJECT PLANTS THAT HAVE GIRDLED ROOT OR ARE BOUND.
- INSTALL TOP OF PLANT BALL 2" ABOVE ADJACENT GRADE.
- TAMP PLANT SOIL MIX FIRMLY IN 8" LIFTS AROUND PLANT BALL.
- SOAK PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
- SHRUBS, BULBS, AND GROUNDCOVERS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS AND/OR IN THE PLANT SCHEDULE.



NOTE:
TREES TO BE PLANTED IN CENTER OF ISLANDS.

TREE ISLAND DETAIL

1" = 1'-0"

Please use updated UF Notes

Charlotte Urban Forestry - Tree Planting and Preservation Requirements (updated 10/10/16)

Plant Material

- 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.
- All new trees must have straight trunks with strong central leaders intact to the top of the crown 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).
- 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.
- All required trees of a particular species and variety shall be uniform in size and configuration.
- 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).
- Minimum of 50% of new trees 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 Guidelines.
- 75% of required trees must be large mature species except in situations with overhead power line conflicts.
- Planting Requirements maximum 3 to 5 trunks, and minimum 8 feet tall.
- See CLDS 40.03 & 40.09 on detailed tree planting requirements.
- Plastic hose parts will NOT be accepted for tree staking. See CLDS 40.01 for approved staking method/materials.
- All strapping, and top 1/3 of wire basket and burlap must be cut away and removed from root ball when planting.
- 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 feet).
- Trees planted on public property will need approval from the City Arborist and/or NCDDT.
- Review soil requirements in the Tree Ordinance Guidelines at: <http://charlottenc.gov/ld> then click Trees.

Utility Issues

- 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.
- Large maturing trees may not be planted within 25' of overhead power distribution or transmission lines.
- If trees conflict with any utilities or signs, call Urban Forester to resolve BEFORE planting.
- Adjust tree planting locations to avoid existing underground utilities. Plant 15' from all underground utilities.
- No light poles, utilities or transformers can be installed in tree islands.
- Commercial scale lighting (> 15' in height) must be a minimum distance of 30' from a tree. Pedestrian scale lighting (< 15' in height) must be a minimum distance of 15' from a tree. Show site lighting on landscape plan.

Tree Save and Preservation

- Tree protection must be installed and verified by Urban Forestry prior to starting ANY construction activity.
- Show tree protection and trees save areas on Demo, erosion control, grading and landscape plan sheets.
- 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.
- 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.
- The area of any easements (water, sewer, utility, etc.) can NOT be counted toward the tree save requirement.
- Any activity within tree save areas must be accomplished without mechanized equipment.
- No structure will be allowed within 10' of tree save areas unless approved by Urban Forestry.
- All trees on public property are protected and removal must be permitted by the city arborist (704)336-4262.
- Contact Urban Forestry Specialist PRIOR to any crane set-up, machinery operation, or temporary construction trailer siting 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, erecting and dismantling of construction cranes.

General

- 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.
- Visit City of Charlotte's Land Development website for additional information and urban forestry requirements: <http://charlottenc.gov/ld> then click Trees.

THE CITY ARBORIST (704)336-4262

GENERAL

- CALL (704) 336-4364 FOR AN INSPECTION OF TREE PROTECTION/PLANTING AREAS, A MINIMUM OF 5 DAYS BEFORE A CO IS NEEDED.
- VISIT CITY OF CHARLOTTE'S LAND DEVELOPMENT WEBSITE FOR ADDITIONAL INFORMATION AND URBAN FORESTRY REQUIREMENTS: <http://landpermits.charmeck.org> THEN CLICK TREES.

TOPSOIL/PLANTING MIX - MINIMUM REQUIREMENTS:

- 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.
- SOIL IN ALL PLANTING STRIPS OR ISLANDS, WHETHER EXISTING OR NEW (ON NEW OR RENOVATED SITES), MUST MEET THE MINIMUM TOPSOIL/PLANTING MIX SPECIFICATIONS. EXISTING SOILS SHOULD BE TESTED. 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 GRADING.
- 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.
- 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 60%
 - 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 PROCESS
- RECOMMENDATIONS:
 - 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%

PLANTINGS IN STREET RIGHT-OF-WAY

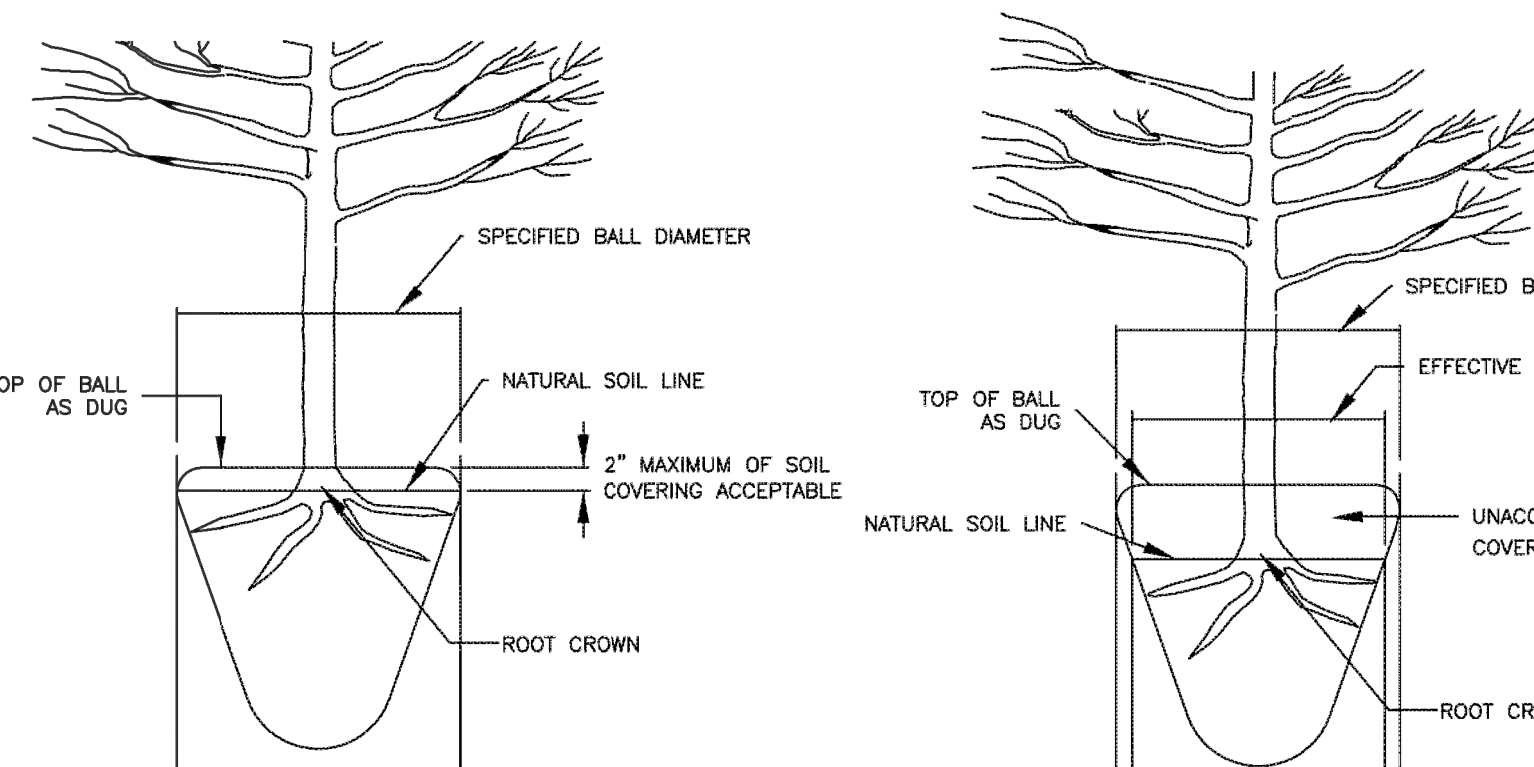
GENERAL NOTES

- TREE GRATES AND ASSOCIATED IRRIGATION SYSTEMS ARE REQUIRED AT VARIOUS LOCATIONS IN THE UPTOWN AREAS TO COMPLY WITH THE UPTOWN STREETSCAPE GUIDELINES AND OTHER ZONING REQUIREMENTS. ALL OTHER INSTALLATIONS OF IRRIGATION SYSTEMS WITHIN THE RIGHT-OF-WAY OF CITY OR STATE MAINTAINED STREETS, REQUIRE AN ENCROACHMENT AGREEMENT EXECUTED THROUGH CDDT OR NCDDT. THE CITY'S ENCROACHMENT AGREEMENT REVIEW/ APPROVAL PROCESS MAY INCLUDE ADDITIONAL REQUIREMENTS. CONTACT CDDT OR NCDDT FOR ADDITIONAL INFORMATION REGARDING COST, SUBMITTAL, AND LIABILITY INSURANCE COVERAGE REQUIREMENTS.
- A DRAINAGE SYSTEM IS REQUIRED AS SHOWN FOR ALL IRRIGATED PLANTING AREAS LOCATED ADJACENT TO STREETS. ALL IRRIGATION/DRAINAGE SYSTEM NOT REQUIRED BY THE UPTOWN STREET GUIDELINES REQUIRE AN ENCROACHMENT AGREEMENT EXECUTED BY CDDT OR NCDDT FOR CITY OR STATE-MAINTAINED ROADS, RESPECTIVELY. CONTACT CDDT OR NCDDT FOR ADDITIONAL INFORMATION REGARDING COST, SUBMITTAL AND LIABILITY INSURANCE COVERAGE REQUIREMENTS.
- AN INSPECTION SCHEDULE IS NEEDED FOR TREES THAT WILL BE PLANTED IN THE STREET RIGHT OF WAY DUE TO ZONING OR OTHER REQUIREMENTS. LANDSCAPE INSPECTION INCLUDE THE FOLLOWING:
 - SUBSURFACE INSPECTION
 - TREE PIT/WELL OR PLANTING STRIP INSPECTION
 - SOIL MIX APPROVALS/INSPECTIONS
 - TREE APPROVALS/INSPECTIONS - PRIOR TO PURCHASING THE TREES, TO BE MADE BY THE CITY ARBORIST OR ASSISTANT CITY ARBORIST - 336-4262.
 - THIS MAY INCLUDE PHOTO APPROVAL OR PARTICIPATION IN TAGGING THE TREES.
 - TREE PLANTING INSPECTION
 - IRRIGATION INSPECTION
 - FINAL WALK THROUGH

ALL OF THE ABOVE INSPECTIONS WILL BE PERFORMED BY THE CITY LAND DEVELOPMENT DIV. (URBAN FORESTRY SECTION) EXCEPT FOR THE TREE APPROVALS AS NOTED.



CITY OF CHARLOTTE
LAND DEVELOPMENT STANDARDS
INCLUDES CHARLOTTE ETJ

TREE PLANTING-NOTES
(DRAINAGE AND INSPECTION)STD. NO. REV.
40.10 9ACCEPTABLE CONDITION
(AS DELIVERED)UNACCEPTABLE CONDITION
(AS DELIVERED)

NOTE:
A ROOT FLARE EXCAVATION FOR ALL TREES SPECIFIED WILL BE DONE BY THE CITY ARBORIST TO ENSURE THAT TREES WERE NOT PLANTED/GROWN TOO DEEPLY AT SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOT BALL. IF CITY ARBORIST DETERMINES THAT THERE IS EXCESSIVE SOIL OVER THE ROOT CROWN, THESE TREES WILL BE REJECTED.

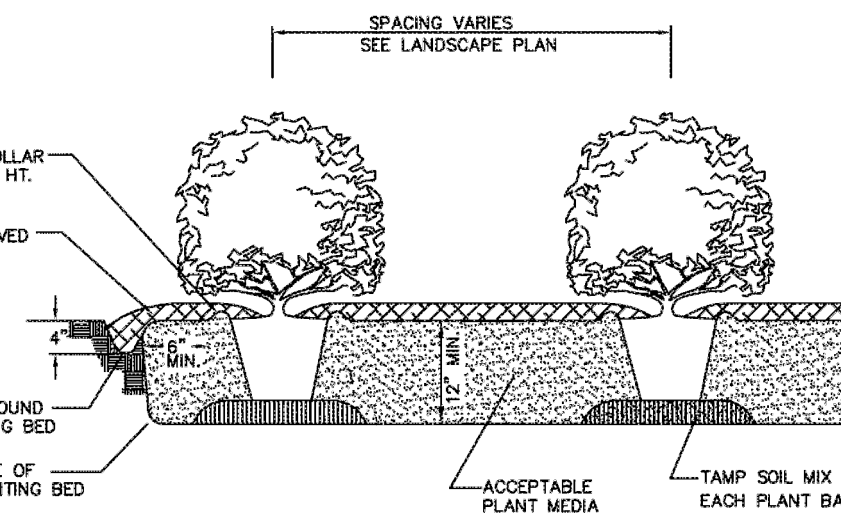


CITY OF CHARLOTTE
LAND DEVELOPMENT STANDARDS
INCLUDES CHARLOTTE ETJ

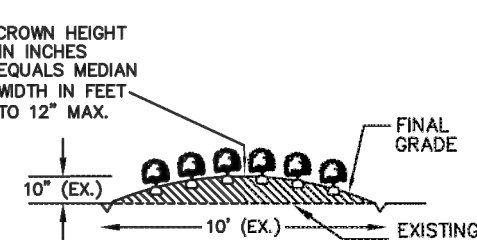
ROOT FLARE DEPTHS
(TREE ROOT BALL CONDITION ON TREES FROM SUPPLIERS)STD. NO. REV.
40.09 9

NOTES:

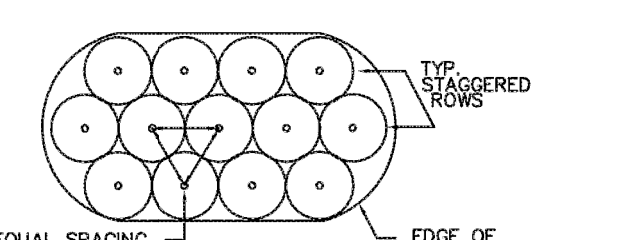
- SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
- INSTALL CONTAINERIZED PLANTS AT FINISHED GRADE.
- TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
- OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
- SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.



TYPICAL PLANTING BED DETAIL



TYPICAL BED CROWNING

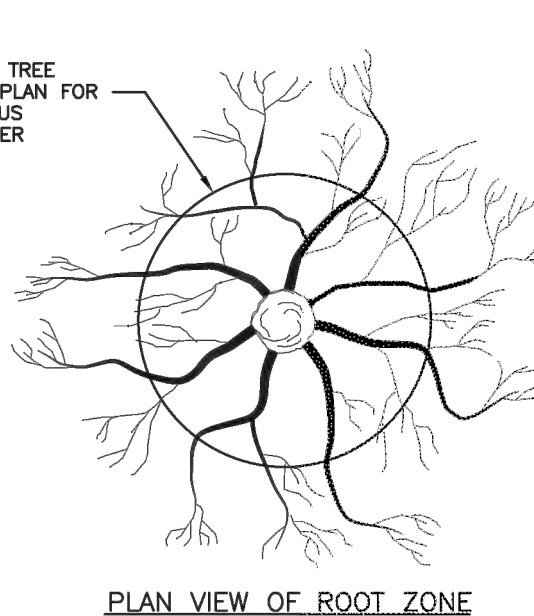


TYPICAL PLANTING BED PLAN

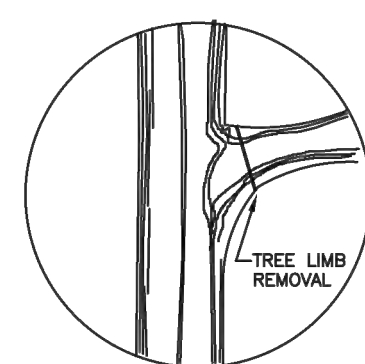


CITY OF CHARLOTTE
LAND DEVELOPMENT STANDARDS
INCLUDES CHARLOTTE ETJ

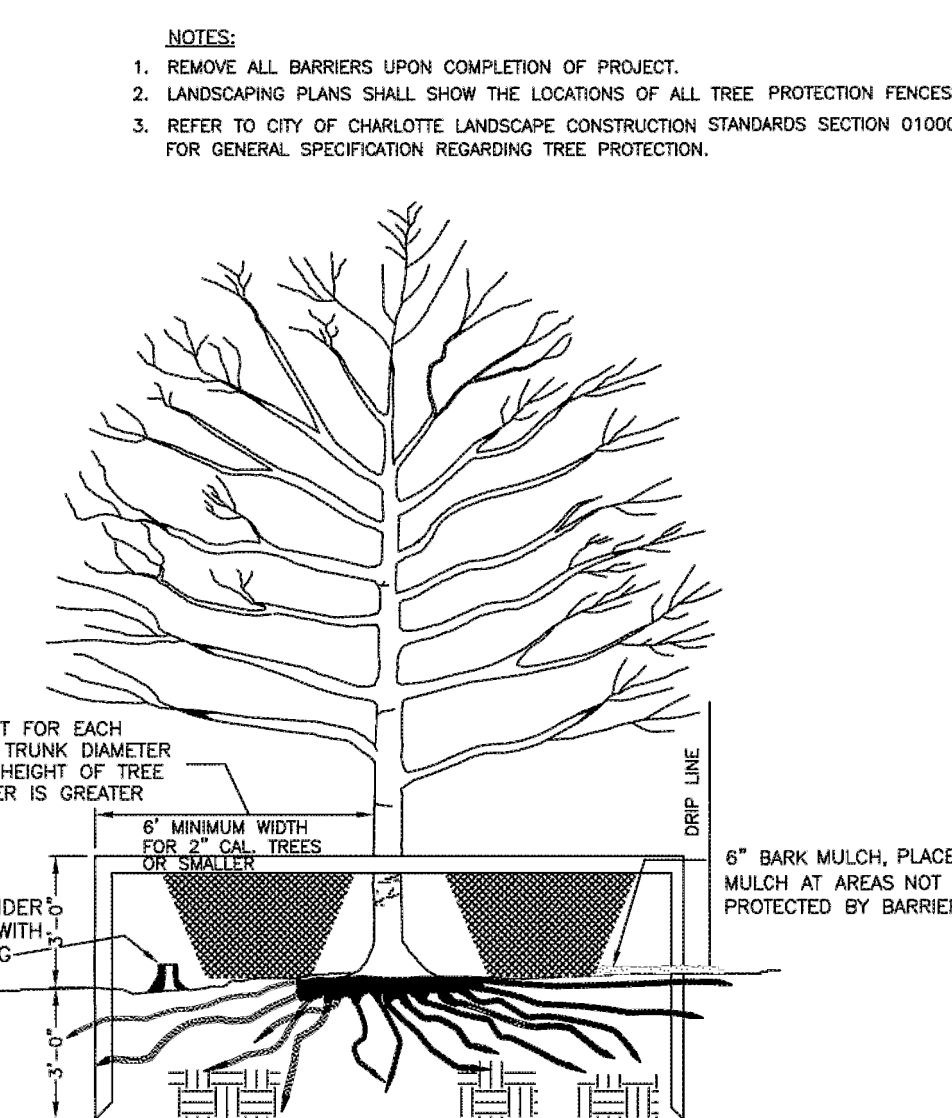
SHRUB PLANTING BED

STD. NO. REV.
40.05A 9

PLAN VIEW OF ROOT ZONE



FOR PRUNING SEE INTERNATIONAL SOCIETY OF ARBORICULTURE SPECS.



ONE FOOT FOR EACH INCH OF TRUNK DIAMETER OR 1/2 HEIGHT OF TREE, WHICHEVER IS GREATER.

6" BARK MULCH, PLACE BARK MULCH AT AREAS NOT PROTECTED BY BARRIER.



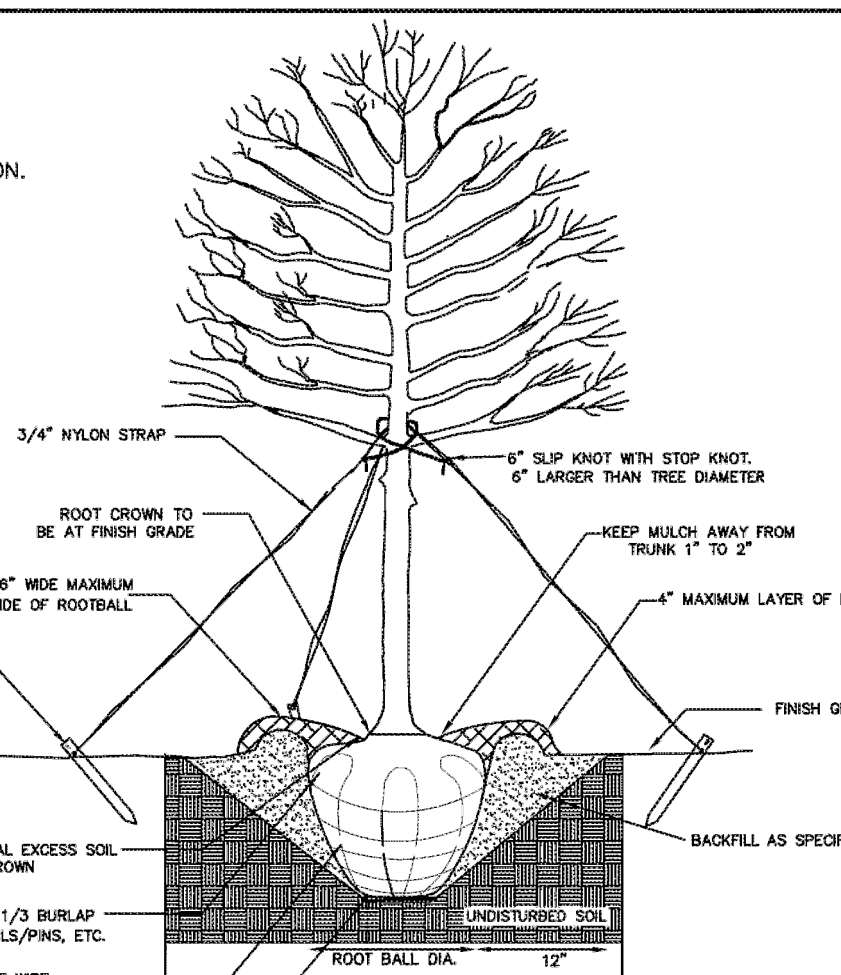
CITY OF CHARLOTTE
LAND DEVELOPMENT STANDARDS
INCLUDES CHARLOTTE ETJ

TREE PROTECTION DETAIL

STD. NO. REV.
40.02 9

NOTES:

- REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
- SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
- STAKING IS REQUIRED FOR ALL TREES IN R.O.W. OR UPON REQUEST OF ARBORIST.
- REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
- RESEED UNMULCHED, DISTURBED AREAS.



ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) FOR EXAMPLE: CALIPER HEIGHT (DIA) MAX. HEIGHT MIN. ROOT BALL DIA. MIN. ROOT BALL DEPTH.

NOT TO SCALE



CITY OF CHARLOTTE
LAND DEVELOPMENT STANDARDS
INCLUDES CHARLOTTE ETJ

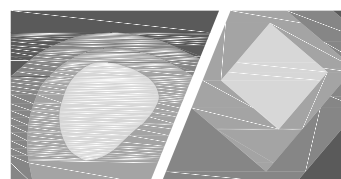
TREE PLANTING
(FOR SINGLE AND MULTI-STEM TREES)STD. NO. REV.
40.01 9

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CHARLOTTE, NC

RICHMOND, VA

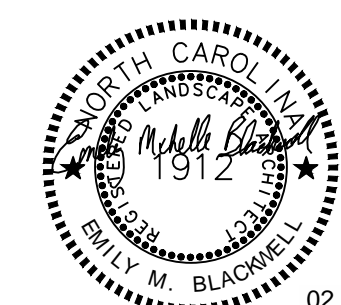
CONSULTANT



STEWART

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717.653.7929

FIRM LICENSE # C-1091
www.stewartinc.com
PROJECT # X17017.00



02.09.2018

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SPRINGHILL
SUITES HOTEL

14500 BEST DAY BOULEVARD
CHARLOTTE, NC



REVISION	DATE	DESCRIPTION
ADDENDA OR MODIFICATION		
SD	09/08/2017	SCHEMATIC DESIGN
30% MI	10/24/2017	MARRIOTT DESIGN REVIEW
100% DD	11/06/2017	100% DD SUBMISSION
CD	01/08/2018	
ISSUE	DATE	DESCRIPTION
FULL SET ISSUES		

PROJECT NO: X17017.00

P.I.C. TAD / JDO

P.MGR. TAD

P.ENG. JDO

DESIGN BY DLS / MRB

SHEET TITLE

LANDSCAPE
DETAILS

SHEET IDENTIFIER

L200