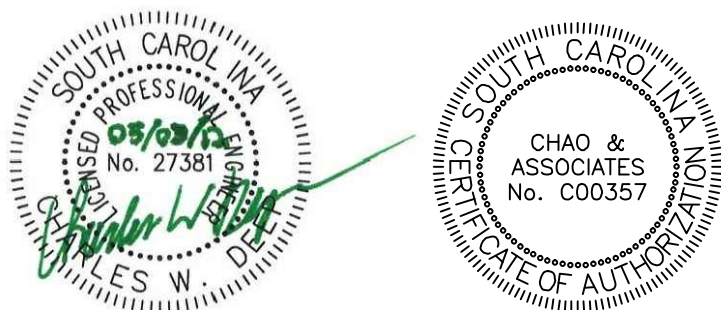


Construction Plans  
For  
Public Health Research Center Parking Lot Construction  
In The City Of Columbia , Richland County, SC

Prepared For  
The University of South Carolina  
by:  
Chao & Associates, Inc.  
Consulting Engineers  
C & A #: 577934-11



Chao & Associates, Inc.  
Civil - Structural - Survey  
7 Clusters Court  
Columbia, SC 29210  
Voice: (803) 772-8420  
Fax: (803) 772-9120  
Email: consult@chaoinc.com

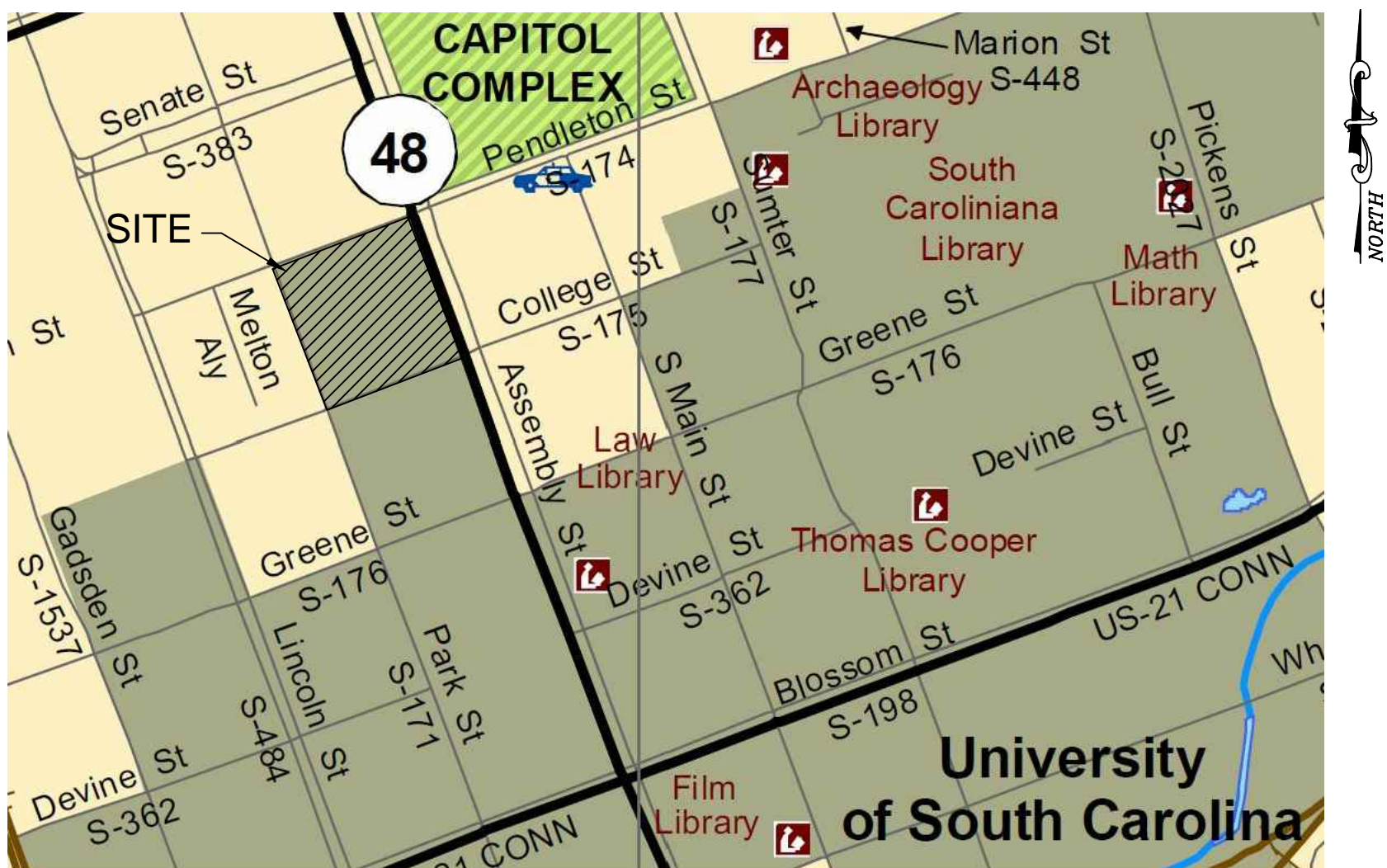


DRAWING INDEX

- C1.0 - Existing Conditions & Demolition Plan
- C2.0 - Site Layout Plan
- C3.0 - Grading & Storm Drainage Plan
- C4.0 - Sediment & Erosion Control Plan
- C5.0 - Landscaping Plan
- C6.0 - Details
- C6.1 - Details

LOCATION MAP

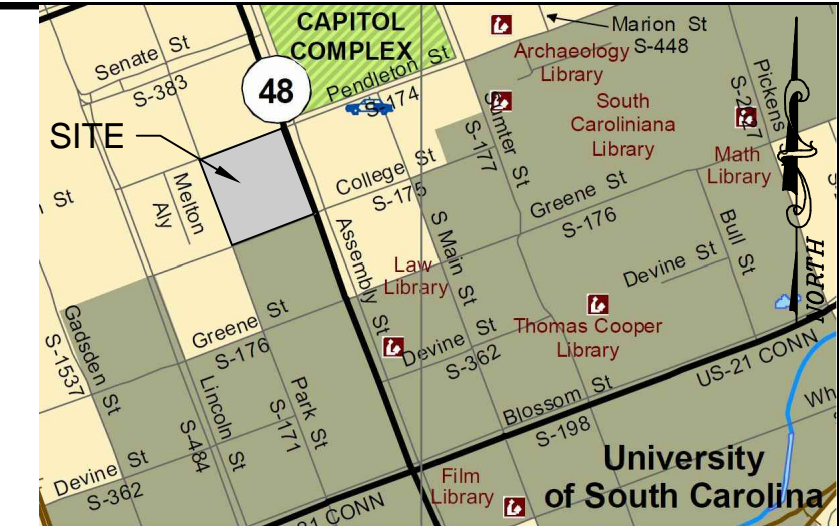
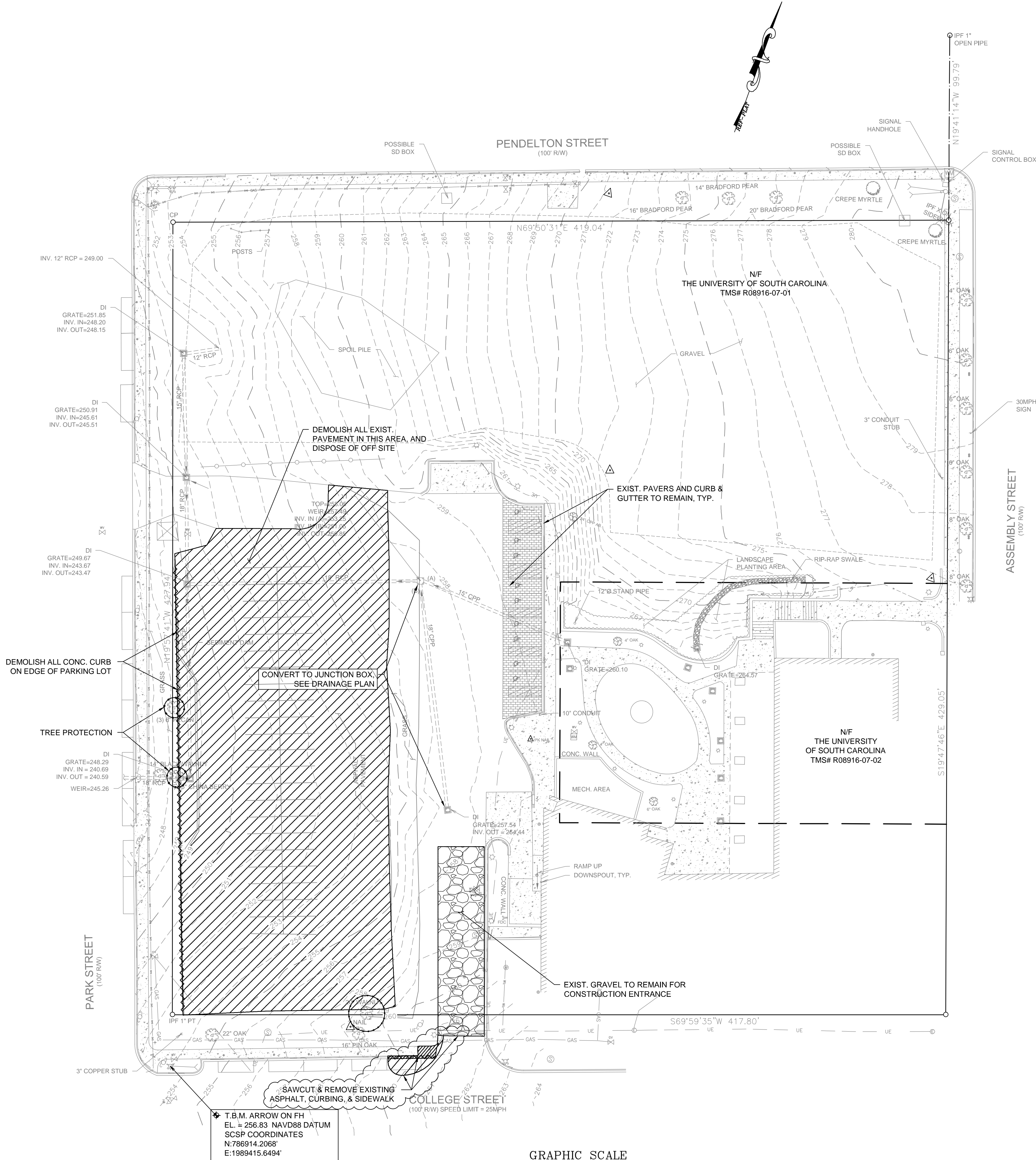
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LEGEND	
EXISTING	PROPOSED
FIRE HYDRANT	CONC. CURB & GUTTER
WATER VALVE	YARD INLET (YI)
WATER METER	JUNCTION BOX (JB)
GAS VALVE	DROP INLET (DI)
SANITARY SEWER MANHOLE	CURB INLET (CI)
CLEANOUT (CO)	CONCRETE SIDEWALK
NATURAL GAS LINE	ASPHALT PAVEMENT
SANITARY SEWER LINE (MATERIAL UNKNOWN)	BRICK PAVEMENT
WATER LINE	STORM DRAIN PIPE
FENCE	PERFORATED DRAIN
OVERHEAD ELECTRIC	LIMITS OF DISTURBANCE
UNDERGROUND TELEPHONE	SILT FENCING
UNDERGROUND FIBER OPTIC LINE	INLET PROTECTION
UNDERGROUND STEAM LINES	TREE PROTECTION
CONC. CURB & GUTTER	SOD
YARD INLET (YI)	
JUNCTION BOX (JB)	
DROP INLET (DI)	
CURB INLET (CI)	
STORM DRAIN PIPE	
CONCRETE SIDEWALK	
POWER POLE & GUY	
LIGHT POLE	

DEMOLITION NOTES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY CHAO AND ASSOCIATES, INC. FOR DIGITAL FORMAT.
- THE CONTRACTOR SHALL CALL PALMETTO UTILITY PROTECTION SERVICE, AT (888) 721-7877, FOR ALL UNDERGROUND UTILITIES LOCATIONS AT LEAST 72 HOURS PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF ANY DIFFERING SITE CONDITIONS ARE NOTED.
- THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES AT NO ADDITIONAL COST TO THE OWNER.
- IF NECESSARY, SLOPES WHICH EXCEED EIGHT VERTICAL FEET OR 3:1 SLOPES SHOULD BE STABILIZED WITH AN APPROVED TURF REINFORCING MAT IN ADDITION TO HYDROSEEDING.
- CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. CONTRACTOR TO DAILY REMOVE MUD/SOIL FROM PAVEMENT AS REQUIRED.
- ALL DEMOLITION ITEMS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

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**Existing Conditions and Demolition Plan**  
Public Health Research Center  
Parking Lot Construction  
In The City Of Columbia  
Richland County, SC

Drawn: TKS    Checked: CWD  
Revised: 05/01/12 Revised per City Comments

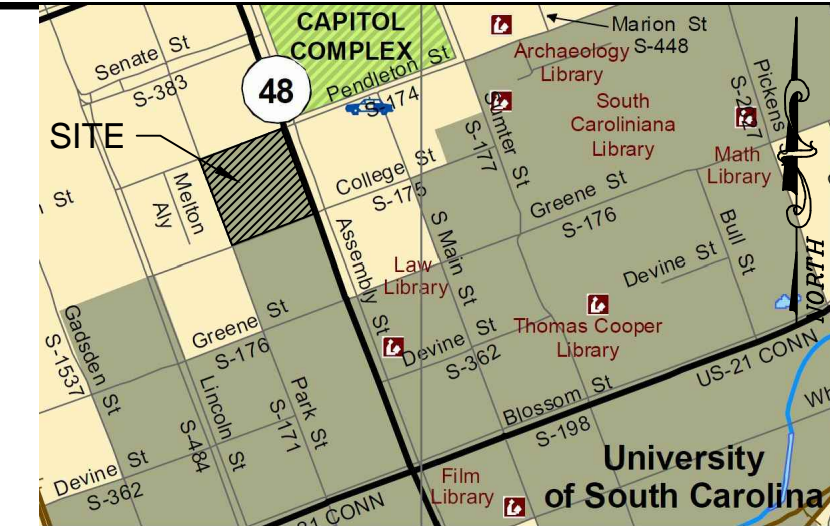
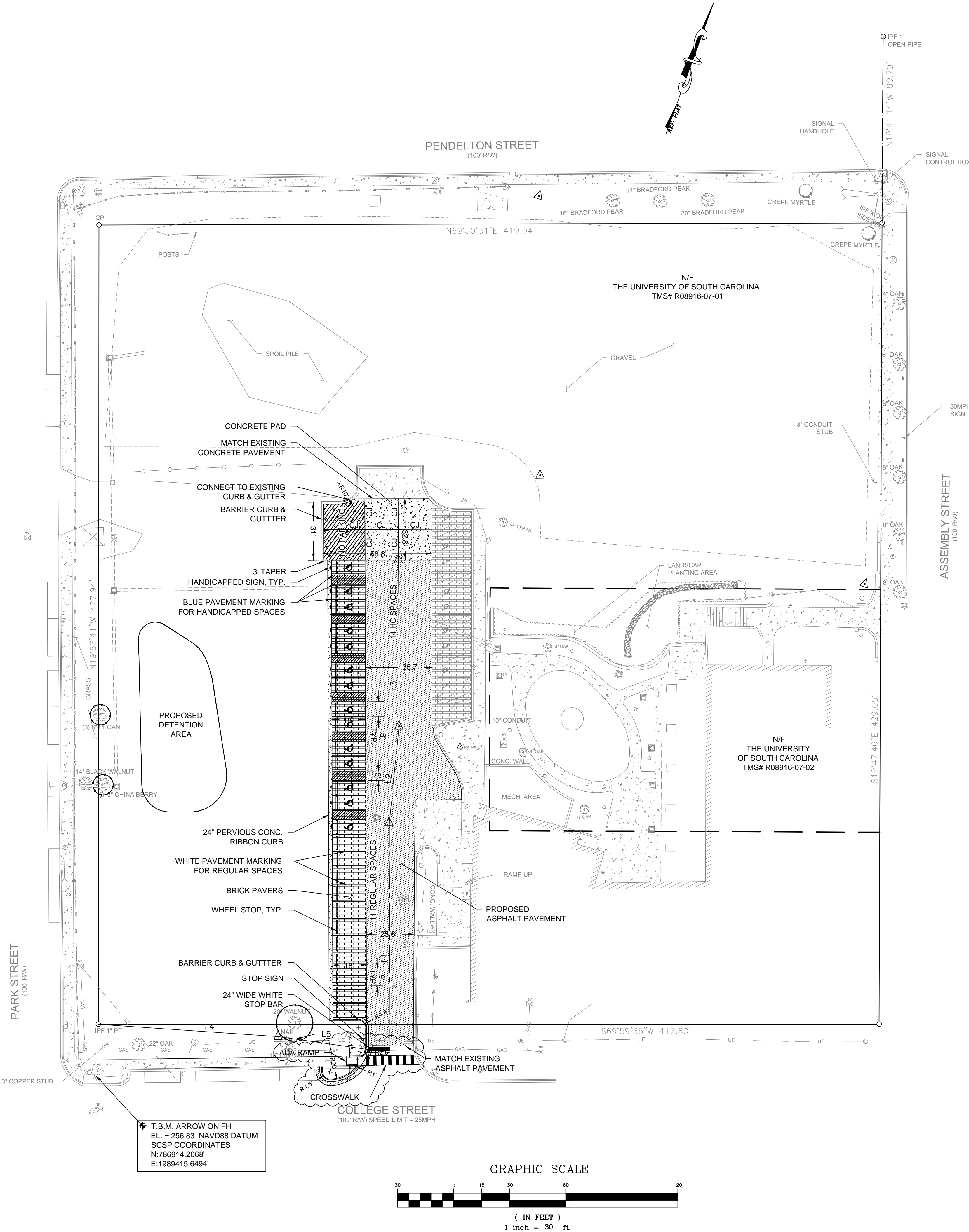
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LEGEND	
EXISTING	PROPOSED
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CURB INLET (CI)	
STORM DRAIN PIPE	
CONCRETE SIDEWALK	
POWER POLE & GUY	
LIGHT POLE	

LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	123.04	N20° 11' 27"W
L2	52.02	N14° 13' 49"W
L3	89.00	N20° 11' 27"W
L4	96.46	N73° 54' 17"E
L5	60.44	S78° 08' 48"W

PROJECT SUMMARY

SIZE OF PROJECT PARCELS: 4.12 ACRES  
DISTURBED AREA: 1.12 ACRE  
TAX MAP REFERENCE: RICHLAND COUNTY TMS NO. R08916-07-01 & R08916-07-02  
CURRENT ZONING: PUD-C  
TYPE OF DEVELOPMENT: PARKING LOT  
ADDITIONAL PARKING PROVIDED= 25 INCLUDING 14 HANDICAPPED SPACES

OWNER:  
THE UNIVERSITY OF SOUTH CAROLINA  
743 GREENE STREET  
COLUMBIA, SC  
CONTACT: TOM OPAL, PE  
TELEPHONE: (803) 777-7076

FLOOD CERTIFICATION

I HEREBY CERTIFY THAT I HAVE CONSULTED THE NATIONAL FLOOD INSURANCE PROGRAM, "FLOOD INSURANCE RATE MAP", MAP NUMBER 45079C0094H, PANEL NUMBER 94 OF 275, EFFECTIVE DATE: 2/20/2002. I HAVE DETERMINED THAT THE ABOVE SITE LIES WITHIN AN UNSHADED ZONE "X".

CHARLES W. DEEP, P.E.  
SC REG. PROFESSIONAL ENGINEER #27381

NOTES

- BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY CHAO AND ASSOCIATES, INC.
- ALL PAVEMENT DIMENSIONS ARE REFERENCED TO THE FACE OF CURB WHERE APPLICABLE.
- ANY ADDITIONAL LIGHTING REQUIRED FOR THIS PARKING LOT TO BE DESIGNED BY OTHERS.
- ALL PAVEMENT MARKING WITHIN ROAD ROW SHALL BE THERMOPLASTIC AND INSTALLED IN ACCORDANCE TO THE CITY OF COLUMBIA STANDARD DRAWINGS AND SPECIFICATIONS.
- ALL SIGNAGE TO BE MUTCD COMPLIANT.
- PROVIDE JOINTS IN ALL CONCRETE AREAS PER CONSTRUCTION DETAILS AND SPECIFICATIONS.

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**Site Layout Plan**  
Public Health Research Center  
Parking Lot Construction  
In The City Of Columbia, SC  
Richland County, SC

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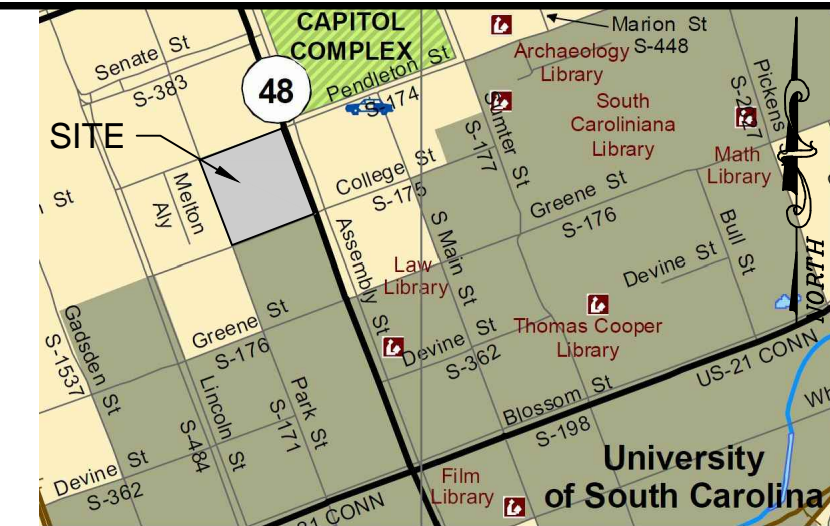
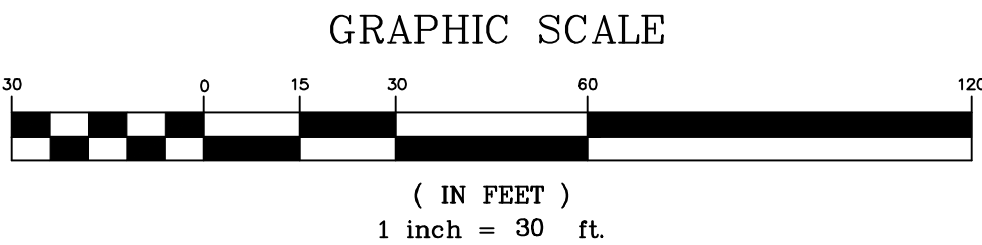
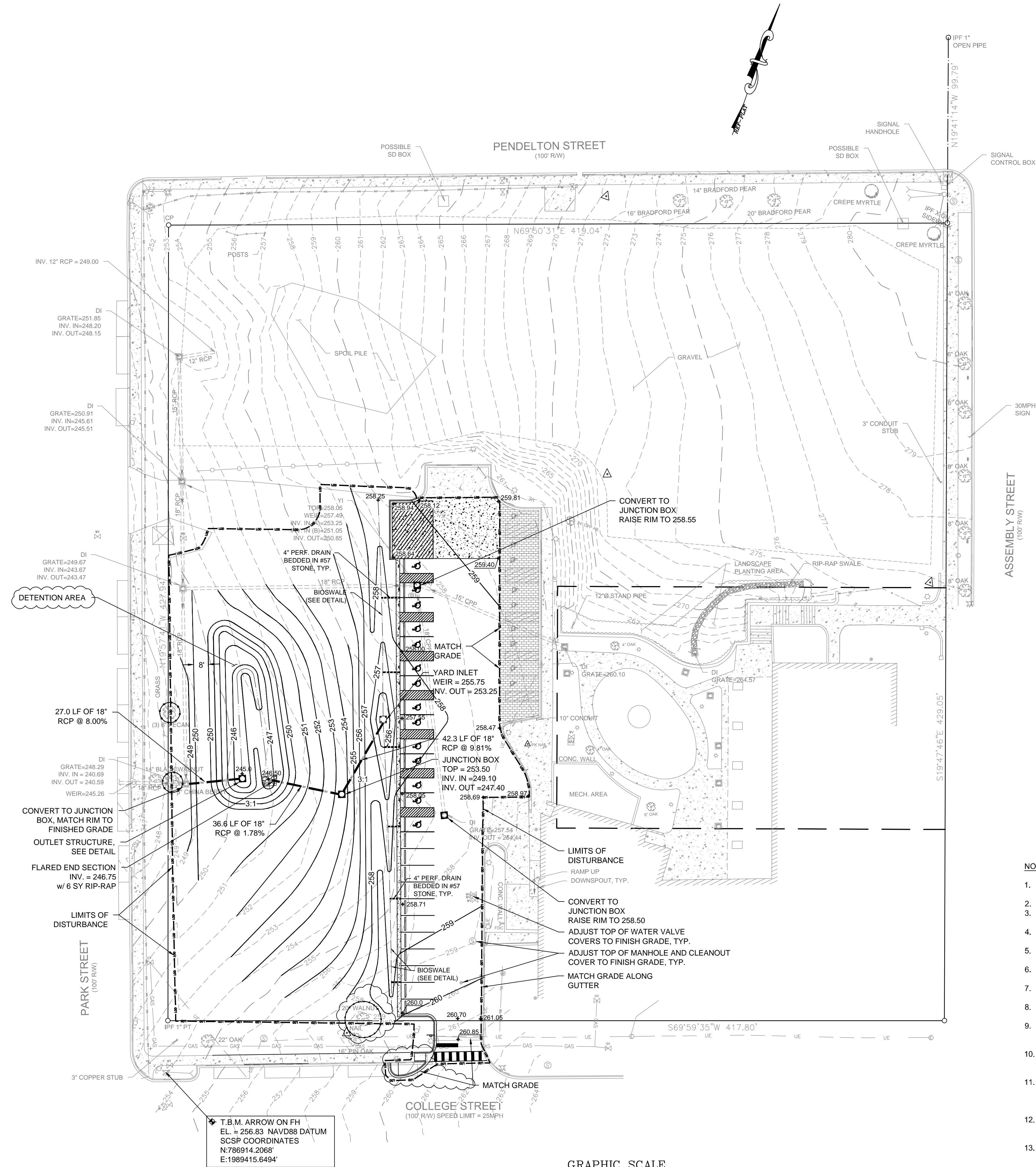
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LEGEND	
EXISTING	PROPOSED
FIRE HYDRANT	CONC. CURB & GUTTER
WATER VALVE	YARD INLET (YI)
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STORM DRAIN PIPE	
CONCRETE SIDEWALK	
POWER POLE & GUY	
LIGHT POLE	

NOTES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY CHAO AND ASSOCIATES, INC. IN DIGITAL FORMAT.
- PROPOSED CONTOURS & PROPOSED SPOT ELEVATIONS REPRESENT FINISHED GRADE.
- THE CONTRACTOR SHALL CALL PALMETTO UTILITY PROTECTION SERVICE, AT (888) 721-7877, FOR ALL UNDERGROUND UTILITIES LOCATIONS AT LEAST 72 HOURS PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF ANY DIFFERING SITE CONDITIONS ARE NOTED.
- THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES AT NO ADDITIONAL COST TO THE OWNER.
- THE CONSTRUCTION OF ALL STREETS AND DRAINAGE FACILITIES SHALL BE GOVERNED BY THE CITY OF COLUMBIA STANDARD SPECIFICATIONS.
- ALL WORK WITHIN PUBLIC RIGHT OF WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED ENCROACHMENT PERMIT, AS APPLICABLE.
- THE CONTRACTOR SHALL HAVE A COPY OF ALL APPROVED ENCROACHMENT PERMITS IN HAND PRIOR TO ANY WORK WITHIN PUBLIC RIGHT-OF-WAY.
- DURING CONSTRUCTION AND UNTIL TURF IS ESTABLISHED, USE THE INLET PROTECTION SHOWN ON DETAIL SHEET AROUND ALL INLETS AND PLACE AND MAINTAIN AS REQUIRED TO PREVENT EROSION AND SEDIMENTATION RUNOFF.
- PROVIDE SILT FENCE AND/OR OTHER EROSION CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER COMPLETION OF CONSTRUCTION IN THE AREA.
- IF NECESSARY, SLOPES WHICH EXCEED EIGHT VERTICAL FEET OR 3:1 SLOPES SHOULD BE STABILIZED WITH AN APPROVED TURF REINFORCING MAT IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY ALSO BE NEEDED.
- CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. CONTRACTOR TO DAILY REMOVE MUD/SOIL FROM PAVEMENT AS REQUIRED.
- 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 TO THE SATISFACTION OF THE CITY OF COLUMBIA AND SCDEEC.
- ALL EXCAVATION IS UNCLASSIFIED AND EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE.
- MATCH ALL STRUCTURES (JUNCTION BOXES, MANHOLES, VALVES, ECT. TO FINISHED GRADE)

Grading and Storm Drainage Plan  
Public Health Research Center  
Parking Lot Construction  
In The City Of Columbia  
Richland County, SC

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Civil - Structural - Survey  
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EROSION AND SEDIMENT CONTROL NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SCDHEC AND THE CITY OF COLUMBIA EROSION AND SEDIMENT CONTROL REGULATIONS.
2. 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.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED EVERY SEVEN (7) DAYS. IF SITE INSPECTIONS IDENTIFY BMPs THAT ARE DAMAGED OR ARE NOT OPERATING EFFECTIVELY, MAINTENANCE MUST BE PERFORMED AS SOON AS PRACTICAL OR AS REASONABLY POSSIBLE AND BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE.
4. ALL DISTURBED AREAS NOT TO BE LANDSCAPED MUST BE GRASSED IN ACCORDANCE WITH THE SEEDING SCHEDULE.
5. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE.
6. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL A PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
7. 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 ARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
9. GRAVEL CONSTRUCTION EXITS SHALL BE CONSTRUCTED AT ALL POINTS OF EGRESS FROM THE SITE.
10. CATCH BASIN INLET PROTECTION SHALL BE INSTALLED AT ALL STORM DRAINAGE STRUCTURES.
11. 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 ANY SEDIMENTS BEFORE BEING DISCHARGED.
12. 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 COMPLETED AND THE SITE IS STABILIZED.
13. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE TRACKING OF MUD ONTO PAVED ROADWAY(S) FROM CONSTRUCTION AREAS AND TO MINIMIZE THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
14. 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.
15. 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.

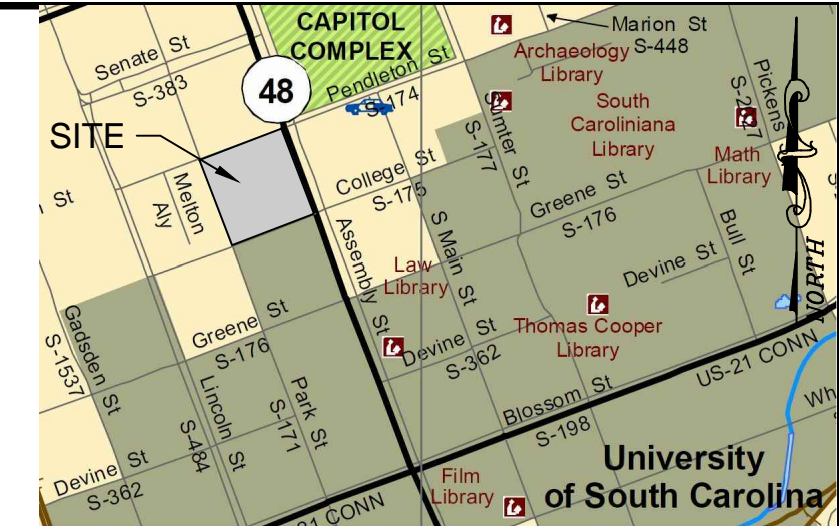
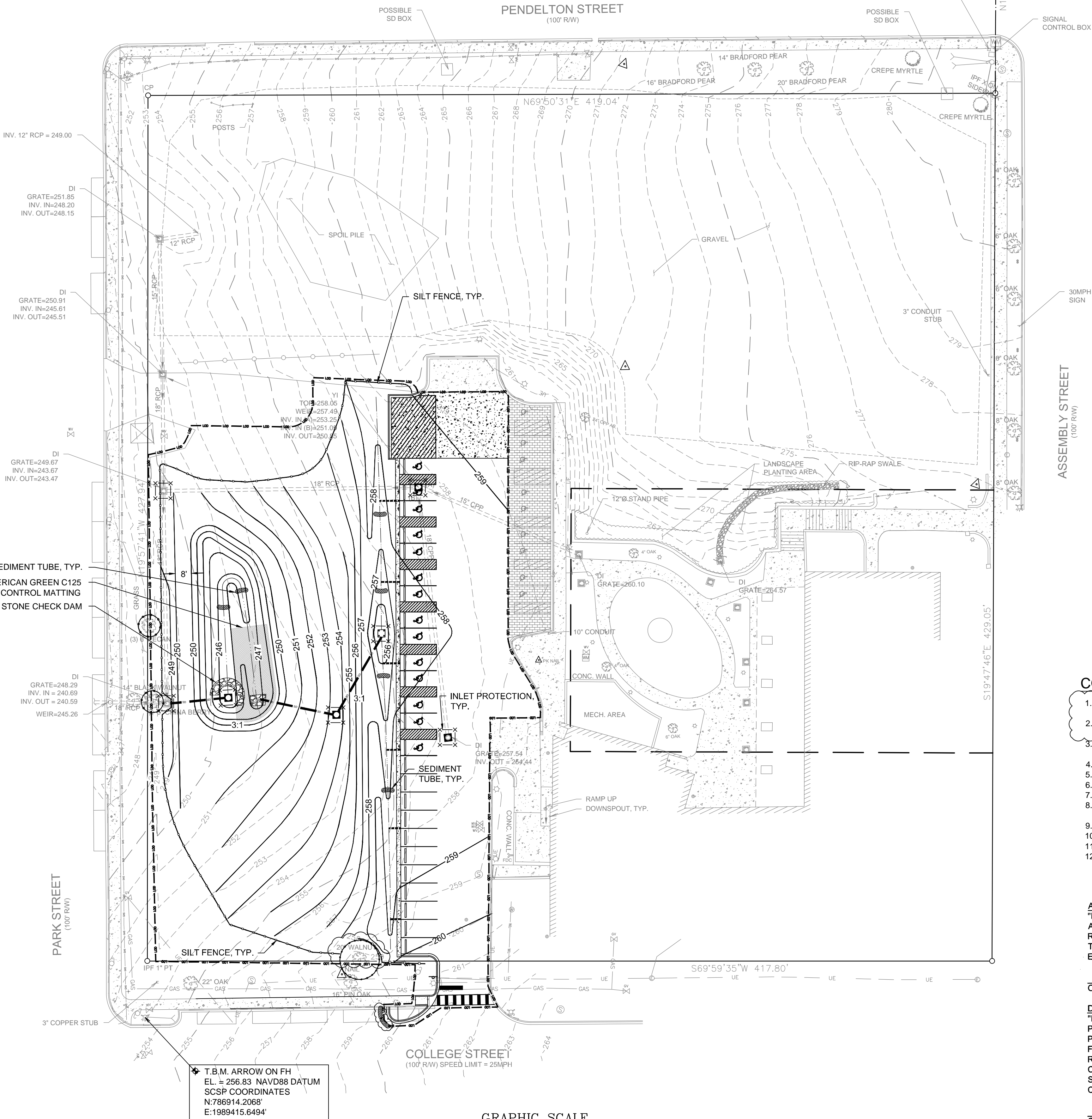
SEEDING SCHEDULE:

THE FOLLOWING RATES ARE PER 1000 S.F.  
MAY 1 - AUG. 31      SEPT. 1 - APR. 30  
1 POUND BROWNTOPMILLET      2 POUNDS ANNUAL RYE GRASS  
2 POUNDS HULLED BERMUDA      0.5 POUND HULLED BERMUDA  
25 POUNDS 10-10-10 FERTILIZER      1.5 POUNDS UNHULLED BERMUDA  
75 POUNDS LIMESTONE      25 POUNDS 10-10-10 FERTILIZER  
75 POUNDS LIMESTONE

NOTES:  
- ON ALL VEGETATED SWALES OR DITCHES WITH SIDE SLOPES (CUT OR FILL) STEEPER THAN 2:1, ADD 4 TO 6 OUNCES PER 1,000 SQUARE FEET OF WEEPING LOVE GRASS SEED TO ANY OF THE ABOVE MIXTURES.  
- SWALE AND DITCH BOTTOMS SHOULD BE DOUBLE SEEDDED.  
- ALL SLOPES STEEPER THAN 2:1 SHALL BE HYDROSEEDDED.  
- GROWTH OF RYE GRASS IN THE EARLY SPRING MUST BE SUPPRESSED TO PREVENT RYE FROM CHOKING OUT PEREMENT GRASS SUCH AS BERMUDA, BAHIA OR FESCUE.

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Palmetto Utility Protection Service

SEDIMENT TUBE, TYP.  
NORTH AMERICAN GREEN C125  
COCONUT EROSION CONTROL MATTING  
LARGE STONE CHECK DAM



LEGEND	
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CONSTRUCTION SEQUENCE

1. RECEIVE CITY OF COLUMBIA PERMIT APPROVALS AND NPDES COVERAGE FROM DHEC.
2. CONDUCT PRE-CONSTRUCTION MEETING WITH CITY OF COLUMBIA STORMWATER MANAGEMENT STAFF PRESENT.
3. NOTIFY THE CITY OF COLUMBIA STORMWATER MANAGEMENT STAFF 48 HOURS PRIOR TO BEGINNING LAND DISTURBING ACTIVITIES.
4. INSTALLATION OF CONSTRUCTION ENTRANCE.
5. SITE DEMOLITION.
6. INSTALLATION OF PERIMETER CONTROLS.
7. ROUGH GRADING. (2 WEEKS±)
8. INSTALLATION OF STORM DRAIN SYSTEM AND PLACEMENT OF INLET PROTECTION AS EACH INLET IS INSTALLED. (2 WEEKS±)
9. FINE GRADING, PAVING, ETC. (2 WEEKS)
10. PERMANENT STABILIZATION. (2 WEEKS)
11. CLEAN-OUT OF DRAINAGE SYSTEM AS REQUIRED. (1 WEEK)
12. REMOVAL OF TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES AFTER ENTIRE AREA DRAINING TO THE STRUCTURE IS FINALLY STABILIZED. (1 WEEK)

**APPLICANT'S CERTIFICATION:**  
"I (WE) HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND I (WE) ARE RESPONSIBLE FOR THE LAND DISTURBANCE AND RELATED MAINTENANCE THEREOF. CITY OF COLUMBIA & SCDHEC AUTHORITIES WILL BE ALLOWED TO ENTER THE PROJECT SITE FOR THE PURPOSE OF ON-SITE INSPECTIONS."

**Fadi Shatrawi**      03-02-12  
OWNER / PERSON FINANCIALLY RESPONSIBLE      DATE

**DESIGNER'S CERTIFICATION:**  
"I HEREBY CERTIFY THAT THIS PLAN IS DESIGNED TO CONTAIN SOIL ON THE PROPERTY CONCERNED TO THE MAXIMUM EXTENT, TO PROVIDE FOR THE PROTECTION OF THE PROPERTY AND THE PROPOSED IMPROVEMENTS THERON FROM THE EFFECTS OF FLOODING, TO PROVIDE FOR THE CONTROL OF THE RUNOFF FROM THE PROPERTY, AND THAT ALL PROVISIONS FOR SEDIMENT CONTROL AND STORM DRAINAGE ARE IN ACCORDANCE WITH THE STORMWATER MANAGEMENT AND SEDIMENT CONTROL ORDINANCE FOR THE CITY OF COLUMBIA & SCDHEC"

**Charles W. Deep, P.E.**      03-02-12  
CHARLES W. DEEP, P.E.      DATE

S.C. REGISTRATION NUMBER: 27381  
LICENSED PROFESSIONAL ENGINEER



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




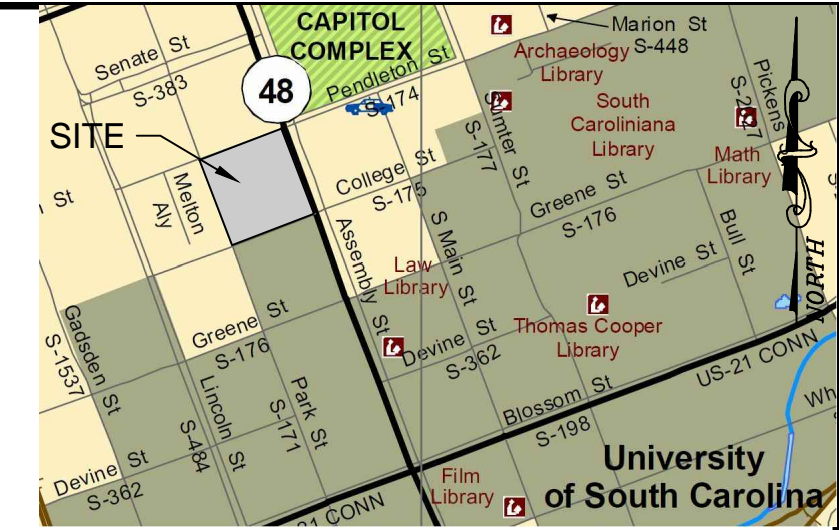
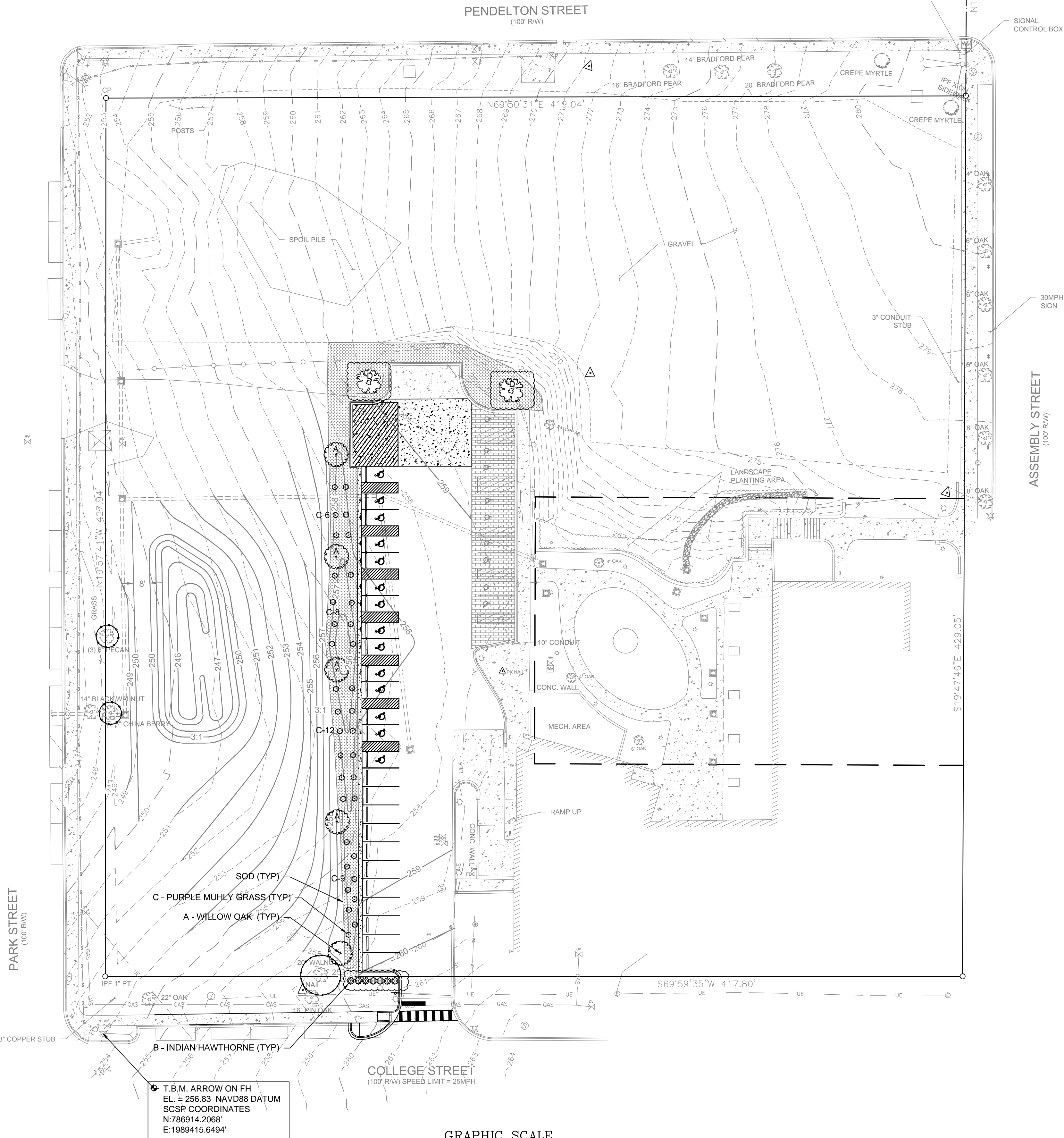
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LANDSCAPE LEGEND						
SYMBOL	LABEL	NAME	BOTANICAL NAME	SIZE	HEIGHT	QUANTITY
	A	WILLOW OAK	QUERCUS PHELLOS	2" CALIPER	10'	5
	D	NUTALL OAK	QUERCUS NUTTALLII	2" CALIPER	10'	2
	B	INDIAN HAWTHORNE	RHAPHIOLEPIS INDICA	3 GALLON	18"	7
	C	PURPLE MUHLY GRASS	MUHLLENBERGIA CAPILLARIS	3 GALLON	18"	35



LEGEND	
EXISTING	PROPOSED

- NOTES:
- ALL DISTURBED AREAS SHALL BE SEEDED OR SODDED ACCORDING TO THE DETAILS AND SPECIFICATIONS FOR THIS PROJECT.
  - PROVIDE 3/4" IRRIGATION METER AND PERMANENT IRRIGATION SYSTEM FOR ALL NEWLY SODDED/PLANTED AREAS. SUBMIT IRRIGATION SYSTEM DESIGN FOR APPROVAL BY ENGINEER/OWNER.
  - PROVIDE ORGANIC MULCH AROUND PROPOSED ALL PROPOSED TREES AND SHRUBS.

Drawing File: 577934-11C-R2.dwg Plotted: Jul 09, 2012 3:14pm

3 DAYS BEFORE DIGGING IN  
SOUTH CAROLINA  
**CALL 1-888-721-7877**  
Palmetto Utility Protection Service



**Chao & Associates, Inc.**  
Civil - Structural - Survey  
7 Clusters Court  
Columbia, SC 29210  
Voice: (803) 772-8420  
Fax: (803) 772-9120  
Email: [consult@chaoinc.com](mailto:consult@chaoinc.com)



**Landscaping Plan**  
Public Health Research Center  
Parking Lot Construction  
In The City Of Columbia  
Richland County, SC

Drawn: TKS	Checked: CWD
Revised: 05/03/12 Revised per City Comments	
File: 577934-11C-R2.dwg	Project No.: 577934-11

**C5.0**  
Sheet Number  
December 9, 2011  
Date



1. CURB AND GUTTER TO BE CONSTRUCTED IN 10 FOOT LENGTHS.
2. 1/2" EXPANSION JOINT SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 50 FEET. AT THE ENDS AND MID-POINT OF RETURNS, AND AT ANY POINT WHERE THE NEW CURB AND GUTTER ABUTS OTHER CONCRETE STRUCTURES.
3. 5' LONG TRANSITIONS SHALL BE PROVIDED BETWEEN NORMAL GUTTER AND PITCHED GUTTER, UNLESS OTHERWISE NOTED ON THE PAVING PLANS.
4. NORMAL CURB AND GUTTER WILL BE USED WHERE THE PAVEMENT SLOPES TOWARD THE CURB.
5. PITCHED CURB AND GUTTER WILL BE USED WHERE THE PAVEMENT SLOPES AWAY FROM THE CURB.



**CONCRETE PAD DETAIL**  
NOT TO SCALE



1. METAL POST TO BE GALVANIZED. ALL BOLTS, NUTS, WASHERS AND SCREWS MUST BE RUSTPROOF. (POST MAY BE ANY STYLE.)
2. CONCRETE FOR FOOTING SHALL BE OF PORTLAND CEMENT AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I.
3. SIGNS WILL BE FABRICATED BY USING A REFLECTING COATING IN THE SYMBOL, MESSAGE AND BORDERS APPLIED TO A SHEET ALUMINUM BACKING (0.80) IN THICKNESS.
4. MESSAGE LETTERING SHALL BE UPPER CASE (WHITE, SERIES B) 2" HIGH IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
5. THE SYMBOL IS COMPOSED OF TWO ELEMENTS: A WHITE WHEELCHAIR FIGURE (WHICH SHOULD ALWAYS FACE RIGHT) ON A SQUARE BACKGROUND, INTERNATIONAL BLUE IN COLOR (FED. STD. 595A, COLOR #15180).
6. SIGN POST SHALL BE MINIMUM OF 2'-0" CLEAR FROM BACK OF SIDEWALK. SEE PLANS FOR LOCATION OF SIGNS.



1. RIBBON CURB TO BE CONSTRUCTED IN 10 FOOT LENGTHS.
2. BRICK PAVERS TO BE STANDARD THICKNESS. SPECIFIC TYPE TO BE COORDINATED WITH OWNER.
3. ½ INCH EXPANSION JOINT SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 50 FEET, AT THE ENDS AND MID-POINT OF RETURNS, AND AT ANY POINT WHERE THE NEW RIBBON CURB ABUTS OTHER CONCRETE STRUCTURES.

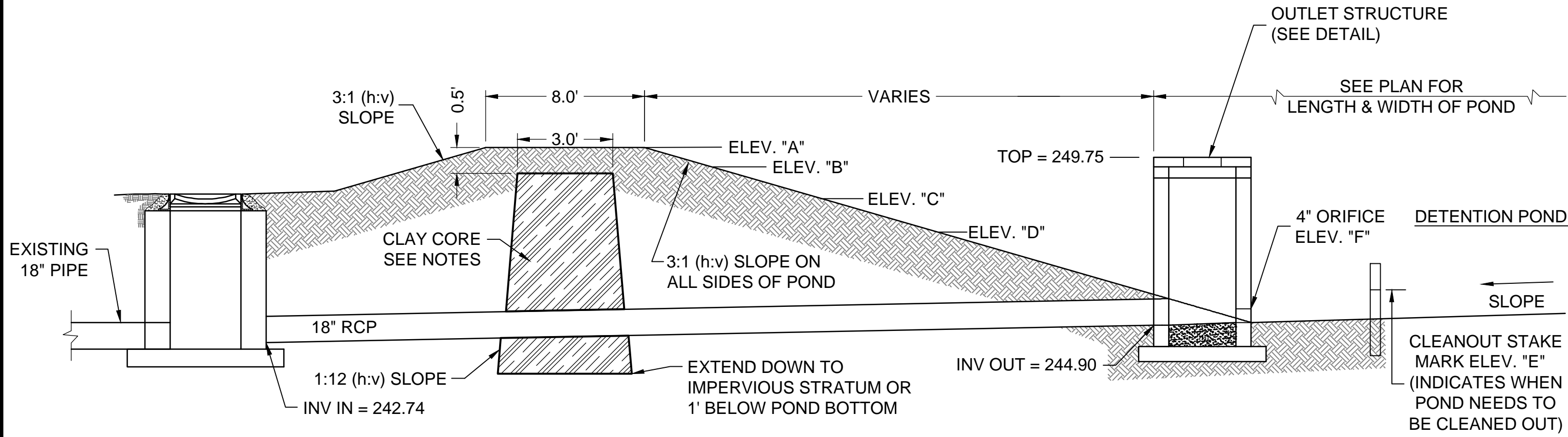




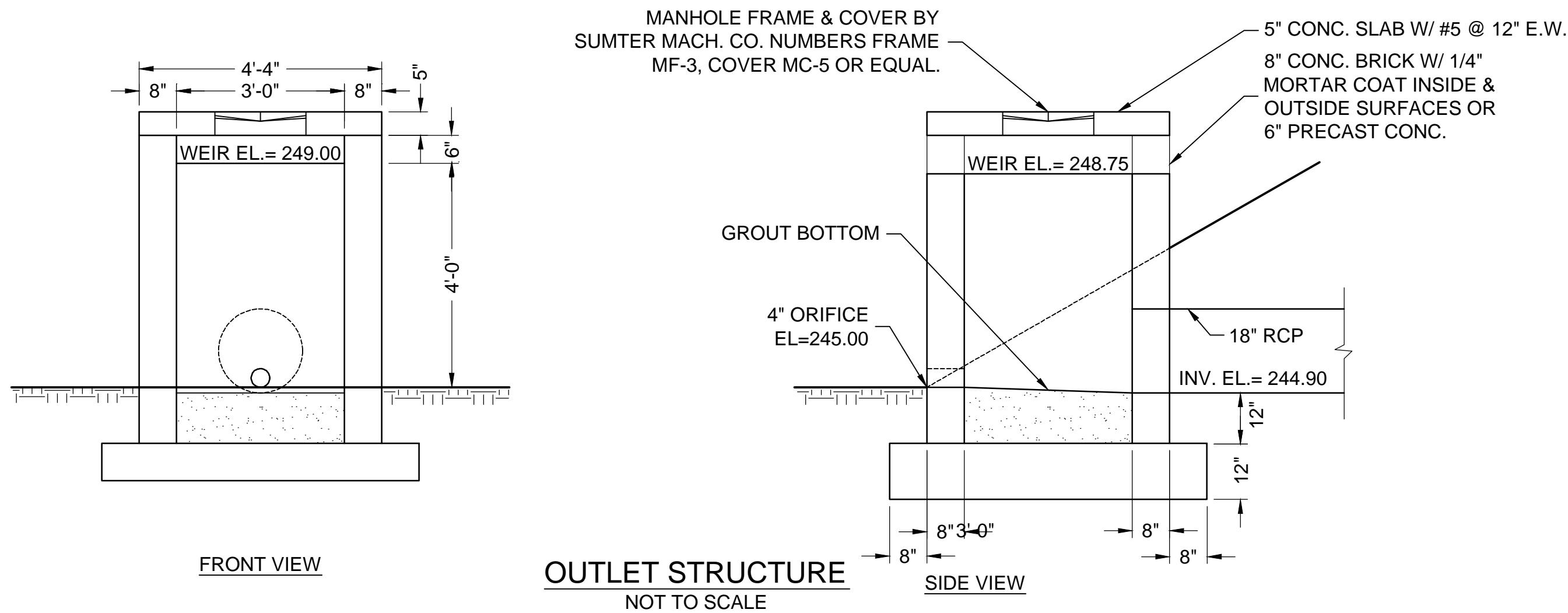
Drawing file: 577934-11C-R2.dwg    Plotted: Jul 09, 2012 - 3:14pm

- NOTES:
1. MATERIALS USED IN THE CONSTRUCTION OF THE IMPERVIOUS CORE SHALL BE CLAY WITH A UNIFIED DESIGNATION OF "CL" AND HAVE A MINIMUM OF 50% CLAY CONSTITUENCY. THE PLASTICITY INDEX SHALL RANGE BETWEEN 10 AND 20, WITH A LIQUID LIMIT RANGING BETWEEN 20 AND 50, AS DETERMINED BY ASTM D4318. A MINIMUM PERMEABILITY OF 10E-6 CM/SEC SHALL BE OBTAINED IN THIS SOIL IN ITS COMPACTED STATE.
  2. CORE MATERIAL SHALL BE PLACED IN 6 INCH THICK LOOSE LIFTS. CORE FILLS SHALL BE COMPACTED TO A MINIMUM OF 98 PERCENT OF THE LABORATORY MAXIMUM DRY DENSITY, AT A MOISTURE CONTENT 2% ABOVE OPTIMUM, AS DETERMINED BY THE STANDARD PROCTOR (ASTM D698)
  3. STRUCTURAL FILL MATERIAL SHALL BE FREE OF DEBRIS AND ORGANIC SOILS. FIBROUS ORGANIC MATERIAL SHALL NOT EXCEED 5 PERCENT BY WEIGHT. STRUCTURAL FILL MATERIAL SHALL HAVE A MINIMUM OF 20% CLAY CONTENT, A PLASTICITY INDEX OF 5 TO 15, A LIQUID LIMIT OF 10 TO 30, AND A MINIMUM PERMEABILITY OF 10E-4 CM/SEC. IN ITS COMPACTED STATE.
  4. STRUCTURAL FILL MATERIAL SHALL BE PLACED IN 6 INCH THICK LOOSE LIFTS. STRUCTURAL FILLS SHALL BE COMPACTED TO A MINIMUM OF 98 PERCENT OF THE LABORATORY MAXIMUM DRY DENSITY, AT A MOISTURE CONTENT 2% ABOVE OPTIMUM, AS DETERMINED BY THE STANDARD PROCTOR (ASTM D698)
  5. TOTAL LENGTH OF WEIR AT OUTLET STRUCTURE = 12 FT (3' SIDES)

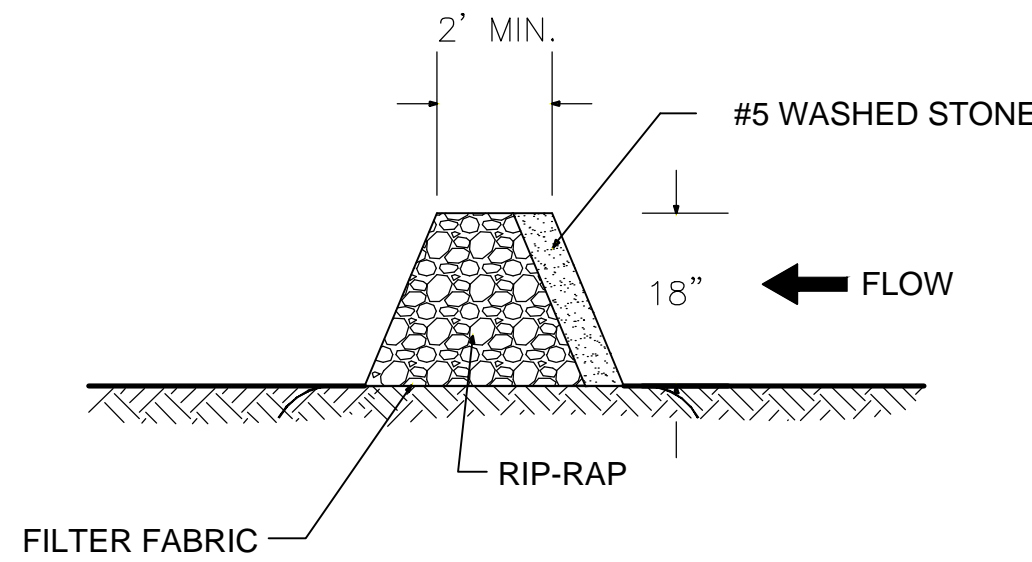
		POND
ELEV. "A"	TOP OF POND EMBANKMENT	250.00
ELEV. "B"	100 YEAR STORM MAX ELEV.	(249.37)
ELEV. "C"	10 YEAR STORM MAX ELEV.	248.62
ELEV. "D"	2 YEAR STORM MAX ELEV.	247.58
ELEV. "E"	CLEANOUT STAKE MARK ELEV.	246.50
ELEV. "F"	BOTTOM OF POND ELEV. AT ORIFICE	245.00



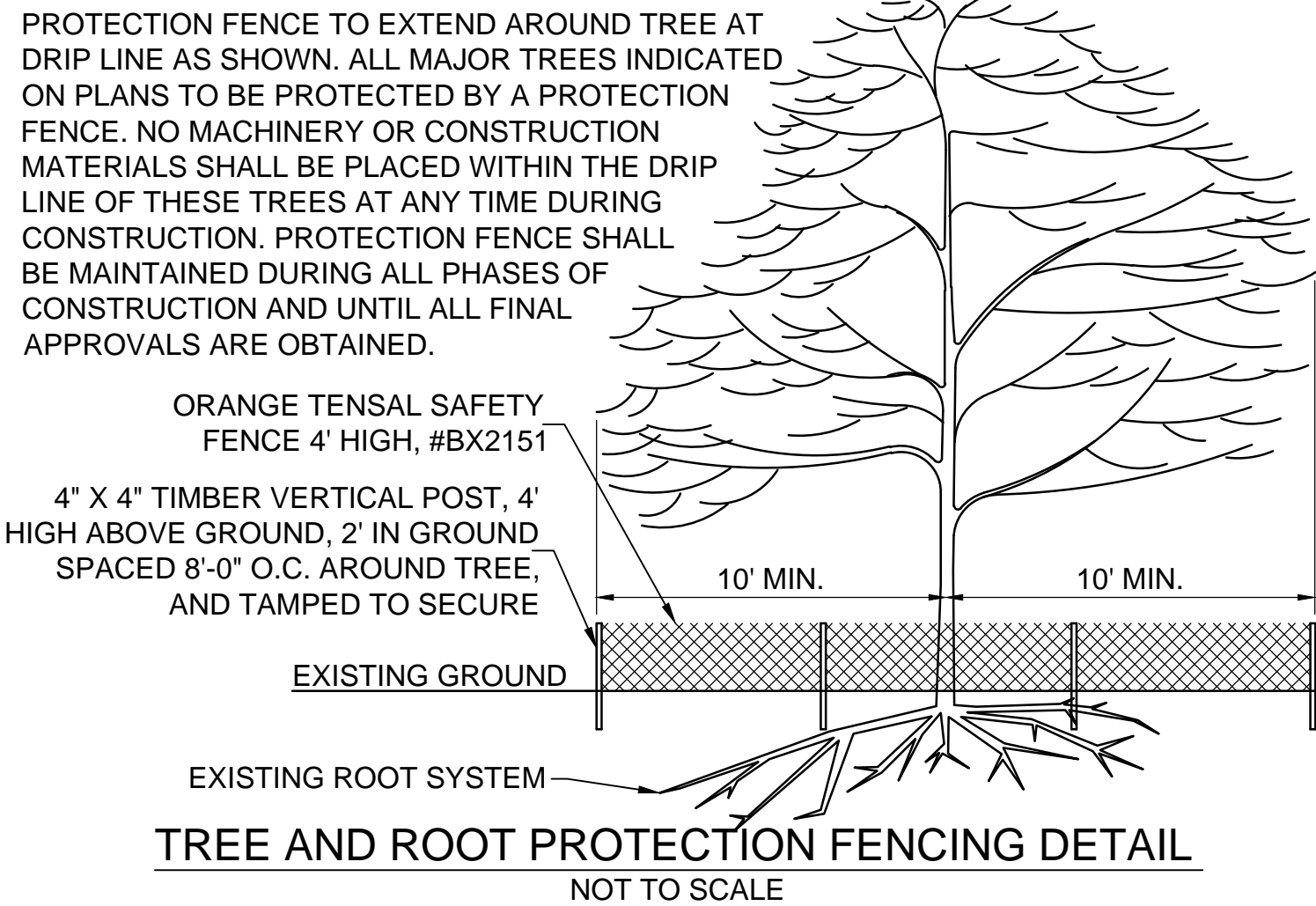
TYPICAL SECTION OF POND  
NOT TO SCALE



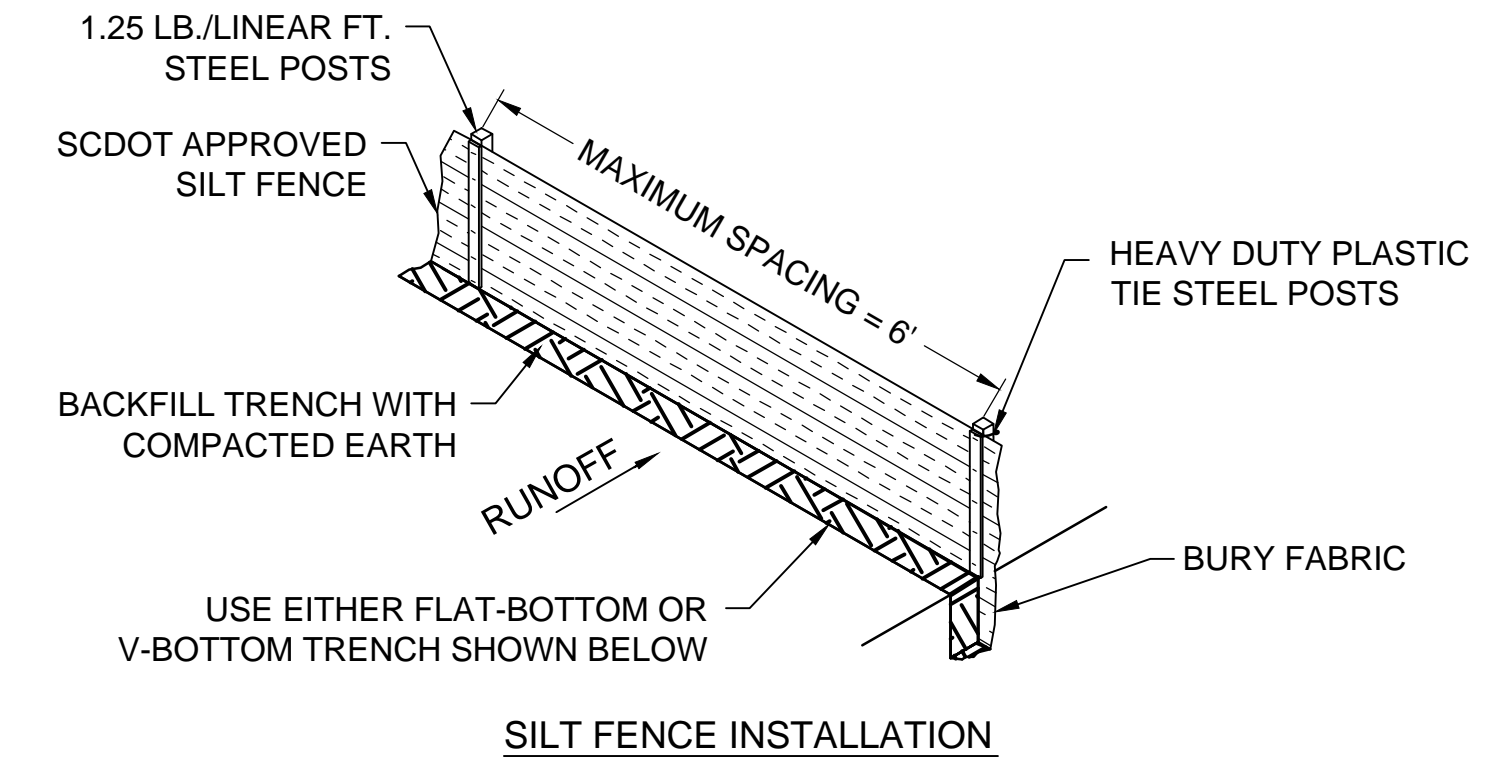
OUTLET STRUCTURE  
NOT TO SCALE



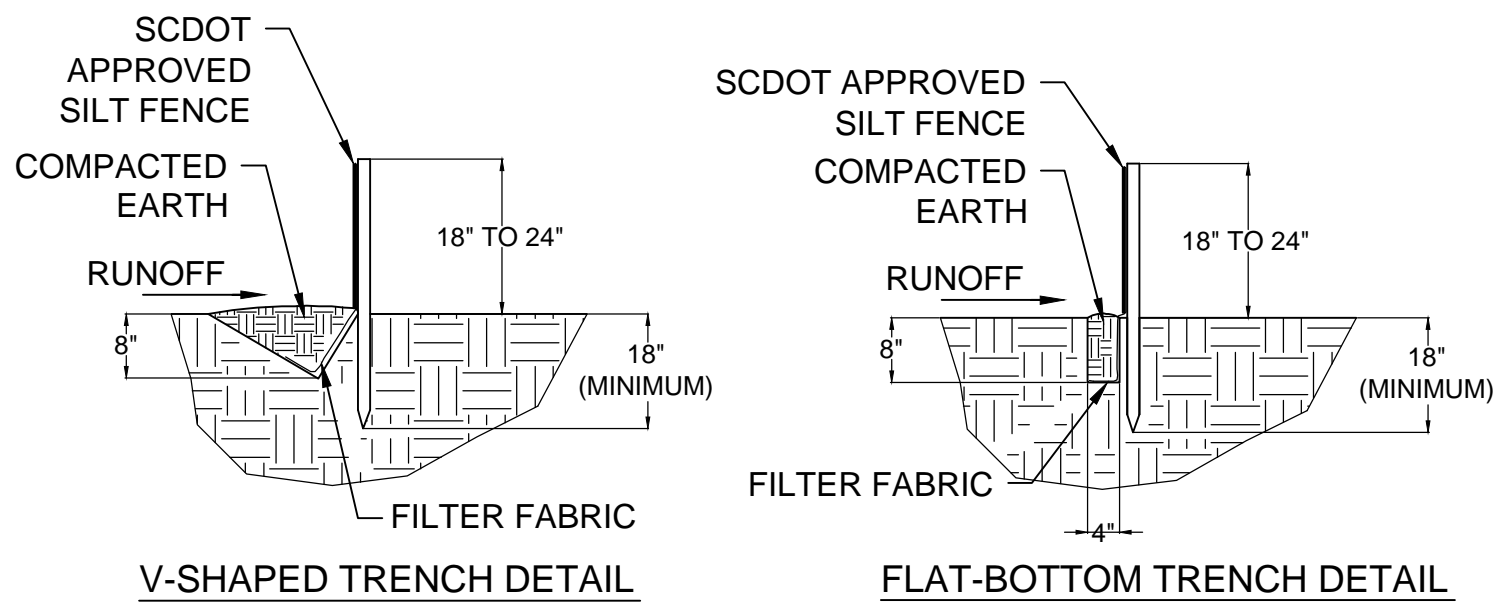
STONE CHECK DAM DETAIL  
NOT TO SCALE



TREE AND ROOT PROTECTION FENCING DETAIL  
NOT TO SCALE



SILT FENCE INSTALLATION

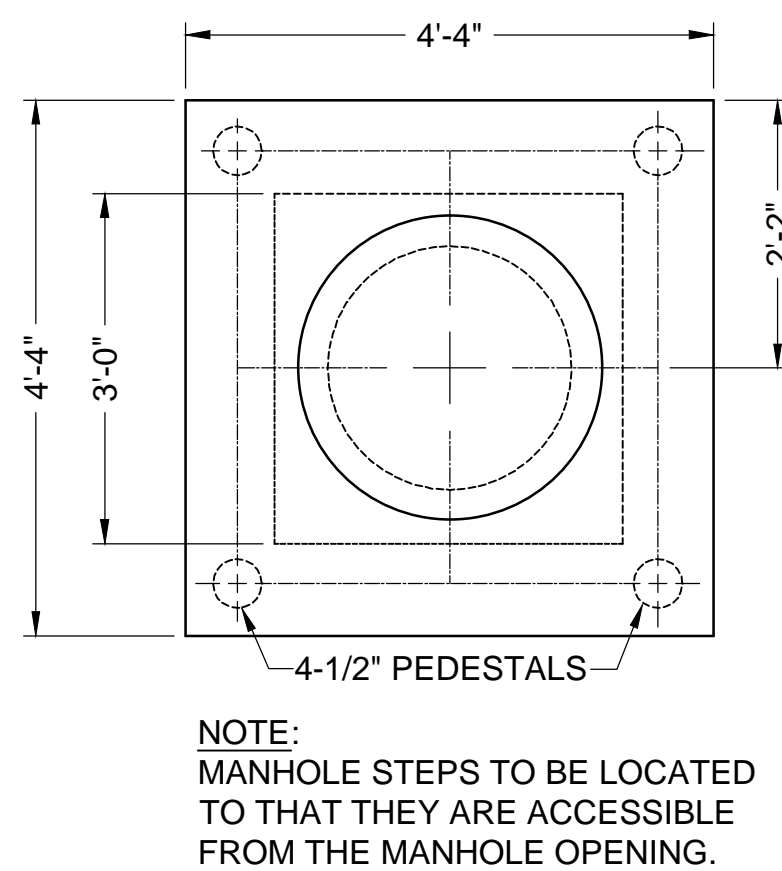


V-SHAPED TRENCH DETAIL

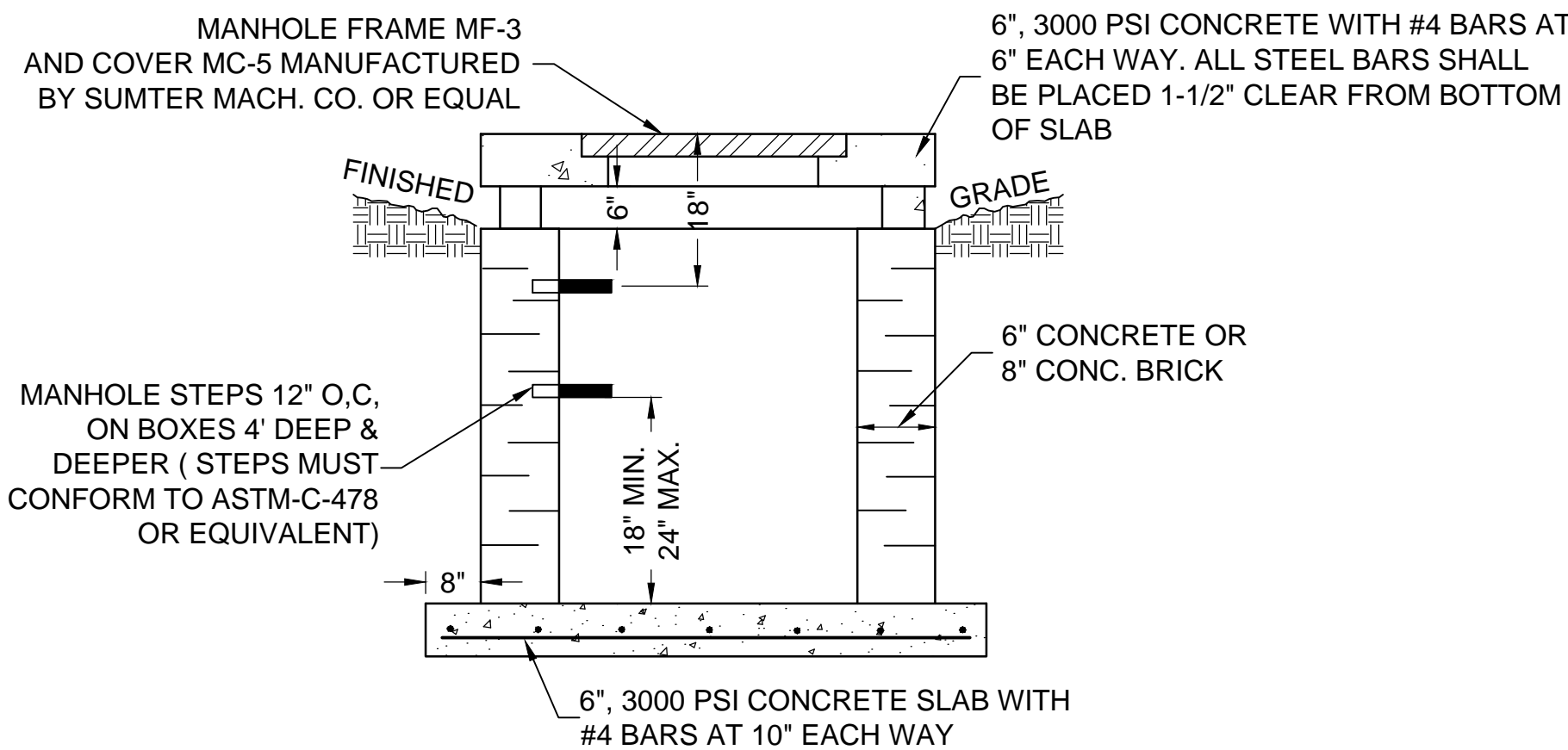
FLAT-BOTTOM TRENCH DETAIL

NOTE:  
CONTRACTOR SHALL REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE

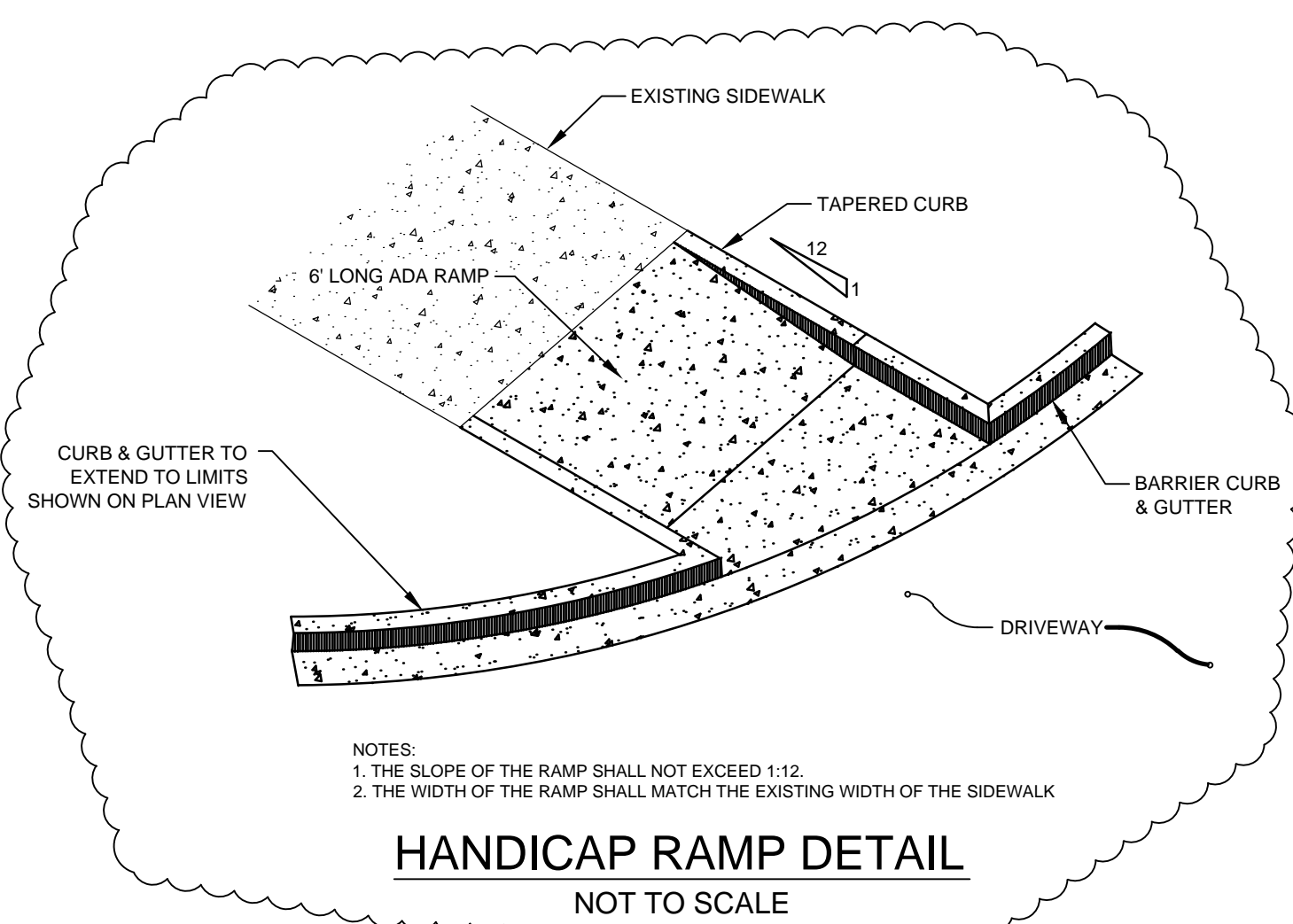
SILT FENCE CONSTRUCTION  
NOT TO SCALE



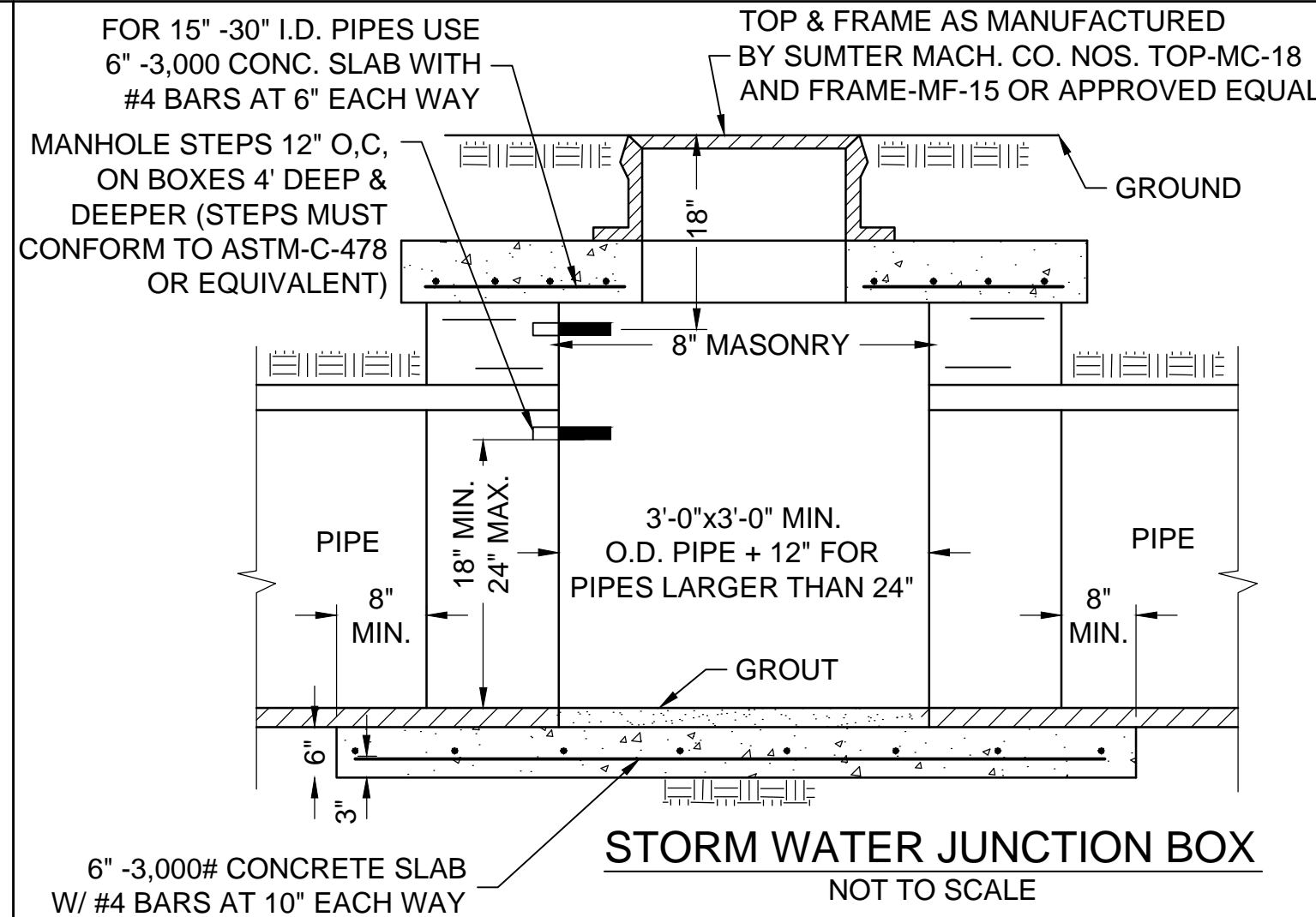
PLAN & SIDE VIEW YARD INLET DETAIL  
NOT TO SCALE



MANHOLE FRAME MF-3 AND COVER MC-5 MANUFACTURED BY SUMTER MACH. CO. OR EQUAL



HANDICAP RAMP DETAIL  
NOT TO SCALE

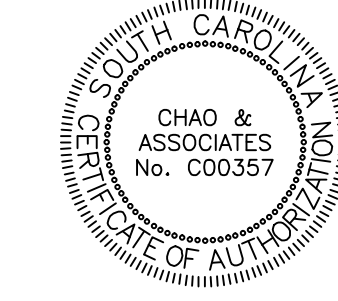


STORM WATER JUNCTION BOX  
NOT TO SCALE



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