NOTE TO CONTRACTOR:

THREE(3) DAYS PRIOR TO DIGGING.

CONTRACTOR SHALL NOTIFY PUPS, METROPOLITAN WATER DISTRICT (864-503-0822) AND USC UPSTATE FACILITIES MANAGEMENT (864-503-5500) A MINIMUM

MEASUREMENTS AND OBSERVATIONS, AND IS SHOWN HEREON.

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES WAS OBTAINED FROM LOCAL UTILITY COMPANIES AND AVAILABLE DRAWINGS SUPPLIED BY THE OWNER AND IS SHOWN HEREON. THERE

IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING, HOWEVER, COX and DINKINS, INC. HAS NO NOTICE OR KNOWLEDGE OF ANY FACTS THAT WOULD LEAD US TO CONCLUDE THAT THE INFORMATION IS NOT

ACCURATE. BUT UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED, THE OWNER.

HIS EMPLOYEES, HIS CONSULTANTS, HIS ASSIGNS AND HIS CONTRACTORS SHALL HEREBY

RESPECT TO ABOVE GROUND MONUMENTS OF SUCH UTILITIES IS BASED UPON ACTUAL FIELD

DISTINCTLY UNDERSTAND THAT COX and DINKINS, INC. IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THE UNDERGROUND INFORMATION. INFORMATION WITH



BY	11/2/1/2011	(18/1	ID INC. 294	X AN NS, COO2	CO: DINKI No.	CATT	CERTIX	
BY: DRAWN							Y:	

			'''	<u>, , ()</u>	<u>"''</u>
		BY			
	BY:	ORIG. BY DRAWN BY			
	KED JLP	BY			
CHECKED BY: JLP	orig.				
	BY:	DATE			
	Ξ V				

SITE CONSTRUCTION DRAWINGS FOR FUEL TANK ADDITIONS

BLOSSOM STREET (WEST ENERGY) STATE PROJECT NUMBER H27-Z228

PREPARED FOR:

UNIVERSITY OF SOUTH CAROLINA

FACILITIES DESIGN AND CONSTRUCTION 743 GREENE STREET COLUMBIA, SOUTH CAROLINA 29208 803.777.3126

SHEET INDEX:

LOCATION MAP

(1"=1000')

CIVIL	ENGINEERING PLANS - COX AND DINKINS, INC.
C0	COVER AND INDEX SHEET
C1	EXISTING CONDITIONS & DEMOLITION PLAN
C2	SITE PLAN
C3	SEDIMENT & EROSION CONTROL PLAN
C4	SITE, SEDIMENT & EROSION DETAILS
MECI	HANICAL ENGINEERING PLANS - SWYGERT AND ASSOCIATES
M1	SITE PLAN
M2	BASEMENT FLOOR PLAN
М3	DETAILS, NOTES SCHEDULE AND LEGEND

NORTH CAROLINA PROJECT SITE

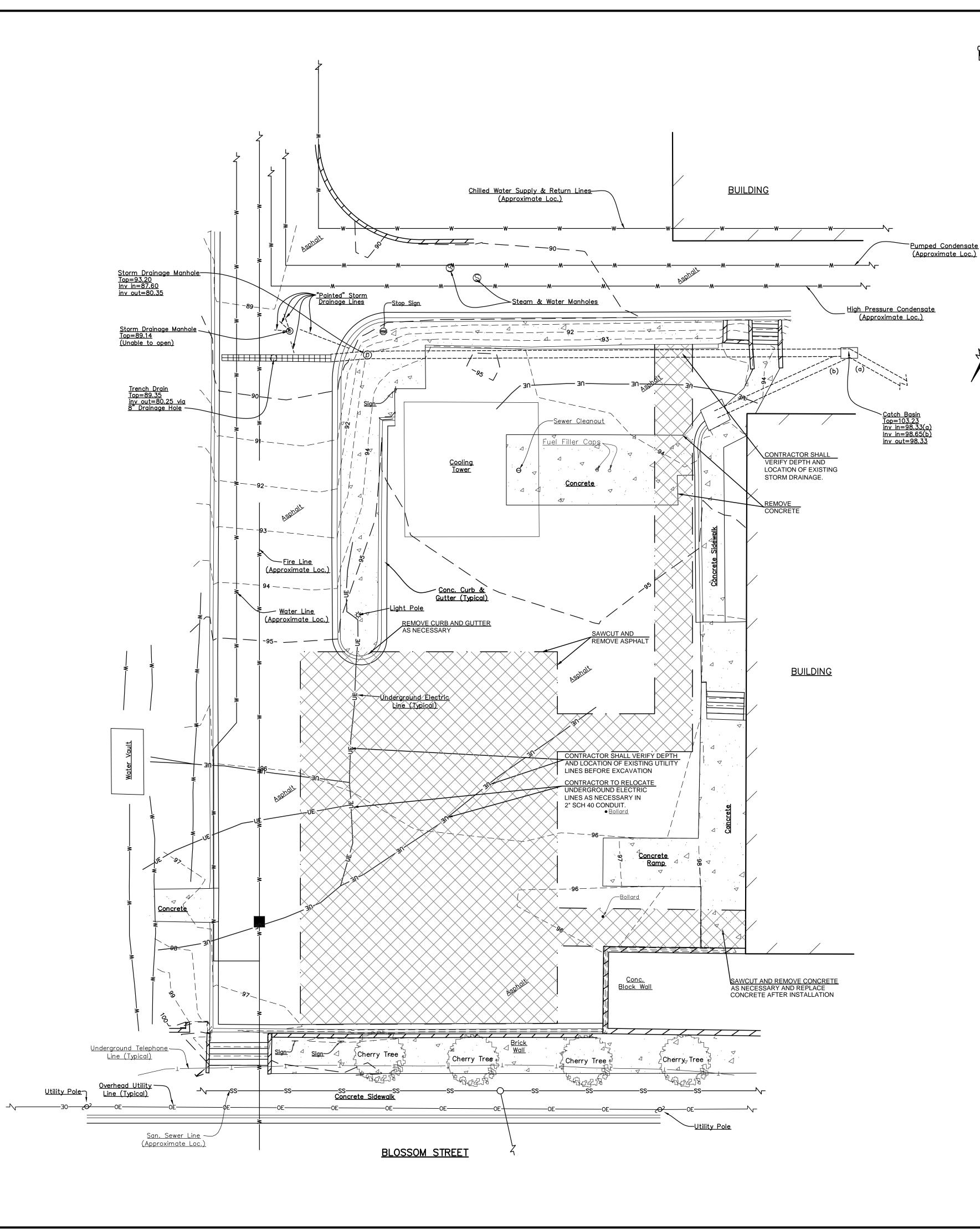
STATE OF SOUTH CAROLINA MAP

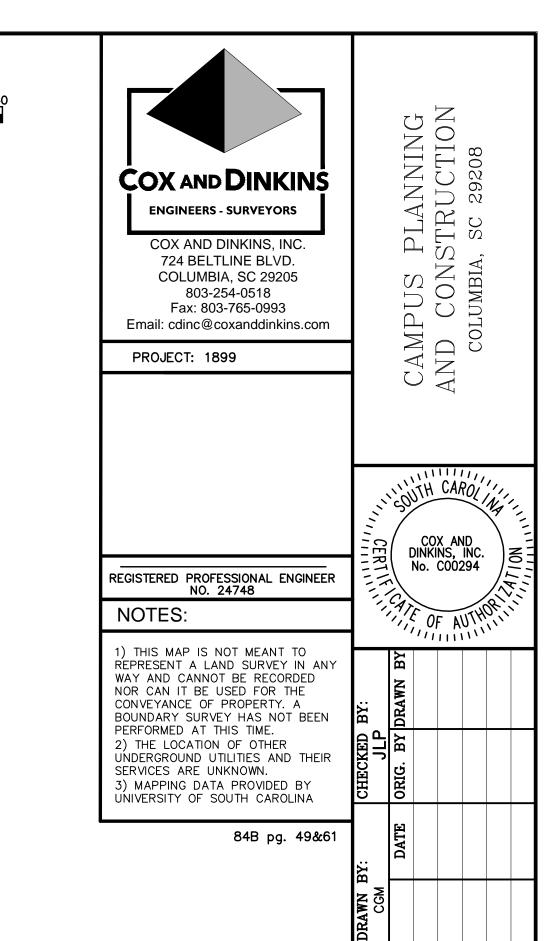
NOT TO SCALE



INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES WAS OBTAINED FROM LOCAL UTILITY COMPANIES AND AVAILABLE DRAWINGS SUPPLIED BY THE OWNER AND IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING, HOWEVER, COX and DINKINS, INC. HAS NO NOTICE OR KNOWLEDGE OF ANY FACTS THAT WOULD LEAD US TO CONCLUDE THAT THE INFORMATION IS NOT ACCURATE. BUT UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED, THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS, HIS ASSIGNS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT COX and DINKINS, INC. IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THE UNDERGROUND INFORMATION, INFORMATION WITH RESPECT TO ABOVE GROUND MONUMENTS OF SUCH UTILITIES IS BASED UPON ACTUAL FIELD MEASUREMENTS AND OBSERVATIONS, AND IS SHOWN HEREON.







CONSTRUCTION SEQUENCE

- INSTALL INLET PROTECTION AT INLETS DOWNSTREAM OF CONSTRUCTION AREA AND SET UP STOCK PILE AREA
- DEMO EXISTING ASPHALT AND PORTION OF CONCRETE. 3. EXCAVATE AREA FOR PROPOSED FUEL TANKS AND FUEL SUPPLY LINES.
- 4. INSTALL SHORING AND/OR SLOPE PROTECTION PER GEOTECHNICAL REPORT.
 5. INSTALL FUEL TANKS, FUEL SUPPLY LINES AND CONNECT WITH THE BUILDING AS SHOWN ON
- SHEETS M1, M2 AND M3. BACKFILL EXCAVATED AREAS TO GEOTECHNICAL REQUIREMENTS.
- REMOVE DEBRIS AND EXCESS DIRT FROM STOCK PILE AREA.
- 8. INSTALL AND REPAIR ASPHALT PAVEMENT AND CONCRETE DOCK. 9. RE-STRIPE PARKING SPACES IN CONSTRUCTION AREA AS NEEDED.

DEMOLITION AND CLEARING NOTES:

10. REMOVE INLET PROTECTION.

- 1) THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS TO BE DEMOLISHED AND REMOVED FROM THE SITE. THE VERIFICATION PROCESS SHALL INCLUDE VISITING AND WALKING THE SITE. ALL ITEMS REQUIRING DEMOLITION/ REMOVAL, WHETHER SHOWN ON THIS PLAN OR NOT, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 2) CONTRACTOR SHALL REMOVE ALL CONCRETE SIDEWALK, CURB AND GUTTER, AND ASPHALT PAVEMENTS AS SHOWN TO CONSTRUCT IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REMOVAL AND/OR RELOCATION
- OF ALL UTILITIES (ABOVE AND BELOW GROUND LEVEL) AS NECESSARY TO ACCOMMODATE THE IMPROVEMENT'S SHOWN ON THESE PLANS AND AS REQUIRED TO FACILITATE
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL WATER, WASTEWATER, AND OTHER UTILITY SERVICES.
- 5) ALL EXISTING CONCRETE AND/OR ASPHALT PAVEMENT THAT IS INDICATED ON THESE PLANS TO BE REMOVED FROM THE PROJECT SITE SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR ACCORDING TO APPLICABLE CODES.
- 6) THE CONTRACTOR SHALL CONSULT THE OWNER REGARDING SALVAGE. ANY ITEMS NOT RETAINED BY THE OWNER SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DEMOLISH AND/OR LEGALLY DISPOSE OF. 7) EROSION AND SEDIMENT CONTROL DEVICES MUST BE IN PLACE PRIOR TO DEMOLITION.
- 8) IF ANY HAZARDOUS MATERIAL IS ENCOUNTERED DURING DEMOLITION, THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND APPROPRIATE AGENCIES FOR PROPER REMOVAL
- 9) DEMOLITION SHALL MEET ALL APPLICABLE STATE, LOCAL, AND FEDERAL REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPLICABLE PERMITS. 10) CONTRACTOR SHALL GRADE DEMOLISHED AREAS TO DRAIN (PIPES, PARKING, ETC.)

REFERENCES:

1) MASTER PLAN PREPARED FOR THE UNIVERSITY OF SOUTH CAROLINA, DESIGN AND ENGINEERING PROJECT DEVELOPMENT OFFICE, DATED JANUARY 5, 1998, SHEET G-2a.

- . THE LOCATIONS OF OTHER UNDERGROUND UTILITIES ARE UNKNOWN.
- 2. THE CONTOUR INTERVAL = ONE (1') FOOT.
- . ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED. 4. ELEVATIONS AND TOPOGRAPHICAL INFORMATION ARE BASED UPON ASSUMED DATUM..
 5. SAN SEWER LINES, ALL WATER LINES, FIRE LINES, AND STEAM LINES WERE SCALED FROM REFERENCE NO. 1, AND IS ON FILE IN OUR OFFICE



SHEET:

OF COLUMBIA, SC DEMOLITION I

∞ర

CHLAND COUNTY, C...
CONDITIONS (CONDITIONS (CONDITIONS

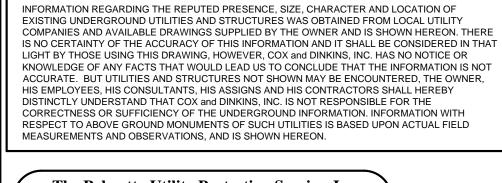
EXISTING

 \bigcirc

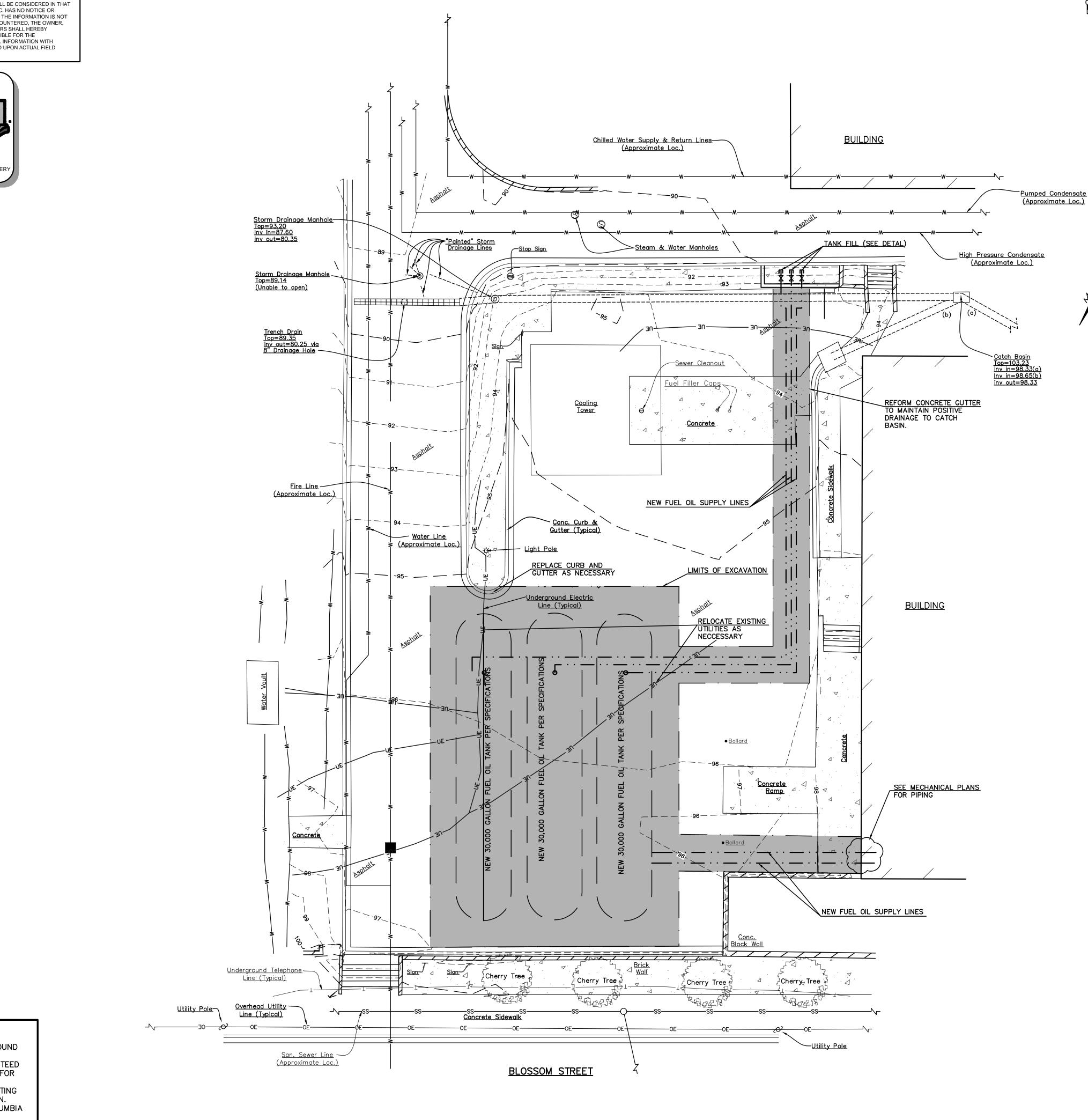
GENERAL NOTES:

CONSTRUCTION.

- UTILITIES SHOWN WERE LOCATED BY GROUND PENETRATING RADAR. THE LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED AND THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITIES.
- . CONTRACTOR RESPONSIBLE FOR PROTECTING EXISTING UTILITIES DURING CONSTRUCTION. CONTRACTOR TO CONTACT CITY OF COLUMBIA ENGINEERING PRIOR TO BEGINNING







PLANNING ISTRUCTION A, SC 29208 COX AND DINKINS **ENGINEERS - SURVEYORS** COX AND DINKINS, INC. CAMPUS AND CONS COLUMBIA, 724 BELTLINE BLVD. COLUMBIA, SC 29205 803-254-0518 Fax: 803-765-0993 Email: cdinc@coxanddinkins.com PROJECT: 1899 No. C00294 REGISTERED PROFESSIONAL ENGINEER NO. 24748 NOTES:

1) THIS MAP IS NOT MEANT TO RÉPRESENT A LAND SURVEY IN ANY WAY AND CANNOT BE RECORDED NOR CAN IT BE USED FOR THE CONVEYANCE OF PROPERTY. A BOUNDARY SURVEY HAS NOT BEEN PERFORMED AT THIS TIME.

2) THE LOCATION OF OTHER UNDERGROUND UTILITIES AND THEIR SERVICES ARE UNKNOWN. 3) MAPPING DATA PROVIDED BY UNIVERSITY OF SOUTH CAROLINA

84B pg. 49&61

THESE PLANS SHOW LOCATION OF NEW FUEL TANKS AND EXTENTS OF LAND DISTURBANCE DEMOLITION AND PAVEMENT REPAIR. PLEASE SEE MECHANICAL PLANS FOR FUEL TANKS SITE

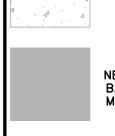
2. CONTRACTOR SHALL COMPLY WITH ALL TALK MANUFACTURER'S SPECS FOR BACKFILL MATERIAL, PROCEDURE AND COMPACTION
3. CONTRACTOR SHALL COMPLY WITH ALL GEOTECHNICAL PAVEMENT REPORT REQUIREMENTS. . THE LOCATIONS OF OTHER UNDERGROUND UTILITIES ARE UNKNOWN. 5. THE CONTOUR INTERVAL = ONE (1') FOOT.

6. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED. 7. ELEVATIONS AND TOPOGRAPHICAL INFORMATION ARE BASED UPON ASSUMED DATUM.. B. SAN SEWER LINES, ALL WATER LINES, FIRE LINES, AND STEAM LINES WERE SCALED FROM REFERENCE NO. 1, AND IS ON FILE IN OUR OFFICE

LEGEND:

AND PIPING INSTALLATION.

EXISTING CONCRETE



NEW HEAVY DUTY CONCRETE TO BE INSTALLED AFTER FUEL TANK INSTALLATION, BACKFILL AND COMPACTION. BACKFILL AND COMPACTION SHALL COMPLY WITH TANK MANUFACTURER SPECIFICATIONS AND GEOTECHNICAL REPORT.

REFERENCES:

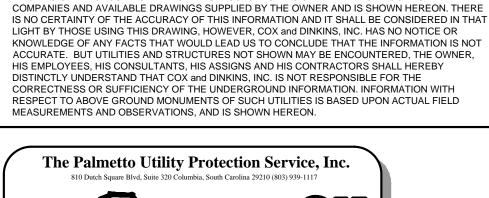
1) MASTER PLAN PREPARED FOR THE UNIVERSITY OF SOUTH CAROLINA, DESIGN AND ENGINEERING PROJECT DEVELOPMENT OFFICE, DATED JANUARY 5, 1998, SHEET G-2a.

SHEET:

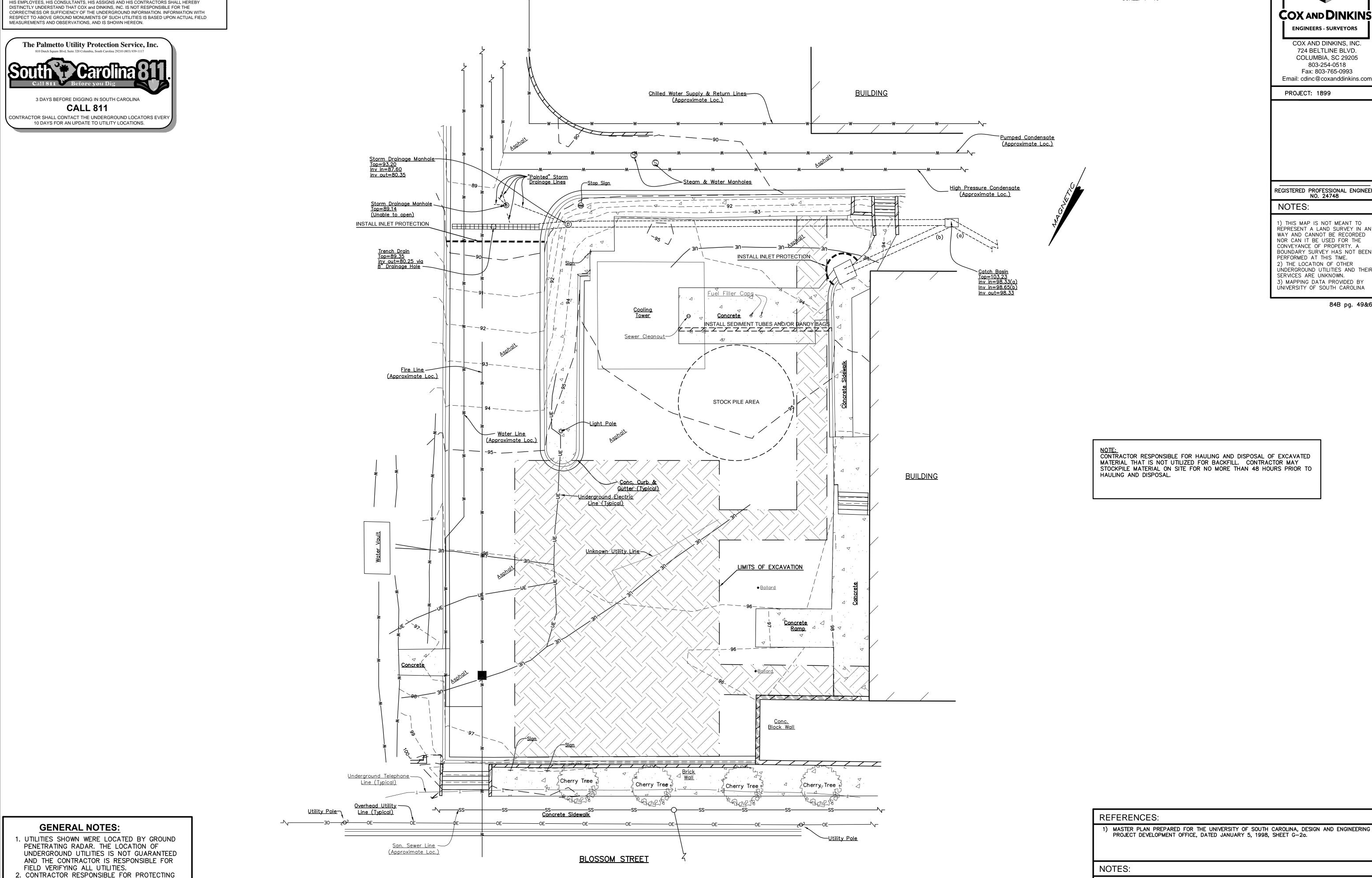
GENERAL NOTES:

CONSTRUCTION.

- . UTILITIES SHOWN WERE LOCATED BY GROUND PENETRATING RADAR. THE LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED AND THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL UTILITIES.
- . CONTRACTOR RESPONSIBLE FOR PROTECTING EXISTING UTILITIES DURING CONSTRUCTION. CONTRACTOR TO CONTACT CITY OF COLUMBIA ENGINEERING PRIOR TO BEGINNING



INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES WAS OBTAINED FROM LOCAL UTILITY



COX AND DINKINS

ENGINEERS - SURVEYORS

COX AND DINKINS, INC.

724 BELTLINE BLVD. COLUMBIA, SC 29205 803-254-0518 Fax: 803-765-0993 Email: cdinc@coxanddinkins.com

REGISTERED PROFESSIONAL ENGINEER NO. 24748

1) THIS MAP IS NOT MEANT TO

RÉPRESENT A LAND SURVEY IN ANY WAY AND CANNOT BE RECORDED NOR CAN IT BE USED FOR THE CONVEYANCE OF PROPERTY. A

BOUNDARY SURVEY HAS NOT BEEN PERFORMED AT THIS TIME.

UNDERGROUND UTILITIES AND THEIR SERVICES ARE UNKNOWN.

84B pg. 49&61

3) MAPPING DATA PROVIDED BY UNIVERSITY OF SOUTH CAROLINA

2) THE LOCATION OF OTHER

NOTES:

PROJECT: 1899

CAMPUS AND CONS

No. C00294

RICHLANE SEDIMENT &

SHEET:

. THE LOCATIONS OF OTHER UNDERGROUND UTILITIES ARE UNKNOWN.

REFERENCE NO. 1, AND IS ON FILE IN OUR OFFICE

2. THE CONTOUR INTERVAL = ONE (1') FOOT.

3. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

4. ELEVATIONS AND TOPOGRAPHICAL INFORMATION ARE BASED UPON ASSUMED DATUM..

5. SAN SEWER LINES, ALL WATER LINES, FIRE LINES, AND STEAM LINES WERE SCALED FROM

ersit

EXISTING UTILITIES DURING CONSTRUCTION. CONTRACTOR TO CONTACT CITY OF COLUMBIA ENGINEERING PRIOR TO BEGINNING CONSTRUCTION.

SEDIMENT AND EROSION CONTROL NOTES

- 1. 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 IN 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
- . 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 SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
- ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION AND 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 HAS BEEN STABILIZED. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE 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. 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 MUST 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 CANNOT 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.
- 10. 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. 11. A COPY OF THE SWPPP, INSPECTION RECORDS, AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS,
- STABILIZATION IS REACHED. 12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND-DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT

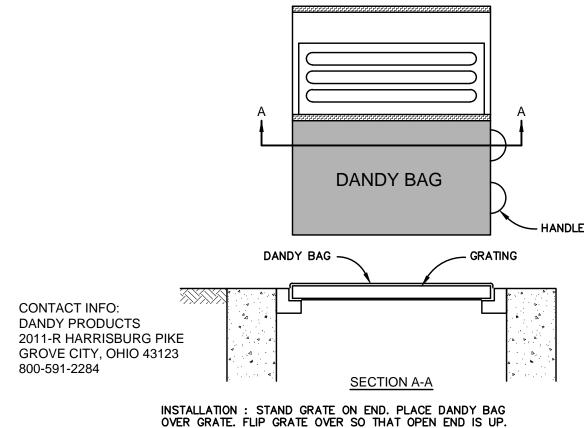
FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES THROUGH THE DATE FINAL

- MINIMIZE TOPSOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL. 14. 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. 15. 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). 16. THE FOLLOWING DISCHARGES FROM THE SITE ARE PROHIBITED:

RESUME FOR A PERIOD OF 7 CALENDAR DAYS.

- . WASTEWATER FROM THE WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE • WASTEWATER FROM THE 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 AND SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

 17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE. 18. IF EXISTING BMPS REQUIRE MODIFICATION 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.
- 19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE COMMENCEMENT 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. 20. THE CONTRACTOR SHALL MAINTAIN A RAIN GAUGE ON SITE AND MAINTAIN DAILY PRECIPITATION
- RECORDS IN THE SWPPP MANUAL PER SCDHEC REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE SWPPP INSPECTOR OF ALL RAINFALL EVENTS OF OVER ONE-HALF INCH PRECIPITATION. 21. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN ISSUED BY GOVERNING AUTHORITIES.
- 22. THE CONTRACTOR SHALL COMPLY WITH APPLICABLE STATE AND LOCAL ORDINANCES. 23. THE EROSION CONTROL MEASURES INCLUDED IN THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE INSTALLED PRIOR TO INITIAL LAND DISTURBANCE ACTIVITIES OR AS SOON AS PRACTICAL. SEDIMENT SHALL BE PREVENTED FROM DISCHARGING FROM THE PROJECT SITE BY INSTALLING AND MAINTAINING CONTROL PRACTICES AS SHOWN ON THIS PLAN. IF SHOWN ON THESE PLANS, ENERGY- DISSIPATION DEVICES OR EROSION CONTROL AT THE OUTFALL OF THE STORM SEWER SYSTEM SHALL BE INSTALLED AT THE TIME OF THE CONSTRUCTION OF THE OUTFALL. STRUCTURAL PRACTICES SHALL BE USED TO CONTROL EROSION FROM ALL SITES
- REMAINING UNDISTURBED FOR MORE THAN 14 DAYS. 24. THE CONTRACTOR SHALL CONTROL WASTES, GARBAGE, DEBRIS, WASTEWATER, AND OTHER SUBSTANCES ON THE SITE IN SUCH A WAY THAT THEY SHALL NOT BE TRANSPORTED FROM THE SITE BY THE ACTION OF WINDS, STORM WATER RUNOFF, OR OTHER FORCES. PROPER DISPOSAL OR MANAGEMENT OF ALL WASTES AND UNUSED BUILDING MATERIAL, APPROPRIATE TO THE NATURE OF THE WASTE OR MATERIAL IS REQUIRED. COMPLIANCE IS REQUIRED WITH ALL STATE OR LOCAL
- REGULATIONS REGARDING WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC SYSTEMS. 25. ALL ON-SITE STORM DRAIN INLETS SHALL BE PROTECTED AGAINST SEDIMENTATION AS SHOWN ON
- 26. THIS EROSION CONTROL PLAN SHALL BE IMPLEMENTED ON ALL DISTURBED AREAS WITHIN THE CONSTRUCTION SITE. ALL MEASURES INVOLVING EROSION CONTROL PRACTICES SHALL BE INSTALLED UNDER THE GUIDANCE OF QUALIFIED PERSONNEL EXPERIENCED IN EROSION CONTROL, AND FOLLOWING THE PLANS AND SPECIFICATIONS INCLUDED HEREIN.
- 27. DURING THE PERIOD OF CONSTRUCTION ACTIVITY, ALL SEDIMENT BASINS AND OTHER EROSION CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR. AT COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE TRANSFER OF MAINTENANCE RESPONSIBILITIES, IF REQUIRED, WITH THE OWNER. MAINTENANCE SHALL BE IN ACCORDANCE WITH DHEC'S MANUAL, "SOUTH CAROLINA STORMWATER MANAGEMENT AND SEDIMENT CONTROL HANDBOOK FOR LAND DISTURBANCE ACTIVITIES".
- 28. ALL EROSION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH "SOUTH CAROLINA STORMWATER MANAGEMENT AND SEDIMENT CONTROL HANDBOOK FOR LAND DISTURBANCE ACTIVITIES"
- 29. EXISTING VEGETATION SHALL BE PROTECTED AS MUCH AS PRACTICAL. 30. IF SYNTHETIC OR PERMANENT VEGETATIVE MATTING IS USED, THE MANUFACTURER'S REPRESENTATIVE MUST PROVIDE WRITTEN APPROVAL OF THE INSTALLATION OF THE MATERIAL. A COPY THAT LETTER MUST BE PROVIDED TO THE OWNER AND THE ENGINEER.
- 31. IF THE INSTALLATION OF THE STORM DRAINAGE SYSTEM IS INTERRUPTED BY WEATHER OR NIGHTFALL, PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC. 32. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM THE DETENTION POND/SEDIMENT BASIN AT SUCH TIME AS IT REACHES A DEPTH OF 0.5 FEET ABOVE THE DESIGN BOTTOM ELEVATION OF THE
- POND/BASIN. DISPOSAL OF THE MATERIAL IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR. 33. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE DETENTION POND/SEDIMENT BASIN AFTER THE SITE IS STABILIZED, ENSURING THAT THE DESIGN VOLUME OF THE POND/BASIN HAS BEEN PROVIDED FOLLOWING STABILIZATION.
- 34. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
- 35. THE CONTRACTOR SHALL RESPREAD THE TOPSOIL ON SITE AS MUCH AS POSSIBLE PRIOR TO FINAL GRADING AND STABILIZATION.
- 36. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES AT HIS EXPENSE TO REDUCE EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ALL CLEANUP AND REPAIR ON-SITE AND DOWNSTREAM DUE TO EROSION AND SILTATION.



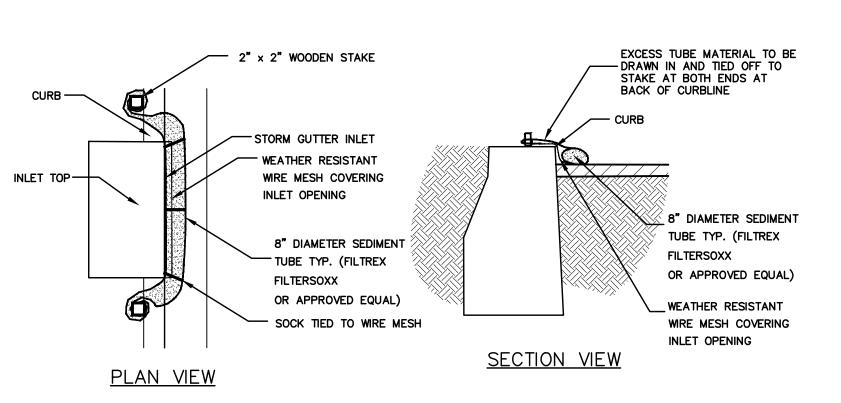
INSTALLATION: STAND GRATE ON END. PLACE DANDY BAG OVER GRATE. FLIP GRATE OVER SO THAT OPEN END IS UP. PULL UP SLACK. TUCK FLAP IN. BE SURE END OF GRATE IS COMPLETELY COVERED BY FLAP OR DANDY BAG WILL NOT FIT PROPERLY. HOLDING HANDLES, CAREFULLY PLACE DANDY BAG WITH GRATE INSERTED INTO CATCH BASIN FRAME SO THAT RED DOT ON THE TOP OF THE DANDY BAG IS VISIBLE.

MAINTENANCE: AFTER SILT HAS DRIED, REMOVE IT FROM THE SURFACE OF DANDY BAG WITH BROOM.

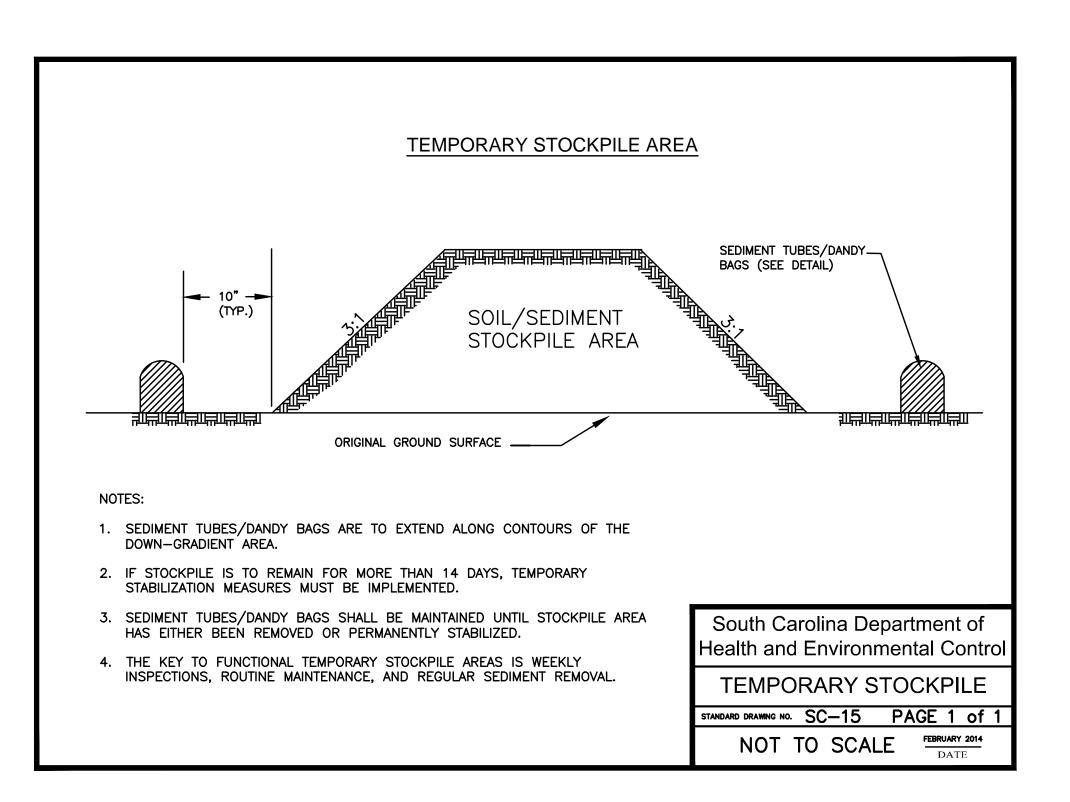
DANDY BAG INLET PROTECTION DETAIL

(OR ENGR APPROVED EQUAL)

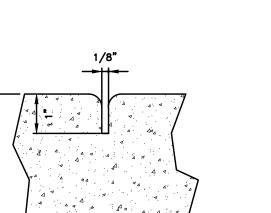
NTS



SEDIMENT TUBE INLET PROTECTION DETAILS

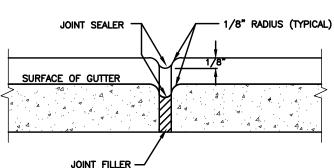


SITE DETAILS:





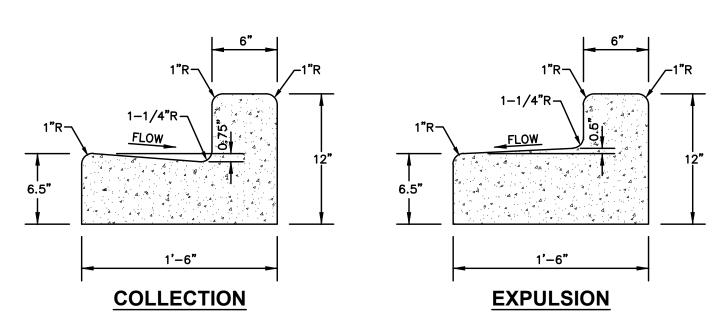
GROOVE JOINT IN SIDEWALK



TRANSVERSE EXPANSION JOINT

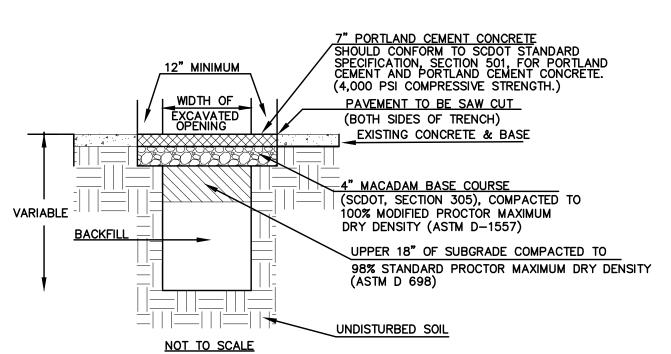
- 1. CONTRACTION JOINTS SHALL BE SPACED AT 10-FOOT INTERVALS. FOR VALLEY GUTTER, A 10-FOOT SPACING MAY BE USED WHEN A MACHINE IS USED. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.
- 2. CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
- 3. ALL EXPANSION JOINTS SHALL BE SPACED AT 90-FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS.
- JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ABUTTING SIDEWALK. 4. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 P.S.I. IN 28 DAYS.
- 5. CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
- 6. TOP 6" OF SUBGRADE BENEATH THE CURB AND GUTTER SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY.

CONCRETE CURB & GUTTER EXPANSION JOINT DETAIL



"L" TYPE CURB AND GUTTER

NTS
Min. Concrete Strength = 2500 p.s.i.



- 1. ALL THICKNESS SHOWN ARE MINIMUM COMPACTED. 2. PAVEMENT SECTIONS ARE TO BE VERIFIED W/ GEOTECHNICAL ENGINEER BEFORE
- 3. CONTRACTOR SHALL COMPLY WITH ALL TALK MANUFACTURER'S SPECS FOR BACKFILL MATERIAL, PROCEDURE AND COMPACTION

NOTE: THE BACKFILL SHALL BE MADE IN 8" LAYERS AND

SHALL BE COMPACTED TO AT LEAST 98% OF STANDARD

CONCRETE PAVEMENT REPAIR DETAIL

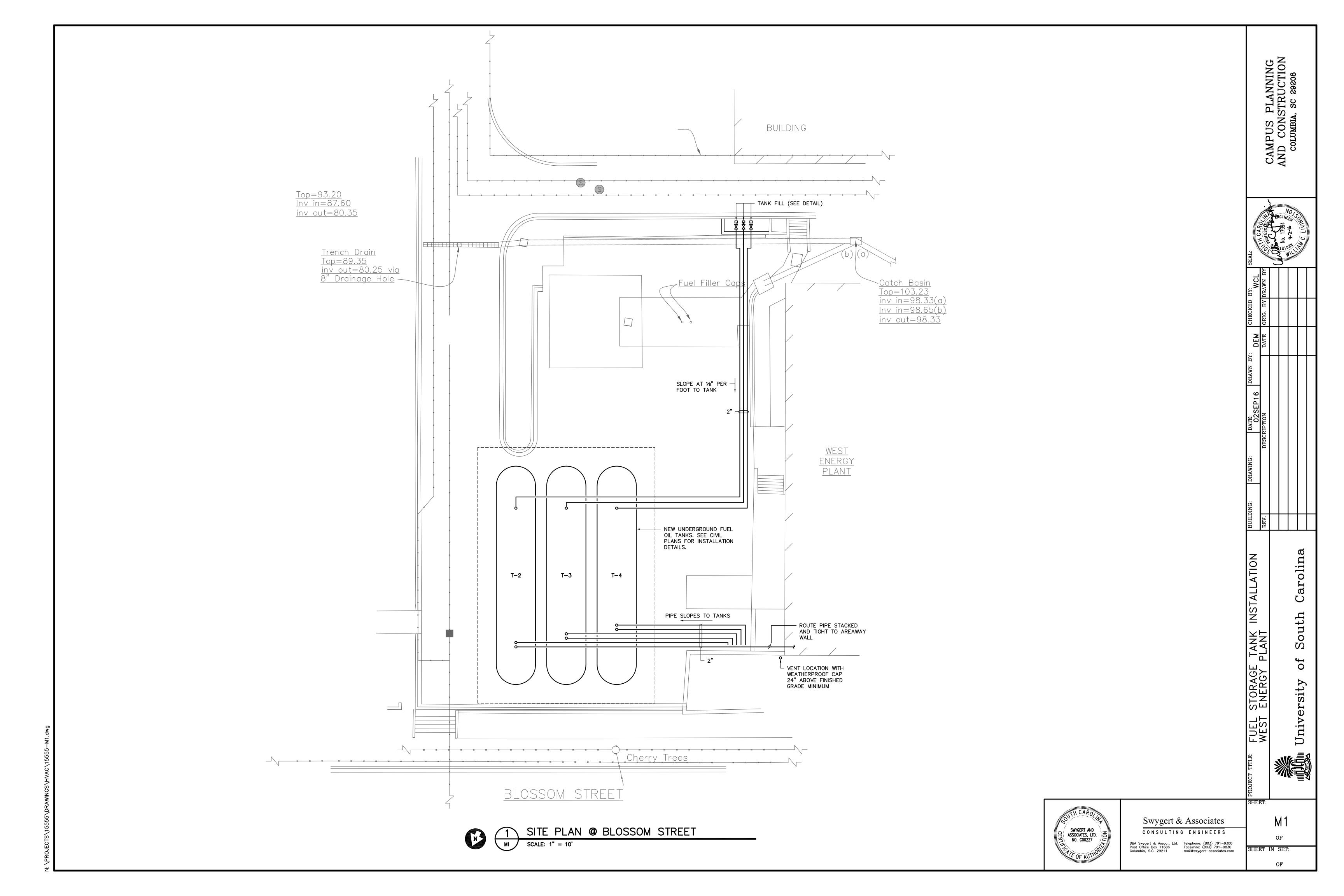
PROCTOR MAXIMUM DRY DENSITY.

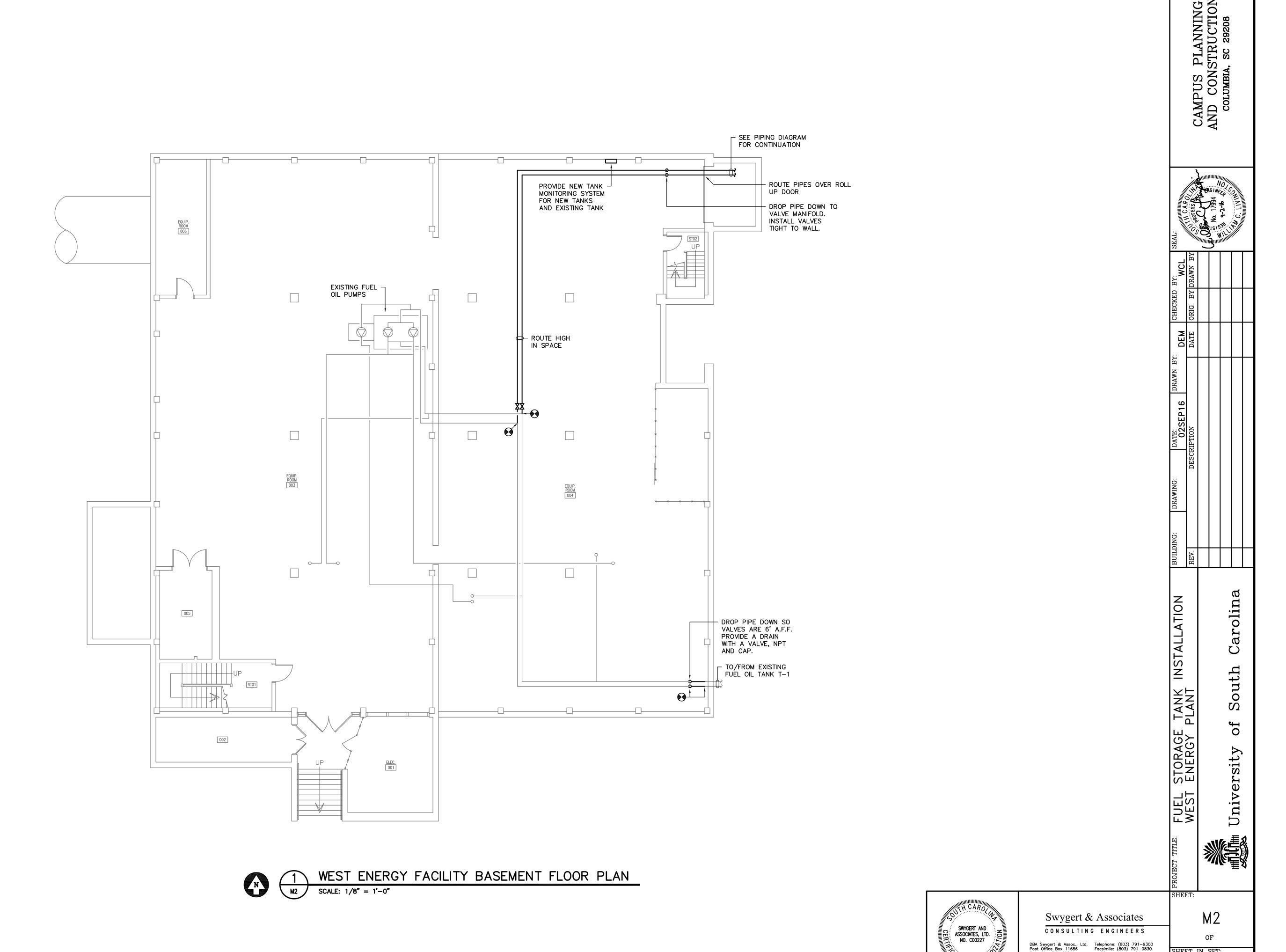
NTS VERIFY WITH GEOTECHNICAL REPORTS

CAAANI COX AND DINKINS, INC. No. C00294 Thinn's

DE EROSION Outh (∞

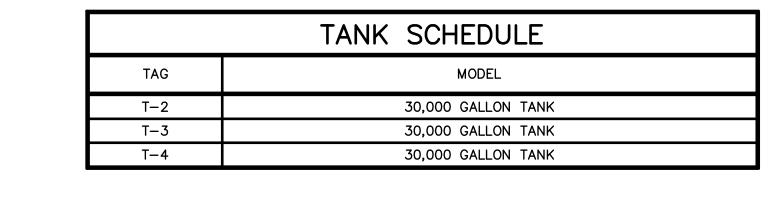
; Ш ∨ SOUNT SOUNT STATE OF THE STATE SE SITE,





SHEET IN SET:

OF



1)	VENT TO BUILDING 7	9 5	FINISHED GRADE
TO/FROM OR DUILDING OS 12	8		- 3'-0" MINIMUM, COORDINATE DEPTH WITH SLOPE FOR FILL LINE
4	6	10	
3		4	(13)

(11) FEEDER ROOT HYDROSTATIC SENSOR

(12) FEEDER ROOT PIPING SUMP SENSOR

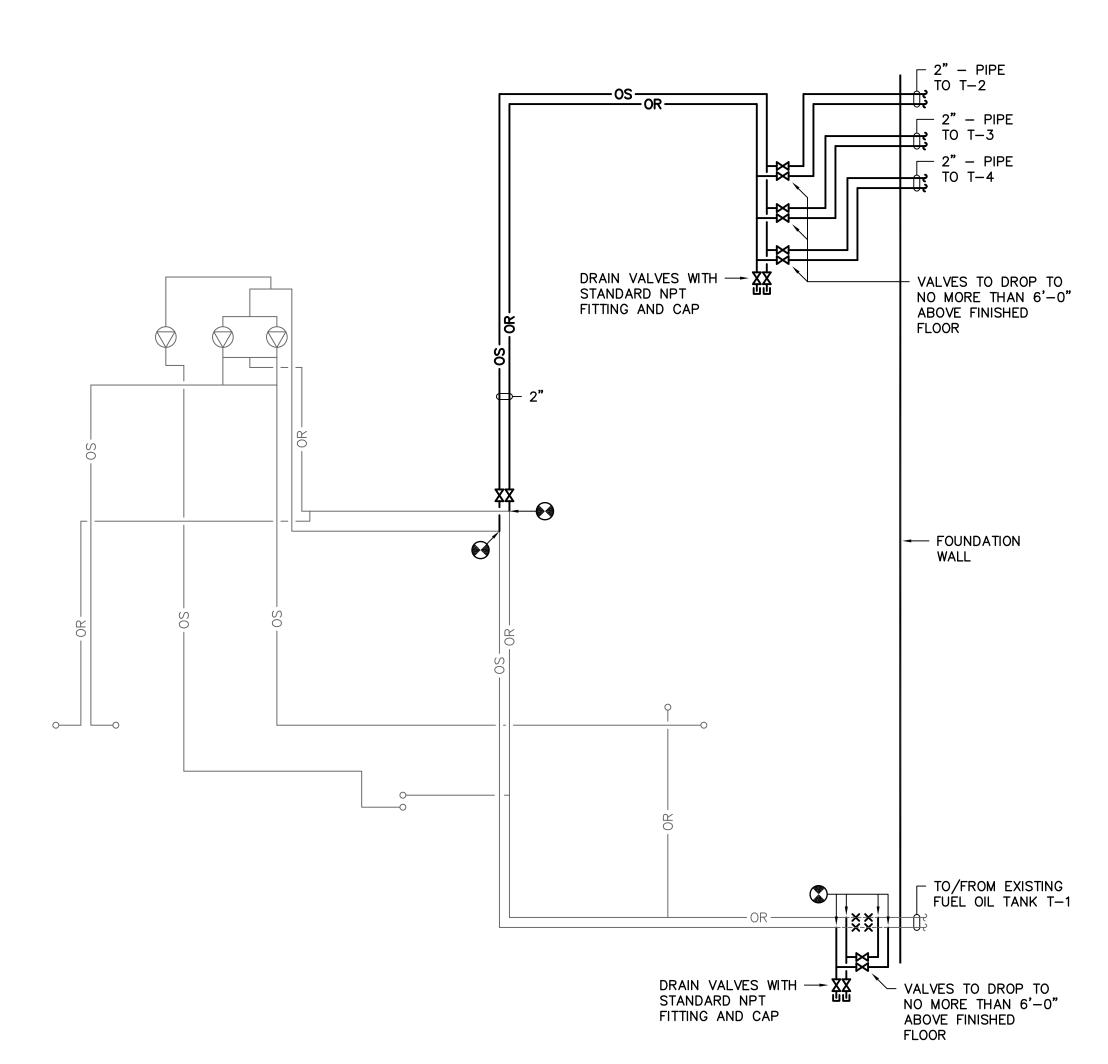
(13) DEADMAN ANCHOR BEAM (TYPICAL)

1) 39" MANHOLE COVER 2 42" TURBINE ENCLOSURE

3 FLOOR VALVE

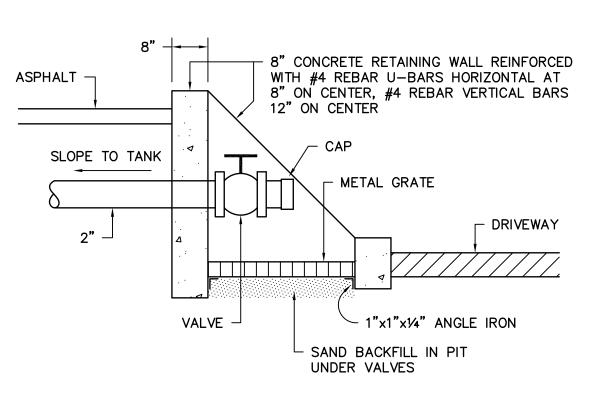
- 6) FEEDER ROOT PROBE (7) 12" MANHOLE COVER
- 4 ANCHOR STRAP (TYPICAL) (5) 18" MANHOLE COVER
- (8) EXTRACTOR VALVE
- 9) FILL SPILL CONTAINER
 - (10) OVERFILL PREVENTION VALVE
 - FUEL OIL TANK DETAIL

NO SCALE



PIPING DIAGRAM

NO SCALE



FILL DETAIL

NO SCALE

- BACKFILL AND FINISH PER CIVIL DRAWINGS - 1 FT. MINIMUM 36" MIN ROCK FREE BACKFILL -12" - 12" -6" MINIMUM SIDE TO SIDE CLEANED SAND BACKFILL 6" MIN FIBERGLASS DOUBLE -WALL PIPE

BACKFILL DETAIL

NO SCALE

GENERAL NOTES

- 1. VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
- 2. DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.

PLANNING VSTRUCTION IA, SC 29208

CAMPUS AND CONS COLUMBIA

arolin

 $_{
m of}$

STORAGE ENERGY

- 3. ALL PIPING LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
- 4. EXISTING PIPE, DUCTWORK, CONDUIT, ETC. THAT INTERFERES WITH THE ROUTING OF NEW SYSTEMS SHALL BE RELOCATED. THIS CONTRACTOR SHALL INCLUDE THE COST OF SUCH IN HIS BID UNLESS NOTED OTHERWISE.
- 5. SEE SITE PLAN FOR CONTINUATION OF UTILITIES.
- 6. PIPE SYSTEMS SHALL BE DRAINED AS REQUIRED FOR INSTALLATION OF WORK. UPON COMPLETION, SYSTEM SHALL BE FILLED AND VENTED OF ALL AIR.
- 7. ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
- 8. ALL VALVES AND SPECIALTIES SHALL BE LINE SIZE UNLESS NOTED OTHERWISE, USING ECCENTRIC REDUCERS ON PUMP SUCTION AND CONCENTRIC REDUCERS ON PUMP DISCHARGE. USE ECCENTRIC REDUCERS ON AUTOMATIC VALVES AS
- 9. ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS AND FURTHER SUPPORTS OR HANGERS SHALL BE PROVIDED TO PREVENT WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
- 10. THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.
- 11. THIS CONTRACTOR SHALL DO ALL CONTROL WIRING AND ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE ROUTED IN EMT CONDUIT.
- 12. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY DISMANTLING OF EQUIPMENT TO BE REMOVED. ITEMS REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF
- 13. THIS CONTRACTOR SHALL PATCH ALL WALLS AND FINISHES TO MATCH EXISTING WHERE ALL ITEMS OR EQUIPMENT ARE REMOVED.

	LEGEND
SYMBOL	DESCRIPTION
os	OIL SUPPLY LINE
~ —OR—→	OIL RETURN LINE
$\longrightarrow \bowtie$	SHUTOFF VALVE
۔۔۔،	PIPE TURNS TO, AWAY
•	CONNECTION POINT OF NEW TO EXISTING

Swygert & Associates SWYGERT AND ASSOCIATES, LTD. NO. C00227 CONSULTING ENGINEERS DBA Swygert & Assoc., Ltd.
Post Office Box 11686
Columbia, S.C. 29211

Telephone: (803) 791-9300
Facsimile: (803) 791-0830
mail@swygert-associates.com

OF HEET IN SET:

OF