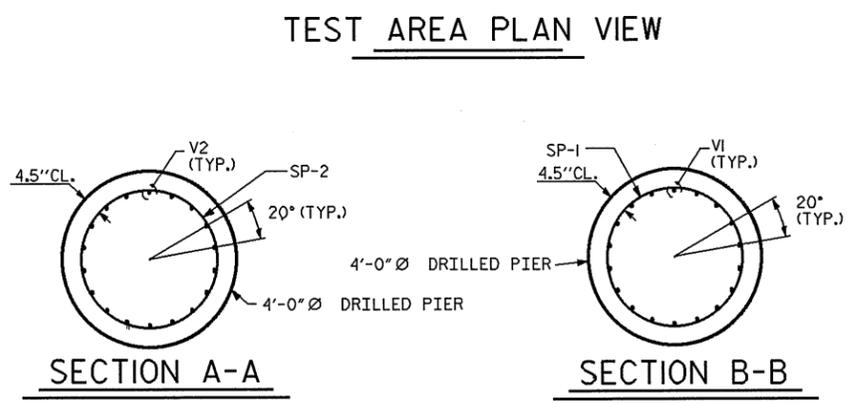
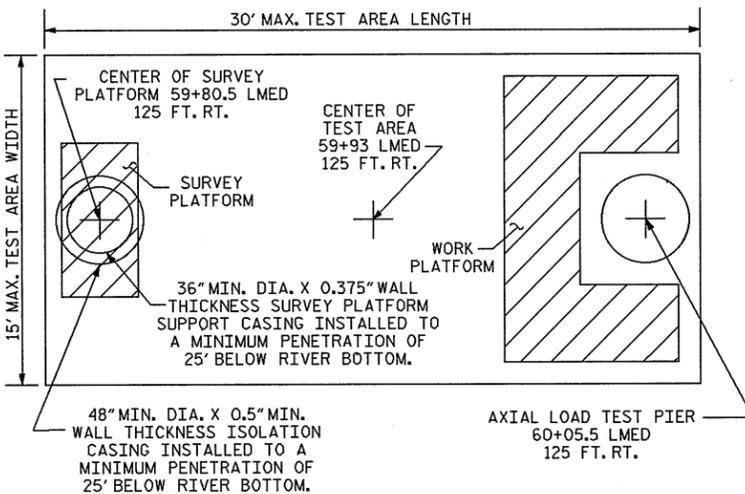
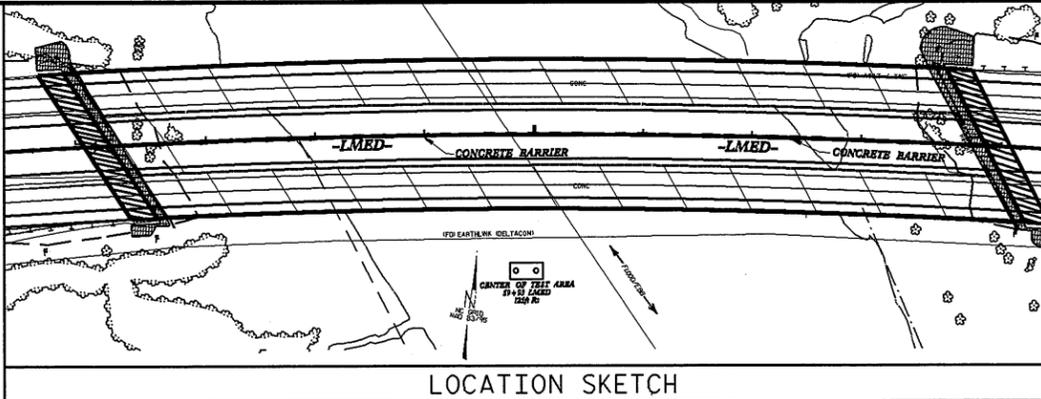
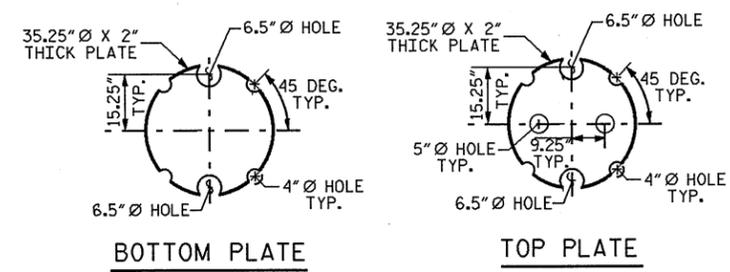


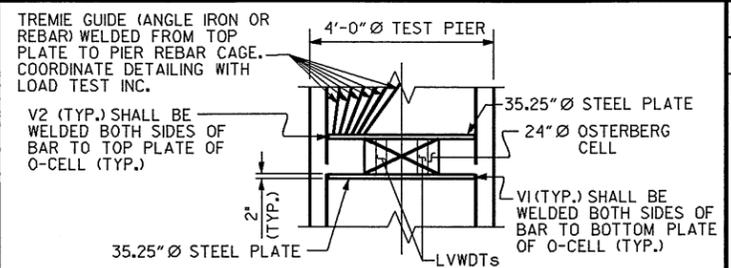
SG LEVEL \* DENOTES STRAIN GAUGE ELEVATIONS



FOR CLARITY, SECTIONS 'A-A' AND 'B-B' OMITTED DETAILS OF TEST INSTRUMENTATION.



35.25" Ø X 2" THICK PLATES  
(35.25" OR INSIDE DIAMETER OF REBAR CAGE)



- ASSEMBLY STEPS:
1. O-CELL FITTED WITH TOP AND BOTTOM STEEL PLATES.
  2. TOP AND BOTTOM STEEL PLATES OF O-CELL ASSEMBLY WELDED TO NON-CONTINUOUS REINFORCING CAGE WITH FILLET WELDS ON BOTH SIDES OF REBAR.
  3. CONSTRUCT TREMIE GUIDE TO DIRECT TREMIE PAST THE O-CELL ASSEMBLY.
  4. REINFORCING CAGE LOWERED INTO EXCAVATION AND SECURED AT REQUIRED ELEVATION.

DETAIL "B"

NOTES

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE V2 BARS ARE DETAILED WITH 1.5 FEET OF EXTRA LENGTH.

FOR DRILLED PIERS, SEE SECTION 411 OF THE NCDOT STANDARD SPECIFICATIONS.

PERMANENT STEEL CASING IS REQUIRED FOR AXIAL LOAD TEST PIER. DO NOT EXTEND PERMANENT STEEL CASING BELOW ELEVATION -55 FT.

SPT TESTING IS REQUIRED TO DETERMINE THE END BEARING CAPACITY OF THE AXIAL LOAD TEST PIER. SEE SECTION 411 OF THE NCDOT STANDARD SPECIFICATIONS.

POLYMER SLURRY IS REQUIRED FOR THE AXIAL LOAD TEST PIER. SEE SECTION 411 OF THE NCDOT STANDARD SPECIFICATIONS.

SID INSPECTIONS ARE REQUIRED TO INSPECT THE BOTTOM CLEANLINESS OF THE AXIAL LOAD TEST PIER. SEE SECTION 411 OF THE NCDOT STANDARD SPECIFICATIONS.

FOR AXIAL LOAD TEST SEE AXIAL LOAD TEST SPECIAL PROVISION.

CSL TUBES AND CSL TESTING ARE REQUIRED FOR THE AXIAL LOAD TEST PIER. SEE SECTION 411 OF THE NCDOT STANDARD SPECIFICATIONS.

AXIAL LOAD TEST PIER SHALL EXTEND TO ELEVATION -155 FT.

FOR MATERIAL PROPERTIES, SEE SECTION 411 OF THE NCDOT STANDARD SPECIFICATIONS.

CONSTRUCT AXIAL LOAD TEST PIER IN ACCORDANCE WITH THE SECTION 411 OF THE NCDOT STANDARD SPECIFICATIONS AND THE AXIAL LOAD TEST SPECIAL PROVISION.

SONIC CALIPER TESTING (SCT) IS REQUIRED TO INSPECT THE VERTICALITY AND DIAMETER OF THE AXIAL LOAD TEST PIER. SEE SONIC CALIPER TESTING SPECIAL PROVISION.

THE "SP" SPIRAL REINFORCING STEEL SHALL BE W31 OR 31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.

PUMP CONCRETE IN A TREMIE PIPE NO SMALLER THAN 5 INCHES IN DIAMETER THAT ALLOWS THE PIPE TO PASS THROUGH THE O-CELL BEARING PLATES TO THE BOTTOM OF THE AXIAL LOAD TEST PIER.

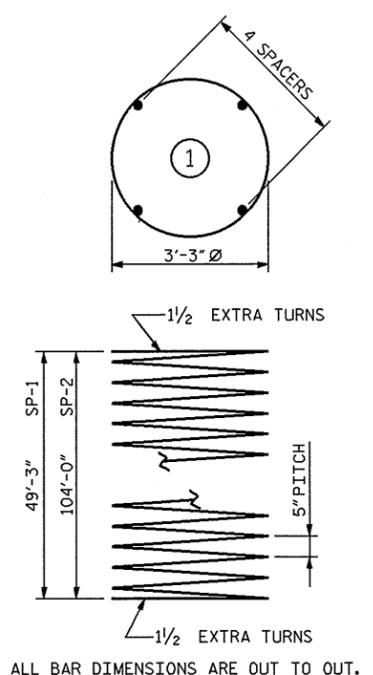
THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, DETAILING, AND CONSTRUCTING WORK PLATFORMS TO ALLOW ACCESS TO THE TOP OF THE TEST PIER AND TO SUPPORT SURVEY INSTRUMENTS. COORDINATE WITH LOAD TEST INC. ON THE DESIGN AND DETAILING OF THE WORK PLATFORM AND SURVEY PLATFORM.

WORK PLATFORM PILES OR CASINGS WITHIN 20' OF THE CENTER OF THE TEST PIER SHALL BE INSTALLED NO DEEPER THAN EL -55.0 FT.

SURVEY AND WORK PLATFORM SUPPORTING PILES OR CASINGS SHALL BE CONTAINED WITHIN THE 15' X 30' LOAD TEST AREA.

DO NOT REMOVE PILES OR CASINGS SUPPORTING WORK OR SURVEY PLATFORMS AFTER DECEMBER 31, 2013. PILES OR CASINGS REMAINING IN PLACE AFTER DECEMBER 31, 2013 WILL BE REMOVED BY THE R-3601 CONTRACTOR DURING FALL 2014. REMAINING PILES OR CASINGS WILL BE MADE AVAILABLE FOR PICK-UP BY THE LOAD TEST CONTRACTOR NO LATER THAN DECEMBER 31, 2014.

BAR TYPES



BILL OF MATERIAL

DEMONSTRATION PIER					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
V1	18	#9	STR	50'-0"	3060
V2	36	#9	STR	56'-4"	6895
SP-1	1	#5	1	1218'-9"	814
SP-2	1	#5	1	2540'-0"	1697

REINFORCING STEEL	(LBS.)	9955
SPIRAL REINFORCING STEEL	(LBS.)	2511
DRILLED PIER CONCRETE	(C.Y.)	72.6
4'-0" DIA. DRILLED PIER (AXIAL LOAD TEST PIER)	(LIN. FT.)	156.00
PERMANENT STEEL CASING FOR 4'-0" DIA. DRILLED PIER	(LIN. FT.)	58.00
SID INSPECTION	EACH	1
SPT INSPECTION	EACH	2
SONIC CALIPER TESTING	EACH	1
AXIAL LOAD TEST	EACH	1

US17-US74-US76-NC133  
OVER THE BRUNSWICK RIVER  
AXIAL LOAD TEST  
(SHEET 1 OF 1)

REVISIONS

NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

**GEOTECHNICAL ENGINEERING UNIT**  
 ■ EASTERN REGIONAL OFFICE  
 □ WESTERN REGIONAL OFFICE

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH