PIERS AND ABUTMENTS ARE PARALLEL

DIMENSIONS SHOWN ARE TO THE CENTERLINE
PILE AT THE BOTTOM OF THE CAP

▲ DENOTES DIRECTION OF 3:12 BATTER

NOTES:

FOR PILES, SEE PILES (LFD-ASD) SPECIAL PROVISIONS.

DRIVE PILES AT ABUTMENT NO.2 TO A REQUIRED BEARING CAPACITY OF 110 TONS PER PILE. THE REQUIRED BEARING CAPACITY IS EQUAL TO THE ALLOWABLE BEARING CAPACITY WITH A MINIMUM FACTOR OF SAFETY OF TWO.

THE ALLOWABLE BEARING CAPACITY FOR PILES AT ABUTMENT NO. 2 IS 55 TONS PER PILE.

FOR DRILLED PIERS, SEE LFD DRILLED PIERS SPECIAL PROVISIONS.

DRILLED PIERS AT ABUTMENT NO.1 ARE DESIGNED FOR BOTH SKIN FRICTION AND END BEARING, CHECK FIELD CONDITIONS FOR THE REQUIRED END BEARING CAPACITY OF 20 TSF.

DRILLED PIERS AT PIER NO.1, PIER NO.2 AND PIER NO.3 ARE DESIGNED FOR BOTH SKIN FRICTION AND END BEARING. CHECK FIELD CONDITIONS FOR THE REQUIRED END BEARING CAPACITY OF 20 TSF.

DRILLED PIERS AT ABUTMENT NO.1 ARE DESIGNED FOR AN APPLIED LOAD OF 220 TONS EACH AT THE TOP OF THE COLUMN.

DRILLED PIERS AT PIER NO.1, PIER NO.2 AND PIER NO.3 ARE DESIGNED FOR AN APPLIED LOAD OF 365 TONS EACH AT THE TOP OF THE COLUMN.

INSTALL DRILLED PIERS AT ABUTMENT NO.1 THAT EXTEND TO AN ELEVATION NO HIGHER THAN 382 FT AND SATISFY THE REQUIRED END BEARING CAPACITY.

INSTALL DRILLED PIERS AT PIER NO.1 THAT EXTEND TO AN ELEVATION NO HIGHER THAN 378 FT AND SATISFY THE REQUIRED END BEARING CAPACITY.

INSTALL DRILLED PIERS AT PIER NO.2 THAT EXTEND TO AN ELEVATION NO HIGHER THAN 372 FT AND SATISFY THE REQUIRED END BEARING CAPACITY.

367 FT (LT, CT) AND 371 FT (RT) AND SATISFY THE REQUIRED END BEARING CAPACITY.

DRILLED PIER EXCAVATIONS AT ABUTMENT NO.1 AND PIER NO.1 THROUGH PIER NO.3 WILL

DRILLED PIER EXCAVATIONS AT ABUTMENT NO.1 AND PIER NO.1 THROUGH PIER NO.3 WILL EXTEND INTO MATERIAL THAT DETERIORATES WHEN EXPOSED TO THE ELEMENTS. CHECK FIELD CONDITIONS FOR THE REQUIRED END BEARING CAPACITY AND PLACE CONCRETE IMMEDIATELY AFTER THE EXCAVATION IS COMPLETED.

INSTALL DRILLED PIERS AT PIER NO. 3 THAT EXTEND TO AN ELEVATION NO HIGHER THAN

SPT TESTING IS REQUIRED FOR DRILLED PIERS AT ABUTMENT NO.1 AND PIER NO.3.

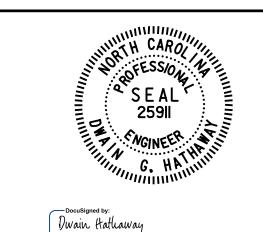
SID INSPECTIONS MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SID INSPECTIONS.

CSL TUBES AND TESTING ARE REQUIRED FOR DRILLED PIERS AT ABUTMENT NO.1 AND PIER NO.1 THROUGH PIER NO.3.

PROJECT NO. U-3308

DURHAM COLL

STATION: 24+55.20 -LALT-



DEPARTMENT OF TRANSPORTATION
RALEIGH

STATE OF NORTH CAROLINA

GENERAL DRAWING

FOR BRIDGE ON CSXT RAILWAY OVER ALSTON AVE. BETWEEN NC 147 AND ANGIER AVE.

Michael Baker

Michael Baker Engineering
8000 Regency Parkway, Suite 600
Cary, North Carolina 276518
NC License No.: F-1084

REVISIONS

NO. BY: DATE: NO. BY: DATE: S4-2

TOTAL SHEETS

68

DRAWN BY: M. D. MAYHEW DATE: 12-31-13
CHECKED BY: S. A. DENNEY DATE: 2-24-14