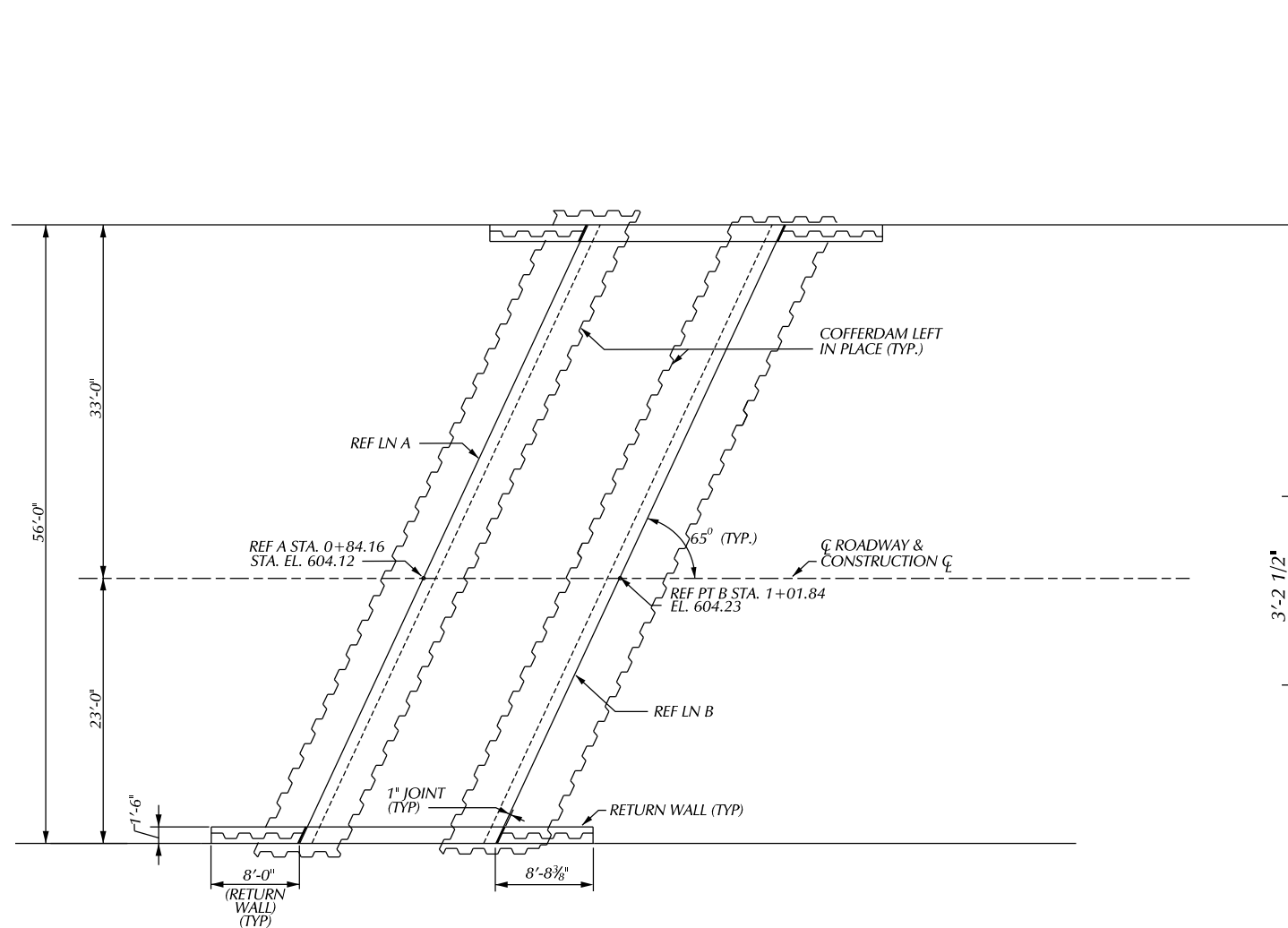


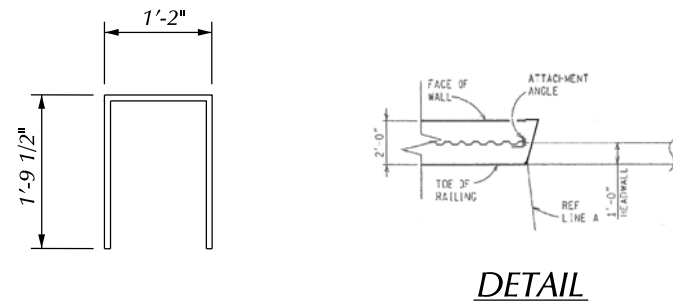


SCALE	HORIZONTAL	BOOK NO.	PG.	LEVEL DATE	BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.
	VERTICAL	PLANS COMPLETED			

BENCH MARKS ELEV



PLAN OF RETURN WALLS



ED040409

DETAIL

SUBSTRUCTURE CONCRETE QUANTITIES	
POUR	AMT (CYDS)

MIN. LAP TABLE	

MISCELLANEOUS QUANTITIES	
— SFT	STEEL SHEET PILING, PERMANENT
— CYD	SUBSTRUCTURE CONC.
— SYD	TEXTURING CONC.
— LB	REINFORCEMENT STEEL, EXPOXY COATED

**NOTES:**  
 ALL PERMANENT STEEL SHEET PILING SHALL BE ASTM A-572, PZ-27, WHERE ALLOWED BY THE ENGINEER, SELECT ALTERNATE HOT ROLLED SHEET PILING WITH A NOMINAL SECTION MODULUS OF AT LEAST 30.2 CUBIC INCHES PER FOOT OF WALL.

ALL WALERS, TIE RODS, CONNECTION APPARATUS, LABOR AND OTHER MATERIALS REQUIRED FOR CONSTRUCTION OF THE PERMANENT STEEL SHEET PILING WITH TIE RODS WILL NOT BE PAID FOR SEPARATELY, BUT INCLUDED IN THE PAVEMENT FOR "STEEL SHEET PILING, PERMANENT".

TIE RODS SHALL BE PLACED AND TIGHTENED BEFORE CASTING THE CONCRETE FACING.

TIE RODS SHALL CONFORM TO ASTM A615 GRADE 75.

THE USE OF VIBRATORY HAMMERS FOR INSTALLING SHEET PILINGS SHALL NOT BE ALLOWED.

THE ANCHOR SHEETING AND THE SHEETING FOR THE SOUTHWEST RETURNWALL SHALL BE INSTALLED AT THE SAME TIME DUE TO GEOTECHNICAL CONCERNS.

TOP ROW OF SHEAR STUDS SHALL BE 3" BELOW THE TOP OF SHEETING AND ADDITIONAL ROWS SHALL BE SPACED VERTICALLY AT 1'-6" MAX. BOTTOM ROW OF STUDS SHALL BE 3" ABOVE THE BOTTOM OF CONCRETE ELEVATION.

SHEAR STUDS SHALL NOT BE PAID SEPARATELY BUT ARE INCLUDED IN PAYMENT FOR "STEEL SHEET PILING, PERMANENT".

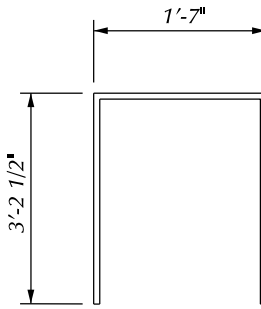
INSTALL RAILING REINFORCEMENT AND CONDUIT FOR LIGHT STANDARDS PRIOR TO POURING CONCRETE CAP ON RETAINING WALL.

THE CONTRACTOR SHALL PROVIDE & INSTALL A MAT OF 6X6-D6XD6 WELDED WIRE FABRIC IN THE FRONT FACE OF SHEET PILING CAP WHERE STANDARD REINFORCEMENT IS NOT SHOWN. THE COST TO PROVIDE AND INSTALL THE WIRE FABRIC IS INCLUDED IN "STEEL SHEET PILING, PERMANENT". PROVIDE A MINIMUM OF 2" OF CLEAR COVER ON ALL SIDES.

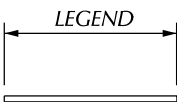
PRIOR TO DRIVING PERMANENT SHEETING, THE CONTRACTOR SHALL ANCHOR L 6X6X1/2" ANGLES TO THE PEDESTAL WALL, CULVERT AND HEADWALL TO USE AS A DRIVING GUIDE FOR THE SHEET PILING. ANGLES SHALL BE ATTACHED UTILIZING EITHER 3/4" ADHESIVE ANCHORED OR 3/4" EXPANSION ANCHORED BOLTS CHOSEN FROM THE QUALIFIED PRODUCT LIST.

AFTER DRIVING PILING, ATTACHED WEB OF PILING TO OUTSTANDING LEG OF ANGLES WITH 3/4" HIGH STRENGTH BOLTS. ALL WORK AND MATERIALS FOR ANGLES AND CONNECTORS ARE INCLUDED IN "STEEL SHEET PILING, PERMANENT".

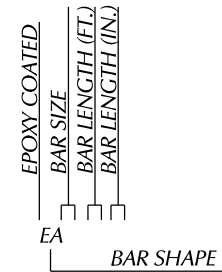
LOW TEMPERATURE PROTECTION OF CONCRETE SHALL BE APPLIED ACCORDING TO SECTION 706.030 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION. LOW TEMPERATURE PROTECTION OF CONCRETE WALL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE BID ITEM "SUBSTRUCTURE CONC."



ED060800



EA BAR



BAR LEGEND

RETAINING WALL ELEVATIONS		
STA.	TOP/ SHEET	TOP/WALL

EPOXY COATED STEEL REINFORCEMENT		
BAR	NO. REQ'D	TOTAL WT FTG B

BY: _____ CHECKED BY: _____ APPROVED: _____ CITY OF DETROIT CITY ENGINEERING DIVISION - D.P.W. BUREAUS OF STREETS AND HIGHWAYS FOR				WEST PARKWAY CULVERT OVER ROUGE RIVER  SHEET PILE WALL DETAILS	SHEET OF SHEETS CONTRACT NO. ASSIGNMENT NO. DATE
PLAN GRADE ESTIMATE FINAL	DR CK DATE	APPROV DATE	REVISIONS	REVISIONS	REVISIONS