ITEM 507 - STEEL PILES HP10X42, FURNISHED
ITEM 507 - STEEL PILES HP10X42, DRIVEN

DRIVE PILES TO REFUSAL ON BEDROCK. REFUSAL TO BE OBTAINED BY PENETRATING SOFT BEDROCK FOR SEVERAL INCHES TO A MINIMUM RESISTANCE OF 20 BLOWS PER INCH OR BY CONTACTING HARD BEDROCK AND THE PILE RECEIVING AT LEAST 20 BLOWS. SELECT THE HAMMER SIZE TO ACHIEVE THE REQUIRED DEPTH TO BEDROCK AND REFUSAL.

TURNER ROAD BRIDGE:
THE ULTIMATE BEARING VALUE IS 55 TONS PER PILE FOR THE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 89 TONS PER PILE FOR THE PIER PILES.

WESTBOUND:
REAR ABUTMENT BACK PILES: 3 PILES 35 FEET LONG, ORDER LENGTH
REAR ABUTMENT FRONT PILES: 6 PILES 35 FEET LONG, ORDER LENGTH
FORWARD ABUTMENT BACK PILES: 3 PILES 40 FEET LONG, ORDER LENGTH
FORWARD ABUTMENT FRONT PILES: 6 PILES 30 FEET LONG, ORDER LENGTH

EASTBOUND:
REAR ABUTMENT BACK PILES: 3 PILES 40 FEET LONG, ORDER LENGTH
REAR ABUTMENT FRONT PILES: 6 PILES 35 FEET LONG, ORDER LENGTH
FORWARD ABUTMENT BACK PILES: 3 PILES 40 FEET LONG, ORDER LENGTH
FORWARD ABUTMENT FRONT PILES: 6 PILES 35 FEET LONG, ORDER LENGTH

PIER 1 PILES: 16 PILES 20 FEET LONG, ORDER LENGTH
PIER 2 PILES: 16 PILES 20 FEET LONG, ORDER LENGTH

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KIRK ROAD BRIDGE:
THE ULTIMATE BEARING VALUE IS 55 TONS PER PILE FOR THE ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 99 TONS PER PILE FOR THE PIER PILES.

WESTBOUND:
REAR ABUTMENT BACK PILES: 3 PILES 50 FEET LONG, ORDER LENGTH
REAR ABUTMENT FRONT PILES: 5 PILES 45 FEET LONG, ORDER LENGTH
FORWARD ABUTMENT BACK PILES: 3 PILES 55 FEET LONG, ORDER LENGTH
FORWARD ABUTMENT FRONT PILES: 5 PILES 50 FEET LONG, ORDER LENGTH

EASTBOUND:
REAR ABUTMENT BACK PILES: 3 PILES 50 FEET LONG, ORDER LENGTH
REAR ABUTMENT FRONT PILES: 5 PILES 45 FEET LONG, ORDER LENGTH
FORWARD ABUTMENT BACK PILES: 3 PILES 55 FEET LONG, ORDER LENGTH
FORWARD ABUTMENT FRONT PILES: 5 PILES 50 FEET LONG, ORDER LENGTH

PIER 1 PILES: 12 PILES 25 FEET LONG, ORDER LENGTH
PIER 2 PILES: 12 PILES 25 FEET LONG, ORDER LENGTH

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ITEM 509 - REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE COMMISSION WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. AN ESTIMATED QUANTITY OF 500 POUNDS HAS BEEN INCLUDED FOR THIS WORK. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE COMMISSION.

MEASUREMENT AND PAYMENT:
PAYMENT SHALL INCLUDE FULL COMPENSATION FOR MATERIAL, TOOLS, EQUIPMENT, LABOR, AND ACCESS. PAYMENT FOR CUTTING, GRINDING, BENDING, PLACEMENT, AND CLEANING AS PART OF THIS REPAIR IS CONSIDERED INCIDENTAL FOR PAYMENT IN THIS ITEM. THE ACCEPTED QUANTITIES FOR THE COMPLETED WORK AS DESCRIBED WILL BE PAID FOR USING THE FOLLOWING CONTRACT ITEM (PAY ITEM).

ITEM	UNIT	DESCRIPTION
509	POUND	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL

ITEM SP 516A - CRACK REPAIR

A CONTINGENCY QUANTITY OF 25 FEET HAS BEEN INCLUDED IN THE PLANS AND SHALL BE USED TO REPAIR THE CONCRETE SUBSTRUCTURE UNITS AS DIRECTED BY THE ENGINEER.

MEASUREMENT AND PAYMENT:
PAYMENT SHALL INCLUDE FULL COMPENSATION FOR LABOR, MATERIALS, TOOLS, EQUIPMENT, AND ACCESS TO COMPLETE THE REPAIR. THE ACCEPTED QUANTITIES FOR THE COMPLETED WORK AS DESCRIBED WILL BE PAID FOR USING THE FOLLOWING CONTRACT ITEM (PAY ITEM).

ITEM	UNIT	DESCRIPTION
SP 516A	FOOT	CRACK REPAIR

ITEM SP 536 - CONCRETE WEATHERPROOFING

ITEM SP 536 - CONCRETE WEATHERPROOFING, SHALL BE APPLIED TO THE FOLLOWING EXPOSED CONCRETE SURFACES OF THE BRIDGE:

-THE TOP OF DECK WITHIN THE BRIDGE LIMITS, ABUTMENT SLABS, AND APPROACH SLABS
-THE UNDERSIDE OF THE DECK (DECK OVERHANG) EXTENDING FROM THE EXTERIOR BASE OF THE PARAPET TO THE EXTERIOR BEAM FLANGE OF THE FASCIA BEAM WITHIN THE BRIDGE LIMITS
-ALL EXPOSED CONCRETE SURFACES OF ALL ABUTMENTS AND PIERS

SEALING SHALL NOT BE DONE UNTIL ALL CONCRETE PATCHING REPAIRS HAVE BEEN COMPLETED AND CURED.

CARE SHALL BE TAKEN NOT TO APPLY WEATHERPROOFING ON CONSTRUCTION JOINT SURFACES, SURFACES TO RECEIVE JOINT SEALER, OR FASCIA BEAM PAINT.

MEASUREMENT AND PAYMENT:
PAYMENT SHALL INCLUDE FULL COMPENSATION FOR MATERIAL, TOOLS, EQUIPMENT, LABOR, AND ACCESS TO COMPLETE CONCRETE WEATHERPROOFING. THE ACCEPTED QUANTITIES FOR THE COMPLETED WORK AS DESCRIBED WILL BE PAID FOR USING THE FOLLOWING CONTRACT ITEM (PAY ITEM):

ITEM	UNIT	DESCRIPTION
SP 536	SQ YD	CONCRETE WEATHERPROOFING, SUBSTRUCTURE
SP 536	SQ YD	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS, AND APPROACH SLABS