DRAINAGE AND EROSION CONTROL

ITEM SPECIAL - MISCELLANEOUS METAL

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. ALL MATERIALS SHALL MEET ITEM 604 OF THE SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATION 932 AND SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM SPECIAL - MISCELLANEOUS METAL /,000 LBS.

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTINGS AT THE EXPENSE OF THE CONTRACTOR.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES
CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL
FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT
WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE
MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION
REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL
INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE
CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR
TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 603 CONDUIT ITEMS.

CASTINGS ADJUSTED TO GRADE

ALL CASTINGS SHALL BE ADJUSTED TO THE FINISHED ROADWAY
ELEVATION BY THE CONTRACTOR. THE DEPTH OF AN ADJUST TO GRADE
SHALL BE I FT OR LESS AND THE WORK SHALL BE AS OUTLINED IN
604.03. ANY WORK BEYOND I FT DEPTH SHALL BE PAID UNDER THE
ITEM 604 - CATCH BASIN, MONUMENT BOX OR MANHOLE RECONSTRUCTED
TO GRADE. THE TIME BETWEEN ADJUSTING THE CASTINGS AND
RESURFACING SHALL BE KEPT TO AN ABSOLUTE MINIMUM. NO
ADJUSTING RINGS SHALL BE PERMITTED. THE FOLLOWING QUANTITIES
HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 604-CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN. . <u>I</u> EACH ITEM 604-MANHOLE ADJUSTED TO GRADE, AS PER PLAN. . . . <u>I</u> EACH

ITEM 604 - CATCH BASIN, MONUMENT BOX OR MANHOLE RECONSTRUCTED TO GRADE

THE CONTRACTOR AND FIELD ENGINEER SHALL FIELD CHECK ALL EXISTING CATCH BASINS, MONUMENT BOXES OR MANHOLES LOCATED WITHIN THE LIMITS OF THE THE PROJECT. ANY CATCH BASIN, MONUMENT BOX OR MANHOLE FOUND THAT EXHIBITS SUBTANTIAL DETERIORATION AND REQUIRES MORE WORK THAN IS SPECIFIED UNDER CASTINGS ADJUSTED TO GRADE, SHALL BE RECONSTRUCTED TO GRADE AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 604 - CATCH BASIN, RECONSTRUCTED TO GRADE . . . <u>I</u> EACH ITEM 604 - MANHOLE, RECONSTRUCTED TO GRADE I EACH

ITEM 203 - ROADWAY, MISC.: DITCH CLEANOUT

THIS WORK SHALL CONSIST OF RE-ESTABLISHING THE CROSS-SECTION OF AN EXISTING DITCH. SURPLUS OR UNSUITABLE MATERIAL, AS DETERMINED BY THE ENGINEER, SHALL BE DISPOSED OF AS PER 203.05. EMBANKMENT REQUIRED FOR ERODED CONDITIONS SHALL MEET THE REQUIREMENTS OF 203.07 EXCEPT THAT THE COMPACTION REQUIREMENTS ARE WAIVED.

THE ORIGINAL DITCH CROSS SECTION AND GRADE SHALL BE RE-ESTABLISHED, AS SHOWN ON THE PREVIOUS CONSTRUCTION PLANS REFERENCED IN THE "EXISTING TYPICAL SECTIONS" NOTE ON SHT 9. THE DITCHES SHALL BE SEEDED AND MULCHED AS PER ITEM 659, INCLUDING FERTILIZER. THE LOCATIONS FOR THIS WORK SHALL BE AS DIRECTED BY THE ENGINEER.

MEASUERMENT OF THE DITCH CLEANOUT SHALL BE THE ACTUAL CUBIC YARD MEASURED BY THE PROJECT ENGINEER.

IN ADDITION, THIS ITEM SHALL INCLUDE THE INSTALLATION OF ITEM 670 - DITCH EROSION PROTECTION IN ALL DISTURBED DITCHES. PAYMENT FOR THIS ITEM SHALL BE INCLUDED IN THE COST FOR THE DITCH CLEANOUT. THIS ITEM SHALL BE PLACED WITHIN 7 DAYS OF THE DITCH OPERATION. THE 7 DAY LIMIT SHALL BEGIN WHEN THE CONTRACTOR FINISHES A CONTINUOUS CLEANOUT LENGTH AND MOVES TO ANOTHER LOCATION.

ALL MATERIALS REMOVED FROM THE DITCHES MUST BE IMMEDIATELY REMOVED TO AN UPLAND SITE AND STABILIZED (I.E. SEEDED) TO PREVENT REDISTRIBUTION INTO ANY WATERS OF THE UNITED STATES. (IMMEDIATE REMOVAL IS DEFINED BY THE CORPS AS DEPOSITING THE REMOVED MATERIALS DIRECTLY INTO A TRUCK AND REMOVING THE MATERIAL FROM THE SITE: PLACEMENT OF REMOVED MATERIALS INTO A WETLAND OR ON THE BANKS OF A STREAM EVEN TEMPORARILY IS CONSIDERED A FILL AND REQUIRES A PERMIT ACTION).

PAYMENT FOR THE ABOVE WORK, INCLUDING EARTHWORK, SEEDING, MULCHING, FERTILIZER, AND ALL LABOR, EQUIPMENT AND INCIDENTALS SHALL BE MADE AT THE UNIT BID FOR ITEM 203, ROADWAY, MISC.: DITCH CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED FOR USE AS DIRECTED BY THE ENGINEER TO PERFORM THE ABOVE DETAILED WORK:

ITEM 203 - ROADWAY, MISC.: DITCH CLEANOUT . . 50 CU. YD.

ITEM 603 - CONDUIT BORED OR JACKED, 6" TYPE B

AT LOCATIONS SHOWN IN THE PLANS, THE EXISTING UNDERDRAIN IS CONNECTED TO AN EXISTING 6" CONDUIT RUNNING UNDER THE ROADWAY. THE EXISTING 6" CONDUIT IS CONSIDERED TO BE NON-FUNCTIONAL. THE FOLLOWING ESTIMATED QUANTITIES SHALL BE USED AS DIRECTED BY THE ENGINEER TO ESTABLISH FLOW EITHER BY BORING OR JACKING A PIPE UNDER THE EXISTING PAVEMENT OR BY OUTLETTING THE UNDERDRAIN AT A LOCATION OUTSIDE THE PAVEMENT:

ITEM	DESCRIPTION	QUANTITY	UNIT
603	6" CONDUIT, TYPE B	<u>50</u>	LIN FT
603	CONDUIT BORED OR JACKED: 6" TYPE B .	<u>100</u>	LIN FT
604	PRECAST REINFORCED CONCRETE OUTLET .	<u>2</u>	EACH
605	6" CONDUIT, TYPE F, 707.14 NON-PERFOR	ATED	
	ASTM D3034, SDR35, 707.42 OR 707.33	<u>100</u>	LIN FT

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 870 - SOIL ANALYSIS TEST	<u>2</u> EACH
ITEM 870 - PLACING TOPSOIL	<u>650</u> CU. YD.
ITEM 870 - COMMERCIAL FERTILIZER	<u> 1.5</u> TON
ITEM 870 - AGRICULTURAL LIME	<u>3</u> TON
ITEM 870 - WATER	<u>32</u> M GAL
ITEM 870 - MOWING	<u>/3</u> M SQ. FT.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING, ARE BASED ON THESE LIMITS.

UNDERDRAIN SUPPLEMENT

THE EXISTING UNDERDRAIN SYSTEM IS TO BE SUPPLEMENTED
THROUGHOUT THIS PROJECT WITH ITEM 605 - 6" SHALLOW PIPE
UNDERDRAIN WITH FABRIC WRAP, AS PER PLAN. THE NEW UNDERDRAINS
SHALL BE INSTALLED AT THE EDGE OF THE PROPOSED ASPHALT
PAVEMENT AS SHOWN ON THE TYPICALS.

THE FLOWLINE ELEVATIONS SHOWN IN THE PLANS ARE APPROXIMATE.
THE PROPOSED UNDERDRAINS SHALL BE PLACED AT A DEPTH AS
DETAILED ON THE TYPICAL SECTION.

NEW UNDERDRAIN AT THE EDGE OF ASPHALT PAVEMENT SHALL BE
OUTLETTED IN THE SAME LOCATIONS AS THE EXISTING, WHERE
APPLICABLE. THE OUTLETS SHALL BE CONSTRUCTED AT THE SAME LINE
AND GRADE AS THE EXISTING OUTLET CONDUITS AND SHALL CONNECT
BOTH THE OLD AND NEW UNDERDRAIN SYSTEMS INTO THE OUTLET. THE
COST FOR ALL PIPE BENDS AND BRANCHES TO CONNECT THE EXISTING
AND PROPOSED UNDERDRAIN SHALL BE INCLUDED IN THE UNIT BID
PRICE FOR ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN WITH FABRIC
WRAP, AS PER PLAN. THE OUTLET CONDUIT SHALL BE ITEM 603 - 6"
CONDUIT, TYPE F, 707.41 NON-PERFORATED ASTM D3034, SDR35,
707.42 OR 707.33.

