

GENERAL NOTES

ITEM 407 - TACK COAT

THE RATE OF APPLICATION OF 407 TACK COAT SHALL BE SUBJECT TO ADJUSTMENT, AS DIRECTED BY THE ENGINEER. PLAN QUANTITIES INDICATE AN AVERAGE APPLICATION RATE OF 0.075 GALLONS PER SQUARE YARD OF TACK COAT FOR ESTIMATING PURPOSES ONLY.

ITEM 203 - REMOVAL & REPLACEMENT OF WET SUBGRADE MATERIALS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO PROVIDE FOR THE REMOVAL AND REPLACEMENT OF WET SUBGRADE MATERIALS ENCOUNTERED DURING EXCAVATION IN ACCORDANCE WITH 203.04. THE WORK SHALL INCLUDE THE SUBSEQUENT PLACEMENT OF SUITABLE EMBANKMENT COMPACTED AS PER ITEM 203. ALL WORK SHALL BE AS DIRECTED BY THE ENGINEER.

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	2500	CU. YDS.
ITEM 203 - EMBANKMENT	2500	CU. YDS.

DRAINAGE

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 THE EXISTING SEWERS WITHIN THE WORK LIMITS 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 INSPECTIONS 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 UNIT PRICE BID FOR THE PERTINENT 603 CONDUIT ITEMS OF THE CONTRACT.

CONNECTION TO EXISTING PIPE

WHERE THE PLANS PROVIDE FOR PROPOSED CONDUIT TO BE CONNECTED TO, OR TO CROSS EITHER OVER OR UNDER AN EXISTING SEWER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE EXISTING PIPE BOTH AS TO LINE AND GRADE BEFORE HE STARTS TO LAY THE PROPOSED CONDUIT.

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

ITEM 604, FRAMES AND COVERS FURNISHED FOR EXISTING CASTINGS

ALL EXISTING STRUCTURES TO BE ADJUSTED TO GRADE HAVE BEEN FIELD CHECKED TO DETERMINE THAT THE EXISTING CASTINGS ARE SUITABLE FOR SALVAGE AND REUSE. HOWEVER, EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE, AS DETERMINED BY THE ENGINEER, DURING THE CONSTRUCTION OF THIS PROJECT. TO PROVIDE FOR THIS CONTINGENCY, AN ESTIMATED QUANTITY OF THE FOLLOWING HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH FOR THE PARTICULAR STRUCTURES IN QUESTION. STORM AND SANITARY MANHOLES SHALL HAVE NEENAH R-1782 FRAME AND LID, OR EAST JORDAN 1710 FRAME AND LID.

ITEM 604	MANHOLE COVERS, AS PER PLAN	10	EACH
ITEM 604	MANHOLE FRAMES, AS PER PLAN	10	EACH

THE CONTRACTOR IS CAUTIONED TO USE EXTREME CARE IN THE REMOVAL, STORAGE AND REPLACEMENT OF ALL EXISTING CASTINGS. ANY CASTINGS DAMAGED BY THE NEGLIGENCE OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, SHALL BE REPLACED WITH THE PROPER NEW CASTING BY THE CONTRACTOR, AT NO EXPENSE TO THE STATE. THE CONTRACTOR SHALL NOT ORDER ANY OF THE ABOVE CASTINGS UNTIL DIRECTED BY THE ENGINEER AND IN THE EVENT NO REPLACEMENT CASTINGS ARE REQUIRED, THE ITEM SHALL BE NONPERFORMED.

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

THE CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY CITY FORCES.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PERTINENT 202 ITEMS OF THE CONTRACT.

HOUSE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS OR YARD DRAINS, DISTURBED BY THE PROPOSED WORK, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING TO A STORM SEWER, MANHOLE, CATCH BASIN, THROUGH THE CURB.

PROPOSED HOUSE CONNECTIONS WILL ALSO BE CONSTRUCTED AS PART OF THIS PROJECT WHERE THERE ARE NO EXISTING CONNECTIONS. THE PROPOSED CONNECTION SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING TO A STORM SEWER, MENHOLE OR CATCH BASIN.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENT AND PROPOSED CONNECTIONS WILL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION.

AN ESTIMATED QUANTITY HAS BEEN TABULATED ON SHEET 68 THROUGH 70 AND HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE.

THE LOCATIONS QUANTITIES SPECIFIED IN THE HOUSE CONNECTION SUB-SUMMARY ARE APPROXIMATE AND ARE TO BE USED FOR ESTIMATING PURPOSES ONLY. THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER.

NONE OF THESE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

FARM DRAINS

ALL FARM DRAINS, WHICH ARE ENCOUNTERED DURING CONSTRUCTION, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS UNDER THE DIRECTION OF THE ENGINEER. EXISTING COLLECTORS WHICH ARE LOCATED BELOW THE ROADWAY DITCH ELEVATIONS, AND WHICH CROSS THE ROADWAY, SHALL BE REPLACED WITHIN THE CONSTRUCTION LIMITS BY ITEM 603 CONDUIT, TYPE B, ONE COMMERCIAL SIZE LARGER THAN THE EXISTING CONDUIT.

EXISTING COLLECTORS AND ISOLATED FARM DRAINS, WHICH ARE ENCOUNTERED ABOVE THE ELEVATION OF THE ROADWAY DITCHES, SHALL BE OUTLETTED INTO THE ROADWAY DITCH BY ITEM 603 TYPE F CONDUIT. THE OPTIMUM OUTLET ELEVATION SHALL BE, IF POSSIBLE, ONE FOOT ABOVE THE FLOWLINE ELEVATION OF THE DITCH. LATERAL TILE FIELDS WHICH CROSS THE ROADWAY SHALL BE INTERCEPTED BY ITEM 603, TYPE E CONDUIT, AND CARRIED IN A LONGITUDINAL DIRECTION TO AN ADEQUATE OUTLET OR ROADWAY CROSSING.

THE LOCATION, TYPE, SIZE AND GRADE OF REQUIRED REPLACEMENTS SHALL BE DETERMINED BY THE ENGINEER DURING CONSTRUCTION, AND PAYMENT SHALL BE MADE ON FINAL MEASUREMENTS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

603	6" CONDUIT, TYPE B	200	LIN. FT.
603	6" CONDUIT, TYPE E	200	LIN. FT.
603	6" CONDUIT, TYPE F	200	LIN. FT.
601	ROCK CHANNEL PROTECTION, TYPE D WITH FILTER	10	CU. YDS.

NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE PERTINENT CONDUIT ITEM.

NONE OF THE ABOVE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

EROSION CONTROL PADS AND ANIMAL GUARDS

EROSION CONTROL PADS AND ANIMAL GUARDS SHALL BE PROVIDED AT THE OUTLET END OF ALL FARM DRAINS, AS PER STANDARD CONSTRUCTION DRAWING MC-4, EXCEPT WHEN THEY OUTLET INTO A DRAINAGE STRUCTURE.

PAYMENT FOR THE EROSION CONTROL PADS AND THE ANIMAL GUARDS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 603, 6" CONDUIT, TYPE F.

SPRING DRAINS

REFERENCE IS MADE TO THE DETAILED DRAWING ON STANDARD CONSTRUCTION DRAWING MC - 1, SHOWING THE METHOD OF DRAINING ANY SPRING THAT MAY BE SHOWN ON THE PLAN, OR ENCOUNTERED DURING CONSTRUCTION, AS DETERMINED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THIS PURPOSE:

605	6" UNCLASSIFIED PIPE UNDERDRAIN, 707.01 TYPE III OR 707.21 TYPE III, AS PER PLAN	200	LIN. FT.
605	AGGREGATE DRAINS FOR SPRINGS	200	LIN. FT.

THE CONTRACTOR SHALL NOT ORDER MATERIALS FOR "SPRING DRAINS" UNTIL AUTHORIZED BY THE ENGINEER, AND IN THE EVENT NO SPRINGS ARE ENCOUNTERED, THE ITEM SHALL BE NON-PERFORMED.

CONDUIT END TREATMENT

IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE RIPRAP, ROCK CHANNEL PROTECTION, SODDING, ETC.

ITEM 603 - CONDUITS TYPE B & C 706.02 WITH JOINTS AS PER 706.11 & AS PER PLAN CONDUITS TYPE B & C 706.04 WITH JOINTS AS PER 706.11 AS PER PLAN

CONDUITS TYPE B & C 706.02 WITH JOINTS AS PER 706.11 AND CONDUITS TYPE B & C 706.04 WITH JOINTS AS PER 706.11 USED FOR STORM CONDUITS DO NOT REQUIRE TESTING FOR INFILTRATION OR EXFILTRATION REQUIREMENTS OF ASTM C 969 AS PER 603.06.

ITEM 604 - CATCH BASINS, AS PER PLAN

CONCRETE BRICK OR CONCRETE MASONRY BLOCK SHALL NOT BE USED FOR THE CONSTRUCTION OF PROPOSED CATCH BASINS IN THIS PROJECT. OTHERWISE, ALL WORK SHALL CONFORM TO ITEM 604.

ITEM 604 - CATCH BASIN 2-3, 2-4 AND 2-5, AS PER PLAN

THIS ITEM OF WORK SHALL CONFORM TO THE REQUIREMENTS OF STANDARD CONSTRUCTION DRAWING CB-2-3 & 2-4 AND CB-2-5 & 2-6, EXCEPT THAT THE GRATE SHALL BE A HEAVY DUTY BICYCLE SAFE GRATE AND SHALL BE AN EAST JORDAN IRON WORKS 6730-3, NEENAH R-4859-C OR APPROVED EQUAL.

ITEM 604 - INLET NO. 1

THE FOLLOWING CONTINGENCY ITEMS ARE TO BE USED AS DIRECTED BY THE ENGINEER TO DRAIN WATER TRAPPED IN LOW AREAS BEHIND THE SIDEWALK. THESE ITEMS ARE IN ADDITION TO THE SPECIFIC LOCATION SHOWN IN THE PLAN FOR ITEM 604 - INLET NO. 1 AND ITEM 603 - CONDUITS, AND ARE TABULATED ON SHEET 82.

ITEM 604 - INLETS NO. 1	10	EACH
ITEM 603 - 6" CONDUIT, TYPE B, 706.08	200	LIN. FT.
ITEM 603 - 6" CONDUIT, TYPE C, 706.08	200	LIN. FT.