

ITEM 690 - SPECIAL - GEOWEB, SUBGRADE

THE GEOWEB CELLULAR CONFINEMENT SYSTEM SHALL BE INSTALLED AS PER THE TYPICAL SECTIONS AND USED FOR LOAD SUPPORT. THE CONTRACTOR SHALL INSTALL GW20V8, MANUFACTURED BY PRESTO GEOSYSTEMS, OR AN APPROVED EQUAL.

PRESTO GEOSYSTEMS,
PO BOX 2399, APPLETON, WISCONSIN 54912 2399.
TOLL FREE (800) 548 3424
PHONE (920) 738 1328
FAX (920) 738 1222.
E-MAIL INFO@PRESTOGEO.COM
WEBSITE WWW.PRESTOGEO.COM

THE MANUFACTURER SHALL PROVIDE A QUALIFIED FIELD REPRESENTATIVE ON SITE AT THE START OF CONSTRUCTION TO ENSURE THE GEOCELL SYSTEM IS INSTALLED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. PRIOR TO INSTALLATION OF ANY MATERIALS, CONDUCT A PRE-INSTALLATION MEETING TO DISCUSS THE SCOPE OF WORK AND REVIEW INSTALLATION REQUIREMENTS. THE PRE-INSTALLATION MEETING SHALL BE ATTENDED BY ALL PARTIES INVOLVED IN THE INSTALLATION OF THE CELLULAR CONFINEMENT SYSTEM, INCLUDING THE DISTRICT GEOTECHNICAL ENGINEER.

THE CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S SPECIFICATIONS INCLUDING BUT NOT LIMITED TO DELIVERY, STORAGE, HANDLING, INFILL MATERIALS AND INSTALLATION SPECIFICATIONS.

CELL INFILL MATERIALS

- A. CELL INFILL MATERIAL SHALL BE CRUSHED AGGREGATE WITH A MAXIMUM PARTICLE SIZE OF 2 INCHES (75 MM) WITH A FINE CONTENT OF LESS THAN 10%.
- B. INFILL MATERIAL SHALL BE FREE OF ANY FOREIGN MATERIAL.
- C. CLAYS, SILTS AND ORGANICS ARE NOT ACCEPTABLE INFILL MATERIAL.
- D. INFILL MATERIAL SHALL BE FREE-FLOWING AND NOT FROZEN WHEN PLACED IN THE GEOWEB SECTIONS.

PAYMENT OF ITEM 411, STABILIZED CRUSHED AGGREGATE FOR CELL INFILL MATERIALS IS INCIDENTAL TO THE COST OF ITEM 690, SPECIAL - GEOWEB, SUBGRADE.

ALL EQUIPMENT, MATERIALS AND LABOR REQUIRED TO PERFORM THE WORK OUTLINED ABOVE AND PER THE MANUFACTURER'S INSTRUCTIONS SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 690, SPECIAL - GEOWEB, SUBGRADE, SQ.FT.

ITEM SPECIAL - MAILBOX SUPPORT

THIS WORK SHALL CONSIST OF FURNISHING AND ERECTING MAILBOX SUPPORTS AND ANY ASSOCIATED MOUNTING HARDWARE IN ACCORDANCE WITH PLAN DETAILS AND ATTACHING AN OWNER-SUPPLIED MAILBOX AT LOCATIONS SPECIFIED IN THE PLAN, OR OTHERWISE ESTABLISHED BY THE ENGINEER.

WOOD POSTS SHALL BE NOMINAL 4 INCHES BY 4 INCHES SQUARE OR 4.5 INCHES DIAMETER ROUND AND CONFORM TO 710.14.

STEEL POSTS SHALL BE NOMINAL PIPE SIZE 2 INCHES I.D. AND CONFORM TO AASHTO M 181.

ALL HARDWARE INCLUDING BUT NOT LIMITED TO PLATES, SCREWS, BOLTS, AND ETC. SHALL BE COMMERCIAL-GRADE GALVANIZED STEEL.

POSTS SHALL BE SET PER THE FIRST PARAGRAPH OF 606.03 AND SHALL IN NO INSTANCE BE ENCASED IN CONCRETE.

SUPPORT HARDWARE SHALL ACCOMMODATE EITHER A SINGLE OR A DOUBLE MAILBOX INSTALLATION, AND NO MORE THAN TWO BOXES MAY BE MOUNTED ON A SINGLE POST.

THE MAILBOX SHALL BE SECURELY AND NEATLY ATTACHED BY THE CONTRACTOR TO THE NEW SUPPORT. THE CONTRACTOR SHALL FURNISH ALL NECESSARY ATTACHMENT HARDWARE (NUTS, BOLTS, PLATES, SPACERS, AND WASHERS) AS NECESSARY TO ACCOMMODATE THE COMPLETE INSTALLATION.

IN THE ABSENCE OF A NEW BOX SUPPLIED BY THE OWNER, THE CONTRACTOR SHALL SALVAGE THE EXISTING BOX AND PLACE IT ON THE NEW SUPPORT. DUE CARE SHALL BE EXERCISED IN SUCH AN OPERATION, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY BOX DAMAGED BY IMPROPER HANDLING ON HIS PART, AS JUDGED AND DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE LOCAL POST MASTER REGARDING THE TIMING OF THE MOVEMENT OF ANY MAILBOX TO A NEW LOCATION.

PAYMENT UNDER THIS ITEM SHALL BE LIMITED TO FINAL PERMANENT INSTALLATIONS. TEMPORARY INSTALLATIONS SHALL BE IN ACCORDANCE WITH 107.10. HOWEVER, THE SAME MATERIAL AND SIZE LIMITATIONS AS FOR PERMANENT INSTALLATIONS SHALL APPLY.

MAILBOX SUPPORTS, COMPLETE IN PLACE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH, FOR ITEM SPECIAL MAILBOX SUPPORT SYSTEM, (SINGLE) (DOUBLE) (MULTIPLE).

ITEM 623 - RIGHT-OF-WAY MONUMENT

THIS WORK SHALL CONSIST OF SETTING RIGHT OF WAY MONUMENTS PER SCD RMI-1 (TYPE C) AT THE FOLLOWINGS LOCATION IDENTIFIED IN THE RIGHT-OF-WAY PLANS OF THESE CONSTRUCTION PLANS, SEE SHEET 269 (5/41) FOR COORDINATES. ENSURE ALL WORK ASSOCIATED WITH THE SETTING MONUMENTS SHALL BE IN ACCORDANCE WITH ITEM 623 OF ODOT CMS, CURRENT EDITION. PAYMENT FOR ALL WORK AS IT PERTAINS TO THE SETTING OF RIGHT OF WAY MONUMENTS SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 623 MONUMENT ASSEMBLY, TYPE C 16 EACH. QUANTITIES CARRIED TO GENERAL SUMMARY.

PAVEMENT RESTORATION FOR PIPE INSTALLATIONS AND/OR REMOVALS

THE FOLLOWING QUANTITY HAS BEEN PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION AND/OR REMOVAL OF PIPES.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) 50 CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 6 INCHES AND A PAVEMENT RESTORATION WIDTH THAT INCLUDES THE TRENCH WIDTH PLUS TWO FEET ON EACH SIDE OF THE TRENCH.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

PAVEMENT RESTORATION FOR DRAINAGE STRUCTURE INSTALLATIONS

THE FOLLOWING QUANTITY IS PROVIDED FOR PAVEMENT RESTORATION FOLLOWING INSTALLATION OF ITEM 611, DRAINAGE STRUCTURES.

ITEM 301 - ASPHALT CONCRETE BASE, PG64-22 (449) 50 CU. YDS.

THE ABOVE QUANTITY IS BASED ON A 301 THICKNESS OF 6 INCHES AND A WIDTH OF TWO FEET AROUND THE PERIMETER OF THE DRAINAGE STRUCTURE.

PROVIDE ANY MATERIALS USED OUTSIDE THE LIMITS STATED ABOVE AT NO ADDITIONAL COST.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1- 1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, (448), PG70-22M, AS PER PLAN

703.05 DO NOT USE COARSE AGGREGATE FROM A SOURCE DESIGNATED 'SR' OR 'SRH' ACCORDING TO THE OFFICE OF MATERIALS MANAGEMENT (OMM) IN ANY JOB MIX FORMULA (JMF) FOR THIS ITEM.

ENVIRONMENTAL NOTES

DRINKING WATER SOURCE PROTECTION AREA

A PORTION OF THIS PROJECT (STA 272+48.62 TO STA 286+15.00) IS LOCATED WITHIN A DRINKING WATER SOURCE PROTECTION AREA. USE PROPER CONTAINMENT AND DIKING IN REFUELING AREAS. DO NOT STORE FUELS, TOXIC/HAZARDOUS MATERIALS, AND CHEMICALS NEAR DRAINAGE WAYS, DITCHES, OR STREAMS. MAINTAIN A SPILL KIT ON-SITE THROUGHOUT CONSTRUCTION ACTIVITIES. IMMEDIATELY MITIGATE ANY EVENT, SUCH AS A SPILL OF FUELS, OILS, OR CHEMICALS, THAT COULD THREATEN TO CONTAMINATE THE DRINKING WATER SUPPLY. REPORT ALL SPILLS OR EVENTS TO THE AQUA OHIO STRUTHERS WATER TREATMENT PLANT AT 330-757-3051 OR AQUA'S CUSTOMER SERVICE NUMBER AT 877-987-2782. IF THE SPILL IS A REPORTABLE AMOUNT (PER OHIO EPA'S RELEASE REPORTING REQUIREMENTS), CONTACT THE MAHONING COUNTY EMERGENCY MANAGEMENT (330-726-4155) OR THE OHIO EPA'S SPILLS HOTLINE AT 800-282-9378 FOR CLEAN-UP OF THE SPILL.

WELKER PARK

1. THE CONTRACTOR MAY ONLY RESTRICT PUBLIC ACCESS POINTS TO WELKER PARK FOR THE TIME NECESSARY TO RECONSTRUCT INDIVIDUAL DRIVEWAYS. ONLY ONE ACCESS POINT MAY BE CLOSED AT A TIME IN ORDER TO MAINTAIN PUBLIC ACCESS TO WELKER PARK AT ALL TIMES THROUGHOUT CONSTRUCTION.

2. INSTALL AND MAINTAIN TEMPORARY CONSTRUCTION FENCING ALONG THE KNOWN BOUNDARIES OF WELKER PARK WITHIN THE PROJECT CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

3. PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, INSTALL SIGNAGE APPROVED BY THE ENGINEER TO ALERT WELKER PARK USERS OF CONSTRUCTION ACTIVITIES AND ACCESS RESTRICTIONS OR CLOSURES, AND TO DIRECT USERS TO SECONDARY ACCESS POINTS.

CONSTRUCTION SCHEDULE

PROVIDE THE CONSTRUCTION SCHEDULE TO ODOT AND THE VILLAGE OF NEW MIDDLETOWN 30 DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

ENVIRONMENTAL NOTES (CONT.)

PETROLEUM CONTAMINATED SOILS (PCS)

ENVIRONMENTAL STUDIES INDICATED THAT PETROLEUM CONTAMINATED SOIL (PCS) (AND UST) WILL BE ENCOUNTERED DURING EXCAVATIONS WITHIN THE PROJECT LIMITS AT THE FOLLOWING PROPERTIES: 10953 MAIN STREET AND 11045 EAST MIDDLETOWN ROAD. THE STATION RANGE FOR THESE LOCATIONS ALONG SR-170 IS STA 215+84.40 TO 221+39.60. ENVIRONMENTAL STUDIES ARE AVAILABLE AT ODOT OFFICE OF ENVIRONMENTAL SERVICES. THE CONTRACTOR MUST DETERMINE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT FOR THOSE WHO CONDUCT WORK WITHIN THE LIMITS OF THE PCS.

ALL EXCAVATED PCS THAT CANNOT BE REUSED AS PROJECT FILL PER CMS 203.03(J), SHALL BE MANAGED AND DISPOSED OF AT A LICENSED LANDFILL. THE ENGINEER MAY PERMIT THE CONTRACTOR TO DIRECT LOAD THE EXCAVATED PCS INTO TRUCKS FOR TRANSPORT AND DISPOSAL. AS AN ALTERNATE, THE ENGINEER MAY PERMIT THE CONTRACTOR TO TEMPORARILY STOCKPILE THE EXCAVATED PCS ON AN IMPERMEABLE MEMBRANE, IN AN AREA PROVIDED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE STOCKPILE SHOULD BE SURROUNDED BY STRAW BALES TO REDUCE RUNOFF. THE CONTRACTOR WILL PROVIDE COMPLETED LOG FORMS AND MANIFESTS FOR TRANSPORT AND DISPOSAL TO THE ENGINEER FOR SIGNATURE. THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL TESTING THAT THE LANDFILL MAY REQUIRE FOR DISPOSAL.

IF EXCAVATIONS WITHIN THE PCS REQUIRE DEWATERING FOR CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL DEWATER, CONTAINERIZE AND DISPOSE OF WATERS BY METHOD APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS NEEDED TO STORE, TRANSPORT AND DISPOSE OF WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THE CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL TESTING REQUIRED FOR DISPOSAL.

ALL EXCAVATED AREAS SHALL BE BACKFILLED WITH SUITABLE MATERIAL IN ACCORDANCE WITH PROJECT PLANS, APPLICABLE ODOT SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ALL THE LABOR, EQUIPMENT AND MATERIALS NECESSARY TO PROPERLY MANAGE, STORE (IF NECESSARY), TEST FOR DISPOSAL, TRANSPORT AND DISPOSE OF REGULATED MATERIALS, INCLUDING ANY REQUIRED PERMITS OR FEES WITHIN THE IDENTIFIED LIMITS. PAYMENT FOR THIS WORK SHALL BE MADE AT THE CONTRACT PRICE BID. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY.

- 690 - SPECIAL, WORK INVOLVING NON-REGULATED MATERIAL 100 TON
- 690 - SPECIAL, WORK INVOLVING PCS 100 TON
- 690 - SPECIAL, WORK INVOLVING NON-REGULATED WATER 1000 GALLON
- 690 - SPECIAL, WORK INVOLVING REGULATED WATER 1000 GALLON

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