

# GENERAL NOTES

CALC. AED  
BY 8/00  
DATE 8/00  
CHKD. WDB  
BY WDB  
DATE 8/00

LAK - 615 - 2.82

OHIO  
FHWA  
REGION 5

13  
199

## SOFT SUBGRADE - 30" UNDERCUT

THE FOLLOWING ITEMS HAVE BEEN PROVIDED FOR THE REPLACEMENT OF UNSUITABLE WET MATERIAL THAT MAY BE ENCOUNTERED DURING EXCAVATION FOR PAVEMENT SUBGRADE. ESTIMATED QUANTITIES HAVE BEEN CALCULATED FOR 500 L.F. OF THE PROJECT PAVEMENT AREA TO A DEPTH OF 30".

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	2800 CU.YD.
ITEM SPECIAL - FILTER FABRIC, 712.09, TYPE D	3400 SQ.YD.
ITEM SPECIAL - GEOGRID, CARTHEGE MILLS FX 1500 OR HUESKAR FORTRAC 20/13-20 OR TENSAR BX-1100	3500 SQ.YD.
ITEM 304 - AGGREGATE BASE, AS PER PLAN	2800 CU.YD.
ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN	1600 LIN.FT.
ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN, WITH FABRIC WRAP, AS PER PLAN	500 LIN.FT.

WHEN UNSUITABLE MATERIAL IS ENCOUNTERED, THE SOIL SHALL BE REMOVED AND THE SOIL SHALL BE DRESSED TO A SMOOTH GRADE. NO SUBGRADE COMPACTION WILL BE REQUIRED. THE SEPARATION FILTER FABRIC SHALL THEN BE PLACED FOLLOWED BY THE GEOGRID IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. THE ITEM 304 MATERIAL SHALL BE PLACED IN ACCORDANCE WITH THE GEOGRID MANUFACTURER'S RECOMMENDATIONS AND SHALL MEET SPECIFICATION COMPACTION AS PER ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE CONTRACTOR MAY WANT TO TAKE PRECAUTIONS NOT TO DISTURB UNDERCUT ZONES OR UNDERGROUND UTILITIES DURING COMPACTION OF ADJACENT AREAS. THE CONTRACTOR SHALL NOT HAUL ON THE SUBGRADE.

ALL OF THE ABOVE MENTIONED OPERATIONS SHALL BE PERFORMED WHERE AND AS DIRECTED BY THE ENGINEER.

MATERIALS REQUIRED SHALL NOT BE ORDERED UNTIL AUTHORIZED BY THE ENGINEER. QUANTITIES NOT REQUIRED SHALL BE NON-PERFORMED.

ADDITIONAL QUANTITIES FOR UNDERDRAIN ARE INCLUDED, IF NEEDED, TO ALLOW FOR OUTLETS TO CATCH BASINS.

## SUBGRADE COMPACTION

QUANTITIES FOR SUBGRADE COMPACTION ARE CALCULATED FOR THE PROPOSED PAVEMENT AREA. AREAS OF PROPOSED SOFT SUBGRADE-30" UNDERCUT THAT WILL NOT REQUIRE THE PERFORMANCE OF THIS ITEM WILL THEN BE NON-PERFORMED.

## ITEM SPECIAL - GEOGRID

THE GEOGRIDS TO BE PLACED ON TOP OF THE ITEM SPECIAL - FILTER FABRIC, 712.09, TYPE D, SHALL BE ONE OF THE FOLLOWING MATERIALS:

FX 1500, MADE BY CARTHEGE MILLS  
1821 SUMMIT RD. SUITE 218  
CINCINNATI, OHIO 45237  
PHONE 800-543-4430

-OR-  
FORTRAC 20/13-20, MADE BY HEUSKAR INC.  
11107A SOUTH COMMERCE BLVD.  
P.O. BOX 411529  
CHARLOTTE, NORTH CAROLINA 28241-1529  
PHONE 800-942-9418

-OR-  
BX-1100, MADE BY TENSAR  
1210 CITIZEN PARKWAY  
MORROW, GEORGIA 30260  
PHONE 404-960-3255

INSTALLATION PROCEDURES, OVERLAPS BETWEEN ROLLS, ETC., SHALL BE AS PER THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

ITEM 452 - 6" PLAIN CONCRETE PAVEMENT, AS PER PLAN  
ITEM 452 - 8" PLAIN CONCRETE PAVEMENT, AS PER PLAN

A ONE (1) FOOT WIDE STRIP OF BOMANITE SHALL BE PLACED ALONG BOTH SIDES OF THE ROADWAY DIRECTLY BEHIND THE CURB. A SELF LEVELING CAULK SHALL BE PLACED ALONG THE JOINTS FOR WEED CONTROL. THIS STRIP WILL RUN THROUGH THE DRIVE APRONS REQUIRING AS PER PLAN DRIVE MATERIAL. QUANTITIES FOR THE BOMANITE APPEAR IN THE DRIVEWAY SUBSUMMARY ON SHEETS 48-49.

## 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 CITY 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. THE CITY OF MENTOR SHALL RECEIVE 1 (ONE) COPY.

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.

### CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

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

### MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

ALL 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 CONTRACT PRICE FOR THE PERTINENT 202 ITEM.

### ITEM 603 - AS PER PLAN (A)

THE INSTALLATION OF ITEM 603 ALONG S.R. 84 BETWEEN STA. 133+10 TO STA. 161+29 REQUIRES THE USE OF SHEETING DUE TO THE DEPTH OF THE CONDUIT AND CLOSE PROXIMITY TO A PRIVATE 20-INCH WATERLINE. COFFERDAMS, CRIB, AND SHEETING (FOR BOTH SIDES OF THE EXCAVATION) SHALL BE PROVIDED AS NECESSARY TO SUPPORT THE SIDES OF THE EXCAVATION. WORK SHALL BE AS PER 503.03. PAYMENT FOR COFFERDAMS, CRIBS AND SHEETING SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 603 - 54" AND 60" CONDUIT, TYPE B, AS PER PLAN (A).

### ITEM 603 & 604 - AS PER PLAN

BACKFILL FOR ALL ITEMS 603 & 604 SHALL EXCLUDE SLAG.

### ITEM 604 - CASTINGS ADJUSTED TO GRADE, AS PER PLAN

ALL MANHOLES, MONUMENTS, AND OTHER CASTINGS ENCOUNTERED WITHIN THE WORK LIMITS SHALL BE ADJUSTED TO GRADE. ADJUSTING RINGS SHALL NOT BE AN ACCEPTED MEANS OF ADJUSTING CASTINGS. BRICK USED FOR ADJUSTING TO GRADE SHALL BE CLAY OR SHALE BRICK MEETING THE REQUIREMENTS OF ASTM C 32 SEWER BRICK GRADE SM. CONCRETE BRICK OR MASONRY BLOCK SHALL NOT BE USED. OTHERWISE ALL WORK SHALL BE IN ACCORDANCE WITH ITEM 604.

## RESIDENTIAL AND COMMERCIAL DRAINAGE CONNECTIONS

EXISTING ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK, SHALL BE PROVIDED WITH UNOBSTRUCTED OUTLETS BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEW CONDUIT REQUIRED TO REPLACE OR EXTEND THE EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER.

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, MANHOLE OR CATCH BASIN.

AN ESTIMATED QUANTITY HAS BEEN TABULATED ON SHEET 46 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.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE:

ITEM 603 - 6" CONDUIT, TYPE B, AS PER PLAN, 706.08	200 LF.
ITEM 603 - 6" CONDUIT, TYPE C, AS PER PLAN, 706.08	200 LF.
ITEM 603 - 8" CONDUIT, TYPE B, AS PER PLAN, 706.08	200 LF.
ITEM 603 - 8" CONDUIT, TYPE C, AS PER PLAN, 706.08	200 LF.

### ITEM 603 - PIPE SPECIALS

THE CONTRACTOR SHALL FURNISH AND INSTALL PIPE SPECIALS SUCH AS BENDS, TEES AND PIPE SADDLES FOR THE VARIOUS SIZES AND TYPES OF CONDUITS TO BE BUILT ON THIS PROJECT OR AS DIRECTED BY THE ENGINEER. THE COST OF SUCH PIPE SPECIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT ITEM 603 CONDUIT.

### ITEM 604 - INLET, NO.1, AS PER PLAN

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.

ITEM 604 - INLET, NO.1, AS PER PLAN	5 EACH
ITEM 603 - 12" CONDUIT, TYPE B, AS PER PLAN, 706.02	100 LF.
ITEM 603 - 12" CONDUIT, TYPE C, AS PER PLAN, 706.02	100 LF.

### 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 NO.3 AND 3A, AS PER PLAN  
ITEM 604 - CATCH BASIN NO.2-2B, AS PER PLAN

THIS ITEM OF WORK SHALL CONFORM TO THE REQUIREMENTS OF STANDARD DRAWING CB-2.1M, CB-2.2M AND CB-1.1M EXCEPT THAT THE GRATE SHALL BE A SINUSOIDAL GRATE AND SHALL BE AN EAST JORDAN #7510, NEENAH R-3246-A OR APPROVED EQUAL. SEE DETAIL SHEETS 145-146. WORK SHALL ALSO CONFORM TO THE REQUIREMENTS OF STANDARD DRAWING CB-1.1M EXCEPT THAT THE GRATE SHALL BE A BIKE SAFE GRATE AND SHALL BE AN EAST JORDAN #5110-M3, NEENAH R-4859-C OR APPROVED EQUAL.