

**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.

**REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE CITY, REPRESENTATIVES OF THE CITY 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 CITY.

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 CITY.

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.

**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.

THE FOLLOWING CONDUIT TYPES MAY BE USED: 707.19 PS46 MIN, 707.17 NON-PERFORATED, SS 931, SS 942, OR SS 944.

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

603, 6" CONDUIT, TYPE C, FOR DRAINAGE CONNECTION 200 L.F.

**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 659, SEEDING AND MULCHING**

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 ITEM 659, SEEDING AND MULCHING, ARE BASED ON THESE LIMITS.

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER.

659, SEEDING AND MULCHING 27,900 SQ. YD.

**WATERING AND MOWING PERMANENT SEEDED AREAS**

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR PERMANENT SEEDED AREAS PER 659.09:

659, WATER 7 M. GAL.

**TEMPORARY SOIL EROSION AND SEDIMENT CONTROL**

THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES:

877, TEMPORARY SEEDING & MULCHING 3000 SQ. YD.

877, SEDIMENT REMOVAL 100 C.Y.

877, TEMPORARY PERIMETER, DITCH CHECK OR INLET PROTECTION FILTER FABRIC FENCE 4300 LIN. FT.

673, SEEDING AND EROSION CONTROL BLANKET, TYPE C 3000 SQ. YD.

**ROUNDING**

THE ROUNDING AT SLOPE BREAKPOINTS SHOWN ON THE TYPICAL SECTIONS APPLY TO ALL CROSS-SECTIONS EVEN THOUGH OTHERWISE SHOWN.

**UTILITIES**

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

OHIO UTILITIES PROTECTION SERVICE  
106 WEST RYEN, ROOM 427  
YOUNGSTOWN, OHIO 44051  
PHONE: (800) 362-2764

THE EAST OHIO GAS COMPANY  
1201 E. 55TH ST.  
CLEVELAND, OHIO 44103  
PHONE: (216)736-6675

ADELPHIA CABLE  
7757 AUBURN RD, SUITE 8  
PAINESVILLE, OHIO 44077  
(440)354-8000

THE ILLUMINATING COMPANY  
4141 ROCKSIDE ROAD, SUITE #110  
SEVEN HILLS, OHIO 44131  
(216)520-9579  
ATTN: FRANK G. DIBBS

CONSUMERS OHIO WATER  
8644 STATION ST.  
MENTOR, OHIO 44060  
(440)255-3421

AMERITECH  
13630 LORAIN AVE. 4TH FLOOR  
CLEVELAND, OHIO 44111  
(216)476-6141

CITY OF KIRTLAND SERVICE DEPARTMENT  
10282 CHILLICOTHE RD.  
KIRTLAND, OHIO 44094  
(440)256-1234

**UTILITIES**

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

**ITEM 407, TACK COAT AND ITEM 407, TACK COAT FOR INTERMEDIATE COURSE, ITEM 408, BITUMINOUS PRIME COAT**

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

407, TACK COAT 0.075 GAL. PER SQ. YD.

407, TACK COAT FOR INTERMEDIATE COURSE 0.075GAL. PER SQ. YD.

408, BITUMINOUS PRIME COAT 0.30 GAL. PER SQ. YD.

**ITEM 611, REINFORCED CONCRETE APPROACH SLAB (T = 13"), AS PER PLAN**

THE REINFORCING STEEL FOR THE APPROACH SLABS ON THIS STRUCTURE SHALL BE EPOXY COATED IN CONFORMANCE WITH 509.

TWO SEPARATE THICKNESSES OF CLEAR OR OPAQUE POLYETHYLENE FILM, 705.06, SHALL BE PLACED ON THE PREPARED SUBBASE AND WHERE THE APPROACH SLAB IS TO BE CONSTRUCTED. THE POLYETHYLENE FILMS SHALL COMPLETELY COVER THE FULL LENGTH AND WIDTH OF THE SUBBASE BETWEEN THE SIDEWALL FORMS FOR THE APPROACH SLAB.

MATERIALS, LABOR AND INSTALLATION SHALL BE INCLUDED WITH APPROACH SLABS FOR PAYMENT.

**CLEARING AND GRUBBING**

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. INCLUDED IN THIS PAY ITEM ARE THE REMOVAL OF TREES ALONG THE WEST SIDE OF S.R. 306 FROM STA. 219+00± LEFT TO STA. 225+00± LEFT AS DIRECTED BY THE CITY TO IMPROVE SIGHT DISTANCE.

ALSO INCLUDED IN THIS PAY ITEM ARE THE REMOVAL OF TREES ALONG THE EAST SIDE OF RELOCATED KIRTLAND-CHARDON ROAD AS DIRECTED BY THE CITY FOR INSTALLATION OF UTILITY POLES BY THE ILLUMINATING COMPANY. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

**CONTINGENCY QUANTITIES**

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL CHANGE ORDER GOVERNING COMPLETION OF THIS PROJECT.

**ELEVATION DATUM**

ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.

**WORK LIMITS**

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

**CONVERSION OF STANDARD CONSTRUCTION DRAWINGS**

THE METRIC STANDARD DRAWINGS REFERENCED IN THIS PLAN SHALL BE CONVERTED TO ENGLISH UNITS USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.11 OF THE 1997 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E 380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

**MONUMENTS**

MONUMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS AS SHOWN ON THE STANDARD CONSTRUCTION DRAWINGS AND AT THE FOLLOWING LOCATIONS:

| ROAD  | STATION            |
|---|--------------------|
| S.R. 615 AT S.R. 306                        | 10+00              |
| S.R. 615                                    | P.C. AT 10+42.15   |
| S.R. 615                                    | P.R.C. AT 13+75.79 |
| S.R. 615                                    | P.C. AT 19+68.19   |
| RELOCATED KIRTLAND-CHARDON ROAD             | P.C. AT 21+02      |
| RELOCATED KIRTLAND-CHARDON ROAD             | P.T. AT 22+80.56   |
| RELOCATED KIRTLAND-CHARDON ROAD             | P.C. AT 25+88.12   |
| RELOCATED KIRTLAND-CHARDON ROAD AT S.R. 615 | 30+00              |

**ITEM 203, PROOF ROLLING**

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

**EXCAVATION OF UNSUITABLE SOILS**

IF UNSUITABLE FOUNDATION SOILS ARE ENCOUNTERED IN THE AREAS OF THE PROPOSED ROADBED, THEY SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL MEETING THE REQUIREMENTS OF 203.08. THE LOCATIONS AND DIMENSIONS WILL BE DETERMINED AS DIRECTED BY THE ENGINEER.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

|  |               |
|--|---------------|
| ITEM 203, EMBANKMENT                                       | 8000 CU. YDS. |
| ITEM 203, EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION | 8000 CU. YDS. |

THESE QUANTITIES HAVE BEEN INCLUDED BASED ON THE SUBSURFACE EXPLORATION REPORT BY EDP CONSULTANTS INC. DATED APRIL 12, 1999 WHICH SUGGESTS THE FOLLOWING TWO AREAS OF UNDERCUT DUE TO POSSIBLE POOR SOILS.

1. RELOCATED S.R. 615 FROM STA. 10+25 TO STA. 14+55 UNDERCUT 3 FEET BELOW PROPOSED SUBGRADE AND BACKFILL WITH MATERIAL MEETING ODOT ITEM 203 EMBANKMENT. BASED ON AN AVERAGE WIDTH OF 40 FEET A QUANTITY OF 2000 C.Y. OF EXCAVATION AND 2000 C.Y. OF EMBANKMENT MAY BE NEEDED.
2. RELOCATED KIRTLAND-CHARDON ROAD FROM STA. 24+00 TO STA. 27+00 UNDERCUT 12 FEET OF EXISTING SOIL AND BACKFILL WITH MATERIAL MEETING ODOT ITEM 203 EMBANKMENT. BASED ON AN AVERAGE WIDTH OF 40 FEET A QUANTITY OF 6000 C.Y. OF EXCAVATION AND 6000 C.Y. OF EMBANKMENT MAY BE NEEDED.
3. IN THE EVENT A COARSE AGGREGATE IS NEEDED TO STABILIZE A SOFT SUBGRADE IN THE ABOVE REFERENCED AREAS, THE FOLLOWING CONTINGENCY QUANTITY IS INCLUDED IN THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER.

SPECIAL COARSE AGGREGATE(NO. 1) 800 C.Y.

THE SIZE OF THE COARSE AGGREGATE SHALL MEET TABLE 703-1 IN THE ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS. THE COARSE AGGREGATE SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH ODOT 203.12.

DATE: 10-18-99 - TIME: 12:43 - H:\CT\97260\SDSK\97260GN1.dwg

SCALE IN FEET

CALCULATED  
CHECKED

GENERAL NOTES

LAK-615-0.00