

# GENERAL NOTES

LAK-2-0.00

FHWA REGION	STATE	PROJECT	
5	OHIO		

8
171

## DRAINAGE AND EROSION CONTROL

### CONNECTIONS TO EXISTING PIPES

WHERE THE PLANS PROVIDE FOR A 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 SPECIAL-HERBICIDES FOR WEED CONTROL

PRIOR TO PLACING THE ITEM 301 BITUMINOUS AGGREGATE, AN APPLICATION OF PRINCEP 80W, OR AMISINE OR AN APPROVED EQUAL, SHALL BE APPLIED TO THE SHOULDER BED. THE RATE AND METHOD OF APPLICATION FOR AMISINE OR AN APPROVED EQUAL SHALL BE IN STRICT CONFORMANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD, "ITEM SPECIAL-HERBICIDES FOR WEED CONTROL", WHICH PRICE SHALL CONSTITUTE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND WATER REQUIRED TO COMPLETE THIS ITEM OF WORK.

### 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 THE PERMANENT SEEDED AREAS, AS PER 659.09.

ITEM 659-WATER..... 50 M.GAL.  
ITEM 659-MOWING..... 100 M.SQ.FT.

### ITEM 605-AGGREGATE DRAIN

THE FOLLOWING ESTIMATED QUANTITY IS INCLUDED IN THE GENERAL SUMMARY TO BE USED WHERE AND AS DIRECTED BY THE ENGINEER TO DRAIN SUBBASE MATERIAL WHICH HAS BECOME SATURATED.

ITEM 605-AGGREGATE DRAIN..... 250 L.F.

### UNDERDRAIN OUTLETS IN EARTHWORK AREAS

EXISTING UNDERDRAIN OUTLETS WHICH ARE ENCOUNTERED IN THE EARTHWORK OR CULVERT EXTENSION AREAS SHALL BE EXTENDED AS DIRECTED BY THE ENGINEER USING 6 INCH CONDUIT, TYPE F. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY TO BE USED AS OUTLINED ABOVE:

ITEM 605-6" CONDUIT, TYPE F..... 250 L.F.

### EROSION CONTROL

ALL PERMANENT EROSION CONTROL ITEMS SHALL BE PLACED IMMEDIATELY AFTER THE EARTHWORK IS COMPLETED AT EACH LOCATION.

ITEMS 601 AND 660 ARE PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE WILL NOT BE REMOVED IN ORDER TO PLACE ANY OF THESE ITEMS. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THIS ITEM WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION.

### SEEDING

QUANTITIES FOR SEEDING ARE CALCULATED FOR THE SOIL AREAS AS SHOWN ON THE CROSS SECTIONS.

### FLUSHING AND REPAIR OF UNDERDRAINS

ALL EXISTING UNDERDRAINS SHALL BE FLUSHED WITH WATER TO DETERMINE IF THEY ARE FUNCTIONING PROPERLY AND IF NOT THE OBSTRUCTIONS ARE TO BE LOCATED AND REPAIRED. THE FOLLOWING PROCEDURES AND METHODS OF PAYMENT ARE PROVIDED FOR THIS PURPOSE. A COPY OF THE ORIGINAL CONSTRUCTION PLANS SHOWING THE LOCATION OF THE UNDERDRAINS AND OUTLETS WILL BE ON FILE IN THE PROJECT OFFICE.

1) ITEM SPECIAL- UNDERDRAIN OPENING- (EACH). THIS ITEM SHALL CONSIST OF EXPOSING THE FIRST TILE AT THE UPPER END OF AN UNDERDRAIN LINE OR A SUBSEQUENT INTERMEDIATE UNDERDRAIN OPENING AS PROVIDED HEREIN. EACH OPENING SHALL INCLUDE THE TRENCH EXCAVATION LENGTHWISE OVER THE EXISTING TILE, REPLACING THE 6" TILE BROKEN IN MAKING THE OPENING AND THE FULL DEPTH BACKFILL WITH NO. 8 AGGREGATE, ALL IN ACCORDANCE WITH SPECIFICATION SECTION 605. PAYMENT FOR THE OPERATIONS DESCRIBED ABOVE SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS INCIDENTAL TO COMPLETING THE ITEM INCLUDING A MAXIMUM OF 6 LIN. FT. OF 6" TILE AND SHALL BE MADE FOR "EACH" - ITEM SPECIAL - UNDERDRAIN OPENING.

2) ITEM SPECIAL - WATER - (M-GALS.). AFTER THE UNDERDRAIN OPENING HAS BEEN MADE AND THE EXPOSED TILE REMOVED, THE LINE SHALL BE FLUSHED WITH WATER USING A MINIMUM SIZE HOSE OF 2" AND A MAXIMUM VOLUME OF WATER CALCULATED AT 1-1/2 GALLONS PER LIN. FT. OF UNDERDRAIN LINE. THE FLUSHING OPERATION MAY BE STOPPED AT ANY TIME BY THE ENGINEER IF FIELD OBSERVATIONS SHOW THE LINE TO BE EITHER PLUGGED OR OPERATING EFFICIENTLY.

IN THE EVENT THE LINE IS FOUND TO BE PLUGGED OR FLOW RESTRICTED, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE THE RESTRICTION BY RODDING OR OTHER SIMILAR METHOD APPROVED BY THE ENGINEER. AN INTERMEDIATE UNDERDRAIN OPENING WILL BE PERMITTED AND PAID FOR, PROVIDING IT IS NO CLOSER THAN 500 FT. TO THE INITIAL OPENING OR AT THE MID POINT OF THE LINE. THE COST OF RODDING THE LINE IS TO BE INCLUDED IN THE UNIT BID PRICE FOR WATER.

THE METHOD OF MEASUREMENT FOR THE ITEM SPECIAL-"WATER" WILL BE IN ACCORDANCE WITH SPECIFICATION - SECTION 616.03 AND PAYMENT WILL BE PER THOUSAND GALLONS (M-GAL.) USED.

3) WHERE A SECTION OF TILE IS FOUND TO BE PLUGGED OR BROKEN, IT IS TO BE ISOLATED AS NOTED ABOVE BY RODDING.

THIS SECTION SHALL BE REPLACED AT APPROXIMATELY THE LINE GRADE, IN ITS ENTIRETY WITH 6" TILE IN ACCORDANCE WITH SPECIFICATION SECTION 605.03. THE COST OF REMOVAL OF THE EXISTING TILE IS CONSIDERED TO BE INCIDENTAL TO THIS WORK AND EXTREME CARE IS TO BE EXERCISED IN NOT DAMAGING OR REMOVING ANY MORE TILE THAN IS NECESSARY. MEASUREMENT AND PAYMENT FOR THIS WORK WILL BE AS PER SECTION 605.06 AND 605.07 RESPECTIVELY.

4) AFTER ALL REPAIRS HAVE BEEN MADE TO A LINE, A FINAL FLUSHING WILL BE PERFORMED TO ASCERTAIN THAT THE LINE IS FUNCTIONING PROPERLY AFTER WHICH THE CLOSING OF THE INITIAL OPENING WILL BE PERMITTED.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE SUMMARY FOR THIS WORK ON THE PARTS OF THIS PROJECT:

ITEM SPECIAL - UNDERDRAIN OPENING ..... 395 EACH  
ITEM SPECIAL - WATER..... 195 M-GAL.  
ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS ..... 500 LIN. FT.  
ITEM 603 - 6" CONDUIT, TYPE F ..... 250 LIN. FT.

### 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:

207 TEMPORARY SEEDING AND MULCHING.....8750 SQ.YD.  
207 STRAW OR HAY BALES..... 48 EACH  
659 COMMERCIAL FERTILIZER.....1.87 TON  
659 WATER..... 20 M.GAL.

### 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.

### SEEDING AND MULCHING AS PER PLAN

THE MEDIAN AREA BETWEEN THE CONCRETE BARRIERS BEGINNING AT STATION 91+00 SHALL BE SEEDED WITH PENNGIFT CROWN VETCH (CORONILLA VARIA). THE CROWN VETCH SEED MIXTURE SHALL CONSIST OF ONE (1) POUND OF PENNGIFT CROWN VETCH WHICH SHALL BE THOROUGHLY MIXED WITH EACH THREE (3) POUNDS OF THE SEED MIXTURE PER 659.09. THIS MIXTURE SHALL BE SOWN OVER THE PREPARED AREA AT THE RATE OF FOUR (4) POUNDS PER 1000 SQUARE FEET IN LIEU OF THE CROWN VETCH APPLICATION RATE LISTED IN 659.09.

PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER SQUARE YARD FOR ITEM 659 - SEEDING AND MULCHING AS PER PLAN.