

# GENERAL NOTES

CALC. BY: SPB  
DATE: 7/13/98  
CHKD. BY: SPB  
DATE: 7/13/98

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OHIO  
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## GENERAL

### RIGHT-OF-WAY

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY OR EASEMENTS.

### UTILITY OWNERSHIP

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

THE ILLUMINATING CO.  
7750 AUBURN ROAD  
PAINESVILLE, OHIO 44077  
216-352-9361

LAKE COUNTY DEPT. OF UTILITIES  
LAKE COUNTY ADMINISTRATION CENTER  
105 MAIN STREET  
PAINESVILLE, OHIO 44077  
440-357-2645  
(SANITARY SEWERS)

AMERITECH  
FLOOR 4  
13630 LORAIN AVENUE  
CLEVELAND, OHIO 44111  
216-476-6141

CITY OF MENTOR DEPT. OF PUBLIC WORKS  
ATTN: MATTHEW SCHWEIKERT  
8500 CIVIC CENTER BOULEVARD  
MENTOR, OHIO 44060  
440-974-5780  
(STORM SEWERS AND TRAFFIC SIGNALS)

THE EAST OHIO GAS CO.  
1201 EAST 55TH STREET  
CLEVELAND, OHIO 44103  
216-361-2753

LAKETRAN (BUS SERVICE)  
200 OLIVE STREET  
P.O. BOX 450  
GRAND RIVER, OHIO 44045  
440-364-6100

MEDIAONE CABLE  
7820 DIVISION DRIVE  
MENTOR, OHIO 44060  
440-953-0423

CONSUMERS OHIO WATER CO.  
LAKE ERIE DIVISION  
8644 STATION STREET  
P.O. BOX 960  
MENTOR, OHIO 44061-0960  
440-255-3421  
(WATERWORKS)

### UNDERGROUND 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.

### 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.

### CASTINGS ADJUSTED TO GRADE BY PRIVATE UTILITY COMPANIES

ALL CASTING IN THE PAVEMENT OWNED BY PRIVATE UTILITY COMPANIES SHALL BE ADJUSTED TO GRADE BY THE RESPECTIVE UTILITY COMPANY PRIOR TO RESURFACING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE UTILITY COMPANIES SO AS TO AVOID DELAYS IN CONSTRUCTION.

### ROUNDING

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

### EXISTING TYPICAL SECTIONS

EXISTING PAVEMENT THICKNESSES HAVE BEEN TAKEN FROM RECORDS AND ARE BELIEVED TO REPRESENT THE EXISTING PAVEMENT, BUT THE STATE DOES NOT GUARANTEE THE ACCURACY OF THE SAME.

### CONVERSION OF METRIC STANDARD 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 109.011 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.

### INDIANA BAT

THE PROJECT IS WITHIN THE RANGE OF FEDERALLY ENDANGERED INDIANA BAT (*MYOTIS SODALIS*). THE PROJECT MAY IMPACT SUMMER AND BROOD REARING HABITS FOR THIS SPECIES (I.E. TREES OVER NINE INCHES DIAMETER BREAST HEIGHT WITH LOOSE OR PEELING BARK AND/OR CAVITIES GREATER THAN 3-4 INCHES IN SIZE). TO PREVENT HARM TO THESE BATS THE REMOVAL OF ANY POTENTIAL ROOST TREES MUST BE COMPLETED BETWEEN SEPTEMBER 15 AND APRIL 15. THE TREES WITHIN THE PROJECT AREA SHOULD BE MARKED AND CUT THE WINTER BEFORE CONSTRUCTION ACTIVITIES START. ALL BAT TREE CUTTINGS MUST BE COMPLETE BEFORE THE APRIL 15 DEADLINE.

## ROADWAY

### REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED UNDER THE LUMP SUM BID FOR ITEM 201, CLEARING AND GRUBBING. THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED:

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	1	0	1
30"	1	0	1
48"	0	0	0
60"	0	0	0

### TRIMMING OF TREE OR SHRUB BRANCHES

BRANCHES ON TREES OR SHRUBS DESIGNATED TO REMAIN SHALL BE TRIMMED IN ACCORDANCE WITH 666.03 TO GIVE A CLEAR HEIGHT OF 15 FEET ABOVE THE BIKE LANE SURFACE AND FOR A MINIMUM WIDTH OF 3 FEET BEYOND THE EDGE OF THE BIKE LANE SURFACE. COST OF TRIMMING TO BE INCLUDED IN THE COST OF ITEM 201, CLEARING AND GRUBBING.

### SIDEWALK REMOVED AND REPLACED

THE CONTRACTOR AND THE PROJECT ENGINEER SHALL FIELD CHECK ALL EXISTING SIDEWALK WITHIN THE LIMITS OF THIS PROJECT. ANY SIDEWALK THAT EXHIBITS SUBSTANTIAL DETERIORATION SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER. OTHERWISE ALL WORK SHALL BE IN ACCORDANCE WITH ITEM 202 WALK REMOVED AND ITEM 608 CONCRETE WALK.

THE FOLLOWING ESTIMATED QUANTITIES BASED ON 10% OF THE TOTAL SIDEWALK AREA HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR WORK AS DIRECTED BY THE ENGINEER. THESE ITEMS ARE IN ADDITION TO THOSE SPECIFIED LOCATIONS NOTED ON THE PLAN.

ITEM 202 - WALK REMOVED	500 S.F.
ITEM 608 - 4" CONCRETE WALK	500 S.F.

### ITEM 203, LINEAR GRADING, AS PER PLAN

THIS WORK SHALL CONSIST OF A SHALLOW GRADING AND/OR FILLING OPERATION PERFORMED FROM THE EDGE OF THE PROPOSED PAVEMENT WIDENING OUTWARD TO RESHAPE THE ROADSIDE AS SHOWN ON THE CROSS SECTIONS TO INSURE A SMOOTH DRAINABLE SURFACE FREE OF ALL IRREGULARITIES.

THE MEASUREMENT SHALL BE IN STATIONS (100 FEET) AND INCLUDES BOTH SIDES OF THE ROADWAY. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 203 - LINEAR GRADING, AS PER PLAN	148 STATIONS
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### ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION

#### ITEM 203 - EMBANKMENT

THE FOLLOWING QUANTITIES ARE CALCULATED ON THE CROSS SECTION SHEETS FOR HENDRICKS ROAD AND CARRIED TO THE GENERAL SUMMARY.

ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION	1655 CU. YD.
ITEM 203 - EMBANKMENT	965 CU. YD.

## EROSION CONTROL

### ITEM 660 - SODDING UNSTAKED

SODDING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE EDGE OF PAVEMENT AND CONSTRUCTION LIMITS AS SHOWN ON THE CROSS SECTIONS. QUANTITY CALCULATIONS FOR ITEM 660, SODDING, ARE BASED ON THESE LIMITS.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 660 - SODDING, UNSTAKED	20000 SQ. YD.
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THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED TO PROMOTE GROWTH FOR SODDED AREAS PER 659.08:

ITEM 659 - COMMERCIAL FERTILIZER (20 lbs./1000 SQ. FT.)=	1.80 TONS
ITEM 659 - AGRICULTURAL LIMING (46 lbs./1000 SQ. FT.) X 220%=	9.10 TONS

## WATERING SODDED AREAS

THE FOLLOWING ESTIMATED QUANTITY IS TO BE USED AS DIRECTED BY THE ENGINEER TO PROMOTE GROWTH AND TO CARE FOR SODDED AREAS PER 659.09:

ITEM 659 - WATER (120 GAL./1000 SQ. FT.)	22 M. GAL.
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### 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:

ITEM 877 - TEMPORARY SEEDING AND MULCHING	4000 SQ. YD.
ITEM 877 - TEMPORARY PERIMETER, DITCH CHECK OR INLET PROTECTION FILTER FABRIC FENCE	2000 LIN. FT.
ITEM 659 - COMMERCIAL FERTILIZER	1.6 TON
ITEM 659 - WATER	9 M GAL.

### EROSION CONTROL

ITEM 660 IS PROVIDED IN THE PLANS FOR EROSION CONTROL. ROCK OF A STABLE NATURE AND TURF OF A STABLE NATURE SHALL NOT BE REMOVED IN ORDER TO PLACE THIS ITEM. THE ENGINEER SHALL CHECK AND NON-PERFORM QUANTITIES OR ADJUST LOCATIONS AND QUANTITIES FOR THIS ITEM WHERE INDICATED BY FIELD CONDITIONS DURING CONSTRUCTION. IN ADDITION, THIS ITEM SHALL MEET THE REQUIREMENTS OF 108.04.

### SANITARY

ALL WORK INVOLVING SANITARY SEWERS AND/OR MANHOLES SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE LAKE COUNTY UTILITIES DEPARTMENT. THE CONTRACTOR SHALL ARRANGE FOR THE PAYMENT OF ANY & ALL INSPECTION FEES ASSOCIATED WITH THE WORK TO BE PERFORMED UNDER THIS CONTRACT PRIOR TO INITIATING ANY WORK IN THE FIELD & SHALL CONTACT THE LAKE COUNTY UTILITIES DEPT. OFFICE OF THE LAKE COUNTY SANITARY ENGINEER NOT LESS THAN 48 HOURS PRIOR TO STARTING CONSTRUCTION TO ARRANGE FOR INSPECTION.

### SANITARY SEWERAGE NOTES

1. THE CONTRACTOR'S ATTENTION IS CALLED TO 107.02 OF THE O.D.O.T. CONSTRUCTION AND MATERIAL SPECIFICATIONS AND SHALL CONTACT MR. SAARI, P.E. (SANITARY ENGINEER) OF LAKE COUNTY UTILITIES DEPARTMENT FOR SPECIFIC CHARGES AND REQUIREMENTS FOR THIS PROJECT.
2. NO MANUFACTURED ADJUSTING RINGS WILL BE PERMITTED ON SANITARY MANHOLES. SANITARY MANHOLE CASTINGS SHALL ONLY BE ADJUSTED TO GRADE UTILIZING RED SHALE BRICK AS SPECIFIED BELOW.
3. THE TOTAL MAXIMUM NUMBER OF FULL BRICK COURSES (EXISTING AND NEW) ALLOWED IS NINE (9) COURSES, UNLESS OTHERWISE DIRECTED BY THE LAKE COUNTY UTILITIES DEPARTMENT. ALL PROPOSED SANITARY MANHOLE ADJUSTMENTS ARE ANTICIPATED TO MEET THIS REQUIREMENT.
4. THE TOP EXISTING MANHOLE STEP SHALL NOT BE MORE THAN 2'-0" BELOW THE TOP OF FRAME UNLESS OTHERWISE DIRECTED BY THE LAKE COUNTY UTILITIES DEPARTMENT. ALL PROPOSED SANITARY MANHOLE ADJUSTMENTS ARE ANTICIPATED TO MEET THIS REQUIREMENT.
5. ALL SEWER BRICK SHALL BE MADE FROM SHALE SEWER BRICK AND SHALL BE SMOOTH, SOUND, HARD, TOUGH, AND THOROUGHLY VITRIFIED. THEY SHALL BE TRUE IN FORM WITH STRAIGHT SHARP EDGES AND FLAT SURFACES, AND SHALL BE UNIFORM IN QUALITY, CROSS-SECTION AND DIMENSIONS. SHALE SEWER BRICK FURNISHED OR USED UNDER THESE SPECIFICATIONS SHALL COMPLY WITH ALL THE REQUIREMENTS FOR GRADE S.S., ASTM C-32 SO FAR AS THE SAME MAY APPLY AND ARE NOT IN CONFLICT WITH THESE SPECIFICATIONS.

### EXTENSIONS AND/OR REPLACEMENT OF EXISTING SANITARY CONDUITS

THE COST OF EXTENDING AND/OR REPLACING THE EXISTING CONDUITS TO NEW SANITARY SEWERS OR REBUILD SANITARY MANHOLES SHALL BE PAID FOR BY THE SIZE AND TYPE SPECIFIED AND/OR APPROVED BY THE ENGINEER. AN ESTIMATED CONTINGENCY QUANTITY OF THE FOLLOWING ITEMS IS PROVIDED IN THE GENERAL SUMMARY FOR THIS WORK.

ITEM 603 - 8" CONDUIT, TYPE B, AS PER PLAN, 706.08 WITH JOINTS AS PER 706.12	100 LIN. FT.
ITEM 603 - 8" CONDUIT, TYPE C, AS PER PLAN, 706.08 WITH JOINTS AS PER 706.12	100 LIN. FT.

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

ALL SANITARY CONNECTION METHODS & MATERIALS SHALL BE APPROVED BY THE LAKE COUNTY UTILITY DEPARTMENT.

### UNRECORDED SANITARY CONNECTIONS

ANY UNRECORDED ACTIVE CONNECTION TO A SANITARY SEWER ENCOUNTERED DURING CONSTRUCTION SHALL BE RECONNECTED TO THE EXISTING SEWER, AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 603 6" CONDUIT, TYPE B, AS PER PLAN, 706.08 W/JOINTS AS PER 706.12	100 LIN. FT.
ITEM 603 6" CONDUIT, TYPE C, AS PER PLAN, 706.08 W/JOINTS AS PER 706.12	100 LIN. FT.

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