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

CLEVELAND ELECTRIC 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 SERVICE DEPARTMENT ATTN: MATHEW 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.

MAILBOX REMOVAL AND REPLACEMENT

THE CONTRACTOR SHALL REMOVE & RE-ERECT EXISTING MAILBOXES AS PER 107.12. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 - LINEAR GRADING, AS PER PLAN.

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.

PROFILE AND ALIGNMENT

THE PROFILE AND ALIGNMENT OF THE PROPOSED ASPHALT CONCRETE COURSE SHALL MEET THAT OF THE EXISTING PAVEMENT AS INDICATED ON THE TYPICAL SECTIONS.

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.

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
1 8"	1	Ο	1
30"	1	Ο	1
48"	0	Ο	0
60"·	0	0	0

GENERAL NOTES

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 ITEM 608 - 4" CONCRETE WALK

1500 S.F.

1500 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

80 STATIONS

BENCHMARKS

THE FOLLOWING BENCHMARKS WERE USED ON THIS PROJECT TO DETERMINE FLOWLINE AND CASTING ELEVATIONS:

BENCHMARK No. 1 - STA. 177+17. 26' LT. TOP OF HYDRANT ELEV. 624.98 TOP OF HYDRANT - STA. 182+82, 22'LT ELEV. 625.46 TOP OF HYDRANT BENCHMARK No. 3 STA. 186+93, 21' LT. ELEV. 626.24

TOP OF HYDRANT BENCHMARK No. 4 - STA. 200+92, 33' LT. ELEV. 630.28 TOP OF HYDRANT BENCHMARK No. 5 STA. 203+27, 33' LT.

ELEV. 629.09 STA. 206+00, 31' LT. TOP OF HYDRANT BENCHMARK No. 6 ELEV. 628.26

BENCHMARK No. 7 - STA. 214+20, 30' LT. TOP OF HYDRANT ELEV. 628.91 TOP OF HYDRANT BENCHMARK No. 8 - STA. 227+78, 22' LT. ELEV. 630.34

NORTH CORNER OF BENCHMARK No. 9 - STA. 233+82, 30' RT. MONUMENT BOX ELEV. 631.55

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 7000 SQ. YD. THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED TO PROMOTE GROWTH

FOR SODDED AREAS PER 659.08: ITEM 659 - COMMERCIAL FERTILIZER

0.63 TONS

TOP OF HYDRANT

ELEV. 629.89

(20 lbs./1000 SQ. FT.) =ITEM 659 - AGRICULTURAL LIMING (46 lbs./1000 SQ. FT.) X 220%=

BENCHMARK No. 10 - STA. 244+32, 24' LT.

3.20 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.)

8 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:

ITEM 207 - TEMPORARY SEEDING AND MULCHING 1400 SQ. YD. 520 EACH ITEM 207 - STRAW OR HAY BALES 300 LIN. FT. ITEM 207 - FILTER FABRIC FENCE ITEM 659 - COMMERCIAL FERTILIZER 0.05 TON ITEM 659 - WATER 3 M GAL.

BY V.L.W. DATE 1/9/96 CHKC BY \(\omega \nu \omega \o

LAK - 283 - 7.97

(104) FHWA REGION

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 REBUILT 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.

NECASSARY 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.

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.

TREATED SEPTIC CONNECTIONS

PERTINENT CONDUIT ITEM.

THE CONTRACTOR SHALL BE AWARE OF THE POSSIBILITY OF UNKNOWN ISOLATED AREAS OF TREATED SEPTIC CONNECTIONS WITHIN THE PROJECT LIMITS. IN THIS EVENT THE FOLLOWING SHALL APPLY:

TREATED SEPTIC FLOW MAY BE DISCHARGED INTO THE HIGHWAY DRAINAGE SYSTEM PROVIDED THE OWNER HAS ACQUIRED AN OFFICIAL PERMIT FROM THE LOCAL AUTHORITY.

IN EACH CASE WHERE A PERMIT HAS BEEN ISSUED FOR MAKING A TREATED SEPTIC CONNECTION INTO A HIGHWAY DRAINAGE CONDUIT, AN INSPECTION WELL SHALL BE PROVIDED IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING MC-8.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER, IN MAKING THE ABOVE **DESCRIBED CONNECTIONS:**

> ITEM 603 6" CONDUIT, TYPE B, AS PER PLAN, 706.08 W/JOINTS AS PER 706.12

100 LIN.FT.

3 EACH

6" CONDUIT, TYPE C. AS PER PLAN,

100 LIN.FT. 706.08 W/JOINTS AS PER 706.12

ITEM 604 INSPECTION WELLS NECESSARY BENDS OR BRANCHES SHALL BE INCLUDED FOR PAYMENT IN THE

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