

GENERAL NOTES AND CALCULATIONS

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC.

ITEM SPECIAL - HERBICIDES FOR WEED CONTROL

PRIOR TO PLACING THE ITEM 304 - AGGREGATE BASE, 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, PRINCEP 80W, 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.

FIELD OFFICE

THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE HAVING A MINIMUM OF 150 SQ. FT. OF FLOOR SPACE. PAYMENT SHALL BE AT THE LUMP SUM PRICE BID FOR ITEM 619, FIELD OFFICE.

REMOVAL OF TREES OR STUMPS

ALL TREES AND STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE CONSTRUCTION LIMITS OF THIS PROJECT SHALL BE REMOVED UNDER THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING, EXCEPT THAT THOSE TREES FOR WHICH PROTECTION AND PRESERVATION WORK IS INDICATED ELSEWHERE IN THESE PLANS SHALL NOT BE REMOVED.

THE FOLLOWING IS AN APPROXIMATE ESTIMATE OF THE NUMBER OF TREES AND STUMPS TO BE REMOVED:

SIZES	NO. TREES	NO. STUMPS	TOTAL
18"	5	1	6

THE ABOVE ESTIMATE IS APPROXIMATE AND THE STATE OF OHIO RESERVES THE RIGHT TO ORDER THE REMOVAL OF ADDITIONAL TREES OR STUMPS OUTSIDE OF THE LIMITS OF CONSTRUCTION BUT WITHIN THE RIGHT-OF-WAY AND/OR EASEMENT LINES. PAYMENT FOR THE REMOVAL OF THESE ADDITIONAL TREES OR STUMPS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

UTILITY OWNERSHIP

THE FOLLOWING UTILITIES AND OWNERS ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT:

THE CLEVELAND ELECTRIC
ILLUMINATING CO.
55 PUBLIC SQUARE
CLEVELAND, OHIO
(216) 623-1350

TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS

REFERENCES TO SUPPLEMENTAL SPECIFICATIONS 857, 858, 859, 957, 958 AND 959 ON THE TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS IN THESE PLANS SHALL BE CONSIDERED TO READ AS RESPECTIVE REFERENCES TO ITEMS 630, 631, 632, 730, 731 AND 732.

ADDITIONAL DRAINAGE FACILITIES

THE ESTIMATED QUANTITIES BELOW ARE INCLUDED IN THE GENERAL SUMMARY AND ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR PERMANENTLY COLLECTING AND DIVERTING STORM DRAINAGE FROM ADJACENT LOW LYING AREAS TO THE STORM DRAINAGE SYSTEM OR ROADSIDE DRAINAGE DITCHES. THE OPTIMUM ROADWAY DITCH OUTLET ELEVATION SHALL BE, IF POSSIBLE, ONE FOOT ABOVE THE FLOW LINE ELEVATION OF THE DITCH.

ITEM 603 - 6" CONDUIT TYPE B, 500 LIN. FT., 711.29

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:

659 WATER 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:

207 STRAW OR HAY BALES 70 EACH
659 REPAIR SEEDING AND MULCHING 360 SQ. YD.

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 LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF THE EXISTING SEWERS WITHIN THE WORK LIMITS 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 INSPECTIONS SHALL BE KEPT IN WRITING BY THE STATE.

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 UNIT PRICES BID FOR THE PERTINENT 603 CONDUIT ITEMS OF THE CONTRACT.

MANHOLES, CATCH BASINS AND INLETS REMOVED OR ABANDONED

THE CASTINGS SHALL BE CAREFULLY REMOVED AND STORED WITHIN THE RIGHT-OF-WAY FOR SALVAGE BY THE CITY.

PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT 202 ITEM.

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

SEEDING QUANTITIES WERE CALCULATED FOR THE SOIL AREAS BETWEEN THE LIMITS SHOWN ON THE CROSS SECTION SHEETS. DAMAGE TO ANY SOIL AREAS OUTSIDE THESE LIMITS SHALL BE RESEED BY THE CONTRACTOR IN ACCORDANCE WITH ITEM 659 - SEEDING AND MULCHING, AND AT NO ADDITIONAL COST TO THE CITY OF EASTLAKE AND STATE OF OHIO.

ITEM 621 - STOP LINES

SHEET NO.	4	7	8	13	14	15	19
LENGTH (FEET)	11.5	11.5	11.5	11.5	11.5	23	11.5

ITEM 621 - STOP LINE = 92 LF

ITEM 202- CATCH BASIN ABANDONED

CATCH BASIN ABANDONED SHALL BE COVERED WITH A SLAB AT A MINIMUM OF ONE FOOT BELOW THE FINISHED SUBGRADE, AND SHALL NOT BE BACKFILLED WITHIN THE REMAINING CAVITY.

CALCULATIONS

ITEM 404 - ASPHALT CONCRETE AC-20

TURN OUT AREA @ CURTIS BLVD. = 58 SY
ADDITIONAL AREA @ STEVENS BLVD. = 7 SY
STA 251+82 TO STA 341+78; 5792 LF X 12.5/9 = 8045 SY
TURN OUT AREA @ LAKE SHORE BLVD. = 35 SY

TOTAL = 8145 SY

8145 SY X 2" X $\frac{YD}{36"} = 453 CY$
USE = 455 CY

ITEM 304 - AGGREGATE BASE

(8145 SY X 6") ÷ 36"/YD = 1358 CY
USE = 1360 CY

ITEM 408 - BITUMINOUS PRIME COAT

8145 SY X 0.4 GAL/SY = 3258 GAL
USE = 3260 GAL

ITEM SPECIAL - HERBICIDE FOR WEED CONTROL

FROM ITEM 404 - 8145 SY

ITEM 659 - SEEDING AND MULCHING

FROM CROSS SECTION SHEETS TOTAL = 7160 SY

ITEM 659 - AGRICULTURAL LIMING

FROM ITEM 659 - SEEDING & MULCHING = 7160 SY

QTY = 7160 SY X $\frac{9 SF}{SY} \times \frac{100\#}{1000 SF} \times \frac{TON}{2000\#} = 3.22 TON$

ITEM 659 - COMMERCIAL FERTILIZER

FROM ITEM 659 - SEEDING & MULCHING = 7160 SY

QTY = 7160 SY X $\frac{9 SF}{SY} \times \frac{20\#}{1000 SF} \times \frac{TON}{2000\#} = 0.64 TON$

ITEM 621 - CENTERLINES, AS PER PLAN (3 FOOT DASH AND 9 FOOT GAP)

QTY = APPROXIMATELY 5900 LF = 1.12 MI

ITEM 607 - 20' GATES TYPE CL

4 GATES AS DIRECTED BY THE ENGINEER

ITEM 605 - AGGREGATE DRAINS

(5792 LF ÷ 50) X 20 = 2316.8 LF

USE = 2320 LF

TRAFFIC SIGNS AND POSTS

SHEET NO.	4	7	8	12	13	14	15	16	19	TOTALS	
										NO.	AREA (S.F.)
SIGN CODE											
W-76B-30	1	1	1		1	1		1	1	7	44
M-7-24	4	4	4	1	3	4	1	5	3	29	87
IM-26-12	1	1	1		1	1		2	1	8	6
R-1-18	1	1	1		1	1		2	1	8	18
R5-3-24	1	1	1		1	1		2	1	8	32
M-14A-24	1	1	1	1		1	1	1	1	8	8
M-15A-24		2	2		2	2		2		10	10
M-15-24	2								1	3	3
M-13A-24	2								1	3	3

TOTAL = 211 SQ. FT.

ITEM 630 SIGNS, FLAT SHEET 211 SQ. FT.
ITEM 630 REMOVAL OF GROUND MOUNTED 1 EACH
ITEM 630 SIGN AND REERECTION
GROUND MOUNTED SUPPORTS, 520 LIN. FT.
NO. 3 POST