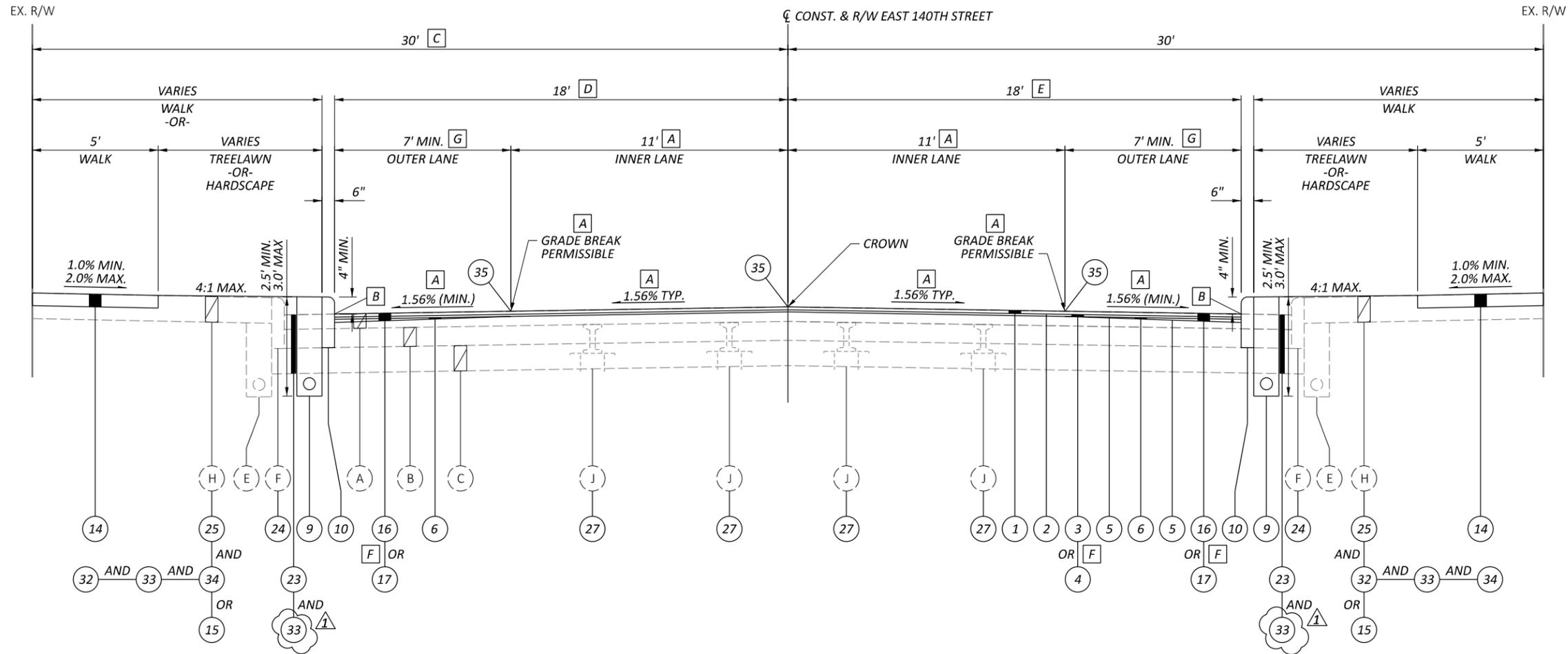


CROSS REFERENCES	
6	EXISTING LEGEND
6	PROPOSED LEGEND



**PROPOSED SECTION - EAST 140TH STREET**

STA. 14+61.41 TO STA. 42+14.31 = 2,752.90 LF  
 STA. 48+79.26 TO STA. 66+22.66 = 1,743.40 LF  
 STA. 68+38.97 TO STA. 72+15.00 = 376.03 LF

COIT AVENUE INTERSECTION TO ASPINWALL AVENUE INTERSECTION  
 DEISE AVENUE INTERSECTION TO SOUTH WATERLOO INTERSECTION  
 MCELHATTEN AVENUE INTERSECTION TO 57.5' NORTH OF OTHELLO AVENUE

TOTAL = 4,872.33 LF

- A** FOR ADDITIONAL DETAILS, SEE PAVEMENT ELEVATION TABLES ON SHEETS 88 - 105.
- B** 4" WIDE GUTTER SEAL MATERIAL, SEE CITY OF CLEVELAND SCD ASPH-1
- C** 40' FROM STA. 48+79.26 TO STA. 51+27.30

D	STATION RANGE	WIDTH	STATION RANGE	WIDTH
	STA. 15+72.57 TO STA. 17+65.00	18.0'	STA. 49+37.26 TO STA. 50+84.93	19.0'
	STA. 17+65.00 TO STA. 17+86.00	18.0 TO 20.0'	STA. 51+63.08 TO STA. 52+80.00	19.0' TO 18.0'
	STA. 17+86.00 TO STA. 18+60.00	20.0'	STA. 52+80.00 TO STA. 53+72.50	18.0'
	STA. 18+60.00 TO STA. 18+81.00	20.0' TO 18.0'	STA. 54+50.33 TO STA. 56+61.84	18.0'
	STA. 18+81.00 TO STA. 20+74.00	18.0'	STA. 57+43.38 TO STA. 59+55.28	19.0'
	STA. 20+74.00 TO STA. 20+95.00	18.0' TO 20.0'		
	STA. 20+95.00 TO STA. 22+27.00	20.0'	STA. 60+28.40 TO STA. 62+54.43	20.0'
	STA. 22+27.00 TO STA. 22+48.00	20.0' TO 18.0'	STA. 63+20.43 TO STA. 65+13.00	20.0'
	STA. 22+48.00 TO STA. 28+44.10	18.0'	STA. 65+13.00 TO STA. 65+49.00	20.0' to 21.8'
	STA. 29+09.43 TO STA. 31+09.00	18.0'	STA. 68+97.50 TO STA. 70+57.00	21.5' TO 13.0'
	STA. 31+09.00 TO STA. 31+30.00	18.0 TO 20.0'	STA. 70+57.00 TO STA. 71+29.48	13.0'
	STA. 31+30.00 TO STA. 31+35.00	20.0'	STA. 71+29.48 TO STA. 72+10.00	15.0'
	STA. 31+35.00 TO STA. 31+56.00	20.0' TO 18.0'	STA. 72+10.00 TO STA. 72+15.00	15.0' TO 20.0'
	STA. 31+56.00 TO STA. 33+74.62	18.0'		
	STA. 34+38.04 TO STA. 36+51.00	18.0'		
	STA. 36+51.00 TO STA. 36+72.00	18.0' TO 20.0'		
	STA. 36+72.00 TO STA. 36+77.00	20.0'		
	STA. 36+77.00 TO STA. 36+88.00	20.0' TO 19.0'		
	STA. 36+88.00 TO STA. 38+67.00	19.0'		
	STA. 38+67.00 TO STA. 39+17.00	19.0' TO 20.0'		
	STA. 39+17.00 TO STA. 41+33.92	20.0'		

E	STATION RANGE	WIDTH
	STA. 15+05.69 TO STA. 26+58.59	18.0'
	STA. 27+16.11 TO STA. 34+14.00	18.0'
	STA. 34+14.00 TO STA. 34+58.00	18.0' TO 19.0'
	STA. 34+58.00 TO STA. 36+19.00	19.0'
	STA. 36+19.00 TO STA. 36+72.00	19.0' TO 18.0'
	STA. 36+72.00 TO STA. 39+40.00	18.0'
	STA. 39+40.00 TO STA. 40+40.00	18.0' TO 20.0'
	STA. 40+40.00 TO STA. 41+53.51	20.0'
	STA. 48+79.26 TO STA. 59+65.00	18.0'
	STA. 60+39.87 TO STA. 61+95.00	18.0'
	STA. 61+95.00 TO STA. 62+95.00	18.0' TO 21.0'
	STA. 62+95.00 TO STA. 63+54.81	21.0'
	STA. 64+10.84 TO STA. 64+98.78	21.0'
	STA. 68+38.97 TO STA. 70+06.52	NO CURB REPLACEMENT, MATCH EXISTING
	STA. 70+68.32 TO STA. 72+15.00	20'

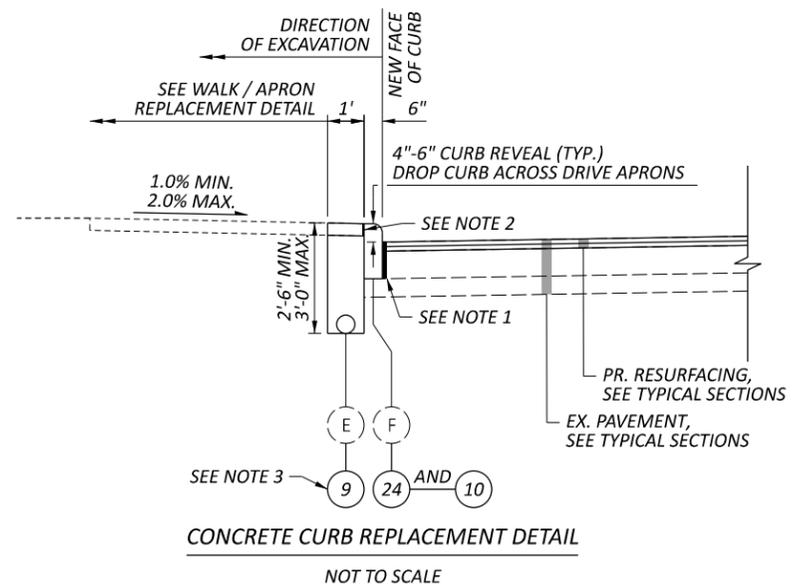
F	STATION RANGE	ITEM
	STA. 14+61.41 TO STA. 34+38.04	3 & 16
	STA. 34+38.04 TO STA. 42+24.19	4 & 17
	STA. 48+79.26 TO STA. 64+94.41	4 & 17
	STA. 68+43.41 TO STA. 72+15.48	4 & 17
<b>G</b>	THE WIDTH OF THE OUTER LANE IS EQUAL TO THE DIFFERENCE BETWEEN THE WIDTH OF ONE SIDE OF THE ROADWAY (CENTERLINE TO EDGE OF PAVEMENT, REFER TO NOTES D AND E ON THIS SHEET) AND THE INNER LANE (VARIES, SEE PAVEMENT ELEVATION TABLES).	

CUY-EAST 140TH STREETSCAPE

MODEL: Sheet03 PAPER: 17x11 (in.) DATE: 2/24/2023 TIME: 10:53:26 AM USER: Mary, Doherty  
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PROPOSED TYPICAL SECTIONS

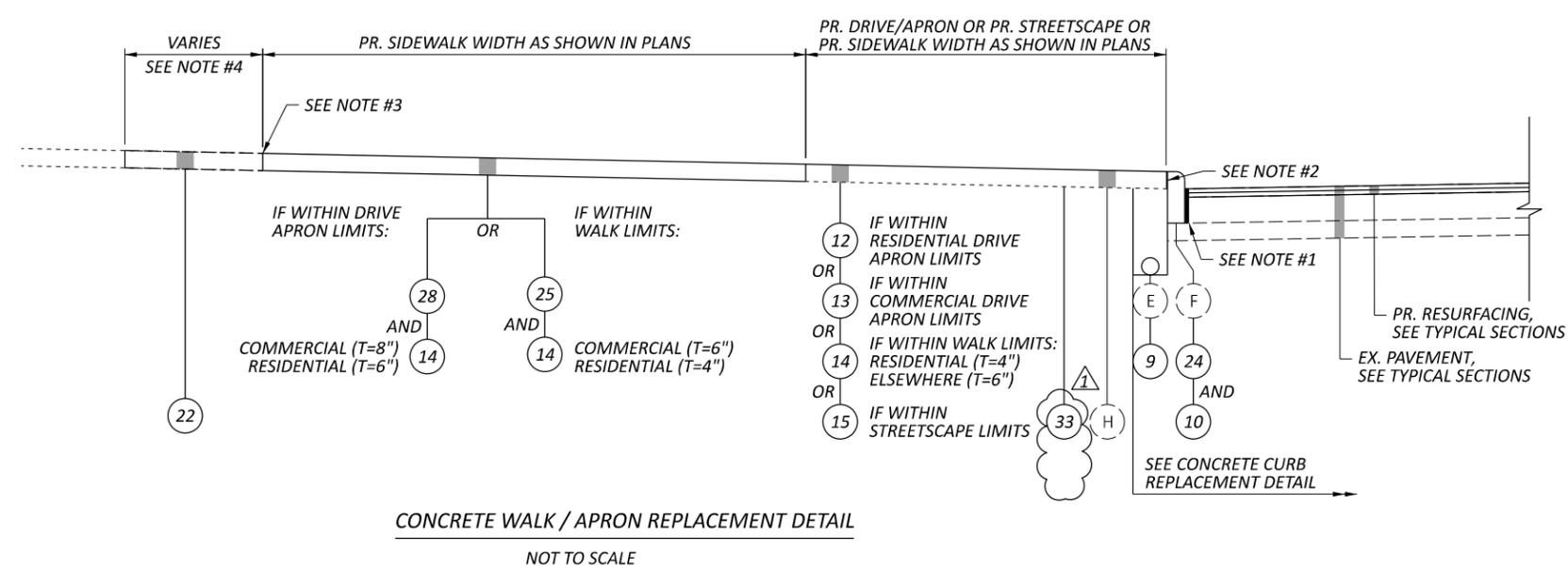
DESIGN AGENCY	
<b>Michael Baker INTERNATIONAL</b>	
DESIGNER	JTH
REVIEWER	MKD 10/21/22
PROJECT ID	115612
SHEET TOTAL	14   298



NOTES:

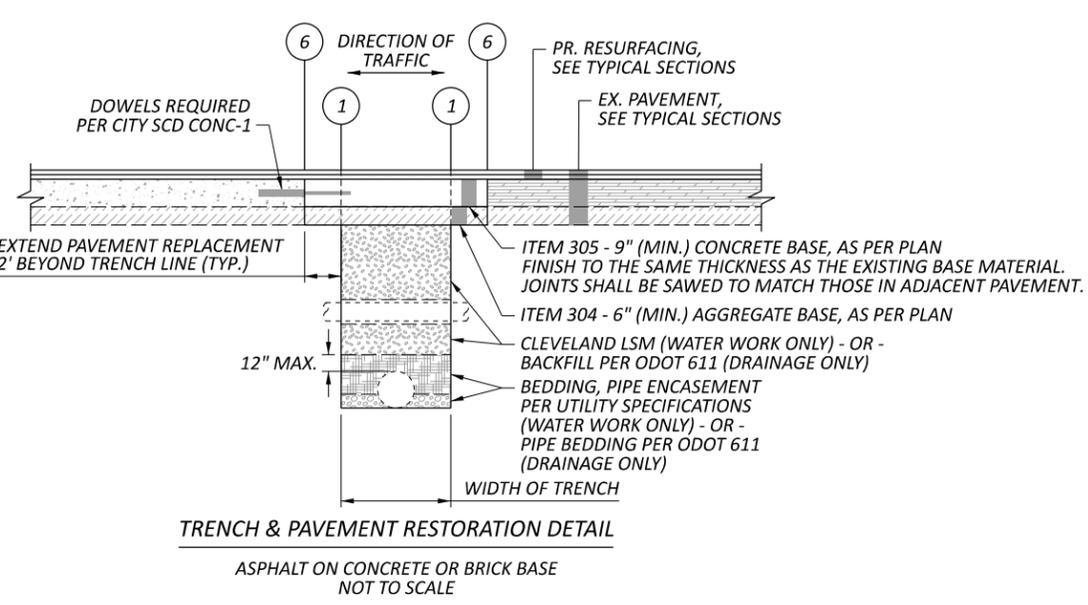
- 3/4" PREFORMED JOINT MATERIAL PER CMS 705.03 RECESSED 1/2" AND FILLED WITH 4" WIDE HOT-APPLIED CRACK SEALANT PER CMS 423 & 705.04.
- 1/2" PREFORMED JOINT MATERIAL PER CMS 705.03 RECESSED 1/2" AND FILLED WITH 1/2" JOINT SEALER PER CMS 705.04.
- THE CONTRACTOR SHALL INSTALL 6" UNDERDRAINS AT LOCATIONS OF CURB REPLACEMENT ALONG THE CORRIDOR. THE UNDERDRAINS SHALL BE CONSTRUCTED SO AS TO MATCH THE LOCATION AND TIE INTO THE EXISTING UNDERDRAIN TO REMAIN.

CROSS REFERENCES	
6	EXISTING LEGEND
6	PROPOSED LEGEND



NOTES:

- 3/4" PREFORMED JOINT MATERIAL PER CMS 705.03 RECESSED 1/2" AND FILLED WITH 4" WIDE HOT-APPLIED CRACK SEALANT PER CMS 423 & 705.04.
- 1/2" PREFORMED JOINT MATERIAL PER CMS 705.03 RECESSED 1/2" AND FILLED WITH 1/2" JOINT SEALER PER CMS 705.04.
- SAWCUT NEAT AND STRAIGHT PER ODOT ITEM 255 (COST INCLUDED WITH PERTINENT REMOVAL ITEM).
- PAVED AREAS BEHIND PROPOSED DRIVES AND WALKS MAY REQUIRE REPAIR AFTER THE INSTALLATION OF THE PROPOSED DRIVE OR WALK. REPAIRS WILL BE DIRECTED BY THE ENGINEER. AN ESTIMATED QUANTITY FOR THESE REPAIRS IS PROVIDED ON THE GENERAL SUMMARY.
- PERFORM WALK/APRON REPAIR PER THE LIMITS DEPICTED ON THE PLANS. WALK/APRON REPAIR LIMITS SHALL EXTEND FURTHER TO THE NEAREST EXISTING TRANSVERSE JOINT, AS DIRECTED BY THE ENGINEER.
- DIVIDE THE SURFACE OF THE WALK INTO EQUALLY SPACED RECTANGULAR BLOCKS AT INTERVALS NO SMALLER THAN 4- FEET.
- SIDEWALK AND DRIVE APRONS WILL BE REPLACED AT LOCATIONS SHOWN ON THE PLANS. THE SLOPE IN THE WALK AREA OF DRIVE APRONS SHALL NOT EXCEED 0.0156 CROSS SLOPE.
- CONSTRUCT DRIVEWAY, IF APPLICABLE, PER CITY SCD CD-1.

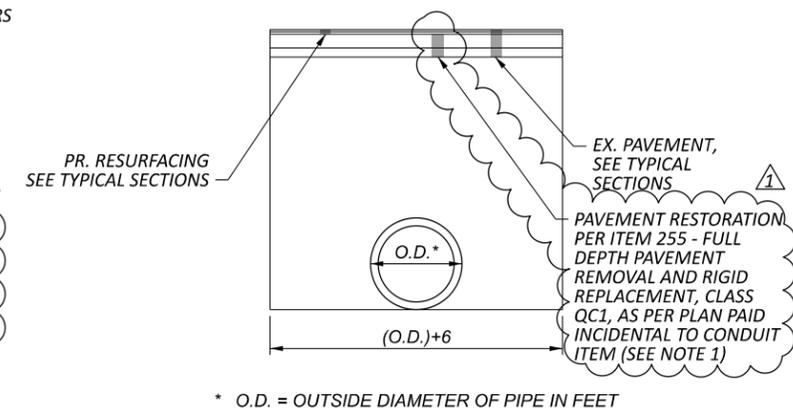


TRENCH & PAVEMENT RESTORATION SEQUENCE OF CONSTRUCTION

- PERFORM INITIAL FULL DEPTH PAVEMENT SAWCUTS EQUAL TO OR GREATER THAN PIPE SIZE PLUS ONE FOOT ON EACH SIDE OF PIPE.
- REMOVE PAVEMENT & EXCAVATE TO PIPE DEPTH.
- PLACE PIPE W/OWNER-SPECIFIED BEDDING UP TO 12" ABOVE TOP OF PIPE. (WATER WORK ONLY) PLACE PIPE BEDDING PER ODOT 611. (DRAINAGE ONLY)
- PLACE LSM. (WATER WORK ONLY) PLACE BACKFILL PER ODOT 611. (DRAINAGE ONLY)
- PLACE 304 AGGREGATE BASE.
- PERFORM 2 FT OVERCUT (SECOND SAWCUT OPERATION) ON EACH SIDE OF TRENCH.
- COMPACT SUBBASE.
- PLACE HOOK BOLTS OR DOWEL BARS AS REQUIRED.
- PLACE PAVEMENT.
- PLACE ASPHALT IN LIFTS WITH ADJACENT PAVEMENT.
- SEAL JOINTS.

NOTE:  
1. PAVEMENT REMOVAL, CONCRETE BASE AND AGGREGATE WITHIN TRENCH RESTORATION LIMITS ARE INCIDENTAL TO WATER WORK AND DRAINAGE ITEMS.

WIDTH OF TRENCH PAVEMENT RESTORATION DETAIL



DESIGN AGENCY	
DESIGNER	JTH
REVIEWER	10/21/22
PROJECT ID	115612
SHEET	TOTAL
17	298

**ROADWAY (CONTINUED)**

**ITEM 608 - CURB RAMP, AS PER PLAN**

UNDER THIS PAY ITEM, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT AND CONSTRUCTING AMERICANS WITH DISABILITIES ACT (ADA) COMPLIANT CURB ITEM. RAMPS AND LANDINGS THAT CONFORM TO THE CITY OF CLEVELAND CURB RAMP STANDARD DRAWINGS.

CURB RAMPS SHALL INCLUDE DETECTABLE WARNING CONSISTING OF TRUNCATED DOME TILES TINTED BRICK RED AND CONFORMING TO 712.14 AND THE CITY OF CLEVELAND SPECIAL PROVISIONS, THE TRUNCATED DOMES SHALL HAVE A NOMINAL DIAMETER OF 0.9-INCH AND A NOMINAL HEIGHT OF 0.2-INCH. THE TILES SHALL BE 24 INCHES WIDE IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE, BUT NOT ON THE FLARE SURFACE. THE TILES SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE OR OTHER POTENTIAL HAZARD IS 6 TO 8 INCHES FROM THE CURB LINE OR OTHER POTENTIAL HAZARD.

CITY OF CLEVELAND CURB RAMP STANDARD DRAWINGS, TYPE I THROUGH TYPE 11, SHALL BE USED AS A BASE FOR CONSTRUCTION OF THE CURB RAMPS. THE CURB RAMP TYPE IS SUBJECT TO ADJUSTMENT AND/OR CHANGE DUE TO FIELD CONDITIONS AND SHALL BE DETERMINED IN THE FIELD BASED ON BEST FIT TO FIELD CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING TYPE OF CURB RAMP PROPOSED IN THE PLANS. NO ADDITIONAL PAYMENT SHALL BE MADE IF THE CURB RAMP TYPE IS CHANGED OR FOR FIELD ADJUSTMENTS NECESSARY FOR THE COMPLETE INSTALLATION OF THE RAMP. IF THE CONTRACTOR BUILDS A CURB RAMP THAT DOES NOT MEET ADA REQUIREMENTS, THE CONTRACTOR SHALL REMOVE AND REPLACE IT TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST.

PAYMENT SHALL BE BASED ON MEASURED SQUARE FEET FOR CURB RAMP AREAS AS INDICATED ON CITY OF CLEVELAND CURB RAMP STANDARD DRAWINGS. PAYMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO CONSTRUCT THE NEW CURB RAMP, COMPLETE IN PLACE. PAYMENT INCLUDES EXISTING RAMP/SIDEWALK REMOVALS, SURVEYING, CONSTRUCTION LAYOUT, FORM WORK, REPLACEMENT OF 2" SCREENINGS BED, PLACEMENT OF CONCRETE SIDEWALK AND CURB FOR NEW RAMP, AND PLACEMENT OF NEW DETECTABLE WARNING STRIPS WITHIN THE PROPOSED RAMP AREAS.

ALL SAWCUTTING, APPURTENANCES, AND OTHER WORK NECESSARY FOR THE COMPLETE INSTALLATION OF THE RAMP IS CONSIDERED INCIDENTAL TO THIS ITEM, INCLUDING THE 8" CONCRETE THICKNESS ON THE SIDEWALK PANELS ADJACENT TO THE CURB WITHIN THE INTERSECTION RETURN AREA, FROM PC TO PI, AND AS SHOWN ON THE CITY OF CLEVELAND STANDARD DRAWINGS. ALL TOPSOIL, SEEDING, AND MULCHING REQUIRED ADJACENT TO THE CURB RAMP SHALL BE CONSIDERED INCIDENTAL TO THIS ITEM. SEEDING MIX SHALL CONFORM TO ODOT CMS 659.08 HIGH QUALITY SEEDS, CLASS I. CURB RAMPS AT INTERSECTION CORNERS AND AT MIDBLOCK/T-INTERSECTION LOCATIONS ARE SHOWN ON THE PLANS FOR ESTIMATING PURPOSES, WORK BEYOND THE LIMITS OF THE CURB RAMP AREA SHALL BE PAID UNDER SEPARATE PAY ITEMS.

CURB RAMPS HAVE BEEN SHOWN SCHEMATICALLY TO REPRESENT CURB RAMP TYPE THAT SHOULD BE USED DUE TO ADA ACCESSIBLE ROUTE DIMENSIONS AND DISTANCE FROM FACE OF CURB TO RIGHT OF WAY. DUE TO THE FACT THAT THE CURB RAMP ELEVATIONS AND DIMENSIONS ARE NOT INCLUDED, THE REQUIRED FOOTPRINT TO PROVIDE THE MINIMUM LANDING DIMENSIONS AND NOT EXCEED THE ALLOWABLE SLOPES MAY DIFFER FROM THE CURB RAMPS SHOWN WITHIN THE PLANS AND MAY REQUIRE ADDITIONAL CURBS INTEGRAL TO THE SIDEWALK. THE CONTRACTOR SHALL BUILD CURB RAMPS AT EACH LOCATION SHOWN IN THE PLANS THAT ADHERE TO THE REQUIREMENTS OF ONE OF CURB RAMP DESIGNS IN THE CITY OF CLEVELAND STANDARD CONSTRUCTION DRAWING CR-1.

THE FOLLOWING CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN CASES WHERE THE CURB RAMP FOOTPRINT DIFFERS FROM THE PLAN.

**ITEM 608 – CURB RAMP, AS PER PLAN 250 SF**

**ITEM 608 - 4" CONCRETE WALK, AS PER PLAN  
 ITEM 608 - 6" CONCRETE WALK, AS PER PLAN  
 ITEM 608 - 8" CONCRETE WALK, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ITEM 608, THE FOLLOWING SHALL APPLY:

ALL CONCRETE SHALL BE MINIMUM OF 4", 6" OR 8" (RESPECTIVELY) AND HAVE A 2" COMPACTED SCREENING BED WHICH MEETS THE REQUIREMENTS OF 703.10 (LIMITED TO CRUSHED STONE). THE COST OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO SAWCUT, REMOVE EXISTING WALK, EXCAVATE, PLACE AND COMPACT SCREENINGS BED, LAYOUT AND FORM WORK, AND PLACEMENT OF NEW CONCRETE WALK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, ITEM 608 - 6" CONCRETE WALK, AS PER PLAN OR ITEM 608 - 8" CONCRETE WALK, AS PER PLAN.

**ITEM 608 - 4" CONCRETE WALK, AS PER PLAN (CONTINUED)  
 ITEM 608 - 6" CONCRETE WALK, AS PER PLAN (CONTINUED)  
 ITEM 608 - 8" CONCRETE WALK, AS PER PLAN (CONTINUED)**

PER 608.03(C), IT IS REQUIRED THAT 1/2 INCH THICK EXPANSION JOINT MATERIAL (705.03) BE INSTALLED BETWEEN THE WALK AND BACK OF CURB OR ANY OTHER FIXED OBJECT, IN ADDITION TO THE LOCATIONS SPECIFIED UNDER 608.03(C). TRANSVERSE EXPANSION JOINTS SHALL BE CONSTRUCTED AT INTERVALS OF NOT MORE THAN 25 TO 30 FEET UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE EXPANSION JOINT FILLER (705.03) SHALL BE PLACED AT THE TRANSVERSE EXPANSION JOINTS FOR THE FULL DEPTH/WIDTH OF THE CONCRETE WALK AND SHALL BE TRULY NORMAL TO GRADE. THE TOP 1/2 INCH OF THE EXPANSION JOINT PLACED BETWEEN THE WALK AND BACK OF CURB SHALL BE SEALED WITH 705.04 JOINT SEALER.

UNLESS OTHERWISE REQUIRED BY MUNICIPAL STANDARDS/ORDINANCES, THE FINAL SURFACE SHALL BE TEXTURED BY USE OF AN ACCEPTED BROOM SO AS TO PRODUCE A UNIFORM, GRITTY, TRANSVERSE TEXTURE, AFTER WHICH, THE CONTRACTOR IS REQUIRED TO RETRACE THE PREVIOUSLY FORMED JOINTS AND OUTSIDE EDGES OF THE WALK. (I.E. PICTURE FRAME).

THE COST OF THE MATERIAL AND LABOR ASSOCIATED WITH THE ABOVE WORK IS INCLUDED IN THE CONTRACT UNIT BID PRICE FOR ITEM 608 - 4" CONCRETE WALK, AS PER PLAN, ITEM 608 - 6" CONCRETE WALK, AS PER PLAN AND ITEM 608 - 8" CONCRETE WALK, AS PER PLAN.

**ADDITIONAL SIDEWALK REPLACEMENT**

FOR LOCATIONS WHERE EXISTING WALK NOT ITEMIZED FOR REPLACEMENT IS IN POOR CONDITION OR IS NOT ADA COMPLIANT, THE CONTRACTOR MAY BE FIELD DIRECTED TO INSTALL ADDITIONAL WALK AND BEYOND THE QUANTITIES ITEMIZED ON THE PLAN SHEETS. THE FOLLOWING QUANTITIES ARE INCLUDED IN THE GENERAL SUMMARY FOR THAT PURPOSE:

<b>ITEM 202 - WALK REMOVED, AS PER PLAN</b>	<b>12210 SF</b>
<b>ITEM 202 - REMOVAL MISC.: PAVEMENT REMOVED FOR DRIVES</b>	<b>100 SY</b>
<b>ITEM 608 - 4" CONCRETE WALK, AS PER PLAN</b>	<b>3800 SF</b>
<b>ITEM 608 - 6" CONCRETE WALK, AS PER PLAN</b>	<b>2650 SF</b>
<b>ITEM 608 - 8" CONCRETE WALK, AS PER PLAN</b>	<b>750 SF</b>

**ITEM SPECIAL - RETAINING WALL AND HANDRAIL REMOVED AT MCELHATTEN**

REMOVE THE FULL LIMITS OF THE RAILING AND WALL AT THE NORTHWEST CORNER OF EAST 140TH AND MCELHATTEN PER ITEM 202. REGRADE THE SURROUNDING AREA AT A MAXIMUM GRADE OF 3:1 AND PER THE ELEVATIONS INDICATED ON THE INTERSECTION DETAILS. THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY AS FULL COMPENSATION FOR ALL WORK NECESSARY TO REMOVE AND REGRADE THIS AREA:

**ITEM SPECIAL - RETAINING WALL AND HANDRAIL REMOVED AT MCELHATTEN LS**

**EXISTING PAVEMENT DISPOSAL/CASTING ADJUSTMENT**

IN AREAS WHERE FULL DEPTH PAVEMENT REPAIR IS PERFORMED, THE EXISTING ASPHALT PAVEMENT WEARING COURSE, BRICK BASE AND CONCRETE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ONCE THE WEARING COURSE, BRICK, AND CONCRETE ARE REMOVED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST CASTINGS TO GRADE AS SHOWN IN THE PLANS.

FOR AREAS OF RESURFACING ONLY, THE EXISTING ASPHALT PAVEMENT WEARING COURSE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. ONCE THE WEARING COURSE IS REMOVED, CASTINGS ARE TO REMAIN AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DELINEATE ANY CASTINGS THAT MAY PROTRUDE ABOVE THE EXISTING CONCRETE BASE. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT MATERIAL IN THE VICINITY OF THESE CASTINGS TO PROVIDE AN ADEQUATE RAMP AROUND THE CASTINGS IMMEDIATELY AFTER THE INSTALLATION OF THE ASPHALT CONCRETE INTERMEDIATE COURSE. FINAL SURFACE COURSE SHALL BE PLACED ONLY AFTER ALL CASTING ADJUSTMENTS ARE COMPLETE. IN NO CASE SHALL THE CASTING REMAIN EXPOSED WITHOUT PROPER PROTECTION.

THE FOLLOWING QUANTITIES ARE TO BE USED FOR STREET CASTINGS AS DIRECTED BY THE ENGINEER:

<b>ITEM 611 - MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)</b>	<b>35 EACH</b>
<b>ITEM SPECIAL - MISCELLANEOUS METAL</b>	<b>2,500 LB</b>

**ITEM 203 - ROADWAY, MISC.: PRE-CONSTRUCTION AUDIO-VIDEO**

PRIOR TO THE DELIVERY OF ANY MATERIALS OR SUPPLIES TO THE SITE OF ANY WORK, OR TO THE BEGINNING OF ANY OF THE CONSTRUCTION WORK, THE CONTRACTOR SHALL PROVIDE PRE-CONSTRUCTION AUDIO-VIDEO TAPING FOR THE PURPOSE OF ESTABLISHING THE SURFACE CONDITIONS EXISTING IN ALL AREAS AFFECTED BY THE WORK. VIDEO TAPING SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, DRIVEWAY, DRIVEWAY APRON, AND BASEMENT WINDOW, ESPECIALLY THE AREA WHERE A TEMPORARY CONNECTION MIGHT BE MADE OR WHERE A TEMPORARY HOSE MIGHT GO THROUGH A BASEMENT WINDOW. TWO PASSES IN EACH DIRECTION ARE REQUIRED TO COMPLETE THIS ACTIVITY: ONE FOCUSING ON RIGHT-OF-WAY AND ONE FOCUSING ON PRIVATE PROPERTY.

THE PRE-CONSTRUCTION VIDEOGRAPHY SHALL BE PERFORMED BY AN INDEPENDENT COMPANY HAVING PREVIOUS EXPERIENCE IN SIMILAR TYPES OF WORK. THE CONTRACTOR SHALL PROVIDE ONE COPY OF THE PRE-CONSTRUCTION VIDEO TO ODOT AND ONE COPY TO THEMSELVES. THE FULL COST OF FURNISHING ALL LABOR, MATERIALS, AND EQUIPMENT TO PERFORM THE REQUIRED AUDIO-VIDEO TAPING AS DESCRIBED HEREIN SHALL BE INCLUDED FOR PAYMENT IN THE LUMP SUM BID FOR ITEM SPECIAL - ROADWAY, MISC.: PRE-COUNSTRUCTION AUDIO-VIDEO.

**ITEM 203 - ROADWAY, MISC.: PRE-CONSTRUCTION AUDIO-VIDEO LS**

**ITEM 203 - ROADWAY, MISC.: RAILROAD INSURANCE PREMIUM**

CONTRACTOR SHALL OBTAIN AND MAINTAIN AN INSURANCE POLICY IN ACCORDANCE WITH THE SPECIAL PROVISION, INSURANCE REQUIREMENTS FOR PUBLIC PROJECTS.

**ITEM 203 - ROADWAY, MISC.: RAILROAD INSURANCE PREMIUM LS**

**ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN**

WHERE MONUMENT ASSEMBLIES ARE BOTH SUITABLE FOR RE-USE AND CONFORM TO CITY OF CLEVELAND STANDARD DRAWING MB-1C, THEY SHALL BE ADJUSTED TO GRADE AS REQUIRED AND SPECIFIED. SUCH ADJUSTMENTS SHALL BE PERFORMED BY THE CONTRACTOR'S USE OF COMPETENT PERSONNEL AND SUITABLE EQUIPMENT WITH SAID WORK DONE UNDER THE SUPERVISION OF A PROFESSIONAL SURVEYOR, LICENSED TO PRACTICE IN THE STATE OF OHIO. WHERE PAVEMENT REMOVAL IS NECESSARY ADJACENT TO A MONUMENT ASSEMBLY, SAW-CUTTING OF THE ADJACENT PAVEMENT WILL BE REQUIRED TO HELP PRESERVE THE MONUMENT.

ALL MONUMENTS EXISTING AND PROPOSED MUST BE REFERENCED PRIOR TO CONSTRUCTION. A MINIMUM OF 3 POINTS OF REFERENCE PER MONUMENT MUST BE USED AND MUST BE LOCATED OUTSIDE OF THE CONSTRUCTION ZONE WORK AREA. ALL MONUMENTS MUST BE REFERENCED PRIOR TO ADJUSTING ASSEMBLY TO GRADE OR REPLACING CASTING. ALL MONUMENTS ADJUSTED OR REPLACED SHALL BE AS PER THE CLEVELAND MONUMENT ASSEMBLY AS DETAILED ON CITY OF CLEVELAND STANDARD DRAWINGS MB-1C, SET TO PROPER GRADE.

IN ADDITION TO ADJUSTING THE CASTING VERTICALLY THIS PAY ITEM SHALL INCLUDE CENTERING THE CASTING OVER THE EXISTING IRON PIN OR STONE. THE ENTIRE MONUMENT ASSEMBLY CASTING SHALL BE ADJUSTED TO GRADE AND NO INSERTS OR ADJUSTING RINGS WILL BE PERMITTED. IF THE EXISTING IRON PIN OR STONE IS EITHER MISSING OR DAMAGED, A NEW MONUMENT ASSEMBLY SHALL BE INSTALLED AND PAID FOR AS ITEM 623 - MONUMENT ASSEMBLY, AS PER PLAN.

CARE AND PROTECTIVE MEASURES SHALL BE EMPLOYED BY THE CONTRACTOR TO AVOID DAMAGE OR DISPLACEMENT OF THE EXISTING MONUMENT DURING THE MONUMENT ASSEMBLY ADJUSTMENT OR REPLACEMENT OPERATIONS AND ALL OTHER OPERATIONS IN THE PROXIMITY.

PRIOR TO THE BEGINNING OF WORK A COPY OF ALL SURVEY AND REFERENCE NOTES WILL BE SENT TO THE ATTENTION OF THE CHIEF SURVEYOR AT THE CITY OF CLEVELAND, MAYOR'S OFFICE OF CAPITAL PROJECTS, DIVISION OF ENGINEERING AND CONSTRUCTION, PLATS AND SURVEY, ROOM 518, CLEVELAND CITY HALL.

PAYMENT FOR THE ABOVE SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR ITEM 623 - MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN.

DESIGN AGENCY

**Michael Baker  
INTERNATIONAL**

DESIGNER  
**MKD**

REVIEWER  
**DAB 10/21/22**

PROJECT ID  
**115612**

SHEET TOTAL  
**26 298**

**DRAINAGE**

**CONSTRUCTION STANDARDS FOR WPC SEWERS**

- ALL SEWER CONSTRUCTION AND MATERIALS INCLUDED ON THIS PROJECT SHALL BE IN ACCORDANCE WITH ODOT CMS 611, AS MODIFIED BY THE CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL. NOTES AND STANDARDS INCLUDED HEREIN.
- IF ALTERNATE BID ITEMS ARE AUTHORIZED, ALL PIPES 18" IN DIAMETER AND SMALLER SHALL BE VCP, C-700 EXTRA STRENGTH WITH PREMIUM JOINTS AS PER ODOT 706.08.
- IF ALTERNATE BID ITEMS ARE AUTHORIZED, ALL PIPES 21" IN DIAMETER AND LARGER SHALL BE RCP, CLASS 3 WITH PREMIUM JOINTS AS PER ODOT 706.02.
- ALL PIPES WITH LESS THAN 3' OF COVER SHALL BE DUCTILE IRON PIPE ANSI CLASS 52, WITH PUSH ON JOINTS AND FITTING.
- THE REPAIR OF ALL DISTURBED CITY BRICK SEWERS SHOULD BE COORDINATED WITH WPC ENGINEER.
- FOR THE SEWER CONNECTION REPAIR, THE FOLLOWING GUIDELINES SHALL BE USED:
  - REPAIR ALL DAMAGED SEWER CONNECTIONS IN KIND.
  - USE VCP FOR ALL REPAIRED/RELOCATED SEWER CONNECTIONS.
  - ALL SEWER REPAIRED/RELOCATED CONNECTIONS SHOULD BE LAID AT NO LESS THAN 1% GRADE.
  - THE MINIMUM SIZE FOR A SEWER CONNECTION SHOULD BE 6".
  - A MINIMUM COVER OF 3 FEET IS REQUIRED FOR ALL PROPOSED SEWER CONNECTIONS.
  - A 6" VCP TEST TEE MAY BE REQUIRED FOR A RELOCATED SEWER CONNECTION.
  - NO HORIZONTAL BENDS ARE ALLOWED FOR SEWER CONNECTIONS.

**COORDINATION WITH CLEVELAND WATER POLLUTION CONTROL**

- THE CONTRACTOR SHALL NOTIFY THE DIVISION OF WATER POLLUTION CONTROL(WPC) PRIOR TO THE START OF CONSTRUCTION AT 216-664-2756.
- THE CONTRACTOR IS REQUIRED TO SUBMIT SEWER SHOP DRAWINGS TO WPC PRIOR TO THE SEWER INSTALLATION. THE DRAWINGS SHOULD INCLUDE THE SEWER PIPES, MANHOLES, CATCH BASINS AND OTHER SEWER APPURTENANCES.
- WPC WILL INSPECT THE WPC SEWER INSTALLATION.
- THE PROPOSED WPC SEWERS SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS APPROVED BY WPC. ANY DEVIATIONS FROM THE APPROVED PLANS OR SPECIFICATIONS REQUIRE A NEW SUBMITTAL REFLECTING THE CHANGES. UPON REVIEW OF THE REVISED ITEMS, WPC WILL REISSUE A NEW APPROVAL. IT IS STRICTLY PROHIBITED TO CONSTRUCT ANY CITY SEWERS UNLESS THEY ARE APPROVED BY WPC.
- UPON COMPLETION OF THE CITY SEWER INSTALLATION, THE CONTRACTOR IS REQUIRED TO SUBMIT AS-BUILT PLANS AND A VIDEO TAPED COPY OF THE NEW CITY SEWERS. WPC RESERVES THE RIGHT NOT TO APPROVE ANY CITY SEWER THAT DOES NOT MEET WPC REQUIREMENTS.
- ALL EXISTING WPC CATCH BASIN CONNECTIONS SHOULD BE TELEVIEWED BY THE CONTRACTOR, AND INSPECTED AND APPROVED BY WPC INSPECTOR PRIOR TO THEIR REUSE.
- THE DIVISION OF WATER POLLUTION CONTROL (WPC) WILL COLLECT ALL CITY SEWER CASTINGS INCLUDING CATCH BASIN FRAMES AND GRATES, AND MANHOLE FRAMES AND COVERS, FOR ALL EXISTING CATCH BASINS THAT NEED TO BE ABANDONED OR REMOVED AND EXISTING MANHOLE COVERS THAT NEEDS TO BE REPLACED. THE CONTRACTOR SHALL DESIGNATE A LOCATION WHERE ALL SEWER CASTINGS ARE TO BE STORED AND SHALL COORDINATE WITH WPC FOR THE COLLECTIONS OF ALL SEWER CASTINGS STORED IN THE DESIGNATED LOCATION.
- THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS TO PERFORM THE REQUIRED WORK. PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE SEWER WORK. NO SEPARATE PAY ITEM WILL BE MADE.

**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 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 611 CONDUIT ITEM.

**REVIEW OF DRAINAGE FACILITIES**

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE, REPRESENTATIVES OF THE DEPARTMENT, THE CONTRACTOR, AND LOCALS 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 APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

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.

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.

ADDITIONALLY, SOME EXISTING DRAINAGE INFORMATION SHOWN ON THESE PLANS IS FROM RECORD PLAN INFORMATION AND COULD NOT BE FIELD VERIFIED. PRIOR TO THE ORDERING OF ANY PRECAST MATERIALS, THE CONTRACTOR SHALL VERIFY AND RECORD THE DEPTHS OF THE EXISTING DRAINAGE STRUCTURES WHICH ARE BEING REMOVED AND REPLACED WITH NEW.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

**CONNECTIONS TO EXISTING UTILITIES**

PRIOR TO THE INSTALLATION OF PROPOSED CONNECTIONS TO EXISTING FACILITIES THE CONTRACTOR SHALL LOCATE AND CONFIRM THE EXISTING LINE AND GRADE AT THE CONNECTION MATCHES THE PROPOSED PLAN ELEVATIONS. ANY DEVIATION FROM PLAN ELEVATIONS OR OTHER PLAN REVISIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONNECTION INSTALLATION.

PRIOR TO THE INSTALLATION OF PROPOSED CONNECTIONS THE CONTRACTOR SHALL CONFIRM CLEARANCES TO THE ADJACENT UNDERGROUND UTILITIES. A CONFLICT REQUIRING A PLAN REVISION SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONNECTION INSTALLATION.

PAYMENT FOR THESE OPERATIONS DESCRIBED IN THESE SPECIFICATIONS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE PERTINENT ODOT ITEM 611 CONDUITS.

**ITEM 202 - PIPE REMOVAL**

PIPE REMOVALS, INCLUDING REMOVAL OF THE PAVEMENT ABOVE THE PIPE, THAT OCCUR IN THE SAME TRENCH AS A PROPOSED PIPE ARE INCIDENTAL TO THE PROPOSED PIPE AND NO SEPARATE PAYMENT SHALL BE MADE.

THIS NOTE DOES NOT APPLY TO REMOVAL OF EXISTING WATER LINES, AS THESE REMOVALS ARE ITEMIZED IN THE WATER WORKS PLANS.

ANY ABANDONED PIPE THAT MAY BE ENCOUNTERED DURING CONSTRUCTION SHALL BE INCLUDED WITH THE COST OF THAT ITEM; WATERLINE, SEWER, EXCAVATION, ETC.

**EXISTING UNDERDRAINS**

THE COST FOR REMOVAL AND DISPOSAL OF EXISTING UNDERDRAIN PIPE IS INCIDENTAL TO ITEM 202 - CURB REMOVED, AS PER PLAN. NONE OF THE MATERIALS SHALL BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

PROVIDE UNOBSTRUCTED OUTLETS FOR ALL EXISTING UNDERDRAINS ENCOUNTERED DURING CONSTRUCTION. PROVIDE AN OUTLET PER ODOT STANDARD CONSTRUCTION DRAWING DM-1.1 FOR ALL UNDERDRAINS THAT OUTLET TO A SLOPE.

UNDERDRAINS THAT CAN BE CONNECTED TO THE NEW OR EXISTING UNDERDRAINS AT THE END OF THE PROJECT LIMITS AS WELL AS ALL NECESSARY BENDS OR BRANCHES REQUIRED FOR CONNECTION ARE INCLUDED IN THE BASIS OF PAYMENT FOR UNCLASSIFIED PIPE UNDERDRAINS.

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK NOTED ABOVE:

ITEM 611 - 6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS 750 FT

**ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN**

NEW UNDERDRAINS SHALL BE CONSTRUCTED TO MATCH THE LOCATION OF ANY EXISTING UNDERDRAIN FOUND AT PROJECT WORK LIMITS SO AS TO ASSURE CONTINUITY OF FLOW. NEW UNDERDRAINS SHALL BE INSTALLED AT A DEPTH WITHIN THE LIMITS SHOWN ON THE TYPICAL SECTIONS AND SHALL DRAIN TO ROADWAY CATCH BASINS.

UNDERDRAIN CONNECTIONS: THE LAST 10 FEET OF UNDERDRAIN OUTLETS TO CATCH BASINS SHALL BE 4" OR 6" CONDUIT, TYPE 4, 706.08, NON-PERFORATED AS INDICATED IN THE PLANS.

IN ADDITION TO THE QUANTITIES PROPOSED IN THE PLAN SHEETS, THE FOLLOWING CONTINGENCY QUANTITY IS INCLUDED TO INSTALL UNDERDRAIN UNDER THE CSX RAILROAD BRIDGE (STA. 44+01.46 TO STA. 45+15.67 ON THE LEFT SIDE AND STA. 44+25.95 TO STA. 45+39.09 ON THE RIGHT SIDE) IN THE EVENT EXISTING UNDERDRAIN IS FOUND DURING THE PROPOSED WORK:

ITEM 605 - 6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN 230 FT

**ITEM 611 - DRAINAGE STRUCTURE, MISC.: UTILITY TEST HOLE**

WHERE PLANS INDICATE OTHER UTILITIES ARE IN CLOSE PROXIMITY OF A NEW CATCH BASIN INSTALLATION, THE ENGINEER MAY DECIDE TO EXCAVATE TO CONFIRM THE CATCH BASIN CAN BE PLACED WITHOUT INTERFERENCE. IF INTERFERENCE IS FOUND, THE CATCH BASIN LOCATION OR TYPE IS TO BE REVISED, AS DIRECTED BY THE ENGINEER.

ONCE THE TEST HOLE IS COMPLETE, THE EXCAVATION SHALL BE BACKFILLED AND SURFACE RESTORED. NO PAYMENT FOR UTILITY TEST HOLE AS PER PLAN WILL BE GIVEN WITHOUT PRIOR APPROVAL FROM THE ENGINEER. PAYMENT FOR ALL LABOR, MATERIALS, EQUIPMENT AND OTHER INCIDENTALS, INCLUDING BACKFILL, COMPACTION AND SURFACE RESTORATION SHALL BE AT THE CONTRACT UNIT PRICE BID FOR ITEM 611 - DRAINAGE STRUCTURE, MISC.: UTILITY TEST HOLE. THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE BY THE ENGINEER:

ITEM 611 - DRAINAGE STRUCTURE, MISC.: UTILITY TEST HOLE 10 EACH

DESIGN AGENCY

Michael Baker INTERNATIONAL

DESIGNER

MKD

REVIEWER

DAB 10/21/22

PROJECT ID

115612

SHEET TOTAL

28 298

**DRAINAGE (CONTINUED)**

**ITEM SPECIAL - TRENCH DRAIN**

THIS ITEM SHALL CONFORM TO ODOT SUPPLEMENTAL SPECIFICATION 839 - TRENCH DRAIN SYSTEM. SUPPLY AND INSTALL TRENCH DRAIN, TYPE B WITH PEDESTRIAN GRATE, AS LOCATED AND AS MODIFIED ON THE DETAILS ON SHEET 291.

**SURFACE DRAINAGE CONTINGENCY**

EVERY EFFORT HAS BEEN MADE TO PROVIDE FOR ADEQUATE CURB INLETS AND PIPE TO PROPERLY ACCOUNT FOR THE SURFACE DRAINAGE. IN THE EVENT THAT ISOLATED LOW AREAS DEVELOP DURING CONSTRUCTION OF THE PROJECT, THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED TO BE USED AS DIRECTED BY THE ENGINEER:

<b>ITEM 202 - MANHOLE REMOVED</b>	<b>2 EACH</b>
<b>ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN</b>	<b>100 FT</b>
<b>ITEM 611 - CATCH BASIN, MISC.: CITY OF CLEVELAND CB-1</b>	<b>8 EACH</b>

**UNRECORDED STORM WATER DRAINAGE**

FURNISH A CONTINUANCE FOR ALL UNRECORDED STORM WATER DRAINAGE, SUCH AS ROOF DRAINS, FOOTER DRAINS, OR YARD DRAINS, DISTURBED BY THE WORK. FURNISH EITHER AN OPEN CONTINUANCE OR AN UNOBSTRUCTED CONTINUANCE BY CONNECTING A CONDUIT THROUGH THE CURB OR INTO A DRAINAGE STRUCTURE. THE LOCATION, TYPE, SIZE AND GRADE OF THE NEEDED CONDUIT TO REPLACE OR EXTEND AN EXISTING DRAIN WILL BE DETERMINED BY THE ENGINEER. ALL SUCH CONTINUANCE REQUIRES A RIGHT OF WAY USE PERMIT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR THE WORK NOTED ABOVE. PAYMENT FOR COMPLETED AND ACCEPTED QUANTITIES SHALL BE MADE AT THE CONTRACT UNIT BID PRICE:

<b>ITEM 202 - PIPE REMOVED, 24" AND UNDER</b>	<b>100 FT</b>
<b>ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN</b>	<b>200 FT</b>
<b>ITEM 611 - 6" CONDUIT, TYPE E</b>	<b>200 FT</b>
<b>ITEM 611 - CONDUIT, MISC.: 12" CONDUIT, DUCTILE IRON PIPE ANSI CLASS 52, PUSH ON JOINTS AND FITTINGS</b>	<b>100 FT</b>

**CLEAN AND TELEWISE SEWER**

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL TELEWISE EXISTING SEWER LATERALS TO REMAIN AT ALL LOCATIONS WHERE EXISTING DRAINAGE STRUCTURES ARE BEING REPLACED. THE TELEVISIONING SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL REPRESENTATIVE(S).

IF, IN THE OPINION OF ODOT AND THE CITY REPRESENTATIVE(S), THE LATERAL HAS REACHED ITS DESIGN SERVICE LIFE AND/OR WARRANTS REPLACEMENT, THE CONTRACTOR SHALL INSTALL A NEW SEWER LATERAL FROM THE NEW DRAINAGE STRUCTURE TO THE SEWER MAIN.

NEW SEWER LATERAL SHALL MATCH THE EXISTING LATERAL IN TERMS OF PIPE SIZE, LOCATION AND SLOPE. EXISTING LATERAL SHALL BE REMOVED. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

<b>ITEM 611 - 12" CONDUIT, TYPE B, AS PER PLAN</b>	<b>200 FT</b>
<b>ITEM 611 - 15" CONDUIT, TYPE B, AS PER PLAN</b>	<b>200 FT</b>

ANY ADDITIONAL COST FOR PAVEMENT REMOVED, MAINTENANCE OF TRAFFIC OR OUT OF SEQUENCE PLANNED WORK SHALL BE INCLUDED WITH PERTINENT ITEM 611. THESE ITEMS ARE CONSIDERED COMPLETE IN PLACE.

COPIES OF THE INSPECTION REPORT SHALL BE DELIVERED TO THE CITY OF CLEVELAND DIVISION OF WATER POLLUTION CONTROL AND THE CITY OF CLEVELAND DIVISION OF ENGINEERING AND CONSTRUCTION. THE INSPECTION SHALL FOLLOW THE GUIDELINES OF THE NATIONAL ASSOCIATION OF SEWER SERVICE COMPANIES.

PAYMENT FOR THIS ITEM INCLUDES THE CCTV SEWER INSPECTION, NASSCO INSPECTION REPORT, AND ANY ADDITIONAL COST FOR MAINTENANCE OF TRAFFIC OR ITEMS NECESSARY TO COMPLETE THE INSPECTION AND SHALL BE INCIDENTAL TO THE UNIT COST BID FOR INSTALLATION, REPLACEMENT, ADJUSTMENT, OR RECONSTRUCTION OF EACH DRAINAGE STRUCTURE.

**ITEM 613 - LOW STRENGTH MORTAR BACKFILL, AS PER PLAN**

1. CERTIFIED OF COMPLIANCE  
 MATERIAL MUST COME FROM A PLANT WITH A CURRENT CERTIFICATE OF COMPLIANCE DEMONSTRATING THE ABILITY OF THE MIX DESIGN TO MEET THE SPECIFIED REQUIREMENTS.

CERTIFICATES IN EXCESS OF ONE YEAR WILL NOT BE ACCEPTED. CERTIFICATES MUST CONTAIN THE NAME OF SUPPLIER, DATE, CONTRACT NUMBER AND MIX DESIGN DATA ON EACH DELIVERY TICKET.

2. MATERIALS  
 ALL MATERIALS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS STATED HEREIN.

- A. CEMENT SHALL BE ASTM C-150 TYPE 1
- B. THE USE OF FLY ASH IS STRICTLY PROHIBITED.
- C. FINE AGGREGATE SHALL CONFORM TO ODOT SPECIFICATION 703.03 FINE AGGREGATE FOR MORTAR OR GROUT. (ODOT CONSTRUCTION AND MATERIALS SPECIFICATIONS MOST CURRENT EDITION).
- D. THE USE OF SPENT FOUNDRY SAND OR CORE SAND IS STRICTLY PROHIBITED.

3. PERFORMANCE ENHANCING ADMIXTURE  
 ANY AIR-ENHANCING ADMIXTURE SHALL BE INCORPORATED IN THE MIX THAT WILL HAVE THE EFFECT OF LOWERING THE WATER/CEMENT RATIO TO BETWEEN 95 AND 105 LBS/CUBIC FOOT. THE AIR ENTRAINED CONTENT FOR THE MIX SHALL BE 30% TO ELIMINATE/ MINIMIZE THE EXCESSIVE WATER AND SEGREGATION. COMPRESSIVE STRENGTHS SHALL HAVE A RANGE OF 50 PSI TO 80 PSI AT 28 DAYS WILL BE REQUIRED IF ADDITIONAL EXCAVATION BY MACHINE OR HAND IS REQUIRED.

APPROVED ADMIXTURES  
 MANUFACTURER PRODUCT NAME

- A. MASTER BUILDERS RHEOFILL
- B. AXIM FLOW AIR
- C. W.R. GRACE DARAFILL
- D. OR APPROVED EQUAL

4. FLOWABLE FILL MIX DESIGN  
 THE MIX DESIGN SHALL BE PROPORTIONED AS FOLLOWS:

CEMENT (TYPE 1)	50 LBS/ CUBIC YARD
SAND (SSD)	2475 LBS/CUBIC YARD
WATER	25 GALLONS/ CUBIC YARD
ADMIXTURE	3 OZ/CUBIC YARD

VARIATIONS OF THE AFOREMENTIONED MIX DESIGN ARE STRICTLY PROHIBITED.

5. APPLICATION
- A. FLOWABLE FILL SHALL BEGIN 12 INCHES ABOVE THE TOP OF PIPE AND CONTINUE IN THE TRENCH IN CONFORMANCE WITH THE CITY STANDARD TRENCH REPAIR DETAIL (PR-1).
  - B. MATERIAL FOR PIPE BEDDING AND PIPE ZONE TO A MAXIMUM DEPTH OF 12 INCHES OVER THE TOP OF PIPE SHALL BE AS SPECIFIED BY THE UTILITY.
  - C. EXPOSED BOLTS AND VALVES EXPOSED IN THE TRENCH SHOULD BE WRAPPED WITH POLYETHYLENE MATERIAL CONFORMING TO ODOT 748.07 (8 MIL. THICK).
  - D. COVER ALL JOINTS IN CLAY PIPE IN THE TRENCH AREA WITH POLYETHYLENE MATERIAL BEFORE POURING FLOWABLE FILL.
  - E. REPAIR ALL OBSERVED OPENING IN ANY PIPE OR MANHOLE IN THE TRENCH AREA PRIOR TO BACKFILLING WITH FLOWABLE FILL. REPAIR TECHNIQUES SHALL BE IN ACCORDING WITH THE UTILITY COMPANY'S STANDARD REPAIR PROCEDURES.
  - F. CONTACT THE RESPECTIVE UTILITY OWNER FOR REPAIR PROCEDURES.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

<b>ITEM 613 - LOW STRENGTH MORTAR BACKFILL, AS PER PLAN</b>	<b>250 CY</b>
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**PAVEMENT**

**PAVEMENT REPAIR OPERATIONS**

AREAS OF PAVEMENT BASE ALONG THE EAST 140TH STREET CORRIDOR WILL BE REPAIRED OR REPLACED TO REHABILITATE DETERIORATING PAVEMENT BASE CONDITIONS. THE FOLLOWING METHODOLOGY WILL BE USED TO IDENTIFY AREAS OF BASE REPAIR.

PAVEMENT PLANING: PER THE TYPICAL SECTIONS, THE CONTRACTOR WILL PERFORM 3.25" UNIFORM FULL WIDTH PAVEMENT PLANING FROM COIT AVENUE TO MAXWELL AVENUE, AND 2.5" UNIFORM FULL WIDTH PAVEMENT PLANING FROM ST. CLAIR AVENUE TO COIT AVENUE AND FROM MAXWELL AVENUE TO LAKESHORE BOULEVARD. THE ROADWAY SHALL MAINTAIN A MINIMUM 0.003 PROFILE GRADE, A 0.156 MINIMUM AND 0.030 MAXIMUM CROSS SLOPE IN THE VEHICLE LANES AND 4" TO 6" CURB REVEAL. SEE THE PAVEMENT ELEVATION TABLE ON SHEETS 88 TO 105.

THE UNIFORM PAVEMENT PLANING IS QUANTIFIED ON THE PAVEMENT SUBSUMMARY AND CARRIED TO THE GENERAL SUMMARY UNDER ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=2.5") OR ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=3.25").

IN ADDITION TO THE UNIFORM PAVEMENT PLANING OPERATION, THE CONTRACTOR SHALL PERFORM ADDITIONAL PAVEMENT PLANING THE AREAS DESIGNATED ON THE PLAN SHEETS AND PAVEMENT ELEVATION TABLES TO ACHIEVE THE PROPOSED PAVEMENT CROSS SLOPES. THIS ADDITIONAL PLANING OPERATION WILL VARY IN THICKNESS AT EACH DESIGNATED LOCATION TO ACHIEVE THE PROPOSED DESIGN. IT IS EXPECTED THAT THE ADDITIONAL PLANING WILL INCLUDE BOTH ASPHALT WEARING COURSE AND CONCRETE BASE AND THE CONTRACTOR SHALL ESTABLISH THE PROPOSED DESIGN REGARDLESS OF THE TYPE OF MATERIAL REQUIRING PAVEMENT PLANING. THE ANTICIPATED ADDITIONAL PAVEMENT PLANING LOCATIONS ARE SHOWN ON THE PAVEMENT ELEVATION TABLE AND CARRIED TO THE GENERAL SUMMARY UNDER ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=1" MIN.) OR ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=1" MIN.).

PAVE INNER TRAVEL LANES PRIOR TO OUTER BIKE LANES.

BASE REPAIR: UPON COMPLETION OF ALL PAVEMENT PLANING OPERATIONS AND CONFIRMATION BY THE ENGINEER THAT THE PROPOSED DESIGN HAS BEEN ESTABLISHED, THE ENGINEER WILL DESIGNATE LOCATIONS AND LIMITS OF PAVEMENT BASE REPAIR. BASE REPAIR ESTIMATED QUANTITIES ARE INCLUDED IN THESE CONTRACT PLANS.

**PAVEMENT ABOVE DRAINAGE AND UTILITIES**

THE COST FOR PAVEMENT REMOVAL AND RESTORATION FOR PIPE/CONDUIT OR ANY OTHER ITEMS UNLESS SPECIFICALLY ITEMIZED, SHALL BE INCLUDED WITH THE PROPOSED DRAINAGE CONDUIT OR WATER WORK CONDUIT/REMOVAL ITEM. NO SEPARATE PAYMENT WILL BE MADE. THE RESTORATION SHALL BE IN ACCORDANCE WITH TRENCH AND PAVEMENT RESTORATION DETAIL ON SHEET 17.

**PART WIDTH CONSTRUCTION**

BECAUSE OF NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

**CONTRACTION AND/OR EXPANSION JOINTS**

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL BE 15 FEET AND IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS. EXPANSION JOINTS SHALL HAVE SPACING OF APPROXIMATELY 300 FEET AND PRIOR TO EACH INTERSECTION.

**CONTRACTION JOINTS IN CONCRETE**

WHERE NEW CONCRETE IS PLACED ADJACENT TO EXISTING CONCRETE, CONTRACTION JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE SO AS TO FORM CONTINUOUS JOINTS WITH THOSE IN THE EXISTING CONCRETE.

THE MAXIMUM DISTANCE BETWEEN THE JOINTS IN THE NEW CONCRETE PAVEMENT SHALL BE 15 FEET AND IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2. IF NECESSARY, ADDITIONAL JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE AT APPROXIMATELY EQUAL INTERVALS BETWEEN EXISTING JOINTS THAT EXCEED THE MAXIMUM SPACING.

DESIGN AGENCY

**Michael Baker**  
INTERNATIONAL

DESIGNER  
MKD

REVIEWER  
DAB 10/21/22

PROJECT ID  
115612

SHEET	TOTAL
30	298

**PAVEMENT (CONTINUED)**

**ITEM 301 AND 441 - ASPHALT CONCRETE, AS PER PLAN**

ASPHALT CONCRETE SHALL COMPLY WITH ODOT ITEMS 301 AND 441, AND PG 64-22 AND PG 70-22, UNLESS SPECIFIED DIFFERENTLY ON THE PLANS.

RECYCLED MATERIAL SHALL BE LIMITED TO WEARING COURSE MAXIMUM OF 10%, INTERMEDIATE COURSE MAXIMUM OF 20%, AND BITUMINOUS BASE COURSE MAXIMUM OF 30%.

**ASPHALT CONCRETE SURFACE COURSE**

AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL PERFORM GUTTER GRINDING AS DETAILED ON SHEET 19 IN THE REGIONS INDICATED ON THE TYPICAL SECTIONS (SEE SHEETS 13 AND 16) AND PAVEMENT ELEVATION TABLES (SEE SHEETS 88 AND 109). ALL ITEMS INCIDENTAL TO GUTTER GRINDING SHALL BE INCLUDED IN THE COST OF THE ASPHALT CONCRETE SURFACE COURSE ITEM OF WORK.

IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL SEAL, WITH A CERTIFIED PG BINDER, THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING BUT NOT LIMITED TO MONUMENTS, MANHOLES, WATER VALVES, CATCH BASINS, CURB INLETS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- FORWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.
- PERIMETER OF ALL PAVEMENT REPAIRS OR OTHER ASPHALT INLAYS WHEN PAVEMENT REPAIRS/INLAYS ARE NOT OVERLAID WITH AN ASPHALT CONCRETE SURFACE COURSE.
- ALL COLD TRANSVERSE CONSTRUCTION JOINTS PER 401.17.
- ALL COLD LONGITUDINAL JOINTS BETWEEN PAVED SHOULDERS AND GUARDRAIL ASPHALT.

THE MATERIAL USED SHALL BE A CERTIFIED 702.01 PG BINDER. THE WIDTH OF THE SEALER SHALL BE 2 INCHES.

**GUTTER SEAL**

UNLESS OTHERWISE SPECIFIED OR PERMITTED, GUTTERS SHALL BE SEALED WITH THE SAME TYPE OF ASPHALT CEMENT USE IN THE CONCRETE MIXTURE FOR A DISTANCE OF FOUR (4) INCHES FROM THE CURB. THE SEAL SHALL BE APPLIED AT A UNIFORM RATE AND WIDTH BY THE MEANS OF A SQUEEGEE OR DISTRIBUTOR IN SUCH A MANNER THAN NO EXCESS MATERIAL WILL BE LEFT ON THE SURFACE. THE ASPHALT GUTTER SEAL SHALL BE APPLIED AT A TEMPERATURE BETWEEN 300 DEGREES FAHRENHEIT AND 350 DEGREES FAHRENHEIT IMMEDIATELY UPON THE COMPLETION OF THE SURFACE COURSE. IN ADDITION TO THE GUTTER SEALING REQUIREMENTS SPECIFIED ON SCD BP-3.1 AND IN 401.15, AFTER COMPLETION OF THE SURFACE COURSE, THE CONTRACTOR SHALL SEAL, WITH CERTIFIED PG BINDER, THE FOLLOWING LOCATIONS:

- ALL CASTINGS INCLUDING, BUT NOT LIMITED TO, MONUMENTS, MANHOLES, WATER VALVES AND CATCH BASINS.
- BUTT JOINTS AND FEATHER JOINTS INCLUDING BRIDGE APPROACHES.
- FORWARD JOINT FOR DRIVEWAY ASPHALT AND TRAILING JOINT WHEN BUTTING TO EXISTING ASPHALT DRIVE.
- PERIMETER OF ALL PAVEMENT REPAIRS WHEN PAVEMENT REPAIRS ARE NOT OVERLAID WITH ASPHALT CONCRETE.

THE MATERIAL USED SHALL BE HOT APPLIED CERTIFIED 702.01 PG BINDER. THE WIDTH OF SEALER SHALL BE 2 INCHES.

THE COST OF THE JOINT SEAL APPLIED AS HEREIN SPECIFIED SHALL BE INCLUDED IN THE PRICE PER SQUARE YARD FOR SURFACE COURSE BID BY THE CONTRACTOR.

**ITEM 441 - ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M (T= 1.5")**

THE COURSE AGGREGATE FOR THIS ITEM SHALL BE A BLEND OF 60% MIN. AIR COOLED BLAST FURNACE SLAG (ACBFS) OR TRAP ROCK FROM ONTARIO WITH LIMESTONE COMPRISING THE REMAINING PERCENTAGE. THE USE OF GRAVEL IS PROHIBITED. FOR THIS ITEM, A THIRD ROLLER IS REQUIRED FOR MAINLINE PAVING OPERATIONS. THE ROLLER SHALL CONFORM TO THE REQUIREMENTS OF 401.13. THIS ITEM SHALL INCLUDE ODOT SUPPLEMENTAL SPECIFICATION 875 - LONGITUDINAL JOINT ADHESIVE. THE COST OF THIS ADHESIVE SHALL BE INCLUDED IN THE PRICE PER CUBIC YARD FOR SURFACE COURSE BID BY THE CONTRACTOR.

**ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22 (0" MIN.)**

FOR THIS ITEM, A THIRD ROLLER IS REQUIRED FOR MAINLINE PAVING OPERATIONS. THE ROLLER SHALL CONFORM TO THE REQUIREMENTS OF 401.13.

THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PLACE 0" MIN. ASPHALT CONCRETE AND TACK COAT IN AREAS WHERE ASPHALT CONCRETE SURFACE AND INTERMEDIATE COURSE IS NOT OF SUFFICIENT DEPTH TO ACHIEVE A MINIMUM CROSS SLOPE OR AS OTHERWISE DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

<b>ITEM 441 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22 (0" MIN.)</b>	<b>690 CY</b>
<b>ITEM 407 - TACK COAT, 702.13</b>	<b>100 GAL</b>

**ITEM 441 - ASPHALT CONCRETE, MISC.: SURFACE REPAIR BEHIND DRIVES AND WALKS (448)**

WHERE DIRECTED IN THE FIELD BY THE ENGINEER THE CONTRACTOR SHALL REMOVE AND REPLACE THE EXISTING ASPHALT BEHIND THE RIGHT OF WAY (SIDEWALK) TO THE LIMITS AS INDICATED BY THE ENGINEER IN THE FIELD.

THE COST FOR PAVEMENT REMOVAL, ITEM 304 AGGREGATE BASE, ITEM 407 TACK COAT FOR INTERMEDIATE COURSE, ITEM 407 TACK COAT, ITEM 441 INTERMEDIATE COURSE AND ITEM 441 SURFACE COURSE SHALL BE INCLUDED IN THE COST FOR ITEM 441 ASPHALT CONCRETE, MISC.: ASPHALT BEHIND DRIVES AND WALKS.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

<b>ITEM 441 - ASPHALT CONCRETE, MISC.: SURFACE REPAIR BEHIND DRIVES AND WALKS (448)</b>	<b>50 CY</b>
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**ITEM 452 - 6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN**

**ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN**

IN ADDITION TO THE REQUIREMENTS OF ITEMS 452 AND 608, THE COST OF EXCAVATING, FURNISHING AND COMPACTING 2" LIMESTONE SCREENING BED SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THESE ITEMS AND SHALL MEET THE REQUIREMENTS OF THE GENERAL NOTE "CONCRETE DESIGN MIX (CLEVELAND 650)". ALL CONCRETE FOR WALKS, ADA RAMPS AND DRIVES SHALL HAVE RETRACED PICTURE FRAME TOOLED EDGE JOINTS.

**ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT, MISC.: SURCHARGE FOR CLASS MS CONCRETE**

AT VARIOUS LOCATIONS ALONG THE CORRIDOR AND TIMES DURING CONSTRUCTION CIRCUMSTANCES MAY REQUIRE THE USE OF CLASS MS CONCRETE. THE USE OF MS CONCRETE SHALL BE AT THE DISCRETION AND DIRECTION OF THE ENGINEER AND THE SPECIFICATIONS OUTLINED IN THESE NOTES. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

<b>ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT, MISC.: SURCHARGE FOR CLASS MS CONCRETE</b>	<b>200 CY</b>
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**CONCRETE DESIGN MIX (CLEVELAND 650)**

CAST-IN-PLACE CONCRETE SHALL BE PROVIDED IN ACCORDANCE WITH THE ODOT CMS, EXCEPT THE MINIMUM CEMENT CONTENT OF THE MIX SHALL BE 650 LBS, PER CUBIC YARD.

**ITEM 452, 608, AND 609 - CONSTRUCTION OF CONCRETE BASE PAVEMENT, DRIVEWAYS, SIDEWALKS AND CURB, AS PER PLAN**

CONSTRUCT CAST-IN-PLACE CONCRETE ITEMS IN ACCORDANCE WITH THE ODOT CMS, EXCEPT AS MODIFIED BY GENERAL NOTE "CONCRETE DESIGN MIX (CLEVELAND 650)" AND OTHER GENERAL NOTES WITHIN THE PLAN SET.

**ITEM 609- CURB, TYPE 6, AS PER PLAN**

THIS ITEM SHALL CONFORM TO ALL REQUIREMENTS OF ITEM 609 EXCEPT THE FOLLOWING: THE NOSING OF THE CURB SHALL BE ½ INCH.

**ITEM 609- CURB, MISC.: SIDEWALK CURB**

FORM AND POUR 6" TALL CURB, FINISHED ON ALL EXPOSED SIDES WITH ½" NOSING, INTEGRAL TO THE SIDEWALK AS THE BACK OF R/W OR AS SHOWN IN THE PLANS. THE CURB SHALL HAVE 2' WIDE FLUSH SECTIONS, SPACED EVENLY, APPROXIMATELY 10' ON CENTER. THE CURB IS BEING INSTALLED TO SEPARATE SIDEWALK FROM PRIVATE PAVEMENT WHILE PERMITTING DRAINAGE TO FLOW. LOCATE FLUSH SECTIONS SO THAT NO PONDING OCCURS ON EITHER SIDE OF CURB.

**EXISTING PAVEMENT DISPOSAL/CASTING ADJUSTMENT**

THIS EXISTING ASPHALT PAVEMENT WEARING COURSE, BRICK BASE, AND CONCRETE SHALL BE REMOVED AND DISPOSED OF BY CONTRACTOR. ONCE THE BASE IS REMOVED, IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO DELINEATE ANY CASTINGS THAT MAY PROTRUDE ABOVE THE EXISTING CONCRETE BASE. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT MATERIAL IN THE VICINITY OF THESE CASTINGS TO PROVIDE AN ADEQUATE RAMP AROUND THE CASTINGS. IN NO CASE SHALL THE CASTING REMAIN EXPOSED WITHOUT PROPER PROTECTION.

**CONTRACTION AND/OR EXPANSION JOINTS**

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL BE 15 FEET AND IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS. EXPANSION JOINTS SHALL HAVE SPACING OF APPROXIMATELY 300' AND PRIOR TO EACH INTERSECTION.

**CONTRACTION JOINTS IN CONCRETE**

WHERE NEW CONCRETE IS PLACED ADJACENT TO EXISTING CONCRETE, CONTRACTION JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE SO AS TO FORM CONTINUOUS JOINTS WITH THOSE IN THE EXISTING CONCRETE.

THE MAXIMUM DISTANCE BETWEEN THE JOINTS IN THE NEW CONCRETE PAVEMENT SHALL BE 15 FEET AND IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2. IF NECESSARY, ADDITIONAL JOINTS SHALL BE PROVIDED IN THE NEW CONCRETE AT APPROXIMATELY EQUAL INTERVALS BETWEEN EXISTING JOINTS THAT EXCEED THE MAXIMUM SPACING.

DESIGN AGENCY

**Michael Baker**  
INTERNATIONAL

DESIGNER  
**MKD**

REVIEWER  
**DAB 10/21/22**

PROJECT ID  
**115612**

SHEET	TOTAL
32	298

GEN. NOTES	SHEET NUM.							PART.		ALT (X)	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	65	68	71	72	WATER NOTES	172	173	01/ENH/OT	02/NFP/PV							
								LS			201	11001	LS	ROADWAY		
								LS			202	23001	3,000	SY	CLEARING AND GRUBBING, AS PER PLAN	
1,000	2,000							3,000			202	30001	108,765	SF	PAVEMENT REMOVED, AS PER PLAN	
12,210	96,555							108,765			202	32001	12,914	FT	WALK REMOVED, AS PER PLAN	
	12,914							12,914			202	35100	100	FT	CURB REMOVED, AS PER PLAN	
100								100			202	38000	14	FT	PIPE REMOVED, 24" AND UNDER	
								14							GUARDRAIL REMOVED	
								2			202	58000	2	EACH	MANHOLE REMOVED	
								39			202	58100	39	EACH	CATCH BASIN REMOVED	
								39			202	98100	31	EACH	REMOVAL MISC.: WATER VALVE BOX REMOVED	
								31			202	98100	13	EACH	REMOVAL MISC.: POLE REMOVED	
								13			202	98100	1	EACH	REMOVAL MISC.: POLE BASE AND FOUNDATION REMOVED	
								1								
								1			202	98100	1	EACH	REMOVAL MISC.: BOLLARD REMOVED	
								282			202	98200	282	FT	REMOVAL MISC.: STRUCTURAL CURB REMOVED	
								3,155			202	98200	3,155	FT	REMOVAL MISC.: WATERLINE REMOVED, 24" AND UNDER	
								750			202	98200	750	FT	REMOVAL MISC.: CONCRETE ENCASED UNKNOWN ELECTRICAL DUCT REMOVAL	
1,000					750			1,000			202	98300	2,000	SY	REMOVAL MISC.: TRACK REMOVED	
100					1,000			2,581			202	98300	2,581	SY	REMOVAL MISC.: PAVEMENT REMOVED FOR DRIVES	
								500			203	10000	500	CY	EXCAVATION	
								500			203	98500	LS		ROADWAY, MISC.: PRE-CONSTRUCTION AUDIO-VIDEO	
								500			203	98500	LS		ROADWAY, MISC.: RAILROAD INSURANCE PREMIUM	
								1,926			204	10000	1,926	SY	SUBGRADE COMPACTION	
								24			204	45000	24	HOUR	PROOF ROLLING	
								500			204	50000	500	SY	GEOTEXTILE FABRIC	
								142			209	60201	142	STA	LINEAR GRADING, AS PER PLAN	
								29,159			608	10001	29,159	SF	4" CONCRETE WALK, AS PER PLAN	
								30,947			608	13001	30,947	SF	6" CONCRETE WALK, AS PER PLAN	
								4,805			608	15001	4,805	SF	8" CONCRETE WALK, AS PER PLAN	
								5,195			608	52001	5,195	SF	CURB RAMP, AS PER PLAN	
								23			623	39501	23	EACH	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN	
								6			623	40900	6	EACH	MONUMENT, MISC.: CLEVELAND MONUMENT ASSEMBLY	
								4			623	40900	4	EACH	MONUMENT, MISC.: MONUMENT BOX AND COVER	
								33			623	40900	33	EACH	MONUMENT, MISC.: MONUMENT REFERENCING	
								LS			SPECIAL	69098400	LS		RETAINING WALL AND HANDRAIL REMOVED AT MCELHATTEN	
								500			SPECIAL	69098700	500	CY	UNDERCUTTING SUBGRADE AND SUBBASE, AS PER PLAN	
															EROSION CONTROL	
								2			659	00100	2	EACH	SOIL ANALYSIS TEST	
								350			659	14000	350	SY	REPAIR SEEDING AND MULCHING	
								350			659	15000	350	SY	INTER-SEEDING	
								0.98			659	20000	0.98	TON	COMMERCIAL FERTILIZER	
								1.45			659	31000	1.45	ACRE	LIME	
								40			659	35000	40	MGAL	WATER	
								40,000			832	30001	40,000	EACH	EROSION CONTROL, AS PER PLAN	
															ENVIRONMENTAL / REMEDIATION	
								75			SPECIAL	69065000	75	TON	WORK INVOLVING NON-REGULATED MATERIALS	
								752			SPECIAL	69065016	752	TON	WORK INVOLVING PETROLEUM CONTAMINATED SOIL	
								35,000			SPECIAL	69065022	35,000	GAL	WORK INVOLVING NON-REGULATED WATER	
								14,000			SPECIAL	69065024	14,000	GAL	WORK INVOLVING REGULATED WATER	
															DRAINAGE	
								13,217			605	11111	13,217	FT	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	
								500			605	31100	500	FT	AGGREGATE DRAINS	
								750			611	00510	750	FT	6" CONDUIT, TYPE F FOR UNDERDRAIN OUTLETS	
								200			611	01400	200	FT	6" CONDUIT, TYPE E	
								18			611	01500	18	FT	6" CONDUIT, TYPE F, 707.45	

GENERAL SUMMARY		DESIGN AGENCY	
		DESIGNER	MGZ
		REVIEWER	DAB 10/21/22
		PROJECT ID	115612
SHEET TOTAL		60	298

SHEET NUM.							PART.		ALT (X)	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
GEN. NOTES	65	68	71	WATER NOTES	172	272	01/ENH/OT	02/NFP/PV							
<b>DRAINAGE</b>															
200							200			611	05901	200	FT	15" CONDUIT, TYPE B, AS PER PLAN	29
200							200			611	97400	200	FT	CONDUIT, MISC.: 12" CONDUIT, DUCTILE IRON PIPE ANSI CLASS 52, PUSH ON JOINTS AND FITTINGS	29
			4				4			611	98631	4	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	29
			15				15			611	98635	15	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN	29
			1				1			611	98635	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE, AS PER PLAN, TYPE A	29
8			28				36			611	98690	36	EACH	CATCH BASIN, MISC.: CITY OF CLEVELAND, CB-1	29
5			2				7			611	98690	7	EACH	CATCH BASIN, MISC.: CITY OF CLEVELAND, CB-1, WITH FLAT GRATE TOP	29
5			9				14			611	98690	14	EACH	CATCH BASIN, MISC.: CITY OF CLEVELAND, CB-2	29
			1				1			611	98690	1	EACH	CATCH BASIN, MISC.: CITY OF CLEVELAND, CB-3	29
			63				63			611	99655	63	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN (SEWER)	29
5							5			611	99661	5	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN (SEWER)	29
25,000							25,000			SPECIAL	61199820	25,000	LB	MISCELLANEOUS METAL	29
			445				445			SPECIAL	61199830	445	FT	TRENCH DRAIN	30
10			3				13			611	99900	13	EACH	DRAINAGE STRUCTURE, MISC.: UTILITY TEST HOLE	28
250							250			613	41201	250	CY	LOW STRENGTH MORTAR BACKFILL, AS PER PLAN	30
<b>DRAINAGE ALTERNATES</b>															
500			274				774		X	611	04401	774	FT	12" CONDUIT, TYPE B, AS PER PLAN (OPEN PIPE POLICY) (ALTERNATE 1)	29
500			274				774		X	611	04401	774	FT	12" CONDUIT, TYPE B, AS PER PLAN (706.08 ES) (ALTERNATE 2)	29
<b>PAVEMENT</b>															
2,000							2,000			251	01001	2,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN	31
	24,747						24,747			254	01001	24,747	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=2 1/2")	31
	8,320						8,320			254	01001	8,320	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=3 1/4")	31
1,500							1,500			254	01001	1,500	SY	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=1" MIN.)	31
	1,453						1,453			254	01011	1,453	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=2 1/2")	31
	364						364			254	01011	364	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=3 1/4")	31
3,200							3,200			254	01011	3,200	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=1" MIN.)	31
400							400			254	01600	400	SY	PATCHING PLANED SURFACE	31
2,500							2,500			255	10011	2,500	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1, AS PER PLAN	31
500		134					634			304	20001	634	CY	AGGREGATE BASE, AS PER PLAN (T=6" MIN.)	31
1,000							1,000			305	13011	1,000	SY	9" CONCRETE BASE, CLASS QC 1P, AS PER PLAN	31
100	3,491						3,591			407	13900	3,591	GAL	TACK COAT, 702.13	
	3,491						3,491			407	20000	3,491	GAL	NON-TRACKING TACK COAT	
	1,456						1,456			441	50101	1,456	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M (T=1 1/2")	32
	727						727			441	50201	727	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22 (T=1")	32
690							690			441	50201	690	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22 (T=0" MIN.)	32
	422						422			441	50301	422	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22 (T=1 3/4")	32
50							50			441	90000	50	CY	ASPHALT CONCRETE, MISC.: SURFACE REPAIR BEHIND DRIVES AND WALKS (448)	32
			232				232			452	10011	232	SY	6" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	32
		694					694			452	12011	694	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	32
200							200			452	19200	200	SY	NON-REINFORCED CONCRETE PAVEMENT, MISC.: SURCHARGE FOR CLASS MS CONCRETE	32
	13,106						13,106			609	26001	13,106	FT	CURB, TYPE 6, AS PER PLAN	32
	337					120	457			609	98000	457	FT	CURB, MISC.: SIDEWALK CURB	32
	282						282			609	98000	282	FT	CURB, MISC.: STRUCTURAL TYPE 6 CURB	289
<b>WATER WORK</b>															
				7,500			7,500			SPECIAL	61199820	7,500	LB	MISCELLANEOUS METAL	148
					25		25			638	10481	25	EACH	FIRE HYDRANT REMOVED, AS PER PLAN	148
					46		46			638	10800	46	EACH	VALVE BOX ADJUSTED TO GRADE	148
			10		45		55			638	10901	55	EACH	SERVICE BOX ADJUSTED TO GRADE, AS PER PLAN	148

GENERAL SUMMARY

DESIGN AGENCY  
**Michael Baker**  
 INTERNATIONAL

DESIGNER  
**MZG**

REVIEWER  
**DAB 10/21/22**

PROJECT ID  
**115612**

SHEET TOTAL  
**61 | 298**

GEN. NOTES	SHEET NUM.							PART.		ALT (X)	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	173	65	71	244	252	268	272	01/ENH/OT	02/NFP/PV							
	2,968								2,968	X	638	98600	2,968	FT	<b>WATER WORK ALTERNATES</b> WATER WORK, MISC.: 8" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS AND RETAINED MECHANICAL JOINT FITTINGS, AS PER CWD (ALTERNATE 5)	149
	83								83	X	638	98600	83	FT	WATER WORK, MISC.: 12" WATER MAIN DIP CLASS 52 PUSH ON JOINTS AND FITTINGS AND RETAINED MECHANICAL JOINT FITTINGS, AS PER CWD (ALTERNATE 5)	149
															<b>OTHER UTILITIES</b>	
2			5						7		611	99655	7	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN (SANITARY)	33
2									2		611	99661	2	EACH	MANHOLE RECONSTRUCTED TO GRADE, AS PER PLAN (SANITARY)	33
35		35							70		611	99690	70	EACH	MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)	29
2,500									2,500		SPECIAL	61199820	2,500	LB	MISCELLANEOUS METAL	148
50									50		611	99900	50	EACH	DRAINAGE STRUCTURE, MISC.: TEST TEE ADJUST TO GRADE	33
															<b>TRAFFIC CONTROL</b>	
				574.7					574.7		630	02100	574.7	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
				319					319		630	03100	319	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
				30					30		630	08600	30	EACH	SIGN POST REFLECTOR	
				177					177		630	79500	177	EACH	SIGN SUPPORT ASSEMBLY, POLE MOUNTED	
				824.1					824.1		630	80100	824.1	SF	SIGN, FLAT SHEET	
				49					49		630	80500	49	EACH	SIGN, DOUBLE FACED, STREET NAME	
				47					47		630	84900	47	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
				22					22		630	86002	22	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
				155					155		630	87500	155	EACH	REMOVAL OF POLE MOUNTED SIGN AND DISPOSAL	
				2.42					2.42		644	00100	2.42	MILE	EDGE LINE, 4"	
				1.16					1.16		644	00300	1.16	MILE	CENTER LINE	
				801					801		644	00400	801	FT	CHANNELIZING LINE, 8"	
				580					580		644	00500	580	FT	STOP LINE	
				3,119					3,119		644	00620	3,119	FT	CROSSWALK LINE, 12"	
				2,019					2,019		644	00630	2,019	FT	CROSSWALK LINE, 24"	
				788					788		644	00700	788	FT	TRANSVERSE/DIAGONAL LINE	
				113					113		644	00900	113	SF	ISLAND MARKING	
				17					17		644	01300	17	EACH	LANE ARROW	
				45					45		644	01630	45	EACH	BIKE LANE SYMBOL MARKING	
				11					11		644	19000	11	EACH	SHARED LANE MARKING	
				35					35		644	30000	35	FT	REMOVAL OF PAVEMENT MARKING	
				1,103					1,103		644	50300	1,103	FT	PAVEMENT MARKING, MISC.: BIKE LANE DOTTED, 2' GAP	253
				1,579					1,579		644	50300	1,579	FT	PAVEMENT MARKING, MISC.: BIKE LANE DOTTED, 6' GAP	253
															<b>TRAFFIC SIGNALS</b>	
									4		625	32000	4	EACH	GROUND ROD	
									4		630	97700	4	EACH	SIGNING, MISC.: SOLAR POWERED RECTANGULAR RAPID FLASHING BEACON (RRFB) SIGN ASSEMBLY	268
									4		632	64020	4	EACH	PEDESTAL FOUNDATION	
									3		632	90101	3	EACH	REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN	268
															<b>LANDSCAPING/STREETSCAPE</b>	
									14,046		608	13001	14,046	SF	6" CONCRETE WALK, AS PER PLAN B	273
									807		653	10000	807	CY	TOPSOIL FURNISHED AND PLACED	
									7,404		659	00501	7,404	SY	SEEDING AND MULCHING, CLASS 1, AS PER PLAN	27
									47		661	00500	47	CY	MULCH	
									27		661	14000	27	EACH	PERENNIALS - HEMEROCALLIS 'HAPPY RETURNS'	
									12		661	14000	12	EACH	PERENNIALS - NEPEŤA FAASSENII 'WALKER'S LOW'	
									9		661	20020	9	EACH	DECIDUOUS SHRUB, 18" HEIGHT, SPIRAEA JAPONICA	
									6		661	30040	6	EACH	EVERGREEN SHRUB, 18" HEIGHT, JUNIPERUS SQUAMATA 'BLUE STAR'	
									33,350		661	31000	33,350	GAL	LANDSCAPE WATERING	
									44		661	40080	44	EACH	DECIDUOUS TREE, 2" CALIPER SYRINGA RETICULATA 'IVORY SILK'	
									44		661	40100	44	EACH	DECIDUOUS TREE, 2-1/2" CALIPER ACER MIYABEI 'STATE STREET'	
									37		661	40100	37	EACH	DECIDUOUS TREE, 2-1/2" CALIPER OSTRYA VIRGINIANA	
									5		SPECIAL	68014550	5	EACH	TRASH RECEPTACLE	273

GENERAL SUMMARY

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
**MZG**

REVIEWER  
**DAB 10/21/22**

PROJECT ID  
**115612**

SHEET TOTAL  
**63 298**

CUY-EAST 140TH STREETSCAPE

MODEL: Sheet PAPER: 17x11 (in.) DATE: 2/24/2023 TIME: 10:53:47 AM USER: Mary.Dohlen  
 pwc:\mb-us-pw-bentley.com\mb-us-pw-03\Documents\Cleveland\_OH\01\_Projects\City-Cleveland\115612\400-Engineering\Roadway\Sheets\115612\_GS101.dgn

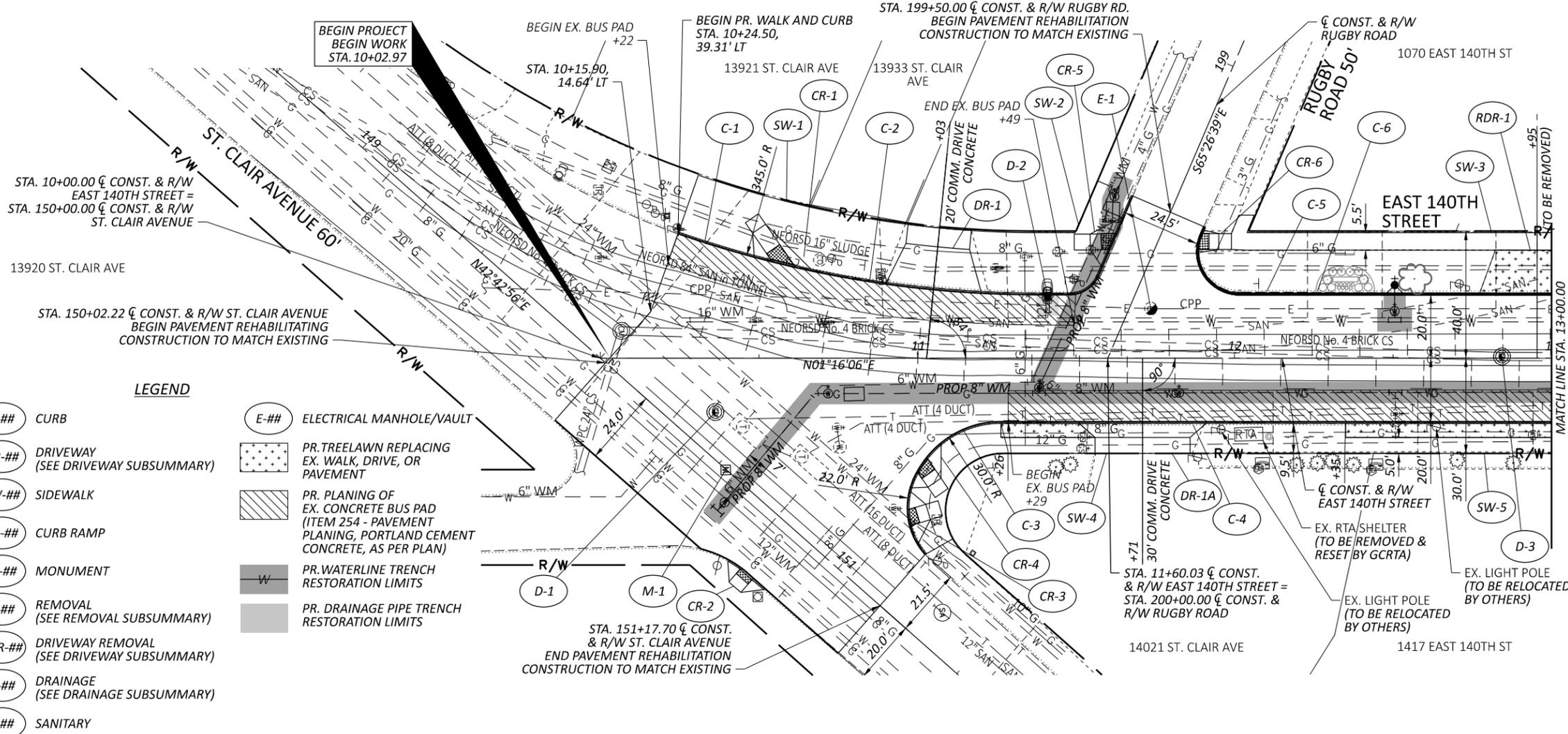
	202	202	202	202	254	254	254	254	407	407	441	441	441	605	608	608	608	609	609	609	611	623
	PAVEMENT REMOVED, AS PER PLAN	WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	REMOVAL, MISC.: STRUCTURAL CURB REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T= 2 1/2")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T= 2 1/2")	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T= 3 1/4")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T= 3 1/4")	NON-TRACKING TACK COAT (APPLIED AT 0.100 GAL/SY)	TACK COAT, 702.13 (APPLIED AT 0.100 GAL/SY)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	4" CONCRETE WALK, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CURB, MISC.: STRUCTURAL TYPE 6 CURB	CURB, MISC.: SIDEWALK CURB	MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN
	SY	SF	FT	FT	SY	SY	SY	SY	GAL	GAL	CY	CY	CY	FT	SF	SF	SF	FT	FT	FT	EACH	EACH
TOTALS FROM SHEET 73	0	4875	537	0	1704	328	0	0	205	205	0	57	85	532	582	1534	478	532	0	0	1	1
TOTALS FROM SHEET 74	144	6459	1091	0	587	140	1763	127	262	262	92	20	109	1091	3460	924	412	1091	0	65	2	2
TOTALS FROM SHEET 75	196	5781	1000	0	0	0	2050	0	205	205	100	0	85	1000	3838	668	0	1000	0	0	3	1
TOTALS FROM SHEET 76	252	6632	1087	0	0	0	1858	194	205	205	100	0	86	998	4507	0	424	1087	0	37	1	1
TOTALS FROM SHEET 77	252	6005	1009	0	0	0	2024	43	207	207	100	0	86	993	3984	0	175	993	0	0	2	1
TOTALS FROM SHEET 78	202	6539	1005	0	1488	0	625	0	211	211	30	41	88	1005	162	2956	150	1005	0	0	2	1
TOTALS FROM SHEET 79	106	5886	1186	0	2407	234	0	0	264	264	0	73	110	1119	0	4134	665	1186	0	115	7	2
TOTALS FROM SHEET 80	70	7895	527	282	2114	37	0	0	215	215	0	60	90	773	0	5798	0	736	282	0	5	0
TOTALS FROM SHEET 81	191	7762	1004	0	2074	158	0	0	223	223	0	62	93	1004	0	4683	353	1004	0	0	2	1
TOTALS FROM SHEET 82	231	9598	999	0	2121	75	0	0	220	220	0	61	92	999	2010	1940	511	999	0	0	1	3
TOTALS FROM SHEET 83	123	8431	970	0	2135	257	0	0	239	239	0	66	100	970	1158	2602	658	970	0	0	2	3
TOTALS FROM SHEET 84	0	4902	648	0	3115	45	0	0	316	316	0	88	132	648	896	2239	398	648	0	0	3	2
TOTALS FROM SHEET 85	207	9004	600	0	2552	56	0	0	261	261	0	72	109	604	2840	0	575	604	0	0	2	3
TOTALS FROM SHEET 86	0	4383	668	0	2347	0	0	0	235	235	0	65	98	668	0	0	101	668	0	0	1	1
TOTALS FROM SHEET 87	26	2403	583	0	2103	123	0	0	223	223	0	62	93	583	1922	0	45	583	0	120	1	1
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>	<b>2000</b>	<b>96555</b>	<b>12914</b>	<b>282</b>	<b>24747</b>	<b>1453</b>	<b>8320</b>	<b>364</b>	<b>3491</b>	<b>3491</b>	<b>422</b>	<b>727</b>	<b>1456</b>	<b>12987</b>	<b>25359</b>	<b>27478</b>	<b>4945</b>	<b>13106</b>	<b>282</b>	<b>337</b>	<b>35</b>	<b>23</b>

ROADWAY PLAN SUBSUMMARY

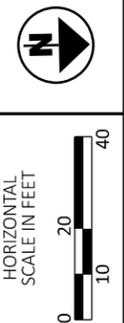
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
DESIGNER	MZG
REVIEWER	MKD 10/21/22
PROJECT ID	115612
SHEET	65
TOTAL	298

**CUY-EAST 140TH STREETSCAPE**

MODEL: 115612\_GPI01\_PAPER SIZE: 17x11 (in.) DATE: 2/24/2023 TIME: 10:54:12 AM USER: Mary.Dohlen  
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CROSS REFERENCES		
SHEET NO.	DESCRIPTION	
6	- 22	TYPICAL SECTIONS & DETAILS
66	- 68	DRIVE QUANTITIES
69	- 71	DRAINAGE QUANTITIES
88	- 105	PAVEMENT ELEVATION TABLES
106	- 120	INTERSECTION DETAILS
121	- 141	DRIVE DETAILS/PROFILES
142	- 146	DRAINAGE DETAILS
147	- 195	WATER WORKS
268	- 271	TRAFFIC SIGNAL PLANS
272	- 288	STREETSCAPE PLANS
289	- 295	STRUCTURAL PLANS



**LEGEND**

- C-##** CURB
- DR-##** DRIVEWAY (SEE DRIVEWAY SUBSUMMARY)
- SW-##** SIDEWALK
- CR-##** CURB RAMP
- M-##** MONUMENT
- R-##** REMOVAL (SEE REMOVAL SUBSUMMARY)
- RDR-##** DRIVEWAY REMOVAL (SEE DRIVEWAY SUBSUMMARY)
- D-##** DRAINAGE (SEE DRAINAGE SUBSUMMARY)
- S-##** SANITARY
- E-##** ELECTRICAL MANHOLE/VAULT
- PR. TREE/LAWN REPLACING EX. WALK, DRIVE, OR PAVEMENT**
- PR. PLANING OF EX. CONCRETE BUS PAD (ITEM 254 - PORTLAND PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN)**
- PR. WATERLINE TRENCH RESTORATION LIMITS**
- PR. DRAINAGE PIPE TRENCH RESTORATION LIMITS**

- NOTES:**
- ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  - INSTALL ALL NEW CURB RAMPS PER CITY OF CLEVELAND STANDARD DRAWINGS. ALL RAMPS MUST BE ADA COMPLIANT. SPECIFIC TYPE OF RAMP IS INDICATED ON SHEET 106
  - SEE SHEET 36 FOR ABBREVIATION LEGEND AND SHEET LEGEND.

**BENCHMARK**  
 EAST 140TH STREET C/L  
 STA. 10+74.19, 28.24' LT  
 MAG NAIL SET (CVE#100)  
 ELEVATION 624.35

REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/LOCAL	202	202	202	202	254	254	254	254	407	407	441	441	441	605	608	608	608	609	609	609	611	623
					PAVEMENT REMOVED, AS PER PLAN	WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	REMOVAL, MISC.: STRUCTURAL CURB REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=2 1/2")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=2 1/2")	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=3 1/4")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=3 1/4")	NON-TRACKING TACK COAT (APPLIED AT 0.100 GAL/SY)	TACK COAT, 702.13 (APPLIED AT 0.100 GAL/SY)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	4" CONCRETE WALK, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CURB, MISC.: STRUCTURAL TYPE 6 CURB	CURB, MISC.: SIDEWALK CURB	MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN
		TO			SY	SF	FT	FT	SY	SY	SY	SY	GAL	GAL	CY	CY	CY	FT	SF	SF	SF	FT	FT	FT	EACH	EACH
	73	BEGIN 13+00	LT/RT	01/ENH/OT					1704	328			205	205		57	85									
SW1-2	73	10+24.50 11+65	LT	01/ENH/OT		2140														724						
SW-3	73	11+88 13+00	LT	01/ENH/OT		667														582						
SW4-5	73	11+03 13+00	RT	01/ENH/OT		2068																				
CR1-6	73	BEGIN 13+00	LT/RT	01/ENH/OT																				478		
C1-6	73	BEGIN 13+00	LT/RT	01/ENH/OT				537															532			
M1	73	10+39	RT	01/ENH/OT																						1
E1	73	11+73	LT	01/ENH/OT																						1
<b>TOTALS CARRIED TO ROADWAY PLAN SUBSUMMARY</b>					0	4875	537	0	1704	328	0	0	205	205	0	57	85	532	582	1534	478	532	0	0	1	1

**PLAN - EAST 140TH STREET  
 BEGIN TO STA. 13+00.00**

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
 MKD

REVIEWER  
 DAB 10/21/22

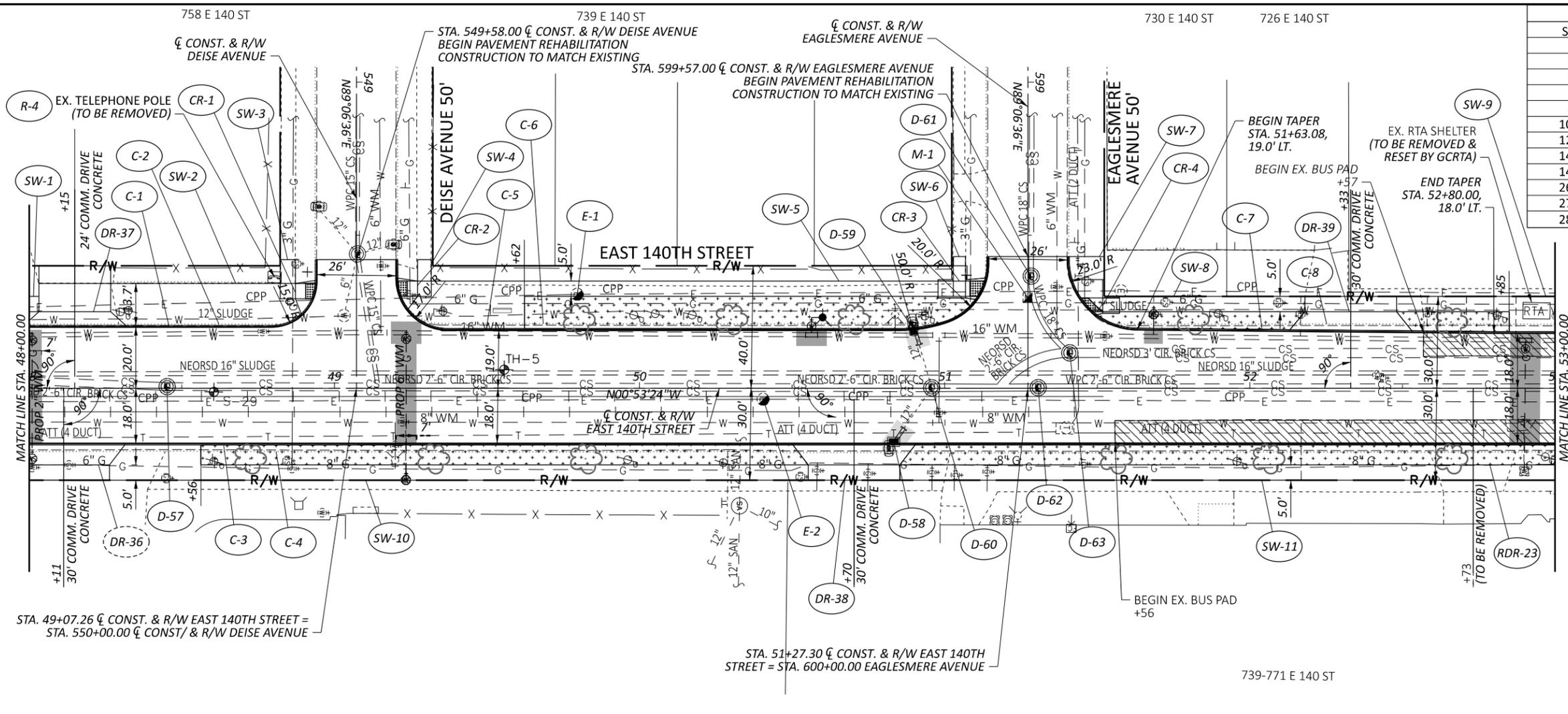
PROJECT ID  
 115612

SHEET TOTAL  
 73 298



**CUY-EAST 140TH STREETSCAPE**

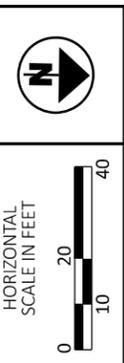
MODEL: 115612\_GPI09\_PAPER SIZE: 17x11 (in.) DATE: 2/24/2023 TIME: 10:54:34 AM USER: Mary.Dohlen  
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CROSS REFERENCES	
SHEET NO.	DESCRIPTION
6 - 22	TYPICAL SECTIONS & DETAILS
66 - 68	DRIVE QUANTITIES
69 - 71	DRAINAGE QUANTITIES
72	REMOVAL QUANTITIES
88 - 105	PAVEMENT ELEVATION TABLES
106 - 120	INTERSECTION DETAILS
121 - 141	DRIVE DETAILS/PROFILES
142 - 146	DRAINAGE DETAILS
147 - 195	WATER WORKS
268 - 271	TRAFFIC SIGNAL PLANS
272 - 288	STREETSCAPE PLANS
289 - 295	STRUCTURAL PLANS

- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER CITY OF CLEVELAND STANDARD DRAWINGS. ALL RAMPS MUST BE ADA COMPLIANT. SPECIFIC TYPE OF RAMP IS INDICATED ON SHEET 111
  3. SEE SHEET 36 FOR ABBREVIATION LEGEND AND SHEET LEGEND.
  4. SEE SHEET 73 FOR HATCHING LEGEND.

**BENCHMARK**  
 EAST 140TH STREET C/L  
 STA. 51+26.24, 34.86' RT  
 MAG NAIL SET (CVE#159)  
 ELEVATION 604.82



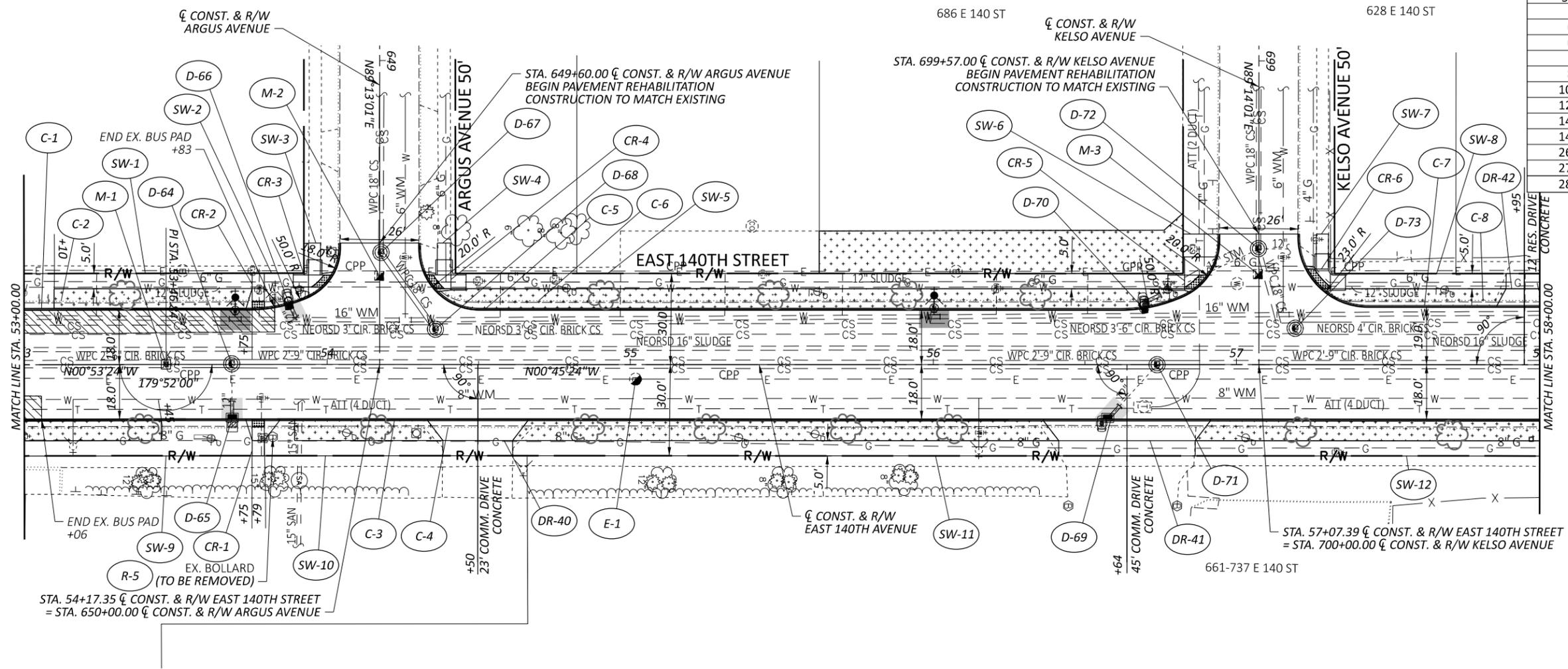
REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/LOCAL	MATERIALS																						
					PAVEMENT REMOVED, AS PER PLAN	WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	REMOVAL, MISC.: STRUCTURAL CURB REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=2 1/2")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=2 1/2")	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=3 1/4")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=3 1/4")	NON-TRACKING TACK COAT (APPLIED AT 0.100 GAL/SY)	TACK COAT, 702.13 (APPLIED AT 0.100 GAL/SY)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	4" CONCRETE WALK, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CURB, MISC.: STRUCTURAL TYPE 6 CURB	CURB, MISC.: SIDEWALK CURB	MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN	
SY	SF	FT	FT	SY	SY	SY	SY	GAL	GAL	CY	CY	CY	FT	SF	SF	SF	FT	FT	FT	FT	EACH	EACH					
		TO			202	202	202	202	254	254	254	254	407	407	441	441	441	605	608	608	608	609	609	609	611	623	
	81	48+00	53+00	LT/RT	01/ENH/OT	191	1		2074	158			223	223		62	93										
SW1-9	81	48+00	53+00	LT	01/ENH/OT																						
SW10-11	81	48+00	53+00	RT	01/ENH/OT																						
CR1-4	81	48+00	53+00	LT	01/ENH/OT																						
C1-8	81	48+00	53+00	LT/RT	01/ENH/OT			1004										1004			1004						
M1	81	51+27		LT	01/ENH/OT																					1	
E1-2	81	48+00	53+00	LT/RT	01/ENH/OT																				2		
<b>TOTALS CARRIED TO ROADWAY PLAN SUBSUMMARY</b>						191	7762	1004	0	2074	158	0	0	223	223	0	62	93	1004	0	4683	353	1004	0	0	2	1

**PLAN - EAST 140TH STREET  
 STA. 48+00.00 TO STA. 53+00.00**

DESIGN AGENCY	<b>Michael Baker INTERNATIONAL</b>
DESIGNER	MKD
REVIEWER	DAB 10/21/22
PROJECT ID	115612
SHEET TOTAL	81 298

**CUY-EAST 140TH STREETSCAPE**

MODEL: 115612\_GPI110\_PAPER SIZE: 17x11 (in.) DATE: 2/24/2023 TIME: 10:54:44 AM USER: Mary.Dohlen  
 pw:\mb-us-pw-bentley.com:mb-us-pw-03\Documents\Cleveland\_OH\01\_Projects\Cleveland\115612\_400-Engineering\Roadway\Sheets\115612\_GPI110.dgn



CROSS REFERENCES	
SHEET NO.	DESCRIPTION
6 - 22	TYPICAL SECTIONS & DETAILS
66 - 68	DRIVE QUANTITIES
69 - 71	DRAINAGE QUANTITIES
72	REMOVAL QUANTITIES
88 - 105	PAVEMENT ELEVATION TABLES
106 - 120	INTERSECTION DETAILS
121 - 141	DRIVE DETAILS/PROFILES
142 - 146	DRAINAGE DETAILS
147 - 195	WATER WORKS
268 - 271	TRAFFIC SIGNAL PLANS
272 - 288	STREETSCAPE PLANS
289 - 295	STRUCTURAL PLANS

- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMP PER CITY OF CLEVELAND STANDARD DRAWINGS. ALL RAMP MUST BE ADA COMPLIANT. SPECIFIC TYPE OF RAMP IS INDICATED ON SHEET 112
  3. SEE SHEET 36 FOR ABBREVIATION LEGEND AND SHEET LEGEND.
  4. SEE SHEET 73 FOR HATCHING LEGEND.

**BENCHMARK**  
 EAST 140TH STREET C/L  
 STA. 51+26.24, 34.86' RT  
 MAG NAIL SET (CVE#159)  
 ELEVATION 604.82



REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/LOCAL	MATERIALS																					
					PAVEMENT REMOVED, AS PER PLAN	WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	REMOVAL, MISC.: STRUCTURAL CURB REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=2 1/2")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=2 1/2")	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=3 1/4")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=3 1/4")	NON-TRACKING TACK COAT (APPLIED AT 0.100 GAL/SY)	TACK COAT, 702.13 (APPLIED AT 0.100 GAL/SY)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	4" CONCRETE WALK, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CURB, MISC.: STRUCTURAL TYPE 6 CURB	CURB, MISC.: SIDEWALK CURB	MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN
SY	SF	FT	FT	SY	SY	SY	SY	GAL	GAL	CY	CY	CY	FT	SF	SF	SF	FT	FT	FT	FT	EACH	EACH				
		TO			202	202	202	202	254	254	254	254	407	407	441	441	441	605	608	608	608	609	609	609	611	623
	82	53+00 58+00	LT/RT	01/ENH/OT	231				2121	75			220	220		61	92									
SW1-8	82	53+00 58+00	LT	01/ENH/OT		5703													2010							
SW9-12	82	53+00 58+00	RT	01/ENH/OT		3895													1940							
CR1-6	82	53+00 58+00	LT/RT	01/ENH/OT																	511					
C1-8	82	53+00 58+00	LT/RT	01/ENH/OT			999											999				999				
M1-3	82	53+00 58+00	LT/RT	01/ENH/OT																					3	
E1	82	55+01	RT	01/ENH/OT																				1		
<b>TOTALS CARRIED TO ROADWAY PLAN SUBSUMMARY</b>					231	9598	999	0	2121	75	0	0	220	220	0	61	92	999	2010	1940	511	999	0	0	1	3

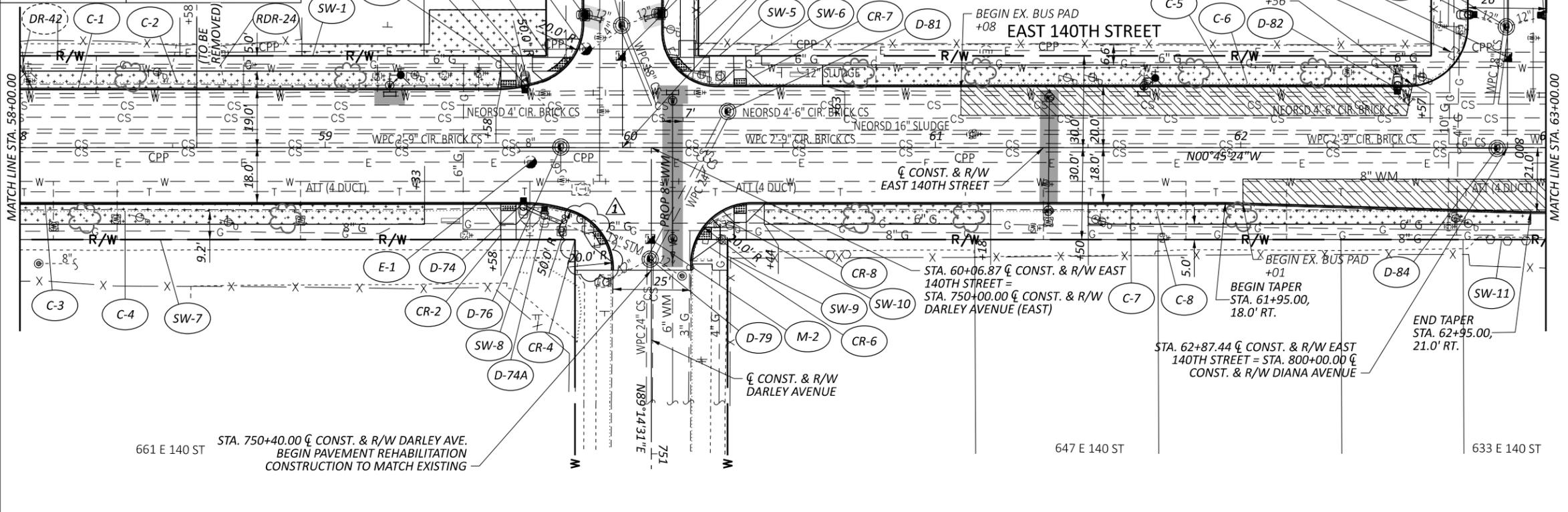
**PLAN - EAST 140TH STREET  
 STA. 53+00.00 TO STA. 58+00.00**

DESIGN AGENCY	<b>Michael Baker INTERNATIONAL</b>
DESIGNER	MKD
REVIEWER	DAB 10/21/22
PROJECT ID	115612
SHEET TOTAL	82 / 298

**CUY-EAST 140TH STREETSCAPE**

MODEL: 115612\_GP111\_PAPER SIZE: 17x11 (in.) DATE: 2/24/2023 TIME: 10:54:55 AM USER: Mary.Dohlen  
 p:\mb-us-pw-bentley.com\mb-us-pw-03\Documents\Cleveland\_OH\01\_Projects\Cleveland\115612\400-Engineering\Roadway\Sheets\115612\_GP111.dgn

CROSS REFERENCES		
SHEET NO.	DESCRIPTION	
6	- 22	TYPICAL SECTIONS & DETAILS
66	- 68	DRIVE QUANTITIES
69	- 71	DRAINAGE QUANTITIES
88	- 105	PAVEMENT ELEVATION TABLES
106	- 120	INTERSECTION DETAILS
121	- 141	DRIVE DETAILS/PROFILES
142	- 146	DRAINAGE DETAILS
147	- 195	WATER WORKS
268	- 271	TRAFFIC SIGNAL PLANS
272	- 288	STREETSCAPE PLANS
289	- 295	STRUCTURAL PLANS



- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMP PER CITY OF CLEVELAND STANDARD DRAWINGS. ALL RAMP MUST BE ADA COMPLIANT. SPECIFIC TYPE OF RAMP IS INDICATED ON SHEETS 113 TO 114.
  3. SEE SHEET 36 FOR ABBREVIATION LEGEND AND SHEET LEGEND.
  4. SEE SHEET 73 FOR HATCHING LEGEND.

**BENCHMARK**  
 EAST 140TH STREET C/L  
 STA. 56+65.15, 26.73' LT  
 MAG NAIL SET (CVE#107)  
 ELEVATION 602.73

REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/LOCAL	202	202	202	202	254	254	254	254	407	407	441	441	441	605	608	608	608	609	609	609	611	623
					PAVEMENT REMOVED, AS PER PLAN	WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	REMOVAL, MISC.: STRUCTURAL CURB REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T= 2 1/2")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T= 2 1/2")	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T= 3 1/4")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T= 3 1/4")	NON-TRACKING TACK COAT (APPLIED AT 0.100 GAL/SY)	TACK COAT, 702.13 (APPLIED AT 0.100 GAL/SY)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	4" CONCRETE WALK, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CURB, MISC.: STRUCTURAL TYPE 6 CURB	CURB, MISC.: SIDEWALK CURB	MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN
		TO			SY	SF	FT	FT	SY	SY	SY	SY	GAL	GAL	CY	CY	CY	FT	SF	SF	SF	FT	FT	FT	EACH	EACH
		58+00 63+00	LT/RT	01/ENH/OT	123				2135	257			239	239		66	100									
SW1-6	83	58+00 60+43	LT	01/ENH/OT		4039													1158							
SW7-11	83	58+00 63+00	RT	01/ENH/OT		4392														2602						
CR1-8	83	58+00 63+00	LT/RT	01/ENH/OT																	658					
C1-8	83	58+00 63+00	LT/RT	01/ENH/OT			970											970				970				
M1-3	83	58+00 63+00	LT/RT	01/ENH/OT																						3
E1-2	83	58+00 63+00	LT/RT	01/ENH/OT																						2
<b>TOTALS CARRIED TO ROADWAY PLAN SUBSUMMARY</b>					<b>123</b>	<b>8431</b>	<b>970</b>	<b>0</b>	<b>2135</b>	<b>257</b>	<b>0</b>	<b>0</b>	<b>239</b>	<b>239</b>	<b>0</b>	<b>66</b>	<b>100</b>	<b>970</b>	<b>1158</b>	<b>2602</b>	<b>658</b>	<b>970</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>



HORIZONTAL SCALE IN FEET  
 0 20 40

**PLAN - EAST 140TH STREET**  
**STA. 58+00.00 TO STA. 63+00.00**

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
**MKD**

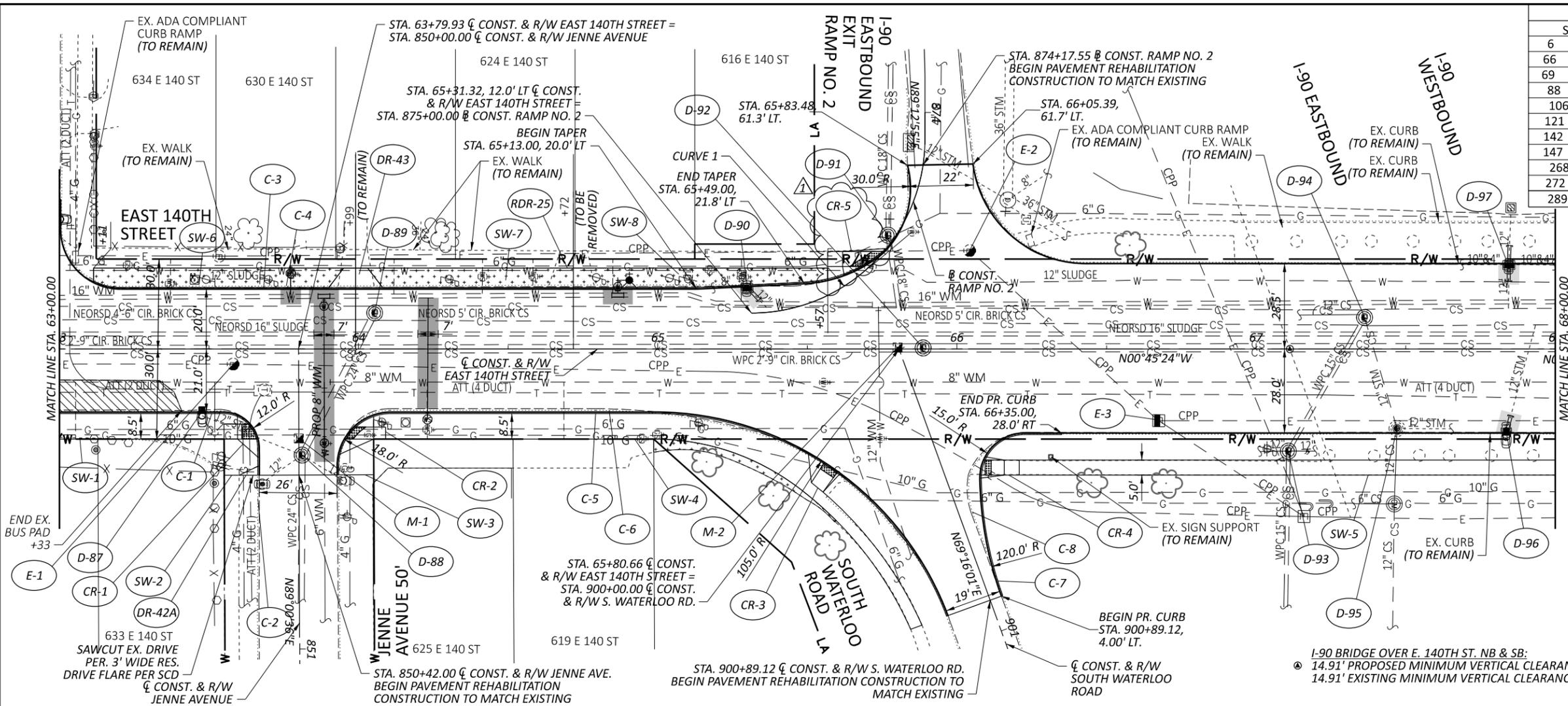
REVIEWER  
**DAB 10/21/22**

PROJECT ID  
**115612**

SHEET TOTAL  
**83 298**

**CUY-EAST 140TH STREETSCAPE**

MODEL: 115612\_GPI112\_PAPER SIZE: 17x11 (in.) DATE: 2/24/2023 TIME: 10:55:05 AM USER: Mary.Dohlen  
 p:\115612\115612\_GPI112\_PAPER\115612\_1400-Engineering\Roadway\Streets\115612\_GPI112.dgn

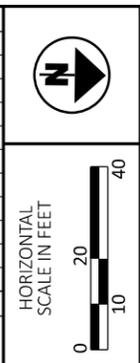


CROSS REFERENCES		
SHEET NO.	DESCRIPTION	
6	- 22	TYPICAL SECTIONS & DETAILS
66	- 68	DRIVE QUANTITIES
69	- 71	DRAINAGE QUANTITIES
88	- 105	PAVEMENT ELEVATION TABLES
106	- 120	INTERSECTION DETAILS
121	- 141	DRIVE DETAILS/PROFILES
142	- 146	DRAINAGE DETAILS
147	- 195	WATER WORKS
268	- 271	TRAFFIC SIGNAL PLANS
272	- 288	STREETSCAPE PLANS
289	- 295	STRUCTURAL PLANS

**CURVE 1 - CURVE DATA**  
 P.I. = STA. 874+66.89  
 $\Delta = 90^{\circ}01'47''$  LT  
 $D_c = 98^{\circ}47'09''$   
 $R = 58.00'$   
 $T = 58.03'$   
 $L = 91.14'$   
 $E = 24.05'$

- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMP PER CITY OF CLEVELAND STANDARD DRAWINGS. ALL RAMP MUST BE ADA COMPLIANT. SPECIFIC TYPE OF RAMP IS INDICATED ON SHEETS 114 TO 115.
  3. SEE SHEET 36 FOR ABBREVIATION LEGEND AND SHEET LEGEND.
  4. SEE SHEET 73 FOR HATCHING LEGEND.

**BENCHMARK**  
 EAST 140TH STREET C/L  
 STA. 64+02.65, 31.57' RT  
 MAG NAIL SET (CVE#108)  
 ELEVATION 600.53



REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/LOCAL	202		202		202		202		254		254		254		254		407		407		441		441		441		605		608		608		608		609		609		609		611		623	
					PAVEMENT REMOVED, AS PER PLAN	WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	REMOVAL, MISC.: STRUCTURAL CURB REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=2 1/2")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=2 1/2")	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T=3 1/4")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T=3 1/4")	NON-TRACKING TACK COAT (APPLIED AT 0.100 GAL/SY)	TACK COAT, 702.13 (APPLIED AT 0.100 GAL/SY)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	4" CONCRETE WALK, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CURB, MISC.: STRUCTURAL TYPE 6 CURB	CURB, MISC.: SIDEWALK CURB	MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN																						
		TO																																														
	84	63+00	68+00	LT/RT	01/ENH/OT					3115	45			316	316					88	132																											
SW1-4	84	63+00	65+88	RT	01/ENH/OT		2700																																									
SW5	84	66+21	68+00	RT	01/ENH/OT		938																																									
SW6-8	84	63+11	65+75	LT	01/ENH/OT		1264																																									
CR1-5	84	63+00	68+00	RT	01/ENH/OT																																											
C1-8	84	63+00	68+00	LT/RT	01/ENH/OT			648																																								
M1-2	84	63+00	68+00	RT	01/ENH/OT																																											
E1-3	84	63+00	68+00	LT/RT	01/ENH/OT																																											
<b>TOTALS CARRIED TO ROADWAY PLAN SUBSUMMARY</b>						0	4902	648	0	3115	45	0	0	316	316	0	88	132	648	896	2239	398	648	0	0	3	2																					

**PLAN - EAST 140TH STREET**  
**STA. 63+00.00 TO STA. 68+00.00**

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
 MKD

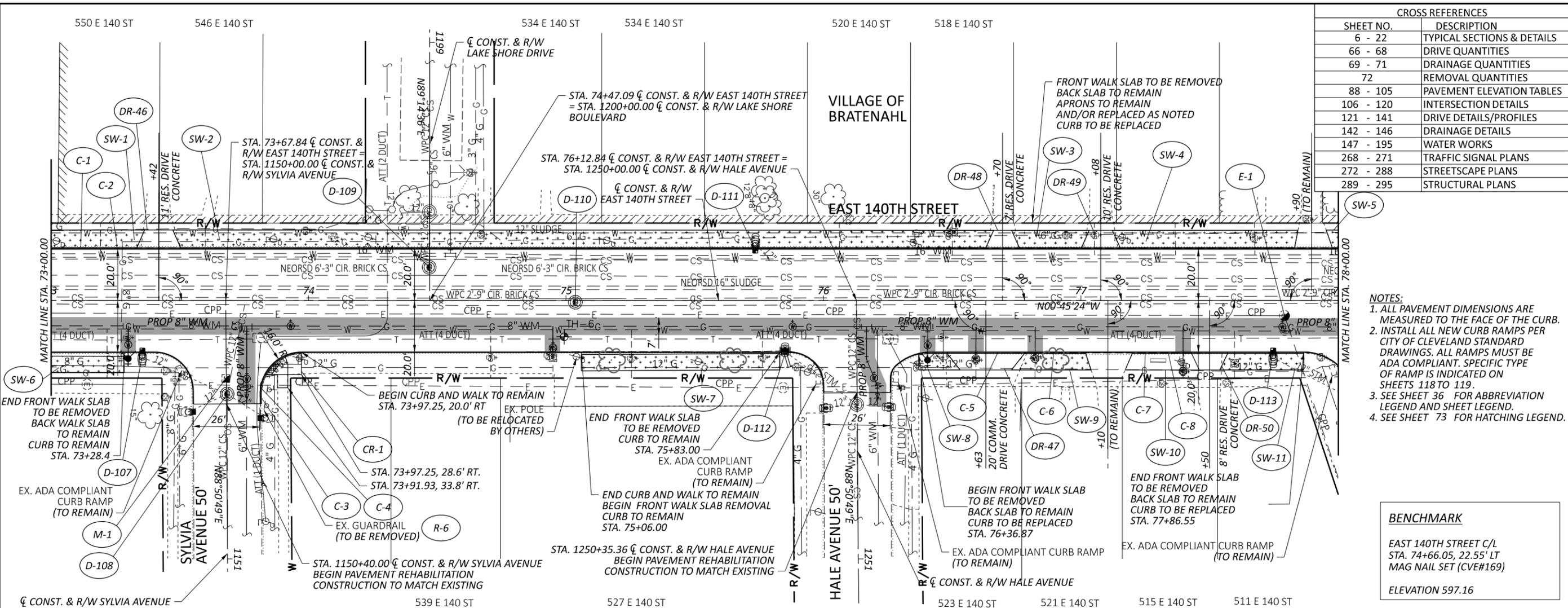
REVIEWER  
 DAB 10/21/22

PROJECT ID  
 115612

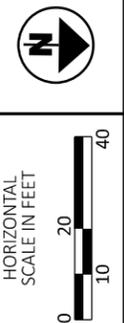
SHEET TOTAL  
 84 298

**CUY-EAST 140TH STREETSCAPE**

MODEL: 115612\_GPI114\_PAPER SIZE: 17x11 (in.) DATE: 2/24/2023 TIME: 10:55:16 AM USER: Mary.Dohlen  
 p:\a\mb-us-pw-bentley.com\mb-us-pw-03\Documents\Cleveland\_OH\01\_Projects\Cleveland\115612\_400-Engineering\Roadway\Streets\115612\_GPI114.dgn



CROSS REFERENCES	
SHEET NO.	DESCRIPTION
6 - 22	TYPICAL SECTIONS & DETAILS
66 - 68	DRIVE QUANTITIES
69 - 71	DRAINAGE QUANTITIES
72	REMOVAL QUANTITIES
88 - 105	PAVEMENT ELEVATION TABLES
106 - 120	INTERSECTION DETAILS
121 - 141	DRIVE DETAILS/PROFILES
142 - 146	DRAINAGE DETAILS
147 - 195	WATER WORKS
268 - 271	TRAFFIC SIGNAL PLANS
272 - 288	STREETSCAPE PLANS
289 - 295	STRUCTURAL PLANS



- NOTES:**
1. ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  2. INSTALL ALL NEW CURB RAMPS PER CITY OF CLEVELAND STANDARD DRAWINGS. ALL RAMPS MUST BE ADA COMPLIANT. SPECIFIC TYPE OF RAMP IS INDICATED ON SHEETS 118 TO 119.
  3. SEE SHEET 36 FOR ABBREVIATION LEGEND AND SHEET LEGEND.
  4. SEE SHEET 73 FOR HATCHING LEGEND.

**BENCHMARK**  
 EAST 140TH STREET C/L  
 STA. 74+66.05, 22.55' LT  
 MAG NAIL SET (CVE#169)  
 ELEVATION 597.16

REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/LOCAL	202		202		202		202		254		254		407		407		441		441		441		605		608		608		608		609		609		609		611		623			
					PAVEMENT REMOVED, AS PER PLAN	WALK REMOVED, AS PER PLAN	CURB REMOVED, AS PER PLAN	REMOVAL, MISC.: STRUCTURAL CURB REMOVED	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T= 2 1/2")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T= 2 1/2")	PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN (T= 3 1/4")	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN (T= 3 1/4")	NON-TRACKING TACK COAT (APPLIED AT 0.100 GAL/SY)	TACK COAT, 702.13 (APPLIED AT 0.100 GAL/SY)	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (448), AS PER PLAN, PG64-22	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), AS PER PLAN, PG70-22M	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC, AS PER PLAN	4" CONCRETE WALK, AS PER PLAN	6" CONCRETE WALK, AS PER PLAN	CURB RAMP, AS PER PLAN	CURB, TYPE 6, AS PER PLAN	CURB, MISC.: STRUCTURAL TYPE 6 CURB	CURB, MISC.: SIDEWALK CURB	MANHOLE, MISC.: VAULT/MANHOLE ADJUSTED TO GRADE (CPP)	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN																				
		TO																																												
	86	73+00	78+00	LT/RT	01/ENH/OT									2347																																
	SW1-5	86	73+00	78+00	LT	01/ENH/OT																																								
	SW6-11	86	73+00	78+00	RT	01/ENH/OT																																								
	CR1	86	73+00	78+00	LT/RT	01/ENH/OT																																								
	C1-8	86	73+00	78+00	LT/RT	01/ENH/OT																																								
	M1	86	73+00	78+00	RT	01/ENH/OT																																								
	E1	86	73+00	78+00	RT	01/ENH/OT																																								
<b>TOTALS CARRIED TO ROADWAY PLAN SUBSUMMARY</b>							0	4383	668	0	2347	0	0	0	235	235	0	65	98	668	0	0	101	668	0	0	1	1																		

**PLAN - EAST 140TH STREET  
 STA. 73+00.00 TO STA. 78+00.00**

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
 MKD

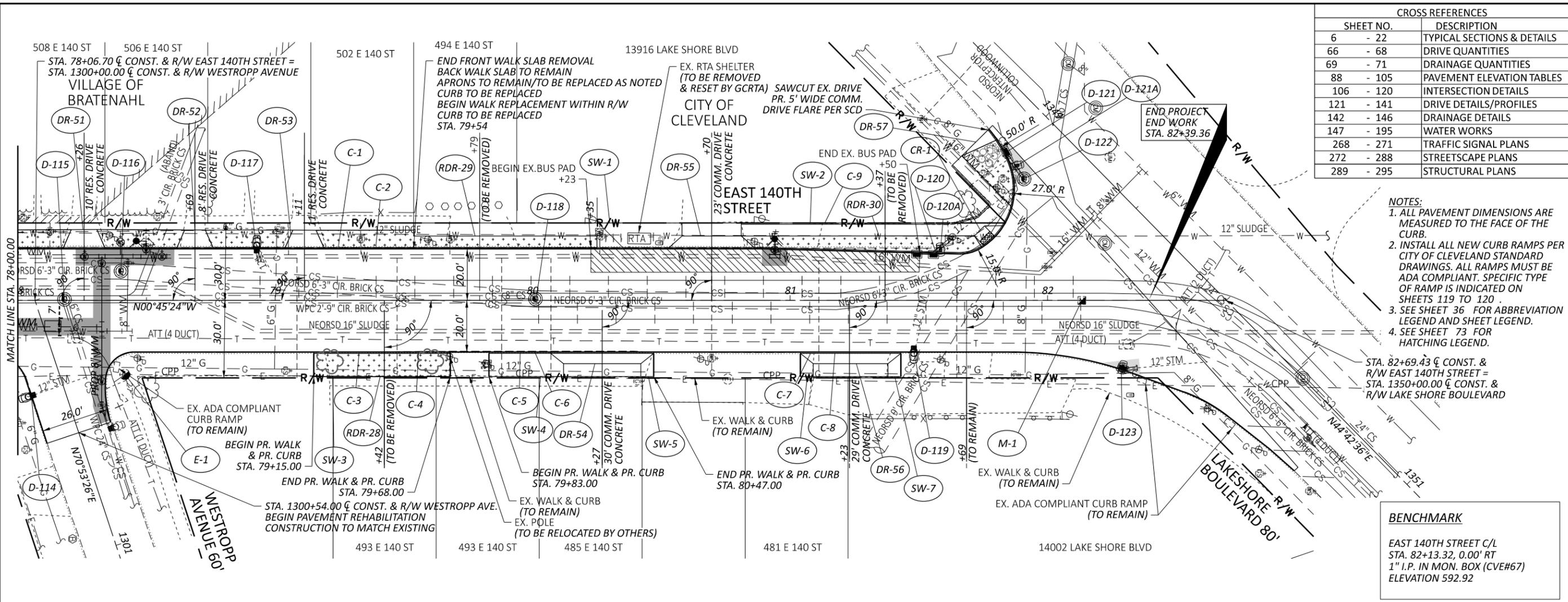
REVIEWER  
 DAB 10/21/22

PROJECT ID  
 115612

SHEET TOTAL  
 86 298

**CUY-EAST 140TH STREETSCAPE**

MODEL: 115612\_GP115\_PAPER SIZE: 17x11 (in.) DATE: 2/24/2023 TIME: 10:55:28 AM USER: Mary,Dohlen  
 p:\a\mb-us-pw-bentley.com\mb-us-pw-03\Documents\Cleveland\_OH\01\_Projects\Cleveland\115612\_400-Engineering\Roadway\Streets\115612\_GP115.dgn



CROSS REFERENCES	
SHEET NO.	DESCRIPTION
6	- 22 TYPICAL SECTIONS & DETAILS
66	- 68 DRIVE QUANTITIES
69	- 71 DRAINAGE QUANTITIES
88	- 105 PAVEMENT ELEVATION TABLES
106	- 120 INTERSECTION DETAILS
121	- 141 DRIVE DETAILS/PROFILES
142	- 146 DRAINAGE DETAILS
147	- 195 WATER WORKS
268	- 271 TRAFFIC SIGNAL PLANS
272	- 288 STREETScape PLANS
289	- 295 STRUCTURAL PLANS

- NOTES:**
- ALL PAVEMENT DIMENSIONS ARE MEASURED TO THE FACE OF THE CURB.
  - INSTALL ALL NEW CURB RAMPS PER CITY OF CLEVELAND STANDARD DRAWINGS. ALL RAMPS MUST BE ADA COMPLIANT. SPECIFIC TYPE OF RAMP IS INDICATED ON SHEETS 119 TO 120.
  - SEE SHEET 36 FOR ABBREVIATION LEGEND AND SHEET LEGEND.
  - SEE SHEET 73 FOR HATCHING LEGEND.

STA. 82+69.43 C/ CONST. & R/W EAST 140TH STREET = STA. 1350+00.00 C/ CONST. & R/W LAKE SHORE BOULEVARD

**BENCHMARK**  
 EAST 140TH STREET C/L  
 STA. 82+13.32, 0.00' RT  
 1" I.P. IN MON. BOX (CVE#67)  
 ELEVATION 592.92

REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/LOCAL	PAVEMENT REMOVED, AS PER PLAN																					
					202 SY	202 SF	202 FT	202 FT	254 SY	254 SY	254 SY	254 SY	407 GAL	407 GAL	441 CY	441 CY	441 CY	605 FT	608 SF	608 SF	608 SF	609 FT	609 FT	609 FT	611 EACH	623 EACH
		TO			26	1																				
	87	78+00	83+00	LT/RT	01/ENH/OT					2103	123				223	223			62	93						
SW1-2	87	79+54	81+67	LT	01/ENH/OT		2251																		1089	
SW3-7	87	79+15	81+43	RT	01/ENH/OT		152																		833	
CR1	87	78+00	83+00	LT	01/ENH/OT																			45		
C1-8	87	78+00	83+00	LT/RT	01/ENH/OT			583																	583	
C9	87	80+81	81+78	LT	01/ENH/OT																			120		
M1	87	78+00	83+00	LT/RT	01/ENH/OT																				1	
E1	87	78+00	83+00	RT	01/ENH/OT																			1		
<b>TOTALS CARRIED TO ROADWAY PLAN SUBSUMMARY</b>					26	2403	583	0	2103	123	0	0	223	223	0	62	93	583	1922	0	45	583	0	120	1	1

**PLAN - EAST 140TH STREET**  
**STA. 78+00.00 TO END**

DESIGN AGENCY  
**Michael Baker INTERNATIONAL**

DESIGNER  
 MKD

REVIEWER  
 DAB 10/21/22

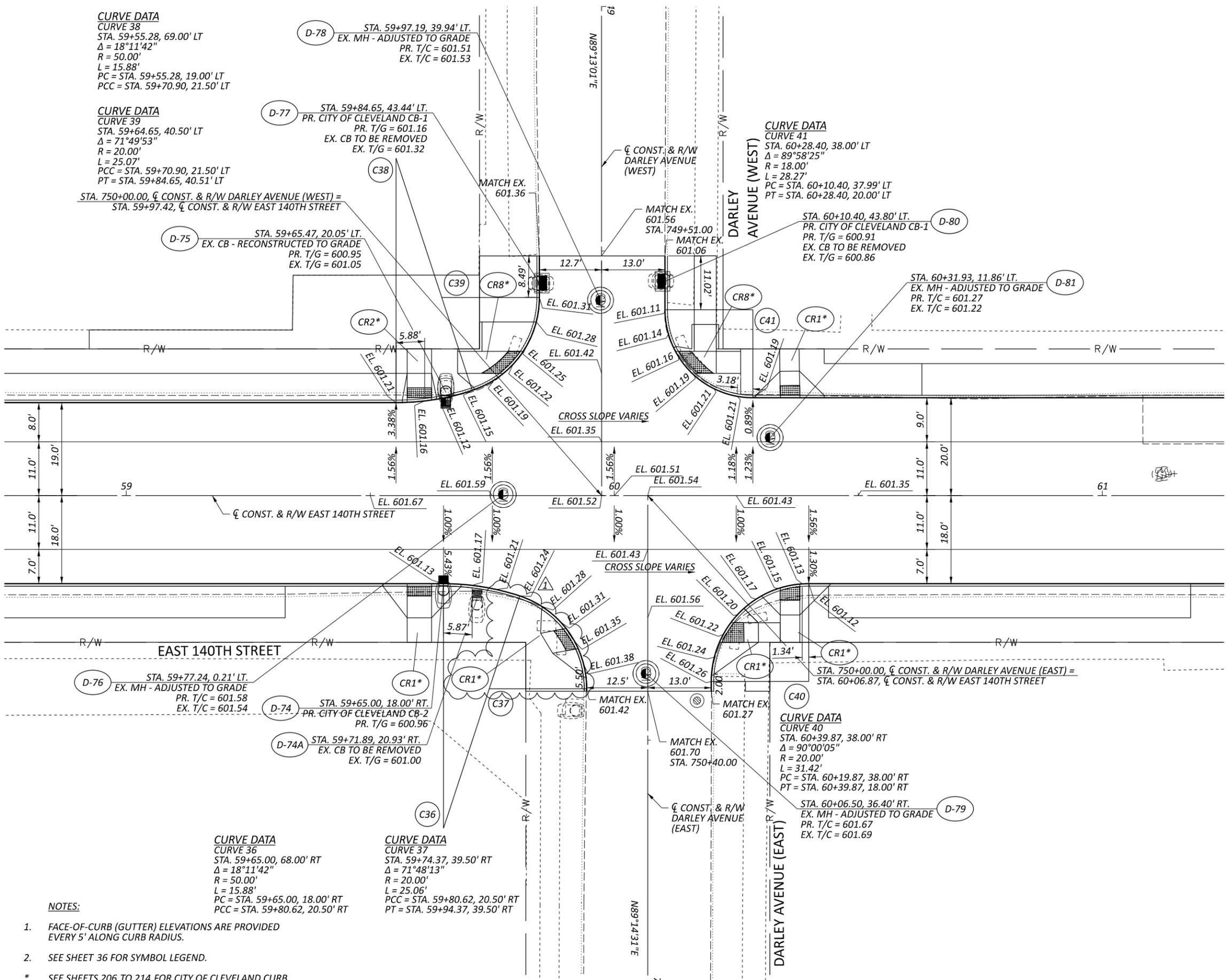
PROJECT ID  
 115612

SHEET TOTAL  
 87 298

**CURVE DATA**  
 CURVE 38  
 STA. 59+55.28, 69.00' LT  
 $\Delta = 18^{\circ}11'42''$   
 R = 50.00'  
 L = 15.88'  
 PC = STA. 59+55.28, 19.00' LT  
 PCC = STA. 59+70.90, 21.50' LT

**CURVE DATA**  
 CURVE 39  
 STA. 59+64.65, 40.50' LT  
 $\Delta = 71^{\circ}49'53''$   
 R = 20.00'  
 L = 25.07'  
 PCC = STA. 59+70.90, 21.50' LT  
 PT = STA. 59+84.65, 40.51' LT

STA. 750+00.00,  $\phi$  CONST. & R/W DARLEY AVENUE (WEST) =  
 STA. 59+97.42,  $\phi$  CONST. & R/W EAST 140TH STREET



**NOTES:**

1. FACE-OF-CURB (GUTTER) ELEVATIONS ARE PROVIDED EVERY 5' ALONG CURB RADIUS.
  2. SEE SHEET 36 FOR SYMBOL LEGEND.
- \* SEE SHEETS 206 TO 214 FOR CITY OF CLEVELAND CURB RAMP DETAILS.

**CURVE DATA**  
 CURVE 36  
 STA. 59+65.00, 68.00' RT  
 $\Delta = 18^{\circ}11'42''$   
 R = 50.00'  
 L = 15.88'  
 PC = STA. 59+65.00, 18.00' RT  
 PCC = STA. 59+80.62, 20.50' RT

**CURVE DATA**  
 CURVE 37  
 STA. 59+74.37, 39.50' RT  
 $\Delta = 71^{\circ}48'13''$   
 R = 20.00'  
 L = 25.06'  
 PCC = STA. 59+80.62, 20.50' RT  
 PT = STA. 59+94.37, 39.50' RT

**CURVE DATA**  
 CURVE 41  
 STA. 60+28.40, 38.00' LT  
 $\Delta = 89^{\circ}58'25''$   
 R = 18.00'  
 L = 28.27'  
 PC = STA. 60+10.40, 37.99' LT  
 PT = STA. 60+28.40, 20.00' LT

**CURVE DATA**  
 CURVE 40  
 STA. 60+39.87, 38.00' RT  
 $\Delta = 90^{\circ}00'05''$   
 R = 20.00'  
 L = 31.42'  
 PC = STA. 60+19.87, 38.00' RT  
 PT = STA. 60+39.87, 18.00' RT

STA. 750+00.00,  $\phi$  CONST. & R/W DARLEY AVENUE (EAST) =  
 STA. 60+06.87,  $\phi$  CONST. & R/W EAST 140TH STREET



INTERSECTION DETAIL  
 EAST 140TH STREET & DARLEY AVENUE

DESIGN AGENCY

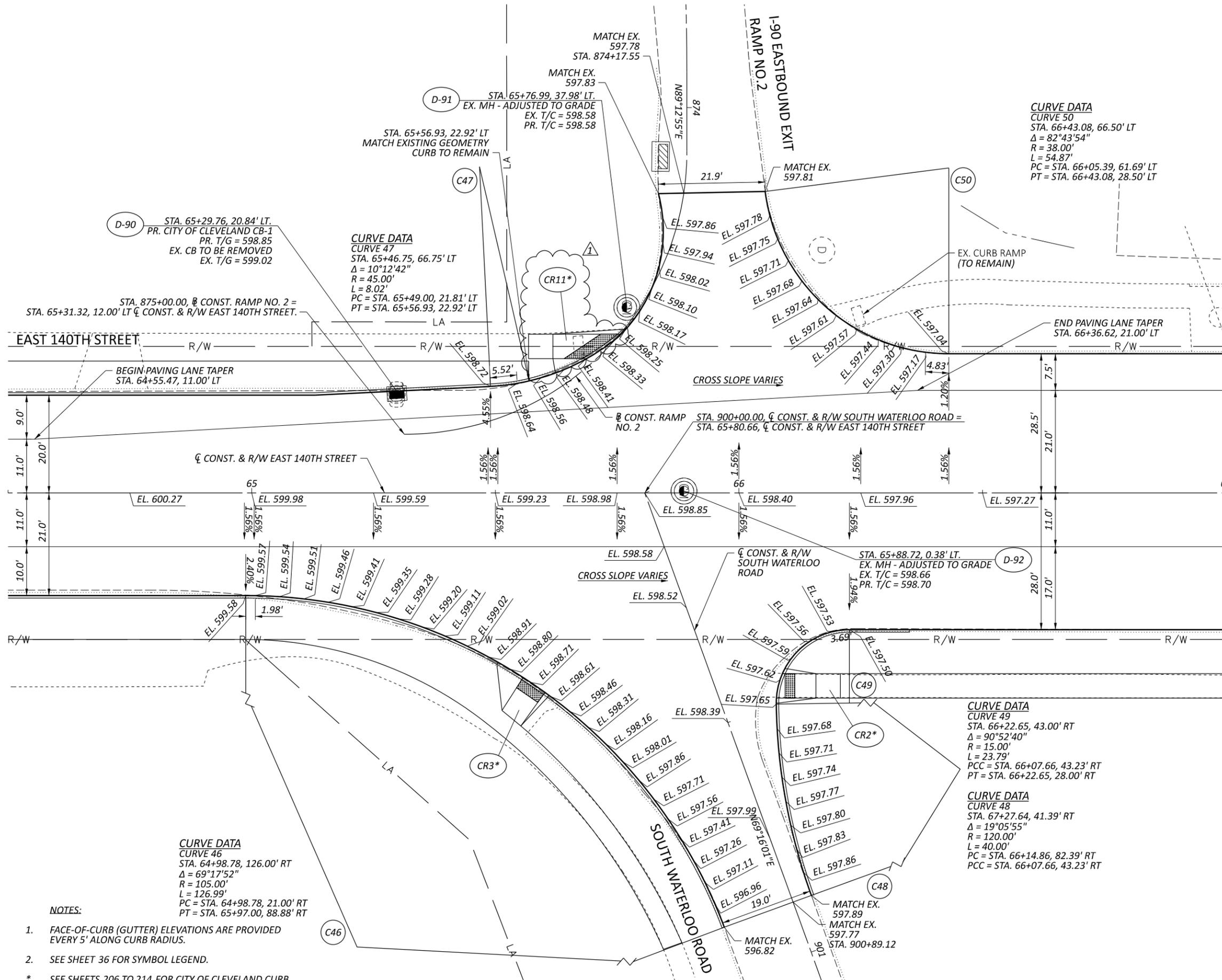
Michael Baker  
 INTERNATIONAL

DESIGNER  
 JLD

REVIEWER  
 MKD 10/21/22

PROJECT ID  
 115612

SHEET TOTAL  
 113 298



**CURVE DATA**  
 CURVE 50  
 STA. 66+43.08, 66.50' LT  
 $\Delta = 82^\circ 43' 54''$   
 R = 38.00'  
 L = 54.87'  
 PC = STA. 66+05.39, 61.69' LT  
 PT = STA. 66+43.08, 28.50' LT

**CURVE DATA**  
 CURVE 47  
 STA. 65+46.75, 66.75' LT  
 $\Delta = 10^\circ 12' 42''$   
 R = 45.00'  
 L = 8.02'  
 PC = STA. 65+49.00, 21.81' LT  
 PT = STA. 65+56.93, 22.92' LT

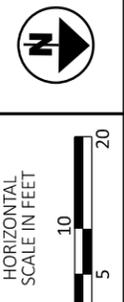
**CURVE DATA**  
 CURVE 49  
 STA. 66+22.65, 43.00' RT  
 $\Delta = 90^\circ 52' 40''$   
 R = 15.00'  
 L = 23.79'  
 PCC = STA. 66+07.66, 43.23' RT  
 PT = STA. 66+22.65, 28.00' RT

**CURVE DATA**  
 CURVE 48  
 STA. 67+27.64, 41.39' RT  
 $\Delta = 19^\circ 05' 55''$   
 R = 120.00'  
 L = 40.00'  
 PC = STA. 66+14.86, 82.39' RT  
 PCC = STA. 66+07.66, 43.23' RT

**CURVE DATA**  
 CURVE 46  
 STA. 64+98.78, 126.00' RT  
 $\Delta = 69^\circ 17' 52''$   
 R = 105.00'  
 L = 126.99'  
 PC = STA. 64+98.78, 21.00' RT  
 PT = STA. 65+97.00, 88.88' RT

**NOTES:**

1. FACE-OF-CURB (GUTTER) ELEVATIONS ARE PROVIDED EVERY 5' ALONG CURB RADIUS.
2. SEE SHEET 36 FOR SYMBOL LEGEND.
- \* SEE SHEETS 206 TO 214 FOR CITY OF CLEVELAND CURB RAMP DETAILS.



INTERSECTION DETAIL  
 EAST 140TH STREET & SOUTH WATERLOO ROAD

DESIGN AGENCY

**Michael Baker**  
 INTERNATIONAL

DESIGNER  
 KJM

REVIEWER  
 MKD 10/21/22

PROJECT ID  
 115612

SHEET TOTAL  
 115 298

**WATER WORK (CONTINUED):**

**GENERAL REQUIREMENTS FOR GENERAL SERVICE/FIRE SERVICE CONNECTIONS (CONTINUED)**

WHERE A GENERAL SUPPLY FOR FIRE SERVICE CONNECTION IS DISTURBED FOR LOWERING, RAISING AND/OR EXTENDING, IT SHALL BE EXTENDED IN A STRAIGHT PROLONGATION OF THE EXISTING CONNECTION. WHERE THE "PROPERTY SIDE" CONNECTION PIPING IS NOT IMMEDIATELY CONTIGUOUS TO THE EXTENDED CONNECTION CURB SHUTOFF, ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO RECONNECT SHALL BE INCLUDED IN THE WORK. ALL RECONNECTION ON THE "PROPERTY SIDE" OF THE CURB SHUTOFF SHALL BE PARALLEL TO THE STREET CENTERLINE OR RIGHT-OF-WAY FROM THE CURB SHUTOFF. IF UPON INSPECTION OF THE "PROPERTY SIDE" PIPING IS FOUND UNSUITABLE FOR SUCH RECONNECTION, THE CONNECTION SHALL NOT BE DISTURBED UNTIL SUCH TIME AS THE ENGINEER/DESIGNER ENGINEER HAS ARRANGED FOR REPLACEMENT.

WHERE A COPPER CONNECTION IS ADVERTENTLY DAMAGED OR BROKEN WHICH WAS NOT TO BE DISTURBED, ONLY THE DAMAGED PORTION NEEDS TO BE REPLACED. WHERE A LEAD/GALVANIZED CONNECTION IS ADVERTENTLY DAMAGED OR BROKEN WHICH WAS NOT TO BE DISTURBED, THE CONNECTION SHALL BE REPLACED AS NOTED IN THESE NOTES AT THE CONTRACTOR'S EXPENSE. IF THE EXTENT OF THE DAMAGE TO THE CONNECTION CANNOT BE FULLY ASSESSED, THE CONNECTION SHALL BE REPLACED AS NOTED, AT THE CONTRACTOR'S EXPENSE.

ALL GENERAL SUPPLY AND FIRE SERVICE CONNECTIONS SHALL BE LAID NOT LESS THAN SIX (6) FEET BELOW ESTABLISHED STREET GRADE AND NOT LESS THAN FIVE AND ONE-HALF (5-1/2) FEET BELOW GROUND SURFACE.

**ITEM SPECIAL - RETAP, RECONNECT AND EXTEND 1 1/2-INCH AND SMALLER AND 2-INCH WATER SERVICE CONNECTIONS, AS PER CWD**

WATER SERVICE CONNECTION REPLACEMENTS SHALL CONFORM TO STANDARD DRAWING NOS. PVC-C01 AND PVC-C03. WORK SHALL INCLUDE REMOVAL OF EXISTING SERVICE CONNECTION PIPING, CURB VALVES, TAPPING VALVES, SERVICE VALVES, VALVE BOXES AND APPURTENANCES. WORK SHALL ALSO INCLUDE NEW TAPPING SADDLES, VALVES, CURB VALVES, VALVE BOXES, COPPER PIPING, EXCAVATION, BACKFILL, TRENCH SUPPORTS AND PIPE CONNECTIONS.

EXISTING WATER SERVICE CONNECTIONS 1-INCH AND SMALLER SIZE SHALL BE REPLACED WITH 1-INCH WATER SERVICE CONNECTIONS. EXISTING 1 1/2-INCH AND 2-INCH SIZE WATER SERVICE CONNECTIONS SHALL BE REPLACED WITH THE SAME SIZE CONNECTIONS AS THE EXISTING LINE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL FOR THE WORK TO BE PERFORMED HEREIN. ALL WORK, MATERIAL AND ARRANGEMENTS SHALL BE SUBJECT TO THE INSPECTION AND APPROVAL OF THE CITY OF CLEVELAND DIVISION OF WATER. THE DIVISION OF WATER RESERVES THE RIGHT TO DETERMINE THE CONFIGURATION OF ALL WATER SERVICE CONNECTIONS INSTALLATION. THE CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR, EQUIPMENT AND DO ALL WORK INCLUDING PROVIDING ALL TRAFFIC MAINTENANCE; PROVIDING AND MAINTAINING TRAFFIC CONTROL; AND WARNING DEVICES, INCLUDING TEMPORARY AND PERMANENT PAVEMENT MARKINGS; PAVEMENT CUTTING (BOTH FOR TRENCH AND FOR PAVEMENT REMOVAL AND RESTORATION); ALL EXCAVATIONS, INCLUDING PAVEMENTS, WATER MAIN TRENCH AND SEWER AND/OR UTILITY TRENCHES; TUNNELING AND BORING AND/OR JACKING; SHEETING AND SHORING, INCLUDING USE OF TRENCH BOX.

ALL SHOP DRAWING SUBMITTALS; THE FURNISHING AND INSTALLING OF ALL APPROVED MATERIALS AS HEREIN SPECIFIED AND AS REQUIRED TO COMPLETE THE WORK; SAND BEDDING BACKFILL; BACKFILL AND/OR PREMIUM BACKFILL; TESTING AND THE REPAIR AND/OR REPLACEMENT OF MATERIALS DUE TO LEAKAGE OR DEFECTS; PAVEMENT REPLACEMENT EXCEPT FOR ASPHALT INTERMEDIATE AND ASPHALT SURFACE COURSES, INCLUDING BASE PAVEMENT REPLACEMENT, BERM REPLACEMENT/REPAIR AND SHOULDER REPLACEMENT/REPAIR; FINAL PAVEMENT RESTORATION, INCLUDING TRAFFIC MARKINGS, SIGNS AND TRAFFIC LOOPS DETECTORS; PROTECTING AND MAINTAINING UTILITIES AND UTILITY SERVICES; REPAIR OF SITE DAMAGE DUE TO CONSTRUCTION, INCLUDING TRAFFIC MAINTENANCE; AND FINAL SITE RESTORATION; ALL AS REQUIRED FOR THE PROPER COMPLETION OF THE WORK INCLUDED UNDER THIS CONTACT. THE DIVISION OF WATER WILL INSTALL THE PRESSURE TAP. THE WORK OF BORING AND/OR JACKING AND EXCAVATION FOR SERVICE CONNECTIONS SHALL BE AS HEREIN SPECIFIED TO COMPLETE THE WORK. SEE SHEET 17 FOR PAVEMENT RESTORATION DETAIL.

**ITEM 638- WATER WORK, MISC.: TEMPORARY WATER SERVICE CONNECTION  
ITEM 638 - WATER WORK, MISC.: TEMPORARY WATERLINE**

THE CONTRACTOR SHALL BE REQUIRED TO INSTALL TEMPORARY WATER MAINS AND TEMPORARY SERVICE CONNECTIONS AS SPECIFIED AND OF SUCH SIZE AS TO PROVIDE A SUFFICIENT WATER SUPPLY DURING CONSTRUCTION. THE FAILURE OF THE CONTRACTOR TO INSTALL TEMPORARY MAINS OF SUFFICIENT SIZE MAY MAKE THE CONTRACTOR LIABLE WHERE CONFLAGRATION DUE TO LACK OF WATER FOR FIRE PROTECTION MAY GIVE RISE TO ACTIONABLE CLAIMS FOR DAMAGES CHARGEABLE TO THE CONTRACTOR BY REASON OF SAID FAILURE. DUE TO WATER CONNECTION REQUIREMENTS AND WEATHER CONDITIONS, THE OPERATION OF TEMPORARY WATER SERVICE SYSTEMS SHALL BE PERFORMED BETWEEN APRIL 15TH AND NOVEMBER 1ST. ALL TEMPORARY WATER MAINS SHALL BE DISCONNECTED BY NOVEMBER 1ST.

THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, TOOLS, MATERIAL AND EQUIPMENT FOR TEMPORARY WATER MAINS AND SERVICE CONNECTIONS WHERE SERVICE CONNECTIONS ARE ENCOUNTERED ON THE MAINS TO BE REMOVED. THE CONTRACTOR SHALL PROVIDE, INSTALL AND REMOVE TEMPORARY WATER MAINS AND TEMPORARY CONNECTIONS TO ALL PREMISES AND SERVICES IN A MANNER SUCH THAT WATER SERVICE CONTINUES UNINTERRUPTED. TEMPORARY WATER MAINS SHALL BE PLACED ON ONE OR BOTH SIDES OF THE STREET SO AS TO PROVIDE SERVICE ONLY TO THOSE CONNECTIONS ON THE SIDE OF THE STREET ON WHICH THE PARTICULAR TEMPORARY MAIN IS LOCATED. THE TEMPORARY MAINS SHALL NOT OBSTRUCT ANY STREETS, SIDEWALK OR DRIVEWAYS. TEMPORARY WATER MAINS THAT CROSS DRIVEWAYS AND SIDEWALKS SHALL BE RAMPED WITH RUBBERIZED/NEOPRENE TYPE RAMPING; NO ASPHALT OR STONE RAMPING SHALL BE ALLOWED FOR THIS PURPOSE.

THE TEMPORARY WATER MAIN FOR ORDINARY SIZE SERVICE CONNECTIONS (1" OR LESS) SHALL BE A MINIMUM OF 2" INSIDE DIAMETER PIPE AND FITTINGS WITH SUPPLEMENTAL 2" CONNECTIONS FROM EXISTING FIRE HYDRANTS OR TAPS ON ADJACENT EXISTING WATER MAINS. THE TEMPORARY WATER MAIN FOR SERVICE CONNECTIONS LARGER THAN 1" SHALL BE A MINIMUM OF 4" INSIDE DIAMETER. MINIMUM SIZE REQUIREMENTS FOR TEMPORARY BYPASS WATER LINES SHALL IN ADDITION INCLUDE A 4-INCH MINIMUM INSIDE DIAMETER PIPE ON AT LEAST ONE SIDE OF ANY STREET WHERE A WATER MAIN IS BEING REHABILITATED BY CLEANING AND LINING OR IS TAKEN OUT OF SERVICE BECAUSE OF ANY WORK BEING PERFORMED UNDER THIS CONTRACT. IF CLEVELAND WATER DEPARTMENT IS OF THE OPINION THAT THE SIZE OF THE TEMPORARY WATER MAIN TO BE FURNISHED AT ANY POINT IS NO SUFFICIENT, THE CLEVELAND WATER DEPARTMENT MAY ORDER 6" INSIDE DIAMETER OR 8" INSIDE DIAMETER SIZE TO BE USED. WHERE TRAFFIC OR OTHER CONDITIONS WARRANT, THE CLEVELAND WATER DEPARTMENT MAY ALSO ORDER THAT ONLY GALVANIZED STEEL BYPASS PIPE AND FITTINGS BE USED. THIS MATERIAL REQUIREMENT, WHEN ORDERED IS NOT COUPLED TO THE SIZING REQUIREMENTS; THE CLEVELAND WATER DEPARTMENT MAY REQUIRE SUCH MATERIAL ON ANY SIZE BYPASS PIPE. THE CONTRACTOR IS HEREWITH NOTIFIED THAT NO EXTRA ALLOWANCE OR PAYMENT WILL BE MADE BASED ON LENGTH, SIZE OR MATERIAL OF TEMPORARY BYPASS PIPE WHERE ADDITIONAL LENGTHS, INCREASE SIZES OR ALTERNATE MATERIALS ARE REQUIRED OR ORDERED TO PROVIDE ACCEPTABLE AND RELIABLE SERVICE AS DETERMINED BY THE CLEVELAND WATER DEPARTMENT. THE COMPLIANCE WITH SUCH ORDERS BY THE CONTRACTOR SHALL NOT RELIEVE OR RELEASE THE CONTRACTOR FROM THE RESPONSIBILITY TO PROVIDE ADEQUATE TEMPORARY WATER SERVICE. PAYMENT FOR ALL WORK REQUIRED AS SPECIFIED SHALL BE INCLUDED IN THE BID ITEMS FOR TEMPORARY WATER LINE AND SERVICE CONNECTIONS.

THE CONTRACTOR SHALL PROVIDE ENOUGH ISOLATION VALVES IN THE TEMPORARY WATER MAIN SYSTEM SUCH THAT PIPE SEGMENTS ON EACH SIDE OF THE STREET OF EACH STREET BLOCK CAN BE ISOLATED. IN NO CASE SHALL SEGMENTS OF PIPE BETWEEN VALVES BE LONGER THAN 1000 FEET.

MINIMUM FLOWS THAT SHALL BE AVAILABLE FROM TEMPORARY BYPASS WATER LINES, 4-INCH IN DIAMETER OR LARGER, SHALL BE:

1. ON THE RESIDENTIAL DEAD END AND SIDE STREETS WHICH MUST BE OR ARE SUPPLIED FROM THE EXISTING WATER LINE BEING CLEANED AND LINED, A MINIMUM OF 600 GALLONS PER MINUTE (GPM) AT A 20 POUND PER SQUARE INCH (PSI) RESIDUAL PRESSURE AT ANY POINT ALONG SAID TEMPORARY BYPASS WATER LINE.
2. ON RESIDENTIAL MAIN OR THROUGH STREETS CONNECTING TWO (2) OR MORE DEAD END OR SIDE STREETS WHICH MUST BE OR ARE SUPPLIED FROM THE EXISTING WATER LINE BEING CLEANED AND LINED, A MINIMUM OF 1,000 GPM AT A 20 PSI RESIDUAL PRESSURE AT ANY POINT ALONG SAID TEMPORARY BYPASS WATERLINE.
3. ON A STREET IN COMMERCIAL, INDUSTRIAL OR MULTI-FAMILY COMPLEX AREAS, WHICH MUST BE OR ARE SUPPLIED FROM THE EXISTING WATER LINE BEING CLEANED AND LINED, A MINIMUM OF 1,300 GPM AT 20 PSI RESIDUAL PRESSURE AT ANY POINT ALONG SAID TEMPORARY BYPASS WATERLINE.

THE CONTRACTOR SHALL GUARANTEE THE AVAILABILITY OF WATER AT A SUFFICIENT PRESSURE AND QUANTITY TO SUPPLY THE TEMPORARY BYPASS LINES. UPON REQUEST OR THE CONTRACTOR, TEST FOR WATER AVAILABILITY WILL BE MADE BY THE CLEVELAND WATER DEPARTMENT, BOTH AS TO SYSTEM SUPPLY AND ADEQUACY OF TEMPORARY BYPASS LINES AND SERVICE CONNECTION SUPPLY, INCLUDING DOMESTIC AND FORE LINE CONNECTIONS. THE CONTRACTOR WILL BE NOTIFIED OF THE TIME OF EACH TEST AND SHALL WITNESS THE TEST WHEN POSSIBLE. FAILURE OF THE CONTRACTOR TO WITNESS SAID TEST SHALL BE CONSIDERED AS ACCEPTANCE OF THE FINDINGS. ANY RE-TESTING SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

THE TEMPORARY WATER MAIN PIPE AND ALL APPURTENANCES SHALL BE FURNISHED AND RETAINED BY THE CONTRACTOR. THE TEMPORARY WATER MAIN PIPE AND APPURTENANCES SHALL BE FURNISHED AND RETAINED BY THE CONTRACTOR. THE TEMPORARY WATER MAIN PIPE AND APPURTENANCES FURNISHED SHALL BE CLEAN AND IN SUCH CONDITION THAT IT MAY BE TESTED, FLUSHED AND SUBJECTED TO AND PRODUCE SATISFACTORY WATER SAMPLES AS REQUIRED BY THE CLEVELAND WATER DEPARTMENT. ALL CONNECTING AND RECONNECTING OF SERVICE CONNECTIONS SHALL BE MADE BY THE CONTRACTOR UNDER THE SUPERVISION OF THE CLEVELAND WATER DEPARTMENT. THE CONTRACTOR SHALL SUBMIT FOR THE CLEVELAND WATER DEPARTMENT'S APPROVAL A PLAN OF THE PROPOSED BYPASS SYSTEM AT LEAST TWO (2) WEEKS BEFORE PLANNED WORK. THE TEMPORARY BYPASS PLAN SHALL INCLUDE A DIAGRAM SHOWING WHERE THE TEMPORARY VALVES WILL BE PLACED. NO WORK IN ANY SPECIFIC AREA SHALL COMMENCE UNTIL A BYPASS PLAN HAS BEEN APPROVED BY THE CLEVELAND WATER DEPARTMENT.

THE CONTRACTOR SHALL FURNISH ALL TEMPORARY WATER MAINS AND APPURTENANCES, INCLUDING THE FURNISHING, INSTALLING, REMOVING AND RELOCATING OF TEES, PLUGS, CAPS, OUTLETS, VALVES, RISERS, CLAMPS AND BLOCKING. THE CONTRACTOR SHALL PROVIDE TEMPORARY WATER MAIN PROTECTION WHERE TEMPORARY MAINS OR SERVICES CROSS SIDEWALKS, DRIVEWAYS, OR ROADWAYS. TEMPORARY WATER MAINS THAT CROSS DRIVEWAYS AND SIDEWALKS SHALL BE RAMPED WITH RUBBERIZED/NEOPRENE TYPE RAMPING; NO ASPHALT OR STONE RAMPING SHALL BE ALLOWED FOR THIS PURPOSE. ALL LINES CROSSING STREETS SHALL BE TRENCHED ACROSS TO ALLOW BYPASS PIPE TO LIE FLUSH WITH THE PAVEMENT SURFACE. NO RAMPING WILL BE ALLOWED ON STREET CROSSINGS EXCEPT FOR SIDE STREETS APPROVED BY THE CLEVELAND WATER DEPARTMENT. THE CONTRACTOR SHALL PROVIDE SUPPLEMENTARY CONNECTIONS WHERE VALVES WITH NIPPLES HAVE BEEN REMOVED, WHERE ADJACENT WATER MAINS CONNECT, OR WHERE ORDERED BY THE CLEVELAND WATER DEPARTMENT.

THE CONTRACTOR SHALL FURNISH NECESSARY HOSES, VALVES, PIPE AND FITTINGS FOR WATER SERVICE CONNECTIONS. THE CONTRACTOR SHALL ONLY CONNECT TO AN OUTSIDE HOSE BIB OR SILL COCK, UNLESS OTHERWISE APPROVED BY THE CLEVELAND WATER DEPARTMENT. ALL CONNECTIONS TO OUTSIDE HOSE BIBS OR SILL COCKS SHALL BE SUPPLIED WITH Y CONNECTORS.

THE CONTRACTOR SHALL MAKE A REASONABLE EFFORT TO SHUT OFF CONNECTIONS AT THE SERVICE STOP BOX WHERE POSSIBLE. IF A SERVICE STOP BOX IS NOT AVAILABLE, THE CONTRACTOR SHALL SHUT OFF THE CONNECTIONS INSIDE THE RESIDENCE OR BUILDING, AND SHALL CLEAR SERVICE CONNECTIONS USING INTERNAL PLUMBING. THE CONTRACTOR SHALL NOT BE PAID ANY EXTRA ALLOWANCE IF REQUIRED TO SHUT A CONNECTION WITHIN A BUILDING OR CLEAR SERVICE CONNECTIONS USING INTERNAL PLUMBING. ALL SUCH COSTS SHALL BE INCLUDED IN THE BID.

THE SIZE OF THE TEMPORARY CONNECTION SHALL BE OF AT LEAST THE SAME SIZE AS THE PERMANENT CONNECTION THAT HAS GONE TO THE BUILDING UNLESS THE CONNECTION IS LARGER THAN THE BYPASS PIPING. IF THE PERMANENT CONNECTION IS LARGER THAN THE BYPASS PIPING, THEN THE TEMPORARY CONNECTION WILL BE OF THE SAME SIZE AS THE BYPASS PIPING.

THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, TOOLS, MATERIAL AND EQUIPMENT TO PROVIDE, INSTALL AND REMOVE 4" TEMPORARY FIRE HYDRANT OUTLET ASSEMBLIES ON THE TEMPORARY WATER MAINS. THE 4" TEMPORARY FIRE HYDRANT OUTLET ASSEMBLY SHALL BE COMPLETE AND COMPLY WITH DRAWING STD-H14. THE CONTRACTOR SHALL PROVIDE PROTECTION IN STREETS, SIDEWALKS AND DRIVEWAYS. THE TEMPORARY HYDRANTS SHALL HAVE OPERATING NUTS OF THE SLOTTED TYPE; NO PENTAGON NUTS SHALL BE USED.

THE CONTRACTOR SHALL BE REQUIRED TO INSTALL 4" TEMPORARY FIRE HYDRANT OUTLET ASSEMBLIES AT EACH LOCATION WHERE A PERMANENT FIRE HYDRANT IS TAKEN OUT OF SERVICE OR USED FOR A TEMPORARY WATER MAIN CONNECTION UNLESS SPECIFICALLY WAIVED BY THE DIRECTOR WITH THE CONCURRENCE OF CHIEF OF THE DIVISION OF FIRE, OR THE SUBURBAN FIRE CHIEF. THE CONTRACTOR SHALL ALSO PROVIDE ADDITIONAL HYDRANTS WHERE SO ORDERED BY THE CLEVELAND WATER DEPARTMENT.

THE TEMPORARY WATER MAINS SHALL BE FLUSHED AND SUCCESSFULLY SAMPLED BEFORE BEING PLACED INTO SERVICE. REFER TO THE SECTION IN THESE SPECIFICATIONS ON FLUSHING AND SAMPLING.

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGES AND MAINTAIN TEMPORARY WATER SERVICE WHEN FREEZING WATER IS POSSIBLE. THE CONTRACTOR SHALL ENSURE THAT NO TEMPORARY CONNECTIONS FREEZE UP, AND THAT NO ICE FORMS ON ROADWAYS, SIDEWALKS OR OTHER ACCESS AREAS.

WHERE IN THE COURSE OF INSTALLING OR REMOVING TEMPORARY WATER LINES AND SERVICE CONNECTIONS, ANY PORTION OF THE PERMANENT SERVICE CONNECTION IS DISTURBED OR DAMAGED, IT SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND CLEVELAND WATER DEPARTMENT IN AMPLE TIME TO ASSESS THE EXTENT OF WORK REQUIRED AND INSPECT THE REPAIR OR REPLACEMENT SO AS TO AVOID UNNECESSARY DELAY IN RESTORING THE SERVICE CONNECTION. THE CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, MATERIALS, TOOLS AND EQUIPMENT AND SHALL DO ALL EXCAVATING, BACKFILLING AND REPAVING AS MAY BE REQUIRED. ODOT WILL MAKE NO SPECIFIC OR SEPARATE PAYMENT OR ALLOWANCE FOR SUCH WORK.

ITEM 638 - WATER WORK MISC.: TEMPORARY WATER SERVICE CONNECTION 30 EACH

ITEM 638 - WATER WORK MISC.: TEMPORARY WATER LINE 3,500 FT  
ITEM 202 - REMOVAL MISC.: WATERLINE REMOVED, 24" AND UNDER

THIS ITEM SHALL INCLUDE ALL WORK ASSOCIATED WITH THE REMOVAL OF THE EXISTING WATERLINE, INCLUDING PAVEMENT REMOVAL, AND SHALL FOLLOW ODOT 202.04 AND CWD STANDARD CONSTRUCTION DRAWINGS.

ITEM 202 - REMOVAL MISC.: WATER VALVE BOX REMOVED

THIS ITEM SHALL INCLUDE ALL WORK ASSOCIATED WITH THE REMOVAL OF THE EXISTING WATER VALVE BOXES AND SHALL FOLLOW ODOT CMS 202.02 AND CWD STANDARD CONSTRUCTION DRAWINGS.

DESIGN AGENCY

CHAGRIN VALLEY ENGINEERING, LTD. 2299 FORBES ROAD, UNIT B CLEVELAND, OHIO 44146 PHONE: (440) 438-1999 FAX: (440) 438-1989
DESIGNER
JPS
REVIEWER
BAK 11/29/22
PROJECT ID
115612
SHEET TOTAL
150 298

SHEET NO.																ITEM	EXT	GRAND TOTAL	UNIT	PARTICIPATION		DESCRIPTION	SEE SHEET
273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288					01/ ENH/ OT	02/ NFP/ PV		
100	1735	580	375		787	2488	871	2755	565	562	401		2364	163	300	608	13001	14,046	SF	14,046	6" CONCRETE WALK, AS PER PLAN B	273	
120																		120	FT	120	CURB, MISC. - SIDEWALK CURB	273	
	21	51	60	65	63	44	28	1	58	158	62	32	84	52	28	653	00300	807	CY	807	TOPSOIL FURNISHED AND PLACED		
	193	461	542	597	567	397	252	6	522	1427	562	401	759	467	251	659	00500	7404	SX	7404	SEEDING AND MULCHING, CLASS 1, AS PER PLAN	28	
	1	4	6	6	4	4	3		3	3	4	3	4		2	661	00500	47	CY	47	MULCH		
	9												9		9	661	14000	27	EA	27	PERENNIALS (No. 1 CONT.) - HEMEROCALLIS 'HAPPY RETURNS'		
	4												4		4	661	14000	12	EA	12	PERENNIALS (No. 2 CONT.) - NEPETA FAASSENII 'WALKER'S LOW'		
	4												5			661	20020	9	EA	9	DECIDUOUS SHRUB, 18" HEIGHT - SPIRAEA JAPONICA		
	2												2		2	661	30040	6	EA	6	EVERGREEN SHRUB, 18" HEIGHT - JUNIPERUS SQUAMATA 'BLUE STAR'		
	650	3250	4000	3500	4000	2500	1500		2750	3250	2750	1500	2250	750	700	661	31000	33,350	GAL	33,350	LANDSCAPE WATERING		
		5	2	7	7		4			10	6		3			661	40080	44	EA	44	DECIDUOUS TREE, 2" CAL. SYRINGA RETICULATA 'IVORY SILK'		
	1	8	5	5	3	6			5		4	3	2		2	661	40100	44	EA	44	DECIDUOUS TREE, 2-1/2" CAL. ACER MIYABEI 'STATE STREET'		
			8	2	6	4	1		6	3	1	3		3		661	40100	37	EA	37	DECIDUOUS TREE, 2-1/2" CAL. OSTRYA VIRGINIANA		
	1	1							1				1		1	680	14550	5	EA	5	SPECIAL - TRASH RECEPTACLE	273	
	3	2								2			3		3	690	50560	13	EA	13	SPECIAL - BICYCLE RACK	273	
	1	1				1	1		1	1	1		2	1		690	98000	10	EA	10	SPECIAL - 6' BENCH	273	
	1												1			690	98000	2	EA	2	SPECIAL - MONUMENT SIGN, TYPE A	273	
													1			690	98000	1	EA	1	SPECIAL - MONUMENT SIGN, TYPE B	273	
44,375															1	690	98400	44,375	EA	-	44,375	SPECIAL - PUBLIC ART FEE	273

NOTE: ALL QUANTITIES CARRIED FROM SHEET SUBSUMMARIES

DESIGN AGENCY



DESIGNER  
CAM

REVIEWER  
CAM 02-23-23

PROJECT ID  
115612

SHEET TOTAL  
272 298

**ITEM 608, 6" CONCRETE WALK, AS PER PLAN B**

THE CONTRACTOR SHALL FURNISH AND INSTALL COLORED AND STAMPED CONCRETE PAVING AS PER THE DRAWINGS AND AS SPECIFIED HEREIN. FURNISHING AND INSTALLATION OF THE INTEGRALLY COLORED CONCRETE ADMIXTURE AND STAMPING OF THE CONCRETE SHALL BE IN CONFORMANCE WITH THIS ITEM AS MODIFIED HEREIN:

1. THE ADMIXTURE SHALL BE A COLORED, WATER-REDUCING ADMIXTURE CONTAINING NO CALCIUM CHLORIDE WITH COLORING AGENTS THAT ARE LIMEPROOF AND UV RESISTANT. THE COLORED ADMIXTURE SHALL CONFORM TO THE FOLLOWING:
  - a. ASTM C979 - STANDARD SPECIFICATION FOR PIGMENTS FOR INTEGRALLY COLORED CONCRETE; COLOR TO BE DAVIS COLORS' OMAHA TAN, OR APPROVED EQUAL.
  - b. ASTM C494 - STANDARD SPECIFICATION FOR CHEMICAL ADMIXTURES FOR CONCRETE
  - c. AASHTO M194 - CHEMICAL ADMIXTURES
2. CURING COMPOUND SHALL COMPLY WITH ASTM C309 AND BE APPROVED BY COLOR ADDITIVE MANUFACTURER FOR USE WITH COLORED CONCRETE.
3. JOINT SEALERS SHALL BE COLOR-MATCHED TO THE CONCRETE AND FORMULATED FOR PEDESTRIAN TRAFFIC.
4. CONCRETE MIX IN ACCORDANCE WITH ITEM 451 SHALL BE USED EXCEPT AS MODIFIED HEREIN. SUBMIT DESIGN FOR APPROVAL:
  - a. CALCIUM CHLORIDE SHALL NOT BE ADDED TO THE MIX.
  - b. SUPPLEMENTAL ADMIXTURES, SUCH AS ADDITIONAL WATER-REDUCING ADMIXTURES, WATER-PROOFING AGENTS, AND SUPER PLASTICIZERS SHALL NOT BE USED.
  - c. USE GRAY PORTLAND CEMENT, TYPE 1 OR 2.
  - d. NO FLY ASH, MICRO SILICA SLAG, OR RECYCLED CONCRETE SHALL BE PERMITTED.
  - e. COLOR ADDITIVES: MIX IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. MIX UNTIL COLOR ADDITIVES ARE UNIFORMLY DISPERSED WITHOUT MIXTURE AND DISINTEGRATING BAGS, IF USED, HAVE DISINTEGRATED.
  - f. DO NOT ADD WATER TO THE MIX IN THE FIELD.
5. COLORED ADMIXTURE SHALL BE ADDED TO THE MIX PER MANUFACTURER'S WRITTEN INSTRUCTIONS IN A PREMEASURED BAG AND SHALL NOT BE ADDED BY WEIGHT OF CEMENT CONTENT.
6. APPLY CURING COMPOUND FOR COLORED CONCRETE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS USING MANUFACTURER'S RECOMMENDED APPLICATION TECHNIQUES. APPLY CURING COMPOUND AT CONSISTENT TIME FOR EACH POUR TO MAINTAIN CLOSE COLOR CONSISTENCY.
7. STAMPED PATTERNS FOR THE SPECIALTY PAVING AREAS SHALL BE AS INDICATED ON THE PLANS. CONTRACTOR IS TO COORDINATE PATTERN WITH ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. PATTERN TO BE STAMPRETE SEAMLESS TEXTURING STONE, OR APPROVED EQUAL.
8. THE CONCRETE SHALL BE PLACED AND CONSOLIDATED SO AS TO COMPLETELY FILL SPACES IN THE FORMS AND TO PROVIDE SUITABLE SURFACE FOR FINISHING. THE CONCRETE ADJACENT TO THE FORMS SHALL BE SPADED. ALL SURROUNDING SURFACES SHALL BE PROTECTED TO PREVENT DISCOLORATION. WATER MUST NOT BE SPRAYED ON THE SURFACE TO RETEMPER THE PLASTIC CONCRETE FOR ADDITIONAL TROWELING. HARD STEEL TROWELING SHALL BE MINIMIZED TO AVOID TROWEL BURNS.
9. THE SEALANT MATERIAL AND INSTALLATION REQUIRED FOR THIS WORK SHALL BE AS RECOMMENDED BY THE COLORING MANUFACTURER. THE MATERIAL INVOLVED IN THIS APPLICATION SHALL BE GUARANTEED BY THE MANUFACTURER. THE GUARANTEE SHALL ENSURE THE MOISTURE PERFORMANCE OF THE SYSTEM FOR A PERIOD OF FIVE YEARS FROM THE DATE OF APPLICATION. PROVISIONS OF THE GUARANTEE SHALL INCLUDE RESPONSIBILITY FOR WATER PENETRATIONS, CHLORIDE (SALT), AND FREEZE-THAW DAMAGE THROUGH STRUCTURALLY SOUND AREAS.
10. WORK INCIDENTAL TO THE THIS ITEM SHALL INCLUDE ALL ITEM 202, PAVEMENT REMOVAL INCLUDING SAWCUTTING, ITEM 203 EXCAVATION, ITEM 204 SUBGRADE COMPACTION AND GEOTEXTILE FABRIC, DOWELING, EXPANSION JOINTS, AND ITEM 304 AGGREGATE BASE (LIMESTONE ONLY) REQUIRED TO REMOVE AND REPLACE EXISTING PAVEMENT AT NEW PAVING AREAS PER DRAWINGS.
11. THE FOLLOWING CONTINGENCY ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER. PAYMENT FOR COMPLETED AND ACCEPTED QUANTITIES SHALL BE MADE AT THE CONTRACT UNIT BID PRICE:

ITEM 608 - 6" CONCRETE WALK, AS PER PLAN B      100 SF

PAYMENT TO BE MADE UNDER:      UNIT  
 ITEM 608, 6" REINFORCED CONCRETE PAVEMENT, AS PER PLAN B      (SQ. YD.)

**TREE PIT**

WORK SHALL CONSIST OF CURBING AT TREE PITS PER CITY OF CLEVELAND DETAILS--SECTIONS A-A, AND B-B (PER PLANS) SHEET 235 OF THE CoC STANDARD CONSTRUCTION DRAWINGS. ALL EXCAVATION, SOIL, AND CURBING ARE TO BE PAID INCIDENTAL TO THE LENGTH OF ITEM 609:

ITEM 609 - CURB, MISC.: SIDEWALK CURB      120 LF

**ITEM SPECIAL - METAL TRASH RECEPTACLE**

WORK SHALL CONSIST OF FURNISHING AND SURFACE MOUNTING METAL TRASH RECEPTACLE. TRASH RECEPTACLE SHALL BE ONE OF THE FOLLOWING:

- VICTOR STANLEY IRONSITES (R) COLLECTION #S-42
- ULINE COURTYARD 36 GAL. TRASH CAN, MODEL # H-2865BL
- PARIS SITE FURNISHINGS' PREMIER 34 GAL. LITTER RECEPTACLE

FINISH TO BE POWDER COATED, COLOR TO BE COORDINATED W/PUBLIC ART MURAL.

**ITEM SPECIAL - METAL BICYCLE RACK**

INSTALLATION TO BE SURFACE MOUNTED AND IN STRICT CONFORMANCE TO MANUFACTURER'S DETAILS AND RECOMMENDATIONS TO ENSURE VANDAL RESISTANCE.

PAYMENT TO BE MADE UNDER:      UNIT  
 ITEM 690 - SPECIAL- METAL TRASH RECEPTACLE      (EACH)  
 WORK SHALL CONSIST OF FURNISHING AND SURFACE MOUNTING BICYCLE RACKS. BICYCLE RACK RACK SHALL BE ONE OF THE FOLLOWING:

- "LOOP BIKE RACK" BY LANDSCAPE FORMS, COLOR: BLUE ASH
- ULINE CIRCLE BIKE RACK, GALVANIZED, MODEL # H-6572GALV
- BELSON OUTDOORS SQUARE TUBE CIRCULAR W/STAINLESS STEEL FINISH

INSTALLATION TO BE EMBEDDED MOUNT AND IN STRICT CONFORMANCE TO MANUFACTURER'S DETAILS AND RECOMMENDATIONS TO ENSURE VANDAL RESISTANCE.

PAYMENT TO BE MADE UNDER:      UNIT  
 ITEM 690 - SPECIAL- METAL BICYCLE RACK      (EACH)

**ITEM SPECIAL - METAL BENCH**

WORK SHALL CONSIST OF FURNISHING AND SURFACE MOUNTING METAL BENCH. BENCH SHALL BE ONE OF THE FOLLOWING:

- VICTOR STANLEY CLASSIC COLLECTION #CBF-138, 6' LENGTH
- THE BENCH FACTORY 6' BROOKLYN BENCH
- BELSON OUTDOORS 6' ALUMINUM PARK BENCH, MODEL # CBPB-6A1B-BK

FINISH TO BE POWDER COATED, COLOR TO BE COORDINATED W/PUBLIC ART MURAL.

INSTALLATION TO BE SURFACE MOUNTED AND IN STRICT CONFORMANCE TO MANUFACTURER'S DETAILS AND RECOMMENDATIONS TO ENSURE VANDAL RESISTANCE.

PAYMENT TO BE MADE UNDER:      UNIT  
 ITEM 690 - SPECIAL- METAL BENCH      (EACH)

**ITEM SPECIAL - MONUMENT SIGN**

ITEM SPECIAL - MONUMENT SIGN, TYPE A  
 ITEM SPECIAL - MONUMENT SIGN, TYPE B

WORK SHALL CONSIST OF CONSTRUCTION OF FREESTANDING CONCRETE WALLS PER DETAILS, THIS SHEET.

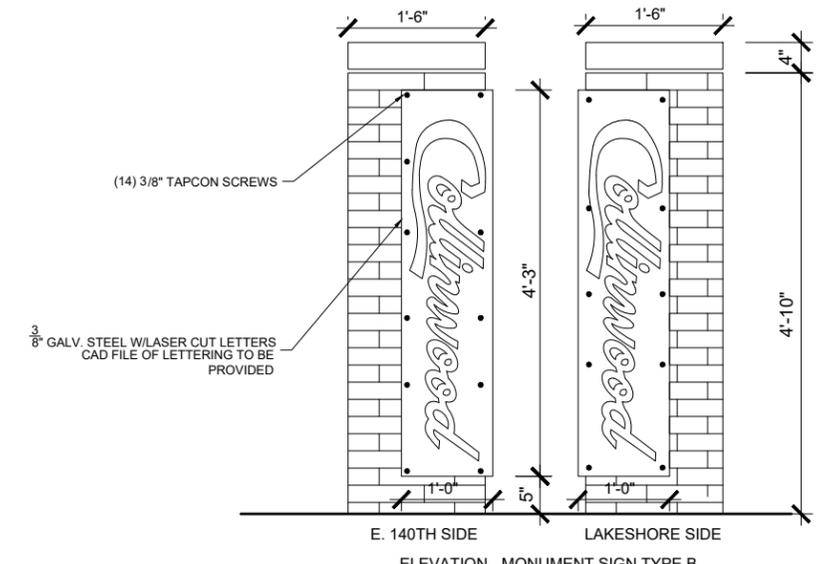
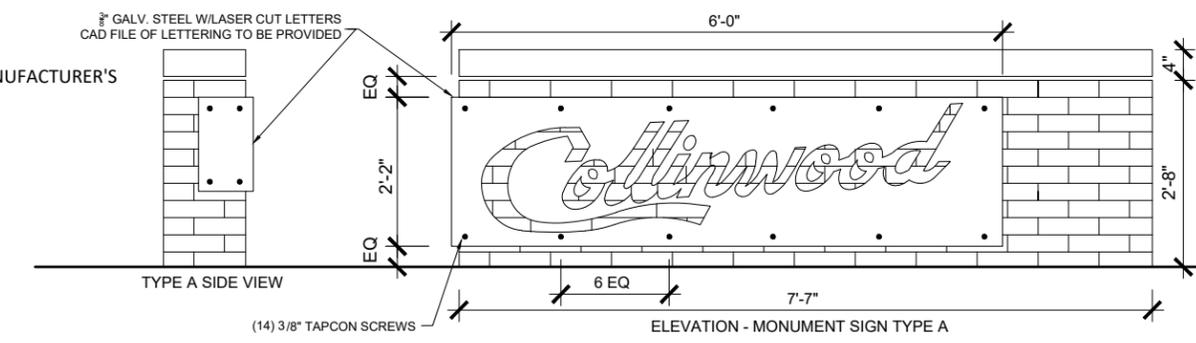
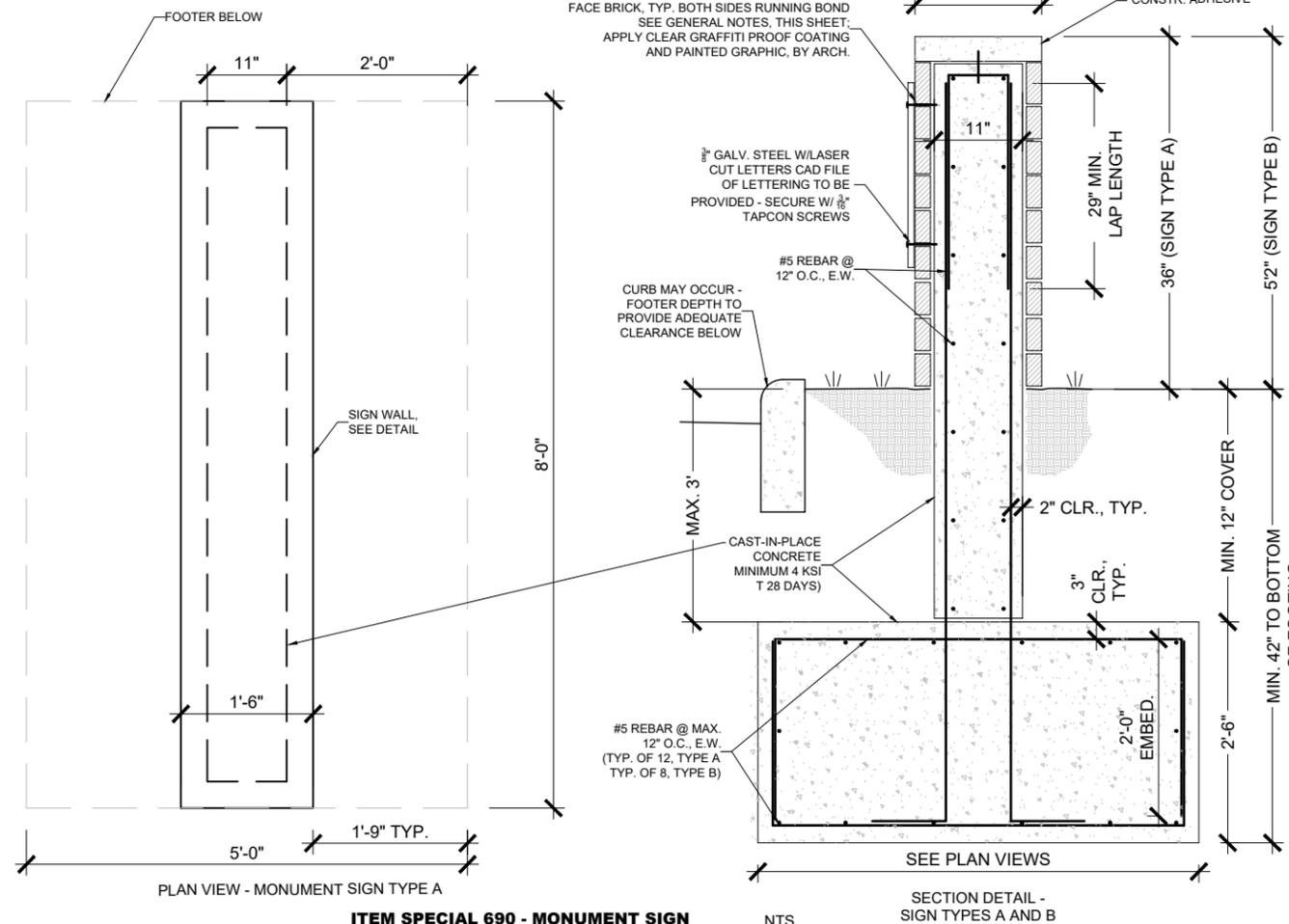
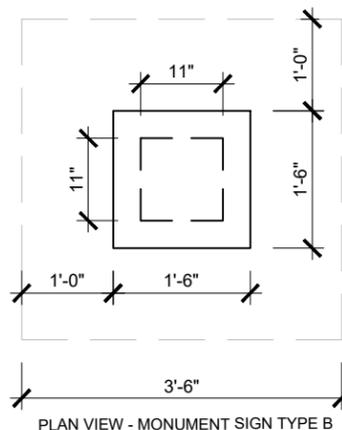
FACE BRICK TO BE:  
 • BELDEN BRICK COMPANY, COLOR 830 DART-TEX  
 • OR APPROVED EQUAL

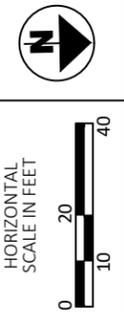
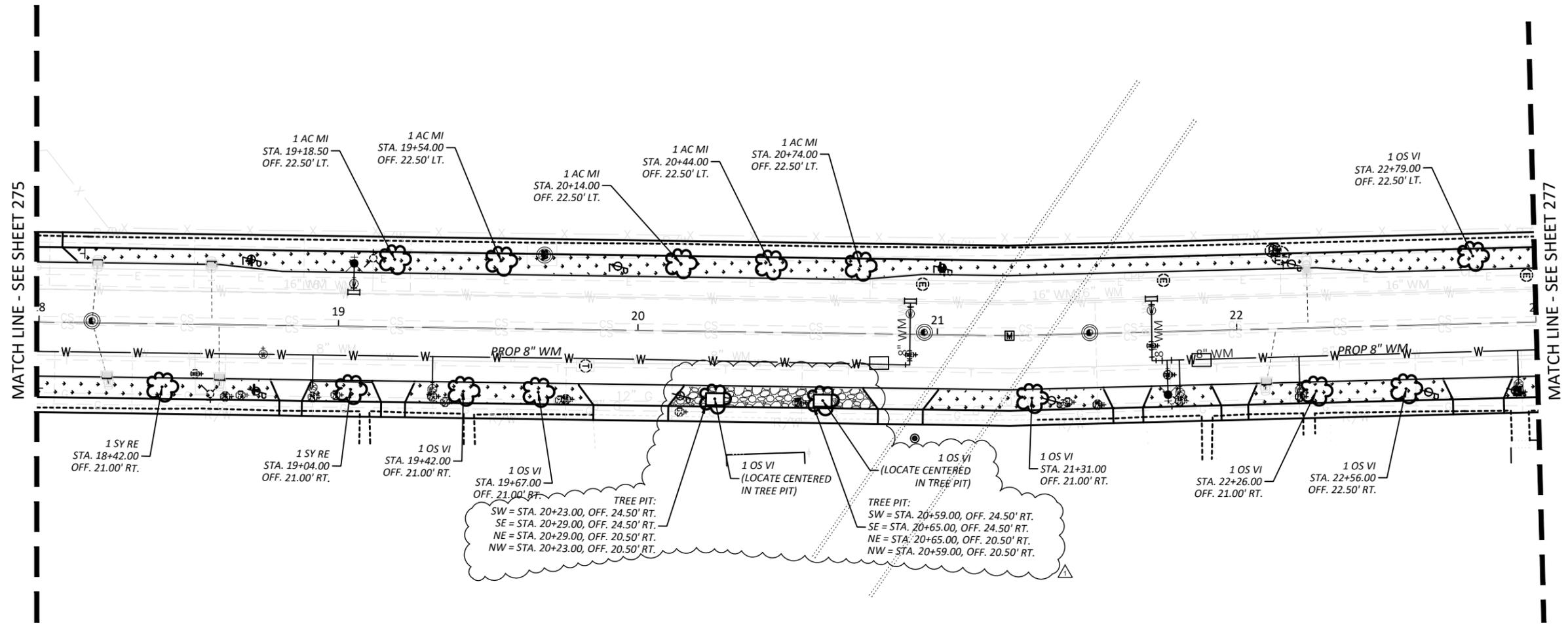
FACE BRICK TO BE APPLIED W/MORTAR PER MANUFACTURER'S RECOMMENDATIONS.

CONTRACTOR TO CONSTRUCT WALL MOCKUP IN FIELD. MOCKUP MAY BECOME PART OF FINISHED INSTALLATION IF APPROVED.

**ITEM SPECIAL - PUBLIC ART FEE**

LAND STUDIO AND THE CITY OF CLEVELAND WILL SELECT AN ARTIST TO PAINT THE MURAL ON THE RETAINING WALL BEING REHABILITATED NORTH OF THE CSX BRIDGE ON THE EAST SIDE OF EAST 140TH STREET. INCLUDED IN THIS LUMP SUM BID ITEM IS \$44,375 FOR DIRECT PAYMENT TO THE ARTIST OR PUBLIC ART AGENCY AS DIRECTED BY THE ENGINEER.





PLAN - EAST 140TH STREET  
STA. 18+00.00 TO 23+00.00

REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/ LOCAL	608	653	659	661	661	661	661	661	661	661	661	680	690	690	690	690		
					SF	CY	SY	CY	EACH													
	this sht	18+00 TO 23+00	LEFT	6" CONCRETE WALK, ASPER PLAN B		34	306	5														
	this sht	18+00 TO 23+00	RIGHT	TOPSOIL FURNISHED AND PLACED SEEDING AND MULCHING, CLASS 1, AS PER PLAN	375	26	236	1														
TOTALS CARRIED TO PLAN SUBSUMMARY					375	60	542	6														

- LEGEND**
- 6" CONCRETE WALK SPECIALTY PAVING
  - TRASH RECEPTACLE
  - BICYCLE RACK
  - BENCH
  - MONUMENT SIGN TYPE A ( TYPE B)
  - SP JA SPIRAEA JAPONICA 'LITTLE PRINCESS' 3 GAL. CONT.
  - JU SQ JUNIPER SQUAMATA 'BLUE STAR' 3 GAL. CONT.
  - NE FA NEPETA FAASSENII 'WALKER'S LOW' 2 GAL. CONT.
  - HE HR HEMEROCALLIS 'HAPPY RETURNS' 2 GAL. CONT.
  - AC MI ACER MIYABEI STATE STREET (R) STATE STREET MAPLE 2-1/2" CAL. B&B
  - OS VI OSTRYA VIRGINIANA HOPHORNBEAM 2-1/2" CAL. B&B
  - SY RE SYRINGA RETICULATA 'IVORY SILK' 2" CAL. B&B

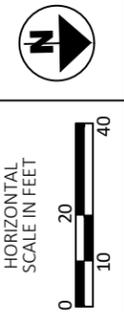
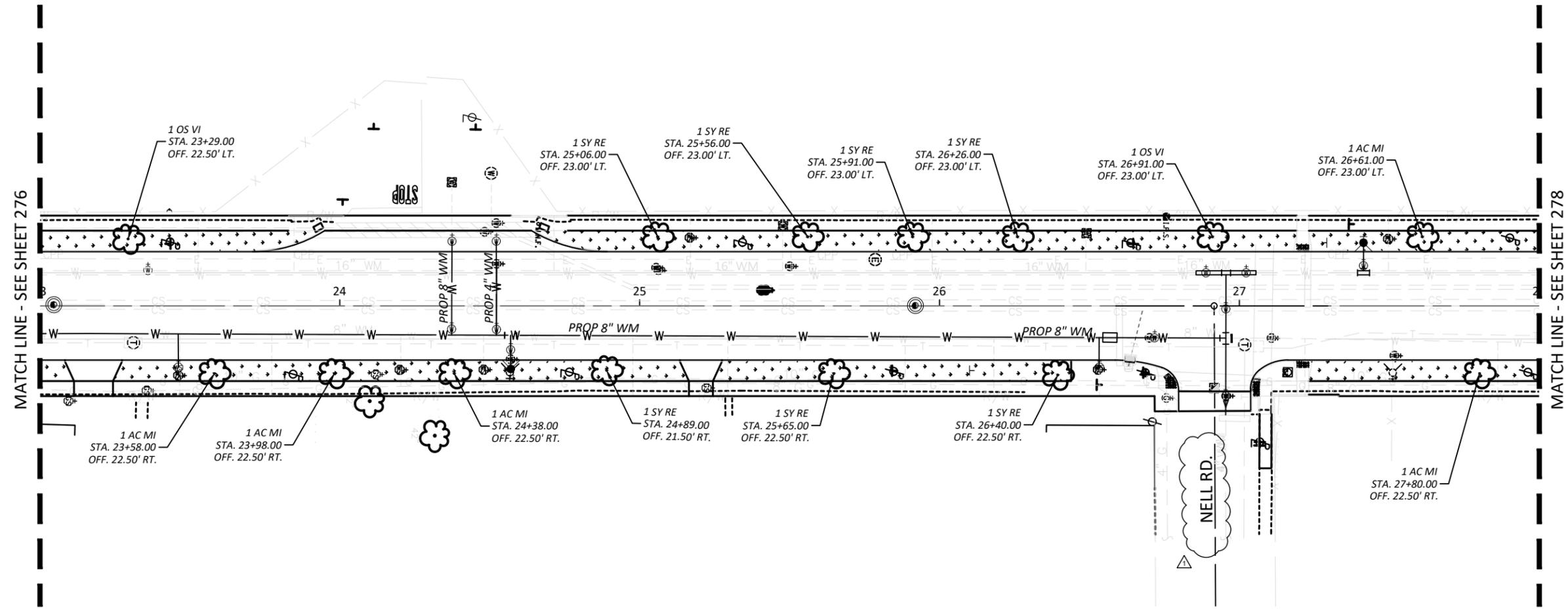
DESIGN AGENCY  
  
 BOULEVARD STUDIOS LLC  
 880 VALLEY BROOK LANE  
 WILMINGTON, OH 46097  
 TEL: 419-231-7704  
 WWW.BOULEVARDSTUDIOS.COM

DESIGNER  
CAM

REVIEWER  
CAM 02-23-23

PROJECT ID  
115612

SHEET TOTAL  
276 298



PLAN - EAST 140TH STREET  
STA. 23+00.00 TO 28+00.00

REF. NO.	SHEET NO.	STATION TO STATION	SIDE	PARTICIPATION/ LOCAL	608	653	659	661	661	661	661	661	661	661	661	680	690	690	690	690		
					SF	CY	SY	CY	EACH													
	this sht	23+00 TO 28+00	LEFT																			
	this sht	23+00 TO 28+00	RIGHT																			
TOTALS CARRIED TO PLAN SUBSUMMARY																						
						65	597	6														

LEGEND

- 6" CONCRETE WALK SPECIALTY PAVING
- TRASH RECEPTACLE
- BICYCLE RACK
- BENCH
- MONUMENT SIGN TYPE A (□ TYPE B)
- SP JA ○ SPIRAEA JAPONICA 'LITTLE PRINCESS' 3 GAL. CONT.
- JU SQ ⊙ JUNIPER SQUAMATA 'BLUE STAR' 3 GAL. CONT.
- NE FA ● NEPETA FAASSENII 'WALKER'S LOW' 2 GAL. CONT.
- HE HR ● HEMEROCALLIS 'HAPPY RETURNS' DAYLILY 2 GAL. CONT.
- AC MI ☼ ACER MIYABEI STATE STREET (R) STATE STREET MAPLE 2-1/2" CAL. B&B
- OS VI ☼ OSTRYA VIRGINIANA HOPHORNBEAM 2-1/2" CAL. B&B
- SY RE ☼ SYRINGA RETICULATA 'IVORY SILK' IVORY SILK JAPANESE TREE LILAC 2" CAL. B&B

DESIGN AGENCY  
  
 BOULEVARD STUDIOS LLC  
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DESIGNER  
 CAM

REVIEWER  
 CAM 02-23-23

PROJECT ID  
 115612

SHEET TOTAL  
 277 298