

LOCATION MAP

LATITUDE: 40°58'25.53" LONGITUDE: 81°27'52.22"

PORTION TO BE IMPROVED	=====
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	=====

DESIGN DESIGNATION (SR-241)

CURRENT ADT (2023)	11,752
DESIGN YEAR ADT (1992)	13,810
DESIGN HOURLY VOLUME (2023)	1293
DIRECTIONAL DISTRIBUTION	56%
TRUCKS (24 HOUR B&C)	317 (3%)
DESIGN SPEED	35
LEGAL SPEED	35
DESIGN FUNCTIONAL CLASSIFICATION:	
URBAN, OTHER, PRINCIPAL ARTERIAL	
NHS PROJECT	YES

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES

Contact Two Working Days
Before You Dig


Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764
(Non members must be called directly)

PLAN PREPARED BY:
ODOT DISTRICT 4, CAPITAL PROGRAMS
2088 S. ARLINGTON ROAD
AKRON, OHIO 44306

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

SUM-241-1.50/VAR

CITY OF GREEN
SPRINGFIELD TOWNSHIP
SUMMIT COUNTY

INDEX OF SHEETS:

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FEDERAL PROJECT NUMBER

E200177

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

RESURFACING OF SUM SR 241, INCLUDES URBAN PAVING
IN THE CITY OF GREEN, AND MINOR WORK TO 1 STRUCTURE.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	2.54 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.25 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A (NOI NOT REQUIRED)*

2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF
TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN
THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL
SPECIFICATION 800 VERSION INDICATED ON THE PROPOSAL SHALL GOVERN
THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS
IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY
AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC
WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



Arthur G. Noirot Jr., P.E.
District 04 Deputy Director


Pamela Boratyn
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS
BP-3.1	1/19/24	MT-98.30	7/16/21			800-2023	1/17/25
BP-3.2	1/18/19	MT-99.20	4/19/19			809	7/19/24
BP-4.1	7/19/13	MT-101.90	7/17/20			821	4/20/12
BP-5.1	7/15/22	MT-105.10	1/17/20			832	1/17/25
BP-7.1	7/19/24	MT-110.10	7/19/13			909	7/19/24
						921	1/19/24
DM-4.3	1/15/16	TC-41.10	7/19/13				
DM-4.4	1/15/16	TC-41.20	10/18/13				
		TC-52.10	10/18/13				
MT-95.31	7/19/19	TC-52.20	1/15/21				
MT-95.32	4/19/19	TC-71.10	4/21/23				
MT-95.60	4/19/19	TC-74.10	7/21/23				
MT-95.61	4/19/19	TC-82.10	7/19/19				
MT-97.10	4/19/19						
MT-97.12	1/20/17						
MT-98.29	1/17/20						

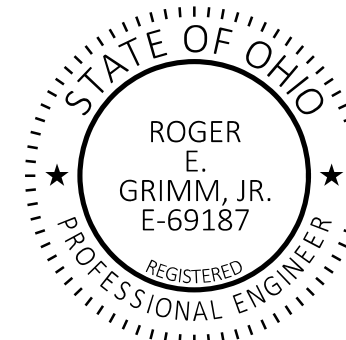
ENGINEER'S SEAL

P.1-P.19, P.24



ENGINEER'S SEAL

P.20-P.23



added signature



UTILITIES

THE CONTRACTOR SHALL USE THE FOLLOWING PROCEDURE AT EACH LOCATION WHERE WORK IS PERFORMED, IN ACCORDANCE WITH SECTIONS 105.07 AND 107.16 IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, OHIO811, THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 4 HEADQUARTERS (MICHELLE CHANEY AT 330-786-2267) AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS.

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS, BUT CAN BE OBTAINED FROM THE OWNERS OF THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROFILE AND ALIGNMENT

PLACE THE PROPOSED PAVEMENT TO FOLLOW THE ALIGNMENT AND PROFILE OF THE EXISTING PAVEMENT. PLACE THE PROPOSED ASPHALT CONCRETE OVERLAY AS SHOWN ON THE TYPICAL SECTIONS.

PAVEMENT MARKING LANE WIDTHS

THE NORMAL LANE WIDTH FOR THE PAVEMENT MARKINGS ON THIS PROJECT SHALL BE AS FOLLOWS:

ROUTE	S.L.M.	TO S.L.M.	LANE WIDTH
SR 241	1.495	3.497	12'
SR 241	3.819	4.002	11'
SR 241	4.734	6.700	12'
SR 241	6.700	7.792	12'

PAVEMENT MARKING DETAILS

THE PAVEMENT MARKING DETAIL SHEETS HAVE BEEN SUPPLIED AS REFERENCE DOCUMENTS FOR THIS PROJECT AND ARE AVAILABLE ON THE ODOT FTP SITE AT <https://ftp.dot.state.oh.us/pub/contracts/Attach/> FOR THIS PROJECT. FOR ANY LOCATIONS THAT PAVEMENT MARKING DETAILS HAVE NOT BEEN MADE AVAILABLE TO THE CONTRACTOR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PUT BACK NEW PAVEMENT MARKINGS IN THE ORIGINAL LOCATIONS.

INTERSECTIONS

INTERSECTIONS WILL BE RESURFACED 10 FT. BEYOND THE EDGE LINE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR INDICATED IN THE PLAN. INTERSECTIONS SHALL BE PAVED AFTER COMPLETION OF THE SURFACE COURSE. A BUTT JOINT, AS PER STANDARD CONSTRUCTION DRAWING BP-3.1, SHALL BE USED TO PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVEMENT. USE THE SAME ASPHALT CONCRETE AS THE MAINLINE PAVEMENT UNLESS SHOWN OTHERWISE ON THE ASPHALT CONCRETE CALCULATIONS SHEET. ANY GRADING OR PRIME NECESSARY TO ACCOMPLISH THIS WORK SHALL BE INCLUDED IN THE COST OF THE PERTINENT BID ITEM.

DRIVEWAYS

THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE ASPHALT SURFACE COURSE AND THE EXISTING DRIVEWAYS. IF APPROVED BY THE ENGINEER, AN ASPHALT WEDGE WITH A MINIMUM WIDTH OF 2' MAY BE PLACED EITHER ON THE ROADWAY SHOULDER OR DRIVEWAY DEPENDENT UPON WHICH SIDE IS HIGH. A QUANTITY OF MAINLINE SURFACE COURSE ASPHALT HAS BEEN PROVIDED IN THE CALCULATIONS AND GENERAL SUMMARY TO PERFORM THIS ITEM OF WORK.

IN THE EVENT THAT THE ENGINEER DETERMINES ADDITIONAL WORK IS NECESSARY TO PROPERLY ADDRESS FIELD CONDITIONS, AN ITEM FOR WEARING COURSE REMOVED HAS BEEN PROVIDED. THE REMOVAL DEPTH IS DEPENDENT UPON THE ELEVATION DIFFERENCE AND ALLOW FOR 1"-2" OF COMPACTED ASPHALT MATERIAL TO BE PLACED.

ITEM 617 - COMPACTED AGGREGATE, AS PER PLAN

IN LOW SHOULDER AREAS EXCEEDING 1", AND ADJACENT TO THE SAFETY EDGE, OR AS DIRECTED BY THE ENGINEER, RECYCLED ASPHALT PAVEMENT (RAP) SHALL BE USED IN AREAS ADJACENT TO THE PAVED BERM. THE RAP SHALL HAVE A MINIMUM PG CONTENT OF 4.5% AND MEET THE FOLLOWING GRADATION. ONCE THE STOCKPILE MEETS THE GRADATION, THE PG CONTENT OF THE RAP SHALL BE DETERMINED PER 441.03. THE RAP ANALYSIS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO USE. METHOD OF MEASUREMENT SHALL BE AS PER 617.06. PLACEMENT AND COMPACTION SHALL MEET THE REQUIREMENTS OF ITEM 617. ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 617 COMPACTED AGGREGATE, AS PER PLAN.

MODIFIED GRADATION SHALL APPLY:

SIEVE	TOTAL PERCENT PASSING
1- 1/2"	100
3/4"	50-100
NO. 4	35-70
NO. 30	9-33
NO. 200	0-13

ITEM 408 - PRIME COAT, AS PER PLAN

APPLY "MC-70" AT A RATE OF 0.4 GALLONS PER SQUARE YARD, OR AS DETERMINED BY THE ENGINEER, TO THE COMPLETED COMPACTED AGGREGATE SHOULDER.

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR (441)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THE ITEM SHALL CONSIST OF REPAIRING EXISTING LOCATIONS EXHIBITING SURFACE DETERIORATION AND PLACING ITEM 441 ASPHALT CONCRETE, TYPE 2. IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. PAVEMENT REPAIRS WILL BE MARKED IN THE FIELD BY THE PROJECT ENGINEER ACCORDING TO CMS 251.02. MINIMUM WIDTH IS 2'. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REPAIR.

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

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 1580 SQ. YD.
(SLM 1.50 TO SLM 3.50, SLM 3.82 TO SLM 4.00, SLM 4.74 TO SLM 5.63)

251, PARTIAL DEPTH PAVEMENT REPAIR (441), 420 SQ. YD.
(SLM 5.63 TO SLM 7.79)

ITEM 253 - PAVEMENT REPAIR

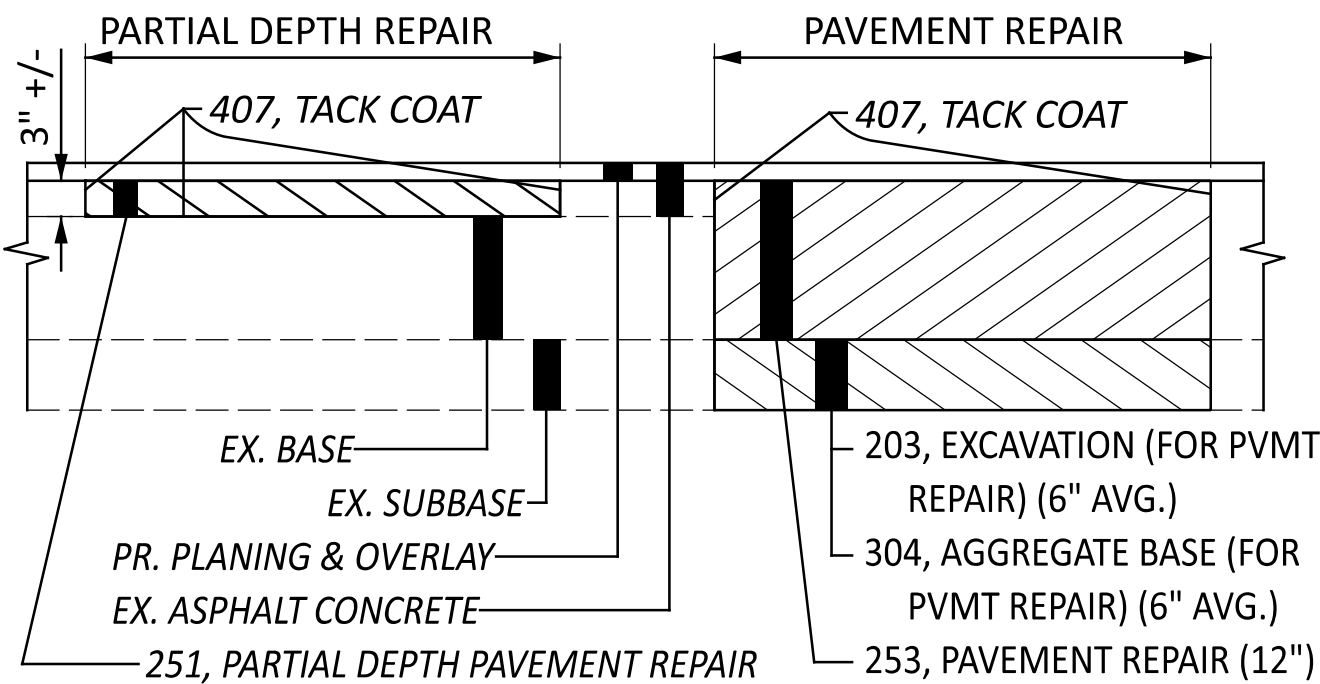
A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 12" 301 ASPHALT CONCRETE BASE, PG64-22. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE.

IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER.

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

253, PAVEMENT REPAIR, 316 SQ YD
(SLM 1.50 TO SLM 3.50, SLM 3.82 TO SLM 4.00, SLM 4.74 TO SLM 5.63)

253, PAVEMENT REPAIR, 84 SQ YD (SLM 5.63 TO SLM 7.79)



removed Curb
Ramps/Detectable Warnings
note

ITEM 304 - AGGREGATE BASE (FOR PAVEMENT REPAIR)

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN PROVIDED AND SHALL BE USED AS DIRECTED BY THE ENGINEER TO BACKFILL AREAS WHICH WERE EXCAVATED UNDER ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
304, AGGREGATE BASE (FOR PAVEMENT REPAIR) 24 CU YD

ITEM 203 - EXCAVATION (FOR PAVEMENT REPAIR)

THIS ITEM OF WORK SHALL CONSIST OF REMOVING AND DISPOSING OF ALL UNSUITABLE MATERIAL BY EXCAVATING THE EXISTING SUBGRADE AND SUBBASE TO AN AVERAGE DEPTH OF 6 INCHES OR AS DIRECTED BY THE ENGINEER. EXACT LIMITS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER. ALL EQUIPMENT, LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THIS ITEM SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203 EXCAVATION (FOR PAVEMENT REPAIR). THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
203, EXCAVATION (FOR PAVEMENT REPAIR) 24 CU YD

MANHOLE RECONSTRUCTED TO GRADE (@ SLM 1.58)

AN ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR RECONSTRUCTING A MANHOLE TO GRADE ON THE NORTHBOUND SIDE AT SLM 1.58.

EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CASTINGS OF REQUIRED TYPE, SIZE AND STRENGTH. ENSURE ALL MATERIAL MEETS CMS ITEM 611 AND HAS PRIOR APPROVAL OF THE ENGINEER.

ITEM 611 – MANHOLE RECONSTRUCTED TO GRADE, 2 EACH
ITEM SPECIAL – MISCELLANEOUS METAL, 400 LB

ITEM 253 - PAVEMENT REPAIR (@ SLM 1.58)

A QUANTITY OF THIS ITEM SHALL BE PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED PAVEMENT FULL DEPTH AND PLACING 12" 301 ASPHALT CONCRETE BASE, PG64-22. THE MAXIMUM COMPACTED DEPTH OF ANY ONE LAYER SHALL BE 6 INCHES. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, THIS ITEM SHALL BE PERFORMED AFTER THE COMPLETION OF MAINLINE PAVEMENT PLANING AND PRIOR TO THE PLACEMENT OF ASPHALT ON THE MILLED SURFACE.

IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED. PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
253, PAVEMENT REPAIR (@ SLM 1.58), 26 SQ YD
(8' LONG X FULL PAVEMENT WIDTH)

GENERAL NOTES

DESIGN AGENCY



DESIGNER

CLG

REVIEWER

MJA 10-30-24

PROJECT ID

105241

SHEET

P.4

TOTAL

24

ITEM 809 – STOP-LINE RADAR DETECTION, AS PER PLAN
ITEM 809 – ADVANCE RADAR DETECTION, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING STOP-LINE RADAR DETECTION - WAVETRONIX SMARTSENSOR MATRIX DETECTION UNIT OR ADVANCE RADAR DETECTION - WAVETRONIX SMARTSENSOR ADVANCE DETECTION UNIT (MODEL SS-200E). THE DETECTION UNIT SHALL INCLUDE THE FOLLOWING:

- 1) POWER SHALL BE PROVIDED FROM THE TRAFFIC CABINET.
- 2) ALL REQUIRED INPUTS CARDS SHALL BE INCLUDED IN THE TRAFFIC CABINET AND SHALL BE COMPATIBLE WITH CALTRANS, NEMA TS1 AND NEMA TS2 DETECTOR RACKS. THE CARDS SHALL PROVIDE TRUE PRESENCE DETECTOR CALLS OR CONTACT CLOSURE TO THE TRAFFIC CONTROLLER.
- 3) THE UNIT SHALL BE MOUNTED DIRECTLY TO A POLE OR MAST ARM, AS RECOMMENDED BY THE MANUFACTURER. CABLE(S) SHALL BE PROVIDED AS REQUIRED AND RECOMMENDED BY THE MANUFACTURER.
- 4) SURGE PROTECTION DEVICES, AS RECOMMENDED BY THE MANUFACTURER SHALL BE INCLUDED BOTH AT THE POLE WHERE THE UNIT IS LOCATED TO PROTECT THE UNIT AND IN THE TRAFFIC CABINET TO PROTECT THE CABINET ELECTRONICS.
- 5) THE MANUFACTURER'S REPRESENTATIVE SHALL BE ON SITE DURING INSTALLATION AND TESTING AND SHALL PROVIDE ONSITE TRAINING ON THE SETUP, OPERATION AND MAINTENANCE OF THE UNIT.
- 6) A SERIAL TO ETHERNET COMMUNICATIONS MODULE AND ETHERNET CABLE (MIN. 7 FEET)
- 7) THE POWER SUPPLY AND COMMUNICATION MODULES SHALL BE SECURED TO A SINGLE PANEL THAT CAN BE MOUNTED INTERIOR TO THE TRAFFIC CABINET. THE PANEL SHALL INCLUDE MODULAR-PLUG STYLE CONNECTIONS FOR UP TO FOUR (4) SENSOR CABLES. ADDITIONAL SENSORS MAY BE HARD-WIRED TO THE COMMUNICATION MODULES, AS NECESSARY.
- 8) THE CONTRACTOR SHALL INSTALL THE RADAR DETECTION PRIOR TO MILLING/DISABLING THE EXISTING LOOPS.
- 9) THE INSTALLATION SHALL INCLUDE ALL CONTROLLER PROGRAMMING FOR COMPLETE INSTALLATION, WHICH INCLUDES MODIFICATIONS FOR REMOVAL OF EXISTING DETECTION.
- 10) THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-786-2267) AND THE CITY OF GREEN (PAUL PICKET 330-896-5510) THREE WORKING DAYS PRIOR TO INSTALLING THE DETECTION TO REMOVE THE CABINET LOCKS. ANY LOOP DETECTORS DISTURBED BY THE PLANING SHOULD BE ABANDONED IN PLACE.
- 11) THE CONTRACTOR SHALL DISCONNECT AND LEAVE THE LOOP DETECTOR AMPLIFIERS IN THE CONTROLLER.

PAYMENT FOR EACH DETECTION UNIT SHALL BE MADE AT THE CONTRACT UNIT PRICE FOR EACH UNIT, COMPLETE AND IN PLACE INCLUDING ALL REQUIRED CABINET HARDWARE, MOUNTING BRACKETS, CABLES, CONDUIT AND CONNECTIONS TESTED AND ACCEPTED, AND ANY OTHER NECESSARY HARDWARE TO ESTABLISH A FULLY FUNCTIONAL DETECTION SYSTEM.

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

INTERSECTION	809- ADVANCE RADAR DETECTION	ADVANCE RADAR APPROACH	809- STOP LINE RADAR DETECTION	STOP LINE RADAR APPROACH
SUM SR 241 & KILLIAN RD.	2	NB, SB SR 241	2	NB, SB SR 241
SUM SR 241 & KILLIAN RD.	N/A	N/A	2	EB, WB KILLIAN RD.
SUM SR 241 & KRUMROY RD.	2	NB, SB SR 241	N/A	NB, SB SR 241
SUM SR 241 & KRUMROY RD.	N/A	N/A	2	EB, WB KRUMROY RD.
SUM SR 241 & GREENSBURG RD.	N/A	NB, SB SR 241	2	NB, SB SR 241
SUM SR 241 & GREENSBURG RD.	N/A	EB, WB GREENSBURG RD.	2	EB, WB GREENSBURG RD.

ITEM 632 - DETECTOR LOOP, AS PER PLAN (ALTERNATE 1)

THE CONTRACTOR SHALL CONTACT THE DISTRICT OFFICE (330-786-3146) THREE WORKING DAYS PRIOR TO ANY PLANING OR TRENCHING AT THE INTERSECTION OF SR 241 AND GREENSBURG RD. LOOP DETECTORS DISTURBED BY PAVEMENT PLANING OR TRENCHING SHALL BE ABANDONED IN PLACE. THE LOOP DETECTOR WIRE WILL BE CUT INTO THE PAVEMENT AFTER THE PROPOSED SURFACE COURSE HAS BEEN PLACED. ALL STOP LINE INDUCTANCE DETECTOR LOOPS SHALL BE THE POWERHEAD CONFIGURATION SHOWN ON TC-82.10. THE WIDTH SHALL BE AS SPECIFIED ON TC-82.10 AND THE LENGTH SHALL BE AS SPECIFIED BELOW. THE LOCATION OF THESE LOOPS SHALL BE SUCH THAT THE POWERHEAD IS LOCATED AT THE STOP LINE, NOT PAST IT. ALL DILEMMA ZONE INDUCTANCE DETECTOR LOOPS CALLED FOR IN THE PLANS SHALL BE THE ANGULAR DESIGN DETECTION (ADD) LOOP AS SHOWN ON TC-82.10. DIMENSIONS SHALL BE AS SPECIFIED ON TC-82.10 AND THE LOOP SHALL BE PLACED AT THE SAME LOCATION AS THE EXISTING LOOPS.

THE QUANTITIES LISTED BELOW HAVE BEEN CARRIED TO THE GENERAL SUMMARY. THE NEW LOOP DETECTOR WIRES SHALL BE RUN INTO THE EXISTING CONTROL BOX OR THE EXISTING PULLBOX. INCLUDED IN THIS ITEM IS THE POURED EPOXY TYPE CABLE SPLICE KIT (CONFORMING TO 725.15E) THAT MUST BE USED IN MAKING THESE CONNECTIONS. ALL NECESSARY MATERIAL, LABOR, SPLICE KITS AND EQUIPMENT SHALL BE INCIDENTAL TO PAYMENT OF THESE ITEMS.

632 DETECTOR LOOP, AS PER PLAN, 4 EACH
(4 EACH, POWERHEAD)

BARRIER REFLECTORS

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY FOR USE AT LOCATIONS DIRECTED BY THE ENGINEER FOR INSTALLING/REPLACING BARRIER REFLECTORS ON ALL EXISTING BARRIER RUNS WITHIN THE PROJECT LIMITS.

202, REMOVAL MISC.: BARRIER REFLECTOR, 7 EACH
(SLM 1.50 TO SLM 3.50, SLM 3.82 TO SLM 4.00, SLM 4.74 TO SLM 5.63)

202, REMOVAL MISC.: BARRIER REFLECTOR, 5 EACH
(SLM 5.63 TO SLM 7.79)

626, BARRIER REFLECTOR, TYPE 1, 1WAY, 14 EACH
(SLM 5.63 TO SLM 7.79)

626, BARRIER REFLECTOR, TYPE 2, 1WAY, 27 EACH
(SLM 1.50 TO SLM 3.50, SLM 3.82 TO SLM 4.00, SLM 4.74 TO SLM 5.63)

626, BARRIER REFLECTOR, TYPE 2, 1WAY, 16 EACH
(SLM 5.63 TO SLM 7.79)

ITEM SPECIAL - VERTICAL CLEARANCE

AFTER ALL CONSTRUCTION HAS BEEN COMPLETED, A REGISTERED SURVEYOR WILL TAKE VERTICAL CLEARANCE MEASUREMENTS AT LOCATIONS INDICATED ON THE APPROVED ODOT FORM (AVAILABLE IN THE DISTRICT 4 STRUCTURES AND PAVEMENT OFFICE). THE FINAL MEASUREMENTS SHALL BE RECORDED ON THE FORM AND SUBMITTED TO THE PROJECT ENGINEER AND THE DISTRICT 4 STRUCTURES AND PAVEMENT ENGINEER. THE RECORD SHALL BEAR THE SEAL OF THE LECENSED SURVEYOR WHO HAS TAKEN THE MEASUREMENTS. THIS WORK SHALL BE PERFORMED AT THE FOLLOWING STRUCTURES: SUM-77-0451L, SUM-77-0451R

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:
SPECIAL - VERTICAL CLEARANCE, 2 EACH

PAVED MAILBOX APPROACHES

ALL EXISTING MAIL BOX APPROACHES WILL BE PAVED WITH ASPHALT CONCRETE. THE BUILDUP OF THE ASPHALT PAVEMENT SHALL MATCH THE MAINLINE PAVING. THE LIMITS OF THE PAVING SHALL MATCH THE EXISTING MAILBOX APPROACH LIMITS. PAYMENT FOR THE WORK SHALL BE INCLUDED IN THE MAINLINE PAVING QUANTITIES. SEPARATE QUANTITIES FOR THE MAILBOX APPROACHES ARE NOT PROVIDED.

ITEM 608 - CURB RAMP, AS PER PLAN

UNLESS OTHERWISE DIRECTED BY THE ENGINEER, INSTALLATION OF THE CURB RAMPS / DETECTABLE WARNINGS WILL BE PERFORMED PRIOR TO MAINLINE RESURFACING.

IN ADDITION TO THE CMS REQUIREMENTS OF ITEM 608 CURB RAMP, THIS ITEM SHALL INCLUDE THE RESTORATION OF THE ADJACENT AREAS DISTURBED FOR THE INSTALLATION OF CURB RAMPS AND IMMEDIATELY ADJACENT CONCRETE WALK. RESTORATION SHALL INCLUDE PLACEMENT OF ITEM 659 TOPSOIL, ITEM 659 COMMERCIAL FERTILIZER, ITEM 659 SEEDING AND MULCHING, AND ITEM 659 WATER, ALL PER CMS.

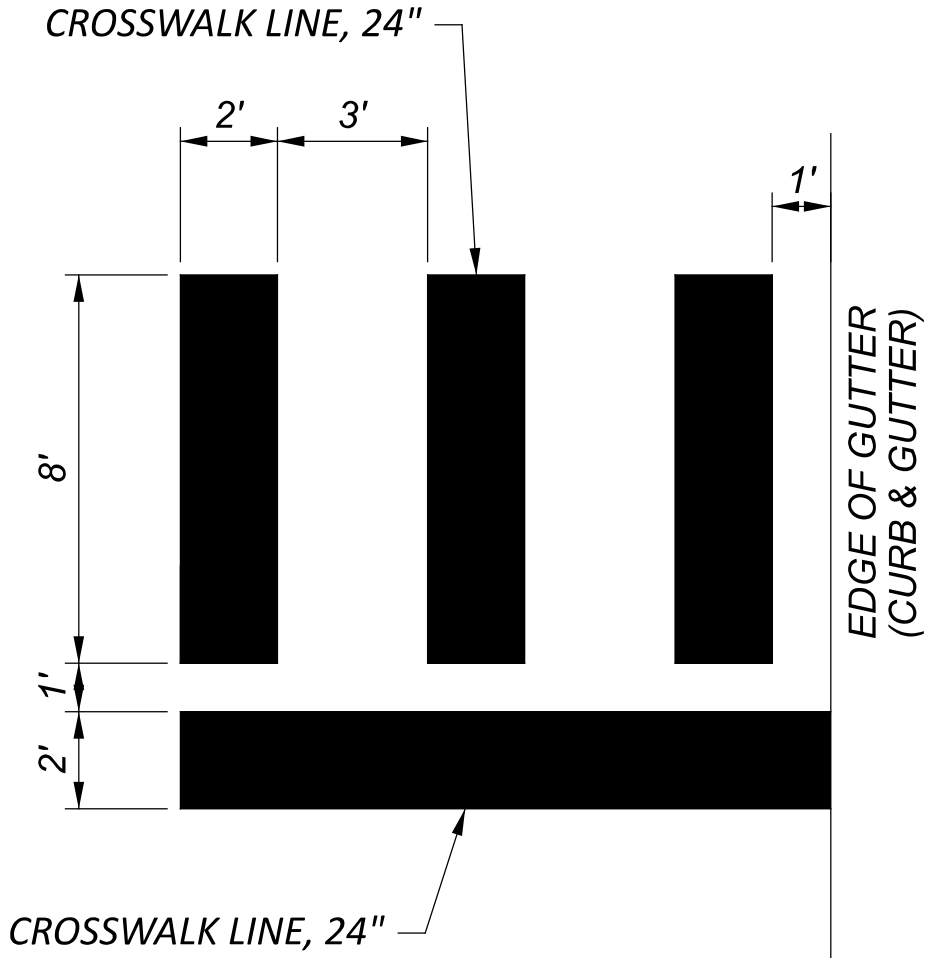
PAYMENT FOR ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO PERFORM THE WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE UNIT PID PRICE FOR ITEM 608 - CURB RAMP, AS PER PLAN.

added note

ITEM 646 - CROSSWALK LINE, 24", AS PER PLAN

THE CONTRACTOR SHALL REPAINT THE CROSSWALKS AT THE LOCATIONS SPECIFIED IN THE PAVEMENT MARKINGS SUBSUMMARY TABLE AS PER THE BELOW DETAIL AFTER PAVING.

ALL CROSSWALK LINES SHALL CONFORM TO THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. QUANTITIES FOR THIS TYPE OF CROSSWALK CAN BE FOUND IN THE PAVEMENT MARKINGS SUBSUMMARY TABLE ON SHEET P.18. THESE QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.



GENERAL NOTES

DESIGN AGENCY



DESIGNER

CLG

REVIEWER

MJA 10-30-24

PROJECT ID

105241

SHEET

P.6

TOTAL

24

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE OFFICE OF MATERIALS MANAGEMENT WEB PAGE. THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

(THE CONTRACTOR SHALL IMPLEMENT A SYSTEM WHEREBY CHANGEABLE MESSAGES WILL BE IMPLEMENTED WITHIN 24 HOURS FOLLOWING TELEPHONE NOTIFICATION FROM THE PROJECT ENGINEER TO A DESIGNATED PHONE.)

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE.

THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

(THE PCMS SHALL CONTAIN A CELLULAR TELEPHONE DATA LINK WHICH WILL (IN ACTIVE CELLULAR PHONE AREAS) ALLOW REMOTE SIGN ACTIVATION, MESSAGE CHANGES, MESSAGE ADDITIONS AND REVISIONS TO TIME OF DAY PROGRAMS. THE SYSTEM SHALL ALSO PERMIT VERIFICATION OF CURRENT AND PROGRAMMED MESSAGES. ONE REMOTE DATA INPUT DEVICE (LAPTOP COMPUTER PLUS MODEM OR EQUIVALENT) SHALL BE FURNISHED FOR USE BY THE DISTRICT TRAFFIC ENGINEER, OR EQUIVALENT, AND SHALL BE INSURED AGAINST THEFT.) THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 8 SIGN MONTH ASSUMING 2 PCMS SIGN(S) FOR 4 MONTH(S)

TIME LIMITATION, CURB RAMP

THE MAXIMUM ALLOWABLE TIME FOR THE CONTRACTOR TO HAVE AN INDIVIDUAL CURB RAMP AND ASSOCIATED SIDEWALK LEADING INTO THE CURB RAMP OUT OF SERVICE FOR THE REMOVAL AND REPLACEMENT SHALL BE 14 CONSECUTIVE CALENDAR DAYS (THE TIME PERIOD INCLUDES ALL WORK LISTED IN THE BASIS OF PAYMENT PER CMS 608.09, INCLUDING ALL REMOVAL, REPLACEMENT, AND BACKFILL ASSOCIATED WITH THE CURB RAMPS, AND CURING TIME PERIOD).

AT THE CONCLUSION OF CONSTRUCTING OF THE CURB RAMP AND PRIOR TO OPENING TO PEDESTRIAN TRAFFIC THE CONTRACTOR SHALL ENSURE THAT THE REQUIREMENTS OF STANDARD CONSTRUCTION DRAWING BP-7.1 ARE MET. THE CONTRACTOR SHALL USE ASPHALT AS A WEDGE, OR SUBMIT ANOTHER METHOD APPROVED BY THE ENGINEER, TO ENSURE THE TRANSITION FROM THE CURB RAMP TO THE ROADWAY ARE PER STANDARD CONSTRUCTION DRAWING BP-7.1. ALL COSTS TO PERFORM THIS WORK SHALL BE INCIDENTAL TO THE ASSOCIATED PAY ITEMS FOR THE INSTALLATION OF THE CURB RAMP.

SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF \$1000 PER DAY PER AFFECTED RAMP THAT THE AFFECTED CURB RAMP REMAINS OUT OF SERVICE BEYOND 14 CONSECUTIVE CALENDAR DAYS.

updated note

ITEM 614, MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR SPECIAL EVENTS:

NEW YEAR'S (OBSERVED)
THANKSGIVING
MEMORIAL DAY
FOURTH OF JULY (OBSERVED)
LABOR DAY
CHRISTMAS DAY (OBSERVED)

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR SPECIAL EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY TIME ALL LANES
OR SPECIAL EVENT MUST BE OPEN TO TRAFFIC

SUNDAY 12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY 12:00N FRIDAY THROUGH 6:00 AM TUESDAY
MONDAY (TOTAL SOLAR ECLIPSE)
 12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY 12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
TUESDAY (GEN./REG. ELECTION)
 5:00 AM TUESDAY THROUGH 12:00 AM WEDNESDAY
WEDNESDAY 12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY 12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)
 6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY 12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY 12:00N FRIDAY THROUGH 6:00 AM MONDAY

DURING THE SAME PERIODS, MAINTAIN PEDESTRAIN ACCESS IF PEDESTRIAN ACCESS WAS PRESENT PRIOR TO CONSTRUCTION.

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE PER THE LANE VALUE CONTRACT (PN 127).

LANE VALUE CONTRACT			
DESCRIPTION OF CRITICAL LANE/ RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE \$ PER TIME PERIOD
SR-241	AS PER MAINTAINING TRAFFIC (LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS) NOTE ABOVE AND THE MAINTENANCE OF TRAFFIC RESTRICTIONS NOTE.	PER LANE/ PER MINUTE	\$135
IR-77 INTERCHANGE RAMPS	AS PER THE MAINTENANCE OF TRAFFIC RESTRICTIONS NOTE.	PER RAMP/ PER MINUTE	\$200
STEESE RD.	AS PER THE MAINTENANCE OF TRAFFIC RESTRICTIONS NOTE.	PER LANE/ PER MINUTE	\$50

MAINTENANCE OF TRAFFIC RESTRICTIONS

SR 241, SLM 1.495 - APPROXIMATE SLM 2.68: WORK AT THIS LOCATION SHALL BE PERFORMED WHILE MAINTAINING ONE, TEN-FOOT MINIMUM LANE OF BIDIRECTIONAL TRAFFIC DURING OFF-PEAK HOURS AS DEFINED IN THE ITEM 614, MAINTAINING TRAFFIC NOT. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, DISINCENTIVES SHALL BE ASSESSED AS PER THE LANE VALUE CONTRACT TABLE (PN 127).

SR 241, APPROXIMATE SLM 2.68 - SLM 3.497: WORK AT THIS LOCATION SHALL BE LIMITED TO OVERNIGHT HOURS BETWEEN 7:00PM - 6:00AM. NORTH OF THE ROUNDABOUT, THE CONTRACTOR IS PERMITTED TO REDUCE SR 241 TO TWO, TWELVE-FOOT LANES OF TRAFFIC WHILE MAINTAINING ONE LANE IN EACH DIRECTION. IN THE VICINITY OF THE ROUNDABOUT, THE CONTRACTOR IS PERMITTED TO REDUCE SR-241 TO ONE, TEN-FOOT LANE WHILE MAINTAINING BIDIRECTIONAL TRAFFIC. STEESE ROAD TRAFFIC SHALL BE MAINTAINED BY FLAGGER CONTROL USING ONE, TEN-FOOT MINIMUM LANE OF BIDIRECTIONAL TRAFFIC. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, DISINCENTIVES SHALL BE ASSESSED AS PER THE LANE VALUE CONTRACT TABLE (PN 127).

SR 241, SLM 3.819 - SLM 4.002: WORK AT THIS LOCATION SHALL BE LIMITED TO WEEKEND OVERNIGHT HOURS. WHEN PERFORMING THE WORK, THE CONTRACTOR IS PERMITTED TO REDUCE SR-241 TO TWO, TWELVE-FOOT LANES OF TRAFFIC WHILE MAINTAINING ONE LANE IN EACH DIRECTION. WEEKEND OVERNIGHT LANE CLOSURES SHALL BE LIMITED TO FRIDAY, SATURDAY, AND SUNDAY BETWEEN THE HOURS OF 8:00PM - 6:00AM. SHORT DURATION CLOSURES OF THE I-77 RAMPS SHALL BE PERMITTED DURING THE WEEKEND OVERNIGHT HOURS AS APPROVED BY THE ENGINEER. INTERCHANGE RAMPS SHALL NOT BE CLOSED CONCURRENTLY. ALL LANES OF TRAFFIC SHALL BE OPEN TO TRAFFIC BETWEEN THE HOURS OF 6:00AM - 8:00PM. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, DISINCENTIVES SHALL BE ASSESSED AS PER THE LANE VALUE CONTRACT TABLE (PN 127).

SR 241, SLM 4.750 - SLM 7.792: WORK AT THIS LOCATION SHALL BE PERFORMED WHILE MAINTAINING ONE, TEN-FOOT LANE OF BIDIRECTIONAL TRAFFIC DURING OFF-PEAK HOURS AS DEFINED IN THE ITEM 614, MAINTAINING TRAFFIC NOTE. SHOULD THE CONTRACTOR FAIL TO MEET THESE REQUIREMENTS, DISINCENTIVES SHALL BE ASSESSED AS PER THE LANE VALUE CONTRACT TABLE (PN 127).

DROPOFFS AT SIDE STREETS AND DRIVEWAYS

THE CONTRACTOR WILL NOT BE PERMITTED TO LEAVE A DIFFERENCE IN ELEVATION BETWEEN THE MAINLINE MILLED SURFACES AND THE SURFACE COURSE OF SIDE STREET APPROACHES/DRIVEWAYS GREATER THAN 1.25 INCH. THE CONTRACTOR SHALL PLACE A 12:1 ASPHALT WEDGE FOR ALL RESULTING ELEVATION DIFFERENCES GREATER THAN 1.25 INCH PRIOR TO OPENING TO TRAFFIC. THE PAVING OF INTERSECTION APPROACHES AND DRIVEWAYS, PER THE NOTES ON SHEET XX, SHALL BE PERFORMED WITHIN 7 DAYS OF MAINLINE SURFACE COURSE BEING APPLIED AND A DROPOFF BEING CREATED BETWEEN THE NEW SURFACE COURSE AND THE MILLED/EXISTING SIDE ROAD OR DRIVEWAY SURFACE. THE CONTRACTOR MAY ELECT TO PLACE A 12:1 ASPHALT WEDGE IN LIEU OF COMPLETING THE PAVING, HOWEVER THE ASPHALT CONCRETE USED FOR THE WEDGE SHALL BE CONSIDERED INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC AND SHALL INCLUDE THE REMOVAL OF THE WEDGE BEFORE THE INTERSECTION/DRIVEWAY IS PAVED.

DESIGN AGENCY



DESIGNER

CLG

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TOTAL

24

SHEET NUM.												PART.			ALT	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
4	5	6	12	13	14	15	17	18	19	20	22	01/NHS/05	02/NHS/05/GREE	03/NHS/04/GREE	(X)		EXT	TOTAL			SHEET NO.
																				ROADWAY	
					540							339	201			202	23500	540	SY	WEARING COURSE REMOVED	
						5,528					1,174			6,702		202	30000	6,702	SF	WALK REMOVED	
						32								32		202	32000	32	FT	CURB REMOVED	
						305					123			428		202	32500	428	FT	CURB AND GUTTER REMOVED	
		12										5	7			202	98100	12	EACH	REMOVAL MISC.: BARRIER REFLECTOR	6
24												6		18		203	10000	24	CY	EXCAVATION (FOR PAVEMENT REPAIR)	
	163											105	58			209	60200	163	STA	LINEAR GRADING	
						3,090					438			3,528		608	10000	3,528	SF	4" CONCRETE WALK	
						2,362					827			3,189		608	52001	3,189	SF	CURB RAMP, AS PER PLAN	6
											121			121		608	52001	121	SF	CURB RAMP, AS PER PLAN (T=8")	23
												6	8			623	39501	14	EACH	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN	5
	14											LS				SPECIAL	69091000	LS		AS-BUILT CONSTRUCTION PLANS	5
	LS												2			SPECIAL	69098000	2	EACH	VERTICAL CLEARANCE	6
		2																			
																				EROSION CONTROL	
												3,000				832	30000	3,000	EACH	EROSION CONTROL	
																				DRAINAGE	
	8											4	4			611	98631	8	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	5
	35											11	24			611	99655	35	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	5
1													1			611	99660	1	EACH	MANHOLE RECONSTRUCTED TO GRADE	
400	1,600											800	1,200			SPECIAL	61199820	2,000	LB	MISCELLANEOUS METAL	5
																				PAVEMENT	
2,000												420		1,580		251	01000	2,000	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
426												110		316		253	01000	426	SY	PAVEMENT REPAIR	
			48,858	53,522	10,293							46,262	65,088	1,323		254	01000	112,673	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=1.5")	
				769	8,933							8,906	796			254	01000	9,702	SY	PAVEMENT PLANING, ASPHALT CONCRETE (T=3")	
24												6		18		304	20000	24	CY	AGGREGATE BASE (FOR PAVEMENT REPAIR)	
			4,398	6,201	354							3,435	7,398	120		407	20000	10,953	GAL	NON-TRACKING TACK COAT	
			773	2,357								1,521	1,609			408	10001	3,130	GAL	PRIME COAT, AS PER PLAN	4
			2,036	3,800	440							3,134	3,085	57		441	50100	6,276	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG70-22M	
				449	449							433	465			441	50300	898	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
					15							10	5			441	70500	15	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), (DRIVEWAYS)	
						305					77			382		609	12000	382	FT	COMBINATION CURB AND GUTTER, TYPE 2	
						32								32		609	26000	32	FT	CURB, TYPE 6	
			54	164	247							352	113			617	10101	465	CY	COMPACTED AGGREGATE, AS PER PLAN	4
																				WATER WORK	
											1			1		638	10800	1	EACH	VALVE BOX ADJUSTED TO GRADE	
	10											2	8			638	10801	10	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	5
																				TRAFFIC CONTROL	
												324				621	00100	324	EACH	RPM	
												261				621	54000	261	EACH	RAISED PAVEMENT MARKER REMOVED	
		14										14				626	00102	14	EACH	BARRIER REFLECTOR, TYPE 1, 1WAY	
		43										16	27			626	00110	43	EACH	BARRIER REFLECTOR, TYPE 2, 1WAY	
	126	21										147				630	02100	147	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
	36	6								1.5		42		1.5		630	80100	43.5	SF	SIGN, FLAT SHEET	
	6	1										7				630	80100	7	SF	SIGN, FLAT SHEET, 730.20	
	18	3										21				630	84900	21	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
										2				2		630	85000	2	EACH	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	
	12	2										14				630	86002	14	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
									6.1			4.32	1.78			646	10000	6.1	MILE	EDGE LINE, 4"	
								1.62					1.62			646	10010	1.62	MILE	EDGE LINE, 6"	
								0.93					0.93			646	10110	0.93	MILE	LANE LINE, 6"	
								1.93	2.1			2.1	1.93			646	10200	4.03	MILE	CENTER LINE	
								1,775				1,775				646	10300	1,775	FT	CHANNELIZING LINE, 8"	
								5,289					5,289			646	10310	5,289	FT	CHANNELIZING LINE, 12"	
								362	103		25	103	362	25		646	10400	490	FT	STOP LINE	
											544			544		646	10520	544	FT	CROSSWALK LINE, 24"	
								1,556					1,556			646	10521	1,556	FT	CROSSWALK LINE, 24", AS PER PLAN	6

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

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SHEET

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TOTAL

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SHEET NUM.												PART.			ALT	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE
4	5	6	7	8	15	17	18	19	20	22	23	01/NHS/05	02/NHS/05/GREE	03/NHS/04/GREE	(X)		EXT	TOTAL			SHEET NO.
																				TRAFFIC CONTROL	
							756	530				530	756			646	10600	1,286	FT	TRANSVERSE/DIAGONAL LINE	
							207	57				57	207			646	10800	264	SF	ISLAND MARKING	
							76	28				2				646	20100	2	EACH	SCHOOL SYMBOL MARKING, 72"	
							1,200	125				28	76			646	20300	104	EACH	LANE ARROW	
							90					125	1,200			646	20504	1,325	FT	DOTTED LINE, 6"	
												90				646	20800	90	FT	YIELD LINE	
																				TRAFFIC SIGNALS	
									30					30		625	25400	30	FT	CONDUIT, 2", 725.04	
									57					57		625	25500	57	FT	CONDUIT, 3", 725.04	
									85					85		625	29000	85	FT	TRENCH	
									1					1		625	30700	1	EACH	PULL BOX, 725.08, 18"	
									1					1		625	31511	1	EACH	PULL BOX REMOVED, AS PER PLAN	21
					2									2		625	31600	2	EACH	PULL BOX, MISC.: ADJUSTED TO GRADE	13
									2					2		625	32000	2	EACH	GROUND ROD	
									85					85		625	36010	85	FT	UNDERGROUND WARNING/MARKING TAPE	
									2					2		632	20731	2	EACH	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	21
									671					671		632	40500	671	FT	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	
									2					2		632	64020	2	EACH	PEDESTAL FOUNDATION	
									2					2		632	89900	2	EACH	PEDESTAL, 8", TRANSFORMER BASE	
									1					1		632	90202	1	EACH	REUSE OF PEDESTRIAN SIGNAL HEAD	
									2					2		632	90211	2	EACH	REUSE OF PEDESTRIAN PUSHBUTTON, AS PER PLAN	21
									1					1		633	99000	1	EACH	CONTROLLER ITEM, MISC.: CONTROLLER MODIFICATION	21
		4										4				809	69001	4	EACH	ADVANCE RADAR DETECTION, AS PER PLAN	8
		6										6				809	69101	6	EACH	STOP LINE RADAR DETECTION, AS PER PLAN	8
																				TRAFFIC SIGNALS ALTERNATES	
		4											4		X	632	26500	4	EACH	DETECTOR LOOP (ALTERNATE 1)	
		4											4		X	809	69101	4	EACH	STOP LINE RADAR DETECTION, AS PER PLAN (ALTERNATE 2)	6
																				STRUCTURE REPAIRS	
																				FOR SUM-241-6.404 ESTIMATED QUANTITIES	23
																				MAINTENANCE OF TRAFFIC	
							100					100				614	11110	100	HOURL	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
							6					3	3			614	12460	6	EACH	WORK ZONE MARKING SIGN	
							10					10				614	13000	10	CY	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
				8								8				614	18601	8	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	7
							1.27						1.27			614	20010	1.27	MILE	WORK ZONE LANE LINE, CLASS I, 6"	
							1.27						1.27			614	20560	1.27	MILE	WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
							4.18					2.1	2.08			614	21000	4.18	MILE	WORK ZONE CENTER LINE, CLASS I	
							4.18					2.1	2.08			614	21550	4.18	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
							7.72					4.32	3.4			614	22360	7.72	MILE	WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
							7,037					1,748	5,289			614	23010	7,037	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12"	
							7,037					1,748	5,289			614	23690	7,037	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
							557					105	452			614	26000	557	FT	WORK ZONE STOP LINE, CLASS I	
							467					105	362			614	26610	467	FT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	
																				INCIDENTALS	
				LS								LS				614	11000	LS		MAINTAINING TRAFFIC	
												6				619	16010	6	MNTH	FIELD OFFICE, TYPE B	
												LS				623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
												LS				624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

SBD

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PROJECT ID

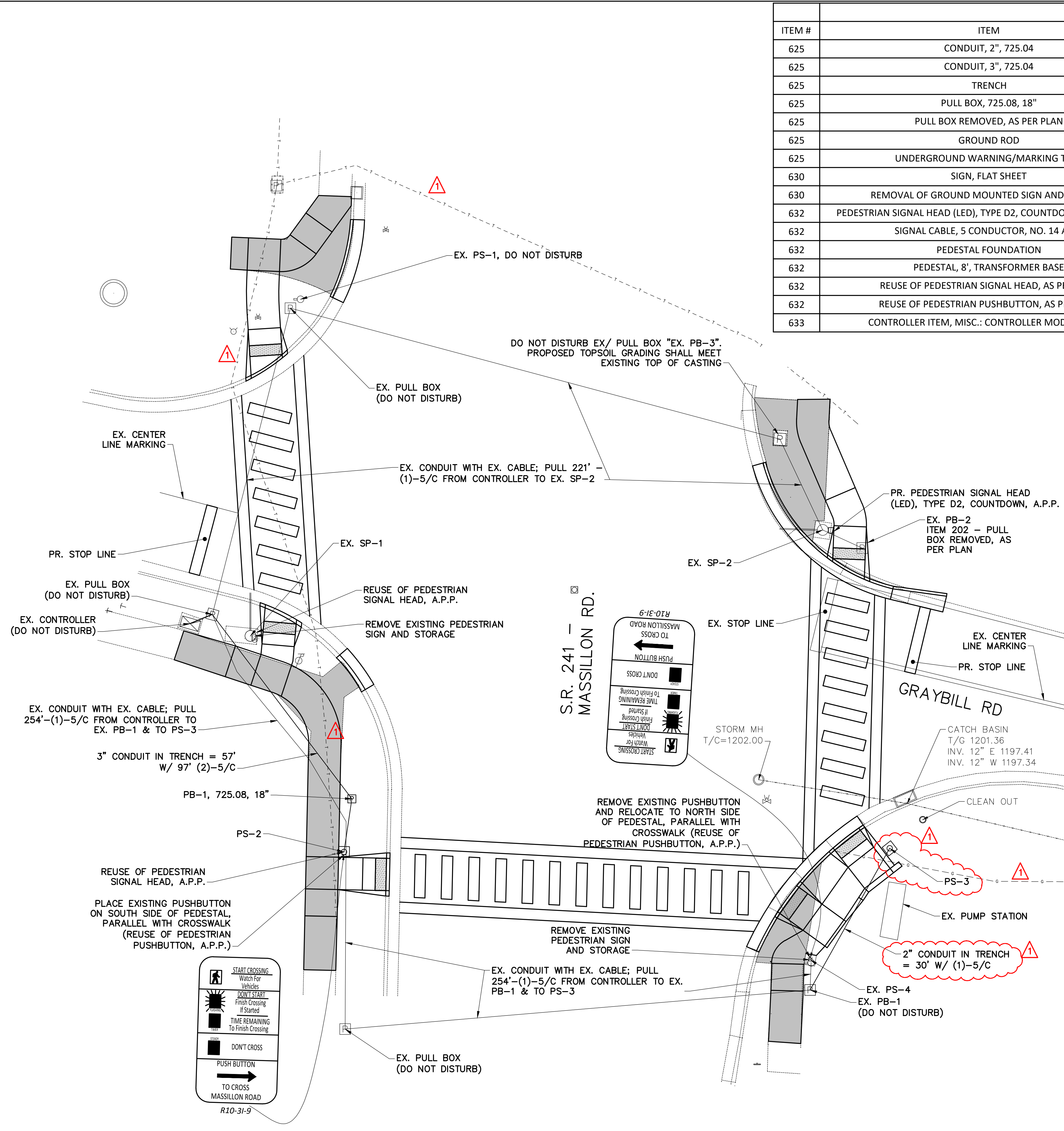
105241

SHEET

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TOTAL

24

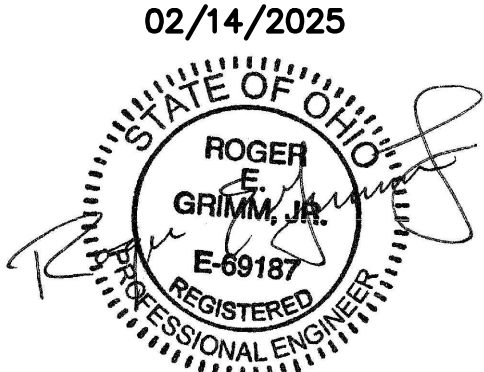


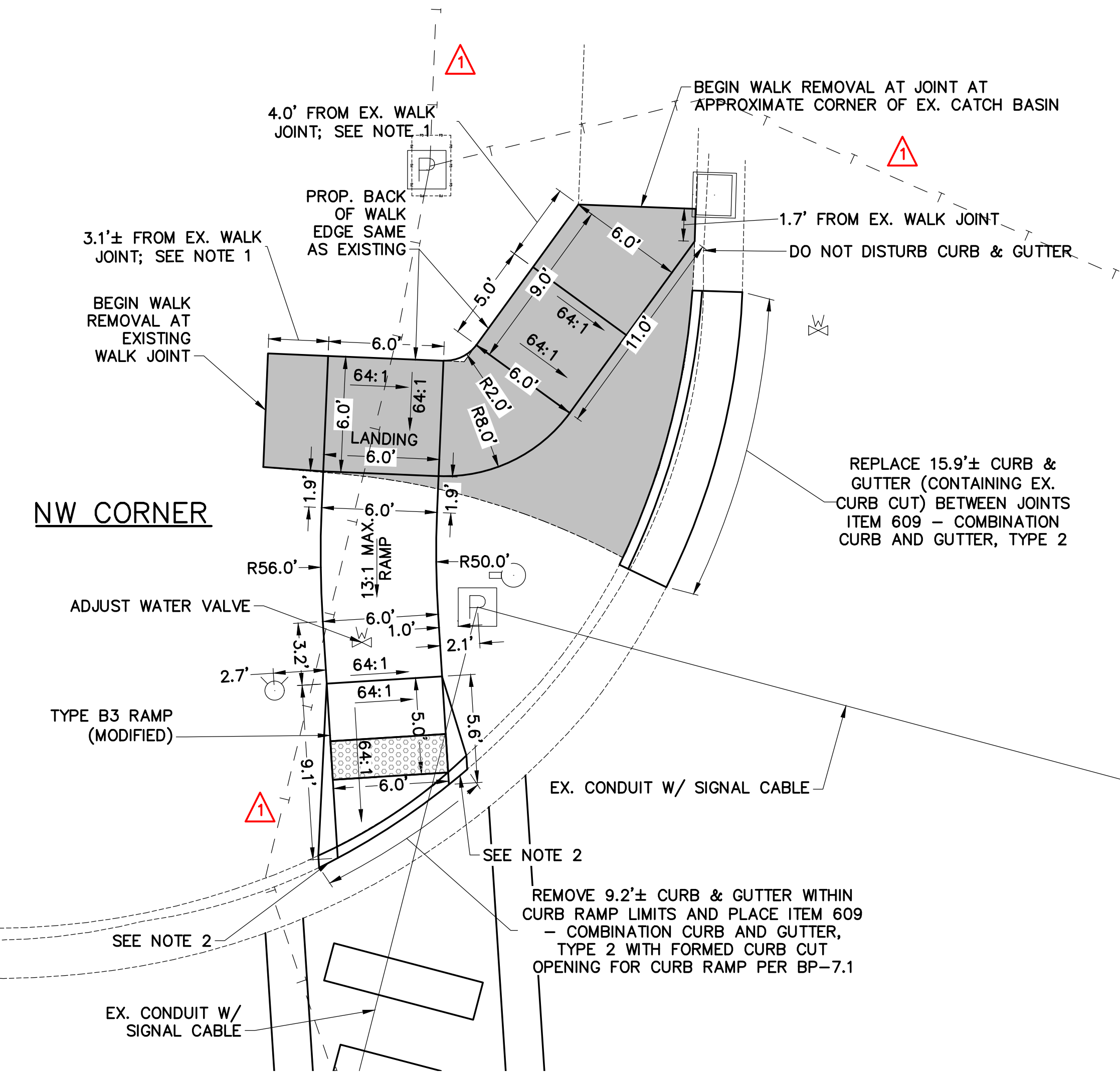
ITEM #	ITEM	UNIT	SIGNALS							TOTAL
			SP-1	PS-2	PB-1	SP-2	PB-2	PS-3	PS-4	
625	CONDUIT, 2", 725.04	FT						30		30
625	CONDUIT, 3", 725.04	FT		57						57
625	TRENCH	FT		57				28		85
625	PULL BOX, 725.08, 18"	EA			1					1
625	PULL BOX REMOVED, AS PER PLAN	EA					1			1
625	GROUND ROD	EA		1				1		2
625	UNDERGROUND WARNING/MARKING TAPE	FT		57				28		85
630	SIGN, FLAT SHEET	SF		0.75					0.75	1.5
630	REMOVAL OF GROUND MOUNTED SIGN AND STORAGE	EA	1						1	2
632	PEDESTRIAN SIGNAL HEAD (LED), TYPE D2, COUNTDOWN, AS PER PLAN	EA				1		1		2
632	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG	FT		194		221		256		671
632	PEDESTAL FOUNDATION	EA		1				1		2
632	PEDESTAL, 8', TRANSFORMER BASE	EA		1				1		2
632	REUSE OF PEDESTRIAN SIGNAL HEAD, AS PER PLAN	EA	1							1
632	REUSE OF PEDESTRIAN PUSHBUTTON, AS PER PLAN	EA	1						1	2
633	CONTROLLER ITEM, MISC.: CONTROLLER MODIFICATION	EA				1				1

- 1 REVISION; 03/03/2025
1. REVISED LOCATION OF THE PEDESTRIAN PEDESTAL.
 2. ADDED EXISTING GAS LINE AND TELEPHONE LINE.
 3. REVISED QUANTITIES.

NOTES:
1. SEE SHEET 21 FOR SIGNAL NOTES.

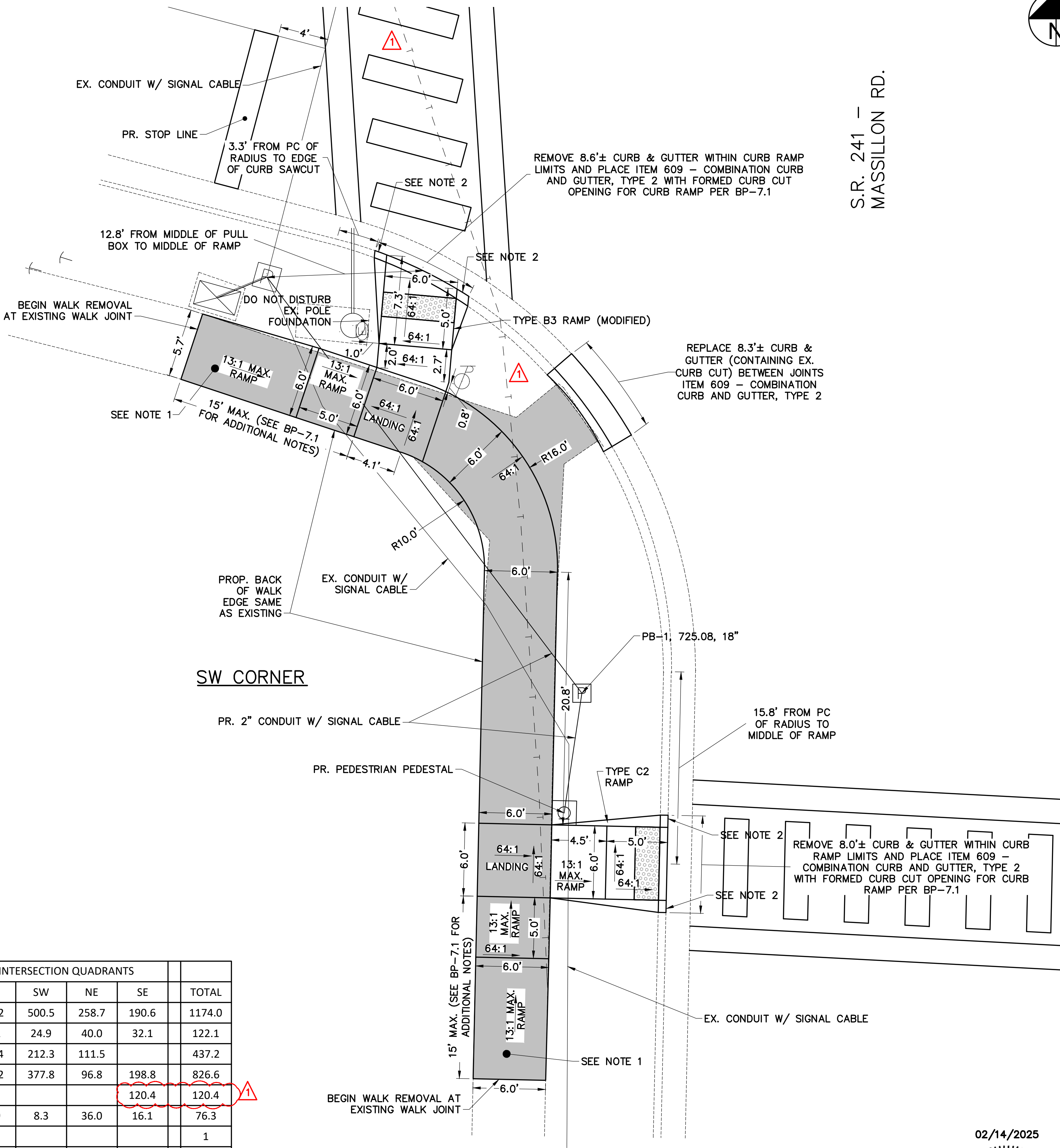
- LEGEND:
- EXISTING WALK TO BE REMOVED
 - DETECTABLE WARNING



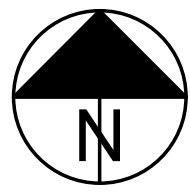


- NOTES:
- CROSS SLOPE VARIES FROM EXISTING CROSS SLOPE AT THE EXISTING JOINT TO 64:1 WITHIN THE LENGTH IF SHOWN IN THE DETAILS.
 - 1'-0" ROLLED CURB (PER TYPE C2 CURB RAMP).

ITEM #	ITEM	UNIT	INTERSECTION QUADRANTS				TOTAL
			NW	SW	NE	SE	
202	WALK REMOVED	FT	224.2	500.5	258.7	190.6	1174.0
202	CURB AND GUTTER REMOVED	FT	25.1	24.9	40.0	32.1	122.1
608	4" CONCRETE WALK	SF	113.4	212.3	111.5		437.2
608	CURB RAMP, AS PER PLAN	SF	153.2	377.8	96.8	198.8	826.6
608	CURB RAMP, AS PER PLAN (T=8")	SF				120.4	120.4
609	COMBINATION CURB AND GUTTER, TYPE 2	FT	15.9	8.3	36.0	16.1	76.3
638	VALVE BOX ADJUSTED TO GRADE	EA	1				1
646	STOP LINE	FT		13	12		25
646	CROSSWALK LINE, 24"	FT	139	245	160		544



- REVISION; 03/03/2025
- REVISED QUANTITY.
 - ADDED EXISTING TELEPHONE LINE.
 - ADDED SUPPLEMENTAL DESCRIPTION TO ITEM.
 - REVISED ITEM TO "AS PER PLAN".



INTERSECTION DETAILS

DESIGN AGENCY



HAMMONTREE & ASSOCIATES, LIMITED
5233 STONEHAM RD.
NORTH CANTON, OH 44720
(330) 499-8817

DESIGNER

REG

REVIEWER

KJO 01-21-25

PROJECT ID

105241

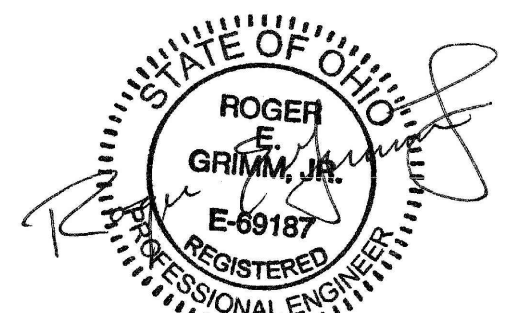
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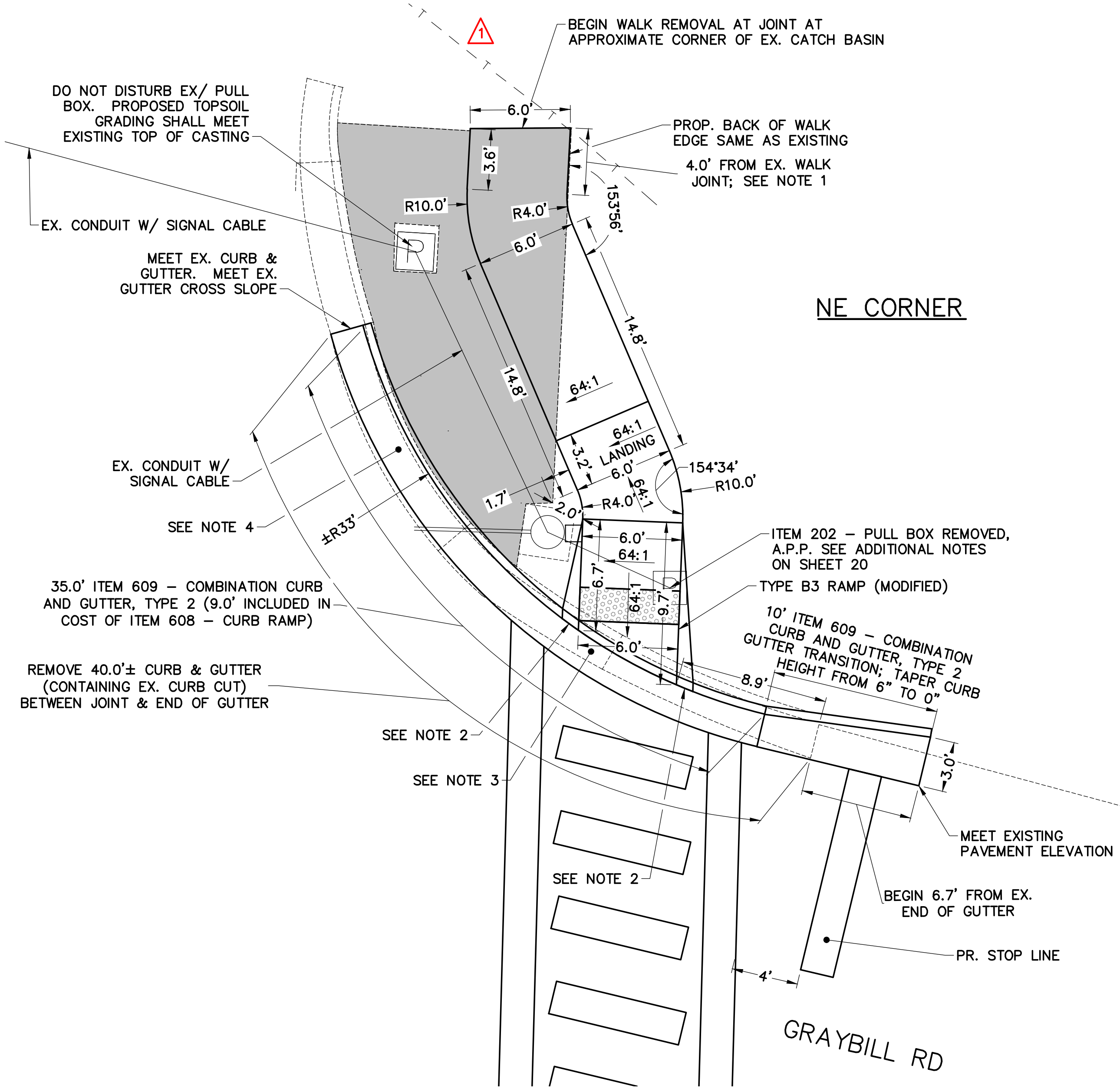
22

TOTAL

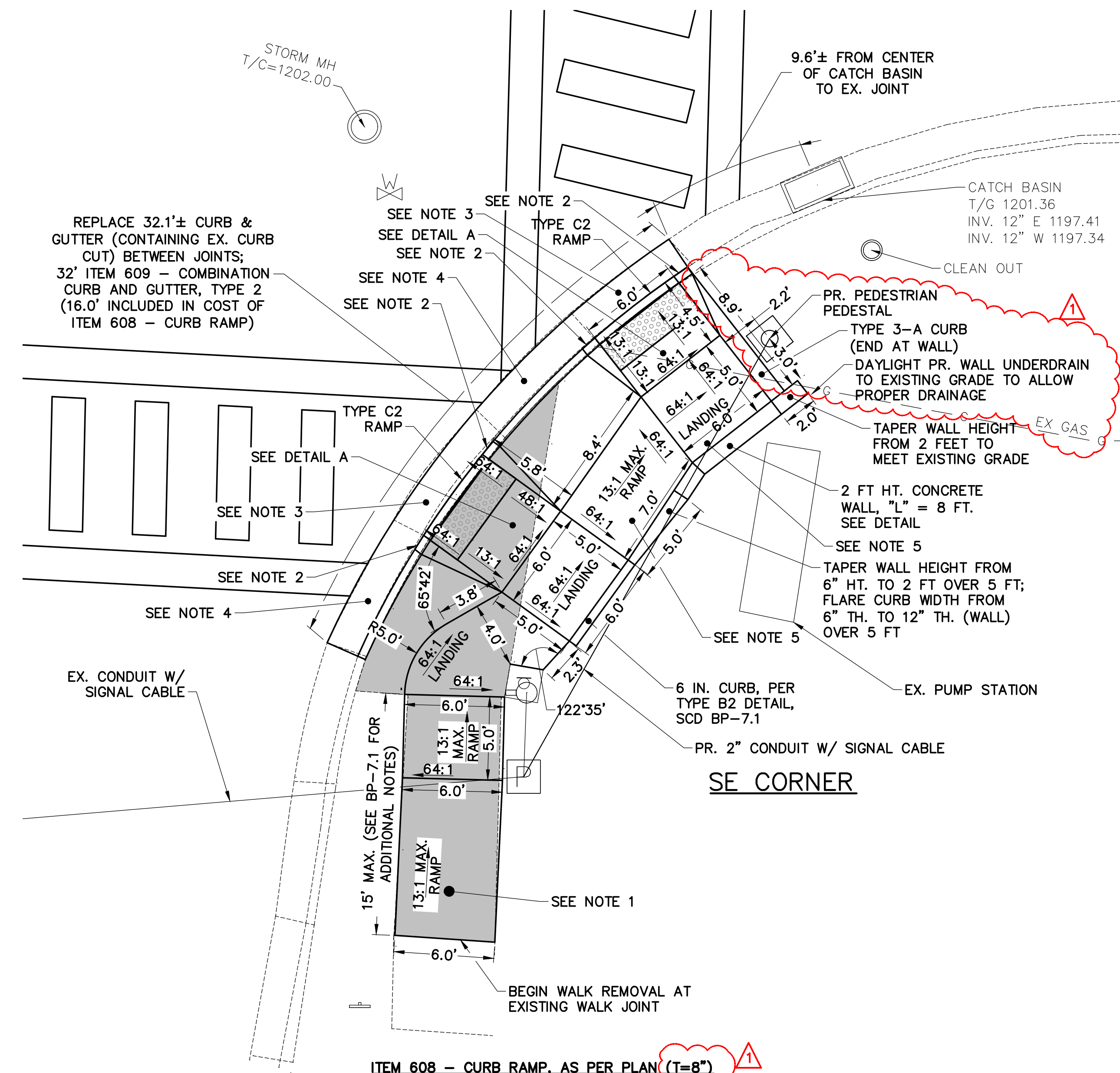
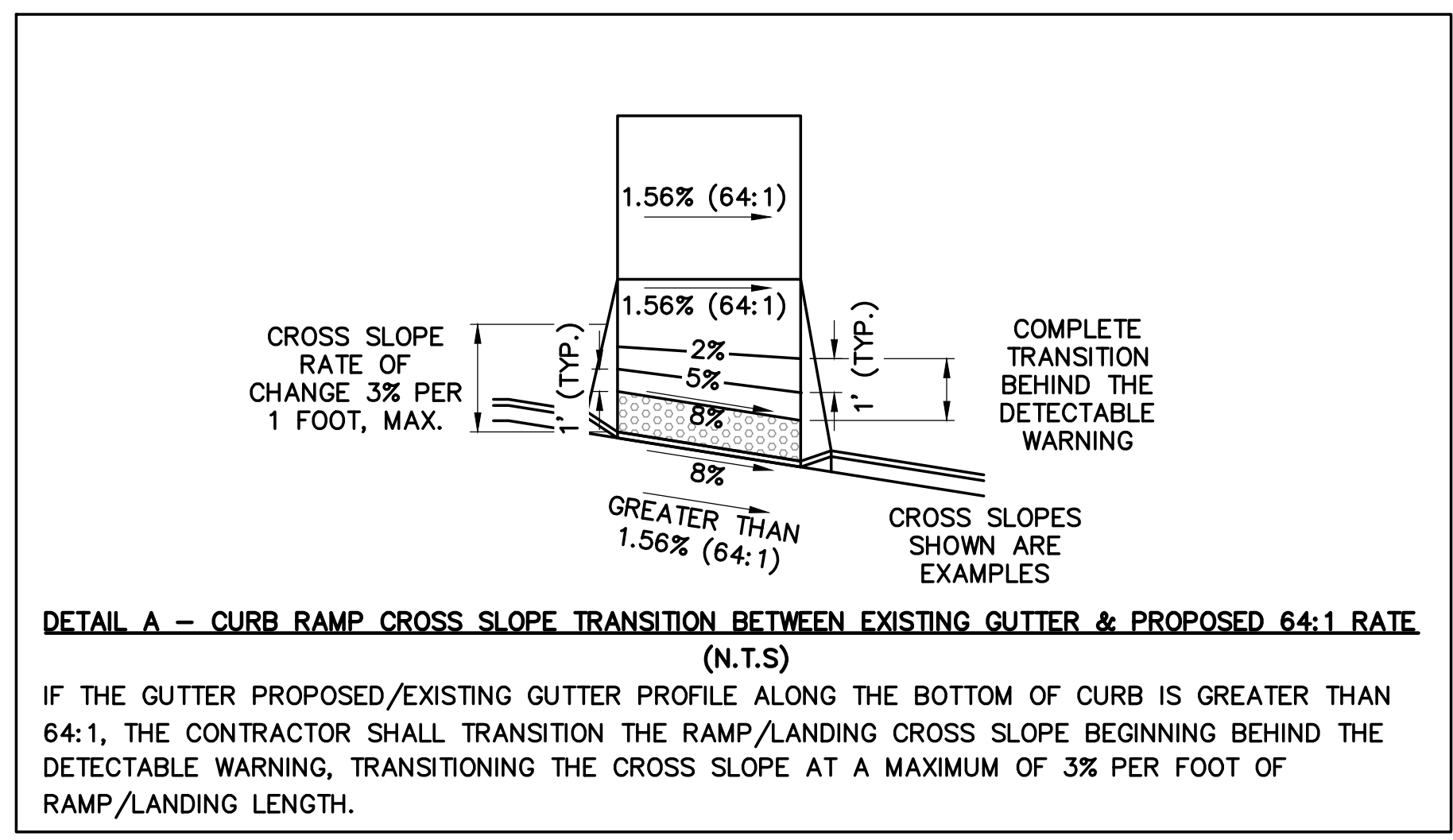
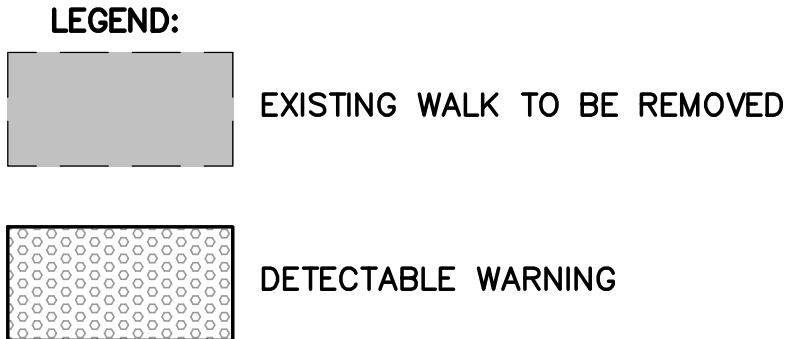
24

02/14/2025





- NOTES:**
- CROSS SLOPE VARIES FROM EXISTING CROSS SLOPE AT THE EXISTING JOINT TO 64:1 WITHIN THE LENGTH IF SHOWN IN THE DETAILS.
 - 1'-0" ROLLED CURB (PER TYPE C2 CURB RAMP).
 - PROPOSED GUTTER EDGE TO MATCH EXISTING PAVEMENT ELEVATIONS. THE GUTTER CROSS SLOPE SHALL MAINTAIN A MAXIMUM OF 5.0% SLOPE WITHIN THE CROSS WALK/ CURB RAMP LOCATION PER BP-7.1.
 - PROPOSED GUTTER EDGE TO MATCH EXISTING PAVEMENT ELEVATIONS. BEYOND THE CROSS WALK/CURB RAMP LIMITS, THE PROPOSED GUTTER CROSS SLOPE SHALL VARY TO MEET THE EXISTING GUTTER CROSS SLOPE.
 - THE EAST CURB RAMP AND LANDING AND THE RAMP FROM THE WEST LANDING SHALL BE CONSTRUCTED PER ITEM 608 CURB RAMP, AS PER PLAN.
 - SEE SHEET 22 FOR SUB-SUMMARY.



ITEM 608 - CURB RAMP, AS PER PLAN (T=8")

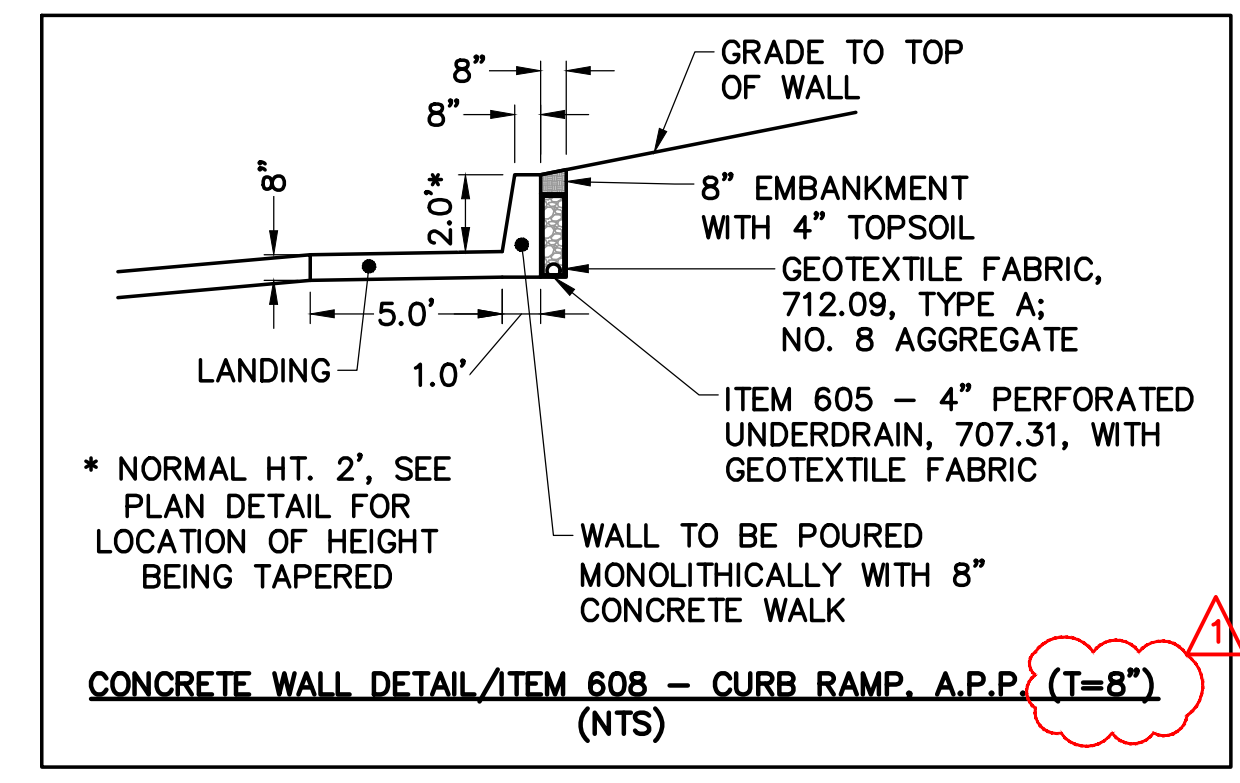
THIS ITEM SHALL INCLUDE THE COST OF THE CONSTRUCTION OF THE EAST CURB RAMP AND LANDING AND THE RAMP FROM THE WEST LANDING, MONOLITHIC POURED CONCRETE WALL, AND THE TYPE 3-A CURB ALONG THE EAST EDGE OF THE LANDING AND RAMP, AS PER THE PLAN DETAIL, THE CONCRETE WALL DETAIL AND NOTES IN THE PLANS, AND PER ODOT CMS 608 AND ODOT SCD BP-7.1.

THE CONCRETE THICKNESS FOR THE LANDING AND RAMPS AS DETAILED SHALL BE A MINIMUM OF 8" THICK AND WILL BE RELATIVELY THICKER WITHIN THE AREA OF DETECTABLE WARNING, AS SHOWN IN BP-7.1.

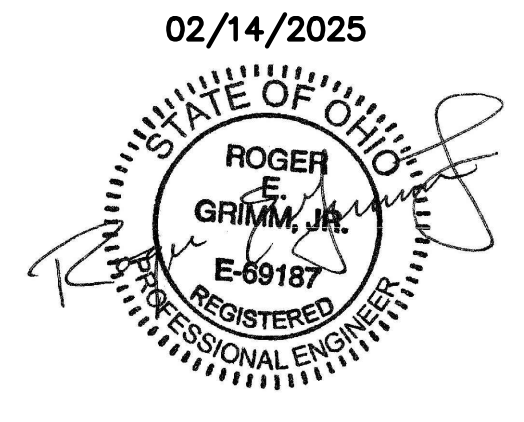
THE COST SHALL INCLUDE ANY EXCAVATION FOR THE WALL AND CURB, BACKFILL OF THE WALL AND UNDERDRAIN AS SHOWN IN THE CONCRETE WALL DETAIL AND ANY NECESSARY LAWN RESTORATION FOR THE CONSTRUCTION OF THE RAMP AND WALL.

IN ADDITION TO THE CMS REQUIREMENTS OF ITEM 608 CURB RAMP, THIS ITEM SHALL INCLUDE THE RESTORATION OF THE ADJACENT AREAS DISTURBED FOR THE INSTALLATION OF CURB RAMPS AND IMMEDIATELY ADJACENT CONCRETE WALK. RESTORATION SHALL INCLUDE PLACEMENT OF ITEM 659 TOPSOIL, ITEM 659 COMMERCIAL FERTILIZER, ITEM 659 SEEDING AND MULCHING, AND ITEM 659 WATER, ALL PER CMS.

PAYMENT FOR THE ABOVE WORK INCLUDING ALL MATERIALS, LABOR, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM 608 - CURB RAMP, AS PER PLAN (T=8").



- REVISION; 03/03/2025**
- REVISED LOCATION OF THE PEDESTRIAN PEDESTAL AND ADDED DIMENSION LOCATIONS.
 - ADDED EXISTING GAS LINE AND TELEPHONE LINE.
 - ADDED SUPPLEMENTAL DESCRIPTION TO ITEM.
 - REVISED NOTE TO ADD ITEM 659 AS PART OF UNIT COST.



INTERSECTION DETAILS

DESIGN AGENCY	HAMMONTREE & ASSOCIATES, LIMITED
DESIGNER	REG
REVIEWER	KJO
PROJECT ID	105241
SHEET	23
TOTAL	24