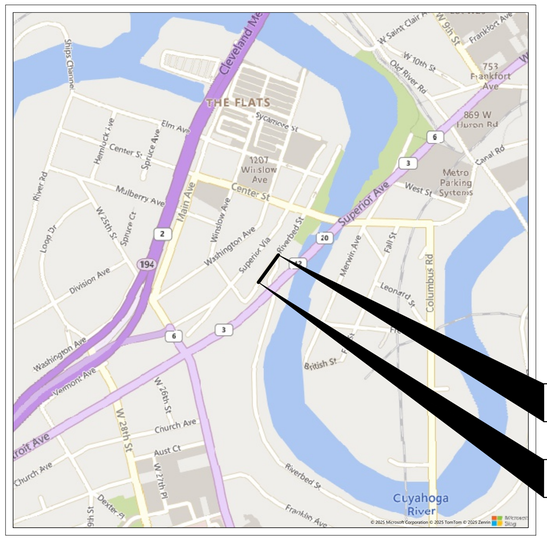
STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

CUY OLD DETROIT RD BRIDGE REHAB

CITY OF CLEVELAND

CUYAHOGA COUNTY



END PROJECT
STA.10+77.00

BEGIN PROJECT
STA. 9+10.00

LOCATION MAP

LATITUDE: N 41° 29' 34" LONGITUDE: W 81° 42' 18"

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

DESIGN DESIGNATION

CURRENT ADT (20__) _____
DESIGN YEAR ADT (20__) _____
DESIGN HOURLY VOLUME (20__) _____
DIRECTIONAL DISTRIBUTION _____
TRUCKS (24 HOUR B&C) _____
DESIGN SPEED _____ *25 MPH*
LEGAL SPEED _____ *25 MPH*
DESIGN FUNCTIONAL CLASSIFICATION:
LOCAL ROAD (URBAN)
NHS PROJECT _____ *NO*

DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

UNDERGROUND UTILITIES
Contact Two Working Days Before You Dig
OHIO811.org Before You Dig
OHIO811, 8-1-1, or 1-800-362-2764
(Non-members must be called directly)

PLAN PREPARED BY:

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
6200 Oak Tree Blvd., Suite 302
Independence, OH 44131
216.518.5544 Fax: 216.518.5545

Copyright; Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

ENGINEER'S SEAL:

SIGNED: _____
DATE: _____

ENGINEER'S SEAL:

SIGNED: _____
DATE: _____

INDEX OF SHEETS:

TITLE SHEET	*P.1*
SCHEMATIC PLAN	*P.2*
TYPICAL SECTIONS	*P.3*
GENERAL NOTES	*P.4-P.9*
MAINTENANCE OF TRAFFIC	*P.10-P.12*
GENERAL SUMMARY	*P.13, P.14*
ESTIMATED QUANTITIES	*P.15-P.16*
PAVEMENT CALCULATIONS	*P.17*
PLAN & PROFILE - DETROIT AVE.	*P.18*
CROSS-SECTIONS - DETROIT AVE.	*P.19-P.21*
PAVEMENT ELEVATION DETAIL	*P.22*
DRAINAGE DETAILS	*P.23-P.24*
DRAINAGE DETAILS	*P.25*
MISCELLLANEOUS DETAILS	*P.26-P.70*
GRADING PLAN	*P.71*
STRUCTURE	*P.72-P.82*

STANDARD CONSTRUCTION DRAWINGS

BP-1.1	*7/28/00*	*DM-1.1*	*1/17/25*	*F-1.1*	*7/18/25*							***SUPPLEMENTAL SPECIFICATIONS***		***SPECIAL PROVISIONS***	
BP-2.1	*1/21/22*	*DM-1.2*	*1/17/25*	*F-3.1*	*7/19/13*							*800-2023*	*1/16/26*	*ASBESTOS SURVEY*	
BP-2.2	*1/15/21*											*832*	*7/18/25*	*11/28/25*	
		DM-4.1	*7/17/20*									*837*	*7/18/25*		
BP-5.1	*7/18/25*	*DM-4.3*	*1/15/16*												
		DM-4.4	*1/15/16*												
		MT-101.60	*1/17/25*												
		MT-101.90	*7/17/20*												
		MT-105.10	*1/17/20*												
		MT-110.10	*7/19/13*												
		TC-41.20	*10/18/13*												
		TC-42.20	*10/18/13*												

FEDERAL PROJECT NUMBER

E250680

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REHABILITATE THE HISTORIC OLD DETROIT AVE. BRIDGE OVER ABANDONED CSX RR IN THE CITY OF CLEVELAND, CUYAHOGA COUNTY. LOCAL BRIDGE PROGRAM (BRIDGE SFN 1867644).

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	*0.39 ACRES*
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	*0.33 ACRES*
NOTICE OF INTENT EARTH DISTURBED AREA:	*0.72 ACRES*

2023 SPECIFICATIONS

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

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON SHEET P.12.

John Picuri, P.E., P.S.
District 12 Deputy Director

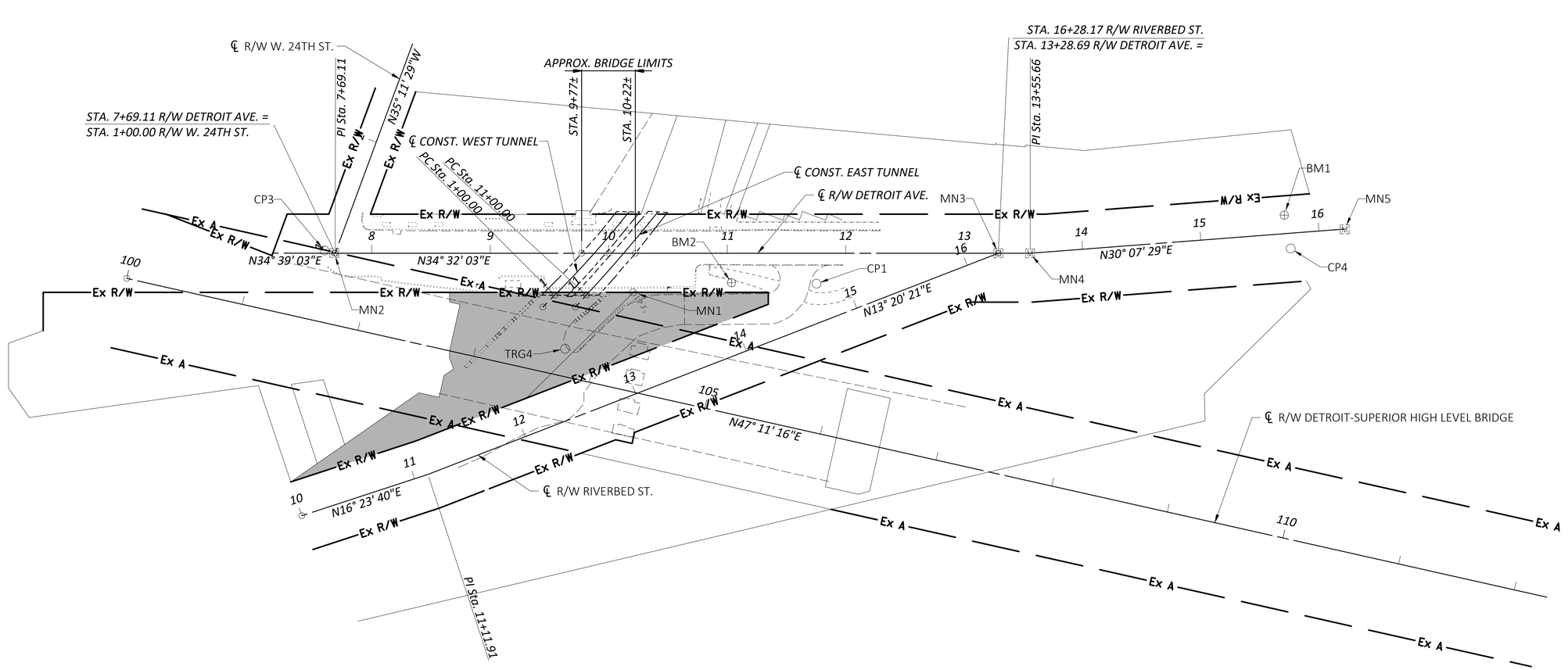
Pamela Boratyn
Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY
GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER ERS
REVIEWER DEN Date
PROJECT ID 123855
SHEET P.1 TOTAL 82

CUY OLD DETROIT RD BRIDGE REHAB
2026/01/07
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GT001.dwg



CONTROL POINT TABLE

CONTROL POINT	GRID COORDINATES U.S. SURVEY FEET		ORTHOMETRIC HEIGHT (FT)	DESCRIPTION	CENTERLINE	STATION	OFFSET
	NORTHING	EASTING					
CP1	666505.1390	2186353.0000	609.8540	CNPT -5/8X30IN REBAR W/ RED GPD CAP	R/W DETROIT AVE.	11+75.33	25.67' RT.
CP3	666178.9530	2186094.4450	636.9500	MAGS -MAGSPIKE	R/W DETROIT AVE.	7+60.05	2.39' LT.
CP4	666851.5780	2186555.3290	589.1920	CNPT -5/8X30IN REBAR W/ RED GPD CAP	R/W DETROIT AVE.	15+75.09	12.86' RT
TRG4	666299.1610	2186277.9260	603.0790	CNPT -5/8X12IN REBAR W/ RED GPD CAP	R/W RIVERBED ST.	12+58.16	57.04' LT.

BENCHMARK TABLE

CONTROL POINT	GRID COORDINATES U.S. SURVEY FEET		ORTHOMETRIC HEIGHT (FT)	DESCRIPTION	CENTERLINE	STATION	OFFSET
	NORTHING	EASTING					
BM1	666863.1390	2186529.1110	591.6130	BM -CROSS CUT ON SW HYDRANT BOLT	R/W DETROIT AVE.	15+71.93	15.62' LT.
BM2	666446.4760	2186311.6360	616.1480	BM -BENCHTIE IN TPP	R/W DETROIT AVE.	11+03.56	24.85' RT.

MONUMENT TABLE

CONTROL POINT	GRID COORDINATES U.S. SURVEY FEET		ORTHOMETRIC HEIGHT (FT)	DESCRIPTION	CENTERLINE	STATION	OFFSET
	NORTHING	EASTING					
MN1	666373.545	2186271.3360	619.7790	IPID -ZARANEC 7126	R/W DETROIT AVE.	10+20.63	33.00' RT.
MN2	666184.5810	2186100.9020	634.8260	MONBOX -NO LID NOTHING FOUND INSIDE SHOT CENTER BOX	R/W DETROIT AVE.	7+68.36	0.28' LT.
MN3	666646.0300	2186418.7900	599.5640	MONBOX -3/4IN REBAR (NO LID)	R/W RIVERBED ST.	16+28.17	0.00
MN4	666668.0970	2186434.0280	598.2400	MONBOX -3/4IN REBAR (NO LID)	R/W DETROIT AVE.	13+55.51	0.04' RT.
MN5	666898.2640	2186567.9010	586.7380	MONBOX -STONE INSIDE NO VISIBLE MARKINGS SHOT CENTER	R/W DETROIT AVE.	16+21.78	0.31' RT.

PARCEL #003-20-002
BOARD OF PARK COMMISSIONERS OF THE CLEVELAND METROPOLITAN PARK DISTRICT
201608080496

FOR SURVEYING PARAMETERS, SEE SHEET 4

HORIZONTAL SCALE IN FEET
0 25 50 100

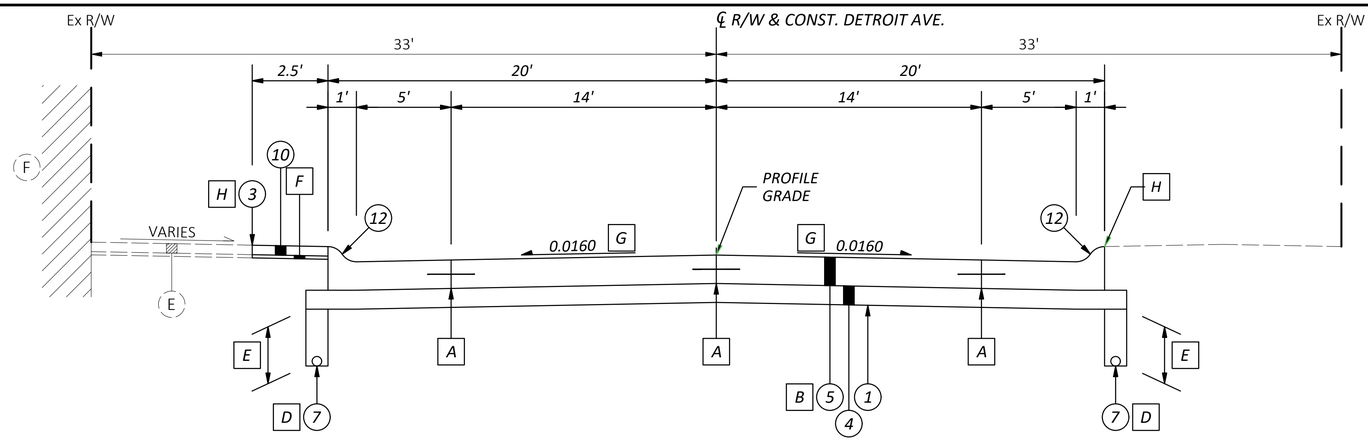
SCHEMATIC PLAN

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GB001.dwg

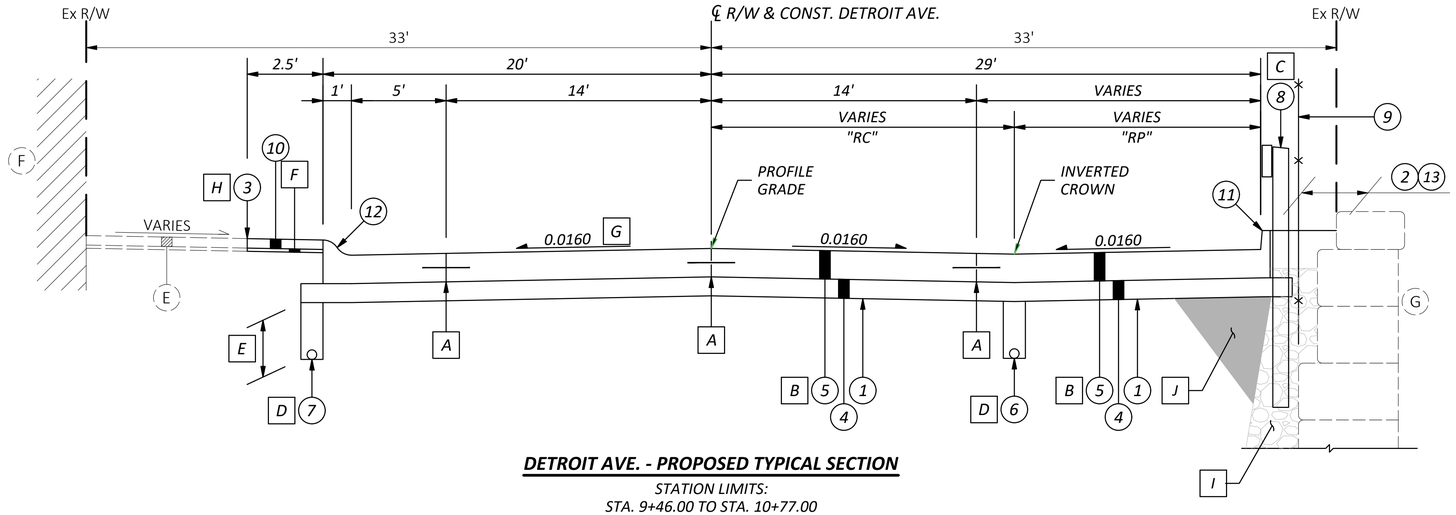
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS
REVIEWER DEN Date
PROJECT ID 123855
SHEET P.2 TOTAL 82



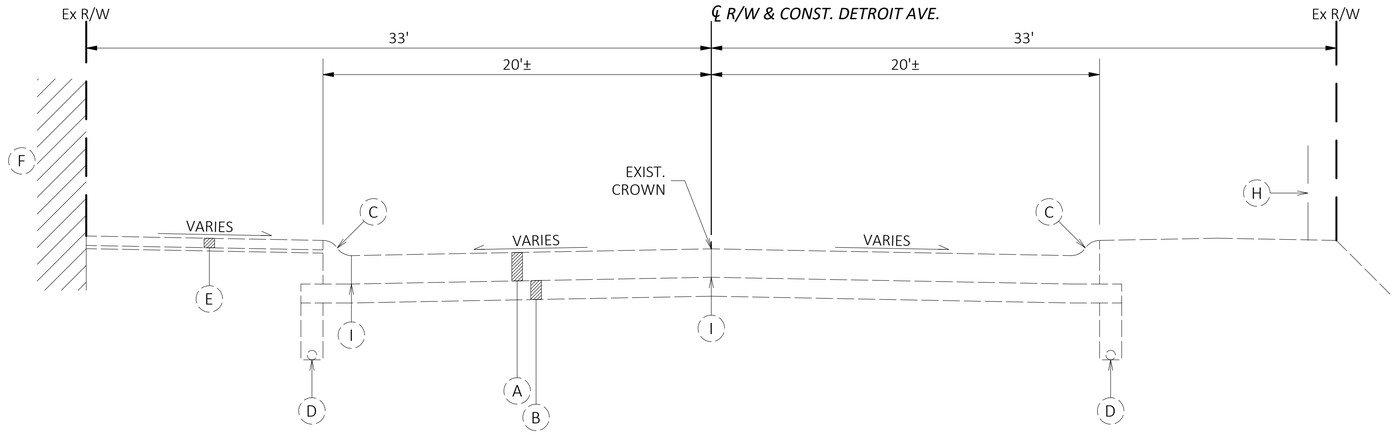
DETROIT AVE. - PROPOSED TYPICAL SECTION

STATION LIMITS:
STA. 9+10.00 TO STA. 9+46.00



DETROIT AVE. - PROPOSED TYPICAL SECTION

STATION LIMITS:
STA. 9+46.00 TO STA. 10+77.00



DETROIT AVE. - EXISTING TYPICAL SECTION

PROPOSED LEGEND

1. ITEM 204 - SUBGRADE COMPACTION
2. ITEM 209 - LINEAR GRADING
3. ITEM 255 - FULL DEPTH PAVEMENT SAWING
4. ITEM 304 - 6" AGGREGATE BASE, AS PER PLAN
5. ITEM 451 - 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN
6. ITEM 605 - 6" BASE PIPE UNDERDRAINS, AS PER PLAN
7. ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN
8. ITEM 606 - GUARDRAIL, MISC.: TIMBER GUARDRAIL (TYPE B)
9. ITEM 607 - FENCE, TYPE CLT
10. ITEM 608 - 6" CONCRETE WALK, AS PER PLAN
11. ITEM 609 - CURB, TYPE 2-A, AS PER PLAN
12. ITEM 609 - CURB, MISC.: MOUNTABLE CURB
13. ITEM 209 - RESHAPING UNDER GUARDRAIL

A. LONGITUDINAL JOINTS IN ACCORDANCE WITH ODOT SCD BP-2.1
B. TRANSVERSE JOINTS IN ACCORDANCE WITH ODOT SCD BP-2.2
C. FACE OF GUARDRAIL SET AT SAME OFFSET AS FACE OF CURB
D. PROVIDE UNOBSTRUCTED OUTLET TO STRUCTURE/UNDERDRAIN
E. MATCH EXIST. DEPTH; PROVIDE UNOBSTRUCTED OUTLET TO STRUCTURE/UNDERDRAIN
F. 2" SCREENINGS, PER 703.10
G. CROSS-SLOPE = VARIES; MATCH EXIST.
H. MEET EXIST. ELEVATION/OFFSET
I. POROUS BACKFILL WITH GEOTEXTILE WRAP, SEE EAST AND WEST TUNNEL PROFILES, SHEET 76
J. LIGHTWEIGHT CELLULAR GROUT BACKFILL, SEE EAST AND WEST TUNNEL PROFILES, SHEET 76

EXISTING LEGEND

A. EXIST. 9"± CONCRETE
B. EXIST. AGGREGATE BASE (IF PRESENT)
C. EXIST. CONCRETE CURB
D. EXIST. UNDERDRAIN (IF PRESENT)
E. EXIST. CONCRETE WALK
F. EXIST. BUILDING
G. EXIST. STONE RETAINING WALL
H. EXIST. CHAIN LINK FENCE
I. EXIST. JOINT

CL R/W & CONST. DETROIT AVE.

RC				RP			
STATION		WIDTH (FT)		STATION		WIDTH (FT)	
FROM	TO	FROM	TO	FROM	TO	FROM	TO
9+46.00	10+77.00	19'	9.68'	9+46.00	10+73.00	10'	19.5'

TYPICAL SECTIONS

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GY001.dwg

DESIGN AGENCY
GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS
REVIEWER DEN Date
PROJECT ID 123855
SHEET P.3 TOTAL 82

GENERAL

UTILITIES

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

AT&T - OHIO
13630 LORAIN AVE. - 2ND FLOOR
CLEVELAND, OH 44111
ATTN: JAMES JANIS
PHONE: 216-476-6142
EMAIL: pj8191@att.com

CEI FIRST ENERGY
6896 MILLER RD, SUITE 101
BRECKSVILLE, OH 44141
ATTN: JOHN M. ZASSICK
PHONE: 440-546-8706
EMAIL: jmzassick@firstenergycorp.com

CHARTER COMMUNICATIONS
7820 DIVISION DR.
MENTOR, OH 44060
ATTN: EMIL SYMISTER
PHONE: 216-575-8016 OPT 1 EXT 12165551158
EMAIL: Emil.Symister@charter.com

CITY OF CLEVELAND
DIVISION OF ENGINEERING AND CONSTRUCTION
601 LAKESIDE AVE. - ROOM 518
CLEVELAND, OH 44114
ATTN: RICK SWITALSKI
PHONE: 216-664-2379
EMAIL: EngineeringDesign@clevelandohio.gov

CITY OF CLEVELAND
DIVISION OF PUBLIC POWER (MELP)
1300 LAKESIDE AVE., ROOM 152
CLEVELAND, OH 44114
ATTN: CHRISTOPHER M. HIRZEL, P.E., P.S.
PHONE: 216-563-7212
EMAIL: chirzel@cpp.org

CITY OF CLEVELAND
DIVISION OF TRAFFIC ENGINEERING
601 LAKESIDE AVE. - ROOM 25
CLEVELAND, OH 44114
ATTN: ROBERT MAVEC
PHONE: 216-664-3195
EMAIL: rmavec@clevelandohio.gov

CITY OF CLEVELAND
DIVISION OF WATER
1201 LAKESIDE AVE.
CLEVELAND, OH 44114
ATTN: FRED ROBERTS
PHONE: 216-644-2444, X75590
EMAIL: planreview@clevelandwater.com
EMERGENCY PHONE: 216-664-3060

CITY OF CLEVELAND
DIVISION OF WATER POLLUTION CONTROL
12302 KIRBY RD.
CLEVELAND, OH 44108
ATTN: ELIE RAMY
PHONE: 216-664-2756
EMAIL: eramy@clevelandwpc.com

ENBRIDGE GAS OHIO (EGO)
320 SPRINGSIDE DR. - SUITE 320
AKRON, OH 44333
ATTN: MICAH RISACHER
PHONE: 330-664-2638
EMAIL: relocation@enbridge.com

EVERSTREAM SOLUTIONS
1228 EUCLID AVE.
CLEVELAND, OH 44113
ATTN: TOM TRUSNIK
PHONE: 216-923-2298
EMAIL: utilityreview@everstream.net

NORTHEAST OHIO REGIONAL SEWER DISTRICT
3900 EUCLID AVE.
CLEVELAND, OH 44115
ATTN: ROBERT STOERKEL
PHONE: 216-881-6600, EXT. 6802
EMAIL: stoerkelr@neorsd.org

ODOT CENTRAL OFFICE
1980 W. BROAD ST.
COLUMBUS, OH 43223
ATTN: RONDA KELLER
PHONE: 614-965-4463
EMAIL: Ronda.Keller@dot.ohio.gov

ODOT CO ITS
1606 W. BROAD ST.
COLUMBUS, OH 43223
ATTN: BRYAN COMER
PHONE: 614-387-1253
EMAIL: cen.its.lab@odot.ohio.gov

ODOT DISTRICT 12 - ROADWAY SERVICES
5500 TRANSPORTATION BLVD.
GARFIELD HEIGHTS, OH 44125
ATTN: BILL GERBER
PHONE: 216-584-2260
EMAIL: william.gerber@dot.ohio.gov

VERIZON (MCI)
120 RAVINE ST.
AKRON, OH 44303
ATTN: DANIEL ARZ
PHONE: 440-457-4832
EMAIL: vzfiber-northernohio@verizon.com

ZAYO FIBER SOLUTIONS
4199 KINROSS LAKES PARKWAY
RICHFIELD, OH 44286
ATTN: COLTON WOODRUFF
PHONE: 419-631-1303
EMAIL: colton.woodruff@zayo.com

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS AS REQUIRED BY SECTION 153.64 O.R.C.

ENBRIDGE GAS OHIO

IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE LATERAL AND SUBJACENT SUPPORT OF ENBRIDGE'S PIPELINE(S), IN COMPLIANCE TO 29 CFR, PART 1926, SUBPART P, (SAFE EXCAVATION & SHORING). EXTREME CARE SHOULD BE TAKEN NOT TO HARM ANY ENBRIDGE FACILITY (PIPELINES, ETC.) OR APPURTENANCE (PIPE COATING, TRACER WIRE, CATHODIC PROTECTION TEST STATION WIRES & DEVICES, VALVE BOXES, ETC.). ENBRIDGE FACILITIES MUST BE PROTECTED WITH A TARP DURING BRIDGE CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE AND LIABLE FOR ENSURING THAT ALL ENBRIDGE EXISTING FACILITIES, ABOVE AND BELOW GROUND, REMAIN UNDAMAGED, ACCESSIBLE AND IN WORKING ORDER. THE CROSSING OF ENBRIDGE'S PIPELINE(S) WITH ANOTHER STEEL FACILITY MAY CREATE A POTENTIAL CORROSION ISSUE FOR THE PROPOSED FACILITY AND THE EXISTING ENBRIDGE FACILITY. PLEASE CONTACT ENBRIDGE'S CORROSION DEPARTMENT AT LEAST TWO WORKING DAYS BEFORE CONSTRUCTION AT: CORROSIONGIS@DOMINIONENERGY.COM

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 8:00 PM AND 7:00 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

SURVEYING PARAMETERS

SURVEYING PARAMETERS – OHIO STATE PLANE, NORTH ZONE, 3401

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL
POSITIONING METHOD: ODOT RTN
MONUMENT TYPE: 5/8" X 30" REBAR W/ RED "GPD CONTROL" CAP

VERTICAL POSITIONING
ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: 18

HORIZONTAL POSITIONING
REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COMBINED SCALE FACTOR: N/A
ORIGIN OF COORDINATE SYSTEM: (0,0)

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH CMS 623.

UNITES ARE IN U.S. SURVEY FEET.

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 REQUIRES BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PERMITS

IN THE CITY OF CLEVELAND, ALL STREET PERMITS MUST BE OBTAINED FROM THE DIVISION OF ASSESSMENTS AND LICENSES PRIOR TO BEGINNING ANY WORK. STREET PERMITS INCLUDE BUT ARE NOT LIMITED TO: STREET OPENING PERMIT, OVERLOAD PERMIT, OBSTRUCTION PERMIT, AND/OR SIDEWALK PERMIT, AND MAY BE OBTAINED THROUGH THE FOLLOWING CONTACT:

CITY OF CLEVELAND
DEPARTMENT OF FINANCE
DIVISION OF ASSESSMENTS AND LICENSES
601 LAKESIDE AVENUE, RM 122
CLEVELAND, OHIO 44114
PHONE: (216) 664-2260 / (216) 664-2174
FAX: (216) 664-4592
E-MAIL: DALpermit@clevelandohio.gov

ALL STREET OPENING REPAIRS, CURB REPAIRS, AND/OR SIDEWALK REPAIRS, EITHER INCIDENTAL TO THE PROJECT OR PART OF THE PROJECT, MUST BE PERFORMED IN ACCORDANCE TO CITY OF CLEVELAND STANDARDS. A COPY OF THE STANDARDS CAN BE OBTAINED FROM THE OFFICE OF CAPITAL PROJECTS, DIVISION OF ENGINEERING AND CONSTRUCTION BY CALLING (216) 664-2381.

ALL STREET PERMITS, FEES, AND CHARGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEIR ASSOCIATED COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE PERTINENT WORK ITEMS. FOR BIDDING PURPOSES, FEES AND CHARGES MAY BE OBTAINED FROM THE DEPARTMENT OF FINANCE, DIVISION OF ASSESSMENTS AND LICENSES AT (216) 664-2260 / (216) 664-2174.

CONTINGENCY QUANTITIES

THE CONTRACTOR SHALL NOT ORDER MATERIALS OR PERFORM WORK FOR ITEMS DESIGNATED BY PLAN NOTE TO BE USED "AS DIRECTED BY THE ENGINEER" UNLESS AUTHORIZED BY THE ENGINEER. THE ACTUAL WORK LOCATIONS AND QUANTITIES USED FOR SUCH ITEMS SHALL BE INCORPORATED INTO THE FINAL SUBSIDIARY AGREEMENT GOVERNING COMPLETION OF THIS PROJECT.

STATIONING AND LOCATIONS

STATIONING AND LOCATIONS OF MISCELLANEOUS OBJECTS AS INDICATED ON THESE PLANS ARE APPROXIMATE (IE, ENCROACHMENTS WITHIN EXISTING RIGHT-OF-WAY). ALL LOCATIONS AND ITEMS CALLED OUT BY STATION ARE SUBJECT TO ADJUSTMENT IN THE FIELD AS DIRECTED BY THE ENGINEER.

EXISTING TYPICAL SECTIONS

EXISTING TYPICAL SECTIONS HAVE BEEN DEVELOPED FROM SITE MEASUREMENTS AND RECORD PLANS AND ARE BELIEVED TO REPRESENT THE WIDTH AND COMPOSITION OF THE EXISTING PAVEMENT, BUT THE OWNER DOES NOT GUARANTEE THE ACCURACY OF SAME.

GENERAL NOTES

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GN001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS
REVIEWER DEN Date
PROJECT ID 123855
SHEET P.4 TOTAL 82

GENERAL (CONT'D)

COOPERATION BETWEEN CONTRACTORS

IT IS ANTICIPATED THAT OTHER CONTRACTORS WILL BE WORKING ON PROJECTS ADJACENT TO OR WITHIN THE LIMITS OF THIS PROJECT, EITHER FOR THE CITY OR FOR OTHER PUBLIC AGENCIES. THE CONTRACTOR SHALL COOPERATE AND COORDINATE CONSTRUCTION OPERATIONS, INCLUDING PROVISIONS FOR THE MAINTENANCE OF TRAFFIC, WITH THE CONTRACTORS OF OTHER PROJECTS THAT MAY BE IN FORCE DURING THE LIFE OF THIS CONTRACT.

CONDOMINIUMS AT STONEBRIDGE

THE CONDOMINIUM AT STONEBRIDGE AND THEIR CONTRACTOR, A-STAR, REQUIRES 30-DAY ADVANCED NOTICE TO COORDINATE CLIMBER RELOCATIONS:

ARCHITECTURAL SIDING, TRIM AND ROOFING, INC.
5667 E. SCHAAF RD.
INDEPENDENCE, OH 44131
ATTN: NATE RAKOCZY, PROJECT MANAGER
PHONE: 216-769-5246

COORDINATION WITH CLEVELAND METROPARKS

THE CONTRACTOR SHALL OBTAIN AN ACCESS PERMIT INCLUDING INSURANCE FROM CLEVELAND METROPARKS FOR WORK WITHIN CLEVELAND METROPARKS PROPERTY PRIOR TO ANY WORK PERFORMED WITHIN THE PROPERTY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULL COMPLIANCE WITH THE ACCESS PERMIT AS PROVIDED BY THE CLEVELAND METROPARKS. A COPY OF THE ACCESS PERMIT SHALL BE PROVIDED TO ODOT AND PRESENT AT THE CONSTRUCTION SITE DURING ANY WORK.

ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS TO COMPLETE THIS PERMITTING SHALL BE INCIDENTAL TO THE PROJECT WORK ITEMS.

THE CONTRACTOR SHALL RESTORE THE PARK DISTRICT PROPERTY TO A CONDITION SATISFACTORY TO THE PARK DISTRICT AND AT A MINIMUM AS GOOD AS EXISTED PRIOR TO THE PROJECT.

THE CONTRACTOR SHALL PROVIDE CLEVELAND METROPARKS WITH AN OPPORTUNITY TO INSPECT THE EFFECTED PARK DISTRICT PROPERTY PRIOR TO COMPLETION OF CONSTRUCTION.

THE CONTRACTOR SHALL COORDINATE THE PROJECT SCHEDULE WITH CLEVELAND METROPARKS:

CLEVELAND METROPARKS
4101 FULTON PARKWAY
CLEVELAND, OH 44144
ATTN.: CHRIS PAPP, P.E.
PHONE: 216-635-3258
EMAIL: cjp2@clevelandmetroparks.com

ROADWAY

CLEARING AND GRUBBING, AS PER PLAN

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEMS 202, 255, 452, 608, 608, 609, ETC. REMOVAL ITEMS, AS PER PLAN

THE COST OF REMOVING AND DISPOSING OF ITEMS PURSUANT TO ITEM 202.05 INCLUDING BUT NOT LIMITED TO PAVEMENT, CONCRETE, AGGREGATE BASE COURSE, WEARING COURSE, SIDEWALKS, CURBS, AND DRIVEWAYS SHALL INCLUDE THE COST OF FULL DEPTH SAW CUTTING. NO SEPARATE PAYMENT SHALL BE MADE FOR FULL DEPTH SAW CUTTING FOR THE REMOVAL OF THESE ITEMS.

ITEM 203 - ROADWAY, MISC.: EXCAVATION
ITEM 203 - ROADWAY, MISC.: EMBANKMENT

ALL REQUIREMENTS OF ODOT CMS 203 SHALL APPLY EXCEPT AS MODIFIED HEREIN:

USE OF SLAG, IN ANY FORM, IS NOT PERMITTED.

THE WORK SPECIFIED FOR THIS PAY ITEM CONSISTS OF THE EXCAVATION AND EMBANKMENT REQUIRED FOR THE PROPOSED WORK, INCLUDING BUT NOT LIMITED TO: CURB RAMPS, DITCHES, DRIVEWAYS, ROADS, SIDEWALKS, SWALES, AND ALL OTHER ITEMS OF WORK SPECIFIED IN THE PLANS. ALL EXCAVATION, EMBANKMENT, EARTHWORK, AND SHAPING NECESSARY FOR THE PREPARATION, CONSTRUCTION, AND COMPLETION OF ALL SUBGRADES AND SLOPES SHALL BE IN ACCORDANCE WITH THE REQUIRED ALIGNMENTS, GRADES, AND ELEVATIONS SHOWN IN THE PLANS, OR AS DIRECTED BY THE ENGINEER.

EXCAVATION AND EMBANKMENT QUANTITIES ARE PROVIDED HEREIN FOR INFORMATIONAL PURPOSES, ONLY:

EXCAVATION	*55 CY*
EMBANKMENT	*75 CY*

PAYMENT FOR ITEM 203 - ROADWAY, MISC.: EXCAVATION AND ITEM 203 - ROADWAY, MISC.: EMBANKMENT SHALL BE PAID FOR AS A LUMP SUM QUANTITY AND SHALL INCLUDE ALL EXCAVATION, EMBANKMENT, FILL, BORROW, GRADING, AND ALL OTHER LABOR, EQUIPMENT, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

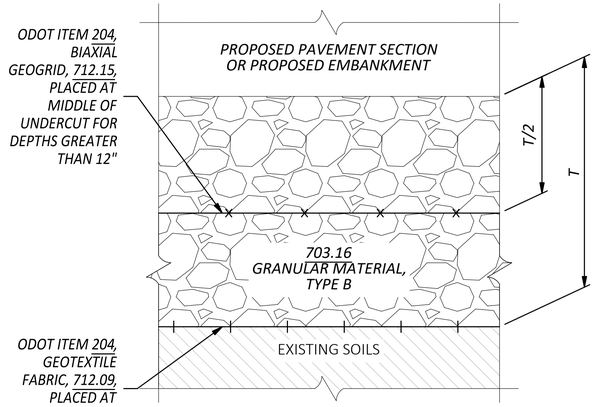
ITEM 203 - ROADWAY, MISC.: EXCAVATION	*LS*
ITEM 203 - ROADWAY, MISC.: EMBANKMENT	*LS*

UNSUITABLE OR UNSTABLE SOILS FOR PAVEMENT STABILIZATION

GEOTEXTILE FABRIC SHALL BE IN ACCORDANCE WITH ODOT 712.09. GEOGRID SHALL BE IN ACCORDANCE WITH ODOT 712.15. ALL MATERIALS MUST BE CONTAINED ON THE ODOT OFFICE OF MATERIALS QUALIFIED PRODUCTS LIST.

THE FOLLOWING ITEMS AND QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER TO ADDRESS UNSTABLE OR UNSUITABLE SOILS ENCOUNTERED IN THE AREAS OF PAVEMENT CONSTRUCTION:

ITEM 204 - EXCAVATION OF SUBGRADE	*50 CY*
ITEM 204 - GRANULAR MATERIAL, TYPE B	*50 CY*
ITEM 204 - GEOTEXTILE FABRIC	*100 SY*
ITEM 204 - GEOGRID	*100 SY*



UNDERCUT / REPLACEMENT TREATMENT METHOD DETAIL
NOT TO SCALE

ITEM 606 - GUARDRAIL, MISC.: TIMBER GUARDRAIL (TYPE B)

ALL REQUIREMENTS OF ODOT CMS ITEM 606 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

GUARDRAIL SHALL BE STEEL-BACKED TIMBER GUARDRAIL, TYPE B, IN ACCORDANCE WITH U.S. DEPARTMENT OF TRANSPORTATION, FLH STANDARD 617-60, SPECIFICATION FP-14, FP-24.

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES WILL BE IN ACCORDANCE WITH ITEM 607.

ITEM 608 - 6" CONCRETE WALK, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF ITEM 608 AND THE CONCRETE SPECIFICATIONS IN THESE PLANS, THE FOLLOWING SHALL APPLY:

THIS ITEM IS INTENDED FOR USE AS DIRECTED BY THE ENGINEER, TO REMOVE AND REPLACE STRUCTURALLY DEFICIENT SIDEWALK AND TO CORRECT TRIPPING HAZARDS. AREAS WHERE THIS APPLIES WILL INCLUDE ANY NECESSARY CONCRETE SIDEWALK ADJACENT TO INTERSECTION CORNERS WHERE NEW ADA CURB RAMPS ARE BEING INSTALLED. SPECIFIC LOCATIONS ARE SHOWN IN THE PLANS, AND AN ADDITIONAL ESTIMATED CONTINGENCY QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY TO BE USED AS DIRECTED BY THE ENGINEER FOR THIS PURPOSE.

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

PER 608.03(C), IT IS REQUIRED THAT 1/2 INCH THICK EXPANSION JOINT MATERIAL (705.03) BE INSTALLED BETWEEN THE WALK AND THE 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 THAT 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 PRICE BID FOR ITEM 608 - 6" CONCRETE WALK, AS PER PLAN.

GENERAL NOTES

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GN001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS
REVIEWER DEN Date
PROJECT ID 123855
SHEET P.5 TOTAL 82

ROADWAY (CONT'D)

ITEM SPECIAL - POTHOLING

POTHOLING SHALL BE UTILIZED, AS DIRECTED BY THE ENGINEER, PRIOR TO COMMENCEMENT OF ANY INSTALLATION OF THE PROPOSED UTILITIES. THE INTENT OF THIS ITEM OF WORK IS TO LOCATE EXISTING UTILITIES, AS WELL AS PREVENT DAMAGE TO UNDERGROUND UTILITIES THAT ARE TO REMAIN.

THE RANGE IN DEPTH FOR POTHOLING IS EXPECTED TO BE FROM 8 FEET TO A MAXIMUM DEPTH OF 12 FEET.

ALLOWABLE POTHOLING METHODS INCLUDE VACUUM EXCAVATION AND HAND DIGGING; USE OF A BACKHOE IS NOT PREFERRED. HOWEVER, IF A BACKHOE IS UTILIZED, IT IS ESSENTIAL THAT A SPOTTER BE PRESENT FOR THE ENTIRETY OF THE EXCAVATION. THE CONTRACTOR SHALL ANTICIPATE THE NECESSITY OF HAND DIGGING.

THE CONTRACTOR IS REQUIRED TO COORDINATE WITH OUPS PRIOR TO ANY EXCAVATION ACTIVITY. FACILITY OWNERS THAT DO NOT PARTICIPATE WITH OUPS SHALL BE CONTACTED BY THE CONTRACTOR.

ONCE EXISTING UTILITIES ARE EXPOSED, RECORD THE HORIZONTAL AND VERTICAL POSITIONS, AS WELL AS THE DEPTH BELOW THE SURFACE OF THE SURROUNDING PAVEMENT. MEASUREMENTS SHALL BE TIED INTO A SURVEY BENCHMARK, AND SURVEY COORDINATES PROVIDED.

ONCE THE UTILITY HAS BEEN LOCATED, A POWERED SAW MAY BE USED TO CUT THROUGH EXISTING PAVEMENT. HEAVY EQUIPMENT MAY BE USED TO DIG WITHIN 3 FEET OF THE UTILITY'S LOCATION, OR AS REQUIRED PER THE RESPECTIVE UTILITY'S TOLERANCE ZONE. HEAVY EQUIPMENT MAY ALSO BE USED TO DIG UP TO CONCRETE ENCASEMENT OF A DUCT BANK, ONCE THE EDGES ARE ESTABLISHED BY POTHOLING.

EXPOSED UTILITIES MUST BE PROTECTED THROUGHOUT THE PROJECT DURATION; AS NECESSARY, THE CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT OR SHORING FOR THE EXPOSED UTILITIES, TO ENSURE NO SHIFTING OR SAGGING WHEN THE SURROUNDING SOIL IS REMOVED; AND/OR PLACE BARRIERS TO PROTECT EXPOSED UTILITIES FROM HEAVY AND SHARP ITEMS FALLING INTO THE EXCAVATION.

ONCE THE UNDERGROUND UTILITY IS LOCATED, THE POTHOLE SHOULD BE MANAGED IN THE SAME MANNER AS ANY OTHER OPEN EXCAVATION TO PREVENT WORKER FALLS AND DAMAGE TO ANY EXPOSED UTILITIES: PLACE BARRICADES, TRAFFIC PLATES, OR OTHER MEASURES UNTIL BACKFILL AND RESTORATION IS COMPLETE. BACKFILLING AND RESTORATION OF PAVEMENT OR SURFACING MUST BE IN ACCORDANCE WITH THE DETAILS PROVIDED HEREIN. BACKFILL WILL BE INCLUDED FOR PAYMENT UNDER THIS ITEM OF WORK. PAVEMENT RESTORATION WILL BE PAID FOR UNDER THE RESPECTIVE CMS ITEMS OF WORK PROVIDED HEREIN.

AFTER THE UNDERGROUND UTILITY HAS BEEN LOCATED, THE POTHOLE SHOULD BE RESTORED WITHIN 24 HOURS, OR AS DIRECTED. APPROPRIATE SEDIMENT CONTROLS SHOULD BE UTILIZED DURING ALL POTHOLING ACTIVITIES TO PREVENT STORM WATER POLLUTION. POTHOLES SHOULD BE CLEAN AND DRY PRIOR TO BACKFILLING.

DRILLING MUD OR REMAINING SPOIL SHOULD BE CLEANED UP AND AREA RESTORED TO THE ORIGINAL CONDITION, OR BETTER. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSING IN AN ENVIRONMENTALLY SUITABLE MANNER.

PAYMENT FOR THE WORK DESCRIBED HEREIN SHALL BE MADE AT THE BID UNIT PRICE PER EACH FOR "ITEM SPECIAL - POTHOLING" WHICH PRICE SHALL CONSTITUTE FULL COMPENSATION FOR ALL EQUIPMENT, LABOR, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK, INCLUDING PROFESSIONAL SURVEY LOCATION SERVICES, DISPOSAL OF ANY SPOILS, EXCAVATION, PREMIUM BACKFILL, AND TRAFFIC CONTROL. PAVEMENT RESTORATION WILL BE PAID FOR UNDER RESPECTIVE BID ITEMS HEREIN.

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

ITEM SPECIAL - POTHOLING	*5 EACH*

ITEM SPECIAL - PRE-CONSTRUCTION VIDEO

THE CONTRACTOR SHALL SUBMIT A DVD RECORDING OF THE CONSTRUCTION LIMITS TO THE CITY OF CLEVELAND AND ODOT PRIOR TO ANY WORK. THE RECORDING SHALL TAKE SPECIAL NOTE OF ALL SURFACE FEATURES, INCLUDING BUT NOT LIMITED TO: DRIVEWAYS, TREES, FENCES, LANDSCAPING FEATURES, AND PLANTERS AND SHALL BE TAKEN AFTER A RAIN EVENT. THE RECORDING WILL BE USED TO ASSIST THE ENGINEER IN THE CASE THAT PROPERTY OWNERS CLAIM DAMAGE HAS BEEN DONE TO THEIR PROPERTY BY THE CONTRACTOR DURING CONSTRUCTION. AREAS THAT HAVE BEEN DAMAGED DUE TO CONTRACTOR NEGLIGENCE SHALL BE RESTORED TO IT'S ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY OR THE PROPERTY OWNER.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID PER LUMP SUM FOR ITEM SPECIAL - PRE-CONSTRUCTION VIDEO WHICH PRICE SHALL CONSTITUTE FULL COMPENSATION FOR ALL LABOR, TOOLS, EQUIPMENT, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

HATCH LEGEND

THE FOLLOWING HATCH STYLES ARE FOUND IN THE PLANS, WITH CORRESPONDING ITEM DESCRIPTIONS; SCALES MAY VARY DEPENDING ON SHEET:



ITEM 451 - 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN



ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS, AS PER PLAN



ITEM 608 - 6" CONCRETE WALK, AS PER PLAN



ITEM 659 - SEEDING AND MULCHING, AS PER PLAN
ITEM 670 - SLOPE EROSION PROTECTION, AS PER PLAN

EROSION CONTROL

WATER SUPPLY

WATER WILL BE SUPPLIED TO THE CONTRACTOR AT THE NEAREST HYDRANT. THE COST OF THE WATER SUPPLY SHALL BE BORNE BY THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMIT FROM THE CITY OF CLEVELAND WATER DEPARTMENT.

THE CONTRACTOR WILL BE REQUIRED TO PROVIDE APPROVED STANDARD TIGHT HOUSE AND FITTINGS WITH WHICH TO MAKE CONNECTIONS TO HYDRANTS AND OUTLETS. NO IMPROPER, WASTEFUL, OR UNDUE USE OF WATER WILL BE PERMITTED.

SEEDING AND MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659 - SOIL ANALYSIS TEST	*2 EACH*
ITEM 659 - TOPSOIL	*45 CY*
ITEM 659 - SEEDING AND MULCHING, AS PER PLAN	*395 SY*
ITEM 659 - COMMERCIAL FERTILIZER	*0.05 TON*
ITEM 659 - LIME	*0.08 ACRES*
ITEM 659 - WATER	*2.15 MGAL*

APPLY SEEDING AND MULCHINGS TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF-WAY LINES COVERED BY WORK AGREEMENTS OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEING AND MULCHING ARE BASED ON THESE LIMITS.

ITEM 659 - SEEDING AND MULCHING, AS PER PLAN

ALL REQUIREMENTS OF ODOT CMS ITEM 659 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

SEEDING METHODS SHALL BE RESTRICTED TO HYDRO SEEDING PER ODOT CMS 659.12. SEED MIX SHALL BE COMPRISED OF THE FOLLOWING:

SCIENTIFIC NAME	*COMMON NAME*	*LBS/AC*
LOLIUM MULTIFLORUM	*ANNUAL RYEGRASS*	*12.00*
SCHIZACHYRIUM SCOPARIUM	*LITTLE BLUESTEM*	*15.00*
BOUTELOUA CURTIPENDULA	*SIDEOATS GRAMA*	*14.46*
ELYMUS CANADENSIS	*CANADA WILDRYE*	*6.00*
ELYMUS VIRGINICUS	*VIRGINIA WILDRYE*	*4.20*
AGROSTIS PERENNANS	*AUTUMN BENTGRASS*	*2.40*
PANICUM CLANDESTINUM	*DEERTONGUE*	*1.80*
ECHINACEA PURPUREA	*PURPLE CONEFLOWER*	*0.90*
CHAMAECRISTA FASCICULATA	*PARTRIDGE PEA*	*0.78*
HELIOPSIS HELIANTHOIDES	*OXEYE SUNFLOWER*	*0.72*
COREOPSIS LANCEOLATA	*LANCELEAF COREOPSIS*	*0.60*
RUDBECKIA HIRTA	*BLACKEYED SUSAN*	*0.60*
MONARDA FISTULOSA	*WILD BERGAMOT*	*0.18*
ASCLEPIAS SYRIACA	*COMMON MILKWEED*	*0.12*
SOLIDAGO RUGOSA	*WRINKLELEAF GOLDENROD*	*0.12*
ASTER LATERIFLORUS	*CALICO ASTER*	*0.06*
ASTER PILOSUS	*HEATH ASTER*	*0.06*
	TOTAL:	*60.00*

ITEM 670 - SLOPE EROSION PROTECTION, AS PER PLAN

ALL REQUIREMENTS OF ODOT CMS ITEM 670 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

THIS WORK CONSISTS OF FURNISHING, PLACING, AND MAINTAINING SLOPE EROSION PROTECTION AS SHOWN ON THE PLANS.

AS THE MINIMUM SCOPE OF WORK FOR EROSION PROTECTION MAT, THE CONTRACTOR SHALL INSTALL MATTING MEETING THE REQUIREMENTS BELOW FOR ALL PERMANENT SLOPES 3:1 OR STEEPER WITH IN THE CONSTRUCTION LIMITS.

EROSION PROTECTION MAT SHALL BE ONE OF THE FOLLOWING:

1. *SC3000BD BIODEGRADABLE DOUBLE-NET STRAW-COCONUT*
   BY: ENVIROSCAPE ECM, LTD
   (WWW.STRAWBLANKET.COM)

2. *BIONET SCREEN*
   BY: NORTH AMERICAN GREEN
   (WWW.NAGREEN.COM)

3. *US-2SC NN 70/30 STRAW/COCONUT WITH NATURAL NETTING*
   BY: L&M SUPPLY COMPANY
   (LANDMSUPPLYCO.COM)

THE CONTRACTOR MUST USE ONE OF THE ABOVE MATERIALS. NO MATTING WITH POLYPROPYLENE OR OTHER NON-BIODEGRADABLE MATERIALS SHALL BE PERMITTED FOR USE ANYWHERE ON THE PROJECT INCLUDING FOR TEMPORARY EROSION PROTECTION. PHOTODEGRADABLE MATERIALS ARE NOT PERMITTED. THE ONLY EXCEPTION TO THIS REQUIREMENT SHALL BE WHERE REINFORCED SOIL SLOPES ARE PROPOSED. INSTALL EROSION CONTROL MATS ACCORDING TO ITEM 671.

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

ITEM 670 - SLOPE EROSION PROTECTION, AS PER PLAN	*395 SY*

ITEM 832 - EROSION CONTROL

THE FOLLOWING ESTIMATED QUANTITY IS PROVIDED FOR TEMPORARY SEDIMENT AND EROSION CONTROL (TSEC) IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 832:

ITEM 832 - EROSION CONTROL	*5,000 EACH*

UNLESS OTHERWISE APPROVED BY THE ENGINEER, DAMAGED FILTER FABRIC FENCE SHALL BE REPLACED IN LIEU OF ANY/ALL METHODS OF REPAIR.

GENERAL NOTES

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GN001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS
REVIEWER DEN Date
PROJECT ID 123855
SHEET P.6 TOTAL 82

ENVIRONMENTAL / REMEDIATION

ENDANGERED BAT HABITAT REMOVAL

THIS PROJECT IS LOCATED WITHIN THE KNOWN HABITAT RANGES OF THE FEDERALLY LISTED AND PROTECTED INDIANA BAT, AND NORTHERN LONG-EARED BAT. NO TREES SHALL BE REMOVED UNDER THIS PROJECT FROM APRIL 1 THROUGH SEPTEMBER 30. ALL NECESSARY TREE REMOVAL SHALL OCCUR FROM OCTOBER 1 THROUGH MARCH 31. THIS REQUIREMENT IS NECESSARY TO AVOID AND MINIMIZE IMPACTS TO THESE SPECIES AS REQUIRED BY THE ENDANGERED SPECIES ACT (ESA). FOR THE PURPOSES OF THIS NOTE, A TREE IS DEFINED AS: A LIVE, DYING, OR DEAD WOODY PLANT, WITH A TRUNK 3 INCHES OR GREATER IN DIAMETER AT A HEIGHT OF 4.5 FEET ABOVE THE GROUND SURFACE, AND WITH A MINIMUM HEIGHT OF 13 FEET.

PROTECTION TO PUBLICLY-OWNED PARKS, RECREATION AREAS, AND WILDLIFE AND WATERFOWL REFUGES

IN ACCORDANCE WITH THE DEPARTMENT OF TRANSPORTATION (DOT) ACT OF 1966, THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS ESTABLISHED IN SECTION 4(f), INCLUDING BUT NOT LIMITED TO:

- *ACCESS TO THE CENTENNIAL TRAIL SHALL BE MAINTAINED DURING ALL CONSTRUCTION ACTIVITIES.*
- *TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED ALONG THE PROPOSED CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES, WHERE NECESSARY TO PROTECT THE EXISTING SECTION 4(f) PROPERTY AND THE PUBLIC.*
- *APPROPRIATE SIGNAGE SHALL BE INSTALLED TO ALERT USER OF THE CENTENNIAL TRAIL OF CONSTRUCTION ACTIVITIES, ACCESS RESTRICTIONS OR CLOSURES, AND TO DIRECT USERS TO SECONDARY ACCESS POINTS.*
- *THE CONTRACTOR SHALL BE REQUIRED TO CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH ODOT, THE CLEVELAND FOUNDATION, AND THE CITY OF CLEVELAND PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.*

NO ADVERSE EFFECTS TO THE PROTECTED RECREATIONAL ACTIVITIES, FEATURES, OR ATTRIBUTES ASSOCIATED WITH THE CENTENNIAL TRAIL WILL BE PERMITTED.

ASBESTOS NOTIFICATION

A CERTIFIED ASBESTOS HAZARD EVALUATION SPECIALIST SURVEYED THE BRIDGE STRUCTURE SCHEDULED FOR DEMOLITION AND/OR REHABILITATION; THE SURVEY DETERMINED THAT NO ASBESTOS IS PRESENT ON THE BRIDGE STRUCTURE.

ODOT SHALL PROVIDE A COPY OF THE OHIO ENVIRONMENTAL PROTECTION AGENCY (OEPA) NOTIFICATION OF DEMOLITION AND RENOVATION FORM, PARTIALLY COMPLETED AND SIGNED BY THE BRIDGE OWNER, TO THE SUCCESSFUL BIDDER. THE CONTRACTOR SHALL COMPLETE THE FORM AND SUBMIT IT TO ONE OF THE ADDRESSES BELOW AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION.

ASBESTOS PROGRAM
OHIO EPA, DAPC
P.O. BOX 1049
COLUMBUS, OH 43216-1049

ASBESTOS PROGRAM
OHIO EPA, DAPC
50 W. TOWN ST., SUITE 700
COLUMBUS, OH 43215

THE CONTRACTOR SHALL PROVIDE A COPY OF THE COMPLETED FORM TO THE ENGINEER AT LEAST TEN (10) WORKING DAYS PRIOR TO THE START OF ANY DEMOLITION AND/OR RENOVATION. THE FORM SHALL INCLUDE:

1) THE CONTRACTORS NAME AND ADDRESS

2) THE SCHEDULED DATES FOR THE START AND COMPLETION OF THE BRIDGE REMOVAL

3) A DESCRIPTION OF THE PLANNED DEMOLITION WORK AND THE METHOD(S) TO BE USED

COPIES OF THE OEPA FORM AND BRIDGE INSPECTION REPORT ARE AVAILABLE FOR REVIEW AT:

ODOT DISTRICT 12 OFFICE
5500 TRANSPORTATION BLVD.
GARFIELD HEIGHTS, OHIO 44125

BASIS FOR PAYMENT

THE CONTRACTOR SHALL FURNISH ALL FEES, LABOR, AND MATERIAL NECESSARY TO COMPLETE AND SUBMIT THE OEPA NOTIFICATION FORM. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN:

ITEM 690 - OEPA NOTIFICATION FORM LS

ENVIRONMENTAL COMMITMENTS

THE FOLLOWING ENVIRONMENTAL COMMITMENTS SHALL BE IMPLEMENTED PRIOR TO OR DURING CONSTRUCTION OF THE PROJECT:

- *ACCESS TO THE CENTENNIAL TRAIL SHALL BE MAINTAINED DURING CONSTRUCTION ACTIVITIES.*
- *TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED ALONG PROPOSED CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES WHERE NECESSARY TO PROTECT THE EXISTING SECTION 4(F) PROPERTY AND THE PUBLIC.*
- *APPROPRIATE SIGNAGE SHALL BE INSTALLED TO ALERT USERS OF THE CENTENNIAL TRAIL OF CONSTRUCTION ACTIVITIES, ACCESS RESTRICTIONS, OR CLOSURES, AND TO DIRECT USERS TO SECONDARY ACCESS POINTS.*
- *THE CONTRACTOR SHALL BE REQUIRED TO CLOSELY COORDINATE THE CONSTRUCTION SCHEDULE WITH ODOT, THE CLEVELAND FOUNDATION, AND THE CITY OF CLEVELAND PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.*

DRAINAGE

CROSSING 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, LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE 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, NOTIFY THE ENGINEER 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, NOTIFY THE ENGINEER 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 IS INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEM.

REVIEW OF DRAINAGE FACILITIES

PRIOR TO THE START OF WORK AND AGAIN BEFORE FINAL ACCEPTANCE, PERFORM AN INSPECTION WITH REPRESENTATIVES OF THE DEPARTMENT, CONTRACTOR AND LOCALS OF ALL EXISTING DRAINAGE FACILITIES THAT ARE TO REMAIN IN SERVICE WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES IS DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION ARE MAINTAINED BY THE DEPARTMENT.

CONFIRM ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE-MENTIONED PARTIES ARE MAINTAINED AND LEFT IN A CONDITION COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR IS RESPONSIBLE TO CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THEIR OPERATIONS AS DIRECTED AND APPROVED BY THE ENGINEER.

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

ITEM 605 - 6" BASE PIPE UNDERDRAINS, AS PER PLAN

ALL REQUIREMENTS OF ODOT CMS ITEM 605 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

UNDERDRAINS SHALL HAVE A MINIMUM OF 3 ROWS OF PERFORATIONS, LOCATED ON THE BOTTOM HALF OF THE PIPE.

ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN

ALL REQUIREMENTS OF ODOT CMS ITEM 605 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

UNDERDRAINS SHALL HAVE A MINIMUM OF 3 ROWS OF PERFORATIONS, LOCATED ON THE BOTTOM HALF OF THE PIPE.

MATCH EXISTING DEPTH OF ADJACENT UNDERDRAINS TO PROVIDE UNOBSTRUCTED OUTLET.

DRAINAGE DISCHARGE CONTINUANCE

FURNISH A DRAINAGE DISCHARGE CONTINUANCE FOR ANY DRAINAGE DISCHARGE DISTURBED BY THE WORK AND NOT SHOWN IN THE PLANS. THE LOCATION, TYPE (CONDUIT OR SWALE), SIZE AND GRADE OF THE DRAINAGE DISCHARGE CONTINUANCE WILL BE AGREED TO BY THE ENGINEER.

FURNISH AN INSPECTION WELL AT THE RIGHT OF WAY LINE IN PER STANDARD CONSTRUCTION DRAWING DM-3.1 FOR EACH DRAINAGE DISCHARGE THAT OUTLETS THROUGH A CURB OPENING OR INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST IS INCLUDED IN ITEM 611, INSPECTION WELL.

FURNISH A WELL GRADED TRANSITION BETWEEN THE DITCH AND THE SWALE WHEN OUTLETTING A SWALE TO A DITCH. THE COST FOR THE GRADED TRANSITION IS INCLUDED IN ITEM 203, EMBANKMENT, AS PER PLAN.

FURNISH AN EROSION CONTROL PAD AS SHOWN IN STANDARD CONSTRUCTION DRAWING DM-1.1 WHEN OUTLETTING A CONDUIT TO A DITCH. THE COST FOR THE EROSION CONTROL PAD IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE.

FURNISH A DRILLED HOLE OR A CURB SECTION WHEN OUTLETTING A CONDUIT THROUGH A CURB OPENING. THE COST OF DRILLING OR FURNISHING THE CURB SECTION WITH HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE.

FURNISH A DRILLED CORE HOLE WHEN OUTLETTING INTO A STORM SEWER OR DRAINAGE STRUCTURE. THE COST OF THE DRILLED CORE HOLE IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE.

DOCUMENTATION

PROVIDE WRITTEN DOCUMENTATION TO THE ENGINEER AND TO THE DISTRICT R/W PERMIT OFFICE. THE DOCUMENTATION INCLUDES THE CONSTRUCTION PROJECT NUMBER, PID, COUNTY, ROUTE, SECTION, LATITUDE AND LONGITUDE OF THE DRAINAGE DISCHARGE AT THE R/W, THE NAME OF PROPERTY OWNER WITH ADDRESS, THE DATE THE DRAINAGE DISCHARGE WAS LOCATED, THE DATE THE DRAINAGE DISCHARGE CONTINUANCE WAS FURNISHED, A DETAILED DESCRIPTION OF THE WORK AND PICTURES OF THE DRAINAGE DISCHARGE CONTINUANCE (IN PDF OR JPEG FORMAT). THE DOCUMENTATION IS INCLUDED IN ITEM 611, CONDUIT, MISC TYPE C/E/F FOR DRAINAGE DISCHARGE CONTINUANCE OR ITEM 203, EMBANKMENT, AS PER PLAN

DRAINAGE DISCHARGE CONTINUANCE REMOVAL

THE ENGINEER MAY REQUIRE THE NEWLY INSTALLED DRAINAGE DISCHARGE CONTINUANCE TO BE REMOVED.

REMOVE THE NEWLY INSTALLED CONDUIT AND ANY EXISTING CONDUIT TO THE RIGHT OF WAY LINE. FOR CONDUIT THAT OUTLETS THROUGH THE CURB, RESTORE THE CURB BY FILLING THE HOLE WITH CLASS QC 1 CONCRETE OR REPLACE THE CURB SECTION. FOR CONDUIT THAT OUTLETS TO A STORM SEWER OR DRAINAGE STRUCTURE LEAVE 6 INCHES PROTRUDING OUTSIDE OF THE CONDUIT. PLUG THE PROTRUDING CONDUIT WITH EITHER A MANUFACTURED CAP OR CLASS QC 1 CONCRETE. FOR CONDUIT THAT OUTLETS TO THE DITCH REMOVE THE EROSION CONTROL PAD. RESTORE ALL AREAS AS REQUIRED. PLUG THE EXISTING CONDUIT REGARDLESS OF SIZE AT THE RIGHT OF WAY LINE WITH CLASS QC 1 CONCRETE AND RESTORE ALL AREAS AS REQUIRED. ALL COSTS ARE INCLUDED IN ITEM 202, REMOVAL MISC.: CONDUIT.

DAM THE SWALE THAT OUTLETS TO THE DITCH AT THE R/W AS DIRECTED BY THE ENGINEER. ALL COSTS ARE INCLUDED IN ITEM 203, EMBANKMENT AS PER PLAN

REMOVE THE INSPECTION WELL AND RESTORE ALL AREAS AS REQUIRED. THE COST IS INCLUDED IN ITEM 202, REMOVAL MISC.: INSPECTION WELL.

CONDUIT MATERIAL TYPES

THE FOLLOWING CONDUIT MATERIAL TYPES ARE PERMITTED: 706.08 ES WITH PREMIUM JOINTS.

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeWeese, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeWeese, Inc. 2025

DESIGNER ERS
REVIEWER DEN Date
PROJECT ID 123855
SHEET P.7 TOTAL 82

DRAINAGE (CONT'D)

PAY ITEMS
EACH OF THE PAY ITEMS LISTED BELOW FOR CONDUIT MISCELLANEOUS TYPES B, C, E, AND F FOR DRAINAGE DISCHARGE CONTINUANCE INCLUDE CONDUIT SIZES 2 INCH TO 10 INCH. THERE IS NO COST DIFFERENTIATION FOR SIZE IN THESE PAY ITEMS.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER IN MAKING THE ABOVE DRAINAGE DISCHARGE CONTINUANCE:

ITEM 202 - REMOVAL MISC.: CONDUIT	*100 FT*
ITEM 202 - REMOVAL MISC.: INSPECTION WELL	*2 EACH*
ITEM 203 - EMBANKMENT, AS PER PLAN	*10 CY*
ITEM 611 - INSPECTION WELL	*2 EACH*
ITEM 611 - CONDUIT, MISC.: TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	*50 FT*
ITEM 611 - CONDUIT, MISC.: TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE	*50 FT*
ITEM 611 - CONDUIT, MISC.: TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE	*50 FT*

ITEM 611 - CATCH BASIN GRATE, AS PER PLAN
MODIFY EXISTING CATCH BASINS BY REPLACING THE EXISTING GRATES WITH BICYCLE SAFE GRATES. QUANTITIES AND LOCATIONS ARE SHOWN IN THE PLANS AND ARE PAID FOR AT THE CONTRACT PRICE FOR ITEM 611, CATCH BASIN GRATE, AS PER PLAN, EACH.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER FOR REPLACEMENT OF EXISTING CATCH BASIN GRATES WITH BICYCLE SAFE GRATES:

ITEM 611 - CATCH BASIN GRATE, AS PER PLAN	*3 EACH*

ITEM SPECIAL - MISCELLANEOUS METAL
EXISTING CASTINGS MAY PROVE TO BE UNSUITABLE FOR REUSE, AS DETERMINED BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE CASTINGS OF THE REQUIRED TYPE, SIZE AND STRENGTH (HEAVY OR LIGHT DUTY) FOR THE PARTICULAR STRUCTURE IN QUESTION. FURNISH MATERIALS PER 611 WITH PRIOR APPROVAL OF THE ENGINEER.

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

ITEM SPECIAL - MISCELLANEOUS METAL	*3,750 LB*

REPLACE EXISTING CASTINGS DAMAGED BY CONTRACTOR NEGLIGENCE, AS DETERMINED BY THE ENGINEER, AT THE EXPENSE OF THE CONTRACTOR.

ITEM 611 - DRAINAGE STRUCTURE, MISC.:
INSPECTION WELL ADJUSTED TO GRADE
ALL REQUIREMENTS OF ODOT CMS ITEM 611 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

CLEAN OUTS/INSPECTION WELLS/TEST TEES DESIGNATED UNDER THIS ITEM SHALL BE ADJUSTED TO GRADE IN ACCORDANCE WITH THE CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS -- MUNICIPAL ENGINEERS ASSOCIATION OF NE OHIO UNIFORM STANDARDS AND SCD "CLEANOUT" AND "TEST TEE/CLEANOUT COVER IN PAVEMENT."

ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1)
A CONTINGENCY QUANTITY FOR ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1) HAS BEEN CARRIED THROUGH TO THE GENERAL SUMMARY, FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 613 - LOW STRENGTH MORTAR BACKFILL (TYPE 1)	*100 CY*

PAVEMENT

CONTRACTION AND/OR EXPANSION JOINTS
ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVED OF THE SPECIFICATIONS IS INTENDED. IN ALL CASES, THE PROVISION OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES INCLUDING THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS IS IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING
WHERE NEW CONCRETE IS PLACED ADJACENT TO AND TIED TO EXISTING CONCRETE, THE CONTRACTION JOINT SPACING REQUIRED IN STANDARD CONSTRUCTION DRAWING BP-2.2 WILL BE WAIVED. CONSTRUCT CONTRACTION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL CONTRACTION JOINTS IN THE EXISTING CONCRETE PAVEMENT. INSTALL EXPANSION JOINTS IN THE NEW CONCRETE PAVEMENT TO FORM A CONTINUOUS LINE WITH ALL EXPANSION JOINTS IN THE EXISTING CONCRETE PAVEMENT.

CONCRETE MIX DESIGN FOR CLASS QC MS CONCRETE
ALL APPLICABLE WORK ITEMS SHALL BE BID USING THE CONCRETE MIX DESIGN SPECIFIED IN THIS SECTION. UNDER THIS SECTION OF THESE SPECIFICATIONS THE CONTRACTOR IS REQUIRED TO SUBMIT A CONCRETE DESIGN MIX FOR CLASS QC MS CONCRETE, AS HEREIN MODIFIED.

REQUIREMENT	*DESCRIPTION*
MINIMUM COMPRESSIVE STRENGTH	*400 PSI MODULUS OF RUPTURE AS PER ASTM C-78 IN 24 HOURS. THE RESULTS OF THE 24 HOUR BEAM TEST SHALL BE FURNISHED IN ADDITION TO THE RESULTS OF THE TWENTY-EIGHT (28) DAY CYLINDER TESTS.*
MINIMUM CEMENT CONTENT	*800 LBS. PORTLAND CEMENT, ONLY; FLY ASH OR AN ADDITIONAL AGGREGATE SHALL NOT BE USED AS A SUBSTITUTE FOR THE CEMENT*
WATER CEMENT RATIO	*0.43 MAXIMUM*

CALCIUM CHLORIDE SHALL NOT BE USED IN THIS DESIGN MIX.

ITEM 304 - AGGREGATE BASE, AS PER PLAN
ALL REQUIREMENTS OF ODOT CMS ITEM 304 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

FURNISH MATERIALS PER ODOT ITEM 703.17. USE OF GRANULATED SLAG, STEEL SLAG, AIR COOLED BLAST FURNACE SLAG, RECYCLED CONCRETE, OR RECYCLED ASPHALT SHALL NOT BE PERMITTED.

ITEM 451 - 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN
ALL REQUIREMENTS OF ODOT CMS ITEM 451 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

IN LIEU OF WELDED WIRE MESH, CONCRETE PAVEMENT SHALL BE FIBER REINFORCED WITH TYPE III SYNTHETIC, NON-METALLIC FIBERS, IN ACCORDANCE WITH ODOT CMS 705.29. FURNISH MATERIALS IN ACCORDANCE WITH THE ODOT QUALIFIED PRODUCT LIST.

LOAD TRANSFER DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH ODOT SCD BP-2.1 AND BP-2.2.

ITEM 609 - CURB, TYPE 2A, AS PER PLAN
ALL REQUIREMENTS OF ODOT CMS ITEM 609 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

CONSTRUCT CURB, TYPE 2A IN ACCORDANCE WITH ODOT SCD BP-5.1 AND SHALL BE CONSTRUCTED INTEGRAL TO THE CONCRETE PAVEMENT.

ITEM 609 - CURB, MISC.: MOUNTABLE CURB
ALL REQUIREMENTS OF ODOT CMS ITEM 609 SHALL APPLY EXCEPT AS MODIFIED HEREIN.

CONSTRUCT MOUNTABLE CURB IN ACCORDANCE WITH CITY OF CLEVELAND, DEPARTMENT OF ENGINEERING & CONSTRUCTION SCD CONC 1, "MOUNTABLE CURB."

DRIVEWAY REPAIR OPERATIONS
THE CLASS QC CONCRETE FOR NEW DRIVEWAYS SHALL CONFORM TO THE REQUIREMENTS IN THE "CONCRETE MIX DESIGN FOR CLASS QC MS CONCRETE" GENERAL NOTE.

RESIDENTIAL DRIVES SHALL BE 6 INCH THICKNESS AND COMMERCIAL DRIVES SHALL BE 8 INCH THICKNESS, IN ACCORDANCE WITH ODOT CMS 452. DRIVE TYPES HAVE BEEN IDENTIFIED ON THE PLANS AND SHOULD BE INSTALLED, AS DIRECTED BY THE ENGINEER. FLARES SHALL BE IN ACCORDANCE WITH CITY OF CLEVELAND, STANDARD CONSTRUCTION DRAWINGS CD 1, AS DIRECTED BY THE ENGINEER.

ALL APRONS SHALL BE CONSTRUCTED ON A COMPACTED SUBGRADE IN ACCORDANCE WITH ODOT CMS 204.03, AND SET UPON A 2" COMPACTED SCREENING BED, MEETING THE REQUIREMENTS OF ODOT CMS 703.10 (LIMITED TO CRUSHED STONE). THE COST OF ALL LABOR, MATERIALS, AND EQUIPMENT REQUIRED TO SAWCUT, EXCAVATE, PLACE, AND COMPACT SCREENINGS BED, LAYOUT, FORM WORK, AND PLACEMENT OF NEW CONCRETE APRONS, SHALL BE INCLUDED IN THE COST OF THE APRONS.

WATER WORK

WATER WORK
ALL WATER WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DRAWINGS OF THE CITY OF CLEVELAND, DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER (CWD), 1201 LAKESIDE AVENUE, CLEVELAND, OHIO. THE COST OF ALL LABOR, MATERIAL, EQUIPMENT, TOOLS, EXCAVATION, BEDDING, AND BACKFILL FOR THE WATER WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR EACH WATER WORK ITEM. THE REPLACEMENT OF PAVEMENT, WALKS, DRIVES, LANDSCAPING, AND ALL OTHER WORK EXCEPT THE "WATER WORK" ITSELF, SHALL BE AS STIPULATED IN THE CONTRACT SPECIFICATIONS.

ALL PERMITS, FEES, AND CWD CHARGES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND THEIR ASSOCIATED COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE PERTINENT WATER WORK ITEMS. FOR BIDDING PURPOSES, THE CLEVELAND DIVISION OF WATER CHARGES AND FEES MAY BE OBTAINED FROM CWD'S WEBSITE AT:

http://www.clevelandwater.com/construction/construction-fees

ITEM 638 - WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE
ALL WATER METER MANHOLES CASTINGS SHALL BE BROUGHT TO PROPER GRADE BY THE CONTRACTOR BY ADJUSTING SAID CASTINGS WITH MORTAR, BRICK, OR STONE AS MAY BE DIRECTED. NO ADJUSTING RINGS OR BANDS WILL BE PERMITTED.

WATER WORK ITEMS WILL BE ADJUSTED IN ACCORDANCE WITH CITY OF CLEVELAND DIVISION OF WATER STANDARDS, NOTES, AND DETAILS.

THE PRICE PAID FOR BRINGING EACH STREET CASTING TO LINE AND GRADE SHALL BE THE CONTRACTOR'S UNIT PRICE BID FOR EACH AND SHALL INCLUDE ALL LABOR AND MATERIAL NECESSARY FOR THIS WORK.

CARE SHALL BE EXERCISED IN MOVING THE CASTINGS SO AS NOT TO DAMAGE THE CASTINGS OR THE STRUCTURE. DAMAGED CASTINGS OR STRUCTURES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

CHANGES TO GRADE MAY OCCUR AT EXISTING STRUCTURES DUE TO PROPOSED WORK. WITH A DECREASE OF GRADE NOT MORE THAN 6 INCHES OR AN INCREASE IN GRADE OF NOT MORE THAN 12 INCHES, THE EXISTING STRUCTURE SHOULD BE ADJUSTED TO GRADE. WHERE GRADE ELEVATION CHANGES ARE GREATER, THE EXISTING STRUCTURE SHOULD BE RECONSTRUCTED TO GRADE.

PAYMENT FOR THE WORK SHALL BE UNDER THE APPLICABLE 638 ITEM(S) FOR RECONSTRUCTING CASTINGS TO GRADE, AS PER PLAN.

GENERAL NOTES

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GN001.dwg

DESIGN AGENCY
GPD GROUP®
Gleus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Gleus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER	ERS
REVIEWER	DEN Date
PROJECT ID	123855
SHEET	P.8
TOTAL	82

TRAFFIC CONTROL

SIGNING RESTORATION

THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE THE EXISTING "RESIDENTIAL PERMIT MARKING" SIGNS TO THEIR ORIGINAL LOCATIONS ONCE CONSTRUCTION IS COMPLETE. TWO (2) SIGNS ARE LOCATED BEHIND THE EXISTING RAILING ON THE EAST SIDE OF THE ROAD AND THE TWO (2) SIGNS ARE LOCATED IN THE SIDEWALK ON THE WEST SIDE OF THE ROAD. ADDITIONALLY, THE R5-1 "DO NOT ENTER" SIGN SHALL BE REMOVED FROM THE TREE PIT AT STA. 10+33, 23' LT. A PROPOSED R5-1-30 "DO NOT ENTER" SIGN SHALL BE INSTALLED AT STA. 10+75, 23' LT.

UNLESS DIRECTED OTHERWISE DIRECTED BY THE ENGINEER, THE FINAL SIGN LOCATIONS SHALL BE RESTORED IN THEIR ORIGINAL LOCATION. FINAL LOCATIONS SHALL BE APPROVED BY THE CITY OF CLEVELAND IN THE FIELD.

ON THE EAST SIDE, THE EXISTING FLAT SHEET SIGNS SHALL BE REMOVED AND REERECTED ON A NEW SUPPORT BEHIND THE PROPOSED GUARDRAIL. THE CONTRACTOR SHALL TAKE GREAT CARE TO NOT DAMAGE THE SIGNS DURING CONSTRUCTION. IF THE ENGINEER HAS DETERMINED THE ITEMS HAVE BEEN DAMAGED, THE CONTRACTOR SHALL REPLACE THE ITEMS, IN LIKE KIND, AT THE CONTRACTOR'S COST.

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 3 POST	*65.0 FT*
ITEM 630 - SIGN POST REFLECTOR	*1 EACH*
ITEM 630 - SIGN, FLAT SHEET	*6.3 SF*
ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	*1 EACH*
ITEM 630 - REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	*4 EACH*
ITEM 630 - REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	*5 EACH*

PAVEMENT MARKING RESTORATION

THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE THE PAVEMENT MARKINGS TO THEIR ORIGINAL STATE.

IN LIEU OF A PAVEMENT MARKING PLAN, THE CONTRACTOR SHALL, PRIOR TO THE START OF CONSTRUCTION, PREPARE AN INVENTORY AND LOG ALL EXISTING PAVEMENT MARKINGS FOR USE IN RESTORING THE MARKINGS AT THE END OF CONSTRUCTION. THE CONTRACTOR SHALL DELIVER TWO (2) COPIES OF THE INVENTORY AND LOG TO THE ENGINEER BEFORE BEGINNING ANY PAVEMENT REMOVALS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE VARIOUS FINAL PAVEMENT MARKINGS, INCLUDING LOCATION OF NO PASSING ZONES, CENTER LINES, EDGE LINES, AND STOP LINES ON THE PROPOSED PAVEMENT IN ACCORDANCE WITH SECTION 641.06.

UNLESS DIRECTED OTHERWISE DIRECTED BY THE ENGINEER, THE FINAL PAVEMENT MARKINGS SHALL BE RESTORED IN THEIR ORIGINAL PATTERNS AND LOCATION. FINAL LOCATION OF ALL PAVEMENT MARKINGS (PRE-LINE LAYOUT) SHALL BE APPROVED BY THE CITY OF CLEVELAND IN THE FIELD.

IN ADDITION, THE CONTRACTOR SHALL REPLACE THE EXISTING CROSSWALK, YELLOW EDGE LINES AND YELLOW TRANSVERSE MARKINGS IN THE NO PARKING ZONE ON THE NORTH SIDE OF THE PROJECT LIMITS AT APPROXIMATELY STA. 10+90.

THE COST OF LOGGING AND PREMARKING SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS PAVEMENT MARKINGS ITEMS. NO SEPARATE PAYMENT WILL BE MADE.

ITEM 646 - EDGE LINE, 4"	*0.01 MILE*
ITEM 646 - CROSSWALK LINE, 12"	*56 FT*
ITEM 646 - TRANSVERSE/DIAGONAL LINE	*80 FT*
ITEM 646 - PARKING LOT STALL MARKING	*315 FT*

INCIDENTALS

ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN

A TYPE B FIELD OFFICE IS REQUIRED FOR THIS PROJECT. THE FOLLOWING REVISIONS TO EQUIPMENT SUPPLIED WITH THE TYPE B FIELD OFFICE, AS SPECIFIED IN TABLE 619.02-1, FIELD OFFICE, SHALL APPLY: THE COPIER SUPPLIED MUST MEET THE REQUIREMENTS OF COPIER SUPPLIED WITH THE TYPE C FIELD OFFICE. THE BROADBAND INTERNET CONNECTION MUST MEET THE REQUIREMENTS OF THE MINIMUM DOWNLOAD SPEEDS SUPPLIED WITH THE TYPE C FIELD OFFICE. ALL OTHER FIELD OFFICE ITEMS SUPPLIED SHALL MEET THE REQUIREMENTS OF A TYPE B, FIELD OFFICE.

THE FOLLOWING QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 619 - FIELD OFFICE, TYPE B, AS PER PLAN	*6 MNTH*

ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING

PER CMS 623.04 AND 623.05, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING MONUMENT ASSEMBLIES PRIOR TO BEGINNING ANY PAVEMENT WORK AND AFTER PROJECT COMPLETION. A PRE-INSPECTION REPORT TO BE SUBMITTED PRIOR TO COMMENCEMENT OF WORK AND POST-CONSTRUCTION REPORT SUBMITTED PRIOR TO OR IN CONJUNCTION WITH THE FINAL INSPECTION TO THE DISTRICT SURVEY OPERATIONS MANAGER. EXISTING MONUMENTATION SHALL BE PRESERVED AND PERPETUATED THROUGHOUT THE PROJECT.

THE DEPARTMENT'S STANDARDIZED VERIFICATION REPORT TEMPLATE CAN BE FOUND AT THE FOLLOWING LOCATION:

https://www.dot.state.oh.us/divisions/constructionmgt/documents

ALL LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS NEEDED TO COMPLETE THIS WORK SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR ITEM 623 - CONSTRUCTION LAYOUT STAKES AND SURVEYING.

ANY MONUMENT ASSEMBLY THAT IS IMMEDIATELY VISIBLE ON THE SURFACE OF THE EXISTING PAVEMENT OR IS UNCOVERED DURING THE PLANNING PROCESS SHALL BE ADJUSTED TO GRADE OR, IF SUBSTANTIAL DETERIORATION IS DETERMINED BY THE ENGINEER, RECONSTRUCTED TO GRADE. THESE ADJUSTMENTS AND RECONSTRUCTIONS SHALL BE PAID FOR UNDER THE PERTINENT 623 PAY ITEMS.

ITEM 623 - PRECONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	*LS*
ITEM 623 - POST CONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	*LS*

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
DESIGNER
ERS
REVIEWER
DEN 08/04/25
PROJECT ID
123855
SHEET P.9
TOTAL 82

NOTIFICATION AND CONTACTS

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING ENTITIES AT LEAST FOURTEEN (14) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITIES. INCLUDED IN THE NOTIFICATION SHALL BE THE PROJECTED DATES AND THE TIME FRAMES OF ANY ROAD CLOSURES OR DETOURS.

1. CLEVELAND DIVISION OF POLICE SECOND DISTRICT
   3841 FULTON ROAD
   CLEVELAND, OHIO 44109
   (216) 623-5200

2. CLEVELAND DIVISION OF FIRE
   1645 SUPERIOR AVENUE
   CLEVELAND, OHIO 44114
   (216) 664-6800

3. CLEVELAND PUBLIC WORKS DEPARTMENT
   500 LAKESIDE AVENUE
   CLEVELAND, OHIO 44114
   (216) 664-2485

4. CLEVELAND METROPOLITAN SCHOOL DISTRICT
   BOARD OF EDUCATION
   1111 SUPERIOR AVENUE, EAST, SUITE 1800
   CLEVELAND, OHIO 44114
   (216) 838-0000

SEQUENCE OF CONSTRUCTION

PHASE 1

THE CONTRACTOR SHALL MAINTAIN ALL TRAFFIC AND PARKING DURING THE CONSTRUCTION OF THE BRIDGE IMPROVEMENTS TO THE DETROIT AVENUE BRIDGE.

PHASE 2

THE CONTRACTOR SHALL CLOSE AND DETOUR DETROIT AVENUE AS DETAILED ON SHEET P.12. THE CONTRACTOR SHALL CONSTRUCT ALL OF THE ROADWAY IMPROVEMENTS.

PHASE 1 AND PHASE 2 MAY BE CONSTRUCTED CONCURRENTLY.

WORK HOUR DESCRIPTIONS

OFF-PEAK HOURS ARE DEFINED AS ANY PERIOD OTHER THAN 6:00-9:00 AM AND 4:00-7:00 PM (MONDAY THRU FRIDAY).

NIGHTTIME HOURS ARE DEFINED AS BETWEEN 8:00 PM AND 6:00 AM.

TEMPORARY NO PARKING SIGNS

EXISTING ON-STREET PARKING WHICH CONFLICTS WITH PROPOSED CONSTRUCTION OR WITH PROCEDURES FOR THE MAINTENANCE OF TRAFFIC SHALL BE TEMPORARILY PROHIBITED. THE CONTRACTOR SHALL SUPPLY AND ERECT R7-1-12 "NO PARKING" SIGNS AT LOCATIONS DETERMINED BY THE CITY OF CLEVELAND TRAFFIC ENGINEER. THE CONTRACTOR SHALL COVER EXISTING CONFLICTING PARKING SIGNS. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - MAINTAINING TRAFFIC.

ITEM 614 - MAINTAINING TRAFFIC

THE MAKING OF THIS IMPROVEMENT REQUIRES THAT DETROIT AVENUE BE TEMPORARILY CLOSED AND TRAFFIC DETOURED AS SHOWN IN THE MAINTENANCE OF TRAFFIC PLANS.

THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY DRIVEWAY ACCESS TO ALL ABUTTING PROPERTIES AT ALL TIMES. THE CONTRACTOR SHALL ALSO MAINTAIN ADEQUATE PEDESTRIAN WALKS AT ALL INTERSECTIONS AND ALONG ONE SIDE OF THE STREET AFFECTED BY CONSTRUCTION, AS DIRECTED BY THE ENGINEER.

ALL WORK ZONE TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, LIGHTING, FLAGGERS, PAVEMENT MARKINGS, DRUMS, DETOUR SIGNS, ETC. SHALL BE PROVIDED SO AS TO AVOID DAMAGE AND/OR INJURY TO VEHICLES AND PERSONS USING THE ROADWAY DURING CONSTRUCTION.

EXISTING TRAFFIC CONTROL DEVICES (SIGNS AND/OR TRAFFIC SIGNALS), LOCATED WITHIN THE WORK AREA WHICH ARE REQUIRED FOR INTERIM OR PERMANENT TRAFFIC CONTROL, SHALL BE RELOCATED TO POINTS APPROVED BY THE ENGINEER. APPROPRIATE TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED IN COMPLIANCE WITH THE OMUTCD AT ALL TIMES WHILE TRAFFIC IS MAINTAINED.

THE CONTRACTOR SHALL DIVERT TRAFFIC FROM NORMAL CHANNELS BY THE USE OF PLASTIC DRUMS, FLASHING ARROW BOARDS COMPLYING WITH ODOT CMS 614 AND WORK ZONE SIGNS AND PAVEMENT MARKINGS.

THE PLACEMENT OF THE SIGNS AND THE DRUMS SHALL BE MADE SIMULTANEOUSLY. NO DRUMS SHALL BE PLACED WITHOUT PROPER SIGNAGE IN PLACE. CONFLICTING SIGNING SHALL BE COVERED.

PAYMENTS FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC (UNLESS SEPARATELY ITEMIZED IN THE PLAN).

ALL WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (OMUTCD) CURRENT EDITION, LATEST REVISION. ALL WORK ZONE SIGNS, SUPPORTS, PAVEMENT MARKINGS, AND OTHER WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR. MERGING TAPER LENGTHS AND SHIFTING TAPER LENGTHS SHALL BE CALCULATED USING THE EQUATIONS SHOWN IN THE OMUTCD, SECTION 6C.08.

DUST CONTROL

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616 - WATER 10 MGAL

FAILURE TO COMPLY

IF THERE IS ANY FAILURE TO COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AS OUTLINED IN THESE PLANS AND NOTES OR WITH THE PROVISIONS OF THE OMUTCD, THE ROADWAY IN THE VICINITY OF THE WORK AREA SHALL NOT BE CONSIDERED TO BE IN A CONDITION FOR SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC. ANY FAILURE TO KEEP THE ROADWAY IN THE VICINITY OF THE WORK AREA IN A CONDITION FOR THE SAFE AND CONVENIENT USE BY THE TRAVELING PUBLIC SHALL BE CONSIDERED A BREACH OF CONTRACT. WORK SHALL BE SUSPENDED UNTIL THE CONTRACTOR COMPLIES WITH THE PROVISIONS OF THE AFOREMENTIONED ITEMS.

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

NOTICE OF CLOSURE SIGN TIME TABLE		
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC
ROAD CLOSURE	≥ 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE
	≤ 12 HOURS	2 BUSINESS DAYS PRIOR TO CLOSURE

THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - MAINTAINING TRAFFIC.

PEDESTRIAN ACCESS

DURING TEMPORARY CLOSURE OR RELOCATION OF SIDEWALKS AND OTHER PEDESTRIAN FACILITIES, TEMPORARY PEDESTRIAN ACCESS FACILITIES SHALL BE PROVIDED. THESE FACILITIES SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING FACILITY. PEDESTRIAN SIDEWALK CLOSURES, CROSSWALK CLOSURES AND PEDESTRIAN DETOURS OR BYPASSES SHALL BE INSTALLED IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING MT-110.10.

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE, BUT IS NOT LIMITED TO, ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

NOTIFICATION OF TRAFFIC RESTRICTIONS TIME TABLE		
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD CLOSURES	>= 2 WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	<= 12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
LANE CLOSURES & RESTRICTIONS	>= 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
	< 2 WEEKS	5 BUSINESS DAYS PRIOR TO CLOSURE
START OF CONSTRUCTION & TRAFFIC PATTERN CHANGES	N/A	14 CALENDAR DAYS PRIOR TO CLOSURE

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

TRAFFIC SIGNING

ADVANCE TRAFFIC SIGNING, INCLUDING DETOUR SIGNING, CONSTRUCTION WORK ZONE APPROACH SIGNING, BARRICADES AND SIGNS ON BARRICADES BEYOND THE WORK LIMITS SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR.

PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC AND SHALL INCLUDE FURNISHING, ERECTING, MAINTAINING AND REMOVING THE SIGNS INCLUDING SUPPORTS.

COOPERATION BETWEEN CONTRACTORS - CONDOMINIUMS AT STONEBRIDGE

THE CONTRACTOR SHALL BE ADVISED THE CONDOMINIUMS AT STONEBRIDGE MAY HAVE AN ONGOING PROJECT IN THE AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL COORDINATE WITH THE CONTRACTOR TO DETERMINE A SCHEDULE THAT WILL LEAST IMPACT BOTH PROJECTS. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

CONTACT:
NATE RAKOCZY - ARCHITECTURAL SIDING, TRIM AND ROOFING, INC.
216-769-5246

MAINTENANCE OF TRAFFIC NOTES

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\MOT\Sheets\123855_MN001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER SRT
REVIEWER AKF 12/19/25
PROJECT ID 123855
SHEET P.10 TOTAL 82

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 FOUR (4) 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.

ITEM 614 - PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN (CONTINUED)

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 10 SNMT

ASSUMING 2 PCMS SIGN(S) FOR 5 MONTH(S)

COORDINATION

THE ENGINEER AND THE CONTRACTOR SHALL WORK WITH THE LOCAL BUSINESS OWNERS AND RESIDENTS TO ENSURE ACCESS TO ALL PROPERTIES AT ALL TIMES. HOWEVER, SOME INCONVENIENCES WILL OCCUR. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE COORDINATION OR PROVIDING ACCESS TO THE BUSINESSES AND RESIDENCES.

DRIVEWAY ACCESS

THIS WORK SHALL BE IN CONJUNCTION WITH ITEM 614 - MAINTAINING TRAFFIC AND ALL COSTS INCURRED FOR THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM BID FOR MAINTAINING TRAFFIC. NO ADDITIONAL PAYMENTS WILL BE MADE. ACCESS TO ALL PROPERTIES, INCLUDING RESIDENCES AND BUSINESSES, SHALL BE MADE AVAILABLE AT ALL TIMES DURING CONSTRUCTION.

THE CONTRACTOR SHALL MAKE AVAILABLE DURING CONSTRUCTION, STEEL PLATES, BRIDGES OR OTHER MEANS APPROVED BY THE ENGINEER TO BRIDGE ACROSS THE ROADWAY CONSTRUCTION, TO PROVIDE FULL TIME ACCESS (TWENTY-FOUR (24) HOURS, SEVEN (7) DAYS A WEEK) TO DRIVEWAYS THAT REQUIRE ACCESS. ALL DRIVEWAY CLOSURES AND/OR APRON WORK SHALL BE CONSTRUCTED IN ALTERNATING INTERVALS IN ORDER TO ELIMINATE ABUTTING PROPERTY OWNERS HAVING BOTH OF THEIR DRIVEWAYS CLOSED.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW SHALL NOT BE PERMITTED AT PROJECT COST NOR TIME COMPENSATION. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS AND/OR IN CONTRARY TO OTHER TRAFFIC CONTROL DEVICES IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614 - LAW ENFORCEMENT OFFICER WITH
PATROL CAR FOR ASSISTANCE 16 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS (CONTINUED)

THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR LEOS WITH:

CITY OF CLEVELAND DEPARTMENT OF PUBLIC SAFETY
DIVISION OF POLICE
1300 ONTARIO STREET
CLEVELAND, OHIO 44114
(216) 623-5000

CENTENNIAL TRAIL PROTECTION

ACCESS TO THE CENTENNIAL TRAIL SHALL BE MAINTAINED DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT PEDESTRIANS UTILIZING THE CENTENNIAL TRAIL DURING THE DURATION OF THE PROJECT. TEMPORARY CONSTRUCTION FENCING SHALL BE INSTALLED ALONG THE PROPOSED CONSTRUCTION LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES WITHIN THE LIMITS OF THE TRAIL. APPROPRIATE SIGNAGE TO ALERT USERS OF THE CENTENNIAL TRAIL OF CONSTRUCTION ACTIVITIES, ACCESS RESTRICTION OR CLOSURES, AND TO DIRECT USERS TO SECONDARY ACCESS POINTS SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. PROTECTION IS REQUIRED WHERE NECESSARY ALONG THE PROPOSED CONSTRUCTION LIMITS. THE CONTRACTOR SHALL SEPARATE PEDESTRIANS FROM THE WORK AREA USING TEMPORARY CONSTRUCTION FENCING AS DETAILED ON SCD MT-110.10.

ALL COSTS ASSOCIATED WITH THE WORK DESCRIBED ABOVE INCLUDING LABOR AND MATERIALS TO INSTALL AND REMOVE PROTECTION SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

COOPERATION BETWEEN CONTRACTORS - LAKE LINK TRAIL

THE CONTRACTOR SHALL BE ADVISED THAT THE LAKE LINK TRAIL PROJECT MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS. IN ACCORDANCE WITH 105.05, THE CONTRACTOR SHALL ARRANGE WITH THE CONTRACTOR SHALL RECEIVE DAILY APPROVALS FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTOR INVOLVING WORK SCHEDULES, WORK AREA, OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED IN THIS PROJECT.

ITEM 614 - MAINTAINING TRAFFIC (TIME LIMITATION ON A DETOUR)

A MINIMUM OF ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, EXCEPT FOR A PERIOD NOT TO EXCEED 45 CONSECUTIVE CALENDAR DAYS, WHEN THROUGH TRAFFIC MAY BE DETOURED AS SHOWN ON SHEET P.12. LIQUIDATED DAMAGES PER CM&S 108.07 SHALL BE ASSESSED FOR EACH CALENDAR DAY THE LANES REMAIN CLOSED TO TRAFFIC BEYOND THE SPECIFIC LIMITS.

CONSTRUCTION TRAFFIC

ALL CONSTRUCTION TRAFFIC SHALL USE ACCEPTABLE TRUCK ROUTES TO ACCESS THE CONSTRUCTION AREA. THE USE OF LOCAL RESIDENTIAL STREETS IS STRICTLY PROHIBITED UNLESS ALLOWED AND DOCUMENTED IN WRITING BY THE LOCAL ENFORCEMENT AGENCY.

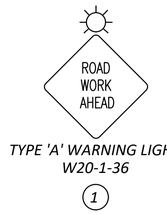
MAINTENANCE OF TRAFFIC NOTES

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER SRT
REVIEWER AKF 12/19/25
PROJECT ID 123855
SHEET P.11 TOTAL 82

CUY OLD DETROIT RD BRIDGE REHAB
2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\MOT\Sheets\123855_MN001.dwg

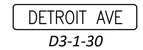




TYPE 'A' WARNING LIGHT
W20-1-36
(1)



TYPE 'A' WARNING LIGHT
W20-2-36
(2)



D3-1-30
(3)



M4-9R-30
(4)



M4-8a-24
(5)



M4-9L-30
(6)



M4-9bL-30
(7)



R11-2-48
MOUNTED ON
TYPE 3 BARRICADE
(8)



R11-3-66
MOUNTED ON
TYPE 3 BARRICADE
(9)

Δ BARRICADE SHALL BE PLACED ADJACENT TO ROAD

DETOUR LEGEND

- *SIGN*
- *TYPE 3 BARRICADE*
- *WORK AREA*
- *DETOUR ROUTE*
- *TRAFFIC FLOW ARROW*

N

DETOUR PLAN - PHASE 2 - DETROIT AVENUE

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\20255331.10 Old Detroit\123855\400-Engineering\MOT\Sheets\123855_MD001.dwg

DESIGN AGENCY
GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER: SRT
REVIEWER: AKF 12/19/25
PROJECT ID: 123855
SHEET: P.12 TOTAL: 82

SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
P.5	P.6	P.7	P.8			P.15	P.16	P.17					01/BRF						
																		ROADWAY	
						855							855	202	23000	855	SY	PAVEMENT REMOVED	
						344							344	202	30000	344	SF	WALK REMOVED	
						359							359	202	32000	359	FT	CURB REMOVED	
						168							168	202	75000	168	FT	FENCE REMOVED	
			2										2	202	98100	2	EACH	REMOVAL MISC.:INSPECTION WELL	P.7, P.8
			100										100	202	98200	100	FT	REMOVAL MISC.:CONDUIT	P.7, P.8
			10										10	203	20001	10	CY	EMBANKMENT, AS PER PLAN	P.7, P.8
LS													LS	203	98500	LS		ROADWAY, MISC.:EMBANKMENT	P.5
LS													LS	203	98500	LS		ROADWAY, MISC.:EXCAVATION	P.5
								975					975	204	10000	975	SY	SUBGRADE COMPACTION	
50													50	204	13000	50	CY	EXCAVATION OF SUBGRADE	
50													50	204	30010	50	CY	GRANULAR MATERIAL, TYPE B	
100													100	204	50000	100	SY	GEOTEXTILE FABRIC	
100													100	204	51000	100	SY	GEOGRID	
							1.29						1.29	209	15000	1.29	STA	RESHAPING UNDER GUARDRAIL	
							1.29						1.29	209	60200	1.29	STA	LINEAR GRADING	
							129						129	606	98000	129	FT	GUARDRAIL, MISC.: TIMBER GUARDRAIL (TYPE B)	P.5
							168						168	607	23000	168	FT	FENCE, TYPE CLT	
							344						344	608	13001	344	SF	6" CONCRETE WALK, AS PER PLAN	P.5
	5												5	SPECIAL	69098000	5	EACH	POTHOLING	P.6
	LS												LS	SPECIAL	69098400	LS		PRE-CONSTRUCTION VIDEO	P.6
																		EROSION CONTROL	
	2												2	659	00100	2	EACH	SOIL ANALYSIS TEST	
	45												45	659	00300	45	CY	TOPSOIL	
	395												395	659	10001	395	SY	SEEDING AND MULCHING, AS PER PLAN	P.6
	0.05												0.05	659	20000	0.05	TON	COMMERCIAL FERTILIZER	
	0.08												0.08	659	31000	0.08	ACRE	LIME	
	2.15												2.15	659	35000	2.15	MGAL	WATER	
	395												395	670	00501	395	SY	SLOPE EROSION PROTECTION, AS PER PLAN	P.6
	5,000												5,000	832	30000	5,000	EACH	EROSION CONTROL	
																		ENVIRONMENTAL / REMEDIATION	
		LS											LS	SPECIAL	69098400	LS		OEPA NOTIFICATION FORM	P.7
																		DRAINAGE	
							203						203	605	13301	203	FT	6" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN	P.7
							132						132	605	14001	132	FT	6" BASE PIPE UNDERDRAINS, AS PER PLAN	P.7
							186						186	611	04600	186	FT	12" CONDUIT, TYPE C	
			50										50	611	97400	50	FT	CONDUIT, MISC.:TYPE C FOR DRAINAGE DISCHARGE CONTINUANCE	P.7, P.8
			50										50	611	97400	50	FT	CONDUIT, MISC.:TYPE E FOR DRAINAGE DISCHARGE CONTINUANCE	P.7, P.8
			50										50	611	97400	50	FT	CONDUIT, MISC.:TYPE F FOR DRAINAGE DISCHARGE CONTINUANCE	P.7, P.8
							2						2	611	98390	2	EACH	CATCH BASIN, NO. 7	
			3										3	611	98645	3	EACH	CATCH BASIN GRATE, AS PER PLAN	P.8
							2						2	611	99574	2	EACH	MANHOLE, NO. 3	
			2										2	611	99720	2	EACH	INSPECTION WELL	
			3,750										3,750	SPECIAL	61199820	3,750	LB	MISCELLANEOUS METAL	P.8
							2						2	611	99900	2	EACH	DRAINAGE STRUCTURE, MISC.: INSPECTION WELL ADJUSTED TO GRADE	P.8
			100										100	613	41250	100	CY	LOW STRENGTH MORTAR BACKFILL (TYPE 1)	

GENERAL SUMMARY

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GG001.dwg

DESIGN AGENCY

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS

REVIEWER DEN 08/04/25

PROJECT ID 123855

SHEET P.13 TOTAL 82

SHEET NUMBER													PART.	ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
	P.9	P.10	P.11			P.16	P.17						01/BRF						
																		PAVEMENT	
							243						243	255	20000	243	FT	FULL DEPTH PAVEMENT SAWING	
							161						161	304	20001	161	CY	AGGREGATE BASE, AS PER PLAN	P.8
							891						891	451	14011	891	SY	9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	P.8
						9							9	452	12051	9	SY	8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS, AS PER PLAN	P.8
							148						148	609	14001	148	FT	CURB, TYPE 2-A, AS PER PLAN	P.8
							355						355	609	98000	355	FT	CURB, MISC.:MOUNTABLE CURB	P.8
																		WATER WORK	
						3							3	638	10801	3	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	P.8
						1							1	638	98000	1	EACH	WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE	P.8
																		SANITARY SEWER	
						1							1	611	99654	1	EACH	MANHOLE ADJUSTED TO GRADE (SANITARY)	
																		TRAFFIC CONTROL	
	65												65	630	03100	65	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
	1												1	630	08600	1	EACH	SIGN POST REFLECTOR	
	6.3												6.3	630	80100	6.3	SF	SIGN, FLAT SHEET	
	1												1	630	84900	1	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
	4												4	630	85100	4	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
	5												5	630	86002	5	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
	0.01												0.01	646	10000	0.01	MILE	EDGE LINE, 4"	
	56												56	646	10510	56	FT	CROSSWALK LINE, 12"	
	80												80	646	10600	80	FT	TRANSVERSE/DIAGONAL LINE	
	315												315	646	20200	315	FT	PARKING LOT STALL MARKING	
																		STRUCTURE OVER 20 FOOT SPAN (CUY-03442-0031)	
																		FOR CUY-03442-0031 ESTIMATED QUANTITIES	P.75
																		MAINTENANCE OF TRAFFIC	
			16										16	614	11110	16	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			10										10	614	18601	10	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	P.11
		10											10	616	10000	10	MGAL	WATER	
																		INCIDENTALS	
		LS											LS	614	11000	LS		MAINTAINING TRAFFIC	
	6												6	619	16011	6	MNTH	FIELD OFFICE, TYPE B, AS PER PLAN	P.9
	LS												LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
	LS												LS	623	50000	LS		PRECONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
	LS												LS	623	51000	LS		POST CONSTRUCTION SURVEY MONUMENT VERIFICATION AND REPORT	
													LS	624	10000	LS		MOBILIZATION	

GENERAL SUMMARY

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GG001.dwg

DESIGN AGENCY

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS

REVIEWER DEN 08/04/25

PROJECT ID 123855

SHEET P.14 TOTAL 82

REF NO.	SHEET NO.	STATION TO STATION					202 PAVEMENT REMOVED	202 WALK REMOVED	202 CURB REMOVED	202 FENCE REMOVED
							SY	SF	FT	FT
		REMOVALS								
	P. 18	9+10.00	LT	TO	10+77.00	LT	361			
	P. 18	9+10.00	RT	TO	10+77.00	RT	485			
CR-1	P. 18	9+10.00	LT	TO	10+77.00	LT			167	
CR-2	P. 18	9+10.00	RT	TO	10+77.00	RT			192	
SWR-1	P. 18	9+10.00	LT	TO	10+46.83	LT		344		
RX-1	P. 18	9+07.04	RT	TO	10+74.20	RT				168
DV-1	P. 18	10+46.83	LT	TO	10+77.00	LT	9			
TOTALS CARRIED TO GENERAL SUMMARY							855	344	359	168

ESTIMATED QUANTITIES

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GS001.dwg

DESIGN AGENCY

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER
ERS

REVIEWER
DEN 08/04/25

PROJECT ID
123855

SHEET P.15 | TOTAL 82

ESTIMATED QUANTITIES

REF NO.	SHEET NO.	STATION TO STATION	209 RESHAPING UNDER GUARDRAIL (STA)	209 LINEAR GRADING (STA)	452 8" NON-REINFORCED CONCRETE PAVEMENT, CLASS QC MS, AS PER PLAN (SY)	605 6" UNCLASSIFIED PIPE UNDERDRAINS, AS PER PLAN (FT)	605 6" BASE PIPE UNDERDRAINS, AS PER PLAN (FT)	606 GUARDRAIL, MISC.: TIMBER GUARDRAIL (TYPE B) (FT)	607 FENCE, TYPE CLT (FT)	608 6" CONCRETE WALK, AS PER PLAN (SF)	611 12" CONDUIT, TYPE C (FT)	611 CATCH BASIN, NO. 7 (EACH)	611 MANHOLE, NO. 3 (EACH)	611 MANHOLE ADJUSTED TO GRADE (SANITARY) (EACH)	611 DRAINAGE STRUCTURE, MISC.: INSPECTION WELL ADJUSTED TO GRADE (EACH)	638 VALVE BOX ADJUSTED TO GRADE, AS PER PLAN (EACH)	638 WATER WORK, MISC.: WATER METER ADJUSTED TO GRADE (EACH)
		ROADWAY															
	P. 18	9+10.00 LT TO 10+46.83 LT								344							
	P. 18	9+45.00 RT TO 10+73.50 RT						129									
	P. 18	9+07.04 RT TO 10+74.20 RT							168								
	P. 18	9+45.00 RT TO 10+73.50 RT	1.29	1.29													
		UNDERDRAIN															
	P. 25	9+10.00 LT TO 10+77.00 LT				167											
	P. 25	9+10.00 RT TO 9+46.00 RT				36											
	P. 25	9+46.00 RT TO 10+77.00 RT					132										
		DRAINAGE															
DJ-1	P. 18	10+34.46													1		
DJ-2	P. 18	10+40.39													1		
D-1	P.23-P.24	9+41.89											1				
D-2	P.23-P.24	8+84.01											1				
D-3	P.23-P.24	9+62.38										1					
D-4	P.23-P.24	8+84.01										1					
P-3	P.23-P.24	D-3 TO D-1									29						
P-1S	P.23-P.24	D-1 TO D-2									81						
P-4	P.23-P.24	D-4 TO D-2									16						
P-2	P.23-P.24	D-2 TO DX-53A									60						
		SANITARY															
SJ-1	P. 18	10+44.74												1			
		WATER															
WJ-1	P. 18	9+11.92													1		
WJ-2	P. 18	9+14.53													1		
WJ-3	P. 18	9+41.60													1		
WJ-4	P. 18	10+50.72														1	
		DRIVES															
DV-1	P. 18	10+46.83 LT TO 10+77.00 LT			9												
TOTALS CARRIED TO GENERAL SUMMARY			1.29	1.29	9	203	132	129	168	344	186	2	2	1	2	3	1

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GS001.dwg

DESIGN AGENCY

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS

REVIEWER DEN 08/04/25

PROJECT ID 123855

SHEET P.16 TOTAL 82

STATION RANGE			TYPICAL SECTION SHEET	SIDE	DISTANCE (D)	AVERAGE WIDTH (W)	SURFACE AREA (A) A=DxW/9	CADD GENERATED AREA	6" BASE EXTENSION	12" BASE EXTENSION	20" BASE EXTENSION	24" BASE EXTENSION	26" BASE EXTENSION	30" BASE EXTENSION	204 SUBGRADE COMPACTION	255 FULL DEPTH PAVEMENT SAWING	304 AGGREGATE BASE, AS PER PLAN	451 9" REINFORCED CONCRETE PAVEMENT, CLASS QC 1P, AS PER PLAN	609 CURB, TYPE 2-A, AS PER PLAN	609 CURB, MISC.:MOUNTABLE CURB
					FT	FT	SF	SF	SF	SF	SF	SF	SF	SF	SY	FT	CY	SY	FT	FT
DETROIT AVE																				
9+10.00	TO	10+77.00	P. 3	LT	167.00			3172.00		167.00			361.83	417.50	399.00	212.00	66.00	371.00		167.00
9+10.00	TO	9+46.00	P. 3	RT	36.00			684.86		188.00			407.33	470.00	129.00	20.00	21.00	97.00		188.00
9+46.00	TO	10+77.00	P. 3	RT	131.00			3726.67	74.00		246.67	296.00			447.00	11.00	74.00	423.00	148.00	
SUBTOTALS															975.00	243.00	161.00	891.00	148.00	355.00
TOTALS CARRIED TO GENERAL SUMMARY															975	243	161	891	148	355

PAVEMENT CALCULATIONS

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GD001.dwg

DESIGN AGENCY

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

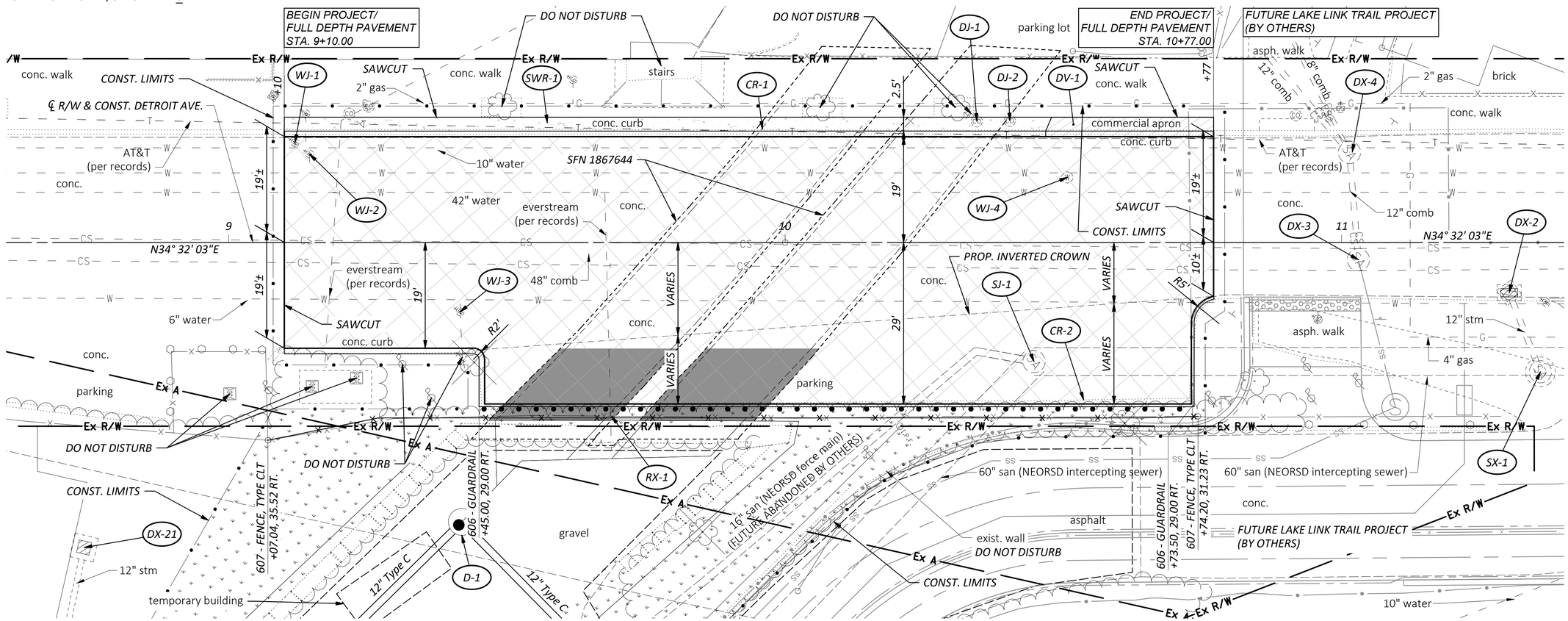
DESIGNER
ERS

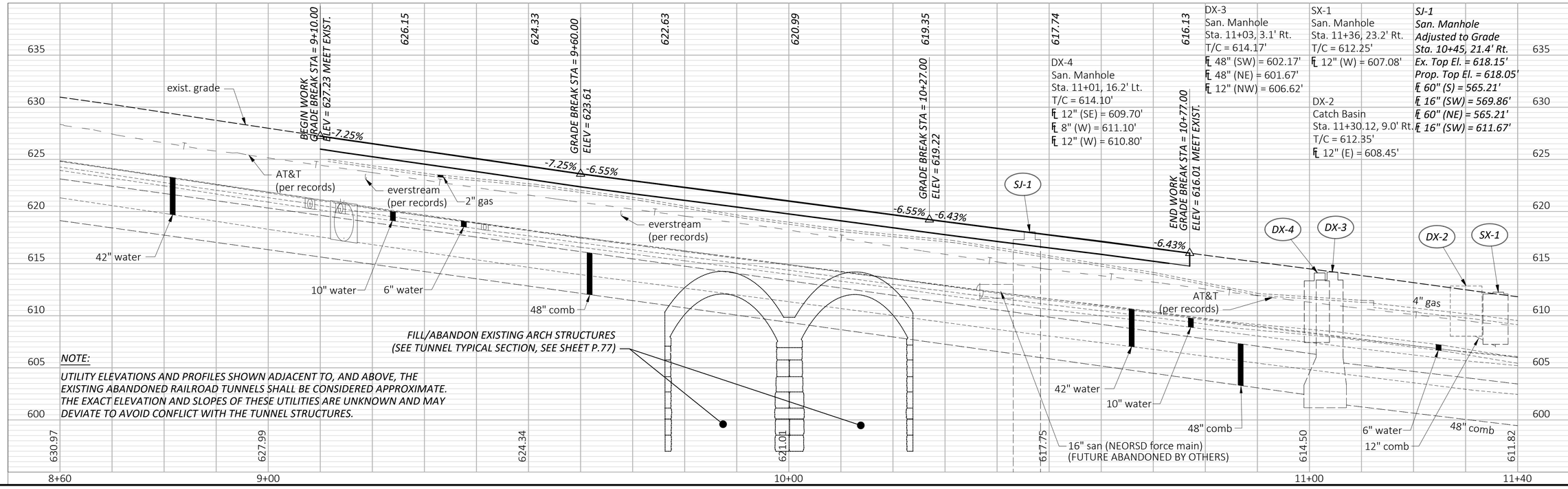
REVIEWER
DEN 08/04/25

PROJECT ID
123855

SHEET P.17 | TOTAL 82

FOR HATCH LEGEND, SEE SHEET P.6





NOTE:

UTILITY ELEVATIONS AND PROFILES SHOWN ADJACENT TO, AND ABOVE, THE EXISTING ABANDONED RAILROAD TUNNELS SHALL BE CONSIDERED APPROXIMATE. THE EXACT ELEVATION AND SLOPES OF THESE UTILITIES ARE UNKNOWN AND MAY DEVIATE TO AVOID CONFLICT WITH THE TUNNEL STRUCTURES.

HORIZONTAL SCALE IN FEET
0 5 10 20

PLAN & PROFILE - DETROIT AVE. BEGIN WORK TO END WORK

CUY OLD DETROIT RD BRIDGE REHAB

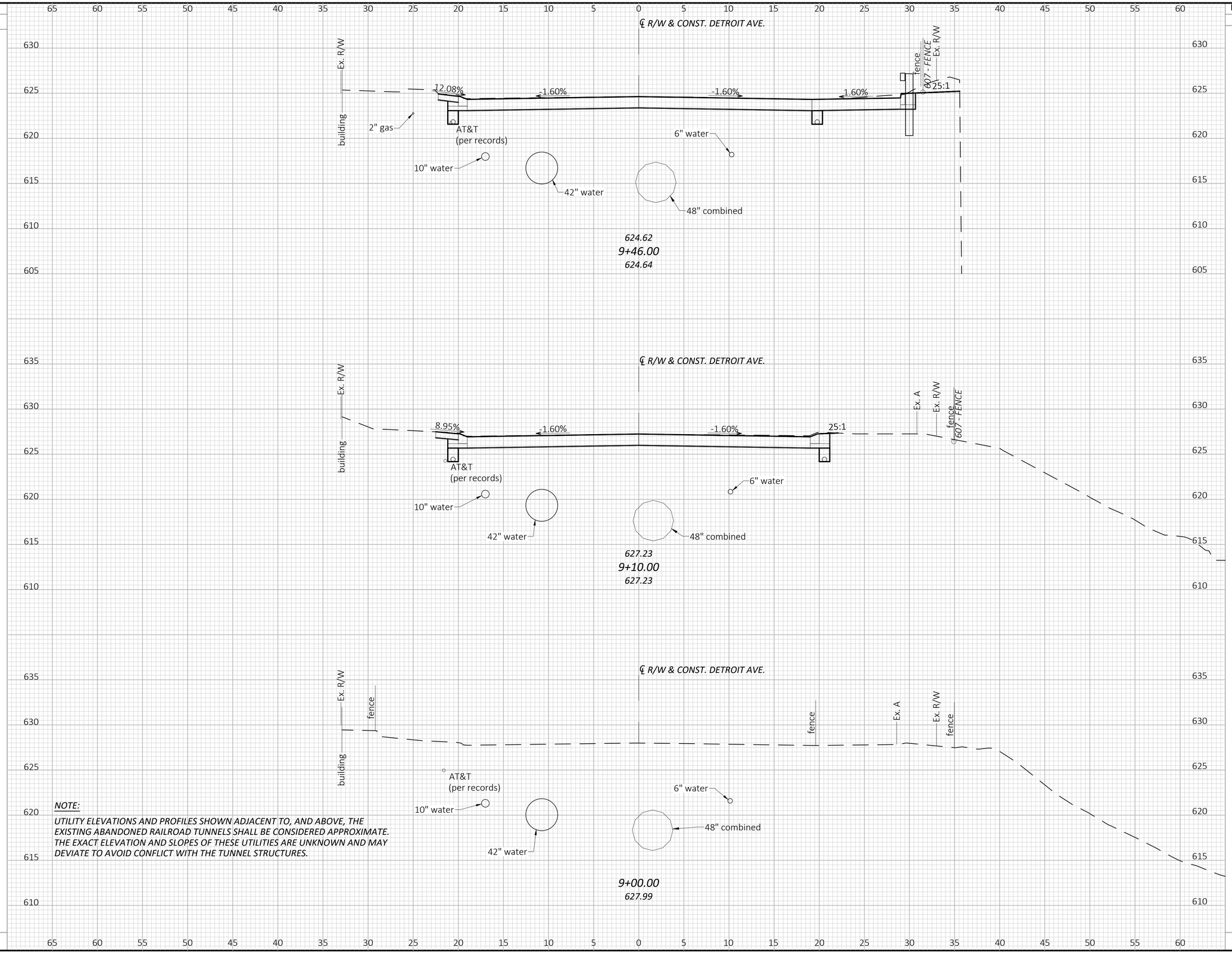
2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GP001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright, Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS
REVIEWER DEN 08/04/25
PROJECT ID 123855
SHEET P.18 TOTAL 82

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL



NOTE:

UTILITY ELEVATIONS AND PROFILES SHOWN ADJACENT TO, AND ABOVE, THE EXISTING ABANDONED RAILROAD TUNNELS SHALL BE CONSIDERED APPROXIMATE. THE EXACT ELEVATION AND SLOPES OF THESE UTILITIES ARE UNKNOWN AND MAY DEVIATE TO AVOID CONFLICT WITH THE TUNNEL STRUCTURES.

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_XS001.dwg

CROSS-SECTIONS - DETROIT AVE.
BRIDGE NO. CUY-03442-0031

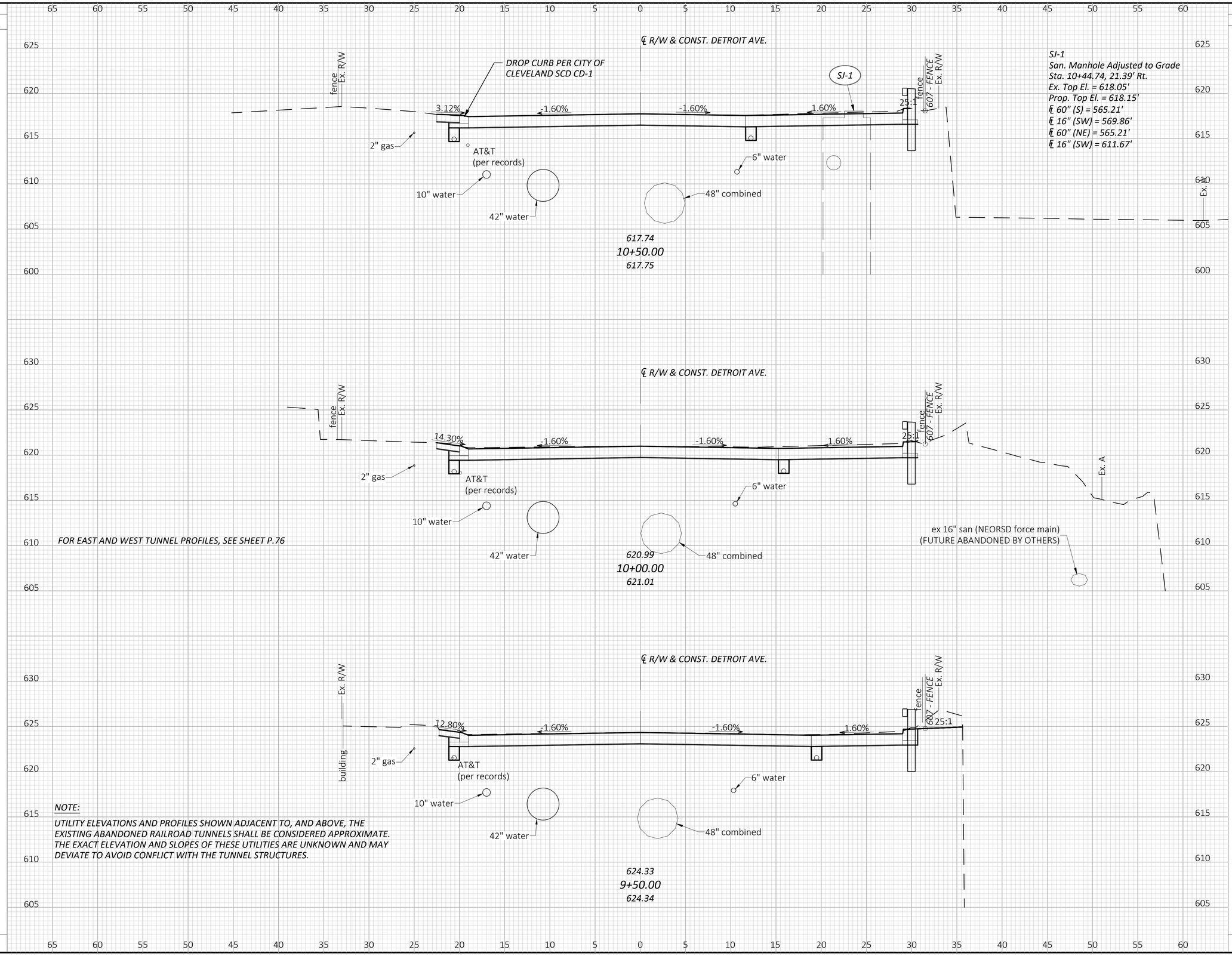
DESIGN AGENCY

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER	ERS
REVIEWER	DEN 08/04/25
PROJECT ID	123855
SHEET	P.19
TOTAL	82

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL



CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_XS001.dwg

CROSS-SECTIONS - DETROIT AVE.
BRIDGE NO. CUY-03442-0031

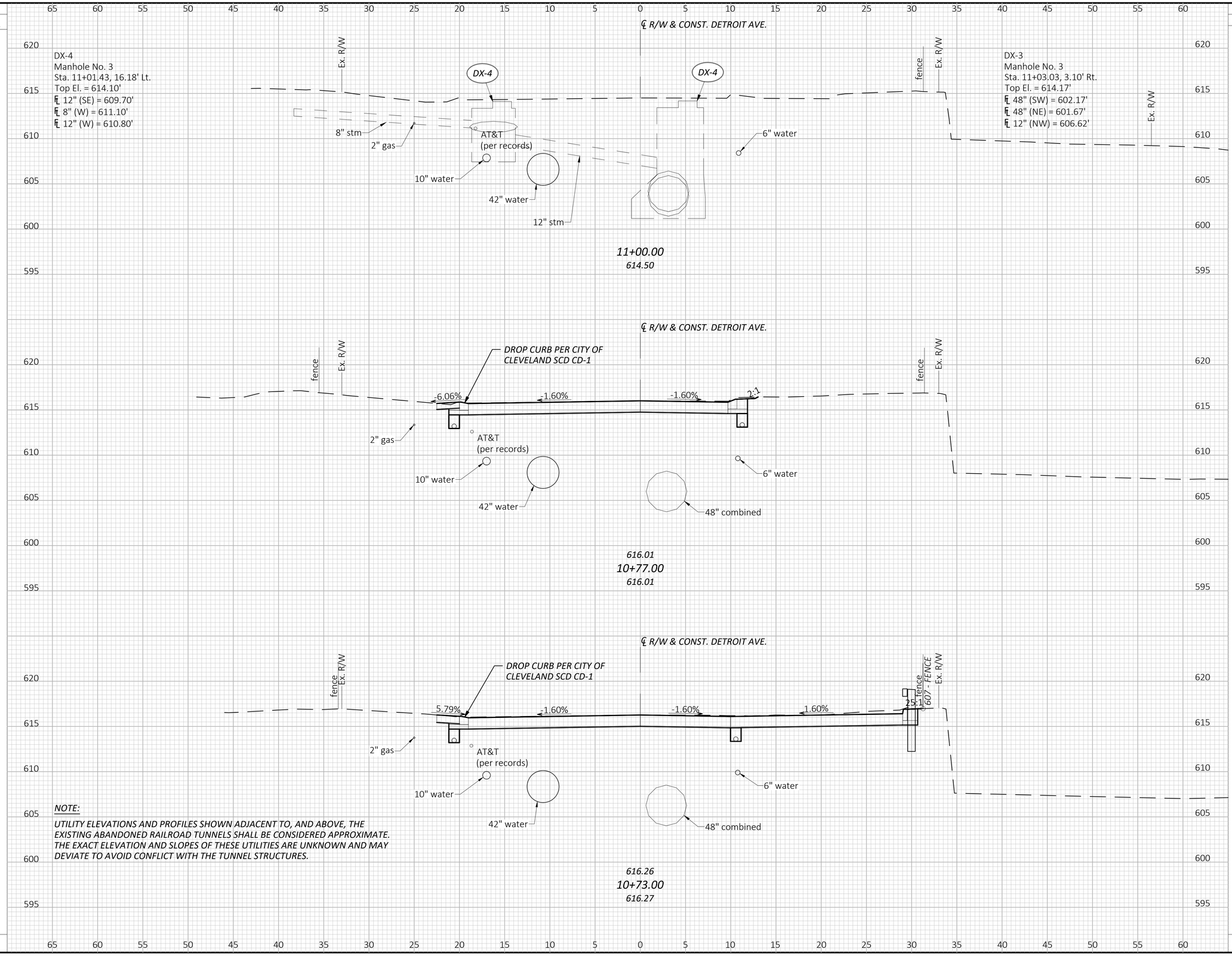
DESIGN AGENCY

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright, Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER	
ERS	
REVIEWER	
DEN	08/04/25
PROJECT ID	
123855	
SHEET	TOTAL
P.20	82

SEEDING	
END WIDTH	SQ. YDS.

END AREA		VOLUME	
CUT	FILL	CUT	FILL



NOTE:

UTILITY ELEVATIONS AND PROFILES SHOWN ADJACENT TO, AND ABOVE, THE EXISTING ABANDONED RAILROAD TUNNELS SHALL BE CONSIDERED APPROXIMATE. THE EXACT ELEVATION AND SLOPES OF THESE UTILITIES ARE UNKNOWN AND MAY DEVIATE TO AVOID CONFLICT WITH THE TUNNEL STRUCTURES.

CUY OLD DETROIT RD BRIDGE REHAB

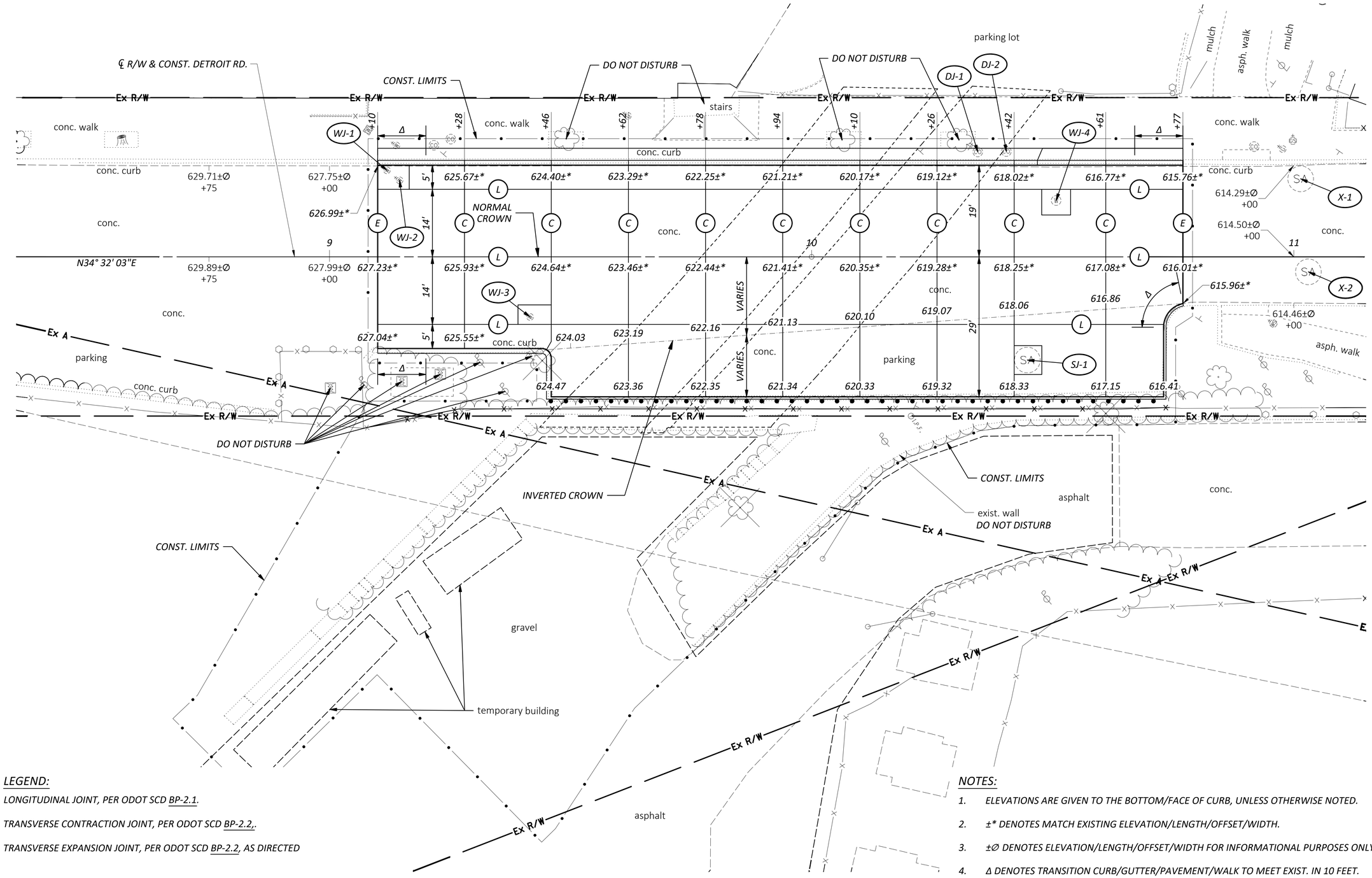
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_XS001.dwg

CROSS-SECTIONS - DETROIT AVE. BRIDGE NO. CUY-03442-0031

DESIGN AGENCY

GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER	ERS
REVIEWER	DEN 08/04/25
PROJECT ID	123855
SHEET	P.21
TOTAL	82



LEGEND:

(L) *LONGITUDINAL JOINT, PER ODOT SCD BP-2.1.*

(C) *TRANSVERSE CONTRACTION JOINT, PER ODOT SCD BP-2.2,.*

(E) *TRANSVERSE EXPANSION JOINT, PER ODOT SCD BP-2.2, AS DIRECTED*

NOTES:

1. *ELEVATIONS ARE GIVEN TO THE BOTTOM/FACE OF CURB, UNLESS OTHERWISE NOTED.*
2. *±* DENOTES MATCH EXISTING ELEVATION/LENGTH/OFFSET/WIDTH.*
3. *±Ø DENOTES ELEVATION/LENGTH/OFFSET/WIDTH FOR INFORMATIONAL PURPOSES ONLY.*
4. *Δ DENOTES TRANSITION CURB/GUTTER/PAVEMENT/WALK TO MEET EXIST. IN 10 FEET.*
5. *CONTRACTOR SHALL ADJUST CURB ELEVATIONS AT ALL CURB RAMPS AND DRIVE APRONS.*
6. *FOR BLOCKOUTS, SEE CUYAHOGA COUNTY SCD BP-2.7C AND BP-2.8C.*

HORIZONTAL SCALE IN FEET
0 5 10 20

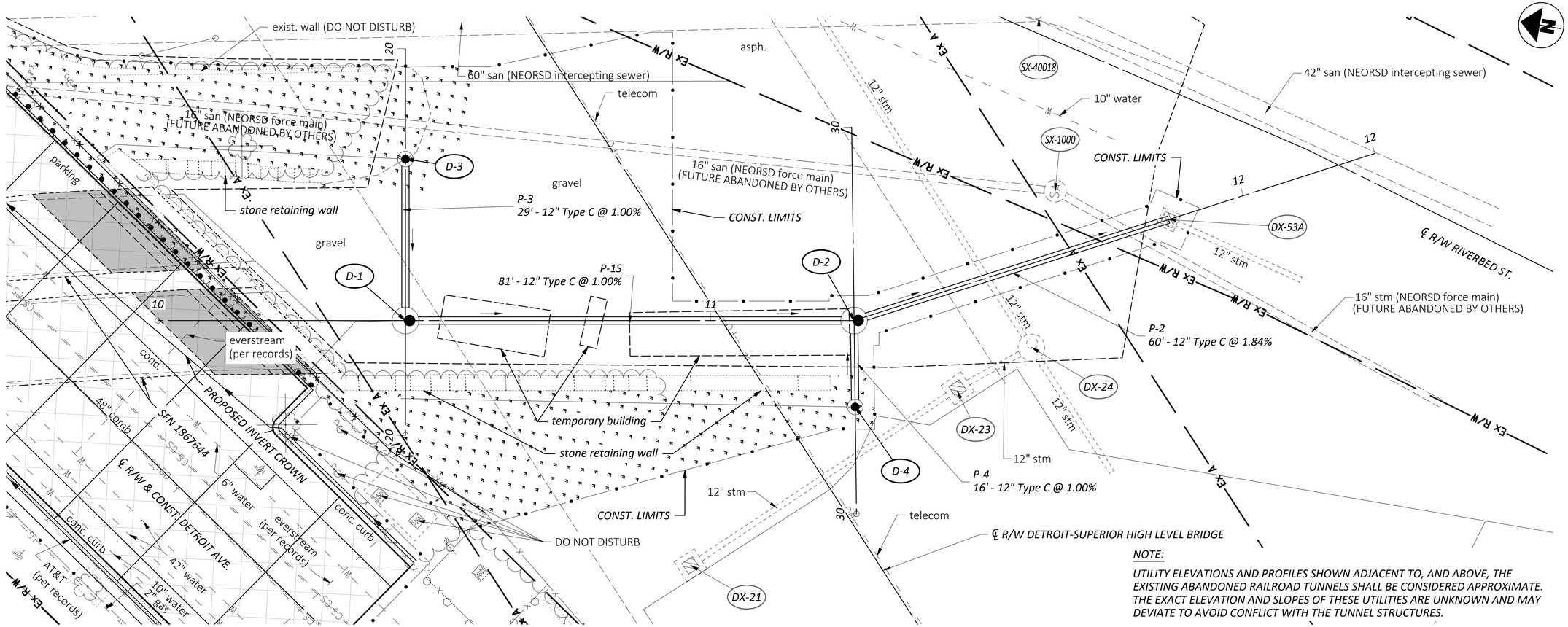
PAVEMENT ELEVATION DETAIL DETROIT AVE.

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GI001.dwg

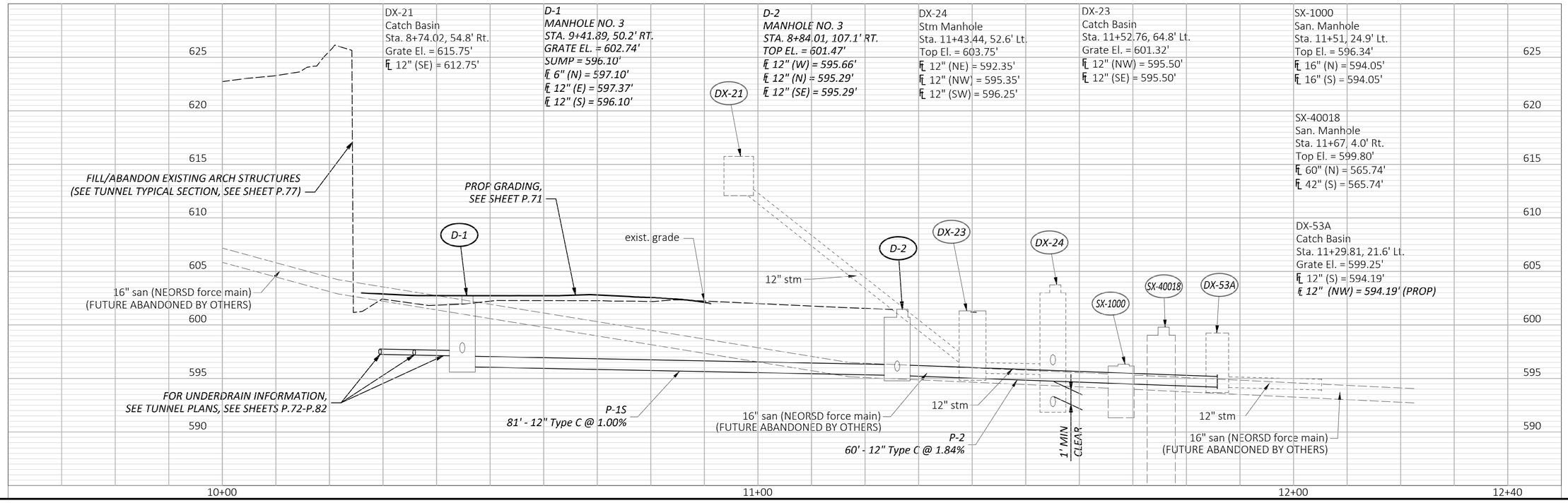
DESIGN AGENCY
GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS
REVIEWER DEN 08/04/25
PROJECT ID 123855
SHEET P.22 TOTAL 82



NOTE:

UTILITY ELEVATIONS AND PROFILES SHOWN ADJACENT TO, AND ABOVE, THE EXISTING ABANDONED RAILROAD TUNNELS SHALL BE CONSIDERED APPROXIMATE. THE EXACT ELEVATION AND SLOPES OF THESE UTILITIES ARE UNKNOWN AND MAY DEVIATE TO AVOID CONFLICT WITH THE TUNNEL STRUCTURES.



CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Drainage\Sheets\123855_DR001.dwg

HORIZONTAL SCALE IN FEET
0 5 10 20

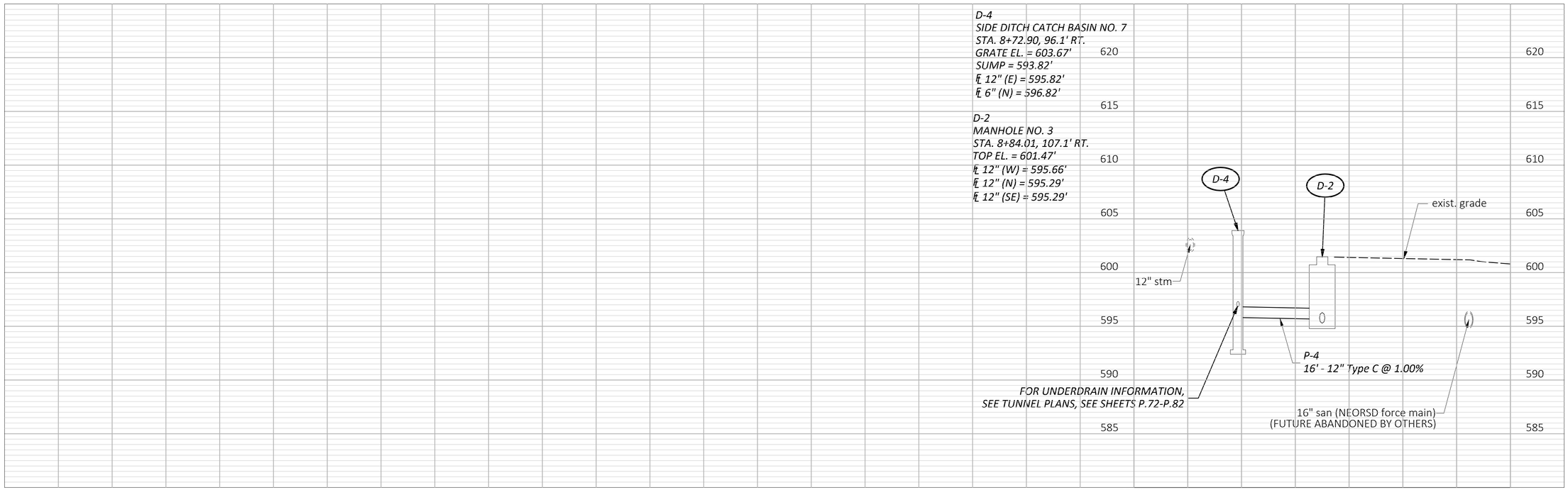
DRAINAGE PLAN & PROFILES TRUNK LINE

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS
REVIEWER DEN 08/04/2025
PROJECT ID 123855
SHEET P.23 TOTAL 82



DRAINAGE PROFILE
EASTERN LATERAL



DRAINAGE PROFILE
WESTERN LATERAL

DRAINAGE PROFILES
BRIDGE NO. CUY-03442-0031

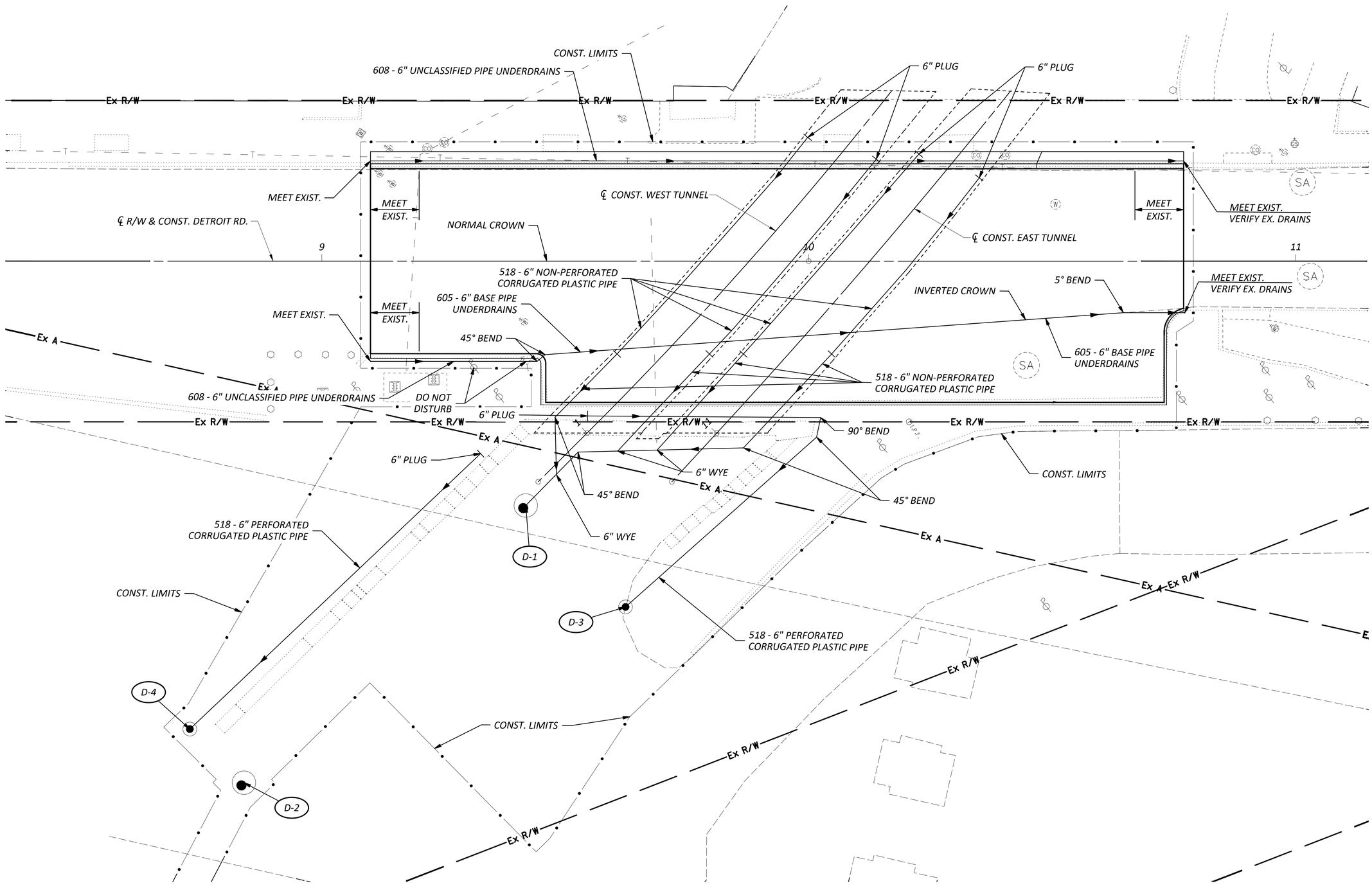
CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\20253331.10 Old Detroit\123855\400-Engineering\Drainage\Sheets\123855_DR001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER	AJS
REVIEWER	DEN 08/04/25
PROJECT ID	123855
SHEET	P.24
TOTAL	82

UNDERDRAIN SCHEMATIC



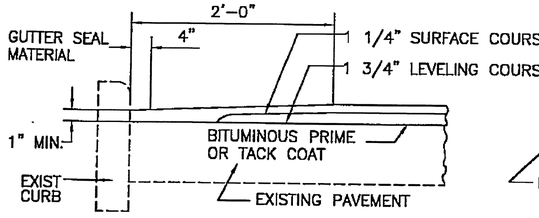
HORIZONTAL SCALE IN FEET
0 5 10 20

CUY OLD DETROIT RD BRIDGE REHAB

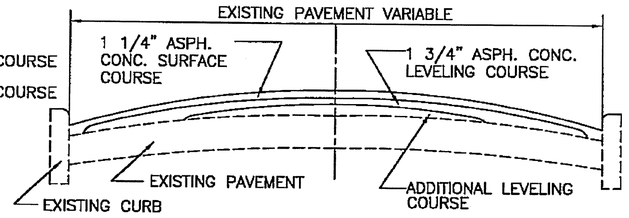
2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Drainage\Sheets\123855_DB001.dwg

DESIGN AGENCY
GPD GROUP
Glous, Pyle, Schomer, Burns & Deneen, Inc.
Copyright: Glous, Pyle, Schomer, Burns & Deneen, Inc. 2025

DESIGNER	ERS
REVIEWER	DEN 08/04/25
PROJECT ID	123855
SHEET	P.25
TOTAL	82



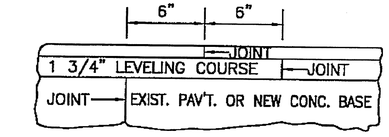
DETAIL SHOWING GUTTER RESURFACING



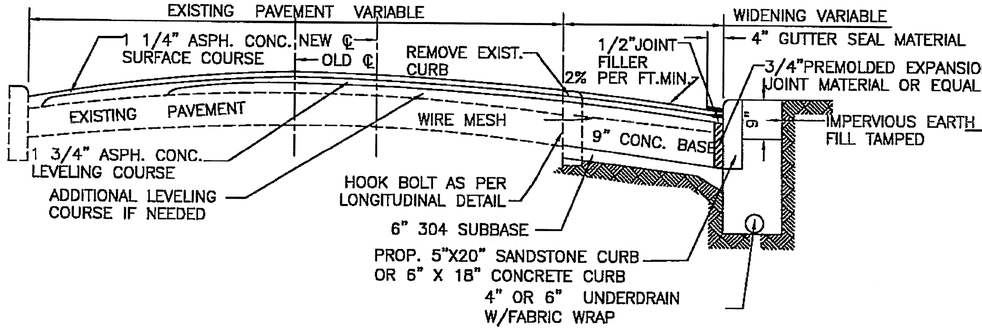
TYPICAL SECTION

NOTES

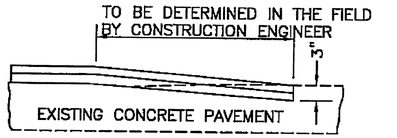
SURFACE COURSE AS PER 448 TYPE I HEAVY TRAFFIC
LEVELING COURSE AS PER 448 TYPE II HEAVY TRAFFIC
ADDITIONAL LEVELING COURSE AS PER 448 TYPE II HEAVY TRAFFIC
BITUMINOUS TACK COAT AS PER 407 & SPECIAL
9" CONCRETE BASE AND INTEGRAL CONCRETE CURB & BASE AS PER 305 & SPECIAL AND 609.04
IF REQUIRED 12 INCH (W4) X 6 INCH (W8.5) EPOXY COATED REINFORCING MESH MEETING ODOT 709.14
AGGREGATE BASE AS PER 304 & SPECIAL
JOINT FILLER AS PER 705.04 (HOT APPLIED)
GUTTER SEAL MATERIAL SAME TYPE OF ASPHALT CEMENT USED IN THE ASPHALT CONCRETE
PREMOLDED EXPANSION JOINT MATERIAL AS PER 705.03
NO. 8 TAMPED POROUS FILTER MATERIAL, LIMESTONE OR GRAVEL.
UNDERDRAIN AS PER 605 & SPECIAL
INTEGRAL CONCRETE CURB AND BASE JOINT DETAIL SHALL BE AS SHOWN ON DRAWING 644 M SHEETS 4 & 5 (LONGITUDINAL) AND 175 ME SHEET 6 (TRANSVERSE).



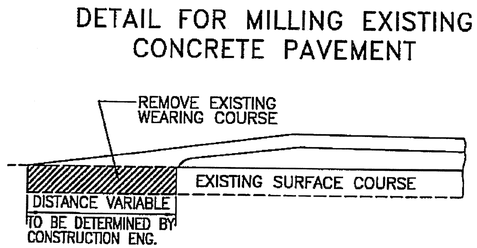
DETAIL FOR LAPPING JOINTS



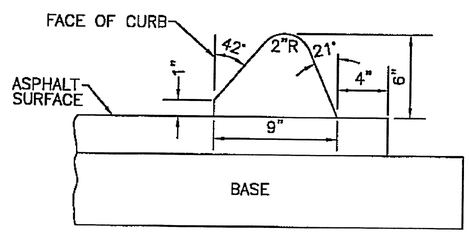
PAVEMENT SECTION WIDENING



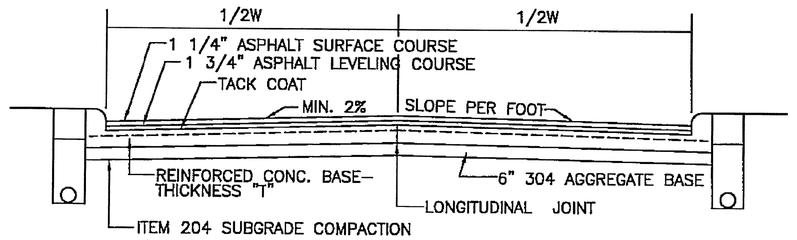
DETAIL FOR MILLING EXISTING CONCRETE PAVEMENT



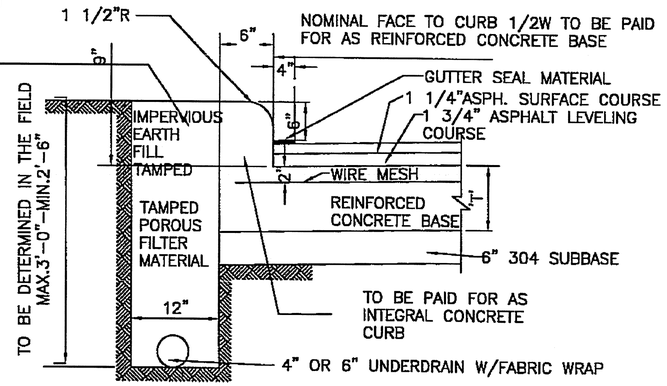
TYPICAL DETAIL OF PAVEMENT MERGER



DETAIL OF ASPHALT CONCRETE CURB



TYPICAL SECTION ASPHALT SURFACE WITH INTEGRAL CONCRETE CURB AND BASE



DETAIL OF INTEGRAL CONCRETE CURB & BASE (ASPHALT SURFACE)

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK—DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
ASPHALT RESURFACING AND ASPHALT SURFACE ON REINFORCED CONCRETE BASE
NOT TO SCALE

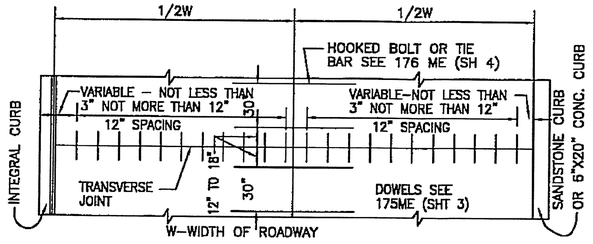
DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO ASPH 1 | SHEET 1/1 | ②

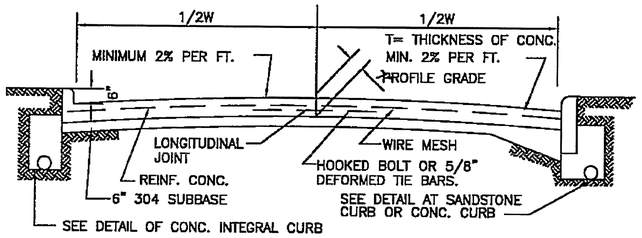
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

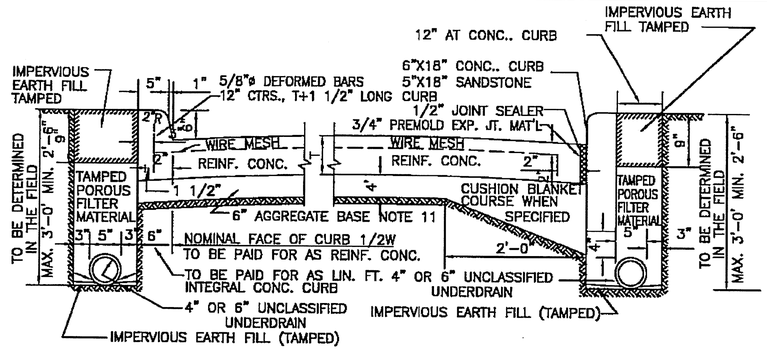
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.26 TOTAL 82



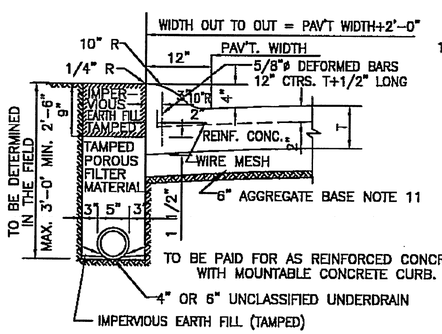
TYPICAL PLAN OF PAVEMENT



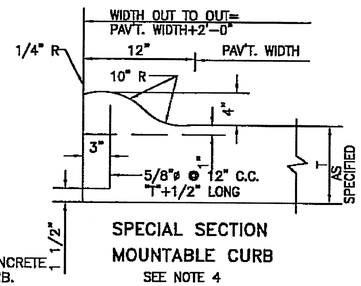
TYPICAL SECTION OF PAVEMENT



DETAIL OF CONC. INTEGRAL CURB DETAIL OF SANDSTONE CURB



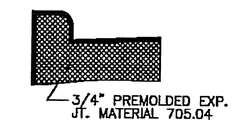
DETAIL OF CONC. MOUNTABLE CURB



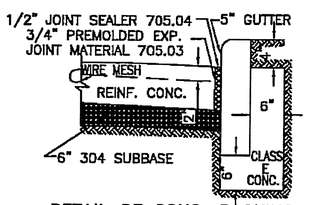
SPECIAL SECTION MOUNTABLE CURB
SEE NOTE 4

NOTES:

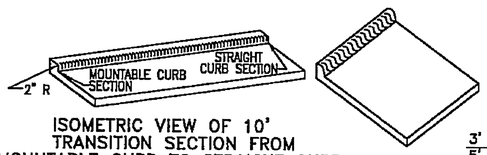
1. REINFORCED CONCRETE PAVEMENT SHALL MEET THE REQUIREMENTS OF 451 AND SPECIAL. CONCRETE SHALL MEET THE REQUIREMENTS OF CITY OF CLEVELAND 650 MIX.
2. IF THE CURB IS PLACED AFTER THE PAVEMENT, OMIT THE ASPHALT EXPANSION JOINT AND PAVE FULL WIDTH. FILL THE VOID BETWEEN THE CURB & EXP. JOINT WITH DRY SAND TO 1/2" FROM THE CONCRETE SURFACE. THE REMAINING 1/2" SHALL BE FILLED WITH JOINT FILLER AS PER 705.04 (HOT APPLIED JOINT FILLER).
3. TRANSITION FROM STANDARD CURB SECTION TO DROP CURB SECTION TO BE MADE IN 12".
4. CONCRETE FOR CURB WHICH IS TO BE INTEGRAL WITH THE CONCRETE BASE OR PAVEMENT SHALL BE PLACED WHILE THE CONCRETE IS PLASTIC.
5. TRANSVERSE JOINT IN THE PAVEMENT SHALL EXTEND THROUGH CURBS.
6. CONTRACTION JOINT (IMPRESSED OR SAWED) SHALL BE PLACED AT MAXIMUM OF 17' CENTERS.
7. PAVEMENT JOINT ASSEMBLIES SHALL BE AS PER 451.02 (709.13).
8. LONGITUDINAL JOINT SHALL BE 5/8" X 30" DEFORMED EPOXY BAR AS PER 451.02 & 709.00 OR 2– 7/8" X 8" EPOXY HOOK BOLTS PLACED AT 30" CENTERS. TRANSVERSE JOINT SHALL BE AS SHOWN ON DRAWING 175 ME (SHEET 6).
9. STEEL FOR TIE BARS, HOOK BOLTS AND DOWEL BARS SHALL MEET THE REQUIREMENTS OF 451.02.
10. 12 INCH (W4) X 6 INCH (W8.5) EPOXY COATED REINFORCING MESH MEETING ODOT 709.14
11. AGGREGATE BASE AS PER 304 & SPECIAL.
12. HOT APPLIED JOINT SEALER AS PER 705.04.
13. PREFORMED EXPANSION JOINT MATERIAL AS PER 705.03.
14. TAMPED POROUS FILTER MATERIAL AS PER 605.
15. UNCLASSIFIED PIPE UNDERDRAIN AS PER 707.31 OR 707.41.



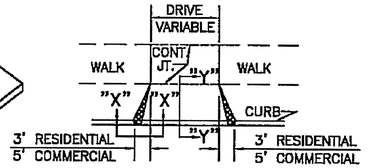
DETAIL OF EXP. JT. AT INTEGRAL CURB



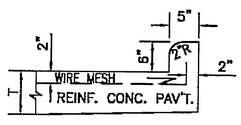
DETAIL OF CONC. BACKING AT STONE CUT TO RADIUS CURB (25' RADIUS & UNDER)



ISOMETRIC VIEW OF 10' TRANSITION SECTION FROM MOUNTABLE CURB TO STRAIGHT CURB

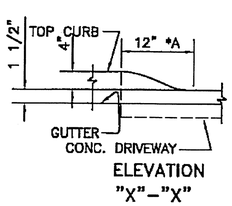


TYPICAL CONC. DRIVEWAY DETAIL



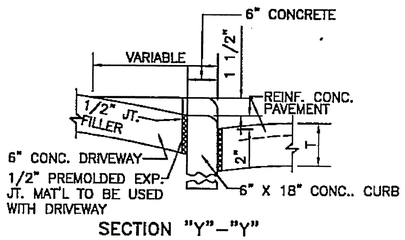
TO BE USED ONLY AT THE END OF TRANSITION

SECTION OF STRAIGHT INTEGRAL CURB

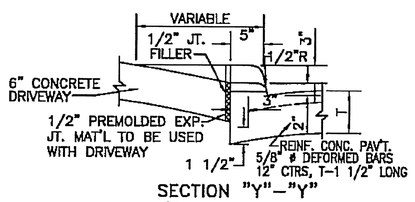


ELEVATION "X"–"X"

*A – 1:12 MAX.. IF IN AN UNOBSTRUCTED SIDEWALK AREA



SECTION "Y"–"Y"



SECTION "Y"–"Y" (INTEGRAL CURB)

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
CONSTRUCTION DETAILS OF REINFORCED CONCRETE PAVEMENT
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO.: CONC 1	SHEET 1/4	③

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

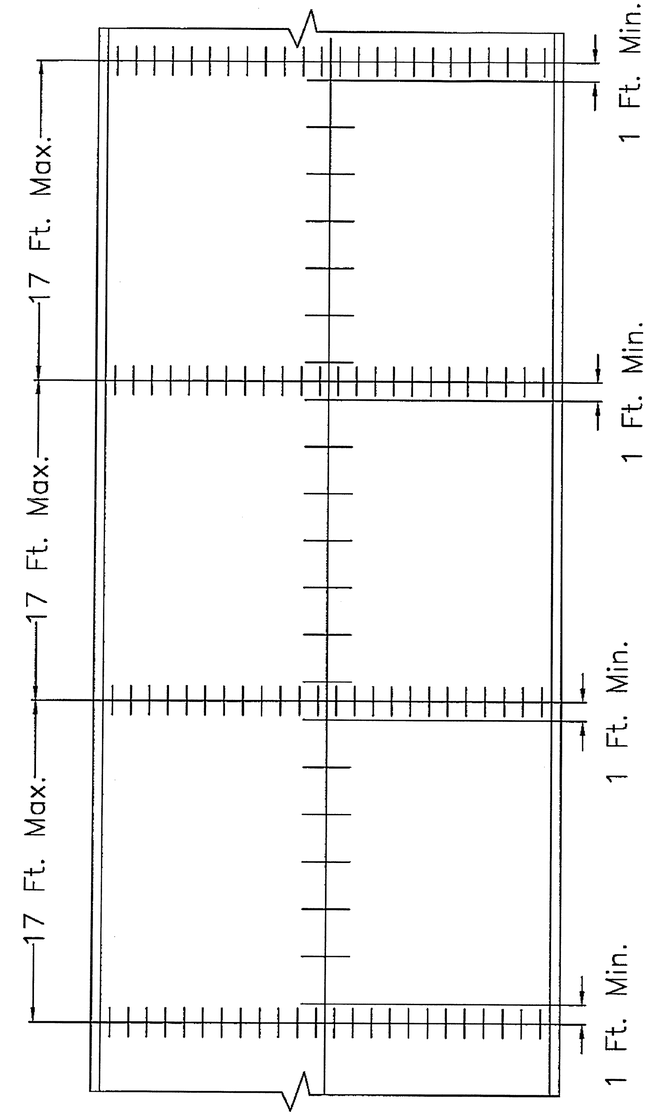
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

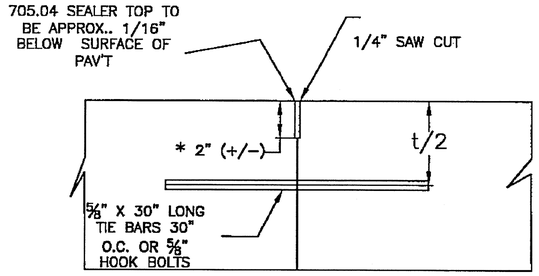
REVIEWER
Reviewed Date

PROJECT ID
123855

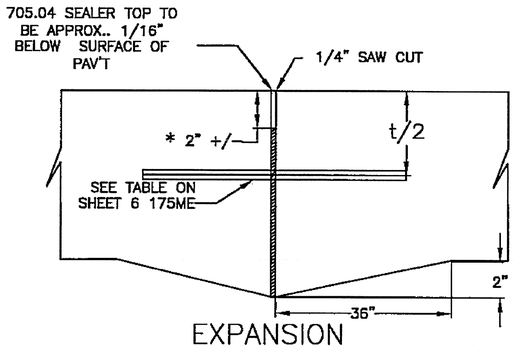
SHEET P.27 TOTAL 82



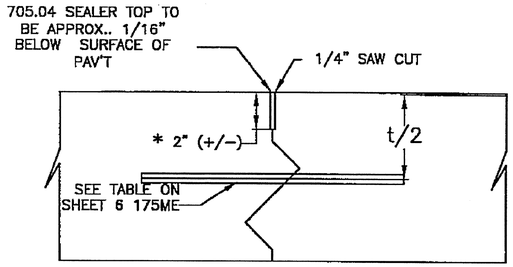
SPACING DIAGRAM FOR JOINTS AND TIE BARS
NOT TO SCALE



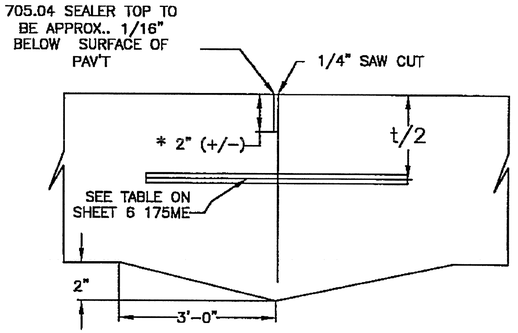
LONGITUDINAL



EXPANSION
(THICKENED)



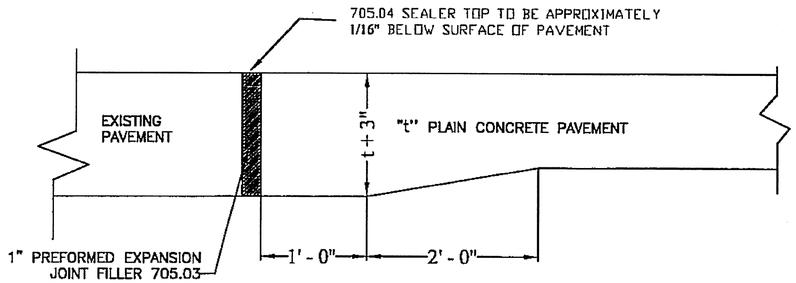
CONTRACTION



CONSTRUCTION
(THICKENED)

DOWELS – ALL DOWELS, HOOK BOLTS AND TIE BARES SHALL BE EPOXY COATED (709.00), AS PER PLAN OR DIRECTION OF THE ENGINEER

* IF CONCRETE IS THICKER THAN 8" USET/4 FOR THE JOINT DEPTH



BUTT JOINT
(THICKENED)

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWINGS
TYPICAL CONSTRUCTION
DETAILS FOR PLAIN
CONCRETE PAVEMENT
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 7-1-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. : CONC 1 | SHEET 2/4 | ④

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

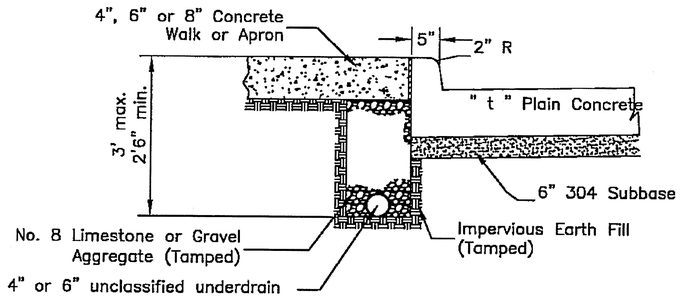
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

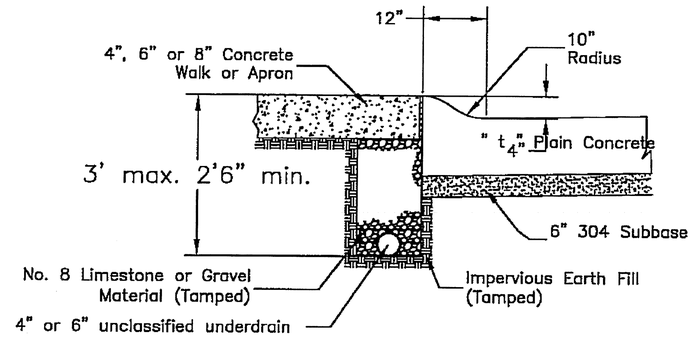
REVIEWER
Reviewed Date

PROJECT ID
123855

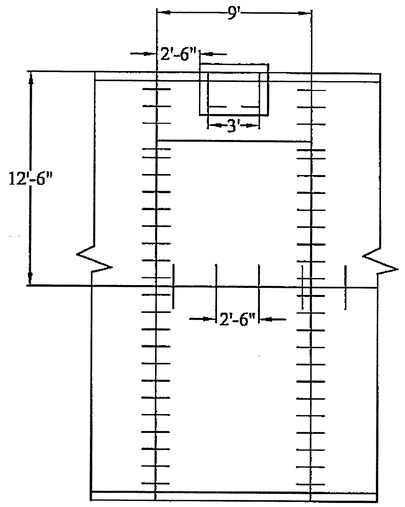
SHEET P.28 | TOTAL 82

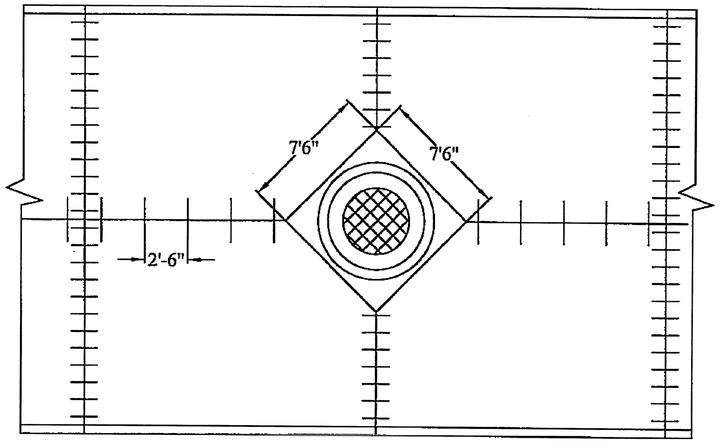


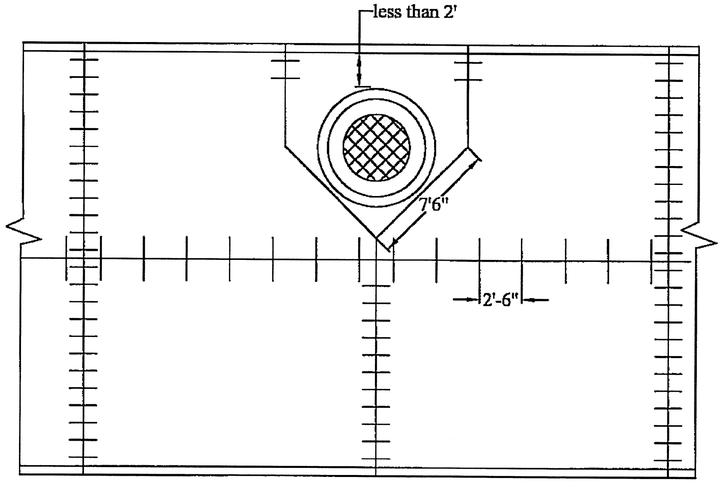
DETAIL OF CONCRETE INTEGRAL CURB
NOT TO SCALE



DETAIL OF CONCRETE MOUNTABLE CURB
(NOT TO SCALE)







TYPICAL BOXOUTS FOR MANHOLES AND CATCH BASINS

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK—DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
TYPICAL CONSTRUCTION
DETAILS FOR PLAIN
CONCRETE PAVEMENT
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 7-4-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. : CONC 1 | SHEET 3/4 | ⑤

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

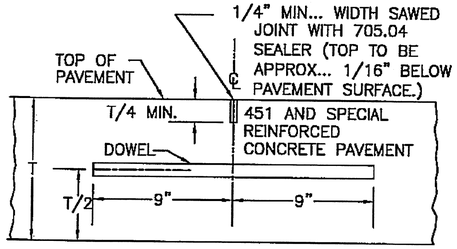
REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.29 | TOTAL 82

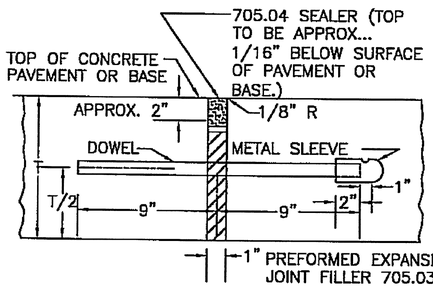
TRANSVERSE JOINTS

CONTRACTION JOINTS

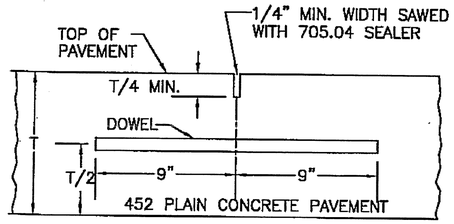


SECTION–451 AND SPECIAL (PAVEMENT)

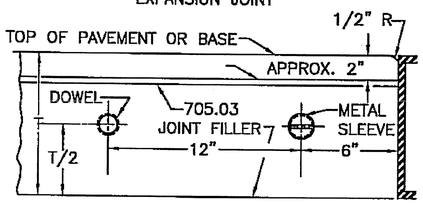
EXPANSION JOINT



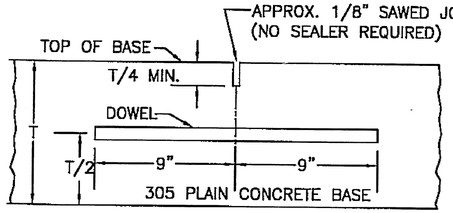
SECTION THROUGH EXPANSION JOINT



SECTION–452 PLAIN CONCRETE (PAVEMENT)

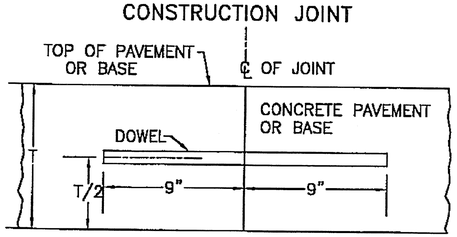


SIDE ELEVATION OF EXPANSION JOINT



SECTION–305 AND SPECIAL (BASE)

CONSTRUCTION JOINT



SECTION THROUGH CONSTRUCTION JOINT

ASSEMBLY: NOTES AND DETAILS SHOWN ON THIS DRAWING SHALL BE CONSIDERED IN CONJUNCTION WITH AND SUPPLEMENTAL TO THE PERTINENT SPECIFICATIONS FOR PORTLAND CEMENT CONCRETE PAVEMENTS AND BASES, AND INCIDENTALS RELATED THERETO.

ALL JOINTS SHALL BE CONSTRUCTED NORMAL TO THE CENTERLINE OF THE PAVEMENT LANE UNLESS OTHERWISE DIRECTED.

WHERE DOWELS ARE SPECIFIED THEY SHALL BE ROUND, STRAIGHT STEEL BARS OF THE SIZE INDICATED IN THE FOLLOWING TABLE, AND SHALL BE EPOXY COATED ODOT 709.13. DOWELS SHALL BE SPACED AT 12" CENTERS, BEGINNING 6" FROM THE LONGITUDINAL JOINT.

BASKET SUPPORTS SHALL BE USED FOR POSITIONING OF THE DOWEL BARS AS SPECIFIED IN THE FOLLOWING TABLE, PROVIDE A FUSION–BONDED EPOXY COATED BASKET DOWEL ASSEMBLY. REPAIR UNCOATED AREAS WITH SURFACE PREPARATION AND PATCHING MATERIAL EQUIVALENT TO THE ORIGINAL EPOXY COATING.

DOWEL SIZE	
THICKNESS OF PAVEMENT	DIAMETER OF DOWEL
8" OR LESS	1"
9"	1 1/8"
10"	1 1/4"
OVER 10"	AS SHOWN ON PLANS

ASSEMBLY: EACH JOINT ASSEMBLY USED TO HOLD DOWELS IN POSITION SHALL BE CONTINUOUS BETWEEN LONGITUDINAL JOINTS OR BETWEEN LONGITUDINAL JOINT AND PAVEMENT EDGE.

THE ASSEMBLY SHALL BE FIRMLY HELD IN PROPER POSITION BY AT LEAST EIGHT 1/2" STEEL PINS DRIVEN AT AN ANGLE TO BRACE THE ASSEMBLY FROM LATERAL AND VERTICAL DISPLACEMENT DURING THE PLACING OF THE CONCRETE. THESE PINS SHALL BE AT LEAST 18" IN LENGTH. TWO OF THESE PINS SHALL BE DRIVEN OPPOSITE EACH OTHER AT EACH END OF THE ASSEMBLY AND THE REMAINING PINS SHALL BE DRIVEN IN STAGGERED POSITIONS ON EACH SIDE OF THE ASSEMBLY. IN EXCEPTIONAL CASES WHERE IT IS IMPRACTICAL TO USE THE 18" LENGTH PINS, SUCH AS WHERE HARDPAN OR ROCK IS ENCOUNTERED, THE ENGINEER MAY AUTHORIZE USE OF SHORTER PINS PROVIDED THE ASSEMBLY IS HELD FIRMLY. WHERE THE ASSEMBLY IS PLACED ON GRANULAR MATERIAL WHICH MAY ALLOW SETTLEMENT OR DISTORTION OF THE ASSEMBLY, A MINIMUM OF 6 STEEL PLATES, EACH HAVING A BEARING AREA OF APPROXIMATELY 25 SQUARE INCHES AND A CROSS–SECTION WHICH WILL NOT BEND UNDER THE IMPOSED LOAD, SHALL BE PLACED UNDER THE ASSEMBLY. ONE PLATE SHALL BE USED AT EACH OF THE FOUR END PINS. THE REMAINING PLATES SHALL BE SPACED UNIFORMLY ON EACH SIDE OF THE ASSEMBLY. THE METHOD OF STAKING AND PLACING BEARING PLATES SHALL BE APPROVED BY THE ENGINEER.

DOWEL SPACING IS SHOWN FOR PAVEMENT LANES OF EVEN FOOT WIDTHS. WHERE OTHER WIDTHS ARE SPECIFIED, STANDARD CAGES MAY BE USED WITH DOWEL SPACINGS ADJUSTED AS FOLLOWS:

THE 6" DOWEL SPACING SHALL BE MAINTAINED AT THE LONGITUDINAL JOINT. THE SPACING AT THE OUTER EDGE OF THE LANE MAY BE INCREASED UP TO 12". WHERE AN ODD WIDTH OF LANE OCCURS, A DOWEL SHALL BE PLACED 6" FROM THE OUTER EDGE OF THE LANE IF THE STANDARD CAGE WOULD PROVIDE FOR A SPACE EXCEEDING 12". SUCH A DOWEL SHALL BE HELD RIGIDLY IN PROPER POSITION BY A METHOD SATISFACTORY TO THE ENGINEER, OR A DOWEL CAGE OF GREATER LENGTH THAN REQUIRED MAY BE USED BY CUTTING THE ASSEMBLY AND SPLICING TO ATTAIN THE REQUIRED LENGTH.

THIS DRAWING IS INTENDED FOR USE WITH A UNIFORM DEPTH PAVEMENT. WHEN THE PROJECT INVOLVES THE PLACING OF VARIABLE DEPTH PAVEMENT, THE JOINT COMPONENTS SHALL BE HELD IN PLACE IN ACCORDANCE WITH THE METHOD SHOWN IN THE PLAN OR AS APPROVED BY THE ENGINEER.

EXPANSION JOINTS: EXPANSION JOINT FILLER SHALL BE PLACED AT 90° TO THE DOWELS, BOTH HORIZONTALLY AND VERTICALLY, SHALL BE HELD RIGIDLY IN POSITION BY THE USE OF A METAL CAP WHICH SHALL BE REMOVED AT SUCH A TIME IN THE FINISHING OPERATION THAT WILL ENABLE THE BEST WORKMANSHIP IN FINISHING THE JOINT TO THE DIMENSIONS SPECIFIED. JOINT FILLER SHALL BE CONTINUOUS FOR THE FULL WIDTH OF EACH LANE.

SMOOTH DOWELS SHALL BE USED, AND FREE MOVEMENT SHALL BE PROVIDED BY APPLYING A COATING OF AN OIL SUCH AS S.A.E. 140 OR OTHER APPROVED "BOND BREAKING" MATERIAL JUST PRIOR TO PLACING THE CONCRETE, ONE FREE END OF EACH DOWEL SHALL BE EQUIPPED, AFTER COATING, WITH A METAL SLEEVE APPROXIMATELY 3" LONG, DESIGNED WITH CRIMPED END AND OVERLAPPING SEAMS, FITTING CLOSELY AROUND THE DOWEL. EACH SLEEVE SHALL BE PROVIDED WITH A DEPRESSION OR INTERIOR PROJECTION TO ACT AS A STOP FOR THE DOWEL, SUFFICIENTLY DISTANT FROM THE CRIMPED END TO ALLOW 1" FOR LONGITUDINAL DOWEL MOVEMENT WITH PAVEMENT EXPANSION. IN LIEU OF THIS REQUIREMENT, ANY OTHER MEAN MAY BE USED IF APPROVED BY THE ENGINEER.

CONTRACTION JOINTS: DOWELS SHALL BE USED IN CONTRACTION JOINTS IN 451 AND SPECIAL REINFORCED CONCRETE PAVEMENT. THEY SHALL BE SMOOTH BARS, AND FREE MOVEMENT SHALL BE PROVIDED BY APPLYING A COATING OF AN OIL SUCH AS S.A.E. 140 OR OTHER "BOND–BREAKING" MATERIAL JUST PRIOR TO PLACING THE CONCRETE.

CONTRACTION JOINTS OF THE TYPE SPECIFIED SHALL BE SPACED IN ACCORDANCE WITH THE FOLLOWING TABLE:

CONTRACTION JOINT SPACING	
TYPES OF PAVEMENT OR BASE	MAXIMUM SPACING BETWEEN JOINTS
451 AND SPECIAL REINFORCED CONCRETE PAVEMENT	17'–0"
305 AND SPECIAL CONCRETE BASE	17'–0"
452 PLAIN CONCRETE PAVEMENT	17'–0"

CONSTRUCTION JOINTS: EITHER SMOOTH OR DEFORMED DOWELS SHALL BE USED IN CONSTRUCTION JOINTS IN ALL PORTLAND CEMENT CONCRETE PAVEMENT AND BASE. DOWELS SHALL BE THOROUGHLY CLEANED OF ALL OIL OR OTHER SUBSTANCE THAT WOULD BREAK THE BOND BETWEEN THE STEEL AND CONCRETE. THE JOINT SHALL BE FORMED BY USING A 2" MINIMUM THICKNESS WOOD BULKHEAD OR EQUAL, WITH OPENINGS PROVIDED FOR DOWEL BARS SPACED AT INTERVALS NOT TO EXCEED 12" AS DIRECTED. THE BULKHEAD SHALL BE SHAPED TO FIT THE TYPICAL SECTION OF THE PAVEMENT OR BASE, AND DOWELS SHALL BE HELD RIGIDLY IN POSITION DURING THE PLACING OF THE CONCRETE. THE CONCRETE SHALL BE CAREFULLY FINISHED SO AS TO PROVIDE A NEAT, TIGHT FITTING JOINT THAT WILL NOT REQUIRE SEALING.

CONSTRUCTION JOINTS IN REINFORCED CONCRETE PAVEMENT SHALL NOT BE LOCATED AT A CONTRACTION JOINT, NOR SHALL THEY BE LOCATED CLOSER THAN 10' TO ANY OTHER PARALLEL JOINT. IN PLAIN CONCRETE PAVEMENT OR BASE, THEY SHALL NOT BE LOCATED CLOSER THAN 5' TO ANOTHER PARALLEL JOINT.

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
PAVEMENT JOINTS
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: [signature] DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO.: CONC 1 | SHEET 4/4 | (6)

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

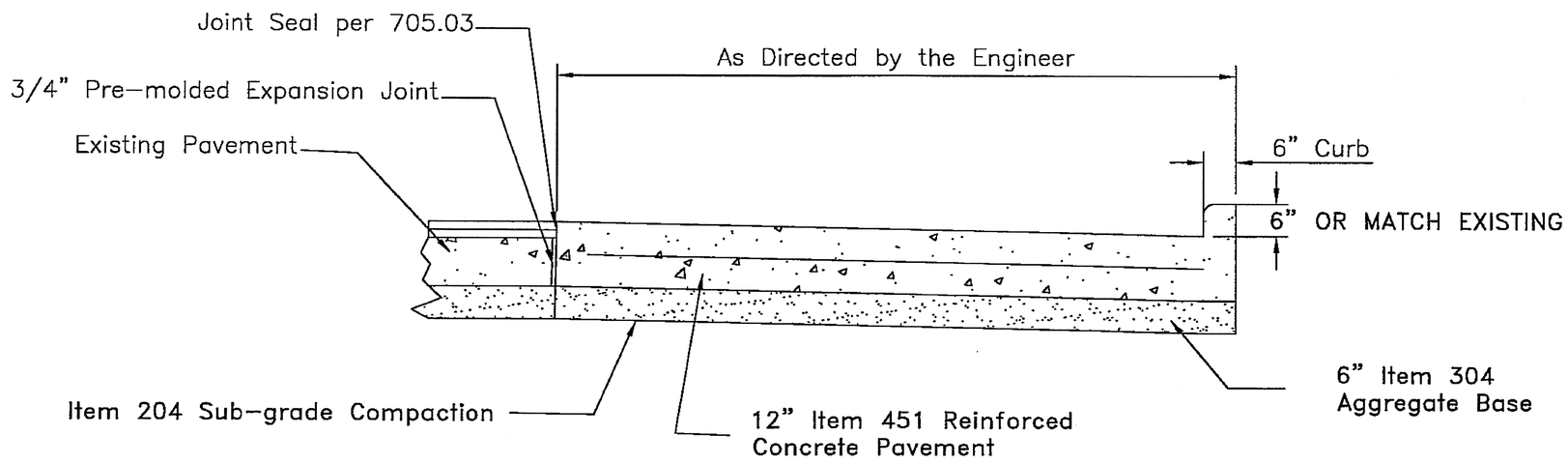
DESIGN AGENCY
GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER
Designed

REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.30 | TOTAL 82



The work performed under this item will be paid for per square yard under item "Concrete Bus Pad" includes:

1 – Full depth sawcutting, removal of existing pavement including subbase.

2 – Excavation and embankment required to achieve proper subgrade.

3 – Item 304 – Aggregate Base

4 – Item 451 – 12" Reinforced Concrete Pavement Joint spacing 17 feet maximum and minimum 5 feet.
12 inch (W4) X 6 inch (w8.5) epoxy coated reinforcing mesh meeting ODOT 709.14

5 – Item 604 – Integral Concrete curb as per plan

6 – All incidental items to install Concrete Bus pad in-place as per detail shown herein.

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
TYPICAL CONSTRUCTION
DETAILS FOR BUS PAD
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: [signature] DATE: 4/14/08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. : BP 1 | SHEET 1/1 | ⑦

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

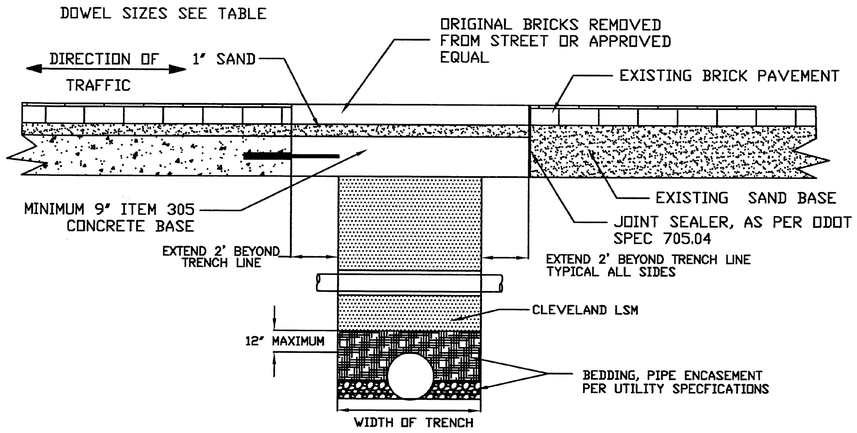
DESIGN AGENCY
GPD GROUP
Gbuis, Pyle, Schomer, Burns & Deneen, Inc.
Copyright Gbuis, Pyle, Schomer, Burns & Deneen, Inc. 2023

DESIGNER
Designed

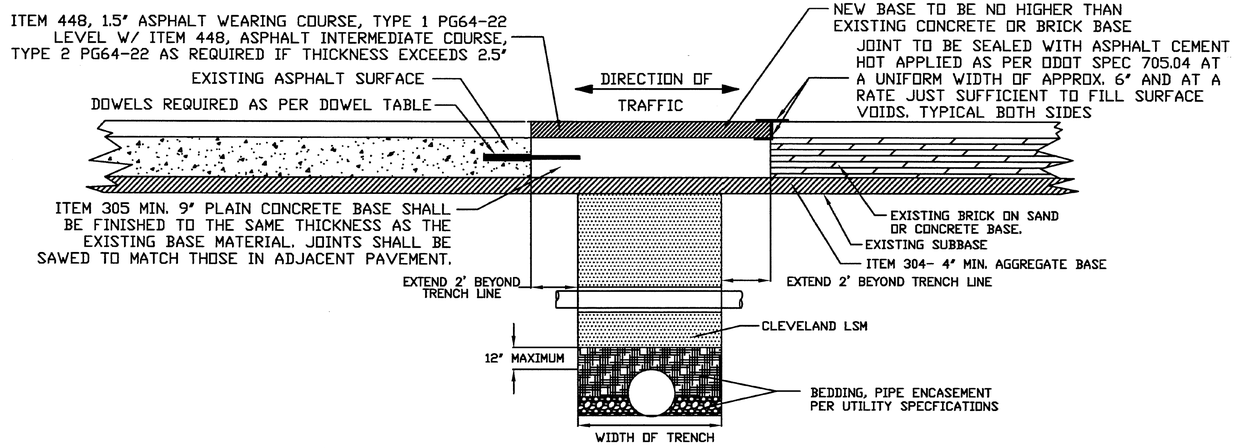
REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.31 | TOTAL 82

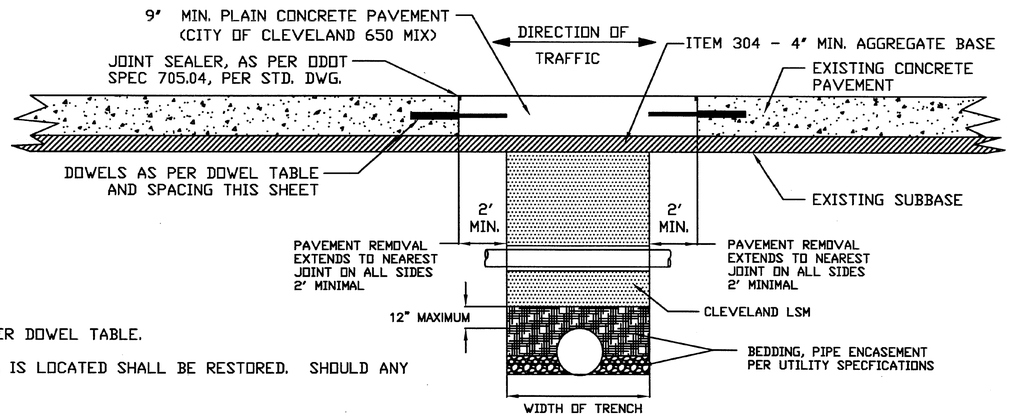


PAVEMENT REPAIR IN BRICK PAVEMENT



ASPHALT ON CONCRETE OR BRICK BASE

DOWEL TABLE	
PAVEMENT THICKNESS	DIAMETER OF DOWELS
8" OR LESS	1"
9"	1 1/8"
10"	1 1/4"
OVER 10"	AS DIRECTED
DOWELS SHALL BE SPACED EVERY 30"	



CONCRETE PAVEMENT

NOTES:

1. ALL PAVEMENT OPENINGS SHALL BE SAWED FULL DEPTH AND HAVE SMOOTH VERTICAL FACES. DOWELS SHALL BE REQUIRED, AS PER DOWEL TABLE.
2. CONCRETE REPAVING SHALL BE PERFORMED IN SUCH A MANNER THAT THE ENTIRE LANE AND/OR SLAB IN WHICH THE REPAIR AREA IS LOCATED SHALL BE RESTORED. SHOULD ANY PORTION OF THE REPAIR AREA EXTEND INTO AN ADJACENT LANE AND/OR SLAB, THAT LANE OR SLAB SHALL ALSO BE REPAVED.
3. EXTEND OVERCUT IN LONGITUDINAL DIRECTION TWO FEET (2') ONTO UNDISTURBED SUBGRADE.
4. ASPHALT RESURFACING SHALL BE PERFORMED IN SUCH A MANNER THAT THE ENTIRE LANE IN WHICH THE REPAIR AREA IS LOCATED SHALL BE RESTORED. SHOULD ANY PORTION OF THE REPAIR AREA EXTEND INTO AN ADJACENT LANE, THAT LANE SHALL ALSO BE RESURFACED. THE RESURFACING SHALL TAKE PLACE FROM BEGINNING PROJECT TO END PROJECT (I.E. WORK LIMITS). FOR PAVEMENTS WITH A WIDTH OF 40' OR LESS A LANE SHALL BE CONSIDERED 1/2 THE PAVEMENT WIDTH.
5. BRICKS REMOVED FROM A REPAIR SHALL BE STORED IN A SAFE PLACE BY THE CONTRACTOR FOR REUSE. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPLACING ANY BRICKS THAT ARE STOLEN OR DAMAGED AT NO COST TO THE CITY.
6. ALL NEW BRICKS SUPPLIED BY THE CONTRACTOR MUST FIRST BE APPROVED BY THE CITY BEFORE THEY ARE USED.
7. SAWCUTTING: ALL PARTIAL BRICKS SHALL BE SAWCUT. FURTHER, NO BRICK WILL BE PERMITTED TO BE CUT, FOR REPLACEMENT, TO A LENGTH LESS THAN ONE-HALF ITS ORIGINAL LENGTH. THIS MAY REQUIRE SAWCUTTING OF ADJACENT UNDISTURBED BRICK(S).
8. THE PERIMETER FACES OF THE EXISTING BASE MATERIAL SHALL BE CUT BACK TO AS NEARLY VERTICAL ORIENTATION AS POSSIBLE. IF SHEARING OF THE ADJACENT BASE RESULTS, THE CONTRACTOR SHALL REMOVE ADDITIONAL BRICK AND BASE AS SHOWN IN THE DETAIL.
9. THE MAXIMUM WIDTH OF A BRICK MORTAR JOINT SHALL BE 1/2" THIS RESTRICTION WILL ALSO APPLY TO THE PERIMETER OF A REPAIR AREA, WHERE THE ROWS MAY NOT BE PARALLEL TO ONE ANOTHER.
10. MORTARING OF JOINTS: ALL JOINTS SHALL BE MORTARED WITH A 50/50 MIXTURE BY VOLUME OF SAND /CEMENT, TO PROVIDE FOR A FLUSH FINISH. THIS MAY REQUIRE MORE THAN ONE APPLICATION; FURTHER MECHANICAL VIBRATION WILL BE REQUIRED FOR COMPACTION.
11. ALL BACKFILL MATERIALS USED UNDER ANY PAVEMENTS SHALL BE CLEVELAND LSM PLACED FROM THE INITIAL ONE FOOT OVER THE TOP OF UTILITIES, TO THE SUBGRADE.
12. TO PREVENT FLOTATION AND ENTRY OF FLOWABLE FILL INTO ANY OTHER AREASCOVER ALL JOINTS IN CLAY PIPE IN THE TRENCH AREA WITH POLYETHYLENE MATERIAL BEFORE POURING FLOWABLE FILL. REPAIR TECHNIQUES SHALL BE IN ACCORDANCE WITH THE UTILITY COMPANY'S STANDARD REPAIR PROCEDURES.

REVISED 8/3/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE

STREET OPENING REPAIR–SUPPLEMENTAL

NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO. : PR 1	SHEET 1/2	(8)

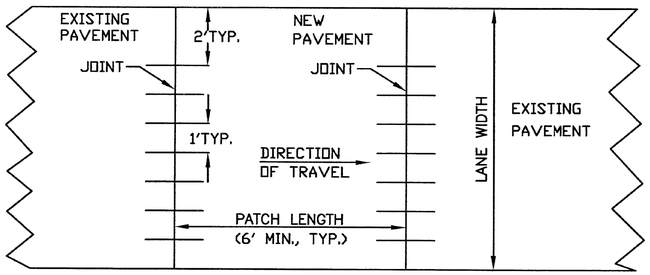
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

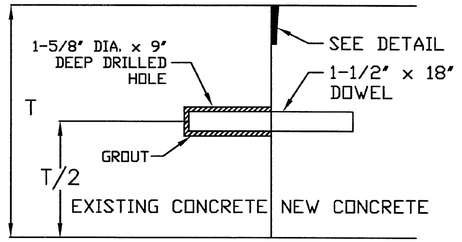
CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

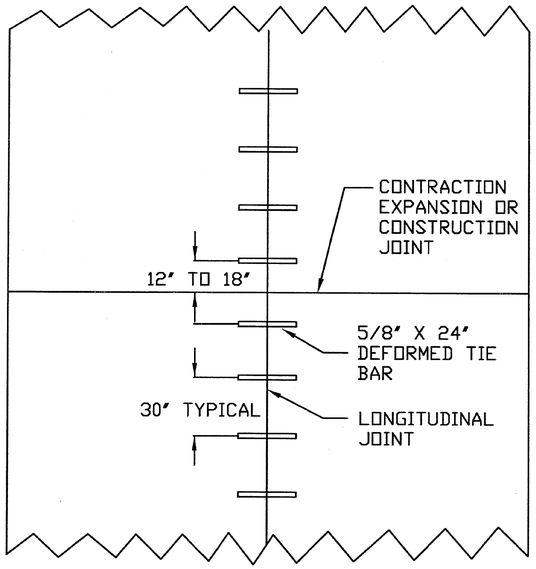
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2023

DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET: P.32 TOTAL: 82

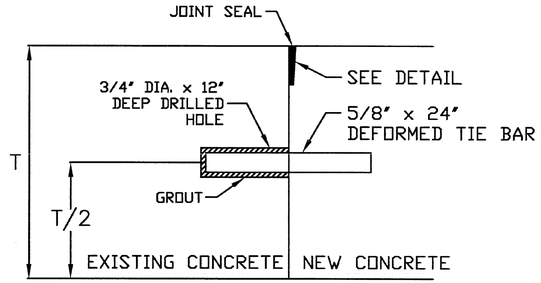




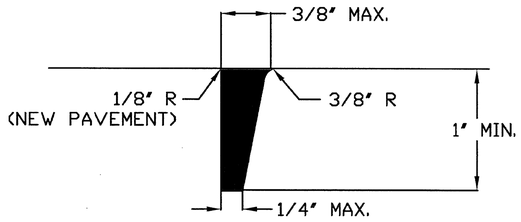
SECTION THROUGH TRANSVERSE JOINT



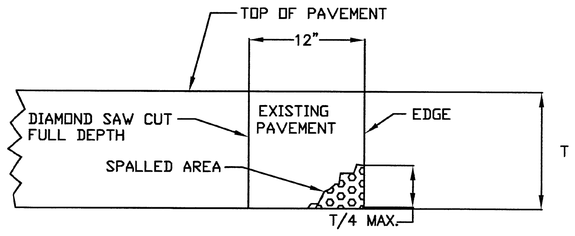
TIE BAR SPACING



TYPE D (DRILLED TIED LONGITUDINAL) JOINT



GROOVE & SEAL DETAIL



ADDITIONAL PAVEMENT REMOVAL

NOTES:

1. ALL JOINTS SHALL BE CONSTRUCTED NORMAL TO THE CENTERLINE OF THE PAVEMENT LANE.

2. ALL DOWEL HOLES SHALL BE DRILLED BY A MECHANICAL DEVICE THAT WILL ALLOW INDEPENDENT ADJUSTMENT OF ALL DRILL SHAFTS IN THE HORIZONTAL AND VERTICAL DIRECTION. THE DEVICE SHALL BE CAPABLE OF DRILLING A MINIMUM OF THREE HOLES AT ONE TIME.

3. ALL SMOOTH DOWELS SHALL BE COATED WITH A THIN LAYER OF OIL OR OTHER 'BOND-BREAKING' MATERIAL AFTER THEY HAVE BEEN INSTALLED IN THE EXISTING PAVEMENT AND JUST PRIOR TO PLACING THE PATCH. ALL DOWELS SHALL BE PLACED PARALLEL TO THE PAVEMENT SURFACE AND THE CENTERLINE OF THE PAVEMENT LANE.

4. ADDITIONAL PAVEMENT REMOVAL: IF AFTER THE REMOVAL OF THE PAVEMENT FROM THE AREA TO BE REPAIRED, THE FACE OF THE REMAINING PAVEMENT IS SPALLED OF DETERIORATED FOR A HEIGHT GREATER THAN ONE-FOURTH (1/4) THE THICKNESS OF THE RIGID PAVEMENT, ADDITIONAL REMOVAL SHALL BE MADE AS SHOWN.

5. LONGITUDINAL JOINT: FOR PATCHES 10 FEET OR GREATER IN LENGTH THE LONGITUDINAL JOINT SHALL BE CONSTRUCTED AS PER STANDARD DRAWING. SPACING OF THE TIE BARS SHALL BE NO MORE THAN 30" NOR LESS THAN 24".

6. TYPE D (DRILLED TIED LONGITUDINAL)JOINT:
TYPE D JOINTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ODOT SPEC. 255.05. GROUT SHALL MEET THE REQUIREMENTS OF ODOT SPEC. 255.02. THE USE OF 5/8" EXPANSION ANCHORS, FF-S-325, GROUP VIII, TYPE I OF GROUP II, TYPE 4, CLASS I MAY BE USED IN LIEU OF THE 5/8" x 24" DEFORMED TIE BAR AND SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. THE USE OF SELF DRILLING EXPANSION SHIELD ANCHORS, FF-S-325, GROUP III, TYPE I (A) AND (C) SHALL NOT BE PERMITTED.

7. SEALING JOINTS:
SAWED OR HAND FORMED JOINTS SHALL BE SEALED WITH ODOT 705.04 JOINT SEALER.

REVISED 8/3/09

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STREET OPENING REPAIR
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO.: PR 1 | SHEET 2/2 | ⑨

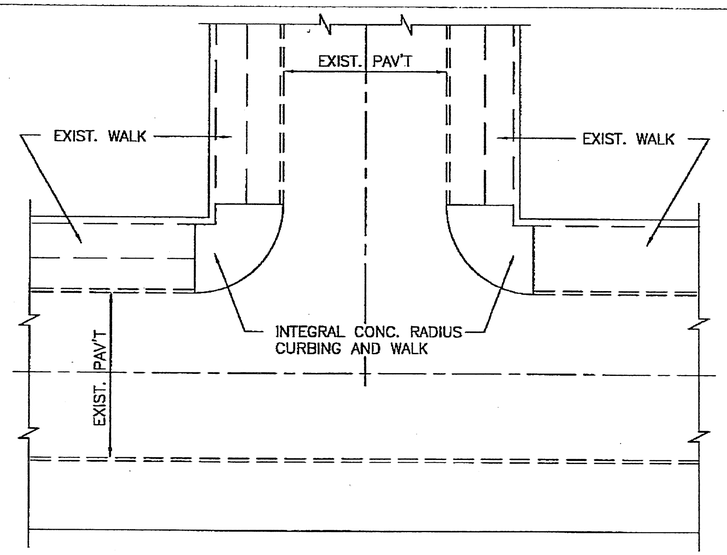
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

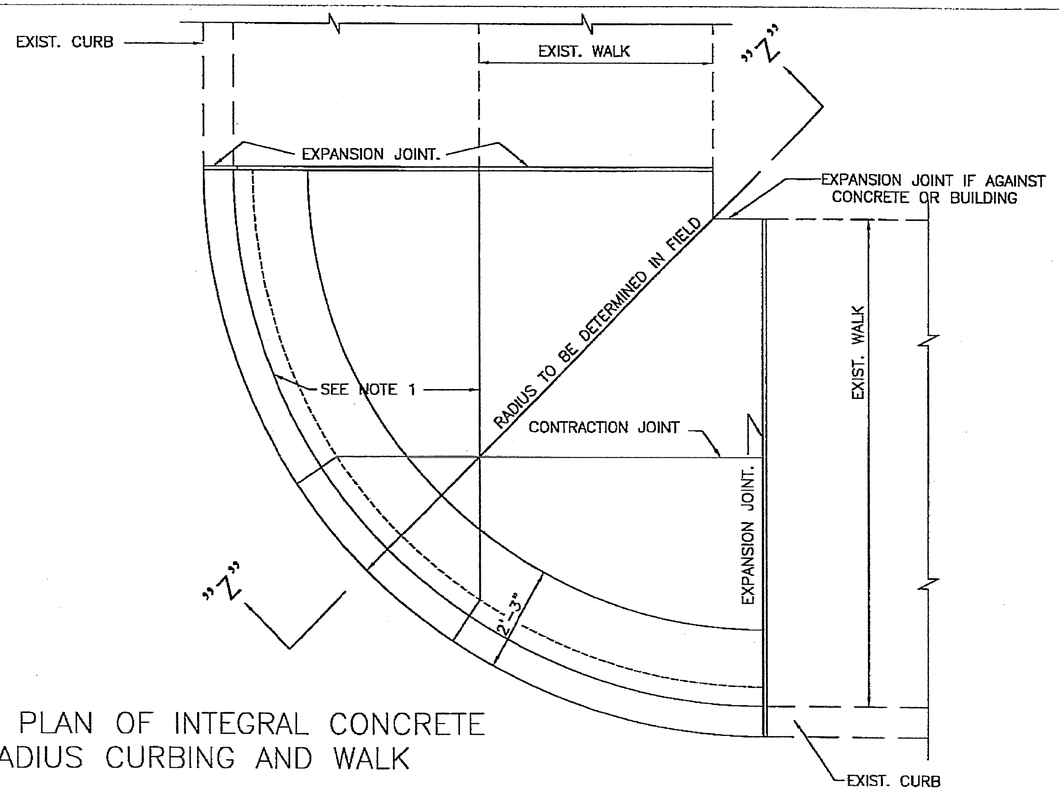
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Gleus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Gleus, Pyle, Schomer, Burns & DeHaven, Inc. 2023

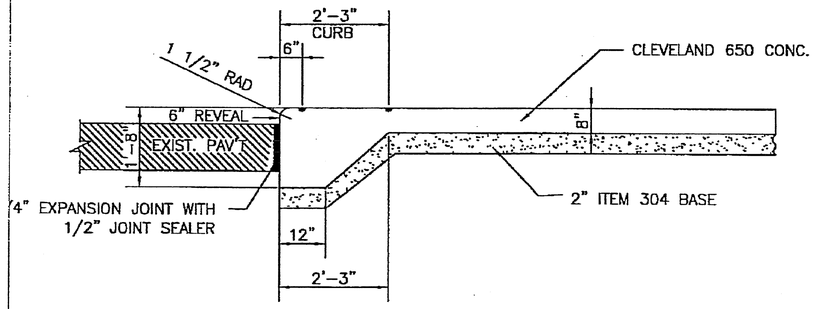
DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET: P.33 | TOTAL: 82



TYPICAL PLAN SHOWING INTEGRAL CONCRETE RADIUS CURBING AND WALK



DETAIL PLAN OF INTEGRAL CONCRETE RADIUS CURBING AND WALK



SECTION "Z"–"Z"

NOTES

1– THE WALK SURFACE SHALL BE CUT INTO SLABS NOT LONGER THAN SIX FEET ON ANY ONE SIDE BY JOINTING IMMEDIATELY BEFORE FINISHING. JOINTS SHALL BE FORMED 6" FROM THE EDGE OF ANY THICKENED SECTION. THESE JOINTS ARE TO BE 1/4" DEEP WITH EDGES ROUNDED TO A 1/4" RADIUS.

2– NUMBER OF RAMPS (1 OR 2) IS DEPENDENT ON FIELD CONDITIONS AND NUMBER OF REQUIRED PEDESTRIAN CROSSINGS.

3– ALL REQUIRED HANDICAP RAMPS, LAYOUT, AND CONCRETE SHALL BE INCLUDED IN THE PER SQ. FT. OR LUMP SUM BID ITEM FOR:
"INTEGRAL RADIUS CURBING AND RAMP WITH STAMPED TRUNCATED DOMES"
OR
"INTEGRAL RADIUS CURBING AND RAMP WITH ARMOR TILES" AS INDICATED IN THE SCHEDULE OF ITEMS.

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
DETAIL PLAN FOR INTEGRAL CONCRETE RADIUS CURBING & WALK
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 4/14/08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. :244–ME | SHEET 1/1 | 10

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

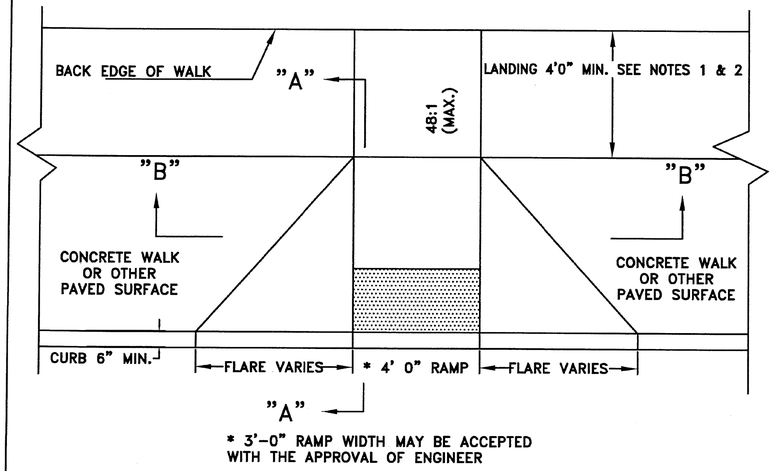
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

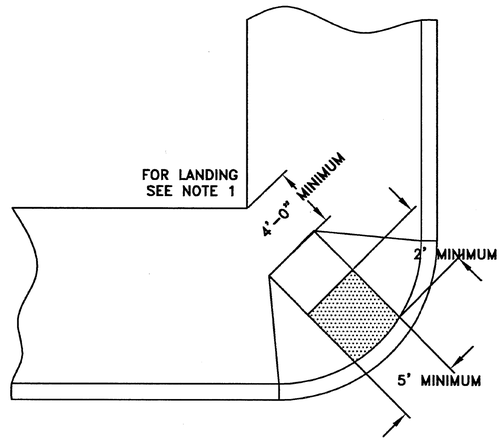
REVIEWER
Reviewed Date

PROJECT ID
123855

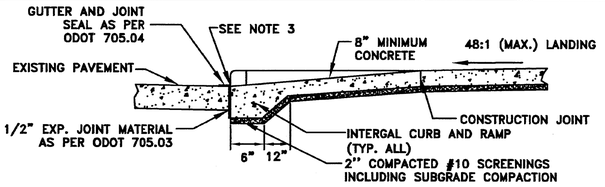
SHEET P.34 | TOTAL 82



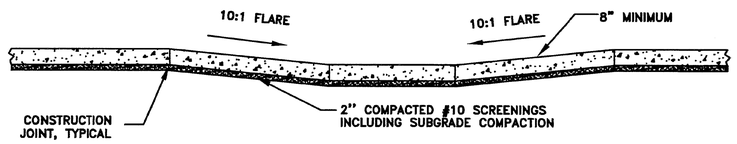
* 3'-0" RAMP WIDTH MAY BE ACCEPTED WITH THE APPROVAL OF ENGINEER



SINGLE RAMP



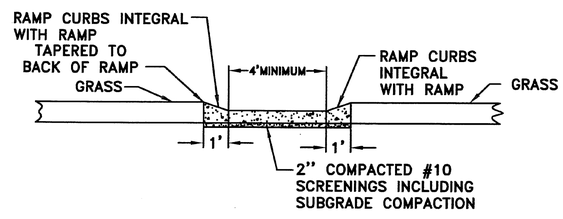
SECTION "A–A"



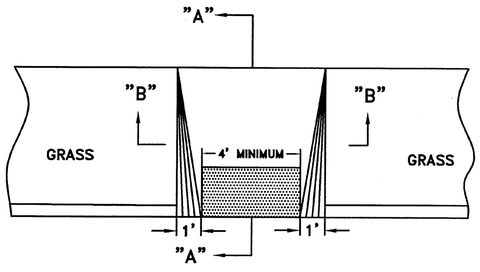
SECTION "B–B"

CR–1

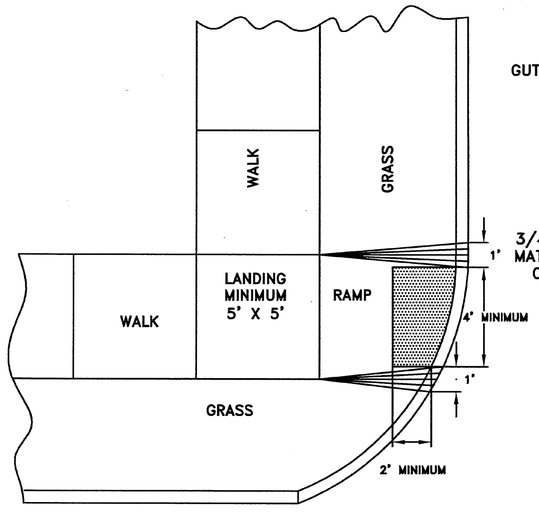
NOTES:
1) MAY BE REDUCED TO 3'–0" IN EXISTING SIDEWALK IF THE LANDING IS CONSTRAINED ALONG THE BACK EDGE.
2) WHERE THE LANDING IS LESS THAN 4'–0", THE RAMP FLARE SHALL BE INCREASED TO 12:1.
3) GUTTER SEAL, 705.04, 4" WIDE THE BOTTOM EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
4) SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.

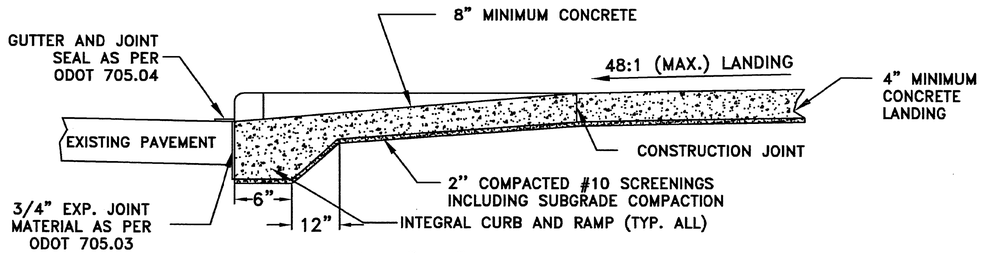


SECTION "B–B"



* 3'–0" RAMP WIDTH MAY BE ACCEPTED WITH THE APPROVAL OF ENGINEER





SECTION "A–A"

CR–2

NOTES:
1–THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
2–SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.
3–GUTTER SEAL, 705.04, 4" WIDE THE BOTTOM EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.

REVISED 12/8/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE

TYPICAL CONSTRUCTION CURB RAMPS

NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: [signature] DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO.: CR–1 | SHEET 1/6 | (11)

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

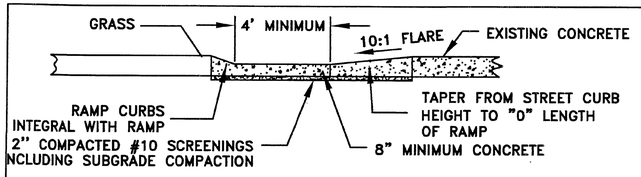
REVIEWER
Reviewed Date

PROJECT ID
123855

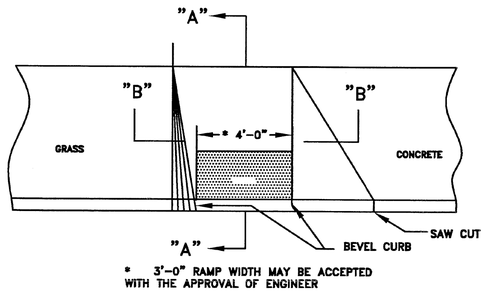
SHEET P.35 | TOTAL 82

CUY OLD DETROIT RD BRIDGE REHAB

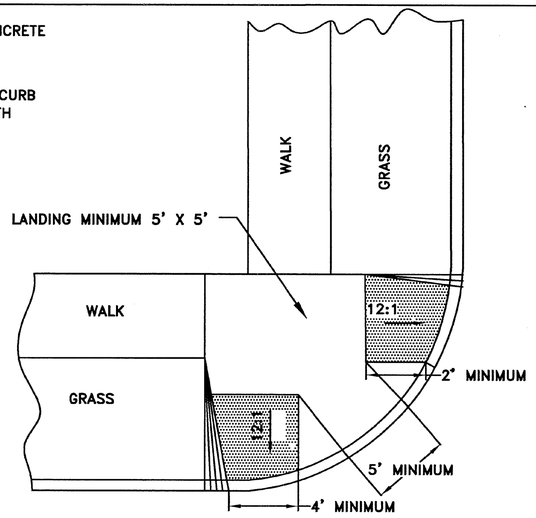
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

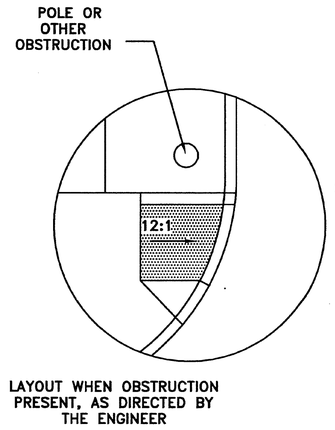


SECTION "B–B"

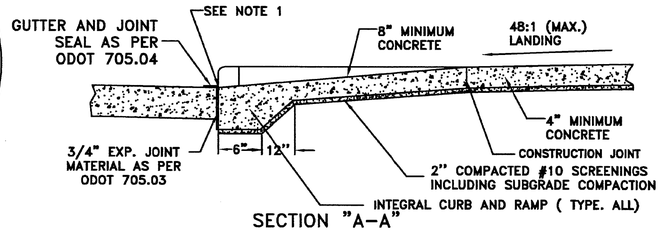


* 3'–0" RAMP WIDTH MAY BE ACCEPTED WITH THE APPROVAL OF ENGINEER





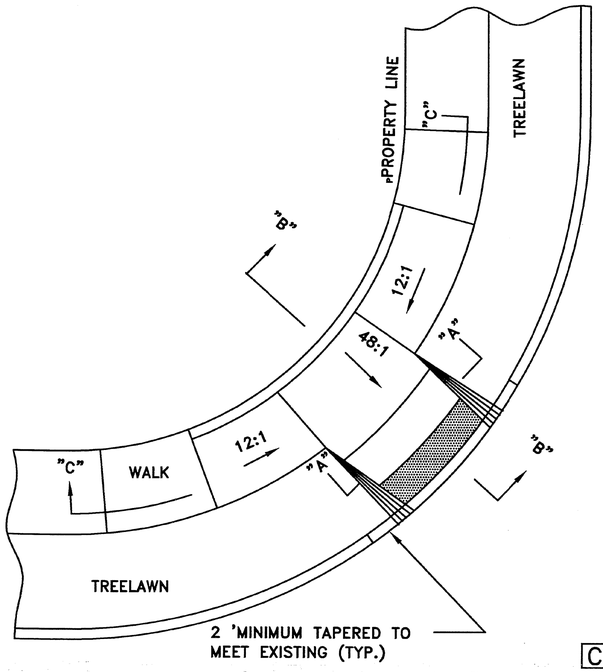
LAYOUT WHEN OBSTRUCTION PRESENT, AS DIRECTED BY THE ENGINEER



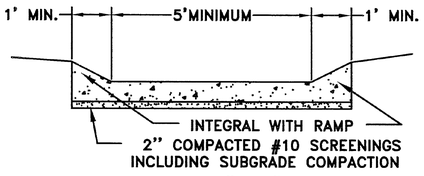
SECTION "A–A"

CR–3

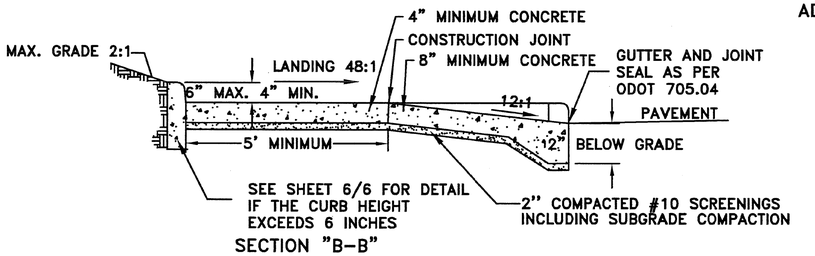
NOTES:
1–THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
2–SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.
3–BARRIER CURB INSTALLATION ONLY WHEN ADJACENT OBSTACLE PRESENT AND AS DIRECTED BY THE ENGINEER



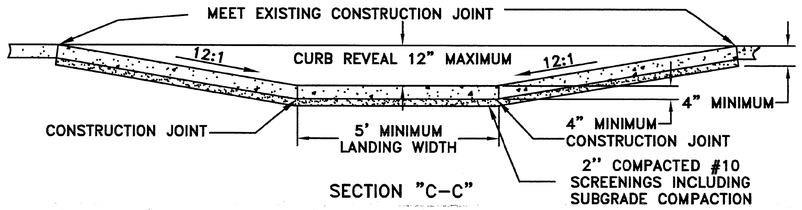
CR–4



SECTION "A–A"



SECTION "B–B"



SECTION "C–C"

NOTES:
1 – WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL TYPE "6" CURB (6" X 18"). ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.
2 – THE BOTTOM EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
3 – SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.

REVISED 12/8/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE

TYPICAL CONSTRUCTION CURB RAMPS

NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: [signature] DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO.: CR 1 | SHEET 2/6 | (12)

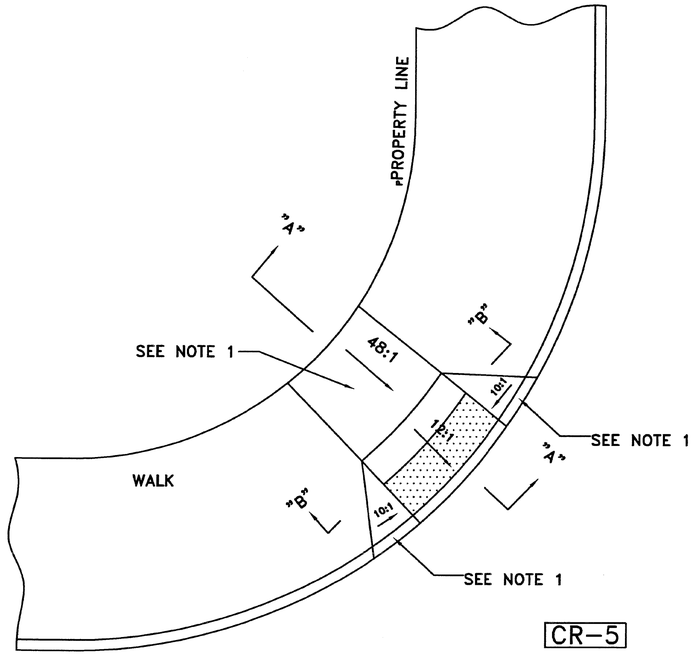
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

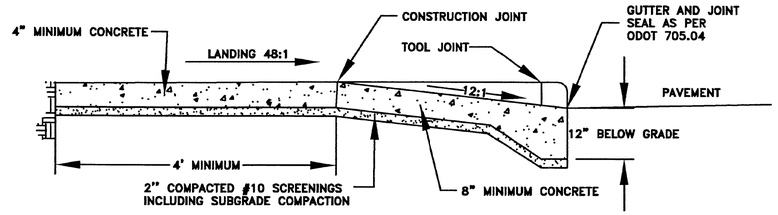
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2023

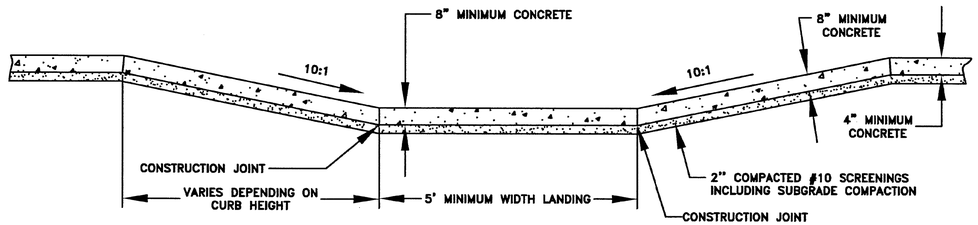
DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET: P.36 | TOTAL: 82



CR-5



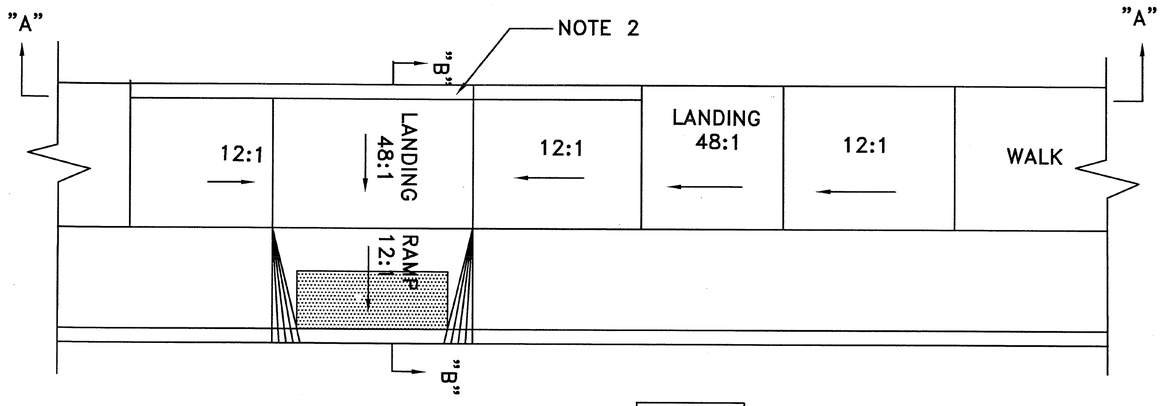
SECTION "A–A"



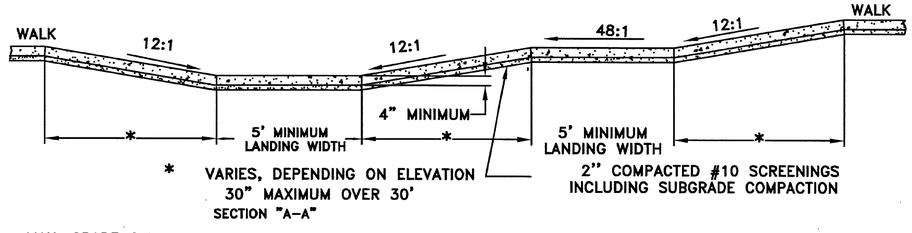
SECTION "B–B"

NOTES:

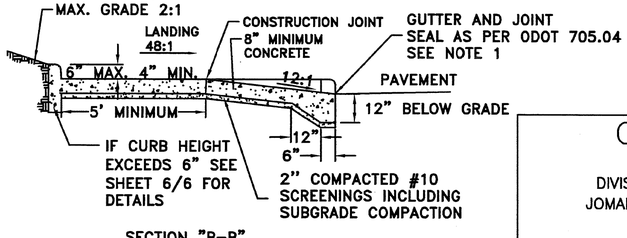
1 – WHERE THE LANDING IS LESS THAN 4'–0" THE RAMP FLARE SHALL BE INCREASED TO 12:1.
2 – SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.
3 – THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT OR GUTTER LINE.
4 – GUTTER SEAL, 705.04, 6" WIDE THE BOTTOM EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.



CR-6



SECTION "A–A"



SECTION "B–B"

NOTES:

1 – THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT OR GUTTER LINE.
2 – WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL TYPE "6" CURB (6" X 18"). ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.
3 – SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.

REVISED 12/8/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE

TYPICAL CONSTRUCTION CURB RAMPS

NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO.: CR 1 | SHEET 3/6 | 13

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

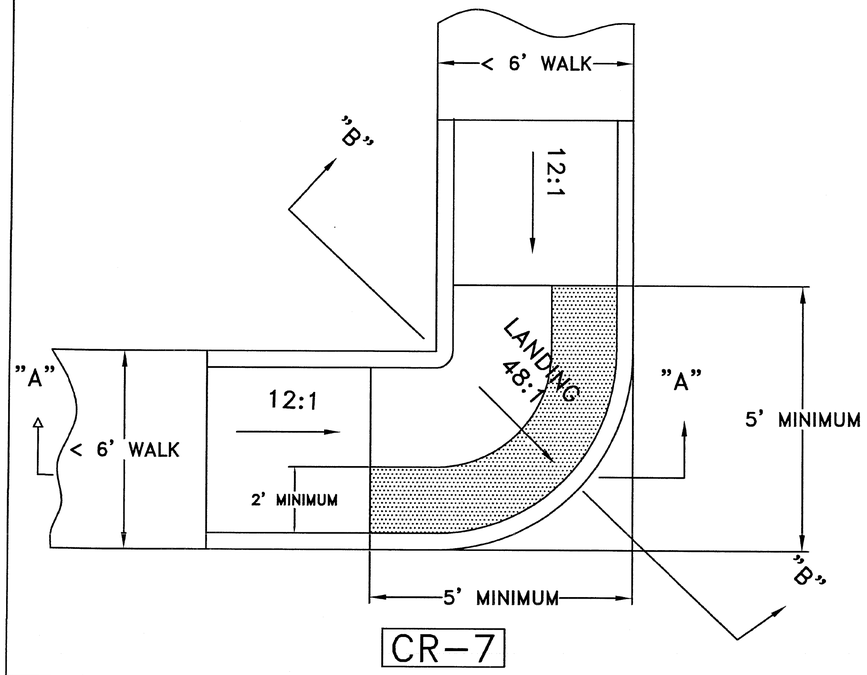
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2023

DESIGNER
Designed

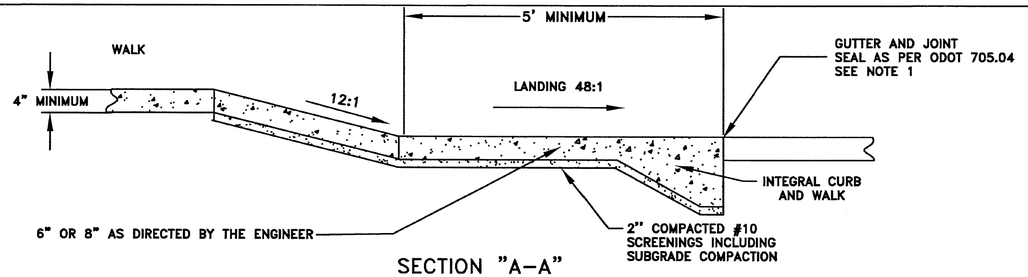
REVIEWER
Reviewed Date

PROJECT ID
123855

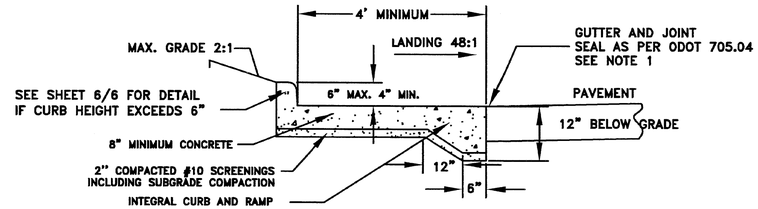
SHEET P.37 | TOTAL 82



CR–7



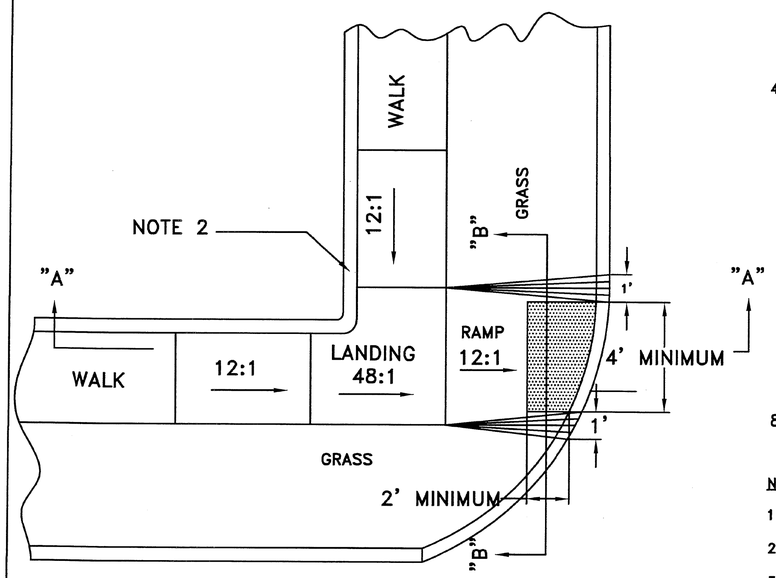
SECTION "A–A"



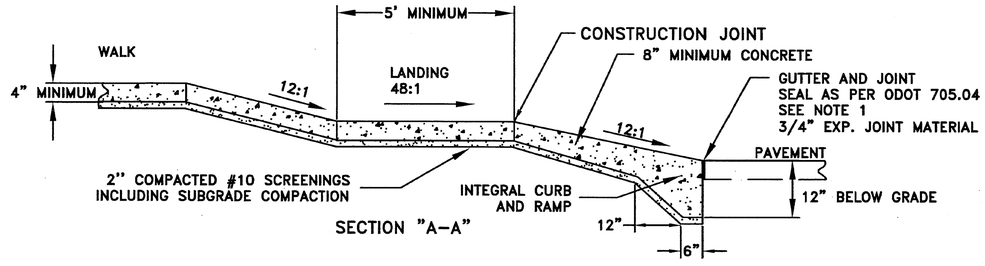
SECTION "B–B"

NOTES:

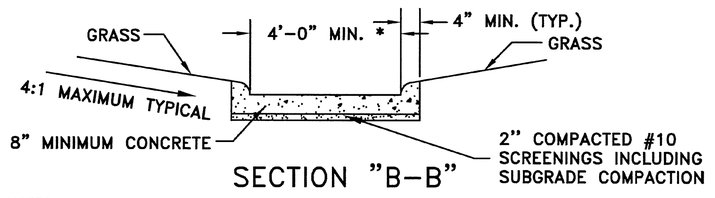
1 – THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT OR GUTTER LINE.
2 – WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL TYPE "6" CURB (6" X 18"). ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.
3 – SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.



CR–8



SECTION "A–A"



SECTION "B–B"

NOTES:

1 – THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT OR GUTTER LINE.
2 – WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL TYPE "6" CURB (6" X 18"). ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.
3 – SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.

REVISED 12/8/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE

TYPICAL CONSTRUCTION CURB RAMPS

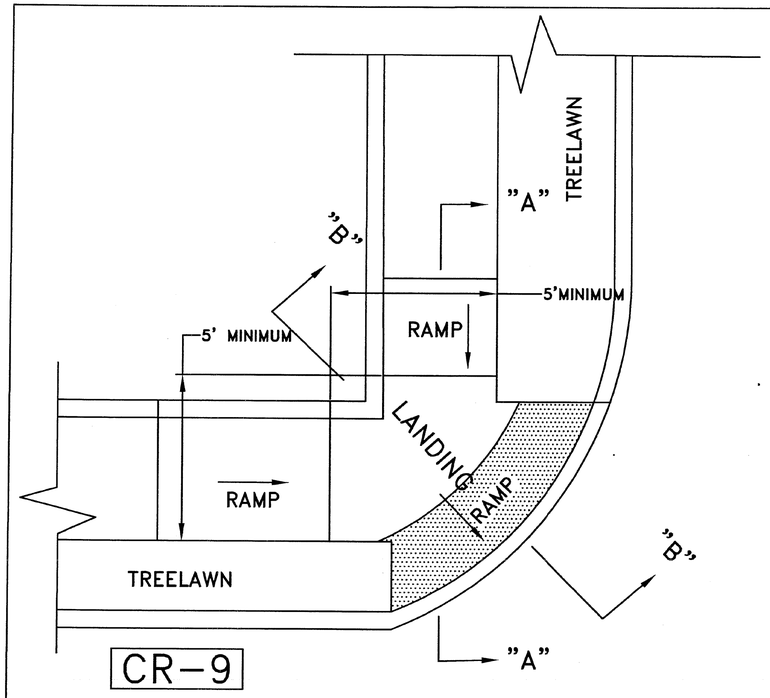
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

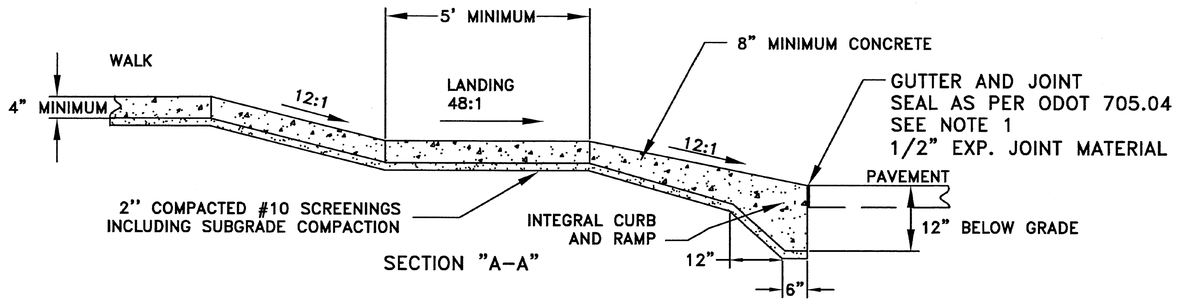
FILE NO.: CR 1 | SHEET 4/6 | 14

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2023

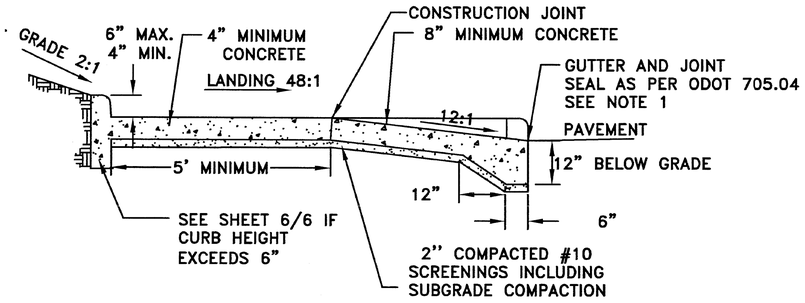
DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET P.38 | TOTAL 82



CR-9



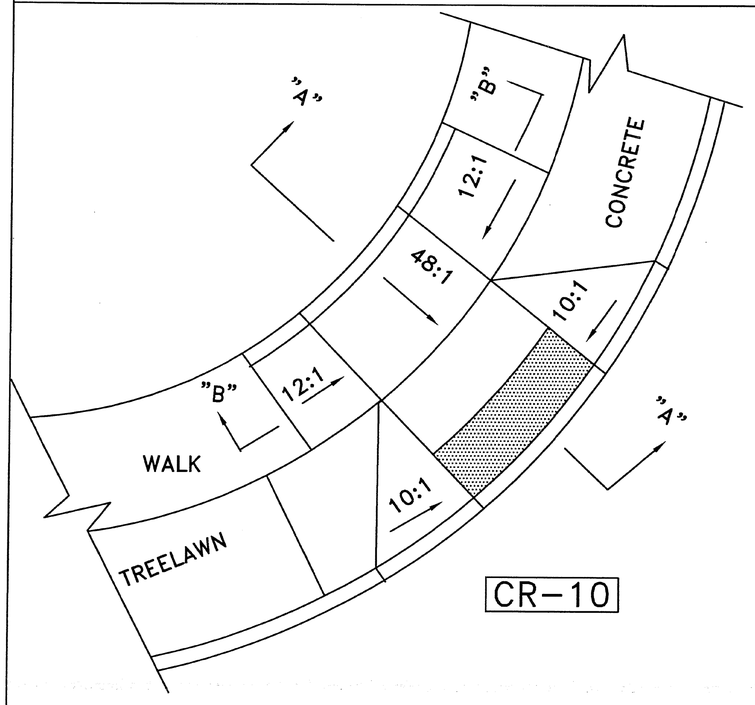
SECTION "A-A"



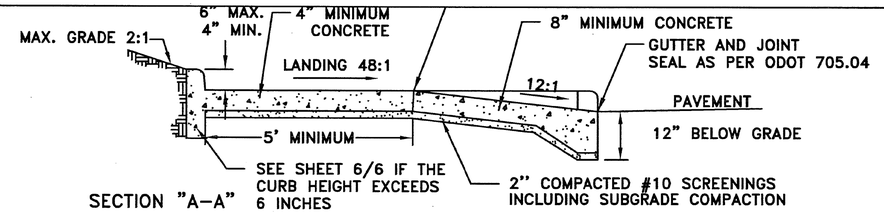
SECTION "B-B"

NOTES:

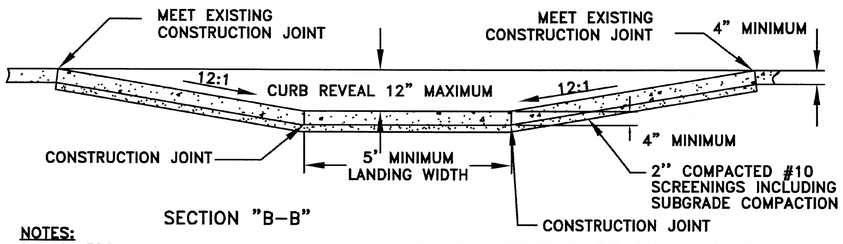
1 - THE BOTTOM EDGE OF THE CURB RAMP SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT OR GUTTER LINE.
2 - WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL TYPE "6" CURB (6" X 18"). ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.
3 - SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.



CR-10



SECTION "A-A"



SECTION "B-B"

NOTES:

1 - WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL TYPE "6" CURB (6" X 18"). ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.
2 - THE BOTTOM EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
3 - SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.

REVISED 12/8/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE

TYPICAL CONSTRUCTION CURB RAMPS

NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO.: CR 1 | SHEET 5/6 | 15

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

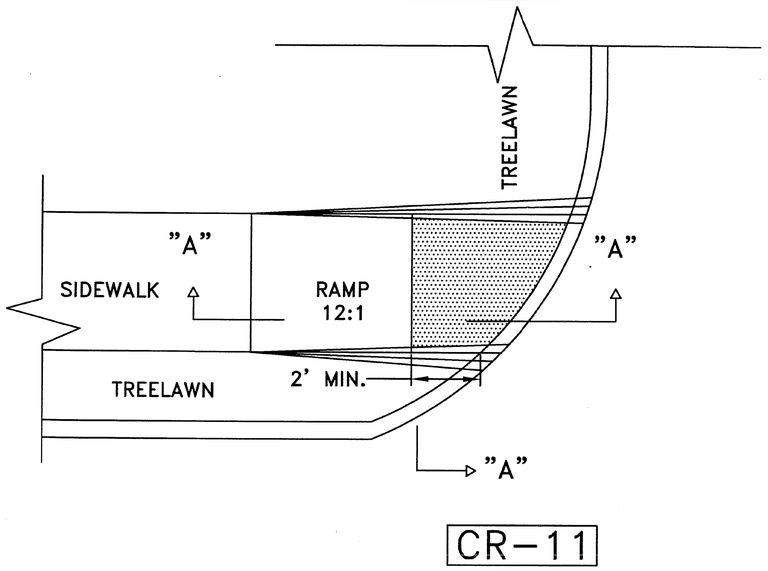
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER
Designed

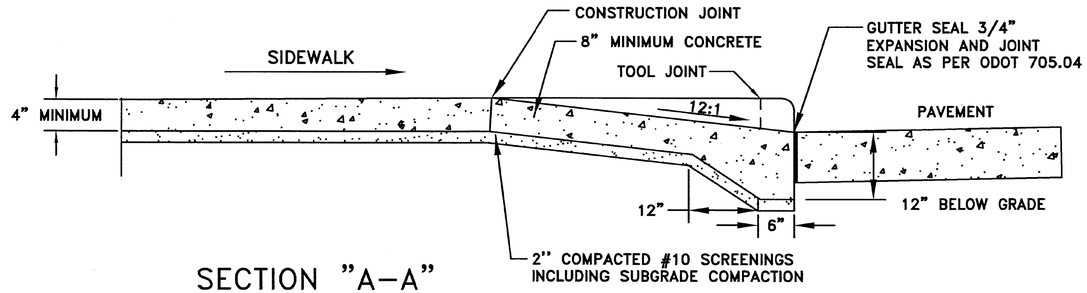
REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.39 | TOTAL 82

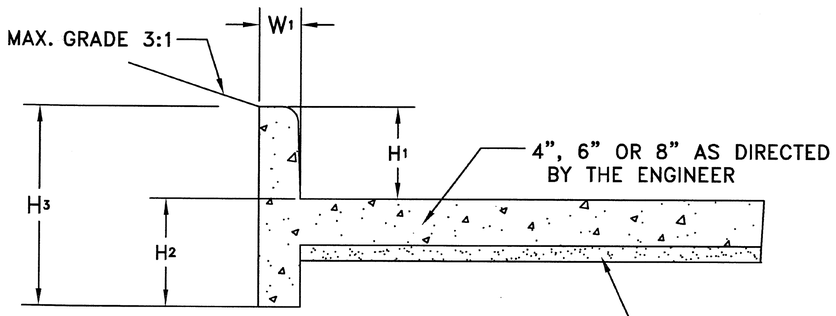


CR-11



SECTION "A–A"

NOTES:
1 – WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL TYPE "6" CURB (6" X 18"). ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.
2 – THE BOTTOM EDGE OF THE CURB SHALL BE FLUSH WITH THE EDGE OF THE ADJACENT PAVEMENT AND GUTTER LINE.
3 – SURFACE TEXTURE OF ALL RAMPS SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE RAMP SLOPES AS DIRECTED BY THE ENGINEER AND SHALL BE ROUGHER THAN ADJACENT WALK.
4 – THIS DETAIL SHALL ONLY BE USED TO RETROFIT EXISTING CURB RAMPS AND SHALL NOT BE USED FOR NEW CURB RAMP CONSTRUCTION.



ROLLED CURB
INSTALL ONLY AT THE DIRECTION OF THE ENGINEER

H_1	W_1	H_2	H_3
6"	6"	6"	12"
8"	6"	10"	18"
10"	8"	12"	22"
12"	10"	12"	24"

NOTES:
1 – WHERE A ROLLED CURB EXCEEDS SIX INCHES ABOVE THE WALK, THE CONTRACTOR SHALL INSTALL CURB PER THIS DETAIL. ROLLED CURB SHALL BE INSTALLED ONLY AT THE DIRECTION OF THE ENGINEER.

REVISED 12/8/09

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
TYPICAL CONSTRUCTION
CURB RAMPS & ROLLED CURB DETAIL
NOT TO SCALE

SUBMITTED BY: R. PLIODZINSKAS DATE: 4/8/08
W. MCLAUGHLIN DATE: 4/8/08

DATE: 4/14/08

COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO.: CR 1 | SHEET 6/6 | 16

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
Gibus, Pyle, Schomer, Burns & Deneen, Inc.
Copyright Gibus, Pyle, Schomer, Burns & Deneen, Inc. 2023

DESIGNER
Designed

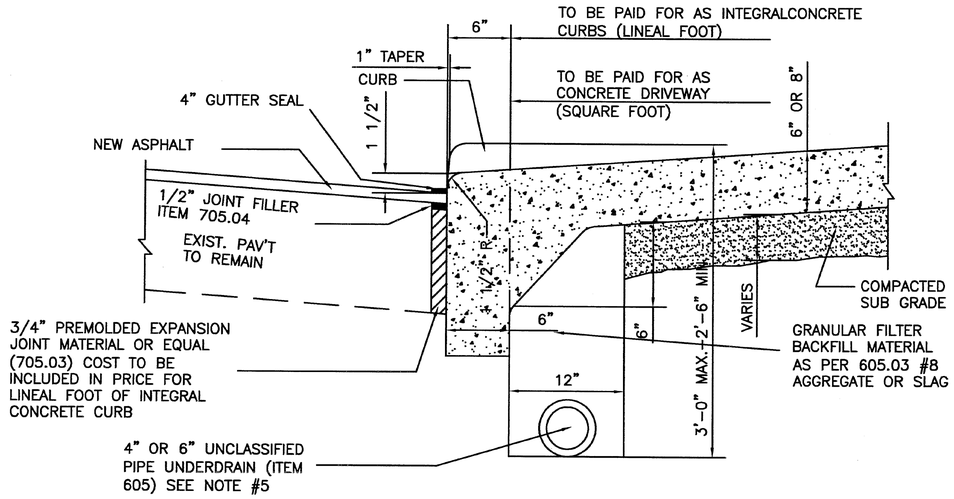
REVIEWER
Reviewed Date

PROJECT ID
123855

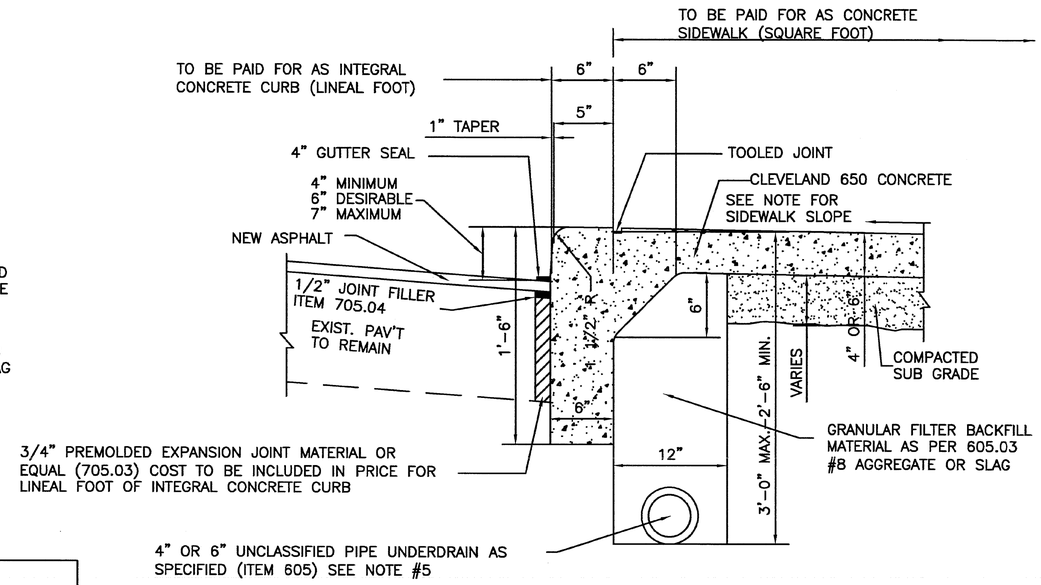
SHEET P.40 | TOTAL 82

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

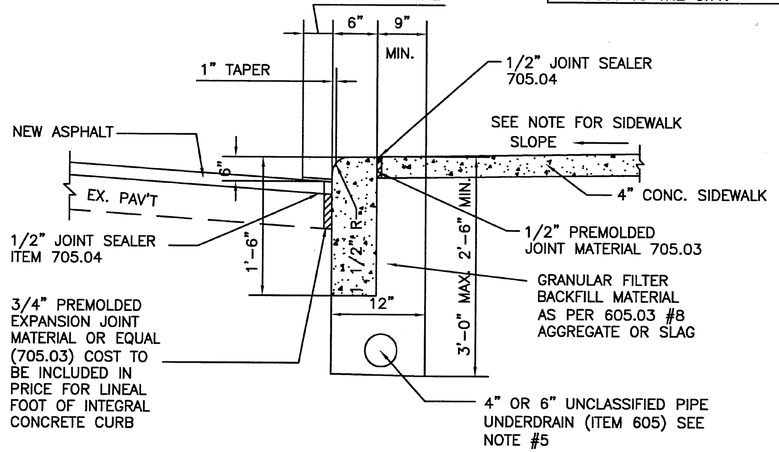


INTEGRAL CONCRETE DRIVEWAY
NO SCALE



INTEGRAL CONCRETE CURB & WALK
NO SCALE

OPTIONAL DETAIL
THE CONTRACTOR MAY USE THIS DETAIL IF GRANTED PERMISSION TO POUR THE CURB AND SIDEWALK OR DRIVEWAY INTEGRALLY THERE SHALL BE NO ADDITIONAL COST TO THE CITY.



CAST-IN-PLACE CONCRETE CURB
NO SCALE

NOTES:

1. SAND BACKFILL AS REQUIRED TO ACHIEVE PROPOSED SUB GRADE. COST TO BE INCLUDED IN UNIT PRICE BID PER SQUARE FOOT OF SIDEWALK OR CONCRETE DRIVEWAY.
2. TRANSVERSE CONTRACTION JOINTS (5'CTRS) AND EXPANSION JOINTS TO BE CONSTRUCTED AS DIRECTED BY THE ENGINEER. JOINTS SHALL BE TOOLED 5 " FROM THE STREET FACE OF THE CURB. 1/4" DEEP WITH EDGES ROUNDED TO A 1/4" RADIUS. COST TO BE INCLUDED IN PRICE PER SQUARE FOOT OF SIDEWALK OR CONCRETE DRIVEWAY.
3. TRANSITION FROM STANDARD CURB SECTION TO DROP CURB SECTION TO BE MADE IN 18" DISTANCE FROM DRIVEWAY.
4. SLOPE SHALL BE PROVIDED AS NEEDED TO DRAIN SIDEWALK AND TREELAWN AREA. 1/8"/ FT. MIN. (1/4"/ FT. DESIRABLE AND 5/8"/ FT. MAX.) IF THE EXISTING CONDITIONS RESULT IN A UNIFORM SLOPE GREATER THAN 1/4"/ FT. THEN THE SLOPE IN THE TREELANWN AREA MAY EXCEED THE MAX. AS NEEDED TO PROVIDE A SIDEWALK SLOPE OF 1/4"/ FT.
   THE SLOPE IN THE WALK AREA OF DRIVE APRONS MUST NOT EXCEED ADA REQUIREMENTS OF ¼"/ FT. CROSS SLOPE.
5. UNDERDRAINS TO BE INSTALLED IN AREAS WHERE CURB IS TO BE REPLACED. THE UNDERDRAIN SHALL BE CONSTRUCTED SO AS TO MATCH THE LOCATION OF ANY EXISTING UNDERDRAIN TO REMAIN. UNDERDRAIN SHALL OUTLET AT CATCH BASIN. UNDERDRAINS SHALL HAVE FILTER FABRIC WRAP OR TRENCH IS WRAPPED WITH FILTER FABRIC AS SPECIFIED.

REVISED 12/3/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE

CURB DETAILS

NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 4/14/08

COMMISSIONER OF ENGINEERING AND CONSTRUCTION

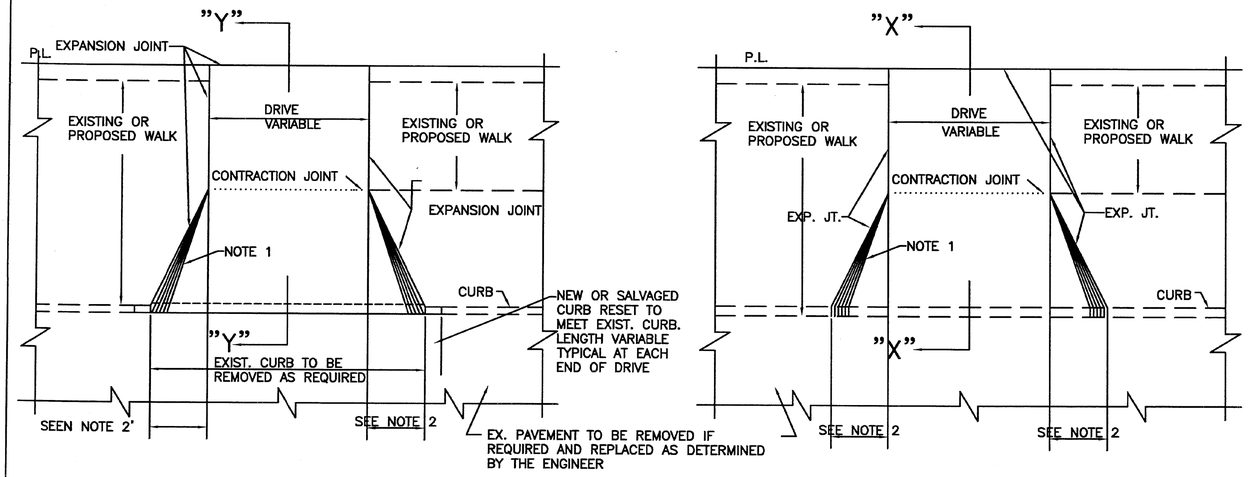
FILE NO. CD 1	SHEET 1/3	17

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.41 TOTAL 82

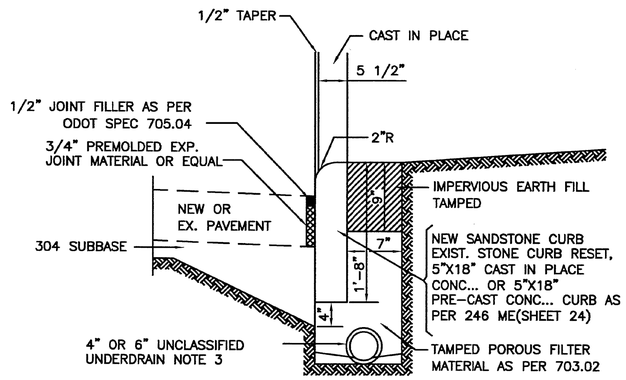


PLAN FOR NEW DRIVE WITH INTEGRAL CONCRETE CURB

NOT TO SCALE

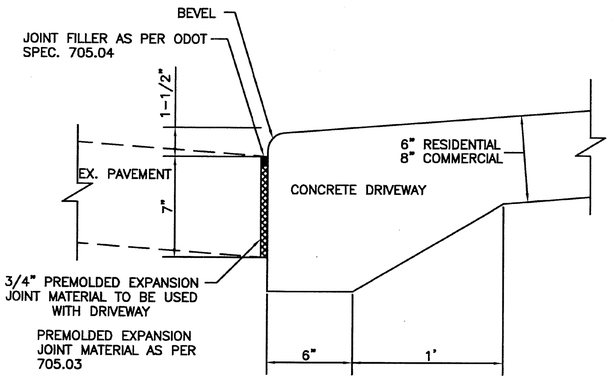
PLAN FOR NEW DRIVE WITH CURB CUT

NOT TO SCALE



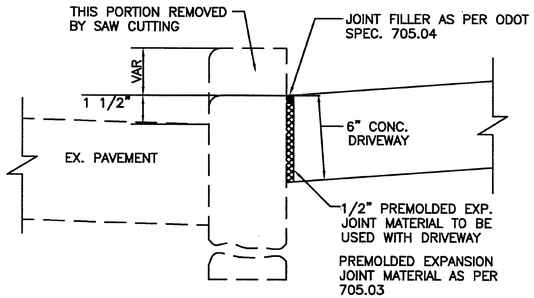
TYPICAL CURB CONSTRUCTION DETAIL

NOT TO SCALE



SECTION "Y"–"Y"

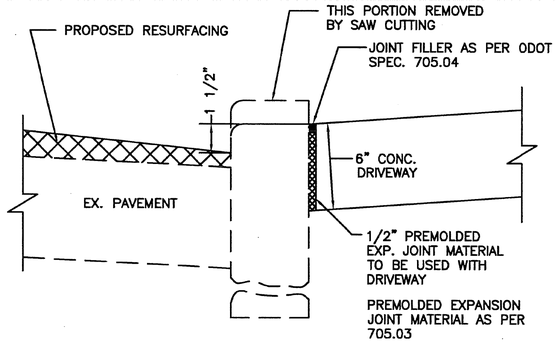
NOT TO SCALE



SECTION "X"–"X"

SHOWING PROPOSED DRIVE GUTTER WITHOUT RESURFACING

NOT TO SCALE



SECTION "X"–"X"

SHOWING PROPOSED DRIVE GUTTER WITH RESURFACING

NOT TO SCALE

NOTES:

1 – ON STREETS WITH NARROW TREELAWNS AND SIDEWALKS OR WITH APPROVAL OF THE ENGINEER THE FOLLOWING DETAIL MAY BE USED.
2 – APRON FLARES ARE 3' FOR RESIDENTIAL AND 5' COMMERCIAL
3 – UNDERDRAINS SHALL HAVE FILTER FABRIC WRAP OR TRENCH IS WRAPPED WITH FILTER FABRIC AS SPECIFIED.

REVISED 8/3/09

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK – DIRECTOR OF PUBLIC SERVICE

STANDARD PLAN OF TYPICAL CURB & DETAILS AT DRIVEWAYS

NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: [signature] DATE: 4/14/08
COMMISSIONER OF ENGINEERING AND CONSTRUCTION

FILE NO. CD 1	SHEET 2/3	(18)

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

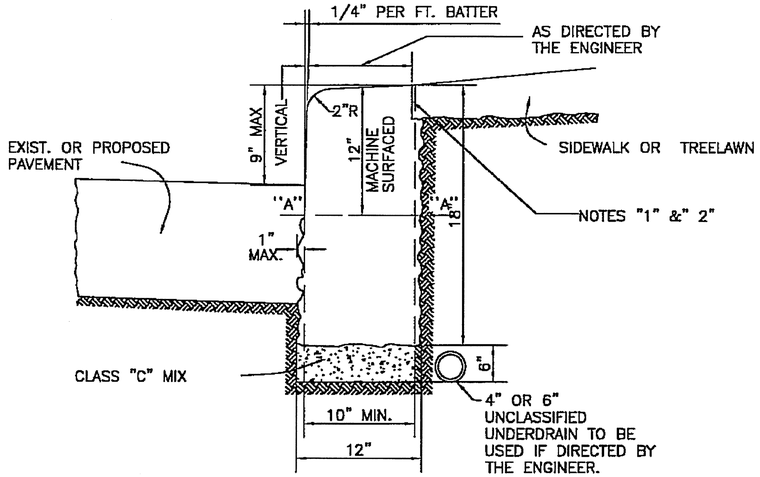
REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.42 TOTAL 82

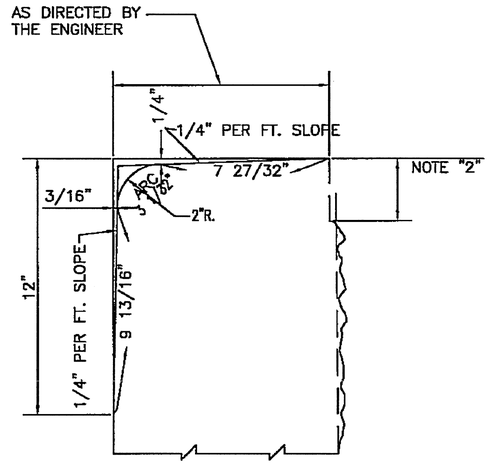
CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

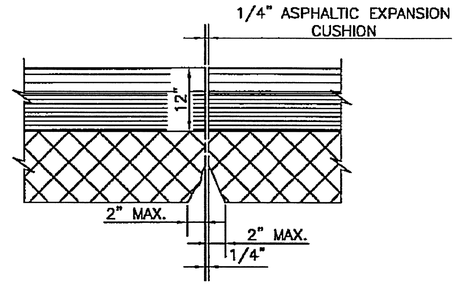


CURB TO BE USED ON STRAIGHT SECTION

TOP FACE AND ENDS OF CURB ABOVE LINE "A"–"A" ARE TO BE MACHINED. ALSO BACK OF CURB 1" FROM TOP AS SHOWN.



DETAIL OF CURB CUTTING



ELEVATION SHOWING CURB JOINT SECTION "A" – "A"

NOTES

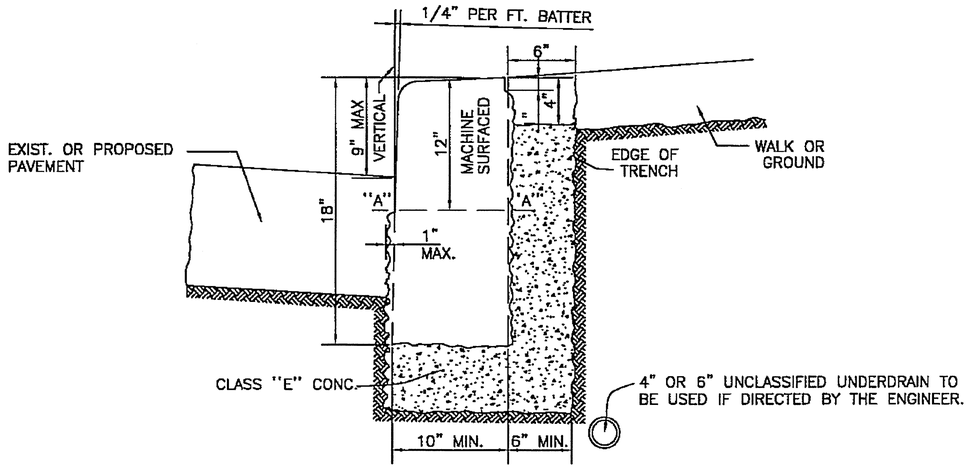
CURB SHALL BE SET IN AND BACKED WITH A MINIMUM OF CLASS "C" CONCRETE AS SHOWN. THE ENTIRE CURB TRENCH IS TO BE COMPLETELY FILLED WITH CONCRETE UP TO THE LEVEL SHOWN ON THE SECTION. SEE STANDARD SPECIFICATIONS.

CURB TO BE LIGHT GRAY GRANITE TO MATCH EXISTING CURBING IN MALL. LENGTH TO BE 4"–6" WITH CLOSURE STONE NOT LESS THAN 3' LONG.

1 – EXPANSION JOINT NOT SHOWN

2 – 6" MINIMUM, INCREASE IF REQUIRED TO MATCH EXISTING WALK OR APRON THICKNESS

3 – FOR 8" OR 12" MALL CURBING DECREASE OR INCREASE THE THICKNESS DIMENSIONS AND TOLERANCES BY 2"



CURB DETAIL TO BE USED ON ALL CURVED SECTIONS

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD DETAILS SHOWING GRANITE CURBING
NOT SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: [signature] DATE: 4/14/08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

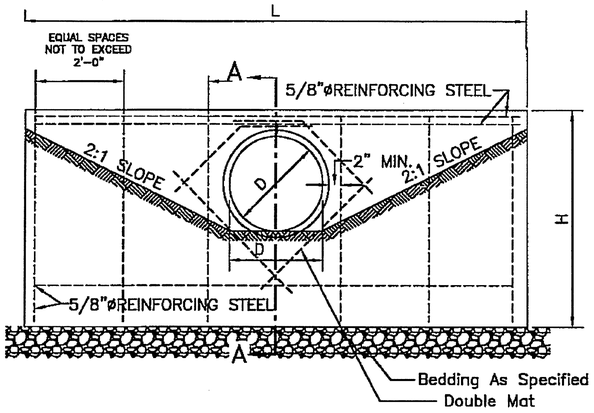
FILE NO. CR 1	SHEET 3/3	19

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

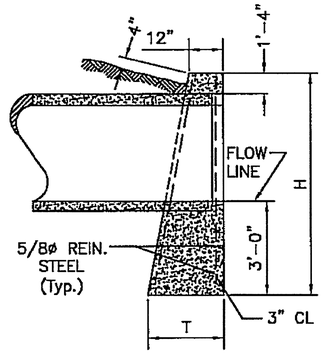
14/12/2023
O:\Public\OH\Cleveland\2025\025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.43 TOTAL 82



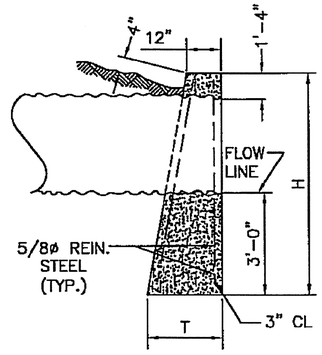
HEADWALL ELEVATION

NOTE: ALL REINFORCEMENT IS TO BE EPOXY COATED



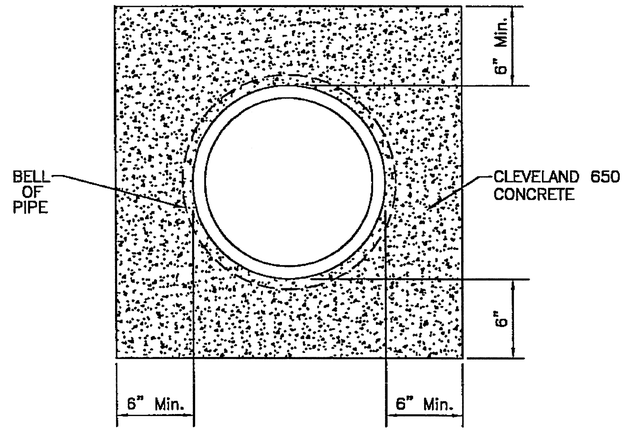
SECTION A–A

RIGIDE PIPE



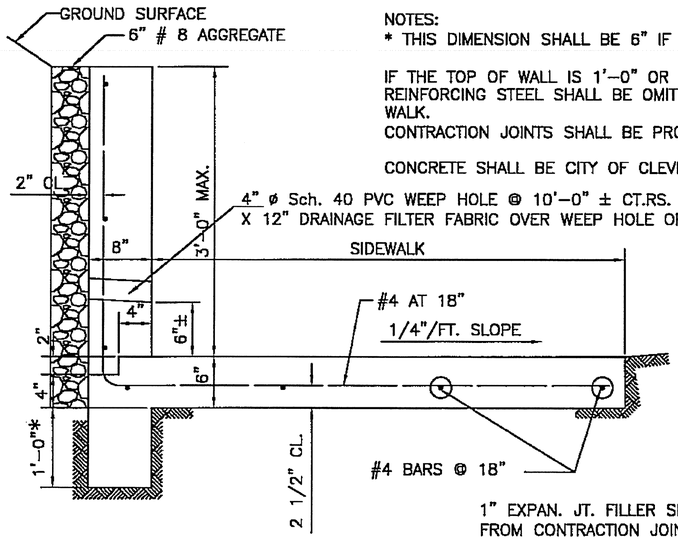
SECTION A–A

CORRUGATED PIPE



STANDARD SECTION OF PIPE SEWER INCASED IN 6" CONCRETE

NOTE: 6" IF FORMED, OTHERWISE EXTEND TO UNDISTURBED EARTH



NOTES:

* THIS DIMENSION SHALL BE 6" IF THE TOP OF WALL IS 1'–0" TO 2'–0" ABOVE TOP OF WALK.

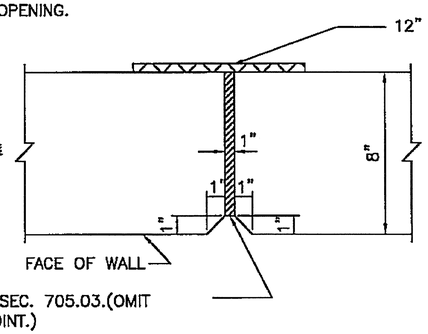
IF THE TOP OF WALL IS 1'–0" OR LESS ABOVE TOP OF WALK, THE FOOTING KEY AND THE REINFORCING STEEL SHALL BE OMITTED, AND THE WALL SHALL BE POURED MONOLITHICALLY WITH THE WALK.

CONTRACTION JOINTS SHALL BE PROVIDED AT 30'–0" MAX. AND EXPANSION JOINTS AT 90'–0" MAX.

CONCRETE SHALL BE CITY OF CLEVELAND 650 MIX

DETAIL FOR CONCRETE WALL & SIDEWALK

NOTE: ALL REINFORCEMENT IS TO BE EPOXY COATED



DETAIL OF EXPANSION JOINT AND CONTRACTION JOINT

HEADWALL DIMENSIONS

D	H	L	T
12"	5'–5"	5'–6"	1'–9"
15"	5'–8 1/2"	5'–9"	1'–11"
18"	6'–0"	6'–0"	2'–0"
21"	6'–3 1/4"	7'–0"	2'–2"
24"	6'–6 1/2"	8'–0"	2'–5"
27"	6'–10 1/2"	9'–0"	2'–8"
30"	7'–1 1/2"	10'–0"	2'–11"
36"	7'–8"	12'–0"	3'–2"

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK– DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
MISCELLANEOUS CONCRETE CONSTRUCTION DETAILS
NO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

SHEET 1/1 | 20

CUY OLD DETROIT RD BRIDGE REHAB

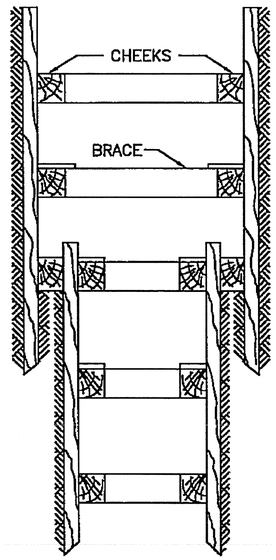
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET: P.44 TOTAL: 82

DEPTH OF TRENCH IN FEET	2 IN. SHEETING FEET BOARD MEAS.	SIZE OF SEWERS												
		12" 15" 18"	21" 24" 27"	30" 33" 36" #2C BR. #3C BR.	42" 48" #4C BR. #5C BR. #6C BR.	54" 60" #7C BR. #8C BR. #9C BR.	66" #10C BR. #11C BR. #12C BR.	72" 78" #13C BR. #14C BR. #15C BR.	84"	90" 96"	102"	108" 114"	120"	
		WIDTH OF TRENCH IN FEET (SEE NOTE)												
		3	4	5	6	7	8	9	10	11	12	13	14	
		SIZE OF BRACES AND CHEEKS IN INCHES												
		6x6	6x6	6x6	6x6 8X8	6x6 8X8	6x6 8X8	6x6 8X8	6x6 8X8	6x6 8X8	6x6 8X8	6x6 8X8	6x6 8X8	
6	24	15	16	18	20 34	21 36	22 39	24 42	25 44	27 47	28 50	30 52	31 55	TWO SETS OF BRACES
8	32	"	"	"	" "	" "	" "	" "	" "	" "	" "	" "	" "	" "
10	40	"	"	"	" "	" "	" "	" "	" "	" "	" "	" "	" "	" "
12	48	27	28	28	29 51	30 52	30 53	31 55	32 56	33 57	33 59	34 60	35 61	THREE SETS OF BRACES
14	56	"	"	"	" "	" "	" "	" "	" "	" "	" "	" "	" "	" "
16	64	34	35	36	37 65	38 67	38 68	39 70	40 71	41 73	41 74	42 76	43 77	2 SETS OF SHEETING FOUR SETS OF BRACES
18	80	"	"	"	" "	" "	" "	" "	" "	" "	" "	" "	" "	" "
20	88	"	"	"	" "	" "	" "	" "	" "	" "	" "	" "	" "	" "
22	96	"	"	"	" "	" "	" "	" "	" "	" "	" "	" "	" "	" "
24	104	43	44	45	46 80	46 81	47 83	48 84	49 86	49 87	50 89	51 90	52 92	FIVE SETS OF BRACES
26	112	"	"	"	" "	" "	" "	" "	" "	" "	" "	" "	" "	" "
28	120	43	44	45	46 80	46 81	47 83	48 84	49 86	49 87	50 89	51 90	52 92	FIVE SETS OF BRACES



NOTES:

1 – THE MIN. TRENCH WIDTH IS DETERMINED AS PER DWG. ME 146 AND IS THE TRENCH WIDTH AT THE TOP OF THE SEWER OR AT THE TOP OF THE UTILITY BEING INSTALLED AS PER OWNING UTILITIES REQUIREMENTS.

2 – THIS CHART SHOWS MINIMUM SHEETING & BRACING REQUIREMENTS. CONTRACTOR SHALL SUBMIT A SHEETING & BRACING SCHEDULE, COMPLETE WITH CALCULATIONS, DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF OHIO

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
SHEETING & BRACING CHART
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. : 164ME | 21

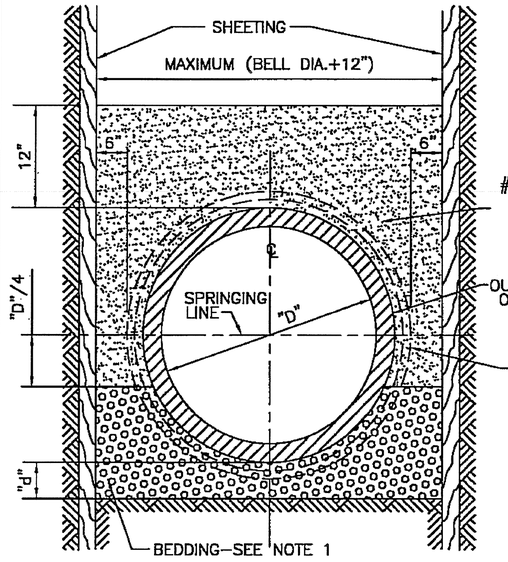
CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

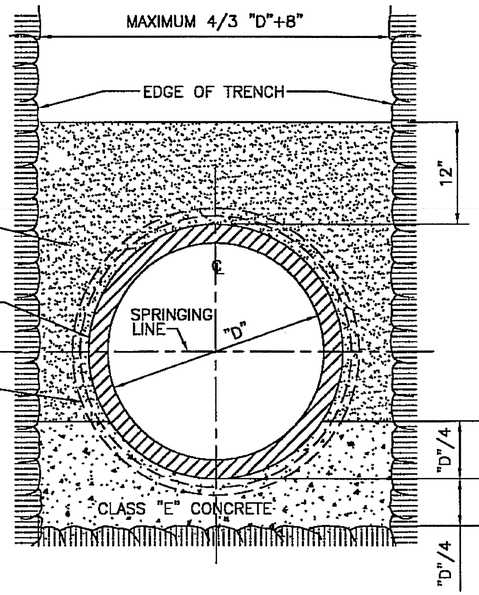
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET: P.45 TOTAL: 82



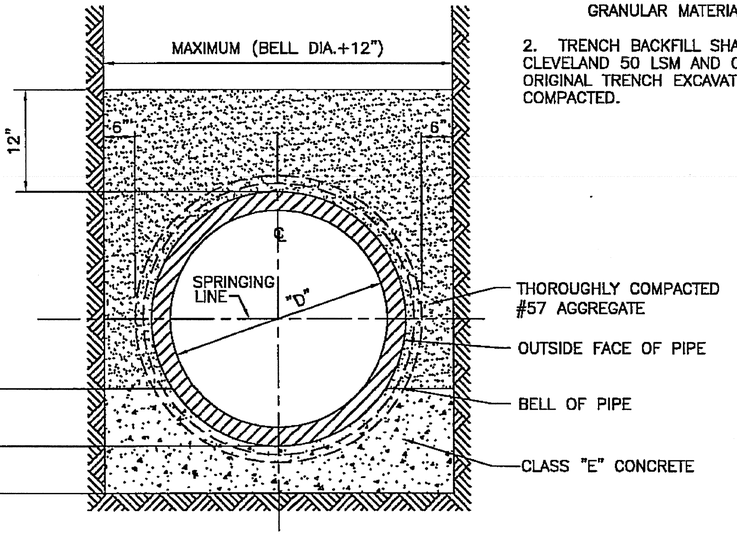
TYPICAL SECTION

PIPE SEWERS IN
ORDINARY EARTH BEDDING



TYPICAL SECTION

PIPE SEWER IN ROCK
AND OR SHALE
WHERE DIRECTED



TYPICAL SECTION

PIPE SEWER IN
CONCRETE CRADLE

NOTES:

1. THE PIPE BEDDING MATERIAL SHALL BE COARSE NATURAL AGGREGATE COMPLYING WITH 703.01 WITH THE FOLLOWING PROVISIONS:

   (A) 4" BEDDING DEPTH "d" OF NO. 57 GRANULAR MATERIAL FOR 8" TO 24" PIPE

   (B) 6" BEDDING DEPTH "d" OF NO. 5 GRANULAR MATERIAL FOR 27" TO 60" PIPE

   (C) 8" BEDDING DEPTH "d" OF NO. 4 GRANULAR MATERIAL FOR PIPE SIZES GREATER THAN 60". THE MINIMUM DEPTH OF THE BEDDING SHALL BE 2" BELOW THE PIPE BELLS, IF ANY, BUT IN NO CASE SHALL THE BEDDING BE LESS THAN 8"

   (D) SERVICE CONNECTIONS SHALL HAVE A 3" MINIMUM BEDDING DEPTH OF NO. 57 GRANULAR MATERIAL.

2. TRENCH BACKFILL SHALL IN PAVED AREAS SHALL BE CLEVELAND 50 LSM AND OUTSIDE OF PAVED AREAS ORIGINAL TRENCH EXCAVATION MAY BE USED, PROPERLY COMPACTED.

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD TRENCH FOR PIPE SEWERS
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 8/28/07
SUBMITTED BY: W. MCLAUGHLIN DATE: 8/28/07
APPROVED: DATE: 7-8-08
COMMISSIONER OF ENGEERING & CONSTRUCTION

FILE NO. 146–ME	SHEET 22	22

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

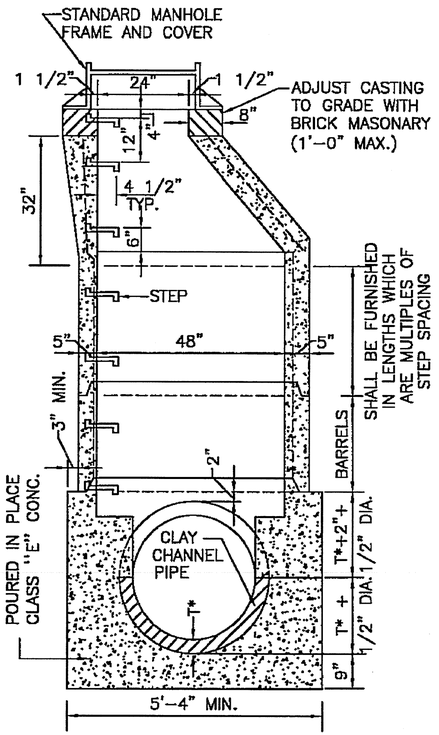
DESIGN AGENCY
GPD GROUP
Gbuis, Pyle, Schomer, Burns & Deneven, Inc.
Copyright: Gbuis, Pyle, Schomer, Burns & Deneven, Inc. 2023

DESIGNER
Designed

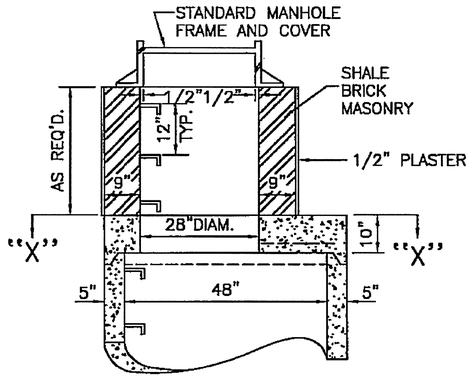
REVIEWER
Reviewed Date

PROJECT ID
123855

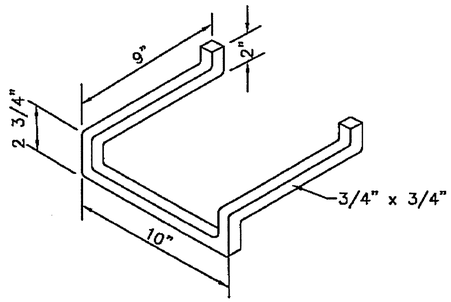
SHEET P.46 | TOTAL 82



SEWERS 42" AND UNDER

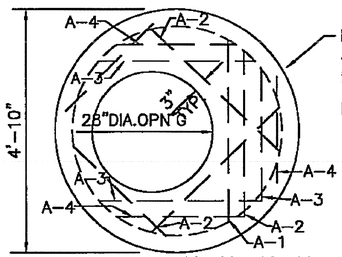


ALTERNATE DOME



STEP DETAIL

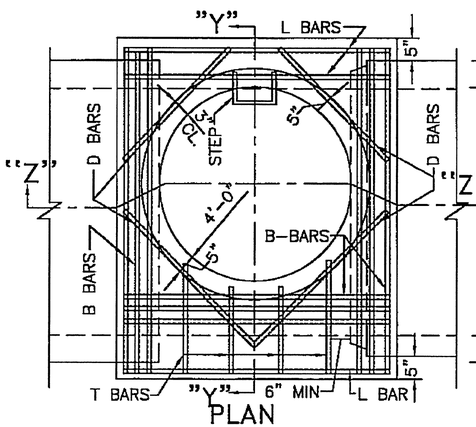
NOTE:
STEPS SHALL BE CAST IRON AS PER ASTM A 48 CLASS 30 GRAY IRON OR ALUMINUM AS PER ASTM B 221,6061-T6



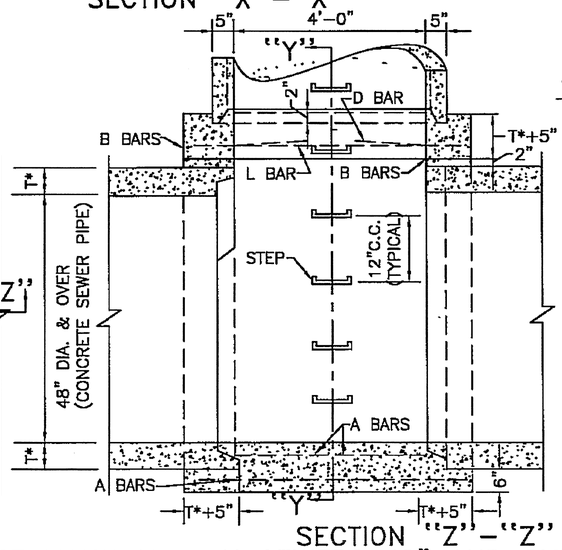
NOTE:
ALL REINFORCING STEEL #5 BARS @ 4" C.C.

BAR LENGTHS
A-1 - 3'-10"
A-2 - 3'-7"
A-3 - 3'-0"
A-4 - 2'-2"
T*-REPRESENTS THICKNESS OF PIPE

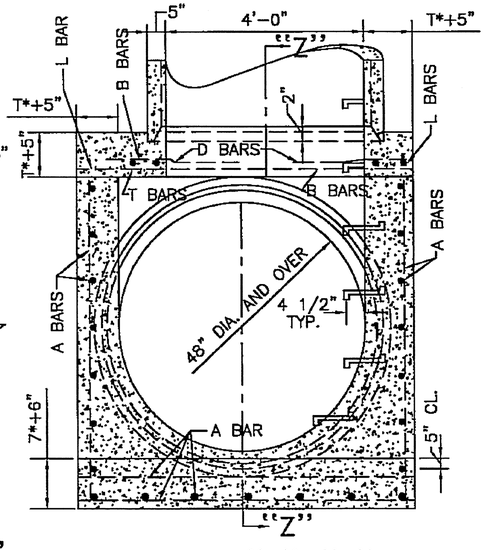
SECTION "X"-"X"



PLAN



SECTION "Z"-"Z"



SECTION "Y"-"Y"

CONNECTION BOX FOR PRECAST MANHOLES ON SEWERS 48" AND OVER

NOTES:

NO HOLES FOR 12" INLET OR CATCH BASIN CONNECTIONS SHALL BE CUT IN ANY SECTION LESS THAN 36"MANHOLE BARREL. NOT MORE THAN 2 INLET CONNECTIONS SPACED 2± FEET APART HORIZONTALLY PERMITTED IN 3 OR 4 FOOT MANHOLE SECTIONS.

ALL JOINTS AND PIPE OPENINGS IN THE MANHOLE SHALL BE THOROUGHLY CALKED WITH 1:3 CEMENT MORTAR HAVING A 1/2" MINIMUM THICKNESS.

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS SHALL COMPLY WITH THE REQUIREMENTS OF ASTM DESIGNATION C 478-06a: MINIMUM WALL THICKNESS SHALL BE 5 INCHES.

CONNECTION BOXES FOR SEWERS 48" AND OVER IN DIAMETER SHALL BE REINFORCED AS SHOWN AND AS SPECIFIED BELOW:

A) BARS SHALL BE SPACED AT 12" CENTERS IN BOTH DIRECTIONS.

B) BARS SHALL BE SPACED AT 3" CENTERS IN BOTH DIRECTIONS.
A,B & L BARS SIZES:
5/8" DIAM. FOR 48" TO 60" SEWERS.
3/4" DIAM. FOR 66" TO 78" SEWERS.
7/8" DIAM. FOR 84" TO 96" SEWERS.

C) T BARS SHALL BE 5/8" DIAM. SPACED AT 12" CENTERS.

D) BARS SHALL BE 5/8" DIAMETER EPOXY COATED REINFORCING STEEL SHALL HAVE 2" CLEARANCE EXCEPT WHERE OTHERWISE SPECIFIED.

E) STANDARD MANHOLE FRAME AS PER A-503 (SHEET 61) AND COVER AS PER A-605 (SHEET 62) OR A-695 (SHEET 63)

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
DETAIL PLAN OF PRECAST CONCRETE MANHOLE
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 8/28/07
SUBMITTED BY: W. MCLAUGHLIN DATE: 8/28/07
APPROVED: [signature] DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. MH 1	SHEET 1/1	23

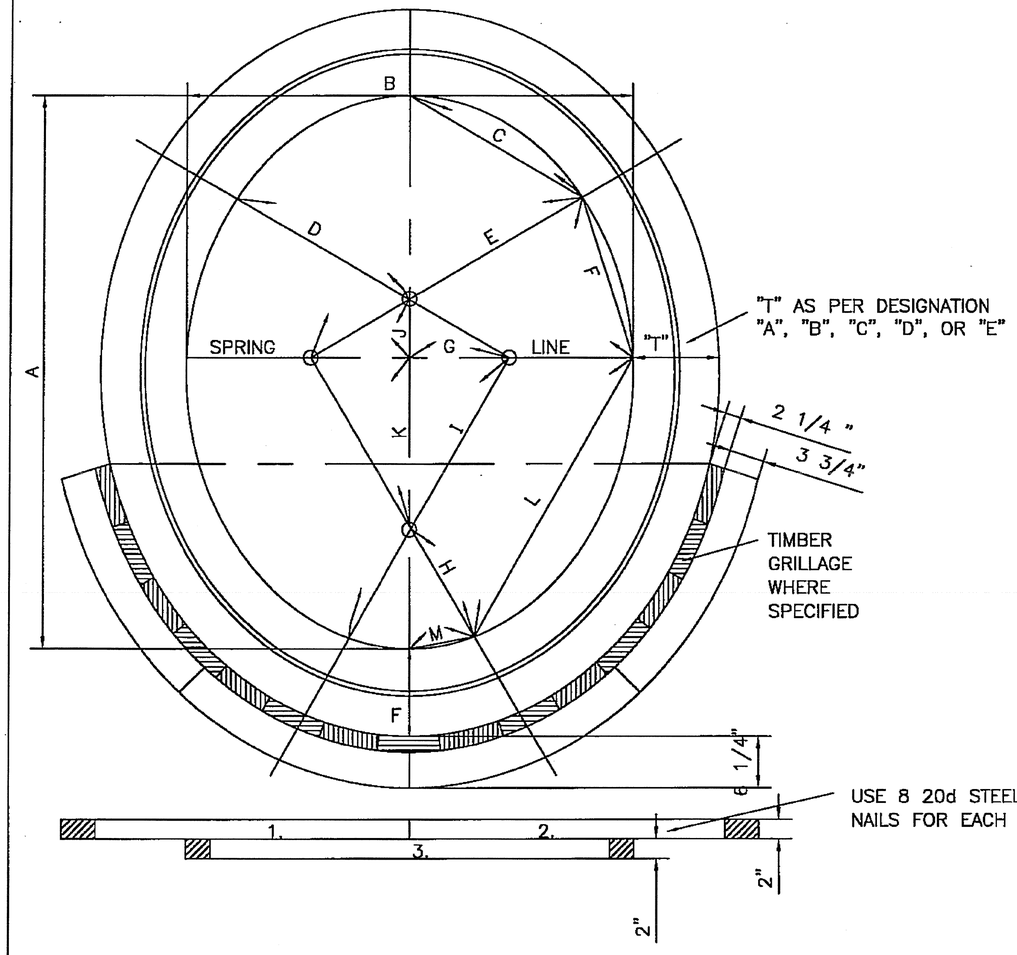
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

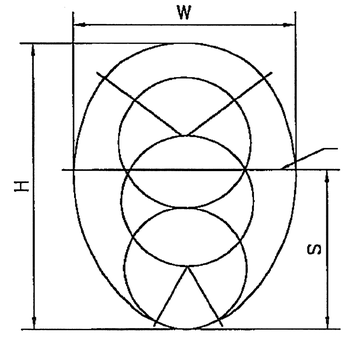
DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.47 TOTAL 82



EGG SHAPED SEWERS													
NO.	H FEET	W FEET	S FEET	AREA SQ. FT.	NO.	H FEET	W FEET	S FEET	AREA SQ. FT.	NO.	H FEET	W FEET	S FEET	AREA SQ. FT.
2	2.25	1.94	1.28	3.41	8	5.12	4.04	2.71	16.00	15	7.79	6.14	4.12	36.99
3	2.75	2.23	1.64	4.75	9	5.54	4.37	2.93	18.72	16	8.13	6.41	4.30	40.32
4	3.23	2.54	1.70	6.35	10	5.94	4.69	3.14	21.54	17	8.47	6.68	4.47	43.71
5	3.74	2.95	1.98	8.55	11	6.33	4.99	3.35	24.46	18	8.79	6.94	4.65	47.17
6	4.23	3.34	2.23	10.90	12	6.71	5.29	3.55	27.47	19	9.12	7.19	4.82	50.70
7	4.69	3.70	2.48	13.39	14	7.44	5.87	3.93	33.74	20	9.43	7.44	4.98	54.29

TYPES OF EGG SHAPED SEWERS

"A"–1 RING OF BRICK ALL AROUND.
"B"–1 RING OF BRICK ALL AROUND & 1 RING EXTRA ON ARCH.
"C"–2 RINGS OF BRICK ALL AROUND .
"D"–2 RINGS OF BRICK ALL AROUND & 1 RING EXTRA ON ARCH.
"E"–3 RINGS OF BRICK ALL AROUND.



FOR RECORD ONLY

TABULAR DIMENSIONS FOR EGG SHAPED SEWERS NO.2 TO NO. 8													
NO.	A	B	C	D	E	F	G	H	I	J	K	L	M
2	2'–3"	1'–11 1/4"					6 3/8"	9"	1'–6"		6 3/8"		
3	2'–9"	2'–2 3/4"					10 5/8"	9"	2'–0"		10 5/8"		
4	3'–2 3/4"	2'–6 5/8"	1'–2 1/8"	1'–2 1/8"	1'–10 1/2"	11 1/2"	7 3/16"	8 1/8"	1'–10 1/2"	4 1/16"	12 3/16"	1'–10 1/2"	4 1/4"
5	3'–9"	2'–11 3/8"	1'–4 3/8"	1'–4 3/8"	2'–1 7/8"	1'–1 3/8"	8 3/16"	9 1/2"	2'–1 7/8"	4 3/4"	1'–2 1/4"	2'–1 7/8"	4 7/8"
6	4'–2 3/4"	3'–4"	1'–6 1/2'	1'–6 1/2'	2'–5 1/4"	1'–3 1/8"	9 1/4"	10 3/4"	2'–5 1/4"	5 3/8"	1'–4 1/8"	2'–5 1/4"	5 1/2"
7	4'–8 1/4"	3'–8 3/8"	1'–8 1/2"	1'–8 1/2"	2'–8 1/2"	1'–4 3/4"	10 5/16"	11 7/8"	2'–8 1/2"	5 15/16"	1'–5 13/16"	2'–8 1/2"	6 1/8"
8	5'–1 1/2"	4'–0 1/2"	1'–10 1/2"	1'–10 1/2"	2'–11 1/2"	1'–6 1/4"	11 1/4"	1'–1"	2'–11 1/2"	6 1/2"	1'–7 1/2"	2'–11 1/2"	6 3/4"

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD PLAN FOR EGG SHAPED SEWERS
DIMENSIONS & AREAS
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. McLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

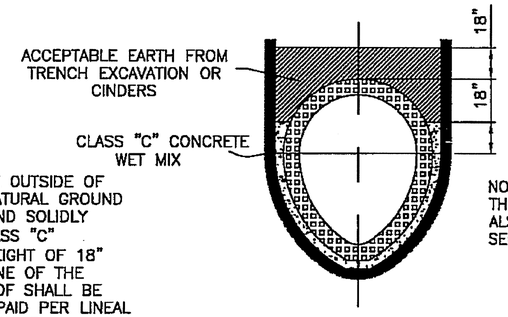
FILE NO. 73M | 24

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

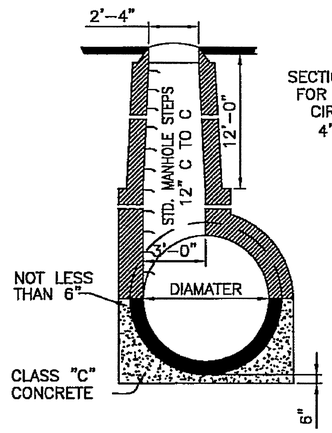
DESIGN AGENCY
GPD GROUP
DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.48 TOTAL 82

TYPICAL SECTION OF TRENCH FOR VITRIFIED BLOCK CONSTRUCTION



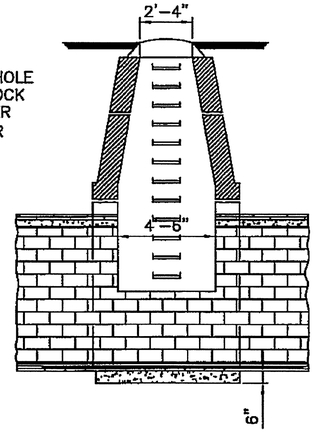
THE SPACE BETWEEN THE OUTSIDE OF THE BLOCKS AND THE NATURAL GROUND SHALL BE COMPLETELY AND SOLIDLY FILLED WITH WET MIX CLASS "C" CONCRETE UP TO THE HEIGHT OF 18" ABOVE THE SPRINGING LINE OF THE SEWER. THE COST THEREOF SHALL BE INCLUDED IN THE PRICE PAID PER LINEAL FOOT OF SEWER CONSTRUCTED.

NOTE:
THIS SECTION APPLIES ALSO FOR CIRCULAR SECTION

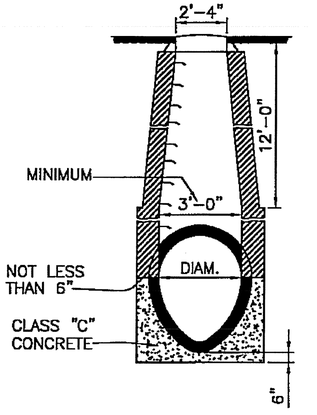


SECTION "A-A"

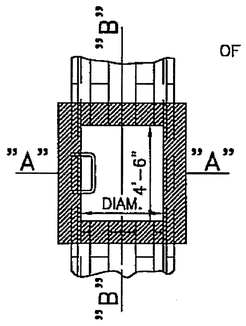
SECTIONS OF MANHOLE FOR VITRIFIED BLOCK CIR. SEWER OVER 4'-6" DIAMETER



SECTION "B-B"

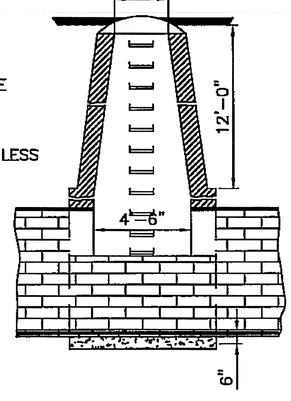


SECTION "A-A"

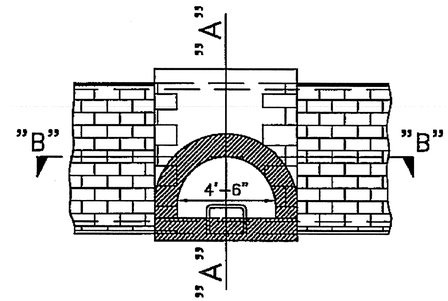


PLAN

SECTIONS OF MANHOLE FOR VITRIFIED BLOCK & CIR. SEWER OF 4'-6" DIAMETER OR LESS



SECTION "B-B"



PLAN

MORTAR SHALL BE COMPOSED OF ONE PORTLAND CEMENT (SEC. 701.04) TO TWO PARTS SAND (SEC. 703.03) BY VOLUME.

RECORD ONLY

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK--DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
VITRIFIED BLOCK SEWER CONSTRUCTION DETAILS
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W.McLAUGHLIN DATE: 4/8/08

APPROVED: _____ DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. B-429

25

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

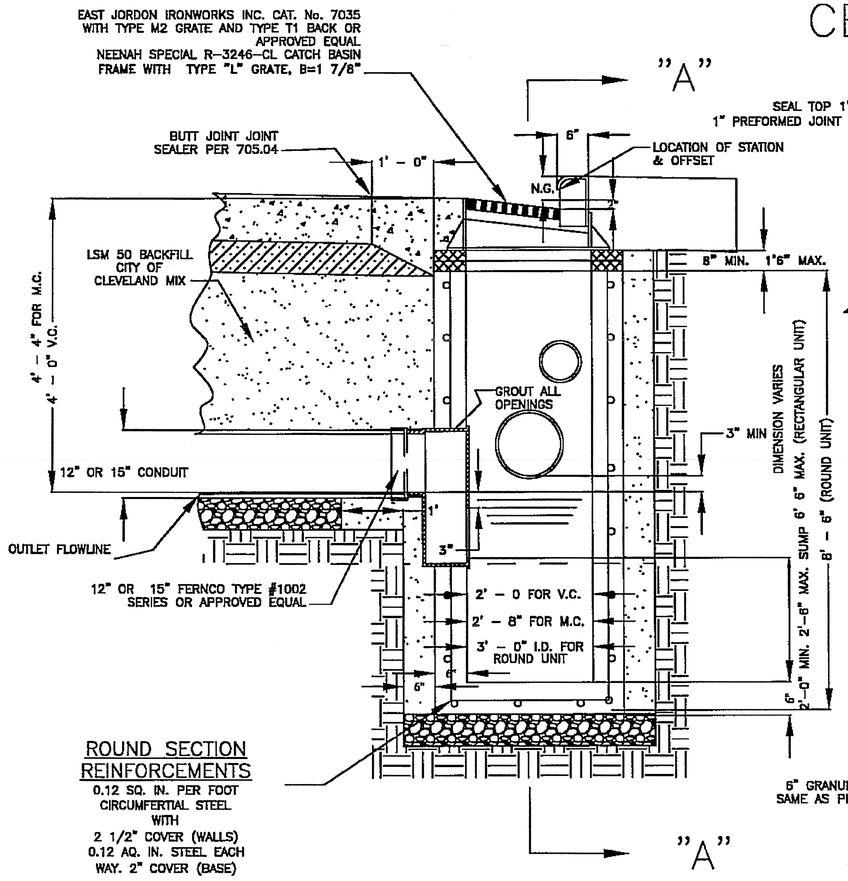
DESIGNER
Designed

REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.49 | TOTAL 82

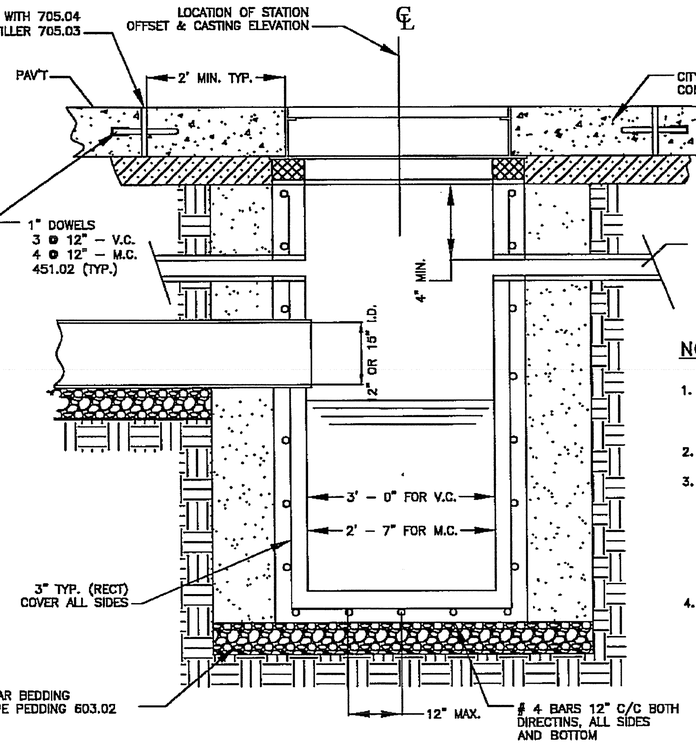
CB–1 CATCH BASIN



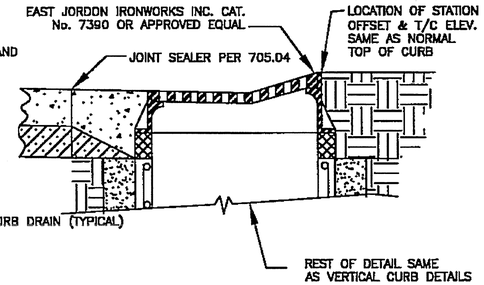
ROUND SECTION REINFORCEMENTS

0.12 SQ. IN. PER FOOT CIRCUMFERTIAL STEEL WITH 2 1/2" COVER (WALLS)
0.12 AQ. IN. STEEL EACH WAY. 2" COVER (BASE)

VERTICAL CURB



"A" – "A"



MOUNTABLE CURB

NOTES

1. ALL REINFORCING SHALL BE # 4 DEFORMED BARS, AS PER ODOT 709, AND SUFFICIENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE TO DECTANGULAR SHAPE.
2. CONCRETE SHALL BE ODOT 499 CLASS "C" 4000 PSI IN 28 DAYS.
3. BOX–OUT SHALL BE PAID FOR AS PAVEMENT IN PORTLAND CEMENT CONCRETE PAVEMENT AND AS PART OF THE CATCH BASIN IN ASPHALTIC CONCRETE PAVEMENT WITH NO REDUCTION IN PAVEMENT OR CURB QUANTITY BECAUSE OF CASTING.

   FOR FULL WIDTH ASPHALTIC CONCRET PAVEMENT CONSTRUCT A PORTLAND CEMENT CONCRET APRON.
4. MINIMUM WALL THICKNESS 8" CAST IN PLACE AND 6" FOR PRECAST.

ALTERNATE BASIN SHAPE

A ROUND PRECAST CONCRETE UNIT MAY BE USED IN LIEU OF RECTANGULAR UNIT. THE ROUND SECTION SHALL BE 36" I.D. UNIT WITH INTEGRAL BASE AND PRECAST TOP TRANSITION SECTION (ROUND TO RECTANGULAR) TO FIT CASTING BEING USED. THE TRANSITION UNIT REQUIRES A # 5 REBAR AT CORNERS OF THE RECTANGULAR SHAPED SECTION AND 3 X 8 W6 X W5 WELDED WIRE FABRIC IN VERTICAL SECTION. ALSO, IF APPROVED BY THE ENGINEER, 8" THICK MASONRY WALL MAY BE USED IN LIEU OF PRECAST UNITS.

NOTE: IF PRECAST CATCH BASIN IS CONSTRUCTED IN TWO PIECES THE JOINT BETWEEN UNITS MUST BE A PERMIUM JOINT,PER 706.11.

LEGEND

V.C. = VERTICAL CURB
M.C. = MOUNTABLE CURB
T/C = TOP OF CASTING
N.G. = NORMAL GUTTER

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD DETAIL FOR
RECTANGULAR CATCH BASIN
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: [signature] DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB–1	SHEET 1/7	26

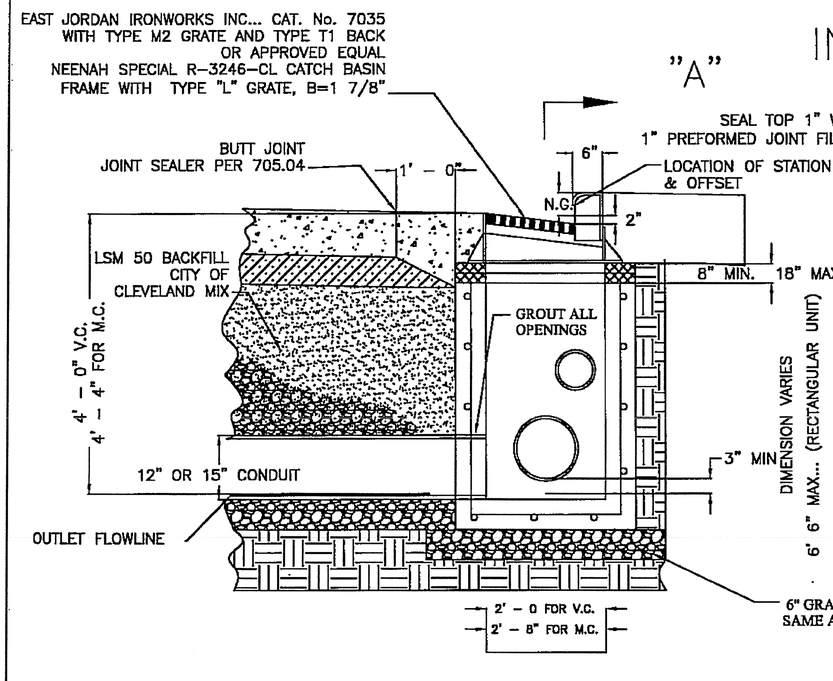
CUY OLD DETROIT RD BRIDGE REHAB

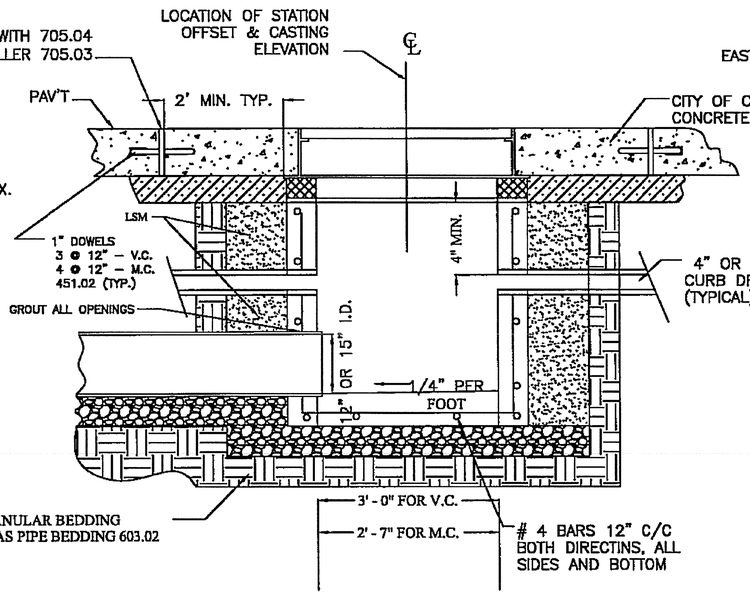
14/12/2023
O:\Public\OH\Cleveland\2025\025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

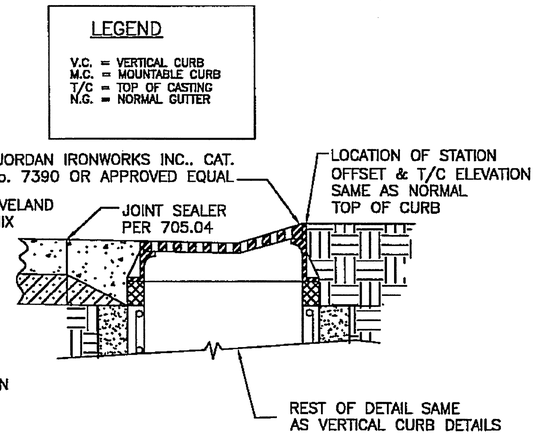
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.50 TOTAL 82

INLET BASIN







MOUNTABLE CURB

" A "

VERTICAL CURB

"A"—"A"

NOTES

1. ALL REINFORCING SHALL BE # 4 DEFORMED BARS, AS PER ODOT 709, AND SUFFICIENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE TO RECTANGULAR SHAPE.
2. CONCRETE SHALL BE ODOT 499 CLASS "C" 4000 PSI IN 28 DAYS.
3. BOX-OUT SHALL BE PAID FOR AS PAVEMENT IN PORTLAND CEMENT CONCRETE PAVEMENT AND AS PART OF THE CATCH BASIN IN ASPHALTIC CONCRETE PAVEMENT WITH NO REDUCTION IN PAVEMENT OR CURB QUANTITY BECAUSE OF CASTING.
4. FOR FULL WIDTH ASPHALTIC CONCRETE PAVEMENT- CONSTRUCT A PORTLAND CEMENT CONCRETE APRON.
5. MINIMUM WALL THISKNESS 8" FOR CAST IN PLACE AND 6" FOR PRECAST

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD RECTANGULAR PRECAST CONCRETE
INLET BASIN
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 7-8-09

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB-1 | SHEET 2/7 | 27

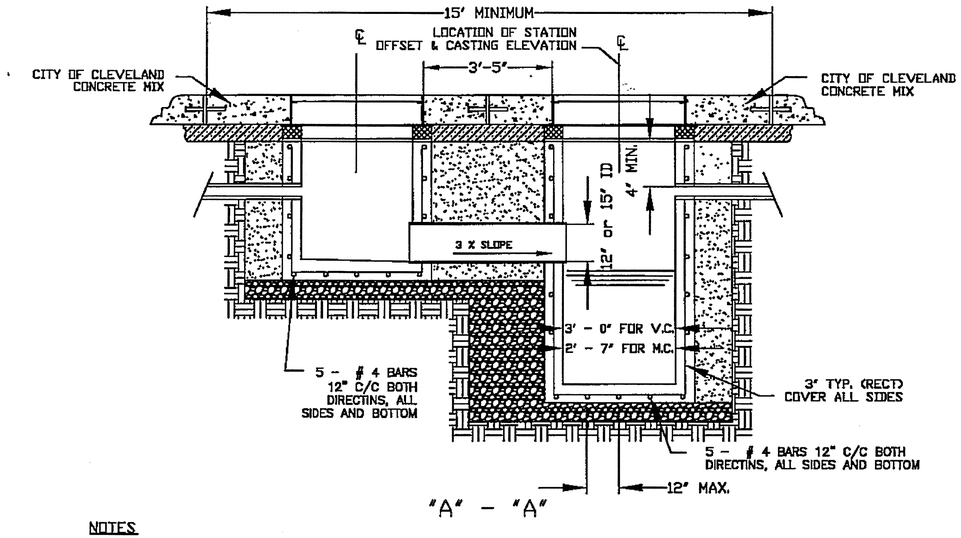
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER
Designed

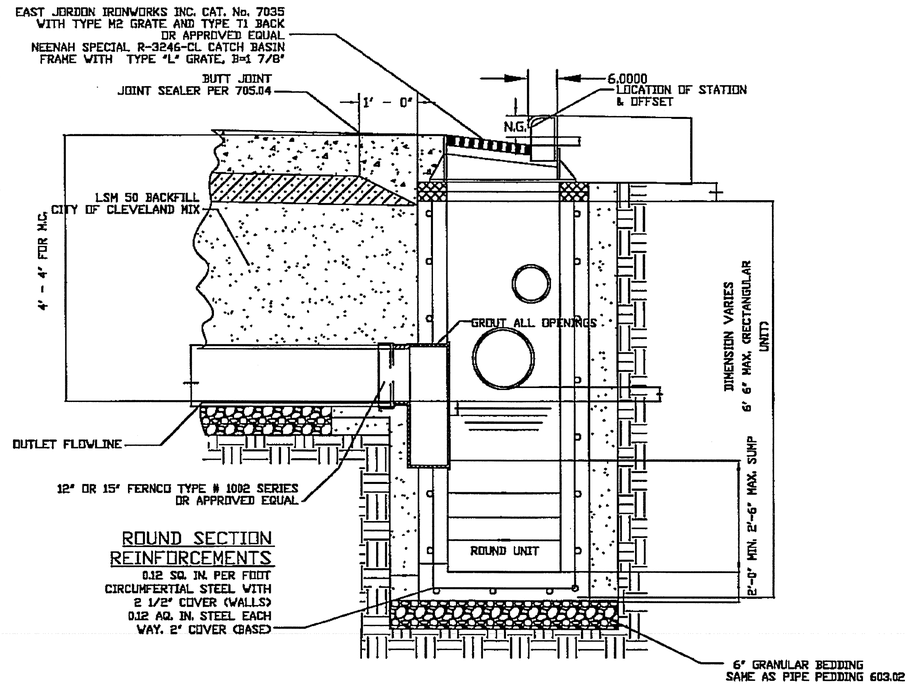
REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.51 | TOTAL 82



"A" – "A"



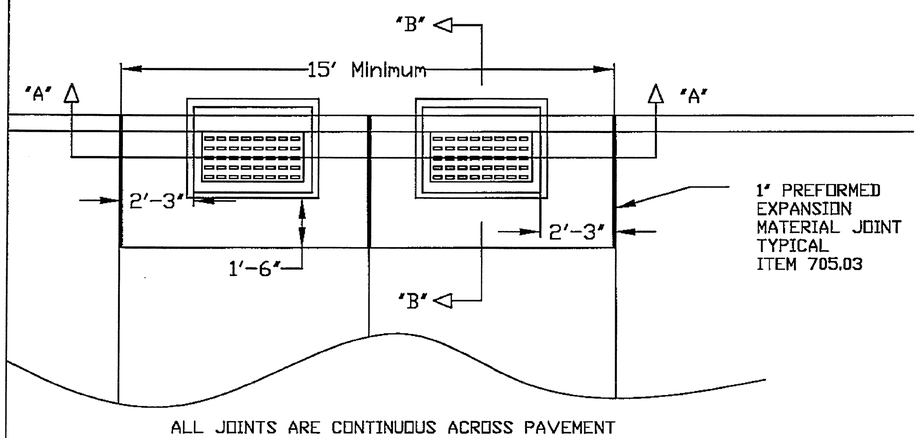
"B"– "B"

NOTES

1. THE CATCH BASIN SHALL BE SET AT THE LOW POINT OF A SAG VERTICAL CURVE OR AT THE POINT WHERE THE GRADE OF THE STREET CHANGES FROM NEGATIVE TO POSITIVE OR DOWNSTREAM FROM THE INLET BASIN.
2. THE CONCRETE BETWEEN THE CASTINGS SHALL BE SLOPED TO MATCH THE SLOPE OF THE CASTINGS.
3. REFER TO CB-1 AND IB-1 FOR FULL DETAILS AND DIMENSIONS.
4. PIPE BETWEEN BASINS SHALL BE EXTRA STRENGTH VCP PIPE AND IS INCLUDED IN THE BID TIEM FOR TWIN BASIN CB-3.
5. DOWEL SPACING AND SIZE SHALL BE AS FOLLOWS:

   1" DOWELS–
   3 @ 12" – V.C.
   4 @ 12" – M.C.
   451.02 (TYP.)

6. MINIMUM WALL THICKNESS 8" FOR CAST IN PLACE AND 6" FOR PRECAST



ALL JOINTS ARE CONTINUOUS ACROSS PAVEMENT

CITY OF CLEVELAND
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCION DRAWING
DETAILS FOR
TWIN BASIN – CB–3
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 4-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB 1	SHEET 3/7	28

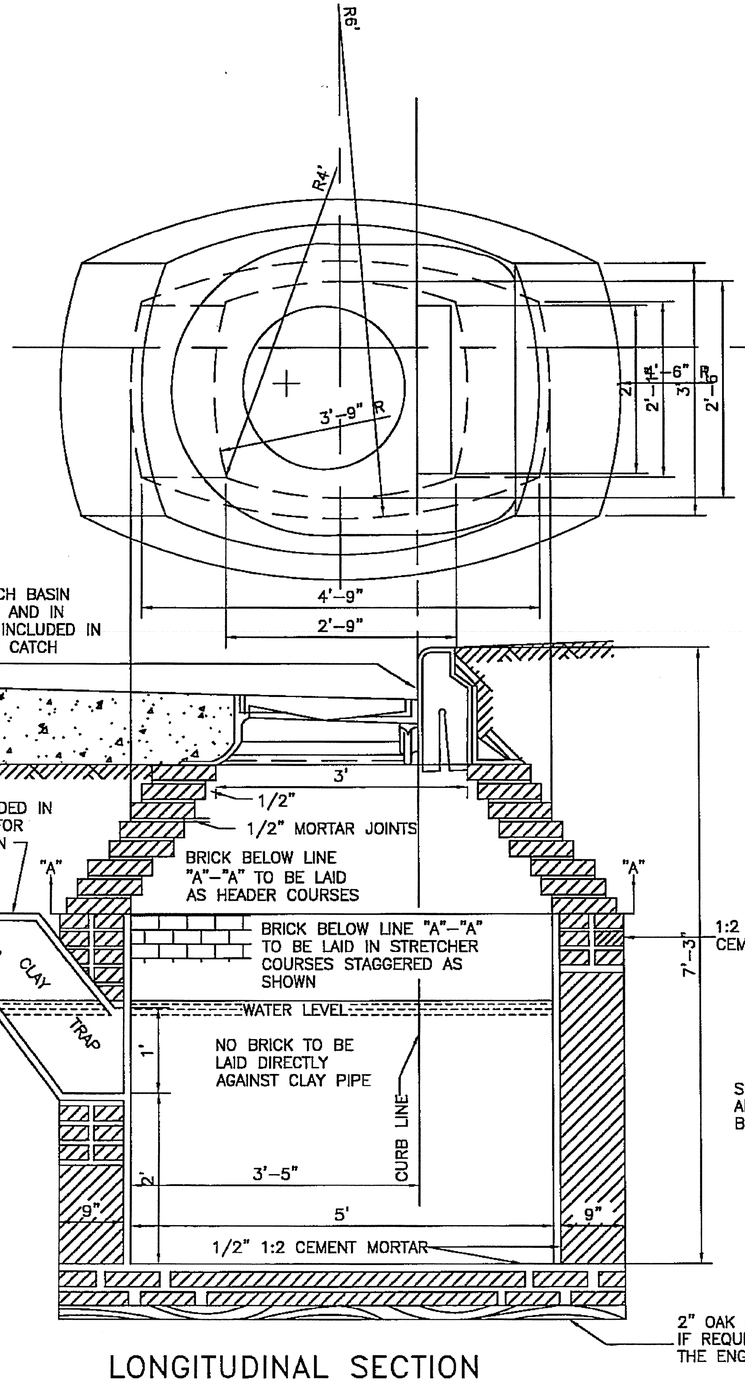
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

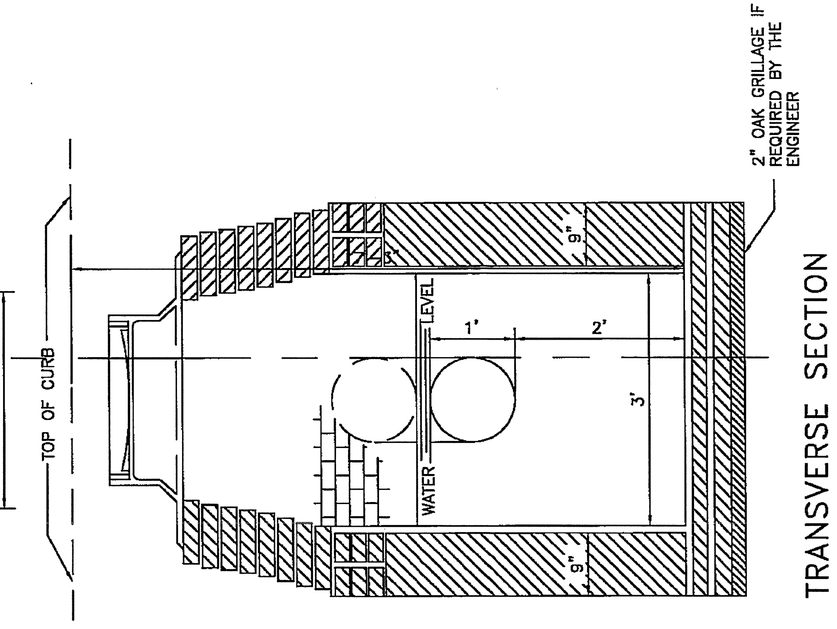
DESIGN AGENCY
GPD GROUP*
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.52 TOTAL 82



LONGITUDINAL SECTION

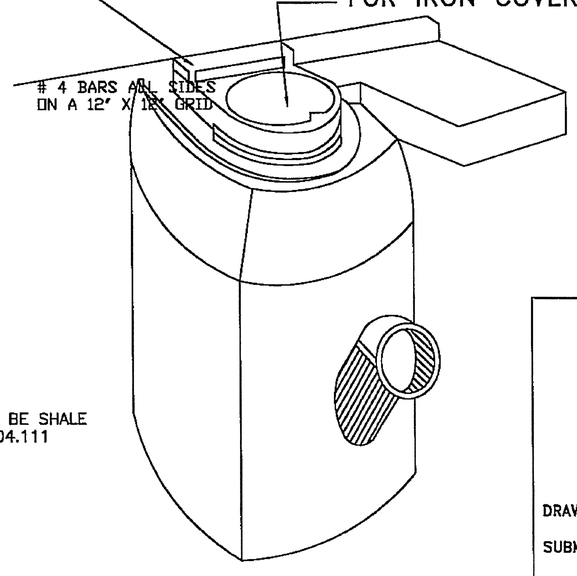
SPECIFICATIONS:
ALL BRICK SHALL BE SHALE BRICK AS PER 704.111



TRANSVERSE SECTION

FOR CAST IRON CURB BOX SEE DRAWING A-694

FOR IRON COVER SEE DRAWING A-693



PERSPECTIVE
NOT TO SCALE

FOR RECORD ONLY

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WAKSIK-DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD PLAN FOR GUTTER CATCH BASIN
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. McLAUGHLIN DATE: 4/8/08

APPROVED DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB 1 | SHEET 4/7 | 29

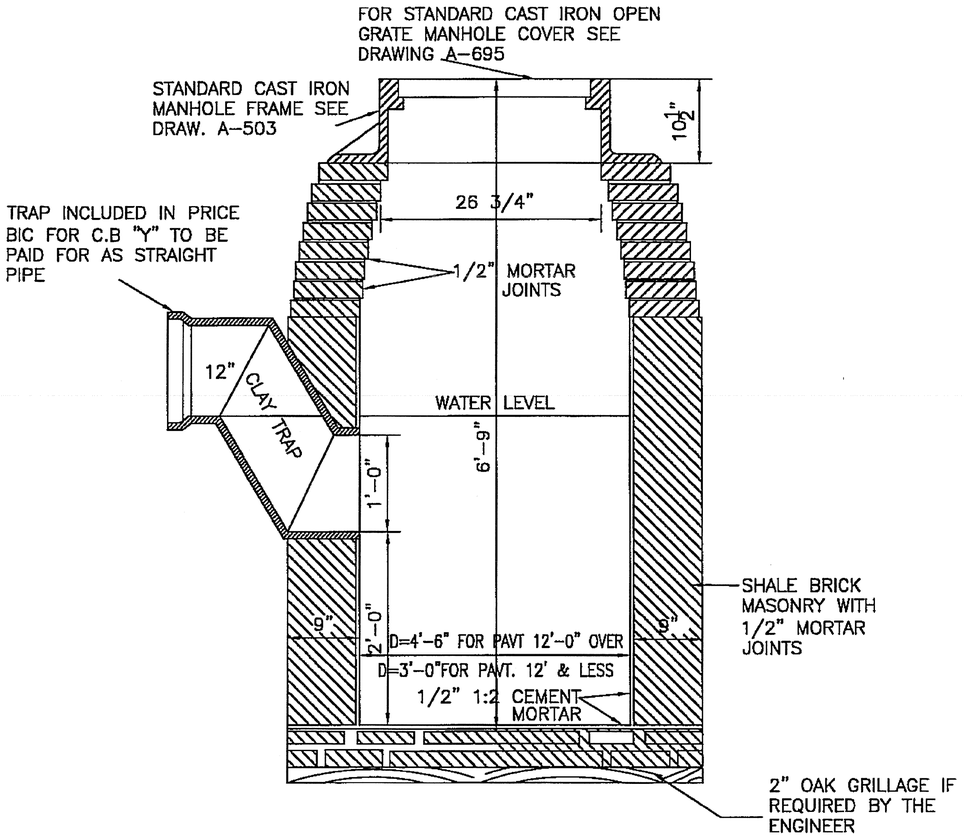
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

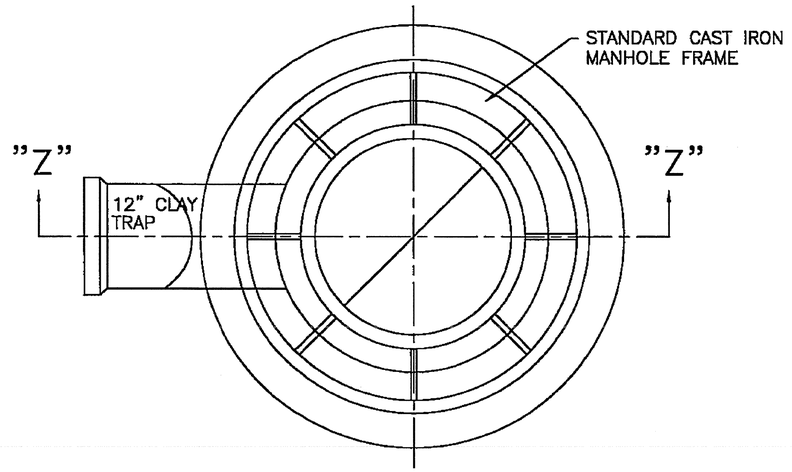
14/12/2023
O:\Public\GH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET: P.53 TOTAL: 82



SECTION "Z-"Z"



PLAN

MORTAR SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT (701.04) TO TWO PARTS SAND (SEE 703.03) BY VOLUME.

FOR RECORD ONLY

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK-DIRECTOR OF PUBLIC SERVICE STANDARD PLAN FOR PARK STYLE CATCH BASIN
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 8/28/07
SUBMITTED BY: W. McLAUGHLIN DATE: 8/28/07
APPROVED: DATE: 1-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB 1 | SHEET 5/7 | 30

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

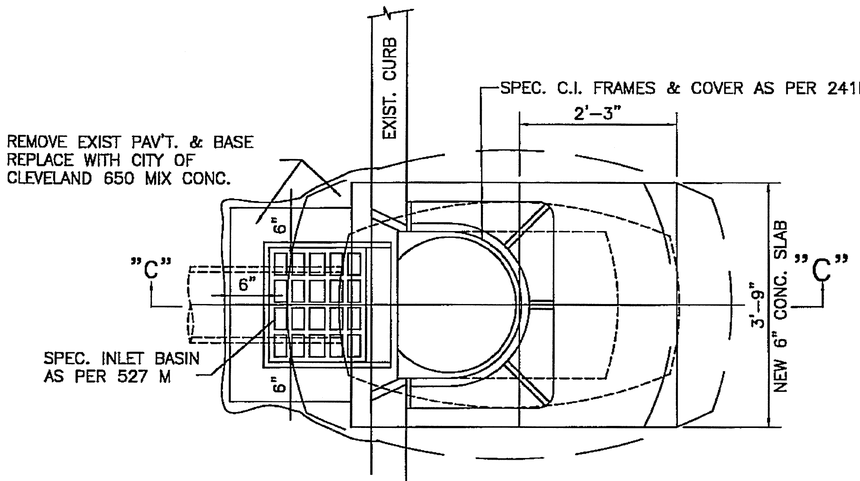
DESIGNER
Designed

REVIEWER
Reviewed Date

PROJECT ID
123855

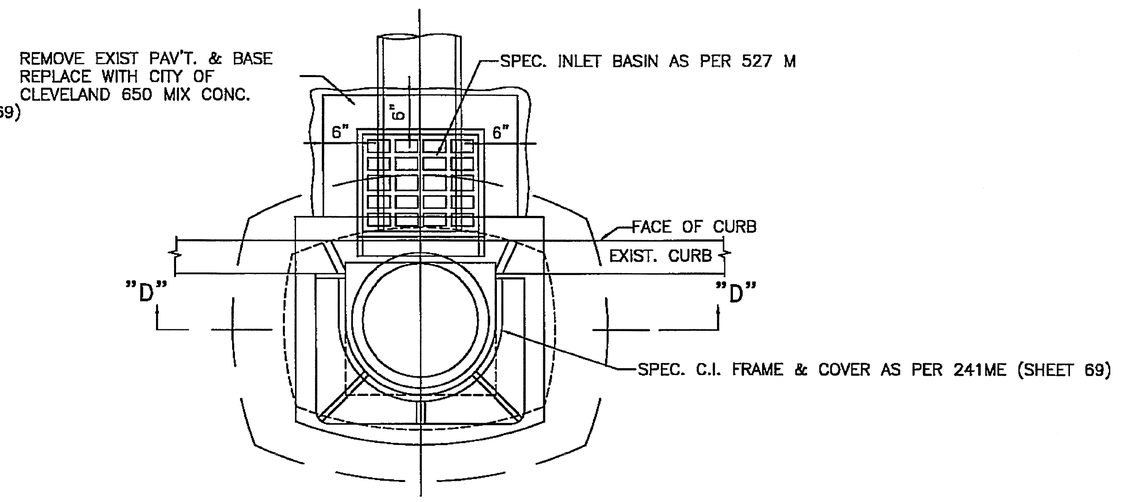
SHEET P.54 | TOTAL 82

DETAIL "A"

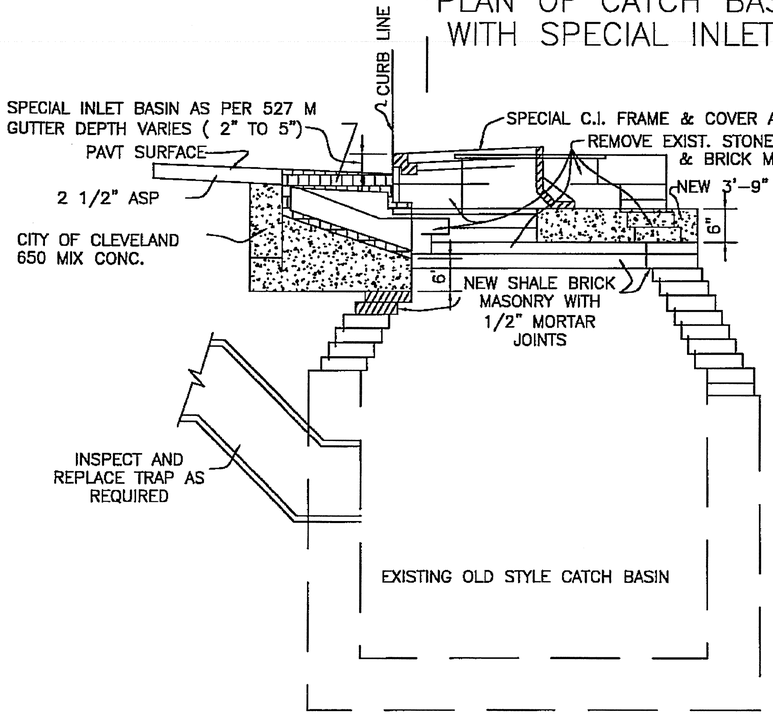


PLAN OF CATCH BASIN
WITH SPECIAL INLET

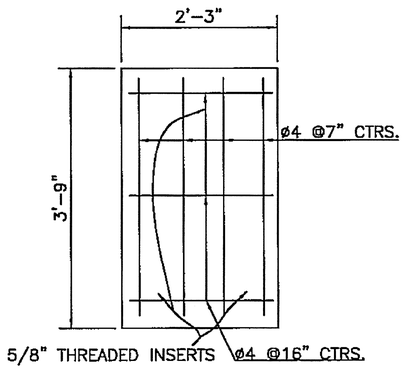
DETAIL "B"



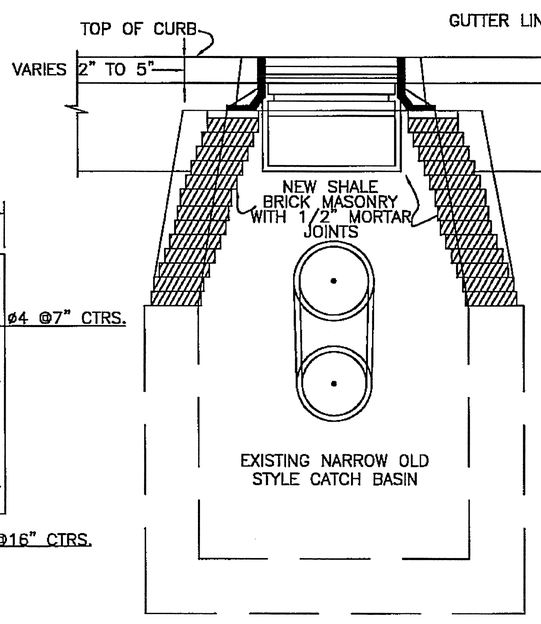
PLAN OF NARROW CATCH BASIN
WITH SPECIAL INLET



SECTION "C"–"C"



PLAN OF
6" CONCRETE SLAB



SECTION "D"–"D"

MORTAR SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT (SEC. 701.04) TO TWO PARTS OF SAND (SEC. 703.03) BY VOLUME.

NOTE: THIS PLAN TO BE USED FOR OLD STYLE CATCH BASIN RECONSTRUCTION AT LOCATIONS WITH DEFICIENT DEPTH OF GUTTER

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
PLAN FOR REBUILDING OLD STYLE CATCH BASIN
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: _____ DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB 1	SHEET 5/7	31

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

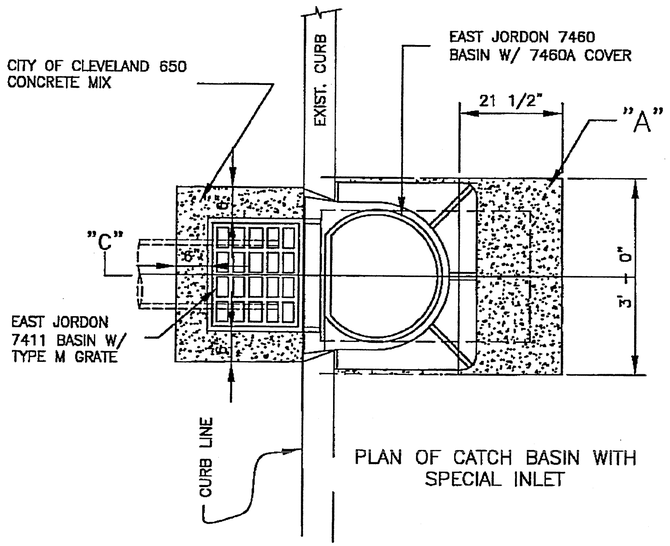
DESIGNER
Designed

REVIEWER
Reviewed Date

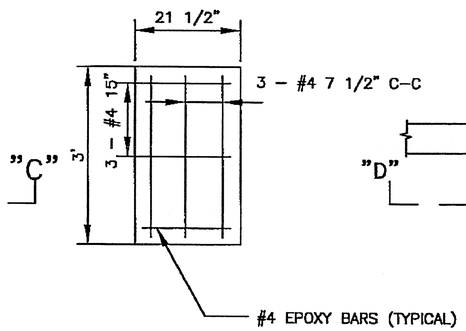
PROJECT ID
123855

SHEET P.55 | TOTAL 82

SETTING METHOD "A"

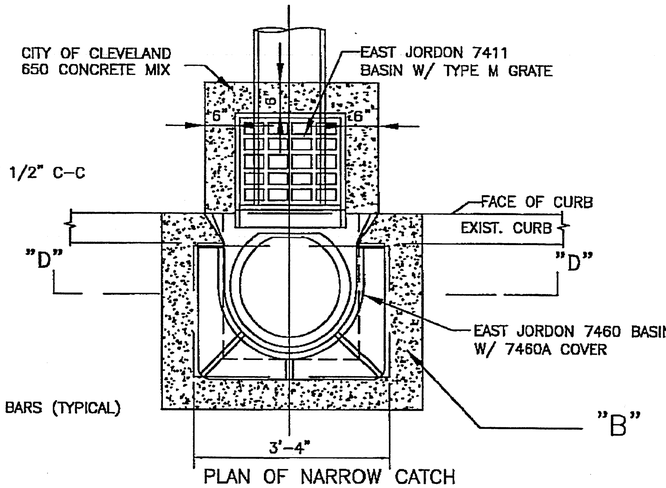


PLAN OF CATCH BASIN WITH SPECIAL INLET

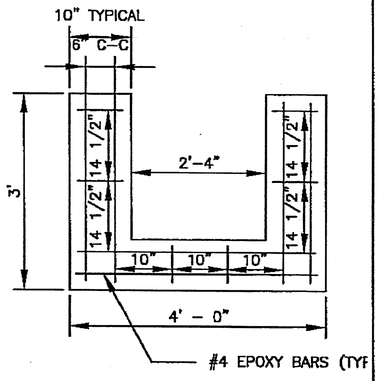


"A" DETAIL OF 6" CONCRETE SLAB

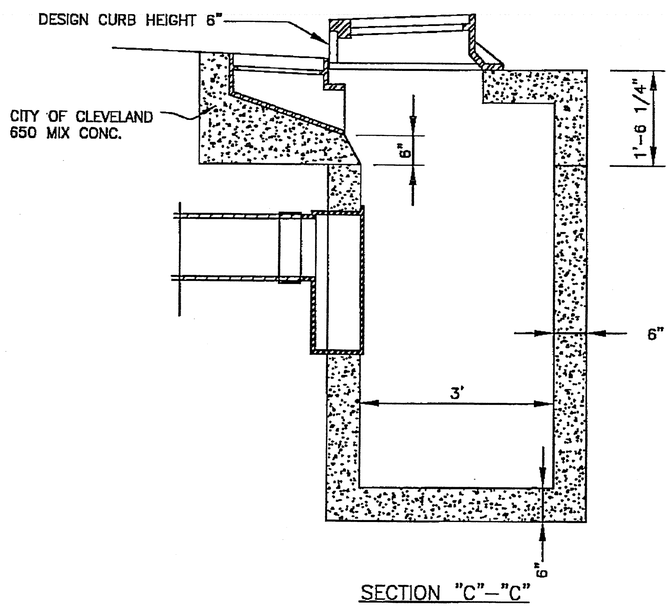
SETTING METHOD "B"



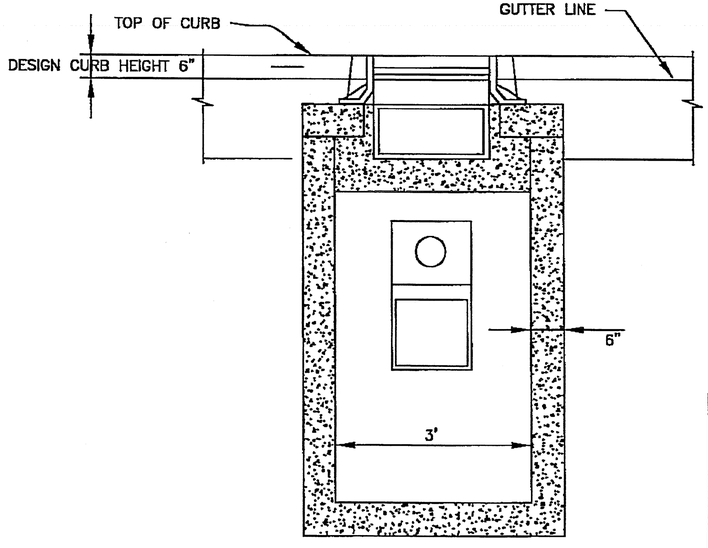
PLAN OF NARROW CATCH BASIN WITH SPECIAL INLET



"B" DETAIL OF 6" CONCRETE SLAB



SECTION "C"–"C"



SECTION "D"–"D"

NOTE:

THIS CATCH BASIN TO BE USED FOR CONSTRUCTION AT LOCATIONS WHICH PREVENT THE INSTALLATION OF A CB–1 IN THE ROADWAY, AS DIRECTED BY THE ENGINEER.

CATCH BASIN BASE DIMENSIONS ON DRAWING CB–1, ONLY RECTANGULAR BASIN SHALL BE ALLOWED.

THIS DETAIL FOR STREETS WITH VERTICAL CURB ONLY

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
PLAN FOR CATCH BASIN 2
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: _____ DATE: 7-8-08

COMMISSIONER OF ENGINEERING & COSNTRUCTION

FILE NO. CB–1	SHEET 6/7	32

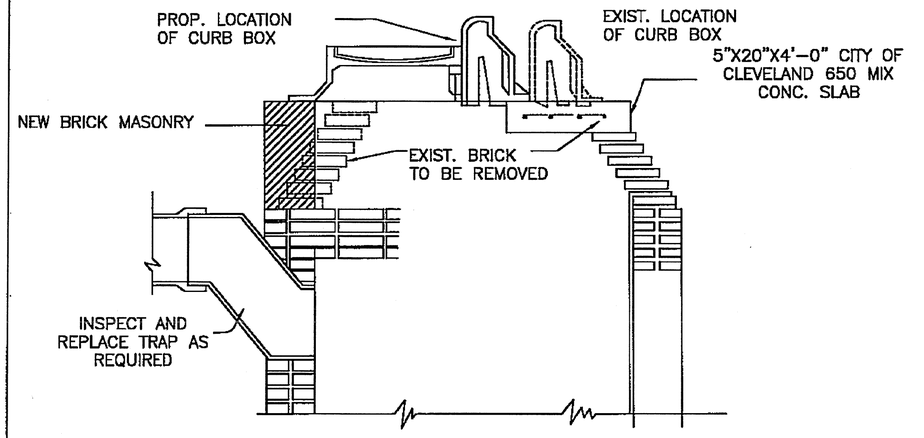
CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

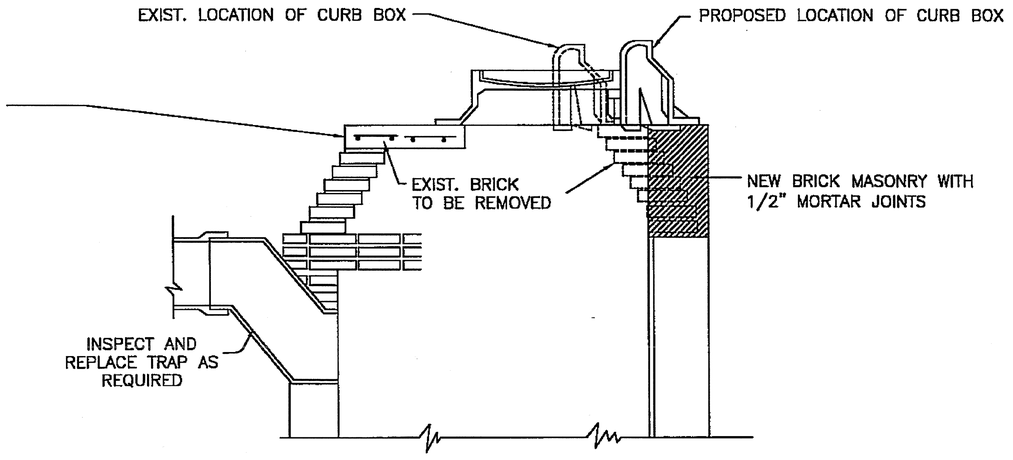
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET: P.56 TOTAL: 82



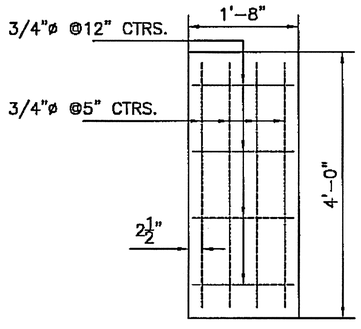
ADJUSTING INWARD
1/2"=1'-0"



ADJUSTED OUTWARD
1/2"=1'-0"

MORTAR SHALL BE COMPOSED OF ONE PART PORTLAND CEMENT (SEC.701.04) TO TWO PARTS SAND (SEC. 703.03) BY VOLUME.

NOTE : CATCH BASINS SPECIFIED TO BE ADJUSTED TO LINE AND GRADE SHALL INCLUDE REBUILDING BRICKWORK AND MOVING CASTING NOT TO EXCEED ONE FOOT.



DETAILS OF CONC. SLAB
1/2"=1'-0"

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
DETAIL PLAN FOR CATCH BASINS
ADJUSTED TO LINE & GRADE
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 7-8-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. CB 1 | SHEET 7/7 | 33

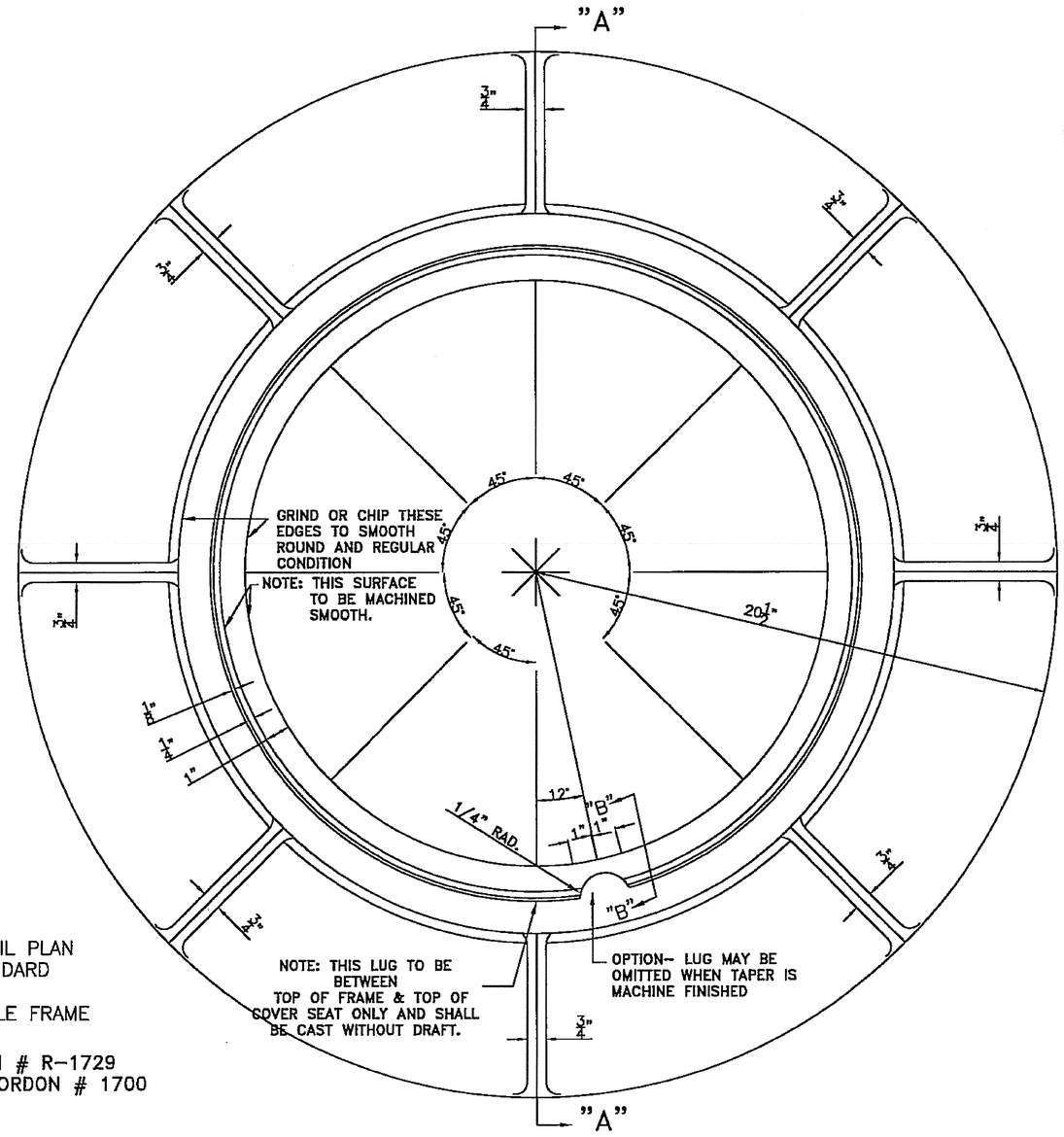
MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.57
TOTAL 82

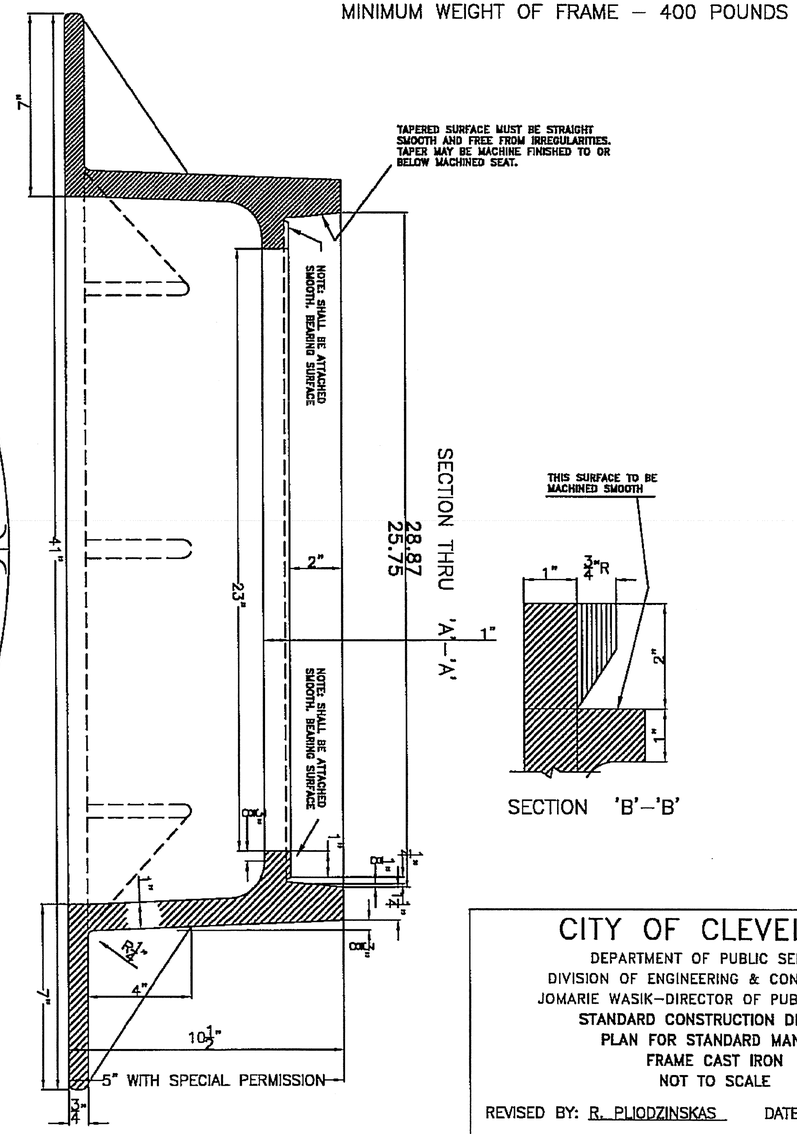


DETAIL PLAN
STANDARD

MANHOLE FRAME

NEENAH # R–1729
EAST JORDON # 1700

MINIMUM WEIGHT OF FRAME – 400 POUNDS



SECTION THRU 'A'–'A'

SECTION 'B'–'B'

EXCEPT WHERE LIMITS ARE NOTED – A CASTING VARIATION OF 1/8" PER FOOT PERMITTED

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
PLAN FOR STANDARD MANHOLE
FRAME CAST IRON
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. A–503

34

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

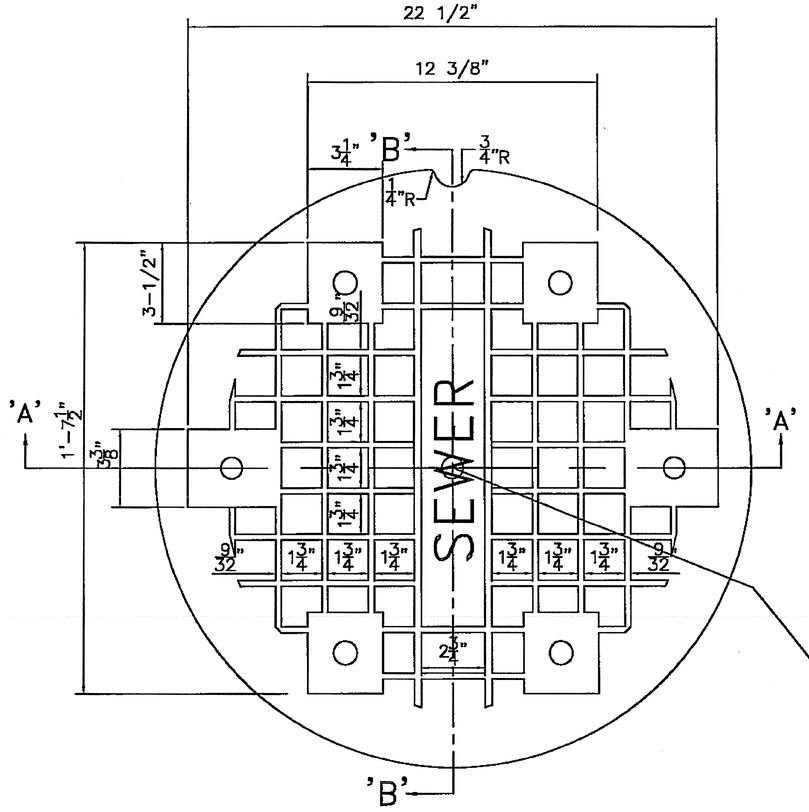
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

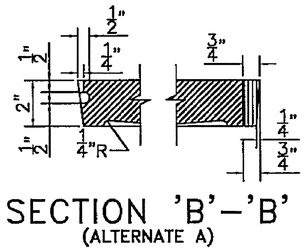
REVIEWER
Reviewed Date

PROJECT ID
123855

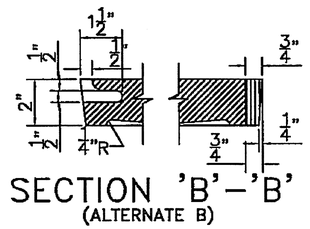
SHEET P.58 TOTAL 82



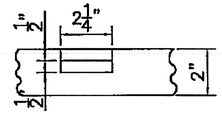
DETAIL PLAN
TOP



SECTION 'B'–'B'
(ALTERNATE A)

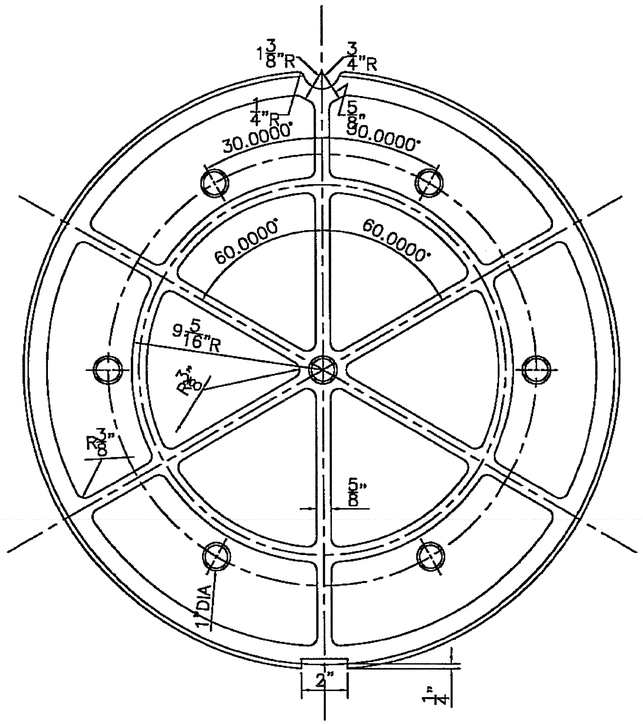


SECTION 'B'–'B'
(ALTERNATE B)



END VIEW
(ALTERNATE B)

FRAME COVERS
NEENAH # R–1729 VENTED
EAST JORDON # 1700 TYPE "M" VENTED

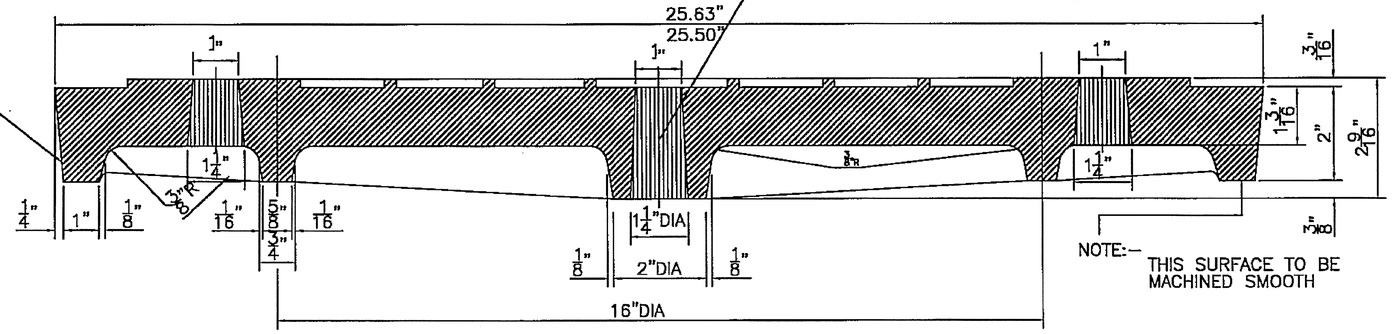


DETAIL PLAN
BOTTOM

MINIMUM WEIGHT OF COVER – 195 POUNDS

OPTION
CENTER HOLE
MAY BE OMITTED

THIS SURFACE
MUST BE STRAIGHT
AND SMOOTH



SECTION 'A'–'A'

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD CAST IRON MANHOLE COVER
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. A–605

35

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

REVIEWER
Reviewed Date

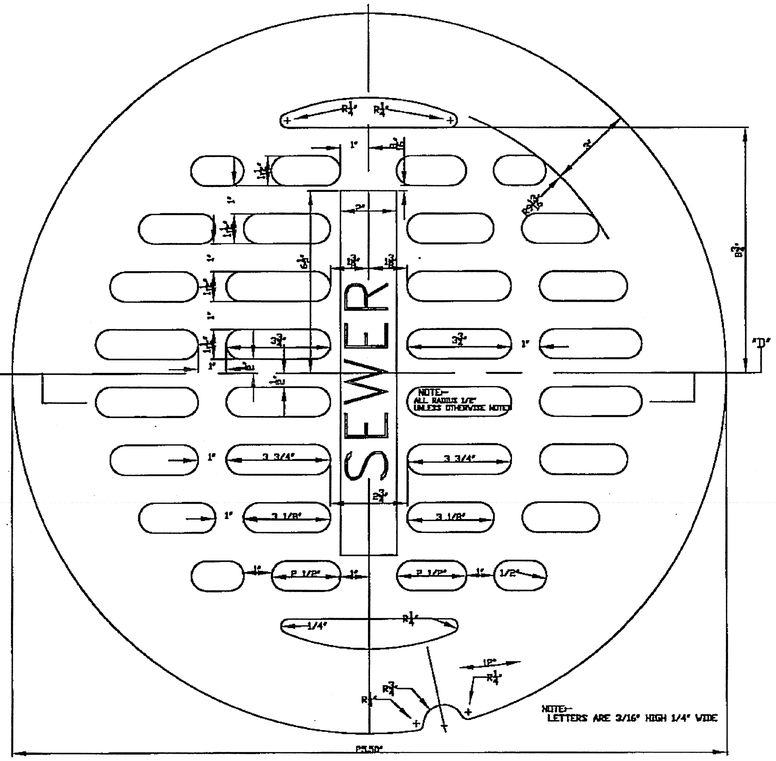
PROJECT ID
123855

SHEET P.59 TOTAL 82

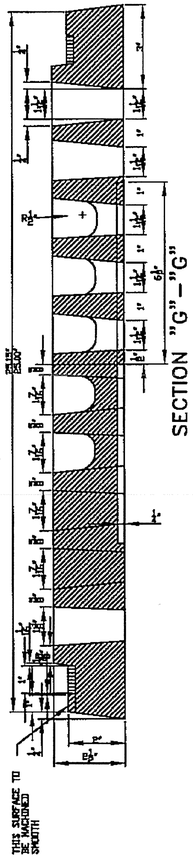
CUY OLD DETROIT RD BRIDGE REHAB

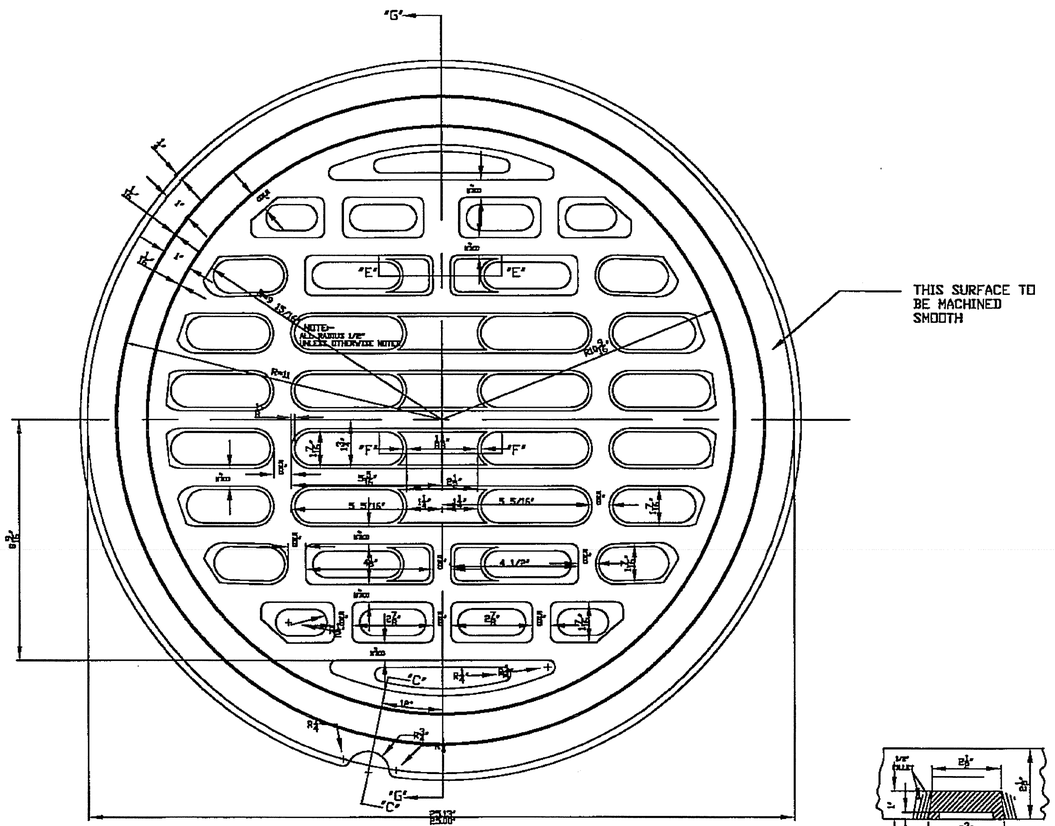
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MINIMUM WEIGHT OF COVER – 190 POUNDS

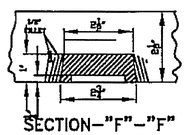


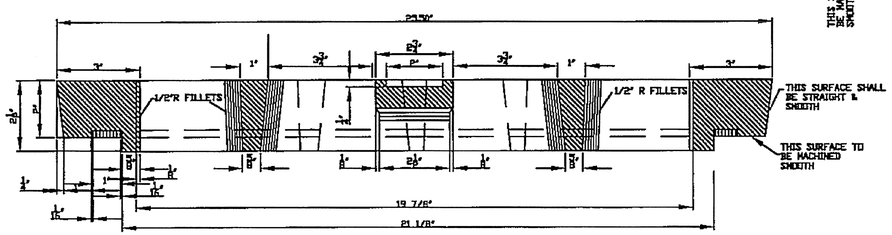
PLAN OF TOP



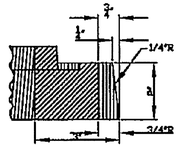


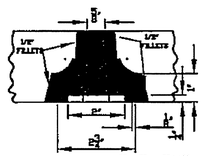
PLAN OF BOTTOM





SECTION "D"–"D"





FRAME COVER
EAST JORDON # 1700 TYPE "M" FLAT COVER

EXCEPT WHERE LIMITS ARE NOTED-A CASTING VARIATION ON 1/8" PER FOOT PERMITTED

CITY OF CLEVELAND

DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
STANDARD CAST IRON MANHOLE COVER
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 7-8-08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. A–695

36

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\0253331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

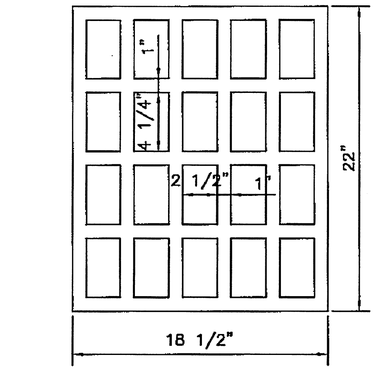
DESIGN AGENCY
GPD GROUP®

DESIGNER
Designed

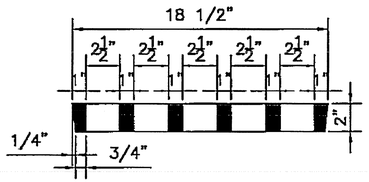
REVIEWER
Reviewed Date

PROJECT ID
123855

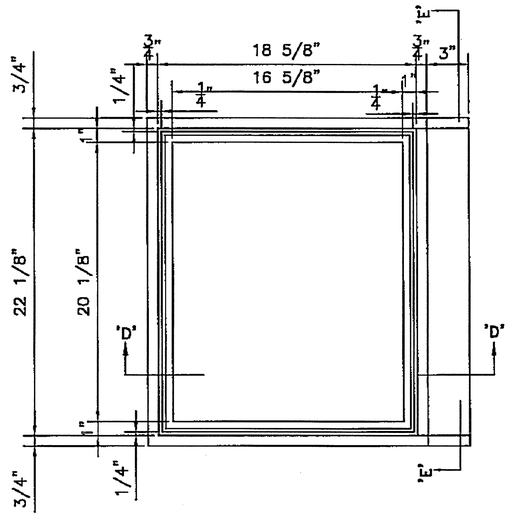
SHEET P.60 TOTAL 82



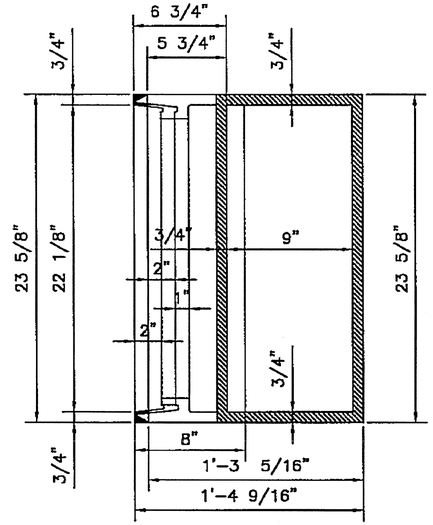
PLAN OF GRATE



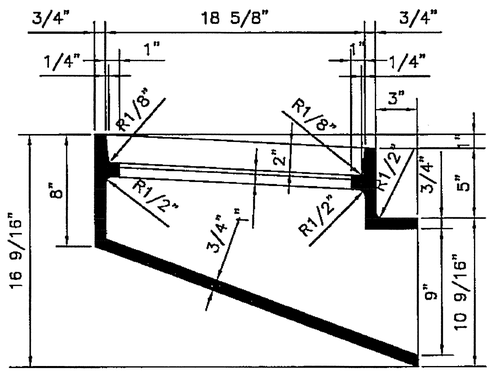
SECTION 'C'–'C'



PLAN OF INLET BASIN



SECTION 'E'–'E'



SECTION 'D'–'D'

MINIMUM WEIGHT OF GRATE – 90 POUNDS
MINIMUM WEIGHT OF FRAME – 330 POUNDS

EAST JORDON IRON WORKS
CATCH BASIN CURB INLET # 7411
GRATE # 7411M

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
DETAIL PLAN FOR SPECIAL
CAST IRON INLET BASIN
NOT TO SCALE

REVISED BY: R. PLIODZINSKAS DATE: 4/8/08
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08
APPROVED: DATE: 7-9-08
COMMISSIONER OF ENGINEERING & CONSTRUCTION

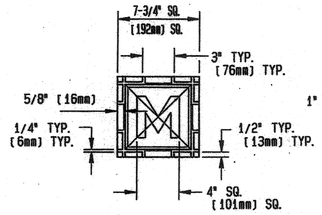
FILE NO. CB 1 | 37

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

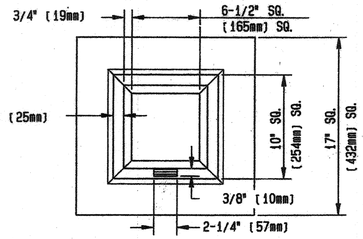
CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

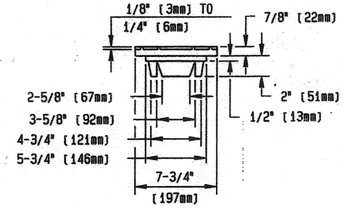
DESIGN AGENCY
GPD GROUP
DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.61 TOTAL 82



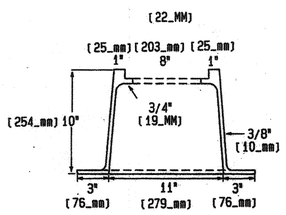
PLAN OF COVER



PLAN OF FRAME

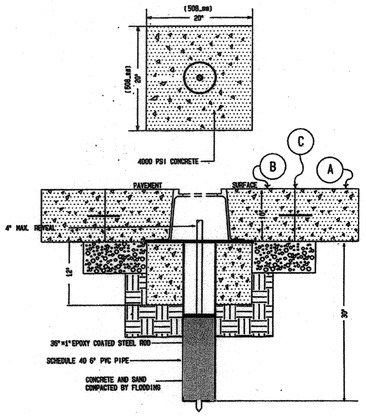


SIDE VIEW OF COVER

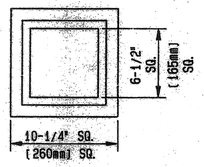


SECTION OF FRAME

MONUMENT ASSEMBLY SECTION



ROADWAY MONUMENT ASSEMBLY



ADJUSTING RING

* SEE NOTE BELOW

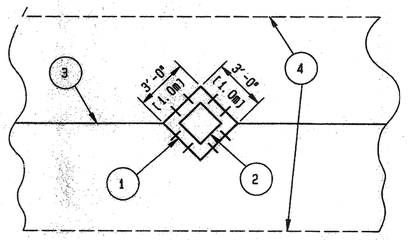
NOTE: ADJUSTING RING IS TO BE TACK WELDED TO THE FRAME BY AT LEAST TWO (2) POINTS OF AN APPROVED METHOD.

ADJUSTMENT HEIGHT	DIMENSION 52A*	MINIMUM WEIGHTS
1-1/8" (29mm)	2" (51mm)	14-LBS. (6.4kg)
1-1/2" (38mm)	2-3/8" (60mm)	20-LBS. (9.1kg)
2-1/2" (64mm)	3-3/8" (86mm)	27-LBS. (12.2kg)
3" (76mm)	3-7/8" (98mm)	30-LBS. (13.6kg)
3-1/2" (89mm)	4-3/8" (111mm)	32-LBS. (14.5kg)

* NOTE: USE OF ADJUSTING RING(S) MUST BE APPROVED BY THE CITY SURVEY SECTION.

RIGHT OF WAY MONUMENT

- (A) NEW OR EXISTING PAVEMENT, A. P. P.
- (B) NEW 3" ASPHALT OVER 7" CONCRETE OR 10" CONCRETE AS DETERMINED BY THE ABUTTING PAVEMENT.
- (C) 4" GUTTER SEAL AS PER ODOT 404.13 FOR ASPHALT SURFACES OR JOINT SEALER AS PER ODOT 451.13 FOR CONCRETE SURFACE DO NOT SEAL THE COVER TO FRAME



1. MONUMENT ASSEMBLY BLOCK OUT OR FULL DEPTH SAW CUT CONSTRUCTION JOINT. W/12" (305mm) LONG 1-1/4" (32mm) DIA. DOWELS. (BY CONTRACTOR), MAY BE OMITTED IF THE EXISTING CONCRETE BASE, IF ANY IS LESS THAN 6" IN THICKNESS.
2. MONUMENT BOX (BY CONTRACTOR)
3. TYPICAL LONGITUDINAL JOINT
4. NEW CONRETE OR ASPHALT OVER CONCRETE PAVEMENT, OR EXISTING PAVEMENT.

TYPICAL BLOCK OUT IN NEW RIGID PAVEMENT, OR MINIMUM FULL DEPTH SAW CUT IN EXISTING PAVEMENT.

NOTES

CASTINGS SHALL MINIMALLY MEET THE REQUIREMENTS OF 604.02-711.12, A.S.T.M. A 48, CLASS 35 GRAY IRON OR 711.13 DUCTILE IRON.
THE ASSEMBLY SHALL BE ESSENTIALLY THE SAME AND EQUALLY AS STRONG AS THOSE SHOWN HEREON.

MINIMUM WEIGHTS:
FRAME_____ 94 LBS. (42.6 kg)
COVER_____ 16 LBS. (7.3 kg)
PROVIDED THEY COMPLY WITH THE SPECIFICATIONS, DETAILS, DIMENSIONS AND MINIMUM WEIGHTS,
EAST JORDAN__NO. 8360
OR APPROVED EQUAL CASTINGS ARE ACCEPTABLE.

BEARING AREAS SHALL BE FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT. NO PROJECTION SHALL EXIST ON THE BEARING AREAS AND THE COVER SHALL SEAT IN ITS FRAME WITHOUT ROCKING.

PRIOR TO CONSTRUCTION OF PAVEMENT, THE FRAME SHALL BE SET TO GRADE IN SUCH A MANNER THAT WILL PREVENT ANY PAVEMENT MATERIAL FROM ENTERING THE CASTING.

CONTACT CITY OF CLEVELAND SURVEY DEPT. AT (216) 664-2460 AT LEAST TWO (2) WEEKS PRIOR TO THE DISTURBANCE OF ANY EXISTING MONUMENTS.

ALL MONUMENTS ARE TO BE SET UNDER THE DIRECTION OF A REGISTERED SURVEYOR. (REF. O.A.C. 4733-37-03)

WHERE CLEVELAND REGIONAL GEODETIC SURVEY (C.R.G.S.) MONUMENT ASSEMBLIES ARE MARKED ON THE PLANS TO BE ABANDONED, THE CONTRACTOR SHALL CAREFULLY REMOVE AND STORE THE MONUMENT CASTINGS AND BRONZE C.R.G.S. MARKERS FOR SALVAGE BY THE COUNTY. THE CONTRACTOR SHALL ALSO NOTIFY THE REGIONAL GEODETIC SURVEY OFFICE AT (216) 348-3846, SO THAT THE MONUMENT CASTINGS AND BRONZE C.R.G.S. MARKERS MAY BE PICKED UP. PAYMENT SHALL BE MADE UNDER ITEM 202-MONUMENT ASSEMBLY ABANDONED, C.R.G.S. MONUMENT.

ITEM 202- MONUMENT ASSEMBLY ABANDONED, C.R.G.S. MONUMENT
ITEM 604- CITY OF CLEVELAND MONUMENT BOX
ITEM 604- CITY OF CLEVELAND ROADWAY MONUMENT ASSEMBLY
ITEM 604- CITY OF CLEVELAND RIGHT OF WAY MONUMENT
ITEM 604- MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN (ONLY WHEN EXISTING MONUMENT BOX CONFORMS TO MB-1C AND IS SUITABLE FOR REUSE)

LEGEND

- CONCRETE, 4000P.S.I. AS PER CONCRETE MIX
- SAND (703.02), COMPACTED AS REQUIRED
- SUBBASE/AGGREGATE BASE PER THE PLANS. (6" MINIMUN; INCREASE, IF REQUIRED, TO MATCH THE BOTTOM OF THE NEW OR EXISTING SUBBASE)
- UNDISTURBED EARTH OR SUITABLE BACKFILL AND FIRM FOUNDATION IN ACCORDANCE WITH 604.04 AND TO THE SATIFACTION OF THE ENGINEER.

Note: All NEW SURVEY MONUMENT ASSEMBLIES MUST BE APPROVED BY THE CITY OF CLEVELAND'S SURVEY SECTION. MUST BE LAYED OUT AND REFERENCED BY A PROFESSIONAL LAND SURVEYOR LICENSED TO PRACTICE IN THE STATE OF OHIO. THE FOLLOWING PROCEDURE MUST BE USED FOR THE INSTALLATION/CONSTRUCTION OF ALL SURVEY MONUMENT ASSEMBLIES. 01.) USE REFERENCES PROVIDED BY SURVEYOR TO POSITION 6" X 30" P.V.C. (BE SURE P.V.C IS PLUM)., 02.) FILL P.V.C. HALF WAY W/SAND., 03.) SECURE P.V.C. WITH A 20" X 20" X 12" CONCRETE PAD (P.V.C MUST BE FLUSH W/CONC. PAD). P.V.C AND CONC. PAD MUST BE SET AT THE APPROPRIATE DEPTH BELOW FINISH GRADE SO THAT THE MON. BOX/CASTING RESTS ON TOP OF CONC. PAD., 04.) COVER P.V.C & CONC. PAD WITH VISQUEEN/PLASTIC BOND BREAKER., 05.) AFTER CONC. HAS SET, CENTER MON. BOX/CASTING OVER P.V.C., 06.) MON. BOX/CASTING MUST BE SECURED WITH A 3' X 3' CONC. PAD (DEPTH BELOW FINISHED GRADE TO BE DETERMINED BY THE DEPTH OF PAVEMENT., 07.) SET 5/8" X 36" EPOXY COATED IRON PIN (REBAR) USING REFERENCES PROVIDED BY SURVEYOR (BE SURE I.P. IS PLUM AND EXTENDS OUT OF P.V.C. AT LEAST 1" AND NO MORE THAN 3")., 08.) BACKFILL P.V.C. W/QUICKCRETE., 09.) I.P'S. TO BE SET BY THE CITY OF CLEVELAND'S SURVEY SECTION WHEN POSSIBLE, AND WILL BE DETERMINED BASED ON THE SCOPE & SIZE OF THE PROJECT, BEFORE CONTRACT IS AWARED. FINAL NOTE: CONTRATORS ARE RESPONSIBLE FOR SUPPLYING ALL MATERIALS (INCLUDING I.P'S & QUICKCREET)

CITY OF CLEVELAND

MONUMENT BOX & ASSEMBLIES

REVISIONS
UPDATED: 01/05/11
UPDATED: 10/15/14

STANDARD CONSTRUCTION DRAWING MB-1C

APPROVED: C/E DATE: 10-15-14

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

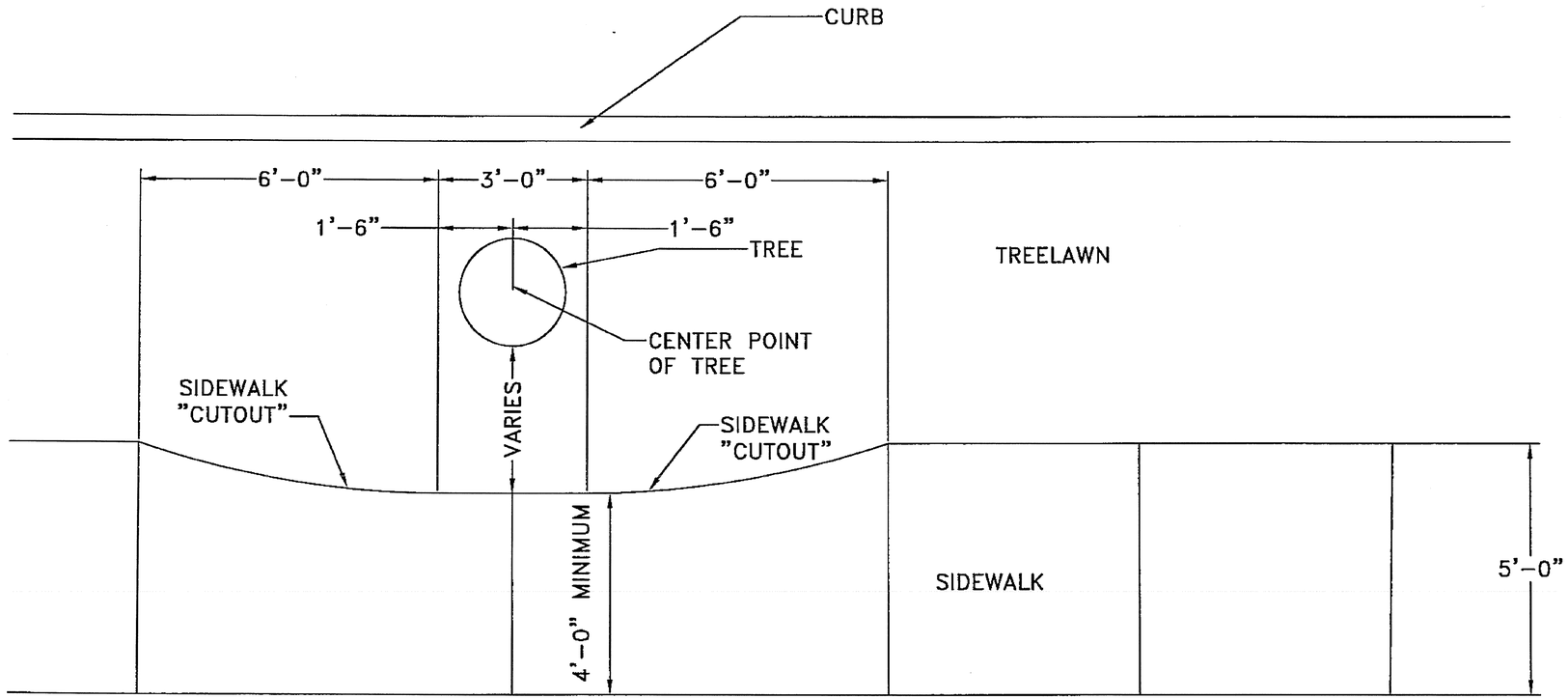
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.62 TOTAL 82



NOTES:
THIS DETAIL IS TO BE USED ONLY AT THE DIRECTION OF THE ENGINEER WITH CONSULTATION WITH THE DIVISION OF URBAN FORESTRY.

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRCTION DRAWING
TYPICAL CONSTRUCTION DETAIL
SIDEWALK TREE BUMPOUT
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 4/14/08

COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. TP 1 | SHEET 1/2 | 39

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

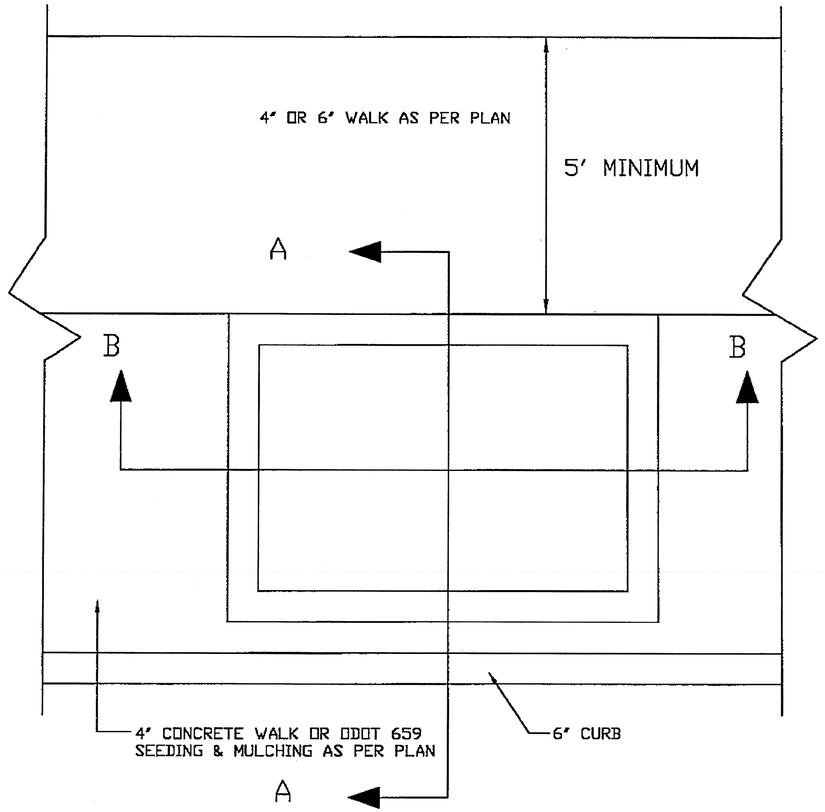
REVIEWER
Reviewed Date

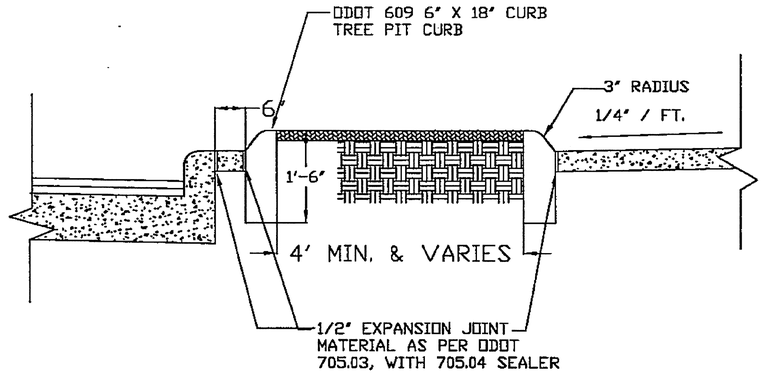
PROJECT ID
123855

SHEET P.63 | TOTAL 82

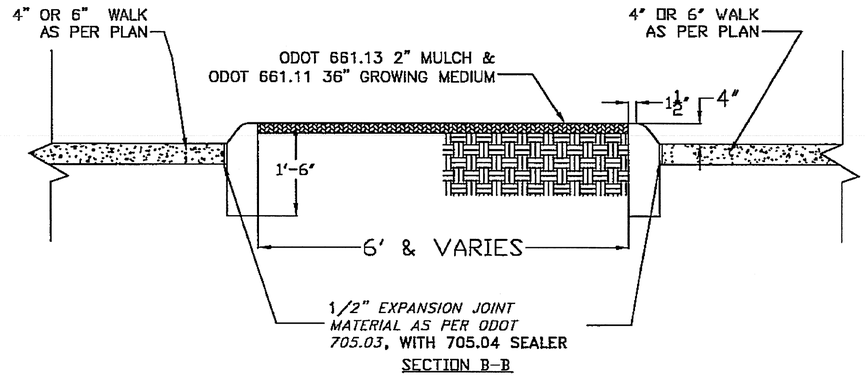
CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg





SECTION A-A



SECTION B-B

NOTE:
1 – 6" THICK SIDEWALK IN BUSINESS DISTRICTS
2 – CONTRACTOR SHALL OBTAIN APPROVAL FROM THE DIVISION OF URBAN FORESTRY FOR SPACING REQUIREMENTS AND TREE SPECIES.
3 –

CITY OF CLEVELAND
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF ENGINEERING & CONSTRUCTION
JOMARIE WASIK–DIRECTOR OF PUBLIC SERVICE
STANDARD CONSTRUCTION DRAWING
TREE PIT
NOT TO SCALE

DRAWN BY: R. PLIODZINSKAS DATE: 4/8/08

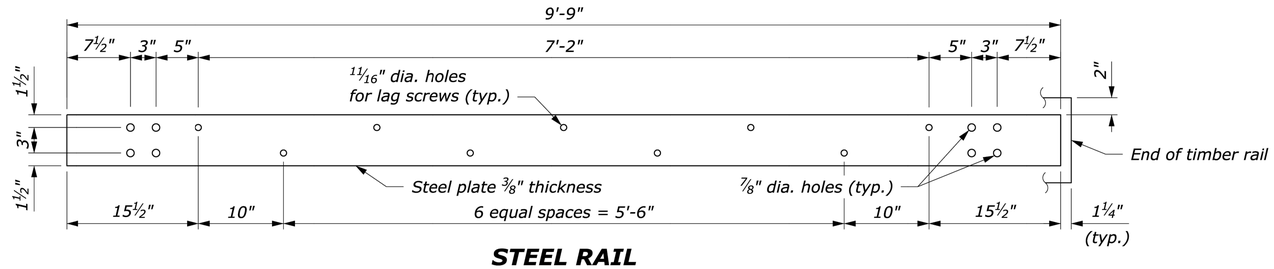
SUBMITTED BY: W. MCLAUGHLIN DATE: 4/8/08

APPROVED: DATE: 4/14/08

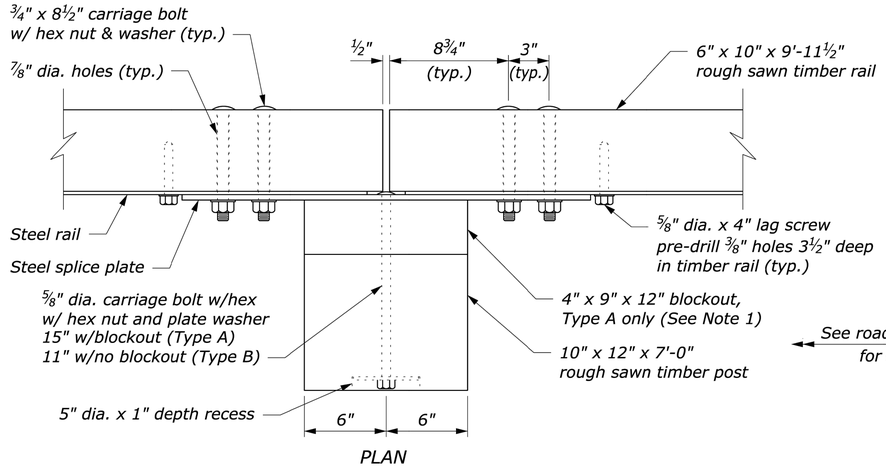
COMMISSIONER OF ENGINEERING & CONSTRUCTION

FILE NO. TP 1	SHEET 2/2	40

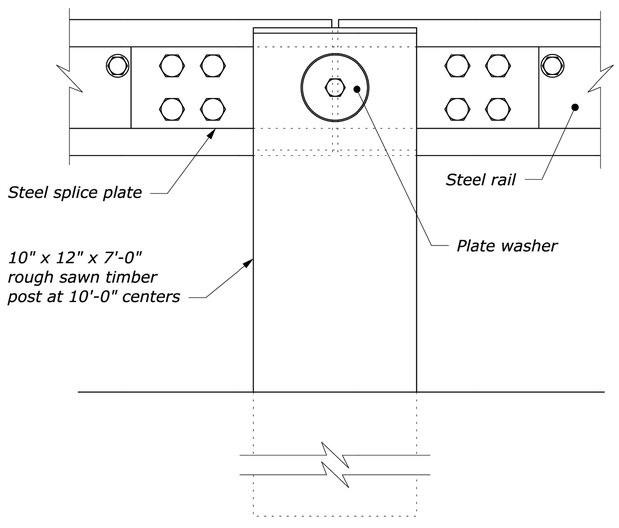
DESIGN AGENCY
GPD GROUP
DESIGNER
Designed
REVIEWER
Reviewed Date
PROJECT ID
123855
SHEET P.64 TOTAL 82



STEEL RAIL

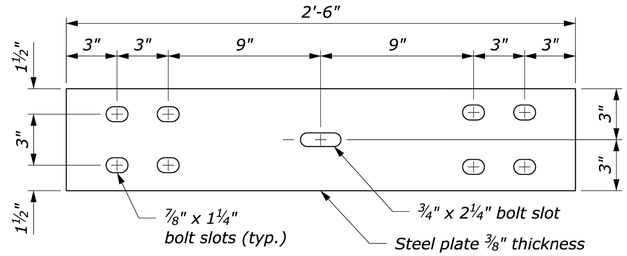


PLAN



ELEVATION

POST CONNECTION



STEEL SPLICE PLATE

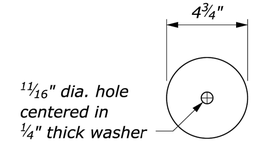
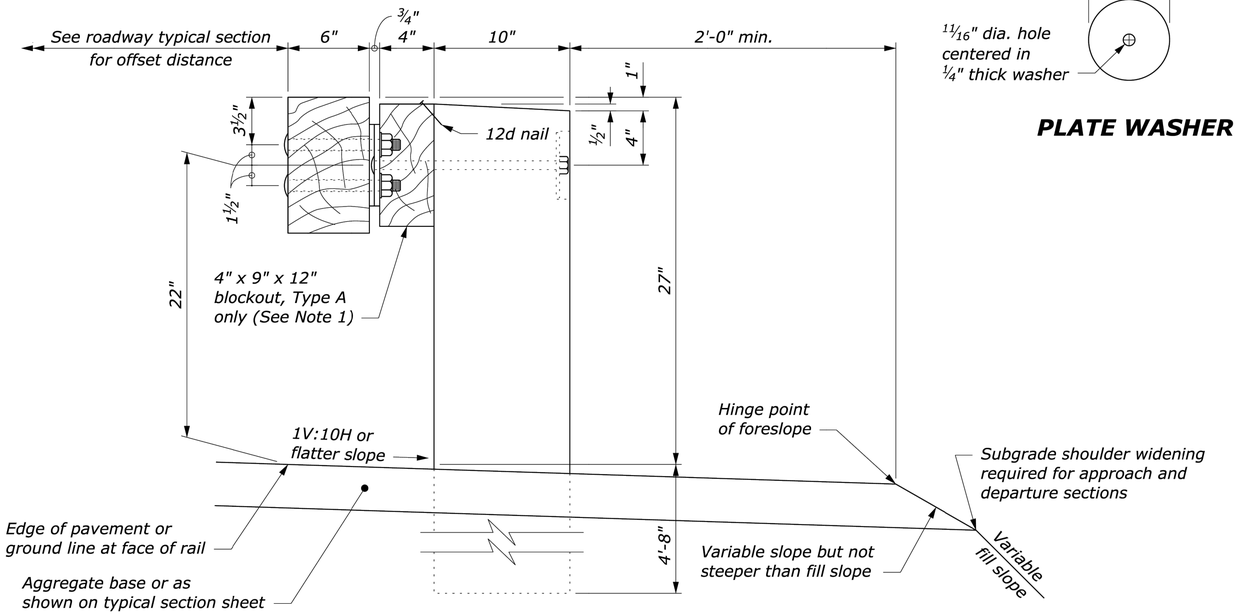


PLATE WASHER



TYPICAL GUARDRAIL CROSS SECTION

NOTE:

1. Use the Type A, blocked-out, system or the Type B, non-blocked-out, system as specified.
2. Use weathering steel for all structural steel and fastener hardware.
3. Place a terminal (see Standards 617-61 and 617-62) on both approach and trailing ends of barrier installations.

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

STEEL-BACKED TIMBER GUARDRAIL
TYPE A & TYPE B

FLH STANDARD
617-60

SPECIFICATION
FP-14, FP-24

APPROVED FOR USE
2/2024

PROJECT | SHEET NUMBER

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

DESIGNER
Designed

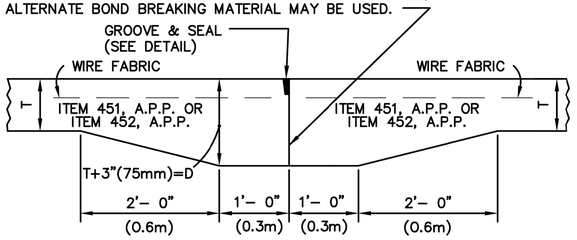
REVIEWER
Reviewed Date

PROJECT ID
123855

SHEET P.65 | TOTAL 82

CUY OLD DETROIT RD BRIDGE REHAB
14/12/2023
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg
24 June 2024 7:12 AM
c:\pw-work\d0419223\Std617-60.dgn [Std 617-60]

PRIOR TO PLACING THE SECOND HALF OF THE JOINT, AN ASPHALT MATERIAL COATING SHALL BE PAINTED ON VERTICAL FACE OF THE FIRST HALF OF THE JOINT TO PREVENT BONDING. AT THE APPROVAL OF THE ENGINEER, ALTERNATE BOND BREAKING MATERIAL MAY BE USED.

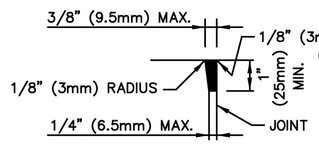


TB–THICKENED EDGE BUTT JOINT

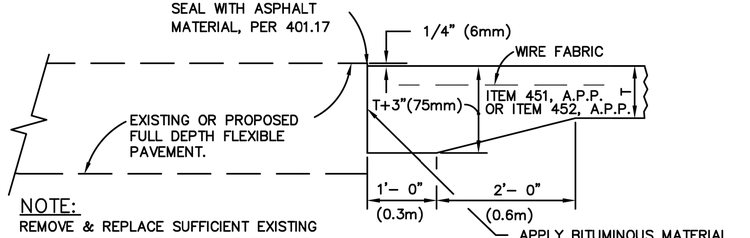
(NEW CONSTRUCTION)

GROOVES: GROOVES FOR SEALING THICKENED EDGE BUTT JOINTS SHALL BE FORMED BY DEPRESSING A DEVICE OR BAR INTO THE NEWLY DEPOSITED CONCRETE ADJACENT TO THE EXISTING OR PREVIOUSLY POURED PAVEMENT. THE DEVICE OR BAR SHALL BE REMOVED AS SOON AS THE CONCRETE IS IN SUCH CONDITION AS TO PRECLUDE DISTORTION OF THE CONCRETE.

AFTER THE JOINT IS FORMED IT SHALL BE PROTECTED FROM DIRT AND FORIEGN MATTER UNTIL THE JOINT SEAL (705.04) IS PLACED.

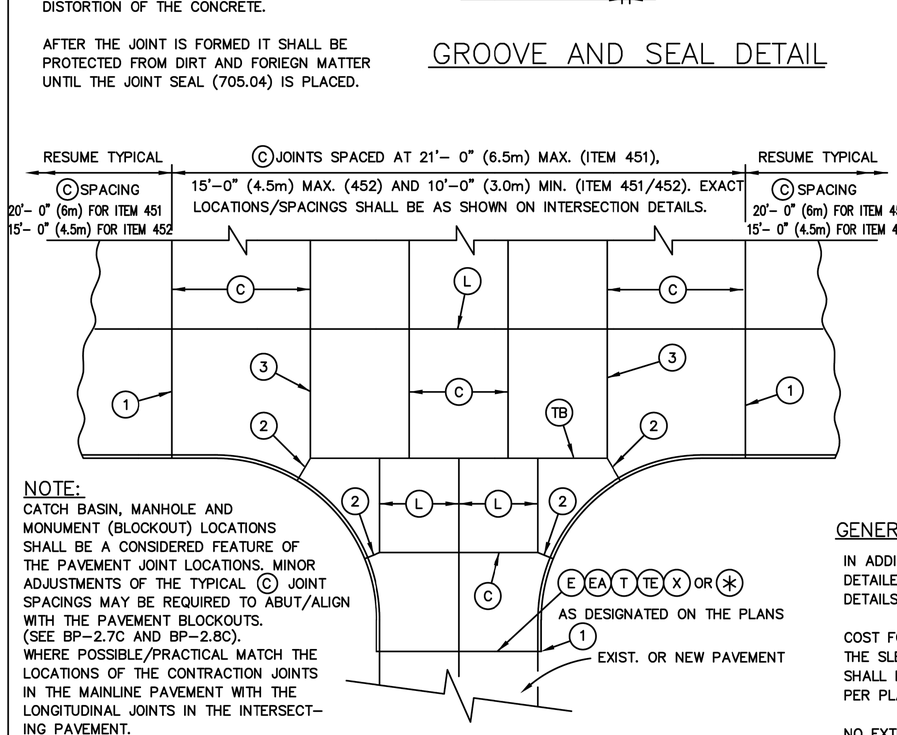


GROOVE AND SEAL DETAIL



NOTE:
REMOVE & REPLACE SUFFICIENT EXISTING FLEXIBLE PAVEMENT ADJACENT TO FACE OF JOINT TO PERMIT THE INSTALLATION OF THE FORM. TOP OF FINISHED ASPHALT TO BE ONE– QUARTER (1/4) INCH (6mm) ABOVE THICKENED CONCRETE SURFACE AT JOINT. NO SEPARATE PAYMENT SHALL BE MADE FOR REMOVAL AND REPLACEMENT OF FLEXIBLE PAVEMENT TO FORM JOINT.

T–THICKENED EDGE JOINT



NOTE:
CATCH BASIN, MANHOLE AND MONUMENT (BLOCKOUT) LOCATIONS SHALL BE A CONSIDERED FEATURE OF THE PAVEMENT JOINT LOCATIONS. MINOR ADJUSTMENTS OF THE TYPICAL Ⓒ JOINT SPACINGS MAY BE REQUIRED TO ABUT/ALIGN WITH THE PAVEMENT BLOCKOUTS. (SEE BP–2.7C AND BP–2.8C). WHERE POSSIBLE/PRACTICAL MATCH THE LOCATIONS OF THE CONTRACTION JOINTS IN THE MAINLINE PAVEMENT WITH THE LONGITUDINAL JOINTS IN THE INTERSECT–ING PAVEMENT.

TYPICAL JOINT LAYOUT FOR CONCRETE INTERSECTION PAVEMENT

LEGEND

1. THESE JOINTS LOCATED AT OR BEYOND THE P.C. OR P.T. ON TANGENT SECTIONS OF PAVEMENT/CURB. EXACT STATION LOCATIONS FOR THESE JOINTS ARE AS SHOWN ON THE INTERSECTION DETAILS.
2. RADIAL PORTION OF Ⓒ JOINTS SHALL BE 2'– 0" (0.6m) MIN. IN LENGTH. DOWELS AND TIE BARS/ HOOK BOLTS SHALL BE OMITTED FROM RADIAL PORTIONS OF ALL JOINTS.
3. FOR NEW CONSTRUCTION, A CONTRACTION JOINT MUST BE LOCATED AT THE END OF THE (TB) JOINT

(L) LONGITUDINAL JOINT, PER BP–2.1.

(C) CONTRACTION JOINT, PER BP–2.2.

(E) EXPANSION JOINT, PER BP–2.2.
–OR–
(EA) EXPANSION JOINT ALTERNATE

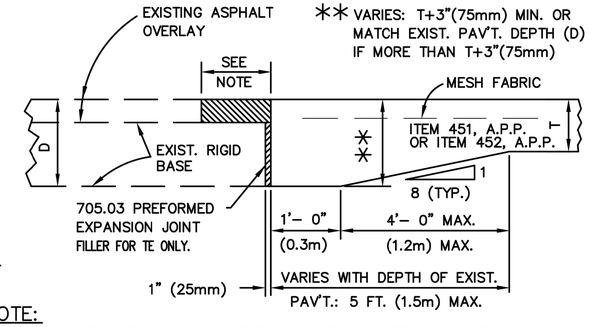
(T) THICKENED EDGE JOINT

(TE) THICKENED EDGE EXPANSION JOINT

(TB) THICKENED EDGE BUTT JOINT

(X) SECTION–TYPE X, EXPANSION JOINT, PER BP–2.5C.

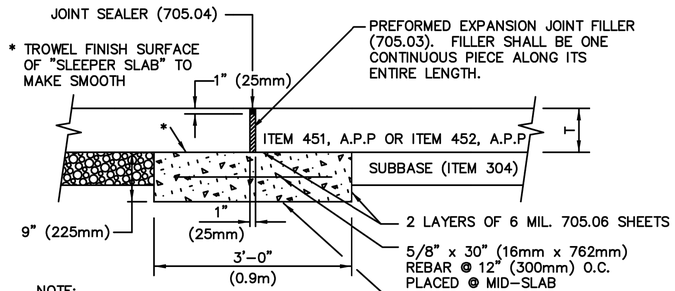
(✳) WHEN MEET EXISTING PAVEMENT SECTION DOES NOT ALLOW FOR ANY OF THE ABOVE, THE JOINT CONSTRUCTION SHALL BE AS DETAILED ON THE PLANS.



NOTE:
A ONE (1) FOOT (0.3m) MINIMUM WIDTH OF EXISTING OVERLAY MATERIAL(S) SHALL BE REMOVED AND REPLACED FLUSH TO THE NEW PAVEMENT JOINT FACE AND SURFACE SEALED PER 401.17; ALL AT THE DIRECTION OF THE ENGINEER. PRIOR TO REPLACING THE ASPHALT CONCRETE COURSE(S), ALL EXPOSED CON–TACT SURFACES SHALL RECEIVE AN APPLICATION OF ASPHALT MATERIAL PER 401.14 AND AS DIRECTED BY THE ENGINEER. NO SEPARATE PAYMENT SHALL BE MADE FOR REMOVAL AND REPLACEMENT OF THE OVERLAY MATERIAL(S).

TE–THICKENED EDGE EXPANSION JOINT –OR– TB–THICKENED EDGE BUTT JOINT

(SAME AS TE WITHOUT 705.03 EXPANSION JOINT FILLER)



NOTE:
CARE SHALL BE TAKEN TO ENSURE THE COMPACTED SUBBASE SURFACE IS FINISHED SMOOTH AND FLUSH WITH OR SLIGHTLY HIGHER THAN THE SURFACE OF THE SLEEPER SLAB.

EA–EXPANSION JOINT ALTERNATE

GENERAL NOTES

IN ADDITION TO THESE DETAILS, PAVEMENT JOINT TYPES AND SPACINGS SHALL BE PER THE DETAILED SPECIFICATIONS, STANDARD CONSTRUCTION DRAWINGS, PLAN NOTES, INTERSECTION DETAILS AND/OR AS DIRECTED BY THE ENGINEER.

COST FOR ALL WORK, MATERIALS AND INCIDENTALS NECESSARY TO ACCEPTABLY CONSTRUCT THE SLEEPER SLAB AND EXPANSION JOINT DETAILED ON THE (EA) –EXPANSION JOINT ALTERNATE SHALL BE INCLUDED IN THE SQUARE YARD UNIT PRICE BID FOR THE ASSOCIATED ITEM 451, AS PER PLAN OR ITEM 452, AS PER PLAN PAVEMENT.

NO EXTRA PAYMENT SHALL BE MADE FOR THE ADDITIONAL QUANTITY OF CONCRETE REQUIRED FOR THICKENED JOINTS. THIS DRAWING IS USED IN CONJUNCTION WITH O.D.O.T. STANDARD CONSTRUCTION DRAWINGS BP–1.1, BP–2.1 AND BP–2.2; AND THE CUYAHOGA COUNTY ENGI–NEER'S CONSTRUCTION DRAWINGS BP–2.5C, BP–2.7C AND BP–2.8C

CUYAHOGA COUNTY ENGINEER

PAVEMENT JOINTS

CONSTRUCTION DRAWING BP–2.6C

DATE
05–05–97
12–07–99
08–15–00
10–29–01
02–10–03
08–20–03
09–29–03
03–01–05
06–27–05
08–28–07
10–10–08
10–31–13

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER
Designed

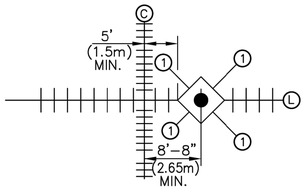
REVIEWER
Reviewed Date

PROJECT ID
123855

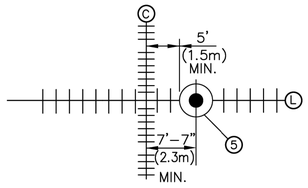
SHEET P.66 TOTAL 82

SITUATION 1

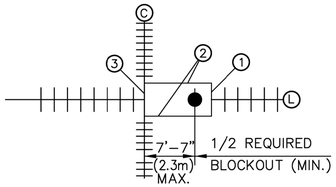
CASTING CENTERED +/−6" (±150mm) ON PROPOSED LONGITUDINAL JOINT.



OPTION 1A



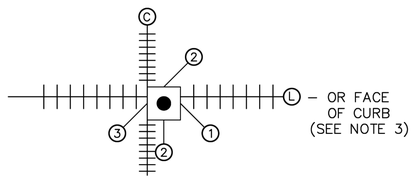
OPTION 1B



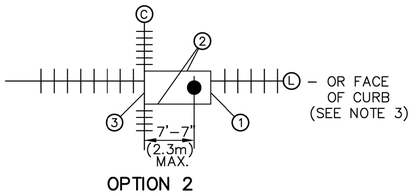
OPTION 2

SITUATION 2

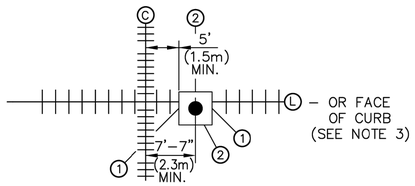
CENTER OF CASTING OFFSET MORE THAN SIX (6) INCHES (150mm) FROM PROPOSED LONGITUDINAL JOINT (OR FACE OF CURB), BUT THE REQUIRED (TYP./MIN.) BLOCKOUT INTERSECTS PROPOSED LONGITUDINAL JOINT (OR FACE OF CURB). (SEE NOTE 3.)



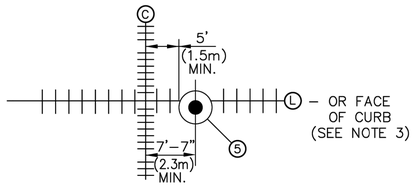
OPTION 1



OPTION 2



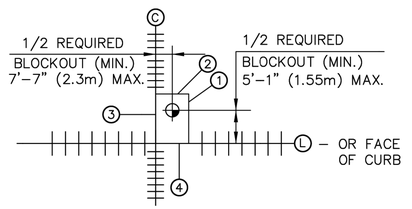
OPTION 3A



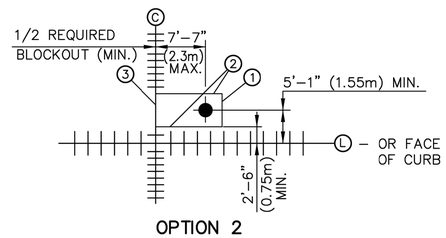
OPTION 3B

SITUATION 3

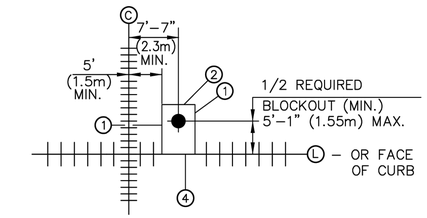
CENTER OF CASTING IS OFFSET FROM PROPOSED LONGITUDINAL JOINT (OR FACE OF CURB) AND REQUIRED (TYP./MIN.) BLOCKOUT DOES NOT INTERSECT PROPOSED LONGITUDINAL JOINT (OR FACE OF CURB).



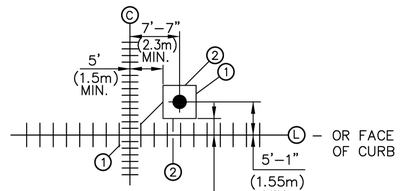
OPTION 1



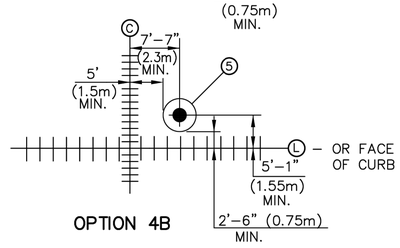
OPTION 2



OPTION 3



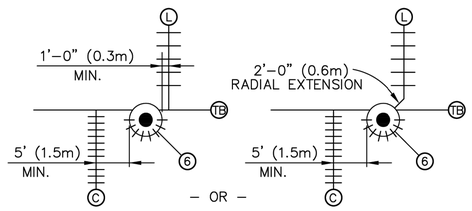
OPTION 4A



OPTION 4B

SITUATION 4

WHERE CASTING/BLOCKOUT INTERSECTS PROPOSED (TB) JOINT, USE CIRCULAR BLOCKOUT WITH MAIN LINE PAVEMENT CONTRACTION JOINT PLACED NO CLOSER THAN FIVE (5) FEET (1.5m) FROM BLOCKOUT. THE INTERSECTING STREET LONGITUDINAL JOINTS THAT ARE WITHIN 1'−0" (0.3m) OF THE CASTING BLOCKOUTS SHALL BE CONNECTED TO THE BLOCKOUTS WITH 2'−0" (0.6m) RADIAL EXTENSIONS.



NOTES

1. PER THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING MH−10C, TYPICAL (MIN.) MANHOLE BLOCKOUT IS THE BOTTOM OF MANHOLE FRAME DIA. (38") (965mm) PLUS THE 12" (305mm) MIN. CLEAR DISTANCE ON EACH SIDE OF THE FRAME = 38" (965mm) + 12" (305mm) +12" (305mm) = 62" (1,575mm) = 5'−2" (1.57m) MIN. USE 5'−2" (1.57m) TYP./MIN. SQUARE/DIAMETER BLOCKOUTS.

2. BLOCKOUT LOCATIONS RELATIVE TO PROPOSED EXPANSION (E) JOINTS SHALL BE THE SAME AS THE CONTRACTION JOINTS SHOWN HEREON.

3. THE PROPOSED FACE OF CURB MAY INTERSECT REQUIRED (TYP./MIN.) BLOCKOUT, BUT THE CENTER OF CASTING SHALL BE NO CLOSER THAN TWO (2) FEET (0.6M) FROM THE FACE OF CURB UNLESS OTHERWISE APPROVED BY THE ENGINEER.

4. APPROPRIATELY CUT/SHAPED STEEL REINFORCEMENT (PER BP−1.1) SHALL BE INSTALLED WITHIN THE BLOCKED OUT PAVEMENT: ALL AT THE APPROVAL OF THE ENGINEER.

5. BUTT JOINTS WITH GROOVE AND SEAL PER BP−2.6C AND SEALED WITH 705.04 JOINT SEALER SHALL BE PROVIDED FOR JOINTS (1), (2) AND (5).

JOINT LEGEND

(1) CONSTRUCTION JOINT USING #11x14" (36Mx355mm) DEFORMED BARS TYPICALLY SPACED AT TWELVE (12) INCH (300mm) CENTERS. ACTUAL BAR PLACEMENTS SHALL PROVIDE A SIX (6) INCH (150mm) MINIMUM CLEAR DISTANCE FROM INTERSECTING LONGITUDINAL PAVEMENT AND/OR BLOCKOUT JOINTS; ALL AT THE APPROVAL OF THE ENGINEER.

(2) LONGITUDINAL CONSTRUCTION JOINT USING #5x24" (16Mx600mm) TIE BAR TYPICALLY SPACED AT TWENTY−FOUR (24) INCH (600mm) CENTERS. ACTUAL BAR PLACEMENTS SHALL PROVIDE A TWELVE (12) INCH (300mm) MINIMUM CLEAR DISTANCE FROM INTERSECTING TRANSVERSE PAVEMENT AND/OR BLOCKOUT JOINTS; ALL AT THE APPROVAL OF THE ENGINEER.

(3) CONSTRUCT PROPOSED CONTRACTION (C) (EXPANSION (E)) JOINT THROUGH BLOCKOUT. DOWELS TYPICALLY SPACED AT TWELVE (12) INCH (300mm) CENTERS SHALL BE PLACED TO PROVIDE A SIX (6) INCH (150mm) MINIMUM CLEAR DISTANCE FROM INTERSECTING LONGITUDINAL PAVEMENT AND/OR BLOCKOUT JOINTS; ALL AT THE APPROVAL OF THE ENGINEER.

(4) CONSTRUCT PROPOSED LONGITUDINAL (L) JOINT THROUGH BLOCKOUT. TIE BARS TYPICALLY SPACED PER BP−2.1 (TABLE A) SHALL BE PLACED TO PROVIDE A TWELVE (12) INCH (300mm) MINIMUM CLEAR DISTANCE FROM INTERSECTING TRANSVERSE PAVEMENT AND/OR BLOCKOUT JOINTS; ALL AT THE APPROVAL OF THE ENGINEER.

(5) CIRCULAR CONSTRUCTION JOINT USING #11x14" (36Mx355mm) DEFORMED BARS RADIALLY SPACED AT TWELVE (12) INCH (300mm) CENTERS. ACTUAL BAR PLACEMENTS SHALL PROVIDE A SIX (6) INCH (150mm) MINIMUM CLEAR DISTANCE FROM INTERSECTING LONGITUDINAL PAVEMENT JOINTS; ALL AT THE APPROVAL OF THE ENGINEER.

(6) ONE HALF (1/2) INCH WIDE CIRCULAR EXPANSION JOINT (PER BP−2.2) WITH DOWELS RADIALLY SPACED AT TWELVE (12) INCH (300mm) CENTERS AND PLACED ON ONE SIDE OF (TB) ONLY. ACTUAL DOWEL PLACEMENTS SHALL PROVIDE A SIX (6) INCH (150mm) MINIMUM CLEAR DISTANCE FROM INTERSECTING PAVEMENT JOINTS; ALL AT THE APPROVAL OF THE ENGINEER.

(C) CONTRACTION JOINT, PER BP−2.2

(E) EXPANSION JOINT, PER BP−2.2

(L) LONGITUDINAL JOINT, PER BP−2.1

(TB) THICKENED EDGE BUTT JOINT, PER BP−2.6C

CUYAHOGA COUNTY ENGINEER

TYPICAL MANHOLE CASTING PAVEMENT BLOCKOUTS	DATE 12−07−99 08−15−00 08−20−03 06−27−05 10−10−08
CONSTRUCTION DRAWING BP−2.7C	

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

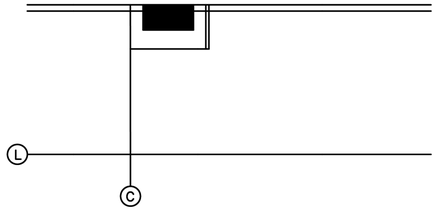
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER: Designed
REVIEWER: Reviewed Date
PROJECT ID: 123855
SHEET: P.67 TOTAL: 82

CUY OLD DETROIT RD BRIDGE REHAB

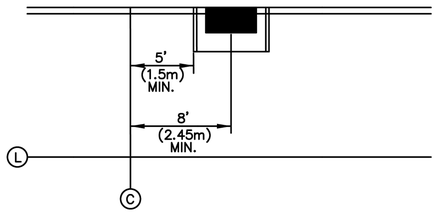
14/12/2023
O:\Public\OH\Cleveland\2025\0225331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

SINGLE BASINS – CUYAHOGA COUNTY No. 3C



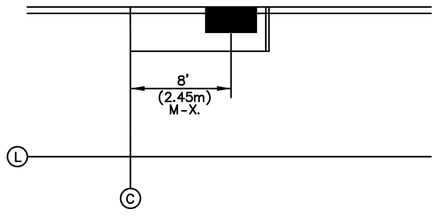
OPTION 1

LOC-TE CONTR-CTION JOINT TO -LIGN/-BUT EITHER SIDE OF TYPIC-L BLOCKOUT.



OPTION 2

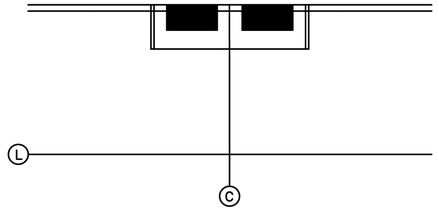
IF PER OPTION 1, THE CONTR-CTION JOINT C-NNOT BE -LIGNED WITH TYPIC-L BLOCKOUT, LOC-TE JOINT - MINIMUM OF FIVE (5) FEET (1.5m) FROM BLOCKOUT.



OPTION 3

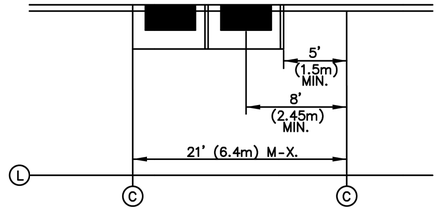
IF PER OPTION 2, CONTR-CTION JOINT C-NNOT BE -LIGNED WITH TYPIC-L BLOCKOUT -ND IS CLOSER TH-N FIVE (5) FEET (1.5m) FROM TYPIC-L BLOCKOUT, EXTEND BLOCKOUT TO CONTR-CTION JOINT.

TWIN BASINS – CUYAHOGA COUNTY TWIN 3C



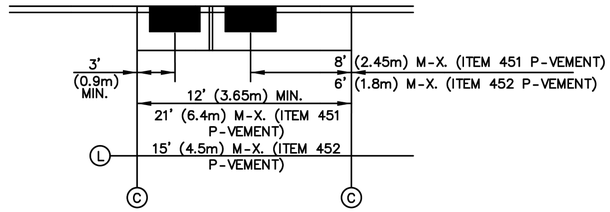
OPTION 1

LOC-TE CONTR-CTION JOINT -T THE MIDPOINT OF THE TWIN B-SIN BLOCKOUTS, PER CB-3C2.



OPTION 2B
(FOR 451 PAVEMENT ONLY)

IF THE CONTR-CTION JOINT C-NNOT BE LOC-TED, PER OPTION 1, -LIGN/-BUT EITHER SIDE OF THE TYPIC-L TWIN B-SIN BLOCKOUT. -LSO NOTE, IF THE NEXT NE-REST CONTR-CTION JOINT IS LESS TH-N FIVE (5) FEET FROM THE TYPIC-L TWIN B-SIN BLOCKOUT, EXTEND THE BLOCKOUT TO THE CONTR-CTION JOINT PER OPTION 2-.



OPTION 2A

IF THE CONTR-CTION JOINT C-NNOT BE LOC-TED PER OPTION 1, TRY TO LOC-TE - CONTR-CTION JOINT NO MORE TH-N EIGHT (8) FEET (2.45m) FOR 451 P-VEMENT -ND NO MORE TH-N SIX (6) FEET (1.8m) FOR 452 P-VEMENT EITHER SIDE OF THE CENTER OF C-STING LOC-TIONS -ND EXTEND THE BLOCKOUT BETWEEN THE CONTR-CTION JOINTS.

NOTES

(1) FOR -DDITION-L SINGLE C-TCH B-SIN BLOCKOUT DET-ILS, SEE THE CUY-HOG- COUNTY ENGINEER'S CONSTRUCTION DR-WING CB-3C (ENGLISH OR METRIC VERSION).

(2) FOR -DDITION-L TWIN C-TCH B-SIN BLOCKOUT DET-ILS, SEE THE CUY-HOG- COUNTY ENGINEER'S CONSTRUCTION DR-WING CB-3C2.

(3) BLOCKOUT LOC-TIONS REL-TIVE TO PROPOSED EXP-NSION (E) JOINTS SH-LL BE THE S-ME -S THE CONTR-CTION JOINTS SHOWN HEREON.

(C) CONTR-CTION JOINT, PER BP-2.2

(E) EXP-NSION JOINT, PER BP-2.2

(L) LONGITUDIN-L JOINT, PER BP-2.1

CUYAHOGA COUNTY ENGINEER

TYPICAL CATCH BASIN CASTING PAVEMENT BLOCKOUTS

DATE
12-07-99
08-15-00
10-10-08

CONSTRUCTION DRAWING BP-2.8C

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023
O:\Public\OH\Cleveland\2025\025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

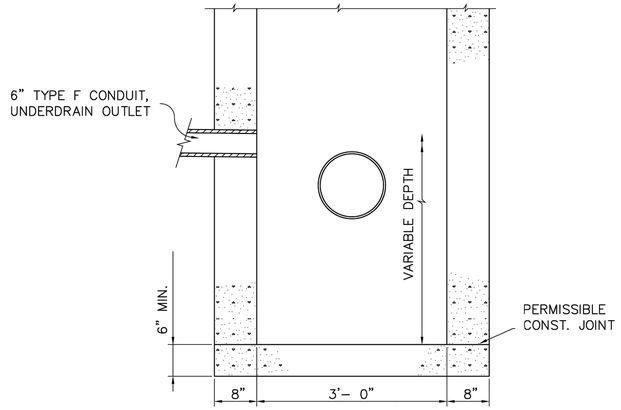
DESIGN AGENCY
GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER
ERS

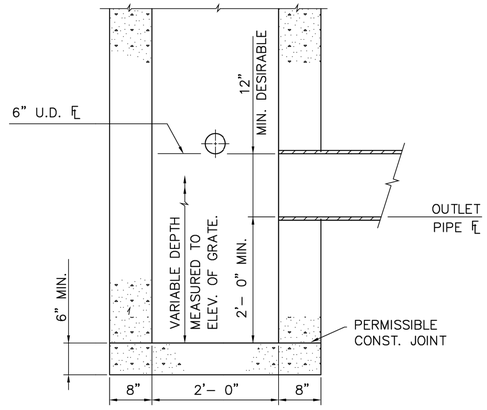
REVIEWER
DEN 08/04/25

PROJECT ID
123855

SHEET P.68 TOTAL 82



*SECTION "B – B"



*SECTION "A – A"

CUYAHOGA COUNTY 3C CATCH BASIN W/SUMP

NOTES

* TO BE USED IN CONJUNCTION WITH THE CUYAHOGA COUNTY ENGINEER'S CONSTRUCTION DRAWING CB–3C. SUMP AND TRAPS ARE REQUIRED FOR COMBINATION (STORM/SANITARY) SEWER SYSTEMS.

CASTING: CAST IRON TRAP SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF 611.02.G (711.14, AASHTO M 306, AND MINIMALLY BE CLASS 35B GRAY IRON), AND SHALL HAVE A MINIMUM WEIGHT OF ONE–HUNDRED AND FORTY–FIVE POUNDS (145 LBS) ±5%. PROVIDED THEY COMPLY WITH THE SPECIFICATIONS, DETAILS, DIMENSIONS AND MINIMUM WEIGHTS, NEENAH No. R–3707–12, EAST JORDAN No. 5964–12 OR APPROVED EQUAL CASTINGS ARE ACCEPTABLE. IF FIFTEEN INCH (15") OUTLET PIPES ARE REQUIRED, USE NEENAH No. R–3707–15, EAST JORDAN No. 5964–15 OR APPROVED EQUAL CASTINGS HAVING A MINIMUM WEIGHT OF ONE–HUNDRED AND SIXTY POUNDS (160 LBS) ± 5%.

PAYMENT: ALL MATERIALS (INCLUDING TRAP), LABOR, EXCAVATION AND BACKFILL SHALL BE PAID UNDER "ITEM 611 – CATCH BASIN, CUYAHOGA COUNTY No. 3C WITH SUMP AND TRAP, AS PER PLAN" OR "ITEM 611 – CATCH BASIN, CUYAHOGA COUNTY No. 3C WITH SUMP, AS PER PLAN".

CUYAHOGA COUNTY ENGINEER
(DEPT. OF PUBLIC WORKS–HIGHWAY)

REVISION DATE
10–29–01 06–09–23
07–07–09
10–31–13

CATCH BASIN WITH SUMP OR WITH SUMP AND TRAP

CONSTRUCTION DRAWING

CB–3C S/T

1 / 1

CUY OLD DETROIT RD BRIDGE REHAB

14/12/2023

O:\Public\OH\Cleveland\2025\20253311 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_GM001.dwg

MISCELLANEOUS DETAILS
BRIDGE NO. CUY-03442-0031

DESIGN AGENCY

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER ERS

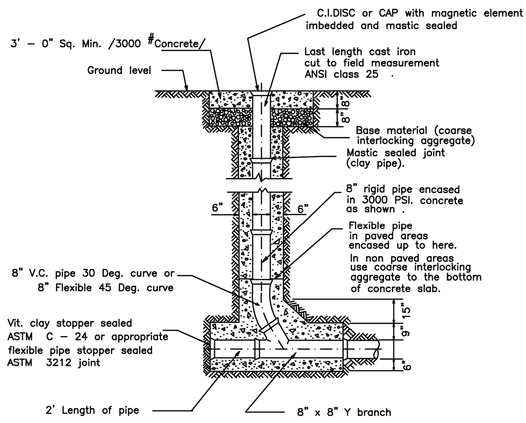
REVIEWER DEN 08/04/25

PROJECT ID 123855

SHEET P.69 | TOTAL 82

NOTE:

8" Clean out shall be used for 8" sewer and larger
Smaller size sewers and lamp holes shall have same size pipe.



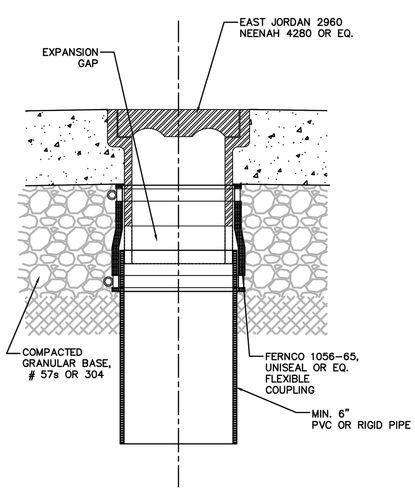
CLEANOUT

SCALE NO SCALE

DATE: OCTOBER 2021

UNIFORM STANDARDS: CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS --- MUNICIPAL ENGINEERS ASSOCIATION OF NE OHIO

SHEET NO. 19



TEST TEE/CLEANOUT COVER IN PAVEMENT

REVISIONS:

SCALE NO SCALE

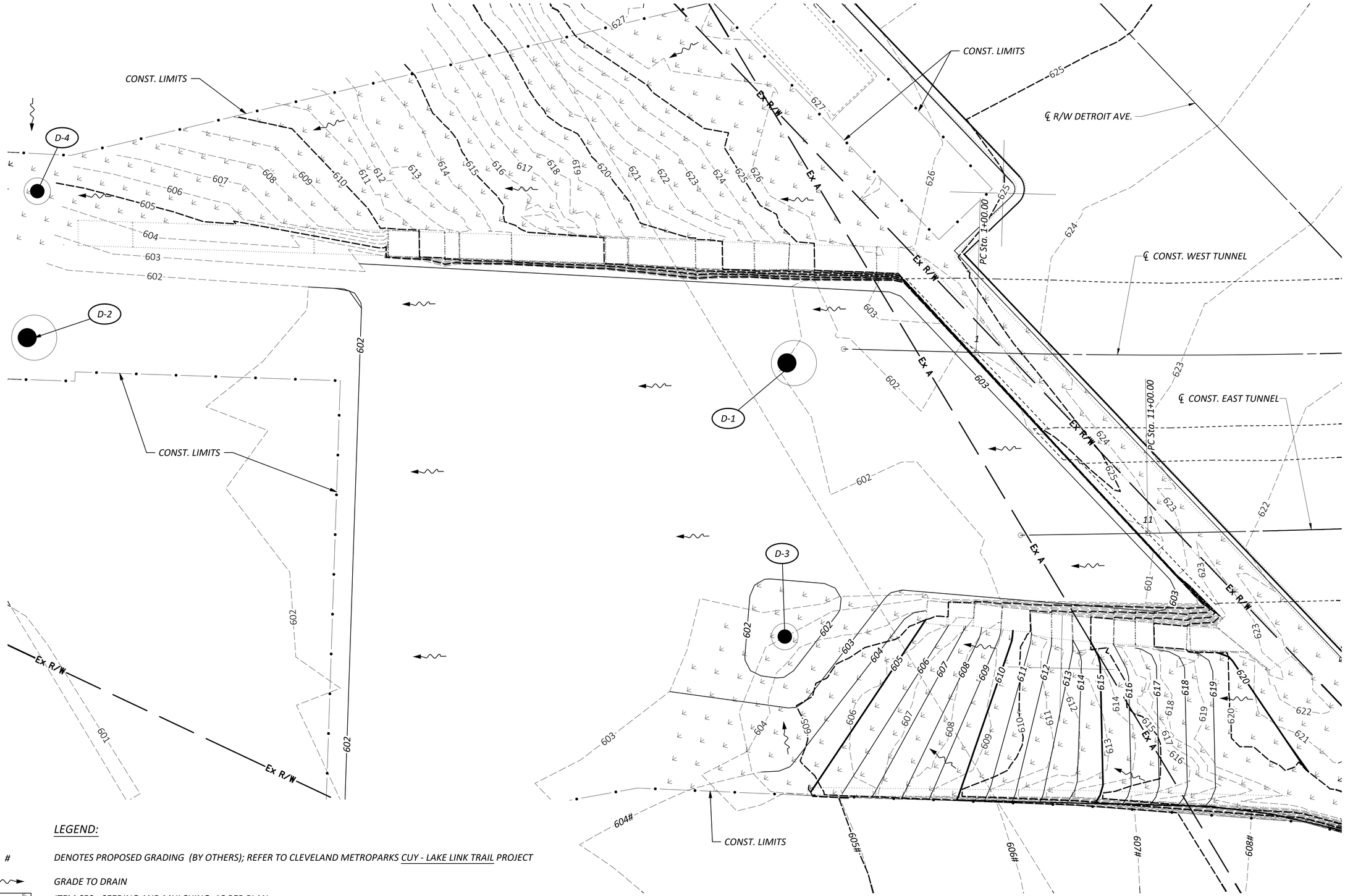
DATE: JANUARY 2020

UNIFORM STANDARDS: CUYAHOGA COUNTY DEPARTMENT OF PUBLIC WORKS --- MUNICIPAL ENGINEERS ASSOCIATION OF NE OHIO

SHEET NO. 20

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Roadway\Sheets\123855_XG001.dwg



LEGEND:

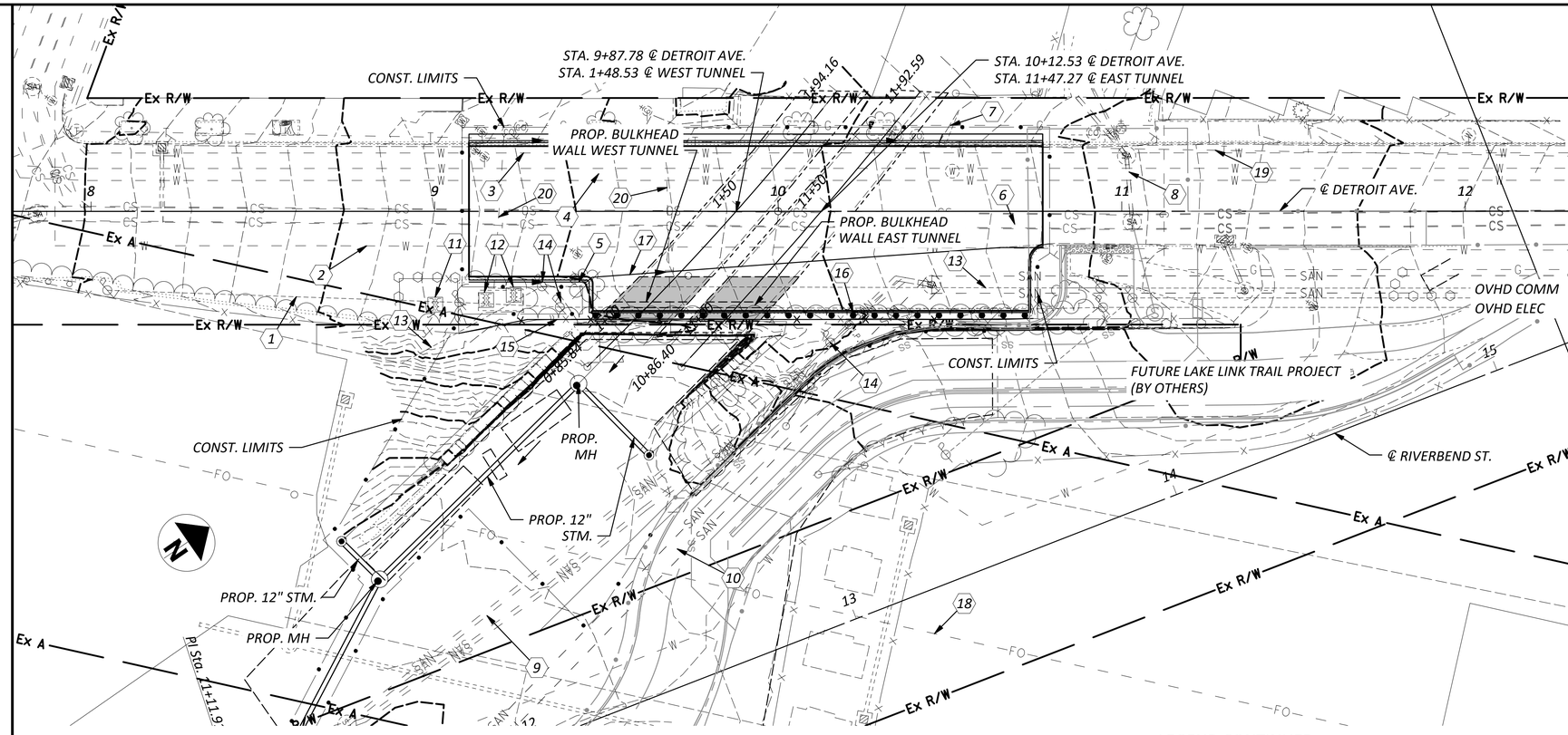
#	*DENOTES PROPOSED GRADING (BY OTHERS); REFER TO CLEVELAND METROPARKS CUY - LAKE LINK TRAIL PROJECT*
	GRADE TO DRAIN
	ITEM 659 - SEEDING AND MULCHING, AS PER PLAN *ITEM 670 - SLOPE EROSION PROTECTION, AS PER PLAN*

HORIZONTAL SCALE IN FEET
0 2.5 5 10

GRADING PLAN

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

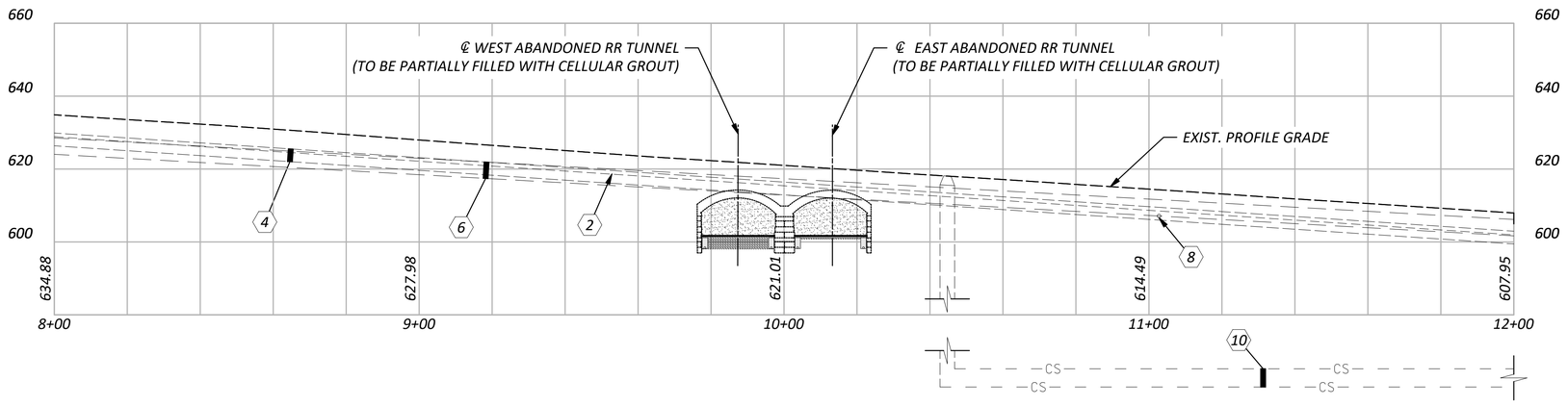
DESIGNER ERS
REVIEWER DEN 08/04/25
PROJECT ID 123855
SHEET P.71 TOTAL 82



PLAN

NOTE:

UTILITY ELEVATIONS AND PROFILES SHOWN ADJACENT TO , AND ABOVE, THE EXISTING ABANDONED RAILROAD TUNNELS SHALL BE CONSIDERED APPROXIMATE. THE EXACT ELEVATION AND SLOPES OF THESE UTILITIES ARE UNKNOWN AND MAY DEVIATE TO AVOID CONFLICT WITH THE TUNNEL STRUCTURES.



PROFILE ALONG ℄ R/W DETROIT AVE.

BENCHMARK DATA

BM1: PIN STA. 15+71.82, 15.62' LT. EL. 591.61
BM2: PIN STA. 11+03.45, 24.86' RT. EL. 616.15

LEGEND

1. *EXISTING OVERHEAD POWER LINES (TO REMAIN)*
2. *EXISTING 6" WATER (TO REMAIN)*
3. *EXISTING 10" WATER (TO REMAIN)*
4. *EXISTING 42" WATER (TO REMAIN)*
5. *EXISTING FIRE HYDRANT TO REMAIN AND BE PROTECTED DURING CONSTRUCTION*
6. *EXISTING 48" COMBINED SEWER (TO REMAIN)*
7. *EXISTING 2" GAS (TO REMAIN)*
8. *EXISTING 12" VCP (TO REMAIN)*
9. *EXISTING 16" SANITARY EMERGENCY BYPASS (FUTURE ABANDONED BY OTHERS)*
10. *EXISTING 60" BRICK SANITARY (NEORSD INTERCEPTING SEWER) (TO REMAIN)*
11. *EXISTING ELECTRIC GENERATOR (TO REMAIN)*
12. *EXISTING ELECTRICAL TRANSFORMERS (TO REMAIN)*
13. *EXISTING OVERHEAD COMMUNICATION LINES CONNECTING TO VETERANS MEMORIAL BRIDGE (TO REMAIN)*
14. *UTILITY POLES TO REMAIN AND BE PROTECTED, EXCAVATION BRACING TO BE PROVIDED AS REQUIRED FOR ADJACENT STRUCTURE EXCAVATION WORK*

LEGEND CONTINUED

15. *PROP. CHAIN LINK FENCE, SEE ROADWAY PLANS*
16. *PROP. GUARDRAIL, SEE ROADWAY PLANS*
17. *PROP. ROADWAY UNDERDRAIN*
18. *EXISTING FIBER OPTIC IN OVERHEAD BRIDGE*
19. *EXISTING UNDERGROUND AT&T CONDUIT (PER RECORDS)*
20. *EXISTING UNDERGROUND EVERSTREAM CONDUIT (PER RECORDS)*

EXISTING STRUCTURE

TYPE: 2-SPAN EARTH-FILLED, MULTI-LAYER BRICK MASONRY ARCH CULVERT WITH SANDSTONE BLOCK MASONRY PEDESTAL WALLS, SPANDREL WALLS AND WINGWALLS (ABANDONED RAILROAD UNDERPASS)

SPANS: 15'-6"± & 15'-3"± F/F STONE PEDESTAL WALLS (MEASURED PERP. TO PEDESTAL WALLS)

ROADWAY: 28'-0"± T/T CURB WITH ADDITIONAL 18'-6"± PERPENDICULAR PARKING STALLS OVER CULVERT

LOADING: H-10 DESIGN, 100% LEGAL (ODOT INVENTORY)

SKEW: 45°± LEFT FORWARD

APPROACH SLABS: NONE (CULVERT)

WEARING SURFACE: MONOLITHIC PORTLAND CEMENT CONCRETE ROADWAY PAVEMENT

ALIGNMENT: TANGENT

SUPERELEVATION: NONE, NORMAL CROWN

STRUCTURE FILE NUMBER: 1867644 (TO BE RETIRED)

DATE BUILT: 1853 (NRHP REGISTERED)

LATITUDE: 41° 29' 34.32" LONGITUDE: 81° 42' 19.42"

DISPOSITION: TO BE PARTIALLY FILLED AND REPAIRED. REMAINING EXPOSED PORTIONS TO BE TURNED INTO A RELIC STRUCTURE.

PROPOSED WORK

1. *CLEAR, GRUB AND REMOVE DEBRIS FROM PROJECT LIMITS.*
2. *INSTALL PERFORATED DRAIN PIPES AND AGGREGATE BASE INSIDE TUNNELS. CONSTRUCT CONCRETE BULKHEAD WALLS INSIDE TUNNELS.*
3. *PUMP CELLULAR GROUT MATERIAL INSIDE TUNNELS TO COMPLETELY FILL REGIONS BEHIND THE NEW BULKHEAD WALLS.*
4. *INSTALL SITE DRAINAGE AND PERFORATED STRUCTURE DRAINAGE PIPES.*
5. *REPAIR AND TUCK POINT BRICK ARCH INTRADOS. REPAIR, TUCK POINT AND SEAL SANDSTONE BLOCK MASONRY SPANDREL WALLS AND WINGWALLS.*
6. *INSTALL NEW GUARDRAIL AND FENCE ALONG SPANDREL WALL.*

HORIZONTAL SCALE IN FEET
0 10 20 40

SITE PLAN
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\202533110_SP001.dwg

SFN	1867644
DESIGN AGENCY	GPD GROUP
DESIGNER	JKM
CHECKER	TJW
REVIEWER	DGN 12/19/25
PROJECT ID	123855
SUBSET	1
TOTAL	11
SHEET	P.72
TOTAL	82

DESIGN SPECIFICATIONS:
NEW BULKHEAD RETAINING WALL STRUCTURES PROPOSED WITH THIS PROJECT CONFORM TO THE 10TH EDITION OF THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 2024 AND THE ODOT BRIDGE DESIGN MANUAL, 2020.

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS:
REFER TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S) AS REFERENCED IN THE PROJECT PLANS AND/OR NOTES:

837 DATED 7-18-25

DESIGN LOADING:
DESIGN LOAD FOR THE EXISTING STRUCTURE IS H-10 PER THE ODOT BRIDGE INVENTORY. THE STRUCTURE IS TO BE FILLED WITH CELLULAR GROUT AND CONSIDERED TO BE PERMANENTLY ABANDONED, SOLIDIFIED AND THUS NO LONGER CARRYING VERTICAL VEHICULAR LOAD AT THE COMPLETION OF THE PROJECT. PROPOSED CONCRETE BULKHEAD WALLS ARE DESIGNED TO RETAIN LOAD DUE TO EARTH SURCHARGE LOAD ABOVE THE EXISTING TUNNEL CROWN ELEVATION COMBINED WITH THE PROPOSED CELLULAR GROUT FILL TO BE PLACED WITHIN THE EXISTING TUNNELS.

DESIGN DATA:
CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (BULKHEAD WALL FOUNDATIONS)

CONCRETE CLASS QC SCC - SELF CONSOLIDATING CONCRETE COMPRESSIVE STRENGTH 4.5 KSI (BULKHEAD VERTICAL WALLS)

CELLULAR GROUT - CONFORMING TO THE REQUIREMENTS OF SUPPLEMENTAL SPECIFICATION 837.02L (TUNNEL ABANDONMENT FILL OF AND BACKFILL ALONG SPANDREL WALL EXCAVATION)

CONCRETE REINFORCEMENT - EPOXY COATED STEEL REINFORCEMENT MINIMUM YIELD STRENGTH 60 KSI

EXISTING STRUCTURE VERIFICATION:
EXISTING STRUCTURE PLANS ARE NOT AVAILABLE. DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO C&MS SECTIONS 102.05 AND 105.02. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

FOUNDATION BEARING RESISTANCE:
TUNNEL BULKHEAD WALL FOOTINGS, AS DESIGNED, PRODUCE A MAXIMUM SERVICE LIMIT STATE BEARING PRESSURE OF 1.97 KIPS PER SQUARE FOOT AND A MAXIMUM STRENGTH LIMIT STATE BEARING PRESSURE OF 2.68 KIPS PER SQUARE FOOT. THE FACTORED BEARING RESISTANCE IS 7.07 KIPS PER SQUARE FOOT.

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN
ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY IS INCLUDED WITH THE STRUCTURE QUANTITIES FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN. ALL EXISTING TREES, BRUSH AND VEGETATION WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM ARE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN.

ADDITIONALLY, THIS ITEM INCLUDES THE CAREFUL REMOVAL OF ALL VEGETATION GROWING ON OR PENETRATING INTO THE MORTAR JOINTS AND OTHER CREVICES WITHIN THE EXISTING STRUCTURE'S SANDSTONE SPANDREL WALL AND SANDSTONE WINGWALLS. ALL VEGETATION REMOVAL OPERATIONS SHALL BE PERFORMED IN A MANNER THAT DOES NOT CAUSE DAMAGE TO THE STRUCTURAL ELEMENTS TO REMAIN. AFTER ALL VISIBLE VEGETATION HAS BEEN REMOVED FROM THE STRUCTURE, APPLY A CONCENTRATED NON-SELECTIVE TYPE HERBICIDE TO ALL JOINTS AND CREVICES WITHIN THE STRUCTURE THAT WERE SUPPORTING VEGETATIVE GROWTH. THE HERBICIDE SHALL BE DESIGNED TO KILL THE ROOT OF THE VEGETATION AND BE REGISTERED, LICENSED OR OTHERWISE APPROVED BY THE US EPA, OSHA, OHIO EPA AND NOT BE SPECIFICALLY PROHIBITED FOR USE BY ANY FEDERAL, STATE OR LOCAL AGENCY. ALL HERBICIDES SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. SHOULD VEGETATION REGROW WITHIN THE STRUCTURE ELEMENTS AT ANY TIME BEFORE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL APPLY ADDITIONAL APPLICATION(S) OF HERBICIDE AT NO ADDITIONAL COST TO THE DEPARTMENT. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF CMS ITEM 201.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE LUMP SUM PRICE BID AND SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM 202 - REMOVAL, MISC.: DEBRIS REMOVED
THIS ITEM SHALL INCLUDE THE REMOVAL AND DISPOSAL OF ALL MISCELLANEOUS DUMPED GARBAGE, TRASH, SCRAP METAL, WOOD, TIRES, UNSUITABLE SOIL MATERIALS AND ANY OTHER DEBRIS AND DELETERIOUS MATERIALS FOUND WITHIN THE LIMITS OF WORK AND INSIDE THE EXISTING ABANDONED RAILROAD TUNNELS WHICH IS NOT INTENDED TO BE INCORPORATED INTO THE FINISHED WORK. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF CMS ITEM 202.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE LUMP SUM PRICE BID AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM 202 - REMOVAL, MISC.: PIPE RAILING REMOVED
THIS ITEM SHALL INCLUDE THE CAREFUL REMOVAL OF THE EXISTING PIPE HAND RAILING MOUNTED TO THE TOP OF THE COPING STONE COURSE ALONG THE TOP OF THE STRUCTURE'S SPANDREL WALL. REMOVAL METHODS SHALL INCLUDE CLEAN AND FLUSH REMOVAL TO THE TOP OF THE COPING STONE SURFACE WITHOUT SHARP OR PROJECTING PORTIONS LEFT BEHIND. ANY REMAINING EMBEDDED PORTIONS OF THE RAILING THAT ARE LOOSE SHALL BE REMOVED. ANY CREVICES OR VOIDS WITHIN THE COPING STONE RESULTING FROM THE REMOVAL OPERATION THAT WILL HOLD WATER OR OTHERWISE POTENTIALLY RESULT IN EVENTUAL DETERIORATION TO THE STONE, AS DETERMINED BY THE ENGINEER, SHALL BE FILLED WITH NON-SHRINK MORTAR TO THE SATISFACTION OF THE ENGINEER. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF CMS ITEM 202.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM 304 - AGGREGATE BASE, AS PER PLAN
THIS ITEM SHALL INCLUDE FURNISHING, PLACING AND COMPACTING AGGREGATE BASE MATERIAL OF VARIABLE THICKNESS INSIDE THE ABANDONED RAILROAD TUNNELS TO THE LINE AND GRADE INDICATED ON THE PLANS. THE FINISHED COMPACTED AGGREGATE SURFACE SHALL SERVE AS THE BASE FOR CELLULAR GROUT FILL TO BE PLACED WITHIN THE TUNNELS UNDER A SEPARATE ITEM. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF CMS 304.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER. THE ESTIMATED QUANTITY SHOWN ON THE PLANS INCLUDES AN ADDITIONAL 70 CUBIC YARDS SET ASIDE AS CONTINGENCY TO BE USED AS DIRECTED BY THE ENGINEER FOR REPLACEMENT MATERIAL WITHIN ANY UNDERCUTTING REQUIRED WITHIN THE TUNNELS.

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN
THIS ITEM SHALL CONSIST OF ANY AND ALL EXCAVATION BRACING THAT MAY BE REQUIRED THROUGHOUT THE PROJECT TO PERFORM EXCAVATION ADJACENT TO EXISTING ITEMS TO REMAIN AND NOT BE DISTURBED. THIS WORK ALSO INCLUDES ANY AND ALL DEWATERING WITHIN THE EXISTING TUNNELS OR ELSEWHERE ON THE PROJECT AS REQUIRED TO PERFORM THE WORK. ALL WORK SHALL COMPLY WITH ITEM 503.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE LUMP SUM PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

ITEM 503 - UNCLASSIFIED EXCAVATION
THIS ITEM INCLUDES ALL STRUCTURE RELATED EXCAVATION WITHIN THE TUNNELS AND ABOVE THE TUNNELS AS NOTED OR SPECIFIED IN THE PLANS. ALL WORK SHALL CONFORM TO CMS ITEM 503. THE ESTIMATED QUANTITY SHOWN ON THE PLANS INCLUDES AN ADDITIONAL 70 CUBIC YARDS SET ASIDE AS CONTINGENCY TO BE USED AS DIRECTED BY THE ENGINEER FOR ANY UNDERCUTTING REQUIRED WITHIN THE TUNNELS. REPLACEMENT MATERIAL WITHIN THE UNDERCUT SHALL BE PAID SEPARATELY.

ITEM 511 - CONCRETE, MISC.: CLASS QC SCC, RETAINING WALL ABOVE FOOTING
THIS ITEM SHALL CONSIST OF FORMING, FURNISHING, PLACING AND CURING SELF CONSOLIDATING PORTLAND CEMENT CONCRETE (SCC) WITHIN THE VERTICAL STEM PORTIONS OF THE PROPOSED BULKHEAD WALLS TO BE CONSTRUCTED WITHIN THE EXISTING ABANDONED RAILROAD TUNNELS AS INDICATED ON THE PLANS. DUE TO ACCESS LIMITATIONS WITH CONSTRUCTION OF THE VERTICAL STEM WALLS WITHIN THE TUNNEL SURROUNDINGS, THE STEM WALL CONCRETE SHALL BE PUMPED INTO THE FORMS USING PORTS WITHIN THE VERTICAL FACE OF THE WALL FORM. TO AID IN PLACEMENT OF TUNNEL BACKFILL MATERIAL PAID UNDER A SEPARATE ITEM, AN OPTIONAL HORIZONTAL CONSTRUCTION JOINT IS SHOWN WITH THE WALL STEM. IF THE CONTRACTOR ELECTS TO USE THE OPTIONAL JOINT, SCC CONCRETE BELOW THE CONSTRUCTION JOINT MAY BE PLACED BY GRAVITY. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE PLACEMENT METHODS, EQUIPMENT, ETC. REQUIRED TO COMPLETE THE WORK. SUITABLE TEMPORARY VENTING PIPES SHALL BE INCORPORATED TO ENSURE THE FORM IS COMPLETELY FILLED WITH CONCRETE AND ALL AIR INSIDE THE FORM HAS BEEN RELEASED DURING CONCRETE PLACEMENT. THE INNER FORM SHALL BE SACRIFICIAL. ALL PORT AND VENT HOLES WITHIN FORMWORK SHALL BE PLACED IN THE MOST INCONSPICUOUS LOCATION AND BE FILLED WITH NON-SHRINK GROUT MATCHING THE COLOR OF THE ADJACENT CONCRETE. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF CMS 511.

IN ADDITION TO THE APPLICABLE REQUIREMENTS OF CMS 511.15, THIS ITEM INCLUDES ALL WORK NECESSARY TO CREATE A SPECIAL SURFACE FINISH AT THE EXPOSED PORTIONS OF THE VERTICAL BULKHEAD WALLS. THE INTENT IS TO PRODUCE A NATURAL GREY CONCRETE FINISH WITH A LIGHT-ETCH TEXTURED SURFACE TO MATCH THE FINISH OF NEARBY RETAINING WALLS PROPOSED WITH THE CLEVELAND METROPARKS LAKE-LINK TRAIL PROJECT. TO PRODUCE A FINISH CLOSELY MATCHING THE METROPARKS WALLS, APPLY AND TREAT THE CONCRETE SURFACES WITH ACC MICRO FINISH GEL BY ARCHITECTURAL CONCRETE CHEMICALS, CAPITOL HEIGHTS, MARYLAND OR EQUIVALENT APPROVED BY THE ENGINEER. SURFACE ETCHING PRODUCTS SHALL BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. MANAGE ALL LIQUID AND OTHER WASTE PRODUCTS IN ACCORDANCE WITH CMS 107.19.

PRIOR TO EXECUTION OF THE WORK, THE CONTRACTOR SHALL PROVIDE A MINIMUM 2' x 2' x 6" THICK MOCK UP PANEL TO THE ENGINEER FOR REVIEW AND APPROVAL OF THE COLOR AND TEXTURE OF THE FINISHED CONCRETE. THE MOCK UP PANEL SHALL BE PRODUCED WITH THE SAME CONCRETE MIX DESIGN, CEMENT AND AGGREGATES TO BE FURNISHED WITH THE ACTUAL BULKHEAD WALL. IF THE MOCK UP PANEL SURFACE FINISH IS NOT ACCEPTABLE TO THE ENGINEER, THE CONTRACTOR SHALL ADJUST THEIR METHOD AND PRODUCE ADDITIONAL MOCK UP PANEL(S) FOR REVIEW AND APPROVAL BY THE ENGINEER UNTIL AN ACCEPTABLE FINISH IS PRODUCED . THE FULL COST OF PREPARING MOCK UP PANELS SHALL BE INCLUDED WITH THIS ITEM FOR PAYMENT.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM 518 - 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN
THIS ITEM SHALL CONSIST OF FURNISHING NON-PERFORATED CORRUGATED PLASTIC PIPE FOR DRAINAGE OF STRUCTURES. WHERE NON-PERFORATED PIPES PASS BENEATH THE PROPOSED BULKHEAD WALL FOUNDATIONS, THE PIPE TRENCH UNDER THE FOUNDATION SHALL BE BACKFILLED WITH CLASS QC1 CONCRETE. THE COST OF THE CONCRETE BACKFILL AND PIPE ENCASEMENT SHALL BE INCIDENTAL TO THE PIPE INSTALLATION.

ITEM SPECIAL - STRUCTURES: BRICK MASONRY ARCH REPAIR
THIS ITEM SHALL CONSIST OF REPAIRS TO THE UNDERSIDE OF THE BRICK MASONRY ARCHES WITHIN PORTIONS TO REMAIN PERMANENTLY EXPOSED IN FRONT OF THE NEW BULKHEAD WALLS. WHERE INDIVIDUAL ARCH RING BRICKS OR SMALL GROUPS OF ARCH RING BRICKS ARE LOOSE, BROKEN, DETERIORATED OR MISSING, THEY SHALL BE REMOVED AND REPLACED WITH NEW BRICK AS DIRECTED BY THE ENGINEER. EXISTING BRICKS THAT ARE IN GOOD CONDITION MAY SALVAGED FOR REUSE AS PERMITTED BY THE ENGINEER. IT IS NOT THE INTENT OF THIS ITEM TO REMOVE LARGE AREAS OF BRICK WITHIN THE LOWEST EXPOSED COURSE OF THE EXISTING MULTI-COURSE ARCH RING AT ANY GIVEN TIME. TO BEST MAINTAIN THE OVERALL INTEGRITY OF THE ARCH RING AND THE LOWEST EXPOSED BRICK COURSE, THE WORK SHALL BE PERFORMED IN A LOGICAL MANNER WHICH ALTERNATES THE LOCATIONS OF THE BRICK REMOVAL AND REPLACEMENT.

NOTE, WHERE BRICKS ARE NOT LOOSE, BROKEN OR DETERIORATED TO A SIGNIFICANT DEGREE BUT HAVE LOOSE OR MISSING MORTAR IN THE EXPOSED MORTAR JOINTS, GENERAL MORTAR JOINT TUCK POINTING OF THE ARCH UNDERSIDE WILL BE PERFORMED UNDER A SEPARATE ITEM WITHOUT REMOVAL OR REPLACEMENT OF THE BRICK. REPAIRS TO THE DISTINCT CIRCUMFERENTIAL CRACK EXISTING WITHIN THE WEST TUNNEL, THAT PASSES THROUGH MULTIPLE COURSES OF THE ARCH RING BRICK ALONG THE CRACK LOCATION, SHALL BE PERFORMED UNDER A SEPARATE PAY ITEM. SELECTED INDIVIDUAL BRICKS ADJACENT TO THE WEST TUNNEL CRACK MAY BE REPLACED UNDER THIS ITEM AS DIRECTED BY THE ENGINEER.

BRICK AND MORTAR REMOVAL OPERATIONS SHALL BE PERFORMED IN A MANNER THAT DOES NOT DAMAGE THE ADJACENT MASONRY TO REMAIN. PNEUMATIC CHIPPING HAMMERS WILL NOT BE PERMITTED. USE ONLY LIGHTWEIGHT HANDHELD POWER CHISELS, ANGLE GRINDERS, MORTAR SAWS, ETC.

NEW BRICK FOR THE MASONRY ARCH SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C1272 TYPE R AND HAVE DIMENSIONS AND COLOR SIMILAR TO THE EXISTING ARCH RING BRICK AFTER CLEANING. MORTAR SHALL MEET THE REQUIREMENTS OF ASTM C270 TYPE S AND BE SUPPLIED IN A FACTORY PRE-BLENDED MIX CONFORMING TO ASTM C1714. MORTAR SHALL HAVE CURED COLOR CLOSELY MATCHING THE EXISTING BRICK ARCH RING MORTAR AFTER BEING CLEANED.

ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER AS PER ACCEPTED MASONRY STANDARDS. ALL CONTACT SURFACES SHALL BE THOROUGHLY CLEANED OF FOREIGN MATERIALS BEFORE PLACING NEW BRICK. HAVE SURFACES IN SATURATED SURFACE DRY CONDITION FOR MORTARING OPERATIONS. MORTAR SHALL BE PLACED TO COMPLETELY FILL THE MORTAR JOINT BETWEEN ADJACENT BRICK. PERFORM ALL WORK IN ACCORDANCE WITH THE PREMIX MORTAR MANUFACTURER'S RECOMMENDATIONS. PROVIDE WEDGES AND OTHER TEMPORARY SUPPORTS FOR BRICK REPLACEMENT AS REQUIRED TO PROPERLY COMPLETE THE WORK. MAINTAIN THE MORTAR IN A DAMP CONDITION FOR AT LEAST 72 HOURS, PROTECTING IT FROM SUN, RAIN, AND DRYING WINDS.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM SPECIAL - STRUCTURES: TUCK POINTING UNDERSIDE OF BRICK MASONRY ARCH
THIS ITEM SHALL CONSIST OF RE-POINTING MORTAR JOINTS WITHIN THE UNDERSIDE OF THE BRICK MASONRY ARCHES AT PORTIONS TO REMAIN PERMANENTLY EXPOSED IN FRONT OF THE NEW BULKHEAD WALLS. PLAN QUANTITY ACCOUNTS FOR THE ENTIRE SURFACE AREA TO REMAIN EXPOSED. THE FINAL QUANTITY MAY BE ADJUSTED/REDUCED IF THE ENGINEER DESIGNATES CERTAIN AREAS AS SATISFACTORY AND NOT REQUIRING TUCK POINTING. REPLACEMENT OF LOOSE OR DAMAGED BRICK AND REPAIRS TO THE DISTINCT CIRCUMFERENTIAL CRACK WITHIN THE WEST TUNNEL SHALL BE PERFORMED UNDER SEPARATE PAY ITEMS.

ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER AS PER ACCEPTED MASONRY STANDARDS. ALL LOOSE AND DISINTEGRATED MORTAR AND FOREIGN MATERIALS WITHIN THE EXISTING JOINTS SHALL BE REMOVED. THE DEPTH OF REMOVAL SHALL BE AT LEAST THAT TO ACCOMMODATE A NEW MORTAR PLACEMENT DEPTH OF AT LEAST 1.5 TIMES THE MORTAR JOINT THICKNESS. BRICK AND MORTAR REMOVAL OPERATIONS SHALL BE PERFORMED IN A MANNER THAT DOES NOT DAMAGE THE ADJACENT MASONRY TO REMAIN. PNEUMATIC CHIPPING HAMMERS WILL NOT BE PERMITTED. USE ONLY LIGHTWEIGHT HANDHELD POWER CHISELS, ANGLE GRINDERS, MORTAR SAWS, ETC.

MORTAR SHALL MEET THE REQUIREMENTS OF ASTM C270 TYPE S AND BE SUPPLIED IN A FACTORY PRE-BLENDED MIX CONFORMING TO ASTM C1714. MORTAR SHALL HAVE CURED COLOR CLOSELY MATCHING THE EXISTING BRICK ARCH RING MORTAR AFTER BEING CLEANED. ENSURE PROPER ADHESION OF THE NEW MORTAR. HAVE SURFACES IN SATURATED SURFACE DRY CONDITION FOR MORTARING OPERATIONS. MORTAR SHALL BE PLACED TO COMPLETELY FILL THE MORTAR JOINT BETWEEN ADJACENT BRICK. ALL EXCESS DEPOSITS OVER THE EXPOSED MASONRY SURFACE SHALL BE CLEANED OFF. PERFORM ALL WORK IN ACCORDANCE WITH THE PREMIX MORTAR MANUFACTURER'S RECOMMENDATIONS. MAINTAIN THE MORTAR IN A DAMP CONDITION FOR AT LEAST 72 HOURS, PROTECTING IT FROM SUN, RAIN, AND DRYING WINDS.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

HORIZONTAL SCALE IN FEET
0 10 20 40

STRUCTURE GENERAL NOTES 1
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

SFN 1867644
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
DESIGNER JKM | CHECKER TJW
REVIEWER DGN 12/19/25
PROJECT ID 123855
SUBSET 2 | TOTAL 11
SHEET P.73 | TOTAL 82

CUY OLD DETROIT RD BRIDGE REHAB
2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\202533110_SN001.dwg

ITEM SPECIAL - STRUCTURES: TUCK POINTING SANDSTONE BLOCK MASONRY

THIS ITEM SHALL CONSIST OF RE-POINTING MORTAR JOINTS WITHIN THE LARGE BLOCK SANDSTONE MASONRY SPANDREL WALL, LARGE BLOCK SANDSTONE WINGWALLS AND THOSE PORTIONS OF THE LARGE BLOCK SANDSTONE PEDESTAL WALLS WITHIN THE TUNNELS THAT WILL REMAIN PERMANENTLY EXPOSED. PLAN QUANTITY ACCOUNTS FOR THE ENTIRE SURFACE AREA TO REMAIN EXPOSED. THE FINAL QUANTITY MAY BE ADJUSTED/REDUCED IF THE ENGINEER DESIGNATES CERTAIN AREAS AS SATISFACTORY AND NOT REQUIRING TUCK POINTING.

ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER AS PER ACCEPTED MASONRY STANDARDS. ALL LOOSE AND DISINTEGRATED MORTAR, VEGETATIVE MATTER AND ALL FOREIGN MATERIALS WITHIN THE EXISTING JOINTS SHALL BE REMOVED. THE DEPTH OF REMOVAL SHALL BE AT LEAST THAT TO ACCOMMODATE A NEW MORTAR PLACEMENT DEPTH OF AT LEAST 2.0 TIMES THE MORTAR JOINT THICKNESS. MORTAR REMOVAL OPERATIONS SHALL BE PERFORMED IN A MANNER THAT DOES NOT DAMAGE THE ADJACENT STONE MASONRY. PNEUMATIC CHIPPING HAMMERS WILL NOT BE PERMITTED. USE ONLY LIGHTWEIGHT HANDHELD POWER CHISELS, ANGLE GRINDERS, MORTAR SAWS, ETC.

MORTAR SHALL MEET THE REQUIREMENTS OF ASTM C270 TYPE S AND BE SUPPLIED IN A FACTORY PRE-BLENDED MIX CONFORMING TO ASTM C1714. MORTAR SHALL HAVE CURED COLOR CLOSELY MATCHING THE EXISTING SANDSTONE WALL MORTAR COLOR AFTER BEING CLEANED. ENSURE PROPER ADHESION OF THE NEW MORTAR. HAVE SURFACES IN SATURATED SURFACE DRY CONDITION FOR MORTARING OPERATIONS. MORTAR SHALL BE PLACED TO COMPLETELY FILL THE MORTAR JOINT BETWEEN ADJACENT STONES. ALL EXCESS DEPOSITS OVER THE EXPOSED MASONRY SURFACE SHALL BE CLEANED OFF. PERFORM ALL WORK IN ACCORDANCE WITH THE PREMIX MORTAR MANUFACTURER'S RECOMMENDATIONS. MAINTAIN THE MORTAR IN A DAMP CONDITION FOR AT LEAST 72 HOURS, PROTECTING IT FROM SUN, RAIN, AND DRYING WINDS.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM SPECIAL - STRUCTURES: CLEANING EXPOSED MASONRY SURFACES

THIS ITEM SHALL CONSIST OF SURFACE CLEANING THE UNDERSIDE OF THE BRICK MASONRY ARCHES AND LARGE BLOCK SANDSTONE PEDESTAL WALLS AT PORTIONS OF THE TUNNELS TO REMAIN PERMANENTLY EXPOSED IN FRONT OF THE NEW BULKHEAD WALLS, PLUS ALL EXPOSED SURFACES OF THE LARGE BLOCK SANDSTONE SPANDREL WALL AND LARGE BLOCK SANDSTONE WINGWALLS. THE INTENT OF THIS ITEM IS TO REMOVE POLLUTION BUILDUP/STAINING, BIOLOGICAL BUILDUP/STAINING, EFFLORESCENCE, DIRT, GRAFFITI, ETC. IN BEST EFFORT TO RESTORE THE STONE TO A NATURAL COLOR. A GOAL OF AT LEAST 85% CLEAN STAIN REMOVAL AND 100% GRAFFITI REMOVAL IS THE EXPECTATION. AVOID OVER-CLEANING WHICH MAY CAUSE DAMAGE TO THE EXISTING SURFACES. THIS WORK SHALL BE PERFORMED BY A CONTRACTOR HAVING AT LEAST FIVE (5) YEARS EXPERIENCE IN CLEANING SIMILAR BRICK AND SANDSTONE MASONRY STRUCTURES. PROVIDE EVIDENCE OF EXPERIENCE AND PAST PROJECTS.

USE COMMERCIALLY AVAILABLE RESTORATION CLEANING PRODUCT(S) IN STRICT ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. ENSURE THE CLEANING PRODUCT IS SUITABLE AND RECOMMENDED FOR THE SPECIFIC SURFACES BEING CLEANED ON THIS PROJECT. SMALL INCONSPICUOUS TEST AREAS SHALL BE PERFORMED TO ENSURE RESULTS, CONFIRM NO ADVERSE AFFECTS, AND CONFIRM THE STRUCTURE IS NOT BEING DAMAGED BY THE CLEANING PROCESS. TEST AREAS SHALL BE ALLOWED TO COMPLETELY DRY TO ASSESS THE RESULTS. ADJUST THE METHODS, MATERIALS, EQUIPMENT, PRESSURES AS NECESSARY.

PROVIDE PLASTIC SHEETING AS REQUIRED TO PROTECT AREAS NOT INTENDED FOR CLEANING. PRESSURE WATER RINSING EQUIPMENT IS EXPECTED WITH 100 TO 400 PSI FOR LOW-PRESSURE AND 400 TO 800 PSI FOR MEDIUM PRESSURE. AVOID HIGH PRESSURES WATER WHICH COULD DAMAGE THE STRUCTURE UNLESS REQUIRED AT CERTAIN LOCATIONS FOR DESIRED CLEANING RESULT AND IT IS DEMONSTRATED THAT NO DAMAGE TO THE STRUCTURE WILL RESULT. UTILIZE OTHER NYLON BRISTLE BRUSHES, PLASTIC SCRAPERS AND OTHER TOOLS AS REQUIRED TO COMPLETE THE WORK. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CLEANING PRODUCT MANUFACTURER'S REQUIREMENTS. SUBMIT ALL PRODUCT DATA AND MATERIAL SAFETY DATA SHEETS FOR REVIEW BY THE ENGINEER.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER. FINAL SEALING OF ALL EXPOSED MASONRY SURFACES THAT HAVE BEEN CLEANED, REPAIRED AND TUCK POINTED SHALL BE PERFORMED SEPARATELY UNDER ITEM 512 USING A PENETRATING, CLEAR, NON-EPOXY SEALER.

ITEM SPECIAL - STRUCTURES: CELLULAR GROUT FILL

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING LIGHTWEIGHT CELLULAR GROUT TO COMPLETELY FILL EACH EXISTING ABANDONED RAILROAD TUNNEL BETWEEN THE EXISTING CLOSED END AND THE PROPOSED CONCRETE BULKHEAD WALL, AND FOR PORTIONS OF BACKFILL WITHIN THE EXCAVATION MADE ALONG THE BURIED SIDE OF THE SPANDREL WALL OF THE EXISTING STRUCTURE.

PROVIDE CELLULAR GROUT WITH MIX PROPORTION AS SPECIFIED IN SUPPLEMENTAL SPECIFICATION 837 TABLE 837.03-3 AND MEETING THE PRE-PUMPING TEST REQUIREMENTS SHOWN IN TABLE 837.03-4. ADD FOAM MEETING THE REQUIREMENTS OF ASTM C869. COMPRESSIVE STRENGTH SHALL BE MINIMUM OF 200 PSI.

PROVIDE AN INSTALLATION PLAN TO THE ENGINEER AT LEAST 21 DAYS PRIOR TO INSTALLATION DETAILING THE GROUT INSTALLATION PROCEDURES. INCLUDE CERTIFIED TEST DATA FOR THE GROUT MIX, THE METHOD AND EQUIPMENT TO BE USED TO MIX THE GROUT, PROVIDE MIXING METHODS AND EQUIPMENT PER THE MANUFACTURER'S RECOMMENDATIONS TO ENSURE UNIFORM GROUT MIX PROPERTIES. INCLUDE A DESCRIPTION OF ELEVATIONS OF ALL BULKHEAD PORTS, VENT AND VISUAL GROUT RETURN PIPES. VISUAL GROUT RETURN PIPES WILL BE USED TO DETERMINE THE ENTIRE TUNNEL VOID SPACE HAS BEEN FILLED WITH THE APPROVED GROUT MIX. BULKHEAD PORTS AND VENT PIPES SHALL SEALED OFF AND NOT BE DETRIMENTAL TO THE FINISHED LOOK OF THE BULKHEAD

1 *WALL.*

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM SPECIAL - STRUCTURES: SANDSTONE BLOCK FURNISHED AND SET

THIS ITEM SHALL CONSIST OF FURNISHING LARGE BLOCK SANDSTONE FROM OUTSIDE SOURCES TO FILL GAPS OF MISSING WALL STONE AT THE SPANDREL WALL COPING COURSE AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. STONE SHALL BE CUT TO THE SIZE REQUIRED FOR THE SPECIFIC LOCATION ON THE PROJECT. THE COLOR AND SURFACE FINISH OF ALL VISIBLE AND NON-VISIBLE EDGES SHALL BE CLOSELY MATCH THE EXISTING STONEWORK. STONE SHALL BE TOUGH, DENSE, SOUND, DURABLE AND FREE OF SEAMS, CRACKS, INCLUSIONS, OR OTHER STRUCTURAL DEFECTS. PRIOR TO SHIPMENT TO THE JOB SITE FOR FINAL USE, THE CONTRACTOR SHALL SUBMIT A REPRESENTATIVE SAMPLE OF STONE TO THE ENGINEER FOR REVIEW. THE SAMPLE SHALL BE DRESSED AND FINISHED MATCH THE FINAL PRODUCT TO BE SUPPLIED AND DIMENSION IN ANY DIRECTION NOT LESS THAN 6 INCHES.

ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER AS PER ACCEPTED MASONRY STANDARDS. MORTAR SHALL MEET THE REQUIREMENTS OF ASTM C270 TYPE S AND BE SUPPLIED IN A FACTORY PRE-BLENDED MIX CONFORMING TO ASTM C1714. MORTAR SHALL HAVE CURED COLOR CLOSELY MATCHING THE EXISTING SANDSTONE WALL MORTAR COLOR AFTER BEING CLEANED. HAVE SURFACES IN SATURATED SURFACE DRY CONDITION FOR MORTARING OPERATIONS. MORTAR SHALL BE PLACED TO COMPLETELY FILL ALL MORTAR JOINTS BETWEEN ADJACENT STONES. ALL EXCESS DEPOSITS OVER THE EXPOSED MASONRY SURFACE SHALL BE CLEANED OFF. PERFORM ALL WORK IN ACCORDANCE WITH THE PREMIX MORTAR MANUFACTURER'S RECOMMENDATIONS. MAINTAIN THE MORTAR IN A DAMP CONDITION FOR AT LEAST 72 HOURS, PROTECTING IT FROM SUN, RAIN, AND DRYING WINDS.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM SPECIAL - STRUCTURES: EXISTING SANDSTONE BLOCK RESET

THIS ITEM SHALL CONSIST OF RESETTING EXISTING SANDSTONE BLOCKS AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THIS MAY INCLUDE RECONSTRUCTION OF PORTIONS OF THE WALL IN PLACE, AND SALVAGING STONES THAT ARE LAYING AT VARIOUS LOCATIONS ON THE SITE AND RESETTING THEM BACK INTO POSITION ON THE WALLS.

ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER AS PER ACCEPTED MASONRY STANDARDS. ALL EXISTING MORTAR AND DEBRIS SHALL BE REMOVED FROM THE STONE SURFACE WITHOUT CAUSING DAMAGE TO THE STONE. NEW MORTAR SHALL MEET THE REQUIREMENTS OF ASTM C270 TYPE S AND BE SUPPLIED IN A FACTORY PRE-BLENDED MIX CONFORMING TO ASTM C1714. MORTAR SHALL HAVE CURED COLOR CLOSELY MATCHING THE EXISTING SANDSTONE WALL MORTAR COLOR AFTER BEING CLEANED. HAVE SURFACES IN SATURATED SURFACE DRY CONDITION FOR MORTARING OPERATIONS. MORTAR SHALL BE PLACED TO COMPLETELY FILL ALL MORTAR JOINTS BETWEEN ADJACENT STONES. ALL EXCESS DEPOSITS OVER THE EXPOSED MASONRY SURFACE SHALL BE CLEANED OFF. PERFORM ALL WORK IN ACCORDANCE WITH THE PREMIX MORTAR MANUFACTURER'S RECOMMENDATIONS. MAINTAIN THE MORTAR IN A DAMP CONDITION FOR AT LEAST 72 HOURS, PROTECTING IT FROM SUN, RAIN, AND DRYING WINDS.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ITEM SPECIAL - STRUCTURES: ARCH RING CRACK REPAIR

THIS ITEM SHALL CONSIST OF REPAIR TO THE EXISTING DISTINCT CIRCUMFERENTIAL CRACK WITHIN THE BRICK MASONRY ARCH PORTION OF THE WEST TUNNEL. THE INTENT OF THIS WORK IS TO FILL AND SOLIDIFY THE CRACK IN PLACE. IF DIRECTED BY THE ENGINEER, LOOSE OR DETERIORATED BRICK ALONG THE CRACK WITHIN THE LOWEST BRICK COURSE SHALL BE REPLACED PRIOR TO THE CRACK REPAIR. BRICK REPLACEMENT IS PAID UNDER A SEPARATE ITEM.

THE CONTRACTOR SHALL CLEAN THE ARCH CRACK OF ALL DIRT AND DEBRIS AND CONSTRUCT FORMWORK ALONG THE CRACK AROUND THE INTERIOR CIRCUMFERENCE OF THE ARCH. FORMWORK SHALL BE CONSTRUCTED IN A MANNER THAT WILL RESULT IN A CLEAN AND FLUSH REPAIR WITHOUT MORTAR FINS EXTENDING ONTO ADJACENT BRICKWORK. FORMWORK SHALL BE SUPPORTED FROM THE GROUND AND NOT BE ANCHORED INTO THE EXISTING ADJACENT BRICK MASONRY. THE EXISTING CRACK AND ANY ASSOCIATED VOIDS ALONG THE CRACK SHALL BE COMPLETELY FILLED UNDER PRESSURE USING NON-SHRINK MORTAR CONFORMING TO CMS 705.22. PLACEMENT METHODS SHALL ENSURE THAT ALL AIR IS RELEASED AND THE CRACK IS FILLED SOLID WITHOUT VOIDS OR AIR POCKETS. ALL WORK SHALL BE PERFORMED IN A MANNER THAT DOES NOT DAMAGE THE EXISTING STRUCTURE.

PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, TOOLS AND INCIDENTALS NECESSARY TO COMPLETE THE WORK TO THE SATISFACTION OF THE ENGINEER.

ABBREVIATIONS:

B.S.	*BOTH SIDES*
BOT.	*BOTTOM*
CONST.	*CONSTRUCTION*
DIA.	*DIAMETER*
DWG.	*DRAWING*
EL.	*ELEVATION*
EXIST.	*EXISTING*
F.S.	*FAR SIDE*
GA.	*GAUGE*
MISC.	*MISCELLANEOUS*
NOM.	*NOMINAL*
N.P.C.P.P	*NON-PERFORATED CORRUGATED PLASTIC PIPE*
N.S.	*NEAR SIDE*
P.C.P.P.	*PERFORATED CORRUGATED PLASTIC PIPE*
P.E.J.F.	*PREFORMED EXPANSION JOINT FILLER*
PERF.	*PERFORATED*
PROP.	*PROPOSED*
SER.	*SERIES*
SPA.	*SPACED OR SPACES*
STA.	*STATION*
TYP.	*TYPICAL*

HORIZONTAL SCALE IN FEET
0 10 20 40

STRUCTURE GENERAL NOTES 2
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

SFN 1867644

DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2026

DESIGNER	CHECKER
JKM	TJW

REVIEWER
DGN 12/19/25

PROJECT ID
123855

SUBSET	TOTAL
3	11

SHEET	TOTAL
P.74	82

CUY OLD DETROIT RD BRIDGE REHAB

2026/04/10
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\20253311O_SN001.dwg

ESTIMATED QUANTITIES

ITEM	EXT.	TOTAL 01/BRF	UNIT	DESCRIPTION	AS PER PLAN REFERENCE SHEET
201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN	2/11
202	98000	LS		REMOVAL MISC.: DEBRIS REMOVED	2/11
202	98200	55	FT	REMOVAL MISC.: PIPE RAILING REMOVED	2/11
304	20001	201	CY	AGGREGATE BASE, AS PER PLAN	2/11
503	11101	LS		COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN	2/11
503	21101	266	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN	2/11
509	10000	7,786	LB	EPOXY COATED STEEL REINFORCEMENT	
511	46510	44	CY	CLASS QC1 CONCRETE, FOOTING	
511	71100	23	CY	CONCRETE, MISC.: CLASS QC SCC, RETAINING WALL ABOVE FOOTING	2/11
512	10050	459	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)	
516	13601	76	SF	1" PREFORMED EXPANSION JOINT FILLER, AS PER PLAN	10/11
518	21200	81	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
518	40000	347	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
518	40011	160	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN	2/11
SPECIAL	530E00400	100	EACH	STRUCTURES: BRICK MASONRY ARCH REPAIR	2/11
SPECIAL	530E00600	348	SF	STRUCTURES: TUCK POINTING UNDERSIDE OF BRICK MASONRY ARCH	2/11
SPECIAL	530E00800	392	SY	STRUCTURES: TUCK POINTING SANDSTONE BLOCK MASONRY	3/11
SPECIAL	530E00800	431	SY	STRUCTURES: CLEANING EXPOSED MASONRY SURFACES	3/11
SPECIAL	530E01100	813	CY	STRUCTURES: CELLULAR GROUT FILL	3/11
SPECIAL	530E01100	2	CY	STRUCTURES: SANDSTONE BLOCK FURNISHED AND SET	3/11
SPECIAL	530E01100	5	CY	STRUCTURES: EXISTING SANDSTONE BLOCK RESET	3/11
SPECIAL	530E01300	26	FT	STRUCTURES: ARCH RING CRACK REPAIR	3/11

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\202533110_SQ001.dwg

STRUCTURE ESTIMATED QUANTITIES
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

SFN 1867644

DESIGN AGENCY

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeWeese, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeWeese, Inc. 2025

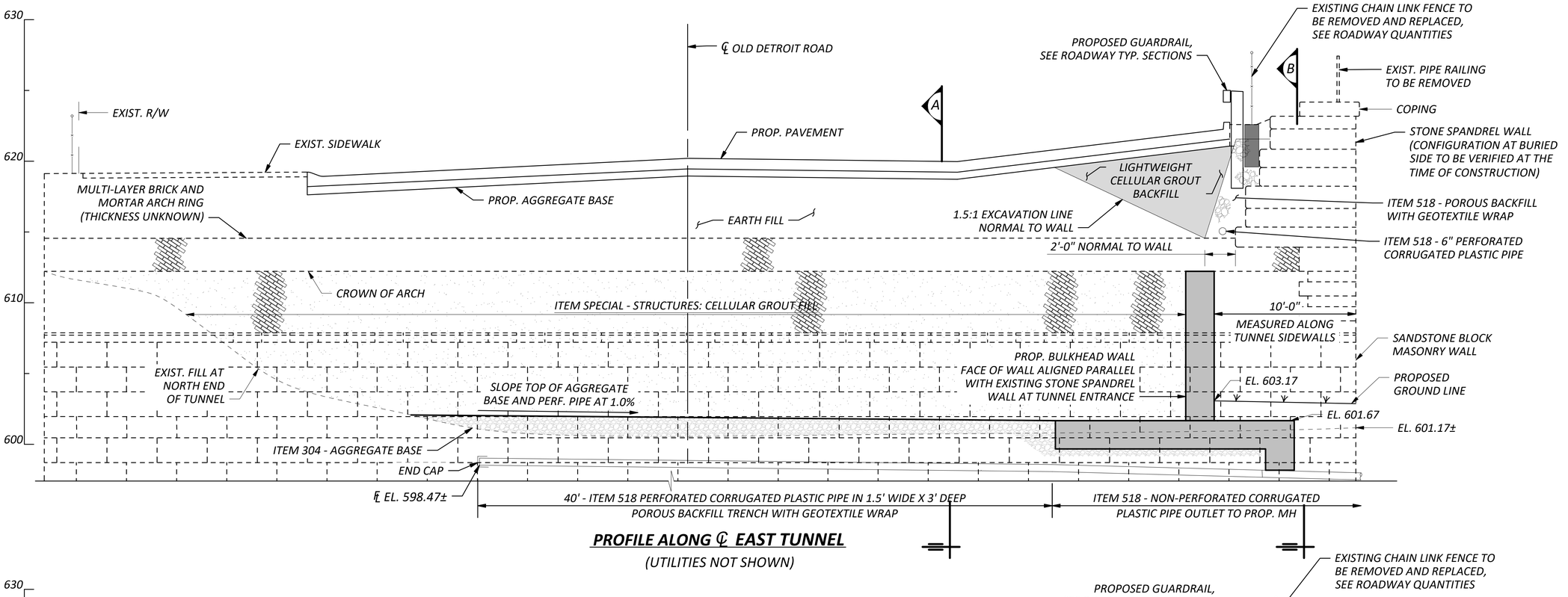
DESIGNER	CHECKER
AFH	TJW

REVIEWER DGN 12/19/25

PROJECT ID 123855

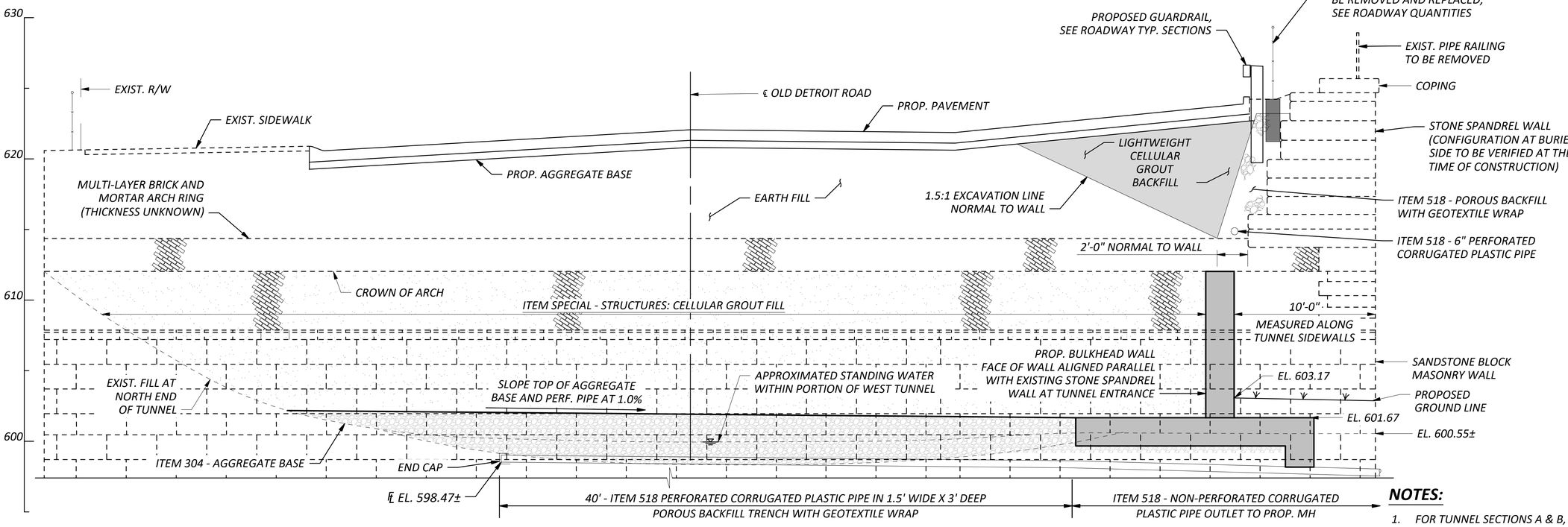
SUBSET	TOTAL
4	11

SHEET	TOTAL
P.75	82



PROFILE ALONG ℄ EAST TUNNEL

(UTILITIES NOT SHOWN)



PROFILE ALONG ℄ WEST TUNNEL

(UTILITIES NOT SHOWN)

NOTES:

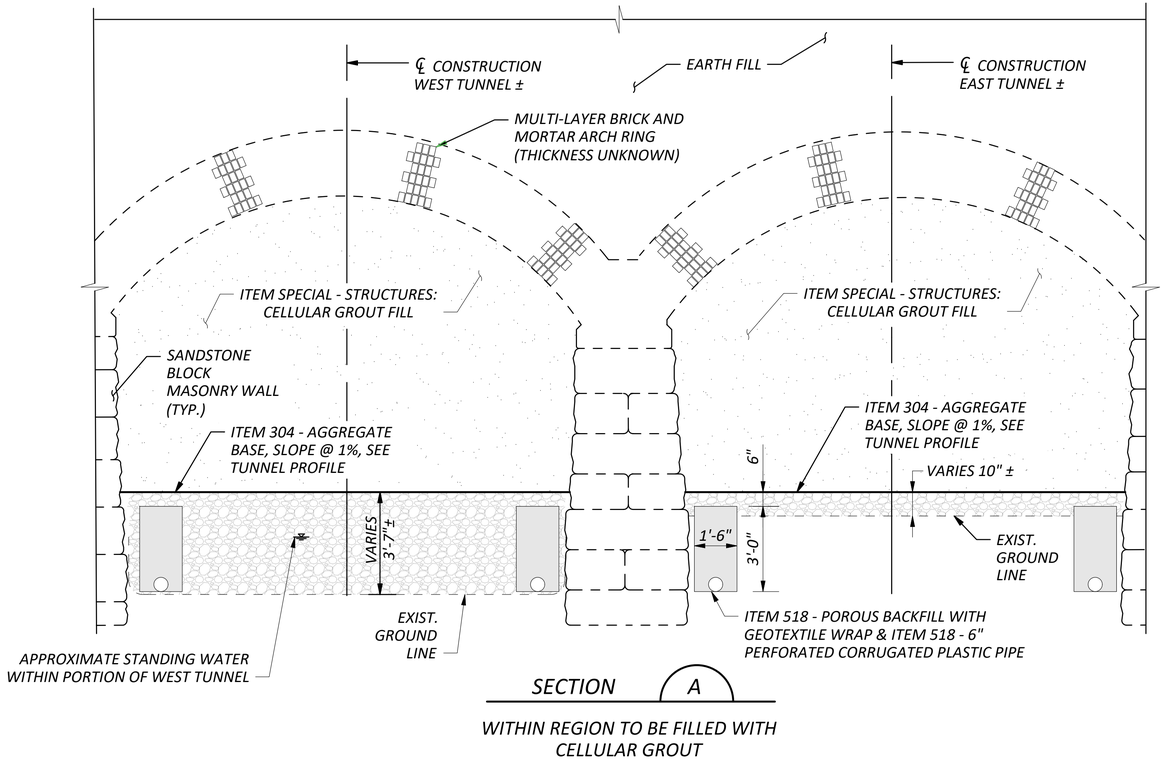
1. *FOR TUNNEL SECTIONS A & B, SEE SHEET 6/11 .*
2. *FOR BULKHEAD WALL DETAILS, SEE SHEETS 9/11 & 10/11 .*
3. *FOR PROPOSED PAVEMENT DETAILS, SEE SHEET P.22.*

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\202533110_SD002.dwg

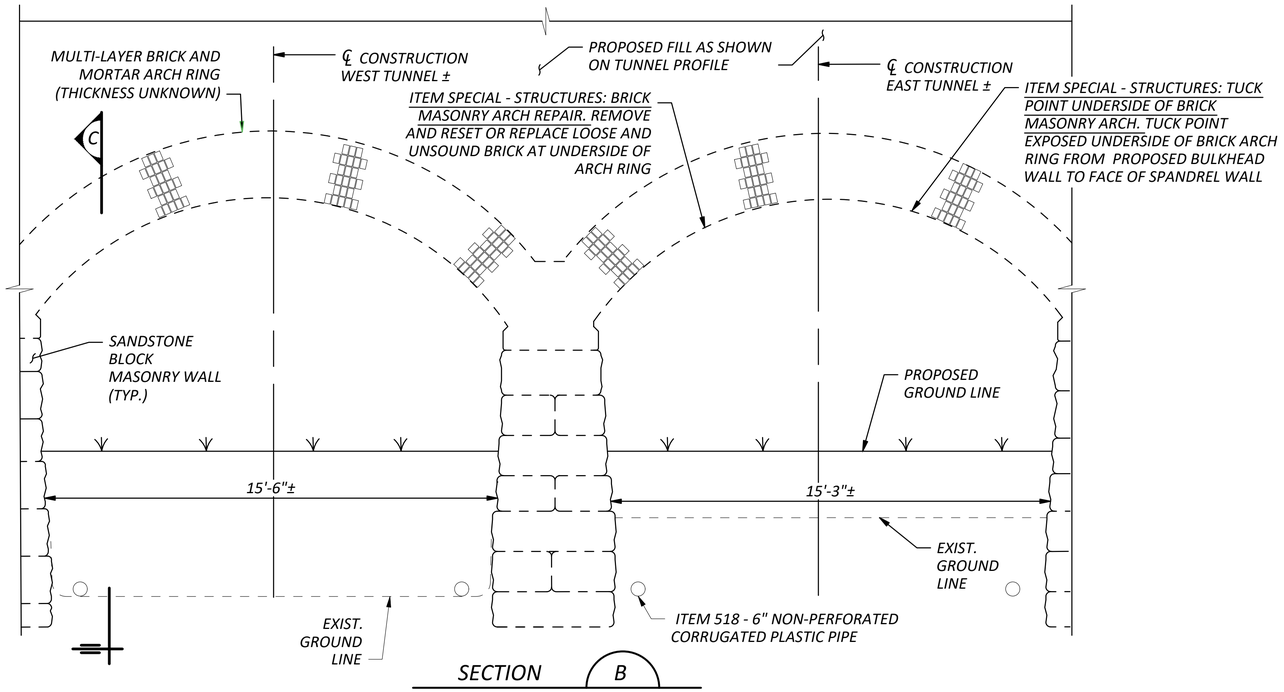
EAST AND WEST TUNNEL PROFILES
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

SFN 1867644
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
DESIGNER AFH | CHECKER TJW
REVIEWER DGN 12/19/25
PROJECT ID 123855
SUBSET 5 | TOTAL 12
SHEET P.76 | TOTAL 82



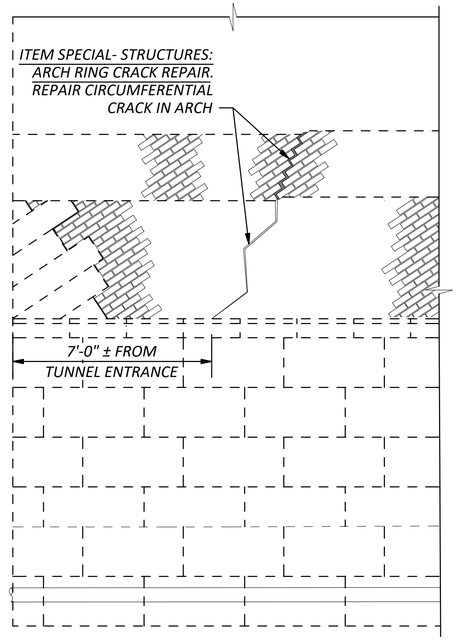
SECTION A

WITHIN REGION TO BE FILLED WITH CELLULAR GROUT



SECTION B

REGION IN FRONT OF BULKHEAD WALL



SECTION C

CRACK TO BE REPAIRED

NOTES:

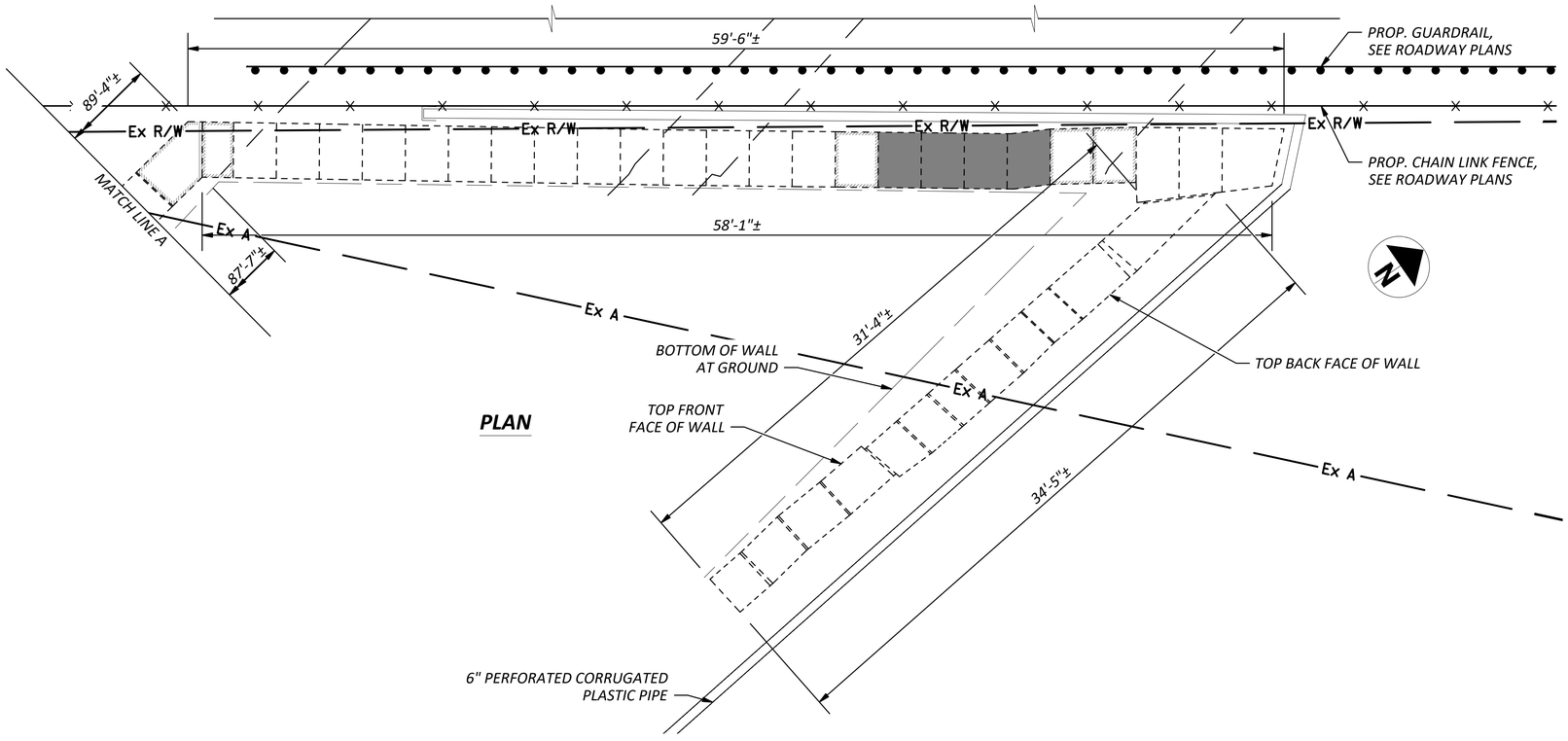
1. FOR STRUCTURE GENERAL NOTES, SEE SHEET 2/11 AND 3/11.
2. FOR LOCATIONS OF SECTIONS A AND B, SEE SHEET 5/11.

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\202533110_SD002.dwg

TUNNEL TYPICAL SECTION
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

SFN 1867644
DESIGN AGENCY
GPD GROUP
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025
DESIGNER AFH | CHECKER TJW
REVIEWER DGN 12/19/25
PROJECT ID 123855
SUBSET 6 | TOTAL 11
SHEET P.77 | TOTAL 82



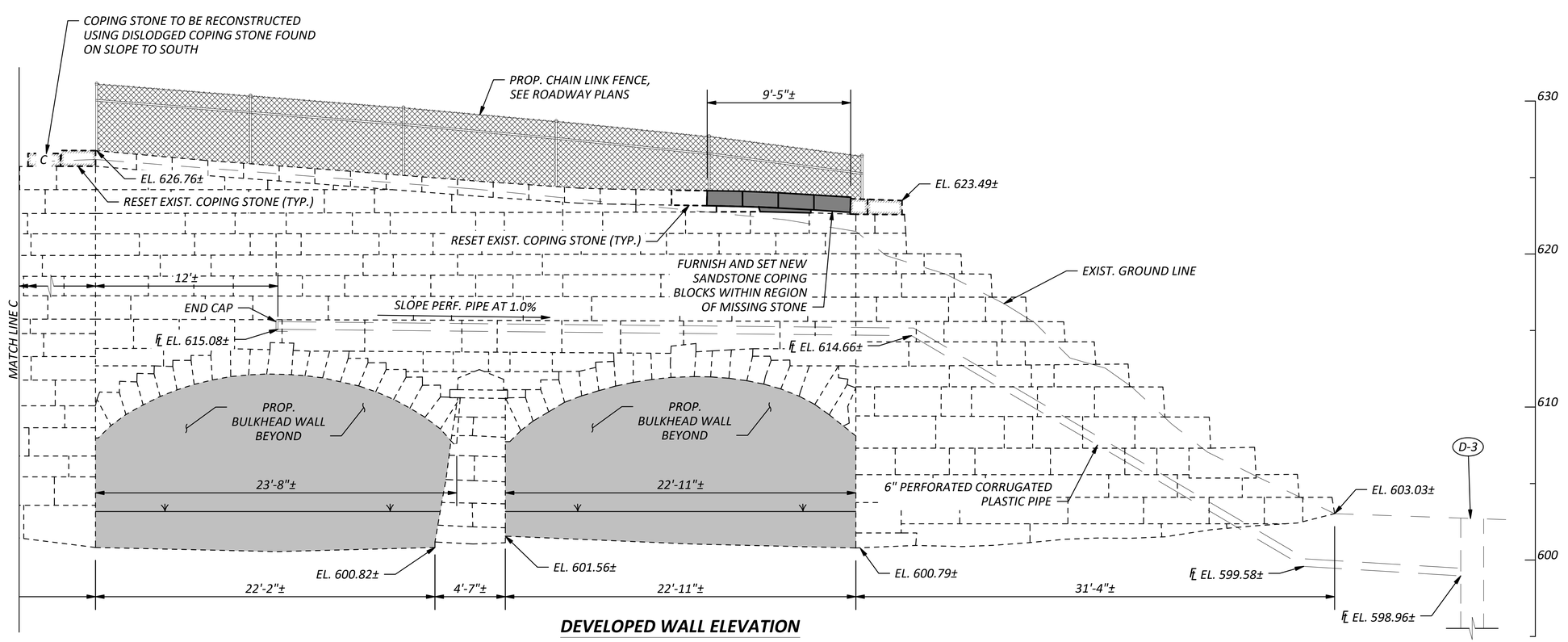
PLAN

NOTES:

1. FOR MATCH LINE A & C, SEE SHEET 8/11 .
2. FOR GENERAL NOTES, SEE SHEET 2/11.
3. FOR TUNNEL PROFILES, SEE SHEET 5/11 .
4. FOR DRAINAGE PLAN SEE SHEET P.23 TO P.25 OF 82 .
5. LOCATIONS OF FENCE AND 6" PERFORATED DRAIN PIPE ARE SUBJECT TO CONFIRMATION OF ANY CONFLICTING MASONRY WALL ELEMENTS FOUND DURING EXCAVATION. THE HORIZONTAL LOCATION OF THE PROPOSED FENCE AND DRAIN MAY REQUIRE FIELD ADJUSTMENT, AS APPROVED BY ENGINEER

LEGEND:

- SANDSTONE BLOCK TO BE RESET
- NEW SANDSTONE COPING BLOCKS



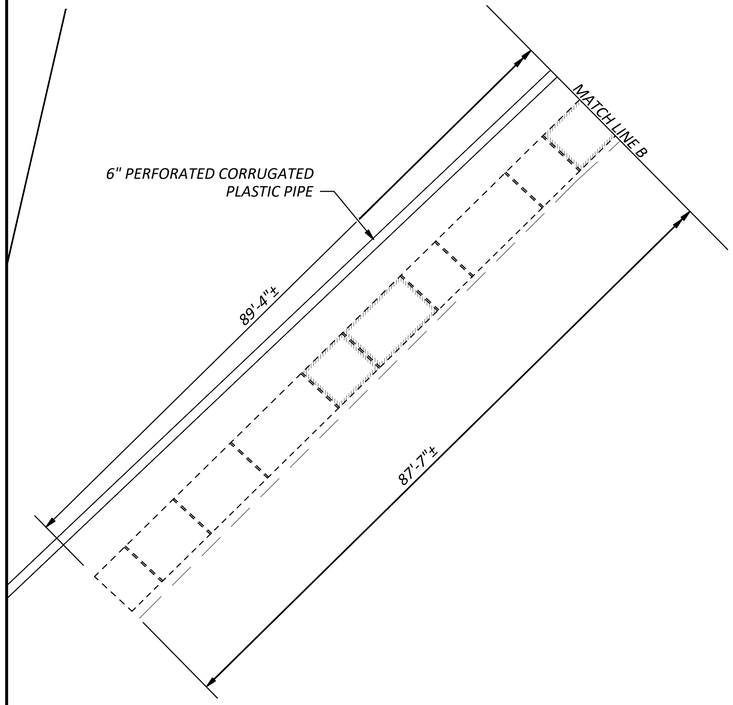
DEVELOPED WALL ELEVATION

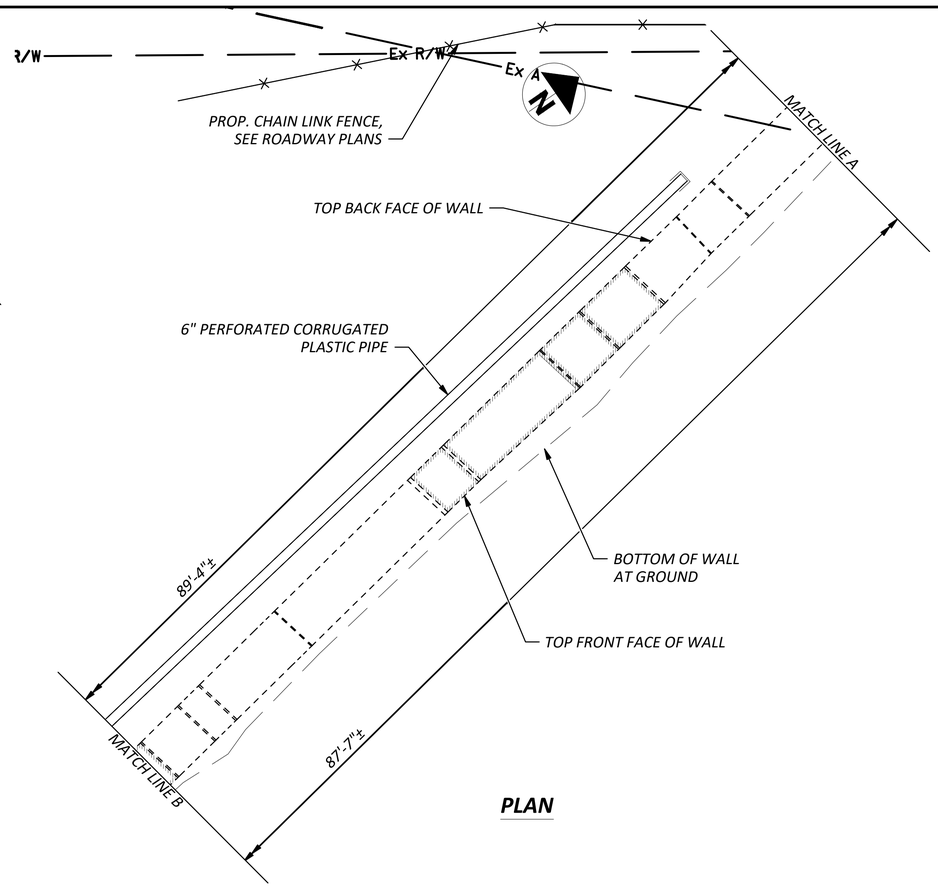
CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\0253331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\202533110_SM001.dwg

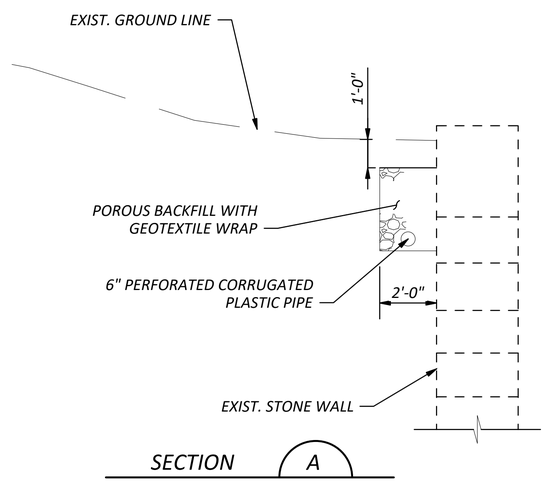
PLAN & ELEVATION STONE RETAINING WALL
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

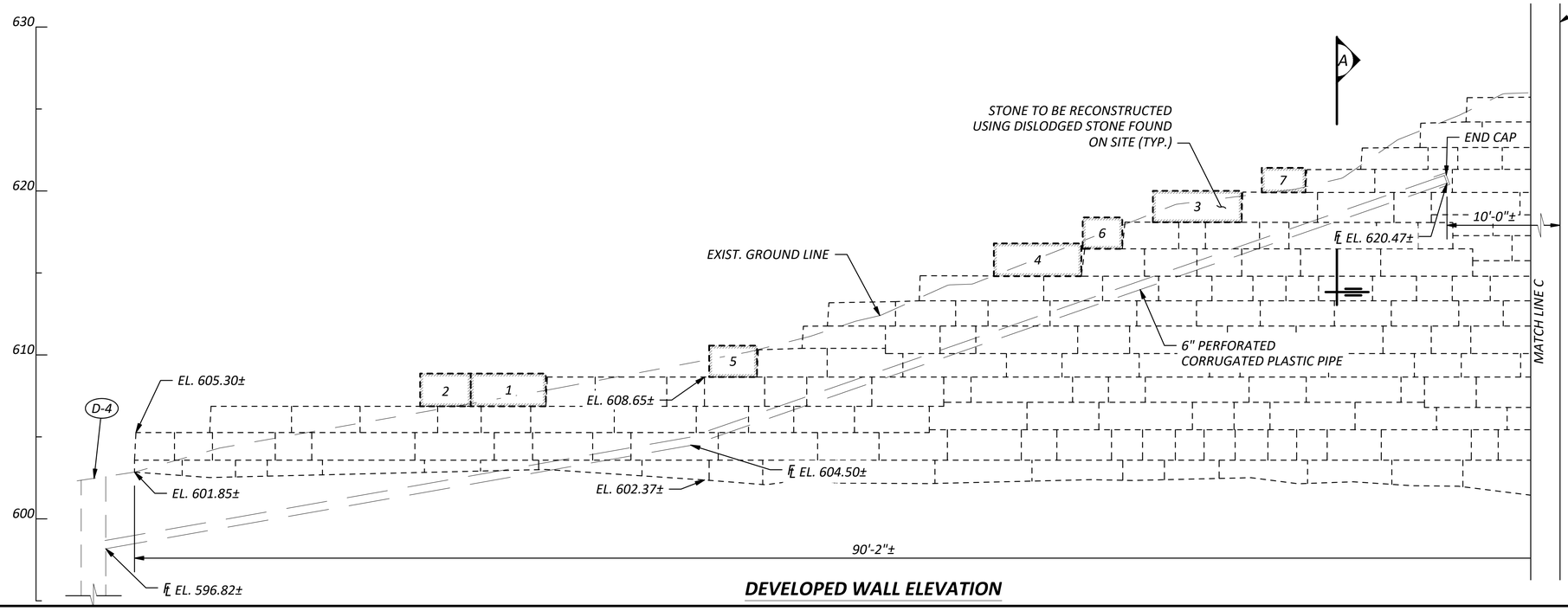
SFN	1867644
DESIGN AGENCY	GPD GROUP® Glaus, Pyle, Schomer, Burns & DeWeese, Inc.
DESIGNER	JKM
CHECKER	TJW
REVIEWER	DGN 12/19/25
PROJECT ID	123855
SUBSET	7
TOTAL	11
SHEET	P.78
TOTAL	82





PLAN





DEVELOPED WALL ELEVATION

DISLODGED STONE DIMENSIONS			
BLOCK	LENGTH (MEAURED PARREL TO WINGWALL)	WIDTH	HEIGHT
1	4'-7"	2'-6"	2'-0"
2	3'-1"	2'-0"	2'-5"
3	5'-5"	2'-4"	1'-11"
4	5'-4"	2'-2"	2'-0"
5	1'-11"	2'-5"	2'-11"
6	2'-5"	3'-0"	1'-11"
7	2'-8"	2'-7"	1'-6"
C	2'-2"	3'-1"	0'-10"

NOTES:

1. FOR MATCH LINE A & C, ADDITIONAL NOTES, AND LEGEND SEE SHEET 7/11.
2. DISLODGED STONES CURRENTLY STORED AGAINST THE WEST WALL ARE NUMBERED STARTING FURTHEST AWAY FROM ENTRANCE OF TUNNEL. THE CONTRACTOR SHALL FIND AND IDENTIFY EXISTING BLOCKS IN THE FIELD AND CONFIRM THEIR RESPECTIVE LOCATIONS TO BE RESET ON THE WALL.

CUY OLD DETROIT RD BRIDGE REHAB

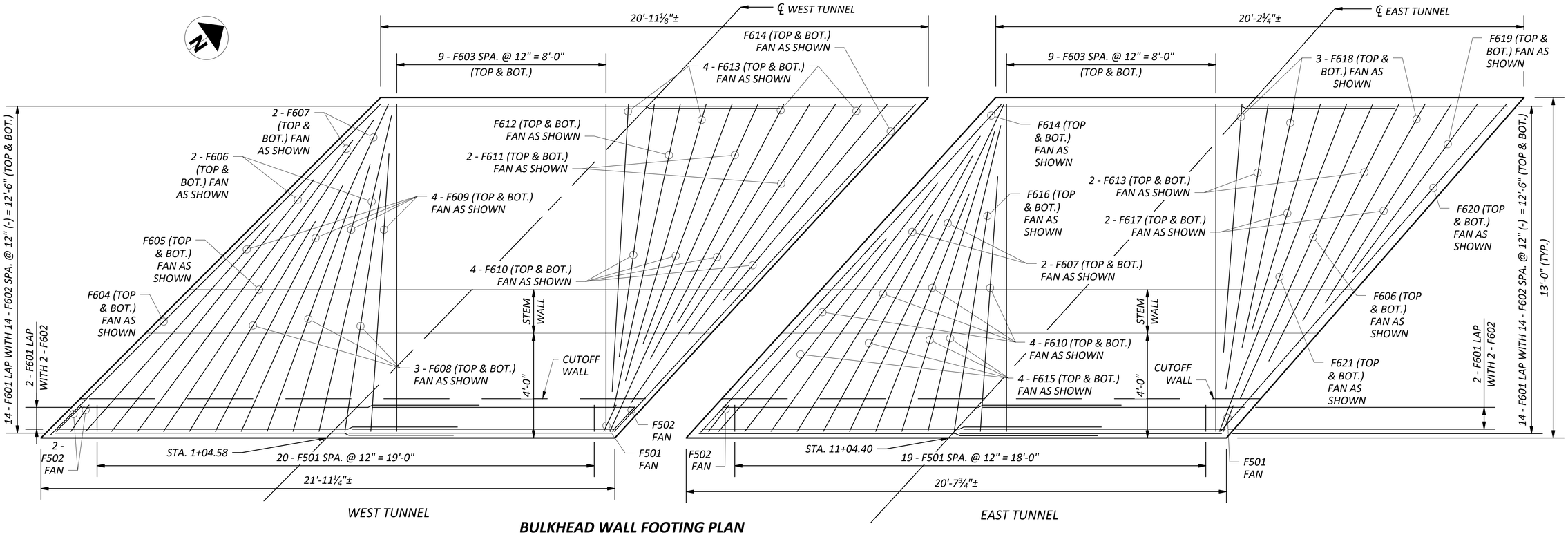
2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\202533110_SM001.dwg

PLAN & ELEVATION STONE RETAINING WALL
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

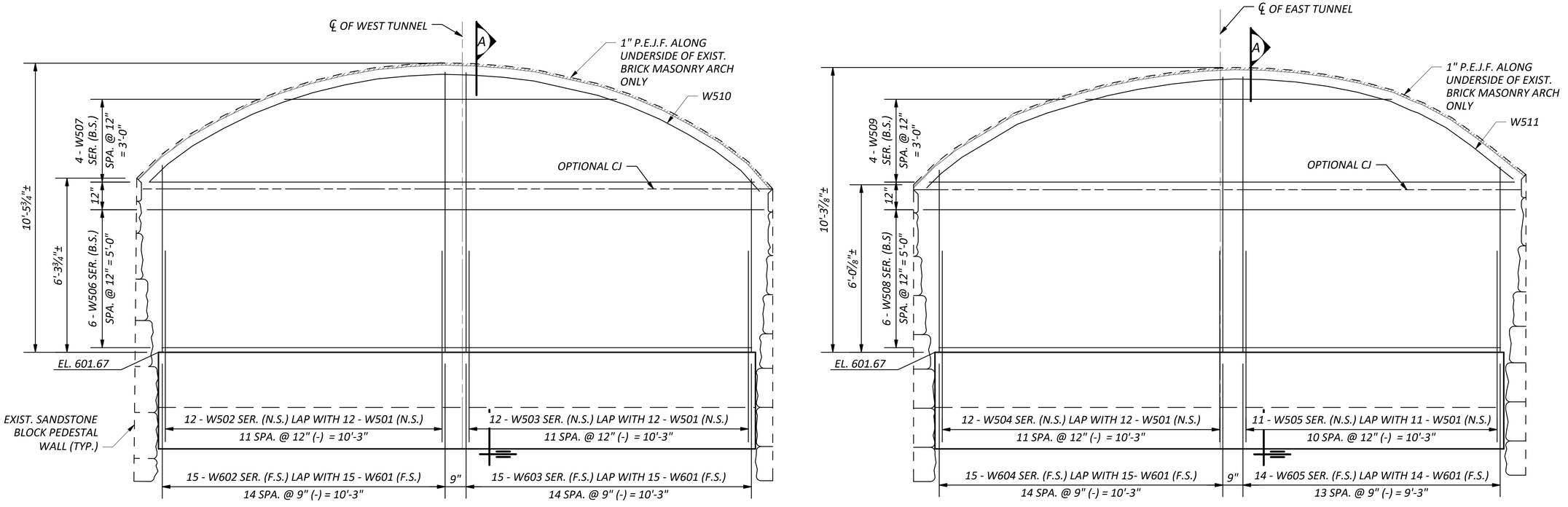
SFN 1867644
DESIGN AGENCY
GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER	CHECKER
JKM	TJW

REVIEWER DGN 12/19/25
PROJECT ID 123855
SUBSET 8 | TOTAL 11
SHEET P.79 | TOTAL 82



BULKHEAD WALL FOOTING PLAN



BULKHEAD WALL ELEVATION

(FOOTING REINFORCING NOT SHOWN)

NOTES:

1. FOR LOCATION OF SECTIONS A, SEE SHEET 10/11.

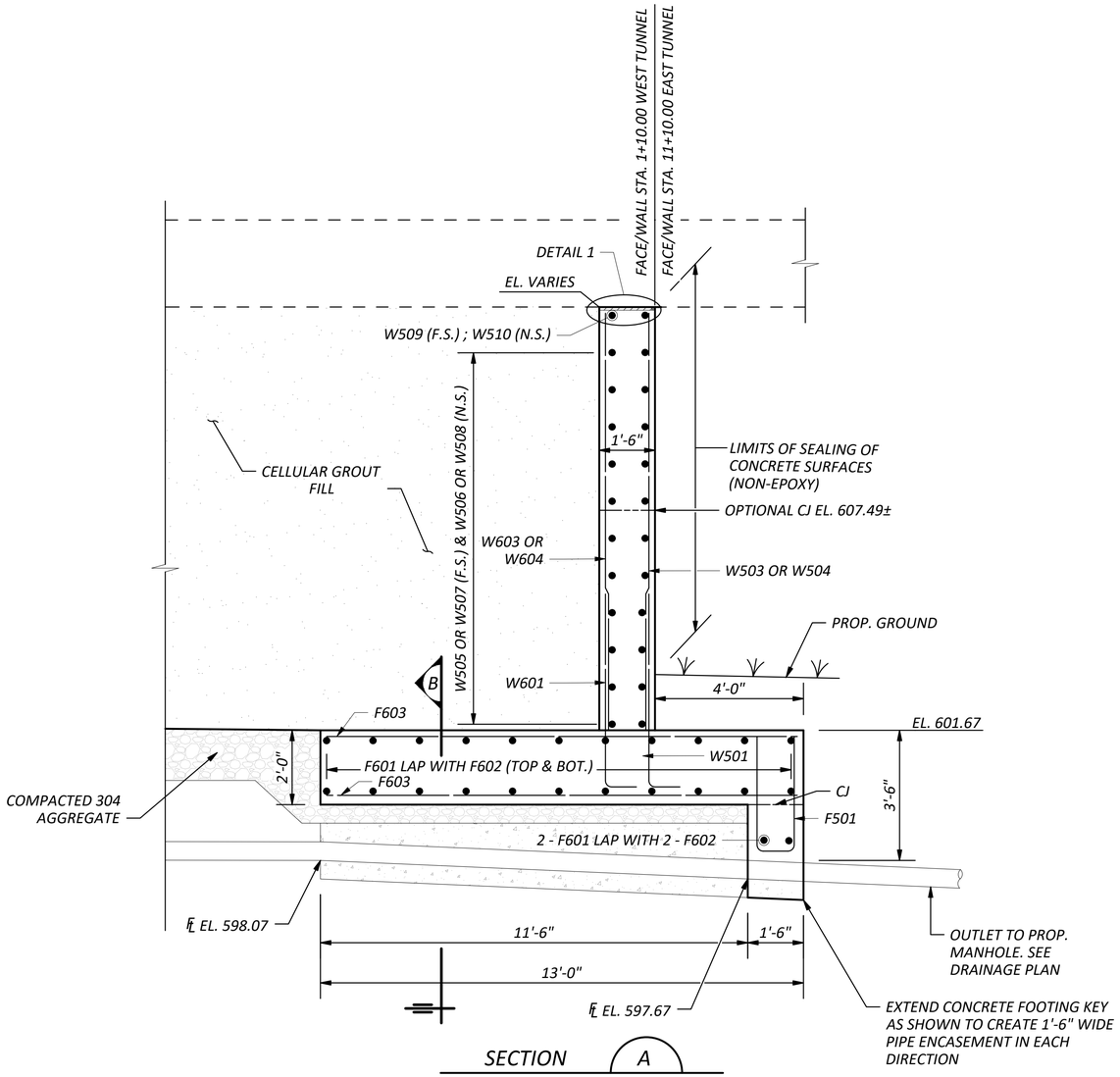
CUY OLD DETROIT RD BRIDGE REHAB

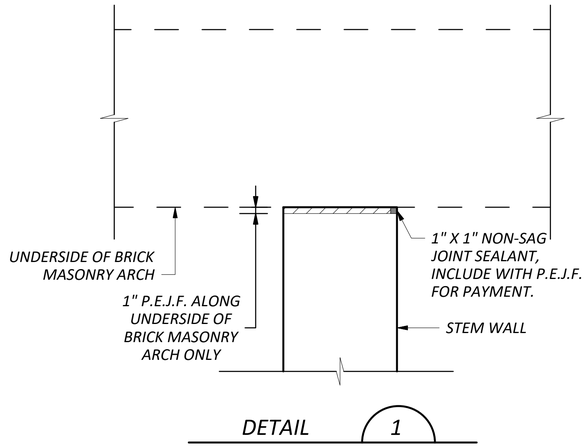
2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\2025331102_SM002.dwg

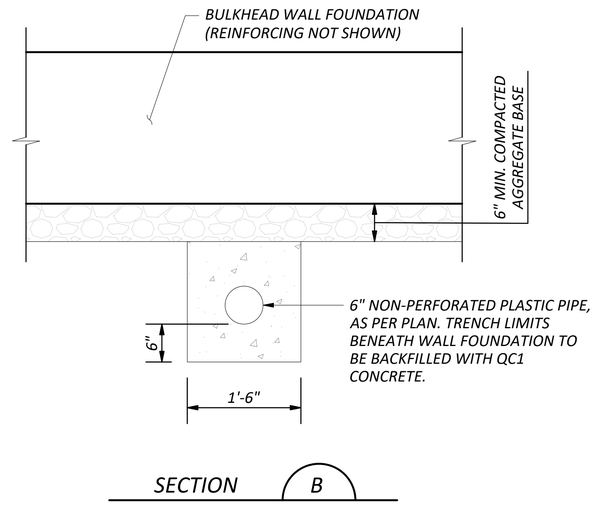
BULKHEAD WALL PLAN AND ELEVATION
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

SFN	1867644
DESIGN AGENCY	GPD GROUP
DESIGNER	AFH
CHECKER	TJW
REVIEWER	DGN 12/19/25
PROJECT ID	123855
SUBSET	9
TOTAL	11
SHEET	P.80
TOTAL	82

Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025







NOTES:

1. FOR LOCATION OF SECTIONS A, SEE SHEET 9/11.
2. VERTICAL STEM WALL CONCRETE SHALL BE SELF CONSOLIDATING CONCRETE (SCC).
3. FOR ADDITIONAL DETAILS OF TUNNEL DRAINAGE AND AGGREGATE BASE, SEE SHEET 5/11 & 6/11.

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\202533110_SM002.dwg

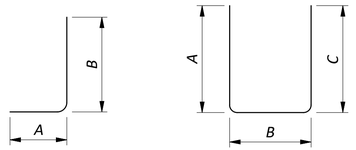
BULKHEAD WALL DETAILS
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

SFN	1867644
DESIGN AGENCY	GPD GROUP® Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
DESIGNER	AFH
CHECKER	TJW
REVIEWER	DGN 12/19/25
PROJECT ID	123855
SUBSET	10
TOTAL	11
SHEET	P.81
TOTAL	82

MARK	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS					
					A	B	C	D	E	INC.
WALL BARS										
W501	47	6'-2"	302	1	10"	5'-5"				
W502	1 SER. OF 12	6'-9" TO 10'-2"	106	ST						0'-3 3/4"
W503	1 SER. OF 12	6'-3" TO 10'-2"	103	ST						0'-4 1/4"
W504	1 SER. OF 12	6'-7" TO 10'-0"	104	ST						0'-3 3/4"
W505	1 SER. OF 11	6'-9" TO 10'-0"	96	ST						0'-3 7/8"
W506	2 SER. OF 6	21'-4" TO 22'-4"	273	ST						0'-2 3/8"
W507	2 SER. OF 4	12'-0" TO 21'-11"	142	ST						3'-3 5/8"
W508	2 SER. OF 6	20'-4" TO 21'-5"	261	ST						0'-2 5/8"
W509	2 SER. OF 4	11'-1" TO 21'-2"	135	ST						3'-4 3/8"
W510	1	24'-2"	25	ST						
W511	1	23'-2"	24	ST						
W601	59	6'-1"	539	1	10"	5'-5"				
W602	1 SER. OF 15	6'-9" TO 10'-2"	191	ST						0'-2 7/8"
W603	1 SER. OF 15	6'-3" TO 10'-2"	185	ST						0'-3 3/8"
W604	1 SER. OF 15	6'-7" TO 10'-0"	187	ST						0'-2 7/8"
W605	1 SER. OF 14	6'-9" TO 10'-0"	176	ST						0'-3"
TOTAL			2,849	LBS						

MARK	TOTAL	LENGTH	WEIGHT (LBS)	TYPE	DIMENSIONS					
					A	B	C	D	E	INC.
FOOTING BARS										
F501	41	6'-11"	296	2	3'-1"	1'-0"	3'-1"			
F502	4	7'-2"	30	2	3'-1"	1'-3"	3'-1"			
F601	60	15'-3"	1,374	ST						
F602	60	10'-0"	901	ST						
F603	36	12'-6"	676	ST						
F604	2	17'-10"	54	ST						
F605	2	14'-4"	43	ST						
F606	6	12'-4"	111	ST						
F607	8	13'-8"	164	ST						
F608	6	9'-4"	84	ST						
F609	8	10'-7"	127	ST						
F610	16	9'-9"	234	ST						
F611	4	13'-9"	83	ST						
F612	2	11'-10"	36	ST						
F613	12	11'-0"	198	ST						
F614	4	17'-0"	102	ST						
F615	8	12'-0"	144	ST						
F616	2	8'-6"	26	ST						
F617	4	9'-0"	54	ST						
F618	6	9'-6"	86	ST						
F619	2	8'-0"	24	ST						
F620	2	16'-7"	50	ST						
F621	2	13'-5"	40	ST						
TOTAL			4,937	LBS						

BAR BENDING DIAGRAMS



TYPE 1 TYPE 2

NOTES:

1. BAR DIMENSIONS ARE OUT-TO-OUT UNLESS NOTED OTHERWISE.
2. ALL STEEL BARS ARE EPOXY COATED.
3. WHEN NO BAR LEG DIMENSIONS ARE SHOWN, IT INDICATES A STANDARD BAR BEND.
4. BAR SIZE AND LOCATION ARE INDICATED IN THE BAR MARK. THE FIRST ALPHABETICAL LETTER (S) INDICATE LOCATION. THE NEXT DIGIT OF THE THREE DIGIT SERIES AND THE NEXT DIGIT OF THE TWO DIGITS OF THE FOUR DIGIT SERIES INDICATE BAR SIZE NUMBERS.

EXAMPLES:
- F501 — NO. 5 SIZE BAR, FOOTING
- W1001 — NO. 10 SIZE BAR, WALL

BULKHEAD WALL REINFORCING STEEL LIST
BRIDGE NO. CUY-03442-0031
OLD DETROIT AVENUE OVER ABANDONED RAILROAD TUNNELS

CUY OLD DETROIT RD BRIDGE REHAB

2025/12/23
O:\Public\OH\Cleveland\2025\2025331.10 Old Detroit\123855\400-Engineering\Structures\Sheets\20253331 10_SL001.dwg

SFN 1867644

DESIGN AGENCY

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.
Copyright: Glaus, Pyle, Schomer, Burns & DeHaven, Inc. 2025

DESIGNER	CHECKER
AFH	TJW

REVIEWER DGN 12/19/25

PROJECT ID 123855

SUBSET	TOTAL
11	11

SHEET	TOTAL
P.82	82