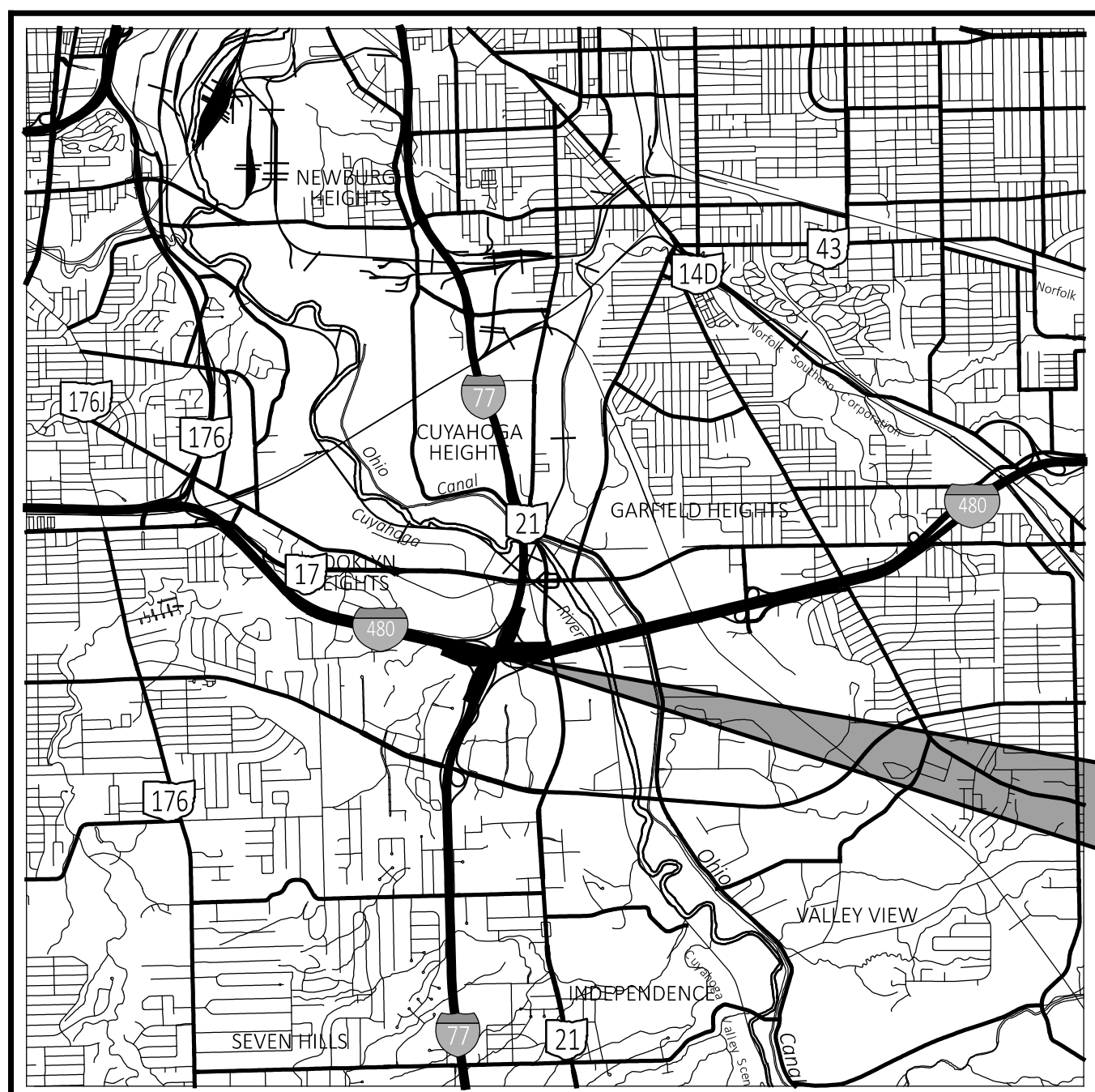


STATE OF OHIO DEPARTMENT OF TRANSPORTATION

CUY IR 480 17.87WN/ 17.90ES DECKS

CITY OF INDEPENDENCE
CUYAHOGA COUNTY



LOCATION MAP

LATITUDE: 41°24'26" N LONGITUDE: 81°38'49" W



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

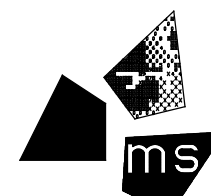
DESIGN DESIGNATION

RAMP ES		RAMP WN	
CURRENT ADT (2026)	14,800	CURRENT ADT (2026)	3,700
DESIGN YEAR ADT (2046)	16,000	DESIGN YEAR ADT (2046)	3,700
DESIGN HOURLY VOLUME (2046)	1,600	DESIGN HOURLY VOLUME (2046)	370
DIRECTIONAL DISTRIBUTION	100%	DIRECTIONAL DISTRIBUTION	100%
TRUCKS (24 HOUR B&C)	5%	TRUCKS (24 HOUR B&C)	9%
Td	4%	Td	5%
DESIGN SPEED	55 MPH	DESIGN SPEED	55 MPH
LEGAL SPEED	55 MPH	LEGAL SPEED	55 MPH
DESIGN FUNCTIONAL CLASSIFICATION:		DESIGN FUNCTIONAL CLASSIFICATION:	
01 - INTERSTATES (URBAN)		01 - INTERSTATES (URBAN)	
NHS PROJECT	YES	NHS PROJECT	YES

ADA DESIGN WAIVERS

N/A

PLAN PREPARED BY:



ms consultants, inc.
ENGINEERS, ARCHITECTS & PLANNERS
333 E. FEDERAL STREET
YOUNGSTOWN, OHIO 44503
PHONE (330) 744-5321



4208 PROSPECT AVE., E
CLEVELAND, OHIO 44103

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)

INDEX OF SHEETS:

TITLE SHEET
SCHEMATIC PLAN
TYPICAL SECTIONS
GENERAL NOTES
MAINTENANCE OF TRAFFIC
GENERAL SUMMARY
ROADWAY SUBSUMMARY
PAVEMENT SUBSUMMARY
PLAN AND PROFILE (RAMPS E-S & W-N)
CROSS SECTIONS (RAMPS E-S & W-N)
SUPERELEVATION TABLES
TRAFFIC CONTROL PLAN
STRUCTURES OVER 20' SPAN
STRUCTURE GENERAL NOTES
CUY-480-1787
CUY-480-1790

DESIGN EXCEPTIONS

P.	DESIGN FEATURE	APPROVAL DATES	SHEET NUMBERS
P.1			
P.2-P.3			
P.4-P.9	VERTICAL CLEARANCE (RAMP E-S)	04/24/2023	P.28, P.38, P.111
P.10-P.11	VERTICAL CLEARANCE (RAMP W-N)	04/05/2023	P.28, P.38, P.64, P.65
P.12-P.20	HORIZONTAL STOPPING SIGHT DISTANCE (RAMP W-N)	05/09/2023	P.37
P.21-P.22			
P.23			
P.24	SUPERELEVATION RATE (RAMP E-S)	05/09/2023	P.27, P.29, P.37, P.38, P.39
P.25-P.40	SUPERELEVATION RATE (RAMP W-N)	04/05/2023	P.27, P.29, P.37, P.38, P.39
P.41-P.50	SHOULDER WIDTH (RAMP E-S)	09/21/2023	P.27, P.29
P.51-P.52	SHOULDER WIDTH (RAMP W-N)	09/21/2023	P.35, P.37
P.53-P.61	DESIGN LOADING STRUCTURAL CAPACITY (RAMP E-S)	09/21/2023	P.111
P.62-P.63	DESIGN LOADING STRUCTURAL CAPACITY (RAMP W-N)	09/21/2023	P.64
P.64-P.110			
P.111-P.158			

FEDERAL PROJECT NUMBER

E240375

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF REPLACING THE DECKS OF THE IR-480 EB & WB RAMP BRIDGES TO IR-77 OVER MAINLINE IR-480 IN THE CITY OF INDEPENDENCE. ADDITIONAL WORK ALSO INCLUDES APPROACH SLABS, EXPANSION JOINTS, FULL DEPTH PAVEMENT AND RESURFACING RAMPS ES AND WN FOR AN APPROXIMATE LENGTH OF 5,550 FEET.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	2.0 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	3.1 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	5.1 ACRES

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

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.

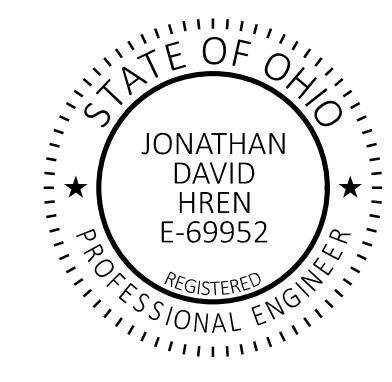
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEETS 16-18, AND THAT DETOURS WILL BE PROVIDED AS INDICATED ON THE PLANS.

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

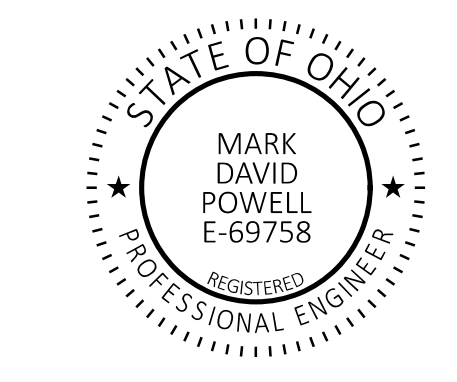
Jack Marchbanks, PhD
Director, Department of Transportation

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS	SPECIAL PROVISIONS	
BP-2.2	1-15-21	TC-41.20	10/18/13	MT-95.30	07/19/19	SS 800	01/19/24	WATERWAY PERMIT 1/5/24
BP-3.1	1-19-24	TC-41.30	04/21/23	MT-95.45	07/21/23	SS 807	01/21/22	
		TC-42.20	10/18/13	MT-98.29	01/17/20	SS 808	01/18/19	
MGS-1.1	7-16-21	TC-52.10	10/18/13	MT-104.10	01/19/24	SS 821	04/20/12	
MGS-3.1	1-19-18	TC-52.20	01/15/21	MT-105.10	01/17/20	SS 832	07/19/24	
MGS-4.2	7-19-13	TC-61.10	04/21/23			SS 850	07/21/23	
MGS-6.1	1-19-18	TC-61.30	07/19/19	AS-1-15	01/20/23	SS 869	10/17/14	
		TC-65.10	01/17/14	AS-2-15	07/21/23	SS 908	10/20/17	
DM-1.1	7-17-20	TC-65.11	01/19/24	EXJ-4-87	07/21/23	SS 921	04/20/12	
DM-1.2	7-16-21	TC-87.10	07/21/23	GSD-1-19	01/15/21			
				SBR-1-20	07/21/23			

ENGINEER'S SEAL
MS CONSULTANTS, INC.



ENGINEER'S SEAL
DLZ



TITLE SHEET

DESIGN AGENCY	
DESIGNER	MSN
REVIEWER	SWG
PROJECT ID	110810
SHEET	P.1
TOTAL	158

CUY IR 480 17.87WN/17.90ES DECKS

MODEL: Sheet PAPER: 34x22 (in.) DATE: 10/3/2024 TIME: 2:34:01 PM USER: jkuczynski \msconsultants.com\files\Production\160\08393-00\110810\400-Engineering\Roadway\Sheets\110810_GT001.dgn

SHEET NUM.										PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
10	11	23	24	50	63					01/BRO/13	EXT	TOTAL				
															ROADWAY	
LS			1,511							LS	201	11000	LS		CLEARING AND GRUBBING	
		745								1,511	202	23000	1,511	SY	PAVEMENT REMOVED	
		2								745	202	38000	745	FT	GUARDRAIL REMOVED	
		1								2	202	42010	2	EACH	ANCHOR ASSEMBLY REMOVED, TYPE E	
		3								1	202	42040	1	EACH	ANCHOR ASSEMBLY REMOVED, TYPE T	
		4								3	202	42050	3	EACH	ANCHOR ASSEMBLY REMOVED, TYPE B	
		4								4	202	47000	4	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
				645						645	203	10000	645	CY	EXCAVATION	
				150						150	203	20000	150	CY	EMBANKMENT	
			1,729							1,729	204	10000	1,729	SY	SUBGRADE COMPACTION	10
2										2	204	45000	2	HOUR	PROOF ROLLING	
		7								7	209	15001	7	STA	RESHAPING UNDER GUARDRAIL, AS PER PLAN	11
				40						40	209	60201	40	STA	LINEAR GRADING, AS PER PLAN	11
		613								613	606	15050	613	FT	GUARDRAIL, TYPE MGS	
		5								5	606	26150	5	EACH	ANCHOR ASSEMBLY, MGS TYPE E (MASH 2016)	10
		1								1	606	26550	1	EACH	ANCHOR ASSEMBLY, MGS TYPE T	
		4								4	606	35002	4	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
															EROSION CONTROL	
					20					20	601	20011	20	CY	CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN	63
	2									2	659	00100	2	EACH	SOIL ANALYSIS TEST	
	1,661									1,661	659	00300	1,661	CY	TOPSOIL	
				14,960						14,960	659	00510	14,960	SY	SEEDING AND MULCHING, CLASS 2	
										748	659	14000	748	SY	REPAIR SEEDING AND MULCHING	
										748	659	15000	748	SY	INTER-SEEDING	
	2.09									2.09	659	20000	2.09	TON	COMMERCIAL FERTILIZER	
	3.09									3.09	659	31000	3.09	ACRE	LIME	
										83	659	35000	83	MGAL	WATER	
										33.7	659	40000	33.7	MSF	MOWING	
										LS	832	15000	LS		STORM WATER POLLUTION PREVENTION PLAN	
										LS	832	15002	LS		STORM WATER POLLUTION PREVENTION INSPECTIONS	
										LS	832	15010	LS		STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	
	60,000									60,000	832	30000	60,000	EACH	EROSION CONTROL	
															DRAINAGE	
		924								924	605	11110	924	FT	6" SHALLOW PIPE UNDERDRAINS WITH GEOTEXTILE FABRIC	
	75									75	605	13300	75	FT	6" UNCLASSIFIED PIPE UNDERDRAINS	
	75									75	611	01500	75	FT	6" CONDUIT, TYPE F	
															PAVEMENT	
	130									130	251	01020	130	SY	PARTIAL DEPTH PAVEMENT REPAIR (442)	
			12,814							12,814	254	01000	12,814	SY	PAVEMENT PLANING, ASPHALT CONCRETE (3" DEPTH)	
			156							156	302	56000	156	CY	ASPHALT CONCRETE BASE, PG64-22, (449)	
			43							43	304	20000	43	CY	AGGREGATE BASE	
			2,958							2,958	407	20000	2,958	GAL	NON-TRACKING TACK COAT	
		45								45	441	70800	45	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, (449), (UNDER GUARDRAIL), AS PER PLAN	11
			555							555	442	22101	555	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG76-22M	11
			555							555	442	22300	555	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 12.5 MM, TYPE A (449)	
			32							32	609	24000	32	FT	CURB, TYPE 4-A	
			28							28	609	24510	28	FT	CURB, TYPE 4-C	
25										25	617	10101	25	CY	COMPACTED AGGREGATE, AS PER PLAN	10

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER
MGW

REVIEWER
SWG 02/01/24

PROJECT ID
110810

SHEET TOTAL
P.21 | 158