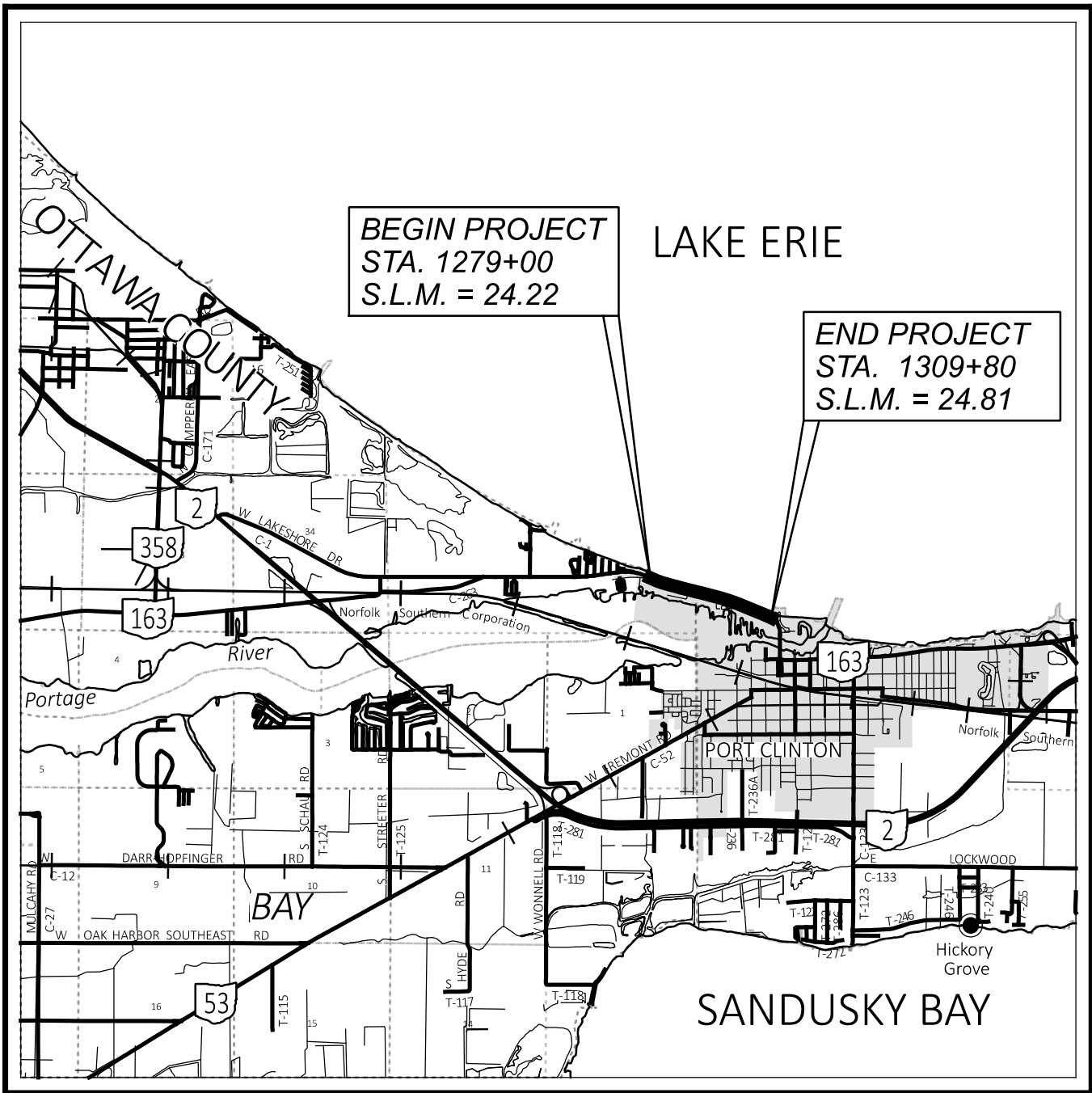




LOCATION MAP

LATITUDE: N41°31'10" LONGITUDE: W82°57'07"



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

DESIGN DESIGNATION

CURRENT ADT (2021)	3,330
DESIGN YEAR ADT (2023)	4,100
DESIGN HOURLY VOLUME (2021)	357
DIRECTIONAL DISTRIBUTION	0.56
TRUCKS (24 HOUR B&C)	3%
DESIGN SPEED	35 MPH
LEGAL SPEED	35 MPH
DESIGN FUNCTIONAL CLASSIFICATION:	
04-MINOR ARTERIAL (URBAN)	
NHS PROJECT	NO

DESIGN EXCEPTIONS

NONE REQUIRED

ADA DESIGN WAIVERS

NONE REQUIRED

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:



1168 N. MAIN STREET
BOWLING GREEN, OH
419.352.7537

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

OTT-163-24.22

SHORE REVETMENT

CITY OF PORT CLINTON

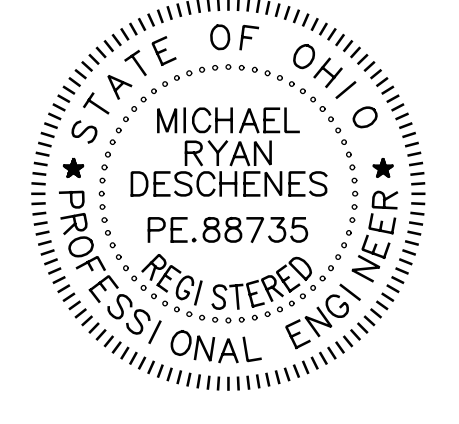
OTTAWA COUNTY, OHIO

INDEX OF SHEETS:

TITLE SHEET	1
SCHEMATIC PLAN	2 - 3
TYPICAL SECTIONS	4 - 5
GENERAL NOTES	6 - 7
MAINTENANCE OF TRAFFIC	8 - 9
GENERAL SUMMARY	10
PROJECT SITE PLAN	11
PLAN AND PROFILE - SR-163	12 - 18
CROSS SECTIONS - SR-163	19 - 35
RIGHT OF WAY CENTERLINE PLAT	RW1 - RW2
RIGHT OF WAY DETAIL SHEETS	RW3 - RW5

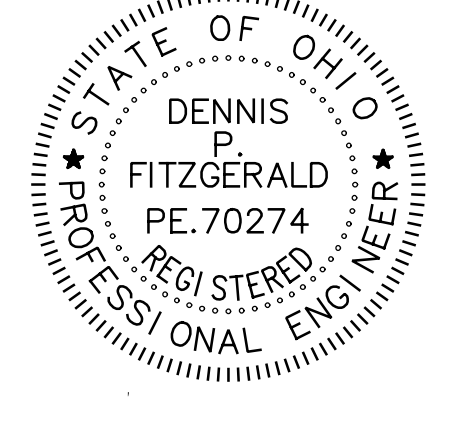
ENGINEER'S SEAL:

STRUCTURAL:



ENGINEER'S SEAL:

ROADWAY:



STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
			MT-95.31	7/19/19	RM-1.1	1/20/23	800-2023 7/19/2024	SHORE STRUCTURE
			MT-96.11	7/21/23			832 7/19/2024	PERMIT
			MT-96.20	7/21/23			961 4/17/2020	5/31/24
			MT-96.26	1/18/19			821 4/20/12	WATERWAY PERMIT
			MT-97.10	4/19/19			921 7/19/24	MID-FEBRUARY
			MT-97.11	1/20/17				UNITED STATES
			MT-101.60	4/21/23				DEPARTMENT
			MT-101.90	7/17/20				OF AGRICULTURE
			MT-105.10	1/17/20				RURAL UTILITIES
								SERVICE RUS
								BULLETIN 1780-26
								RURAL DEVELOP-
								MENT-GD-2024-001",
								DATED 1-17-25

FEDERAL PROJECT NUMBER

E230028

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

REPAIR OF APPROXIMATELY 3,100 FT OF REVETMENT ALONG THE NORTH SIDE SHORELINE OF SR-163 (WEST LAKESHORE DR) IN THE CITY OF PORT CLINTON.

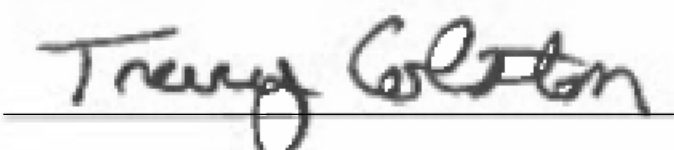
EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	3.0 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	0.3 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	3.3 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.

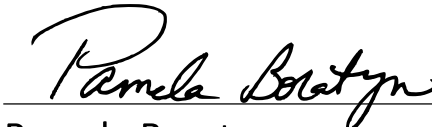
* I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.



CITY OF PORT CLINTON

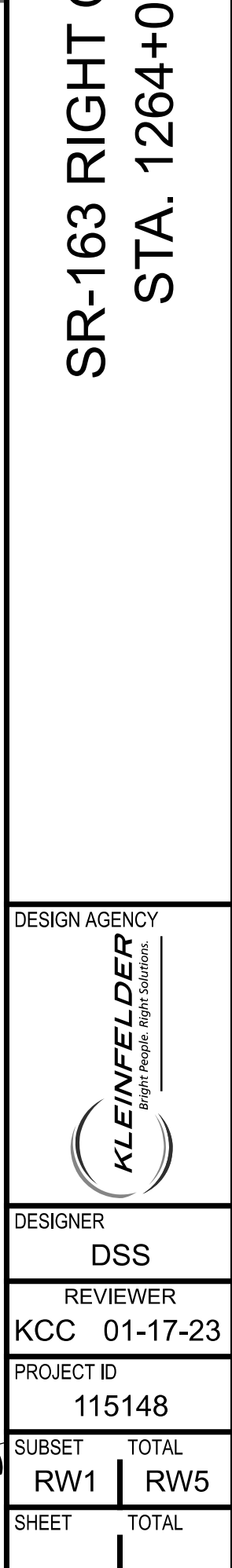
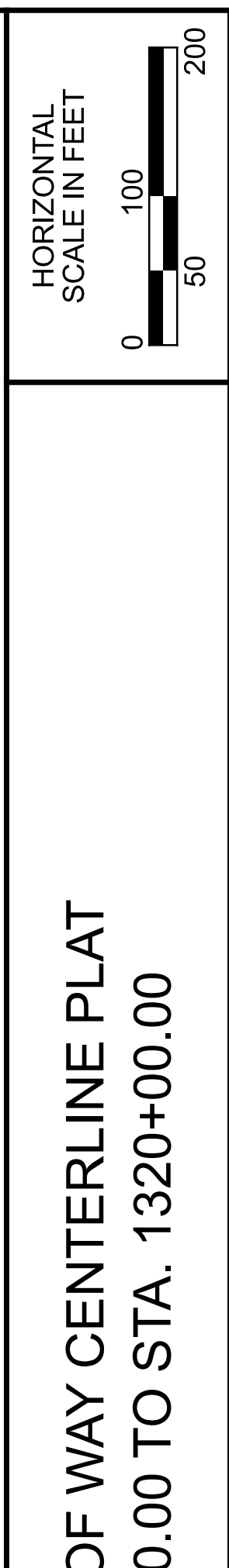


Pat McColley, P.E., S.I.
District 02 Deputy Director



Pamela Boratyn
Director, Department of Transportation

MODEL: Sheet PAPER SIZE: 34x22 (in) DATE: 1/16/2025 TIME: 2:06:45 PM USER: DSupinski
CITY of Port Clinton OH\20225628.001A--PORT CLINTON INFRASTRUCTURE\Final Deliverables\15148_400--Engineering\RW_Sheets\15148_RC001.dgn



C1

CURVE DATA
P.I. = Sta. 1269+12.87
Δ = 31°58'21" RT
Dc = 03°18'30"
R = 1,731.92'
T = 496.17'
L = 966.45'
E = 69.67'
P.C. = Sta.1264+16.70
P.T. = Sta.1269+12.87

C2

CURVE DATA
P.I. = Sta. 1279+13.84
Δ = 09°33'00" LT
Dc = 02°10'00"
R = 2,644.42'
T = 220.90'
L = 440.77'
E = 9.21'
P.C. = Sta.1276+92.94
P.T. = Sta.1281+33.71

C3

CURVE DATA
P.I. = Sta. 1303+47.50
Δ = 07°58'47" RT
Dc = 01°00'00"
R = 5,729.55'
T = 399.63'
L = 797.97'
E = 13.92'
P.C. = Sta.1299+47.87
P.T. = Sta.1307+45.84

C4

CURVE DATA
P.I. = Sta. 1321+97.16
Δ = 67°48'15" RT
Dc = 10°00'09"
R = 572.82'
T = 384.95'
L = 677.88'
E = 117.33'
P.C. = Sta.1318+12.21
P.T. = Sta.1324+90.09

UTILITIES

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

CHARTER COMM (SPECTRUM/TIME WARNER)
3760 INTERCHANGE DR
COLUMBUS, OH 43204
PH: 614.255.6340

COLUMBIA GAS OF OHIO
1800 BROAD AVE.
FINDLAY, OHIO 45840
PH: 614.301.3875

FRONTIER COMMUNICATION
3126 N MCCORD RD.
TOLEDO, OHIO 434617
PH: 419.841.7281

OHIO EDISON
2508 W. PERKINS AVE.
SANDUSKY, OH 44870
PH: 419.627.6887

OHIO TELECOM (dba OMNI FIBER)
115 W 2ND ST.
PORT CLINTON, OH 43452
PH: 419.734.2369

OTTAWA COUNTY SANITARY ENGINEER
315 MADISON ST. ROOM 105
PORT CLINTON, OH 43452
PH: 419.734.6725

PORT CLINTON - CITY OF (SEWER & WATER)
1868 E PERRY ST.
PORT CLINTON, OH 43452
PH: 419.734.5522

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

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 3 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: GPS (ODOT VRS)
MONUMENT TYPE: CORS

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD88
GEOID: GEOID18

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83 (2011)
ELLIPSOID: GPS 805
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: NAD83 OHIO NORTH ZONE
COMBINED SCALE FACTOR: 1.0000537506
ORIGIN OF COORDINATE SYSTEM: 39°40'00" N, 83°30'00" W

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.

UNITS ARE IN U.S. SURVEY FEET.

BASIS OF EX. C/L OF R/W AND R/W WIDTH:

THE CENTERLINE OF RIGHT OF WAY AND RIGHT OF WAY LIMITS WERE ESTABLISHED BY USING THE FOLLOWING OHIO DEPARTMENT OF HIGHWAYS PLANS:
S.H. 438-279 DATED 1947 AS FOUND ON FILE AT THE OHIO DEPARTMENT OF TRANSPORTATION - DISTRICT 2 OFFICE AT BOWLING GREEN, OHIO

BASIS FOR BEARINGS:

ALL BEARINGS SHOWN ARE FOR PROJECT USE ONLY.
SR-163 CENTERLINE ESTABLISHED w/ REFERENCE TO ODOT OT-163-22.42-26.71 PLANS

OTT-163-24.22
OTTAWA COUNTY
CITY OF PORT CLINTON
NE 1/4 SEC. 36, T-7-N, R-16-E
SW 1/4 SEC. 31, T-7-N, R-17-E

MONUMENT LEGEND

- EXISTING R/W MONUMENT BOX
- IRON PIN FOUND
- IRON PIN FOUND W/ ID CAP
- IRON PIPE FOUND
- P.K. NAIL FOUND

PROJECT CONTROL

POINT NUMBER	GROUND COORDS. (US SURVEY FEET)		C/L SR-163 (EX. C/L R/W)			ELEV.	FEATURE	DESCRIPTION
	NORTHING	EASTING	STATION	OFFSET	ALIGNMENT			
EXISTING CONTROL POINTS								
34	675978.493	1842639.371	1275+17.85	-40.07	CLX_RW163	579.52	MAG	MAG NAIL FD. NEAR FORMER MOOSE LODGE
35	675852.299	1842921.979	1276+92.95	-40.00	CLX_RW163	577.93	IPIN	N RW LINE E OF W. RICHEY RD. INT.
79	675737.655	1842988.643	1277+98.98	38.07	CLX_RW163	578.23	IPID	KUSMER
80	675739.195	1842989.146	1277+98.98	39.68	CLX_RW163	578.03	IPID	CANNOT READ
88	676114.373	1841665.115	1264+09.02	-40.00	CLX_RW163	578.73	IPIN	1" NE R/W CORNER OF INT. ERNEST/SR-163
89	675910.455	1842046.811	1268+00.93	176.47	CLX_RW163	577.80	IPIN	0.625" W. RICHEY RD. N R/W
91	675905.540	1842606.179	1273+82.86	40.07	CLX_RW163	575.40	MON	DISK ODOT NEAR W. RICHEY RD.
143	675772.770	1841916.519	1266+55.63	319.58	CLX_RW163	577.68	IPIN	3/4" IRON PIN FD. NEAR VACTIONLAND
144	675869.379	1841902.441	1266+39.51	222.90	CLX_RW163	579.49	IPIN	0.5" W. RICHEY RD S R/W
145	675882.846	1842048.686	1268+08.64	203.33	CLX_RW163	577.19	IPIN	0.5" W. RICHEY RD S R/W
331	675454.117	1841965.000	1267+32.56	637.17	CLX_RW163	575.41	IPIN	0.625" FEICK
359	675551.330	1842097.023	1269+17.70	523.08	CLX_RW163	575.58	IPIN	0.5" PROPERTY LINE RIVERSIDE MARINA
2	676106.643	1842245.882	1269+78.64	-45.00	CLX_RW163	582.55	IPID	BEC ASSOCIATES, PROPERTY CORNER
1	676219.653	1842275.518	1269+86.14	-161.56	CLX_RW163	579.08	IPID	MUSTRIC, PROPERTY CORNER
LPL3	675916.087	1840530.627	1252+58.67	14.17	CLX_RW163	577.52	MAG	SHINER CL PI 154+03.30
LPL13	675427.843	1844103.543	1289+51.82	39.03	CLX_RW163	577.25	IPIN	2" S R/W LINE SR-163
LPL14	675023.941	1845537.592	1304+46.22	49.57	CLX_RW163	577.65	IPID	S R/W LINE SR-163
W20595	674742.412	1846472.548	1314+20.54	-40.00	CLX_RW163	580.03	IPID	N R/W LINE SR-163
SITE BENCHMARKS								
L52	675913.738	1842757.656	1275+17.85	-29.14	CLX_RW163	578.68	BM	NE OF INT. OF SR-163 /W. RICHEY RD. T/WALL BY CB
SS18	674490.098	186891.429	1319+08.75	25.28	CLX_RW163	576.24	NAIL	FD NAIL IN SSMH
TO BE SET CONTROL								
RW01	675776.039	1842999.536	1277+94.88	0.00	CLX_RW163		MON	SET MON AT C/L FOR N. LINE DEFL.
RW02	675670.453	1843321.254	1281+00.01	0.00	CLX_RW163		MON	SET MON AT C/L PT
RW03	675216.262	1845077.637	1299+47.87	0.00	CLX_RW163		MON	SET MON AT C/L PC
RW04	674963.416	1845833.812	1309+97.61	0.00	CLX_RW163		MON	SET MON AT C/L PT
RW05	674555.703	1846819.162	1318+64.04	0.00	CLX_RW163		MON	SET MON AT C/L PC

SETTING OF ALL MONUMENTS SHALL BE PERFORMED BY A SURVEYOR REGISTERED IN THE STATE OF OHIO. THE MONUMENT ASSEMBLIES AND REFERENCE MONUMENTS WILL BE INSTALLED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. THE IRON PIN AND CAP (WHEN REQUIRED) ARE TO BE INSTALLED BY THE CONTRACTOR'S SURVEYOR.

CHANGES OR ALTERATIONS TO THE LOCATION OF ANY MONUMENTS SHOWN IN THIS TABLE, REQUIRE PRIOR APPROVAL FROM THE DISTRICT REAL ESTATE ADMINISTRATOR OF THE OHIO DEPARTMENT OF TRANSPORTATION. IN THE EVENT THAT CHANGES OR ALTERATIONS ARE APPROVED, A REVISED CENTERLINE PLAT WITH THE NEW LOCATIONS SHALL BE RECORDED IN THE APPLICABLE COUNTY RECORDS AND THE OHIO DEPARTMENT OF TRANSPORTATION. SPECIFICATIONS FOR MONUMENT ASSEMBLIES, REFERENCE MONUMENTS AND RIGHT OF WAY MONUMENTS ARE SHOWN ON STANDARD CONSTRUCTION DRAWING RM-1.1.

I, KEVIN CANAVAN, P.S. HAVE CONDUCTED A SURVEY OF THE EXISTING CONDITIONS FOR THE OHIO DEPARTMENT OF TRANSPORTATION BETWEEN JUNE, 2022 AND AUGUST, 2022. THE RESULTS OF THAT SURVEY ARE CONTAINED HEREIN. SEE THE SURVEY PARAMETERS NOTE AFFIXED TO THESE PLANS FOR THE HORIZONTAL AND VERTICAL SURVEY PARAMETERS USED FOR THIS PROJECT. AS A PART OF THIS PROJECT, I HAVE REESTABLISHED THE LOCATIONS OF THE EXISTING BOUNDARY LINES, THE EXISTING CENTER LINE OF RIGHT OF WAY AND THE EXISTING RIGHT OF WAY LIMITS AS NECESSARY. AS A PART OF THIS WORK, CENTERLINE RIGHT OF WAY MONUMENTS WILL BE SET AT THE LOCATIONS SHOWN HEREIN PER THE MEMORANDUM OF UNDERSTANDING BETWEEN THE BOARD OF REGISTRATION FOR ENGINEERS AND SURVEYORS AND THE OHIO DEPARTMENT OF TRANSPORTATION DATED 9-22-2010. ALL OF MY WORK CONTAINED HEREIN WAS CONDUCTED IN ACCORDANCE WITH THE OHIO ADMINISTRATIVE CODE CHAPTER 4733-37 STANDARDS FOR BOUNDARY SURVEYS UNLESS SO NOTED. THE WORDS "I AND MY" AS USED HEREIN ARE TO MEAN THAT EITHER MYSELF OR SOMEONE WORKING UNDER MY DIRECT SUPERVISION.

KEVIN CANAVAN P.S. NO. 7448

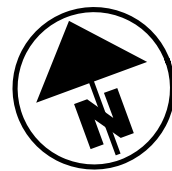
DATE

RECEIVED _____, 20 _____
RECORDED _____, 20 _____
BOOK _____ PAGE _____
COUNTY RECORDER



DESIGN AGENCY
KLEINFELDER
DESIGNER
DSS
REVIEWER
KCC
PROJECT ID
115148
SUBSET
RW2
TOTAL
RW5
SHEET
TOTAL

MODEL: CLX_RW_7 - Plan 2 [Sheet] PAPER SIZE: 34x22 (in.) DATE: 1/17/2025 TIME: 2:20:41PM USER: DFITZGERALD
\\City of Port Clinton\0H\20225628\001A-PORT CLINTON INFRASTRUCTURE\Final Deliverables\15148_400-Engineer



**HORIZONTAL
SCALE IN FEET**



A horizontal scale bar with a black background and white markings. The markings are at 0, 20, 40, and 80 feet. The numbers are in a bold, sans-serif font.

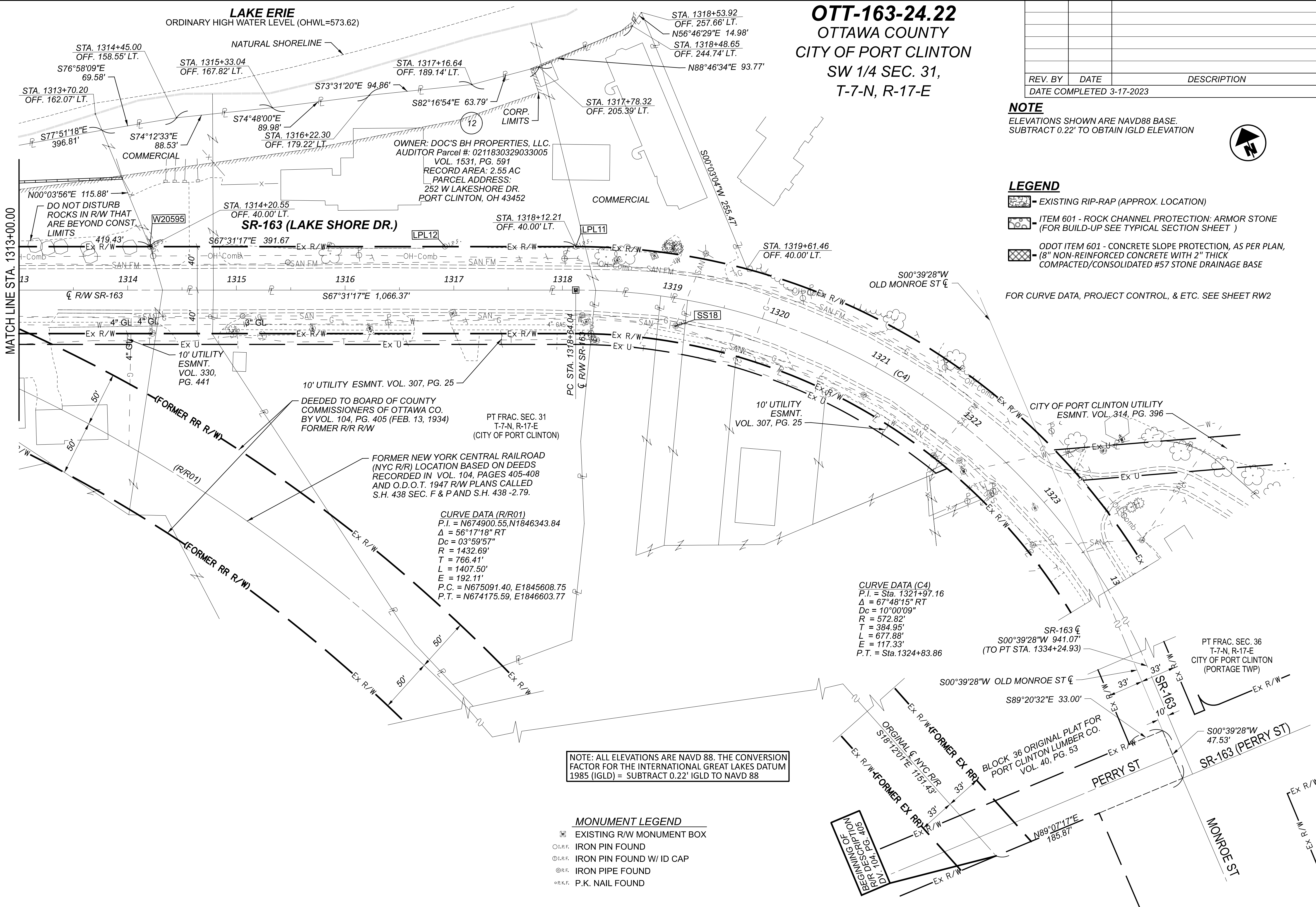
STA. 1273+00.00 TO STA. 1293+00.00



KLEINFELDER
Bright People. Right Solutions.

REV. BY	DATE	DESCRIPTION
<i>DATE COMPLETED: 3-17-2023</i>		

PORTAGE TWP., SW 1/4 SEC. 31, T-7-N, R-17-E



OTT-163-24.22
OTTAWA COUNTY
CITY OF PORT CLINTON
SW 1/4 SEC. 31,
T-7-N, R-17-E

REV. BY	DATE	DESCRIPTION
DATE COMPLETED 3-17-2023		

NOTE
ELEVATIONS SHOWN ARE NAVD88 BASE.
SUBTRACT 0.22' TO OBTAIN IGLD ELEVATION

- LEGEND**
- EXISTING RIP-RAP (APPROX. LOCATION)
 - ITEM 601 - ROCK CHANNEL PROTECTION: ARMOR STONE (FOR BUILD-UP SEE TYPICAL SECTION SHEET)
 - ODOT ITEM 601 - CONCRETE SLOPE PROTECTION, AS PER PLAN, (8" NON-REINFORCED CONCRETE WITH 2" THICK COMPACTED/CONSOLIDATED #57 STONE DRAINAGE BASE)

FOR CURVE DATA, PROJECT CONTROL, & ETC. SEE SHEET RW2

SR-163 RIGHT OF WAY DETAIL
STA. 1313+00.00 TO STA. 1325+00.00



NOTE: ALL ELEVATIONS ARE NAVD 88. THE CONVERSION FACTOR FOR THE INTERNATIONAL GREAT LAKES DATUM 1985 (IGLD) = SUBTRACT 0.22' IGLD TO NAVD 88

- MONUMENT LEGEND**
- EXISTING R/W MONUMENT BOX
 - IRON PIN FOUND
 - IRON PIN FOUND W/ ID CAP
 - IRON PIPE FOUND
 - P.K. NAIL FOUND

CURVE DATA (C4)
P.I. = Sta. 1321+97.16
Δ = 67°48'15" RT
Dc = 10°00'09"
R = 572.82'
T = 384.95'
L = 677.88'
E = 117.33'
P.T. = Sta. 1324+83.86

CURVE DATA (R/R01)
P.I. = N674900.55, N1846343.84
Δ = 56°17'18" RT
Dc = 03°59'57"
R = 1432.69'
T = 766.41'
L = 1407.50'
E = 192.11'
P.C. = N675091.40, E1845608.75
P.T. = N674175.59, E1846603.77

DESIGN AGENCY	KLEINFELDER
DESIGNER	DSS
REVIEWER	KCC 01-17-23
PROJECT ID	115148
SUBSET	TOTAL
RW5	RW5
SHEET	TOTAL