

*** SUPPORT VALUE ENGINEERING - IT PAYS ***

*** SAFETY PAYS ***

THIS PROJECT WAS PRODUCED BY THE BUFFALO DISTRICT OF THE U.S. ARMY CORPS OF ENGINEERS FOR PARTNERS FOR CLEAN STREAMS.

ABBREVIATIONS

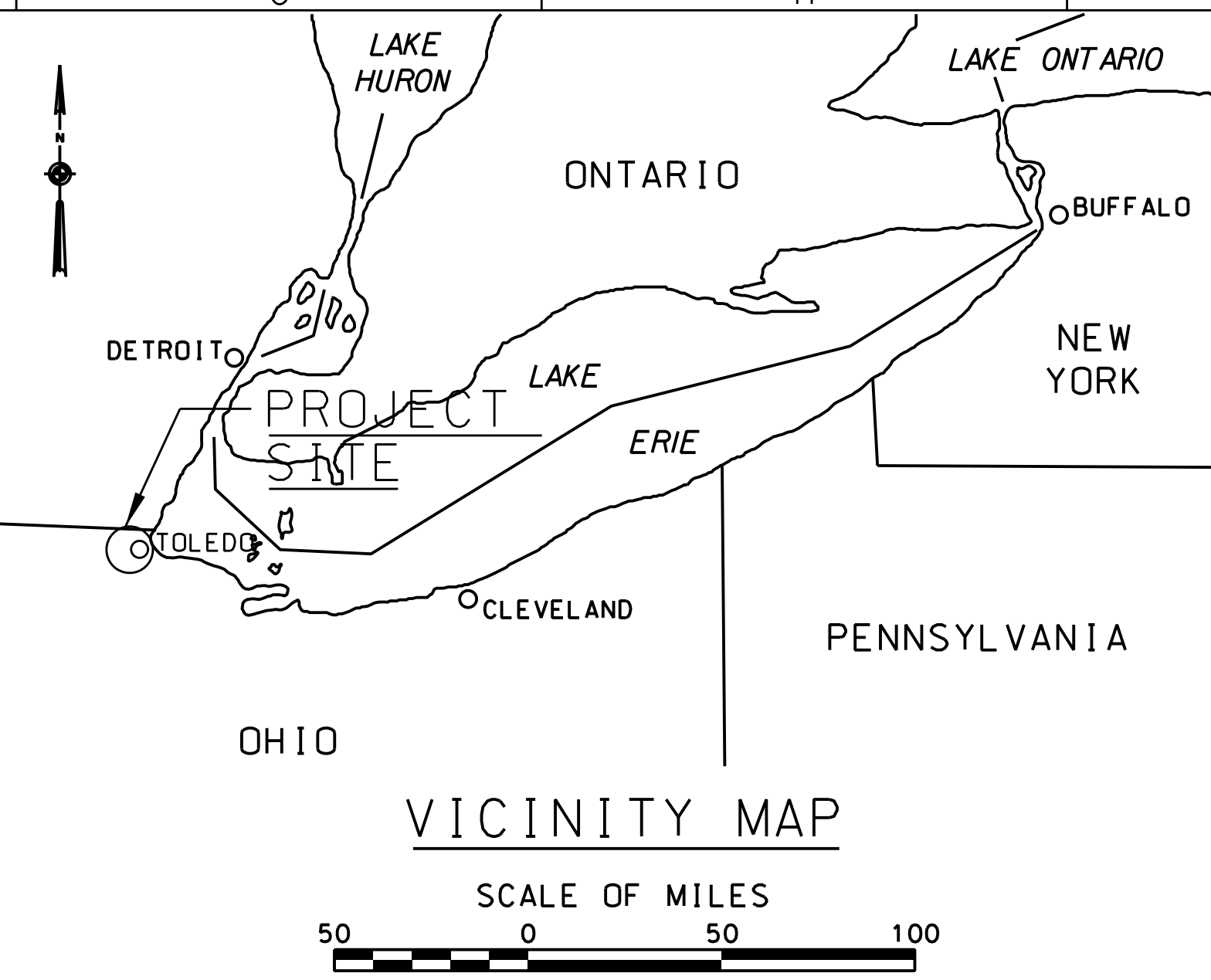
@	APPROX.	AT	APPROXIMATELY
B	B.M.	B	BENCHMARK
BW	BENDWAY WEIR	C	CENTERLINE
C	CONC.	C	CONCRETE
CP	CONTROL POINT	D	DIAMETER
O	DIAM.	D	DIAMETER
E	ELEV.	E	EAST
EX.	EXIST.	ELEV.	ELEVATION
EXIST.	EXIST.	EX.	EXISTING
H	INV.	H	HORIZONTAL
LPSTP	LONGITUDINAL PEAK STONE PROTECTION	I	INVERT
L.W.D.	LOW WATER DATUM	LPSTP	LONGITUDINAL PEAK STONE PROTECTION
MAX.	MAXIMUM	L.W.D.	LOW WATER DATUM
MIN.	MINIMUM	MAX.	MAXIMUM
N	NORTH	MIN.	MINIMUM
NAVD	NORTH AMERICAN VERTICAL DATUM	N	NORTH
O.C.	ON CENTER	NAVD	NORTH AMERICAN VERTICAL DATUM
PL	PLATE	O.C.	ON CENTER
S	SOUTH	PL	PLATE
STA.	STATION	S	SOUTH
T&B	TOP AND BOTTOM	STA.	STATION
TBD	TO BE DETERMINED	T&B	TOP AND BOTTOM
TYP.	TYPICAL	TBD	TO BE DETERMINED
V	VERTICAL	TYP.	TYPICAL
W	WEST	V	VERTICAL
W/	WITH	W	WEST
		W/	WITH

INDEX OF DRAWINGS

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STONE SIZES

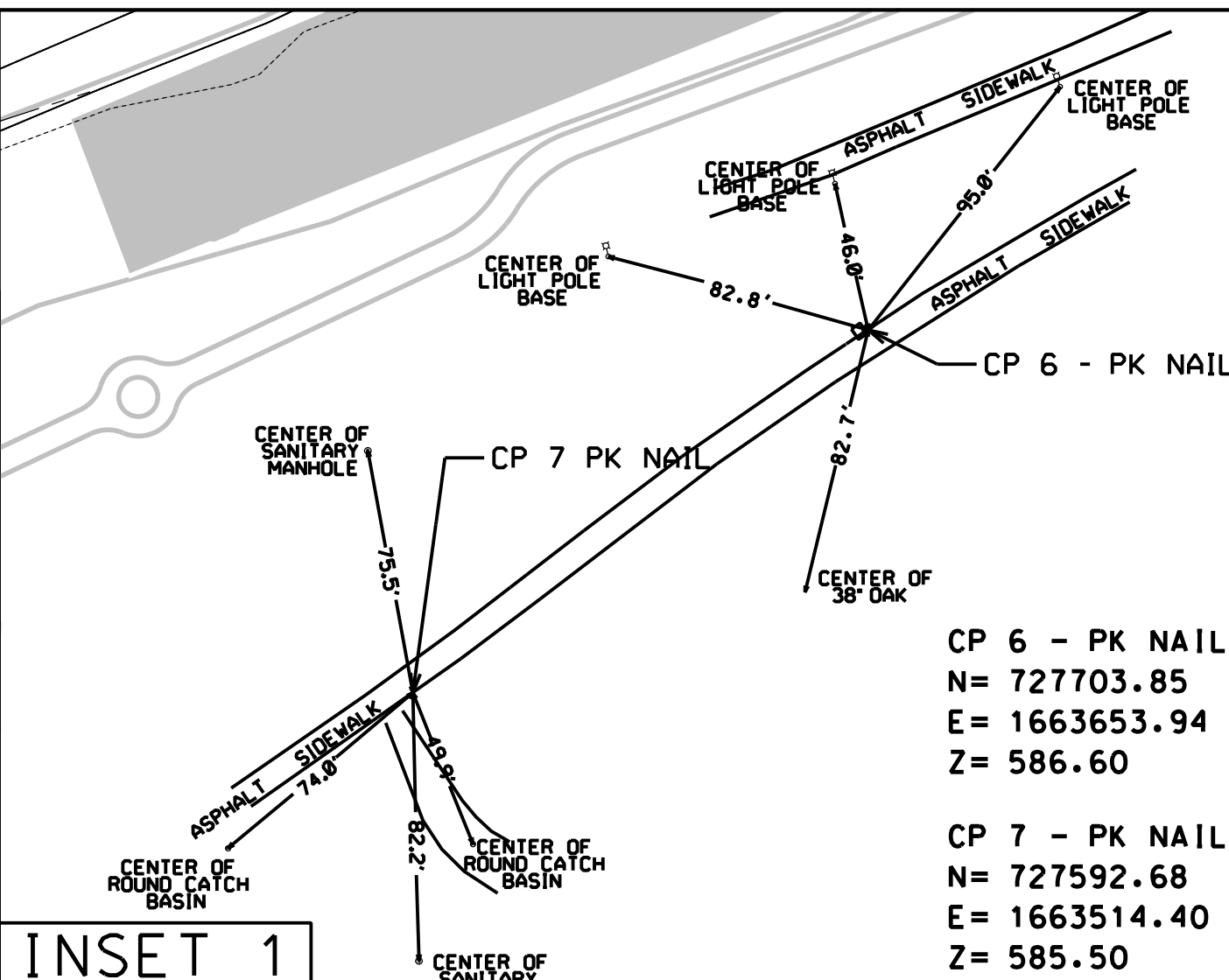
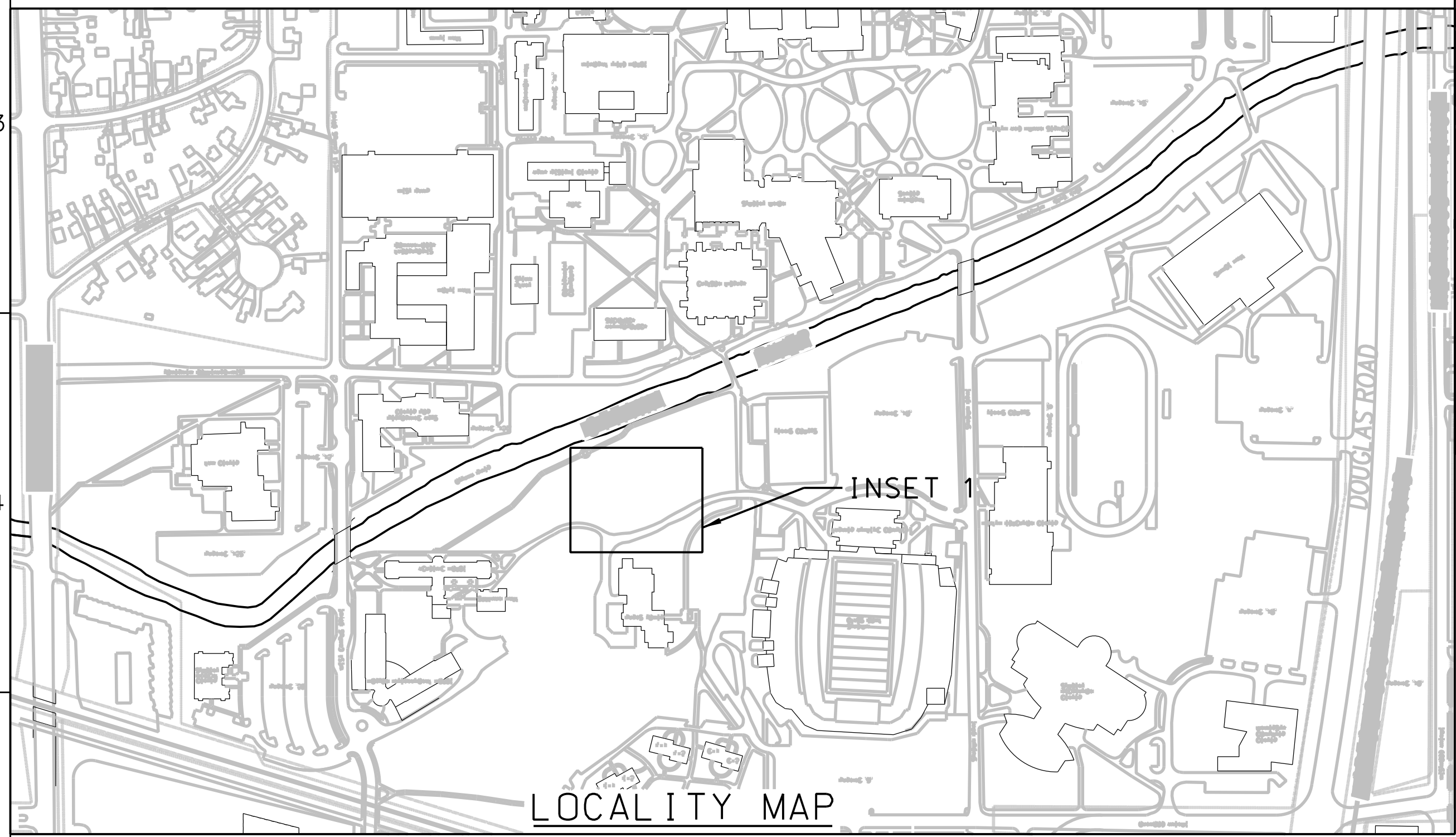
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TYPE "A"	24
TYPE "B"	18
ARMOR	36



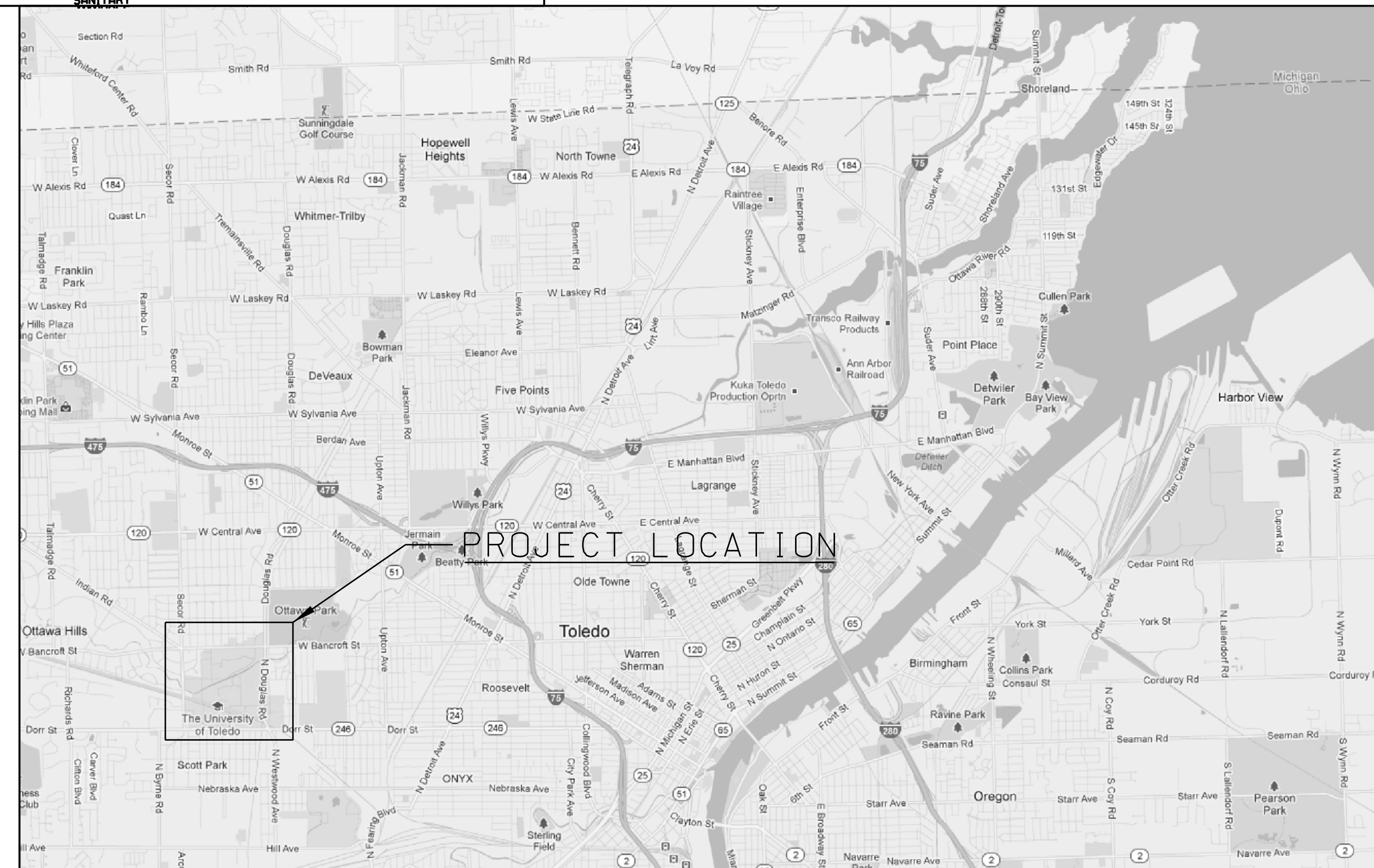
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IDENTIFIER
SECTION MARKER
SECTION TITLE

IDENTIFIER
LOCATION (SHEET NUMBER)
TITLE
ORIGIN (SHEET NUMBER)



- GENERAL NOTES:
- THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
 - ACCEPTED EROSION CONTROL PRACTICES SHALL BE APPLIED IN ALL DISTURBED AREAS.
 - EXISTING UTILITIES AND THEIR LOCATIONS AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION AVAILABLE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING THE DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE.
 - COORDINATION WITH UNIVERSITY OF TOLEDO PERSONNEL REQUIRED TO ENSURE THERE ARE NO TRAFFIC IMPEDEMENTS FOR THE UNIVERSITY.
 - ANY DAMAGE TO EXISTING PROPERTY DURING CONSTRUCTION SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITIONS AFTER PROJECT COMPLETION.
 - MAJORITY OF RIVER WORK IS TO BE COMPLETED BETWEEN AUGUST 5, 2012 AND AUGUST 16, 2012 IN ORDER TO ALLOW OVERSITE BY USACE REPRESENTATIVE, DAVE DERRICK.
 - CONTOURS AND SOUNDINGS ARE U.S. SURVEY FEET REFERRED TO NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88). CONTOURS SHOWN ARE APPROXIMATE AND TAKEN FROM LIDAR SURVEY. DATA AND ACTUAL CONTOURS MAY VARY.
 - HORIZONTAL COORDINATES ARE U.S. SURVEY FEET REFERRED TO NORTH AMERICAN DATUM 1983/CORS1996 (NAD83/96) NEW YORK STATE PLANE COORDINATE SYSTEM - WEST ZONE.
 - ALL INSTREAM WORK WILL BE COMPLETED UNDER THE DIRECTION OF THE USACE REPRESENTATIVE, DAVE DERRICK. THE EXACT LOCATION AND ORIENTATION OF FEATURES MAY CHANGE IN THE FIELD.



THE UNIVERSITY OF TOLEDO

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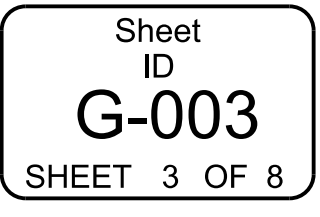
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THE UNIVERSITY OF TOLEDO
SNYDER HALL
2801 W. BANCROFT ST
TOLEDO, OHIO 43606

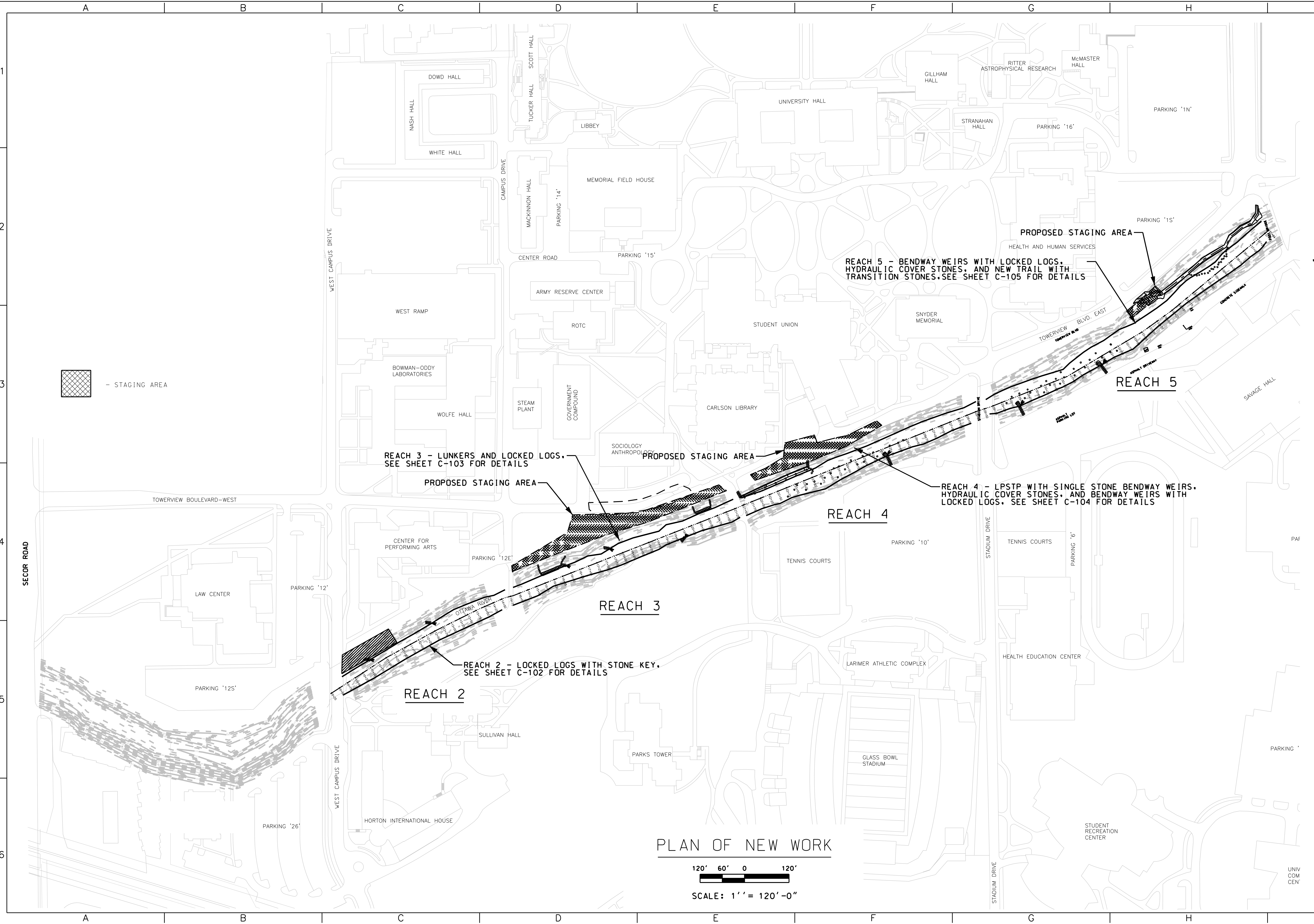
GENERAL INFORMATION

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SHEET 2 OF 8

*** SAFETY PAYS ***



*** SAFETY DAYS ***



THE
UNIVERSITY
OF TOLEDO

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THE UNIVERSITY OF TOLEDO 1400 UNIVERSITY CIRCLE SNYDER HALL, ROOM 3000 2301 W. BANCROFT ST TOLEDO, OHIO 43606	DWN BY: A341	CHK BY:	SOLICITATION NO: 1071712
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THE UNIVERSITY OF TOLEDO

TOLEDO, OHIO

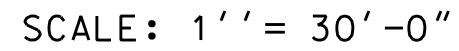
PLAN OF NEW WORK

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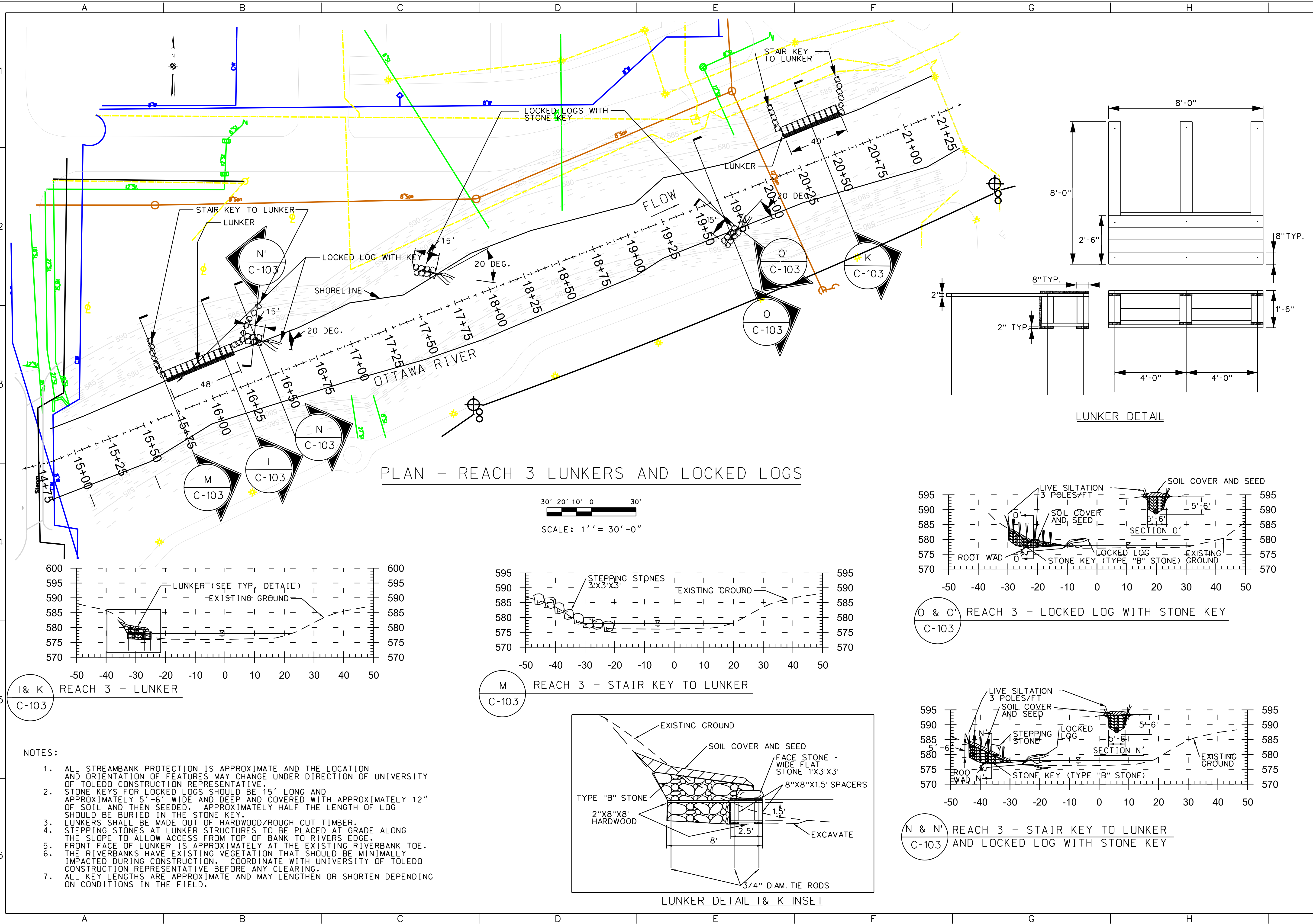
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THE UNIVERSITY OF TOLEDO
TOLEDO, OHIO

REACH 2

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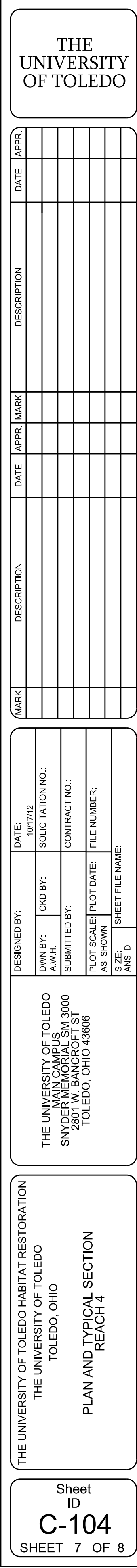


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THE UNIVERSITY OF TOLEDO
SNYDER HALL ROOM 3000
2801 W. BANCROFT ST
TOLEDO, OHIO 43606

THE UNIVERSITY OF TOLEDO HABITAT RESTORATION THE UNIVERSITY OF TOLEDO TOLEDO, OHIO	PLAN AND TYPICAL SECTIONS REACH 3
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REACH 5 - NEW PATHWAY COORDINATES AND ELEVATIONS

PT.	STATION	NORTHING	EASTING	ELEV.
POB	0+00.00	728721.29	1665239.96	591.00
PI	0+22.08	728699.27	1665241.71	587.00
PI	0+53.53	728673.15	1665224.19	584.75
PI	0+82.06	728660.55	1665198.61	580.00
PI	1+04.70	728645.82	1665181.41	580.00
PI	1+20.99	728636.30	1665168.18	581.00
PI	1+49.42	728610.88	1665155.45	581.00
PI	2+20.16	728574.59	1665094.74	581.00
PI	2+55.07	728550.99	1665069.02	583.00
PI	3+28.80	728504.83	1665011.52	583.00
PI	3+68.02	728481.33	1664980.13	583.00
PI	3+91.26	728479.05	1664957.00	583.00
PI	4+19.63	728467.36	1664931.14	586.25
POE	4+41.36	728461.55	1664910.21	590.00

NOTES:

1. HYDRAULIC COVER STONES TO BE PLACED ON RIVER BOTTOM. APPROXIMATELY 50 STONES SHALL BE PLACED RANDOMLY AT THE DIRECTION OF UNIVERSITY OF TOLEDO CONSTRUCTION REPRESENTATIVE.
2. ALL STREAMBANK PROTECTION IS APPROXIMATE. LOCATION AND ORIENTATION MAY CHANGE UNDER DIRECTION OF UNIVERSITY OF TOLEDO CONSTRUCTION REPRESENTATIVE.
3. STONE KEYS FOR BENDWAY WEIRS SHOULD BE APPROXIMATELY 20' LONG AND APPROXIMATELY 5'-6' WIDE AND DEEP.
4. BENDWAY WEIRS SHOULD BE 10' LONG AND 8' WIDE WITH CREST AT ELEVATION 578.0 ANGLED APPROXIMATELY 20 DEGREES UPSTREAM FROM PERPENDICULAR TO SHORELINE. LOCKED LOGS SHALL BE ANCHORED UNDER WEIR STRUCTURE AT RIVER BOTTOM.
5. NEW PATHWAY WILL BE 8' WIDE WITH 6" OF CRUSHED ROCK FOR WALKING SURFACE WITH SLIGHT SLOPE TOWARDS RIVER FOR DRAINAGE.
6. HYDRAULIC COVER STONES AT NEW WALKING PATH TO BE PLACED AT GRADE IF LEVEL. OTHERWISE SLOPE WILL BE EXCAVATED MINIMALLY TO PROVIDE LEVEL SURFACE. STONES TO BE PLACED DOWN THE SLOPE INTO THE RIVER ALONG THE RIVER FOR APPROXIMATELY 100' AND THEN BACK UP THE SLOPE AT THE APPROXIMATE LOCATIONS SHOWN IN PLAN VIEW.
7. ALL KEY LENGTHS ARE APPROXIMATE AND MAY LENGTHEN OR SHORTEN DEPENDING ON CONDITIONS IN THE FIELD.

HYDRAULIC COVER STONES (TYP.) SEE NOTE 6

NEW WALKING PATH

PROPOSED STAGING AREA

HEALTH AND HUMAN SERVICES

TOWerview BLVD

HYDRAULIC COVER STONES (TYP.) SEE NOTE 1

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