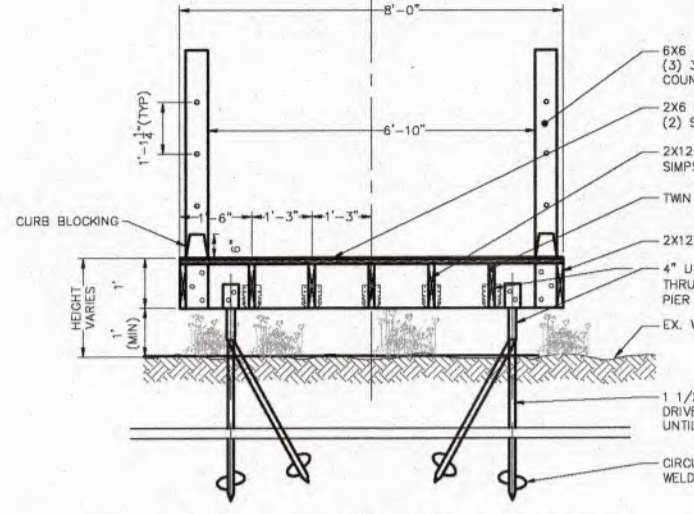


**BID ALTERNATE #1**

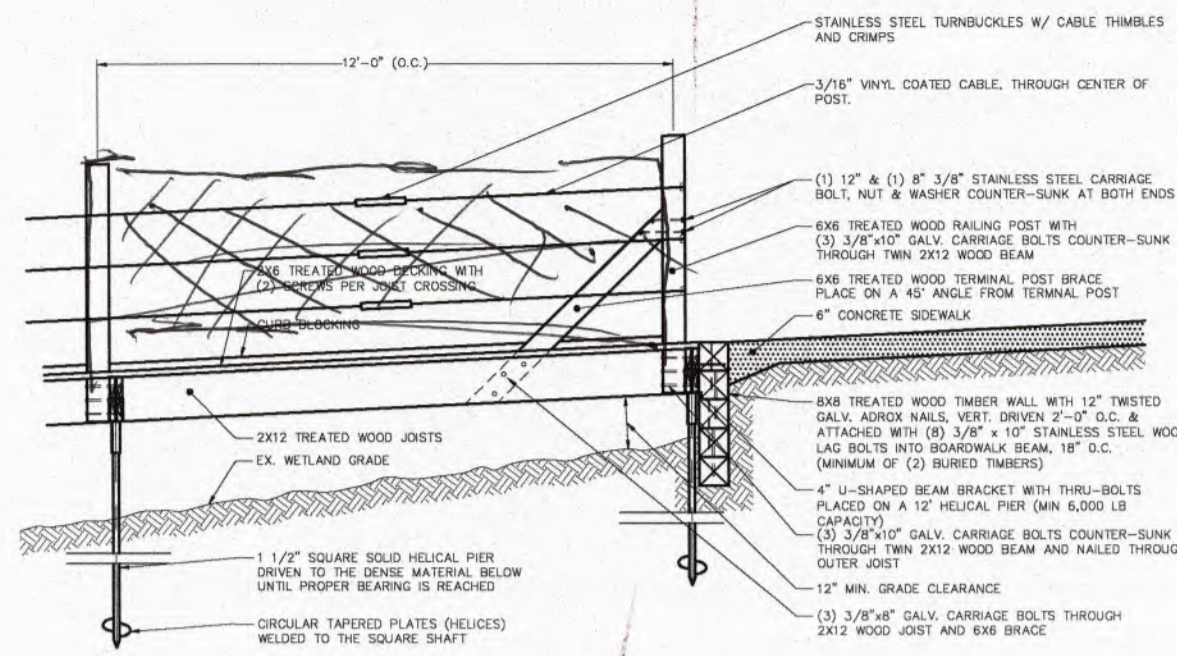
INSTALLATION OF THE PROPOSED BOARDWALK SYSTEM DETAILED IN THE SECTIONS BELOW TO BE COMPLETED WITH OWNER APPROVAL OF BID ALTERNATE #1 ONLY.

**BOARDWALK CONSTRUCTION**

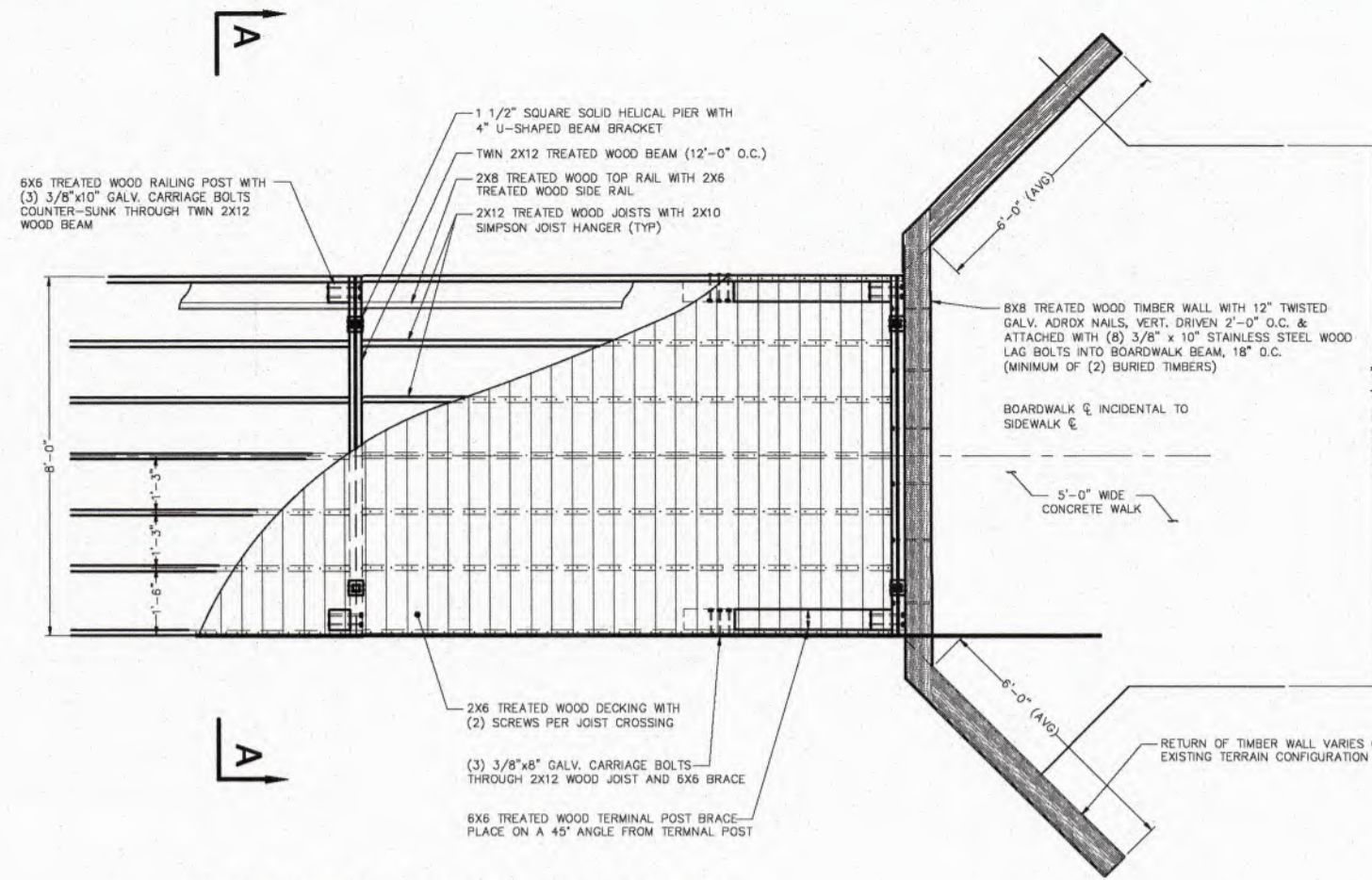
- DECK SURFACE 1" - 4" ABOVE WETLAND GRADE. CONSTRUCT DECK AS DETAILED WITH ONE DIAGONAL PER
- DECK SURFACE OVERVIEW FROM 4" ABOVE WETLAND GRADE. CONSTRUCT DECK AS DETAILED WITH THE DIAGONAL PER
- PRIMARY DECK JOISTS SHOULD NOT EXCEED 36" IF POSSIBLE. IF CARRIERS MUST BE EXCEED 36" EXCEEDS 36" 5.0" MUST BE MAINTAINED LESS THAN 48" AND PROVIDE HANDRAILS INSTALLED.



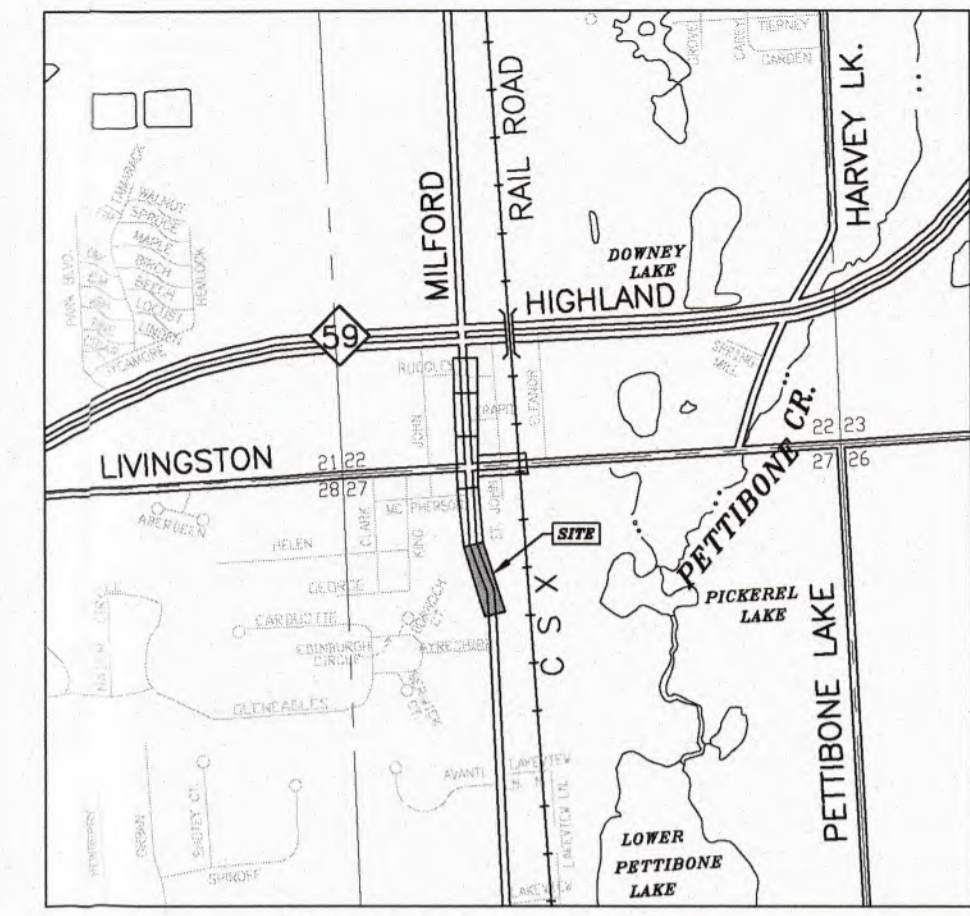
TYPICAL BOARDWALK SECTION (A-A)



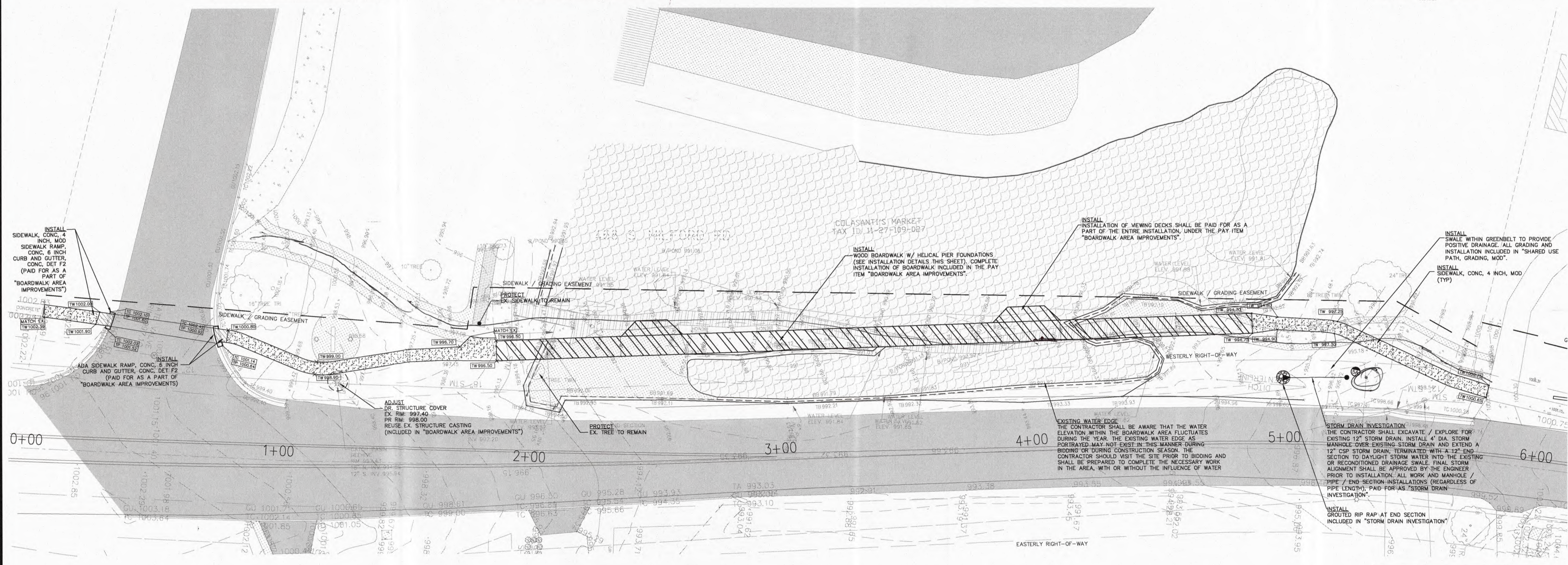
TYPICAL BOARDWALK ELEVATION



TYPICAL BOARDWALK PLAN VIEW



LOCATION MAP  
N.T.S.



SEAL

PROJECT  
Milford Road / Livingston Road Streetscape Improvements

CLIENT  
Highland Downtown Development Authority  
205 West Livingston Road  
Highland, MI 48357

CONTACT  
Mr. Tim Colbeck  
Tel.: (248) 887-7700  
Fax: (248) 887-7226

PROJECT LOCATION  
Part of the SW 1/4, Section 22  
Part of the NW 1/4, Section 27  
T. 3 N., R. 7 E.  
Highland Township  
Oakland County, Michigan

SHEET  
Construction Plan  
STA 0+00 to STA 5+78.70



REVISIONS  
2024-01-16 Client Review

DRAWN BY:  
S.Grever  
DESIGNED BY:  
S.Sutton  
APPROVED BY:  
S.Sutton  
DATE:  
January 16, 2024  
SCALE:  
1" = 20'  
NFE JOB NO.  
F803-02  
sheet no.  
C-3

**PROJECT RESTORATION**

SEE LANDSCAPE PLAN FOR ALL PROPOSED GREENBELT RESTORATION, TREE PLANTINGS, AND LANDSCAPE IMPROVEMENTS.

**BID ALTERNATE #1**

ALL WORK ASSOCIATED WITH THE REMOVAL OR INSTALLATION OF SIDEWALK AND WOODEN BOARDWALK, BETWEEN STATION 0+00 - STA. 4+75, SHALL BE CONSIDERED PART OF BID ALTERNATE #1. THIS WORK WILL ONLY BE UNDERTAKEN WITH OWNER APPROVAL OF THIS ALTERNATE. IF APPROVED, ALL WORK (DEMOLITION, REMOVALS, CLEARING, INSTALLATIONS AND RESTORATION) WILL BE PAID FOR AS THE LUMP SUM ITEM "BOARDWALK AREA IMPROVEMENTS"

**SIDEWALK GRADING**

ALL EARTHWORK, EXCAVATION AND /OR FILL PLACEMENT AND ALL ASSOCIATED GRADING REQUIRED TO PREPARE THE GRADE FOR SIDEWALK INSTALLATION SHALL BE PAID FOR AS "SHARED USE PATH, GRADING, MODIFIED"

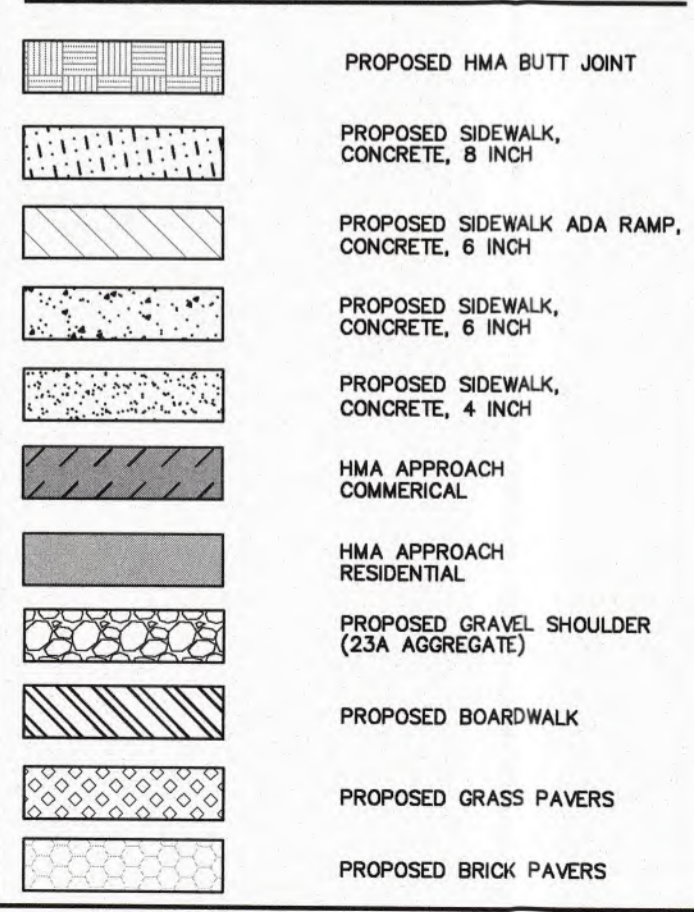
**BUSINESS ACCESS**

THE CONTRACTOR SHALL MAINTAIN FULL ACCESS (TWO WAY TRAFFIC) TO ALL EX. BUSINESSES THROUGHOUT ALL PHASES OF THE PROJECT AND SHALL MAINTAIN PEDESTRIAN TRAFFIC TO BUSINESSES / RESIDENCES DURING ALL PHASES OF CONSTRUCTION. PAID FOR AS "MAINTAINING ACCESS TO BUSINESS / RESIDENTS".

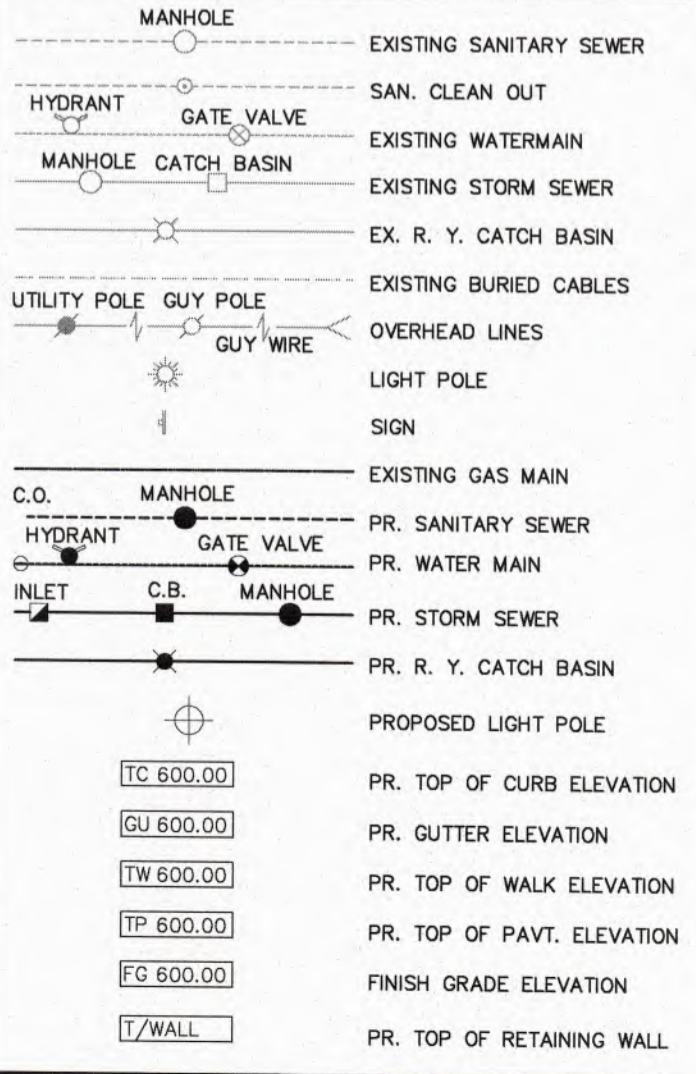
**SIDEWALK / GRADING EASEMENTS**

TEMPORARY / PERMANENT EASEMENTS HAVE BEEN OBTAINED AS OUTLINED IN VARIOUS LOCATIONS, FOR THE PURPOSES OF PREPARING FOR AND INSTALLING SIDEWALK. THE CONTRACTOR SHALL RESTRICT THEIR OPERATIONS AND ALL PROJECT DISRUPTION TO THE PUBLIC RIGHT-OF-WAY AND TO WITHIN THE EASEMENT AREAS ONLY.

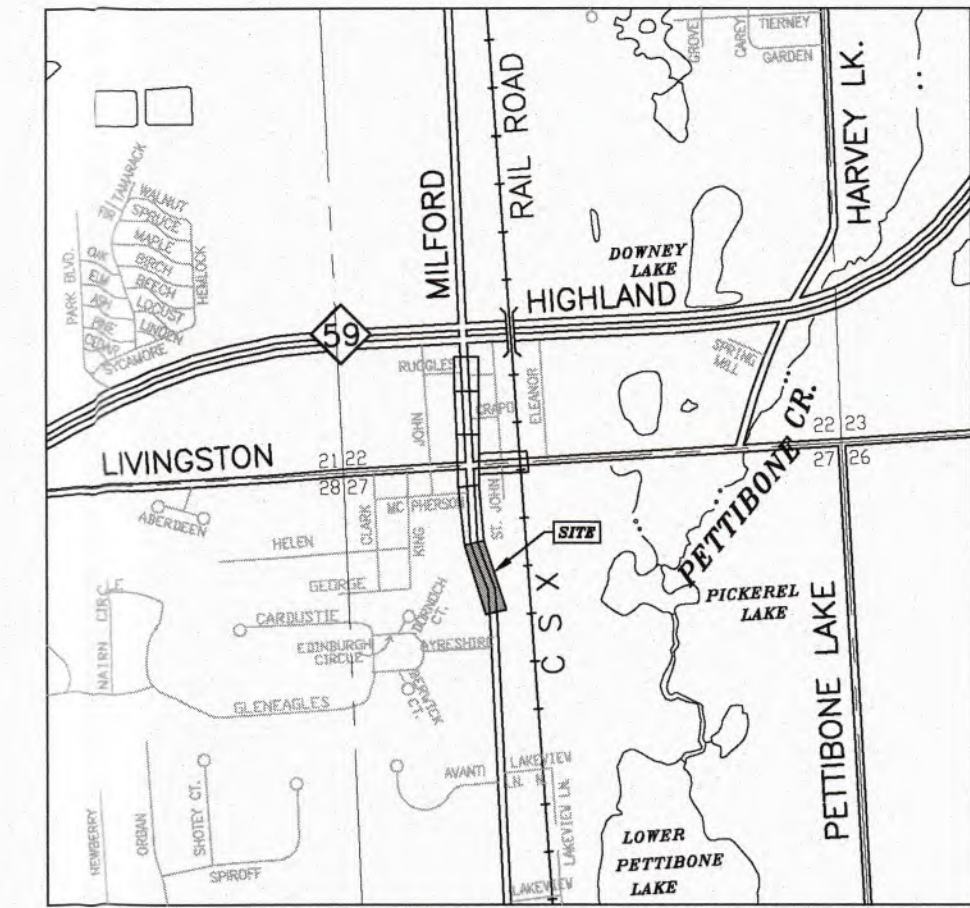
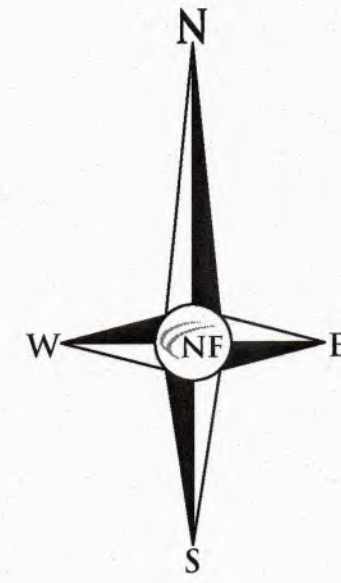
**PAVING LEGEND**



**LEGEND**







LOCATION MAP  
N.T.S.



CIVIL ENGINEERS  
LAND SURVEYORS  
LAND PLANNERS

NOWAK & FRAUS ENGINEERS  
46777 WOODWARD AVE.  
PONTIAC, MI 48342-5032  
TEL. (248) 332-7931  
FAX. (248) 332-8257  
WWW.NFE-ENGR.COM

SEAL

PROJECT  
Milford Road / Livingston  
Road Streetscape  
Improvements

CLIENT  
Highland Downtown  
Development Authority  
205 West Livingston Road  
Highland, MI 48357

CONTACT  
Mr. Tim Colbeck  
Tel.: (248) 887-7700  
Fax: (248) 887-7226

PROJECT LOCATION  
Part of the SW 1/4, Section 22  
Part of the NW 1/4, Section 27  
T. 3 N., R. 7 E.  
Highland Township  
Oakland County, Michigan

SHEET  
Boundary / Topographic /  
Tree Survey



Know what's below  
Call before you dig.

**BASIS OF BEARING NOTE**

THE BASIS OF BEARING FOR THIS SURVEY WAS ESTABLISHED BY THE RECORD DESCRIPTION AS SHOWN IN THE PLAT REFERENCED HEREON.

**FLOOD HAZARD NOTE**

THIS PROPERTY IS NOT LOCATED WITHIN THE FLOOD HAZARD AREA INDICATED BY FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NO. 26125C0313F DATED: 12-6-2023

**MISS DIG / UTILITY DISCLAIMER NOTE**

A MISS DIG TICKET NUMBER 2023110102965, PURSUANT TO MICHIGAN PUBLIC ACT 174 WAS ENTERED FOR THE SURVEYED PROPERTY, DUE TO THE EXTENDED REPORTING PERIOD FOR UNDERGROUND FACILITY OWNERS TO PROVIDE THEIR RECORDS, THE SURVEY MAY NOT REFLECT ALL THE UTILITIES AT THE TIME THE SURVEY WAS ISSUED ON 12-7-2023. THE SURVEY ONLY REFLECTS THOSE UTILITIES WHICH COULD BE OBSERVED BY THE SURVEYOR IN THE FIELD OR AS DESCRIBED BY THE UTILITY COMPANY RECORDS FURNISH PRIOR TO THE DATE THIS SURVEY WAS ISSUED. THE CLIENT AND/OR THEIR AUTHORIZED AGENT SHALL VERIFY WITH THE FACILITY OWNERS AND/OR THEIR AUTHORIZED AGENTS, THE COMPLETENESS AND EXACTNESS OF THE UTILITIES LOCATION.

**TOPOGRAPHIC SURVEY NOTES**

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

**LEGEND**

	MANHOLE		EXISTING SANITARY SEWER
	HYDRANT		EXISTING SAN. CLEAN OUT
	GATE VALVE		EXISTING WATER MAIN
	MANHOLE		EXISTING STORM SEWER
	CATCH BASIN		EX. R.Y. CATCH BASIN
	UTILITY POLE		EXISTING BURIED CABLES
	GUY POLE		OVERHEAD LINES
	GUY WIRE		LIGHT POLE
	SIGN		SIGN
	EXISTING GAS MAIN		ASPHALT SURFACE
	ASPHALT SURFACE		BRICK SURFACE
	BRICK SURFACE		BRIDGE SURFACE
	BRIDGE SURFACE		CONCRETE SURFACE
	CONCRETE SURFACE		GRAVEL SURFACE
	GRAVEL SURFACE		LANDSCAPED SURFACE
	LANDSCAPED SURFACE		WATER SURFACE

DATE ISSUED/REVISED  
2024-01-16 CLIENT REVIEW

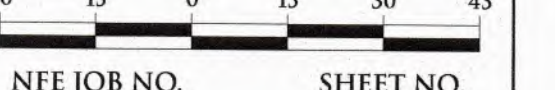
DRAWN BY:  
S. Grever

DESIGNED BY:  
S. Sutton

APPROVED BY:  
S. Sutton

DATE:  
2024-01-16

SCALE: 1" = 30'



NFE JOB NO. SHEET NO.  
F803-02 C-1