

CHARTER TOWNSHIP OF FLUSHING

6524 N. Seymour Road, Flushing, MI 48433

P (810) 659-0800 F (810) 659-4212

www.flushingtowship.com

PLANNING COMMISSION AGENDA

DATE: SEPTEMBER 11, 2023

TIME: 7:00 P.M.

MEMBERS OF PLANNING COMMISSION

Chair – Vicki Bachakes

Vice Chair – William Mills

Secretary – Amy Bolin

Board of Trustees Representative – Terry A. Peck

Makenzie Dearlove, Recording Secretary

Craig Davis

Timothy Lloyd

Michael Moon

I. CALL THE MEETING TO ORDER

ROLL CALL

PLEDGE OF ALLEGIANCE

II. APPROVAL OF AGENDA

III. APPROVAL OF PREVIOUS MINUTES

July 18, 2023 Meeting

IV. PUBLIC COMMENTS FOR AGENDA ITEMS ONLY

Each speaker limited to three minutes

V. UNFINISHED BUSINESS

None

VI. NEW BUSINESS

1. Motion on the Site Plan Review for a Family Dollar / Dollar Tree store to be located at 7029 Mt. Morris Road, Flushing, MI 48433, Parcel No. 08-12-200-014, pursuant to *Article XVIII Special Use Permits*

2. Public Hearing and motion on the Special Use Permit for a Family Dollar / Dollar Tree store to be located at 7029 Mt. Morris Road, Flushing, MI 48433, Parcel No. 08-12-200-014, pursuant to *Article XVIII Special Use Permits*

VII. ZONING ADMINISTRATOR COMMENTS

VIII. PUBLIC COMMENTS

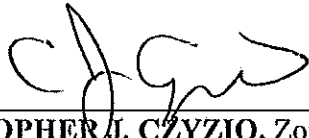
Each speaker limited to three minutes

IX. COMMISSION COMMENTS

X. NEXT REGULAR SCHEDULED MEETING

TUESDAY, OCTOBER 10, 2023 AT 7:00 P.M.

XI. ADJOURNMENT



CHRISTOPHER J. CZYZIO, Zoning Administrator

CHARTER TOWNSHIP OF FLUSHING

6524 N. SEYMOUR ROAD, FLUSHING, MI 48433

P (810) 659-0800 F (810) 659-4212

www.flushingtowship.com

PLANNING COMMISSION MINUTES

DATE: JULY 18, 2023

TIME: 7:00 P.M.

MEMBERS OF PLANNING COMMISSION

Chair – Vicki Bachakes

Craig Davis

Vice Chair – William Mills

Timothy Lloyd

Secretary – Amy Bolin

Michael Moon

Board of Trustees Representative – Terry A. Peck

Makenzie Dearlove, Recording Secretary

PRESENT: Moon, Bolin, Mills, Bachakes, Lloyd, and Peck

ABSENT: Davis

OTHERS PRESENT: Sixteen (16) other individuals were present.

I. MEETING CALLED TO ORDER at 7:00 P.M. by Planning Commission
Chairperson Bachakes with Roll Call and Pledge to the American Flag.

II. APPROVAL OF AGENDA:

TREASURER PECK MOVED, supported by Commissioner Bolin to approve the agenda.

THE MOTION CARRIED.

III. APPROVAL OF PREVIOUS MINUTES:

TREASURER PECK MOVED, supported by Commissioner Mills to approve the minutes of the June 12, 2023 meeting.

ACTION ON THE MOTION

ROLL CALL VOTE:

AYES: Bolin, Mills, Bachakes, Lloyd, Peck, and Moon

NAYS: None

ABSENT: Davis

THE MOTION CARRIED.

IV. PUBLIC COMMENTS

OPEN FOR PUBLIC COMMENTS 7:01 P.M.

No comments were made.

CLOSED FOR PUBLIC COMMENTS 7:02 P.M.

V. UNFINISHED BUSINESS

None

VI. NEW BUSINESS

1. Motion on the Site Plan Review for a swimming pool placed in the front yard of 5211 Deland Road, Flushing, MI 48433, Parcel No. 08-23-300-021, pursuant to Article XVIII Special Use Permits

Mr. Huffman, the applicant, was present and stated that the reason for placement of the pool on the front yard was to avoid cutting down heavy brush on several other parts of his property and the pool would remain unseen by neighbors and from the road with the vegetation surrounding the front yard. Treasurer Peck stated that he supported this plan based on the cover of the view of the pool from the road and the two letters of support from the neighbors.

TREASURER PECK MOVED, supported by Commissioner Mills to approve the Site Plan Review for a swimming pool placed in the front yard of 5211 Deland Road, Flushing, MI 48433, Parcel No. 08-23-300-021, pursuant to Article XVIII Special Use Permits.

ACTION ON THE MOTION

ROLL CALL VOTE:

AYES: Mills, Bachakes, Lloyd, Peck, Moon, and Bolin

NAYS: None

ABSENT: Davis

THE MOTION CARRIED.

2. Public Hearing and motion on the Special Use Permit for a swimming pool placed in the front yard of 5211 Deland Road, Flushing, MI 48433, Parcel No. 08-23-300-021, pursuant to Article XVIII Special Use Permits.

Public Hearing opened at 7:05 P.M.

- No comments were made.

Public Hearing closed at 7:06 P.M.

After brief discussion the following motion was made.

TREASURER PECK MOVED, supported by Commissioner Mills to approve the Special Use Permit for a swimming pool placed in the front yard of 5211 Deland Road, Flushing, MI 48433, Parcel No. 08-23-300-021, pursuant to Article XVIII Special Use Permits.

ACTION ON THE MOTION

ROLL CALL VOTE:

AYES: Peck, Moon, Bolin, Mills, Bachakes, and Lloyd

NAYS: None

ABSENT: Davis

THE MOTION CARRIED.

3. Motion on the Site Plan Review for placement of a gas station convenience store located at 8464 Mt. Morris Road, Flushing, MI 48433, Parcel No. 08-02-300-021 and 08-02-300-022, pursuant to Article XVIII Special Use Permits

TREASURER PECK MOVED, supported by Commissioner Bolin to accept the Site Plan Review for placement of a gas station convenience store located at 8464 Mt. Morris Road, Flushing, MI 48433, Parcel No. 08-02-300-021 and 08-02-300-022, pursuant to Article XVIII Special Use Permits for discussion.

Mr. Hansen, the applicant, was present. Chairperson Bachakes invited Mr. Ball, from Rowe Professional Services, to speak on the review letter of the Site Plan. Mr. Ball had originally written a Site Plan review letter for the Planning Commission on June 21, 2023 and had updated the letter on July 13, 2023 after receiving updated Site Plans. The letter contained information on the outstanding issues with the Site Plan and Mr. Ball shared what he had written with the Planning Commission.

Chairperson Bachakes asked Mr. Hansen if he was currently working on obtaining permits and approval for different project aspects through the County and State currently, and he confirmed he is. Chairperson Bachakes also asked questions in relation to the traffic flow through and within the parking lot proposed and Mr. Hansen's representative, Mr. Kim Carlson, spoke about possible changes they may be required to make to meet ordinance requirements.

Commissioner Mills inquired about when Mr. Hansen had hoped to begin construction and have the project completed. Mr. Hansen stated that he hopes to begin construction in the spring and be completed in the fall, if all requirements can be met. Commissioner Lloyd asked Mr. Hansen if he has other businesses similar to this and Mr. Hansen shared he has eight locations similar to this proposed store.

Commissioner Bolin asked Mr. Hansen about the filtration systems for the proposed store. Treasurer Peck expressed that a gas station is needed in the township and there's a great amount of interest in placing one in this part of town in particular. Treasurer Peck also stated he wants to address all avenues where a problem could arise to ensure this process is done correctly. Chairperson Bachakes shared that due to the outstanding issues with the Site Plan before the Commission she would like to see a revised set of plans before approving the Site Plan.

The Commissioners had a lengthy discussion on whether to postpone approval on the Site Plan until the outstanding issues have been addressed or to approve the Site Plans with the condition that all outstanding issues must be addressed. After this discussion Treasurer Peck withdrew his motion, supported by Commissioner Mills. The following motion was then made.

TREASURER PECK MOVED, supported by Commissioner Bolin to postpone the Site Plan Review for placement of a gas station convenience store located at 8464 Mt. Morris Road, Flushing, MI 48433, Parcel No. 08-02-300-021 and 08-02-300-022, pursuant to Article XVIII Special Use Permits until next month for the applicant to address the outstanding issues as pointed out by Rowe Professional Services.

ACTION ON THE MOTION

ROLL CALL VOTE:

AYES: Bachakes, Peck, and Bolin

NAYS: Lloyd, Moon, and Mills

ABSENT: Davis

THE MOTION FAILED.

After further discussion the following motion was made.

COMMISSIONER LLOYD MOVED, supported by Commissioner Moon to approve the Site Plan Review for placement of a gas station convenience store located at 8464 Mt. Morris Road, Flushing, MI 48433, Parcel No. 08-02-300-021 and 08-02-300-022, pursuant to Article XVIII Special Use Permits with the unmet conditions being met that were pointed out with red text by Rowe Professional Services in the Site Plan Review Letter. (Letter is attached to the minutes.)

ACTION ON THE MOTION

ROLL CALL VOTE:

AYES: Peck, Moon, Mills, Bachakes, and Lloyd

NAYS: Bolin

ABSENT: Davis

THE MOTION CARRIED.

4. Public Hearing and motion on the Special Use Permit for placement of a gas station convenience store located at 8464 Mt. Morris Road, Flushing, MI 48433, Parcel No. 08-02-300-021 and 08-02-300-022, pursuant to Article XVIII Special Use Permits

Public Hearing opened at 8:10 P.M.

- No comments were made.

Public Hearing closed at 8:11 P.M.

After brief discussion the following motion was made.

TREASURER PECK MOVED, supported by Commissioner Mills to approve the Special Use Permit for placement of a gas station convenience store located at 8464 Mt. Morris Road, Flushing, MI 48433, Parcel No. 08-02-300-021 and 08-02-300-022, pursuant to Article XVIII Special Use Permits.

ACTION ON THE MOTION

ROLL CALL VOTE:

AYES: Lloyd, Peck, Moon, Bolin, Mills, and Bachakes

NAYS: None

ABSENT: Davis

THE MOTION CARRIED.

VII. ZONING ADMINISTRATOR COMMENTS

Zoning Administrator Chris Czyzio shared with the board that the next steps for the proposed gas station convenience store at 8464 Mt. Morris Road would be for him to review the changes to the Site Plan as they are made and report the changes to the Planning Commission. Mr. Czyzio also stated that some of the changes to the Site Plan may require the developer to come before the Planning Commission again but some of the changes would only need Zoning Administrator approval. Mr. Czyzio shared that Bear's Party Store is looking to remodel. Current plans would require a variance so they may be on a meeting agenda in the future. Mr. Czyzio also shared that he has not received any new information from the developers of the Flushing Bibi Villas this past month.

VIII. PUBLIC COMMENTS

OPEN FOR COMMENTS: 8:15 P.M.

Two comments were made in regards to the recent Special Use Permit approval for Veteran's Mechanical.

CLOSED FOR COMMENTS: 8:19 P.M.

IX. COMMISSION COMMENTS

Treasurer Peck commented that he was sorry to hear about the difficulty Veteran's Mechanical owners are having in moving forward with the purchase of 8034 N. McKinley Road. Zoning Administrator Chris Czyzio was asked to share recent information he had been given by Genesee County Road Commission in regards to the driveway at 8034 N. McKinley Road.

X. NEXT REGULAR SCHEDULED MEETING

MONDAY, AUGUST 14, 2023 AT 7:00 P.M.

XI. ADJOURNMENT

With no further business, the meeting adjourned at 8:31 P.M.

VICKI BACHAKES, Chairperson

AMY BOLIN, Secretary

Date of Approval

Makenzie Dearlove, Recording Secretary

Wolgast CORPORATION

4835 Towne Center Road, Suite 203
 SAGINAW, Michigan 48604
 989/790-9120 FAX 989/790-9063

LETTER OF TRANSMITTAL

DATE: 7/21/2023 JOB NO.: D23506
 ATTENTION: Chris Czylo
 RE.: Site Plan Approval
 From: Wolgast Corporation - Cole Stadler

TO: Flushing Twp.
6524 N Seymour Rd
Flushing Township, MI 48433
Ph. 810-659-0800

RECEIVED

JUL 24 2023

CHARTER TOWNSHIP
 OF FLUSHING

<input type="checkbox"/>	WE ARE SENDING YOU:	<input type="checkbox"/>	TEST REPORT
<input type="checkbox"/>	SHOP DRAWINGS	<input checked="" type="checkbox"/>	OTHER
<input type="checkbox"/>	PRINTS	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	CONSTRUCTION DRWGS.	<input checked="" type="checkbox"/>	ATTACHED
<input type="checkbox"/>	SAMPLES		

Copies	Date	Division	Description
2	7/21/2023	----	Drawings
1	7/21/2023	----	Commercial Site Plan Check List
1	7/21/2023	----	Special Use Permit Request
1	7/21/2023	----	Check for Payment

<input type="checkbox"/>	FOR APPROVAL	<input type="checkbox"/>	APPROVED AS SUBMITTED
<input checked="" type="checkbox"/>	FOR YOUR USE	<input type="checkbox"/>	APPROVED AS NOTED
<input checked="" type="checkbox"/>	AS REQUESTED	<input type="checkbox"/>	NOT APPROVED
<input type="checkbox"/>	FOR REVIEW & COMMENT		

REMARKS: Please find the attached are the drawings, applications and payment for the upcoming Family Dollar / Dollar Tree project a t7029 Mt. Morris Rd. Should you have any questions please let me know. My phone number is 989-245-4900 and my email is cstadler@wolgast.com

COPY TO: _____

SIGNED: Cole Stadler

Shipping Method: Ground

SPECIAL USE PERMIT REQUEST FORM

RECEIVED

JUL 24 2023

CHARTER TOWNSHIP
OF FLUSHING

Special Use Permit Request Cas No. _____
Variance Fee: _____
Date Paid: _____
Date Notice was Published: _____
Date of Public Hearing: _____
Affidavit Attached: _____

FLUSHING TOWNSHIP PLANNING COMMISSION SPECIAL USE PERMIT REQUEST

Required information from owner or person having interest in requesting Planning Commission (PC) review and opinion.

1. Name of applicant/owner requesting PC review and opinion

A. Applicant

Name: Wolast Acquisition Corporation
Address: _____
Phone: _____

B. Owner of property (if different than above)

Name: _____
Address: _____
Phone: _____

2. Location of Property

Street number and name: 7029 Mt. Morris Rd.
Property tax identification number: 08-12-200-014

Legal description of property involved: A parcel of land beginning at the Northeast corner of the Section, thence South 88 degrees 55 minutes 47 seconds West, 449.88 feet; thence South 00 degrees 00 minutes 50 seconds West, 249.94 feet and South 00 degrees 04 minutes 15 seconds West, 315.21 feet; thence North 89 degrees 22 minutes 41 seconds East, 200 feet; thence North 118.48 feet; thence East 250.04 feet; thence North 450 feet to the Point of Beginning, being in Section 12, Town 8 North, Range S East

List deed restrictions and easements: _____

Present zoning of property: C-2 Commercial

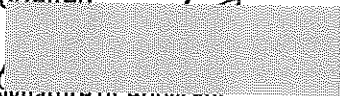
3. With all requests, a site plan must be submitted (see attached site plan form)

4. Answer the following questions of the affidavit:

a. What is the purpose of the request for a Special Use Permit?

Required as part of C-2 zoning.

ACKNOWLEDGEMENT AND CERTIFICATION: It is hereby acknowledged that the applicant(s) has fully read and completed the above application. It is also understood that in case of cancellation or failure of the owner or his representative to appear at the hearing, I understand that all fees will be forfeited.



Signature of Applicant

Signature of Owner (If different than the applicant)

PLANNING COMMISSION:

The Planning Commission (PC) having reviewed the submitted data do hereby:

() APPROVE () DISAPPROVE the application for the following reasons: _____

If approved, are there conditions? _____

Date

Chairperson

Site Plan Review Checklist

This form and any required site plan **MUST** be completed in full and turned into Flushing Township **30 DAYS BEFORE THE SCHEDULED** Planning Commission meeting date to insure all Commission members have the necessary information:

Date of Next Meeting: _____

Fee Due: _____

Date Paid: _____

Paperwork Due By: _____

Amount Paid: _____

Receipt #: _____

RECEIVED

COMMERCIAL SITE PLAN REVIEW CHECKLIST

JUL 24 2023

CHARTER TOWNSHIP
OF FLUSHING

Name of Applicant: Wolgast Acquisition Corporation

Mailing Address: [REDACTED] S [REDACTED] 04

Property Address: 7029 Mt. Morris Rd. Flushing, MI 48433

Parcel Number: 08-12-200-014

Proposed Use: C-2 Commercial

Existing Zoning: C-2 Commercial

Section 36-1902 Site Plan Review Requirements:

Before any Permit shall be issued, a site plan drawn to a scale of one (1) inch equals twenty (20) feet, and at least two (2) copies of this site plan shall be submitted to the township clerk. **Such site plan drawing shall contain ALL of the following information:**

PLEASE PLACE AN ANSWER IN EVERY BOX UNDER PROPOSED.

ORDINANCE REQUIREMENTS	COMMISSIONERS REVIEW	APPLICANT'S PROPOSAL
(a) Statistical data including: number of dwelling units, size of dwelling units (e.g., one-bedroom, two-bedrooms, and three-bedrooms), if any, and total gross acreage involved. In all other cases, the location, type, horsepower, fuel, dimensions, and other data of all machinery to be used on the proposed site.		Yes
(b) The location of principal and accessory buildings on the lot and the relationship of each structure to the other.		Yes
(c) Vehicular traffic and pedestrian circulation features within and without the site.		No
(d) The location and dimensions of all off-street parking areas including maneuvering lanes, service lanes, off-street loading spaces and other service areas within the development.		Yes
(e) The location, dimensions and proposed use of all on-site recreation areas, if any.		NA
(f) The location of all proposed landscaping, fences or walls.		Yes
(g) The height and dimensions of all structures.		Yes
(h) Front, rear and side elevations of any typical structure proposed for development.		Yes

Site Plan Review Checklist

<p>(i) The location and capacity of private or public water and sanitary services and solid waste disposal facilities servicing the site.</p>		<p>Yes</p>
<p>(j) The locations, dimensions and lighting of all signs.</p>		<p>Yes</p>
<p>(k) The location, intensity and orientation of all lighting.</p>		<p>Yes</p>
<p>(l) A location map indicating the relationship of the site to the surrounding land use for an area of not less than one (1) square mile.</p>		<p>Yes</p>
<p>(m) A physiographic map showing the natural topography, the soil types, and suitability for intended use, natural features such as wood lots, lakes, drains, streams, and ditches, and surface coverage data (such as paved areas and structures) related to storm water runoff characteristics.</p>		<p>Yes</p>
<p>(n) The site plan shall be sealed by a professional engineer, architect, landscape architect or community planner.</p>		<p>Yes</p>
<p>(o) Location and size of interior and exterior areas and structures to be used for storage use, loading/unloading, recycling, or disposal of hazardous substances.</p>		<p>Yes</p>
<p>(p) Location of all underground and above ground storage tanks for such uses as fuel storage, waste oil holding tanks, chemical storage, hazardous waste storage, collection of contaminated storm water or wash water, and all similar uses.</p>		<p>NA</p>

Site Plan Review Checklist

<p>(q) Location of exterior drains, dry wells, catch basins, retention/detention areas, sumps and other facilities designed to collect, store to transport storm water or waste water. The point of discharge for all drains and pipes shall be specified on the site plan.</p>		<p>Yes</p>
<p>(r) Delineation of areas on the site which are known or suspected to be contaminated, together with a report on the status of site cleanup.</p>		<p>NA</p>
<p>(s) Submission of the "Hazardous Substances Reporting Form for Site Plan Review."</p>		<p>NA</p>
<p>(t) Submission of the "State/County Environmental Permits Checklist."</p>		<p>Yes</p>
<p>(u) 100 year floodplain.</p>		<p>Yes</p>
<p>(v) Topographic lines at 1' intervals.</p>		<p>Yes</p>
<p>(w) Proposed and existing utilities including water, sewer, storm water and lighting.</p>		<p>Yes</p>
<p>(x) Driveway location.</p>		<p>Yes</p>
<p>(y) Current zoning of parcel and if the proposed use is not permitted in the district the parcel is zoned, an indication as to the proposed zoning. (Amended by adoption July 25, 2002).</p>		<p>Yes</p>
<p>(z) Statement on the plan as to whether wetlands exist on the site. (Added by adoption July 25, 2002).</p>		<p>Yes</p>
<p>(aa) Easements impacting property.</p>		<p>NA</p>
<p>(bb) Underground utilities present on property.</p>		<p>Yes</p>

NOTE: Review the Flushing Township Code of Ordinances Section 36 Article 19: Site Plan for additional information.

ADDITIONAL COMMENTS:

A parking varlance was granted at the ZBA meeting on 7/17/23.

Signature of Approving Planning Commission Chair

Date Approved

FAMILY DOLLAR NORTH ELMS ROAD

SECTION 12, TOWN 8 NORTH, RANGE 5 EAST
FLUSHING TOWNSHIP, GENESEE COUNTY, MICHIGAN

APPLICANT

WOLGAST CORPORATION
4835 TOWNE CENTER ROAD
SUITE 203
SAGINAW, MI 48604

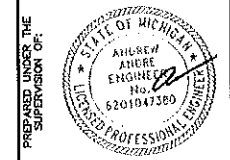
SITE PLANS



LOCATION MAP
SCALE: 1" = 300' +/-

CIVIL ENGINEER

D&M SITE, INC
401 BALSAM STREET
P.O. BOX 159
CARROLLTON, MI 48724



FILE: 2023-141	PROJECT MGR: JON	DESIGNED BY: ZAA	DRAWN BY: ZAA	CHECKED BY: NO SCALE	SHEET: OF
----------------	------------------	------------------	---------------	----------------------	-----------

WOLGAST CORPORATION
4835 TOWNE CENTER ROAD, STE 203
SAGINAW, MICHIGAN 48604

NORTH ELMS ROAD
SECTION 12, T8N-R5E
FLUSHING TOWNSHIP
GENESEE COUNTY, MICHIGAN
COVER SHEET

D&M SITE, INC.
Surveying, Inspection, Testing, Engineering
401 BALSAM STREET, PO BOX 159, CARROLLTON, MICHIGAN 48724
PHONE: (989) 752-4500 FAX: (989) 752-4600

C1.0
2023.141

STANDARD LEGEND		
DESCRIPTION	PROPOSED	EXISTING
STORM SEWER	— 12" —	— 12" —
SANITARY SEWER	— S —	— S —
WATER	— W —	— W —
GAS LINE	— G —	— G —
ELECTRIC LINE	— E —	— E —
TELEPHONE LINE	— T —	— T —
MANHOLE	●	○
CATCH BASIN	○ □	○ □
ENDSECTION		⊓
FIRE HYDRANT	⋈	⋈
GATE VALVE & WELL	⊕	⊕
UTILITY POLE	⊕	⊕
UTILITY RISER	⊓	⊓
SIGN	—	—
LIGHT POLE	⊕	⊕
CURB & OUTLET	—	—
FENCE	—	—
SILT FENCE	—	—
TREE - DEODOUOUS	AS NOTED ON PLANS	
TREE LINE	—	—
SPOT ELEVATION	+ 100.00	+ 100.00
CONTOUR LINE	100	100
SECTION CORNER		⊕
FOUND PROPERTY IRON		○
SET PROPERTY IRON		○
GAS METER		⊕
ELECTRICAL METER		⊕
TELEPHONE RISER		⊕
MAILBOX		⊕
SOIL BORING LOCATION		⊕

PLAN DISTRIBUTION

FLUSHING TOWNSHIP	06/16/23	SITE PLAN APPROVAL
	09/05/23	SITE PLAN APPROVAL
GENESEE COUNTY-SWM	06/16/23	STORM DRAINAGE APPROVAL
GENESEE COUNTY - WWS	06/16/23	IPP
	06/16/23	WATER & SEWER SITE PLAN
	06/16/23	SESC
GENESEE COUNTY ROAD COMMISSION	06/16/23	RIGHT-OF-WAY

DRAWING INDEX

- C1.0 COVER SHEET
- C1.1 GCDC NOTES
- C2.0 TOPOGRAPHIC SURVEY
- C3.0 SITE PLAN
- C4.0 GRADING PLAN
- C4.1 EROSION CONTROL PLAN
- C4.2 EROSION CONTROL DETAILS
- C5.0 UTILITY PLAN
- C5.1 STORM MANAGEMENT CALCULATIONS
- C6.0 SITE DETAILS

GENESEE COUNTY DRAIN COMMISSION - WWS
STANDARD CONSTRUCTION NOTES
PRESSURE PIPE CONSTRUCTION
SANITARY SEWER CONSTRUCTION

BUILDING PLANS (BY WOLGAST)
A1.00 EXTERIOR ELEVATIONS

GCDC-WWS UTILITY STATEMENT
EXISTING UTILITIES WERE NOT EXPOSED FOR VERIFICATION OF LOCATION AND ELEVATION DURING INITIAL FIELD INVESTIGATION. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND REPORT ALL FINDINGS TO THE ENGINEER.

GCDC-WWS NOTE
THIS PROJECT HAS BEEN DESIGNED IMPLEMENTING THE LATEST GCDC-WWS DESIGN SPECIFICATIONS. CAREFULLY REVIEW THE NOTES, DETAILS, AND DESIGN PRIOR TO SUBMITTING A BID. FULL COMPLIANCE WITH THE NEW STANDARDS WILL BE REQUIRED.

GCDC-WWS UTILITY LOCATION NOTE
THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. EXISTING UTILITIES WERE NOT EXPOSED FOR VERIFICATION OF LOCATION AND ELEVATIONS. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.

EASEMENT STATEMENT
ALL PUBLIC SANITARY SEWERS AND PUBLIC WATERMAINS SHALL HAVE AN EASEMENT GRANTED TO GCDC-WWS AND/OR LOCAL MUNICIPALITY FOR MAINTENANCE, REPAIR AND/OR REPLACEMENT. FOR CONDOMINIUMS, THE EASEMENTS SHALL BE RECORDED ON THE MASTER DEED DOCUMENT AND FOR A SUBDIVISION, THE EASEMENT SHALL BE NOTED ON THE FINAL RECORDED PLAT. ALL OTHERS SHALL BE RECORDED ON THE NEW STANDARD GCDC-WWS EASEMENT FORM.

UTILITY NOTE
THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OF COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIGG (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

FLOODPLAIN INFORMATION
FLUSHING TOWNSHIP
GENESEE COUNTY, MICHIGAN
MAP NUMBER: 26049C0152D
EFFECTIVE DATE: 09-25-2009
FLOOD ZONE RSL: X (PER FIRN)
AREA OUTSIDE OF MINIMAL FLOOD HAZARD

ZONING INFORMATION
ZONE ROAD- C-2 (COMMERCIAL GENERAL)
RETRACTOR:
FRONT: - 50'
REAR: - 50'
SIDE: - 50'

UTILITY CONTACTS

TELEPHONE ATAF 502 BEACH ST FLINT, MICHIGAN 48903 (810) 768-0107	GAS AND ELECTRIC CONSUMERS ENERGY 3201 E COURT ST. FLINT, MICHIGAN 48908 (810) 477-5050
ZONING FLUSHING TOWNSHIP ZONING & PLANNING 6324 N. SEYMOUR RD FLUSHING, MICHIGAN 48433 (810) 859-0800	WATER/SEWER GENESEE WATER AND SEWER SERVICES 1101 S. SAGINAW ST. FLINT, MICHIGAN 48907 (810) 766-7015

PARCEL DESCRIPTION
PER QUIT CLAIM DEED 202007100344502
A POL BEO AT NE COR OF SEC 11 S 89 DEG 55 MIN 47 SEC
W 449.88 FT TH S 0 DEG 00 MIN 50 SEC W 249.84 FT & S
0 DEG 04 MIN 15 SEC W 315.21 FT TH N 89 DEG 22 MIN 41
SEC E 200 FT TH N 110.49 FT TH E 280.04 FT TH N 450 FT
TO POB SEC 12 T8N-R5E 5.7 AC

BENCHMARKS

B.M. #1 - ARROW ON HYD AT THE NW COR OF PROP. ON S. SIDE OF MT MORRIS RD.
NAVD 88 ELEV. 715.58

B.M. #2 - CHISELED "X" ON NW COR OF CONC VAULT NEAR THE NE COR OF PROP. ON S. SIDE OF MT. MORRIS RD.
NAVD 88 ELEV. 715.04



THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.

DRAWN - 12-28-24

D AND M SITE

BY NUMBER: ALL DATA RECORDS

GCDC SANITARY AND WATER NOTES

- A. SANITARY SEWER SADDLE TAPS SHALL BE MADE BY GCDC-WWS PERSONNEL... B. THE CONTRACTOR SHALL VERIFY THE SANITARY SEWER DEPTH... C. SANITARY SERVICE LEADS SHALL BE ENCASED IN 6" GA CRUSHED Limestone... D. WATER SERVICE CONNECTION AND CURB BOX SHALL BE INSTALLED... E. ALL WATER SERVICE LEADS SHALL BE "K" COPPER... F. ALL WATERMAIN PRESSURE TAPS AND CUT IN VALVES 4" AND LARGER... G. SAND FILL UNDER ANY FLOOR SLAB, YALKS, PAVED AREAS, ETC... H. ALL EXISTING UTILITIES SERVING THE PROPERTY SHALL BE PROPERLY TERMINATED... I. FOR ANY DEMOLITION WORK, PLEASE SEE DEMOLITION NOTES... J. VERIFY EXACT LOCATION OF UNDERGROUND UTILITIES... K. CONTRACTOR IS TO ADJUST ANY UTILITY ELEMENT... L. THE WATER SUPPLY FOR ALL COMMERCIAL AND INDUSTRIAL BUILDINGS... M. ALL ON-SITE WATER SERVICE SHALL MEET THE REQUIREMENTS... N. THE CONTRACTOR SHALL NOTIFY MISS DND... O. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, COUNTY, AND STATE... P. THE CONTRACTOR/DEVELOPER SHALL PAY FOR AND OBTAIN ALL PERMITS... Q. THE CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION LINES AND GRADE... R. THE CONTRACTOR SHALL CONTROL NOISE... S. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING UP... T. COMMERCIAL BUILDINGS SHALL USE A 6" SANITARY RISER... U. FOR COMMERCIAL ESTABLISHMENTS THAT GENERATE GRIT OR GREASE... V. THE MINIMUM SLOPE FOR A COMMERCIAL LEAD IS 1" OF FALL PER 100 FEET... W. ALL SANITARY SEWER RISERS SHALL BE 6DR-26 PVC... X. EACH PARCEL OF LAND SHALL HAVE AN INDIVIDUAL RISER.

GCDC 10 STANDARD SITE PLAN NOTES

- A. EXTENSION OF PUBLIC UTILITIES: ALL PUBLIC SANITARY SEWER AND/OR WATERMAIN SHALL BE EXTENDED TO THE FURTHEST LIMITS... B. WATERMAIN LOOPING: ALL PUBLIC WATERMAINS SHALL BE LOOPED... C. INDUSTRIAL PRE-TREATMENT PROGRAM (IPP): THIS PERMIT IS REQUIRED... D. SOIL EROSION: THE DEVELOPER SHALL SUBMIT A DETAILED SOIL EROSION... E. FLOOD PLAIN OR WETLAND CONSTRUCTION... F. NPDES STORM WATER DISCHARGE PERMIT... G. GENESSEE COUNTY PERMIT TO CONSTRUCT A PUBLIC UTILITY... H. GENESSEE COUNTY ROAD COMMISSION PERMIT... I. MUNICIPALITY SANITARY SEWER AND WATER PERMIT... J. STATE CONSTRUCTION PERMITS: THE SANITARY SEWER AND WATERMAIN CONSTRUCTION PERMITS FROM THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY SHALL BE SUBMITTED TO THE MDEQ AFTER APPROVAL OF GCDC-WWS.

GCDC DEMOLITION NOTES

- A. PRIOR TO BEGGING ANY OF THIS WORK THE CONTRACTOR SHALL NOTIFY GCDC-WWS... B. ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES... C. THE CONTRACTOR SHALL REMOVE AND CLEAR ALL TREES, BRUSH, FENCES, BUILDINGS, CURBS, AND ASPHALT... D. ALL DEMOLITION MATERIAL SHALL BE PROPERLY REMOVED... E. THE CONTRACTOR SHALL DEMOLISH AND REMOVE ANY ITEMS REMAINING FROM THE EXISTING BUILDING... F. BACKFILL EXCAVATED AREAS WITH CLEAN GRANULAR FILL... G. AT THE CONCLUSION OF THE DEMOLITION OPERATIONS...

GCDC-WWS UTILITY STATEMENT

EXISTING UTILITIES WERE NOT EXPOSED FOR VERIFICATION OF LOCATION AND ELEVATION DURING INITIAL FIELD INVESTIGATION. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND REPORT ALL FINDINGS TO THE ENGINEER.

GCDC-WWS UTILITY LOCATION NOTE

THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. EXISTING UTILITIES WERE NOT EXPOSED FOR VERIFICATION OF LOCATION AND ELEVATIONS. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.

GCDC-WWS NOTE

THIS PROJECT HAS BEEN DESIGNED IMPLEMENTING THE LATEST GCDC-WWS DESIGN SPECIFICATIONS. CAREFULLY REVIEW THE NOTES, DETAILS, AND DESIGN PRIOR TO SUBMITTING A BID. FULL COMPLIANCE WITH THE NEW STANDARDS WILL BE REQUIRED.

EASEMENT STATEMENT

ALL PUBLIC SANITARY SEWERS AND PUBLIC WATERMAINS SHALL HAVE AN EASEMENT GRANTED TO GCDC-WWS AND/OR LOCAL MUNICIPALITY FOR MAINTENANCE, REPAIR AND/OR REPLACEMENT. FOR CONDOMINIUMS, THE EASEMENTS SHALL BE RECORDED ON THE MASTER DEED DOCUMENT AND FOR A SUBDIVISION, THE EASEMENT SHALL BE NOTED ON THE FINAL RECORDED PLAT. ALL OTHERS SHALL BE RECORDED ON THE NEW STANDARD GCDC-WWS EASEMENT FORM.

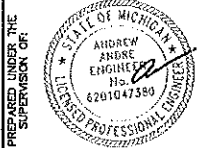
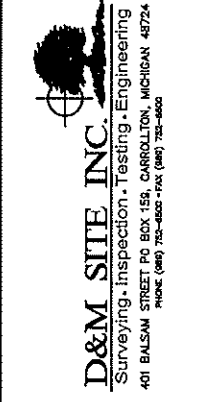


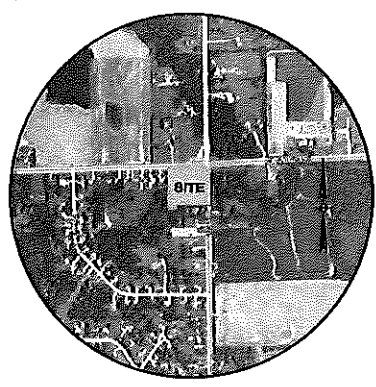
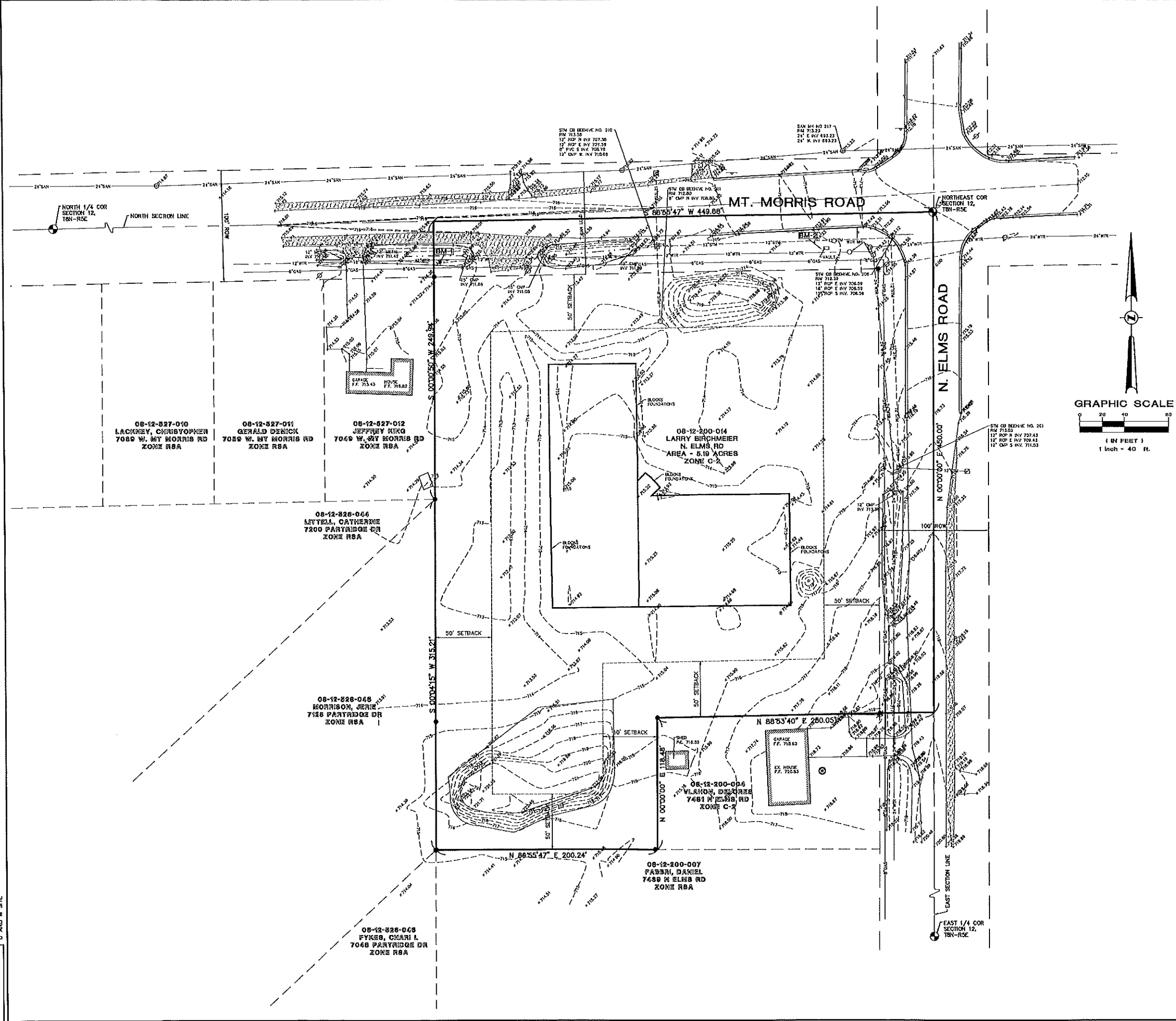
Table with columns for PROJECT LOG, FILE, PROJECT MGR, DESIGNER, DRAWN BY, CHECKED BY, SCALE, SHEET.

WOLGAST CORPORATION
4835 TOWNE CENTER ROAD, STE 203
SAGINAW, MICHIGAN 48804

NORTH ELMS ROAD
SECTION 12, TOWNSHIP 11 N, RANGE 11 E
SAGINAW TOWNSHIP, GENESSEE COUNTY, MICHIGAN
GCDC NOTES

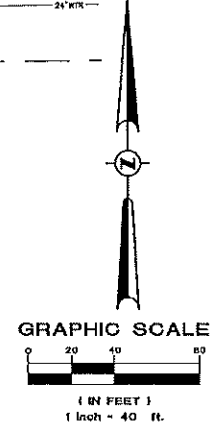


D AND M SITE
 NOT TO SCALE
 PREPARED UNDER THE SUPERVISION OF
 PROJECT LOG
 FILE: 2023-141
 PROJECT MOR: JDM
 DESIGNED BY: ZAA
 DRAWN BY: ZAA
 CHECKED BY:
 SCALE: 1"=40'
 SHEETS: 01 OF



LOCATION MAP
NOT TO SCALE

SURVEY LEGEND	
●	MONUMENT / SECTION CORNER
○	FOUND PROPERTY IRON
○	SET PROPERTY IRON
□	EXISTING CATCHBASIN
○	EXISTING MANHOLE/CATCHBASIN
○	EXISTING MANHOLE
○	EXISTING HYDRANT
○	EXISTING VALVE
—S—S—	EXISTING SANITARY SEWER
—S—S—	EXISTING STORM SEWER
—S—S—	EXISTING WATERMAIN
—S—S—	EXISTING FENCE LINE
—S—S—	EXISTING UNDERGROUND ELECTRIC LINE
—S—S—	EXISTING UNDERGROUND GAS LINE
—S—S—	EXISTING UNDERGROUND TELEPHONE LINE
—S—S—	EXISTING CENTERLINE
—S—S—	EXISTING OVERHEAD ELECTRICAL WIRES
—S—S—	EXISTING MAILBOX / NEWSPAPER BOX
—S—S—	EXISTING SIGN
—S—S—	EXISTING DECIDUOUS TREES
—S—S—	EXISTING CONIFEROUS TREES
—S—S—	EXISTING UTILITY POWER POLE
—S—S—	EXISTING TELEPHONE RISER



ZONING INFORMATION	
ZONE ROAD- O-2 (COMMERCIAL GENERAL)	
SETBACKS:	
FRONT: - 50'	
REAR: - 50'	
SIDE: - 50'	

UTILITY CONTACTS	
TELEPHONE	GAS AND ELECTRIC
AT&T 502 BEACH ST FLINT, MICHIGAN 48903 (810) 768-0107	CONSUMERS ENERGY 3201 E COURT ST. FLINT, MICHIGAN 48906 (810) 477-5050
ZONING	WATER/SEWER
FLUSHING TOWNSHIP ZONING & PLANNING 6324 N. SEYMOUR RD FLUSHING, MICHIGAN 48433 (810) 859-0800	GENESSEE WATER AND SEWER SERVICES 1101 S. SAGINAW ST. FLINT, MICHIGAN 48907 (810) 766-7015

PARCEL DESCRIPTION
PER QUIT CLAIM DEED 20200710004502 A PLOT BEG AT E. COR. OF SEC TH S 88 DEG 55 MIN 47 SEC W 449.88 FT TH S O DEG 00 MIN 50 SEC W 249.94 FT & S O DEG 04 MIN 15 SEC W 315.21 FT TH N 89 DEG 22 MIN 41 SEC E 200 FT TH N 118.48 FT TH E 250.04 FT TH N 450 FT TO P.O.B. SEC 12 T16N-R5E S.7 AC

BENCHMARKS
BM #1 - ARROW ON LTD AT THE NW COR. OF PROP. ON S. SIDE OF MT MORRIS RD. NAVD 88 ELEV. 715.58
BM #2 - CHECKED "X" ON NW COR. OF CONC VAULT NEAR THE NE. COR. OF PROP. ON S. SIDE OF MT. MORRIS RD NAVD 88 ELEV. 715.04

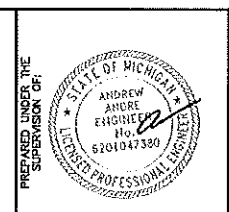
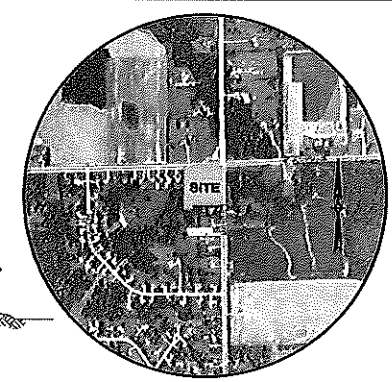
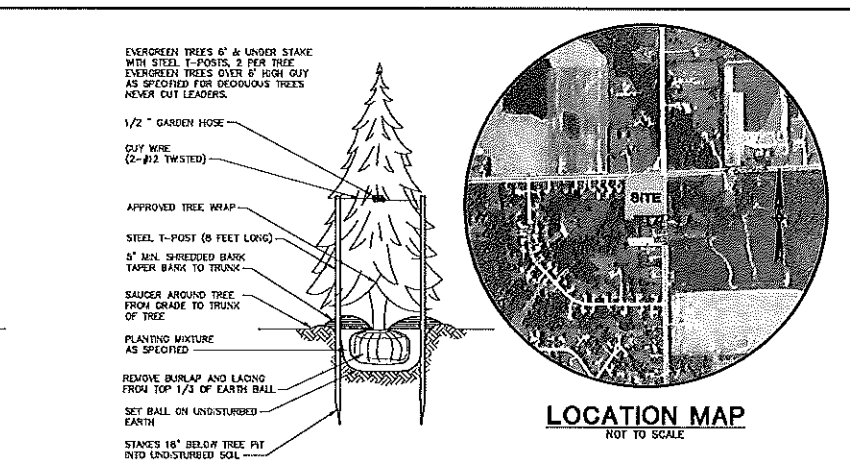
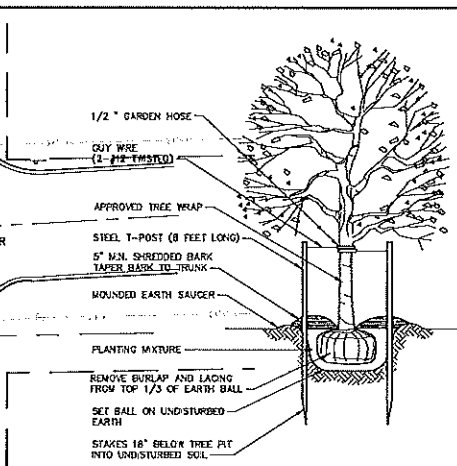
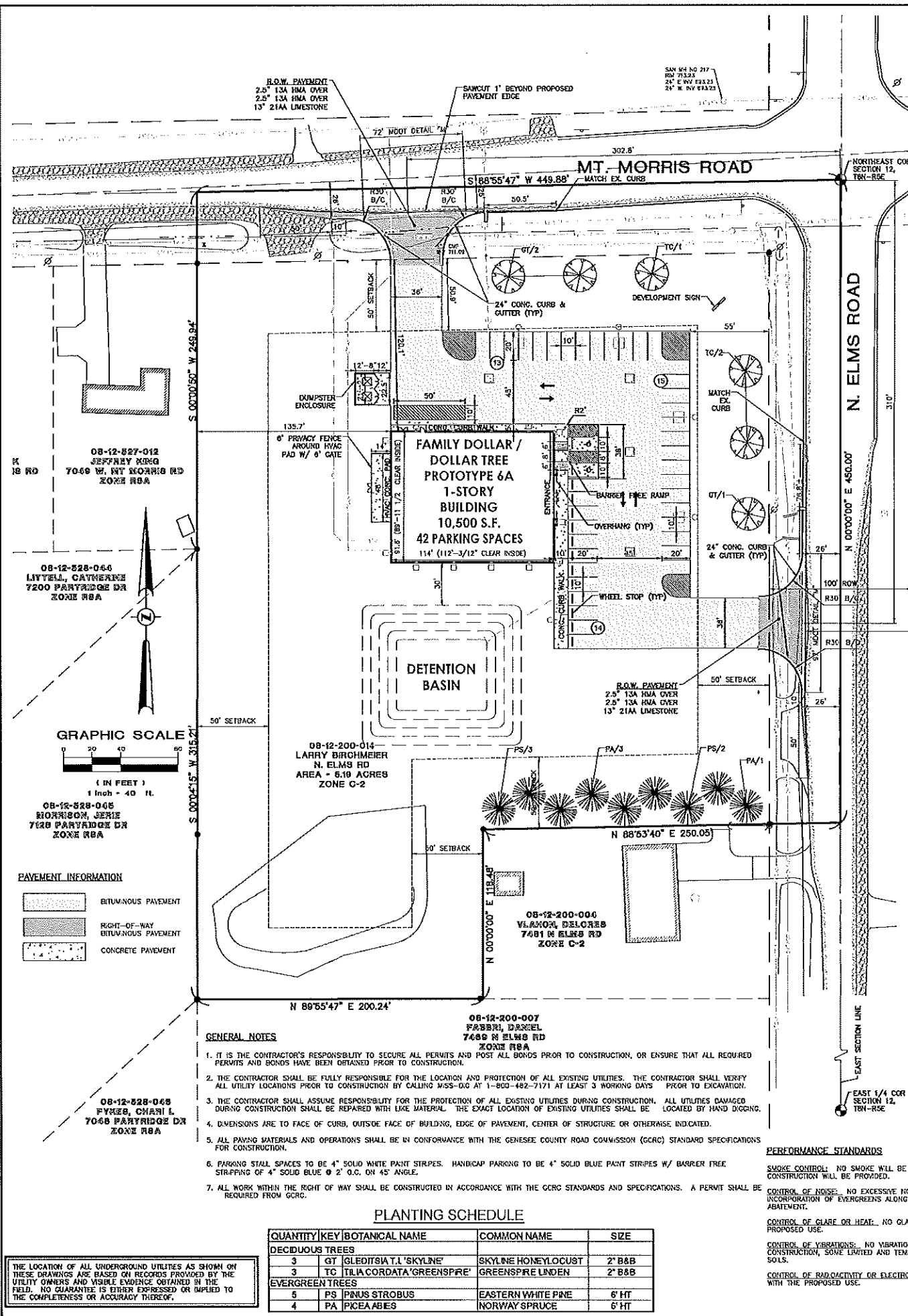
FLOODPLAIN INFORMATION
FLUSHING TOWNSHIP GENESSEE COUNTY, MICHIGAN MAP NUMBER: 2604900152D EFFECTIVE DATE: 09-25-2009 FLOOD ZONE RISK: N (PER FIRM) AREA OUTSIDE OF MINIMAL FLOOD HAZARD

UTILITY NOTE

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OF COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DWP (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

WOLGAST CORPORATION	
4886 TOWNE CENTER ROAD, STE 203 SAGINAW, MICHIGAN 48804	
NORTH ELMS ROAD	TOPOGRAPHIC SURVEY
SECTION 12, T16N-R5E FLUSHING TOWNSHIP GENESSEE COUNTY, MICHIGAN	
D&M SITE INC. Surveying - Inspection - Testing - Engineering 401 BALSAM STREET PO BOX 156, CARROLLTON, MICHIGAN 48724 PHONE (810) 752-8000 • FAX (810) 752-8000	
C2.0	
2023.141	

NOT REPRODUCED WITHOUT PERMISSION OF D. AND M. SITE
 CADDIS - 10-28-2023



PROJECT LOG

DATE	BY	DESCRIPTION
08/15/23	DA	PREPARED FOR THE SUBMITTER
08/15/23	DA	PROJECT LOG

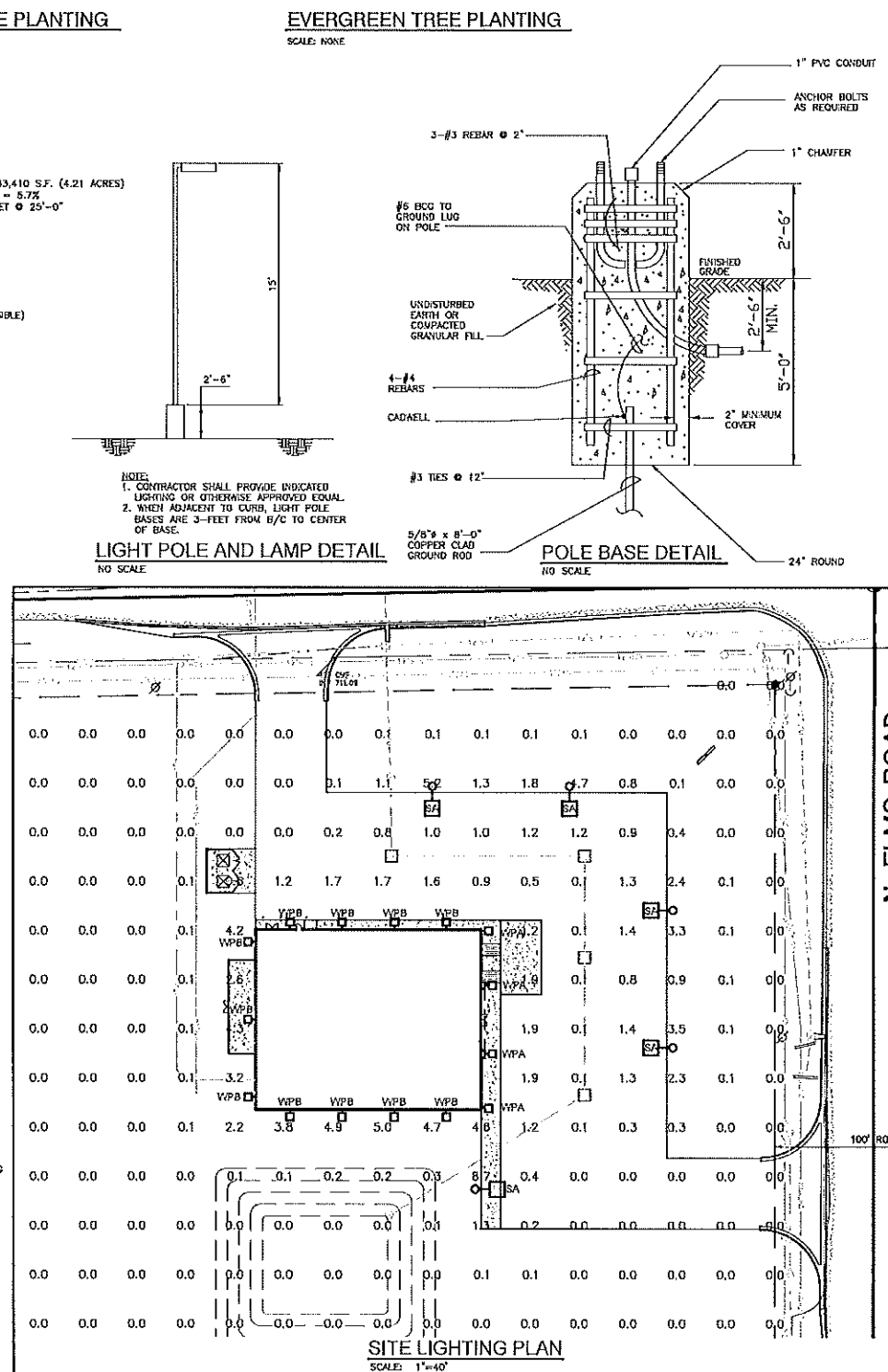
FILE: 2023-141
 PROJECT NO.: 08-12-200-014
 DESIGNED BY: JDA
 DRAWN BY: ZAA
 CHECKED BY: JAA
 SCALE: 1"=40'
 SHEET: 05

WOLGAST CORPORATION
 4835 TOWNE CENTER ROAD, STE 203
 SAGINAW, MICHIGAN 48804

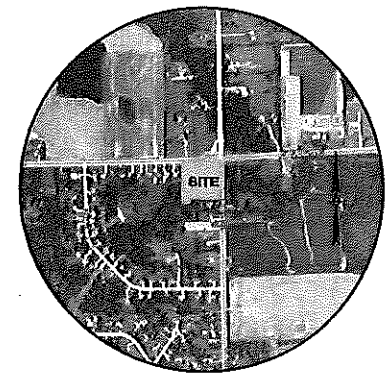
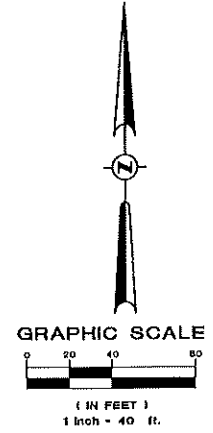
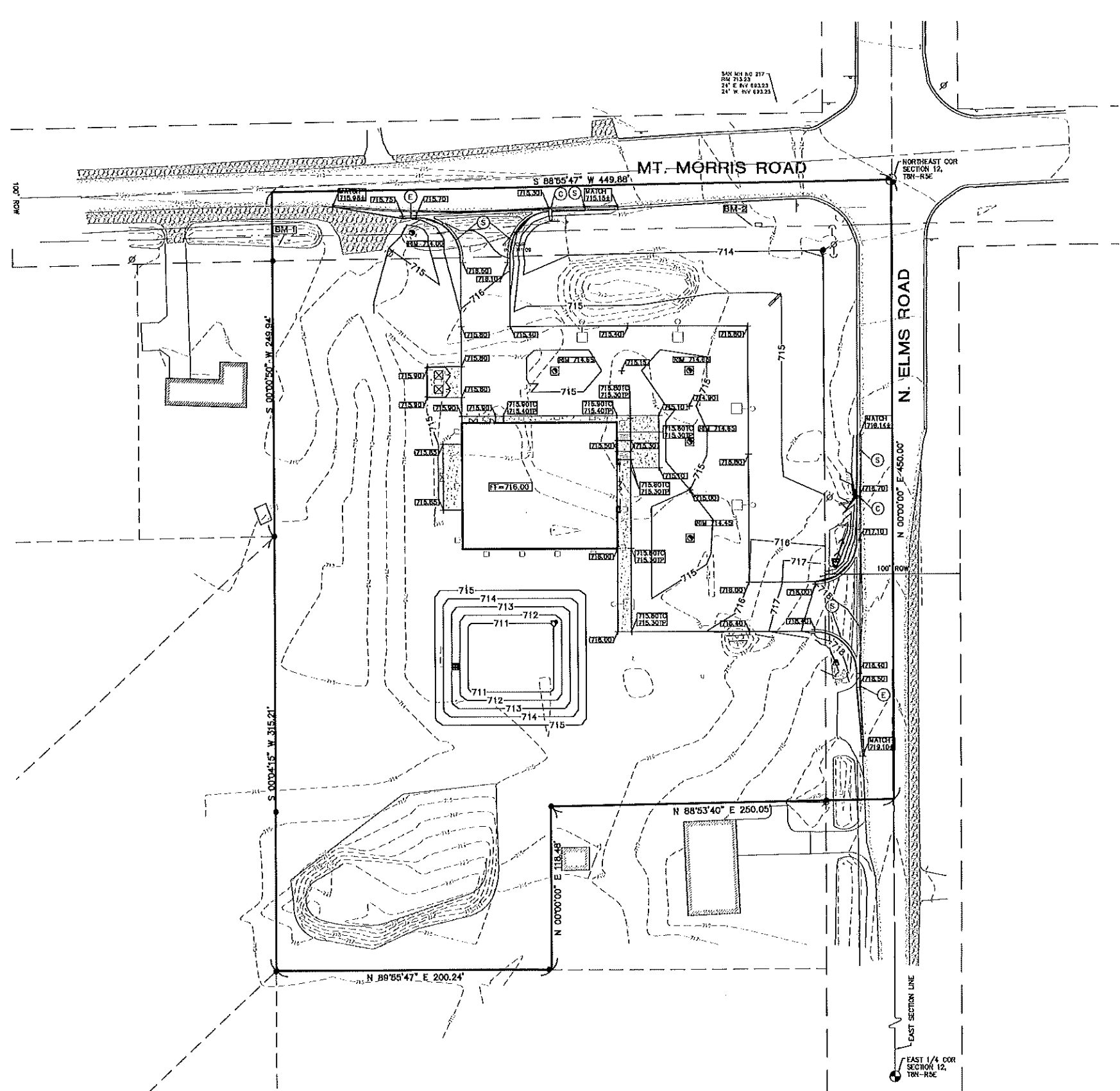
NORTH ELMS ROAD
 SECTION 12, T1N-R5E
 TOWNSHIP OF WILSON
 GENESSEE COUNTY, MICHIGAN

D&M SITE INC.
 Surveying • Inspection • Testing • Engineering
 401 BALSAM STREET PO BOX 150, CARROLLTON, MICHIGAN 48724
 PHONE (989) 742-4884 FAX (989) 742-4884

C3.0
 2023.141



D AND M SITE



LOCATION MAP
NOT TO SCALE

- GRADING NOTES**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLUSHING TOWNSHIP AND MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
 - SPOT ELEVATIONS INDICATE GUTTER GRADE UNLESS OTHERWISE INDICATED. REFER TO CONCRETE CURB & GUTTER DETAIL ON SHEET C6.0.
TC = TOP OF CURB
TP = TOP OF PAVEMENT

BENCHMARKS	
B.M. #1 - ARROW ON HYD AT THE NW COR OF PROP. ON S. SIDE OF MT MORRIS RD.	NAVD 88 ELEV. 715.55
B.M. #2 - CHISELED "X" ON HWY COR OF CONC VAULT NEAR THE NE COR OF PROP. ON S. SIDE OF MT. MORRIS RD	NAVD 88 ELEV. 715.04

UTILITY CONTACTS	
TELEPHONE AT&T 502 BEACH ST FLINT, MICHIGAN 48503 (810) 768-0107	GAS AND ELECTRIC CONSUMERS ENERGY 3201 E COURT ST. FLINT, MICHIGAN 48506 (810) 477-5050
ZONING FLUSHING TOWNSHIP ZONING & PLANNING 6524 N. SERRAVALLO RD FLUSHING, MICHIGAN 48433 (810) 859-0800	WATER/SEWER GENESSEE WATER AND SEWER SERVICES 1101 S. SAGINAW ST. FLINT, MICHIGAN 48507 (810) 766-7015

GENESSEE WATER AND SEWER SERVICES
1101 S. SAGINAW ST.
FLINT, MICHIGAN 48507
(810) 766-7015

UTILITY NOTE

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OF COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIGGO (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

PREPARED UNDER THE SUPERVISION OF:

STATE OF MICHIGAN
ANDREW ANDREWS
ENGINEER
No. 6201047380
LICENSED PROFESSIONAL ENGINEER

FILE: 2023-141	PROJECT NO: 2023-141	DESIGNED BY: ZAA	DRAWN BY: ZAA	CHECKED BY:	SCALE: 1"=40'	SHEET: 01
----------------	----------------------	------------------	---------------	-------------	---------------	-----------

WOLGAST CORPORATION
4835 TOWNE CENTER ROAD, STE 203
SAGINAW, MICHIGAN 48804

NORTH ELMs ROAD
SECTION 12, TOWNSHIP 12N-35E
FLUSHING TOWNSHIP
GENESSEE COUNTY, MICHIGAN

GRADING PLAN

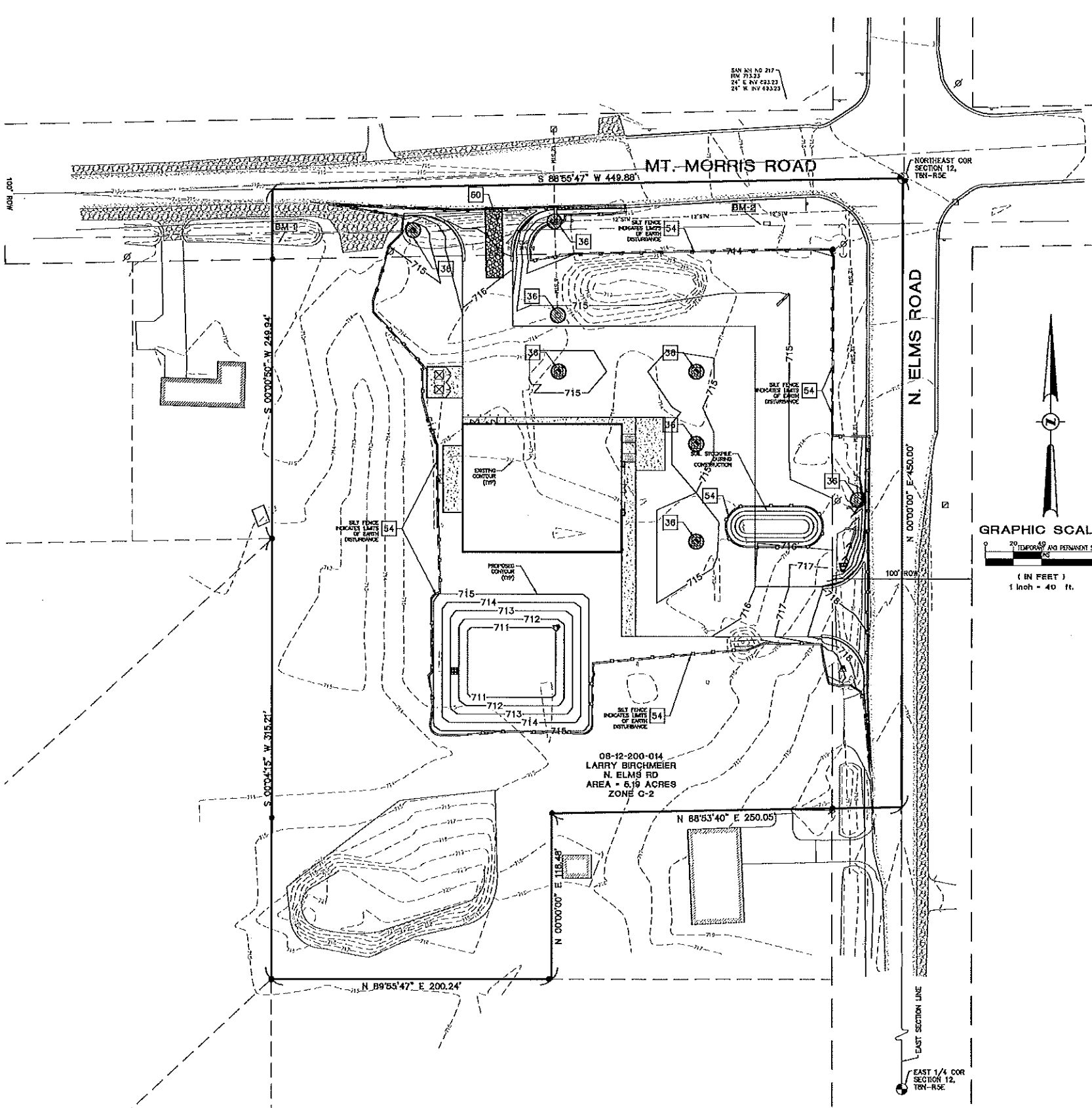
D&M SITE INC.
Surveying • Inspection • Testing • Engineering
401 BALSAM STREET PO BOX 195, CARROLLTON, MICHIGAN 48724
PHONE (989) 752-6500 • FAX (989) 752-4800

C4.0

2023.141

SCALE - 1"=40'

NOT FOR CONSTRUCTION. ALL NORTH REFERENCES TO D AND M SITE.



UTILITY NOTE

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIGG (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

PARCEL DESCRIPTION

PER QURT CLAIM DEED 202007100044592
 A P.O. BEG AT THE COR OF SEC 12 S 89 DEG 55 MIN 47 SEC W 449.88 FT TH S 0 DEG 00 MIN 50 SEC W 249.94 FT & S 0 DEG 04 MIN 15 SEC W 316.21 FT TH N 89 DEG 22 MIN 41 SEC E 200 FT TO N 118.48 FT TH E 250.04 FT TH N 450 FT TO POB SEC 12 T8N-R5E 5.7 AC

SOIL EROSION CONTROL MEASURES

2	SELCTIVE GRADING & SWOOP	WATER CAN BE DIVERTED TO MINIMIZE EROSION FLATTER SLOPES EASE EROSION PROBLEMS
4	VEGETATIVE STABILIZATION	
54	SILT FENCE	USES RECYCLED FABRIC AND POSTS OR ROLLS. EASY TO CONSTRUCT AND LOCATE AS NECESSARY.
60	PERMANENT DRAIN CONSTRUCTION ENTRANCE	STABILIZES SOIL SURFACES, TRAP MAINTAINING EROSION MARKERS CONSTRUCTION TRAFFIC IN ADVISE BEHIND MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS

SOIL CONDITIONS

USDA NRCS WEB SOIL SURVEY
 GENESSEE COUNTY, MICHIGAN (10149)
 Chromic CONVEYER LOAM, 0 TO 3 PERCENT SLOPES

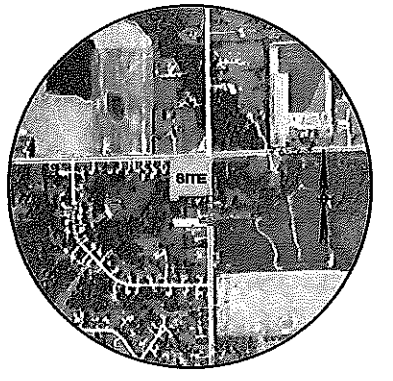
RESPONSIBLE PARTY

WOLGAST CORPORATION
 4835 TOWNE CENTER ROAD
 SUITE 203
 SAGINAW, MI 48604
 PH 989-709-9120

- SOIL EROSION & SEDIMENTATION CONTROL NOTES**
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE AUTHORITY WITH JURISDICTION STANDARDS AND SPECIFICATIONS.
 - DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES. ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
 - ANY EROSION OR SEDIMENT FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MANMADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
 - CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AS REQUIRED AND AS DIRECTED ON THESE PLANS. CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES AND OTHER EARTH CHANGES HAVE BEEN ESTABLISHED.
 - AFTER ALL TEMPORARY EROSION CONTROL MEASURES HAVE BEEN INSTALLED, THE CONTRACTOR SHALL CONTACT AUTHORITY WITH JURISDICTION FOR AN INSTALLATION INSPECTION.
 - DUST CONTROL SHALL BE EXERCISED AT ALL TIMES WITHIN THE PROJECT BY THE CONTRACTOR.
 - ALL MUD, DIRT AND DEBRIS TRACKED ONTO EXISTING ROADS SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR NO LESS THAN ON A DAILY BASIS. ALL MUD, DIRT AND DEBRIS TRACKED OR SPILLED ONTO PAVED SURFACES WITHIN THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
 - PERMANENT EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OR EARTH MOVING ACTIVITY HAS BEEN COMPLETED. A FINAL INSPECTION SHALL BE SCHEDULED BY THE CONTRACTOR.
 - GCDC SHALL INSPECT ALL SOIL EROSION CONTROL MEASURES. UPON THEIR DIRECTION, ADDITIONAL MEASURES SHALL BE CONSTRUCTED AND MAINTENANCE WORK SHALL BE PERFORMED TO ENSURE COMPLIANCE WITH ALL PERMIT REQUIREMENTS.

SOIL EROSION & SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

CONSTRUCTION SEQUENCE	SEP 2023	OCT	NOV	DEC	JAN 2024	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TEMPORARY EROSION CONTROL MEASURES	[Bar chart showing duration]												
STRIP & STOCKPILE TOPSOIL / ROUGH GRADE	[Bar chart showing duration]												
STORM SYSTEM / DETENTION	[Bar chart showing duration]												
FOUNDATION / BLDG. CONSTRUCTION	[Bar chart showing duration]												
INSTALL WATER, SANITARY & FRANCHISE UTILITIES	[Bar chart showing duration]												
SITE CONSTRUCTION & PAVEMENT	[Bar chart showing duration]												
PERMANENT EROSION CONTROL MEASURES	[Bar chart showing duration]												
FINISH GRADING	[Bar chart showing duration]												
LANDSCAPING	[Bar chart showing duration]												



LOCATION MAP
 NOT TO SCALE

ULTIMATE DRAINAGE OUTLET
 CENTRAL DRAIN LOCATED 320' EA TO THE EAST

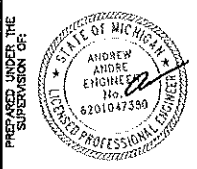
SESC LEGEND

SOIL FENCE

UNITS OF EARTH DISTURBANCE

SOIL EROSION CONTROL
 DISTURBED AREA = 2.3± ACRES
 NO NPDES N.O.C. PERMIT REQUIRED
 AFTER RECEIPT OF SESC PERMIT FROM GCDC

- MAINTENANCE NOTES**
- SOIL STOCKPILES**
 PERIODIC INSPECTIONS SHOULD BE DONE TO ENSURE EXCESSIVE EROSION HAS NOT OCCURRED. IF RUNOFF OR WIND EROSION HAS OCCURRED, REDUCE THE SIDE SLOPES OF THE STOCKPILE OR RE-STABILIZE THE STOCKPILE BY PROVIDING TEMPORARY SEEDING.
 - WHEN FILTER FENCING IS USED AROUND A SPOIL PILE, PERIODIC CHECKS SHOULD BE MADE TO ENSURE THAT PILING HAS NOT OCCURRED UNDER THE FENCING, AND TO ENSURE THE FENCE HAS NOT COLLAPSED DUE TO SOIL SLUMPAGE OR ACCESS BY CONSTRUCTION EQUIPMENT. REPAIR ANY DAMAGED FENCING IMMEDIATELY.**
 - BERMS AT THE BASE OF THE SPOIL PILE WHICH BECOME DAMAGED SHOULD BE REPLACED.**
 - DUST CONTROL**
 TO PREVENT DUST FROM BECOMING A PUBLIC NUISANCE AND CAUSING OFF-SITE DAMAGES, DUST CONTROL SHOULD BE ONGOING DURING EARTH CHANGE ACTIVITIES.
 - SILT FENCE**
 SILT FENCES SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND SEVERAL TIMES DURING PROLONGED RAINFALLS.
 - IF THE FENCE IS SAGGING OR THE SOIL HAS REACHED ONE HALF (1/2) THE HEIGHT OF THE FABRIC, THE SOIL BEHIND THE FABRIC MUST BE REMOVED AND DISPOSED OF IN A STABLE UPLAND SITE. THE SOIL CAN BE ADDED TO THE SOIL STOCKPILE.**
 - IF THE FABRIC IS BEING UNDERCUT (I.E. IF WATER IS SEEPING UNDER THE FENCE), THE FENCE SHOULD BE REMOVED AND REINSTALLED FOLLOWING THE PROCEDURES GIVEN ABOVE.**
 - FABRIC WHICH DECOMPOSES OR OTHERWISE BECOMES INEFFECTIVE SHOULD BE REMOVED AND REPLACED WITH NEW FILTER FABRIC IMMEDIATELY.**
 - SILT FENCES SHOULD BE REMOVED ONCE VEGETATION IS WELL ESTABLISHED AND THE UP-SLOPE AREA IS FULLY STABILIZED.**
 - SEEDING**
 NEWLY SEEDING AREAS NEED TO BE INSPECTED FREQUENTLY FOR THE FIRST FEW MONTHS TO ENSURE THE GRASS IS GROWING. IF THE SEEDING AREA IS DAMAGED DUE TO RUNOFF, ADDITIONAL STORMWATER MEASURES MAY BE NEEDED. SPOT SEEDING CAN BE DONE ON SMALL AREAS TO FILL IN BARE SPOTS WHERE GRASS DIDNT GROW PROPERLY.
 - MULCHING**
 MULCHED AREAS SHOULD BE CHECKED FOLLOWING EACH RAIN TO ENSURE THE MULCH IS STAYING IN PLACE. ADDITIONAL TACKING MATERIALS OR NETTING MAY NEED TO BE APPLIED TO HOLD THE MULCH IN PLACE.
 - CONSTRUCTION ENTRANCE**
 PROPER MAINTENANCE MAY INCLUDE ADDING ADDITIONAL LAYERS OF STONE WHEN THE ORIGINAL STONE BECOMES COVERED WITH MUD. AFTER EACH STORM EVENT, INSPECT THE ROAD FOR EROSION AND MAKE ANY NECESSARY REPAIRS. ALL SEDIMENT DROPPED OR ERODED ONTO PUBLIC RIGHT-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY SHEEPING.



PROJECT LOG

DATE	BY	REVISIONS

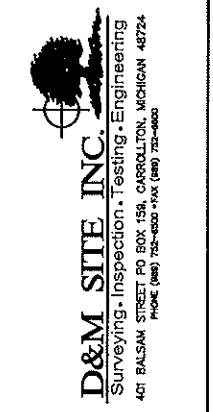
FILE: 2023-141
 PROJECT NO: 08-12-200-014
 DESIGNED BY: ZIA
 DRAWN BY: ZIA
 CHECKED BY: ZIA
 SCALE: 1"=40'
 SHEET: 01 OF 01

WOLGAST CORPORATION
 4835 TOWNE CENTER ROAD, STE 203
 SAGINAW, MICHIGAN 48604

NORTH ELMS ROAD

SECTION 12, T8N R5E
 EUSHONG TOWNSHIP
 GENESSEE COUNTY, MICHIGAN

EROSION CONTROL PLAN



C4.1
 2023.141

CGM-1 (6-28-95)

NO DRAWING DETAIL PROVIDED

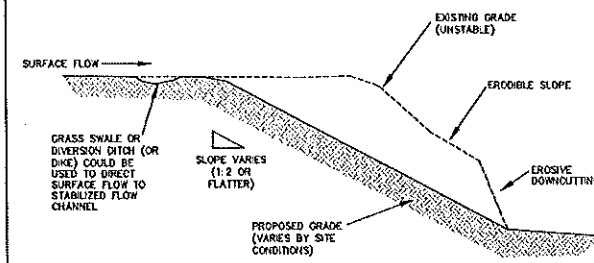
APPLICATIONS

- 1. ON CONSTRUCTION SITES DURING PERIODS OF LOW PRECIPITATION, LOW HUMIDITY AND HIGH TEMPERATURE OR HIGH WINDS.
- 2. USE ON UNPAVED ROADWAYS, CONSTRUCTION SITES WITH VEHICLE TRAFFIC, SOIL STOCKPILE AREAS AND GENERAL AREAS WITH UNSTABILIZED OR FINE SOILS.

DESIGN

- 1. DUST CONTROL APPLICATIONS CAN INCLUDE WATERING, CHEMICAL DUST SUPPRESSION, GRAVEL OR ASPHALT SURFACING, TEMPORARY AGGREGATE COVER AND HAUL TRUCK COVERS.
- 2. FOLLOW MANUFACTURER'S INSTRUCTIONS REGARDING APPLICATION OF ANY DUST PALLIATIVE AND MIXO DETAILS.
- 3. APPLY DUST SUPPRESSANT TO SURFACES USING A PRESSURE TYPE WATER DISTRIBUTOR TRUCK EQUIPPED WITH A SPRAY SYSTEM.
- 4. LIMIT VEHICULAR TRAFFIC TO 15 MILES PER HOUR.
- 5. IMMEDIATELY CLEAN-UP SEDIMENT TRACKED ONTO PAVED ROADS. KEEP CONSTRUCTION TRAFFIC DIRECTED TO STABILIZED SITE ROADWAYS WHEN POSSIBLE.
- 6. DUST CONTROL APPLICATION NEEDS TO BE APPLIED ON A REGULAR SCHEDULE TO MAINTAIN EFFECTIVENESS.

DUST CONTROL [1]



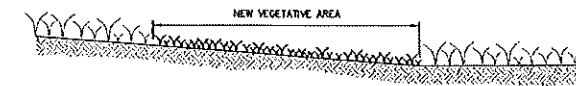
APPLICATIONS

- 1. WHENEVER EXISTING SLOPES OR CONSTRUCTION ACTIVITIES RESULT IN GRADES WHICH MAY BE SUBJECT TO ERODIBLE FLOW VELOCITIES CAPABLE OF DOWNCUTTING OR EROSION RESULTING IN OFF-SITE SEDIMENTATION.
- 2. WHERE EXISTING NATURAL OR CREATED GRADES ARE SUBJECT TO SURFACE FLOWS CAPABLE OF CREATING GULLIES, RILLS, OR OTHER SURFACE EROSION PROBLEMS.

DESIGN

- 1. ESTABLISH SLOPES APPROPRIATE FOR INTENDED USE. SLOPES, IN GENERAL SHOULD BE FLATTER THAN 1:2. SLOPES REQUIRING MOWING SHOULD BE NO STEEPER THAN 1:3.
- 2. AVOID SENSITIVE AREAS (WATERCOURSES, WETLANDS, VEGETATIVE BUFFERS) WITH GRADING/SHAPING.
- 3. DIVERT SURFACE FLOWS TO AREAS APPROPRIATELY STABILIZED TO HANDLE EXPECTED VOLUMES AND VELOCITIES.
- 4. LOCATE SPILL AREAS AWAY FROM SENSITIVE AREAS OR FLOW PATHS AND STABILIZE WITH SEED.
- 5. EXPOSED AREAS SHOULD BE STABILIZED WITH VEGETATION OR OTHER GROUND COVER AS SOON AS WORK IS COMPLETED OR INTERRUPTED FOR 2 NORMAL WORK WEEKS.

SELECTIVE GRADING AND SHAPING [2]



TEMPORARY SEEDING

APPLICATIONS

- 1. WHEN AN AREA NEEDS STABILIZATION DURING A BREAK IN CONSTRUCTION.
- 2. TO STABILIZE SOIL AND PREVENT OR REDUCE SOIL EROSION/SEDIMENTATION PROBLEMS FROM DEVELOPING.
- 3. USED ON CONSTRUCTION AND EARTH CHANGE SITES WHICH REQUIRE TEMPORARY VEGETATIVE STABILIZATION.

DESIGN

- 1. REVIEW SEED PLAN AND CONSTRUCTION PHASING TO IDENTIFY AREAS IN NEED OF TEMPORARY VEGETATIVE STABILIZATION.
- 2. SELECT ANNUAL GRASS SEED FOR TEMPORARY COVER AREAS.
- 3. SEED MIXES MAY VARY, SHOULD ONLY CONTAIN ANNUAL, NON-AGGRESSIVE SPECIES, AND GENERALLY INCLUDE RYE, WHEAT OR OAT SPECIES. SEED MIXES SHOULD OBTAINED THROUGH CONSULTATION WITH A QUALIFIED SEED PROVIDER AND WITH CONSIDERATION OF SOIL TYPE, LIGHT, MOISTURE AND USE APPLICATION.
- 4. PREPARE SEEDBED BY REMOVAL OF CONSTRUCTION AND WOODY DEBRIS. THEN SCARIFY OR RAKE SEEDBED.
- 5. SLOPES STEEPER THAN 1:3 SHOULD BE ROUGHENED.
- 6. APPLY SEED AS SOON AS POSSIBLE AFTER SEEDBED PREPARATION. MULCH IMMEDIATELY AFTER SEEDING ALL SLOPES, UNSTABLE SOILS, HEAVY CLAY SOILS AND ALL AREAS ADJACENT TO WETLANDS, WATERCOURSES, OR SENSITIVE AREAS.
- 7. PROTECT SEEDING AREAS FROM PEDESTRIAN OR VEHICULAR TRAFFIC.
- 8. DIVERT CONCENTRATED FLOWS AWAY FROM THE SEEDING AREA UNTIL VEGETATION IS ESTABLISHED.
- 9. INSPECT TEMPORARY SEEDING AREAS WEEKLY AND FOLLOWING EACH RAIN EVENT UNTIL FINAL GRADING AND STABILIZATION ARE COMPLETED.
- 10. TEMPORARY SEEDING MUST BE FOLLOWED BY PERMANENT SEEDING.

PERMANENT SEEDING

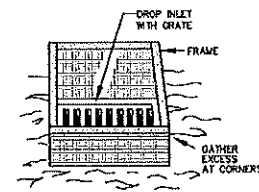
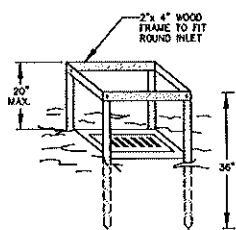
APPLICATIONS

- 1. TO FINALIZE STABILIZATION OF TEMPORARY SEEDING AREAS OR WHEN AN AREA NEEDS PERMANENT STABILIZATION FOLLOWING COMPLETION OF CONSTRUCTION. ALSO USED WHEN VEGETATIVE ESTABLISHMENT CAN CORRECT EXISTING SOIL EROSION OR SEDIMENTATION PROBLEMS.
- 2. TO STABILIZE SOIL AND PREVENT OR REDUCE SOIL EROSION/SEDIMENTATION PROBLEMS FROM DEVELOPING.
- 3. USED ON CONSTRUCTION AND EARTH CHANGE SITES WHICH REQUIRE PERMANENT VEGETATIVE STABILIZATION.

DESIGN

- 1. REVIEW SEED PLAN AND CONSTRUCTION PHASING TO IDENTIFY AREAS IN NEED OF PERMANENT VEGETATIVE STABILIZATION.
- 2. SELECT PERENNIAL GRASS AND GROUND COVER FOR PERMANENT COVER.
- 3. SEED MIXES MAY VARY BUT SHOULD BE SELECTED THROUGH CONSULTATION WITH A QUALIFIED SEED PROVIDER AND WITH CONSIDERATION OF SOIL TYPE, LIGHT, MOISTURE, USE APPLICATIONS, AND NATIVE SPECIES CONTENT.
- 4. SOIL TESTS SHOULD BE PERFORMED TO DETERMINE THE NUTRIENT AND PH LEVELS IN THE SOIL. THE PH MAY NEED TO BE ADJUSTED TO BETWEEN 6.5 AND 7.0.
- 5. PREPARE A 3-5" DEEP SEEDBED, WITH THE TOP 3-4" CONSISTING OF TOPSOIL.
- 6. SLOPES STEEPER THAN 1:3 SHOULD BE ROUGHENED.
- 7. APPLY SEED AS SOON AS POSSIBLE AFTER SEEDBED PREPARATION. SEED MAY BE BROADCAST BY HAND, HYDROSEEDING, OR BY USING MECHANICAL DRILLS.
- 8. DORMANT SEED MIXES ARE FOR USE AFTER THE GROWING SEASON, USING SEED WHICH LIES DORMANT IN THE WINTER AND BEGINS GROWING AS SOON AS SITE CONDITIONS BECOME FAVORABLE.
- 9. MULCH IMMEDIATELY AFTER SEEDING.
- 10. PROTECT SEEDING AREAS FROM PEDESTRIAN OR VEHICULAR TRAFFIC.
- 11. DIVERT CONCENTRATED FLOWS AWAY FROM THE SEEDING AREA UNTIL VEGETATION IS ESTABLISHED.

VEGETATIVE STABILIZATION [4]



APPLICATIONS

- 1. INLETS WITH DRAINAGE OF 1 ACRE OR LESS AND SLOPES LESS THAN 5%.
- 2. SERVICE, CLEAN AND REPAIR AFTER EACH STORM EVENT.

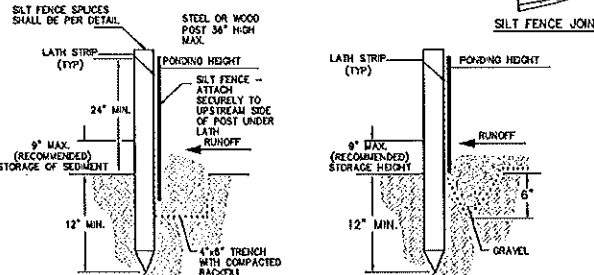
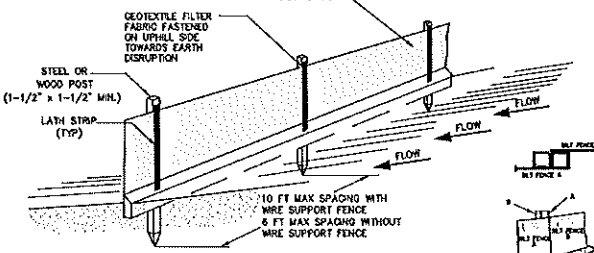
NOTE

DO NOT USE SILT FENCE IN LIEU OF FILTER FABRIC FOR THIS APPLICATION.

DESIGN

- 1. FILTER BAGS MAY BE PLACED IN THE MANHOLE TO INCREASE THE EFFECTIVENESS OF THIS DEVICE.
- 2. IN SOME CASES FILTER BAGS IN THE MANHOLE MAY BE USED ALONE.
- 3. WARNING! THIS DEVICE MAY CAUSE FLOODING OF ADJACENT PROPERTY!
- 4. TOP OF FRAME (POUNDING HEIGHTS) MUST BE LOWER THAN GROUND ELEVATION DOWN STREAM TO PREVENT BYPASSING THE INLET. A TEMPORARY DISE MAY BE NECESSARY DOWN SLOPE OF THE STRUCTURE.

CATCH BASIN INLET PROTECTION [36]



STANDARD DETAIL TRENCH WITH NATIVE BACKFILL

ALTERNATE DETAIL TRENCH WITH GRAVEL

APPLICATIONS

- 1. INSTALLED TO REDUCE SEDIMENT LADEN SURFACE RUNOFF FROM LEAVING THE PROPERTY OF CONSTRUCTION SITE INVOLVING DISTURBED EARTH.
- 2. DIVERSIONARY STRUCTURE.

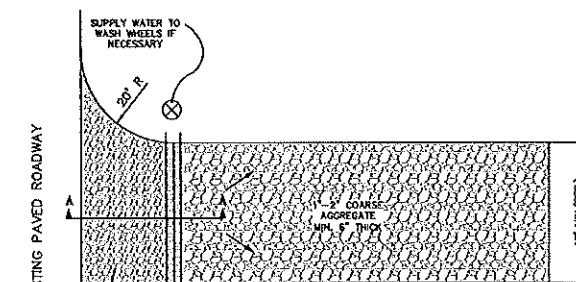
DESIGN

- 1. INSTALL AROUND THE BASE OF SOIL STOCKPILES.
- 2. UTILIZE FOR SHEET FLOW ONLY.

SILT FENCE [54]

DESIGN (CONT)

- 3. INSTALL ON DOWN STREAM SIDE OF CONSTRUCTION.
- 4. SILT FENCE SHALL BE PLACED ON SLOPE CONTIGUOUS TO MAXIMIZE POUNDING EFFICIENCY.
- 5. IF POSSIBLE LOCATE FENCE 10-FT. FROM TOP OF SLOPE, WETLAND OR WATER BODY.
- 6. JOIN SECTIONS OF SILT FENCE BY WRAPPING THE ENDS TOGETHER.



PLAN

SECTION A - A

APPLICATIONS

- 1. ASSISTS IN REMOVING SOIL FROM THE TIRES OF CONSTRUCTION EQUIPMENT/VEHICLES WHEN EXITING THE CONSTRUCTION SITE. THIS REDUCES TRACKING EXCESSIVE SEDIMENT/SOIL ONTO THE ADJACENT ROAD.

DESIGN

- 1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP

DESIGN (CONT)

- DRESSING, REPAIR AND/OR CLEANOUT OF ANY WEARURES USED TO TRAP SEDIMENT.
- 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ON PUBLIC RIGHTS-OF-WAY.
- 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE [60]



PROJECT NO.	2023-141
DATE	08/20/23
PROJECT LOG	
FILE	2023-141
PROJECT MGR.	JON
DESIGNED BY	ZAA
DRAWN BY	ZAA
CHECKED BY	
SCALE	1"=40'
SHEET	OF

WOLGAST CORPORATION
4838 TOWNE CENTER ROAD, STE 203
SAGINAW, MICHIGAN 48804

NORTH ELMS ROAD

SECTION 12, TEN-REE
FLUSHING TOWNSHIP
GENESSEE COUNTY, MICHIGAN

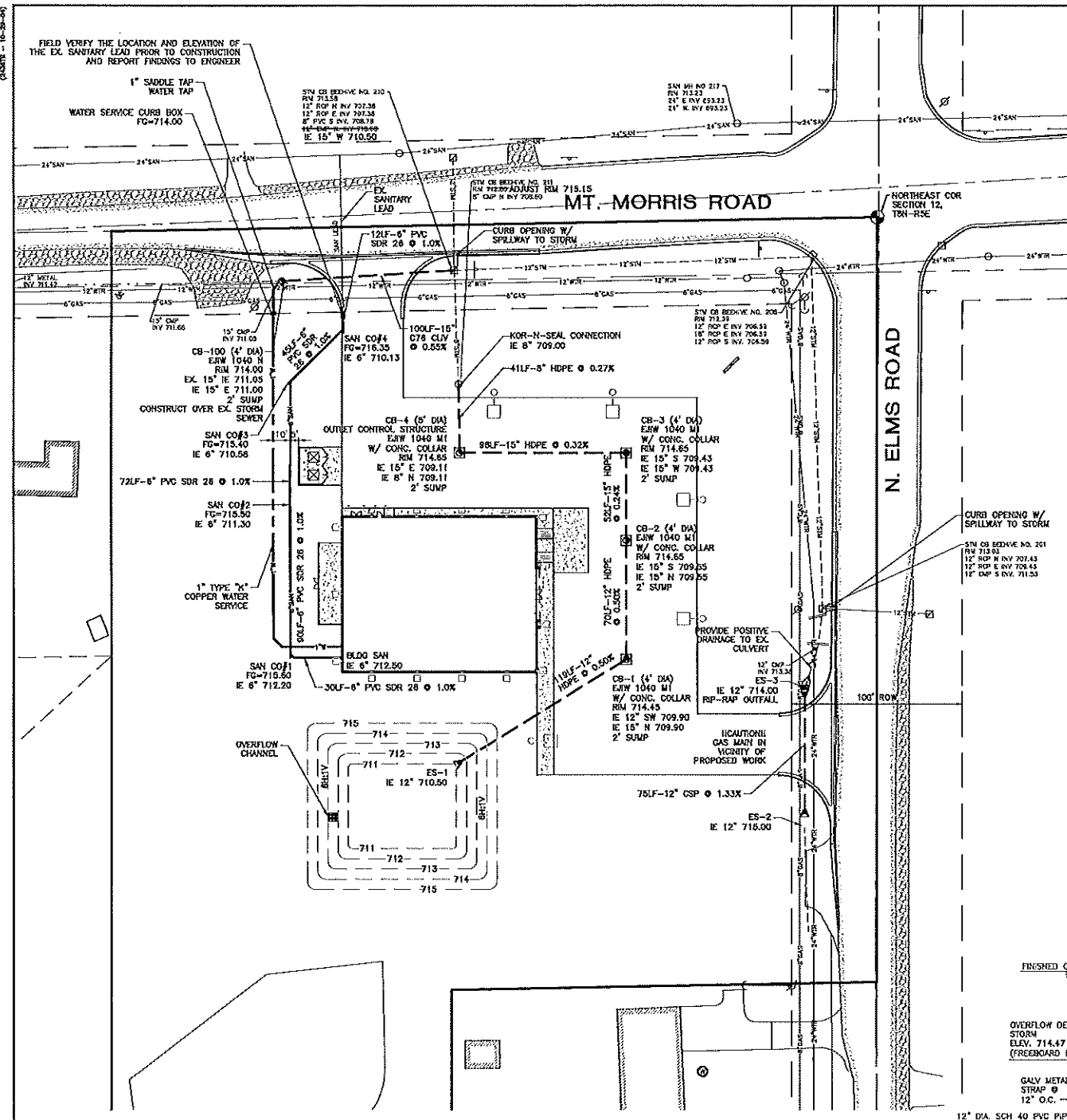
EROSION CONTROL DETAILS

D&M SITE INC.
Surveying - Inspection - Testing - Engineering
401 BALSAM STREET, PO BOX 152, CARROLLTON, MICHIGAN 48724
PHONE: (517) 733-8500 • FAX: (517) 733-8600

C4.2

2023.141

NOT REPRODUCED WITHOUT PERMISSION OF D AND M SITE



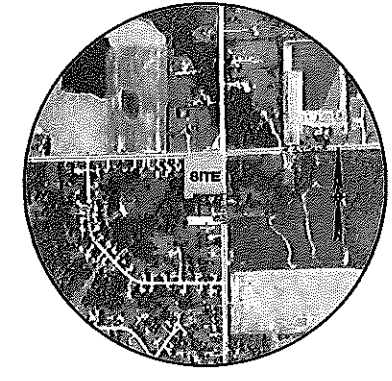
SANITARY USE CALCULATION

INITIAL & ULTIMATE DESIGN

USAGE	AREA	UNIT FACTOR	R.E.U.
Retail	10,500 sf	0.04 units / 1000 sf	0.42
			0.42
			Rounded= 1.00

PROPOSED SANITARY SEWER

POPULATION EQUIVALENT = 3.5	Persons per R.E.U.
POPULATION = 3.5	Persons
AVERAGE FLOW RATE = 100	Gallons per capita per day
AVERAGE FLOW = 350.00	CPD
PEAK FACTOR = 18 + SQRTP(4 + SQR(P)) = 4.45	
PEAK FLOW = 1,557.15 GPD = 0.002 CFS	6" @ 0.70% = 0.73 CFS



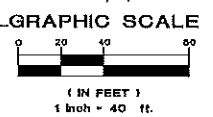
WATER USE CALCULATION

INITIAL & ULTIMATE DESIGN

USAGE	AREA	UNIT FACTOR	R.E.U.
Retail	10,500 sf	0.04 units / 1000 sf	0.42
			0.42
			Rounded= 1.00

PROPOSED WATER USE

POPULATION EQUIVALENT = 3.5	Persons per R.E.U.
POPULATION = 3.5	Persons
AVERAGE FLOW RATE = 100	Gallons per capita per day
AVERAGE FLOW = 350.00	CPD
PEAK FACTOR = 18 + SQRTP(4 + SQR(P)) = 4.45	
PEAK FLOW = 1,557.15 GPD = 0.001567 MGD	



STORM SEWER CALCULATIONS

$Q_p = C \cdot I \cdot A$
 $Q_p = A \times 1.486 / n \times R^{2/3} \times S^{1/2}$
 (1 = 176 / (1+25)) for 10 year storm event

AREA NO.	FROM MH/MB	TO MH/MB	AREA A	COEFF. C	A x C	AREA TOTAL	COEFF. Wt	AI x Cw	TIME t _c	INT. I	Q _p	PIPE CAP. CFS	PIPE LENGTH	PIPE DIA.	PIPE SLOPE	VEL. FULL	TIME FLOW	10-YR HGL		INVERT ELEV.		
																		HIGH END HGL	LOW END HGL	HIGH END INV	LOW END INV	
DA1	1	2	1.10	0.60	0.66	1.10	0.60	0.68	15.00	4.38	0.011	2.89	2.98	70	12	0.50%	3.79	0.31	714.45	714.65	711.34	710.90
DA2	2	3	0.20	0.70	0.14	1.30	0.62	0.80	15.31	4.34	0.011	3.49	3.74	52	15	0.24%	3.05	0.28	714.65	714.65	710.90	710.74
DA3	3	4	0.38	0.52	0.20	1.67	0.60	1.00	15.59	4.31	0.011	4.31	4.32	98	15	0.32%	3.52	0.46	714.65	714.65	710.74	710.38

GCDC-WWS UTILITY LOCATION NOTE

THE LOCATION OF ALL UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE BASED ON RECORDS PROVIDED BY THE UTILITY OWNERS AND VISIBLE EVIDENCE OBTAINED IN THE FIELD. EXISTING UTILITIES WERE NOT EXPOSED FOR VERIFICATION OF LOCATION AND ELEVATIONS. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED TO THE COMPLETENESS OR ACCURACY THEREOF.

EASEMENT STATEMENT

ALL PUBLIC SANITARY SEWERS AND PUBLIC WATERMAINS SHALL HAVE AN EASEMENT GRANTED TO GCDC-WWS AND/OR LOCAL MUNICIPALITY FOR MAINTENANCE, REPAIR AND/OR REPLACEMENT. FOR CONDOMINIUMS, THE EASEMENTS SHALL BE RECORDED ON THE MASTER DEED DOCUMENT AND FOR A SUBDIVISION, THE EASEMENT SHALL BE NOTED ON THE FINAL RECORDED PLAT. ALL OTHERS SHALL BE RECORDED ON THE NEW STANDARD GCDC-WWS EASEMENT FORM.

GCDC 10 STANDARD SITE PLAN NOTES

- EXTENSION OF PUBLIC UTILITIES:** All public sanitary sewer and/or watermain shall be extended to the furthest limits of the property, including corner lots, with the pipe size and material approved by GCDC-WWS. This is necessary for plan approval. For water service of 1" or less or a building on a corner lot, the requirements to extend the public watermain and/or sanitary sewer along both property lines will be reviewed. Final determination shall be made by GCDC-WWS.
- WATERMAIN LOOPING:** All public watermains shall be looped whenever possible. The pipe size requirements shall be approved by GCDC-WWS.
- INDUSTRIAL PRETREATMENT PROGRAM (IPP):** This permit is required for all commercial (non-residential) and industrial discharges. The OWNER shall obtain an Industrial Pretreatment Discharge Permit prior to the issuance of a Sewer Connection Permit. Industrial Discharge Permits are non-transferable. Changes in facility use will require a new Industrial Discharge Permit. For more information contact the Anthony Response Treatment Plant at (810) 232-7652.
- SOIL EROSION:** THE DEVELOPER shall submit a detailed Soil Erosion and Sedimentation Control plan and obtain an NPDES Storm Water Discharge permit for the alteration and/or occupation of a flood plain or floodway, as required by 5 SITE PLAN STANDARDS under PA 451. Evidence of this permit may be required prior to plan approval by GCDC-WWS.
- NPDES STORM WATER DISCHARGE PERMIT:** The owner of the property shall obtain an NPDES Storm Water Discharge permit for construction activities from MDEQ as required under Public Act 451. The notice of coverage form shall be submitted through GCDC-WWS with the Soil Erosion Control permit application. All NPDES fees shall accompany the Notice of Coverage. Evidence of this permit may be required prior to plan approval by GCDC-WWS.
- GENESEE COUNTY PERMIT TO CONSTRUCT A PUBLIC UTILITY:** After the approval of this preliminary plat or site plan, the DEVELOPER shall submit a detailed plan for construction of all public sanitary sewer and watermain. The plans must have GCDC-WWS approval, a 5-permit issued, and approval from the MDEQ prior to beginning construction.
- GENESEE COUNTY ROAD COMMISSION PERMIT:** The DEVELOPER shall obtain a permit from the Genesee County Road Commission to perform work within the general location of the Commission Right-of-Way. All fees for the permit, bonds and insurances are the responsibility of the developer.
- MUNICIPALITY SANITARY SEWER AND WATER PERMIT:** Prior to the issuance of a building permit by the local municipality, the developer shall be required to obtain a sanitary sewer and/or water tap-in permit from the local municipality, if authorized, or GCDC-WWS.
- STATE CONSTRUCTION PERMITS:** The sanitary sewer and watermain construction permits from the Michigan Department of Environmental Quality shall be submitted to the MDEQ after approval of GCDC-WWS. Construction shall not begin until these state permits are issued.

GCDC-WWS UTILITY STATEMENT

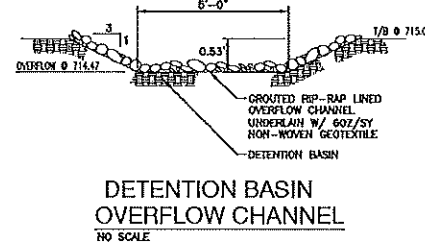
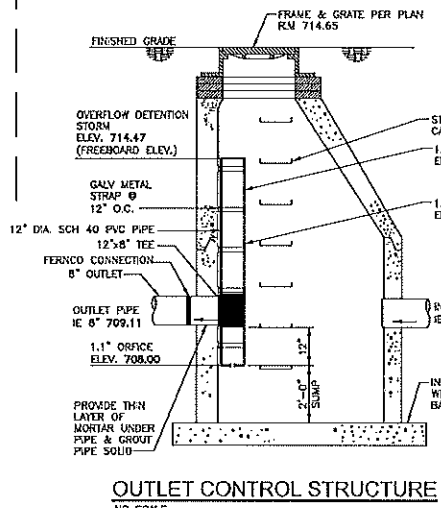
EXISTING UTILITIES WERE NOT EXPOSED FOR VERIFICATION OF LOCATION AND ELEVATION DURING INITIAL FIELD INVESTIGATION. CONTRACTOR SHALL BE RESPONSIBLE TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND REPORT ALL FINDINGS TO THE ENGINEER.

GCDC-WWS NOTE

THIS PROJECT HAS BEEN DESIGNED IMPLEMENTING THE LATEST GCDC-WWS DESIGN SPECIFICATIONS. CAREFULLY REVIEW THE NOTES, DETAILS, AND DESIGN PRIOR TO SUBMITTING A BID. FULL COMPLIANCE WITH THE NEW STANDARDS WILL BE REQUIRED.

UTILITY NOTES

- ALL WORK MUST BE DONE IN ACCORDANCE WITH CURRENT STANDARDS, SPECIFICATIONS AND GENERAL CONDITIONS OF THE GCDC-WWS AND FLUSHING TOWNSHIP.
- SHOP DRAWINGS SHALL BE SUBMITTED BY THE UNDERGROUND CONTRACTOR FOR ALL WATER, SANITARY AND STORM INSTALLATION.
- CONTRACTOR SHALL SUBMIT RECORD "AS-BUILT" PLANS AFTER CONSTRUCTION.
- MAINTAIN A MINIMUM HORIZONTAL SEPARATION BETWEEN WATER SERVICE AND ANY OTHER UTILITY OF 10-FEET. THE MINIMUM VERTICAL CLEARANCE BETWEEN A WATER MAIN AND A SEWER SHALL BE 18-INCHES.
- NO GROUNDWATER, STORM WATER, CONSTRUCTION WATER, DOWNSPOUT DRAINAGE OR WEEP TILE DRAINAGE SHALL BE ALLOWED TO ENTER ANY SANITARY SEWER INSTALLATION.
- REFER TO PLUMBING PLANS TO VERIFY BUILDING UTILITY CONNECTION LOCATIONS. SITE UTILITY LOCATIONS TO TERMINATE 5' OUTSIDE OF BUILDING.
- SANITARY CLEANOUT ASSEMBLIES TO BE ERM 1565Z WITH FLAT GASKET SEAL.
- THE LOCATION AND SIZE OF THE FRANCHISE UTILITY SERVICES SHALL BE DESIGNED AND INSTALLED BY THE UTILITY COMPANY.
- MAINTAIN 6" MIN. DEPTH OF BURY TO FINISHED GRADE FOR WATER SERVICE.
- ALL UTILITIES TO BE REMOVED SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE ENVIRONMENTAL AND/OR REGULATORY REQUIREMENTS.
- CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONNECTION AND REPORT ALL FINDINGS TO THE ENGINEER.
- FIRE HYDRANTS SHALL BE LOCATED 3- FEET FROM BACK OF CURB.



GCDC-WWS UTILITY WARNING

Utility Warning - Underground utility locations as shown on the plans were obtained from utility owners, and were not field located. A minimum of three (3) working days prior to beginning construction, the contractor shall notify MISS DIG (800-482-7171) and have all underground utilities staked before any work may begin. The contractor shall be responsible for the protection and/or relocation of all utilities that may interfere with construction. Three (3) Working Days before You Dig - Call MISS DIG (1-800-482-7171).

UTILITY CONTACTS

TELEPHONE	GAS AND ELECTRIC
AT&T 802 BEACH ST FLINT, MICHIGAN 48503 (810) 765-0107	CONSUMERS ENERGY 3201 E COURT ST. FLINT, MICHIGAN 48508 (810) 477-0050
ZONING	WATER/SEWER
FLUSHING TOWNSHIP ZONING & PLANNING 6524 N. SAGINAW RD FLUSHING, MICHIGAN 48433 (810) 859-0900	GENESEE WATER AND SEWER SERVICES 1101 S. SAGINAW ST. FLINT, MICHIGAN 48507 (810) 766-7015

DETENTION BASIN OVERFLOW CHANNEL
NO SCALE

OUTLET CONTROL STRUCTURE
NO SCALE

UTILITY NOTE

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES. TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BUREAED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIG (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

SANITARY CLEANOUT NOTE

SANITARY SEWER CLEANOUT ASSEMBLIES SHALL HAVE TRAFFIC BEARING BOX (REFER TO DETAIL ON SHEET C810) THAT PROVIDE WATER-TIGHT CONNECTION ON THE RISER.

GCDC-WWS SANITARY CONNECTION NOTE

GCDC-WWS SHALL PERFORM THE SADDLE TAP FOR THE SANITARY SEWER SERVICE LEAD.

GCDC-WWS UTILITY BACKFILL NOTE

SAND BACKFILL SHALL BE USED WITH ALL UTILITIES WITHIN THE PAYMENT UNIT.

PROCESSED UNDER THE SUPERVISION OF:

STATE OF MICHIGAN
ARCHITECT
ENGINEER
No. 6201047380
LICENSED PROFESSIONAL ENGINEER

PROJECT LOG

DATE	DESCRIPTION
08/15/23	PREPARED
08/22/23	REVISION
09/01/23	REVISION

FILE: 2023-141
 PROJECT MGR: JDN
 DESIGNED BY: ZJA
 DRAWN BY: ZJA
 CHECKED BY:
 SCALE: 1"=40'
 SHEET: 05

WOLGAST CORPORATION
4835 TOWNE CENTER ROAD, STE 203
SAGINAW, MICHIGAN 48804

NORTH ELMS ROAD

SECTION 12, TOWNSHIP
SAGINAW
GENESEE COUNTY, MICHIGAN

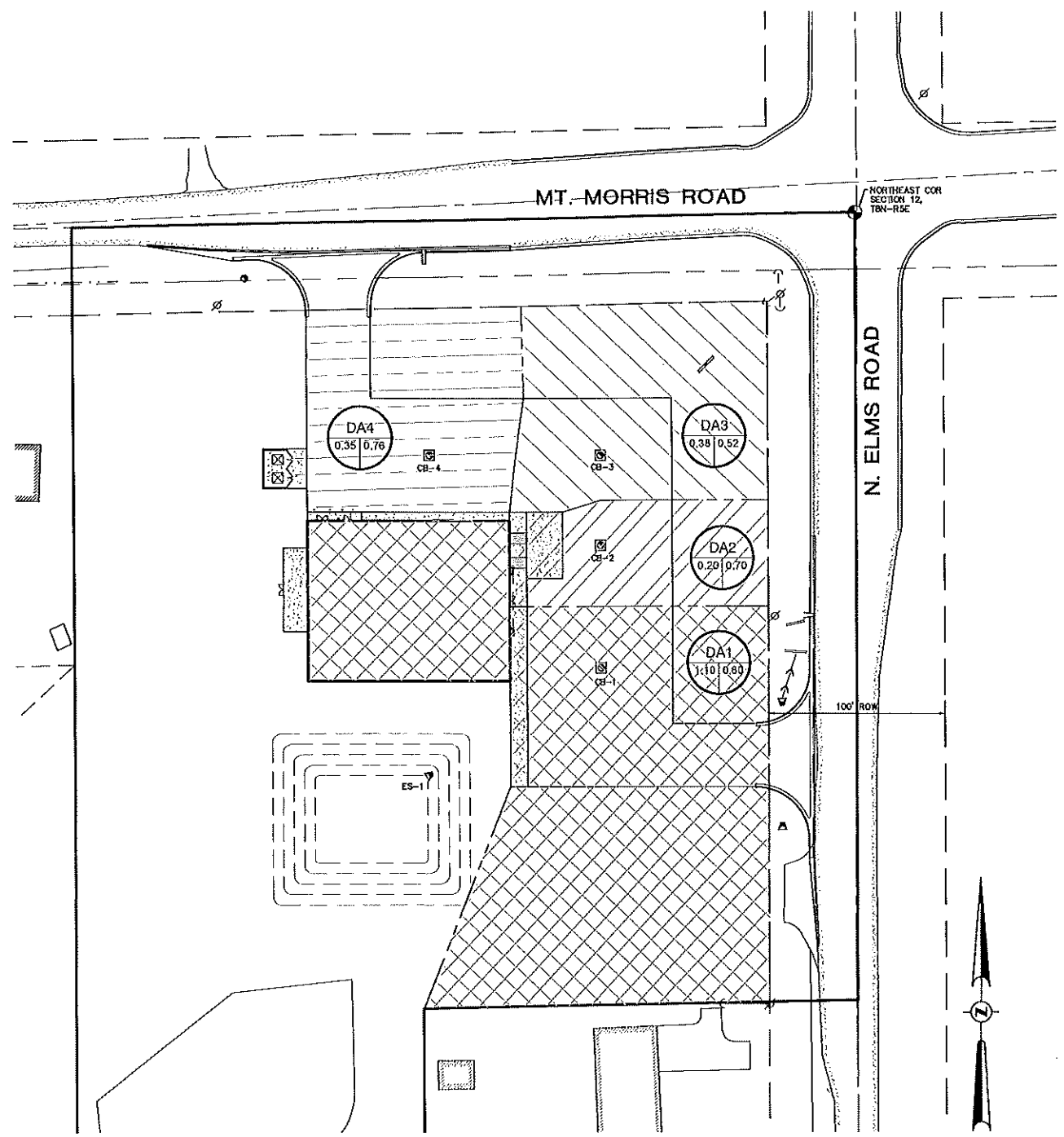
UTILITY PLAN

D&M SITE INC.
Surveying, Inspection, Testing, Engineering
401 BALSAM STREET, PO BOX 150, CARROLLTON, MICHIGAN 48724
Phone: (989) 726-4564 Fax: (989) 726-4660

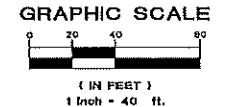
C5.0

2023.141

D AND N SITE
FOR FURNISHING ALL POINT INFORMATION



DRAINAGE AREA MAP
SCALE: 1"=40'



DRAINAGE AREA KEY

Drainage Area	Area Total (S.F.)	Impervious Area (S.F.)	Penious Area (S.F.)	C Imperv	C Pen	Area Total (acres)	Cv
DA1	47720	22255	25465	0.95	0.30	1.10	0.60
DA2	8827	5484	3342	0.95	0.30	0.20	0.70
DA3	16410	5554	10856	0.95	0.30	0.38	0.52
DA4	15083	10635	4447	0.95	0.30	0.35	0.76

UTILITY NOTE
THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE SIZE, LOCATION, DEPTH, PRESSURE, OR ANY OTHER CHARACTERISTICS OF UNDERGROUND UTILITIES, TANKS OR SEPTIC FIELDS WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL MISS DIGG (1-800-482-7171) A MINIMUM OF THREE WORKING DAYS PRIOR TO ANY EXCAVATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND MAKE EVERY EFFORT TO PROTECT AND/OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND.

Calculations for Stormwater Runoff Volume Control
SITE NAME: FAMILY DOLLAR FLUSHING TOWNSHIP
Total Site Disturbed Area: 4.21 acres
2-Year, 24-Hour Rainfall: 2.26 in (See Rainfall Tab for regional rainfall value or site specific rainfall event may be substituted with OHRB approval)

Pre-Development Conditions

Cover Type	Soil Type	Area (sf)	Area (ac)	CN (from TR-55)	S	Q Runoff (in)	Runoff Volume ² (ft ³)
					$\frac{1000}{CN}$	$(P - 0.25)^2$	$Q \times 1/12 \times A$
Woods / Meadow	A	0		30	23.3	0.27677817	0
Open Space	A	0		39	15.6	0.0519248	0
Woods	B	0		55	8.2	0.0416834	0
Meadow	B	0		58	7.2	0.0318189	0
Open Space	B	0		61	6.4	0.13057686	0
Woods	C	0		70	4.3	0.34595824	0
Meadow	C	0		71	4.1	0.37825147	0
Open Space	C	182581	4.19	74	3.5	0.47826175	7276.792441
Woods	D	0		77	3.0	0.5945079	0
Meadow	D	0		78	2.8	0.636804	0
Open Space	D	0		80	2.5	0.72713615	0
Impervious	N/A	829	0.02	98	0.20	2.03228931	140.3973198
Other:		0				N/A	N/A
TOTAL:							7,417

Post-Development Conditions

Cover Type	Soil Type	Area (sf)	Area (ac)	CN	S	Q Runoff (in)	Runoff Volume ² (ft ³)
Impervious	N/A	43928.72	1.01	98	0.2	2.03228931	7439.653671
Penious	C	139481.28	3.20	74	3.5	0.47826175	5559.046801
		0				0.0	0
		0				0.0	0
TOTAL:							12,999

Runoff Volume Increase (ft³): 5,582

DETENTION CALCULATIONS

REQUIREMENT A: First Flush (Water Quality)
Using the 90% annual non-exceedance storm methodology:
P = 0.90 inches
Impervious % = 24%
Rv = 0.05 + 0.009 (24%) = 0.27
WQV = 0.243 Watershed Inches
Convert to Cubic Feet
WQV = 3715 cf
First Flush Elevation = 711.66

REQUIREMENT B: Channel Protection (Bankfull)
Post-development site runoff volume and peak flow rate at or below existing levels for all storms up to the 2-year, 24-hour event
Total Contributing Area: 4.21 acres
Pre-Development Conditions: 7,417 c.f.
Post-Development Conditions: 12,999 c.f.
Calculations for Stormwater Runoff Volume Control
Channel Protection: 5,582 cf

REQUIREMENT C: FLOOD CONTROL
100-Year Storm Detention REQUIRED
Flood Control: 100-Year Storm Event
Area = 4.21 acres
Cv = 0.46
Out = 0.2 cfs / acre
Cv = 0.84 cfs max discharge
T = 160 minutes for maximum volume
Intensity = 1.4 in / hour (GDCD IDF curve)
V req = 17,846 cubic feet

100-Year Storm Detention Basin PROVIDED
PROVIDED VOLUME = 18,207 cf @ Elev = 714
STORM ELEVATION = 713.97

STORM STORAGE INFORMATION

EVENT	VOLUME	ELEVATION
First Flush	3,715	711.66
Channel Prot	5,582	712.08
10-YEAR	12,902	713.31
100-YR	17,846	713.97
OVERFLOW	714.47	

DETENTION BASIN VOLUME

ELEV	AREA (ft ²)	AVO.	VOLUME (ft ³)
710.50	0	791	0
710.75	1,582	2,373	79
711	3,164	3,538	1,265
711.5	3,908	4,260	3,033
712	4,652	5,100	5,173
712.5	5,548	5,997	7,724
713	6,445	6,965	10,722
713.5	7,485	8,006	14,204
714	8,525	9,117	18,207
714.5	9,710	10,302	22,706
715	10,894		27,916

RESTRICTED DISCHARGE
Requirement A: First Flush (Water Quality)
The restricted discharge will be released over 24 hours
First Flush (Water Quality) volume = 3,715 cf
Q = V / T = 0.043 cfs
h = 1.58 ft
A = Q / (0.62 * (2 * g * h^{0.5}))^{0.5}
A = 0.0069 s.f.
Office Dia = 1.1 inches @ 708.00

Requirement B: Channel Protection (Bankfull)
The restricted discharge will be released over 48 hours
Channel Protection (Bankfull) volume = 5,582 cf
Q = V / T = 0.032 cfs
h = 0.42 ft
A = Q / (0.62 * (2 * g * h^{0.5}))^{0.5}
A = 0.0101 s.f.
Office Dia = 1.4 inches @ 711.66

Requirement C: 100-Year Storm
V_{req} = (ELEV₁₀₀ - ELEV_{Outlet})
V_{req} = 3.47 ft
Restricted Discharge
Out = 0.84 cfs max discharge
T = V / Q = 5.9 HR
Increase Discharge Time = 48 HR
Q = V / T = 0.11 cfs
A = Q / (0.62 * (2 * g * h^{0.5}))^{0.5}
A = 0.01 s.f.
D = 1.5 inches @ 712.08

OVERFLOW WEIR/PILLWAY DESIGN
Q = C * B * H^{3/2}
Q = 2.71 CFS (Q = C * I * A)
C = 3.4 Weir Coefficient
H = 0.53 Maximum Head on Weir
B = Q / (C * H^{3/2})
B = 2.1 = 3 Feet, Make 5 Feet

Outlet	Outfall	Upstream	Downstream	Distance	Pipe	PPE
		Invert	Invert	(LF)	Dia (in)	CAP. (cfs)
		714.47	709.00	40	8	5.28

The discharge pipe from the Outlet Control Structure has been sized to accommodate overflow discharge.

PREPARED UNDER THE SUPERVISION OF:

PROJECT LOC:

FILE: 2023-141

PROJECT NO: 2023-141

DESIGNED BY: ZAA

DRAWN BY: ZAA

CHECKED BY: 1"=40'

SCALE: 1"=40'

SHEET: 05

WOLGAST CORPORATION
4835 TOWNE CENTER ROAD, STE 203
SAGINAW, MICHIGAN 48604

NORTH ELMS ROAD
SECTION 12, TEN-RUE
FLUSHING TOWNSHIP
GENESEE COUNTY, MICHIGAN

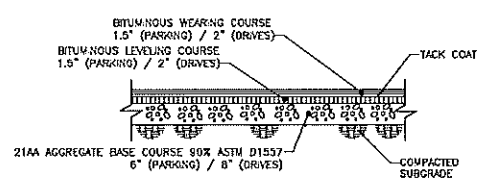
STORM MANAGEMENT CALCULATIONS

D&M SITE INC.
Surveying • Inspection • Testing • Engineering
401 BALSAM STREET P.O. BOX 159, CARROLLTON, MICHIGAN 48724
PHONE: (989) 753-8000 • FAX: (989) 753-8800

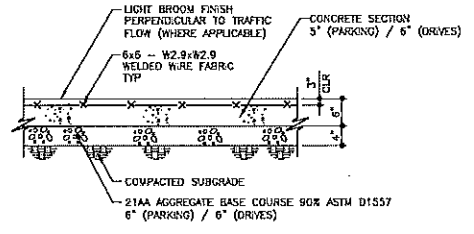
C5.1

2023.141

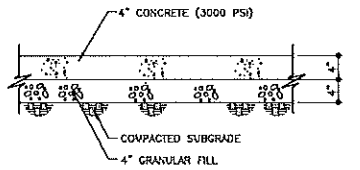
2023-141
 D AND M SITE
 NOT PUBLISHED, ALL RIGHTS RESERVED.



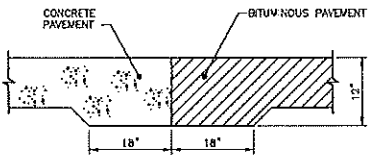
BITUMINOUS PAVEMENT
NO SCALE



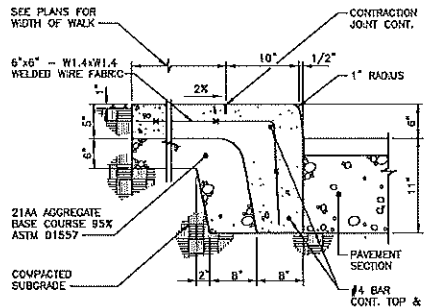
CONCRETE PAVEMENT
NO SCALE



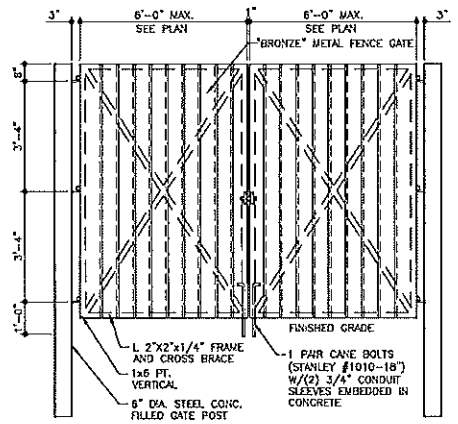
CONCRETE WALK
NO SCALE



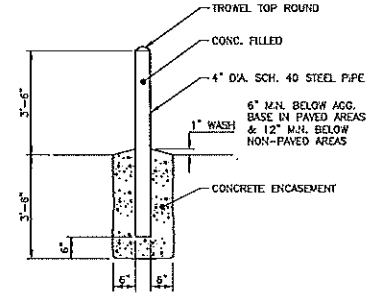
TURNDOWN PAVEMENT SECTION
NO SCALE



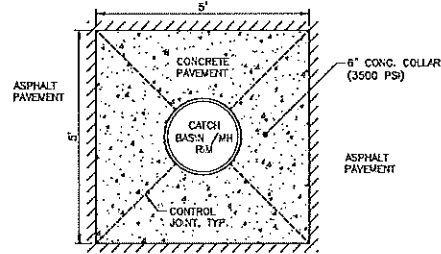
CONCRETE CURB WALK
NO SCALE



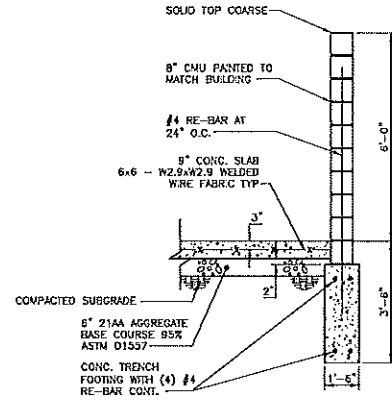
DUMPSTER GATE DETAIL
NO SCALE



BOLLARD
NO SCALE



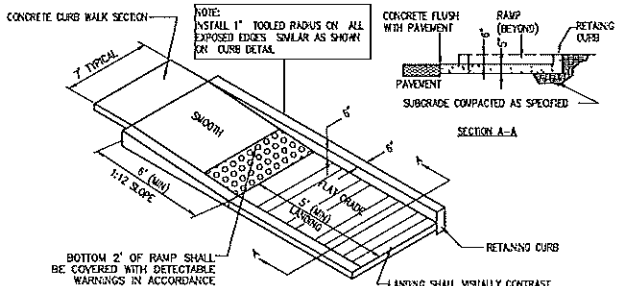
CONCRETE COLLAR
NO SCALE



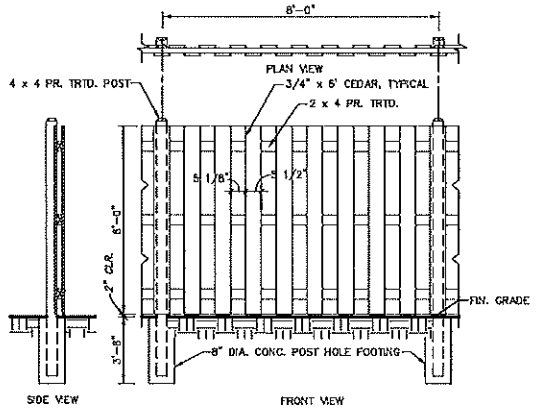
DUMPSTER WALL
NO SCALE



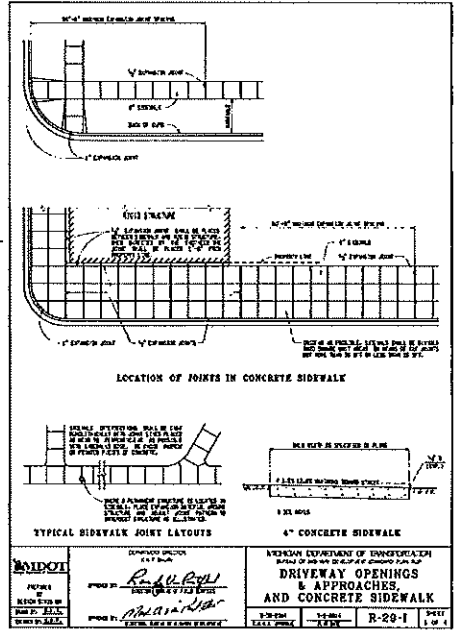
TYPICAL HANDICAP SIGN
NO SCALE



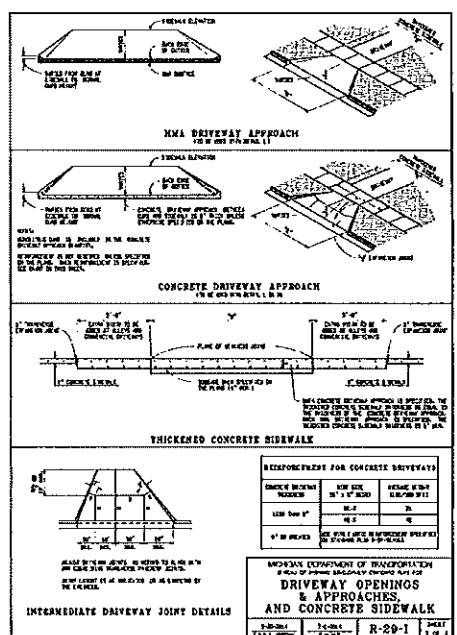
BARRIER FREE RAMP
NO SCALE



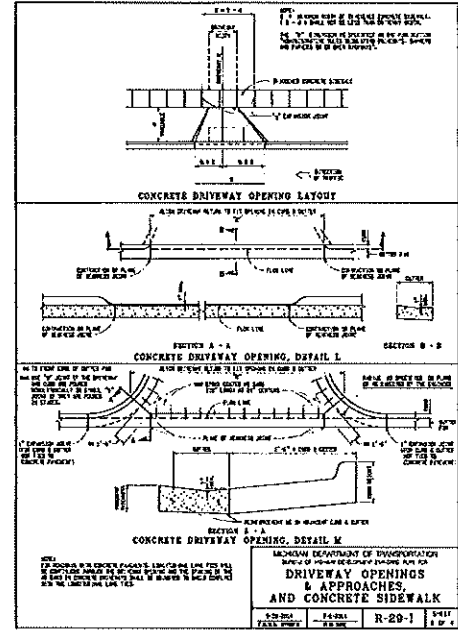
PRIVACY FENCE
NO SCALE



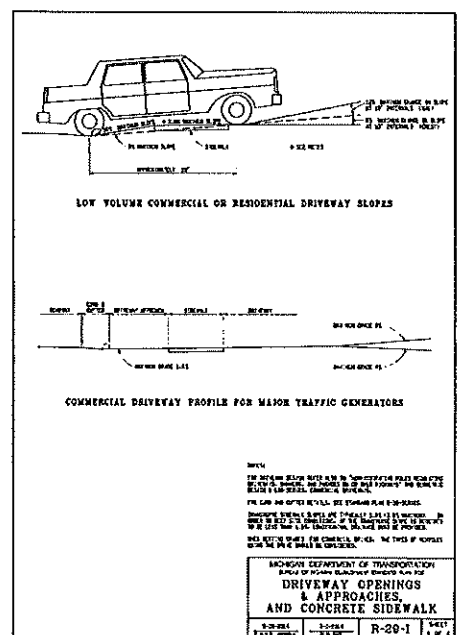
DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALK
R-20-1



DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALK
R-20-1



DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALK
R-20-1



DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALK
R-20-1



PROVIDED UNDER THE SUPERVISION OF:

DATE: 06/27/23	PROJECT LOG
FILE: 2023-141	PROJECT NO: 2023-141
DESIGNED BY: ZAA	DRAWN BY: ZAA
CHECKED BY: ZAA	SCALE: 1"=40'
SHEET: 05	

WOLFGAST CORPORATION
4835 TOWNE CENTER ROAD, STE 203
SAGINAW, MICHIGAN 48804

NORTH ELMS ROAD
SECTION 15, TOWN-SHIP OF GENESEE COUNTY, MICHIGAN

D & M SITE INC.
Surveying • Inspection • Testing • Engineering
401 BALSAM STREET, PO BOX 158, CARROLLTON, MICHIGAN 48724
PHONE (810) 752-0200 FAX (810) 752-0200

GENERAL CONSTRUCTION NOTES

SANITARY CONSTRUCTION NOTES

PRESSURE PIPE CONSTRUCTION NOTES

1. STANDARD SPECIFICATIONS & DETAILS
ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE LATEST GENESSEE COUNTY STANDARD SPECIFICATIONS AND STANDARD DETAILS FOR SANITARY SEWER, PRESSURE PIPE, AND PUMP STATION CONSTRUCTION. ANY DEVIATIONS FROM THE GCDC-WWS APPROVED PLANS WILL NOT BE PERMITTED. IF IT BECOMES NECESSARY TO REVISE THE PLAN, THEY SHALL BE RESUBMITTED TO GCDC-WWS FOR APPROVAL.

2. PRE-CONSTRUCTION MEETING
A PRE-CONSTRUCTION MEETING SHALL BE HELD AT THE GCDC-WWS OFFICE PRIOR TO BEGINNING THE WORK. NO PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO OBTAINING THE STATE CONSTRUCTION PERMITS. THE MEETING'S TIME, PLACE, AND ATTENDEES SHALL BE ARRANGED BY THE ENGINEER FOR THE PROJECT. GCDC-WWS, GCDC-SM, THE MUNICIPALITY, THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS, PROJECT OWNER, CONTRACTOR, AND ANY AFFECTED UTILITIES SHALL BE INVITED, AS A MINIMUM, TO THE PRE-CONSTRUCTION MEETING.

3. MISS DIG 811 UTILITY ALERT
THREE (3) WORKING DAYS PRIOR TO BEGINNING THE WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT MISS DIG 811 UTILITY PROTECTION SERVICE (1-800-482-7171 OR 811) TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PROTECTION OF ALL EXISTING UTILITIES DURING CONSTRUCTION. ALL UTILITIES DAMAGED DURING CONSTRUCTION SHALL BE PROPERLY REPAIRED IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS.

4. FIELD LOCATION OF UTILITIES
PRIOR TO BEGINNING THE WORK, THE CONTRACTOR SHALL BE REQUIRED TO EXPOSE ALL EXISTING UTILITIES THAT CROSS THE PROPOSED CONSTRUCTION. SO THE ENGINEER MAY DETERMINE IF A VERTICAL CONFLICT EXISTS BETWEEN AN EXISTING UTILITY AND THE PROPOSED WORK. ALL LABOR REQUIRED TO UNCOVER THE EXISTING UTILITY SHALL BE CONSIDERED INCLUDED IN THE LINEAL FEET OF PRESSURE PIPE OR SANITARY SEWER PIPE INSTALLED. THE CONTRACTOR SHALL VERIFY THE DEPTH AND HORIZONTAL LOCATIONS OF ALL UTILITIES IN SUFFICIENT TIME SUCH THAT ANY CONFLICTS CAN BE RESOLVED BEFORE WORK IS STARTED IN THAT PORTION OF THE PROJECT. THE CONTRACTOR SHALL ARRANGE FOR THE VARIOUS UTILITY OWNERS TO LOCATE, REMOVE AND REPLACE, OR RELOCATE THEIR FACILITIES. ALL COSTS FOR THIS SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

5. SUBSURFACE SOIL CONDITIONS
PRIOR TO BIDDING, THE CONTRACTOR AND SUBCONTRACTORS SHALL MAKE A PERSONAL INVESTIGATION OF THE SITE AND EXISTING SURFACE AND SUBSURFACE CONDITIONS. THE CONTRACTOR SHALL ACQUAINT ITSELF WITH CONDITIONS OF THE WORK AREA. THE CONTRACTOR IS ADVISED TO DETERMINE THE SUBSURFACE SOIL AND GROUND WATER CONDITIONS. DEMATERING, IF DETERMINED NECESSARY BY THE CONTRACTOR AND NOT SPECIALLY REQUIRED BY THE CONTRACT DOCUMENTS, WILL BE INCIDENTAL TO THE COST OF INSTALLATION.

6. PERMITS AND FEES
THE CONTRACTOR/DEVELOPER SHALL OBTAIN ALL PERMITS, INCLUDING THE PAYMENT OF ANY FEES OR BONDS, REQUIRED BY ANY FEDERAL, STATE, COUNTY, LOCAL, OR PRIVATE ORGANIZATIONS PRIOR TO COMMENCING WORK.

7. GCDC-WWS INSPECTION FEES
THE CONTRACTOR SHALL PAY ALL SANITARY SEWER AND PRESSURE PIPE INSPECTION FEES AND WATER USAGE FEES PRIOR TO THE PRE-CONSTRUCTION MEETING.

8. SOIL EROSION CONTROL, PART 91 OF P.A. 451 OF 1994
THE CONTRACTOR/DEVELOPER SHALL COMPLY WITH ALL PROVISIONS OF PART 91, ACT 451 OF P.A. 1994 FOR SOIL EROSION AND SEDIMENTATION CONTROL AND WILL BE RESPONSIBLE FOR ALL MAINTENANCE UNTIL THE FINAL ACCEPTANCE OF THE PERMANENT CONTROL MEASURES BY GCDC-WWS. THE CONTRACTOR/DEVELOPER IS REQUIRED BY GCDC-WWS TO PREPARE AND SUBMIT A SOIL EROSION AND SEDIMENTATION CONTROL PLAN IN ORDER TO OBTAIN THE SOIL EROSION AND SEDIMENTATION CONTROL PERMIT AND TO PAY ANY APPLICATION FEES AND BOND FEES NECESSARY TO OBTAIN THE PERMIT.

9. STATE CONSTRUCTIONS PERMITS
THE CONSTRUCTION OF PUBLIC SANITARY SEWERS OR PRESSURE PIPES SHALL NOT BEGIN UNTIL THE REQUIRED STATE CONSTRUCTION PERMITS HAVE BEEN OBTAINED. NOTES, SOIL EROSION AND CONSTRUCTION PLAN APPROVAL ARE SEPARATE APPROVALS AT GCDC-WWS.

10. ROADWAY PERMITS
A PERMIT FROM THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS IS REQUIRED FOR ALL CONSTRUCTION WITHIN ANY ROAD RIGHT-OF-WAY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ALL NECESSARY PERMITS, POST ALL NECESSARY BONDS, PAY ALL FEES, AND OBTAIN ANY REQUIRED INSURANCES IN CONNECTION THERE WITH.

11. WORK OBSERVATION
ALL WORK SHALL BE PERFORMED UNDER THE OBSERVATION OF A CONSTRUCTION OBSERVER FROM GCDC-WWS OR LOCAL MUNICIPALITY HAVING JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OBSERVING AGENCIES THREE (3) WORKING DAYS OR 72 HOURS PRIOR TO STARTING CONSTRUCTION TO ARRANGE FOR ON-SITE OBSERVATION AND TESTING. CUT SHEETS FOR ALL PIPE INSTALLATION AND REPAIRING SHALL BE PROVIDED TO THE GCDC-WWS CONSTRUCTION OPERATOR'S SUPERVISOR A MINIMUM OF 24 HOURS PRIOR TO STARTING THE WORK WITH RESPECT TO THAT UTILITY. GCDC-WWS OR THE LOCAL MUNICIPALITY HAVING JURISDICTION SHALL BE NOTIFIED FOR A FINAL INSPECTION.

12. CONTRACTOR'S MINIMUM WAGE & USE OF IN-COUNTY LABOR
THE CONTRACTOR SHALL EMPLOY COMPETENT AND SKILLED WORKERS THROUGHOUT THE COURSE OF THE PROJECT. THE CONTRACTOR SHALL STRIVE TO USE GENESSEE COUNTY RESIDENTS WHEN FEASIBLE. THE CONTRACTOR SHALL BE REQUIRED TO PAY THE PREVAILING WAGE RATES AS ESTABLISHED BY THE BUILDING AND CONSTRUCTION TRADES DEPARTMENT OF THE AMERICAN FEDERATION OF LABOR WHICH APPLIES TO THE COUNTY OF GENESSEE. THESE RATES CAN BE OBTAINED BY CONTACTING THE MICHIGAN DEPARTMENT OF CONSUMER AND INDUSTRIAL SERVICES.

13. MIOSHA SAFETY REQUIREMENTS
ALL WORK, WORK PRACTICE, AND MATERIALS SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL SAFETY GUIDELINES, OCCUPATION, HEALTH AND ENVIRONMENTAL REGULATIONS, AND ALSO NFPA AND ANSI CODES AS APPLICABLE. ALL WORK INSIDE A CONFINED SPACE, SUCH AS MANHOLES OR OTHER UNDERGROUND STRUCTURES, SHALL BE COORDINATED WITH THE UTILITY OWNER, AND ALL WORKER SAFETY REQUIREMENTS STRICTLY ENFORCED. THE CONTRACTOR SHALL HAVE ITS SAFETY PLAN ON FILE WITH GCDC-WWS AND ONE COPY ON SITE AT ALL TIMES.

14. ROADWAY REQUIREMENTS FOR UTILITY CONSTRUCTION
THE CONTRACTOR SHALL COMPLY WITH ALL OF THE REQUIREMENTS OF THE OCRG OR LOCAL MUNICIPALITY REGARDING THE CONSTRUCTION OF PRESSURE PIPE AND SEWER MAINS, MAINTAINING TRAFFIC, BARRICADING, BORING, BACKFILLING AND RESTORATION WITHIN THE ROAD RIGHT-OF-WAY.

15. OPEN CUTTING OF COUNTY/LOCAL ROADS
WHEN OPEN CUTTING OF GRAVEL OR HARD SURFACED ROADS ARE INCORPORATED INTO THE PROJECT, THE CONTRACTOR SHALL OBTAIN THE APPROVAL AND COMPLY WITH ALL OF THE REQUIREMENTS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS, AND BY THE SPECIFICATIONS OF GCDC-WWS.

16. GRAVEL ROAD CONTAMINATION BY THE WORK
IF IT IS DETERMINED BY THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS THAT GRAVEL ROADS HAVE BECOME CONTAMINATED DURING THE WORK, THE ROAD MUST BE REPAIRED PER THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS. ALL MANHOLES (WATER AND SANITARY), ALL HYDRANTS, ALL VALVES, AND ALL SERVICE RISERS (WATER AND SANITARY) AT THEIR TERMINUS, ALL METER PITS, AND ALL PUMP STATIONS.

17. RESTORATION OF GRAVEL SHOULDERS
IF IT IS DETERMINED BY THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS THAT GRAVEL SHOULDERS HAVE BEEN CONTAMINATED BY THE WORK, THE CONTRACTOR SHALL RE-GRAVEL PER THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS. ALL WORK AND MATERIALS SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS.

18. COMPACTED GRANULAR BACKFILL FOR ROADWAYS, DRIVES, ETC.
ALL TRENCH EXCAVATION WITH A ONE-TO-ONE INFLUENCE OF A ROADWAY, DRIVEWAY CROSSINGS, PARKING LOTS, OR AS OTHERWISE NOTED ON THE PLANS, SHALL BE BACKFILLED WITH COMPACTED SAND MDOT CLASS II (A5) PER THE SCHEDULE OF BACKFILLING, FOUND IN THE SPECIFICATIONS. IN ADDITION, SEE THE SPECIFICATIONS FOR THE REQUIREMENTS FOR THE COMPACTATION PLAN. THIS STANDARD ALSO INCLUDES SERVICE LEADS UNLESS NOTED.

19. SURFACE RESTORATION
ALL DISTURBED AREAS SHALL BE COMPLETELY RESTORED IN STRICT COMPLIANCE WITH THE SOIL EROSION AND SEDIMENTATION SPECIFICATIONS AND TO THE SATISFACTION OF GCDC-WWS, GCDC-SM, GORG, MDOT, THE LOCAL MUNICIPALITY, AND THE PROPERTY OWNER. ALL COSTS FOR THE CLEANUP, RESTORATION WORK, AND OTHER INTERMEDIATE OPERATIONS INCLUDING BUT NOT LIMITED TO, CONSTRUCTION SIGNAGE, STREET SWEEPING, AND MAINTAINING EXISTING UTILITIES, SHALL BE CONSIDERED INCLUSIVE AND AT NO ADDITIONAL COST TO GCDC-WWS. AREAS DISTURBED DURING THE WORK SHALL RECEIVE A 4" APPLICATION OF SCREENED TOPSOIL, FERTILIZED AND SEEDED. ALL EXCESS MATERIALS, DEBRIS, AND SIMILAR ITEMS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF IN ACCORDANCE WITH THE LAW. ALL GROUND SURFACES SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER PRIOR TO FINAL APPROVAL.

20. TRAFFIC CONTROL
THE CONTRACTOR SHALL EXECUTE THE WORK IN A MANNER SUCH THAT TRAFFIC IS MAINTAINED AND ACCESS IS PROVIDED TO ALL RESIDENCES, BUSINESSES, AND COMMERCIAL ESTABLISHMENTS. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS AND THE LATEST EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 6, AND THE REQUIREMENTS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS, OR AS DIRECTED BY THE ENGINEER.

21. SIGNING AND BARRICADING
SIGNING AND BARRICADING SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE DETAILS ON THE PLANS, THE LATEST EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 6, AND THE REQUIREMENTS OF THE AGENCY HAVING AUTHORITY OVER THE ROADWAYS. SIGNS AND BARRICADES LEFT IN PLACE AFTER DARK SHALL BE LIGHTED.

22. PROTECTION OF HAZARDOUS AREAS
EXCAVATION AND HAZARDOUS AREAS SHALL BE PROTECTED BY BARRICADES, SNOW FENCE, OR OTHER APPROPRIATE MEANS. BARRICADES LEFT IN PLACE AFTER DARK SHALL BE LIGHTED.

23. STORM WATER DRAINAGE DURING THE WORK
THE CONTRACTOR/DEVELOPER SHALL OBTAIN THE SERVICES OF A CERTIFIED STORM WATER OPERATOR AND COMPLY WITH THE PROVISIONS OF THE WSDCS AND SSO PERMITS. THE CONTRACTOR SHALL MAINTAIN DITCH DRAINAGE DURING CONSTRUCTION AND SHALL NOT OBSTRUCT SUMP PUMP LEADS DISCHARGING INTO THE DITCH. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ALL STORM SEWER FACILITIES, SUCH AS CATCH BASINS AND CULVERTS, DURING THE WORK. CULVERTS AND CATCH BASINS CONTAMINATED DURING THE WORK SHALL BE CLEANED.

24. UTILITY INFORMATION
UTILITY INFORMATION IS DELINEATED IN ACCORDANCE WITH THE LOCATIONS PROVIDED BY UTILITY OWNERS. THE ENGINEER IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION OR THE LOCATION AT WHICH THESE SERVICES EXIST. DIFFERING FIELD CONDITIONS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND GCDC-WWS.

25. EXISTING UTILITIES
THE CONTRACTOR SHALL MAINTAIN ALL EXISTING SANITARY SEWER, PRESSURE PIPE, OR STORM SEWER CONNECTIONS IN SERVICE THROUGHOUT THE WORK. THE CONTRACTOR SHALL PROVIDE OR ARRANGE FOR THE TEMPORARY SUPPORT OF GAS MAIN, TELEPHONE, FIBER OPTIC, CABLE, PRESSURE PIPE, SANITARY SEWER, STORM SEWER, AND UTILITY POLES WHERE NEEDED. ALL STORM SEWERS DAMAGED OR REMOVED, OR RELOCATED BY THE CONTRACTOR, SHALL BE REPLACED WITH THE SAME SIZE AND QUALITY PIPE BY THE CONTRACTOR AT CONTRACTOR'S SOLE EXPENSE. ALL UTILITIES UNDERMINED BY THE EXCAVATION SHALL HAVE COMPACTED SAND BACKFILL PLACED UNDER THEM, UNLESS MDOT 6A CRUSHED Limestone (A1) OR MDOT 22A GRAVEL (A2) IS SHOWN ON THE CONSTRUCTION PLANS. ALL WORK, INCLUDING THE REBORING OF SANITARY SEWER SERVICE LEADS AND WATERMAIN LEADS TO ACCOMMODATE CONSTRUCTION TO CLEAR EXISTING SERVICES, SHALL BE INCLUSIVE TO THE PROJECT.

26. SHOP DRAWINGS
PRIOR TO THE START OF THE WORK, THE CONTRACTOR SHALL FURNISH TO GCDC-WWS SHOP DRAWINGS AND/OR CATALOG CUTS FOR ALL MATERIALS AND EQUIPMENT ITEMS PER THE STANDARD SPECIFICATIONS.

27. MATERIAL CERTIFICATIONS
PRIOR TO THE START OF THE WORK, THE CONTRACTOR SHALL FURNISH TO GCDC-WWS MATERIALS CERTIFICATES FOR ALL MATERIALS USED DURING THE WORK.

28. NON-STOPPAGE CLAUSE
THE CONTRACTOR SHALL BE REQUIRED TO COMPLETE ALL WORK IN AN EXPEDITIOUS MANNER AND SHALL NOT STOP THE WORK FOR EXTENDED PERIODS ONCE THE WORK HAS BEGUN WITHOUT WRITTEN APPROVAL OF GCDC-WWS.

29. DISPOSAL OF EXCESS EXCAVATED MATERIAL
ALL EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR, WITH ALL PERMITS, PERMISSIONS, AND LOCATIONS PROVIDED BY THE CONTRACTOR. ADJACENT PROPERTY OWNERS SHALL BE GIVEN PREFERENCE FOR DISPOSAL SITES. WRITTEN PERMISSION FOR DISPOSAL ON ADJACENT PROPERTY OWNERS SHALL BE PROVIDED TO GCDC-WWS.

30. CONSTRUCTION STAKING
THE CONTRACTOR SHALL, AT ITS OWN EXPENSE, PROVIDE A PROFESSIONAL LAND SURVEYOR, LICENSED IN THE STATE OF MICHIGAN, TO PROVIDE ALIGNMENT AND GRADE STAKES, AND CUT SHEETS. THE SURVEYOR SHALL PROVIDE GRADE STAKES AND CUT SHEETS AT ALL STRUCTURES AND AT A MAXIMUM OF 50' INTERVALS BETWEEN STRUCTURES.

31. FINAL ELEVATIONS OF SURFACE UTILITIES
ALL FINAL ELEVATIONS OF MANHOLE CASTINGS, HYDRANTS, VALVES, AND VALVE BOXES SHALL BE APPROVED BY THE GCDC-WWS REPRESENTATIVE IN THE FIELD. ANY ADJUSTMENTS THAT ARE MADE SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.

32. PROJECT RECORD DOCUMENTS
UPON COMPLETION OF THE WORK AND PRIOR TO FINAL APPROVAL FROM GCDC-WWS, THE OWNER/DEVELOPER SHALL FURNISH GCDC-WWS WITH ONE COMPLETE SET OF PROJECT RECORD DOCUMENTS. THESE PROJECT RECORD DOCUMENTS ARE COMPRISED OF DRAWINGS ON MYLAR AND AN ELECTRONIC DATA SET.

THE MYLAR PROJECT RECORD DOCUMENTS SHALL BE SUBMITTED TO GCDC-WWS ON 4 MIL MYLAR FOR THE REVIEW AND APPROVAL OF GCDC-WWS. THE MYLAR PROJECT RECORD DOCUMENTS SHALL INCLUDE BUT NOT BE LIMITED TO: INVERT OF PIPES, LOCATION OF MANHOLES, PIPE LENGTHS, SLOPES OF PIPE, LOCATION OF SERVICE LEADS, LOCATION OF MAINLINE VALVES, LOCATION OF BENDS, TEE CROSSINGS, AND LOCATION OF CURB BOXES. THIS INFORMATION SHALL BE GATHERED BY THE OWNER/DEVELOPER AT ITS SOLE EXPENSE. THESE PROJECT RECORD DOCUMENTS SHALL ALSO INCLUDE ANY ADDITIONAL INFORMATION COLLECTED BY THE GCDC-WWS OR MUNICIPAL CONSTRUCTION OBSERVER.

IN ADDITION TO THE AS-BUILT MYLARS, THE OWNER/DEVELOPER SHALL PROVIDE TO GCDC-WWS AN ELECTRONIC DATA SET IN A MICROSOFT EXCEL SPREADSHEET DETAILING THE FOLLOWING ITEMS IN THEIR AS-BUILT LOCATIONS DEPICTED IN MICHIGAN STATE PLANE SOUTH COORDINATES (MADS) AND ELEVATIONS (LEGS/NGVD): ALL MANHOLES (WATER AND SANITARY), ALL HYDRANTS, ALL VALVES, AND ALL SERVICE RISERS (WATER AND SANITARY) AT THEIR TERMINUS, ALL METER PITS, AND ALL PUMP STATIONS.

33. 2-YEAR MAINTENANCE AND GUARANTEE BOND
UPON COMPLETION OF THE WORK AND PRIOR TO FINAL APPROVAL, THE CONTRACTOR SHALL FURNISH THE GCDC-WWS WITH A 2-YEAR MAINTENANCE AND GUARANTEE BOND.

34. SOIL EROSION AND SEDIMENTATION CONTROL RELEASE
PRIOR TO FINAL ACCEPTANCE BY GCDC-WWS, THE CONTRACTOR SHALL REQUEST A FINAL INSPECTION OF ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND RECEIVE WRITTEN APPROVAL FROM GCDC-WWS. THE SOIL EROSION AND SEDIMENTATION CONTROL BOND WILL BE RELEASED UPON GCDC-WWS FINAL APPROVAL.

35. ORDER OF PRECEDENCE
IN RESOLVING INCONSISTENCIES BETWEEN TWO OR MORE SECTIONS OF THE CONTRACT DOCUMENTS, PRECEDENCE SHALL BE GIVEN IN THE FOLLOWING ORDER FROM (A) THROUGH (G):

- AGREEMENT AND ANY CONTRACT MODIFICATIONS (WITH GCDC-WWS)
- BID
- SUPPLEMENTARY CONDITIONS
- INSTALLATION TO BIDDERS
- GENERAL CONDITIONS OF THE CONTRACT
- SPECIFICATIONS
- DRAWINGS

1. ALL MATERIAL AND WORK SHALL COMPLY WITH THE LATEST GCDC-WWS SPECIFICATIONS AND STANDARD DETAILS.

2. NO CONNECTION TO AN EXISTING SANITARY SEWER SHALL BE MADE WITHOUT THE PRIOR APPROVAL OF GCDC-WWS. GCDC-WWS SHALL HAVE FINAL INSPECTION AUTHORITY AND APPROVAL FOR UNDERGROUND SANITARY SEWER FACILITIES.

3. THE MATERIAL FOR THE SANITARY SEWER SHALL BE SPECIFIED ON THE CONSTRUCTION DRAWINGS. THE FOLLOWING MATERIALS ARE ACCEPTABLE TO GCDC-WWS:

- 8" TO 15", PVC WITH A MINIMUM SDR OF 26 CONFORMING TO ASTM D-3034-00 GASKETED SEWER PIPE.
- LARGER THAN 15", REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76-03 JOINTS SHALL BE MOVED TONGUE & GROOVE TYPE WITH SOLID RUBBER GASKETS CONFORMING TO ASTM C-443-02. MINIMUM SIZE SHALL BE CLASS III, WALL B AS RECOMMENDED BY THE ENGINEER.

4. ALL SANITARY SEWER SERVICE RISERS SHALL BE 6" INTERNAL DIAMETER SDR-26 PVC OR LOWER CONFORMING TO ASTM D-3034-00. JOINTS SHALL BE RUBBER GASKET JOINTS OR SOLVENT WELD BELL JOINTS. RISERS SHALL BE LEFT AT 8-10" DEEP AT THE FRONT-OF-WAY OR EASEMENT LINE, OR AS DEEP TO SERVICE BASEMENTS. SERVICE RISERS WITH EASEMENTS SHALL BE EXTENDED A MINIMUM OF ONE PIPE LENGTH FROM THE MAINLINE SEWER OR TO THE EDGE OF THE EASEMENT, WHICH EVER IS LONGER. WEEP TILES, PERMETER DRAINS, DOWN SPOUTS, OR ANY OTHER SOURCE OF WATER, SHALL NOT BE CONNECTED TO THE SANITARY SEWER.

5. PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C-478-03 WITH RUBBER JOINTS CONFORMING TO ASTM C-443-02. ALL FINAL ELEVATIONS OF MANHOLE CASTINGS SHALL BE DETERMINED BY GCDC-WWS. MANHOLE FRAMES AND COVERS SHALL BE BOLT-DOWN, WATER TIGHT EAST JORDAN 1040 ZPT, REZIMAN FOUNDRY COMPANY R-1916F, OR GCDC-WWS APPROVED ALTERNATE STEEL SHALL BE M.A. INDUSTRIES PS-1-PT, AMERICAN STEEL CO. M-10, OR GCDC-WWS APPROVED ALTERNATE.

6. ALL SANITARY SEWERS SHALL BE INSTALLED PURSUANT TO THE SANITARY SEWER STANDARD DETAILS. DEEPER SEWERS EXCESSIVE TRENCH WIDTH AND WHERE NOTED, THE CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS SPECIFIED.

7. WHERE MANHOLE ADJUSTMENT IS REQUIRED, THE MAXIMUM AMOUNT OF ADJUSTMENT BETWEEN THE CASTING AND THE CONE SHALL BE 6". A MAXIMUM OF TWO ADJUSTMENT RINGS ARE ALLOWED. ONLY 3", 4", OR 6" CONCRETE ADJUSTMENT RINGS SHALL BE USED. THE MANHOLE SHALL BE WRAPPED PER SD-5 OF THE SANITARY SEWER DETAILS.

8. ALL SANITARY SEWERS 6" THROUGH 24" DIAMETER, INCLUDING SERVICE LEADS CONSTRUCTED AS PART OF WORK, SHALL UNDERGO A LOW PRESSURE AIR TEST AND AN INFILTRATION TEST, IN CONFORMANCE WITH ASTM C-924-02 OR C-899-02, PRIOR TO FINAL ACCEPTANCE. SANITARY SEWER SYSTEMS LARGER THAN 24" SHALL UNDERGO AN INFILTRATION TEST. THE MAXIMUM ALLOWABLE INFILTRATION FOR PVC SYSTEMS SHALL BE 0 GALLONS PER INCH DIAMETER, PER MILE, PER 24 HOURS, AND CONCRETE SYSTEMS SHALL BE 100 GALLONS PER INCH DIAMETER, PER MILE.

9. ALL PUBLIC SANITARY SEWERS 6" OR LARGER SHALL BE INTERNALLY TELEVIEWED (PAP/TILT) BY THE CONTRACTOR. THE TELEVIEW REPORT, INCLUDING THE DVD, SHALL BE GIVEN TO GCDC-WWS PRIOR TO A REQUEST FOR FINAL INSPECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING (JET/WAO) THE LINE AND ASSURING ALL DIRT AND DEBRIS HAS BEEN REMOVED PRIOR TO TELEVIEWING. PRIOR TO TELEVIEWING THE LINE, WATER SHALL BE PLACED IN THE MAIN FROM THE UPSTREAM MANHOLE UNTIL IT COMES OUT OF THE DOWNSTREAM MANHOLE. THE TELEVIEW REPORT SHALL LIST THE DISTANCE A HOUSE LEAD IS LOCATED FROM A MANHOLE, ALL SHEAR BREAKS IN THE MAIN OR SERVICE LEADS, ALL LONGITUDINAL CRACKS, BROKEN PIPE, BIPS, OR HIGH POINTS IN THE LINE, ETC. THE CONTRACTOR SHALL REPAIR DAMAGED PIPE BY EXCAVATING THE PIPE AND REPLACING THE LENGTH OF PIPE IN AN APPROVED METHOD. LEAKING JOINTS SHALL BE REPAIRED BY THE CONTRACTOR BY GROUTING. A LEAKING JOINT IS DEFINED AS HAVING SUFFICIENT INFILTRATION TO WET THE INTERIOR OF THE JOINT. GCDC-WWS SHALL BE NOTIFIED WHEN THE LINE IS TO BE TELEVIEWED AND SHALL BE PRESENT TO INSPECT REPAIRS.

10. SANITARY MANHOLES SHALL BE PLACED CLOSEST TO PROPERTY CORNERS WHEN FEASIBLE.

11. PRIOR TO PERFORMING ANY TESTING, THE CONTRACTOR SHALL BE REQUIRED TO DO THE FOLLOWING:

- CONDUCT PRELIMINARY TESTS ON THE SYSTEM.
- PROVIDE THE RESULTS FROM THE PRELIMINARY TESTS ON THE SYSTEM.
- PROVIDE RESULTS OF DENSITY CHECKS ON COMPACTED SAND BACKFILL FROM A CERTIFIED TESTING AGENCY.
- FURNISH A COMPLETED TWO-YEAR MAINTENANCE & GUARANTEE BOND.
- COMPLETE FINAL ADJUSTMENTS ON ANY SANITARY SEWER STRUCTURES.

12. PRIOR TO FINAL APPROVAL, THE FOLLOWING ITEMS MUST BE COMPLETED BY THE CONTRACTOR:

- THE FINAL TESTING SHALL CONSIST OF VISUAL INSPECTION OF MANHOLES, TELEVIEWING OF SANITARY MAIN, LOW PRESSURE AIR TEST, AND/OR INFILTRATION TEST DEPENDENT ON THE SIZE OF THE SANITARY MAIN (SEE #9 ABOVE), AND PASSING AN APPROPRIATE SIZED MANHOLE 30 DAYS AFTER THE MAIN HAS BEEN INSTALLED.
- PROVIDE MATERIAL CERTIFICATES.
- PROVIDE RECORDED COPIES OF ALL EASEMENTS FOR THE MASTER DEED REFLECTING FINAL PROJECT RECORD DOCUMENT LOCATIONS.

1. ALL MATERIAL AND WORK SHALL COMPLY WITH THE LATEST GCDC-WWS SPECIFICATIONS AND STANDARD DETAILS.

2. ALL PUBLIC PRESSURE PIPE SHALL BE DUCTILE IRON. THE PIPE SHALL BE BELL AND SPIGOT OR RESTRAINED JOINT FITTINGS FITTED WITH A RUBBER GASKET. FITTINGS MAY BE GRAY IRON OR DUCTILE IRON MEETING CLASS 350 PSI RATING. FOR 3" OR SMALLER SANITARY SEWER FORCE MAIN, SDR-21 PVC MAY BE UTILIZED.

3. ALL PIPES, VALVES, AND FITTINGS SHALL BE POLYMERIZED, EXCEPT IN MANHOLES. DISCUMPERENTIAL WRAPS OF MANUFACTURER RECOMMENDED TAPE SHALL BE PLACED AT NO GREATER THAN 4' INTERVALS ALONG THE BARREL OF THE PIPE, WITH THE EXCESS FOLDED OVER THE TOP TO TAKE OUT EXCESS SLACK, HELPING TO MINIMIZE THE SPACE BETWEEN THE POLYETHYLENE AND THE PIPE. COMPLETE THE INSTALLATION BY OVERLAPPING THE POLYETHYLENE TUBE WRAP AT EACH END AND SEAL ENDS PER THE MOST CURRENT VERSION OF AWWA C105/A21.5 STANDARD. WRAPPING PVC PIPE IS NOT REQUIRED.

4. WHERE SANITARY SERVICE LEADS OR OTHER UTILITIES ARE ENCOUNTERED, THE CONTRACTOR SHALL MAKE ADJUSTMENTS TO PROVIDE CONTINUOUS SERVICE TO PROPERTIES ALONG THE ROUTE OF CONSTRUCTION. ALL WORK, INCLUDING THE REBORING OF SANITARY SEWER SERVICE RISERS TO ACCOMMODATE CONSTRUCTION, OR ADJUSTING PRESSURE PIPE INSTALLATION TO CLEAR EXISTING SERVICES, SHALL BE INCLUSIVE TO CONSTRUCTION.

5. ALL PRESSURE PIPES SHALL HAVE A MINIMUM COVER OVER THE TOP OF THE PIPE OF 5' FROM FINISHED GRADE, 5' CLEARANCE UNDER DRAINS, 5' CLEARANCE BELOW EXISTING DITCHES, AND/OR A MINIMUM 5' BELOW THE EXISTING ROAD. THE STANDARD LAYING CONDITIONS FOR PRESSURE PIPE SHALL BE A 30" TRENCH WIDTH, OR PIPE DIAMETER PLUS 12". THE PIPE SHALL BE LAID ON MDOT CLASS II SAND (A5) A MINIMUM OF 4" WITH RECESSES TO ACCOMMODATE PIPE BELLS OR AS SHOWN ON THE PLANS.

6. ALL TRENCH EXCAVATION, UNDER OR WITHIN THE ONE-TO-ONE INFLUENCE OF THE EXISTING OR PROPOSED PAVING, SHALL BE BACK FILLED WITH COMPACTED MDOT CLASS II SAND (A5).

7. THE CONTRACTOR SHALL RESTRAIN ALL THRUST IN THE SYSTEM BY THE USE OF GCDC-WWS APPROVED RESTRAINED JOINTS AND THRUST BLOCKS. DURING THE INSTALLATION OF WATERMAIN, ALL HYDRANTS, TEES, VERTICAL OR HORIZONTAL BENDS AND FUTURE VALVE CONNECTIONS SHALL BE RESTRAINED. THE RESTRAINT SYSTEM AND LOCATION IN THE FIELD SHALL BE DESIGNATED ON THE PLANS.

8. THE CONTRACTOR SHALL ENCASE THE PRESSURE PIPE IN CONCRETE WHERE THE VERTICAL SEPARATION BETWEEN THE SANITARY SEWER OR STORM SEWER AND THE WATERMAIN IS LESS THAN 18" INCHES.

9. GATE VALVES SHALL BE RESILIENT SEATED CONFORMING TO THE MOST CURRENT VERSION OF AWWA C509 OR C516 STANDARDS. VALVES SHALL HAVE A VERTICAL, NON-RISING STEM, AND OPEN CLOCKWISE, OR AS SPECIFIED BY LOCAL MUNICIPALITY HAVING JURISDICTION.

10. FIRE HYDRANTS SHALL CONFORM TO THE MOST CURRENT VERSION OF AWWA C502 STANDARD. ALL HYDRANTS SHALL BE TRAFFIC MODELS WITH BREAKAWAY FLANGES, AND SHALL HAVE THE DRAIN HOLES FACTORY PLUGGED. ALL THE FIRE HYDRANT ASSEMBLIES FROM THE TEE THROUGH THE HYDRANT, SHALL BE RESTRAINED BY GCDC-WWS APPROVED METHOD. FIRE HYDRANTS SHALL BE PLACED AT PROPERTY CORNERS AND WITHIN THE RIGHT-OF-WAY WHEN POSSIBLE AND SHALL BE PAINTED YELLOW WITH THE CAP COLOR CODED IN ACCORDANCE WITH THE STANDARD DETAILS. FINAL ELEVATIONS AND ADJUSTMENTS TO GRADE, USING EXTENSION PIECES IF REQUIRED, SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT THE CONTRACTOR'S SOLE EXPENSE. FIRE HYDRANTS SHALL HAVE A 1 1/4" VALVE OPENING. FIRE HYDRANTS SHALL BE EAST JORDAN SBR 250, AMERICAN FLOW CONTROL, WATEROUS PACER W867-250, OR A GCDC-WWS APPROVED ALTERNATE.

11. PRESSURE TAPS TO EXISTING WATERMAIN, AND CONNECTIONS TO EXISTING VALVES, SHALL BE MADE ONLY UNDER GCDC-WWS OR THE LOCAL MUNICIPALITY HAVING JURISDICTION. ALL VALVE OPENING AND CLOSING SHALL BE BY THE OPERATIONAL AUTHORITY. ONLY A GCDC-WWS APPROVED TAPPING SLEEVE IS ALLOWED FOR ALL PRESSURE TAPS. A CONCRETE MANHOLE SHALL BE REQUIRED AROUND ALL PRESSURE TAPS. SEE PRESSURE PIPE DETAILS.

12. THE CONTRACTOR SHALL HAVE THE OPTION OF PRESSURE TESTING THE WATERMAIN AGAINST THE EXISTING VALVE AT THE POINT OF BEGINNING OF THE PROJECT OR PLACING A CAP WITHIN 10' OF THE EXISTING VALVE AND STUB. IF TESTING AGAINST THE EXISTING VALVE AND IT LEAKS, THE CONTRACTOR SHALL MAKE REPAIRS AND REPEAT THE PRESSURE TEST AGAINST THE EXISTING VALVE, AT THE CONTRACTOR'S SOLE EXPENSE. IF A CAP HAS BEEN PLACED, THEN THE CONTRACTOR SHALL PERFORM THE SYSTEM TEST, AND IF THE TESTS ARE SATISFACTORY TO GCDC-WWS, THEN THE FINAL CONNECTION SHALL BE MADE.

13. WATERMAIN SHALL BE TESTED IN ACCORDANCE WITH THE MOST CURRENT VERSION OF AWWA C600 STANDARD, AND CHLORINATED IN ACCORDANCE WITH THE LATEST GENESSEE COUNTY STANDARD SPECIFICATIONS. WATERMAIN SHALL BE TESTED TO 150 PSI AS MEASURED AT THE HIGH POINT IN THE WATER LINE. WATERMAIN CHLORINATION SHALL BE OBSERVED AND MONITORED BY GCDC-WWS OR THE LOCAL MUNICIPALITY HAVING JURISDICTION. CHLORINATION AND TESTING SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE. A LETTER OF APPROVAL FROM THE AGENCY HAVING AUTHORITY SHALL BE ISSUED PRIOR TO THE WATER BEING USED FOR HUMAN CONSUMPTION.

14. WHEN SPECIFIED BY THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL SUPPLY ALL WATER SERVICE LEADS. THESE LEADS SHALL BE 1/2" COPPER AND SHALL BE A MINIMUM OF 3/4" IN DIAMETER. THEY SHALL BE INSTALLED IN ACCORDANCE WITH THE WATERMAIN STANDARD DETAIL. ALL CORPORATIONS SHALL BE BROWNZE. ALL APPURTENANCES THAT COME IN CONTACT WITH PORTABLE WATER SHALL BE LEAD FREE ACCORDING TO NSF/ANSI STANDARD 372.

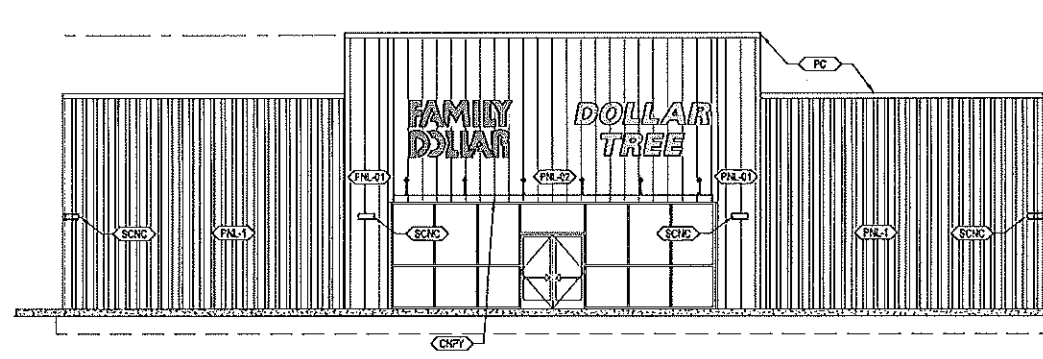
15. THE CONTRACTOR SHALL INSTALL, AS A MINIMUM, 2" COPPERATIONS ON THE PRESSURE PIPE FOR PRESSURE TESTING, CHLORINE ADDITION, AND FOR BLOW-OFF PURPOSES. THE CORPORATIONS SHALL HAVE COPPER PIPE EXTENDING TO THE GROUND SURFACE. THE CONTRACTOR SHALL REMOVE THE CORPORATIONS AND COPPER LINES UPON A SATISFACTORY TEST AND INSTALL BRONZE PLUGS PRIOR TO FINAL ACCEPTANCE.

16. PRIOR TO REQUESTING ANY FINAL PRESSURE TESTING AND GATHERING THE REQUIRED BACTERIA SAMPLES (FOR WATERMAIN ONLY), THE CONTRACTOR SHALL PERFORM THE FOLLOWING ITEMS:

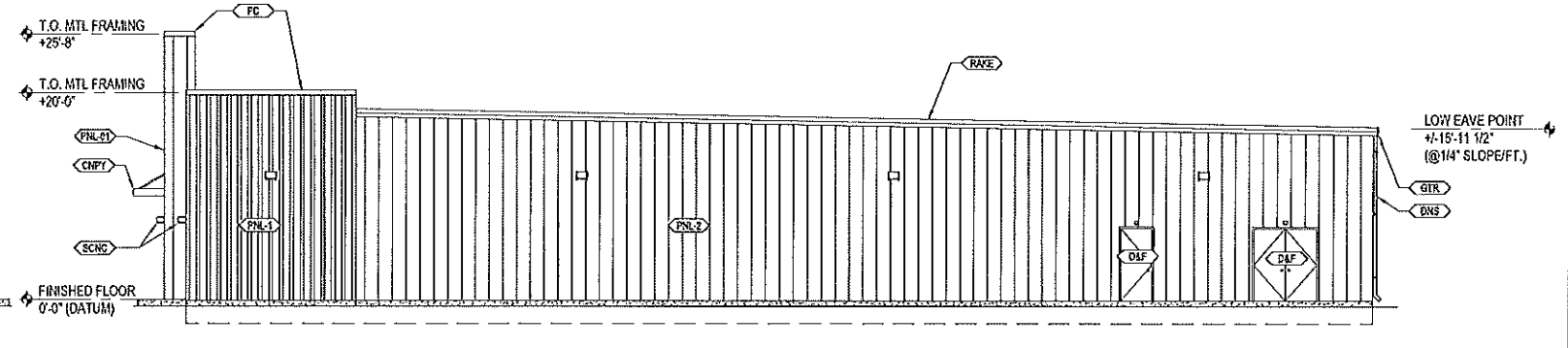
- CONDUCT A PRELIMINARY PRESSURE TEST ON THE SYSTEM.
- PROVIDE THE RESULTS FROM THE PRELIMINARY TESTS ON THE SYSTEM.
- PROVIDE PROPER CAP COLOR ON THE FIRE HYDRANTS (FOR WATERMAIN ONLY).

17. PRIOR TO FINAL APPROVAL, THE FOLLOWING ITEMS SHALL BE COMPLETED BY THE CONTRACTOR:

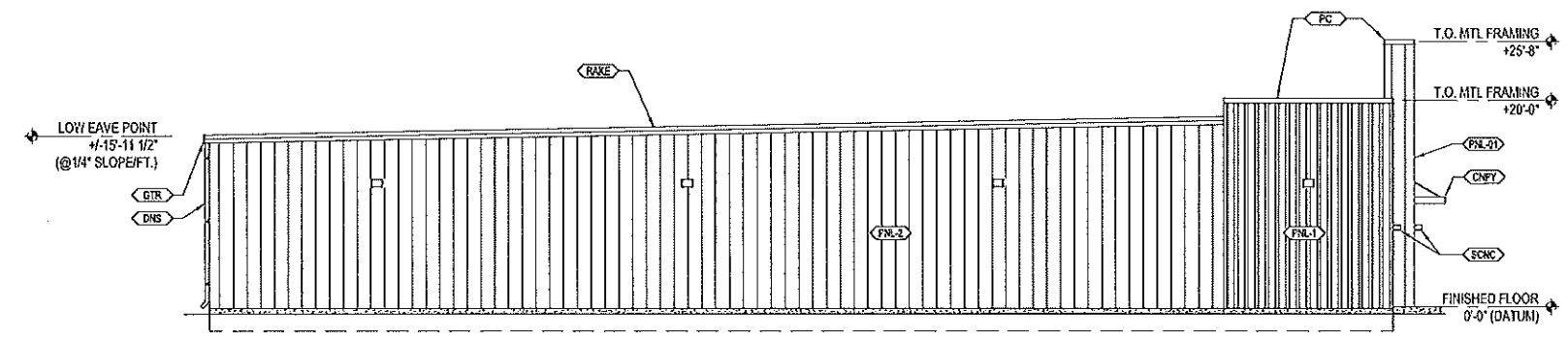
- FURNISH A COMPLETED TWO-YEAR MAINTENANCE & GUARANTEE BOND.
- PROVIDE MATERIAL CERTIFICATES.
- COMPLETE FINAL ADJUSTMENTS OF FIRE HYDRANTS (FOR WATERMAIN ONLY), VALVES, AND BENDS.
- PROVIDE RESULTS OF DENSITY CHECKS ON COMPACTED SAND BACKFILL FROM A CERTIFIED TESTING AGENCY.
- PROVIDE RECORDED COPIES OF ALL EASEMENTS FOR THE MASTER DEED REFLECTING FINAL PROJECT RECORD DOCUMENT LOCATIONS.



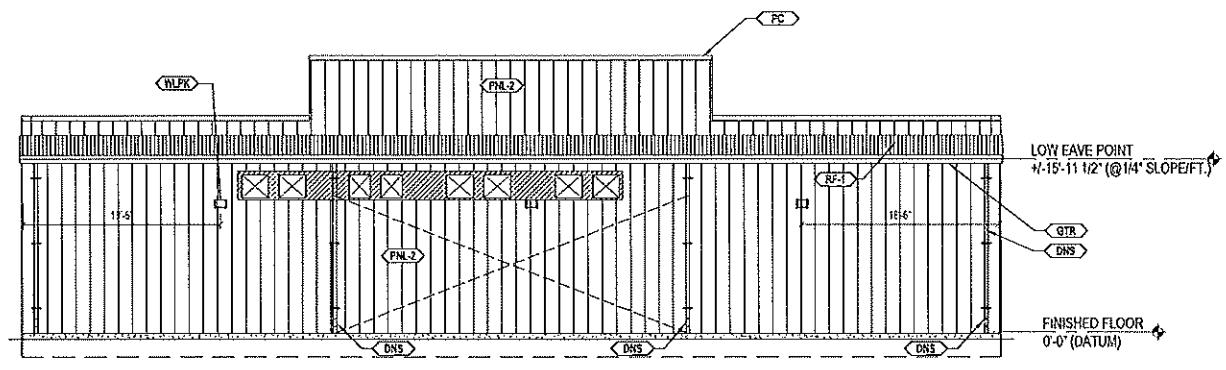
1 FRONT/EAST ELEVATION
SCALE: 1/8" = 1'-0"



2 SIDE/NORTH ELEVATION
SCALE: 1/8" = 1'-0"



3 SIDE/SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 REAR/WEST ELEVATION
SCALE: 1/8" = 1'-0"

EXTERIOR FINISH SCHEDULE			
SYMBOL	PAINT	DESCRIPTION	COLOR
FNL-01		12" PW-1 20-G CONCEALED FASTENER METAL SIDING PANELS - 24 GAUGE	LIGHT STONE
FNL-02		12" PW-1 20-G CONCEALED FASTENER METAL SIDING PANELS - 24 GAUGE	ALUMINUM
FE-1		16" FLUTED DESIGNER SERIES 24 GAUGE METAL WALL PANEL WITH CONCEALED FASTENERS (PROVIDED BY METAL BUILDING MANUFACTURER)	MBCI SIGNATURE 200 - LIGHT STONE
FE-2		SUPER SPAN 26 GAUGE METAL WALL PANEL (PROVIDED BY METAL BUILDING MANUFACTURER)	MBCI SIGNATURE 200 - LIGHT STONE
FR-1		3"-24 GAUGE DOUBLE LOCK GALVALUME METAL ROOF SYSTEM	SOLAR WHITE
CRPT		CANOPY BY TENANT	SHERMAN WILLIAMS SAFETY RED FOR FD SIDE AND DASH FOR DT SIDE
WLPK		SCULPTURED PANE FRAM (PROV BY METAL BUILDING MANUFACTURER)	MBCI SIGNATURE 200 - LIGHT STONE
PC	NA	24 GAUGE ANNEAL COATED METAL CORING (PROV BY METAL BUILDING MANUFACTURER)	SHERMAN WILLIAMS SAFETY RED FOR FD SIDE AND DASH FOR DT SIDE
DHS	NA	GALVALUME METAL DOWNSPOUT (SIZED & PROVIDED BY METAL BUILDING MANUFACTURER)	MBCI SIGNATURE 200 - LIGHT STONE
GTR	NA	GALVALUME METAL GUTTER (SIZED & PROVIDED BY METAL BUILDING MANUFACTURER)	MBCI SIGNATURE 200 - LIGHT STONE
WFL		LED EXTERIOR WALL PAK LIGHT @ 12'-0" A.F.F. (SEE ELECTRICAL)	
SCNC		18" LED PARROT 4x4 5000K @ 8'-0" A.F.F. (SEE ELECTRICAL)	DRZ - BAGAZP
DF	NA	STEEL DOOR & HOLLOW METAL FRAME	SHERMAN WILLIAMS - SW7037 BALANCED BEIGE

<p>PAINTING NOTES:</p> <p>CNU - (1) COAT OF 5-W LIXON BLOCK SURFACER A24W200 (OR EQUAL).</p> <p>DUMPSTER ENCLOSURE - (2) COATS OF 5-W COMPLEX XL ELASTOMERIC HIGH BUILD COATING, A5-400 SERIES (OR EQUAL)</p> <p>METAL - (2) COATS OF 5-W METALTEX ACRYLIC SEMI-GLOSS (B42 SERIES)</p> <p>UNITELS - PAINT STOREFRONT UNITELS PER METAL NOTE ABOVE WITH SHERMAN WILLIAMS BALANCED BEIGE SW7037 AFTER PRIMING WITH (1) COAT OF 5-W PRO INDUSTRIAL PRO-CRYL UNIVERSAL PRIMER (B66-310 SERIES)</p>	<p>REVISIONS:</p> <p> </p> <p> </p> <p> </p>
---	---



Survey ▪ Inspection ▪ Testing ▪ Engineering

401 Balsam, PO Box 159, Carrollton, MI 48724-0159

989-752-6500

September 5, 2023

Chris Czyzio
Zoning Administrator
Flushing Township
6524 N. Seymour Road
Flushing, MI 48433

**RE: Family Dollar
Site Plan and Special Land Use - 7029 W. Mt. Morris Road**

D&M Site, Inc. (D&M) is in receipt of the August 15, 2023 ROWE Professional Services Company review. Plans have been updated (dated September 5, 2023) and narrative responses to the review are provided below:

1. Due to the size of the property and the need to depict off-site conditions and topographic features, the scale of the plan is needed at 1"=40'.
2. Additional landscaping has been placed along the southern portion of the property for screening purposes.
3. The building height has been added to sheet C3.0 and architectural building elevations are included with the updated plan set.
4. Water capacity calculations has been added to sheet C5.0.
5. The location map on the cover sheet has been expanded to at least 1 square mile.
6. A Phase 1 ESA has been completed and no areas of concern were identified.
7. A Hazardous Substances Reporting Form will be completed if requested by the Township.
8. A State/County Environmental Permits Checklist will be completed if requested by the Township.
9. The plans have been submitted to the Genesee County Road Commission (GCRC) and the Genesee County Drain Commission (GCDC) for approvals and permitting. GCRC had previously reviewed the driveway locations and did not have any objections.
10. Performance Standards have been added to sheet C3.0.
11. The loading/unloading zone that is indicated is twice the size of the required and the single loading space is adequate for the single-purpose use.

D&M appreciates the thorough review conducted and believes that the updated plans and responses provide above are sufficient for plan approval.

Respectfully,
D&M SITE, Inc.

Andy Andre, P.E.



August 15, 2023

Mr. Chris Czyzio, Zoning Administrator
6524 N. Seymour Road
Flushing, MI 48433

RE: Site Plan Review and Special Land Use – 7029 W Mt. Morris Road

Dear Mr. Czyzio:

ROWE Professional Services Company is in receipt of a site plan and special land use application for a Family Dollar store located at 7029 W Mt. Morris Road. The proposed new building is to include a dollar store with on-site parking. The proposed site is a parcel which is zoned C-2 Commercial General.

Planning Comments:
Information Requirements

The following items from the list of informational requirements for a site plan in Section 36 of the Township Zoning Ordinance were not included. Note, the Planning Commission may waive any of these requirements that they find are not necessary to review this application.

- **Section 36-1902 Site Plan Scale** – The site plan is scaled to 1-inch equals 40 feet instead of the required 1-inch equals 20 feet.
- **Section 36-1902(f) Landscaping** – Planning Commission to decide if landscaping greenbelt is required.
- **Section 36-1902(g) Height and Dimensions** – Building height is not shown on site plans.
- **Section 36-1902(h) Front, Rear, and Side Elevations** – No elevations were provided.
- **Section 36-1902(i) Water and Sanitary Services** – Water capacity calculations were not provided.
- **Section 36-1902(l) Location Map** – Location map provided does not show a total 1 square mile.
- **Section 36.1902(r) Contamination** – Unclear if there are areas on site which could be contaminated, such as mounds in the back of the site.
- **Section 36-1902(s) Hazardous Substances Reporting Form** – Unclear if Hazardous Substances Reporting Form is required for this site.
- **Section 36-1902(t) State/County Environmental Permits Checklist** – Unclear if the State/County Environmental Permits Checklist has been submitted.

SINCE 1962

Zoning Compliance

The following items were identified as potential zoning ordinance compliance issues.

- **Section 36-324 Landscaping and Screening** – The Planning Commission may require a greenbelt between the proposed use and adjacent residential uses to limit impact from additional traffic and the visual impact of the new building.
- **Section 36-406 Curb Cuts and Driveways** – It is unclear if driveways have been approved by the county road commission.
- **Section 36-416 Performance Standards** – No performance standards information was provided. The applicant should indicate whether performance standards will be complied with.
- **Section 36-500 Off-Street Loading and Unloading** – One loading space was provided, two are required.
- **Section 36-701 Maximum Building Height** – Maximum building height is not stated.

In addition to these comments, we have attached checklists which contain additional information for your use.

Next Steps:

As the Planning Commission is aware, the Special Land Use and Site Plan Review request must be addressed separately. Following is a general summary of the process necessary for the Planning Commission to take action on this request.

1. **Address outstanding ordinance issues:** The Planning Commission should determine which informational requirements, if any, are appropriate to be waived. The Planning Commission should also determine whether outstanding zoning compliance issues have been addressed by the applicant or if they are appropriate to be addressed via a conditional approval.
2. **Take action on the Special Land Use:** The Planning Commission must take action on the Special Land Use request according to the standards in the zoning ordinance. See the attached Special Land Use checklist for additional information.
3. **Take action on the Site Plan:** The Planning Commission must take action on the Site Plan Request according to the standards in the zoning ordinance. See the attached Site Plan checklist for additional information.

Regulatory and other governmental agencies with jurisdiction may have additional comments or requirements. The developer and designer remain responsible for the design, construction, and any resulting impacts of the project. If you have any questions or require additional information, please contact me at jball@rowepsc.com or (810) 341-7500.

Sincerely,
ROWE Professional Services Company

Jason Ball, AICP
Senior Planner II

Attachments



September 7, 2023

Ms. Wendy Meinberg, Flushing Township Clerk
7029 Mt Morris Road
Flushing, MI 48433

RE: Site Plan Review – 7029 Mt. Morris Road – Family Dollar

Dear Ms. Meinberg:

Per your request, ROWE Professional Services Company has performed an engineering review of the above-referenced proposed site project plans. The proposed development includes a 10,500 square foot commercial building, an asphalt parking lot, a detention basin, storm sewer, sanitary sewer lead and water main connection. The proposed development is to be located at 7029 Mt. Morris Road. The township received the site plan set on July 24, 2023. The subject property is zoned C-2 Commercial.

Based on our review, we offer the following comments:

Engineering Comments

1. Sheet C4.0: The proposed detention basin overflow is shown within contours that do not match the calculated overflow elevation.
2. Sheet C4.0: Further proposed site grading may be needed around the detention basin—most notably regarding the overflow outlet.
3. Sheet C5.0: The outlet control structure detail notes a frame and grate rim elevation that would be incompatible with the elevation of interior structure elements as shown.
4. Sheet C5.0: Storm sewer calculations should be provided for individual pipe runs.
5. Sheet C5.0: The proposed slope for the storm sewer run from CB-100 to EX Stm 210 does not match the indicated inverts at the structures.
6. If applicable, any proposed easements shall be shown on the plans and developer shall verify that easements are granted to the public agency maintaining these utilities.
7. The developer shall obtain all permits through Michigan Department of Environment, Great Lakes, and Energy (EGLE), Genesee County Road Commission (GCRC), and Genesee County Drain Commissioner – Division of Water and Waste Services (GCDC-WWS) as necessary to complete the proposed work shown.
8. Plans shall be reviewed by the GCDC-WWS for approval on any proposed water main and proposed sanitary sewer.
9. Plans shall be reviewed by the Genesee County Drain Commission – Surface Water Management (GCDC-SWM) for surface water management and onsite detention.

SINCE 1962

Ms. Wendy Meinberg, Flushing Township Clerk
September 7, 2023
Page 2

Regulatory and other governmental agencies with jurisdiction may have additional comments or requirements. The developer and designer remain responsible for the design, construction, and any resulting impacts of the project. If you have any questions or require additional information, please contact me at dsanders@rowepsc.com or (810) 341-7500.

Sincerely,
ROWE Professional Services Company

Deveron Q. Sanders, PE
Project Engineer

R:\Projects\22C0001\Docs\Planning and Zoning Services\Planning Commission\Site Plan Review\Family Dollar\Eng Review\Family Dollar Eng Rev.docx

Charter Township of Flushing
Zoning Ordinance Compliance Checklist
Family Dollar, 7029 W. Mount Morris Road

Site Plan Received: July 25, 2023

Article 3: General Provisions Requirements	<i>Does Site Plan Include This Information</i>			
	Yes	No	N/A	Comment
Sec. 36-304. Common Driveways. Are the proper Right-of-Way (ROW) shown on the plan (33 ft ingress/egress for not more than 2 residences)? The applicant provides there are records with the Genesee County Register of Deeds, written agreement with all lot or residences to be served by the common driveway, and staked boundary survey of driveway easement.			X	Common driveways does not apply to this site
Sec. 36-305. Private Roads. Are the required information provided and the road has a minimum 66ft ROW and follow other requirements?			X	No private road is planned
Sec. 36-309. Non Conforming Use Generally. Is this a non conforming use and if so it is not being enlarged, altered, or changed in area, activity, content, and has not ceased business for a period of 1 year or more?			X	The use is conforming
Sec. 36-310. Non Conforming Structure. Is this a non conforming structure and if so there is no change in use, location, modification, or structure in setback requirements or other dimensional requirements?			X	The structure is conforming
Sec. 36-314. Non Conventional Dwellings. Does any proposed dwelling comply with the prohibition against dwelling in a cellar, garage, or incompletely constructed structure after 1989?			X	No dwelling is proposed
Sec. 36-318. Temporary Dwelling Structure, Fixed, or Movable. If a temporary structure is proposed for a dwelling, has it been granted the required Special Use Permit (SUP).			X	No temporary dwelling is proposed

Article 4: Site Regulations Requirements	<i>Does Site Plan Include This Information</i>			
	Yes	No	N/A	Comment
Sec. 36-400. Accessory Structures. Is any accessory structure being proposed that follows these requirements?			X	No accessory structure is proposed
Sec. 36-403. Lot Sizes. Is the lot not served by municipal water and sanitary sewer have a minimum lot size of 30,000 sq ft with at least 100 feet of frontage on a public road and other septic system requirements?			X	Lot is served by municipal water and sanitary
Sec. 36-404. One Family Dwelling Regulations. Do any proposed the one family dwellings meet the requirements?			X	Site is not a dwelling
Sec. 36-405. Clear Vision Zone. Does the development meet the requirement to have a 25ft area from the intersection of 2 public ROW with no structure, objects, or existing topography over 2 ft, besides some tree exceptions?	X			Site plan shows nearest objects with potential to block vision (trees) are 55+ ft from corner of ROW
Sec. 36-406. Curb Cuts and Driveways. Do any proposed curb cuts or driveways have approval from the Genesee County Road Commission for curb cuts or driveways?	?			Have the driveways been approved and a permit issued by the Genesee County Road Commission?
Sec. 36-408. Fences, Walls, and Other Protective Barriers. Do any proposed fences conform to the Flushing Township Fence Ordinance?			X	No fences are proposed

Flushing Township- Zoning Compliance Checklist

Article 4: Site Regulations Requirements	<i>Does Site Plan Include This Information</i>			
	Yes	No	N/A	Comment
Sec. 36-409. Incinerators and Outside Trash Containers. Do any proposed incinerators and outside trash containers follow these requirements?	X			Proposed trash dumpsters are accessible from the road and driveway without blocking traffic and are maintained in a enclosure.
Sec. 36-410. Lot Grades. Does the site plan include a sloping grade cause the surface drainage to flow away from the walls of such structures and does new construction it does not jeopardize existing drainage systems?	X			Grading and drainage plan slopes away from structures and is designed to not jeopardize existing systems
Sec. 36-411. Setback. Does the site plan comply with the setback requirements?	X			Setback rules are followed, and nearest residential district is 135.7' from proposed structure, well within additional setback
Sec. 36-413. Storage in Front Yard. Does the proposed storage, parking of any vehicle, or permanent structure outside of the front yard?			X	Not located in a residential district
Sec. 36-414. Water Supply. Does the proposed development have safe, adequate, and sanitary water supply?	X			Connecting to existing water and sanitary
Sec. 36-415. Private Water Supply. Does the proposed development met the requirements to have a private water supply?			X	Public water supply
Sec. 36-416. Performance Standards. Does the proposed development meet performance standards for the below categories?	X			
(a) Smoke Control.	?			Please indicate the amount of smoke projected.
(b) Control of Noise.	?			Please indicate max noise projected
(c) Odors.	?			Please indicate any potential odors, if any
(d) Control of Glare or Heat.	?			Please indicate any glare or heat
(e) Control of Vibrations.	?			Please indicate any vibration potential
(f) Control of Radioactivity or Electronical Disturbance.	?			Please indicate radioactive or electric disturbance
(g) Outdoor Storage and Waste Disposal.	X			Requirements met
Sec. 36-417. Mobile Home Park Development. Does the proposed mobile home park meet these requirements?			X	Site is not a mobile home park
Sec. 36-418. Industrial Parks. Does the proposed industrial park meet these requirements?			X	Site is not an industrial park
Sec. 36-419. Farm Animals and Horses. Within the RSA district, are the requirements being met?			X	Site will not store farm animals or horses

Article 5: Off Street Parking Requirements	<i>Does Site Plan Include This Information</i>			
	Yes	No	N/A	Comment
Sec. 36-500. Off-Street Loading and Unloading. Is a loading/unloading space provided as required?	?			One loading space is provided instead of two, but it is double the

Article 5: Off Street Parking Requirements	Does Site Plan Include This Information			Comment
	Yes	No	N/A	
				required size
Sec. 36-501. Off-Street Parking Requirements. Do any proposed parking spaces meet these requirements?		X		Spaces are the correct size, not enough spaces are provided. A variance was granted at the ZBA Meeting on 7/17/2023.

Sec. 36-501(b)(1) Off-Street Parking Requirements	Required	Provided
Parking Spaces-	8607/100 = 86 spaces (stated on C3.0)	42
Barrier Free Spaces-	2	2
Loading Spaces-	10500/10000 = 2 Loading Spaces	1 Loading Space, double of required size

Flushing Township- Zoning Compliance Checklist

Article 7: District Requirements
What is the use: Retail / Sales and service, general
Is use permitted in the district it is located in (C-2) By Right: <input type="checkbox"/> By SUP: <input checked="" type="checkbox"/>

Sec. 36-701 Table of District Regulations		
<i>District Requirement</i>	Ordinance Standard	Proposed Plot Plan
Minimum Lot Area (sq. ft.)	22,500	5.19ac = 226,076 sq. ft.
Minimum Lot Width (ft.)	150	450
Minimum Lot Depth (ft.)	150	569
Minimum Setbacks – Front (S)	50	50
- Sides (E)	50	50
- Sides (W)	50	50
- Rear (N)	50	50
Maximum Building Height (Stories)	2.5	Not Stated
Maximum Lot Coverage (%)	N/A	N/A
Are there any required conditions for this district?	N/A	

Article 18: Special Use Permits Requirements Sec. 36-1804	<i>Does Site Plan Include This Information</i>			Comment
	Yes	No	N/A	

R:\Projects\22C0001\Docs\Planning and Zoning Services\Planning Commission\Site Plan Review\Family Dollar\7.25.23 Flushing Twp-Zoning Compliance Checklist - Family Dollar.docx

Charter Township of Flushing
Site Plan Standards for Approval
 Family Dollar, 7029 W. Mount Morris Road

Site Plan Date: July 25, 2023

Sec. 20-1907 Standards for Approval				
<i>Standards</i>		<i>Does Site Meet Requirements</i>		
		Yes	No	N/A
<p>(a) Off Site Improvements. No off site improvements can be required as a condition for site approval, unless the applicant has volunteered to construct such improvements as documented by their site plan drawing. However, if the lack of such off site improvements will create unacceptable conditions, said lack is sufficient justification for denial of a site plan.</p>				
<p>COMMENTS/FINDINGS OF FACT:</p> <ul style="list-style-type: none"> No off-site improvements are proposed. 				
<p><i>Applicant's Comments:</i></p>	<p><i>Planning Consultant's Comments:</i> N/A</p>	<p><i>Planning Commission Comments:</i></p>		
<p>(b) District Regulations. The project must comply with the applicable district regulation regarding use, dimensions, off street parking and any other aspects of development.</p>				
<p>COMMENTS/FINDINGS OF FACT:</p> <ul style="list-style-type: none"> Retail Use is permitted under special land use requirements There are several ordinance requirements that need further clarification, including performance standards and loading zones. 				
<p><i>Applicant's Comments:</i></p>	<p><i>Planning Consultant's Comments:</i> Applicant may be able to provide more information regarding these outstanding requirements.</p>	<p><i>Planning Commission Comments:</i></p>		
<p>(c) Special Use Standards. If the site plan review is being conducted for a proposed Special Land Use Permit, any Special Use Standards relating to the use must also be satisfied.</p>				
<p>COMMENTS/FINDINGS OF FACT:</p> <ul style="list-style-type: none"> A few minor outstanding issues remain relative to zoning compliance. The Planning Commission may determine that a greenbelt is necessary. 				
<p><i>Applicant's Comments:</i></p>	<p><i>Planning Consultant's Comments:</i> Overall, the site is largely in compliance with special use standards.</p>	<p><i>Planning Commission Comments:</i></p>		
<p>(d) Transportation. Transportation facilities serving the parcel must be sufficient to provide safe and efficient access to the parcel and circulation within it. Consideration shall be given to roads rights of way, surface type, number of lanes, driveway design and location, vehicular circulation within the parcel, parking, snow removal from transportation facilities, pedestrian circulation, emergency vehicle access, and accessibility for handicapped persons. When the adequacy of public road service to the parcel is questioned, the input of the Genesee County Road Commission shall be sought. All parking areas shall be adequately screened to minimize headlight glare from shining onto adjacent property.</p>				
<p>COMMENTS/FINDINGS OF FACT:</p> <ul style="list-style-type: none"> It is not clear whether the applicant requires additional approvals from the County Road Commission. The roadways appear to be adequate to support the proposed use. 				

Sec. 20-1907 Standards for Approval

Standards			Does Site Meet Requirements		
			Yes	No	N/A
<i>Applicant's Comments:</i>	<i>Planning Consultant's Comments:</i> The Planning Commission should determine whether a county road commission permit will be required and if approval should be conditioned upon that review.	<i>Planning Commission Comments:</i>			
(e) Utilities. Public utilities, including water, sewer and storm drainage facilities, must be adequate to serve the proposed use or sufficient provisions shall be made to provide these services on site. Private utility services, including electricity, telephone and natural gas, must be sufficient to serve the needs of the project. When the adequacy of any public utility service to the site is in question, the input of the appropriate public utility provider shall be sought.					
COMMENTS/FINDINGS OF FACT: <ul style="list-style-type: none"> Capacity of public sanitary sewer has been calculated and will not have an effect. Capacity of public water has not been calculated but would not appear to be significantly impacted. Utility permits will be acquired and approved prior to construction. 					
<i>Applicant's Comments:</i>	<i>Planning Consultant's Comments:</i> Overall, the site is largely in compliance with utility standards.	<i>Planning Commission Comments:</i>			
(f) Fire Protection. The proposed project must comply with applicable fire safety regulations. Also, current fire department personnel and equipment must be sufficient to serve the project or sufficient provisions shall be made to provide these services. Finally, location number and capacity of fire hydrants, if applicable, must be adequate to serve fire suppression needs.					
COMMENTS/FINDINGS OF FACT: <ul style="list-style-type: none"> No fire protection information was provided with the application. 					
<i>Applicant's Comments:</i>	<i>Planning Consultant's Comments:</i> It may be helpful to have the fire department review the plans to confirm compliance.	<i>Planning Commission Comments:</i>			

Sec. 20-1907 Standards for Approval

<i>Standards</i>		<i>Does Site Meet Requirements</i>		
		Yes	No	N/A
<p>(g) Environment. Natural features of the landscape should be retained whenever practicable to serve as a buffer between the project and adjoining properties or help to control erosion, contain storm water runoff, absorb noise, deflect wind currents, reduce glare or otherwise benefit the general health, safety or appearance of the neighborhood. Any buildings, fences, lighting, vegetation or other features that are introduced into the landscape should be designed to complement the site's surrounding environment and enhance the positive features of the project. The site will be developed with the goal of controlling any negative impacts the project might have, such as noise, smoke, vibration, odor, glare, heat or dust so that they will not be discernible beyond the property boundaries. ... In addition:</p> <ol style="list-style-type: none"> 1) Sites at which hazardous substances are stored, used or generated shall be designed to prevent spills and discharges to the air, surface of the ground, ground water, lakes, streams, rivers or wetlands. 2) Secondary containment for above ground areas where hazardous substances are stored or used shall be provided. Secondary containment shall be sufficient to store the substance for the maximum anticipated period of time necessary for the recovery of any released substance. 3) General purpose floor drains shall only be allowed if they are approved by the responsible agency for connection to a public sewer system, an onsite closed holding tank (not a septic system), or regulated through a State of Michigan ground water discharge permit. 4) State and federal agency requirements for storage, spill prevention, record keeping, emergency response, transport and disposal of hazardous substances shall be met. No discharges to ground water, including direct and indirect discharges, shall be allowed without required permits and approvals. 				
<p>COMMENTS/FINDINGS OF FACT:</p> <ul style="list-style-type: none"> • No materials hazardous to the environment are proposed. • Negative project impacts have not been studied but are not expected to have an impact beyond property boundaries. 				
<i>Applicant's Comments:</i>	<i>Planning Consultant's Comments:</i> Overall, the site is largely in compliance with standards. The Planning Commission may determine whether impact studies will be required and if approval should be conditioned upon that review.	<i>Planning Commission Comments:</i>		
<p>(h) Consistency With Ordinance Intent. The site plan should be generally consistent with the purpose and objectives of this ordinance and with the purpose of the Zoning District in which the subject parcel is located.</p>				
<p>COMMENTS/FINDINGS OF FACT:</p> <ul style="list-style-type: none"> • 				
<i>Applicant's Comments:</i>	<i>Planning Consultant's Comments:</i> The outstanding issues identified above should be addressed to meet ordinance intent.	<i>Planning Commission Comments:</i>		

R:\Projects\17C0091\Docs\Planning and Zoning Services\Planning Commission\Flushing Twp- Site Plan Standards for Approval.docx

Charter Township of Flushing
Special Land Use Standards for Approval
 Family Dollar, 7029 W. Mount Morris Road

Site Plan Date: July 25, 2023

Sec. 20-1802 Standards for Approval					
<i>Standards</i>			<i>Does Site Meet Requirements</i>		
			Yes	No	N/A
(a) That the special land use shall be consistent with and promote the intent and purpose of this chapter.					
COMMENTS/FINDINGS OF FACT:					
<ul style="list-style-type: none"> The use (Retail) is permitted as a special land use in the zoning district C-2. 					
<i>Applicant's Comments:</i> N/A	<i>Planning Consultant Comments:</i> The use is permitted as a special land use and the current use of the site is a vacant lot. The construction of retail on this lot would support the township's goal of future commercial development.	<i>Planning Commission Comments:</i>			
(b) That the proposed use will ensure that the land use or activity authorized shall be compatible with adjacent land uses, the natural environment and the capacities of public services and facilities affected by the proposed land use.					
COMMENTS/FINDINGS OF FACT:					
<ul style="list-style-type: none"> Building and parking will be distanced from neighboring residential lots by the required 100 ft. Capacity of public sanitary sewer has been calculated and will not have an effect. Capacity of public water has not been calculated, but would not appear to be significantly impacted. The property is adjacent to residential properties to the West and South, no fences or buffers are proposed to limit impact from the new commercial development on adjacent residential properties. The Planning Commission may require a greenbelt be planted to buffer adjacent residential uses per Section 36-324. 					
<i>Applicant's Comments:</i>	<i>Planning Consultant Comments:</i> Use appears to meet this standard, however the Planning Commission may determine that a greenbelt is necessary to buffer adjacent residential uses/districts.	<i>Planning Commission Comments:</i>			
(c) The special land use sought is consistent with the public health, safety, and welfare of the township.					
COMMENTS/FINDINGS OF FACT:					
<ul style="list-style-type: none"> The only potential risks posed by the use would relate to traffic at the intersection of Elms and Mt. Morris Road. The applicant is proposing two separate driveways that will connect both roads. The applicant has not provided confirmation of approval from the Genesee County Road Commission. 					
<i>Applicants Comments:</i>	<i>Planning Consultant Comments:</i> The use does not clearly present dangers to public health, safety,	<i>Planning Commission Comments:</i>			

	and welfare, but confirmation of driveway placement and approval from the county road commission is necessary.			
(d) A request for approval of the land use or activity, which is in compliance with the standards stated in this chapter, the conditions imposed pursuant to this chapter, and other applicable ordinances and state and federal statutes shall be approved by the commission.				
<p>COMMENTS/FINDINGS OF FACT:</p> <ul style="list-style-type: none"> • A few minor outstanding issues remain relative to zoning compliance. • The Planning Commission may determine that a greenbelt is necessary. 				
<i>Applicants Comments:</i> N/A	<i>Planning Consultant Comments:</i> Overall the site is largely in compliance with ordinance standards.	<i>Planning Commission Comments:</i>		

R:\Projects\22C0001\Docs\Planning and Zoning Services\Planning Commission\Site Plan Review\Family Dollar\7.25.23 Flushing Twp-SUP Standards for Approval - Family Dollar.docx

Charter Township of Flushing Site Plan Information Checklist

Family Dollar, 7029 W. Mount Morris Road

Site Plan Received Date: July 25, 2023

Sec. 36-1902 Site Plan Review Requirements				
<i>Required Information</i>	<i>Does Site Plan Include This Information</i>			
	Yes	No	N/A	Comment
A site plan drawn to a scale of 1 inch equals 20 feet.		X		Site plan is scaled to 1 inch equals 40 feet
(a) Statistical data including: number of dwelling units, size of dwelling units (e.g., one-bedroom, two-bedroom, and three-bedroom), if any, and total gross acreage involved. In all other cases, the location, type, horsepower, fuel, dimensions and other data of all machinery to be used on the proposed site.			X	No dwelling units or machinery is planned to be used on the site.
(b) The location of principal and accessory buildings on the lot and the relationship of each structure to the other.	X			Principal building is shown with relation to the site, no accessory buildings are planned.
(c) Vehicular traffic and pedestrian circulation features within and without the site.	X			Vehicular and pedestrian circulation features are shown
(d) The location and dimensions of all off-street parking areas including maneuvering lanes, service lanes, off-street loading spaces and other service areas within the development.	X			Maneuvering lanes are 45'
(e) The location, dimensions and proposed use of all on-site recreation areas, if any.			X	No on-site recreation areas are proposed.
(f) The location of all proposed landscaping, fences or walls.	X			Landscaping trees are shown, no other landscaping is shown. Is other landscaping or fences required?
(g) The height and dimensions of all structures.		X		Building height not shown.
(h) Front, rear and side elevations of any typical structure proposed for development.		X		Front, rear, and side elevations were not submitted for the main building.
(i) The location and capacity of private or public water and sanitary services and solid waste disposal facilities servicing the site.	?			Locations and capacity calculations are shown for sanitary on sheet C5.0, but only location is shown for water. No water capacity calculations are shown.
(j) The locations, dimensions and lighting of all signs.		X		Location shown in C3.0 with no lighting and no dimensions Will the sign be lit?
(k) The location, intensity and orientation of all lighting.	X			Does the sign have lighting? If not, lighting is completely shown on C3.0.
(l) A location map indicating the relationship of the site to the surrounding land use for an area of not less than 1 square mile.		X		Largest map view (on cover) shows approximately ½ sq mile

Sec. 36-1902 Site Plan Review Requirements				
<i>Required Information</i>	<i>Does Site Plan Include This Information</i>			
	Yes	No	N/A	Comment
(m) A physiographic map showing the natural topography, the soil types, and suitability for intended use, natural features such as wood lots, lakes, drains, streams, and ditches, and surface coverage data (such as paved areas and structures) related to storm water runoff characteristics.	X			Topography map is shown on Sheet C2.0, and soil type and suitability are shown on Sheet C4.1. There does not appear to be any wood lots, lakes, drains, streams, or unlabeled ditches.
(n) The site plan shall be sealed by a professional engineer, architect, landscape architect or community planner.	X			Site plan is sealed by a licensed professional engineer.
(o) Location and size of interior and exterior areas and structures to be used for storage use, loading/unloading, recycling, or disposal of hazardous substances.			X	No hazardous substances will be stored, loaded, recycled, or disposed of
(p) Location of all underground and above ground storage tanks for such uses as fuel storage, waste oil holding tanks, chemical storage, hazardous waste storage, collection of contaminated storm water or wash water, and all similar uses.			X	There is no necessity for underground or above ground storage for any of the listed items.
(q) Location of exterior drains, dry wells, catch basins, retention/detention areas, sumps and other facilities designed to collect, store to transport storm water or waste water. The point of discharge for all drains and pipes shall be specified on the site plan.	X			Wastewater information is shown on Sheet 5.0, and all information is provided. Proposed storm will discharge into existing storm and overflow channel.
(r) Delineation of areas on the site which are known or suspected to be contaminated, together with a report on the status of site cleanup.	?			No suspected contaminated areas are shown, are there areas that could be contaminated on the site, such as the mounds in the back of the site?
(s) Submission of the "Hazardous Substances Reporting Form for Site Plan Review."			?	Does this site require the submission of the "Hazardous Substances Reporting Form for Site Plan Review."?
(t) Submission of the "State/County Environmental Permits Checklist."	?			Has this checklist been submitted?
(u) 100 year floodplain.	X			This site sits in an area outside of minimal flood hazard, according to Sheet C1.0
(v) Topographic lines at 1' intervals.	X			Topographic lines are all at 1' intervals on the site plan
(w) Proposed and existing utilities including water, sewer, storm sewer and lighting.	X			All proposed and existing utilities shown on Sheet C5.0. Lighting plan shown on Sheet C3.0
(x) Driveway location.	X			Two driveways shown and dimensioned on Sheet C3.0

Sec. 36-1902 Site Plan Review Requirements

<i>Required Information</i>	<i>Does Site Plan Include This Information</i>			
	Yes	No	N/A	Comment
(y) Current zoning of parcel and if the proposed use is not permitted in the district the parcel is zoned, an indication as to the proposed zoning.	X			Parcel is zoned C-2. The proposed use of the parcel (retail) is allowed as a SLU, which an application has been submitted
(z) Statement on the plan as to whether wetlands exist on the site.			X	Based on EGLE Viewer, no wetlands exist on the site.

R:\Projects\22C0001\Docs\Planning and Zoning Services\Planning Commission\Site Plan Review\Family Dollar\7.25.23 Flushing Twp-Site Plan Review Information Checklist - Family Dollar.docx