

VILLAGE OF MATTAWAN
ZONING BOARD OF APPEALS

AUGUST 25, 2025

AGENDA

1. CALL TO ORDER AT 7:00 P.M.
2. PLEDGE OF ALLEGIANCE
3. ATTENDANCE
4. WELCOME TO THE PUBLIC
5. ANNOUNCEMENT OF MEETING BEING RECORDED
6. ADDITIONS TO THE AGENDA
7. APPROVAL OF THE AGENDA
8. LIMITED PUBLIC COMMENT ON ANY AGENDA ITEM
9. OLD BUSINESS
 - A. DISCUSSION & DECISION ON VARIANCE REQUEST SUBMITTED BY EDWARD AND FLORENCE KUCINICH TRUST
10. NEW BUSINESS
11. PUBLIC COMMENT
12. COMMENTS FROM VISITORS
13. COMMENTS FROM MEMBERS
14. ADJOURNMENT @

offices

From: Megan Yankee <megancyankee@gmail.com>
Sent: Wednesday, August 20, 2025 9:29 PM
To: offices
Subject: Gas Station on McGillen

CAUTION: This email originated from outside the Village of Mattawan. Maintain caution when opening external links/attachments

Hello,

I'm writing as a resident of the Village of Mattawan. I'm not able to attend the village meeting on Monday, but I want to take a moment and voice my opposition to the proposed gas station. We love our small town and would hope for more development that considers the needs of the people that live here. This is not it!

We have 4 gas stations within the village. Another in our city center is not needed and adds problems to traffic and will be an eye sore.

Please reach out to me if you need anything else or have any questions.

Megan

Megan Yankee

she/her/hers

Phone:

Email: MeganCYankee@gmail.com

offices

From: Cameo Phelps <clisport@yahoo.com>
Sent: Wednesday, August 20, 2025 9:31 PM
To: offices
Subject: Gas station meeting

CAUTION: This email originated from outside the Village of Mattawan. Maintain caution when opening external links/attachments

To whom it may concern,

I am writing about the upcoming meeting for the potential gas station to be put on the corner of McGillen.

I am highly NOT in favor, nor is my family. Does Mattawan need 5 gas stations? No. It absolutely does not. Can we not see a plot of land and leave it alone? Do we always have to build and pollute? I know it will eventually be turned into something, but I/we are abhorrently against it being a gas station.

We hope you take all the voices and votes into consideration and not make it just about money.

Thank you for your time!

Most sincerely,
Cameo & Matt Phelps

Sent from my iPhone

offices

From: Patrick Yankee <patrickjyankee@gmail.com>
Sent: Wednesday, August 20, 2025 9:36 PM
To: offices
Subject: NO TO A NEW GAS STATION

CAUTION: This email originated from outside the Village of Mattawan. Maintain caution when opening external links/attachments

No thank you to adding an unwanted, unneeded, unnecessary traffic causing smelly eyesore to our landscape. There's already 3 gas stations within walking distance of the proposed site. Please come up with a better idea.

Patrick Yankee
Mattawan Resident

From:
Sent: Wednesday, August 20, 2025 8:58 PM
To: offices
Subject: Re: Public comment for Aug. 11 meeting

CAUTION: This email originated from outside the Village of Mattawan. Maintain caution when opening external links/attachments

Dear Members of the Village Council and Planning Commission,

I was not able to attend the last meeting; however, I was informed by another community member that you did not read my statement due to not addressing the variance with the building size? I need to advise you that I am not in opposition to the size of the building - it could be 5000 sq. feet for all I care - my opposition is to the nature of the business, as is very clearly communicated in my message. I would very much appreciate a form or something explaining, in exact detail, what you need in order to have my opposition shared, because we do not all work in government, and we do not all understand every minute detail of how to participate in this civic process. I am sharing my opinion with you here, as a local business owner who brings in literally hundreds of people at a time to my company that is in town, which also brings in customers to the surrounding businesses in town, and I deserve to have a voice. I am not able to attend this coming meeting, because as per usual, I am working and providing a valuable service for our community and its children and families.

I also HIGHLY, HIGHLY recommend that on Monday, 8/25/25, all of you sit in the Wagoner's parking lot, and you see for yourselves the amount of children that walk into the Village on half days of school. I am going to say that I am extremely, extremely uncomfortable with a franchise gas station going in that close to the school, where any random person could be coming into town, and it doesn't seem to be in anyone's consideration the safety aspect of our community with the kids walking to down on every half day, the fact that this would directly impede safety for our Fire Department, and everything I have previously stated below:

.....

I am writing to express my strong concern about the proposed Casey's gas station development at the corner of McGillen Avenue and Main Street, directly across from Wagoner's grocery store. I am unable to attend tonight's meeting, but I did want to have my voice heard on this matter.

This project appears to be in direct conflict with the direction our community is growing. With new residential neighborhoods being developed and more families choosing to settle here, Mattawan has an opportunity to encourage projects that reflect and reinforce its values: safety, family-centered spaces, and a vibrant small-town atmosphere. One of the main reasons people

choose Mattawan over larger surrounding cities is its rural charm and small-town feel. The addition of another large, franchise-style gas station does not support or enhance that character. If anything, it detracts from the unique identity that makes this area so attractive to residents. A Casey's may be convenient to the landowners of the estate, but it does not contribute to the sense of place, connection, or community that defines Mattawan.

We already have two well-established gas stations, Shell and Speedway, located nearby, both fully capable of meeting the town's fueling needs. The Speedway was recently remodeled, yet its attached restaurant remains unused, clearly indicating that current demand is already being met. Adding a third gas station will not create new value; it will simply add redundancy, increase traffic congestion, and take up valuable land that could be used for something more beneficial. I have many environmental concerns about having so many gas stations in such a small radius.

The stations we already have to service this area:

1. Speedway – 24118 Cole Ave
2. Shell – 54312 N Main St
3. Citgo – 24039 Red Arrow Hwy
4. Marathon (Mattawan Party Store) – 24182 Red Arrow Hwy

According to data from the U.S. Census Bureau and NACS (National Association of Convenience Stores): National average: 1 gas station per 2,500 to 3,000 people. According to the latest census estimates, the population of Mattawan, MI (2024 estimate) is 2,700 residents.

Let's not also forget that we have Halftime located in the Historic district, offering another convenience store in town. We already have almost 4.5 times more gas stations per person than the national average; with the Casey's added, it would reach 5.5 times more than the national norm! The local demand does not appear to justify an additional gas station.

This level of fuel service saturation is very high for a town of this size, especially when considering:

- Two stations (Shell and Speedway) are recently updated and serve interstate traffic;

- One station includes a convenience store, restaurant, and fuel (Speedway);
- One station also serves dual purposes as a liquor/party store (Marathon)

The Mattawan Fire Department is located directly adjacent to the proposed site. It is difficult to understand how our emergency responders would be expected to safely conduct fire training exercises or manage daily operations with a gas station and fuel storage tanks next door. This presents a real and avoidable conflict between public safety needs and private development interests. Adding a fifth gas station in Mattawan would result in one station for every 540 people, a highly disproportionate number compared to both national trends and the size of the local population. This suggests that another gas station is not needed, and would likely cannibalize existing business while occupying land that could be used for much more community-beneficial development (parks, local shops, public spaces, etc.).

The intersection of McGillen Avenue and Main Street is already congested during school dismissal, business closing hours, and seasonal traffic spikes. A new gas station would only worsen the existing problems at this high-traffic intersection, making it more dangerous and less accessible for residents, emergency vehicles, and local businesses. I have many concerns about the impact on half days of school, where many of the kids walk into town to go to Happy Days, Subway, and Pizza Hut. Development of that area would be amazing for family-friendly businesses, park development, or anything where the hundreds of new families who have moved into town have walkable places to go. This is not the type of development the residents want or need.

If you look just a few miles away to Texas Corners, you will see the kind of development that serves both residents and the economy. They have invested in a farmers market, splash pad, walkable retail, and locally owned restaurants. These are the types of investments that bring communities together, promote small business growth, and increase quality of life. Mattawan has the same potential. We just need to make the right choices now, before available land is gone.

This development is not just about adding another place to buy gas. It is about deciding what kind of town we want to become. Do we want to remain a family-friendly, small-town community with a clear identity and vibrant local spaces? Or do we want to give that up for short-term, corporate convenience?

I respectfully urge the Village Council and Planning Commission to reconsider the approval of this gas station and instead encourage development that supports Mattawan's long-term character, public safety, and community well-being. I am a local business owner in town in the historic district, and my business is serving families with children. In all of the discussions about

this proposal, I have not heard a single positive remark from the public; on the contrary, people are upset that this is what is being proposed for our small town. We have Shell, Speedway, Citgo, and Marathon. We want the land developed for our town's needs, not just developed for the sake of someone making money on our town without consideration for those of us who actually live and work here.

I do not want my name attached to my comments publicly as I do not want my business negatively impacted by speaking out. I feel very passionately about this, however, and I hope that my comments are taken into consideration because I deeply value and care for the Mattawan community as a whole. I do want the family who is selling the land to succeed, but not at the expense of the rest of us.

Thank you for your time and consideration.

Sincerely,

Mattawan, MI

From:

Sent: Monday, August 11, 2025 10:49 AM

To: offices@mattawanmi.com <offices@mattawanmi.com>

Subject: Public comment for Aug. 11 meeting

Dear Members of the Village Council and Planning Commission,

I am writing to express my strong concern about the proposed Casey's gas station development at the corner of McGillen Avenue and Main Street, directly across from Wagoner's grocery store. I am unable to attend tonight's meeting, but I did want to have my voice heard on this matter.

This project appears to be in direct conflict with the direction our community is growing. With new residential neighborhoods being developed and more families choosing to settle here, Mattawan has an opportunity to encourage projects that reflect and reinforce its values: safety, family-centered spaces, and a vibrant small-town atmosphere. One of the main reasons people choose Mattawan over larger surrounding cities is its rural charm and small-town feel. The addition of another large, franchise-style gas station does not support or enhance that character. If anything, it detracts from the unique identity that makes this area so attractive to residents. A Casey's may be convenient to the landowners of the estate, but it does not contribute to the sense of place, connection, or community that defines Mattawan.

We already have two well-established gas stations, Shell and Speedway, located nearby, both fully capable of meeting the town's fueling needs. The Speedway was recently remodeled, yet its attached restaurant remains unused, clearly indicating that current demand is already being

met. Adding a third gas station will not create new value; it will simply add redundancy, increase traffic congestion, and take up valuable land that could be used for something more beneficial. I have many environmental concerns about having so many gas stations in such a small radius.

The stations we already have to service this area:

1. Speedway – 24118 Cole Ave
2. Shell – 54312 N Main St
3. Citgo – 24039 Red Arrow Hwy
4. Marathon (Mattawan Party Store) – 24182 Red Arrow Hwy

According to data from the U.S. Census Bureau and NACS (National Association of Convenience Stores): National average: 1 gas station per 2,500 to 3,000 people. According to the latest census estimates, the population of Mattawan, MI (2024 estimate) is 2,700 residents.

Let's not also forget that we have Halftime located in the Historic district, offering another convenience store in town. We already have almost 4.5 times more gas stations per person than the national average; with the Casey's added, it would reach 5.5 times more than the national norm! The local demand does not appear to justify an additional gas station.

This level of fuel service saturation is very high for a town of this size, especially when considering:

- Two stations (Shell and Speedway) are recently updated and serve interstate traffic;
- One station includes a convenience store, restaurant, and fuel (Speedway);
- One station also serves dual purposes as a liquor/party store (Marathon)

The Mattawan Fire Department is located directly adjacent to the proposed site. It is difficult to understand how our emergency responders would be expected to safely conduct fire training exercises or manage daily operations with a gas station and fuel storage tanks next door. This presents a real and avoidable conflict between public safety needs and private development interests. Adding a fifth gas station in Mattawan would result in one station for every 540 people, a highly disproportionate number compared to both national trends and the size of the local population. This suggests that another gas station is not needed, and would likely cannibalize existing business while occupying land that could be used for much more community-beneficial development (parks, local shops, public spaces, etc.).

The intersection of McGillen Avenue and Main Street is already congested during school dismissal, business closing hours, and seasonal traffic spikes. A new gas station would only worsen the existing problems at this high-traffic intersection, making it more dangerous and less accessible for residents, emergency vehicles, and local businesses. I have many concerns about the impact on half days of school, where many of the kids walk into town to go to Happy Days, Subway, and Pizza Hut. Development of that area would be amazing for family-friendly businesses, park development, or anything where the hundreds of new families who have moved into town have walkable places to go. This is not the type of development the residents want or need.

If you look just a few miles away to Texas Corners, you will see the kind of development that serves both residents and the economy. They have invested in a farmers market, splash pad, walkable retail, and locally owned restaurants. These are the types of investments that bring communities together, promote small business growth, and increase quality of life. Mattawan has the same potential. We just need to make the right choices now, before available land is gone.

This development is not just about adding another place to buy gas. It is about deciding what kind of town we want to become. Do we want to remain a family-friendly, small-town community with a clear identity and vibrant local spaces? Or do we want to give that up for short-term, corporate convenience?

I respectfully urge the Village Council and Planning Commission to reconsider the approval of this gas station and instead encourage development that supports Mattawan's long-term character, public safety, and community well-being. I am a local business owner in town in the historic district, and my business is serving families with children. In all of the discussions about this proposal, I have not heard a single positive remark from the public; on the contrary, people are upset that this is what is being proposed for our small town. We have Shell, Speedway, Citgo, and Marathon. We want the land developed for our town's needs, not just developed for the sake of someone making money on our town without consideration for those of us who actually live and work here.

I do not want my name attached to my comments publicly as I do not want my business negatively impacted by speaking out. I feel very passionately about this, however, and I hope

that my comments are taken into consideration because I deeply value and care for the Mattawan community as a whole. I do want the family who is selling the land to succeed, but not at the expense of the rest of us.

Thank you for your time and consideration.

Sincerely,

Mattawan, MI



VARIANCE REQUEST APPLICATION

PERMIT FEE: COMMERCIAL - \$450

RESIDENTIAL - \$400

Date Fee Paid 7/10/25

Check no. 80887

The Variance Request Application will be presented to the Zoning Board of Appeals who will schedule a public hearing. After the public hearing the Zoning Board of Appeals will make a decision on the request without unreasonable delay. Consideration of the Variance Request will be based on the criteria outlined in Sections 23.45 and 23.50 of Ordinance no. 214, Zoning Ordinance, a copy of which is attached.

GENERAL INFORMATION

Name of Property Owner Edward Kucinich & Florence J. Kucinich Trustees of Living Trust of Edward Kucinich & Florence Kucinich

Address of Property Owner 1398 Palmetto Drive Portage, MI 49002

Day time Phone number 269-599-2805

SPECIFIC VARIANCE INFORMATION

Address of property for which Variance is being requested 2344E. McGillen Street Mattawan, MI

Property tax ID number PID: 80-46-700-057-01

Current zoning of property Village General Business District (VGBD)

Description of Variance (Specify which section of the Zoning Ordinance requires a Variance)
We are requesting a variance from Section 10.30E of the Village of Mattawan Zoning Ordinance to allow the construction of a gas station convenience store exceeding 1,000 square feet. While buildings over 1,000 sq ft are permitted under special land use in the VGBD, the proposed use includes fueling stations, which are not explicitly addressed in the VGBD as they are in the Highway Business District.

What practical difficulties or unnecessary hardships are present?
The proposed development requires a building size that exceeds the 1,000 sq ft threshold to meet modern operational standards for a gas station and convenience store, including safety, accessibility, and customer service needs.

Will the granting of this Variance be detrimental to adjacent property and the surrounding neighborhood?
The project will be designed to align with the character of the surrounding area and will not negatively impact adjacent properties or the neighborhood.

What exceptional or extraordinary circumstances apply to this property that do not generally apply to other similarly zoned properties?

The property's location and intended use as a fueling station create unique conditions not generally applicable to other VGBD parcels.

Is the condition or situation of the property unique compared to surrounding properties?

The site's proximity to major roads and its suitability for a fueling station make it distinct from other properties in the district.

Is a Variance necessary to allow you to enjoy your property to the same extent as other property owners in the same zoning district and in the vicinity?

A variance is necessary to utilize the property in a manner consistent with its location and potential, similar to other commercial properties in the vicinity.

Any other information you would like to add?

I acknowledge that I have been notified that this request will be considered at a public hearing to be held on _____ at _____ o'clock. I certify that all requirements of Article 23 of Ordinance 214 pertaining to Variances will be met.

I understand that no order of the Zoning Board of Appeals permitting the erection or alteration of a building, an open air land use, or a parking lot shall be valid for longer than twelve (12) months, unless such use is established within such period or a permit for such erection or alteration is obtained within such period and such erection or alteration is commenced and proceeds to a completion in accordance with the terms of the permit.

Owner's signature

Date

Received by

Date

Payment not received at time of Application Paid 7/10/25

FOR OFFICE USE ONLY

Application approved?

☐ YES

☐ NO

Additional comments:

Signature

Village Clerk

Date

ARTICLE 10

VILLAGE GENERAL BUSINESS DISTRICT (VGBD) -

Section 10.10 Purpose (pg. 88)

Section 10.20 Principal Permitted Uses (pg. 89)

Section 10.30 Special Uses (pg. 91)

Section 10.40 Development Requirements (pg. 93)

Section 10.10 Purpose

The purpose of this district is to permit a wide range of business, retail, and service uses, which are needed to serve the nearby residential areas. It is further the intent of this district to encourage a concentration of uses and high quality site development standards for the mutual advantage of both merchants and consumers to avoid conventional strip commercial development along major streets located within the Village.

Further objectives of this Article include:

- A. To accommodate patrons arriving primarily in personal vehicles
- B. To avoid development that would result in hazards, offensive and loud noises, vibration, smoke, glare, heavy traffic, and late hours of operation.
- C. To serve as a buffer between the Historic Central Business District, Highway Business District, and residential areas within the Village.

Section 10.20 Principal Permitted Uses

No building or land shall be used and no building shall be erected except for one (1) or more of the following specified uses, unless otherwise provided in this Ordinance.

- A. Adult day care and foster care facilities
- B. Art galleries

- C. Bed and breakfast inns
- D. Business service establishments, such as office machine sales and repair, printing, blueprinting; provided that each occupies a total useable floor area of not more than ten-thousand (10,000) square feet
- E. Business establishments that perform services on premises such as, but not limited to: banks, savings and loans, and credit unions (including drive-through facilities); brokerage houses; insurance, real estate, and travel agencies
- F. Catering Establishments
- G. Data processing and computing centers with up to ten thousand (10,000) square feet gross floor area
- H. Essential public services when conducted within a completely enclosed building, excluding storage yards
- I. Medical offices with up to ten thousand (10,000) square feet gross floor area
- J. Mixed-use buildings with business, commercial, or service uses on the ground floor and residential, office, or warehouse uses on upper floors
- K. Offices of an executive, administrative, or professional nature with up to ten thousand (10,000) square feet gross floor area
- L. Outdoor cafes and outdoor eating areas
- M. Personal fitness centers up to ten thousand (10,000) square feet gross floor area
- N. Personal service establishments within a completely enclosed building, including but not limited to such uses as: repair shops (watches, radio, television, shoes, etc), tailor and dressmaking shops, beauty parlors and styling salons, barber shops, dry cleaners, photographic studios, film processing outlets, copy centers, interior decorators, and postal

center; provided that each occupies a total usable floor area of not more than ten-thousand (10,000) square feet

- O. Public, quasi-public, and institutional uses such as, but not limited to, municipal buildings and offices, courthouses, public off-street parking facilities, libraries, museums, public safety facilities, parks and playgrounds, post offices, and civic center, but excluding storage yards for any use
- P. Restaurants (excluding drive-in restaurants or those with predominately drive-through facilities), where the patrons are served while seated within the buildings occupied by such establishments
- Q. Retail businesses which supply commodities on the premise of up to ten-thousand (10,000) square feet of gross floor area, such as but not limited to groceries, meats, fruits and produce, dairy products, baked goods, candies, specialty wines, and other specialty food products; and stores selling drugs, dry goods, flowers, clothing, notions, books and magazines, toys, sporting goods, shoes, tobacco products, musical instruments, recorded music, video rentals and sales, gifts and souvenirs, antiques furniture, and hardware
- R. Retail sales in which both a workshop and retail outlet or showroom are required, such as but not limited to, plumbing, electrician, interior decorating, upholstering, printing, photographic-reproducing, radio, and home appliance and similar establishments of similar character, subject to the provision that not more than eighty percent (80%) of the total useable floor area of the establishment shall be used for servicing, repairing, or processing activities and further provided that such retail outlet or showroom activities shall be provided in that portion of the building where the customer entrance is located
- S. Studios for art, music, dance, or theatrical instruction

- T. Veterinary clinics and animal grooming, provided that all activities are conducted within an enclosed building, with up to ten-thousand (10,000) square feet gross floor area
- U. Public utility buildings, telephone exchange buildings, electric transformer stations and substations, and gas regulator stations when operating requirements necessitate the locating within the district in order to serve the immediate vicinity, but not including service or storage yards
- V. Retail establishments whose principal activity is the sale or rental of merchandise within a completely enclosed building of less than sixty-thousand (60,000) square feet of gross floor area, including supermarkets and commercial centers
- W. Theaters, cinemas, assembly halls, community centers, or similar places of assembly, when conducted completely within enclosed buildings
- X. Churches and other facilities normally incidental thereto
- Y. Mortuaries and funeral homes
- Z. Accessory structures and uses customarily incidental to the above permitted uses, including drive-thru service windows, except as otherwise noted in this Article

Section 10.30 Special Uses

The following uses shall be considered conditional and shall require a special use approval, and shall comply with any applicable special use requirements of Article 21:

- A. Automobile and other vehicle wash facilities
- B. Bars, taverns, pubs and brewpubs, cocktail lounges, and nightclubs
- C. Business schools, colleges, universities, or private schools operated for a profit

- D. Commercial parking lots and structures
- E. Commercial greenhouses, nurseries, and garden centers less than one-thousand (1,000) square feet
- F. Commercial parking lots and structures
- G. Hospitals
- H. Indoor recreational centers such as, but not limited to bowling alleys, roller and ice skating rinks, pool or billiard halls, pinball and mechanical device arcades, and other general indoor recreation facilities
- I. Open air business uses, such as but not limited to retail sales of trees, shrubs, plants, flowers, topsoil, fruit, vegetables, and miniature golf
- J. Party Stores
- K. Rental facilities
- L. Veterinary hospitals and clinics, boarding, or other similar uses, with outdoor pens
- M. Automotive fueling stations including those combined with convenience stores of less than one-thousand (1,000) square feet, or automotive fueling stations and automobile service centers/stations, without accessory or combined convenience stores
- N. Other commercial uses not specifically stated or implied elsewhere which, in the determination of the Planning Commission, are similar to the principal permitted uses provided herein, and in harmony with the character of the District and the purpose and intent of this Article and the Village of Mattawan Master Plan

Section 10.40 Development Requirements

The following requirements shall be met within a Village General Business District (VGBD):

1. Site plan approval for all permitted and conditional uses as specified in Article 15 of this Ordinance.
2. Off-street parking, loading, and access management standards for all uses as specified in Article 20 of this Ordinance.
3. Signs for all uses as specified in Article 19 of this Ordinance.
4. Height, area, lot coverage, yard regulations, building mass, and yard regulations as specified in Article 16 of this Ordinance.
5. Landscaping requirements as specified in Article 18 of this Ordinance.
6. Design, architectural, and building material standards as specified in Article 17 of this Ordinance.

ARTICLE 23

ZONING BOARD OF APPEALS

Section 23.05	Purpose (pg. 305)
Section 23.10	Creation; Membership; Terms of Office (pg. 305)
Section 23.15	Legal Counsel (pg. 306)
Section 23.20	Rules of Procedure (pg. 306)
Section 23.25	Appeals (pg. 306)
Section 23.30	General Powers and Duties (pg. 307)
Section 23.35	Administrative Reviews (pg. 307)
Section 23.40	Interpretation of District Boundaries (pg. 308)
Section 23.45	Variances (pg. 308)
Section 23.50	Standards for Judging Appeals and Variances (pg. 309)
Section 23.55	Conditions of Appeals and Variances (pg. 310)
Section 23.60	Effective Period of Orders (pg. 310)
Section 23.65	Appeals to Circuit Court (pg. 311)
Section 23.70	Stay of Proceedings (pg. 311)
Section 23.75	Fees (pg. 311)

Section 23.05 Purpose.

In order that the objectives of this Ordinance may be fully and equitably achieved, that a means shall be provided for the competent interpretation of the Ordinance, that adequate but controlled flexibility be provided in the application of this Ordinance, that the health, safety, and welfare of the public is secured, and that justice be done, there is hereby established a Zoning Board of Appeals.

Section 23.10 Creation; Membership; Terms of Office.

There is hereby established in and for the Village of Mattawan, a Zoning Board of Appeals, which shall perform its duties and exercise its powers as provided in Section 5 of Act 207 of the Public Acts of 1921, as amended (MCLA 125.585), in such a way that the objectives of this Ordinance shall be observed, public safety secured and substantial justice done.

The Village Council shall serve as the Zoning Board of Appeals and shall consist of these individuals then serving on the Village Council and the terms of the members of the Board of Zoning Appeals shall coincide with their terms as Council members. The Village President shall serve as the Chairperson, the Village President Pro-Tem shall serve as the Vice-Chairperson, and the Village Clerk shall serve as the Secretary of the Zoning Board of Appeals.

Section 23.15 Legal Counsel.

The Village Attorney or his or her representative shall act as legal counsel for the Board and, subject to prior approval of the Village Council, shall be present at meetings of the Board upon request.

Section 23.20 Rules of Procedure.

- A. Hearings shall be public and minutes, including action taken by the members, shall be kept for public record by its designated Secretary, and submitted to the Village Clerk for filing.
- B. A quorum will consist of a majority of members present.
- C. A two-thirds (2/3) majority of the members present affirmative vote shall be required to reverse any order, requirement, decision, or determination of any administrative official in the use of this Ordinance and to grant any variances from uses of land which may be permitted by this Ordinance.
- D. Records and minutes shall be recorded of all proceedings which shall contain evidence and data relevant to every case considered together with the votes of the members and the final disposition of such case. The grounds of every determination shall be stated. Such minutes shall accompany and be attached to the standard forms required to persons appealing as part of the Zoning Board of Appeals= permanent records.

Section 23.25 Appeals.

- A. An appeal may be taken to the Zoning Board of Appeals by any person, officer, department, board or bureau affected by a decision of the Village concerning this Ordinance. Such appeal shall be taken within thirty (30) days from the decision by filing with the Zoning Official and with the Board a notice of appeal specifying the grounds thereof. The Zoning Official shall forthwith transmit to the Board all of the papers constituting the record upon which the action appealed from was taken.

- B. The Board shall select a reasonable time and place for the hearing of the appeal, shall give due notice thereof to the parties, and shall render a decision on the appeal without unreasonable delay. Any person may appear and testify at the hearing either in person or by duly authorized agent or attorney.
- C. The Board, in conducting any public hearing, shall fix a reasonable time for the hearing of the appeal and shall give due notice to the parties concerned, including all owners of record of property and occupants of single and two-family dwellings thereof, if not the owner of record, within three hundred (300) feet of the premises in question. For structures containing more than four (4) dwelling units owned or leased by different individuals, partnerships, businesses, or organizations, notice shall be given to the manager or owner of the structure who shall be requested to post the notice at the primary entrance to the structure.

Such notice shall be delivered at least five (5) days before the date set for the hearing. The board shall decide the appeal within a reasonable period of time.

Section 23.30 General Powers and Duties.

The Board shall have the specific powers and duties as set forth in this Article, all jurisdiction and powers prescribed in other chapters of this Ordinance or the Code of Ordinances, and all jurisdiction and powers granted by Act 207 of the Public Acts of 1921, as amended (MCLA 125.581 et seq.) The power or authority to alter or change this Ordinance or the Zoning Map remains reserved to the Village Council in the manner provided by law.

Section 23.35 Administrative Review.

The Zoning Board of Appeals may hear and decide appeals when it is alleged by the appellant that there is an error of law in any order, requirement, permit, decision, determination, or refusal made by any administrative official in carrying out or enforcing this Ordinance.

Section 23.40 Interpretation of District Boundaries.

The Zoning Board of Appeals shall interpret the official Zoning Map of the Village of Mattawan, including the interpretation of the specific locations of zoning district boundaries when in doubt.

Section 23.45 Variances.

- A. The Zoning Board of Appeals may authorize, upon an appeal, a variance from the strict application of any provision of this Ordinance, where, by reason of exceptional irregularity, narrowness, shallowness, shape, or area of a specific piece of property at the effective date of this Ordinance, or by reason of exceptional topographic conditions or other extraordinary or exceptional conditions of such property, the strict application of this Ordinance would result in peculiar or exceptional practical difficulties to or unnecessary undue hardship upon the owner of such property.
- B. In hearing and deciding appeals for variances, the Board shall adhere to the following criteria in determining whether or not practical difficulties and/or unnecessary hardships exist:
1. That if the property owner complies with this Ordinance, he or she can secure no reasonable return from or make no reasonable use of his or her property;
 2. That the hardship results from the application of this Ordinance to his or her property, rather than from some other factor;
 3. That the hardship of which he or she complains is suffered merely by his or her property directly and not by others;
 4. That the hardship is not the result of his or her own actions; and
 5. That the hardship is peculiar to the property of the applicant.

The Board shall grant no variance, if it finds an applicant does not meet all of the above listed criteria for determining whether or not a practical difficulty and/or unnecessary hardship exists.

Section 23.50 Standards for Judging Appeals and Variances.

In consideration of all appeals and proposed variations of this Ordinance, the Zoning Board of Appeals shall, before making any variation from this Ordinance, in a specific case, first determine that the proposed variation affirmatively meets all of the following general standards:

- A. A practical difficulty and/or unnecessary hardship exists according to the standards of this Article.
- B. The proposed variation involves exceptional circumstances not found in other areas of the same zoning district.
- C. The proposed variation will be in harmony with the general purposes and intent of this Ordinance.
- D. The proposed variation will not in any respect impair the public health, safety, comfort, or welfare of the inhabitants of the Village.
- E. The proposed use will be of such location, size, and character that it will be in harmony with the appropriate and orderly development of the surrounding neighborhood.
- F. The proposed use will be of a nature that will make vehicular and pedestrian traffic no more hazardous than is normal for the distance involved, taking into consideration vehicular turning movements in relation to routes of traffic flow, proximity and relationship to intersections, adequacy of sight distances, location and access of off-street parking and provisions for pedestrian traffic, with particular attention to minimizing child-vehicle contact.

- G. The location, size, intensity, site layout and periods of operation of such proposed use will be designed to eliminate any possible nuisances emanating therefrom, which nuisance might be noxious to the occupants of any other nearby permitted uses, whether by reason of dust, noise, fumes, vibration, smoke, or lights.
- H. The location and height of buildings or structures and the location, nature, and height of walls and fences will be such that the proposed use will not interfere with or discourage the appropriate development and use of adjacent land and buildings or unreasonably affect their value.

Section 23.55 Conditions of Appeals and Variances.

- A. The Zoning Board of Appeals, in acting favorably on any appeal in connection with a request for a variance may attach any conditions to its approval which it finds necessary to accomplish the reasonable application of the standards set forth in this Article. In addition, the Board may require some form of guarantee that the conditions will be adhered to.
- B. In exercising the powers described in this chapter, the Board may reverse or affirm, wholly or partly, or modify, the order, requirement, decision, or determination appealed from and may make such order, requirement, decision, or determination as ought to be made.

Section 23.60 Effective Period of Orders.

No order of the Zoning Board of Appeals permitting the erection or alteration of a building, an open air land use, or a parking lot shall be valid for longer than twelve (12) months, unless such use is established within such period or a permit for such erection or alteration is obtained within such period and such erection or alteration is commenced and proceeds to a completion in accordance with the terms of the permit.

Section 23.65 Appeals to Circuit Court.

The decision of the Zoning Board of Appeals shall be final. However, a person having an interest affected by this Ordinance may appeal such decision to the Circuit Court.

Section 23.70 Stay of Proceedings.

An appeal stays all proceedings in furtherance of the action appealed from unless the Zoning Official certifies to the Zoning Board of Appeals after the notice of the appeal shall have been filed with him that, for reasons of facts stated in the certificate, a stay would, in his opinion, cause imminent peril to life or property, in which case proceeding shall not be stayed otherwise than by a restraining order, which may be granted by the Zoning Board of Appeals or by Circuit Court, upon application.

Section 23.75 Fees.

The Village Council, may from time to time, prescribe and amend, a reasonable schedule of fees to be charged to the applicants for appeals to the Zoning Board of Appeals. At the time the notice of appeal is filed, said fee shall be paid to the Village.

OWNER/DEVELOPER:
CASEY'S GENERAL STORES, INC.
ONE SE CONVENIENCE BLVD.
ANKENY, IA 50021
PHONE: (515) 381-5722
CONTACT: ERIK NIKKEL

ENGINEER:
CESO, INC.
2800 CORPORATE EXCHANGE DR., SUITE 400
COLUMBUS, OH 43231
PHONE: (440) 773-3461
CONTACT: JEFF LONGHOR, P.E.
EMAIL: LONGHOR@CESOINC.COM
EOR: ZACHARY FRESHNER, P.E.

GOVERNING AGENCIES AND UTILITY COMPANIES:

SEWER:
VILLAGE OF MATTAWAN PUBLIC WORKS
PHONE: 269-668-2128
CONTACT: TOM ANTHONY
EMAIL: TOM@MATTAWANMI.COM

GAS SERVICE:
CONSUMERS ENERGY
PHONE: 800-477-5050

WATER:
VILLAGE OF MATTAWAN PUBLIC WORKS
PHONE: 269-668-2128
CONTACT: TOM ANTHONY
EMAIL: TOM@MATTAWANMI.COM

COMMUNICATIONS:
SPECTRUM
PHONE: 866-874-2389

STORMWATER:
VILLAGE OF MATTAWAN PUBLIC WORKS
PHONE: 269-668-2128
CONTACT: TOM ANTHONY
EMAIL: TOM@MATTAWANMI.COM

ELECTRIC:
INDIANA MICHIGAN POWER
PHONE: 888-311-8424

ZONING:
VILLAGE OF MATTAWAN
PHONE: 269-668-2128
CONTACT: TERRI MCLEAN
EMAIL: OFFICES@MATTAWANMI.COM

PROPERTY DATA:

PARCEL OWNER: KUCINICH EDWARD & FLORENCE

PARCEL ID: 80-46-700-057-20

ADDRESS: 23968 MCGILLEN AVENUE
MATTAWAN, MI 49071

EXISTING PROPERTY AREA: 16.262 ACRES

PROPOSED PROPERTY AREA: 2.295 ACRES

EXISTING ZONING: AG - AGRICULTURE

PROPOSED ZONING: VGB - VILLAGE GENERAL BUSINESS

PROPOSED USE: C-STORE & GAS STATION

	REQUIRED	PROPOSED
BUILDING SETBACKS		
FRONTAGE ALONG STREET:	0'	55.72'
SIDE:	10'	138.74'
REAR:	15'	108.3'

PARKING AREA SETBACKS
FRONT: 10' - PROPERTY 155'

SIGN SETBACKS: 15' - SIDE 48'

MAXIMUM BUILDING HEIGHT: 35' 25'

BUILDING AREA: 3,219 SF

PARKING:
TOTAL PARKING SPACES: 11 14
ADA PARKING SPACES: N/A 1

FLOODPLAIN DESIGNATION: PARCEL IS LOCATED WITHIN "ZONE X" AS INDICATED BY THE FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NUMBER 26196C0375C, EFFECTIVE DATE: 12/03/2009, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY

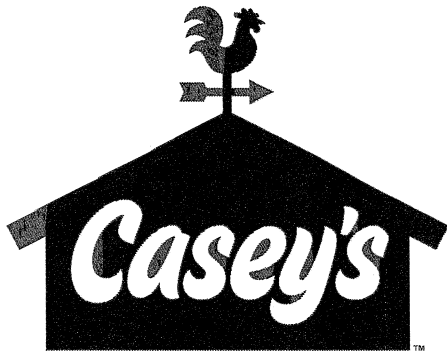
LEGEND

EXISTING FEATURES LEGEND
APPLIES TO ALL CIVIL SHEETS

	RIGHT OF WAY LINE		BENCHMARK
	PARCEL LINE		SET 5/8\" x 3/4\" IRON REBAR WITH YELLOW CAP STAMPED "CESO"
	SUBJECT PROPERTY BOUNDARY LINE		SANITARY MANHOLE
	EASEMENT LINE		TELEPHONE BOX
	CURB		CLEANOUT
	EDGE OF PAVEMENT		GUY WIRE ANCHOR
	EDGE OF WALK		CATCH BASIN
	PAVEMENT MARKINGS		CURB INLET
	STORM SEWER		LIGHT POLE
	SANITARY SEWER		POWER POLE
	WATER LINE		ELECTRIC METER
	GAS LINE		GAS METER
	OVHD ELECTRIC LINE		SIGN
	UGND ELECTRIC LINE		ELECTRIC BOX
	UGND TELECOMM LINE		TRAFFIC BOX
	MAJOR CONTOUR		WATER VALVE
	MINOR CONTOUR		FIRE HYDRANT
			SIGNAL POLE

VILLAGE OF MATTAWAN, VAN BUREN COUNTY, MICHIGAN
SITE IMPROVEMENTS
FOR
CASEY'S #4605

23968 MCGILLEN AVENUE
MATTAWAN, MICHIGAN 49071

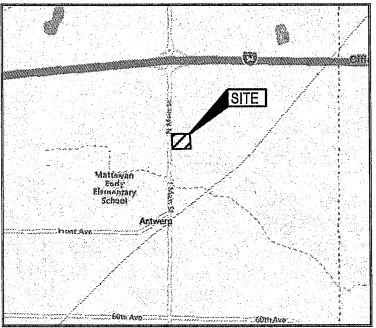
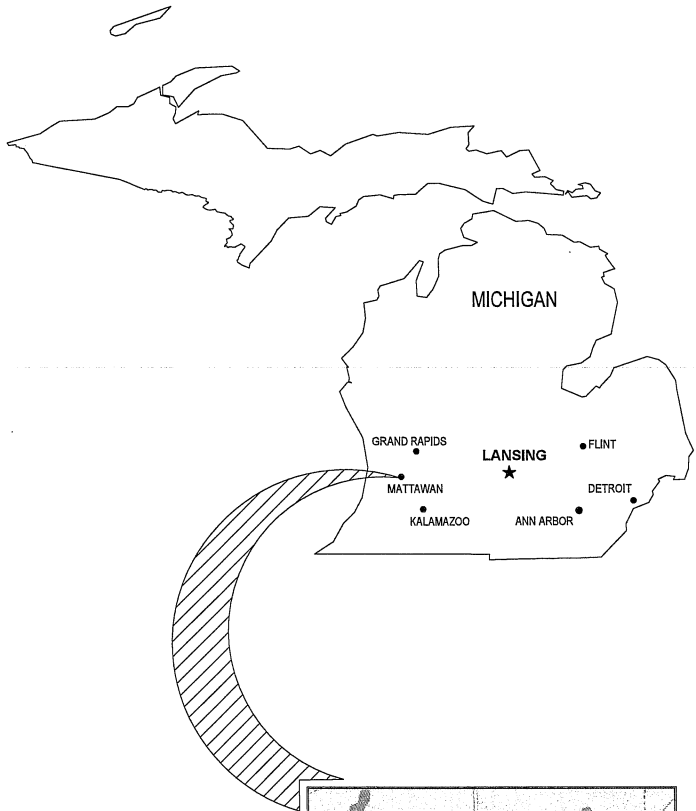


SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE
C-001	COVER SHEET
C-002	GENERAL NOTES
C-003	ALTA NSPS LAND TITLE SURVEY
C-004	ALTA NSPS LAND TITLE SURVEY
C-100	DEMOLITION PLAN
C-101	SITE PLAN
C-101A	ALTERNATIVE PAVEMENT PLAN
C-201	GRADING PLAN
C-301	UTILITY PLAN
C-401	SWPPP
C-402	SWPPP DETAILS
C-500	PHOTOMETRIC PLAN
C-601	CONSTRUCTION DETAILS
C-602	CONSTRUCTION DETAILS
C-603	CONSTRUCTION DETAILS
C-604	CONSTRUCTION DETAILS
C-701	LANDSCAPE PLAN
C-702	LANDSCAPE DETAILS

BENCHMARK	
Vertical Datum: NAVD88 derived from GPS Observations	
BM "A":	Bench nail set west side of power pole, next to green cable box, east side of Main Street, southwest corner of Mattawan Fire Station property. Elevation = 840.27'
BM "B":	Chiseled "X" on southeast bolt of signal pole base, behind sidewalk on northwest corner of Main Street and West McGillen Avenue intersection. Elevation = 841.61'
BM "C":	Bench nail set north side of power pole # V524-185, between sidewalk and south side of West McGillen Avenue, next to green telephone riser, east from entrance to McGillen's Crossing. Elevation = 843.27'

NOTE: REFER TO ALTA SURVEY, SHEET C-004, FOR BENCHMARK LOCATIONS



VICINITY MAP
NO SCALE



175 Montrose West Ave., Suite 400
Ann Arbor, MI 48106
Phone: 330.655.0690 Fax: 888.208.4926



CASEY'S #4605

MATTAWAN, MI

23968 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions

ID	Description	Date
----	-------------	------

© 2024 CESO, INC.

Project Number: 764183

Scale: NO SCALE

Drawn By: BTD

Checked By: JMS

Date: 12/12/2024

Issue: PERMIT SET

Drawing Title:

COVER SHEET



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-482-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

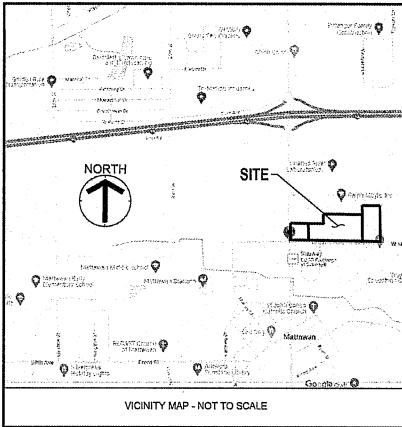
C-001

DEMOLITION NOTES

- ## SITE NOTES

- ### GRADING NOTES

- C-002**



- SURVEY MONUMENT LEGEND**
- 5/8" Iron Pin Set w/cap CESO, Inc
 - Iron Pin Found as Described
 - Monument Found as Described
 - PK Nail/Mag Nail Found
 - PK Nail/Mag Nail Set
 - Benchmark Set

- TOPOGRAPHIC LEGEND**
- | | |
|-----------------------|------------------------|
| Signal Pole | Power / Telephone Pole |
| Telephone Pole | Guy Wire |
| Electric Meter | Power Pole |
| Gas Line Marker | Electric Manhole |
| Fire Hydrant | Air Conditioner |
| Telephone Line Marker | Gas Meter |
| Sanitary Manhole | Water Valve |
| Telephone Box | Water Well |
| Telephone Manhole | Cable Box |
| End Storm Drain | Storm Manhole |
| Structure Number | Curb Inlet |
| Sign | Flag Pole |
| Downspout | Catch Basin (Round) |

- | | |
|-----|----------------------------|
| G | Gas Line |
| W | Water Line |
| USE | Underground Electric |
| UST | Underground Communications |
| CHL | Overhead Utility Line |
| STM | Storm Sewer |
| SN | Sanitary Sewer |
| RW | Right-of-Way Line |
| X | Fence Line |

SURVEYOR NOTES:

- This survey does not constitute a title search by the surveyor. All information regarding record easements, and other documents that might affect the quality of title to the parcel shown hereon was obtained through a certified title commitment conducted by Sun Title Agency of Michigan, LLC, Commitment Number 230050, and bearing an effective date of 4/4/2024 at 8:00 a.m.
- Direct access to the subject parcel is available via Main Street & West McGillen Avenue, both being public rights-of-way.
- The utilities shown are located from field survey information and/or existing drawings supplied by client. The surveyor makes no guarantee that the utilities located comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the utilities located are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. 611 ticket numbers: 2024041702847-000, 2024041702881-000, 2024041702907-000, 2024041702921-000, 2024041702936-000, 2024041702976-000, 2024041703022-000, 2024041703063-000.
- Parcel is located within Zone "X" (Area of Minimal Flood Hazard) as indicated by the Flood Insurance Rate Map (FIRM) Map Number 26159C0375C, effective date: 12/3/2009 published by the Federal Emergency Management Agency.
- Horizontal Datum - U.S. State Plane, NAD83 Michigan South (2113) established from using the Michigan Real Time Network (RTN) provided by the Michigan Department of Transportation. Coordinates taken to ground at latitude N42°12'57.27208", W85°47'06.51214", project height 732.111', ground scale factor 1.00006042746441.
- There are no designated parking areas or spaces on the surveyed property.
- There was no evidence of current earth moving work, building construction, or building additions observed at the time of the survey.
- No proposed changes in street right of way lines were provided to the surveyor. No evidence of street or sidewalk construction or repairs observed at time of survey.

SCHEDULE B - II

No easement exceptions contained in the title commitment.

SCHEDULE C LEGAL DESCRIPTION

The Land referred to in Commitment Number 230050 is described as follows:
Land situated in the Village of Mattawan, Van Buren County, Michigan:

Parcel 1:
Commencing at the South 1/4 of Section 12, Township 3 South, Range 13 West; thence South 89 degrees 44 minutes 02 seconds West along the South line of said Section 12, 801.88 feet for the Place of Beginning; thence continuing South 89 degrees 44 minutes 02 seconds West along the South line of said Section 12; 200.00 feet; thence North 01 degrees 36 minutes 47 seconds West parallel with the West line of the Southwest 1/4 of said Section 12, 446.02 feet; thence North 89 degrees 44 minutes 02 seconds East parallel with the South line of said Section 12, 200.00 feet; thence South 01 degrees 36 minutes 47 seconds East parallel with the West line of the Southwest 1/4 of the Southwest 1/4 of said Section 12, 446.02 feet to the Place of Beginning.
Tax Parcel: 80-46-700-058-30

Parcel 2:
The South 15 acres of the Southwest 1/4 of the Southwest 1/4 of Section 12, Township 3 South, Range 13 West, ALSO, the West 1/2 of the Southwest 1/4 of the Southwest 1/4 of Section 12 EXCEPT commencing at the Southwest corner of said Section; thence North along the West Section line 497.54 feet to the North line of said Section 15 acres of the Southwest 1/4 of the Southwest 1/4 and the Place of Beginning; thence South 88 degrees 32 minutes 51 seconds East along said North line 605.00 feet; thence South 180.00 feet; thence North 88 degrees 32 minutes 51 seconds West 605.00 feet to the West Section line; thence North along the West Section line 180.00 feet to the Point of Beginning.
Tax Parcel: 80-46-700-057-01, 80-46-700-058-30, 80-46-700-057-01.

If provided above, any address and tax parcel number are solely for informational purposes, without warranty as to accuracy or completeness. If inconsistent in any way with the legal description above, the legal description shall control.

AS-SURVEYED LEGAL DESCRIPTION

Situated in the Southwest Quarter of Section 12, Township 3 South, Range 13 West, Village of Mattawan, Van Buren County, Michigan, being 2.295 acres out of a 17.581 acre tract conveyed to Edward Kucinich & Florence J. Kucinich, Trustees of the Living Trust of Edward Kucinich and Florence J. Kucinich, by document recorded in Liber 986, Page 257, Van Buren County Register of Deeds, being more particularly described as follows:

BEGINNING at Monument K-05 found at the southwest corner of said Section 12, also being the centerline intersection of North Main Street (a 66-foot-wide public right-of-way) and East McGillen Avenue (a 66-foot-wide public right-of-way);

Thence with the centerline of North Main Street, and the westerly line of said Section 12, North 00° 32' 22" East, a distance of 311.89 feet to a Set Mag Nail at the southwest corner of a 2.50-acre tract conveyed to Antwerp Township by document recorded in Liber 960, Page 992;

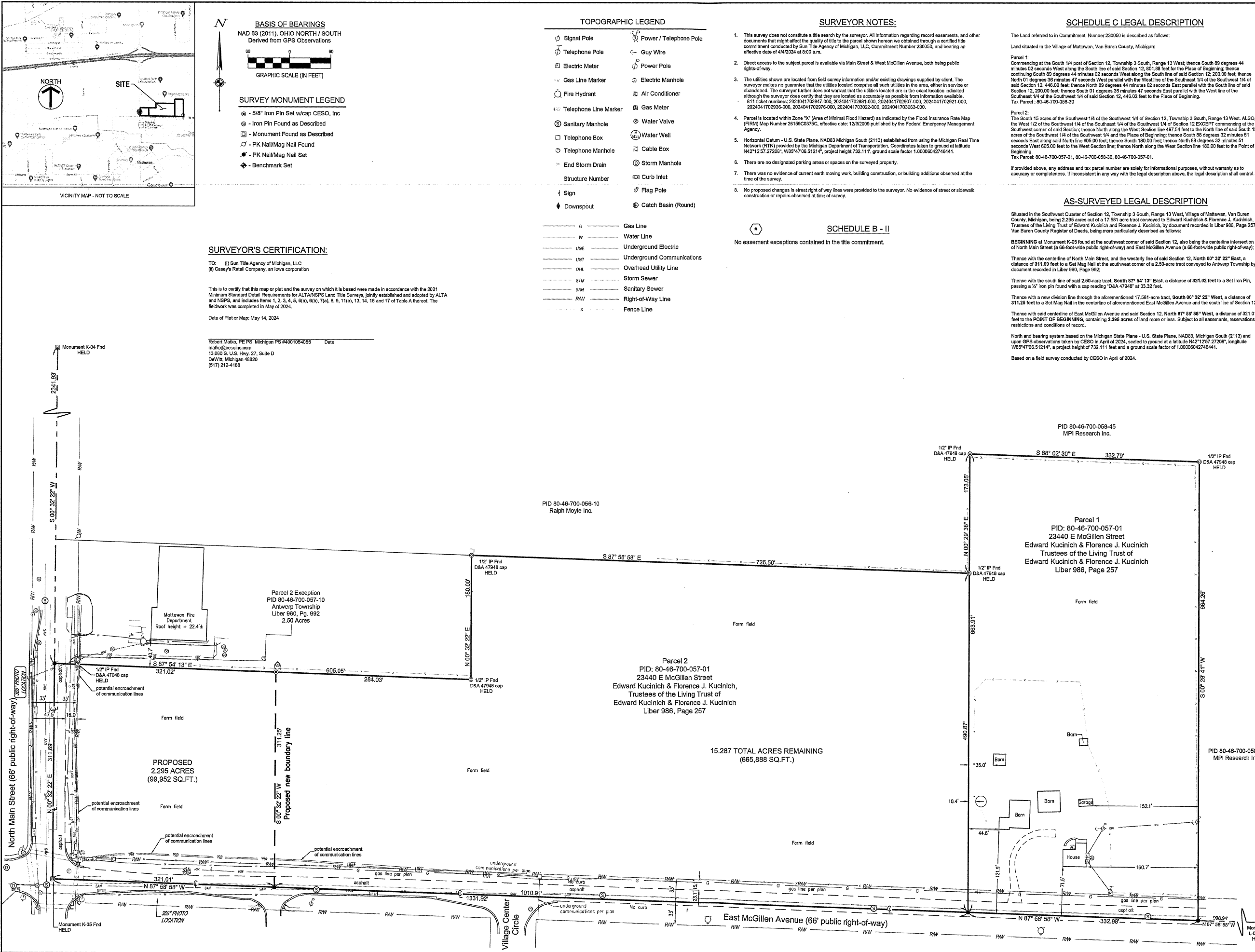
Thence with the south line of said 2.50-acre tract, South 87° 54' 13" East, a distance of 321.02 feet to a Set Iron Pin, passing a 1/2" iron pin found with a cap reading 'D&A 47948' at 33.32 feet;

Thence with a new division line through the aforementioned 17.581-acre tract, South 00° 32' 22" West, a distance of 311.25 feet to a Set Mag Nail in the centerline of aforementioned East McGillen Avenue and the south line of Section 12;

Thence with said centerline of East McGillen Avenue and said Section 12, North 87° 58' 58" West, a distance of 321.01 feet to the **POINT OF BEGINNING**, containing 2.295 acres of land more or less. Subject to all easements, reservations, restrictions and conditions of record.

North and bearing system based on the Michigan State Plane - U.S. State Plane, NAD83, Michigan South (2113) and upon GPS observations taken by CESO in April of 2024, scaled to ground at a latitude N42°12'57.27208", longitude W85°47'06.51214", a project height of 732.111 feet and a ground scale factor of 1.00006042746441.

Based on a field survey conducted by CESO in April of 2024.



Casey's Retail Company

23440 East McGillen Street
Mattawan, MI

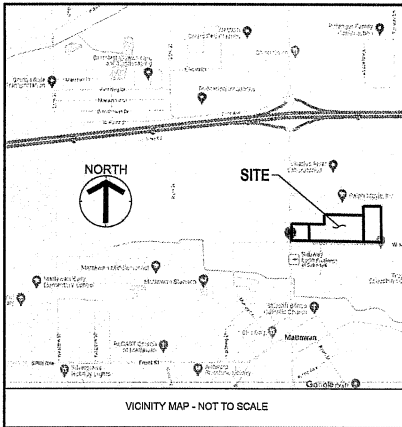
Village of Mattawan, Van Buren County, Michigan
Southwest Quarter Section 12, Township 3 South, Range 13 West

Revisions / Submissions		
ID	Description	Date

Project Number: 764183
Scale: 1" = 60'
Drawn By: RSL
Checked By: RLC
Date: 5/17/2024
Issue: Survey

Drawing Title:
**ALTA / NSPS
Land Title Survey**

C-003



BENCHMARK
Vertical Datum: NAVD88
derived from GPS Observations

BM "A": Benchmark set west side of power pole, next to green cable box, east side of Main Street, southwest corner of Mattawan Fire Station property.
Elevation = 840.27'

BM "B": Chiseled "X" on southeast bolt of signal pole base, behind sidewalk on northwest corner of Main Street and West McGillen Avenue intersection.
Elevation = 841.61'

BM "C": Benchmark set north side of power pole # V524-165, between sidewalk and south side of West McGillen Avenue, next to green telephone riser, east from entrance to McGillen's Crossing.
Elevation = 843.27'

SANITARY CHART

SMH 20370
RM = 838.70'
18" CPP (N&S) = 830.70'

SMH 20353
RM = 841.02'
18" CPP (N) = 829.12'
24" CPP (W) = 829.12'
8" PVC (S) = 829.12'
15" PVC (E) = 829.12'

SMH 20091
RM = 841.42'
15" PVC (E&W) = 830.52'

STORM CHART

CI 20342
GRT = 840.10'
8" PVC (SW) = 838.65'

CI 20390
GRT = 839.07'
12" CPP (S) = 830.42'
12" CPP (S) = 834.47'

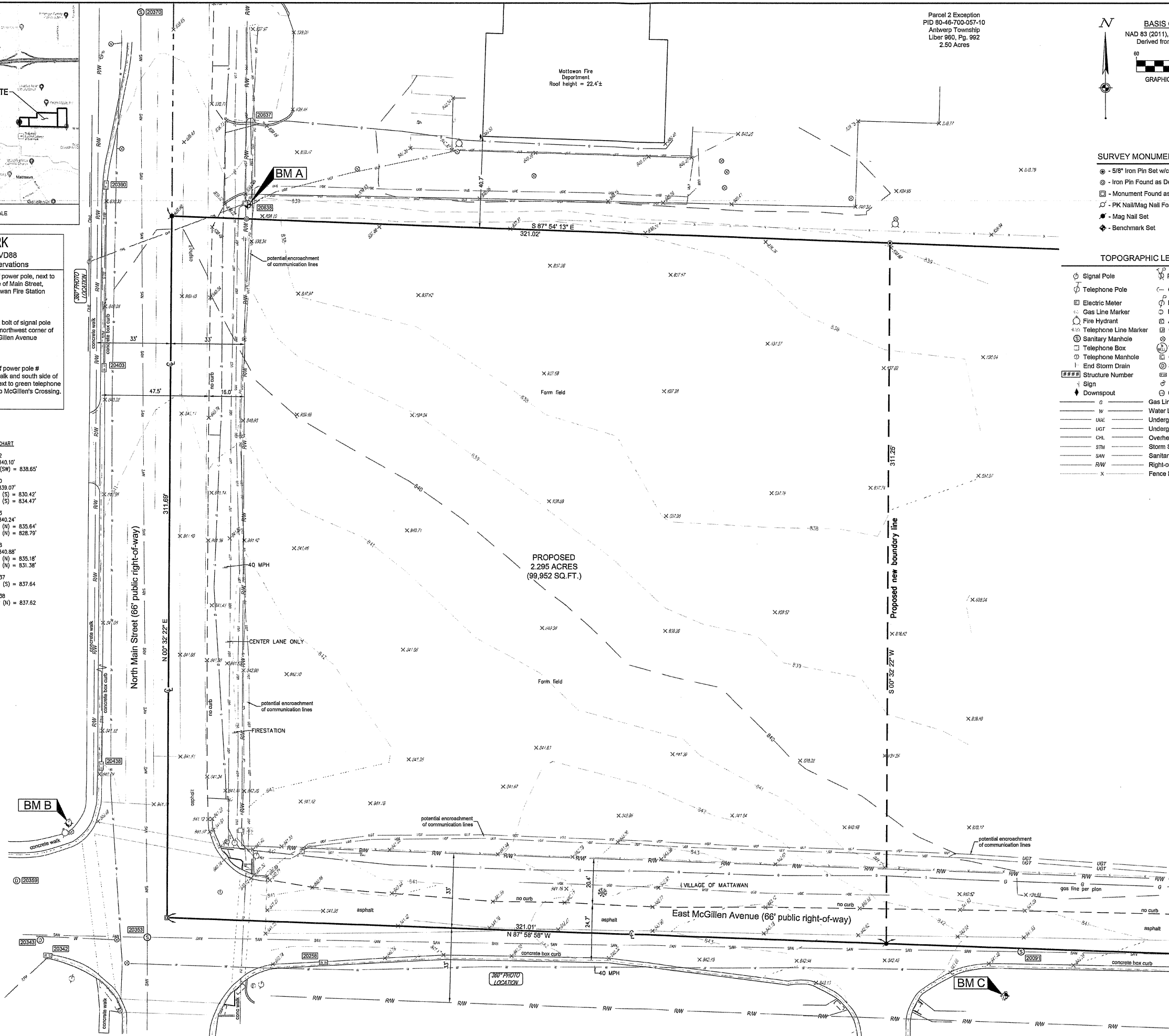
CI 20403
GRT = 840.24'
12" CPP (N) = 835.64'
12" CPP (N) = 828.79'

CI 20438
GRT = 840.88'
12" CPP (N) = 835.18'
12" CPP (N) = 831.38'

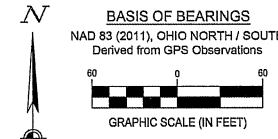
INV 20637
12" CMP (S) = 837.64

INV 20638
12" CMP (N) = 837.62

W:\PROJECTS\CASEYS\64183_Mattawan MI05-SURVEY\DWG\64183_Caseys_Mattawan MI_Surv.dwg - 5/17/2024 - Ryan Libansky



Parcel 2 Exception
PID 80-46-700-057-10
Antwerp Township
Liber 960, Pg. 992
2.50 Acres



SURVEY MONUMENT LEGEND

- 5/8" Iron Pin Set w/cap CESO, Inc
- Iron Pin Found as Described
- Monument Found as Described
- PK Nail/Mag Nail Found
- Mag Nail Set
- Benchmark Set

TOPOGRAPHIC LEGEND

- Signal Pole
- Telephone Pole
- Electric Meter
- Gas Line Marker
- Fire Hydrant
- Telephone Line Marker
- Sanitary Manhole
- Telephone Box
- Telephone Manhole
- End Storm Drain
- Structure Number
- Sign
- Downspout
- Power / Telephone Pole
- Guy Wire
- Power Pole
- Electric Manhole
- Air Conditioner
- Gas Meter
- Water Valve
- Water Well
- Cable Box
- Storm Manhole
- Curb Inlet
- Flag Pole
- Catch Basin (Round)
- Gas Line
- Water Line
- Underground Electric
- Underground Communications
- Overhead Utility Line
- Storm Sewer
- Sanitary Sewer
- Right-of-Way Line
- Fence Line



Casey's Retail Company

23440 East McGillen Street
Mattawan, MI
Village of Mattawan, Van Buren County, Michigan
Southwest Quarter Section 12, Township 3 South, Range 13 West

Revisions / Submissions

ID	Description	Date
----	-------------	------

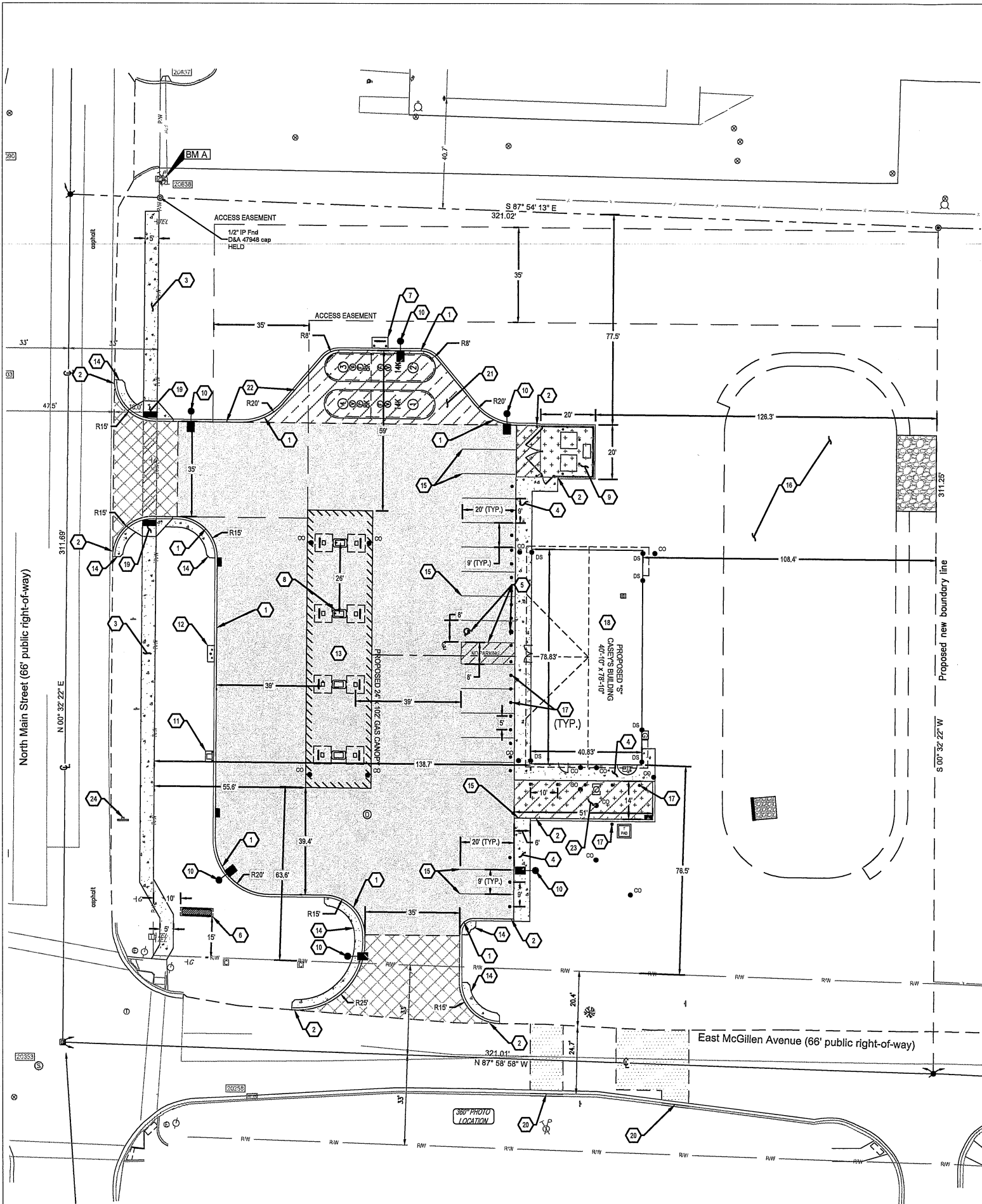
© 2024 CESO, INC.

Project Number: 764183
Scale: 1" = 60'
Drawn By: RSL
Checked By: RLC
Date: 5/17/2024
Issue: Survey

Drawing Title:
ALTA / NSPS
Land Title Survey

C-004

C:\Users\patrick.elliott\OneDrive\CEISO\Caseys Mattawan\MP\Project Files\CEISO\03-CIVIL\PLAN\LOT764183_SITE PLAN.dwg - 1/27/2025 - Patrick Oehlman



CODED NOTES:

1. PROPOSED INTEGRAL CURB. SEE DETAIL 2 ON SHEET C-801.
2. CURB TAPER. SEE DETAIL ON SHEET C-802.
3. PROPOSED 5' WIDE SIDEWALK WITHIN RIGHT-OF-WAY PER VILLAGE OF MATTAWAN STANDARDS.
4. PROPOSED SIDEWALK. SEE DETAIL 1 ON SHEET C-801.
5. CONTRACTOR TO CONSTRUCT ADA PARKING SPACE PER DETAILS 6 & 7 ON SHEET C-801 AND ACCORDING TO ALL LOCAL, STATE AND FEDERAL REGULATIONS.
6. CASEY'S MONUMENT SIGN, PER SIGNAGE PLAN.
7. PROPOSED FUEL TANK VENTS AND PAD. SEE DETAIL 5 ON SHEET C-802.
8. PROPOSED GAS TAPERED FUEL ISLAND. SEE DETAIL 1 ON SHEET C-802.
9. PROPOSED 20' X 20' DUMPSTER ENCLOSURE AND PAD. SEE ARCHITECTURAL PLANS FOR DETAILS.
10. PROPOSED SITE LIGHT POLE AND FOUNDATION. SEE DETAIL 8 ON C-802 FOR DETAILS.
11. AIR COMPRESSOR BOX. SEE DETAIL 7 ON SHEET C-801.
12. EMERGENCY SHUTOFF FOR GASOLINE DISPENSERS. ALL DISPENSERS FALL WITHIN A 100-FOOT RADIUS OF SHUTOFF. SEE DETAIL 8 ON SHEET C-801.
13. PROPOSED 24' X 102' DISPENSER AUTO FUEL CANOPY. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
14. PROPOSED LANDSCAPE PROTECTOR. SEE DETAIL 4 ON SHEET C-801.
15. PROPOSED PAVEMENT MARKINGS.
16. PROPOSED STORM WATER MANAGEMENT BASIN. REFER TO GRADING PLAN FOR DETAILS.
17. CASEY'S TYPICAL BOLLARD. SEE DETAIL 1 ON SHEET C-801.
18. PROPOSED 3,219 SF BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
19. PROPOSED MDOT CURB RAMP TYPE F PER STD. DWG. R-28-J. SEE DETAIL ON SHEET C-804.
20. PROPOSED CURB AND GUTTER PER VILLAGE OF MATTAWAN STANDARDS.
21. PROPOSED FUEL TANK AREA CONCRETE PAD. SEE DETAIL 2 ON SHEET C-801 AND DETAIL 2 ON SHEET C-802.
22. PROPOSED 2' MOUNTABLE CURB. SEE DETAIL ON SHEET C-803.
23. PROPOSED 14' X 51' LOADING ZONE.
24. APPROXIMATE LOCATION OF RELOCATED SIGN. CONTRACTOR TO COORDINATE WITH THE VILLAGE OF MATTAWAN FOR FINAL LOCATION.

SITE LEGEND

EXISTING
REFER TO C-801 FOR EXISTING FEATURES LEGEND

PROPOSED

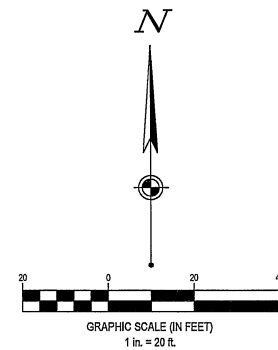
- PROPOSED STANDARD DUTY CONCRETE PAVEMENT. SEE DETAIL 2 ON SHEET C-801
- PROPOSED FUEL TANK CONCRETE PAVEMENT. SEE DETAIL 2 ON SHEET C-801 AND DETAIL 2 ON SHEET C-802
- PROPOSED HEAVY DUTY NON-REINFORCED CONCRETE PAVEMENT. SEE DETAIL 2 ON SHEET C-801
- PROPOSED CONCRETE SIDEWALK. SEE DETAIL 1 ON SHEET C-801
- PROPOSED APPROACH CONCRETE PAVEMENT. SEE DETAIL 2 ON SHEET C-801
- PROPOSED ASPHALT REPAIR. CONTRACTOR TO MATCH EXISTING SECTION IN KIND
- SETBACK
- EASEMENT
- BUILDING
- CANOPY
- CONCRETE CURB
- PAVEMENT/WALK
- PARKING SPACE COUNT
- SIGN
- DETECTABLE WARNING MAT.
- CATCH BASIN
- STORM MANHOLE
- SANITARY MANHOLE
- CURB INLET
- CLEANOUT
- DOWN SPOUT
- FIRE HYDRANT
- LIGHT POLE
- BOLLARD

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

- BM "A": Benchmark set west side of power pole, next to green cable box, east side of Main Street, southwest corner of Mattawan Fire Station property.
Elevation = 840.27'
- BM "B": Chiseled "X" on southeast bolt of signal pole base, behind sidewalk on northwest corner of Main Street and West McGillen Avenue intersection.
Elevation = 841.61'
- BM "C": Benchmark set north side of power pole # V524-165, between sidewalk and south side of West McGillen Avenue, next to green telephone riser, east from entrance to McGillen's Crossing.
Elevation = 843.27'

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-482-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE



175 Montrose West Ave., Suite 400
Morris, OH 44131
Phone: 330.665.0860 Fax: 888.208.4928



CASEY'S #4605

MATTAWAN, MI
23988 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions

ID	Description	Date

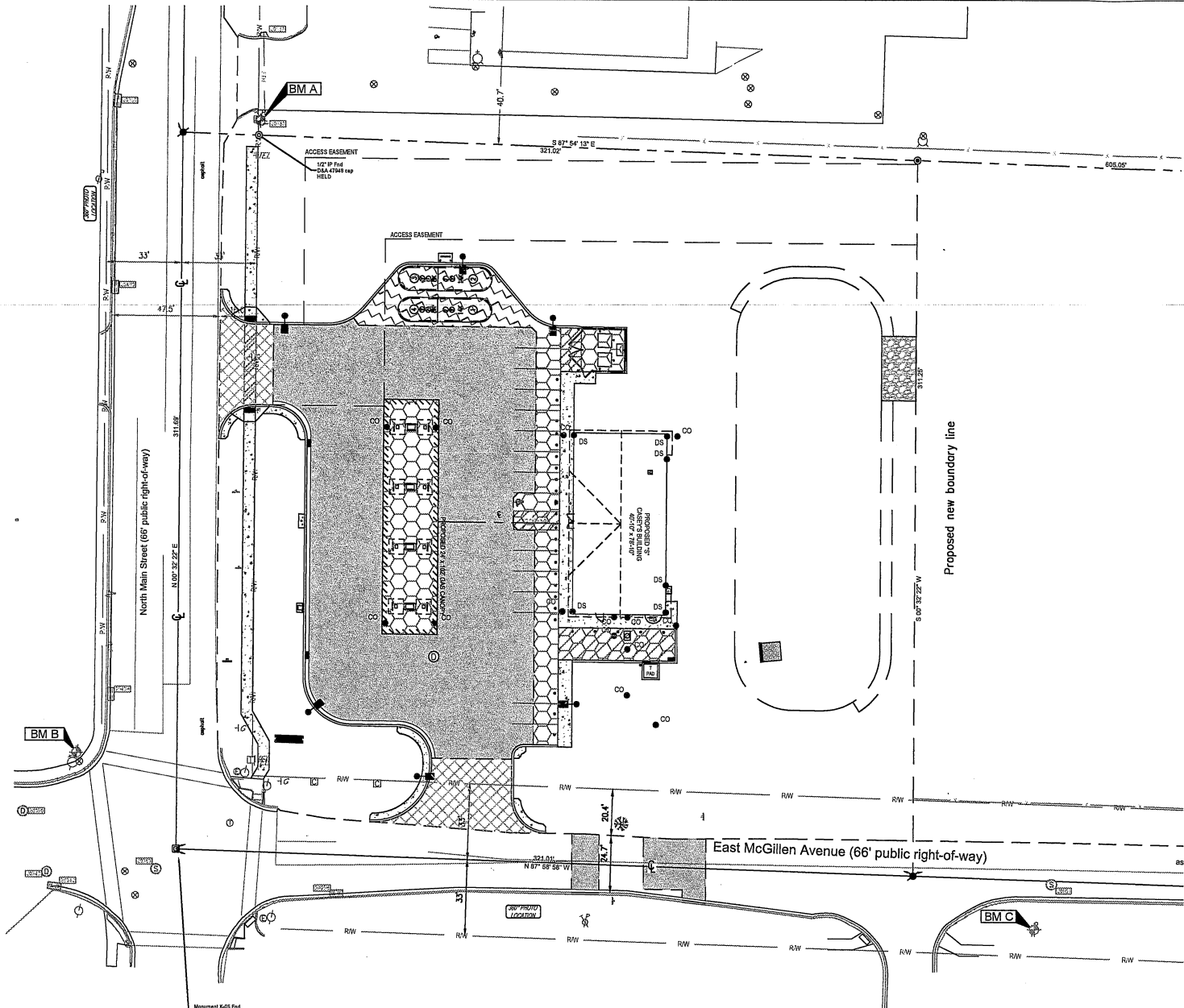
Project Number: 764183
Scale: 1" = 20'
Drawn By: BTD
Checked By: JMS
Date: 12/12/2024
Issue: PERMIT SET

Drawing Title:

SITE PLAN

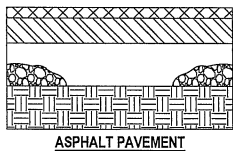
C-101

C:\Users\patrick.oeilman\OneDrive\CESO\Caseys Mattawan MIP\Project Files\CESO103-CIVIL\PLAN_PLOT\TV64183_SITE PLAN.dwg - 1/27/2025 - Patrick Oehlman



PAVEMENT LEGEND		APPROXIMATE QUANTITY (SQUARE FEET) **
	PAVEMENT DELINEATION	N/A
	STANDARD DUTY ASPHALT PAVEMENT	16408
	CONCRETE SIDEWALK PAVEMENT	2631
	STANDARD 6" CONCRETE PAVEMENT	5752
	APPROACH 7" CONCRETE PAVEMENT	2205
	HEAVY DUTY 8" CONCRETE PAVEMENT	1646

** MEASURED FROM EDGE OF CURB GUTTER



ASPHALT PAVEMENT

PAVEMENT LAYER DEPTHS			
ASPHALT			
	A	B	C
STANDARD DUTY	2"	4"	6"

ASPHALT PAVEMENT SECTION

NTS

- REFERENCE CHART FOR DEPTHS
- A. ASPHALT PAVEMENT SURFACE COURSE
 - B. ASPHALT PAVEMENT BINDER COURSE
 - C. AGGREGATE BASE MATERIAL
 - D. SUBGRADE-COMPACT PER GEOTECHNICAL REPORT SECTION

GENERAL NOTES

- CONTRACTOR SHALL FULLY COMPLY WITH AHJ RULES AND REGULATIONS, AND ALL CONSTRUCTION AND MATERIAL SPECIFICATIONS, CURRENT EDITION.
- ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT AHJ / DOT CONSTRUCTION AND MATERIAL SPECIFICATION.
- CONTRACTOR TO REFER TO GEOTECHNICAL REPORT FOR SUBGRADE COMPACTION.
- ASPHALT PAVEMENT SPECIFICATIONS SHALL BE PER DOT SPECIFICATIONS SHOWN IN TABLE BELOW, OR MOST CURRENT DOT SPECIFICATION MANUAL.

DOT ASPHALT PAVEMENT SPECIFICATIONS

STATE	SURFACE COURSE	BINDER COURSE	AGGREGATE COURSE
MI	SECTION 501, MATERIAL 501.02	SECTION 501, MATERIAL 501.02	SECTION 302, MATERIAL 302.02 - CLASS 22A

ASPHALT PAVING SPECIFICATIONS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. AGGREGATE BASE COURSE.
- B. SINGLE COURSE BITUMINOUS CONCRETE PAVING.
- C. DOUBLE COURSE BITUMINOUS CONCRETE PAVING.
- D. SURFACE SEALER.

1.02 REFERENCE STANDARDS

- A. AASHTO M 147 - STANDARD SPECIFICATION FOR MATERIALS FOR AGGREGATE AND SOIL-AGGREGATE SUBBASE, BASE AND SURFACE COURSES; 2017.
- B. AI MS-2 - ASPHALT MIX DESIGN METHODS; 2015.
- C. AI MS-19 - BASIC ASPHALT EMULSION MANUAL; 2008.
- D. ASTM C136/C136M - STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES; 2019.
- E. ASTM D948 - STANDARD SPECIFICATION FOR PENETRATION-GRADED ASPHALT CEMENT FOR USE IN PAVEMENT CONSTRUCTION; 2009A.
- F. ASTM D2487 - STANDARD PRACTICE FOR CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOIL CLASSIFICATION SYSTEM); 2017, WITH EDITORIAL REVISION.
- G. ASTM D4318 - STANDARD TEST METHODS FOR LIQUID LIMIT, PLASTIC LIMIT, AND PLASTICITY INDEX OF SOILS; 2017, WITH EDITORIAL REVISION (2018).

1.03 PERFORMANCE REQUIREMENTS

- A. DESIGN PAVING AND SUBBASE AT HEAVY-DUTY AREAS FOR MOVEMENT OF TRUCKS.
- B. DESIGN PAVING AND SUBBASE AT STANDARD-DUTY AREAS FOR LIGHT DUTY COMMERCIAL VEHICLE AND PASSENGER VEHICLE TRAFFIC.

1.04 QUALITY ASSURANCE

- D. PERFORM WORK IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS.
- E. MIXING PLANT: COMPLYING WITH STATE DOT HIGHWAYS STANDARDS.
- F. OBTAIN MATERIALS FROM SAME SOURCE THROUGHOUT.

1.05 FIELD CONDITIONS

- A. DO NOT PLACE ASPHALT WHEN AMBIENT AIR OR BASE SURFACE TEMPERATURE IS LESS THAN 40 DEGREES F (4 DEGREES C), OR SURFACE IS WET OR FROZEN.
- B. PLACE BITUMEN MIXTURE WHEN TEMPERATURE IS NOT MORE THAN 15 F DEGREES (8 C DEGREES) BELOW BITUMEN SUPPLIER'S BILL OF LADING AND NOT MORE THAN MAXIMUM SPECIFIED TEMPERATURE.

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS

- A. COMPLY WITH APPLICABLE CODE FOR PAVING WORK ON PUBLIC PROPERTY.

2.02 MATERIALS

- A. ASPHALT CEMENT: ASTM D948.
- B. AGGREGATE FOR BASE COURSE: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS, SHOWN BELOW IN SPECIFICATIONS TABLE.
- C. AGGREGATE FOR BINDER COURSE: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS, SHOWN IN SPECIFICATIONS TABLE.
- D. AGGREGATE FOR WEARING COURSE: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS, SHOWN IN SPECIFICATIONS TABLE.
- E. FINE AGGREGATE: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS.
- F. MINERAL FILLER: FINELY GROUND PARTICLES OF LIMESTONE, HYDRATED LIME OR OTHER MINERAL DUST, FREE OF FOREIGN MATTER.
- G. PRIMER: IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS.
- H. TACK COAT: HOMOGENEOUS, MEDIUM CURING, LIQUID ASPHALT.
- I. SEAL COAT: AI MS-19, SAND TYPE.

2.03 ASPHALT PAVING MIXES AND MIX DESIGN

- A. USE DRY MATERIAL TO AVOID FOAMING. MIX UNIFORMLY.
- B. BASE COURSE: AGGREGATE PLACED AND COMPACTED IN ACCORDANCE WITH STATE DOT SPECIFICATIONS
- C. BINDER COURSE: 4.5 TO 6 PERCENT OF ASPHALT CEMENT BY WEIGHT IN MIXTURE IN ACCORDANCE WITH STATE DOT SPECIFICATIONS.
- D. WEARING COURSE: 5 TO 7 PERCENT OF ASPHALT CEMENT BY WEIGHT IN MIXTURE IN ACCORDANCE WITH STATE DOT SPECIFICATIONS.
- E. SUBMIT PROPOSED MIX DESIGN OF EACH CLASS OF MIX FOR REVIEW PRIOR TO BEGINNING OF WORK.

2.04 SOURCE QUALITY CONTROL

- A. TEST MIX DESIGN AND SAMPLES IN ACCORDANCE WITH STATE DOT SPECIFICATIONS.

PART 3 EXECUTION

3.01 EXAMINATION

- A. VERIFY THAT COMPACTED SUBGRADE IS DRY AND READY TO SUPPORT PAVING AND IMPOSED LOADS.
- B. VERIFY GRADIENTS AND ELEVATIONS OF BASE ARE CORRECT.

3.02 AGGREGATE BASE COURSE

- A. PLACE AND COMPACT AGGREGATE BASE COURSE.

3.03 PREPARATION - PRIMER

- A. APPLY PRIMER IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- B. APPLY PRIMER ON AGGREGATE BASE OR SUBBASE AT UNIFORM RATE OF 1/3 GAL/SQ YD (1.5 L/SQ M).
- C. APPLY PRIMER TO CONTACT SURFACES OF CURBS, AND GUTTERS.
- D. USE CLEAN SAND TO BLOT EXCESS PRIMER.

3.04 PREPARATION - TACK COAT

- A. APPLY TACK COAT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- B. APPLY TACK COAT ON ASPHALT OR CONCRETE SURFACES OVER SUBGRADE SURFACE AT UNIFORM RATE OF 1/3 GAL/SQ YD (1.5 L/SQ M).
- C. APPLY TACK COAT TO CONTACT SURFACES OF CURBS, AND GUTTERS
- D. COAT SURFACES OF MANHOLE FRAMES WITH OIL TO PREVENT BOND WITH ASPHALT PAVEMENT. DO NOT TACK COAT THESE SURFACES.

3.05 PLACING ASPHALT PAVEMENT - SINGLE COURSE

- A. INSTALL WORK IN ACCORDANCE WITH STATE DOT HIGHWAYS STANDARDS.
- B. PLACE ASPHALT WITHIN 24 HOURS OF APPLYING PRIMER OR TACK COAT.
- C. INSTALL GUTTER DRAINAGE GRILLES AND FRAMES IN CORRECT POSITION AND ELEVATION.
- D. COMPACT PAVEMENT BY ROLLING TO SPECIFIED DENSITY. DO NOT DISPLACE OR EXTRUDE PAVEMENT FROM POSITION. HAND COMPACT IN AREAS INACCESSIBLE TO ROLLING EQUIPMENT.
- E. PERFORM ROLLING WITH CONSECUTIVE PASSES TO ACHIEVE EVEN AND SMOOTH FINISH WITHOUT ROLLER MARKS.

3.06 PLACING ASPHALT PAVEMENT - DOUBLE COURSE

- A. PLACE ASPHALT BINDER COURSE WITHIN 24 HOURS OF APPLYING PRIMER OR TACK COAT.
- B. PLACE WEARING COURSE WITHIN TWO HOURS OF PLACING AND COMPACTING BINDER COURSE.
- C. INSTALL GUTTER DRAINAGE GRILLES AND FRAMES IN CORRECT POSITION AND ELEVATION.
- D. COMPACT PAVEMENT BY ROLLING TO SPECIFIED DENSITY. DO NOT DISPLACE OR EXTRUDE PAVEMENT FROM POSITION. HAND COMPACT IN AREAS INACCESSIBLE TO ROLLING EQUIPMENT.
- E. PERFORM ROLLING WITH CONSECUTIVE PASSES TO ACHIEVE EVEN AND SMOOTH FINISH, WITHOUT ROLLER MARKS.

3.07 PLACING ASPHALT PAVEMENT - ADJACENT TO CONCRETE

- A. CONCRETE PAVEMENT TO BE PLACED FIRST OR ASPHALT IS TO BE LAID BEYOND THE CONCRETE EDGE AND SAWCUT PRIOR TO CONCRETE PLACEMENT FOR A CLEAN LINE AND VERTICAL EDGE.

3.08 TOLERANCES

- A. FLATNESS: MAXIMUM VARIATION OF 1/4 INCH (6 MM) MEASURED WITH 10 FOOT (3 M) STRAIGHT EDGE.
- B. COMPACTED THICKNESS: WITHIN 1/4 INCH (6 MM) OF SPECIFIED OR INDICATED THICKNESS.
- C. VARIATION FROM TRUE ELEVATION: WITHIN 1/2 INCH (12 MM).

3.09 FIELD QUALITY CONTROL

- A. PROVIDE FIELD INSPECTION AND TESTING. TAKE SAMPLES AND PERFORM TESTS IN ACCORDANCE WITH STATE DOT SPECIFICATIONS.

3.10 PROTECTION

- A. IMMEDIATELY AFTER PLACEMENT, PROTECT PAVEMENT FROM MECHANICAL INJURY UNTIL SURFACE TEMPERATURE IS LESS THAN 140 DEGREES F (60 DEGREES C).



WWW.CESOINC.COM

175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.855.0860 Fax: 888.208.4829



CASEY'S #4605

MATTAWAN, MI

23968 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions

ID	Description	Date
----	-------------	------

© 2024 CESO, INC.

Project Number: 764183

Scale: 1" = 30'

Drawn By: BTD

Checked By: JMS

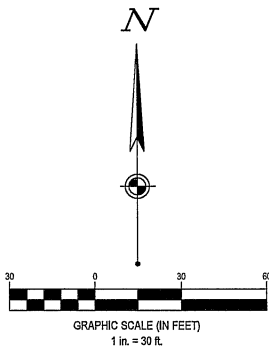
Date: 12/12/2024

Issue: PERMIT SET

Drawing Title:

ALTERNATIVE
PAVEMENT PLAN

C-101A

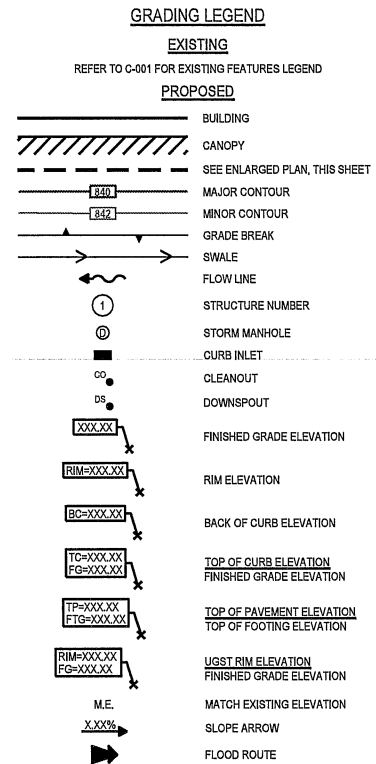
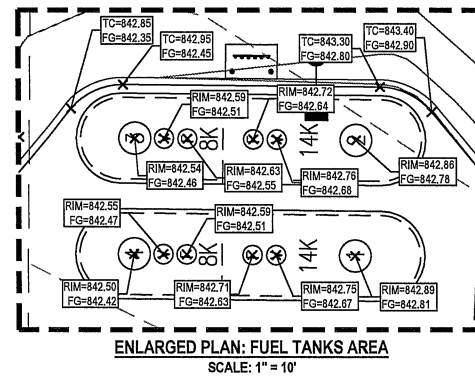
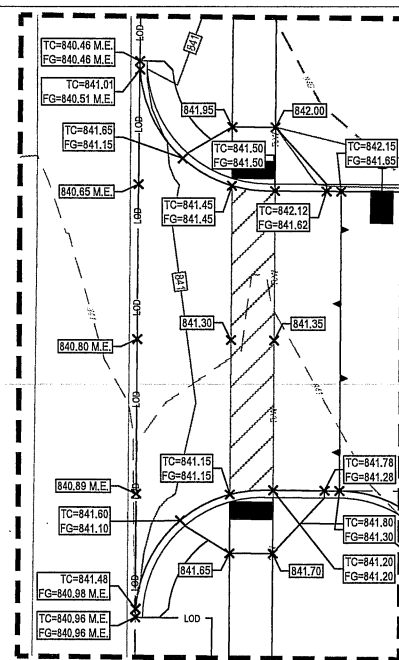
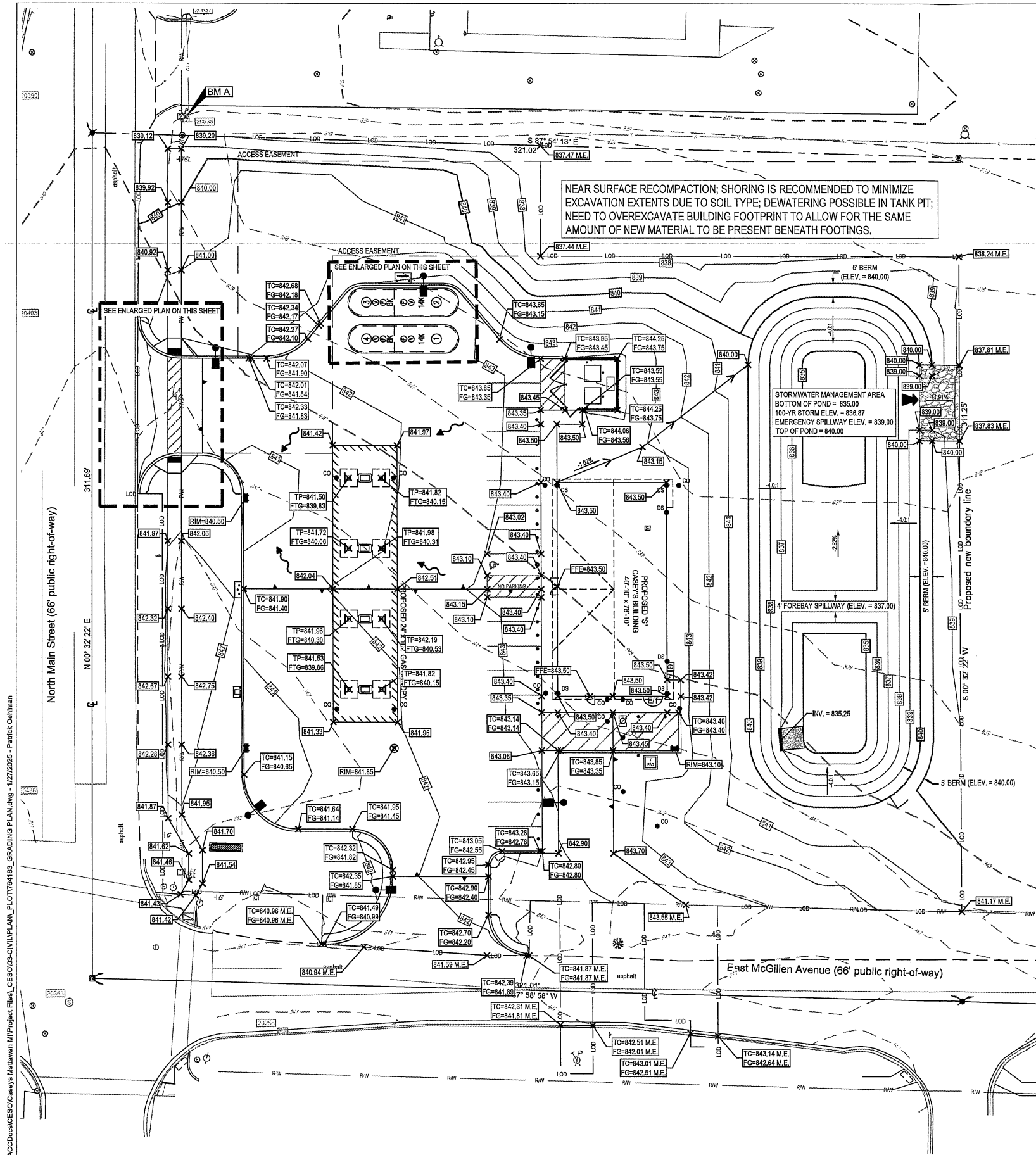


SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-482-1711 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS

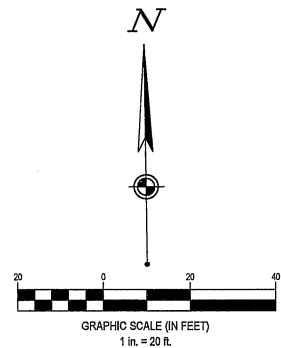
BENCHMARK	
Vertical Datum: NAVD88 derived from GPS Observations	
BM "A":	Benchmark set west side of power pole, next to green cable box, east side of Main Street, southwest corner of Mattawan Fire Station property. Elevation = 840.27'
BM "B":	Chiseled "X" on southeast bolt of signal pole base, behind sidewalk on northwest corner of Main Street and West McGillen Avenue intersection. Elevation = 841.61'
BM "C":	Benchmark set north side of power pole # V524-165, between sidewalk and south side of West McGillen Avenue, next to green telephone riser, east from entrance to McGillen's Crossing. Elevation = 843.27'

C:\Users\patrick.oeilman\OneDrive\Casey's Mattawan\Project Files\CESO03-CIVIL\PLAN\LOT764183-GRADING PLAN.dwg - 1/27/2025 - Patrick Oeilman



BENCHMARK	
Vertical Datum: NAVD88 derived from GPS Observations	
BM "A":	Benchmark set west side of power pole, next to green cable box, east side of Main Street, southwest corner of Mattawan Fire Station property. Elevation = 840.27'
BM "B":	Chiseled "X" on southeast bolt of signal pole base, behind sidewalk on northwest corner of Main Street and West McGillen Avenue intersection. Elevation = 841.61'
BM "C":	Benchmark set north side of power pole # V524-165, between sidewalk and south side of West McGillen Avenue, next to green telephone riser, east from entrance to McGillen's Crossing. Elevation = 843.27'

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-482-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE



CASEY'S #4605

MATTAWAN, MI

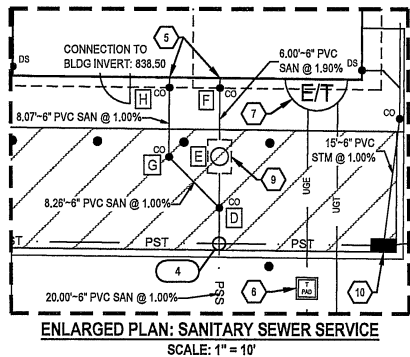
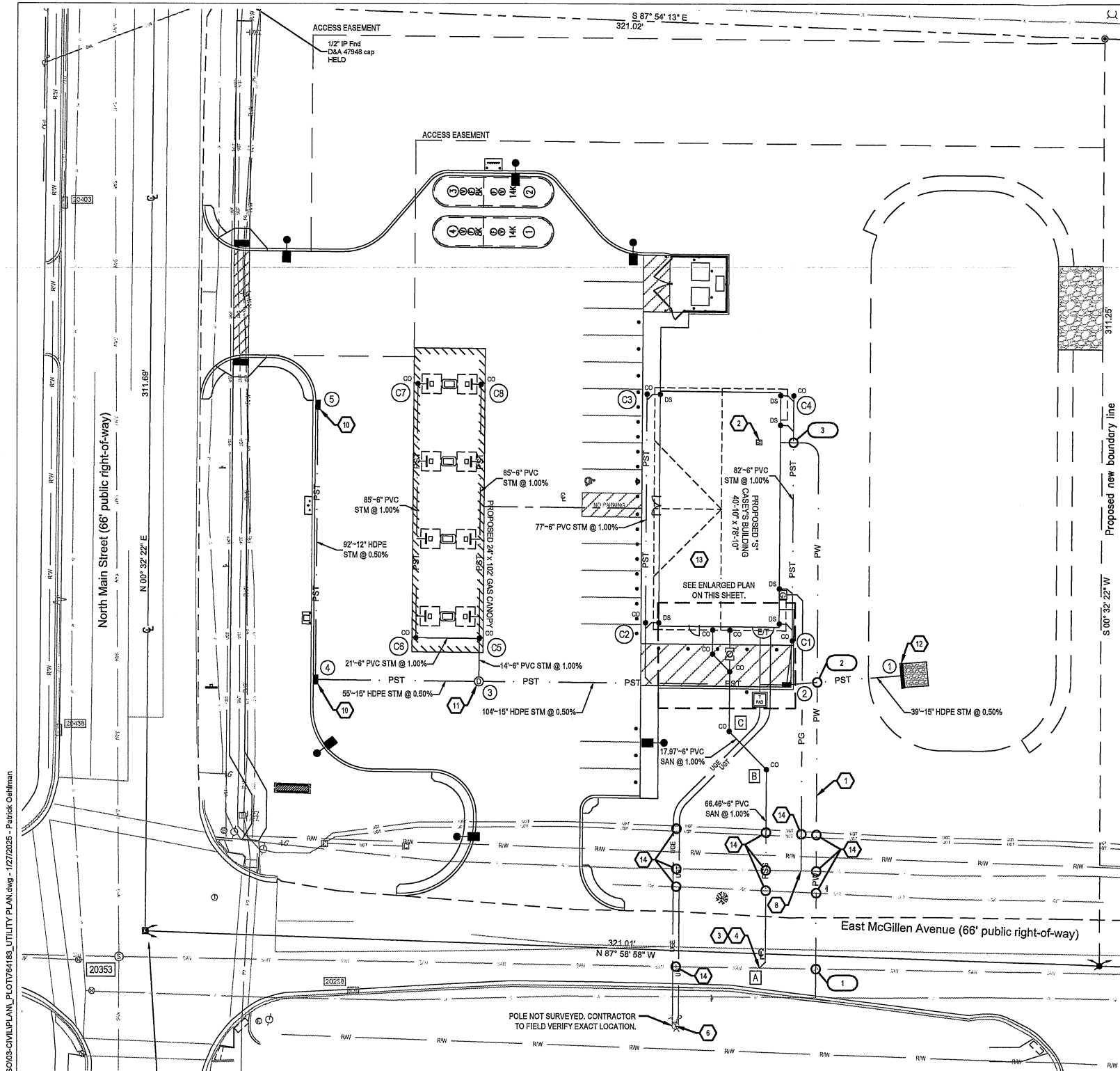
23968 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions		
ID	Description	Date
Project Number: 764183		
Scale: 1" = 20'		
Drawn By: BTD		
Checked By: JMS		
Date: 12/12/2024		
Issue: PERMIT SET		

Drawing Title:
GRADING PLAN

C-201

C:\Users\patrick.oe\hman\DC\Acc\DC\Caseys Mattawan\MI\Project Files\CESO03-CIVIL\PLAN\LOT764183_UTILITY PLAN.dwg - 1/27/2025 - Patrick Oshinan



CONTRACTOR NOTE:

- CONTRACTOR SHALL VERIFY ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES.

CODED NOTES:

- CONTRACTOR SHALL FURNISH AND INSTALL 2" COPPER TUBE SIZE POLYETHYLENE PIPING FROM METER TO NEW 2" TAP. CONTRACTOR IS RESPONSIBLE FOR ALL WORK PERMITS WITHIN THE PUBLIC RIGHT-OF-WAY. NEW WATER TAPS WILL NEED TO BE INSTALLED AT WATER MAIN.
- A SEPARATE IRRIGATION METER SHALL BE PROVIDED. IRRIGATION SYSTEM SHALL BE DESIGN BUILD BY CONTRACTOR.
- CONNECT 6" SDR-35 PVC SANITARY SERVICE TO EXISTING SANITARY SEWER LINE PER VILLAGE OF MATTAWAN STANDARDS. CONTRACTOR TO FIELD LOCATE AND VERIFY EXISTING SANITARY SEWER LINE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO ENGINEER. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS FOR FINAL CONNECTION.
- CONTRACTOR SHALL WYE INTO EXISTING SANITARY MAIN FOR CASEY'S LATERAL. CONTRACTOR SHALL CONFIRM DEPTH OF MAIN PRIOR TO CONSTRUCTION AND CONTACT DESIGN ENGINEER WITH ANY DISCREPANCIES. CONTRACTOR SHALL COORDINATE WITH VILLAGE OF MATTAWAN FOR SEWER TAP.
- COORDINATE UTILITIES WITH PLUMBING CONTRACTOR, CAP AND MARK FOR FUTURE CONNECTION. FINAL CONNECTION BY PLUMBING CONTRACTOR.
- CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND THE LOCAL UTILITY COMPANY TO INSTALL PRIMARY RISER AS REQUIRED TO PROVIDE ELECTRICAL SERVICE TO THE PROPOSED BUILDING. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR AND THE LOCAL UTILITY COMPANY TO INSTALL NEW PAD MOUNTED TRANSFORMER.
- ELECTRICAL SERVICE ENTRANCE. COORDINATE WITH ELECTRICAL CONTRACTOR FOR CONNECTION LOCATION OF ELECTRICAL SERVICE.
- CONNECTION TO GAS MAIN. LOCAL GAS COMPANY SHALL FURNISH AND INSTALL GAS LINE FROM METER TO NEW TAP. THE CONTRACTOR SHALL INSTALL THE GAS LINE FROM THE METER TO THE BUILDING SERVICE PER THE BUILDING DRAWINGS.
- GREASE TRAP TO BE PROCURED AND INSTALLED BY CONTRACTOR. GREASE TRAP TO BE PROCURED FROM SCHIER PRODUCTS. CONTACT SCHIER PRODUCTS WITH ANY QUESTIONS OR CASEY'S TEAM MEMBER IF THERE IS AN ISSUE. REFER TO MEP PLANS FOR DETAILS.
- SUPPLY AND INSTALL (3) MDOOT TYPICAL CATCH BASINS PER STD. DWG. R-1-G WITH CASEY'S STANDARD INLET CASTING PER DETAIL 5 ON SHEET C-601.
- SUPPLY AND INSTALL (1) MDOOT TYPICAL MANHOLES PER STD. DWG. R-1-G WITH MDOOT COVER B PER STD. DWG. R-7-F. SEE DETAILS ON SHEET C-604.
- SUPPLY AND INSTALL (1) STANDARD HEADWALL. SEE DETAILS ON SHEET C-603.
- BUILDING UTILITY ENTRANCE LOCATIONS TO BE VERIFIED WITH ARCHITECTURAL PLANS.
- CONTRACTOR TO FIELD VERIFY DEPTH OF EXISTING UTILITY LINES AND NOTIFY ENGINEER OF ANY CROSSING CONFLICTS FOR PROPOSED UTILITY CONNECTIONS.

STORM SEWER STRUCTURE SCHEDULE			
NO.	STRUCTURE	RIM	INVERT
1	HEADWALL		835.25 (15') W
2	CURB INLET	843.10	835.44 (15') W 839.43 (6') N 835.44 (15') E
3	48" MANHOLE	841.85	835.96 (15') W 837.54 (6') N 835.96 (15') E
4	CURB INLET	840.50	836.49 (12') N 836.24 (15') E
5	CURB INLET	840.50	836.95 (12') S

STORM SEWER STRUCTURE SCHEDULE			
NO.	STRUCTURE	RIM	INVERT
C1	6" CO	843.40	839.58 (6') N 839.58 (6') S
C2	6" CO	843.42	840.13 (6') N 840.13 (6') S
C3	6" CO	843.42	840.90 (6') S
C4	6" CO	843.43	840.40 (6') S
C5	6" CO	841.93	837.68 (6') W 837.68 (6') N 837.68 (6') S
C6	6" CO	841.37	837.90 (6') N 837.90 (6') E
C7	6" CO	841.37	838.75 (6') S
C8	6" CO	841.84	838.54 (6') S

BENCHMARK

Vertical Datum: NAVD88
derived from GPS Observations

- BM "A": Benchmnll set west side of power pole, next to green cable box, east side of Main Street, southwest corner of Mattawan Fire Station property. Elevation = 840.27'
- BM "B": Chiseled "X" on southeast bolt of signal pole base, behind sidewalk on northwest corner of Main Street and West McGillen Avenue intersection. Elevation = 841.61'
- BM "C": Benchmnll set north side of power pole # V524-165, between sidewalk and south side of West McGillen Avenue, next to green telephone riser, east from entrance to McGillen's Crossing. Elevation = 843.27'

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS

UTILITY LEGEND

EXISTING

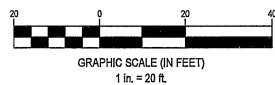
REFER TO C-001 FOR EXISTING FEATURES LEGEND

PROPOSED

	BUILDING
	CANOPY
	CONCRETE CURB
	PAVEMENT/WALK
	STORM SEWER LINE
	SANITARY SEWER LINE
	DOMESTIC WATER LINE
	GAS SERVICE LINE
	UNDERGROUND ELECTRIC LINE
	UNDERGROUND TELEPHONE LINE
	STORM SEWER
	SANITARY SEWER
	CURB INLET
	CLEANOUT
	DOWNSPOUT
	ELECTRICAL SERVICE ENTRANCE
	ELECTRICAL TRANSFORMER PAD
	WATER METER
	GAS METER
	HEADWALL WITH SCOUR MAT

UTILITY CROSSING SCHEDULE			
NO.	UTILITY	ELEVATIONS	DIFF.
1	2" WAT	B/PIPE = 837.86	6.65'
	EX. 15" SAN	T/PIPE = 831.21	
2	15" STM	B/PIPE = 836.19	1.50'
	2" WAT	T/PIPE = 834.69	
3	6" STM	B/PIPE = 840.24	1.61'
	2" WAT	T/PIPE = 838.43	
4	6" SAN	B/PIPE = 838.32	1.53'
	15" STM	T/PIPE = 836.79	

SANITARY SEWER STRUCTURE SCHEDULE			
NO.	STRUCTURE	RIM	INVERT
A	WYE CONNECTION		837.32 (6') N PR. 829.90 (15') E EX. 829.90 (15') W EX.
B	6" CO	842.68	837.98 (6') NW 837.98 (6') S
C	6" CO	843.55	838.16 (6') N 838.16 (6') SE
D	6" CO	843.34	838.32 (6') NW 838.32 (6') N 838.36 (6') S
E	GREASE INTERCEPTOR	843.38	838.36 (6') N 838.36 (6') S
F	6" CO	843.49	838.48 (6') N 838.48 (6') S
G	6" CO	843.40	838.41 (6') N 838.41 (6') SE
H	6" CO	843.49	838.49 (6') N 838.49 (6') S



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-482-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE



W W . C E S O I N C . C O M

175 Montrose West Ave., Suite 400
Ann Arbor, MI 48106
Phone: 330.855.0680 Fax: 848.208.4838



CASEY'S #4605

MATTAWAN, MI

23968 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions

ID	Description	Date
----	-------------	------

© 2024 CESO, INC.
Project Number: 764183
Scale: 1" = 20'
Drawn By: BTB
Checked By: JMS
Date: 12/12/2024
Issue: PERMIT SET

Drawing Title:
UTILITY PLAN

C-301



PLAN ENGINEERS:
CESO, INC.
2800 CORPORATE EXCHANGE DR, SUITE 400
COLUMBUS, OH 43231
PHONE: (440) 773-3461
CONTACT: JEFF LONCHOR
EOR: ZACHARY FRESHER

THE ENTIRE SITE DRAINS FROM SOUTHWEST TO NORTHEAST INTO ADJACENT FIELDS

ON-SITE SOILS: 9B - PLAINFIELD SAND, LAKE PLAIN, 0 TO 6 PERCENT SLOP 100%

HYDROLOGIC SOIL GROUPS: SB - A

EXISTING ON-SITE CONDITIONS: UNDEVELOPED VACANT LOT.

1. NOTIFY VILLAGE OF MATTAWAN ADMINISTRATOR BEFORE WORK IS TO BEGIN.
2. INSTALL ALL TEMPORARY EROSION CONTROL MEASURES INCLUDING SILT FENCE, CONSTRUCTION EXIT, FILTER SACKS, CONCRETE WASHOUT.
3. SITE DEMOLITION AND CLEARING.
4. ROUGH GRADING. PROVIDE TEMPORARY SEEDING OF DISTURBED AREAS WHICH ARE INACTIVE.
5. STORM SEWER AND UNDERGROUND UTILITY CONSTRUCTION.
6. BUILDING PAD.
7. CURB CONSTRUCTION.
8. FINE GRADING AND PAVEMENT SUBGRADE PREPARATION
9. ASPHALT PAVING AND REMAINING CONCRETE FLATWORK.
10. FINAL SEEDING.

SWPPP LEGEND

REFER TO C-001 FOR EXISTING FEATURES LEGEND

	MAJOR CONTOUR
	MINOR CONTOUR
	PAVEMENT/WALK
	TREE PROTECTION
	SILT FENCE
	STRAW WATTLE
	GRADING/SEEDING LIMITS
	LIMIT OF DISTURBANCE
	STABILIZED CONSTRUCTION ENTRANCE
	CONCRETE WASHOUT
	BASIN SEDIMENT FILTER
	STORM MANHOLE
	CATCH BASIN
	CURB INLET
	STABILIZED CONSTRUCTION ENTRANCE
	TEMPORARY SEEDING
	PERMANENT SOD
	HAZARDOUS WASTE STORAGE AREA
	FUEL STORAGE AREA
	CONCRETE WASHOUT AREA
	INLET PROTECTION
	TRASH AREA
	TREE PROTECTION



175 Monroe West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0680 Fax: 888.208.4888



MATTAWAN, MI

223968 MCGILLEN AVENUE
MATTAWAN MI 49071

Revisions / Submissions		
ID	Description	Date

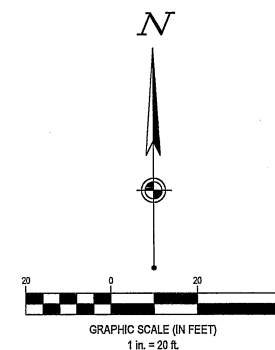
© 2024 CESO, INC.

Project Number:	76418
Scale:	1" = 2'
Drawn By:	BT
Checked By:	JM
Date:	12/12/2021
Issue:	PERMIT SET

Drawing Title:

SWPPP

C-401



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-452-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE



Vertical Datum: NAVD88
derived from GPS Observations

Bench nail set west side of power pole, next to green cable box, east side of Main Street, southwest corner of Mattawan Fire Station property.
Elevation = 840.27'

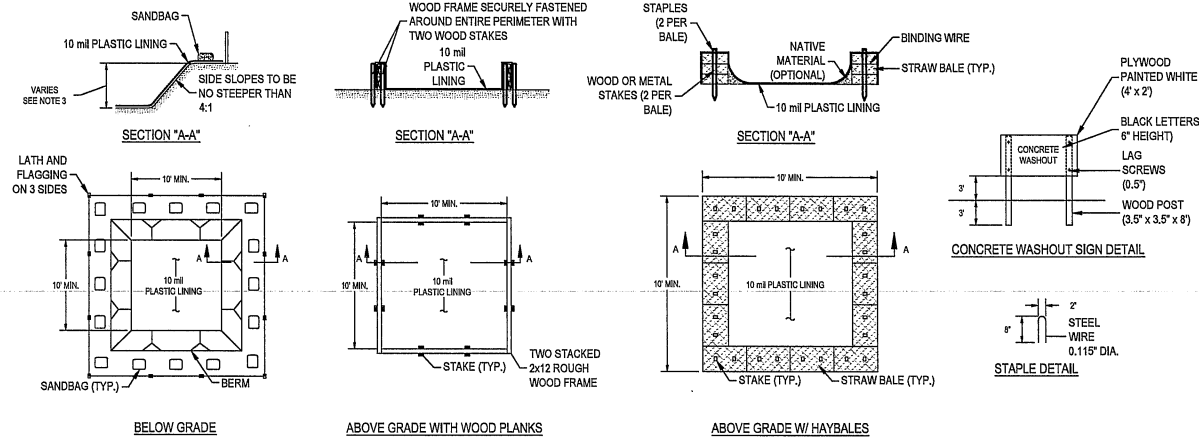
BM "A": Bench nail set west side of power pole, next to green cable box, east side of Main Street, southwest corner of Mattawan Fire Station property.
Elevation = 840.27'

BM "B": Chiseled "X" on southeast bolt of signal pole base, behind sidewalk on northwest corner of Main Street and West McGillen Avenue intersection.
Elevation = 841.61'

BM "C": Bench nail set north side of power pole # V524-165, between sidewalk and south side of West McGillen Avenue, next to green telephone riser, east from entrance to McGillen's Crossing
Elevation = 843.27'

NOTE: REFER TO ALTA SURVEY, SHEET C-003, FOR BENCHMARK LOCATIONS

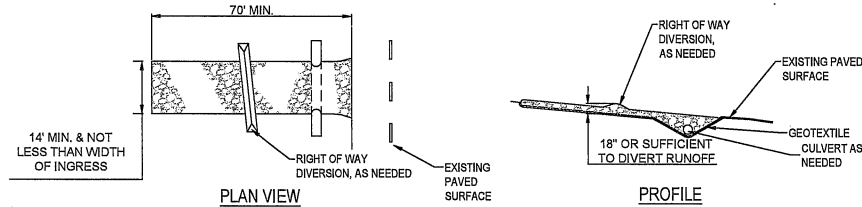
C:\Users\patrick.oehlman\Documents\CESOC\Caseys Mattawan SWPPP PLAN.dwg - 1/27/2025 - Patrick Oehlman



- NOTES:
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
 2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
 3. THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING BUT NOT LIMITED TO OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.

CONCRETE WASHOUT

NTS



NOTES:

1. STONE SIZE - (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS.
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH - THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE - A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:
6. TIMING - THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICAL BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

GEOTEXTILE SPECIFICATION FOR CONSTRUCTION ENTRANCE	
MINIMUM TENSILE STRENGTH	200 lbs.
MINIMUM PUNCTURE STRENGTH	80 psi.
MINIMUM TEAR STRENGTH	50 lbs.
MINIMUM BURST STRENGTH	320 psi.
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS < 0.6 mm.
PERMITTIVITY	1x10 ⁻³ cm/sec.

STABILIZED CONSTRUCTION ENTRANCE

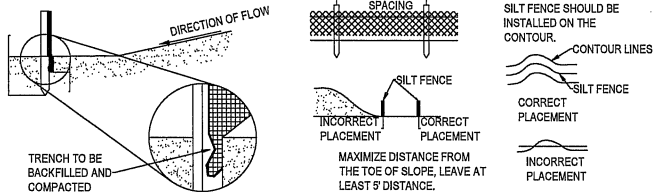
NTS

SPECIFICATIONS FOR SILT FENCE

FABRIC PROPERTIES	VALUES	TEST METHODS
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D-1682
MULEN BURST STRENGTH	190 PSI MINIMUM	ASTM D-3786
SLURRY FLOW RATE	0.3 GAL/MIN/FT. MAX.	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW 02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM - G 26

CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES LONG. WOOD POSTS WILL BE 2 IN. X 2 IN. HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
2. SILT FENCE FABRIC (SEE CHART BELOW)

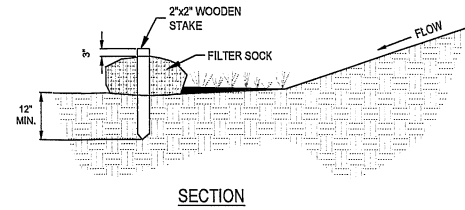


NOTES:

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE ESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 IN. ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN A TRENCH OUT A MINIMUM F 6 IN. DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICES WHICH WILL ENSURE ADEQUATE UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT THE 8 INCHES OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 IN. DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
10. MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONLY OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
 - 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED,
 - 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR
 - 3) OTHER PRACTICES SHALL BE INSTALLED.

SILT FENCE DETAIL

NTS



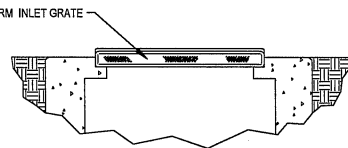
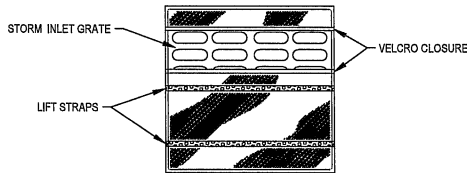
SECTION

NOTES:

1. MATERIALS - COMPOST USED FOR FILTER SOCKS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF PARTICLES RANGING FROM 3/8" TO 2".
2. FILTER SOCKS SHALL BE 5 MIL CONTINUOUS, TUBULAR, HOPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST PASSING THE ABOVE SPECIFICATIONS FOR COMPOST PRODUCTS.
3. FILTER SOCKS WILL BE PLACED ON A LEVEL LINE ACROSS SLOPES, GENERALLY PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA. ON SLOPES APPROACHING 2:1, ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND AS NEEDED MIDSLOPE.
4. FILTER SOCKS INTENDED TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, SHALL BE SEEDED AT THE TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION.
5. FILTER SOCKS ARE NOT TO BE USED IN CONCENTRATED FLOW SITUATIONS OR IN RUNOFF CHANNELS.
6. ROUTINELY INSPECT FILTER SOCKS AFTER EACH SIGNIFICANT RAIN, MAINTAINING FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES.
7. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER SOCKS WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE PRACTICE.
8. WHERE THE FILTER SOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
9. REMOVAL - FILTER SOCKS WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED IN SUCH AS WAY AS TO FACILITATE AND NOT OBSTRUCT SEEDINGS.

FILTER SOCK

NTS

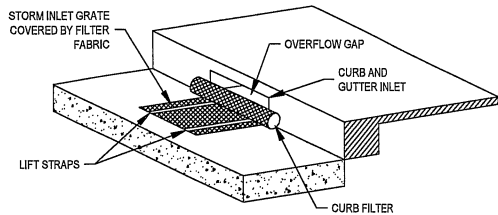


NOTE:

INLET PROTECTION SHALL BE DANDY BAG OR APPROVED OTHER.

INLET PROTECTION

NTS

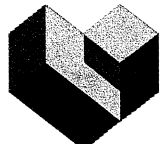


NOTE:

INLET PROTECTION SHALL BE DANDY CURB BAG OR APPROVED OTHER.

CURB INLET PROTECTION

NTS



CESO
WWW.CESOINC.COM

175 Montrose West Ave., Suite 400
Mokena, IL 60451
Phone: 333.663.0660 Fax: 888.308.4826



CASEY'S #4605

MATTAWAN, MI

23666 MCGILLEN AVENUE
MATTAWAN, MI 48071

Revisions / Submissions

ID Description Date

© 2024 CESO, INC.

Project Number: 764183
Scale: AS SHOWN
Drawn By: BTD
Checked By: JMS
Date: 12/12/2024
Issue: PERMIT SET

Drawing Title:

SWPPP DETAILS

C-402

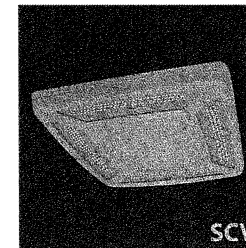
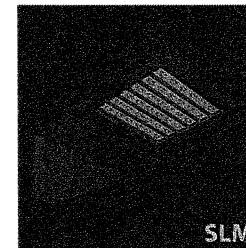
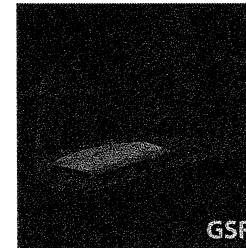
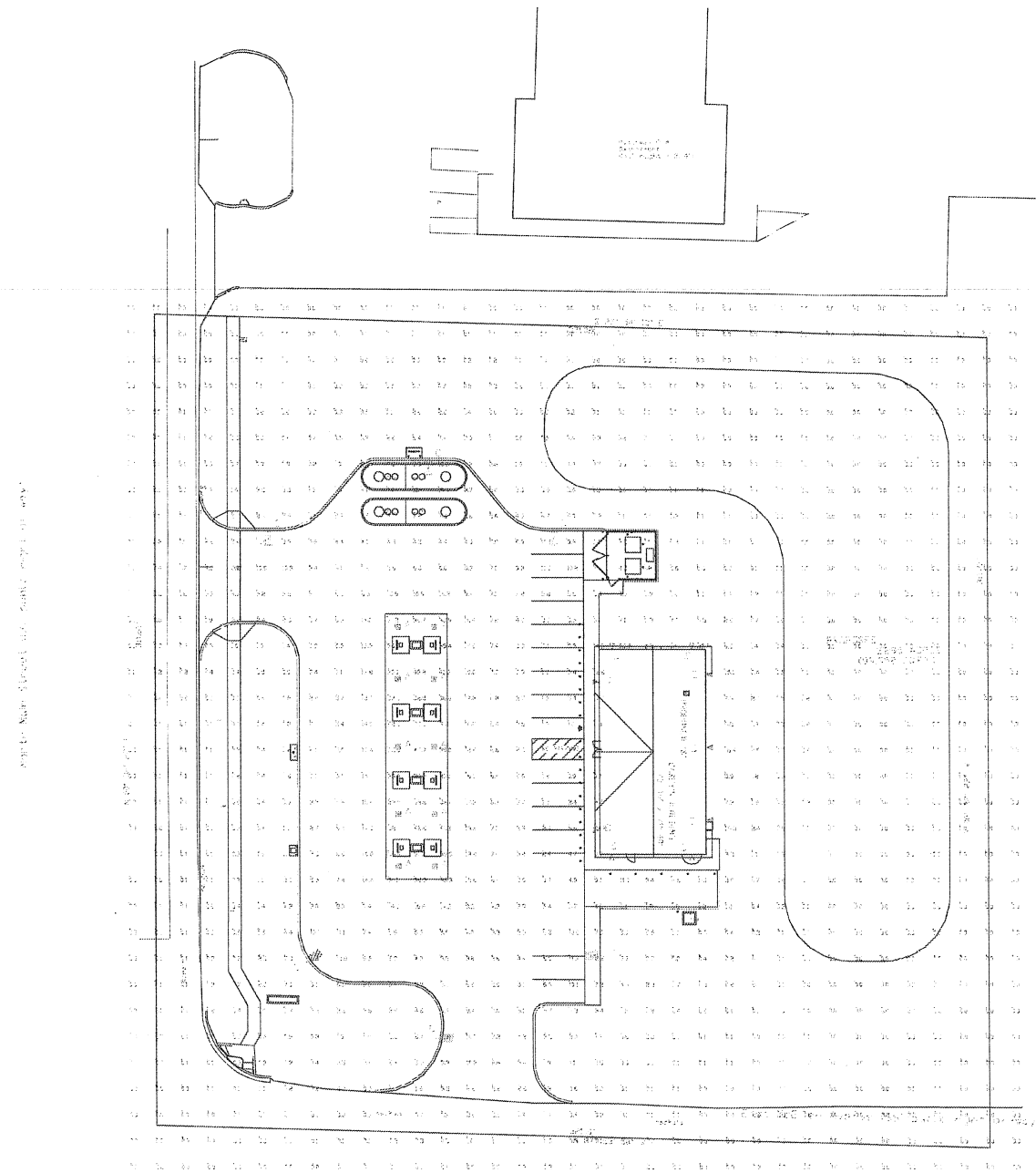


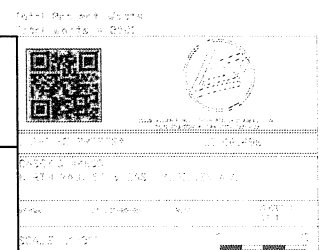
PLATE 1. *FLYING* (1974, 1975, 1976, 1977)
 N. C. FLYING (1974, 1975, 1976, 1977)

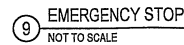
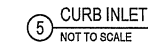
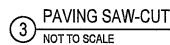
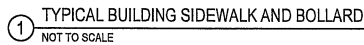
Based on the information provided, it is evident that the respondents were not clear about the recommended positions for a given position. The respondents were hesitant to the validity of the data. It is evident that the respondents were not clear

[illegible]

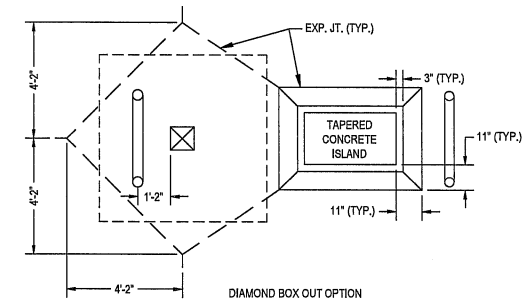
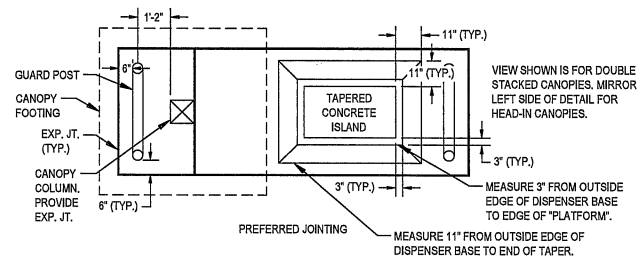
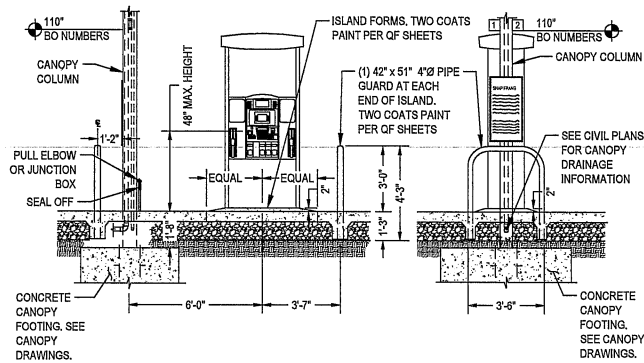
PHOTOMETRIC PLAN

C-500

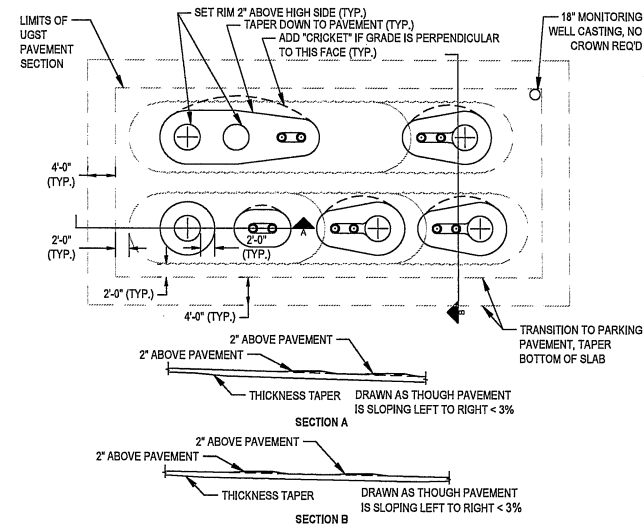




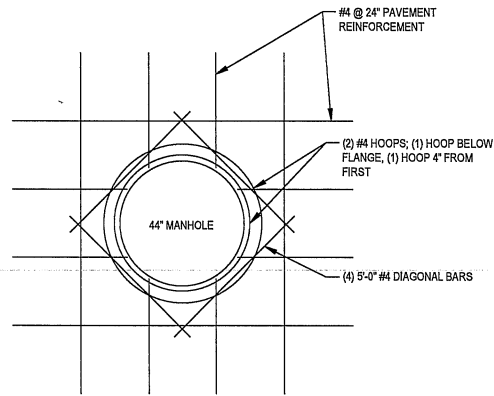
C:\Users\patrick.oshman\Documents\CESO\Casys\Mattawan_MIT\Project Files\CESO03-CIVIL\PLAN_PLOT\TY64183_CONSTRUCTION DETAILS.dwg - 1/27/2025 - Patrick Oshman



1 GAS TAPERED FUEL ISLAND (PREFERRED OPTION)
NOT TO SCALE



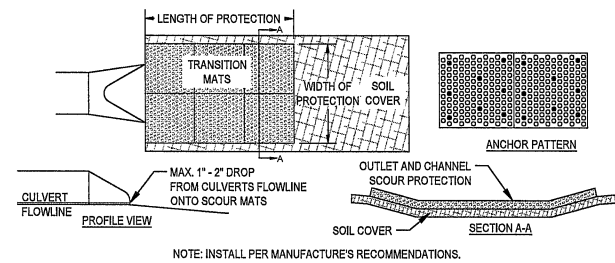
2 UGST PAVING FOR PAVEMENT SLOPE <3%
NOT TO SCALE



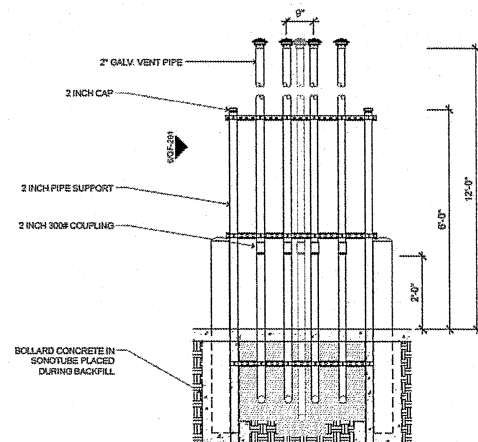
GENERAL NOTES:

1. ALL REINFORCING IS CENTER OF SLAB.

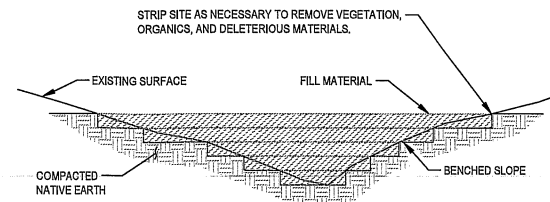
3 UGST MANHOLE DETAIL
NOT TO SCALE



4 SCOUR STOP EROSION CONTROL
NOT TO SCALE

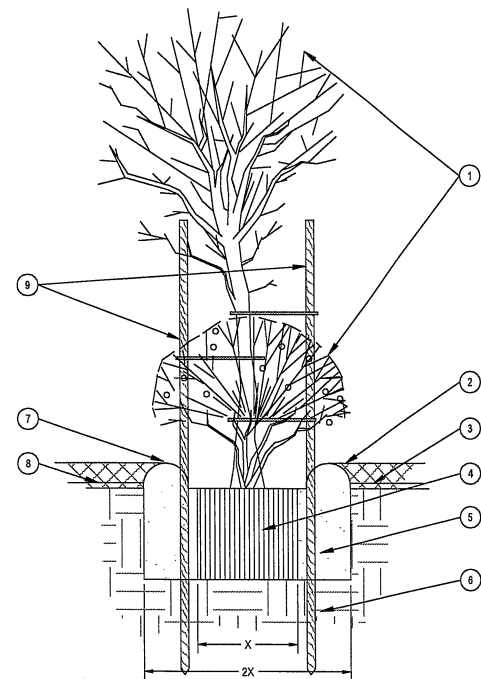


5 Tank Vent Detail - Front
1/2\"/>

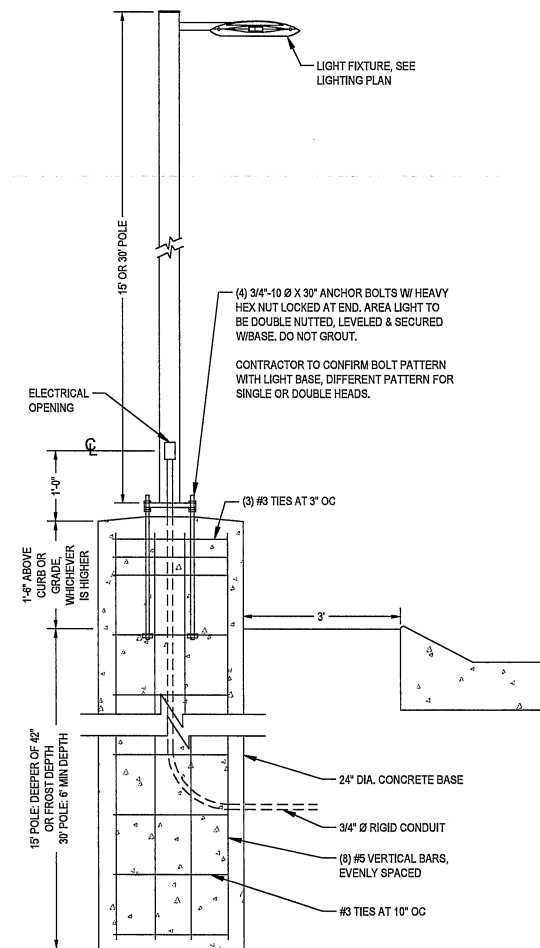


- NOTES:
1. BENCH SLOPES TO MAINTAIN VERTICAL SIDE SLOPES AT FILL LIMITS +/- 3\"/>

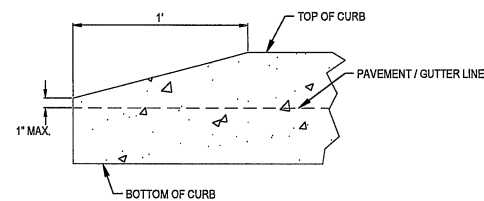
6 TYPICAL FILL SECTION
NOT TO SCALE



7 PLANT/TREE INSTALLATION
NOT TO SCALE



8 AREA LIGHTING
NOT TO SCALE



CURB TAPER
NTS



WWW.CESOINC.COM

175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.665.0660 Fax: 330.208.4829



CASEY'S #4605

MATTAWAN, MI

23988 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions

ID	Description	Date

Drawing Title:
**CONSTRUCTION
DETAILS**

C-602

C:\Users\patrick.ohlinman\Documents\CESOCivil\PLANS\LOT1764183_CONSTRUCTION DETAILS.dwg - 1/27/2025 - Patrick Ohlinman

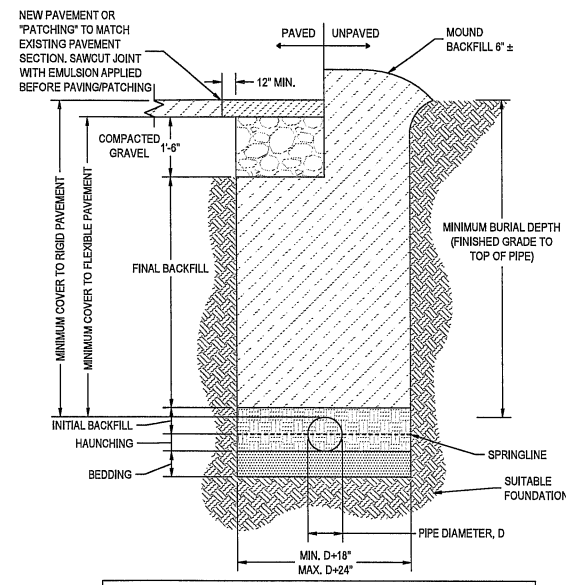
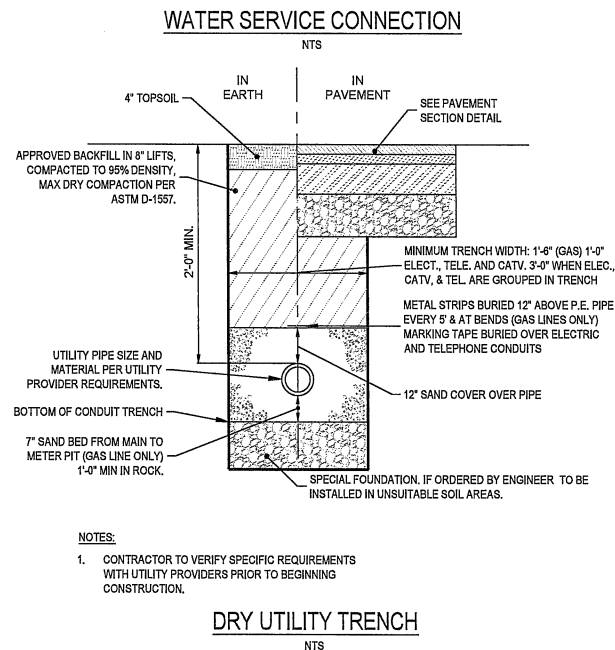
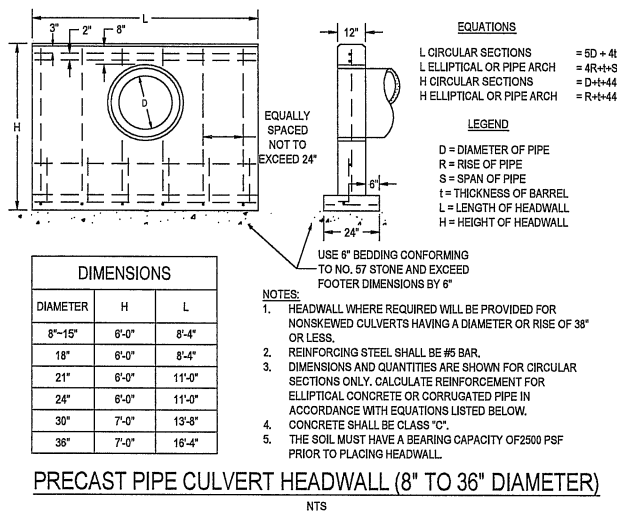
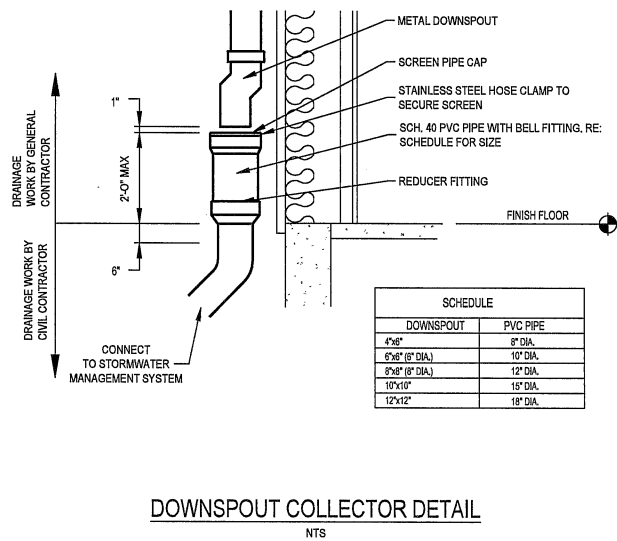
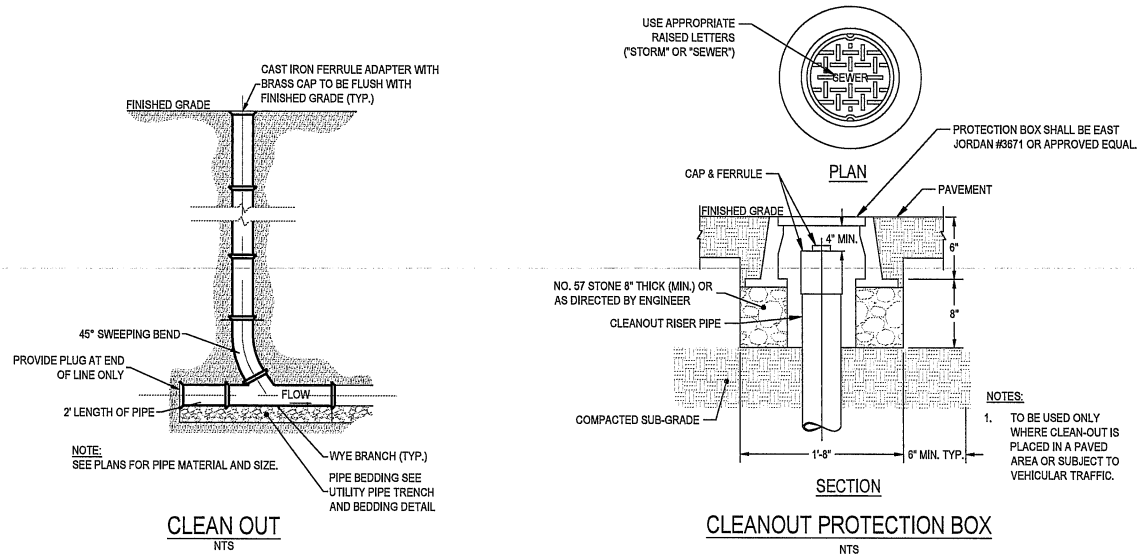
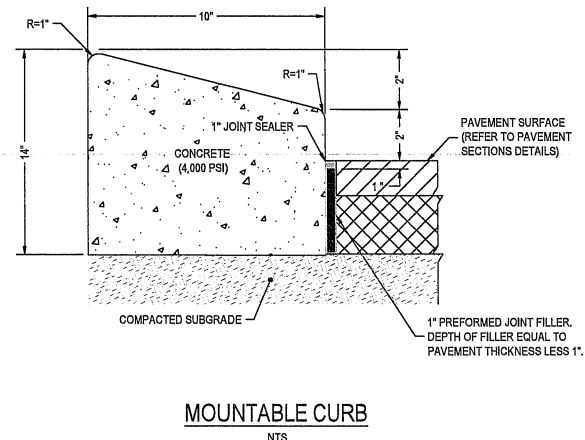


TABLE 1: BACKFILL AND EMBEDMENT MATERIALS	
SOIL CLASSIFICATIONS (AS DEFINED IN ASTM D2487 AND D2321)	
CLASS I	CRUSHED ROCK ANGULAR (CLEAN).
CLASS II	GRAVEL AND/OR SANDS, WITH LITTLE OR NO FINES.
CLASS III	SAND/SILT AND SAND/CLAY MIXTURES.
CLASS IV	INORGANIC CLAYS
CLASS V	ORGANIC SILTS, CLAYS, AND PEATS.
SOIL CLASSIFICATIONS (AS DEFINED IN ASCE 15-98)	
CATEGORY I	GRAVELLY SAND
CATEGORY II	SANDY SILT
CATEGORY III	SILTY CLAY

- NOTES:
- IN THE CASE OF TRENCH BOTTOM BEING UNSTABLE, THE CONTRACTOR SHALL REPLACE FOUNDATION WITH SUITABLE MATERIAL AS SPECIFIED BY GEOTECHNICAL ENGINEER.
 - COMPACTION PERCENTAGES SPECIFIED REFER TO STANDARD PROCTOR PERCENT COMPACTION.
 - CONTRACTOR TO MANDATE DEWATERING IN TRENCHES DURING CONSTRUCTION.
 - TRENCHING OPERATIONS SHALL CONFORM TO ALL OSHA REQUIREMENTS.
 - FOR HDPE AND PVC WATERLINES AND LONG SEWER LATERALS, INSTALL METALLIC LOCATOR TAPE 12" (MIN) AND 18" (MAX) BELOW FINISHED SUBGRADE ELEVATION. INSTALL TRACER WIRE LOCATED AT THE TOP OF THE PIPE WITHIN THE INITIAL BACKFILL.
- DESIGNER NOTES:
- REPLACE TRENCH DETAILS / SECTIONS OF THIS DETAIL WITH AHAJ STANDARD DETAILS FOR WATERLINES, SEWER TRENCHES, ETC. CERTAIN SECTIONS OR TABLES MAY BE REMOVED AS LOCAL DETAILS WILL SUPERCEDE THESE REQUIREMENTS.
 - REVIEW FILL HEIGHTS AND PIPE MATERIALS (PIPE CLASS, SDR, DR, ETC.) UNDER GENERAL NOTES FOR SHALLOW AND DEEP PIPE INSTALLATIONS. ADDITIONAL MEASURES MAY NEED TO BE SPECIFIED ON THE PLANS SUCH AS CONCRETE ENCASUREMENT
 - REFER TO WWW.CONCRETEPIPE.ORG FOR CONCRETE PIPE DESIGN MANUAL INCLUDING CLASS OF PIPE AND LOAD TABLES. SEE ALSO ELLIPTICAL PIPE TRENCH RECOMMENDATIONS FROM CONCRETEPIPE.ORG.



PVC PIPE	
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CLASS I-V*
INITIAL BACKFILL	MINIMUM DEPTH = D/2 (12" COMMON)** CLASS I, II, AND III*
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III COMPACTED*
BEDDING	DEPTH = 4-6" CLASS I, II, AND III COMPACTED*

NOTE: HAUNCHING ZONE MUST BE COMPACTED PRIOR TO PLACEMENT AND COMPACTION OF INITIAL AND FINAL BACKFILLS TO PREVENT PIPE DEFLECTION.

HDPE PIPE	
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	MINIMUM COVER UNPAVED AREAS = 12" MINIMUM COVER PAVED AREAS (D ≤ 48") = 12"*** MINIMUM COVER PAVED AREAS (D > 48") = 24"*** CLASS I AND II (COMPACTED 90% SPD) AND CLASS III (COMPACTED 95% SPD)*
INITIAL BACKFILL	MINIMUM DEPTH = D/2 (CAN EXTEND TO THE CROWN OF THE PIPE)** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*
BEDDING	DEPTH (D ≤ 24") = 4"*** DEPTH (D > 24") = 6"*** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*

NOTE: THE MIDDLE 1/3 BENEATH THE PIPE INVERT IN THE BEDDING ZONE SHALL BE LOOSELY PLACED

RC PIPE	
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CATEGORY I, II, III*
INITIAL BACKFILL	DEPTH = D/2** CATEGORY I (80-85% COMPACTION), CATEGORY II (80-85% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*
HAUNCHING	DEPTH = D/2** CATEGORY I (85-95% COMPACTION), CATEGORY II (80-85% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*
BEDDING	MINIMUM DEPTH = D/24 (NOT LESS THAN 3")** IF ROCK FOUNDATION, MINIMUM DEPTH = D/12 (NOT LESS THAN 8")** CATEGORY I (85-95% COMPACTION), CATEGORY II (80-85% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*

NOTE: FOR ELLIPTICAL AND ARCH PIPE, D SHALL REPRESENT HORIZONTAL SPAN OF PIPE.

DI PIPE	
ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CLASS I-V*
INITIAL BACKFILL	DEPTH = D/2** CLASS I, II, AND III (APPROX. 90% STANDARD PROCTOR PER AASHTO T-99)
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III*
BEDDING	MINIMUM DEPTH = 4" CLASS I, II, AND III*

*SEE TABLE 1 FOR SPECIFICATIONS ON SOIL MATERIALS
** D = PIPE DIAMETER
*** MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.



CASEY'S #4605

MATTAWAN, MI

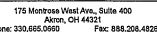
23968 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions		
ID	Description	Date

Project Number: 764183
Scale: NO SCALE
Drawn By: BTD
Checked By: JMS
Date: 12/12/2024
Issue: PERMIT SET

Drawing Title:
**CONSTRUCTION
DETAILS**

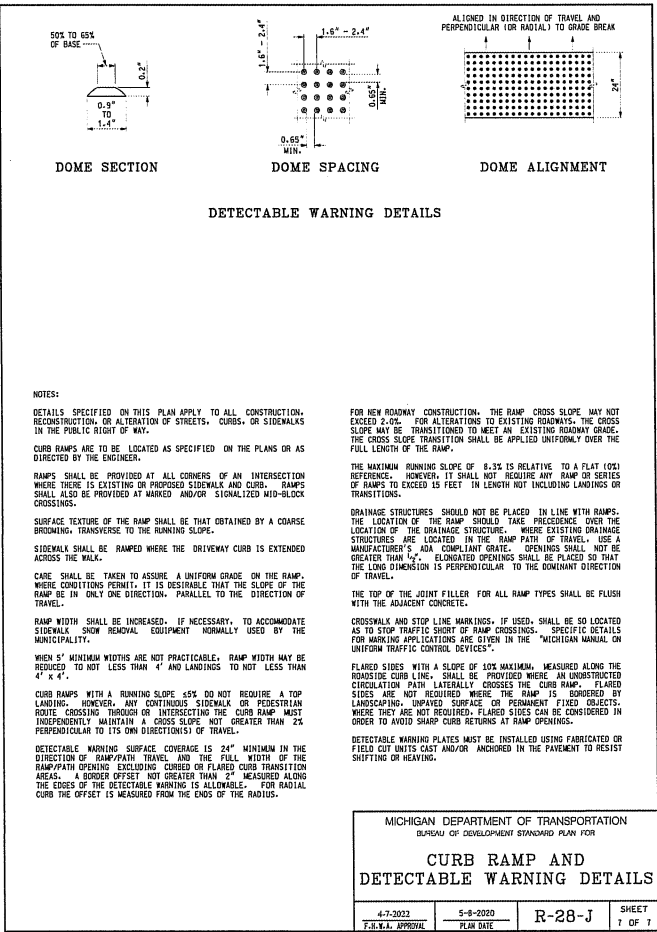
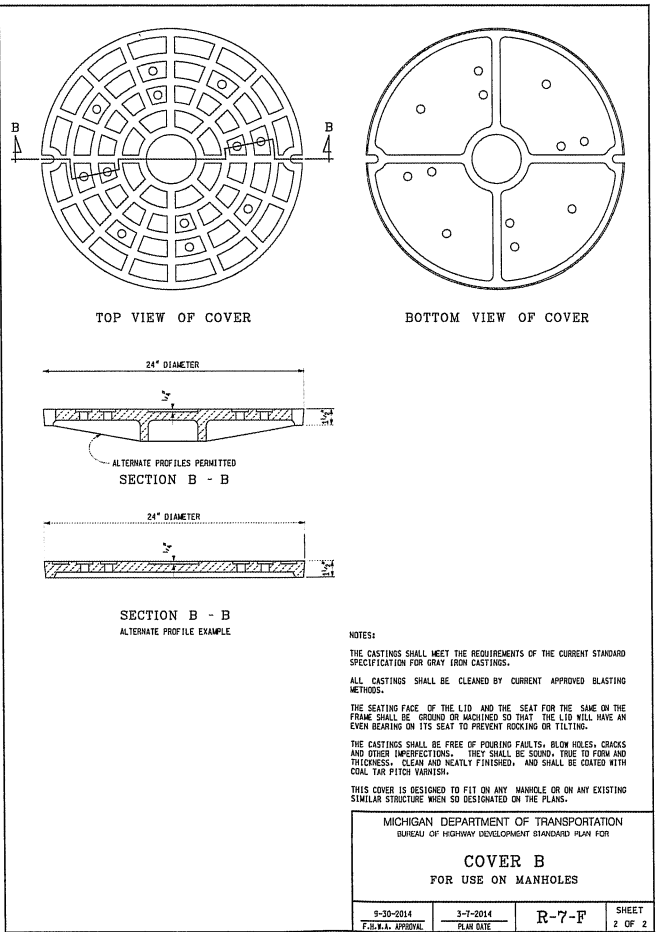
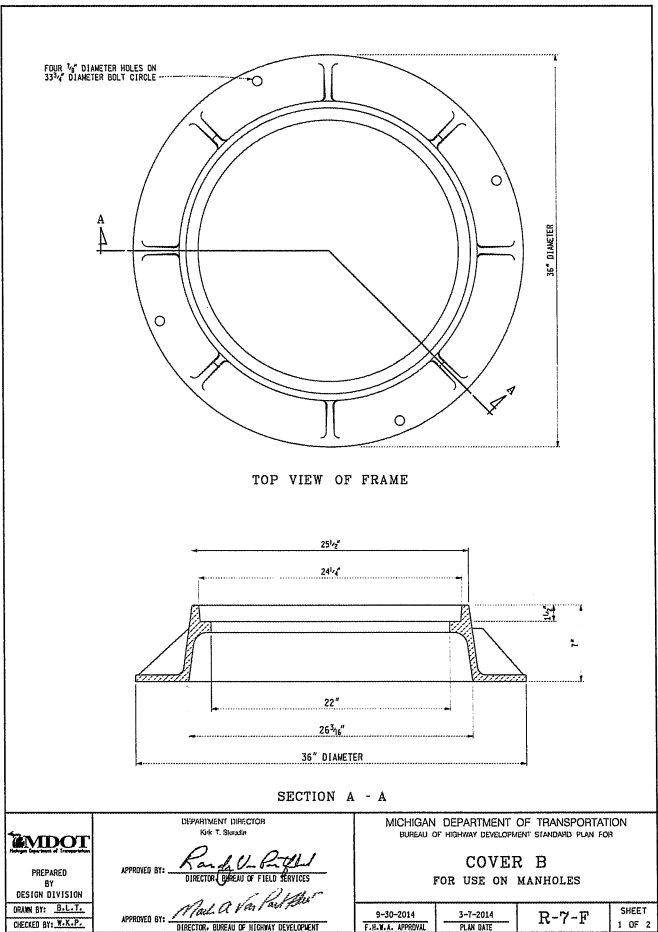
C-603



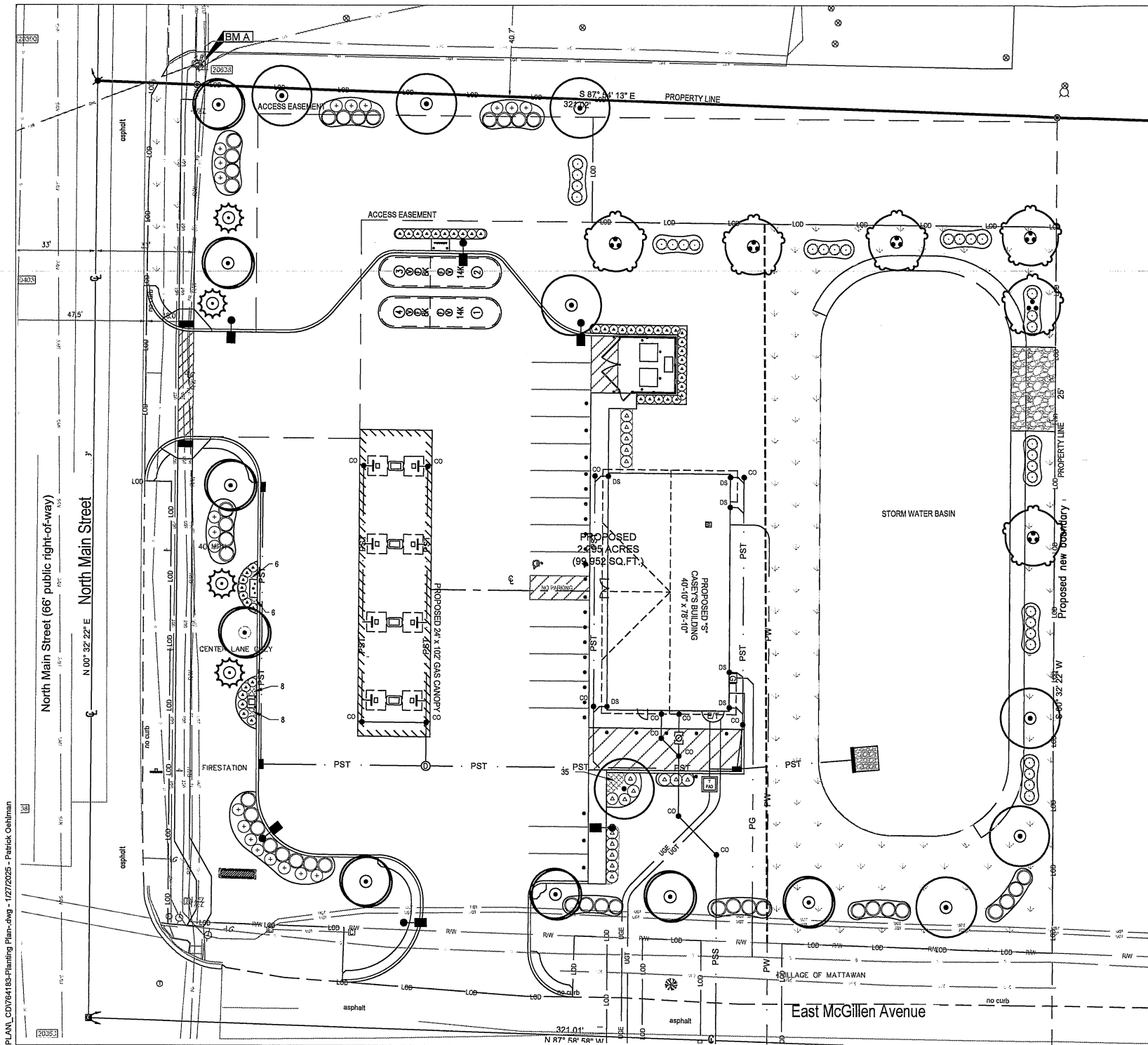
CASEY'S #4605

Project Number:	764183
Scale:	NO SCALE
Drawn By:	BTD
Checked By:	JMS
Date:	12/12/2024
Issue:	PERMIT SET

C-604



C:\Users\patrick.oolman\OneDrive\Documents\CESO\Caseys Mattawan MI\Project Files\CESO06-LA_PLAN_CD\64183-Planting Plan.dwg - 1/27/2025 - Patrick Oohman



TREES

8	ACER RUBRUM RED MAPLE	2.5" CAL	8-10' HT	AS SHOWN
6	BETULA NIGRA RIVER BIRCH	2.5" CAL	10'-12' HT	AS SHOWN
4	CERCIS CANADENSIS EASTERN REDBUD	—	8' HT	10'-0" OC
8	OSTRYA VIRGINIANA AMERICAN HOPHORNBEAM	2.5" CAL	8-12' HT	AS SHOWN

SHRUBS

46	ILEX GLABRA INKBERRY HOLLY	3 GAL	24" HT	3'-0" OC
20	RHODODENDRON X 'P.J.M.' P.J.M. RHODODENDRON	3 GAL	24" HT	4'-0" OC
17	TAXUS CUSPIDATA JAPANESE YEW	3 GAL	24" HT	4'-0" OC
31	THUJA OCCIDENTALIS 'YELLOW RIBBON' YELLOW RIBBON ARBORVITAE	—	6' HT	3'-0" OC
40	VIBURNUM CARLESII KOREANSPICE VIBURNUM	—	36" HT	5'-0" OC

GROUND COVERS

63	LIRIOPE MUSCARI 'SUPER BLUE' SUPER BLUE LILYTURF	1' HT & W
NUMBER INDICATED ON HATCH THROUGHOUT THE DRAWING REFLECTS THE NUMBER OF PLANTS IN THAT PARTICULAR AREA		

SOD/SEED

10,936 SF	POA PRATENSIS KENTUCKY BLUEGRASS	SEED
21,625 SF	POA PRATENSIS KENTUCKY BLUEGRASS	SOD

MULCH

- ALL PLANT BEDS SHALL CONTAIN A 3" LAYER OF LOCALLY SOURCED LANDSCAPE STONE. CONTRACTOR TO PROVIDE A SAMPLE FOR REVIEW PRIOR TO INSTALLATION
- CONTRACTOR TO PLACE A 4" DIAMETER MULCH RING AROUND ALL TREES IN LAWN

IRRIGATION

THE CONTRACTOR SHALL DESIGN, SUPPLY, AND INSTALL IRRIGATION SYSTEM FOR ALL SODDED AND PLANTING AREAS AS SHOWN ON THIS SHEET. DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. REFER TO UTILITY PLAN FOR METER LOCATION MOUNT RAIN SENSOR ON BACK OF RAILING OF ROOF. NO IRRIGATION REQUIRED IN THE STORMWATER POND, BEYOND THE TOP OF BANK. NO IRRIGATION BEYOND PROPERTY LINE. PLACE HEADS SO THAT THEY IRRIGATE SOD BEYOND THE PROPERTY LINE.

LANDSCAPE REQUIREMENTS

OPEN SPACE (10% OF LOT)
TOTAL LOT: 2,295 A, 99,952 SF
REQUIRED: 9,995 SF
PROPOSED: 25,822 SF (25%)

GREENBELT- MIN 15' WIDTH
(1) DEC. TREE & (4) SHRUBS PER EACH 50 LF
SHRUBS - MIN 24" HEIGHT OF HEDGE & 36" MAX.

NORTH MAIN STREET- (WEST) - 243 LF

REQUIRED TREES: 9
PROPOSED TREES: 9

REQUIRED SHRUBS: 36
PROPOSED SHRUBS: 36

EAST MCGILLEN STREET- (SOUTH)- 246 LF

REQUIRED TREES: 5
PROPOSED TREES: 5

REQUIRED SHRUBS: 20
PROPOSED SHRUBS: 20

BUFFER STRIP- MIN 10' WIDTH
1 TREE AND FOUR SHRUBS PER 50 LF (MIX OF EVERGREEN & DECIDUOUS)
NORTH: 321 LF
REQUIRED TREES: 6
PROPOSED TREES: 6

REQUIRED SHRUBS: 25
PROPOSED SHRUBS: 26

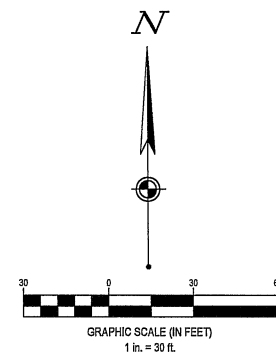
(EAST): 285 LF
REQUIRED TREES: 5
PROPOSED TREES: 5

REQUIRED SHRUBS: 23
PROPOSED SHRUBS: 24

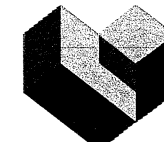
PARKING AREA LANDSCAPE
(1) DECIDUOUS, OR ORNAMENTAL TREE PER 10 PARKING SPACES
(100) SF OF PLANTING AREA
TOTAL PARKING SPACES: 15 SPACES
REQUIRED TREES: 2
PROPOSED TREES: 2

LEGEND

RW	RIGHT OF WAY LINE
LOT LINE	LOT LINE
PROPERTY BOUNDARY LINE	PROPERTY BOUNDARY LINE
EASEMENT LINE	EASEMENT LINE
SIGHT TRIANGLE LINE	SIGHT TRIANGLE LINE
TREE PROTECTION FENCE	TREE PROTECTION FENCE
PROPOSED FENCE	PROPOSED FENCE
PROPOSED CONCRETE SIDEWALK OR DECK	PROPOSED CONCRETE SIDEWALK OR DECK
OVERHEAD POWER LINE	OVERHEAD POWER LINE
CHE	STORM DRAIN
SS	SANITARY SEWER
W	WATER LINE
G	GAS LINE
UGT	UNDERGROUND TELEPHONE LINE
UGE	UNDERGROUND ELECTRIC LINE
EXISTING TREE CANOPY	EXISTING TREE CANOPY
SOD LIMIT	SOD LIMIT
SWALE	SWALE
MAJOR EXISTING CONTOUR	MAJOR EXISTING CONTOUR
MINOR EXISTING CONTOUR	MINOR EXISTING CONTOUR
MAJOR ENGINEERED CONTOUR	MAJOR ENGINEERED CONTOUR
MINOR ENGINEERED CONTOUR	MINOR ENGINEERED CONTOUR



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-452-1171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE



CESO
WWW.CESONC.COM

175 Montrose West Ave., Suite 400
Akron, OH 44321
Phone: 330.655.0080 Fax: 330.655.4828



CASEY'S #4605

MATTAWAN, MI

23968 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions

ID	Description	Date

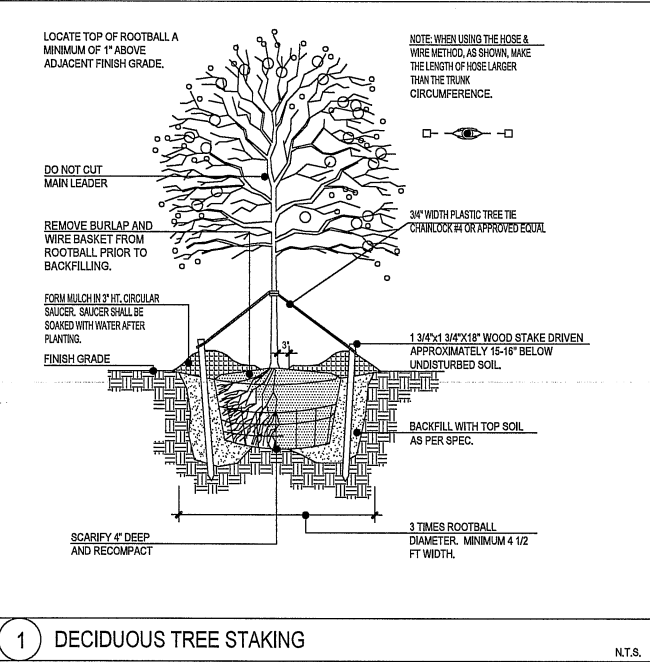
© 2024 CESO, INC.

Project Number: 764183
Scale: 1"=20'
Drawn By: JC
Checked By: EAB
Date: 12/06/2024
Issue:

Drawing Title:
LANDSCAPE PLAN

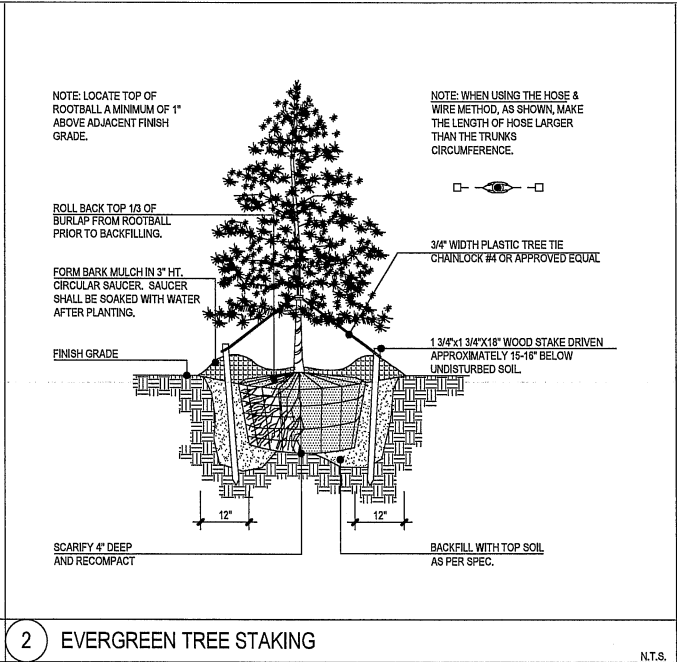
C-701

C:\Users\patrick.ohlman\Documents\CESOCad\Drawings\Caseys Mattawan MI\Project Files\LAN_CD\06183-Planting Plans.dwg - 1/27/2025 - Patrick Ohlman



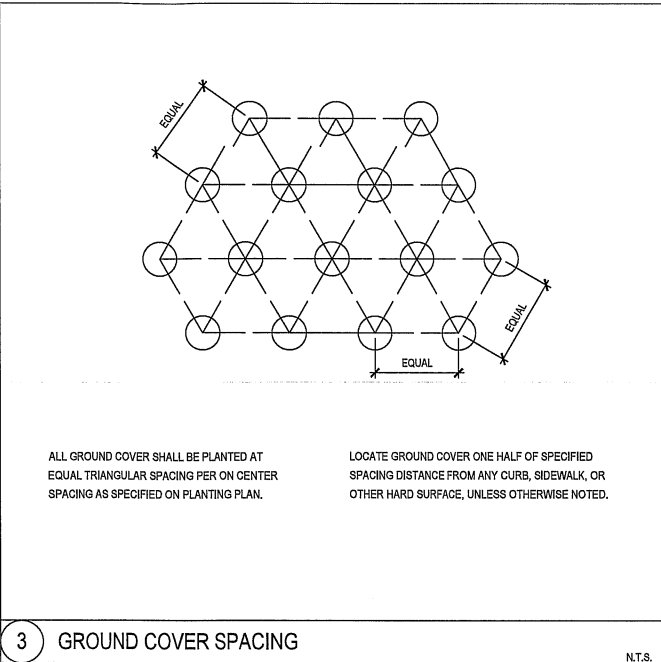
1 DECIDUOUS TREE STAKING

N.T.S.



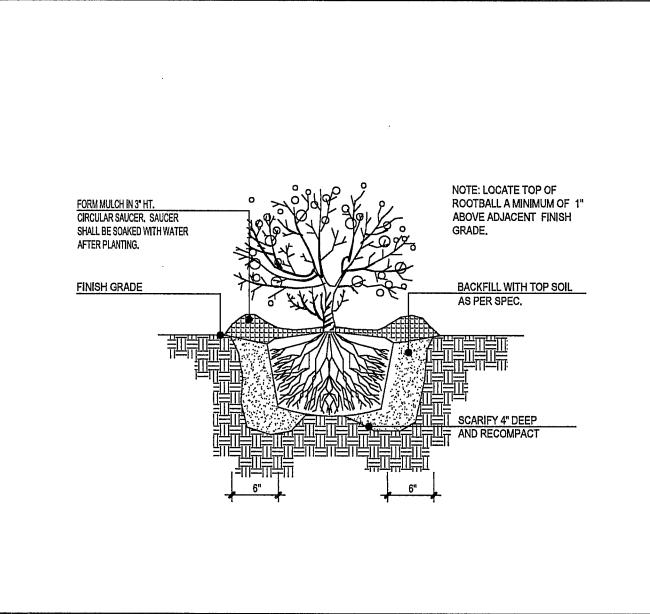
2 EVERGREEN TREE STAKING

N.T.S.



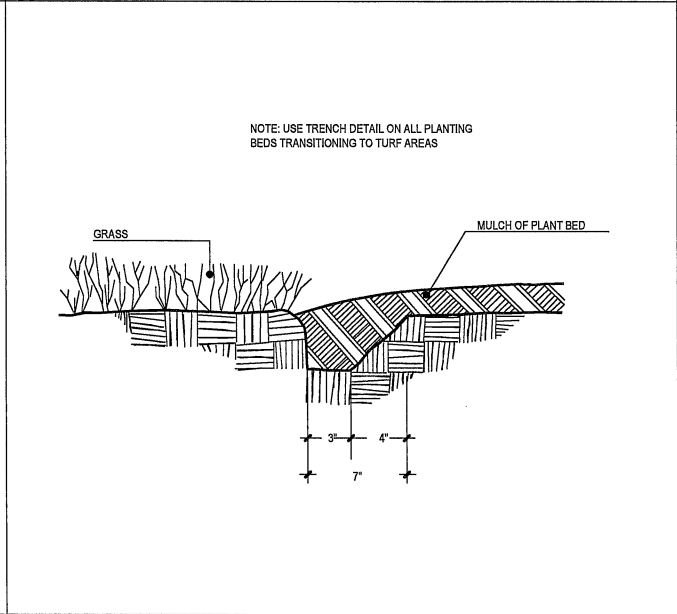
3 GROUND COVER SPACING

N.T.S.



4 EVERGREEN / DECIDUOUS SHRUB

N.T.S.



5 TRENCH EDGING

N.T.S.

GENERAL NOTES: LANDSCAPE PLAN

- CONTRACTOR TO VERIFY WITH OWNER AND UTILITY COMPANIES THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION, TO DETERMINE IN THE FIELD THE ACTUAL LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CALL UTILITY LOCATE SERVICE 72 HOURS PRIOR TO CONSTRUCTION.
- SITE CONDITIONS BASED UPON SURVEY PROVIDED BY OWNER. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BY DETAILED INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING CONSTRUCTION.
- REFER TO SITE CIVIL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWING AS NEEDED.
- REESTABLISH EXISTING TURF IN AREAS DISTURBED BY GRADING OR UTILITY TRENCHING, INCLUDING AREAS IN RIGHT-OF-WAY, TO MATCH EXISTING SPECIES.
- CONTRACTOR SHALL EXAMINE FINISH SURFACE, GRADES, TOPSOIL QUALITY AND DEPTH. DO NOT START ANY WORK UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED. VERIFY LIMITS OF WORK BEFORE STARTING.
- CONTRACTOR TO REPORT ALL DAMAGES TO EXISTING CONDITIONS AND INCONSISTENCIES WITH PLANS TO LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN ALL LANDSCAPE BEDS AND ALL LAWN AREAS.
- CONTRACTOR TO FINE GRADE AND ROCK-HOUND ALL TURF AREAS PRIOR TO SEEDING, TO PROVIDE A SMOOTH AND CONTINUAL SURFACE, FREE OF IRREGULARITIES (BUMPS OR DEPRESSIONS) & EXTRANEOUS MATERIAL OR DEBRIS.
- REMOVE EXISTING WEEDS FROM PROJECT SITE PRIOR TO THE ADDITION OF ORGANIC AMENDMENTS AND FERTILIZER. APPLY AMENDMENTS AND FERTILIZER AS NEEDED.
- QUANTITIES SHOWN ARE INTENDED TO ASSIST CONTRACTOR IN EVALUATING THEIR OWN TAKE OFFS AND ARE NOT GUARANTEED AS ACCURATE REPRESENTATIONS OF REQUIRED MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HIS BID QUANTITIES AS REQUIRED BY THE PLANS AND SPECIFICATIONS. IF THERE IS A DISCREPANCY BETWEEN THE NUMBER LABELED ON THE PLANT LEGEND AND THE QUANTITY OF GRAPHIC SYMBOLS SHOWN, THE GREATER QUANTITY SHALL GOVERN.
- COORDINATE LANDSCAPE INSTALLATION WITH INSTALLATION OF UNDERGROUND SPRINKLER AND DRAINAGE SYSTEMS.
- ALL SIZES AND QUALITY OF PLANT MATERIAL SHALL MEET THE MINIMUM SPECIFICATIONS OF THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014). THE LANDSCAPE CONTRACTOR SHALL INSTALL ALL PLANT MATERIAL IN SIZE AS INDICATED IN THE PLANT SCHEDULE UNLESS OTHERWISE SPECIFIED ON THE PLAN SET. ALL PLANTS THAT DO NOT MEET THE SIZE AND SPECIFICATIONS SET FORTH BY THE AMERICAN STANDARD FOR NURSERY STOCK WILL BE REJECTED BY LANDSCAPE ARCHITECT AT NO COST TO OWNER.
- ONCE PROJECT IS AWARDED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE TO SECURE ALL PLANT MATERIAL IN THE SIZE SPECIFIED ON PLAN PRIOR TO INSTALLATION. IN THE EVENT THE PLANT MATERIAL IS NOT AVAILABLE IN THE SIZE SPECIFIED, THE CONTRACTOR SHALL INSTALL LARGER AT NO COST TO OWNER.
- THE LANDSCAPE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ALL PLANT MATERIAL SUBSTITUTIONS FROM THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. PLANT SUBSTITUTIONS WITHOUT PRIOR WRITTEN APPROVAL THAT DO NOT COMPLY WITH THE DRAWINGS AND SPECIFICATIONS MAY BE REJECTED BY THE LANDSCAPE ARCHITECT AND REPLACED BY CONTRACTOR AT NO COST TO THE OWNER.
- PRIOR TO MOBILIZATION THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT, IN WRITING, IF HE/SHE BELIEVES ANY OF THE PLANT MATERIAL IDENTIFIED ON THE PLAN MAY NOT BE SUITABLE FOR THE SITE OR MAY DIE. SUBSTITUTION REQUESTS WILL BE GRANTED BY THE LANDSCAPE ARCHITECT PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. IF NOTIFICATION IS NOT GIVEN TO THE LANDSCAPE ARCHITECT ALL PLANTING WHICH FAILS TO GROW (EXCEPT FOR DEFECTS RESULTING FROM LACK OF ADEQUATE MAINTENANCE AS DETERMINED BY THE OWNER, NEGLECT, OR VANDALISM) SHALL BE REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- WHERE PROPOSED TREE LOCATIONS OCCUR UNDER EXISTING OVERHEAD UTILITIES OR CROWD EXISTING TREES, NOTIFY LANDSCAPE ARCHITECT TO ADJUST TREE LOCATIONS.
- ALL PLANT MASSES TO BE TOP DRESSED WITH MULCH AS SPECIFIED IN PLANT SCHEDULE, SPREAD UNIFORMLY IN DEPTH OVER THE PLANTING BEDS AS DELINEATED ON THE PLANS UNLESS OTHERWISE NOTED.
- BED EDGE TO BE NO LESS THAN 12" AND NO MORE THAN 18" FROM OUTER EDGE OF PLANT MATERIAL BRANCHING. WHERE GROUND-COVER OCCURS, PLANT TO LIMITS OF AREA AS SHOWN.
- INITIAL LANDSCAPE MAINTENANCE IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY UNTIL FINAL ACCEPTANCE BY THE OWNER. MAINTAIN TREES, SHRUBS, LAWNS, AND OTHER PLANTS AS PER THE PROJECT MANUAL AND/OR WRITTEN SPECIFICATIONS, IF APPLICABLE. EXTENDED LANDSCAPE MAINTENANCE PERIOD BEGINS IMMEDIATELY AFTER THE COMPLETION OF ALL PLANTING OPERATIONS AND WRITTEN ACCEPTANCE FROM THE OWNER AND/OR LANDSCAPE ARCHITECT.
- ALL LANDSCAPE MAINTENANCE SHALL BE IN ACCORDANCE WITH LOCAL GOVERNING STANDARDS, IN ADDITION TO OWNER REQUIREMENTS.
- ALL PLANTS SHALL COME WITH A 1 YEAR WARRANTY. WARRANTY BEGINS AFTER SUBSTANTIAL COMPLETION OCCURS AND FINAL ACCEPTANCE BY OWNER. WARRANTY ASSUMES PLANTINGS ARE MAINTAINED AND IRRIGATED (VIA SYSTEM OR HAND) EITHER BY INSTALLING CONTRACTOR OR MAINTENANCE CONTRACTOR.
- REFER TO PROJECT MANUAL OR WRITTEN SPECIFICATIONS, IF AVAILABLE, FOR ADDITIONAL REQUIREMENTS.

SOIL PLANTING MIXTURE (MIX ONSITE)

- THE LANDSCAPE CONTRACTOR SHALL FURNISH FROM THEIR SOURCE A GOOD CLEAN, NATIVE SOIL WHICH SHALL MEET THE APPROVAL OF THE OWNER'S REPRESENTATIVE. THIS SOIL SHALL BE USED FOR THE PLANTING MIXTURE AS FOLLOWS:
 - ONE PART COMPOST/MANURE PLANTING MIX, TOPSOIL OR APPROVED EQUAL
 - ONE PART NATIVE SOIL
- SOILS WITHIN PLANTING AREAS MUST BE SUITABLE FOR PROPOSED PLANTED MATERIAL & SOD WITH REGARD TO: pH, SOIL TEXTURE, SOIL STRUCTURE, AND SEASONAL HIGH WATER TABLE. THE CONTRACTOR SHALL ANALYZE EXISTING SOILS LOCATED IN PROXIMITY TO PROPOSED PLANT MATERIAL AND BE RESPONSIBLE TO AMEND THE SOIL TO OBTAIN ESSENTIAL REQUIREMENTS NECESSARY FOR THE ESTABLISHMENT AND GROWTH OF PLANT LIFE. LANDSCAPE CONTRACTOR TO PROVIDE SOILS REPORT AND APPROPRIATE RECOMMENDATIONS PRIOR TO INSTALLATION TO OWNER'S REPRESENTATIVE FOR REVIEW. FAILURE TO PROVIDE REPORT MAY RESULT IN PLANT MATERIAL BEING REJECTED BY OWNER'S REPRESENTATIVE AND REPLACED AT NO COST TO OWNER.
- THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING PRIOR TO PLANTING, WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, POOR PLANTING SOIL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS.



CESO
WWW.CESONC.COM

175 Montross West Ave., Suite 400
Akron, OH 44321
Phone: 330.855.0690 Fax: 330.855.0625



CASEY'S #4605

MATTAWAN, MI

23968 MCGILLEN AVENUE
MATTAWAN, MI 49071

Revisions / Submissions

ID	Description	Date

© 2024 CESO, INC.

Project Number: 764183
Scale: 1"=20'
Drawn By: JC
Checked By: EAB
Date: 12/06/2024
Issue:

Drawing Title:
LANDSCAPE DETAILS

C-702