



**AGENDA**  
CHARTER TOWNSHIP OF MERIDIAN  
PLANNING COMMISSION – REGULAR MEETING  
June 22, 2026 6:30 PM

---

1. CALL MEETING TO ORDER
2. ROLL CALL
3. PUBLIC REMARKS
4. APPROVAL OF AGENDA
5. APPROVAL OF MINUTES
  - A. June 8, 2026
6. COMMUNICATIONS
  - A. None
7. PUBLIC HEARINGS
  - A. SUP #26017 – Sheetz
  - B. SUP #26018 – 7-11
8. UNFINISHED BUSINESS
  - A. REZ #26010 – Copper Creek
  - B. SUP #26011 – Kedi Craft Restaurant
  - C. REZ #26013 – Singh
9. OTHER BUSINESS
  - A. None
10. REPORTS AND ANNOUNCEMENTS
  - A. Township Board update
  - B. Liaison reports
11. PROJECT UPDATES
  - A. Mass Timber Update
12. PUBLIC REMARKS
13. COMMISSIONER COMMENTS
14. ADJOURNMENT

---

Individuals with disabilities requiring auxiliary aids or services should contact: Director of Community Planning and Development  
Timothy R. Schmitt, 5151 Marsh Road, Okemos, MI 48864 or 517.853.4506 - Ten Day Notice is Required.  
Meeting Location: 5151 Marsh Road, Okemos, MI 48864



**TENTATIVE PLANNING COMMISSION AGENDA**  
**July 13, 2026**

1. PUBLIC HEARINGS
  - A. None
  
2. UNFINISHED BUSINESS
  - A. SUP #26017 – Sheetz
  - B. SUP #26018 – 7-11
  
3. OTHER BUSINESS
  - A. None

---

Individuals with disabilities requiring auxiliary aids or services should contact: Director of Community Planning and Development  
Timothy R. Schmitt, 5151 Marsh Road, Okemos, MI 48864 or 517.853.4506 - Ten Day Notice is Required.  
Meeting Location: 5151 Marsh Road, Okemos, MI 48864

Providing a safe and welcoming, sustainable, prime community.



CHARTER TOWNSHIP OF MERIDIAN  
REGULAR MEETING PLANNING COMMISSION  
5000 Okemos Road, Okemos MI 48864-1198  
517.853.4000, Township Townhall Room  
Monday, June 8, 2026, 6:30 pm

PRESENT: Chair Romback, Commissioners Brooks, Nahum, McConnell, and Shrewsbury

ABSENT: Vice-Chair McCurtis

STAFF: Principal Planner Shorkey

1. CALL MEETING TO ORDER

Chair Romback called the June 8, 2026, regular meeting for the Meridian Township Planning Commission to order at 6:37 pm.

2. ROLL CALL

Chair Romback called the roll of the Board. All Board members were present except Vice-Chair McCurtis.

3. PUBLIC REMARKS

None

4. APPROVAL OF AGENDA

Chair Romback asked for approval of the agenda.

**Commissioner McConnell moved to approve the June 8, 2026, Regular Planning Commission meeting agenda as written. Seconded by Commissioner Shrewsbury. Motion passed unanimously.**

5. APPROVAL OF MINUTES

**Commissioner Brooks moved to approve Minutes of the May 11, 2026 meeting as written. Seconded by Commissioner McConnell. Motion passed unanimously.**

6. COMMUNICATIONS

None

7. PUBLIC HEARINGS

A. REZ #26010 – Copper Creek

Principal Planner Shorkey opened the discussion and summarized the application. Commissioner McConnell asked for an explanation of the overlay. Principal Planner Shorkey

showed the overlay district language to the Planning Commission and explained how it worked.

The applicant, Robert Schroeder, addressed the Commission. Commissioner Nahum asked Mr. Schroeder to describe the natural features that would be preserved. Mr. Schroeder explained why he was applying for a PRD instead of a plat.

Chair Romback opened the floor for public comment at 6:49.

Ruth Baer spoke in opposition of the rezoning.

Chair Romback closed the floor for public comment at 6:50. By informal vote, the Planning Commission indicated support for the application. Principal Planner Shorkey said that Staff would return at the next meeting with a resolution recommending approval.

Commissioner Brooks asked for the history of the zoning on the property. Commissioner Brooks asked about the traffic study and the study requirements. Principal Planner Shorkey explained the traffic assessment and that Staff asked for it to be recertified in light of the current Copper Creek. Commissioner Brooks asked if the PRD allows for more units. Principal Planner Shorkey said the underlying zoning did not change and that no additional lots were proposed. Mr. Schroeder gave a brief history of the Copper Creek development.

#### B. SUP #26011 – Kedi Craft Restaurant

Principal Planner Shorkey opened the discussion and summarized the application, noting the building's historical character and raising the question of preservation. Principal Planner Shorkey advised that a standalone restaurant in a PO district requires a special land use permit, and that if the Commission was not comfortable making that determination, it could refer the matter to the ZBA or recommend rezoning. Principal Planner Shorkey further noted that the site falls within a PICA area, making C-2 zoning a possible alternative.

Commissioner Brooks asked if Staff was recommending the C-2 zoning. Principal Planner Shorkey said that it depended on the use of the second story. Commissioner Brooks asked if the SUP stays with the property and if a restaurant can function on multiple floors. Principal Planner Shorkey said that they could convert the entire building into a restaurant. Commissioner Brooks asked about commercial kitchens.

Chair Romback asked about the ZBA and if they were bound by their decision. Principal Planner Shorkey described the process for the ZBA.

Jaihoon Khamush, Applicant, presented their concept, noting a reduced seating capacity of 32 and intended use of the upper floor for storage. Principal Planner Shorkey recommended these elements be included as conditions if the SUP moves forward. Commissioner McConnell asked about potential grilling and smoking. Principal Planner Shorkey referenced the nuisance ordinance's smoke provisions but noted potential technique-based workarounds. Mr. Khamush confirmed that an exhaust system is incorporated into their plans.

Chair Romback opened the floor for public comment at 7:17.

David Ledebuhr spoke in favor of the application.  
Patricia York spoke in support of the application.  
Michael Mumaush spoke in favor of the application.

Chair Rombach closed the floor for public comment at 7:23.

Principal Planner Shorkey said that based on the conditions for the second floor and the seating as proposed by the Applicant, and after hearing the public comments, Staff shares the interest in preserving the building and supported the application. Commissioner Shrewsbury stated support and said that she would be concerned with a commercial rezoning.

Commissioner Nahum discussed the seating and said that he could support more seating. Commissioner McConnell noted that the zoning ordinance permits restaurants in a PO district when appropriate to the primary use of the land or structure and expressed that a restaurant use was compatible with the surrounding residential areas.

Commissioner Brooks asked what happened to the SUP if the property was rezoned to C-2. Principal Planner Shorkey explained and said that C-2 was unnecessary if the second story was not being used as a residence. Chair Rombach asked about the seating. Principal Planner Shorkey said that the applicant proposed 32 seats and that was easier to accommodate with the existing parking.

By informal vote, the Planning Commission indicated support for the application. Principal Planner Shorkey said that Staff would return at the next meeting with a resolution recommending approval.

C. REZ #26013 - Singh

Principal Planner Shorkey opened the discussion and summarized the application.

B. K. Singh, the applicant, described the history of the site and his application.

Commissioner Shrewsbury asked about the services on the site. Principal Planner Shorkey said that he would confirm with the Engineering Department about required connections and suggested the connections are required because of the new residence.

Chair Rombach said that this seemed like a multi-year phased development with the property to the east and asked for the Applicant's vision for the area. Mr. Singh discussed the history of the site. Principal Planner Shorkey described the history of the property to the east and said that the SUP for that property has expired. Commissioner Brooks asked if RDD development would require public connections.

Chair Rombach opened the floor to public comment at 7:51.

Michael Mumaush spoke in support of the rezoning, with concerns regarding preservation of the built environment.

Chair Rombach closed the floor to public comment at 7:53.

Chair Rombach asked about the density in the RDD district. Commissioner Brooks asked if the property is in the USB. Principal Planner Shorkey acknowledged that the requested zoning is inconsistent with the future land use map but noted that RDD zoning aligns with zoning to the east and allows greater density within the existing RR zone.

Commissioner McConnell asked about potential development and extension of services. Principal Planner Shorkey described the zoning in the entire corridor. Commissioner McConnell asked if services would ever extend beyond the Township. Principal Planner

Shorkey said that Bath Township has a completely separate and non-looping system. Commissioner McConnell asked about connections to sewer lines.

Commissioner Shrewsbury said that the requested RDD zoning is closer in intent to the master plan's vision for the area than the existing RR zoning. Commissioner Nahum supported the rezoning, noting that the adjacent parcel's RDD designation makes the current request an extension of existing zoning rather than an isolated inconsistency. Commissioner McConnell cautioned that if the Commission approves an application inconsistent with the master plan, it must clearly articulate the conditions under which such departures are acceptable.

Principal Planner Shorkey said that he would answer the questions about service connections and the Pathway and return for further conversation at the next meeting.

8. UNFINISHED BUSINESS

None

9. OTHER BUSINESS

A. Mass Timber Construction Discussion

Commissioner McConnell noted that level three amenities all constitute significant investments by a builder and suggested that mass timber fit this level. In contrast, Commissioner Nahum observed that mass timber construction does not automatically provide many of the community building aspects that other level three amenities hold and does not require as much of an economic investment as other amenities.

Principal Planner Shorkey offered to take the draft MUPUD resolutions to the next Corridor Improvement Authority meeting for their input. Chair Romback tabled the discussion until after that.

10. REPORTS AND ANNOUNCEMENTS

a. Township Board Update

Principal Planner Shorkey updated the Planning Commission on recent Board activities.

b. Liaison Reports

Commissioner Nahum said that the ZBA had not met. Commissioner McConnell reported on the recent activities of the Environmental Commission. Commissioner Brooks reported on the recent activities of the Brownfield Redevelopment Authority.

11. PROJECT UPDATES

Principal Planner Shorkey pointed out updates to the project update report.

12. PUBLIC REMARKS

None

13. COMMISSIONER COMMENTS

Commissioner Nahum discussed the recent moratoriums that the Board passed on data centers and battery storage facilities.

14. ADJOURNMENT

Chair Romback called for a motion to adjourn the meeting.

**Commissioner Brooks moved to adjourn the June 8, 2026 regular meeting of the Planning Commission. Seconded by Commissioner Nahum. Motion passed unanimously at 8:42.**



**To: Planning Commission**

**From: Brian Shorkey, Principal Planner**

**Date: June 22, 2026**

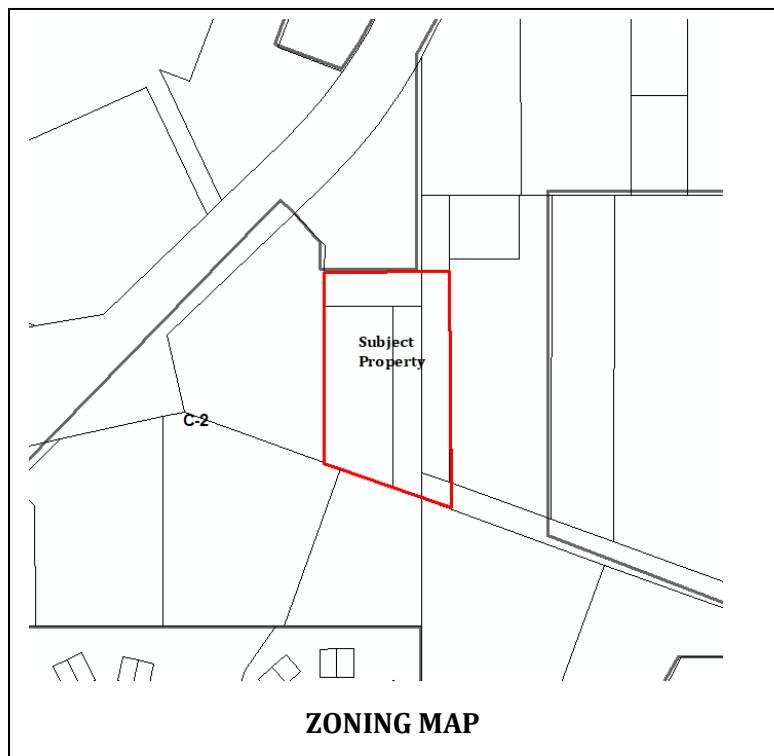
**Re: Special Use Permit #26017 (Sheetz), to construct a Sheetz gas station and convenience store at 1930 and 1878 West Grand River Avenue.**

Sheetz, Inc. (Applicant) has submitted a Special Use Permit (SUP) application for the construction of a Sheetz gas station, convenience store, and restaurant at 1930 and 1878 West Grand River Avenue (Subject Property). The Subject Property currently contains a vacant Verizon wireless store and a car wash and is zoned C-2, Commercial. Gas stations are special uses in the C-2 district.

#### **Zoning and Future Land Use**

The Subject Property is located in the C-2, Commercial zoning district. The same zoning designation applies to the adjacent properties to the west, south, and east. The property to the north is zoned C-3, Commercial.

The C-2 district requires a minimum of 100 feet of lot frontage and 4,000 square feet of lot area for new lots. The Subject Property consists of parts of four parcels that together total approximately 2.5 acres in size. The Subject Property has a total of approximately 270 feet of frontage along Grand River Avenue.



The Future Land Use Map from the 2023 Master Plan designates the subject site in the Commercial category. The same designation applies to all adjacent properties, except for the property to the west, which is shown within the Meridian Mall PICA area.

**Staff Analysis**

Applications for special land use permits are reviewed under Sec. 86-126 in the Zoning Ordinance. Based on that review, Staff has the following comments:

1. *The project is consistent with the intent and purposes of this chapter.*

The uses proposed, a gas station with an attached convenience store, all exist in other locations in the Township under the C-2 zoning.

2. *The project is consistent with applicable land use policies contained in the Township's comprehensive development plan of current adoption.*

The property is zoned appropriately and complies with the Future Land Use map and Master Plan.

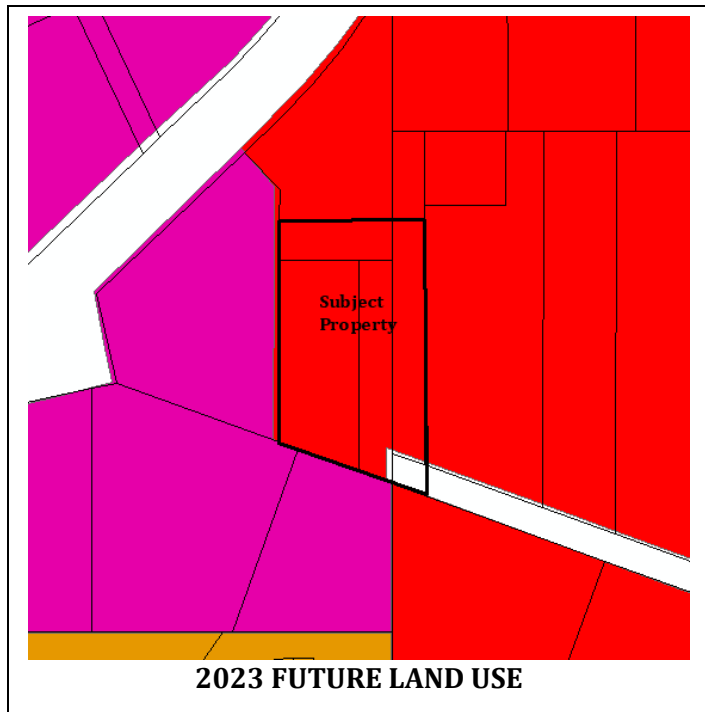
3. *The project is designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the same area.*

The attached proposed site plan shows that the Applicant is complying with the dimensional requirements in the Township Zoning Ordinance. However, if the proposed site plan moves forward as drawn, one variance will be necessary for approval:

1. Sec. 86-404(e)(13) – The standards for gas stations in the C-2 zone state that no more than 10 vehicle fueling stations are allowed. The proposed site plan shows eight pumps, resulting in 16 fuel stations. A variance will be required for the extra 6 fuel stations.
4. *The project will not adversely affect or be hazardous to existing neighboring uses.*

The project is not expected to adversely affect or be hazardous to existing neighboring uses. There are no natural environmental concerns on the Subject Property.

5. *The project will not be detrimental to the economic welfare of surrounding properties or the community.*



The project is not expected to be detrimental to the economic welfare of the surrounding properties or the community.

6. *The project is adequately served by public facilities, such as existing roads, schools, stormwater drainage, public safety, public transportation, and public recreation, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide any such service.*

#### Vehicular Traffic

The site fronts on Grand River Avenue, which is classified as a Principal Arterial on the Street Setbacks and Service Drives Map in the zoning ordinance. A 7-foot pedestrian pathway is located along the Subject Property's frontage.

The Applicant completed a full Traffic Impact Study (TIS). The TIS assumes an access to Marsh Road through the adjacent parcel to the west, as well as the maintenance of two existing driveways on Grand River Avenue. The study does make the following recommendations:

- Maintaining the Marsh Road driveway (Driveway #1) as a full access drive and control it with a stop sign.
- Maintaining both driveways on Grand River Avenue as full access drives and control them both with stop signs.

The proposed site plan reflects these suggested improvements. Note that Grand River Avenue is under the jurisdiction of MDOT while Marsh Road is under the jurisdiction of the Ingham County Road Department. The TIS will have to be approved by both of these agencies for site plan approval.

7. *The project is adequately served by public sanitation facilities if so designed. If on-site sanitation facilities for sewage disposal, potable water supply, and stormwater are proposed, they shall be properly designed and capable of handling the longterm needs of the proposed project.*

The project is adequately served by public water. Potential stormwater impacts will be reviewed by the Ingham County Drain Commission during site plan review.

8. *The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.*

The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.

9. *The project will not directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, and wildlife areas.*

The project is not expected to directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, or wildlife areas. While

the proposed site plan shows environmentally sensitive areas, it also shows that the proposed development does not affect them.

There are additional standards found in Sec. 86-404, C-2 Commercial District, for the regulation of gas stations.

1. *No gasoline service station shall have more than 10 vehicle fueling stations.*

As noted above, the Applicant is proposing 16 fuel stations and will require a variance before site plan approval.

2. *Any building, gas island, air compressors, tire filling stations, vacuum cleaners, or similar equipment shall be set back a minimum of 300 feet from an abutting residential district line.*

This requirement is met.

3. *Any building or structure shall be set back a minimum of 100 feet from the property line when adjacent to a child care center.*

Not applicable.

4. *The site shall accommodate safe internal vehicle circulation.*

The drive aisles are all approximately 35 feet in width and meet our parking and circulation standards.

5. *Setbacks for vehicle fueling stations, and similar equipment, shall be a minimum of 20 feet from any right-of-way lines as specified in the Master Plan for Major Streets and Highways, Meridian Charter Township, Ingham County, Michigan. Gasoline pump islands, and similar equipment shall be a minimum of 25 feet from a side or rear property line.*

This requirement is met.

6. *Off-street vehicle storage. No outdoor storage of wrecked or partially dismantled vehicles shall be permitted unless such vehicles are required to be temporarily stored for a period of time by police or court order. All such storage facilities shall be screened or shielded, in accordance with the special use permit.*

This requirement is met.

7. *All activities, except routine maintenance performed at the fuel pump shall be carried on entirely within a building.*

No maintenance facility is shown on the proposed site plan and this requirement is met.

8. *There shall be no outdoor displays of items for sale, such as tires, tractors, lawnmowers, or other materials, except that supplies intended to be provided to customers directly, such as oil or windshield washer fluid, may be displayed on the pump islands.*

No outdoor storage areas are shown on the proposed site plan and no outdoor storage is planned.

9. *The extensive physical modification of vehicles shall not be permitted in a gasoline service station.*

No maintenance facility is planned and this requirement is met.

10. *Storage of flammable products. Outside aboveground tanks for the storage of gasoline, oil or other inflammable liquids or gases for sale, other than liquefied petroleum gas, shall be prohibited at any gasoline service station.*

No storage of flammable products or outdoor storage tanks are shown on the proposed site plan.

Based on the information provided by the Applicant, Staff has identified the number of fueling stations a potential issue with the proposed site plan. Staff has no other major concerns that would negatively impact surrounding properties or the Township at large while reviewing the proposed Special Use Permit, as long as the development happens as proposed on the site plan. If the Special Use Permit for the project is approved by the Planning Commission, the applicant will be required to submit for Site Plan Review and/or any required building permits prior to beginning operations.

### **Planning Commission Options**

The Planning Commission may recommend approval, approval with conditions, or denial of the proposed special use permit. A resolution will be provided at a future meeting.

### **Attachments**

1. Zoning Compliance Letter, prepared by Zausamer
2. Proposed Site Plan and Attachments, prepared by CESO
3. Traffic Impact Study, prepared by CESO



[Redacted]

June 11, 2026

Charter Township of Meridian  
ATTN: Community Planning & Development  
5151 Marsh Road  
Okemos, MI 48864

**Re: Zoning Compliance Letter – Sheetz, Inc.  
Application for Special Land Use Approval - Convenience Market w/Fueling Stations**

Dear Planning Commission Members:

Our firm represents the Applicant, Sheetz, Inc. (“Applicant”) regarding the aforementioned Application for certain property located at the northeast corner of Grand River Avenue and Marsh Road, consisting of Tax Parcels 33-02-02-22-153-003, 33-02-02-22-153-005, 33-02-02-22-176-001, and 33-02-02-22-153-004 (collectively, the “Property”) in Charter Township of Meridian (“Township”), Ingham County, Michigan.

Sheetz is family owned and operated since 1952 and is famous for its quality food products including its made-to-order sandwiches, and features breakfast, lunch, dinner, coffee, milkshakes, and more. The proposed development will include a Sheetz facility containing a convenience store and restaurant with a drive-in and 16 fueling positions with a modern canopy cover. The proposed facility is a one story building consisting of approximately 6,132 square feet. (collectively, the “Project”).

**I. Introduction**

**a. Existing Conditions**

The Applicant is under contract to purchase the Property which is depicted below. Currently, the Property is being used as a car wash and the adjacent cellular store is vacant.

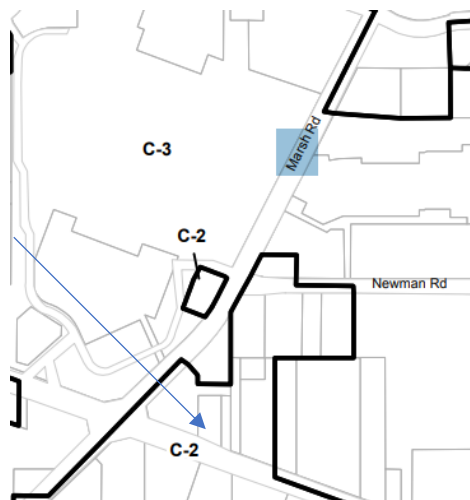
Re: **Zoning Compliance Letter – Sheetz, Inc.**

June 10, 2026

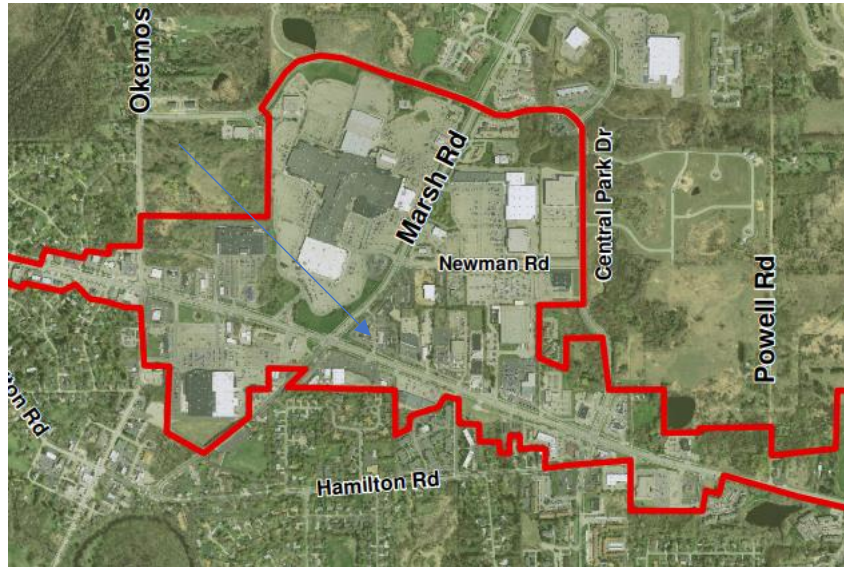
Page 2



The Property is currently zoned C-2 – Commercial District and the Future Land Use Map identifies it as commercial. The C-2 District is intended to permit the establishment of a wide variety of business enterprise. Restaurants or other eating facilities and gasoline service stations are permitted as a special land use in the C-2 District. The properties to the east of the Property are zoned C-3. To the north, the properties are zoned C-3. To the west, the properties are zoned C-2 and C-3. Finally, to the south, the properties are zoned C-2. Outside of the commercial districts there is some residential largely consisting of multi-family units.



The Property is also located within the Corridor Improvement Authority (“CIA”):

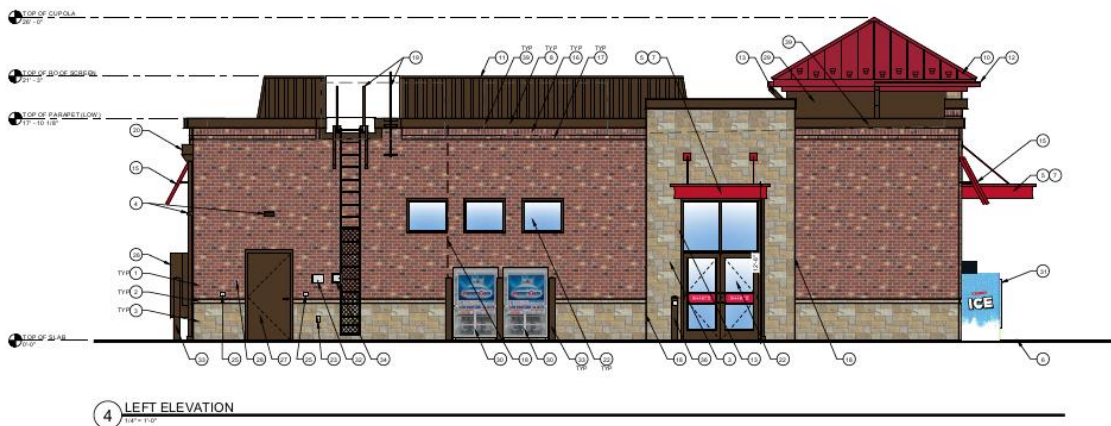


To the west of the Property is the Meridian Mall and to the south-west is a Meijer. To the north is a Kroger and Gordon Food Service. The area consists largely of retail stores, commercial, and food service facilities with some residential on the periphery. Accordingly, the Project location is well suited for the proposed use, which will be harmonious and compatible with the surrounding area.

### **b. Proposed Development**

As noted above, the Project will redevelop an existing aging car wash and vacant former cellular retail outlet and replace it with a state-of-the-art convenience center, restaurant, dine-in and fueling service station. The Project will consist of a modern masonry façade:





This development will dramatically improve the use of the site and add to the convenience and image of the corridor, while providing fuel, dining, groceries and other amenities to the community.

### I. Special Land Use Approval

Section 86-124 sets forth the application requirements:

The application shall be submitted to the Director of Community Planning and Development to be submitted to the Planning Commission and shall include the provisions specified in this section. Only complete applications shall be processed.

**Re: Zoning Compliance Letter – Sheetz, Inc.**

June 10, 2026

Page 5

A completed special use permit application form, available in the Department of Community Planning and Development, shall contain the following information, if applicable:

- (1) The type of special use requested.
- (2) The address and/or parcel number of the property.
- (3) The applicant's name, address, and phone number.
- (4) The name, address, and phone number of all persons with an ownership interest, if different from the applicant.
- (5) Name and address of the developer, if different from the applicant.
- (6) Name and address of the engineer, architect, landscape architect, land planner and/or land surveyor aiding in preparation of the site plan.
- (7) Project title.
- (8) The gross and net acreage of all parcels in the project.
- (9) Proposed project and development phases.
- (10) Total number of existing and proposed structures, units, bedrooms, or offices.
- (11) Square footage and usable floor area of existing and proposed buildings.
- (12) Number of existing and proposed parking spaces, carports, or garages.
- (13) Approximate number of employees by shift.
- (14) Amount and type of existing and proposed recreation and open space.

**RESPONSE: The Applicant is providing a letter from the Property owner authorizing the Application.**

In addition, the following is required:

- (1) A nonrefundable fee in the amount established in the schedule of fees adopted by the Township Board.

**RESPONSE: This requirement is met. The fee has been submitted to the Township.**

- (2) A legal description of the subject property.

**RESPONSE: This requirement is met. See ALTA Survey, provided with the Application, Sheet C1.3.**

- (3) Evidence of fee and/or other ownership of the property for which the special use permit is being requested.

**RESPONSE: The Property is under contract for purchase. A memorandum of the purchase agreement can be provided if requested.**

- (4) A site plan, drawn to a legible scale, containing the following information where applicable:

**Re: Zoning Compliance Letter – Sheetz, Inc.**

June 10, 2026

Page 6

- a. Boundaries of the subject property.
- b. Total area of the subject property.
- c. Location of all existing and proposed structures.
- d. Approximate location and distance of all structures within 100 feet of the subject property.
- e. Uses of existing and proposed buildings, on the subject site.
- f. Proposed means of vehicular and pedestrian ingress and egress to the subject property.
- g. Public and private roads and streets, rights-of-way, and easements, indicating names and widths, which abut or cross the site.
- h. Existing and proposed parking spaces, and vehicular and pedestrian circulation patterns.
- i. The buildable area of the subject property indicating all required setbacks, yards and open space.
- j. Zoning classification of the subject and adjacent properties.
- k. Existing and proposed fencing, screening, landscaping, and buffers.
- l. Location and sizes of existing utilities including power lines and towers, both above and below the ground.
- m. Amount and location of all impervious surfaces.
- n. The verified boundaries of all natural water features and required setback lines.

**RESPONSE: This requirement is met. The Landscape Plan is included as L1.0.**

(5) Elevations illustrating all sides of the proposed structures and project entrance features as they will appear upon completion, accompanied by samples of or a display board of the various exterior materials and colors proposed to be used for the project.

**RESPONSE: This requirement is met. See Elevations submitted with Application, A200 and A201.**

(6) A traffic assessment or a traffic impact study may be required as specified in Section 86-130.

**RESPONSE: This requirement is met. Both Marsh Road and Grand River Avenue are designated as Minor Arterial Roads and this corridor is the major commercial and retail hub for the Township. A traffic study has been provided prepared by Robert E. Matko and Randy Nguyen, E.I. of CESO, Inc., on May 15, 2026. The Study concluded there was minimal impact as a result of the proposed Project as designed.**

(7) Natural features assessment. A written description of the anticipated impacts on the natural features at each phase and at project completion in accordance with the following provisions:

a. The natural features assessment shall, at a minimum, contain the following information:

1. An inventory of natural features proposed to be retained, removed, or modified. Natural features shall include, but are not limited to, wetlands, significant stands of trees or individual trees greater

**Re: Zoning Compliance Letter – Sheetz, Inc.**

June 10, 2026

Page 7

than 12 inches dbh, floodways, floodplains, waterbodies, identified groundwater vulnerable areas, slopes greater than 20%, ravines, and vegetative cover types with potential to sustain significant or endangered wildlife.

2. Description of the impacts on natural features.

3. Description of any proposed efforts to mitigate any negative impacts.

*b. The requirement for preparing a natural features assessment may be waived by the Director of Community Planning and Development in the following instances:*

1. The Director of Community Planning and Development determines that no natural features will be significantly impacted by the proposed project including impacts to adjacent properties.

2. A similar environmental study was previously prepared for the subject site and the Director of Community Planning and Development has determined that no substantive change in conditions has occurred.

**RESPONSE: This requirement has been waived by the Township on April 24, 2026.**

Section 86-126 sets forth the review criteria:

Applications for special use permits shall be reviewed for compliance with the following standards and requirements, where applicable. An application for a special use permit that complies with all the following standards and requirements in this chapter may be approved. The applicant shall assure that:

(1) The project is consistent with the intent and purposes of this chapter.

**RESPONSE: This criterion is met. The Property is zoned C-2, which contemplates a wide variety of businesses to service the community, including fueling stations, restaurants, and drive-throughs. This district includes a mix of uses, including banks, recreational facilities, offices, retail establishments, bars, multiple family dwellings, and large institutional uses such hospitals, light manufacturing, bus terminals and hotels. The Property here is located at the northeast corner of Grand River Avenue and Marsh Road. The property is surrounded by many retail and commercial uses, including a Meijer, Kroger, the Meridian Mall, and dining. The Project will serve to service not only the surrounding commercial area, but nearby residential properties as well.**

**Consistent with the Purpose of the C-2 District, the Project will provide a variety of shopping and service needs for the surrounding community. Specifically, the proposed restaurant offers convenience and access to high-quality food options. Similarly, the Project offers convenient access to high-quality fuel, propane tanks, and other amenities. Thus, the Project will serve the needs of the broader community. As noted above, the C-2 District allows and**

*Re: Zoning Compliance Letter – Sheetz, Inc.*

June 10, 2026

Page 8

encourages a wide range of commercial uses, and the proposed use is listed among the permitted special land uses for this district. Applicant’s unique proposed development promotes the C-2 District’s purpose by encouraging well-designed, modern, service-oriented commercial establishments that meet consumer needs while enhancing the corridor’s functionality and appearance. Further, Applicant’s proposed development has been strategically designed to minimize traffic, congestion, and environmental concerns, while maximizing aesthetic quality, safety, and compatibility with surrounding uses. Therefore, the Applicant’s proposed use is consistent with the purpose of the district in which it is located, and the purpose thereof.

(2) The project is consistent with applicable land use policies contained in the Township's comprehensive development plan of current adoption.

**RESPONSE:** This criterion is met. The Township’s Master Plan approved by the Township Board on February 6, 2024 (“Plan”) designates the Property as commercial, retaining its current zoning designation. Further, the Plan encourages infill development along main vehicular corridors to reuse existing developed land for new uses. As such, the Project is consistent with applicable land use policies as set forth in the Plan as well as the Future Land Use Map and sound planning.

(3) The project is designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the same area.

**RESPONSE:** This criterion is met. The Project is consistent with other uses in the C-2 District. For example, there is a Meijer with a fueling station to the southwest of the Property off of Grand River Avenue and a Kroger north of the Property off Marsh Road. The proposed use will be in line with the essential character of the area and bring a first class convenience and restaurant facility to the area, which will enhance the corridor and provide desired services for consumers. The proposed development will provide convenient access to high quality fuel and foods. The Project will serve as a vital one-stop shop for customers allowing them to obtain grocery items, fuel, and dine in or out quickly. Moreover, the proposed building will be constructed using aesthetically pleasing, modern brick and landscaping. Such a modern brick façade reflects the high-end design trends seen in new urban commercial construction. The fueling canopy will also match this modern design, which will enhance the design and aesthetics of the area, consistent with surrounding development patterns. The proposed building, being one story and approximately 6,132 sq. ft., is modest in scale in comparison to adjacent uses such as the Meijer and Meridian Mall, etc.

(4) The project will not adversely affect or be hazardous to existing neighboring uses.

*Re: Zoning Compliance Letter – Sheetz, Inc.*

June 10, 2026

Page 9

**RESPONSE:** This criterion is met. As noted above, the Project will provide a convenient service to customers and neighboring uses. The proposed use is similar to other uses in the area and compatible with the adjacent properties. The Project will provide a benefit to the area by providing a first class convenience facility, restaurant, and high quality fueling center. Finally, the Traffic Study concluded the overall impact of the development would be minimal.

(5) The project will not be detrimental to the economic welfare of surrounding properties or the community.

**RESPONSE:** This criterion is met. The Project will serve to increase the economic welfare of the surrounding properties. Currently, the Property is used as a car wash and a vacant commercial building. The proposed development will serve as a significant improvement to the site and provide a unique amenity to surrounding uses. The modern brick building and state of the art technology used for the Project will enhance the overall aesthetics. The presence of a long time family owned and nationally recognized high quality commercial operator will instill confidence in the local market and serve as a flagship development for the community. Finally, the investment in the Property and new development will positively serve the tax base of the community.

(6) The project is adequately served by public facilities, such as existing roads, schools, stormwater drainage, public safety, public transportation, and public recreation, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide any such service.

**RESPONSE:** This requirement is met. As noted in the Traffic Study provided with the Application, the Sheetz development will have minimal impacts on the intersection or surrounding roadway network. The streets and access facilities serving the Subject Property will safely accommodate the proposed Special Uses and will not cause excessive traffic congestion or delays. Applicant's proposed drive-in restaurant and an auto service center are merely a convenient stop along the path of vehicles already traveling along Grand River Avenue and Marsh Road.

(7) The project is adequately served by public sanitation facilities if so designed. If on-site sanitation facilities for sewage disposal, potable water supply, and stormwater are proposed, they shall be properly designed and capable of handling the long term needs of the proposed project.

**RESPONSE:** This requirement is met. The Project will be adequately served by public sanitation facilities. There are two restroom facilities contained within the facility, one for men and one for women.

*Re: Zoning Compliance Letter – Sheetz, Inc.*

June 10, 2026

Page 10

(8) The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.

**RESPONSE: No excessive noise, vibration, light, glare, or odors will emanate from the facility that would cause a nuisance to surrounding properties or persons. In fact, the lighting on Applicant’s proposed facility is specifically designed in such a way as to shine down and not spill over onto the adjacent properties. Additionally, the site will be designed and developed consistent with state and federal environmental standards for fuel dispensing.**

(9) The project will not directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, and wildlife areas.

**RESPONSE: This criterion is met. The Project is located in an existing commercial district and will reuse the existing development for a state of the art new use, greatly enhancing the area without any impact to natural resources, including prime agricultural soils, lakes, rivers, streams, forest, or wetland/wildlife areas.**

In addition, the following criteria apply to fueling service stations pursuant to Section 86-404(e)(13)(b):

(13) Drive-in or drive-through uses.

(b) Standards applying to gasoline and automobile service stations, and oil change establishments.

1. No gasoline service station shall have more than 10 vehicle fueling stations.

**RESPONSE: The Applicant is requesting approval subject to obtaining a variance from the Zoning Board of Appeals to allow 16 vehicle fueling stations. There are eight fuel pumps which constitute 16 fueling stations (2 per pump). As such, the applicant will seek a variance to permit an additional 6 fueling stations, consistent with other approved similarly situated uses in the area.**

2. Any building, gas island, air compressors, tire filling stations, vacuum cleaners, or similar equipment shall be set back a minimum of 300 feet from an abutting residential district line.

**RESPONSE: This requirement is met. See Site Plan submitted with Application. As shown on the proposed plans, the proposed fuel station pumps are to be located over 400 feet from the nearest residential district line.**

*Re: Zoning Compliance Letter – Sheetz, Inc.*

June 10, 2026

Page 11

3. Any building or structure shall be set back a minimum of 100 feet from the property line when adjacent to a child care center.

**RESPONSE: N/A.**

4. The site shall accommodate safe internal vehicle circulation.

**RESPONSE: This requirement is met. The site is well designed so as to accommodate safe internal vehicle circulation. Moreover, as noted in the Traffic Study provided, there is sufficient internal stacking and alternative cross-access routes to the east and west to access Grand River Avenue.**

5. Setbacks for vehicle fueling stations, and similar equipment, shall be a minimum of 20 feet from any right-of-way lines as specified in the Master Plan for Major Streets and Highways, Meridian Charter Township, Ingham County, Michigan. Gasoline pump islands, and similar equipment shall be a minimum of 25 feet from a side or rear property line.

**RESPONSE: This requirement is met. The fueling stations are set back over 60 feet or more from the right-of-way of both Grand River Avenue and Marsh Road. Moreover, they are over 60 feet from the side or rear property line.**

6. Off-street vehicle storage. No outdoor storage of wrecked or partially dismantled vehicles shall be permitted unless such vehicles are required to be temporarily stored for a period of time by police or court order. All such storage facilities shall be screened or shielded, in accordance with the special use permit.

**RESPONSE: This requirement is not applicable to the Project. The Applicant does not plan to have any such outdoor storage of vehicles or off-street vehicle storage.**

7. All activities, except routine maintenance performed at the fuel pump shall be carried on entirely within a building.

**RESPONSE: The Applicant will comply with this requirement.**

8. There shall be no outdoor displays of items for sale, such as tires, tractors, lawnmowers, or other materials, except that supplies intended to be provided to customers directly, such as oil or windshield washer fluid, may be displayed on the pump islands.

**RESPONSE: The Applicant will comply with this requirement.**

9. The extensive physical modification of vehicles shall not be permitted in a gasoline service station.



**Re: Zoning Compliance Letter – Sheetz, Inc.**

June 10, 2026

Page 12

**RESPONSE: This requirement is not applicable to the Project. The Applicant has no plans for extensive physical modification of vehicles or any modification of vehicles. The proposed use will not have a repair or automotive service shop.**

10. Storage of flammable products. Outside aboveground tanks for the storage of gasoline, oil or other inflammable liquids or gases for sale, other than liquefied petroleum gas, shall be prohibited at any gasoline service station.

**RESPONSE: This requirement is met. The proposed use will have underground storage tanks for the fueling stations. The Applicant will otherwise comply with these requirements as noted.**

**II. Applicable Law**

Under Michigan law, when a site plan contains the information required by the zoning ordinance and is in compliance with the zoning ordinance, it is to be approved. *See* MCL 125.3501(5); *Hessee realty, Inc. v Ann Arbor*, 61 Mich App 319 (1975); *Keating Int'l Corp v Orion*, 51 Mich App 122 (1974), *aff'd*, 395 Mich 539 (1975). Likewise, a request for a special land use must be approved if the request is in compliance with the standards stated in the local zoning ordinance, the conditions imposed under the ordinance, other applicable ordinances, and state and federal statutes. MCL 125.3504(3); MCL 125.3502(4). *See also Room & Board Homes & Family Care Homes, Operators & Owners v Gribbs*, 67 Mich App 381 (1976).

**III. Conclusion**

In conclusion, the Applicant respectfully requests that the foregoing materials be considered by the Township and that the Application for Special Land Use be APPROVED. The Application is consistent with sound planning and zoning and in full compliance with the Township's Zoning Ordinance and Master Plan as well as Michigan law.

On behalf of the Applicant, we thank you in advance for your timely attention to this matter and look forward to working with the Township throughout the zoning approval process.

Sincerely,



**Re: Zoning Compliance Letter – Sheetz, Inc.**

June 10, 2026

Page 13

ZAUSMER, P.C.

A handwritten signature in blue ink, appearing to read "SRE", with a long horizontal line extending to the right.

Stephen R. Estey

SRE

Enclosures

cc: Client

# MARSH & GRAND RIVER, INGHAM COUNTY, MICHIGAN PRIVATE SITE IMPROVEMENTS FOR **SHEETZ**

1930 & 1878 W. GRAND RIVER AVE., OKEMOS, MI



**DEVELOPER:**  
SHEETZ  
393 W. 12 MILE RD., SUITE 100  
FARMINGTON HILLS, MI 48331  
PHONE: (313) 402-6681  
CONTACT: ALEX SIWICKI  
EMAIL: ASIWICKI@SHEETZ.COM

**ENGINEER:**  
CESO, INC.  
13060 S. US HIGHWAY 27, SUITE D  
DEWITT, MI 48820  
PHONE: (517) 622-3000  
CONTACT: KAVEH IPAKCHIAN  
EMAIL: KAVEH.IPAKCHIAN@CESOINC.COM

**GOVERNING AGENCIES AND UTILITY COMPANIES:**

**SEWER:**  
MERIDIAN TOWNSHIP DPW  
PHONE: (517) 853-4440  
EMAIL: DPW@MERIDIAN.MI.US

**GAS SERVICE:**  
CONSUMERS ENERGY  
PHONE: (800) 805-0490

**WATER:**  
MERIDIAN TOWNSHIP DPW  
PHONE: (517) 853-4440  
EMAIL: DPW@MERIDIAN.MI.US

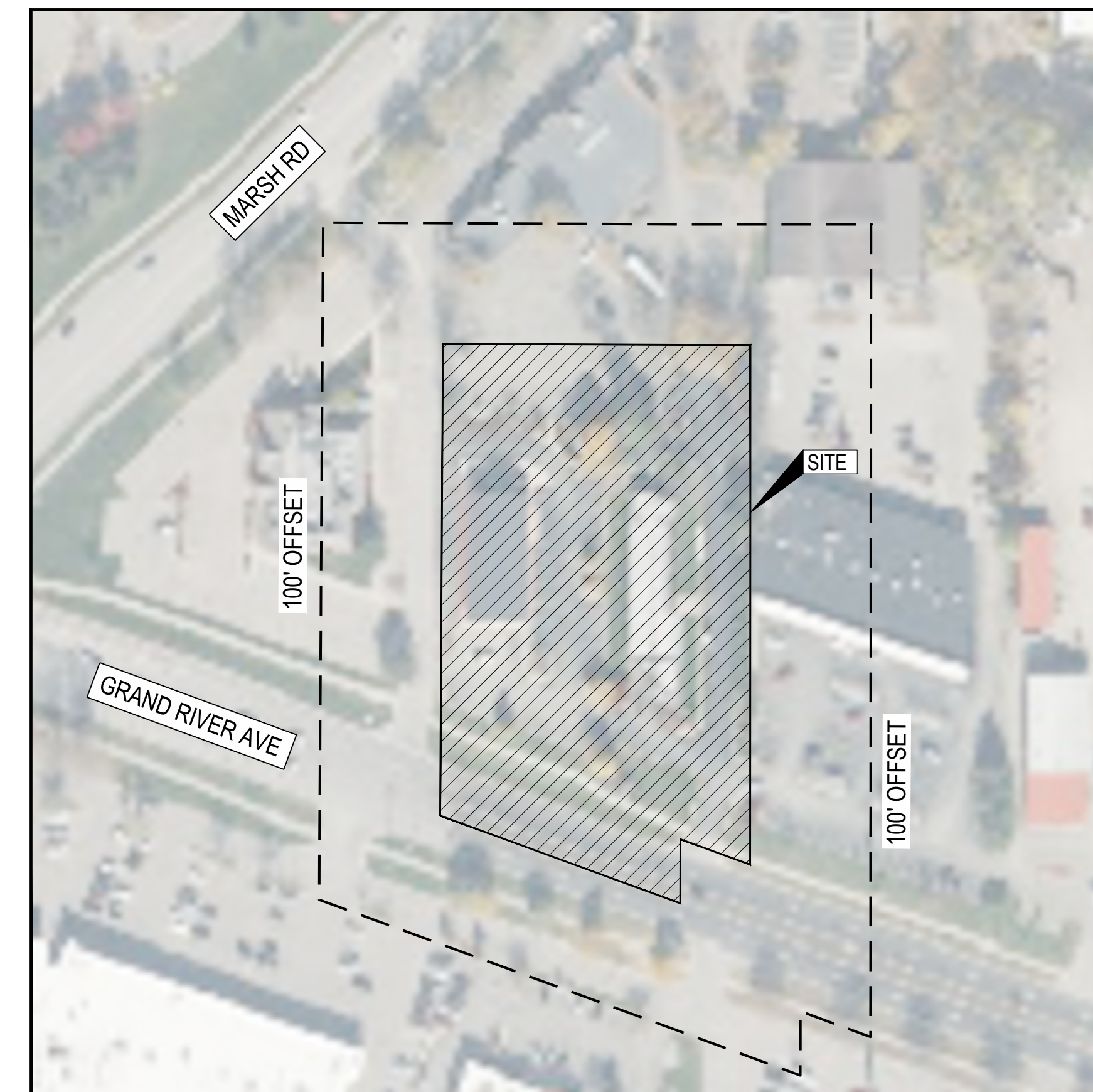
**COMMUNICATIONS:**  
COMCAST BUSINESS  
PHONE: (866) 999-5777  
CONTACT: LARRY HILL  
EMAIL: LARRY\_HILL@COMCAST.COM

**STORMWATER:**  
INGHAM COUNTY DRAIN COMMISSIONER  
CONTACT: ANGIE COSMAN  
EMAIL: ACOSMAN@INGHAM.ORG

**ELECTRIC:**  
CONSUMERS ENERGY  
PHONE: (800) 805-0490

**ZONING:**  
MERIDIAN TOWNSHIP  
PHONE: (517) 853-4576  
CONTACT: BRIAN SHORKEY  
EMAIL: SHORKEY@MERIDIAN.MI.US

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
C1.0	TITLE SHEET
C1.1	GENERAL NOTES
C1.2	GENERAL NOTES
C1.3	ALTA NSPS LAND TITLE SURVEY
C2.0	EX. CONDITIONS & DEMOLITION PLAN
C3.0	SITE PLAN
C3.1	AUTOTURN PLAN
C4.0	GRADING PLAN
C5.0	UTILITY PLAN
EX-1	EXISTING CONDITIONS DRAINAGE MAP
EX-2	PROPOSED CONDITIONS DRAINAGE MAP
L1.0	LANDSCAPE PLAN



VICINITY MAP  
NO SCALE

**SURVEY PROVIDED BY:**  
CESO, INC.  
3601 RIGBY ROAD, SUITE 300  
CITY, STATE ZIP  
PHONE: 937.435.8584  
DATED: 2026.05.20  
CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO BID AND CONSTRUCTION.

BENCHMARK	DATUM
BM "A": TOP NUT OF HYDRANT LOCATED APPROXIMATELY 63' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 500' SOUTHEAST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 863.27	NAVD 88
BM "B": "X" SCRIBED IN CURB LOCATED APPROXIMATELY 30' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 530' SOUTHEAST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 861.04	
BM "C": MAG NAIL SET IN CONCRETE BASE OF LIGHT POLE LOCATED APPROXIMATELY 180' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 733' WEST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 865.41	



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

TOPOGRAPHIC LEGEND	
⊕ LIGHT POLE	⊙ WATER VALVE
⊞ ELECTRIC METER	○ BOLLARD
⊞ ELECTRIC TRANSFORMER	⊙ ROCK
⊕ GAS MARKER	⊕ SIGN
⊙ CLEANOUT	⊙ BUSH
⊙ SANITARY MANHOLE	⊙ DECIDUOUS TREE
⊞ CURB INLET	⊙ PINE TREE
⊞ CATCH BASIN	⊙ STUMP
⊙ CATCH BASIN (ROUND)	⊞ MAILBOX
##### STRUCTURE NUMBER	○ COLUMN
◆ DOWNSPOUT	⊞ COMMUNICATION BOX
⊕ FIRE HYDRANT	⊞ COMMUNICATION MARKER
⊞ IRRIGATION VALVE	
— G —	GAS LINE (PER MARKINGS & PLANS)
— W —	WATER LINE (PER MARKINGS & PLANS)
— UGE —	UNDERGROUND ELECTRIC (PER MARKINGS & PLANS)
— COM —	UNDERGROUND COMMUNICATIONS (PER MARKINGS & PLANS)
— OHL —	OVERHEAD UTILITY LINE (PER FIELD OBS.)
— STM —	STORM SEWER (PER FIELD OBS.)
— SAN —	SANITARY SEWER (PER FIELD OBS.)

PARCEL IS LOCATED WITHIN "ZONE X" AS INDICATED BY THE FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NUMBER 26065C0156D EFFECTIVE DATE: 08/16/2011; PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.



THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE. NO ASSURANCE IS MADE AS TO THE ACCURACY OF THE INFORMATION.



**SHEETZ**

**MARSH & GRAND RIVER**  
1930 & 1878 W. GRAND RIVER AVE.  
OKEMOS, MI 48864

Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

Project Number: 768368  
Scale: AS SHOWN  
Drawn By: AAB  
Checked By: RAP  
Date: 05/22/2026  
Issue: NOT FOR CONSTRUCTION

Drawing Title:  
**TITLE SHEET**

**C1.0**

C:\DCC\Draws\CESO\SHEETZ-Meridian\_Twp\_MI (Marsh)\Project Files\CESO03-CIVIL\PLAN\CONSTRUCTION\768368\_C1.0\_TITLE.dwg - 5/22/2026 - Aaron Bumpgarner

**SHEETZ GENERAL NOTES**

NOTE: THESE GENERAL NOTES MAY CONFLICT WITH NOTES ELSEWHERE ON THE PLANS. THE MORE RESTRICTIVE NOTE SHALL APPLY.

**DEMOLITION NOTES:**

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND/OR VERIFYING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK HAVE BEEN OBTAINED.
2. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
3. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE AND DO NOT INCLUDE MECHANICAL, ELECTRICAL AND MISCELLANEOUS STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY.
4. ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES WITHIN THE LIMITS OF NEW CONSTRUCTION SHALL BE RAZED UNLESS NOTED OTHERWISE WITHIN THIS CONSTRUCTION SET, ARCHITECTURAL PLANS AND/OR PROJECT SPECIFICATIONS. THIS INCLUDES FOUNDATION SLABS, WALLS, AND FOOTINGS.
5. ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
6. ALL UTILITY REMOVAL, RELOCATION, CUTTING, CAPPING AND/OR ABANDONMENT SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.
7. THE BURNING OF CLEARED MATERIAL AND DEBRIS SHALL NOT BE ALLOWED UNLESS CONTRACTOR GETS WRITTEN AUTHORIZATION FROM THE LOCAL AUTHORITIES.
8. UTILITY CONTACTS ARE LISTED ON THE TITLE SHEET.
9. EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES AROUND AREAS OF DEMOLITION SHALL BE INSTALLED PRIOR TO INITIATION OF DEMOLITION ACTIVITIES. REFER TO THE E&S PLAN FOR DETAILS.
10. ASBESTOS OR HAZARDOUS MATERIALS, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY SHEETZ IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
11. CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS, AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
12. CONTRACTOR SHALL ADHERE TO ALL LOCAL, STATE, FEDERAL, AND OSHA REGULATIONS WHEN OPERATING DEMOLITION EQUIPMENT AROUND UTILITIES. CONTRACTOR SHALL ALSO COMPLY WITH 29 CFR 1926.651 & 1926.652 OR COMPARABLE OSHA APPROVED STATE PLAN REQUIREMENTS FOR TRENCHING AND EXCAVATION.

**LAYOUT NOTES:**

1. CONTRACTOR SHALL REFER TO THE SHEETZ ARCHITECTURAL PLANS FOR THE EXACT LOCATION OF UTILITY ENTRANCES, BUILDING DIMENSIONS, ROOF LEADERS, EXIT DOORS, EXIT RAMPS AND PORCHES.
2. ALL DIMENSIONS ARE TO BUILDING FACE, FACE OF CURB, OR EDGE OF SIDEWALK UNLESS NOTED OTHERWISE. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS FOR THE INSTALLATION OF TRAFFIC SIGNAGE AND PAVEMENT MARKINGS AS SHOWN ON THE CONSTRUCTION PLANS.
4. ALL NON-LANDSCAPED ISLANDS SHALL BE PAINTED WITH STRIPES 4" WIDE, AT 45° AND 2 FEET O.C.
5. ALL STRIPING SHALL BE 4" WIDE UNLESS NOTED OTHERWISE.
6. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF THE SHEETZ MAIN FREESTANDING SIGN WITH THE SHEETZ CONSTRUCTION MANAGER.
7. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
8. ALL DIMENSIONS SHOWN ON THIS PLAN SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY SHEETZ REPRESENTATIVE AND DESIGN ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLAN AND FIELD CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS AT THE PROJECT SITE.
9. SEE DETAIL SHEETS FOR ADDITIONAL CONSTRUCTION INFORMATION.
10. CONTRACTOR SHALL NEATLY SAW-CUT ALL JOINTS WHERE THE PROPOSED CONSTRUCTION MEET EXISTING PAVEMENT AND CONCRETE.

**GRADING NOTES:**

1. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY CESO, THE CURRENT REQUIREMENTS OF MERIDIAN TOWNSHIP, THE APPLICABLE SECTIONS OF THE MDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
2. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE. IF DISCREPANCIES BETWEEN FIELD CONDITIONS AND DESIGN PLANS ARE DISCOVERED, CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER IMMEDIATELY.
4. BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY MISS DIG AT 1 (800) 482-7171. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
5. ALL EXISTING TREES, VEGETATION, PAVEMENTS, CONCRETE FOUNDATIONS, STRUCTURES AND ORGANIC TOPSOIL SHALL BE STRIPPED AND REMOVED FROM NEW CONSTRUCTION AREAS UNLESS NOTED OTHERWISE.
6. ALL SLOPES SHALL BE 2:1 (HORIZONTAL:VERTICAL) MAXIMUM UNLESS NOTED OTHERWISE. ALL SLOPES 3:1 OR GREATER SHALL BE PERMANENTLY STABILIZED WITH VEGETATION.
7. AN AS-BUILT DRAWING OF NEW UTILITY SERVICES MUST BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
8. ALL AREAS NOT PAVED SHALL BE TOP SOILED, SEEDED, SODDED, MULCHED AND/OR LANDSCAPED UNLESS OTHERWISE NOTED IN THE CONSTRUCTION DRAWINGS, SITE SPECIFICATIONS OR INSTRUCTED BY THE OWNER.
9. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT PREPARED BY TBD, PRIOR TO INITIATION OF ANY EARTHWORK ACTIVITY.
10. ALL ELEVATIONS SHOWN ARE REFERENCED TO BENCHMARKS ON THE PROJECT SURVEY AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR AT GROUND BREAKING.
11. ALL SPOT ELEVATIONS ARE REFERENCED TO THE FINISHED GROUND SURFACE UNLESS NOTED OTHERWISE.
12. CONTRACTOR SHALL REFERENCE DETAILED BUILDING PLANS FOR EXACT BUILDING DIMENSIONS, ELEVATIONS, AND UTILITY CONNECTION POINTS.
13. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
14. CONTRACTOR SHALL COMPLY WITH 29 CFR 1926.651 & 1926.652 OR COMPARABLE OSHA APPROVED STATE PLAN REQUIREMENTS FOR TRENCHING AND EXCAVATION.

**STORMWATER MANAGEMENT NOTES:**

1. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY CESO, THE CURRENT REQUIREMENTS OF ICDC, THE APPLICABLE SECTIONS OF THE MDOT STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
2. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID. SUBMISSION OF A BID SHALL BE CONSTRUED TO MEAN THE CONTRACTOR HAS REVIEWED THE SITE AND IS FAMILIAR WITH CONDITIONS AND CONSTRAINTS OF THE SITE.
4. BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY MISS DIG AT 1 (800) 482-7171. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
5. CONTRACTOR SHALL COORDINATE FUEL ISLAND CANOPY DRAINS CONNECTION TO THE MAIN COLLECTOR PIPE WITH THE SHEETZ CONSTRUCTION MANAGER AND PROVIDE ALL NECESSARY FITTINGS TO MAKE THE CONNECTION TO THE MAIN COLLECTOR PIPE.
6. CONTRACTOR TO PROVIDE SHOP DRAWINGS ON ALL STORM SEWER PIPE, MANHOLES, AND INLETS TO THE SHEETZ CONSTRUCTION MANAGER FOR APPROVAL.
7. AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
8. ALL STORM PIPE SHALL BE AS SPECIFIED. ALL JOINTS SHALL BE WATERTIGHT.
9. ALL STORM STRUCTURES ADJACENT TO CURBS SHALL BE MDOT COMPLIANT INLET WITH GRATE.
10. ALL STORM STRUCTURES DIRECTLY DOWN GRADIENT OF THE FUEL PUMP PAD OR UNDERGROUND STORAGE TANKS SHALL HAVE A SUMP AND BMP FEATURE (FOR EXAMPLE 'SNOUT') INSTALLED ON THE OUTFLOW PIPE.
11. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.

**UTILITY NOTES:**

1. ALL SITE WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS PREPARED BY CESO, THE CURRENT REQUIREMENTS OF MERIDIAN TOWNSHIP, THE APPLICABLE SECTIONS OF THE ICDC STANDARD SPECIFICATIONS FOR ROADWAY CONSTRUCTION, AND ALL OTHER PERTINENT FEDERAL AND STATE LAWS.
2. THE CONTRACTOR SHALL COMPLY AT ALL TIMES WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, PROVISIONS, AND POLICIES GOVERNING SAFETY AND HEALTH.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXAMINING THE AREAS AND CONDITIONS UNDER WHICH THE PROJECT IS TO BE CONSTRUCTED PRIOR TO THE SUBMISSION OF A BID.
4. BEFORE EXCAVATION, ALL UNDERGROUND UTILITIES SHALL BE LOCATED IN THE FIELD BY THE PROPER AUTHORITIES. THE CONTRACTOR SHALL NOTIFY MISS DIG AT 1 (800) 482-7171. THE LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES ARE APPROXIMATE AND MAY NOT ALL BE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND EXACT LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BID AND PERFORM ALL UTILITY WORK IN COMPLIANCE TO ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THE INSTALLATION, INSPECTING, TESTING AND FINAL ACCEPTANCE OF ALL PROPOSED UTILITY CONSTRUCTION UNLESS OTHERWISE COORDINATED BEFOREHAND WITH SHEETZ.
7. CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY ON THE ADDITION, REMOVAL AND/OR RELOCATION OF UTILITIES AND UTILITY POLES AND THE EXTENSION OF ALL PROPOSED UTILITIES TO THE SHEETZ PROJECT STRUCTURES.
8. ALL UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE RESPECTIVE UTILITY COMPANY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL UTILITIES ARE INSTALLED CORRECTLY TO MEET PROJECT REQUIREMENTS WHETHER PERFORMED BY THE CONTRACTOR OR NOT.
9. AN AS-BUILT DRAWING OF NEW UTILITY SERVICES SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE OWNER UPON COMPLETION OF THE PROJECT.
10. UTILITY COMPANIES AND CONTACTS ARE LISTED ON THE TITLE SHEET.
11. CONDUIT LOCATIONS TO FREESTANDING SIGNS AND SITE LIGHT POLES TO BE COORDINATED WITH SHEETZ CONSTRUCTION MANAGER.
12. CONTRACTOR SHALL COORDINATE AND VERIFY WITH SHEETZ CONSTRUCTION MANAGER ON LOCATION AND SIZE OF THE STORE GREASE TRAP. GREASE TRAP SHALL BE PROVIDED WITH "T" PIPE IN OUTFLOW CHAMBER. ALL SANITARY SEWER PIPE SHALL BE SDR-35 PVC UNLESS OTHERWISE NOTED.
13. CONTRACTOR SHALL COORDINATE WITH SHEETZ CONSTRUCTION MANAGER AND SHEETZ IT DEPARTMENT ON THE CONDUIT ROUTE TO STORE FOR TELE/COMMUNICATION SERVICES.
14. CONTRACTOR SHALL COMPLY WITH 29 CFR 1926.651 & 1926.652 OR COMPARABLE OSHA APPROVED STATE PLAN REQUIREMENTS FOR TRENCHING AND EXCAVATION.
15. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.

ELECTRIC - PRIMARY SERVICE	RESPONSIBILITY	
	SHEETZ	UTILITY
*ASSUMES SECONDARY POWER ALL BY SHEETZ		
PRIMARY CONNECTION TO EXISTING SERVICE MAIN	TBD	TBD
IF UNDERGROUND, EXCAVATION FOR CONNECTION TO MAIN	TBD	TBD
IF CONNECTION IN ROW (ROADWAY/ROW BACKFILL & COMPACTION)	TBD	TBD
IF CONNECTION IN ROW (ROADWAY/ROW SURFACE REPAIR/RESTORATION)	TBD	TBD
IF UNDERGROUND, ROAD/ROW OPENING PERMIT	TBD	TBD
PRIMARY LINE (EX. SERVICE MAIN TO PROPERTY LINE)	TBD	TBD
IF UNDERGROUND, TRENCHING/BACKFILL/COMPACTION (EX. SERVICE MAIN TO PROPERTY LINE)	TBD	TBD
PRIMARY LINE (PROPERTY LINE TO FACILITIES SERVICE TRANSFORMER)	TBD	TBD
IF UNDERGROUND, PRIMARY LINE TRENCHING/BACKFILL/COMPACTION (PROPERTY LINE TO FACILITIES SERVICE TRANSFORMER)	TBD	TBD
IF PAD MOUNT TRANSFORMER - PAD BY	TBD	TBD
IF PAD MOUNT TRANSFORMER - TRANSFORMER BY	TBD	TBD

WATER - DOMESTIC SERVICE	RESPONSIBILITY	
	SHEETZ	UTILITY
EXCAVATION OF MAIN	TBD	TBD
MAIN TAP (PAID BY APPLICANT)	TBD	TBD
IF TAP IN ROW (ROAD/ROW BACKFILL AND COMPACTION)	TBD	TBD
ROADWAY/ROW SURFACE REPAIR/RESTORATION	TBD	TBD
ROAD/ROW OPENING PERMIT	TBD	TBD
SERVICE LINE (MAIN TO PROPERTY LINE)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (MAIN TO PROPERTY LINE)	TBD	TBD
VALVE/CURB STOP AT PROPERTY LINE (PAID BY APPLICANT)	TBD	TBD
SERVICE LINE (PROPERTY LINE TO STORE/METER)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (PROPERTY LINE TO STORE/METER)	TBD	TBD
METER (PURCHASED FROM CITY)	TBD	TBD
BACKFLOW PREVENTER	TBD	TBD
METER & BACKFLOW PREVENTER INSTALLATION	TBD	TBD

WATER - IRRIGATION SERVICE	RESPONSIBILITY	
	SHEETZ	UTILITY
EXCAVATION OF MAIN	TBD	TBD
SERVICE LINE TAP (PAID BY APPLICANT)	TBD	TBD
IF TAP IN ROW (ROAD/ROW BACKFILL AND COMPACTION)	TBD	TBD
ROADWAY/ROW SURFACE REPAIR/RESTORATION	TBD	TBD
ROAD/ROW OPENING PERMIT	TBD	TBD
SERVICE LINE (MAIN TO PROPERTY LINE)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (MAIN TO PROPERTY LINE)	TBD	TBD
VALVE/CURB STOP AT PROPERTY LINE (PAID BY APPLICANT)	TBD	TBD
SERVICE LINE (PROPERTY LINE TO STORE/METER)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (PROPERTY LINE TO STORE/METER)	TBD	TBD
METER (PURCHASED FROM CITY)	TBD	TBD
BACKFLOW PREVENTER	TBD	TBD
METER & BACKFLOW PREVENTER INSTALLATION	TBD	TBD

WATER - FIRE LINE	RESPONSIBILITY	
	SHEETZ	UTILITY
EXCAVATION OF MAIN	TBD	TBD
MAIN TAP	TBD	TBD
IF TAP IN ROW (ROAD/ROW BACKFILL AND COMPACTION)	TBD	TBD
ROADWAY/ROW SURFACE REPAIR/RESTORATION	TBD	TBD
ROAD/ROW OPENING PERMIT	TBD	TBD
FIRE LINE (MAIN TO FIRE HYDRANT, CITY MAINTAINS)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (MAIN TO FIRE HYDRANT)	TBD	TBD
VALVE AND FIRE HYDRANT ASSEMBLY INSTALLATION BY	TBD	TBD

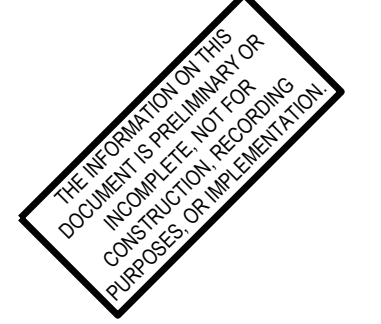
SANITARY SERVICE	RESPONSIBILITY	
	SHEETZ	UTILITY
MANHOLE CONNECTION	TBD	TBD
IF CONNECTION IN ROW (ROAD/ROW BACKFILL AND COMPACTION)	TBD	TBD
IF CONNECTION IN ROW (ROADWAY/ROW SURFACE REPAIR/RESTORATION)	TBD	TBD
SERVICE LINE (MAIN TO PROPERTY LINE)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (MAIN TO PROPERTY LINE)	TBD	TBD
SERVICE LINE (PROPERTY LINE TO STORE)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (PROPERTY LINE TO STORE)	TBD	TBD

GAS SERVICE	RESPONSIBILITY	
	SHEETZ	UTILITY
EXCAVATION OF MAIN	TBD	TBD
MAIN TAP	TBD	TBD
IF TAP IN ROW (ROAD/ROW BACKFILL AND COMPACTION)	TBD	TBD
ROADWAY/ROW SURFACE REPAIR/RESTORATION	TBD	TBD
ROAD/ROW OPENING PERMIT	TBD	TBD
SERVICE LINE (MAIN TO PROPERTY LINE)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (MAIN TO PROPERTY LINE)	TBD	TBD
VALVE/CURB STOP AT PROPERTY LINE	TBD	TBD
SERVICE LINE (PROPERTY LINE TO STORE/METER)	TBD	TBD
TRENCHING/BACKFILL/COMPACTION (PROPERTY LINE TO STORE/METER)	TBD	TBD
METER & REGULATOR SET	TBD	TBD
METER & REGULATOR INSTALLATION	TBD	TBD



**CESO**  
WWW.CESOINC.COM

13060 S. US Highway 27, Suite D  
Dowagiac, MI 48820  
Phone: 517.622.3000 Fax: 888.208.4826



**SHEETZ**

**MARSH & GRAND RIVER**  
1930 & 1878 W. GRAND RIVER AVE.  
OKEMOS, MI 48864

Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

Project Number: 768368  
Scale: AS SHOWN  
Drawn By: AAB  
Checked By: RAP  
Date: 05/22/2026  
Issue: NOT FOR CONSTRUCTION

Drawing Title:  
**GENERAL NOTES**

**C1.1**

C:\DC\ACC\Draw\CESO\Sheetz-Meridian\_Twp\_MI\_(Marsh)\Project Files\CESO\03-CIVIL\PLAN\CONSTRUCTION\768368\_C10\_TITLE.dwg - 5/22/2026 - Aaron Bungamer

## CESO GENERAL NOTES

NOTE: THESE GENERAL NOTES MAY CONFLICT WITH NOTES ELSEWHERE ON THE PLANS. THE MORE RESTRICTIVE NOTE SHALL APPLY.

### DEMOLITION NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. THE DEMOLITION, REMOVAL, AND DISPOSAL IS TO BE APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL FACILITIES SUCH AS: STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, WELLS, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL AS SPECIFIED BY A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER. IF UNDOCUMENTED FACILITIES ARE FOUND ON SITE, CONTRACTOR SHALL CONTACT THE OWNER AND UTILITY COMPANY PRIOR TO REMOVAL. ALL FACILITIES SHALL BE PLUGGED, ABANDONED, OR REMOVED PER STATE AND LOCAL REQUIREMENTS.
- FEDERAL, STATE AND LOCAL CODE REQUIREMENTS SHALL GOVERN THE DISPOSAL OF DEBRIS INCLUDING ANY POTENTIALLY HAZARDOUS AND TOXIC MATERIALS. ALL MATERIALS AND STRUCTURES DESIGNATED AS "TO BE REMOVED" SHALL BE DISPOSED OF OFF SITE AND AT THE COST OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING JOB SITE SAFETY PER OSHA REQUIREMENTS AT ALL TIMES.
- PRIOR TO DEMOLITION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL THE STATE 811 AND NOTIFY ALL UTILITY COMPANIES TO SCHEDULE UTILITY SERVICE REMOVAL AND/OR ABANDONMENT. ALL UTILITIES SHALL BE REMOVED/RELOCATED PER THE SPECIFICATIONS OF THE UTILITY COMPANIES. THE CONTRACTOR IS RESPONSIBLE TO PAY ALL FEES AND CHARGES ASSOCIATED WITH THIS WORK
- CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO INHABITED BUILDINGS ON SITE AND ADJACENT PROPERTIES AT ALL TIMES. INTERRUPTIONS SHALL BE APPROVED BY THE OWNERS OF THE BUILDINGS/PROPERTIES.
- THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES. IF THE LOCATION OR ELEVATION OF THE EXISTING UTILITIES ARE FOUND TO BE DIFFERENT FROM THE PLANS, CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES TO REMAIN INSIDE AND OUTSIDE CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGES AND NOTIFY THE CITY/COUNTY PRIOR TO CONSTRUCTION START. ANY EXISTING SITE FEATURE TO REMAIN THAT IS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, CURB, ETC. SHALL BE REPAIRED TO A CONDITION THAT IS EQUAL TO, OR BETTER THAN, THE EXISTING CONDITIONS. PRIOR TO BEING DAMAGED, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
- CONTINUOUS ACCESS SHALL BE MAINTAINED TO THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND LOCAL REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING CONSTRUCTION FENCE, SIGNS, ETC. TO WARN AND KEEP UNAUTHORIZED PEOPLE OFF SITE FOR THE DURATION OF THE PROJECT.
- PRIOR TO DEMOLITION, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED PER THE GOVERNING AGENCIES GUIDELINES AND STANDARDS. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- SAWCUT LINE PROVIDED IS FOR REFERENCE ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXTENT OF THE SAWCUT THAT WILL BE REQUIRED AS WELL AS PAVEMENT REPAIRS TO INSTALL UTILITY TRENCHING. IF ANY DAMAGE OCCURS ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THAT WHICH IS NECESSARY TO COMPLETE THE INTENT OF THE PROPOSED IMPROVEMENTS. SAWCUT EXISTING PAVEMENT TO FULL DEPTH, USING CARE TO CUT NEAT, STRAIGHT LINES. CUT AT EXISTING JOINTS WHERE POSSIBLE.
- THE CONTRACTOR SHALL MAINTAIN A WELL-DRAINED SITE, FREE OF STANDING WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DRAINAGE MEASURES DURING CONSTRUCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO STUDY THE PLANS AND VISIT THE SITE TO DETERMINE THE ITEMS THAT MUST BE REMOVED TO COMPLY WITH THE SITE DEVELOPMENT PLANS. NO EXTRA FEE WILL BE PAID FOR THE REMOVAL OF ANY ITEM NOT LISTED THAT IS VISIBLE UPON A SITE VISIT. THE DEMOLITION PLAN IS INTENDED TO PRESENT THE SCOPE OF THE DEMOLITION, AND DOES NOT GUARANTEE THAT ALL ITEMS ARE ADDRESSED.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS AND CHECK ALL GOVERNING AUTHORITIES' SPECIFICATIONS FOR BUT NOT LIMITED TO, GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING THE REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON PLANS OR NOTED OTHERWISE.
- THE CONTRACTOR SHALL CREATE AND IMPLEMENT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT. THE PLAN MUST CONFORM TO THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT.
- ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.

### SITE NOTES

- ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
- ALL MATERIAL NOTED ON DRAWINGS WILL BE SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS TO COORDINATE ACCESS POINTS AND ELEVATIONS. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF DOORS, ENTRY RAMP, AND CANOPY.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS AND CHECK ALL GOVERNING AUTHORITIES' SPECIFICATIONS FOR BUT NOT LIMITED TO, GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING THE REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON PLANS OR NOTED OTHERWISE.
- THE CONTRACTOR SHALL CREATE AND IMPLEMENT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT. THE PLAN MUST CONFORM TO THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT.
- ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.
- ACCESSIBILITY STANDARDS SHALL BE IN ACCORDANCE WITH FEDERAL AND LOCAL REQUIREMENTS FOR HANDICAP ACCESSIBILITY, INCLUDING BUT NOT LIMITED TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES. ADA PARKING STALLS SHALL MEET ADA GRADE GUIDELINES. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES AT ACCESS POINTS, ACCESSIBLE ROUTES, AND EXISTING PARKING TO REMAIN TO DETERMINE COMPLIANCE WITH STANDARDS.
- ALL DISTURBED AREAS ARE TO RECEIVE 6" OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
- ALL DIMENSIONS AND RADII ARE TO THE EDGE OF PAVEMENT OR FACE OF BUILDING, AS APPLICABLE, UNLESS OTHERWISE NOTED.
- ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
- PROVIDE SIGNAGE AND STRIPING AS SHOWN. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE GOVERNING MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). ALL PAVEMENT MARKINGS SHALL BE YELLOW.
- REFER TO ARCHITECTURAL PLANS FOR PROPOSED BUILDING SIGNAGE.
- REFER TO MECHANICAL PLANS FOR EQUIPMENT LAYOUT.
- REFER TO ELECTRICAL PLANS FOR ELECTRICAL WORK.
- REFER TO GEOTECHNICAL ENGINEERING REPORT FOR SITE WORK PREPARATION/RECOMMENDATIONS AND PAVEMENT SECTIONS.
- REFER TO ORIGINAL SURVEY PROVIDED BY CESO INC, DATED 05/20/2026 .
- ALL LIGHT POLES TO BE LOCATED 3' FROM THE BACK OF CURB, AS MEASURED FROM THE FACE OF POLE FOUNDATION, UNLESS OTHERWISE DENOTED ON PLANS.

### GRADING NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- THE TOPOGRAPHIC SURVEY WAS PERFORMED BY A REGISTERED LAND SURVEYOR. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- EXISTING AND PROPOSED GRADE CONTOUR INTERVALS ARE SHOWN AT 1 FOOT INTERVALS.
- ALL SPOT ELEVATIONS REFER TO FINISHED PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
- ALL ADA ACCESSIBLE PARKING SPACED AND LOADING AREAS SHALL BE GRADED WITH A 2.0% MAXIMUM SLOPE IN ALL DIRECTIONS. ALL ADA ACCESSIBLE ROUTES SHALL BE GRADED WITH A 2.0% MAXIMUM CROSS SLOPE AND 5.0% MAXIMUM RUNNING SLOPE.
- MAINTAIN EXISTING DRAINAGE PATTERN THROUGHOUT THE SITE, EXCEPT WITHIN THE LIMITS OF DISTURBANCE (LOD).
- COORDINATE GRADES AT BUILDING ENTRIES WITH ARCHITECTURAL PLANS.
- EXISTING DRAINAGE STRUCTURES SHALL BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES ARE TO BE CLEANED TO REMOVE ALL SILT AND DEBRIS AFTER CONSTRUCTION IS COMPLETE.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO A CONDITION EQUAL TO OR BETTER THAN ITS CONDITION PRIOR TO DAMAGE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND WITHIN PAVED AREAS.
- ALL TOPSOIL MUST BE REMOVED BEFORE FILL MATERIAL IS PLACED.
- ALL WET, OR OTHERWISE UNSUITABLE SOILS MUST BE STABILIZED. THIS MAY BE ACCOMPLISHED BY DRYING, REMOVAL & REPLACEMENT, REMOVAL & DRYING & RECOMPACTION, OR SOIL TREATMENT (LIME/CEMENT) UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER.
- ALL UNSURFACED AREAS, DISTURBED BY GRADING, OPERATION SHALL RECEIVE 6" OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER AND SEED WITH LOW MAINTENANCE GRASS SEED MIX. CONTRACTOR SHALL SEED DISTURBED AREAS IN ACCORDANCE WITH SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. ALL EXPOSED SURFACE AREAS SHALL BE STABILIZED PER THE SWPPP AND LANDSCAPE REQUIREMENTS AS PART OF THIS PLAN SET.
- ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUDED TO ASSURE CONNECTION AT STRUCTURE IS SOIL TIGHT.
- ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
- STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

MATERIAL	TYPE	PIPE SPEC	JOINT SPEC	INSTALLATION	ACCEPTABLE AREAS OF USE
REINFORCED CONCRETE PIPE (RCP)	CLASS III, IV, V	ASTM C-76	ASTM C443	ASTM C1479	WITHIN R/W, COVER VARIES WITH PIPE CLASS
HIGH DENSITY POLY-ETHYLENE (HDPE)	SMOOTH-WALLED CORRUGATED ADS-N12 OR EQUAL	AASHTO M294 (TYPE S)	ASTM F477	ASTM D2321	ON SITE, 12" TO 60" DIA.
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321	ON SITE, 4" TO 10"

- ALL STORM SEWER STRUCTURE GRATES AND FRAMES WITHIN PAVEMENT SHALL BE HEAVY DUTY.
- ALL STORM DRAINAGE SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL COUNTY AND ICDC STANDARDS.
- ALL DOWNSPOUT DRAIN LINES OR ROOF LEADERS SHALL HAVE A 1.0% MINIMUM SLOPE, UNLESS OTHERWISE NOTED. CONNECT ALL DOWNSPOUTS AND ROOF LEADERS TO THE STORM SEWER SYSTEM. REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT AND ROOF LEADER LOCATIONS. PROVIDE POSITIVE DRAINAGE AND PAVEMENT REPAIR AS NEEDED.
- ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
- THE STORM SEWER GRADE WILL BE SUCH THAT A MINIMUM COVER IS MAINTAINED TO WITHSTAND AASHTO HS-25 LOADING ON THE PIPE. PROVIDE MINIMUM 2.0 FEET OF COVER FOR ALL STORM SEWERS UNLESS OTHERWISE NOTED.
- WHEN A SANITARY SEWER MAIN LIES ABOVE A STORM SEWER, OR WITHIN 18 INCHES BELOW, THE SANITARY SEWER WILL HAVE AN IMPERVIOUS ENCASEMENT OR BE CONSTRUCTED OF STRUCTURAL SEWER PIPE FOR A MINIMUM OF 10 FEET ON EACH SIDE OF WHERE THE STORM SEWER CROSSES.
- IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY SHALL BE REPAIRED AND/OR TIED INTO A STORM SEWER SYSTEM AS NEEDED TO MAINTAIN POSITIVE DRAINAGE.

### UTILITY NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE.
- THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF O.S.H.A. DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR O.S.H.A.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY REGULATIONS AND THE OWNER'S INSPECTION AUTHORITIES.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITY'S INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- WATER AND SANITARY UTILITIES SHALL HAVE TEN (10) FEET OF HORIZONTAL CLEARANCE WHEN PARALLEL OR 18" VERTICAL CLEARANCE WHEN CROSSING. ALL CLEARANCE DISTANCES SHALL BE MEASURED FROM OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SANITARY SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER LINE JOINTS.
- IF A WATER LINE PASSES UNDER THE SANITARY SEWER LINE, THE SEWER LINE SHOULD BE CONSTRUCTED OF A WATERTIGHT MATERIAL APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION AND SHALL EXTEND TEN (10) FEET ON BOTH SIDES OF THE CROSSING, AS MEASURED PERPENDICULAR TO THE WATER LINES. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.
- UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY REGULATIONS AND THE OWNER'S INSPECTION AUTHORITIES.
- UTILITY TRENCHES WITHIN PAVED AREAS TO BE BACKFILLED PER UTILITY TRENCH DETAIL PROVIDED WITHIN THE CONSTRUCTION DETAILS SHEET.
- ALL WATER LINE WORK SHALL BE PERFORMED IN ACCORDANCE WITH MERIDIAN TOWNSHIP CONSTRUCTION STANDARDS AND STATE REGULATIONS.
- INSTALL ALL WATER LINES WITH A MINIMUM COVER OF 4'-0".
- ON-SITE WATER LINE MATERIAL SHALL BE AS FOLLOWS:

MATERIAL	PRESSURE RATING	PIPE SPEC	FITTINGS	INSTALLATION	ACCEPTABLE AREAS OF USE
HIGH-DENSITY POLY-ETHYLENE (HDPE TUBING)	SDR 9 P.C. = 250 PSI	ASTM D2239 AWWA C901 ASTM F714	ASTM D3350 ASTM D3261	ASTM D2774	ON SITE, < 3" DIA.
COPPER 1"-3"	TYPE "K"	ASTM B88	AWWA C800	AWWA C800	DOMESTIC WATERLINES 1"-3"
PE 4710 POLY-ETHYLENE PLASTIC (IPS)	SDR 11 P.C. = 200 PSI	ASTM D3035 AWWA C901	ASTM D3350 ASTM D3261	ASTM D2774	ON SITE, 2" TO 3" DIA.
P.V.C. POLY VINYL CHLORIDE 4"- 8" C900	C900	AWWA C901 (RATED DR 14)	ASTM F-477 ASTM D3139	AWWA C900 C651	ON SITE, 4"-8" WATER LINES & FIRE LINES INSTALL W/ TRACER & TAPE #12 COPPER
DUCTILE IRON PIPE 4'-12"	CLASS 52 P.C. = 350PSI	AWWA C104, C110, C151, C500	AWWA C111	AWWA C600, C651	6" FIRE HYDRANT LEADS
PE 4710 POLY-ETHYLENE PLASTIC (DIPS)	SDR 9 P.C. = 250 PSI	ASTM D2239 ASTM F714 AWWA C906	ASTM D3350 ASTM D3261	ASTM D2774	ON SITE, 4" DIA. AND LARGER

- ON-SITE SANITARY SEWER LINE MATERIAL SHALL BE AS FOLLOWS:

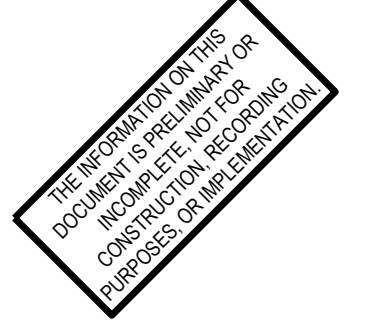
MATERIAL	PRESSURE RATING	PIPE SPEC	FITTINGS	INSTALLATION	ACCEPTABLE AREAS OF USE
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321 WITH TYPE 1 BEDDING	ON SITE, 6" TO 8" DIA., LESS THAN 8.5' OF COVER
POLY VINYL CHLORIDE (PVC)	SDR 26	ASTM 3034	ASTM D3212	ASTM 2321 WITH TYPE 1 BEDDING	ON SITE, 6" TO 8" DIA., GREATER THAN OR EQUAL TO 8.5' OF COVER

- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
- CLEAN OUTS AND CURB BOXES WITHIN THE PAVED AREAS MUST HAVE TRAFFIC LOADING FRAMES AND COVERS.



**CESO**  
WWW.CESOINC.COM

13060 S. US Highway 27, Suite D  
Dowell, MI 48802  
Phone: 517.622.3000 Fax: 888.208.4826



**SHEETZ**

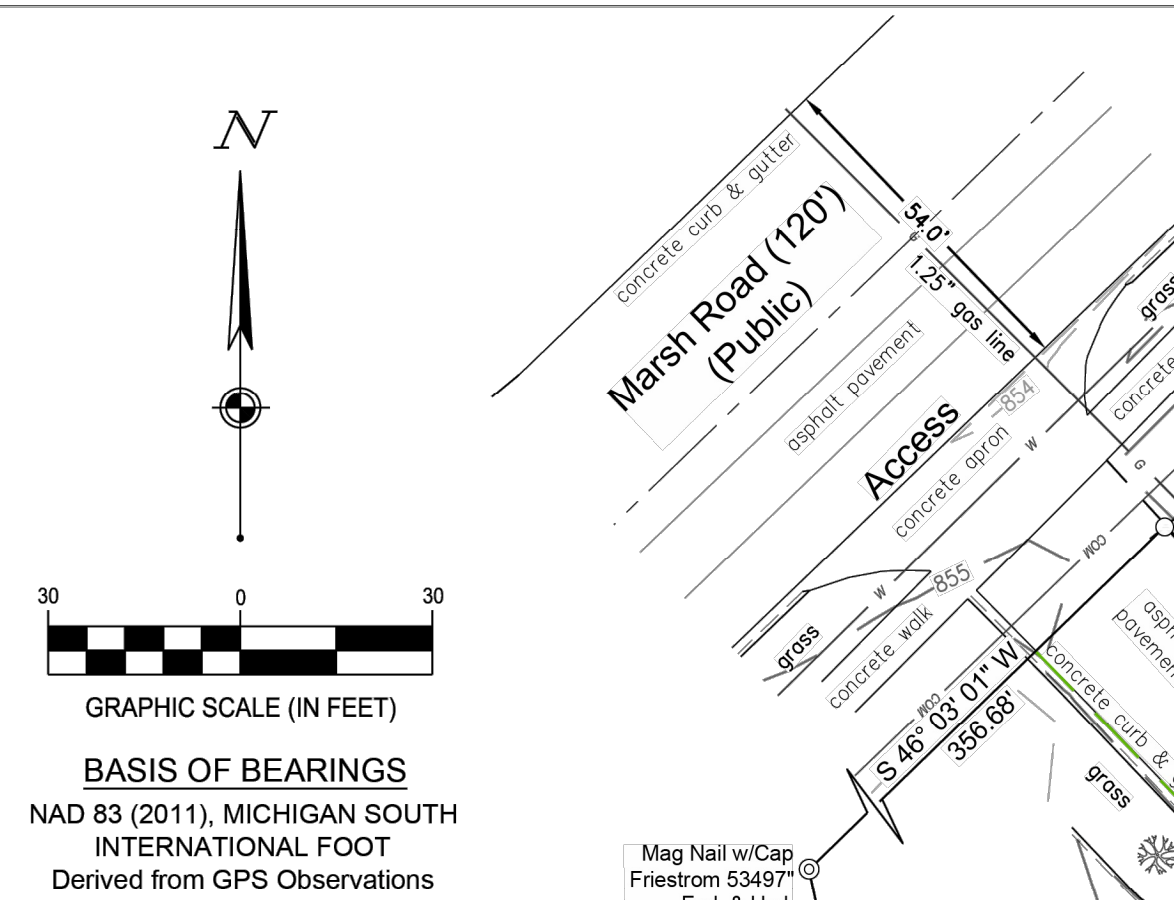
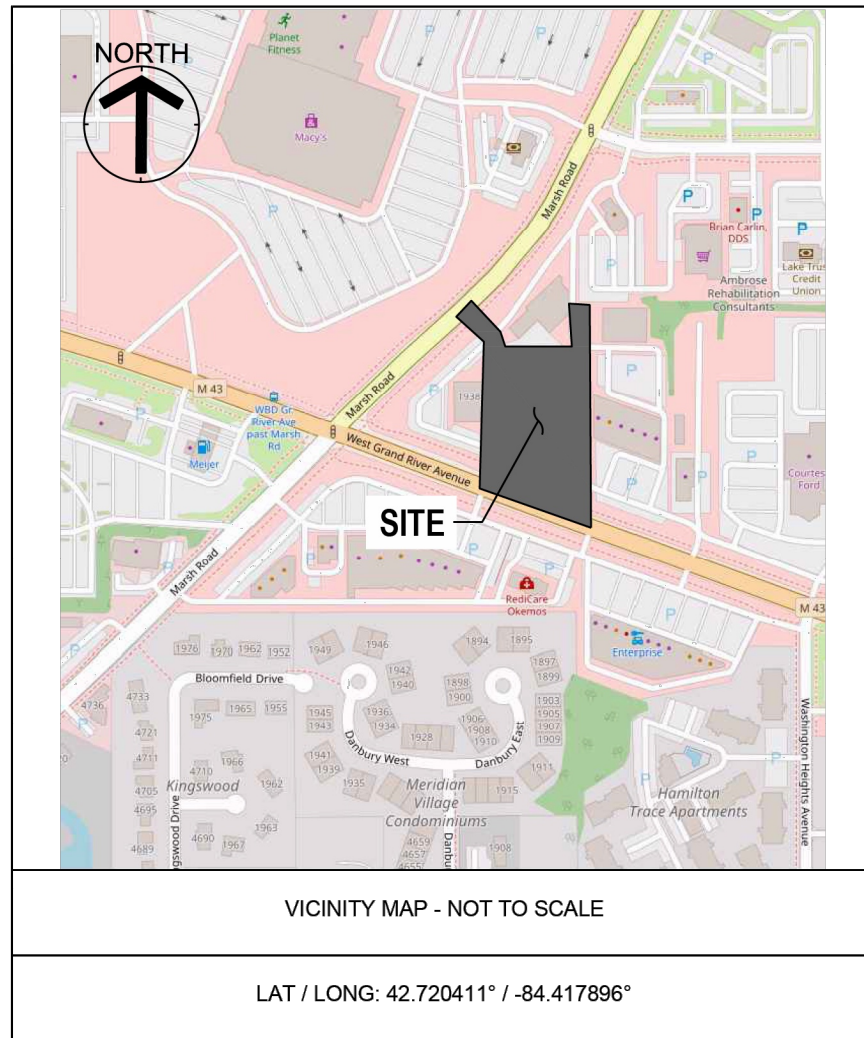
**MARSH & GRAND RIVER**  
1930 & 1878 W. GRAND RIVER AVE.  
OKEMOS, MI 48864

Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

Project Number:	768368
Scale:	AS SHOWN
Drawn By:	AAB
Checked By:	RAP
Date:	05/22/2026
Issue:	NOT FOR CONSTRUCTION

Drawing Title:  
**GENERAL NOTES**

**C1.2**



**SURVEY LEGEND**

- - 5/8" Iron Pin Set w/cap "Cottingim 4001071358" Fnd. (F) - Found
- - Monument Found as Described Usd. (U) - Used
- ⊕ - PK Nail/Mag Nail Found Meas. (M) - Measured
- Rec. (R) - Deed
- Calc. (C) - Calculated

**TOPOGRAPHIC LEGEND**

⊕ Light Pole	○ Water Valve
⊖ Electric Meter	○ Bollard
⊖ Electric Transformer	○ Rock
⊕ Gas Marker	⊕ Sign
○ Cleanout	○ Bush
○ Sanitary Manhole	○ Deciduous Tree
⊖ Curb Inlet	○ Pine Tree
⊖ Catch Basin	⊖ Stump
⊖ Catch Basin (Round)	⊖ Mailbox
##### Structure Number	○ Column
⬇ Downspout	⊖ Communication Box
⊕ Fire Hydrant	⊖ Communication Marker
⊖ Irrigation Valve	
G Gas Line (Per Markings & Plans)	
W Water Line (Per Markings & Plans)	
UGE Underground Electric (Per Markings & Plans)	
COM Underground Communications (Per Markings & Plans)	
OHL Overhead Utility Line (Per Field Obs.)	
SHM Storm Sewer (Per Field Obs.)	
SAN Sanitary Sewer (Per Field Obs.)	

**BENCHMARK**

DATUM: NAVD 88

BM "A": TOP NUT OF HYDRANT LOCATED APPROXIMATELY 62' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 100' SOUTHEAST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 863.27

BM "B": "X" SCRIBED IN CURB LOCATED APPROXIMATELY 36' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 130' SOUTHEAST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 861.84

BM "C": MAG NAIL SET IN CONCRETE BASE OF LIGHT POLE LOCATED APPROXIMATELY 180' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 75' WEST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 865.41

**STORM STRUCTURES**

5113 - CATCH BASIN RIM = 856.11' FL 12" RCP E = 850.4' FL 12" RCP NW = 850.3'	5295 - CATCH BASIN RIM = 856.89' FL 12" RCP S = 852.2' FL 12" RCP E = 851.9' FL 12" RCP N = 851.9'	5380 - CATCH BASIN RIM = 858.95' FL NO VISIBLE FL (FULL OF WATER & DEBRIS)	5429 - CATCH BASIN RIM = 858.11' FL 12" RCP N = 852.9'	5529 - CATCH BASIN RIM = 853.91' FL 24" RCP NE = 849.7' FL 12" RCP SE = 847.6' FL 24" RCP SW = 847.3'	9291 - CURB INLET RIM = 860.37' FL NO VISIBLE FL (FULL OF WATER)	9327 - CURB INLET RIM = 862.92' FL NO VISIBLE FL (FULL OF WATER & DEBRIS)
9371 - CURB INLET RIM = 860.07' FL NO VISIBLE FL (FULL OF WATER & DEBRIS)	9499 - CATCH BASIN RIM = 859.43' FL 12" RCP NW & SE = 856.6' FL 12" RCP SE = 856.0'	9626 - CATCH BASIN RIM = 857.91' FL NO VISIBLE FL (FULL OF WATER & DEBRIS)	9854 - CATCH BASIN RIM = 857.63' FL NO VISIBLE FL (FULL OF WATER & DEBRIS)	10124 - CATCH BASIN RIM = 854.76' FL 12" RCP NE = 850.7' FL 12" RCP NW = 850.6' FL 12" RCP S = 850.5'	10133 - CATCH BASIN RIM = 854.41' FL 12" RCP NE = 851.5' FL 12" RCP S = 850.9'	

**SANITARY STRUCTURES**

5016 - SANITARY MANHOLE RIM = 857.00' FL 6" PVC NE = 850.6' FL 18" RCP NW & SE = 843.5'	9307 - SANITARY MANHOLE RIM = 862.61' FL 18" RCP SE = 845.9' FL 18" RCP NW = 846.9'	10255 - SANITARY MANHOLE RIM = 859.02' FL 6" PVC N = 853.8' FL 18" RCP SE & NW = 845.5'
PPN: 33-02-02-22-153-006 Ledebuhr Family LTD Partnership & Betty Eiler, LLC		

**SIGNIFICANT OBSERVATIONS:**

- Curb crosses onto surveyed property by up to 2.8'
- Building crosses onto surveyed property by up to 3.5' but falls within building easement (Item 17 Inst. No. 2026-002287).
- Asphalt parking & access across property described in title commitment.
- Column & roof over hang cross onto survey property by up to 3.0'

**SCHEDULE C LEGAL DESCRIPTION**

Land in the Township of Meridian, Ingham County, MI, described as follows:

**PARCEL 1:** Commencing at the West 1/4 corner of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan; thence South 89 degrees 07 minutes 22 seconds East 115.5 feet to a point on the center line of Marsh Road; thence North 45 degrees 57 minutes 48 seconds East along said center line 726.05 feet to a point on the center line of Grand River Avenue; thence South 69 degrees 28 minutes 42 seconds East along said center line of Grand River Avenue 521.37 feet to the Point of Beginning; thence North 00 degrees 59 minutes 04 seconds East 321.66 feet; thence South 89 degrees 00 minutes 56 seconds East 140 feet; thence South 00 degrees 43 minutes 50 seconds West 371.92 feet to a point on the center line of said Grand River Avenue; thence North 69 degrees 28 minutes 42 seconds West along said center line 150.29 feet to the Point of Beginning.

**PARCEL 2:** Commencing at the West 1/4 corner of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan; thence South 89 degrees 07 minutes 22 seconds East 115.5 feet to a point on the center line of Marsh Road; thence North 45 degrees 57 minutes 48 seconds East along said center line 726.05 feet to a point on the center line of Grand River Avenue; thence South 69 degrees 28 minutes 42 seconds East along said center line of Grand River Avenue 671.66 feet to the Point of Beginning; thence North 00 degrees 43 minutes 50 seconds East 371.92 feet; thence South 89 degrees 00 minutes 56 seconds East 58.38 feet; thence South 00 degrees 43 minutes 50 seconds West 392.67 feet to a point on the center line of Grand River Avenue; thence North 69 degrees 28 minutes 42 seconds West along said center line 62.05 feet to the Point of Beginning.

**PARCEL 3:** Lot 1, SUPERVISOR'S PLAT OF HERRE HILL, according to the Plat thereof, as recorded in Liber 12 of Plats, Page 46, Ingham County Records.

**PARCEL 4:** Easement for ingress and egress, as created, limited, and defined in that certain Declaration of Driveway Easement, recorded January 26, 2026 in Instrument No. 2026-001885, Ingham County Records

**SCHEDULE B - SECTION II**

- Items 1-6 & 20-25 are not a matter of survey
- Right of Way in favor of Consumers Power Company, a corporation and the Covenants, Conditions and Restrictions contained in instrument recorded in Liber 17MR, Page 601. (Affects PARCEL 3)  
-NOT LOCATED ON SURVEYED PROPERTY
  - Release of Right of Way in favor of the State Highway Commissioner of the State of Michigan and the Covenants, Conditions and Restrictions contained in instrument recorded in Liber 19MR, Page 534. (Affects PARCEL 1 AND PARCEL 2)  
-FALLS WITHIN CURRENT RIGHT OF WAY OF GRAND RIVER AVE.
  - Right of Way in favor of Michigan-Toledo Pipeline Company and the Covenants, Conditions and Restrictions contained in instrument recorded in Liber 23MR, Page 420 and as affected by Assignment of Rights-of-Way recorded in Liber 49MR, Page 122; as amended by Pipeline Right of Way recorded in Liber 977, Page 878, which was re-recorded in Liber 978, Page 301 and further affected by Receipt for Additional Pipeline Consideration recorded in Liber 2847, Page 1203. (Affects PARCEL 1 AND PARCEL 2)  
-EASEMENT IS BLANKET IN NATURE AND COVERS PARCELS 1 & 2
  - Release of Right of Way in favor of the County Drain Commissioner of the County of Ingham and the Covenants, Conditions and Restrictions contained in instrument recorded in Liber 70MR, Page 560. (Affects PARCEL 1 AND PARCEL 2)  
-ILLEGIBLE DOCUMENT, LOCATION CANNOT BE DETERMINED FROM THE RECORD DOCUMENT
  - Grant of Easement in favor of Charter Township of Meridian, a municipal corporation and the Covenants, Conditions and Restrictions contained in instrument recorded in Liber 999, Page 828. (Affects PARCEL 1 AND PARCEL 2)  
-EASEMENT IS ON PARCELS 1 & 2 AS SHOWN HEREON
  - Grant of Easement in favor of Charter Township of Meridian, a municipal corporation and the Covenants, Conditions and Restrictions contained in instrument recorded in Liber 999, Page 829. (Affects PARCEL 1 AND PARCEL 2)  
-EASEMENT IS ON PARCELS 1 & 2 AS SHOWN HEREON
  - The terms, provisions and easement(s) contained in the document entitled Drainage Facilities Maintenance Agreement recorded November 30, 2006 as Liber 3245, Page 1003. (Affects PARCEL 1)  
NOTE: Said Drainage Facilities Maintenance Agreement contains error in legal description in that third call should read South 69 degrees 28 minutes 47 seconds East 521.37 feet.  
-BLANKET ON PARCEL 1
  - Grant of Easement in favor of New Par d/b/a Verizon Wireless, a Delaware partnership and the Covenants, Conditions and Restrictions contained in instrument recorded in Instrument No. 2016- 032349. (Affects PARCEL 1)  
-LOCATION IS SHOWN
  - The terms, provisions and easement(s) contained in the document entitled Declaration of Driveway Easement recorded January 26, 2026 as Instrument No. 2026-001885. (Affects ALL PARCELS)  
-LOCATION IS SHOWN
  - The terms, provisions and easement(s) contained in the document entitled Easement recorded January 30, 2026 as Instrument No. 2026-002285. (Affects PARCEL 3)  
-LOCATED ADJACENT TO THE SURVEYED PROPERTY
  - The terms, provisions and easement(s) contained in the document entitled Encroachment Easement Agreement recorded January 30, 2026 as Instrument No. 2026-002287. (Affects PARCEL 3)  
-LOCATION IS SHOWN
  - The terms, provisions and easement(s) contained in the document entitled Access and Turnaround Easement Agreement recorded January 30, 2026 as Instrument No. 2026-002288. (Affects PARCEL 3)  
-LOCATION IS SHOWN
  - Easement(s), Restrictions and/or Setback Lines, if any, as disclosed by the recorded plat. (Affects PARCEL 3)  
-PARCEL 3 IS WITHIN PLATTED AREA, NO EASEMENTS TO PLOT
  - The interest of New Par d/b/a Verizon Wireless, a Delaware partnership Lessee, and the terms, conditions and provisions of Lease, as disclosed by the Grant of Easement recorded September 08, 2016 in Instrument No. 2016-032349. (Affects PARCEL 1)  
-LOCATION IS SHOWN
  - Matters referenced by survey recorded in Liber 2, Page 1128.  
-LOCATION IS SHOWN

**SURVEYOR'S CERTIFICATION:**

To: (i) First American Title Insurance Company National Commercial Services  
(ii) Sheetz, Inc., a Pennsylvania corporation

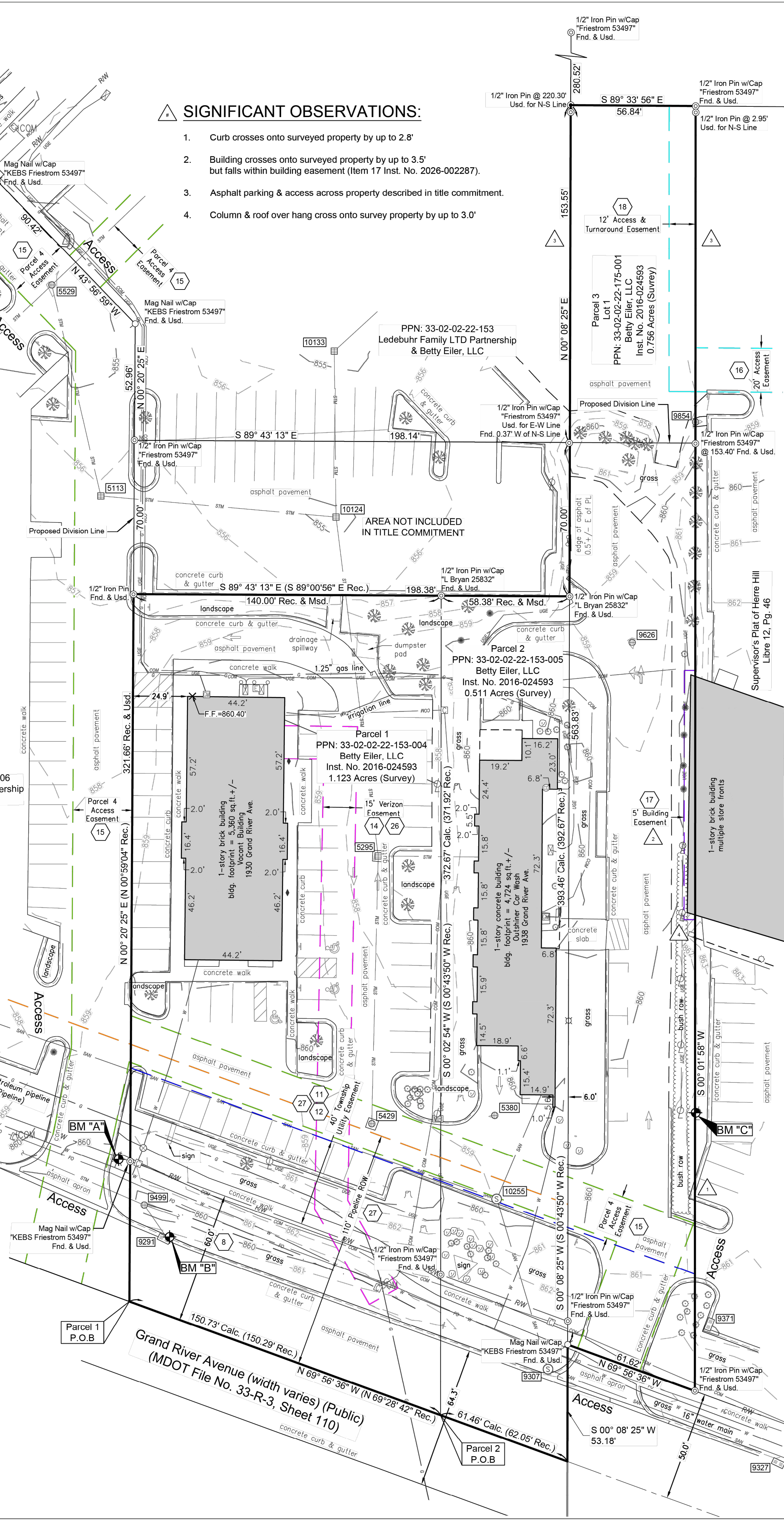
This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 5, 6(a), 7(a), 7(b)(1), 7(c), 8, 9, 11(a), 13, 14, 16, & 17 of Table A thereof. The fieldwork was completed on February 18, 2026. Date of Map May 20, 2026

Joshua R. Cottingim  
Michigan PS No. 4001071358  
joshua.cottingim@cesoinc.com  
3601 Rigby Road Suite 300  
Miamisburg, Ohio 45342  
(937) 435-8584

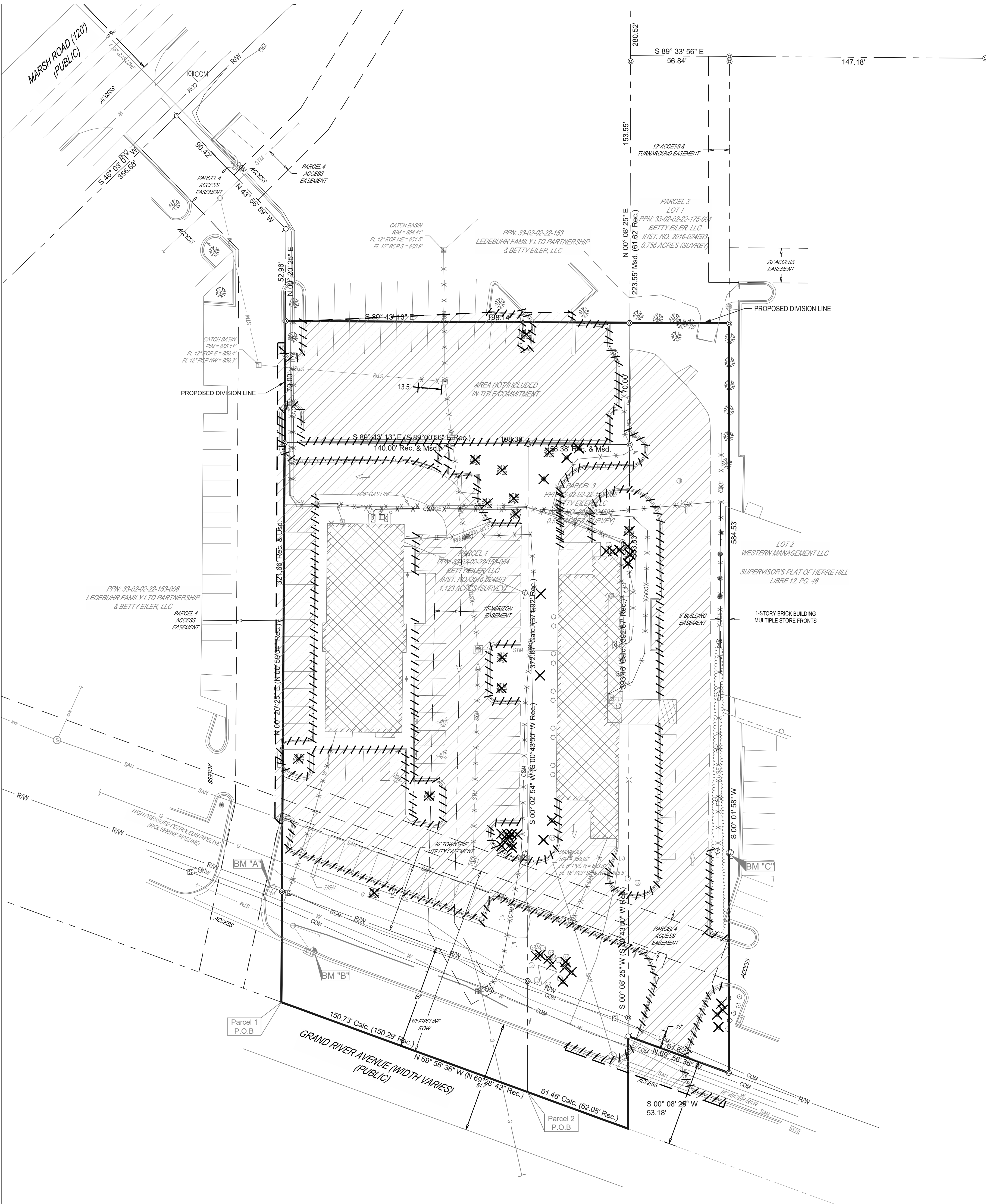
Date

**SURVEYOR NOTES:**


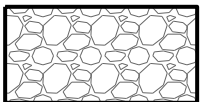
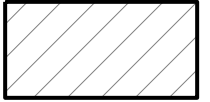






- This survey does not constitute a title search by the surveyor. All information regarding record easements, and other documents that might affect the quality of title to the parcel shown hereon were obtained through a certified title commitment conducted by First American Title Insurance Company National Commercial Service, Commitment Number NCS-1302780-PITT and bearing an effective date of March 31, 2026 at 7:30 a.m.
- Direct access to the subject parcel is available via Grand River Avenue, Marsh Road, & adjoining parking lots via Schedule C Parcel 4 (Schedule B Part II Item 15 & 16).
- No roadway improvement plans were disclosed to CESO during the survey.
- The utilities shown are located from field survey information, MISS DIG 811 Ticket #2026041502181-000, #2026041501973-000, #2026041501998-000, #2026041502006-000, #2026041502027-000, #2026041502113-000, #2026041502141-000, Underground Detective Utility Locate Scan / Safe Site Utility Services LLC, 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.  
  
Utilities were marked by the 3rd party utility locating service, Underground Detective Utility Locate Scan / Safe Site Utility Services LLC Project number 00231875.
- Parcel is located within Zone "X" (Area of Minimal Flood Hazard) as indicated by the Flood Insurance Rate Map (FIRM) Map Number 2606SC0156d, effective date: 8/16/2011 published by the Federal Emergency Management Agency.
- There was no observed evidence of current earth moving work, building construction or building additions at the time of this 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.
- There are 3 handicap and 53 regular parking spots on the surveyed property.
- The nearest intersecting street is Marsh Road located approximately 525 feet to the northwest.
- No zoning report was provided at the time of this survey.



C:\DACC\Drawings\CES03\Sheetz-Meridian\_Twp\_MI\_(Marsh)\Project Files\CES03-CIVIL\PLAN\CONSTRUCTION\768368\_C20\_DEMO.dwg - 5/22/2026 - Aaron Bumgarner



**DEMOLITION LEGEND**

- EXISTING**  
REFER TO C1.0 FOR EXISTING FEATURES LEGEND
- PROPOSED**
-  REMOVE EXISTING BUILDING
  -  REMOVE EXISTING GRAVEL PAVEMENT
  -  REMOVE EXISTING ASPHALT PAVEMENT (OR AS NOTED ON THE PLANS)
  -  SAWCUT LINE
  -  UTILITY LINE TO BE REMOVED / RELOCATED
  -  REMOVE EXISTING CURB & GUTTER
  -  REMOVE EXISTING FENCE
  -  REMOVE AND DISPOSE OF EXISTING TREE
  -  PROTECT EXISTING TREE TO REMAIN



13060 S. US Highway 27, Suite D  
Dowen, MI 48820  
Phone: 517.622.3000 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY AND CONSTRUCTION SHOULD BE ACCORDING TO PERMITS AND RECORDS OF THE JURISDICTION.



**SHEETZ**

**MARSH & GRAND RIVER**  
1930 & 1878 W GRAND RIVER AVE.  
OKEMOS, MI 48864

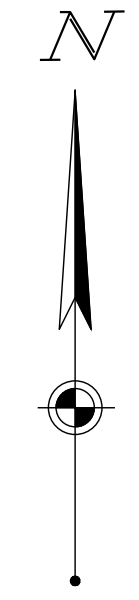
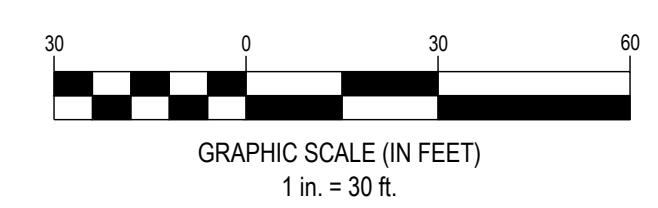
Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

Project Number: 768368  
Scale: AS SHOWN  
Drawn By: AAB  
Checked By: RAP  
Date: 05/22/2026  
Issue: NOT FOR CONSTRUCTION

Drawing Title:  
**EX. CONDITIONS & DEMOLITION PLAN**

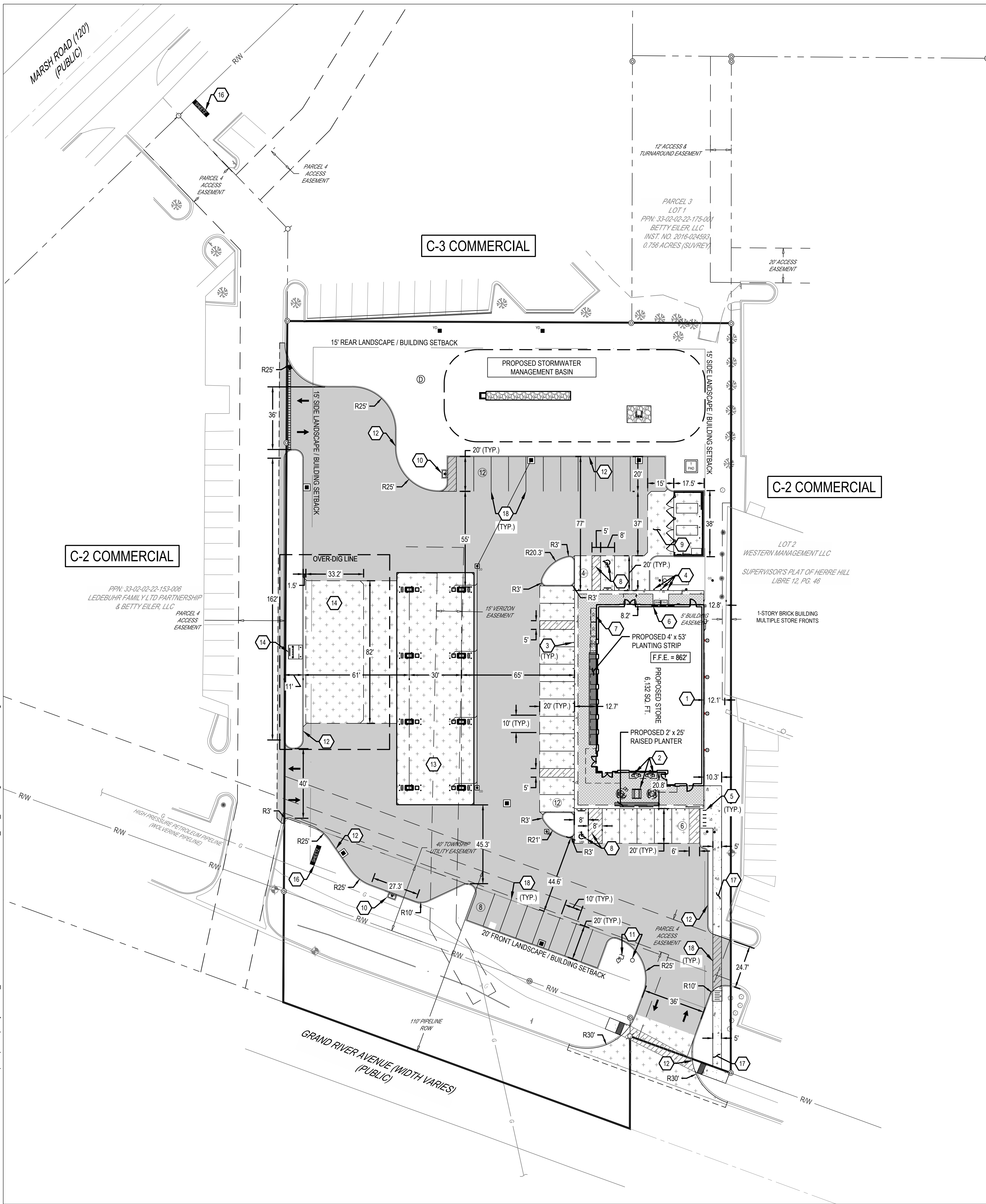
**C2.0**

BENCHMARK		DATUM
		NAVD 88
BM "A":	TOP NUT OF HYDRANT LOCATED APPROXIMATELY 65' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 500' SOUTHEAST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 863.27'	
BM "B":	"X" SCRIBED IN CURB LOCATED APPROXIMATELY 30' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 530' SOUTHEAST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 881.04'	
BM "C":	MAG NAIL SET IN CONCRETE BASE OF LIGHT POLE LOCATED APPROXIMATELY 180' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 735' WEST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 865.41'	



SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-492-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

C:\DCC\Drawings\CESO\Sheetz-Meridian\_Twp\_MI\_(Marsh)\Project Files\CESO03-CIVIL\PLAN\CONSTRUCTION\768368\_C30\_SITE.dwg - 5/22/2026 - Aaron Bungamer



**REQUIRED PARKING COUNT:**  
 GASOLINE SERVICE STATIONS: 1 FOR EACH BAY AND 1 FOR EACH EMPLOYEE ON THE LARGEST SHIFT = 18 SPACES  
 DRIVE-IN & SELF SERVICE: 1 FOR EVERY 3 PATRON SEATS AND 1 FOR EACH EMPLOYEE ON DUTY DURING THE HIGHEST STAFFED SHIFT = 14 SPACES

**TOTAL REQUIRED PARKING COUNT = 32 SPACES**  
**PROPOSED PARKING COUNT = 42 TOTAL SPACES (2 ADA)**

**GENERAL NOTES:**

1. ALL PAVEMENT MARKINGS SHALL BE YELLOW.

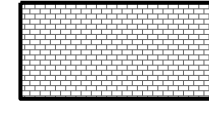

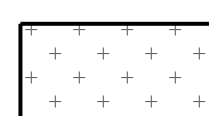
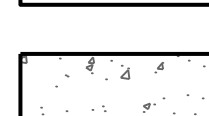

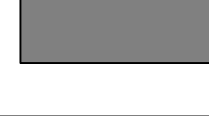
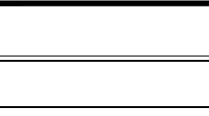
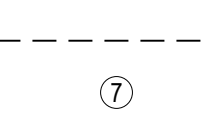


**CODED NOTES:**

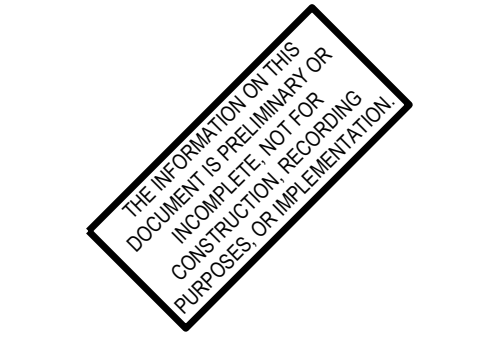
1. PROPOSED 6,132 SF STORE. REFER TO ARCHITECTURAL PLANS.
2. PROPOSED PATIO SEATING. REFER TO ARCHITECTURAL PLANS.
3. PROPOSED 4' X 4' STOREFRONT BUMPER POST.
4. PROPOSED 6" BOLLARD.
5. PROPOSED BIKE RACK.
6. PROPOSED PROPANE LOCKER.
7. PROPOSED ICE MERCHANDISER LOCATION.
8. CONTRACTOR TO CONSTRUCT ADA PARKING SPACE ACCORDING TO ALL LOCAL, STATE AND FEDERAL REGULATIONS.
9. PROPOSED DUMPSTER ENCLOSURE AND PAD.
10. PROPOSED AIR MACHINE.
11. PROPOSED FLAG POLE AND SPOTLIGHT.
12. PROPOSED 6" CONCRETE CURB.
13. PROPOSED EIGHT (8) DISPENSER FUEL CANOPY. REFER TO ARCHITECTURAL PLANS.
14. PROPOSED UNDERGROUND FUEL TANK PAD AND VENT PAD. SEE PETROLEUM PLANS FOR VENT PAD DETAIL.
15. EMERGENCY STOP BUTTON FOR GASOLINE DISPENSERS.
16. PROPOSED SHEETZ SIGN. SEE SIGNAGE PLAN.
17. PROPOSED SIDEWALK.
18. PROPOSED PAVEMENT MARKING. ALL PAVEMENT MARKINGS SHOULD BE YELLOW.

**SITE LEGEND**

**EXISTING**  
 REFER TO C1.0 FOR EXISTING FEATURES LEGEND

**PROPOSED**

-  PROPOSED BRICK PAVERS (REFER TO ARCHITECTURAL PLANS)
-  PROPOSED ASPHALT PAVEMENT
-  PROPOSED CONCRETE PAVEMENT
-  PROPOSED SIDEWALK
-  PROPOSED PLANTERS
-  BUILDING
-  CONCRETE CURB
-  EDGE OF PAVEMENT / WALK
-  PAVEMENT TRANSITION
-  PARKING SPACE COUNT SIGN



**SHEETZ**

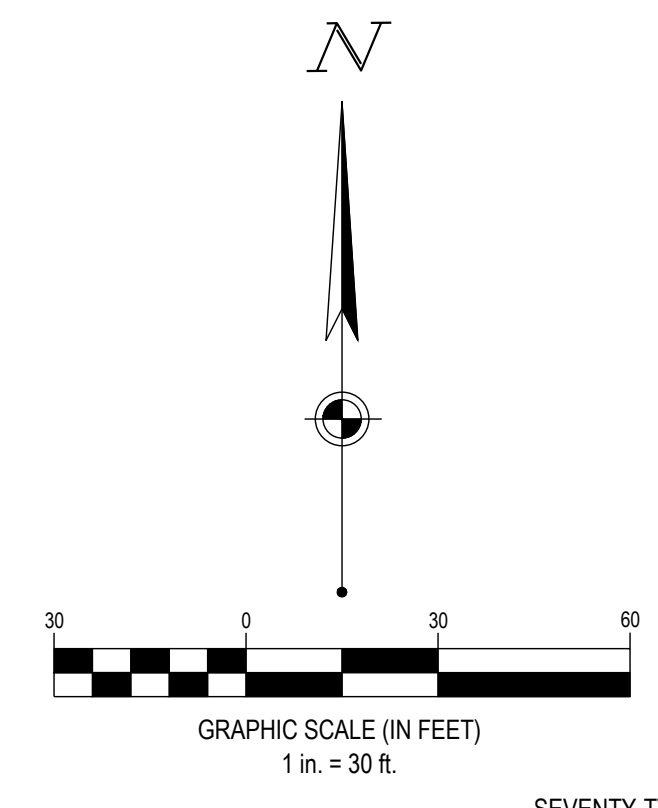
**MARSH & GRAND RIVER**  
 1930 & 1878 W. GRAND RIVER AVE.  
 OKEMOS, MI 48864

Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

Project Number: 768368  
 Scale: AS SHOWN  
 Drawn By: AAB  
 Checked By: RAP  
 Date: 05/22/2026  
 Issue: NOT FOR CONSTRUCTION

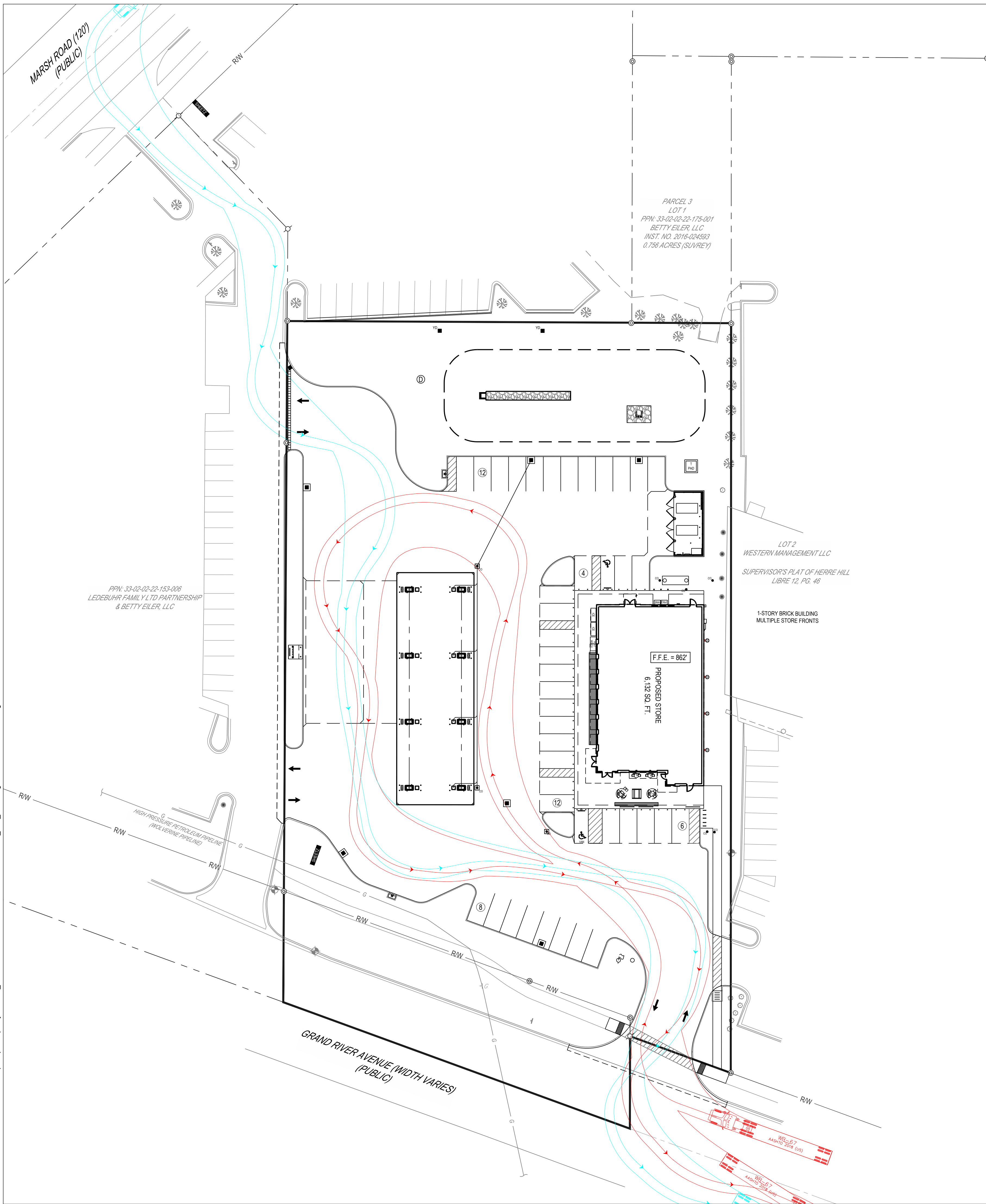
Drawing Title:  
**SITE PLAN**

**C3.0**



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

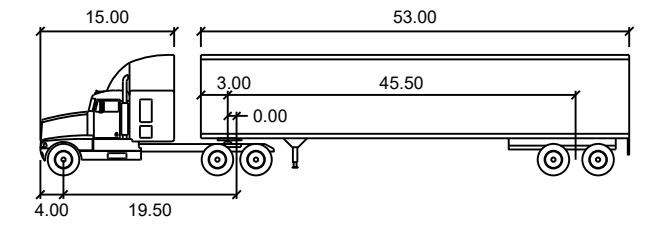
C:\D:\ACC\ces\ces\Sheetz-Meridian\_Twp\_MI\_(Marsh)\Project Files\_CES03\CIVIL\PLAN\CONSTRUCTION\768368\_C30\_SITE.dwg - 5/22/2026 - Aaron Bungamer



REQUIRED PARKING COUNT:  
 GASOLINE SERVICE STATIONS; 1 FOR EACH BAY AND 1 FOR EACH  
 EMPLOYEE ON THE LARGEST SHIFT = 18 SPACES  
 DRIVE-IN & SELF SERVICE; 1 FOR EVERY 3 PATRON SEATS AND 1 FOR EACH  
 EMPLOYEE ON DUTY DURING THE HIGHEST STAFFED SHIFT = 14 SPACES  
 TOTAL REQUIRED PARKING COUNT = 32 SPACES  
 PROPOSED PARKING COUNT = 42 TOTAL SPACES (2 ADA)

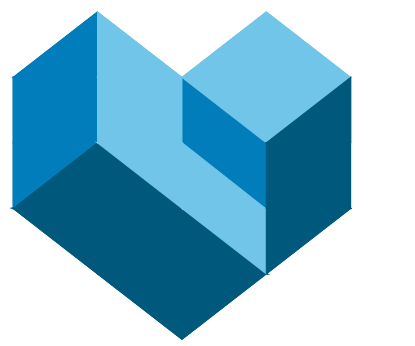
**GENERAL NOTES:**

- ALL PAVEMENT MARKINGS SHALL BE YELLOW.



WB-67

	feet		
Tractor Width	: 8.00	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 28.4
Tractor Track	: 8.00	Articulating Angle	: 75.0
Trailer Track	: 8.50		



**CESO**  
 WWW.CESOINC.COM

13060 S. US Highway 27, Suite D  
 Owego, MI 48867  
 Phone: 517.622.3000 Fax: 888.208.4826

THE INFORMATION ON THIS  
 DOCUMENT IS PRELIMINARY OR  
 INCOMPLETE. DO NOT CONSIDER  
 THIS DOCUMENT FOR RECORDING  
 PURPOSES OR RELEVANT DATA.



**SHEETZ**

**MARSH & GRAND RIVER**  
 1930 & 1878 W. GRAND RIVER AVE.  
 OKEMOS, MI 48864

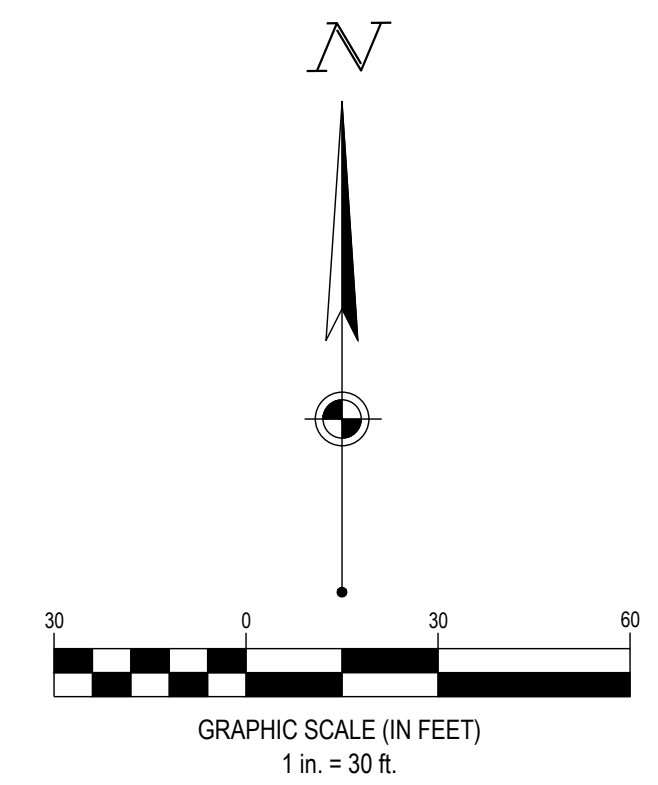
Revisions / Submissions

ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

Project Number: 768368  
 Scale: AS SHOWN  
 Drawn By: AAB  
 Checked By: RAP  
 Date: 05/22/2026  
 Issue: NOT FOR CONSTRUCTION

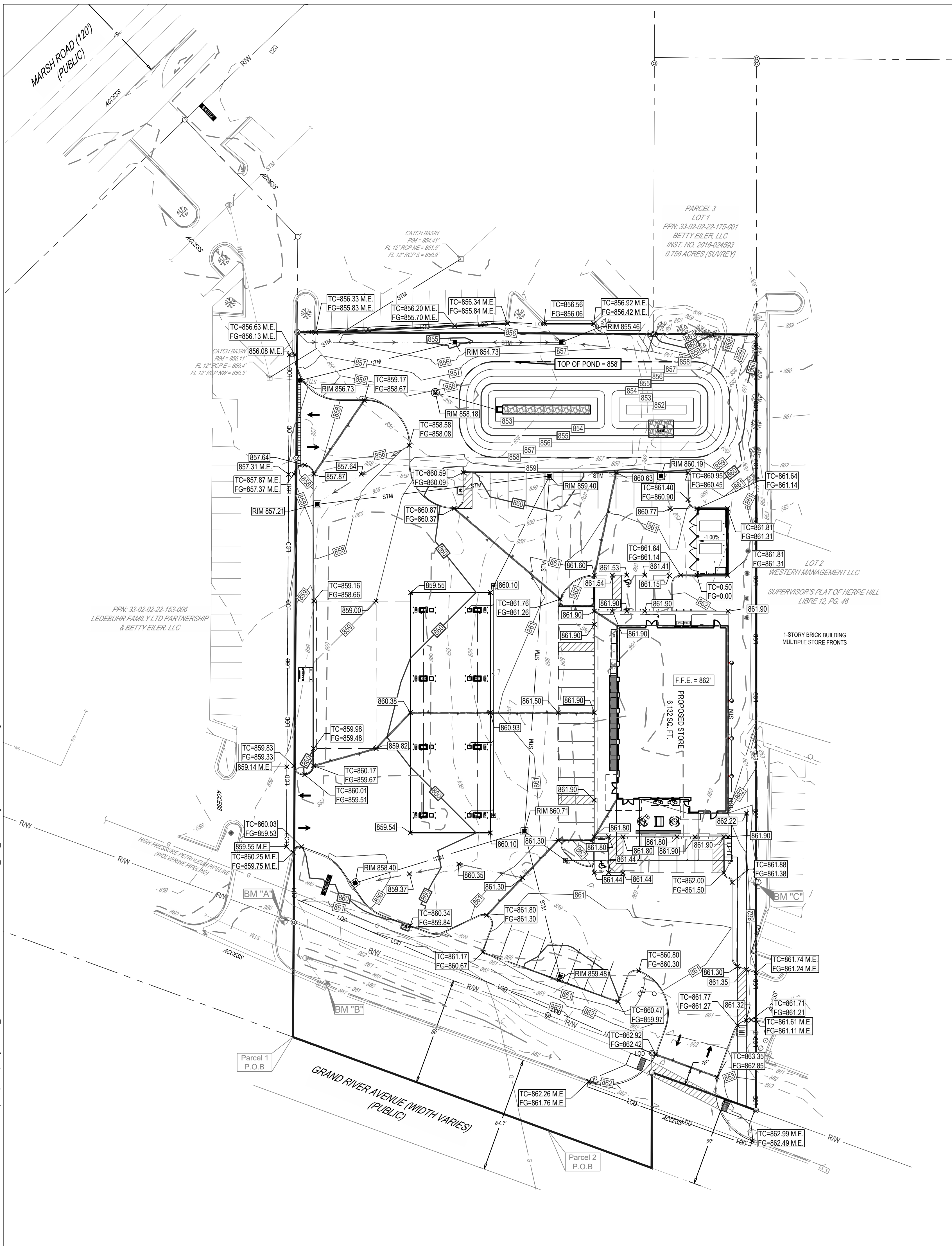
Drawing Title:  
**AUTOTURN PLAN**

**C3.1**



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:\DCC\03-Civil\Projects\Meridian\_Twp\_MI\_(Marsh)\Project Files\CESO03-CIVIL\PLAN\CONSTRUCTION\768368\_C40\_GRAD.dwg - 5/22/2026 - Aaron Bumpgarner



**GRADING LEGEND**

- EXISTING**
- 100 --- MAJOR CONTOUR
  - 102 --- MINOR CONTOUR
  - REFER TO C1.0 FOR EXISTING FEATURES LEGEND
- PROPOSED**
- BUILDING
  - - - PAVEMENT TRANSITION
  - 951 --- MAJOR CONTOUR
  - 952 --- MINOR CONTOUR
  - GRADE BREAK
  - SWALE LINE
  - CATCH BASIN
  - ⊙ STORM SEWER MANHOLE
  - CLEANOUT
  - TRENCH DRAIN
  - DS DOWNSPOUT
  - XXX.XX FINISHED GRADE ELEVATION
  - RIM=XXX.XX RIM ELEVATION
  - TC=XXX.XX  
FG=XXX.XX TOP OF CURB ELEVATION  
FINISHED GRADE ELEVATION
  - M.E. MATCH EXISTING ELEVATION



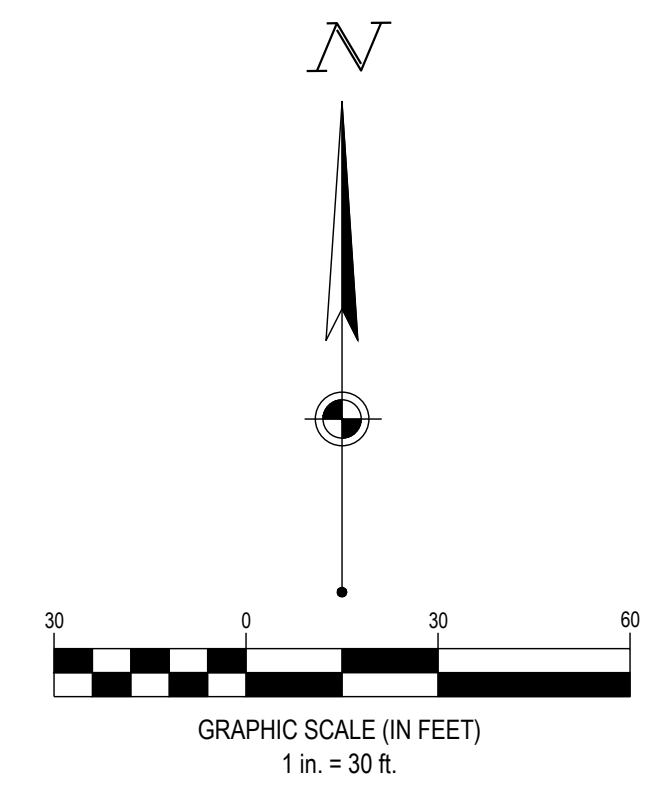
THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE. NOT FOR CONSTRUCTION OR FOR INFORMATION.



**SHEETZ**

**MARSH & GRAND RIVER**  
1930 & 1878 W. GRAND RIVER AVE.  
OKEMOS, MI 48864

Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026



**BENCHMARK** DATUM: NAVD 88

BM "A":	TOP NUT OF HYDRANT LOCATED APPROXIMATELY 65' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 500' SOUTHEAST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 863.27
BM "B":	"X" SCRIBED IN CURB LOCATED APPROXIMATELY 30' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 530' SOUTHEAST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 861.04
BM "C":	MAG NAIL SET IN CONCRETE BASE OF LIGHT POLE LOCATED APPROXIMATELY 180' NORTH OF THE CENTERLINE OF GRAND RIVER AVE. AND APPROXIMATELY 735' WEST OF THE CENTERLINE INTERSECTION OF GRAND RIVER AVE. & MARSH RD. ELEVATION = 865.41



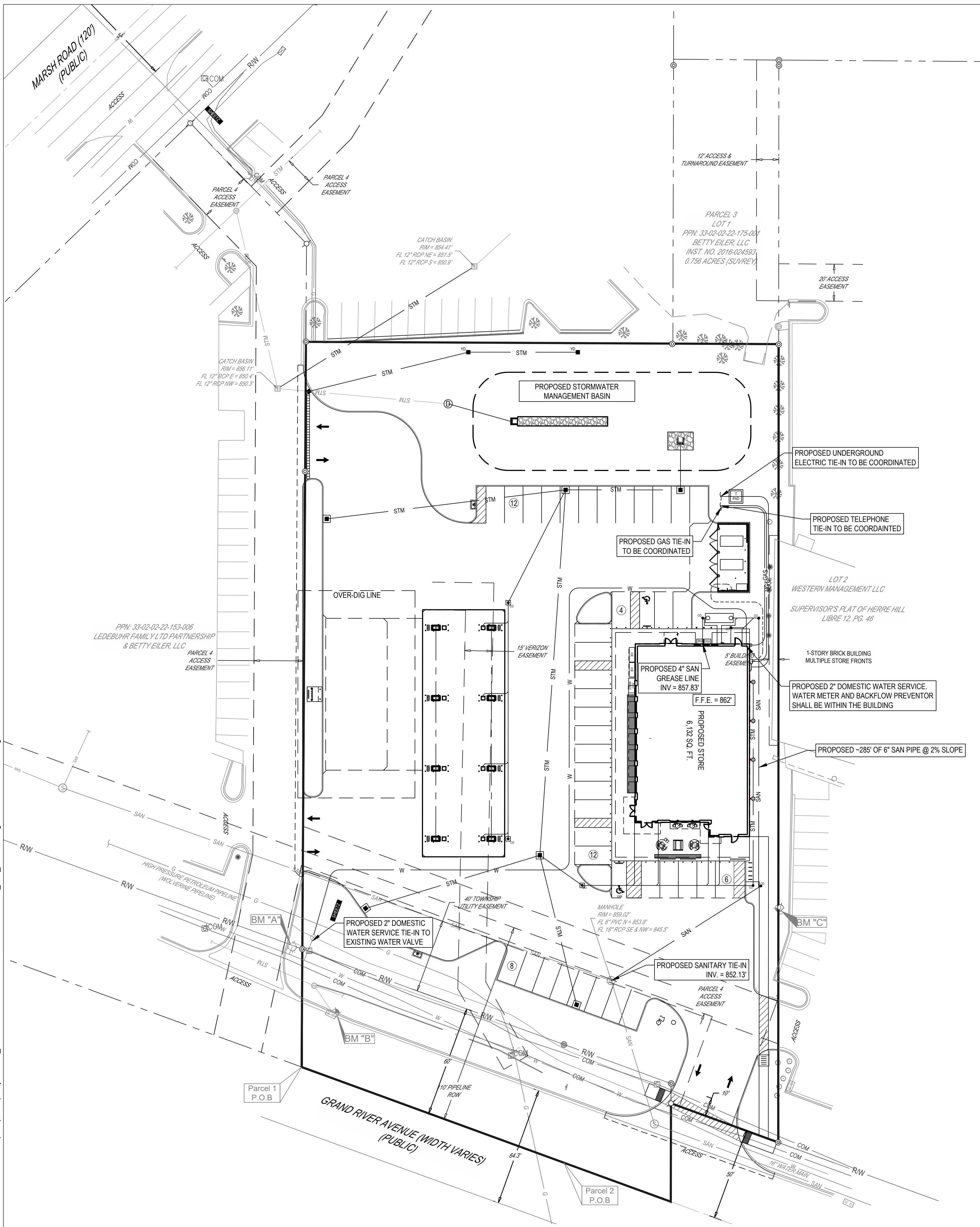
SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-482-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION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

Project Number: 768368  
Scale: AS SHOWN  
Drawn By: AAB  
Checked By: RAP  
Date: 05/22/2026  
Issue: NOT FOR CONSTRUCTION

Drawing Title:  
**GRADING PLAN**

**C4.0**

C:\D:\ACC\Drawings\CES03\Sheetz-Meridian\_Twp\_MI (Marsh)\Project Files\CES03\CIVIL\PLAN\CONSTRUCTION\768368\_C50\_UTILITY.dwg - 5/22/2026 - Aaron Bungamer



**UTILITY LEGEND**

EXISTING	
REFER TO C1.0 FOR EXISTING FEATURES LEGEND	
PROPOSED	
[Symbol]	BUILDING
[Symbol]	STORM SEWER LINE
[Symbol]	STORM DOWNSPOUT LINE
[Symbol]	SANITARY SEWER LINE
[Symbol]	DOMESTIC WATER LINE
[Symbol]	IRRIGATION SLEEVES
[Symbol]	GAS SERVICE LINE
[Symbol]	UNDERGROUND ELECTRIC LINE
[Symbol]	UNDERGROUND TELEPHONE LINE
[Symbol]	CATCH BASIN
[Symbol]	TRENCH DRAIN
[Symbol]	AREA DRAIN
[Symbol]	STORM SEWER MANHOLE
[Symbol]	CLEANOUT
[Symbol]	ELECTRICAL TRANSFORMER PAD
[Symbol]	GAS METER

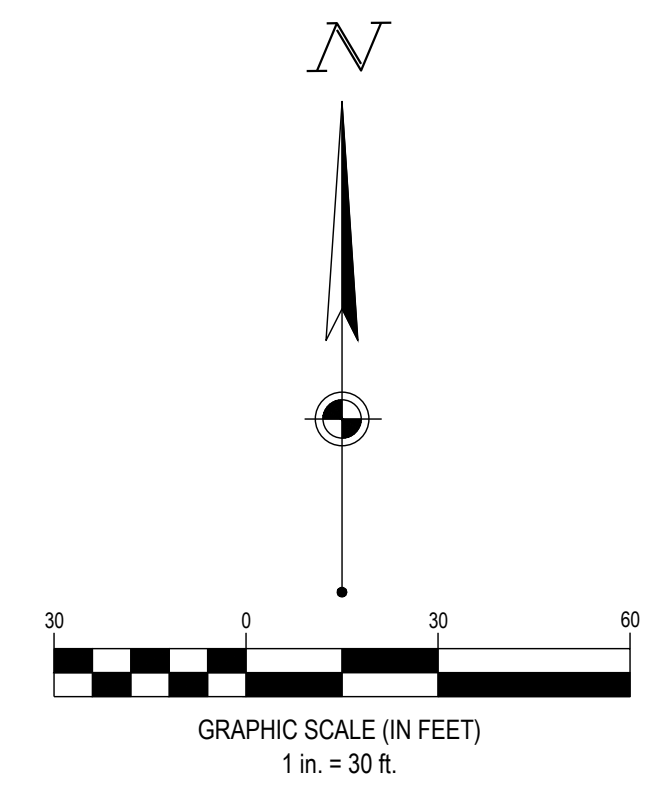
THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE AND SHOULD NOT BE USED FOR CONSTRUCTION OR RECORDING PURPOSES WITHOUT CONSULTATION.



**MARSH & GRAND RIVER**  
1930 & 1878 W. GRAND RIVER AVE.  
OKEMOS, MI 48864

**SHEETZ**

Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026



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

Project Number: 768368  
Scale: AS SHOWN  
Drawn By: AAB  
Checked By: RAP  
Date: 05/22/2026  
Issue: NOT FOR CONSTRUCTION

Drawing Title:  
**UTILITY PLAN**

**C5.0**



**CESO**  
WWW.CESOINC.COM

13060 S. US Highway 27, Suite D  
Dowell, MI 48820  
Phone: 517.622.3000 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE. DO NOT CONSTRUCT OR RECORD FOR PURPOSES OF REGULATION.

**LEGEND**

	SOIL BOUNDARY
	IMPERVIOUS AREA
	PERVIOUS AREA
	SOIL IDENTIFIER

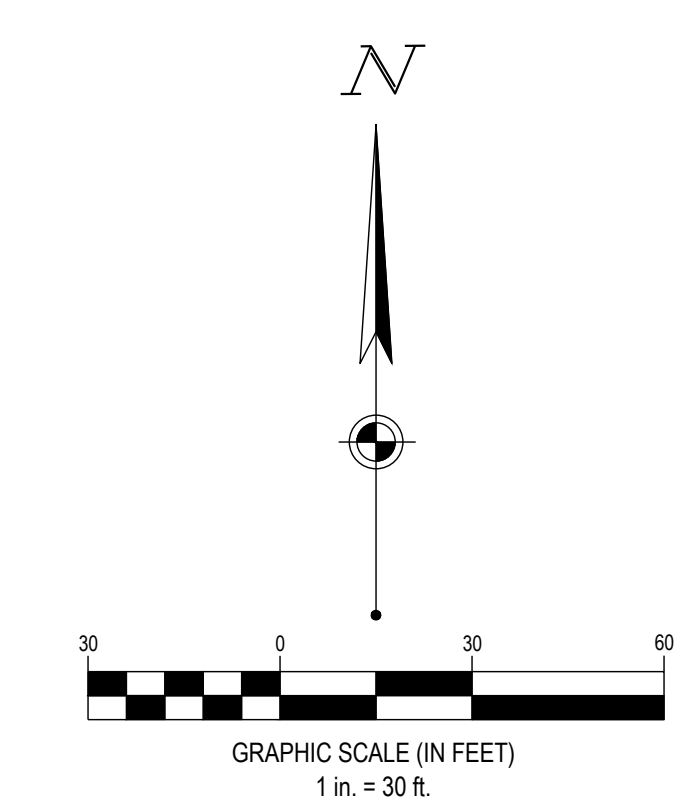
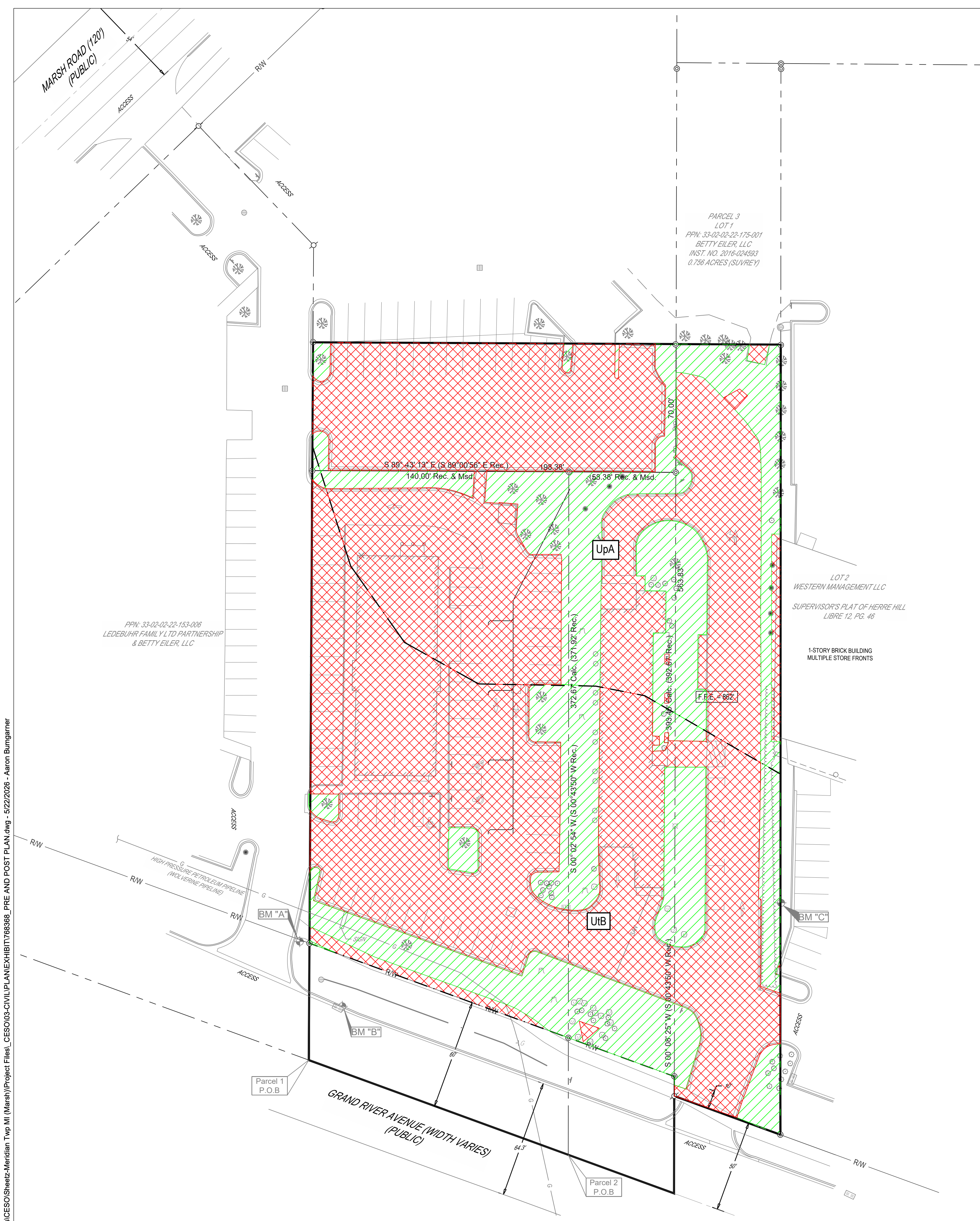
**SOIL DATA TABLE**

SOIL NAME	HYDROLOGIC SOIL GROUP
URBAN LAND-CAPAC-COLWOOD COMPLEX (UpA) 0-4% SLOPES	C/D
URBAN LAND-MARLETTE COMPLEX (UIB) 2-12% SLOPES	C

**PRE-DEVELOPED DRAINAGE AREA CALCULATIONS**

DRAINAGE DISTRICT	PERVIOUS AREA: GRASS COVER (SOIL GROUP - C, C-VALUE = 0.23) [ACRES]	PERVIOUS AREA: GRASS COVER (SOIL GROUP - D, C-VALUE = 0.27) [ACRES]	IMPERVIOUS AREA: PAVEMENT (ALL SOIL GROUPS: C-VALUE = 0.90) [ACRES]	TOTAL AREA [ACRES]	WEIGHTED C-VALUE
PRE-DEVELOPED SITE	0.34	0.29	1.59	2.22	0.72

**SITE COVERAGE**  
EXISTING PERVIOUS = 0.63 ACRES (28%)  
EXISTING IMPERVIOUS = 1.59 ACRES (72%)  
TOTAL AREA = 2.22 ACRES



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:\DCC\acc\ceso\sheetz\Meridian\_Twp\_MI\_(Marsh)\Project Files\CESO03-CIVIL\PLAN\EXHIBIT\768368\_PRE AND POST PLAN.dwg - 5/22/2026 - Aaron Bungamer



**SHEETZ**

**MARSH & GRAND RIVER**  
1930 & 1878 W. GRAND RIVER AVE.  
OKEMOS, MI 48864

Revisions / Submissions

ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

Project Number: 768368  
Scale: AS SHOWN  
Drawn By: AAB  
Checked By: RAP  
Date: 05/22/2026  
Issue: NOT FOR CONSTRUCTION

Drawing Title:  
**EXISTING CONDITIONS DRAINAGE MAP**

**EX-1**



**CESO**  
WWW.CESOINC.COM

13060 S. US Highway 27, Suite D  
Dowell, MI 48820  
Phone: 517.622.3000 Fax: 888.208.4826

THE INFORMATION ON THIS DOCUMENT IS PRELIMINARY OR INCOMPLETE. DO NOT CONSTRUCT OR CONDUIT WORK ACCORDING TO THIS INFORMATION.



**MARSH & GRAND RIVER**  
1930 & 1878 W. GRAND RIVER AVE.  
OKEMOS, MI 48864

**SHEETZ**

Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

Project Number: 768368  
 Scale: AS SHOWN  
 Drawn By: AAB  
 Checked By: RAP  
 Date: 05/22/2026  
 Issue: NOT FOR CONSTRUCTION

Drawing Title:  
**PROPOSED  
 CONDITIONS  
 DRAINAGE MAP**

**EX-2**

**LEGEND**

	SOIL BOUNDARY
	IMPERVIOUS AREA
	PERVIOUS AREA
	SOIL IDENTIFIER

**SOIL DATA TABLE**

SOIL NAME	HYDROLOGIC SOIL GROUP
URBAN LAND-CAPAC-COLWOOD COMPLEX (UpA) 0-4% SLOPES	C/D
URBAN LAND-MARLETTE COMPLEX (UIB) 2-12% SLOPES	C

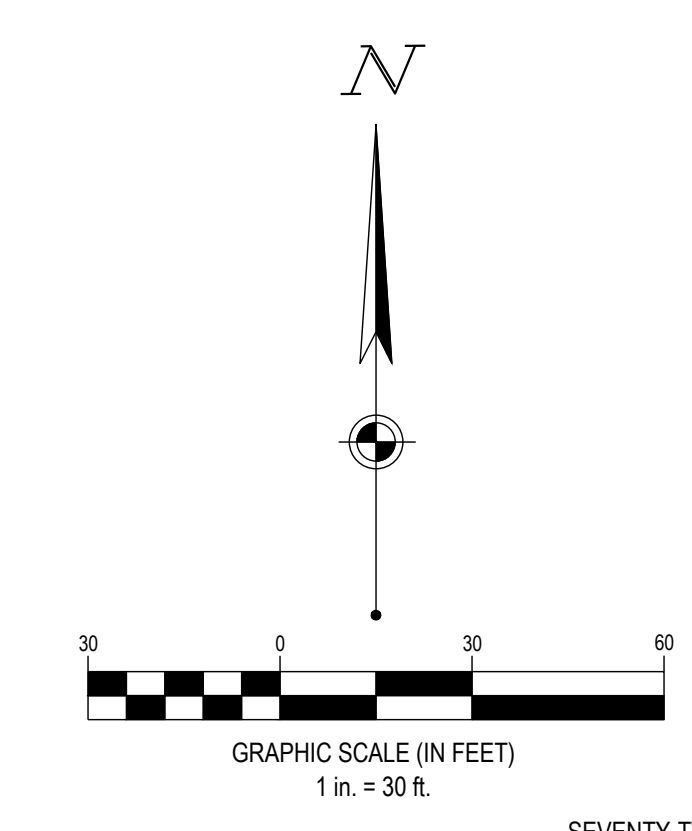
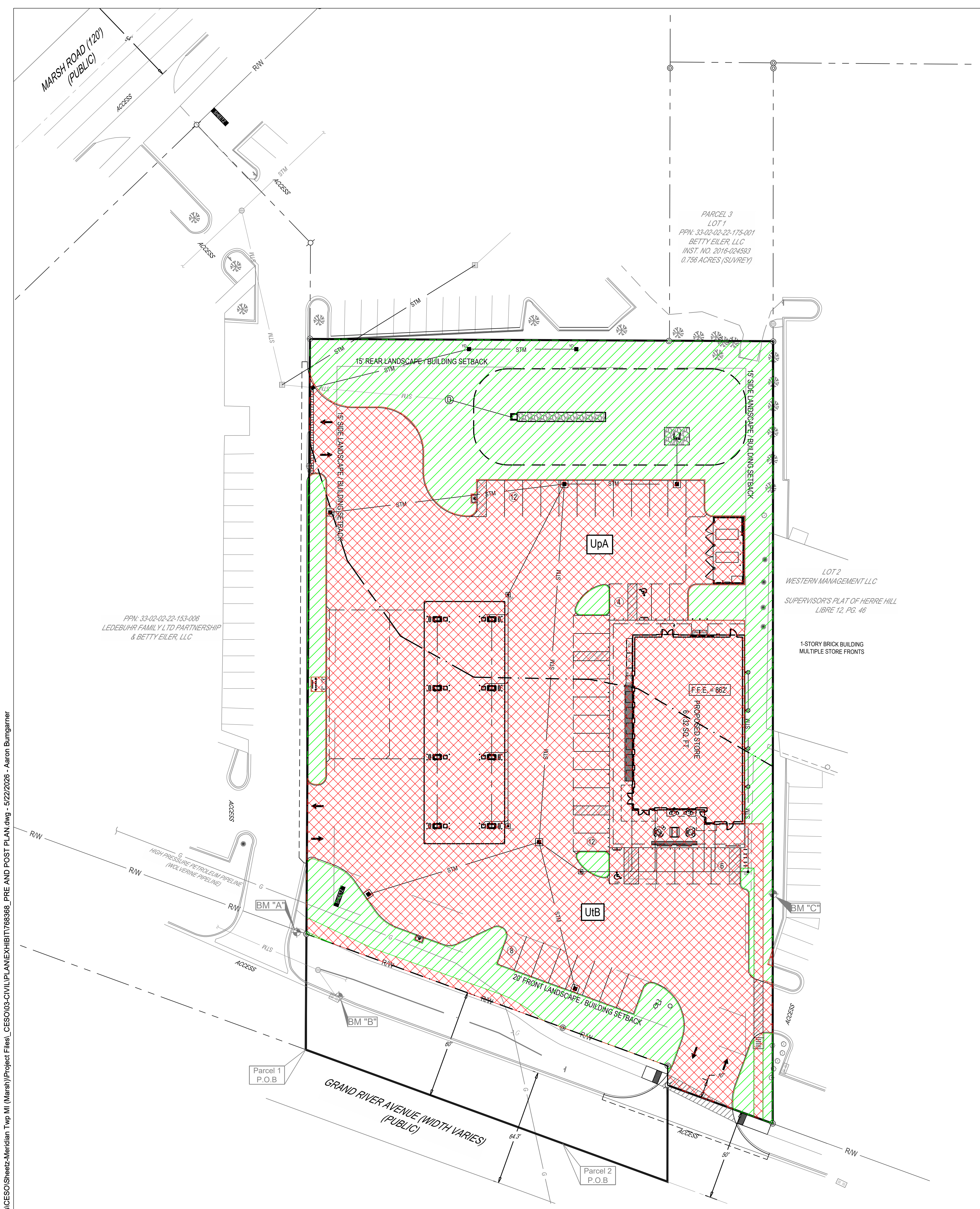
**POST-DEVELOPED DRAINAGE AREA CALCULATIONS**

HYDROGRAPH NAME	PERVIOUS AREA: GRASS COVER (SOIL GROUP - C, C-VALUE = 0.23) [ACRES]	PERVIOUS AREA: GRASS COVER (SOIL GROUP - D, C-VALUE = 0.27) [ACRES]	IMPERVIOUS AREA: PAVEMENT (ALL SOIL GROUPS: C-VALUE = 0.90) [ACRES]	TOTAL AREA [ACRES]	WEIGHTED C-VALUE
POST-DEVELOPED SITE	0.20	0.49	1.53	2.22	0.70

**SITE COVERAGE**  
 PROPOSED PERVIOUS = 0.69 ACRES (31%)  
 PROPOSED IMPERVIOUS = 1.53 ACRES (69%)  
 TOTAL AREA = 2.22 ACRES

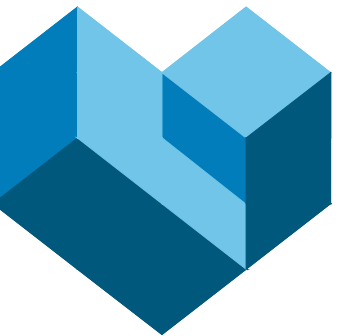
**PRE-POST DRAINAGE AREA CALCULATIONS**

DRAINAGE DISTRICT	PERVIOUS AREA [ACRES]	IMPERVIOUS AREA [ACRES]
PRE-DEVELOPED SITE	0.63	1.59
POST-DEVELOPED SITE	0.69	1.53
NET INCREASE [ACRES]	0.06	-0.06



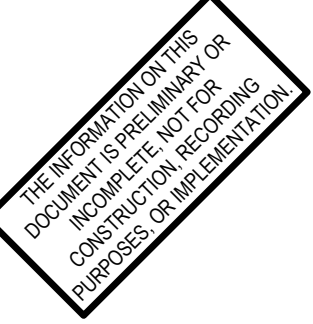
SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-482-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION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

C:\DCC\Acc\ceso\Sheetz-Meridian\_Twp\_MI\_(Marsh)\Project Files\CESO03-CIVIL\PLAN\EXHIBIT\768368\_PRE AND POST PLAN.dwg - 5/22/2026 - Aaron Bungamer



CESO  
WWW.CESOINC.COM

13060 S. US Highway 27, Suite D  
Dowell, MI 48820  
Phone: 517.622.3000 Fax: 888.208.4826



ERIC LALONE  
LANDSCAPE ARCHITECT  
3801001796

05/22/2026



MARSH & GRAND RIVER  
1930 & 1878 W GRAND RIVER AVE.  
OKEMOS, MI 48864

SHEETZ

Revisions / Submissions		
ID	Description	Date
1	SPECIAL USE PERMIT	05/22/2026

© 2026 CESO, INC.  
 Project Number: 768368  
 Scale: AS SHOWN  
 Drawn By: JC  
 Checked By: EAB  
 Date: 05.28.2025  
 Issue: NOT FOR CONSTRUCTION

Drawing Title:  
**LANDSCAPE PLAN**

L1.0

**PLANT\_SCHEDULE**

SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE	MIN HT / SPR	SPACING
--------	-----	-------------------------	------	--------------	---------

**TREES**

	3	ACER RUBRUM 'BOWHALL' BOWHALL RED MAPLE	3.5" CAL	10-12' HT	AS SHOWN
	4	MALUS X 'PRAIRIFIRE' PRAIRIFIRE CRABAPPLE	2" CAL	8-10' HT	AS SHOWN
	6	ULMUS AMERICANA AMERICAN ELM	2.5" CAL	10-12' HT	AS SHOWN

**SHRUBS**

	19	BUXUS X 'GREEN GEM' GREEN GEM BOXWOOD	---	18" HT	2'-0" OC
	131	EUONYMUS ALATUS 'COMPACTUS' COMPACT BURNING BUSH	---	36" HT	3'-0" OC
	55	SPIRAEA X BUMALDA 'ANTHONY WATERER' ANTHONY WATERER SPIRAEA	---	36" HT	3'-0" OC
	119	TAXUS X MEDIA 'DENSIFORMIS' DENSE ANGLO-JAPANESE YEW	---	36" HT	3'-0" OC
	36	TAXUS X MEDIA 'HICKSII' HICKS YEW	---	18" HT	1'-6" OC

**GROUND COVERS**

	212	HEMEROCALLIS X 'STELLA DE ORO' STELLA DE ORO DAYLILY	1 GAL	1' HT / SPR	1'-6" OC
	14	SEASONAL COLOR ANNUALS & PERENNIALS	---	4" FLAT	2'-0" OC

**MULCH**

- ALL PLANT BEDS SHALL CONTAIN A 3" LAYER OF DOUBLE SHREDDED HARDWOOD MULCH DYED BROWN OR BLACK (FROM A SUSTAINABLE SOURCE)
- CONTRACTOR TO PLACE A 4" DIAMETER MULCH RING AROUND ALL TREES IN LAWN
- ALL TREE RINGS TO BE A MINIMUM OF 3' AWAY FROM PLANTING BED EDGE UNLESS SPECIFICALLY DIMENSIONED OTHERWISE
- PLACE DEWITT 15 YEAR WEED BARRIER WOVEN POLYPROPYLENE OR APPROVED EQUAL IN ALL PLANTED BEDS AND AT EACH TREE RING.

**IRRIGATION**

THE CONTRACTOR SHALL DESIGN, SUPPLY, AND INSTALL IRRIGATION SYSTEM FOR ALL SOODED AND PLANTING AREAS AS SHOWN ON THIS SHEET. DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION

**LANDSCAPE REQUIREMENTS**

**STREET FRONTAGE LANDSCAPE**

1 STREET TREE PER 100 LF ( 1 STREET TREE PER EVERY 50' OVER 100' OF STREET FRONTAGE)

(SOUTH) GRAND RIVER AVENUE (235 LF) NOT INCLUDING DRIVEWAY

REQUIRED: 4 STREET TREES

PROVIDED: 4 STREET TREES

**INTERIOR LANDSCAPING**

2 CANOPY TREES PER 10 PARKING SPACES  
TOTAL PARKING SPACES: 42

REQUIRED: 8

PROVIDED: 9

200 SF OF LANDSCAPE AREA PER 10 PARKING SPACES

REQUIRED: 840 SF

PROVIDED: 1,394 SF

**BUILDING PERIMETER LANDSCAPE**

REQUIRED: 4' PLANTING AREA

PROVIDED: 4' PLANTING AREA (WEST)

RAISED PLANTER (SOUTH)

**STORMWATER SCREENING**

REQUIRED: LANDSCAPING TO OBSCURE VIEW FROM ADJACENT LOTS

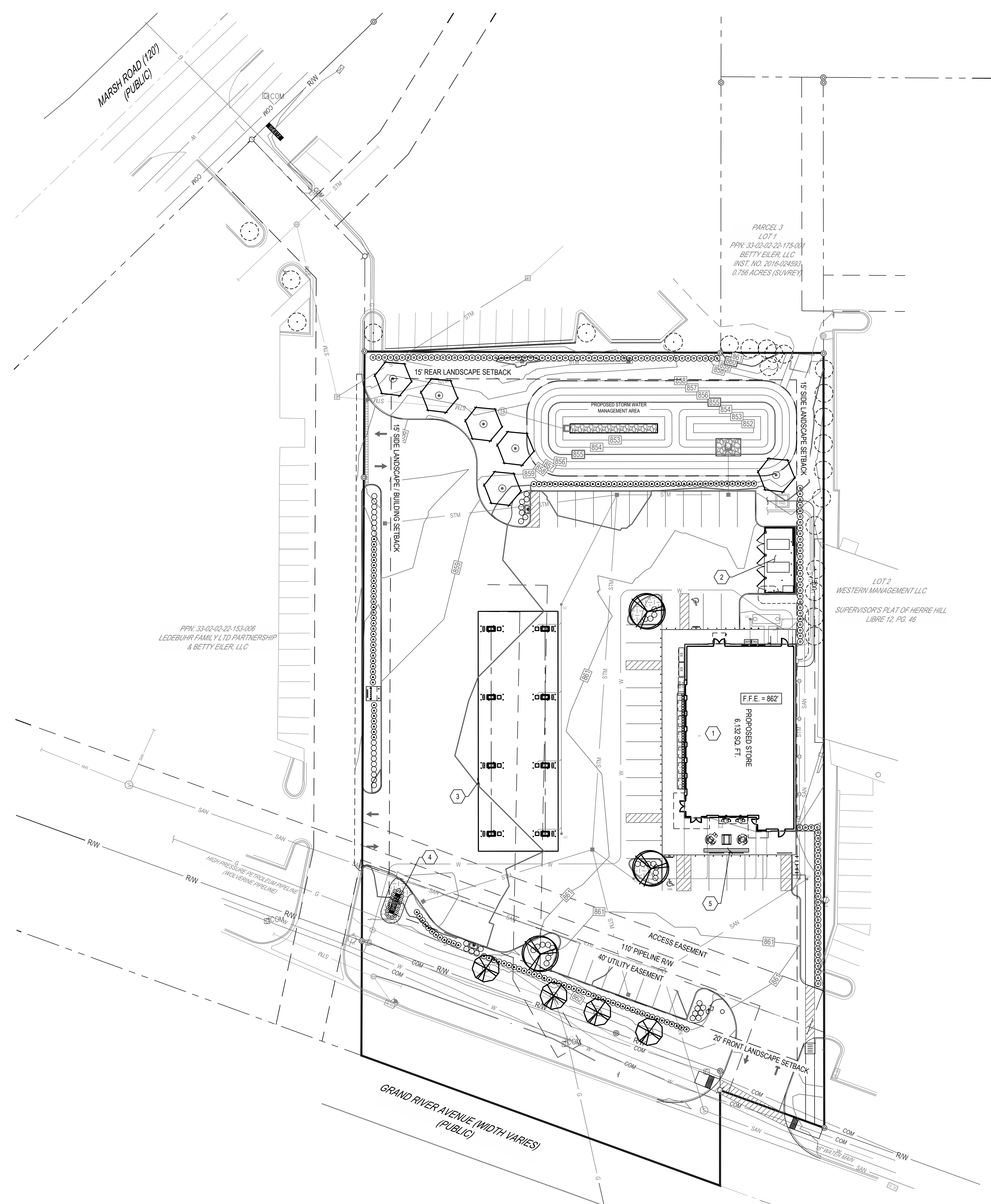
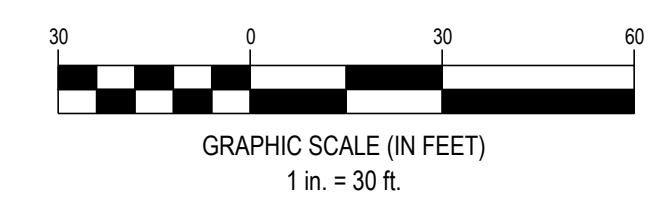
PROVIDED: LANDSCAPING TO OBSCURE VIEW FROM ADJACENT LOTS

**CODED NOTES:**

- PROPOSED BUILDING
- PROPOSED DUMPSTER AREA
- PROPOSED FUEL TANK AREA
- PROPOSED SIGN
- PROPOSED RAISED PLANTER

**LEGEND**

	RIGHT OF WAY LINE
	LOT LINE
	PROPERTY BOUNDARY LINE
	EASEMENT LINE
	OVERHEAD POWER LINE
	STORM DRAIN
	SANITARY SEWER
	WATER LINE
	GAS LINE
	UNDERGROUND TELEPHONE LINE
	UNDERGROUND ELECTRIC LINE
	MAJOR EXISTING CONTOUR
	MINOR EXISTING CONTOUR
	MAJOR ENGINEERED CONTOUR
	MINOR ENGINEERED CONTOUR
	SIGN
	CATCH BASIN
	STORM MANHOLE
	SANITARY MANHOLE
	FIRE HYDRANT
	LIGHT POLE
	EXISTING TREE TO REMAIN



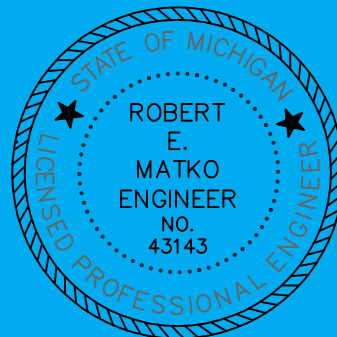
C:\DC\ACC\Draws\CESO\Sheetz-Meridian\_Twp\_MI\_Marsh\Project Files\CESO\06-LA\_PLAN\_CD\768368\_LANDSCAPE.dwg - 6/11/2026 - T.yar Whittington



05.15.2026

# Traffic Impact Study

Proposed Sheetz Development



*Robert E. Matko*

**On behalf of:**



**Contact:**

Alex Siwicki  
Sheetz, Inc.  
39300 West 12 Mile Road Suite 100  
Farmington Hills, MI 48331

**Preparation Date:**

05/15/2026

# Traffic Impact Study

**CLIENT**      Sheetz, Inc.

**LOCATION:**      Northeast Corner of Grand River Avenue & Marsh Road

**COUNTY**      Ingham County

**CITY, STATE**      Charter Township of Meridian, Michigan

**PREPARED BY**      Randy Nguyen, E.I.

CESO, Inc.

**ADDRESS**      4445 Lake Forest Drive, Suite 275

**CITY, STATE**      Cincinnati, OH 45242

**PHONE**      380.710.8999

**DATE**      May 15<sup>th</sup>, 2026

<b>Contents</b>	<b>Page</b>
<b>Contents</b> .....	<b>I</b>
<b>List of Figures</b> .....	<b>II</b>
<b>List of Tables</b> .....	<b>II</b>
<b>List of Appendices</b> .....	<b>III</b>
<b>1. Executive Summary</b> .....	<b>1</b>
1.1. Summary .....	1
1.2. Conclusions .....	1
1.3. Summary of Recommendations .....	3
<b>2. Introduction</b> .....	<b>4</b>
<b>3. Roadway and Traffic Conditions in the Vicinity of the Site</b> .....	<b>7</b>
3.1. Study Location and Area Land Use .....	7
3.2. Area Roadway Characteristics .....	7
3.3. Existing Traffic Volumes .....	10
<b>4. Estimates of 2027 No-Build Traffic in the Vicinity of the Site</b> .....	<b>13</b>
4.1. Background Development.....	13
4.2. 2027 No-Build Traffic Volumes .....	13
<b>5. Trip Generation</b> .....	<b>16</b>
5.1. Site Generated Traffic Volumes .....	16
5.2. Directional Distribution of Site Generated Traffic Volumes .....	17
<b>6. Estimates of 2027 Build Traffic in the Vicinity of the Site</b> .....	<b>22</b>
6.1. 2027 Build Traffic Volumes .....	22
<b>7. Capacity Analysis</b> .....	<b>24</b>
7.1. Capacity Analysis Parameters.....	24
7.2. Traffic Scenario Capacity Analysis .....	25
<b>8. Turn Lane Analysis</b> .....	<b>29</b>
8.1. Left-Turn Lane Warrant Review Summary .....	29
8.2. Right-Turn Lane Analysis .....	29
8.3. Right-Turn Lane Warrant Review Summary .....	29
<b>9. Queue Length Analysis</b> .....	<b>30</b>
9.1. Queue Length Analysis Procedure and Results .....	30
9.2. Queue Length Analysis Summary .....	32



**10. Summary of Recommendations..... 33**  
 10.1. Recommendations ..... 33  
**11. References ..... 34**  
 11.1. References ..... 34

**List of Figures**

<b>Figure</b>	<b>Page</b>
1. Site Location .....	6
2. Site Plan.....	8
3. Existing Transportation System.....	9
4.A Existing Weekday Peak Hour Traffic Volumes (Year 2026) – Cars & Trucks.....	11
4.B Existing Weekday Peak Hour Traffic Volumes (Year 2026) – Total Volumes.....	12
5. Background Traffic Volumes – Total Volumes .....	14
6. 2027 No-Build Weekday Peak Hour Traffic Volumes – Total Volumes.....	15
7.A. Directional Distribution of Site Generated Traffic Volumes (Cars – Primary).....	18
7.B. Directional Distribution of Site Generated Traffic Volumes (Cars – Pass-by).....	19
8.A. Site Generated Traffic Volumes (Cars – Primary).....	20
8.B. Site Generated Traffic Volumes (Cars – Pass-by).....	21
9. 2027 Build Weekday Peak Hour Traffic Volumes – Total Volumes.....	23

**List of Tables**

<b>Table</b>	<b>Page</b>
1. Site Generated Traffic Volumes .....	16
2. Level of Service Criteria.....	24
3. Summary of AM Peak Hour Traffic Scenario Capacity Analysis .....	25
4. Summary of PM Peak Hour Traffic Scenario Capacity Analysis.....	26
5. Right-Turn Lane Warrant Review .....	29
6. Queue Length Analysis – AM Peak Hour .....	30
7. Queue Length Analysis – PM Peak Hour .....	31



**List of Appendices**

<b>Appendix</b>	<b>Page</b>
A. Memorandum of Understanding Between CESO and MDOT .....	A
B. Existing Traffic Count Data and Signal Timings .....	B
C. Growth Rate Documentation .....	C
D. Background Development Traffic Volumes .....	D
E. ITE Trip Generation Resources and Calculations.....	E
F. Existing Traffic Scenario Capacity and Queue Length Analysis Summary Sheets.....	F
G. 2027 No-Build Traffic Scenario Capacity and Queue Length Analysis Summary Sheets.....	G
H. 2027 Build Traffic Scenario Capacity and Queue Length Analysis Summary Sheets .....	H
I. MDOT Turn Lane Resources .....	I

## 1. Executive Summary

### 1.1. Summary

Recommendations are listed in Section 1.3 – Summary of Recommendations (Page 3).

This report is submitted on behalf of Sheetz, Inc. in connection with its application to the Township of Meridian, Michigan (MI) for site plan approval. The Traffic Impact Study (TIS) conducted by CESO, Inc. identifies the traffic related impacts, if any, associated with the proposed Sheetz Store; referred to herein as “Sheetz Development.”

The proposed Sheetz Development is to be constructed near the northeast corner of Grand River Avenue & Marsh Road within the Charter Township of Meridian, Ingham County, MI. The full buildout of the Sheetz Development is projected to have a 6,132 S.F. convenience market store with 16 passenger car fueling positions.

Sheetz Site Plan application requests approval of maintaining one (1) shared access connection to Marsh Road and one (1) shared access connections to Grand River Avenue, as well as retaining one (1) shared access connection to Grand River Avenue and create three (3) internal cross-access connections via cross-access easements.

The Traffic Impact Study focused on evaluating the 2027 No-Build and 2027 Build traffic conditions near the site.

### 1.2. Conclusions

The full buildout of the Sheetz Development is estimated to generate 3,256 trips per day on a typical weekday (1,628 inbound and 1,628 outbound), of which 319 trips will be generated during the Weekday AM Peak Hour (162 inbound and 157 outbound), and 306 trips will be generated during the Weekday PM Peak Hour (153 inbound and 153 outbound). **Pass-by trips were included in the analysis.**

Trips for the Sheetz Development are anticipated to approach and depart the Site following the distribution patterns illustrated on Figures 7.A-7.B (see pg. 17-18).

Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized and TWSC methodology was used to analyze the current level of service at the key study intersections.

In comparison between the **Existing, 2027 No-Build, and 2027 Build Traffic Scenarios**, the following can be observed:

- The signalized intersections are expected to continue operating at their current overall LOS “D” or better during both the AM and PM peak hours, with minimal increases (maximum increase of 0.4 seconds of delay for both signal intersections) between the 2027 No-Build and 2027 Build Traffic Scenarios.
  - The SBL movement at Grand River Avenue & Dobie Road/Central Park Drive maintains a LOS “E” and “F” for all traffic scenarios during the AM and PM peak hours respectively. However, the recommended improvements from the Background Commercial Development address these concerns with timing improvements to this intersection.

- The stop-sign controlled intersections are expected to see increased delays due to the traffic volumes from the Sheetz Development for its respective Site Driveways. However, these delay increases are minimal, and the intersections operate at an LOS “D” or better for all individual movements, except for the NBLTR movement located across from Site Driveway #2 which operates at an LOS “E”.
- In the case of increased delays at the study locations along Grand River Avenue, the Sheetz development as well as the developments south along Grand River Avenue provide sufficient internal stacking and alternative cross-access routes to the east and west to access Grand River Avenue.
- Overall, it can be concluded that the Sheetz Development has minimal impacts on the study intersections and surrounding roadway network.

CESO conducted turn lane analyses for the study network and reached the following conclusions:

- Due to the presence of two-way left-turn lanes (TWLTL) on Grand River Avenue and Marsh Road, that can be utilized for left turns into the site driveways, a left-turn lane warrant was not analyzed.
- According to NCHRP Figure 4-23 within the MDOT Geometric Design Guidance, a NB to EB right-turn taper **is warranted** at the intersection of Marsh Road & Site Driveway #1 during the 2027 Build Traffic Scenario. However, due to sufficient levels of service and minimal queuing for this movement, CESO **does not recommend** the installation of this right-turn taper.
- According to NCHRP Figure 4-23 within the MDOT Geometric Design Guidance, a WB to NB right-turn lane **is not warranted** at the intersection of Grand River Avenue & Site Driveway #2 during the 2027 Build Traffic Scenario.
- According to NCHRP Figure 4-23 within the MDOT Geometric Design Guidance, a WB to NB right-turn taper **is warranted** at the intersection of Grand River Avenue & Site Driveway #3 during the 2027 Build Traffic Scenario. However, due to sufficient levels of service and potential right-of-way conflicts, CESO **does not recommend** the installation of this right-turn taper.

CESO conducted queue length analyses for the study network and reached the following conclusions:

- It can be observed that some left turn queues exceed their existing storage lengths at the signal intersections. However, there are two-way left-turn lanes (TWLTL) beyond the existing storage length that can be utilized in case of overflow.
- While some movements exceed existing storage lengths, these queue conditions are present in the Existing and 2027 No-Build Traffic Scenarios prior to the buildout of the proposed Sheetz Development. CESO confirmed that the proposed Sheetz Development has a minimal impact on current queuing issues.
- In the event of moderate queuing at the Site Driveways, the proposed Sheetz Development provides cross-access points to the east to allow for vehicles to maneuver to other driveways for access onto Grand River Avenue.

### 1.3. Summary of Recommendations

The following summary of recommendations was generated based upon the findings in the Traffic Impact Study. Refer to Figure 9 for the Recommended Improvement graphic.

#### **2027 No-Build Traffic Scenario (Responsibility – Others):**

- No improvements are recommended or required.

#### **2027 Build Traffic Scenario (Responsibility – Sheetz, Inc.):**

##### Marsh Road & Site Driveway #1:

- Maintain Site Driveway #1 to permit right-in, right-out, left-in, and left-out (full access) movements of passenger cars. Control this driveway with one (1) stop sign.

##### Grand River Avenue & Site Driveway #2:

- Maintain Site Driveway #2 to permit right-in, right-out, left-in, and left-out (full access) movements of passenger cars. Control this driveway with one (1) stop sign.

##### Grand River Avenue & Site Driveway #3:

- Construct Site Driveway #3 to permit right-in, right-out, left-in, and left-out (full access) movements of passenger cars. Control this driveway with one (1) stop sign.

## 2. Introduction

This report is submitted on behalf of Sheetz, Inc. in connection with its application to the Township of Meridian, Michigan (MI) for site plan approval. The Traffic Impact Study (TIS) conducted by CESO, Inc. identifies the traffic related impacts, if any, associated with the proposed Sheetz Store; referred to herein as “Sheetz Development.”

The proposed Sheetz Development is to be constructed near the northeast corner of Grand River Avenue & Marsh Road within the Township of Meridian, Ingham County, MI. The full buildout of the Sheetz Development is projected to have a 6,132 S.F. convenience market store with 16 passenger car fueling positions.

Sheetz Site Plan application requests approval of the following access points:

- Maintain a full access shared driveway connection to Marsh Road (referred to as "Site Driveway #1") located approximately 450' north of Grand River Avenue (stop-bar-to-centerline).
- Maintain a full access shared driveway connection to Grand River Avenue (referred to as "Site Driveway #2") located approximately 400' west of Marsh Road (stop-bar-to-centerline).
- Retain a full access shared driveway connection to Grand River Avenue (referred to as "Site Driveway #3") located approximately 670' west of Marsh Road (stop-bar-to-centerline).
- Two (2) cross-access points located on the east side and one (1) on the west side of the site via cross-access easements.

This report presents the methodologies, analyses, and results of the Traffic Impact Study (TIS) for traffic generated by the proposed Sheetz Development. The purpose of the TIS was to identify the traffic related impacts, if any, during typical weekday AM and PM peak hours of the adjacent street traffic corresponding with the weekday hours of operation for the proposed Sheetz Development. The study parameters of this report were generated based upon a Memorandum of Understanding (MOU) dated April 24<sup>th</sup>, 2026, between CESO and MDOT and a recent concept site plan. A copy of the MOU is located in Appendix A of the TIS.

The following intersections were analyzed in the Traffic Impact Study:

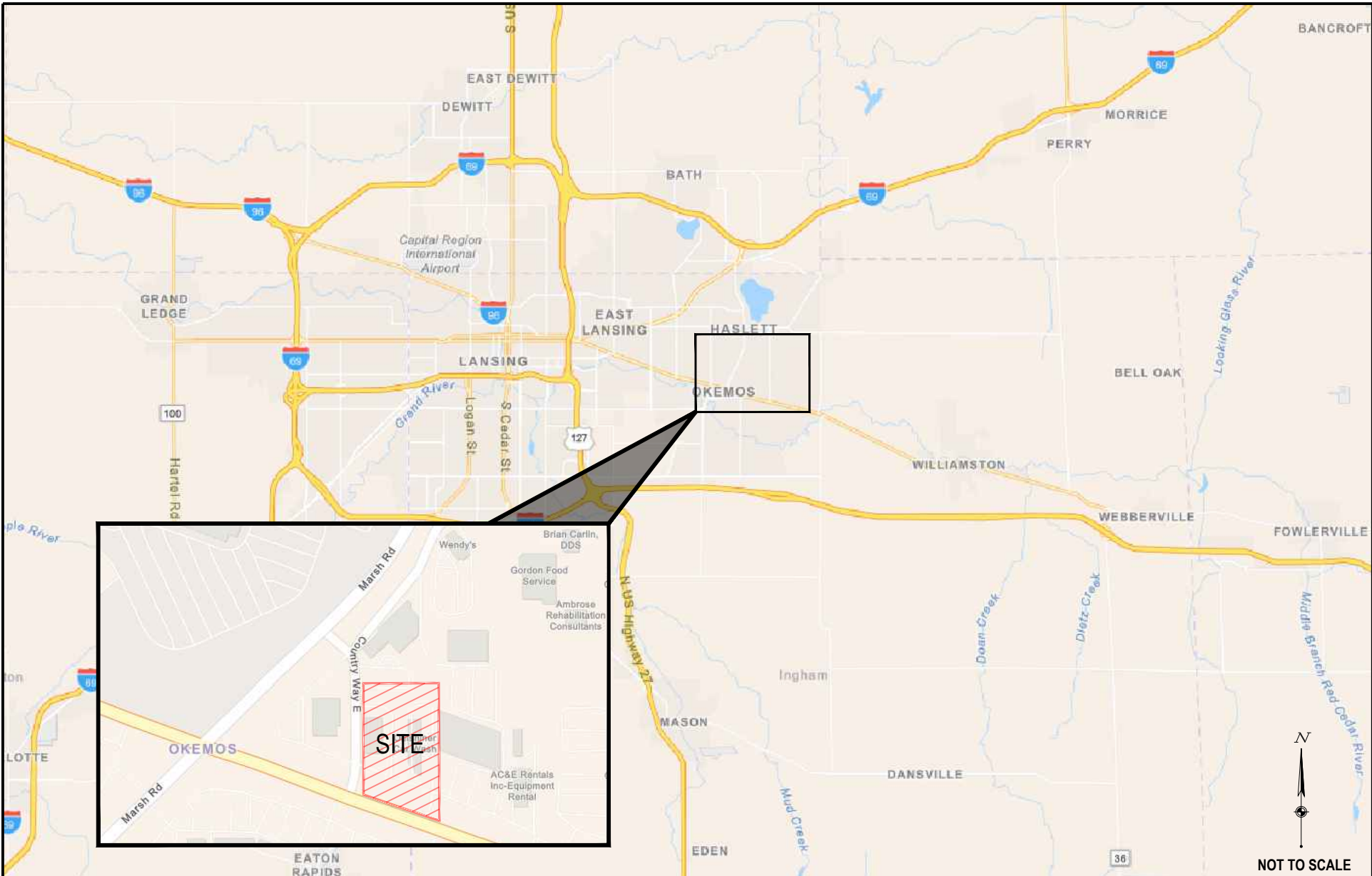
- Grand River Avenue & Marsh Road (Signal Controlled).
- Marsh Road & Shopping Center North Driveway (Stop Sign Controlled).
- Grand River Avenue & Shopping Center South Driveway (Stop Sign Controlled).
- Grand River Avenue & Access Driveways (Stop Sign Controlled).
- Grand River Avenue & Dobie Road/Central Park Drive (Signal Controlled).

The following traffic scenarios were included in the analysis:

**2027 No-Build Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2027, without the proposed Sheetz Development.

**2027 Build Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2027, with the proposed Sheetz Development.

Figure 1 illustrates the Site location with respect to the study area.



### 3. Roadway and Traffic Conditions in the Vicinity of the Site

An inventory of existing transportation conditions in the vicinity of the Site was created to form a database for use in projecting Build conditions.

#### 3.1. Study Location and Area Land Use

The proposed Sheetz Development is to be constructed near the northeast corner of Grand River Avenue & Marsh Road within the Township of Meridian, Ingham County, MI. Land use in the direct vicinity of the Site is primarily residential and commercial.

Figure 2 illustrates the Site Plan for the proposed Sheetz Development.

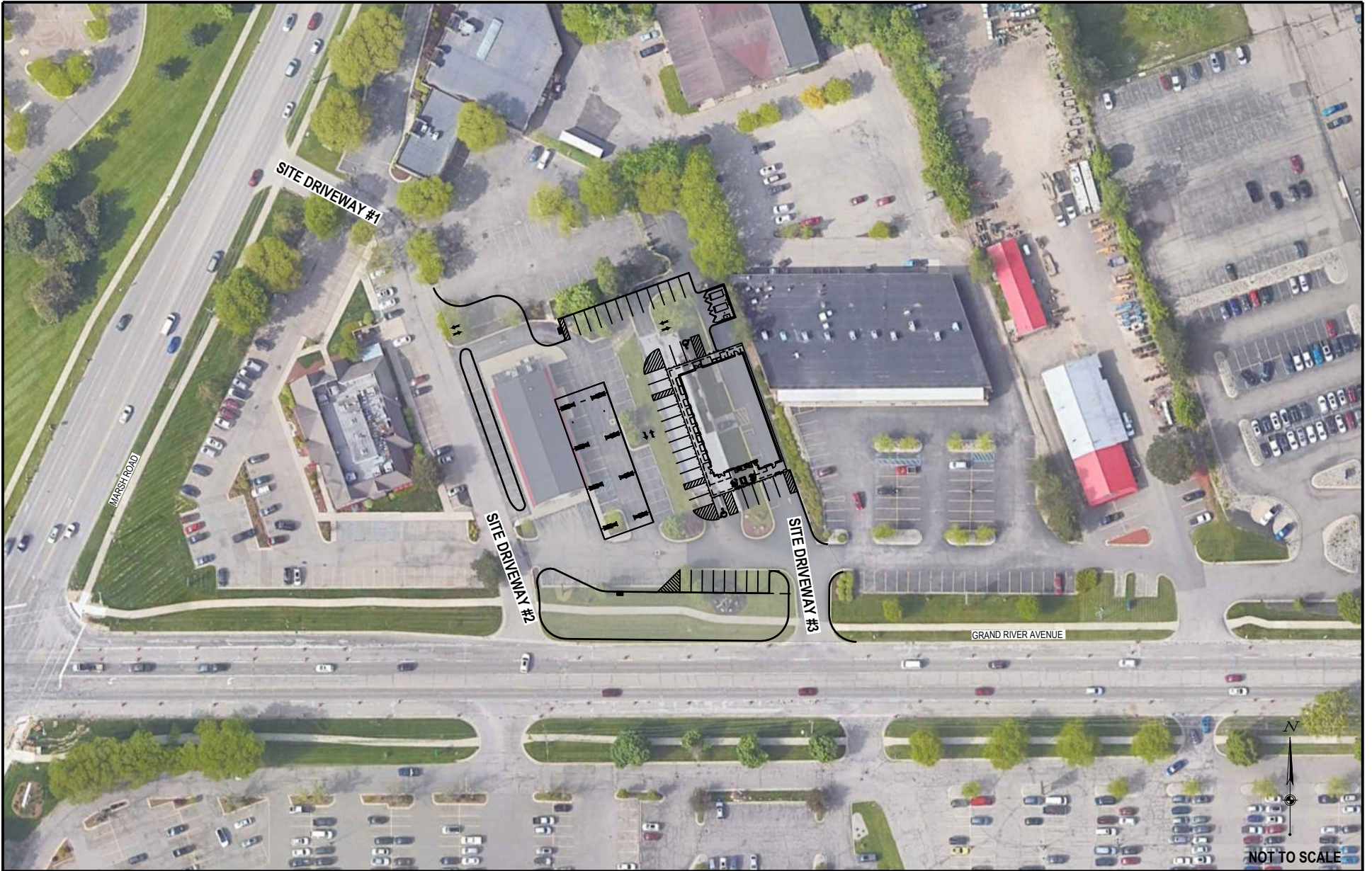
#### 3.2. Area Roadway Characteristics

**Grand River Avenue** – Grand River Avenue runs in the east/west direction in the vicinity of the Site. Grand River Avenue is a two-way roadway with two lanes in each direction and a center left turn lane. Grand River Avenue is classified as a Minor Arterial according to the *MDOT National Functional Classification Maps*. Grand River Avenue is under the jurisdiction of the Michigan Department of Transportation (MDOT). The posted speed limit on Grand River Avenue is 45 mph.

**Marsh Road** – Marsh Road runs in the north/south direction in the vicinity of the Site. Marsh Road is a two-way roadway with two lanes in each direction and a center left turn lane. Marsh Road is classified as a Minor Arterial according to the *MDOT National Functional Classification Maps*. Marsh Road is under the jurisdiction of Ingham County. The posted speed limit on Marsh Road is 40 mph.

**Dobie Road/Central Park Drive** – Dobie Road/Central Park Drive runs in the north/south direction in the vicinity of the Site. Dobie Road/Central Park Drive is a two-way roadway with one lane in each direction and a center left turn lane on Central Park Drive. Dobie Road/Central Park Drive is classified as a Major Collector according to the *MDOT National Functional Classification Maps*. Dobie Road/Central Park Drive are under the jurisdiction of Ingham County. The posted speed limit on Dobie Road/Central Park Drive is 35 mph.

The Existing Transportation System is shown in Figure 3 of the report.

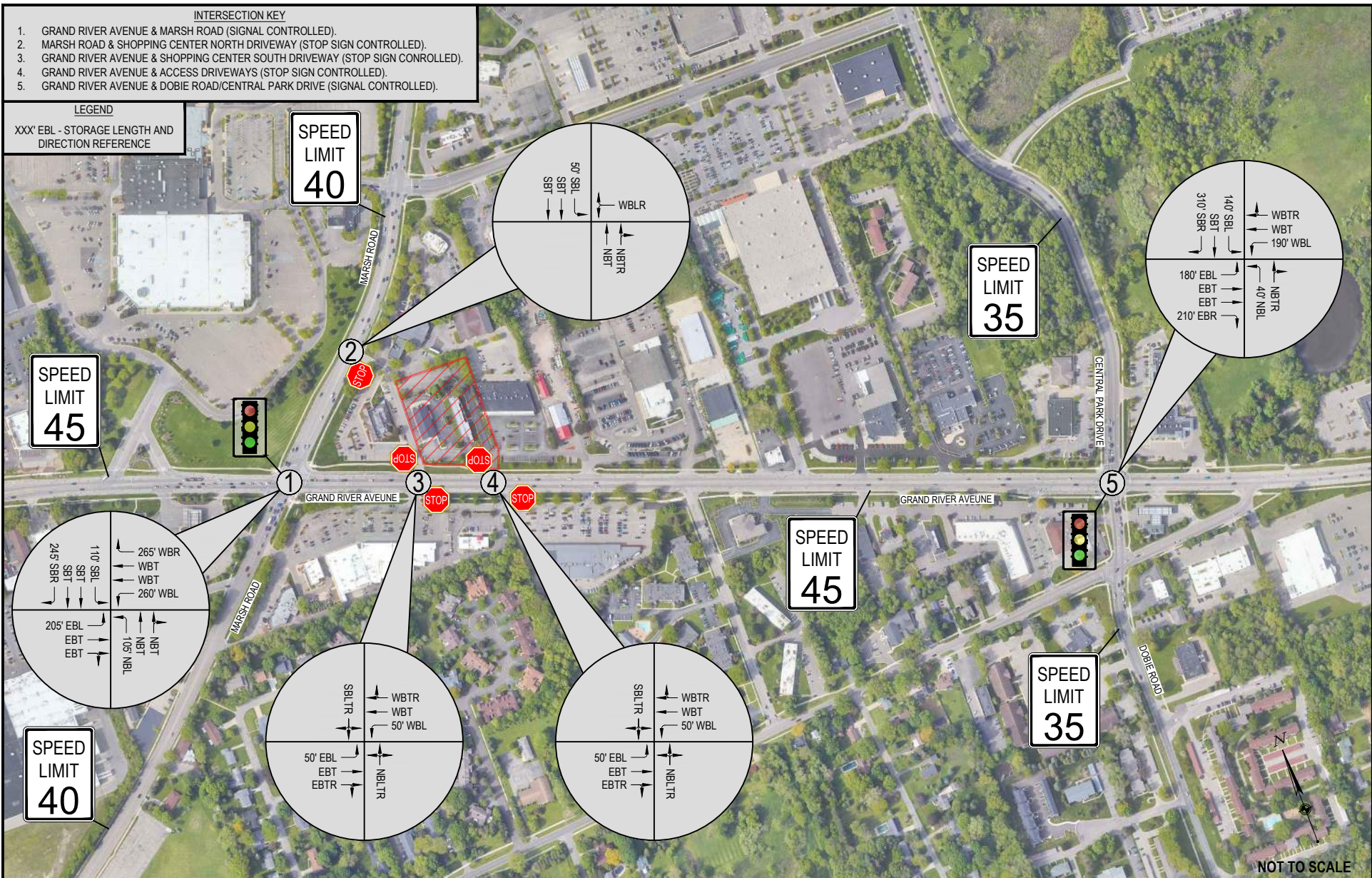


NOT TO SCALE

SITE PLAN

PROPOSED SHEETZ DEVELOPMENT

FIGURE 2	
DATE:	5/22/2026
JOB NO.:	768368-01
DESIGNED BY:	VGM
DRAWN BY:	VGM
CHECKED BY:	REM
PAGE:	8



### 3.3. Existing Traffic Volumes

Traffic turning movement counts were conducted by Gewalt Hamilton Associates, Inc. (GHA) on Thursday, April 30<sup>th</sup>, 2026, between the hours of 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM at the following intersections:

- Grand River Avenue & Marsh Road (Signal Controlled).
- Marsh Road & Shopping Center North Driveway (Stop Sign Controlled).
- Grand River Avenue & Shopping Center South Driveway (Stop Sign Controlled).
- Grand River Avenue & Access Driveways (Stop Sign Controlled).
- Grand River Avenue & Dobie Road/Central Park Drive (Signal Controlled).

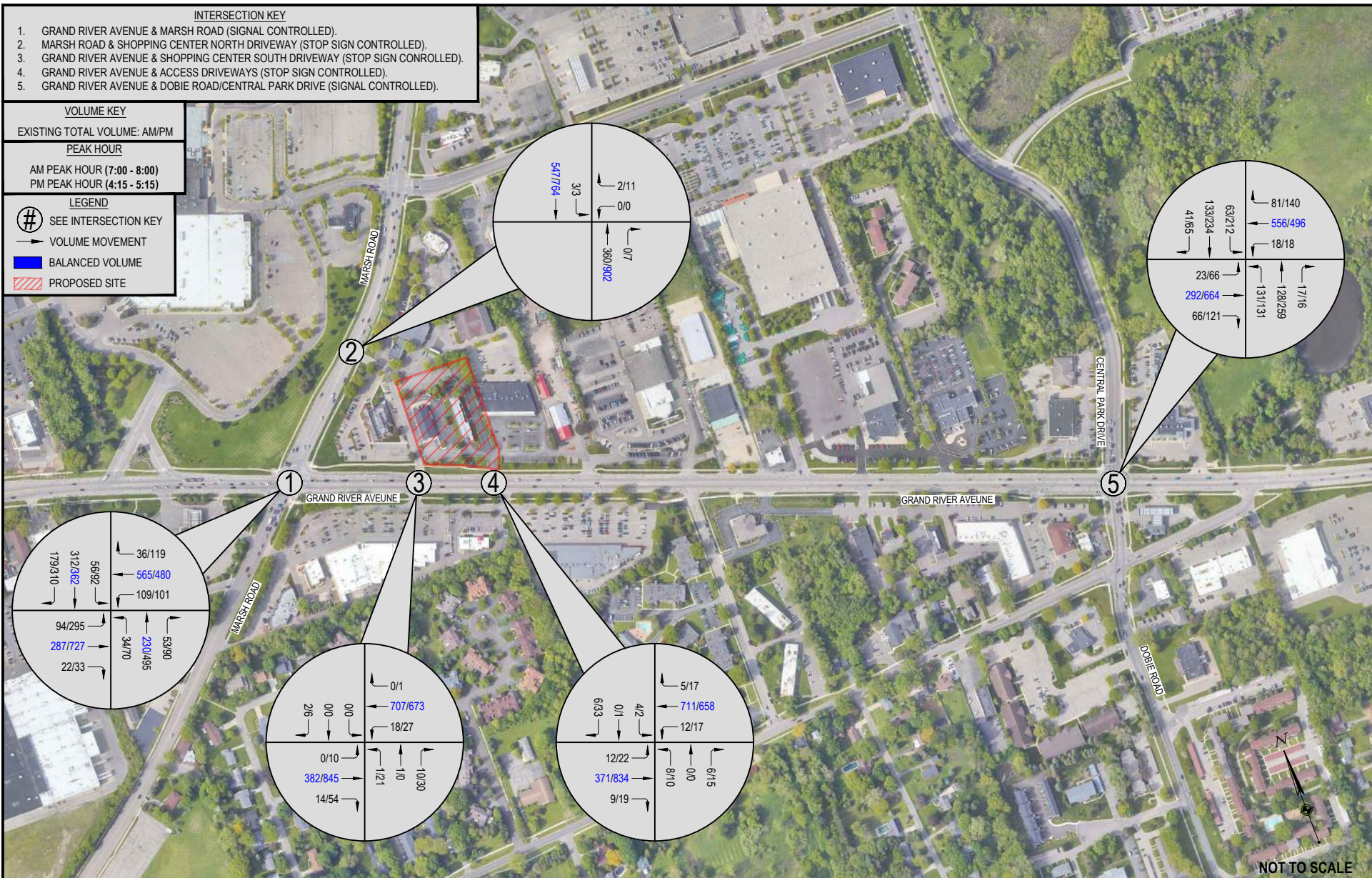
The weekday peak hours of the Traffic Impact Study roadway network were determined to occur between the hours of:

- 8:00 AM – 9:00 AM (AM Peak Hour).
- 4:15 PM – 5:15 PM (PM Peak Hour).

Count data collected consists of turning movement counts with classification breakouts of lights, buses, single-unit trucks, and articulated trucks.

The Existing Traffic Count Data and Signal Timings are located in Appendix B of the report. The Existing Weekday Peak Hour Traffic Volumes (Year 2026) are illustrated on Figure 4.A (cars & trucks) and Figure 4.B (total volumes).





## 4. Estimates of 2027 No-Build Traffic in the Vicinity of the Site

### 4.1. Background Development

Based on scoping guidance from MDOT, the 2027 No-Build volumes are to include traffic generated by a nearby commercial development expected to be completed by 2027. The trip generation for the commercial development was completed by Progressive Companies and forwarded to CESO. The commercial development trip generation was calculated using the following land uses:

- 6,800 SF Gas Station with Convenience Market
- 3,000 SF Fast-Food Restaurant with Drive-Thru

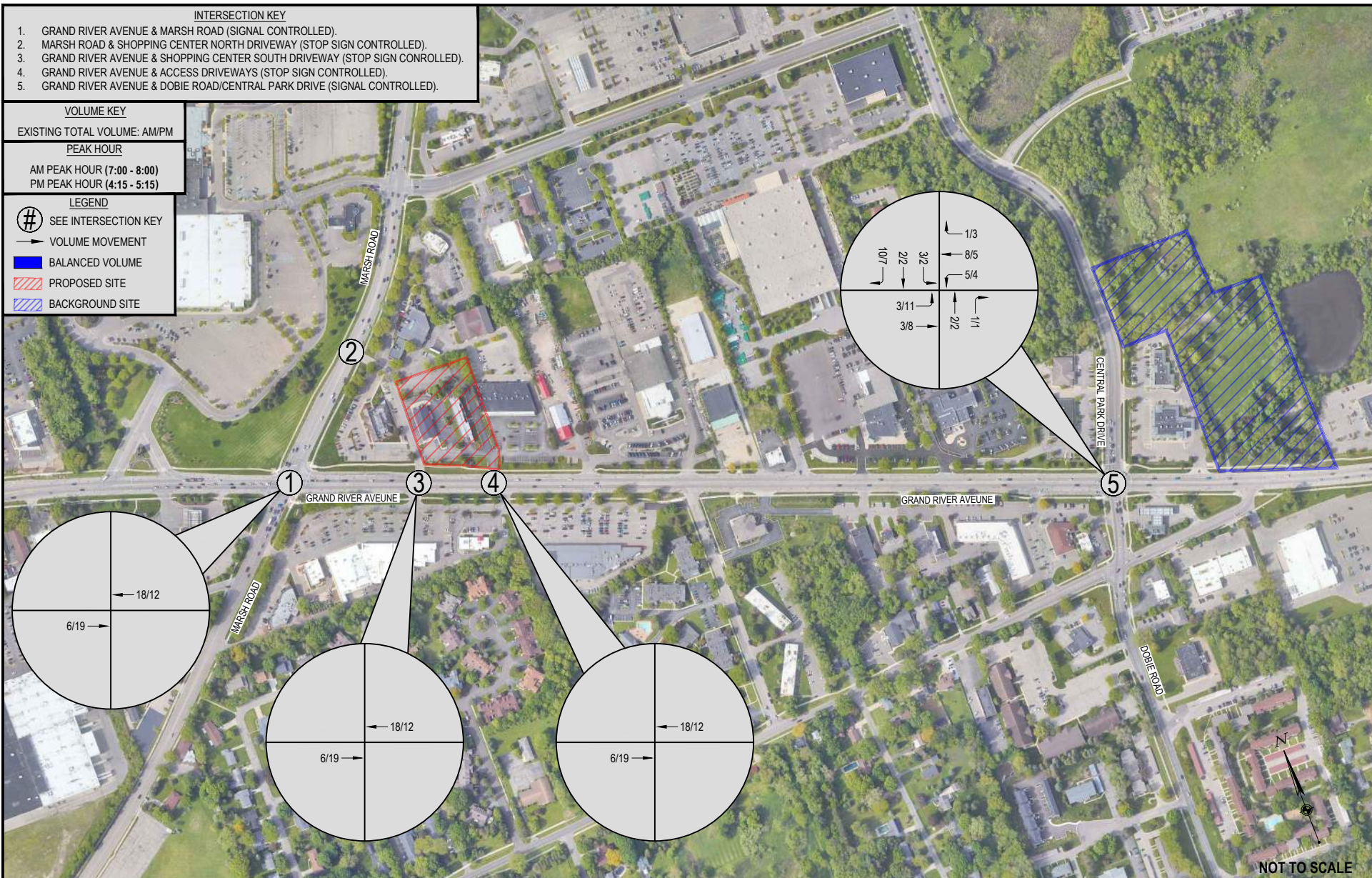
The provided trip distribution included one similar study location of Grand River Avenue & Dobie Road/Central Park Drive, the trips were taken from this intersection and distributed along Grand River Avenue to our study locations. Trips generated by the commercial development are illustrated on Figure 5.

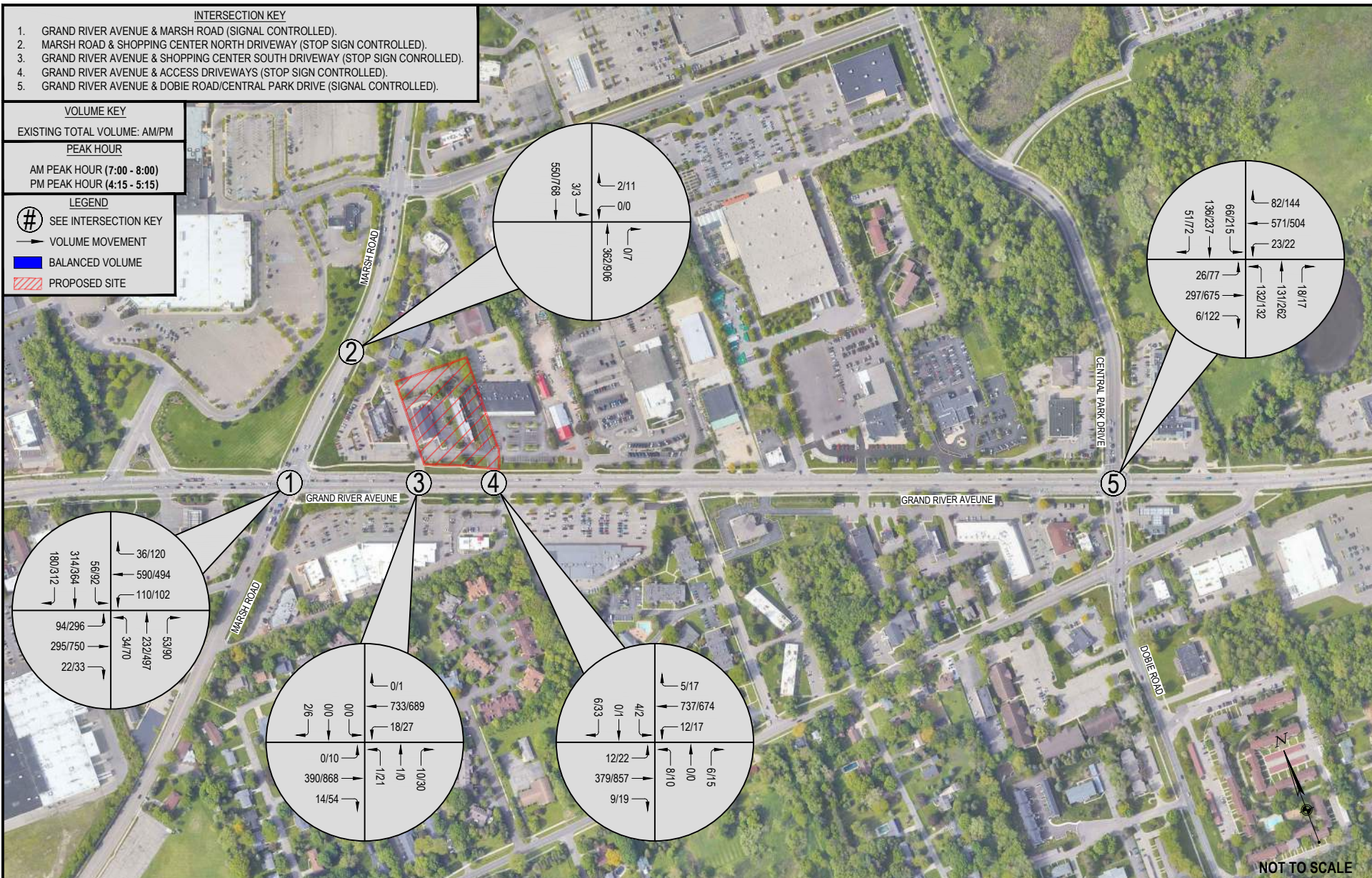
Refer to Appendix D of the report for the commercial development trip generation and trip distribution performed by Progressive Companies

### 4.2. 2027 No-Build Traffic Volumes

The 2027 No-Build Weekday Peak Hour Traffic Volumes – Total Volumes (Figure 6) were calculated by applying growth rates obtained from historical data from *MDOT Transportation Data Management System* to the Existing Weekday Peak Hour Traffic Volumes (Year 2026) – Total Volumes (Figure 4.B). The historical growth rates showed a negative trend and therefore a conservative growth rate of 0.5 percent (%) was applied for one (1) year (1.005 growth factor) to the volumes on all study roadways and combined with the Background Development Traffic Volumes – Total Volumes (Figure 5) to reach the 2027 No-Build Weekday Peak Hour Traffic Volumes – Total Volumes (Figure 6).

Refer to Appendix C of the report for Growth Rate Documentation.





2027 NO-BUILD WEEKDAY PEAK HOUR TRAFFIC VOLUMES - TOTAL VOLUMES

PROPOSED SHEETZ DEVELOPMENT

## 5. Trip Generation

### 5.1. Site Generated Traffic Volumes

Studies of similar developments throughout North America have shown that the amount of traffic generated will be functionally related to some unit of activity (i.e., number of fueling stations, gross floor area, service bays, etc.). In development, site traffic fluctuates substantially on different days and hours throughout the year. Therefore, it is imperative to select an appropriate hourly volume on which to base the design of the external roadway and site access facilities. The Weekday AM and PM Peak Hours were selected based on the adjacent street traffic during this hour.

The 2027 Build Traffic Scenario includes the proposed use of the Site as a Sheetz Development that consists of:

- Gasoline Service Station with a 6,132 S.F. Convenience Market consisting of 16 passenger car fueling positions.

For analysis purposes, the base variable units for the trip-generation rates were number of fueling positions. The Site Generated Traffic Volumes (Table 1) were calculated by utilizing data contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 12th Edition*, in combination with methods outlined in the (ITE) *Trip Generation Handbook, 3rd Edition*.

The Site Generated Traffic Volumes are presented below in Table 1.

**Table 1**  
**Site Generated Traffic Volumes**

ITE Land Use Description	ITE Cat.	Size	Unit	Total Generated Trips										
				Weekday			Weekday AM Peak Hour				Weekday PM Peak Hour			
				Tot	In	Out	<sup>A</sup> Tot	In	Out	<sup>B</sup> PB	<sup>A</sup> Tot	In	Out	<sup>B</sup> PB
Passenger Car														
Convenience Store/Gas Station	945	16	Fuel Pos.	3,256	1,628	1,628	319	39	38	242	306	38	38	230
<i>ITE Cat. 945 Entering (%) / Exiting (%)</i>				100%	50%	50%	100%	51%	49%	<sup>C</sup> 76%	100%	50%	50%	<sup>C</sup> 75%
Net Trip Generation Summary				3,256	1,628	1,628	319	39	38	242	306	38	38	230
Newly Generated Trips							77	39	38		76	38	38	

<sup>A</sup> – Primary Trips + Pass-by Trips, <sup>B</sup> – Pass-by Trips Generated, <sup>C</sup> – Percent (%) of <sup>A</sup>Tot, n/a – No Data Available

The full buildout of the Sheetz Development is estimated to generate 3,256 trips per day on a typical weekday (1,628 inbound and 1,628 outbound), of which 319 trips will be generated during the Weekday AM Peak Hour (162 inbound and 157 outbound), and 306 trips will be generated during the Weekday PM Peak Hour (153 inbound and 153 outbound).

Appendix E includes trip generation calculations and ITE Trip Generation Category 945 sheets utilized to calculate the values presented in Table 1.

## 5.2. Directional Distribution of Site Generated Traffic Volumes

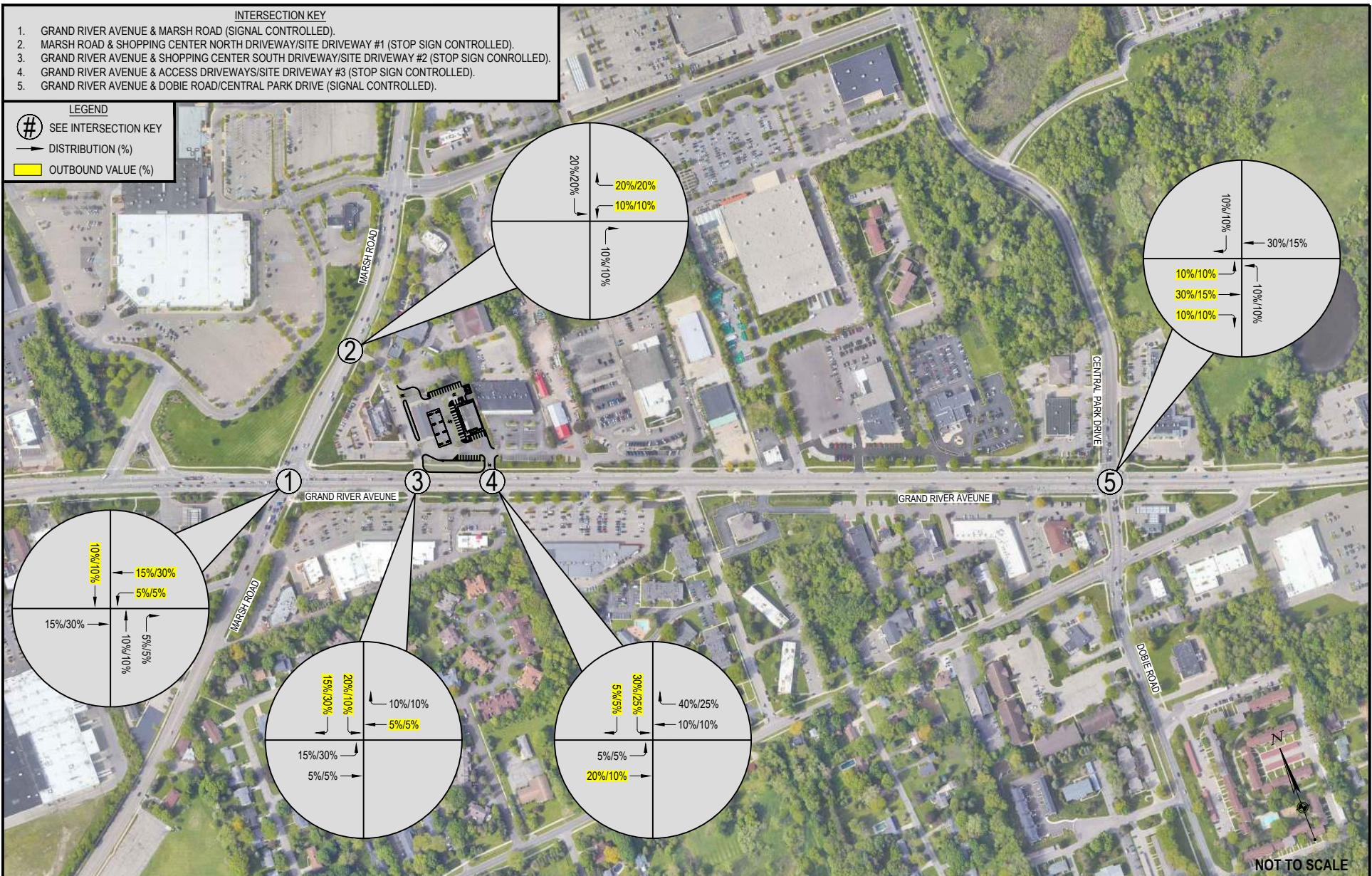
The directional distribution of the development-generated traffic is a function of several variables. The assumptions and methods used in estimating the direction in which traffic will approach and depart the Site varies with several location-specific conditions such as:

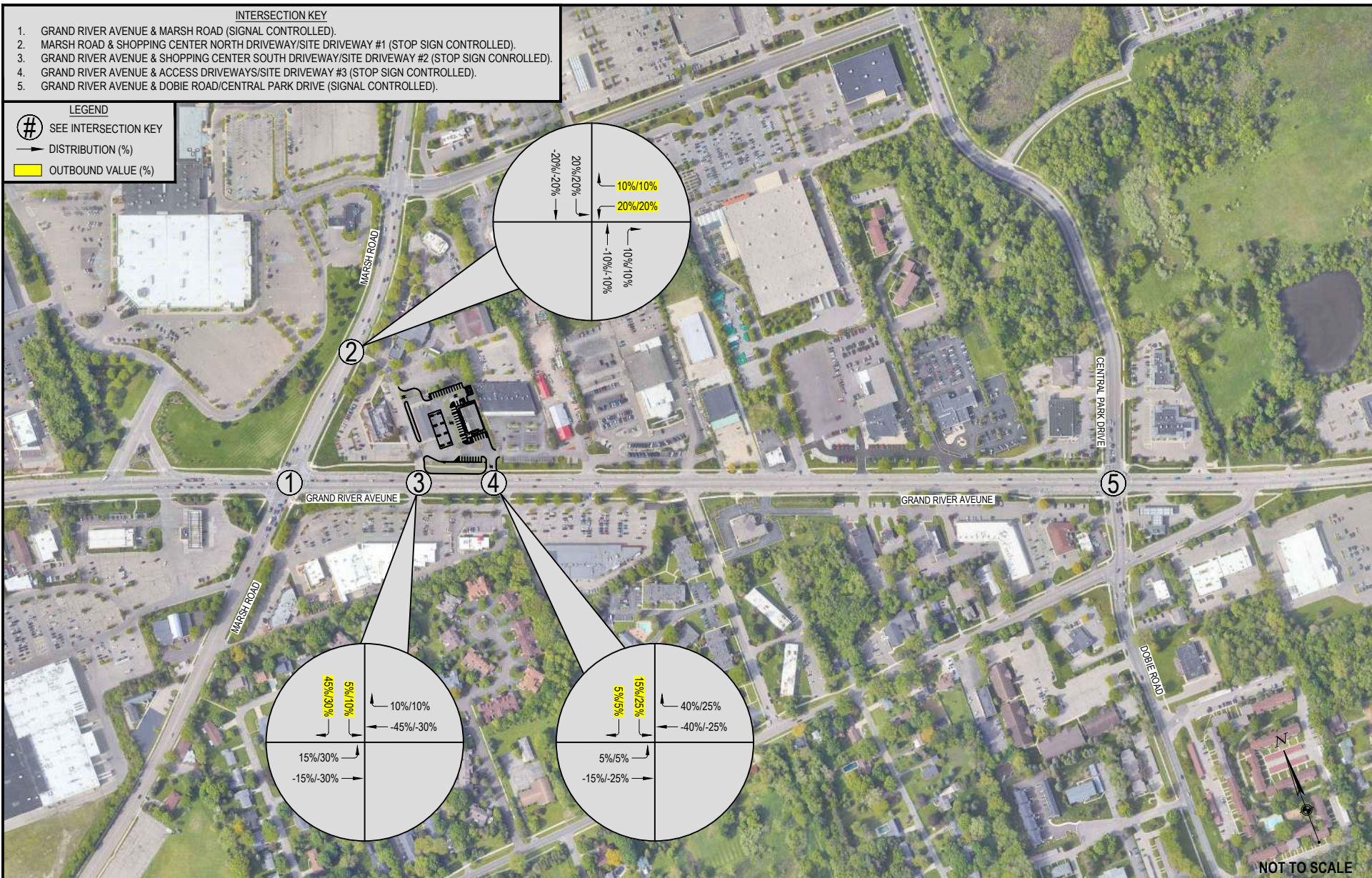
- Size and type of the proposed development.
- Population distribution within the defined area of influence.
- Prevailing operating conditions on the existing street system.

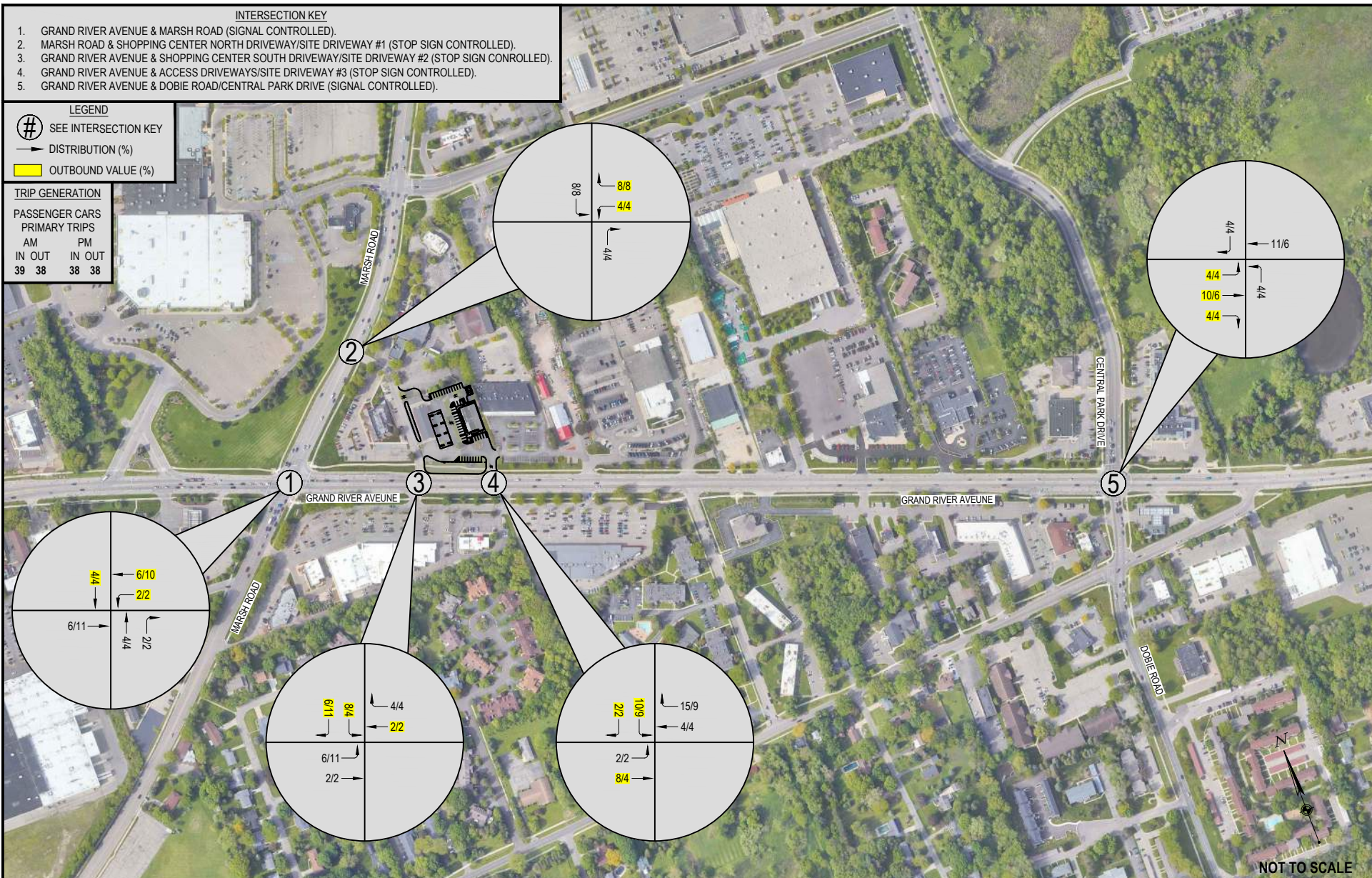
The analysis of directional distribution is based on the observation that drivers normally will choose the fastest (not necessarily the most direct) routes to and from a given traffic generator.

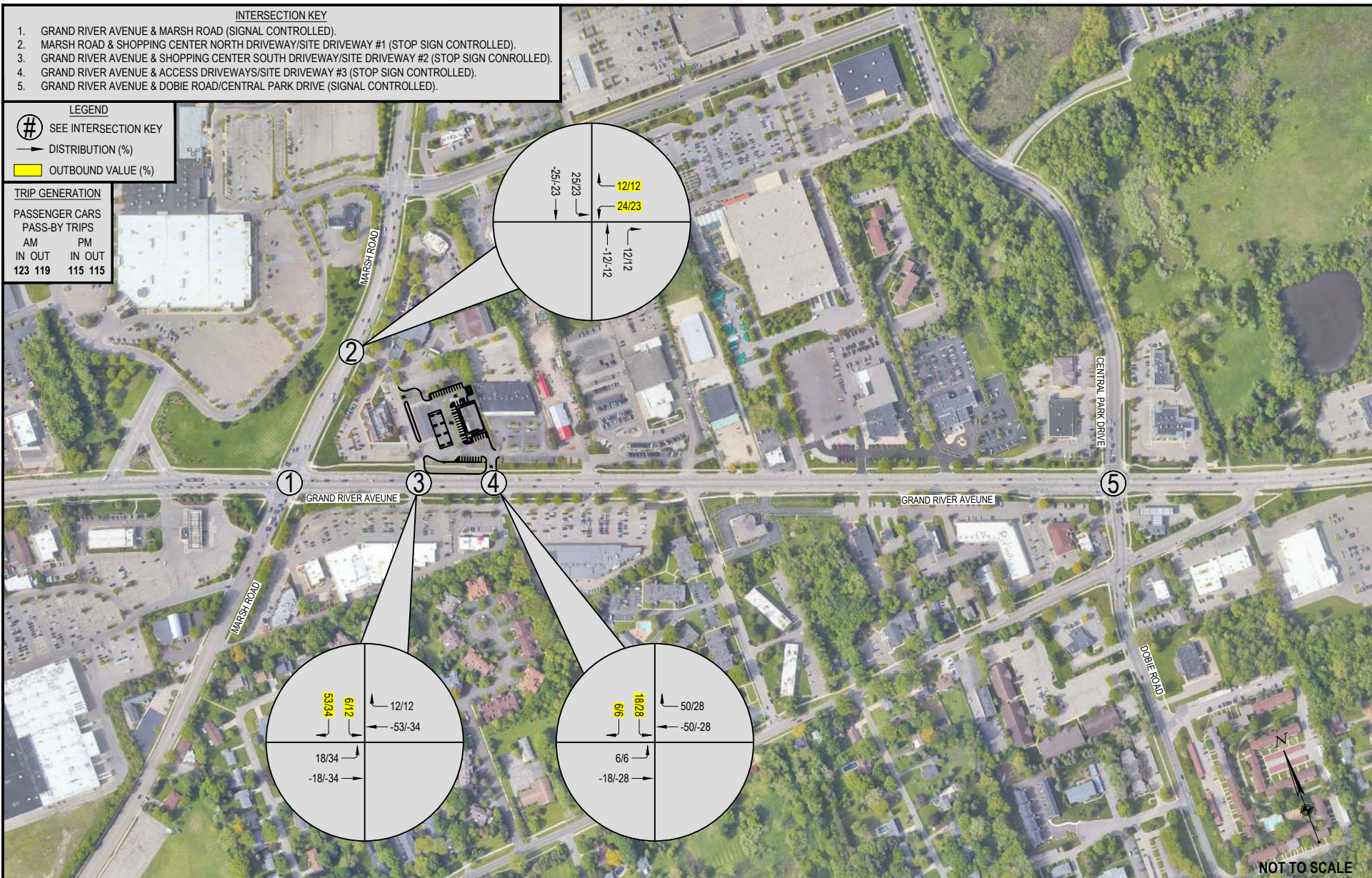
The anticipated directional distribution of trips generated by the proposed Sheetz Development are illustrated on Figures 7.A-7.B showing the primary and pass-by directional distribution for passenger cars.

Based upon the directional distributions illustrated in Figures 7.A-7.B, the estimated Site Generated Traffic Volumes shown in Table 1 were distributed to the adjacent roadway system. The Site Generated Traffic Volumes are illustrated in Figures 8.A-8.B.





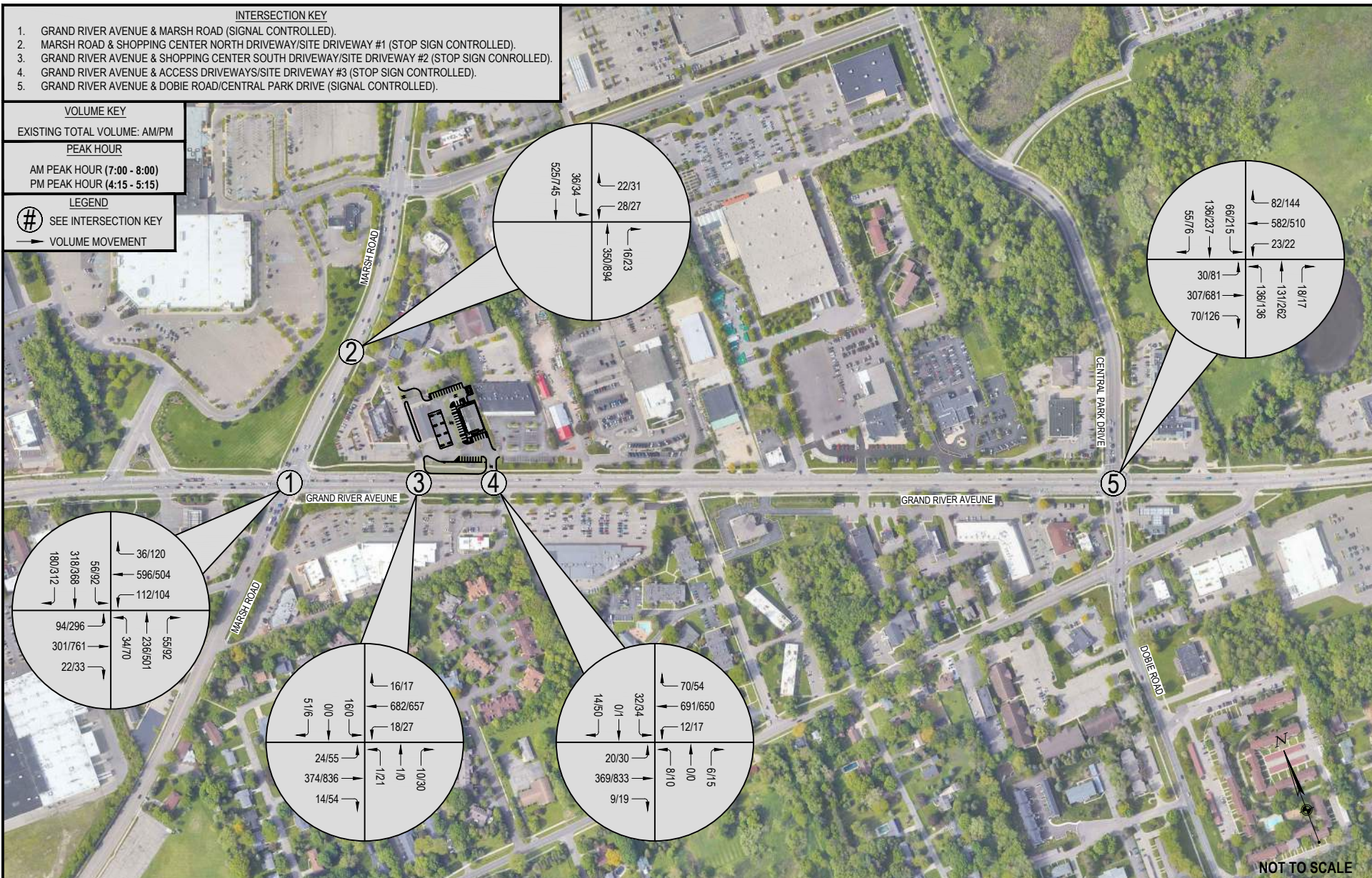




## 6. Estimates of 2027 Build Traffic in the Vicinity of the Site

### 6.1. 2027 Build Traffic Volumes

The 2027 Build Weekday Peak Hour Traffic Volumes (Figure 9) were calculated by adding the Site Generated Traffic Volumes (Figures 8.A-8.B) to the 2027 No-Build Weekday Peak Hour Traffic Volumes (Figure 6).



## 7. Capacity Analysis

### 7.1. Capacity Analysis Parameters

The capacity of an intersection (signalized or unsignalized) can best be described by its corresponding Level of Service (LOS). The level of service of an intersection is a qualitative measure of the various attributes of an intersection. There are six levels of service ranging from “ideal” free flow conditions at LOS “A,” to forced or “breakdown” conditions at LOS “F.” The level of service for signalized intersections is based upon the average stopped delay per vehicle for various movements within the intersection. Although volume capacity ratio (v/c) affects delay, there are other parameters that more strongly affect it, such as the quality of progression, length of green phases, cycle lengths, and others. Thus, for any given v/c ratio, a range of delay values may result, and vice versa.

The level of service for unsignalized intersections is based upon total delay. Total delay is defined in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*, as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position. Throughout the report “unsignalized intersections” are commonly referred to as “stop sign controlled.”

Highway Capacity Manual 2022 (HCM 7<sup>th</sup> Edition) methodology was used in the Traffic Impact Study to remain consistent with “state-of-the-practice” professional standards. Table 2 summarizes the LOS criteria for an unsignalized intersection and a signalized intersection.

**Table 2**  
**Level of Service Criteria**

Level of Service	Unsignalized Intersections Control Delay (seconds per vehicle)	Signalized Intersections Control Delay (seconds per vehicle)
A	≤ 10.0	< 10.0
B	> 10.0 and ≤ 15.0	> 10.0 and ≤ 20.0
C	> 15.0 and ≤ 25.0	> 20.0 and ≤ 35.0
D	> 25.0 and ≤ 35.0	> 35.0 and ≤ 55.0
E	> 35.0 and ≤ 50.0	> 55.0 and ≤ 80.0
F	≥ 50.0	> 80.0

Source: *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*. Transportation Research Board.

Synchro Version 12.0 was utilized to calculate delay and level of service values. Synchro Version 12.0 model parameters that include traffic volumes, movements, peak hour factors, heavy vehicle percentage, intersection traffic control, and storage lengths. The peak hour factors (PHF) from the intersection TMCs were used and a PHF of 0.92 was used for the proposed site driveway intersections.

## 7.2. Traffic Scenario Capacity Analysis

Utilizing the Traffic Volumes illustrated on Figures 4.B, 6, and 9, capacity calculations were performed for the key study intersections and proposed Site Driveways. Capacity calculations followed procedures documented in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2022). All study intersections were analyzed with Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized and TWSC methodology. Table 3 and Table 4 summarizes the capacity analyses results for the AM and PM Peak Hour Traffic Scenarios respectively.

**Table 3**  
**Summary of AM Peak Hour Traffic Scenario Capacity Analysis**

Lane	Existing		2027 No-Build		2027 Build	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
<b>Grand River Avenue &amp; Marsh Road (Signal Controlled)</b>						
<b>Intersection</b>	<b>D</b>	<b>36.1</b>	<b>D</b>	<b>36.2</b>	<b>D</b>	<b>36.4</b>
EBL	C	21.2	C	21.5	C	22.3
EBT	C	28.6	C	28.7	C	28.9
EBTR	C	28.7	C	28.7	C	28.9
<b>EB Approach</b>	<b>C</b>	<b>26.9</b>	<b>C</b>	<b>27.0</b>	<b>C</b>	<b>27.4</b>
WBL	B	19.9	C	20.0	C	20.5
WBT	D	39.8	D	40.1	D	40.5
WBR	C	32.3	C	32.3	C	32.3
<b>WB Approach</b>	<b>D</b>	<b>36.4</b>	<b>D</b>	<b>36.6</b>	<b>D</b>	<b>37.1</b>
NBL	D	42.7	D	42.7	D	42.6
NBT	D	44.9	D	44.8	D	44.7
NBTR	D	45.4	D	45.4	D	45.2
<b>NB Approach</b>	<b>D</b>	<b>44.9</b>	<b>D</b>	<b>44.8</b>	<b>D</b>	<b>44.7</b>
SBL	D	47.2	D	47.2	D	47.2
SBT	D	43.4	D	43.4	D	43.3
SBR	C	22.2	C	22.2	C	22.3
<b>SB Approach</b>	<b>D</b>	<b>36.9</b>	<b>D</b>	<b>36.8</b>	<b>D</b>	<b>36.9</b>
<b>Marsh Road &amp; Shopping Center North Driveway/Site Driveway #1 (Stop Sign Controlled)</b>						
<b>Intersection</b>	--	--	--	--	--	--
WBLR	A	9.9	A	9.9	C	15.5
SBL	A	8.5	A	8.5	A	8.6
<b>Grand River Avenue &amp; Shopping Center South Driveway/Site Driveway #2 (Stop Sign Controlled)</b>						
<b>Intersection</b>	--	--	--	--	--	--
EBL	A	0.0	A	0.0	A	9.4
WBL	A	8.3	A	8.3	A	8.3
NBLTR	B	12.1	B	12.1	B	12.5
SBLTR	B	10.7	B	10.8	C	15.4
<b>Grand River Avenue &amp; Access Driveways/Site Driveway #3 (Stop Sign Controlled)</b>						
<b>Intersection</b>	--	--	--	--	--	--
EBL	A	9.5	A	9.5	A	9.7
WBL	A	8.2	A	8.2	A	8.2
NBLTR	C	16.2	C	16.4	C	16.5
SBLTR	C	17.7	C	17.9	D	26.4

L – Left T – Through R – Right [X] – With Recommended Improvements

**Table 3 – Continued.**  
**Summary of AM Peak Hour Traffic Scenario Capacity Analysis**

Lane	Existing		2027 No-Build		2027 Build	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Grand River Avenue & Dobie Road/Central Park Drive (Signal Controlled)						
<b>Intersection</b>	<b>C</b>	<b>21.3</b>	<b>C</b>	<b>21.3</b>	<b>C</b>	<b>21.5</b>
EBL	A	0.8	A	0.8	A	0.9
EBT	A	0.1	A	0.1	A	0.1
EBR	A	0.1	A	0.1	A	0.1
<b>EB Approach</b>	<b>A</b>	<b>0.2</b>	<b>A</b>	<b>0.2</b>	<b>A</b>	<b>0.2</b>
WBL	A	6.3	A	6.3	A	6.4
WBT	A	8.2	A	8.3	A	8.5
WBTR	A	8.2	A	8.3	A	8.5
<b>WB Approach</b>	<b>A</b>	<b>8.1</b>	<b>A</b>	<b>8.2</b>	<b>A</b>	<b>8.4</b>
NBL	E	56.0	E	56.8	E	58.3
NBTR	D	48.8	D	48.7	D	48.6
<b>NB Approach</b>	<b>D</b>	<b>52.2</b>	<b>D</b>	<b>52.6</b>	<b>D</b>	<b>53.2</b>
SBL	D	47.3	D	47.2	D	47.3
SBT	D	48.9	D	48.9	D	48.6
SBR	D	41.6	D	41.5	D	42.1
<b>SB Approach</b>	<b>D</b>	<b>47.2</b>	<b>D</b>	<b>47.2</b>	<b>D</b>	<b>46.9</b>
L – Left T – Through R – Right [X] – With Recommended Improvements						

**Table 4**  
**Summary of PM Peak Hour Traffic Scenario Capacity Analysis**

Lane	Existing		2027 No-Build		2027 Build	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Grand River Avenue & Marsh Road (Signal Controlled)						
<b>Intersection</b>	<b>C</b>	<b>33.7</b>	<b>C</b>	<b>33.7</b>	<b>C</b>	<b>34.1</b>
EBL	C	29.7	C	29.9	C	30.7
EBT	D	38.0	D	38.1	D	39.5
EBTR	D	37.7	D	37.9	D	39.2
<b>EB Approach</b>	<b>D</b>	<b>35.6</b>	<b>D</b>	<b>35.7</b>	<b>D</b>	<b>37.0</b>
WBL	C	23.9	C	24.1	C	25.1
WBT	B	16.5	B	16.5	B	16.8
WBR	B	15.4	B	15.4	B	15.4
<b>WB Approach</b>	<b>B</b>	<b>17.4</b>	<b>B</b>	<b>17.4</b>	<b>B</b>	<b>17.7</b>
NBL	D	39.4	D	39.4	D	39.3
NBT	D	44.0	D	44.0	D	44.1
NBTR	D	44.4	D	44.4	D	44.5
<b>NB Approach</b>	<b>D</b>	<b>43.7</b>	<b>D</b>	<b>43.7</b>	<b>D</b>	<b>43.8</b>
SBL	D	50.9	D	50.9	D	50.9
SBT	D	41.3	D	41.2	D	41.2
SBR	C	30.1	C	30.1	C	30.2
<b>SB Approach</b>	<b>D</b>	<b>37.9</b>	<b>D</b>	<b>37.9</b>	<b>D</b>	<b>37.9</b>
L – Left T – Through R – Right [X] – With Recommended Improvements						



**Table 4 – Continued.**  
**Summary of PM Peak Hour Traffic Scenario Capacity Analysis**

Lane	Existing		2027 No-Build		2027 Build	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Marsh Road & Shopping Center North Driveway/Site Driveway #1 (Stop Sign Controlled)						
<b>Intersection</b>	--	--	--	--	--	--
WBLR	B	12.0	B	12.0	D	31.2
SBL	B	10.1	B	10.1	B	10.4
Grand River Avenue & Shopping Center South Driveway/Site Driveway #2 (Stop Sign Controlled)						
<b>Intersection</b>	--	--	--	--	--	--
EBL	A	9.2	A	9.2	A	9.4
WBL	B	10.2	B	10.2	B	10.1
NBLTR	D	32.7	D	33.1	E	43.2
SBLTR	B	10.8	B	10.8	C	23.6
Grand River Avenue & Access Driveways/Site Driveway #3 (Stop Sign Controlled)						
<b>Intersection</b>	--	--	--	--	--	--
EBL	A	9.2	A	9.3	A	9.4
WBL	A	10.0	A	10.0	A	9.9
NBLTR	D	28.3	D	28.6	D	29.3
SBLTR	B	14.1	B	14.2	D	34.0
Grand River Avenue & Dobie Road/Central Park Drive (Signal Controlled)						
<b>Intersection</b>	<b>D</b>	<b>35.9</b>	<b>D</b>	<b>36.0</b>	<b>D</b>	<b>36.4</b>
EBL	C	33.6	C	33.8	D	35.6
EBT	C	27.0	C	27.0	C	27.3
EBR	C	22.3	C	22.4	C	22.6
<b>EB Approach</b>	<b>C</b>	<b>26.8</b>	<b>C</b>	<b>26.9</b>	<b>C</b>	<b>27.4</b>
WBL	C	21.6	C	21.7	C	22.4
WBT	B	14.5	B	14.6	B	14.9
WBTR	B	14.6	B	14.7	B	14.9
<b>WB Approach</b>	<b>B</b>	<b>14.8</b>	<b>B</b>	<b>14.8</b>	<b>B</b>	<b>15.1</b>
NBL	D	39.6	D	39.7	D	39.7
NBTR	D	51.2	D	51.3	D	51.5
<b>NB Approach</b>	<b>D</b>	<b>47.5</b>	<b>D</b>	<b>47.5</b>	<b>D</b>	<b>47.6</b>
SBL	F	101.8	F	103.1	F	106.4
SBT	D	47.1	D	47.2	D	47.1
SBR	D	37.2	D	37.2	D	37.5
<b>SB Approach</b>	<b>E</b>	<b>68.6</b>	<b>E</b>	<b>69.1</b>	<b>E</b>	<b>69.8</b>
L – Left T – Through R – Right [X] – With Recommended Improvements						

In comparison between the **Existing, 2027 No-Build, and 2027 Build Traffic Scenarios**, the following can be observed:

- The signalized intersections are expected to continue operating at their current overall LOS “D” or better during both the AM and PM peak hours, with minimal increases (maximum increase of 0.4 seconds of delay for both signal intersections) between the 2027 No-Build and 2027 Build Traffic Scenarios.
  - The SBL movement at Grand River Avenue & Dobie Road/Central Park Drive maintains a LOS “E” and “F” for all traffic scenarios during the AM and PM peak hours respectively. However, the recommended improvements from the Background Commercial Development address this concern with timing improvements to this intersection.
- The stop-sign controlled intersections are expected to see increased delays due to the traffic volumes from the Sheetz Development for its respective Site Driveways. However, these delay increases are minimal, and the intersections operate at an LOS “D” or better for all individual movements, except for the NBLTR movement located across from Site Driveway #2 which operates at an LOS “E”.
- In the case of increased delays at the study locations along Grand River Avenue, the Sheetz development as well as the developments south along Grand River Avenue provide sufficient internal stacking and alternative cross-access routes to the east and west to access Grand River Avenue.
- Overall, it can be concluded that the Sheetz Development has minimal impacts on the study intersections and surrounding roadway network.

Capacity analysis summary sheets for all traffic scenarios can be found in Appendix F (Existing), Appendix G (2027 No-Build), and Appendix H (2027 Build) of the report.

## 8. Turn Lane Analysis

Left and right-turn lane analyses were completed using the turn lane warrant charts from the MDOT *Geometric Design Guidance (September 2017)*. Capacity analysis results were used to determine if turn lanes were warranted at signalized intersections.

### 8.1. Left-Turn Lane Warrant Review Summary

Due to the presence of two-way left-turn lanes (TWLTL) on Grand River Avenue and Marsh Road, that can be utilized for left turns into the site driveways, a left-turn lane warrant was not analyzed.

### 8.2. Right-Turn Lane Analysis

Table 5 provides a summary of the data and results utilized in the review of each study location for a right-turn lane. Based on the total peak hour approach having volumes greater than 300 vph, the right turn volumes were not adjusted per the instructions on the chart. Based on the existence of a center left-turn lane on Grand River Avenue and Marsh Road, the total approach volumes were adjusted to remove the left-turn volumes per the instructions on the chart.

**Table 5**  
**Right-Turn Lane Warrant Review**

Intersection and Traffic Scenario	Direction	*Approach Traffic (am/pm)	Right-Turn Traffic (am/pm)	Chart Used	Warranted
2027 Build Traffic Scenario					
Marsh Road & Site Driveway #1	NBR	366/917	16/23	NCHRP Fig. 4-23	<b>No/Taper</b>
Grand River Ave & Site Driveway #2	WBR	698/674	16/17	NCHRP Fig. 4-23	<b>No/No</b>
Grand River Ave & Site Driveway #3	WBR	761/704	70/54	NCHRP Fig. 4-23	<b>Taper/Taper</b>

\* Adjusted Approach Volumes

### 8.3. Right-Turn Lane Warrant Review Summary

According to NCHRP Figure 4-23 within the MDOT Geometric Design Guidance, a NB to EB right-turn taper **is warranted** at the intersection of Marsh Road & Site Driveway #1 during the 2027 Build Traffic Scenario. However, due to sufficient levels of service and minimal queuing for this movement, CESO **does not recommend** the installation of this right-turn taper.

According to NCHRP Figure 4-23 within the MDOT Geometric Design Guidance, a WB to NB right-turn lane **is not warranted** at the intersection of Grand River Avenue & Site Driveway #2 during the 2027 Build Traffic Scenario.

According to NCHRP Figure 4-23 within the MDOT Geometric Design Guidance, a WB to NB right-turn taper **is warranted** at the intersection of Grand River Avenue & Site Driveway #3 during the 2027 Build Traffic Scenario. However, due to sufficient levels of service and potential right-of-way conflicts, CESO **does not recommend** the installation of this right-turn taper.

MDOT Turn Lane Resources are located in Appendix I of the report.

## 9. Queue Length Analysis

### 9.1. Queue Length Analysis Procedure and Results

The 95<sup>th</sup> percentile queue lengths were calculated using Synchro Version 12.0 in combination with SimTraffic. CESO reviewed the Existing, 2027 No-Build, and 2027 Build Traffic Scenarios. The results of the analyses for the AM and PM Peak Hours are listed below in Table 6 and Table 7 respectively. The 95<sup>th</sup> percentile queue length analyses summary sheets are located alongside the capacity analyses in Appendix F (Existing), Appendix G (2027 No-Build), and Appendix H (2027 Build) of the report.

**Table 6**  
**Queue Length Analysis – AM Peak Hour**

Location	Movement	Storage Length Existing	AM Peak Hour No-Build and Build Year Traffic Scenarios		
			95 <sup>th</sup> Percentile Queue Length (ft) [With Recommended Improvements]		
Traffic Scenario →			Existing	2027 No-Build	2027 Build
Grand River Avenue & Marsh Road (Signal Controlled)	EBL	205'	91	90	97
	EBT	--	87	94	97
	EBTR	--	81	83	83
	WBL	260'	80	80	81
	WBT	--	145	153	148
	WBT	--	167	175	173
	WBR	265'	36	37	39
	NBL	105'	54	58	70
	NBT	--	150	154	141
	NBTR	--	114	126	115
	SBL	110'	94	94	93
	SBT	--	166	157	168
	SBT	--	131	128	132
Marsh Road & Shopping Center North Driveway/Site Driveway #1 (Stop Sign Controlled)	WBLR	--	131	11	54
	SBL	TWLTL	59	6	29
Grand River Avenue & Shopping Center South Driveway/Site Driveway #2 (Stop Sign Controlled)	EBL	TWLTL	--	--	32
	WBL	TWLTL	24	23	24
	WBT	--	--	--	5
	WBTR	--	--	--	5
	NBLTR	--	30	32	28
Grand River Avenue & Access Driveway/Site Driveway #3 (Stop Sign Controlled)	SBLTR	--	12	14	61
	EBL	TWLTL	25	25	28
	EBTR	--	--	--	4
	WBL	TWLTL	13	13	14
	WBT	--	10	6	14
	WBTR	--	6	9	16
	NBLTR	--	37	38	35
	SBLTR	--	27	30	53

**Table 6 – Continued.**  
**Queue Length Analysis – AM Peak Hour**

Location	Movement	Storage Length Existing	AM Peak Hour No-Build and Build Year Traffic Scenarios		
			95 <sup>th</sup> Percentile Queue Length (ft) [With Recommended Improvements]		
Traffic Scenario →			Existing	2027 No-Build	2027 Build
Grand River Avenue & Marsh Road (Signal Controlled)	EBL	180'	31	35	46
	EBT	--	51	48	53
	EBT	--	55	54	57
	EBR	210'	27	25	25
	WBL	190'	30	33	37
	WBT	--	142	157	161
	WBTR	--	115	123	133
	NBL	40'	82	81	82
	NBTR	--	209	205	217
	SBL	140'	93	99	96
	SBT	--	144	152	161
SBR	310'	49	49	54	

**Table 7**  
**Queue Length Analysis – PM Peak Hour**

Location	Movement	Storage Length Existing	AM Peak Hour No-Build and Build Year Traffic Scenarios		
			95 <sup>th</sup> Percentile Queue Length (ft) [With Recommended Improvements]		
Traffic Scenario →			Existing	2027 No-Build	2027 Build
Grand River Avenue & Marsh Road (Signal Controlled)	EBL	205'	303	300	308
	EBT	--	766	532	986
	EBTR	--	715	482	927
	WBL	260'	97	91	95
	WBT	--	99	103	109
	WBT	--	112	111	125
	WBR	265'	61	59	62
	NBL	105'	134	124	127
	NBT	--	229	224	227
	NBTR	--	204	197	200
	SBL	110'	123	124	130
	SBT	--	174	169	175
	SBT	--	133	133	141
	SBR	245'	90	95	92
Marsh Road & Shopping Center North Driveway/Site Driveway #1 (Stop Sign Controlled)	WBLR	--	35	33	68
	SBL	TWLTL	14	9	40
Grand River Avenue & Shopping Center South Driveway/Site Driveway #2 (Stop Sign Controlled)	EBL	TWLTL	22	25	55
	EBT	--	3	7	26
	EBTR	--	6	7	17
	WBL	TWLTL	43	44	46
	WBT	--	--	4	--
	WBTR	--	3	--	--
	NBLTR	--	60	56	58
SBLTR	--	25	22	62	

**Table 7 – Continued.**  
**Queue Length Analysis – PM Peak Hour**

Location	Movement	Storage Length Existing	AM Peak Hour No-Build and Build Year Traffic Scenarios		
			95 <sup>th</sup> Percentile Queue Length (ft) [With Recommended Improvements]		
Traffic Scenario →			Existing	2027 No-Build	2027 Build
Grand River Avenue & Access Driveway/Site Driveway #3 (Stop Sign Controlled)	EBL	TWLTL	32	31	36
	EBTR	--	7	7	6
	WBL	TWLTL	25	26	32
	WBT	--	16	16	15
	WBTR	--	17	7	14
	NBLTR	--	44	45	49
	SBLTR	--	40	41	64
Grand River Avenue & Marsh Road (Signal Controlled)	EBL	180'	79	73	88
	EBT	--	112	113	111
	EBT	--	136	138	141
	EBR	210'	32	30	31
	WBL	190'	37	40	53
	WBT	--	177	165	176
	WBTR	--	170	161	170
	NBL	40'	83	82	82
	NBTR	--	225	223	220
	SBL	140'	325	211	216
	SBT	--	325	301	329
SBR	310'	135	108	142	

**9.2. Queue Length Analysis Summary**

CESO reviewed all study locations to identify queuing issues and determine if calculated queue lengths exceed existing turn lane storage lengths. The queue length analysis revealed the following:

- It can be observed that some left turn queues exceed their existing storage lengths at the signal intersections. However, there are two-way left-turn lanes (TWLTL) beyond the existing storage length that can be utilized in case of overflow.
- While some movements exceed existing storage lengths, these queue conditions are present in the Existing and 2027 No-Build Traffic Scenarios prior to the buildout of the proposed Sheetz Development. CESO confirmed that the proposed Sheetz Development has a minimal impact on current queuing issues.
- In the event of moderate queuing at the Site Driveways, the proposed Sheetz Development provides cross-access points to the east to allow for vehicles to maneuver to other driveways for access onto Grand River Avenue.

## 10. Summary of Recommendations

### 10.1. Recommendations

The following summary of recommendations was generated based upon the findings in the Traffic Impact Study. Refer to Figure 9 for the Recommended Improvement graphic.

#### **2027 No-Build Traffic Scenario (Responsibility – Others):**

- No improvements are recommended or required.

#### **2027 Build Traffic Scenario (Responsibility – Sheetz, Inc.):**

##### Marsh Road & Site Driveway #1:

- Maintain Site Driveway #1 to permit right-in, right-out, left-in, and left-out (full access) movements of passenger cars. Control this driveway with one (1) stop sign.

##### Grand River Avenue & Site Driveway #2:

- Maintain Site Driveway #2 to permit right-in, right-out, left-in, and left-out (full access) movements of passenger cars. Control this driveway with one (1) stop sign.

##### Grand River Avenue & Site Driveway #3:

- Construct Site Driveway #3 to permit right-in, right-out, left-in, and left-out (full access) movements of passenger cars. Control this driveway with one (1) stop sign.

## 11. References

### 11.1. References

This report utilizes information provided by the following sources:

1. *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*. Transportation Research Board, Washington, D.C., 2022.
2. *Trip Generation Manual*. 12<sup>th</sup> ed. Washington, DC: Institute of Transportation Engineers, 2025.
3. Most recent Site Plan obtained from Sheetz.
4. *Michigan Manual of Uniform Traffic Control Devices (MMUTCD)*. Michigan Department of Transportation (MDOT).
5. "Charter Township of Meridian, MI." 42° 43' 14.25" N and 84° 25' 5.38" W, *Google Earth*. Imagery Date: July 17<sup>th</sup>, 2021.
6. *Geometric Design Guidance (September 2017)*. Michigan Department of Transportation (MDOT).



**To:** Planning Commission

**From:** Brian Shorkey, Principal Planner

**Date:** June 22, 2026

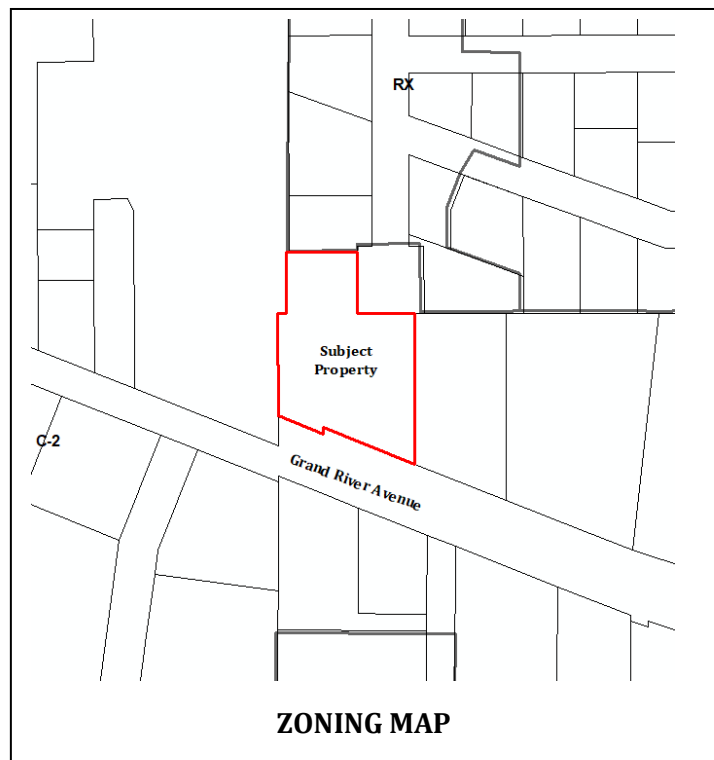
**Re:** Special Use Permit #26018 (7-Eleven), to construct a 7-Eleven gas station and convenience store at 2736 Grand River Avenue.

CESO, Inc. (Applicant) has submitted a Special Use Permit (SUP) application for the construction of a new 7-Eleven gas station and convenience store at 2736 Grand River Avenue (Subject Property). The Subject Property contains a Clarion hotel which the Applicant is proposing to tear down. The Subject Property is zoned C-2, Commercial, and gas stations are special uses in the C-2 district.

#### **Zoning and Future Land Use**

The Subject Property is located in the C-2, Commercial zoning district. The same zoning designation applies to the adjacent properties to the west, south, and east. The property to the north is zoned RX, One- and Two-Family Residential. The Subject Property is adjacent to Whole Foods and accesses that property to the east.

The C-2 district requires a minimum of 100 feet of lot frontage and 4,000 square feet of lot area for new lots. The Subject Property consists of two parcels that together total approximately 2.4 acres in size. The Subject Property has a total of approximately 260 feet of frontage along Grand River Avenue.



The Future Land Use Map from the 2023 Master Plan designates the subject site in the Commercial category. The same designation applies to all adjacent properties, except for the property to the north, which is shown as Single-Family Residential.

### **Staff Analysis**

Applications for special land use permits are reviewed under Sec. 86-126 in the Zoning Ordinance. Based on that review, Staff has the following comments:

1. *The project is consistent with the intent and purposes of this chapter.*

The uses proposed, a gas station and convenience store, exist in other locations in the Township under the C-2 zoning.

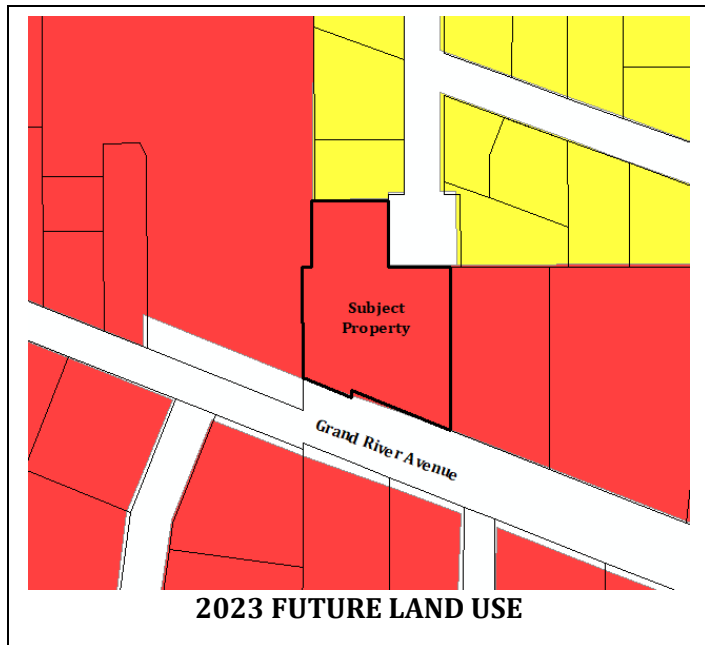
2. *The project is consistent with applicable land use policies contained in the Township's comprehensive development plan of current adoption.*

The property is zoned appropriately and complies with the Future Land Use map and Master Plan.

3. *The project is designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the same area.*

The attached proposed site plan shows that the Applicant is complying with the dimensional requirements in the Township Zoning Ordinance. However, if the proposed site plan moves forward as drawn, the following variances will be necessary for approval:

1. Variance from Sec. 86-404(b)(3) – Rear setback adjacent to a residential district of 24.4 feet instead of the required 100 feet, or 60 feet if screening incorporating a double row of interlocking trees, primarily evergreens, or the equivalent in addition to general screening standards is provided.
2. Variance from Sec. 86-404(e)(13)(b) – Buildings setback adjacent to a residential district of 24.4 feet instead of the required 300 feet.
3. Variance from Sec. 86-402(13), Building perimeter landscaping – Applicant wishes to waive this requirement.
4. *The project will not adversely affect or be hazardous to existing neighboring uses.*



The project is not expected to adversely affect or be hazardous to existing neighboring uses. The nearest adjacent residentially zoned property is the right-of-way for Wardcliff Drive. The nearest residentially occupied structures are an additional 100 feet further north.

5. *The project will not be detrimental to the economic welfare of surrounding properties or the community.*

The project is not expected to be detrimental to the economic welfare of the surrounding properties or the community.

6. *The project is adequately served by public facilities, such as existing roads, schools, stormwater drainage, public safety, public transportation, and public recreation, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide any such service.*

#### Vehicular Traffic

The site fronts on Grand River Avenue, which is classified as a Principal Arterial on the Street Setbacks and Service Drives Map in the zoning ordinance. A 7-foot pedestrian pathway is located along the Subject Property's frontage.

A traffic impact study is required for developments that are expected to generate more than 250 additional directional trips during the peak hour. The Applicant supplied a Traffic Impact Study that does make the following recommendation:

- Construct 7-Eleven Driveway to permit right-in and right-out (limited-access) movements of passenger cars. Provide one (1) Inbound lane and one (1) outbound lane. Control this driveway with one (1) stop sign.

The proposed site plan reflects these suggested improvements. Note that Grand River Avenue is under the jurisdiction of MDOT and that the traffic study will have to be approved by that agency for site plan approval.

7. *The project is adequately served by public sanitation facilities if so designed. If on-site sanitation facilities for sewage disposal, potable water supply, and stormwater are proposed, they shall be properly designed and capable of handling the longterm needs of the proposed project.*

The project is adequately served by public water. Potential stormwater impacts will be reviewed by the Ingham County Drain Commission during site plan review.

8. *The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.*

The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.

9. *The project will not directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, and wildlife areas.*

The project is not expected to directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, or wildlife areas. While the proposed site plan shows environmentally sensitive areas, it also shows that the proposed development does not affect them.

There are additional standards found in Sec. 86-404, C-2 Commercial District, for the regulation of gas stations.

1. *No gasoline service station shall have more than 10 vehicle fueling stations.*

This requirement is met.

2. *Any building, gas island, air compressors, tire filling stations, vacuum cleaners, or similar equipment shall be set back a minimum of 300 feet from an abutting residential district line.*

As noted, a variance to this requirement is required.

3. *Any building or structure shall be set back a minimum of 100 feet from the property line when adjacent to a child care center.*

Not applicable.

4. *The site shall accommodate safe internal vehicle circulation.*

The drive aisles are all at least 35 feet in width and meet our parking and circulation standards.

5. *Setbacks for vehicle fueling stations, and similar equipment, shall be a minimum of 20 feet from any right-of-way lines as specified in the Master Plan for Major Streets and Highways, Meridian Charter Township, Ingham County, Michigan. Gasoline pump islands, and similar equipment shall be a minimum of 25 feet from a side or rear property line.*

This requirement is met.

6. *Off-street vehicle storage. No outdoor storage of wrecked or partially dismantled vehicles shall be permitted unless such vehicles are required to be temporarily stored for a period of time by police or court order. All such storage facilities shall be screened or shielded, in accordance with the special use permit.*

This requirement is met.

7. *All activities, except routine maintenance performed at the fuel pump shall be carried on entirely within a building.*

No maintenance facility is shown on the proposed site plan and this requirement is met.

8. *There shall be no outdoor displays of items for sale, such as tires, tractors, lawnmowers, or other materials, except that supplies intended to be provided to customers directly, such as oil or windshield washer fluid, may be displayed on the pump islands.*

No outdoor storage areas are shown on the proposed site plan and no outdoor storage is planned.

9. *The extensive physical modification of vehicles shall not be permitted in a gasoline service station.*

No maintenance facility is planned and this requirement is met.

10. *Storage of flammable products. Outside aboveground tanks for the storage of gasoline, oil or other inflammable liquids or gases for sale, other than liquefied petroleum gas, shall be prohibited at any gasoline service station.*

No storage of flammable products or outdoor storage tanks are shown on the proposed site plan.

Based on the information provided by the Applicant, Staff has identified the listed variances as issues with the proposed site plan. Staff has no other major concerns that would negatively impact surrounding properties or the Township at large while reviewing the proposed Special Use Permit, as long as the development happens as proposed on the site plan. If the Special Use Permit for the project is approved by the Planning Commission, the applicant will be required to submit for Site Plan Review and/or any required building permits prior to beginning operations.

#### **Planning Commission Options**

The Planning Commission may recommend approval, approval with conditions, or denial of the proposed special use permit. A resolution will be provided at a future meeting.

#### **Attachments**

1. Narrative, prepared by the Applicant
2. Proposed Site Plan and Existing Survey, prepared by CESO
3. Proposed Landscape Plan, prepared by CESO
4. Proposed Building Elevations
5. Traffic Impact Study, prepared by CESO

**SUP REQUEST STANDARDS**  
**Township Code of Ordinances, Section 86-126**

Applications for Special Land Uses will be reviewed with the standards stated below. An application that complies with the standards stated in the Township Ordinance, conditions imposed pursuant to the Ordinance, other applicable Ordinances, and State and Federal statutes will be approved. Your responses to the questions below will assist the Planning Commission in its review of your application.

(1) The project is consistent with the intent and purposes of this chapter.

**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities is consistent with the intent and purposes of Chapter 86 of the Township Code of Ordinances. The project incorporates defined ingress and egress, internal circulation, and separation of vehicular movements to promote safety, along with appropriate setbacks, landscaping, and buffering, particularly adjacent to residential areas, to minimize impacts. The building placement and site layout provide an orderly and functional development that is compatible with surrounding uses and infrastructure.**

(2) The project is consistent with applicable land use policies contained in the Township's Master Plan of current adoption.

**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities is consistent with the Township's currently adopted Master Plan. The development supports the planned commercial land use designation by providing a neighborhood-serving use along an existing roadway corridor, utilizing existing infrastructure, and incorporating a site layout that promotes safe access, efficient circulation, and compatibility with surrounding land uses.**

(3) The project is designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the same area.

**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities is designed to be harmonious and compatible with the existing and intended character of the surrounding area. The site layout places the building toward the interior of the parcel with parking located along the perimeter, consistent with commercial development patterns in the vicinity. The project includes defined vehicular circulation with controlled access points, including separate ingress and egress drives, to promote safe and efficient traffic flow. Landscaping, buffering, and setbacks are incorporated along the property boundaries, particularly adjacent to nearby residential zoning, to provide appropriate screening and transition between uses. The building orientation, pedestrian connections, and internal drive aisles are designed to minimize conflicts and enhance functionality. These design elements ensure that the development will integrate with surrounding land uses and will not alter the essential character of the area.**

(4) The project will not adversely affect or be hazardous to existing neighboring uses.

**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities will not adversely affect or be hazardous to existing neighboring uses. The site provides controlled access via two driveways along East Grand River Avenue, with defined internal drive aisles that separate circulation between fuel pumps, parking, and building access to promote safe traffic flow. The building is centrally located on the site, with parking positioned along the perimeter, reducing congestion near adjacent properties. Landscaping, setbacks, and buffering, particularly along property lines adjacent to residential zoning, are incorporated to mitigate potential impacts related to lighting, noise, and vehicle activity, ensuring compatibility with surrounding uses.**

(5) The project will not be detrimental to the economic welfare of surrounding properties or the community.

**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities will not be detrimental to the economic welfare of surrounding properties or the community. The development represents an investment in the site that will enhance the corridor along East Grand River Avenue, provide convenient**

**services to nearby residents and the traveling public, and support local economic activity. The project's organized site layout, including designated parking, controlled access, and efficient circulation, contributes to a well-functioning commercial development that is expected to complement and support surrounding land uses.**

(6) The project is adequately served by public facilities, such as existing roads, schools, stormwater drainage, public safety, public transportation, and public recreation, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide any such service.

**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities is adequately served by existing public facilities and services. The site has direct access to East Grand River Avenue, a primary roadway capable of supporting the proposed traffic. The development will utilize existing utilities and incorporate on-site stormwater management systems in accordance with applicable regulations. Public safety services, schools, and other community facilities are available within the Township and are not expected to be adversely impacted by the project. The site design, including defined access points and internal circulation, ensures that the development can be safely and efficiently served by existing infrastructure.**

(7) The project is adequately served by public sanitation facilities if so designed. If on-site sanitation facilities for sewage disposal, potable water supply, and storm water are proposed, they shall be properly designed and capable of handling the longterm needs of the proposed project.

**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities will be adequately served by public sanitation facilities. The project will connect existing municipal water and sanitary sewer systems. There is an existing 8" water line running east to west along the north side of the property and north to south along the west side of the property and a 15-inch sanitary sewer main and manholes runs north to south along the east side of the property. Stormwater will be managed on-site through a properly designed above ground detention system in accordance with applicable regulations to accommodate the long-term needs of the development. All utilities and drainage systems will be designed to meet Township, State, and Federal requirements, ensuring safe and reliable service for the project.**

(8) The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.

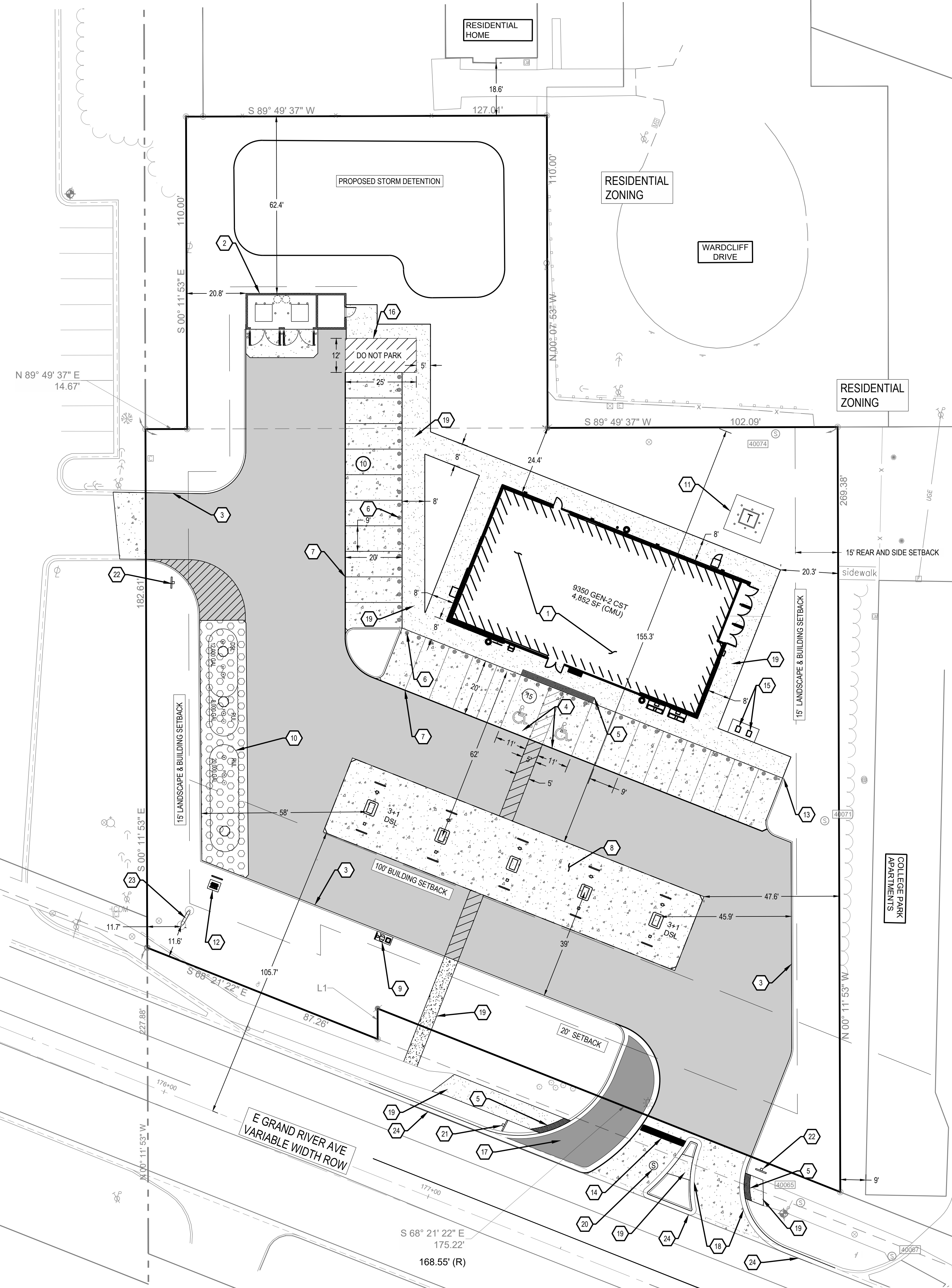
**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities will not involve uses or operations that are detrimental to people, property, or the general welfare. Traffic will be accommodated through controlled access points and defined internal circulation designed to minimize conflicts and congestion. Potential impacts related to noise, lighting, and vehicle activity will be mitigated through building placement, setbacks, and site layout. Any lighting associated with the fuel canopy and site will be designed to minimize glare onto adjacent properties, and all operations will comply with applicable regulations to prevent excessive noise, fumes, or odors.**

(9) The project will not directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, and wildlife areas.

**The proposed 7-Eleven (AKA Speedway) convenience store with associated fuel service facilities will not have a substantial adverse impact on the Township's natural resources. The site is located within an existing developed corridor along East Grand River Avenue and does not involve significant impacts to sensitive environmental features such as wetlands, water bodies, or major forested areas. Stormwater will be managed on-site in accordance with applicable regulations to protect water quality and recharge. The development represents a controlled and properly designed use of the property that minimizes environmental impacts while supporting orderly development.**

C:\D\CAD\Drawings\ERH East Lansing MI\Project Files\CESO\03-CIVIL\PLANS SITE\_PLAN.dwg - 5/19/2026 - Lisa Gunter

WHOLE FOODS  
PARKING LOT



**PROPERTY DATA:**

PARCEL OWNER: EAST LANSING LODGE, INC  
 PARCEL ID: 33-02-02-17-460-017  
 ADDRESS: 2736 EAST GRAND RIVER AVENUE  
 EAST LANSING, MI 48823  
 PROPERTY AREA: 1.57 AC  
 ZONING: C-2 (COMMERCIAL)  
 ADJACENT PROPERTIES: NORTH: RX (RESIDENTIAL)  
 SOUTH: C-2 (COMMERCIAL)  
 EAST: C-2 (COMMERCIAL)  
 WEST: C-2 (COMMERCIAL)  
 EXISTING USE: LODGING/ HOTEL  
 PROPOSED USE: CONVENIENCE STATION/ SERVICE STATION  
 BUILDING SETBACKS:  
 FRONTAGE ALONG STREET: 100' FROM CENTER LINE  
 SIDE: 15' FROM PROPERTY LINE  
 REAR: 60' FROM PROPERTY LINE  
 MAXIMUM BUILDING HEIGHT: 2 STORIES OR 35'  
 BUILDING AREA: 4,852 SF  
 EXISTING PARKING: 74 PARKING SPACES & 4 ADA SPACES  
 PARKING: TOTAL PARKING SPACES: 25 SPACES  
 ADA PARKING SPACES: 2  
 FLOODPLAIN DESIGNATION: PARCEL IS LOCATED WITHIN ZONE 'X' AS INDICATED BY THE FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL 26065C0152D, EFFECTIVE DATE: 08/16/2011, PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

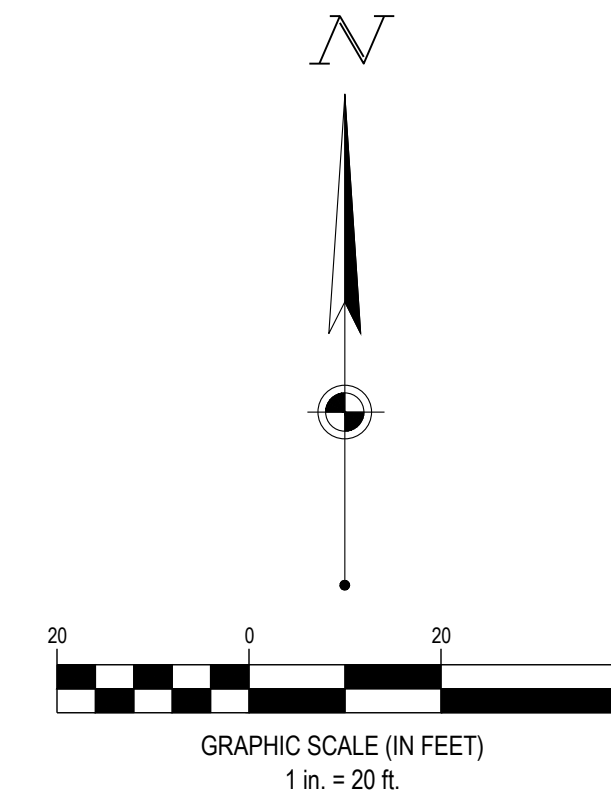
**SITE LEGEND**

EXISTING		PROPOSED	
[Symbol]	± 19,218 SF. PROPOSED STANDARD DUTY ASPHALT PAVEMENT PER DETAIL 5 ON SHEET CPC-1	[Symbol]	± 9,834 SF. PROPOSED CONCRETE PAVEMENT PER DETAIL 1 ON SHEET CPC-1
[Symbol]	± 4,542 SF. PROPOSED CONCRETE SIDEWALK PER DETAIL 4 ON SHEET CPC-1	[Symbol]	± 1,407 SF. PROPOSED TANK SLAB PAVEMENT PER DETAIL 3 ON SHEET CPC-1
[Symbol]	R/W	[Symbol]	RIGHT-OF-WAY
[Symbol]	PROPERTY LINE	[Symbol]	PROPERTY LINE
[Symbol]	SETBACK	[Symbol]	EASEMENT
[Symbol]	CENTERLINE	[Symbol]	BUILDING
[Symbol]	CONCRETE CURB	[Symbol]	PAVEMENT/WALK
[Symbol]	PARKING SPACE COUNT	[Symbol]	PARKING SPACE COUNT
[Symbol]	SIGN	[Symbol]	DETECTABLE WARNING MAT.
[Symbol]	DETECTABLE WARNING MAT.	[Symbol]	SANITARY MANHOLE

**NOTES:**  
 IMPERVIOUS COVERAGE LIMIT (% OF SITE): 70%  
 IMPERVIOUS AREA FOR THIS SITE ±62%

**CODED NOTES:**

- PROPOSED BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
- PROPOSED TRASH ENCLOSURE WITH RECYCLE SHED PER LOCAL REQUIREMENTS. SEE ARCHITECTURAL PLAN FOR DETAILS.
- PROPOSED 6" STRAIGHT CURB.
- ADA ACCESSIBLE PARKING SPACE WITH SIGNAGE.
- ADA DETECTABLE WARNING STRIP.
- PROPOSED 6" PIPE BOLLARD.
- PROPOSED PARKING LOT PAVEMENT MARKINGS.
- PROPOSED AUTO FUELING CANOPY. REFER TO FUEL PLANS.
- PROPOSED AIR MACHINE.
- PROPOSED UNDERGROUND FUEL TANKS. REFER TO FUELING PLANS.
- ELECTRICAL TRANSFORMER PAD
- PROPOSED VENT STACKS FOR FUEL TANKS. REFER TO FUELING PLANS.
- PROPOSED CURB TO TRANSITION TO FLUSH.
- PROPOSED STOP BAR.
- PROPOSED BIKE RACK.
- PROPOSED 12' X 25' LOADING ZONE WITH A LABEL STATING "DO NOT PARK"
- PROPOSED RED STAMPED CONCRETE.
- PROPOSED ROLL CURB.
- PROPOSED SIDEWALK.
- RELOCATED SANITARY MANHOLE.
- RELOCATED DIRECTIONAL SIGN.
- PROPOSED DIRECTIONAL SIGN. REFER TO BRANDBOOK FOR SPECIFICATIONS.
- PROPOSED PYLON SIGN. REFER TO BRANDBOOK FOR SPECIFICATIONS.
- PROPOSED MDOT CURB & GUTTER

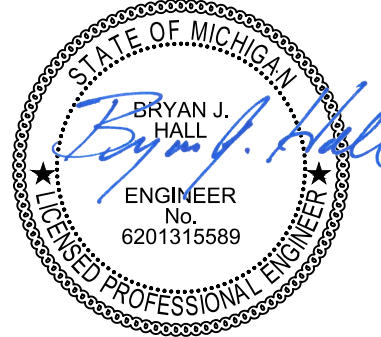


SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MICHIGAN UTILITIES PROTECTION SERVICE AT 811 OR 800-482-7171 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION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



**CESO**  
 WWW.CESODINC.COM

3601 Ryby Rd., Suite 300  
 Mansfield, OH 43342  
 Phone: 937.435.8584 Fax: 888.208.4826



05/19/2026



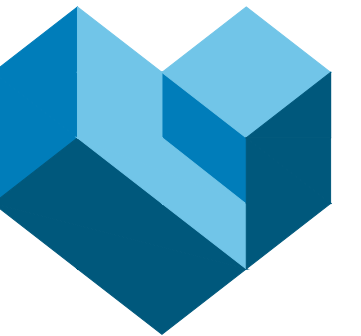
7-ELEVEN, INC.

**EAST LANSING, MI**  
 2736 E. GRAND RIVER AVE.  
 EAST LANSING, MI 48823

Revisions / Submissions		
ID	Description	Date

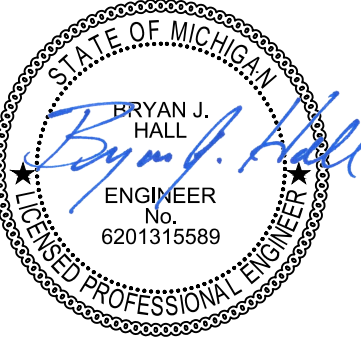
Project Number: 766857  
 Scale: 1"=20'  
 Drawn By: LG  
 Checked By: JPM  
 Date: 05/07/2026  
 Issue: ENTITLEMENT SET

Drawing Title:  
**SITE PLAN**  
**CS**



**CESO**  
WWW.CESOINC.COM

3601 Ryby Rd., Suite 300  
Mansfield, OH 43342  
Phone: 937.435.8584 Fax: 888.208.4826



05/19/2026



7-ELEVEN, INC.

**EAST LANSING, MI**

2736 E. GRAND RIVER AVE.  
EAST LANSING, MI 48823

Revisions / Submissions

ID Description Date

Project Number: 766857

Scale: 1"=50'

Drawn By: LG

Checked By: JPM

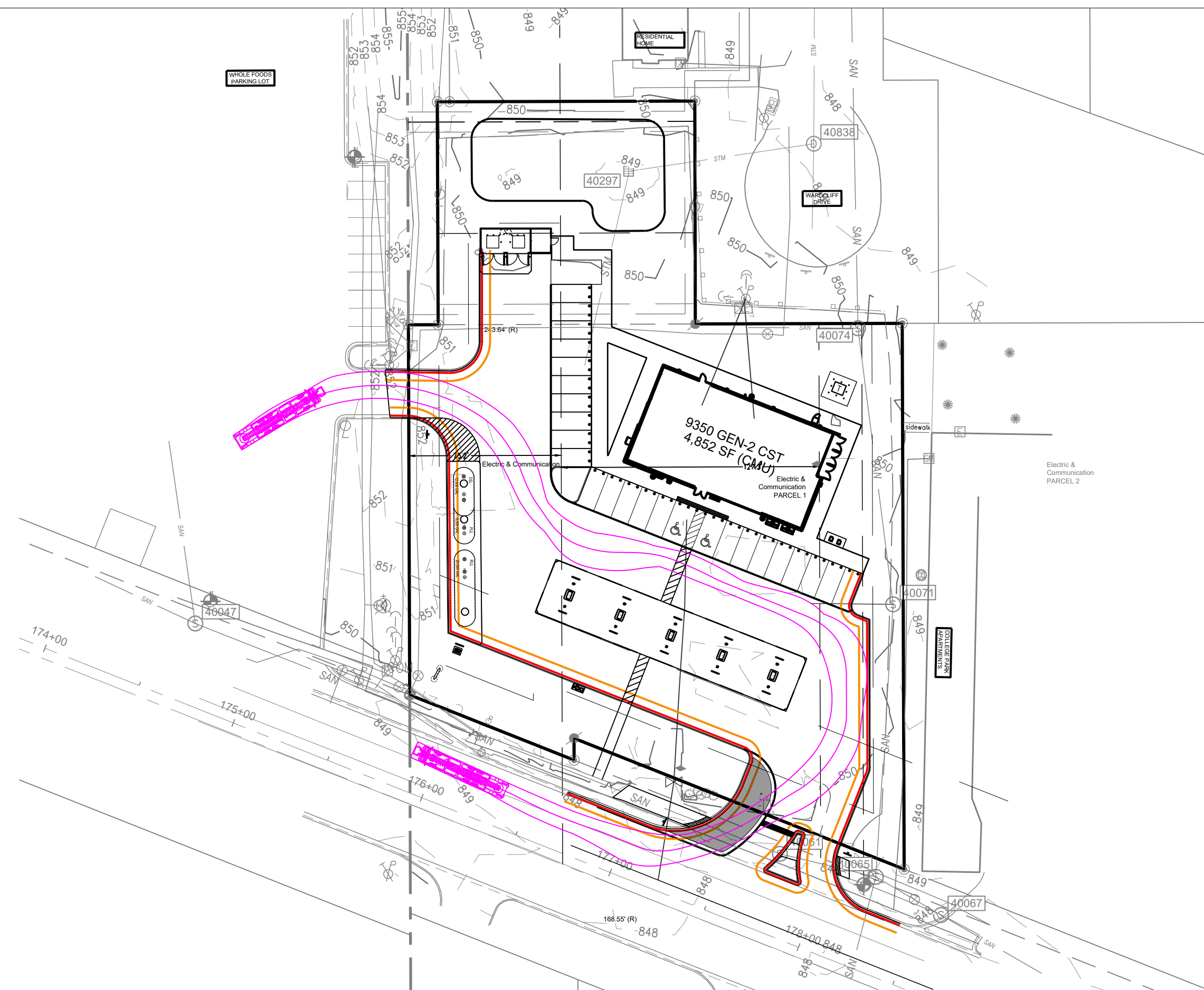
Date: 05/07/2026

Issue: ENTITLEMENT SET

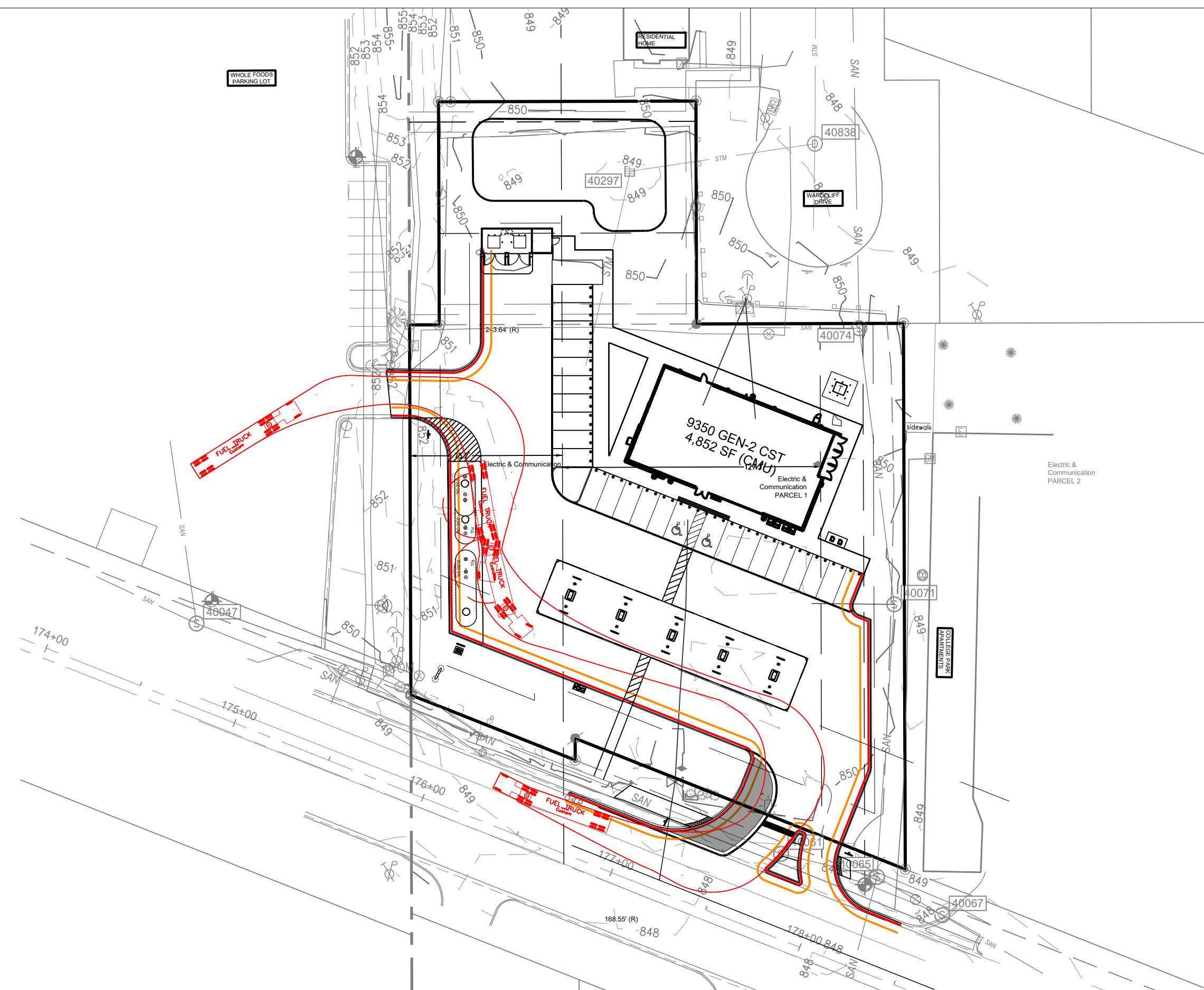
Drawing Title:

**CIRCULATION PLAN**

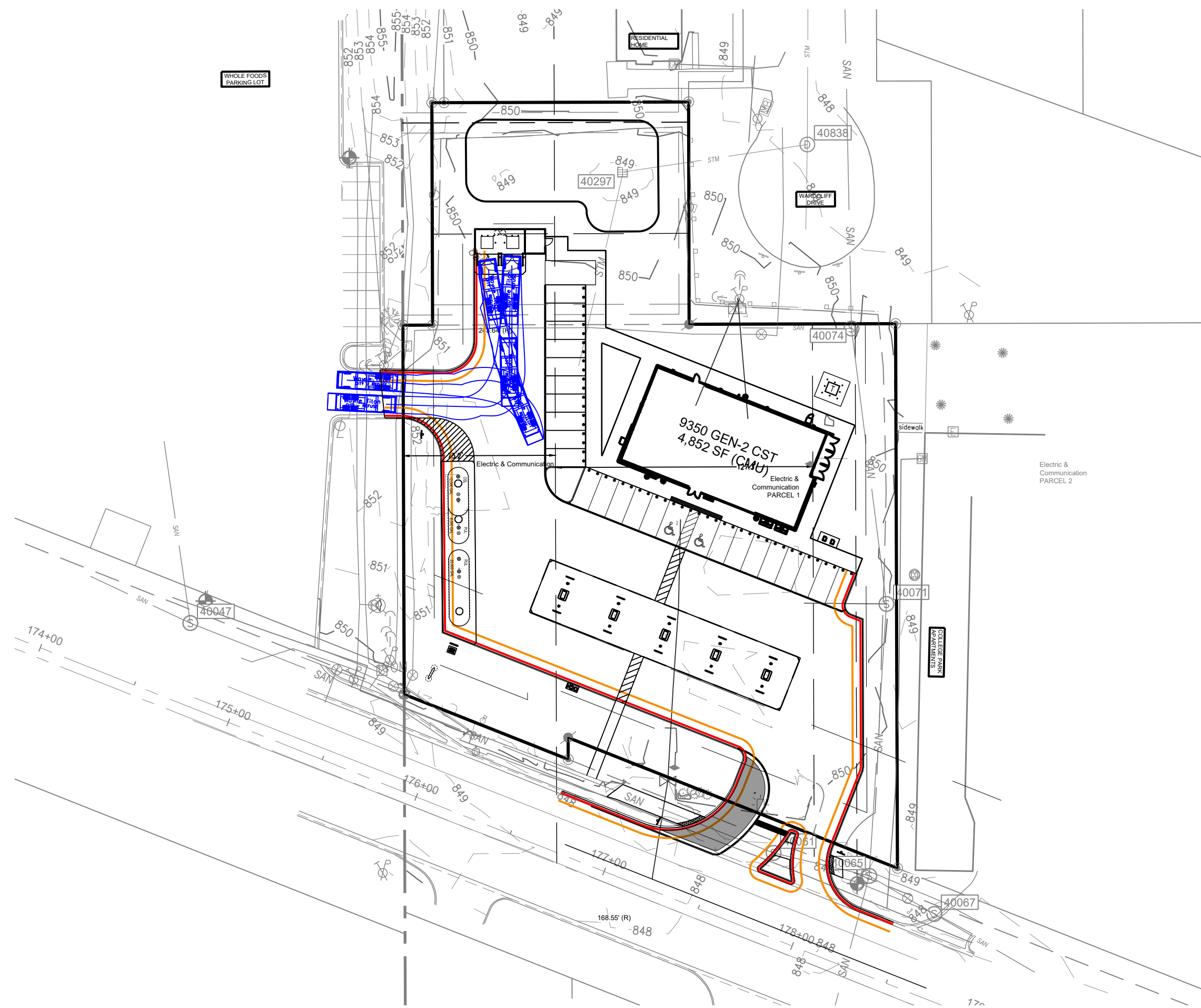
**CR**



FIRE TRUCK CIRCULATION  
1"=50'



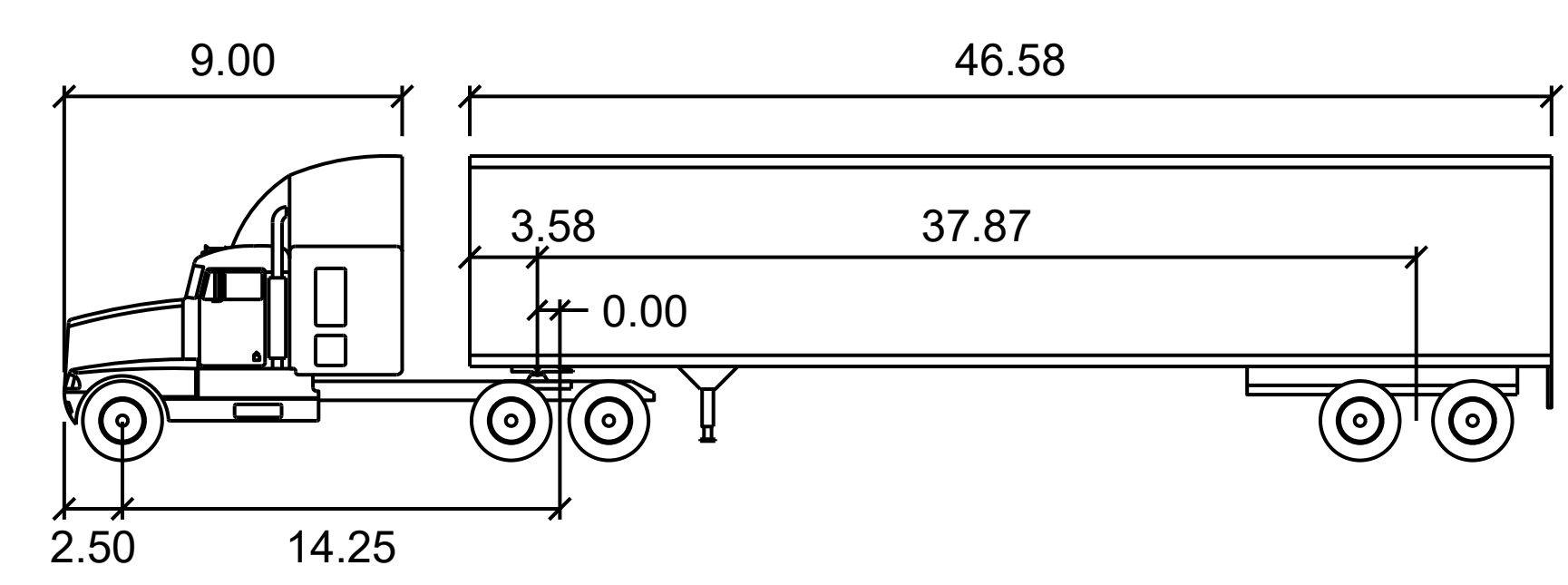
FUEL TRUCK CIRCULATION  
1"=50'



GARBAGE TRUCK CIRCULATION  
1"=50'

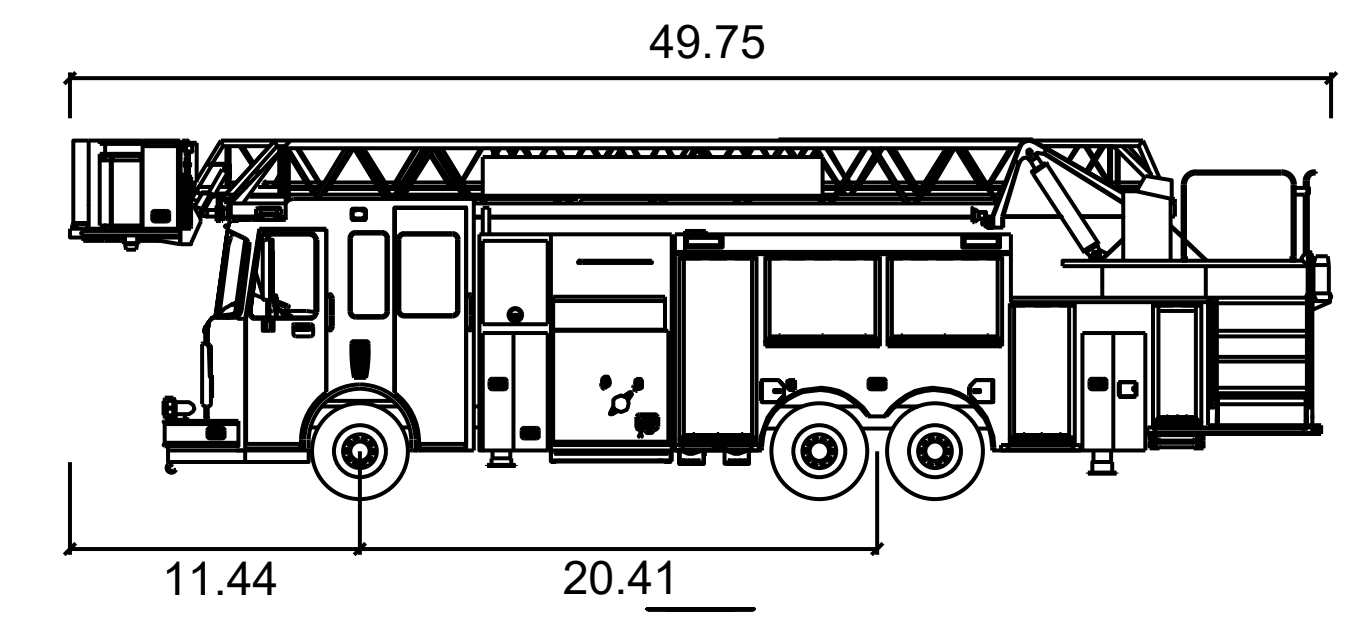
**LEGEND**

- 1 FT OFFSET FROM FACE OF CURB
- 5 FT OFFSET FROM FACE OF CURB



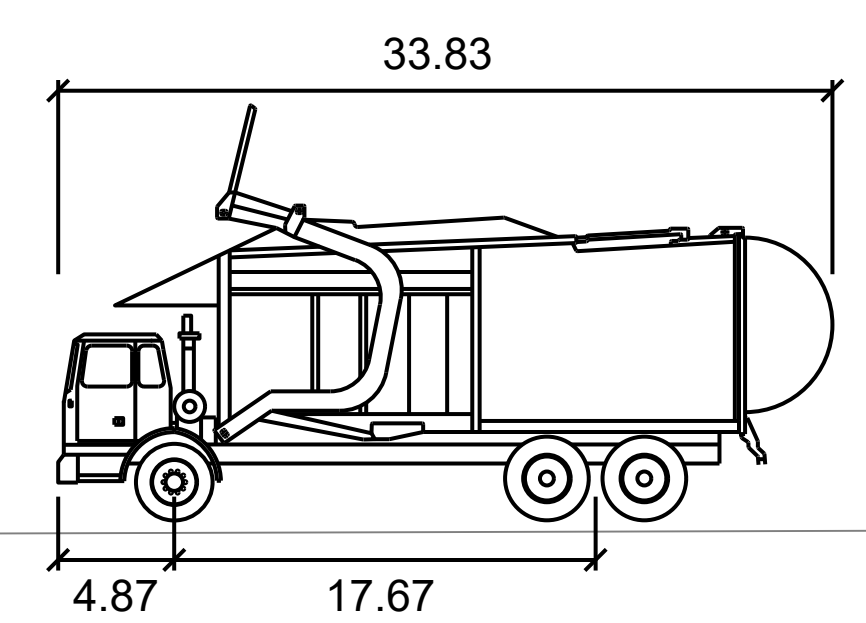
**FUEL TRUCK**

	feet		
Tractor Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 26.0
Tractor Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		



**E-One Cyclone II**

	feet
Width	: 8.33
Track	: 8.33
Lock to Lock Time	: 6.0
Steering Angle	: 31.0

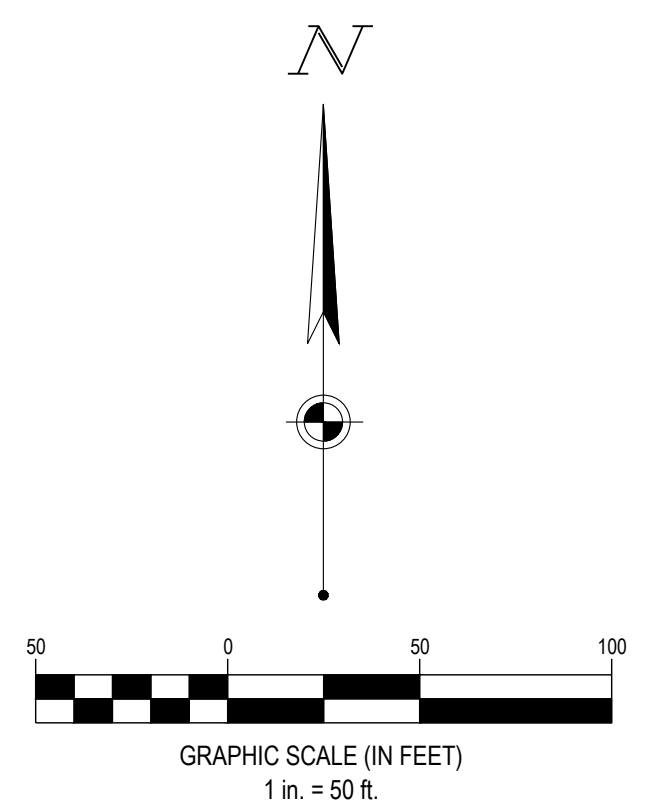


**Wayne Titan**

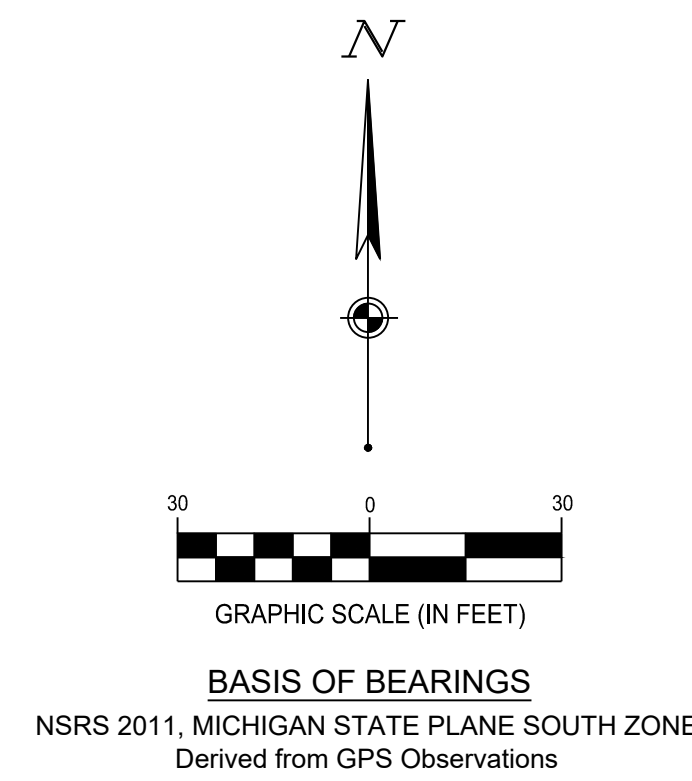
	feet
Width	: 8.46
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 45.0



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:\DCA\CD\ceso\7-Eleven ERE East Lansing MI\Project Files\_CESO\03-CIVIL\PLAN\_ PLOT\766857\_SITE\_PLAN.dwg - 5/19/2026 - Lisa Gunter



**BENCHMARK** DATUM: NAVD88

BM "A": CHISELED "X" ON SOUTH SIDE OF CONCRETE LIGHT POLE BASE, EAST SIDE OF WHOLE FOODS PARKING LOT, 2ND POLE SOUTH FROM WHOLE FOODS BUILDING. 854.17'

BM "B": CHISELED "X" ON WEST BOLT FOR TRAFFIC SIGNAL STEEL POLE, NORTH SIDE OF M-43, NORTHEAST CORNER OF ENTRANCE TO WHOLE FOODS AND M-43 INTERSECTION. 851.18'

BM "C": BENCHMARK SET WEST SIDE OF POWER/TELE POLE, BETWEEN SIDEWALK AND BACK OF CURB, NORTH SIDE OF M-43, EAST FROM ENTRANCE TO HOTEL PARKING LOT, SOUTHWEST FROM SANITARY MANHOLE IN SIDEWALK. 848.28'

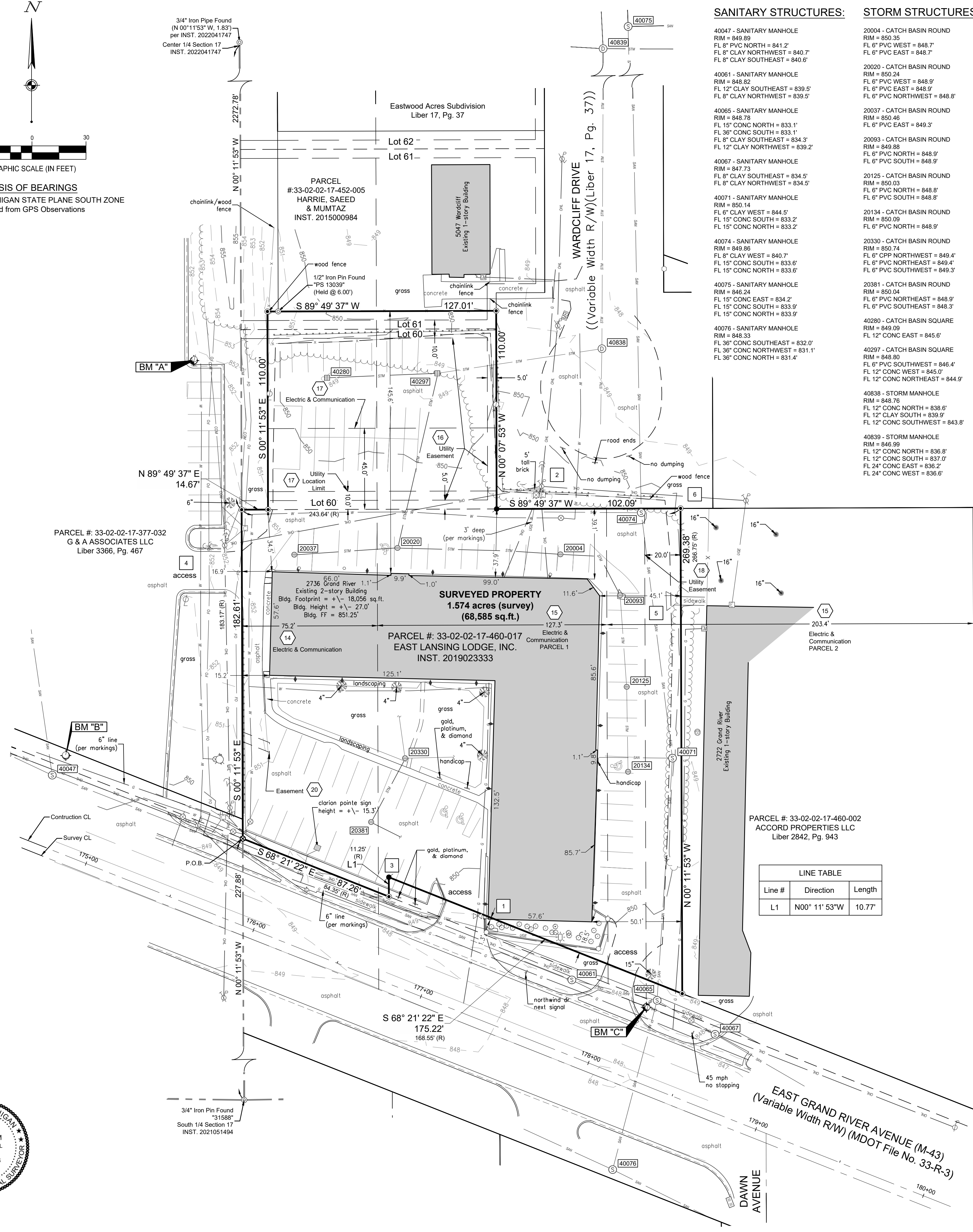
- SURVEY LEGEND**
- - 5/8" Iron Pin Set w/cap COTTINGIM 4001071358
  - ⊙ - Monument Found as Described
  - ⊙ - Cross Notch Set
  - ⊙ - Mag Spike Set
  - (R) - Record

- TOPOGRAPHIC LEGEND**
- Power / Telephone Pole
  - Light Pole
  - Electric Box (Access)
  - Air Conditioner
  - Gas Meter
  - Cleanout
  - Sanitary Manhole
  - Storm Manhole
  - Catch Basin
  - Catch Basin (Round)
  - End Storm Drain
  - Structure Number
  - G - Underground Gas Line
  - W - Underground Water Line
  - UGE - Underground Electric
  - COM - Underground Communications
  - FO - Underground Fiber Optic
  - OHL - Overhead Utility Line
  - STM - Storm Sewer
  - Sanitary Sewer
  - Guardrail
  - Treeline
  - Downspout
  - Fire Hydrant
  - Mailbox
  - Water Valve
  - Guy Wire
  - Bollard
  - Post
  - Sign
  - Bush
  - Deciduous Tree
  - Coniferous Tree

**SURVEYOR'S CERTIFICATION:**  
 (i) 7-Eleven (ii) Fidelity National Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2026 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6a, 7a, 7b1, 8, 9, 11a, 13, 14, 16, & 17 of Table A thereof. The fieldwork was completed on April 03, 2026.

Date of Plat or Map: April 24, 2026  
 Joshua R. Cottingim  
 Michigan PS No. 4001071358  
 joshua.cottingim@cesoinc.com  
 3601 Rigby Road Suite 300  
 Miamisburg, Ohio 45342  
 (937) 435-8584



- SANITARY STRUCTURES:**
- 40047 - SANITARY MANHOLE RIM = 849.89 FL 8" PVC NORTH = 841.2' FL 8" CLAY NORTHWEST = 840.7' FL 8" CLAY SOUTHWEST = 840.6'
  - 40061 - SANITARY MANHOLE RIM = 848.82 FL 12" CLAY SOUTHWEST = 839.5' FL 8" CLAY NORTHWEST = 839.5'
  - 40065 - SANITARY MANHOLE RIM = 848.78 FL 15" CONC NORTH = 833.1' FL 36" CONC SOUTH = 833.1' FL 8" CLAY SOUTHWEST = 834.3' FL 12" CLAY NORTHWEST = 839.2'
  - 40067 - SANITARY MANHOLE RIM = 847.73 FL 8" CLAY SOUTHWEST = 834.5' FL 8" CLAY NORTHWEST = 834.5'
  - 40071 - SANITARY MANHOLE RIM = 850.14 FL 8" CLAY WEST = 844.5' FL 15" CONC SOUTH = 833.2' FL 15" CONC NORTH = 833.2'
  - 40074 - SANITARY MANHOLE RIM = 849.86 FL 8" CLAY WEST = 840.7' FL 15" CONC SOUTH = 833.6' FL 15" CONC NORTH = 833.6'
  - 40075 - SANITARY MANHOLE RIM = 848.24 FL 15" CONC EAST = 834.2' FL 15" CONC SOUTH = 833.9' FL 15" CONC NORTH = 833.9'
  - 40076 - SANITARY MANHOLE RIM = 848.33 FL 36" CONC SOUTHWEST = 832.0' FL 36" CONC NORTHWEST = 831.1' FL 36" CONC NORTH = 831.4'
- STORM STRUCTURES:**
- 20004 - CATCH BASIN ROUND RIM = 850.35 FL 6" PVC WEST = 848.7' FL 6" PVC EAST = 848.7'
  - 20020 - CATCH BASIN ROUND RIM = 850.24 FL 6" PVC WEST = 848.9' FL 6" PVC EAST = 848.9'
  - 20037 - CATCH BASIN ROUND RIM = 850.46 FL 6" PVC EAST = 849.3'
  - 20093 - CATCH BASIN ROUND RIM = 849.88 FL 6" PVC NORTH = 848.9' FL 6" PVC SOUTH = 848.9'
  - 20125 - CATCH BASIN ROUND RIM = 850.03 FL 6" PVC NORTH = 848.8' FL 6" PVC SOUTH = 848.8'
  - 20134 - CATCH BASIN ROUND RIM = 850.09 FL 6" PVC NORTH = 848.9'
  - 20330 - CATCH BASIN ROUND RIM = 850.74 FL 6" CPP NORTHWEST = 849.4' FL 6" PVC NORTHEAST = 848.4' FL 6" PVC SOUTHWEST = 848.5'
  - 20381 - CATCH BASIN ROUND RIM = 850.04 FL 6" PVC NORTHEAST = 848.9' FL 6" PVC SOUTHWEST = 848.3'
  - 40280 - CATCH BASIN SQUARE RIM = 849.09 FL 12" CONC EAST = 845.6'
  - 40297 - CATCH BASIN SQUARE RIM = 848.80 FL 6" PVC SOUTHWEST = 846.4' FL 12" CONC NORTHEAST = 844.9'
  - 40838 - STORM MANHOLE RIM = 848.76 FL 12" CONC NORTH = 838.6' FL 12" CONC SOUTH = 839.9' FL 12" CONC SOUTHWEST = 843.8'
  - 40839 - STORM MANHOLE RIM = 846.99 FL 12" CONC NORTH = 836.8' FL 12" CONC SOUTH = 837.0' FL 24" CONC EAST = 836.2' FL 24" CONC WEST = 836.6'

**LINE TABLE**

Line #	Direction	Length
L1	N00° 11' 53" W	10.77'

**EXHIBIT "A" LEGAL DESCRIPTION**

Land situated in the Township of Meridian, County of Ingham and State of Michigan described as:  
 Commencing on the North line of US-16 at its intersection with the North and South 1/4 line of Section 17, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan; thence Southeastly 84.35 feet along the North line of US-16; thence North 11.25 feet; thence Southeastly 168.55 feet along the North line of US-16; thence North 266.75 feet; thence West 243.64 feet to the North and South 1/4 line of Section 17; thence South along the North and South 1/4 line of Section 17, 183.17 feet to the Point of Beginning; also Lot No. 60 and the South 10.00 feet of Lot No. 61, except the Westerly 15.00 feet of said lots of Eastwood Acres Subdivision, Meridian Township, Ingham County, Michigan, according to the recorded plat thereof, as recorded in Liber 17 of Plats, Page 37, Ingham County Records.

**SCHEDULE B - SECTION II**

- Items 1-13 are not survey related.
14. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted in a document:  
 Granted to: Consumers Power Company (now known as Consumers Energy) Recording No. Liber 57 of Miscellaneous Records, Page 360  
**EASEMENT IS ON THE SURVEYED PROPERTY AND SHOWN HEREON.**
15. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted in a document:  
 Granted to: Consumers Power Company (now known as Consumers Energy) Recording No. Liber 68 of Miscellaneous Records, Page 476  
**EASEMENTS ARE ON THE SURVEYED PROPERTY AND SHOWN HEREON.**
16. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the document

Recording No: Liber 689, Page 250  
**EASEMENTS ARE ON THE SURVEYED PROPERTY AND SHOWN HEREON.**  
**LOT 60 & 61 OF THE SURVEYED PROPERTY ARE DESCRIBED IN RECORD DOCUMENT.**

17. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted in a document:  
 Granted to: Consumers Power Company (now known as Consumers Energy) Recording No. Liber 789, Page 881  
**EASEMENT IS ON THE SURVEYED PROPERTY AND SHOWN HEREON.**

18. Easements, Terms, Covenants, and Conditions of Grant of Easement as set forth below:  
 Recording No: Liber 816, Page 571  
**EASEMENT IS ON THE SURVEYED PROPERTY AND SHOWN HEREON.**

19. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted in a document:  
 Granted to: Ingham County Drain Commissioner  
 Recording No: Liber 1071, Page 873  
**EASEMENT IS BLANKET IN NATURE AND COVERS THE SURVEYED PROPERTY.**

20. Right(s) of Way and/or Easement(s) and rights incidental thereto, as granted in a document:  
 Granted to: Charter Township of Meridian  
 Recording No: 2016-031921  
**EASEMENT IS ON THE SURVEYED PROPERTY AND SHOWN HEREON.**

**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 we obtained through a certified title commitment conducted by Fidelity National Title Insurance Company, Commitment Number A071030025 and bearing an effective date of November 12, 2025 at 8:00 a.m.
- Direct access to the subject parcel is available via East Grand River Avenue.
- 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.  
 MISS Dig Ticket #'s 2026032504788-000, 2026032504941-000, 2026032505101-000, 2026032505131-000, 2026032505176-000, 2026032505209-000, and 2026032505283-000.  
 Safe Site Work Order: 00231431
- Parcel is located within Zone "X" (Area of Minimal Flood Hazard) as indicated by the Flood Insurance Rate Map (FIRM) Map Number 26065C0152D, effective date: 08/16/2011 published by the Federal Emergency Management Agency.
- No evidence of recent earth movement, building construction, or building additions observed on the surveyed property at the time of the fieldwork.
- No proposed changes to street right-of-way lines were provided to the surveyor at the time of this survey.
- There are 79 regular and 4 ADA accessible marked parking spaces on the surveyed property.
- A zoning report was not provided to the surveyor at the time of the survey.  
 The following zoning information was obtained from a Site Investigation Report created by CESO, Inc on 01/28/2026  
 Currently zoned: Commercial (C-2)  
 Building setbacks: Front & Rear - 100' Side - 15'  
 Height restriction: 35' for fuel canopy
- The nearest roadway intersection is East Grand River Avenue and Dawn Avenue, being approximately 90 feet southeast of the southeast corner of the surveyed property.

**SIGNIFICANT OBSERVATIONS:**

- Building and landscaping crosses boundary line.
- Fence, guard rail, and asphalt cross boundary line.
- Parking lot crosses boundary line.
- Asphalt crosses boundary line and connects to existing drive, no apparent easement found.
- Concrete sidewalk crosses boundary line.
- A dirt path was observed near the northeast corner of the property signaling cross access



**7-ELEVEN**  
 2736 GRAND RIVER  
 SECTION 17, TOWN 4 NORTH, RANGE 1 WEST,  
 MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

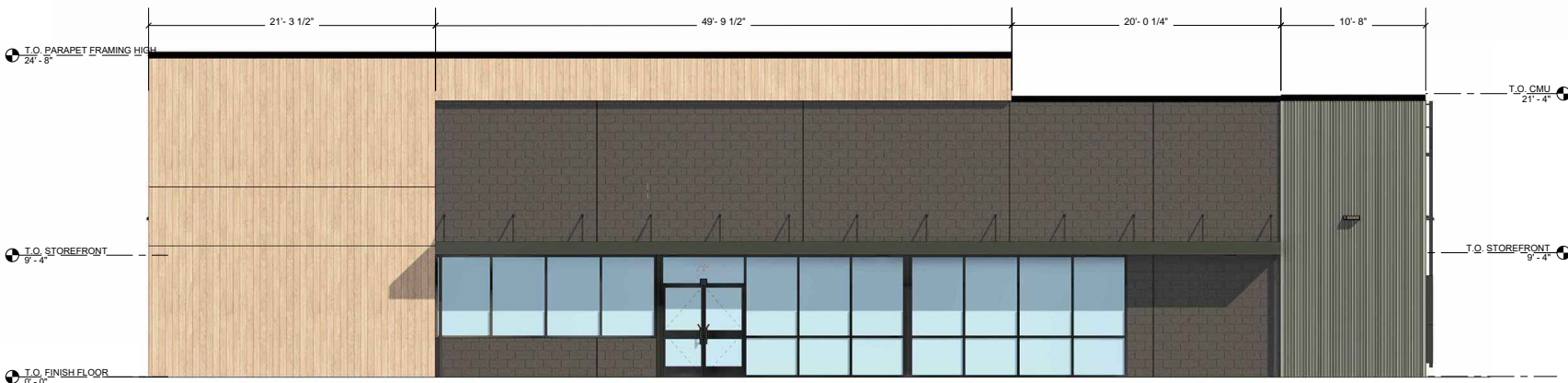
Revisions / Submissions

ID	Description	Date

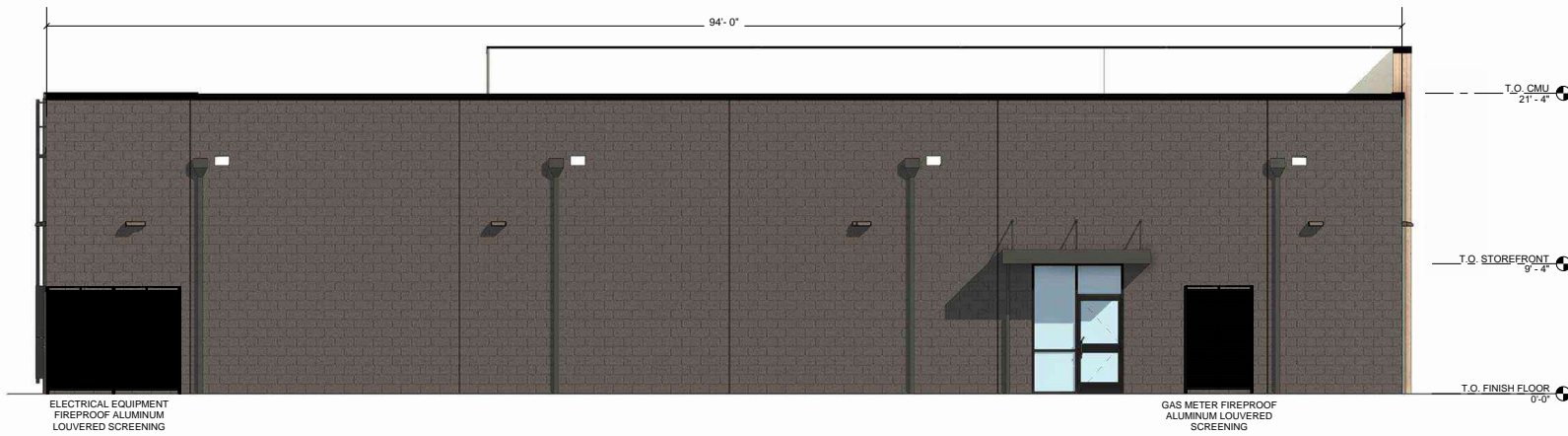
© 2026 CESO, INC.  
 Project Number: 766857  
 Drawn By: TBC  
 Checked By: JRC  
 Date: 04-24-2026  
 Issue: SURVEY

Drawing Title:  
**ALTA/NSPS LAND TITLE SURVEY**

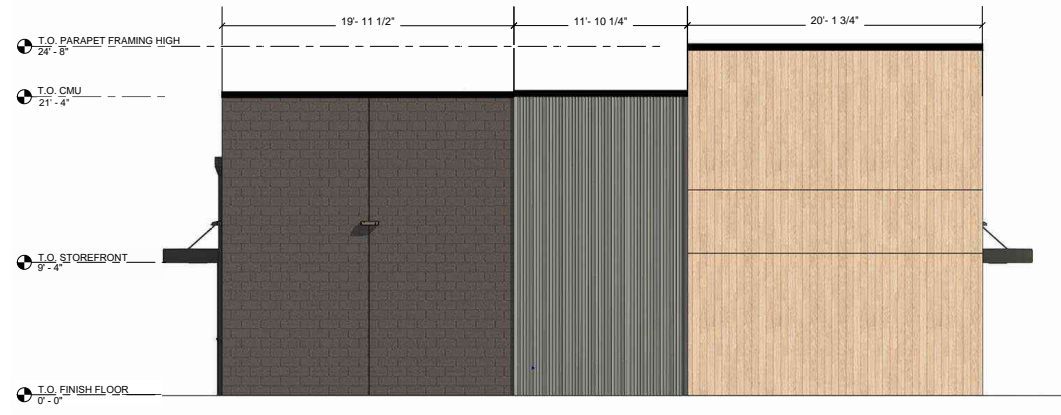




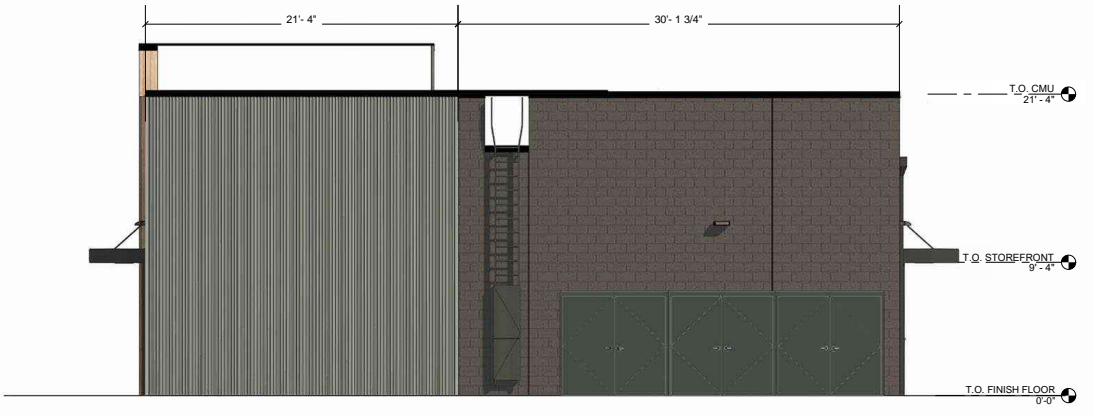
4 FRONT (EAST) ELEVATION  
1/4" = 1'-0"



3 REAR (WEST) ELEVATION  
1/4" = 1'-0"



2 LEFT (SOUTH) ELEVATION  
1/4" = 1'-0"



1 RIGHT (NORTH) ELEVATION  
1/4" = 1'-0"

EXTERIOR MATERIALS SCHEDULE					
CODE	DESCRIPTION	COLOR	MANUFACTURER	MODEL	COMMENTS
FIBER CEMENT PANEL					
FC-1	FIBER CEMENT PANELS - VINYLACEWOOD	SBRUCE	NICHHA	AWP 3000	VERTICAL INSTALLATION
MASONRY					
CMU1	8" INTEGRALLY-COLORED ARCHITECTURAL CMU	PFT-608	WESTBROOK CONCRETE BLOCK	POLISHED FACE TEXTURED BLOCK	EXPOSED CMU ONLY. MORTAR SPEC MIX PORTLAND CEMENT ANTIQUE WHITE SM250. CALK SEALANT TREMCO, VULKEM 116 "STONE".
CMU1	ALT. 8" INTEGRALLY-COLORED ARCHITECTURAL CMU	FRIO	TEXAS BUILDING PRODUCTS	BURNISHED BLOCK CONCRETE MASONRY UNITS	NOTE: GC IS APPROVED TO SELECT CMU1 OR CMU1-1 ALTERNATE WITHOUT THE NEED FOR AN EXCEPTION REQUEST. BOTH ARE DEEMED EQUIVALENT. GC TO SELECT THE CMU THAT PROVIDES THE LOWEST COST, LEAD TIME AND SHIPPING COSTS AND BEST MEETS THE PROJECT REQUIREMENTS.
CMU3	8" STANDARD ARCHITECTURAL CMU	NATURAL / GREY	WESTBROOK CONCRETE BLOCK	8" CONCRETE MASONRY UNITS	ALL CONCEALED CMU LOCATIONS ONLY. NOTE: GC IS APPROVED TO SELECT CMU-3 OR CMU-3-1 ALTERNATE WITHOUT THE NEED FOR AN EXCEPTION REQUEST. BOTH ARE DEEMED EQUIVALENT. GC TO SELECT THE CMU THAT PROVIDES THE LOWEST COST, LEAD TIME AND SHIPPING COSTS AND BEST MEETS THE PROJECT REQUIREMENTS.
CMU3	ALT. 8" STANDARD ARCHITECTURAL CMU	NATURAL / GREY	TEXAS BUILDING PRODUCTS	8" CONCRETE MASONRY UNITS	NOTE: GC IS APPROVED TO SELECT CMU-3 OR CMU-3-1 ALTERNATE WITHOUT THE NEED FOR AN EXCEPTION REQUEST. BOTH ARE DEEMED EQUIVALENT. GC TO SELECT THE CMU THAT PROVIDES THE LOWEST COST, LEAD TIME AND SHIPPING COSTS AND BEST MEETS THE PROJECT REQUIREMENTS.
METAL					
MT-1	EXPOSED FASTENER CORRUGATED METAL PANEL	SILVER	PAC-CLAD	7/8" 24 GAUGE CORRUGATED METAL PANEL	INSTALL VERTICALLY
MT-2	PRE-FINISHED METAL COPING & COMPRESSION EDGE	GOAL BLACK	DURO-LAST	DURO-LAST #R02 & #110	20 GA. PRE-FINISHED METAL PARAPET CAP
MT-3	PRE-FINISHED ALUMINUM CANOPY	MATTE BLACK	MAPES ARCHITECTURAL CANOPIES	MAPES SUPER FLAT SOFFIT CANOPY	MATTE BLACK BAKED ENAMEL WITH REAR GUTTER CONNECTIONS
MT-4	PRE-FINISHED ALUMINUM DOWNSPOUTS, SCUPPER & COLLECTION BOX	MATTE BLACK	ATAS	COMMERCIAL GRADE WATER CONTROL	
MT-5	PRE-FINISHED LADDER	BLACK	ALACO LADDER CO.	FIXED WALL LADDER, MODEL 561 AND H300 SECURITY DOOR WITH POWDER COAT FINISH	
PAINT					
P-1	EXTERIOR UTILITIES, EXTERIOR HW DOORS & FRAMES	ROCK BOTTOM	SHERWIN WILLIAMS	SW 702	SEE PAINT SCHEDULE FOR ADDITIONAL INFORMATION
P-3	TRASH ENCLOSURE GATE, TRASH ENCLOSURE BOLLARDS & PIPES	TRICORN BLACK	SHERWIN WILLIAMS	SW6258	SEE PAINT SCHEDULE FOR ADDITIONAL INFORMATION
ROOFING					
MR-1	MEMBRANE ROOFING SYSTEM	WHITE	DURO-LAST	WHITE 40ML SINGLE PLY PVC ROOFING MEMBRANE	
STOREFRONT					
S-1	ALUMINUM STOREFRONT #29 BLACK FRAMING	BLACK	KAWNEER	451T VG	

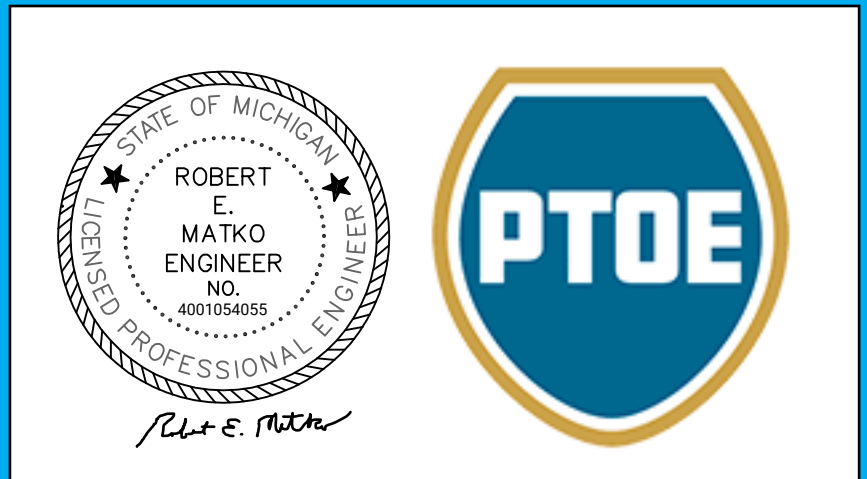
CORRUGATED METAL PANEL TOTAL PERCENTAGE = 14.4%



4.27.2026

# Traffic Impact Study

Proposed 7-Eleven Development



On behalf of:



Contact:

Patrick J. Budronis  
Encore Real Estate  
1646 W. Snow Ave.  
Tampa, FL 33606

Preparation Date:

4/27/2026

# Traffic Impact Study

**CLIENT** Encore Real Estate

**LOCATION:** 2736 East Grand River Avenue

**COUNTY** Ingham

**CITY, STATE** Meridian Township, MI

**PREPARED BY** Idalio Perez-Foulds

CESO, Inc.

**ADDRESS** 13060 S. US Hwy 27, Suite D

**CITY, STATE** Dewitt, MI 48820

**PHONE** 517-299-5766

**DATE** April 27<sup>th</sup>, 2026

<b>Contents</b>	<b>Page</b>
<b>List of Figures</b> .....	<b>II</b>
<b>List of Tables</b> .....	<b>II</b>
<b>List of Appendices</b> .....	<b>III</b>
<b>1. Executive Summary</b> .....	<b>1</b>
1.1. Summary .....	1
1.2. Conclusions .....	1
1.3. Summary of Recommendations .....	2
<b>2. Introduction</b> .....	<b>3</b>
<b>3. Roadway and Traffic Conditions in the Vicinity of the Site</b> .....	<b>7</b>
3.1. Study Location and Area Land Use .....	7
3.2. Area Roadway Characteristics .....	7
3.3. Existing Traffic Volumes .....	9
<b>4. Estimates of 2027 No-Build Traffic in the Vicinity of the Site</b> .....	<b>11</b>
4.1. 2027 No-Build Traffic Volumes .....	11
<b>5. Trip Generation</b> .....	<b>13</b>
5.1. Site Generated Traffic Volumes .....	13
5.2. Directional Distribution of Site Generated Traffic Volumes .....	14
<b>6. Estimates of 2027 Build Traffic in the Vicinity of the Site</b> .....	<b>19</b>
6.1. 2027 Build Traffic Volumes .....	19
<b>7. Estimates of 2028 No-Build Traffic in the Vicinity of the Site</b> .....	<b>21</b>
7.1. 2028 No-Build Traffic Volumes .....	21
<b>8. Estimates of 2028 Build Traffic in the Vicinity of the Site</b> .....	<b>23</b>
6.1. 2028 Build Traffic Volumes .....	23
<b>9. Capacity Analysis</b> .....	<b>25</b>
9.1. Capacity Analysis Parameters .....	25
9.2. Traffic Scenario Capacity Analysis .....	26
<b>10. Turn Lane Analysis</b> .....	<b>28</b>
10.1. Left-Turn Lane Warrant Review Summary .....	28
10.2. Right-Turn Lane Analysis .....	28
10.3. Right-Turn Lane Warrant Review Summary .....	28
<b>11. Queue Length Analysis</b> .....	<b>29</b>



11.1. Queue Length Analysis Procedure and Results .....	29
11.2. Queue Length Analysis Summary .....	30
<b>12. Summary of Recommendations .....</b>	<b>31</b>
12.1. Recommendations .....	31
12.2. References .....	32

## List of Figures

<b>Figure</b>	<b>Page</b>
1. Site Location .....	5
2. Site Plan.....	6
3. Existing Transportation System.....	8
4. 2026 Existing Weekday Peak Hour Traffic Volumes.....	10
5. 2027 No-Build Weekday Peak Hour Traffic Volumes.....	12
6.A. Directional Distribution for Site Generated Traffic Volumes – Primary Trips .....	15
6.B. Directional Distribution for Site Generated Traffic Volumes – Pass-By Trips .....	16
7.A. Site Generated Traffic Volumes - Primary Trips .....	17
7.B. Site Generated Traffic Volumes - Pass-by.....	18
8. 2027 Build Weekday Peak Hour Traffic Volumes.....	20
9. 2028 No-Build Weekday Peak Hour Traffic Volumes.....	22
10. 2028 Build Weekday Peak Hour Traffic Volumes .....	24

## List of Tables

<b>Table</b>	<b>Page</b>
1. Site Generated Traffic Volumes .....	13
2. Level of Service Criteria.....	25
3. Summary of AM Peak Hour Traffic Scenario Capacity Analysis .....	26
4. Summary of PM Peak Hour Traffic Scenario Capacity Analysis.....	27
5. Right-Turn Lane Warrant Review .....	28
6. Queue Length Analysis – AM Peak Hour.....	29
7. Queue Length Analysis – PM Peak Hour .....	30



**List of Appendices**

<b>Appendix</b>	<b>Page</b>
A. Memorandum of Understanding .....	A
B. Existing Traffic Count Data.....	B
C. Growth Rate Documentation .....	C
D. ITE Trip Generation Resources and Calculations .....	D
E. Capacity Analysis Summary Sheets.....	E
F. MDOT Turn Lane Resources.....	F
G. 95 <sup>th</sup> Percentile Queue Length Analysis Summary Sheets .....	G
H. MDOT Existing and Proposed Signal Timings .....	H

## 1. Executive Summary

### 1.1. Summary

This report is submitted on behalf of Encore Real Estate in connection with its application to Meridian Township, Michigan (MI) for site plan approval. The Traffic Impact Study (TIS) conducted by CESO, Inc. identifies the traffic related impacts, if any, associated with the proposed 7-Eleven Store; referred to herein as “7-Eleven Development.”

Encore Real Estate’s Site Plan requests approval of one (1) access connection to E. Grand River Avenue.

The proposed 7-Eleven Development is to be constructed at 2736 East Grand River Ave, within Meridian Township, Ingham County, MI. The full buildout of the 7-Eleven Development is projected to have 10 fueling positions for passenger vehicles and a 4,852 S.F. convenience market store. The 7-Eleven Development is projected to have approximately 25 parking spaces for passenger cars.

The Traffic Impact Study focused on evaluating the 2027 No-Build and 2027 Build Year traffic conditions near the site.

### 1.2. Conclusions

The full buildout of the 7-Eleven is estimated to generate 2,036 trips per day on a typical weekday (1,018 inbound and 1,018 outbound), of which 199 trips will be generated during the Weekday AM Peak Hour (100 inbound and 99 outbound), and 192 trips will be generated during the Weekday PM Peak Hour (96 inbound and 96 outbound).

Under the **2027 No-Build and Build Traffic Scenarios**, the signal-controlled intersection operates at an overall level of service (LOS) “B” or better. Individual movements at the stop-controlled intersection operate at LOS “C” or better.

Under the **2028 Build with Improvements Traffic Scenario**, with the addition of left-turn phasing, the signal-controlled intersection operates at an overall level of service (LOS) “C”. Individual movements at the stop-controlled intersection operate at LOS “C” or better.

CESO conducted turn lane analyses for the study network and reached the following conclusions:

- According to NCHRP Figure 4-23 within the MDOT Geometric Design Guidance, a WB to NB full-width turn lane is **not warranted** at the E. Grand River Ave & 7-Eleven Driveway intersection under the 2027 Build Traffic Scenario. A taper is warranted for this movement under the 2027 Build Traffic Scenario. However, due to physical constraints, limited right-of-way, and the fact that there are no site driveways on the north side E. Grand River and in vicinity of the site with right-turn tapers, CESO would **not recommend** the construction of a taper into the 7-Eleven Driveway.

CESO conducted queue length analyses for the study network and reached the following conclusions:

- The queue length for the EBL movement at the E. Grand River Ave & Northwind Dr intersection exceeds the existing storage under the PM Peak Hour of the 2027 No-Build, 2027 Build, and 2028 Build with Improvements Traffic Scenarios.
- The EBL queue length at the E. Grand River Ave & Northwind Dr intersection exceeds the existing storage because the EBT queue backs up further than the storage length + taper of the EBL movement. The addition of left-turn phasing removes green time from the EBT and WBT phases, increasing their queues and limiting the ability for eastbound left-turning vehicles to enter the left turn lane.
- The proposed 7-Eleven Development has minimal impact to the existing queue lengths throughout the study network.

### **1.3. Summary of Recommendations**

The following summary of recommendations was generated based upon the findings in the Traffic Impact Study.

**2027 No-Build Traffic Scenario (Responsibility – Others):**

- No improvements are recommended or required.

**2027 Build Traffic Scenario (Responsibility – 7-Eleven):**

**E. Grand River Ave & 7-Eleven Driveway:**

- Construct 7-Eleven Driveway to permit right-in and right-out (limited-access) movements of passenger cars. Provide one (1) inbound lane and one (1) outbound lane. Control this driveway with one (1) stop sign.

## 2. Introduction

This report is submitted on behalf of Encore Real Estate in connection with its application to Meridian Township, Michigan (MI) for site plan approval. The Traffic Impact Study (TIS) conducted by CESO, Inc. identifies the traffic related impacts, if any, associated with the proposed 7-Eleven Store; referred to herein as “7-Eleven Development.”

The proposed 7-Eleven Development is to be constructed at 2736 East Grand River Ave, within Meridian Township, Ingham County, MI. The full buildout of the 7-Eleven Development is projected to have 10 fueling positions for passenger vehicles and a 4,852 S.F. convenience market store. The 7-Eleven Development is projected to have approximately 25 parking spaces for passenger cars.

7-Eleven’s Site Plan application requests approval of the following access points:

- Restricted access driveway, permitting right-in and right-out movements, connection to E. Grand River Ave (referred to as “7-Eleven Driveway”) approximately 295’ east of Northwind Dr (stop-bar-to-centerline).

In addition, the 7-Eleven Site Plan application also requests approval to conduct work within the right-of-way to construct the proposed access driveway. *E. Grand River Ave is under the jurisdiction of the Michigan Department of Transportation.*

This report presents the methodologies, analyses, and results of the Traffic Impact Study (TIS) for traffic generated by the proposed 7-Eleven Development. The purpose of the TIS was to identify the traffic related impacts, if any, during typical weekday AM and PM peak hours of the adjacent street traffic corresponding with the weekday hours of operation for the proposed 7-Eleven Development. The study parameters of this report were generated based upon a recent concept site plan, a Memorandum of Understanding (MOU) dated April 8<sup>th</sup>, 2026, between CESO and the Michigan Department of Transportation outlining the TIS scope of services (see Appendix A).

The following intersections were analyzed in the Traffic Impact Study:

- E. Grand River Ave & Northwind Dr (Signal Controlled).
- E. Grand River Ave & Whole Foods Right-In (Uncontrolled).

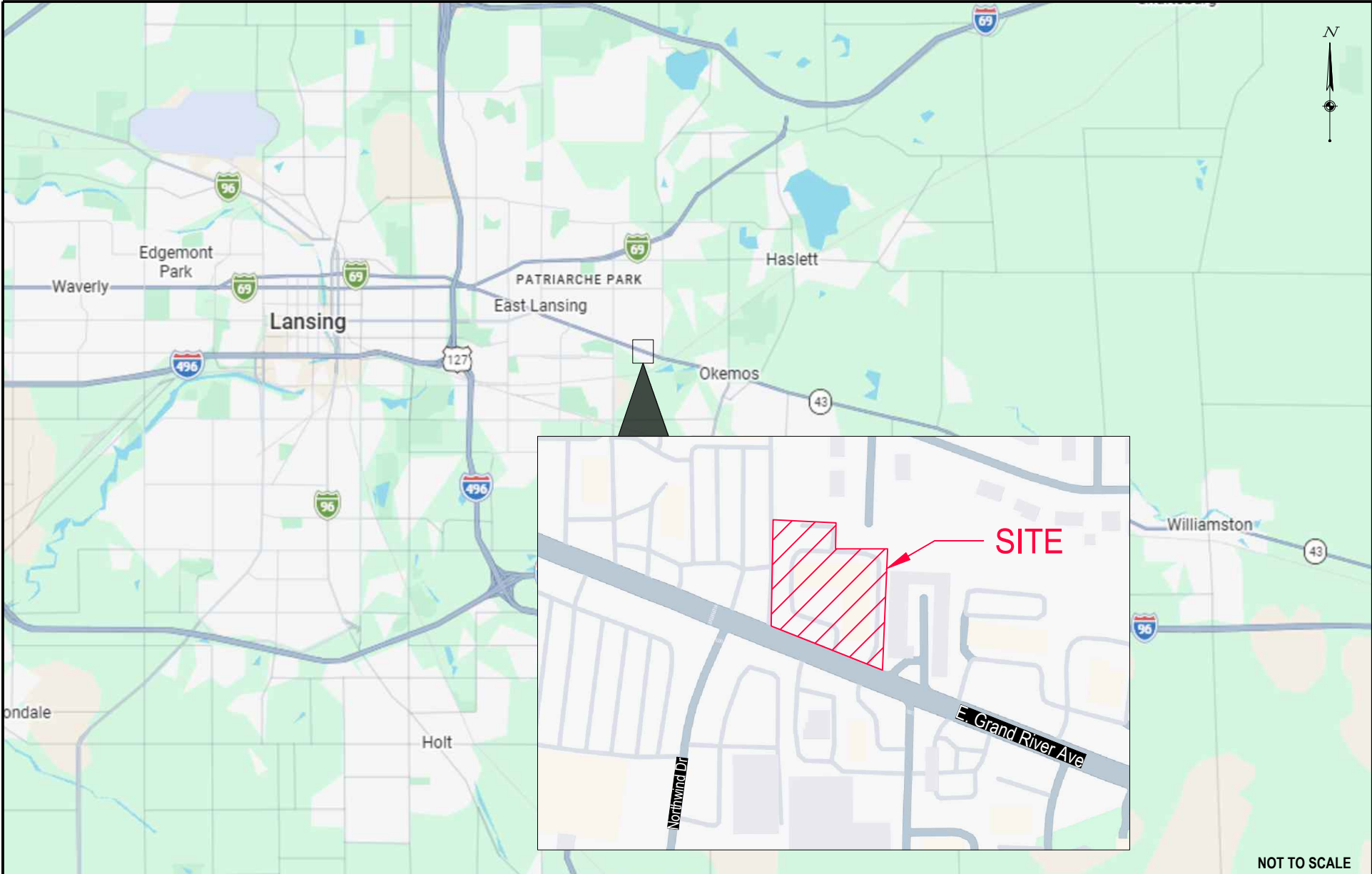
The following traffic scenarios were included in the analysis:

**2027 No-Build Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2027, without the proposed 7-Eleven Development.

**2027 Build Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2027, with the proposed 7-Eleven Development.

**2028 Build with Improvements Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2028, with the proposed 7-Eleven Development. The improvements include MDOT’s proposed left-turn phasing at the E. Grand River Ave & Northwind Dr intersection.

Figure 1 illustrates the Site location with respect to the study area and Figure 2 illustrates the Site Plan for the proposed 7-Eleven Development.



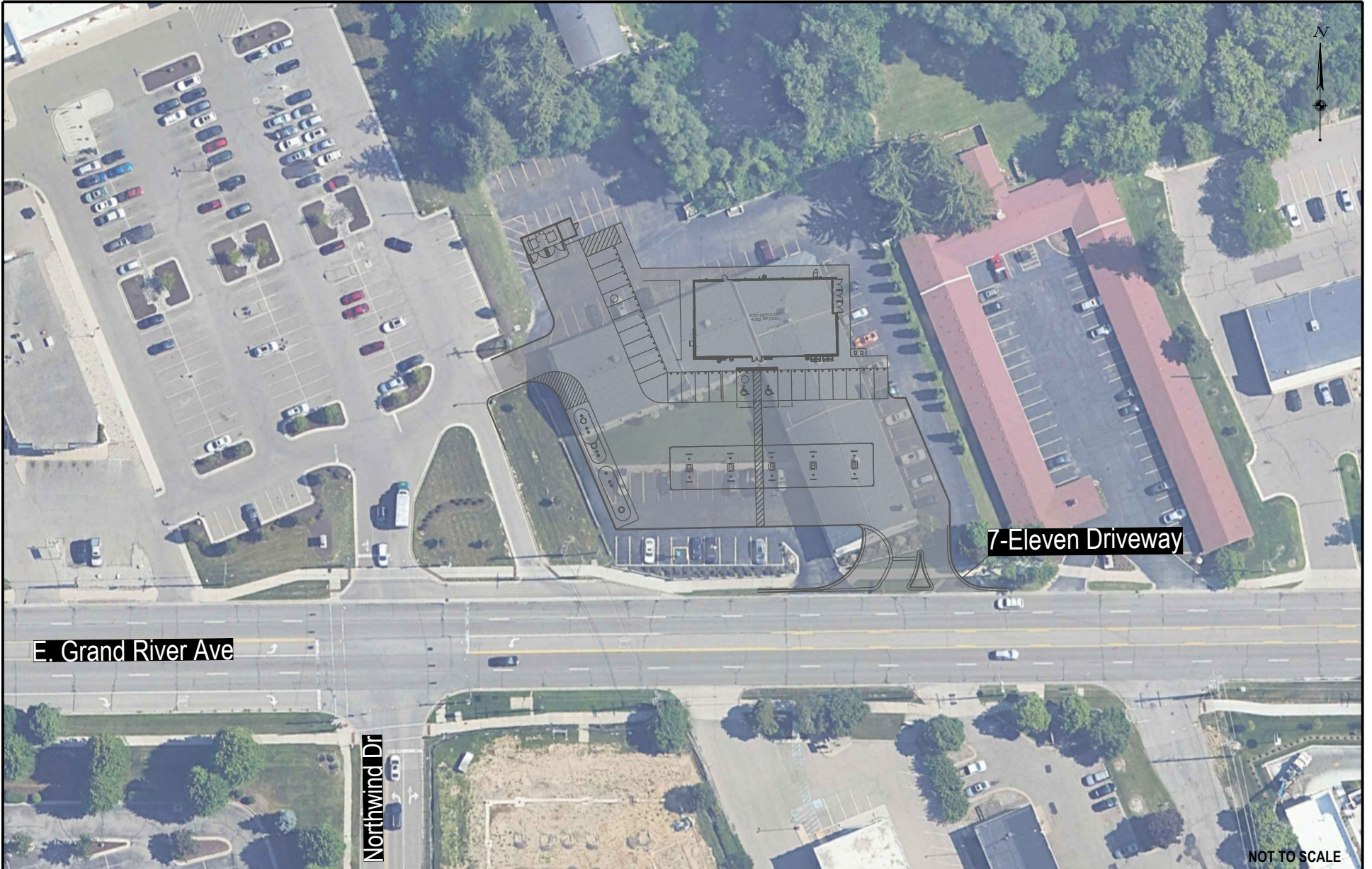
NOT TO SCALE

SITE LOCATION

7-ELEVEN DEVELOPMENT

FIGURE 1

DATE:	04/27/2026
JOB NO.:	766857
DESIGNED BY:	IPF
DRAWN BY:	IPF
CHECKED BY:	REM
PAGE:	5



E. Grand River Ave

Northwind Dr

7-Eleven Driveway

NOT TO SCALE

SITE PLAN

7-ELEVEN DEVELOPMENT

FIGURE 2

DATE:	04/27/2026
JOB NO.:	766857
DESIGNED BY:	IPF
DRAWN BY:	IPF
CHECKED BY:	REM
PAGE:	6

### 3. Roadway and Traffic Conditions in the Vicinity of the Site

An inventory of existing transportation conditions in the vicinity of the Site was created to form a database for use in projecting Build conditions.

#### 3.1. Study Location and Area Land Use

The proposed 7-Eleven Development is to be located at 2736 E. Grand River Avenue, within Meridian Township, Ingham County, MI. Land use in the direct vicinity of the Site is primarily residential and commercial.

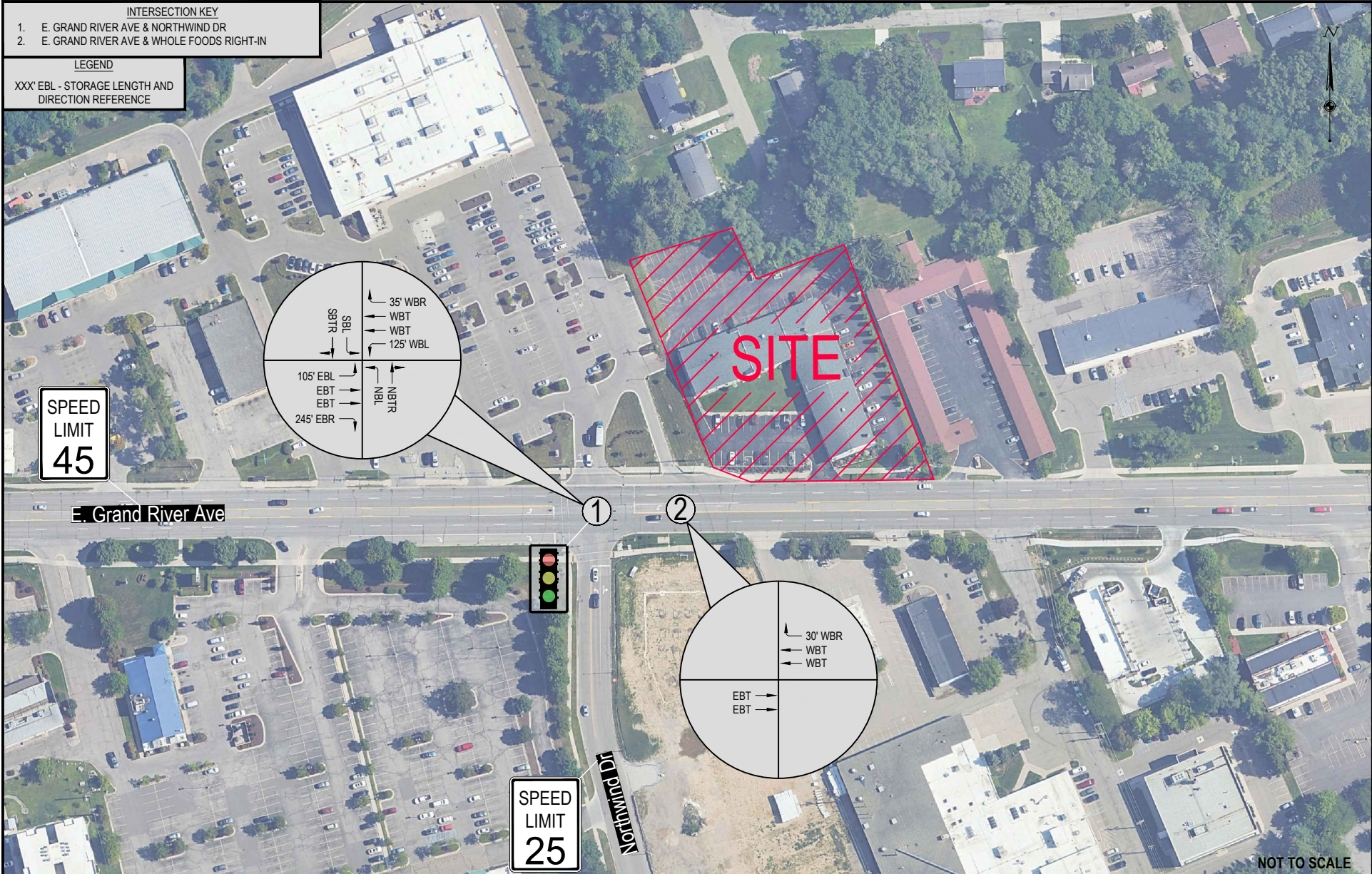
Access to the proposed 7-Eleven Development is projected via two (2) access points on the adjacent roadway; one restricted access auto driveway connection to E. Grand River Ave, and one full access auto driveway connection to the Whole Foods parking lot.

#### 3.2. Area Roadway Characteristics

**E. Grand River Avenue** – E. Grand River Avenue runs in the east/west direction in the vicinity of the Site. E. Grand River Avenue is a two-way roadway with two lanes in each direction. E. Grand River Avenue is classified as a Principal Arterial according to the *MDOT National Functional Classifications (NFC) Maps*. E. Grand River Avenue is under the jurisdiction of the Michigan Department of Transportation (MDOT). The posted speed limit on E. Grand River Avenue is 45 mph.

**Northwind Dr** – Northwind Drive runs in the north/south direction in the vicinity of the Site. Northwind Drive is a two-way roadway with one lane in each direction. Northwind Drive is classified as a Local Road according to the *MDOT National Functional Classifications (NFC) Maps*. Northwind Drive is under the jurisdiction of Meridian Township. The posted speed limit on Northwind Drive is 25 mph.

The Existing Transportation System is shown in Figure 3 of the report.



### 3.3. Existing Traffic Volumes

Traffic turning movement counts were conducted by Gewalt Hamilton Associates, Inc. (GHA) on Tuesday, April 7<sup>th</sup>, 2026, between the hours of 7:00 to 9:00 AM and 4:00 to 6:00 PM at the following intersections:

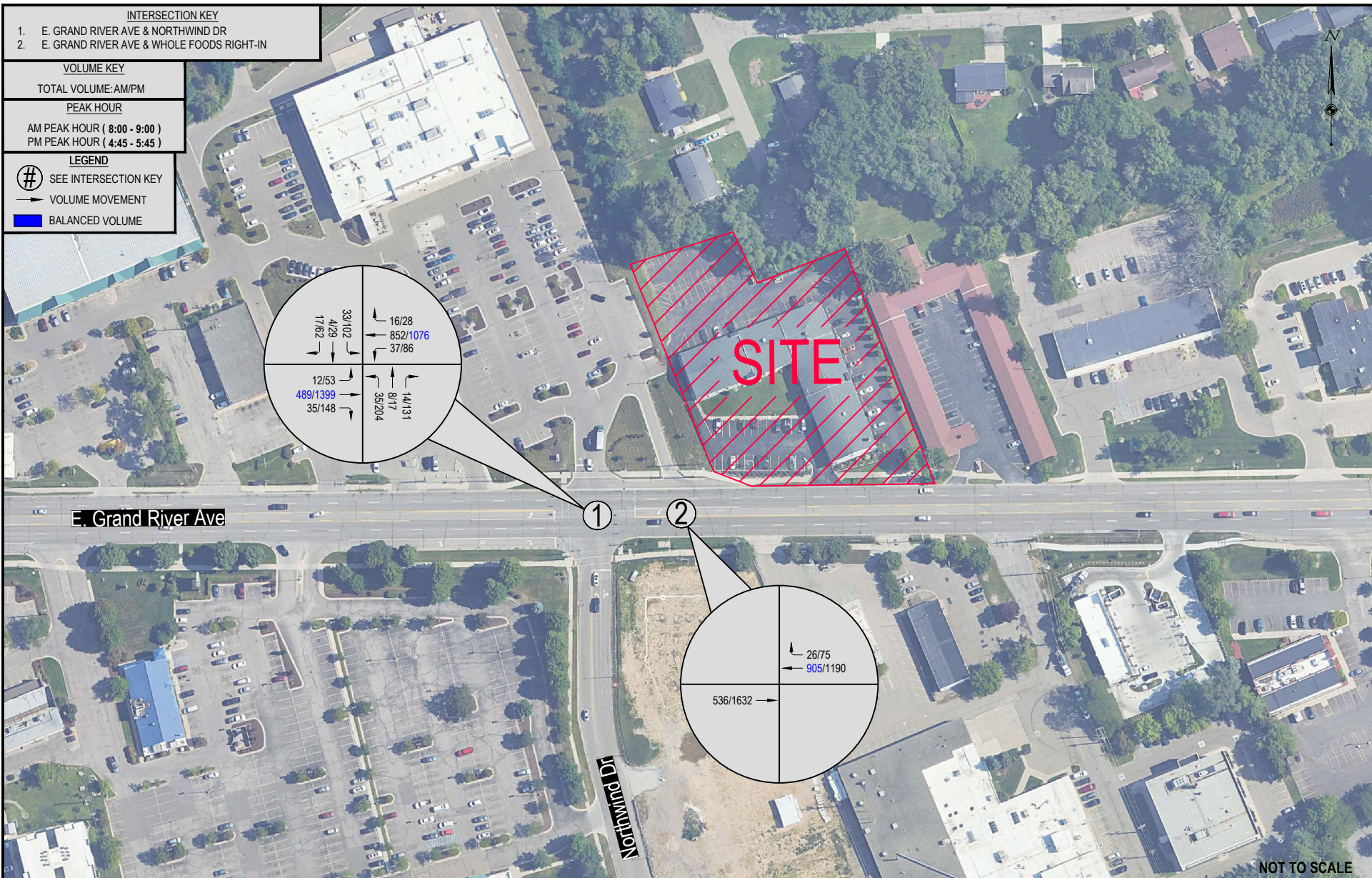
- E. Grand River Ave & Northwind Dr (Signal Controlled).
- E. Grand River Ave & Whole Foods Right-In (Uncontrolled).

The weekday peak hours of the Traffic Impact Study roadway network were determined to occur between the hours of:

- 8:00 AM – 9:00 AM (AM Peak Hour).
- 4:45 PM – 5:45 PM (PM Peak Hour).

Count data collected consists of turning movement counts with classification breakouts of lights, buses, single-unit trucks, and articulated trucks.

The Existing Traffic Count Data is located in Appendix B of the report. The 2026 Existing Weekday Peak Hour Traffic Volumes are illustrated on Figure 4.



NOT TO SCALE

2026 EXISTING WEEKDAY PEAK HOUR TRAFFIC VOLUMES

7-ELEVEN DEVELOPMENT

MERIDIAN TOWNSHIP

INGHAM COUNTY, MICHIGAN

FIGURE 4

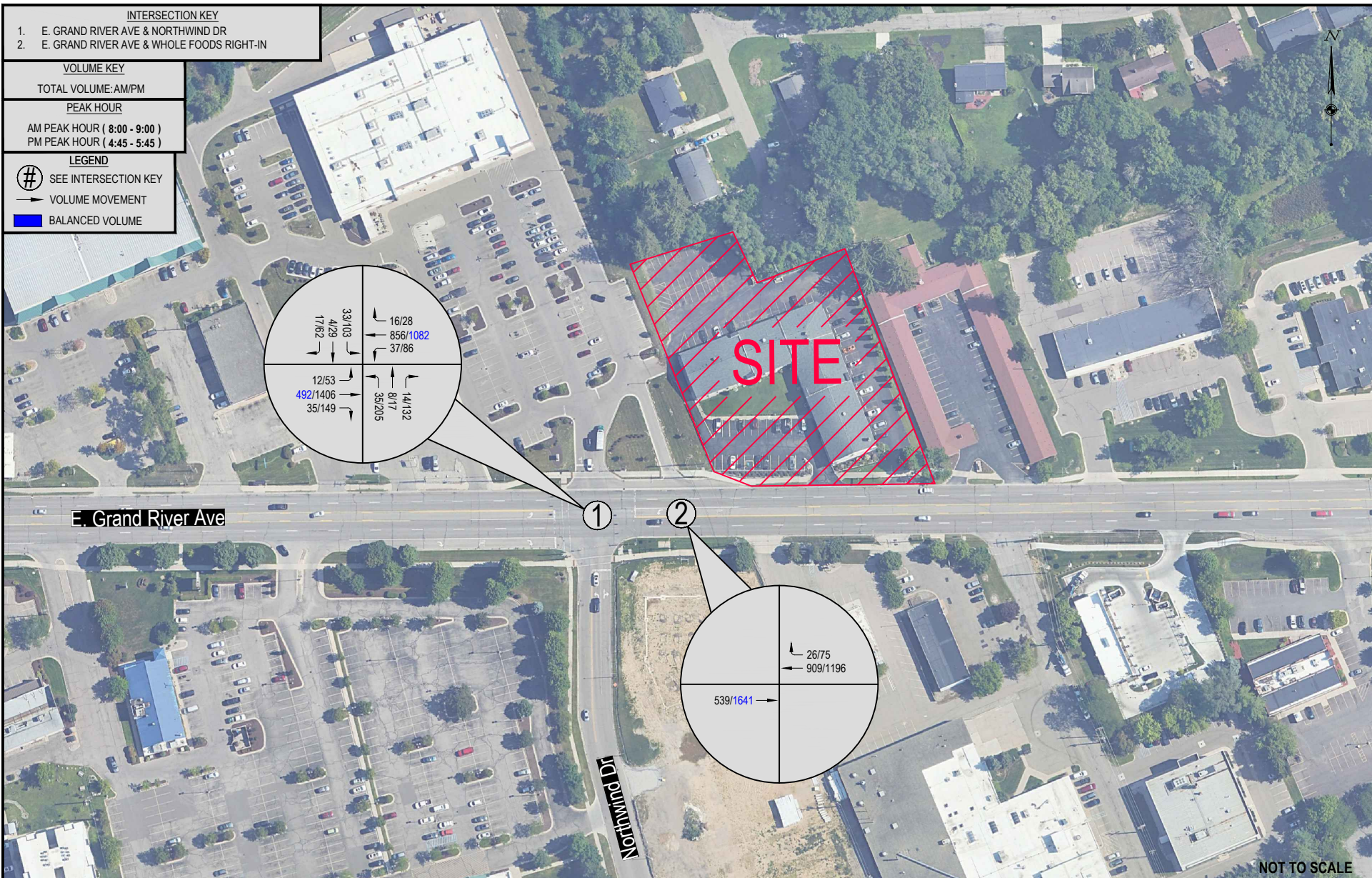
DATE:	04/27/2026
JOB NO.:	766857
DESIGNED BY:	IPF
DRAWN BY:	IPF
CHECKED BY:	REM
PAGE:	10

## 4. Estimates of 2027 No-Build Traffic in the Vicinity of the Site

### 4.1. 2027 No-Build Traffic Volumes

The 2027 No-Build Weekday Peak Hour Traffic Volumes (Figure 5) were calculated by applying growth rates obtained from historical data from *MDOT Transportation Data Management System* to the 2026 Existing Weekday Peak Hour Traffic Volumes (Figure 4). A growth rate of 0.5 percent (%) was applied for one (1) year to the study volumes (growth factor of 1.005).

The growth rate documentation can be found in Appendix C.



NOT TO SCALE

2027 NO-BUILD WEEKDAY PEAK HOUR TRAFFIC VOLUMES

7-ELEVEN DEVELOPMENT

MERIDIAN TOWNSHIP

INGHAM COUNTY, MICHIGAN

**FIGURE 5**

DATE:	04/27/2026
JOB NO.:	766857
DESIGNED BY:	IPF
DRAWN BY:	IPF
CHECKED BY:	REM
PAGE:	12

## 5. Trip Generation

### 5.1. Site Generated Traffic Volumes

Studies of similar developments throughout North America have shown that the amount of traffic generated will be functionally related to some unit of activity (i.e., number of fueling stations, gross floor area, service bays, etc.). In development, site traffic fluctuates substantially on different days and hours throughout the year. Therefore, it is imperative to select an appropriate hourly volume on which to base the design of the external roadway and site access facilities. The Weekday AM and PM Peak Hours were selected based on the adjacent street traffic during this hour.

The 2027 Build Traffic Scenario includes the proposed use of the Site as a 7-Eleven Development that consists of:

- Gasoline Service Station with a 4,852 S.F. Convenience Market and 10 passenger car fueling positions.

For analysis purposes, the base variable units for the trip-generation rates were number of fueling positions. The Site Generated Traffic Volumes (Table 1) were calculated by utilizing data contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 12th Edition*, in combination with methods outlined in the (ITE) *Trip Generation Handbook, 3rd Edition*.

The Site Generated Traffic Volumes are presented below in Table 1.

**Table 1**  
**Site Generated Traffic Volumes**

TE Land Use Description	ITE Cat.	Size	Unit	Total Generated Trips											
				Weekday			Weekday AM Peak Hour			Weekday PM Peak Hour					
				Tot	In	Out	<sup>A</sup> Tot	In	Out	<sup>B</sup> PB	<sup>A</sup> Tot	In	Out	<sup>B</sup> PB	
Passenger Car															
Gasoline/Service Station with Convenience Market	945	10	Fuel Pos.	2,036	1,018	1,018	199	24	23	152	192	24	24	144	
<i>ITE Cat. 945 Entering (%) / Exiting (%)</i>				100%	50%	50%	100%	51%	49%	<sup>C</sup> 76%	100%	50%	50%	<sup>C</sup> 75%	

<sup>A</sup> – Primary Trips + Pass-by Trips, <sup>B</sup> – Pass-by Trips Generated, <sup>C</sup> – Percent (%) of <sup>A</sup>Tot

The full buildout of the 7-Eleven is estimated to generate 2,036 trips per day on a typical weekday (1,018 inbound and 1,018 outbound), of which 199 trips will be generated during the Weekday AM Peak Hour (100 inbound and 99 outbound), and 192 trips will be generated during the Weekday PM Peak Hour (96 inbound and 96 outbound).

Appendix D includes trip generation calculations and ITE Trip Generation Category 945 sheets utilized to calculate the values presented in Table 1.

## 5.2. Directional Distribution of Site Generated Traffic Volumes

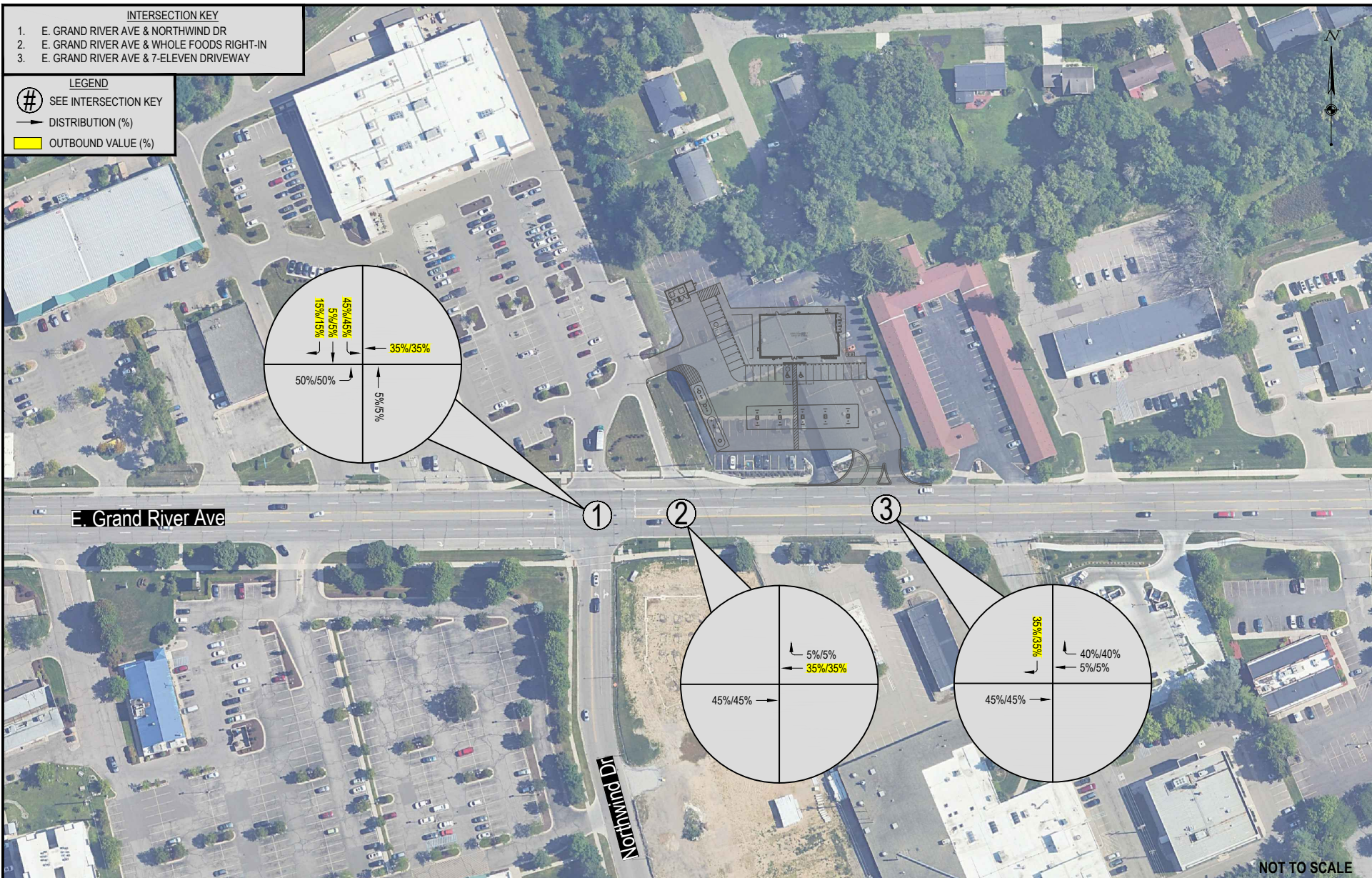
The directional distribution of the development-generated traffic is a function of several variables. The assumptions and methods used in estimating the direction in which traffic will approach and depart the Site varies with several location-specific conditions such as:

- Size and type of the proposed development.
- Population distribution within the defined area of influence.
- Prevailing operating conditions on the existing street system.

The analysis of directional distribution is based on the observation that drivers normally will choose the fastest (not necessarily the most direct) routes to and from a given traffic generator.

The anticipated directional distribution of trips generated by the proposed 7-Eleven Development is illustrated on Figures 6.A-6.B, which illustrate the primary and pass-by directional distribution for passenger cars.

Based upon the directional distributions illustrated on Figures 6.A-6.B, the estimated Site Generated Traffic Volumes shown in Table 1 were distributed to the adjacent roadway system. The Site Generated Traffic Volumes are illustrated in Figures 7.A-7.B.



NOT TO SCALE

DIRECTIONAL DISTRIBUTION OF SITE GENERATED TRAFFIC - PRIMARY TRIPS

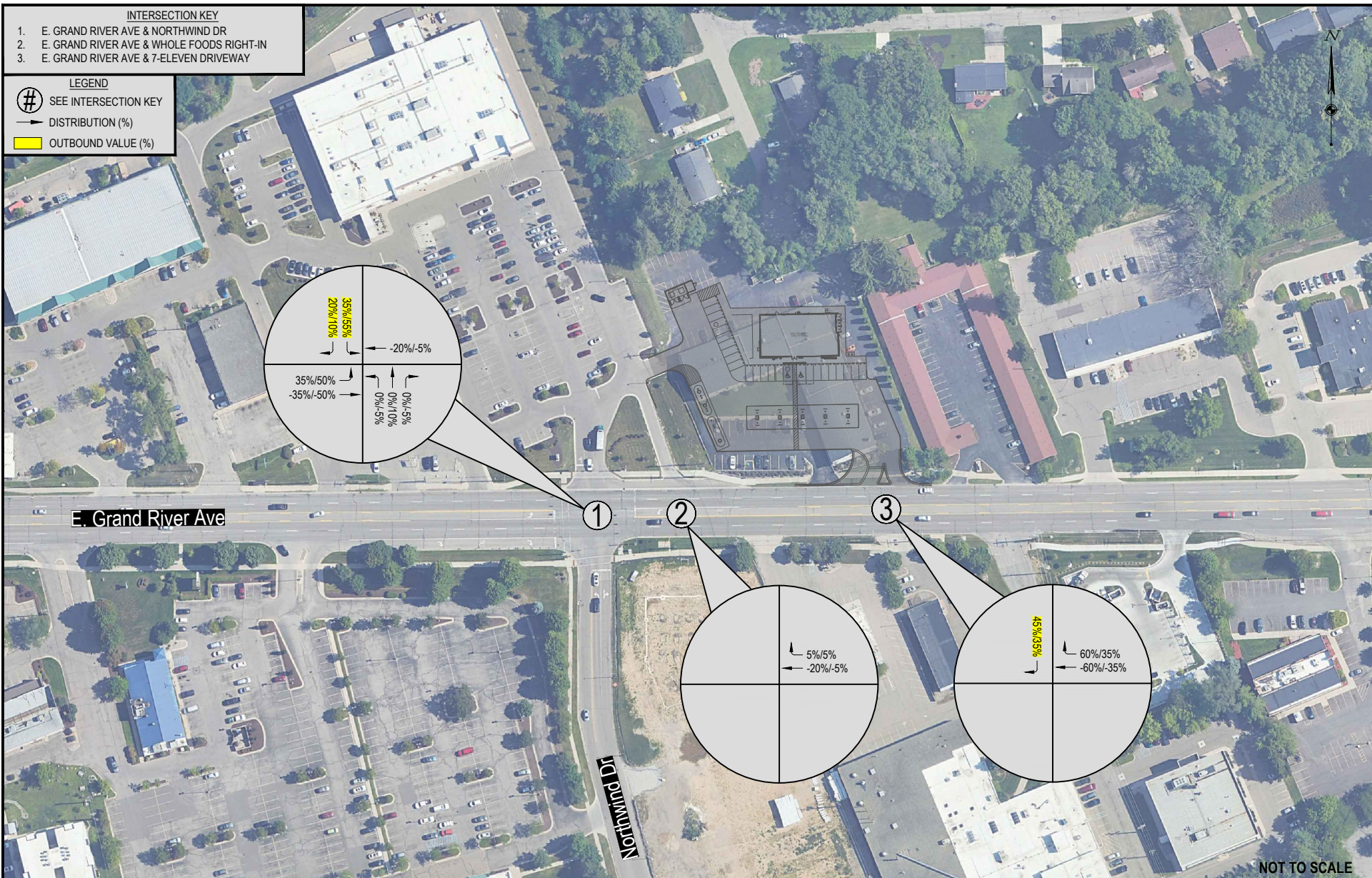
7-ELEVEN DEVELOPMENT

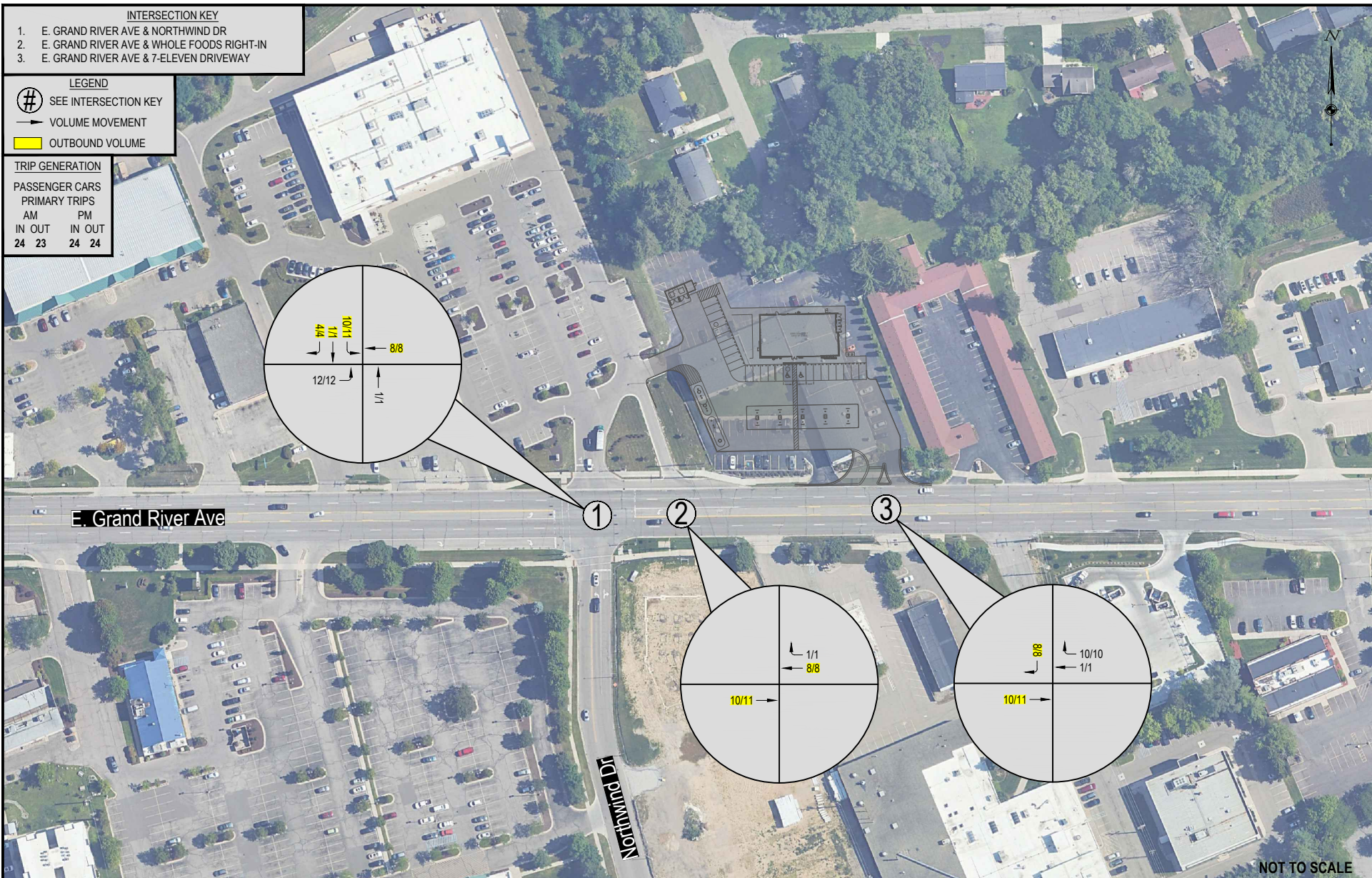
MERIDIAN TOWNSHIP

INGHAM COUNTY, MICHIGAN

FIGURE 6.A

DATE:	04/27/2026
JOB NO.:	766857
DESIGNED BY:	IPF
DRAWN BY:	IPF
CHECKED BY:	REM
PAGE:	15





NOT TO SCALE

SITE GENERATED TRAFFIC - PRIMARY TRIPS

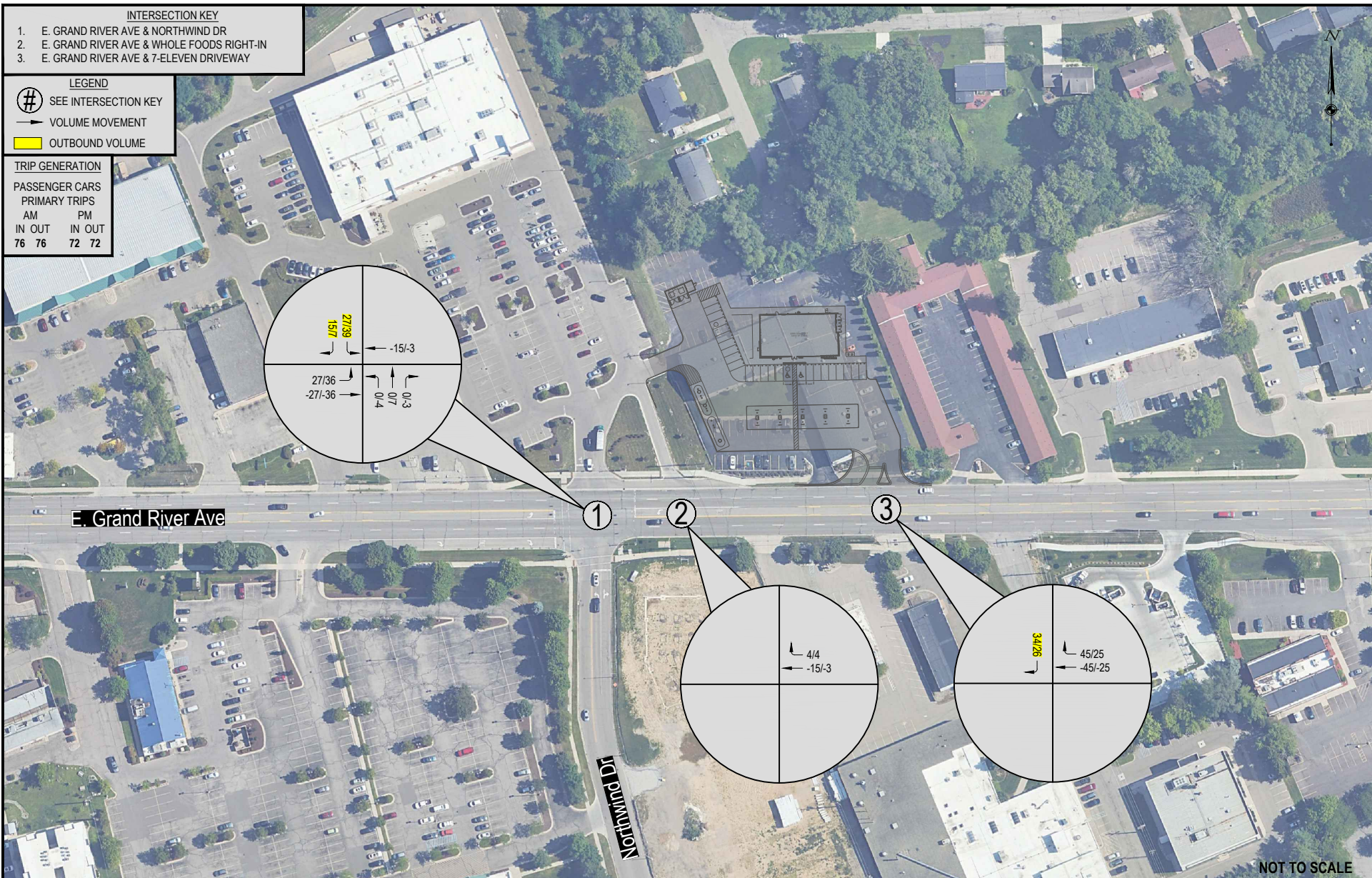
7-ELEVEN DEVELOPMENT

MERIDIAN TOWNSHIP

INGHAM COUNTY, MICHIGAN

FIGURE 7.A

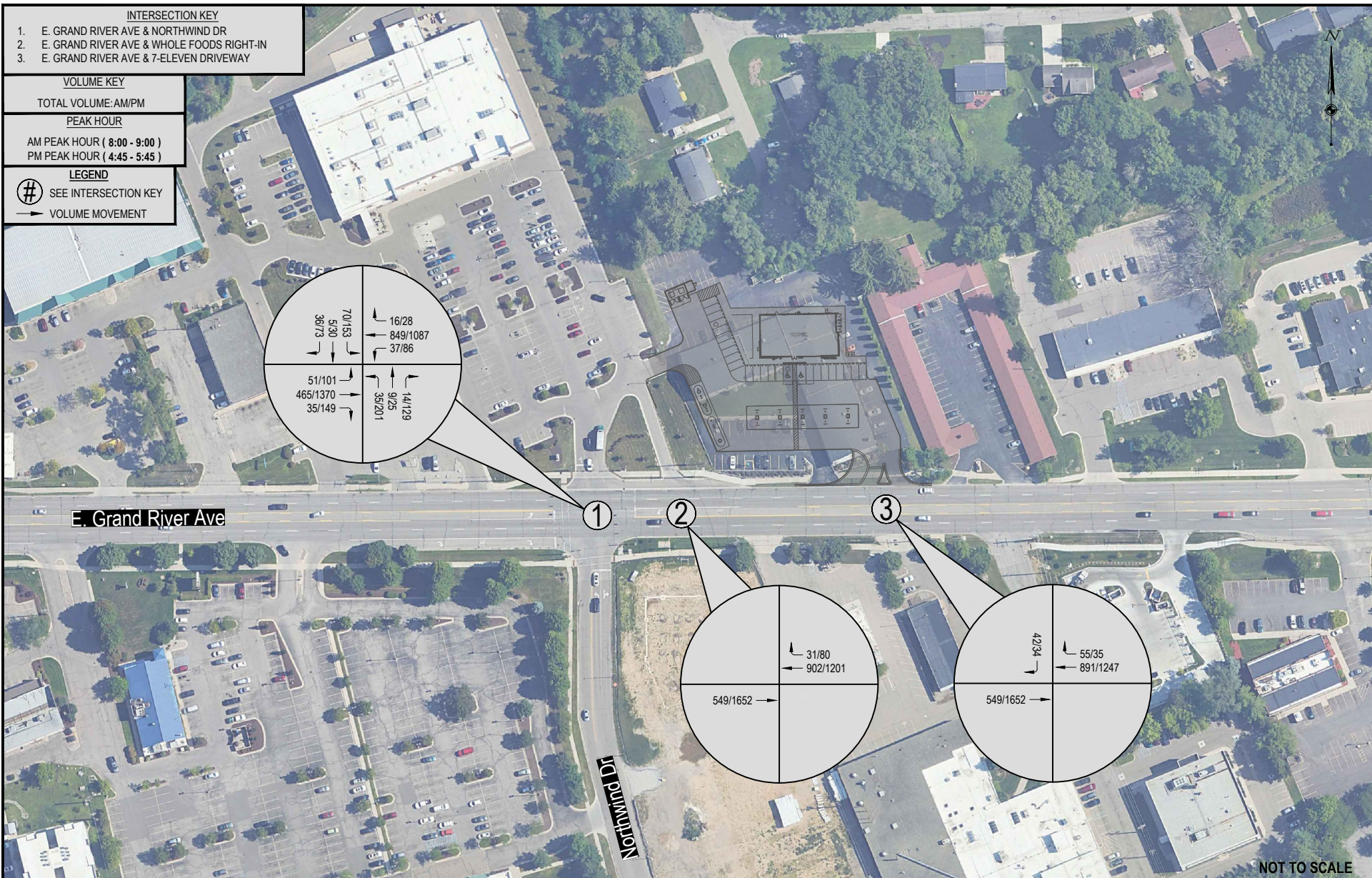
DATE:	04/27/2026
JOB NO.:	766857
DESIGNED BY:	IPF
DRAWN BY:	IPF
CHECKED BY:	REM
PAGE:	17



## 6. Estimates of 2027 Build Traffic in the Vicinity of the Site

### 6.1. 2027 Build Traffic Volumes

The 2027 Build Weekday Peak Hour Traffic Volumes (Figure 8) were calculated by adding the Site Generated Traffic Volumes (Figures 7.A-7.B) to the 2027 No-Build Weekday Peak Hour Traffic Volumes (Figure 5).



NOT TO SCALE

2027 BUILD WEEKDAY PEAK HOUR TRAFFIC VOLUMES

7-ELEVEN DEVELOPMENT

MERIDIAN TOWNSHIP

INGHAM COUNTY, MICHIGAN

FIGURE 8
DATE: 04/27/2026
JOB NO.: 766857
DESIGNED BY: IPF
DRAWN BY: IPF
CHECKED BY: REM
PAGE: 20

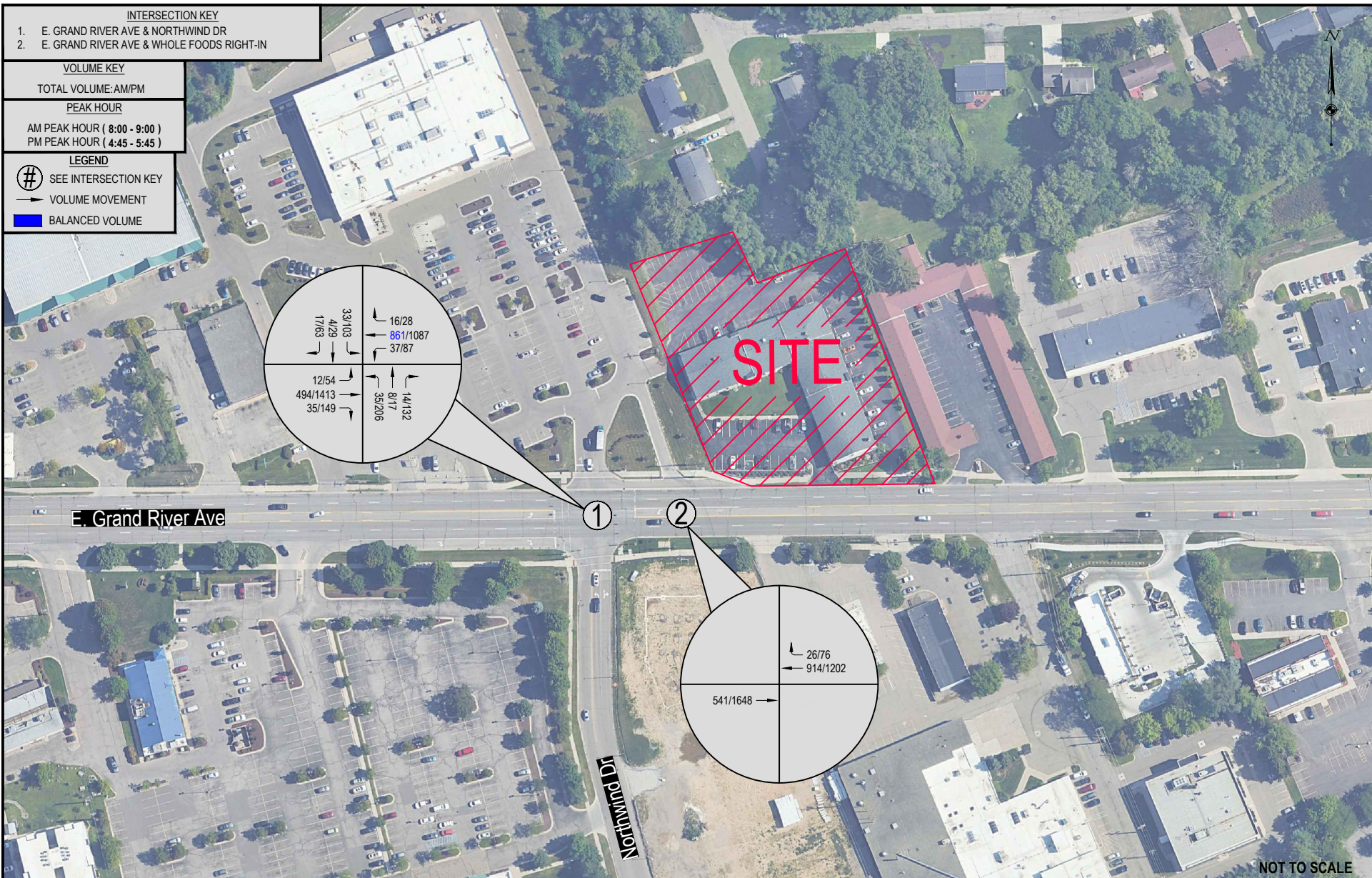
## 7. Estimates of 2028 No-Build Traffic in the Vicinity of the Site

### 7.1. 2028 No-Build Traffic Volumes

*Note: MDOT requested CESO, Inc. to analyze a 2028 Build with Improvements Traffic Scenario because they indicated plans to implement left-turn phasing in 2028 at the signalized intersection of E. Grand River & Northwind Dr. The 2028 No-Build volumes were not used in the analysis, but were used to demonstrate how the 2028 Build Volumes were achieved.*

The 2028 No-Build Weekday Peak Hour Traffic Volumes (Figure 9) were calculated by applying growth rates obtained from historical data from *MDOT Transportation Data Management System* to the 2026 Existing Weekday Peak Hour Traffic Volumes (Figure 4). A growth rate of 0.5 percent (%) was applied for two (2) years to the study volumes (growth factor of 1.010).

The growth rate documentation can be found in Appendix C.



NOT TO SCALE

2028 NO-BUILD WEEKDAY PEAK HOUR TRAFFIC VOLUMES

7-ELEVEN DEVELOPMENT

MERIDIAN TOWNSHIP

INGHAM COUNTY, MICHIGAN

FIGURE 9
DATE: 04/27/2026
JOB NO.: 766857
DESIGNED BY: IPF
DRAWN BY: IPF
CHECKED BY: REM
PAGE: 22

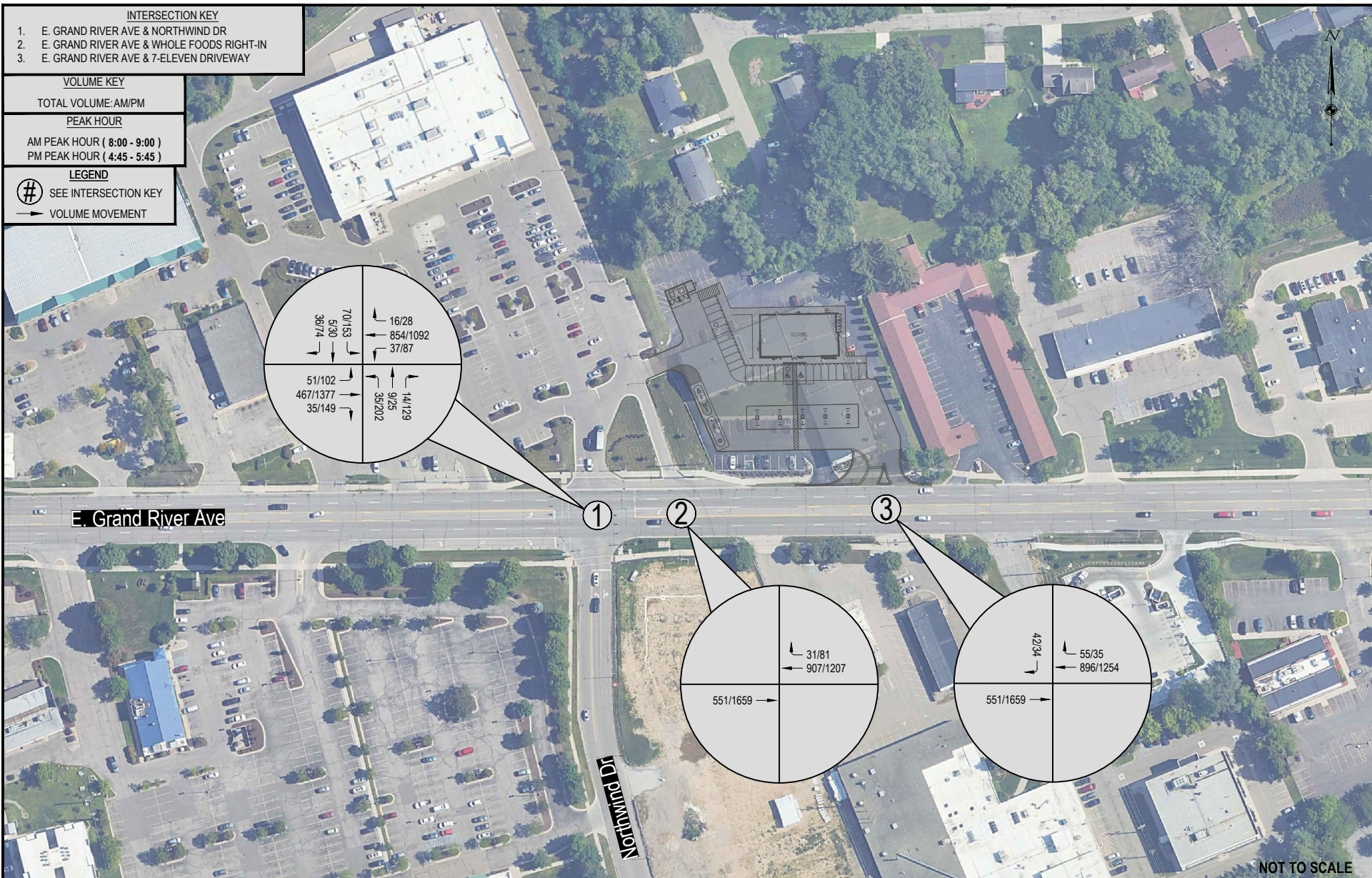
## 8. Estimates of 2028 Build Traffic in the Vicinity of the Site

### 6.1. 2028 Build Traffic Volumes

*Note: MDOT requested CESO, Inc. to analyze a 2028 Build with Improvements Traffic Scenario because they indicated plans to implement left-turn phasing in 2028 at the signalized intersection of E. Grand River Ave & Northwind Dr. The 2028 Build volumes and the proposed signal timing for the E. Grand River Ave & Northwind Dr intersection provided by MDOT were used for the 2028 Build with Improvements Analysis.*

The 2028 Build Weekday Peak Hour Traffic Volumes (Figure 10) were calculated by adding the Site Generated Traffic Volumes (Figures 7.A-7.B) to the 2028 No-Build Weekday Peak Hour Traffic Volumes (Figure 9).

MDOT existing and proposed signal timings can be found in Appendix H.



NOT TO SCALE

## 9. Capacity Analysis

### 9.1. Capacity Analysis Parameters

The capacity of an intersection (signalized or unsignalized) can best be described by its corresponding Level of Service (LOS). The level of service of an intersection is a qualitative measure of the various attributes of an intersection. There are six levels of service ranging from “ideal” free flow conditions at LOS “A,” to forced or “breakdown” conditions at LOS “F.” The level of service for signalized intersections is based upon the average stopped delay per vehicle for various movements within the intersection. Although volume capacity ratio (v/c) affects delay, there are other parameters that more strongly affect it, such as the quality of progression, length of green phases, cycle lengths, and others. Thus, for any given v/c ratio, a range of delay values may result, and vice versa.

The level of service for unsignalized intersections is based upon total delay. Total delay is defined in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*, as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position. Throughout the report “unsignalized intersections” are commonly referred to as “stop sign controlled.”

Highway Capacity Manual 2022 (HCM 7<sup>th</sup> Edition) methodology was used in the Traffic Impact Study to remain consistent with “state-of-the-practice” professional standards. Table 2 summarizes the LOS criteria for an unsignalized intersection and a signalized intersection.

**Table 2**  
**Level of Service Criteria**

Level of Service	Unsignalized Intersections Control Delay (seconds per vehicle)	Signalized Intersections Control Delay (seconds per vehicle)
A	≤ 10.0	< 10.0
B	> 10.0 and ≤ 15.0	> 10.0 and ≤ 20.0
C	> 15.0 and ≤ 25.0	> 20.0 and ≤ 35.0
D	> 25.0 and ≤ 35.0	> 35.0 and ≤ 55.0
E	> 35.0 and ≤ 50.0	> 55.0 and ≤ 80.0
F	≥ 50.0	> 80.0

Source: *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*. Transportation Research Board.

Synchro Version 12.0 was utilized to calculate delay and level of service values. Synchro Version 12.0 model parameters that include traffic volumes, movements, peak hour factors, heavy vehicle percentage, intersection traffic control, and storage lengths. The peak hour factors (PHF) from the intersection TMCs were used and a PHF of 0.92 was used for the proposed site driveway intersections.

## 9.2. Traffic Scenario Capacity Analysis

Utilizing the traffic volumes illustrated on Figure 5, Figure 8 and Figure 10 capacity calculations were performed for the key study intersections and proposed Site Driveways. All capacity calculations followed procedures documented in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2022). All study intersections were analyzed with Synchro Version V12.0.

Table 3 summarizes the capacity analyses results for the AM Peak Hour and Table 4 summarizes the capacity analyses results for the PM Peak Hour.

**Table 3**  
**Summary of AM Peak Hour Traffic Scenario Capacity Analysis**

Lane	2027 No-Build		2027 Build		2028 Build w/ Imp.	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
E. Grand River Ave & Northwind Dr (Signal Controlled)						
<b>Intersection</b>	<b>A</b>	<b>5.6</b>	<b>A</b>	<b>7.6</b>	<b>C</b>	<b>21.4</b>
EBL	A	3.5	A	5.0	B	11.7
EBT	A	2.3	A	2.8	B	16.7
EBR	A	1.9	A	2.4	B	14.4
<b>EB Approach</b>	<b>A</b>	<b>2.3</b>	<b>A</b>	<b>3.0</b>	<b>B</b>	<b>16.1</b>
WBL	A	2.8	A	3.4	A	7.2
WBT	A	2.7	A	3.4	C	20.9
WBR	A	1.8	A	2.3	B	14.6
<b>WB Approach</b>	<b>A</b>	<b>2.7</b>	<b>A</b>	<b>3.4</b>	<b>C</b>	<b>20.3</b>
NBL	D	46.9	D	45.7	D	45.7
NBTR	D	45.1	D	42.5	D	42.5
<b>NB Approach</b>	<b>D</b>	<b>46.2</b>	<b>D</b>	<b>44.4</b>	<b>D</b>	<b>44.5</b>
SBL	D	46.8	D	46.7	D	46.7
SBTR	D	45.0	D	43.6	D	43.7
<b>SB Approach</b>	<b>D</b>	<b>46.1</b>	<b>D</b>	<b>45.5</b>	<b>D</b>	<b>45.6</b>
E. Grand River Ave & 7-Eleven Driveway (Stop Sign Controlled)						
<b>Intersection</b>	--	--	--	--	--	--
SBR	<del>X</del>	<del>X</del>	B	12.7	B	12.8

L – Left T – Through R – Right [X] – With Improvements

**Table 4**  
**Summary of PM Peak Hour Traffic Scenario Capacity Analysis**

Lane	2027 No-Build		2027 Build		2028 Build w/ Imp.	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
E. Grand River Ave & Northwind Dr (Signal Controlled)						
<b>Intersection</b>	<b>B</b>	<b>16.4</b>	<b>B</b>	<b>17.2</b>	<b>C</b>	<b>27.1</b>
EBL	B	17.7	C	22.9	C	30.6
EBT	B	12.7	B	12.7	C	25.1
EBR	A	7.6	A	7.8	B	14.3
<b>EB Approach</b>	<b>B</b>	<b>12.4</b>	<b>B</b>	<b>12.9</b>	<b>C</b>	<b>24.5</b>
WBL	D	37.2	D	35.7	D	41.1
WBT	B	10.5	B	10.8	C	23.4
WBR	A	6.7	A	6.9	B	14.5
<b>WB Approach</b>	<b>B</b>	<b>12.3</b>	<b>B</b>	<b>12.5</b>	<b>C</b>	<b>24.5</b>
NBL	D	42.2	D	42.3	D	44.6
NBTR	C	32.7	C	32.5	C	32.7
<b>NB Approach</b>	<b>D</b>	<b>38.2</b>	<b>D</b>	<b>38.0</b>	<b>D</b>	<b>39.4</b>
SBL	D	40.0	D	43.0	D	44.3
SBTR	C	31.0	C	30.9	C	31.2
<b>SB Approach</b>	<b>D</b>	<b>35.8</b>	<b>D</b>	<b>38.2</b>	<b>D</b>	<b>39.0</b>
E. Grand River Ave & Site Driveway (Stop Sign Controlled)						
<b>Intersection</b>	--	--	--	--	--	--
SBR	X	X	C	15.2	C	15.3
L – Left T – Through R – Right [X] – With Improvements						

Under the **2027 No-Build and Build Traffic Scenarios**, the signal-controlled intersection operates at an overall level of service (LOS) “B” or better. Individual movements at the stop-controlled intersection operate at LOS “C” or better.

Under the **2028 Build with Improvements Traffic Scenario**, with the addition of left-turn phasing, the signal-controlled intersection operates at an overall level of service (LOS) “C”. Individual movements at the stop-controlled intersection operate at LOS “C” or better.

The Capacity Analysis Summary Sheets are contained in Appendix E of the report.

## 10. Turn Lane Analysis

Left and right-turn lane analyses were completed using the turn lane warrant charts from the MDOT *Geometric Design Guidance (September 2017)*. Capacity analysis results were used to determine if turn lanes were warranted at signalized intersections.

### 10.1. Left-Turn Lane Warrant Review Summary

Left-turn warrants were not reviewed due to no left-turning movements permitted into the 7-Eleven Driveway connected to E. Grand River Avenue.

### 10.2. Right-Turn Lane Analysis

Table 5 provides a summary of the data and results utilized in the review of each study location for a right-turn lane. Based on the total peak hour approach having volumes greater than 300 vph, the right turn volumes were not adjusted per the instructions on the chart.

**Table 5**  
**Right-Turn Lane Warrant Review**

Intersection and Traffic Scenario	Direction	Approach Traffic (am/pm)*	Right-Turn Traffic (am/pm)	Chart Used	Full-Width Turn Lane Warranted	Taper Warranted
2027 Build Traffic Scenario						
E. Grand River Ave & 7-Eleven Driveway	WBR	946/1282	55/35	NCHRP Fig. 4-23	No/No	Yes/Yes

\* Includes Right Turns

### 10.3. Right-Turn Lane Warrant Review Summary

- According to NCHRP Figure 4-23 within the MDOT Geometric Design Guidance, a WB to NB full-width turn lane is **not warranted** at the E. Grand River Ave & 7-Eleven Driveway intersection under the 2027 Build Traffic Scenario. A taper is warranted for this movement under the 2027 Build Traffic Scenario. However, due to physical constraints, limited right-of-way, and the fact that there are no site driveways on the north side E. Grand River and in vicinity of the site with right-turn tapers, CESO would **not recommend** the construction of a taper into the 7-Eleven Driveway.

MDOT Turn Lane Resources are located in Appendix F of the report.

## 11. Queue Length Analysis

### 11.1. Queue Length Analysis Procedure and Results

The 95<sup>th</sup> percentile queue lengths were calculated using Synchro Version 12.0 in combination with SimTraffic. CESO reviewed the 2027 No-Build, 2027 Build, and 2028 Build with Improvements Traffic Scenarios. The results of the analysis for the AM and PM Peak Hours are listed below in Table 6 and Table 7. The 95<sup>th</sup> percentile queue length analyses summary sheets are located in Appendix G of the report.

**Table 6**  
**Queue Length Analysis – AM Peak Hour**

Location	Movement [Proposed Movement]	Existing [Proposed] Storage Length	Traffic Scenario Comparison		
			95 <sup>th</sup> Percentile Queue Lengths		
			AM Peak Hour		
Traffic Scenario →			2027 No-Build	2027 Build	2028 Build w/Imp.
E. Grand River Ave & Northwind Dr	EBL	105'	29	58	56
	EBT – 2	---	73	86	83
	EBR	245'	17	20	18
	WBL	125'	45	47	47
	WBT – 2	---	104	113	120
	WBR	35'	19	18	18
	NBL	---	66	61	62
	NBTR	---	40	40	37
	SBL	---	59	92	93
	SBTR	---	31	42	40
E. Grand River Ave & 7-Eleven Driveway	SBR	---	X	48	47

**Table 7**  
**Queue Length Analysis – PM Peak Hour**

Location	Movement [Proposed Movement]	Existing [Proposed] Storage Length	Traffic Scenario Comparison		
			95 <sup>th</sup> Percentile Queue Lengths		
			AM Peak Hour		
Traffic Scenario →			2027 No-Build	2027 Build	2028 Build w/Imp.
E. Grand River Ave & Northwind Dr	EBL	105'	168	199	214
	EBT – 2	---	431	466	668
	EBR	245'	130	112	345
	WBL	125'	125	125	102
	WBT – 2	---	153	147	149
	WBR	35'	28	29	32
	NBL	---	200	187	192
	NBTR	---	120	116	122
	SBL	---	115	154	154
	SBTR	---	76	89	95
E. Grand River Ave & 7-Eleven Driveway	SBR	---	X	41	45

### 11.2. Queue Length Analysis Summary

CESO reviewed all study locations to identify queuing issues and determine if calculated queue lengths exceed existing turn lane storage lengths. The queue length analysis revealed the following:

- The queue length for the EBL movement at the E. Grand River Ave & Northwind Dr intersection exceeds the existing storage under the PM Peak Hour of the 2027 No-Build, 2027 Build, and 2028 Build with Improvements Traffic Scenarios.
- The EBL queue length at the E. Grand River Ave & Northwind Dr intersection exceeds the existing storage because the EBT queue backs up further than the storage length + taper of the EBL movement. The addition of left-turn phasing removes green time from the EBT and WBT phases, increasing their queues and limiting the ability for eastbound left-turning vehicles to enter the left turn lane.
- The proposed 7-Eleven Development has minimal impact to the existing queue lengths throughout the study network.

## 12. Summary of Recommendations

### 12.1. Recommendations

The following summary of recommendations was generated based upon the findings in the Traffic Impact Study.

#### **2027 No-Build Traffic Scenario (Responsibility – Others):**

- No improvements are recommended or required.

#### **2027 Build Traffic Scenario (Responsibility – 7-Eleven):**

##### E. Grand River Ave & 7-Eleven Driveway:

- Construct 7-Eleven Driveway to permit right-in and right-out (limited-access) movements of passenger cars. Provide one (1) inbound lane and one (1) outbound lane. Control this driveway with one (1) stop sign.

## 12.2. References

This report utilizes information provided by the following sources:

1. *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*. Transportation Research Board, Washington, D.C., 2022.
2. *Trip Generation Manual*. 12<sup>th</sup> ed. Washington, DC: Institute of Transportation Engineers, 2026.
3. Most recent Site Plan obtained from 7-Eleven.
4. *Michigan Manual of Uniform Traffic Control Devices (MMUTCD)*. Michigan Department of Transportation (MDOT).
5. "Meridian Township, MI." 42° 43' 34.72" N and 84° 27' 01.27" W, *Google Earth*. Imagery Date: August 2<sup>nd</sup>, 2023.
6. *Geometric Design Guidance (September 2017)*. Michigan Department of Transportation (MDOT).



**To:** Planning Commission

**From:** Brian Shorkey, Principal Planner

**Date:** June 22, 2026

**Re:** **Rezoning #26010 (Copper Creek)**, rezone 65.38 acres of 139 acres located on Haslett Road from RA (Single-family Residential) to RA with a Planned Residential Development (PUD) overlay.

---

Haslett Land Investment, LLC (Applicant) has requested the rezoning of 65.38 acres of an approximately 139 acre site located on Haslett Road, adjacent to the east of the existing Copper Creek development (Subject Property), from RA (Single-family Residential) to RA with a PRD overlay. The application is for the next two phases of Copper Creek and calls for 126 lots in total.

The Planning Commission held a public hearing for this application at their regular meeting on June 8, 2026 and indicated support for the rezoning.

#### **Planning Commission Options**

The Planning Commission may recommend approval or denial of the request, or it may recommend a different zoning designation than proposed by the applicant to the Township Board. Staff **recommends approval** of Rezoning #26010 to rezone the Subject Property from RA (Single-family Residential) to RA with a Planned Residential Development (PUD) overlay.

Staff would offer the following motion for the Planning Commission if they wish to approve the resolution to recommend **approval** of the proposed rezoning request. Should the Planning Commission have additional reasons for supporting the recommendation, they can be added to the end of the motion.

**Move to adopt the resolution to recommend approval of Rezoning #26010 to rezone 65.38 acres of 139 acres located on Haslett Road from RA (Single-family Residential) to RA with a Planned Residential Development (PUD) overlay I, for the following reasons:**

- The requested overlay zoning conforms with the Township Master Plan and Future Land Use map.
- The lots as proposed conform the underlying RA zoning.
- The plan attached to the application shows that the wetlands on the property are being preserved as dedicated open space.
- The requested overlay zoning would be consistent with the prior Copper Creek development to the west.

#### **Attachments**

1. Resolution recommending approval of REZ #26010
2. Staff report from the public hearing dated June 8, 2006

**RESOLUTION TO RECOMMEND APPROVAL**

**Rezoning #26010  
Copper Creek**

**RESOLUTION**

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 22nd day of June, 2026, at 6:30 p.m., Local Time.

PRESENT:

ABSENT:

The following resolution was offered by Commissioner \_\_\_\_\_ and supported by Commissioner \_\_\_\_\_.

WHEREAS, Haslett Land Investment, the applicant, has requested the rezoning of 65.38 acres of an approximately 139 acre site located on Haslett Road, adjacent to the east of the existing Copper Creek development (Subject Property), from RA (Single-family Residential) to RA with a PRD overlay; and

WHEREAS, the Planning Commission held a public hearing and discussed the rezoning at its regular meeting on June 8, 2026; and

WHEREAS, the proposal calls for the development of 126 single-family homes; and

WHEREAS, the site plan shows the preservation of the wetlands; and

WHEREAS, the site plan conforms to the underlying RA, Single-Family Residential zoning; and

WHEREAS, the requested PRD development is consistent with the character of the existing Copper Creek development to the west; and

WHEREAS, the requested PRD development conforms to the Zoning Ordinance and the Township Master Plan.

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby recommends **approval** of Rezoning #26010 to rezone the Subject Property, 65.38 acres of an approximately 139 acre site located on Haslett Road, adjacent to the east of the existing Copper Creek development (Subject Property), from RA (Single-family Residential) to RA with a PRD overlay.

ADOPTED: YEAS:

NAYS:

STATE OF MICHIGAN )

) ss

COUNTY OF INGHAM )

**Resolution to Recommend Approval**

**Rezoning #26010 (Copper Creek)**

**Page 2**

I, the undersigned, the duly qualified and acting Chair of the Planning Commission of the Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and a complete copy of a resolution adopted at a regular meeting of the Planning Commission on the 22nd day of June, 2026.

---

Jeff Romback  
Planning Commission Chair



**To:** Planning Commission

**From:** Brian Shorkey, Principal Planner

**Date:** June 8, 2026

**Re:** Rezoning #26010 (Copper Creek), rezone 65.38 acres of 139 acres located on Haslett Road from RA (Single-family Residential) to RA with a Planned Residential Development (PUD) overlay.

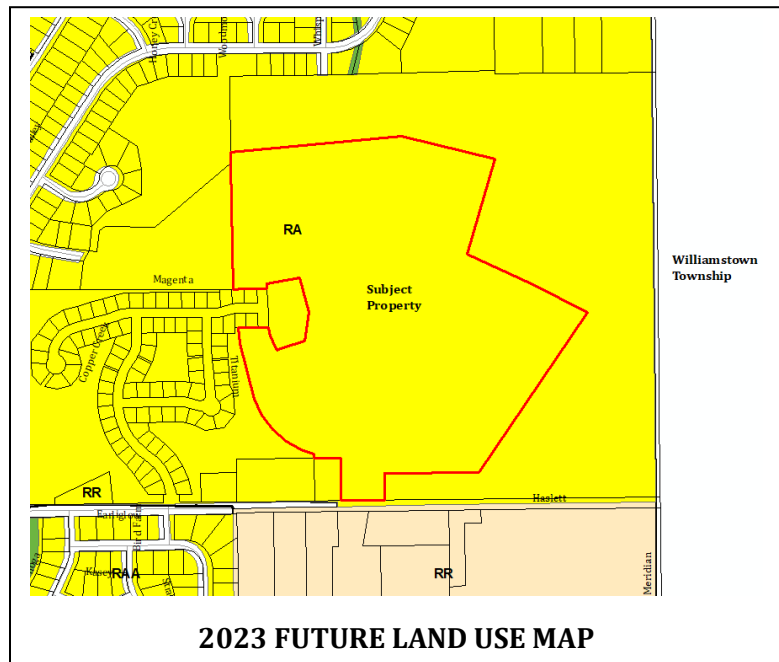
Haslett Land Investment, LLC (Applicant) has requested the rezoning of 65.38 acres of an approximately 139 acre site located on Haslett Road, adjacent to the east of the existing Copper Creek development (Subject Property), from RA (Single-family Residential) to RA with a PRD overlay. The application is for the next two phases of Copper Creek and calls for 126 lots in total.

#### **Future Land Use**

The Future Land Use Map from the 2023 Master Plan designates the Subject Property as Suburban Residential. This designation aligns with the requested RA/PRD zoning and is the same as the designations to the west and north. The properties adjacent to the south are designated as Rural Residential. The property to the east is in Williamstown Township and is designated as Open Space in their Future Land Use map.

#### **Zoning**

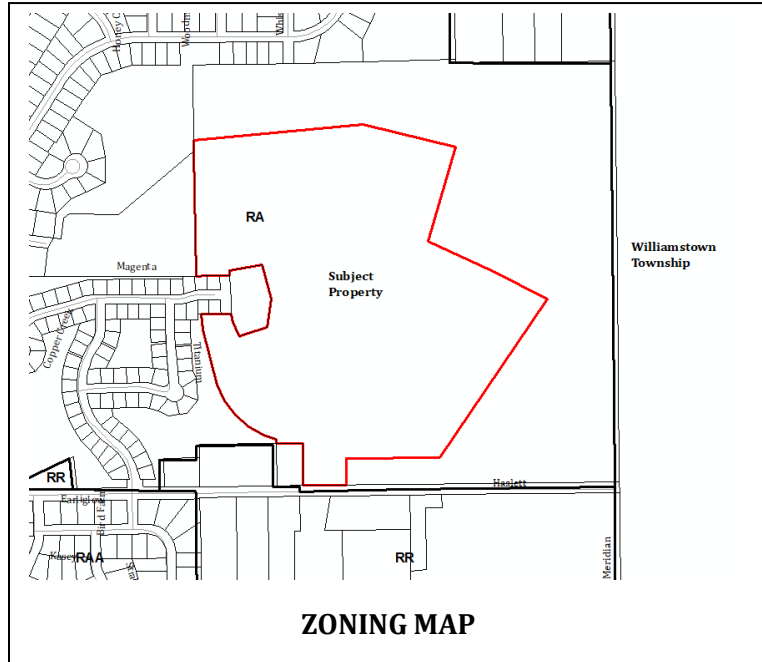
The property is currently zoned RA (Single-Family Residential), which requires a minimum of 80 feet of lot width and 10,000 square feet of lot area. The requested PRD overlay allows for variation in the dimensional regulations. The property to the north and west is similarly zoned RA. The properties to the south are zoned the existing RR zone. As noted, the property to the east is in Williamstown Township.



**Physical Features**

The northern third of the overall property is crossed by the Jefferies Drain. The drain generally crosses the southern edge of extensive wetlands on the northern third of the overall property. This wetland complex is north of the current proposed development.

The wetlands take up approximately 68 acres of the Subject Property and are shown on the Township’s Greenspace Plan as Priority Conservation Corridors (PCC). PCCs are recognized as part of a network of ecologically significant open spaces that link wildlife habitat, protect water quality, and preserve the natural character of the Township.



**Streets & Traffic**

The site fronts on its southern boundary on Haslett Road, which is a two-lane road without curb and gutter classified as a Minor Arterial Street on the Street Setbacks and Service Drives Map in the zoning ordinance. The site also has local access via the existing private road system in Copper Creek to the west.

The applicant submitted a traffic study prepared by Fleis & Vandenbrink, Inc. dated April 2024. The study was confirmed as still accurate by Fleis & Vandenbrink in April 2026. According to the study, site access is proposed via the continuation of the existing Copper Creek development.

The study used data from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11<sup>th</sup> edition to estimate trip generation rates for Single Family-Detached Housing under the existing RR zoning and the requested RA zoning. The study estimated that 83 units are currently available under the RR zoning while the requested RA zoning would yield 307 units. The following table summarizes findings from the submitted traffic assessment.

Land Use	Size	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Existing Zoning (RR)	83 Units	16	47	63	52	31	83	850
Proposed Zoning (RA)	307 units	52	155	207	180	105	285	2,832
Difference		+36	+108	+144	+128	+74	+202	+1,982

A traffic impact study is required for rezonings when the proposed district would permit uses that could generate more than 249 additional directional trips during the peak hour than the principal uses permitted under the current zoning, or if directional trips are expected to increase by at least 750 during the day. Based on the study, development of the Subject Property will require a traffic impact study, which will be required to be approved by the Ingham County Road Department prior to site plan approval.

### **Utilities**

The Subject Property is inside of the Urban Service Boundary and municipal water and sanitary sewer are available. The location and capacity of utilities for any proposed development will be reviewed in detail by the Department of Public Works and Engineering at the time of a development submittal.

### **Staff Analysis**

The applicant has requested the rezoning of approximately 139 acres from RA to RA with a PRD overlay. The PRD district is regulated by Sec. 86-378 in the zoning ordinance. When evaluating a rezoning request, the Planning Commission should consider all uses permitted by right and by special use permit in the current and proposed zoning districts, as well as the reasons for rezoning listed on page two of the rezoning application (attached). Based on that, Staff has the following comments:

1. The Future Land Use map for the Subject Property was updated during the 2023 Master Plan update to support the requested RA/PRD zoning. This was done at the request of the applicant and had no opposition from the Township Planning Commission or Board of Trustees.
2. The proposed development will continue the existing Copper Creek development and mirror it in terms of aesthetics and density. As such, the requested zoning is compatible with the surrounding area.
3. Significant environmental challenges face development of the Subject Property. The concept plan submitted demonstrates that the Applicant is aware of those challenges. Before development can occur on the Subject Property, a site plan will have to be approved by the Ingham County Drain Commission and the Township Engineering Department.
4. The proposed rezoning may have adverse effects on surrounding traffic, as demonstrated by the traffic study. A full traffic impact study will be required to be approved by the Ingham County Road Department before a site plan approval can be granted. The Applicant will be required to construct any required road improvements in order to mitigate the increased traffic.
5. The PRD requirements require a minimum of 20% of the development parcel remain as open space. The site plan indicates that this requirement is met.

### **Planning Commission Options**

The Planning Commission may recommend approval or denial of the request, or it may recommend a different zoning designation than proposed by the applicant to the Township Board. A resolution will be provided at a future meeting.

**Attachments**

1. Rezoning application dated March 27, 2026 and received by the Township on April 29, 2026.
2. Traffic assessment update prepared by Fleis & Vandenbrink, Inc., dated April 23, 2026 and received by the Township on May 4, 2026.
3. Preliminary Condominium Site Plan prepared by Kebs, Inc., received by the Township on May 4, 2026.
4. Rezoning criteria.



**To:** Planning Commission

**From:** Brian Shorkey, AICP  
Principal Planner

**Date:** June 22, 2026

**Re:** Special Use Permit #26011 (Jaihoon Khamush), to construct a restaurant at 4632 Okemos Road.

---

Jaihoon Khamush (Applicant) has submitted a Special Use Permit (SUP) application for the construction of a new restaurant at the property at 4632 Okemos Road (Subject Property). The property previously contained the Red Cedar Cat Hospital. The Subject Property is zoned PO, Professional and Office.

The Planning Commission held the public hearing for Special Use Permit #26011 at its meeting on June 8, 2026. After discussion, the Planning Commission agreed to consider a resolution to approve the special use permit to allow the construction of a restaurant on the Subject Property.

The original staff report, dated June 8, 2026, is attached. Additional materials from the public hearing may be found at the following link: <https://www.meridian.mi.us/your-government/boards-commissions/planning-commission/>

### **Planning Commission Options**

The Planning Commission may approve, approve with conditions, or deny the special use permit. A resolution to recommend approval of the request is provided. Staff **recommends approval** of the Special Use Permit to allow the construction of a new restaurant at the property at 4632 Okemos Road, with the conditions listed in the resolution.

**Move to adopt the resolution to approve Special Use Permit #26011 to allow the construction of a new restaurant at the property at 4632 Okemos Road, subject to the conditions found in the resolution to approve, for the following reasons:**

- The proposed restaurant complies with the Township Master Plan and the Future Land Use map.
- The proposed restaurant is consistent with the general standards for granting a special use permit found in Section 86-126 of the Code of Ordinances.
- The applicant has agreed to comply with the conditions in the resolution to approve.

### **Attachments**

1. Resolution to approve SUP #26011.
2. Staff Memo, Dated June 8, 2026

**RESOLUTION TO APPROVE**

**Special Use Permit #26011  
(Jaihoon Khamush)**

**RESOLUTION**

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 22nd day of June, 2026 at 6:30 p.m., Local Time.

PRESENT:

ABSENT:

The following resolution was offered by \_\_\_\_\_ and supported by \_\_\_\_\_.

WHEREAS, Jaihoon Khamush has submitted a Special Use Permit application for the construction of a new restaurant at the property at 4632 Okemos Road; and

WHEREAS, the proposed development requires Special Use Permit approval for the proposed restaurant; and

WHEREAS, the proposed development complies with the Township Master Plan and Future Land Use map; and

WHEREAS, the proposed project is consistent with the general standards for granting a special use permit found in Section 86-126 of the Code of Ordinances; and

WHEREAS, the Township Planning Commission held a public hearing on the Special Use Permit application at their regular meeting on June 8, 2026; and

WHEREAS, the proposed development would preserve the exiting historic structure in a viable economic way; and

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby recommends approval of Special Use Permit #26011, subject to the following conditions:

1. Approval is granted in accordance with the application materials submitted by the applicant.
2. The SUP will become null and void if the second floor of the building is used as a residence.
3. The restaurant is limited to 32 seats.
4. The applicant shall obtain any and all other applicable permits, licenses, and approvals necessary to construct the new restaurant.

ADOPTED: YEAS:

NAYS:

STATE OF MICHIGAN )

) ss

**Resolution to Approve**  
**SUP #26011 (Jaihoon Khamush)**  
**Page 2**

COUNTY OF INGHAM )

I, the undersigned, the duly qualified and acting Chairperson of the Planning Commission of the Charter Township Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and a complete copy of a resolution adopted at a regular meeting of the Planning Commission on the 22nd day of June, 2026.

\_\_\_\_\_  
Jeff Romback  
Planning Commission Chairperson



**To:** Planning Commission

**From:** Brian Shorkey, AICP  
Principal Planner

**Date:** June 8, 2026

**Re:** Special Use Permit #26011 (Jaihoon Khamush), to construct a restaurant at 4632 Okemos Road.

---

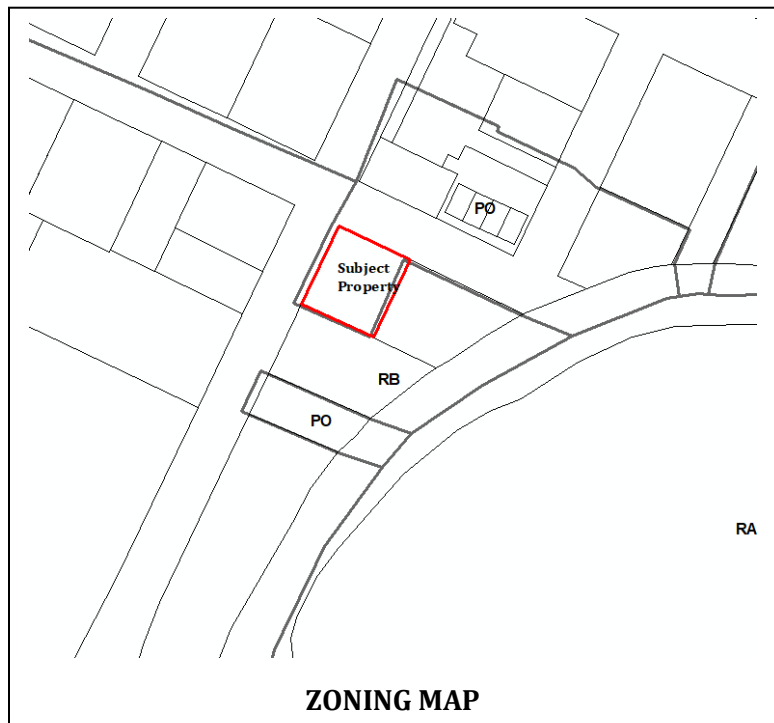
Jaihoon Khamush (Applicant) has submitted a Special Use Permit (SUP) application for the construction of a new restaurant at the property at 4632 Okemos Road (Subject Property). The property previously contained the Red Cedar Cat Hospital. The Subject Property is zoned PO, Professional and Office.

According to Sec. 86-432(c)(3), restaurants are allowed in the PO district as a special use permit. However, the language states that restaurants may be permitted by special use permit when deemed appropriate to the primary use of the land or structure. Staff previously discussed this with the Applicant for several months and suggested that a rezoning to C-1 might be more appropriate and straightforward. However, the Applicant chose to apply for an SUP under the PO provisions.

### Zoning and Future Land Use

The Subject Property is located in the PO, Professional and Office zoning district. The same zoning designation applies to the adjacent properties to the north. The properties to the west, south, and east are zoned RB, Single-Family Residential.

The PO district requires a minimum of 50 feet of lot frontage and 5,000 square feet of lot area for new lots. The Subject Property consists of one parcel approximately 12,360 square feet in size. The Subject Property has access on Clinton Street. As a corner lot, there are two front yard setbacks. The setback from Clinton Street is 25 feet from the right-of-way line and the setback from Okemos Road is 100 feet from the centerline of the street. The existing building is non-conforming with these dimensional requirements.



**ZONING MAP**

The Future Land Use Map from the 2023 Master Plan designates the Subject Property as part of the Meridian Mall PICA area. The same designation applies to all adjacent properties.

**Staff Analysis**

The language regarding restaurants in the PO district, from Sec. 86-432(c)(3) says, “The following uses may be permitted by special use permit when deemed appropriate to the primary use of the land or structure.” In reading the language, Staff has determined that the restaurant can be deemed appropriate as the primary use of the land. Longer term, rezoning of the property or modification of the language in the PO district may be appropriate.



Under the premise of restaurant being the primary use of the property, Staff offers the following analysis based on Sec. 86-126 in the Zoning Ordinance:

1. *The project is consistent with the intent and purposes of this chapter.*

If the Planning Commission agrees with the Applicant, then the proposed restaurant is consistent with the PO zoning under the special land use requirements.

2. *The project is consistent with applicable land use policies contained in the Township's comprehensive development plan of current adoption.*

The Future Land Use map calls for the area to be a ‘Potential Intensity Change Area’ pointing towards redevelopment and reuse of existing buildings. The applicant is proposing to reuse the existing building for a new land use.

3. *The project is designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the same area.*

The Applicant is not planning to demolish the existing building. Proposed changes to the Subject Property included the restriping of the barrier free space and the addition of two bicycle parking spaces.

4. *The project will not adversely affect or be hazardous to existing neighboring uses.*

The project is not expected to adversely affect or be hazardous to existing neighboring uses.

5. *The project will not be detrimental to the economic welfare of surrounding properties or the community.*

The project is not expected to be detrimental to the economic welfare of the surrounding properties or the community.

6. *The project is adequately served by public facilities, such as existing roads, schools, stormwater drainage, public safety, public transportation, and public recreation, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide any such service.*

The prior use of the building was as a cat hospital. The current parking lot is expected to be able to handle the potential traffic.

7. *The project is adequately served by public sanitation facilities if so designed. If on-site sanitation facilities for sewage disposal, potable water supply, and stormwater are proposed, they shall be properly designed and capable of handling the longterm needs of the proposed project.*

The project is adequately served by public water and sewer. No enlargement of impervious surface is proposed as part of this application.

8. *The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.*

The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.

9. *The project will not directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, and wildlife areas.*

The project is not expected to directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, or wildlife areas. The Natural Features Inventory did not identify any sensitive environmental issues on the Subject Property.

If the Special Use Permit for the project is approved by the Planning Commission, the applicant will be required to submit for any required building permits prior to beginning operations. Based on the information provided by the Applicant, Staff has no further concerns with the proposed restaurant as shown on the site plan.

### **Planning Commission Options**

The Planning Commission may recommend approval, approval with conditions, or denial of the proposed special use permit. A resolution will be provided at a future meeting.

### **Attachments**

1. Special Use Permit Supplemental Information
2. Business Plan
3. Proposed Site Plan and Building Drawings



**To: Planning Commission**

**From: Brian Shorkey, Principal Planner**

**Date: June 22, 2026**

**Re: Rezoning #26013 (Singh), rezone 1.1 acres located at 2020 M-78 from RR (Rural Residential) to RDD (Multiple-Family Residential).**

---

B. K. Singh (Applicant) has requested the rezoning of a 1.1-acre site located at 2020 M-78 (Subject Property), from RR (Rural Residential) to RDD (Multiple-Family Residential) for the purpose of converting an existing single-family residence into a duplex. This application comes almost two years after a variance request to waive the maximum square footage request for an Accessory Dwelling Unit (ADU) was denied by the Zoning Board of Appeals (ZBA).

The Planning Commission held a public hearing for this application at their regular meeting on June 8, 2026. At that time, the Planning Commission asked Staff to research two questions before they made a recommendation.

1. Township Sewer/Water

Staff's memo, dated June 8, 2026, for the public hearing indicated that if the rezoning was approved, the proposed duplex would be required to connect to public water. It is Township policy for new residences to connect to public water if it is available, as required by Sec. 78-27 in the Township Ordinance. Sec. 78-127 in the Township Ordinance requires sewer connections for all new construction intended for human occupancy. Based on these ordinances, the proposed duplex would be required to connect to Township water and sewer before any certificate of occupancy is issued.

2. Township Pathway

According to the Engineering Department, the Applicant will be required to create and record a pathway easement across the front of the Subject Property. If the property is redeveloped in the future, the Applicant would be required to either construct the Pathway or pay the amount in lieu of construction.