

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION PUBLIC HEARING
JUNE 10, 2024
MONDAY
6:30 P.M.
AGENDA**

CALL TO ORDER:

PLEDGE OF ALLEGIANCE:

APPROVAL OF AGENDA:

DECLARATION OF CONFLICT OF INTEREST:

CALL TO THE PUBLIC: *(Note: The Board reserves the right to not begin new business after 10:00 p.m.)*

OPEN PUBLIC HEARING #1... Consideration of a special land use application, environmental impact assessment and site plan for a contractor's yard with outdoor storage at an existing industrial site for Adams Well Drilling located at 5893 Sterling Drive. The site is located on a 5.39-acre parcel on the north side of Sterling Drive, west of Dorr Road. The request is petitioned by Adams Well Drilling.

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (5-21-24)
- C. Recommendation of Site Plan (5-21-24)

OPEN PUBLIC HEARING #2...Consideration of a special land use application, environmental impact assessment and site plan for the sale of new and used trailers. The property is located at an existing commercial site for AAA Trailer Sales located at 4675 Grand River Avenue, north side of Grand River Avenue, west of Boulevard Drive. The request is petitioned by AAA Trailer Sales.

- A. Recommendation of Special Land Use Application
- B. Recommendation of Environmental Impact Assessment (5-20-24)
- C. Recommendation of Site Plan (5-20-24)

OPEN PUBLIC HEARING #3...Consideration of a Zoning Ordinance Text amendment to Article 7 of the Zoning Ordinance, entitled "Commercial and Service Districts".

- A. Recommendation of Zoning Ordinance Amendment to Article 7 entitled "Commercial and Service Districts".

ADMINISTRATIVE BUSINESS:

- Staff Report
- Approval of May 13, 2024 Planning Commission meeting minutes
- Member discussion
- Adjournment

<p>*Citizen's Comments- In addition to providing the public with an opportunity to address the Township Board at the beginning of the meeting, opportunity to comment on individual agenda items may be offered by the Chairman as they are presented. Anyone speaking on an agenda item will be limited to 2 minutes.</p>
--



GENOA CHARTER TOWNSHIP

Special Land Use Application

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: Brody Adams; 5893 Sterling Drive
Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

APPLICANT PHONE: (517) - 545-7517 EMAIL: info@adamswelldrilling.com

OWNER NAME & ADDRESS: Adams Acreage LLC; 5893 Sterling Drive

SITE ADDRESS: 5893 Sterling Drive, Howell, MI 48843 PARCEL #(s): 4711-15-200-017

OWNER PHONE: (517) - 545-7517 EMAIL: info@adamswelldrilling.com

Location and brief description of site and surroundings:

Project Site is located in the Industrial District and contains the business Adams Well Drilling and a large gravel storage yard in the north.

There is a drive approach in the south along Sterling Drive and a gravel driveway in the northeast. There is a wetland in the storage yard and a detention basin along Sterling Drive.

Proposed Use:

The proposed project would see the removal of excessive gravel beyond the established setback lines, the installation of a storm sewer network, and an expansion of the existing detention basin to accommodate the calculated stormwater runoff.

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

- a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The proposed project would have the parcel come into compliance with the standards of Genoa Township. Once the site has been approved for compliance, the onsite business would continue to operate as allowed under the Industrial District.

- b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

The site will not be significantly altered from its originally intended use. The changes made to the site as a result of the project will be the removal of gravel from beyond the established setbacks, the installation of a storm sewer network to capture the stormwater, and some grading to allow for stormwater runoff to enter the proposed forebay and expanded basin.

- c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

There will be no changes to essential public facilities and services as a result of the project.

d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

There will be no change to the type of use of the facility as a result of the project. The site lies within the Industrial District.

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

The storage yard is existing and will comply with Section 8.02.02(p) as a result of this project.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED _____ STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: Brody Adams Brody Adams

ADDRESS: 5893 Sterling Drive, Howell, MI 48843

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

Jared Prather	of Boss Engineering	at jaredp@bosseng.com
Name	Business Affiliation	Email

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: Brody Adams DATE: 4-9-2021

PRINT NAME: Brody Adams PHONE: (517) - 545-7517



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: BRODY ADAMS; 5893 STERLING DRIVE
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: ADAMS ACREAGE LLC; 5893 STERLING DRIVE

SITE ADDRESS: 5893 STERLING DRIVE, HOWELL, MI 48843 PARCEL #(s): #4711-15-200-017

APPLICANT PHONE: (517)-545-7517 OWNER PHONE: (517)-545-7517

OWNER EMAIL: info@adamswelldrilling.com

LOCATION AND BRIEF DESCRIPTION OF SITE: Project Site is located in the Industrial District and contains the business Adams Well Drilling and a large gravel storage yard in the north. There is a drive approach in the South along Sterling Drive and a gravel driveway in the northeast. There is a wetland in the storage yard and a detention basin along Sterling Drive.

BRIEF STATEMENT OF PROPOSED USE: The proposed project would see a removal of excessive gravel beyond the established setback lines, the installation of a storm sewer network, and an expansion of the existing detention basin to accommodate the calculated stormwater runoff.

THE FOLLOWING BUILDINGS ARE PROPOSED: No new buildings are proposed onsite.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: Brody Adams

ADDRESS: 5893 Sterling Drive, Howell, MI 48843

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Jared Prather of Boss Engineering at jaredp@bosseng.com
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: Brady Adams DATE: 4-9-2024
PRINT NAME: Brady Adams PHONE: 517-545-7517
ADDRESS: 5893 Sterling Dr. Howell Mi



June 4, 2024

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	Adams Well Drilling – Special Land Use and Site Plan Review #2
Location:	5893 Sterling Drive – north side of Sterling Drive, west of Dorr Road
Zoning:	IND Industrial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Adams Well Drilling for a contractor’s yard with outdoor storage for the developed property at 5893 Sterling Drive (plans dated 5/21/24).

A. Summary

1. Section 19.03 General Special Land Use Standards:

- a. The standards of Section 19.03 are generally met, provided:
 - i. the use conditions of Section 8.02.02(b) are met to the Commission’s satisfaction regarding compatibility and impacts; and
 - ii. the applicant addresses comments from the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Section 8.02.02(b) Use Conditions:

- a. The applicant must complete the lot reconfiguration process (if they have not already).
- b. The Commission may allow gravel surfacing of the outdoor storage yard, pending a recommendation from the Township Engineer.
- c. The buffer/screening requirements are not fully met.

3. Site Plan Review:

- a. We request the applicant confirm that the proposed roof extension complies with the 25-foot side yard setback requirement.
- b. The main driveway is slightly deficient in width for two-way travel.
- c. The buffers around the outdoor storage area do not fully comply with buffer zone B requirements.
- d. We request the applicant provide detail sheets for existing light fixtures to ensure compliance with current standards.
- e. The waste receptacle/enclosure should be brought into compliance with current standards.

B. Proposal/Process

The applicant proposes improvements to bring the site into compliance with current Ordinance standards. The property has been used as a contractor’s yard with outdoor storage that has gradually expanded over time without approvals.

Table 8.02 lists contractor’s yards with outdoor storage as special land uses in the IND. Such uses are also subject to the conditions of Section 8.02.02(b).

Procedurally, the Planning Commission is to review the special land use, site plan, and Impact Assessment, and put forth a recommendation on each to the Township Board following a public hearing.



Aerial view of site and surroundings (looking north)

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

- 1. Master Plan.** The Township Master Plan identifies the subject site as Industrial, which is intended for “industrial uses such as research, wholesale and warehouse activities and light industrial operations which manufacture, compound, process, package, assemble and/or treat finished or semi-finished products from previously prepared material.”

Given this description, we are of the opinion that the proposal is generally consistent with the Plan.

- 2. Compatibility.** Much of Sterling Drive is developed with light industrial or heavy commercial uses with a significant amount of outdoor storage. The intent of this project is to bring the site into compliance with current Ordinance standards.

The use conditions of Section 8.02.02(b) are intended to help ensure compatibility. In order to make a favorable finding under this criterion, these conditions must be met to the Commission’s satisfaction.

- 3. Public Facilities and Services.** As a previously developed industrial site, we anticipate that necessary public facilities and services are already in place.

However, the applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority related to this criterion.

- 4. Impacts.** Similar to the comment above, the use conditions of Section 8.02.02(b) are intended to limit impacts of the proposal upon the site and surrounding properties.

Provided these conditions are met to the Commission’s satisfaction, surrounding properties are not expected to be adversely impacted by the proposal.

- 5. Mitigation.** If further comments/concerns arise as part of the review process, the Township may require additional efforts to mitigate potential adverse impacts.

D. Use Conditions

Contractor's yards with outdoor storage are subject to the use conditions of Section 8.02.02(b), as follows:

1. Minimum lot area shall be one (1) acre.

The subject site contains 5.39 acres of lot area. It is important to note that this includes 0.35 acres of the adjacent parcel to the east via a lot reconfiguration.

It is unclear whether the lot reconfiguration has been applied for and/or approved at this time. If it has not, the Commission should include this as a condition to a favorable recommendation.

2. Any stockpiles of soils, fertilizer or similar loosely packaged materials shall be sufficiently covered or contained to prevent dust or blowing of materials.

The revised submittal materials note that no loosely packaged materials will be stored.

3. All outdoor storage areas shall be paved with a permanent, durable and dustless surface and shall be graded and drained to dispose stormwater without negatively impact adjacent property. The Township Board, following a recommendation of the Planning Commission and the Township Engineer, may approve a gravel surface for all or part of the display or storage area for low intensity activities, upon a finding that neighboring properties and the environment will not be negatively impacted.

The applicant proposes to utilize the existing gravel surfacing for the outdoor storage area.

The Commission has the discretion to permit such, pending a recommendation from the Township Engineer.

4. No outdoor storage shall be permitted in any required yard (setback) of buildings for the district in which the outdoor display, sales or storage use is located. Any approved outdoor sales or display with a parking lot shall meet the required parking lot setback; provided the Planning Commission may require additional landscaping screening or ornamental fencing.

The limits of the outdoor storage yard comply with the side (25') and rear (40') yard setbacks of the IND.

5. The site shall include a building of at least five hundred (500) feet of gross floor area for office use in conjunction with the use.

The site includes 2 buildings (1 principal and 1 accessory), both of which exceed 500 square feet in floor area.

6. All loading and truck maneuvering shall be accommodated on-site.

Sheet 8 of the site plan includes a truck turning template, depicting on-site maneuvering between the driveway and outdoor storage area.

- 7. All outdoor storage area property lines adjacent to a residential district shall provide a buffer zone A as described in Section 12.02. A buffer zone B shall be provided on all other sides. The Planning Commission may approve a six (6) foot high screen wall or fence, or a four (4) foot high landscaped berm as an alternative.**

The property is not adjacent to a residential district; therefore, a buffer zone B is required for the rear and (both) side yards.

The landscape plan includes new plantings for the front yard greenbelt, around the stormwater ponds and along the east side lot line.

Given the setbacks provided, the required width for a buffer zone B is provided; however, the planting requirements are not fully met.

The outdoor storage area is enclosed with chain link fencing with a fabric backing to screen views. A portion of the fencing is 8 feet in height, which may be allowed by the Zoning Administrator.

- 8. The height of all material and equipment stored in an outdoor storage area shall not exceed the height of any landscape screening, wall or fence. Boats and recreational vehicles may exceed the height of the fence provided that they are setback from the fence a distance equal to their height. Storage of materials up to the height of the adjacent building wall may be permitted in the rear yard if it is illustrated on the site plan, the rear yard does not abut a residential district or face an expressway, and such storage is confined to within twenty (20) feet of the building.**

The revised submittal notes that trucks stored outdoors are 12 feet in height, but will be parked behind the principal building.

E. Site Plan Review

- 1. Dimensional Requirements.** The site plan has been reviewed for compliance with the dimensional requirements of the IND, as follows:

	Min. Lot Req.		Minimum Yard Setbacks (feet)				Max. Lot Coverage (%)	Max. Height (feet)
	Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking Lot		
IND	1	150	50	25	40	20 front 10 side/rear	40% building 85% impervious	30
Proposal	5.39	333	173	207 (E) 24 (W)	326	143 front 25 side	8.9% building 58.5% impervious	20

The existing east side building setback is nonconforming. The proposed roof extension appears to comply with the 25-foot side yard setback requirement; however, we request the applicant confirm that this is the case.

- 2. Building.** Aside from a 20-foot roof extension off the back of the main building, no exterior changes are proposed to either of the 2 existing buildings.
- 3. Pedestrian Circulation.** Per Section 12.05 and the Township’s Pathway Plan, neither a walk nor path is required along Sterline Drive.

The site plan does include a sidewalk between the parking lot and building entrances.

- 4. Vehicular Circulation.** The site currently provides 1 curb cut to/from Sterling Drive, and no changes are proposed. It is worth noting that the existing driveway is slightly deficient in width (23.9' for main drive and 23.5' between parking spaces).

The Commission may wish to require improvements that bring the driveway width(s) into compliance with current standards for two-way travel (24'); however, the drive between parking spaces can be corrected with proper striping allowing for vehicle overhang (Section 14.06.06).

The applicant must address any additional comments provided by the Township Engineer and/or the Brighton Area Fire Authority with respect to vehicular circulation.

- 5. Parking.** Based on the information provided, Section 14.04 requires a total of 28 parking spaces for the development. The site plan provides 30 spaces, including the 2 required barrier-free spaces.

Parking space dimensions and design comply with current standards; however, as previously noted, the depth of the 9 spaces nearest the main building may be reduced.

- 6. Landscaping.** The revised landscape plan has been reviewed for compliance with the standards of Section 12.02, as shown in the following table:

Standard	Required	Proposed	Notes
Front yard greenbelt	20' width 9 canopy trees	20' width 6 canopy trees 3 evergreen trees	PC may allow substitution of evergreen trees for up to 50% of required trees
Buffer Zone "B" (north)	20' width 13 canopy trees 13 evergreen trees 51 shrubs 6' wall OR 3' berm	40' width	Deficient in plantings and wall or berm requirement
Buffer Zone "B" (east)	20' width 12 canopy trees 12 evergreen trees 47 shrubs 6' wall OR 3' berm	70' width 5 existing canopy trees 12 existing evergreen trees 32 shrubs Partial 4' berm	Existing mature trees count as 2 for requirements; therefore, total trees are compliant. Deficient by 15 shrubs and full wall/berm requirement.
Buffer Zone "B" (west)	20' width 11 canopy trees 11 evergreen trees 44 shrubs 6' wall OR 3' berm	25' width	Deficient in plantings and wall or berm requirement
Detention pond	14 trees 140 shrubs	14 trees 145 shrubs	Requirements met

The Commission has the discretion to waive or modify the above requirements, per Section 12.02.13.

There is a minor discrepancy between the plan and list with respect to the number of Ivory Halo Dogwood (33 plan; 30 list) and Mariesi Doublefile Viburnum (15 plan; 18 list).

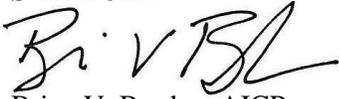
- 7. Exterior Lighting.** The submittal does not include a lighting plan. The site plan depicts existing wall mounted fixtures. We request the applicant provide a detail sheet of the existing fixtures to ensure compliance with current standards.
- 8. Waste Receptacle/Enclosure.** The site plan identifies an existing dumpster northeast of the building; however, no enclosure details are provided. Additionally, it does not appear that the concrete base pad meets current dimensional requirements.

The waste receptacle/enclosure should be brought into compliance with the standards of Section 12.04 as part of this project.

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,

SAFEBUILT

A handwritten signature in black ink, appearing to read "B. V. Borden". The signature is stylized and cursive.

Brian V. Borden, AICP
Michigan Planning Manager



May 24, 2024

Ms. Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: Adams Well Drilling Parking and Storage Expansion
Site Plan Review No. 2**

Dear Ms. Ruthig:

Tetra Tech has conducted a second review of the Adams Well Drilling site plan last dated May 21, 2024. The impact assessment and site plan documents were prepared by Boss Engineering on behalf of Adams Acreage LLC/Brody Adams. The site is located on a 5.39-acre parcel on the north side of Sterling Drive and the petitioner is proposing installation of storm sewer, an addition of a sediment forebay, expansion of the detention basin and the removal of a gravel border. We also reviewed the site lighting plan prepared by Gasser Bush Associates dated May 23, 2024.

The Petitioner has satisfactorily addressed our previous comments and we have no further engineering related concerns with the proposed site plan. Please call or email if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sydney Streveler', with a horizontal line extending to the right.

Sydney Streveler, EIT
Civil Engineering Group

A handwritten signature in black ink, appearing to read 'John Y. Barber', with a horizontal line extending to the right.

John Y. Barber, PE
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

June 4, 2024

Amy Ruthig/Sharon Stone
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: Adams Well Drilling
5893 Sterling Drive
Genoa Twp., MI

Dear Amy/Sharon,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on May 21, 2024 and the drawings are dated May 21, 2024. The project is based on an existing 5.39-acre parcel with two existing buildings of 13,400-square-foot business/storage use, and an outbuilding of 3,868 square feet. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

1. The only additional detail requested is regarding the fences and the access drives. Please provide clarification on whether or not the fences will be provided with access gates. If gates are to be provided, a Knox padlock or Knox key switch shall be provided for emergency access. **(A note has been added to comply with Knox box or key switch access requirements.)**

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). The applicant is reminded that the fire authority must review the fire protection systems submittals (sprinkler & alarm) before permit issuance by the Building Department and that the authority will also review the building plans for life safety requirements in conjunction with the Building Department.

If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, CFPS
Fire Marshal

cc: Amy Ruthig amy@genoa.org
Sharon Stone sharon@genoa.org

**GENOA TOWNSHIP IMPACT ASSESSMENT
Adams Well Drilling**

Prepared for:

**Property Owner
Adams Acreage LLC
Brody Adams**

**Applicant
Adams Acreage LLC
Brody Adams**

Prepared by:

Jared Prather, E.I.T.



3121 E. Grand River Howell, MI 48843
517.546.4836 fax 517.548.1670
www.bosseng.com

May 21, 2024

DISCUSSION ITEMS

- A. Name(s) and address(es) of person(s) responsible for preparation of the Impact Assessment and a brief statement of their qualifications.

Prepared by:

Jared Prather, E.I.T.
Project Engineer
Boss Engineering
3121 E Grand River
Howell, MI 48843

Prepared for:

Owner:
Adams Acreage LLC / Brody Adams
5893 Sterling Drive
Howell, MI 48843

Applicant:
Adams Acreage LLC / Brody Adams
5893 Sterling Drive
Howell, MI 48843

- B. Description of the site, including existing structures, man-made facilities, and natural features, all-inclusive to within 10' of the property boundary.***

The project site is on parcel #4711-15-200-017 in Section 15, Genoa Township, Livingston County, MI.

The subject site is bordered:

- On the west and northwest by the Wilson Marine, 15.63 total acre parcel zoned Industrial (IND).
- On the northeast by the GMD Photograph business, 2.00-acre parcel - zoned IND & Town Center Overlay District (TCOD).
- On the east by the Sterling Auto Creations, 5.00-acre parcel zoned IND & TCOD.
- On the south by Sterling Drive, and approximately 300-ft of wetland to the Wellbridge Brighton Rehabilitation facility 10.38-acre parcel zoned Mixed-Use Planned Unit Development District (MU-PUD) & TCOD.

The subject site is an occupied parcel of land consisting of a contractor's office and support building, Adams Well Drilling, an out-building, paved parking lot, and a gravel-surfaced fenced in storage area. MHOG sanitary and watermain run along the south property line parallel with Sterling Drive (See the Existing Conditions Plan). There is a 0.14-acre wet basin at the southeast corner of the parcel, large expanse of lawn around the basin at the front and east side of the office and with primarily Spruce trees scattered throughout. In the northwest corner of the site is a small (0.08-acre) remnant wetland / wet storm basin within the storage yard. There is currently one existing paved commercial drive approach from the south end of the subject property and one gravel drive approach to the entry to the storage yard from the northeast of the subject property, directly off Dorr Road.

C. Impact on natural features: A written description of the environmental characteristics of the site prior to development, i.e., topography, soils, vegetative cover, drainage, streams, creeks or ponds.

The parcel is already developed. As described in Section B it includes buildings, a paved parking lot, and a gravel storage area. The storage area occupies approximately the north half of the site (with the small wetland/basin & outbuilding), the main building and parking lot approximately 1/4 of the site in the middle and large expanse of lawn, a wet basin with fountain and scattered large coniferous trees in the south 1/4 of the site.

The site slopes from north to south with slopes generally 3-5% at and behind the building at the north end and increasing to 15-20% at the south end / front yard of the site. The site also generally drains from north to south with a small portion being directed to the small basin at the north end, another portion directed into the basin at the southeast corner, and the remainder sheet flowing to a ditch that flanks Sterling Drive where it eventually terminates into the wetland across the street through culverts.

The NRCS soils on the property are Miami Loam with varying designated slope classifications of 2 to 6% slopes at the north and 6-12% and 12-18% slopes at the south and southeast. Carlisle Muck is to the south at the wetland area across Sterling Drive.

D. Impact on storm water management: description of soil erosion control measures during construction.

Storm water will be managed onsite including modifications to the existing storm water detention basin. The entire gravel storage area, buildings, & paved parking will be captured in catch basins and directed to a new forebay/sedimentation basin, an expanded detention basin and include a restricted discharge to the Sterling Drive storm system (ditch & culverts) through a new overflow control structure. Detailed construction plans will be reviewed by the Township Engineer and the Soil Erosion Control plans will be reviewed and permit issued by the Livingston County Drain Commissioners office prior to construction commencing. Ongoing/periodic soil erosion inspections will occur per County requirements to ensure soil erosion is managed proactively.

E. Impact on surrounding land use: Description of proposed usage and other man-made facilities; how it conforms to existing and potential development patterns. Effects of added lighting, noise or air pollution which could negatively impact adjacent properties.

There will be minimal impact on surrounding land uses or development patterns as there will be no change to these uses. The proposed project is to better screen water well drilling vehicles, equipment, and onsite storage from Dorr Road, add landscaping around the new / expanded basin and upgrade the site to meet current Township, County, and State engineering standards. The materials are packaged and stored securely. Trucks are 12 feet tall and are parked behind the principal building. The existing fence around the storage yard is 8 feet tall. No new lighting is planned onsite. The proposed uses conform to existing development patterns and will not negatively impact adjacent properties with added lighting, noise, or air pollution. The site development will comply with Township Ordinances.

F. Impact on public facilities and services: Description of number of residents, employees, patrons, and impact on general services, i.e., schools, police, fire.

The proposed updates to the existing site do not add additional burden on the fire and police services as there will be no changes to the site uses and the site is surrounded by similar developments. There is already existing hydrant coverage along Sterling Drive. The emergency and waste disposal vehicles have access to the site and storage yard via two sliding gates: one sliding gate from the Sterling Drive access and the other from Dorr Road directly to the storage yard. Access through the gates in case of an emergency or for weekly garbage collection is through a Knox Padlock or Knox Key Switch. The existing dumpster sits behind the Sterling Drive sliding gate at the entrance of the storage yard. The use does not add population that may impact schools. There will be no change to the employment total (15-20 varying seasonally). The proposed changes will bring the existing site into compliance with the Township standards.

G. Impact on public utilities: description of public utilities serving the project, i.e., water, sanitary sewer, and storm drainage system. Expected flows projected in residential units.

Storm water will be detained onsite via the use of an enlarged detention basin and forebay. Additional runoff along the northern end of the site will be captured by the new system. The storm water will be discharged at a new restricted rate to the Sterling Drive storm sewer system whereas it is uncontrolled now. Detailed construction plans would be reviewed by the Township Engineer and the Soil Erosion Control permit would be reviewed and issued by the Livingston County Drain Commissioner. MHOG sanitary sewer and MHOG water both run along the south property line in Sterling Drive.

H. Storage or handling of any hazardous materials: Description of any hazardous materials used, stored, or disposed of onsite.

No storing or handling of any bulk hazardous materials is expected for this development. Materials stored on pallets include water softener salt and bentonite that is used in the proper abandonment of wells.

I. Impact on traffic and pedestrians: Description of traffic volumes to be generated and their effect on the area.

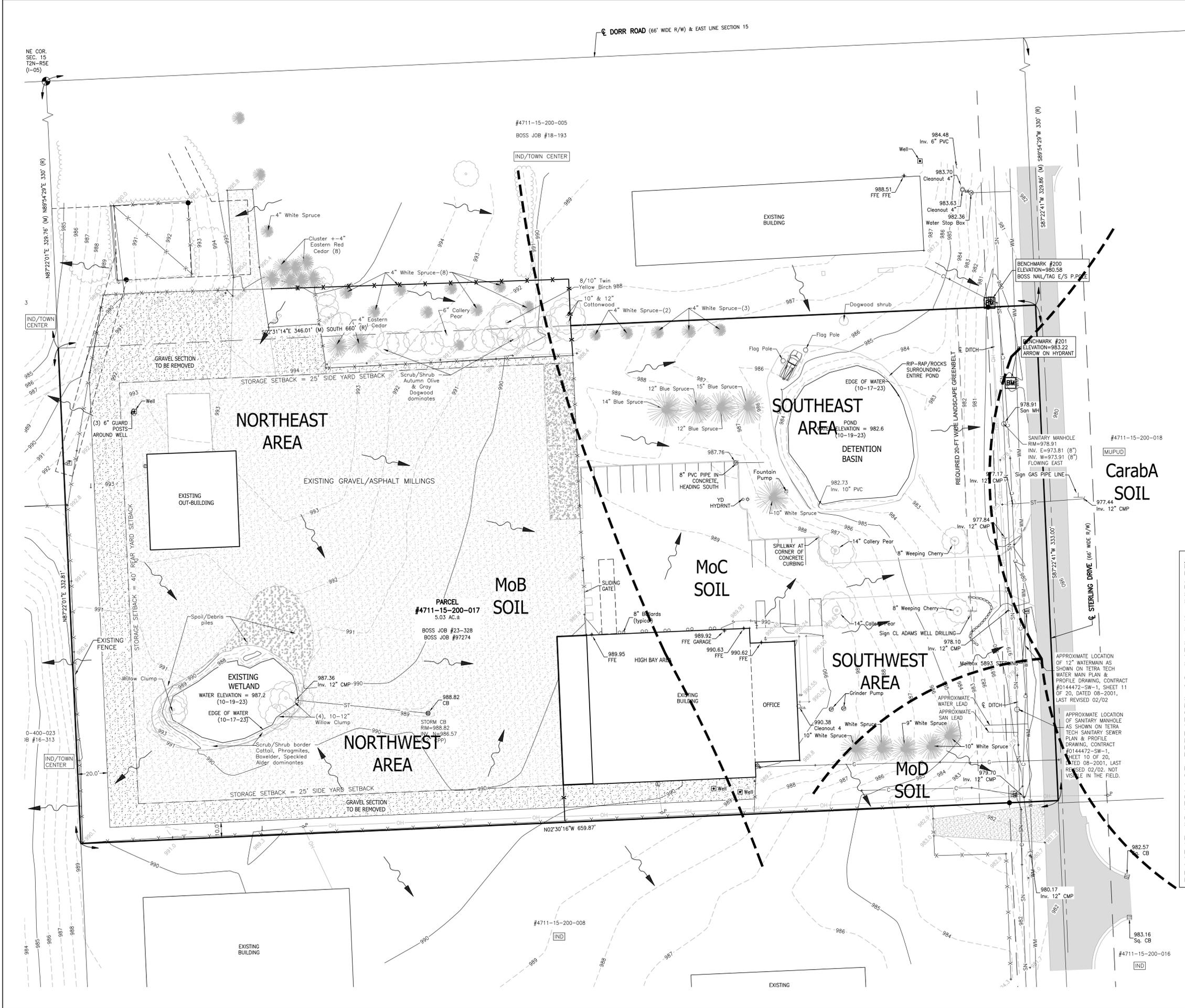
A Trip Generation summary has been completed using the ITE 10th Edition Volume 2 manual and is included on the plans. There is no proposed change to the employee count of a maximum of 20 (summer months) that would generate a maximum AM peak total of 15 and PM peak total of 16 arriving and departing the site. There will be no changes to the two existing drives that currently access the site.

J. Special provisions: Deed restrictions, protective covenants, etc.

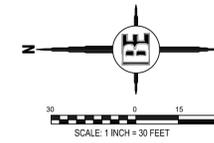
There is a 15-foot-wide permanent utility easement along the south property along Sterling Drive. There is also a 12-foot-wide easement at the northeast corner of the site centered on an existing overhead line associated with a cell tower adjacent to the site.

K. Description of all sources:

- Genoa Township Zoning Ordinance and engineering standards
- Livingston County Drain Commissioner engineering standards
- NRCS Web Soil Survey
- Institute of Traffic Engineers (ITE) Trip General Manual, 10th Edition



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



- LEGEND**
- NATURAL FEATURE TYPE BOUNDARY
 - EXISTING DRAINAGE FLOW
 - 900 EXISTING 1-FT CONTOURS

PARCEL INFORMATION:
 PARCEL ID: #4711-15-200-017
 ZONING: INDUSTRIAL DISTRICT (IND)
 ADDRESS: 5893 STERLING DRIVE,
 HOWELL, MI 48843
 OWNER: ADAMS ACREAGE LLC

DESCRIPTION OF PARCEL #4711-15-200-017 AS PROVIDED:

LAND SITUATED IN THE TOWNSHIP OF GENOA, COUNTY OF LIVINGSTON, STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:
 PART OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 15, TOWN 2 NORTH, RANGE 5 EAST, GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT ON THE NORTH LINE OF SAID SECTION 15, DISTANT SOUTH 89°54'29" WEST 330 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 15; THENCE SOUTH 89°54'29" WEST ALONG SAID NORTH LINE OF SECTION 15, 333 FEET; THENCE DUE SOUTH 660 FEET; THENCE NORTH 89°54'29" EAST, 333 FEET; THENCE DUE NORTH 660 FEET TO THE POINT OF BEGINNING, SUBJECT TO AND INCLUDING AN ACCESS EASEMENT FOR DRIVEWAY AND PUBLIC UTILITIES TO DORR ROAD DESCRIBED AS: BEGINNING AT A POINT ON THE EAST LINE OF SAID SECTION 15, DISTANT DUE SOUTH 594 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 15; THENCE DUE SOUTH ALONG SAID EAST LINE OF SECTION 15, WHICH IS ALSO THE CENTERLINE OF DORR ROAD RIGHT-OF-WAY 132 FEET; THENCE SOUTH 89°54'29" WEST 50 FEET; THENCE NORTH 45°05'31" WEST 46.67 FEET; THENCE SOUTH 89°54'29" WEST 580 FEET; THENCE DUE NORTH 66 FEET; THENCE NORTH 89°54'29" EAST, 580 FEET; THENCE NORTH 44°54'29" EAST 46.67 FEET; THENCE NORTH 89°54'29" EAST 50 FEET TO THE POINT OF BEGINNING.

&
 THE SECTION OF LAND FROM PARCEL #4711-15-200-005 AS DESCRIBED AS: BEGINNING AT THE NORTHEAST POINT ON THE NORTH LINE OF SAID SECTION 15 OF PARCEL #4711-15-200-017, DISTANT NORTH 87°22'01" EAST 43.83 FEET; THENCE SOUTH 02°31'14" EAST, 346 FEET; THENCE SOUTH 87°22'01" WEST 43.83 FEET TO THE INTERSECTION OF PARCEL #4711-15-200-017, THENCE NORTH 02°31'14" WEST TO THE POINT OF BEGINNING. THIS 15,165.18 SQUARE FOOT SECTION SHALL RECOMBINE WITH THE ENTIRE EXISTING PARCEL #4711-15-200-017. A RECOMBINATION SURVEY WILL BE REQUIRED AS PART OF THE NEWLY DESCRIBED PARCEL.

SITE BENCHMARKS (NAVD88 DATUM):
 -BM #200 = BOSS NAIL/TAG E/S P.P.OLE. ELEV. = 980.58
 -BM #201 = ARROW ON HYDRANT. ELEV. = 983.22

NRCS EXISTING SOILS DATA:

Caraba	Carisle Muck	0-2% Slopes
MoB	Miami Loam	2-6% Slopes
MoC	Miami Loam	6-12% Slopes
MoD	Miami Loam	12-18% Slopes

NATURAL FEATURES NARRATIVE:
 NATURAL FEATURES WERE IDENTIFIED DURING A SITE VISIT ON NOVEMBER 15, 2023. THE SITE IS DEVELOPED AND INCLUDES A CONTRACTOR'S OFFICE WITH SUPPORT SPACES, (MAIN BUILDING) AN ACCESSORY BUILDING, (SMALL) STORAGE LOT, AND A LARGE OUTDOOR STORAGE AREA. THE UNDERLYING SOILS ARE PRIMARILY MIAMI LOAM WITH THE ENTIRE SITE SLOPING FROM NORTH TO SOUTH WITH INCREASING SLOPES SOUTH OF THE MAIN BUILDING TOWARD STERLING DRIVE (3-5% SLOPES BECOMING 20%+ SLOPES).

AREAS OF THE SITE ARE DESCRIBED AS FOLLOWS:
 THE BUILDING IS SITUATED IN THE NORTHWEST CORNER OF THE ROAD (1-160') RESULTING IN A LARGE MOWED SOUTH-FACING FRONT LAWN AREA WITH A RETENTION POND FRONTING STERLING DRIVE.

SOUTHWEST: THIS AREA IS THE FRONT YARD OF THE MAIN BUILDING, WEST OF THE SITE ENTRANCE DRIVE. IT IS PRIMARILY MOWED LAWN WITH A ROW OF LARGE 10-INCH CALIPER, 25-30' HEIGHT WHITE SPRUCE (PICEA GLAUCA) AT THE WESTERN EDGE OF A TRANSITION FROM 6-10% SLOPES TO STEEPER (20%+) SLOPES TOWARD THE WEST AND SOUTH.

ON EITHER SIDE OF THE ENTRANCE DRIVE ARE CALLERY PEAR TREES (PYRUS CALLERYANA) (14-INCH) & WEEPING CHERRY TREES (PRUNUS SPP.) (8-INCH) - 1 EACH SIDE.

SOUTHEAST: THIS AREA IS EAST OF THE ENTRANCE DRIVE & PARKING LOT. IT IS ALSO PRIMARILY MOWED LAWN SLOPING TO THE SOUTH TOWARD THE ROAD BUT WITH A STONE-LINED WET BASIN GRADED INTO THE HILLSIDE. A WATER FOUNTAIN OPERATES DURING THE SUMMER. THERE IS A RETIRED WELL-DRILLING TRUCK RIG USED AS AN ADVERTISEMENT / DECORATIVE ELEMENT ALONG WITH FLAG POLES ALONG THE NORTH, HIGH SIDE OF THE BASIN, TO THE NORTHWEST OF THE BASIN IS (1) 10-INCH WHITE SPRUCE, FURTHER NORTH OF THE BASIN, EAST OF THE PAVED PARKING LOT IS MORE MOWED LAWN WITH A ROW OF (4) 12 TO 15-INCH CALIPER, 25-30' HEIGHT BLUE SPRUCE (PICEA PUNGENS) (1 TOPPED), & (5) 4-INCH CALIPER, 10-12' HEIGHT WHITE SPRUCE ALONG THE EAST PROPERTY LINE.

NORTHEAST: FURTHER NORTH IS A FENCED STORAGE YARD WITH ASPHALT MILLINGS. THIS AREA GENERALLY SLOPES FROM NORTH TO SOUTH AT 3-5%, ALONG THE EAST PROPERTY LINE, OUTSIDE ADJACENT TO THE FENCE LINE IS APPROXIMATELY 20' WIDE BUFFER OF PRIMARILY SCRUB TREES AND SHRUBS. THESE INCLUDE EASTERN RED CEDAR (JUNIPERUS VIRGINIANA), AUTUMN OLIVE (ELAAGNUS UMBELLATA), GRAY DOGWOOD (CORNUS RACEMOSA), SEEDLING CALLERY PEAR & (1) LARGER 6-INCH CALIPER PEAR TREE). JUST OFF THE PROPERTY LINE TO THE EAST IS A TWIN, 8 & 10-INCH YELLOW BIRCH (BETULA ALLEGHANIENSIS), AND 10-INCH & 12-INCH COTTONWOODS (POPULUS DELTOIDES). THERE IS ALSO 2 STAGGERED PLANTED ROWS OF SMALL 4-INCH WHITE SPRUCE TREES FURTHER EAST, ANOTHER APPROXIMATELY 30' IN TOTAL WIDTH.

NORTHWEST: THE FENCED STORAGE YARD ALSO OCCUPIES THE NORTHWEST CORNER OF THE SITE. THIS AREA IS DIRECTLY ADJACENT TO ANOTHER STORAGE AREA TO THE NORTH & WEST WITH A THIN LINE OF SCRUB SHRUBS & VINES ALONG THE FENCE LINE. THERE IS ALSO A SMALL ISOLATED WETLAND WITH STANDING WATER (0.08 ACRE). DOMINANT PLANTS INCLUDE LARGE CLUMPS OF WILLOW (SALIX SPP.), CATTAIL (TYPHA SPP.), COMMON REED GRASS (PHRAGMITES AUSTRALIS), BOXELDER (ACER NEGUNDO), & A FEW SPECKLED ALDER (ALNUS INCANA). IT IS POOR QUALITY WITH DEBRIS PILES FLANKING ITS EASTERN EDGE.

NOTES:
 • REFER TO EXISTING CONDITIONS PLAN & DEMOLITION PLAN (SHEET 3) FOR ADDITIONAL EXISTING PROPERTY, UTILITY INFORMATION, AND EXISTING EASEMENT AREAS.

FOR SITE PLAN APPROVAL ONLY!
 NOT FOR CONSTRUCTION

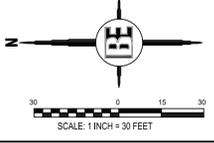
THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

BEBOSS Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

PROJECT	ADAMS WELL DRILLING PARKING EXPANSION
PREPARED FOR	ADAMS WELL DRILLING LLC 5893 STERLING DRIVE HOWELL, MI 48843 (517)5463757
TITLE	NATURAL FEATURES PLAN
DATE	05/21/24
REVISIONS PER TOWNSHIP COMMENTS	NO BY
1 UP	NO BY
DESIGNED BY:	BL
DRAWN BY:	JP
CHECKED BY:	
SCALE:	1" = 30'
JOB NO:	23-328
DATE:	04/23/24
SHEET NO.	4



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



SITE DATA:

GENOA TOWNSHIP
 PARCEL # 4711-15-200-017
 5893 STERLING DRIVE, HOWELL, MI 48843
 OWNER: ADAMS ACREAGE LLC
 5.39 AC ± = 5.04 AC + 0.35 AC LOT RECONFIGURATION

ZONING: INDUSTRIAL DISTRICT (IND) + INDUSTRIAL DISTRICT/TOWN CENTER (IND)
 EXISTING BUILDING SF: 13,400 GSF ±
 EXISTING BUILDING USE: OFFICE/HIGH BAY UNLOADING AREA
 EXISTING OUT-BUILDING SF: 3,868 GSF ±
 EXISTING OUT-BUILDING USE: STORAGE

MIN. LOT AREA REQUIRED FOR ZONING: 1 ACRE
 EX. LOT AREA: 5.04 AC ± (219,712 SQ FT) +
 PR. LOT AREA: 0.35 AC ± (15,166 SQ FT) =
 TOTAL LOT AREA: 5.39 AC ± (234,878 SQ FT)
 TOTAL EX. WORKING AREA: 4.45 AC ± (193,842 SQ FT)

MIN. LOT WIDTH: 150 FT TOTAL EXISTING LOT WIDTH: 332.90 FT
 MAX. LOT COVERAGE: 40.0% BLDG, 85.0% IMPERVIOUS
 EXISTING LOT COVERAGE: 7.35% BLDG, 56.9% IMPERVIOUS
 PROPOSED LOT COVERAGE: 8.20% BLDG, 58.5% IMPERVIOUS

EXISTING IMPERVIOUS AREAS =
 EXISTING ASPHALT ROADWAY 2,995 SF (0.07 AC)
 EXISTING CONCRETE DRIVE/PARKING 20,202 SF (0.46 AC)
 EXISTING CONCRETE WALK 682 SF (0.01 AC)
 EXISTING BUILDING 13,400 SF (0.31 AC)
 EXISTING OUT-BUILDING 3,869 SF (0.09 AC)
 EXISTING GRAVEL/ASPHALT MILLING SURFACE 92,424 SF (2.12 AC)
 133,572 SF (3.07 AC)

EXISTING PERVIOUS AREAS =
 EXISTING LAWN/VEGETATION 94,289 SF (2.16 AC)
 EXISTING WETLAND 7,017 SF (0.16 AC)
 101,306 SF (2.32 AC)

SITE AREA TOTAL:
 234,878 (5.39 AC)

PROPOSED IMPERVIOUS AREAS =
 EXISTING ASPHALT ROADWAY 2,995 SF (0.07 AC)
 PROPOSED CONCRETE DRIVE/PARKING 22,296 SF (0.51 AC)
 EXISTING CONCRETE WALK 682 SF (0.01 AC)
 PROPOSED BUILDING 15,394 SF (0.35 AC)
 EXISTING OUT-BUILDING 3,869 SF (0.09 AC)
 PROPOSED GRAVEL/ASPHALT MILLING SURFACE 73,567 SF (1.69 AC)
 PROPOSED DETENTION BASINS 18,667 SF (0.43 AC)
 137,470 SF (3.16 AC)

PROPOSED PERVIOUS AREAS =
 PROPOSED LAWN/VEGETATION 92,370 SF (2.12 AC)
 PROPOSED WETLAND 5,038 SF (0.11 AC)
 97,408 SF (2.23 AC)

SITE AREA TOTAL:
 234,878 (5.39 AC)

MIN. PRINCIPAL BLDG SETBACKS REQUIRED: EXISTING SETBACKS:
 RIGHT-OF-WAY: 33'-FT 33'-FT
 FRONT: 50'-FT 173'-FT
 SIDE: 25'-FT 74.1'-FT
 REAR: 40'-FT 55.9'-FT
 MAX BLDG HGT: 30'-FT (IND) 20'-FT (APPROX.)

MIN. ACCESSORY BLDG SETBACKS REQUIRED: EXISTING SETBACKS:
 RIGHT-OF-WAY: 33'-FT 33'-FT
 FRONT: 50'-FT 543.3'-FT
 SIDE: 25'-FT 74.1'-FT
 REAR: 40'-FT 346.9'-FT
 MAX BLDG HGT: 30'-FT (IND) 20'-FT (APPROX.)

PARKING CALCULATION: 28 SPACES, INCLUDING 2 BARRIER-FREE SPACES NEEDED

LIGHT INDUSTRIAL
 1.5 SPACES PER 1,000 GSF: 12,994 = 20 SPACES REQUIRED INCLUDING 2 BARRIER-FREE SPACES.

PROFESSIONAL OFFICE, NON-MEDICAL
 1 SPACE PER 300 GSF: 2400/300 = 8 TOTAL SPACES.

PROVIDED PARKING: 30 SPACES
 INCLUDING 2 BARRIER-FREE SPACES (PER TOWNSHIP REQUIREMENTS)

PARKING, LOADING, & UNLOADING:
 PROPOSED PARKING: 30 SPACES ONSITE, INCLUDING 2 BARRIER-FREE SPACES
 TYPICAL PARKING SPACE SIZE: 9'x18'
 DRIVEWAY AISLE SIZE: 24' WIDTH
 TYPICAL LOADING SPACE SIZE: 10'x50'

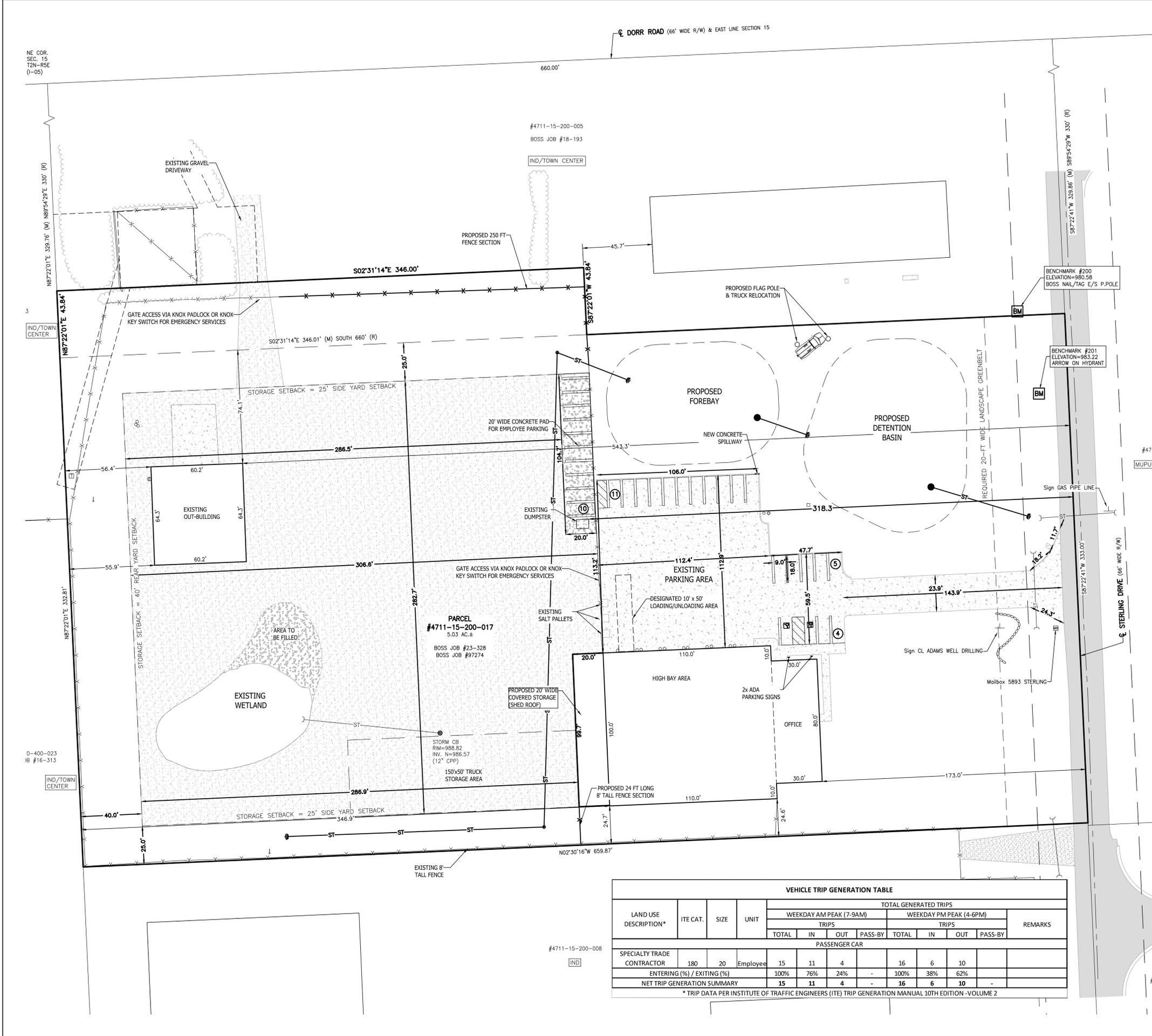
BUILDING NARRATIVE:
 THE TWO EXISTING BUILDINGS, BOTH PRINCIPAL AND ACCESSORY, WILL REMAIN UNCHANGED. A 20'-FT WIDE SHED ROOF IS PROPOSED FOR THE STORAGE OF ONSITE MATERIALS ADJACENT TO THE EXISTING PRINCIPAL BUILDING.

DUMPSTER ENCLOSURE:
 BECAUSE OF THE PROPOSED BASIN/FOREBAY LANDSCAPE SCREENING, THE INTENT OF THE ZONING ORDINANCE IS MET. THE DUMPSTER IS 318.3' FROM STERLING DRIVE AND IS OUT OF VIEW FROM THE ROAD.

FOR SITE PLAN APPROVAL ONLY!
 NOT FOR CONSTRUCTION

VEHICLE TRIP GENERATION TABLE												
LAND USE DESCRIPTION*	ITE CAT.	SIZE	UNIT	TOTAL GENERATED TRIPS								REMARKS
				WEEKDAY AM PEAK (7-9AM)				WEEKDAY PM PEAK (4-6PM)				
				TRIPS	IN	OUT	PASS-BY	TRIPS	IN	OUT	PASS-BY	
PASSENGER CAR												
SPECIALTY TRADE CONTRACTOR	180	20	Employee	15	11	4	-	16	6	10	-	
ENTERING (%) / EXITING (%)				100%	76%	24%	-	100%	38%	62%	-	
NET TRIP GENERATION SUMMARY				15	11	4	-	16	6	10	-	

* TRIP DATA PER INSTITUTE OF TRAFFIC ENGINEERS (ITE) TRIP GENERATION MANUAL 10TH EDITION - VOLUME 2



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE PLANS.

BEFORE ANY DIG CALL MSS DIG 1-800-487-7171

BEBOSS Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

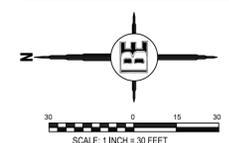
PROJECT: ADAMS WELL DRILLING PARKING & STORAGE EXPANSION
 PREPARED FOR: ADAMS WELL DRILLING LLC
 5893 STERLING DRIVE
 HOWELL, MI 48843
 (517)546.7517

TITLE: SITE PLAN

NO.	BY	REVISIONS PER TOWNSHIP COMMENTS	DATE
1	JP		05/21/24

DESIGNED BY: BL
 DRAWN BY: JP
 CHECKED BY:
 SCALE: 1" = 30'
 JOB NO: 23-328
 DATE: 04/23/24
 SHEET NO. 5

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



SITE BENCHMARKS (NAVD88 DATUM):
 -BM #200 = BOSS NAIL/TAG E/S P. POLE. ELEV. = 980.58
 -BM #201 = ARROW ON HYDRANT. ELEV. = 983.22

STORM STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
FES 08	INV. = 987.50
CB 07	RIM = 989.72 15" INV. = 986.39 18" INV. = 986.19
CB 06	RIM = 989.50 18" INV. = 985.34 21" INV. = 985.14
FES 05	INV. = 985.00
OCS 04	RIM = 986.00 24" INV. = 984.16 2' SUMP
FES 03	INV. = 984.00
OCS 02	RIM = 983.00 27" INV. = 977.25 2' SUMP
FES 01	INV. = 977.17

DRAINAGE AREA TABLE						
DRAINAGE AREA	TOTAL AREA (AC)	IMP. AREA (AC)	PER. AREA (AC)	MISC. AREA (AC)	C VALUE	A'C
A	0.93	0.13	0.80	-	0.30	0.28
B	0.78	0.57	0.21	0.00	0.71	0.56
C	1.01	0.47	0.16	0.39	0.72	0.72
D	0.40	-	0.27	0.13	0.37	0.15
E	0.74	0.17	0.06	0.50	0.70	0.52
F	1.38	0.47	0.47	0.79	0.55	0.75
G	0.10	-	0.10	-	0.20	0.02
H	0.04	-	0.04	-	0.20	0.01
TOTALS	5.39	1.46	2.12	1.81	0.56	3.00

DRAINAGE NARRATIVE:
 THE PROPOSED STORMWATER RUNOFF WILL DRAIN INTO THE PROPOSED STORM SEWER NETWORK, ENTER THE DETENTION BASIN, AND ULTIMATELY DISCHARGE FROM THE OUTLET INTO THE STERLING DRIVE DRAINAGE COURSE.

LIVINGSTON COUNTY DETENTION BASIN CALCULATIONS					
AREA (ACRES)	IMPERVIOUS FACTOR	IMPERVIOUS			
1.32	0.9	1.19			
1.81	0.7	1.27			
1.17	0.2	0.23			
COMPOUND C:		0.63			
TOTAL DRAINAGE AREA:		4.31 ACRES			
WATER QUALITY VOLUME V_{WQ}					
$V_{WQ} = 3.63(C)/A$		957 FT ³			
Are upstream infiltration BMP's provided?	NO	1478 FT ³			
$V_p = 0.15(V_{WQ})$					
WATER QUALITY RATE FOR MECHANICAL STRUCTURE					
$T_c = \text{MAX TIME OF CONCENTRATION} = 17.31 \text{ MIN}$					
$Q_{WQ} = (C)/A(30.2)(T_c+9.17)^{0.11}$		5.77 CFS			
CHANNEL PROTECTION VOLUME CONTROL - REQUIRED					
$V_{CR} = 4.719(C)/A$		12814 FT ³			
CHANNEL PROTECTION VOLUME CONTROL - PROVIDED					
In-Situ Infiltration rate = 1	1	1 IN/HR			
Are upstream infiltration BMP's provided?	NO				
Basin Footprint Infiltration Area Required =	5125	FT ²			
$V_{CR} =$		0 FT ³			
CHANNEL PROTECTION RATE CONTROL (EXTENDED DETENTION VOLUME)					
$V_{ED} = 6.897(C)/A$		18727 FT ³			
EXTENDED DETENTION OUTLET RATE					
$Q_{ED} = V_{ED}/(48 \text{ hr})$	0.108	CFS			
$H = V_{ED}/(4.800 \text{ (ft)}^2)$	1.0	1" HOLES			
$H =$	5.75	FT			
$ELEV_{ED} =$	981.07	FT			
$ELEV_{ED} =$	983.59	FT			
100-YEAR ALLOWABLE OUTLET RATE					
$Q_{ORAH} =$	0.2	CFS/ACRE			
$Q_{OR} =$	1.1055 - 0.206(LN(A))	CFS/ACRE			
$Q_{100} =$	(LESSER OF Q_{ORAH} & Q_{OR})/A	0.862			
100-YEAR DETENTION VOLUME					
$V_{100} =$	51550	FT ³			
$Q_{100} =$	15.92	CFS			
$R_{100} =$	0.8434	FT ³			
$V_{100} =$	33168	FT ³			
Is $V_{100} > V_{ED}$?	YES				
$V_{100} =$	33168	FT ³			
FOREBAY STORAGE VOLUME PROVIDED:					
ELEVATION	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)	FREEBOARD
987	7853	1	7,084	17,028	DHWL
986	6314	1	5,624	9,945	DHWL
985	4933	1	4,321	4,321	BOTTOM OF STORAGE
984	3709	1	0	0	SUMP
983	2642	1	0	0	SUMP
982	1732	0	0	0	SUMP
BASIN STORAGE PROVIDED					
ELEVATION	AREA (FT ²)	DEPTH (FT)	VOLUME (FT ³)	TOTAL VOLUME (FT ³)	FREEBOARD
984	12389	1	11,423	45,052	DHWL
983	10456	1	9,569	33,629	DHWL
982	8681	1	7,872	24,061	
981	7063	1	6,333	16,189	
980	5602	1	4,950	9,856	
979	4298	1	3,725	4,908	
978	3151	0.75	1,182	1,182	
977.25	0	0	0	0	BOTTOM OF STORAGE
PROVIDED FOOTPRINT OF BASIN BOTTOM AREA			4298	FT ²	
OUTLET CONTROL STRUCTURE					
$Q_{ED} \text{ ACTUAL} =$	1	(1" HOLES)			
$H_{ED} =$	0.0055	FT ²			
$Q_{ED} \text{ ACTUAL} = (A_{ED})/0.62 \times (2 \times 32.2 \times h^{0.5})$			0.065	CFS	
OVERFLOW SPILLWAY DESIGN					
Design Flow Rate:	$Q_{100} =$	15.92	CFS		
Depth of Spillway:	$D_{SPILL} =$	6	INCHES		
Width of Spillway:	$W_{SPILL} = Q_{100}/3.33D_{SPILL}^{0.5}$	13.5	FT		
Sq. CB					

FROM	TO	DRAIN AREA	ACRES	RUNOFF COEFF C	EQUIV. AREA A'C	INTEN-SITY I	TIME OF CONC. T_c	ADD'L RUNOFF Q	RUNOFF (CFS)	PIPE LENGTH (LF)	PIPE DIA. (IN)	VELOCITY FLOWING FULL (FPS)	HYDRAULIC GRADIENT SLOPE %	ACTUAL SLOPE USED	MANNING COEFFICIENT	MANNING FLOW CAPACITY	MANNING'S VELOCITY (FT/SEC)	TIME (MIN)	HG ELEV UPPER END	HG ELEV LOWER END	RIM ELEV UPPER END	RIM ELEV LOWER END	INVERT UPPER END	INVERT LOWER END
FES 8	CB 7	F	1.38	0.55	0.75	4.38	15.00		3.29	168	15	3.90	0.55%	0.66%	0.013	5.26	4.29	0.65	988.50	987.39	-	989.72	987.50	986.39
CB 7	CB 6	E	0.74	0.70	0.52	4.30	15.65		5.52	310	18	3.13	0.27%	0.28%	0.013	5.52	3.13	1.65	987.39	986.54	989.72	989.50	986.19	985.34
CB 6	FES 5	D	0.40	0.37	0.15	4.14	17.31		6.13	49	21	3.41	0.27%	0.28%	0.013	8.41	3.50	0.23	986.54	986.40	989.50	-	985.14	985.00
OCS 4	FES 3	Forebay	3.53	0.75	2.64	4.14	17.31		17.04	34	27	5.50	0.50%	0.41%	0.013	19.88	5.00	0.11	985.97	985.80	986.00	-	984.14	984.00
OCS 2	FES 1	Basin	4.31	0.74	3.19	4.14	17.31		13.18	66	30	3.77	0.20%	0.12%	0.013	14.25	2.90	0.38	986.10	985.97	983.00	-	977.25	977.17

BASIN DESIGN SUMMARY		
FOREBAY SIZE REQUIRED =	9,857 FT ³	
FOREBAY SIZE PROVIDED =	9,945 FT ³	
BASIN SIZE REQUIRED =	23,223 FT ³	
BASIN SIZE PROVIDED =	33,629 FT ³	
ORIFICE DESIGN SUMMARY		
ELEVATION	# OF HOLES	DIAMETER OF HOLES
977.25	1	1-INCH
981.07	5	2-INCH
OVERFLOW SPILLWAY SUMMARY		
WIDTH OF OVERFLOW SPILLWAY =	14 FT	

BASIC DESIGN SUMMARY		
FOREBAY SIZE REQUIRED =	9,857 FT ³	
FOREBAY SIZE PROVIDED =	9,945 FT ³	
BASIN SIZE REQUIRED =	23,223 FT ³	
BASIN SIZE PROVIDED =	33,629 FT ³	
ORIFICE DESIGN SUMMARY		
ELEVATION	# OF HOLES	DIAMETER OF HOLES
977.25	1	1-INCH
981.07	5	2-INCH
OVERFLOW SPILLWAY SUMMARY		
WIDTH OF OVERFLOW SPILLWAY =	14 FT	

BASIC DESIGN SUMMARY		
FOREBAY SIZE REQUIRED =	9,857 FT ³	
FOREBAY SIZE PROVIDED =	9,945 FT ³	
BASIN SIZE REQUIRED =	23,223 FT ³	
BASIN SIZE PROVIDED =	33,629 FT ³	
ORIFICE DESIGN SUMMARY		
ELEVATION	# OF HOLES	DIAMETER OF HOLES
977.25	1	1-INCH
981.07	5	2-INCH
OVERFLOW SPILLWAY SUMMARY		
WIDTH OF OVERFLOW SPILLWAY =	14 FT	

BASIC DESIGN SUMMARY		
FOREBAY SIZE REQUIRED =	9,857 FT ³	
FOREBAY SIZE PROVIDED =	9,945 FT ³	
BASIN SIZE REQUIRED =	23,223 FT ³	
BASIN SIZE PROVIDED =	33,629 FT ³	
ORIFICE DESIGN SUMMARY		
ELEVATION	# OF HOLES	DIAMETER OF HOLES
977.25	1	1-INCH
981.07	5	2-INCH
OVERFLOW SPILLWAY SUMMARY		
WIDTH OF OVERFLOW SPILLWAY =	14 FT	

BASIC DESIGN SUMMARY		
FOREBAY SIZE REQUIRED =	9,857 FT ³	
FOREBAY SIZE PROVIDED =	9,945 FT ³	
BASIN SIZE REQUIRED =	23,223 FT ³	
BASIN SIZE PROVIDED =	33,629 FT ³	
ORIFICE DESIGN SUMMARY		
ELEVATION	# OF HOLES	DIAMETER OF HOLES
977.25	1	1-INCH
981.07	5	2-INCH
OVERFLOW SPILLWAY SUMMARY		
WIDTH OF OVERFLOW SPILLWAY =	14 FT	

BASIC DESIGN SUMMARY		
FOREBAY SIZE REQUIRED =	9,857 FT ³	
FOREBAY SIZE PROVIDED =	9,945 FT ³	
BASIN SIZE REQUIRED =	23,223 FT ³	
BASIN SIZE PROVIDED =	33,629 FT ³	
ORIFICE DESIGN SUMMARY		
ELEVATION	# OF HOLES	DIAMETER OF HOLES
977.25	1	1-INCH
981.07	5	2-INCH
OVERFLOW SPILLWAY SUMMARY		
WIDTH OF OVERFLOW SPILLWAY =	14 FT	

BASIC DESIGN SUMMARY		
FOREBAY SIZE REQUIRED =	9,857 FT ³	
FOREBAY SIZE PROVIDED =	9,945 FT ³	
BASIN SIZE REQUIRED =	23,223 FT ³	
BASIN SIZE PROVIDED =	33,629 FT ³	
ORIFICE DESIGN SUMMARY		
ELEVATION	# OF HOLES	DIAMETER OF HOLES
977.25	1	1-INCH
981.07	5	2-INCH
OVERFLOW SPILLWAY SUMMARY		
WIDTH OF OVERFLOW SPILLWAY =	14 FT	

BASIC DESIGN SUMMARY		
FOREBAY SIZE REQUIRED =	9,857 FT ³	
FOREBAY SIZE PROVIDED =	9,945 FT ³	
BASIN SIZE REQUIRED =	23,223 FT ³	
BASIN SIZE PROVIDED =	33,629 FT ³	
ORIFICE DESIGN SUMMARY		
ELEVATION	# OF HOLES	DIAMETER OF HOLES
977.25	1	1-INCH
981.07	5	2-INCH
OVERFLOW SPILLWAY SUMMARY		
WIDTH OF OVERFLOW SPILLWAY =	14 FT	

FOR SITE PLAN APPROVAL ONLY!
 NOT FOR CONSTRUCTION

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO WARRANTIES OR GUARANTEES ARE MADE BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AND STATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AND STATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AND STATE AGENCIES.

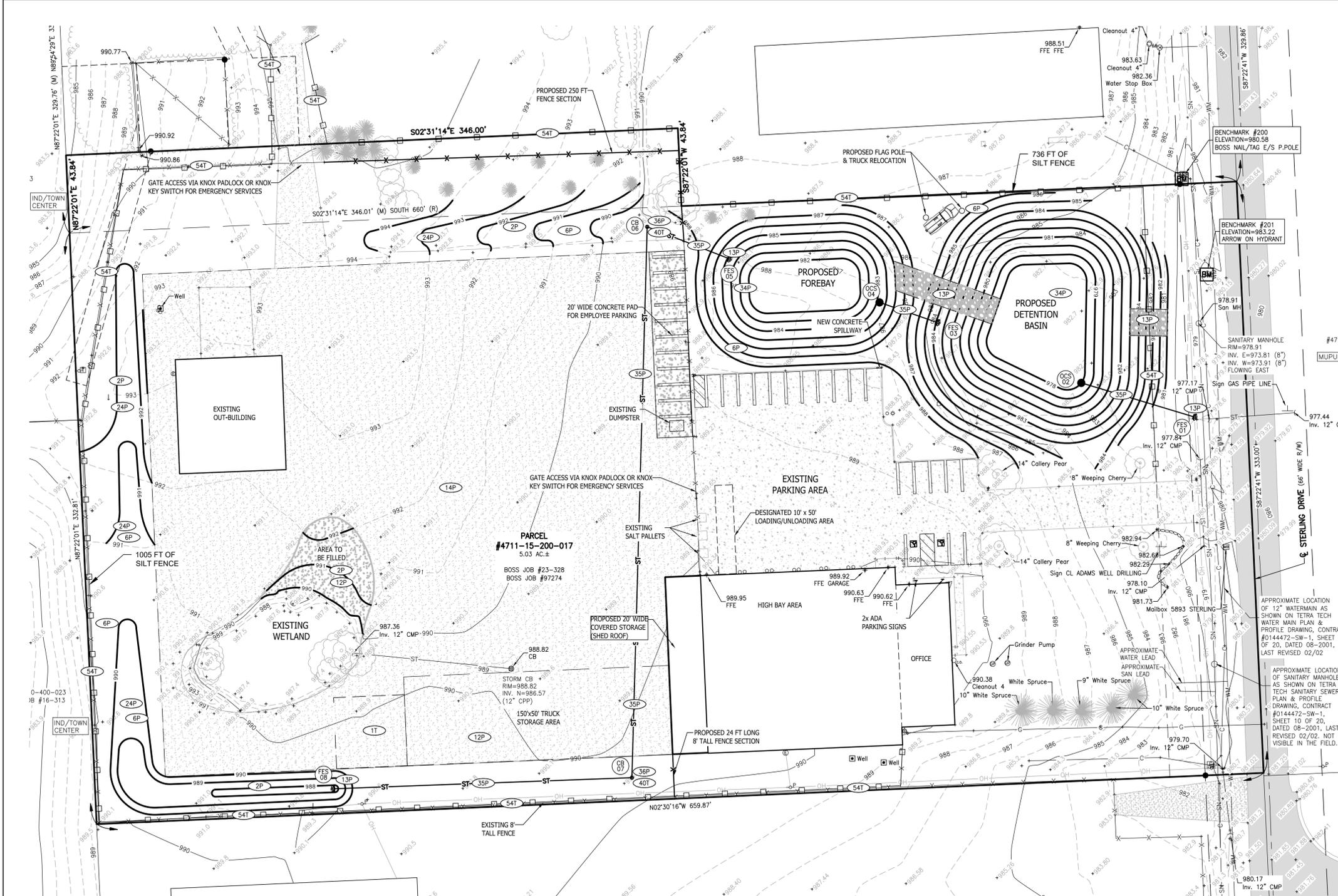
BEBOSS Engineering
 Engineers Surveyors Planners Landscape Architects
 3121 E. GRAND RIVER AVE.
 HOWELL, MI. 48843
 517.546.4836 FAX 517.548.1670

PROJECT: **ADAMS WELL DRILLING PARKING & STORAGE EXPANSION**
 PREPARED FOR: **ADAMS WELL DRILLING LLC**
 9803 STERLING DRIVE
 HOWELL, MI. 48843
 (517) 546-7517

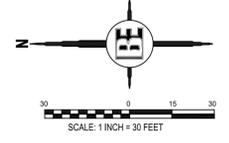
TITLE: **GRADING, DRAINAGE, & UTILITY PLAN**

NO.	BY	REVISIONS PER TOWNSHIP COMMENTS	DATE
1	JP		05/21/24

DESIGNED BY: BL
 DRAWN BY: JP
 CHECKED BY:
 SCALE: 1" = 30'
 JOB NO: 23-328
 DATE: 04/23/24
 SHEET NO. **6**



SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



SOIL EROSION CONTROL MEASURES

1		TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION (SLOPES SHOULD BE TEMPORARILY SEED)
2		WATER CAN BE DIVERTED TO MINIMIZE EROSION (FURTHER SLOPE EROSION PROTECTION)
6		FACILITATES ESTABLISHMENT OF VEGETATION COVER (EFFECTIVE FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS) EASILY PLACED IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL (SEE)
12		HELPS HOLD SOIL IN PLACE, MAKING EXPOSED AREAS LESS VULNERABLE TO EROSION
13		USED WHERE VEGETATION IS NOT EASILY ESTABLISHED (EFFECTIVE FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS) PERMS BENEFIT TO INFILTRATE SOIL (DISPOSES PERIODIC FLOW AT COSTLY OUTLETS)
14		STABILIZES SOIL SURFACE, THIS MINORING EROSION (CONCRETE CONSTRUCTION TRAFFIC IN AVOIDANCE) WEATHER MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS
24		MUCH MORE STABLE FORM OF BRANCHED THAN BARE CHANNEL (GRASS TENDS TO SLOW RUNOFF AND FILTER OUT SEDIMENT) USED WHERE BARE CHANNEL WOULD BE ERODED
34		TRAPS SEDIMENT (RELEASES RUNOFF AT NON-EROSIVE RATES) (GRASS TENDS TO SLOW RUNOFF AND FILTER OUT SEDIMENT) CAN BE VISUAL MONITORING
35		SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS (CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF) (CONDUCTS RUNOFF TO MANHOLE, SAND SYSTEM OR STABILIZED OUTLET LOCATION) (USE CATCH BASINS TO COLLECT SEDIMENT)
36		COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF (MAY USE FILTER CATCH BASIN INLET)
40		EASY TO SHAPE (COLLECTS SEDIMENT) (MAY BE CLEANED AND EXPANDED AS NEEDED)
54		USES DEGRADABLE POLYMER AND POST OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE DETAIL THIS SHEET)

T= TEMPORARY, P= PERMANENT
TOTAL DISTURBED AREA= 4.45 AC.

PROPOSED CONST. SCHEDULE FOR THE YEAR 2024

ACTIVITY	JUL	AUG	SEP	OCT	NOV	DEC
DEMO & CLEAR						
MASS GRADING						
UNDERGROUND UTILITY						
FINAL GRADING						
SEED & MULCH						

SURFACE WATER & COUNTY DRAINS

WETLAND	- ON SITE
LAKES	- APPROXIMATELY 1390 FT NNE TO LAKE CHEMUNG
STREAMS	- APPROXIMATELY 400 FT SSE TO STREAM INTO WETLAND
BASINS	- ON SITE
DRAINS	- APPROXIMATELY 2000 FT E TO GRAND-BEACH DR
PONDS	- APPROXIMATELY 280 FT NE AT 1910 DORR DR

NRCS EXISTING SOILS DATA:

CarabA	Carlsle Muck	0-2% Slopes
MoB	Miami Loam	2-6% Slopes
MoC	Miami Loam	6-12% Slopes
MoD	Miami Loam	12-18% Slopes

CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE

ACTIVITY	WEEKLY	MONTHLY	AS REQUIRED
MAINTAIN LANDSCAPING, REPLACE MULCH	X	X	X
CLEAN INLETS		X	X
COLLECT LITTER	X		X
SWEEP PARKING LOT		X	X

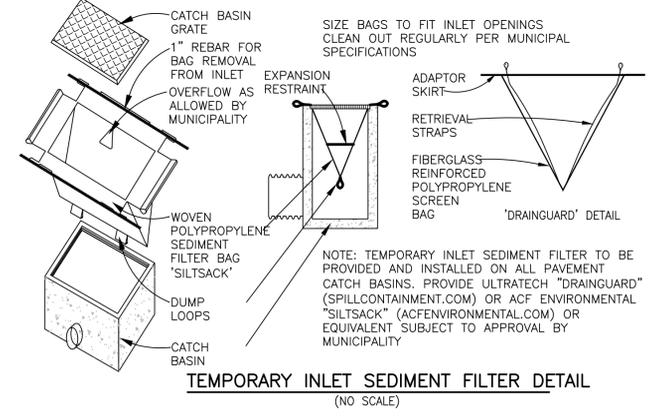
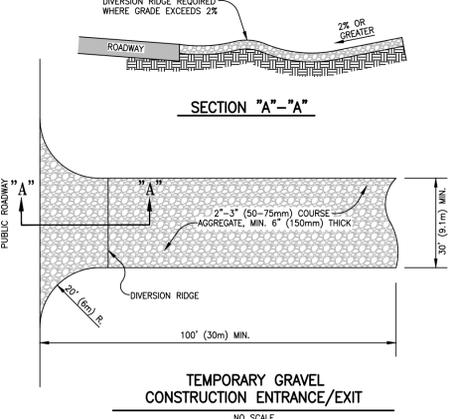
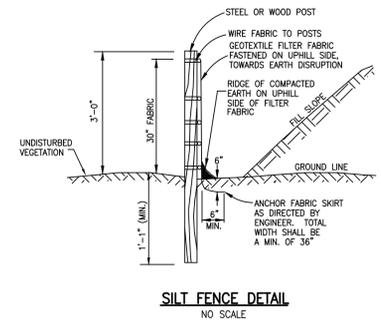
CONTROLS & MEASURES NARRATIVE

ACTIVITY	DESCRIPTION
MAINTAIN LANDSCAPING, REPLACE MULCH	COLLECT GRASS, TREE, AND SHRUB CLIPPINGS; DISPOSE IN APPROVED CONTAINER. REPLACE DEAD SOD, TREES AND SHRUBS.
CLEAN INLETS	REMOVE LITTER, SEDIMENT, AND DEBRIS; DISPOSE OF IN APPROVED LANDFILL.
COLLECT LITTER	DISPOSE OF WITH INLET DEBRIS.
SWEEP PARKING LOT	REMOVE MUD, DIRT, GREASE AND OIL WITH PERIODIC SWEEPING.
DUST CONTROL	SPRINKLE WATER AS NEEDED.

CONSTRUCTION SEQUENCE

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EROSION IS MINIMIZED AND THAT COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, AND ORDINANCES IS MAINTAINED THROUGHOUT EXECUTION OF THIS PROJECT.

1 DAY	1. INSTALL SILT FENCE AS SHOWN ON PLANS.
5 DAYS	2. ROUGH GRADE AND INSTALL STORM DRAINAGE.
1 DAY	3. INSTALL INLET PROTECTION ON STORM INLETS.
180 DAYS	4. START BUILDING CONSTRUCTION.
4 DAYS	5. INSTALL PAVEMENT.
4 DAYS	6. FINE GRADE AROUND BUILDING, SPREAD TOPSOIL, SEED, OR SOD AS APPLICABLE.
1 DAY	7. REMOVE ALL EROSION CONTROL STRUCTURES.
1 DAY	8. REMOVE ACCUMULATED SILT FROM ALL EXISTING DRAINAGE.



FOR SITE PLAN APPROVAL ONLY!
NOT FOR CONSTRUCTION

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO ASSURANCE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES CROSSING IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

BEBOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

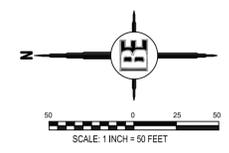
PROJECT: **ADAMS WELL DRILLING PARKING & STORAGE EXPANSION**
PREPARED FOR: **ADAMS WELL DRILLING LLC**
9893 STERLING DRIVE
HOWELL, MI 48843
(517) 546-7517

TITLE: **SOIL EROSION & SEDIMENTATION CONTROL PLAN**

REVISIONS PER TOWNSHIP COMMENTS	DATE	BY
1 UP	05/21/24	BL

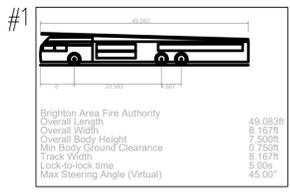
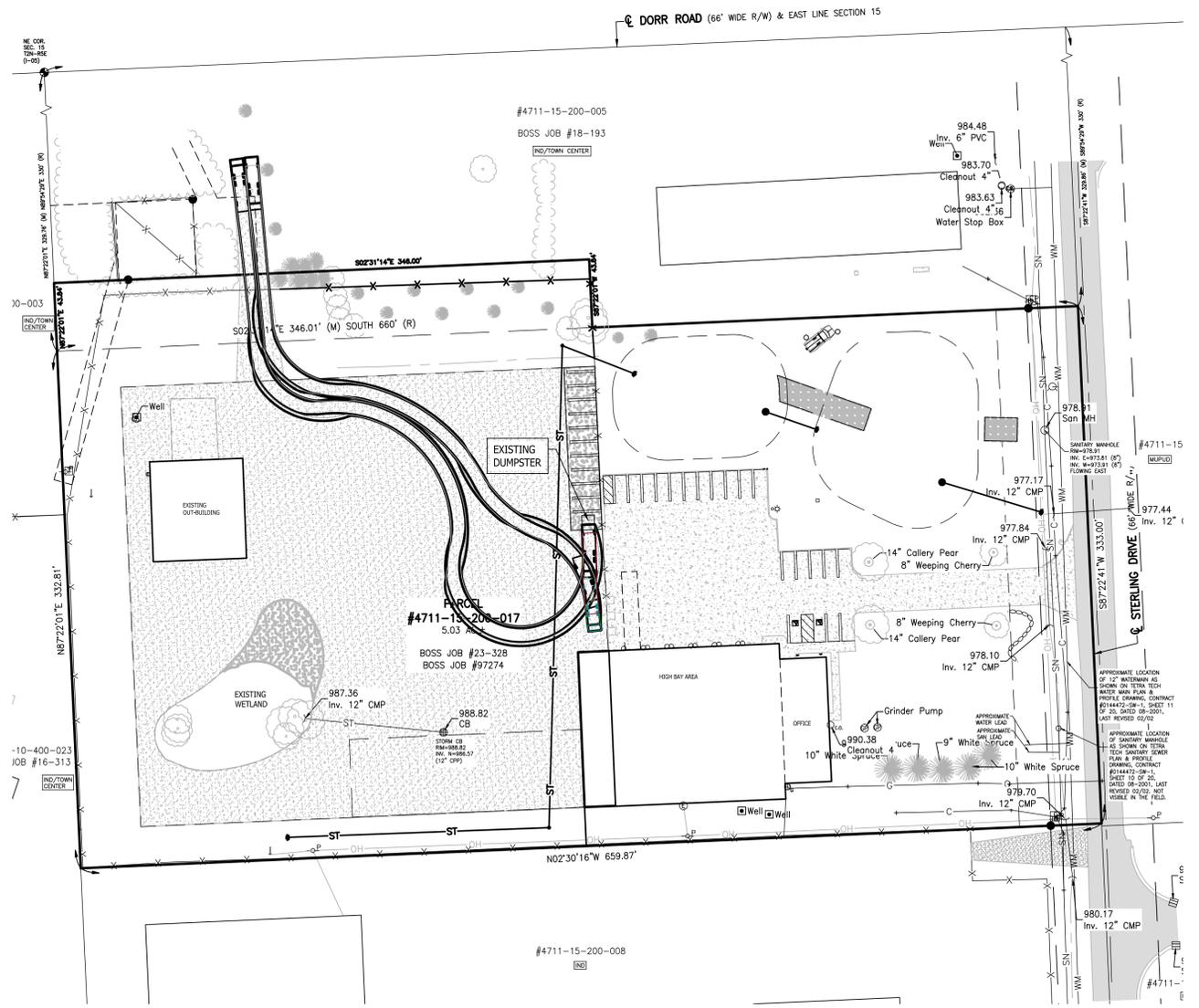
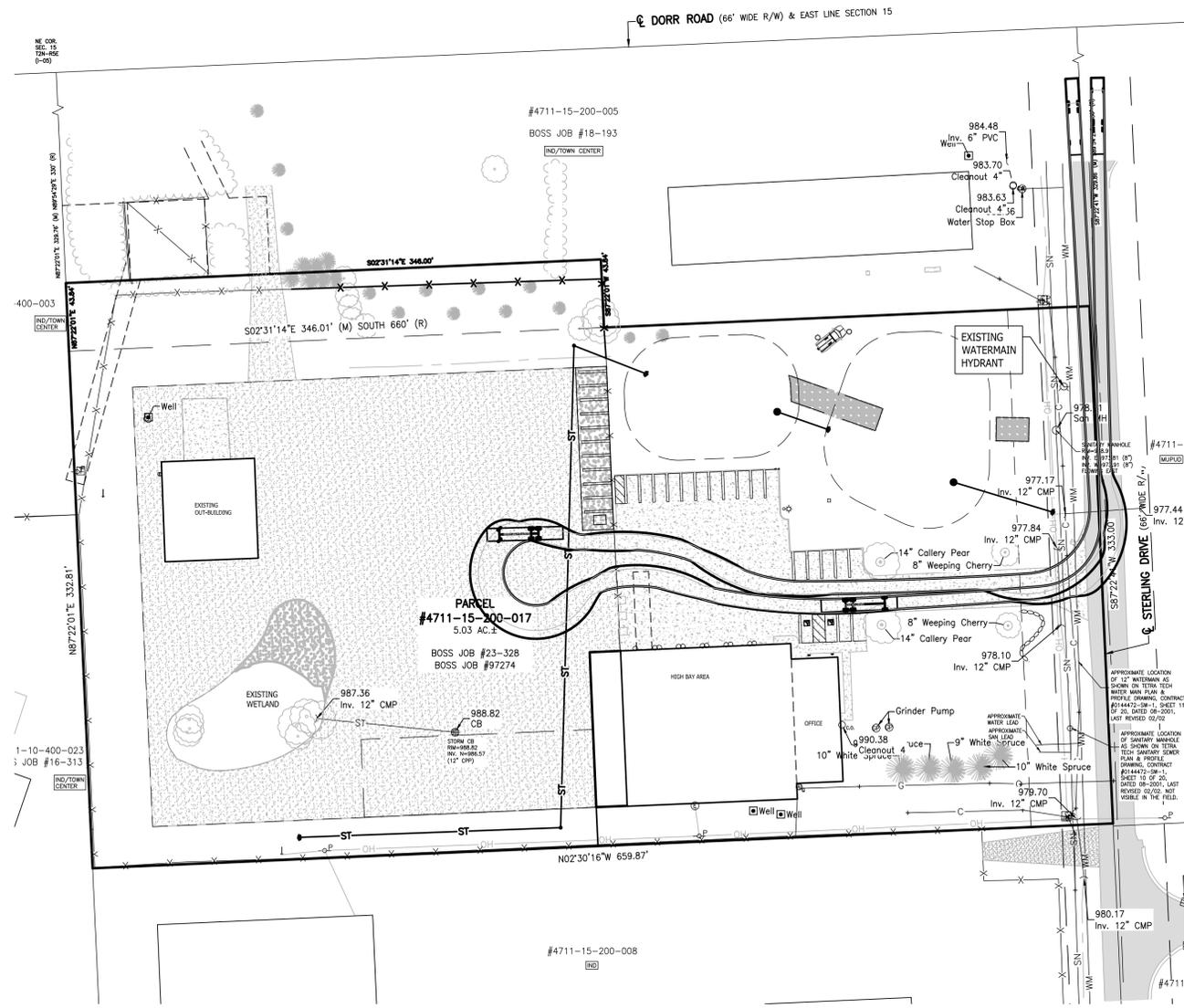
DESIGNED BY: BL
DRAWN BY: JP
CHECKED BY:
SCALE: 1" = 30'
JOB NO: 23-328
DATE: 04/23/24
SHEET NO. **7**

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



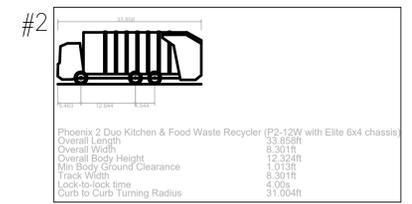
THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH, OR ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL EXISTING UTILITIES AND STRUCTURES TO ORIGINAL OR BETTER CONDITION AFTER CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL EXISTING UTILITIES AND STRUCTURES TO ORIGINAL OR BETTER CONDITION AFTER CONSTRUCTION.

BEBOSS ENGINEERING
CALL: 517.548.1670
1-800-968-7171
www.beboss.com



BRIGHTON AREA FIRE AUTHORITY
ACCESS ROADS SHALL BE CONSTRUCTED TO BE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF THE FIRE APPARATUS WEIGHTING AT LEAST 84,000 POUNDS.

EMERGENCY VEHICLE CIRCULATION PATH
PATH 1: BRIGHTON AREA FIRE AUTHORITY
PATH 2: WASTE COLLECTOR VEHICLE



WASTE COLLECTOR VEHICLE
REFUSE AND WASTE SERVICES ARE ACTIVE ON THE PROPERTY ON WEDNESDAY.

FOR SITE PLAN APPROVAL ONLY!
NOT FOR CONSTRUCTION

PROJECT: **ADAMS WELL DRILLING PARKING & STORAGE EXPANSION**
PREPARED FOR: **ADAMS WELL DRILLING LLC**
9803 STERLING DRIVE
HOWELL, MI 48843
(517)5463757

TITLE: **VEHICLE CIRCULATION PLAN**

NO	BY	REVISIONS PER TOWNSHIP COMMENTS	DATE
1	JP		05/21/24
NO	BY		

DESIGNED BY: BL
DRAWN BY: JP
CHECKED BY:
SCALE: 1" = 50'
JOB NO: 23-328
DATE: 04/23/24
SHEET NO. **8**



BEFORE BACK FILLING AROUND PLANT, REMOVE ALL PLASTIC BALLING MATERIAL & METAL CONTAINERS. PUNCH HOLES IN FIBER POTS TO PROVIDE DRAINAGE.

NEVER PRUNE EVERGREENS

TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE TO PREVIOUS EXISTING GRADE

RUBBER HOSE 1/2" UP TREE POSITIONED DIRECTLY ABOVE TREE BRANCH

4" MULCH INSIDE SAUCER

EARTH SAUCER 5" DEEP

IN SODDED AREAS PLACE SOD TO BOTTOM OF EARTH SAUCER

2"x4"x30" STAKE SET BELOW FIN. GRADE REMOVE TOP 1/3 OF BURLAP, ROPES & WIRE

PLANTING MIX SUBGRADE SCARIFY TO 4" DEPTH 6" COMPACTED PLANTING MIX UNDER BALL

EVERGREEN TREE PLANTING DETAIL
(NO SCALE)

NEVER CUT THE LEADER

RUBBER HOSE POSITIONED DIRECTLY ABOVE THE TREE BRANCH

DOUBLE STRAND = 12 GAUGE TWISTED WIRE

TREE STAKES, THREE 120] APART

PULL WIRE THROUGH HOLE AND AROUND STAKE BEFORE TYING

BEFORE BACK FILLING AROUND PLANT, REMOVE ALL PLASTIC BALLING MATERIAL & METAL CONTAINERS. PUNCH HOLES IN FIBER POTS TO PROVIDE DRAINAGE.

PRUNE BROKEN OR MISHPAPEN - RETAIN NATURAL SHAPE

IN SODDED AREAS PLACE SOD TO BOTTOM OF EARTH SAUCER

REMOVE BALLING MATERIAL &/OR CONTAINERS

FINISH GRADE

MIN. 4" SHREDDED MULCH

6" MIN. PLANTING MIXTURE BETWEEN BALL & PITWALL

UNDISTURBED SUBGRADE SCARIFY TO 2" DEPTH

TREE WRAP TO FIRST BRANCH

MULCH 4" DEEP INSIDE SAUCER

REMOVE BURLAP, ROPES AND WIRE FROM TOP 1/3 OF BALL

SAUCER 5" DEEP

IN SODDED AREAS PLACE SOD TO BOTTOM OF EARTH SAUCER

FINISH GRADE

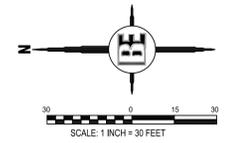
12" MINIMUM PLANTING MIXTURE BETWEEN BALL AND PIT WALL

UNDISTURBED SUBGRADE SCARIFY TO 1" DEPTH

SET TREE STAKE AT LEAST 18" BELOW BOTTOM OF PIT IN UNDISTURBED SOIL

DECIDUOUS TREE PLANTING DETAIL
(NO SCALE)

SEE SHEET 2 FOR GENERAL NOTES AND LEGEND



LANDSCAPE CALCULATIONS 'IND' ZONING (FOLLOWING SECTION 12.02):

REQUIRED:
GREENBELT - PUBLIC R.O.W.'S - STERLING DRIVE: (PRIVATE RD.)

1 CANOPY TREE / 40 LFT FRONTAGE, MIN 20 FT WIDTH (UP TO 50% CONIFERS WITH PLAN COMMISSION APPROVAL)

BUFFERS
ADJ. TO INDUSTRIAL - ALL SIDES: NONE REQUIRED. SEE PROPOSED EAST SIDE TOWARD DORR ROAD.

PARKING AREA (10-100 SPACES): 1 CANOPY TREE + 100 SQFT LANDSCAPED AREA / 10 SPACES
MIN. 1/3 TREES SHALL BE IN THE INTERIOR OF THE LOT
IF PARKING WITHIN FRONT YARD, HEDGE ROW (2-FT PLANTED HGT), MASONRY WALL (3-FT HGT), OR SCREENING BERM (3-FT HGT) REQ'D

DETENTION / RETENTION BASIN: 1 DECID. SHADE OR CONIFER TREE + 10 SHRUBS / 50 LFT BASIN PERIMETER AS MEASURED ALONG TOP OF BANK

ACCESSORY STRUCTURES (DUMPSTER ENCLOSURE): SCREENED WITH SHRUBS IF IN 'VISIBLE LOCATION'

PROVIDED:
GREENBELT - PUBLIC R.O.W. - STERLING DRIVE: 333.00 LFT FRONTAGE / 40 = 9 CANOPY TREES REQ'D & PROVIDED REQUESTING UTILIZATION OF 3 CONIFER TREES (1/3 OF TOTAL)

BUFFER - EAST: PROPOSE TYPE 'C' CALCULATION FOR VEGETATION QUANTITY = 255-LFT - 20-FT WIDE DRIVE = 235-LFT / 20 = 8 TREES + 32 SHRUBS
PROPOSED 58-FT WIDE BUFFER WITH 6-FT FENCE WITH PRESERVATION OF 8 EX. TREES, SUPPLEMENTED WITH 32 NEW SHRUBS BETWEEN CELL TOWER & STORMWATER FOREBAY.

PARKING LOT: 28 SPACES - 10 = 18 / 10 = 2 CANOPY TREES + 200 SQFT LANDSCAPED AREA (12 DECIDUOUS SHRUBS IN 200 SQFT OF LANDSCAPE BEDS);
PARKING OUTSIDE OF THE FRONT YARD - NO SCREENING REQ'D.;
PROVIDED PARKING IS A RE-STRIPPING OF AN EX. LOT - PROPOSED ALL LANDSCAPING AT PERIMETER TO FIT EX. CONFIGURATION

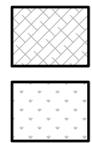
DETENTION BASIN: STORMWATER DETENTION SYSTEM IS AN EXPANSION OF AN EX. BASIN FOREBAY: 296-LFT / 50 = 6 TREES + 60 SHRUBS
DETENTION BASIN: 402-LFT / 50 = 8 TREES + 80 SHRUBS

DUMPSTER ENCLOSURE: ENCLOSURE IS 304-FT FROM ROAD, UP HILL, BEHIND FENCING - NOT IN READILY VISIBLE LOCATION - NO ADJ. LANDSCAPING PROPOSED.

PLANT LIST

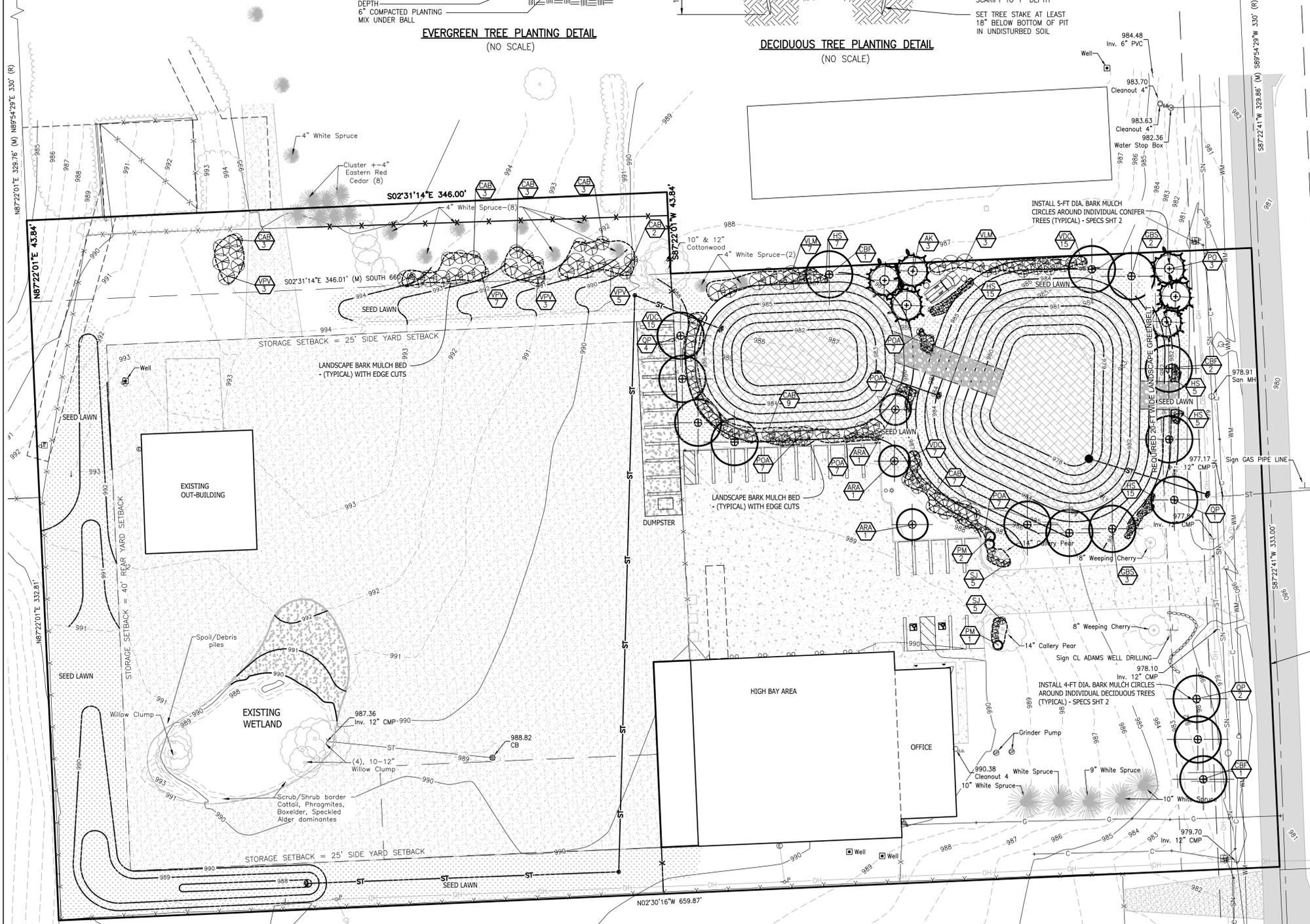
KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
DECIDUOUS SHADE TREES					
ARA	3	Acer rubrum f. 's' KW 78	Armstrong Gold Columnar Red Maple	2-1/2" cal.	B-B
CBF	4	Carpinus betulus 'Frans Fontaine'	Frans Fontaine European Hornbeam	2-1/2" cal.	B-B
GBS	5	Ginkgo biloba 'Saratoga'	Saratoga Ginkgo	2-1/2" cal.	B-B
QP	7	Quercus palustris	Pin Oak	2-1/2" cal.	B-B
CONIFER TREES					
AK	3	Abies koreana	Korean Fir	6-ft hgt.	B-B
PO	3	Picea omorika	Serbian Spruce	6-ft hgt.	B-B
CONIFER SHRUBS					
PM	3	Pinus mugo var Pumilo	Dwarf Mugo Pine	36" ht./#5	Cont.
DECIDUOUS SHRUBS					
CAB	30	Cornus alba 'Bailhala'	Ivory Halo Dogwood	24" ht./#3	Cont.
HS	47	Hydrangea serrata 'smhstd'	Mountain Tuff Stuff Ah-ha Hydrangea	24" ht./#3	Cont.
POA	35	Physocarpus opulifolius 'Amber Jubilee'	Amber Jubilee Ninebark	24" ht./#3	Cont.
SJ	10	Spiraea japonica 'ncsx2' Ppaf	Double Play Doozie Spirea	24" ht./#3	Cont.
VDC	37	Viburnum dentatum 'Christom'	Blue Muffin Arrowwood Viburnum	24" ht./#3	Cont.
VLM	10	Viburnum lantana 'Mohican'	Mohican Viburnum	36" ht./#5	Cont.
VPV	18	Viburnum plicatum f. tomentosum 'mariesii'	Mariesi Doublefile Viburnum	36" ht./#5	Cont.

SPECIAL SEED MIX & LAWN LEGEND



SUPPLEMENTAL LANDSCAPE NOTES STORM BASIN SEED MIX
PROVIDE THE FOLLOWING SEED MIXES FROM JFNEW/CARDNO, INC., WWW.CARDNONATIVEPLANTNURSERY.COM, 574-586-2412, WALKERTON, INDIANA:

- SEED 1.0-FT BELOW DESIGN HIGHWATER ELEVATION (+10-11-FT DOWN FROM TOP OF BANK - EAST SIDE) TO BOTTOM OF BASINS WITH 'STORMWATER' SEED MIX INCL. ANNUAL RYE COVER CROP & AT RATE OF 33 PLS LBS / ACRE.
- SEED LANDSCAPE SPECIFICATION ON SHEET 2 FOR INFORMATION ON TYPICAL LAWN SEED MIX AND/OR SOD INSTALLATION



FOR SITE PLAN APPROVAL ONLY!
NOT FOR CONSTRUCTION

BEBOSS Engineering
Engineers Surveyors Planners Landscape Architects
3121 E. GRAND RIVER AVE.
HOWELL, MI. 48843
517.546.4836 FAX 517.548.1670

ADAMS WELL DRILLING PARKING EXPANSION

PROJECT: ADAMS WELL DRILLING LLC
PREPARED FOR: 9833 STERLING DRIVE, HOWELL, MI 48843 (517)5463757

TITLE: LANDSCAPE PLAN

NO.	BY	REVISIONS PER TOWNSHIP COMMENTS	DATE
1	UP		05/21/24

DESIGNED BY: PC
DRAWN BY: PC
CHECKED BY:
SCALE: 1" = 30'
JOB NO: 23-328
DATE: 04/23/24
SHEET NO. 9

BEBOSS Engineering



GENOA CHARTER TOWNSHIP
Application for Site Plan Review

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: Edward Copp, 9800 Marshall Road, South Lyon, MI 48178
If applicant is not the owner, a letter of Authorization from Property Owner is needed.

OWNER'S NAME & ADDRESS: Edward Copp, 9800 Marshall Road, South Lyon, MI 48178

SITE ADDRESS: 4675 Grand River, Brighton, MI PARCEL #(s): 11-09-200-006 & 008

APPLICANT PHONE: (517) 404-4619 OWNER PHONE: (517) 404-4619

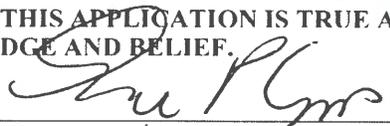
OWNER EMAIL: edcopp@1800fixitnow.com

LOCATION AND BRIEF DESCRIPTION OF SITE: The 1.35 acre combined property, located on the North side of Grand River, East of Lawson Drive, is developed and contains two existing buildings, a paved commercial drive, paved parking area, and gated gravel rear yard area.

BRIEF STATEMENT OF PROPOSED USE: Proposed use as a trailer sales office, new trailer outdoor display sales area, and new trailer storage.

THE FOLLOWING BUILDINGS ARE PROPOSED: Existing 1,756 square foot commercial building and 2,208 square foot garage building are proposed to remain. No new buildings are proposed on the property.

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: 

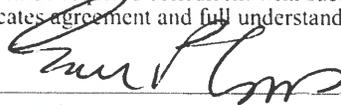
ADDRESS: 4675 E GRAND RIVER AVE BRIGHTON MI 48178

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

1.) Ryan Copp of AAA Trailer at ryancopp@gmail.com
Name Business Affiliation E-mail Address

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE:  DATE: 1-29-24
PRINT NAME: Ed Copp PHONE: 517 404-4619
ADDRESS: 9800 Marshall Road, South Lyon, MI 48178



GENOA CHARTER TOWNSHIP
Special Land Use Application

This application **must** be accompanied by a site plan review application and the associated submittal requirements. (The Zoning Official may allow a less detailed sketch plan for a change in use.)

APPLICANT NAME & ADDRESS: Edward Copp, 9800 Marshall Road, South Lyon, MI 48178
Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.

APPLICANT PHONE: (517) 404-4619 EMAIL: edcopp@1800fixitnow.com

OWNER NAME & ADDRESS: Edward Copp, 9800 Marshall Road, South Lyon, MI 48178

SITE ADDRESS: 4675 Grand River, Brighton, MI PARCEL #(s): 11-09-200-006 & 008

OWNER PHONE: (517) 404-4619 EMAIL: edcopp@1800fixitnow.com

Location and brief description of site and surroundings:

The 1.35 acre combined property, located on the North side of Grand River, East of Lawson Drive, is developed and contains two existing buildings, a paved commercial drive, paved parking area, and gated gravel rear yard area.

Proposed Use:

As a trailer sales office, new trailer outdoor display sales area, and new trailer storage.

Describe how your request meets the Zoning Ordinance General Review Standards (section 19.03):

- a. Describe how the use will be compatible and in accordance with the goals, objectives, and policies of the Genoa Township Comprehensive Plan and subarea plans, and will promote the Statement of Purpose of the zoning district in which the use is proposed.

The Genoa Twp. Future Land Use plan identifies the site for Mixed Use, and the Zoning District is General Commercial (GCD). Proposed use of the site for sales and display of trailers for sale will serve the needs of the general community.

- b. Describe how the use will be designed, constructed, operated, and maintained to be compatible with, and not significantly alter, the existing or intended character of the general vicinity.

The site is an existing, developed, commercial property and the proposed change in use will not alter the commercial / retail character of the area. Removal of the second point of access, and the addition of landscaping along Grand River will significantly improve the aesthetics of the property and will reduce the number of commercial driveways along Grand River.

- c. How will the use be served adequately by essential public facilities and services such as highways, streets, police and fire protection, drainage structures, water and sewage facilities, refuse disposal and schools?

No expansion to the existing building is proposed and existing public utilities and services are adequate to support the existing building. A reduction in pavement area and impervious surface area will reduce overall storm water runoff from the property. No change in fire protection services, refuse disposal and school use is anticipated.

d. Will the use involve any uses, activities, processes, or materials potentially detrimental to the natural environment, public health, safety, or welfare by reason of excessive production of traffic, noise, vibration, smoke, fumes, odors, glare, or other such nuisance? If so, how will the impacts be mitigated?

Proposed trailer sales office and new trailer outdoor display sales area, and new trailer parking areas, will not be detrimental to the environment, public health, safety or welfare.

e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

Existing topography on the North and West sides is an existing embankment, adjacent to a storm water detention basin, making construction of a berm with landscaping non-functional. A proposed 8' privacy fence and existing wooded area adjacent to residential and improved landscaping along Grand River address the requirements of Section 7.02.02 (d).

I HEREBY CERTIFY THAT ALL INFORMATION AND DATA ATTACHED TO AND MADE PART OF THIS APPLICATION ARE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AGREE TO DESIGN, CONSTRUCT AND OPERATE, AND MAINTAIN THESE PREMISES AND THE BUILDINGS, STRUCTURES, AND FACILITIES WHICH ARE GOVERNED BY THIS PERMIT IN ACCORDANCE WITH THE STATED REQUIREMENTS OF THE GENOA TOWNSHIP ZONING ORDINANCE, AND SUCH ADDITIONAL LIMITS AND SAFEGUARDS AS MAY BE MADE A PART OF THIS PERMIT.

THE UNDERSIGNED Ed Copp STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: ED COPP

ADDRESS: 4675 E. GRAND RIVER AVE Howell MI 48843

Contact Information - Review Letters and Correspondence shall be forwarded to the following:

Ryan Copp of AAA Trailer at ryancopp@gmail.com
Name Business Affiliation Email

FEE EXCEEDANCE AGREEMENT

As stated on the site plan review fee schedule, all site plans are allocated two (2) consultant reviews and one (1) Planning Commission meeting. If additional reviews or meetings are necessary, the applicant will be required to pay the actual incurred costs for the additional reviews. If applicable, additional review fee payment will be required concurrent with submittal to the Township Board. By signing below, applicant indicates agreement and full understanding of this policy.

SIGNATURE: [Signature] DATE: 1-29-29

PRINT NAME: Ed Copp PHONE: 517 404-4619



June 4, 2024

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

Attention:	Amy Ruthig, Planning Director
Subject:	AAA Trailer Sales – Special Land Use and Site Plan Review #2
Location:	4675 Grand River Avenue – north side of Grand River, west of Boulevard Drive
Zoning:	GCD General Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised special land use and site plan submittal from AAA Trailer Sales for the property at 4675 Grand River Avenue (site plan dated 5/20/24).

A. Summary

1. Special Land Uses (Section 19.03):

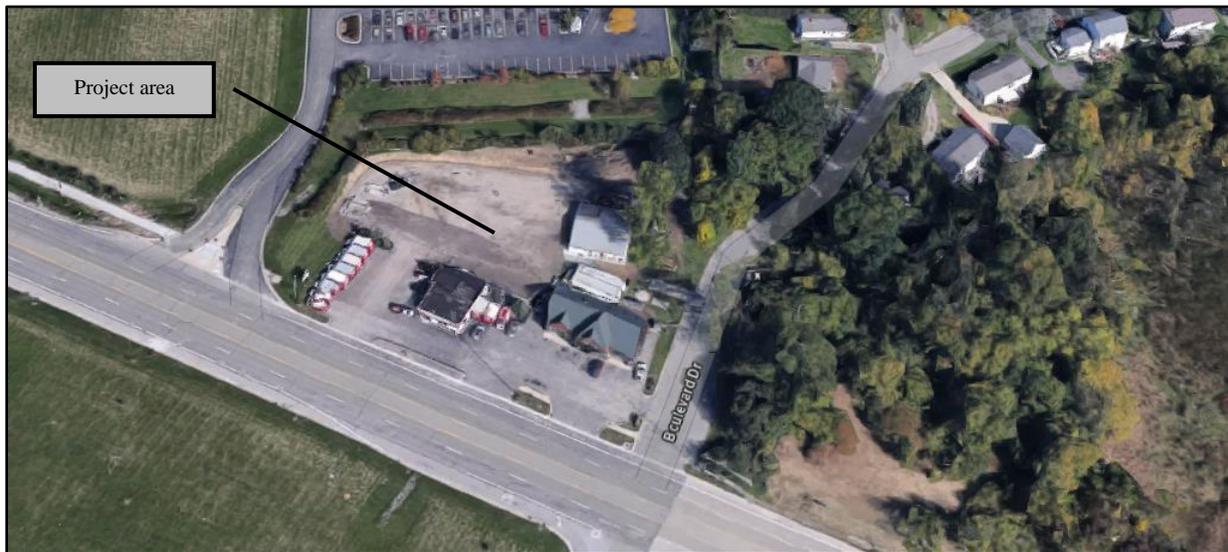
- a. Provided the use conditions are met to the Commission’s satisfaction, we are of the opinion that the revised submittal complies with the standards of Section 19.03; however, the applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Use Conditions (Section 7.02.02(c)):

- a. Gravel may be allowed pending a recommendation from the Township engineering consultant.
- b. The Commission may allow a trailer display pod instead of an automobile display pod.
- c. The plan does not fully provide the required buffer zones, but does provide some plantings, privacy fencing, and steep slopes. Planning Commission has the authority to waive or modify these requirements based on existing vegetation, grading, and adjacent land uses.

3. Site Plan Review:

- a. The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority (particularly with respect to the security gate).
- b. The revised landscape plan does not fully meet buffer zone requirements; however, the Commission may modify these requirements based on Section 12.02.13.
- c. We encourage the applicant to replace the nonconforming pole sign with a compliant sign.



Aerial view of site and surroundings (looking north)

B. Proposal/Process

The applicant proposes the sale of new and used trailers. Table 7.02 allows automobile, motorcycle, boat and recreational vehicle sales, new and used with special land use approval in the GCD. (By definition, trailers are included as recreational vehicles.)

The request is also subject to the use conditions of Section 7.02.02(c).

Procedurally, the Planning Commission is to review the special land use, site plan, and Environmental Impact Assessment, and put forth recommendations on each to the Township Board following a public hearing.

C. Special Land Use Review

Section 19.03 of the Zoning Ordinance identifies the review criteria for Special Land Use applications as follows:

- 1. Master Plan.** The Township Master Plan identifies the subject site as Mixed Use – West Grand River. The Plan includes the following commentary on this category:

This area is envisioned for a higher intensity of commercial and residential uses than the East Grand River District. Currently developed with general commercial and office along Grand River, this area is intended to continue to promote these uses that are supported by area and regional residents as well as pass-by traffic along Grand River Avenue, including interchange traffic from I-96.

In our opinion, the proposed use is generally consistent with this description.

- 2. Compatibility.** This area of Grand River contains a variety of land uses, including commercial, service and office. The subject site also abuts residential to the northeast along Boulevard Drive.

Protection of the residential area and views along Grand River are the primary concerns under this criterion.

The use conditions of Section 7.02.02(c), which include screening requirements, are intended to help mitigate potential off-site impacts of the outdoor storage and display areas.

In response to our initial review letter, the applicant has removed several trailers that previously encroached into the Boulevard Drive front yard and 20-foot buffer zone, as well as a display pod in the Grand River front yard.

There are 2 trailers that still encroach into the buffer zone along the westerly side lot line; however, they sit at the low level of a relatively steep slope and will be screened by existing topography.

Provided the use conditions are met to the Commission's satisfaction, we are of the opinion that the revised plan is compatible with adjacent and surrounding land uses.

- 3. Public Facilities and Services.** As a previously developed site along Grand River Avenue, we anticipate that necessary public facilities and services are in place.

With that being said, the applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority related to this criterion.

- 4. Impacts.** Provided the use conditions are met to the Commission's satisfaction, we are of the opinion that the revised submittal will mitigate impacts on the surrounding area.
- 5. Mitigation.** If additional concerns arise as part of the review process, the Township may require additional efforts to mitigate potential adverse impacts.

D. Use Conditions

Automobile, motorcycle, boat and recreational vehicle sales uses are subject to the use requirements of Section 7.02.02(c), as follows:

- 1. Sale space for used mobile homes, recreational vehicles and boats may only be carried on in conjunction with a regularly authorized new mobile home, recreational vehicle or boat sales dealership on the same parcel of land.**

The submittal materials identify the sale of new trailers with no mention of used trailers.

- 2. All outdoor storage areas shall be paved with a permanent, durable and dustless surface and shall be graded and drained to dispose storm water without negatively impact adjacent property. The Township Board, following a recommendation of the Planning Commission and the Township Engineer, may approve a gravel surface for all or part of the display or storage area for low intensity activities, upon a finding that neighboring properties and the environment will not be negatively impacted.**

The proposed outdoor storage area is primarily surfaced with gravel.

The use of gravel may be allowed, pending a recommendation from the Township engineering consultant that neighboring properties and the environment will not be negatively impacted.

- 3. No storage or display of vehicles shall be permitted in any landscape greenbelt area, provided the Township may permit a display pod for an automobile within the greenbelt area where it is integrated into the landscape design.**

The revised plan depicts 1 trailer display pod in the Grand River greenbelt. The display pod is in a lawn area with trees and shrubs surrounding.

Technically, this condition allows a single automobile, though the Commission could allow a single trailer display pod in lieu of an automobile.

4. The site shall include a building of at least five hundred (500) feet of gross floor area for office use in conjunction with the use.

The site contains an existing 1,756 square foot building for office use.

5. All loading and truck maneuvering shall be accommodated on-site.

This standard is met.

6. All outdoor storage area property lines adjacent to a residential district shall provide a buffer zone A as described in Section 12.02. A buffer zone B shall be provided on all other sides. The Planning Commission may approve a six (6) foot high screen wall or fence, or a four (4) foot high landscaped berm as an alternative.

A buffer zone A is required along the northeast side lot line, while buffer zone Bs are required around the remainder of the outdoor storage and display area.

The buffer zone standards are not fully met, though there is some existing vegetation on site and on the adjacent properties. The plan also includes 6' and 8' privacy fencing on the east and south side of the outdoor storage area.

The Planning Commission has the authority to waive or modify landscaping requirements based on the standards of Section 12.02.13. Considerations include existing vegetation, grading, and adjacent land uses, all of which are noted by the applicant as reasons to modify these requirements.

E. Site Plan Review

1. Dimensional Requirements. Aside from improvements to reduce the amount of impervious surface, no changes are proposed that impact the dimensional requirements of the GCD.

The applicant has applied to combine the 2 separate parcels as part of this project.

2. Building Design and Materials. No changes are proposed to the existing buildings.

3. Pedestrian Circulation. The site plan provides the 8-foot wide bike path along Grand River, as required per Section 12.05.

Internal connections are also provided between the public sidewalk and building entrance, as well as the parking lot and building entrance.

4. Vehicular Circulation. The project includes closure of 1 existing driveway to/from Grand River.

The main drive aisle is wider than required; however, the applicant has stated that the proposed width is necessary to accommodate turning and maneuvering space for trailers.

The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority (particularly with respect to the security gate).

5. Exterior Lighting. The lighting plan includes 4 light poles and 8 wall mounted fixtures (5 on the main building and 3 on the garage building).

Based on the detail sheets provided, the proposed fixtures are downward directed LED, as required.

Pole heights and photometric readings (both on-site and along property lines) comply with Ordinance standards.

6. **Landscaping.** The landscape plan has been reviewed for compliance with the standards of Section 12.02, as follows:

Standard	Required	Proposed	Notes
Front yard greenbelt	20' width 5 canopy trees	20' width 5 canopy trees	In compliance
Buffer Zone A (NE)	50' width 6' wall or 4' berm 4 canopy trees 8 evergreen trees 16 shrubs	50' width 8' privacy fence Existing vegetation	8' fence may be allowed by Zoning Administrator
Buffer Zone B (N)	20' width 6' wall or 3' berm 11 canopy trees 11 evergreen trees 42 shrubs	20' width Existing vegetation in NE corner and on adjacent property	Deficient in wall/berm, and plantings (though there is a steep slope along the rear lot line)
Buffer Zone B (W)	20' width 6' wall or 3' berm 3 canopy trees 3 evergreen trees 10 shrubs	10' width 3 canopy trees 4 evergreen trees 10 shrubs	Deficient by wall/berm (though there is steep slope along the side lot line)

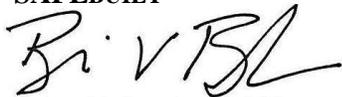
Planning Commission has the authority to waive or modify the above landscaping standards based on Section 12.02.13, which include existing vegetation, topography, and adjacent land uses.

7. **Waste Receptacle.** In response to our initial review letter, the applicant has indicated that the business will utilize hand carts in lieu of a dedicated waste receptacle. The carts will be stored in the accessory building.
8. **Signage.** The site contains a nonconforming pole sign in the southwest corner of the property. We encourage the applicant to remove this sign and replace it with a compliant monument sign.

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,

SAFE BUILT



Brian V. Borden, AICP
 Michigan Planning Manager



May 24, 2024

Ms. Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

**Re: AAA Trailer Special Use
Site Plan Review No. 2**

Dear Ms. Ruthig:

Tetra Tech conducted a review of the proposed AAA Trailer site plan last dated May 20, 2024. The plan was prepared by Desine Inc. on behalf of AAA Trailer. The development is located on the north side of Grand River Avenue, to the west of Boulevard Drive. The Petitioner is proposing to use the existing buildings on site and proposed improvements include removing one of two site driveways, addition of a trailer display area, and a new parking lot configuration.

The Petitioner has satisfactorily addressed our previous comments and we have no further engineering related concerns with the proposed site plan. Please call or email if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sydney Streveler', with a horizontal line extending to the right.

Sydney Streveler, EIT
Civil Engineering Group

A handwritten signature in black ink, appearing to read 'John Y. Barber', with a horizontal line extending to the right.

John Y. Barber, PE
Project Engineer



BRIGHTON AREA FIRE AUTHORITY

615 W. Grand River Ave.
Brighton, MI 48116
o: 810-229-6640 f: 810-229-1619

June 4, 2024

Amy Ruthig
Genoa Township
2911 Dorr Road
Brighton, MI 48116

RE: AAA Trailer Sales
4675 Grand River
Genoa Twp., MI

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on May 21, 2024 and the drawings are dated January 19, 2024. The project is based on an existing 1.23-acre parcel that has been vacated by the owner for a short time who wishes to start utilizing the space for outside storage and sales. The property consists of open area parking and green space, as well as two buildings each approximately 1,700 and 2,200 square feet respectively. The large building is an S-2 storage building and the smaller building will be used as office and retail space for sales staff and customers. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

All previous comments regarding site access and the proposed outdoor storage use have been complied with or acknowledged by the applicant on the most recent submittal.

Additional comments will be given during the building plan review process (specific to the building plans and occupancy). The applicant is reminded that the fire authority must review the fire protection systems submittals (sprinkler & alarm) prior to permit issuance by the Building Department and that the authority will also review the building plans for life safety requirements in conjunction with the Building Department.

If you have any questions about the comments on this plan review please contact me at 810-229-6640.

Cordially,

A handwritten signature in black ink, appearing to read "R. Boisvert".

Rick Boisvert, CFPS
Fire Marshal

cc: amy@genoa.org
sharon@genoa.org

3. Consideration of a recommendation for approval and adoption of rezoning ordinance number Z-23-04, rezoning application and environmental impact assessment to rezone property at 4675 Grand River Avenue from Neighborhood Service District (NSD) to General Commercial District (GCD). The property consists of two contiguous parcels (4711-09-200-006 and 008) located on the north side of Grand River Avenue, west of Boulevard Drive. The request is petitioned by Desine, Inc.
 - A. Disposition of Rezoning Ordinance Z-23-04. (roll call)
 - B. Disposition of Environmental Impact Assessment dated July 31, 2023.

Mr. Wayne Perry of Desine, Inc. stated they are requesting a rezoning of two parcels. If the request is approved, they will be combining them. They anticipate developing this site to be used by AAA Trailer.

Moved by Lowe, supported by Dhaenens, to approve and adopt Ordinance No. Z-23-04. **The motion carried unanimously with a roll call vote (Ledford - yes, Croft - yes, Hunt - yes, Lowe - yes, Dhaenens - yes, Skolarus - yes, and Rogers - yes).**

Moved by Hunt, supported by Croft, to approve the Environmental Impact Assessment dated July 31, 2023 (dated September 20, 2023 PC recommendation) for two contiguous parcels (4711-09-200-006 and 008) at 4675 Grand River Avenue as submitted. **The motion carried unanimously.**

4. Consideration of a recommendation for approval of an environmental impact assessment dated October 16, 2023 for additional parking at the Woodland Village Senior Community located at 7533 Grand River Avenue, Brighton located on the north side of Grand River Avenue, west of Bendix Road. The request is petitioned by Trinity Continuing Care Services d/b/a/ Woodland Village.

Mr. Luke Smith, the Environmental Services Manager of Woodland Village, provided a review of the proposal. They are installing 27 new parking spaces. They have met all of the outstanding issues from the township's consultants.

Moved by Dhaenens, supported by Lowe, to approve the Environmental Impact Assessment dated October 16, 2023 corresponding to the proposed parking lot expansion to allow for additional parking spaces for the Woodland Village Senior Community located at 7533 Grand River Avenue with the condition that site plan conditions must be met as requested by the Planning Commission. **The motion carried unanimously.**

5. Request for approval of Resolution 231204 establishing the 2024 instructions for poverty exemption, guidelines for poverty exemption, poverty exemption application, and poverty exemption worksheet as submitted by Assessor Debra Rojewski. (roll call)

Yapici. **The motion carried (Grajek - yes; Rauch - yes; Chouinard - yes; McBain - yes; Lowe - yes; Rassel - no).**

Moved by Commissioner Rauch, seconded by Commissioner Lowe, to recommend to the Township Board approval of the sketch plan dated September 20, 2023 to allow for a proposed Bed and Breakfast located at 7854 Collingwood Drive for Nazmiye Yapici. **The motion carried (Grajek - yes; Rauch - yes; Chouinard - yes; McBain - yes; Lowe - yes; Rassel - no).**

NEW BUSINESS:

OPEN PUBLIC HEARING #2... Consideration of a rezoning application and environmental impact assessment to rezone property at 4675 Grand River Avenue from Neighborhood Service District (NSD) to General Commercial District (GCD) to allow for trailer sales and storage. The property consists of two contiguous parcels (4711-09-200-006 and 008) located on the north side of Grand River Avenue, west of Boulevard Drive. The request is petitioned by Desine, Inc.

- A. Recommendation of Rezoning
- B. Recommendation of Environmental Impact Assessment (9-20-23)

Mr. Wayne Perry of Desine, Inc. and Mr. Edward Copp, the owner, were present. Mr. Perry stated they would like to rezone these two parcels from NSD to GCD and combine them to a total of just over 1.3 acres. The property will be for the future use of AAA Trailers.

Mr. Borden viewed his letter dated October 3, 2023.

1. GCD zoning is generally consistent with the rezoning criteria of Section 22.04.
2. Since the zoning designation intended for the Mixed Use – West Grand River future land use category - has not been created, the Commission may find that GCD is a reasonable option at this time.
3. The request is anticipated to be compatible with environmental conditions and the surrounding area.
4. The two parcels comprising the subject site must be combined to create a conforming property. He noted that due to this type of rezoning, conditions are not able to be placed on approvals.
5. The host of uses permitted in GCD are generally compatible with existing and planned uses in the surrounding area, especially along Grand River.
6. Consideration must be given to any technical comments provided by the Township Engineer, Utilities Director and/or Fire Authority with respect to compatibility/capacity of infrastructure and services.

Chairman Grajek asked if GCD allows for outdoor storage. Mr. Borden stated the “leasing of auto trucks and trailers” are allowed as a special land use in that zoning district.

Mr. Rauch stated that to the north, west, and south is a PUD. He asked if those uses outlined in that PUD generally match what is allowed in the GCD. Mr. Borden stated the allowable uses are very similar. Ms. Ruthig stated auto and motorcycle sales are allowable uses in the PUD.

Ms. Byrne stated she does not have any engineering issues regarding site drainage, or water and sewer utilities that would arise from this change in zoning classification. It appears that the provided sketch plan does include some site improvements, such as a new parking lot. This will need to be submitted and reviewed separately as part of the site plan approval process.

The Fire Marshal's letter dated August 24, 2023 outlined the following comments:

1. The building shall include the address at a minimum of 6" high letters of contrasting colors and be clearly visible from the street. The location and size shall be verified prior to installation.
2. The access drive into the parking area and the gated lot shall provide a minimum of 26-foot clear width for emergency vehicle access to all structures. This includes the clear width of the gate opening.
3. A minimum vertical clearance of 13½ feet shall be maintained along the length of all apparatus access drives. This includes but is not limited to porte-cochere, lighting, and large canopy trees.
4. A Knox padlock shall be utilized to secure the gate in conjunction with the owner's lock for use in the event of an emergency. A Knox box shall be located adjacent to the main entrance of the structure, in a location coordinated with the fire authority.

Mr. Perry stated they have seen the Fire Marshal's letter.

The call to the public was made at 6:55 pm with no response.

Moved by Commissioner Rauch, seconded by Commissioner Lowe, to recommend to the Township Board approval of the rezoning of the two contiguous parcels (4711-09-200-006 and 008) at 4675 Grand River Avenue from Neighborhood Service District (NSD) to General Commercial District (GCD) to allow for trailer sales and storage, with the following notes:

- The request to rezone is consistent with the standards found in Section 19.03 of the Township Ordinance.
- The request is generally consistent with the objectives and goals of the township Master Plan.
- The request is anticipated to be compatible with the environmental conditions and surrounding area.
- The host of uses permitted in GCD are generally compatible with the uses in the surrounding area, especially along Grand River.

The motion carried unanimously.

Moved by Commissioner Rauch, seconded by Commissioner Chouinard, to recommend to the Township Board approval of the Environmental Impact Assessment dated September 20, 2023 for two contiguous parcels (4711-09-200-006 and 008) at 4675 Grand River Avenue to allow for trailer sales and storage. **The motion carried unanimously.**

OPEN PUBLIC HEARING #3...Consideration of a site plan amendment for revisions to the previously approved site grading on a 4.32-acre parcel (4711-06-200-101) on the north side of Grand River Avenue, just west of Char-Ann Drive. The request is petitioned by Chestnut Development.

- A. Disposition of amended Site Plan (9-1-23)
- B. Recommendation of Environmental Impact Assessment (9-20-23)

Ms. Brittney Shay of Monument Engineering was present. She advised that grading plans were previously approved by the township in preparation for future development. There were 19 trees that were required to be saved; however, when the project started, those trees were removed. They are proposing a new plan to establish screening due to the removal of these trees.

Mr. Borden reviewed his letter dated October 3, 2023.

- 1. In accordance with Section 13.01, the Planning Commission has review and approval authority over the site plan for grading and tree removal.
- 2. The approved site plan included a condition for additional tree preservation in the northerly portion of the site; however, those trees were removed, and the applicant now seeks approval of an amended site plan.

The applicant has addressed some of their concerns; however, his additional comments are:

- 3. There is a discrepancy between the notes and plan with respect to the number of new trees proposed. The plan depicts 20 trees, while the notes say 19. This must be corrected.
- 4. The size of the new trees proposed is not identified.
- 5. In his opinion, if the new trees are to be treated as replacement for what was removed, the new trees need to be much larger than Ordinance minimums of six feet in height at the time of planting. The trees removed were well above 20 feet in height. Alternatively, the Commission could require an increase in the number of trees to be planted to help offset what was removed.
- 6. The silt fence line should be adjusted to ensure protection of the tree along the west side of the limits of disturbance.
- 7. The applicant must address any comments provided by the Township Engineer.

Ms. Byrne has no engineering issues. She stated that the berm or plantings will not affect the drainage or underground utilities.

The Fire Marshal had no issues.

**Parcels 11-09-200-006
and 11-09-200-008
AAA TRAILER
SITE PLAN / SPECIAL USE
Genoa Township, Michigan**

IMPACT ASSESSMENT

Owner:

Edward Copp
9800 Marshall Road
South Lyon, Michigan 48178

Prepared by:

DESINE INC.
2183 Pless Drive
Brighton, Michigan 48114

A. INTRODUCTION (Sec. 18.07.01)

This impact assessment has been prepared pursuant to Article 18 – SITE PLAN REVIEW of the Zoning Ordinance for the Township of Genoa, Livingston County, Michigan. This assessment addresses the impact of the proposed renovation and use of the site as the AAA Trailer sales office and new trailer outdoor display sales area on the surrounding community and, the economic condition and social environment of the Township.

This Impact Assessment has been prepared under the direction of Wayne Perry, P.E., DESINE INC., 2183 Pless Drive, Brighton, Michigan 48114. Mr. Perry is a licensed Civil Engineer, providing professional engineering services in Livingston County since 1988 with experience in private and municipal development including projects within Genoa Township and Livingston County.

B. SITE LOCATION / DESCRIPTION (Sec. 18.07.02)

The site consists of two existing parcels containing a total of 1.35 acres of property, excluding the Grand River Right-of-Way, bordered on the South by Grand River Avenue, on the West and North by Tractor Supply Company, with the party store to the East, as shown on Figure 1. Properties to the North and West of the site, and South of Grand River Avenue, are zoned NRPUD. East of the site is zoned OSD and LRR.

The existing site is developed and has been recently used as sales, office, operations center and warehouse for AAA Service Network.

C. IMPACT ON NATURAL FEATURES (Sec. 18.07.03)

Existing soils on the property are Wawasee loam. These soils are well drained soils found in till plains and moraines, with slopes of 2%-12%. Surface runoff is medium, permeability is moderately low and the soil erosion hazard is light. The Soils Map, shown in Figure 3, shows the locations of specific soil types as classified.

Soil classifications are prepared by the United States Department of Agriculture, Soil Conservation Service, and “Soil Survey of Livingston County”. On-site soils consist of the following:

WAWASEE LOAM (MoB): WAWASEE LOAMS are typically well drained soils found in till plains and moraines, with slopes of 2%-6%. Surface runoff is medium, permeability is moderately low and the soil erosion hazard is light.

WAWASEE LOAM (MoC): WAWASEE LOAMS are typically well drained soils found in till plains and moraines, with slopes of 6%-12%. Surface runoff is high, permeability is moderate and the soil erosion hazard is light.

The property is currently developed and paved. Existing topography of the site is generally flat. Surface water drainage over the site proposed for re-development is to the Northeast.

Surface drainage characteristics on the property will not be significantly impacted by the proposed re-use of the site. Construction for the proposed use will increase the permeable

area on the property, resulting in a decrease in surface water runoff generated. The proposed changes and modifications to the surface drainage conditions will not have a significant impact on local aquifer characteristics or groundwater recharge capacity. Surface water runoff from the site will be reduced and no significant impacts to adjacent properties are anticipated from the proposed renovation and use of the site.

Improved landscaping is being proposed for the site to reduce the visual impact of the site from the Grand River Right-of-Way. All proposed landscaping areas and plantings are intended to improve the aesthetics of the property. Within the site, areas not otherwise covered, shall have lawn or other vegetative surface cover established.

No wildlife habitats currently exist on the property.

D. IMPACT ON STORM WATER MANAGEMENT (Sec. 18.07.04)

Proposed renovations to the site will reduce the impervious surface area due to a reduction in pavement area. Surface water runoff currently discharges to an existing storm sewer system East of the property. Site grading will mesh with existing grades on adjoining properties. No adverse impact to adjacent parcels is anticipated due to the proposed reuse of the property.

Soil erosion and sedimentation are controlled by the Soil Erosion Control Act No. 347 of the Public Acts of 1972, as amended and is administered by the Livingston County Drain Commissioner. Silt fencing will be installed around the site during any construction. The Contractor shall comply with all regulations including control during and after construction.

Impact on adjoining properties due to the re-development of this site will be minimized by implementing soil erosion control methods. No adverse impact to adjacent properties due to surface water runoff will be created as a result of proposed improvements.

E. IMPACT ON SURROUNDING LAND USES (Sec. 18.07.05)

No adverse impact to adjacent properties is anticipated due to the proposed use of the existing building, parking and related site utilities. Ambient noise levels on and around the property are largely generated by vehicular traffic on Grand River Avenue. Daily activities within the existing building are not anticipated to create an increase in the sound level in the area.

The proposed use of the site as the AAA Trailer sales office and new trailer outdoor display sales area will not create any significant emissions of smoke, airborne solids, odors, gases, vibrations, noise or glare discernable and substantially annoying or injurious to person and/or property beyond the lot lines. No significant change in air pollution is anticipated.

During construction, the Contractor shall be responsible for initiating and maintaining adequate dust control measures during and after construction until the project site is fully stabilized and a vegetative cover established. Dust control measures used during construction may consist of site watering, mulching of completed areas, installation of

windbreak fencing, and application of chemical dust control materials. The site will comply with the performance standards contained in Section 13.05 of the Township Zoning Ordinance.

Soil erosion control measures such as silt fence, geotextile silt sack filters and construction track mats will be used during construction to control siltation and sedimentation from entering the storm water system, impacting the adjacent properties.

F. IMPACT ON PUBLIC FACILITIES AND SERVICES (Sec. 18.07.06)

The Livingston County Sheriff and Michigan State Police will provide Police protection. Public safety services required to accommodate use of the site are anticipated to be minor.

The Brighton Area Fire Department as a part of an existing governmental agreement will provide fire protection service. Existing fire hydrants are located along Grand River Avenue. The building address will be located at the front of the proposed building. No significant change in fire protection services are anticipated due to the proposed use of the property.

The proposed use on the property will not create any direct adverse impact on the public schools.

G. IMPACT ON PUBLIC UTILITIES (Sec 18.07.07)

The property is presently within municipal sewer & water. Water service is available along Grand River. Capacity is available within the existing water system to provide adequate service to this site. Capacity is available within the existing sanitary sewer system to provide adequate service for the site. The site is currently serviced by electric, gas, phone and cable systems located along Grand River Avenue.

H. STORAGE AND HANDLING OF ANY HAZARDOUS MATERIALS (Sec. 18.07.08)

The proposed use on the site as a sales office and new trailer outdoor display sales area will not use, store, generate and/or discharge potentially polluting materials. Small quantities of material such as cleaning products and chemicals may be stored. No adverse effect is expected due to hazardous materials on-site.

I. TRAFFIC IMPACT STUDY (Sec. 18.07.09)

Traffic generated by use of the site for trailer sales is not anticipated to create a significant change in traffic due to the limited size of the parcel. The property fronts on, and has access from, Grand River Avenue. No adverse impact on pedestrian traffic in the area is anticipated as a result of use of the property.

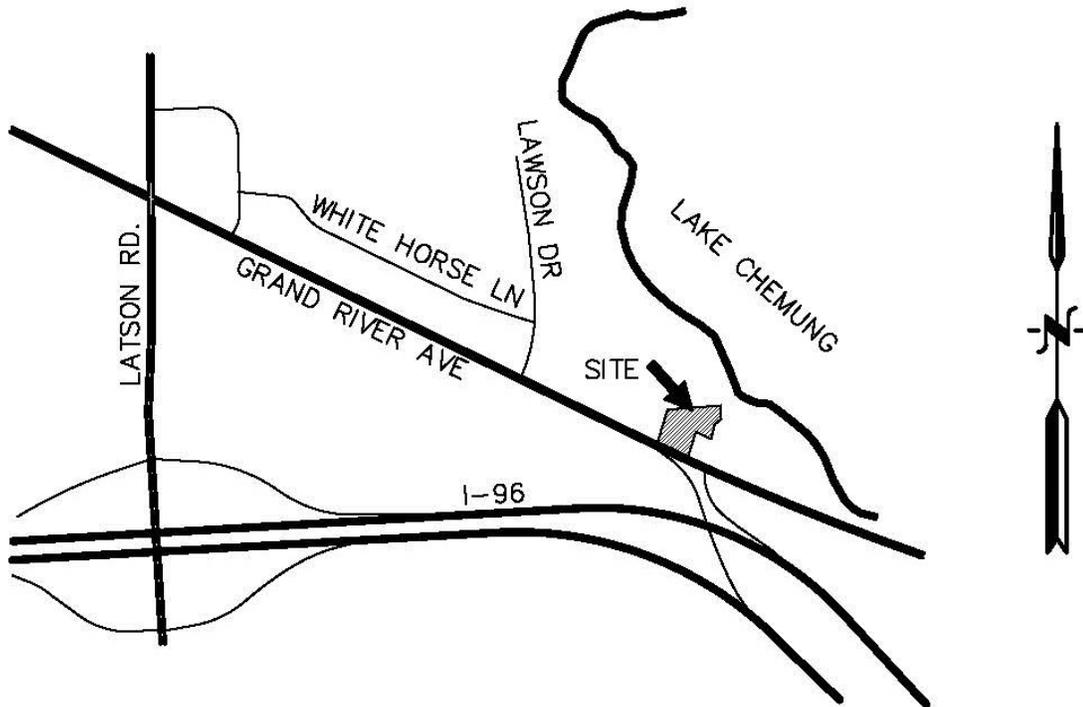
J. HISTORIC AND CULTURAL RESOURCES (Sec. 18.07.10)

The existing building on the property do not have any major historic significance on a local, regional or state level.

K. SPECIAL PROVISIONS

No special provisions or requirements are currently proposed for this facility.

FIGURE 1



LOCATION MAP
NOT TO SCALE

FIGURE 3



SOILS MAP

NOT TO SCALE

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
MoB	Wawasee loam, 2 to 6 percent slopes	1.5	22.3%
MoC	Wawasee loam, 6 to 12 percent slopes	5.4	77.7%
Totals for Area of Interest		6.9	100.0%

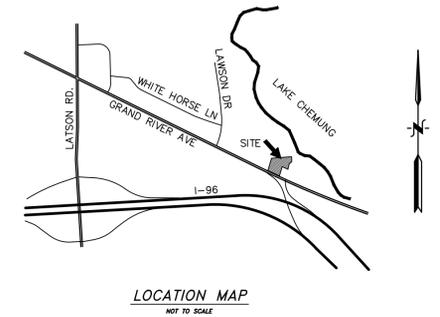
SOILS MAP
NOT TO SCALE

SITE PLAN

FOR

AAA TRAILER SALES

GENOA TOWNSHIP, MICHIGAN
 A PART OF THE NE 1/4 OF SECTION 9, T2N, R5E.
 GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



AERIAL PHOTOGRAPH
 SCALE: 1" = 40'



Aerial photographic underlay is an unrectified image and is oriented to the engineering line work within reasonable accuracy and precision, and may not accurately depict current site conditions.

PARCEL I: Tax ID No.: 4711-09-200-006

Part of the West 1/2 of the Northeast 1/4 of the Section 9, Town 2 North, Range 5 East, Michigan, described as:
BEGINNING at point in the centerline of Grand River Road, distant North 60 degrees West 300 feet from the Point of Intersection of the centerline of Grand River Road and the Westerly line of the West entrance to Sunrise Park, according to the plat thereof recorded in Liber 2 of Plats, Page 23, Livingston County Records, extended Southerly to the Point of Intersection; thence North 14 degrees 51 minutes East 150 feet; thence South 60 degrees East 200 feet thence South 14 degrees 51 minutes West 150 feet to the centerline of Grand River Road; thence North 60 degrees West 200 feet along the centerline of Grand River Road to the Place of Beginning.

PARCEL II: Tax ID No.: 4711-09-200-008

BEGINNING at a point on the West line of Lot 177 of the Plat of Sunrise Park, aforesaid at a point: 80 feet North 00 degrees 17 minutes West from the Southwest corner of said Lot 177; thence South 00 degrees 17 minutes East 80 feet to the Southwest corner of said Lot 177; thence South 52 degrees 49 minutes West 50.6 feet; thence South 14 degrees 51 minutes West 92 feet; thence North 60 degrees 00 minutes West 300 feet parallel to the Northerly line of Grand River Road; thence North 14 degrees 51 minutes East 50 feet; thence Easterly 315.6 feet to the Point of Beginning.

SHEET INDEX

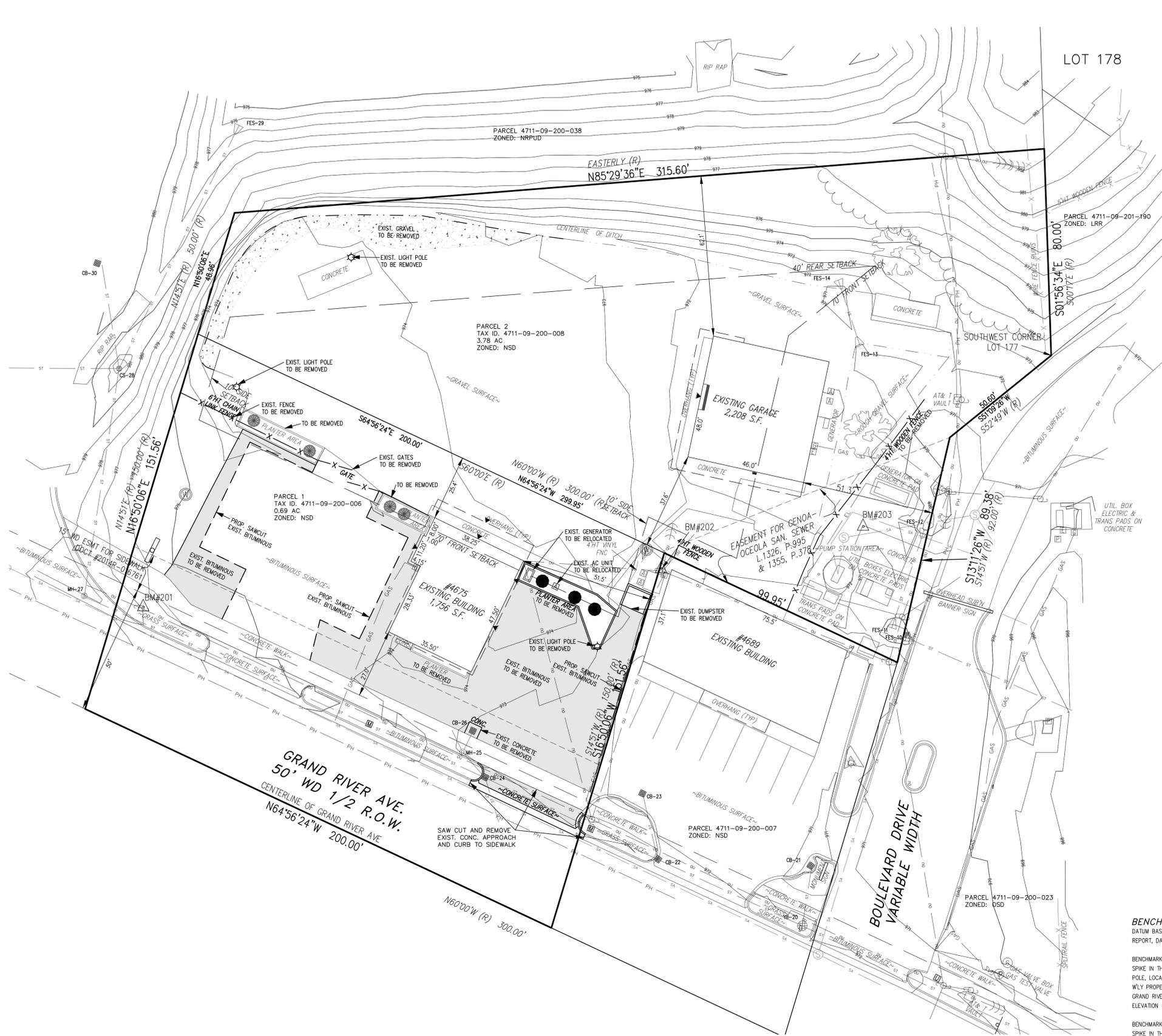
- EX EXISTING CONDITIONS AND DEMOLITION PLAN
- SP SITE PLAN
- TR TRAILER OUTDOOR DISPLAY SALES AREA PLAN
- GR GRADING DETAIL
- LS LANDSCAPE PLAN
- SE SOIL EROSION CONTROL PLAN, NOTES AND DETAILS
- WS1 EXISTING WATERSHED PLAN AND CALCULATIONS
- WS2 PROPOSED WATERSHED PLAN AND CALCULATIONS
- DT NOTES AND DETAILS
- A BUILDING PHOTOGRAPHS
- PHOTOMETRIC PLAN

OWNER
 AAA TRAILER
 4675 GRAND RIVER
 HOWELL, MICHIGAN 48843

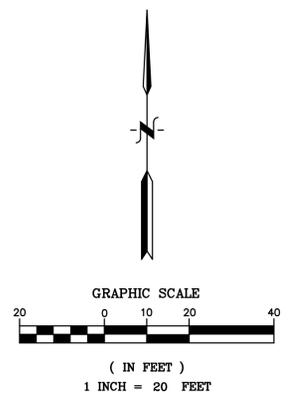
ENGINEER/SURVEYOR
 DESINE INC.
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114
 PHONE: (810) 227-9533



ISSUED	SCALE: NONE
JAN. 19, 2024	PROJECT No.: 234472
	DWG NAME: 4472 COV
	PRINT: MAY 20, 2024



LOT 178



- LEGEND**
- = PARCEL BOUNDARY LINE
 - - - = SETBACK LINE
 - ⊙ = WELL WATER
 - ⊙ = BOLLARD
 - ⊙ = STOP SIGN / PEDESTRIAN CROSSING SIGN
 - ⊙ = SIGN / MONUMENT SIGN
 - ⊙ = HANDICAP PARKING DESIGNATION
 - ⊙ = EX. WALL PACK / OVERHEAD LIGHT
 - ⊙ = LIGHT BASE
 - ⊙ = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 - ⊙ = UTILITY POLE W/GUY WIRE
 - ⊙ = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - ⊙ = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - ⊙ = EDGE OF BRUSH LINE
 - ⊙ = DECIDUOUS TREE W/IDENTIFIER
 - ⊙ = CONIFEROUS TREE W/IDENTIFIER
 - ⊙ = EX. FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 - ⊙ = EX. CONCRETE CURB (UNLESS OTHERWISE STATED)
 - ⊙ = SANITARY SEWER MANHOLE W/IDENTIFIER
 - ⊙ = SANITARY SEWER PIPE
 - ⊙ = STORM WATER MANHOLE W/IDENTIFIER
 - ⊙ = CATCH BASIN W/IDENTIFIER
 - ⊙ = FLARED END SECTION
 - ⊙ = STORM WATER DRAINAGE PIPE
 - ⊙ = HYDRANT
 - ⊙ = WATER SHUT OFF
 - ⊙ = WATER VALVE BOX
 - ⊙ = WATER MAIN
 - ⊙ = GAS SHUT OFF
 - ⊙ = U/G GAS
 - ⊙ = 1' CONTOUR
 - ⊙ = 5' CONTOUR
 - ⊙ = EX. BITUMINOUS PAVEMENT TO BE REMOVED
 - ⊙ = EX. GRAVEL SURFACE TO BE REMOVED

BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION
 REPORT, DATED DECEMBER 20, 2022.

BENCHMARK #201
 SPIKE IN THE NORTHERLY SIDE OF AN UTILITY
 POLE, LOCATED NEAR THE INTERSECTION OF
 WLY PROPERTY LINE AND THE NORTH LINE OF
 GRAND RIVER.
 ELEVATION = 977.80 (NAVD 88)

BENCHMARK #202
 SPIKE IN THE NORTHWESTERLY SIDE OF AN
 UTILITY POLE, LOCATED NEAR THE
 NORTHEASTERLY CORNER OF PARCEL #006.
 ELEVATION = 973.77 (NAVD 88)

3 WORKING DAYS
 BEFORE YOU DIG
 CALL 811 OR 1-800-482-7171
 (TOLL FREE)
 OR VISIT CALL811.COM

(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

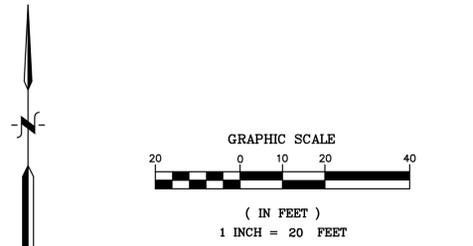
AAA
 TRAILER SALES

EXISTING CONDITIONS
 AND DEMOLITION PLAN

CLIENT:
 AAA TRAILER
 4675 GRAND RIVER
 HOWELL, MICHIGAN 48843
 734-449-4400

SCALE: 1in. = 20ft.
 PROJECT No.: 234472
 DWG NAME: 4472 EX
 ISSUED: MAY 20, 2024

EX



- LEGEND**
- = PARCEL BOUNDARY LINE
 - = SETBACK LINE
 - ⊙ = WELL WATER
 - ⊙ = BOLLARD
 - ⊙ = STOP SIGN / PEDESTRIAN CROSSING SIGN
 - ⊙ = SIGN / MONUMENT SIGN
 - ⊙ = HANDICAP PARKING DESIGNATION
 - ⊙ = EX. WALL PACK / OVERHEAD LIGHT
 - ⊙ = LIGHT BASE
 - ⊙ = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 - = UTILITY POLE W/GUY WIRE
 - = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - = EDGE OF BRUSH LINE
 - ⊙ = DECIDUOUS TREE W/IDENTIFIER
 - ⊙ = CONIFEROUS TREE W/IDENTIFIER
 - = EX. FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 - = EX. EDGE OF GRAVEL
 - = EX. CONCRETE CURB (UNLESS OTHERWISE STATED)
 - ⊙ = SANITARY SEWER MANHOLE W/IDENTIFIER
 - = SANITARY SEWER PIPE
 - ⊙ = STORM WATER MANHOLE W/IDENTIFIER
 - = CATCH BASIN W/IDENTIFIER
 - = FLARED END SECTION
 - = STORM WATER DRAINAGE PIPE
 - ⊙ = HYDRANT
 - ⊙ = WATER SHUT OFF
 - ⊙ = WATER VALVE BOX
 - = WATER MAIN
 - = GAS SHUT OFF
 - = U/G GAS
 - = 1' CONTOUR
 - = 5' CONTOUR
 - = PROP. FENCE
 - = PROP. CONCRETE CURB
 - ⊙ = PROP. LIGHT POLE

BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION
 REPORT, DATED DECEMBER 20, 2022.

BENCHMARK #201
 SPIKE IN THE NORTHERLY SIDE OF AN UTILITY
 POLE, LOCATED NEAR THE INTERSECTION OF
 WLY PROPERTY LINE AND THE NORTH LINE OF
 GRAND RIVER.
 ELEVATION = 977.80 (NAVD 88)

BENCHMARK #202
 SPIKE IN THE NORTHWESTERLY SIDE OF AN
 UTILITY POLE, LOCATED NEAR THE
 NORTHEASTERLY CORNER OF PARCEL #006.
 ELEVATION = 973.77 (NAVD 88)

3 WORKING DAYS
 BEFORE YOU DIG
 CALL 811 OR 1-800-482-7171
 (TOLL FREE)
 OR VISIT CALL811.COM

(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	5-20-24	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

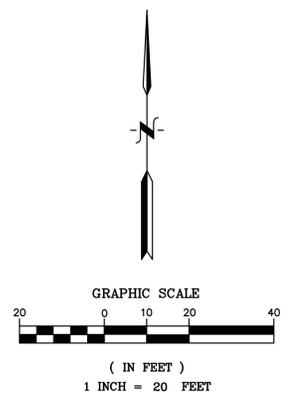
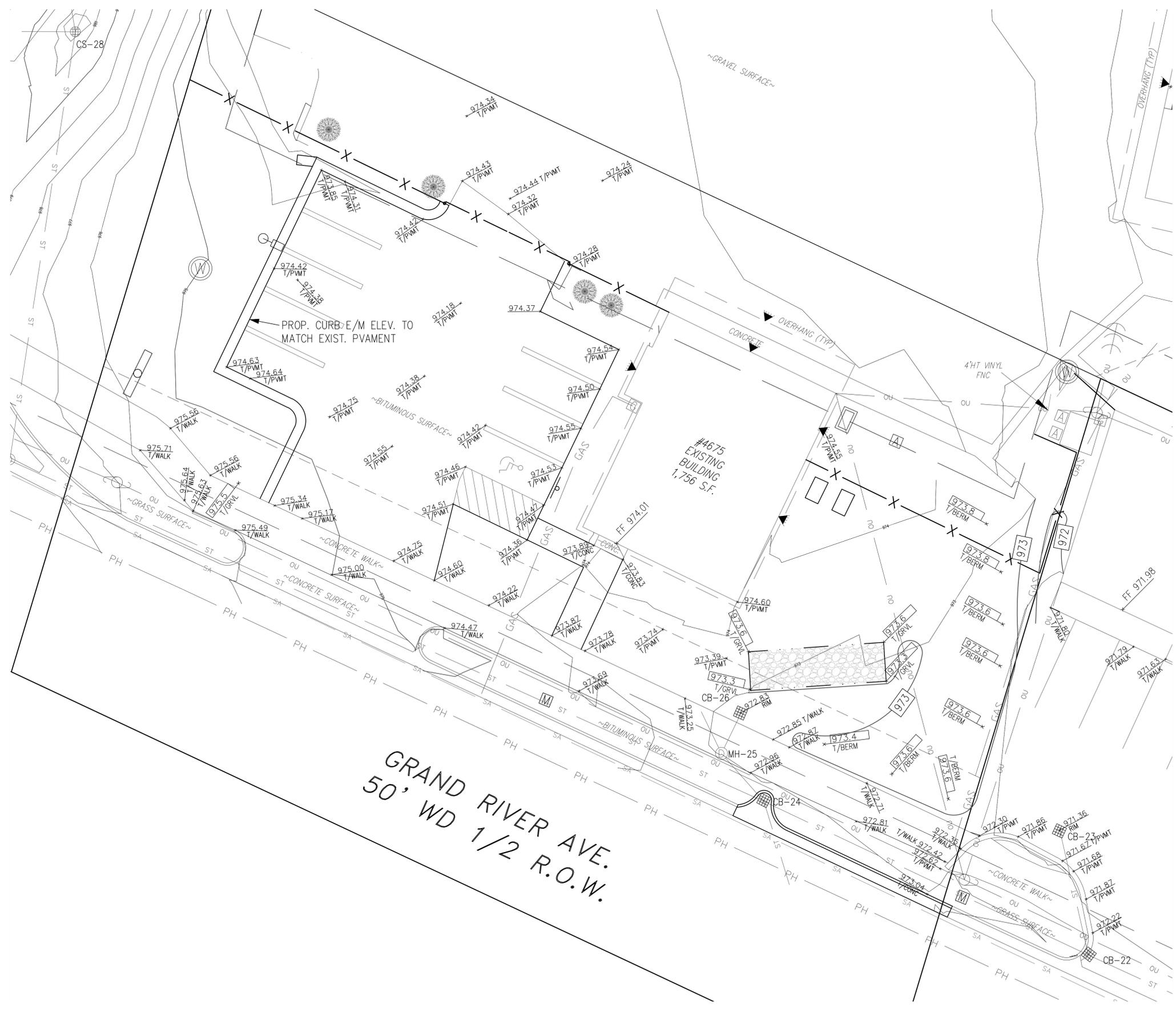
**AAA
TRAILER SALES**

**TRAILER OUTDOOR DISPLAY
SALES AREA PLAN**

CLIENT:
 AAA TRAILER
 4675 GRAND RIVER
 HOWELL, MICHIGAN 48843
 734-449-4400

SCALE: 1in. = 20ft.
 PROJECT No.: 234472
 DWG NAME: 4472 TRAILER
 ISSUED: **MAY 20, 2024**

TR



- LEGEND**
- = PARCEL BOUNDARY LINE
 - = SETBACK LINE
 - = WELL WATER
 - = BOLLARD
 - ⊕ = STOP SIGN / PEDESTRIAN CROSSING SIGN
 - ⊕ = SIGN / MONUMENT SIGN
 - ⊕ = HANDICAP PARKING DESIGNATION
 - ⊕ = EX. WALL PACK / OVERHEAD LIGHT
 - ⊕ = LIGHT BASE
 - ⊕ = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 - ⊕ = UTILITY POLE W/GUY WIRE
 - ⊕ = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - ⊕ = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - = EDGE OF BRUSH LINE
 - ⊕ = DECIDUOUS TREE W/IDENTIFIER
 - ⊕ = CONIFEROUS TREE W/IDENTIFIER
 - = EX. EDGE (CHAIN LINK UNLESS OTHERWISE STATED)
 - = EX. EDGE OF GRAVEL
 - = EX. CONCRETE CURB (UNLESS OTHERWISE STATED)
 - = SANITARY SEWER MANHOLE W/IDENTIFIER
 - = SANITARY SEWER PIPE
 - = STORM WATER MANHOLE W/IDENTIFIER
 - = CATCH BASIN W/IDENTIFIER
 - = FLARED END SECTION
 - = STORM WATER DRAINAGE PIPE
 - = HYDRANT
 - = WATER SHUT OFF
 - = WATER VALVE BOX
 - = WATER MAIN
 - = GAS SHUT OFF
 - = U/G GAS
 - = 1' CONTOUR
 - = 5' CONTOUR
 - = PROP. FENCE
 - = PROP. CONCRETE CURB
 - 973 = PROP. CONTOUR
 - 973.6 = PROP. SPOT ELEV.
 - 974.60 = EXIST. SPOT ELEV.
 - T/WALK = TOP OF WALK
 - T/PVMT = TOP OF PAVEMENT
 - T/BERM = TOP OF BERM
 - = PROP. GRAVEL SURFACE

BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION
 REPORT, DATED DECEMBER 20, 2022.

BENCHMARK #201
 SPIKE IN THE NORTHERLY SIDE OF AN UTILITY
 POLE, LOCATED NEAR THE INTERSECTION OF
 WLY PROPERTY LINE AND THE NORTH LINE OF
 GRAND RIVER.
 ELEVATION = 977.80 (NAVD 88)

BENCHMARK #202
 SPIKE IN THE NORTHEASTERLY SIDE OF AN
 UTILITY POLE, LOCATED NEAR THE
 NORTHEASTERLY CORNER OF PARCEL #006.
 ELEVATION = 973.77 (NAVD 88)

811
 Know what's below.
 Call before you dig.

3 WORKING DAYS
 BEFORE YOU DIG
 CALL 811 OR 1-800-482-7171
 (TOLL FREE)
 OR VISIT CALL811.COM

DESIGN INC
 (810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	5-20-24	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

AAA
 TRAILER SALES

GRADING DETAIL

CLIENT:
 AAA TRAILER
 4675 GRAND RIVER
 HOWELL, MICHIGAN 48843
 734-449-4400

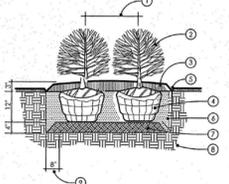
SCALE: 1in. = 10ft.
 PROJECT No.: 234472
 DWG NAME: 4472 GR2
 ISSUED: MAY 20, 2024

GR

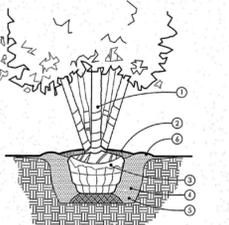
LANDSCAPE NOTES:

- LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, THE PLAN SHALL GOVERN QUANTITIES. CONTACT THE LANDSCAPE ARCHITECT WITH ANY CONCERNS.
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES, AND SHALL REPORT ANY UNACCEPTABLE SITE CONDITIONS TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT.
- PLANTS SHALL BE FULL, WELL-BRANCHED, AND IN HEALTHY VIGOROUS GROWING CONDITION.
- PLANTS SHALL BE WATERED BEFORE AND AFTER PLANTING IS COMPLETE.
- THE CONTRACTOR AGREES TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR. AT THAT TIME, THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT FOR A FINAL INSPECTION. PLANT MATERIAL WITH A 25% DEBACK OR GREATER AS DETERMINED BY THE OWNER'S REPRESENTATIVE SHALL BE REPLACED. THIS GUARANTEE INCLUDES THE FURNISHING OF NEW PLANTS, LABOR AND MATERIALS. THESE NEW PLANTS SHALL ALSO BE GUARANTEED FOR THE PERIOD OF ONE YEAR.
- ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN THE MOST RECENT EDITION OF THE "AMERICAN STANDARDS FOR NURSERY STOCK".
- CONTRACTOR WILL SUPPLY FINISHED GRADE AND EXCAVATE AS NECESSARY TO SUPPLY PLANTING BEDS AS INDICATED IN PLANT DETAILS.
- PROVIDE CLEAN BACKFILL SOIL, USING MATERIAL EITHER STOCKED ON-SITE OR DELIVERED. SOIL SHALL BE SCREENED AND FREE OF DEBRIS, FOREIGN MATERIAL, AND STONE. SLOW-RELEASE FERTILIZER SHALL BE ADDED TO THE PLANT PITS BEFORE BEING BACKFILLED. APPLICATION SHALL BE AT THE MANUFACTURER'S RECOMMENDED RATES. CONTRACTOR SHALL USE A 13-13-13 MULTIPURPOSE FERTILIZER.
- AMENDED PLANT MIX (PREPARED TOPSOIL) SHALL CONSIST OF 10 SCREENED TOPSOIL, 10 SAND, AND 10 COMPOST, MIXED WELL AND SPREAD TO A DEPTH AS INDICATED IN THE PLANTING DETAILS.
- ALL PLANTINGS SHALL BE MULCHED WITH DOUBLE SHREDDED HARDWOOD BARK, SPREAD TO A DEPTH OF 3" FOR TREES AND SHRUBS, AND 2" ON PERENNIALS, AND GROUND COVER PLANTINGS. MULCH SHALL BE FREE FROM DEBRIS AND FOREIGN MATERIAL, AND PIECES OF INCONSISTENT SIZE.
- NO SUBSTITUTIONS OR CHANGES OF LOCATION, OR PLANT TYPE SHALL BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE.
- THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS PRIOR TO INSTALLATION.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN A VERTICAL CONDITION THROUGHOUT THE GUARANTEED PERIOD.
- THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIAL THAT DOES NOT MEET THE REQUIREMENTS OF THE PLANS AND/OR SPECIFICATIONS.
- THE LANDSCAPE CONTRACTOR SHALL SEED AND MULCH OR SOIL (AS INDICATED ON PLANS) ALL AREAS DESIGNATED AS SUCH ON THE PLANS, THROUGHOUT THE CONTRACT LIMITS. FURTHER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING AREAS DISTURBED DURING CONSTRUCTION, NOT IN THE CONTRACT LIMITS, TO EQUAL OR GREATER CONDITION.
- ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESSIVE WATER FROM PONDING ON LAWN AREAS OR AROUND TREES AND SHRUBS.
- ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM PER TOWNSHIP REQUIREMENTS.

- NOTE:**
- CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PITS PRIOR TO INSTALLATION.
 - SEE TOP OF ROOFS/2" ABOVE FINISH GRADE
 - SEE PLAN FOR SPACING
 - SHRUBS, SEE PLANT SCHEDULE
 - 3" DEPTH DOUBLE SHREDDED HARDWOOD MULCH, TYPICAL
 - REMOVE ALL NON-BIOGRADABLE TRUNKS FROM EXISTING ROOFS/RAILS. REMOVE BURIAL FROM TOP 1/2 OF ROOFS/RAILS.
 - SHOVEL CUT OR METAL EDGE, SEE PLAN
 - EXCAVATE EXISTING SOIL TO 12" DEPTH, REPLACE WITH PLANT MIX
 - SCARIFY TO 4" DEPTH AND RECOMPACT
 - UNDISTURBED SUBGRADE
 - MINIMUM 8" BETWEEN FOOTBALL AND EDGE OF PLANTING PIT

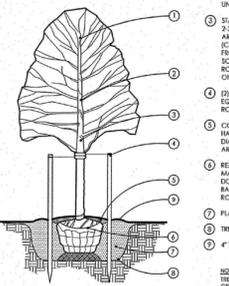


SHRUB PLANTING
NOT TO SCALE



MULTISTEM TREE PLANTING
NOT TO SCALE

- NOTE:**
- CONTRACTOR TO VERIFY PERCOLATION OF PLANTING PITS PRIOR TO INSTALLATION.
 - SEE TOP OF ROOFS/2" ABOVE FINISH GRADE
 - REMOVE ALL TAGS, STRINGS, PLASTICS, AND ANY OTHER MATERIALS WHICH ARE UNSIGHTLY OR COULD CAUSE GIRDLING.
 - COVER PLANTING W/ 3" DOUBLE SHREDDED HARDWOOD BARK MULCH, MINIMUM 4" DIA. LEAVE 3" CIRCLE OF BARE SOIL AROUND BASE OF THE STEMS.
 - REMOVE ALL NON-BIOGRADABLE MATERIALS FROM THE ROOFS/RAILS. FOLD DOWN ALL BURIAL AND REMOVE WIRE BARS FROM THE TOP 1/2 OF THE ROOFS/RAILS.
 - PLANT MIX
 - TREE PIT TO BE THREE TIMES WIDTH OF ROOFS/RAILS
 - 4" TOPSOIL SAUCER



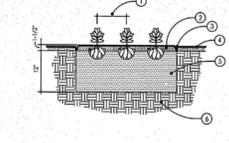
DECIDUOUS TREE PLANTING
NOT TO SCALE

- NOTE:**
- REMOVE SECONDARY LEADERS. DO NOT PRUNE TRUNKS LEADERS OR BRANCHES PRIOR ALL DEAD AND BROKEN BRANCHES.
 - REMOVE ALL TAGS, STRINGS, PLASTICS, AND ANY OTHER MATERIALS WHICH ARE UNSIGHTLY OR COULD CAUSE GIRDLING.
 - STAKE TREES JUST BELOW FIRST BRANCH W/ 2" WIRE RINGS, STAKE STIFF ONLY. AIRBORNE OR APPROVED EQUAL. CONNECTED FROM THE STAKE TO TRUNK FROM EACH OTHER, AND ALLOW FOR SOME TIGHTENING DO NOT USE WIRE OR ROPE THROUGH A NOSE. REMOVE AFTER ONE YEAR.
 - 3" DEPTH CANADIAN PEAT TOP DRESSING OR 2" DEPTH DOUBLE SHREDDED HARDWOOD MULCH
 - SHOVEL CUT OR METAL EDGE, SEE PLAN
 - FINISH GRADE
 - EXCAVATE EXISTING SOIL TO 12" DEPTH, REPLACE WITH PLANT MIX
 - UNDISTURBED SUBGRADE

MAINTENANCE NOTES:

LANDSCAPING REQUIRED BY THIS ORDINANCE SHALL BE MAINTAINED IN A HEALTHY, NEAT AND ORDERLY APPEARANCE, FREE FROM REFUSE AND DEBRIS. ALL UNHEALTHY AND DEAD PLANT MATERIAL SHALL BE REPLACED IMMEDIATELY, UNLESS THE SEASON IS NOT APPROPRIATE FOR PLANTING, IN WHICH CASE SUCH PLANT MATERIAL SHALL BE REPLACED AT THE BEGINNING OF THE NEXT PLANTING SEASON. THE OWNER SHALL INSURE PERPETUAL AND MANDATORY MAINTENANCE AND/OR REPLACEMENT OF VEGETATIVE PLANTINGS PURSUANT TO THE APPROVED LANDSCAPE PLAN.

ALL LANDSCAPED AREAS WILL BE IRRIGATED WITH AN AUTOMATIC IRRIGATION SYSTEM.



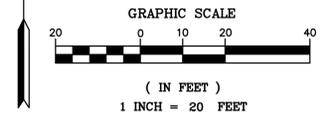
PERENNIAL / GROUND COVER PLANTING
NOT TO SCALE

- NOTE:**
- SEE PLANT SCHEDULE FOR SPACING
 - 2" DEPTH CANADIAN PEAT TOP DRESSING OR 2" DEPTH DOUBLE SHREDDED HARDWOOD MULCH
 - SHOVEL CUT OR METAL EDGE, SEE PLAN
 - FINISH GRADE
 - EXCAVATE EXISTING SOIL TO 12" DEPTH, REPLACE WITH PLANT MIX
 - UNDISTURBED SUBGRADE



PROPOSED LANDSCAPE PLANTING LEGEND

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MINIMUM SIZE	ROOT
DECIDUOUS TREES					
NM	9	Acer Platanoides	Norway Maple	3" Caliper	B & B
DECIDUOUS ORNAMENTAL TREES					
PF	3	Malus 'Prairifire'	Prairifire Flowering Crabapple	2" Caliper	B & B
SS	2	Malus 'Spring Snow'	Spring Snow Crabapple	2" Caliper	B & B
EVERGREEN SHRUBS					
GJ	38	Thuja Occidentalis 'Golden Glow'	Golden Glow Arborvitae	24" Height	Container
MA	6	Juniperus scopulorum 'Moon Glow'	Moon Glow Juniper	24" Height	Container
DECIDUOUS SHRUBS					
BB	5	Euonymus alata 'Compacta'	Dwarf Burning Bush	24" Height	Container
DG	5	Physocarpus Opulifolia 'Dart's Gold'	Dart's Gold Ninebark	24" Height	Container
GF	4	Potentilla 'Goldfinger'	Gold Finger Potentilla	24" Height	Container
EVERGREEN TREE					
PV	4	Pinus V. 'Vanderwolfii' Pyramid	Vanderwolf's Limber Pine	6" HT / 12.5' Spread	B & B



- LEGEND**
- PARCEL BOUNDARY LINE
 - SETBACK LINE
 - WELL WATER
 - BOLLARD
 - STOP SIGN / PEDESTRIAN CROSSING SIGN
 - SIGN / MONUMENT SIGN
 - HANDICAP PARKING DESIGNATION
 - EX. WALL PACK / OVERHEAD LIGHT
 - LIGHT BASE
 - UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
 - UTILITY POLE W/ GUY WIRE
 - OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
 - U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
 - EDGE OF BRUSH LINE
 - DECIDUOUS TREE W/ IDENTIFIER
 - CONIFEROUS TREE W/ IDENTIFIER
 - EX. FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
 - EX. EDGE OF GRAVEL
 - EX. CONCRETE CURB (UNLESS OTHERWISE STATED)
 - SANITARY SEWER MANHOLE W/ IDENTIFIER
 - SANITARY SEWER PIPE
 - STORM WATER MANHOLE W/ IDENTIFIER
 - CATCH BASIN W/ IDENTIFIER
 - FLARED END SECTION
 - STORM WATER DRAINAGE PIPE
 - HYDRANT
 - WATER SHUT OFF
 - WATER VALVE BOX
 - WATER MAIN
 - GAS SHUT OFF
 - U/G GAS
 - 1" CONTOUR
 - 5" CONTOUR
 - PROP. FENCE
 - PROP. CONCRETE CURB

BENCHMARK
DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED DECEMBER 20, 2022.

BENCHMARK #201
SPIKE IN THE NORTHERLY SIDE OF AN UTILITY POLE, LOCATED NEAR THE INTERSECTION OF WLY PROPERTY LINE AND THE NORTH LINE OF GRAND RIVER.
ELEVATION = 977.80 (NAVD 88)

BENCHMARK #202
SPIKE IN THE NORTHWESTERLY SIDE OF AN UTILITY POLE, LOCATED NEAR THE NORTHEASTERLY CORNER OF PARCEL #.006.
ELEVATION = 973.77 (NAVD 88)



3 WORKING DAYS BEFORE YOU DIG
CALL 811 OR 1-800-482-7171 (TOLL FREE)
OR VISIT CALL811.COM



DESIGNER	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DESIGN: JHG	1	5-20-24	REVISED PER REVIEW COMMENTS			
DRAFT: JHG						
CHECK: WMP						

AAA TRAILER SALES

LANDSCAPE PLAN

CLIENT:
AAA TRAILER
4675 GRAND RIVER
HOWELL, MICHIGAN 48843
734-449-4400

SCALE: 1in. = 20ft.
PROJECT No.: 234472
DWG NAME: 4472 LS
ISSUED: MAY 20, 2024

LS



SOILS MAP

Map Unit Legend

Map Unit Symbol	Map Unit Name	Area in ACI	Percent of ACI
Mud	Mudstone 100' to 150' deep	1.5	22.3%
MAC	Mudstone 100' to 150' deep	5.4	77.7%
Totals for Area of Interest		6.9	100.0%

MAINTENANCE NOTES FOR SOIL EROSION CONTROL MEASURES:

The Construction Site and all Soil Erosion Control Measures shall be inspected periodically in accordance with the appropriate local municipality/authority and the Michigan EGLE NPDES rules and regulations. At a MINIMUM, inspections shall be performed once a week and within 24 hours following a storm event resulting in 1" of rainfall or greater. Inspections shall be performed throughout the duration of the construction process and until the site is completely stabilized. Following construction, the owner (or its assigned) shall periodically inspect all permanent soil erosion control measures to ensure proper operation.

MUD TRACKING CONTROL DEVICE / CONSTRUCTION ACCESS: Mud tracking control devices shall be inspected for significant mud accumulation and to ensure the access is not eroding into public rights of way or drainage facilities. Add additional layers of stone or remove and replace stone each time the stone becomes covered with mud. All sediment dropped or eroded onto public rights of way shall be removed immediately. Sweeping of the public rights of way and/or paved access route shall be performed as necessary to maintain the access route free of sediment and debris.

SEEDING: Newly seeded areas shall be inspected until substantial vegetative growth is obtained. Seeded areas shall be inspected to ensure erosion is not occurring in the seeded area and vegetative growth is promoted. Eroded areas shall be finish graded as necessary to remove erosion channels or gulleys and new seed placed as soon as weather permits.

SILT FENCE: Silt fencing shall be inspected for soil accumulation/clogging, undercutting, overtopping and sagging. Soil accumulation shall be removed from the face of the silt fence each time it reaches half the height of the fence. Removed sediment shall be disposed of in a stable upland site or added to a spoils stockpile. When undercutting occurs, grade out areas of concentrated flow upstream of the silt fence to remove channels and/or gulleys and repair or replace silt fence ensuring proper trenching techniques are utilized. Silt fencing, which sags, falls over or is not staked in shall be repaired or replaced immediately. Silt fencing fabric, which decomposes or becomes ineffective, shall be removed and replaced with new fabric immediately. Silt fencing shall be removed once vegetation is well established and the up-slope area is fully stabilized.

STOCKPILES: Temporary and permanent topsoil and spoils stockpiles shall be seeded to promote vegetative growth. Stockpiles shall be inspected to ensure excessive erosion has not occurred. When runoff or wind erosion is evident, reduce the side slopes of the stockpile or stabilize the stockpile with pieces of staked soil laid perpendicular to the slope. When filter fencing is used around a stockpile, the fencing shall be inspected to ensure piping has not occurred under the fencing and to ensure the fencing is not collapsed due to soil slippage or access by construction equipment. Repair or replace damaged fencing immediately. Berms at the base of stockpiles, which become damaged, shall be replaced.

STORM STRUCTURE INLET FILTER: Inlet filters shall be inspected for sediment accumulation, clogging and damage. When stone is used in conjunction with inlet filter fabric, replace the stone each time it becomes clogged with sediment. Clean or replace the inlet filter fabric each time it becomes clogged with sediment. Reinstall or replace fallen filter fabrics immediately. Replace damaged filter fabrics immediately.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

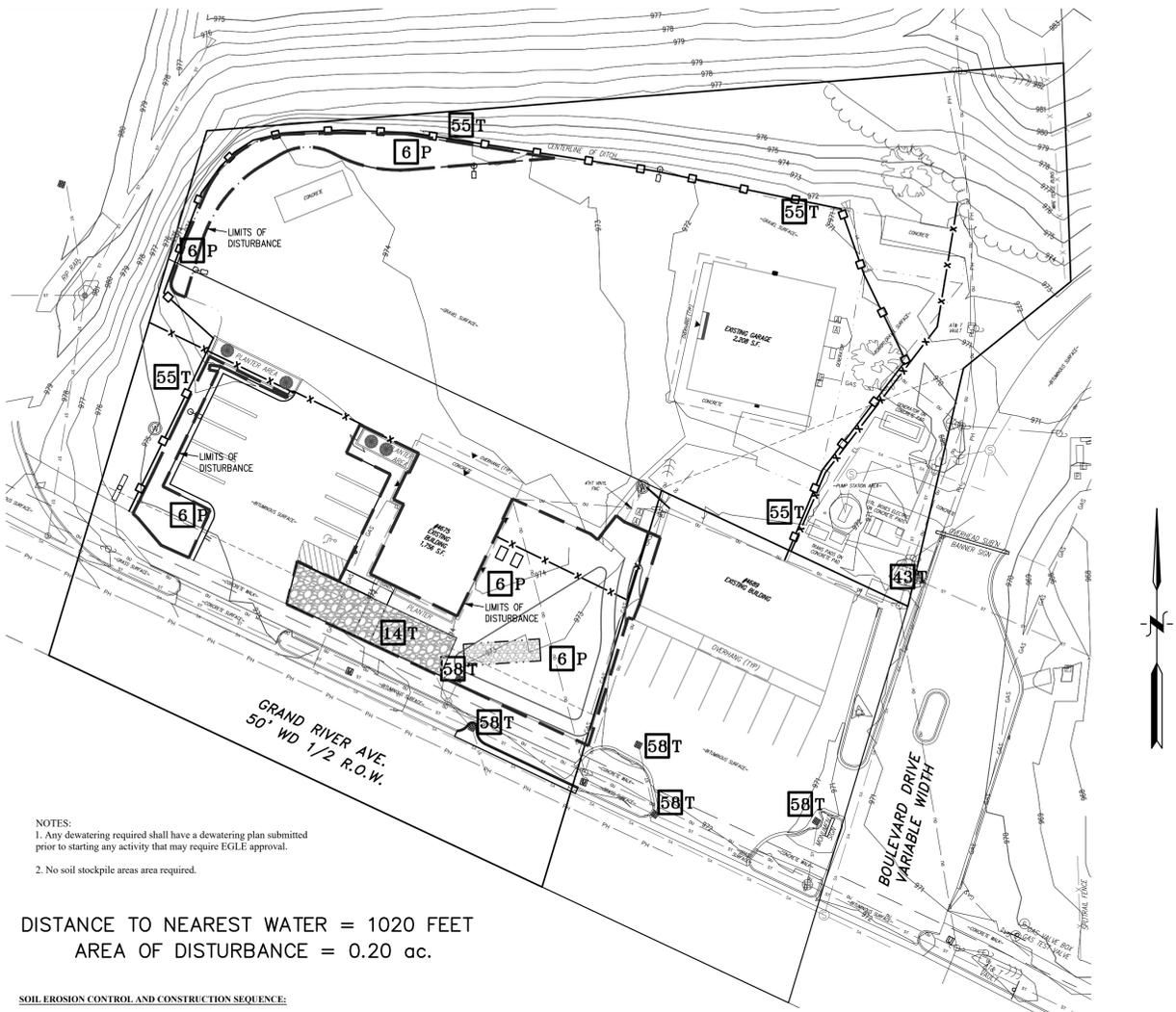
- The Soil Erosion and Sedimentation Control Specifications of the appropriate Local, County and/or State Agencies are a part of this work. Refer to the General Notes on the Project Plans for additional requirements.
- The Soil Erosion and Sedimentation Control (SESC) Permit Holder shall be responsible for compliance with the SESC Permit requirements for the duration of the project and until receipt of final approval from the Permitting Agency. For any site with an earth disturbance area of 1 acre or greater, the SESC Permit Holder shall retain a Certified Storm Water Operator in accordance with the SESC Permit requirements. The Certified Storm Water Operator shall perform routine inspections of the site and the SESC measures and file inspection reports in accordance with the SESC permit requirements. For any site with an earth disturbance area of 5 acres or greater, the SESC Permit Holder shall file a National Pollutant Discharge Elimination System (NPDES) Notice of Coverage Form with the State DEQ prior to any earth disturbance.
- The Contractor shall install the appropriate Soil Erosion Control Measures in accordance with the Project Plans prior to massive earth disruption, including but not limited to; silt fence, mud tracking control mats and sediment filters on existing storm sewer structures. Demolition work may be necessary prior to installation of some soil erosion control measures. In such cases, postpone installation of affected soil erosion control measures until immediately following demolition work. Refer to the Project Plans and the Soil Erosion Control and Construction Sequence for additional requirements.
- The Contractor shall schedule work so as to minimize the period of time that an area is exposed and disturbed. The Contractor shall observe the grading limits and limits of disturbance in accordance with the Project Plans. The Contractor shall maintain an undisturbed vegetative buffer around the work when shown on the Project Plans.
- The Contractor shall install and maintain Soil Erosion Control Measures in accordance with the Project Plans during the appropriate phases of construction. The Project Plans show the minimum requirements for Soil Erosion Control Measures. The Contractor shall install additional Soil Erosion Control Measures as necessary due to site conditions and as directed by the Permitting Agency and/or Engineer. The Contractor shall perform routine inspection and maintenance of all Soil Erosion Control Measures to ensure compliance with the permit requirements and proper operation of the Soil Erosion Control Measures.
- The Contractor shall strip and stockpile topsoil from all areas of proposed disturbance. Topsoil stockpiles shall be located in accordance with the Project Plans. Topsoil stockpiles shall be stabilized with vegetative growth (or matted with straw during the non-growing season) to prevent wind and water erosion. A temporary diversion berm and/or silt fence shall encompass all earthen material stockpiles, including but not limited to topsoil, sand and gravel.
- The Contractor shall install Soil Erosion Control Measures associated with the proposed storm sewer system during storm sewer construction. Inlet structure filters shall be installed immediately following completion of each storm inlet structure. Riprap shall be installed immediately following the installation of each flared end section with the following exception: Storm drain outlets that do NOT empty into a Retention, Detention or Sedimentation Basin shall have a temporary 5' wide x 10' long x 3' deep sump installed at the termination of the storm sewer. Upon completion of the stabilization work, the sump area shall be filled and riprap shall be installed in accordance with the Project Plans.
- The Contractor shall install filter stone around the storm basin control structure(s) in accordance with the Project Plans immediately following installation of the control structure(s). The filter stone shall be monitored for sediment build up. The filter stone may need to be cleaned and/or replaced as site conditions require and as directed by the Permitting Agency and/or the Engineer.
- All disturbed areas outside of paved areas shall be restored within 15 days of finish grading. Proposed vegetative areas shall be restored with a minimum of 3 inches of topsoil, then seeded and mulched, unless noted otherwise on the Project Plans. During the non-growing season, temporary stabilization shall be provided using straw matting or as directed by the Permitting Agency and/or the Engineer.

Seeding, Fertilizer and Mulch Bare Ground Ratio: This information is provided as minimum guidance for acceptable application rates. Actual amounts depending on soil conditions and site topography shall be detailed on the construction plans.

Topsoil: 3 inches in depth.
Grass Seed: 210 lbs. per acre.
Fertilizer: 150 lbs. per acre.
Straw Mulch: 3" in depth 1.5 to 2 tons per acre
 (All mulch must have a tie-down, such as tackifier, net binding, etc.)

Hydro-Seeding: Hydro-seeding is not acceptable for slopes exceeding 1%, in such cases, stabilization shall be done with seed and straw mulch with a tackifier.

- Following complete site restoration and stabilization; sediment shall be removed from all storm sewer structures, paved areas and storm basins. The SESC Permit Holder shall contact the Permitting Agency to request closure of the SESC Permit. For any site with an earth disturbance area of 5 acres or greater, the SESC Permit Holder shall file a NPDES Notice of Termination Form with the State DEQ.



- NOTES:**
- Any dewatering required shall have a dewatering plan submitted prior to starting any activity that may require EGLE approval.
 - No soil stockpile areas are required.

DISTANCE TO NEAREST WATER = 1020 FEET
 AREA OF DISTURBANCE = 0.20 ac.

SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE:

- Obtain all necessary Soil Erosion and Sedimentation Control related permits from the appropriate Local, County and/or State Agencies. Refer to the General Notes on the project plans for additional requirements.
- Prior to commencement of any earth disruption, install Silt Fence, Tree Protection, Mud Tracking Control Devices, Culvert Sediment Traps on existing culvert inlets and Inlet Sediment Filters at existing storm catch basins in accordance with the Soil Erosion and Sedimentation Control Plan and the Soil Erosion and Sedimentation Control Permit.
- Inspect and maintain all Soil Erosion Control Measures daily. Maintain all Soil Erosion Control Measures as necessary and as directed by the Engineer and/or the Permitting Agency.
- Perform demolition and tree clearing work. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Strip and stockpile topsoil. Dispose of excess topsoil offsite. Perform mass grading and land balancing. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Construct building in accordance with the Project Plans. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Construct underground utilities including sanitary sewer lead, sanitary sewer main, water leads, water main, storm sewer, and conduit for underground public utilities. Install appropriate Soil Erosion Control Measures, including Inlet Sediment Filters on new catch basins and Culvert Sediment Traps on new culverts, in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Install light pole bases and fixtures and underground electric. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Construct curb & gutter, sidewalk and paved parking and roadway areas. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Backfill curb and sidewalks and finish grade all disturbed areas outside of pavement areas. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Place sod / topsoil / hydroseed / seed & mulch within 5 days of finish grade for establishment of vegetative ground cover outside of pavement and mulched landscape bed areas. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Landscape site in accordance with the Project Landscape Plan. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan and as directed by the Engineer and/or the Permitting Agency.
- Following establishment of sufficient vegetative ground cover and receipt of approval from the Permitting Agency, remove all temporary Soil Erosion Control Measures, clean all storm sewer structures, and repair any permanent Soil Erosion Control Measures as directed by the Engineer and/or the Permitting Agency.

TIME LINE OF SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE

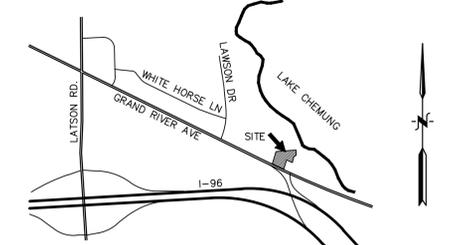
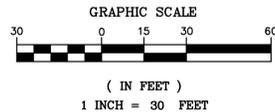
CONSTRUCTION & WORK CATEGORIES*	CONSTRUCTION PERIOD								
	Month	1	2	3	4	5	6	7	8
1. OBTAIN PERMITS									
2. INSTALL INITIAL SESC MEASURES									
3. INSPECT & MAINTAIN SESC MEASURES									
4. DEMOLITION WORK									
5. EARTH WORK									
6. BUILDING CONSTRUCTION									
7. UNDERGROUND UTILITY WORK									
8. SITE LIGHTING WORK									
9. CURB, SIDEWALK & PAVEMENT WORK									
10. BACKFILL & FINISH GRADE WORK									
11. TOPSOIL, SEED & MULCH									
12. LANDSCAPE WORK									
13. REMOVE TEMPORARY SESC MEASURES									

*REFER TO THE MAJOR WORK ITEMS OUTLINED IN THE SOIL EROSION CONTROL AND CONSTRUCTION SEQUENCE NOTES.

BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED DECEMBER 20, 2022.

BENCHMARK #201
 SPIKE IN THE NORTHERLY SIDE OF AN UTILITY POLE, LOCATED NEAR THE INTERSECTION OF WLY PROPERTY LINE AND THE NORTH LINE OF GRAND RIVER.
 ELEVATION = 977.80 (NAVD 88)

BENCHMARK #202
 SPIKE IN THE NORTHWESTERLY SIDE OF AN UTILITY POLE, LOCATED NEAR THE NORTHEASTERLY CORNER OF PARCEL #006.
 ELEVATION = 973.77 (NAVD 88)



LEGEND

[Symbol]	PARCEL BOUNDARY LINE
[Symbol]	SETBACK LINE
[Symbol]	WELL WATER
[Symbol]	BOLLARD
[Symbol]	STOP SIGN / PEDESTRIAN CROSSING SIGN
[Symbol]	SIGN / MONUMENT SIGN
[Symbol]	HANDICAP PARKING DESIGNATION
[Symbol]	EX. WALL PACK / OVERHEAD LIGHT
[Symbol]	LIGHT BASE
[Symbol]	UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CTV BOX, MAIL BOX, UTIL. BOX)
[Symbol]	UTILITY POLE W/GUY WIRE
[Symbol]	OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
[Symbol]	U/G UTILITY LINES (PHONE, FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
[Symbol]	EDGE OF BRUSH LINE
[Symbol]	DECIDUOUS TREE W/IDENTIFIER
[Symbol]	CONIFEROUS TREE W/IDENTIFIER
[Symbol]	EX. FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
[Symbol]	EX. EDGE OF GRAVEL
[Symbol]	EX. CONCRETE CURB (UNLESS OTHERWISE STATED)
[Symbol]	SANITARY SEWER MANHOLE W/IDENTIFIER
[Symbol]	SANITARY SEWER PIPE
[Symbol]	STORM WATER MANHOLE W/IDENTIFIER
[Symbol]	CATCH BASIN W/IDENTIFIER
[Symbol]	FLARED END SECTION
[Symbol]	STORM WATER DRAINAGE PIPE
[Symbol]	HYDRANT
[Symbol]	WATER SHUT OFF
[Symbol]	WATER VALVE BOX
[Symbol]	WATER MAIN
[Symbol]	GAS SHUT OFF
[Symbol]	U/G GAS
[Symbol]	1' CONTOUR
[Symbol]	5' CONTOUR
[Symbol]	PROP. FENCE
[Symbol]	PROP. CONCRETE CURB
[Symbol]	PROP. LIGHT FIXTURE

SOIL EROSION CONTROL MEASURE LEGEND

6	SEEDING WITH MULCH AND/OR MATTING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAPED AREAS WITH LOW VELOCITY EXCEL. PLACED IN SMALL QUANTITIES BY EXPERIENCED PERSONNEL SHOULD INCLUDE SHEAVED TOPSOIL (50)
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, THUS MINIMIZING EROSION PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS
55	GEOTEXTILE SILT FENCE	USES GEOTEXTILE AND POSTS OR POLES MAY BE CONSTRUCTED OR PREFABRICATED EASY TO CONSTRUCT AND LOCATE AS NECESSARY
58	INLET SEDIMENT FILTER	USES PREFABRICATED GEOTEXTILE SACKS FILLED WITH STONE TO TRAP SEDIMENT FROM RUNOFF AT CATCH BASIN INLET EASY TO INSTALL AND MAINTAIN

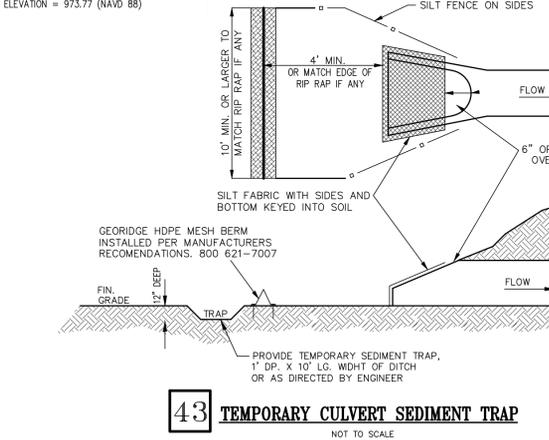
LEGAL DESCRIPTION OF RECORD

Reference: Warranty Deed as recorded in Liber 3474, Page 127, Livingston County Records

PARCEL I: Tax ID No.: 4711-09-200-006
 Part of the West 1/2 of the Northeast 1/4 of the Section 9, Town 2 North, Range 5 East, Michigan, described as: BEGINNING at point on the centerline of Grand River Road, distant North 60 degrees West 300 feet from the Point of Intersection of the centerline of Grand River Road and the Westerly line of the West entrance to Sunrise Park, according to the plat thereof recorded in Liber 2 of Plate, Page 21, Livingston County Records, extended South to the Point of Intersection; thence North 14 degrees 51 minutes East 150 feet; thence South 60 degrees East 200 feet; thence South 14 degrees 51 minutes West 150 feet to the centerline of Grand River Road; thence North 60 degrees West 200 feet along the centerline of Grand River Road to the Place of Beginning.

PARCEL II: Tax ID No.: 4711-09-200-009
 BEGINNING at a point on the West line of Lot 177 of the Plat of Sunrise Park, afforsaid at a point 80 feet North 00 degrees 17 minutes West from the Southwest corner of said Lot 177; thence South 00 degrees 17 minutes East 80 feet to the Southwest corner of said Lot 177; thence South 52 degrees 49 minutes West 50.6 feet; thence South 14 degrees 51 minutes West 92 feet; thence North 60 degrees 00 minutes West 500 feet parallel to the Northernly line of Grand River Road; thence North 14 degrees 51 minutes East 50 feet; thence Easterly 315.6 feet to the Point of Beginning.

Tax ID No.: 4711-09-200-007
 Beginning at the southwest corner of Sunrise Park. Thence northeasterly along the west side of park entrance, 100 ft. Parallel to US-16, thence in S20°44'40"W (direction parallel to E description) 150 ft. to center of US-16. Thence S81°02'39"E along center of road 100 ft. Thence N20°44'40"E 150 ft. to beginning.

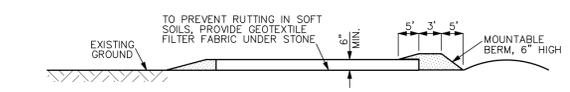


43 TEMPORARY CULVERT SEDIMENT TRAP
 NOT TO SCALE



SEEDING DETAIL
 NOT TO SCALE

- Seed mixture shall consist of 10% - Kentucky Blue Grass
 20% - Perennial Ryegrass
 30% - Hard Fescue
 40% - Creeping Red Fescue
 Seed shall be uniformly applied at a rate of 210 pounds per acre.
- Topsoil shall be a dark, organic, natural surface soil free of clay lumps, peat or muck, subsoil, noxious weeds or other foreign matter such as roots, sticks, rocks over 1/2" in diameter and not frozen or muddy. Material shall meet with approval of the Engineer.
- Straw mulching shall be a minimum depth of 3" applied at a rate of 1.5 to 2 tons per acre. All mulching must have a tie down, such as tackifier, net binding, etc.
- Fertilizer shall be evenly applied at a rate which will provide 150 pounds per acre of chemical fertilizer nutrients, in equal portions, (10-10-10), of Nitrogen, Phosphoric Acid and Potash.
- Hydroseeding is not acceptable for slopes exceeding 1%. In such cases, stabilization shall be done with seed and straw mulch with a tackifier.
- The carbon areas to receive topsoil shall be at the required grade and properly trimmed. Topsoil shall be spread on the prepared areas to a depth of 3 inches. After spreading, any large clods and lumps of topsoil shall be broken up and pulverized. Stones and rocks over 1/2" in diameter, roots, litter, and all foreign matter shall be raked up and disposed of by the contractor. Place topsoil only when it can be followed within a reasonable time by seeding operations.



14 MUD TRACKING CONTROL DEVICE
 NOT TO SCALE

NOTE: WHEN ACCEPTABLE TO ENGINEER, CONTRACTOR MAY INSTALL STONE BELOW THE SUBGRADE ELEVATION; THUS STONE MAY BE LEFT IN PLACE BELOW PAVEMENT.

DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	5-20-24	REVISED PER REVIEW COMMENTS
CHECK: WMP			

REVISION #	DATE	REVISION-DESCRIPTION

AAA TRAILER SALES

SOIL EROSION CONTROL PLAN, NOTES & DETAILS

CLIENT: AAA TRAILER 4675 GRAND RIVER HOWELL, MICHIGAN 48843 734-449-4400	SCALE: 1in. = 30ft. PROJECT No.: 234472 DWG NAME: 4472 SE ISSUED: MAY 20, 2024
--	---

SE

811
 Know what's below. Call before you dig.
 3 WORKING DAYS BEFORE YOU DIG
 CALL 811 OR 1-800-482-7171 (TOLL FREE)
 OR VISIT CALL811.COM

DESIGN INC.
 (810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLEYS DRIVE
 BRIGHTON, MICHIGAN 48114



LEGEND

- = PARCEL BOUNDARY LINE
- - - = SETBACK LINE
- = WELL WATER
- = BOLLARD
- ⊕ = STOP SIGN / PEDESTRIAN CROSSING SIGN
- ⊕ = SIGN / MONUMENT SIGN
- ⊕ = HANDICAP PARKING DESIGNATION
- ⊕ = EX. WALL PACK / OVERHEAD LIGHT
- ⊕ = LIGHT BASE
- ⊕ = UTILITY METERS & BOXES (ELECTRIC METER, GAS METER, WATER METER, PHONE BOX, CATV BOX, MAIL BOX, UTIL. BOX)
- ⊕ = UTILITY POLE W/GUY WIRE
- ⊕ = OVERHEAD UTILITY LINES (ELECTRIC/PHONE/CABLE)
- ⊕ = U/G UTILITY LINES (PHONE/FIBER OPTIC/ELECTRIC/CABLE TV/MISC UTILITIES)
- ⊕ = EDGE OF BRUSH LINE
- ⊕ = DECIDUOUS TREE W/IDENTIFIER
- ⊕ = CONIFEROUS TREE W/IDENTIFIER
- ⊕ = EX. FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- ⊕ = EX. EDGE OF GRAVEL
- ⊕ = EX. CONCRETE CURB (UNLESS OTHERWISE STATED)
- ⊕ = SANITARY SEWER MANHOLE W/IDENTIFIER
- ⊕ = SANITARY SEWER PIPE
- ⊕ = STORM WATER MANHOLE W/IDENTIFIER
- ⊕ = CATCH BASIN W/IDENTIFIER
- ⊕ = FLARED END SECTION
- ⊕ = STORM WATER DRAINAGE PIPE
- ⊕ = HYDRANT
- ⊕ = WATER SHUT OFF
- ⊕ = WATER VALVE BOX
- ⊕ = WATER MAIN
- ⊕ = GAS SHUT OFF
- ⊕ = U/G GAS
- ⊕ = 1' CONTOUR
- ⊕ = 5' CONTOUR
- ⊕ = PROP. FENCE
- ⊕ = PROP. CONCRETE CURB
- ⊕ = PROP. CONTOUR
- ⊕ = PROP. DRAINAGE FLOW ARROW

PROPOSED STORM WATER RUN-OFF

"Area"	0.95 Pavement	0.90 Building	0.85 Gravel	0.25 Lawn	0.18 Open Field	1.00 Water	(ACRES)	"C" Factor
FES-14	0.03	0.00	0.11	0.41	0.00	0.00	0.55	0.41
FES-12	0.12	0.06	0.36	0.29	0.00	0.00	0.83	0.66
CB-21	0.09	0.07	0.00	0.00	0.00	0.00	0.16	0.93
CB-23	0.06	0.00	0.00	0.02	0.00	0.00	0.08	0.78
CB-26	0.02	0.04	0.00	0.11	0.00	0.00	0.17	0.49
							1.79	ACRES
							0.59	"C"

BENCHMARK
 DATUM BASED ON NGS OPUS SOLUTION
 REPORT, DATED DECEMBER 20, 2022.

BENCHMARK #201
 SPIKE IN THE NORTHERLY SIDE OF AN UTILITY
 POLE, LOCATED NEAR THE INTERSECTION OF
 WLY PROPERTY LINE AND THE NORTH LINE OF
 GRAND RIVER.
 ELEVATION = 977.80 (NAVD 88)

BENCHMARK #202
 SPIKE IN THE NORTHWESTERLY SIDE OF AN
 UTILITY POLE, LOCATED NEAR THE
 NORTHEASTERLY CORNER OF PARCEL #006.
 ELEVATION = 973.77 (NAVD 88)

811
 Know what's below.
 Call before you dig.

3 WORKING DAYS
 BEFORE YOU DIG
 CALL 811 OR 1-800-482-7171
 (TOLL FREE)
 OR VISIT CALL811.COM

DESIGN INC
 (810) 227-9533
 CIVIL ENGINEERS
 LAND SURVEYORS
 2183 PLESS DRIVE
 BRIGHTON, MICHIGAN 48114

DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

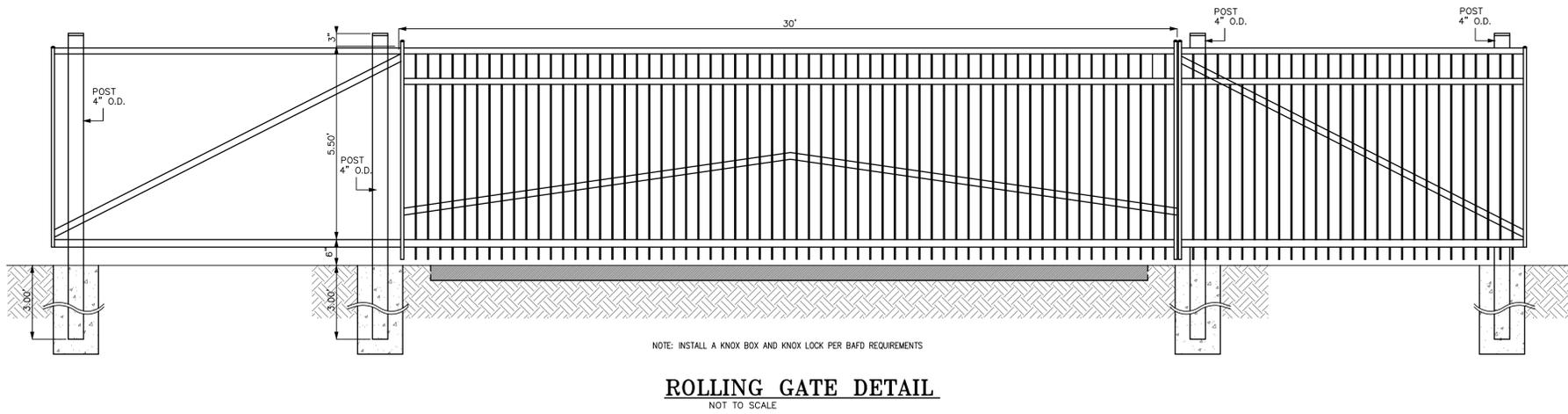
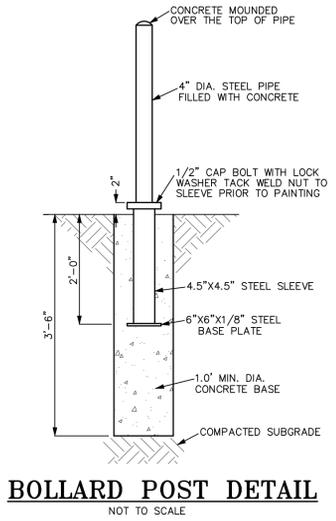
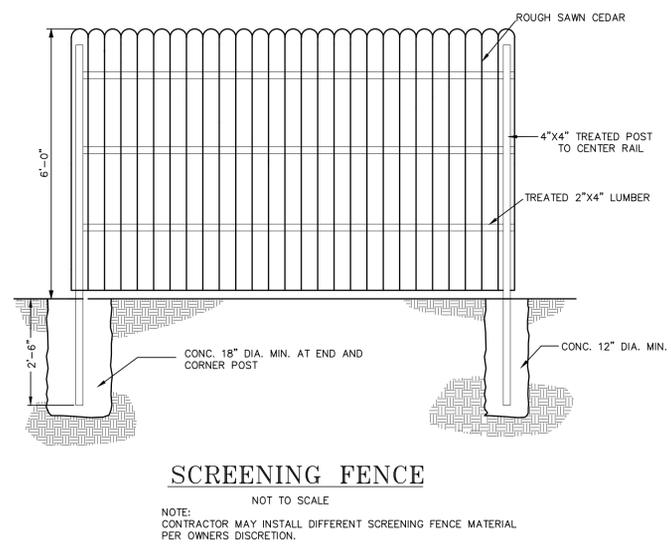
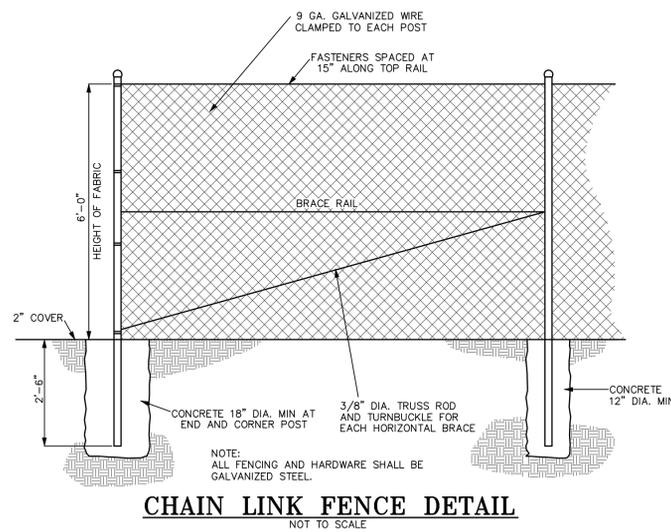
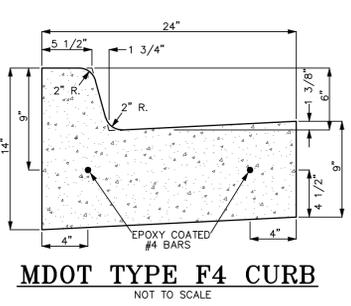
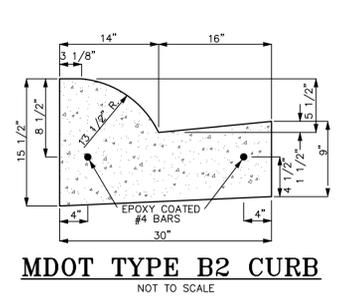
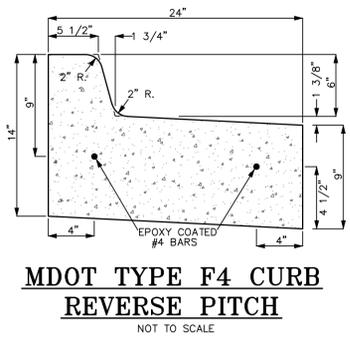
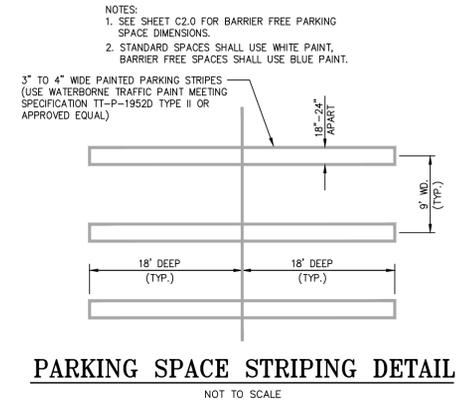
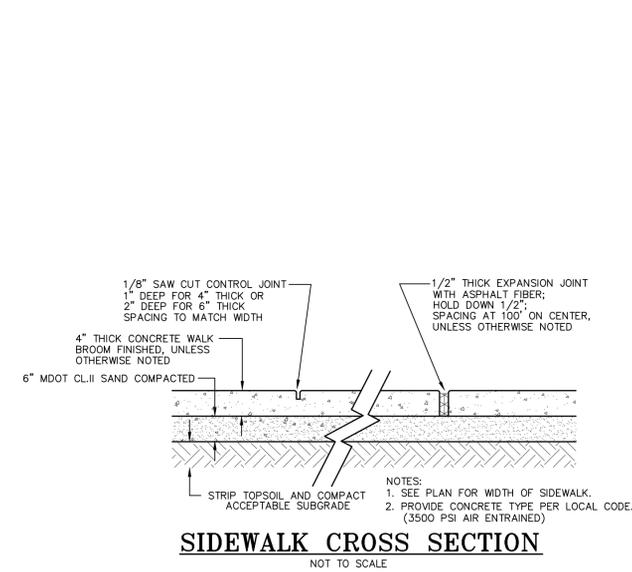
**AAA
 TRAILER SALES**

**PROP, WATERSHED
 PLAN AND CALCULATIONS**

CLIENT:
 AAA TRAILER
 4675 GRAND RIVER
 HOWELL, MICHIGAN 48843
 734-449-4400

SCALE: 1in. = 20ft.
 PROJECT No.: 234472
 DWG NAME: 4472 WS2
 ISSUED: MAY 20, 2024

WS2



- GENERAL NOTES:**
- Contractor shall perform the work in accordance with the requirements of the appropriate Local, County and State Agencies and all other Government and Regulatory Agencies with jurisdiction over the project. Contractor shall notify the appropriate Agencies in advance of each stage of work in accordance with each Agency's requirements.
 - Contractor shall comply with all permit, insurance, licensing and inspection requirements associated with the work. Prior to construction, Contractor and Owner/Developer shall determine who is responsible for obtaining each required permit. Contractor shall verify that the each required permit has been obtained prior to commencement of the stage of work associated with the required permit(s).
 - Contractor shall furnish liability insurance and property damage insurance to save harmless the Owner, Developer, Architect, Engineer, Surveyor and Government Agencies for any accident occurring during the construction period. Refer to the appropriate Local, County and State Agencies for additional requirements. Copies of insurance certifications shall be made available to the Owner/Developer.
 - Contractor shall conduct and perform work in a safe and competent manner. Contractor shall perform all necessary measures to provide for traffic and pedestrian safety from the start of work and through substantial completion. Contractor shall determine procedures and provide safety equipment such as traffic controls, warning devices, temporary pavement markings and signs as needed. Contractor shall comply with the safety standards of the State Department of Labor, the occupational health standards of the State Department of Health and safety regulations of the appropriate Local, County, State and Federal Agencies. Refer to the safety specifications of the appropriate Regulatory Agencies. The Contractor shall designate a qualified employee with complete job site authority over the work and safety precautions; said designated employee shall be on site at all times during the work.
 - Contractor shall coordinate scheduling of all work in the proper sequence, including work by Subcontractors. Additional costs due to improper planning by Contractor or work done out of sequence as determined by standard acceptable construction practices, shall be Contractor's responsibility.
 - Contractor shall contact the 811 Underground Public Utility Locating System or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to construction. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
 - Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of work.
 - The Local Municipality, County and/or State in which the project is located may require an Engineer's Certification of construction of the proposed site improvements. Contractor shall verify the certification requirements with Engineer prior to commencement of work. Contractor shall coordinate construction staking, testing, documentation submittal and observation with the appropriate Agency, Surveyor and/or Engineer as required for Engineer's Certification and Government Agency Acceptance. All materials used and work done shall meet or exceed the requirements of certification and acceptance, the contract documents and the material specifications noted on the project plans. Any materials used or work done that does not meet said requirements, contract documents and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.
 - Engineer may provide subsurface soil evaluation results, if available, to Contractor upon request. Subsurface soil evaluation results, soils maps and/or any other documentation does NOT guarantee existing soil conditions or that sufficient, acceptable on-site granular material is available for use as structural fill, pipe bedding, pipe backfill, road subbase or use as any other granular material specified on the project plans. On-site granular material that meets or exceeds the material specifications noted on the project plans may be used as structural fill, pipe bedding, pipe backfill and/or road subbase material. On-site granular material shall be stockpiled and tested as acceptable to the appropriate Agency and/or Engineer prior to use.
 - During the performance of their work, Contractor shall be solely responsible for determining soil conditions and appropriate construction methods based on the actual field conditions. Contractor shall furnish, install and maintain sheeting, shoring, bracing and/or other tools and equipment and/or construction techniques as needed for the safety and protection of the workers, pedestrians and vehicular traffic and for protection of adjacent structures and site improvements.
 - Contractor shall install temporary and permanent soil erosion and sedimentation control devices at the appropriate stages of construction in accordance with the appropriate regulatory Agencies. Refer to Soil Erosion and Sedimentation Control Plans and Notes on the project plans.
 - Structural fill shall be placed as specified on the project plans and within the 1 on 1 influence zone of all structures, paved areas and other areas subject to vehicular traffic. Structural fill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor). Fill material shall meet or exceed the specifications noted on the project plans or as directed by Engineer when not specified on the project plans.
 - All existing monuments, property corners, ground control and benchmarks shall be protected and preserved; and if disturbed by Contractor, shall be restored at Contractor's expense. Contractor shall notify Surveyor of any conflicts between existing monuments, property corners, ground control and/or benchmarks and the proposed site improvements.
 - Contractor shall notify Owner/Developer and Engineer immediately upon encountering any field conditions, which are inconsistent with the project plans and/or specifications.
 - When noted on the project plans for demolition and/or removal, Contractor shall remove existing structures, building and debris and recycle and/or dispose of in accordance with Local, County, State and Federal regulations.
 - Contractor shall remove excess construction materials and debris from site and perform restoration in accordance with the project plans and specifications. Disposing of excess materials and debris shall be performed in accordance with Local, County, State and Federal regulations.
 - Construction access to the site shall be located as acceptable to the Owner/Developer and to the appropriate Local, County and/or State Agency with jurisdiction over the road(s) providing access to the site. Construction access shall be maintained and cleaned in accordance with the appropriate Local, County and/or State Agencies and as directed by Owner/Developer and/or Engineer.
 - Contractor shall take necessary precautions to protect all site improvements from heavy equipment and construction procedures. Damage resulting from Contractor actions shall be repaired at Contractor's expense.

- CONCRETE CURB NOTES:**
- Refer to the project plans for the proposed locations of the specific curb types.
 - The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the General Notes and Curb Cross Section Details on the project plans for additional requirements.
 - Extend the base and/or subbase material of the appropriate adjacent pavement cross-section horizontally to 1 foot behind the back of curb. Concrete curb shall be constructed on no less than 6" of combined depth of compacted base/subbase material.
 - Concrete material shall meet or exceed the specification requirements of the appropriate Local Municipality. If not specified by the Local Municipality, then the concrete material shall be MDOT P1 (I-A) 6.0 sack concrete pavement mixture with a minimum 28 day design compressive strength of 4,000 PSI and 6.5% (+/-1.5%) entrained air. Contractor shall submit concrete mix design and aggregate mechanical analysis report to the Local Municipality and Engineer for review and approval prior to use.
 - Install transverse contraction control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse contraction control joints in curb with 1" minimum depth at 10' on center. Tool joints in fresh concrete or saw cut within 8 hours.
 - Install transverse expansion control joints in accordance with the Local Municipality requirements. If not specified by the Local Municipality, then install transverse expansion control joints in curb as follows: 400' maximum on center, at spring points of intersecting streets and within 10' on each side of catch basins. Transverse expansion control joints shall be 1" thick asphalt fiber joint filler matching entire curb cross section.
 - Provide 1" asphalt fiber control joint behind back of curb and all other concrete structures, such as concrete sidewalks and concrete driveways.
 - Curb Contractor shall provide final adjustment of catch basin castings in curb line. Castings shall be tucked pointed to structure water tight with concrete or mortar inside and outside of casting.
 - Install curb cuts for all existing and proposed sidewalks and pedestrian ramps in accordance with the American Disabilities Act and the Barrier Free Design requirements of the appropriate Local, County and/or State Agency. Refer to MDOT Standard Plan R-28, latest revision. Install curb cuts for all existing and proposed vehicular ramps and drives as noted on the project plans.

3 WORKING DAYS BEFORE YOU DIG
CALL 811 OR 1-800-482-7171 (TOLL FREE)
OR VISIT CALL811.COM

(810) 227-9533
3 CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	5-20-24	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

AAA TRAILER SALES

DETAILS

CLIENT: AAA TRAILER
4675 GRAND RIVER
HOWELL, MICHIGAN 48843
734-449-4400

SCALE: AS NOTED
PROJECT No.: 234472
DWG NAME: 4472 DT
ISSUED: MAY 20, 2024

DT



**SALES BUILDING
NORTH ELEVATION**
NOT TO SCALE



**EXISTING GARAGE
WEST ELEVATION**
NOT TO SCALE



**SALES BUILDING
WEST ELEVATION**
NOT TO SCALE



**SALES BUILDING
EAST ELEVATION**
NOT TO SCALE



**EXISTING GARAGE
SOUTH ELEVATION**
NOT TO SCALE



**SALES BUILDING
SOUTH ELEVATION**
NOT TO SCALE

811
Know what's below.
Call before you dig.
3 WORKING DAYS
BEFORE YOU DIG
CALL 811 OR 1-800-482-7171
(TOLL FREE)
OR VISIT CALL811.COM

DESIGN INC
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

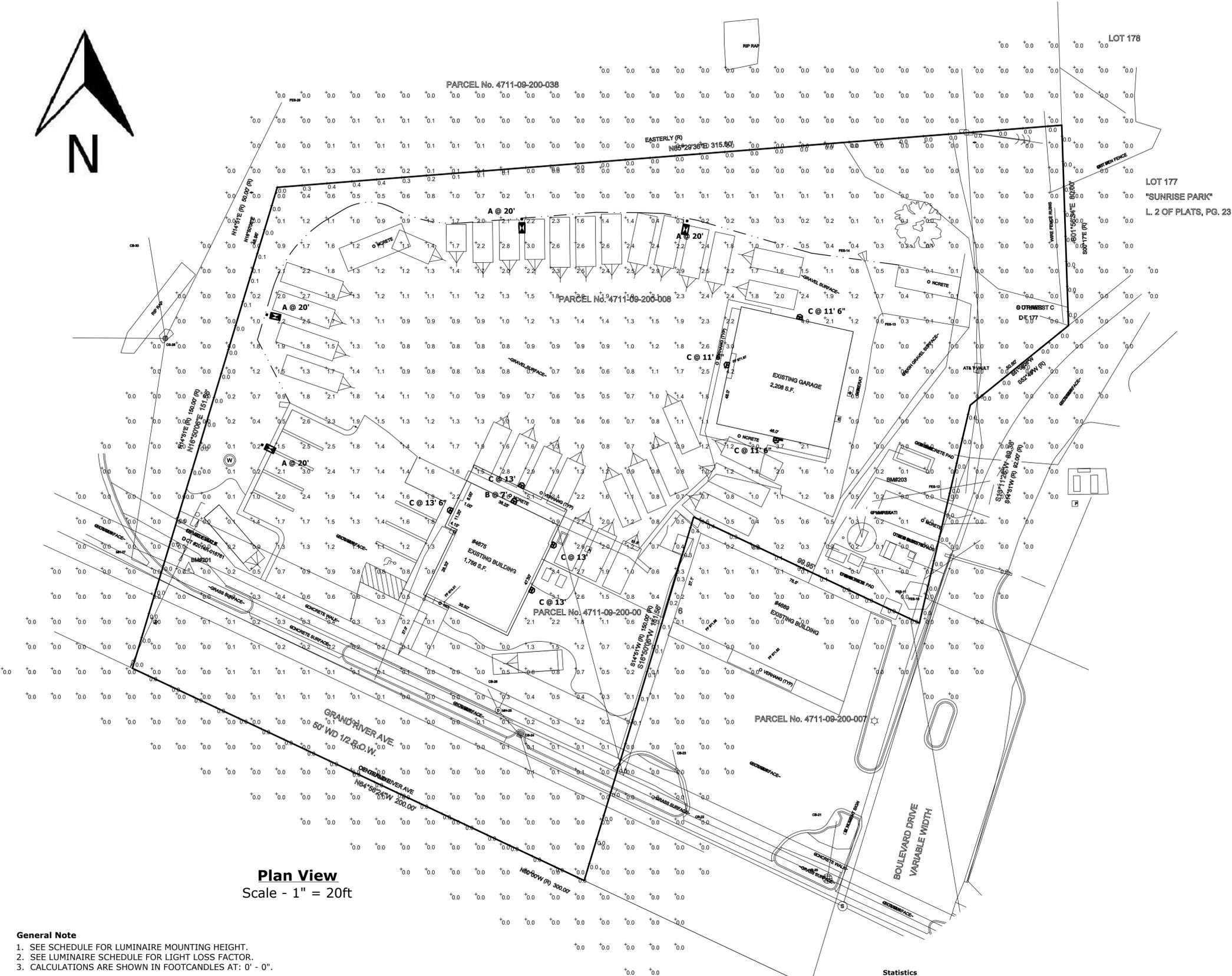
**AAA
TRAILER SALES**

**EXISTING BUILDING
EXTERIOR ELEVATIONS**

CLIENT:
AAA TRAILER
4675 GRAND RIVER
HOWELL, MICHIGAN 48843
734-449-4400

SCALE: AS NOTED
PROJECT No.: 234472
DWG NAME: 4472 PHOTO
ISSUED: **MAY 20, 2024**

A



Plan View
Scale - 1" = 20ft

- General Note**
- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
 - SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
 - CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0".

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIREMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705

Drawing Note
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Ordering Note
FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
OVERALL	+	0.5 fc	1.0 fc	0.0 fc	N/A	N/A	0.1:1
PARKING LOT	+	1.4 fc	3.0 fc	0.3 fc	10.0:1	4.7:1	0.5:1
PROPERTY LINE	+	0.0 fc	4.0 fc	0.0 fc	N/A	N/A	0.0:1
STORAGE AREA	+	1.4 fc	5.1 fc	0.2 fc	25.5:1	7.0:1	0.3:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage	Mounting Height
⊙	A	4	Lithonia Lighting	DSX0 LED P5 40K 80CRI BLC4	D-Series Size 0 Area Luminaire P5 Performance Package 4000K CCT 80 CRI Type 4 Extreme Backlight Control	LED	1	8334	0.9	90.12	20'-0"
⊙	B	1	Lithonia Lighting	DSXW1 LED 10C 350 40K T3M MVOLT	DSXW1 LED WITH (1) 10 LED LIGHT ENGINES, TYPE T3M OPTIC, 4000K, @ 350mA.	LED	1	1488	0.9	13.3	7'-0"
⊙	C	7	Lithonia Lighting	DSXW1 LED 20C 530 40K T4M MVOLT	DSXW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE T4M OPTIC, 4000K, @ 530mA.	LED	1	4201	0.9	34.9	VARIES

D-Series Size 0 LED Area Luminaire

Specifications

EPA: 0.44 ft² (0.04 m²)
 Length: 26.18" (66.5 cm)
 Width: 14.04" (35.2 cm)
 Height H1: 2.26" (5.7 cm)
 Height H2: 7.46" (18.9 cm)
 Weight: 23 lbs (10.4 kg)

Ordering Information

EXAMPLE: DSX0 LED P6 40K 70CRI T3M MVOLT SPL NTAIR2 PIRHN DDBXD

Series	LEDs	Color Temperature	Color Rendering Index	Distribution	Mounting	Shipped Included
DSX0 LED	P1, P2, P3, P4, P10, P11	30K, 4000K, 5000K	70CRI	AFR, T15, T2M, T3M, T4M, T5M, T6M, T7M, T8M, T9M, T10M, T11M	MVOLT, VOLT	SPK, RPA, SPAS, RPA, SPAN, WBA, MA

D-Series Size 1 LED Wall Luminaire

Specifications

Width: 13-3/4" (34.9 cm)
 Depth: 10" (25.4 cm)
 Height: 6-3/8" (16.2 cm)

Back Box (BBW, E20WC)

Width: 13-3/4" (34.9 cm)
 Depth: 10" (25.4 cm)
 Height: 6-3/8" (16.2 cm)

Ordering Information

EXAMPLE: DSXW1 LED 20C 1000 40K T3M MVOLT DDBTDX

Series	LEDs	Driver Current	Color Temperature	Distribution	Mounting	Control Options
DSXW1 LED	10C, 20C	350, 700 mA	30K, 4000K, 5000K	T25, T2M, T3M, T4M, T5M, T6M, T7M, T8M, T9M, T10M, T11M	MVOLT, BBW	PE, DMG, PIR, PIRFCV, PIRFCVW, E20WC

LITHONIA LIGHTING
 One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
 © 2011-2024 Acuity Brands Lighting, Inc. All rights reserved.

Accessories

NOTES

- 20C, 1000 is not available with PIR, PIRFCV or PIRFCVW.
- MAXIMUM driver operates on any line voltage from 120-277V (50/60 Hz).
- Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 200, 240 or 480 voltage option.
- Only available with 20C, 700mA or 1000mA. Not available with PIR or PIRFCV.
- Back box ships installed on fixture. Cannot be field installed. Cannot be available as an accessory.
- Photocell (PE) requires 120, 208, 240, 277 or 347 voltage option. Not available with motion sensor (PIR or PIRFCV).
- Reference Motion Sensor table on page 3.
- Same as old ELWC. Cold weather (20C) rated. Not compatible with condensation entry applications. Not available with BBW mounting option. Not available with fusing. Not available with 347 or 480 voltage options. Emergency components located in back box housing. Emergency mode (ES) files located on product page at www.lithonia.com.
- Not available with SPD.
- Not available with E20WC.
- Also available with a separate accessory. See Accessories information.
- Not available with E20WC.

Designer
DB/KB
Date
01/31/2024
Scale
Not to Scale
Drawing No.
#24-25148-V1
1 of 1



May 13, 2024

Planning Commission
Genoa Township
2911 Dorr Road
Brighton, Michigan 48116

A request was made for a rezoning from OSD to NSD to allow for a laundromat. Planning Consultant and Township Staff feel that an amendment to the Zoning Ordinance to allow laundromats as a special use meets the purpose of the OSD Zoning District.

Attention:	Amy Ruthig, Planning Director
Subject:	Proposed rezoning from OSD to NSD (Review #1)
Location:	8020 West Grand River Avenue – west side of Grand River, north of Herbst Road
Zoning:	OSD Office Service District

Dear Commissioners:

At the Township’s request, we have reviewed the application and revised submittal materials proposing rezoning of a single parcel from OSD Office Service District to NSD Neighborhood Service District.

The stated intent of the proposed rezoning is to accommodate re-use of the existing multi-tenant buildings for a laundromat and tanning salon, amongst others.

This proposal has been reviewed in accordance with the applicable provisions of the Genoa Township Zoning Ordinance.

A. SUMMARY

1. The applicant must provide the legal description of the subject site and a conceptual plan, per Section 22.02.02.
2. NSD zoning is generally consistent with the rezoning criteria of Section 22.04.
3. Since the zoning designation intended for the Mixed Use – East Grand River future land use category has not been created, the Commission may find that NSD is a reasonable option at this time.
4. The request is anticipated to be compatible with environmental conditions and the surrounding area.
5. The host of uses permitted in NSD are generally compatible with existing and planned uses in the surrounding area, especially along Grand River.
6. Consideration must be given to any technical comments provided by the Township Engineer, Utilities Director and/or Fire Authority with respect to compatibility/capacity of infrastructure and services.
7. Approval will result in an isolated parcel of NSD amongst several OSD properties. We suggest that the remainder of the OSD land in this area be evaluated if the Township is amenable to this rezoning.
8. If the request is being made only so a laundromat can be pursued, an amendment to the zoning text in lieu of rezoning is worth a discussion.

B. PROCESS

As outlined in Article 22 of the Township Zoning Ordinance, the process to amend the Official Zoning Map is as follows:

1. The Township Planning Commission holds a public hearing on the rezoning and makes its recommendation to the Township Board;
2. The Livingston County Planning Commission reviews the request and puts forth its recommendation; and
3. The Township Board considers the recommendations and takes action to grant or reject the rezoning request.

It is important to note that Township action on a request for conventional rezoning, which this is, cannot include conditions per the Michigan Zoning Enabling Act.

C. AREA OVERVIEW

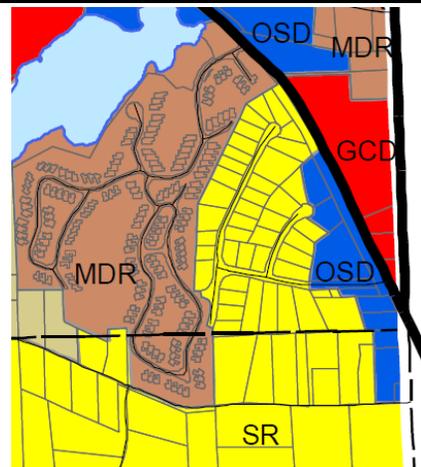
The site is located on the west side of Grand River Avenue, north of Herbst Road.

Existing uses, current zoning, and planned uses in the subject area are as follows:

Existing Land Use	
Site	Commercial/Office
North	Commercial/Office
East	Commercial/Office (Charter Township of Brighton)
South	Commercial/Office
West	Single Family Residential



Zoning	
Site	OSD
North	OSD
East	B-2 (Charter Township of Brighton)
South	OSD
West	SR



Master Plan	
Site	Mixed Use – East Grand River
North	Mixed Use - East Grand River
East	General Business (Charter Township of Brighton)
South	Mixed Use – East Grand River
West	Low Density Residential



D. SUBMITTAL REQUIREMENTS

Section 22.02.02 identifies the required submittal materials for rezoning consideration. The submittal does not include the legal description of the subject property or a conceptual plan. These items must be provided.

E. REZONING REVIEW

- 1. Consistency with the goals, policies and future land use map of the Genoa Township Master Plan, including any subarea or corridor studies. If conditions have changed since the Master Plan was adopted, the consistency with recent development trends in the area.***

As depicted above, the Future Land Use Map identifies the subject site as Mixed Use – East Grand River. Per the Zoning Plan, this future land use classification equates to either the Town Center Overlay District (TCOD) or a new zoning category that has not yet been created.

From a use perspective, NSD zoning relates reasonably to the TCOD; however, it does not entail the site design requirements of the Overlay District.

Since a new district has yet to be created covering the mixed use aspect, NSD seems to relate reasonably, as it will not allow some of the more intensive uses of GCD or RCD zoning. This is of particular importance given the site's proximity to residential.

Provided the Commission agrees with this assessment, they may find the proposal to be consistent with the Master Plan and Future Land Use Map.

- 2. Compatibility of the site's physical, geological, hydrological and other environmental features with the host of uses permitted in the proposed zoning district.***

The site was previously developed with two existing buildings and a paved parking lot.

Based on the Impact Assessment and the fact that the site was previously developed, there do not appear to be any environmental conditions that will be impacted by the proposed change from OSD to NSD zoning.

With that being said, the Commission should consider any technical comments provided by the Township Engineer under this criterion.

- 3. The ability of the site to be reasonably developed with one (1) of the uses permitted under the current zoning.***

Many OSD (current zoning) uses are also allowed in the NSD (proposed zoning). The applicant's stated intent is to develop a laundromat and NSD is the least intensive zoning district allowing this use (as a special land use).

The submittal also references the decline in the demand for office space, which has been seen in the Township (and elsewhere).

- 4. The compatibility of all the potential uses allowed in the proposed zoning district with surrounding uses and zoning in terms of land suitability, impacts on the environment, density, nature of use, traffic impacts, aesthetics, infrastructure and potential influence on property values.***

OSD and NSD allow similar types of uses. Though NSD provides for larger and more intensive uses, many of them would require special land use review and approval (such as the laundromat noted).

The primary concern under this criterion is potential impact upon the residential properties to the west though further development of the site will require landscaping/buffering and other site improvements (lighting standards, waste receptacle placement, use requirements) to help mitigate potential off-site impacts.

5. The capacity of Township infrastructure and services sufficient to accommodate the uses permitted in the requested district without compromising the "health, safety and welfare" of the Township.

Given the nature of the request (rezoning to a relatively low intensity district), the location of the property (along Grand River), and the fact that the site was previously developed, we do not anticipate issues with infrastructure and services.

However, the Commission should consider any technical comments provided by the Township Engineer, Utilities Director, and/or Brighton Area Fire Authority.

6. The apparent demand for the types of uses permitted in the requested zoning district in the Township in relation to the amount of land in the Township currently zoned to accommodate the demand.

As depicted on Page 2, zoning in this area of the Township includes OSD, GCD and SR.

There is a limited amount of land zoned and/or planned for NSD/Neighborhood Commercial. In general, there appears to be more demand for NSD uses than OSD.

However, approval will result in an isolated parcel of NSD amongst several OSD properties. As such, we suggest that the remainder of the OSD land in this area be evaluated, if the Township is amenable to this rezoning.

7. Where a rezoning is reasonable given the above criteria, a determination the requested zoning district is more appropriate than another district or amending the list of permitted or Special Land Uses within a district.

If the request is being made only so a laundromat can be pursued, an amendment to the zoning text is worth a discussion.

8. The request has not previously been submitted within the past one (1) year, unless conditions have changed or new information has been provided.

There has not been a rezoning request for the subject property in the past year.

Should you have any questions concerning this matter, please do not hesitate to contact our office.

Respectfully,
SAFEBUILT STUDIO



Brian V. Borden, AICP
Planning Manager

Table 7.02 Schedule of Commercial Uses						
	OSD	NSD	GCD	RCD	Req.	
Bed and breakfast inns, hotels and motels with no more than 25 rooms not including accessory convention/meeting facilities or restaurants These uses may include the residence for the owner/manger's family	--	P	P	P		
Hotels and motels with more than 25 rooms including accessory convention/meeting facilities and restaurants	--	--	P	P		
Laundromats	S-	S	P	--		
Personal and business service establishments, performing services on the premises, including: dry cleaning drop-off stations (without on site processing), photographic studios, copy centers, mailing centers, data processing centers, dressmakers and tailors, shoe repair shops, tanning salons, beauty parlors, barber shops, and similar establishments	P	P	P	P		
Dry cleaning drop-off stations with drive-through service	S	S	S	S	7.02.02(b)	
Restaurants, taverns, bars, delicatessen, food carryout, coffee shops, and similar establishments serving food or beverages	Standard restaurants and coffee shops, except as provided below	S	P	P	P	
	Restaurants and bars serving alcoholic beverages	S	S	P	P	
	Bars providing dancing and live music	--	--	P	P	
	Restaurants with open front windows	--	S	S	S	7.02.02(i)
	Restaurants with outdoor seating	--	P	P	P	7.02.02(i)
	Drive-through restaurants	--	--	--	S	7.02.02(j)
	Drive- in restaurants	--	--	S	S	7.02.02(j)
	Carry-out restaurants	--	P	P	P	
	Coffee Shop with drive-through	--	--	S	S	7.02.02(j)
	Brewpub	--	--	P	P	
Micro-brewery, small distillery and small winery	--	--	S	S	7.02.02(y)	
Studios of photographers and artists	P	P	P	P		
Tattoo parlors	--	--	P	P		
Tool and equipment rental, excluding vehicles	--	--	P	P		
Kennel, commercial			S	S	7.02.02(h)	
Pet day care center			S	S	7.02.02 (w)	
Climate-controlled indoor commercial storage	--	--	S	S	7.02.02(z)	
Auto Service Uses						
Minor auto repair establishment	--	--	S	S	7.02.02(k)	
Auto/gasoline service station	--	--	--	S	7.02.02(k)	
Automobile wash, automatic or self serve	--	--	S	S	7.02.02(l)	
Leasing and rental of automobiles, trucks and trailers	--	--	S	--		

**GENOA CHARTER TOWNSHIP
PLANNING COMMISSION
PUBLIC HEARING
May 13, 2024**

MINUTES

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:33 p.m. Present were Chris Grajek, Marianne McCreary, Greg Rassel, and Tim Chouinard. Absent were Jeff Dhaenens, Eric Rauch, and Glynis McBain. Also present were Planning Director Amy Ruthig, Brian Borden of Safebuilt, and John Barber of Tetra Tech.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

Moved by Commissioner McCreary, seconded by Commissioner Rassel, to approve the agenda as presented. **The motion carried unanimously.**

DECLARATION OF CONFLICT OF INTEREST:

None

CALL TO THE PUBLIC:

The call to the public was made at 6:31 pm.

Ms. Melanie Johnson of 3990 Chilson Road has read the zoning ordinance and the master plan regarding the Latson Road interchange and is trying to learn how this was put in place. There was no community engagement for that project. She is confused by the descriptions.

Mr. Andrew Kimbel lives on three acres on Crooked Lake Road. He is opposed to the Latson Road PUD. He moved here in 2021 to escape development. They like the back roads and nature. He requested the Planning Commission not approve the proposed amendment and keep the rural area rural.

The call to the public was closed at 6:35 pm.

OLD BUSINESS:

OPEN PUBLIC HEARING #1... (STAFF REQUESTS ITEM TO BE POSTPONED)

Consideration of a special use application, environmental impact assessment and site plan to allow for commercial outdoor recreational events at the existing Mt. Brighton facility. The property is located at 4141 Bauer Road on the south-east corner of Bauer and Challis Roads. The request is petitioned by VR US Holdings, Inc.

A. Recommendation of Special Use Application

B. Recommendation of Environmental Impact Assessment (6-28-23)

C. Recommendation of Sketch Plan (7-27-23)

The call to the public was made at 6:36 pm with no response.

Moved by Commissioner Chouinard, supported by Commissioner Rassel, to postpone the request for a special use application, environmental impact assessment and site plan to allow for commercial outdoor recreational events at the existing Mt. Brighton facility until the June 10, 2024 Planning Commission meeting. **The motion carried unanimously.**

OPEN PUBLIC HEARING #2...Consideration of a special land use application, environmental impact assessment and site plan to allow for temporary boat sales and service at an existing commercial site located at 5776 Grand River Avenue, south side of Grand River Avenue, west of Dorr Road. The request is petitioned by Wonderland Marine West.

A. Recommendation of Special Use Application

B. Recommendation of Environmental Impact Assessment (1-16-24)

C. Recommendation of Site Plan (3-25-24)

Mr. Wayne Perry with Desine, Inc. and Mr. Gary Mitter, Sr., the applicant, were present. Mr. Perry stated the applicant would like to use 5776 Grand River Avenue as Wonderland Marine's showroom while they are working on the remodeling of their existing store. They have addressed the consultants' concerns.

Mr. Borden reviewed his letter dated April 5, 2024

1. Special Land Uses (Section 19.03):

a. The special land use standards of Section 19.03 are generally met.

b. In order to make favorable findings related to compatibility and impacts, the use requirements of Section 7.02.02(c) must be met to the Commission's satisfaction.

c. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.

2. Use Requirements (Section 7.02.02(c)):

a. The majority of the use conditions are met; however, the buffer zone/screen fence requirement for outdoor storage is not fully met at the rear of the site. They are proposing a six-foot decorative aluminum fence and 30-inch tall shrubs. The Planning Commission can approve this modification.

Mr. Perry stated that this area abuts the Dumpster, trailer storage, and loading zone for Crystal Gardens. There was a discussion regarding the location, style, material and color of the proposed fence and the proposed shrubs.

3. Site Plan Review:

a. Details must be provided for the proposed wall mounted light fixtures.

b. The Commission may wish to require new/modified light fixtures that meet current standards.

c. He encourages removal of the nonconforming pole sign.

Mr. Mitter stated they have replaced the light fixtures on the building. Mr. Borden recommends that Staff review and approve the new fixtures.

Mr. Perry stated the existing Wonderland Marine site, as well as this site, has a lot of underground utilities. A monument sign is not able to be put in because it will conflict with the water and sewer utilities.

Mr. Barber stated the applicant has addressed all of his comments from his letter dated May 6, 2024.

Commissioner McCreary asked for confirmation as to when the access drive will be removed. Mr. Perry stated that if either of the parcels are sold, it will be removed.

The call to the public was made at 6:53 pm with no response.

Moved by Commissioner McCreary, supported by Commissioner Rassel, to recommend to the Township Board approval of the Special Use Application to allow for temporary boat sales and service at an existing commercial site located at 5776 Grand River Avenue, south side of Grand River Avenue, west of Dorr Road as this Commission finds it meets the requirements of Sections 19.03 and Section 7.02.02(c) of the zoning ordinance to the commissions' satisfaction. It is also consistent with the uses on Grand River, inclusive of boat sales.

The motion carried unanimously.

Moved by Commissioner McCreary, supported by Commissioner Chouinard, to recommend to the Township Board approval of the Environmental Impact Assessment dated January 16, 2024 to allow for temporary boat sales and service at an existing commercial site located at 5776 Grand River Avenue, south side of Grand River Avenue, west of Dorr Road. **The motion carried unanimously.**

Moved by Commissioner McCreary, supported by Commissioner Rassel, to recommend to the Township Board approval of the Sketch Plan dated July 27, 2023 to allow for temporary boat sales and service at an existing commercial site located at 5776 Grand River Avenue, south side of Grand River Avenue, west of Dorr Road, with the following conditions:

- Details for the six wall mounted light fixtures that have been changed shall be approved by Staff and meet the current standards.
- The southern boundary of the fence line will be constructed with 30-inch-tall evergreen shrubs from the total east to west, along with a six-foot tall aluminum fence with a green decor color.
- The notations regarding if either property be sold, the temporary access drive to the east shall be removed shall be added to the site plan.

The motion carried unanimously.

NEW BUSINESS:

OPEN PUBLIC HEARING #3... Consideration of an environmental impact assessment and final site plan for a 2-unit nonresidential site condominium with contractor's offices and yards with outdoor storage and accessory fuel storage. The property is located at 2025 Euler Road, east side of Euler Road, north of Grand River Avenue. The request is petitioned by Desine, Inc.

- A. Recommendation of Environmental Impact Assessment (2-20-24)
- B. Recommendation of Final Site Plan (4-22-24)

Mr. Wayne Perry of Desine, Inc. and Mr. John Moretti, the applicant, were present.

Mr. Perry provided a review of the project and site plan. They have made modifications to the plans to address all of the consultants' comments.

Chairman Grajek asked if either of the buildings have the ability to be expanded. Mr. Perry stated, "yes".

Mr. Borden reviewed his letter dated April 30, 2024. He noted that the Planning Commission made a recommendation to approve the preliminary plans, and that was approved by the Township Board.

- 1. The applicant must provide copies of necessary permits from outside agencies.
- 2. The applicant must address comments from the Township Attorney and/or staff on the condominium documents.
- 3. The final condominium plan is generally consistent with the approved preliminary plan, including conditions; however:
 - a. The applicant should be prepared to present building material and color samples. Mr. Perry stated they have provided colored renderings of the buildings, but do not have building samples this evening.
 - b. The building elevations are subject to review and approval by the Planning Commission.
 - c. The applicant must address any comments provided by the Township engineering consultant and Brighton Area Fire Authority.

Mr. Barber stated the applicant has addressed all of his comments from his letter dated May 7, 2024.

Ms. Ruthig stated she received the master deed and by-laws today and they are being reviewed by the township attorney.

Commissioner McCreary stated the business hours are not listed in the document. After a discussion, it was decided that the business hours shall be stated to comply with the township ordinance.

Commissioner McCreary stated that the by-laws still state that one of the uses is a medical building. Ms. Reister, the applicant's attorney, stated that a red-lined copy of the by-laws were provided to the township attorney and that was removed. Ms. Ruthig stated the one in the packet, which is from April, still says "medical". The copy received today also has it. Ms. Reister will provide a revised copy.

Commissioner Chouinard questioned the fuel storage location. Mr. Perry stated that has been removed from the plans. It was put on the agenda in error.

It was noted that the building material samples have not been provided. Commissioner McCreary would like to see the samples. Ms. Ruthig stated they can be submitted prior to the submission to the Township Board.

The call to the public was made at 7:22 pm with no response.

Moved by Commissioner McCreary, supported by Commissioner Rassel, to recommend to the Township Board approval of the Environmental Impact Assessment dated February 20, 2024 for a two-unit nonresidential site condominium with contractor's offices and yards with outdoor storage at 2025 Euler Road, east side of Euler Road, north of Grand River Avenue. **The motion carried unanimously.**

Moved by Commissioner McCreary, supported by Commissioner Rassel, to recommend to the Township Board approval of the Final Site Plan dated April 22, 2024 for a two-unit nonresidential site condominium with contractor's offices and yards with outdoor storage at 2025 Euler Road, east side of Euler Road, north of Grand River Avenue, with the following conditions:

- The applicant shall be prepared to present building materials and samples subject to approval of township staff.
- The applicant must address any comments from the township engineer, planner and Brighton Area Fire Authority Fire Marshal.
- The following changes shall be made to the condominium by-laws:
 - Page 83, removing the word "Medical" from "medical and business".
 - Page 53 of the Impact Assessment shall state that business hours will comply with township ordinances for the specified zoning use.
- No fuel storage has been requested and has been removed from the request.

The motion carried unanimously.

OPEN PUBLIC HEARING #4...Consideration of a site plan application and environmental impact assessment for a proposed building and parking lot expansion for the existing Maxey Ford automobile dealership. The property is located at 2798 E. Grand River Avenue, south side of Grand River Avenue and east of Chilson Road. The request is petitioned by Michael Maxey.

A. Recommendation of Environmental Impact Assessment (3-19-24)

B. Recommendation of Site Plan (3-19-24)

Mr. Karl Vollmar, the architect; Hugo Ceron from Livingston Engineering; Mike Maxey, the property owner; and Neil with Rand Construction were present.

Mr. Volmer provided a review of the project, which is an addition on the south side of the existing building to add four service bays and the expansion of the parking lot.

Mr. Borden reviewed his letter dated May 7, 2024.

1. The proposed expansion areas are mostly compliant with the use requirements for auto sales; however, the following requirements are not met and are existing conditions. /warrant additional discussion:
 - Existing vehicle storage/display along Grand River occupies the area required for a 20-foot landscaped greenbelt.
 - Improvements may be required if there are current issues with off-site vehicle un/loading.
 - The proposed vehicle storage area does not fully provide a buffer zone B.
2. The amount of metal siding on the building exceeds that allowed by Section 12.01; however, it matches the existing building.
3. Building design, including materials and color, are subject to review and approval by the Planning Commission.
4. In his opinion, the Commission may allow single striping for the spaces in the proposed expansion area, which is against the looped striping requirement in the ordinance since it is intended for vehicle storage and not customer or employee parking.
5. He suggests the new pole mounted light fixtures be reduced in height to 20 feet, since the property abuts residential uses to the south. Ms. Ruthig stated that Mr. Maxey has worked with the residents regarding the lighting in the past. Mr. Maxey stated they would like the new poles to match the existing poles. The lights further back, closer to the residents, have shields, but if there were any concerns from the residents, he would install shields on the new ones as well.
6. The Commission may modify landscaping/screening requirements, per Section 12.02.13.
7. The applicant must replace any plantings on the approved landscape plan that have been removed or are in poor condition. Mr. Maxey stated he has not removed any landscaping from the previous approval.
8. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority.

Mr. Barber reviewed his letter dated May 6, 2024.

1. The comments regarding the parking layout from his April 16, 2024 have been addressed.
2. The petitioner has indicated that the detention basin in the southwest corner of the site is under Livingston County Drain Commissioner jurisdiction and the construction plans will be submitted for their review and approval.
3. The petitioner has indicated that the existing valves to isolate the water main during construction will be shown on the construction drawings.

4. Connection of the new trench drains in the building expansion to the sanitary sewer will be shown on the construction drawings.
5. Storm sewer calculations will be provided in the construction drawings indicating the existing 30-inch storm sewer has adequate capacity for receiving runoff from the new parking lot.

The Fire Marshal's letter dated May 7 states that his concerns have been met or will be addressed during construction. He has a concern with the flow and circulation through the site. Mr. Maxey stated he has spoken to Mr. Boisvert regarding this. There will be some additional signage and pavement markings installed to alleviate his concerns. He should be sending over an updated letter.

Commissioner Chouinard would like to be consistent with parking lot striping. He noted that Brighton Motors was recently required to put in looped spaces.

The call to the public was made at 7:48 pm with no response.

Moved by Commissioner Rassel, supported by Commissioner Chouinard, to recommend to the Township Board approval of the Environmental Impact Assessment dated March 19, 2024 for a proposed building and parking lot expansion for the existing Maxey Ford automobile dealership at 2798 E. Grand River Avenue, south side of Grand River Avenue and east of Chilson Road.
The motion carried unanimously.

Moved by Commissioner Rassel, supported by Commissioner McCreary, to approve the Site Plan dated March 19, 2024 for a proposed building and parking lot expansion for the existing Maxey Ford automobile dealership at 2798 E. Grand River Avenue, south side of Grand River Avenue and east of Chilson Road, with the following conditions:

- Review of the current landscape to ensure it is consistent with the previously approved site plan.
- There shall be looped striping for the new parking spaces.
- The application shall comply with all of the Brighton Area Fire Authority Fire Marshal's requirements.

The motion carried unanimously.

ADMINISTRATIVE BUSINESS:

Staff Report

Ms. Ruthig stated staff decided to remove Mt. Brighton's item this evening because there were inconsistencies. They will be on the June meeting agenda.

There is a rezoning request for 8020 Grand River to allow for a laundry mat. The zoning is for office and service, and a laundry mat is a service, so they are proposing to amend the ordinance text adding this as a special use in this district instead of having the petitioner request a rezoning.

Genoa Township Planning Commission
May 13, 2024
Unapproved Minutes

There has not been a submittal provided for the Latson Road PUD.

Commissioner Rassel will not be at the June meeting.

Approval of the April 8, 2024 Planning Commission meeting minutes

One change was noted.

Moved by Commissioner McCreary, seconded by Commissioner Chouinard, to approve the minutes of the April 8, 2024 Planning Commission Meeting as amended. **The motion carried unanimously.**

Member Discussion

Chairman Grajek encouraged the Commissioners to attend the upcoming training being held in Grand Rapids.

Adjournment

Moved by Commissioner McCreary, seconded by Commissioner Rassel, to adjourn the meeting at 8:06 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary