

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
DECEMBER 12, 2022  
6:30 P.M.  
AGENDA**

**CALL TO ORDER:**

**PLEDGE OF ALLEGIANCE:**

**APPROVAL OF AGENDA:**

**DECLARATION OF CONFLICT OF INTEREST:**

**CALL TO THE PUBLIC: (Public comment will be limited to two minutes per person) \*:**

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

**OPEN PUBLIC HEARING # 1...**Consideration of special land use application, environmental impact assessment and site plan for the construction of an 11,990 sq. ft. boat showroom and sales office building replacing the existing building for Wonderland Marine West located at 5796 Grand River Avenue. The request is petitioned by Mitts, LLC.

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (dated 11-1-22)
- C. Recommendation of Site Plan (dated 11-21-22)

**OPEN PUBLIC HEARING #2...**Continuation of public hearing for the proposed Genoa Charter Township Master Plan.

**ADMINISTRATIVE BUSINESS:**

- *Staff Report*
- *Approval of November 14, 2022 Planning Commission meeting minutes*
- *Member discussion*

\*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.



**GENOA CHARTER TOWNSHIP**  
**Application for Site Plan Review**

**TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:**

APPLICANT NAME & ADDRESS: MITTS, LLC  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: MITTS, LLC

SITE ADDRESS: 5796 E. Grand River, Howell, MI. PARCEL #(s): 4711-10-400-019

APPLICANT PHONE: (517) 548-5122 OWNER PHONE: (517) 548-5122

OWNER EMAIL: pmitter@WonderlandMarineWest.com

LOCATION AND BRIEF DESCRIPTION OF SITE: South side of Grand River, West of Dorr Road. Existing Wonderland Marine boat sales showroom and offices.

BRIEF STATEMENT OF PROPOSED USE: Boat showroom and sales offices

THE FOLLOWING BUILDINGS ARE PROPOSED: Construct a new showroom and sales offices to replace the existing showroom and sales offices.

**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: Gary Mitter 

ADDRESS: 5796 E. Grand River, Howell, MI.

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

1.) Wayne M. Perry, P.E. of Desine Inc. at Waynep@DesineInc.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: *Gary E. Mitter* DATE: 10-27-22  
PRINT NAME: Gary Mitter PHONE: 517 548-5122  
ADDRESS: 5796 E. Grand River, Howell, MI. 48843



# 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: MITTS, LLC, 5796 E. Grand River, Howell, MI 48843

*Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.*

APPLICANT PHONE: ( 517) 548-5122 EMAIL: pmitter@WonderlandMarineWest.com

OWNER NAME & ADDRESS: MITTS, LLC, 5796 E. Grand River, Howell, MI 48843

SITE ADDRESS: 5796 E. Grand River, Howell, MI PARCEL #(s): 4711-10-400-019

OWNER PHONE: ( 517) 548-5122 EMAIL: pmitter@WonderlandMarineWest.com

**Location and brief description of site and surroundings:**

South side of Grand River, West of Dorr Road. Existing Wonderland Marine boat sales and service  
\_\_\_\_\_  
\_\_\_\_\_

**Proposed Use:**

New and used boat sales and service showroom and sales offices  
\_\_\_\_\_

**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.

Proposed use of the site for new and used boat sales and service will remain the same as the current use of the site. The use as a retail business serving the requirements of the overall community. Future land use of the property, and the adjacent parcels, is anticipated to be Commercial.  
\_\_\_\_\_

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 proposed showroom and sales office building will replace the existing showroom and sales office building. The new building will be relocated to conform to the required front setback, and will be designed to conform to current architectural standards of the Township. The proposed building will provide a significant improvement to the area.  
\_\_\_\_\_

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?

The proposed expanded showroom and sales offices will allow for the display and sales of a wider variety of boats, and larger size boats. The existing public facilities and services currently servicing the site are adequate to accommodate the proposed larger showroom and sales office building.  
\_\_\_\_\_



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 use as a showroom and sales offices for new and used boats is the same as the existing use. The activities are not detrimental to the environment, public health, safety or welfare.

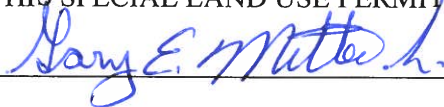
e. Does the use have specific criteria as listed in the Zoning Ordinance (sections 3.03.02, 7.02.02, & 8.02.02)? If so, describe how the criteria are met.

7.02.02(c) - Site is the location of the existing showroom and sales offices for new and used boats, outdoor storage areas on the parcel are paved and not within proposed greenbelt areas, proposed building is 11,990 sq.ft. in area, adequate truck maneuvering area is provided, and the parcel does not abut residentially zoned property.

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 Gary Mitter, MITTS, LLC STATES THAT THEY ARE THE FREE OWNER OF THE PROPERTY OF PROPERTIES DESCRIBED ABOVE AND MAKES APPLICATION FOR THIS SPECIAL LAND USE PERMIT.

BY: Gary Mitter



ADDRESS: 5796 E. Grand River, Howell, MI 48843

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

Wayne M. Perry, P.E. of Desine Inc. at Waynep@Desineinc.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: Gary E. Mitter DATE: 10-27-22

PRINT NAME: Gary Mitter PHONE: 517-548-5122



**NOTICE OF PUBLIC HEARING – DECEMBER 12, 2022  
(SPECIAL USE)**

November 22, 2022

2911 Dorr Road  
Brighton, MI 48116  
810.227.5225  
810.227.3420 fax  
genoa.org

To Whom It May Concern:

Please be advised that the Planning Commission of Genoa Charter Township will conduct a public hearing on **Monday, December 12, 2022 commencing at 6:30 p.m.** As required by state law, you are receiving this notice because you have been identified as an owner or occupant of real property within 300 feet of the subject parcels.

The property in question is located on Lawson Road, north of Grand River Avenue. **The applicant is requesting a special use permit for the construction of a new boat showroom and sales office building replacing the existing building for Wonderland Marine West located at 5796 Grand River Avenue. The request is petitioned by Mitts, LLC.**

You are invited to attend this hearing. Members of the public will be able to speak during the public hearing portions of the meeting. If, prior to the meeting, members of the public have certain questions or wish to provide input on any business that will be addressed at the meeting then such persons may contact the Planning Commissioners through email to [amy@genoa.org](mailto:amy@genoa.org), or by mail at 2911 Dorr Road, Brighton, Michigan 48116.

Genoa Charter Township will provide necessary reasonable auxiliary aids and services to individuals with disabilities at the meeting/hearing upon seven (7) days' notice to the Township. Individuals with disabilities requiring auxiliary aids or services should contact the Township in writing or by calling at (810) 227-5225.

Sincerely,

Amy Ruthig,  
Planning Director

**SUPERVISOR**

Bill Rogers

**CLERK**

Paulette A. Skolarus

**TREASURER**

Robin L. Hunt

**TRUSTEES**

Jean W. Ledford

H. James Mortensen

Terry Croft

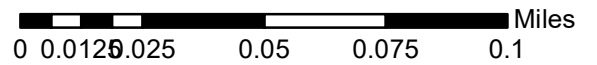
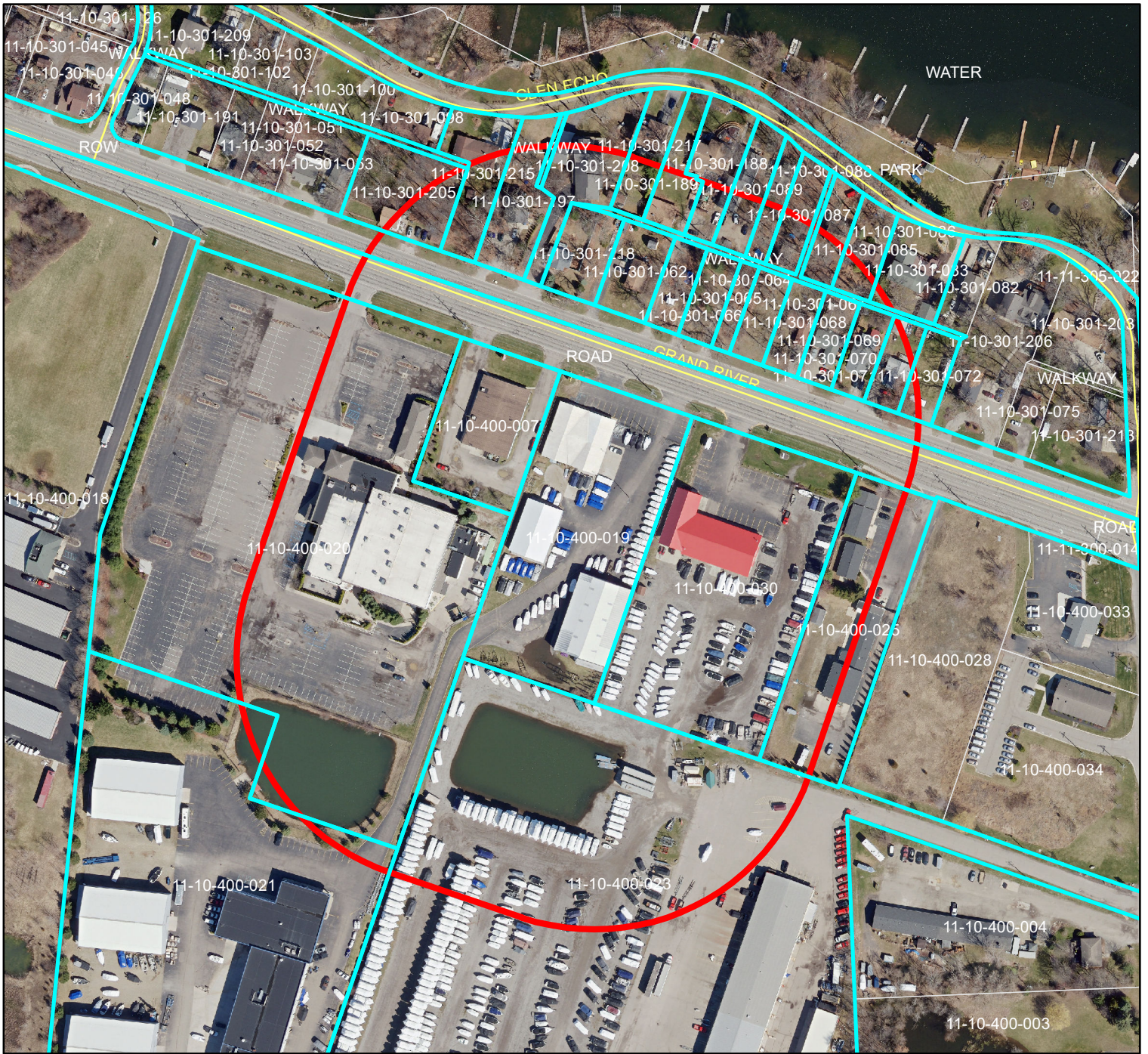
Diana Lowe

**MANAGER**

Kelly VanMarter



# 300 Foot Buffer for Noticing



Special Use: MITTS, LLC

Address: 5796 E. Grand River Ave.

Parcel: 4711-10-400-019

Meeting Date: December 13, 2022



November 18, 2022





December 6, 2022

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Amy Ruthig, Planning Director
<b>Subject:</b>	Wonderland Marine – Special Land Use and Site Plan Review #2
<b>Location:</b>	5796 Grand River Avenue – south side of Grand River, west of Dorr Road
<b>Zoning:</b>	GCD General Commercial District and TCOD Town Center Overlay District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Wonderland Marine for construction of a new boat showroom and sales office building to replace the existing building (plans dated 11/21/22).

**A. Summary**

**1. Special Land Uses (Section 19.03):**

- a. The standards of Section 19.03 are generally met.
- b. In order to make favorable findings related to compatibility and impacts, the conditions of Section 7.02.02(c) need to 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 Conditions (Section 7.02.02(c)):**

- a. The majority of the use conditions are met.
- b. The buffer zone requirements are not fully met for either side or the rear of the site. Under the TCOD regulations, the Commission may waive the side yard requirements; however, the rear yard buffer zone is required.

**3. Site Plan Review:**

- a. The proposed parking does not fully comply with the dimensional requirements of Section 9.04.01.
- b. The proposed building does not fully comply with the architectural requirements of Section 9.05.01. Per Section 9.05.03, the Township may modify these requirements.
- c. Proposed sidewalks, street trees and lighting do not fully comply with the streetscape requirements of Section 9.06.01.
- d. The proposed parking does not fully comply with the parking and loading requirements of Section 9.07.
- e. The site plan does not fully comply with the open space requirements of Section 9.08.

**B. Proposal/Process**

The applicant proposes to replace the existing boat showroom/office sales building with a new 11,990 square foot building.

Section 9.03.01 allows boat and recreational vehicle sales with special land use approval along the Grand River frontage in the TCOD.

Per Section 9.03.02, the use conditions of Section 7.02.02(c) also apply to the request.

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



*Aerial view of site and surroundings (looking south)*

### **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 Town Center, which is planned for “a mixture of uses integrated into a traditional-style development of high density single family homes, attached and detached, along with various commercial uses including retail and office” with the intent of creating “a destination in the Township as an alternative to the consistent strip development that currently exists along Grand River Avenue from Howell to Brighton.”

The Township may view the proposal as an improvement to the site and existing building, while the existing business could be viewed as an attraction to the area.

- 2. Compatibility.** Properties fronting Grand River include a variety of commercial, office, and service uses (including boat sales). The use of the property will not change, but the increase in building size necessitates re-review of the special land use.

Generally speaking, since the use is not changing, it is expected to remain compatible with surrounding area. With that being said, the use conditions of Section 7.02.02(c) are intended to help mitigate the potential impacts of such uses.

Provided these conditions are met to the Commission’s satisfaction, the proposal is generally expected to be compatible with the surrounding area.

- 3. Public Facilities and Services.** Given that the site fronts Grand River and has already been developed, 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 comments above, provided the use conditions are met, surrounding properties are not expected to be adversely impacted by the proposal.

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

**D. Use Conditions**

Boat sales are subject to the use conditions 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 notes that the business includes the sale of new and used boats.

- 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 project area includes new pavement, while the remainder of the site already contains paved surfaces.

- 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 project includes a display area in the front yard towards the easterly side of the site; however, it is not located within the required front yard greenbelt area.

- 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 proposed building contains an area of 11,990 square feet.

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

The submittal states that sufficient maneuvering space is provided on-site.

- 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.**

The site is not adjacent to a residential district. As such a buffer zone B is required along both sides and the rear of the site; however, none of these areas contain a full buffer zone B.

The west side includes existing fencing ranging in height from 4' to 8' and a bioswale is proposed along the east side. Neither the site plan nor the landscape plan depicts the rear of the property.

Additionally, Section 9.04.06 notes that buffer zones are not required within the TCOD, except at the outer perimeter of the District.

As such, the Commission may waive the side yard buffer zone requirements; however, the rear yard buffer zone is required under both the GCD and TCOD.

## **E. Site Plan Review**

**1. Dimensional Requirements.** The proposal has been reviewed for compliance with the applicable dimensional standards of the TCOD (Section 9.04.01), as follows:

- Front yard setback and building ratio – the building setback of 70.8’ is within the required build-to zone (0’ to 75’) and the building width ratio of 54% exceeds the minimum frontage ratio (40%)
- Side yard setbacks – 15’ (W) and 76.2’ (E) side yard setbacks are proposed, both of which exceed the 0’ minimum
- Rear yard setback – a note on Sheet SP identifies a 255.8’ rear yard setback, which exceeds the minimum of 25’ (though the rear of the property is not depicted)
- Building height – the proposed height of 27.5’ is within the height range required (20’ to 45’); the building also meets the first floor minimum height of 12’
- Accessory buildings – the site plan identifies 2 existing accessory buildings, both of which are located in the rear yard, per TCOD standards
- Parking lot location:
  - a. Parking is permitted in the side or rear yards; the proposal entails front and side yard parking
  - b. Parking in the side yard shall be set back at least a distance equal to the building; the side yard parking provides a 51’ setback from the easterly lot line, while the building provides side setbacks of 15’ and 76.2’
  - c. A 3’ screenwall shall be provided between the parking and public sidewalk; the plan does not include a screenwall
  - d. Parking areas shall not occupy more than 50% of the lot frontage; the proposal entails a 57% ratio
  - e. A single row of parking is permitted in the front yard along Grand River only with a parallel service drive; the plan includes a row of parking in the front yard without a service drive

**2. Building.** As noted in the following bullet points, the proposal has been reviewed for compliance with the applicable architectural standards of the TCOD (Section 9.05.01).

- Building types – non-residential buildings shall be designed with traditional styles of architecture, similar to that found in downtown Brighton and Howell. In our opinion, the proposed building does not bear any resemblance to the traditional architecture found in downtown Brighton or Howell. The project architect may wish to provide the Township with more information to help determine compliance.
- Front façade – entrances are to be located on the street frontage, and include design details; buildings longer than 100’ shall provide architectural variation to break the building up. The entrance on the front of the building is covered with a canopy; however, there are no architectural variations to speak of for the 110’ wide building. Additionally, there is an overhead door incorporated into the front façade, which is not typically permitted anywhere in the Township.
- Building materials – 75% of facades facing the street or parking areas are to be brick or stone. The front (north) and east (side towards parking lot) facades are predominantly brick. The revised submittal includes calculations demonstrating compliance with this standard.
- Windows and doors – at least 70% of the storefront is to be clear glass and doorway; the front entranceway shall be inset at least 3’ from the building wall. The 70% ratio appears to be met, though the entrance is not inset from the building wall.
- Roof design – Planning Commission may permit a pitched (gable) roof; eaves shall not be lower than 20’. The gable roof requires Commission approval, though the eave line complies with the 20’ minimum requirement.
- Section 9.05.03 allows the Township to grant modifications to the architectural requirements.

**3. Streetscape.** The proposal has been reviewed for compliance with the streetscape standards of the TCOD (Section 9.06.01), as follows:

- Sidewalks – a minimum 8’ wide concrete sidewalk is required; the proposal includes a 5’ wide sidewalk
- Street trees – the requirement entails 5 trees within a 20’ wide greenbelt; the proposal does not include any street trees, but does have a 20’ wide greenbelt along the site’s frontage (excluding the 2 drive aisles)
- Street lights – pedestrian scale ornamental street lighting is required along all sidewalks and within parking areas; the lighting plan (Sheet LT) includes only conventional shoebox style fixtures and no photometric readings are provided. Additionally, the wall mounted fixtures are directed outwards instead of downwards, as is required.

**4. Parking and loading.** The proposal has been reviewed for compliance with the applicable parking and loading standards of the TCOD (Section 9.07), as follows:

- Parking requirements – based on the calculations provided by the applicant, the project needs 26 parking spaces (which are provided), though it should be noted that 4 are parallel spaces, which should typically be avoided for off-street commercial parking. Maneuvering to/from these spaces will be tricky and is likely to cause drive confusion and/or turning conflicts.
- Location – parking is to be in the rear yard to the maximum extent practical; the proposal entails front and side yard parking
- Screening and landscaping – where parking is visible from the street, a 3’ brick screenwall shall be provided between the parking lot and sidewalk; no such screenwall is provided

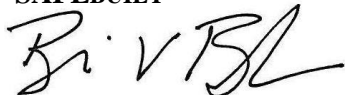
**5. Open space.** The proposal has been reviewed for compliance with the applicable open space standards of the TCOD (Section 9.08), as follows:

- Non-residential open space – at least 15% of the land area shall be set aside for open spaces such as plazas, common greens or parks; the submittal does not identify any open space areas
- Common green focal point – open space needs to include at least one area that provides a focal point for the town center, such as the provision of one or more central squares or common greens; the submittal does not identify a common green focal point
- Public art – art shall be incorporated in the form of sculptures, fountains or murals as part of the open space system, within plazas and along sidewalks at key, highly visible locations; the submittal does not identify any public art

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

Respectfully,

**SAFEBUILT**



Brian V. Borden, AICP  
Michigan Planning Manager





December 7, 2022

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

**Re: Wonderland Marine Showroom  
Site Plan Review No. 2**

Dear Ms. Ruthig:

Tetra Tech conducted a second review of the proposed Wonderland Marine West site plan last dated November 21, 2022. The plans were prepared by Desine, Inc. on behalf of MITTS LLC. The development is located on 2 acres on the south side of Grand River Avenue near Dorr Road. The Petitioner is proposing to remove their existing 6,640 square foot showroom building and replace it with a new 11,990 square foot showroom building. The proposed site work includes repaving the existing parking lot with curb and gutter. We offer the following comments:

**GENERAL**

1. The sidewalk cross section should be updated to show 6 inches of MDOT CLII sand subbase.

**DRAINAGE AND GRADING**

1. The LCDC requires that the “Land Use Summary Table” found in Appendix J of their updated LCDC Procedures and Design Criteria for Stormwater Management Systems be included on the cover sheet of the construction plans.
2. The existing site plan originally showed standing water around the storm catch basin on the south of the site. More information should be provided as to what is causing the on-site flooding, and the site plan should demonstrate how this issue will be addressed. Aerial imagery shows that the area is frequently flooded throughout the year.

We recommend the petitioner address the above comments prior to approval.

Sincerely,

A handwritten signature in blue ink that reads 'Shelby Byrne'.

Shelby Byrne, P.E.  
Project Engineer



# BRIGHTON AREA FIRE AUTHORITY

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

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December 5, 2022

Amy Ruthig  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Wonderland Marine - Boat Showroom & Sales Office  
5796 E. Grand River Avenue  
Genoa Twp., MI

Dear Amy,

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on November 23, 2022 and the drawings are dated November 1, 2022 with a revision date of November 21, 2022. The project is based on a proposed new Type IIB, 11,990 square foot showroom and sales office to replace the existing building. This plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

**The Knox box and Knox Padlock are now shown on the revised site plan submittal. All other previous comments will be addressed on the architectural plan review and are subject to inspection by the fire authority.**

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

**WONDERLAND MARINE WEST  
Genoa Township, Michigan  
Site Plan Application**

**IMPACT ASSESSMENT**

**Owner:**

MITTS, L.L.C.  
5796 East Grand River  
Howell, Michigan 48843

**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 construction of a new showroom and sales office building 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 is an existing parcel containing 2.01 acres of property, bordered on the North by Grand River Avenue, on the East and South by Wilson Marine, with Crystal Gardens banquet center and a multi-tenant commercial building to the West, as shown on Figure 1. Properties North of Grand River Avenue are zoned “Lakeshore Resort Residential” (LRR) district, to the East and West is zoned General Commercial (GCD), and the parcel to the South is zoned Industrial (IND).

The existing site is developed and currently used as a showroom, sales center and for new boat display by Wonderland Marine West. The Wonderland Marine West Site Plan depicts removal and replacement of the existing showroom and sales center, and construction of a new showroom and sales center building. Re-development of the site will required demolition of the existing showroom building and removal of the surrounding pavement and utilities. Proposed improvements to the site will consist of the new 11,990 square foot showroom and sales center, sidewalks, parking, drive aisles, utilities, lighting and landscaping.

**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%-18%. 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.

MIAMI LOAM (MoD): MIAMI LOAMS are typically well drained soils found in till plains and moraines, with soil slopes of 12%-18%. Surface runoff is medium, permeability is moderate and the soil erosion hazard is moderate.

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

The proposed construction and improvements will require filling and grading in the area of the proposed building and new parking area. The proposed elevations and grading of the site mesh with the existing grades at the property lines. The limits of disturbance have been depicted on the grading plan.

Surface drainage characteristics on the property will not be significantly impacted by the proposed construction. Construction of the proposed improvements will increase the permeable area on the property, resulting in a decrease in the surface water runoff generated. The proposed changes and modifications to the surface drainage conditions will not have a negative impact on local aquifer characteristics or groundwater recharge capacity. Surface water runoff from the development will be reduced and no significant impacts to adjacent properties are anticipated from the proposed construction and re-development of the site.

Landscaping is proposed for the re-developed portion of the site to reduce the visual impact of the proposed project. All proposed landscaping areas and plantings have been designed per the requirements of Genoa Township’s current Zoning Ordinance and are intended to improve the aesthetics of the property. Within the developed portion of 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)**

The portion of the site proposed for re-development currently discharges surface water runoff to an existing storm sewer system along Grand River Avenue. Site grading will mesh with existing grades on adjoining properties. No adverse impact to adjacent parcels is anticipated due to the construction and grading 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 a majority of the site during construction. The Contractor shall comply with all regulations including control during and after construction.

Impact on adjoining properties due to the construction 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 the proposed improvements.

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

No adverse impact to adjacent properties is anticipated due to the proposed demolition of the existing building, parking and related site utilities, and construction of the new showroom, parking and improvements.

Ambient noise levels on and around the property are largely generated by vehicular traffic on Grand River Avenue. Daily activities within the proposed buildings are not anticipated to create an increase in the sound level in the area.

All site lighting proposed will be pole mounted fixtures, will be shielded and down directed on the site.

The proposed use of the property does 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.

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 and have an adverse impact on 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 the proposed use 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 as a result of the proposed re-development of the property.

The proposed plan modifications 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.

Delivery services are generally limited to parcel trucks, such as UPS, and similar single axle vehicles. These delivery service providers use available street parking temporarily while dropping off deliveries.

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

The showroom and sales center use within the proposed building 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)**

No change in traffic use to the site is anticipated by the removal and replacement of the existing showroom and sales center building. No adverse impact on pedestrian traffic in the area is anticipated as a result of developing the proposed project.

**J. HISTORIC AND CULTURAL RESOURCES (Sec. 18.07.10)**

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

**K. SPECIAL PROVISIONS**

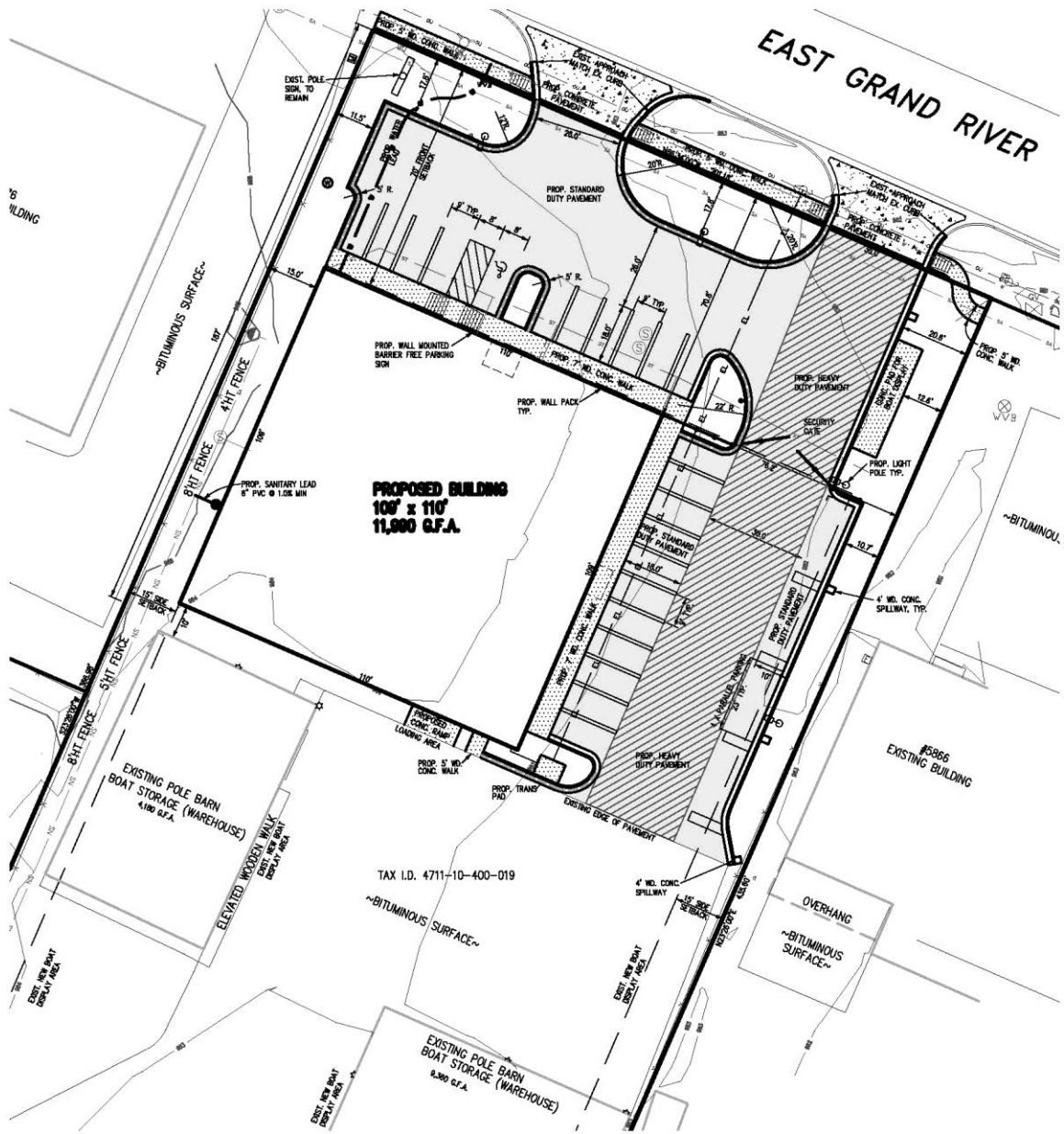
No special provisions or requirements are currently proposed for this facility.

**FIGURE 1**





**FIGURE 2**



**SITE IMPROVEMENTS**  
**NOT TO SCALE**

**FIGURE 3**

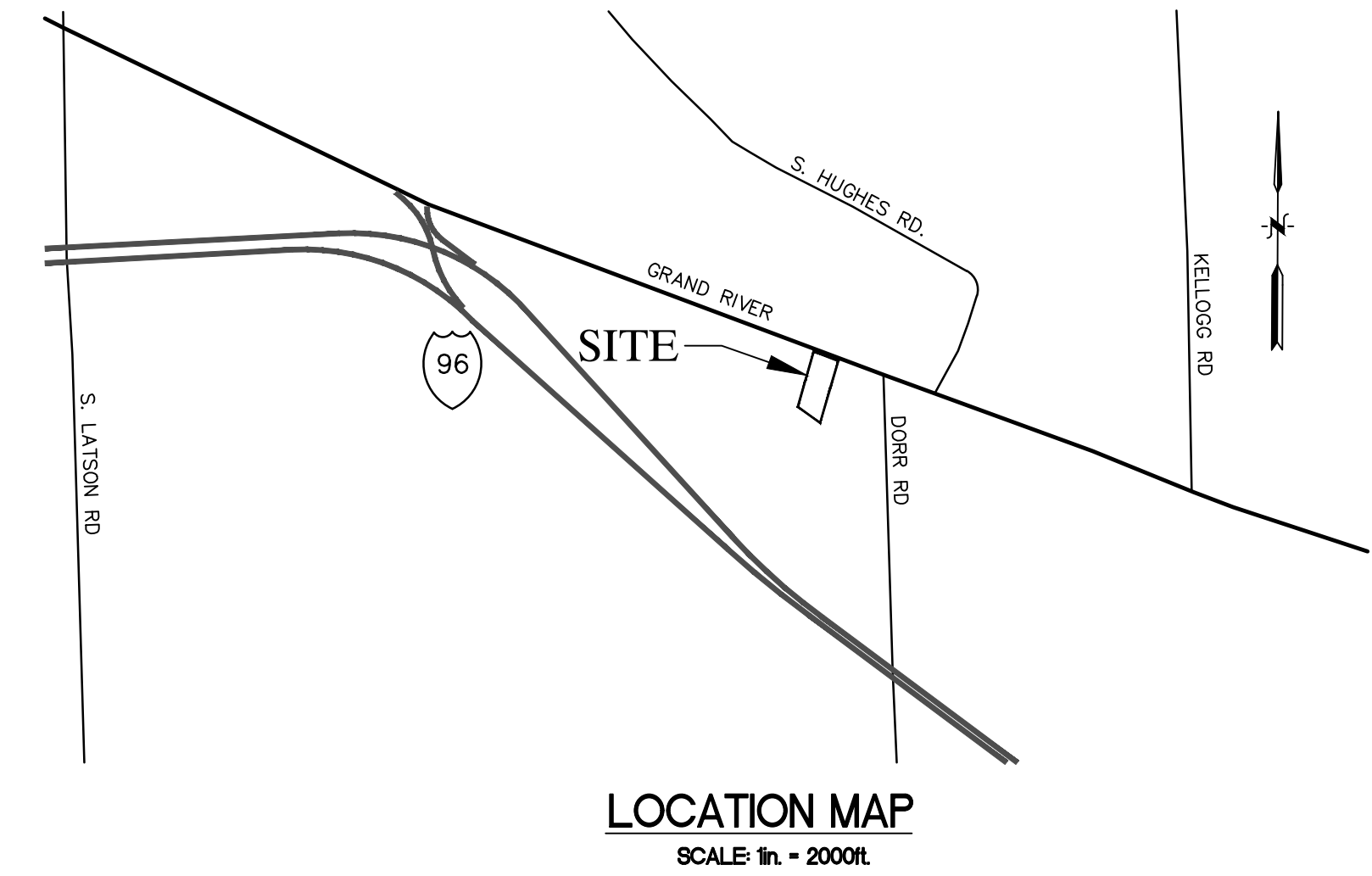


**SOILS MAP**  
**(NOT TO SCALE)**



# PROPOSED SITE PLAN FOR WONDERLAND MARINE WEST NEW SHOWROOM AND SALES OFFICE

**A PART OF THE SE 1/4 OF SECTION 10, T 2 N, R 5 E,  
GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN**



## LEGAL DESCRIPTION

### LEGAL DESCRIPTION

Reference: Tax Roll 2022

Part of the Southeast 1/4 of Section 10, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, more particularly described as follows:

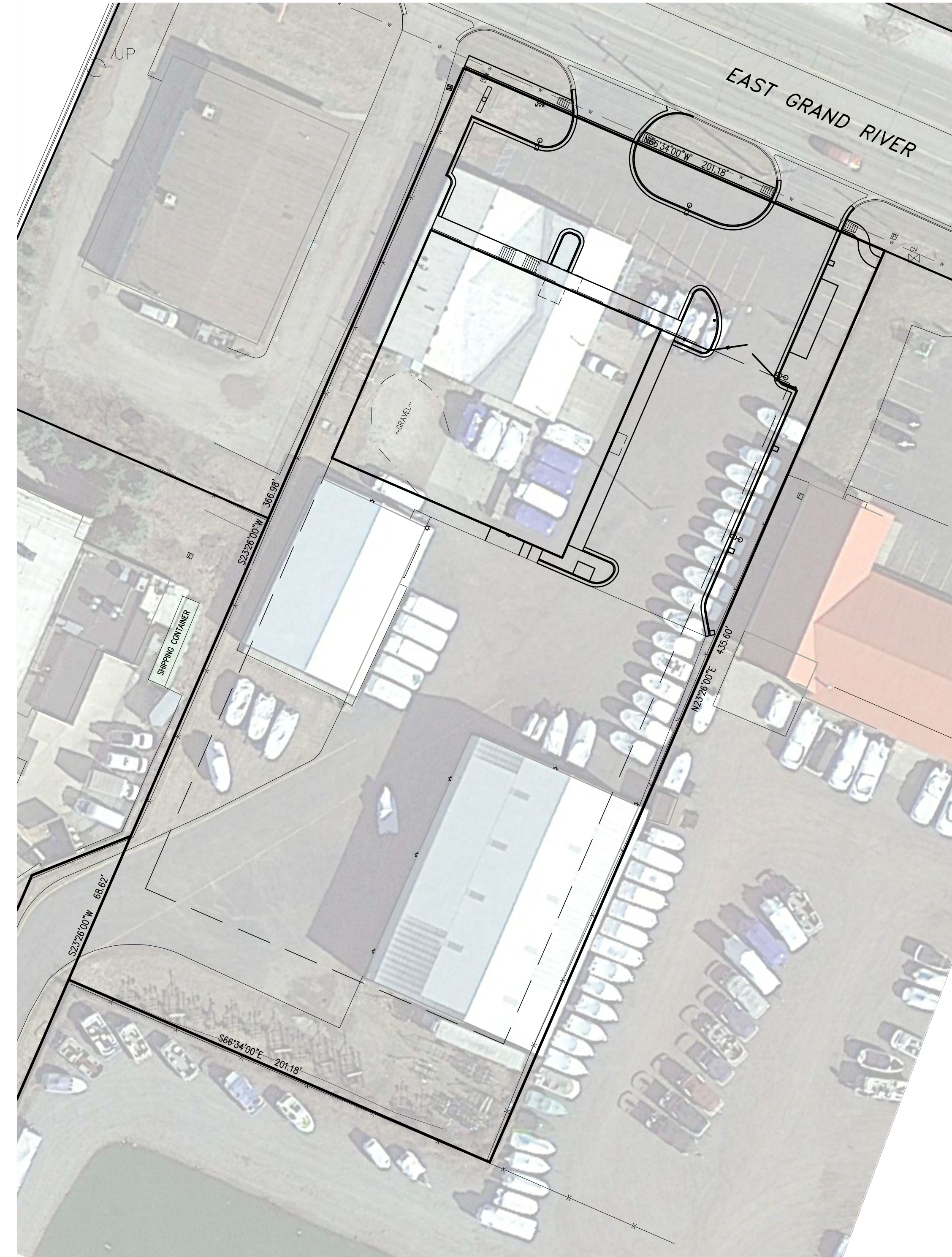
Commencing at the Southeast Corner of said Section 10;  
thence N02°08'E 800 feet;  
thence N66°34'W 679 feet to the PLACE OF BEGINNING;  
thence N66°34'W 200 feet;  
thence S23°26'W 435.6 feet;  
thence S66°34'E 200 feet;  
thence N23°26'E 435.6 feet to the Place of Beginning.

Subject to and together with all easements and restrictions affecting title to the above described premises.

Tax ID No.: 4711-10-400-019

Also known as: 5796 E. Grand River, Howell, Michigan 48843

Refer to the current policy for title insurance for proof of ownership and all encumbrances affecting title to the described above parcel.



## SHEET INDEX

<b>EX</b>	<b>EXISTING CONDITIONS &amp; DEMOLITION PLAN</b>
<b>SP</b>	<b>SITE PLAN</b>
<b>GR</b>	<b>GRADING PLAN</b>
<b>LA1</b>	<b>LANDSCAPE PLAN, NORTH AREA</b>
<b>LA2</b>	<b>LANDSCAPE NOTES &amp; DETAILS</b>
<b>LT</b>	<b>LIGHTING PLAN</b>
<b>SE1</b>	<b>SOIL EROSION CONTROL PLAN</b>
<b>SE2</b>	<b>SOIL EROSION CONTROL DETAILS</b>
<b>DT</b>	<b>GENERAL NOTES &amp; DETAILS</b>

<b>A1</b>	<b>PROPOSED FLOORPLAN</b>
<b>A2</b>	<b>PROPOSED BUILDING ELEVATIONS</b>
<b>A3</b>	<b>PROPOSED BUILDING ELEVATIONS</b>
<b>A4</b>	<b>PROPOSED PERSPECTIVE VIEWS</b>

## BENCHMARKS

DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED MARCH 28, 2022 AT 11:26 AM. PREVIOUS DATUM FROM MARCH 1999 HAS A DIFFERENCE OF -0.76'.

BENCHMARK #201  
ARROW ON HYDRANT, LOCATED ON THE SOUTHERLY SIDE OF GRAND RIVER, NEAR THE NORTHWESTERLY CORNER OF #5796 PARCEL.  
ELEVATION = 986.63 (NAVD 88)

BENCHMARK #202  
SOUTHEASTERLY CORNER OF CONCRETE PAD, LOCATED ON THE EASTERLY SIDE OF #5796 BUILDING.  
ELEVATION = 983.53 (NAVD 88)



**ARCHITECT**  
**LINDHOUT ASSOCIATES**  
10465 CITATION DR.  
BRIGHTON, MICHIGAN 48116  
(810) 227-5668

**OWNER/DEVELOPER**  
**MITTS LLC**  
5796 E. GRAND RIVER  
HOWELL, MICHIGAN 48843  
(517) 548-5122

**CIVIL ENGINEER/LAND SURVEYOR**  
**DESINE INC.**  
2183 PLESS DRIVE  
BRIGHTON, MI. 48114  
(810) 227-9533

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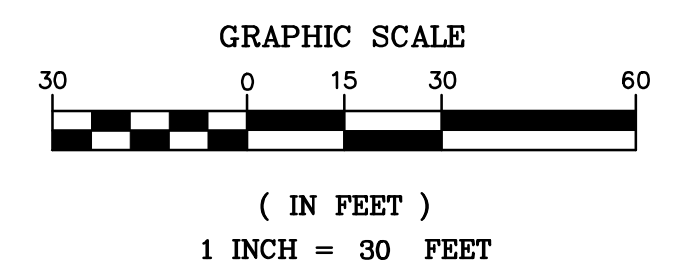
(810) 227-9533  
**CIVIL ENGINEERS  
LAND SURVEYORS**  
2183 PLESS DRIVE  
BRIGHTON, MICHIGAN 48114

REVISED	SCALE: N/A
NOV. 1, 2022	PROJECT No.: 214052
	DWG NAME: 4052 COV
	PRINT: NOV. 21, 2022





- DEMOLITION NOTES:**
- The demolition specifications of the Local Municipality are a part of this work. Refer to the General Notes on the project plans for additional requirements.
  - 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 performing demolition work. 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 contact the appropriate Agencies to coordinate disconnect of the electric, gas, phone, cable and other public utilities as necessary prior to performing demolition work.
  - Contractor shall contact the appropriate Agencies to coordinate removal and/or relocation of any underground and/or overhead public utility lines as necessary prior to performing demolition work.
  - Contractor shall recycle and/or dispose of all demolition material and debris in accordance with the appropriate Local, County, State and Federal regulations.
  - All bituminous and concrete pavement that is to be removed shall be saw cut at the limits of removal to provide for a clean straight edge for future abutment.
  - All existing irrigation lines that are to be removed shall be terminated at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Ends of pipe shall be capped and the location of marked for future connection.
  - All existing water main and sanitary sewer that is to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent plugs shall be installed in the ends of pipe in accordance with the appropriate Agency. The Contractor shall record the location of all permanent plugs and provide the location information to the appropriate Agency.
  - All existing storm sewer that is to be removed shall be terminated at the limits of demolition or as indicated on the project plans. Temporary plugs shall be installed in the ends of pipe in accordance with the appropriate Agency and the locations of marked for future connection. Permanent bulkheads shall be installed in the ends of pipe and/or openings in terminating structures in accordance with the appropriate Agency. The Contractor shall record the location of all permanent bulkheads and provide the location information to the appropriate Agency.
  - All existing light sources to be removed shall have their power cables removed up to the power source or properly terminated for future connection at the limits of demolition or as necessary to allow for construction of the proposed site improvements. Removal and termination of power cables shall be performed in accordance with local electric codes.
  - All existing utility meters that are to be removed shall be properly removed to allow for reuse. Any existing utility meters that are not to be reused as a part of this project shall be returned to the appropriate Agency.
  - All trenches and/or excavations resulting from the demolition of underground utilities, building foundations, etc., that are located within the 1 on 1 influence zone of proposed structures, paved areas and/or other areas subject to vehicular traffic shall be backfilled with MDOT Class III granular material (or better) to the proposed subgrade elevation. Backfill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, Modified Proctor).



- 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
  - Bush / Shrub
  - Boulder
  - Fence (Chain Link Unless Otherwise Stated)
  - Edge of Gravel
  - Concrete Curb (Unless Otherwise Stated)
  - Edge of Water
  - Sanitary Sewer Manhole w/Identifier
  - Sanitary Sewer Pipe
  - Clean Out
  - Roof Drain
  - 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. Drainage Tributary Limits
  - Surface Runoff Flow Direction

**BENCHMARK**  
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 BENCHMARK #202  
 SOUTHEASTERLY CORNER OF CONCRETE PAD, LOCATED ON THE EASTERLY SIDE OF #5796 BUILDING. ELEVATION = 983.53 (NAVD 88)

DESIGN:WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	11-21-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

**WONDERLAND MARINE WEST**

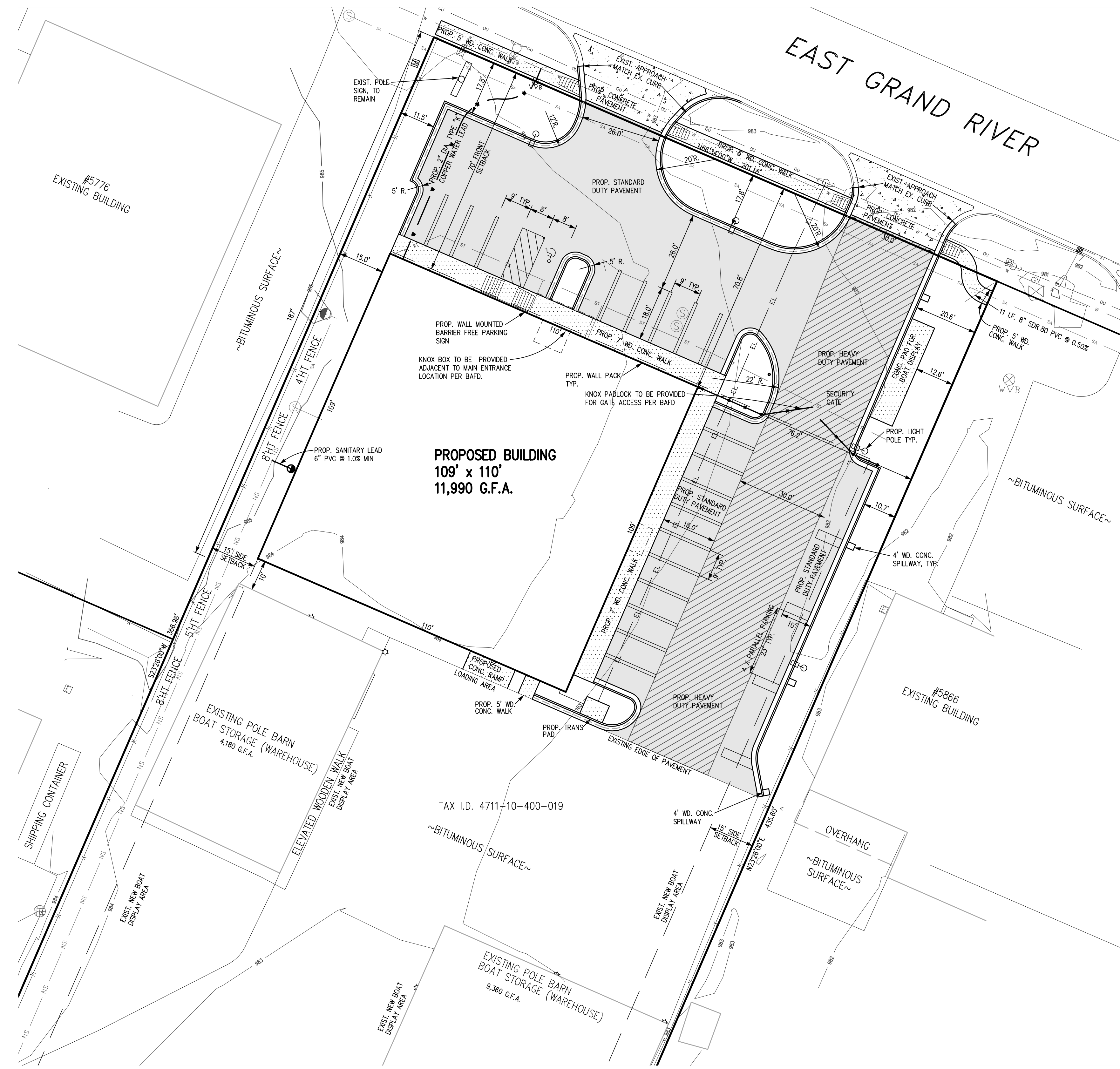
**EXISTING CONDITIONS AND DEMOLITION PLAN**

CLIENT: MITTS LLC  
 5796 E. GRAND RIVER  
 HOWELL, MICHIGAN, 48843  
 517-548-5122

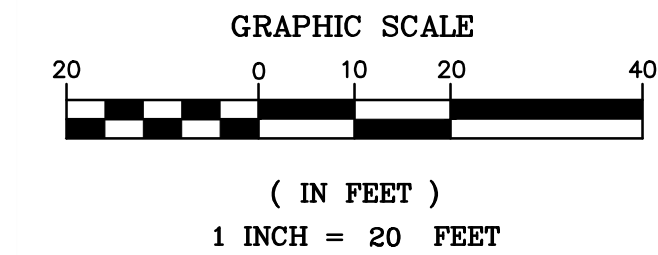
SCALE: 1in. = 30ft.  
 PROJECT No.: 214052  
 DWG NAME: 4052-DEMO  
 ISSUED: NOV. 21, 2022

**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
  - = BUSH / SHRUB
  - = BOULDER
  - = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
  - = EDGE OF GRAVEL
  - = CONCRETE CURB (UNLESS OTHERWISE STATED)
  - = EDGE OF WATER
  - = SANITARY SEWER MANHOLE W/IDENTIFIER
  - = SANITARY SEWER PIPE
  - = CLEAN OUT
  - = ROOF DRAIN
  - = 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
  - = HEAVY DUTY PAVEMENT
  - = STANDARD DUTY PAVEMENT
  - = CONCRETE PAVEMENT
  - = CONCRETE SIDEWALK



**SITE CHARACTERISTICS**

PARCEL ID: 4711-10-400-019  
 ZONED: GC - GENERAL COMMERCIAL

	REQUIRED	PROVIDED
AREA:	1.0 AC.	2.01 AC.
WIDTH:	150'	201'
SETBACKS:		
FRONT	70'	70.08'
SIDE	15'	15.0'
REAR	50'	255.8'

BUILDING COVERAGE AREA: 35% MAX. 29.2%  
 IMPERVIOUS COVERAGE AREA: 75% MAX. 75.0%

**PARKING REQUIREMENTS**

Recreational vehicle, boat, mobile home and similar sales	1.0 space per 800 sq.ft. gross leasable floor area, plus 2.0 spaces per each vehicle sales service bay	
Boat storage (warehouse),	1.0 space per 1,500 sq.ft. gross leasable floor area	
A. Gross leasable floor area (sales) = 11,990 sq. ft.	Parking req'd 11,990 sq.ft. X 1.0space/800 sq.ft.	= 15 spaces
B. Gross leasable floor area (warehouse) = 13,493 sq. ft.	Parking req'd 13,493 sq.ft. X 1.0space/1,500 sq.ft.	= 9 spaces
B. Vehicle sales service bays = 1 bays	Parking req'd 1 bays X 2 spaces/bay	= 2 spaces
<b>TOTAL REQUIRED SPACES</b>		<b>= 26 spaces</b>
<b>SPACES PROVIDED</b>		<b>= 26 spaces</b>

**COVERAGE CALCULATION**

CHANGE IN IMPERVIOUS AREA OF THE NORTHERLY 187' OF PARCEL 4711-10-400-019  
 EXISTING IMPERVIOUS AREA: 31,443 SQ.FT.  
 PROPOSED IMPERVIOUS AREA: 29,750 SQ.FT.

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DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	11-21-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

**WONDERLAND MARINE WEST**

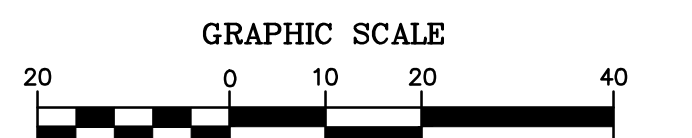
**SITE PLAN**

CLIENT: MITTS LLC  
 5796 E. GRAND RIVER  
 HOWELL, MICHIGAN, 48843  
 517-548-5122

SCALE: 1in. = 20ft.  
 PROJECT No.: 214052  
 DWG NAME: 4052 SP  
 ISSUED: NOV. 21, 2022

**SP**

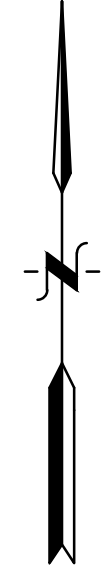




( IN FEET )  
1 INCH = 20 FEET

**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
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- = EDGE OF BRUSH LINE
- = DECIDUOUS TREE W/IDENTIFIER
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- = FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
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- = SANITARY SEWER PIPE
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- = ROOF DRAIN
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- = 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. SPOT ELEVATION
- = EX. SPOT ELEVATION
- = EDGE OF METAL
- = BACK OF CURB
- = TOP OF PAVEMENT
- = TOP OF WALK
- = CENTERLINE OF SPILLWAY



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

REVISION #	DATE	REVISION-DESCRIPTION

WONDERLAND  
 MARINE WEST

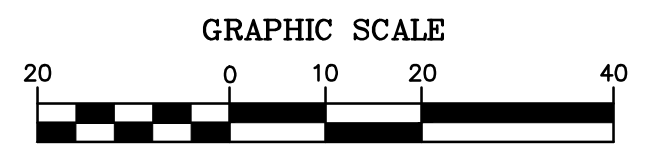
GRADING PLAN

CLIENT:  
 MITTS LLC  
 5796 E. GRAND RIVER  
 HOWELL, MICHIGAN, 48843  
 517-548-5122

SCALE: 1in. = 20ft.  
 PROJECT No.: 214052  
 DWG NAME: 4052 GR  
 ISSUED: NOV. 21, 2022

GR

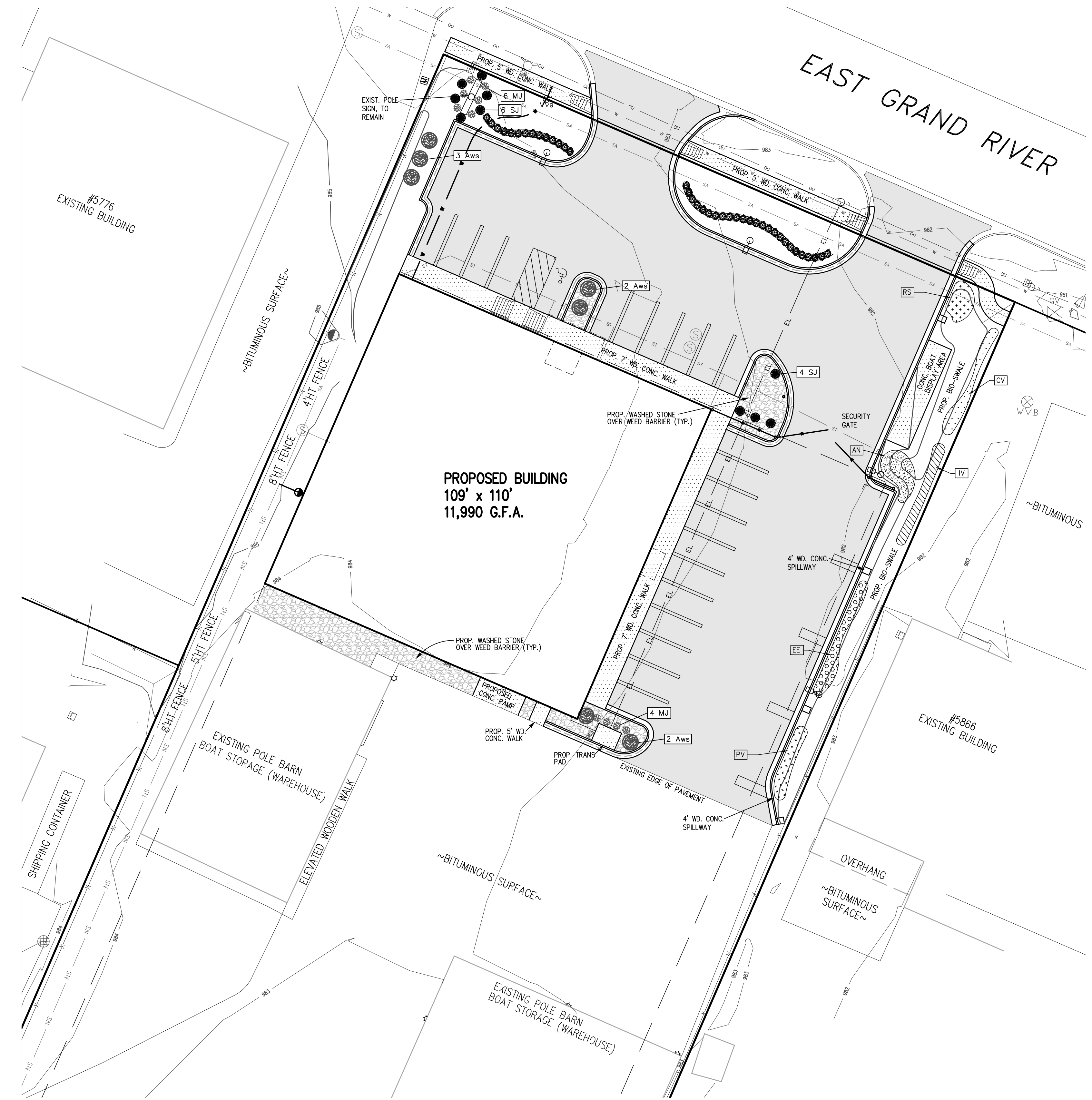
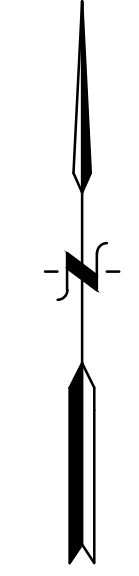




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- = 1' CONTOUR
- = 5' CONTOUR



**LANDSCAPE CALCULATION:**

STREET FRONTAGE GREENBELT  
20' WIDTH  
1 CANOPY TREE PER 40 LF.  
135 LF./40 = 3.4, 4 TREES REQUIRED, 0 PROVIDED

PARKING AREA LANDSCAPE  
1 CANOPY TREE & 100 sq.ft. PER 10 SPACES  
26 SPACES/10 = 2.6, 3 TREES REQUIRED, 0 PROVIDED  
260 sq.ft. REQUIRED, 596 sq.ft. PROVIDED

**PLANTING SCHEDULE**

QTY	SYM	BOTANICAL NAME	COMMON NAME	SIZE
10	MJ	JUNIPERUS SCOPULORUM 'MEDORA'	MEDORA JUNIPER	3" HT.
7	Aws	SPIRAEA BUMALDA 'AWS'	ANTHONY WATERER SPIRAEA	24" HT.
10	SJ	SPIRAEA J. 'SHIROBANA'	SHIROBANA SPIRAEA	24" HT.
TBD	TBD	TBD	TBD	TBD

(SPECIES, SPACING, AND SIZE OF PROPOSED HEDGE PLANTINGS, TO BE DETERMINED BY OWNER\*)

**BENCHMARK**  
DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED MARCH 28, 2022 AT 11:26 AM. PREVIOUS DATUM FROM MARCH 1999 HAS A DIFFERENCE OF -0.76'.

BENCHMARK #201  
ARROW ON HYDRANT, LOCATED ON THE SOUTHERLY SIDE OF GRAND RIVER, NEAR THE NORTHWESTERLY CORNER OF #5796 PARCEL. ELEVATION = 986.63 (NAVD 88)

BENCHMARK #202  
SOUTHEASTERLY CORNER OF CONCRETE PAD, LOCATED ON THE EASTERLY SIDE OF #5796 BUILDING. ELEVATION = 983.53 (NAVD 88)

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BRIGHTON, MICHIGAN 48114

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

WONDERLAND  
MARINE WEST

LANDSCAPE PLAN

CLIENT:  
MITTS LLC  
5796 E. GRAND RIVER  
HOWELL, MICHIGAN, 48843  
517-548-5122

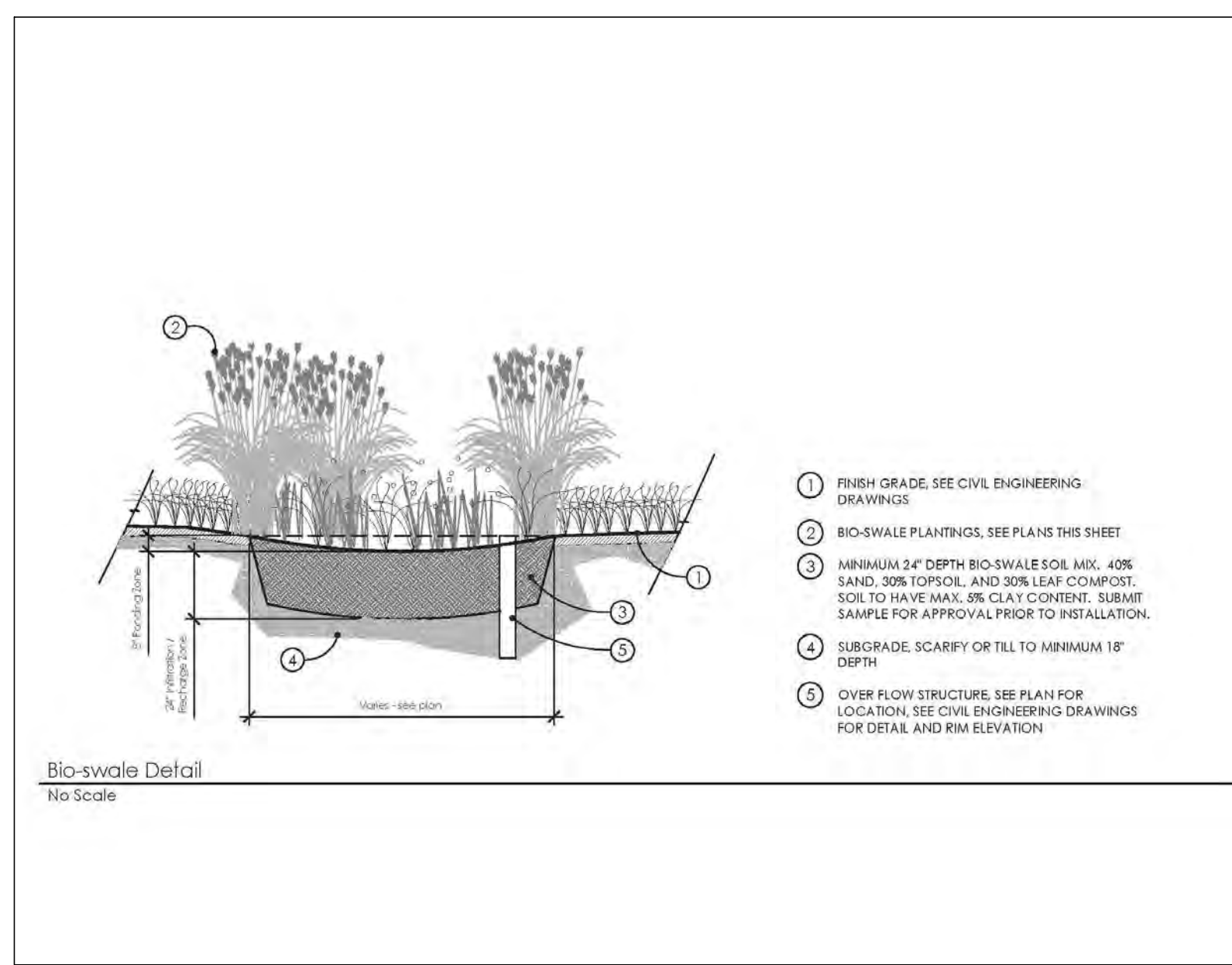
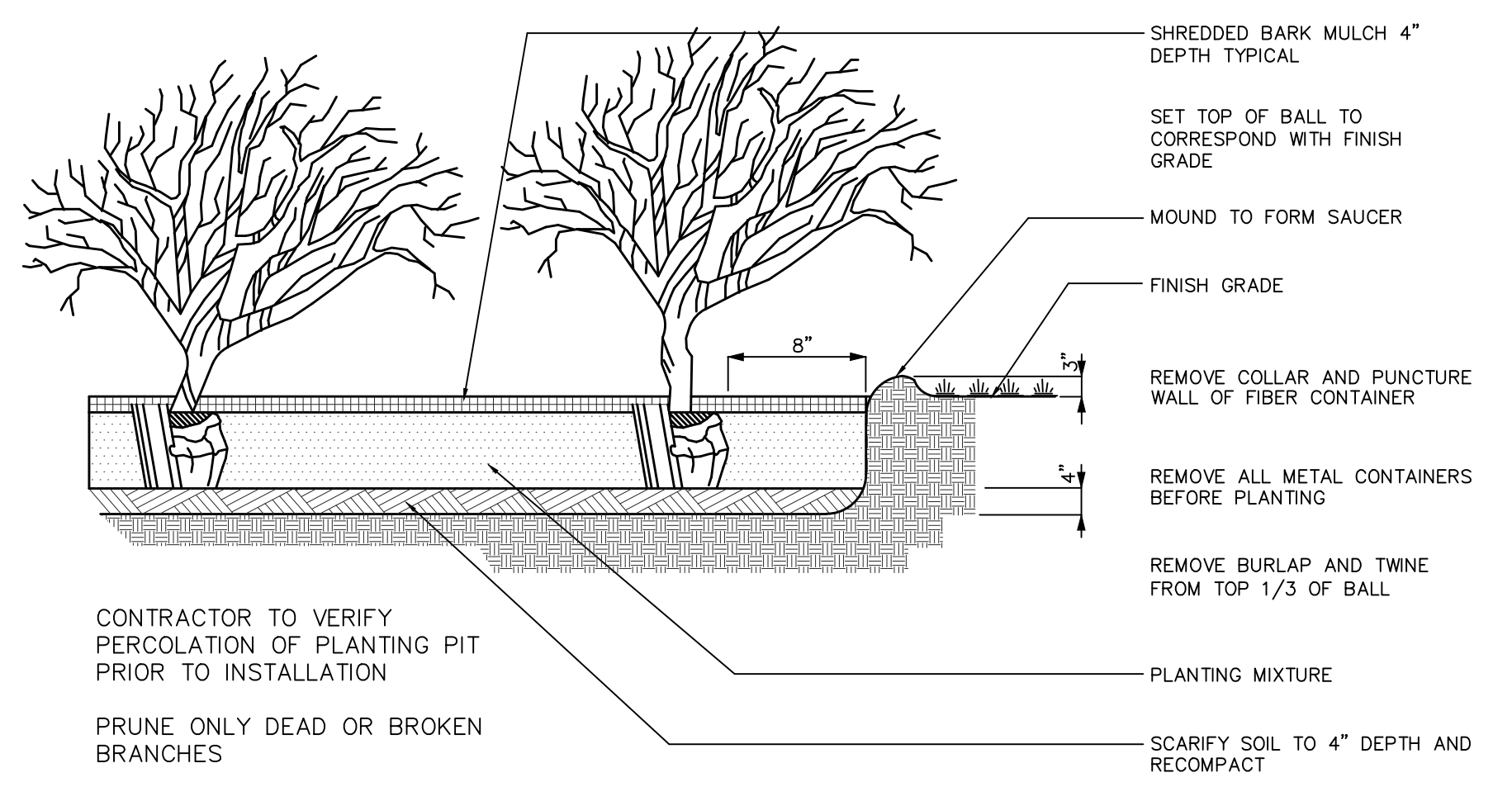
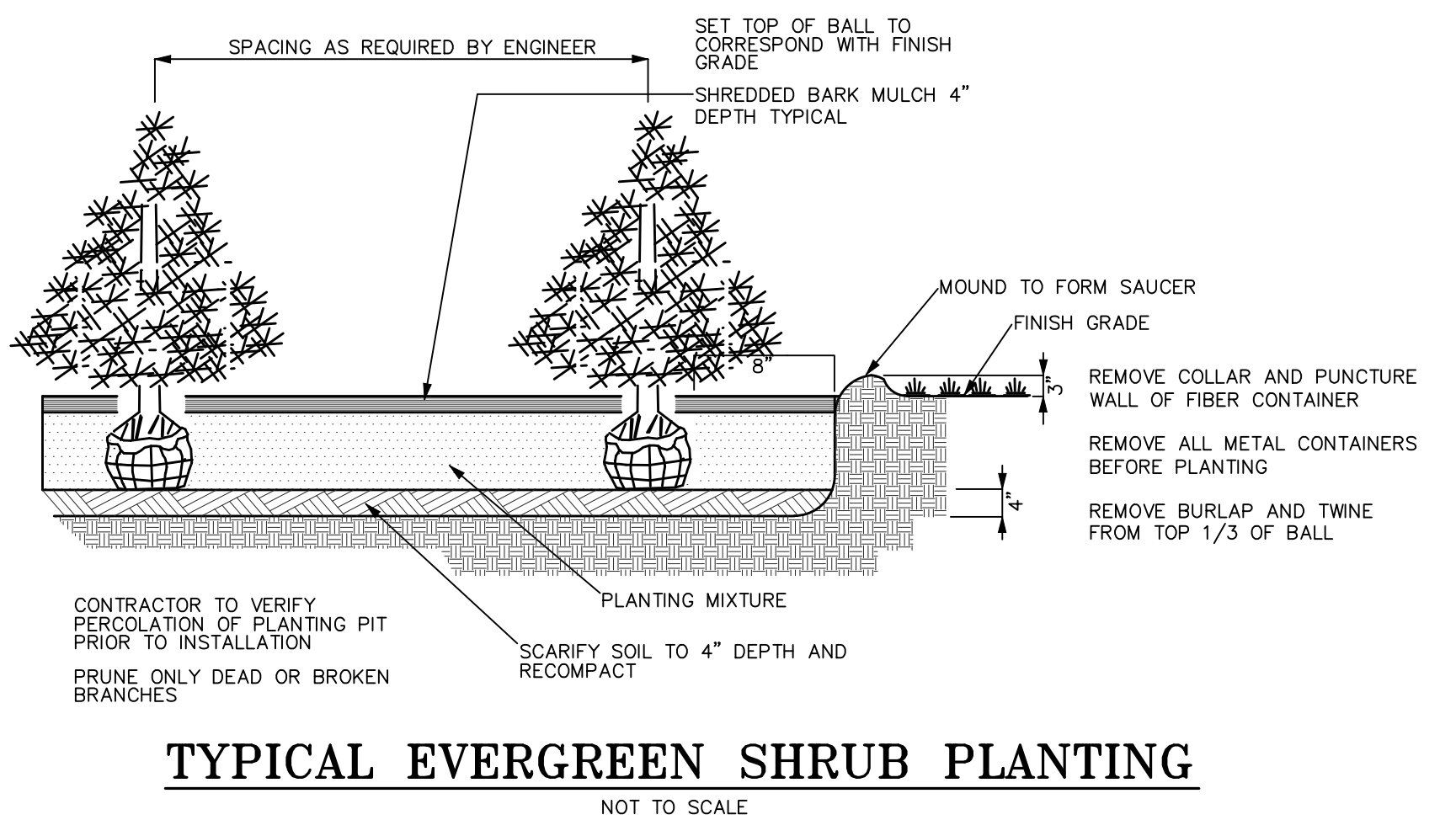
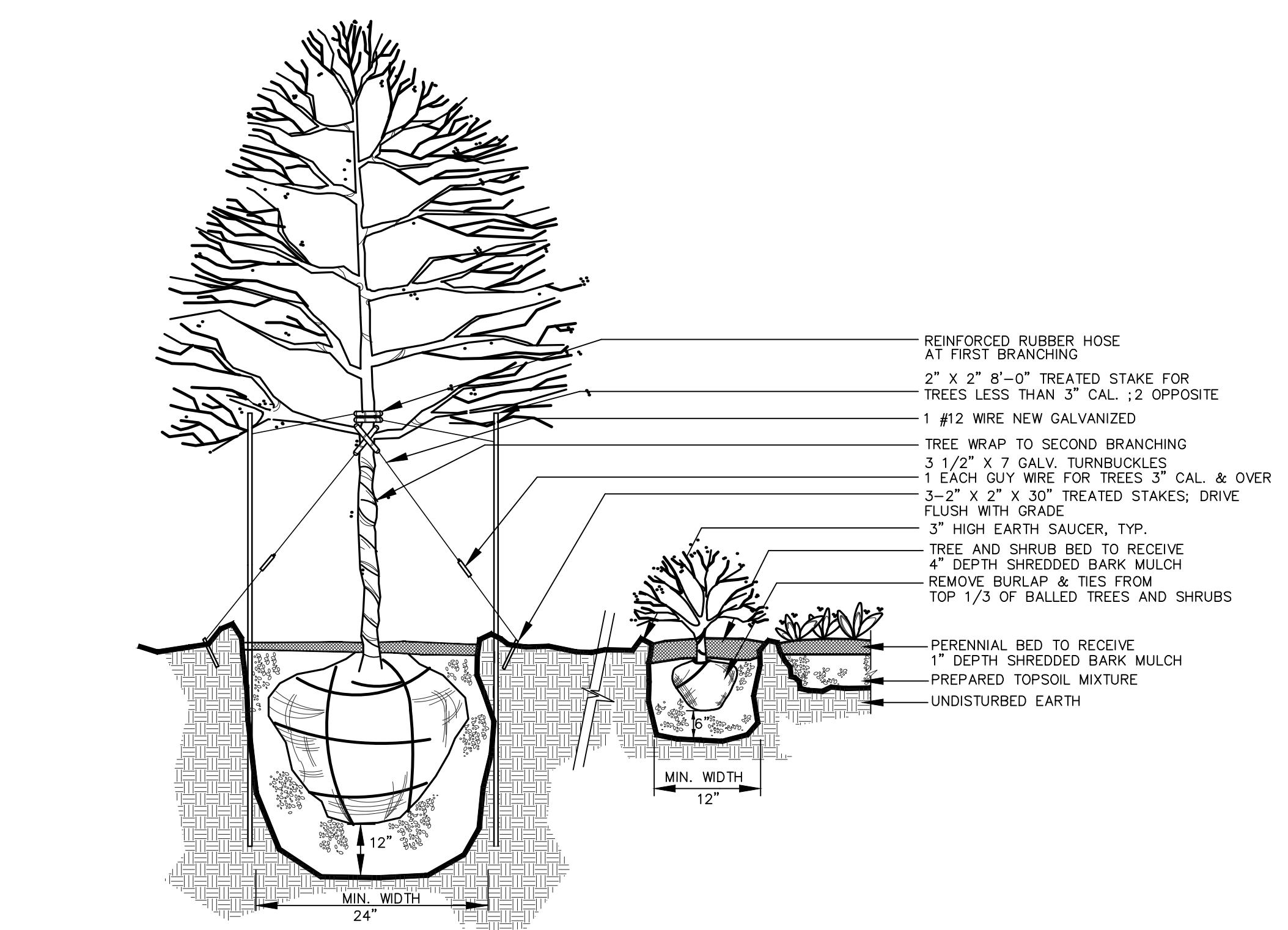
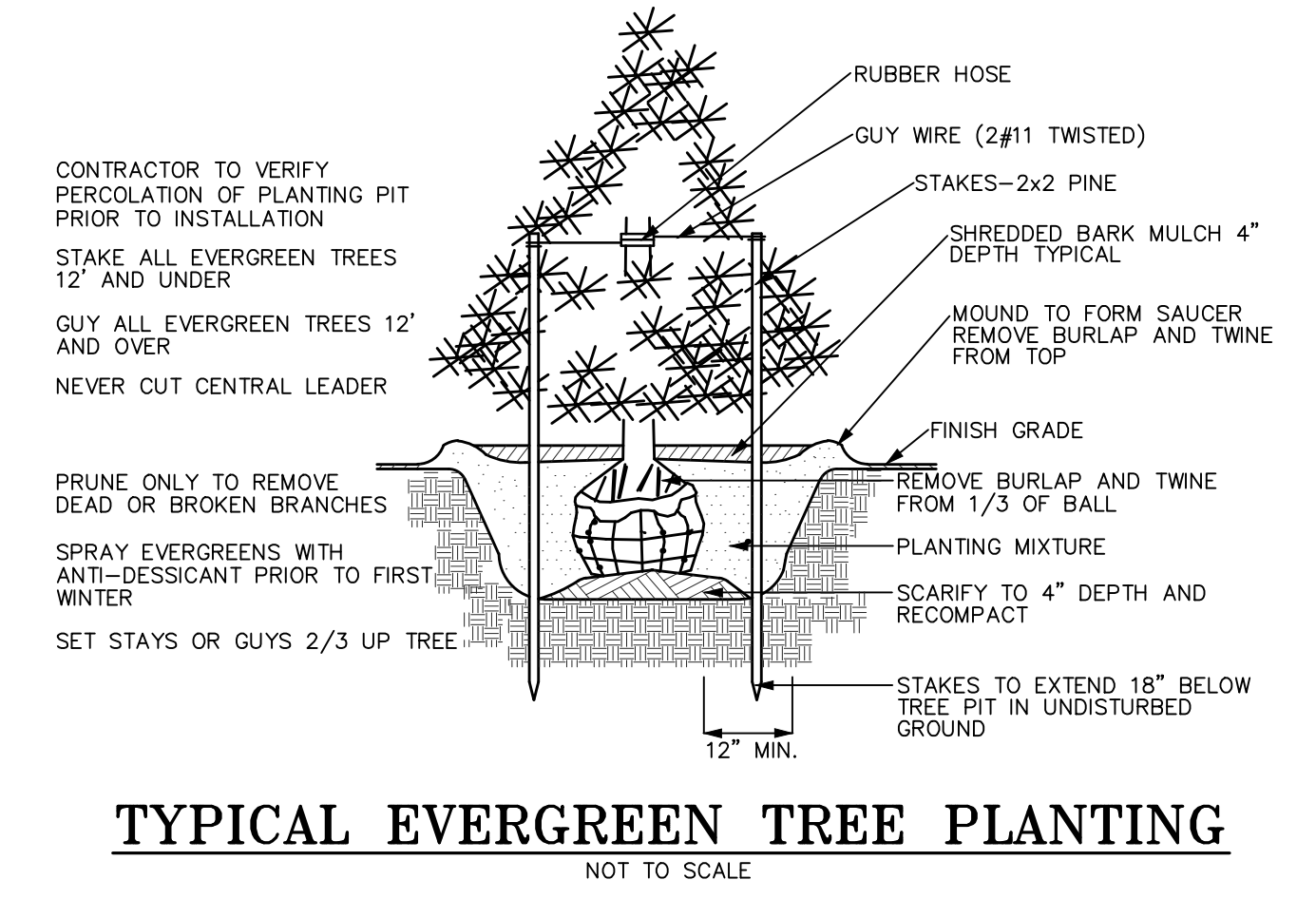
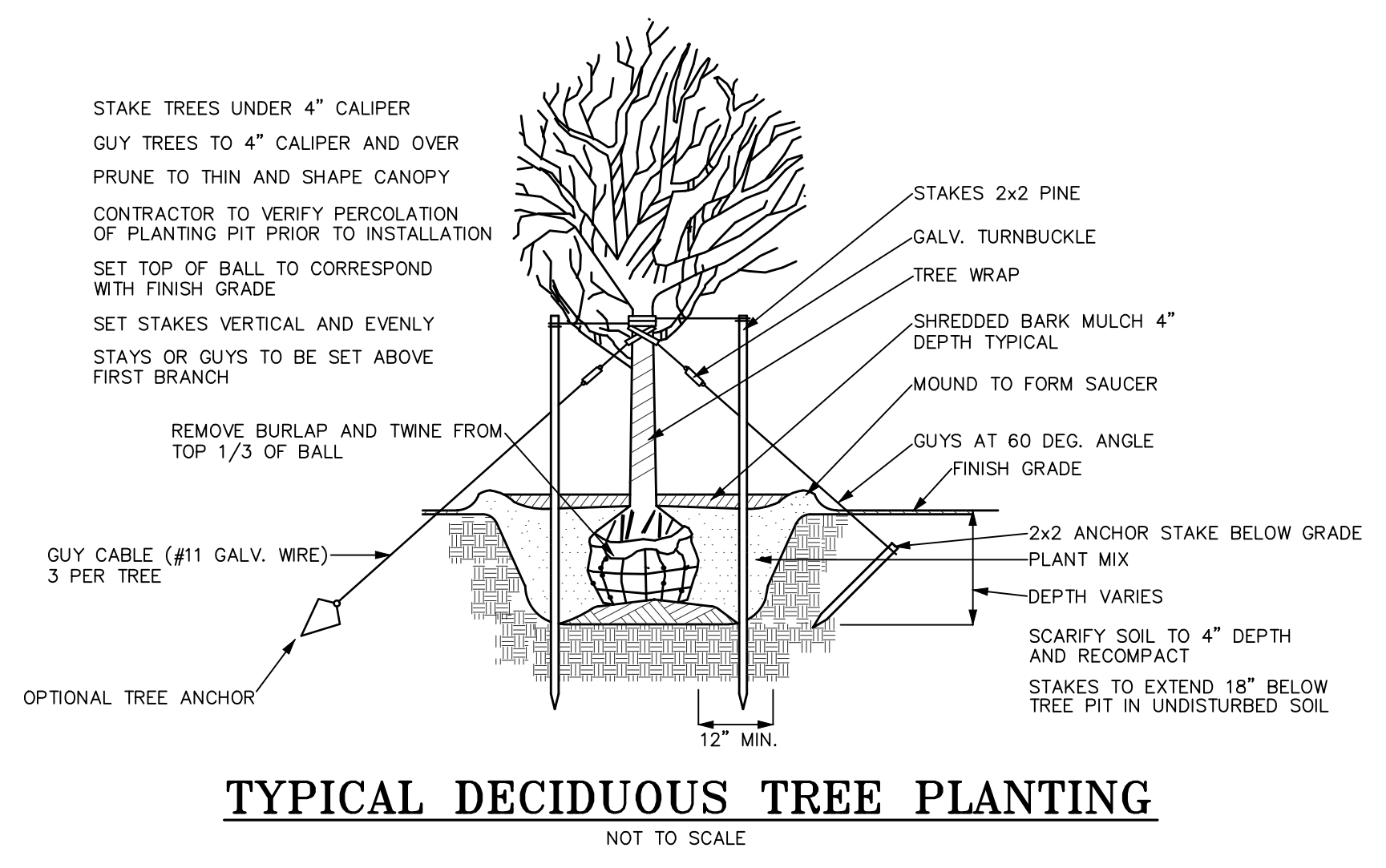
SCALE: 1in. = 20ft.  
PROJECT No.: 214052  
DWG NAME: 4052 LA  
ISSUED: NOV. 21, 2022

LA1



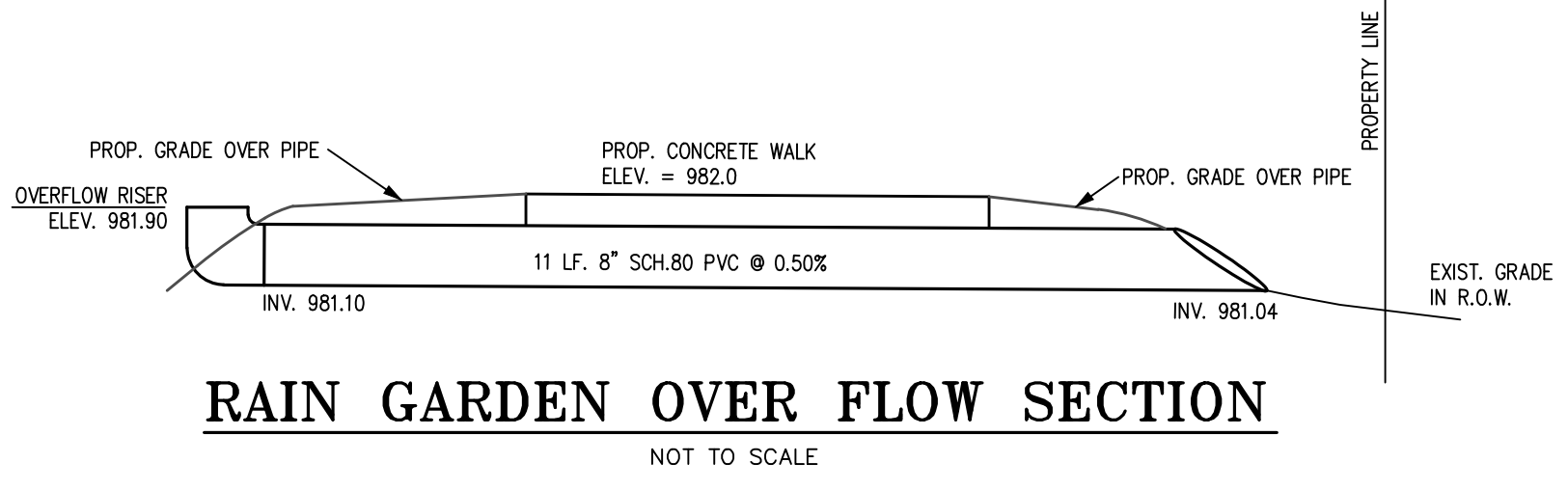
**LANDSCAPING NOTES:**

- All minimum planting sizes specified on the Project Plans shall be at the time of planting.
- All landscape materials shall be as specified on the Project Plans or approved equal. Substitutions shall not be made without prior written approval from the Project Engineer and receipt of the Owner's Authorization.
- All plant material shall be free of disease and insects and shall conform to the American Standard of Nursery Stock of the American Association of Nurserymen.
- All landscape plantings shall be planted and maintained in a healthy condition and shall be guaranteed by the Landscape Contractor and/or Supplier for a minimum period of 1 year from the time of planting. Any plantings that die or become diseased during the guarantee period shall be removed and replaced by the Landscape Contractor and/or Supplier at no cost to the Owner.
- Excavations for container or balled plantings shall be no deeper than the root ball or container and shall be at least twice the diameter of the root ball or container.
- Excavations for bare root plantings shall be no deeper than the longest roots and shall be at least twice the diameter of the root spread.
- The sides of planting excavations in heavy and/or wet soils shall be scarified with a fork, pick or shovel to eliminate glazing.
- Landscape planting backfill shall consist of a prepared mixture of peat moss, composted manure and topsoil or suitable excavated native soil material mixed with the appropriate soil conditioners that are compatible with the native soil and plant species. The type and mixture ratio of soil conditioners shall be in accordance with the Landscape Supplier's recommendations.
- The Landscape Contractor shall stake and reinforce all trees to prevent wind damage. The Landscape Contractor shall remove all tree reinforcement and stakes upon expiration of the guarantee period.
- Perennials shall be planted on a 3" minimum bed of prepared peat moss, composted manure and topsoil mixture.
- Ground cover within landscape beds shall be decorative stone. Decorative stone shall be 2" to 4" diameter washed river rock placed 4" deep.
- Ground cover within landscape beds shall be placed over a landscape fabric weed barrier. Landscape fabric shall be non-woven, 4 oz. per sq. yd. minimum weight, with UV protection. Landscape fabric shall be installed in strict accordance with the Manufacturer's specifications and recommendations. Landscape fabric shall not be installed over or within 12 inches of perennial plantings.
- Lawn areas shall be established with 3" minimum depth of prepared topsoil and hydrosced. The Landscape Contractor shall guarantee all lawn areas for a minimum period of 1 year from time of seeding. All lawn areas that do not take root or die during the guarantee period shall be re-hydrated as appropriate by the Landscape Contractor at no cost to the Owner. All lawn areas that become diseased during the guarantee period shall be removed and re-hydrated as appropriate by the Landscape Contractor at no cost to the Owner.
- Topsoil shall be a dark, organic, natural surface soil free of clay lumps, peat, muck, subsoil, noxious weeds and other foreign material such as roots, sticks and rocks over 1/2" diameter. Topsoil shall not be frozen or muddy. All earthen areas to receive topsoil shall be finish graded 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 Landscape Contractor. Seed and mulch shall be placed within 5 days of topsoil placement.
- Seed mixture for lawn areas shall consist of 10% Kentucky Blue Grass, 20% Perennial Rye Grass, 30% Hard Fescue and 40% Creeping Red Fescue. Hydroseed shall be placed within 5 days of topsoil placement and shall be placed to provide complete and uniform coverage. Fertilizer shall be placed at 80 pounds per acre, hydro mulch at 1,200 pounds per acre and water at 500 gallons per acre unless otherwise specified by the Seed Distributor/Manufacturer. All over spray areas shall be properly cleaned and restored at no expense to the contract.
- Seed and mulch may be substituted for hydroseed when authorized by the Owner. Seed mixtures shall meet the requirements for lawn areas as outlined above. Seed shall be uniformly applied at a rate of 220 lbs per acre unless otherwise recommended by the seed Distributor/Manufacturer. Seed mixture shall be fertilized. Fertilizer shall be uniformly applied at a rate of 240 pounds per acre of chemical fertilizer nutrients in equal portions (10-10-10) of Nitrogen, Phosphoric Acid and Potash.
- All seeded areas with a slope less than 1:4 shall be stabilized with straw mulch placed at 2 tons per acre unless otherwise recommended by the seed Distributor/Manufacturer. Erosion control blankets shall be substituted for straw mulch in roadway greenbelts, lawn areas adjacent to heavy traffic, lawn areas subject to high winds, slopes of 1:4 or greater and within ditches, swales and other areas exposed to concentrated overland storm water flow. Erosion control blankets shall consist of 100% straw fiber matrix with photodegradable polypropylene netting and have a 12-month minimum longevity rating. Erosion control blankets shall be pinned with biodegradable pins and shall be installed in accordance with the Manufacturer's recommendations.
- The Landscape Contractor shall be responsible for watering non-irrigated plantings and stock during dry weather conditions throughout the guarantee period as necessary to promote growth and establishment.



**RAIN GARDEN PLANT LIST**

PERENNIALS AND GROUNDCOVERS					
KEY	QTY	BOTANICAL/COMMON NAME	ROOT	SIZE	COMMENT
AN	12	Aster novae-angliae / New England Aster	Potted	1 Gallon	
CV	15	Carex volpimoldea / Fox Sedge	Potted	1 Gallon	
EE	15	Eupatorium Phatom / Phantom Joe-Pye Weed	Potted	1 Gallon	
IV	10	Iris virginica-shrevei / Wild Blue Flag Iris	Potted	1 Gallon	
PV	10	Panicum virgatum 'Shenandoah' / Shenandoah Switch Grass	Potted	1 Gallon	
RS	12	Rudbeckia subtomentosa / Sweet Cone Flower	Potted	1 Gallon	



**RAIN GARDEN NOTES:**

- The planting soil must be a mixture that includes sand (2.0-0.50 mm) (50-60%), topsoil (sandy/clay loam) (20-25%), and leaf compost (20-25%). The maximum clay content of the mixture must be equal to or less than 5%. The planting soil mixture shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches, excluding mulch. The soil must have an infiltration rate of at least 0.5" per hour and a pH between 5.5 and 6.5. In addition, the planting soil should have a maximum 500 ppm concentration of soluble salts. The planting soil mixture will be installed in 6" horizontal lifts, compacted at each lift by evenly saturating the entire surface area of the lift until water flows from the underdrain system. Final grading of the planting soil will be performed after a 24 hour setting period.
- Compost shall be mature, stable, weed free and produce by aerobic decomposition of organic matter with a pH between 5.5 and 7.5, submit sample for approval.
- Underdrain gravel blanket should be double washed, 1.5" in size, MDOT CL.I porous material.
- A uniform depth of 3" shredded hardwood bark mulch (natural color) will cover the entire rain garden area.
- The planting soil mixture shall be placed and graded using low ground-contract pressure equipment or by excavators and/or backhoes operating on the ground adjacent to the rain garden area.
- No heavy equipment shall be used within the perimeter of the rain garden area before, during or after the placement of the planting soil mixture.
- Geotextile fabric should maintain a flow rate of 125 GPM per square foot, per MDOT specifications for non-woven geotextile separator.

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DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	11-21-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

WONDERLAND  
MARINE WEST

LANDSCAPE  
NOTES & DETAILS


CLIENT:  
MITTS LLC  
5796 E. GRAND RIVER  
HOWELL, MICHIGAN 48843  
517-548-5122

SCALE:  
PROJECT No.: 214052  
DWG NAME: 4052 LA  
ISSUED: NOV. 21, 2022

LA2



### D-Series Size 0 LED Area Luminaire



**Specifications**

- Length: 15.75"
- Width: 15.75"
- Height: 15.75"
- Weight: 15.75 lbs

**Introduction**

The modern styling of the D-Series is striking yet understated, making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: DSX0 LED P6 40K 12M MVOLT 5PA NLTAR2 PISHIN DSX00

Code	Part	Part Description	Quantity	Part	Part Description	Quantity	Part	Part Description
DSX00	DSX00	LED P6 40K 12M MVOLT 5PA NLTAR2 PISHIN DSX00	1	DSX00	LED P6 40K 12M MVOLT 5PA NLTAR2 PISHIN DSX00	1	DSX00	LED P6 40K 12M MVOLT 5PA NLTAR2 PISHIN DSX00

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### TWPX3 LED Vandal Resistant LED Wall Luminaire



**Specifications**

- Depth: 5.5"
- Height: 14.0"
- Width: 14.0"
- Weight: 15.0 lbs

**Introduction**

The TWPX3 LED wall pack family features premium polycarbonate lenses that are designed to make these luminaires tough enough to take real world abuse in applications such as parks and recreation areas, bike racks, and even in other public spaces that have high traffic. The TWPX3 LED is energy efficient, saving up to 80% in energy costs when replacing a metal halide luminaire. The adjustable Light Output (LO) features allow the contractor to set the light output during installation, a level preferred for the job site. The TWPX3 LED ALD luminaires can replace anything from a 100W to 400W metal halide luminaire.

**TWPX3 LED Family Overview**

Code	Part	Part Description	Quantity	Part	Part Description	Quantity
TWPX3	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1

**Ordering Information** EXAMPLE: TWPX3 LED ALD 40K MVOLT DSX00

Code	Part	Part Description	Quantity	Part	Part Description	Quantity
TWPX3	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1

**FEATURES & SPECIFICATIONS**

**INTENDED USE:** The TWPX3 LED wall pack is designed for use in applications such as parks and recreation areas, bike racks, and even in other public spaces that have high traffic. The TWPX3 LED is energy efficient, saving up to 80% in energy costs when replacing a metal halide luminaire. The adjustable Light Output (LO) features allow the contractor to set the light output during installation, a level preferred for the job site. The TWPX3 LED ALD luminaires can replace anything from a 100W to 400W metal halide luminaire.

**ELECTRICAL:** The TWPX3 LED wall pack is designed for use in applications such as parks and recreation areas, bike racks, and even in other public spaces that have high traffic. The TWPX3 LED is energy efficient, saving up to 80% in energy costs when replacing a metal halide luminaire. The adjustable Light Output (LO) features allow the contractor to set the light output during installation, a level preferred for the job site. The TWPX3 LED ALD luminaires can replace anything from a 100W to 400W metal halide luminaire.

**Performance Data**

Code	Part	Part Description	Quantity	Part	Part Description	Quantity
TWPX3	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1

**Electrical Load**

Code	Part	Part Description	Quantity	Part	Part Description	Quantity
TWPX3	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1

**Adjustable Lumen Output (ALO) Table**

Code	Part	Part Description	Quantity	Part	Part Description	Quantity
TWPX3	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1

**Lumen Ambient Temperature (LAT) Multiplier**

Code	Part	Part Description	Quantity	Part	Part Description	Quantity
TWPX3	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1

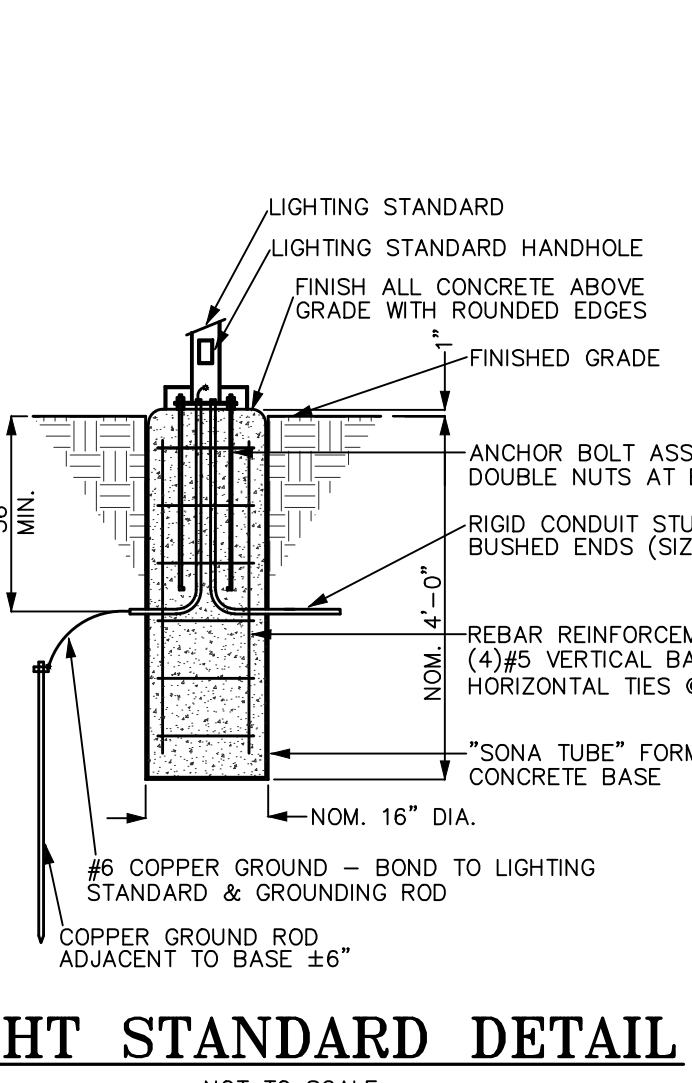
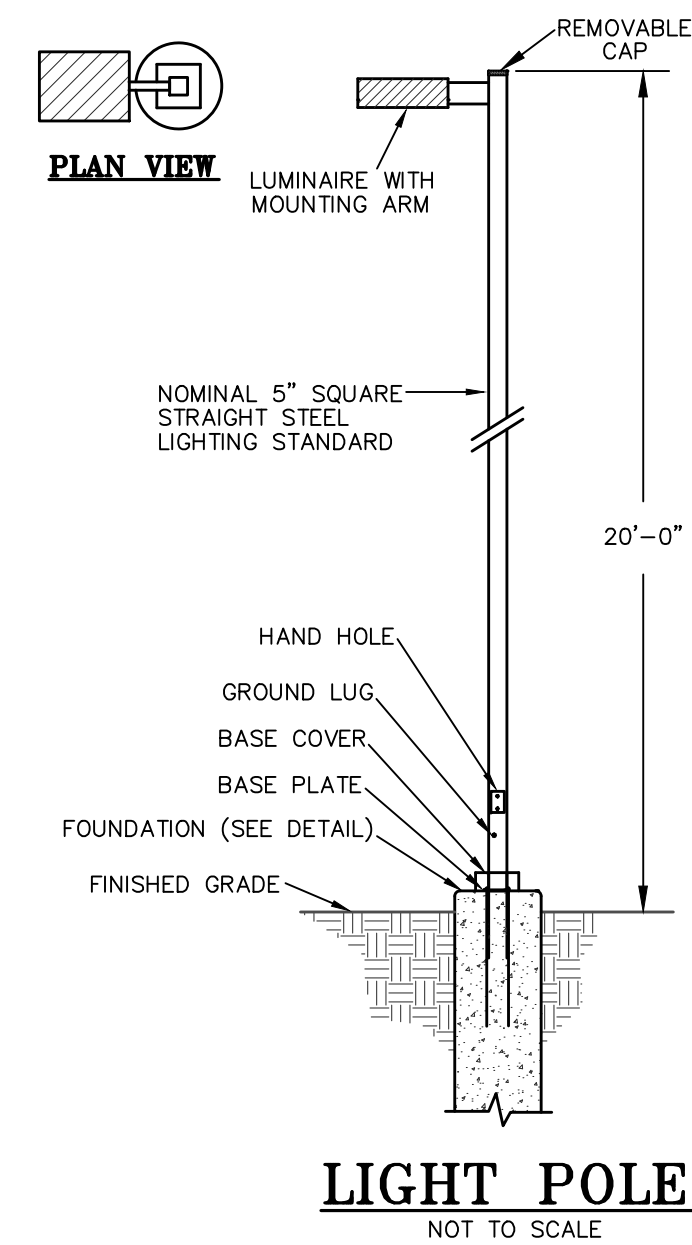
**Projected Lumen Maintenance**

Code	Part	Part Description	Quantity	Part	Part Description	Quantity
TWPX3	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1	TWPX3	LED WALL PACK 100W 120V 5000K 1000LM 1000LM	1

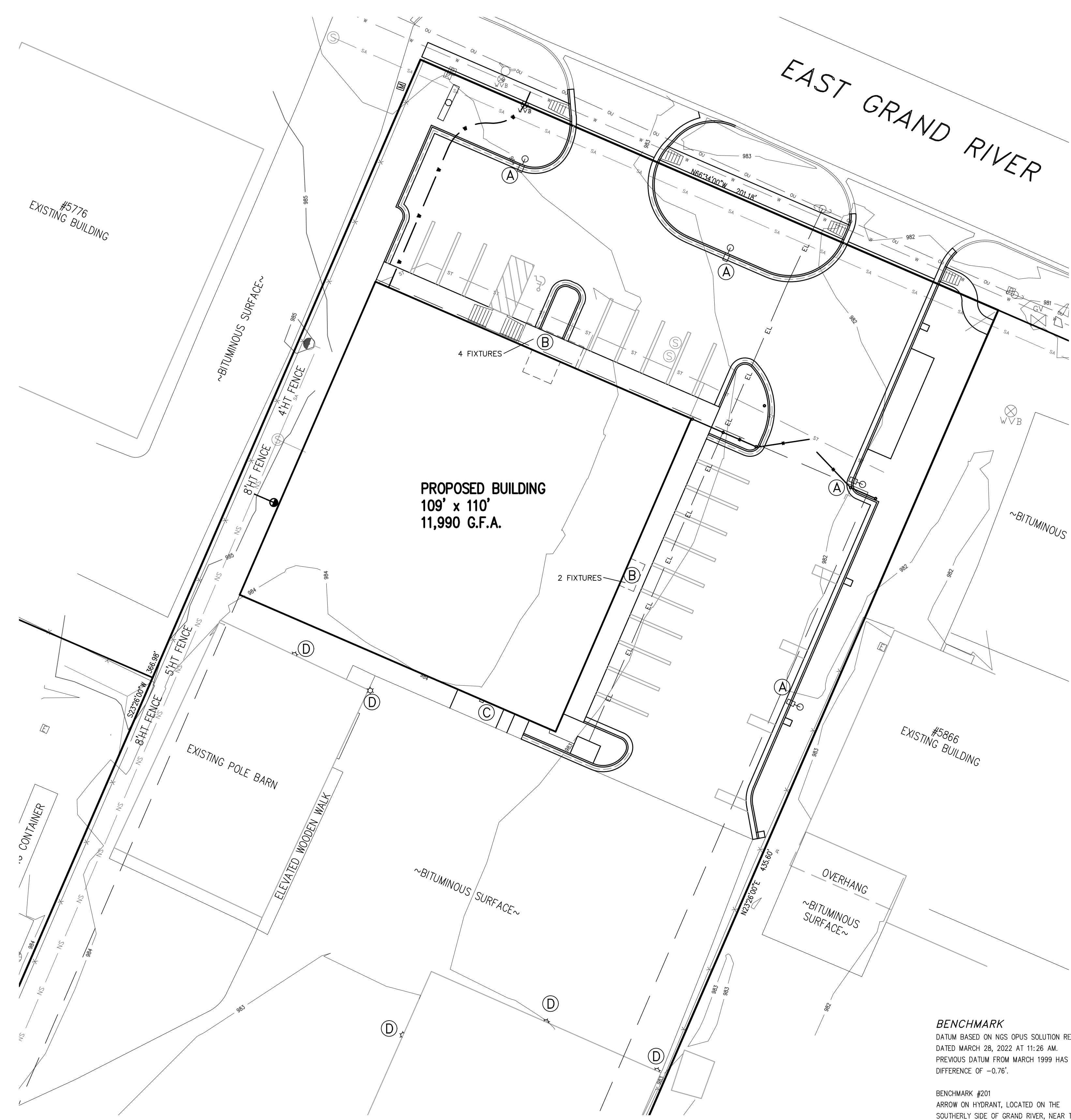


**Light Pole Detail**

REMovable CAP  
LUMINAIRE WITH MOUNTING ARM  
NOMINAL 5" SQUARE STRAIGHT STEEL LIGHTING STANDARD  
20'-0"



**LIGHT STANDARD DETAIL**  
NOT TO SCALE



**GRAPHIC SCALE**  
20 0 10 20 40  
( IN FEET )  
1 INCH = 20 FEET

**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
- BUSH / SHRUB
- BOLLARD
- FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- EDGE OF GRAVEL
- CONCRETE CURB (UNLESS OTHERWISE STATED)
- EDGE OF WATER
- SANITARY SEWER MANHOLE W/IDENTIFIER
- SANITARY SEWER PIPE
- CLEAN OUT
- ROOF DRAIN
- 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

**LIGHTING LEGEND**

- A LITHONIA, D-SERIES, SIZE 0
- B RECESSED DOWN LIGHTING
- C LITHONIA, D-SERIES, SIZE 0
- D EXISTING WALL PACK

**BENCHMARK**  
DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED MARCH 28, 2022 AT 11:26 AM. PREVIOUS DATUM FROM MARCH 1999 HAS A DIFFERENCE OF -0.76'.  
BENCHMARK #201  
ARROW ON HYDRANT, LOCATED ON THE SOUTHERLY SIDE OF GRAND RIVER, NEAR THE NORTHEASTERLY CORNER OF #5796 PARCEL. ELEVATION = 986.63 (NAVD 88)  
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DESIGN: JHG	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: WMP						

WONDERLAND MARINE WEST

LIGHTING PLAN

CLIENT: MITTS LLC  
5796 E. GRAND RIVER  
HOWELL, MICHIGAN, 48843  
517-548-5122

SCALE: 1in. = 20ft.  
PROJECT No.: 214052  
DWG NAME: 4052 LT  
ISSUED: NOV. 21, 2022

LT





SOILS MAP  
NOT TO SCALE

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Frb	Fox-Boyer complex, 2 to 6 percent slopes	0.9	0.6%
HgtaA	Houghton musk, 0 to 1 percent slopes	1.3	0.9%
HmC	Hillsdale Miami loams, 6 to 12 percent slopes	1.5	1.1%
MoB	Wawassee loam, 2 to 6 percent slopes	85.9	62.4%
MoC	Wawassee loam, 6 to 12 percent slopes	7.5	5.4%
MoD	Miami loam, 12 to 18 percent slopes	12.7	9.2%
MoE	Miami loam, 18 to 25 percent slopes	0.7	0.5%
W	Water	24.6	17.9%
Wh	Wheatonaw silt loam	2.6	1.9%
<b>Totals for Area of Interest</b>		<b>137.6</b>	<b>100.0%</b>

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 assignee) shall periodically inspect all permanent soil erosion control measures to ensure proper operation.

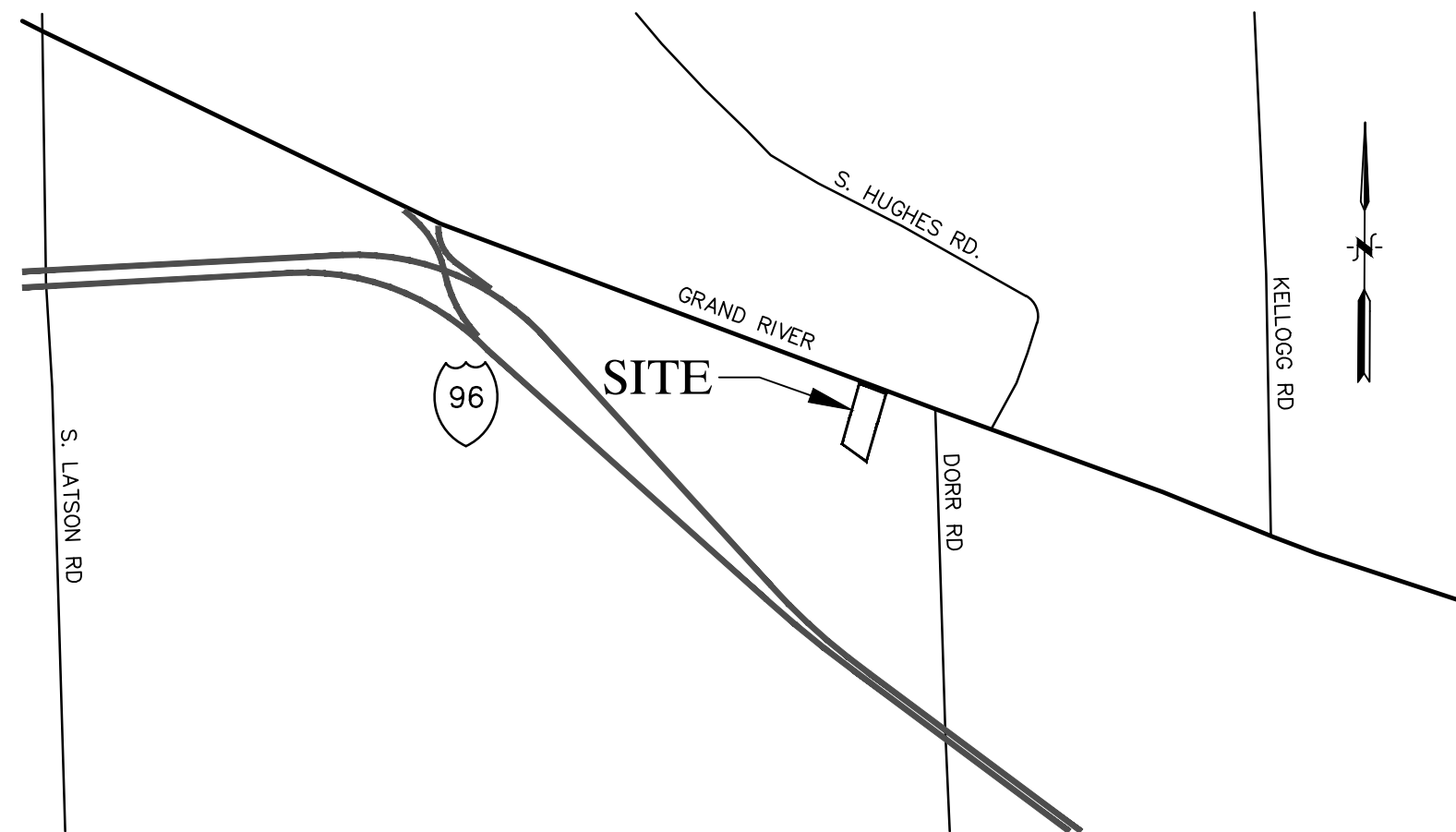
**MUD TRACKING CONTROL DEVICE / CONSTRUCTION ACCESS:** Mud tracking control devices shall be inspected for significant mud accumulation and to ensure the access is not eroding into public rights of way or drainage features. Add additional layers of stone or remove and replace stone each time the stone 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 has 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.



LOCATION MAP  
SCALE: 1in = 2000ft

LEGAL DESCRIPTION

Reference: Tax Roll 2022

Part of the Southeast 1/4 of Section 10, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, more particularly described as follows:

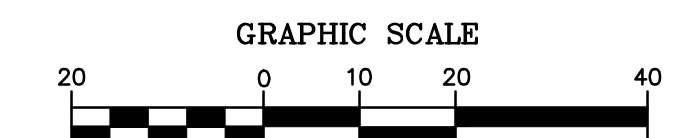
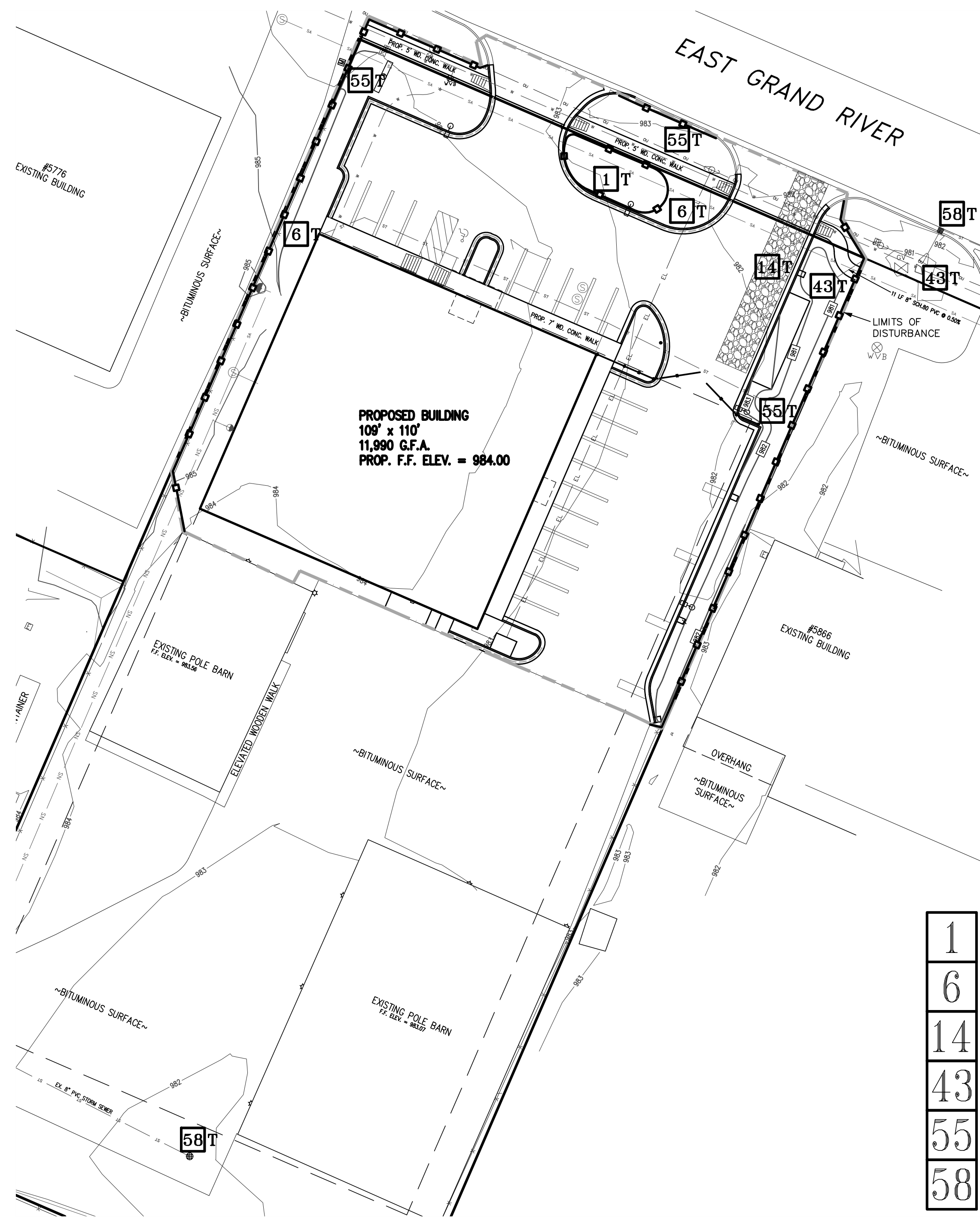
Commencing at the Southeast Corner of said Section 10; thence N02°08'E 800 feet; thence N66°34'W 679 feet to the PLACE OF BEGINNING; thence N66°34'W 200 feet; thence S23°26'W 435.6 feet; thence S66°34'E 200 feet; thence N23°26'E 435.6 feet to the Place of Beginning. Subject to and together with all easements and restrictions affecting title to the above described premises. Tax ID No.: 4711-10-400-019 Also known as: 5796 E. Grand River, Howell, Michigan 48843

Refer to the current policy for title insurance for proof of ownership and all encumbrances affecting title to the described above parcel.

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 disruption.
- 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.  
**Top-Soil** 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.



( IN FEET )  
1 INCH = 20 FEET

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
- BUSH / SHRUB
- BOULDER
- FENCE (CHAIN LINK UNLESS OTHERWISE STATED)
- EDGE OF GRAVEL
- EDGE OF WATER
- CONCRETE CURB (UNLESS OTHERWISE STATED)
- SANITARY SEWER MANHOLE W/IDENTIFIER
- SANITARY SEWER PIPE
- CLEAN OUT
- ROOF DRAIN
- 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

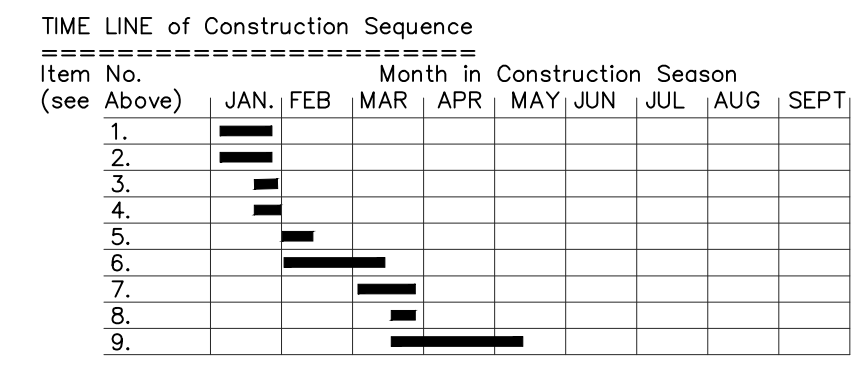
SOIL EROSION CONTROL MEASURE LEGEND

1	STRIPPING & STOCKPILES TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION STOCKPILE SHOULD BE TEMPORARILY SEEDED
6	SEEDING WITH MULCH AND/OR MATTING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DRAINAGEWAYS WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY INEXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED
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
43	CULVERT SEDIMENT TRAP	EASY TO INSTALL AT INLET KEEPS CULVERT CLEAN AND FREE FLOWING MAY BE CONSTRUCTED OF LUMBER OR LOGS
55	GEOTEXTILE SILT FENCE	USES GEOTEXTILE AND POSTS OR POLES MAY BE CONSTRUCTED OR PREPACKAGED EASY TO CONSTRUCT AND LOCATE AS NECESSARY
58	INLET SEDIMENT FILTER	USES PREPACKAGED GEOTEXTILE SACKS FILTERS SEDIMENT FROM RUNOFF AT CATCH BASIN INLET EASY TO INSTALL AND MAINTAIN

T = TEMPORARY, P = PERMANENT

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 and Mud Tracking Control Device(s) in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct Retention/Detention and Sedimentation Basins, including associated spillways, in accordance with the project plans. Finish grade and establish vegetative growth in Retention/Detention and Sedimentation Basins prior to massive earth disruption. Install temporary Soil Erosion Control Measures as necessary to stabilize Retention/Detention and Sedimentation Basins.
- Strip and stockpile topsoil. Perform mass grading and land balancing. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Install proposed underground utilities. (i.e.: storm and sanitary sewer, water main, etc.) Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct building(s) if required on the project plans. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Construct roadways and/or parking areas. Install appropriate Soil Erosion Control Measures in accordance with the Soil Erosion and Sedimentation Control Plan.
- Finish grade all disturbed areas outside of pavement. Perform final restoration, including placement of topsoil and establishment of vegetative growth outside of pavement.
- 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 all permanent Soil Erosion Control Measures.



**BENCHMARK**  
 DATUM BASED ON NGS OPUS SOLUTION REPORT, DATED MARCH 28, 2022 AT 11:26 AM. PREVIOUS DATUM FROM MARCH 1999 HAS A DIFFERENCE OF -0.76'.

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

WONDERLAND  
MARINE WEST

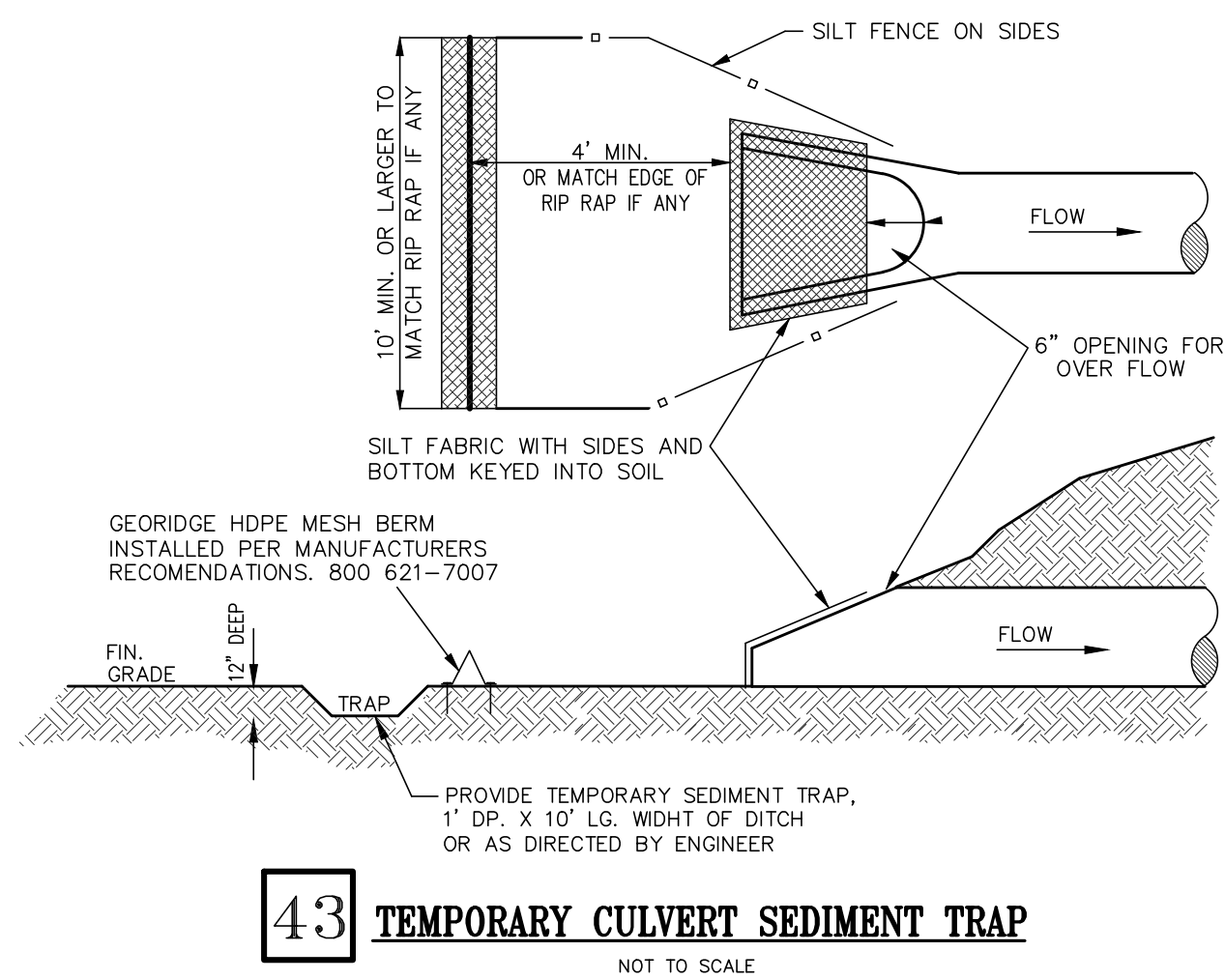
SOIL EROSION CONTROL PLAN

CLIENT: MITTS LLC  
 5796 E. GRAND RIVER  
 HOWELL, MICHIGAN, 48843  
 517-548-5122

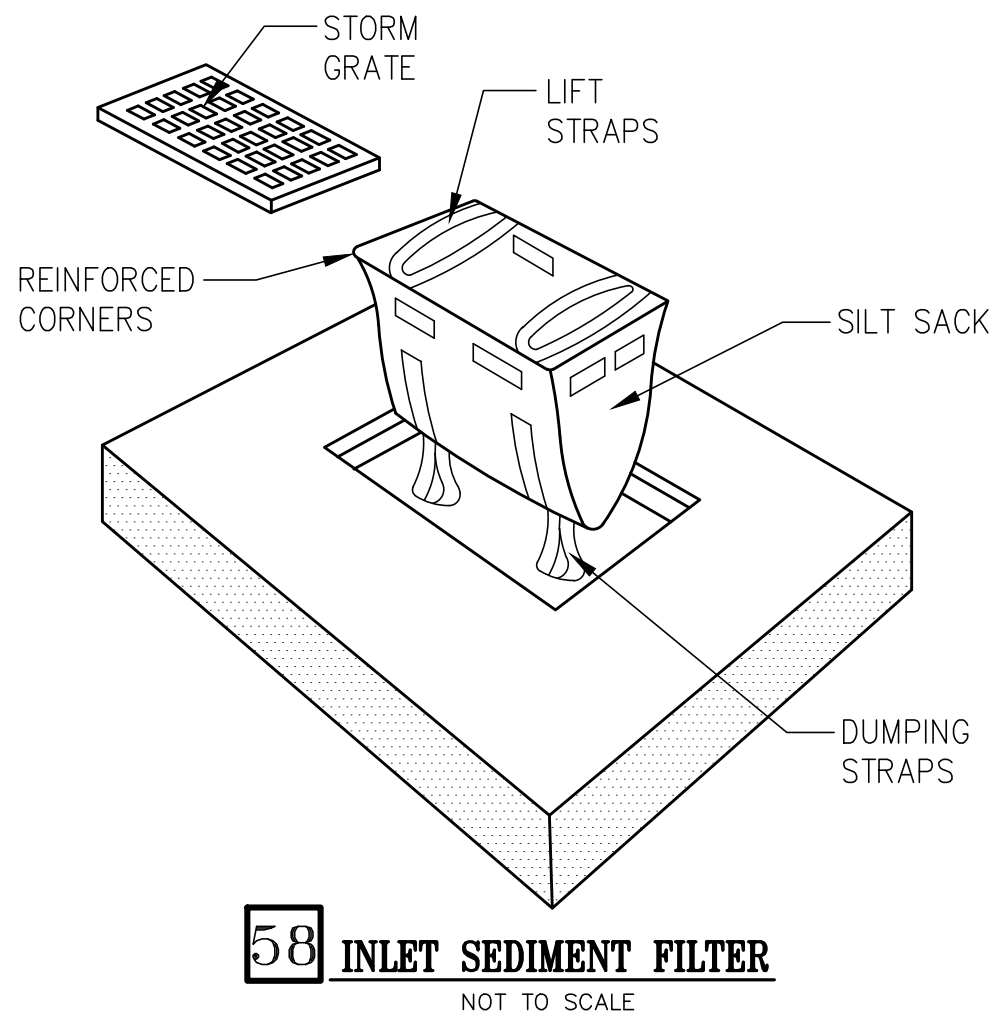
SCALE: 1in. = 30ft.  
 PROJECT No.: 214052  
 DWG NAME: 4052 SE  
 ISSUED: NOV. 21, 2022

SE1

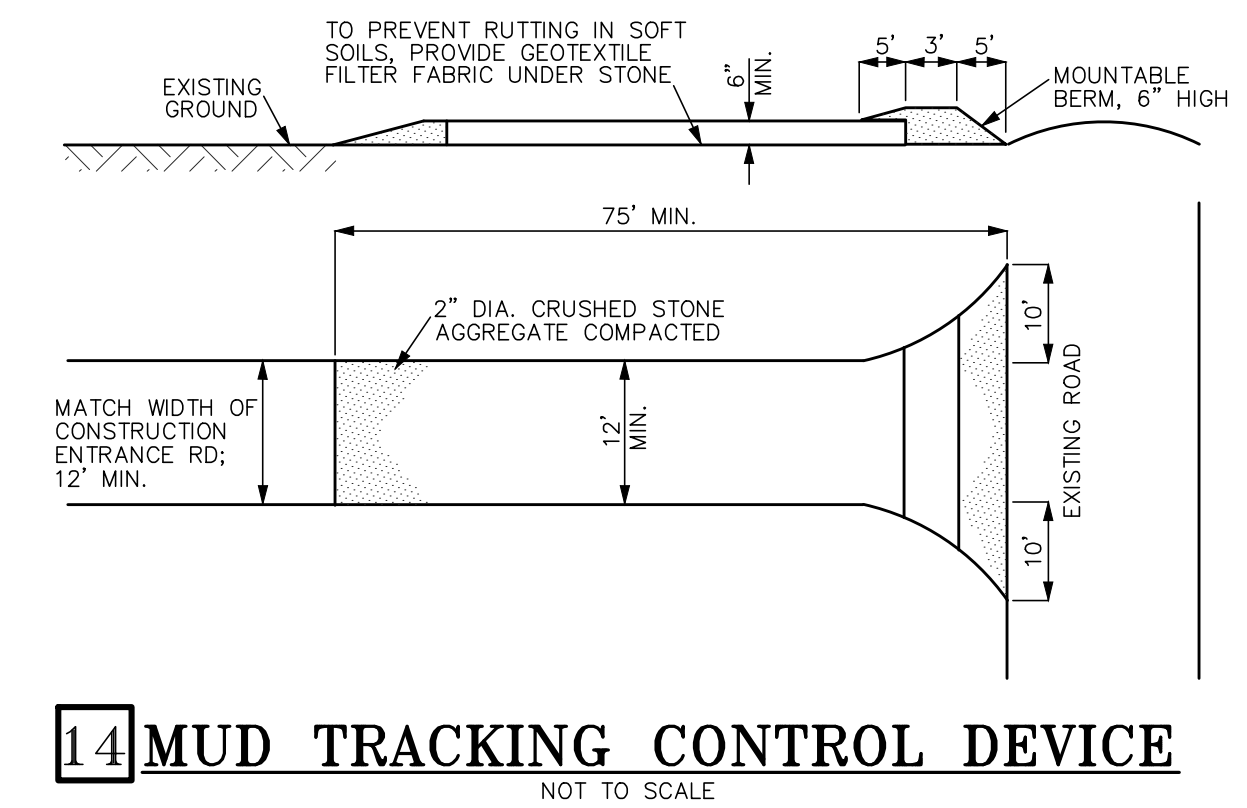




**43 TEMPORARY CULVERT SEDIMENT TRAP**  
NOT TO SCALE

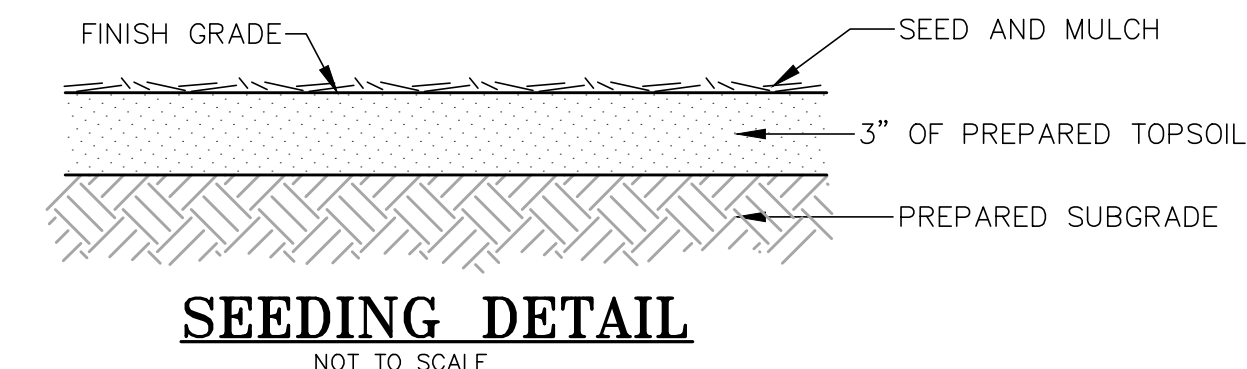


**58 INLET SEDIMENT FILTER**  
NOT TO SCALE



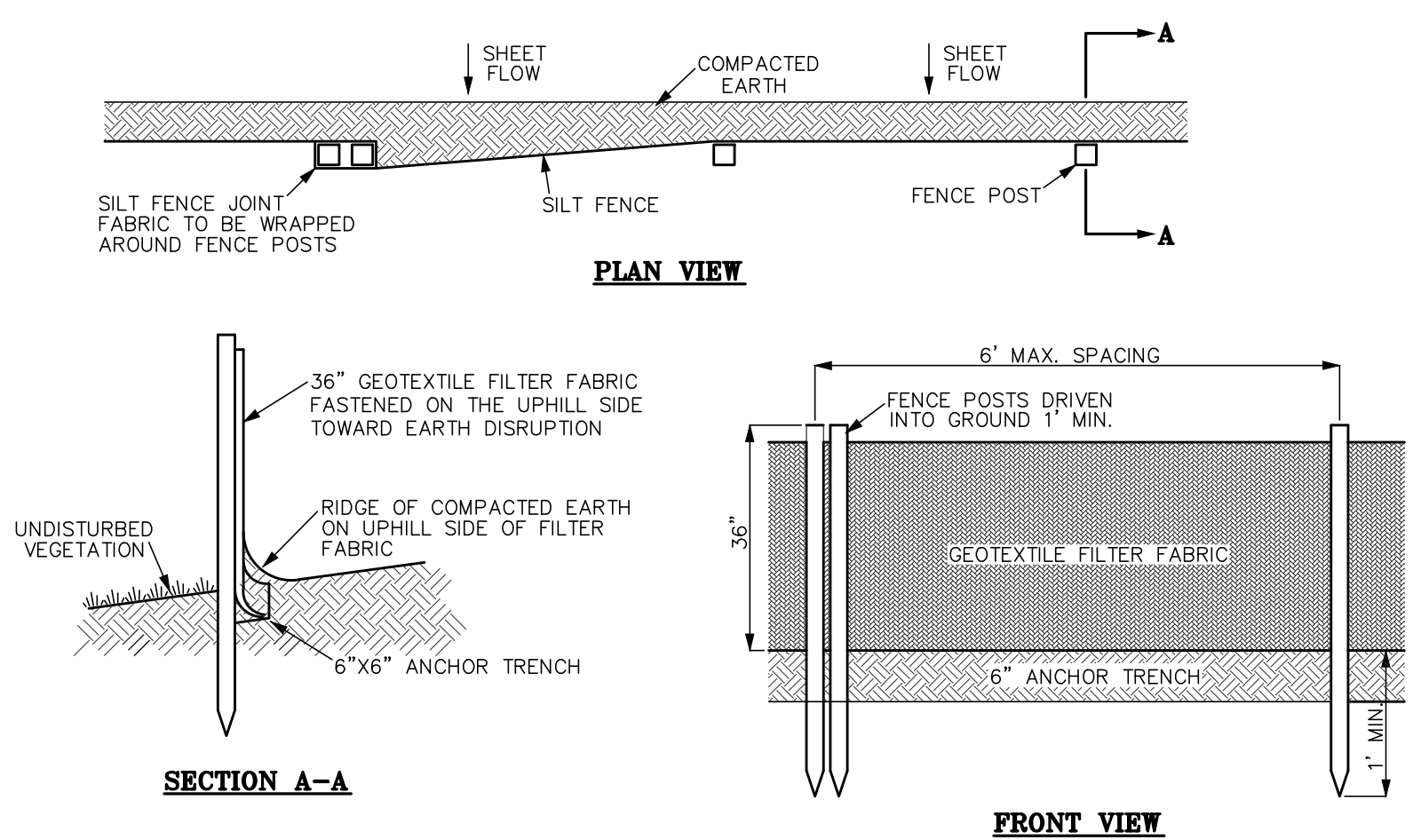
**14 MUD TRACKING CONTROL DEVICE**  
NOT TO SCALE

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



**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 earthen 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.



**55 SILT FENCE**  
NOT TO SCALE

- NOTES:
- REPAIR AND REPLACE SILT FENCE AS NEEDED, INCIDENTAL.
  - FIELD LOCATE SILT FENCE TO FOLLOW CONSTANT CONTOUR ELEVATIONS.
  - OVERLAP FENCES AT JOINTS.
  - INSTALL FILTER BERM AT LOW POINTS WHERE INDICATED ON PLANS.

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

WONDERLAND  
MARINE WEST

SOIL EROSION CONTROL  
DETAILS

CLIENT:  
MITTS LLC  
5796 E. GRAND RIVER  
HOWELL, MICHIGAN, 48843  
517-548-5122

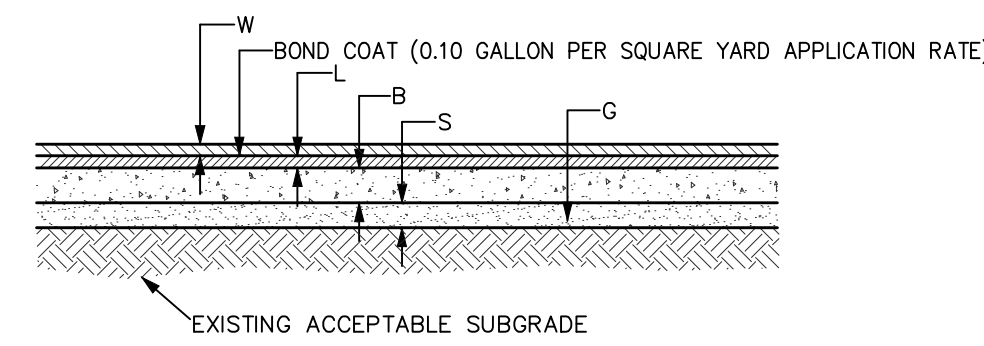
SCALE: AS NOTE  
PROJECT No.: 214052  
DWG NAME: 4052 SE  
ISSUED: NOV. 21, 2022

SE2

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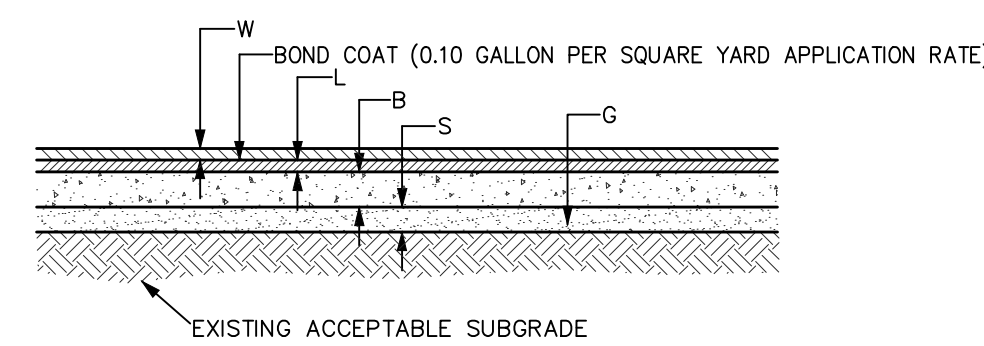


**STANDARD DUTY BITUMINOUS PAVEMENT CROSS SECTION**  
NOT TO SCALE

KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 36A	1.5"
L	LEVELING COURSE	MDOT 13A	1.5"
B	AGGREGATE BASE	MDOT 21AA	8"
S	GRANULAR SUBBASE	MDOT CLASS II	6"
G	GEOGRID	N/A	N/A

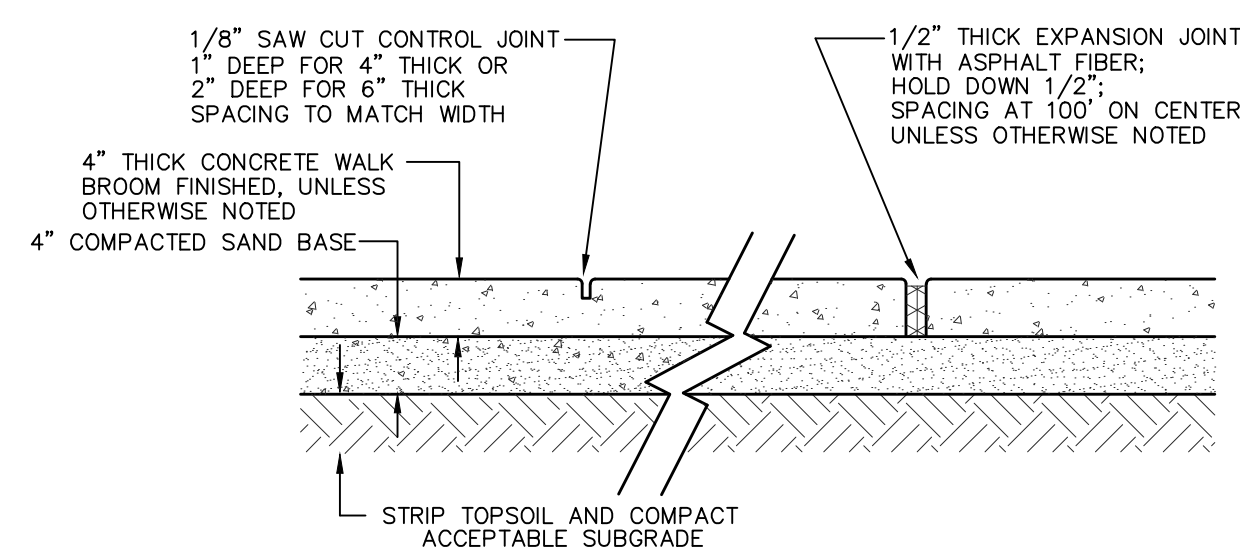
**BITUMINOUS PAVEMENT NOTES:**

- The construction specifications of the appropriate Local Municipality are a part of this work. Refer to the General Notes, Road and/or Parking Lot Construction Notes and Typical Road and/or Pavement Cross Section details on the project plans for additional requirements.
- Unsuitable soils found within the 1 on 1 influence zone of the pavement, such as muck, peat, topsoil, marl, silt or other unstable materials shall be excavated and replaced up to the proposed subgrade elevation with MDOT Class III granular material compacted to 95% maximum unit weight, modified proctor.
- Contractor shall proof roll prepared subgrade as directed by Engineer. Unacceptable areas of subgrade shall be undercut and replaced as directed by Engineer.



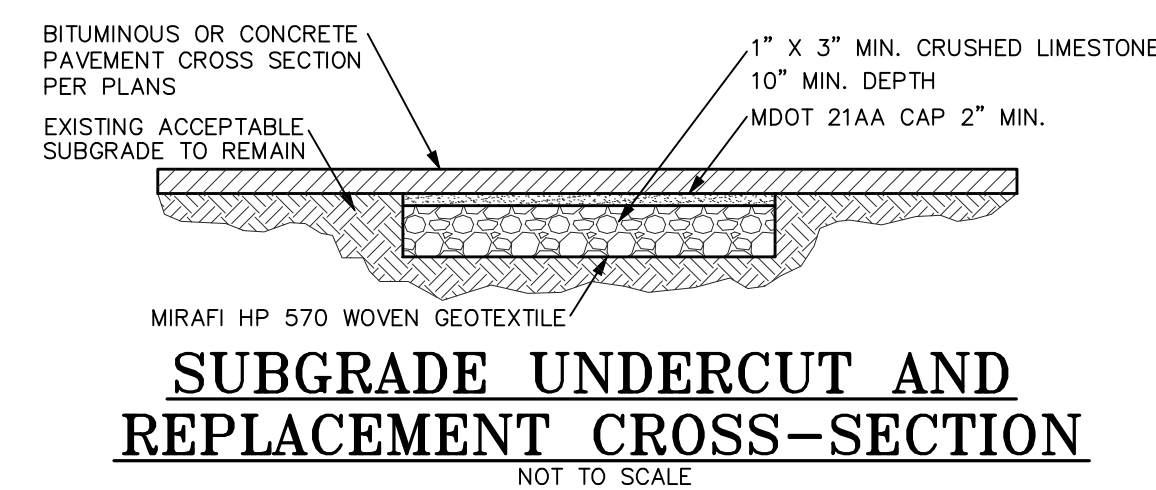
**HEAVY DUTY BITUMINOUS PAVEMENT CROSS SECTION**  
NOT TO SCALE

KEY	DESCRIPTION	MATERIAL SPECIFICATION	MINIMUM COMPACTED THICKNESS
W	WEARING COURSE	MDOT 36A	1.5"
L	LEVELING COURSE	MDOT 13A	4"
B	AGGREGATE BASE	MDOT 21AA	8"
S	GRANULAR SUBBASE	MDOT CLASS II	6"
G	GEOGRID	N/A	N/A



**SIDEWALK CROSS SECTION**  
NOT TO SCALE

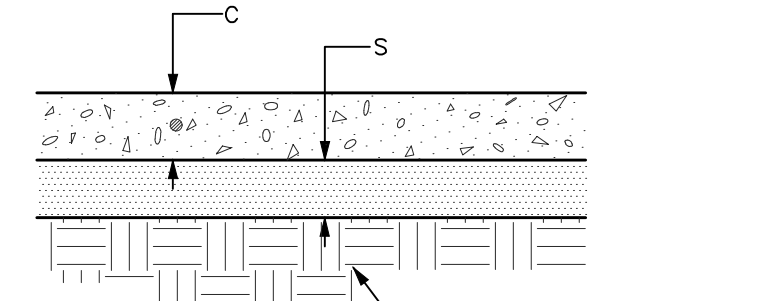
- NOTES:  
1. SEE PLAN FOR WIDTH OF SIDEWALK.  
2. PROVIDE CONCRETE TYPE PER LOCAL CODE. (3500 PSI AIR ENTRAINED)



**SUBGRADE UNDERCUT AND REPLACEMENT CROSS-SECTION**  
NOT TO SCALE

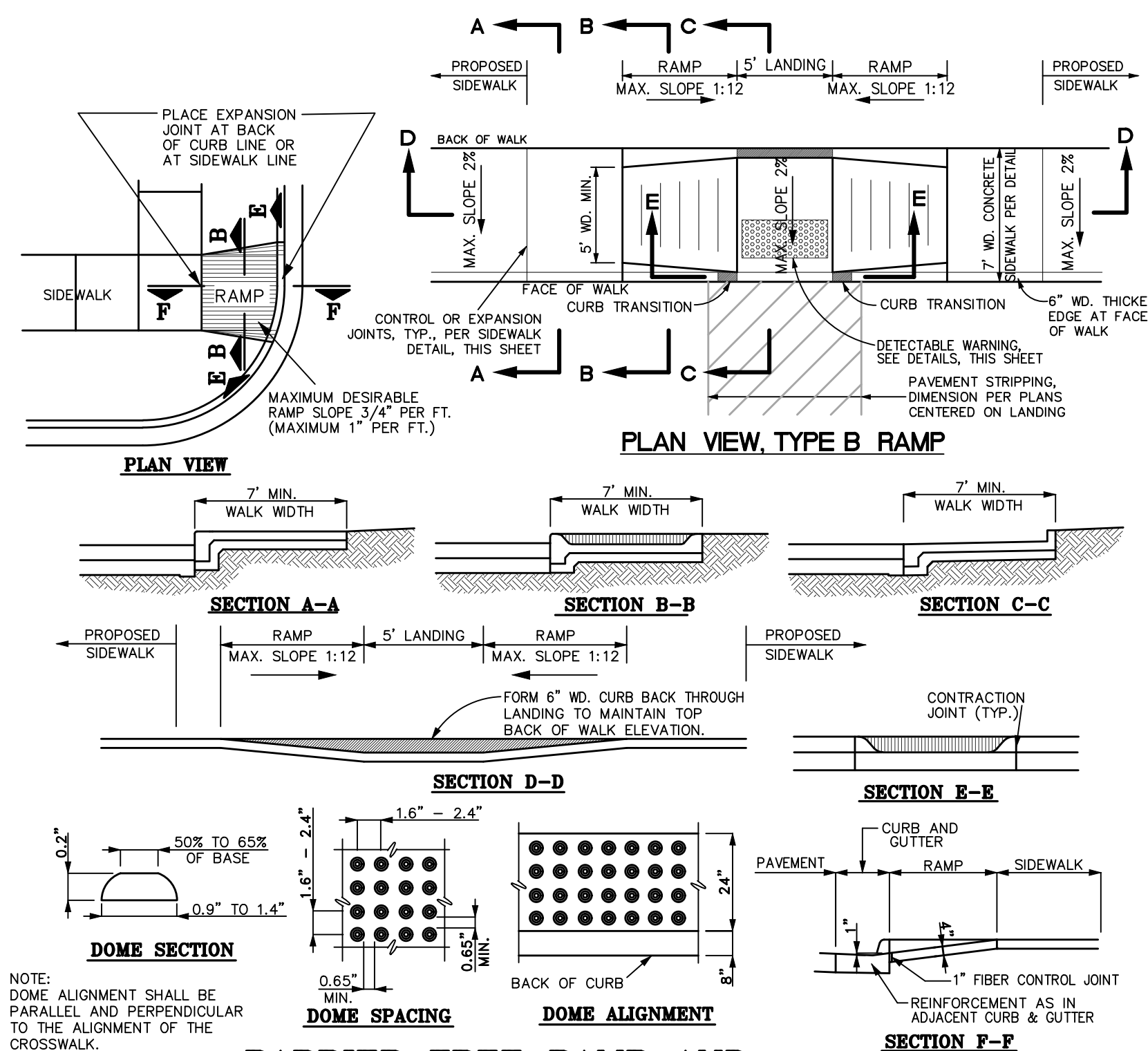
**PAVEMENT SUBGRADE UNDERCUT NOTES:**

- Areas of pavement subgrade that do not pass a proof roll inspection shall be undercut when directed by the Material Testing Engineer and/or Project Engineer. All undercut work shall be witnessed and field measured by the Material Testing Engineer and/or Project Engineer. Copies of the field notes depicting the field measurements of the undercut areas shall be provided to the General Contractor and/or Earthwork Subcontractor and Owner.
- Undercut areas shall be excavated to a depth of 12" below the proposed subgrade elevation using an Excavator or Backhoe with a Smooth Edged Ditching Bucket so as not to scarify the underlying soils. Undercut areas shall remain free of all construction traffic and equipment to avoid rutting and/or tracking of the underlying soils.
- Mirafi HP 570 Woven Geotextile Fabric (or approved equal) shall be placed over all undercut areas per the Manufacturer's specifications. Overlap all seams a minimum of 12" unless specified otherwise by the Manufacturer.
- Backfill the undercut areas with 1" x 3" minimum size crushed angular limestone and cap with 21AA crushed angular limestone up to the proposed subgrade elevation. Crushed concrete material shall NOT be substituted for crushed limestone material. The backfill material shall be spread with a Wide Track Dozer to minimize loading on the underlying soils. Static roll the backfill material with a large smooth drum roller.
- Construct the appropriate Bituminous or Concrete Pavement Cross Section over the undercut areas per the Project Plans.

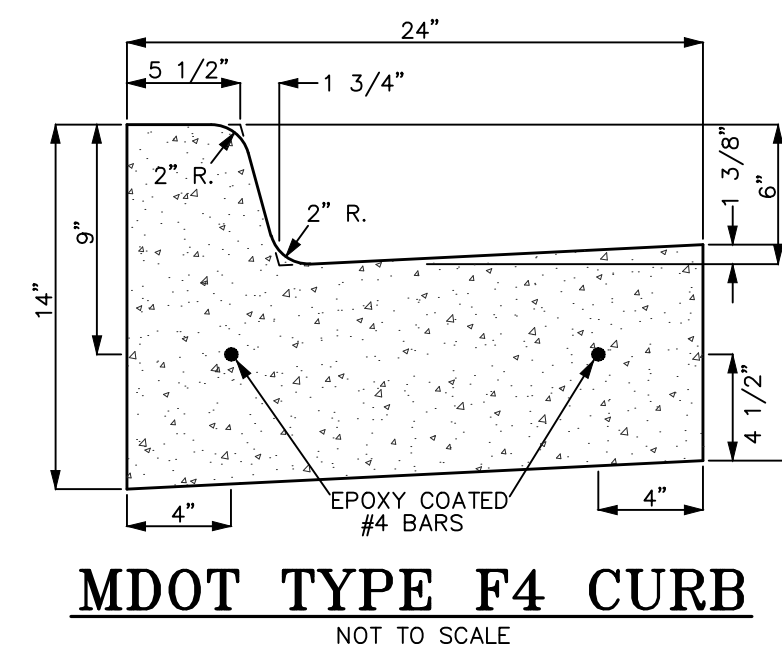


**CONCRETE PAVEMENT CROSS-SECTION**  
NOT TO SCALE

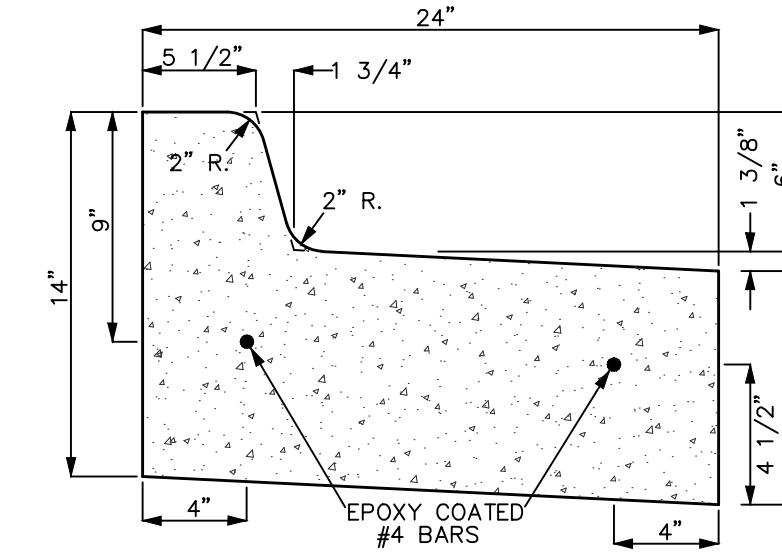
KEY	DESCRIPTION	MATERIAL SPEC.	MIN. THICKNESS
C	CONCRETE	MDOT P1-1A - 6 SACK	6"
S	GRANULAR SUBBASE	MDOT CLASS II	6"



**BARRIER FREE RAMP AND DETECTABLE WARNING DETAILS**  
NOT TO SCALE



**MDOT TYPE F4 CURB**  
NOT TO SCALE



**MDOT TYPE F4 CURB REVERSE PITCH**  
NOT TO SCALE

**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 between 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.

**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 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.

DESIGN: WMP	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG	1	11-21-22	REVISED PER REVIEW COMMENTS			
CHECK: WMP						

WONDERLAND MARINE WEST

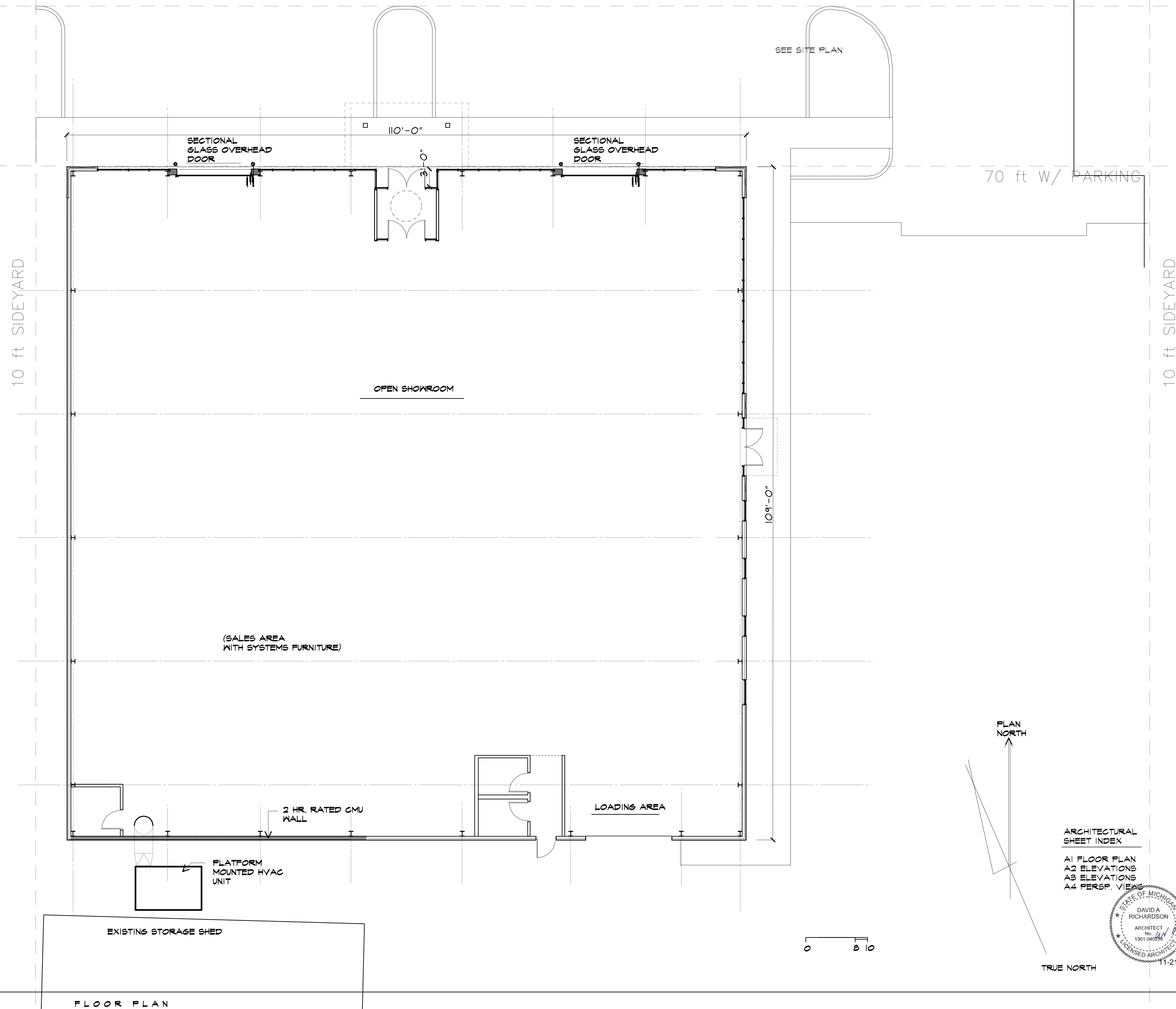
SITE & PAVEMENT NOTES AND DETAILS

CLIENT: MITTS LLC	SCALE: N/A
5796 E. GRAND RIVER HOWELL, MICHIGAN 48843	PROJECT No.: 214052
517-548-5122	DWG NAME: 4052 DT
	ISSUED: NOV. 21, 2022

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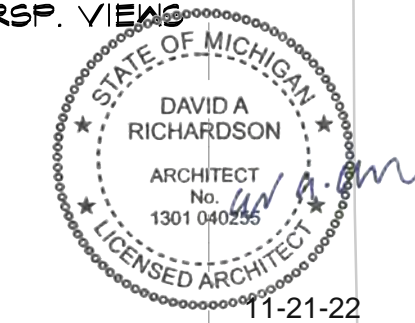
DATE PLOTTED: 6-4-2024 THE PLOTTED: 3:8 PM FILE LOCATION: J:\PRED\DEVELOPMENT\L2ARC.DWG COPYRIGHT © 2010 LINDHOUT ASSOCIATES architects and pc THIS DOCUMENT AND THE SUBJECT MATTER CONTAINED THEREIN IS PROPRIETARY AND IS NOT TO BE USED OR REPRODUCED WITHOUT PRIOR WRITTEN APPROVAL



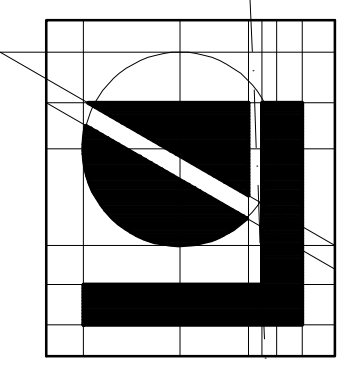
FLOOR PLAN

ARCHITECTURAL SHEET INDEX

- A1 FLOOR PLAN
- A2 ELEVATIONS
- A3 ELEVATIONS
- A4 PERSP. VIEWS



11-21-22



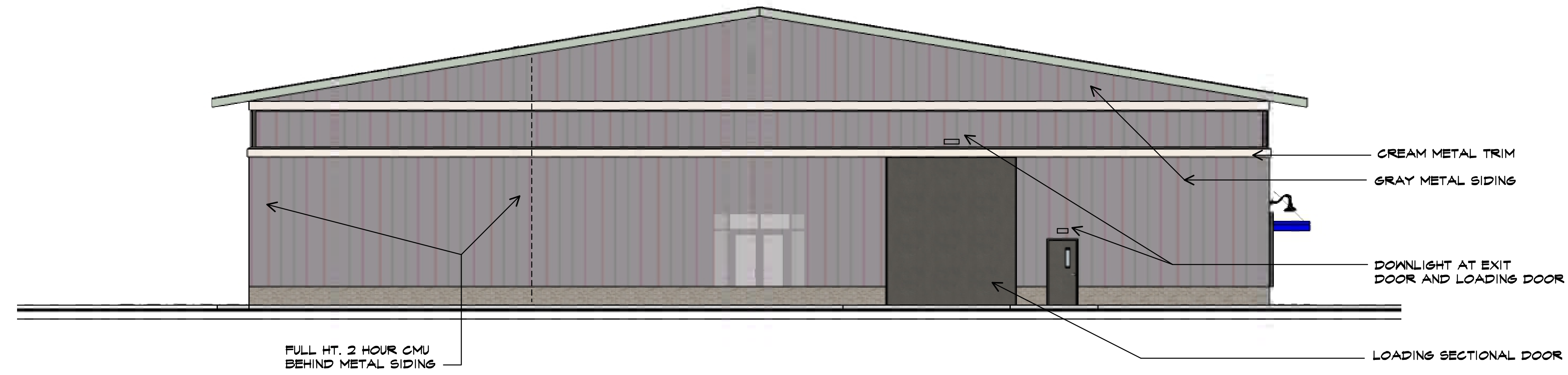
Lindhout Associates  
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10465 citation drive, brighton, michigan 48116-9510  
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consultant

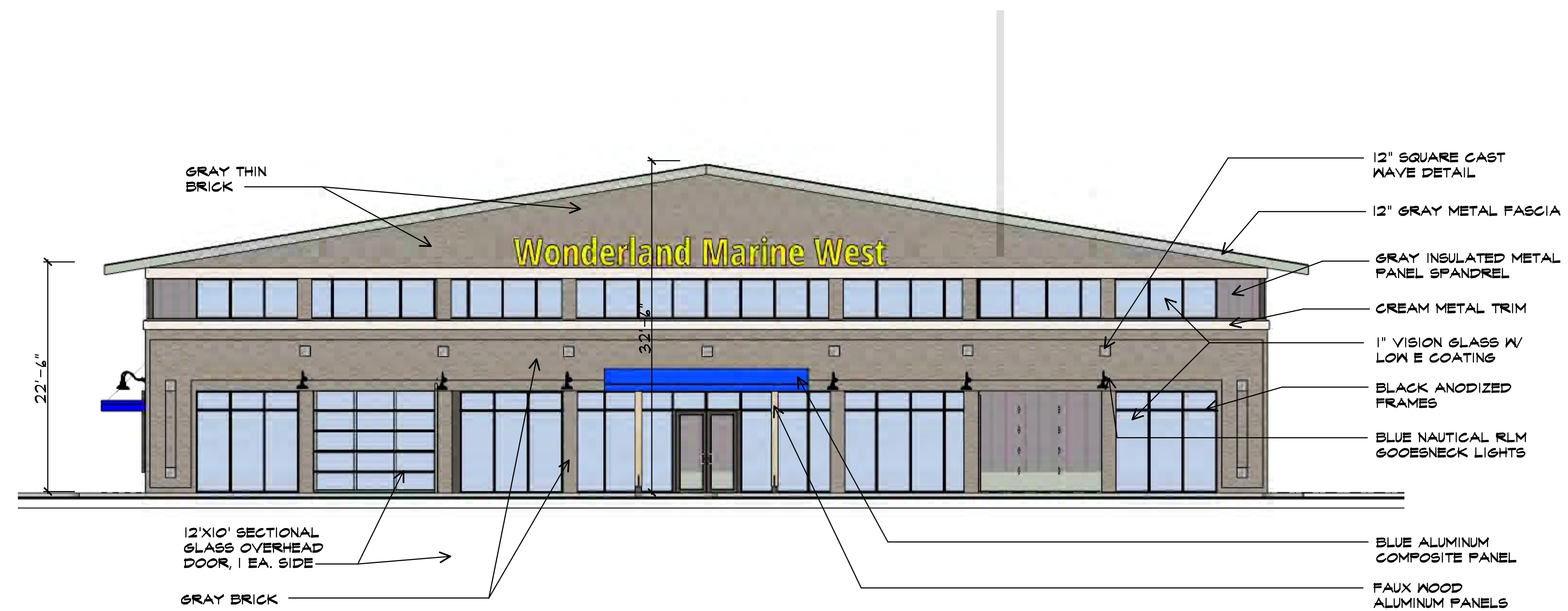
DR:	MRL	DATE	REVIEW
CK'D:	DAR	11-22-2022	SITE PLAN REVIEW
APP'D:		11-21-2022	OWNER REVIEW
		8-05-2022	INITIAL SITE PLAN REVIEW
			ISSUED FOR

NEW HIGH BAY BOAT SHOWROOM for:  
**WONDERLAND MARINE WEST**  
GENOA TWP., MI  
**FLOOR PLAN**

A1  
22001



SOUTH ELEVATION



NORTH ELEVATION



**NORTH ELEVATION MATERIALS**

2,925 SQ.FT. TOTAL

CORNER GLASS UNITS  
 $2(88+99) = 274$  SQ.FT.

RUNNING GLASS UNITS  
 $4(40+115) = 620$  SQ.FT.  
 (INCLUDES GLASS SECTIONAL DOORS)

CENTER GLASS UNITS  
 $91+242 = 333$  SQ.FT.

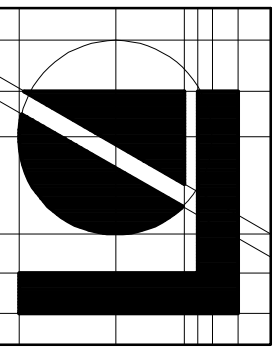
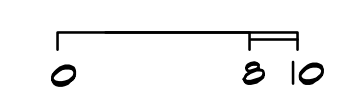
NON GLASS AREA  
 $2,925 - 1,227 = 1,698$  SQ.FT.

METAL TRIM AND CORNER IMP SPANDRELS  
 261 SQ.FT.

BLUE A.C.P. CANOPY, FAUX WOOD  
 60 SQ.FT.

BRICK AREA  
 1,357 SQ.FT.

BRICK PERCENTAGE  
 $1,357 / 1,698 = 80\% \pm$



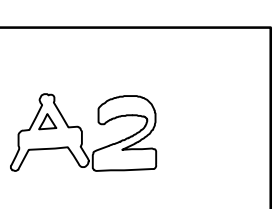
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consultant

DATE: 11-21-2022  
 DR: MRL  
 CK'D: DAR  
 APP'D: [Signature]  
 SITE PLAN REVIEW  
 OWNER REVIEW  
 ISSUED FOR

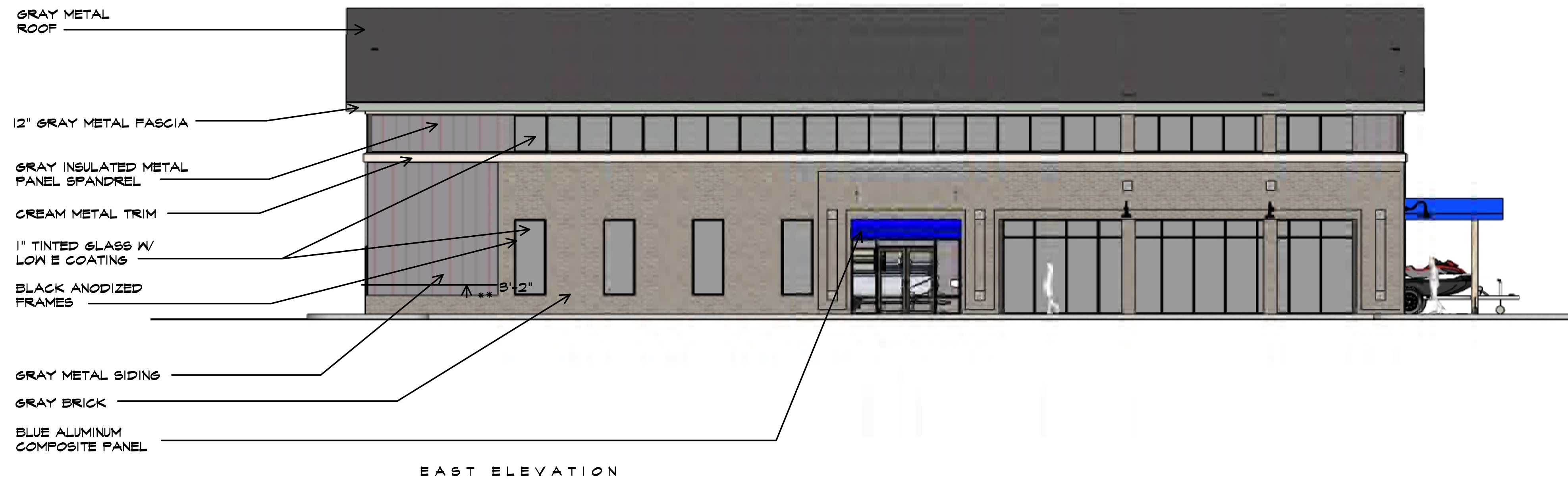
11-21-2022  
 11-21-2022  
 date

NEW HIGH BAY BOAT SHOWROOM for:  
**WONDERLAND MARINE WEST**  
 GENOA TWP., MI  
**ELEVATIONS**



22001





GRAY METAL ROOF

12" GRAY METAL FASCIA

GRAY INSULATED METAL PANEL SPANDREL

CREAM METAL TRIM

1" TINTED GLASS W/ LOW E COATINGS

BLACK ANODIZED FRAMES

GRAY METAL SIDING

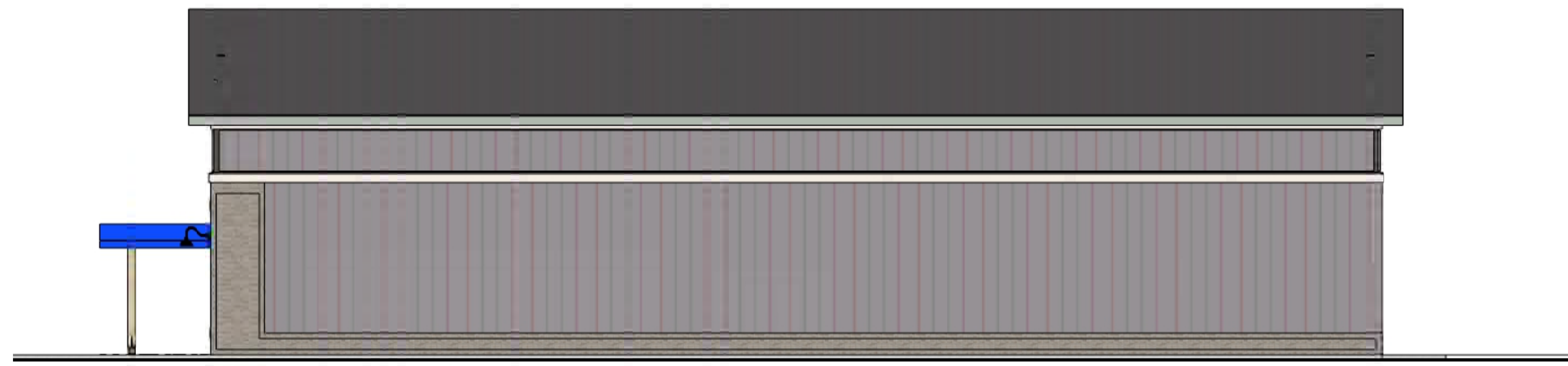
GRAY BRICK

BLUE ALUMINUM COMPOSITE PANEL

EAST ELEVATION

\*\*  
RAISE BRICK BASE  
12" THIS AREA TO 3'-2" EL. FOR  
75% BRICK PERCENTAGE

SEE EAST ELEV.  
FOR NOTES



WEST ELEVATION

EAST ELEVATION MATERIALS

2348 SQ.FT. TOTAL

CORNER GLASS UNITS  
(3+3) = 112 SQ.FT.

UPPER GLASS LESS CORNER

49+242 = 278 SQ.FT.

PUNCHED WINDOW OPENINGS  
4(24) = 96 SQ.FT.

LOWER GLASS LESS CORNER  
92+124+131 = 347 SQ.FT.

NON GLASS AREA  
2348 - 895 = 1508 SQ.FT.

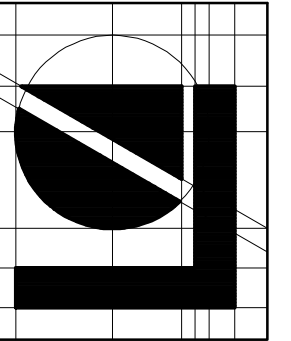
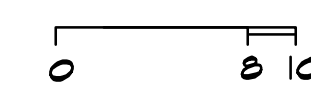
METAL TRIM AND CORNER IMP SPANDRELS  
184 SQ.FT.

METAL SIDING BELOW TRIM  
179 SQ.FT.

BLUE A.C.P. CANOPY  
24 SQ.FT.

BRICK AREA  
1131 SQ.FT.

BRICK PERCENTAGE  
1131 / 1508 = 75%

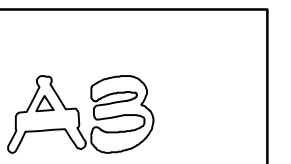


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PHL  
dr: DAR  
ck'd: DAR  
app'd: DAR  
SITE PLAN REVIEW  
OWNER REVIEW  
ISSUED FOR  
11-22-2022  
11-21-2022  
date

NEW HIGH BAY BOAT SHOWROOM For:  
WONDERLAND MARINE WEST  
GENOA TWP., MI  
ELEVATIONS



22001





VIEW FROM EAST DRIVE



VIEW FROM N.E. CORNER



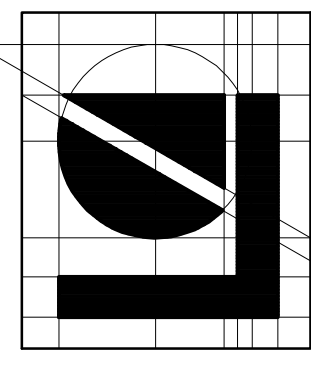
NEW HIGH BAY BOAT SHOWROOM for:  
**WONDERLAND MARINE WEST**  
GENOA TWP., MI  
**PERSPECTIVE VIEWS**

app'd: HRL  
ck'd: DAR  
date: 11-22-2022  
11-21-2022

SITE PLAN REVIEW  
OWNER REVIEW  
issued for

consultant

**Lindhout Associates**  
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## **Item #2**

**Continuation of the public hearing for the Master Plan.**

**No new material has been submitted.**

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
November 14, 2022  
6:30 P.M.  
MINUTES**

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Chris Grajek, Jeff Dhaenens, Eric Rauch, Tim Chouinard, Diana Lowe, Marianne McCreary and Glynis McBain. Also present was Township Manager Kelly VanMarter, Planning Director Amy Ruthig, Brian Borden of Safebuilt, and Shelby Byrne of Tetra Tech.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

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

DECLARATION OF CONFLICT OF INTEREST:

Commissioner McBain stated her company manages the Hampton Ridge Condominiums. Chairman Grajek does not believe this would be considered a conflict of interest. All commissioners agree.

CALL TO THE PUBLIC:

The call to the public was opened at 6:33 pm with no response.

**OPEN PUBLIC HEARING #1...**Consideration of a special use application, environmental impact assessment and sketch plan for the storage of hazardous materials for Bottcher Systems located at 1349 Grand Oaks Drive, south of Grand River Avenue and North of I-96 on the east side of Grand Oaks. The request is petitioned by Bottcher America.

- A. Recommendation of Special Use Application.
- B. Recommendation of Environmental Impact Assessment (dated 10-18-22)
- C. Recommendation of Sketch Plan (dated 8-1-22)

Ms. Nikki Calloway of Bottcher Systems provided a review of their company. They are requesting a Special Land Use to store chemicals that they use in their business.

Mr. Borden reviewed his letter dated November 10, 2022.

1. Section 19.03 General Special Land Use Standards:
  - A. In order to make favorable findings related to compatibility and impacts, the conditions of Section 13.07 need to be met to the Commission's satisfaction. He has determined that these conditions have been met.
  - B. The applicant must address any comments provided by the Township Engineer or Brighton Area Fire Authority regarding public facilities and services.
2. Section 13.07 Conditions:
  - A. The applicant needs to demonstrate compliance with the requirement for secondary containment. He did not find anything in the submittal demonstrating this.
  - B. The applicant must obtain any outside permits necessary for the proposed operation.
3. Site Plan Review:
  - A. The request for a new special land use on a developed site provides the Township with an opportunity to require improvements that bring the site into, or closer to, compliance with current standards.
  - B. We suggest that improvements and/or further information/discussion are warranted for the following:
    - i. Landscaping – front yard greenbelt trees, which would be the additional of two to three trees in front of the building, though the Ordinance requires five canopy trees for the front yard greenbelt
    - ii. Lighting – upgrade wall-mounted fixtures. He suggests the applicant provide an indication of the fixture type, and the Township require upgrades, if needed.
    - iii. Impervious surface – patch or repair blacktop areas, as needed
    - iv. Parking lot – provide striping and barrier-free parking, per Ordinance requirements. The plan notes that the parking lot is not currently striped. He suggests that the plan be revised to include parking lot striping in accordance with the requirements of Sections 14.05 and 14.06. This includes minimum dimensional requirements for spaces and drive aisles, looped (or double) striping, and the required number of barrier-free spaces.
    - v. Miscellaneous – other improvements suggested by Township staff or the Township Engineer

Ms. Byrne reviewed her letter dated November 9, 2022.

She has no engineering related concern to the proposed special use. Since no site improvements are proposed, the existing storm management and utilities will not be impacted. In the future, if any site improvements are required for the proposed use, they will need to be included on a proposed site plan to be approved by the Township.

The existing building is connected to public water and sanitary sewer and some of the products being stored are considered hazardous materials. The petitioner has already coordinated with Genoa-Oceola Sewer and Water Authority to ensure all of their requirements are met. They

should submit written documentation of their on-site hazardous materials management program to the Sewer and Water Authority for their records.

The Brighton Area Fire Authority Fire Marshal's letter dated October 25, 2022 states there are no outstanding issues.

Ms. Calloway is aware of all of the comments made by the consultants.

Commissioner Rauch asked how the hazardous materials are handled on the outside as well as on the inside of the building. He also asked for clarification on the secondary containment process. Ms. Calloway provided their secondary containment and SDS processes. She added that the products they purchase are flammable so they have equipment that funnels the bulk material into smaller one- or five-gallon containers with specific types of caps for each of those containers. She confirmed that they have a containment measure to ensure that the chemicals do not enter into the stormwater system. All of their mixing is done within the building; there are no chemicals mixed outside.

Commissioner McCreary asked the applicant if she is familiar with the previous owner of the building. Ms. Calloway stated the chemicals they used were different from what her company uses. Their materials were very corrosive and hers are not. Commissioner McCreary asked if any PPE is required by employees. Ms. Calloway stated they wear goggles and gloves, but no masks are required.

Commissioner Dhaenens questioned if the site plan improvements noted by Mr. Borden will be addressed. Ms. Calloway stated she will be making all of those improvements.

Chairman Grajek asked who oversees their chemical storage and use. Ms. Calloway stated they are overseen by the State of Michigan and must provide their reports to them. She also noted that they do not use underground or above ground storage tanks.

The call to the public was opened at 7:00 pm.

Mr. Keith Burrison, the owner of CenTech at 1325 Grand Oaks Drive, is concerned about the safety of his employees. He wants to ensure that the chemical smell will not make its way to his building, there will be nothing leaching into the ground, and there is a process for a spill.

Ms. Janeen Musselman, who lives in Hampton Ridge, sent an email expressing her opposition to this plan. She does not want hazardous waste brought into their backyard. It will negatively impact the residents and animals.

The call to the public was closed at 7:05 pm

Commissioner McCreary questioned how vapors or odors from the chemicals will be contained so they are not toxic to the neighbors. Ms. Calloway stated most of their chemicals are completely odorless. They have 24/7 ventilation. They will be using the same system that was used by the previous building owner. Also, they are not regulated by the EPA because of the type of chemicals they use.

**Moved** by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Special Use Application for the storage of hazardous materials for Bottcher Systems located at 1349 Grand Oaks Drive as this Commission finds that the conditions in Sections 19.03 and 19.07 of the zoning ordinance have been met. This recommendation is conditioned on the following:

- All concerns from the Township Engineer and Brighton Area Fire Marshal regarding facilities and services must be met to their satisfaction.

**The motion carried unanimously.**

**Moved** by Commissioner Rauch, seconded by Commissioner Lowe, to recommend to the Township Board approve of the Environmental Impact Assessment dated October 10, 2022 for the storage of hazardous materials for Bottcher Systems located at 1349 Grand Oaks Drive, as the applicant has demonstrated their compliance with the requirement for secondary containment. This recommendation is conditioned upon the following:

- The applicant must obtain any outside permits necessary and required for this type of operation.

**The motion carried unanimously.**

**Moved** by Commissioner Rauch, seconded by Commissioner Dhaenens, to recommend to the Township Board approval of the Sketch Plan dated August 1, 2022 for the storage of hazardous materials for Bottcher Systems located at 1349 Grand Oaks Drive, conditioned upon the following:

- The petitioner shall update the landscaping, specifically the front yard greenbelt
- The petitioner shall upgrade the lighting with wall mounted lighting fixtures.
- All repairs to impervious surfaces shall be made to the satisfaction of Township Staff, including parking space striping and correct number of barrier free spaces.
- The petitioner shall make any other miscellaneous improvements as determined by Township Staff

**The motion carried unanimously.**

**OPEN PUBLIC HEARING # 2...**Consideration of an amendment to the Summerfield Pointe Planned Unit Development Agreement, preliminary condominium site plan and environmental impact assessment to reduce the project from 140 attached condominiums to 102 single family detached homes and 12 attached condominiums. The project is located on Lawson Drive, North of Grand River Avenue. The request is petitioned by Healy Homes of Summerfield, LLC.

- A. Recommendation of PUD Agreement Amendment
- B. Recommendation of Environmental Impact Assessment (9-26-22)

C. Recommendation of Preliminary Site Condominium Plan (9-26-22)

Mr. Wayne Perry of Desine Engineering and Mr. Jack Healy were present. Mr. Perry provided a review of the request. The prior approval was for 192 single-family attached condominiums; however, they would like to modify the agreement to provide for 56 attached single-family condominium units and 102 detached single-family condominium units. The general road network and utilities are the same as the previous plan. He presented the site plan and reviewed the proposed changes.

Mr. Borden reviewed his letter dated November 8, 2022.

1. PUD Amendment:

- A. The applicant proposes to construct 102 detached residential units in lieu of the 140 attached units that are included in the approved PUD.
- B. Dimensional deviations are sought for lot width, lot area, and combination of side yard setbacks.
- C. The applicant must address any comments provided by Township staff and/or the Township Attorney on the draft PUD Agreement.

2. Preliminary Condominium Plan:

- A. The applicant must address any comments provided by Township staff and/or the Township Attorney on the draft condominium documents.
- B. The detailed plan drawings do not identify the area where the proposed building containing Units 53-56 is located.
- C. The site data and zoning table should be included on Sheet SD. It was in the previous submittal and is currently referenced on Sheet SP1.
- D. Sidewalks are located within the site condominium units and not the roadway easement, which is relatively unusual.
- E. There are minor discrepancies on the landscape plan that need to be corrected.
- F. The Master Deed should identify the open space areas as general common elements subject to maintenance and protection by the Association.
- G. The Commission should consider comments provided by the Township Engineer and/or Brighton Area Fire Authority.

3. Private Road:

- A. The provisions to allow variation from public roadway standards do not appear to be met.
- B. The submittal does not include a Private Road Maintenance Agreement.
- C. The required easement and roadway widths are not provided; however, both are identified as dimensional deviations in the draft PUD Agreement.
- D. The plans do not identify any street signs.
- E. Design details such as AASHTO standards, pavement, curb and gutter, grades, and curves, are subject to review by the Township Engineer.



Ms. Byrne reviewed her letter dated November 9, 2022.

She noted that this is a conceptual plan and will be reviewed in more detail during the final site plan review; however, since the applicant provided a lot of detail on this plan, she provided the following comments:

The general road layout for the proposed Summerfield Pointe development is essentially the same as the previously approved version with multi-family units. We have no engineering related concerns with single family units as opposed to multi-family units.

- After final site plan approval, the petitioner will be required to submit private road construction plans to the Township for review and approval. The Petitioner should review the private road requirements in the Genoa Township Engineering Standards and make sure all requirements are met. Engineering Design Standards allow a minimum horizontal curve radius of 150 feet for roads with a posted speed limit of twenty-five miles per hour or less. This should be addressed on the final site plan.
- The intersection radii are currently shown as 27 feet. Genoa Township Engineering Design Standards require a minimum intersection radius of 30 feet.
- Low spots within intersections are not allowed. More spot elevations should be used at proposed intersections to show that drainage is being carried away from the intersection.
- After final site plan approval, the Petitioner will be required to submit construction plans to MHOG Sewer and Water Authority for review and approval.
- The Existing and Proposed Utility Structure Inventories on UT 7 are inconsistent with the calculations and the utility plans. This should be addressed on the final site plan.
- The proposed PUD Amendment notes in Article II, note 4, that installation of drainage facilities for the future phase have been completed, and that the Developer shall have no obligation to install further stormwater drainage facilities for future phases. The Township does not have the final authority to waive improvements to the existing drainage facilities. Since the previous site plan with multi-family units was approved, the Livingston County Drain Commissioner (LCDC) has updated their design standards and may require that the future phases of this development are brought into compliance with the new updated LCDC Procedures and Design Criteria for Stormwater Management Systems.
- The existing on-site detention basin was designed using the previous LCDC Standards. The Petitioner should work with the Drain Commissioner to determine if their existing detention pond will need to be revised to conform to the new standard. Evidence of approval from the LCDC should be provided to the Township prior to final site plan review.
- The final site plan must include SESC measures for review and approval. SESC details should be included and should match LCDC Standards.
- The LCDC requires that the "Land Use Summary Table" found in Appendix J of their updated LCDC Procedures and Design Criteria for Stormwater Management Systems be included on the cover sheet of the construction plans.
- CB 132B on the storm sewer calculations is labeled as FES 303 on the utility plans.

The Brighton Area Fire Authority Fire Marshal's letter dated October 19, 2022 states all outstanding issues have been met.

Commissioner McCreary asked if this would be added to the existing condominium association. Mr. Perry stated this new development would be its own association; however, they would follow the same bylaws of the existing association and after completion, they would all be under one condominium umbrella.

Commissioner Rauch stated the plan that was previously approved was 140 units. Under traditional zoning, without the PUD Agreement, it would allow 131 units. The applicant is requesting 102 detached units this evening.

Ms. VanMarter provided the public the process of this approval, noting that this could be the first of possibly four meetings and could take several months to complete.

The call to the public was opened at 7:36 pm.

Ms. Jamie Schingeck of 4441 Aster Boulevard is concerned about the difference in the HOA's. Her condominium has very strict bylaws and the new association's bylaws have differences in law care, pets, fireworks, etc.

Ms. Carrier Carter of 4464 Aster Boulevard stated their roads are private and they pay for them. She is concerned about construction traffic as well as safety. Cutting down the trees will affect the wildlife.

Karen of 4697 Summer Ridge Drive questioned if her condominium association could be separate from the single-family homes. She asked if they will look identical and if the Township has details of what is being built. She would like them to be the same. She questioned why it took 16 years to finish this development.

Ms. Ann Streeter who is on the Board of the Hampton Ridge HOA stated she would like this project to be redesigned so it does not connect to Aster Boulevard. Due to the new traffic light on Latson, many drivers use Aster so this new development will increase this traffic. If they still connect to Aster, her HOA would like some money to be given to them toward the purchase of speed bumps.

Ms. Lori Rowe at 4476 Aster Boulevard is concerned with the construction drive egress, which is being proposed to be Aster Boulevard. It is a shorter distance from Grand River to the development site than off of Latson.

Ms. Pat Anderson of 4280 Hampton Ridge is concerned with the density. Westbury Apartments are also being expanded. There will be a lot of people roaming through the neighborhood. There will also be mature trees that will be taken down.

Ms. Jeanine Gazley of 709 Abbington Court is one of the residents who will look at the new development. She is concerned that the trees will be taken down. She questioned how the two associations will work together.

Mr. Ron Watson of 4460 Aster Boulevard does not believe this project should be approved with the connection to Aster. It will be a major safety factor. Speed bumps are not a solution.

Mr. Larry Limonoff of 4363 Aster Boulevard is concerned that Aster is a private road and they pay to maintain it and other residents will be using it.

Ms. Susan Gardner of 4355 Aster Boulevard stated that the roads are private and they are narrow. There is no on-street parking and the speed limit is very slow. It was never meant to be a throughway. Kids play on the road, people walk their dogs, they jog, etc. If fire and safety was a concern when the connection was first designed 20 years ago, the homes can have fire suppression instead of the need for two accesses.

Ms. Martha Pappas of 757 Abbington Court lives where Aster ends. There will be constant traffic on Aster Boulevard.

Gary Laundroche of 4689 Summer Ridge Drive stated they have met many times with Mr. Healey and he worked with their association to address their concerns. They will be working on how best to incorporate the single-family homes into their association. He is in support of this development.

Ms. Ruthig read the public comment letters and emails that were received after the packet was published.

- Ms. Ann Streeter who spoke this evening is against this proposal.
- Ms. Janeen Mussleman is not in favor of this project. The road connection would negatively impact their neighborhood by increasing traffic, cause backups at the traffic light at Latson Road, and cause safety issues. Their association pays for their roads. Removing the trees for this development will displace local wildlife
- Ms. Christie LePoint is not in favor of this project.
- Mary Lynn Buzzell of 741 Abbington Court is concerned with the connection to Aster Boulevard as it is a private road and maintenance is paid by the Hampton Ridge unit owners, children ride their bikes and scooters along the streets and sidewalks so it is a safety issue, and the Master Plan calls for the preservation of wooded areas and the amount of trees that will be replaced is not sufficient. She questioned because the agreement is with a different owner and is 20 years old, is it still valid.
- Sandra send an email stating her opposition to the project, stating they pay for the road, there are a lot of accidents at the light on Latson, there is a long wait at that light and she will sell if this is approved
- Ms. Susan Gardner, who spoke this evening is against this proposal.

- Mr. Charles Tinsley of 4324 Hampton Ridge is against the road connection for these communities. It will increase traffic and cause safety concerns.

The call to the public was closed at 8:03 pm

Commissioner Rauch believes the major complexity of this project is that it was conceived and began 19 years ago and a lot has changed since that time with regard to traffic. He would like a comprehensive traffic study to be done to determine if it is appropriate at this time to connect these two developments.

Commissioner Dhaenens advised the members of the public that Mr. Healey has met with the current association and has listened to and accommodated their concerns. He agrees with the need for a traffic study.

Chairman Grajek noted that this new roadway will also add a way for residents in Hampton Ridge to access Grand River by traveling onto Lawson Drive.

Mr. Perry stated he and Mr. Healey are listening to the concerns of the residents. He showed the original plan from 2002, noting that the road network is approved with 192 attached condominiums. This can be built as approved. When this was developed, the connection to Aster Boulevard was requested by the Township; however, he does agree with Commissioner Rauch that things have changed since that time. They have changed the plan by moving the roadway further away from the Hampton Ridge Development and saving more trees. They are requesting to reduce the density of an already approved project. They will do a traffic study with the approved plan and their proposed plan and it will show that the traffic will be less with the new plan than what is already approved because it is less dense. In the existing development, Mr. Healey has agreed to build the new buildings to match exactly the existing buildings. There is a large area of open space that has been given to the Township as part of the original plan. He showed it on the site plan.

Commissioner Rauch questioned if the developer can start building what was originally approved in 2002. Ms. VanMarter stated her interpretation of the ordinance is that the existing site plan is expired and the applicant would need to come back before the Planning Commission for review. Mr. Perry noted that the PUD Agreement is still in place. Ms. VanMarter agreed.

Commissioner Rauch stated that having a traffic study could provide information that could show how the connecting of these two developments could be positive.

Commissioner Chouinard does not agree with the construction traffic using Aster Boulevard. He would like the connection to be made at the end of the project. Mr. Perry stated the construction traffic can use Lawson Drive.

Mr. Perry asked for feedback regarding the deviations that they have requested. Mr. Rauch is in favor of the width of the road as it matches the existing ones. Commissioner McCreary is concerned with the private road being used by many additional vehicles.

Commissioner McBain stated the issue is this was anticipated to be all built at one time 20 years ago. She knows this will impact all of the existing residents and private roads. She reiterated the concerns of the member of the public who spoke about the differences in the restrictions in the two different condominiums. She would like the developer to investigate that portion of the by-laws.

Mr. Perry requested to have this item postponed until the next Planning Commission meeting so they can address the issues discussed this evening.

**Moved** by Commissioner Lowe, seconded by Commissioner Dhaenens, to postpone Open Public Hearing #2 until the next regularly-scheduled Planning Commission meeting. **The motion carried unanimously.**

**OPEN PUBLIC HEARING #3...**Consideration of a sketch plan for a proposed dumpster enclosure, deck and gravel drive for Image Pros located at 1910 Dorr Road, west side of Dorr Road and south of Grand River Avenue. The request is petitioned by Stephanie Konker.

A. Disposition of Sketch Plan (9-22-22)

Mr. Ken Elphinstone and Ms. Stephanie Konker were present. They have reviewed the comments from the consultants and they can remove the proposed deck. This is a small business and only cars will be accessing the gravel driveway; however, they can widen it if necessary. The gravel area is only for cars to park and bring in boxes. There are no large delivery vehicles. Having gravel instead of a hard surface will not affect the stormwater runoff.

Mr. Borden reviewed his letter dated November 9, 2022.

1. Use of gravel, instead of hard-surfacing, requires approval by the Planning Commission based on review and recommendation of the Township Engineer.
2. The proposed drive does not meet the minimum width required by Ordinance for one-way travel, and the design necessitates two-way travel.
3. We request the applicant explain the intended purpose of the 30' x 20' gravel area at the rear of the building. Mr. Borden wanted to ensure that this is not used for outdoor storage.
4. If the accessory building shown in aerial photos is still present, it must be added to the plan. The applicant noted it has been taken down.
5. The Commission may wish to request a turning template for access to/from the waste receptacle. The applicant stated they could relocate this to the other side. Mr. Borden said if that is done, the parking spaces in front of it should be marked for employee parking only.

6. The waste receptacle must provide a lid.
7. The Commission may allow treated lumber (cedar) enclosure.
8. The applicant must identify the height of the enclosure.
9. The proposed deck is also labeled as a loading dock. Mr. Elphinstone noted this is not a loading dock and can be removed.
10. The submittal does not include details of the proposed deck.
11. Any landscaping shown on previously approved site plans that may be in poor condition (or may have been removed) should be replaced as part of this project.
12. The applicant must address any comments provided by the Township Engineer and/or the Brighton Area Fire Authority.

Ms. Byrne reviewed her letter dated November 7, 2022.

1. More detail should be provided on the proposed grading and stormwater management plan. The proposed improvements will increase the area of impervious surface on the site and more detail should be provided on how it will be managed to ensure it is not draining to adjacent properties.
2. The proposed gravel access drive and 30-foot by 20-foot gravel area does not meet the Township Zoning standards, which require site drives be paved with concrete curb and gutter. If the proposed gravel area behind the existing building will serve as parking, any proposed parking areas need to be clearly shown and dimensioned.
3. Additional detail and dimensions should be provided for the proposed drive and rear gravel area.
4. A detail should be provided for the proposed dumpster enclosure.

The Brighton Area Fire Authority Fire Marshal's letter dated October 20, 2022 stated:

1. The building shall include the building address on the building. The address shall be 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 location of a Knox Box shall be indicated on future submittals. The Knox box shall be located adjacent to the main entrance of the structure, in a location coordinated with the fire authority.

Commissioner Rauch asked how often the rear area is used for loading. Ms. Konker stated it is used when she has a large order. The only vehicle that would be there would be her car.

Commissioner Rauch questioned why a Dumpster enclosure is needed. Mr. Elphinstone stated there is currently a Dumpster there so it needs to be enclosed. Based on the comments from Mr. Borden, he will be moving it to the other side of the property where the deck was proposed.

The call to the public was opened at 9:07 pm with no response.



**Moved** by Commissioner Rauch, seconded by Commissioner Dhaenens, to approve the Sketch Plan dated September 22, 2022 for a dumpster enclosure and gravel drive for Image Pros located at 1910 Dorr Road, based on the following conditions:

- The use of gravel is acceptable due to the use conditions discussed this evening
- The minimum width of the gravel drive will be increased to 15 feet wide
- The dumpster enclosure will be installed on the south side of the building. The location and design will be approved by Township Staff and shall meet ordinance requirements.
- The material of treated lumber or cedar is acceptable for the dumpster enclosure materials.
- An “Employees Only” sign will be placed in front of the dumpster enclosure.
- All conditions of the Brighton Area Fire Authority Fire Marshal’s letter dated October 20, 2022 shall be met.

**The motion carried unanimously.**

**OPEN PUBLIC HEARING #4...** Consideration of a sketch plan for proposed camp zip line structures including a climbing tower, terminating pole and a deck for the Our Lady of the Fields located at 7000 McClements Road, south side of McClements Road, between Kellogg and Euler Roads. The request is petitioned by Chaldean Catholic Church of the United States.

A. Disposition of Sketch Plan (10-26-22)

Mr. Wayne Perry of Desine, Inc. stated the applicant would like to add a deck to the rear of one of the buildings, as well as a tower, end pole, and a zip line for the camp participants.

Mr. Borden reviewed his letter dated November 8, 2022.

1. The “climbing tower” at 45 feet exceeds the maximum height requirement, which will require variances from the ZBA.
2. Pending the Township’s interpretation, the “terminating pole” may also need a variance for its height.
3. Note D on Sheet C1.0 needs to be revised to remove the phrase “at grade.”

Ms. Byrne stated she has no engineering related comments on this proposed sketch plan.

The Brighton Area Fire Authority Fire Marshal's letter dated November 2, 2022 stated:

1. No details were provided regarding the specific construction of the deck. The applicant is advised that the existing building is a sprinklered wood frame structure. The sprinkler code requires combustible exterior projections greater than 4-feet be suppressed below when used for storage. Due to the height and area below this will require suppression.
2. The fire pump test connection is located below the proposed location of the deck. The test connection shall be relocated near the FDC or a minimum 44-inch wide 84-inch tall clear access space maintained clear along the building face for pump testing.

Mr. Perry stated he will work with the Fire Marshal regarding his concerns.

The call to the public was opened at 9:17 pm

Mr. James Drouillard of 6781 Felice questioned if this will bring excessive noise or more people.

Ms. Patty Kopicko of 6843 Felice read a letter from Mike and Dory Berean of 1237 Euler Road, who were not able to attend tonight's meeting. They continue to have concerns with the use of this property as well as the addition of this zip line. Ms. Kopicko agrees with Mr. and Mrs. Berean's letter. The camp was at full capacity last year so they do not need this to have to bring in more people. She is concerned with the additional noise this will bring.

Mr. Steve Olivieri of 1200 Kellogg Road questioned if the rope course was approved by the Township.

Ms. Lynn Drouillard of 6781 Felice questioned why a large building needs to be there for people to start the zip line. She is concerned with the users being able to look into her house as well as the noise. She is fine with the camp, but they keep adding elements. They have now purchased the property across the street.

Mr. David Shirk of 1160 Kellogg loves to hear the children in the camp having a good time. He does not care how tall the structure is. If it makes the kids happy, he is in favor of it. He prefers that instead of the gunshots that he hears behind him.

The call to the public was closed at 9:28 pm.

Commissioner Lowe asked about safety. She questioned if the zip line will be open to the public. Mr. James Berigan stated the zip line is only available when the camp is being used. When the camp is closed, it is locked and not accessible. There will also be certified personnel monitoring the people using the zipline.

**Moved** by Commissioner Rauch, seconded by Commissioner Dhaenens, to approve the Sketch Plan dated October 26, 2022 for propose camp zip line structures including a climbing tower, terminating pole and a deck for the Our Lady of the Fields located at 7000 McClements Road, with the following conditions:

- The climbing tower and terminating pole shall receive a variance form the ZBA for the height.
- Note D on Sheet C1.0 shall be revised to remove the phrase "at grade."
- All conditions of the Brighton Area Fire Authority Fire Marshal's letter dated November 2, 2022 shall be met

**The motion carried unanimously.**

**OPEN PUBLIC HEARING #5...**Public hearing for the proposed Genoa Charter Township Master Plan.

Ms. Sri Ravali Komaragiri of Giffels Webster provided a review of the changes that were made since the last discussion regarding the Master Plan.

The plan has been sent to Livingston County and the surrounding municipalities for their review and comment. Comments were only received from Livingston County. One of their major recommendations was to highlight the Township's high-quality natural areas, as well as adding a goal regarding the preservation of these areas. She recommended opening the public hearing this evening, she would then make any changes as recommended by the Planning Commission, and return for the remainder of the public hearing at the next Planning Commission meeting.

The call to the public was opened at 9:44 pm.

Mr. Harold Perlman of 6483 Grand Circle Drive noted a proposed change of zoning of this property from medium to high density and this raises concerns regarding the water table. He questioned if this was a case of spot zoning. This request is inconsistent with what has been done by the Township.

Ms. Melanie Johnson of 3990 Chilson noted that the Master Plan shows the traffic study from 2012 and 2013 for Latson Road, south of 96 only had 5,000 vehicles per day and now there are 34,000 vehicles per day. She suggested this information be used when planning in the future.

Mr. Roy Yapple of 4704 Mt. Brighton Drive is against the zoning change. A property with 127 acres with five to eight homes per acre is another 1,000 units and his current subdivision is 70 units. This would cause additional traffic and additional loads on police and fire. If it is rezoned, due to the rising interest rates, could this project be started and then not finished.

Mr. Chris Ford of 6511 Grand Circle Drive knew that there would be growth near him, but he would like the Township to maintain the current zoning as described in the Master Plan.

Ms. Scott Mulder of 4535 Summer Hill stated he built his home in this area because of the Master Plan. He would like the zoning to remain the same.

Ms. Christine Rands of 4160 Summer Hill has horses, sheep, goats, etc. on ten acres. She has been told that if this area is developed more densely, it will drop the water table and could affect their wells and the lake levels.

Mr. Carrey Zbicz of 4107 Summer Hill would like to keep the character of Genoa Township. The Challis Road area is not the location for high density residential.

Ms. Stacey Carroll of 6418 Challis Road has a farm and she wants to maintain the beautiful, farm-friendly area.

Mr. Gary Whitt of 4555 Kingswood Drive is concerned with the traffic if the medium and high-density rezoning is approved.

Ms. Lynn Winklebauer of 3488 Bauer Road asked the Planning Commission to visit the area and see the beauty that will be destroyed if all of these units are built.

Ms. Ruthig stated that letters of opposition to the rezoning of the property were received from Gretta Winklebauer, Craig Lytle at 4162 Bauer Road, Sara Cross of 6489 Challis, Collin Hebert of 6899 Lyle Lane, Kirt Mortensen of 6475 Grand Circle, and Ben Tasich of 3492 Lakewood Shores Drive, who would like the Board to look at adding more public transportation to our area.

Ms. VanMarter stated that since there are minor revisions to be made to the Master Plan, the Call to the Public will be left open until the next Planning Commission meeting.

Commissioner McBain questioned the property that the members of the public were speaking about this evening. Mr. VanMarter showed the property, noting that it is currently master planned for Low Density Residential and the adjacent property is zoned large lot rural residential. She believes the concern is that The Planning Commission received a letter regarding the possibility of rezoning this property to high-density residential, which would be approximately eight units per acre. The Township and Planning Commission received the letter prior to their beginning the master plan review process. There are no plans to rezone this property.

Commissioner Dhaenens agrees that the recommendation from Livingston County regarding the natural features be added to the Master Plan.

#### ADMINISTRATIVE BUSINESS:

##### **Staff Report**

Ms. Ruthig stated there will be one item on the December 12 Planning Commission meeting. The Master Plan and the Summerfield Pointe Estates items may be on that meeting as well.

##### **Approval of the September 12, 2022 Planning Commission meeting minutes**

Needed changes were noted.

**Moved** by Commissioner McCreary, seconded by Commissioner Lowe, to approve the minutes of the September 12, 2022 Planning Commission Meeting as corrected. **The motion carried unanimously.**

##### **Member Discussion**

There were no items to discuss this evening.

Genoa Township Planning Commission  
November 14, 2022  
Unapproved Minutes

**Adjournment**

**Moved** by Commissioner Rauch, seconded by Commissioner Lowe, to adjourn the meeting at 10:18 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary

DRAFT