

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION PUBLIC HEARING  
MONDAY, JULY 11, 2016  
6:30 P.M.  
AGENDA**

**CALL TO ORDER:**

**PLEDGE OF ALLEGIANCE:**

**APPROVAL OF AGENDA:**

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

**OLD BUSINESS:**

**OPEN PUBLIC HEARING #1...** Review of special use applications, impact assessment and site plan for proposed 9,200 square feet contractor's office, warehouse and storage yard. Special land use approvals are requested for outdoor storage, storage of hazardous materials, and grading activities within 25-foot natural features setback. The property is located on the east side of Victory Drive, south of Grand River Avenue on vacant parcel# 11-05-303-025. The request is petitioned by Seaside Seawalls.

**Planning Commission disposition of petition:**

- A. Recommendation of Special Use Application – Outdoor Storage
- B. Recommendation of Special Use Application – Storage of hazardous materials
- C. Recommendation of Special Use Application – Grading within natural features setback
- D. Recommendation of Impact Assessment (6-22-16)
- E. Recommendation of Site Plan (6-22-16)

**NEW BUSINESS:**

**OPEN PUBLIC HEARING #2...** Review of a rezoning application and impact assessment to rezone approximately 64 acres from RR and PRF to CE for the following parcels: #11-12-100-007, 008, 010, 011, 012, 013. The parcels are located on the east side of Euler Road south of McClements Road in Brighton. The request is petitioned by Joyce Oliveto.

**Planning Commission disposition of petition:**

- A. Recommendation of Rezoning
- B. Recommendation of Impact Assessment (6-22-16)

**OPEN PUBLIC HEARING #3...** Review of an impact assessment and site plan for a proposed parking lot expansion and carport structure located at the rear of the Livingston County complex located at 2300 E. Grand River, Howell. The request is petitioned by Livingston County Building Department.

**Planning Commission disposition of petition:**

- A. Recommendation of Impact Assessment (6-1-16)
- B. Disposition of Site Plan (6-22-16)

**OPEN PUBLIC HEARING #4...**Review of an impact assessment and site plan for a parking lot addition for new vehicle parking area at the existing Bob Maxey Ford located at 2798 E. Grand River, Howell. The request is petitioned by SRM Associates, LLC.

Planning Commission disposition of petition:

- A. Recommendation of Impact Assessment (6-22-16)
- B. Disposition of Site Plan (6-22-16)

**OPEN PUBLIC HEARING #5...**Review of an impact assessment and site plan for the proposed construction of a new 9,600 sq.ft. showroom and an 11,750 sq.ft. storage building for the existing Wilson Marine located at 5866 Grand River Howell. The request is petitioned by Wilson Marine.

Planning Commission disposition of petition:

- A. Recommendation of Impact Assessment (dated 6-1-16, received 6-27-16)
- B. Disposition of Site Plan (6-27-16)

**OPEN PUBLIC HEARING #6...**Review of sketch plan for a proposed 1,200 sq. ft. storage building for the existing Brighton Church of Nazarene located at 7669 Brighton Road, Brighton. The request is petitioned by Brighton Nazarene Church.

Planning Commission disposition of petition:

- A. Disposition of Sketch Plan (6-22-16)

**ADMINISTRATIVE BUSINESS:**

- *Staff Report*
- *Approval of June 13, 2016 Planning Commission meeting minutes*
- *Member discussion*
- *Adjournment*



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

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

APPLICANT NAME & ADDRESS: Seaside Seawalls, LLC

*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Aaron Wallace, 9868 East Grand River, Suites 110-225, Brighton, MI 48116

SITE ADDRESS: Victory Drive, Howell, MI 48843 PARCEL #(s): 4711-05-303-025

APPLICANT PHONE: ( 248 ) 207-1984 OWNER PHONE: ( 248 ) 207-1984

OWNER EMAIL: AARON@SEASIDESEAWALLS.COM

LOCATION AND BRIEF DESCRIPTION OF SITE: The site is located on the east side of Victory Drive, approximately

1,625 feet southwest of the E. Grand River Ave. intersection. The property has a total area of 5.85 AC and is currently undeveloped.

The subject property and adjacent properties are all zoned within the Industrial district, with the subject property having

approximately 660 feet of frontage along Victory Dr.

BRIEF STATEMENT OF PROPOSED USE: The proposed use for the property is to store and maintain  
construction equipment.

THE FOLLOWING BUILDINGS ARE PROPOSED: Seaside Seawalls, LLC - 9,200 SF

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

BY: 


ADDRESS: AARON WALLACE, 9868 E. GRAND RIVER, SUITES 110-225, BRIGHTON, MI 48116

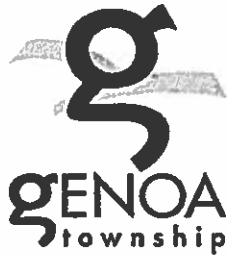
**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

1.) Brent LaVanway of Boss Engineering at brentl@bosseng.com  
Name Business Affiliation E-mail Address

**FEE EXCEEDANCE AGREEMENT**

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

SIGNATURE  DATE: 4-24-16  
PRINT NAME: AARON WALLACE PHONE: (248) 207-1984  
ADDRESS: 9868 East Grand River, Suites 110-225, Brighton, MI 48116



**GENOA CHARTER TOWNSHIP**  
**Special Land Use Application**

**GENOA TOWNSHIP**

**MAY 19 2016**

**RECEIVED**

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: Seaside Seawalls, LLC

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

APPLICANT PHONE: ( 248 ) 207-1984 EMAIL: aaron@seasideseawalls.com

OWNER NAME & ADDRESS: Aaron Wallace, 9868 E. Grand River, Suites 110-225, Brighton, MI 48116

SITE ADDRESS: Victory Drive, Howell, MI 48843 PARCEL #(s): 4711-05-303-025

OWNER PHONE: ( 248 ) 207-1984 EMAIL: aaron@seasideseawalls.com

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

The site is located on the east side of Victory Drive, approximately 1,625 feet southwest of the E. Grand River Ave. intersection

The property has a total area of 5.85 acres and is currently undeveloped. The subject property and adjacent properties are all zoned within the industrial district, with the subject property having approximately 660 feet of frontage along Victory Drive.

**Proposed Use:**

The proposed use for the property is to store and maintain construction equipment.

Special Use: Fuel Storage Tanks

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

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

The special land use application is for fuel storage tanks. The site will contain two 300 gallon fuel tanks on a concrete pad with a built in containment curb. The use is consistent with the zoning district.

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

The proposed tanks will be designed and constructed to comply with all standards and regulations of the Genoa Township ordinance, section 13.07 and will be in accordance with state and federal requirements.

- 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 site will be able to be served adequately by all public facilities and services. The subject property will be located and accessible from Victory Drive for police and fire protection. The site will be service by public sanitary sewer and connect to the existing sanitary lead on site. The development lies outside of the municipal water main district and will be serviced by well.

Stormwater management will meet all local, county and state stormwater and erosion control requirements.

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?

No, the site will not have any potentially detrimental uses, activities, processes, or materials to either the natural environment, public health, safety, or welfare. Fuel storage will be contained within secondary containment structure.

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.

No, the special use does not have specific criteria as listed in section 8.02.02 of the zoning ordinance. The fuel tanks however will comply with all standards set forth in section 13.07 of the zoning ordinance. The tanks will be 300 gallon capacity, located more than 75-feet from any occupied building or lot line and is being mounted on a concrete pad with a built in curb.

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

BY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

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

Brent LaVanway of Boss Engineering at BRENTL@BOSSENG.COM  
Name Business Affiliation Email

**FEE EXCEEDANCE AGREEMENT**

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

SIGNATURE:  DATE: 5-19-16

PRINT NAME: Aaron Wallace PHONE: 248-207-1984



**GENOA CHARTER TOWNSHIP**  
**Special Land Use Application**

GENOA TOWNSHIP

MAY 19 2016

RECEIVED

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: Seaside Seawalls, LLC

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

APPLICANT PHONE: ( 248 ) 207-1984 EMAIL: aaron@seasideseawalls.com

OWNER NAME & ADDRESS: Aaron Wallace, 9868 E. Grand River, Suites 110-225, Brighton, MI 48116

SITE ADDRESS: Victory Drive, Howell, MI 48843 PARCEL #(s): 4711-05-303-025

OWNER PHONE: ( 248 ) 207-1984 EMAIL: aaron@seasideseawalls.com

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

The site is located on the east side of Victory Drive, approximately 1,625 feet southwest of the E. Grand River Ave. intersection

The property has a total area of 5.85 acres and is currently undeveloped. The subject property and adjacent properties are all zoned within the industrial district, with the subject property having approximately 660 feet of frontage along Victory Drive.

**Proposed Use:**

The proposed use for the property is to store and maintain construction equipment.

Special Use: Grading within 25-feet of a wetland

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

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

The special land use application is for grading within 25-feet of a wetland. No permanent structure will be within the required 25' wetland setback. The minimal grading being done within this 25' setback will not negatively impact the wetland and is to ensure proper

stormwater management with the use of sedimentation basins. The sedimentation basins will allow for stormwater to be treated and outlet into existing wetlands at a controlled rate. The use will conform with all requirements set forth by Genoa Township.

- 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 grading will be designed and constructed to comply with all grading standards and regulations of Genoa Township.

The site is 5.85 acres, however the majority of this acreage consists of wetlands which limits upland 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 site will be able to be served adequately by all essential public facilities and services. The subject property will be located and accessible from Victory Drive for police and fire protection. The site will be service by public sanitary sewer and connect to the existing sanitary lead on site. The development lies outside of the municipal water main district and will be serviced by well.

Stormwater management will meet all local, county and state stormwater and erosion control requirements.

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?

No, the site will not have any potentially detrimental uses, activities, processes, or materials to either the natural environment, public health, safety, or welfare. A special use permit for fuel storage has been applied for.

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

The special use grading does not have specific criteria as listed in section 8.02.02 of the zoning ordinance. However the grading will follow all standards and regulations set forth by Genoa Township. Once the setback area is graded it will be seeded and mulched and remain lawn.

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

BY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

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Brent LaVanway of Boss Engineering at BRENTL@BOSSENG.COM  
Name Business Affiliation Email

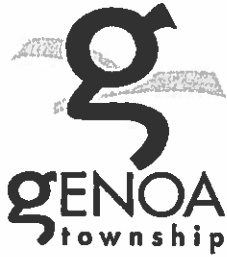
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SIGNATURE:  DATE: 5-19-16

PRINT NAME: Aaron Wallace PHONE: 248-207-1984





**GENOA CHARTER TOWNSHIP  
Special Land Use Application**

GENOA TOWNSHIP  
MAY 19 2016  
RECEIVED

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: Seaside Seawalls, LLC

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

APPLICANT PHONE: ( 248 ) 207-1984 EMAIL: aaron@seasideseawalls.com

OWNER NAME & ADDRESS: Aaron Wallace, 9868 E. Grand River, Suites 110-225, Brighton, MI 48116

SITE ADDRESS: Victory Drive, Howell, MI 48843 PARCEL #(s): 4711-05-303-025

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

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The property has a total area of 5.85 acres and is currently undeveloped. The subject property and adjacent properties are all zoned within the industrial district, with the subject property having approximately 660 feet of frontage along Victory Drive.

**Proposed Use:**

The proposed use for the property is to store and maintain construction equipment.

Special Use: Outdoor Storage

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

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

The outdoor storage use will comply with all requirements set forth by Genoa Township. This is a common use within the industrial zoning district.

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

The proposed use of the site is for storage purposes, with hours of operation between 7am and 7pm. The subject site conforms with current surrounding land being zoned in the industrial district. The increase in light, noise or air pollution will be minimal with what is typically associated with an industrial development.

- 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 site will be able to be served adequately by all essential public facilities and services. The subject property will be located and accessible from Victory Drive for police and fire protection. The site will be service by public sanitary sewer and connect to the existing sanitary lead on site. The development lies outside of the municipal water main district and will be serviced by well. Stormwater management will meet all local, county and state stormwater and erosion control requirements.

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?

No, the site will not have any potentially detrimental uses, activities, processes, or materials to either the natural environment, public health, safety, or welfare. A special use permit for fuel storage has been applied for.

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

The special use of outdoor storage for the site will comply with all of the criteria listed in 8.02.02 section "b".

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.

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ADDRESS: \_\_\_\_\_

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SIGNATURE: AW DATE: 5-19-16

PRINT NAME: Aaron Wallace PHONE: 248-207-1984

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
June 13, 2016  
6:30 P.M.  
MINUTES**

**CALL TO ORDER:** The meeting of the Genoa Charter Township Planning Commission was called to order at 6:33 p.m. Present were Chairman Doug Brown, Diana Lowe, James Mortensen, Chris Grajek, John McManus, and Eric Rauch. Absent was Barbara Figurski. Also present was Kelly VanMarter, Community Development Director/Assistant Township Manager, Brian Borden of LSL Planning, and an audience of 10.

**PLEDGE OF ALLEGIANCE:** The pledge of allegiance was recited.

**APPROVAL OF AGENDA:** Moved by Commissioner McManus, seconded by Commissioner Mortensen, to approve the agenda as presented. The motion carried unanimously.

**CALL TO THE PUBLIC:** The call to the public was made at 6:34 pm with no response.

**OPEN PUBLIC HEARING #1...**Review of special use applications, impact assessment, and site plan for proposed 9,200 square foot contractor's office, warehouse, and storage yard. Special land use approvals are requested for outdoor storage, storage of hazardous materials, and grading activities within 25 feet of natural features setback. The property is located on the east side of Victory Drive, south of Grand River Avenue, on vacant Parcel #11-05-303-025. The request is petitioned by Seaside Seawalls.

**Planning Commission disposition of petition:**

- A. Recommendation of Special Use Application
- B. Recommendation of Impact Assessment (5-25-16)
- C. Recommendation of Site Plan (5-25-16)

Mr. Aaron Wallace of Seaside Seawalls, Mr. Karl Vollmer, the architect for the project, and Brent LaVanway, of Boss Engineering were present.

Mr. LaVanway gave a brief description of the property, the proposed project and what is being requested. Mr. Vollmer showed colored renderings and the floor plan of the building.

Mr. Borden reviewed his letter of June 7, 2016. There was a discussion between the Planning Commission and the applicant regarding what materials and equipment will be stored on site. It was noted that this information was not included on the site plan and

## 06-13-16 Unapproved Minutes

in the impact assessment. This needs to be added prior to presenting the plan to the Township Board.

Mr. Borden stated there is no proposed screening or a berm shown on the south side of the property. There are no plantings shown for the north and east side of the site and he is unsure if the existing vegetation is sufficient to meet the requirements. Commissioner Mortensen does not feel there is enough information presented to make this determination. Commissioner Rauch agrees. He is also concerned with the containment of the materials being stored relative to the wetlands.

Commissioner Grajek is concerned with fueling the equipment and the possibility of spills. Mr. Borden stated there will be additional permits required for this use. Also, a Pollution Incident Prevention Plan is required. It was suggested that this plan be reviewed by the Township Engineer.

Mr. Wallace described the enclosure for the fuel tanks and how any spills will be contained. He also will be obtaining a permit from the DEQ, which will address Commissioner Grajek's concerns regarding fueling up equipment.

Mr. Borden stated that Planning Commission approval is required because the sedimentation basins encroach to the edge of the wetland. Additionally, the proposed fence is within 25 feet of the wetland setback and requires a variance. The applicant agreed to change the location of the fence so that it meets the requirements.

Mr. Borden stated there is no dumpster enclosure proposed and the Township Ordinance does not allow for this requirement to be waived. The applicant will provide a dumpster enclosure.

Chairman Brown read an e-mail submitted by Michael and Christine Bartlett who own three parcels adjacent to this property. They do not object to the outdoor storage; however, they would like the entire area to be fenced. They are concerned with the storage of hazardous materials and want to ensure that all requirements are being met with regard to containing leaks or spills.

Chairman Brown asked that "waiting room" be changed to "waiting room / show room" and the anticipated number of customers / visitors per week be added to the Impact Assessment.

The call to the public was made at 7:29 pm.

Mr. Bill Gregory, who owns 960 Victory Lane, believes this will be a good addition to the industrial area and has no objections to the proposal.

Commissioner Mortensen does not believe this plan is ready to be sent to the Township Board. There are outstanding issues with the landscaping buffer, fuel storage, dumpster enclosure, etc. Chairman Brown agrees that the plan needs to be revised to address the concerns raised this evening.

## 06-13-16 Unapproved Minutes

**Moved** by Commission Lowe, seconded by Commissioner Mortensen, to table Agenda Item #1 until the July 11, 2016 Planning Commission meeting. **The motion carried unanimously.**

**OPEN PUBLIC HEARING #2...**Review of site plan and impact assessment for a proposed 16,053 sq. ft. addition to an existing industrial building known as Michigan Rod Products, Inc., which is located at 1326 Grand Oaks Drive, Howell. The request is petitioned by Asselin, McLane Architectural Group, LLC.

Planning Commission disposition of petition:

- A. Recommendation of Impact Assessment (3-29-16)
- B. Disposition of Site Plan (5-25-16)

Mr. John Asselin of Asselin, McLane Architectural Group, LLC, gave a brief description of the proposed project and showed the proposed building materials.

Mr. Borden stated that the applicant has addressed all of the concerns in his original review letter. He noted that the applicant is proposing less parking that is required; however, they will be providing a land bank in the case additional parking is needed in the future. They are required to provide 143 spaces. They are proposing 131 spaces and land bank 143 spaces. They have three shifts with a total of 75 employees so he believes this proposal is sufficient.

The call to the public was made at 7:50 pm with no response.

**Moved** by Commissioner McManus, seconded by Commissioner Lowe, to recommend to the Township Board approval of the Impact Assessment for Michigan Rod Products, Inc. dated March 29, 2016. **The motion carried unanimously.**

**Moved** by Commissioner Mortensen, seconded by Commissioner Grajek, to approve the Site Plan dated May 25, 2016 for a 16,053 sq. ft. factory expansion for Michigan Rod Products, Inc., subject to the following:

- The conditions spelled out in the Township Engineer's letter dated June 8, 2016 must be met.
- The conditions spelled out in the Brighton Area Fire Authority's letter of June 3, 2016 must be met.

**The motion carried unanimously.**

**Administrative Business:**

- Staff Report

Mr. VanMarter stated there will be five items on next month's agenda, plus the item that was tabled this evening.



July 5, 2016

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
<b>Subject:</b>	Seaside Seawalls – Special Land Use and Site Plan Review #3
<b>Location:</b>	Victory Drive – east side of Victory Drive, south of Grand River Avenue
<b>Zoning:</b>	IND Industrial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised site plan (dated 6/22/16) proposing a new industrial building on a vacant 5.85-acre lot on Victory Drive. The project also includes outdoor storage, fuel storage tanks and grading within 25 feet of a wetland, each of which requires special land use approval. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Master Plan and Zoning Ordinance.

**A. Summary**

1. Provided the applicant complies with the specific use requirements (items 2-4 below) and any issues identified by Engineering and Fire are addressed, the project is expected to comply with the general special land use criteria.
2. Additional shrubs are required as screening for the outdoor storage yard.
3. Township Board approval is required for the gravel portion of the storage yard.
4. The applicant must submit a PIP Plan.
5. Planning Commission approval is required for the sedimentation basin outlets, which encroach to the edge of the wetland.
6. The proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission. We request the applicant present a material and color sample board.
7. A sign permit will be required prior to installation.

**B. Proposal**

The applicant requests site plan review and approval of a 9,200 square foot building on a vacant 5.85-acre site. The application indicates that the proposed use is to store and maintain construction equipment.

Based on the project description, it best fits a contractor’s office and building with indoor storage of equipment and machinery, which is a permitted use. The submittal also includes outdoor storage, fuel storage tanks and grading within 25 feet of a wetland, each of which requires a separate special land use approval.

Given the need for special land use approval, Planning Commission is to make a recommendation on the special land uses, site plan and Impact Assessment for consideration by the Township Board.



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

### **C. Special Land Use Review**

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

- 1. Master Plan.** The Township Master Plan and Future Land Use map identify the site and surrounding properties as Industrial. This category is intended for “industrial uses such as research, wholesale and warehouse activities and light industrial operations which manufacture, compounding, process, package, assemble and/or treat finished or semi-finished products from previously prepared material.”

Provided the specific use requirements are met, the location and nature of the site and proposed uses are generally consistent with this category and description.

- 2. Compatibility.** Surrounding properties are generally developed with industrial uses or are undeveloped. Review of aerial photos indicates existing outdoor storage that is accessory to other industrial operations in the vicinity.

As described in Paragraphs D-F below, the host of uses are subject to specific requirements of Section 8.02.02(b) and Article 13, which are intended to protect surrounding properties and the environment from potential adverse impacts. Provided these requirements are met, the project is generally expected to be compatible with the surrounding area.

- 3. Public Facilities and Services.** We defer to the Township Engineer and Fire Department for any specific comments/concerns they may have.

- 4. Impacts.** The site contains a large amount of wetland area – approximately 3 acres of the 5.85-acre site. The Impact Assessment states that the wetland areas are of low quality.

The revised submittal includes a “no exposure certification” from MDEQ stating that a permit is not required for stormwater discharges associated with the proposed use.

- 5. Mitigation.** The Township may deem mitigation necessary to limit or alleviate any potential adverse impacts as a result of the proposed project.

#### **D. Outdoor Storage Standards**

Section 8.02.02(b) identifies the specific requirements for commercial outdoor display sales or storage as follows:

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

The submittal identifies a lot area of 5.85 acres. This standard is met.

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

The revised submittal includes separate storage areas atop the concrete pad and notes that a “lean-to” structure will cover the fuel tanks and soil storage bin. The applicant may also need to cover the soil storage bin with a tarp (or other material) to prevent the materials from blowing around.

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

The site plan includes a 20’ x 60’ concrete pad for storage. The area adjacent to the rear of the building is also concrete. The larger area in between is proposed as gravel. Given the proximity of wetland areas to the site, the use of gravel is likely to reduce stormwater run-off, which could be a benefit; however, we defer to the Township Engineer for specific comments on this aspect of the proposal.

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

Section 8.03 requires setbacks of 40 feet (rear) and 25 feet (side). This standard is met.

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

The proposed building contains 9,200 square feet of gross floor area. This standard is met.

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

The site plan provides access to/from Victory Drive, with sufficient area for truck maneuvering. This standard is met.



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

The site is surrounded by Industrial zoning; therefore, a Buffer Zone B is required around the outdoor storage area.

The revised submittal includes new plantings north and south of the storage area and proposes to allow the vegetated wetland area to act as screening on the east side.

The required berming has been added along the north and south sides, along with additional plantings. The total number of trees exceeds Buffer Zone B requirements, although there are more evergreen trees and fewer canopy trees than called for.

We do not have an issue with the tree plantings; however, both sides are deficient in terms of shrub plantings, which are intended to provide some low level screening. Given the depth of the storage area, 18 shrubs are required along both sides.

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

The revised Impact Assessment notes that the maximum height of equipment/material to be stored is 12 feet. Given the landscaping, vegetation, design and location of the building and storage yard, this standard is met.

#### **E. Fuel Storage Standards**

Section 13.07 identifies the specific requirements for fuel storage as follows:

- 1. Above Ground Storage Tanks.** The project includes 2 above ground storage tanks, each with 300 gallon capacity. The tanks will be mounted on a concrete base pad that is located well away from the building and property lines. These standards are met.
- 2. Below Ground Storage Tanks.** The project entails above ground storage; therefore, these standards are not applicable.
- 3. Secondary Containment.** The project narrative indicates that the secondary containment area is designed to contain more than twice the volume of the tanks. This standard also requires “documentation of compliance with state and federal regulations, as required.” The applicant must provide any such documentation required.
- 4. Pollution Incident Prevention Plan.** The revised submittal does not include the required PIP Plan. Section 13.07.04 lists all of the information required for a PIP Plan.
- 5. Permits.** Given the nature of the proposed use, the applicant may be required to obtain additional permits.

**F. Wetland Protection Standards**

Grading is allowed within 25 feet of a regulated wetland with special land use approval; however, no activities are allowed within 10 feet of a regulated wetland, unless otherwise approved by the Planning Commission.

The outlet for both sedimentation basins encroach to the edge of the wetland. As such, Commission approval is required.

**G. Site Plan Review**

**1. Dimensional Requirements.** As shown in the table below, the proposal complies with the dimensional standards of the IND:

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
IND	1	150	50	25	40	20 front 10 side/rear	30' / 2 stories	40% building 85% impervious
Proposal	5.85	497	50.3	336 (N) 143 (S)	293	50.3 front 267 side 180 rear	24.67' / 1 story	3.29% building 18.79% impervious

**2. Building Materials and Design.** The proposed elevations, including colors and materials, are subject to review and approval by the Planning Commission. We request the applicant present the Commission with material and color samples.

The proposed building consists of concrete block with different color treatments and a metal roof. Overhead doors are proposed on the rear and side of the building, as required.

Lastly, the front of the building is mostly a blank surface, but will be broken up via bands of color and the front yard greenbelt.

**3. Parking.** The proposed project results in the need for 18 parking spaces, which are provided. The one required barrier free space is also provided and spaces are designed with looped striping, per Ordinance standards. Parking space and drive aisle dimensions also comply with Ordinance standards.

**4. Pedestrian Circulation.** A 7-foot wide sidewalk is proposed between the main parking lot and building entrance. Because this is an industrial site, a public sidewalk is not required.

**5. Vehicular Circulation.** The site plan proposes two driveways that align with the existing drives across Victory Drive. We see no issues with internal circulation, as drive aisle widths are compliant and there is ample maneuvering space behind the building for large vehicles/equipment.

**6. Landscaping.** As shown in the table below, the plan complies with the standards of Section 12.02:


Location	Requirements	Proposed	Comments
Front yard greenbelt	17 canopy trees 20' width	17 canopy trees 50' width	Requirements met
Parking lot	2 canopy trees 180 SF landscaped area	2 canopy trees 190 SF landscaped area	Requirements met

- 7. Waste Receptacle and Enclosure.** The site plan identifies a concrete pad in the rear yard with space for a waste receptacle. The revised plans include a 6-foot tall masonry enclosure, as required.
- 8. Exterior Lighting.** The lighting plan proposes 2 pole-mounted and 4 wall-mounted light fixtures. Intensities on-site and at the property lines, as well as pole heights and fixture types, are all compliant.
- 9. Signs.** The site plan does not identify a ground sign; however, the elevation drawings show a 100 square foot wall sign. The proposed sign complies with the standards of Article 16, although the applicant will be required to obtain a sign permit prior to its installation.
- 10. Fencing.** The rear yard is enclosed by security fencing, including gates at the two driveways. The revised plan includes a detail showing a 6-foot tall chain link fence with 1-foot of barbed wire across the top, as well as 8-foot tall chain link gates, also with 1-foot of barbed wire. The proposed fencing, including the barbed wire, complies with the standards of Section 11.04.04.
- 11. Impact Assessment.** The submittal includes an Impact Assessment (most recently dated 6/22/16). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at [borden@lslplanning.com](mailto:borden@lslplanning.com).

Respectfully,

**LSL PLANNING, A SAFE BUILT LLC COMPANY**



Brian V. Borden, AICP  
Planning Manager



July 6, 2016

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Seaside Seawalls Site Plan Review #2**

Dear Ms. Van Marter:

We have reviewed the updated impact assessment and site plan documents prepared by Boss Engineering and dated June 22, 2016. The petitioner is planning to develop an approximately 9,200 square foot building and storage yard located on east side of Victory Drive, south of Grand River Avenue. Tetra Tech has reviewed the documents and found that the petitioner has included information requested during our last review regarding sanitary sewer tap fees and acknowledges that a water well will require Livingston County approval prior to installation.

All outstanding items have been addressed in this submittal.

Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Markstrom'.

Gary J. Markstrom, P.E.  
Unit Vice President

A handwritten signature in blue ink, appearing to read 'Joseph C. Siwek'.

Joseph C. Siwek, P.E.  
Project Engineer

copy: Brent LaVanway, P.E. Boss Engineering

**Tetra Tech**

401 South Washington Square, Suite 100, Lansing, MI 48933  
Tel 517.316.3930 Fax 517.484.8140 [www.tetratech.com](http://www.tetratech.com)



# BRIGHTON AREA FIRE AUTHORITY

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

June 29, 2016

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Seaside Seawalls, LLC  
Victory Drive (SW of E. Grand River)  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on June 27, 2016 and the drawings are dated June 22, 2016. The project is for the proposed construction of a new 9,200 square foot B/S-1 mixed-use Occupancy that appears to be Type IIIB construction. The plan review is based on the requirements of the International Fire Code (IFC) 2015 edition.

1. The proposed diesel fuel containment area must be provided with impact protection in accordance with IFC 312. **(No impact protection is identified on the drawings)**

All previous comments have been corrected on drawings.

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".

Capt. Rick Boisvert, CFPS  
Fire Inspector

GENOA TOWNSHIP

JUN 22 2016

RECEIVED

**IMPACT ASSESSMENT  
FOR  
SITE PLAN PETITION  
"SEASIDE SEAWALLS, LLC"  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**SEASIDE SEAWALLS, LLC  
9868 EAST GRAND RIVER  
SUITES 110-225  
BRIGHTON, MI 48116  
(248) 207-1984**

Prepared by:

**BOSS ENGINEERING COMPANY  
3121 E. GRAND RIVER  
HOWELL, MI 48843  
(517) 546-4836**

MAY 04, 2016  
Revised: 05/25/2016  
06/22/2016

**16-049 EIA**

## INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development may have on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Submittal Requirements for Impact Assessment* guidelines in accordance with Section 18.07 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

## DISCUSSION ITEMS

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

Prepared For:  
SEASIDE SEAWALLS, LLC  
9868 East Grand River  
Suites 110-225  
Brighton, MI 48116  
(248) 207-1984

Prepared By:  
BOSS ENGINEERING COMPANY  
Civil Engineers, Land Surveyors, Landscape Architects and Planners  
3121 E. Grand River  
Howell, MI 48843  
(517) 546-4836

Boss Engineering has been successfully providing engineering, surveying, planning and landscape architecture services on land development projects since 1969. Since its beginning, Boss Engineering has strived to provide unparalleled professional services with integrity and respect to every client. Today, Boss provides a complete lineup of consulting services for each project, ranging from conceptual design through final construction. The company currently employs a variety of professions including civil engineers, surveyors, landscape architects and sanitarians.

### **B. Map(s) and written description / analysis of the project site including all existing structures, manmade facilities, and natural features. The analysis shall also include information for areas within 10 feet of the property. An aerial photograph or drawing may be used to delineate these areas.**

The site is located on the east side of Victory Drive approximately 1,625 feet southwest of the E. Grand River Ave intersection. The property has a total area of 5.85 AC and is currently undeveloped. The subject property and adjacent properties are all zoned within the Industrial District (IND), with the subject property having approximately 660 feet of frontage along Victory Drive.

### **C. Impact on natural features: A written description of the environmental characteristics of the site prior to development and following development, i.e., topography, soils, wildlife, woodlands, mature trees (eight inch caliper or greater), wetlands, drainage, lakes, streams, creeks or ponds. Documentation by a qualified wetland specialist shall be required wherever the Township determines that there is a potential regulated wetland. Reduced copies of the Existing Conditions Map(s) or aerial photographs may accompany written material.**

The total site area is 5.85 acres. Approximately 3.03 acers of the site are designated as wetland, that surround the site along the north and east property lines. The wetland is considered low quality and part of the county drain system with excavated ditches being connected by culverts and draining into the wetland. The woodlands on site contain dogwood (scrub), cottonwood (1"-20"), boxelder (1"-8"), and silver maple (1"-8"). The common wetland vegetation consists of reed canary grass with cattails and common reed grass within open water.

The site gradually drains towards the wetlands with the buildable area consisting of slopes of up to approximately 5.0% The USDA Soil Conservation Service soil classification for the site with Bronson Loamy Sand, Brookston Loam, Carlisle Muck, and Miami Loam.

The proposed development will not have any negative impact on the surrounding wetlands or vegetation and will help clean the site of significant debris. All storm water will be collected in two separate sedimentation basins and outlet at a controlled rate into the wetlands.

**D. Impact on storm water management: Description of measures to control soil erosion and sedimentation during grading and construction operations and until a permanent ground cover is established. Recommendations for such measures may be obtained from County Soil Conservation Service.**

Surface runoff during periods of construction will be controlled by proper methods set forth by the Livingston County Drain Commissioner, including silt fence, inlet protection devices, and seed and mulch.

At the time of construction, there may be some temporary dust, noise, vibration and smoke, but these conditions will be of relatively short duration and shall be controlled by applying appropriate procedures to minimize the effects, such as watering if necessary for dust control.

The Site Plan documents show the proposed locations of all site improvements along with detailed soil erosion control information. The plans will be reviewed by the Livingston County Drain Commissioner's office for compliance with their regulations prior to issuance of a Soil Erosion Control permit.

**E. Impact on surrounding land use: Description of the types of proposed uses and other man made facilities, including any project phasing, and an indication of how the proposed use conforms or conflicts with existing and potential development patterns. A description shall be provided of any increases of light, noise or air pollution which could negatively impact adjacent properties.**

The proposed primary use of the site is for storage purposes for construction equipment and material, with hours of operations between 7am and 7pm Monday through Friday. The equipment being stored on-site consists of general construction equipment with a maximum storage height of 12 feet. The material being stored on-site will be on a concrete pad and contained by a 6 foot screen wall between the material and the existing wetland with bin blocks between each storage use. The material consist of top soil, sand, crushed concrete, gravel, rip-rap, and field stone. Top soil will be covered overhead with a lean-to structure.

The subject site conforms with current surrounding land being zoned in the industrial district. The increase in light, noise or air pollution will be minimal with what is typically associated with an industrial development.

**F. Impact on public facilities and services: Description of number of expected residents, employees, visitors, or patrons, and the anticipated impact on public schools, police protection and fire protection.**

Letters from the appropriate agencies may be provided, as appropriate.

The anticipated occupancy of approximately 6 employees and 5 total visitors/clients per week, will have very little impact to nearby properties.

There is no expected impact on Howell Area Schools and very minimal impact on the police and fire departments.



**G. Impact on public utilities: Description of the method to be used to service the development with water and sanitary sewer facilities, the method to be used to control drainage on the site and from the site, including runoff control during periods of construction. For sites service with sanitary sewer, calculations for pre- and post development flows shall be provided in equivalents to a single family home. Where septic systems are proposed, documentation or permits from the Livingston County Health Department shall be provided.**

For sanitary, the development is to be served by public sanitary sewer and connect to the existing sanitary lead on site. The development lies outside of the municipal water main district and will be serviced by well.

The pre-development sanitary flow from this site is zero. Post-development flows based on MHOG sewer standards for industrial buildings is equivalent to 0.46 REU's.

Warehouse & Storage: Unit factor = 0.05 per 1,000 sq ft

REU's = (9,200 sq ft / 1,000 sq ft) x 0.05 = 0.46 REU's

With regards to storm water management, the project will be required to meet all local, county and state storm water and erosion control requirements. All of the required information is included in the Site Plan documents. All storm water will be directed towards either the proposed north or south sedimentation basins and outlet at a controlled rate into the onsite wetland.

**H. Storage or handling of any hazardous materials: Description of any hazardous substances expected to be used, stored or disposed of on the site. The information shall describe the type of materials, location within the site and method of containment. Documentation of compliance with federal and state requirements, and a Pollution Incident Prevention Plan (PIPP) shall be submitted, as appropriate.**

Two 300 gallon diesel tanks will be stored on-site on a 20 ft. x 10 ft. concrete pad. The tanks will be surrounded by a 1 ft. concrete secondary containment structure that is capable of holding 1,279 gallons, more than twice the volume of fuel being stored in the tanks. The fuel tanks will be covered overhead with a lean-to structure. A DEQ no exposure certificate has been obtained to address concerns regarding a pollution incident prevention plan and fueling equipment.

No hazardous materials will be disposed of on this site.

**I. Impact on traffic and pedestrians: A description of the traffic volumes to be generated based on national reference documents, such as the most recent edition of the Institute of Transportation Engineers Trip Generation Manual, other published studies or actual counts of similar uses in Michigan.**

The anticipated number of trips that will be generated based on the number of employees will be 6 trips between 7 AM - 9 AM and 6 trips between 5 PM - 7 PM. With 1 visitor/client per day for a total of 5 visitors/clients per week, the anticipated number of trips that will be generated based on visitors/clients will be 10 total per week.

**J. A detailed traffic impact study shall be submitted for any site over ten (10) acres in size which would be expected to generate 100 directional vehicle trips (i.e. 100 inbound or 100 outbound trips) during the peak hour of traffic of the generator or on the adjacent streets.**

The site is under 10 acres and therefore a detailed traffic impact study is not necessary.

**K. Special Provisions: General description of any deed restrictions, protective covenants, master deed or association bylaws.**

None at this time.

**L. A list of all sources shall be provided.**

Genoa Township's Submittal Requirements for Impact Assessment

Genoa Township Zoning Ordinances

Soil Survey of Livingston County, Michigan, U.S.D.A. Soil Conservation Service

National Wetland Inventory Plan, United States Department of the Interior, Fish and Wildlife Service

Trip Generation manual, 6<sup>th</sup> edition, Institute of Transportation Engineers



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER RESOURCES DIVISION

DEQ only do not write in this space

**NO EXPOSURE CERTIFICATION**  
FOR EXCLUSION OF COVERAGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY  
By Authority of Act 451, PA 1994, Part 31

Submission of this No Exposure Certification constitutes certification the Facility identified below does not require permit authorization for storm water discharges associated with industrial activity in Michigan based on 40CFR 122. The Michigan Department of Environmental Quality (DEQ) may deny an exclusion at any time it determines that conditions at the facility do not meet the exclusion requirements. If the exclusion is denied, the owner must obtain authorization to discharge prior to any point source discharge of storm water from the facility.

Be advised that facilities excluded from permit requirements due to "no exposure" are required to submit a no exposure certification form to the DEQ once every five years to continue to be excluded from the permitting requirements.

FACILITY INFORMATION (where discharge occurs)			OWNER/PERMITEE INFORMATION		
SITE/FACILITY NAME Proposed New build for Seaside Seawalls			COMPANY NAME Seaside Seawalls, LLC		
ADDRESS 1 Victory Dr. Part of lot 18 & 19			ADDRESS 1 9864 E. Grand River		
ADDRESS 2 Howell 1 MI 48843			ADDRESS 2 Suite 110-225		
CITY Howell 1	STATE MI	ZIP CODE 48843	CITY Brighton	STATE MI	ZIP CODE 48116
COUNTY Livingston	TOWNSHIP Genoa		CONTACT PERSON Aron Wallace		
LATITUDE (to nearest 15 seconds)	LONGITUDE (to nearest 15 seconds)		CONTACT PERSON TELEPHONE cell - (248) 207-1984		

SW 1/4 of SE 1/4 Section: 5 & 6 Town: T 2N Range: R 5E

PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE

(5-employees)

TO DETERMINE THE PRIMARY INDUSTRIAL ACTIVITY, USE THE VALUE OF NET REVENUES. IF SUCH INFORMATION IS NOT AVAILABLE FOR A PARTICULAR FACILITY, THE NUMBER OF EMPLOYEES OR PRODUCTION RATE FOR EACH PROCESS MAY BE COMPARED. THE OPERATION THAT GENERATES THE MOST NET REVENUE OR EMPLOYS THE MOST PERSONNEL IS THE OPERATION IN WHICH THE FACILITY IS PRIMARILY ENGAGED.

THIS FACILITY HOLDS EXISTING NPDES PERMIT:

Please list any other NPDES number(s):

N/A

PLEASE RETURN THIS COMPLETED FORM (Page 1 & 2), AND ANY ATTACHMENTS, TO THE FOLLOWING ADDRESS:

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER RESOURCES DIVISION  
525 WEST ALLEGAN STREET  
P.O. BOX 30458  
LANSING MI 48909

If you have any questions regarding the completion of this form, please contact the appropriate district office. Please find district contact information at [www.michigan.gov/deqstormwater](http://www.michigan.gov/deqstormwater)

NOTE: There are TWO pages to a complete no exposure exclusion request. Please make sure that both pages have been completed prior to submitting

**EXPOSURE CHECK LIST**

Are any of the following materials or activities exposed to storm water, now or in the foreseeable future?

- 1. Using, storing, or cleaning of industrial machinery or equipment, or residuals from such practices. Yes  No
  - 2. Materials or residuals on the ground or in storm water inlets from spills or leaks. Yes  No
  - 3. Materials or products from past industrial activities. Yes  No
  - 4. Material handling equipment (except adequately maintained vehicles). Yes  No
  - 5. Materials or products during loading, unloading or transporting activities. Yes  No
  - 6. Materials or products stored outdoors (except final product intended to be used outside where exposure to storm water does not result in a discharge of pollutants). Yes  No
  - 7. Materials contained in open, unsealed, deteriorated, leaking, or improperly managed drums, barrels, tanks, etc. Yes  No
  - 8. Materials or products handled or stored on roads or railways owned or maintained by the facility. Yes  No
  - 9. Waste materials (except general office trash). Yes  No
  - 10. Application or disposal of process wastewater (unless otherwise permitted). Yes  No
  - 11. Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e. under an air quality control permit). Yes  No
- NOTE:** If you answered yes to any of the above questions (1-11), you are not eligible for the no exposure exclusion.
- 12. Facility has conducted an investigation to locate any illicit connections to the storm sewer system. *within our plans.* Yes  No
  - 13. Based on the above investigation, the facility has concluded that there are no illicit connections to the storm water system. Yes  No

**CERTIFICATION**

State of Michigan regulations require this form be signed as follows:

**Corporation:** by the principal executive officer or vice-president or higher, or his/her designated representative if the representative is responsible for the overall operation of the facility from which the discharge described originates.

**Partnership:** by a general partner

**Sole proprietorship:** by the proprietor

**Municipal, state, or other public facility:** by a principal executive officer, the mayor, village president, city or village manager, or other duly authorized employee.

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from storm water permitting.

I certify under penalty of law that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under 40 CFR 122.26(g)(2))

I understand that I am obligated to submit a no exposure certification form to the Michigan Department of Environmental Quality once every 5 years. I understand that I must allow the Michigan Department of Environmental Quality to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain discharge authorization under an NPDES permit prior to any point source discharge of storm water associated with industrial activity from the facility.

I certify, under penalty of law, that this document and all attachments were prepared by me, or under my direction or supervision in accordance with a system to assure qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I certify under penalty of law that I possess full authority on behalf of the legal owner/permittee to sign and submit this No Exposure Certification.

Printed name	<i>Arden Wallace</i>	Title	<i>PRESIDENT</i>
Signature	<i>AW</i>	Date	<i>6-22-16</i>

# SITE PLAN FOR SEASIDE SEAWALLS, LLC

## PART OF THE SW. 1/4 SEC. 5 & THE SE. 1/4 SEC 6, T2N-R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MI

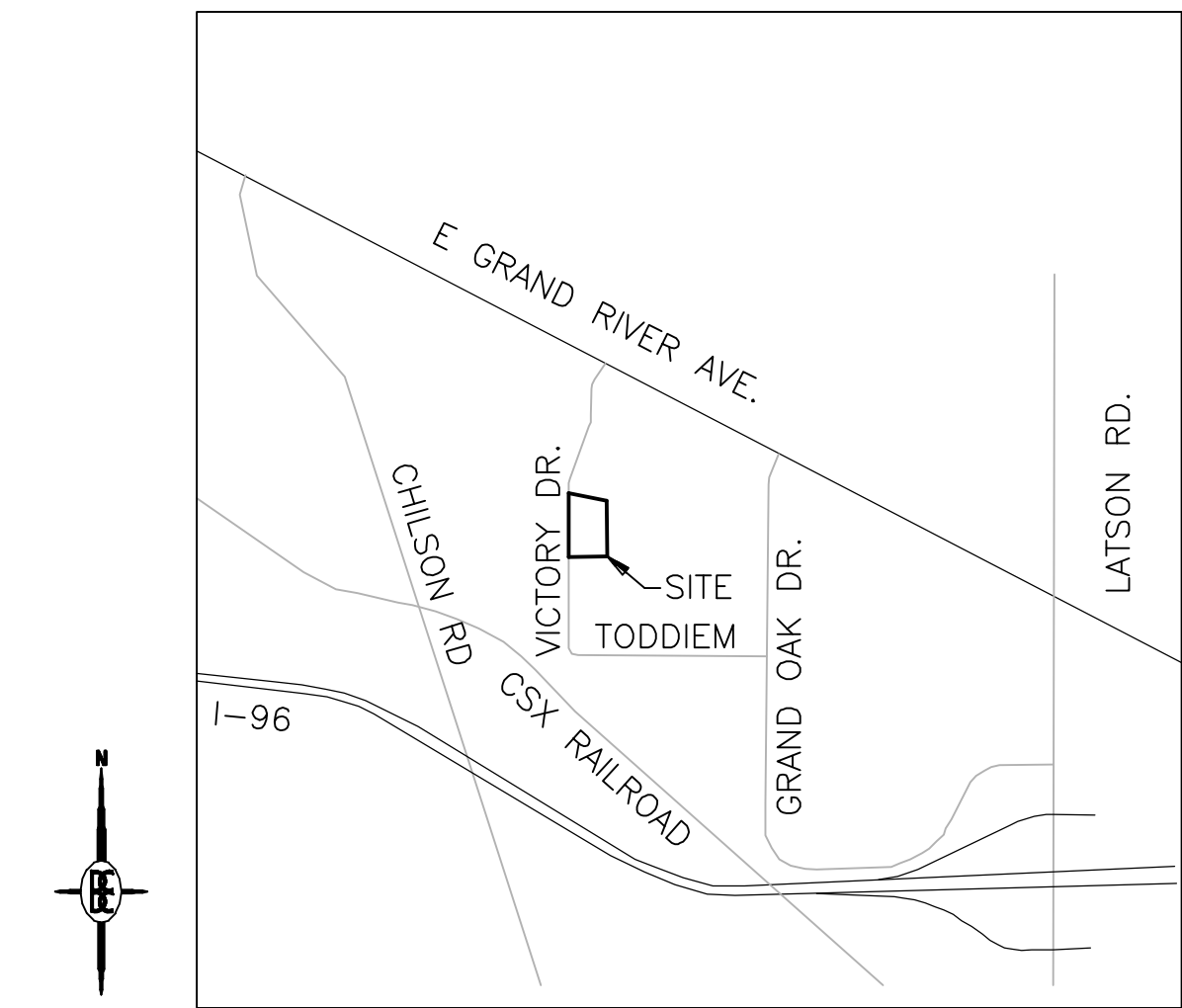
### PROPERTY DESCRIPTION:

Part of Lot 18 and part of Lot 19 of "GRAND OAKS WEST INDUSTRIAL PARK", as recorded in Liber 30 of Plats, Pages 1-5, Livingston County Records and being a part of the Southwest 1/4 of Section 5 and part of the Southeast 1/4 of Section 6, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Beginning at the Northwest Corner of said Lot 19 of "GRAND OAKS WEST INDUSTRIAL PARK"; thence along the North line of said Lot 19, S 80°36'27" E, 435.57 feet; thence S 02°07'51" W, 581.16 feet; thence S 88°58'54" W, 379.75 feet; thence along the East line of Victory Drive 66 foot wide Right of Way on the following three (3) courses:

1. Northerly on an arc left, having a length of 62.39 feet, a radius of 650.15 feet, a central angle of 05°29'55", and a long chord which bears N 08°06'52" W, 62.37 feet;
2. Northerly on an arc right, having a length of 99.88 feet, a radius of 584.15 feet, a central angle of 09°47'49", and a long chord which bears N 05°57'55" W, 99.76 feet;
3. N 01°04'01" W, 497.72 feet, to the POINT OF BEGINNING, containing 5.85 acres, more or less, and subject to the rights of the public over the existing said Victory Drive. Also subject to any other easements or restrictions of record.

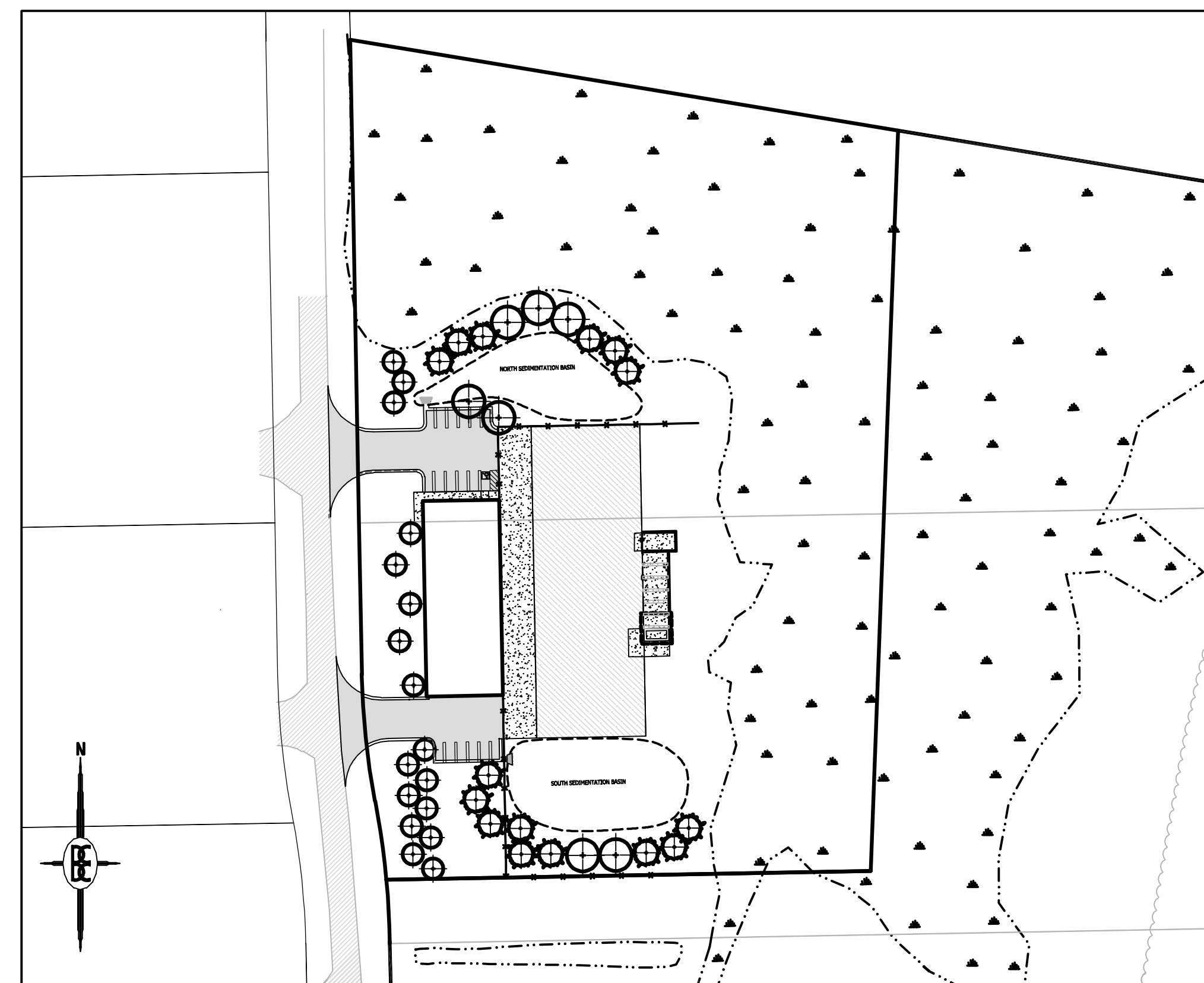
### CONSTRUCTION NOTES

- THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
1. THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.
  2. DO NOT SCALE THESE DRAWINGS AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
  3. A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
  4. IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
  5. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
  6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
  7. PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
  8. ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS.
  9. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
  10. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
  11. THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
  12. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
  13. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
  14. THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
  15. THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
  16. ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOT CLASS II).
  17. ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
  18. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
  19. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
  20. DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
  21. IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
  22. NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
  23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
  24. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
  25. ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
  26. TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
  27. ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
  28. AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
  29. ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
  30. NO SEEDING SHALL BE DONE AFTER OCTOBER 15 WITHOUT APPROVAL OF THE ENGINEER.
  31. ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
  32. SOIL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
  33. ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.
  34. ACCESS ROADS TO SITE SHALL BE MAINTAINED DURING CONSTRUCTION.



### LOCATION MAP

NO SCALE



### OVERALL SITE MAP

NO SCALE

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS
3	SITE PLAN
4	GRADING, DRAINAGE & SOIL EROSION CONTROL PLAN
5	DRAINAGE AREA & UTILITY PLAN
6	STORM SEWER CALCULATIONS
7	LANDSCAPE PLAN
8	LIGHTING PLAN
9	SANITARY SEWER DETAILS
10	CONSTRUCTION DETAILS
DRAWINGS PREPARED BY ARCHITECT	
A1	EXTERIOR ELEVATIONS
A2	PROPOSED FLOOR PLAN

## SEASIDE SEAWALLS, LLC

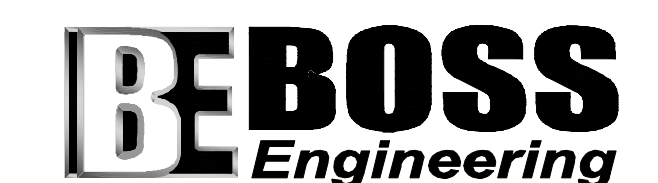
ARCHITECT:

PUCCI & VOLLMAR ARCHITECTS, PC  
508 E. GRAND RIVER AVE #100B  
BRIGHTON, MI 48116  
CONTACT: KARL VOLLMAR  
PHONE: (810) 225-2930  
E-MAIL: KARL@PV-ARCHITECTS.COM

PREPARED FOR OWNER:

SEASIDE SEAWALLS, LLC  
9868 EAST GRAND RIVER  
SUITES 110-225  
BRIGHTON, MI 48116  
CONTACT: AARON WALLACE  
PHONE: (248) 207-1984  
E-MAIL: AARON@SEASIDeseawalls.com

PREPARED BY:



Engineers Surveyors Planners Landscape Architects

3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843

800.246.6735 FAX 517.548.1670

### INDEMNIFICATION STATEMENT

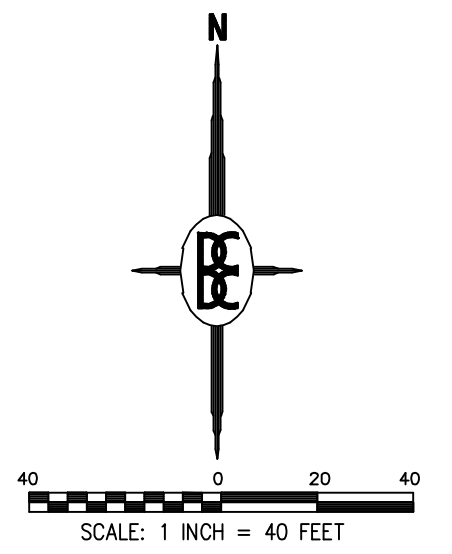
THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

FOR SITE PLAN APPROVAL ONLY!  
NOT FOR CONSTRUCTION

NO	BY	CHK	REVISION	DATE	JOB NO.	16-049
3	KS		GENOA TOWNSHIP	06/22/16	1	ISSUE DATE: 5/4/2016
2	KS		LIVINGSTON COUNTY ROAD COMMISSION	06/13/16		
1	KS		GENOA TOWNSHIP	05/25/16		

**LEGEND**

- 900- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- STORM DRAINAGE FLOW
- ⊕ POWER POLE
- ⊖ STORM INVERT
- ⊕ U.G. TELEPHONE MARKER
- ⊕ U.G. GAS MARKER
- ⊕ U.G. ELECTRIC MARKER
- ⊕ MAILBOX
- ⊕ DECIDUOUS TREE
- ⊕ MARSH SYMBOL
- ⊕ OVERHEAD WIRES
- CENTERLINE
- ⊕ MANHOLE
- ⊕ SANITARY SEWER
- - - WETLAND BOUNDARY



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. THE LOCATION AND ELEVATION OF EXISTING UTILITIES IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE ENGINEER HAS NOT CONDUCTED A FIELD SURVEY TO DETERMINE THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE ENGINEER HAS CONDUCTED A FIELD SURVEY TO DETERMINE THE LOCATION AND ELEVATION OF EXISTING UTILITIES AND HAS PROVIDED A UTILITY CROSSING PLAN TO THE FIELD PRIOR TO CONSTRUCTION. THE ENGINEER HAS CONDUCTED A FIELD SURVEY TO DETERMINE THE LOCATION AND ELEVATION OF EXISTING UTILITIES AND HAS PROVIDED A UTILITY CROSSING PLAN TO THE FIELD PRIOR TO CONSTRUCTION. THE ENGINEER HAS CONDUCTED A FIELD SURVEY TO DETERMINE THE LOCATION AND ELEVATION OF EXISTING UTILITIES AND HAS PROVIDED A UTILITY CROSSING PLAN TO THE FIELD PRIOR TO CONSTRUCTION.

**BEFORE YOU DIG**  
CALL MISS DIG  
1-800-482-7171  
www.missdig.com

SANITARY MH#1  
RIM ELEV: 945.12  
IE 6" N. 933.22  
IE 6" S. 933.32

12" CMP  
IE 943.63

12" CMP  
IE 944.77

SANITARY MH#2  
RIM ELEV: 947.93  
IE 6" N. 934.98  
IE 6" S. 935.08  
12" CMP  
IE 945.85

LOT 9

12" CMP  
IE 944.04

12" CMP  
IE 943.69

12" CMP  
IE 946.93

LOT 10

12" CMP  
IE 943.74

12" CMP  
IE 947.12

20 FT. PARKING LOT  
SETBACK

BUILDING  
SETBACK  
S 80°36'27" E 918.14'  
435.57'

N 01°04'01" W 497.72'  
378.05'

VICTORY DRIVE (66' WIDE)  
118.67'

PARCEL: 4711-05-303-025  
5.85 AC.  
ZONED: INDUSTRIAL DISTRICT (IND)

LOT 18

LOT 19

S 88°58'54" W  
379.75'

C/L 40' WIDE PRIVATE EASEMENT  
FOR PUBLIC STORM DRAINAGE  
(ALSO INCLUDES LIBER 690,  
PAGES 171,172, LIVINGSTON COUNTY  
RECORDS)

PRIVATE EASEMENT FOR  
PUBLIC STORM WATER  
DETENTION PURPOSES

C/L 40' WIDE PRIVATE EASEMENT  
FOR PUBLIC STORM DRAINAGE  
(ALSO INCLUDES LIBER 690,  
PAGES 171,172, LIVINGSTON COUNTY  
RECORDS)

C/L 30' WIDE PRIVATE EASEMENT  
FOR CATHODIC UNIT, LIBER 1517,  
PAGES 58-70, LIVINGSTON CO.  
RECORDS

PRIVATE EASEMENT FOR  
PUBLIC STORM WATER  
DETENTION PURPOSES

PARCEL 2 10.42 AC.

S 02°07'51" W  
581.16'

S 87°53'37" W  
220.00'

S 02°06'27" E  
174.00'

S 02°06'23" E 695.00'

**VICTORY DRIVE CURVE DATA:**

C1	C2	C3	C4
L=111.03'	L=99.88'	L=48.78'	L=62.39'
R=650.15'	R=584.15'	R=650.15'	R=650.15'
D=09°47'49"	D=09°47'49"	D=04°17'55"	D=05°29'55"
CH=N05°57'55"W 111.03'	CH=N05°57'55"W 99.76'	CH=N03°12'57"W 48.77'	CH=N08°06'52"W 62.37'

**SITE SOIL INFORMATION**  
BwA: BRONSON LOAMY SAND  
By: BROOKSTON LOAM  
Cc: CARLISLE MUCK  
MoB: MIAMI LOAM, 2-6% SLOPES  
MoC: MIAMI LOAM, 6-12% SLOPES

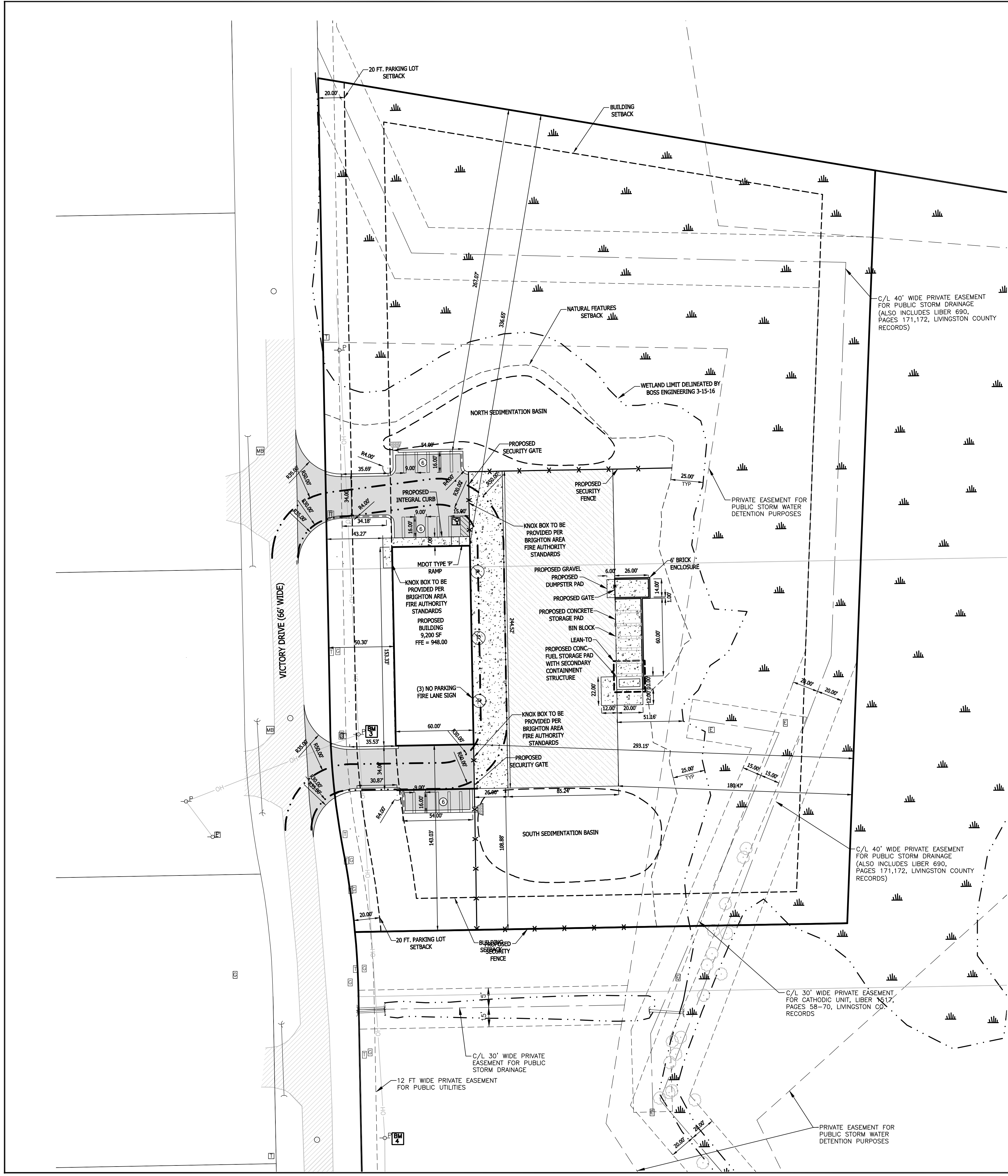
- GENERAL NOTES:**
- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
  - THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.
  - BENCHMARK INFORMATION: (U.S.G.S. DATUM)**  
BENCHMARK #3  
NAIL IN WEST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ACROSS FROM ENTRANCE TO "BEST SELF STORAGE"  
ELEVATION: 948.85  
BENCHMARK #4  
NAIL & TAG IN EAST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ON LOT 17, 75'± SOUTH OF EAST-WEST DITCH  
ELEVATION: 952.36
  - CONTOUR INTERVAL = 1 FOOT
  - WETLANDS WERE FLAGGED BY KING & MACGREGOR ENVIRONMENTAL, INC. ON OCTOBER 22, 2004. WETLANDS EDGE WAS UPDATED AND FLAGGED BY BOSS ENGINEERING ON MARCH 15, 2016.
  - BEARING BASIS IS "GRAND OAKS WEST INDUSTRIAL PARK" AS RECORDED IN LIBER 30, PAGES 1 THROUGH 5, LIVINGSTON COUNTY RECORDS.
  - EASEMENTS SHOWN ON THIS SURVEY ARE PER "GRAND OAKS WEST INDUSTRIAL PARK" AS RECORDED IN LIBER 30, PAGES 1 THROUGH 5, LIVINGSTON COUNTY RECORDS.

**SEASIDE SEAWALLS, LLC**

**SEASIDE SEAWALLS, LLC**  
9868 EAST GRAND RIVER, SUITE 110-225  
BRIGHTON, MI 48116  
(248) 207-1884

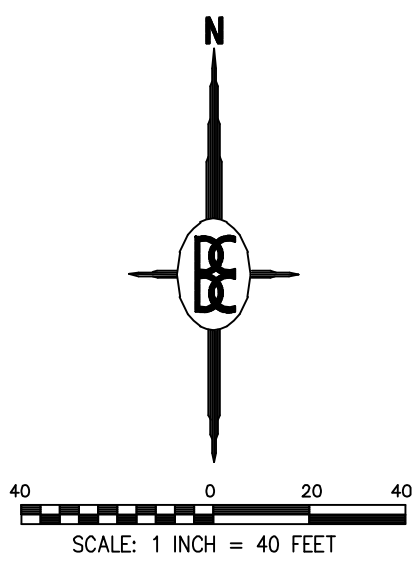
**EXISTING CONDITIONS**

PROJECT	DATE	TITLE
SEASIDE SEAWALLS, LLC	06/13/16	EXISTING CONDITIONS
PREPARED FOR	05/25/16	
DESIGNED BY:	2	KS
DRAWN BY:	1	KS
CHECKED BY:	1	KS
SCALE	1" = 40'	
JOB NO.	16-049	
DATE	03/30/16	
SHEET NO.	2	



**LEGEND**

PROPOSED (PR)	EXISTING (EX)
FFE	FFE
FENCE	FENCE
SIGN	SIGN
MODIFIED CURB	MODIFIED CURB
CONCRETE	CONCRETE
ASPHALT	ASPHALT
GRAVEL	GRAVEL
'FIRE LANE NO PARKING' SIGN	'FIRE LANE NO PARKING' SIGN
FIRE TRUCK ACCESS	FIRE TRUCK ACCESS
WETLAND BOUNDARY	WETLAND BOUNDARY
SEDIMENTATION BASIN	SEDIMENTATION BASIN



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN ARE EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE ENGINEER HAS CONDUCTED VISUAL SURVEYS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITIES. THE ENGINEER HAS CONDUCTED VISUAL SURVEYS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITIES. THE ENGINEER HAS CONDUCTED VISUAL SURVEYS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITIES. THE ENGINEER HAS CONDUCTED VISUAL SURVEYS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITIES.

**BEFORE YOU DIG**  
CALL MISS DIG  
1-866-270-2022  
www.missdig.com

**SITE DATA**

ZONING	INDUSTRIAL DISTRICT (IND)	
SITE AREA	5.85 AC (254,930 SF)	
SETBACKS	REQUIRED	PROVIDED
FRONT	50 FT	50.00 FT
SIDE	25 FT	S. 143.03 FT N. 336.65 FT
REAR	40 FT	293.15 FT
NATURAL FEATURES	25 FT	25.00 FT
PERVIOUS SURFACE	207033 SF	
IMPERVIOUS SURFACE	47,897 SF	
MAX COVERAGE	REQUIRED	PROVIDED
BUILDING	40%	3.29%
IMPERVIOUS SURFACE	85%	18.79%

**PARKING LOT DATA**

SETBACKS	REQUIRED	PROVIDED
FRONT	20 FT	22.30 FT
SIDE	10 FT	S. 111 FT N. 264 FT
REAR	10 FT	180 FT
PARKING SPACES	18	18
BARRIER FREE SPACES	1	1

**PARKING SPACES REQUIRED**

SPACES REQUIRED FOR THE SUB. ECT SITE IS BASED ON THE GREATER OF THE FOLLOWING TWO SCENARIOS:

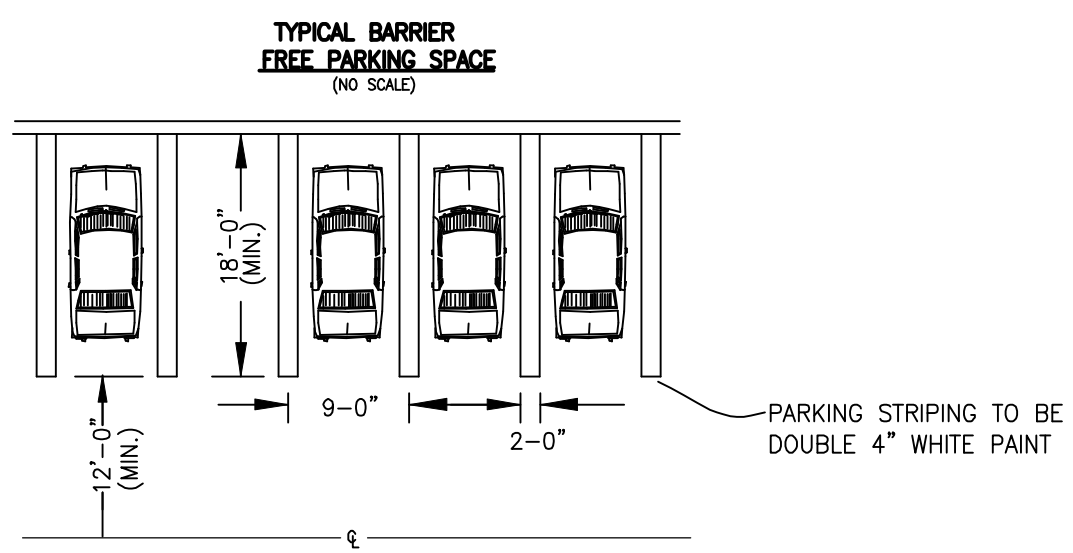
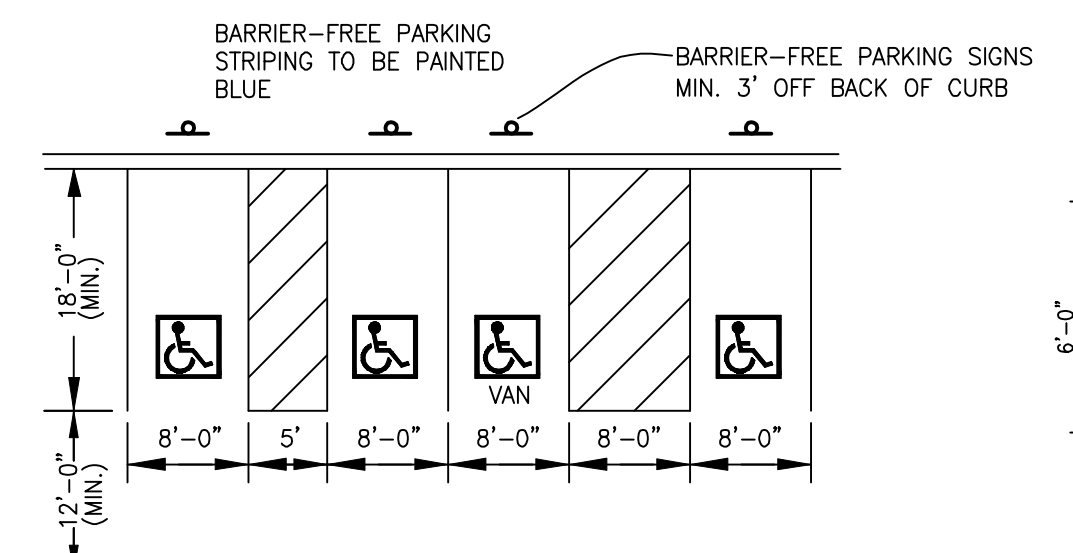
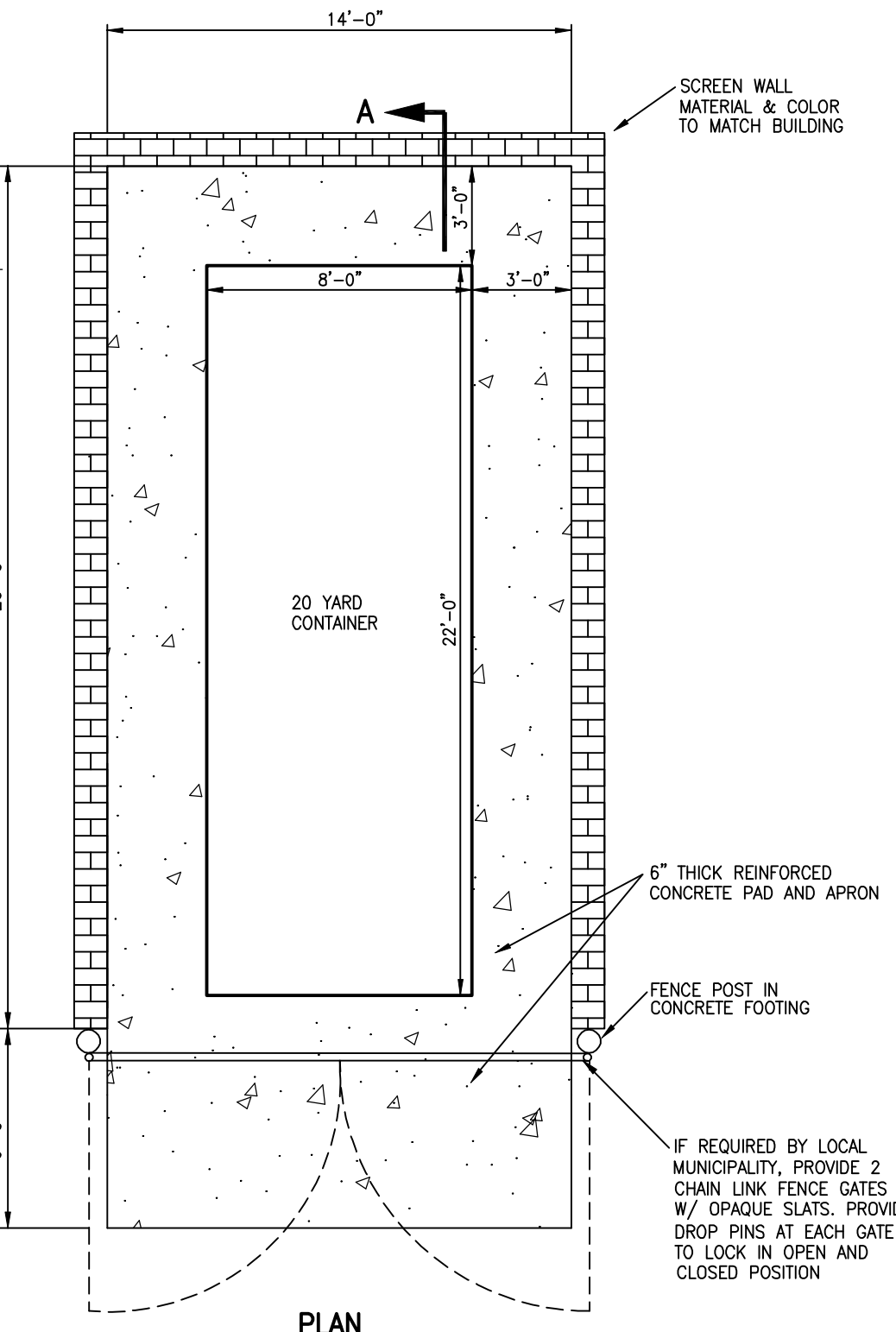
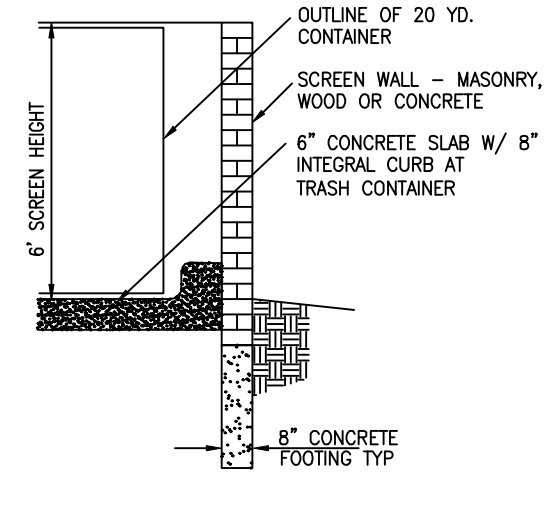
- 1.5 SPACES/1,000 SQ. FT. FLOOR AREA PLUS 1 SPACES PER CORPORATE VEHICLE
- 1.5 SPACES x 9,200 SQ. FT./1,000 SQ. FT. □ 4 SPACES □ 18 SPACES
- 1.2 SPACES PER EMPLOYEE AT PEAK HOUR PLUS 1 SPACE PER CORPORATE VEHICLE
- 1.2 SPACES x 5 SPACES □ 4 SPACES □ 10 SPACES

**SITE USE**

THE PROPOSED PRIMARY USE OF THE SITE IS FOR STORAGE PURPOSES FOR CONSTRUCTION EQUIPMENT & MATERIAL. THE EQUIPMENT BEING STORED ON-SITE CONSISTS OF GENERAL CONSTRUCTION EQUIPMENT WITH A MAXIMUM STORAGE HEIGHT OF 12 FEET. THE MATERIAL BEING STORED ON-SITE WILL BE ON A CONCRETE PAD AND CONTAINED BY A 8 FOOT SCREEN WALL BETWEEN THE MATERIAL AND THE EXISTING WETLAND WITH BIN BLOCKS BETWEEN EACH STORAGE USE. THE MATERIAL CONSISTS OF TOP SOIL, SAND, CRUSHED CONCRETE, GRAVEL, RIP-RAP, AND FIELD STONE. TOP SOIL WILL BE COVERED OVERHEAD BY A LEAN-TO STRUCTURE.

**FUEL STORAGE**

TWO 300 GALLON DIESEL TANKS WILL BE STORED ON-SITE ON A 20 FT. x 10 FT. CONCRETE PAD. THE TANKS WILL BE SURROUNDED BY A 1 FT. CONCRETE SECONDARY CONTAINMENT STRUCTURE. THAT IS CAPABLE OF HOLDING 1,279 GALLONS. 19 FT x 9 FT x 1 FT. x 7.48 GALLONS/CFT. = 1,279 GALLONS. MORE THAN TWICE THE VOLUME OF FUEL BEING STORED IN THE TANKS. 600 GALLONS. FUEL TANKS WILL BE COVERED OVERHEAD BY A LEAN-TO STRUCTURE.



**DOUBLE CONTAINER CORRAL**  
(NO SCALE)

**HANDICAP PARKING - MOUNTABLE SIGN DETAIL**  
(NO SCALE)

**BENCHMARK INFORMATION: U.S.G.S. DATUM**

BENCHMARK #3  
NAIL IN WEST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ACROSS FROM ENTRANCE TO BEST SELF STORAGE  
ELEVATION: 948.85

BENCHMARK #4  
NAIL & TAG IN EAST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ON LOT 17, 75' SOUTH OF EAST-WEST DITCH  
ELEVATION: 952.36

**BEBOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
800.246.6735 FAX 517.548.1670

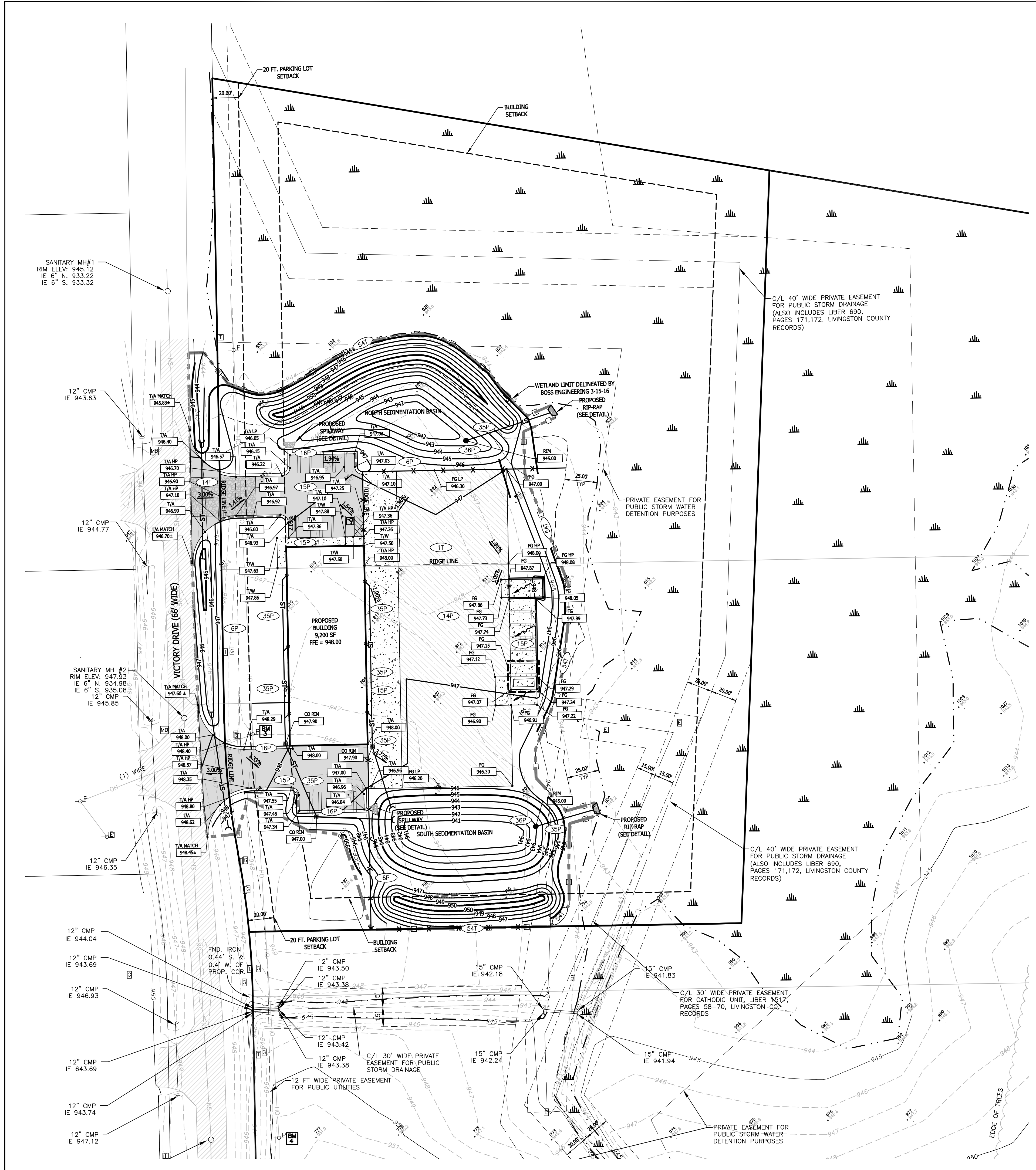
**SEASIDE SEAWALLS, LLC**  
SEASIDE SEAWALLS, LLC  
9868 EAST GRAND RIVER, SUITE 110-225  
BRIGHTON, MI 48116  
(248) 207-1884

PROJECT: SEASIDE SEAWALLS, LLC  
PREPARED FOR: SEASIDE SEAWALLS, LLC  
DATE: 06/13/16

NO.	BY	DATE	REVISION
1	KS	06/13/16	GENOA TOWNSHIP PER
2	KS	06/25/16	REVISION PER

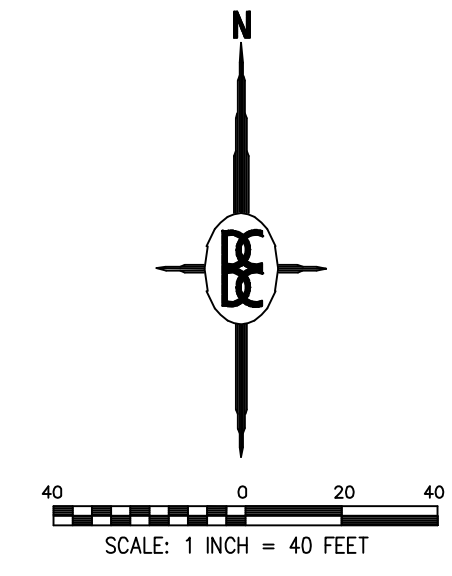
DESIGNED BY: KS  
DRAWN BY: KS  
CHECKED BY:

SCALE: 1" = 40'  
JOB NO. 16-049  
DATE: 03/30/16  
SHEET NO. 3



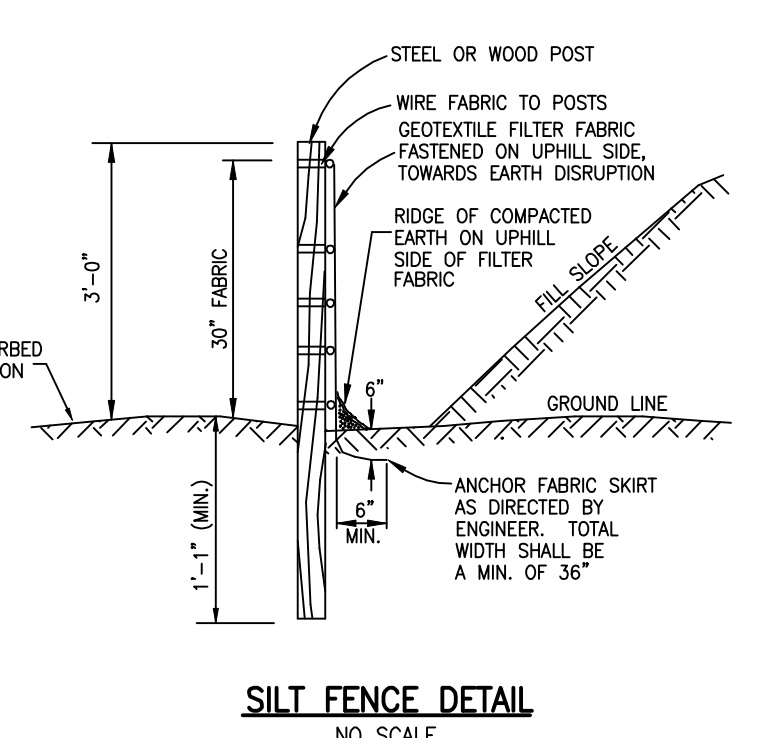
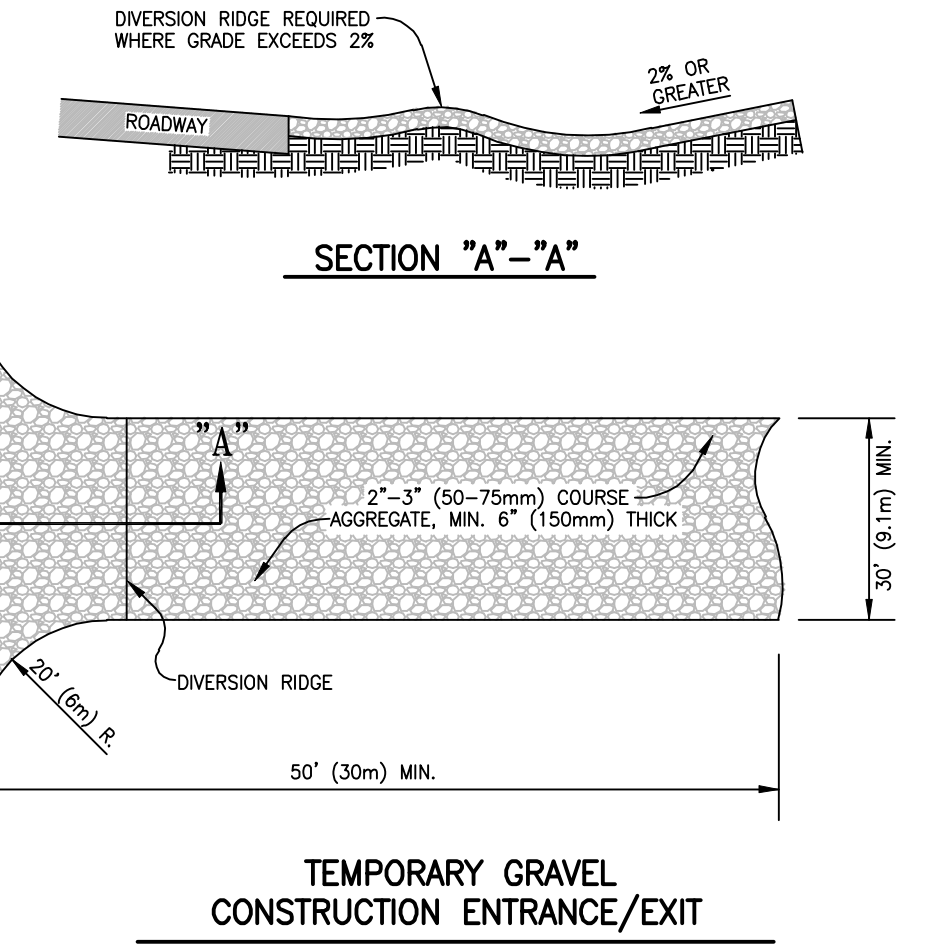
### LEGEND

PROPOSED (PR)	EXISTING (EX)
FFE T/A T/C RIM MH CB ES GV HY SN SL ST OH Manhole Inlet / Catchbasin Flared End-Section Gate Valve Hydrant Fence Sign Silt Fence Concrete Asphalt SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY) WETLAND BOUNDARY SEDIMENTATION BASIN	



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY DATA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. BESS ENGINEERING, LLC DOES NOT WARRANT THE ACCURACY OF ANY INFORMATION OR DATA OBTAINED FROM ANY SOURCE OTHER THAN THE ONE SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL APPLICABLE AGENCIES PRIOR TO CONSTRUCTION. A NOTARIZED AFFIDAVIT OR AFFIRMATION OF THE CONTRACTOR'S RESPONSIBILITY IS REQUIRED FOR THE PLAN.

**BESS ENGINEERING, LLC**  
 ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 800.246.6735 FAX 517.548.1670



**STORM WATER NARRATIVE**  
 PER THE LIVINGSTON COUNTY DRAIN COMMISSION THIS SITE MUST PROVIDE SEDIMENTATION CONTROL. THE STORM WATER IS DIRECTED TO TWO ON SITE SEDIMENTATION BASINS PRIOR TO DISCHARGE INTO THE LARGE WETLAND NETWORK ON AND ADJACENT TO THE SUB ECT PROPERTY WHICH IS WITHIN A PUBLIC DRAINAGE EASEMENT.

**SOIL EROSION CONTROL MEASURES**

NO.	MEASURE	DESCRIPTION
1	STRIPING & STOCKPILE TOPSOIL	TOPSOIL MAY BE STOCKPILED WHERE BORROW AREAS TO ACT AS A DIVERSION STOCKPILE SHOULD BE TEMPORARILY SEEDED
6	SEEDING WITH MULCH AND/OR MATING	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR BRANCHED WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY EXPERIENCED PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL 600
14	AGGREGATE COVER	STABILIZES SOIL SURFACE. THIS MINIMIZING EROSION PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS
15	FABRIC	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY REGULAR SURFACE WILL HELP SLOW VELOCITY
16	EDDS & CUTTER	KEEPS HIGH VELOCITY RUNOFF ON PAVED AREAS FROM LEAVING PAVED SURFACE COLLECTS AND CONVEYS RUNOFF TO ENCLOSED DRAINAGE SYSTEM OR PREPARED DRAINAGEWAY
35	STORM STRIP	SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF CONDUITS RUNOFF TO MANHOLE, SEWER SYSTEM OR STABILIZED OUTFALL LOCATION USE CATCH BASIN TO COLLECT SEDIMENT
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER CLUM OVER INLET
54	SILT FENCE	USES GEOTEXTILE FABRIC AND POST OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY (SEE DETAIL THIS SHEET)

**CONTROLS & MEASURES NARRATIVE**

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

**CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE**

ACTIVITY	DAILY	WEEKLY	MONTHLY	AS REQUIRED
MAINTAIN LANDSCAPING, REPLACE MULCH		X	X	X
CLEAN INLETS		X	X	X
COLLECT LITTER		X	X	X
SWEEP PAVED AREAS		X	X	X
SCRAPE PAVED AREAS	X			X

**P = PERMANENT, T = TEMPORARY  
 TOTAL DISTURBED AREA = 2.52 AC (109,791 SF)**

**DESIGNED BY:** KS  
**DRAWN BY:** KS  
**CHECKED BY:** KS

**BENCHMARK INFORMATION: U.S.G.S. DATUM**  
 BENCHMARK #3  
 NAIL IN WEST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ACROSS FROM ENTRANCE TO BEST SELF STORAGE  
 ELEVATION: 948.85  
 BENCHMARK #4  
 NAIL & TAG IN EAST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ON LOT 17, 75' SOUTH OF EAST-WEST DITCH  
 ELEVATION: 952.36

**BEBOSS ENGINEERING**  
 ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
 3121 E. GRAND RIVER AVE.  
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 800.246.6735 FAX 517.548.1670

**SEASIDE SEAWALLS, LLC**  
 SEASIDE SEAWALLS, LLC  
 9868 EAST GRAND RIVER, SUITE 110-225  
 BRIGHTON, MI 48116  
 (248) 207-1884

**GRADING & SOIL EROSION CONTROL PLAN**

PROJECT: 16-049

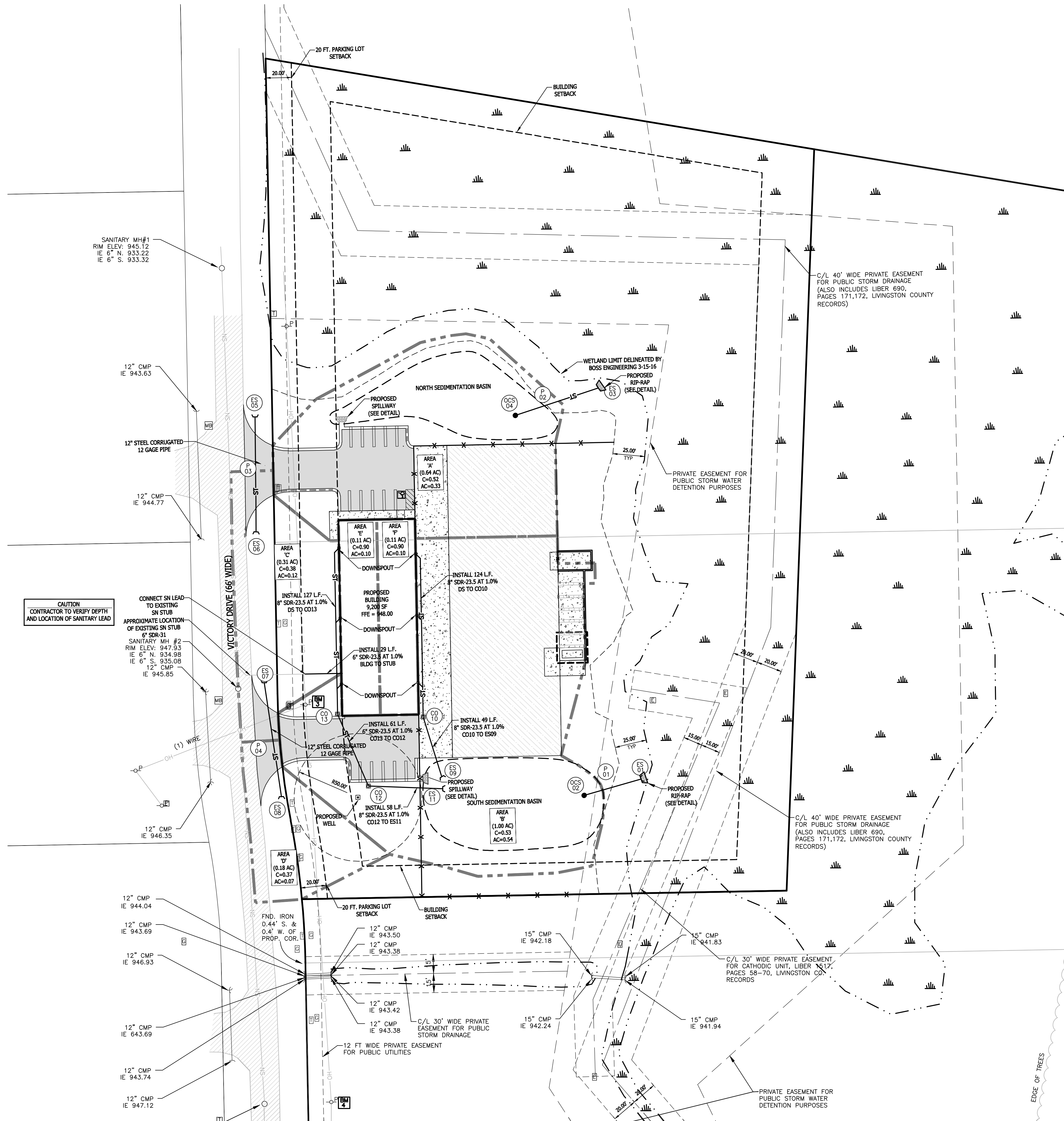
PREPARED FOR: BEBOSS ENGINEERING

DATE	06/13/16
DATE	05/25/16
LORC	GENOA TOWNSHIP
NO BY	REVISION PER

DESIGNED BY: KS  
 DRAWN BY: KS  
 CHECKED BY: KS

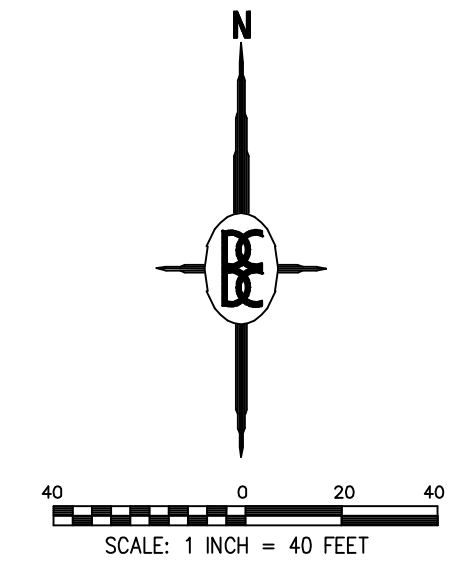
SCALE: 1" = 40'  
 JOB NO. 16-049  
 DATE: 03/30/16  
 SHEET NO. 4





**LEGEND**

PROPOSED (PR)	EXISTING (EX)	(EX)
RIM	RIM	RIM ELEVATION
INV	INV	INVERT ELEVATION
MH	MH	MANHOLE STRUCTURE
IN	IN	INLET STRUCTURE
CB	CB	CATCHBASIN STRUCTURE
RY	RY	REAR YARD STRUCTURE
ES	ES	END-SECTION
CV	CV	GATEVALVE STRUCTURE
HY	HY	HYDRANT
UP	UP	UTILITY POLE
DS	DS	DOWNSPOUT
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAIN
PS	PS	PRESSURE SEWER
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
FO	FO	FIBER OPTIC
OH	OH	OVERHEAD WIRE
C	C	CABLE
E	E	ELECTRIC
G	G	GAS
T	T	TELEPHONE
O	O	MANHOLE
□	□	INLET / CATCHBASIN
⊕	⊕	FLARED END-SECTION
⊕	⊕	GATE VALVE
⊕	⊕	HYDRANT
⊕	⊕	UTILITY POLE
⊕	⊕	FENCE
⊕	⊕	SIGN
⊕	⊕	STORM SEWER LABEL
⊕	⊕	LIMITS OF DRAINAGE
⊕	⊕	WETLAND BOUNDARY



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS, FIELD SURVEY, AND EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE ENGINEER HAS CONDUCTED VISUAL INSPECTIONS AND DETERMINED THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES.

**STORM STRUCTURE SCHEDULE**

STRUCTURE	SECTION	SIZE	INVERT	ELEVATION
ES 01	FLARED END SECTION	12"	INV.W	942.73
ES 08	FLARED END SECTION	12"	INV.N	946.14
OCS 02	2' SUMP	12"	INV.E	942.88
ES 09	FLARED END SECTION	8"	INV.NW	943.50
ES 03	FLARED END SECTION	12"	INV.SW	943.32
CO 10	ROOF DRAIN-STORM CLEANOUT		INV.SE	943.99
OCS 04	2' SUMP	12"	INV.NE	943.50
ES 11	FLARED END SECTION	8"	INV.NW	942.88
ES 05	FLARED END SECTION	12"	INV.S	943.90
CO 12	ROOF DRAIN-STORM CLEANOUT		INV.SE	943.49
ES 06	FLARED END SECTION	12"	INV.N	944.19
CO 13	ROOF DRAIN-STORM CLEANOUT		INV.NW	943.49
ES 07	FLARED END SECTION	12"	INV.S	945.85
ES 11	FLARED END SECTION	8"	INV.SE	943.96
ES 11	FLARED END SECTION	8"	INV.N	943.96

**STORM PIPE SCHEDULE**

PIPE	LENGTH	SIZE	TYPE	SLOPE
1	47	12	C-76 CLV	0.32%
2	56	18	C-76 CLV	0.32%
3	90	12	CMP	0.32%
4	90	12	CMP	0.32%

**CULVERT DRAINAGE AREA SUMMARY**

STRUCTURE	DRAINAGE AREA(S)	AREA (AC)
ES 06 TO ES 05	C,D	0.49
ES 08 TO ES 07	D	0.18

**SEDIMENTATION BASIN DRAINAGE AREA SUMMARY**

NORTH BASIN DRAINAGE AREA			
DRAINAGE AREA	AREA (AC)	C	AxC
A	0.62	0.54	0.33
B	0.93	0.54	0.50
E	0.11	0.90	0.10
F	0.11	0.90	0.10

NOTE  
DRAINAGE AREA C IS GREENBELT THAT DRAINS TO THE VICTORY DRIVE ROADSIDE DITCH.

BENCHMARK INFORMATION: U.S.G.S. DATUM  
BENCHMARK #3  
NAIL IN WEST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ACROSS FROM ENTRANCE TO BEST SELF STORAGE  
ELEVATION: 948.85  
BENCHMARK #4  
NAIL & TAG IN EAST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ON LOT 17, 75' SOUTH OF EAST-WEST DITCH  
ELEVATION: 952.36

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**DRAINAGE AREA & UTILITY PLAN**

PROJECT	DATE	TITLE
	06/13/16	
	05/25/16	

NO	BY	REVISION	PER
2	KS		
1	KS		

DESIGNED BY: KS  
DRAWN BY: KS  
CHECKED BY:  
SCALE: 1" = 40'  
JOB NO. 16-049  
DATE: 03/30/16  
SHEET NO. 5



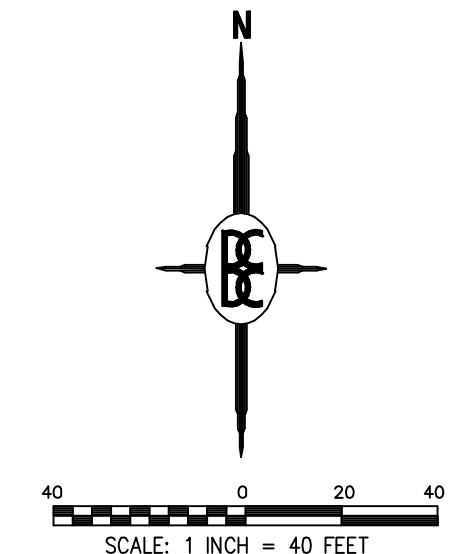
**LANDSCAPE SUMMARY**

Location	Ordinance Requirement	Landscaping Required	Proposed
Front Yard Greenbelt (660 ft.)	20' width 1 canopy tree every 40'	17 canopy trees required	50' width 17 canopy trees
Parking Lot (18 Spaces)	1 tree & 100 SF landscaped area per 10 spaces	2 canopy trees and 180 SF landscaping. 1 tree must be interior parking lot.	2 canopy trees 190 SF landscaping

**NOTE**  
ADDITIONAL LANDSCAPING AND EXISTING VEGETATION WITHIN WETLAND USED FOR SCREENING PURPOSES OF SEDIMENTATION BASINS.

**LEGEND**

	<b>PROPOSED (PR)</b>		<b>EXISTING (EX)</b>
	SANITARY LEAD		SANITARY SEWER
	STORM SEWER		MANHOLE
	FLARED END-SECTION		MODIFIED CURB
	CONCRETE		ASPHALT
	FENCE		WETLAND BOUNDARY
	SEDIMENTATION BASIN		



**PLANT LIST**

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
AC	5	Abies concolor	White Fir	6' Hgt	B&B
AG	5	Acer ginnala	Amur Maple	2.5" cal	B&B
AS	7	Acer saccharum 'Legacy'	Legacy Sugar Maple	2.5" cal	B&B
PG	10	Picea glauca 'Densata'	White Spruce	6' hgt	B&B
QR	12	Quercus robur 'Fastigiata'	Columnar English Oak	2.5" cal	B&B

**LANDSCAPE KEY**

**EVERGREEN TREE PLANTING DETAIL (NO SCALE)**

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

NEVER PRUNE EVERGREENS

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

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

GUYING CABLE @ 3 GUYS PER TREE (120" APART) DOUBLE STRAND = 12 GAUGE TWISTED WIRE

4" MULCH INSIDE SAUCER

EARTH SAUCER 5" DEEP

IN SODDED AREAS PLACE SOD TO BOTTOM OF EARTH SAUCER

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

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

**DECIDUOUS TREE PLANTING DETAIL (NO SCALE)**

NEVER CUT THE LEADER

RUBBER HOSE POSITIONED DIRECTLY ABOVE THE TREE BRANCH

DOUBLE STRAND = 12 GAUGE TWISTED WIRE

TREE STAKES, THREE 120" APART

PULL WIRE THROUGH HOLE AND AROUND STAKE BEFORE TYING

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

TREE WRAP TO FIRST BRANCH

MULCH 4" DEEP INSIDE SAUCER

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

SAUCER 5" DEEP

IN SODDED AREAS PLACE SOD TO BOTTOM OF EARTH SAUCER

FINISH GRADE

12" MINIMUM PLANTING MIXTURE BETWEEN BALL AND PIT WALL

UNDISTURBED SUBGRADE SCARIFY TO 1" DEPTH

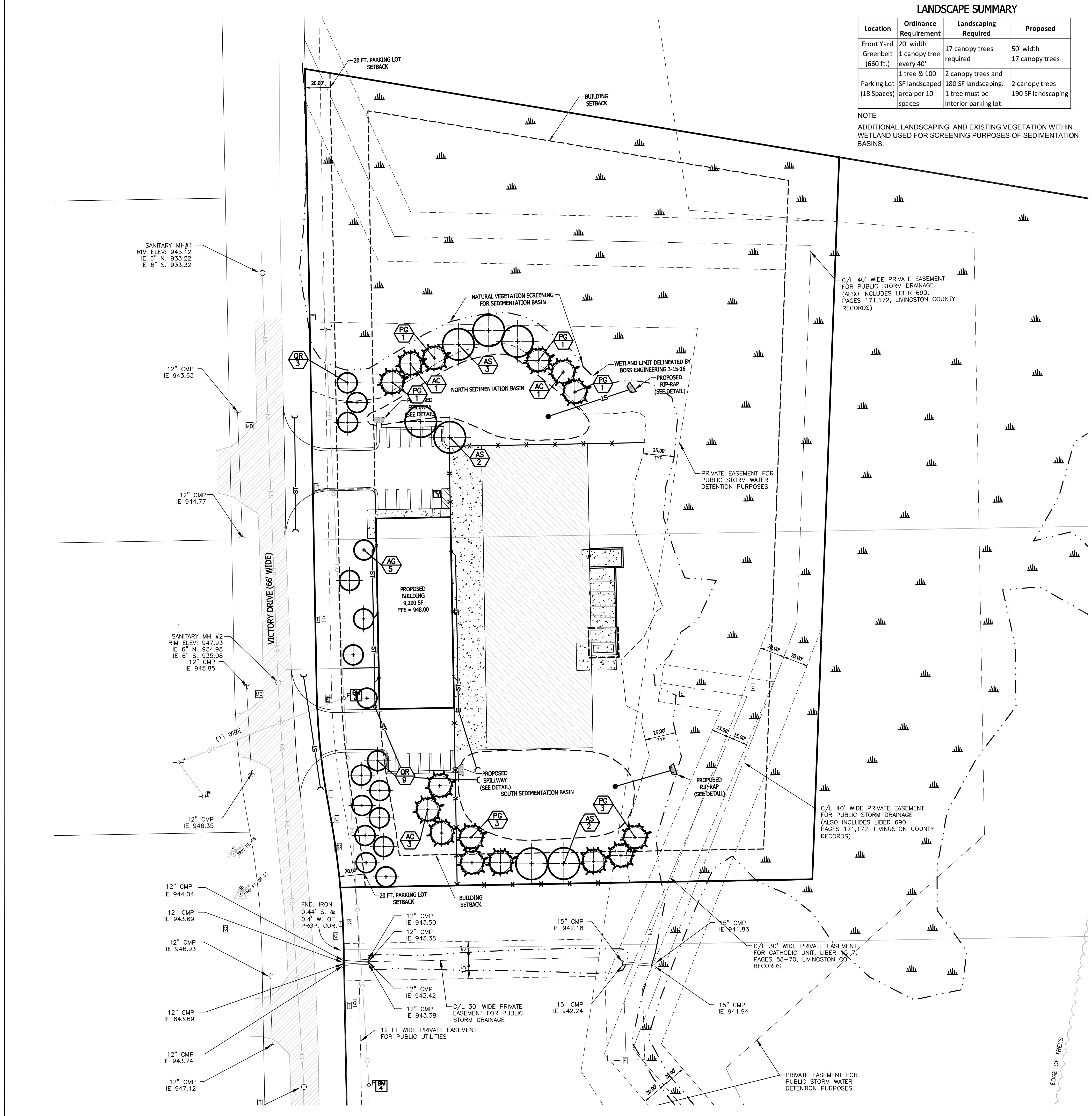
SET TREE STAKE AT LEAST 18" BELOW BOTTOM OF PIT IN UNDISTURBED SOIL

NOTE: SEE SHEET 10 FOR GENERAL LANDSCAPE NOTES

**BENCHMARK INFORMATION: U.S.G.S. DATUM**

BENCHMARK #3  
NAIL IN WEST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ACROSS FROM ENTRANCE TO BEST SELF STORAGE  
ELEVATION: 948.85

BENCHMARK #4  
NAIL & TAG IN EAST SIDE OF UTILITY POLE ON EAST SIDE OF VICTORY DRIVE ON LOT 17, 75' SOUTH OF EAST-WEST DITCH  
ELEVATION: 952.36



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS AND FIELD SURVEY. THE LOCATION AND ELEVATION OF EXISTING UTILITIES HAS BEEN VERIFIED BY FIELD SURVEY. THE LOCATION AND ELEVATION OF EXISTING UTILITIES HAS BEEN VERIFIED BY FIELD SURVEY. THE LOCATION AND ELEVATION OF EXISTING UTILITIES HAS BEEN VERIFIED BY FIELD SURVEY.

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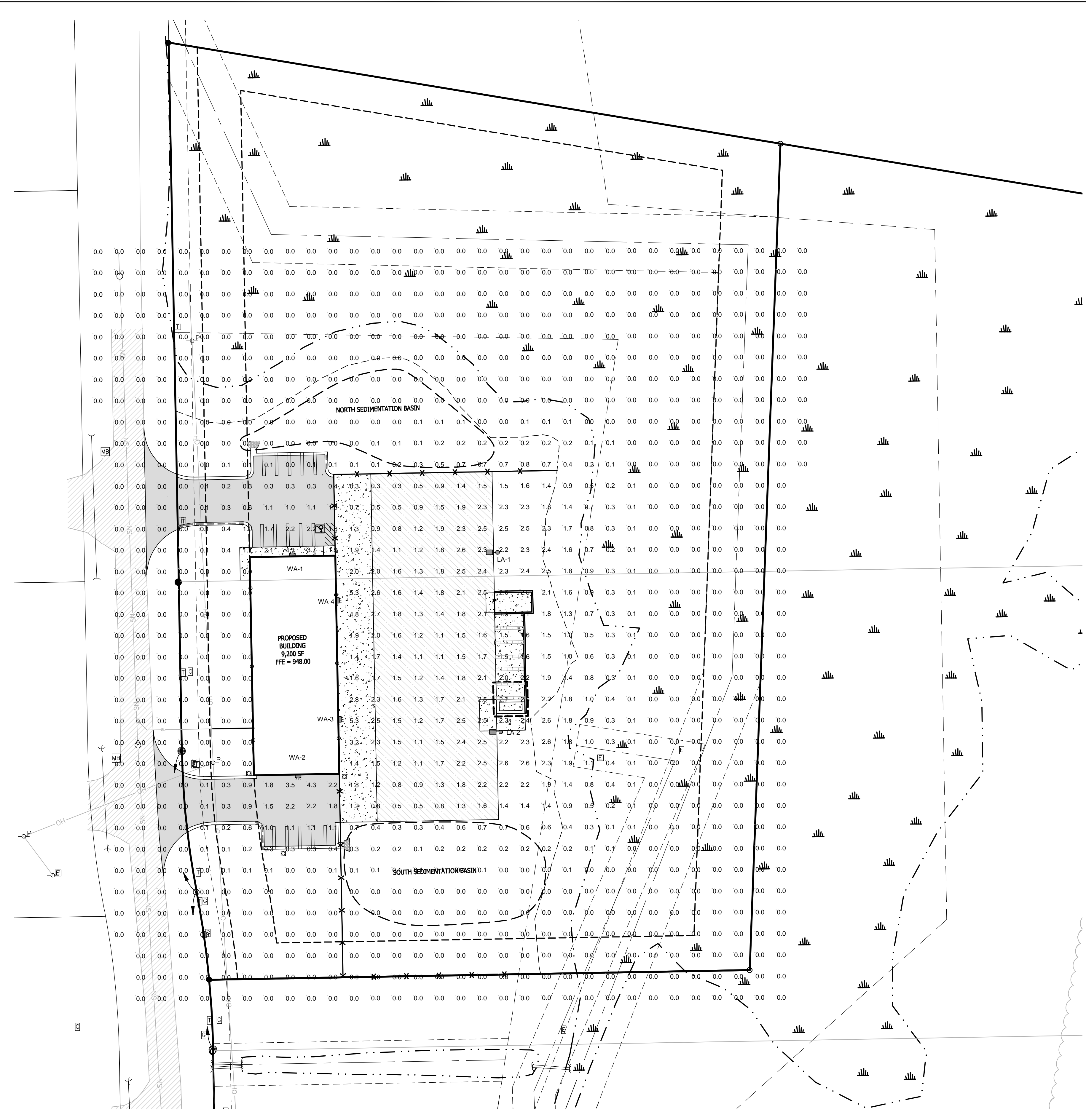
PROJECT: LANDSCAPE PLAN

PREPARED FOR: SEASIDE SEAWALLS, LLC

NO.	BY	DATE	REVISION PER
1	KS	06/13/16	LORC
2	KS	05/25/16	GENA TOWNSHIP

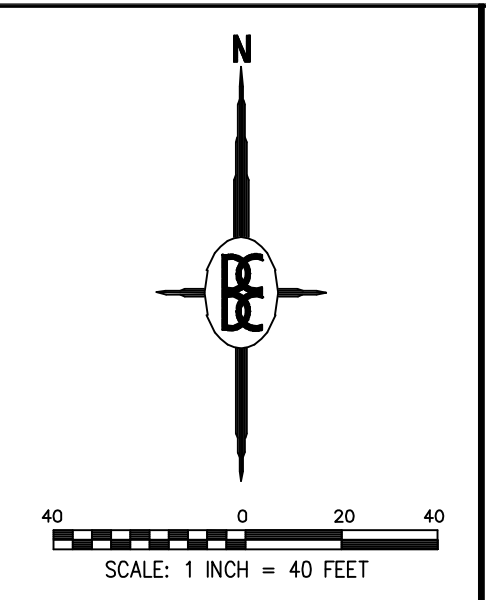
DESIGNED BY: KS  
DRAWN BY: KS  
CHECKED BY:

SCALE: 1" = 40'  
JOB NO. 16-049  
DATE: 03/30/16  
SHEET NO. 7



**LEGEND**

EXISTING	PROPOSED	DESCRIPTION
●	○	SINGLE BOX
□	○	SINGLE BOX 2
○	○	SINGLE BOX FORWARD THROW
○	○	DOUBLE BOX
○	○	DOUBLE BOX FORWARD THROW
○	○	GROUND LIGHT
○	○	POLE FIXTURE
○	○	POLE / CANOPY FIXTURE
○	○	WALL FIXTURE
○	○	WALL FIXTURE
○	○	WALL FIXTURE
○	○	WALL FIXTURE
○	○	FOOT CANDLES ON SITE



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN ARE BASED ON RECORD DRAWINGS, FIELD SURVEY AND OTHER INFORMATION. THE ENGINEER HAS NOT CONDUCTED A FIELD SURVEY TO VERIFY THE LOCATION AND ELEVATION OF EXISTING UTILITIES. THE LOCATION AND ELEVATION OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE NOT TO BE CONSIDERED A GUARANTEE OF ACCURACY. THE ENGINEER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

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**MUNICIPAL REQUIREMENTS**

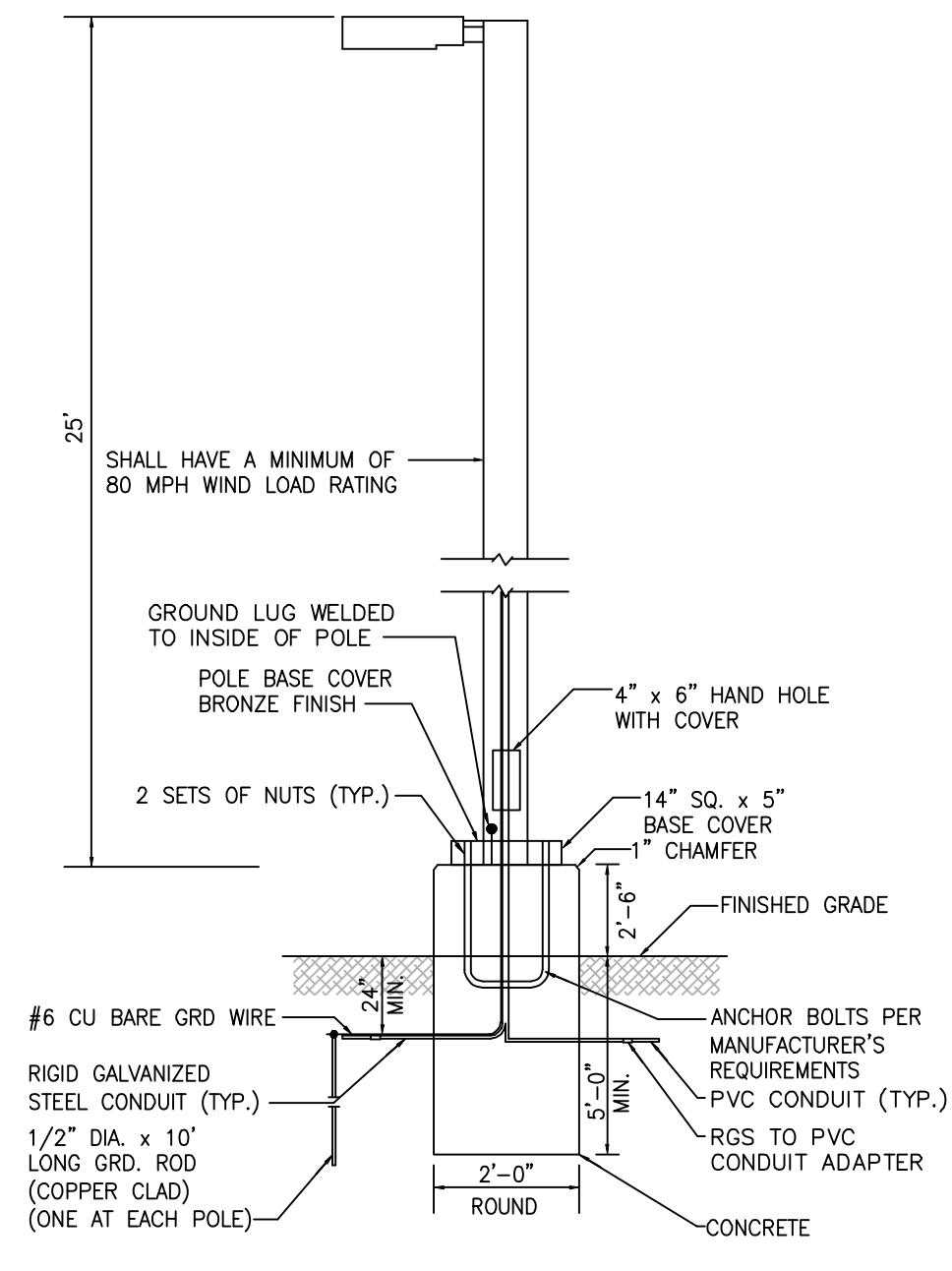
1. MAXIMUM 0.5 FOOTCANDLE AT RESIDENTIAL LOT LINE.
2. MAXIMUM 1.0 FOOTCANDLE AT NON-RESIDENTIAL LOT LINE.
3. MAXIMUM 20 FT. HT. ADJACENT TO RESIDENTIAL
4. MAXIMUM 30 FT. HT. ADJACENT TO NON-RESIDENTIAL

**SITE LIGHTING SUMMARY**

LIGHTING LEVELS ARE SHOWN IN FOOTCANDLES AT GRADE  
MAX. LIGHT LEVEL AT THE PROPERTY LINE: 0.00 FC.  
MIN. LIGHT LEVEL AT THE PROPERTY LINE: 0.00 FC.

**GENERAL LIGHTING NOTES**

1. THE LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS.
2. ALL POLES ARE TO BE MOUNTED ON CONCRETE PEDESTALS 2' ABOVE GRADE IN PARKING LOTS AS SHOWN IN DETAIL.
3. ALL POLES LOCATED OUTSIDE OF THE PARKING AREA SHALL BE LOCATED 3' FROM BACK OF CURB OR EDGE OF SIDEWALKS.
4. SHOP DRAWINGS FOR THE ELECTRICAL WIRING OF THE POLES NEED TO BE SUBMITTED TO THE ENGINEER FOR COORDINATION OF UNDERGROUND CONDUIT AND APPROVAL OF LAYOUT.



**BOX LIGHT FIXTURE DETAIL (TYP.)**  
(NO SCALE)

**D-Series Size 2 LED Area Luminaire**

**Specifications**

- Length: 40"
- Width: 15"
- Height: 7'-3/4"
- Weight: 36 lbs

**Ordering Information**

EXAMPLE: DSX2 LED 80C 1000 40K 14M MVOLT SPA DBXDB

Stock	LEDs	Mounting	Color temperature	Substitution	Voltage	Mounting
DSX2LED	80C 1000 40K	14M	4000K	DSX2LED 80C 1000 40K 14M MVOLT SPA DBXDB	120V	DBXDB

**Controls & Shields**

**Accessories**

**Tenon Mounting Slitter\*\***

**SEASIDE SEAWALLS, LLC**  
SEASIDE SEAWALLS, LLC  
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BRIGHTON, MI 48116  
(248) 207-1884

**SITE LIGHTING PLAN**

**LUMINAIRE SCHEDULE**

SYMBOL	LABEL	QTY.	DESCRIPTION	CATALOG NUMBER	LAMP	FILE	LUMENS	LLF	POLE DESCRIPTION	POLE HEIGHT	BASE HEIGHT	TOTAL HEIGHT
LA	LA	2	DSX2 LED W/2 LARGE & 2 SMALL LIGHT ENGINES, (2) 1050mA DRIVERS, 4000K LED, TYPE T5M OPTICS	LITHONIA #DSX2 LED 80C 1000 40K T5M MVOLT	LED	ABSOLUTE	.92			25'	2'-6"	27'-6"
WA	WA	4	DSX1 LED WITH 3 LIGHT ENGINES, 30 LED'S, 1000mA DRIVER, 4000K LED, TYPE T4M OPTICS	LITHONIA #DSX1 LED 30C 1000 40K T4M MVOLT	LED	ABSOLUTE	.92			14'		14'

ALL IES FILES PROVIDED BY MANUFACTURER FOR CALCULATION OF LIGHTING LEVEL.

PROJECT: \_\_\_\_\_

PREPARED FOR: \_\_\_\_\_

NO.	DATE	REVISION	PER
1	06/13/16	DATE	
2	05/25/16	DATE	
1	KS	GENOA TOWNSHIP	
1	KS	REVISION PER	
NO	BY		

DESIGNED BY: TD

CHECKED BY: \_\_\_\_\_

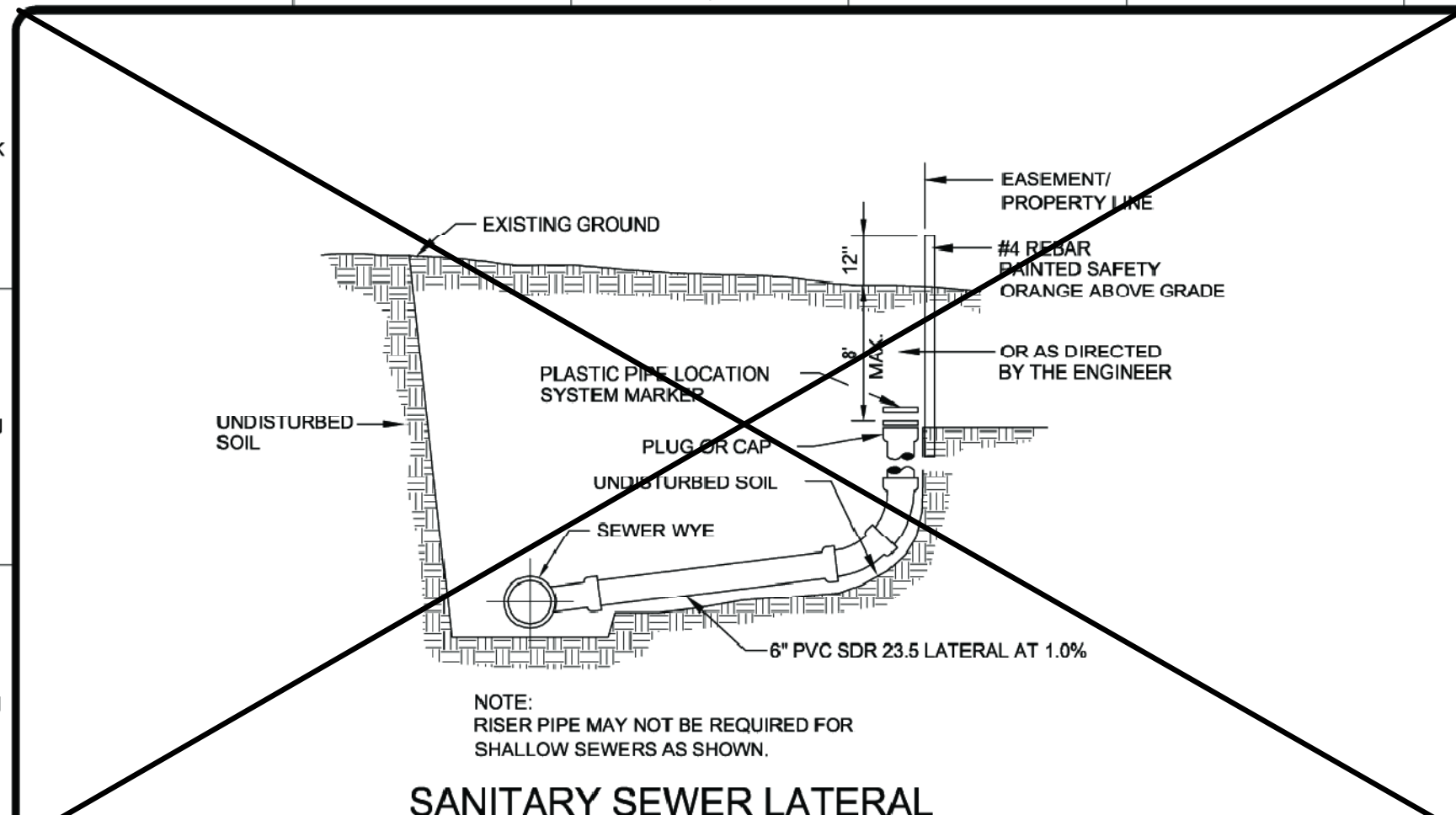
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JOB NO. 16-049

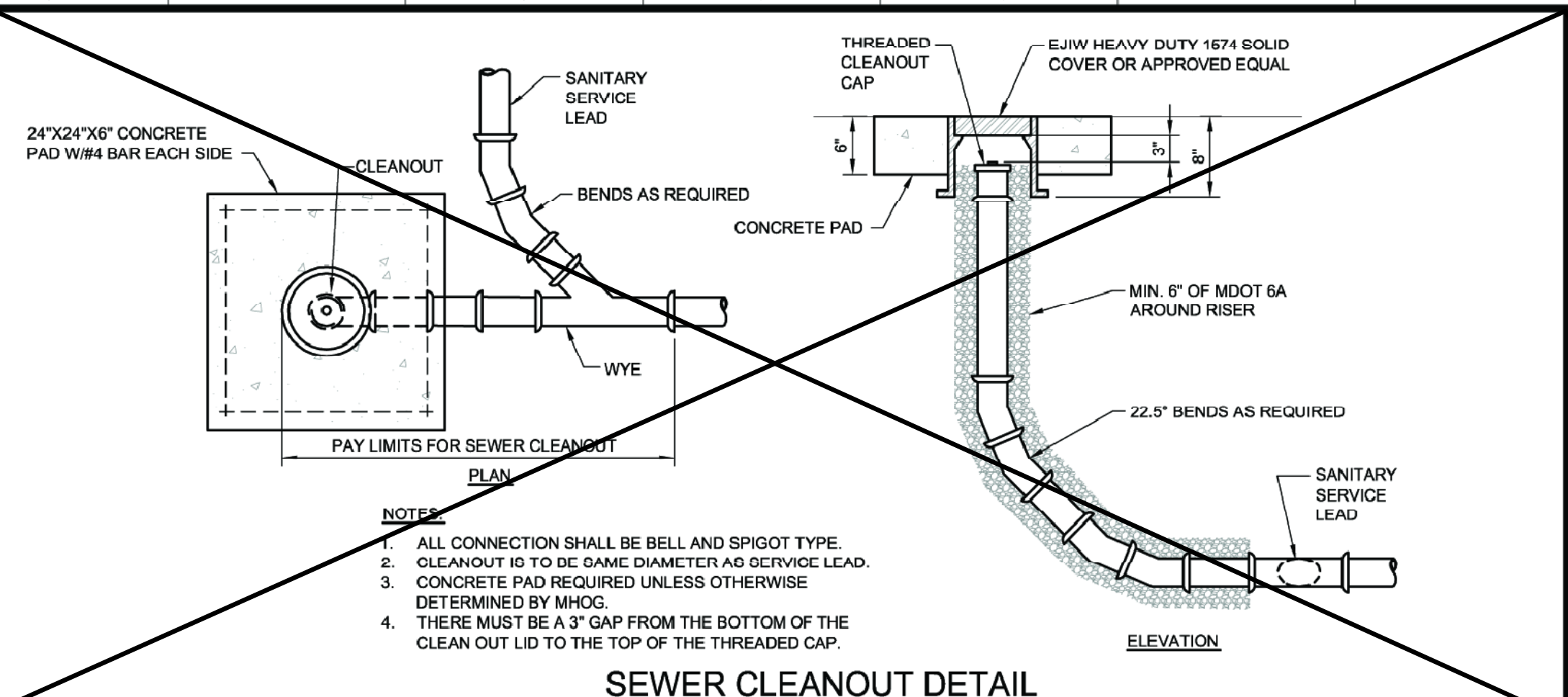
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SHEET NO. 8

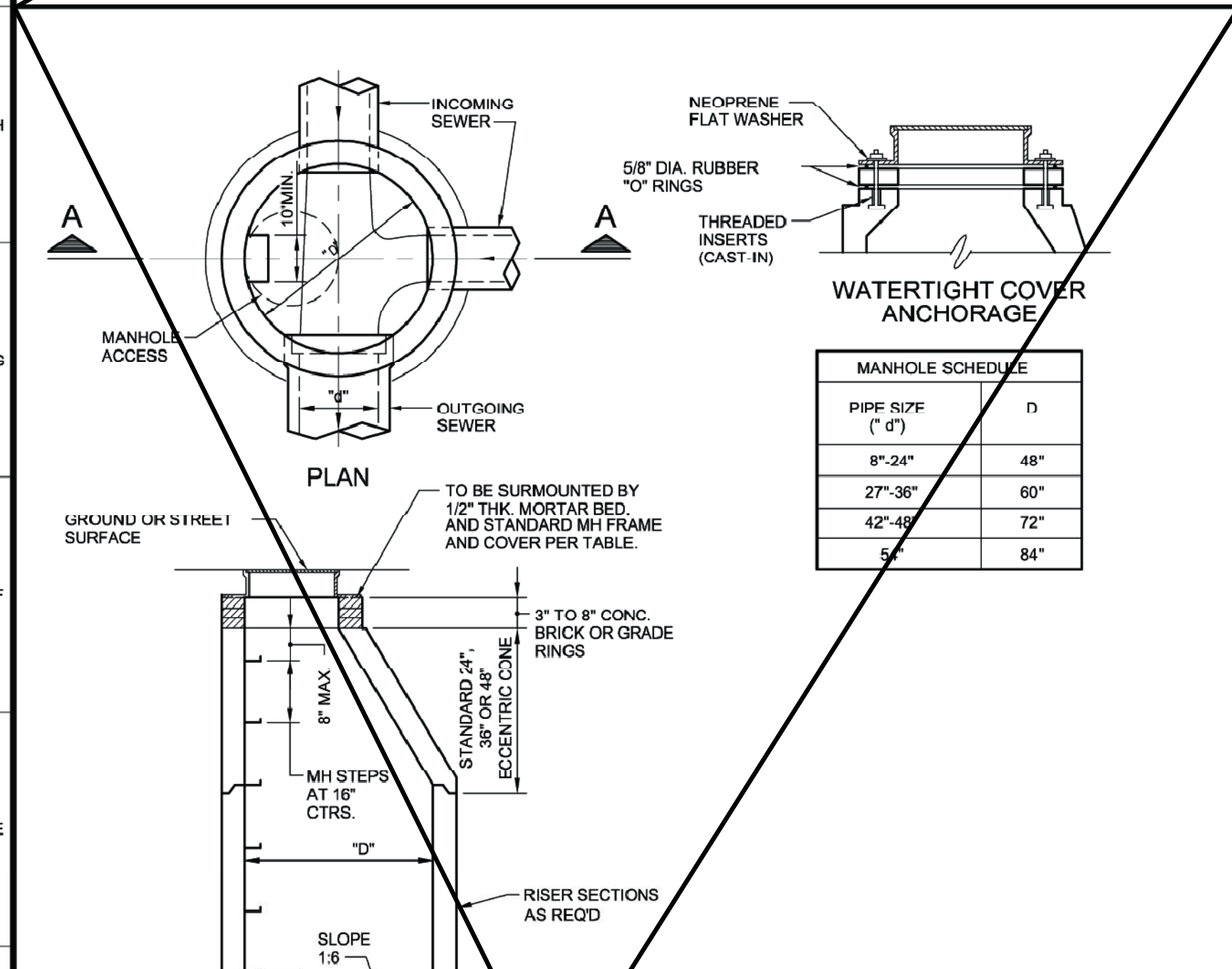
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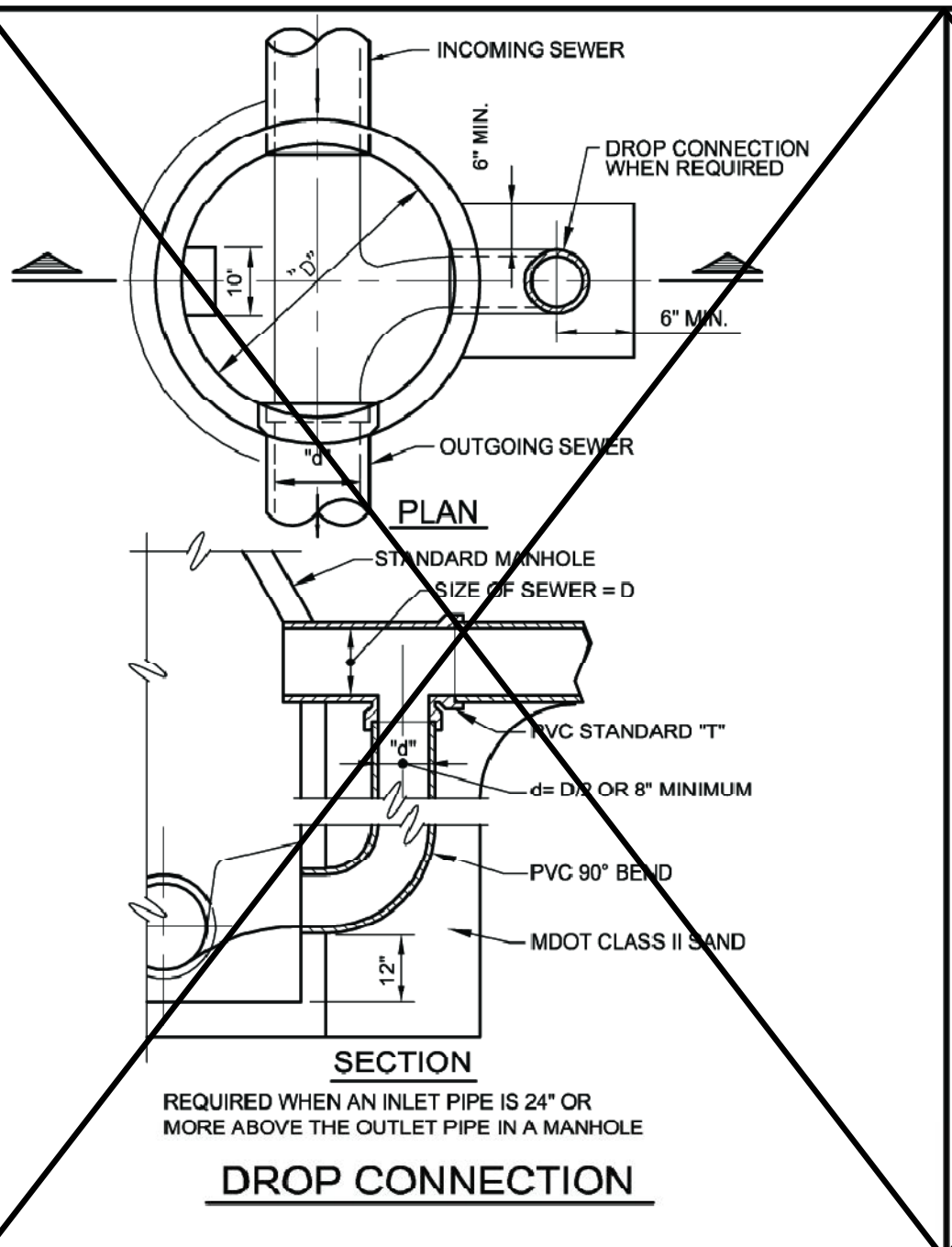
SANITARY SEWER LATERAL



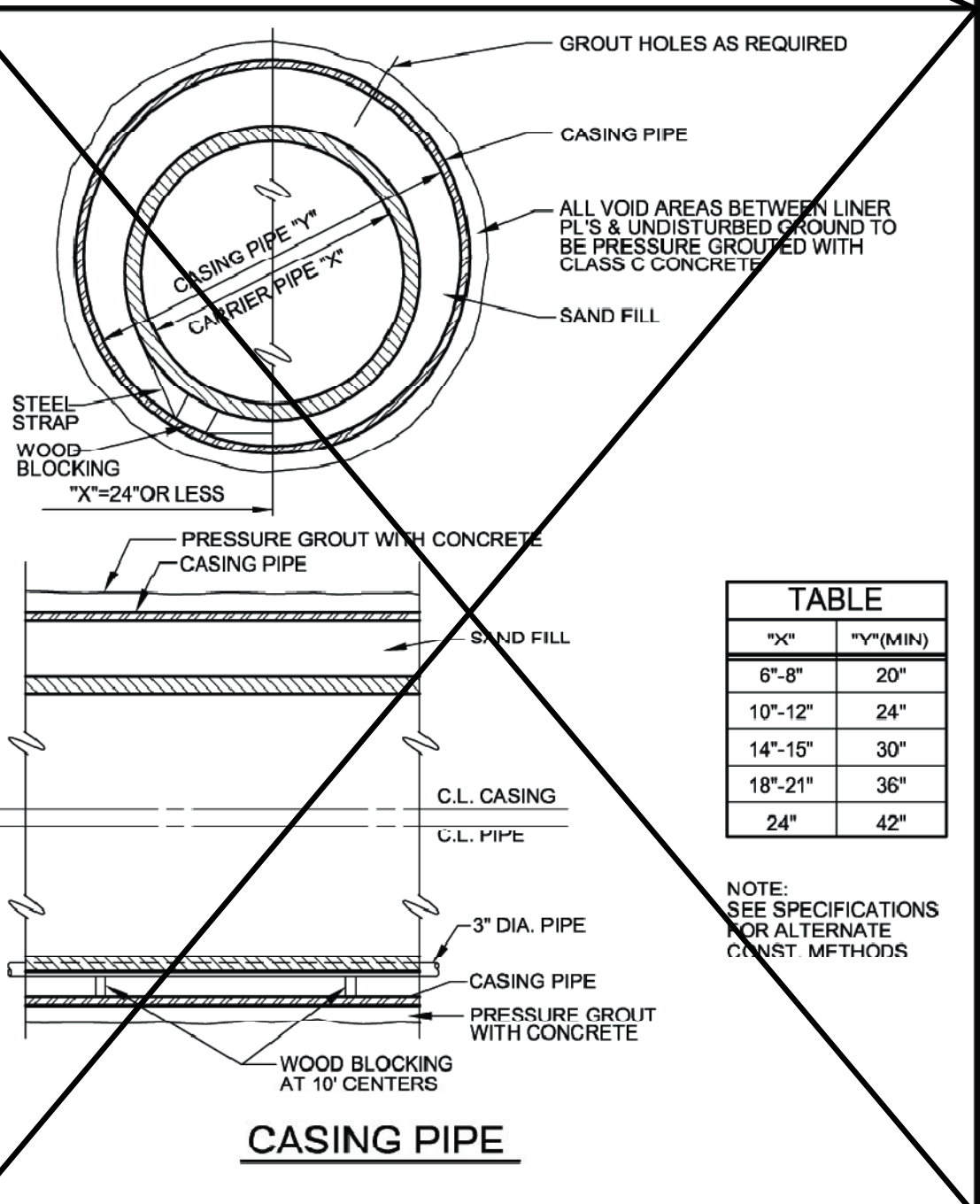
SEWER CLEANOUT DETAIL



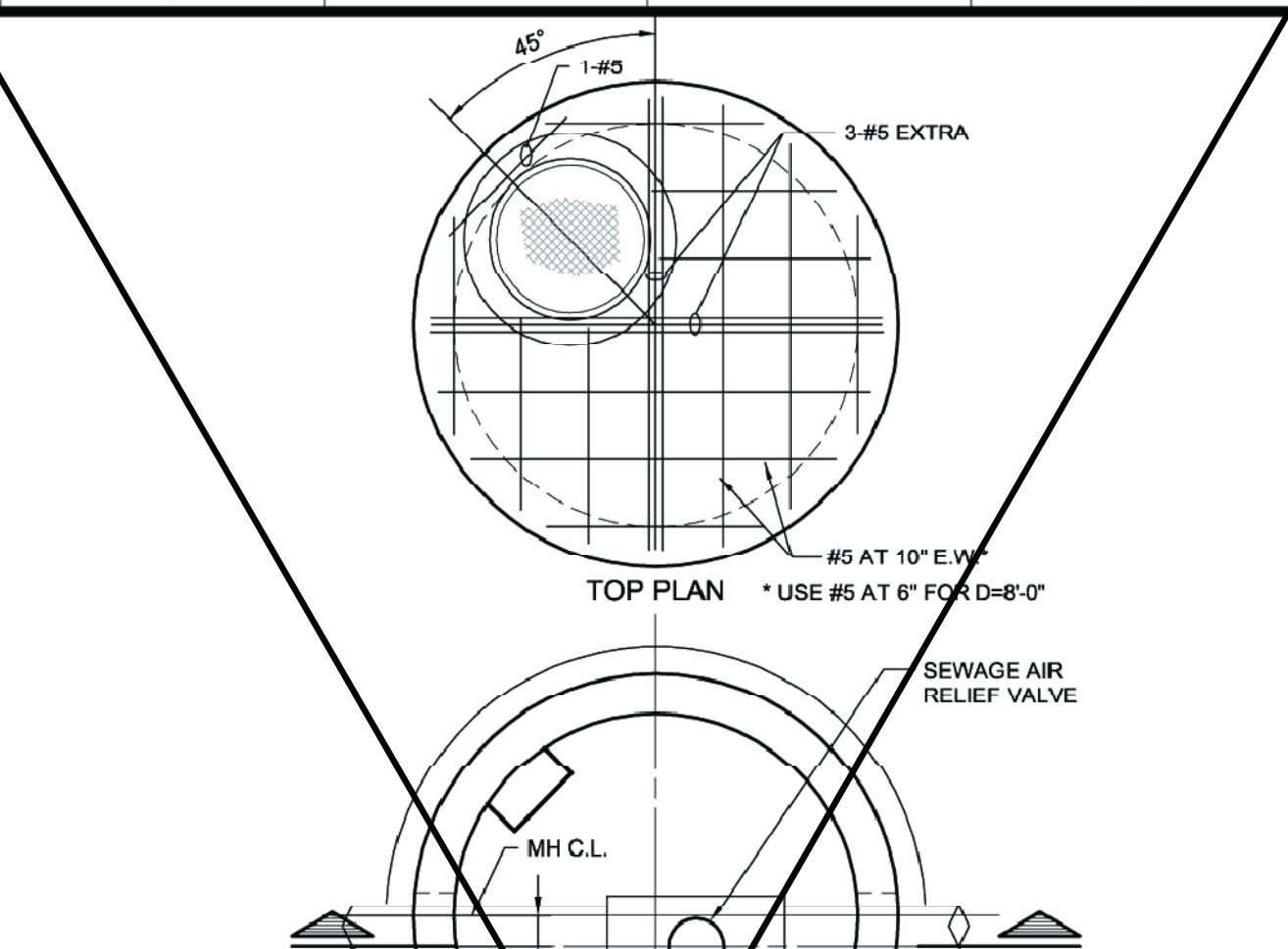
WATERTIGHT COVER ANCHORAGE



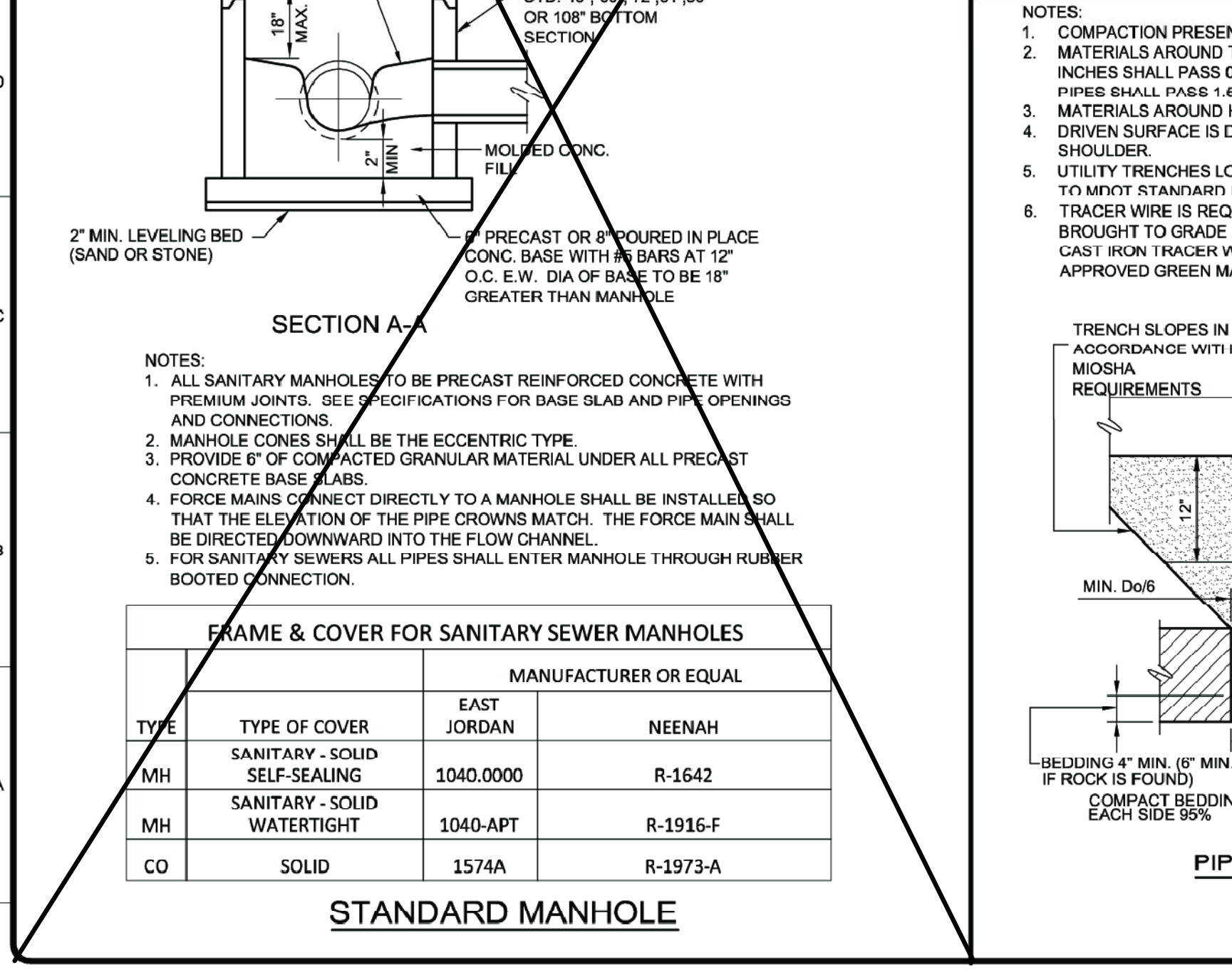
DROP CONNECTION



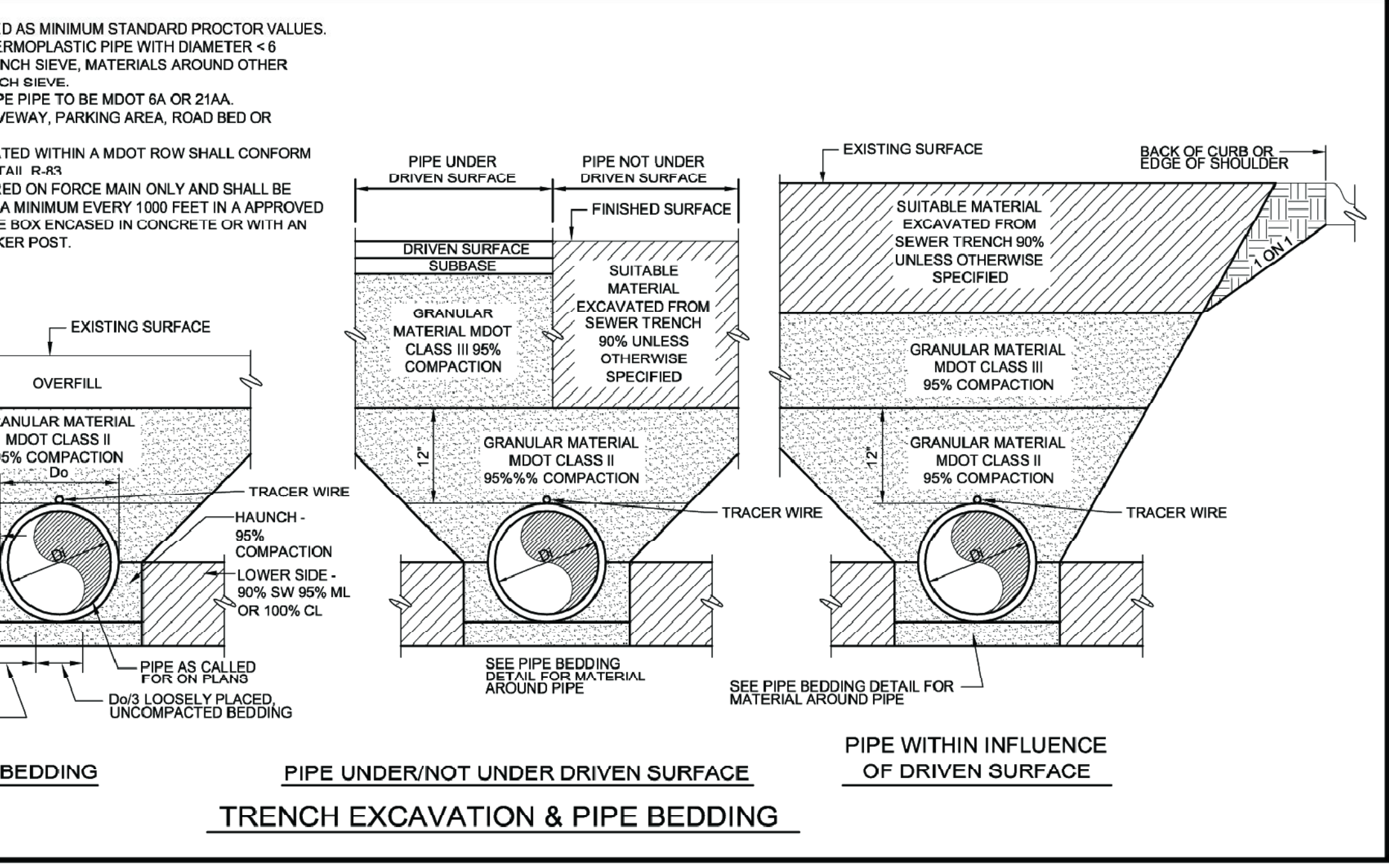
CASING PIPE



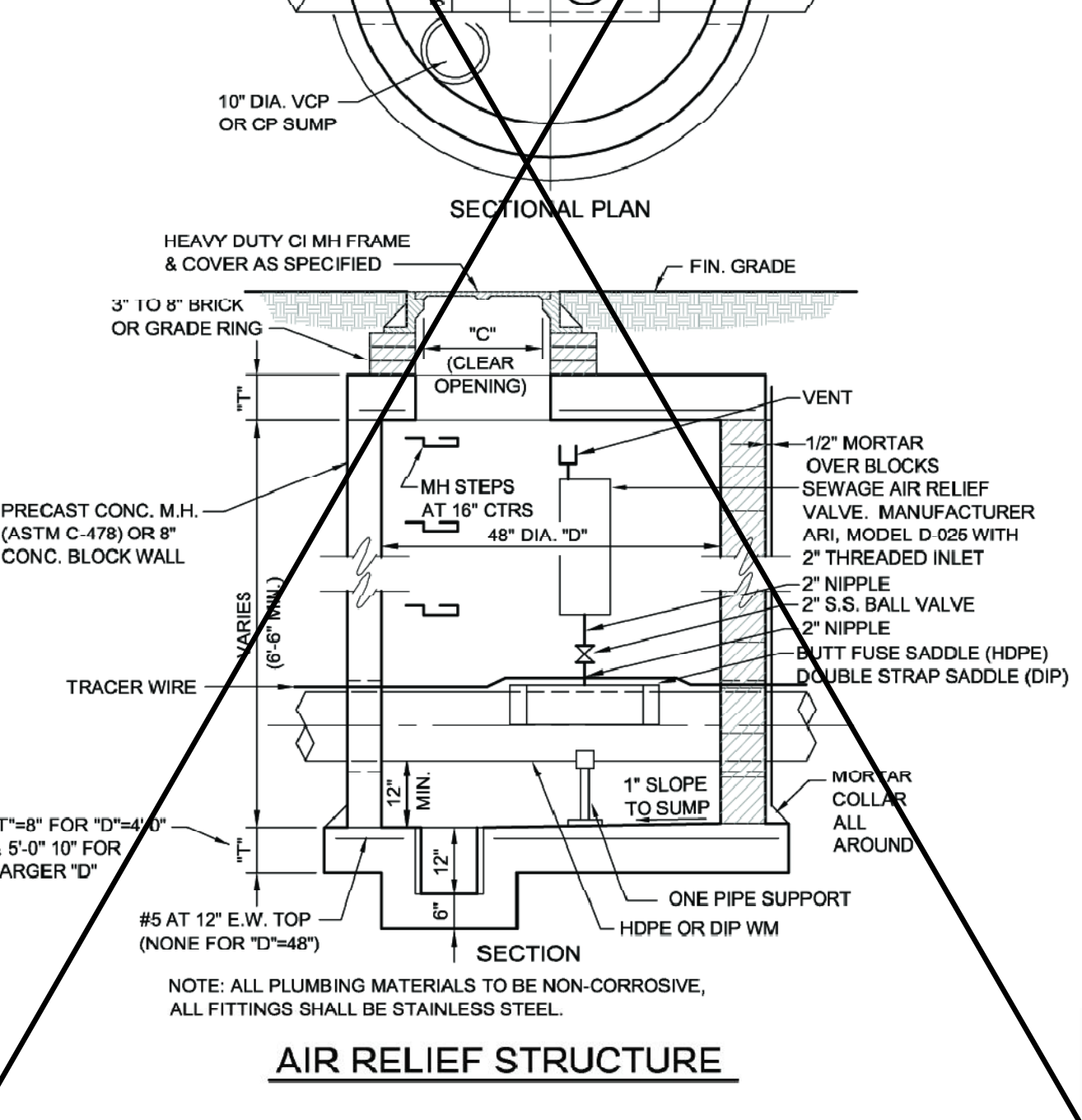
AIR RELIEF STRUCTURE



STANDARD MANHOLE



TRENCH EXCAVATION & PIPE BEDDING



INTERIOR SEWER LATERAL DROP CONNECTION



GENOA OCEOLA  
Sewer and Water Authority

Scale: NONE  
Issued Date: JANUARY - 2014

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**SEASIDE SEAWALLS, LLC**  
**SEASIDE SEAWALLS, LLC**  
9868 EAST GRAND RIVER, SUITE 110-225  
BRIGHTON, MI 48116  
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PROJECT: \_\_\_\_\_  
PREPARED FOR: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
SCALE: \_\_\_\_\_  
JOB NO. 16-049  
DATE: 03/30/16  
SHEET NO. **9**



**2012 MICHIGAN BUILDING CODE NOTES:**

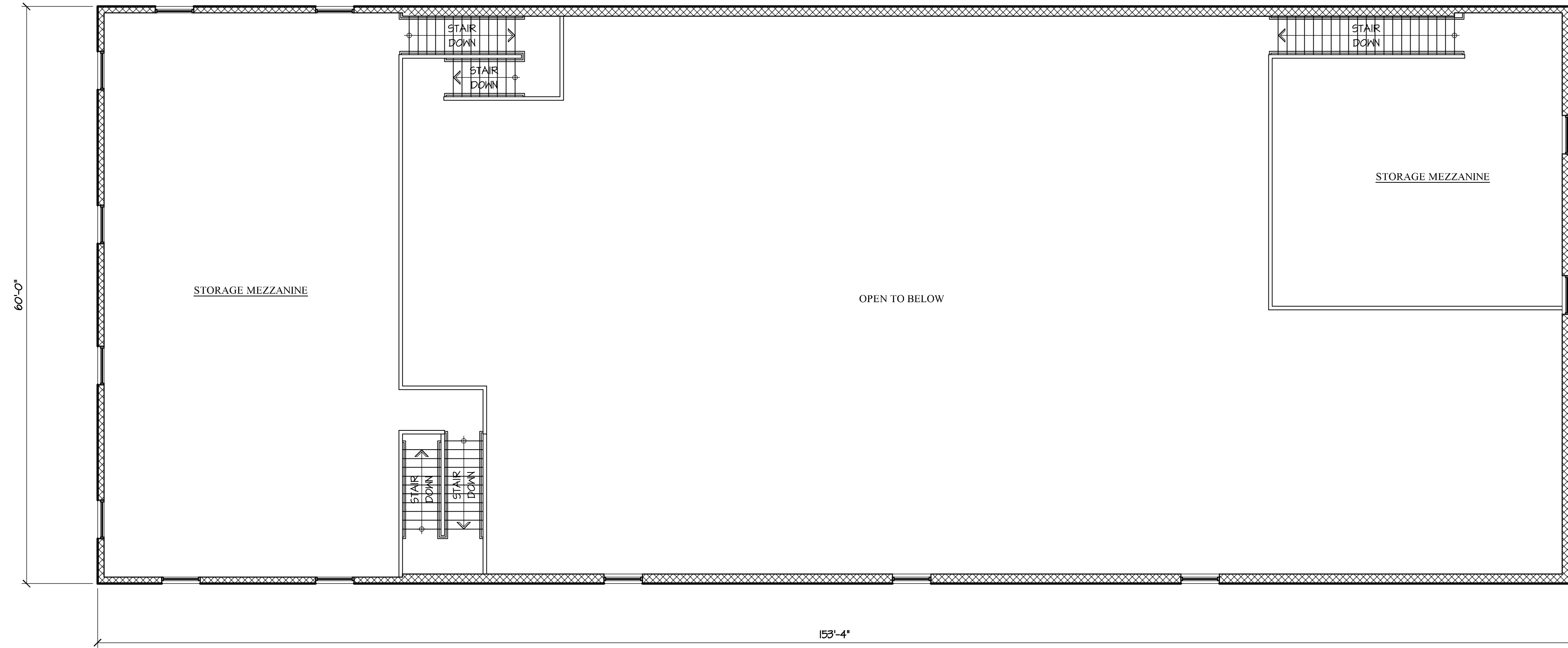
NON-SEPARATED MIXED USE GROUPS (508.3) OF:  
 BUSINESS = B (304) AND  
 WAREHOUSING = S-1 (311.2)

ALLOWABLE HEIGHT AND AREA (TABLE 503)  
 WORST CASE SCENARIO (508.3.2) OF USE GROUPS (B) AND (S-1)  
 AND A CONSTRUCTION TYPE = SB (602.5)  
 ALLOWABLE HEIGHT = 1 STORY / 40' MAX.  
 PROPOSED HEIGHT = 1 STORY / 23'-4" (COMPLIES)  
 ALLOWABLE AREA = 4,000 GSF  
 PROPOSED AREA = 8,111 GSF (PER THE BLDG. CODE - COMPLIES)

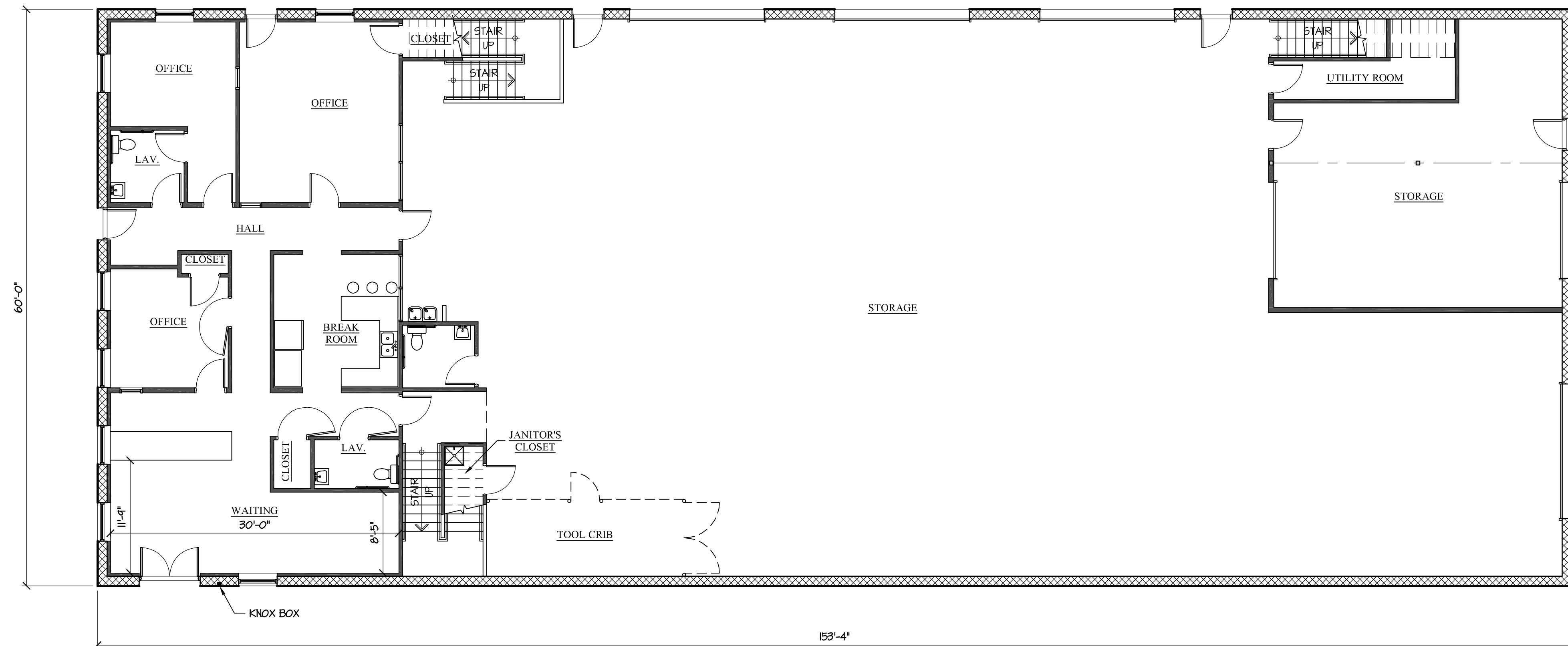
THE BUILDING IS NOT REQUIRED TO BE EQUIPPED WITH AN NFPA-B FIRE SUPPRESSION SYSTEM PER:  
 903.2 FOR USE GROUP (B),  
 903.2 FOR USE GROUP (S-1)

ALL STORAGE SHALL BE LIMITED TO 12' HIGH MAX.

A FIRE ALARM SYSTEM IS NOT REQUIRED PER:  
 901.2.2 FOR USE GROUP (B) AND  
 901.2 FOR USE GROUP (S-1)



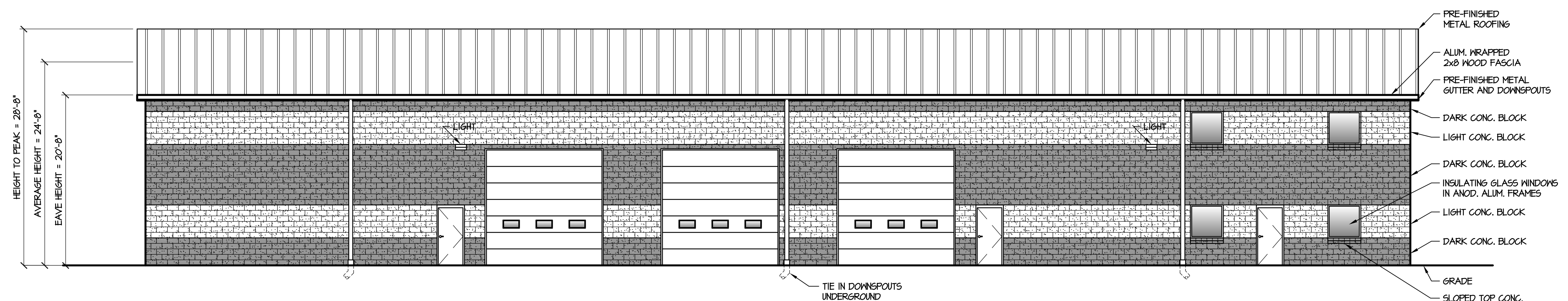
**PROPOSED MEZZANINE PLAN**  
 SCALE: 1/8" = 1'-0" TOTAL MEZZANINE FLOOR AREA = 1,920 S.F.



**PROPOSED FLOOR PLAN**  
 SCALE: 1/8" = 1'-0" 4,200 G.S.F. (PER ZONING ORDINANCE)  
 8,111 G.S.F. (PER THE BUILDING CODE)

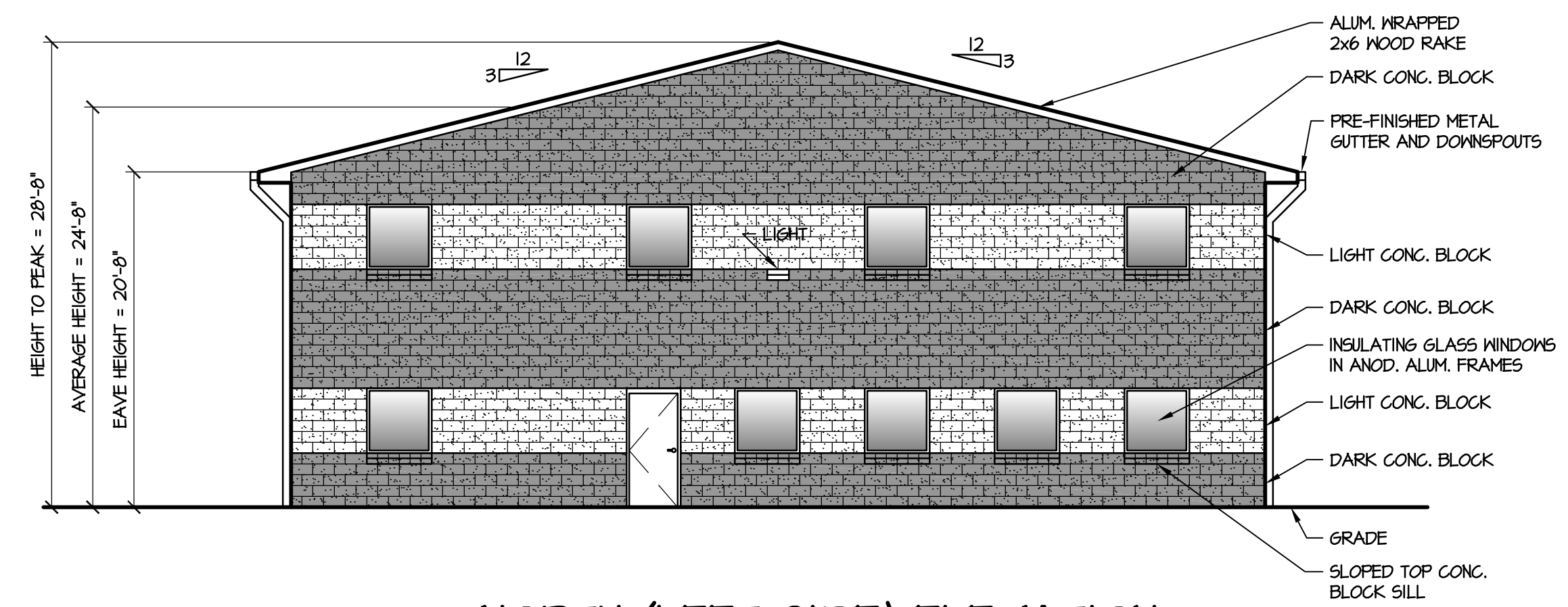
PROJECT	ISSUED FOR SITE PLAN SUBMITTAL
SHEET TITLE	ISSUED FOR:
DATE	5-9-2016





**EAST (REAR) ELEVATION**  
SCALE: 1/8" = 1'-0"

**MATERIALS:**  
GROSS SQUARE FOOTAGE = 3,061 SF  
DOORS AND WINDOWS = 124 SF  
NET SQUARE FOOTAGE = 3,061 SF - 124 SF = 2,937 SF  
SPLIT FACED CONG. BLOCK = 2,338 SF / 2,937 = 79% (COMPLIES)  
SMOOTH FACED CONG. BLOCK = 5 SF / 2,937 = 0% (COMPLIES)



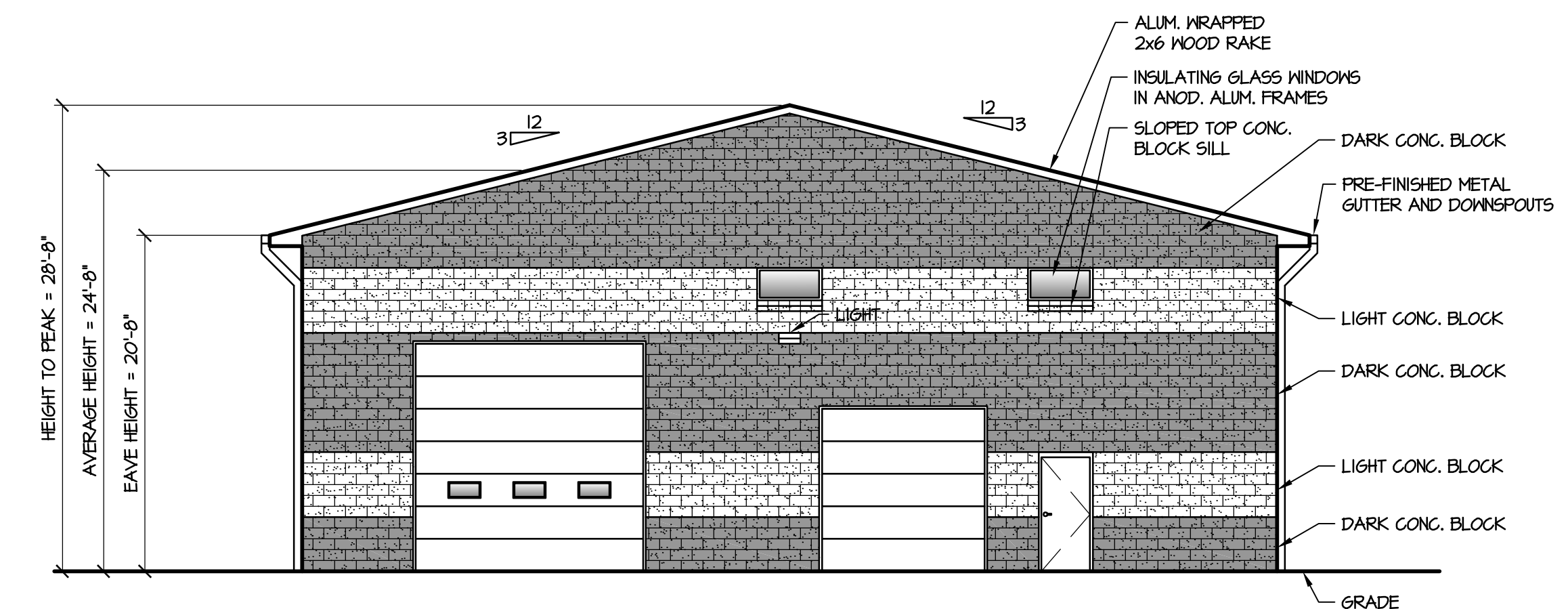
**NORTH (LEFT SIDE) ELEVATION**  
SCALE: 1/8" = 1'-0"

**MATERIALS:**  
GROSS SQUARE FOOTAGE = 1,464 SF  
DOORS AND WINDOWS = 169 SF  
NET SQUARE FOOTAGE = 1,464 SF - 169 SF = 1,295 SF  
SPLIT FACED CONG. BLOCK = 1,281 SF / 1,295 = 99% (COMPLIES)  
SMOOTH FACED CONG. BLOCK = 14 SF / 1,295 = 1% (COMPLIES)

**MATERIALS:**

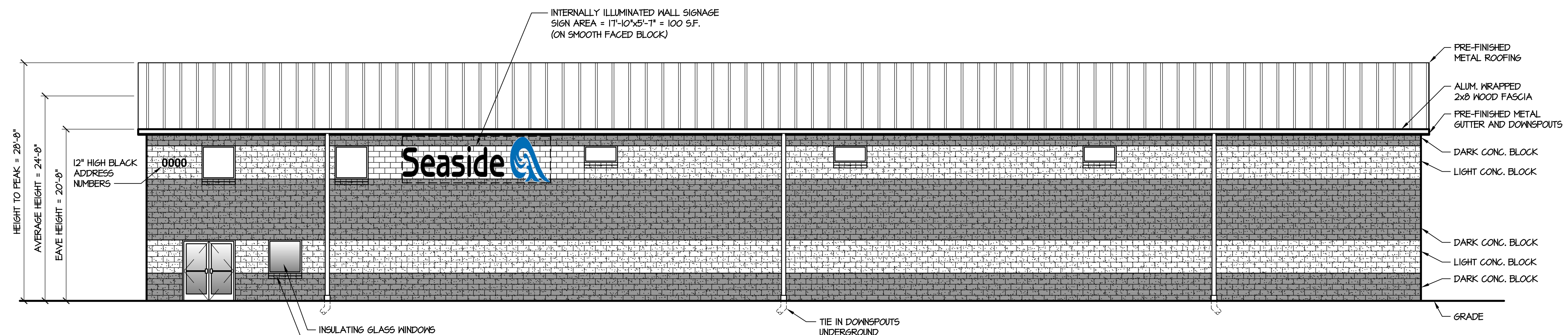
- DARK CONCRETE BLOCK = GRAND BLANC CEMENT PRODUCTS SPLIT-FACED CONCRETE BLOCK INTEGRAL COLOR = CHARCOAL (WITH SEALANT)
- LIGHT CONCRETE BLOCK = GRAND BLANC CEMENT PRODUCTS SPLIT-FACED AND SMOOTH-FACED CONCRETE BLOCK (SEE ELEVATIONS) INTEGRAL COLOR = LIGHT GREY (WITH SEALANT)
- SLOPED TOP CONCRETE BLOCK SILL = GRAND BLANC CEMENT PRODUCTS SPLIT-FACED CONCRETE BLOCK FACE WITH SMOOTH SLOPED TOP INTEGRAL COLOR TO MATCH SURROUNDING BLOCK (WITH SEALANT)
- WINDOWS = 1" LOW-E INSULATING GLASS W/ GREY TINT IN CLEAR ANODIZED ALUMINUM FRAMES
- PRE-FINISHED METAL ROOFING, GUTTERS, FASCIAS, AND RAKES = 'ATAS', COLOR = DOVE GREY
- PRE-FINISHED METAL DOWNSPOUTS = COLOR TO MATCH DARK BLOCK
- HOLLOW METAL DOORS = PAINTED TO MATCH LIGHT BLOCK
- PRE-FINISHED INSULATED METAL OVERHEAD DOORS = COLOR TO MATCH LIGHT BLOCK

**TOWNSHIP REGULATIONS:**  
HEIGHT: 30 FT. / 2 STORIES MAX.  
WALL SIGNS: AREA = 10% OF BUILDING FACADE OR 100 S.F. (WHICHEVER IS LESS)  
WEST FACADE = 3,061 S.F. x 0.10 = 306 S.F. / 100 S.F. MAX.  
WALL SIGNS SHALL NOT PROJECT MORE THAN 12" FROM THE WALL.  
NOTE: A MONUMENT SIGN IS NOT PROPOSED.  
MATERIALS: SPLIT FACED CONCRETE BLOCK = 100% ALLOWABLE (ZONED, IND)



**SOUTH (RIGHT SIDE) ELEVATION**  
SCALE: 1/8" = 1'-0"

**MATERIALS:**  
GROSS SQUARE FOOTAGE = 1,464 SF  
DOORS AND WINDOWS = 336 SF  
NET SQUARE FOOTAGE = 1,464 SF - 336 SF = 1,128 SF  
SPLIT FACED CONG. BLOCK = 1,125 SF / 1,128 = 99% (COMPLIES)  
SMOOTH FACED CONG. BLOCK = 3 SF / 1,128 = 0% (COMPLIES)



**WEST (FRONT) ELEVATION**  
SCALE: 1/8" = 1'-0"

**MATERIALS:**  
GROSS SQUARE FOOTAGE = 3,061 SF  
DOORS AND WINDOWS = 118 SF  
NET SQUARE FOOTAGE = 3,061 SF - 118 SF = 2,943 SF  
SPLIT FACED CONG. BLOCK = 2,831 SF / 2,943 = 96% (COMPLIES)  
SMOOTH FACED CONG. BLOCK = 112 SF / 2,943 = 4% (COMPLIES)



DO NOT SCALE THIS PRINT, USE DIMENSIONS SHOWN ONLY
DRAWN BY: KV
APPROVED BY: KV
PROJECT: 1616
SHEET: <b>A2</b>
ISSUED FOR SITE PLAN SUBMITTAL
DATE: 5-9-2016
ISSUED FOR:





GENOA CHARTER TOWNSHIP
Application for Re-Zoning

GENOA TOWNSHIP

JUN 0 1 2016

RECEIVED

APPLICANT NAME: Joyce Oliveto ADDRESS: 963 Peaceful Ct
OWNER NAME: Joyce Oliveto ADDRESS: Brighton, MI 48114
PARCEL #(s): 4711-12-100-007,008,010,011,012,013 PRIMARY PHONE: (810) 599-1404
EMAIL 1: rejoyce@comcast.net EMAIL 2:

We, the undersigned, do hereby respectfully make application to and petition the Township Board to amend the Township Zoning Ordinance and change the zoning map of the township of Genoa as hereinafter requested, and in support of this application, the following facts are shown:

A. REQUIRED SUBMITTAL INFORMATION

- 1. A legal description and street address of the subject property, together with a map identifying the subject property in relation to surrounding properties;
2. The name, signature and address of the owner of the subject property, a statement of the applicant's interest in the subject property if not the owner in fee simple title, and proof of consent from the property owner;
3. It is desired and requested that the foregoing property be rezoned from:

PRF and RR to CE

- 4. A site plan illustrating existing conditions on the site and adjacent properties; such as woodlands, wetlands, soil conditions, steep slope, drainage patterns, views, existing buildings, sight distance limitations, relationship to other developed sites. and access points in the vicinity;
5. A conceptual plan demonstrating that the site could be developed with representative uses permitted in the requested zoning district meeting requirements for setbacks, wetland buffers access spacing, any requested service drives and other site design factors;
6. A written environmental assessment, a map of existing site features as described in Article 18 describing site features and anticipated impacts created by the host of uses permitted in the requested zoning district;
7. A written description of how the requested rezoning meets Sec. 22.04 "Criteria for Amendment of the Official Zoning Map."
8. The property in question shall be staked prior to the Planning Commission Public Hearing.

B. DESCRIBE HOW YOUR REQUESTED RE-ZONING MEETS THE ZONING ORDINANCE CRITERIA FOR AMENDING THE OFFICIAL ZONING MAP:

- i. How is the rezoning consistent with the goals, policies and future land use map of the Genoa Township Master Plan, including any subareas or corridor studies. If not consistent, describe how conditions have changed since the Master Plan was adopted?

Parcels are currently zoned RR and PRF. Applicant wishes to re-zone to CE. Future land use map indicates RR land use. Parcels are adjacent to existing AG zoning and future CE land use. Current property owner and potential buyers would like to keep horses on the property (allowed in CE zoning, not in RR or PRF zoning).

2. Are the site's physical, geological, hydrological and other environmental features suitable for the host of uses permitted in the proposed zoning district?

Proposed CE zoning allows horses to be kept on property and has less density than current RR and PRF zoning. The site's physical, geological and hydrological features are all suitable for the proposed uses.

3. Do you have any evidence that a reasonable return on investment cannot be received by developing the property with one (1) of the uses permitted under the current zoning?

Proposed CE zoning has less density than the current RR and PRF zoning. Investment value is not a concern for property owner.

4. How would all the potential uses allowed in the proposed zoning district be compatible with surrounding uses and zoning in terms of views, noise, air quality, the environment, density, traffic impacts, drainage and potential influence on property values?

There will be a decrease in density and traffic impacts with the proposed zoning and land use. There may or may not be an impact to noise, air quality and property values. Views, environment and drainage will be unaffected.

5. Are infrastructure capacity (streets, sanitary sewer, water, and drainage) and services (police and fire protection, etc.) sufficient to accommodate the uses permitted in the requested district?

There is sufficient infrastructure capacity and services to accommodate the proposed uses.

6. Is there a demonstrated demand in Genoa Township or the surrounding area for the types of uses permitted in the requested zoning district? If yes, explain how this site is better suited for the zoning than others which may be planned or zoned to accommodate the demand.

There are potential buyers for the property that have expressed an interest in keeping horses on the property.

7. If you have a particular use in mind, is another zoning district more appropriate? Why should the Township re-zone the land rather than amend the list of uses allowed in another zoning district to accommodate your intended use?

If the township amended the list of uses for RR and PRF zoning to allow horses, this would apply to all parcels with RR or PRF zoning to allow horses. It would be simpler to re-zone the parcels to zoning that allows the desired uses.

b. Describe any deed restrictions which could potentially affect the use of the property.

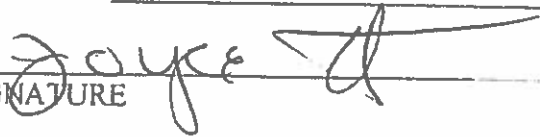
There are two access easements located on the property. There are no other deed restrictions on the property that would affect the use.

**C. AFFIDAVIT**

The undersigned says that they are the Owner (owner, lessee, or other specified interest) involved in this petition and that the foregoing answers and statements herein contained and the information herewith submitted are in all respects true and correct to the best of his/her knowledge and belief.

BY: Joyce Oliveto

ADDRESS: 963 Peaceful Ct, Brighton, MI 48114

SIGNATURE: 

The following contact should also receive review letters and correspondence:

Name: Marc Jones Email: marcj@bosseng.com

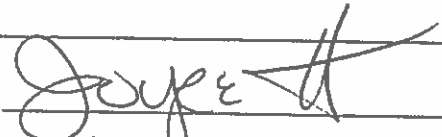
Business Affiliation: Boss Engineering, planning consultant

**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.

PROJECT NAME: Oliveto property re-zoning

PROJECT LOCATON & DESCRIPTION: Property at southeast corner of McClements Rd & Euler Rd

SIGNATURE: 

DATE: 5-26-16

PRINT NAME: JOYCE OLIVETO

PHONE: (810) 599-1404

COMPANY NAME & ADDRESS: \_\_\_\_\_

July 5, 2016

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
<b>Subject:</b>	PRF and RR to CE Rezoning Review #2
<b>Location:</b>	Euler Road – east side of Euler, between McClements Road and Grand River Avenue
<b>Zoning:</b>	Rural Residential District; Public and Recreational Facility District

Dear Commissioners:

At the Township's request, we have reviewed the revised submittal proposing the rezoning of 6 parcels under common ownership from RR Rural Residential (2 acre lot area) and PRF Public and Recreational Facilities to CE Country Estate (5 acre lot area).

In total, the parcels comprise approximately 64 acres of land, the smallest of which is a 5-acre parcel that is currently being processed for a lot reconfiguration to meet the minimum CE standards.

The proposal has been reviewed in accordance with the Genoa Township Zoning Ordinance and Master Plan.

#### **A. SUMMARY**

1. The proposed rezoning to CE is not wholly consistent with the Future Land Use Map; however, CE requires a larger lot size than the Master Plan and would result in less density, thus protecting the relatively rural character of this area.
2. Rezoning of the PRF parcels to CE would generally be consistent with the intent of the Master Plan classification of the property.
3. The host of permitted uses in RR (current) and CE (proposed) are nearly identical, except that CE allows for agricultural uses including the keeping of horses (which is the stated intent of the request).
4. Some of the agricultural uses allowed in CE could be impactful to nearby single-family residences.
5. The Township should consider any comments provided by the Township Engineer, Utilities Director and/or Fire Department for any comments related to infrastructure compatibility or capacity.

#### **B. PROCESS**

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

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

**PRF and RR to CE Rezoning**

Review #2

Page 2

**C. PROJECT DESCRIPTION**

The site is located on the east side of Euler Road, bounded on the north by McClements Road. Current zoning, as well as existing and planned land uses in the area are as follows:

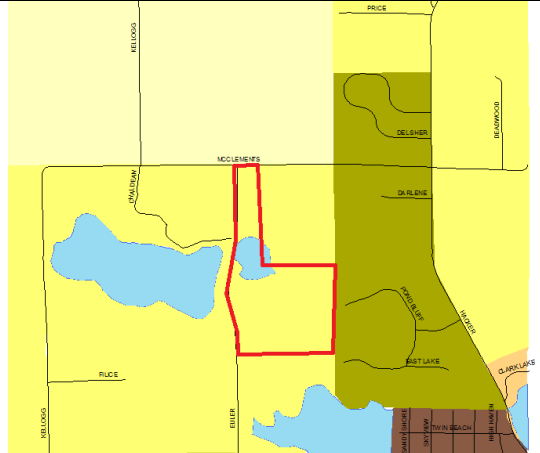
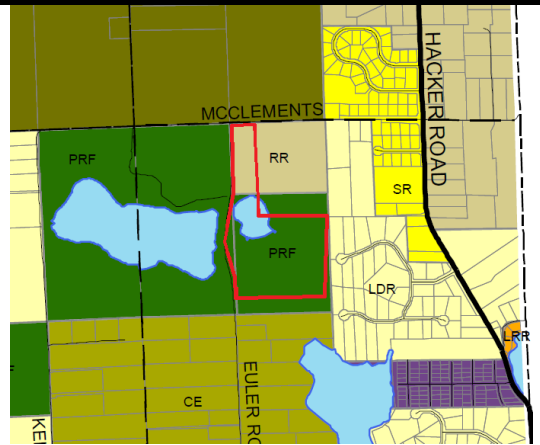
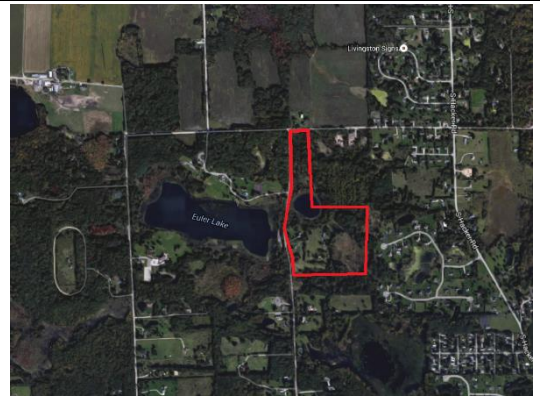
<b>Existing Land Use</b>	
<b>Site</b>	Single-family
<b>North</b>	Single-family
<b>East</b>	Agriculture (NE) Single-family (SE)
<b>South</b>	Single-family
<b>West</b>	Institutional

<b>Zoning</b>	
<b>Site</b>	RR/PRF
<b>North</b>	AG
<b>East</b>	RR, PRF, LDR
<b>South</b>	PRF
<b>West</b>	PRF

<b>Master Plan</b>	
<b>Site</b>	Large Lot Rural Residential
<b>North</b>	Agriculture/ Country Estate
<b>East</b>	Low Density Residential
<b>South</b>	Large Lot Rural Residential
<b>West</b>	Large Lot Rural Residential



#### **D. REZONING REVIEW**

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

The Township Master Plan and Future Land Use map identify the site and adjacent property to the south and west as Large Lot Rural Residential, which calls for residential properties of not less than 2 acres. Two of the six parcels are currently zoned RR, which is consistent with this classification. The proposed rezoning to CE is more consistent for the remaining four parcels that are currently zoned PRF.

While not wholly consistent with the Master Plan, the proposal for CE zoning is less dense than what the Master Plan calls for.

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

The subject area contains two ponds and two wetland areas. Generally speaking, a proposal for less density than would otherwise be allowed is likely to decrease any potential impacts upon these environmental features.

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

In our opinion, rezoning the PRF parcels to a residential designation makes sense and is generally consistent with the intent of the Master Plan. For the other parcels, the primary distinction between the existing (RR) and proposed (CE) zoning is the inclusion of agricultural uses in the proposed district.

We see no reason why the site could not be developed under RR; however, the stated intent of the request is to allow the keeping of horses, which is not permitted in RR, but is in CE.

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

Review of Table 3.03 indicates that the host of permissible uses is nearly identical with the primary distinction between RR and CE being the allowance for more agricultural uses. While not necessarily intense by nature, some of these uses could have impacts upon established residential uses in the area, particularly those adjacent to the east.

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

We defer to the Township Engineer, Utilities Director and Fire Department for comment under this criterion.

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

In response to this criterion, the submittal notes that "there are potential buyers for the property that have expressed an interest in keeping horses on the property."

**PRF and RR to CE Rezoning**

Review #2

Page 4

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

In this particular instance, we believe that rezoning the PRF parcels to a low density residential designation is reasonable. Meanwhile, the proposed change from RR to CE is not wholly consistent with the Master Plan designation, but does result in a lower density.

As a result of the lot reconfiguration, each of the subject parcels will comply with CE dimensional standards.

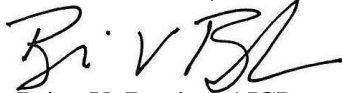
8. *The request has not previously been submitted within the past one (1) year, unless conditions have changed or new information has been provided.*

We are unaware of any rezoning applications associated with this site within the past year.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at [borden@lslplanning.com](mailto:borden@lslplanning.com).

Respectfully,

**LSL PLANNING, A SAFE BUILT LLC COMPANY**



Brian V. Borden, AICP  
Planning Manager



June 14, 2015

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Oliveto Rezoning Review**

Dear Ms. Van Marter:

We have reviewed the rezoning application for the property owned by Joyce Oliveto dated May 27, 2016, from Boss Engineering. The site is located on the east side of Euler Road between McClements and Kemper Roads. The petitioner would like to have the current zoning designations of rural residential (RR) and public and recreational facilities (PRF) changed to country estates (CE) to allow current and future property owners to own horses on the land.

The petitioner argues that the adjacent sites to the south consist of CE parcels and that this change will not result in any other significant impact to the current developments in the area.

Tetra Tech has reviewed the documents and did not find any engineering issues regarding site drainage or water and sewer utilities that would arise from this change in zoning classification. The parcel is served by public roads and the proposed change in zoning would have minimal impact to this public transportation system. Therefore, we have no engineering related objections to the proposed rezoning.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Markstrom'.

Gary J. Markstrom, P.E.  
Unit Vice President

A handwritten signature in blue ink, appearing to read 'Joseph C. Siwek'.

Joseph C. Siwek, P.E.  
Project Engineer

copy: Marc Jones P.E., Boss Engineering



## Amy Ruthig

---

**From:** Richard Boisvert <rboisvert@brightonareafire.com>  
**Sent:** Wednesday, June 29, 2016 4:26 PM  
**To:** Kelly VanMarter  
**Cc:** Amy Ruthig  
**Subject:** Re: No comments  
**Attachments:** Victory Dr. - Seaside Seawalls, LLC (SP) 06282016.docx; 7669 Brighton Rd. - Brighton Church of Nazarene Storage Bldg (SP) 06282016.docx; 2300 E. Grand River - Livingston County Complex Carport (SP) 06282016.docx; 5866 E. Grand River - Wilson Marine Showroom & Storage Bldgs. (SP) 06282016.docx; 2798 E. Grand River - Bob Maxey Ford Parking Lot Exp. (SP) 06282016.docx

Kelly & Amy,

Attached are the letters for the re-submittals received. The only one not included is the Oliveto Re-zoning as we have no comments regarding this unless they propose development.

Rick,

If you would just send a quick e-mail with the cases that you have no further comments on listed that is sufficient.

Thank you!

[Kelly VanMarter, AICP](#)

[Assistant Township Manager/Community Development Director](#)

[Genoa Charter Township](#)

[2911 Dorr Road, Brighton, Michigan 48116](#)

[Direct: \(810\) 588-6900, Phone: \(810\) 227-5225, Fax: \(810\) 227-3420](#)

[E-mail: \[kelly@genoa.org\]\(mailto:kelly@genoa.org\), Url: \[www.genoa.org\]\(http://www.genoa.org\)](#)

**IMPACT ASSESSMENT  
FOR  
OLIVETO PROPERTY  
RE-ZONING  
GENOA TOWNSHIP  
LIVINGSTON COUNTY, MI**

Prepared for:

**Joyce Oliveto  
963 Peaceful Court  
Brighton, MI 48114**

Prepared by:

**BOSS ENGINEERING COMPANY  
3121 EAST GRAND RIVER AVE  
HOWELL, MICHIGAN 48843  
517-546-4836  
BE Project No. 16-170**

June 1, 2016  
Revised June 22, 2016

## INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed re-zoning has on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Submittal Requirements For Impact Assessment/Impact Statement* guidelines in accordance with Section 13.05 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

## DISCUSSION ITEMS

**A. Name(s) and address(es) of person(s) responsible for preparation of the impact assessment and a brief statement of their qualifications.**

Prepared By:  
BOSS ENGINEERING COMPANY  
3121 E. Grand River  
Howell, Michigan 48843  
Phone: 517-546-4836

Prepared For:  
Joyce Oliveto  
963 Peaceful Court  
Brighton, MI 48114  
Phone: 810-599-1404

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

The subject site is located on the east side of Euler Road, bounded on the north by McClements Road. The re-zoning is to take place on properties owned by Joyce Oliveto. The parcel numbers are: 4711-12-100-007, 4711-12-100-008, 4711-12-100-010, 4711-12-100-011, 4711-12-100-012, 4711-12-100-013. The boundary between parcels 4711-12-100-008 and 4711-12-100-010 are in the process of a land division that will be adjusted so that all properties in the re-zoning application will meet the 5-acre minimum lot size. The property is located in the Northwest ¼ of Section 12, T2N-R5E, Genoa Township, Livingston County, Michigan. Current zoning of the site is RR (Rural Residential) and PRF (Public and Recreational Facilities).

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

The site is gently rolling with areas of steeper slopes and generally slopes from all parcels to an existing pond located near Euler Road on parcel #4711-12-100-008.

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

Stormwater management and soil erosion will be unaffected by the proposed re-zoning.

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

The applicant is proposing to re-zone the subject properties to allow horses to be kept on the properties. There may or may not be a slight impact on noise, air quality and property values.

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

There will be no impact on public facilities and services, as the density of the properties will decrease. There are sufficient services to accommodate the proposed use.

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

There will be no impact on public utilities, as the density of the properties will decrease. There is sufficient capacity to accommodate the proposed use.

**H. Storage or handling of any hazardous materials: Description of any hazardous materials used, stored, or disposed of on-site.**

The subject properties will not be storing or handling any hazardous materials.

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

There will be a decrease in density with the proposed re-zoning which will result in a slight decrease in the amount of traffic.

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

There are existing access easements located on the property.

**K. Description of all sources:**

- Genoa Township Zoning Ordinance
- 2013 Genoa Township Master Plan Update
- Livingston County Information Technology Department, GIS map

## Amy Ruthig

---

**From:** LA <lsalley@gmail.com>  
**Sent:** Thursday, June 23, 2016 8:59 PM  
**To:** Amy Ruthig  
**Cc:** Don Alley  
**Subject:** Country Estate Rezoning Request

June 23, 2016

Hello Amy,

I don't have Marc Jones' (Boss Engineering) email and if you could forward this message that would be great.

We own property on Euler Road in Genoa Township. Our parcel number is 4711-12-100-009. We understand some of our neighbors are interested in rezoning this area to be "Country Estate".

We would like our property to be included in this rezoning initiative so that it is also zoned as Country Estate.

Thank you,

Donald and Linda Alley

248.719.3416

[lsalley@gmail.com](mailto:lsalley@gmail.com)

[Djalley@gmail.com](mailto:Djalley@gmail.com)

GENOA TOWNSHIP  
COMBINATION APPLICATION  
(Line Change)

NAME: Joyce Oliveto

ADDRESS: 963 Peaceful Ct.

Brighton MI

TELEPHONE: 810-220-2088 810-599-1404

TAX ID #'S: 11-12-100-010 (Parcel D)  
11-12-100-012 (Parcel F)

YOU MUST HAVE THE FOLLOWING IN ORDER TO HAVE A COMPLETED APPLICATION:

- A. NAME & SIGNATURES OF ALL OWNERS OR AUTHORIZED AGENTS
- B. A LEGAL DESCRIPTION OF EACH PARCEL INTO WHICH THE PROPERTY IS TO BE DIVIDED PERPARED BY A REGISTERED LAND SURVEYOR. SHOWING:
  - 1. ALL DIMENSIONS OF THE EXISTING AND PROPOSED PARCELS.
  - 2. LOCATION OF ALL BUILDINGS AND SETBACKCKS FROM LOT LINES  
(THIS MUST MEET CURRENT ZONING SETBACKS)
  - 3. PROPOSED SETBACK LIMITSWITHIN EACH PARCEL WITH DIMENSIONS (ENVELOPE)
  - 4. A QUALIFIED WETLAND CONSULTANT SHALL ILLUSTRATE BOUNDARIES OF ANY WATER BODY OR WETLAND, WHICH MAY BE REGULATED BY THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY, WITH SUPPORTING DOCUMENTATION.
  - 5. PROPOSED PUBLIC UTILITIES AND ACCESS EASEMENT LOCATIONS, WITH DIMENSIONS.
- C. ARE THERE ANY SPECIAL ASSESSMENTS ON THE PARENT PARCEL?  
YES \_\_\_\_\_ NO \_\_\_\_\_  
IF YES HAS THAT ASSESSMENT BEEN PAID IN FULL?  
YES \_\_\_\_\_ NO \_\_\_\_\_

Petitioners Signatures: Joyce Oliveto Date: 6-29-16

ASSESSORS OFFICE

*[Handwritten signature]*

TOWNSHIP MANAGER

*[Handwritten signature]*

6/29/16

TREASURERS OFFICE:

*[Handwritten signature]*

HAVE SPECIALS BEEN PAID OFF?

YES

NO

HAVE TAXES BEEN PAID?

YES

NO

UTILITY OFFICE:

N/A

ARE UTILITIES UP TO DATE?

YES

NO

APPROVED:

YES

NO

NEW PARCEL NUMBERS:

11-12-100-010 (Parcel D)

11-12-100-012 (Parcel F)

COMMENTS:

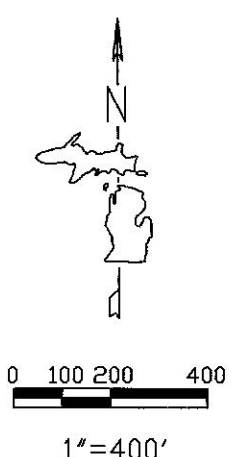
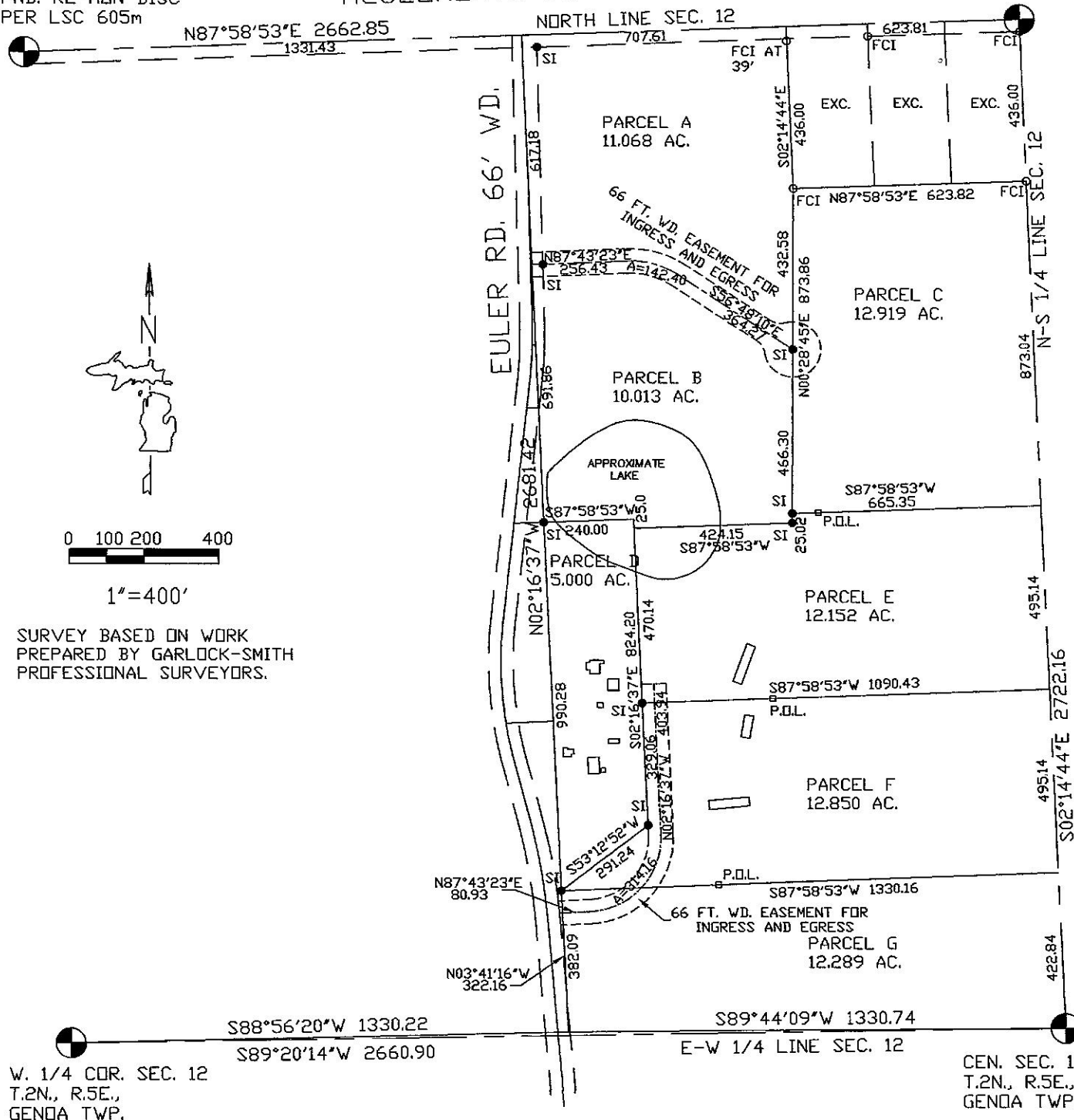
The parcel #'s will NOT change since this is only a slight legal change.

# CERTIFIED SURVEY

K-3  
N.W. COR. SEC. 12  
T.2N., R.5E.,  
GENOA TWP.  
FND. RE-MON DISC  
PER LSC 605m

L-3  
N. 1/4 COR. SEC. 12  
T.2N., R.5E.,  
GENOA TWP.  
FND. RE-MON DISC  
PER LSC 602m

McCLEMENTS RD. 66' WD.



SURVEY BASED ON WORK  
PREPARED BY GARLOCK-SMITH  
PROFESSIONAL SURVEYORS.

SURVEYOR'S CERTIFICATE - I HEREBY CERTIFY THAT THIS SURVEY WAS PREPARED BY ME, OR UNDER MY DIRECT SUPERVISION, THAT I AM A PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MICHIGAN, THAT THIS SURVEY COMPLIES WITH THE REQUIREMENTS OF SECTION 3,P.A. 132 OF 1970 AS AMENDED BY P.A. 280 OF 1972, AND THAT THE ERROR OF CLOSURE IS NO GREATER THAN 1 TO 5000.

LEGEND	
○	= FI = Found Iron
●	= SCI = Set Capped Iron
⊙	= FCI = Fnd. Capped Iron
(R)	= Recorded
(M)	= Measured

JOHN S. BLANCHARD P.S. #27446

CLIENT: J. OLIVETO  
REV. 6-27-16

<b>APEX SURVEY</b> 36554 GRANDON LIVONIA MICHIGAN 48150 LAND SURVEYOR # 27446 (734) 634-3591 FAX (734) 421-1036	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>JOB #15-48</td> <td>1"=400'</td> </tr> <tr> <td>DATE 10-15-15</td> <td>SCALE</td> </tr> <tr> <td>DWG. BYMWD</td> <td>BK PG</td> </tr> </table> <p style="text-align: center; font-size: 2em; font-weight: bold;">SHEET 1 OF 4</p>	JOB #15-48	1"=400'	DATE 10-15-15	SCALE	DWG. BYMWD	BK PG
JOB #15-48	1"=400'						
DATE 10-15-15	SCALE						
DWG. BYMWD	BK PG						



# LEGAL DESCRIPTION

## PARCEL A

A PARCEL OF LAND IN THE N.W. 1/4 OF SECTION 12, T.2N., R.5E., GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12; THENCE S87°58'53"W, ALONG THE NORTH LINE OF SAID SECTION 12 AND THE CENTERLINE OF McCLEMENTS ROAD, 66 FEET WIDE, 623.81 FEET TO THE POINT OF BEGINNING; THENCE S02°14'44"E, 436.00 FEET; THENCE S00°28'45"W, 432.58 FEET; THENCE N56°48'10"W, 364.27 FEET; THENCE 142.40 FEET ALONG THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 230.00 FEET AND A CHORD BEARING N74°32'23"W, 140.14 FEET; THENCE S87°43'23"W, 256.43 FEET; THENCE N02°16'37"W, 617.18 FEET TO SAID NORTH LINE AND CENTERLINE; THENCE N87°58'53"E, ALONG SAID NORTH LINE AND CENTERLINE, 707.61 FEET TO THE POINT OF BEGINNING.

CONTAINING 11.068 ACRES OF LAND MORE OR LESS.

SUBJECT TO THE RIGHTS OF THE PUBLIC OVER THE NORTHERLY 33 FEET FOR McCLEMENTS ROAD AND THE WESTERLY PORTION FOR EULER ROAD. ALSO SUBJECT TO A 66 FEET WIDE EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES, THE CENTERLINE BEING DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12, THENCE S87°58'53"W, ALONG THE NORTH LINE OF SAID SECTION 12 AND THE CENTERLINE OF McCLEMENTS ROAD, 66 FEET WIDE, 1331.42 FEET; THENCE S02°16'37"E, 617.18 FEET TO THE POINT OF BEGINNING; THENCE N87°43'23"E, 256.43 FEET; THENCE 142.40 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 230.00 FEET AND A CHORD BEARING S74°32'23"E, 140.14 FEET; THENCE S56°48'10"E, 364.27 FEET TO THE CENTER OF A 75 FEET RADIUS CUL-DE-SAC AND THE POINT OF ENDING.

ALSO SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.

## PARCEL B

A PARCEL OF LAND IN THE N.W. 1/4 OF SECTION 12, T.2N., R.5E., GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12; THENCE S87°58'53"W, ALONG THE NORTH LINE OF SAID SECTION 12 AND THE CENTERLINE OF McCLEMENTS ROAD, 66 FEET WIDE, 623.81 FEET; THENCE S02°14'44"E, 436.00 FEET; THENCE S00°28'45"W, 432.58 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING S00°28'45"W, 466.30 FEET; THENCE S87°58'53"W, 424.15 FEET; THENCE N02°16'37"W, 25.00 FEET; THENCE S87°58'53"W, 240.00 FEET; THENCE N02°16'37"W, 691.86 FEET; THENCE N87°43'23"E, 256.43 FEET; THENCE 142.40 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 230.00 FEET AND A CHORD BEARING S74°32'23"E, 140.14 FEET; THENCE S56°48'10"E, 364.27 FEET TO THE POINT OF BEGINNING.

CONTAINING 10.013 ACRES OF LAND MORE OR LESS.

SUBJECT TO THE WESTERLY PORTION FOR EULER ROAD. ALSO SUBJECT TO A 66 FEET WIDE EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES, THE CENTERLINE BEING DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12, THENCE S87°58'53"W, ALONG THE NORTH LINE OF SAID SECTION 12 AND THE CENTERLINE OF McCLEMENTS ROAD, 66 FEET WIDE, 1331.42 FEET; THENCE S02°16'37"E, 617.18 FEET TO THE POINT OF BEGINNING; THENCE N87°43'23"E, 256.43 FEET; THENCE 142.40 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 230.00 FEET AND A CHORD BEARING S74°32'23"E, 140.14 FEET; THENCE S56°48'10"E, 364.27 FEET TO THE CENTER OF A 75 FEET RADIUS CUL-DE-SAC AND THE POINT OF ENDING.

ALSO SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.

## PARCEL C

A PARCEL OF LAND IN THE N.W. 1/4 OF SECTION 12, T.2N., R.5E., GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12; THENCE S02°14'44"E, ALONG THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 12, 436.00 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING S02°14'44"E, ALONG SAID NORTH-SOUTH 1/4 LINE, 873.04 FEET; THENCE S87°58'53"W, 665.35 FEET; THENCE N00°28'45"E, 873.66 FEET; THENCE N87°58'53"E, 623.82 FEET TO THE POINT OF BEGINNING.

CONTAINING 12.919 ACRES OF LAND MORE OR LESS.

SUBJECT TO AND TOGETHER WITH A 66 FEET WIDE EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES, THE CENTERLINE BEING DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12, THENCE S87°58'53"W, ALONG THE NORTH LINE OF SAID SECTION 12 AND THE CENTERLINE OF McCLEMENTS ROAD, 66 FEET WIDE, 1331.42 FEET; THENCE S02°16'37"E, 617.18 FEET TO THE POINT OF BEGINNING; THENCE N87°43'23"E, 256.43 FEET; THENCE 142.40 FEET ALONG THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 230.00 FEET AND A CHORD BEARING S74°32'23"E, 140.14 FEET; THENCE S56°48'10"E, 364.27 FEET TO THE CENTER OF A 75 FEET RADIUS CUL-DE-SAC AND THE POINT OF ENDING.

ALSO SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.

CLIENT: J. OLIVETO  
REV. 6-27-16

APEX SURVEY  
36554 GRANDON  
LIVONIA MICHIGAN 48150  
LAND SURVEYOR # 27446  
(734) 634-3591  
FAX (734) 421-1036

JOB #15-48	SCALE
DATE 10-15-15	BK PG
DWG. BYMWD	
SHEET 2 OF 4	

# LEGAL DESCRIPTION

## PARCEL D

A PARCEL OF LAND IN THE N.W. 1/4 OF SECTION 12, T.2N., R.5E., GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12; THENCE S87°58'53"W, ALONG THE NORTH LINE OF SAID SECTION 12 AND THE CENTERLINE OF McCLEMENTS ROAD, 66 FEET WIDE, 623.81 FEET; THENCE S02°14'44"E, 436.00 FEET; THENCE S00°28'45"W, 898.88 FEET; THENCE S87°58'53"W, 424.15 FEET TO THE POINT OF BEGINNING; THENCE S02°16'37"E, 799.20 FEET; THENCE S53°12'52"W, 291.24 FEET; THENCE N02°16'37"W, 990.28 FEET; THENCE N87°58'33"E, 240.00 FEET; THENCE S02°16'37"E, 25.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 5.000 ACRES OF LAND MORE OR LESS.

SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.

## PARCEL E

A PARCEL OF LAND IN THE N.W. 1/4 OF SECTION 12, T.2N., R.5E., GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12; THENCE S02°14'44"E, ALONG THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 12, 1309.04 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING S02°14'44"E, ALONG SAID NORTH-SOUTH 1/4 LINE, 495.14 FEET; THENCE S87°58'53"W, 1090.43 FEET; THENCE N02°16'37"W, 470.14 FEET; THENCE N87°58'53"E, 424.15 FEET; THENCE N00°28'45"E, 25.02 FEET; THENCE N87°58'53"E, 665.35 FEET TO THE POINT OF BEGINNING.

CONTAINING 12.152 ACRES OF LAND MORE OR LESS.

SUBJECT TO AND TOGETHER WITH A 66 FEET WIDE EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES, THE CENTERLINE BEING DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12, THENCE S02°14'44"E, ALONG THE N-S 1/4 LINE OF SAID SECTION 12, 2722.16 FEET TO THE CENTER OF SAID SECTION 12, THENCE S89°44'09"W, 1330.74 FEET; THENCE N03°41'16"W, 322.16 FEET TO THE POINT OF BEGINNING; THENCE N87°43'23"E, 80.93 FEET; THENCE 314.16 FEET ALONG THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 200.00 FEET AND A CHORD BEARING N42°43'23"E, 282.84 FEET; THENCE N02°16'37"W, 403.94 FEET TO THE POINT OF ENDING.

ALSO SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.

## PARCEL F

A PARCEL OF LAND IN THE N.W. 1/4 OF SECTION 12, T.2N., R.5E., GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12; THENCE S02°14'44"E, ALONG THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 12, 1804.18 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING S02°14'44"E, ALONG SAID NORTH-SOUTH 1/4 LINE, 495.14 FEET; THENCE S87°58'53"W, 1330.16 FEET; THENCE N53°12'52"E, 291.24 FEET; THENCE N02°16'37"W, 329.06 FEET; THENCE N87°58'53"E, 1090.43 FEET TO THE POINT OF BEGINNING.

CONTAINING 12.850 ACRES OF LAND MORE OR LESS.

SUBJECT TO AND TOGETHER WITH A 66 FEET WIDE EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES, THE CENTERLINE BEING DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12, THENCE S02°14'44"E, ALONG THE N-S 1/4 LINE OF SAID SECTION 12, 2722.16 FEET TO THE CENTER OF SAID SECTION 12, THENCE S89°44'09"W, 1330.74 FEET; THENCE N03°41'16"W, 322.16 FEET TO THE POINT OF BEGINNING; THENCE N87°43'23"E, 80.93 FEET; THENCE 314.16 FEET ALONG THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 200.00 FEET AND A CHORD BEARING N42°43'23"E, 282.84 FEET; THENCE N02°16'37"W, 403.94 FEET TO THE POINT OF ENDING.

ALSO SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.

CLIENT: J. OLIVETO  
REV. 6-27-16

APEX SURVEY  
36554 GRANDON  
LIVONIA MICHIGAN 48150  
LAND SURVEYOR # 27446  
(734) 634-3591  
FAX (734) 421-1036

JOB #15-48	SCALE
DATE 10-15-15	BK PG
DWG. BYMWD	

SHEET 3 OF 4

# LEGAL DESCRIPTION

PARCEL G

A PARCEL OF LAND IN THE N.W. 1/4 OF SECTION 12, T.2N., R.5E., GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN, DESCRIBED AS:

COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12; THENCE S02°14'44"E, ALONG THE NORTH-SOUTH 1/4 LINE OF SAID SECTION 12, 2299.32 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING S02°14'44"E, ALONG SAID NORTH-SOUTH 1/4 LINE, 422.84 FEET TO THE CENTER OF SAID SECTION 12; THENCE S89°44'09"W, 1330.74 FEET; THENCE N02°16'37"W, 382.09 FEET; THENCE N87°58'53"E, 130.16 FEET TO THE POINT OF BEGINNING.

CONTAINING 12.289 ACRES OF LAND MORE OR LESS.

SUBJECT TO AND TOGETHER WITH A 66 FEET WIDE EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES, THE CENTERLINE BEING DESCRIBED AS:

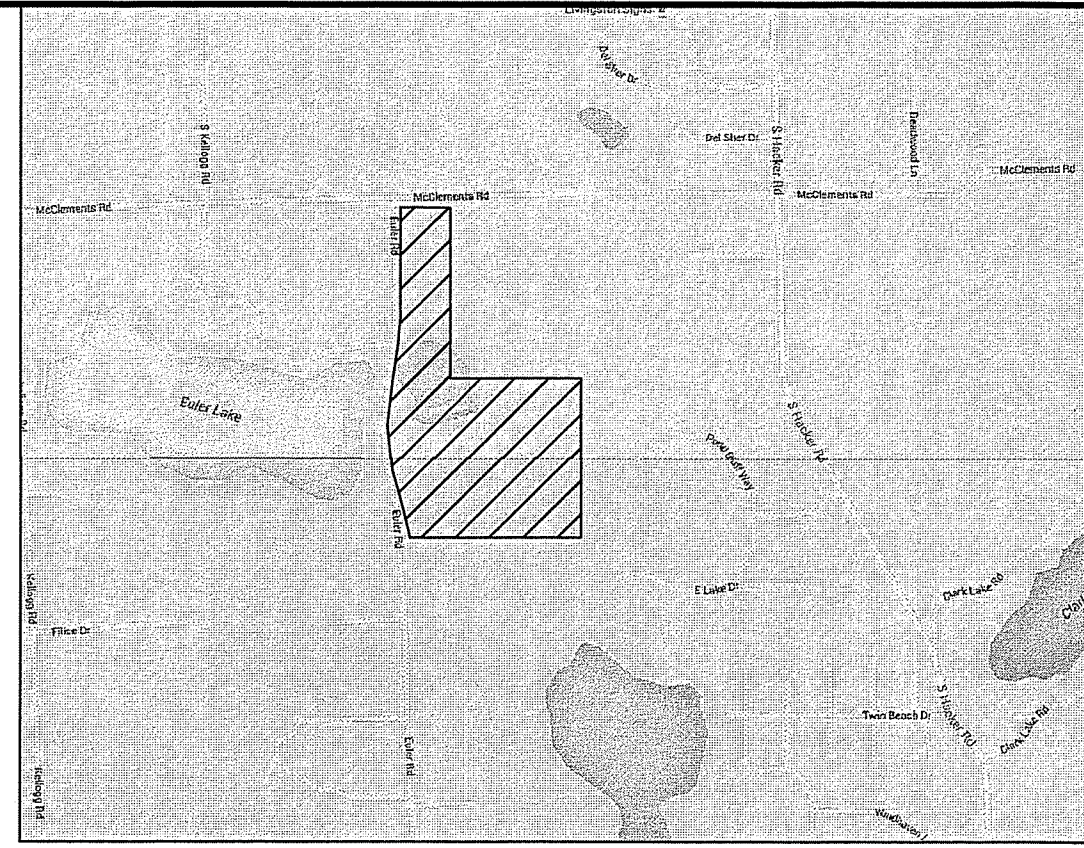
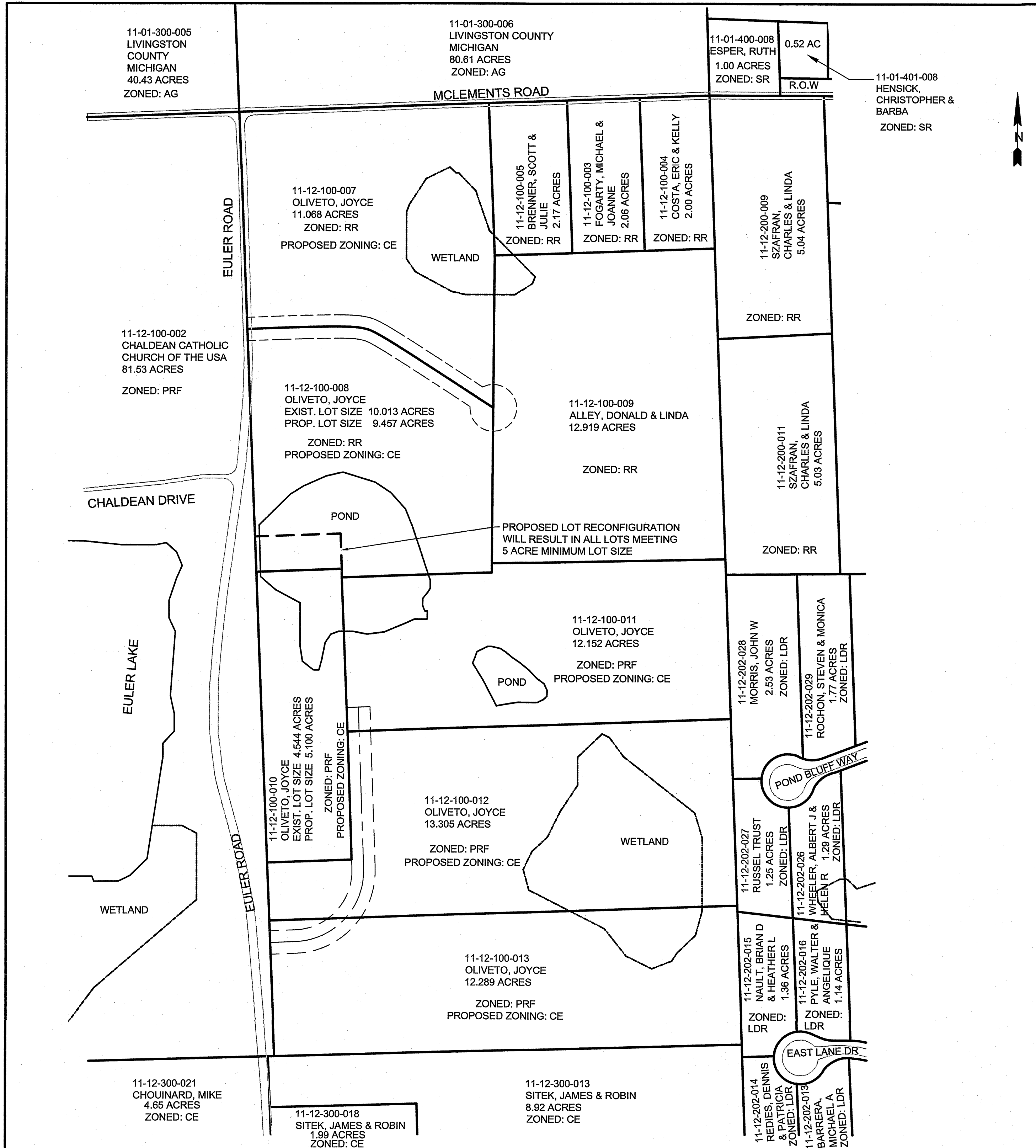
COMMENCING AT THE NORTH 1/4 CORNER OF SAID SECTION 12, THENCE S02°14'44"E, ALONG THE N-S 1/4 LINE OF SAID SECTION 12, 2722.16 FEET TO THE CENTER OF SAID SECTION 12, THENCE S89°44'09"W, 1330.74 FEET; THENCE N03°41'16"W, 322.16 FEET TO THE POINT OF BEGINNING; THENCE N87°43'23"E, 80.93 FEET; THENCE 314.16 FEET ALONG THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 200.00 FEET AND A CHORD BEARING N42°43'23"E, 282.84 FEET; THENCE N02°16'37"W, 403.94 FEET TO THE POINT OF ENDING.

ALSO SUBJECT TO ANY EASEMENTS OR RESTRICTIONS OF RECORD.

CLIENT: J. OLIVETO  
REV. 6-27-16

APEX SURVEY  
36554 GRANDON  
LIVONIA MICHIGAN 48150  
LAND SURVEYOR # 27446  
(734) 634-3591  
FAX (734) 421-1036

JOB #15-48	SCALE
DATE 10-15-15	BK PG
DWG. BYMWD	
SHEET 4 OF 4	



**BEBOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects  
HOWELL, MI. 48843  
800.246.6735 FAX 517.548.1670

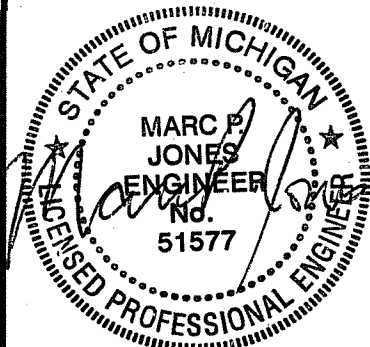
**OLIVETO RE-ZONING**  
PREPARED FOR  
**JOYCE OLIVETO**  
963 PEACEFUL CT  
BRIGHTON, MI 48114  
P.L.O. 500-1404

**RE-ZONING PLAN**

NO	BY	ADDED AC. & WETLANDS	REVISION PER	DATE
1	RD			6-16-16

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES AND PROPOSED UTILITY CROSSINGS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM THE PLANS.

**3 WORKING DAYS BEFORE YOU DIG CALL MISS DIG 1-800-482-7171**



DESIGNED BY:  
DRAWN BY: J  
CHECKED BY: M&L  
SCALE: N  
JOB NO. 16-70  
DATE: 5/27/16  
SHEET NO. 1 OF 1



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

GENOA TOWNSHIP  
JUN 01 2016  
RECEIVED

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

APPLICANT NAME & ADDRESS: Livingston County Building Department  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Livingston County - Jim Rowell

SITE ADDRESS: 2300 E. Grand River Ave., Howell, MI 48843 PARCEL #(s): 4711-06-100-039

APPLICANT PHONE: (517) 546-3240 OWNER PHONE: (517) 546-3240

OWNER EMAIL: jrowell@livgov.com

LOCATION AND BRIEF DESCRIPTION OF SITE: The site is located on the south side of East Grand River, approximately

0.11 miles east of the Chilson Road intersection. The subject property has a total area of 27.97 acres and located in the general commercial district.

The adjacent properties to the north and west are also within the general commercial district, while the property to the east is suburban

residential, and the property to the south is within the public and recreational facilities district.

BRIEF STATEMENT OF PROPOSED USE: The proposed use for the development is continued use a parking lot

but expand the lot 1 row to create a carport area. The parking lot will also have a new sliding security gate at it entrance and

new LED cut-off type lighting for the parking lot and under the carport area. The project will also replace the existing screen fence

with a new fence (approximately 400 lineal feet).

THE FOLLOWING BUILDINGS ARE PROPOSED: Carport Structure for 24 Spaces

**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:  5/27/2016

ADDRESS: 2300 E. Grand River Ave., Howell, MI 48843

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

L.) Brent LaVanway of Boss Engineering at brentl@bosseng.com  
Name Business Affiliation E-mail Address

**FEE EXCEEDANCE AGREEMENT**

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

SIGNATURE: *Jim Rowell* DATE: 5/27/2016  
PRINT NAME: Jim Rowell PHONE: 517-552-6724  
ADDRESS: 2300 E. Grand River Ave., Howell, MI 48843

June 29, 2016

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
<b>Subject:</b>	Livingston County – Site Plan Review #2
<b>Location:</b>	2300 E. Grand River Avenue – South of Grand River, west of Chilson Road
<b>Zoning:</b>	GCD General Commercial District

Dear Commissioners:

At the Township's request, we have reviewed the revised site plan (dated 6/22/16) proposing a parking lot expansion and construction of a carport at the rear of the Livingston County complex. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance.

**A. Summary**

1. We request the applicant present the Commission with material and color samples for the carport structure.
2. The applicant must provide calculation to ensure the project does not result in excessive parking.
3. The applicant must remove the note on Sheet C4 that a dumpster enclosure is not proposed.
4. There are inconsistencies in the size/shape of the dumpster enclosure and base pad between Sheets C4 and C7 that need to be corrected.
5. The proposed dumpster is located within an easement; however, the applicant has indicated that they have received approval from the County Drain Commissioner's Office for this placement.

**B. Proposal/Process**

The applicant requests site plan review and approval to expand an existing parking lot by 24 spaces and construct a carport for the new spaces. The project also includes new lighting, relocation of an existing waste receptacle and new screen fencing.

Public government buildings and related parking lots are permitted by right in the GCD. Parking lot additions of 5 spaces or more require site plan review and approval by the Planning Commission.

**C. Site Plan Review**

1. **Dimensional Requirements.** Given the limited scope of the project, the only applicable dimensional standards are parking lot setback and impervious surface coverage.

The proposed parking lot expansion is located well outside of minimum setback requirements and the revised plans confirm compliance with the impervious surface restriction.

2. **Structure Design.** The proposed carport structure is to be constructed of metal (roof and support columns). The applicant has indicated that they will present the Commission with a material and color sample board at the upcoming meeting.



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

3. **Parking.** The revised submittal provides a description of existing parking, but does not provide sufficient detail to determine the amount of parking required by Ordinance. Given the proposed increase in parking, this information is necessary to ensure the project does not result in excessive parking per Section 14.02.06.

The proposed spaces comply with the dimensional/design standards of the Ordinance and more barrier-free spaces are provided than required.

4. **Pedestrian Circulation.** There is an existing sidewalk connecting the parking lot and building with no changes proposed or required.
5. **Vehicular Circulation.** The proposed parking lot meets requirements for drive aisle width. All parking spaces are aligned at 90° angles and traffic will flow easily around the lot. A Knox box has been provided for Fire Department access through the proposed gates.
6. **Landscaping and Screening.** The project requires parking area landscaping and a landscape buffer per Section 12.02.

Location	Requirements	Proposed	Comments
Parking lot	Rear lot requires: 7 canopy trees 690 SF landscaped area	None	Existing lot is nonconforming
Buffer Zone “B” (west adjacent to SR zone district)	20’ wide 3’ berm or 6’ screen wall 21 canopy trees 21 evergreen trees 81 shrubs	8’ to 30’ width (varies) 7 existing trees 8’ vinyl privacy fence	The new privacy fence, along with existing trees and vegetation, will provide for an improved buffer zone

7. **Waste Receptacle and Enclosure.** The existing dumpster and enclosure will be relocated east of the parking lot. The proposed dumpster will be located approximately 40’ from the side property line, which exceeds the minimum requirement of 20’.



The revised plans include details of a wooden enclosure with a metal gate; however, Sheet C4 still includes a note that an enclosure is not proposed. The applicant must remove this note from the plans. Additionally, the size and shape of the enclosure and base pad are inconsistent between the site plan (Sheet C4) and the detail (Sheet C7). The applicant should correct this inconsistency.

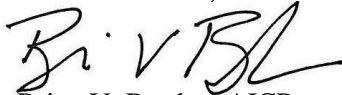
The proposed location is also within an easement, although the revised submittal indicates that the applicant has received approval from the County Drain Commissioner's Office for this placement.

- 8. Exterior Lighting.** The photometric plan illustrates 4 light poles and under-canopy lighting for the carport. The light levels comply with the maximum foot-candles permitted and the pole heights have been reduced to comply with the Ordinance (20-foot maximum when adjacent to residential).
- 9. Impact Assessment.** The submittal includes an Impact Assessment (dated June 1, 2016). In summary, the Assessment notes that the proposed building addition is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at [borden@lsplanning.com](mailto:borden@lsplanning.com).

Respectfully,

**LSL PLANNING, A SAFE BUILT LLC COMPANY**



Brian V. Borden, AICP

Planning Manager



July 6, 2016

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Livingston County Complex Carport  
Site Plan Review**

Dear Ms. Van Marter:

We have received the updated site plan documents for the Livingston County Complex Carport improvements from Boss Engineering dated June 22, 2016. The applicant is proposing to extend the pavement and construct a carport adjacent to the existing parking spaces along the southern edge of the rear parking lot for the Livingston County Offices located on the south side of Grand River Avenue west of Chilson Road.

All outstanding items have been addressed in this submittal.

Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Markstrom'.

Gary J. Markstrom, P.E.  
Unit Vice President

A handwritten signature in blue ink, appearing to read 'Joseph C. Siwek'.

Joseph C. Siwek, P.E.  
Project Engineer

Copy: Brent LaVanway, Boss Engineering



# BRIGHTON AREA FIRE AUTHORITY

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

June 28, 2016

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Livingston County Complex Carport  
2300 E. Grand River  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on June 27, 2016 and the drawings are dated June 22, 2016. The project is for the alteration of the facilities rear parking area for the addition of a carport and access gate. The plan review is based on the requirements of the International Fire Code (IFC) 2015 edition.

The details of the submittal have been previously discussed and appear to be in compliance with the fire code requirements. We have only one recommendation listed below.

1. The knox box located at the entry of the gate is recommended to be replaced with a Knox key switch that will override the opener allowing fire department access. The knox box or key switch must be purchased through [www.knoxbox.com](http://www.knoxbox.com) **(Recommendation acknowledged)**

**IFC 506.1**

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".

Capt. Rick Boisvert, CFPS  
Fire Inspector

**IMPACT ASSESSMENT  
FOR  
SITE PLAN PETITION  
“LIVINGSTON COUNTY BUILDING DEPARTMENT”  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC  
10465 CITATION DRIVE  
BRIGHTON, MI 48116  
(810) 227-5668**

Prepared by:

**BOSS ENGINEERING COMPANY  
3121 E. GRAND RIVER  
HOWELL, MI 48843  
(517) 546-4836**

□UNE 01, 2016

**16-135 EIA**

## INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development may have on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Submittal Requirements for Impact Assessment* guidelines in accordance with Section 18.07 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

## DISCUSSION ITEMS

### **A. Name(s) and address(es) of person(s) responsible for preparation of the impact assessment and a brief statement of their qualifications.**

Prepared For:  
Lindhout Associates Architects, AIA, PC  
10465 Citation Drive  
Brighton, MI 48116  
810-227-5668

Prepared By:  
BOSS ENGINEERING COMPANY  
Civil Engineers, Land Surveyors, Landscape Architects and Planners  
3121 E. Grand River  
Howell, MI 48843  
517-546-4836

Boss Engineering has been successfully providing engineering, surveying, planning and landscape architecture services on land development projects since 1969. Since its beginning, Boss Engineering has strived to provide unparalleled professional services with integrity and respect to every client. Today, Boss provides a complete lineup of consulting services for each project, ranging from conceptual design through final construction. The company currently employs a variety of professions including civil engineers, surveyors, landscape architects and sanitarians.

### **B. Map(s) and written description / analysis of the project site including all existing structures, manmade facilities, and natural features. The analysis shall also include information for areas within 10 feet of the property. An aerial photograph or drawing may be used to delineate these areas.**

The site is located on the south side of East Grand River Avenue, approximately 750 feet southwest of East Grand River Ave and Chilson Road intersection within the general commercial district (GC). To the north and east, the site is surrounded by general commercial development, including a PNC Bank and ALDI. The adjacent properties to the east are residential developments along Chilson Road within the suburban residential district. To the south is undeveloped property within the public and recreational facilities district. To the west is the City of Howell.

### **C. Impact on natural features: A written description of the environmental characteristics of the site prior to development and following development, i.e., topography, soils, wildlife, woodlands, mature trees (eight-inch caliper or greater), wetlands, drainage, lakes, streams, creeks or ponds. Documentation by a qualified wetland specialist shall be required wherever the Township determines that there is a potential regulated wetland. Reduced copies of the Existing Conditions Map(s) or aerial photographs may accompany written material.**

The total site area is 27.97 acres. To the south is a low quality, non-regulated wetland dominated by reed canary grass. The wetland appears to be artificially created from previous development with a low point in otherwise non-hydraulic soils. The retention basin for the site is located approximately 345-feet southwest of the existing pavement. The existing pavement on site, within the area of disturbance, gradually slopes to the southwest at approximately 2.75%, draining into the vegetated area to the south, then following vegetated swales to the east or west, gradually making its way to the retention basin. With the increased runoff volume being negligible, the proposed conditions will follow the existing drainage patterns.

The trees and shrubs/brush on site are minimal. The primary vegetation is located along the east fence line consisting of pines and spruces that act as a buffer between the existing commercial and residential development with Bradford Pears surrounding the building. The vegetation to the south, within the non-developed area, consists primarily of scrub vegetation that includes boxelder, black walnut, and reed canary grass. The USDA Soil Conservation Service classified the primary soils on site as Fox-Boyer complex, Brady loamy sand, and Carlisle mucic.

**D. Impact on storm water management: Description of measures to control soil erosion and sedimentation during grading and construction operations and until a permanent ground cover is established. Recommendations for such measures may be obtained from County Soil Conservation Service.**

Surface runoff during periods of construction will be controlled by proper methods set forth by the Livingston County Drain Commissioner, including silt fence, inlet protection devices, and seed and mulch.

At the time of construction, there may be some temporary dust, noise, vibration and smoke, but these conditions will be of relatively short duration and shall be controlled by applying appropriate procedures to minimize the effects, such as watering if necessary for dust control.

The site plan documents show the proposed locations of all site improvements along with detailed soil erosion control information in compliance with Livingston County Drain Commission regulations.

**E. Impact on surrounding land use: Description of the types of proposed uses and other man made facilities, including any project phasing, and an indication of how the proposed use conforms or conflicts with existing and potential development patterns. A description shall be provided of any increases of light, noise or air pollution which could negatively impact adjacent properties.**

The proposed development will have a minimal impact on surrounding properties. The increase of light, noise, and air pollution will be negligible.

**F. Impact on public facilities and services: Description of number of expected residents, employees, visitors, or patrons, and the anticipated impact on public schools, police protection and fire protection. Letters from the appropriate agencies may be provided, as appropriate.**

There will be no impact on public facilities due to the proposed development as well as on public schools, police protection, and fire protection

**G. Impact on public utilities: Description of the method to be used to service the development with water and sanitary sewer facilities, the method to be used to control drainage on the site and from the site, including runoff control during periods of construction. For sites service with sanitary sewer, calculations for pre- and post development flows shall be provided in equivalents to a single family home. Where septic systems are proposed, documentation or permits from the Livingston County Health Department shall be provided.**

No impact will be made on public utilities due to the proposed development as service is not needed.

**H. Storage or handling of any hazardous materials: Description of any hazardous substances expected to be used, stored or disposed of on the site. The information shall describe the type of materials, location within the site and method of containment. Documentation of compliance with federal and state requirements, and a Pollution Incident Prevention Plan (PIPP) shall be submitted, as appropriate.**

There will be no hazardous materials used or disposed of on this site, such as gas cans, striping paint, etc.

**I. Impact on traffic and pedestrians: A description of the traffic volumes to be generated based on national reference documents, such as the most recent edition of the Institute of Transportation**

**Engineers Trip Generation Manual, other published studies or actual counts of similar uses in Michigan.**

There will be no impact on traffic or pedestrians. The additional spaces will be utilized by county vehicles already utilizing the site.

**J. A detailed traffic impact study shall be submitted for any site over ten (10) acres in size which would be expected to generate 100 directional vehicle trips (i.e. 100 inbound or 100 outbound trips) during the peak hour of traffic of the generator or on the adjacent streets.**

The proposed development will not generate 100 directional vehicle trips. Therefore a detailed traffic impact study is not necessary.

**K. Special Provisions: General description of any deed restrictions, protective covenants, master deed or association bylaws.**

None at this time.

**L. A list of all sources shall be provided.**

Genoa Township's *Submittal Requirements for Impact Assessment*

Genoa Township Zoning Ordinances

Soil Survey of Livingston County, Michigan, U.S.D.A. Soil Conservation Service

National Wetland Inventory Plan, United States Department of the Interior, Fish and Wildlife Service

# SITE PLAN / CONSTRUCTION PLANS FOR LIVINGSTON COUNTY BUILDING DEPARTMENT REAR PARKING LOT IMPROVEMENTS 2300 E. GRAND RIVER, HOWELL, MI 48843 GENOA TOWNSHIP, LIVINGSTON COUNTY, MI

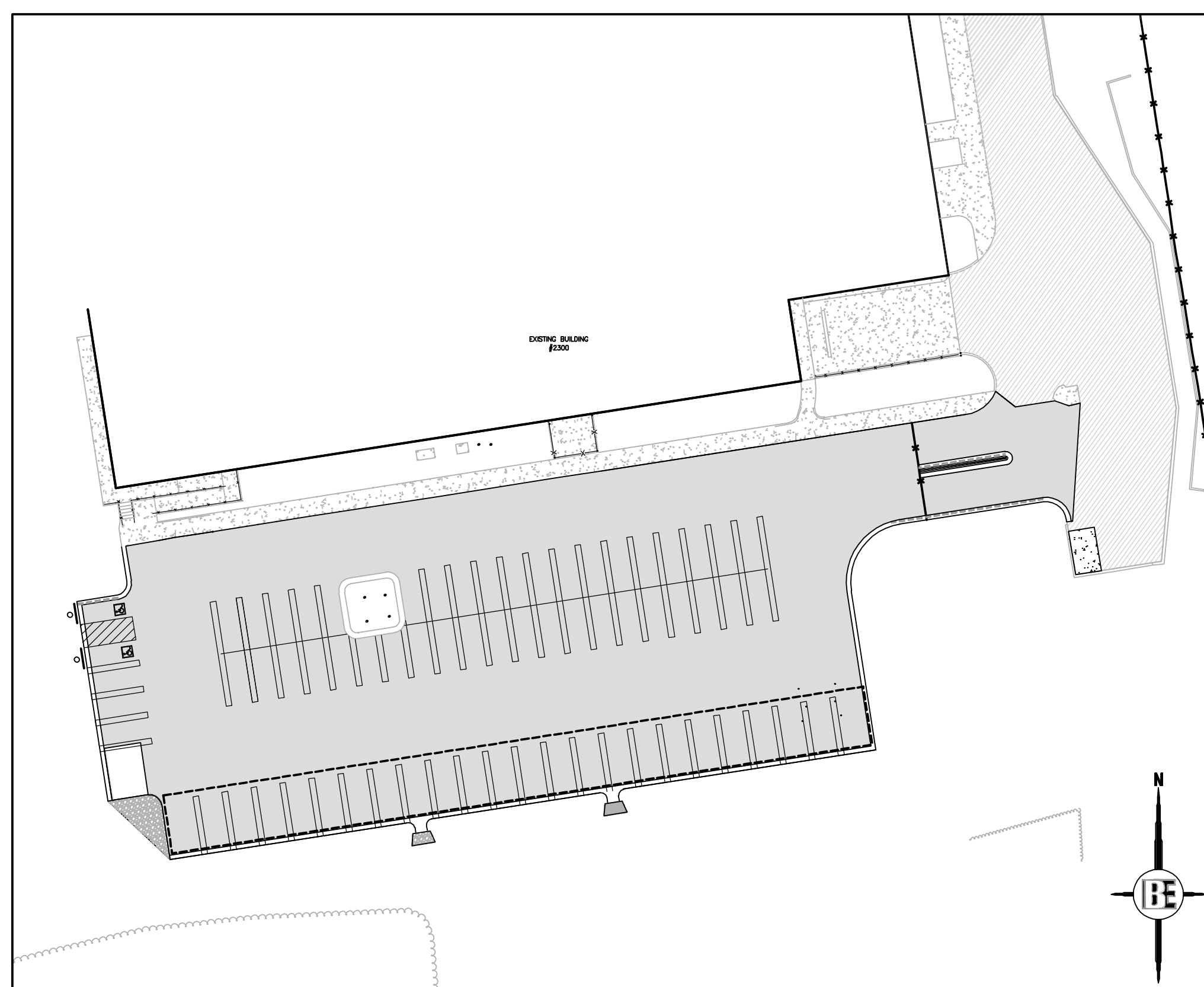
## PROPERTY DESCRIPTION:

GENERAL INFORMATION: PARCEL NO.: 4711-06-100-039 EFFECTIVE DATE: 5/18/2004  
 ZONING: GENERAL COMMERCIAL DISTRICT (GC)  
 AREA: 27.97 AC  
 PROPERTY DESCRIPTION PER LIVINGSTON COUNTY TAX RECORDS:  
 SEC 6 T2N R5E COM NW COR. TH S87°E 844.7 FT, TH S60°E 1062.32 FT TO POB,  
 TH S60°E 45 FT, TH S28°W 163.19 FT, TH S33°E 35.38 FT, TH N84°E 104.65 FT, TH  
 S5°E 91.33 FT, TH N85°W 233.48 FT, TH S5°E 593.52 FT, TH N85°W 361.2 FT, TH  
 S1°E 785.26 FT, TH S14°W 82 FT, TH S20°W 122 FT, TH S27°W 84 FT, TH S31°W 61  
 FT, TH S35°W 255 FT, TH, S8°W 22 FT, TH S2°W 141.72 FT, TH N88°W 230.73 FT,  
 TH NW'LY ALG E RR ROW 2409.97 FT, TH N69°E 345.92 FT, TH S60°E 85.93 FT, TH  
 S3°E 14.51 FT, TH N84°E 219.05 FT, TH N28°E 135.65 FT TO POB 28.04 AC M/L  
 SPLIT 11/90 FROM 026 & 030

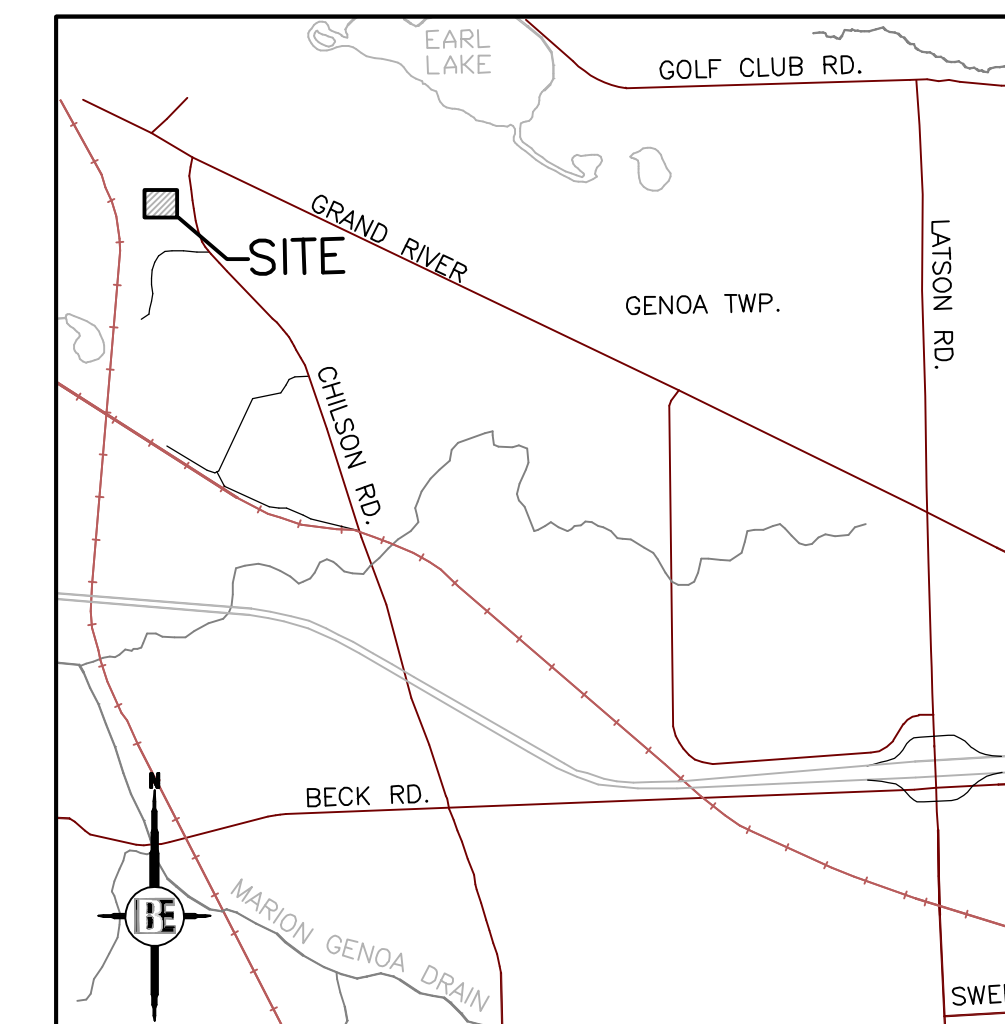
## CONSTRUCTION NOTES

THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

1. THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.
2. DO NOT SCALE THESE DRAWINGS AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
3. A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
4. IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
5. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
7. PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
8. ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS.
9. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
10. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
11. THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
12. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
13. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
14. THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
15. THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
16. ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOT CLASS II).
17. ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
18. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
19. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
20. DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
21. IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
22. NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
24. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
25. ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
26. TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
27. ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
28. AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
29. ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
30. NO SEEDING SHALL BE DONE AFTER OCTOBER 15 WITHOUT APPROVAL OF THE ENGINEER.
31. ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
32. SOIL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
33. ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.



**OVERALL SITE MAP**  
NO SCALE



**LOCATION MAP**  
NO SCALE

## SHEET INDEX

SHEET NO.	DESCRIPTION
C1	COVER SHEET
C2	OVERALL DIMENSIONED SITE PLAN
C3	EXISTING CONDITIONS & DEMOLITION PLAN
C4	SITE PLAN
C5	GRADING, DRAINAGE & SOIL EROSION CONTROL PLAN
C6	LIGHTING PHOTOMETRIC PLAN
C7	CONSTRUCTION DETAILS
DRAWINGS PREPARED BY ARCHITECT	
A.1	(CANOPY) PLAN AND DETAILS

## LIVINGSTON COUNTY BUILDING DEPARTMENT

**OWNER:**  
 LIVINGSTON COUNTY  
 BUILDING DEPARTMENT  
 2300 E. GRAND RIVER  
 HOWELL, MI 48843

**PREPARED FOR:**  
 LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC  
 10465 CITATION DRIVE  
 BRIGHTON, MI 48116  
 CONTACT: MICHAEL KENNEDY  
 PHONE: (810) 227-5668

### PREPARED BY:

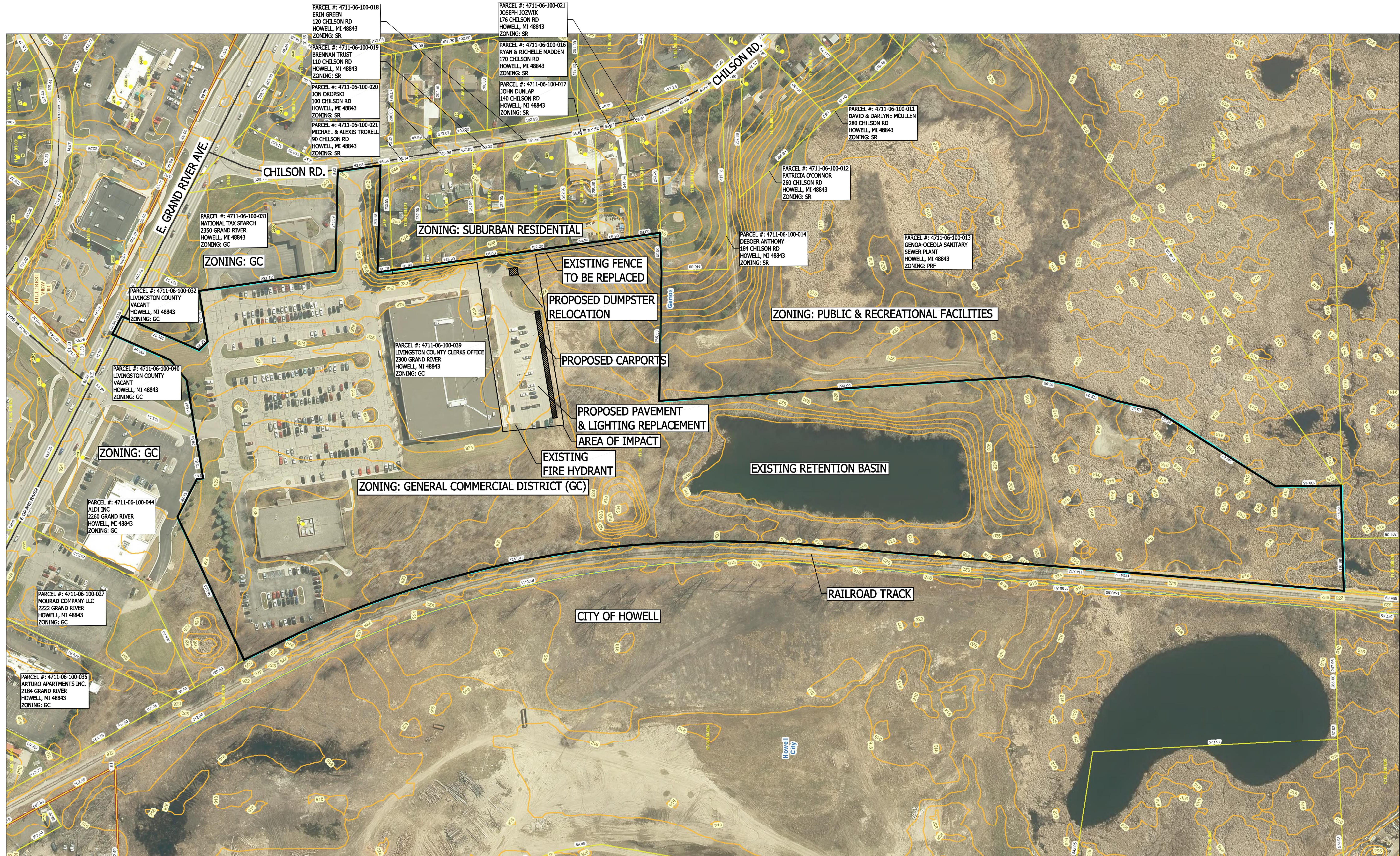
**BEBOSS**  
**Engineering**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 800.246.6735 FAX 517.548.1670

## INDEMNIFICATION STATEMENT

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

NO	BY	CK	REVISION	DATE	JOB NO.
2	KS	BL	GENOA TOWNSHIP REVIEW	06/22/16	<b>C1</b>
1	PC	BL	FOR BIDDING	6/13/16	
					ISSUE DATE: 06/01/2016
					JOB NO. 16-135





PARKING DATA	
MAIN LOT IN FRONT OF COUNTY BUILDING	301 REGULAR PARKING SPACES 13 ACCESSIBLE SPACES
COMMUNITY MENTAL HEALTH BUILDING	62 REGULAR PARKING SPACES 4 ACCESSIBLE SPACES
BACK LOT (PROJECT AREA)	43 REGULAR SPACES (EXISTING) 2 ACCESSIBLE SPACES (EXISTING)
TOTAL:	425 SPACES INCLUDING 19 ACCESSIBLE SPACES
EXISTING PARKING EXCEEDS REQUIREMENTS OF SECTION 1106.2 MICHIGAN BLDG CODE	
PROPOSED NEW SPACES FOR COUNTY OWNED WORK & INSPECTION VEHICLES - NOT FOR ADDT. EMPLOYEE OR VISITOR PARKING	

SITE DATA	
ZONING	GENERAL COMMERCIAL DISTRICT (GC)
PARCEL NUMBER	4711-06-100-039
AREA (GROSS)	27.97 ACRES
AREA (DISTURBED)	0.81 ACRES
USE	PARKING LOT EXTENSION
IMPERVIOUS SURFACE	
EXISTING	298,700 SF
PROPOSED	6,207 SF
PERCENT INCREASE	2%
MAX LOT COVERAGE	EXISTING PROPOSED
- BUILDING	7% 7%
- IMPERVIOUS SURFACE	24% 25%

NOTE: REFER TO EXISTING CONDITIONS PLAN FOR UTILITY, EASEMENT, AND SOILS INFORMATION

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES AND PROVIDING UTILITY COORDINANCE IN THE FIELD PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR OTHER PROPERTY CAUSED BY THE LOCATION OR DEPTH DIFFERS FROM THE PLAN.

BEFORE YOU DIG  
CALL 811  
1-800-485-7171

**BE BOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects

3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
800.246.6735 FAX 517.548.1670

PROJECT: **LIVINGSTON COUNTY BUILDING DEPARTMENT**  
PREPARED FOR: **LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC**

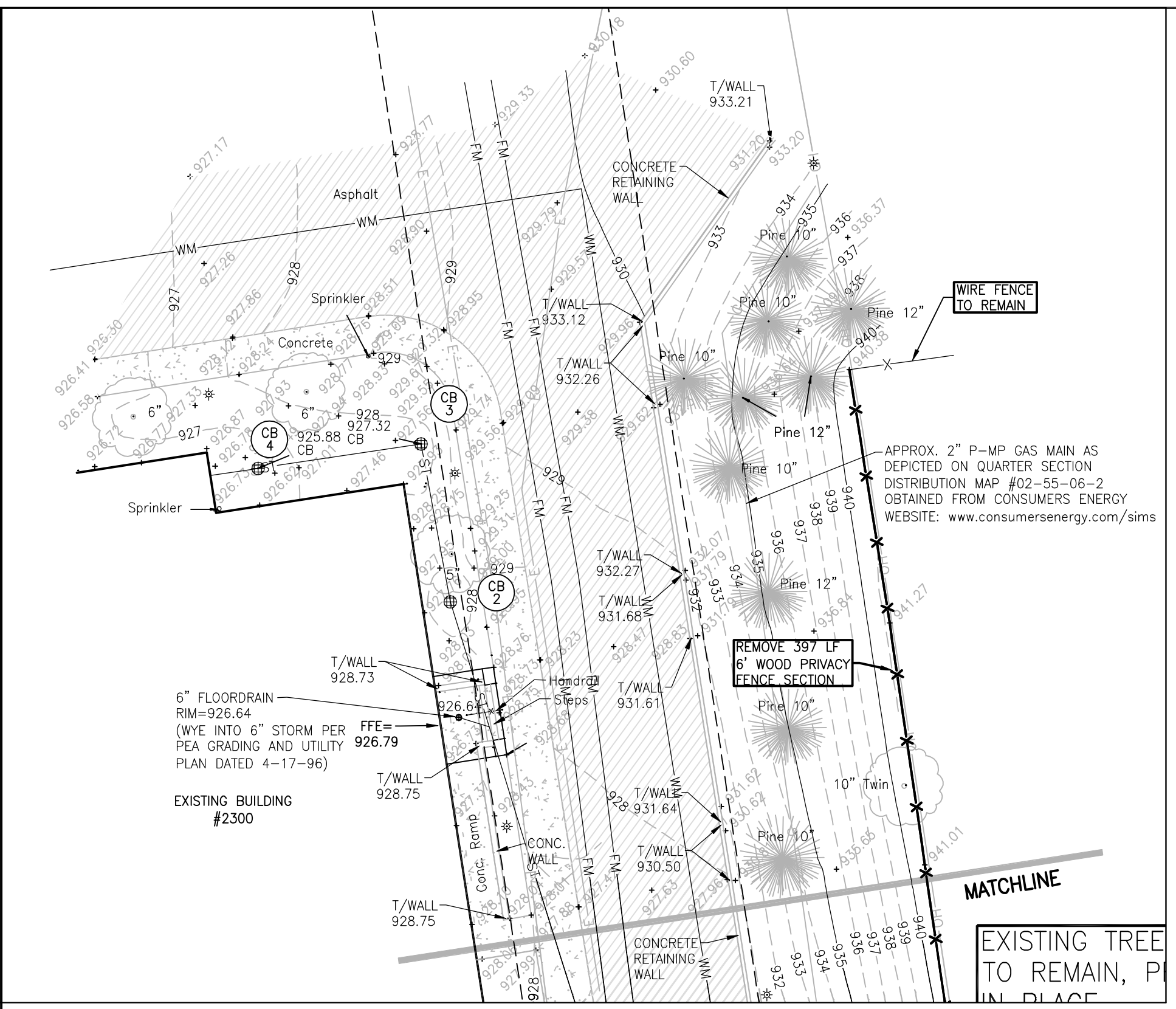
10465 CITATION DRIVE  
BRIGHTON, MI 48116  
810-227-5668

TITLE: **OVERALL DIMENSIONED SITE PLAN**

NO.	BY	DATE	REVISION PER
1	KS	6/22/16	GENDA TWP. REVIEW
1	PC	6/13/16	FOR BIDDING

DESIGNED BY: PC  
DRAWN BY: KS  
CHECKED BY:

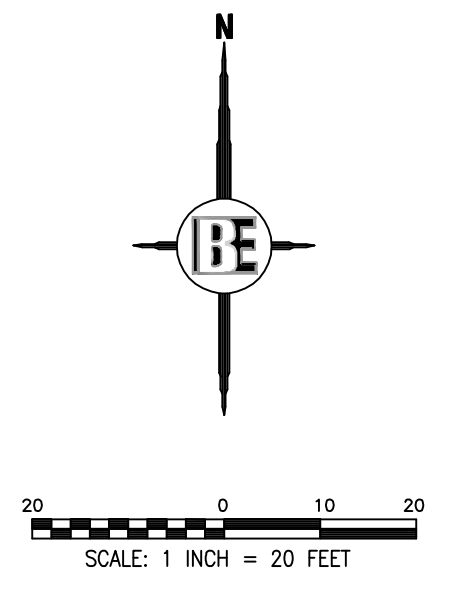
SCALE: NOT TO SCALE  
JOB NO. 16-135  
DATE 06/01/16  
SHEET NO. C2



- GENERAL SURVEY NOTES:**
- HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED WITH GPS USING MICHIGAN STATE PLANE COORDINATE SYSTEM (SOUTH ZONE).
  - SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
  - EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
  - ELEVATIONS WERE ESTABLISHED WITH GPS USING OPUS. (NAVD88 DATUM)
  - CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
  - ALL ELEVATIONS ARE SHOWN TO THE NEAREST 0.01 FOOT; HOWEVER SOFT-SURFACE ELEVATIONS CAN ONLY BE PRESUMED ACCURATE TO THE NEAREST 0.1 FOOT.
  - ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
  - ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.

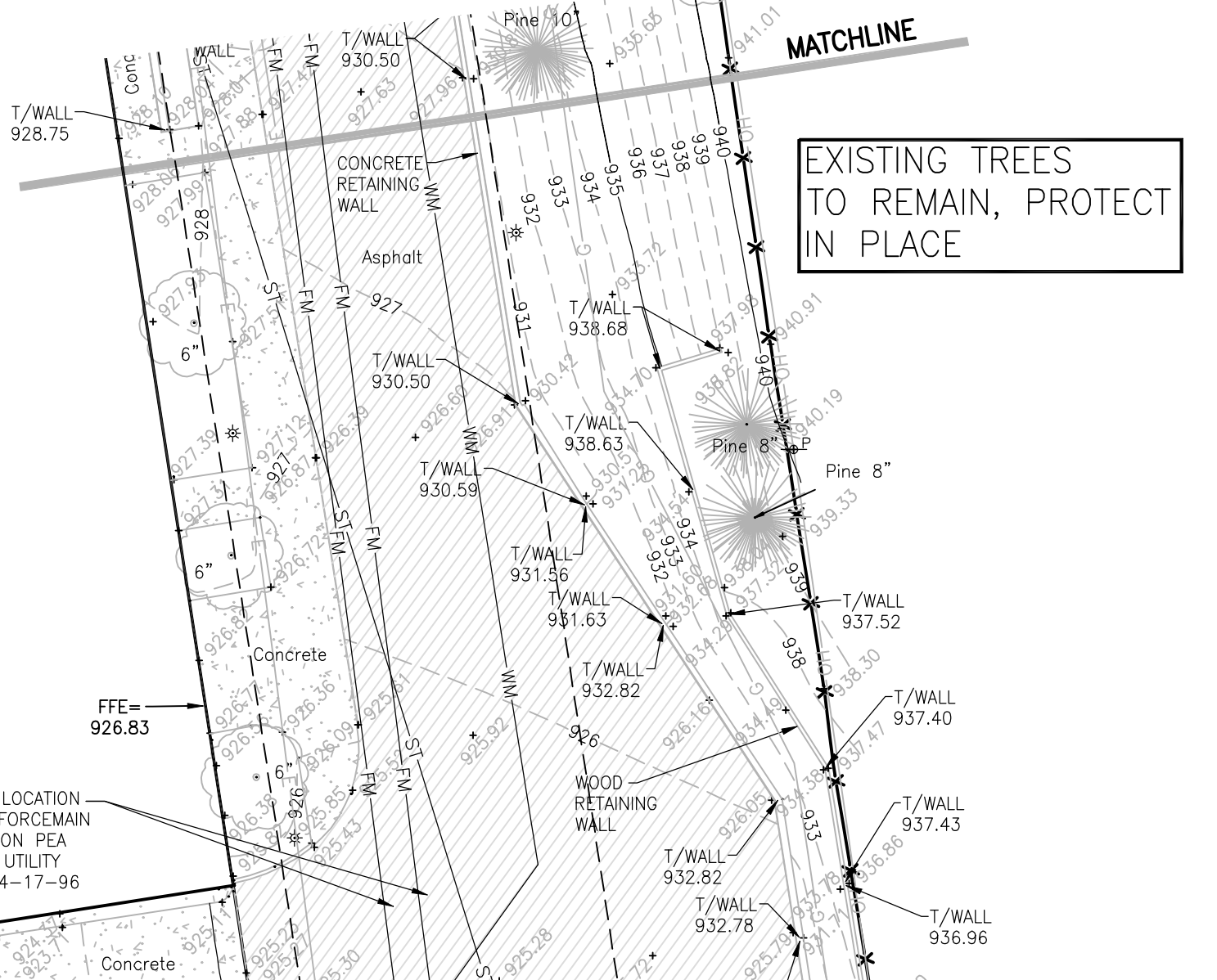
**SOIL DATA PER USDA SOIL SURVEY**  
 - Brady loamy sand, 0 to 2 percent slopes (BuA)  
 - Carlisle muck (Cc)  
 - Fox-Boyer complex, 18 to 25 percent slopes (FrE)  
 - Miami loam, 2 to 6 percent slopes (MoB)

**ZONING**  
 GENERAL COMMERCIAL DISTRICT (GC)



**STORM STRUCTURE INVENTORY:**

<b>STORM MANHOLE #1</b>	RM=923.39
INV. W=918.29 (12" CONC.)	
INV. E=918.34 (12" CONC.)	
INV. N=918.69 (8" PVC)	
<b>STORM CATCH BASIN #1</b>	RM=923.92
INV. W=920.47 (12" CONC.)	
INV. S=920.87 (6" PVC)	
INV. NW=921.87 (6" CFP)	
INV. NE=921.87 (6" CFP)	
INV. SE=921.92 (6" CFP)	
INV. S=921.92 (6" CFP)	
<b>STORM CATCH BASIN #2</b>	RM=927.32
INV. S=922.82 (6" PVC)	
INV. N=922.87 (8" PVC)	
<b>STORM CATCH BASIN #3</b>	RM=927.32
INV. S=923.17 (8" PVC)	
INV. W=923.22 (8" PVC)	
<b>STORM CATCH BASIN #4</b>	RM=925.88
INV. E=923.48 (8" PVC)	
INV. W=923.58 (8" PVC)	



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS AND APPROVED UTILITY COORDINANCE IN THE FIELD PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR PROPERTY FROM ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR PROPERTY FROM ANY CONSTRUCTION.

**BEFORE YOU DIG**  
 CALL MISS DIG  
 1-800-482-7171

**BEBOSS**  
 Engineering  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 800.246.6735 FAX 517.548.1670

**LIVINGSTON COUNTY BUILDING DEPARTMENT**  
**LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC**  
 PROJECT: 10465 CITATION DRIVE BRIGHTON, MI 48116 810-227-5668  
 PREPARED FOR: **EXISTING CONDITIONS & DEMOLITION PLAN**  
 TITLE: **EXISTING CONDITIONS & DEMOLITION PLAN**

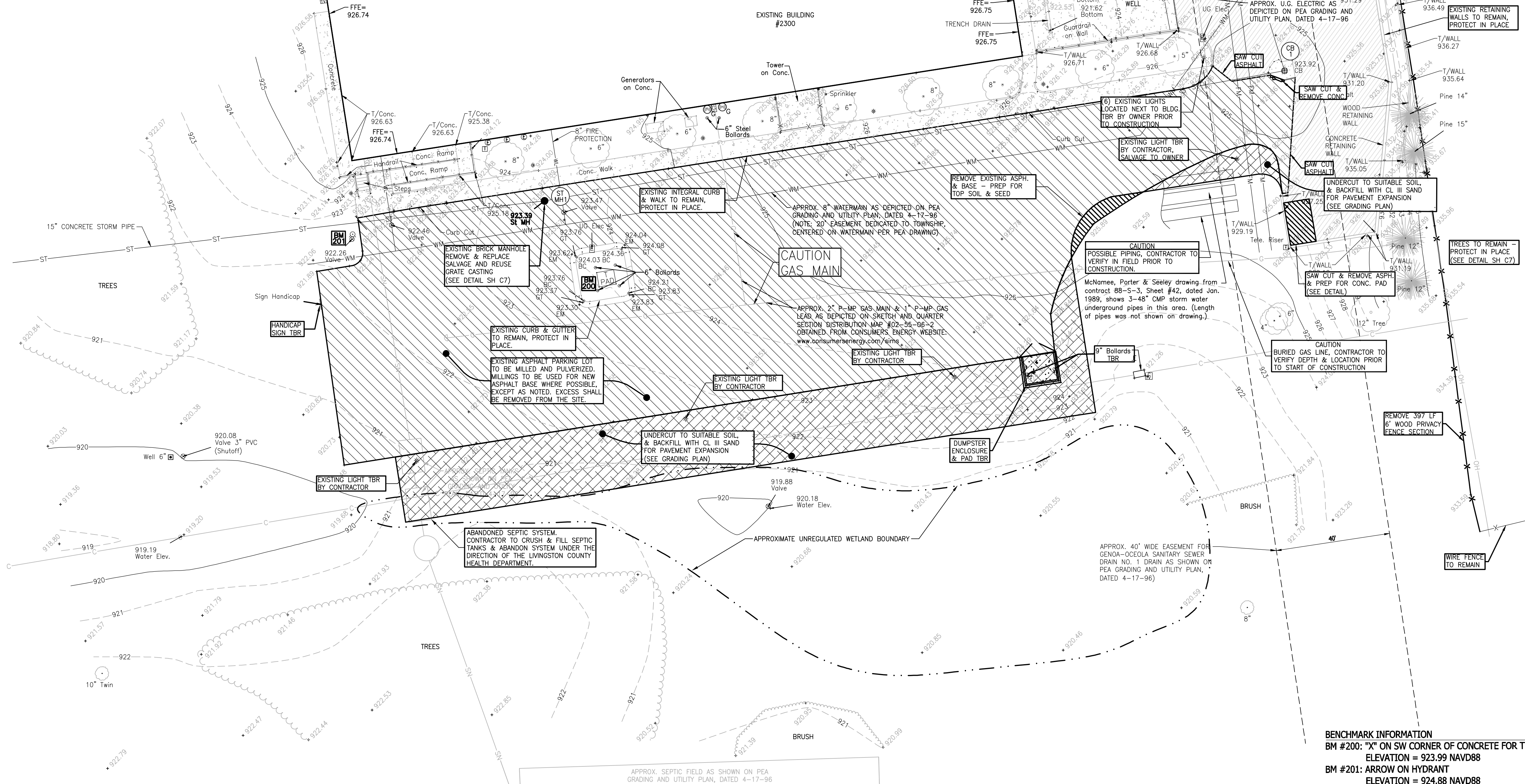
NO.	BY	DATE
1	GENOA TWP REVIEW	6/22/16
1	FOR BIDDING	6/13/16
1	NO BY	

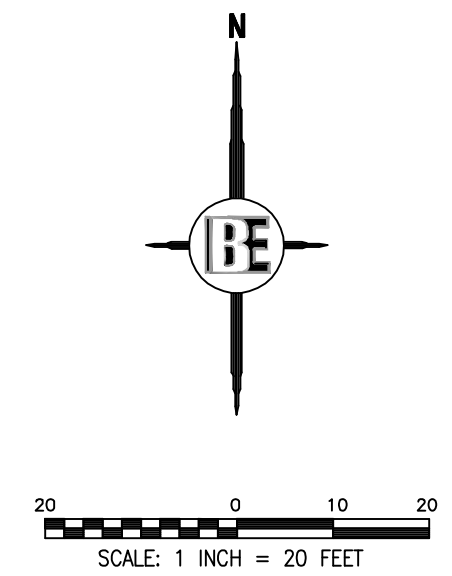
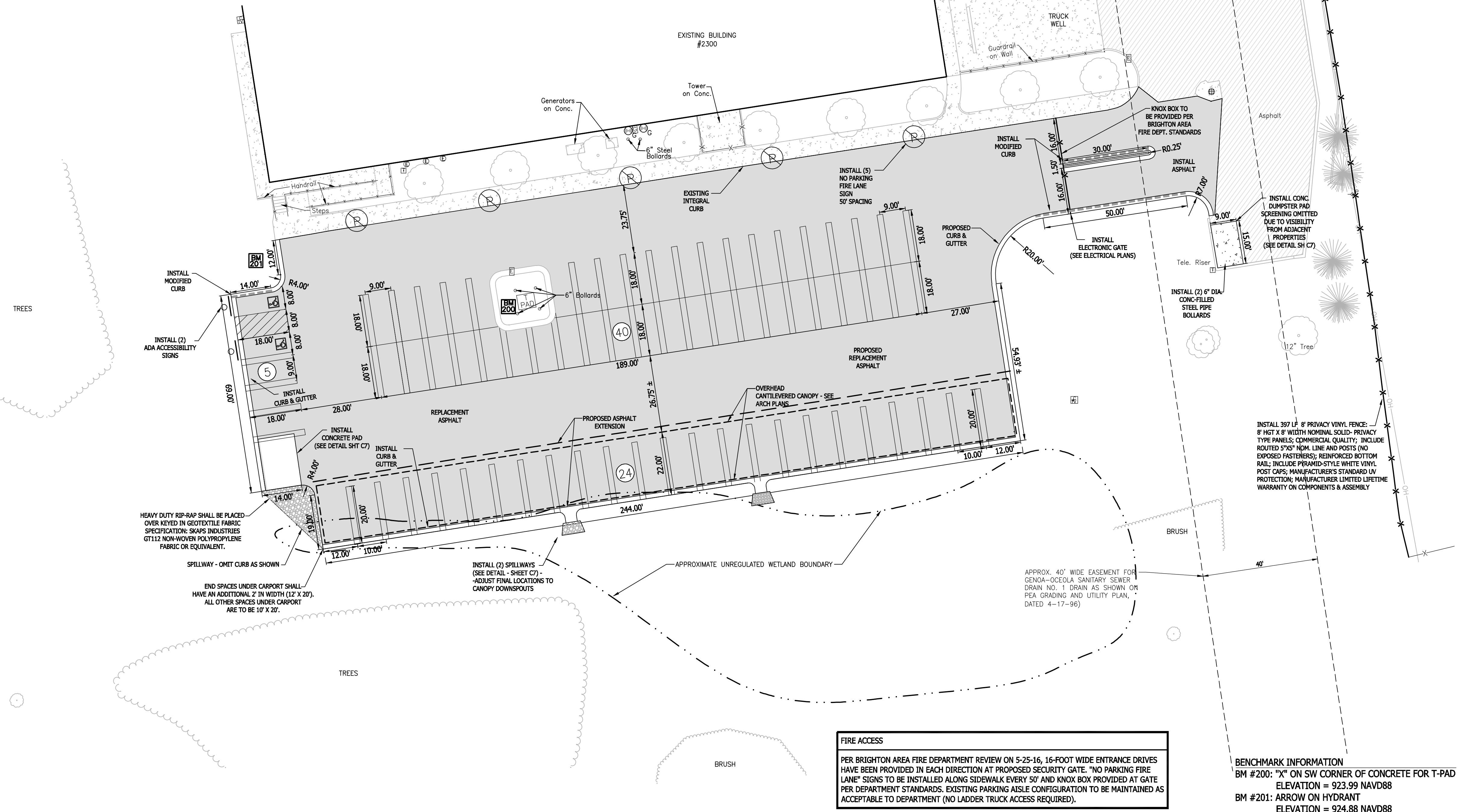
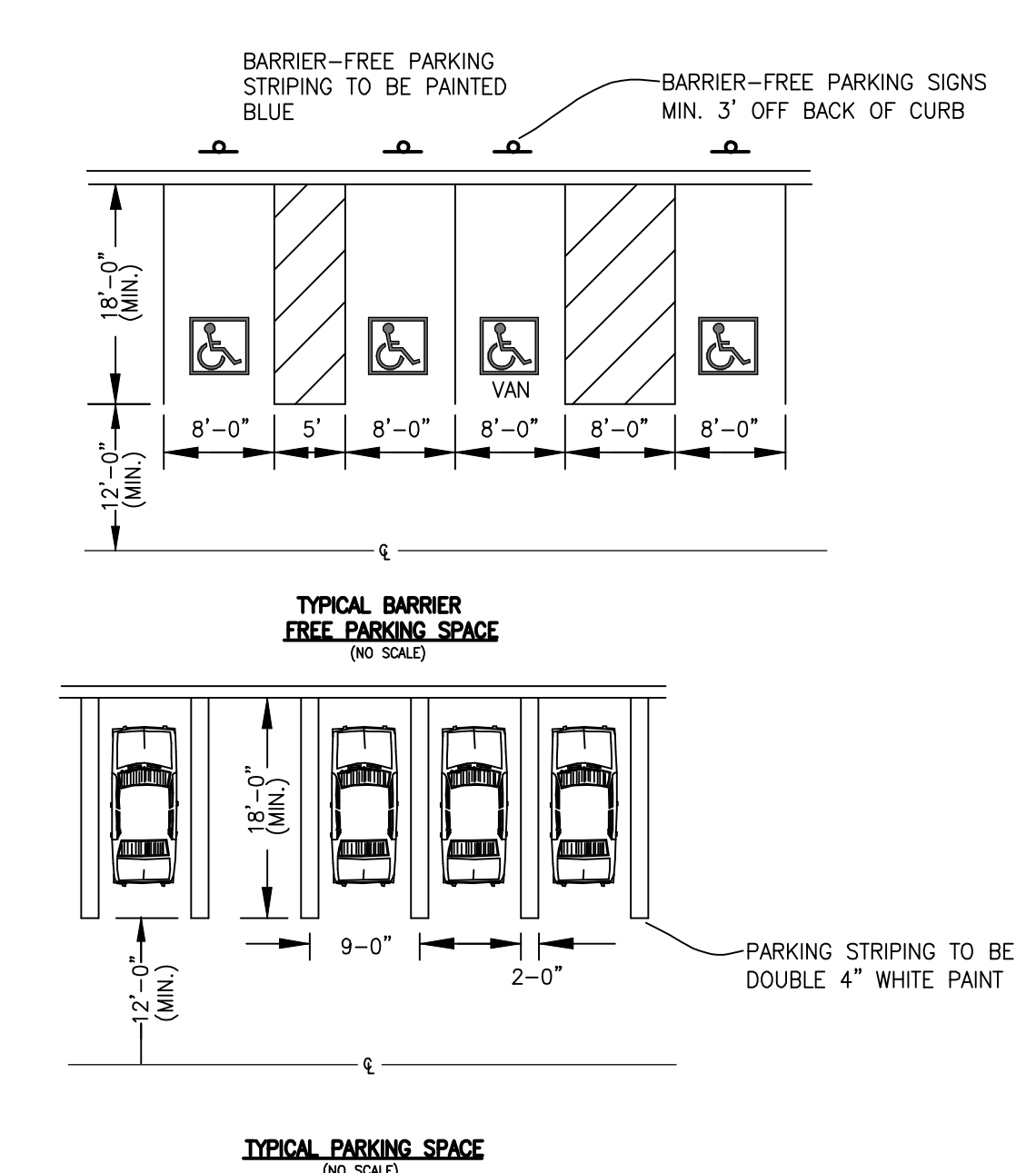
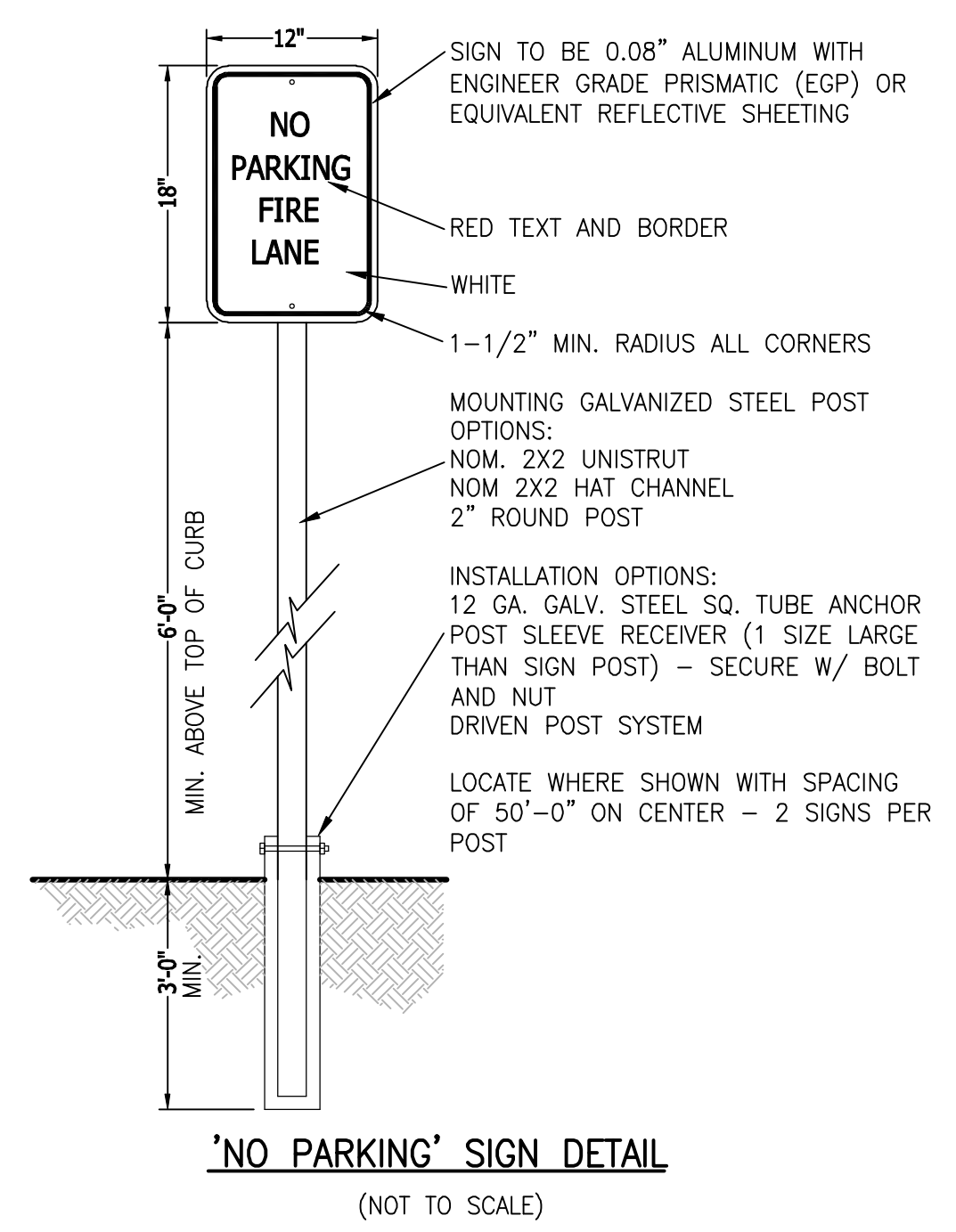
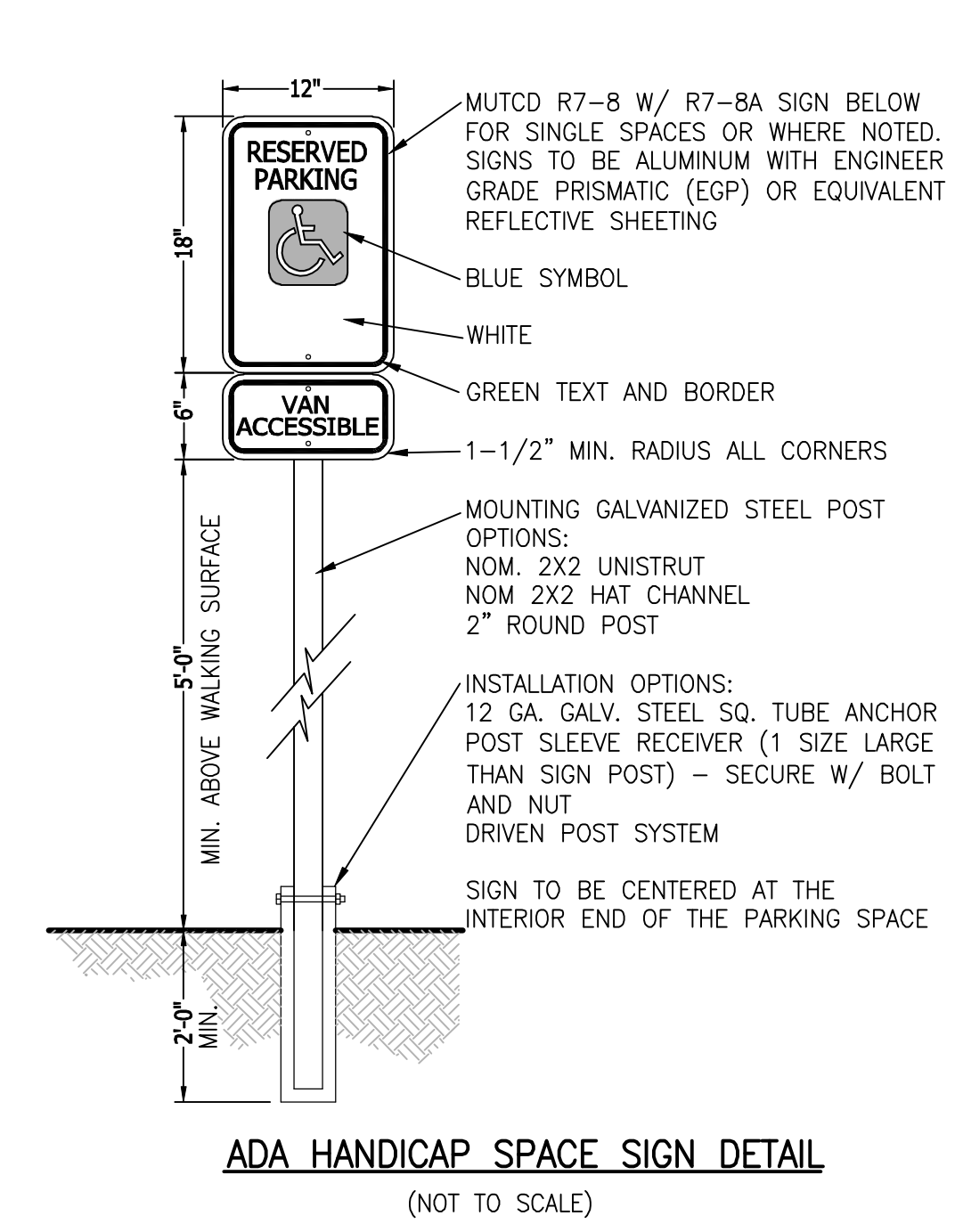
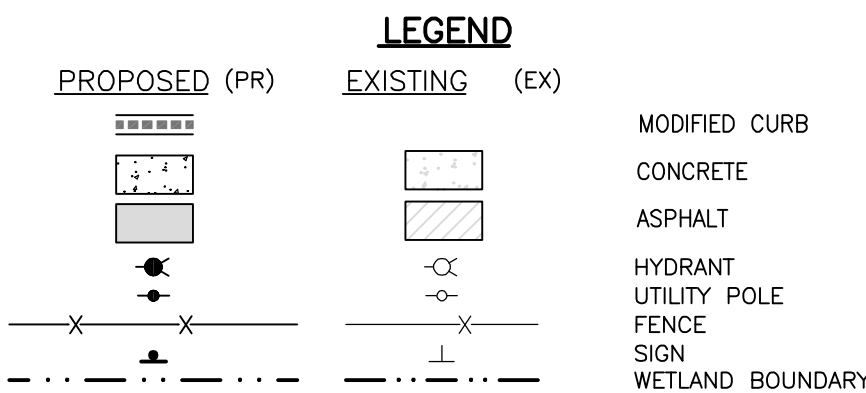
DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: AEB  
 CHECKED BY: \_\_\_\_\_  
 SCALE: 1" = 20'  
 JOB NO. 16-135  
 DATE 06/01/16  
 SHEET NO. **C3**

**BENCHMARK INFORMATION**  
 BM #200: "X" ON SW CORNER OF CONCRETE FOR T-PAD  
 ELEVATION = 923.99 NAVD88  
 BM #201: ARROW ON HYDRANT  
 ELEVATION = 924.88 NAVD88

**LEGEND**

900	EXISTING CONTOUR
922.00	EXISTING SPOT ELEVATION
OP	POWER POLE
I	GUY WIRE
TP	TRANSFORMER PAD
ER	ELECTRICAL RISER
EM	U.G. ELECTRIC MARKER
MT	ELECTRICAL METER
ACU	AIR CONDITIONING UNIT
LP	LIGHT POLE
OL	ORNAMENTAL LIGHT
W	WELL
H	HYDRANT
GV	GATE VALVE
WM	WATER MANHOLE
M	MANHOLE
SCB	STORM CATCH BASIN (BEEHIVE)
SCS	STORM CATCH BASIN (SQUARE)
SI	STORM INVERT
TR	TELEPHONE RISER
UTM	U.G. TELEPHONE MARKER
GM	GAS METER
GR	GAS RISER
UGM	U.G. GAS MARKER
CTR	CABLE TV RISER
UCM	U.G. CABLE TV MARKER
MB	MAILBOX
S	SIGN
DT	DECIDUOUS TREE
CT	CONIFEROUS TREE
SN	SANITARY SEWER
WM	WATER MAIN
ST	STORM SEWER
C	CABLE
G	GAS
OH	OVERHEAD WIRES
X	FENCE TO BE REMOVED
AS	ASPHALT
AM	ASPHALT MILLING
D	DEMOLITION
T	TREE TO BE REMOVED





THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE BY THE ENGINEER AS TO THE ACCURACY OF THE INFORMATION PROVIDED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION OF ALL UTILITIES AND PROVIDING UTILITY COORDINANCE IN THE FIELD PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR OTHER STRUCTURES CAUSED BY ANY CONSTRUCTION FROM THE PLANS.

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**LIVINGSTON COUNTY BUILDING DEPARTMENT**  
**LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC**

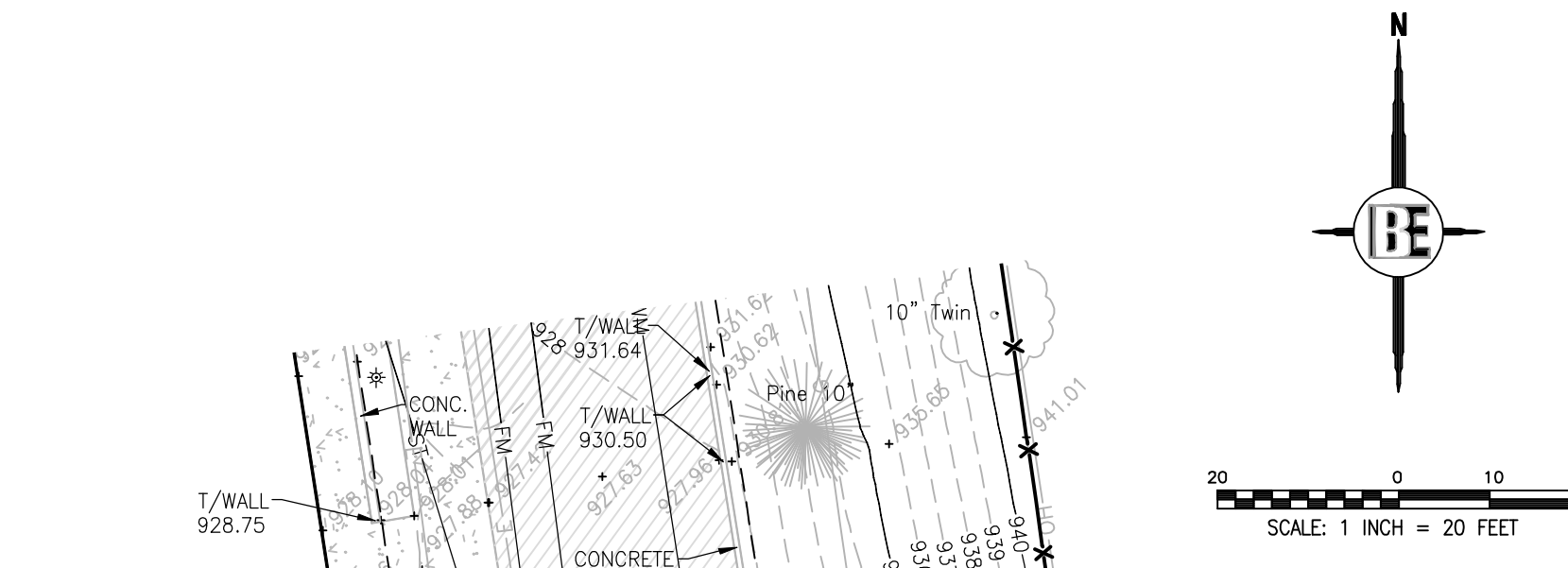
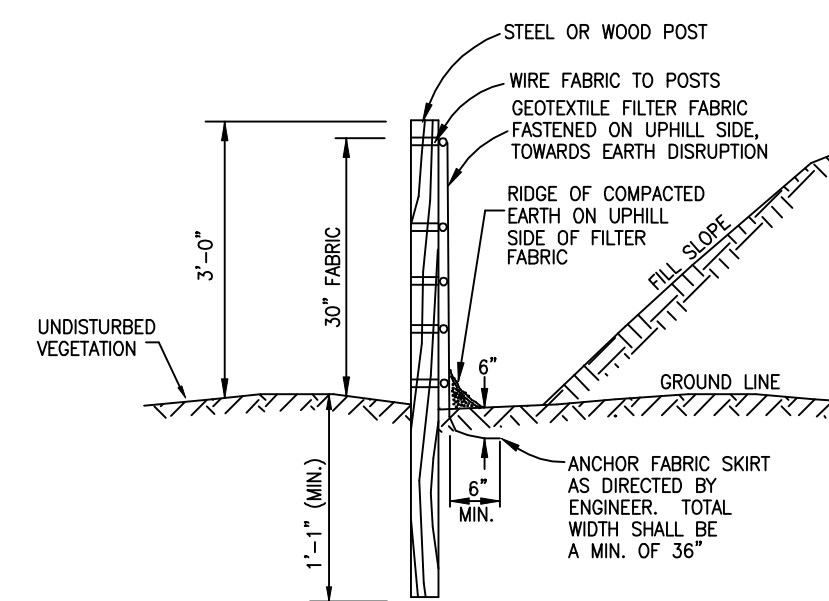
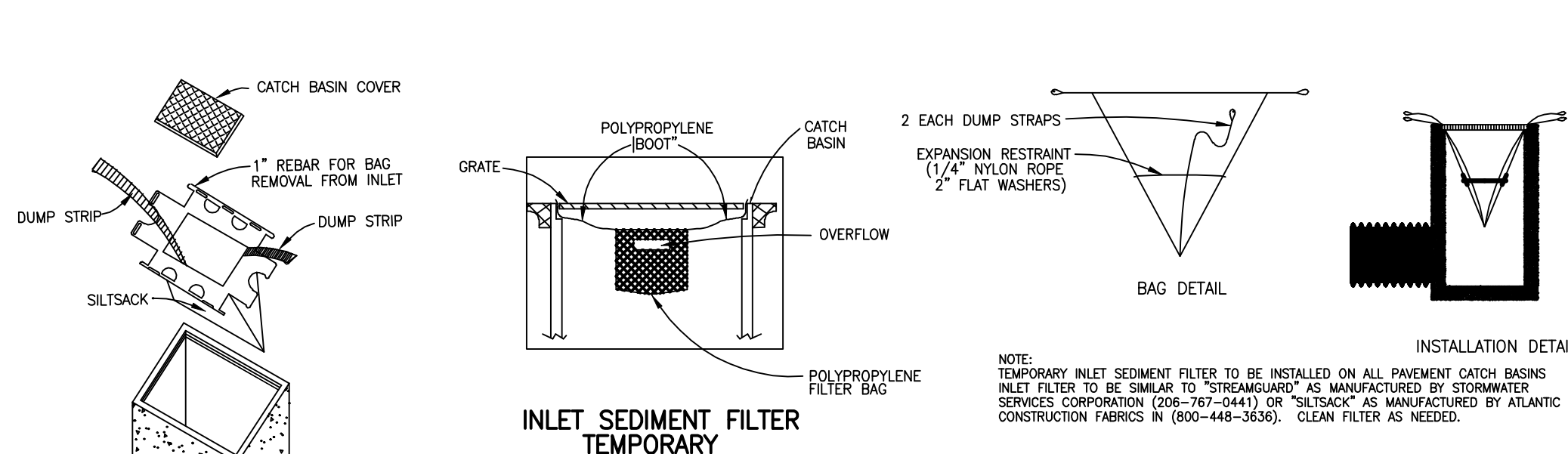
10465 CITATION DRIVE  
BRIGHTON, MI 48116  
810-227-5668

**SITE PLAN**

PROJECT:	PREPARED FOR:	TITLE:
6/22/16	6/13/16	DATE
1 KS	1 PC	NO. BY
DESIGNED BY: PC	DRAWN BY: KS	CHECKED BY:
SCALE 1" = 20'	JOB NO. 16-135	DATE 06/01/16
SHEET NO. <b>C4</b>		

**LEGEND**

PROPOSED (PR)	EXISTING (EX)	DESCRIPTION
900	900	CONTOUR
T/C	T/C	STORM DRAINAGE FLOW
XXX.XX	+ 922.08	SPOT ELEVATION
FG	FG	MODIFIED CURB
T/A	T/A	FINISHED GRADE ELEVATION
T/W	T/W	TOP OF ASPHALT
R/M	R/M	TOP OF CURB / CONCRETE
M/H	M/H	TOP OF WALK
CB	CB	RIM ELEVATION
HY	HY	MANHOLE STRUCTURE
UP	UP	CATCHBASIN STRUCTURE
	SN	HYDRANT
	ST	UTILITY POLE
	WM	SANITARY SEWER
	OH	STORM SEWER
	C	WATER MAIN
	E	OVERHEAD WIRE
	G	CABLE
	T	ELECTRIC
	○	TELEPHONE
	□	MANHOLE
	○	INLET / CATCHBASIN
	⊕	FLARED END-SECTION
	⊕	GATE VALVE
	⊕	HYDRANT
	⊕	UTILITY POLE
	⊕	FENCE
	⊕	SIGN
		STORM SEWER LABEL
		SOIL EROSION CONTROL MEASURE
		(P=PERMANENT, T=TEMPORARY)
		SILT FENCE
		LIMITS OF GRADING/CLEARING
		WETLAND BOUNDARY



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES AND PROVIDING UTILITY COORDINATES IN THE FIELD PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR STRUCTURES AS A RESULT OF ANY CONSTRUCTION FROM THESE PLANS.

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**GRADING & SOIL EROSION CONTROL NOTES:**

- ENGINEERED FILL TO BE BACKFILLED WITH SUITABLE EXCAVATED MATERIAL PLACED MAXIMUM 12" LIFTS AND COMPACTED TO 95% OF ITS UNIT WEIGHT.
- ALL GRADING SHOWN ON THIS SHEET SHALL BE DONE AS PART OF THIS CONTRACT.
- APPROPRIATE SOIL EROSION CONTROL MEASURES SHALL BE ESTABLISHED PRIOR TO CONSTRUCTION AND CONTINUOUSLY MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
- ENTIRE EXPANSION AREA TO BE STRIPPED OF TOPSOIL AND STOCKPILED.

**CONSTRUCTION SEQUENCE**

- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EROSION IS MINIMIZED AND THAT COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, AND ORDINANCES IS MAINTAINED THROUGHOUT EXECUTION OF THIS PROJECT.
- JULY 1. INSTALL SILT FENCE & INLET PROTECTION AS SHOWN ON PLANS.
  - JULY 2. SITE DEMOLITION.
  - AUGUST 3. ROUGH GRADE AND INSTALL MANHOLE.
  - SEPTEMBER 4. INSTALL CURB & GUTTER & PAVEMENT.
  - OCTOBER 5. INSTALL CARPORT STRUCTURE & LIGHTING.
  - OCTOBER 6. FINE GRADE, SPREAD TOPSOIL, SEED OR SOD AS APPLICABLE.
  - NOVEMBER 7. REMOVE ALL EROSION CONTROL STRUCTURES.
  - NOVEMBER 8. REMOVE ACCUMULATED SILT FROM ALL EXISTING DRAINAGE.

**CONTROLS & MEASURES NARRATIVE**

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

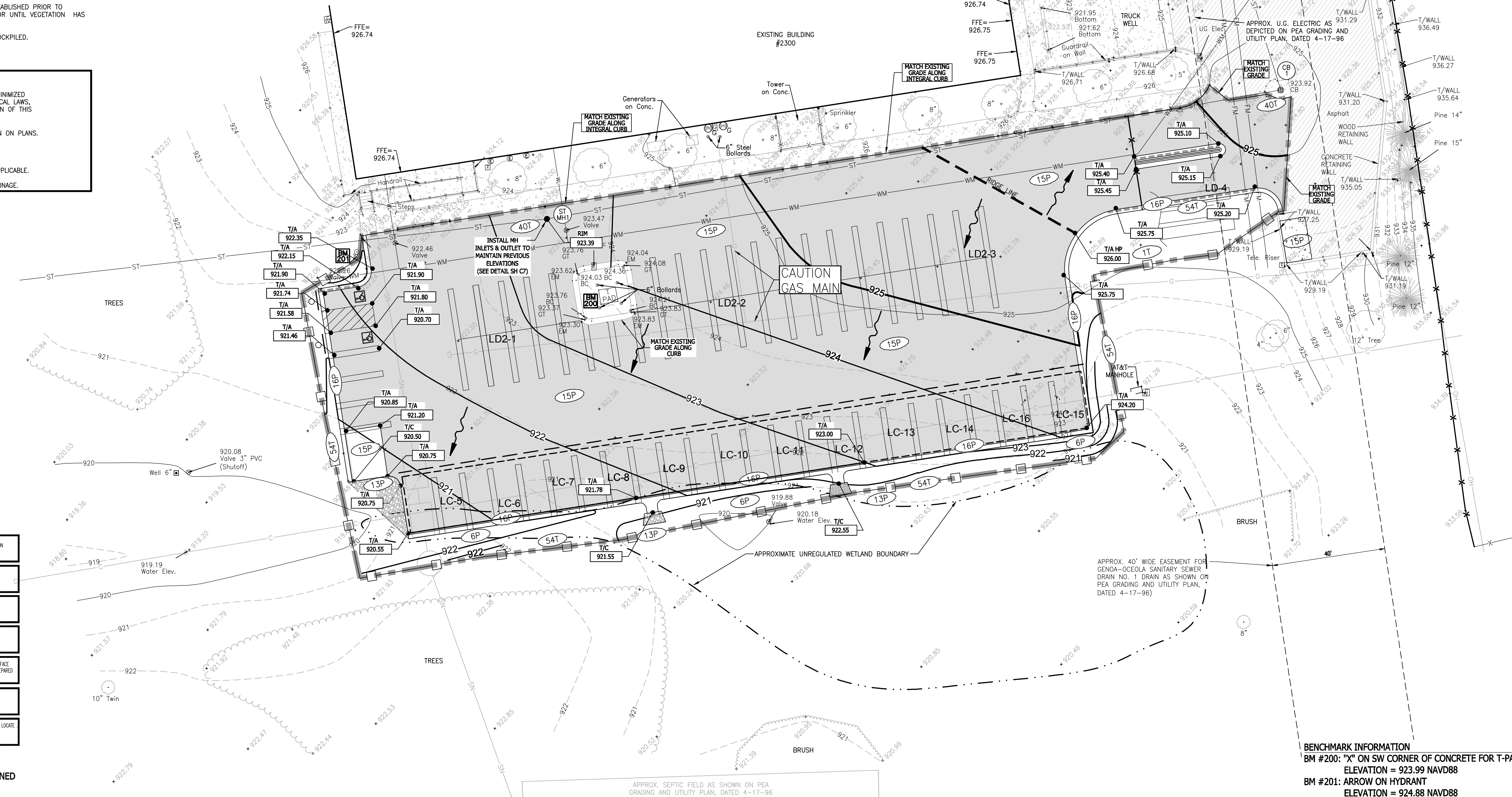
**CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE**

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

**SOIL EROSION CONTROL MEASURES**

<b>1</b>		TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION STOCKPILE SHOULD BE TEMPORARILY SEED.
<b>6</b>		FACILITATES ESTABLISHMENT OF VEGETATION COVER EFFECTIVE FOR ORGANISMS WITH LOW VELOCITY SOIL PLACES IN SMALL QUANTITIES BY INDEPENDENT PERSONNEL. SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.
<b>13</b>		USED WHERE VEGETATION IS NOT EASILY ESTABLISHED EFFECTIVE FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS FIGHTS RUNOFF TO REDUCE SOIL DISPERSED ENERGY FLOW AT SYSTEM OUTLETS.
<b>15</b>		PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY IRREGULAR SURFACE WILL HELP SLOW VELOCITY.
<b>16</b>		KEEPS HIGH VELOCITY RUNOFF ON PAVED AREAS FROM LEAVING PAVED SURFACE COLLECTS AND CONDUCTS RUNOFF TO ENCLOSED DRAINAGE SYSTEM OR PREPARED DRAINAGE.
<b>40</b>		EASY TO SHAPE COLLECTS SEDIMENT MAY BE CLEANED AND EXPANDED AS NEEDED.
<b>54</b>		USES GEOTEXTILE FABRIC AND POST OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE DETAIL THIS SHEET)

P = PERMANENT T = TEMPORARY  
TOTAL DISTURBED AREA = 0.83 AC (35,991 SF)  
NOTE: A SOIL EROSION CONTROL PERMIT WAIVER SHALL BE OBTAINED PRIOR TO CONSTRUCTION



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PROJECT: **LIVINGSTON COUNTY BUILDING DEPARTMENT**  
PREPARED FOR: **LINDHEUT ASSOCIATES ARCHITECTS, AIA, PC**

10465 CITATION DRIVE  
BRIGHTON, MI 48116  
810-227-5668

TITLE: **GRADING, DRAINAGE, & SOIL EROSION CONTROL PLAN**

NO.	BY	DATE
1	KS	6/22/16
2	PC	6/13/16
3	PC	06/01/16

DESIGNED BY: KS  
DRAWN BY: KS  
CHECKED BY:  
SCALE: 1" = 20'  
JOB NO. 16-135  
DATE 06/01/16  
SHEET NO. **C5**

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Symbol	Label	Qty	Catalog Number	Description	Lamp	File	Lumens	LLF	Watts
	LC	12	LITHONIA #XWMLD	4" WET LOCATION STRIPLIGHT, CLEAR PRISMATIC POLYCARBONATE LENS, 4000K	LED	XWMLD.ies	Absolute	0.95	23.7
□	LD	1	LITHONIA #DSXO LED 40C 700 50K TSM MVOLT	DSXO LED with 40 LEDs @530 mA, 5000K, Type 5 Medium Optics	LED	DSXO_LED_40 C_530_50K_T5 M_MVOLT.ies	Absolute	0.90	91
□	LD2	3	LITHONIA #DSXO LED 40C 700 50K TSM MVOLT	DSXO LED with 40 LEDs @530 mA, 5000K, Type 5 Medium Optics	LED	DSXO_LED_40 C_530_50K_T5 M_MVOLT.ies	Absolute	0.90	182

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
CARPOT AT GRADE	X	3.5 fc	5.7 fc	1.7 fc	3.4:1	2.1:1
PARKING & DRIVE AT 5'AFG	X	2.4 fc	3.6 fc	0.3 fc	12.0:1	8.0:1
PARKING & DRIVE AT GRADE	X	2.1 fc	3.1 fc	0.7 fc	4.4:1	3.0:1
SITE 5' AFG	+	1.3 fc	15.5 fc	0.0 fc	N/A	N/A
SITE AT GRADE	+	1.0 fc	5.7 fc	0.0 fc	N/A	N/A

No.	Label	X	Y	MH	Orientation	Tilt
1	LD2	53.1	81.7	20.0	-8.5	0.0
2	LD2	133.3	94.2	20.0	-8.5	0.0
3	LD2	222.2	108.1	20.0	-8.5	0.0
4	LD	317.7	127.6	20.0	-8.5	0.0
5	LC	37.2	23.7	10.0	-8.5	0.0
6	LC	57.0	26.7	10.0	-8.5	0.0
7	LC	76.7	30.2	10.0	-8.5	0.0
8	LC	96.5	33.0	10.0	-8.5	0.0
9	LC	116.1	36.1	10.0	-8.5	0.0
10	LC	136.0	39.3	10.0	-8.5	0.0
11	LC	155.6	42.4	10.0	-8.5	0.0
12	LC	175.4	45.5	10.0	-8.5	0.0
13	LC	195.1	48.8	10.0	-8.5	0.0
14	LC	214.8	51.9	10.0	-8.5	0.0
15	LC	234.3	55.3	10.0	-8.5	0.0
16	LC	234.7	55.0	10.0	-8.5	0.0

- NOTES**
- SEE MH COLUMN OF LUMINAIRE LOCATIONS FOR MOUNTING HEIGHTS.
  - SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTORS.
  - CALCULATIONS ARE SHOWN IN FOOTCANDLES AT GRADE & 5' AFG.

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

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

**FEATURES & SPECIFICATIONS**

**WETTED LED** - Wet location LED luminaire with a gasketed lens, sealed and protected from moisture. Wet location LED luminaire with a gasketed lens, sealed and protected from moisture. Wet location LED luminaire with a gasketed lens, sealed and protected from moisture.

**CONSTRUCTION** - Light pole, 4" x 6" hand hole with cover and lock. Wet location LED luminaire with a gasketed lens, sealed and protected from moisture.

**INSTALLATION** - Wet location LED luminaire with a gasketed lens, sealed and protected from moisture. Wet location LED luminaire with a gasketed lens, sealed and protected from moisture.

**TESTING** - Wet location LED luminaire with a gasketed lens, sealed and protected from moisture. Wet location LED luminaire with a gasketed lens, sealed and protected from moisture.

**WARRANTY** - Wet location LED luminaire with a gasketed lens, sealed and protected from moisture. Wet location LED luminaire with a gasketed lens, sealed and protected from moisture.

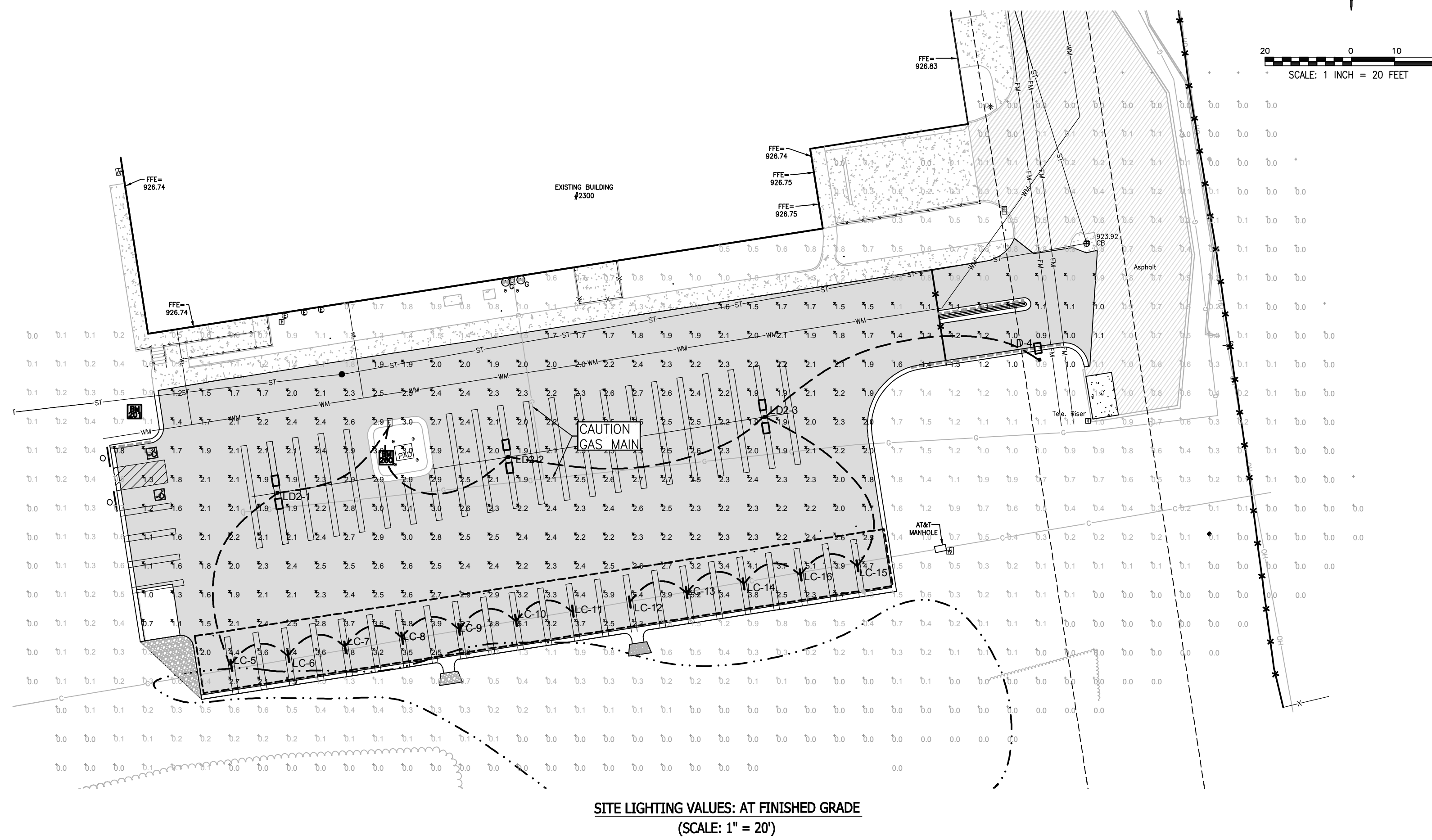
**Wet Location Striplight**

Specifications

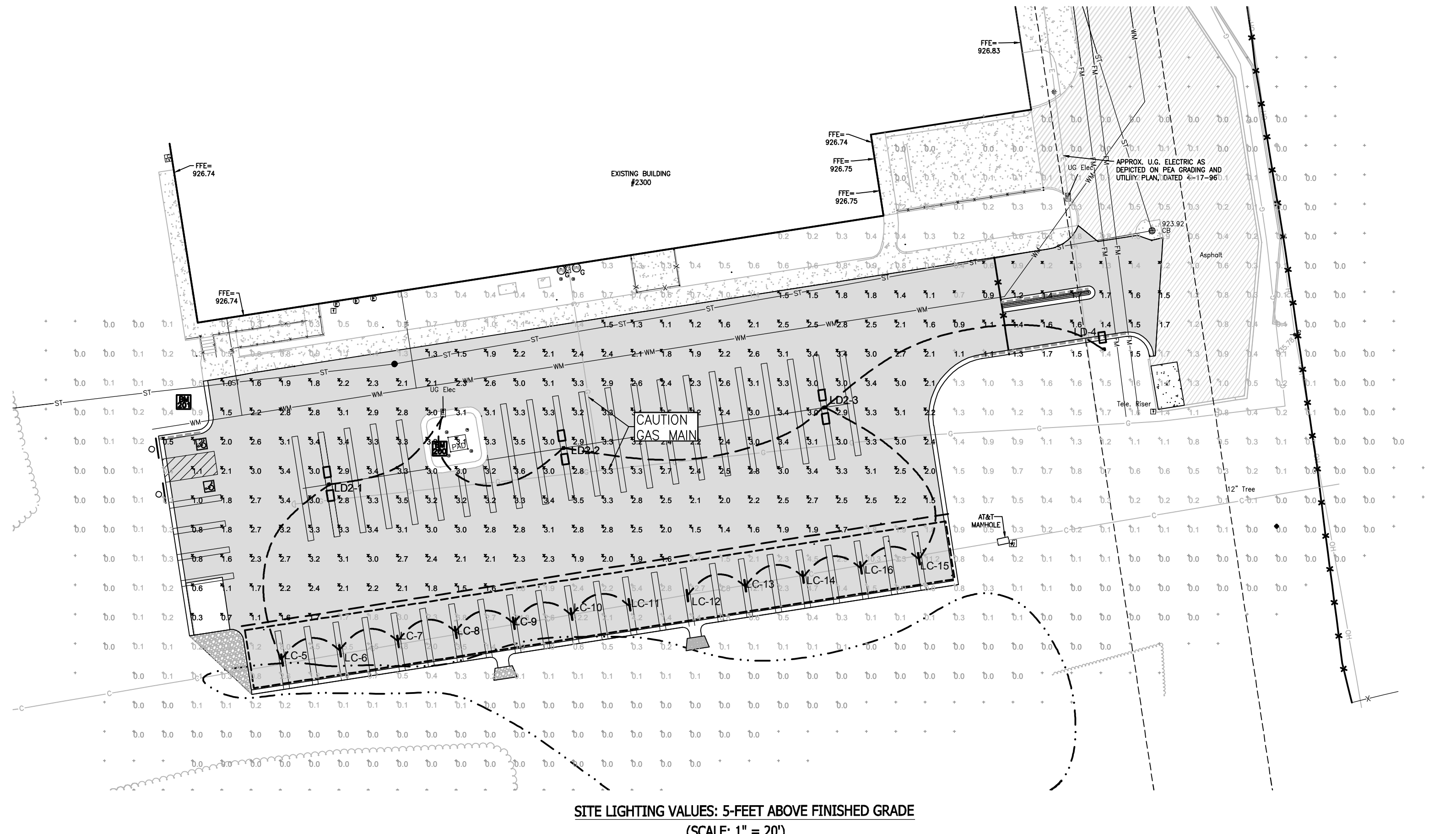
Label	Length	Width	Height	Weight	Power
LD2	12.00 ft	2.25 in	3.75 in	4.40 lb	10.00 W

Ordering Information

Label	Qty	Description	Lumens	Voltage	Color Temperature	Beam Spread	Standard Mount
LD2	1	LED Wet Location Striplight	1000	24	5000K	60°	1



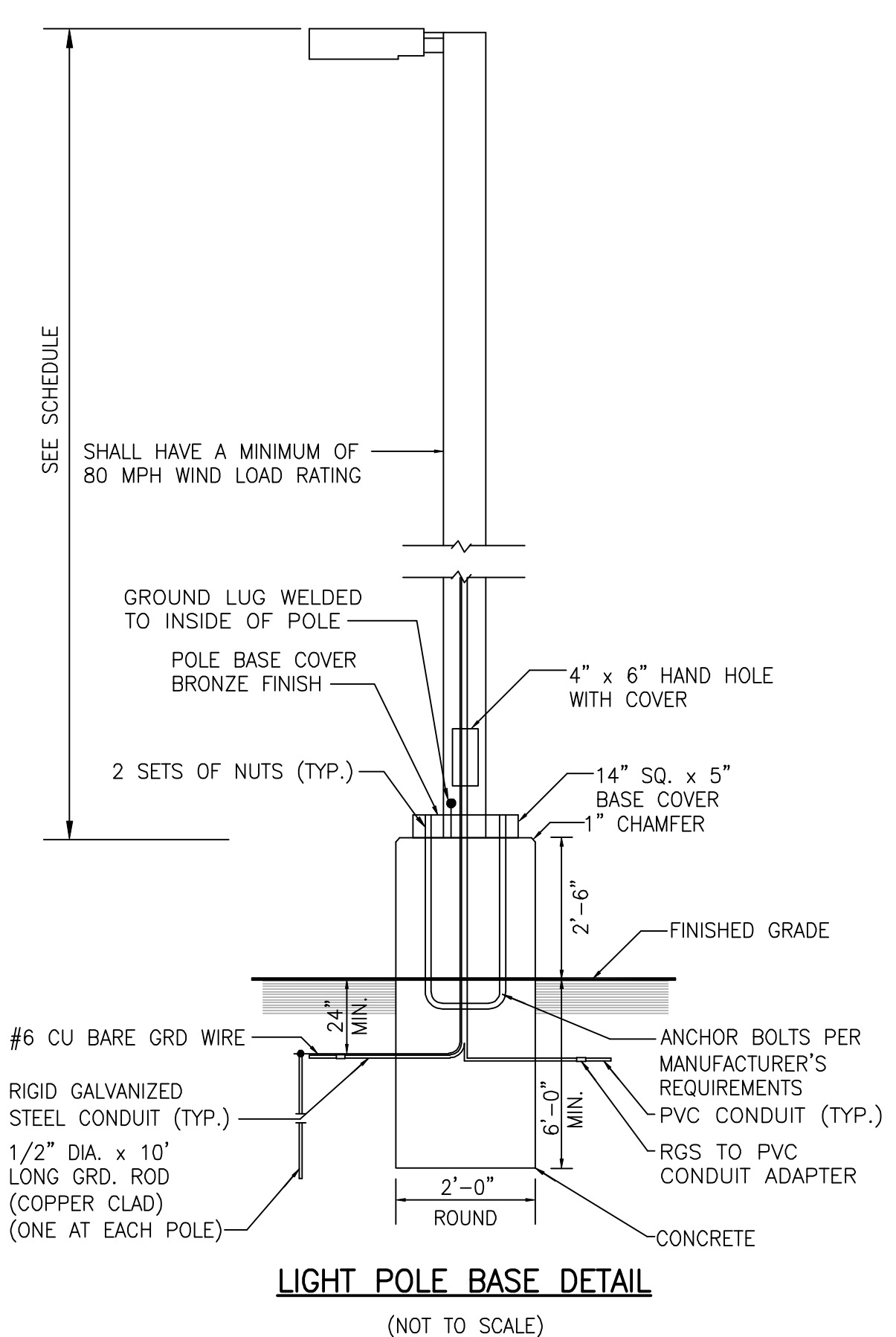
SITE LIGHTING VALUES: AT FINISHED GRADE  
(SCALE: 1" = 20')



SITE LIGHTING VALUES: 5- FEET ABOVE FINISHED GRADE  
(SCALE: 1" = 20')

**NOTE**  
SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION

**BENCHMARK INFORMATION**  
BM #200: "X" ON SW CORNER OF CONCRETE FOR T-PAD  
ELEVATION = 923.99 NAVD88  
BM #201: ARROW ON HYDRANT  
ELEVATION = 924.88 NAVD88



**LIGHT POLE BASE DETAIL**  
(NOT TO SCALE)

**D-Series Size 0 LED Area Luminaire**

**Specifications**

EPA: 100 lm/w  
Length: 24" (609.6 mm)  
Width: 1 1/2" (38.1 mm)  
Height: 7 1/2" (191.5 mm)  
Weight (max): 1.9 lb

**Introduction**

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its surroundings.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficiency, long-life luminaire. The outstanding photometric performance results in less wasted electricity, uniforming greater pole spacing and lower power density. It's ideal for replacing up to 40W metal halide with typical energy savings of 60% and expected service life of over 100,000 hours.

**Ordering Information**

EXAMPLE: DSXO LED 40C 1000 40K TSM MVOLT SPA DOB20

Label	Qty	Description	Lumens	Voltage	Color Temperature	Beam Spread	Standard Mount
LD2	1	LED Wet Location Striplight	1000	24	5000K	60°	1

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MICHIGAN STATE UNIVERSITY

**LIGHTING CALCULATIONS & SCHEDULED BY: GBA**

**Lighting Schedule**

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HOWELL, MI. 48843  
800.246.6735 FAX 517.548.1670

**LIVINGSTON COUNTY BUILDING DEPARTMENT**  
**LINDHOUT ASSOCIATES ARCHITECTS, AIA, PC**

PROJECT: 10465 CITATION DRIVE  
BRIGHTON, MI 48116  
810-227-5668

PREPARED FOR: **LIGHTING PHOTOMETRIC PLAN**

TITLE:

NO.	BY	REVISION PER	DATE
1	KS	GENOA TWP. REVIEW	6/22/16
1	PC	FOR BIDDING	6/13/16

DESIGNED BY: BW/JAB  
DRAWN BY:  
CHECKED BY:

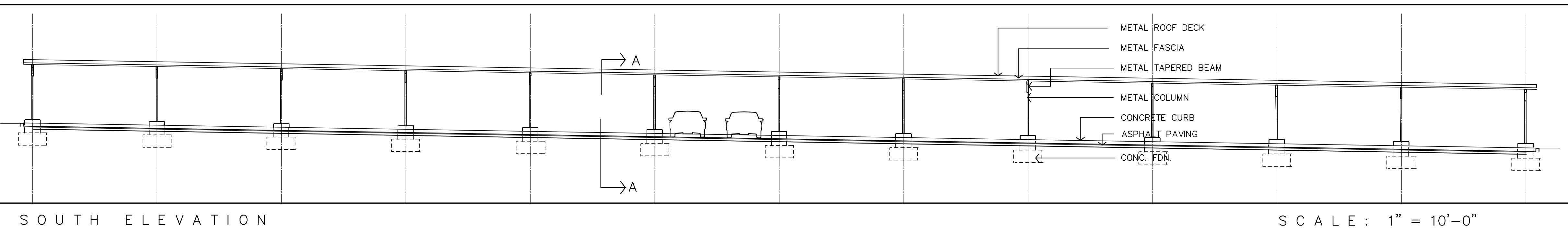
SCALE: 1" = 20'  
JOB NO. 16-135  
DATE 06/01/16

SHEET NO. **C6**



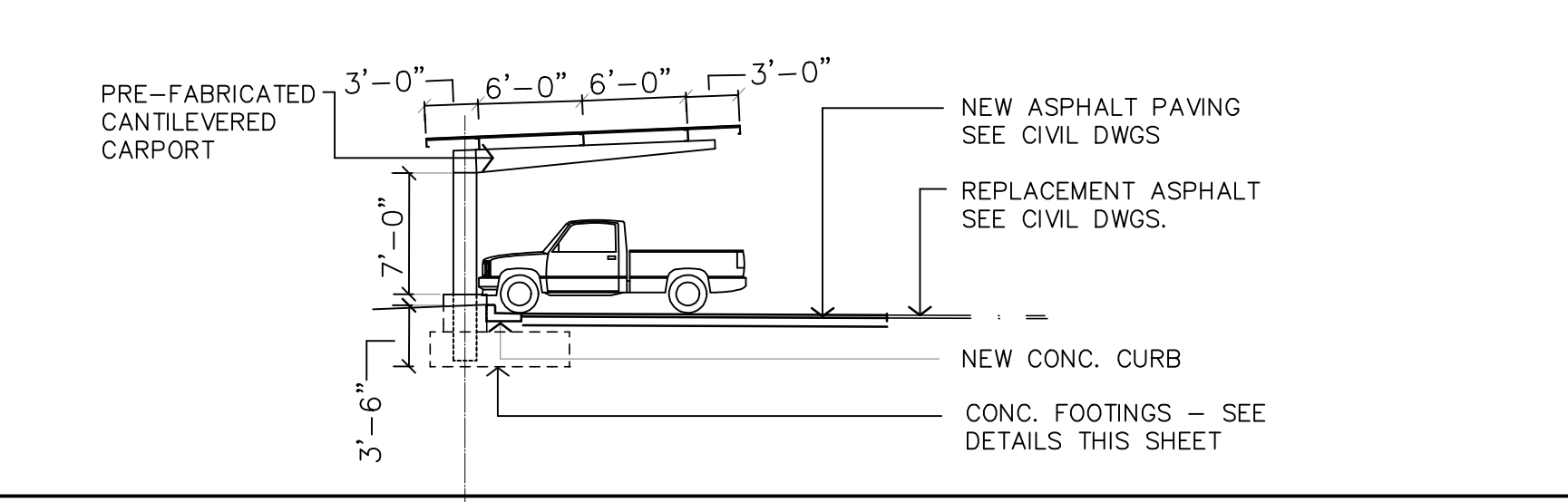
DATE PLOTTED: 6-4-2023

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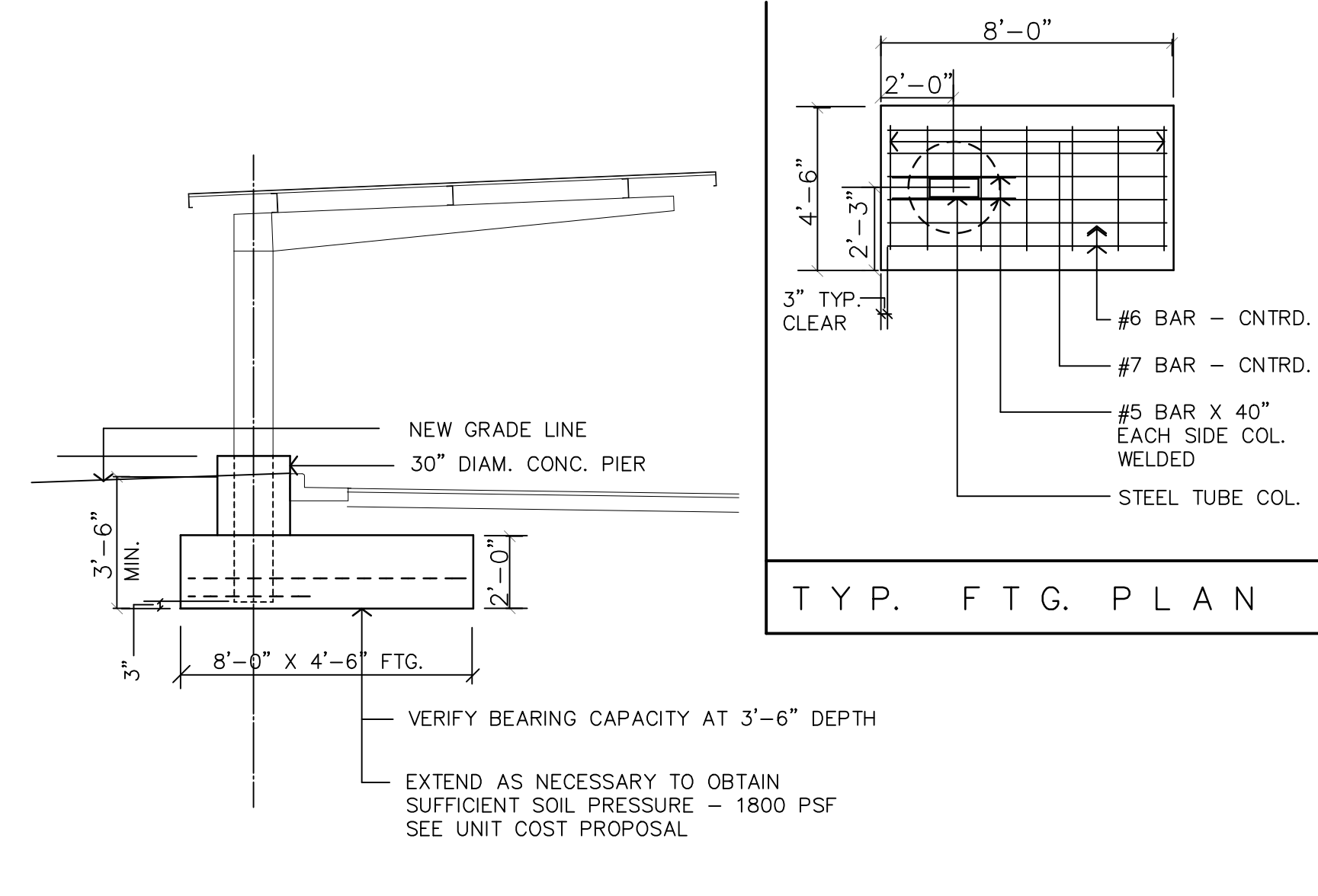


SOUTH ELEVATION

SCALE: 1" = 10'-0"

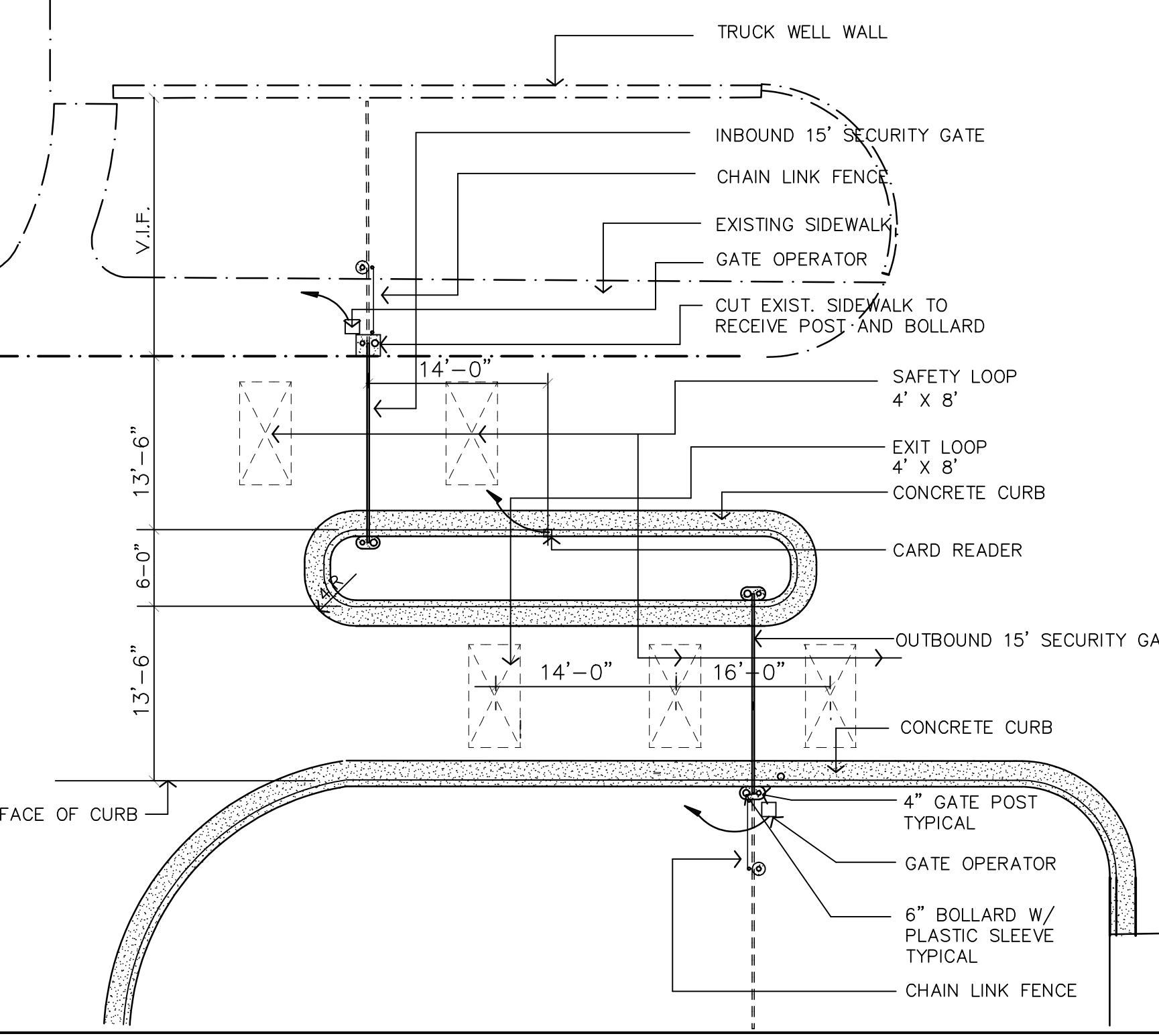


SECTION "A-A" THRU CARPORT 1" = 10'-0"

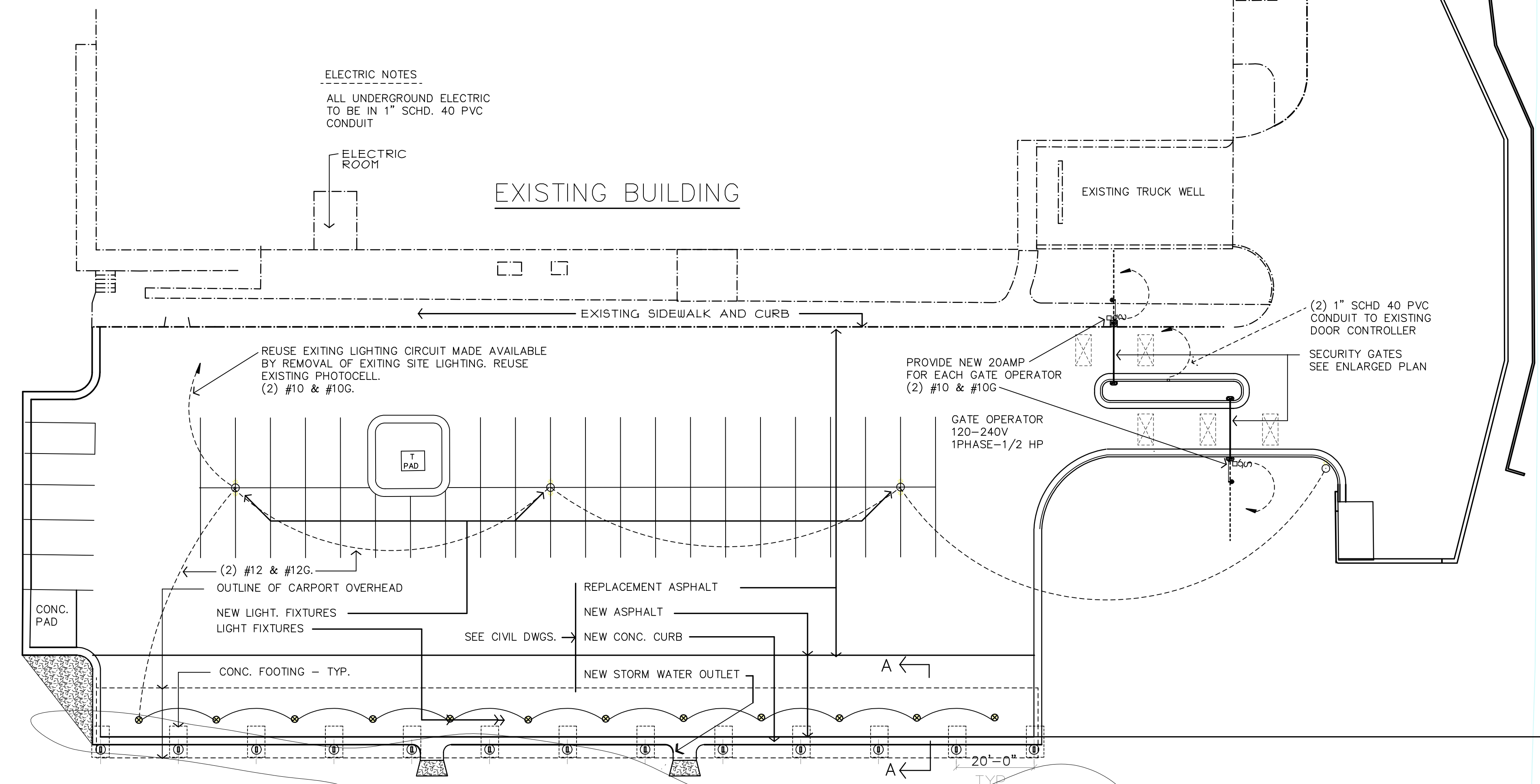


TYP. FTG. PLAN

CONCRETE FOOTING DETAIL 1" = 5'-0"



SECURITY GATE SCHEMATIC 1" = 10'-0"



**ELECTRIC NOTES**  
ALL UNDERGROUND ELECTRIC TO BE IN 1" SCHD. 40 PVC CONDUIT

EXISTING BUILDING

EXISTING TRUCK WELL

(2) 1" SCHD 40 PVC CONDUIT TO EXISTING DOOR CONTROLLER  
SECURITY GATES SEE ENLARGED PLAN

PROVIDE NEW 20AMP FOR EACH GATE OPERATOR (2) #10 & #10G

GATE OPERATOR 120-240V 1PHASE-1/2 HP

REUSE EXISTING LIGHTING CIRCUIT MADE AVAILABLE BY REMOVAL OF EXISTING SITE LIGHTING. REUSE EXISTING PHOTOCELL. (2) #10 & #10G.

REPLACEMENT ASPHALT

NEW ASPHALT

NEW CONC. CURB

NEW STORM WATER OUTLET

SEE CIVIL DWGS.

(2) #12 & #12G.

OUTLINE OF CARPORT OVERHEAD

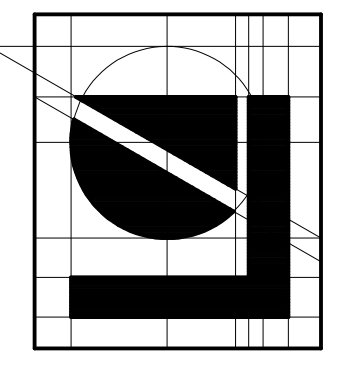
NEW LIGHT. FIXTURES

CONC. FOOTING - TYP.

CONC. PAD

CONC. FDN.

SCALE: 1" = 20'-0"



**Lindhout Associates**  
architects aia pc  
10465 citation drive, brighton, michigan 48116-9510  
www.lindhout.com (810)227-5668 fax: (810)227-5655

consultant

issued for  
BIDDING REVIEW

4-14-14 date  
4-13-14 date  
wpl  
hjk  
ck'd: hjk  
app'd: hjk

PROJECT DESCRIPTION for:  
**EAST COMPLEX SITE**  
BRIGHTON, MICHIGAN  
**PLAN AND DETAILS**

**A.1**  
16037



GENOA CHARTER TOWNSHIP  
Application for Site Plan Review

GENOA TOWNSHIP

MAY 31 2016

RECEIVED

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

APPLICANT NAME & ADDRESS: SRM Associates LLC / Bob Maxey Ford  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: SRM Associates LLC / Mike Maxey - <sup>Partner</sup>

SITE ADDRESS: 2798 E Grand River PARCEL #(s): \_\_\_\_\_

APPLICANT PHONE: (517) 545-5700 OWNER PHONE: ( ) \_\_\_\_\_

OWNER EMAIL: mmaxey@bobmaxey.com

LOCATION AND BRIEF DESCRIPTION OF SITE: Ford Auto dealership  
on E Grand River

BRIEF STATEMENT OF PROPOSED USE: Auto dealership is looking  
to expand parking lot on vacant land that  
is adjacent to existing parking lot to make  
the display of new car inventory better

THE FOLLOWING BUILDINGS ARE PROPOSED: NONE

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: Michael Maxey

ADDRESS: 2798 E Grand River Howell MI 48843



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

1.) Mike Maxey of SRM Associates LLC at mmaxey@bobmaxey.com  
Name Business Affiliation Bob Maxey Ford 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 Michael Maxey DATE 5-18-16  
PRINT NAME Michael Maxey PHONE 517-545-5700  
ADDRESS 2798 E Grand River Howell MI 48843

June 30, 2016

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
<b>Subject:</b>	Maxey Ford Parking Lot Addition – Site Plan Review #2
<b>Location:</b>	2798 E. Grand River Ave. – South side of Grand River Avenue, west of Tahoe Boulevard
<b>Zoning:</b>	GCD General Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised site plan (dated 6/22/16) for an expanded new vehicle parking area for the Maxey Ford dealership located at 2798 E. Grand River Avenue. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance.

**A. Summary**

1. The applicant should be aware that they are approaching the maximum impervious surface coverage allowed for the site.
2. We encourage the applicant to provide additional plantings and bring the site closer to compliance with the requirements of Section 12.02.
3. Additional details are needed to confirm compliance with the Buffer Zone A requirements south of the project area.
4. We suggest the applicant provide a 6-foot tall screen wall north and west of the project area as the required buffer/screen.
5. Township Board approval is required for the gravel storage lot.
6. There is a discrepancy between the site plan and Impact Assessment with respect to the number of vehicle spaces in the proposed storage lot.

**B. Proposal/Process**

The applicant requests site plan review and approval for new vehicle parking area. The applicant indicates that use of the 141 spaces will be as “a holding area prior to vehicles being sold.”

Automobile dealerships are special land uses in the GCD; however, the proposal is a minor amendment to an existing special use per Section 19.06. Therefore, the request requires only site plan review and approval at this time.

**C. Site Plan Review**

1. **Dimensional Requirements.** Given the scope of the proposed project, the only dimensional standards impacted are side parking setbacks and impervious surface coverage, all of which are met.

For the applicant’s future consideration, it is worth noting that the resulting impervious surface ratio of 74% is approaching the 75% maximum for this site.



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

2. **Vehicular Circulation.** No changes are proposed to the existing ingress/egress for the dealership, which consists of 3 driveways (1 of which is shared with the adjacent parcel to the west).
3. **Landscaping.** The submittal does not propose any new landscaping as part of the project.

Based on the information provided, the development is currently deficient in terms of landscaping for greenbelts, parking lot landscaping, buffer zones and the retention pond. We encourage the applicant to provide additional plantings and bring the site closer to compliance with the requirements of Section 12.02.

4. **Use Requirements.** Automobile dealerships are subject to the requirements of Section 7.02.02(c). Given the relatively limited scope of the project, these requirements are generally either met or not impacted by the project. However, there are screening requirements for outdoor storage areas and Township approval is required for gravel storage lots.

More specifically, a Buffer Zone A is required to the south (adjacent to residential), while a Buffer Zone B is required north and west of the project area.

The area to the south contains existing vegetation, including 10 trees shown on the plan; however, there is not enough detail to determine full compliance (additional plantings, berming, screen wall, etc.).

There is no screening (existing or proposed) north or west of the project area. The Ordinance allows the Planning Commission to permit a 6-foot tall screen wall or 4-foot landscaped berm in lieu of the full Buffer Zone B requirements. Given the limited space available, we suggest the applicant utilize the screen wall option to the north and west.

Lastly, the Township Board may approve a gravel storage lot based on a recommendation from the Planning Commission and Township Engineer “upon a finding that neighboring properties and the environment will not be negatively impacted.”

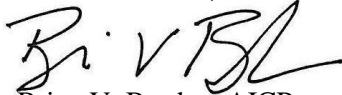
5. **Exterior Lighting.** The submittal includes a lighting plan proposing 4 new light poles, each with double fixtures. The photometric plan complies with maximum lighting intensities both on-site and along property lines. A detail on Sheet C8 notes the use of downward directed, cut-off LED fixtures.
6. **Impact Assessment.** The submittal includes a revised Impact Assessment (dated June 22, 2016). In summary, the Assessment notes that the project is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

For the sake of accuracy and consistency, we do note that the Impact Assessment states that the storage lot is for 146 vehicles, while the plan provides for 141.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at [borden@lslplanning.com](mailto:borden@lslplanning.com).

Respectfully,

**LSL PLANNING, A SAFE BUILT LLC COMPANY**



Brian V. Borden, AICP  
Planning Manager



July 6, 2016

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Maxey Ford Parking Lot Expansion  
Site Plan Review #2**

Dear Ms. Van Marter:

We have received the resubmitted impact assessment and site plan documents for the referenced project from Boss Engineering dated June 22, 2016. The site is located on an 11.27 acre parcel on the south side of Grand River Avenue and the petitioner is proposing to build an approximately 42,000 sft expansion to the existing parking lot on the west side of the property.

Tetra Tech reviewed the documents and found all outstanding items have been addressed.

Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Markstrom'.

Gary J. Markstrom, P.E.  
Unit Vice President

A handwritten signature in blue ink, appearing to read 'Joseph C. Siwek'.

Joseph C. Siwek, P.E.  
Project Engineer

Copy: Mike Maxey



# BRIGHTON AREA FIRE AUTHORITY

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

June 28, 2016

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Bob Maxey Ford Parking Lot Expansion  
2798 E. Grand River  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on June 27, 2016 and the drawings are dated June 22, 2016. The project is for the proposed addition of outdoor vehicle parking/storage lot. The lot will extend from the existing lot. The plan review is based on the requirements of the International Fire Code (IFC) 2015 edition.

1. The access drive shall be a minimum of 26' wide and shall be constructed to be capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds. **(There are no dimensions provided for the drives and detail for surface must indicate its weight carrying capability)**

IFC D 103.6

IFC D 103.1

IFC D 102.1

IFC D 103.3

2. Access shall provide emergency vehicles with turning radius of 30' inside and 50' outside and maintain a minimum vertical clearance of 13 ½ feet. Provide vehicle circulation plan from the existing drive through the new parking area. **(No circulation was provided for emergency vehicles through new parking area, therefore radii cannot be determined as sufficient)**
3. Provide names, addresses, phone numbers, emails of owner or owner's agent, contractor, architect, on-site project supervisor. **(Contractor info is not provided)**

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".

Capt. Rick Boisvert, CFPS  
Fire Inspector

**IMPACT ASSESSMENT  
FOR  
BOB MAXEY FORD DEALERSHIP EXPANSION  
  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**Bob Maxey Ford  
2798 E. Grand River  
Howell, Michigan 48843  
517.545.5700**

Prepared by:

**BOSS ENGINEERING COMPANY  
3121 E. GRAND RIVER  
HOWELL, MICHIGAN 48843  
517-546-4836**

**June 22, 2016**

## INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development has on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Written Impact Assessment Requirements* guidelines in accordance with Section 18.07 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

## DISCUSSION ITEMS

### **A. Name(s) and address(es) of person(s) responsible for preparation of the impact assessment and a brief statement of their qualifications.**

Prepared By:  
BOSS ENGINEERING COMPANY  
3121 E. Grand River  
Howell, Michigan 48843

Prepared For:  
Bob Maxey Ford  
2798 E. Grand River  
Howell, Michigan 48843

### **B. Description of the site, including existing structures, man made facilities, and natural features, all-inclusive to within 100' of the property boundary.**

Bob Maxey Ford is located on 11.7 acres on the south side of Grand River Avenue between Tenpenny Furniture to the west and Howell Elks Lodge to the east. Approximately 7.1 acres of the property is currently being used by the automobile dealership. The remainder of the site (4.6 acres) has been left in its natural state and undeveloped except for a retention basin in the southwest corner of the property.

The property is at a high point along Grand River Avenue with a majority of it sloping south and west to the existing retention basin area. A portion of the property sheet flows to the east. The total elevation change across the property is approximately 32 feet. The undeveloped portion of the property is covered with scattered trees, brush and native grasses.

Existing utilities on-site and abutting the site include a 12" water main along the south side of Grand River Ave., and an 8" water main running through the center of the property. The sanitary sewer service is provided to the dealership through a sanitary lead which connects to the public sewer located near the southeast corner of the property. The storm sewer system is self contained on site.

Grand River Avenue is a five (5) lane roadway under the jurisdiction of the Michigan Department of Transportation (M.D.O.T.) with curb and gutter, and a center left turn lane.

Also, a small portion of the existing parking lot currently extends into the Grand River Avenue right-of-way by 4 feet. Section 24.10 of the Genoa Township Ordinance states "Where a non-conforming front setback, parking lot setback or green belt is created as a result of additional road right-of-way width being acquired by a road agency, the building or parking lot may be improved or expanded without the need to obtain a variance from the ZBA, providing the following conditions are met:"

1. Conformed Prior to Right-of Way Widening – Even though Boss Engineering has been working on the site since 1998, we do not have any record of the original site plan and how it related to



the Grand River right-of-way. The asphalt was installed prior to the previous owner purchasing the dealership which was in 1996.

2. Will Not Decrease Conformity – Our plan is to leave the front area untouched. Therefore, not decreasing the conformity.

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

As previously mentioned, the subject site slopes gradually from Grand River towards the southwest. The U.S.D.A. Soil Conservation Service "Soil Survey of Livingston County" indicates the soils to be as follows:

Percent of Site	Name	Percent Slopes
100%	Miami Loam	2-6%

The site contains no streams, creeks, lakes or regulated wetlands per the National Wetland Inventory Plan prepared by the United States Department of the Interior, and site visit.

The undeveloped portion of the site contains a mix of trees, brush and grasses.

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

Most of the existing storm drainage runoff is captured in a retention basin located at the southwest corner of the property. The dealership is proposing expanding the area for their new auto parking area. The area where the expansion is proposed currently and will continue to drain into the existing retention basin. The existing storm water forebay will treat the initial runoff per the requirements of the Livingston County Drain Commission requirements.

The Livingston County Drain Commissioner must issue a Soil Erosion Control permit to ensure proper soil erosion control measures are used during construction. All requirements will be met including temporary drainage control, temporary dust control and runoff control. The following methods will be used as required, diversion berms, geotextile sediment control fences, diversion ditching, and slope stabilization. Stone filters will be installed on catch basins, inlets and pipe inlets. Finish grades, redistribution of top soil and lawn will be installed upon paving construction completion. Pavements, swales, basins, etc will be cleaned after construction and properly maintained by Maxey Ford.

At the time of construction, there may be some temporary dust, noise, vibration and smoke, but these conditions will be of relatively short duration and shall be controlled by applying appropriate procedures to minimize the effects, such as watering if necessary for dust control and working near adjacent buildings only during daytime hours.

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

The owner is proposing to construct an expanded new vehicle parking area between the existing commercial development along Grand River Avenue and the retention basin. This would add an additional 146 parking spaces. This would be a holding area prior to vehicles being sold. Therefore, the amount of traffic in and out of this area would be minimal. Also, the parking area

was pushed as far north as possible towards the existing commercial development along Grand River Avenue in order to minimize the impact to the residence to the south.

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

The improvements will have little or no effect on the existing infrastructure and services in the area.

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

Except for a short run of storm sewer, no additional utilities will be added as part of this project.

Because the storm sewer system is located entirely on the site, limited impact is anticipated from storm events.

**H. Storage or handling of any hazardous materials: Description of any hazardous materials used, stored, or disposed of on-site.**

The automobile fluids (new and used) kept on site will be stored or disposed of in accordance with current local, state and federal requirements.

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

Based on the Institute of Transportation Engineers Publication TRIP GENERATION manual for automobile care centers, the number of trips in an average weekday is 1500, with the peak being between 4:00 PM and 6:00 PM.

**Traffic Impact Statement**

Bob Maxey Ford is located on Grand River Avenue which is under the jurisdiction of the Michigan Department of Transportation. The five lane road has two west and two east bound lanes with a center turn. Michigan Department of Transportation has no plans to make any modifications to the current configuration of the road.

There are three drive approaches onto the site from Grand River. The first two are on either side of the new vehicle showroom, and the final drive approach is a shared approach with the development to the west. No improvements are proposed for the three approaches.

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

None

**K. Description of all sources:**

- Genoa Township's Submittal Requirements For Impact Assessment/Impact Statement
- Genoa Township Zoning Ordinances
- Soil Survey of Livingston County, Michigan, U.S.D.A. Soil Conservation Service
- Trip Generation 6<sup>th</sup> Edition, Institute of Transportation Engineers

# SITE / CONSTRUCTION PLANS FOR BOB MAXEY FORD OF HOWELL DEALERSHIP EXPANSION PART OF NE 1/4 SEC. 6, T.2N., R.6E. GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN

## PROPERTY DESCRIPTION:

(Per Metropolitan Title Company, Commitment No. NU-412578, effective date March 28, 2002 at 8:00 A.M.); Revision E, May 13, 2002

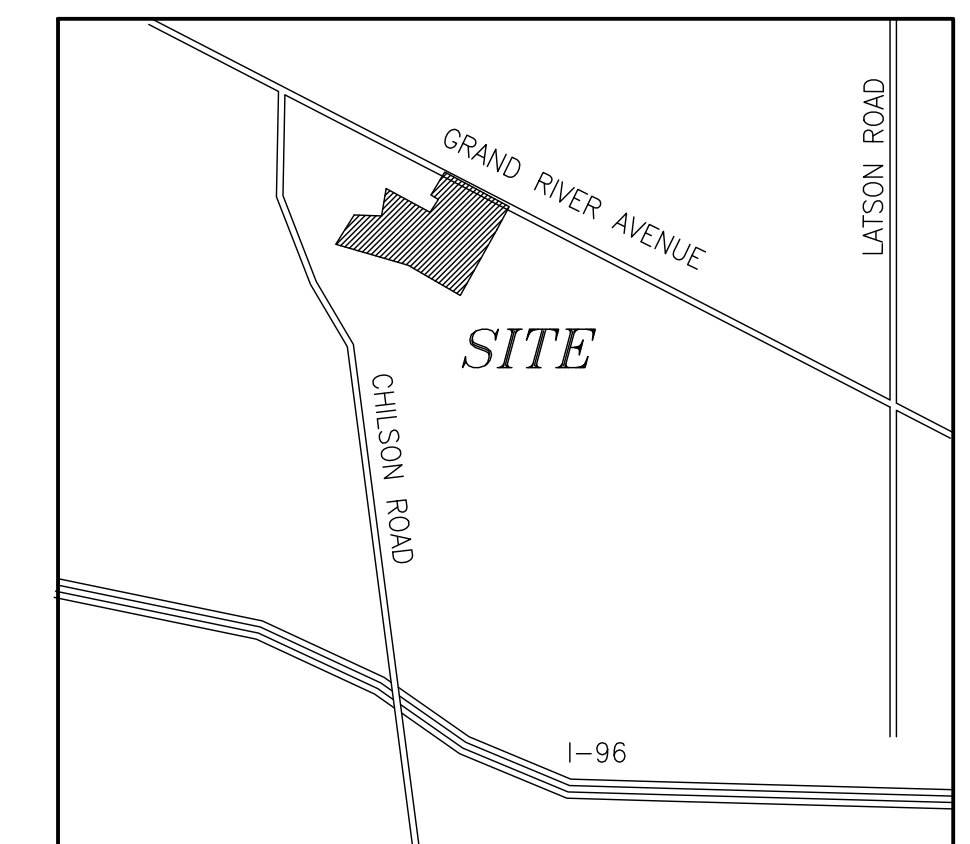
Land in the Township of Genoa, Livingston County, Michigan, described as follows:  
 Parcel 1: A part of the Northeast fractional 1/4 of Section 6, Town 2 North, Range 5 East, described as follows: Commencing at the East 1/4 corner of said Section 6; thence N 87°31'15" W 804.54 feet; thence N 1°34'30" E 1022.16 feet; thence N 60°06'45" W 616.07 feet along the centerline of Grand River Avenue to the point of beginning of the land to be described; running thence N 60°06'45" W 531.00 feet along the centerline of Grand River Avenue; thence S 29°53'15" W 570.00 feet; thence S 60°06'45" E 531.00 feet; thence N 29°53'15" E 570.00 feet to the point of beginning. Parcel 2: Part of the Northeast 1/4 of Section 6, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the East 1/4 corner of said Section 6; thence N 87°24'40" W 1616.81 feet along the East-West 1/4 line to a found iron rod; thence N 01°33'53" E 796.77 feet to a found concrete monument; thence N 60°06'45" W 531.00 feet to a found concrete monument and to the point of beginning of the land to be described; running thence N 70°11'20" W 525.21 feet (recorded as N 70°16'30" W 525.00 feet) to a found 1/2 inch iron rod; thence N 30°12'43" E 166.40 feet (recorded as N 29°41'36" E 166.45 feet) to a found 1/2 inch iron rod; thence S 78°31'03" E 114.50 feet (recorded as S 78°38'13" E 114.55 feet) to a found 1/2 inch iron rod; thence N 21°31'08" E 173.16 feet (recorded as N 21°26'18" E 173.06 feet) to a found 1/2 inch iron rod; thence S 60°01'58" E 326.49 feet (recorded as S 60°06'45" E) to a set 1/2 inch iron rod; thence N 29°52'49" E 105.14 feet to a set 1/2 inch iron rod; thence N 60°01'58" W 35.46 feet to a set 1/2 inch iron rod; thence N 29°52'49" E 183.46 feet and passing through the centerline of a curb cut to the centerline of Grand River Avenue; thence S 60°01'58" E 141.66 feet (recorded as S 60°06'45" E) along the centerline of Grand River Avenue; thence S 29°52'49" W 570.00 feet (recorded as S 29°53'15" W 570.00 feet) to the point of beginning.

Easement Parcel:  
 Easement for Common Driveway as created, limited and defined in the document entitled Grant of Common Driveway Easement dated January, 15, 1997, recorded in Liber 2147, page 719, Livingston County Records.

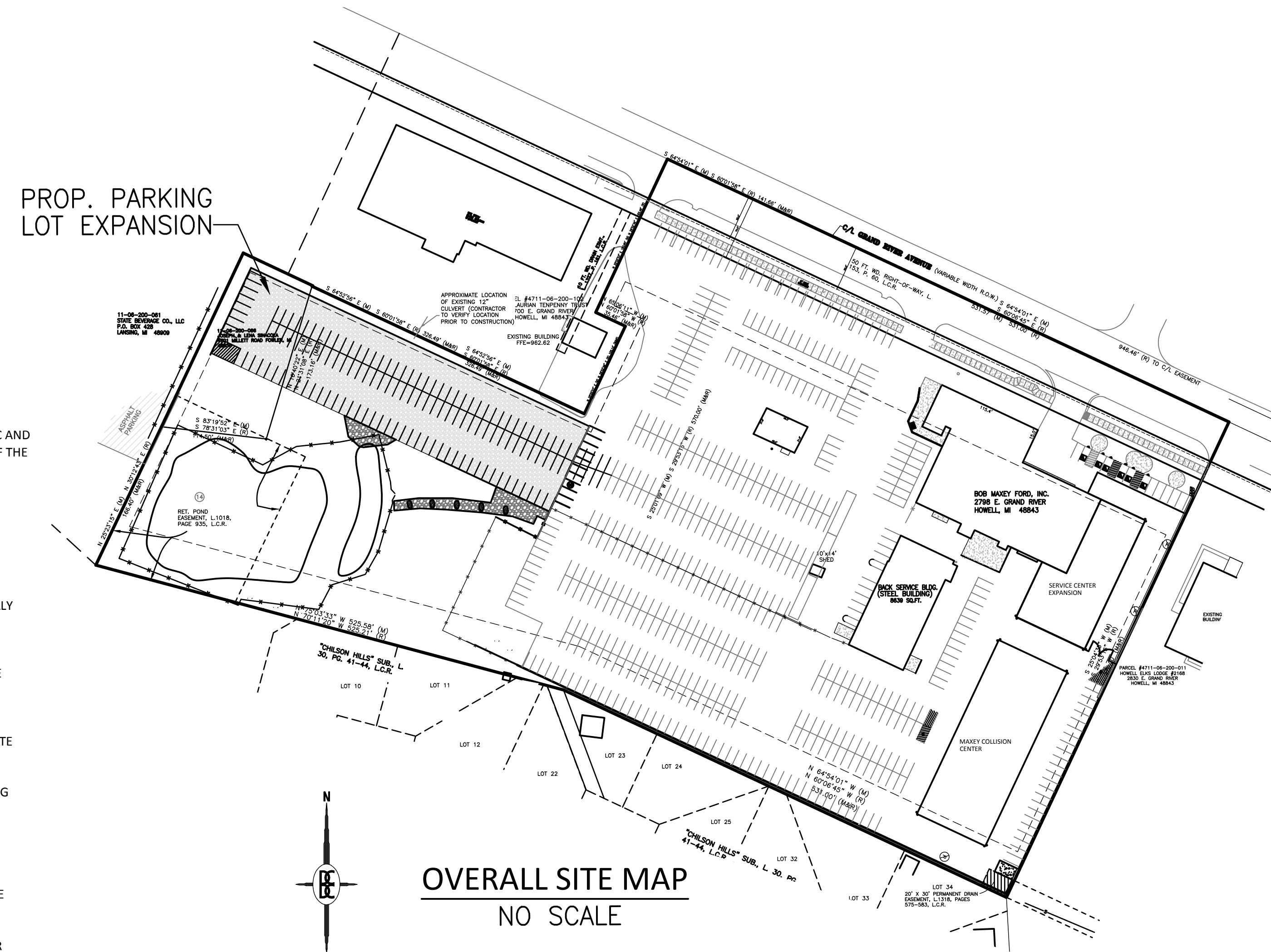
Tax Item No. 11-06-200-058  
 Tax Item No. 11-06-200-103  
 Tax Item No. 11-06-200-066

## CONSTRUCTION NOTES

- THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.
  - DO NOT SCALE THESE DRAWINGS AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
  - A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
  - IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
  - ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
  - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
  - PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
  - ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS.
  - ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
  - THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
  - THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
  - THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
  - THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
  - THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
  - THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
  - ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOT CLASS II).
  - ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
  - THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
  - NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
  - DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
  - IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
  - NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
  - ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
  - ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
  - TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
  - ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
  - AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
  - ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
  - NO SEEDING SHALL BE DONE AFTER OCTOBER 15 WITHOUT APPROVAL OF THE ENGINEER.
  - ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
  - SOIL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
  - ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.



LOCATION MAP  
NO SCALE



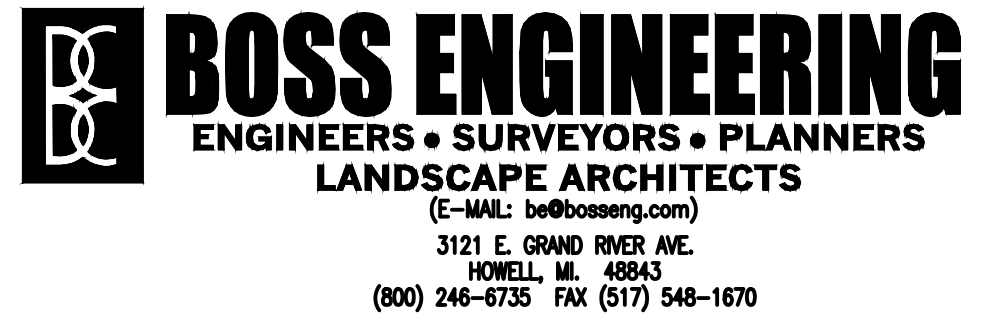
OVERALL SITE MAP  
NO SCALE

SHEET INDEX	
SHEET NO.	DESCRIPTION
C1	COVER SHEET
C2	SITE PLAN
C3	GRADING, DRAINAGE & SOIL EROSION CONTROL PLAN
C4	UTILITY PLAN
C5	LANDSCAPE PLAN
C6	LIGHTING PLAN
C7	EXISTING CONDITIONS & DEMOLITION PLAN
C8	CONSTRUCTION NOTES & DETAILS
C9	MHOG SANITARY SEWER DETAILS

## BOB MAXEY FORD DEALERSHIP EXPANSION

OWNER  
 BOB MAXEY FORD  
 2798 E. GRAND RIVER  
 HOWELL, MICHIGAN 48843  
 CONTACT: MR. MICHAEL MAXEY  
 PHONE: 517-545-5700

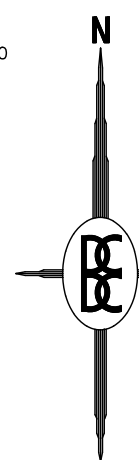
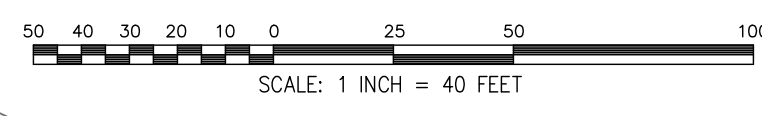
CIVIL ENGINEER/LANDSCAPE ARCHITECT



## INDEMNIFICATION STATEMENT

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

				<b>C1</b>
1	TD	TWP. REVIEW	6-22-16	ISSUE DATE: 5-27-16
	NO	BY CK	REVISION PER	DATE
				13-182



**GENERAL NOTES:**

- CURRENT ZONING: GCD (GENERAL COMMERCIAL)
- GROSS AREA = 11.7 AC.
- NET AREA = 10.6 AC.
- LOT COVERAGE  
BUILDINGS = 1.34 AC. (13.2%)  
IMPERVIOUS (BUILDINGS & PAVEMENT) = 7.82 AC. (74%)
- MINIMUM SETBACK REQUIREMENTS:  
FRONT = 70' (30' IF NO PARKING IN FRONT YARD)  
SIDES = 15'  
REAR = 50'
- EXISTING USE: SAME  
PROPOSED USE: SAME  
NO NEW SIGNAGE PROPOSED.
- ALL VEHICLE MAINTENANCE WILL BE CONDUCTED INSIDE THE FACILITY.
- NO OUTDOOR STORAGE IS PROPOSED.
- NO WRECKED VEHICLES WILL BE STORED ON SITE.
- ALL WASTE FLUIDS ARE TO BE STORED INSIDE THE FACILITY. THE STORAGE AND DISPOSAL OF ALL WASTE FLUIDS TO MET ALL CURRENT LOCAL, STATE AND FEDERAL REQUIREMENTS.
- ACCORDING TO THE NATIONAL WETLAND INVENTORY MAP, NO WETLANDS EXISTING ON THIS PROPERTY.
- BUILDING AREAS  
MAIN SALES & SERVICE BUILDING 30,950 S.F.  
PRE-OWNED CARS 1,550 S.F.  
SERVICE & PREP 8,475 S.F.  
BODY SHOP 17,085 S.F.  
TOTAL 58,060 S.F.
- TOTAL NUMBER PEOPLE EMPLOYED AT THIS FACILITY = 68
- PARKING REQUIREMENTS  
REQUIRED: 1 PARKING SPACE PER 200 S.F. OF GROSS LEASABLE AREA, PLUS 3 SPACES PER AUTO SERVICE BAY FOR SALES USES.  
GROSS AREA 6,517 S.F./200 = 33 SPACES  
SERVICE BAYS = 54 SPACES X 3 = 162 SPACES  
TOTAL SPACES REQUIRED = 195 SPACES  
TOTAL SPACES PROVIDED = 713 SPACES (INCLUDES 6 BARRIER FREE SPACES BASED ON 195 REQUIRED PARKING SPACES) - REMAINDER OF SPACES TO BE USED FOR NEW AND USED VEHICLE SALES).
- ALL TRUCK MANUEVERING IS/WILL TAKE PLACE ON THE PROPERTY. NO MANUEVERING ALLOWED IN GRAND RIVER.

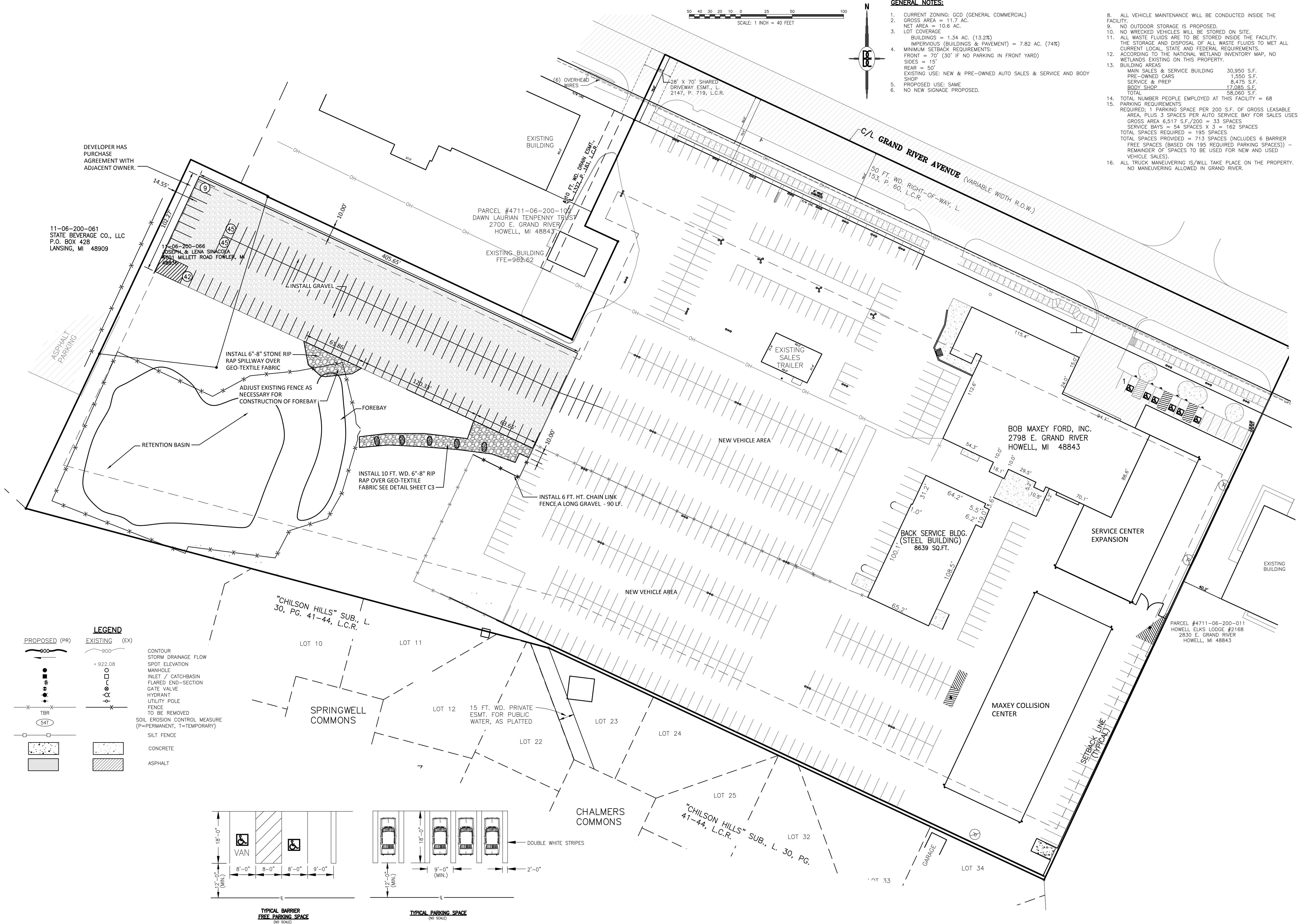
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(E-MAIL: BOSS@BOSSENGINEERING.COM)  
3121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
(800) 246-6735 FAX (517) 548-1670

PROJECT:	BOB MAXEY FORD DEALERSHIP EXPANSION
PREPARED FOR:	BOB MAXEY FORD OF HOWELL 2798 E. GRAND RIVER AVE. HOWELL, MI 48843 517.545.5700
TITLE:	SITE PLAN
DESIGNED BY:	TD
DRAWN BY:	TD
CHECKED BY:	
SCALE:	1" = 40'
JOB NO.:	13-182
DATE:	5-27-16
SHEET NO.:	C2



DEVELOPER HAS PURCHASE AGREEMENT WITH ADJACENT OWNER.

11-06-200-061  
STATE BEVERAGE CO., LLC  
P.O. BOX 428  
LANSING, MI 48909

11-06-200-066  
JOSEPH & LENA SINAGOLA  
7241 MILLETT ROAD FOWLER, MI 48833

PARCEL #4711-06-200-102  
DAWN LAURIAN TENPENNY TRUST  
2700 E. GRAND RIVER  
HOWELL, MI 48843

BOB MAXEY FORD, INC.  
2798 E. GRAND RIVER  
HOWELL, MI 48843

BACK SERVICE BLDG.  
(STEEL BUILDING)  
8639 SQ.FT.

SERVICE CENTER  
EXPANSION

MAXEY COLLISION  
CENTER

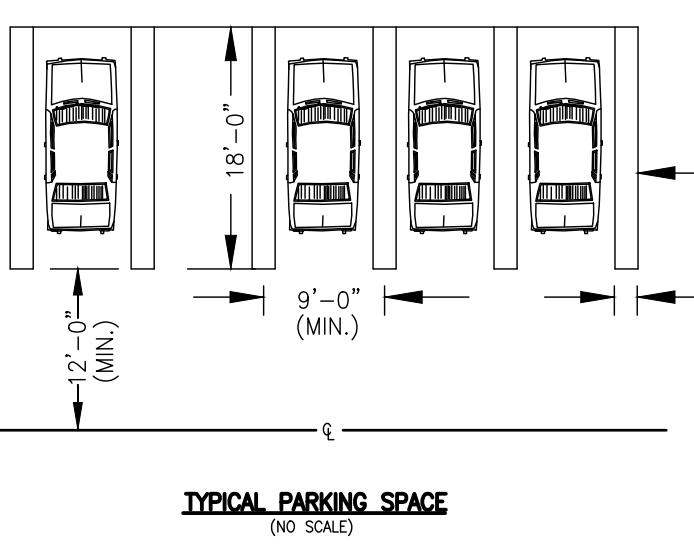
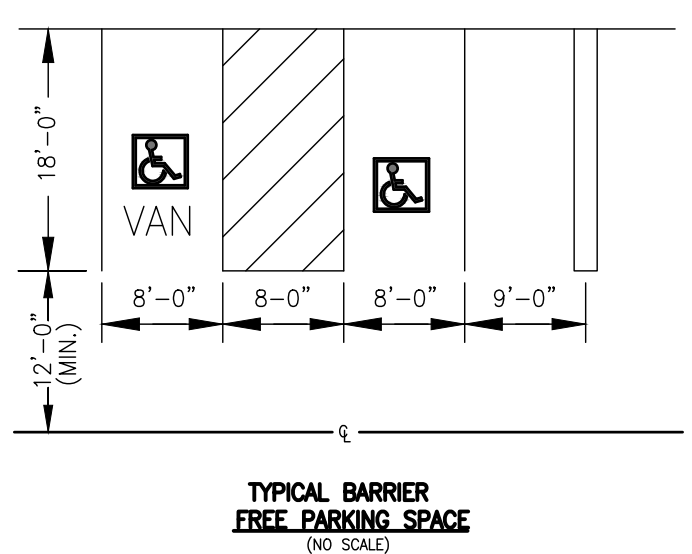
PARCEL #4711-06-200-011  
HOWELL ELKS LODGE #2168  
2830 E. GRAND RIVER  
HOWELL, MI 48843

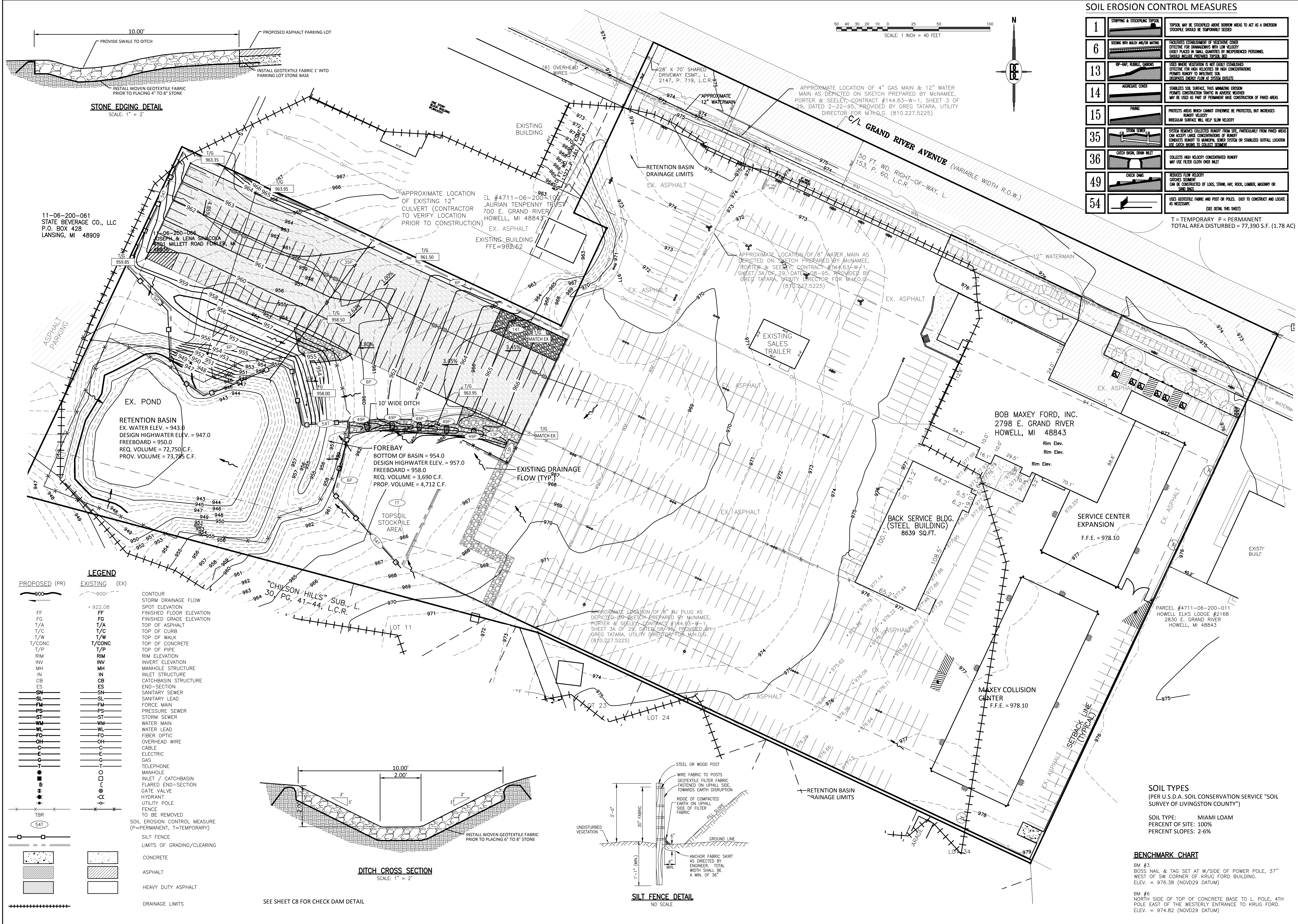
"CHILSON HILLS" SUB., L.  
30, PG. 41-44, L.C.R.

"CHILSON HILLS" SUB., L. 30, PG.  
41-44, L.C.R.

**LEGEND**

PROPOSED (PR)	EXISTING (EX)	DESCRIPTION
— 900 —	— 900 —	CONTOUR
— 900 —	— 900 —	STORM DRAINAGE FLOW
●	●	SPOT ELEVATION
○	○	MANHOLE
○	○	INLET / CATCHBASIN
○	○	FLARED END-SECTION
○	○	GATE VALVE
○	○	HYDRANT
○	○	UTILITY POLE
○	○	TO BE REMOVED
○	○	FENCE
○	○	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
○	○	SILT FENCE
○	○	CONCRETE
○	○	ASPHALT

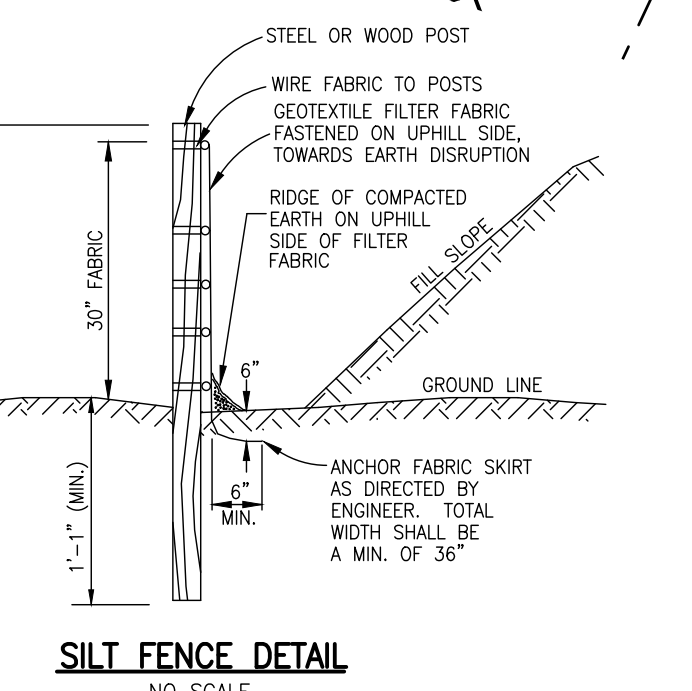
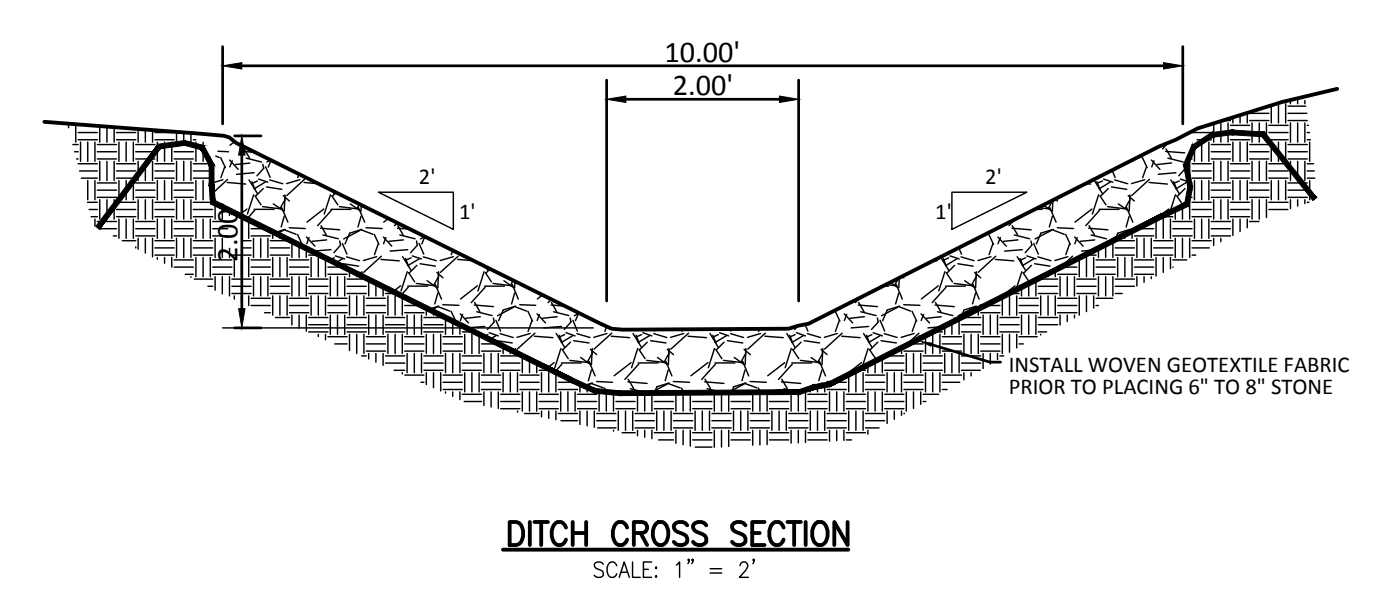
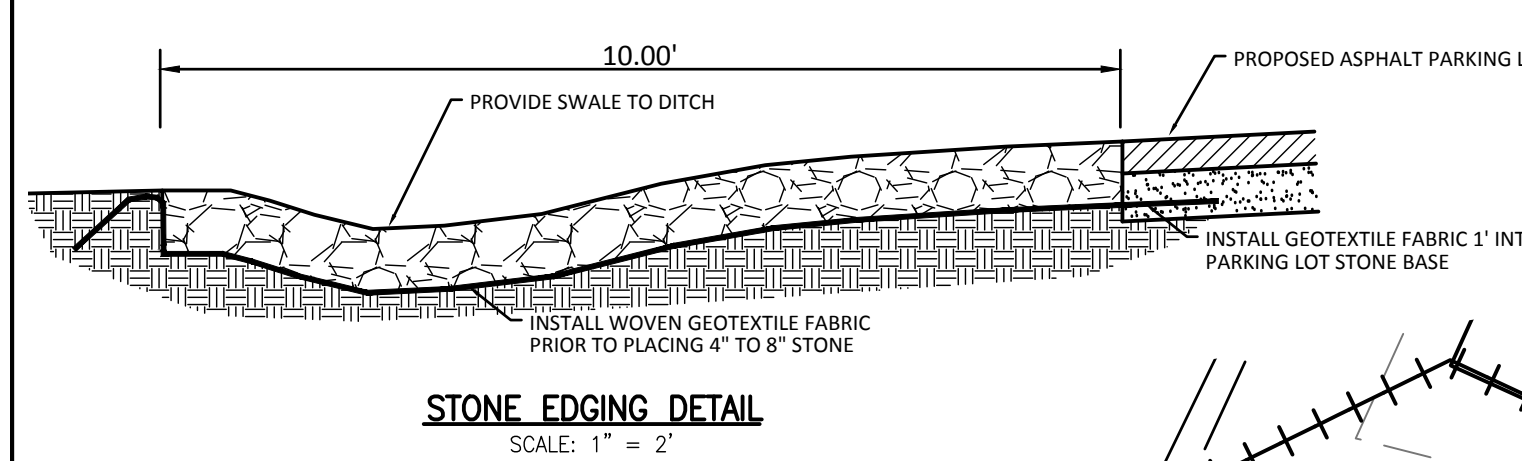




### SOIL EROSION CONTROL MEASURES

1	STRIPPING & STOCKPILING TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BURNING AREAS TO ACT AS A DRAINAGE STOCKPILE SHOULD BE TEMPORARILY SEED
6	SEEDING WITH MIXED AND/OR NATIVE SPECIES	FACILITATES ESTABLISHMENT OF VEGETATIVE COVER EFFECTIVE FOR DOWNSTREAMS WITH LOW VELOCITY EASILY PLACED IN SMALL QUANTITIES BY UNEXPERIENCED PERSONNEL SHOULD INCLUDE PROTECTED TOPSOIL (B)
13	SP-RIP, RIPPLE, CUBES	USED WHERE VEGETATION IS NOT EASILY ESTABLISHED EFFECTIVE FOR HIGH VELOCITIES OR HIGH CONCENTRATIONS PERMITS RUNOFF TO INFILTRATE SOIL DISPERSES ENERGY DOWN AT SYSTEM OUTLETS
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, THIS MINIMIZES EROSION PERMITS CONSTRUCTION WORK IN DROUSE WEATHER MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS
15	FRANK	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY IRREGULAR SURFACE WILL HELP SLOW VELOCITY
35	SWISS SERRA	SYSTEM REMOVES COLLECTED RUNOFF FROM SITE, PARTICULARLY FROM PAVED AREAS CAN ACCEPT LARGE CONCENTRATIONS OF RUNOFF CONDUCTS RUNOFF TO MANHOLE SEED SYSTEM OR CHANNELS OUTFALL LOCATION USE CAREFUL DESIGN TO COLLECT SEWAGE
36	CATCH BASIN, DOWN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER CLOTH OVER INLET
49	CHECK DAMS	REDUCES FLOW VELOCITY CATCHES SEDIMENT CAN BE CONSTRUCTED OF LOGS, STRAW, ROCK, LIMBER, MASONRY OR SAND BAGS
54	GEOTEXTILE FABRIC AND POST OR POLES	EASY TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE DETAIL THIS SHEET)

T = TEMPORARY P = PERMANENT  
TOTAL AREA DISTURBED = 77,390 S.F. (1.78 AC)



### LEGEND

PROPOSED (PR)	EXISTING (EX)	DESCRIPTION
900	900	CONTOUR
FF	FF	STORM DRAINAGE FLOW
T/A	T/A	SPOT ELEVATION
T/C	T/C	FINISHED FLOOR ELEVATION
T/W	T/W	FINISHED GRADE ELEVATION
T/CONC	T/CONC	TOP OF ASPHALT
T/P	T/P	TOP OF CURB
RM	RM	TOP OF WALK
INV	INV	TOP OF CONCRETE
MH	MH	TOP OF PIPE
IN	IN	RIM ELEVATION
CB	CB	INVERT ELEVATION
ES	ES	MANHOLE STRUCTURE
SN	SN	INLET STRUCTURE
SL	SL	CATCHBASIN STRUCTURE
FM	FM	END-SECTION
PS	PS	SANITARY SEWER
ST	ST	SANITARY LEAD
WM	WM	FORCE MAIN
WL	WL	PRESSURE SEWER
FO	FO	STORM SEWER
OH	OH	WATER MAIN
C	C	WATER LEAD
E	E	FIBER OPTIC
G	G	OVERHEAD WIRE
T	T	CABLE
●	○	ELECTRIC
○	○	GAS
○	○	TELEPHONE
○	○	MANHOLE
○	○	INLET / CATCHBASIN
○	○	FLARED END-SECTION
○	○	GATE VALVE
○	○	HYDRANT
○	○	UTILITY POLE
○	○	FENCE TO BE REMOVED
○	○	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
○	○	SILT FENCE
○	○	LIMITS OF GRADING/CLEARING
○	○	CONCRETE
○	○	ASPHALT
○	○	HEAVY DUTY ASPHALT
○	○	DRAINAGE LIMITS

UNLESS OTHERWISE NOTED, ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, AND THE MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) REGULATIONS FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

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11-06-200-061  
STATE BEVERAGE CO., LLC  
P.O. BOX 428  
LANSING, MI 48909

**BOB MAXEY FORD DEALERSHIP EXPANSION**  
PREPARED FOR: BOB MAXEY FORD OF HOWELL  
2798 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
517.545.5700

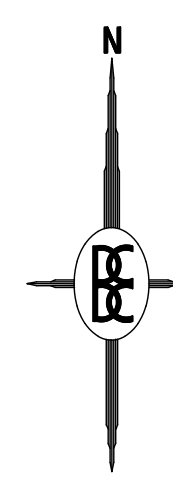
**GRADING, DRAINAGE & SOIL EROSION CONTROL**

DESIGNED BY: TD  
DRAWN BY: TD  
CHECKED BY: TD

SCALE: 1" = 40'  
JOB NO. 13-182  
DATE: 5-27-16  
SHEET NO. C3

SOIL TYPES  
(PER U.S.D.A. SOIL CONSERVATION SERVICE "SOIL SURVEY OF LIVINGSTON COUNTY")  
SOIL TYPE: MIAMI LOAM  
PERCENT OF SITE: 100%  
PERCENT SLOPES: 2-6%

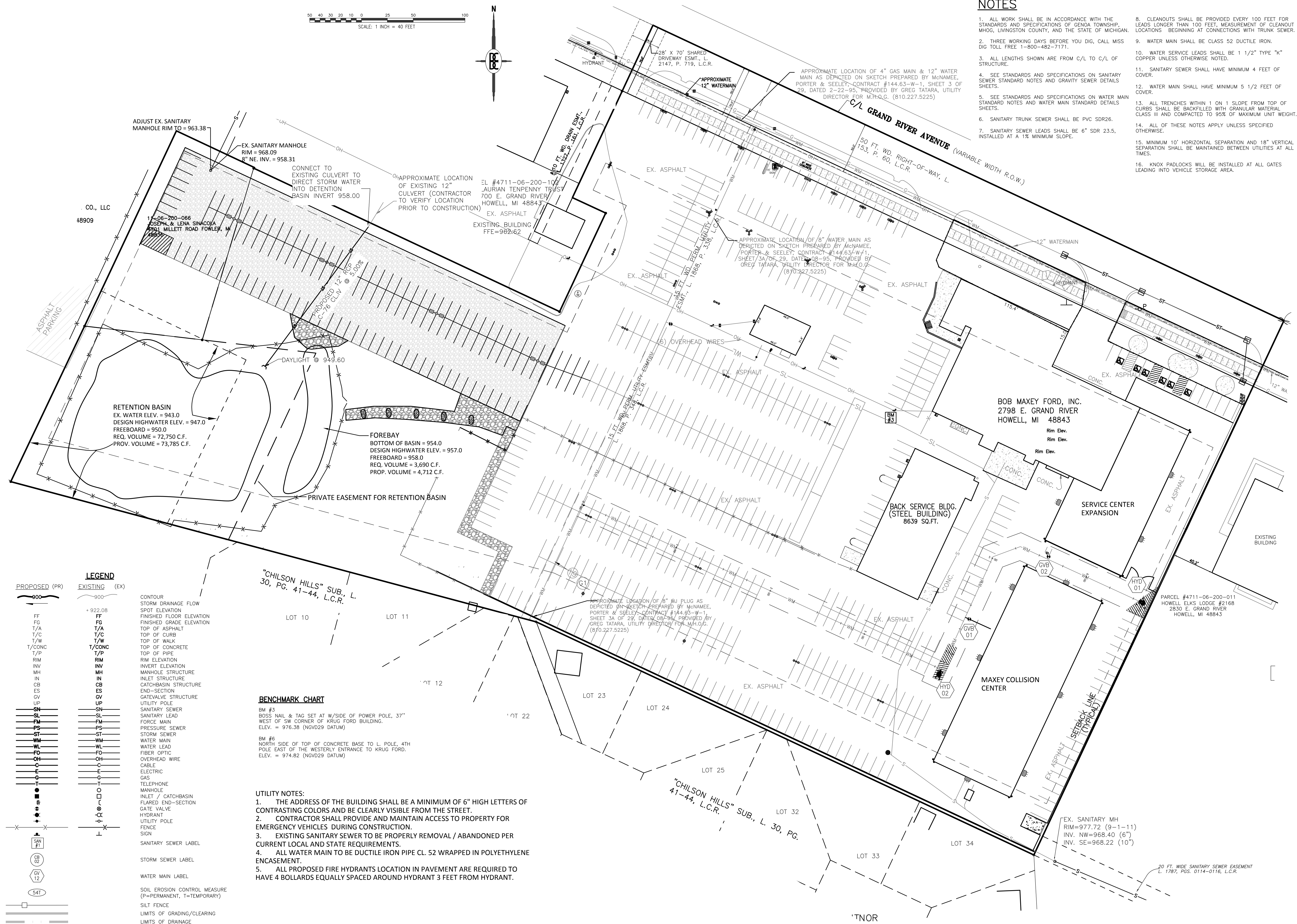
**BENCHMARK CHART**  
BM #3  
BOSS NAIL & TAG SET AT W/SIDE OF POWER POLE, 37' WEST OF SW CORNER OF KRUG FORD BUILDING. ELEV. = 976.38 (NGVD29 DATUM)  
BM #6  
NORTH SIDE OF TOP OF CONCRETE BASE TO L. POLE, 4TH POLE EAST OF THE WESTERLY ENTRANCE TO KRUG FORD. ELEV. = 974.82 (NGVD29 DATUM)



**NOTES**

- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF GENOA TOWNSHIP, MHOG, LIVINGSTON COUNTY, AND THE STATE OF MICHIGAN.
- THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.
- ALL LENGTHS SHOWN ARE FROM C/L TO C/L OF STRUCTURE.
- SEE STANDARDS AND SPECIFICATIONS ON SANITARY SEWER STANDARD NOTES AND GRAVITY SEWER DETAILS SHEETS.
- SEE STANDARDS AND SPECIFICATIONS ON WATER MAIN STANDARD NOTES AND WATER MAIN STANDARD DETAILS SHEETS.
- SANITARY TRUNK SEWER SHALL BE PVC SDR26.
- SANITARY SEWER LEADS SHALL BE 6" SDR 23.5, INSTALLED AT A 1% MINIMUM SLOPE.
- CLEANOUTS SHALL BE PROVIDED EVERY 100 FEET FOR LEADS LONGER THAN 100 FEET, MEASUREMENT OF FEET LOCATIONS BEGINNING AT CONNECTIONS WITH TRUNK SEWER.
- WATER MAIN SHALL BE CLASS 52 DUCTILE IRON.
- WATER SERVICE LEADS SHALL BE 1 1/2" TYPE "K" COPPER UNLESS OTHERWISE NOTED.
- SANITARY SEWER SHALL HAVE MINIMUM 4 FEET OF COVER.
- WATER MAIN SHALL HAVE MINIMUM 5 1/2 FEET OF COVER.
- ALL TRENCHES WITHIN 1 ON 1 SLOPE FROM TOP OF CURBS SHALL BE BACKFILLED WITH GRANULAR MATERIAL CLASS III AND COMPACTED TO 95% OF MAXIMUM UNIT WEIGHT.
- ALL OF THESE NOTES APPLY UNLESS SPECIFIED OTHERWISE.
- MINIMUM 10' HORIZONTAL SEPARATION AND 18" VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITIES AT ALL TIMES.
- KNOX PADLOCKS WILL BE INSTALLED AT ALL GATES LEADING INTO VEHICLE STORAGE AREA.

THESE NOTES SHALL BE READ IN CONJUNCTION WITH THE STANDARD NOTES AND SPECIFICATIONS OF GENOA TOWNSHIP, MICHIGAN. UNLESS AS SHOWN ON THESE DRAWINGS, ALL DIMENSIONS ARE GIVEN APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT DIMENSIONS AND LOCATIONS OF ALL UTILITIES AND STRUCTURES IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT DIMENSIONS AND LOCATIONS OF ALL UTILITIES AND STRUCTURES IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT DIMENSIONS AND LOCATIONS OF ALL UTILITIES AND STRUCTURES IN THE FIELD PRIOR TO CONSTRUCTION.



**LEGEND**

PROPOSED (PR)	EXISTING (EX)	DESCRIPTION
900	+922.08	CONTOUR
FF	FF	SPOT ELEVATION
FG	FG	FINISHED FLOOR ELEVATION
T/A	T/A	FINISHED GRADE ELEVATION
T/C	T/C	TOP OF ASPHALT
T/W	T/W	TOP OF CURB
T/CONC	T/CONC	TOP OF WALK
T/P	T/P	TOP OF CONCRETE
RIM	RIM	TOP OF PIPE
INV	INV	RIM ELEVATION
MH	MH	INVERT ELEVATION
IN	IN	MANHOLE STRUCTURE
CB	CB	INLET STRUCTURE
ES	ES	CATCHBASIN STRUCTURE
GV	GV	END-SECTION
UP	UP	GATEVALVE STRUCTURE
SN	SN	UTILITY POLE
SL	SL	SANITARY SEWER
FM	FM	SANITARY LEAD
PS	PS	FORCE MAIN
WM	WM	PRESSURE SEWER
WL	WL	WATER MAIN
FO	FO	WATER LEAD
OH	OH	FIBER OPTIC
C	C	OVERHEAD WIRE
E	E	CABLE
G	G	ELECTRIC
T	T	GAS
MANHOLE	MANHOLE	TELEPHONE
INLET / CATCHBASIN	INLET / CATCHBASIN	MANHOLE
FLARED END-SECTION	FLARED END-SECTION	INLET / CATCHBASIN
GATE VALVE	GATE VALVE	FLARED END-SECTION
HYDRANT	HYDRANT	GATE VALVE
UTILITY POLE	UTILITY POLE	HYDRANT
FENCE	FENCE	UTILITY POLE
SIGN	SIGN	FENCE
SAN #1	SAN #1	SIGN
CB 02	CB 02	SANITARY SEWER LABEL
GV 12	GV 12	STORM SEWER LABEL
54T	54T	WATER MAIN LABEL
		SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
		SILT FENCE
		LIMITS OF GRADING/CLEARING
		LIMITS OF DRAINAGE

**BENCHMARK CHART**

BM #3	BOSS NAIL & TAG SET AT W/SIDE OF POWER POLE, 37" WEST OF SW CORNER OF KRUG FORD BUILDING. ELEV. = 976.38 (NGVD29 DATUM)
BM #6	NORTH SIDE OF TOP OF CONCRETE BASE TO L. POLE, 4TH POLE EAST OF THE WESTERLY ENTRANCE TO KRUG FORD. ELEV. = 974.82 (NGVD29 DATUM)

- UTILITY NOTES:**
- THE ADDRESS OF THE BUILDING SHALL BE A MINIMUM OF 6" HIGH LETTERS OF CONTRASTING COLORS AND BE CLEARLY VISIBLE FROM THE STREET.
  - CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS TO PROPERTY FOR EMERGENCY VEHICLES DURING CONSTRUCTION.
  - EXISTING SANITARY SEWER TO BE PROPERLY REMOVAL / ABANDONED PER CURRENT LOCAL AND STATE REQUIREMENTS.
  - ALL WATER MAIN TO BE DUCTILE IRON PIPE CL. 52 WRAPPED IN POLYETHYLENE ENCASEMENT.
  - ALL PROPOSED FIRE HYDRANTS LOCATION IN PAVEMENT ARE REQUIRED TO HAVE 4 BOLLARDS EQUALLY SPACED AROUND HYDRANT 3 FEET FROM HYDRANT.

**BOSS ENGINEERING**  
ENGINEERS • SURVEYORS • PLANNERS  
LANDSCAPE ARCHITECTS  
(E-MAIL: bossengr@bossengr.com)  
3121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
(800) 246-6725 FAX (517) 548-1670

PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**  
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**  
2798 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
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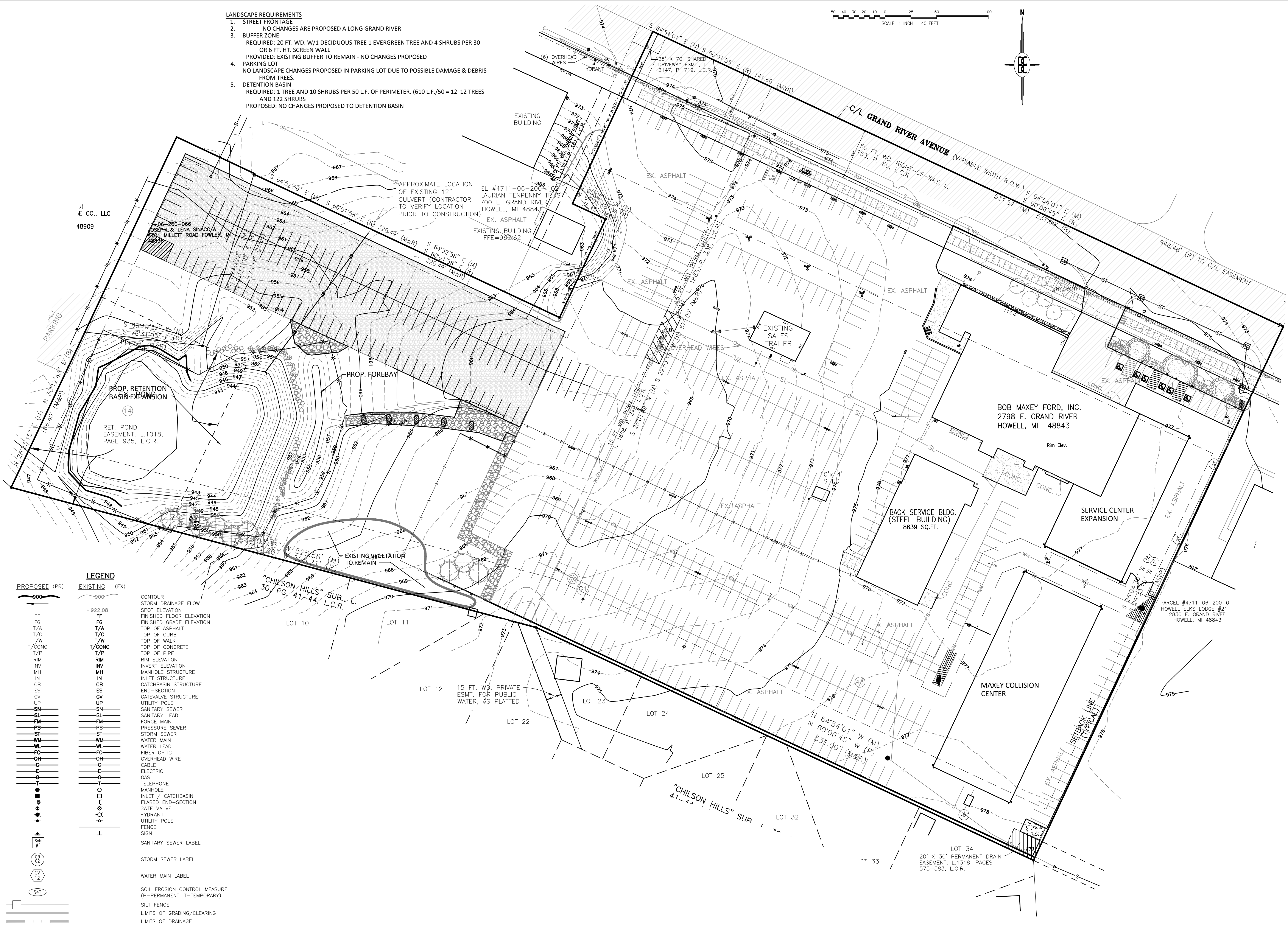
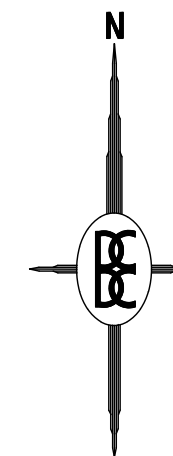
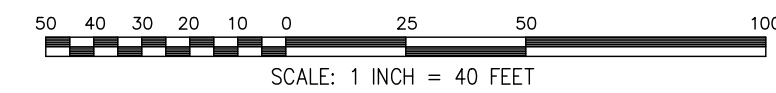
TITLE: **UTILITY PLAN**

NO.	BY	DATE	REVISION PER
1	TD	6-22-16	

DESIGNED BY: TD  
DRAWN BY: TD  
CHECKED BY:  
SCALE: 1" = 40'  
JOB NO. 13-182  
DATE 05-27-16  
SHEET NO. C4

**LANDSCAPE REQUIREMENTS**

- STREET FRONTAGE  
NO CHANGES ARE PROPOSED A LONG GRAND RIVER
- BUFFER ZONE  
REQUIRED: 20 FT. WD. W/1 DECIDUOUS TREE 1 EVERGREEN TREE AND 4 SHRUBS PER 30 OR 6 FT. HT. SCREEN WALL  
PROVIDED: EXISTING BUFFER TO REMAIN - NO CHANGES PROPOSED
- PARKING LOT  
NO LANDSCAPE CHANGES PROPOSED IN PARKING LOT DUE TO POSSIBLE DAMAGE & DEBRIS FROM TREES
- DETENTION BASIN  
REQUIRED: 1 TREE AND 10 SHRUBS PER 50 L.F. OF PERIMETER. (610 L.F./50 = 12 TREES AND 122 SHRUBS)  
PROPOSED: NO CHANGES PROPOSED TO DETENTION BASIN



1 E CO., LLC  
48909

1-06-200-066  
JOSEPH & LENA SINACOLA  
2941 MILLETT ROAD FOWLER, MI

APPROXIMATE LOCATION OF EXISTING 12" CULVERT (CONTRACTOR TO VERIFY LOCATION PRIOR TO CONSTRUCTION)

EL #4711-06-200-0  
AURIAN TENPENNY TRUST  
700 E. GRAND RIVER  
HOWELL, MI 48843

BOB MAXEY FORD, INC.  
2798 E. GRAND RIVER  
HOWELL, MI 48843

BACK SERVICE BLDG.  
(STEEL BUILDING)  
8639 SQ.FT.

SERVICE CENTER  
EXPANSION

MAXEY COLLISION  
CENTER

"CHILSON HILLS" SUR  
41-44

PARCEL #4711-06-200-0  
HOWELL ELKS LODGE #21  
2830 E. GRAND RIVER  
HOWELL, MI 48843

**LEGEND**

PROPOSED (PR)	EXISTING (EX)	
900	900	CONTOUR
FF	FF	STORM DRAINAGE FLOW
FB	FB	SPOT ELEVATION
T/A	T/A	FINISHED FLOOR ELEVATION
T/C	T/C	FINISHED GRADE ELEVATION
T/W	T/W	TOP OF ASPHALT
T/CONC	T/CONC	TOP OF CURB
T/P	T/P	TOP OF WALK
RIM	RIM	TOP OF CONCRETE
INV	INV	TOP OF PIPE
MH	MH	RIM ELEVATION
IN	IN	INVERT ELEVATION
CB	CB	MANHOLE STRUCTURE
ES	ES	INLET STRUCTURE
GV	GV	CATCHBASIN STRUCTURE
UP	UP	END-SECTION
SN	SN	GATEVALVE STRUCTURE
SL	SL	UTILITY POLE
FM	FM	SANITARY SEWER
PS	PS	SANITARY LEAD
ST	ST	FORCE MAIN
WM	WM	PRESSURE SEWER
WL	WL	STORM SEWER
FO	FO	WATER MAIN
OH	OH	WATER LEAD
C	C	FIBER OPTIC
E	E	OVERHEAD WIRE
G	G	CABLE
T	T	ELECTRIC
○	○	GAS
●	●	TELEPHONE
○	○	MANHOLE
○	○	INLET / CATCHBASIN
○	○	FLARED END-SECTION
○	○	GATE VALVE
○	○	HYDRANT
○	○	UTILITY POLE
○	○	FENCE
○	○	SIGN
○	○	SANITARY SEWER LABEL
○	○	STORM SEWER LABEL
○	○	WATER MAIN LABEL
○	○	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
○	○	SILT FENCE
○	○	LIMITS OF GRADING/CLEARING
○	○	LIMITS OF DRAINAGE

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1121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
(800) 246-6725 FAX (517) 548-1670

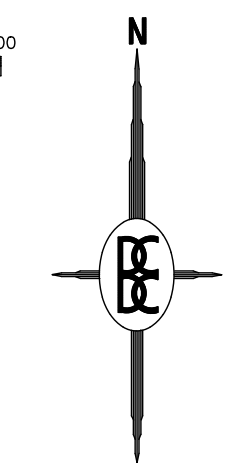
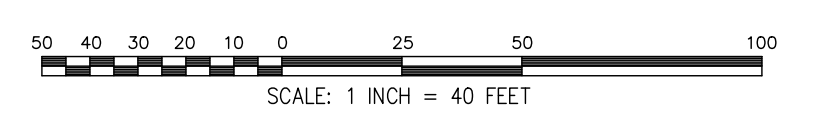
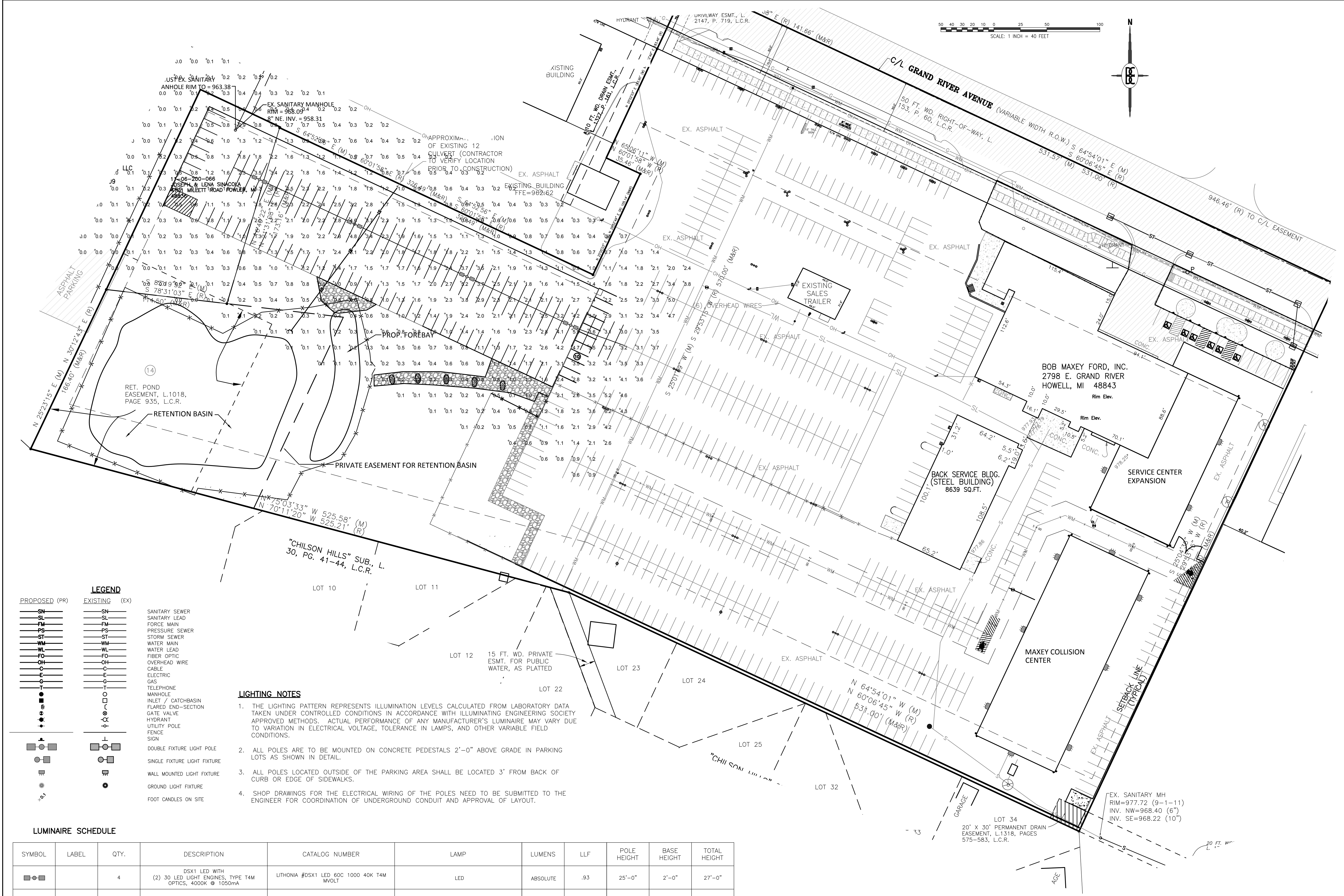
PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**  
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**  
2798 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
517.545.5700

TITLE: **LANDSCAPE PLAN**

NO.	BY	DATE	REVISION PER
1	TD	6-22-16	

DESIGNED BY: TD  
DRAWN BY: TD  
CHECKED BY:

SCALE: 1" = 40'  
JOB NO. 13-182  
DATE: 5-27-16  
SHEET NO. C5



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**BOSS ENGINEERING**  
ENGINEERS • SURVEYORS • PLANNERS  
LANDSCAPE ARCHITECTS  
(E-MAIL: BOSS@BOSSENGINEERS.COM)  
3121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
(800) 246-6725 FAX (517) 548-1670

PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**  
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**  
2798 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
517.545.5700

NO.	DATE	REVISION PER	TWP.
1	6-22-16		
2			
3			
4			
5			
6			
7			
8			
9			
10			

DESIGNED BY: TD  
DRAWN BY: TD  
CHECKED BY:  
SCALE: 1" = 40'  
JOB NO. 13-182  
DATE: 5-27-16  
SHEET NO. C6

**LEGEND**

PROPOSED (PR)	EXISTING (EX)	DESCRIPTION
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAIN
PS	PS	PRESSURE SEWER
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
FO	FO	FIBER OPTIC
OH	OH	OVERHEAD WIRE
E	E	ELECTRIC
G	G	GAS
T	T	TELEPHONE
M	M	MANHOLE
I	I	INLET / CATCHBASIN
F	F	FLARED END-SECTION
G	G	GATE VALVE
H	H	HYDRANT
U	U	UTILITY POLE
F	F	FENCE
S	S	SIGN
D	D	DOUBLE FIXTURE LIGHT POLE
S	S	SINGLE FIXTURE LIGHT FIXTURE
W	W	WALL MOUNTED LIGHT FIXTURE
G	G	GROUND LIGHT FIXTURE
C	C	FOOT CANDLES ON SITE

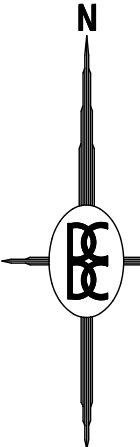
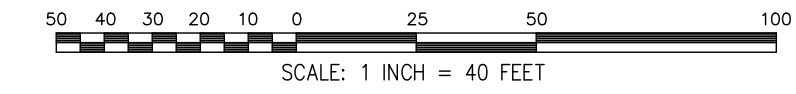
- LIGHTING NOTES**
1. THE LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS.
  2. ALL POLES ARE TO BE MOUNTED ON CONCRETE PEDESTALS 2'-0" ABOVE GRADE IN PARKING LOTS AS SHOWN IN DETAIL.
  3. ALL POLES LOCATED OUTSIDE OF THE PARKING AREA SHALL BE LOCATED 3' FROM BACK OF CURB OR EDGE OF SIDEWALKS.
  4. SHOP DRAWINGS FOR THE ELECTRICAL WIRING OF THE POLES NEED TO BE SUBMITTED TO THE ENGINEER FOR COORDINATION OF UNDERGROUND CONDUIT AND APPROVAL OF LAYOUT.

**LUMINAIRE SCHEDULE**

SYMBOL	LABEL	QTY.	DESCRIPTION	CATALOG NUMBER	LAMP	LUMENS	LLF	POLE HEIGHT	BASE HEIGHT	TOTAL HEIGHT
■		4	DSX1 LED WITH (2) 30 LED LIGHT ENGINES, TYPE T4M OPTICS, 4000K @ 1050mA	LITHONIA #DSX1 LED 60C 1000 40K T4M MVOLT	LED	ABSOLUTE	.93	25'-0"	2'-0"	27'-0"

ALL IES FILES PROVIDED BY MANUFACTURER FOR CALCULATION OF LIGHTING LEVEL.





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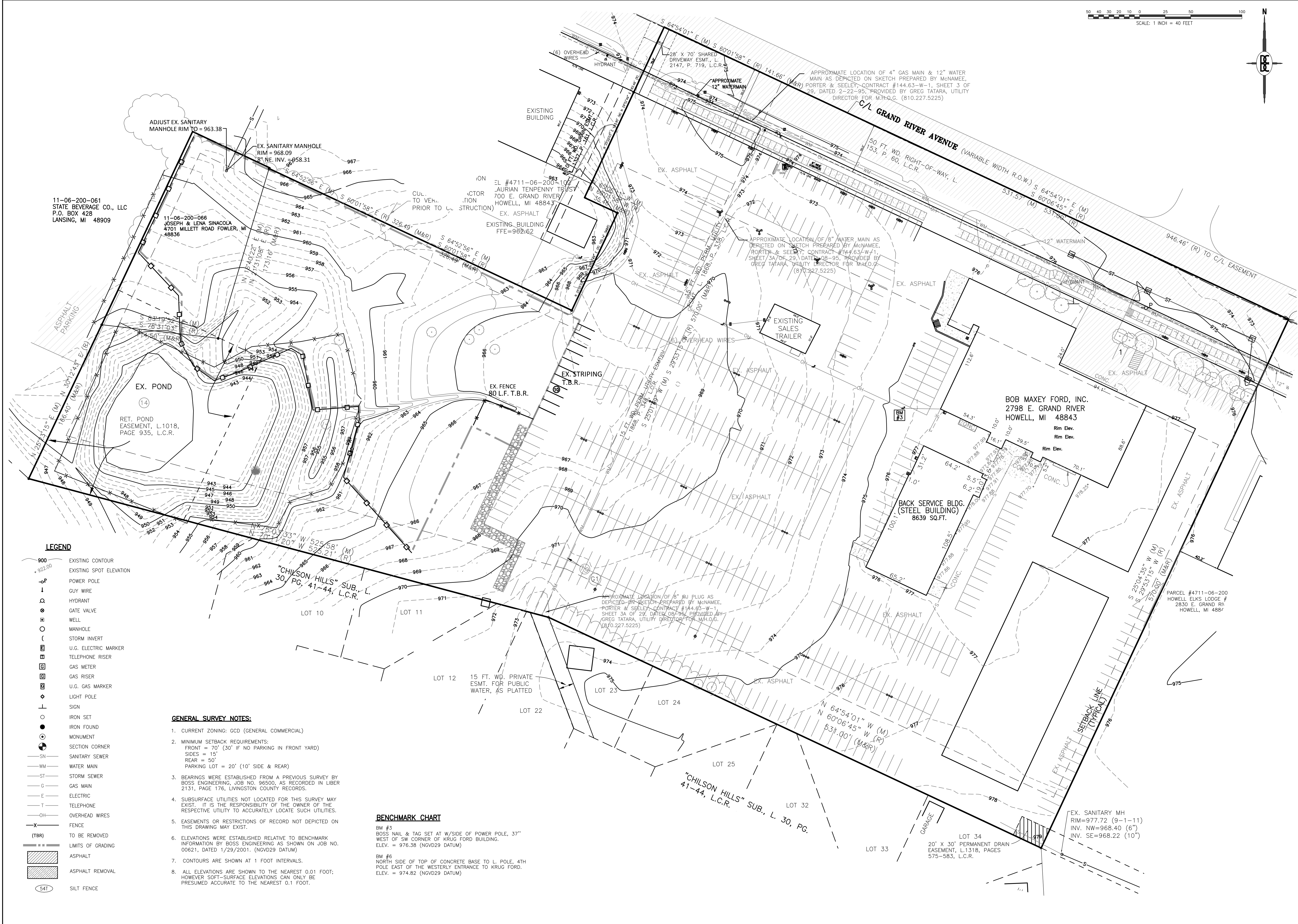
**BOSS ENGINEERING**  
ENGINEERS • SURVEYORS • PLANNERS  
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PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**  
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**  
2798 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
517.545.5700

TITLE: **EXISTING CONDITIONS & DEMOLITION PLAN**

NO.	ID	TWP.	REVIEW	PER	DATE
1					6-22-16

DESIGNED BY: TD  
DRAWN BY: TD  
CHECKED BY:  
SCALE: 1" = 40'  
JOB NO.: 13-182  
DATE: 5-27-16  
SHEET NO.: C7



- LEGEND**
- 900 EXISTING CONTOUR
  - 922.00 EXISTING SPOT ELEVATION
  - P— POWER POLE
  - |— GUY WIRE
  - H— HYDRANT
  - V— GATE VALVE
  - W— WELL
  - M— MANHOLE
  - S— STORM INVERT
  - E— U.G. ELECTRIC MARKER
  - T— TELEPHONE RISER
  - G— GAS METER
  - R— GAS RISER
  - U— U.G. GAS MARKER
  - L— LIGHT POLE
  - S— SIGN
  - O— IRON SET
  - IRON FOUND
  - MONUMENT
  - SECTION CORNER
  - SN— SANITARY SEWER
  - WM— WATER MAIN
  - ST— STORM SEWER
  - G— GAS MAIN
  - E— ELECTRIC
  - T— TELEPHONE
  - OH— OVERHEAD WIRES
  - X— FENCE
  - (TBR)— TO BE REMOVED
  - (Hatched)— LIMITS OF GRADING
  - (Hatched)— ASPHALT
  - (Hatched)— ASPHALT REMOVAL
  - (541)— SILT FENCE

- GENERAL SURVEY NOTES:**
- CURRENT ZONING: GCD (GENERAL COMMERCIAL)
  - MINIMUM SETBACK REQUIREMENTS:  
FRONT = 70' (30' IF NO PARKING IN FRONT YARD)  
SIDES = 15'  
REAR = 50'  
PARKING LOT = 20' (10' SIDE & REAR)
  - BEARINGS WERE ESTABLISHED FROM A PREVIOUS SURVEY BY BOSS ENGINEERING, JOB NO. 96500, AS RECORDED IN LIBER 2131, PAGE 176, LIVINGSTON COUNTY RECORDS.
  - SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
  - EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
  - ELEVATIONS WERE ESTABLISHED RELATIVE TO BENCHMARK INFORMATION BY BOSS ENGINEERING AS SHOWN ON JOB NO. 00621, DATED 1/29/2001. (NGVD29 DATUM)
  - CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
  - ALL ELEVATIONS ARE SHOWN TO THE NEAREST 0.01 FOOT; HOWEVER SOFT-SURFACE ELEVATIONS CAN ONLY BE PRESUMED ACCURATE TO THE NEAREST 0.1 FOOT.

**BENCHMARK CHART**

BM #3  
BOSS NAIL & TAG SET AT W/SIDE OF POWER POLE, 37' WEST OF SW CORNER OF KRUG FORD BUILDING.  
ELEV. = 976.38 (NGVD29 DATUM)

BM #6  
NORTH SIDE OF TOP OF CONCRETE BASE TO L. POLE, 4TH POLE EAST OF THE WESTERLY ENTRANCE TO KRUG FORD.  
ELEV. = 974.82 (NGVD29 DATUM)

11-06-200-061  
STATE BEVERAGE CO., LLC  
P.O. BOX 428  
LANSING, MI 48909

11-06-200-068  
JOSEPH & LENA SINACOLA  
4701 MILLETT ROAD FOWLER, MI 48836

EL #4711-06-200-10  
AURIAN TENPENNY TRUST  
700 E. GRAND RIVER  
HOWELL, MI 48843

BOB MAXEY FORD, INC.  
2798 E. GRAND RIVER  
HOWELL, MI 48843  
Rim Elev.  
Rim Elev.  
Rim Elev.

BACK SERVICE BLDG.  
(STEEL BUILDING)  
8639 SQ.FT.

PARCEL #4711-06-200  
HOWELL ELKS LODGE #  
2830 E. GRAND RIVER  
HOWELL, MI 48843

"CHILSON HILLS" SUB., L. 30, PG. 41-44, L.C.R.

20' X 30' PERMANENT DRAIN  
EASEMENT, L.1318, PAGES  
575-583, L.C.R.

EX. SANITARY MH  
RIM=977.72 (9-1-11)  
INV. NW=968.40 (6")  
INV. SE=968.22 (10")

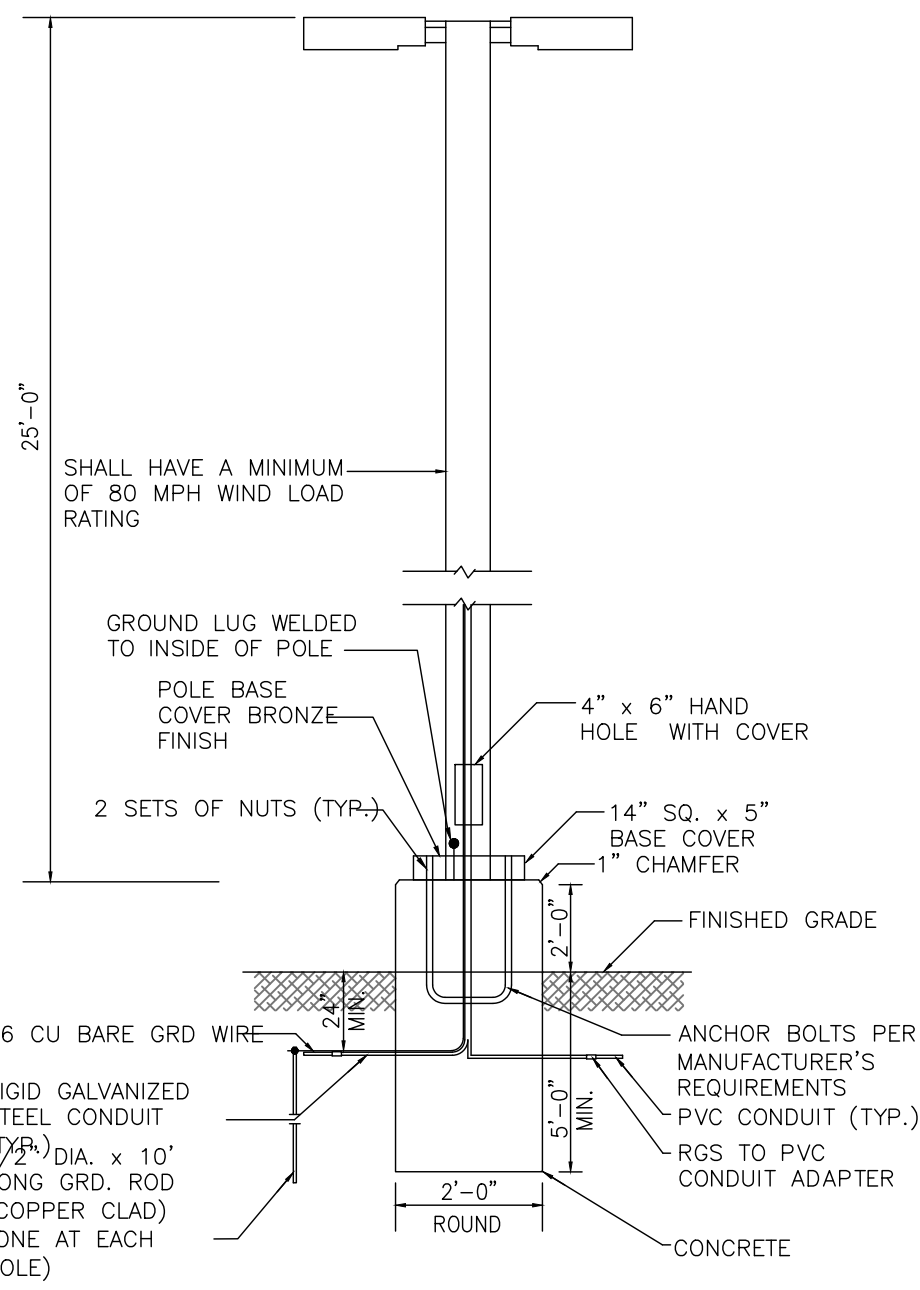
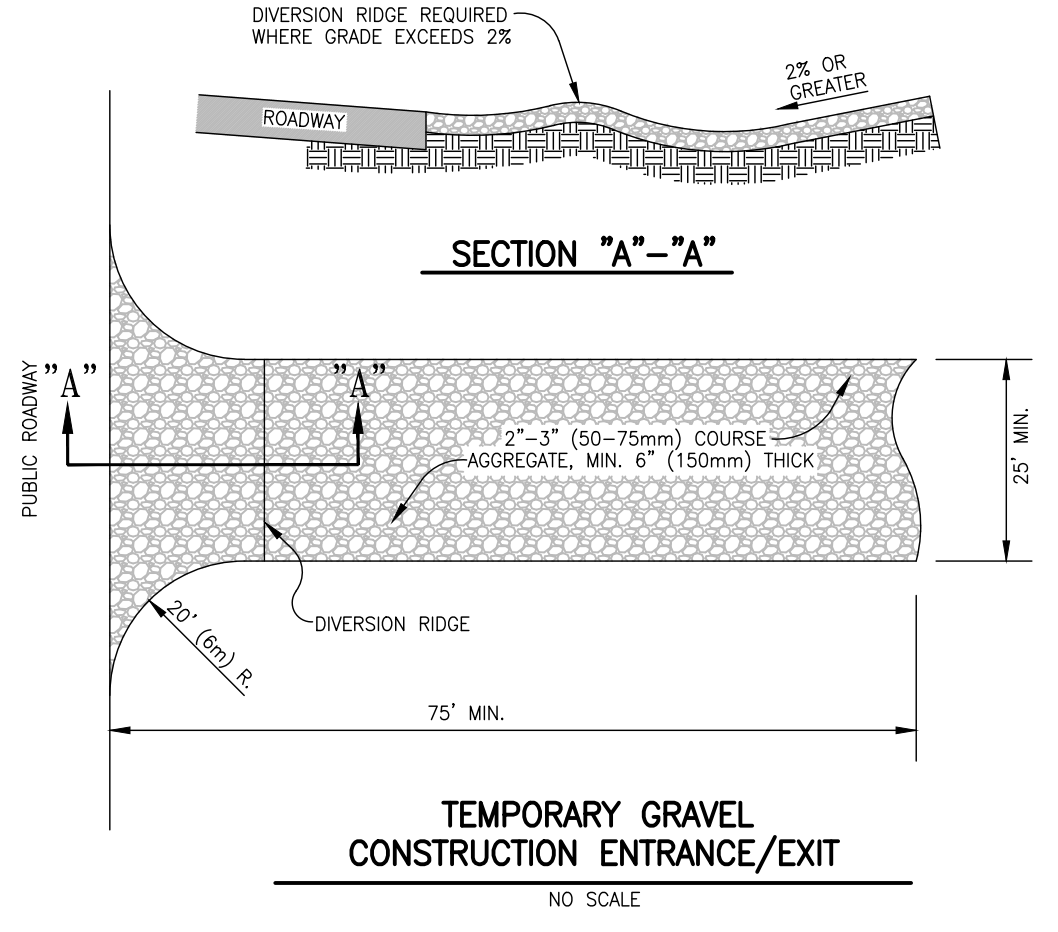
**LIVINGSTON COUNTY SOIL EROSION PERMIT TEMPLATE  
TEMPORARY CONTROLS AND SEQUENCE**

- NOTIFY LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE 24 HOURS PRIOR TO START OF GRADE WORK.
  - IN ACCORDANCE WITH PUBLIC ACT NO. 53, OF 1974 THE PERMIT HOLDER SHALL CALL MISS DIG FOR STAKING AND LOCATING OF UTILITIES, AT LEAST 72 HOURS IN ADVANCE OF THE START OF ANY WORK.
- PERMITTING STANDARDS**
- (IMPORTANT NOTICE) RETENTION/DETENTION PONDS SHALL BE EXCAVATED, TOPSOILED, SEEDED, MULCHED AND TACKED PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. INGRESS/EGRESS MUST HAVE LARGE CRUSHED ROCK TO REDUCE THE TRACKING OF SOIL ONTO THE PUBLIC TRAFFIC AREAS. SEE DETAIL ITEMS BELOW.
  - 36" M.D.T. SPECIFICATION TYPE SILT FABRIC FENCE AS SHOWN ON PLANS SHALL BE PLACED AND MAINTAINED ALONG PERIMETER ON ALL LOW LYING AREAS OF THE CONSTRUCTION SITE TO FILTER RUNOFF BEFORE LEAVING PROJECT SITE.
  - ALL TEMPORARY EROSION CONTROL DEVICES AS NOTED ON PLANS SHALL BE INSTALLED PRIOR TO THE START OF MASSIVE EARTH DISTRIBUTION.
  - PLAN DOES DENOTE A DETAILED EROSION CONTROL DEVICE TO RESTRICT TRACKING OF MATERIAL ONTO THE HIGHWAY. STONE DIAPERS SHALL BE INSTALLED AT ALL INGRESS/EGRESS AREAS OF THE SITE PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. DIAPERS SHALL BE OF CRUSHED STONE AND SHALL HAVE A MINIMUM LENGTH OF 100' LINEAL FEET.
  - RETENTION/DETENTION/SEDIMENTATION PONDS SHALL BE EXCAVATED, TOPSOILED, SEEDED, MULCHED AND TACKED PRIOR TO THE START OF MASSIVE EARTH DISRUPTION.
  - DETENTION POND OUTLETS SHALL BE OF THE STANDPIPE AND STONE FILTER SYSTEM, WITH TRASH SCREEN. OUTLET FLOW SHALL NOT EXCEED 0.20 CUBIC FEET OF WATER PER SECOND/PER ACRE. POND DIKES SHALL HAVE A MINIMUM OF ONE (1) FOOT OF FREEBOARD. AN EMERGENCY SPILLWAY SHALL BE CONSTRUCTED WITHIN THE FREEBOARD LEVEL.
  - THE EMERGENCY SPILLWAY FROM THE DETENTION POND SHALL BE SLOTTED AND PEGGED, OR RIP RAPPED, 15 FEET PAST THE TOE OF THE SLOPE OF THE BERM.
  - DIKES AND BERMS SHALL BE FREE OF ALL ORGANIC MATTER.
  - RETENTION/DETENTION PONDS SHALL BE FENCED WITH A 4' CHAIN LINK FENCE, INCLUDING A 12" ACCESS GATE FOR MAINTENANCE UNLESS MINIMUM 5 FT. HORIZONTAL TO 1 FT. VERTICAL SIDE SLOPES ARE PROVIDED. THE FENCE SHALL BE INSTALLED AT THE OUTER PORTION OF THE BERM, TO ALLOW FOR MAINTENANCE WORK TO BE DONE INSIDE THE FENCE.
  - ALL UNIMPROVED DISTURBED AREAS SHALL BE STRIPPED OF TOPSOIL WHICH WILL BE STORED ONSITE DURING THE EXCAVATING STAGE. TOPSOIL PILES SHALL BE SEEDED AND MULCHED, OR MATTED WITH STRAW IN THE NON-GROWING SEASON, IMMEDIATELY AFTER THE STRIPPING PROCESS IS COMPLETED, TO PREVENT WIND AND WATER EROSION.
  - SOIL EROSION CONTROLS SHALL BE MONITORED DAILY BY THE ON-SITE ENGINEER, OR CONTRACTOR, WHICHEVER CASE APPLIES.
- SLOPES AND DITCHES**
- ON SITE DITCHES SHALL BE OF THE FLAT BOTTOM TYPE MINIMUM WIDTH OF 2' WITH A MINIMUM OF 3' HORIZONTAL TO 1' VERTICAL SIDE SLOPES, 3:1.
  - DITCHES WITH STEEP SLOPES WILL NEED FLOW CHECKS TO PREVENT SCOURING OF THE DITCH BOTTOM. THESE SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR INSPECTOR.
  - SLOPES IN EXCESS OF 3' HORIZONTAL TO 1' VERTICAL SHALL NOT BE USED EXCEPT WITH A MECHANICAL DEVICE, SUCH AS A RETAINING WALL, TERRACING, OR OTHER PERMITTED DEVICE.
- STORM DRAINS**
- ALL STORM WATER STRUCTURES, CATCH BASINS AND/OR MANHOLES, IF BLOCK, SHALL BE PLASTERED ON BOTH THE INSIDE AND OUTSIDE OF THE STRUCTURES. GROUTING AND POINTING WILL BE NECESSARY AT THE CASTING AND STRUCTURE JOINT TO PREVENT LEAKAGE AND THE RESULTING SOIL MOVEMENT, AROUND THE STRUCTURE.

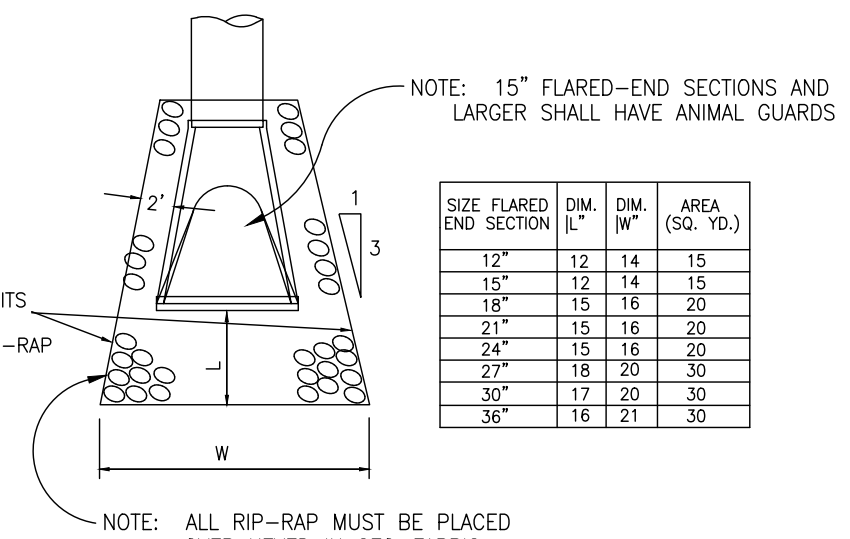
- ALL STORM DRAINAGE PIPE 30" IN DIAMETER OR LARGER SHALL BE POINTED, AT THE JOINTS ON THE INSIDE WITH MORTAR, AFTER BACKFILLING.
  - ALL STORM DRAIN OUTLETS THAT DO NOT EMPTY INTO THE RETENTION/DETENTION POND SHALL HAVE A TEMPORARY 5'X10'X3' SUMP INSTALLED AT THE TERMINATION OF THE STORM SEWER. UPON COMPLETION OF THE STABILIZATION WORK THE SUMP AREA SHALL BE FILLED AND RIP RAPPED WITH COBBLE STONE. SILT TRAPS SHALL BE INSPECTED AFTER EACH STORM.
  - STORM WATER OUTLETS DO DENOTE RIP RAP. ALL OUTLETS SHALL BE RIP RAPPED OVER KEVED FILTER FABRIC WITH A MINIMUM OF 15 SQ. YARDS OF 6" OR LARGER COBBLE STONE.
  - RIP RAP AS NOTED ON THE PLAN SHALL BE OF A FUNNEL SHAPE CONSTRUCTION, WIDTH SHALL INCREASE AS DISTANCE FROM THE OUTLET POINT INCREASES AT A 3:1 RATIO.
  - RIP RAP SHALL BE OF COBBLE STONE, 6" IN DIAMETER OR LARGER. GROUTING MAY BE NECESSARY, AND SHALL BE A MINIMUM OF 6" IN DEPTH WITH THE COBBLE SET IN THE CEMENT SLURRY.
  - STORM WATER OUTLET IS IN NEED OF A SPLASH BLOCK WHICH IS NOT NOTED ON THE PLAN. INSTALL SPLASH BLOCK IF SLOPE OF THE PIPE IS 4% OR GREATER.
  - IT WILL BE NECESSARY FOR THE DEVELOPER TO HAVE THE STORM DRAINAGE LINES CLEANED PRIOR TO FINAL INSPECTION BY THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE. IF REQUIRED, THIS WORK SHALL BE DONE BY A PROFESSIONAL SEWER CLEANING FIRM AND CERTIFIED IN WRITING BY THE PROJECT ENGINEER. ALL SUMPS AND TEMPORARY SILT TRAPS SHALL ALSO BE CLEANED AT THIS TIME.
- STABILIZATION**
- ALL UNIMPROVED DISTURBED AREAS SHALL BE RE-TOP SOILED, WITH A MINIMUM OF 3" OF MATERIAL, SEEDED, MULCHED AND TACKED WITHIN 15 DAYS OF THE COMPLETION OF THE MASSIVE EARTH DISRUPTION. IN THE NON-GROWING SEASON STRAW MATTING WILL SUFFICE. HYDROSEEDING WILL BE AN ACCEPTABLE ALTERNATE FOR MULCHING. EXTREME CARE SHOULD BE EXERCISED IN SPRING AND FALL PERIODS AS A FROST WILL BREAK THE BIND OF THE HYDROSEEDING, WHICH WILL AFFECT THE EFFECTIVENESS OF THIS PROCEDURE.
  - IN THE NON-GROWING SEASON, TEMPORARY STABILIZATION OF MASSIVELY EXPOSED AREAS FOR WINTER STABILIZATION SHALL BE DONE WITH STRAW MATTING.
  - PERMIT FEES DURING THE WINTER PERIOD OF NON-CONSTRUCTION, (DECEMBER 1 THROUGH MARCH 31), SHALL NOT BE IMPOSED IF THE PERMIT HOLDER TEMPORARILY STABILIZES THE EXPOSED AREAS WITH STRAW MATTING, AND OTHER APPROVED CONTROLS, AND OBTAINS A WINTER STABILIZATION CERTIFICATE FROM THIS OFFICE.
  - PERIODIC INSPECTIONS WILL BE MADE THROUGHOUT THE COURSE OF THE PROJECT. IT WILL BE THE RESPONSIBILITY OF THE MANAGERS OF THE PROJECT TO CONTACT THIS OFFICE FOR THE FINAL INSPECTION AT THE END OF THE PROJECT.
  - THIS COMMERCIAL PERMIT IS VALID FOR THE MASS EARTH MOVEMENT, THE INSTALLATION OF ROADS, DRAINS, AND UTILITIES AND IS NOT FOR ANY SINGLE FAMILY RESIDENCE. ALL RESIDENTIAL BUILDERS WILL NEED TO SECURE WAIVERS AND/OR PERMITS AS NECESSARY FOR EACH LOT IN THIS DEVELOPMENT AT THE TIME APPLICATION FOR SINGLE FAMILY RESIDENCE IS MADE.
  - THE ISSUING BUILDING DEPARTMENT SHALL NOT ISSUE THE CERTIFICATE OF OCCUPANCY UNTIL THE FINAL INSPECTION LETTER FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE HAS BEEN OBTAINED.
  - PER THE LIVINGSTON COUNTY DRAIN COMMISSIONER THE SEEDING, FERTILIZER AND MULCH MINIMUM QUANTITIES SHALL BE AS FOLLOWS:  
TOP-SOIL 3" IN DEPTH  
GRASS SEED 218 LBS. PER ACRE  
FERTILIZER 150 LBS. PER ACRE  
STRAW MULCH 3" IN DEPTH 1.5 TO 2 TONS PER ACRE (ALL MULCHING 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.
- SANITARY SEWERS**
- SANITARY SEWER TAP TO THE GENOA-OCCEOLA SANITARY COUNTY DRAIN, SHALL ONLY BE MADE AFTER SECURING IN WRITING CLEARANCE FROM THE GENOA TOWNSHIP AND A SEWER TAP PERMIT FROM THE LIVINGSTON COUNTY DEPARTMENT OF BUILDING & SAFETY.
  - A TAP PERMIT WILL BE NEEDED BY THE OWNER/DEVELOPER OF THIS PROJECT TO TAP TO THE LEGALLY ESTABLISHED COUNTY STORM DRAIN. THE OWNER/DEVELOPER SHALL MAKE A WRITTEN REQUEST TO THE DRAIN COMMISSIONER TO REQUEST THE TAP TO THE STORM SEWER. THE FEES FOR SUCH TAP ARE AS FOLLOWS:  
A. NON REFUNDABLE ADMINISTRATIVE FEE OF \$50.00, TO BE PAID AT THE TIME OF APPLICATION.  
B. INSPECTION FEES ARE BASED ON TIME AND MATERIAL BASIS FROM PORT TO PORT FOR THE ON-SITE INSPECTOR. INSPECTORS RATE, VEHICLE MILEAGE, AND 0.5 HOURS OF REPORT PREPARATION TIME WILL BE CHARGED, AS WELL AS ANY NECESSARY MATERIALS. TIME AND MATERIAL FEES ARE PAID AT THE COMPLETION OF THE TAP INSTALLATION.

**MAINTENANCE SCHEDULE FOR SOIL EROSION CONTROLS**

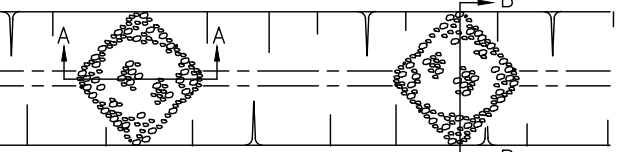
- SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH MAJOR STORM EVENT. MAINTENANCE SHALL INCLUDE REMOVAL OF ACCUMULATED SILT AND REPLACEMENT OF TORN SECTIONS. SILT FENCE SHALL BE REMOVED WHEN ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
- TRACKING PAD SHALL BE INSPECTED MONTHLY FOR ACCUMULATED DIRT. TRACKING PAD SHALL BE REPLACED WHEN THE STONES ARE CHOKED WITH DIRT. TRACKING PAD SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FIRST COURSE OF ASPHALT BEING LAID.
- DETENTION/RETENTION POND SHALL BE INSPECTED QUARTERLY ON A PERMANENT BASIS. MAINTENANCE SHALL INCLUDE SEDIMENT REMOVAL, EMBANKMENT STABILIZATION AND MAINTAINING THE OUTLET STRUCTURE IN GOOD CONDITION. NO TREES SHALL BE ALLOWED TO GROW ON THE EMBANKMENT.
- CATCH BASINS SHALL BE INSPECTED ANNUALLY FOR ACCUMULATION OF SEDIMENT. ALL SEDIMENT MUST BE REMOVED AND DISPOSED OF PROPERLY WHEN THE SUMP IS FULL.
- COMMON AREAS SHALL BE STABILIZED NO LATER THAN 15 DAYS AFTER GRADE WORK, PURSUANT TO RULE 1709 (5).



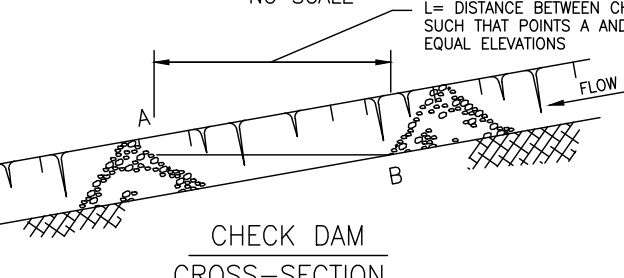
**DOUBLE LIGHT FIXTURE DETAIL (TYP.)**  
(NO SCALE)



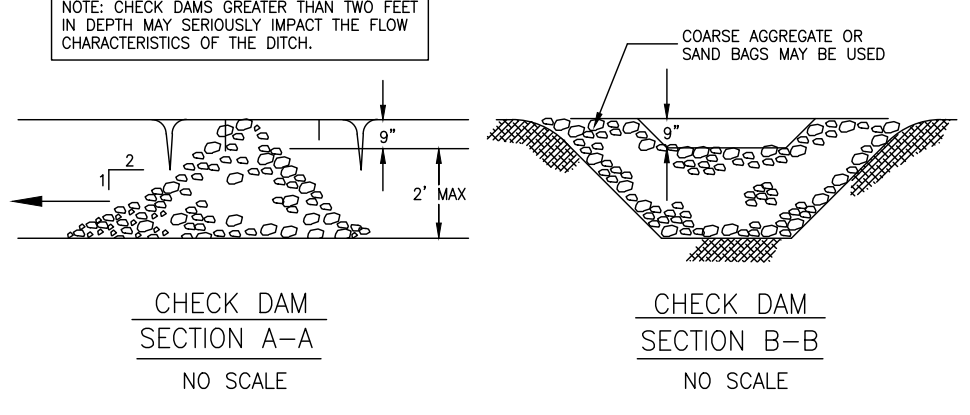
**TYPICAL RIP-RAP DETAIL**  
(SCALE: NONE)



**CHECK DAM PLAN VIEW**  
(NO SCALE)

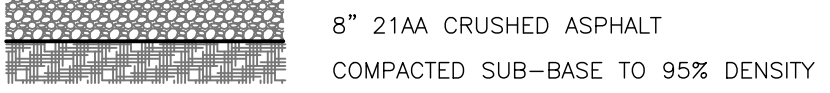


**CHECK DAM CROSS-SECTION**  
(NO SCALE)



**CHECK DAM SECTION A-A**  
(NO SCALE)

**CHECK DAM SECTION B-B**  
(NO SCALE)



**GRAVEL PARKING LOT SECTION**  
(NO SCALE)

**CONSTRUCTION SEQUENCE**

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

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

**CONTROLS & MEASURES  
POST CONSTRUCTION SEQUENCE**

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

**CONTROLS & MEASURES NARRATIVE**

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

**RETENTION BASIN DESIGN CALCULATIONS**  
RETENTION BASIN SIZED FOR 2" OF RUNOFF OVER THE ENTIRE DRAINAGE AREA.  
DRAINAGE = 10.02 AC. (436,498 S.F.)  
REQUIRED RETENTION = 436,498 X 2/12 = 72,750 C.F.

BASIN STORAGE			
ELEV.	AREA (FT <sup>2</sup> )	DEPTH (FT)	VOLUME (FT <sup>3</sup> )
950	29780	1	28,487
949	27194	1	26,021
948	24848	1	23,714
947	22579	1	21,533
946	20487	1	19,458
945	18428	1	17,398
944	16367	1	15,397
943	14426	0	0

**FOREBAY DESIGN CALCULATIONS**  
FOREBAY SIZE BASED ON 5% OF TOTAL VOLUME  
PROPOSED RETENTION = 73,785 C.F.  
FOREBAY VOLUME = 73,785 C.F. X 0.05 = 3,690 C.F.

FOREBAY STORAGE VOLUME PROVIDED:			
ELEV.	AREA	VOLUME	CUMMULATIVE VOLUME
958	8025	5740	10452
957	3454	2766	4712
956	2078	1493	1946
955	907	454	454
954	0		

FOR THE RECORD, THE CONTRACTOR SHALL MAINTAIN THE EXISTING UTILITIES AS SHOWN ON THESE DRAWINGS AND SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE EXACT UTILITY LOCATIONS IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE EXISTING UTILITIES AS SHOWN ON THESE DRAWINGS AND SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL UTILITIES.

BEFORE ANY DIG  
CALL MISS DIG  
800-368-7771

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ENGINEERS • SURVEYORS • PLANNERS  
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(E-CAD/CADD/ARCHITECTURE)

3121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
(800) 246-6725 FAX (517) 548-1670

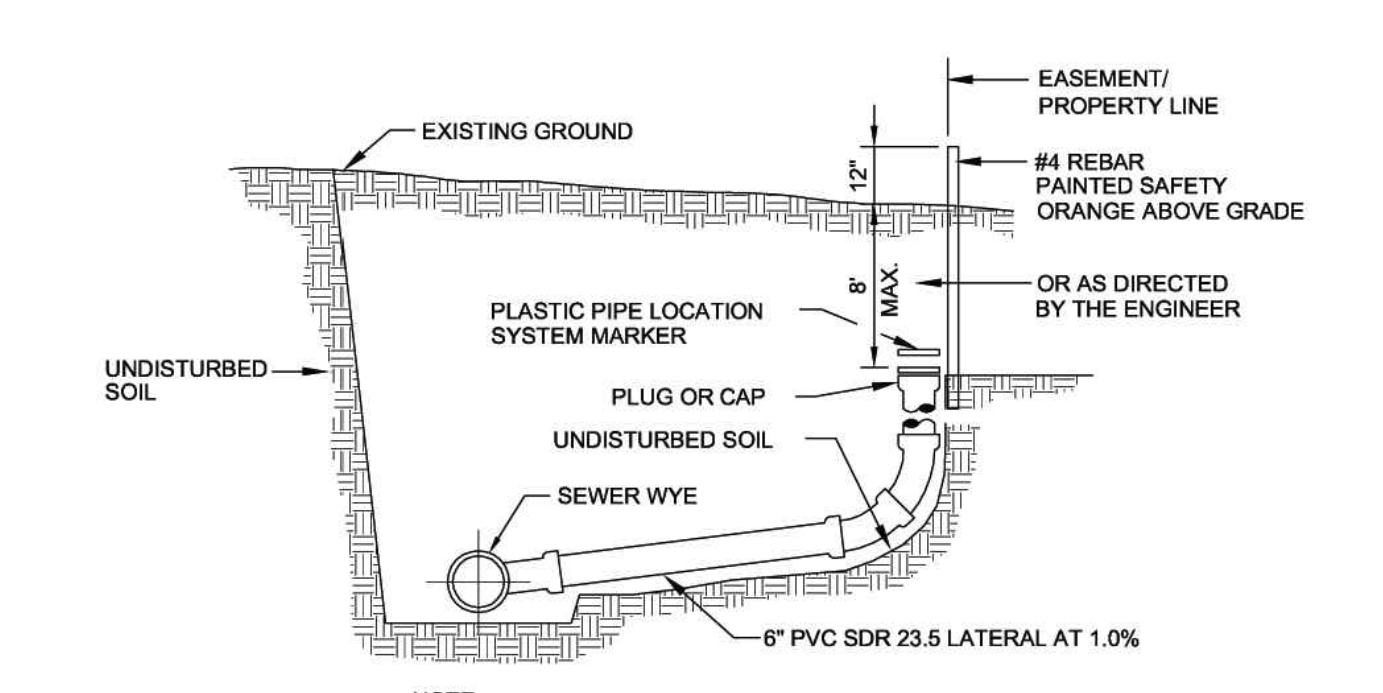
PROJECT:  
**BOB MAXEY FORD DEALERSHIP EXPANSION**  
PREPARED FOR:  
**BOB MAXEY FORD OF HOWELL**  
2798 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
517.545.5700

TITLE:  
**CONSTRUCTION NOTES & DETAILS**

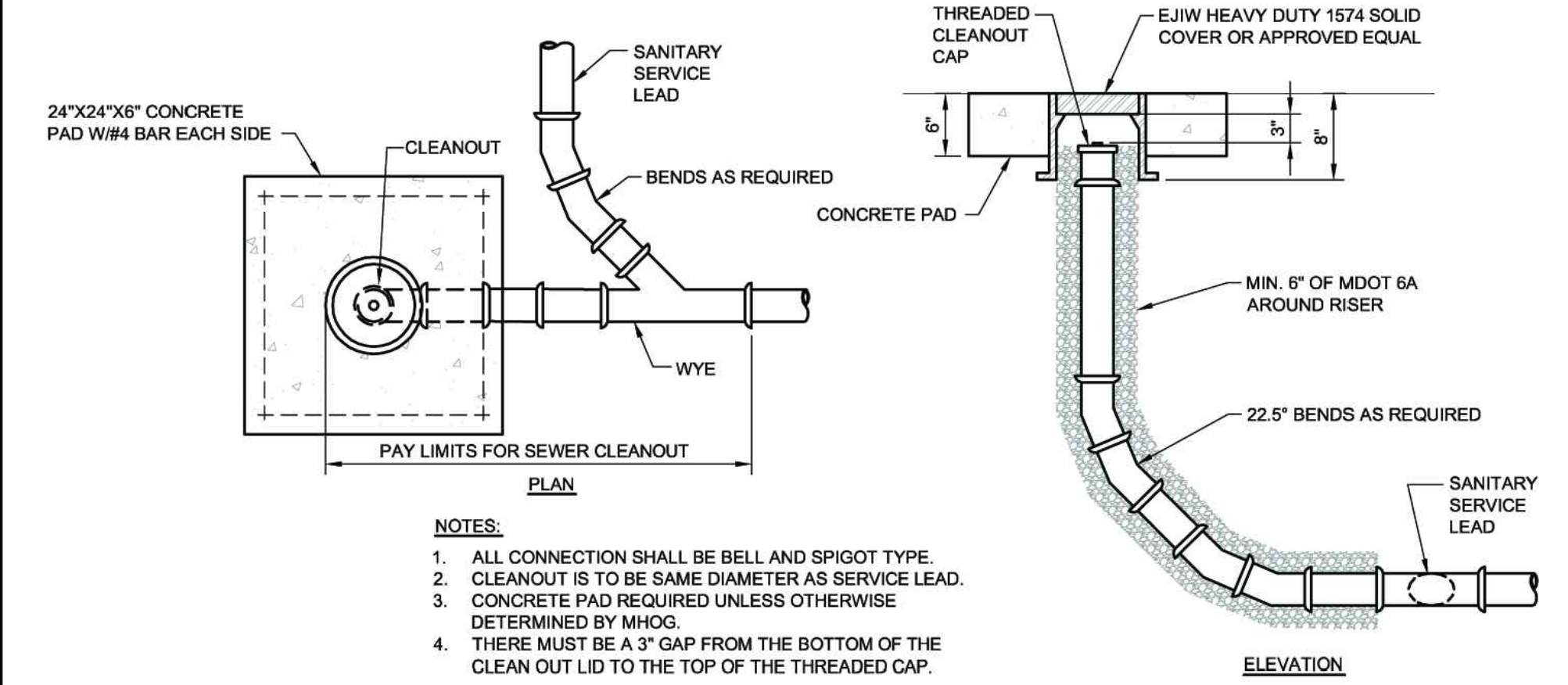
NO	BY	TWP.	REVISION	DATE
1	TD		REVIEW	6-22-16

DESIGNED BY: TD  
DRAWN BY: TD  
CHECKED BY:  
SCALE  
JOB NO. 13-182  
DATE 5-27-16  
SHEET NO. C8

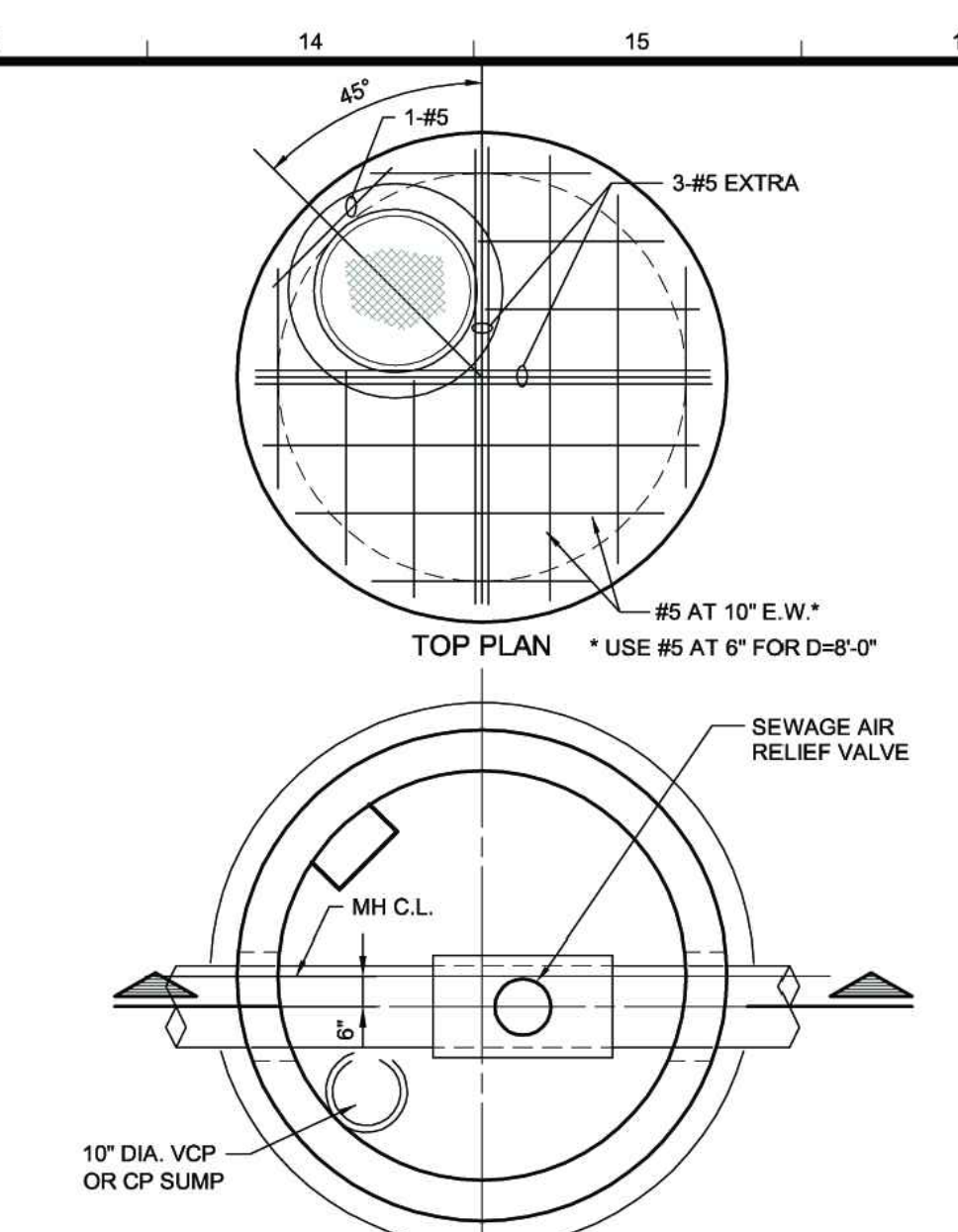
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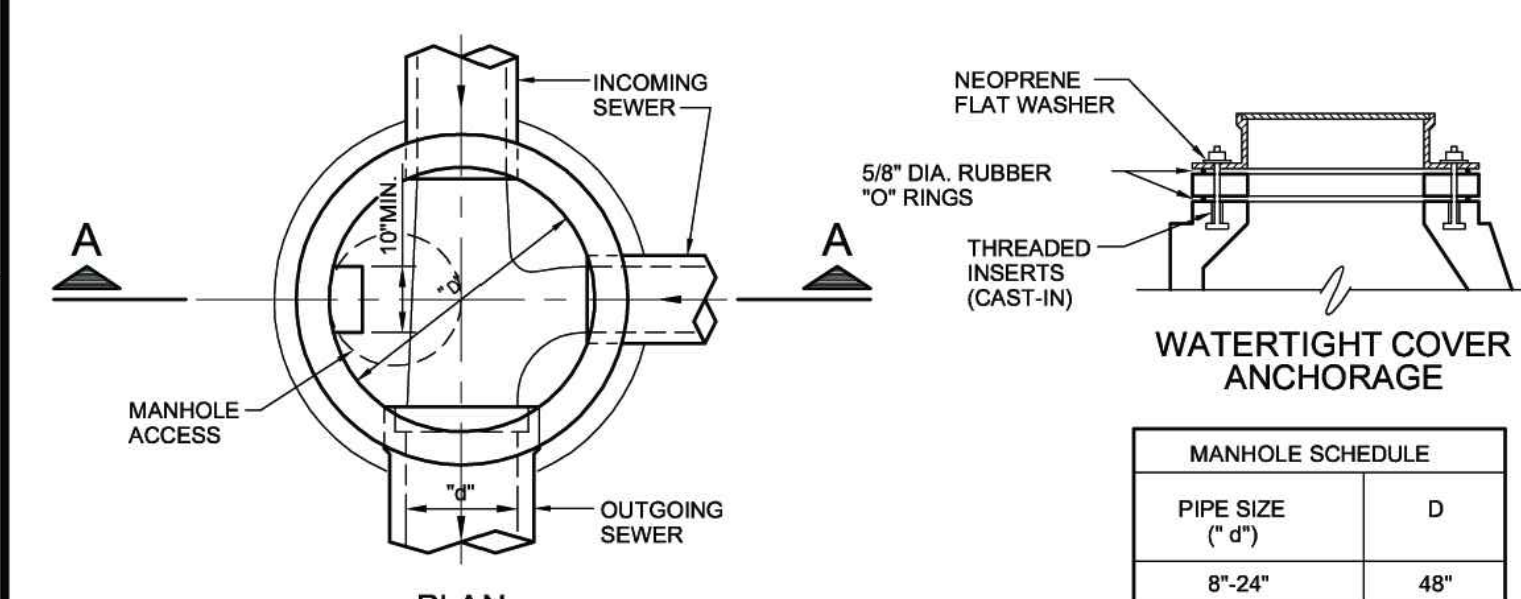
**SANITARY SEWER LATERAL**



**SEWER CLEANOUT DETAIL**

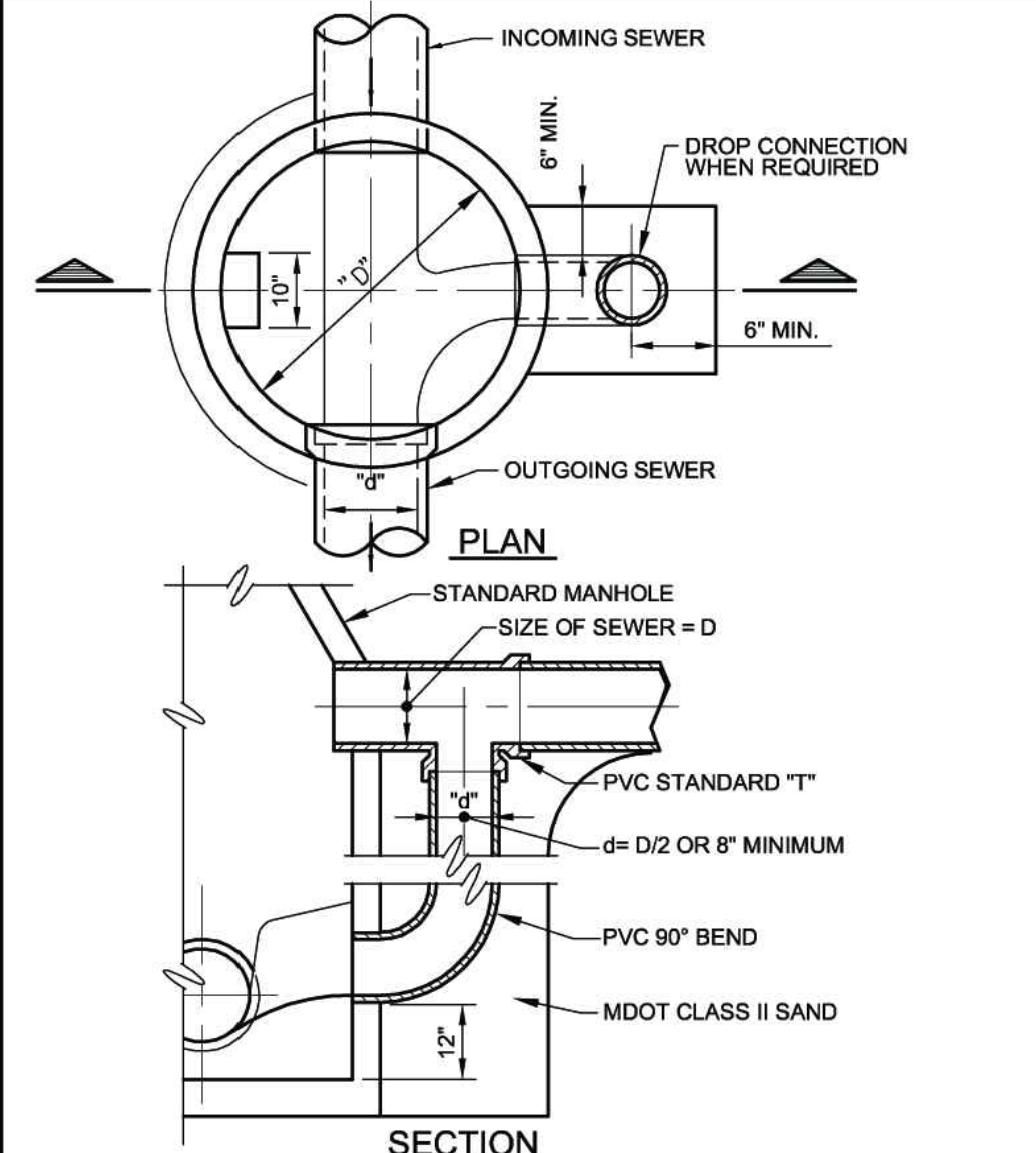


**AIR RELIEF STRUCTURE**

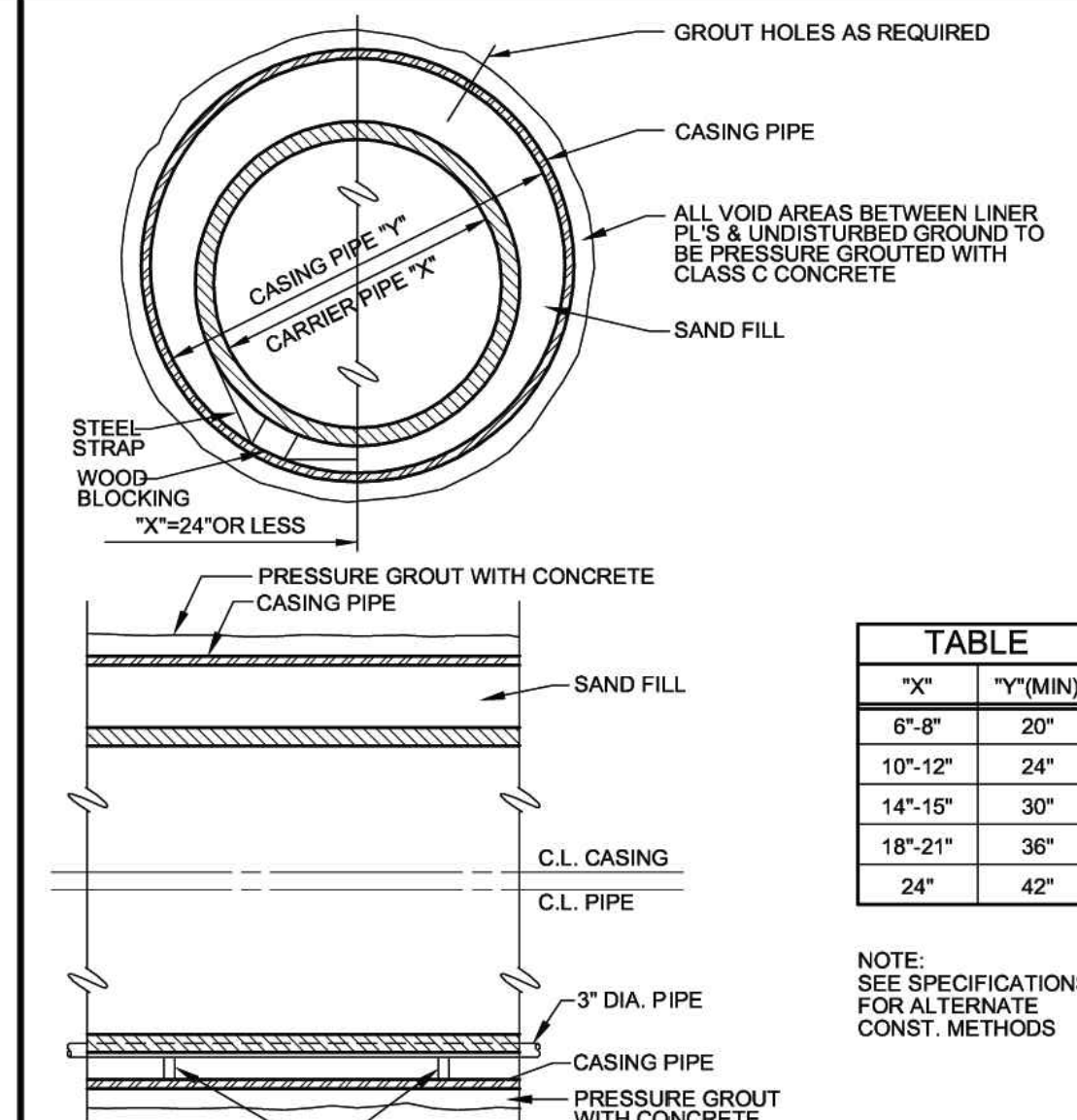


**WATERTIGHT COVER ANCHORAGE**

PIPE SIZE ("ø")	D
8"-24"	48"
27"-36"	60"
42"-48"	72"
54"	84"



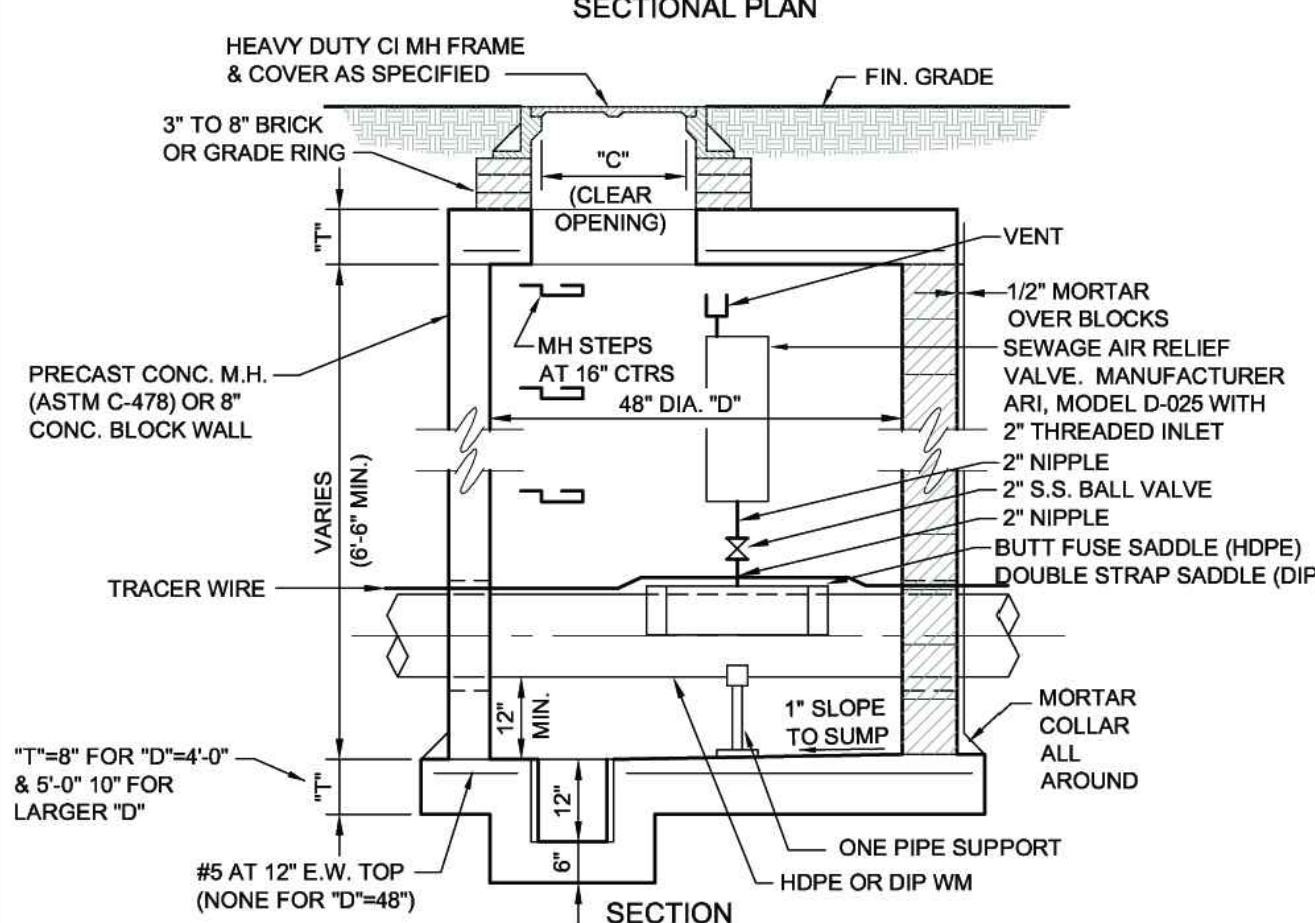
**DROP CONNECTION**



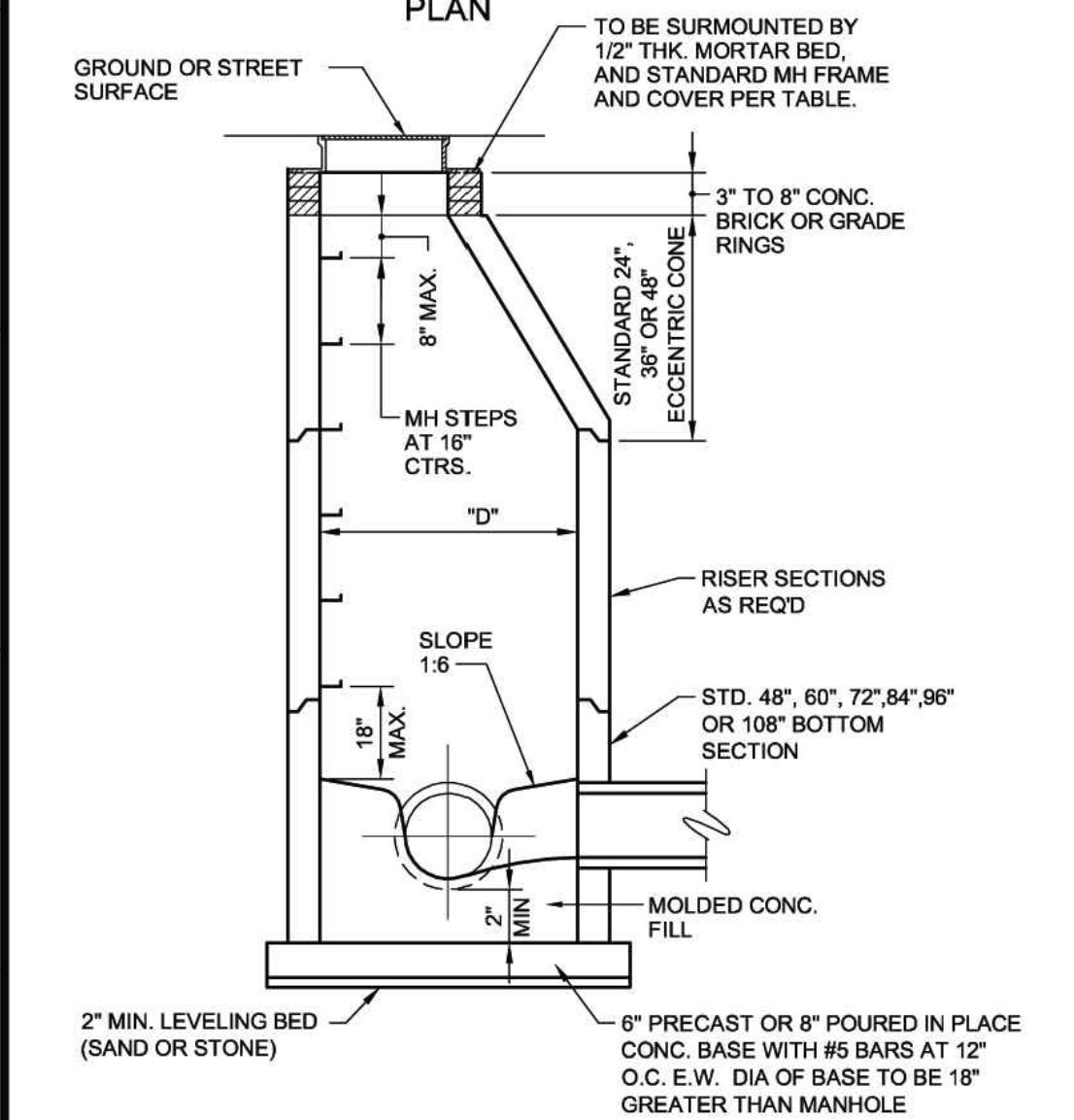
**CASING PIPE**

"X"	"Y"(MIN)
6"-8"	20"
10"-12"	24"
14"-15"	30"
18"-21"	36"
24"	42"

NOTE: SEE SPECIFICATIONS FOR ALTERNATE CONST. METHODS



**AIR RELIEF STRUCTURE**

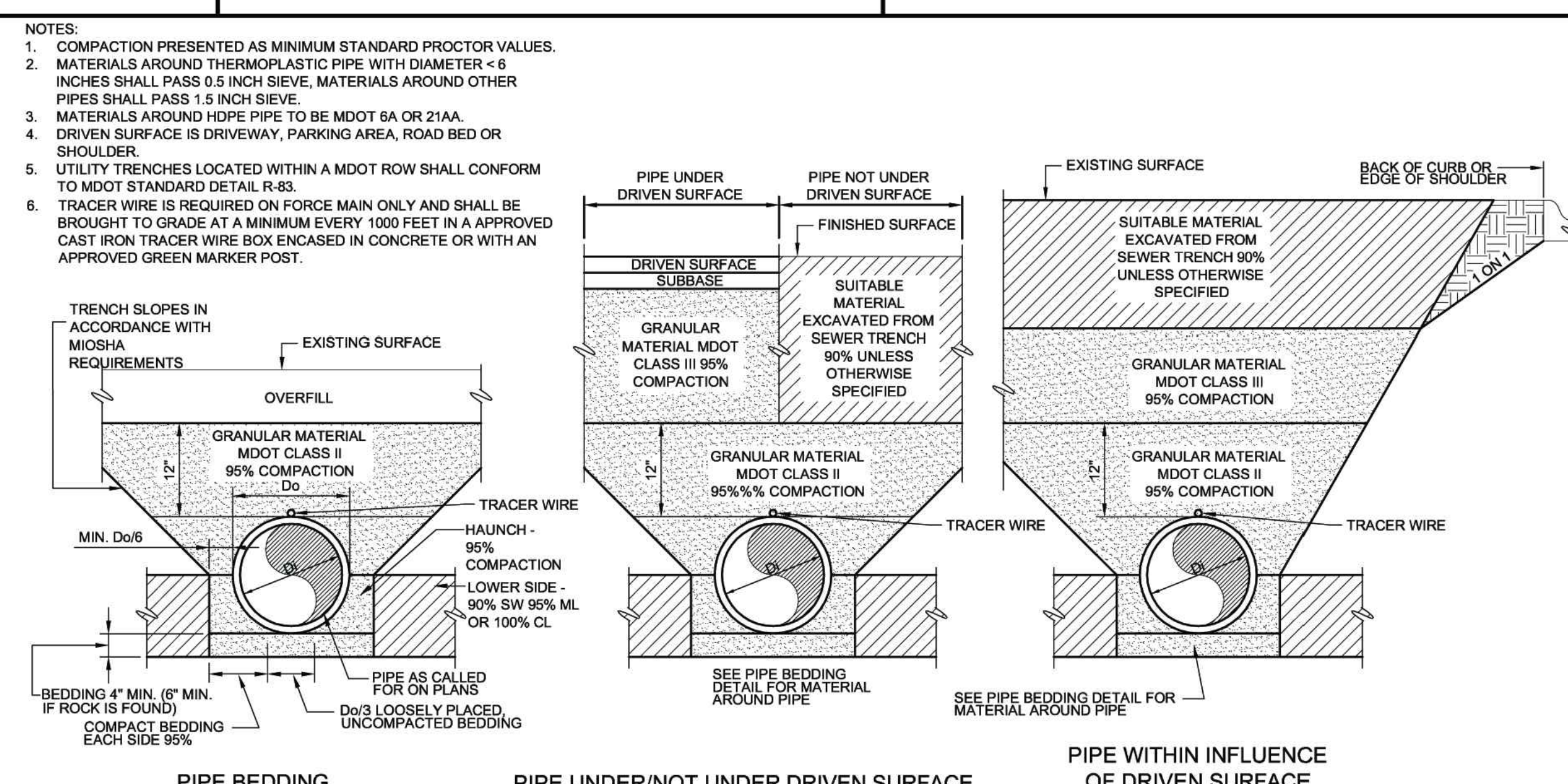


**SECTION A-A**

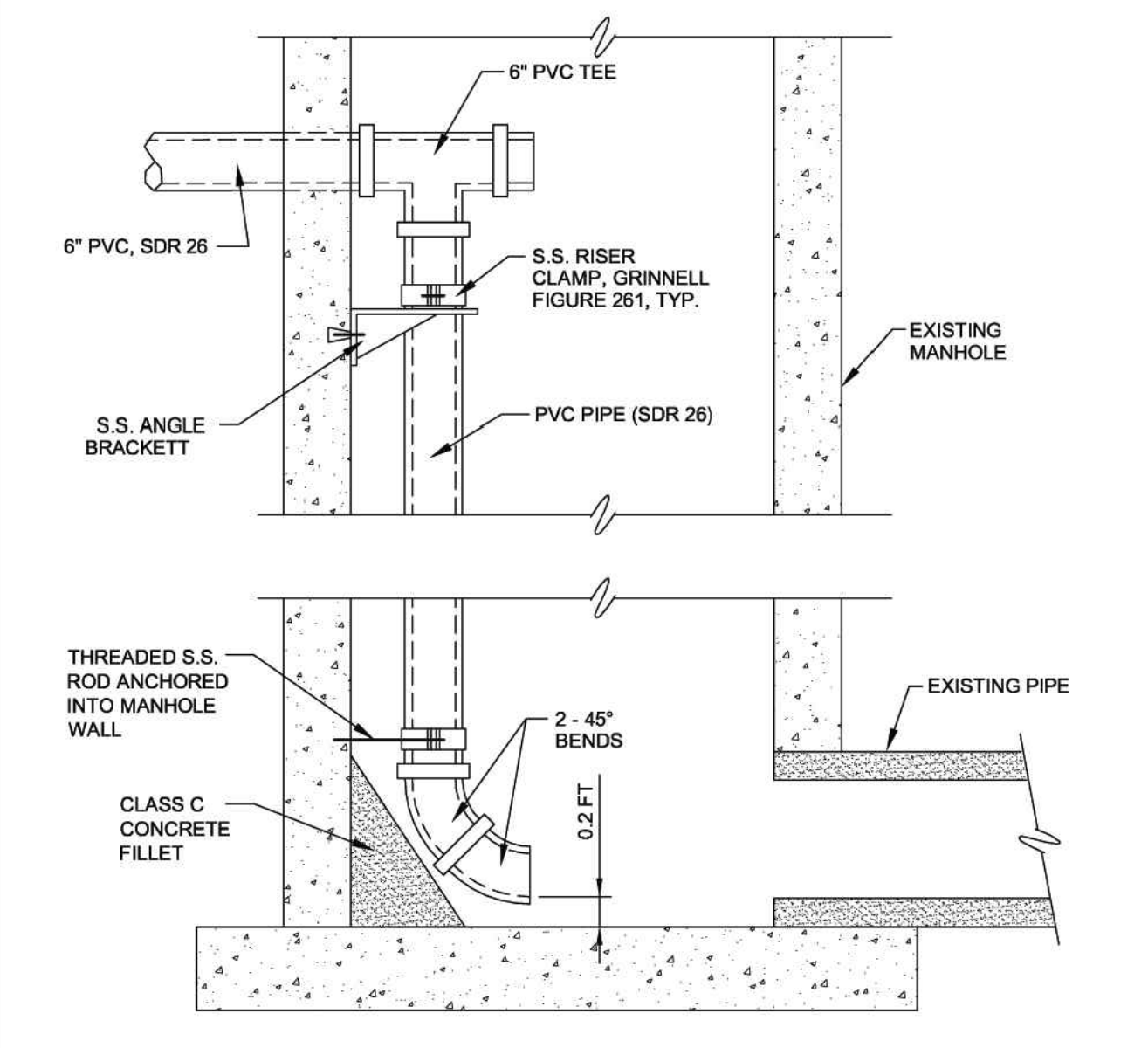
- NOTES:
- ALL SANITARY MANHOLES TO BE PRECAST REINFORCED CONCRETE WITH PREMIUM JOINTS. SEE SPECIFICATIONS FOR BASE SLAB AND PIPE OPENINGS AND CONNECTIONS.
  - MANHOLE CONES SHALL BE THE ECCENTRIC TYPE.
  - PROVIDE 6" OF COMPACTED GRANULAR MATERIAL UNDER ALL PRECAST CONCRETE BASE SLABS.
  - FORCE MAINS CONNECT DIRECTLY TO A MANHOLE SHALL BE INSTALLED SO THAT THE ELEVATION OF THE PIPE CROWNS MATCH. THE FORCE MAIN SHALL BE DIRECTED DOWNWARD INTO THE FLOW CHANNEL.
  - FOR SANITARY SEWERS ALL PIPES SHALL ENTER MANHOLE THROUGH RUBBER BOOTED CONNECTION.

TYPE	TYPE OF COVER	MANUFACTURER OR EQUAL	
		EAST JORDAN	NEENAH
MH	SANITARY - SOLID SELF-SEALING	1040.0000	R-1642
MH	SANITARY - SOLID WATERTIGHT	1040-APT	R-1916-F
CO	SOLID	1574A	R-1973-A

**STANDARD MANHOLE**



**TRENCH EXCAVATION & PIPE BEDDING**



**INTERIOR SEWER LATERAL DROP CONNECTION**



GENOA OCEOLA  
Sewer and Water Authority

SANITARY SEWER  
STANDARD DETAILS

Scale: NONE  
Issued Date: JANUARY - 2014

THE USER SHALL BE RESPONSIBLE FOR VERIFYING THE ACCURACY OF THE INFORMATION PROVIDED HEREIN. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AUTHORITIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AUTHORITIES. THE USER SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY PERMITS AND APPROVALS FROM THE LOCAL, STATE, AND FEDERAL AUTHORITIES.

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LANDSCAPE ARCHITECTS  
(E-Mail: bossengr@aol.com)  
1121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
(800) 246-6725 FAX (517) 548-1670

PROJECT: **BOB MAXEY FORD DEALERSHIP EXPANSION**  
PREPARED FOR: **BOB MAXEY FORD OF HOWELL**  
2798 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
517.545.5700

NO.	BY	DATE	REVISION PER
1	TD	6-22-16	

DESIGNED BY: TD  
DRAWN BY: TD  
CHECKED BY:  
SCALE  
JOB NO. 13-182  
DATE 5-27-16  
SHEET NO. C9

Friday, January 03, 2014 1:27:07 PM DRAWING: L:\CAD\B\HOG\std.dwg



GENOA CHARTER TOWNSHIP  
Application for Site Plan Review 2016

RECEIVED

TO THE GENOA TOWNSHIP PLANNING COMMISSION AND TOWNSHIP BOARD:

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

OWNER'S NAME & ADDRESS: Ron Wilson

SITE ADDRESS: 5866 Grand River Ave., Howell, MI 48843 PARCEL #(s): 4711-15-200-015 & 4711-10-400-003

APPLICANT PHONE: ( 517 ) 546-3774 OWNER PHONE: ( 517 ) 546-3774

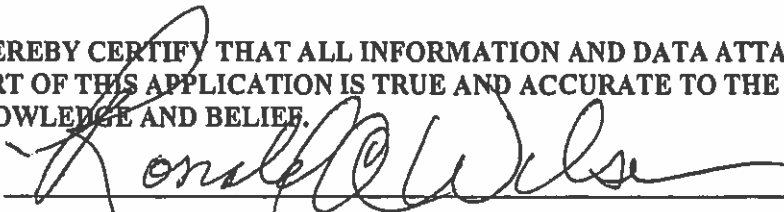
OWNER EMAIL: ronwilson@wilsonboats.com

LOCATION AND BRIEF DESCRIPTION OF SITE: The site is located on the south side of East Grand River, approximately 0.12 miles east of the Dorr Road Intersection. The property consist of two parcels, having a total area of 7.54 acres. The north parcel is within the general commercial district and the south parcel is within the industrial district. The surrounding adjacent properties are in similar zoning districts.  
The subject property has 250 feet of frontage along East Grand River.

BRIEF STATEMENT OF PROPOSED USE: The proposed use for the buildings is for storage.

THE FOLLOWING BUILDINGS ARE PROPOSED: 9,600 sf - Showroom/Warehouse  
11,750 sf - Cold Storage

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

BY: 

ADDRESS: 5866 E. Grand River Ave., Howell, MI 48843

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

1.) Brent LaVanway of Boss Engineering at brentl@bosseng.com  
Name Business Affiliation E-mail Address

**FEE EXCEEDANCE AGREEMENT**

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

SIGNATURE:  DATE: 5-25-16

PRINT NAME: RONALD WILSON PHONE: \_\_\_\_\_

ADDRESS: 5866 E. Grand River Ave., Howell, MI 48843



July 5, 2016

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Planning Director and Assistant Township Manager
<b>Subject:</b>	Wilson Marine – Site Plan Review #2
<b>Location:</b>	5866 Grand River Avenue – south side of Grand River, west of Dorr Road
<b>Zoning:</b>	GCD General Commercial District, TCOD Town Center Overlay District and IND Industrial District

Dear Commissioners:

At the Township’s request, we have reviewed the revised site plan (dated 6/27/16) proposing two new buildings for the existing Wilson Marine development located at 5866 Grand River Avenue. We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance and provide the following comments for your consideration.

**A. Summary**

1. Given the unique nature of this project, additional discussion is warranted as to the review/approval procedure for the full site plan.
2. The proposed elevations, including colors and materials, are subject to review and approval by the Township. We request the applicant present a material and color sample board at the upcoming meeting.
3. Neither of the proposed buildings meets the applicable architectural/material requirements of the Ordinance. Planning Commission has discretion over materials for the IND, while the Township Board may modify the requirements for the TCOD building.
4. While it appears there is sufficient parking, the Planning Commission may wish to request parking calculations/details to ensure full compliance.
5. The applicant may wish to combine parcels or the Township may wish to consider requiring a cross-access easement over the multiple parcels that comprise the development.
6. The applicant has indicated that they would like to discuss alternative landscaping proposals with the Planning Commission.

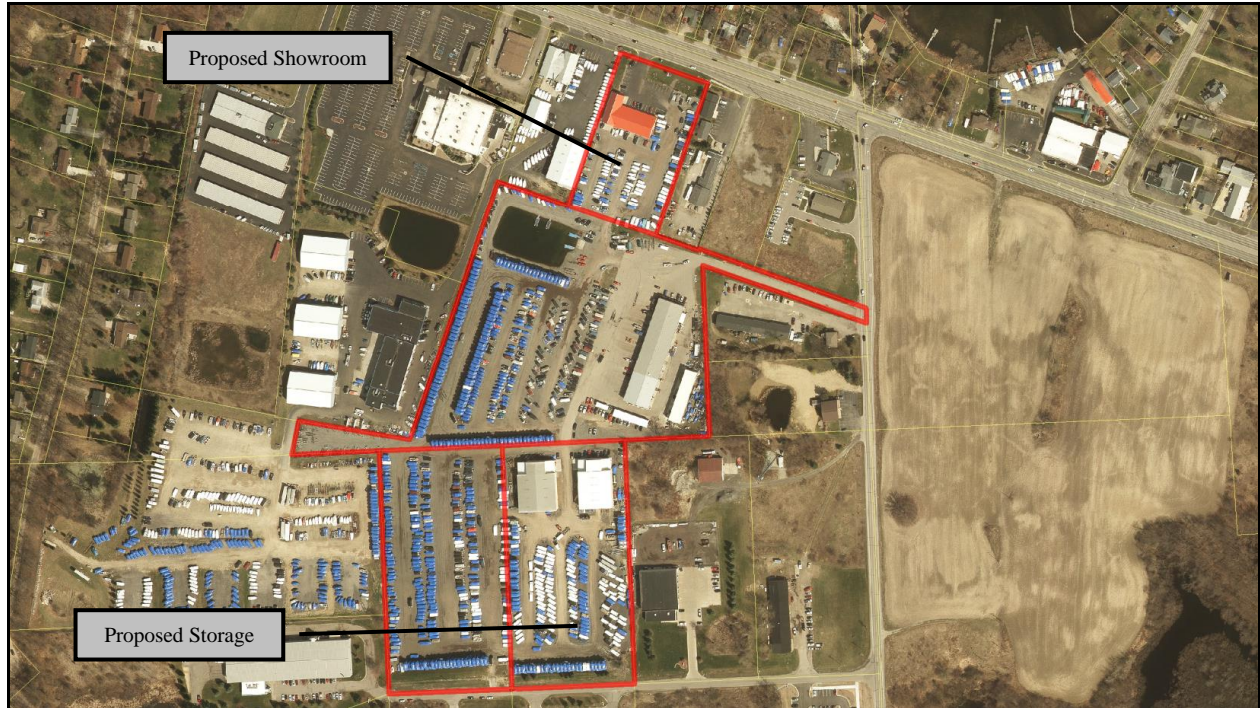
**B. Proposal**

The applicant requests site plan review and approval for two new buildings: a 9,600 square foot showroom on the northerly parcel; and an 11,750 square foot storage building on the parcel to the southeast.

The developed site is comprised of four parcels – the northerly parcel fronts Grand River and is within the GCD and TCOD, while the remaining parcels are zoned IND.

Boat sales are listed as special land uses in the GCD/TCOD, while indoor commercial storage (including boat storage) is permitted by right in the IND.

With respect to the former, the Township has determined that a new special land use approval is not required in accordance with Section 19.06 given the nature/size of the existing development in relation to the size of the proposed building.



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

Since a portion of the project lies within the TCOD, the Planning Commission is to make a recommendation to the Township Board, who then has final approval authority over both the site plan and Impact Assessment.

Given the somewhat unique situation of one building in the TCOD and another that is not, the Township could divvy up review authorities whereby the Board is responsible only for that portion within the TCOD. This procedural aspect may warrant additional discussion.

**C. Site Plan Review**

**1. Dimensional Requirements.** The proposed buildings have been reviewed for conformance with the applicable dimensional standards, as outlined in the tables below:

District	Lot Size		Minimum Setbacks (feet)				Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
TCOD	N/A	N/A	0 min. 75 max.	0	25	20 front	20' min.	N/A
Proposal	2.5	250	108 (existing)	65 (E) 104 (W)	64	Existing	19.5' / 1 story	16.5% building 57.6% impervious

The existing showroom room building and front yard parking do not conform to current TCOD standards; however, no changes are proposed that impact these conditions.

District	Lot Size		Minimum Setbacks (feet)				Max. Height	Lot Coverage
	Lot Area (acres)	Width (feet)	Front Yard	Side Yard	Rear Yard	Parking		
IND	1	150	50	25	40	20 front 10 side/rear	30' / 2 stories	40% building 85% impervious
Proposal	5	335	130	106 (E) 125 (W)	390	N/A	28' / 1 story	5.3% building 5.3% impervious

- 2. Building Materials and Design.** The proposed elevations, including colors and materials, are subject to review and approval by the Township.

Both buildings are constructed of metal siding with standing seam metal roofs. There is no indication of colors. Neither building complies with the applicable architectural/material standards – Section 9.05 for the TCOD building and Section 12.01 for the IND building.

The Planning Commission has authority to modify the material standards for the IND building, while the Township Board has the ability to modify the architectural requirements of the TCOD based on the standards in Section 9.05.03.

- 3. Parking.** The revised submittal identifies 3 existing parking lots – 2 for employees and 1 for patrons. In total, the employee lots contain 47 spaces, while the submittal indicates there are 45 employees.

Details are not provided for the patron lot; however, it appears there is sufficient parking. The Planning Commission may wish to request parking calculations/details to ensure compliance.

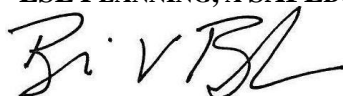
- 4. Pedestrian Circulation.** The project includes a new concrete sidewalk along the site's Grand River frontage.
- 5. Vehicular Circulation.** No changes are proposed to existing circulation pattern, although circulation moves across all 4 parcels. The applicant may wish to combine the parcels, or the Township may wish to consider requiring a cross-access easement.
- 6. Landscaping.** The submittal does not identify any existing or proposed landscaping. This information should be included on the plans. If there are deficiencies in existing plantings, the Township may wish to require improvements.

The applicant has noted that they would like to discuss alternative landscaping proposals with the Planning Commission at the upcoming meeting.

- 7. Waste Receptacle and Enclosure.** The submittal identifies an existing waste receptacle in the southeast corner of the middle parcel. A new concrete base pad and wooded enclosure are proposed as part of this project.
- 8. Exterior Lighting.** The project includes 5 new wall mounted LED light fixtures – 3 on the showroom building and 2 on the storage building. Fixture details, mounting heights and photometric readings all comply with current standards.
- 9. Impact Assessment.** The submittal includes an Impact Assessment (June 1, 2016). In summary, the Assessment notes that the proposed building addition is not anticipated to adversely impact natural features, public services/utilities, surrounding land uses or traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at [borden@lslplanning.com](mailto:borden@lslplanning.com).

Respectfully,  
**LSL PLANNING, A SAFE BUILT LLC COMPANY**

  
Brian V. Borden, AICP  
Planning Manager





July 6, 2016

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Wilson Marine Showroom and Storage Buildings  
Site Plan Review #2**


Dear Ms. Van Marter:

We have received the revised site plan documents for the referenced project from Boss Engineering dated June 27, 2016. The applicant is proposing to construct a 9,600 sft showroom and an 11,750 sft storage building on the site located on the south side of Grand River Avenue between Gray and Dorr Roads. The new buildings are going to be placed in areas that are currently developed and paved as part of the existing complex.

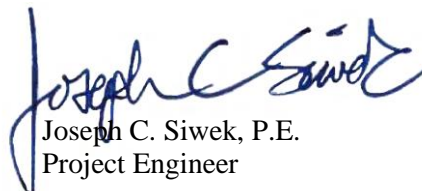
Tetra Tech has reviewed the revised documents and found that the petitioner has addressed the previous comments and acknowledged a meeting with the Township to discuss potential changes in site utility usage.

If you have any questions, please call.

Sincerely,



Gary J. Markstrom, P.E.  
Unit Vice President



Joseph C. Siwek, P.E.  
Project Engineer

Copy: Brent LaVanway P.E. Boss Engineering



# BRIGHTON AREA FIRE AUTHORITY

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

June 28, 2016

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Wilson Marine Showroom/Storage Building  
5866 E. Grand River  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on June 27, 2016 and the drawings are dated June 27, 2016. The project is for the proposed construction of a new 11,750 square foot boat storage (S-1) building and a new 9,600 square foot mercantile/storage (M/S-1) showroom to the existing site. The plan review is based on the requirements of the International Fire Code (IFC) 2015 edition.

~~1. The nearest hydrants are shown; however the water main locations are not indicated on the submittal. Provide the location of the water mains.~~

~~———— IFC 912.2~~

~~2. Based upon the design and construction criteria for the new structures, additional fire hydrants shall be added to the site to meet the required fire flow of between 2,750-3,000gpm for each structure. Based upon this flow rate each structure requires a minimum of three fire hydrants be provided on the site. Spacing shall be on average no more than 425 foot hose lay distance from the other. Hydrant spacing may begin at the nearest hydrant to the site with the first on site hydrant being no more than 225 feet hose lay from this location.~~

~~IFC B 105.1(2)~~

~~IFC C 102.1~~

~~A. Provide the location of hydrants, size and location of water mains and gate valves on the utility site plan.~~

**(Based upon the results of a meeting with the civil engineer, Mr. Ron Wilson and the contractor the following criteria have been agreed upon to accommodate for the fire flow requirements: Existing hydrant locations, use of on-site pond if needed, Maintenance of secondary accesses and relocation of the storage building to the southern end of the property to be within proper distance of water supply.)**

3. The access roads shall be maintained a minimum of 26' wide and provide for inside turning radius of 30' and outside radius of 50'. Access roads to site shall be provided and maintained during construction. Access roads shall be constructed to be capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds. **(Surface detail and apparatus drives and radius are reflected on the drawing)**

**IFC D 103.1**

**IFC D 102.1**

**IFC D 103.3**



4. Sterling Drive access gate shall be maintained clear and unobstructed as secondary emergency vehicle access at all times. This gate shall be secured with a Knox padlock in conjunction with site lock. **(Acknowledged and revised on drawing)**
5. The location of a new Knox Box shall be indicated on future submittals. The Knox box will be located adjacent to the main entrance of the showroom structure. It can be acquired at [www.knoxbox.com](http://www.knoxbox.com) **(Revised on drawing)**
6. Provide names, addresses, phone numbers, emails of owner or owner's agent, contractor, architect, on-site project supervisor. **(Provided on drawing)**

**IFC 506.1**

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".

Capt. Rick Boisvert, CFPS  
Fire Inspector

**GENOA TOWNSHIP**

**JUN 27 2016**

**RECEIVED**

**IMPACT ASSESSMENT  
FOR  
SITE PLAN PETITION  
"WILSON MARINE"  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**CONTRACTING MANAGEMENT CORP.  
3471 BREEZE POINTE COURT  
LINDEN, MI 48451  
(248) 756-3911**

Prepared by:

**BOSS ENGINEERING COMPANY  
3121 E. GRAND RIVER  
HOWELL, MI 48843  
(517) 546-4836**

JUNE 1, 2016

**16-181 EIA**

## INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development may have on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Submittal Requirements for Impact Assessment* guidelines in accordance with Section 18.07 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

## DISCUSSION ITEMS

### **A. Name(s) and address(es) of person(s) responsible for preparation of the impact assessment and a brief statement of their qualifications.**

Prepared For:  
CONTRACTING MANAGEMENT CORP.  
3471 Breeze Point Court  
Linden, MI 48451  
(248) 756-3911

Prepared By:  
BOSS ENGINEERING COMPANY  
Civil Engineers, Land Surveyors, Landscape Architects and Planners  
3121 E. Grand River  
Howell, MI 48843  
(517) 546-4836

Boss Engineering has been successfully providing engineering, surveying, planning and landscape architecture services on land development projects since 1969. Since its beginning, Boss Engineering has strived to provide unparalleled professional services with integrity and respect to every client. Today, Boss provides a complete lineup of consulting services for each project, ranging from conceptual design through final construction. The company currently employs a variety of professions including civil engineers, surveyors, landscape architects and sanitarians.

### **B. Map(s) and written description / analysis of the project site including all existing structures, manmade facilities, and natural features. The analysis shall also include information for areas within 10 feet of the property. An aerial photograph or drawing may be used to delineate these areas.**

The site is located at 5866 East Grand River on the south side of East Grand River Avenue, approximately 430 feet west of the East Grand River Ave and Dorr Road intersection within the general commercial district (GC). To the east and west of the site is GC development, including Wonderland Marine, Spirit Auto Repair and Financial Plus Credit Union. Across Grand River to the north (Lake Chemung) is single-family residential. Bordering to the south is the Industrial District (I). The existing site includes a showroom building, a maintenance and repair facility, 2 warehouse storage buildings, an engineered retention basin, open storage racks and several smaller accessory buildings. One proposed building (Additional Showroom Building) will be in the General Commercial District and one will be in the Industrial District (Warehouse Building).

### **C. Impact on natural features: A written description of the environmental characteristics of the site prior to development and following development, i.e., topography, soils, wildlife, woodlands, mature trees (eight-inch caliper or greater), wetlands, drainage, lakes, streams, creeks or ponds. Documentation by a qualified wetland specialist shall be required wherever the Township determines that there is a potential regulated wetland. Reduced copies of the Existing Conditions Map(s) or aerial photographs may accompany written material.**

The total site area is approximately 26.45 acres and is entirely developed. The entire site is either concrete paved, asphalt paved, surfaced by asphalt millings, or occupied by buildings. Approximately half of the site is served by an engineered retention pond (78,200 cu ft) with embankments consisting of asphalt millings. Portions at the north and south ends of the site drain off-site. The 2 proposed buildings

will drain to the existing retention pond with no change to the drainage areas or configuration. Existing soils consist of Miami-loam of varying percent slopes (generally 2-6%). There is no significant vegetation on site therefore no impact on any existing natural features.

**D. Impact on storm water management: Description of measures to control soil erosion and sedimentation during grading and construction operations and until a permanent ground cover is established. Recommendations for such measures may be obtained from County Soil Conservation Service.**

Surface runoff during periods of construction will be controlled by proper methods set forth by the Livingston County Drain Commissioner, including silt fence and inlet protection devices.

At the time of construction, there may be some temporary dust, noise, vibration and smoke, but these conditions will be of relatively short duration and shall be controlled by applying appropriate procedures to minimize the effects, such as watering if necessary for dust control.

The site plan documents show the proposed locations of all site improvements along with detailed soil erosion control information in compliance with the Livingston County Drain Commissioner's office regulations.

**E. Impact on surrounding land use: Description of the types of proposed uses and other man made facilities, including any project phasing, and an indication of how the proposed use conforms or conflicts with existing and potential development patterns. A description shall be provided of any increases of light, noise or air pollution which could negatively impact adjacent properties.**

The proposed development of 2 buildings (9,600 sq. ft and 11,750 sq ft) will be on an already completely developed site and internal to the existing complex of existing buildings and storage facilities. Therefore, they will have minimal impact, if any, on surrounding properties. The increase of light, noise, and air pollution will be negligible.

**F. Impact on public facilities and services: Description of number of expected residents, employees, visitors, or patrons, and the anticipated impact on public schools, police protection and fire protection.**

Letters from the appropriate agencies may be provided, as appropriate.

There will be no impact on public facilities due to the proposed development as well as on public schools, police protection, and fire protection. An increase of approximately 2 employees is anticipated.

**G. Impact on public utilities: Description of the method to be used to service the development with water and sanitary sewer facilities, the method to be used to control drainage on the site and from the site, including runoff control during periods of construction. For sites service with sanitary sewer, calculations for pre- and post development flows shall be provided in equivalents to a single family home. Where septic systems are proposed, documentation or permits from the Livingston County Health Department shall be provided.**

No impact will be made on public utilities due to the proposed development as no new services are needed.

**H. Storage or handling of any hazardous materials: Description of any hazardous substances expected to be used, stored or disposed of on the site. The information shall describe the type of materials, location within the site and method of containment. Documentation of compliance with federal and state requirements, and a Pollution Incident Prevention Plan (PIPP) shall be submitted, as appropriate.**

There will be no hazardous materials stored or handled within the proposed buildings. They are intended for additional showroom space and storage only respectively.

**I. Impact on traffic and pedestrians: A description of the traffic volumes to be generated based on national reference documents, such as the most recent edition of the Institute of Transportation Engineers Trip Generation Manual, other published studies or actual counts of similar uses in Michigan.**

There will be no impact on traffic or pedestrians. The additional buildings are intended only as additional enclosed storage and display of existing inventory.

**J. A detailed traffic impact study shall be submitted for any site over ten (10) acres in size which would be expected to generate 100 directional vehicle trips (i.e. 100 inbound or 100 outbound trips) during the peak hour of traffic of the generator or on the adjacent streets.**

The buildings are for additional storage and display only and will not generate 100 additional directional vehicle trips. Therefore, no detailed traffic impact study is necessary.

**K. Special Provisions: General description of any deed restrictions, protective covenants, master deed or association bylaws.**

None at this time.

**L. A list of all sources shall be provided.**

*Genoa Township's Submittal Requirements for Impact Assessment*

Genoa Township Zoning Ordinances

Soil Survey of Livingston County, Michigan, U.S.D.A. Soil Conservation Service

National Wetland Inventory Plan, United States Department of the Interior, Fish and Wildlife Service

Trip Generation manual, 6<sup>th</sup> edition, Institute of Transportation Engineers

**APPENDIX**

*(SEE PLANS FOR ADDITIONAL REFERENCE INFORMATION)*



**PROPERTY DESCRIPTION:**

**DESCRIPTION OF PARCEL # 4711-10-400-003 (SHOWROOM BUILDING):**

Description of W.M. Acquisition Parcel, as Recorded in Warranty Deed, dated November 4, 1996, and recorded in Liber 1910, Page 439, Livingston County Records:

A part of the Southeast 1/4 of Section 10, Town 2 North, Range 5 East, Michigan, described as follows: Beginning at a point on the Southerly Right-of-Way line of Grand River Road, North 2 degrees 08 minutes East, 800.00 feet and North 66 degrees 34 minutes West, 579.00 feet from the Southeast corner of said Section 10; running thence N 66 degrees 34 minutes West 100.00 feet along the Southerly Right-of-Way line of Grand River Road; thence South 23 degrees 26 minutes West, 435.60 feet; thence South 66 degrees 34 minutes East, 100.00 feet; thence North 23 degrees 26 minutes East 435.60 feet to the Point of Beginning.

Description of Wilson Marine Corporation Parcel, as recorded in Warranty Deed, dated September 7, 1988, and recorded in Liber 1303, Page 795, Livingston County Records:

A part of the Southeast 1/4 of Section 10, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as follows: Beginning at a point on the Southerly right-of-way line of Grand River Road, North 02 degrees 08 minutes East 800.00 feet and North 66 degrees 34 minutes West 429.00 feet from the Southeast corner of said Section 10; running thence North 66 degrees 34 minutes West 150.00 feet along the Southerly right-of-way line of Grand River Road; thence South 23 degrees 26 minutes West 435.60 feet; thence South 66 degrees 34 minutes East 150.00 feet; thence North 23 degrees 26 minutes East 435.60 feet to the point of beginning.

**DESCRIPTION OF PARCEL #4711-15-200-015 (WAREHOUSE BUILDING):**

PARCEL DESCRIPTION PER WARRANTY DEED, AS RECORDED IN LIBER 5075, PAGE 489, LIVINGSTON COUNTY RECORDS: Part of the Northeast 1/4 of the Northeast 1/4 of Section 15, Town 2 North, Range 5 East, Michigan, described: Beginning at a point on the North line of said Section 15, distant South 89 degrees 54 minutes 29 seconds West 994.50 feet from the Northeast corner of said Section 15; thence South 89 degrees 54 minutes 29 seconds West along the North line of said Section 15, 331.50 feet thence due South 660.00 feet; thence North 89 degrees 54 minutes 29 seconds East 331.50 feet; thence due North 660.00 feet to the point of beginning, subject to the rights of others over the Southerly 33 feet in an access easement driveway and public utilities; along with an easement for access to Dorr Road, described as: Beginning at a point on the East line of said Section 15, distant due South 594.00 feet from the Northeast corner of said Section 15; thence due South along said East line of Section 15, which is also the centerline of Dorr Road right-of-way, 132.00 feet; thence South 89 degrees 54 minutes 29 seconds West 50.00 feet; thence North 45 degrees 05 minutes 31 seconds West 46.67 feet; thence South 89 degrees 54 minutes 29 seconds West 1243.00 feet; thence due North 66.00 feet; thence South 89 degrees 54 minutes 29 seconds East 1243.00 feet; thence North 44 degrees 54 minutes 29 seconds East 46.67 feet; thence North 89 degrees 54 minutes 29 seconds East 50.00 feet to the point of beginning, EXCEPT all mineral and oil and gas rights reserved by grantor, as set forth in Deed Liber 1592, Page 815.

**PARCEL ASSESSED AS:**

The West 1/2 of the Northwest 1/4 of the Northeast 1/4 of the Northeast 1/4 of Section 15, Town 2 North, Range 5 East.

**PARCEL DESCRIPTION AS SURVEYED:**

Part of the Northeast 1/4 of Section 15, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northeast Corner of Section 15; thence along the true North line of Section 15, S 89°54'29" W, 994.17 feet (previously recorded as 994.50 feet); thence S 0°01'46" W (recorded as due South), 3.90 feet, to the POINT OF BEGINNING of the Parcel to be described; said point also being the following course from the Northeast Corner of Section 15; along the North line of Section 15 as previously surveyed and monumented, S 89°41'00" W, 994.19 feet; thence S 0°01'46" W, 655.68 feet (recorded as due South, 660.00 feet); thence S 89°54'29" W, 334.44 feet (recorded as 331.50 feet); thence along the West line of the Northwest 1/4 of the Northeast 1/4 of the Northeast 1/4 of Section 15, as previously surveyed and monumented, N 0°06'01" W, 654.36 feet (recorded as due North 660.00 feet); thence along the North line of Section 15, as previously surveyed and monumented, N 89°41'00" E, 335.92 feet, to the POINT OF BEGINNING, containing 5.04 acres, more or less, and subject to the rights of the public over the existing Sterling Drive. Also subject to any other easements or restrictions of record.

Bearings were established from Warranty Deed, as recorded in Liber 5075, Page 489, Livingston County Records.

**CONSTRUCTION NOTES**

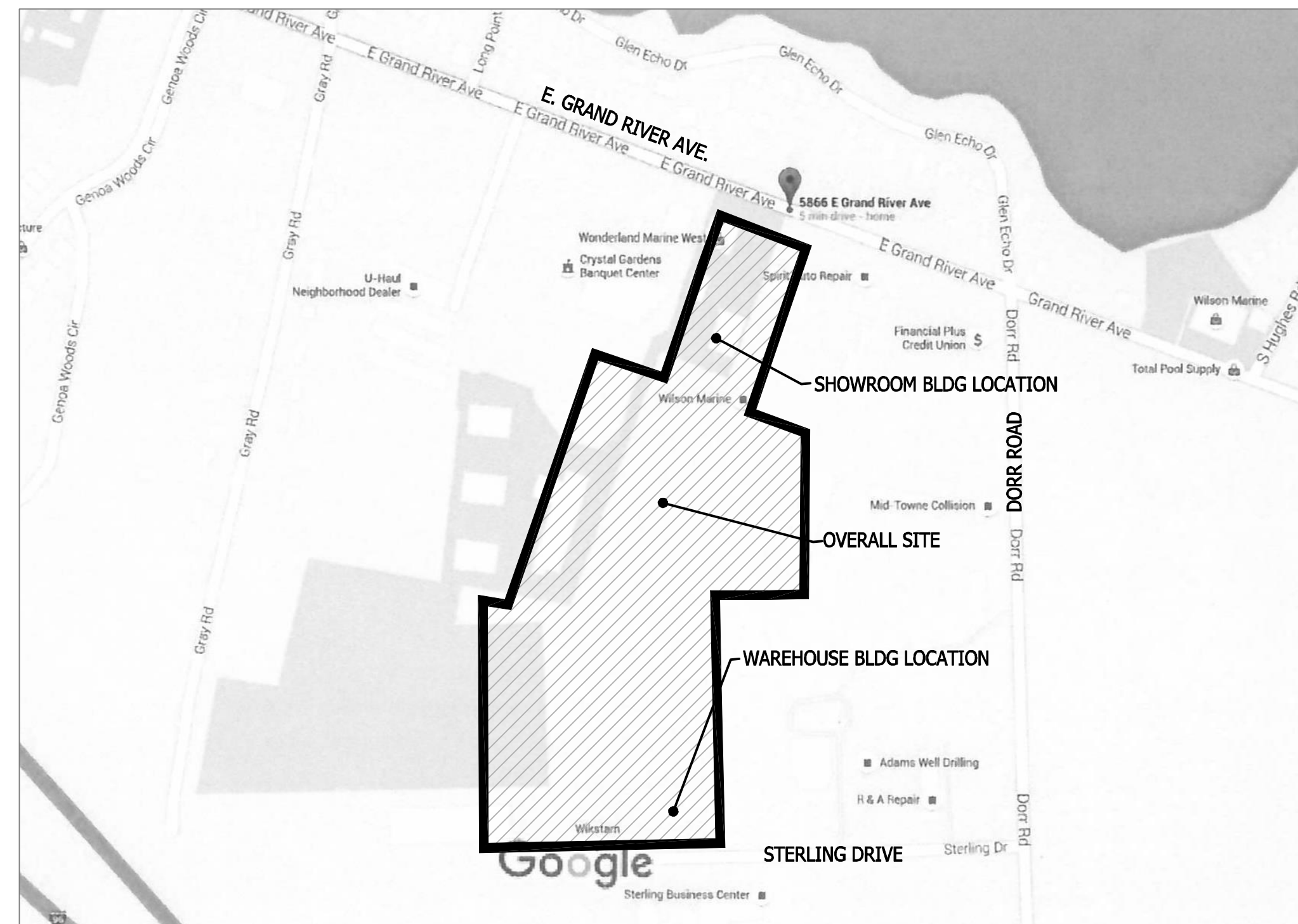
THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT:

- DO NOT SCALE THESE DRAWINGS AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
- A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
- IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED CITY, COUNTY, AND STATE OF MICHIGAN PERMITS.
- EXISTING PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED UNLESS OTHERWISE NOTED.
- ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS.
- ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
- THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKERS AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
- THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT THE END OF EACH WORK DAY.
- THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOT CLASS II).
- ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
- NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
- DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
- IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
- NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
- ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
- ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
- TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. NO WORK SHALL BE COMPLETED UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
- ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
- AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
- ALL GRADING IN THE PLANS SHALL BE COMPLETED AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
- NO SEEDING SHALL BE COMPLETED AFTER OCTOBER 15 WITHOUT APPROVAL OF THE ENGINEER.
- ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- SOIL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
- ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.

**INDEMNIFICATION STATEMENT**

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

# SITE PLAN SUBMITTAL FOR WILSON MARINE 5866 EAST GRAND RIVER HOWELL, MICHIGAN 48843 GENOA TOWNSHIP, LIVINGSTON COUNTY



**LOCATION MAP**  
NO SCALE

SHEET INDEX	
SHEET NO.	DESCRIPTION
	CIVIL DRAWINGS
C1	COVER SHEET
C2	OVERALL SITE PLAN
C3	EX. COND. & DEMOLITION PLAN - SHOWROOM BLDG
C4	EX. COND. & DEMOLITION PLAN - WAREHOUSE BLDG
C5	SITE PLAN - SHOWROOM BLDG
C6	SITE PLAN - WAREHOUSE BLDG
C7	GRADING, DRAINAGE & EROS. CNTRL PLN - SHWRM BLDG
C8	GRADING, DRAINAGE & EROS. CNTRL PLN - WAREHSE BLDG
C9	LIGHTING PLANS - SHOWROOM AND WAREHOUSE BLDGS
C10	CONSTRUCTION & EROS. CNTRL DETAILS
	ARCHITECTURAL DRAWINGS
A-01	SHOW ROOM FLOOR PLAN
A-02	SHOWROOM ELEVATIONS
B-01	STORAGE (BLDG) FLOOR PLAN
B-02	STORAGE BUILDING ELEVATIONS

**OWNER:**  
WILSON MARINE  
CONTACT: RON WILSON  
5866 EAST GRAND RIVER  
HOWELL, MI 48843  
PHONE: 517-546-3774  
EMAIL: RONWILSON@WILSONBOATS.COM

**PREPARED FOR:**  
CONTRACTING MANAGEMENT CORP.  
CONTACT: KEVIN WETZEL  
3471 BREEZE POINTE DRIVE  
LINDEN, MI 48451  
PHONE: 248-756-3911  
EMAIL: KEVIN@CMCMICHIGAN.COM

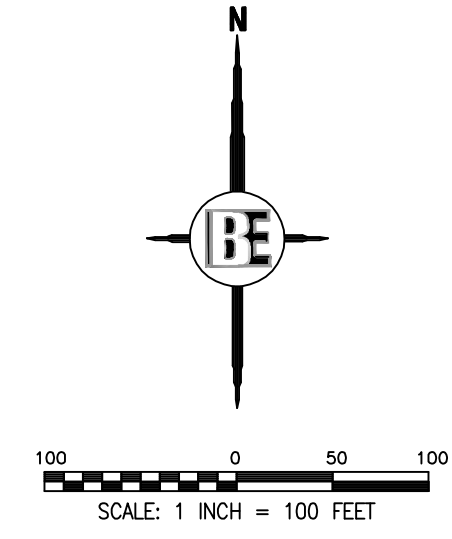
**ARCHITECT:**  
MATTHEW PRINCE ARCHITECT  
CONTACT: MATT PRINCE  
2639 KATHLEEN DRIVE  
BRIGHTON, MI 48114  
PHONE: 305-393-0565  
EMAIL: MPRINCE200@GMAIL.COM

**PREPARED BY:**  
**BEBOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
800.246.6735 FAX 517.548.1670

FOR SITE PLAN APPROVAL ONLY!  
NOT FOR CONSTRUCTION

					<b>C1</b>
1	PC	GENOA TOWNSHIP REVIEW COMMENTS	6/27/16	ISSUE DATE: 6-1-16	
NO	BY	CK	REVISION	DATE	JOB NO. 16-181

# OVERALL SITE PLAN



## LEGEND

- 900 — EXISTING CONTOUR
- 912.00 EXISTING SPOT ELEVATION
- ⊕ LIGHT POLE
- ( ) STORM INVERT
- STEEL ROD/PIPE FOUND
- ⊙ SECTION CORNER
- X- FENCE
- CONC. CONCRETE
- ⊕ CENTERLINE
- L. LIBER
- P. PAGE
- L.C.R. LIVINGSTON COUNTY RECORDS
- (R&M) RECORD AND MEASURED
- P.O.B. POINT OF BEGINNING



- EXISTING HYDRANT
- EXISTING LANDSCAPING (NO CHANGES)
- NEW SIDEWALK
- EXISTING HYDRANT
- EXISTING DRAINAGE - FRONT PARKING ONLY
- EXISTING ASPHALT PAVING (FRONT PARKING AREA)
- EXISTING SHOWROOM #2
- SHOWROOM BLDG PARCEL - EXISTING ZONING (DASHED) - GENERAL COMMERCIAL (GCD)
- EMPLOYEE PARKING (8 SPACES - 2 NEW)
- PROPOSED SHOWROOM BUILDING (9,600 GROSS SQ. FT.)
- EXISTING / PROPOSED STORMWATER DRAINAGE FLOW - PARTIAL OVERLAND FLOW, PARTIAL CULVERT PIPE TO EXISTING POND - NOTE ALL STORMWATER FLOW FROM SHOWROOM BUILDING TO DRAIN TO BASIN
- EXISTING GRAVEL / ASPHALT MILLINGS
- EXISTING HYDRANT
- EXISTING RETENTION BASIN
- EX. ASPHALT PAVING - PARKING LOT & SERVICE AREA
- EXISTING ZONING (REMAINDER) - INDUSTRIAL (I)
- EXISTING SERVICE AND REPAIR FACILITY
- EXISTING OUTSIDE STORAGE
- EXISTING GRAVEL / ASPHALT MILLINGS
- EXISTING DUMPSTER LOCATION - ENCLOSE. SEE ENCLOSURE DETAIL SHEET C10
- EMPLOYEE PARKING (39 SPACES)
- WAREHOUSE BLDG PARCEL (DASHED)
- EXISTING COLD STORAGE BUILDINGS
- PROPOSED STORAGE BUILDING (11,750 GROSS SQ FT)
- EXISTING GRAVEL / ASPHALT MILLINGS
- EXISTING/PROPOSED STORMWATER DRAINAGE FLOW FROM WAREHOUSE BUILDING - OVERLAND FLOW TO INFILTRATION SWALE (UNDER BOAT RACK) WITH OVERFLOW INTO EXISTING SWALE ALONG STERLING DRIVE THAT DRAINS INTO EXISTING AREA BASIN
- EXISTING FIRE HYDRANTS
- STERLING DRIVE

FOR SITE PLAN APPROVAL ONLY!  
NOT FOR CONSTRUCTION

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE EVALUATED RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY AND PROPOSED UTILITY CONSTRUCTION IN THE FIELD. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND CONDUCTS AS APPROPRIATE OF THE LOCATION OR DEPTH DIFFERS SUBSTANTIALLY FROM THE PLAN.

BEFORE YOU DIG  
CALL 811  
1-800-487-7171  
OR VISIT WWW.CALL811.MI.GOV

BEBOSS

Engineering

Engineers Surveyors Planners Landscape Architects

3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
800.246.6735 FAX 517.548.1670

PROJECT: WILSON MARINE

CONTRACTING MANAGEMENT CORPORATION

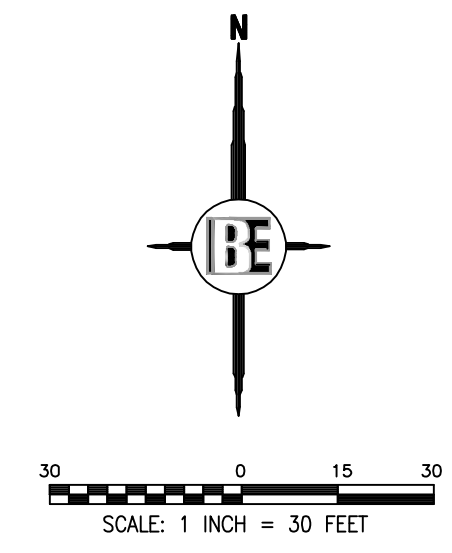
3471 BREEZE POINT COURT  
LINDEN, MI 48451  
248-756-3911

TITLE: OVERALL SITE PLAN

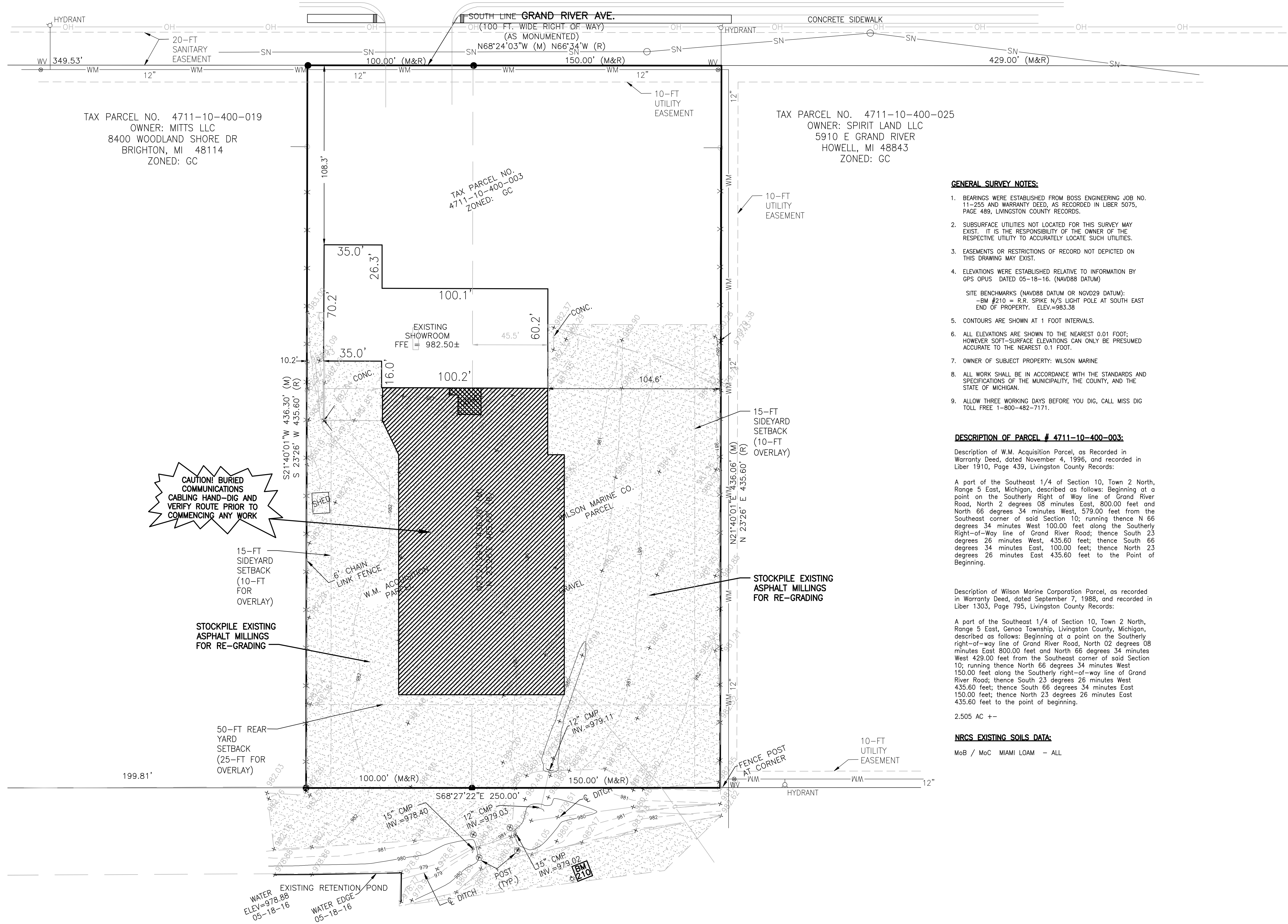
NO.	BY	REVISION PER	DATE
1	PLC	GENOA TOWNSHIP REVIEW	6/27/16

DESIGNED BY: PLC  
DRAWN BY: PLC  
CHECKED BY:  
SCALE 1"=100'-0"  
JOB NO. 16-181  
DATE 6-1-16  
SHEET NO. C2

# EXISTING CONDITIONS & SITE DEMOLITION PLAN - SHOWROOM BUILDING



- LEGEND**
- 900 --- EXISTING CONTOUR
  - 922.00 --- EXISTING SPOT ELEVATION
  - ⊕ --- POWER POLE
  - |— GUY WIRE
  - ⊞ --- TRANSFORMER PAD
  - ⊞ --- ELECTRICAL RISER
  - ⊞ --- U.G. ELECTRIC MARKER
  - ⊞ --- LIGHT POLE
  - ⊞ --- ORNAMENTAL LIGHT
  - ⊞ --- WELL
  - ⊞ --- MANHOLE
  - ⊞ --- STORM CATCH BASIN (BEEHIVE)
  - ⊞ --- STORM CATCH BASIN (SQUARE)
  - ⊞ --- STORM INVERT
  - ⊞ --- TELEPHONE RISER
  - ⊞ --- U.G. TELEPHONE MARKER
  - ⊞ --- GAS RISER
  - ⊞ --- U.G. GAS MARKER
  - ⊞ --- CABLE TV RISER
  - ⊞ --- U.G. CABLE TV MARKER
  - ⊞ --- MAILBOX
  - ⊞ --- SIGN
  - ⊞ --- DECIDUOUS TREE
  - ⊞ --- CONIFEROUS TREE
  - ⊞ --- SOIL BORING
  - ⊞ --- STEEL ROD OR PIPE FOUND
  - ⊞ --- MONUMENT
  - ⊞ --- SECTION CORNER
  - ⊞ --- STORM SEWER
  - G— GAS MAIN
  - E— ELECTRIC
  - T— TELEPHONE
  - OH— OVERHEAD WIRES
  - X— FENCE
  - ⊞ --- BENCHMARK
  - ⊞ --- NEWSPAPER BOX
  - CONC. --- CONCRETE
  - SAN MH --- SANITARY MANHOLE
  - ST MH --- STORM MANHOLE
  - ⊞ --- CENTERLINE
  - L --- LIBER
  - P --- PAGE
  - L.C.R. --- LIVINGSTON COUNTY RECORDS
  - (R&M) --- RECORD AND MEASURED
  - P.O.B. --- POINT OF BEGINNING
  - ▨ --- ASPHALT PAVEMENT/MILLINGS REMOVAL
  - ▨ --- CONCRETE PAVEMENT REMOVAL



**CAUTION! BURIED COMMUNICATIONS CABLING HAND-DIG AND VERIFY ROUTE PRIOR TO COMMENCING ANY WORK**

STOCKPILE EXISTING ASPHALT MILLINGS FOR RE-GRADING

50-FT REAR YARD SETBACK (25-FT FOR OVERLAY)

STOCKPILE EXISTING ASPHALT MILLINGS FOR RE-GRADING

BOSS SURVEY #86445  
(L. 1266, P. 803, L.C.R.)  
GARLOCK SURVEY F.B. 143-75

- GENERAL SURVEY NOTES:**
1. BEARINGS WERE ESTABLISHED FROM BOSS ENGINEERING JOB NO. 11-255 AND WARRANTY DEED, AS RECORDED IN LIBER 5075, PAGE 489, LIVINGSTON COUNTY RECORDS.
  2. SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
  3. EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
  4. ELEVATIONS WERE ESTABLISHED RELATIVE TO INFORMATION BY GPS OPUS DATED 05-18-16. (NAVD88 DATUM)
  5. SITE BENCHMARKS (NAVD88 DATUM OR NGVD29 DATUM):  
-BM #210 = R.R. SPIKE N/S LIGHT POLE AT SOUTH EAST END OF PROPERTY. ELEV.=983.38
  6. CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
  7. ALL ELEVATIONS ARE SHOWN TO THE NEAREST 0.01 FOOT, HOWEVER SOFT-SURFACE ELEVATIONS CAN ONLY BE PRESUMED ACCURATE TO THE NEAREST 0.1 FOOT.
  8. OWNER OF SUBJECT PROPERTY: WILSON MARINE
  9. ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
  10. ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.

**DESCRIPTION OF PARCEL # 4711-10-400-003:**  
Description of W.M. Acquisition Parcel, as Recorded in Warranty Deed, dated November 4, 1996, and recorded in Liber 1910, Page 439, Livingston County Records:  
A part of the Southeast 1/4 of Section 10, Town 2 North, Range 5 East, Michigan, described as follows: Beginning at a point on the Southerly Right of Way line of Grand River Road, North 2 degrees 08 minutes East, 800.00 feet and North 66 degrees 34 minutes West, 579.00 feet from the Southeast corner of said Section 10; running thence N 66 degrees 34 minutes West 100.00 feet along the Southerly Right-of-Way line of Grand River Road; thence South 23 degrees 26 minutes West, 435.60 feet; thence South 66 degrees 34 minutes East, 100.00 feet; thence North 23 degrees 26 minutes East 435.60 feet to the Point of Beginning.

Description of Wilson Marine Corporation Parcel, as recorded in Warranty Deed, dated September 7, 1988, and recorded in Liber 1303, Page 795, Livingston County Records:  
A part of the Southeast 1/4 of Section 10, Town 2 North, Range 5 East, Genoa Township, Livingston County, Michigan, described as follows: Beginning at a point on the Southerly right-of-way line of Grand River Road, North 02 degrees 08 minutes East 800.00 feet and North 66 degrees 34 minutes West 429.00 feet from the Southeast corner of said Section 10; running thence North 66 degrees 34 minutes West 150.00 feet along the Southerly right-of-way line of Grand River Road; thence South 23 degrees 26 minutes West 435.60 feet; thence South 66 degrees 34 minutes East 150.00 feet; thence North 23 degrees 26 minutes East 435.60 feet to the point of beginning.  
2.505 AC +-  
**NRCS EXISTING SOILS DATA:**  
MoB / MoC MIAMI LOAM - ALL

FOR SITE PLAN APPROVAL ONLY!  
NOT FOR CONSTRUCTION

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES CAUSED BY THE LOCATION OR DEPTH DIFFERS SUBSTANTIALLY FROM THE PLANS.

BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171  
MISS DIG

**BEBOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
800.246.6735 FAX 517.548.1670

**WILSON MARINE**  
CONTRACTING MANAGEMENT CORPORATION  
3471 BREEZE POINT COURT  
LINDEN, MI 48451  
248-756-3911

PROJECT: EX. COND. & DEMOLITION PLAN - SHOWROOM BLDG

PREPARED FOR: BOSS ENGINEERING

TITLE: EX. COND. & DEMOLITION PLAN - SHOWROOM BLDG

NO.	BY	REVISION PER	DATE
1	PG	GENOA TOWNSHIP REVIEW	6/27/16

DESIGNED BY: KRJ

DRAWN BY: KRJ

CHECKED BY:

SCALE: 1" = 30'

JOB NO. 16-181

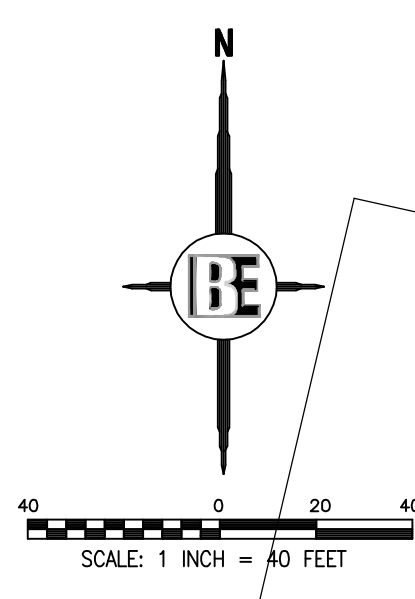
DATE 6-1-16

SHEET NO. C3

# EXISTING CONDITIONS & SITE DEMOLITION PLAN - WAREHOUSE BUILDING

- BEARINGS WERE ESTABLISHED FROM BOSS ENGINEERING JOB NO. 11-255 AND WARRANTY DEED, AS RECORDED IN LIBER 5075, PAGE 489, LIVINGSTON COUNTY RECORDS.
- SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
- EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
- ELEVATIONS WERE ESTABLISHED RELATIVE TO INFORMATION BY GPS OPUS DATED 05-18-16. (NAVD8 DATUM)
- SITE BENCHMARKS (NAVD8 DATUM):  
-BM #210 = RR SPKE N/S LIGHT POLE AT S/E END OF SHOWROOM PARCEL. ELEV.=983.38
- CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
- ALL ELEVATIONS ARE SHOWN TO THE NEAREST 0.01 FOOT; HOWEVER SOFT-SURFACE ELEVATIONS CAN ONLY BE PRESUMED ACCURATE TO THE NEAREST 0.1 FOOT.
- OWNER OF SUBJECT PROPERTY: WILSON MARINE
- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
- ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.

BEFORE YOU DIG  
3 WORKING DAYS  
1-800-482-7171  
MISS DIG



BOSS SURVEY #86445  
(L. 1266, P. 803, L.C.R.)  
GARLOCK SURVEY F.B. 143-75

NORTH LINE SECTION 15 AS PREVIOUSLY SURVEYED AND MONUMENTED  
(SOUTH LINE OF GARLOCK SURVEY, F.B. 143-75, DATED 11-26-77  
& BOSS ENGINEERING SURVEY, JOB NO. 86455, L. 1266, P. 803, L.C.R.)

### LEGEND

- 900 EXISTING CONTOUR
- 922.00 EXISTING SPOT ELEVATION
- P— POWER POLE
- G— GUY WIRE
- T— TRANSFORMER PAD
- E— ELECTRICAL RISER
- U.G.— U.G. ELECTRIC MARKER
- L— LIGHT POLE
- O— ORNAMENTAL LIGHT
- W— WELL
- M— MANHOLE
- S— STORM CATCH BASIN (BEEHIVE)
- SQ— STORM CATCH BASIN (SQUARE)
- I— STORM INVERT
- TR— TELEPHONE RISER
- U.G.— U.G. TELEPHONE MARKER
- G— GAS RISER
- U.G.— U.G. GAS MARKER
- C— CABLE TV RISER
- U.G.— U.G. CABLE TV MARKER
- M— MAILBOX
- S— SIGN
- D— DECIDUOUS TREE
- C— CONIFEROUS TREE
- S— SOIL BORING
- R— STEEL ROD OR PIPE FOUND
- M— MONUMENT
- S— SECTION CORNER
- S— STORM SEWER
- G— GAS MAIN
- E— ELECTRIC
- T— TELEPHONE
- O— OVERHEAD WIRES
- X— FENCE
- BM— BENCHMARK
- N— NEWSPAPER BOX
- C— CONC.
- SAN MH— SANITARY MANHOLE
- ST MH— STORM MANHOLE
- CL— CENTERLINE
- L— LIBER
- P— PAGE
- L.C.R.— LIVINGSTON COUNTY RECORDS
- (R&M)— RECORD AND MEASURED
- P.O.B.— POINT OF BEGINNING
- X— ASPHALT PAVEMENT/MILLINGS REMOVAL
- X— CONCRETE PAVEMENT REMOVAL

BOSS SURVEY #88373  
(8-9-88)  
(L. 1315, P. 922, L.C.R.)  
TAX PARCEL NO. 4711-15-200-012  
OWNER: MITTS LLC  
8400 WOODLAND SHORE DR  
BRIGHTON, MI 48114  
ZONED: IND

BOSS SURVEY #98184  
(04-10-98)  
(L. 2481, P. 669, L.C.R.)  
TAX PARCEL NO. 4711-15-200-028  
OWNER: KORICH, INC  
5665 STERLING DR  
HOWELL, MI 48843  
ZONED: IND

PARCEL #4711-15-200-015  
5.04 AC.±  
WARRANTY DEED  
(L. 5075, P. 489, L.C.R.)  
ZONED: IND

TAX PARCEL NO. 4711-15-200-013  
OWNER: CREGAR PROPERTIES LLC  
5818 STERLING DR  
HOWELL, MI 48843  
ZONED: IND

DESINE SURVEY #1-10-15-8672  
(10-14-98)  
TAX PARCEL NO. 4711-15-200-033  
OWNER: PAUL & DOROTHY WAGNER  
3480 MIDDLEBELT ROAD  
WEST BLOOMFIELD, MI 48323  
ZONED: IND

**FOR SITE PLAN APPROVAL ONLY!  
NOT FOR CONSTRUCTION**

### DESCRIPTION OF PARCEL #4711-15-200-015:

PARCEL DESCRIPTION PER WARRANTY DEED, AS RECORDED IN LIBER 5075, PAGE 489, LIVINGSTON COUNTY RECORDS:  
Part of the Northeast 1/4 of the Northeast 1/4 of Section 15, Town 2 North, Range 5 East, Michigan, described: Beginning at a point on the North line of said Section 15, distant South 89 degrees 54 minutes 29 seconds West 994.50 feet from the Northeast corner of said Section 15; thence South 89 degrees 54 minutes 29 seconds West along the North line of said Section 15, 331.50 feet; thence due South 660.00 feet; thence North 89 degrees 54 minutes 29 seconds East 331.50 feet; thence due North 660.00 feet to the point of beginning, subject to the rights of others over the Southerly 33 feet in an access easement driveway and public utilities; along with an easement for access to Dorr Road, described as: Beginning at a point on the East line of said Section 15, distant due South 594.00 feet from the Northeast corner of said Section 15; thence due South along said East line of Section 15, which is also the centerline of Dorr Road right-of-way, 132.00 feet; thence South 89 degrees 54 minutes 29 seconds West 50.00 feet; thence North 45 degrees 05 minutes 31 seconds West 46.67 feet; thence South 89 degrees 54 minutes 29 seconds West 1243.00 feet; thence North 44 degrees 54 minutes 29 seconds East 46.67 feet; thence North 89 degrees 54 minutes 29 seconds East 50.00 feet to the point of beginning, EXCEPT all mineral and oil and gas rights reserved by grantor, as set forth in Deed Liber 1592, Page 815.

PARCEL ASSESSED AS:  
The West 1/2 of the Northwest 1/4 of the Northeast 1/4 of the Northeast 1/4 of Section 15, Town 2 North, Range 5 East.

PARCEL DESCRIPTION AS SURVEYED:  
Part of the Northeast 1/4 of Section 15, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the Northeast Corner of Section 15; thence along the true North line of Section 15, S 89°54'29" W, 994.17 feet (previously recorded as 994.50 feet); thence S 0°01'46" W (recorded as due South), 3.90 feet, to the POINT OF BEGINNING of the Parcel to be described; said point also being the following course from the Northeast Corner of Section 15: along the North line of Section 15 as previously surveyed and monumented, S 89°41'00" W, 994.19 feet; thence S 0°01'46" W, 655.68 feet (recorded as due South, 660.00 feet); thence S 89°54'29" W, 334.44 feet (recorded as 331.50 feet); thence along the West line of the Northwest 1/4 of the Northeast 1/4 of the Northeast 1/4 of Section 15, as previously surveyed and monumented, N 00°06'01" W, 654.36 feet (recorded as due North 660.00 feet); thence along the North line of Section 15, as previously surveyed and monumented, N 89°41'00" E, 335.92 feet, to the POINT OF BEGINNING, containing 5.04 acres, more or less, and subject to the rights of the public over the existing Sterling Drive. Also subject to any other easements or restrictions of record.

Bearings were established from Warranty Deed, as recorded in Liber 5075, Page 489, Livingston County Records.

### EXISTING SOILS:

MoB / MoC MIAMI LOAM - ALL

TAX PARCEL NO. 4711-15-200-17  
OWNER: ADAMS ACREAGE LLC  
5893 STERLING DRIVE  
HOWELL MI 48843  
ZONED: IND

☉ DORR ROAD (66' WIDE R/W)

E 1/4 COR.  
SEC. 15  
T2N-R5E  
(1-6)

**BEBOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
800.246.6735 FAX 517.548.1670

PROJECT  
PREPARED FOR  
**WILSON MARINE**  
**CONTRACTING MANAGEMENT CORPORATION**  
3471 BREEZE POINT COURT  
LINDEN, MI 48451  
248-758-3811

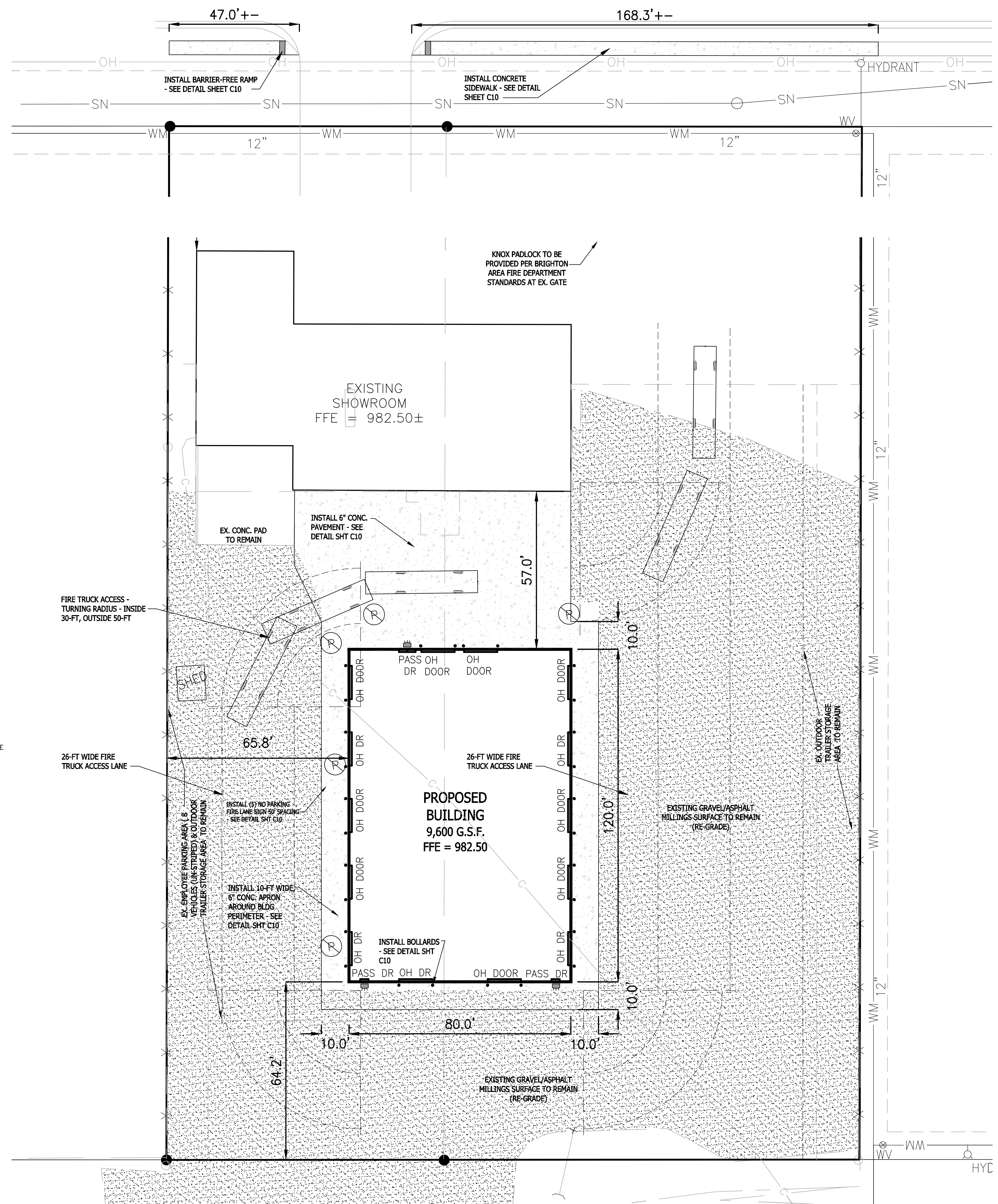
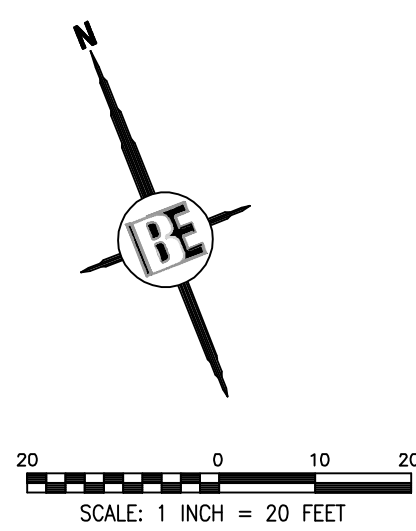
TITLE  
**EX. COND. & DEMO PLAN - WAREHOUSE BLDG**

NO	BY	REVISION PER	DATE
1	PC	GENOA TOWNSHIP REVIEW	6/27/16
2	UJ	REVISION PER	

DESIGNED BY:  
DRAWN BY: KRJ  
CHECKED BY:  
SCALE 1" = 40'  
JOB NO. 16-181  
DATE 6-1-16  
SHEET NO. C4

**BOSS**  
Engineering

# SITE PLAN - SHOWROOM BUILDING



PROPOSED (PR)	EXISTING (EX)	LEGEND
300	900	CONTOUR
T/C	+922.08	STORM DRAINAGE FLOW
FF		SPOT ELEVATION
FG		FINISHED FLOOR ELEVATION
T/A		FINISHED GRADE ELEVATION
T/C		TOP OF ASPHALT
T/W		TOP OF CURB / CONCRETE
F/L		TOP OF WALK
T/P		FLOW LINE
B/P		TOP OF PIPE
RM		BOTTOM OF PIPE
INV		RM ELEVATION
MH		INVERT ELEVATION
IN		MANHOLE STRUCTURE
CB		INLET STRUCTURE
RY		CATCHBASIN STRUCTURE
ES		REARYARD STRUCTURE
GV		END-SECTION
HY		GATEVALVE STRUCTURE
UP		HYDRANT
SN		UTILITY POLE
SL		SANITARY SEWER
FM		SANITARY LEAD
PS		FORCE MAIN
ST		PRESSURE SEWER
WM		STORM SEWER
WL		WATER MAIN
FO		WATER LEAD
OH		FIBER OPTIC
C		OVERHEAD WIRE
E		CABLE
G		ELECTRIC
T		GAS
M		TELEPHONE
○		MANHOLE
○		INLET / CATCHBASIN
○		FLARED END-SECTION
○		GATE VALVE
○		HYDRANT
○		UTILITY POLE
○		FENCE
○		SIGN
○		NOT FIELD VERIFIED
○		TO BE REMOVED
○		COMPACTED SAND BACKFILL
○		SANITARY SEWER LABEL
○		STORM SEWER LABEL
○		WATER MAIN LABEL
○		SOIL EROSION CONTROL MEASURE
○		(P=PERMANENT, T=TEMPORARY)
○		SILT FENCE
○		LIMITS OF GRADING/CLEARING
○		WETLAND BOUNDARY

SITE DATA: SHOWROOM BUILDING		
PARCEL NUMBER	4711-10-400-003	
SITE AREA	2.50 AC	
ZONING	GENERAL COMMERCIAL DISTRICT	
SETBACKS	REQUIRED	PROVIDED
FRONT	70 FT	252
SIDE	15 FT	E. 104.50 FT W. 65.8 FT
REAR	50 FT	64.2
LOT COVERAGE	REQUIRED	PROVIDED
BUILDING	35%	16.57%
IMPERVIOUS SURFACE	75%	57.60%
ZONING	GENOA TOWN CENTER OVERLAY	
SETBACKS	REQUIRED	PROVIDED
FRONT	0 FT	252
SIDE	10 FT	E. 104.50 FT W. 65.8 FT
REAR	25 FT	64.2

FOR SITE PLAN APPROVAL ONLY!  
NOT FOR CONSTRUCTION

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**BEBOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
800.246.6735 FAX 517.548.1670

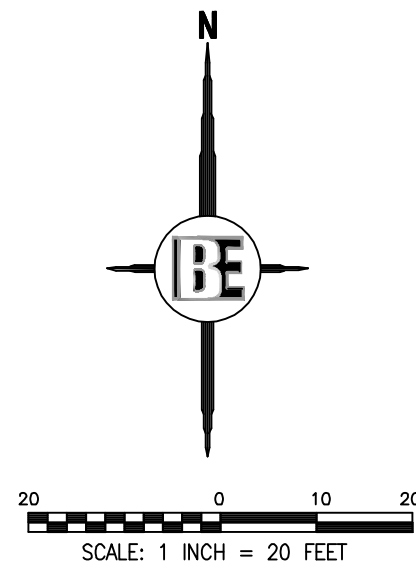
**WILSON MARINE**  
**CONTRACTING MANAGEMENT CORPORATION**  
3471 BREEZE POINT COURT  
LINDEN, MI 48451  
248-756-3911

**SITE PLAN - SHOWROOM BLDG.**

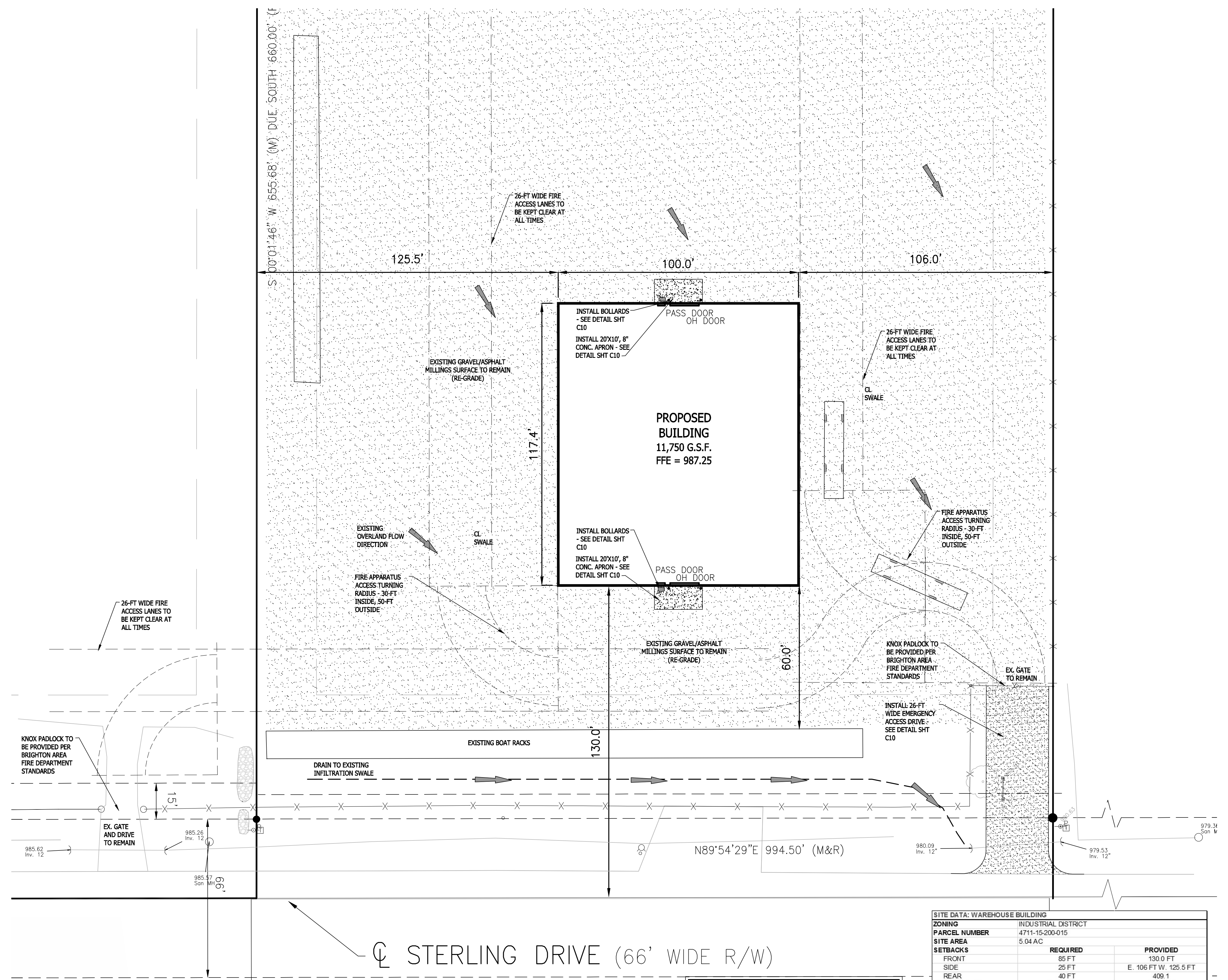
NO.	BY	REVISION PER	DATE
1	PG	GENOA TOWNSHIP REVIEW	6/27/16

DESIGNED BY: \_\_\_\_\_  
DRAWN BY: KRJ  
CHECKED BY: \_\_\_\_\_  
SCALE: 1" = 20'  
JOB NO. 16-181  
DATE 6-1-16  
SHEET NO. **C5**

# SITE PLAN - WAREHOUSE BUILDING



PROPOSED (PR)	EXISTING (EX)	LEGEND
900	900	CONTOUR
T/C		STORM DRAINAGE FLOW
XXX.XX	+922.08	SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
FG	FG	FINISHED GRADE ELEVATION
T/A	T/A	TOP OF ASPHALT
T/C	T/C	TOP OF CURB / CONCRETE
T/W	T/W	TOP OF WALK
F/L	F/L	FLOW LINE
T/P	T/P	TOP OF PIPE
B/P	B/P	BOTTOM OF PIPE
RIM	RIM	RIM ELEVATION
INV	INV	INVERT ELEVATION
MH	MH	MANHOLE STRUCTURE
IN	IN	INLET STRUCTURE
CB	CB	CATCHBASIN STRUCTURE
RY	RY	REARYARD STRUCTURE
ES	ES	END-SECTION
GV	GV	GATE VALVE STRUCTURE
HY	HY	HYDRANT
UP	UP	UTILITY POLE
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAIN
PS	PS	PRESSURE SEWER
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
FO	FO	FIBER OPTIC
OH	OH	OVERHEAD WIRE
C	C	CABLE
E	E	ELECTRIC
G	G	GAS
T	T	TELEPHONE
○	○	MANHOLE
□	□	INLET / CATCHBASIN
○	○	FLARED END-SECTION
○	○	GATE VALVE
○	○	HYDRANT
○	○	UTILITY POLE
—	—	FENCE
—	—	SIGN
—	—	NOT FIELD VERIFIED
—	—	TO BE REMOVED
—	—	COMPACTED SAND BACKFILL
—	—	SANITARY SEWER LABEL
—	—	STORM SEWER LABEL
—	—	WATER MAIN LABEL
—	—	SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
—	—	SILT FENCE
—	—	LIMITS OF GRADING/CLEARING
—	—	WETLAND BOUNDARY



SITE DATA: WAREHOUSE BUILDING		
ZONING	INDUSTRIAL DISTRICT	
PARCEL NUMBER	4711-15-200-015	
SITE AREA	5.04 AC	
SETBACKS	REQUIRED	PROVIDED
FRONT	85 FT	130.0 FT
SIDE	25 FT	E. 106 FT W. 125.5 FT
REAR	40 FT	409.1
LOT COVERAGE	REQUIRED	PROVIDED
BUILDING	40%	5.35%
IMPERVIOUS SURFACE	85%	5.35%

FOR SITE PLAN APPROVAL ONLY!  
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**BOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects

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800.246.6735 FAX 517.548.1670

**WILSON MARINE**  
PROJECT FOR  
**CONTRACTING MANAGEMENT CORPORATION**  
3471 BREEZE POINT COURT  
LINDEN, MI 48841  
248-756-3811

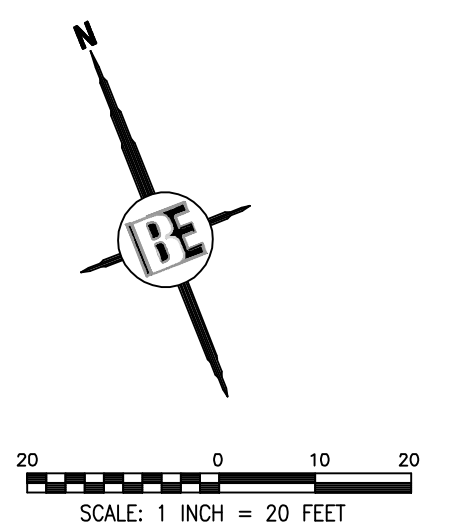
**SITE PLAN - WAREHOUSE BLDG.**

NO	BY	REVISION PER	DATE
1	PC	GENOA TOWNSHIP REVIEW	6/27/16

DESIGNED BY: \_\_\_\_\_  
DRAWN BY: KRJ  
CHECKED BY: \_\_\_\_\_  
SCALE: 1" = 20'  
JOB NO. 16-181  
DATE: 6-1-16  
SHEET NO. \_\_\_\_\_

**BOSS**  
**C6**  
Engineering

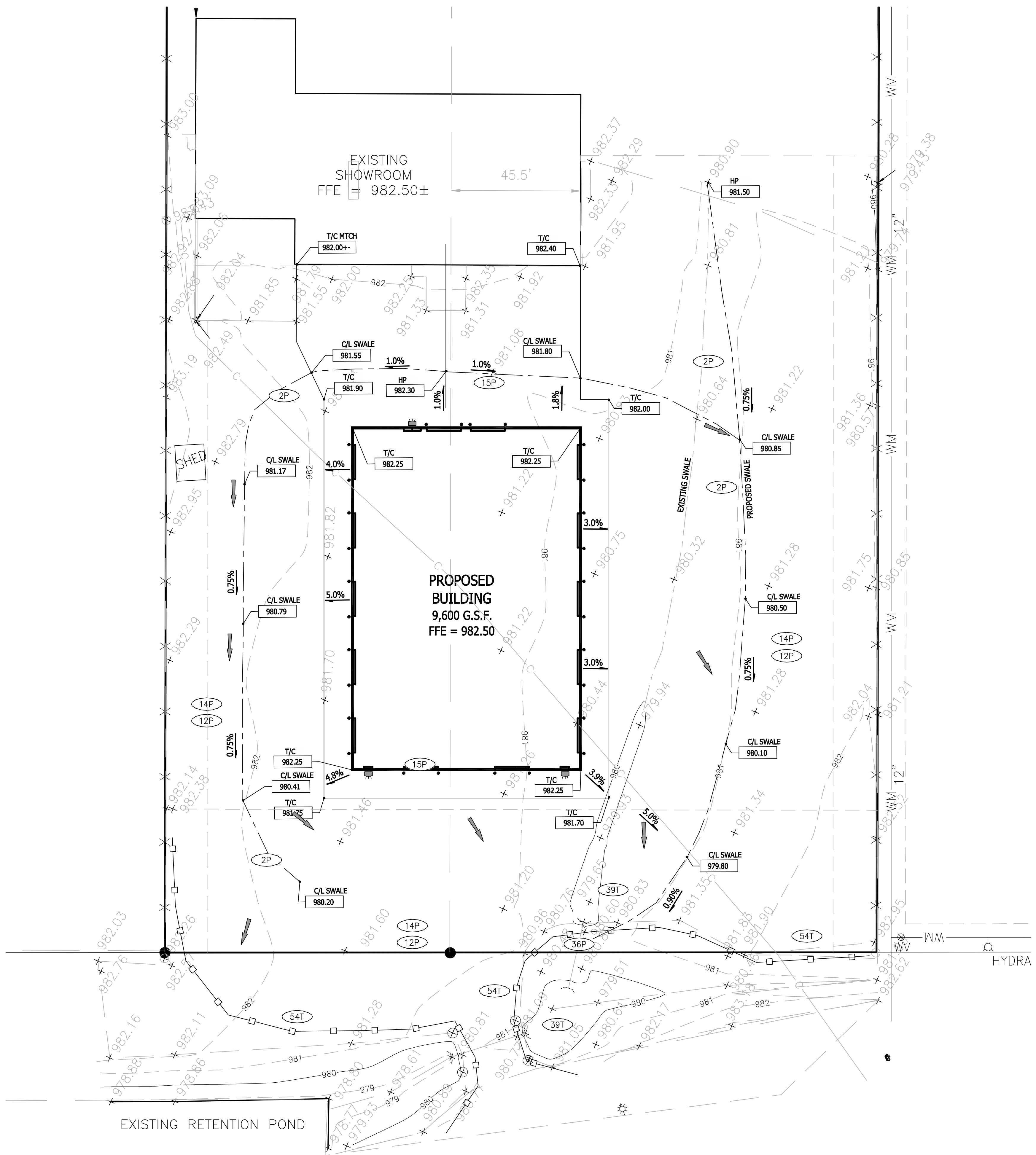
# GRADING, DRAINAGE, AND EROSION CONTROL PLAN - SHOWROOM BUILDING



LEGEND	
PROPOSED (PR)	EXISTING (EX)

2		WATER CAN BE DIVERTED TO MINIMIZE EROSION. FLATTER SLOPES REDUCE EROSION PROBLEMS.
12		HELPS HOLD SOIL IN PLACE, MAKING EXPOSED AREAS LESS VULNERABLE TO EROSION.
14		STABILIZES SOIL SURFACE, THUS MINIMIZING EROSION. PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER. MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS.
15		PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY. IRREGULAR SURFACE WILL HELP SLOW VELOCITY.
36		COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.
39		CAN UTILIZE MATERIAL FOUND ON SITE. EASY TO CONSTRUCT. FILTERS SEDIMENT FROM RUNOFF.
54		USES GEOTEXTILE FABRIC AND POST OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE DETAIL THIS SHEET)

P=PERMANENT T=TEMPORARY  
 TOTAL DISTURBED AREA = 1.2 AC (52,300 SF)  
 SEE DETAIL SHEET C10 FOR ADDITIONAL EROSION CONTROL REQUIREMENTS AND DETAILS



**GRADING NOTES:**  
 1. PROPOSED DRAINAGE TO MATCH EXISTING SLOPE PERCENTAGES (AVERAGE APPROXIMATELY 0.75%) AND INCREASE THEM WHERE POSSIBLE

**STORMWATER NARRATIVE:**  
 1. PROPOSED DRAINAGE (BOTH PROPOSED BUILDINGS) TO MAINTAIN EXISTING OVERLAND FLOW TO EXISTING RETENTION BASIN.  
 2. EXISTING RETENTION BASIN IS 78,200 CU FT WITH 3-FT FREEBOARD CURRENTLY SERVING A 13.89 ACRE DRAINAGE AREA AND HAS PERFORMED WITHOUT INCIDENT SINCE ITS DESIGN IN 1987.  
 3. ENTIRE DRAINAGE AREA IS BUILDING, PAVEMENT, OR ASPHALT MILLINGS.  
 4. INCREASE IN IMPERVIOUS AREA OVER ENTIRE DRAINAGE AREA (TOTAL OF BOTH PROPOSED BLDGS) = 3.5%  
 5. INCREASE IN VOLUME REQUIRED (TO C VALUE OF 0.9 FROM C VALUE OF 0.7) (TOTAL OF BOTH PROPOSED BLDGS) = 2,012 CF OR 2.6% FOR RETENTION BASIN OR APPROXIMATELY 1" OF THE EXISTING FREEBOARD VOLUME.

FOR SITE PLAN APPROVAL ONLY!  
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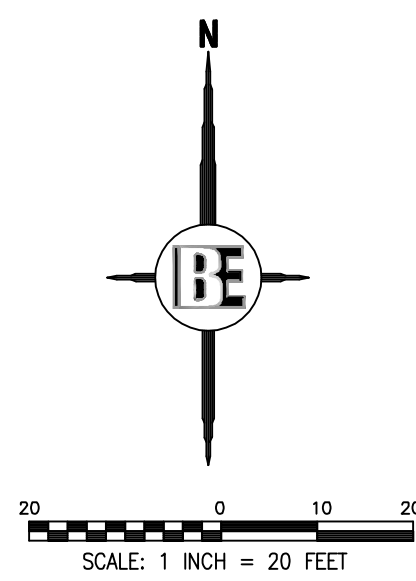
**BEBOSS**  
 Engineering  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 800.246.6735 FAX 517.548.1670

**WILSON MARINE**  
**CONTRACTING MANAGEMENT CORPORATION**  
 3471 BREEZE POINT COURT  
 LINDEN, MI 48451  
 248-756-3911

NO.	BY	REVISION PER	DATE
1	PC	GENA	TOWNSHIP REVIEW
			6/27/16

DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: KRJ  
 CHECKED BY: \_\_\_\_\_  
 SCALE: 1" = 20'  
 JOB NO. 16-181  
 DATE 6-1-16  
 SHEET NO. **C7**

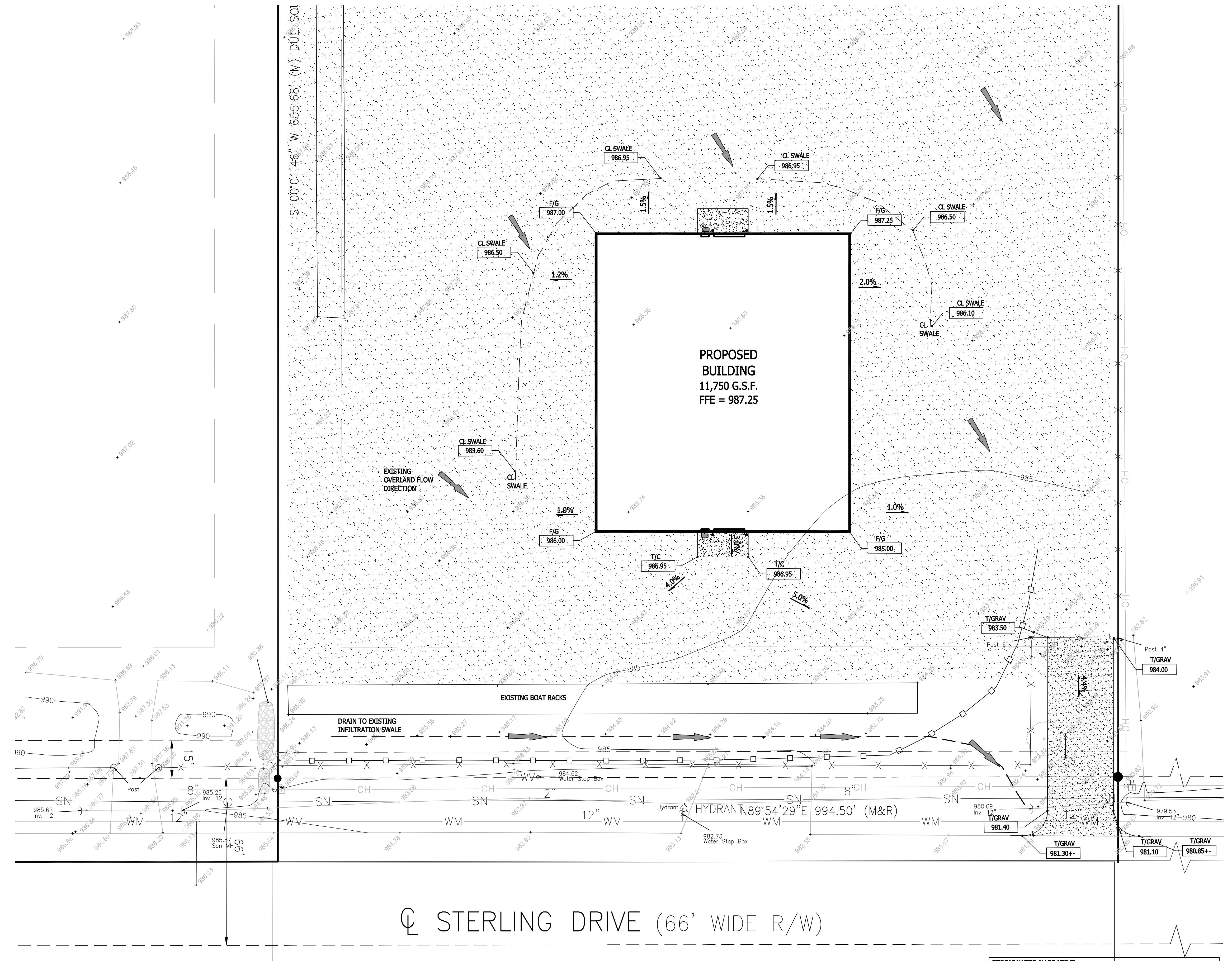
# GRADING, DRAINAGE, & EROSION CONTROL PLAN - WAREHOUSE BUILDING



PROPOSED (PR)	EXISTING (EX)	LEGEND
— 90° —	— 90° —	CONTOUR
→	→	STORM DRAINAGE FLOW
T/C	+ 922.08	SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
FG	FG	FINISHED GRADE ELEVATION
T/A	T/A	TOP OF ASPHALT
T/C	T/C	TOP OF CURB / CONCRETE
T/W	T/W	TOP OF WALK
F/L	F/L	FLOW LINE
T/P	T/P	TOP OF PIPE
B/P	B/P	BOTTOM OF PIPE
R/M	R/M	RIM ELEVATION
INV	INV	INVERT ELEVATION
MH	MH	MANHOLE STRUCTURE
IN	IN	INLET STRUCTURE
CB	CB	CATCHBASIN STRUCTURE
RY	RY	REARWARD STRUCTURE
ES	ES	END-SECTION
GV	GV	GATEVALVE STRUCTURE
HY	HY	HYDRANT
UP	UP	UTILITY POLE
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAIN
PS	PS	PRESSURE SEWER
ST	ST	STORM SEWER
WM	WM	WATER MAIN
WL	WL	WATER LEAD
FO	FO	FIBER OPTIC
OH	OH	OVERHEAD WIRE
C	C	CABLE
E	E	ELECTRIC
G	G	GAS
T	T	TELEPHONE
O	O	MANHOLE
□	□	INLET / CATCHBASIN
△	△	FLARED END-SECTION
⊗	⊗	GATE VALVE
⊙	⊙	HYDRANT
⊕	⊕	UTILITY POLE
+	+	FENCE
⊖	⊖	SIGN
⊘	⊘	NOT FIELD VERIFIED
⊙	⊙	TO BE REMOVED
⊙	⊙	COMPACTED SAND BACKFILL
TBR	NFV	SANITARY SEWER LABEL
CSB		STORM SEWER LABEL
SN 71		WATER MAIN LABEL
ST 81		SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)
WM 12		SILT FENCE
54T		LIMITS OF GRADING/CLEARING
		WETLAND BOUNDARY

2	SELECTIVE GRADING & SHORING	WATER CAN BE DIVERTED TO MINIMIZE EROSION. FLATTER SLOPES EASE EROSION PROBLEMS.
12	COMPACTION	HELPS HOLD SOIL IN PLACE, MAKING EXPOSED AREAS LESS VULNERABLE TO EROSION.
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, THIS MINIMIZING EROSION. PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER. MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS.
15	PAVING	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY. IRREGULAR SURFACE WILL HELP SLOW VELOCITY.
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF. MAY USE FILTER CLOTH OVER INLET.
39	ROCK FILTER	CAN UTILIZE MATERIAL FOUND ON SITE. EASY TO CONSTRUCT. FILTERS SEDIMENT FROM RUNOFF.
54	SILT FENCE	USES GEOTEXTILE FABRIC AND POST OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE DETAIL THIS SHEET)

P=PERMANENT T=TEMPORARY  
 TOTAL DISTURBED AREA = 0.40 AC (16,500 SF)  
 SEE DETAIL SHEET C10 FOR ADDITIONAL EROSION CONTROL REQUIREMENTS AND DETAILS



STERLING DRIVE (66' WIDE R/W)

FOR SITE PLAN APPROVAL ONLY!  
 NOT FOR CONSTRUCTION

- STORMWATER NARRATIVE:**
1. PROPOSED DRAINAGE (WAREHOUSE BUILDING) OVERLAND FLOW TO ENHANCED EXISTING INFILTRATION SWALE.
  2. INFILTRATION BASIN OVERFLOW IS EXISTING SWALE ALONG NORTH SIDE OF STERLING DRIVE. SWALE EVENTUALLY DRAINS INTO EXISTING BASIN/WETLAND TO THE SOUTHEAST.
  3. ENTIRE DRAINAGE AREA IS BUILDING, PAVEMENT, OR ASPHALT MILLINGS.
  4. INCREASE IN IMPERVIOUS AREA OVER ENTIRE DRAINAGE AREA (WAREHOUSE BLDG) = 4.9%
  5. INCREASE IN VOLUME REQUIRED (TO C VALUE OF 0.9 FROM C VALUE OF 0.7) (WAREHOUSE BLDG) = 1,107 CF
  6. VOLUME INCREASED IN EXISTING SWALE BY 1,107 CF OR APPROXIMATELY 3" IN DEPTH OF ENTIRE AREA OF SWALE.

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND. THE ENGINEER SHALL BE RESPONSIBLE FOR THE LOCATION AND ELEVATION OF DEPTH UTILITIES SHOWN ON THESE PLANS.

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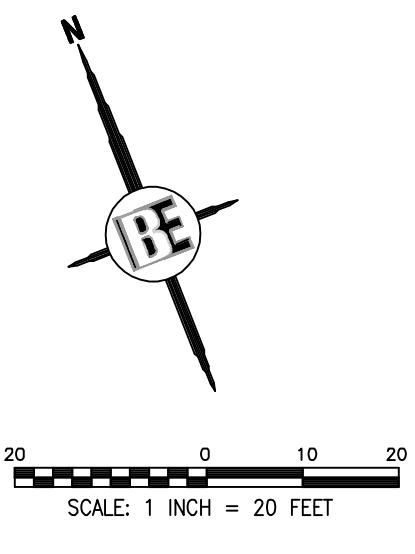
**WILSON MARINE**  
 CONTRACTING MANAGEMENT CORPORATION  
 3471 BREEZE POINT COURT  
 LINDEN, MI 48841  
 248-758-3811

NO.	DATE	REVISION PER	BY
1	6/27/16	REVIEW	PC
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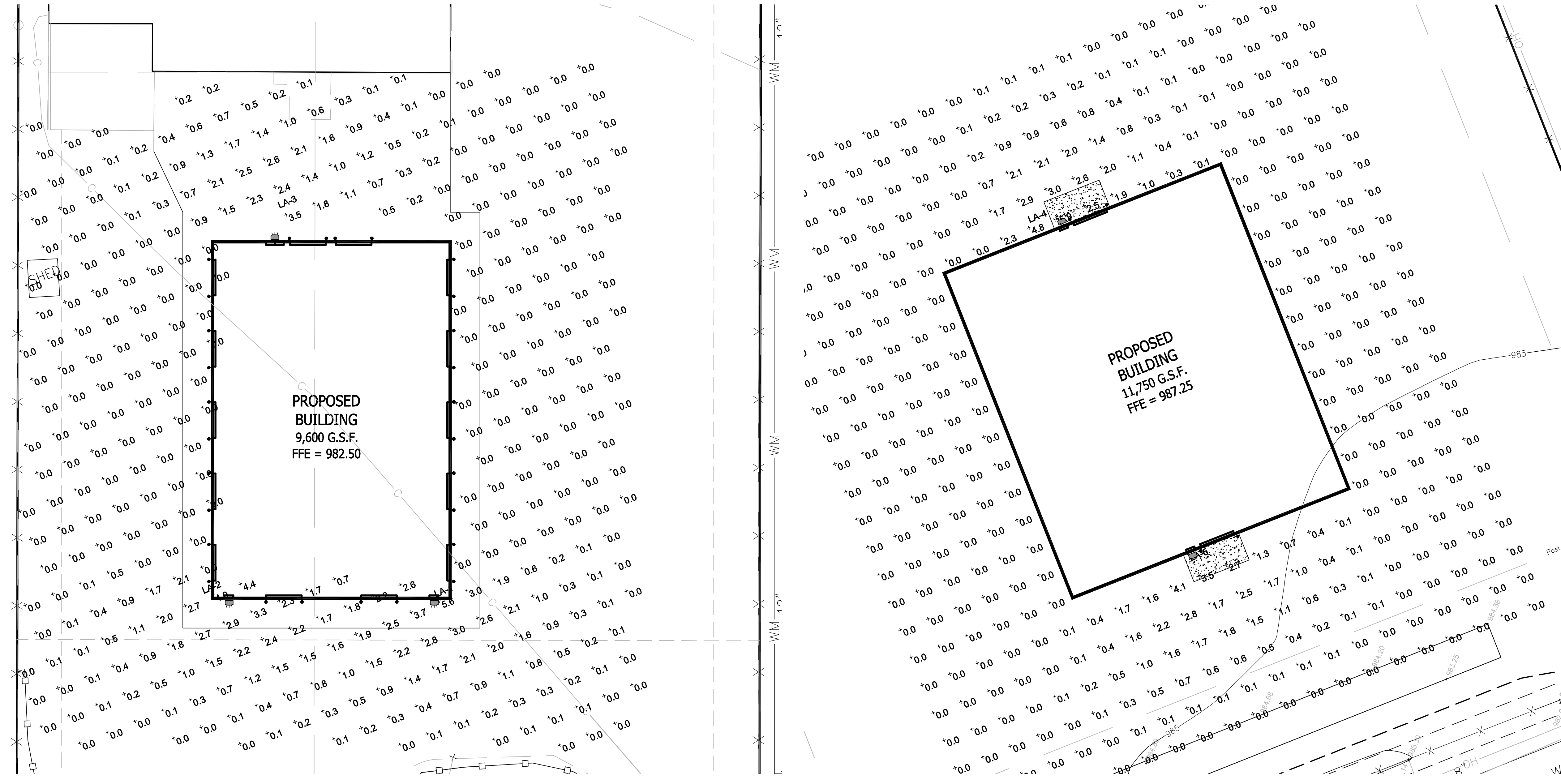
DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: KRJ  
 CHECKED BY: \_\_\_\_\_  
 SCALE: 1" = 20'  
 JOB NO. 16-181  
 DATE: 6-1-16  
 SHEET NO. C8



# LIGHTING PLAN - SHOWROOM & WAREHOUSE BUILDINGS



- LEGEND**
- 900 --- EXISTING CONTOUR
  - 922.00 --- EXISTING SPOT ELEVATION
  - ⊙ --- LIGHT POLE
  - ( ) --- STORM INVERT
  - --- STEEL ROD/PIPE FOUND
  - ⊕ --- SECTION CORNER
  - X- --- FENCE
  - CONC. --- CONCRETE
  - ⊕ --- CENTERLINE
  - L --- LIBER
  - P --- PAGE
  - L.C.R. --- LIVINGSTON COUNTY RECORDS
  - (R&M) --- RECORD AND MEASURED
  - P.O.B. --- POINT OF BEGINNING



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL UTILITIES.

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**WILSON MARINE**  
CONTRACTING MANAGEMENT CORPORATION  
3471 BREEZE POINT COURT  
LINDEN, MI 48451  
248-756-3911

**PROJECT:** LIGHTING PLANS - SHOWROOM & WAREHOUSE BLDGS  
**PREPARED FOR:** WILSON MARINE  
**TITLE:** LIGHTING PLANS - SHOWROOM & WAREHOUSE BLDGS  
**DATE:** 6/27/16  
**REVISION PER:** NO. BY DATE

DESIGNED BY: TD  
DRAWN BY: KS  
CHECKED BY:  
SCALE: 1" = 20'  
JOB NO. 16-181  
DATE 6-1-16  
SHEET NO. C9

LUMINAIRE SCHEDULE										
SYMBOL	LABEL	QTY.	DESCRIPTION	CATALOG NUMBER	LAMP	LUMENS	LLF	POLE HEIGHT	BASE HEIGHT	TOTAL HEIGHT
⊕	LA	5	LITHONIA CONTOUR SERIES LED WALL-MOUNT WITH 30 5000K LEDs OPERATED AT 700mA AND PRECISION	CSXW LED 30C 700 50K T4M	LED	ABSOLUTE	.93	12'	WALL MOUNTED	12'

ALL IES FILES PROVIDED BY MANUFACTURER FOR CALCULATION OF LIGHTING LEVEL.

**CSXW LED LED Wall Luminaire**

**Specifications**

Height: 7.5/8" (213 mm)  
Width: 16.5/8" (493 mm)  
Depth: 9.5/16" (238 mm)  
Weight (max): 30 lbs (13.6 kg)

**Introduction**

The Contour® Series luminaires offer traditional square daylights with softened edges for a versatile look that complements many applications. The CSXW LED combines the latest in LED technology with the familiar aesthetic of the Contour® Series for stylish, high-performance illumination that lasts. It is ideal for replacing 100-400W metal halide in wall-mounted applications with typical energy savings of 80% and expected service life of over 100,000 hours.

**Ordering Information**

EXAMPLE: CSXW LED 30C 700 40K T3M MVOLT DDBXD

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting	Options	Finish
CSXW LED 30C	30 LEDs	700 mA	40K	500K	T3M	Spd-L	SHIPPED SEPARATELY	30300
			50K	500K	T3M	Spd-M	30300	
CSXW LED 30C	30 LEDs	1000 mA	40K	500K	T3M	Spd-L	SHIPPED SEPARATELY	30300
			50K	500K	T3M	Spd-M	30300	

**Accessories**

CSXW LED 0 --- Back box (sold separately)

CSXW LED 1 --- Wall mount (sold separately)

CSXW LED 2 --- Wall mount (sold separately)

CSXW LED 3 --- Wall mount (sold separately)

CSXW LED 4 --- Wall mount (sold separately)

CSXW LED 5 --- Wall mount (sold separately)

CSXW LED 6 --- Wall mount (sold separately)

CSXW LED 7 --- Wall mount (sold separately)

CSXW LED 8 --- Wall mount (sold separately)

CSXW LED 9 --- Wall mount (sold separately)

CSXW LED 10 --- Wall mount (sold separately)

CSXW LED 11 --- Wall mount (sold separately)

CSXW LED 12 --- Wall mount (sold separately)

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CSXW LED 95 --- Wall mount (sold separately)

CSXW LED 96 --- Wall mount (sold separately)

CSXW LED 97 --- Wall mount (sold separately)

CSXW LED 98 --- Wall mount (sold separately)

CSXW LED 99 --- Wall mount (sold separately)

CSXW LED 100 --- Wall mount (sold separately)

- LEGEND**
- ⊕ (FR) --- PROPOSED (FR)
  - ⊕ (EX) --- EXISTING (EX)
  - ⊕ --- DOUBLE FIXTURE LIGHT POLE
  - ⊕ --- SINGLE FIXTURE LIGHT FIXTURE
  - ⊕ --- WALL MOUNTED LIGHT FIXTURE
  - ⊕ --- GROUND LIGHT FIXTURE
  - ⊕ --- FOOT CANDLES ON SITE

FOR SITE PLAN APPROVAL ONLY!  
NOT FOR CONSTRUCTION

**LIVINGSTON COUNTY SOIL EROSION TEMPORARY CONTROLS AND SEQUENCE**

- NOTIFY LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE 24 HOURS PRIOR TO START OF GRADE WORK.
- IN ACCORDANCE WITH PUBLIC ACT NO. 53, OF 1974 THE PERMIT HOLDER SHALL CALL MISS DIG FOR STAKING AND LOCATING OF UTILITIES, AT LEAST 72 HOURS IN ADVANCE OF THE START OF ANY WORK. PERMITTING STANDARDS INGRESS/EGRESS MUST HAVE LARGE CRUSHED ROCK TO REDUCE THE TRACKING OF SOIL ONTO THE PUBLIC TRAFFIC AREAS. SEE DETAIL ITEMS BELOW.
- 3/8" M.D.O.T SPECIFICATION TYPE SILT FABRIC FENCE AS SHOWN ON PLANS SHALL BE PLACED AND MAINTAINED ALONG PERIMETER ON ALL LOW LYING AREAS OF THE CONSTRUCTION SITE TO FILTER RUNOFF BEFORE LEAVING PROJECT SITE.
- ALL TEMPORARY EROSION CONTROL DEVICES AS NOTED ON PLANS SHALL BE INSTALLED PRIOR TO THE START OF MASSIVE EARTH DISTRIBUTION.
- PLAN DOES DENOTE A DETAILED EROSION CONTROL DEVICE TO RESTRICT TRACKING OF MATERIAL ONTO THE HIGHWAY. STONE DIAPERS SHALL BE INSTALLED AT ALL INGRESS/EGRESS AREAS OF THE SITE PRIOR TO THE START OF MASSIVE EARTH DISRUPTION. DIAPERS SHALL BE OF CRUSHED STONE AND SHALL HAVE A MINIMUM LENGTH OF 100' LINEAL FEET. RETENTION PONDS RETENTION/DETENTION/SEDIMENTATION PONDS SHALL BE EXCAVATED, TOPSOILED, SEEDDED, MULCHED AND TACKED PRIOR TO THE START OF MASSIVE EARTH DISRUPTION.
- DETENTION POND OUTLETS SHALL BE OF THE STANDPIPE AND STONE FILTER SYSTEM, WITH TRASH SCREEN. OUTLET FLOW SHALL NOT EXCEED 0.20 CUBIC FEET OF WATER PER SECOND/PER ACRE. POND DIKES SHALL HAVE A MINIMUM OF ONE (1) FOOT OF FREEBOARD. AN EMERGENCY SPILLWAY SHALL BE CONSTRUCTED WITHIN THE FREEBOARD LEVEL.
- THE EMERGENCY SPILLWAY FROM THE DETENTION POND SHALL BE SODDED AND PEGGED, OR RIP RAPPED, 15 FEET PAST THE TOE OF THE SLOPE OF THE BERM.
- DIKES AND BERMS SHALL BE FREE OF ALL ORGANIC MATTER.
- RETENTION/DETENTION PONDS SHALL BE FENCED WITH A 4' CHAIN LINK FENCE, INCLUDING A 12' ACCESS GATE FOR MAINTENANCE UNLESS MINIMUM 5 FT. HORIZONTAL TO 1 FT. VERTICAL SIDE SLOPES ARE PROVIDED. THE FENCE SHALL BE INSTALLED AT THE OUTER PORTION OF THE BERM, TO ALLOW FOR MAINTENANCE WORK TO BE DONE INSIDE THE FENCE.
- ALL UNIMPROVED DISTURBED AREAS SHALL BE STRIPPED OF TOPSOIL WHICH WILL BE STORED ONSITE DURING THE EXCAVATING STAGE. TOPSOIL PILES SHALL BE SEEDDED AND MULCHED, OR MATTED WITH STRAW IN THE NON-GROWING SEASON, IMMEDIATELY AFTER THE STRIPPING PROCESS IS COMPLETED, TO PREVENT WIND AND WATER EROSION.
- SOIL EROSION CONTROLS SHALL BE MONITORED DAILY BY THE ON-SITE ENGINEER, OR CONTRACTOR, WHICHEVER CASE APPLIES. SLOPES AND DITCHES ON SITE DITCHES SHALL BE OF THE FLAT BOTTOM TYPE MINIMUM WIDTH OF 2' WITH A MINIMUM OF 3 HORIZONTAL TO 1 VERTICAL SIDE SLOPES, 3:1. DITCHES WITH STEEP SLOPES WILL NEED FLOW CHECKS TO PREVENT SCOURING OF THE DITCH BOTTOM. THESE SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR INSPECTOR.
- SLOPES IN EXCESS OF 3 HORIZONTAL TO 1 VERTICAL SHALL NOT BE USED EXCEPT WITH A MECHANICAL DEVICE SUCH AS A RETAINING WALL, TERRACING, OR OTHER PRIOR APPROVED DEVICE. STORM DRAINS
- ALL STORM WATER STRUCTURES, CATCH BASINS AND/OR MANHOLES, IF BLOCK, SHALL BE PLASTERED ON BOTH THE INSIDE AND OUTSIDE OF THE STRUCTURES. GROUTING AND POINTING WILL BE NECESSARY AT THE CASTING AND STRUCTURE JOINT TO PREVENT LEAKAGE AND THE RESULTING SOIL MOVEMENT. AROUND THE STRUCTURE.
- STORM WATER INLETS SHALL HAVE AS A TEMPORARY CONTROL A STRAW BALE BARRIER AND STONE FILTER INSTALLED AROUND THE INLET DURING CONSTRUCTION. AS AN ALTERNATIVE TO THE STRAW BALE BARRIER, A BURLAP AND PEA STONE FILTER MAY BE USED. THREE LAYERS OF BURLAP FIBER AND A FILTER OF PEA STONE MINIMUM 1 FT. IN DEPTH CAN BE USED. DUE TO THE POROSITY OF THE BURLAP FILTER THE MINIMUM OF 1 FT. OF STONE IS VERY IMPORTANT. THE CONTROL SHALL BE INSTALLED AS SOON AS THE STRUCTURE IS BUILT AND INSPECTED DAILY.
- BURLAP AND PEA STONE FILTERS WILL NEED TO BE CHANGED AFTER EACH RAINFALL.
- COUNTY CODE REQUIRES A MINIMUM PIPE SIZE OF 12" IN DIAMETER. IF SMALLER PIPE IS NEEDED FOR OUTLET PURPOSES THE 12" CAN BE BAFFLED TO THE CORRECT SIZE. ALL PIPE SHALL MEET THE 12" DIAMETER CODE SIZE.
- ALL STORM DRAIN OUTLETS 15" IN DIAMETER OR LARGER SHALL HAVE ANIMAL GUARDS INSTALLED TO PREVENT ENTRANCE TO THE SYSTEM.
- ALL STORM DRAINAGE PIPE 30" IN DIAMETER OR LARGER SHALL BE POINTED, AT THE JOINTS ON THE INSIDE WITH MORTAR, AFTER BACKFILLING.
- ALL STORM DRAIN OUTLETS THAT DO NOT EMPTY INTO THE RETENTION/DETENTION POND SHALL HAVE A TEMPORARY 5'x10'x3' SUMP INSTALLED AT THE TERMINATION OF THE STORM SEWER. UPON COMPLETION OF THE STABILIZATION WORK THE SUMP AREA SHALL BE FILLED AND RIP RAPPED WITH COBBLE STONE. SILT TRAPS SHALL BE INSPECTED AFTER EACH STORM.
- STORM WATER OUTLETS DO DENOTE RIP RAP. ALL OUTLETS SHALL BE RIP RAPPED OVER KEYED FILTER FABRIC WITH A MINIMUM OF 15 SQ. YARDS OF 6" OR LARGER COBBLE STONE.
- RIP RAP AS NOTED ON THE PLAN SHALL BE OF A FUNNEL SHAPE CONSTRUCTION, WIDTH SHALL INCREASE AS DISTANCE FROM THE OUTLET POINT INCREASES AT A 3:1 RATIO.
- RIP RAP SHALL BE OF COBBLE STONE, 6" IN DIAMETER OR LARGER. GROUTING MAY BE NECESSARY, AND SHALL BE A MINIMUM OF 6" IN DEPTH WITH THE COBBLE SET IN THE CEMENT SLURRY.
- INSTALL SPLASH BLOCK ON STORMWATER OUTLETS IF SLOPE OF THE PIPE IS 4% OR GREATER.
- ALL UNIMPROVED DISTURBED AREAS SHALL BE RE-TOP SOILED, WITH A MINIMUM OF 3" OF MATERIAL, SEEDDED, MULCHED AND TACKED WITHIN 15 DAYS OF THE COMPLETION OF THE MASSIVE EARTH DISRUPTION. IN THE NON-GROWING SEASON STRAW MATTING WILL SUFFICE. HYDROSEEDING WILL BE AN ACCEPTABLE ALTERNATE FOR MULCHING. EXTREME CARE SHOULD BE EXERCISED IN SPRING AND FALL PERIODS AS A FROST WILL BREAK THE BIND OF THE HYDROSEEDING, WHICH WILL AFFECT THE EFFECTIVENESS OF THIS PROCEDURE.
- IN THE NON-GROWING SEASON, TEMPORARY STABILIZATION OF MASSIVELY EXPOSED AREAS FOR WINTER STABILIZATION SHALL BE DONE WITH STRAW MATTING.
- PERMIT FEES DURING THE WINTER PERIOD OF NON-CONSTRUCTION, (DECEMBER 1 THROUGH MARCH 31), SHALL NOT BE IMPOSED IF THE PERMIT HOLDER TEMPORARILY STABILIZES THE EXPOSED AREAS WITH STRAW MATTING, AND OTHER APPROVED CONTROLS, AND OBTAINS A WINTER STABILIZATION CERTIFICATE FROM THIS OFFICE.
- PERIODIC INSPECTIONS WILL BE MADE THROUGHOUT THE COURSE OF THE PROJECT. IT WILL BE THE RESPONSIBILITY OF THE MANAGERS OF THE PROJECT TO CONTACT THIS OFFICE FOR THE FINAL INSPECTION AT THE END OF THE PROJECT.
- THE ISSUING BUILDING DEPARTMENT SHALL NOT ISSUE THE CERTIFICATE OF OCCUPANCY UNTIL THE FINAL INSPECTION LETTER FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE HAS BEEN OBTAINED. PER THE LIVINGSTON COUNTY DRAIN COMMISSIONER THE SEEDING, FERTILIZER AND MULCH MINIMUM QUANTITIES SHALL BE AS FOLLOWS: 3" IN DEPTH TOP-SOIL 218 LBS. PER ACRE GRASS SEED 150 LBS. PER ACRE FERTILIZER 3" IN DEPTH 1.5 TO 2 TONS PER ACRE (ALL STRAW MULCH MULCHING MUST HAVE A TIE DOWN, SUCH AS TACKIFIER, NET BINDING, ETC.) HYDRO-SEEDING IS NOT ACCEPTABLE FOR SLOPES HYDRO-SEEDING EXCEEDING 5%, IN SUCH CASES STABILIZATION SHALL BE DONE WITH SEED AND STRAW MULCH WITH A TACKIFIER.

**MAINTENANCE SCHEDULE FOR SOIL EROSION CONTROLS:**

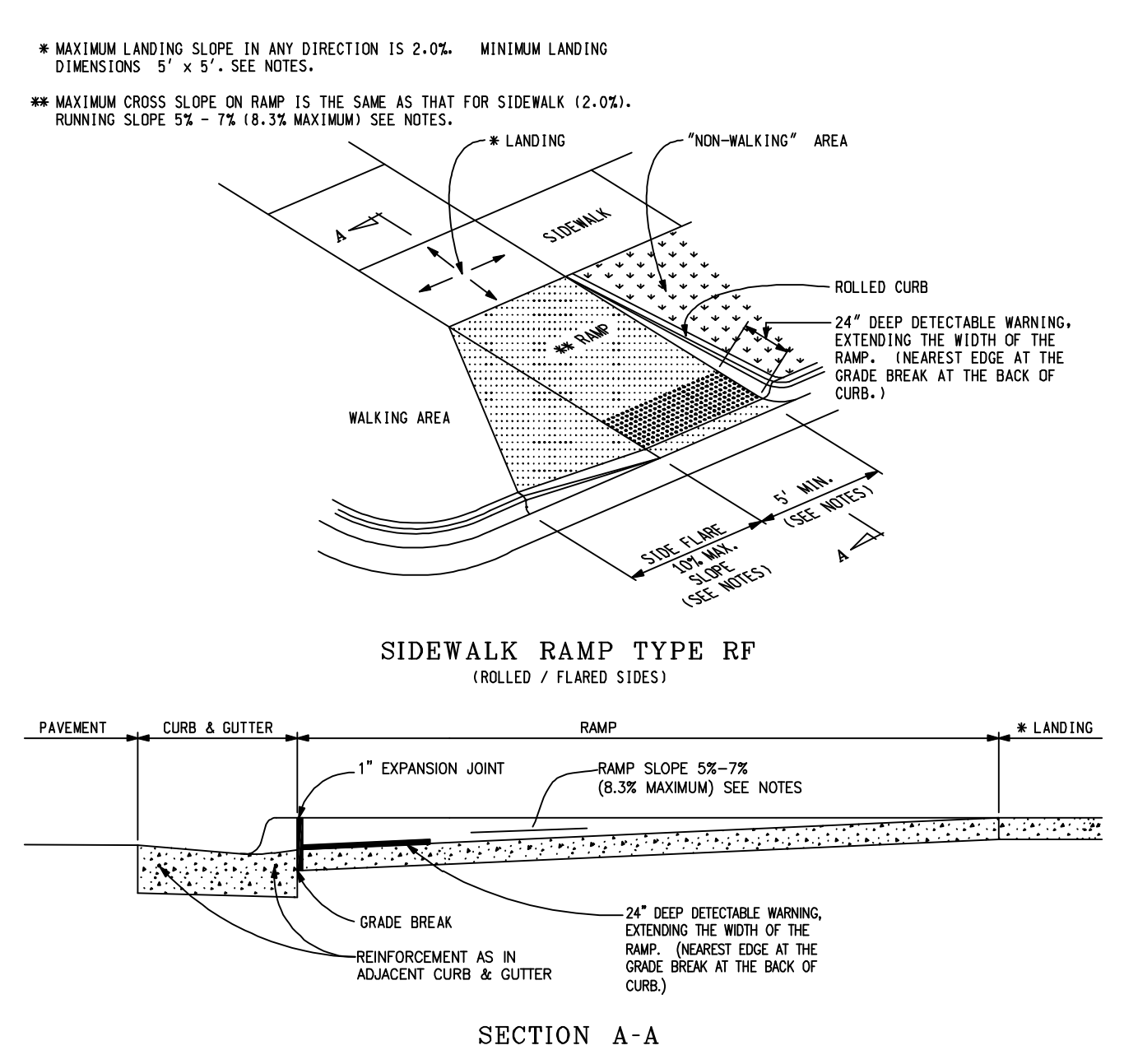
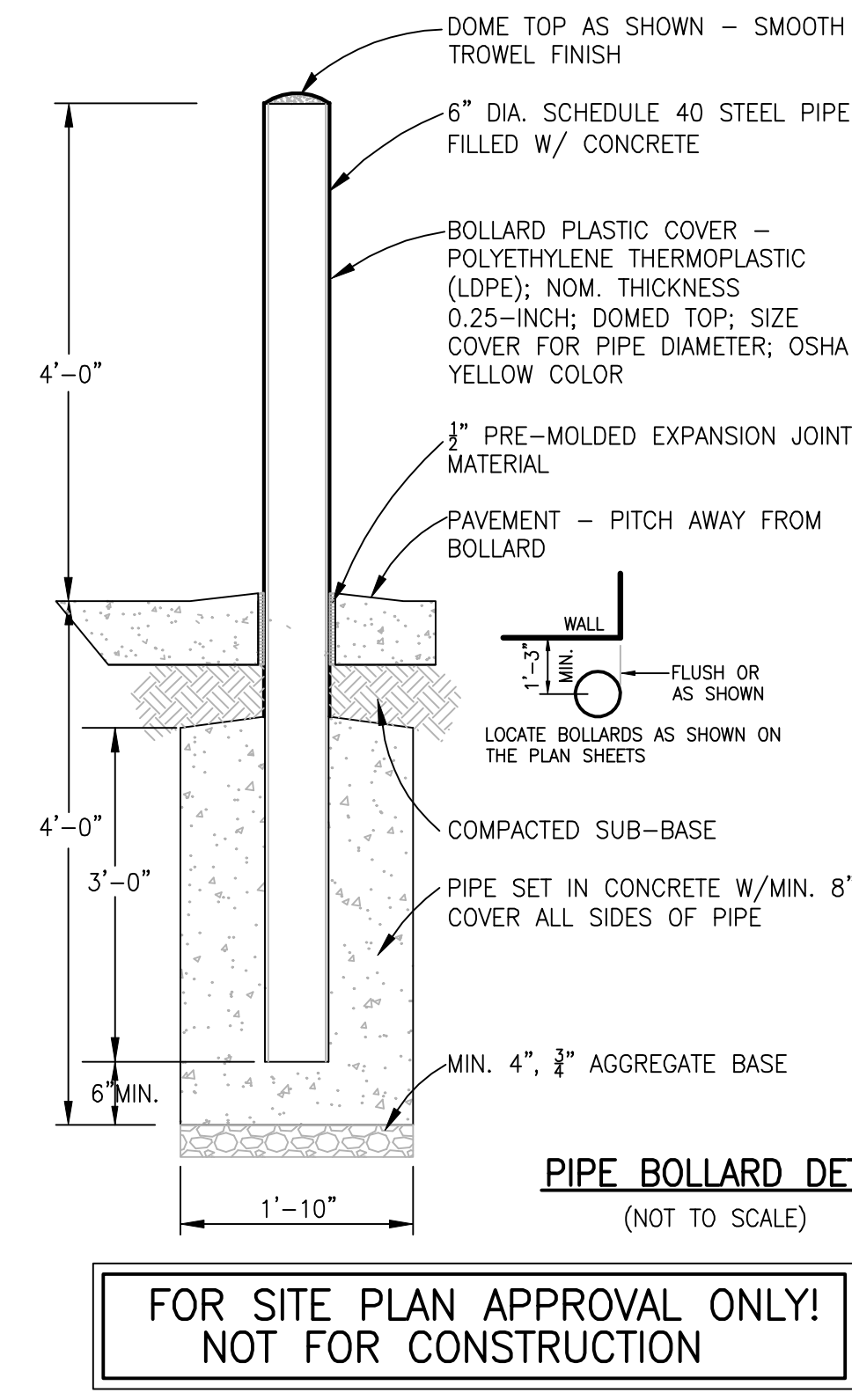
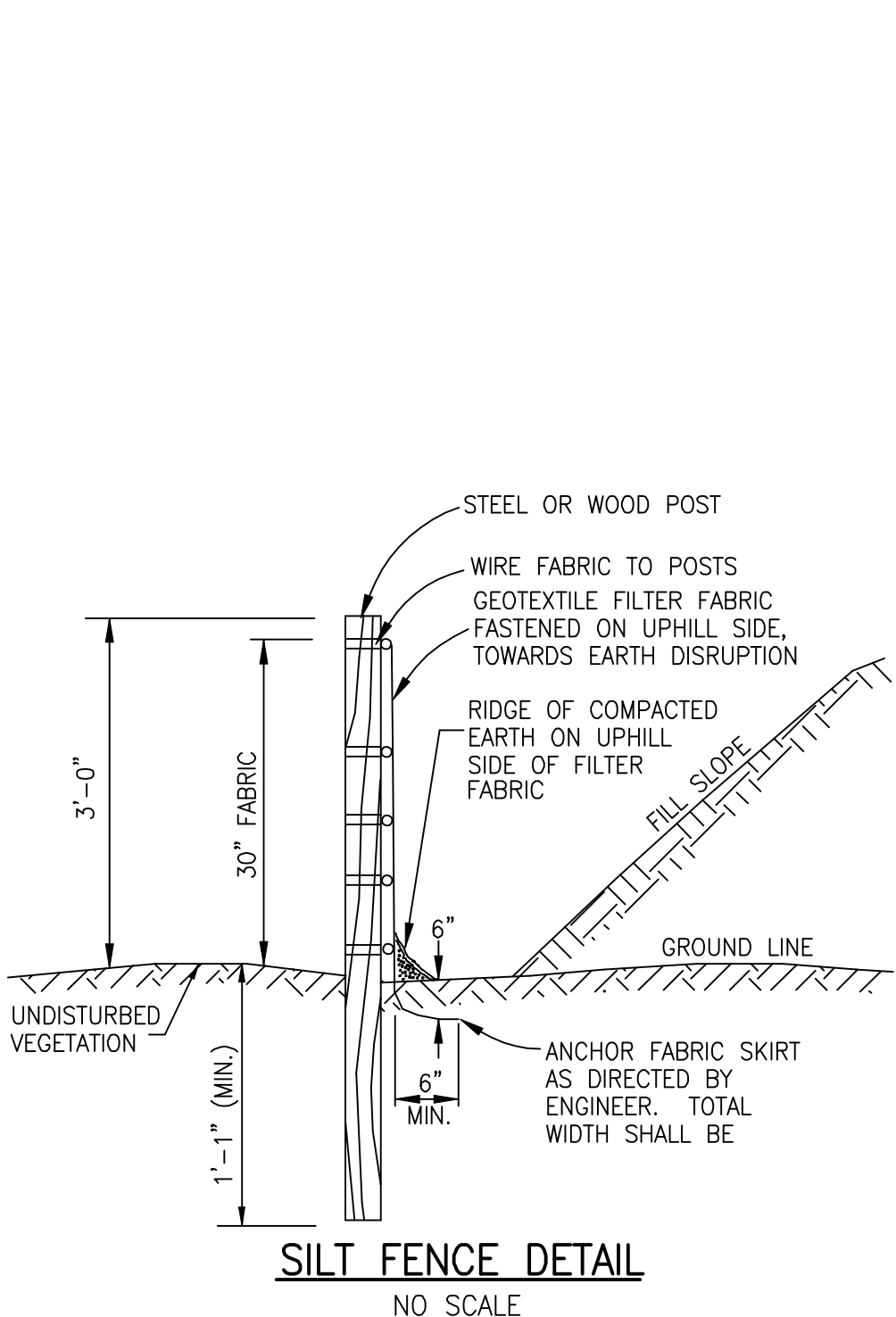
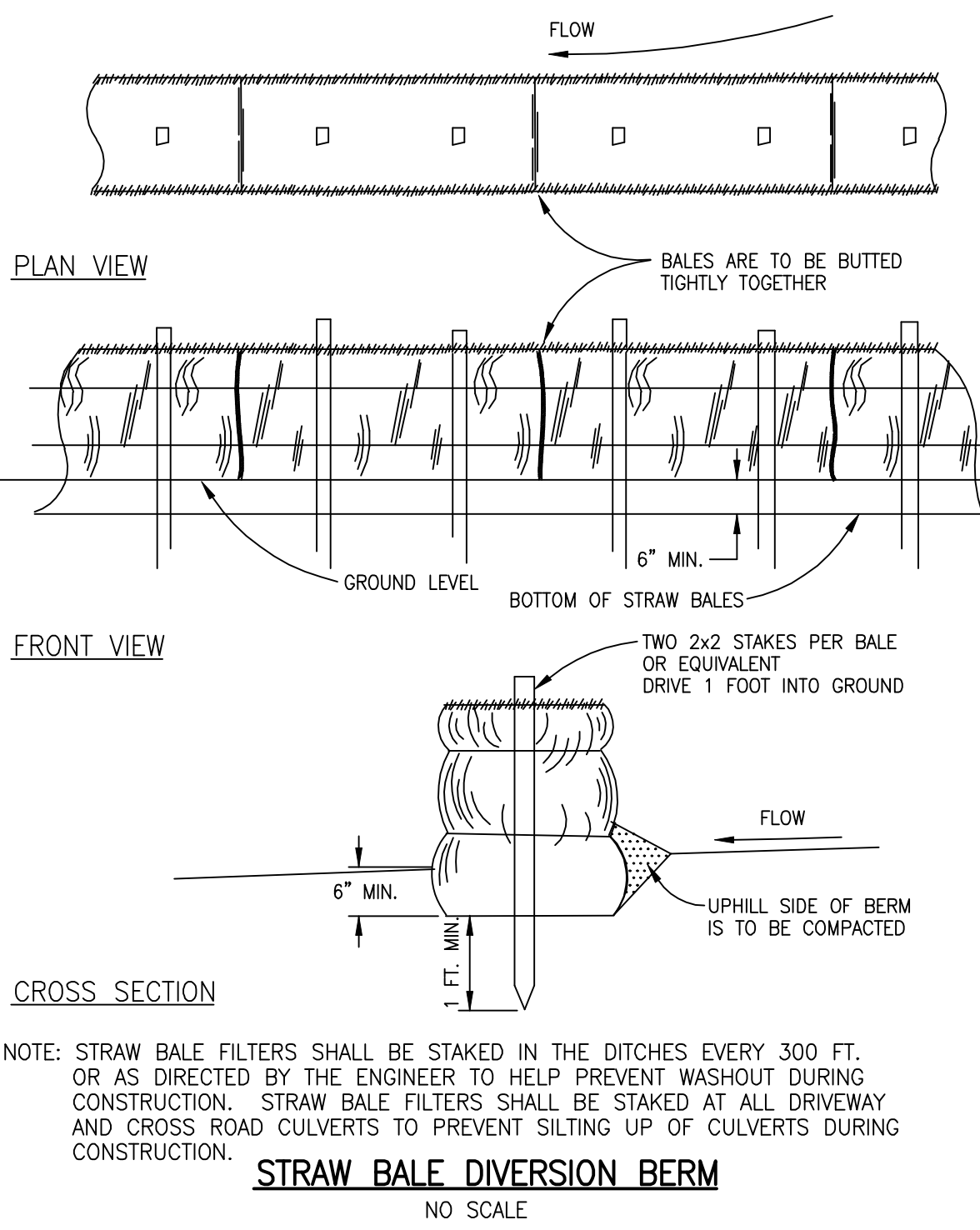
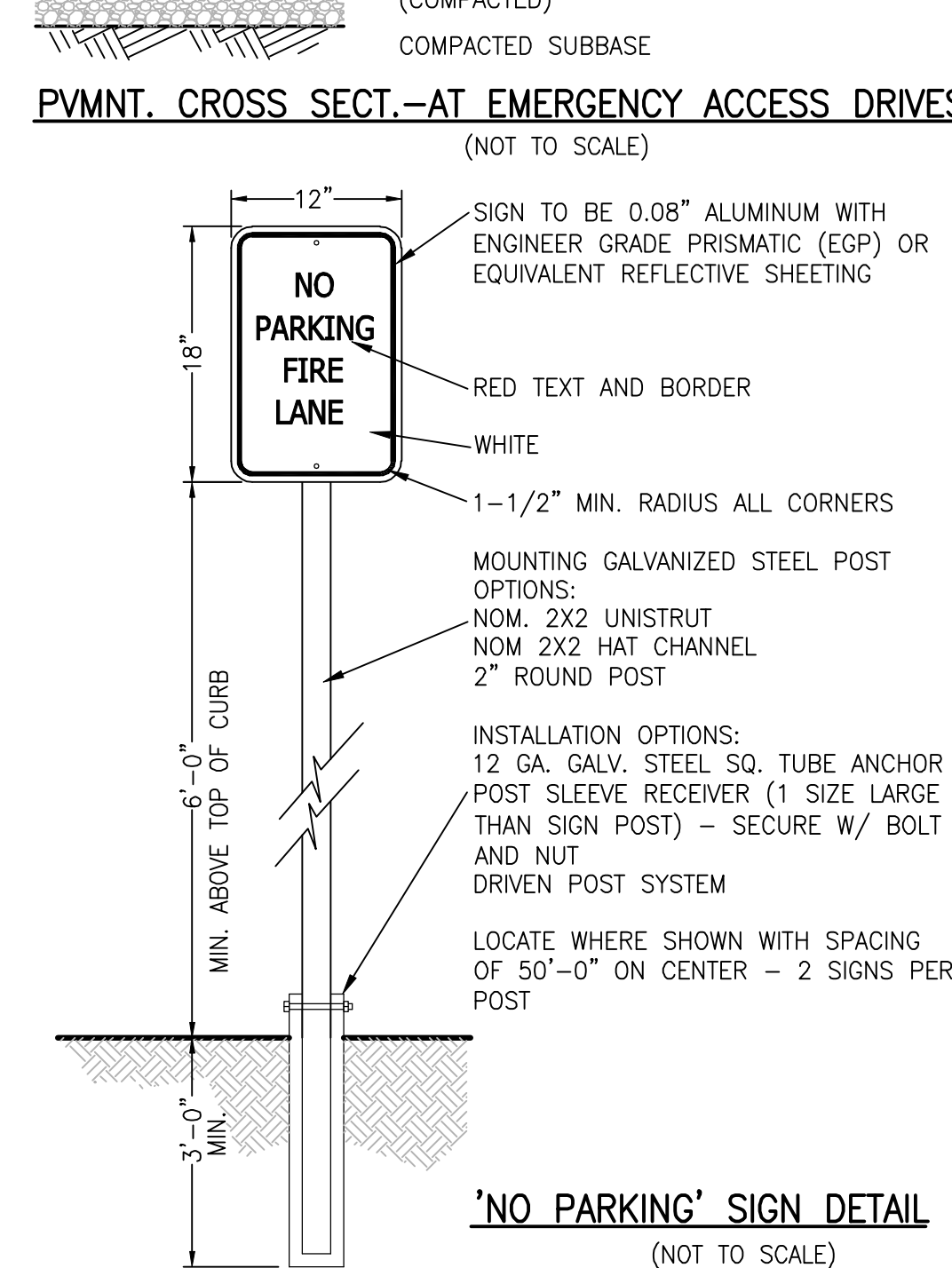
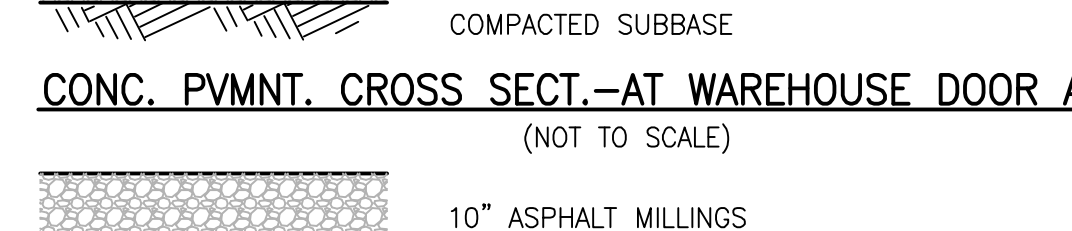
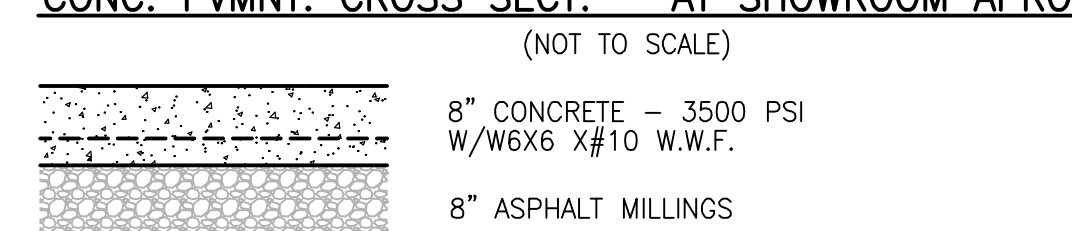
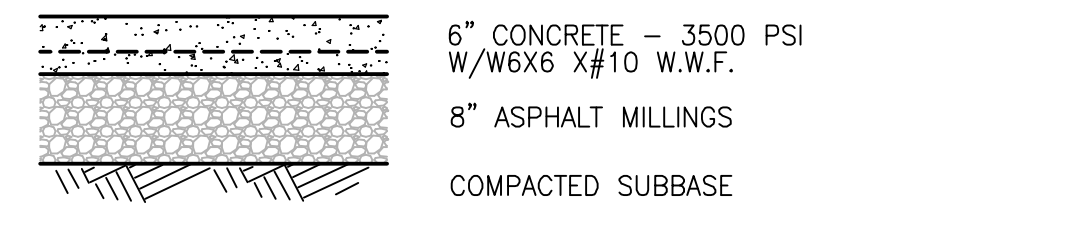
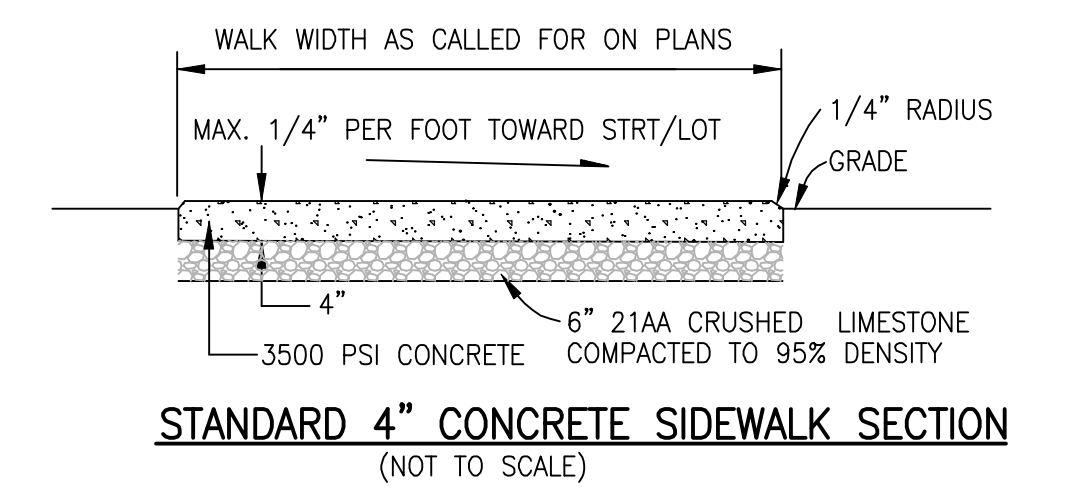
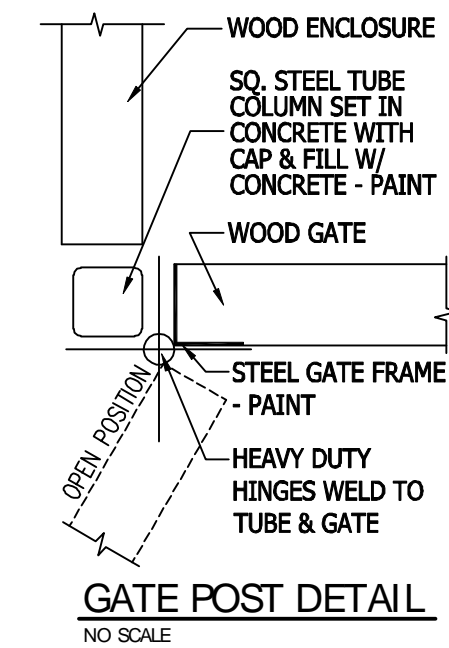
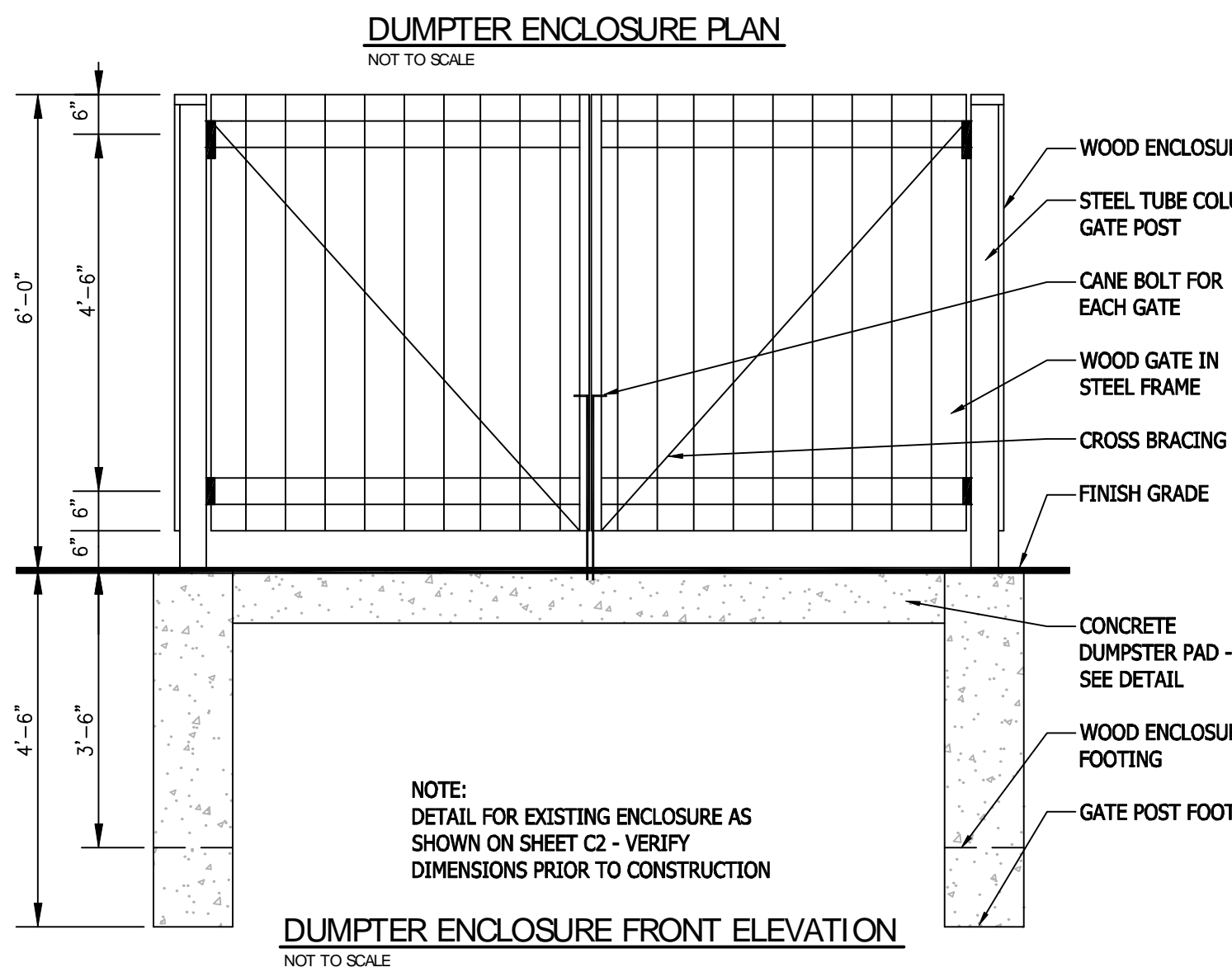
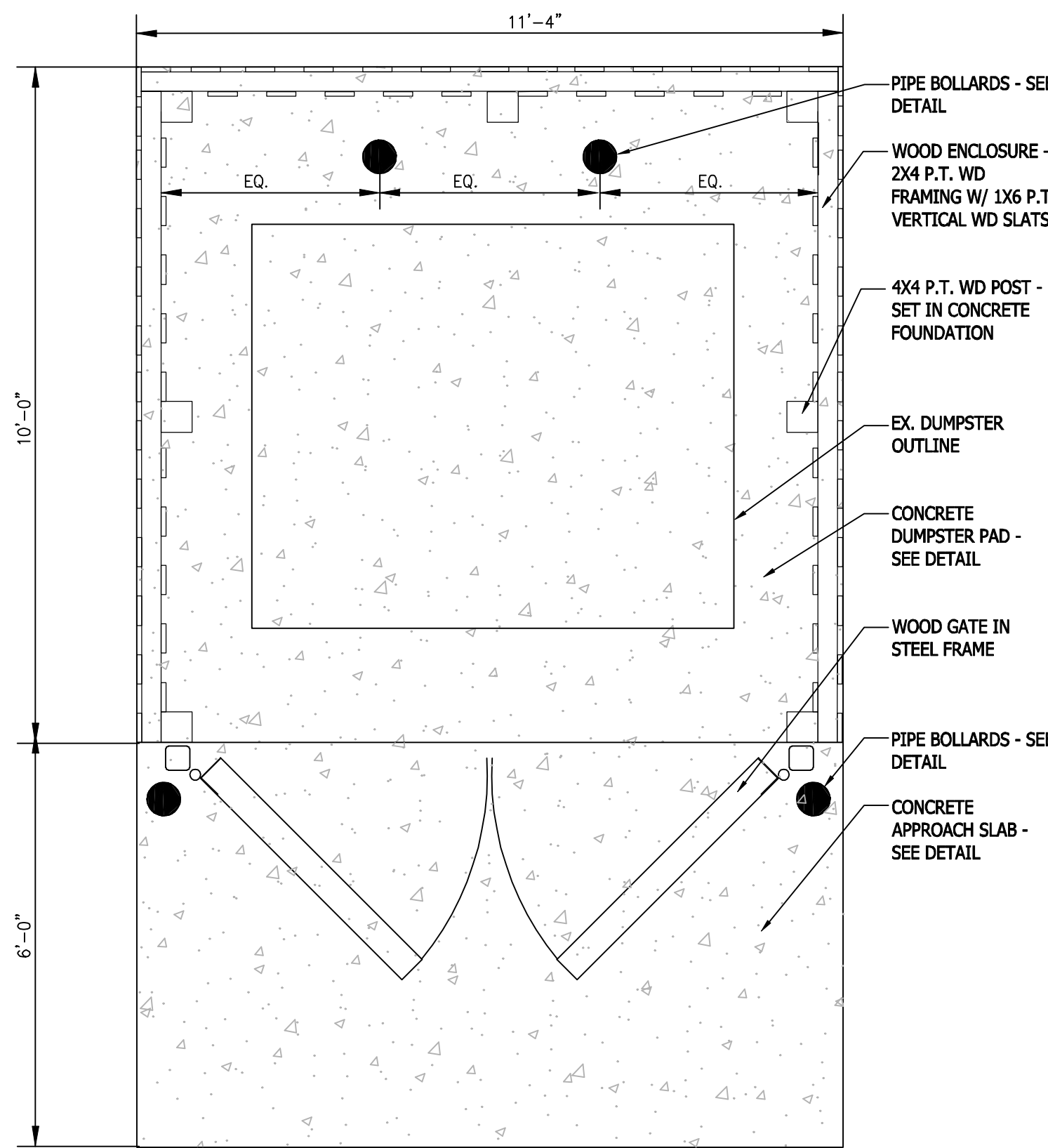
- SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH MAJOR STORM EVENT. MAINTENANCE SHALL INCLUDE REMOVAL OF ACCUMULATED SILT AND REPLACEMENT OF TORN SECTIONS. SILT FENCE SHALL BE REMOVED WHEN ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
- TRACKING PAD SHALL BE INSPECTED MONTHLY FOR ACCUMULATED DIRT. TRACKING PAD SHALL BE REPLACED WHEN THE STONES ARE CHOKED WITH DIRT. TRACKING PAD SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FIRST COURSE OF ASPHALT BEING LAID.
- DETENTION/RETENTION POND SHALL BE INSPECTED QUARTERLY ON A PERMANENT BASIS. MAINTENANCE SHALL INCLUDE SEDIMENT REMOVAL, EMBANKMENT STABILIZATION AND MAINTAINING THE OUTLET STRUCTURE IN GOOD CONDITION. NO TREES SHALL BE ALLOWED TO GROW ON THE EMBANKMENT.
- CATCH BASINS SHALL BE INSPECTED ANNUALLY FOR ACCUMULATION OF SEDIMENT. ALL SEDIMENT MUST BE REMOVED AND DISPOSED OF PROPERLY WHEN THE SUMP IS FULL.
- COMMON AREAS SHALL BE STABILIZED NO LATER THAN 15 DAYS AFTER GRADE WORK, PURSUANT TO RULE 1709 (5).

**CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE**

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

**CONTROLS & MEASURES NARRATIVE**

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



**BE BOSS Engineering**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 800.246.6735 FAX 517.548.1670

**WILSON MARINE CONTRACTING MANAGEMENT CORPORATION**  
 3471 BREEZE POINT COURT  
 LINDEN, MI 48451  
 248-756-3911

PROJECT: \_\_\_\_\_ PREPARED FOR: \_\_\_\_\_ TITLE: **CONSTRUCTION & EROS. CNTRL. DETAILS**

NO	BY	REVISION PER	DATE
1	PC	GENERAL TOWNSHIP REVIEW	6/27/16

DESIGNED BY: PC  
 DRAWN BY: PC  
 CHECKED BY: \_\_\_\_\_  
 SCALE: AS NOTED  
 JOB NO. 16-181  
 DATE 6-1-16  
 SHEET NO. **C10**

FOR SITE PLAN APPROVAL ONLY!  
 NOT FOR CONSTRUCTION



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

GENOA TOWNSHIP

JUN 0 1 2016

RECEIVED

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

APPLICANT NAME & ADDRESS: Brighton Nazarene Church

*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Brighton Nazarene Church (Pastor Ben Walls)

SITE ADDRESS: 7669 Brighton Rd., Brighton, MI 48116 PARCEL #(s): 4711-25-400-058

APPLICANT PHONE: ( 810 ) 227-6600 OWNER PHONE: ( 810 ) 227-6600

OWNER EMAIL: al.herndon@terex.com

LOCATION AND BRIEF DESCRIPTION OF SITE: The site is located on the north side of Brighton Road, approximately

0.97 miles west of the W. Grand River Ave. intersection. The property has a total area of 10.23 acres. The subject property and surrounding

adjacent properties are located within the suburban residential zoning district.

BRIEF STATEMENT OF PROPOSED USE: The proposed disturbed area is approximately 0.17 acres located in the

northwest section of the subject site. The use is for a small accessory storage building (40' x 30') for a church van and seasonal

items.

THE FOLLOWING BUILDINGS ARE PROPOSED: 40' x 30' (1,200 sf) storage building

**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: Pastor Ben D. Walls

ADDRESS: 7669 Brighton Road, Brighton, MI 48116

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

1.) Brent LaVanway of Boss Engineering at brentl@bosseng.com  
Name Business Affiliation E-mail Address

**FEE EXCEEDANCE AGREEMENT**

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

SIGNATURE: Pastor Ben D. Walls DATE: 5/31/16  
PRINT NAME: BEN D. WALLS PHONE: 810-227-6600  
ADDRESS: 7669 Brighton Road, Brighton, MI 48116

July 5, 2016

Planning Commission  
Genoa Township  
2911 Dorr Road  
Brighton, Michigan 48116

<b>Attention:</b>	Kelly Van Marter, AICP Assistant Township Manager and Planning Director
<b>Subject:</b>	Brighton Nazarene Church – Site Plan Review #2
<b>Location:</b>	7669 Brighton Road – northwest corner of Brighton and Aljoann Roads
<b>Zoning:</b>	SR Suburban Residential

Dear Commissioners:

As requested, we have reviewed the revised site plan submittal (dated 6/22/16) proposing construction of a 1,200 square foot accessory building for the existing Brighton Nazarene Church development at 7669 Brighton Road.

We have reviewed the proposal in accordance with the applicable provisions of the Genoa Township Zoning Ordinance and provide the following comments for your consideration.

**A. Summary**

1. From a planning and zoning perspective, we find no issues with the proposal.
2. Any issues raised by the Township Engineer or Fire Department must be addressed.

**B. Proposal/Process**

The applicant proposes construction of a 30' x 40' storage building, which requires sketch plan review/approval per Table 18.2. As such, Planning Commission review and approval is required for this project.

The storage building has been reviewed per the requirements for accessory buildings (11.04.01) and dimensional standards for the SR District (3.04).

**C. Site Plan Review**

1. **Dimensional Requirements.** The proposed storage building meets the dimensional requirements as per the table below:

	Accessory building setbacks		Max. Height	Max. Size
	Side Yard	Rear Yard		
Requirement	20'	50'	14'	1,200 SF
Provided	20'/282'	80'	13' 10 7/8"	1,200 SF

2. **Building Materials and Design.** The proposed storage building will consist of vinyl siding and an asphalt shingle roof. The south side of the building will have an overhead door to allow church van access. The revised elevation drawings note the use of tan siding and brown shingles – both intended to match the existing residence on site.



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


- 3. Access and Circulation.** Access to the storage building will be provided by a 16' wide gravel path from the existing gravel parking lot to the building.

A larger gravel area has been provided in front of the building to improve circulation into and out of the proposed building. Additionally, the plans show an existing gate accessing the gravel path with a Knox Box per Fire Department requirements.

- 4. Landscaping.** Section 12.02.06 states that the Planning Commission may require that accessory structures be screened/landscaped when in a visible location. The proposed building is within a heavily wooded area and should be screened from off-site views.
- 5. Exterior Lighting.** Per the photometric plan, the south side of the building will be fitted with two wall sconce lights at a height of 10'. The plan illustrates 0.1 foot candles at the side property line, which is less than the maximum 0.5 permitted by the Ordinance.
- 6. Impact Assessment.** The Impact Assessment (revised 6/22/16) notes that the project will have minimal impact to natural features, public services/utilities, surrounding land uses and traffic.

Should you have any questions concerning this matter, please do not hesitate to contact our office. I can be reached by phone at (248) 586-0505, or via e-mail at [borden@lsplanning.com](mailto:borden@lsplanning.com).

Respectfully,  
**LSL PLANNING, A SAFE BUILT LLC COMPANY**

  
Brian V. Borden, AICP  
Planning Manager



July 6, 2016

Ms. Kelly Van Marter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

**Re: Brighton Nazarene Church Storage Building  
Site Plan Review #2**

Dear Ms. Van Marter:

We have received the revised site plan documents for the referenced project from Boss Engineering dated June 22, 2016. The applicant is proposing to construct a 1,200 sft storage building in the northwest corner of the site which is located on the north side of Brighton Road just east of Aljoann Road.

Tetra Tech has reviewed the documents and found all outstanding comments have been addressed.

Please call if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Markstrom'.

Gary J. Markstrom, P.E.  
Unit Vice President

A handwritten signature in blue ink, appearing to read 'Joseph C. Siwek'.

Joseph C. Siwek, P.E.  
Project Engineer

Copy: Brent LaVanway, P.E., Boss Engineering



# BRIGHTON AREA FIRE AUTHORITY

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

June 29, 2016

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Brighton Nazarene Church Storage Building  
7669 Brighton Rd.  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above mentioned site plan. The plans were received for review on June 27, 2016 and the drawings are dated June 22, 2016. The project is for the addition of a pole barn style garage located at the rear of the property with the intended use of storage of motor vehicles. The plan review is based on the requirements of the International Fire Code (IFC) 2015 edition.

**The building shall only be used for the purpose of accessory storage as described. Any alteration or deviation from the storage use shall require approval from the Livingston County Building Department and will require further review and approval.**

1. Access drive is proposed to be 10' wide. The minimum width for an emergency access drive shall be 20'. However due to the proposed accessory use, limited occupancy and separation from other structures, the access road to the site shall be permitted to be a minimum of 16' wide to accommodate emergency vehicles safely. Fire lane signage shall be provided at the gate and at least 2 equally spaced along the drive. Include a detail of the fire lane sign in the submittal. Access roads to site shall be provided and maintained during construction and shall be constructed to be capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds. **(Noted and revised on drawing)**

**IFC D 103.6**  
**IFC D 103.1**  
**IFC D 102.1**  
**IFC D 103.3**

2. The Knox Box is recommended to be replaced with a Knox padlock to be used in conjunction with facility lock. Lock and box can be ordered through [www.knoxbox.com](http://www.knoxbox.com) **(Noted and revised on drawing)**

**IFC 506.1**

3. Provide names, addresses, phone numbers, emails of owner or owner's agent, contractor, architect, on-site project supervisor. **(Provided on drawing)**

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".

Capt. Rick Boisvert, CFPS  
Fire Inspector



**IMPACT ASSESSMENT  
FOR  
SITE PLAN PETITION  
“BRIGHTON NAZARENE CHURCH”  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**BRIGHTON NAZARENE CHURCH  
7669 BRIGHTON RD.  
BRIGHTON, MI 48116  
(810) 227-6600**

Prepared by:

**BOSS ENGINEERING COMPANY  
3121 E. GRAND RIVER  
HOWELL, MI 48843  
(517) 546-4836**

□ JUNE 1, 2016  
REVISED: 06/22/16

**16-172 EIA**

## INTRODUCTION

The purpose of this Impact Assessment (IA) report is to show the effect that this proposed development may have on various factors in the general vicinity of the project. The format used for presentation of this report conforms to the *Submittal Requirements for Impact Assessment* guidelines in accordance with Section 18.07 of the published Zoning Ordinance for Genoa Township, Livingston County, Michigan.

## DISCUSSION ITEMS

### **A. Name(s) and address(es) of person(s) responsible for preparation of the impact assessment and a brief statement of their qualifications.**

Prepared For:  
Brighton Naumarene Church  
7669 Brighton Rd.  
Brighton, MI 48116

Prepared By:  
BOSS ENGINEERING COMPANY  
Civil Engineers, Land Surveyors, Landscape Architects and Planners  
3121 E. Grand River  
Howell, MI 48843  
517-546-4836

Boss Engineering has been successfully providing engineering, surveying, planning and landscape architecture services on land development projects since 1969. Since its beginning, Boss Engineering has strived to provide unparalleled professional services with integrity and respect to every client. Today, Boss provides a complete lineup of consulting services for each project, ranging from conceptual design through final construction. The company currently employs a variety of professions including civil engineers, surveyors, landscape architects and sanitarians.

### **B. Map(s) and written description / analysis of the project site including all existing structures, manmade facilities, and natural features. The analysis shall also include information for areas within 10 feet of the property. An aerial photograph or drawing may be used to delineate these areas.**

The site is located on the north side of Brighton Rd, approximately 0.97 miles west of the Grand River Ave intersection. The property has a total area of 10.23 acres. The subject property and surrounding adjacent properties are located within the suburban residential zoning district.

### **C. Impact on natural features: A written description of the environmental characteristics of the site prior to development and following development, i.e., topography, soils, wildlife, woodlands, mature trees (eight inch caliper or greater), wetlands, drainage, lakes, streams, creeks or ponds. Documentation by a qualified wetland specialist shall be required wherever the Township determines that there is a potential regulated wetland. Reduced copies of the Existing Conditions Map(s) or aerial photographs may accompany written material.**

The impact on existing natural features will be minimal with a disturbed area for the proposed development of 0.26 acres. A tree survey was performed on site within the area of impact and surrounding areas to locate and identify all trees having a dbh of 8" or above. The existing wooded area is dominated by oak species and also includes elms, locust, maples, and cherries.

The proposed development calls for an accessory structure to store one van and seasonal items for the church. The project will require that seven trees over a dbh of 8" be removed. Natural existing drainage patterns and slopes will not be impacted with minimal grading being proposed.

**D. Impact on storm water management: Description of measures to control soil erosion and sedimentation during grading and construction operations and until a permanent ground cover is established. Recommendations for such measures may be obtained from County Soil Conservation Service.**

Surface runoff during periods of construction will be controlled by proper methods set forth by the Livingston County Drain Commissioner, including silt fence and seed and mulch.

At the time of construction, there may be some temporary dust, noise, vibration and smoke, but these conditions will be of relatively short duration and shall be controlled by applying appropriate procedures to minimize the effects, such as watering if necessary for dust control.

The site plan documents show the proposed locations of all site improvements along with detailed soil erosion control information.

**E. Impact on surrounding land use: Description of the types of proposed uses and other man made facilities, including any project phasing, and an indication of how the proposed use conforms or conflicts with existing and potential development patterns. A description shall be provided of any increases of light, noise or air pollution which could negatively impact adjacent properties.**

There will not be any negative impact on surrounding land use as all surrounding properties are within the same zoning district. The proposed accessory structure is not in a readily visible location with surrounding mature vegetation minimizing visibility further.

The increase of light will be minimal to adjacent properties with a single wall panel being proposed on the structure and surrounding mature vegetation decreasing the impact further. There will not be an increase in noise or air pollution with the proposed development.

**F. Impact on public facilities and services: Description of number of expected residents, employees, visitors, or patrons, and the anticipated impact on public schools, police protection and fire protection. Letters from the appropriate agencies may be provided, as appropriate.**

There will be no impact on public facilities and services due to the proposed development.

**G. Impact on public utilities: Description of the method to be used to service the development with water and sanitary sewer facilities, the method to be used to control drainage on the site and from the site, including runoff control during periods of construction. For sites service with sanitary sewer, calculations for pre- and post development flows shall be provided in equivalents to a single family home. Where septic systems are proposed, documentation or permits from the Livingston County Health Department shall be provided.**

There will be no impact on public utilities as the proposed structure will not be serviced by sanitary sewer or water. With regards to storm water management, the increase in runoff volume is negligible. Shallow swales are being proposed to direct flow towards existing on-site swales and away from adjacent properties. The storm water will follow natural drainage patterns once it is directed to existing swales to Worden Lane. All calculations can be found within the site plan set.

**H. Storage or handling of any hazardous materials: Description of any hazardous substances expected to be used, stored or disposed of on the site. The information shall describe the type of materials, location within the site and method of containment. Documentation of compliance with federal and state requirements, and a Pollution Incident Prevention Plan (PIPP) shall be submitted, as appropriate.**

There will be no hazardous materials used or disposed of on this site, such as gas cans, striping paint, etc.

**I. Impact on traffic and pedestrians: A description of the traffic volumes to be generated based on national reference documents, such as the most recent edition of the Institute of Transportation Engineers Trip Generation Manual, other published studies or actual counts of similar uses in Michigan.**

There will be no impact on traffic and pedestrians with the proposed development.

**J. A detailed traffic impact study shall be submitted for any site over ten (10) acres in size which would be expected to generate 100 directional vehicle trips (i.e. 100 inbound or 100 outbound trips) during the peak hour of traffic of the generator or on the adjacent streets.**

A detailed traffic impact study is not necessary as the proposed development will not generate any additional traffic.

**K. Special Provisions: General description of any deed restrictions, protective covenants, master deed or association bylaws.**

None at this time.

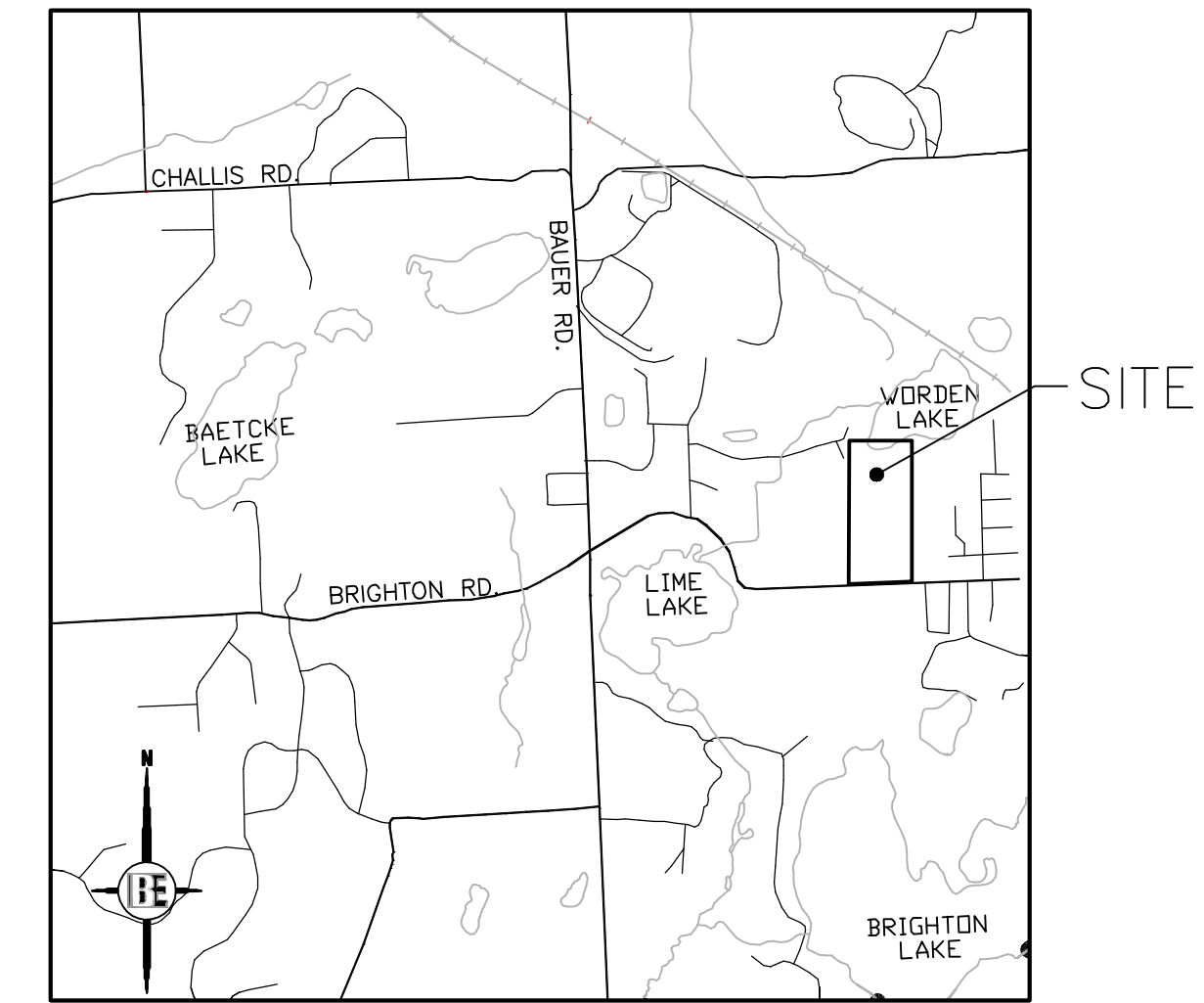
**L. A list of all sources shall be provided.**

Genoa Township's *Submittal Requirements for Impact Assessment*

Genoa Township Zoning Ordinances

# SITE PLAN / CONSTRUCTION PLANS FOR BRIGHTON NAZARENE CHURCH

7669 BRIGHTON ROAD, BRIGHTON, MI 48116  
GENOA TOWNSHIP, LIVINGSTON COUNTY, MI



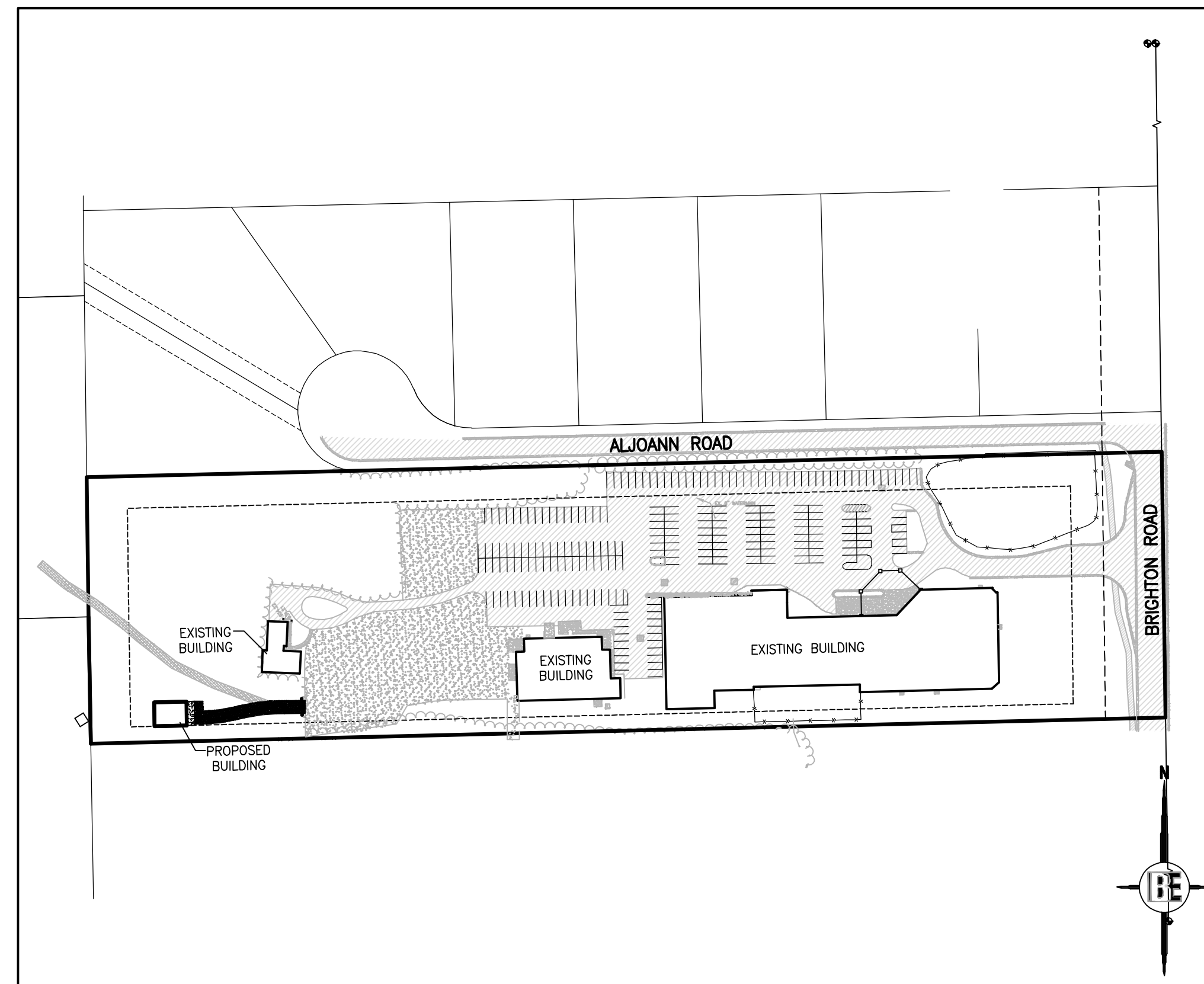
**LOCATION MAP**  
NO SCALE

**PROPERTY DESCRIPTION:**

GENERAL INFORMATION: PARCEL NO.: 4711-25-400-058  
A part of the SE 1/4 of Section 25, T2N-R5E, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the South 1/4 corner of said Section 25; thence N 89°08'15" E along the South line of said Section 663.28 feet to the Point of Beginning of the parcel to be described: thence N 01°24'19" W, 1341.56 feet to the South line of "Mt. Brighton Subdivision No. 2", as recorded in Liber 13 of Plots, Pages 12 and 13, Livingston County Records; thence N 89°03'20" E along said South line 158.13 feet to the Southeast corner of said Plot; thence N 89°13'50" E, 174.61 feet; thence S 01°21'30" E, 1341.53 feet to said South line of said Section 25; thence S 89°08'15" W along said South line 331.64 feet to the Point of Beginning, containing 10.23 acres, more or less and subject to the rights of the public over the existing Brighton Road.

**CONSTRUCTION NOTES**

- THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
1. THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.
  2. DO NOT SCALE THESE DRAWINGS AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
  3. A GRADING PERMIT FOR SOIL EROSION-SEDIMENTATION CONTROL SHALL BE OBTAINED FROM THE GOVERNING AGENCY PRIOR TO THE START OF CONSTRUCTION.
  4. IF DUST PROBLEM OCCURS DURING CONSTRUCTION, CONTROL WILL BE PROVIDED BY AN APPLICATION OF WATER, EITHER BY SPRINKLER OR TANK TRUCK.
  5. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH LOCAL MUNICIPAL STANDARDS AND SPECIFICATIONS.
  6. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED TOWNSHIP, COUNTY, AND STATE OF MICHIGAN PERMITS.
  7. PAVED SURFACES, WALKWAYS, SIGNS, LIGHTING AND OTHER STRUCTURES SHALL BE MAINTAINED IN A SAFE, ATTRACTIVE CONDITION AS ORIGINALLY DESIGNED AND CONSTRUCTED.
  8. ALL BARRIER-FREE FEATURES SHALL BE CONSTRUCTED TO MEET ALL LOCAL, STATE AND A.D.A. REQUIREMENTS.
  9. ANY DISCREPANCY IN THIS PLAN AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE DESIGN ENGINEER PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS AND DIMENSIONS SHOWN HEREON BEFORE BEGINNING CONSTRUCTION.
  10. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES AND RIGHTS-OF-WAY, PUBLIC OR PRIVATE, PRIOR TO THE START OF CONSTRUCTION.
  11. THE CONTRACTOR SHALL COORDINATE WITH ALL OWNERS TO DETERMINE THE LOCATION OF EXISTING LANDSCAPING, IRRIGATION LINES & PRIVATE UTILITY LINES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING LANDSCAPING, IRRIGATION LINES, AND PRIVATE UTILITY LINES.
  12. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE UPON COMPLETION OF THE PROJECT.
  13. THE CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND PUBLIC SHALL BE PROTECTED FROM INJURY, AND ADJOINING PROPERTY PROTECTED FROM DAMAGE.
  14. THE CONTRACTOR SHALL KEEP THE AREA OUTSIDE THE "CONSTRUCTION LIMITS" BROOM CLEAN AT ALL TIMES.
  15. THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
  16. ALL EXCAVATION UNDER OR WITHIN 3 FEET OF PUBLIC PAVEMENT, EXISTING OR PROPOSED SHALL BE BACKFILLED AND COMPACTED WITH SAND (MDOT CLASS II).
  17. ALL PAVEMENT REPLACEMENT AND OTHER WORKS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWNSHIP, INCLUDING THE LATEST MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
  18. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES.
  19. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY DELAY OR INCONVENIENCE DUE TO THE MATERIAL SHORTAGES OR RESPONSIBLE DELAYS DUE TO THE OPERATIONS OF SUCH OTHER PARTIES DOING WORK INDICATED OR SHOWN ON THE PLANS OR IN THE SPECIFICATION OR FOR ANY REASONABLE DELAYS IN CONSTRUCTION DUE TO THE ENCOUNTERING OR EXISTING UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.
  20. DURING THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL NOT PERFORM WORK BY PRIVATE AGREEMENT WITH PROPERTY OWNERS ADJACENT TO THE PROJECT.
  21. IF WORK EXTENDS BEYOND NOVEMBER 15, NO COMPENSATION WILL BE DUE TO THE CONTRACTOR FOR ANY WINTER PROTECTION MEASURES THAT MAY BE REQUIRED BY THE ENGINEER.
  22. NO TREES ARE TO BE REMOVED UNTIL MARKED IN THE FIELD BY THE ENGINEER.
  23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE PROPERTY BEYOND THE CONSTRUCTION LIMITS INCLUDING BUT NOT LIMITED TO EXISTING FENCE, LAWN, TREES AND SHRUBBERY.
  24. ALL AREAS DISTURBED BY THE CONTRACTOR BEYOND THE NORMAL CONSTRUCTION LIMITS OF THE PROJECT SHALL BE SODDED OR SEEDED AS SPECIFIED OR DIRECTED BY THE ENGINEER.
  25. ALL ROOTS, STUMPS AND OTHER OBJECTIONABLE MATERIALS SHALL BE REMOVED AND THE HOLE BACKFILLED WITH SUITABLE MATERIAL. WHERE GRADE CORRECTION IS REQUIRED, THE SUBGRADE SHALL BE CUT TO CONFORM TO THE CROSS-SECTION AS SHOWN IN THE PLANS.
  26. TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SIGNS AND TRAFFIC CONTROL DEVICES. FLAG PERSONS SHALL BE PROVIDED BY THE CONTRACTOR IF DETERMINED NECESSARY BY THE ENGINEER. ALL SIGNS SHALL CONFORM TO THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AT NO COST TO THE TOWNSHIP. NO WORK SHALL BE DONE UNLESS THE APPROPRIATE TRAFFIC CONTROL DEVICES ARE IN PLACE.
  27. ALL DEMOLISHED MATERIALS AND SOIL SPOILS SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST, AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
  28. AFTER REMOVAL OF TOPSOIL, THE SUBGRADE SHALL BE COMPACTED TO 95% OF ITS UNIT WEIGHT.
  29. ALL GRADING IN THE PLANS SHALL BE DONE AS PART OF THIS CONTRACT. ALL DELETERIOUS MATERIAL SHALL BE REMOVED FROM THE SUBGRADE PRIOR TO COMPACTING.
  30. NO SEEDING SHALL BE DONE AFTER OCTOBER 15 WITHOUT APPROVAL OF THE ENGINEER.
  31. ANY EXISTING APPURTENANCES SUCH AS MANHOLES, GATE VALVES, ETC. SHALL BE ADJUSTED TO THE PROPOSED GRADE AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
  32. SOIL EROSION MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION HAS BEEN RE-ESTABLISHED.
  33. ALL PERMANENT SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF THE MICHIGAN MUTCD MANUAL AND SHALL BE INCIDENTAL TO THE CONTRACT.
  34. ACCESS ROADS TO THE SITE SHALL BE PROVIDED AND MAINTAINED DURING CONSTRUCTION AND SHALL BE CONSTRUCTED TO BE CAPABLE OF SUPPORTING THE IMPOSED LOAD OF FIRE APPARATUS WEIGHING AT LEAST 75,000 POUNDS.



**OVERALL SITE MAP**  
NO SCALE

SHEET INDEX	
SHEET NO.	DESCRIPTION
C1	COVER SHEET
C2	OVERALL DIMENSIONED SITE PLAN
C3	EXISTING CONDITIONS & DEMOLITION PLAN
C4	SITE PLAN
C5	GRADING, DRAINAGE & SOIL EROSION CONTROL PLAN
C6	LIGHTING PLAN
DRAWINGS PREPARED BY ARCHITECT	
A-111	FOUNDATION & FLOOR PLANS, DETAILS & SECTIONS
A-112	ELEVATIONS & FRAMING

## BRIGHTON NAZARENE CHURCH

ARCHITECT:

PMKN DESIGNS  
7504 BINGHAM  
BRIGHTON, MI 48116  
CONTACT: PAUL MCGAHAN  
PHONE: (810) 599-0428  
EMAIL: PMCGAHAN@AMERITECH.NET

PREPARED FOR OWNER:

BRIGHTON NAZARENE CHURCH  
7669 BRIGHTON ROAD  
BRIGHTON, MI 48116  
CONTACT: PASTOR BEN WALLS  
PHONE: (810) 227-6600

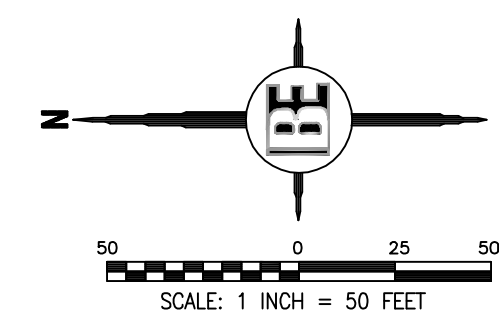
PREPARED BY:



**INDEMNIFICATION STATEMENT**

THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS FOR DAMAGES TO INDIVIDUALS AND PROPERTY, REAL OR OTHERWISE, DUE TO THE OPERATIONS OF THE CONTRACTOR AND/OR THEIR SUBCONTRACTORS.

										C1
1	KS	GENOA TOWNSHIP REVIEW	06/22/16	ISSUE DATE: 06/01/2016						
NO	BY	CK	REVISION	DATE	JOB NO.	16-172				



**LEGEND**

PROPOSED (PR)	EXISTING (EX)	
		GRAVEL
		CONCRETE
		ASPHALT
		PATH

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR VERIFYING THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL GOVERNMENT.

**BEFORE YOU DIG**  
 3 WORKING DAYS  
 1-800-482-7171  
 BE Engineering

**BEBOSS**  
 Engineers Surveyors Planners Landscape Architects

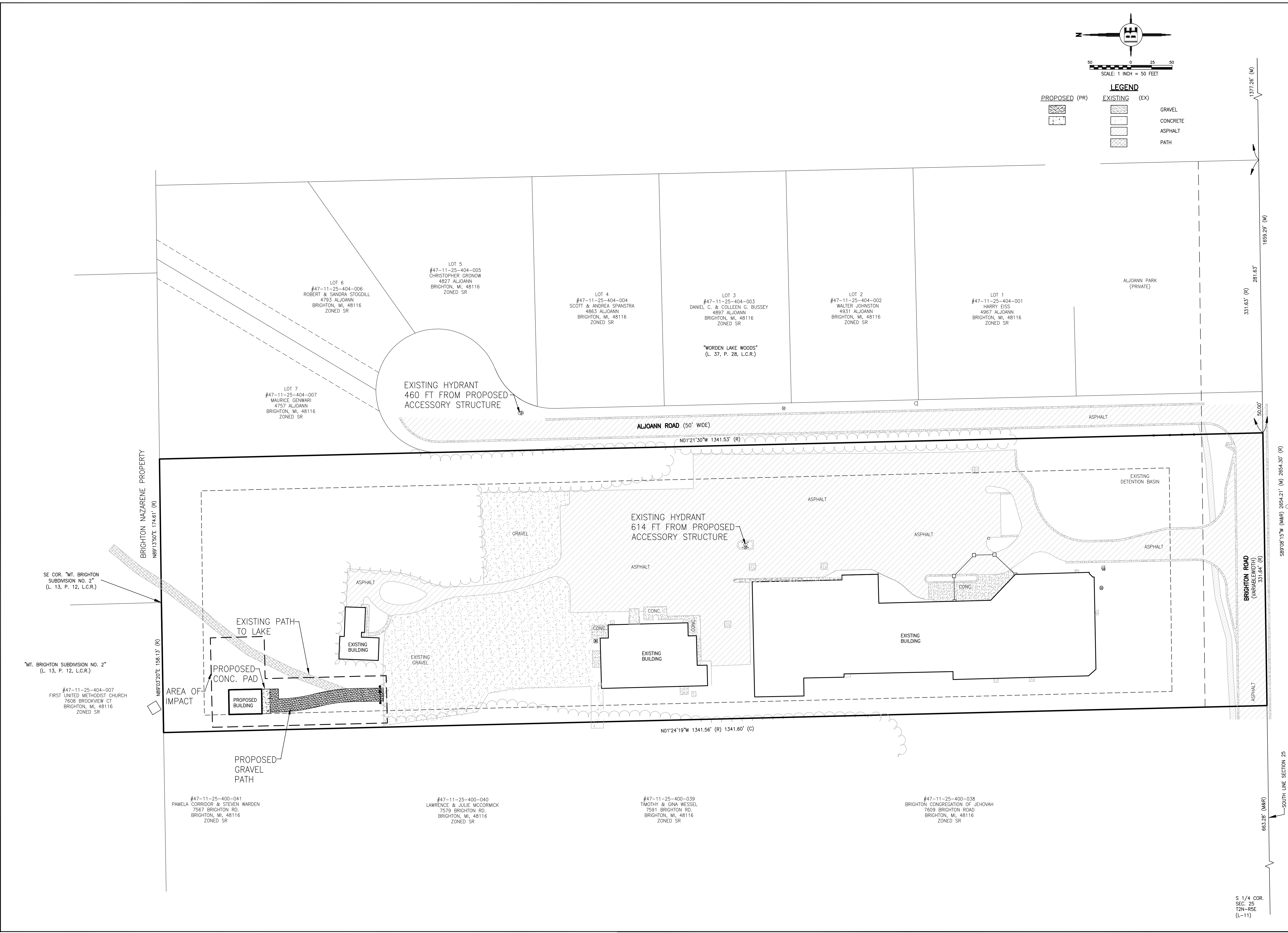
3121 E. GRAND RIVER AVE.  
 HOWELL, MI 48843  
 800.246.6735 FAX 517.548.1670

**BRIGHTON NAZARENE CHURCH**  
 BRIGHTON NAZARENE CHURCH  
 7669 BRIGHTON ROAD  
 BRIGHTON, MI 48116  
 810-227-6660

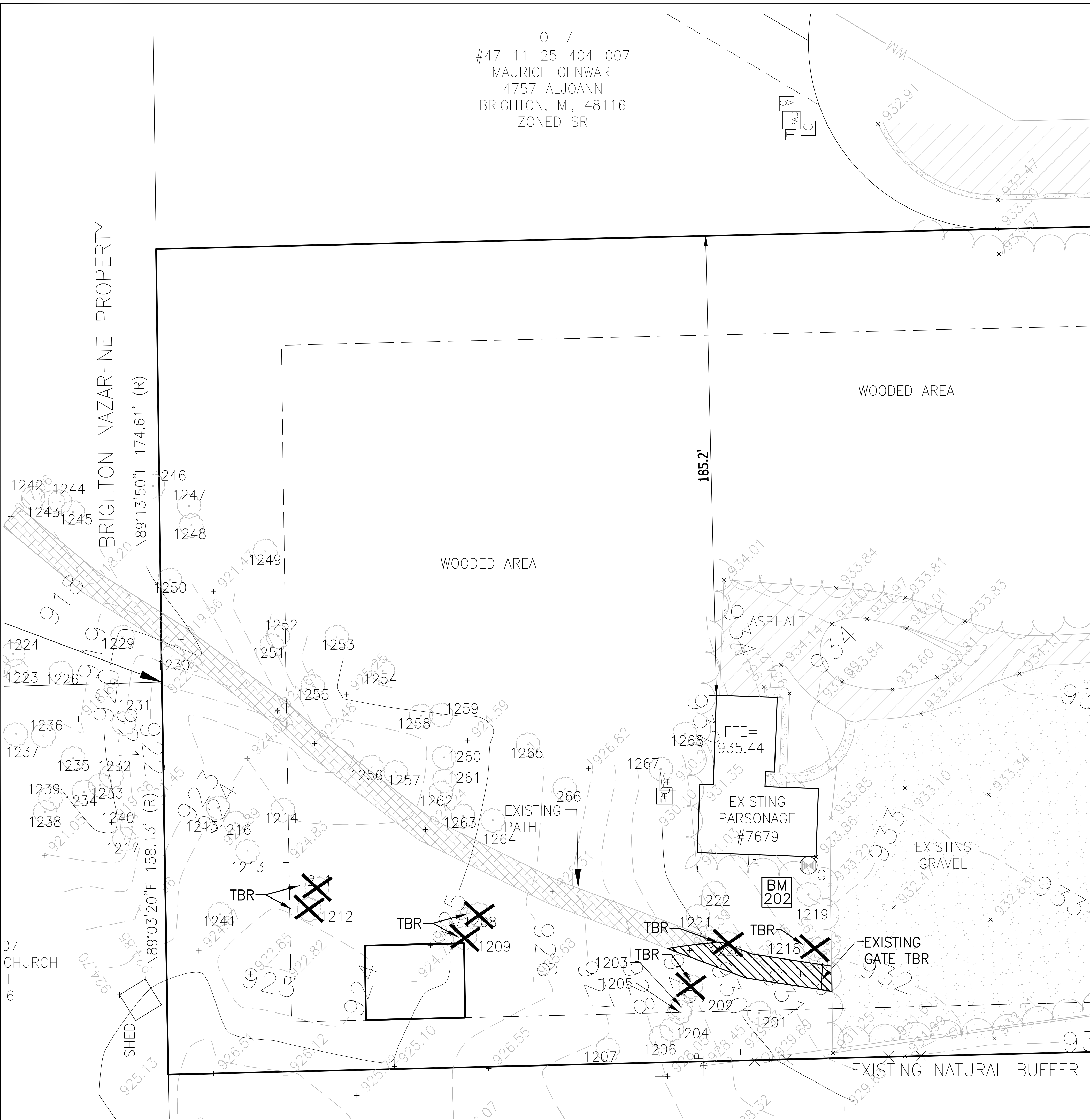
**OVERALL DIMENSIONED SITE PLAN**

NO.	BY	REVISION PER	DATE
1	KS	REVISION PER	05/22/16

DESIGNED BY: KS  
 DRAWN BY: KS  
 CHECKED BY:  
 SCALE: 1" = 50'  
 JOB NO. 16-172  
 DATE 06-01-2016  
 SHEET NO. 25

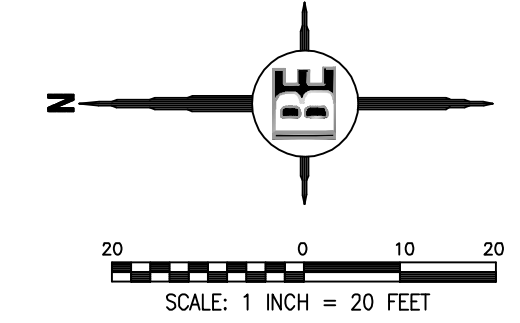


LOT 7  
 #47-11-25-404-007  
 MAURICE GENWARI  
 4757 ALJOANN  
 BRIGHTON, MI, 48116  
 ZONED SR



**TREE LIST**

NO.	Botanical Name	Common Name	SIZE	COND.
1201	Quercus macrocarpa	Bur Oak	16	Good
1202	Quercus macrocarpa	Bur Oak	11	Good
1203	Quercus alba	White Oak	12	Good
1204	Quercus rubra	Northern Red Oak	17	Good
1205	Ulmus americana	American Elm	8	Good
1206	Juglans nigra	Black Walnut	12	Good
1207	Quercus rubra	Northern Red Oak	21	Good
1208	Ulmus americana	American Elm	8	Good
1209	Quercus rubra	Northern Red Oak	23	Good
1211	Prunus serotina	Black Cherry	9	Good
1212	Quercus rubra	Northern Red Oak	17	Good
1213	Carya	Hickory Sp.	10	Good
1214	Prunus serotina	Black Cherry	8	Good
1215	Prunus serotina	Black Cherry	8	Good
1216	Quercus alba	White Oak	15	Good
1217	Quercus rubra	Northern Red Oak	9	Good
1218	Quercus macrocarpa	Bur Oak	22	Good
1219	Quercus macrocarpa	Bur Oak	20	Good
1220	Quercus macrocarpa	Bur Oak	18	Good
1221	Quercus macrocarpa	Bur Oak	19	Good
1222	Quercus macrocarpa	Bur Oak	18	Good
1223	Quercus alba	White Oak	24	Good
1224	Quercus macrocarpa	Bur Oak	8	Good
1228	Robinia pseudoacacia	Black Locust	8	Good
1229	Ulmus americana	American Elm	8	Good
1230	Quercus rubra	Northern Red Oak	19	Good
1231	Quercus rubra	Northern Red Oak	8	Good
1232	Quercus rubra	Northern Red Oak	8	Good
1233	Quercus alba	White Oak	9	Good
1234	Quercus rubra	Northern Red Oak	9	Good
1235	Quercus rubra	Northern Red Oak	14	Good
1236	Quercus rubra	Northern Red Oak	8	Good
1237	Quercus rubra	Northern Red Oak	12	Good
1238	Quercus rubra	Northern Red Oak	12	Good
1239	Quercus rubra	Northern Red Oak	12	Good
1240	Quercus rubra	Northern Red Oak	10	Good
1241	Carya	Hickory Sp.	21	Good
1242	Robinia pseudoacacia	Black Locust	8	Good
1243	Robinia pseudoacacia	Black Locust	8	Good
1244	Robinia pseudoacacia	Black Locust	9	Good
1245	Ulmus americana	American Elm	8	Good
1246	Quercus rubra	Northern Red Oak	12	Good
1247	Quercus rubra	Northern Red Oak	12	Good
1248	Quercus macrocarpa	Bur Oak	13	Good
1249	Quercus rubra	Northern Red Oak	9	Good
1250	Ulmus americana	American Elm	9	Good
1251	Robinia pseudoacacia	Black Locust	8	Good
1252	Robinia pseudoacacia	Black Locust	9	Good
1253	Quercus rubra	Northern Red Oak	9	Good
1254	Quercus macrocarpa	Bur Oak	26	Good
1255	Prunus serotina	Black Cherry	8	Good
1256	Quercus macrocarpa	Bur Oak	20	Good
1257	Quercus macrocarpa	Bur Oak	19	Good
1258	Quercus macrocarpa	Bur Oak	12	Good
1259	Quercus alba	White Oak	21	Good
1260	Quercus macrocarpa	Bur Oak	12	Good
1261	Quercus macrocarpa	Bur Oak	22	Good
1262	Quercus macrocarpa	Bur Oak	24	Good
1263	Quercus alba	White Oak	18	Good
1264	Robinia pseudoacacia	Black Locust	8	Good
1265	Quercus alba	White Oak	15	Good
1266	Quercus macrocarpa	Bur Oak	15	Good
1267	Quercus macrocarpa	Bur Oak	18	Good
1268	Quercus macrocarpa	Bur Oak	17	Good



**LEGEND**

- 900 --- EXISTING CONTOUR
- 922.00 --- EXISTING SPOT ELEVATION
- P--- POWER POLE
- G--- GUY WIRE
- H--- HYDRANT
- V--- GATE VALVE
- M--- MANHOLE
- S--- STORM CATCH BASIN (BEEHIVE)
- S--- STORM CATCH BASIN (SQUARE)
- I--- STORM INVERT
- W--- WELL
- T--- TRANSFORMER PAD
- G--- GAS METER
- M--- MAILBOX
- A--- AIR CONDITIONING UNIT
- L--- LIGHT POLE
- O--- ORNAMENTAL LIGHT
- S--- SIGN
- D--- DECIDUOUS TREE
- C--- CONIFEROUS TREE
- S--- SECTION CORNER
- S--- SANITARY SEWER
- W--- WATER MAIN
- S--- STORM SEWER
- O--- OVERHEAD WIRES
- X--- FENCE
- P--- PUMP CHAMBER
- R--- ELECTRICAL RISER TO BE REMOVED
- C--- CONCRETE
- A--- ASPHALT
- G--- GRAVEL
- P--- PATH

**GENERAL SURVEY NOTES**

- BEARINGS WERE ESTABLISHED FROM THE PLAT OF "MT. BRIGHTON SUBDIVISION NO. 2", AS RECORDED IN LIBER 13 OF PLATS, PAGE 12, LIVINGSTON COUNTY RECORDS.
- SUBSURFACE UTILITIES NOT LOCATED FOR THIS SURVEY MAY EXIST. IT IS THE RESPONSIBILITY OF THE OWNER OF THE RESPECTIVE UTILITY TO ACCURATELY LOCATE SUCH UTILITIES.
- EASEMENTS OR RESTRICTIONS OF RECORD NOT DEPICTED ON THIS DRAWING MAY EXIST.
- ELEVATIONS WERE ESTABLISHED FROM BENCHMARK INFORMATION AS SHOWN ON BOSS ENGINEERING AS-BUILT PLANS FOR WORDEN LAKE WOODS UNDER JOB NO. 98011, AS-BUILT DATE OF 4-6-2000. (NGVD29 DATUM)
- CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
- ALL ELEVATIONS ARE SHOWN TO THE NEAREST 0.01 FOOT; HOWEVER SOFT-SURFACE ELEVATIONS CAN ONLY BE PRESUMED ACCURATE TO THE NEAREST 0.1 FOOT.
- THE LOCATIONS OF STORM SEWER, SANITARY SEWER & WATERMAIN, AS SHOWN ON THIS DRAWING ARE APPROXIMATE. THE LOCATIONS ARE BASED ON PHYSICAL FIELD LOCATIONS OF STRUCTURES ALONG WITH RECORD DRAWINGS. SEPTIC TANKS, PUMP CHAMBER & FIELD AS SHOWN ON THIS SURVEY ARE DEPICTED FROM A PREVIOUS SITE PLAN BY BOSS ENGINEERING, JOB NO. 88603, DATED 10-25-89. LOCATIONS AS SHOWN ARE APPROXIMATE AND WILL NEED FIELD VERIFICATION.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY, THE COUNTY, AND THE STATE OF MICHIGAN.
- ALLOW THREE WORKING DAYS BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.

**DESCRIPTION OF PARCEL #4711-25-400-058:**

A part of the SE 1/4 of Section 25, T2N-R5E, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the South 1/4 corner of said Section 25; thence N 89°08'15" E along the South line of said Section 663.28 feet to the Point of Beginning of the parcel to be described; thence N 01°24'19" W, 1341.55 feet to the South line of "Mt. Brighton Subdivision No. 2", as recorded in Liber 13 of Plats, Pages 12 and 13, Livingston County Records; thence N 89°03'20" E along said South line 158.13 feet to the Southeast corner of said Plat; thence N 89°13'50" E, 174.61 feet; thence S 01°21'30" E, 1341.53 feet to said South line of said Section 25; thence S 89°08'15" W along said South line 331.64 feet to the Point of Beginning, containing 10.23 acres, more or less and subject to the rights of the public over the existing Brighton Road.

**BENCHMARK INFORMATION**

BM 202: BOSS NAIL/TAG SET S/S 20° OAK, 15± WEST OF SW CORNER OF PARSONAGE.  
 ELEVATION = 933.32

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE AS TO THE ACCURACY OF THESE UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY CONFLICTS ARE FOUND. THE ENGINEER OR DEPTH OFFICER SHALL VERIFY THE LOCATION OF UTILITIES PRIOR TO CONSTRUCTION. BEFORE YOU DIG, CALL MISS DIG TOLL FREE 1-800-482-7171.

**BEBOSS**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI, 48843  
 800.246.6735 FAX 517.548.1670

**BRIGHTON NAZARENE CHURCH**  
 PREPARED FOR  
**BRIGHTON NAZARENE CHURCH**  
 7669 BRIGHTON ROAD  
 BRIGHTON, MI 48116  
 810-227-6600

**EXISTING CONDITIONS & DEMOLITION PLAN**

NO.	DATE	REVISION PER	DATE
1	05/22/16	KS	05/22/16
2	06/01/2016	KS	06/01/2016

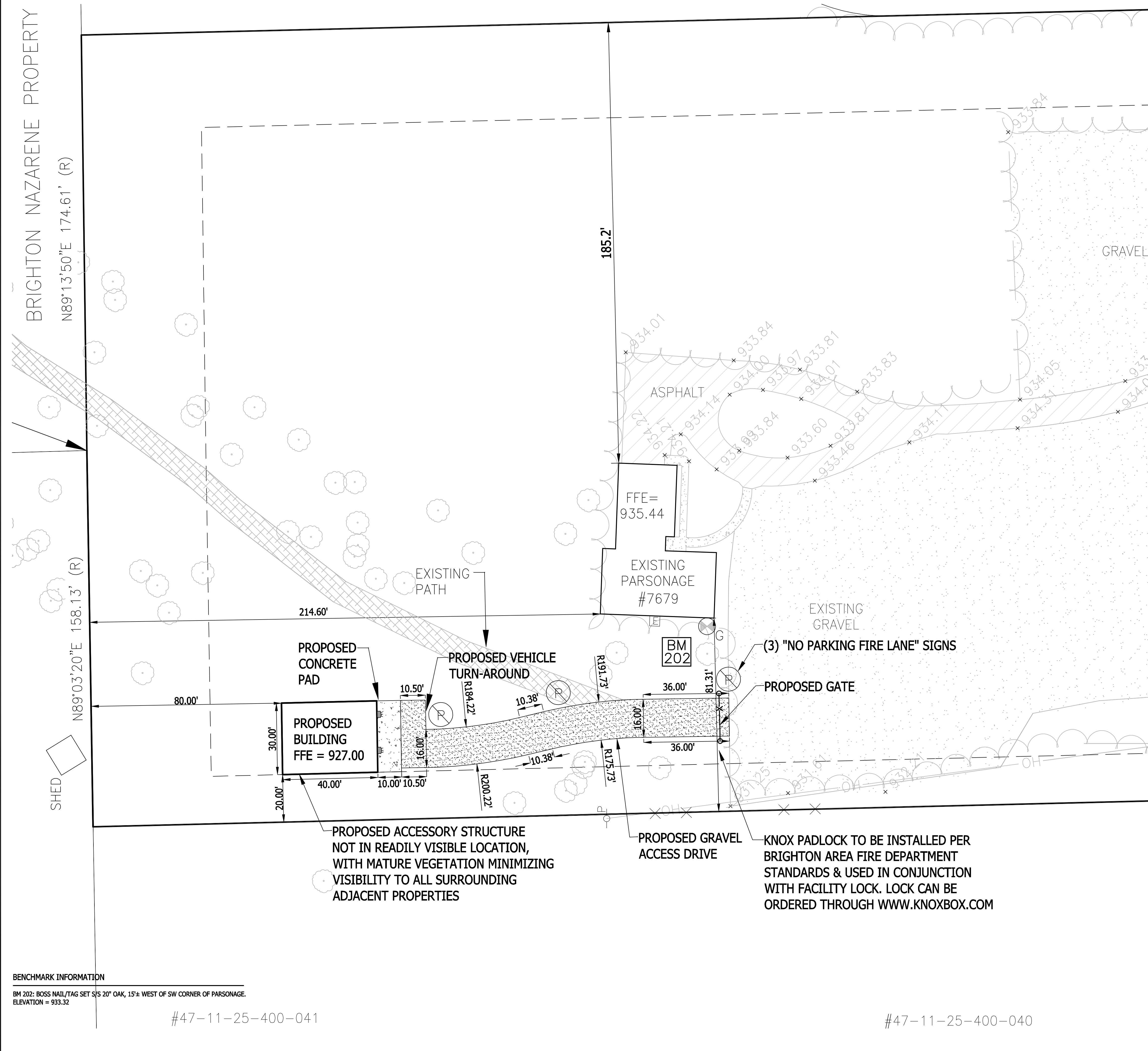
DESIGNED BY: KS  
 DRAWN BY: KS  
 CHECKED BY:  
 SCALE: 1" = 20'  
 JOB NO. 16-172  
 DATE 06/01/2016  
 SHEET NO. C3

BRIGHTON NAZARENE PROPERTY

N89°13'50"E 174.61' (R)

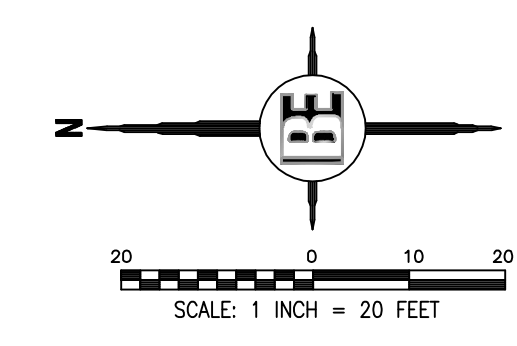
N89°03'20"E 158.13' (R)

SHED



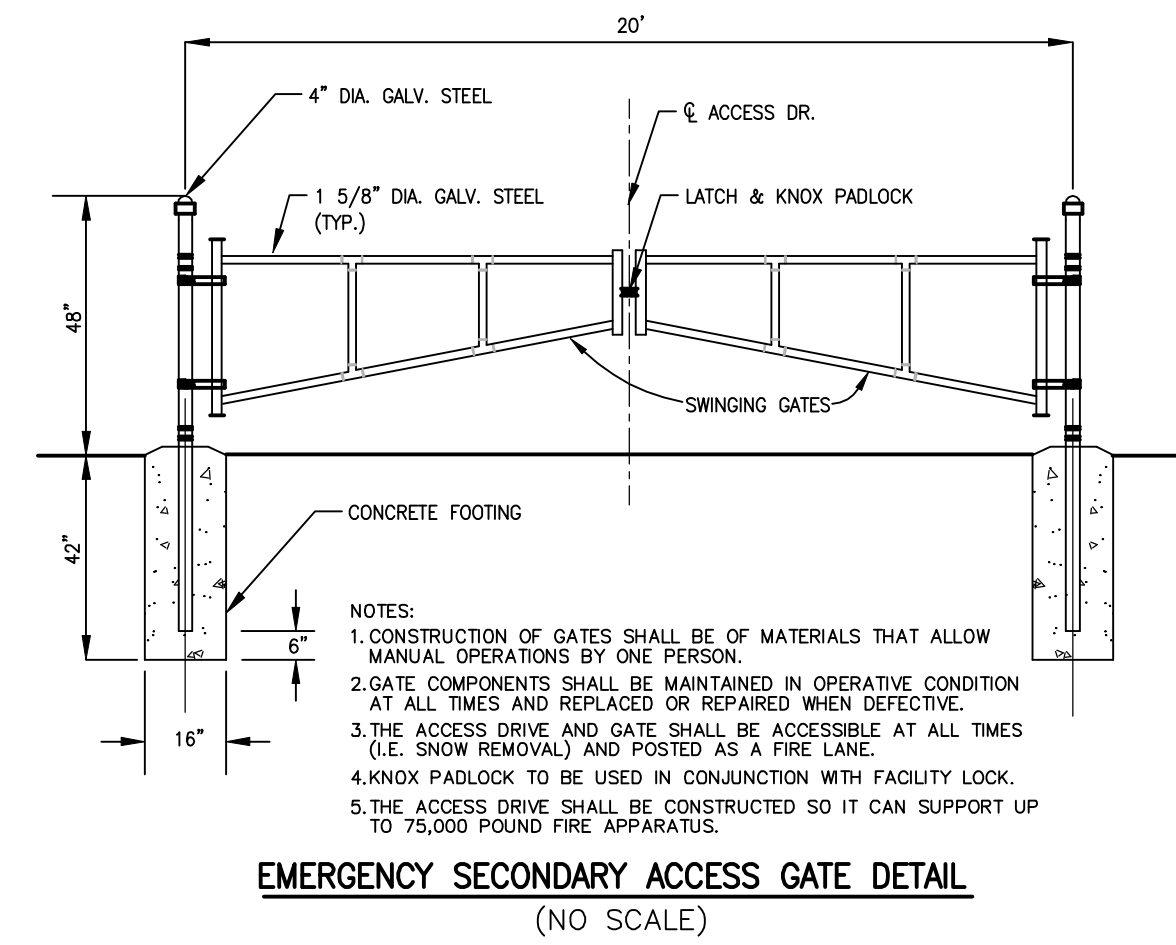
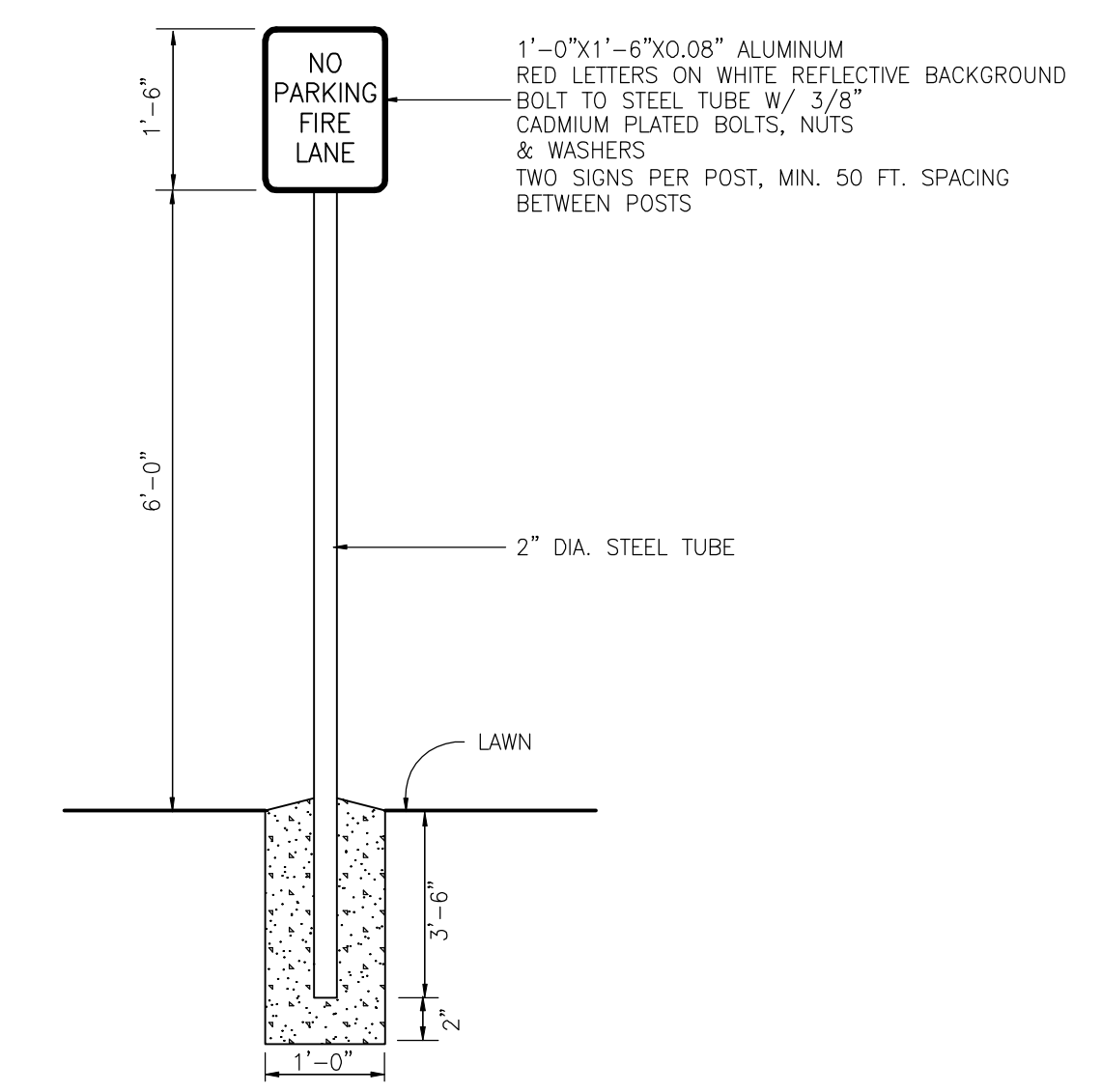
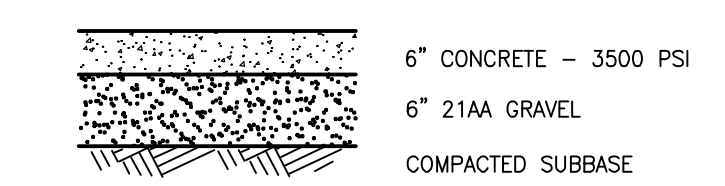
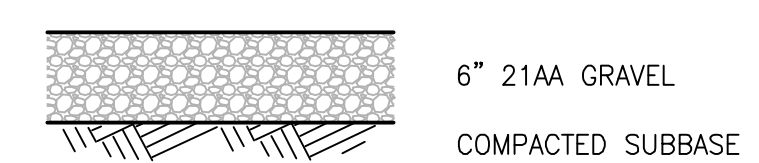
**LEGEND**

PROPOSED (PR)	EXISTING (EX)	
FFE	FFE	FINISHED FLOOR ELEVATION
[Symbol]	[Symbol]	FENCE
[Symbol]	[Symbol]	GRAVEL
[Symbol]	[Symbol]	CONCRETE
[Symbol]	[Symbol]	ASPHALT
[Symbol]	[Symbol]	PATH
[Symbol]	[Symbol]	"NO PARKING FIRE LANE" SIGN



**SITE DATA**

ZONING	SUBURBAN RESIDENTIAL(SR)	
AREA (GROSS)	10.23 ACRES	
AREA (IMPACT)	0.17 ACRES	
USE	1,200 SF ACCESSORY STRUCTURE	
SETBACKS	EXISTING/REQUIRED	PROPOSED
SIDE	20 FT	20 FT
REAR	50 FT	50 FT



**BENCHMARK INFORMATION**  
BM 202: BOSS NAIL/TAG SET S/S 20" OAK, 15'± WEST OF SW CORNER OF PARSONAGE.  
ELEVATION = 933.32

#47-11-25-400-041

#47-11-25-400-040

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BEFORE YOU DIG  
1-800-482-7171  
www.beforeyoudig.com

**BEBOSS**  
Engineering  
Engineers Surveyors Planners Landscape Architects

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HOWELL, MI 48843  
800.246.6735 FAX 517.548.1670

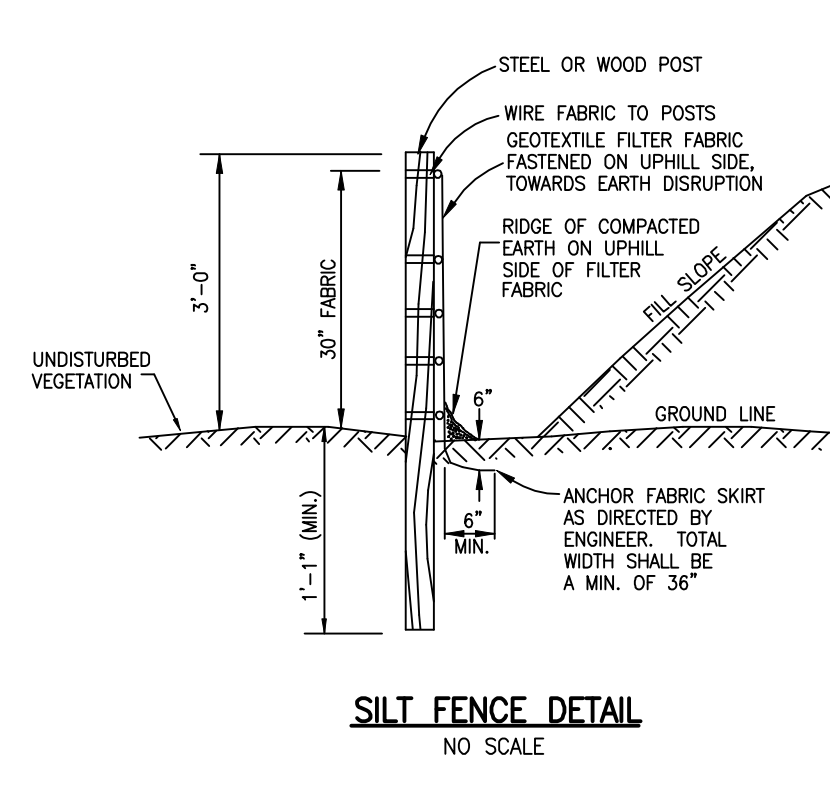
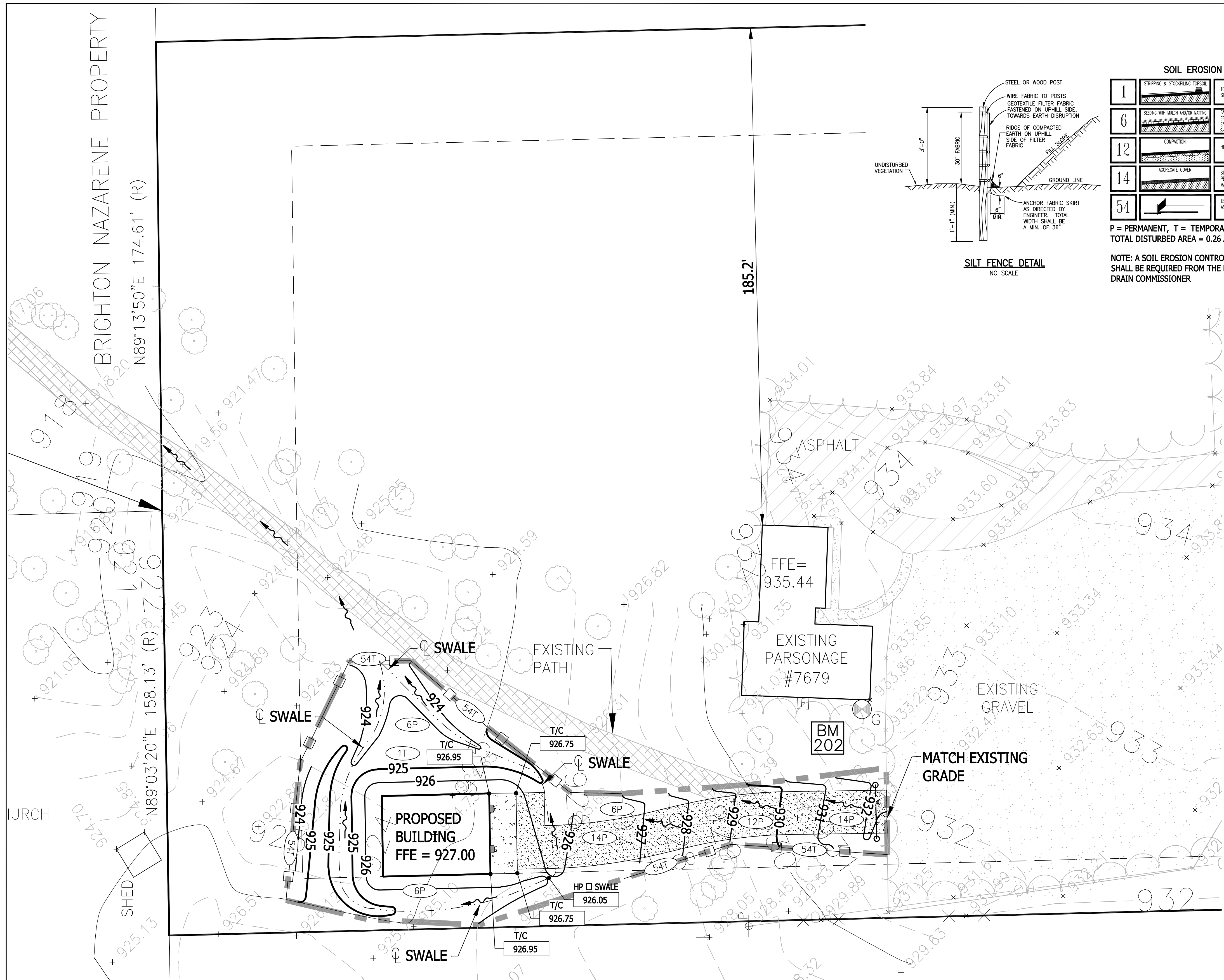
**BRIGHTON NAZARENE CHURCH**  
BRIGHTON NAZARENE CHURCH  
7669 BRIGHTON ROAD  
BRIGHTON, MI 48116  
810-227-6600

**SITE PLAN**

NO.	BY	REVISION PER	DATE
1	KS	REVISION	05/22/16

DESIGNED BY: KS  
DRAWN BY: KS  
CHECKED BY: KS  
SCALE: 1" = 20'  
JOB NO. 16-172  
DATE 06/01/2016  
SHEET NO. C4





**SOIL EROSION CONTROL MEASURES**

1	SHIPPING & STOCKPILING TOPSOIL	TOPSOIL MAY BE STOCKPILED ABOVE BORROW AREAS TO ACT AS A DIVERSION. STOCKPILE SHOULD BE TEMPORARILY SEEDED.
6	SEEDING WITH MULCH AND/OR WIRE FABRIC	REQUIRES ESTABLISHMENT OF VEGETATION COVER. EFFECTIVE FOR DRIVeways WITH LOW VELOCITY. EASY PLACED IN SMALL QUANTITIES BY EXPERIENCED PERSONNEL. SHOULD INCLUDE PROPOSED TOPSOIL LAY.
12	COMPACTION	HELPS HOLD SOIL IN PLACE, MAKING EXPOSED AREAS LESS VULNERABLE TO EROSION.
14	MULCH/COVER	STABILIZES SOIL SURFACE. THIS MEASUREMENT PROMOTES CONSTRUCTION TRAFFIC IN ADVERSE WEATHER. MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS.
54	ANCHOR FABRIC SKIRT	USES GEOTEXTILE FABRIC AND POST OR POLES. EASY TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE DETAIL THIS SHEET)

P = PERMANENT, T = TEMPORARY  
 TOTAL DISTURBED AREA = 0.26 AC (11,166 SF)

NOTE: A SOIL EROSION CONTROL PERMIT WAIVER SHALL BE REQUIRED FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER

**LEGEND**

PROPOSED (PR)      EXISTING (EX)

900      900  
 T/C      T/C  
 FFE      FFE

54T      54T  
 ST      ST

CONTOUR  
 STORM DRAINAGE FLOW  
 SPOT ELEVATION  
 FINISHED FLOOR ELEVATION  
 UTILITY POLE  
 FENCE  
 SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)  
 SILT FENCE  
 LIMITS OF GRADING/CLEARING  
 STORM SEWER  
 DOWNSPOUT  
 CLEANOUT  
 PATH  
 GRAVEL  
 CONCRETE  
 ASPHALT

SCALE: 1 INCH = 20 FEET

**LIVINGSTON COUNTY'S STORM WATER CALCULATIONS**

**PRE DEVELOPMENT CONDITIONS - AREA OF ADDITION ONLY**

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
0.00	0.9	0.00
0.00	0.7	0.00
0.06	0.2	0.01

COMPOUND C: 0.20  
 TOTAL DRAINAGE AREA: 0.06 ACRES

K1 = AxC (Design Constant) 0.012  
 Qa = MAX ALLOW OUTFLOW (0.10 CFS / ACRE) 0.006 CFS

DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF xAxC	OUTFLOW DURATION x Qa	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2750	33	2	31
10	600	7.86	4714	57	4	53
15	900	6.88	6188	74	5	69
20	1200	6.11	7333	88	7	81
30	1800	5.00	9000	108	11	97
60	3600	3.24	11647	140	22	118
90	5400	2.39	12913	155	32	123
120	7200	1.90	13655	164	43	121
180	10800	1.34	14488	174	65	109

REQUIRED 100 YEAR STORAGE VOLUME = 123 CF

**POST DEVELOPMENT CONDITIONS - AREA OF ADDITION ONLY**

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
0.03	0.9	0.03
0.03	0.7	0.02
0.00	0.2	0.00

COMPOUND C: 0.80  
 TOTAL DRAINAGE AREA: 0.06 ACRES

K1 = AxC (Design Constant) 0.048  
 Qa = MAX ALLOW OUTFLOW (0.10 CFS / ACRE) 0.006 CFS

DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF xAxC	OUTFLOW DURATION x Qa	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2750	132	2	130
10	600	7.86	4714	226	4	223
15	900	6.88	6188	297	5	292
20	1200	6.11	7333	352	7	345
30	1800	5.00	9000	432	11	421
60	3600	3.24	11647	559	22	537
90	5400	2.39	12913	620	32	587
120	7200	1.90	13655	655	43	612
180	10800	1.34	14488	695	65	631

REQUIRED 100 YEAR STORAGE VOLUME = 631 CF

100 YEAR VOLUME DIFFERENCE = 508 CF

INCREASED RUNOFF VOLUME IS NEGLIGIBLE AND WILL FOLLOW NATURAL DRAINAGE PATTERNS OF OVERLAND FLOW TO WORDEN LAKE.

- LIVINGSTON COUNTY SOIL EROSION PERMIT TEMPLATE**  
**TEMPORARY CONTROLS AND SEQUENCE**
- NOTIFY LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE 24 HOURS PRIOR TO START OF GRADE WORK.
  - IN ACCORDANCE WITH PUBLIC ACT NO. 53, OF 1974 THE PERMIT HOLDER SHALL CALL MISS DIG FOR STAKING AND LOCATING OF UTILITIES, AT LEAST 72 HOURS IN ADVANCE OF THE START OF ANY WORK.
- PERMITTING STANDARDS**
- 36" M.D.O.T SPECIFICATION TYPE SILT FABRIC FENCE AS SHOWN ON PLANS SHALL BE PLACED AND MAINTAINED ALONG PERIMETER ON ALL LOW LYING AREAS OF THE CONSTRUCTION SITE TO FILTER RUNOFF BEFORE LEAVING PROJECT SITE.
  - ALL TEMPORARY EROSION CONTROL DEVICES AS NOTED ON PLANS SHALL BE INSTALLED PRIOR TO THE START OF MASSIVE EARTH DISTRIBUTION.
- SLOPES AND DITCHES**
- SLOPES IN EXCESS OF 3 HORIZONTAL TO 1 VERTICAL SHALL NOT BE USED EXCEPT WITH A MECHANICAL DEVICE SUCH AS A RETAINING WALL, TERRACING, OR OTHER PRIOR APPROVED DEVICE.

- STABILIZATION**
- ALL UNIMPROVED DISTURBED AREAS SHALL BE RE-TOP SOILED, WITH A MINIMUM OF 3" OF MATERIAL, SEEDED, MULCHED AND TACKED WITHIN 15 DAYS OF THE COMPLETION OF THE MASSIVE EARTH DISRUPTION. IN THE NON-GROWING SEASON STRAW MATTING WILL SUFFICE. HYDROSEEDING WILL BE AN ACCEPTABLE ALTERNATE FOR MULCHING. EXTREME CARE SHOULD BE EXERCISED IN SPRING AND FALL PERIODS AS A FROST WILL BREAK THE BIND OF THE HYDROSEEDING, WHICH WILL AFFECT THE EFFECTIVENESS OF THIS PROCEDURE.
  - IN THE NON-GROWING SEASON, TEMPORARY STABILIZATION OF MASSIVELY EXPOSED AREAS FOR WINTER STABILIZATION SHALL BE DONE WITH STRAW MATTING.
  - PERMIT FEES DURING THE WINTER PERIOD OF NON-CONSTRUCTION, (DECEMBER 1 THROUGH MARCH 31), SHALL NOT BE IMPOSED IF THE PERMIT HOLDER TEMPORARILY STABILIZES THE EXPOSED AREAS WITH STRAW MATTING, AND OTHER APPROVED CONTROLS, AND OBTAINS A WINTER STABILIZATION CERTIFICATE FROM THIS OFFICE.
  - PERIODIC INSPECTIONS WILL BE MADE THROUGHOUT THE COURSE OF THE PROJECT. IT WILL BE THE RESPONSIBILITY OF THE MANAGERS OF THE PROJECT TO CONTACT THIS OFFICE FOR THE FINAL INSPECTION AT THE END OF THE PROJECT.
- HYDRO-SEEDING**
- THIS COMMERCIAL PERMIT IS VALID FOR THE MASS EARTH MOVEMENT, THE INSTALLATION OF ROADS, DRAINS, AND UTILITIES AND IS NOT FOR ANY SINGLE FAMILY RESIDENCE. ALL RESIDENTIAL BUILDERS WILL NEED TO SECURE WAIVERS AND/OR PERMITS AS NECESSARY FOR EACH LOT IN THIS DEVELOPMENT AT THE TIME APPLICATION FOR SINGLE FAMILY RESIDENCE IS MADE.
  - THE ISSUING BUILDING DEPARTMENT SHALL NOT ISSUE THE CERTIFICATE OF OCCUPANCY UNTIL THE FINAL INSPECTION LETTER FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONER'S OFFICE HAS BEEN OBTAINED.
  - PER THE LIVINGSTON COUNTY DRAIN COMMISSIONER THE SEEDING, FERTILIZER AND MULCH MINIMUM QUANTITIES SHALL BE AS FOLLOWS:  
 TOP-SOIL 3" 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 MULCHING MUST HAVE A TIE DOWN, SUCH AS TACKIFIER, NET BINDING, ETC.)

- MAINTENANCE SCHEDULE FOR SOIL EROSION CONTROLS**
- SILT FENCE SHALL BE INSPECTED WEEKLY AND AFTER EACH MAJOR STORM EVENT. MAINTENANCE SHALL INCLUDE REMOVAL OF ACCUMULATED SILT AND REPLACEMENT OF TORN SECTIONS. SILT FENCE SHALL BE REMOVED WHEN ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED.
  - COMMON AREAS SHALL BE STABILIZED NO LATER THAN 15 DAYS AFTER GRADE WORK, PURSUANT TO RULE 1709 (5).
- BENCHMARK INFORMATION**
- BM 202: BOSS NAIL/TAG SET S/S 20" OAK, 15'± WEST OF SW CORNER OF PARSONAGE. ELEVATION = 933.32

**CONTROLS & MEASURES NARRATIVE**

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

**CONTROLS & MEASURES POST CONSTRUCTION SEQUENCE**

ACTIVITY	DAILY	WEEKLY	MONTHLY	AS REQUIRED
MAINTAIN LANDSCAPING, REPLACE MULCH		X	X	X
CLEAN INLETS		X	X	X
COLLECT LITTER		X	X	X
SWEEP PAVED AREAS		X	X	X
SCRAPE PAVED AREAS	X			X

**BEFORE YOU DIG**  
 MISS DIG  
 1-800-482-7171

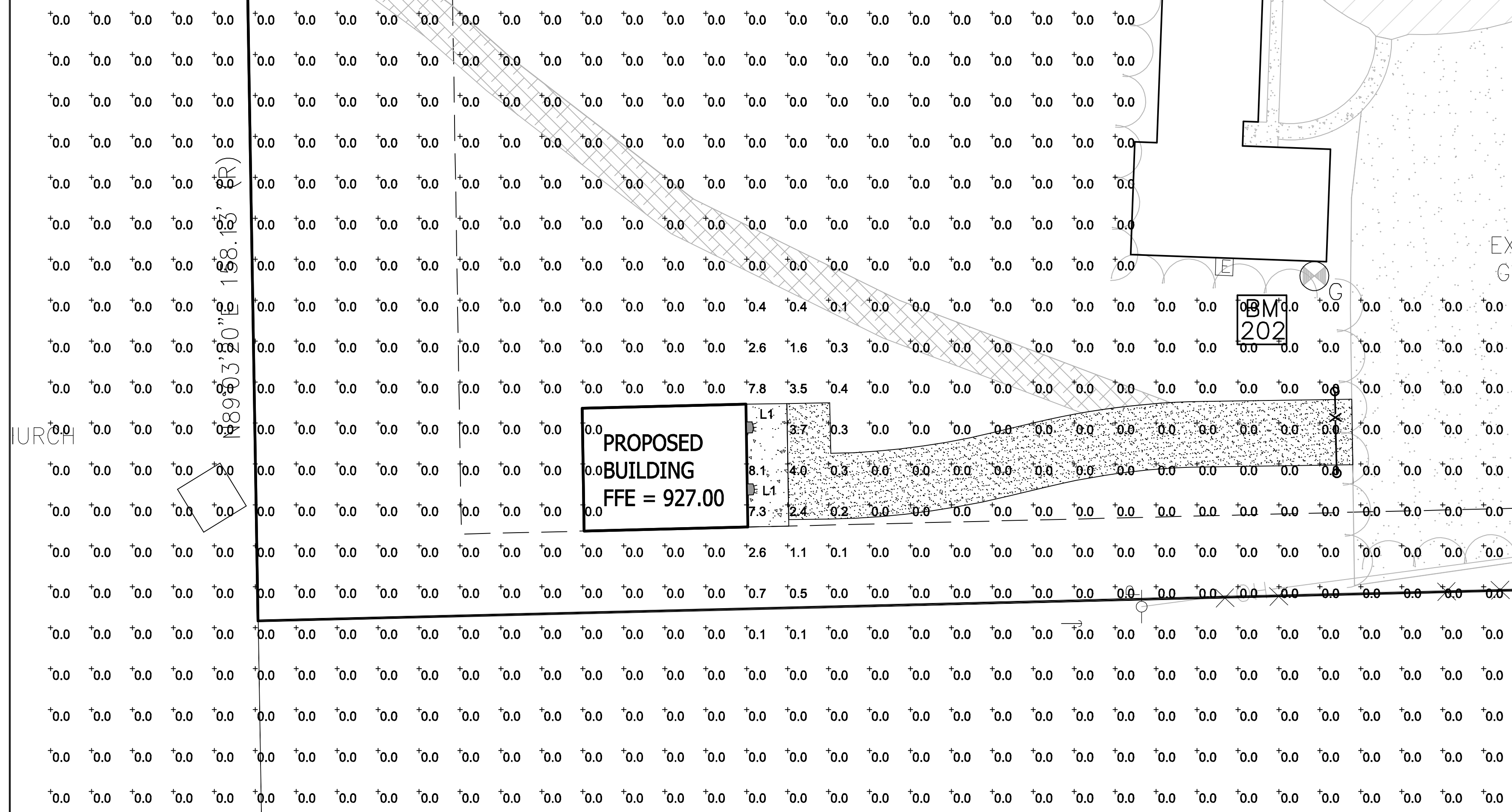
**BEBOSS**  
 Engineers Surveyors Planners Landscape Architects  
 3121 E. GRAND RIVER AVE.  
 HOWELL, MI. 48843  
 800.246.6735 FAX 517.548.1670

**BRIGHTON NAZARENE CHURCH**  
 BRIGHTON NAZARENE CHURCH  
 7669 BRIGHTON ROAD  
 BRIGHTON, MI 48116  
 810-227-6600

**GRADING, DRAINAGE, & S.E.C. PLAN**

DESIGNED BY: KS  
 CHECKED BY:  
 SCALE: 1" = 20'  
 JOB NO. 16-172  
 DATE 06/01/2016  
 SHEET NO. C5

BRIGHTON NAZARENE PROPERTY  
N89°13'50"E 174.61' (R)



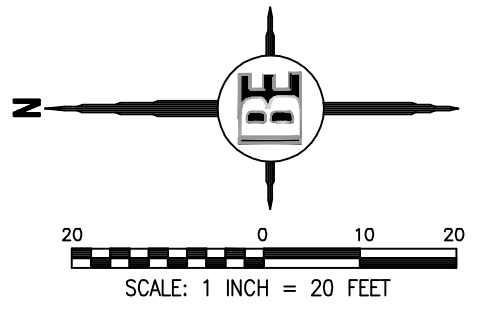
PROPOSED BUILDING  
FFE = 927.00

ASPHALT

EXISTING GRAVEL

BM 202

PROPOSED (PR)	EXISTING (EX)	LEGEND
FFE	FFE	FINISHED FLOOR ELEVATION
○	○	UTILITY POLE
—	—	FENCE
▨	▨	GRAVEL
▩	▩	CONCRETE
▧	▧	ASPHALT
⊙	⊙	DOUBLE FIXTURE LIGHT POLE
⊙	⊙	SINGLE FIXTURE LIGHT FIXTURE
⊙	⊙	WALL MOUNTED LIGHT FIXTURE
⊙	⊙	GROUND LIGHT FIXTURE
⊙	⊙	FOOT CANDLES ON SITE



BEFORE YOU DIG  
3 WORKING DAYS  
1-800-482-7171  
BE ENGINEERS

**BEBOSS**  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI 48843  
800.246.6735 FAX 517.548.1670

PROJECT: BRIGHTON NAZARENE CHURCH  
PREPARED FOR: BRIGHTON NAZARENE CHURCH  
7669 BRIGHTON ROAD  
BRIGHTON, MI 48116  
810-227-6600  
TITLE: LIGHTING PLAN

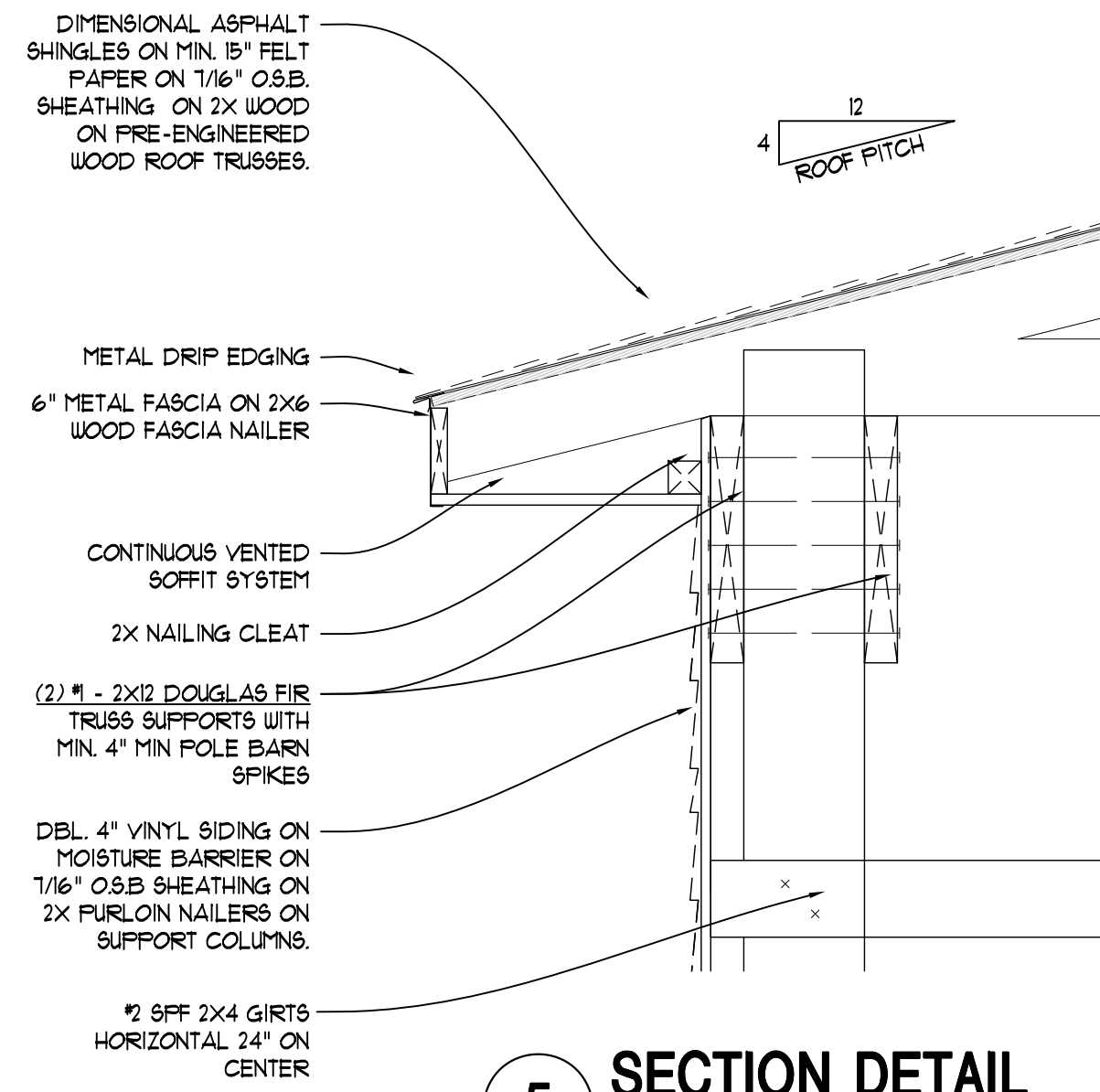
SYMBOL	LABEL	QTY.	DESCRIPTION	CATALOG NUMBER	LAMP	LUMENS	LLF	POLE HEIGHT	TOTAL HEIGHT
⊙	L1	2	LITHONIA — ARCHITECTURAL SCENCE WITH WIDE THROW DISTRIBUTION WITH CLEAR, FLAT GLASS LENS	WST 150M WT (PROBE)	ONE 150-WATT CLEAR ED-17 METAL HALIDE, HORIZONTAL POSITION	12,900	.72	10'	10'

ALL IES FILES PROVIDED BY MANUFACTURER FOR CALCULATION OF LIGHTING LEVEL.

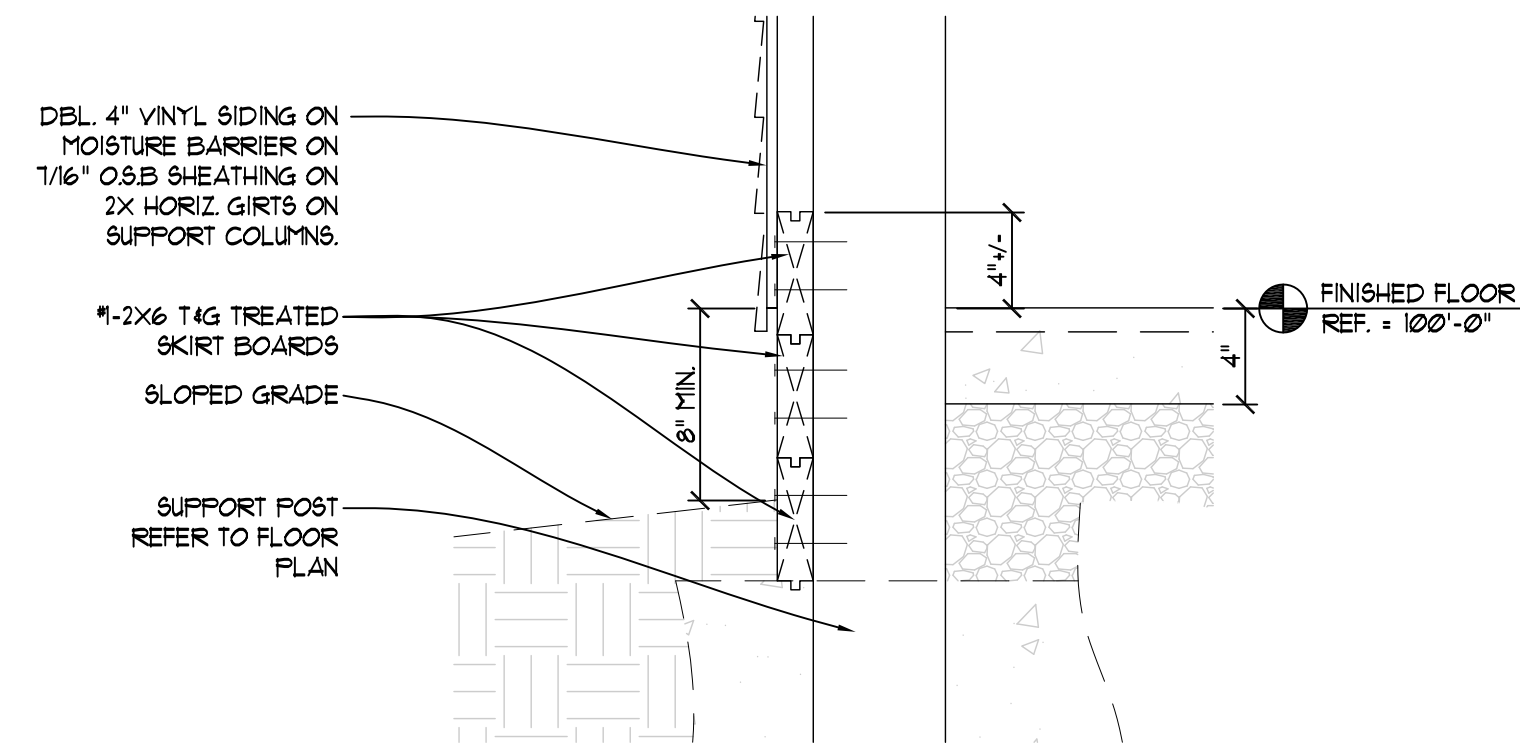
BENCHMARK INFORMATION  
BOSS NAIL/TAG SET S/S 20" OAK, 15"± WEST OF SW CORNER OF PARSONAGE.  
ELEVATION = 933.32

NO.	BY	REVISION PER	DATE
1	KS	DESIGN REVIEW	05/22/16

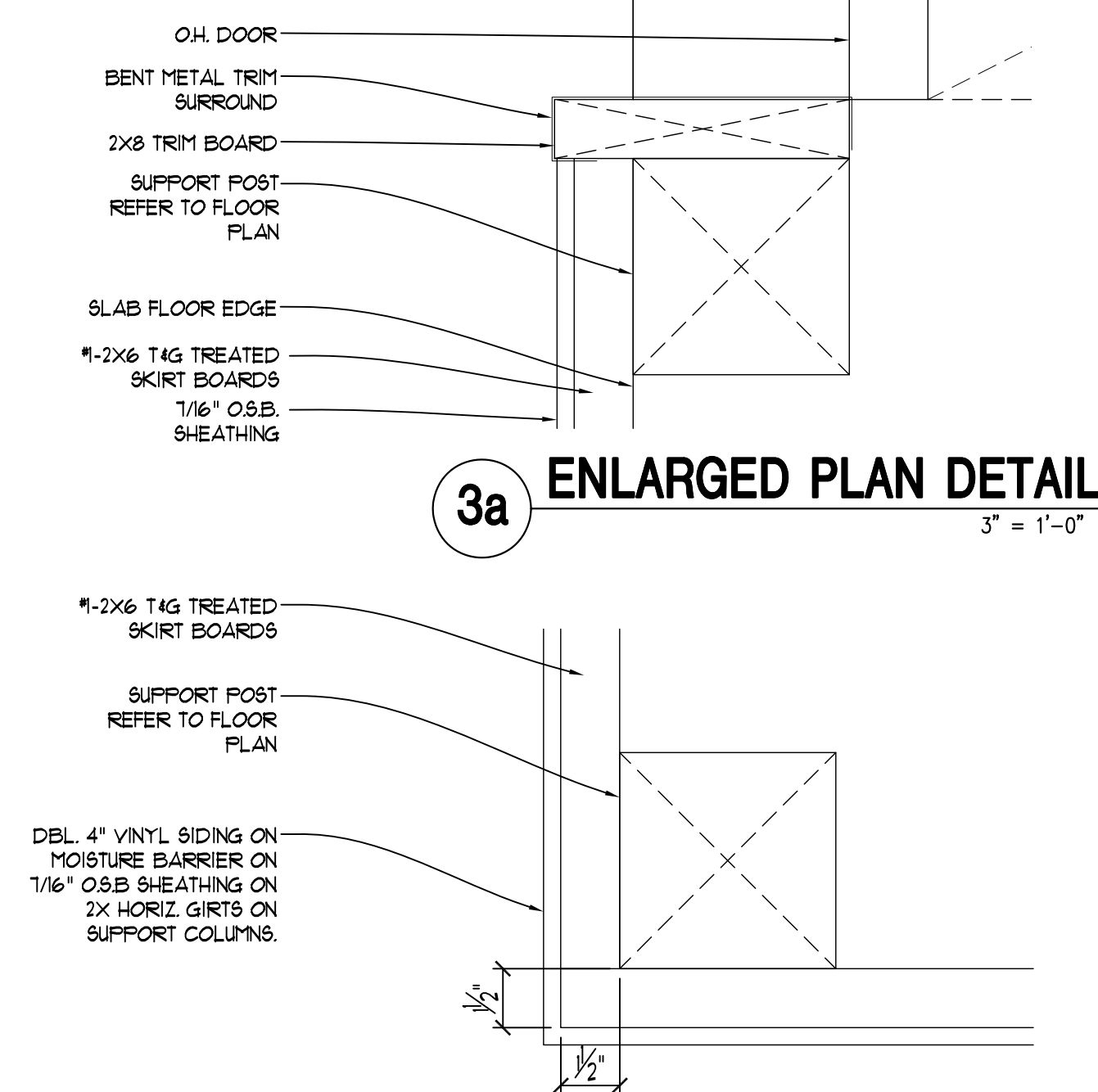
DESIGNED BY: KS  
DRAWN BY: KS  
CHECKED BY:  
SCALE: 1" = 20'  
JOB NO. 16-172  
DATE 06/01/2016  
SHEET NO. C6



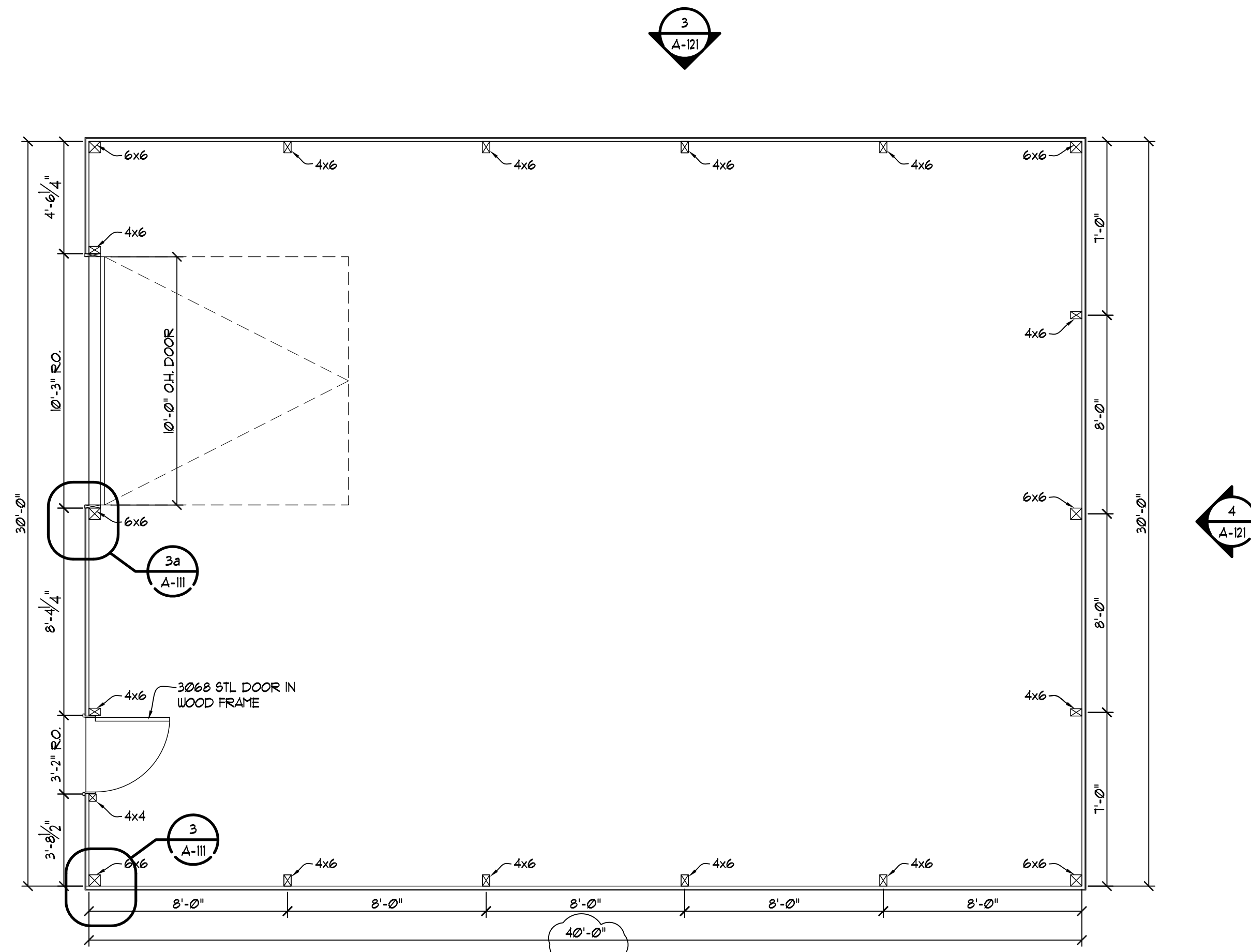
5 SECTION DETAIL 3/4" = 1'-0"



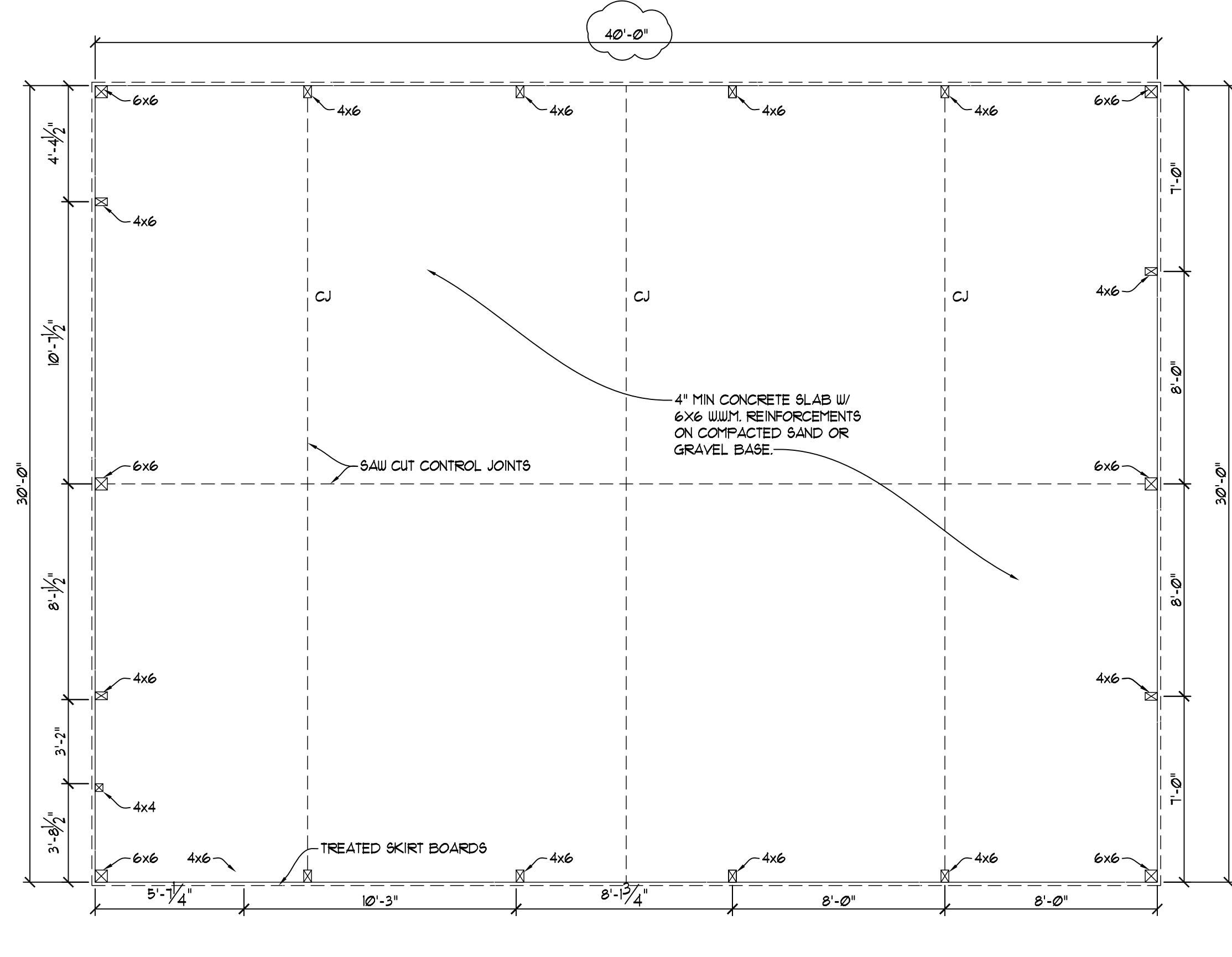
4 SECTION DETAIL 3/4" = 1'-0"



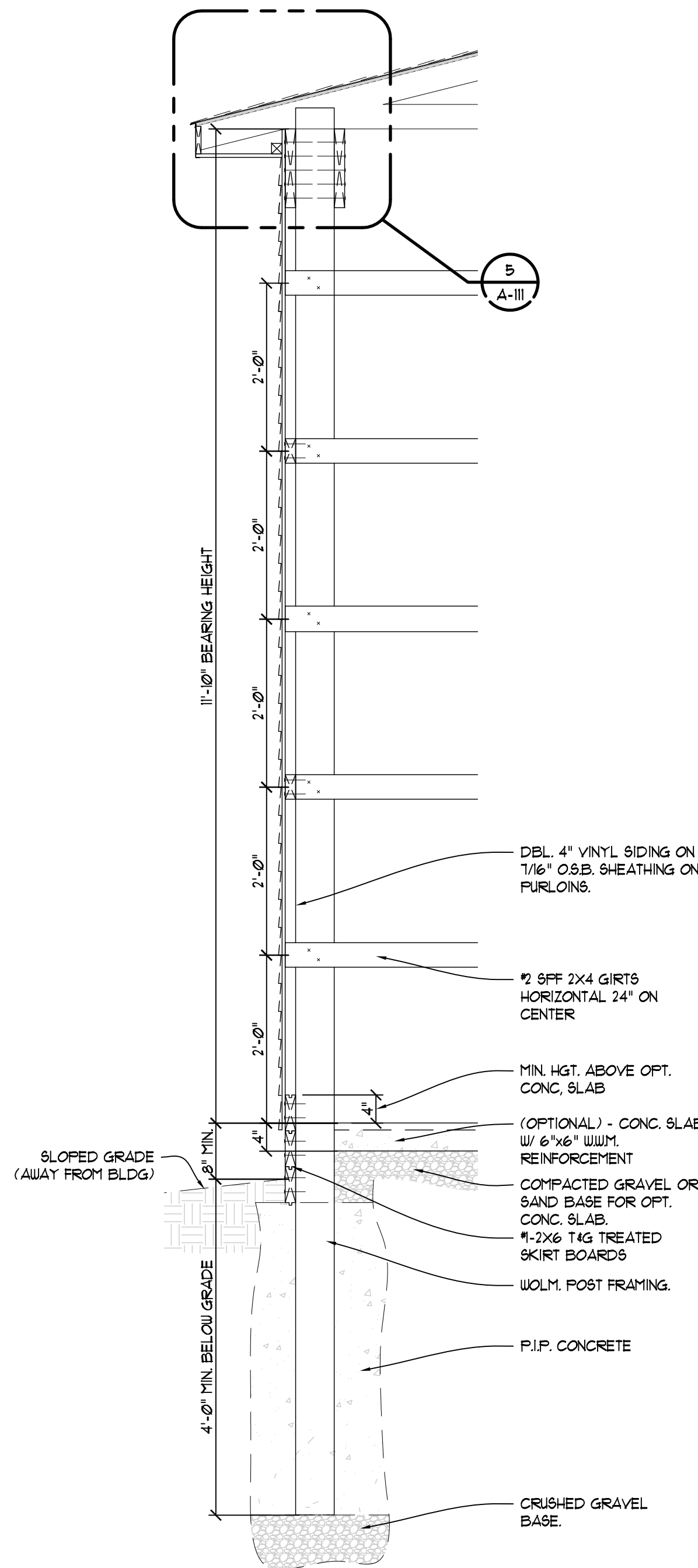
3a ENLARGED PLAN DETAIL 3" = 1'-0"



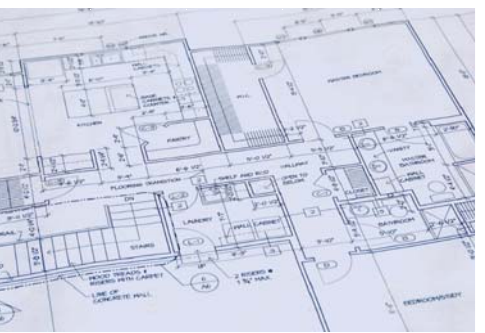
2 FLOOR PLAN 1/2" = 1'-0"



1 FOUNDATION PLAN 1/2" = 1'-0"



6 SECTION DETAIL 3/4" = 1'-0"



PMKN DESIGNS

7504 Bingham, Brighton, MI. 48116  
810-599-0428 ph

client  
**BRIGHTON NAZARENE CHURCH**

notice  
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project title

**VEHICLE GARAGE**

7669 Brighton Lake Road  
Brighton, MI

sheet title  
**FOUNDATION & FLOOR PLANS, DETAILS & SECTIONS**  
DO NOT SCALE DRAWINGS  
USE FIGURED DIMENSIONS ONLY

project number

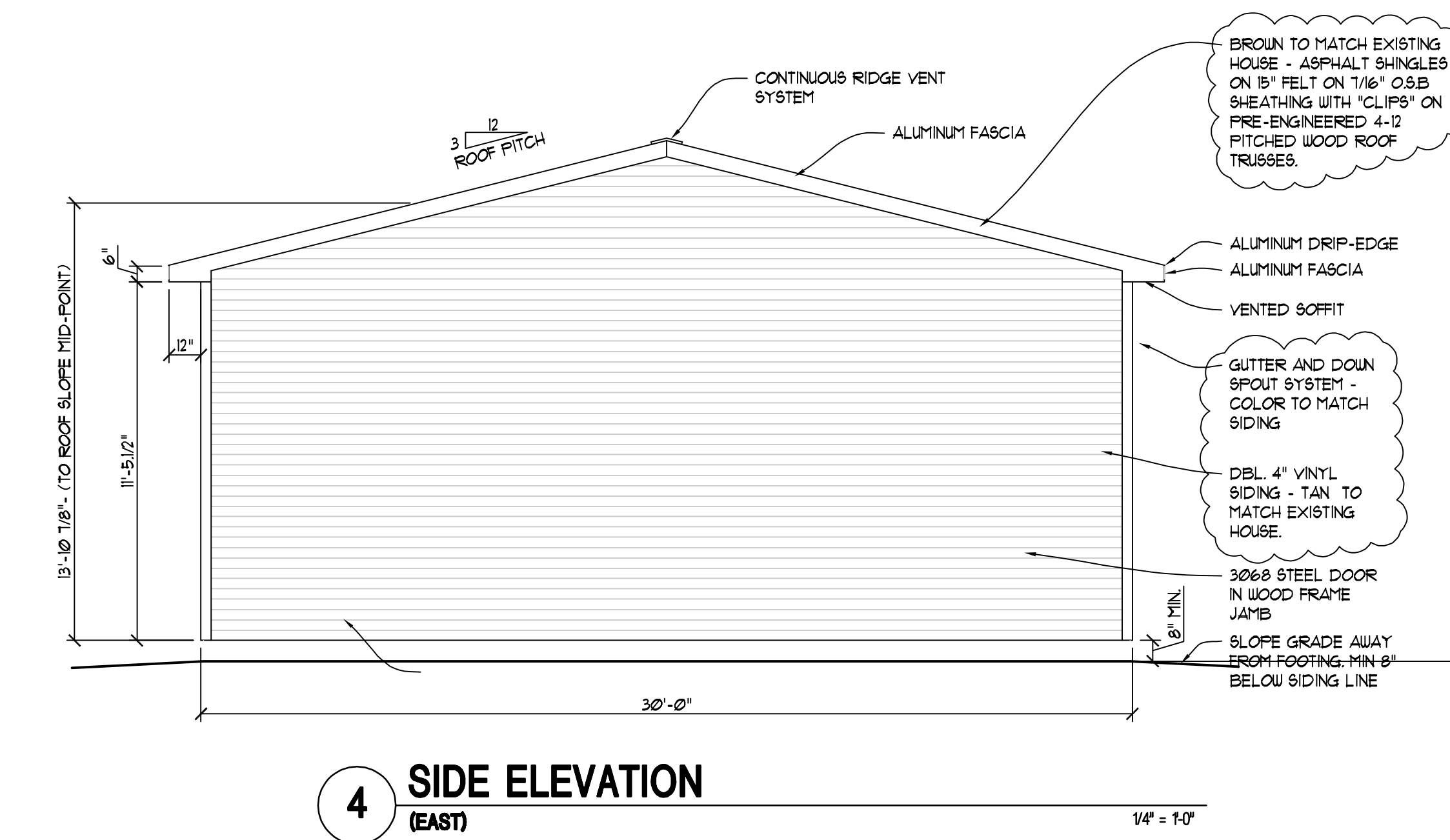
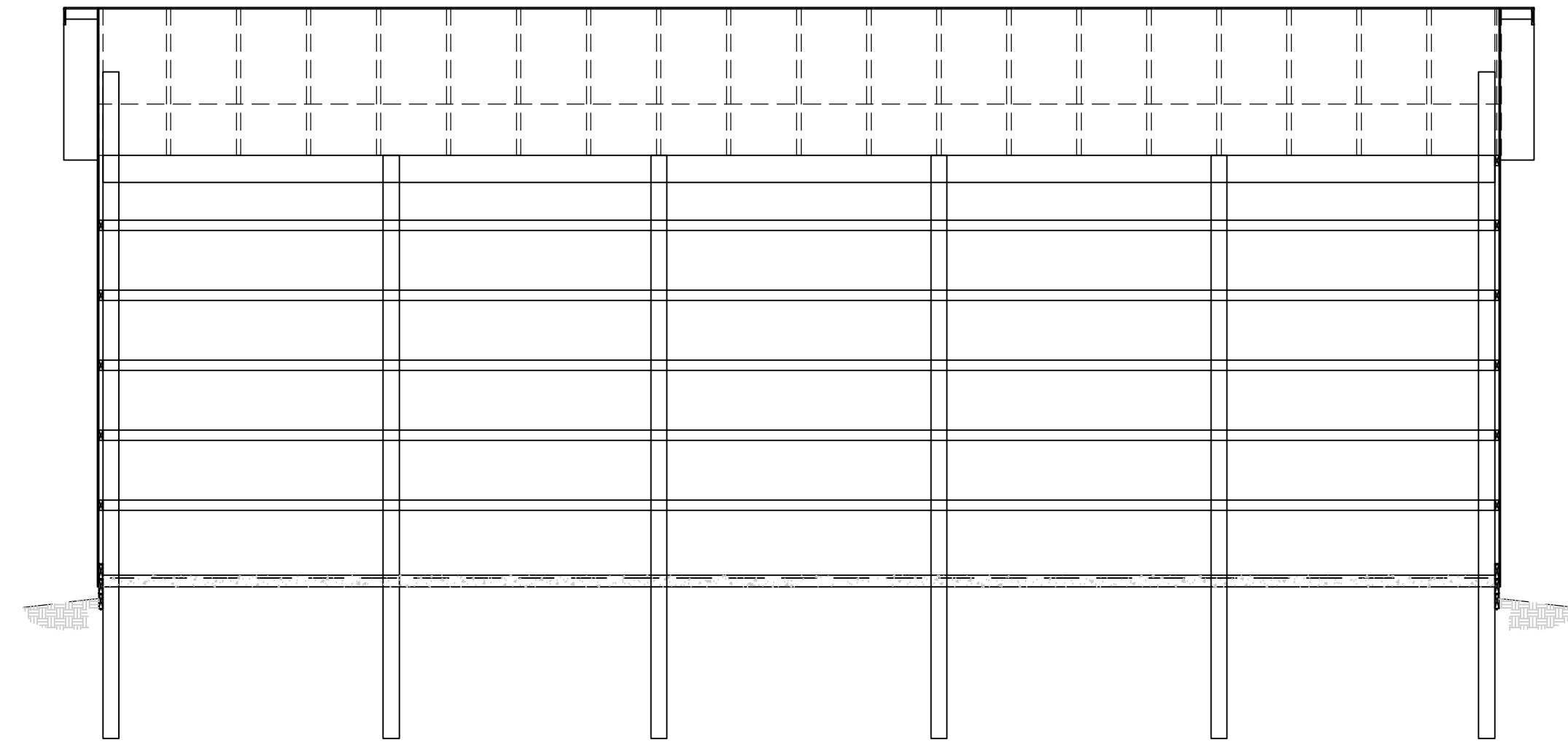
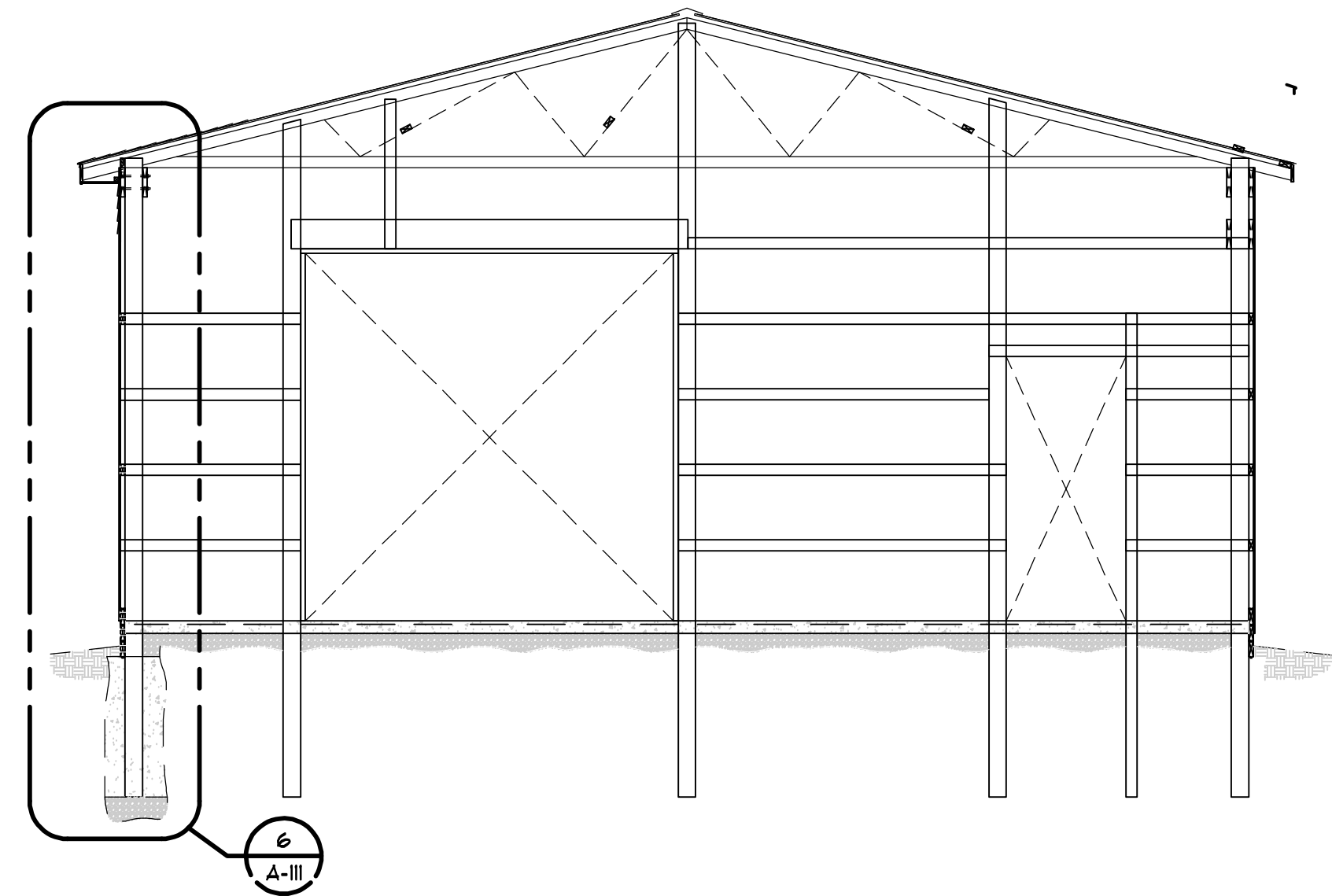
**16004**

drawn PMC  
approved PMC

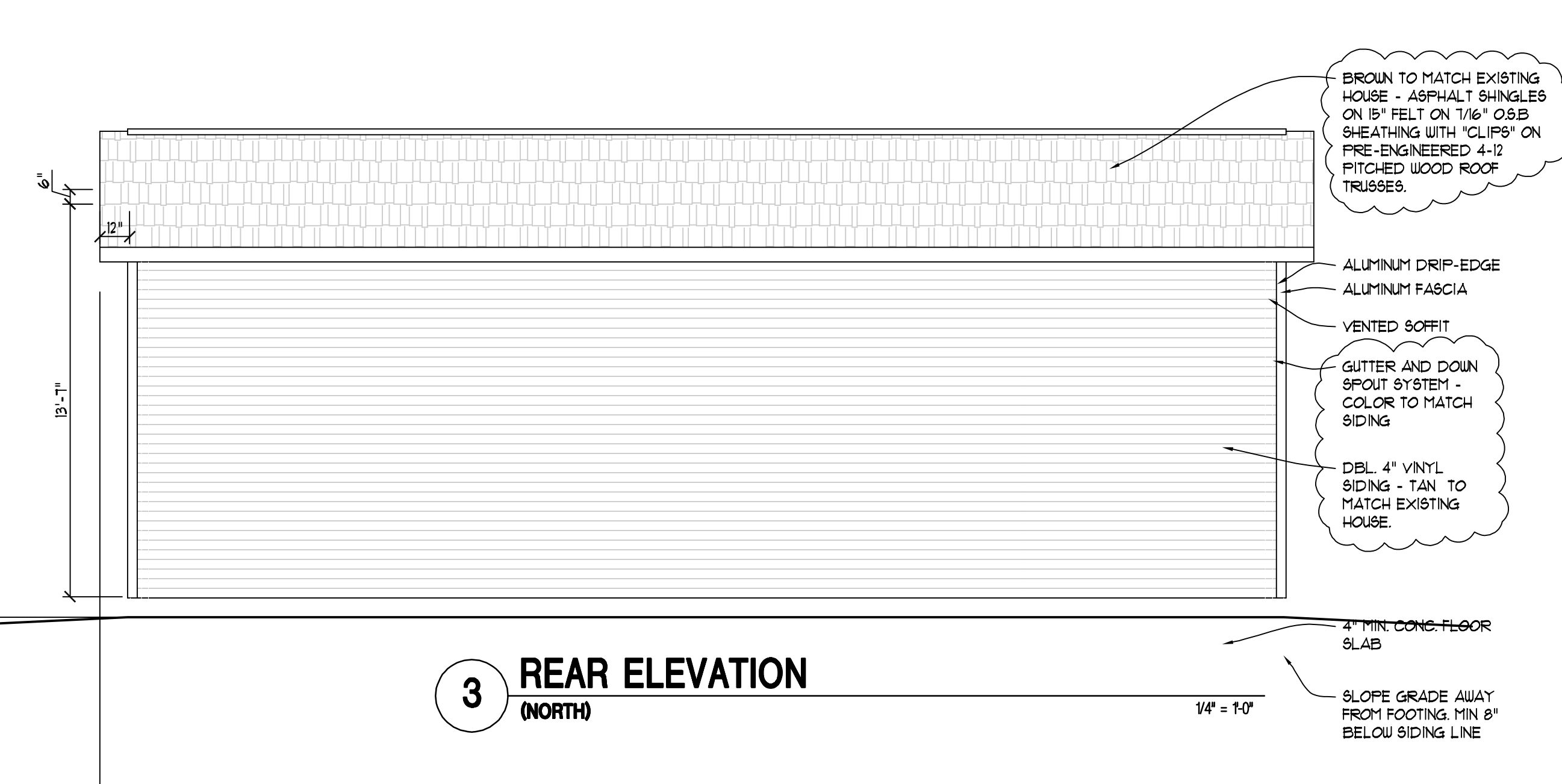
issued	date
OWNER REVIEW	04-13-16
PERMITTING	04-20-16
TWP. REV. COMMENTS	05-18-16

sheet number

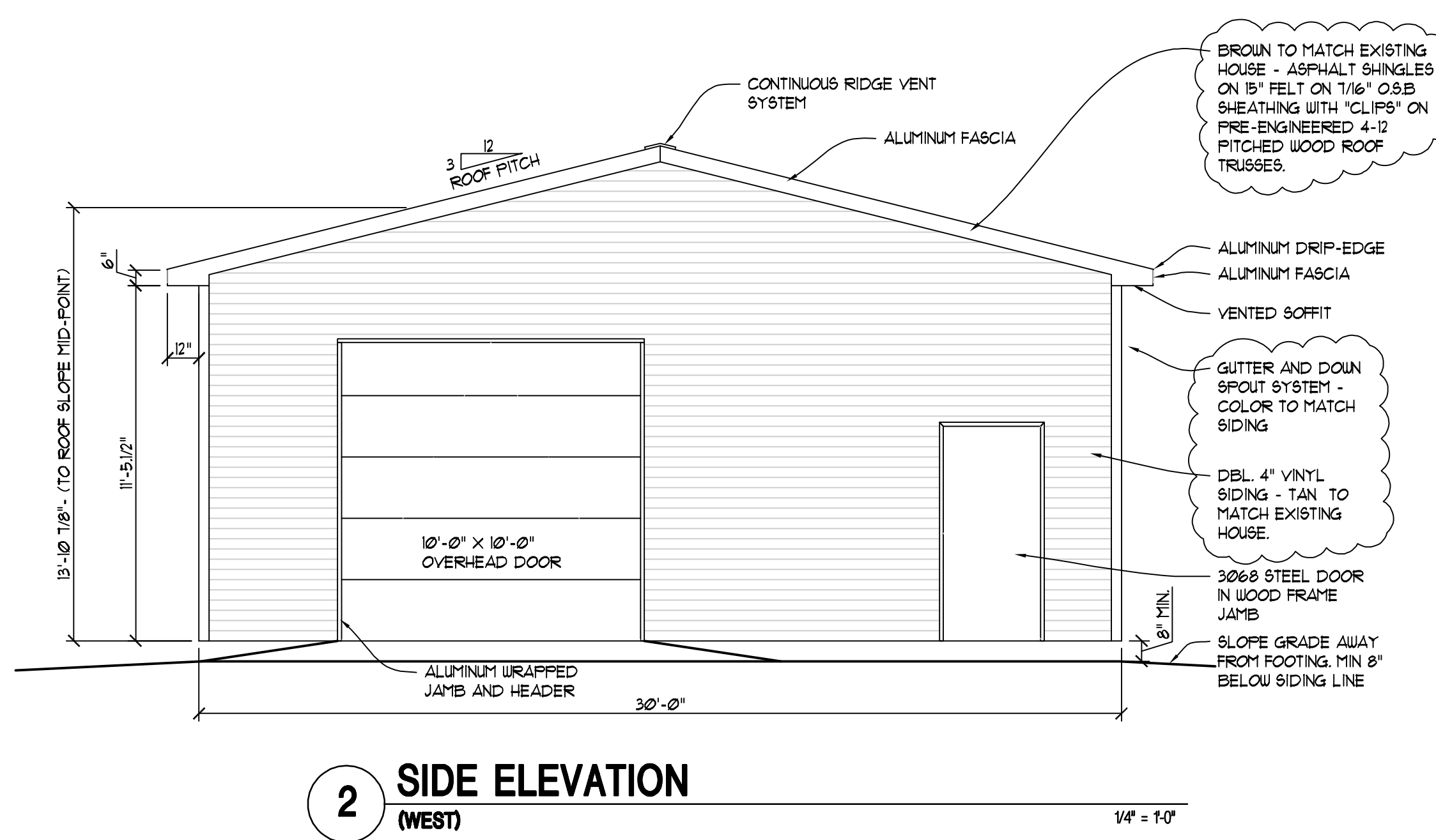
**A-111**



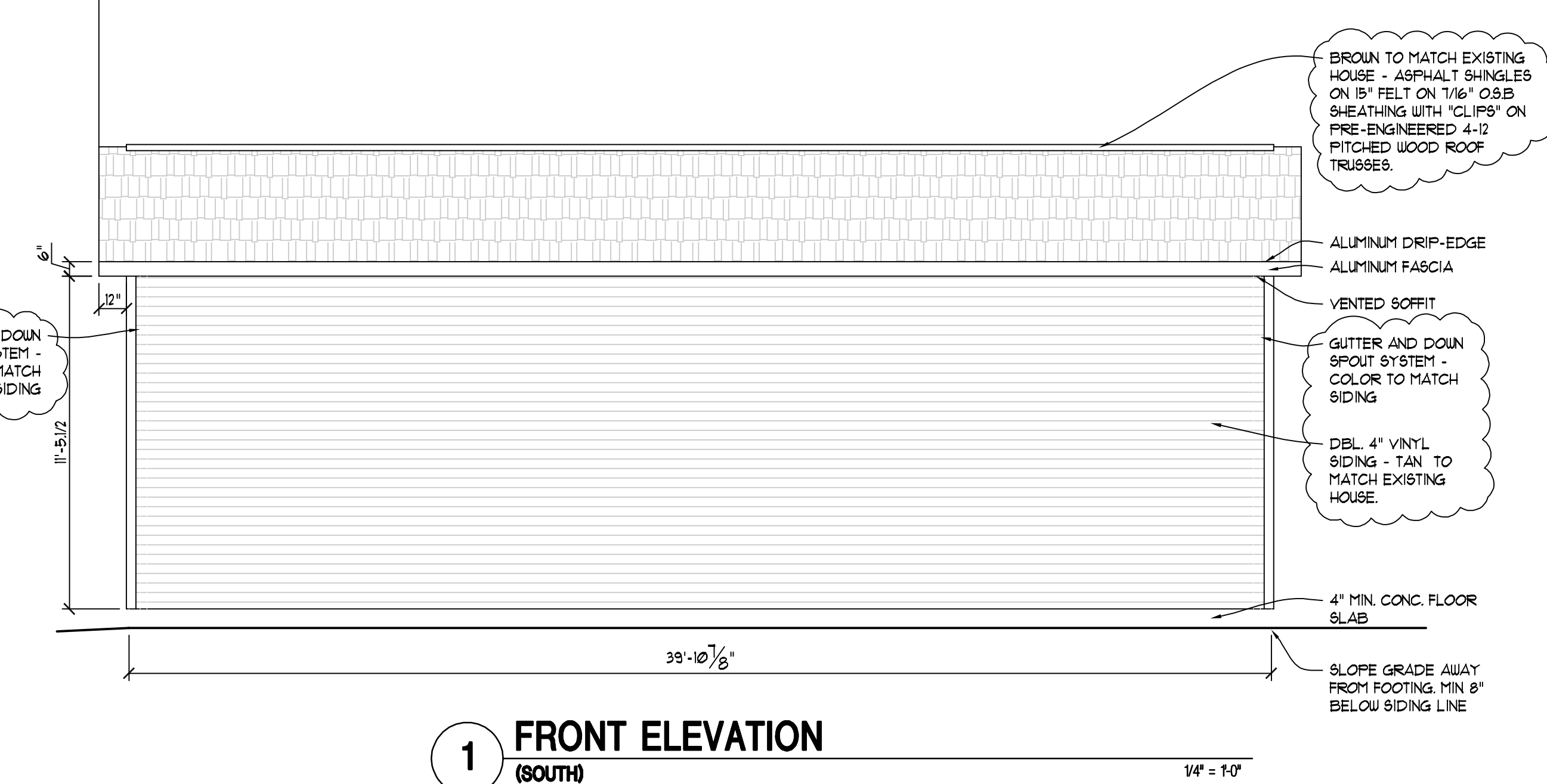
**4 SIDE ELEVATION (EAST)**



**3 REAR ELEVATION (NORTH)**



**2 SIDE ELEVATION (WEST)**



**1 FRONT ELEVATION (SOUTH)**

PMKN  
DESIGNS  
7504 Bingham, Brighton, MI. 48116  
810-599-0428 ph

client  
**BRIGHTON NAZARENE CHURCH**

notice  
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project title  
**VEHICLE GARAGE**

7669 Brighton Lake Road  
Brighton, MI

sheet title  
**ELEVATIONS**  
DO NOT SCALE DRAWINGS  
USE FIGURED DIMENSIONS ONLY

project number  
**16004**

drawn PMC  
approved PMC

issued	date
50% CD REVIEW	04-08-16
PERMITTING	04-20-16
TWP REV. COMMENTS	05-18-16
REV. #2 COMMENTS	06-17-16

sheet number  
**A-121**

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
June 13, 2016  
6:30 P.M.  
MINUTES**

CALL TO ORDER: The meeting of the Genoa Charter Township Planning Commission was called to order at 6:33 p.m. Present were Chairman Doug Brown, Diana Lowe, James Mortensen, Chris Grajek, John McManus, and Eric Rauch. Absent was Barbara Figurski. Also present was Kelly VanMarter, Community Development Director/Assistant Township Manager, Brian Borden of LSL Planning, and an audience of 10.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA: **Moved** by Commissioner McManus, seconded by Commissioner Mortensen, to approve the agenda as presented. **The motion carried unanimously.**

CALL TO THE PUBLIC: The call to the public was made at 6:34 pm with no response.

**OPEN PUBLIC HEARING #1**...Review of special use applications, impact assessment, and site plan for proposed 9,200 square foot contractor's office, warehouse, and storage yard. Special land use approvals are requested for outdoor storage, storage of hazardous materials, and grading activities within 25 feet of natural features setback. The property is located on the east side of Victory Drive, south of Grand River Avenue, on vacant Parcel #11-05-303-025. The request is petitioned by Seaside Seawalls.

Planning Commission disposition of petition:

- A. Recommendation of Special Use Application
- B. Recommendation of Impact Assessment (5-25-16)
- C. Recommendation of Site Plan (5-25-16)

Mr. Aaron Wallace of Seaside Seawalls, Mr. Karl Vollmer, the architect for the project, and Brent LaVanway, of Boss Engineering were present.

Mr. LaVanway gave a brief description of the property, the proposed project and what is being requested. Mr. Vollmer showed colored renderings and the floor plan of the building.

Mr. Borden reviewed his letter of June 7, 2016. There was a discussion between the Planning Commission and the applicant regarding what materials and equipment will be stored on site. It was noted that this information was not included on the site plan and

in the impact assessment. This needs to be added prior to presenting the plan to the Township Board.

Mr. Borden stated there is no proposed screening or a berm shown on the south side of the property. There are no plantings shown for the north and east side of the site and he is unsure if the existing vegetation is sufficient to meet the requirements. Commissioner Mortensen does not feel there is enough information presented to make this determination. Commissioner Rauch agrees. He is also concerned with the containment of the materials being stored relative to the wetlands.

Commissioner Grajek is concerned with fueling the equipment and the possibility of spills. Mr. Borden stated there will be additional permits required for this use. Also, a Pollution Incident Prevention Plan is required. It was suggested that this plan be reviewed by the Township Engineer.

Mr. Wallace described the enclosure for the fuel tanks and how any spills will be contained. He also will be obtaining a permit from the DEQ, which will address Commissioner Grajek's concerns regarding fueling up equipment.

Mr. Borden stated that Planning Commission approval is required because the sedimentation basins encroach to the edge of the wetland. Additionally, the proposed fence is within 25 feet of the wetland setback and requires a variance. The applicant agreed to change the location of the fence so that it meets the requirements.

Mr. Borden stated there is no dumpster enclosure proposed and the Township Ordinance does not allow for this requirement to be waived. The applicant will provide a dumpster enclosure.

Chairman Brown read an e-mail submitted by Michael and Christine Bartlett who own three parcels adjacent to this property. They do not object to the outdoor storage; however, they would like the entire area to be fenced. They are concerned with the storage of hazardous materials and want to ensure that all requirements are being met with regard to containing leaks or spills.

Chairman Brown asked that "waiting room" be changed to "waiting room / show room" and the anticipated number of customers / visitors per week be added to the Impact Assessment.

The call to the public was made at 7:29 pm.

Mr. Bill Gregory, who owns 960 Victory Lane, believes this will be a good addition to the industrial area and has no objections to the proposal.

Commissioner Mortensen does not believe this plan is ready to be sent to the Township Board. There are outstanding issues with the landscaping buffer, fuel storage, dumpster enclosure, etc. Chairman Brown agrees that the plan needs to be revised to address the concerns raised this evening.

**Moved** by Commission Lowe, seconded by Commissioner Mortensen, to table Agenda Item #1 until the July 11, 2016 Planning Commission meeting. **The motion carried unanimously.**

**OPEN PUBLIC HEARING #2...**Review of site plan and impact assessment for a proposed 16,053 sq. ft. addition to an existing industrial building known as Michigan Rod Products, Inc., which is located at 1326 Grand Oaks Drive, Howell. The request is petitioned by Asselin, McLane Architectural Group, LLC.

Planning Commission disposition of petition:

- A. Recommendation of Impact Assessment (3-29-16)
- B. Disposition of Site Plan (5-25-16)

Mr. John Asselin of Asselin, McLane Architectural Group, LLC, gave a brief description of the proposed project and showed the proposed building materials.

Mr. Borden stated that the applicant has addressed all of the concerns in his original review letter. He noted that the applicant is proposing less parking that is required; however, they will be providing a land bank in the case additional parking is needed in the future. They are required to provide 143 spaces. They are proposing 131 spaces and land bank 143 spaces. They have three shifts with a total of 75 employees so he believes this proposal is sufficient.

The call to the public was made at 7:50 pm with no response.

**Moved** by Commissioner McManus, seconded by Commissioner Lowe, to recommend to the Township Board approval of the Impact Assessment for Michigan Rod Products, Inc. dated March 29, 2016. **The motion carried unanimously.**

**Moved** by Commissioner Mortensen, seconded by Commissioner Grajek, to approve the Site Plan dated May 25, 2016 for a 16,053 sq. ft. factory expansion for Michigan Rod Products, Inc., subject to the following:

- The conditions spelled out in the Township Engineer's letter dated June 8, 2016 must be met.
- The conditions spelled out in the Brighton Area Fire Authority's letter of June 3, 2016 must be met.

**The motion carried unanimously.**

**Administrative Business:**

- Staff Report

Mr. VanMarter stated there will be five items on next month's agenda, plus the item that was tabled this evening.

- Approval of the May 9, 2016 Planning Commission meeting minutes

Ms. Lowe asked that “for Misty Meadows” be added to the motion to recommend approval of their Environmental Impact Assessment. She also asked that the statement, “Commissioner Lowe feels all Commissioners are able to make the motions” be changed to “Commissioner Lowe believes all Commissioners have the ability to make motions”.

**Moved** by Commissioner Lowe, seconded by Commissioner Mortensen, to approve the minutes of the May 9, 2016 Planning Commission Meeting with the proposed changes. **The motion carried unanimously.**

- Member Discussion:

Commissioner Grajek questioned if Ms. VanMarter met with the BAFA regarding their requirements for cisterns. Ms. VanMarter stated she has spoken to them and expressed the Township’s concerns and they have agreed to no longer require cisterns in their review letters when homes are over a certain size.

- Adjournment

**Moved** by Commissioner McManus, seconded by Commissioner Mortensen, to adjourn the meeting at 8:00 pm. **The motion carried unanimously.**

DRAFT