

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
DECEMBER 13, 2021  
6:30 P.M.  
AGENDA**

**CALL TO ORDER:**

**PLEDGE OF ALLEGIANCE:**

**APPROVAL OF AGENDA:**

**DECLARATION OF CONFLICT OF INTEREST:**

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

**OLD BUSINESS:**

**OPEN PUBLIC HEARING # 1**...Review of a special use application, environmental impact assessment and site plan for a commercial stable located at 7318 Herbst Road, south side of Herbst Road, east of Hubert Road. The request is petitioned by the Nancy Merlo, Brighton Equestrian Club.

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (11-5-21)
- C. Recommendation of Site Plan (11-5-21)

**NEW BUSINESS:**

**OPEN PUBLIC HEARING # 2**... Review of an environmental impact assessment and site plan for a proposed 73-space parking lot on the west side of the site located at 7372 Grand River, Brighton for Community Bible Church. The request is petitioned by Community Bible Church.

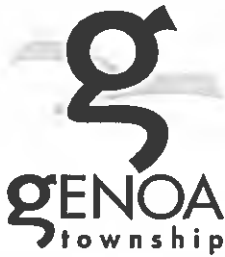
- A. Recommendation of Environmental Impact Assessment (11-22-21)
- B. Disposition of Site Plan (11-22-21)

**OPEN PUBLIC HEARING # 3**...Review of a special use application, environmental impact assessment and site plan for a proposed Place of Worship (Prayer Campus) with outdoor uses including Stations of the Cross, a mural wall with altar, prayer trails, religious landscape/garden statues, a 352 sq. ft. utility building and related driveways and parking. The property in question is located at 3280 Chilson Road on the west side of Chilson Road, south of Crooked Lake Road. The request is petitioned by Catholic Healthcare International.

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

**ADMINISTRATIVE BUSINESS:**

- *Staff Report*
- *Approval of October 25, 2021 Planning Commission meeting minutes*
- *Correspondence – Master Plan Public Input Summary*
- *Member discussion*
- *Adjournment*



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

**GENOA TOWNSHIP**

**MAY - 1 2019**

**RECEIVED**

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

APPLICANT NAME & ADDRESS: Nancy Merlo, Brighton Equestrian Club, 7318 Herbst Road  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Nancy Merlo, 7318 Herbst Road, Genoa Twp

SITE ADDRESS: 7318 Herbst Road PARCEL #(s): 4711-24-100-014

APPLICANT PHONE: (248 )866-1142 OWNER PHONE: ( 248 ) 866-1142

OWNER EMAIL: nancy@clubBEC.com

LOCATION AND BRIEF DESCRIPTION OF SITE: Brighton Equestrian Club ("BEC") is located on 97  
acres of the former Herbst farm on Herbst road adjacent to I-96.

BRIEF STATEMENT OF PROPOSED USE: BEC's use is currently authorized by the Right  
to Farm Act. BEC's use includes use as a commercial stable for academies, rearing  
and housing of horses and related uses as described in section 3.03.02(h).

Such use may also include horse shows and other horse related member and guest events in the  
clubhouse.

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

**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: Nancy L. Merlo

ADDRESS: 7318 Herbst Rd, Genoa Twp.

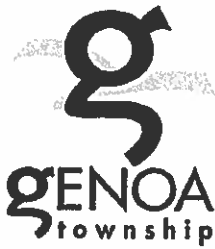
**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

1.) Nancy Merlo of Brighton Equestrian Club at nancy@clubBEC.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: Nancy Merlo DATE: April 29, 2019  
PRINT NAME: Nancy Merlo PHONE: 248-866-1142  
ADDRESS: 7318 Herbst Rd, Genoa Twp



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

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

APPLICANT NAME & ADDRESS: Nancy Merlo - Brighton Equestrian Club, 7318 Herbst Rd

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

APPLICANT PHONE: (248 ) 866-1142 EMAIL: nancy@clubBEC.com

OWNER NAME & ADDRESS: Nancy Merlo, 7318 Herbst Rd

SITE ADDRESS: 7318 Herbst Rd PARCEL #(s): 4711-24-100-014

OWNER PHONE: 248 ) 866-1142 EMAIL: nancy@clubBEC.com

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

Brighton Equestrian Club is located on 97 acres of the former Herbst farm. Surrounding area includes mobile home development, single family rural residential and other agricultural uses.

**Proposed Use:**

Brighton Equestrian Club ("BEC") is currently authorized by the Right to Farm Act. BEC's use includes use as a commercial stable for academies, rearing and housing of horses and related uses as described in section 3.03.02(h). Such use may also include horse shows, and other horse related member and guest events in the clubhouse.

**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.

BEC's use promotes the AG statement of purpose by maintaining the irreplaceable agricultural soils and farmland from turning into yet another residential subdivision. The facility is well served by public facilities and will not over tax the roads and infrastructure. Further, all uses are in strict compliance with the right to farm act to minimize any potential nuisance to neighbors.

- 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.

BEC contains stables, clubhouse and pastures. The pastures front all roads and neighboring properties. The stables and clubhouse were designed with an appealing facade in keeping with agricultural buildings of a similar nature.

- 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 property is currently served by Herbst road which offers more than adequate access for all purposes. Drainage, water and sewer has not been altered from the original Herbst farm so does not put any additional tax on that system.



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?

All farming uses are in strict compliance with the Right to Farm Act which pays close attention to proper noise and odor management through proper planning and maintenance. Guests, members, riders and employees at BEC will not cause a noticeable impact on traffic as it will be spread out throughout the day.

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.

3.03.02(h) permits Commercial Stables as a special land use. All criteria contained in that ordinance section are being complied with including numbers of animals, distance from dwellings, fencing and nuisance management.

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

BY: Nancy Merlo

ADDRESS: 7318 Herbst Road, Genoa Township

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

Nancy Merlo of Brighton Equestrian Club at nancy@clubBEC.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: Nancy Merlo DATE: 5/29/18

PRINT NAME: Nancy Merlo PHONE: 248-866-1142

**OPEN PUBLIC HEARING # 1...**Review of a special use application, environmental impact assessment and site plan for a commercial stable located at 7318 Herbst Road, south side of Herbst Road, east of Hubert Road. The request is petitioned by the Nancy Merlo, Brighton Equestrian Club.

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (5-1-19)
- C. Recommendation of Site Plan (7-16-21)

Chairman Grajek stated the applicant requested to have this item tabled this evening; however, a call to the public will be made.

The call to the public was made at 8:32 pm.

Mr. Bill Kapelanski of 2636 Spring Grove Drive does not understand the commercial aspect of this being requested now because they have been in business for over three years. Ms. VanMarter stated that the applicant was building a private stable for her own horses; however, after the building was completed they started having non-equestrian events at the location, such as parties, baby showers, etc. so this makes it a commercial instead of a private use.

Mr. Kapelanski stated he and his neighbors have always thought it was a commercial use. He is concerned with the horse manure seeping into the community kettle pond that they share, hearing gunshots from the property, and the traffic that is on Herbst Road.

Mr. Hugh Rowe of 2550 Spring Grove Drive stated what was built there is not compatible with the surrounding neighbors in the area. If this will be expanded and used for more events, he will be concerned.

Mr. Mark Faulkner of 2496 Spring Grove Drive has approximately ¼ mile of shared property with the applicant. The applicant is spreading manure 10 feet from their property line and their well is also in that area. He is concerned with the quality of the water in the shared kettle pond, the construction equipment that the applicant stores on her property for their cement business, and the traffic on Herbst Road.

Mr. James Rohrer of 7442 Herbst Road objects to this proposal due to the traffic, the construction equipment traffic and its storage on their property. There has been a police response at one of the weddings, and the use of holding weddings where there will be alcohol is not appropriate for the middle of a subdivision. The applicant has contacted a neighbor to request to purchase her property and expand her business.

Ms. VanMarter stated she has received all of the public letters and has forwarded them to the Commission. She has another one from another neighbor and she will be shared with the Commission in the next meeting packet.

The call to the public was closed at 8:47 pm.

**Moved** by Commissioner Dhaenens, seconded by Commissioner McCreary, to table the review of a Special Land Use, Environmental Impact Assessment and Site Plan for commercial stable located at 7318 Herbst Road until the Tuesday, October 12, 2021 Planning Commission meeting per the applicant's request. **The motion carried unanimously.**

**OPEN PUBLIC HEARING #2...**Review of a sketch plan for a proposed trash compactor inside the existing Salvation Army building and removal of the existing dumpster enclosure located at 7000 Grand River, Brighton. The request is petitioned by The Salvation Army Southeast Michigan ARC.

A. Disposition of Sketch Plan

Ms. Courtney Rauch of the Salvation Army stated they would like to install a compactor inside the warehouse portion of the store. This would reduce truck traffic and would remove the existing dumpster enclosure. They would like to keep the parking spaces that are located in front of the proposed door for the compactor because the compactor will be changed prior to business hours. The property owner has advised they will improve the landscape as requested by the Township.

Mr. Borden reviewed his letter dated September 8, 2021.

- The only external modification is the inclusion of a new overhead door on the westerly façade.
- We suggest the space in front of the overhead door be signed/striped as no parking. He is not concerned with the parking space remaining per the reasoning noted by the applicant this evening.
- If any existing site landscaping is in poor condition, such plantings should be replaced as part of this project.

Ms. Byrne stated they have no engineering related concerns with this proposal.

Fire Marshal Rick Boisvert's letter dated September 2, 2021 stated that the fire code permits the installation of the compactor and associated dumpster to be installed within the structure as it is protected throughout with an automatic sprinkler system. The existing fire lane markings shall be maintained and evaluated at time of inspection. The fire lanes shall not be obstructed by construction materials, dumpsters, or vehicles. Signs shall be maintained to be legible and unobstructed by vegetation.

Commissioner McCreary asked what items will be put in the compactor and how it will be used. She is concerned about safety. Ms. Envoy Jaqueline stated it is a 16-yard compactor that will be used for everything that cannot be used or sold, with the exception of cloth goods, as well as

trash that is generated by the business. She advised she can provide the Township with the specifications for the compactor. This will significantly decrease their amount of trash truck traffic.

The call to the public was made at 8:58 pm with no response.

**Moved** by Commissioner McCreary, seconded by Commissioner Dhaenens, to approve the sketch plan for The Salvation Army located at 7000 Grand River Avenue for the installation of a new trash compactor and removal of the existing waste receptacle enclosure, conditioned upon the following:

- The parking space located at the door will remain available for use
- The overhead door shall remain closed when the compactor is not being serviced.
- The requirements of the Brighton Area Fire Authority's letter dated September 2, 2021 shall be met.

**The motion carried unanimously.**

**OPEN PUBLIC HEARING #3**...Review of an amendment to a site plan in regard to landscaping for the previously approved Birkenstock Planned Industrial Development agreement for a climate control self-storage building located at 2600 Harte Drive, Brighton. The request is petitioned by James Harte.

A. Recommendation of Site Plan Amendment.

Mr. James Harte stated that landscaping supplies are difficult to obtain right now because of COVID and he is not going to be able to get those required by the approval. He is requesting that the number and size of the plantings be reduced so that they can be installed this season. He noted that the trees on the adjacent property are overgrown and block their view of his property.

Mr. Borden reviewed his letter dated September 8, 2021.

- The proposed landscape plan reduces the quantity and size of plantings required for the east, west, and south buffer zones, as well as both detention ponds.
- The proposed plan entails an overall reduction of 402 shrubs from the approved plan.
- All of the required canopy/deciduous trees are to be reduced in size from 2.5" (required) to 1.75"-2".
- The Planning Commission has the authority to waive or modify landscaping requirements, per Ordinance Section 12.02.13.

Mr. Borden noted that 290 of the 402 shrubs are around the detention ponds.

Commissioner Mortensen noted that the landscaping around the detention ponds are only able to be seen by people accessing the site and not the abutting neighbors. Commissioner McCreary agrees.

**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
PUBLIC HEARING  
OCTOBER 12, 2021  
6:30 P.M.  
MINUTES**

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:30 p.m. Present were Chris Grajek, Jeff Dhaenens, Jim Mortensen, Marianne McCreary, Eric Rauch and Glynis McBain. Also present were Michael Archinal, Township Manager; Brian Borden of SafeBuilt Studio; and Gary Markstrom of Tetra Tech.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

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

DECLARATION OF CONFLICT OF INTEREST: None

CALL TO THE PUBLIC: The call to the public was made at 6:31 pm with no response.

**PRESENTATION BY LIVINGSTON COUNTY PLANNING COMMISSION**

Ms. Kathleen Klein-Hudson, the Director of the Livingston County Planning Department, and Mr. Dennis Bowdoin, who is on the County Planning Commission, were present. Ms. Klein-Hudson provided an update of the Planning Department, including changes to their submission deadlines, specific projects they are working on, and a current Board vacancy. She also stated that the new Filmore park has been very busy throughout the pandemic and they are gathering data on trail usage and vehicle traffic.

**OPEN PUBLIC HEARING # 1...Review of a special use application, environmental impact assessment and site plan for a commercial stable located at 7318 Herbst Road, south side of Herbst Road, east of Hubert Road. The request is petitioned by the Nancy Merlo, Brighton Equestrian Club.**

- A. Recommendation of Special Use Application
- B. Recommendation of Environmental Impact Assessment (5-1-19)
- C. Recommendation of Site Plan (7-16-21)

Ms. Nancy Merlo, Mr. Clay Thomas, and Daniel LeClair of Greentech Engineering were present.

Mr. Thomas stated that their requested use complies with the Township Ordinance and the Right To Farm Act. This is a very beautiful facility and it is a great use of the site, keeping with the agricultural zoning. They have received the review letters. They would like to discuss these this evening. They will be meeting with the Fire Department regarding the comments in their letter. They will meet all of their requirements.

While the ordinance speaks to a hard surface, the ordinance allows for the Planning Commission to waive this requirement. They would like to keep the existing gravel surfaces instead of asphalt. The gravel is more environmentally friendly. There was a comment regarding cleaning up equipment stored on the site. The site is very neat and orderly. The equipment is stored inside or neat and orderly on the site if outside. They are not seeking to expand the site or its use or add additional buildings, etc.

Mr. Borden reviewed his letter dated September 8, 2021.

- The special land use standards of Section 19.03 are generally met, though the current zoning (AG) and future land use (LDR) do not align. Furthermore, we request the applicant provide additional information regarding the frequency of events.
- Any comments provided by the Township Engineer and Brighton Area Fire Authority must be addressed as part of the special land use and site plan review.
- The revised submittal demonstrates compliance with the use conditions of Section 3.03.02(h).
- The existing parking spaces, drive aisles, and driveway are surfaced with gravel, though hard surfacing is required by Ordinance; however, the Planning Commission can allow the gravel to remain as an alternative paving material. If gravel is allowed to remain in place, the applicant must apply dust control measures (as noted in the revised submittal).
- An internal drive aisle does not provide sufficient width for two-way travel. It must either be widened to 24' or signed for one-way travel only.
- The applicant should confirm that the "curb carts" are sufficient to handle the refuse generated by the number of people anticipated (maximum occupancy of 150 noted).
- Township Staff has requested that the applicant be required to clean up equipment stored on the site as part of this project/review process.
- There are new(er) structures visible on aerial photos that are not depicted on the site plan (pasture areas, a barn, and a pavilion).

Mr. Markstrom reviewed his letter dated September 2, 2021

- The proposed use should be approved by the Fire Authority to ensure there is adequate fire protection and site access for hosting 150 people in the existing building. Written approval from the Fire Authority should be provided to the Township.
- The use must be approved by the building department. Written approval from the Livingston County Building Department should be provided to the Township.

- The aerial of the property shows a second building at the back of the site to the east, but this building is not shown on the provided site plan. The site plan should depict the current site accurately.
- The petitioner provided calculations on the size of the existing pond on the site but did not provide any calculations on how the proposed improvements would impact onsite drainage. If additional impervious surface is proposed, onsite detention will be required to handle the additional drainage.
- Genoa Township Standards require that parking lots be paved with curb and gutter. Storm drainage facilities will also need to be incorporated into the parking lot improvements. The Petitioner does not propose curb and gutter behind some of the proposed parking, but it is unclear if paving is proposed. The site plan should clearly show paving limits if any are proposed. The Planning Commission may choose to consider an aggregate parking lot as a Low Impact Development Alternative to the zoning requirements.
- Increasing the number of guests in the facility will increase the loading on the existing septic system. Approval by the Livingston County Health Department has been provided to the Township via email.

Commissioner McCreary asked if this is a members' only club. Ms. Merlo said there is no membership to use her facility. Commissioner McCreary also asked if there are other events that are held there that were not provided in the application. Ms. Merlo stated it is also used as an equine therapy program.

Commissioner McCreary asked where the participants come from. Ms. Merlo stated the riding program is mostly students from Brighton Area Schools. They are local residents. She has 30 students.

Commissioner Rauch stated the Impact Assessment noted there are occasional events of up to 150 people held on this site. He asked how frequent they are held and is there any sound amplification. Mr. Thomas stated they are no more than twice per year and there is no outdoor amplification. They are around the barn and do not use the entire property. Ms. Merlo said she does not have events with alcohol and she does not host weddings. Commissioner Rauch would like the details of these events to be included in the Impact Assessment. He noted that Mr. Borden and Mr. Markstrom's concerns must be met.

Commissioner Rauch asked if there is any production of commercial farm products? Mr. Thomas said they grow corn and hay.

Commissioner Dhaenens noted there is a clubhouse that is rented to outside organizations and the applicant does not monitor what events they have. He has been on Herbst Road when there were cars parked there for an event. He noted that the neighbors are concerned with the pond and how the horse manure would affect that. Mr. Thomas stated the manure is now away from

the neighbors' property lines or the pond so this should no longer be a concern. It was addressed. He agrees with the comment regarding the rentals and there should be clear rules.

Chairman Grajek asked the applicant if they would be able to meet the requirements of the Brighton Area Fire Marshal. Mr. Thomas stated they will meet with the Fire Marshal and work to meet his concerns.

Commissioner Mortensen asked what is being changed for this application. Mr. Thomas stated the use is not changing. They are trying to "clean up this use". It has been used in this way for approximately five years.

The call to the public was made at 7:09 pm.

Mr. Kenneth Stahl of 2846 Spring Grove Drive stated he would like to leave the gravel surface instead of installing a hard surface. There was manure being spread within 50 feet of the pond so he is concerned that it could continue. He is also concerned that if there are a lot of people at a gathering on this site, the lake could be a liability. He is concerned with the label of "Commercial Stable".

Mr. Mark Faulkner of 2496 Spring Grove stated his property is to the east of the barn and for several years, they were spreading manure up to his boundary, approximately 100 feet from their well. He spoke to Nancy and it was relocated and he appreciated that. He would like assurance that it won't be moved back near his property and near the pond.

Ms. Heather McCaig 7617 Herbst stated she lives across from the western edge of the property. All interactions of the owner and the staff here have always been positive. They appear to work with the neighbors to be good neighbors.

Ms. Mary Faulkner of 2496 Spring Grove stated the view from their home looks at where the equipment is stored. She has spoken to Ms. Merlo and asked to have some screening placed around it.

Mr. Robert Johnson 2624 Spring Grove stated this is a kettle pond so there is no entrance or exit but it collects what is put in it.

Mr. Bill Kapelanski of 2636 Spring Grove Drive is concerned with the constant gun fire that occurs on this site.

The call to the public was closed at 7:19 pm.



Mr. Thomas stated the pond is not used. It is in the back of the property. The manure is now being spread approximately 1,000 feet from the pond and there is no intention of moving it from its current location.

Mr. LeClair showed the site plan explaining that there is approximately 600 feet of separation between the barn and the neighboring properties. He noted that this area is master planned for residential one-acre lots.

Commissioner McCreary asked if a GAMP inspection had been done. Ms. Merlo stated it was done in 2017 and they approved their operations. Commissioner McCreary asked if the applicant would be open to having another one done. Ms. Merlo agreed to having another inspection done.

Chairman Grajek noted that a number of residents have submitted correspondence and they were all shared with the Planning Commission.

Commissioner Rauch is not concerned with the daily activities; however, it is the other events that have 150 or more people. Is it a commercial stable or an event rental space? He would like more clarification on these events and would not be comfortable moving this request forward until that information is provided.

Commissioner Dhaenens agrees. He is concerned with the clubhouse rentals and would like to see more detailed information as noted by Commissioner Rauch.

Commissioner McBain agrees with wanting to see more information regarding the rental space and the approvals from the Fire Authority. She would like the neighbors' concerns to be addressed.

Chairman Rauch questioned the construction equipment being stored on the site. Mr. Thomas stated there is no longer any of this equipment being stored on the property.

Commissioner Mortensen stated the Impact Assessment and the site plan do not include all of the existing buildings. The applicant should submit revised documents. He would like to know the detail of where the manure pile be placed as well as where it is being spread.

The Planning Commission and petitioner agreed that this item should be postponed this evening.

**Moved** by Commissioner Dhaenens, seconded by Commissioner Mortensen, to postpone, per the petitioner's request, the recommendation for the Special Use Application, Environmental Impact Assessment, and the Site Plan for a commercial stable located at 7318 Herbst Road, south side of Herbst Road, east of Hubert Road until the November 8, 2021 Planning

Commission meeting to allow the applicant to address the comments made by the Planning Commission this evening. **The motion carried unanimously.**

**OPEN PUBLIC HEARING #2...** A request of a rezoning from Industrial (IND) to Planned Industrial District (PID), Planned Industrial Development Agreement, Environmental Impact Assessment and Conceptual PID site plan for a proposed asphalt plant at 3080 Toddiem Drive, located at Victory Drive and Toddiem Drive intersection. The rezoning includes the following parcels: 4711-08-100-009 and 4711- 05-303-015. The request is petitioned by Net Least Associates South, LLC.

- A. Recommendation of Rezoning and PUD Application
- B. Recommendation of PID Agreement
- C. Recommendation of Impact Assessment (9-1-2021)
- D. Recommendation of Conceptual PUD Plan (9-21-2021)

Ms. Abby Cooper, the attorney for the applicant, Mr. Wayne Perry, the engineer, Mr. Daren Zimmerman and Mr. Chris Smith, representing the applicant, Ms. Kathleen Gunkle, an environmental engineer, and the sellers of the abutting properties were present.

Ms. Cooper stated they are proposing to develop a state-of-the art asphalt plant on this site. The applicant runs an asphalt plant in Lansing and would like to operate one here in Livingston County. She noted that the use and the project are compatible with the surrounding neighborhood. The applicant will be bringing Toddiem Drive up to Livingston County Road Commission standards. Municipal water and a new stormwater management system will be installed and the existing outdoor storage of metal scrap will be removed as part of this project.

Mr. Perry reviewed the site plan, detailing the paving plan, building locations, site access, and the process and operations of the asphalt plant. He explained where the material is brought in and through the site to the stockpile locations. They are requesting that the Buffer Zones B requirement be waived for three sides of the property. They will meet the requirements along Toddiem Drive. Due to the existing topography, existing foliage and surrounding uses, additional plantings would be unnecessary. They are also requesting approval to store liquids on the site.

Commissioner McCreary asked if there will be a maintenance agreement for Toddiem Drive after it is paved. Mr. Perry stated it is a private drive so a maintenance agreement would need to be made between all four of the adjacent property owners.

Mr. Zimmerman showed a photograph of his existing plant. They pave the site so that they can use dust control measures. It is also swept multiple times per day. He explained the environmental requirements they must follow with the State of Michigan.

Commissioner Rauch stated that this site is the best one in the Township for this type of use. While the residential areas are not in the near vicinity to this site, he asked what the impact is on

## Kelly VanMarter

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**From:** MARK FAULKNER <mdfaulkner@comcast.net>  
**Sent:** Tuesday, September 14, 2021 5:55 PM  
**To:** Kelly VanMarter  
**Subject:** BEC Special Use Permit

To Genoa Township Planning Board;  
Thoughts on Brighton Equestrian Center request for special permit;

We have submitted a list of our concerns to the Board previously and after attending meeting I have additional thoughts.

I have had a conversation with MDARD regarding the spreading of manure on property. After explaining the practices I have witnessed, they indicated that is not the proper way of disposal. I would suggest a call to MDARD to set up an instructional session with BEC to clarify best practices to appropriate employees. This may address the odor and pollution concerns.

All businesses are subject to landscape requirements as part of a construction process, it would seem that a thoughtful application of evergreens would soften the visual, noise and odor concerns reported.

We would like to see a Greenspace required East of the buildings to help with runoff into lake, downwind odors, visual aspect, and noise reduction.

I have spoke with Nancy Merlot on several occasions, initially as a good neighbor and other times regarding concerns of activities. I find her to be very passionate about her vision for BEC.

We too are very passionate about our home and are continuously maintaining and improving our property. We purchased our property with the vision of this being our retirement home. We were aware of zoning requirements, building codes and HOA restrictions when we purchased it and built our home. We have now lived here 27 years and have abided by the rules, have not done anything to endanger or offend any of our neighbors.

I'm sure BEC was aware of property restrictions when they made their property purchase. I don't feel we should make concessions because her vision has changed from when she originally purchased the property to now BEC becoming a commercial entity.

I expect the board to consider concerns from all interested parties and make a decision that is equitable to all. We have heard from the board that this request has been going on for a year and a half and I trust that persistence won't be a part of the final decision.

Thank You for your time,

Mark & Mary Faulkner

2496 Spring Grove

## Kelly VanMarter

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**From:** MARK FAULKNER <mdfaulkner@comcast.net>  
**Sent:** Sunday, September 12, 2021 6:48 PM  
**To:** Kelly VanMarter  
**Subject:** Brighton Equestrian Club Public Hearing

We live east of the horse farm on 5 acres at 2496 Spring Grove Dr. and the entire length of our property is alongside the horse farm

Our concerns with the rezoning of their property to commercial are as follows:

- The smell of manure would come into our home when our windows were open or when we were just outside. Our grandkids would not go outside because of the smell. They have stopped spreading the manure by our property line but with the increased activity it will eventually increase the smell.
- Boarding of animals and spreading their waste and the potential effect of contamination to the lake and we have been told the lake is part of the Brighton water supply aquifer
- The potential risk of contaminating our drinking water because our well is located 10 feet from their property
- The lake is small and does rezoning allow them to be able to host camps and put boats, rafts, etc on the lake? The lake is too small to allow any increased activity with the current homes on the lake
- They store their equipment and other businesses equipment on this property. They have put up a storage unit but not all the large equipment is put in that unit and this is our view from our home
- If the property is zoned commercial could any type of commercial business be put on the property that would not be appropriate for residential homes on the lake
- The increased traffic on Herbst road is becoming very dangerous when they host functions. Guests leaving their property have no regard for speed limits and it is becoming very unsafe when trying to pull out of our road.
- We have paid to stock the lake with fish. Everyone that lives on the lake only fishes as a catch and release. The employees of the horse farm have taken all the fish out of the lake.
- Could a green space be set between the east end of the property to protect our property, and also run-off into the lake
- Could a screen of large evergreens be put up to shield their business activities such as spreading manure, parties, etc.

Mark and Mary Faulkner  
2496 Spring Grove Dr.  
Brighton MI 48114  
734-216-7805

## Kelly VanMarter

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**From:** Greg Rusnica <grusnicaus@gmail.com>  
**Sent:** Monday, September 13, 2021 3:19 PM  
**To:** Kelly VanMarter  
**Subject:** Brighton Equestrian Club, and Bar, Partyville, construction Company ETC.

Brighton Equestrian Club, Hello my name is Greg Rusnica my wife and I live directly across the street from the BEC. The concerns I have are the party after hours and people driving in and out of there while they have parties going on. We're very tired of the person(s) leaving and driving down the road like they have the need for speed, kicking up dirt, reckless driving. The biggest concern is with the truck's coming and going all hours of the day, sometime late at night, I can't believe that Ray Merlo just decided a while back over 6 months to start running his company from there also, it's a horse stable and not a construction company. Why is he using that facility to park his 18 wheelers and other equipment there, he doesn't pay taxes for Merlo Construction in Genoa Township. Ever since they have opened there has been nothing but traffic galore, and the road is getting ruined by those larger vehicles. When are the Merlo's going to be stopped at doing what they want to do. It used to be very quiet until they decided to DO WHAT THEY WANT, basically for \$50 a crack!!!! Because of the business can't the speed limit be dropped to 25 MPH in that area? It seems like it's a law, I could be wrong. Thank you

## Kelly VanMarter

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**From:** ronda golip <rondagolip@hotmail.com>  
**Sent:** Monday, September 13, 2021 12:09 PM  
**To:** Kelly VanMarter  
**Subject:** Brighton Equestrian Club

Good Evening MS. VanMarter,

We are unable to attend this meeting. We do however have some concerns. The traffic that comes in and out of the BEC is ridiculous. We along with a neighbor counted 33 Merlo trucks in one day and on a sperate day there was 36. We realize we live on a dirty road and the speed limit is 50. However, we have clocked the traffic exiting the BEC at higher speeds then that. We have voiced our concerns as well as our neighbors to the police, township and road commission. We have signed several petitions that have been brought by our house from residents of the road. We have a hearing-impaired daughter and have had signs placed up by the road commission. We cannot let her ride her bike in front of our house or get our mail anymore. Our grandson hates coming over because of the smell in the air from the barn. The traffic that flies down the road passed our home and turns into the BEC is more then we all bargained for. You can't go outside of your home and enjoy the day without being choked out by the road dusted coming from the BEC traffic of Merlo trucks. I can't tell you how many times we have had people stop at our house regarding the BEC smell and traffic that also live on this road. Allowing this commercial stable permit would cause an already busy road to get worse. Mrs. Merlo will tell you we don't like her. She would be correct, however, personal feeling aside. This was a quiet neighborhood . The BEC has taken that from us all. We have our property for sale. We have had prospective buyers at our home and they have commented on the amount of traffic that the barn has with large equipment. Herbst road has a high amount of traffic on a daily bases. With a lot of the traffic exceeding the speed limit. We are not saying it is all the BEC fault but their traffic and large trucks don't help the problem at all. Serval of us have tried to reach out to Mrs. Merlo about the traffic and noise and we have all yet to get a call back. We as neighbors all show each other neighborly respect. Mrs. Merlo should show the same respect to her neighbors. She touted when she bought the property that it was for personal use. She should be held to that.

Bill and Ronda Golip

## Kelly VanMarter

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**From:** Bill <billpkap@gmail.com>  
**Sent:** Monday, September 13, 2021 8:14 AM  
**To:** Kelly VanMarter  
**Subject:** Brighton Equestrian Club public hearing

Good morning,

I have a few questions for the meeting tonight:

My understanding is that the Brighton Equestrian Club is already a commercial stable. What changes would take place if the special land use permit is approved?

What would be the impact on Herbst Road? On the body of water that borders the BEC property (and the property of other homeowners)?

Is something going to be done about the disposal of horse manure? How is that impacting the water quality right now? I understand that BEC is putting the horse waste against the property line adjacent to a homeowner. I hope this has changed but as of earlier this summer they were still dumping waste there.

Thank you for taking my questions. I look forward to the meeting tonight.

Sincerely,

Bill Kapelanski



**NOTICE OF PUBLIC HEARING – DECEMBER 13, 2021  
(SPECIAL USE)**

November 24, 2021

To Whom It May Concern:

Please be advised that the Planning Commission of Genoa Charter Township will conduct a public hearing on **Monday, December 13, 2021 commencing at 6:30 p.m.** As required by state law, you are receiving this notice because you have been identified as an owner or occupant of real property within 300 feet of the subject parcels.

The property in question is located at 7318 Herbst Road on the south side of Herbst Road, east of Hubert Road on parcel #4711-24-100-014. **The applicant is requesting a special land use permit to allow a commercial stable at the Brighton Equestrian Club. The request is petitioned by Nancy Merlo, Brighton Equestrian Club.**

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

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

Sincerely,

Kelly VanMarter,  
Assistant Township Manager / Community Development Director

2911 Dorr Road  
Brighton, MI 48116  
810.227.5225  
810.227.3420 fax  
[genoa.org](http://genoa.org)

**SUPERVISOR**

Bill Rogers

**CLERK**

Paulette A. Skolarus

**TREASURER**

Robin L. Hunt

**TRUSTEES**

Jean W. Ledford

H. James Mortensen

Terry Croft

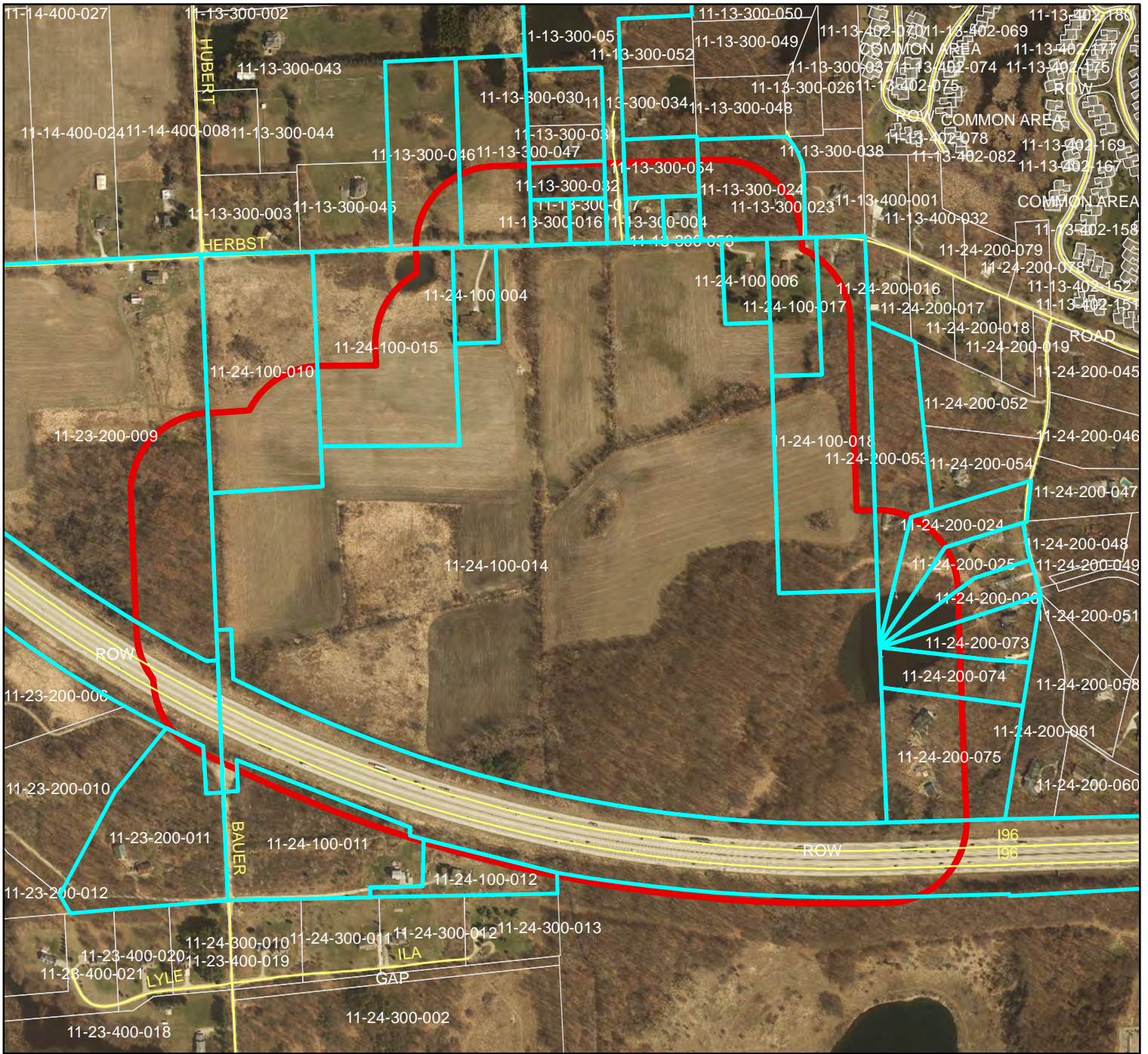
Diana Lowe

**MANAGER**

Michael C. Archinal



# 300 Foot Buffer for Noticing



Special Use Application: BEC

Address: 7318 Herbst Road

Parcel: 4711-24-100-014

Meeting Date: December 13, 2021



November 22, 2021



December 8, 2021

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>	Brighton Equestrian Club – Special Land Use and Site Plan Review #2
<b>Location:</b>	7318 Herbst Road – south side of Herbst, east of Huber Road
<b>Zoning:</b>	AG Agricultural District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Brighton Equestrian Club, including the original special land use application (dated 5/29/18) and the revised site plan (dated 11/5/21).

**A. Summary**

1. The special land use standards of Section 19.03 are generally met, though the current zoning (AG) and future land use (LDR) do not align. Furthermore, we request the applicant confirm that any events conducted will be related to the commercial stable operation. This should be included in a revised Impact Assessment.
2. Any comments provided by the Township Engineer and/or Brighton Area Fire Authority must be addressed as part of the special land use and site plan review.
3. The revised submittal demonstrates compliance with the use conditions of Section 3.03.02(h).
4. The existing parking spaces, drive aisles, and driveway are surfaced with gravel, though hard surfacing is required by Ordinance. If gravel is allowed to remain in place, the applicant must apply dust control measures (as noted in the revised submittal).

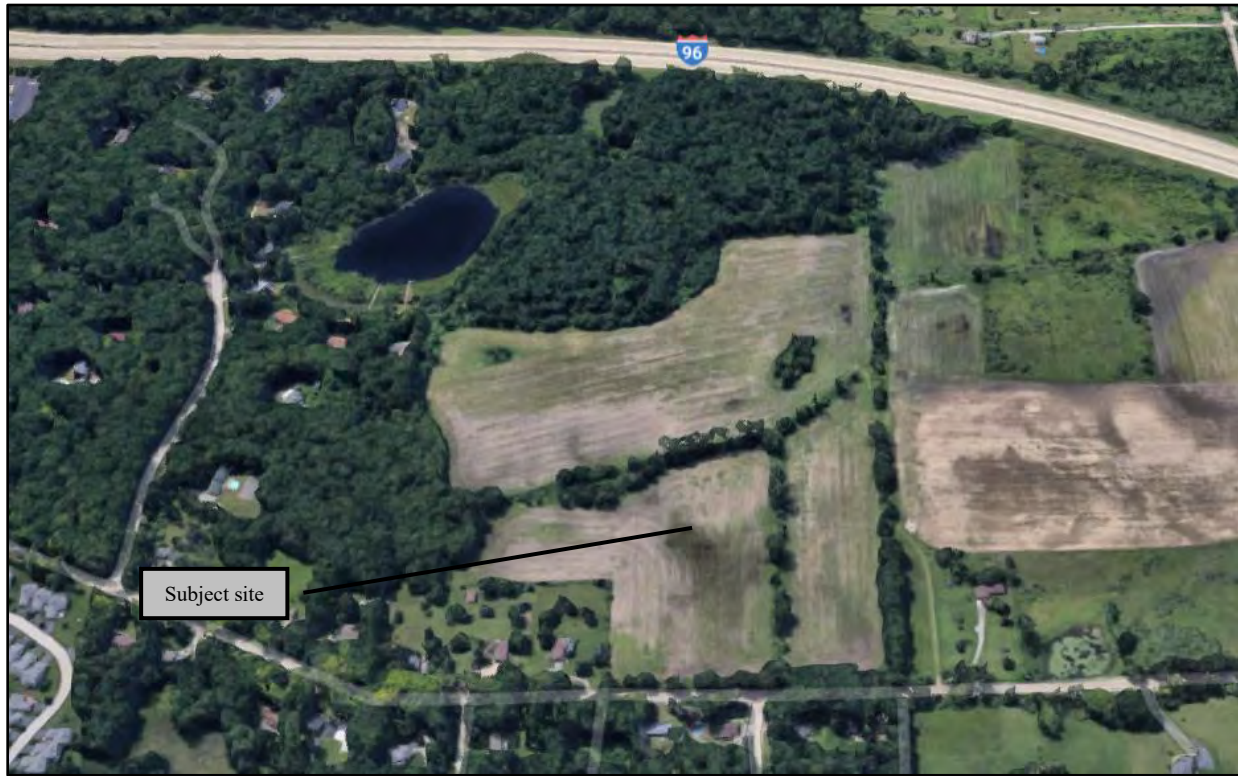
**B. Proposal/Process**

The applicant proposes a commercial stable, which requires special land use approval in accordance with Table 3.03 of the Township Zoning Ordinance. The use conditions of Section 3.03.02(h) also apply to the request.

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

The request was presented and discussed at the September Planning Commission meeting, though action was postponed due to the need for additional information.





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

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

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

- 1. Master Plan.** The Township Master Plan identifies the subject site as Low Density Residential, which is intended for single-family residential uses on lots with at least 1-acre of area.

In this instance, the current zoning (AG) and Master Plan (LDR) designations do not align. The proposed use of a commercial stable would not be permitted in LDR zoning, though they may be appropriate in areas zoned AG or CE.

As such, the proposed use would not be deemed compatible with the Future Land Use Map; however, this is due more to an inconsistency between the Zoning Ordinance and Master Plan than the use itself.

Additionally, the Plan includes a goal to “accommodate a variety of land uses that are located in a logical pattern and complement community goals, the surrounding land uses, environment, capacity of roads and the sanitary sewer, and public water system capabilities.” The proposal appears compatible with this goal.

The case can be made that the proposal is consistent with this overarching goal of the Master Plan. So, while not entirely consistent with the Master Plan, there are elements that can be viewed as compatible.

- 2. Compatibility.** The subject area is sparsely developed with a mix of agricultural and single-family residential uses.

Given the overall size of the subject site and the fact that the proposed use is generally confined to a central portion of the property with large setbacks, we are generally of the opinion that the proposed use will be compatible with the surrounding area.

The revised submittal identifies two types of events that will be held in relation to the commercial stable: club training and meetings (4-20 people), and fundraisers (80-99 people; 2 times per year).

Our only concern with the detail on events is that the Impact Assessment states that they include, but are not limited to those noted above.

Based on discussion at the September Planning Commission meeting, any events proposed must be related to the commercial stable itself. Accordingly, we request the applicant confirm that this will be the case. The Assessment should also be revised accordingly.

- 3. Public Facilities and Services.** The subject area is within the Secondary Growth Boundary and, as such, we do not believe the site currently has access to public water or sanitary sewer. Given the nature of the use, we do not believe public utilities are necessary.

With that being said, we defer to the Township Engineer and Brighton Area Fire Authority for any comments they have under this criterion.

- 4. Impacts.** The use conditions of Section 3.03.02(h) are intended to limit impacts of the proposal upon the site and surrounding properties. Provided these conditions are met, surrounding properties are not expected to be adversely impacted by the proposal.
- 5. Mitigation.** If further concerns arise as part of the review process, the Township may require additional efforts to mitigate potential adverse impacts.

#### **D. Use Conditions**

Commercial stables are subject to the use conditions of Section 3.03.02(h), as follows:

- 1. The number of permitted animals shall not exceed the limits in (g)(2) above.**

The Impact Assessment states that the site contains approximately 95 acres of land. As such, the Ordinance limit on the number of horses or other equine is 95. The revised submittal notes that 34 horses are kept on site.

This standard is met.

- 2. All buildings wherein animals are kept shall not be less than one hundred (100) feet from any occupied dwelling or to any adjacent building used by the public.**

The revised submittal notes that the nearest building is approximately 900 feet from the existing building where animals are kept.

As such, this standard is met.

- 3. When animals are fed hay and oats or other feed outside of a building, the feeding area shall be located not less than one hundred (100) feet from any occupied dwelling or any adjacent building used by the public. Corrals where animals graze only shall not be considered feeding areas.**

Similar to the comments above, this standard is met.

- 4. Stables shall be enclosed by a suitable fence, and shall be maintained so that odor, dust, noise or water drainage impact to adjoining premises shall be minimized in accordance with accepted agricultural management practices.**

The revised submittal notes that “all stables and riding areas are well kept and cleaned regularly.” Additionally, deodorizing and fly sprays are used in the stables.

Photographs included on Sheet 3 identify the existing wood fencing.

Based on the revised submittal, this standard is met

#### **E. Site Plan Review**

- 1. Dimensional Requirements.** The stable/arena building is located well outside of required AG setbacks.

The revised submittal also demonstrates compliance with the maximum building height (35’ allowed; 27’ provided to the peak).

- 2. Building Materials and Design.** The building design and material requirements of Section 12.01 do not apply to this project.

- 3. Parking.** Article 14 of the Township Zoning Ordinance does not provide a specific parking calculation for a commercial stable.

The revised submittal notes a maximum occupancy of 150 people, while the site plan depicts 51 parking spaces. The resulting ratio of 1 space for each 3 people of maximum occupancy is consistent with the requirement for a church or similar place of worship, which seems to be an apt comparison.

The parking spaces, drive aisles, and driveway are surfaced with gravel, though hard surfacing is required by Section 14.06.01.

This section allows the Commission to allow the use of low impact alternatives (permeable/grass pavers are noted) upon recommendation of the Township Engineer.

Pending input from the Township Engineer, the Commission could allow the gravel to remain as an existing condition.

The revised submittal materials note that dust control measures will be applied twice per year.

- 4. Vehicular Circulation.** The revised plan depicts compliant driveway and drive aisle widths sufficient for two-way travel.
- 5. Waste Receptacle and Enclosure.** The revised submittal states that “waste collection from the existing building is via curb carts that are pulled to the site entrance on trash day.”
- 6. Landscaping.** The site contains relatively large natural areas with mature trees that will not be altered. No additional landscaping is proposed as part of this project.
- 7. Exterior Lighting.** Site lighting is limited to existing wall mounted fixtures on the building, which are depicted in the photographs on Sheet 3. The submittal also notes that no new lighting is proposed.

8. **Additional Considerations.** The revised submittal notes that the equipment previously stored on site has been removed, and depicts the structures not previously shown.
9. **Impact Assessment.** The submittal includes a revised Impact Assessment dated November 5, 2021.

In general, the revised Assessment states that the project is not expected to have an adverse impact upon natural features, stormwater, surrounding land, public services/utilities, or traffic and pedestrians.

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

Respectfully,  
**SAFEBUILT**



Brian V. Borden, AICP  
Michigan Planning Manager



December 8, 2021

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

**Re: Brighton Equestrian Club  
Site Plan Review No. 3**

Dear Mrs. Van Marter:

Tetra Tech conducted a third review of the Brighton Equestrian Club site plan and application resubmitted on November 15, 2021. The plans were completed by Greentech Engineering on behalf Brighton Equestrian Club. The development includes 97 acres at 7318 Herbst Road with an existing 7,040 square foot stable and arena building and an additional smaller building to the east of the larger barn. The petitioner is requesting to use their existing building as a commercial barn with events. We offer the following comments:

After reviewing the site and impact assessment we offer the following:

#### **GENERAL NOTES**

1. The proposed use should be reviewed and approved by the Fire Authority to ensure there is adequate fire protection and site access for hosting 150 people in the existing building. Written approval from the Fire Authority should be provided to the Township.
2. The use must be approved by the building department. Written approval from the Livingston County Building Department should be provided to the Township.

#### **TRAFFIC AND PAVEMENT**

1. Genoa Township Standards require that parking lots be paved with curb and gutter. Storm drainage facilities will also need to be incorporated into the parking lot improvements. The Petitioner does note proposed curb and gutter behind some of the proposed parking, but it does not appear that paving is proposed. The Planning Commission may choose to consider an aggregate parking lot as a Low Impact Development Alternative to the zoning requirements.

#### **SANITARY AND WATER SERVICES**

1. Increasing the number of guests in the facility will increase the loading on the existing septic system. Approval by the Livingston County Health Department has been provided to the Township via email.

We recommend the petitioner address the above comments prior to approval. Please call or email if you have any questions.

Sincerely,

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

Gary J. Markstrom, P.E.  
Vice President

A handwritten signature in blue ink, appearing to read 'Shelby Byrne'.

Shelby Byrne  
Project Engineer

**Tetra Tech**

3497 Coolidge Road, East Lansing, MI 48823  
Tel 517.316.3930 Fax 517.484.8140 www.tetratech.com



# BRIGHTON AREA FIRE AUTHORITY

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

November 30, 2021

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Brighton Equestrian Club - Special Use  
7318 Herbst Road  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on November 17, 2021 and the drawings are dated July 16, 2021 with latest revisions dated November 5, 2021. The project is based on an existing 42,106 square foot, separated mixed-use A-4/B of Type-VB construction. The owner/applicant is seeking a revision of their existing use permit from private use to allow for larger public events to be held at the facility. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

1. Under the previous reviews for occupancy the occupant load of the facility for assembly gatherings is limited to the main clubhouse portion of the structure and shall not take place in the arena. **(The applicant has noted and agrees that events will be limited to the clubhouse area ONLY.)**
2. The occupant load is limited to 99 people in the clubhouse if food and drinks are provided as this would constitute a change of use from a B to an A-2 and occupant loads 100 or greater would require automatic sprinklers. **(This has been noted on Sheet 3, however, the fire authority would like a notarized affidavit from the applicant placed on file acknowledging the occupant load limitation.)**
3. The pond is shown to be provided with a dry hydrant as originally requested for the project. The pond shall be provided with a means to maintain its water level if provided as the fire suppression water source. Suction pipe shall be no closer than 2-feet from the bottom and maintained with a minimum of 4-feet of water cover. Provide revised pond volume calculations that account for the minimum cover and depth of suction. **(The detail of the dry hydrant has been revised for compliance with the installation requirements. The revised volume has been provided and is in compliance with the required capacity. Additional details must be provided detailing the means of volume maintenance.)**
4. The suction pipe shall be a 6-inch diameter PVC pipe and provided with a 6-inch National Hose (NH) female-thread connection and provided with a threaded male cap. **(It is noted that the connections will be provided as required.)**
5. The fire flow calculation factor is inaccurate at 1,500 gallons per minute for 2-hours. The fire flow rate should be 3,500 gallons per minute for 3-hours. **(Re-calculation of the structure as two separate structures by area and materials, due to the presence of the fire wall. The capacity of the pond meets the flow rate and duration as required.)**





November 30, 2021

Page 2

Brighton Equestrian Club Special Use

7318 Herbst Road

Site Plan Review

6. Two-way emergency vehicle access roads shall be a minimum clear width of 26-feet wide. With a width of 26-feet, one side (building side) of the drive shall be marked as a fire lane. With proposed parking revising, the North drive is reduced in clear width to 24-feet and shall be revised to 26-feet. With parking along the building, the non-building side of the drive shall be maintained as a fire lane. **(Access drive widths around the pond and the north side of the barn have been revised to meet the required widths.)**

IFC D 103.6

IFC D 103.1

IFC D 102.1

IFC D 103.3

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

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

Cordially,

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

Rick Boisvert, FM, CFPS  
Fire Marshal

cc: Amy Ruthig [amy@genoa.org](mailto:amy@genoa.org)

**From:** [Matt Bolang](#)  
**To:** [Amy Ruthig](#)  
**Cc:** [Aaron Aumock](#)  
**Subject:** RE: Brighton Equestrian Club Special Use Submittal  
**Date:** Tuesday, August 10, 2021 4:35:58 PM  
**Attachments:** [image002.png](#)  
[image003.png](#)  
[image006.png](#)  
[image005.png](#)

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Hi Amy,

No issues on our end. New well and septic system installed in 2018. Should be adequate for normal use and small to medium sized gatherings. The owner should consider the use of portable toilets if larger events are planned. Routine sampling of the well for bacteria, nitrates and arsenic would be recommended going forward, but not a requirement.

-Matt

**Matt Bolang, MSA, REHS**  
**Deputy Health Officer**  
**Director of Environmental Health**  
Livingston County Health Department  
2300 East Grand River  
Howell, MI 48843

517-552-6870 | [www.lchd.org](http://www.lchd.org)



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**From:** Amy Ruthig <amy@genoa.org>  
**Sent:** Tuesday, August 10, 2021 3:52 PM  
**To:** Matt Bolang <MBolang@livgov.com>  
**Subject:** [EXT] Brighton Equestrian Club Special Use Submittal

**"The e-mail below is from an external source. Please do not open attachments or click links from an unknown or suspicious origin."**

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Good Afternoon,

I have attached the following for your review in regards to the Brighton Equestrian

# Impact Assessment for

**BRIGHTON EQUESTRIAN CLUB**

**7318 Herbst Road**

**Brighton, MI 48116**

**Prepared by:**



Date:

**April 2019**

**Revised November 5, 2021**

**Brighton Equestrian Club**  
**Impact Assessment Statement**

**Preparer (18.07.01)**

This Impact Assessment was prepared by :

**Nancy Merlo, Brighton Equestrian Club, 7318 Herbst Road, Genoa Township, with the help of GreenTech Engineering.**

**Location (18.07.02)**

The site is located along the southerly side of Herbst Road between Grand River Avenue and Dorr Road. The parcel identification number is 11-24-100-014. The site is approximately 95 Acres in size. The existing Brighton Equestrian Club is located on the property including the main building that includes a Clubhouse and indoor arena, stalls, along with a second accessory barn and a pavilion with several outdoor corrals. The remaining portion of the property is predominately farm area with a woodlot located near the southeast corner of the property. An aerial drawing is attached on Exhibit A.

**Impact on natural features (18.07.03)**

Natural features on the site range from a woodlot near the southeasterly corner of the site approximately 13 Acres in size, to rolling terrain throughout the northern and central portion of the site. The southwesterly portion of the site is lower and relatively flat. The wooded area in the southeasterly portion of the site is rather steep falling to the east to the existing lake. There is also a creek that runs through the central portion of the site as indicated on the site plan.

The soils on the site are generally sandy to sandy loams with the exception of the southwesterly portion of the site which is lower and comprised of more seasonably mucky soils. The aerial map of the site indicates darker areas where the more wet soils are located.

The southeasterly portion of the site includes a woodlot of approximately 13 acres of wooded area consisting of predominately, oaks, maple and hickory. There are also a few tree rows throughout the site along the field borders. The remainder of the non-developed site is currently farm fields.

The vast majority of the site is either farm land or wood lot. The existing building along with the associated gravel parking lot and accessory buildings take up approximately 3.5 acres (3.5%) of the 95 Acre site.

Since there are no new improvements proposed with this application, we do not anticipate any changes to the existing site natural features as part of this application.

**Impact on stormwater management (18.07.04)**

Currently the rainfall runoff that leaves the site does so by flowing toward the existing ditch that traverses the central portion of the site. The southeasterly portion of the subject property drains in an

easterly direction to the existing lake. The area immediately surrounding the existing clubhouse and arena building drain toward the existing pond located adjacent to the existing driveway along the westerly side of the existing building. No new stormwater management facilities are proposed as there are no proposed activities taking place.

The site is currently stabilized, therefore no new erosion control measures are proposed.

**Impact on surrounding land uses (18.07.05)**

*Conformance with the master plan:* The surrounding land uses consist of larger acreage farmland and acreage homesites to the west, and Interstate highway I-96 to the south. The townships future land use map designates the subject parcel and all surrounding parcels as minimum one acre lots. The minimum setback requirements for the LDR (1 Acre minimum lot) are 50 feet front yard, 30 feet side yard and 60 feet rear yard. The main building is over 630 feet to the neighboring residence to the east.

*Hours of Operation:* The horse boarding portion of the site is a continuous operation, but the clubhouse portion of the site generally operates between 8 am and 8 pm with the occasional event ending around 10 pm.

*Phasing:* There are no proposed changes to the site as it currently exists, therefore there no phasing is anticipated.

*Types of Events:* The types of events held in the clubhouse include but are not limited to the following:

- BCC club training and meeting events: Typically, 4-20 people, events are typically 2 hours in duration any time between 9 am and 9 pm.
- Louie R Merlo Foundation fundraising events: Typically, 80 – 99 people, held twice per year between 5 and 11 PM.

It should be noted that the above described use and event list has been taking place for the last couple years.

*Light & Noise Pollution:* The subject is currently lit with building mounted lights that are down lit. With the main building being over 630 feet away, none of the ambient light from the existing building reaches the neighboring residences. The operations of the subject property include the use of mowers, tractors, equipment and vehicles as part of the normal operations for a horse farm operation. Any activities associated with the clubhouse portion of the building are held indoors, therefore there is very little ambient noise at the neighboring properties as a result of the current use.

*Air Pollution:* Manure from the farm is loaded onto a trailer inside the barn and spread across the subject property. Upon the initial opening of the BCC, the applicant did receive requests from one neighbor to maintain a little more distance from the neighboring properties to the manure spreading areas. Since that time, the farm spreads the manure in the north and westerly portions of the property.

Dust: The applicant currently applies dust control to the driveway areas twice per year. The applicant is also willing to apply additional dust control on an as needed basis in the event of higher dust levels from extended dry periods.

In summary, the clubhouse and horse boarding/arena operations have been in operation for several years as described herein, and with no proposed change in use and/or activities, it is not anticipated that the impact on the surrounding uses will be noticed going forward.

**Impact on public facilities and services (18.07.06)**

This facility and its use, is not expected to have any impact on schools, police or fire. We expect on average 5-10 employees and 10-20 guests per day. We will occasionally have larger events where up to 90 guests can be expected. Parking for such events will be entirely contained on site. Furthermore, coming and going of guests will be spread out throughout the day causing unnoticeable impact on the surrounding roads.

**Impact on public utilities (18.07.07)**

Since the building is currently serviced by a private well and septic system, there is no impact to the townships water and/or waste water systems. The current site has received well and septic permits from the Livingston County Health Department and a Certificate of Occupancy from the Livingston County

There is currently a pond on the subject property that handles the storm runoff from the existing building and parking area. The pond was part of the original site plan approval for the project.

**Storage and handling of hazardous materials (18.07.08)**

No hazardous materials will be stored or handled. There are no known underground tanks on the subject property.

**Traffic Impact Study (18.07.09)**

Based on review of the institute of Transportation Engineers Trip Generation Manual and related studies and reports, a detailed traffic impact study is not warranted. Typical days, as noted above, will generate fewer than 30 visitors throughout the course of the day, falling far below the 100 directional trips during the peak hour of traffic. Furthermore, on days where events of up to 150 guests are held, the peak hour of traffic would be fewer than 50 vehicle trips, as the events will be spread out throughout the day.

**Historic and Cultural Resources (18.07.10)**

This proposal does not involve the alteration or demolition of any structures that are 50 years old, or older.

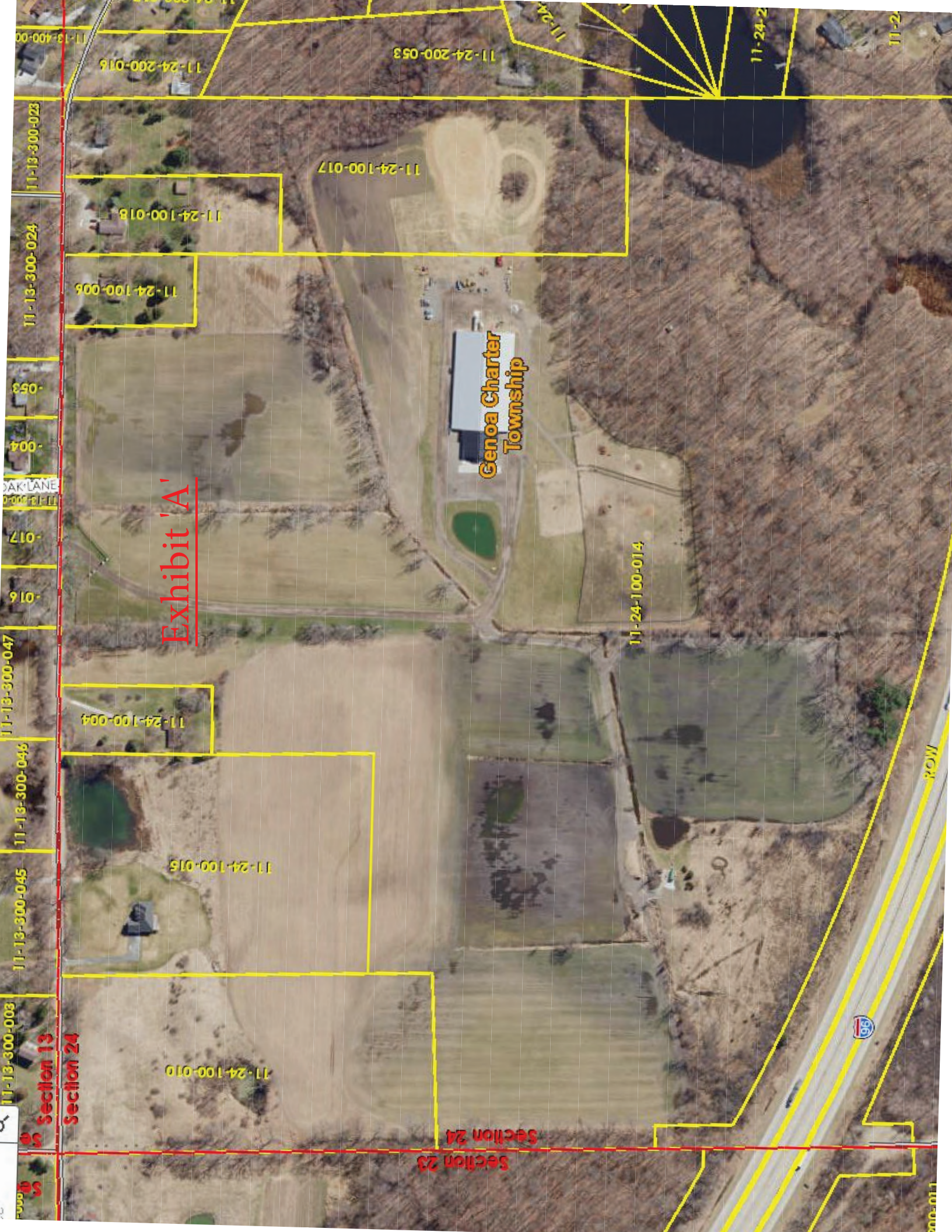
**Special Provision (18.07.11)**

There are no deed restrictions, protective covenants, master deed or association bylaws encumbering the subject property.

**List of Sources (18.07.12)**

The sources utilized in preparing report include personal knowledge of the subject property by the applicant/owner, aerial photography and partial topographic survey as prepared by GreenTech Engineering, and the Genoa Township ordinance.





Genoa Charter  
Township

Exhibit 'A'

DARK LANE

ROW

96

Section 23  
Section 24

Section 13  
Section 24

11-24-200-053  
11-24-200-016  
11-24-100-017  
11-24-100-018  
11-24-100-006  
11-24-100-004  
11-24-100-014  
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11-24-100-015  
11-24-100-010  
11-13-300-023  
11-13-300-024  
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**From:** [Kelly VanMarter](#)  
**To:** [Amy Ruthig](#)  
**Subject:** FW: Brighton Equestrian Club Summary  
**Date:** Monday, October 28, 2019 12:55:09 PM

---

Can you include this in the Brighton Equestrian File for the next submittal?

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)

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**From:** Nancy Merlo [mailto:[nancy@clubbec.com](mailto:nancy@clubbec.com)]  
**Sent:** Wednesday, July 17, 2019 6:37 AM  
**To:** Kelly VanMarter  
**Subject:** Brighton Equestrian Club Summary

Hi Kelley,

My apologies for the delay getting the following information to you; below you will find the list of activities we would like to include at the Brighton Equestrian Club:

### **Horseback Riding Social Events**

Through social events based around horses it is our goal to connect people in similar life circumstance to help make this world a better place. Be it, Grief Groups, Breast Cancer Survivors, Daddy Daughter events, Veterans, Moms or newly Empty-Nesters, there is nothing quite as inspirational, and therapeutic as some time with a horse and engaging conversation. Social events could include a small presentation, time with the horses and light refreshments.

### **Open House**

We host 3 Open House events annually in order to promote our business. Being tucked away from all major roads, we have little to no visibility resulting in no drive-by word-of-mouth marketing potential. There is no charge for an Open House event.

### **Community Meetings - capacity 12**

The conference room comfortably seats up to twelve guests with access to high-speed wireless internet, cable television, large screen display and white board. There is a small charge for the use of this room.

### **Corporate Meetings - capacity 50**

The Brighton Equestrian Club offers team building and leadership exercises with horses for companies looking to increase the effectiveness and productivity of their team. These events can be 1/2 day, full day or even up to two days. We work with local catering companies for breakfast/lunches and light snacks.

### **Artist Promotionals**

The Brighton Equestrian Club provides the perfect backdrop for authors, artists, and photographers to showcase their work. It is our hope that we will be able to support the local art community here in Brighton by providing an elegant space to feature their work.

### **Clubhouse Rental**

On the rare occasion a group is interested in renting our facility for their event, we do charge a fee. We have no control how these organizations choose to market their event. For example, the Brighton Chamber of Commerce hosted a very elegant Derby Luncheon for their Ladies Group and charged for admission. We would like to request that cover charges for admission be allowed for events.

Please let me know if you need anything further.

Nancy Merlo  
President

### **BRIGHTON EQUESTRIAN CLUB**

7318 Herbst Rd.  
Brighton, MI 48114  
[www.ClubBEC.com](http://www.ClubBEC.com)

O. 810.772.7612  
C. 248.866.1142



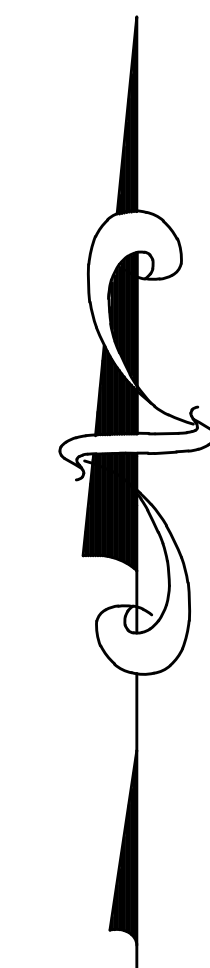
# CONSTRUCTION PLANS

for

# BRIGHTON EQUESTRIAN CLUB

## 7318 HERBST ROAD

GENOA TOWNSHIP, LIVINGSTON COUNTY, MICHIGAN



**SHEET INDEX:**  
 1 COVER SHEET  
 2 EXISTING CONDITIONS PLAN  
 3 SITE PLAN

**ZONING DATA:**  
 CURRENT ZONING: AG-AGRICULTURAL  
 FUTURE LAND USE: LOW DENSITY RESIDENTIAL

**SPECIAL LAND USE NARRATIVE:**

THIS IS A REQUEST FOR SPECIAL LAND USE OF THE BRIGHTON EQUESTRIAN CLUB WITH CURRENT AG ZONING. THE APPLICANT SEEKS APPROVAL FOR FUTURE LAND USE ZONED AS LDR IN ORDER TO HOST EVENTS THAT CATER TO LARGE AUDIENCES. THE DESIGN OF THE SEPTIC TANK AND DRAIN FIELD CAN ACCOMMODATE A MAXIMUM OCCUPANCY OF 150 PEOPLE. THERE IS ADEQUATE PARKING ON SITE FOR EVENTS AT MAXIMUM CAPACITY.

THE HORSES ON SITE ARE KEPT IN A SEPARATE ADJOINING BUILDING IN FULLY ENCLOSED STABLES WITH 12 FOOT HIGH WALLS AND A CENTRAL SPRAY SYSTEM FOR FLY CONTROL AND ODOR CONTROL MEASURES ELIMINATING ODOR, DUST, NOISE, AND WATER DRAINAGE IMPACTS TO THE ADJACENT BUILDING. THERE ARE NO OCCUPIED DWELLINGS WITHIN 100 FEET OF THE STABLES OR OUTDOOR CORRALS.

THE PRIMARY USE OF THIS SITE REMAINS AS A FACILITY FOR BOARDING AND RIDING HORSES. TYPICAL DAILY OPERATIONS INVOLVE RIDING HORSES THROUGHOUT THE FACILITY, INCLUDING THE ACCESS DRIVE AND PARKING LOT. THE APPLICANT IS REQUESTING A WAIVER FROM ZONING ORDINANCE 14.06.01 REQUIRING PARKING LOTS AND DRIVEWAYS TO BE PAVED ALLOWING THE EXISTING GRAVEL TO REMAIN FOR THE SAFETY OF THE ANIMALS THAT WILL BE WALKING ON IT. A CHLORIDE SPRAY IS APPLIED TWICE A YEAR TO THE GRAVEL DRIVE AS A DUST CONTROL MEASURE TO PREVENT OFFSITE IMPACTS OF DUST DUE TO INCREASED TRAFFIC FROM LARGE EVENTS.

**NOTE:**

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AS DISCLOSED BY AVAILABLE UTILITY COMPANY RECORDS AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE COMPANY. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF A CONFLICT IS APPARENT.

**APPLICANT:**  
 BRIGHTON EQUESTRIAN CLUB  
 7318 HERBST ROAD  
 BRIGHTON, MI 48114  
 PHONE (810) 772-7612  
 CONTACT: NANCY MERLO

**SITE CIVIL:**  
 GREENTECH ENGINEERING, INC.  
 51147 PONTIAC TRAIL  
 WIXOM, MI 48393  
 PHONE (248) 668-0700  
 FAX (248) 668-0701  
 CONTACT: DAN LECLAIR

**GREENTECH**  
ENGINEERING, INC.

CIVIL ENGINEERS & LAND SURVEYORS

51147 Pontiac Trail, Wixom, MI 48393  
 Phone: (248) 668-0700 Fax: (248) 668-0701

CLIENT: BRIGHTON EQUESTRIAN CLUB

COVER SHEET

SECTION: 24  
TOWNSHIP 2 N  
GENOA TOWNSHIP  
LIVINGSTON COUNTY  
MICHIGAN

RANGE: 5 E.

REVISED

2021-11-5 PER REVIEW

SEAL

DATE: 7-16-2021

DRAWN BY: RMS

CHECKED BY: DJL

FBK: --

SCALE: HOR 1" = 80 FT.  
VER 1" = -- FT.

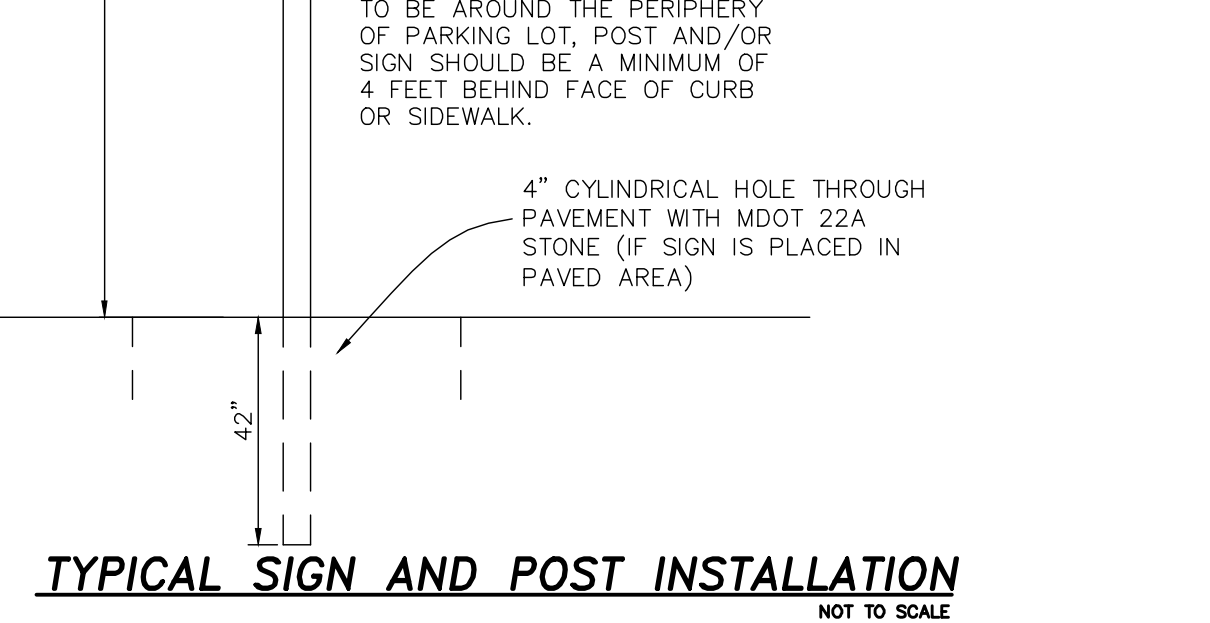
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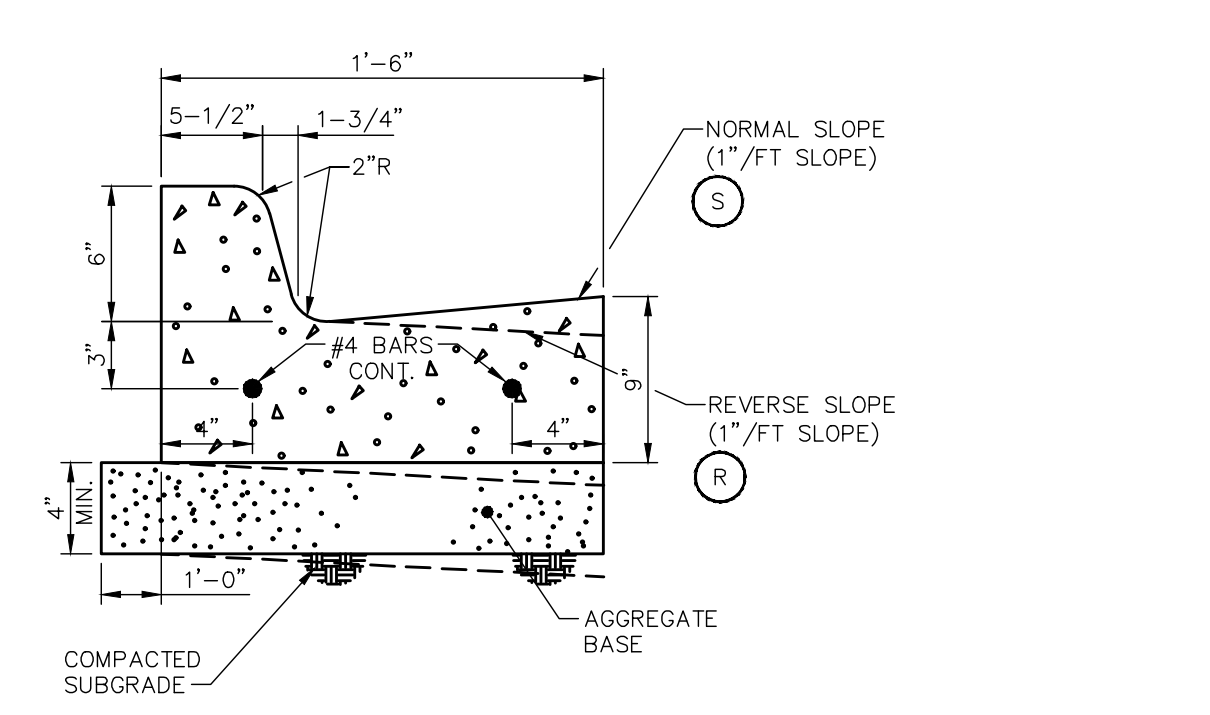






**SIGNING & STRIPING NOTES:**

- ALL SIGNS SHALL COMPLY WITH THE LATEST STANDARDS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
- SINGLE SIGNS WITH NOMINAL DIMENSIONS OF 12"x18" OR SMALLER SHALL BE MOUNTED ON A GALVANIZED 2 LB. U-CHANNEL POST. MULTIPLE SIGNS AND/OR SIGNS WITH NOMINAL DIMENSIONS GREATER THAN 12"x18" SHALL BE MOUNTED ON A GALVANIZED 3 LB OR GREATER U-CHANNEL POST AS DIRECTED BY THE WEIGHT OF THE PROPOSED SIGNS.
- ALL SIGNS SHALL BE INSTALLED WITH A BOTTOM OF SIGN HEIGHT BEING 7" FROM FINAL GRADE.
- ALL SIGNING SHALL BE PLACED 2' FROM THE FACE OF THE CURB OR EDGE OF THE NEAREST SIDEWALK TO THE NEAR EDGE OF THE SIGN.
- TRAFFIC CONTROL SIGNS SHALL USE THE FHWA STANDARD ALPHABET SERIES.
- TRAFFIC CONTROL SIGNS SHALL HAVE HIGH INTENSITY PRISMATIC (HIP) SHEETING TO MEET FHWA RETROREFLECTIVITY REQUIREMENTS.



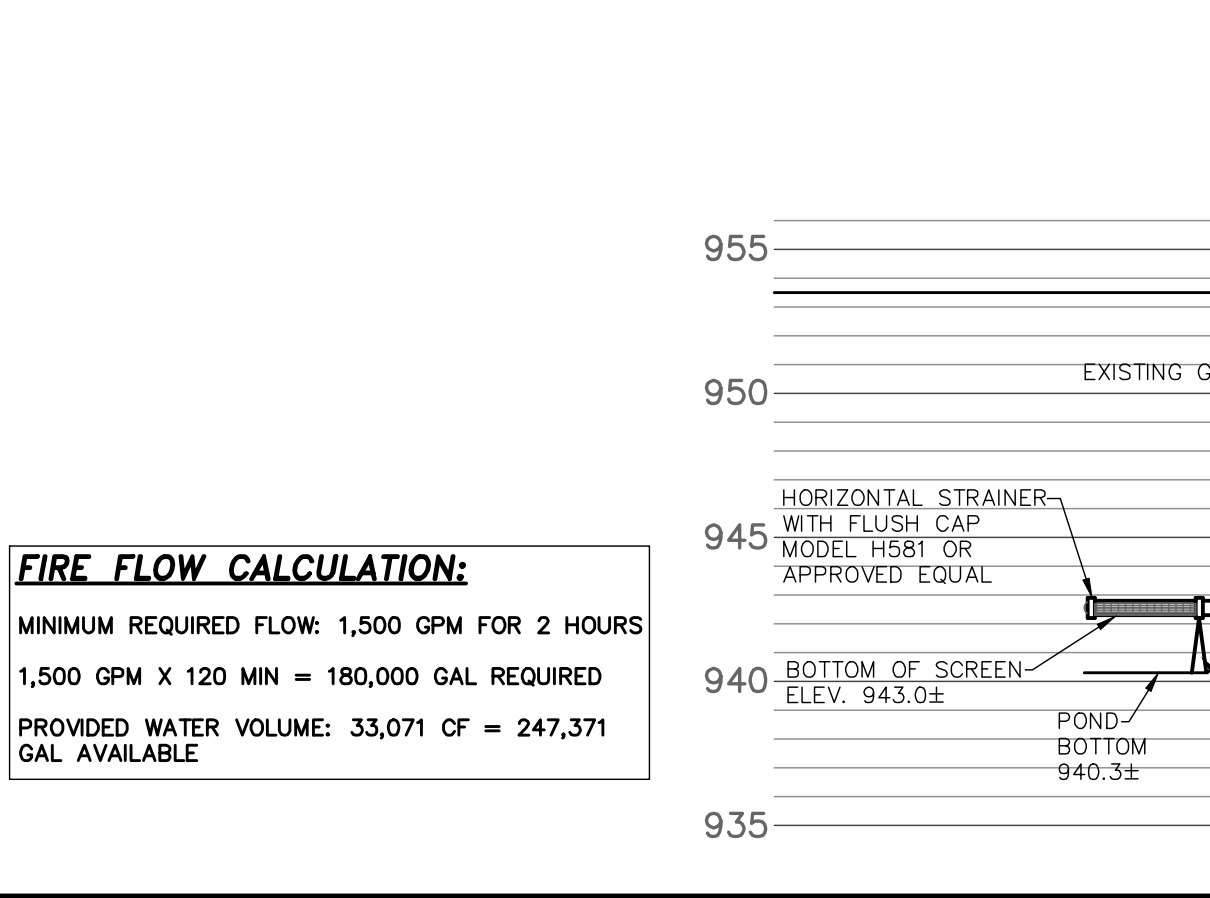
**18" CONC. CURB & GUTTER**

NO SCALE

**POND VOLUME**

ELEVATION	AREA	AVG. AREA	HEIGHT	VOLUME	CUM. VOLUME
944	1,454	1,811	1.0	1,811	1,811
945	2,167	2,586	1.0	2,586	4,396
946	3,004	3,483	1.0	3,483	7,879
947	3,961	4,497	1.0	4,497	12,376
948	5,033	5,626	1.0	5,626	18,002
949	6,219	6,864	1.0	6,864	24,866
950	7,509	8,205	1.0	8,205	33,071
951	8,901				

**NOTE:**  
POND VOLUME DETERMINED BY BATHOMETRIC SURVEY COMPLETED 10/26/2021 BY GREENTECH ENGINEERING, INC.



**MAXIMUM OCCUPANCY:**

OVERALL SITE AREA: 97 ACRES

MAIN BUILDING AREA: 27,000 SF  
ARENA/INDOOR STABLE: 37,000 SF  
CLUBHOUSE: 4,852 SF  
TOTAL BUILDING AREA: 42,100 SF

BUILDING USE GROUP: B

MAXIMUM CLUBHOUSE CAPACITY: 99 PEOPLE

**ACCESS ROAD NOTE:**

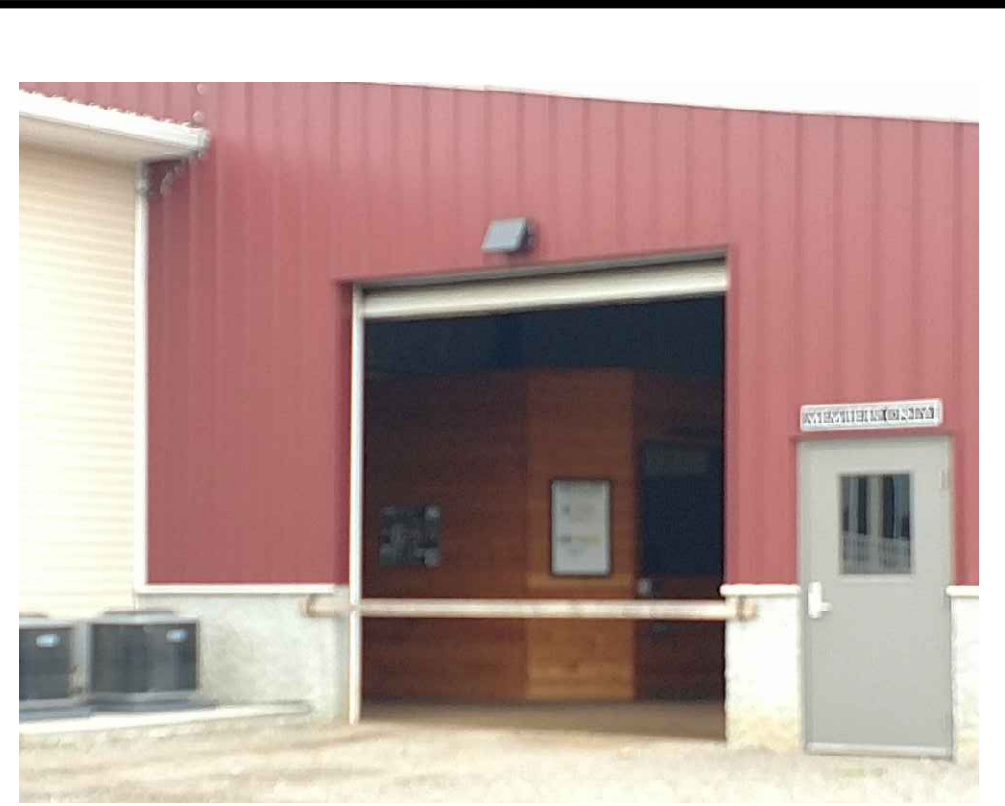
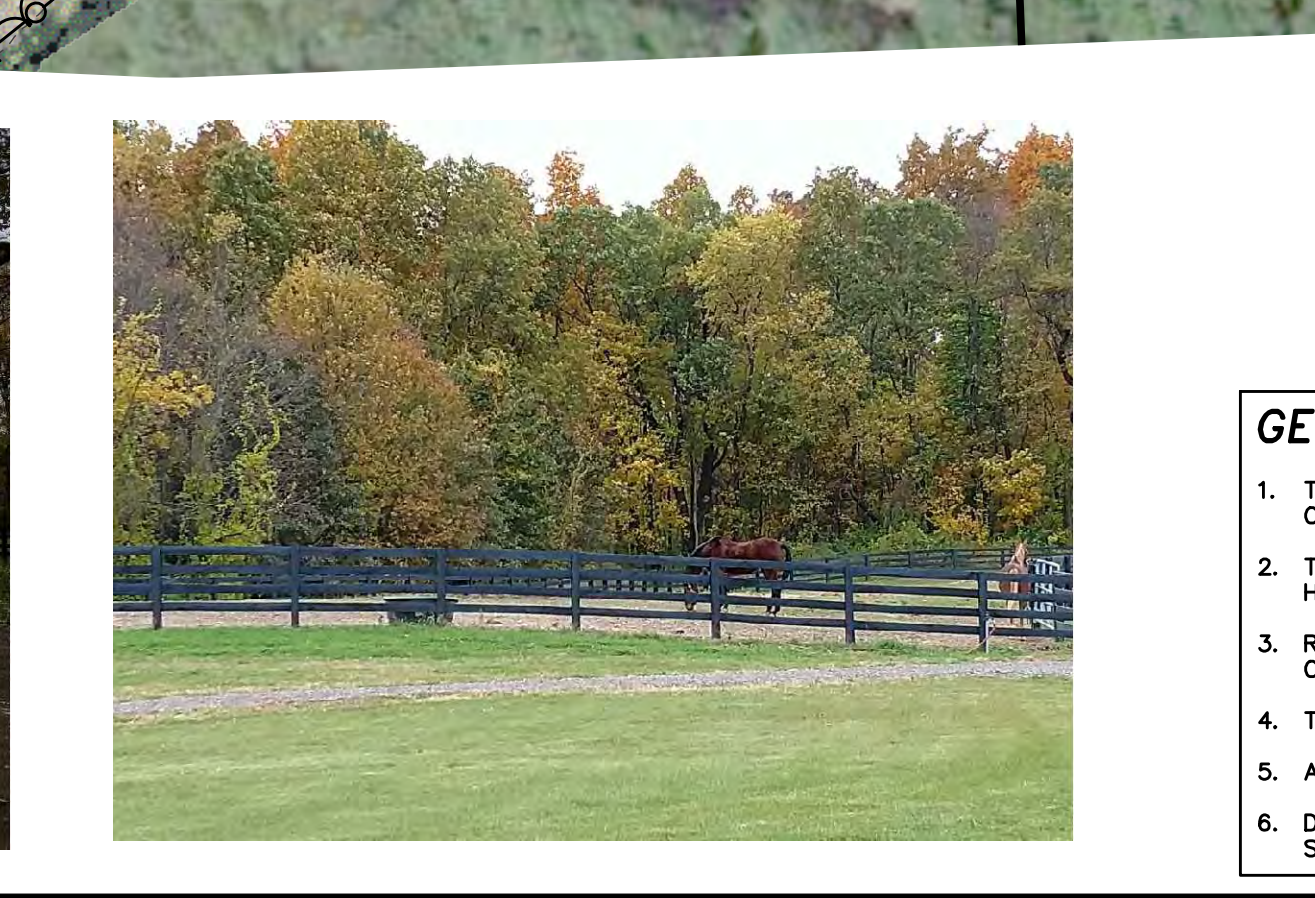
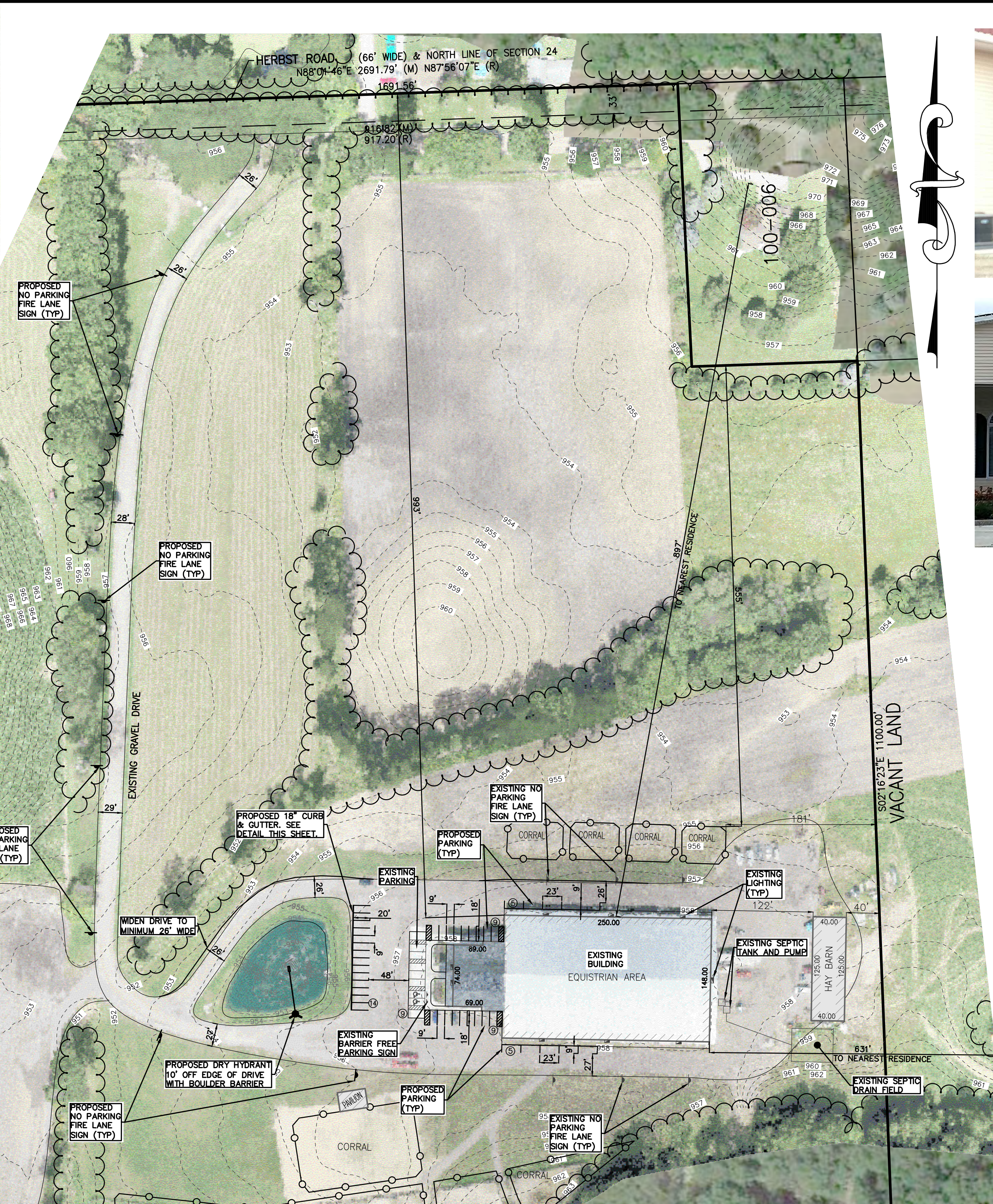
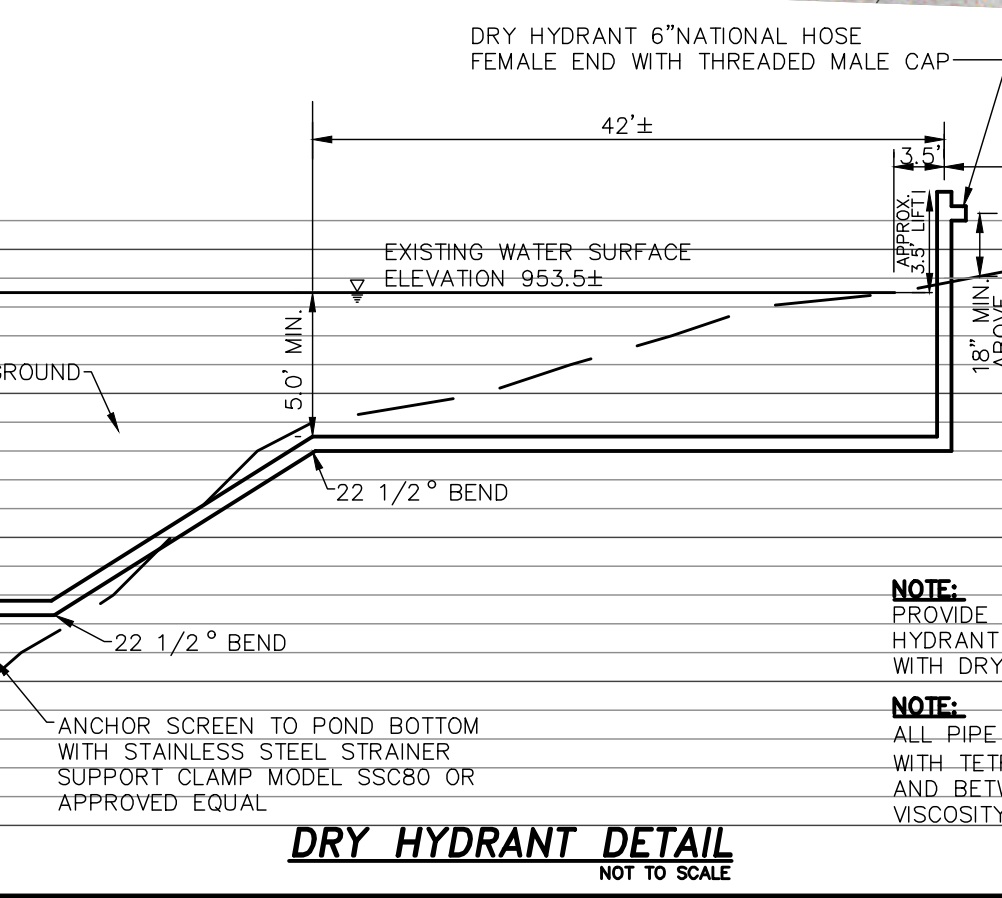
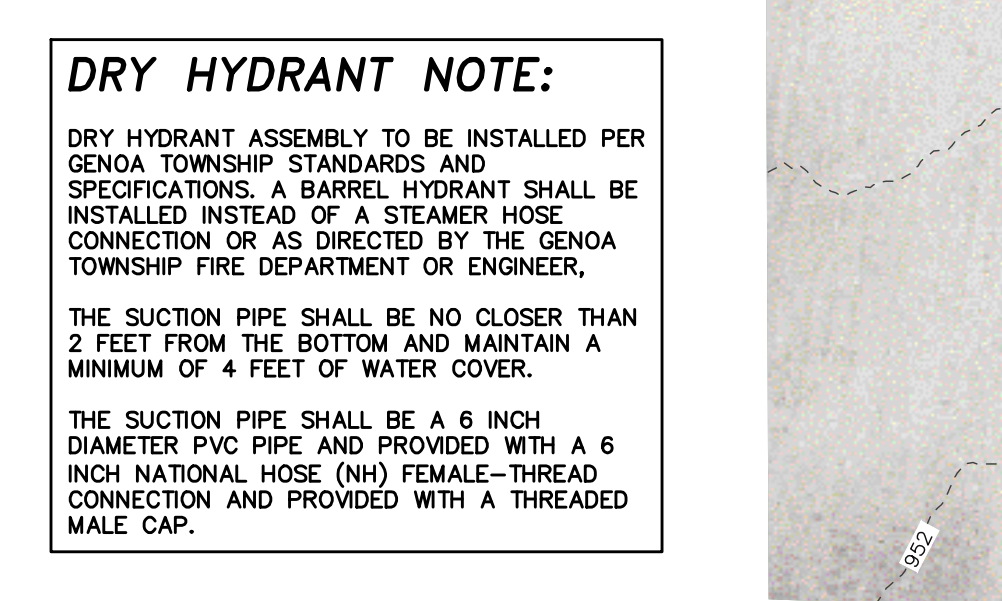
ACCESS ROAD AND PARKING LOT WERE WERE LOAD TESTED WITH A SEMI-TRUCK LOADED WITH GRAVEL TOTALING 97,840 LBS. IT WAS OBSERVED THAT THE DRIVING SURFACE WAS STABLE AND CAPABLE OF SUPPORTING A FIRE TRUCK. REFER TO HASTINGS TESTING ENGINEERS AND ENVIRONMENTAL INC. LETTER DATED FEB. 8, 2020.

**DRY HYDRANT NOTE:**

DRY HYDRANT ASSEMBLY TO BE INSTALLED PER GENOA TOWNSHIP STANDARDS AND SPECIFICATIONS. A BARREL HYDRANT SHALL BE INSTALLED INSTEAD OF A STEAMER HOSE CONNECTION OR AS DIRECTED BY THE GENOA TOWNSHIP FIRE DEPARTMENT OR ENGINEER.

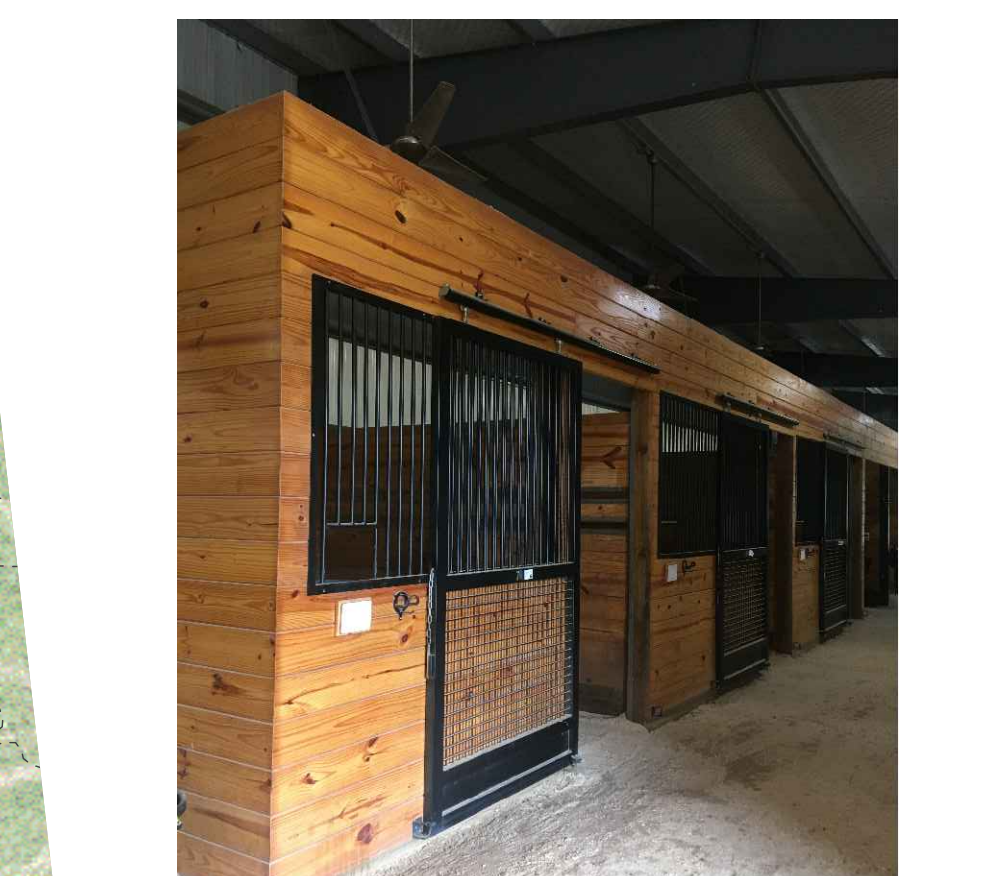
THE SUCTION PIPE SHALL BE NO CLOSER THAN 2 FEET FROM THE BOTTOM AND MAINTAIN A MINIMUM OF 4 FEET OF WATER COVER.

THE SUCTION PIPE SHALL BE A 6 INCH DIAMETER PVC PIPE AND PROVIDED WITH A 6 INCH NATIONAL HOSE (NH) FEMALE-THREAD CONNECTION AND PROVIDED WITH A THREADED MALE CAP.



**LIGHTING NOTE:**  
NO ADDITIONAL LIGHTING IS PROPOSED.

**LANDSCAPING NOTE:**  
NO ADDITIONAL LANDSCAPING IS PROPOSED.



**HORSE STABLE:**  
HORSE STABLES ARE FULLY ENCLOSED WITH 12 FT HIGH WALLS AND SLIDING GATE. PROPOSED MAXIMUM CAPACITY: 99 PEOPLE

**SEPTIC SYSTEM CAPACITY:**  
EXISTING SEPTIC TANK SIZE: 1500 GAL  
EXISTING DRAIN-FIELD SIZE: 2000 SF  
EXISTING SEPTIC TANK SEAT CAPACITY:  
SEWAGE FLOW: 5 GAL/SEAT  
1500 GAL / 5 GAL/SEAT = 300 SEATS CAPACITY

EXISTING DRAIN FIELD CAPACITY:  
SOIL TYPES IN DRAIN-FIELD: FINE SAND/LOAMY SAND  
MAX ACCEPTABLE APPLICATION RATE: 0.50 GAL/SF  
2000 SF X 0.5 GAL/SF X 0.75 SAFETY FACTOR = 750 GAL  
750 GAL / 5 GAL/SEAT = 150 SEATS  
MAXIMUM ALLOWABLE SEPTIC CAPACITY= 150 PEOPLE

**PARKING DATA:**

PROPOSED PARKING REQUIRED:

ONE (1) SPACE FOR EACH THREE (3) PERSONS  
MAXIMUM OCCUPANCY = 99 PEOPLE  
1 SPACE X 99 PEOPLE / 3 = 33 SPACES REQUIRED

TOTAL PARKING REQUIRED: 33 SPACES, 2 BARRIER-FREE  
TOTAL PARKING PROVIDED: 51 SPACES, 2 BARRIER-FREE

**GENERAL NOTES:**

- THERE ARE 34 HORSES KEPT ON SITE. 95 HORSES ARE ALLOWED PER ORDINANCE.
- THE MAIN BUILDING IS 27 FEET AT THE HIGHEST POINT. MAXIMUM BUILDING HEIGHT ALLOWED IS 35 FEET.
- REFUSE IS HAND CARTED TO THE STREET FOR PICKUP USING A MAXIMUM OF 4 CURB CARTS. MANURE IS SPREAD ACCORDING TO M.D.A.R.D.
- THERE ARE NO OCCUPIED DWELLINGS ON THIS SITE.
- A CHLORIDE SPRAY IS USED ON GRAVEL TWICE A YEAR FOR DUST CONTROL.
- DEODORIZING SPRAY SYSTEM AND FLY SPRAY ARE USED IN THE HORSE STABLE AREA AND DISPERSED BY FAN THROUGHOUT THE STABLES.

**GREENTECH ENGINEERING, INC.**  
CIVIL ENGINEERS & LAND SURVEYORS

51147 Pontiac Trail, Wixom, MI 48393  
Phone: (248) 668-0700 Fax: (248) 668-0701



CLIENT: BRIGHTON EQUESTRIAN CLUB

**SITE PLAN**

7318 HERBST ROAD  
TOWNSHIP 2 N  
GENOA TOWNSHIP  
LIVINGSTON COUNTY  
MICHIGAN

SECTION: 24

RANGE: 5 E.

REVISED 2021-11-5 PER REVIEW

DATE: 7-16-2021

DRAWN BY: RMS

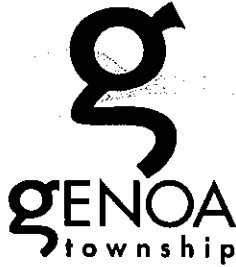
CHECKED BY: DJL

SCALE FOR 1"=80 FT. VER 1"= FT.

3

16-265





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

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

APPLICANT NAME & ADDRESS: Community Bible Church, 7372 Grand River Ave, Brighton, MI 48114  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Community Bible Church, 7372 Grand River Ave, Brighton, MI 48114

SITE ADDRESS: 7372 Grand River Ave, Brighton, MI 48114 PARCEL #(s): 4711-13-300-055

APPLICANT PHONE: ( 810 ) 227-2255 OWNER PHONE: ( 810 ) 227-2255


OWNER EMAIL: chip@communitybible.net

LOCATION AND BRIEF DESCRIPTION OF SITE: This is the site of Community Bible Church which  
is on the south side of Grand River Avenue between Euler Rd and Genoa Business Park.

BRIEF STATEMENT OF PROPOSED USE: Site will continue to function as Community Bible  
Church. Project proposes a parking lot expansion to accommodate church growth.

THE FOLLOWING BUILDINGS ARE PROPOSED: No buildings are proposed as part of this project.

**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: 

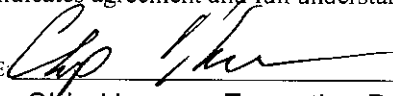
ADDRESS: 7372 Grand River Ave, Brighton, MI 48114

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

1.) Scott Tousignant, P.E. of Boss Engineering at scottt@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: 11/17/21  
PRINT NAME: Chip Herrera, Executive Pastor PHONE: 810-227-2255  
ADDRESS: 7372 Grand River Ave, Brighton, MI 48114



December 8, 2021

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>	Community Bible Church – Site Plan Review #1
<b>Location:</b>	7372 Grand River Avenue – southwest corner of Grand River and Harte Drive
<b>Zoning:</b>	GCD General Commercial District

Dear Commissioners:

At the Township’s request, we have reviewed the submittal from Community Bible Church requesting site plan review/approval for a parking lot expansion (plans dated 11/22/21).

**A. Summary**

1. The excess parking proposed requires Planning Commission approval in accordance with Section 14.02.06.
2. The applicant must provide evidence supporting the need for excess parking.
3. If any existing plantings are in poor condition, they should be removed and replaced as part of this project.
4. The applicant must address any comments provided by the Township’s engineering consultant and/or the Brighton Area Fire Authority.

**B. Proposal/Process**

The applicant proposes construction of a new 73-space parking lot on the west side of the site.

The proposed parking lot expansion is identified on the site plan as “Lot D” and includes vehicular connection to the existing parking lot and main drive aisles, as well as new lighting and landscaping.

Per Section 18.02, parking lot expansions of more than 5 new spaces requires site plan review by the Planning Commission.

As such, the Planning Commission has approval authority over the site plan, while a recommendation to the Township Board is needed for the Environmental Impact Assessment.





*Aerial view of site and surroundings (looking north; prior to recent remodel/expansion)*

**C. Site Plan Review**

- 1. Dimensional Requirements.** Given the nature of the proposal, the only GCD dimensional requirements that apply are parking lot setbacks and impervious surface lot coverage.

Required setbacks are met, including the 25-foot natural features setback from the nearby wetland.

Sheet C3 includes calculations noting compliant impervious surface lot coverage.

- 2. Vehicular Circulation.** The new parking lot includes compliant drive aisle widths.

The applicant must address any comments provided by the Township’s engineering consultant or the Brighton Area Fire Authority with respect to vehicular circulation.

- 3. Parking.** The parking lot has been reviewed for compliance with the standards of Article 14, as follows:

	<b>Required</b>	<b>Proposed</b>	<b>Comments</b>
<b>Parking Spaces</b> Churches and similar places of worship (1 space for each 3 seats in the main unit of worship)	203	212 existing 73 proposed 285 total	14.02.06 requires PC approval for parking above 120% of the minimum requirement. Proposal entails 140%. Applicant must submit evidence demonstrating the need for excess parking.
<b>Barrier Free Spaces</b>	8	8 existing	In compliance
<b>Dimensions</b> Spaces (75 to 90-degree) Drive aisle width (two-way)	9’ x 18’ 24’	9’ x 18’ 24’ (minimum)	In compliance In compliance
<b>Construction</b>	Looped striping Curbing on all sides	Looped striping Curbing around proposed lot	In compliance In compliance

**4. Exterior Lighting.** There are 3 light poles in the proposed parking lot.

Details note the use of shielded, downward directed LED fixtures mounted at a height of 20'. The photometric plan notes compliant intensities both on-site, and along property lines.

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

Standard	Required	Proposed	Notes
Parking lot (development area only)	5 canopy trees 490 SF landscaped area	5 canopy trees 500+ SF landscaped area	In compliance

The plan also provides 14 new shrubs along the front of the building near Harte Drive.

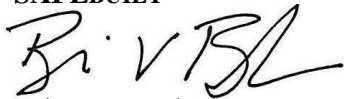
Lastly, if any existing plantings are in poor condition, they should be removed and replaced as part of this project (if approved).

**6. Impact Assessment.** The submittal includes an Environmental Impact Assessment dated November 22, 2021.

In summary, the Assessment states that the proposed parking lot expansion is not expected to have an adverse impact upon natural features, stormwater, surrounding land, public services/utilities, or traffic and pedestrians.

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

Respectfully,  
**SAFE BUILT**

  
Brian V. Borden, AICP  
Michigan Planning Manager



December 8, 2021

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

**Re: Community Bible Parking Lot Addition  
Site Plan Review No. 1**

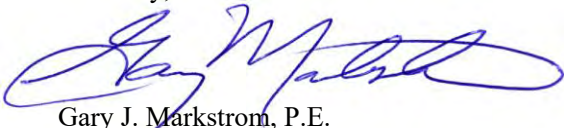
Dear Mrs. Van Marter:

Tetra Tech conducted a review of the proposed Community Bible Parking Lot Addition site plan last dated November 22, 2021. The plans and impact assessment were submitted by Boss Engineering on behalf of Community Bible Church. The site is on a 9.24-acre parcel located on the south side of Grand River Avenue, just west of Harte Drive. The site includes an existing church and the Petitioner is proposing a parking addition to their existing parking lot.

The proposed parking lot meets Township standards and the existing detention basin and storm sewer on site were designed for the full build out of the site, including future building additions and parking. Therefore, we have no engineering related concern to the proposed parking expansion.

Please call or email if you have any questions.

Sincerely,



Gary J. Markstrom, P.E.  
Vice President



Shelby Byrne  
Project Engineer



# BRIGHTON AREA FIRE AUTHORITY

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

---

November 30, 2021

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Community Bible Church - Parking Lot Addition  
7372 Grand River Road  
Genoa Twp., MI

Dear Kelly:

The Brighton Area Fire Department has reviewed the above-mentioned site plan. The plans were received for review on November 24, 2021 and the drawings are dated November 22, 2021. The project is based on the site lateration to accommodate additional parking. The plan review is based on the requirements of the International Fire Code (IFC) 2021 edition.

1. Existing access roads to the site shall be maintained during construction. Access roads shall be constructed to be capable of supporting the imposed load of fire apparatus weighing at least 84,000 pounds.

#### **IFC D 102.1**

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".

Rick Boisvert, FM, CFPS  
Fire Marshal

cc: Amy Ruthig [amy@genoa.org](mailto:amy@genoa.org)

**IMPACT ASSESSMENT  
FOR  
SITE PLAN PETITION  
"COMMUNITY BIBLE CHURCH – PARKING LOT EXPANSION"  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**COMMUNITY BIBLE CHURCH  
7372 GRAND RIVER  
BRIGHTON, MICHIGAN 48114  
(810) 227-2255**

Prepared by:

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

November 22, 2021

**14-047-7 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 By :  
Scott Tousignant, P.E.  
BOSS ENGINEERING COMPANY  
Civil Engineers, Land Surveyors, Landscape Architects and Planners  
3121 E. Grand River  
Howell, MI 48843  
(517) 546-4836

Prepared For :  
Community Bible Church  
7372 Grand River  
Brighton, MI 48114  
(810) 227-2255

### **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 9.24 acre site is located on the south side of Grand River immediately west of Harte Dr and across from Euler Rd. The subject property is currently the Community Bible Church Facility. There is the existing Church building, paved parking lots, and detention basin. The south end of the property contains a natural area with shrub/scrub vegetation and a wetland. There is an established tree row along Harte Dr just off of the east side of the subject property.

### **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.**

Resources utilized to study the natural features of the site included an on-site visit, aerial photos from Google Earth, a web soil survey prepared by the USDA, Wetlands Inventory Maps prepared by the MDEQ as well as resources prepared by the Huron River Watershed Council and other Livingston County Natural resources agencies.

The entire northern portion of the property is the newly constructed church facility with all associated parking, sidewalks, and utility infrastructure. The developed site slopes north to south and is served by a stormwater sewer system and detention basin that was constructed as part of the church expansion in 2020.

The soils on site consist of loam, loamy sand and muck. The soils shown on the USDA map are consistent with the field assessment of the upland and low land areas found on site. The land cover identified in the field is also consistent with the soils which consist of impervious surface, compacted lawn area, wetland and wooded shrub scrub areas. Given that the site has already been developed to accommodate the future parking that is now proposed, there will not be any tree removal nor any natural features disturbance. Stormwater for all future impervious surfaces had been accounted for in the design and construction of the storm water management system.

**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.**

Topography on the site ranges from a low of 961.81 at the wetland edge to a high of 992.54 at the north central portion of the property near Grand River Avenue. The property is undulating, but largely drains from the north to the south toward a wetland system that extends off the property.

The land cover found in the field consisted of three different types; impervious surface (parking lot, building), wetland, wooded/lawn area including shrub scrub.

The existing storm system has been designed to accommodate the church facility that was constructed in 2020 as well all future parking lot and building expansions that were anticipated. The proposed parking lot was one of the indicated future impervious surfaces and thus has been accommodated in the stormwater calculations.

Soil erosion measures will be utilized throughout the construction process to reduce the risk of erosion and sedimentation. This will be accomplished through the use of silt sacks placed in catch basins, and silt fence installed along the perimeter of the disturbed area.

**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.**

As previously stated the site is the current home of Community Bible Church. The use of the site conforms with development patterns of the surrounding area and will feature an expansion of the existing parking lot.

In general, the site will see an increase in use due to the expansion of the parking. The new parking lot will be illuminated but will have no adverse impacts on adjacent properties as the lighting will be provided to meet Township Ordinance.

**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 new parking lot is proposed to accommodate the growth the Church has seen since the expansion of its facility in 2020. Additional parking spaces will alleviate some pressure on the parking lot particularly between the two Sunday services as people come and go. The new parking lot does not impact local school districts, or other public services.

**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.**

The existing Church is currently served by M.H.O.G public water and Genoa Township public sanitary sewer. Given the use of the building and peak usage times being Sunday mornings the impact on sanitary and water is anticipated to be minimal. The sites drainage is controlled via a storm sewer system and detention basin that was installed as part of the church expansion project in 2020.

**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.

**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. 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 area is under 10 acres and thus a traffic study is not required.

The site is serviced by a 5-lane road which includes a left turn lane. There are two points of ingress/egress for the site; one direct on Grand River and the other to Harte Drive (which connects to Grand River).



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

None.

**K. 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 COMMUNITY BIBLE CHURCH PARKING LOT

## PART OF NORTH 1/4 CORNER, SECTION 13, T2N-R5E GENOA TOWNSHIP, LIVINGSTON COUNTY, MI

### PROPERTY DESCRIPTION:

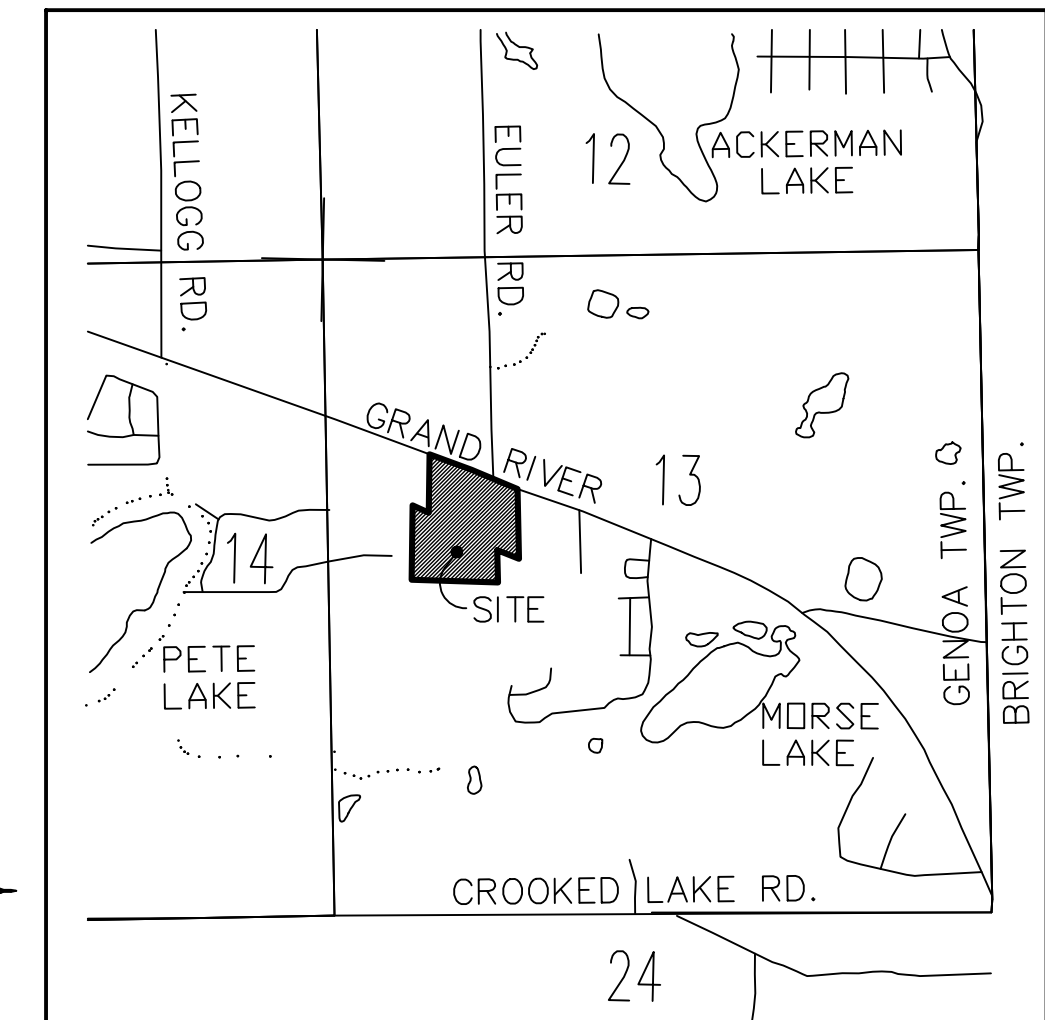
**PARCEL DESCRIPTION (AS SURVEYED) (4711-13-300-055):**  
Part of the Northwest 1/4 of Section 13, T2N-R5E, Genoa Township, Livingston County, Michigan, more particularly described as follows: Commencing at the West 1/4 Corner of Section 13, thence along the East-West 1/4 line of Section 13, as previously surveyed and monumented, S 88°51'48" E, 1341.91 feet, to the POINT OF BEGINNING of the Parcel to be described, said point also being the Southwest Corner of the Southeast 1/4 of the Northwest 1/4 of Section 13, as monumented; thence N 00°39'48" E, 460.60 feet (recorded as N 00°41'35" E, 461.41 feet); thence S 65°23'01" E, 110.15 feet (recorded as 110.00 feet); thence N 00°50'02" E, 363.14 feet (recorded as N 00°34'55" W, 362.88 feet); thence along the Southerly Right of Way line of Grand River Avenue (50 foot wide 1/2 Right of Way), on the following two (2) courses: 1) S 89°30'24" E, 275.61 feet (recorded as S 71°02'45" E, 272.00 feet and S 71°06'30" E, 3.42 feet); 2) S 67°16'23" E, 312.61 feet (recorded as S 68°46'30" E, 312.69 feet), (said point bearing the following two (2) courses, from the Center of Section 13: 1) along the North-South 1/4 line of Section 13, as previously surveyed and monumented, N 00°04'53" E, 315.11 feet (recorded as N 01°03'38" W, 314.82 feet); 2) along the Southerly Right of Way line of Grand River Avenue (50 foot wide 1/2 Right of Way), N 67°16'23" W, 748.03 feet (recorded as N 68°46'30" W, 749.36 feet); thence S 00°04'47" W, 430.35 feet (recorded as S 01°23'01" E, 430.25 feet); thence N 66°58'10" W (recorded as N 68°25'53" W), 145.05 feet; thence S 00°07'44" W (recorded as S 01°20'04" E), 206.68 feet; thence N 87°55'46" W (recorded as N 89°46'13" W), 523.39 feet, to the POINT OF BEGINNING, containing 9.24 acres, more or less, and subject to the rights of the public over the existing Grand River Avenue. Also subject to any other easements or restrictions of record.

Description containing parcels: 4711-13-300-007, 4711-13-300-008, & 4711-13-300-035

### CONSTRUCTION NOTES

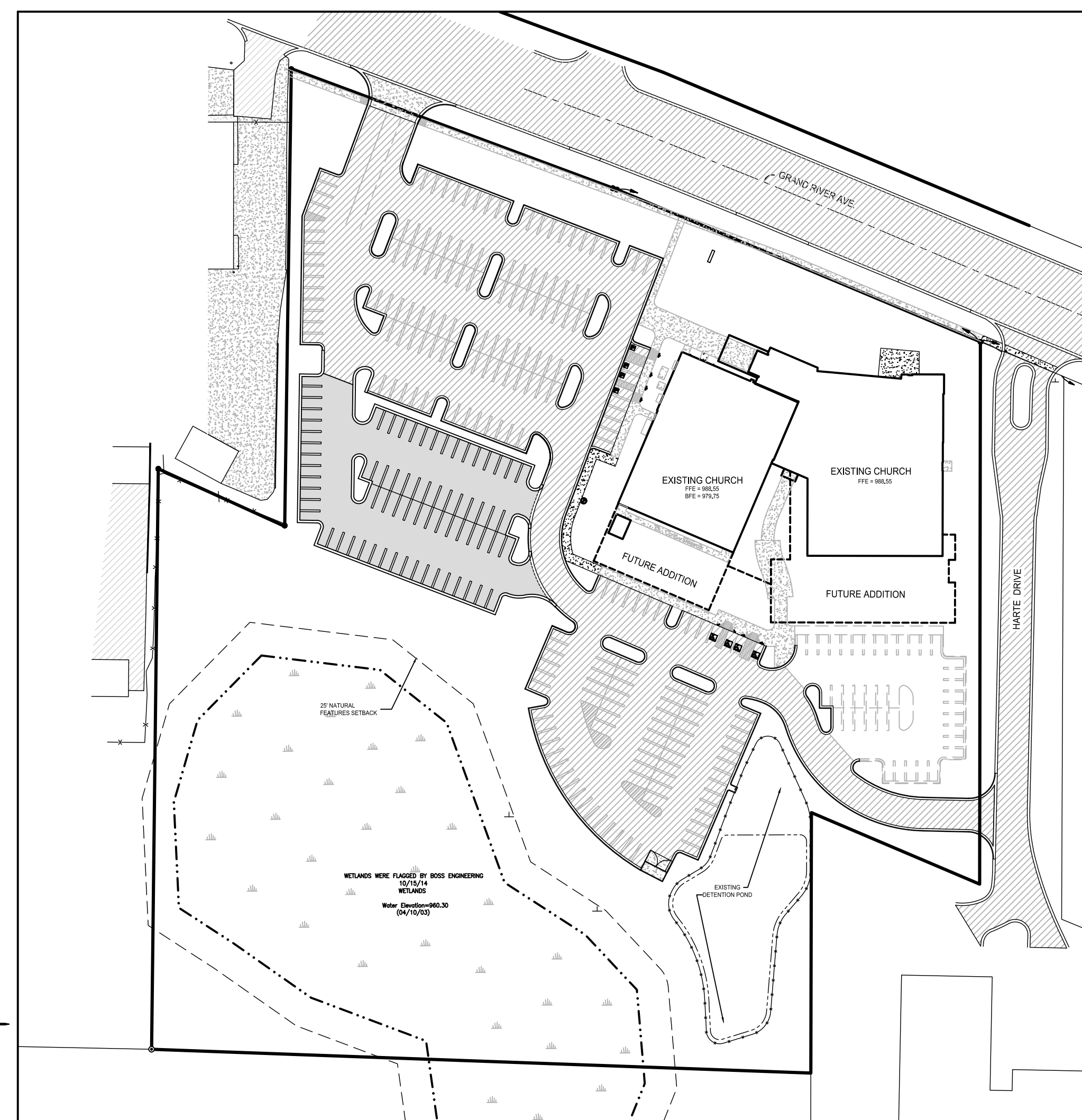
THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

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.



LOCATION MAP

NO SCALE



OVERALL SITE MAP

NO SCALE

### SHEET INDEX

SHEET NO.	DESCRIPTION
C1	COVER SHEET
C2	EXISTING CONDITIONS & DEMOLITION PLAN
C3	SITE PLAN
C4	GRADING & SESC PLAN
C5	LANDSCAPE PLAN
BY OTHERS	
1	SITE PHOTOMETRIC PLAN (BY GASSER BUSH)

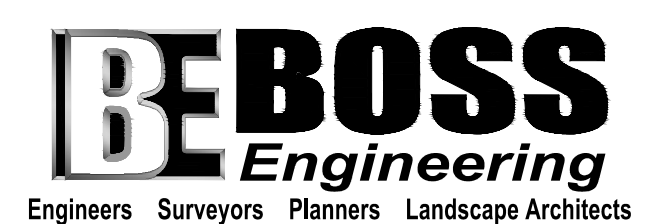
### COMMUNITY BIBLE CHURCH PARKING LOT



PREPARED FOR:

COMMUNITY BIBLE CHURCH  
7372 GRAND RIVER AVENUE  
BRIGHTON, MI 48114  
CONTACT: CHIP HERRERA  
PHONE: 810-227-2255

PREPARED BY:



3121 E. GRAND RIVER AVE.

HOWELL, MI. 48843

517.546.4836 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.

C1

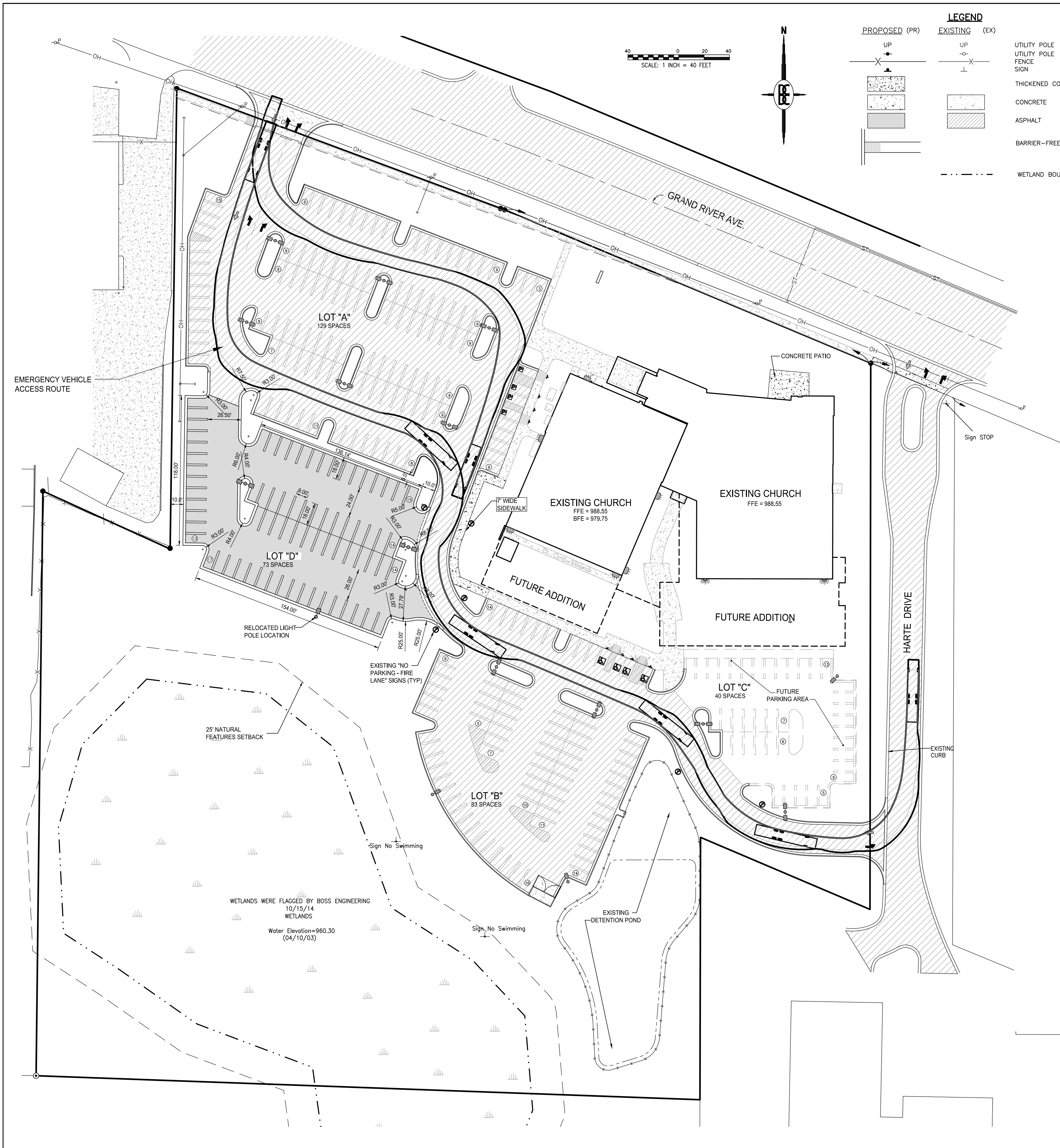
NO BY CK REVISION DATE JOB NO. 14-047-7

ISSUE DATE: 11/22/21

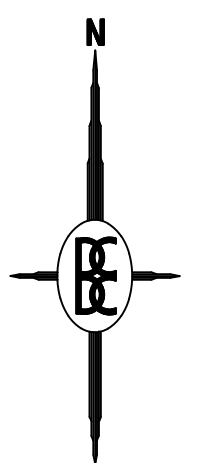




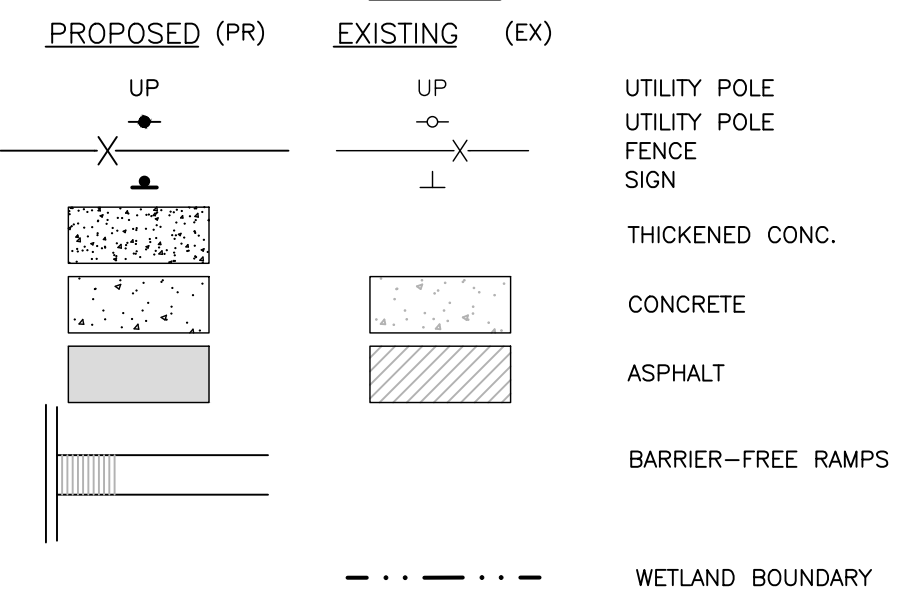




SCALE: 1 INCH = 40 FEET



**LEGEND**



**SITE/BUILDING DATA**

PARCEL SIZE:	9.24 AC.
EXISTING ZONING:	GENERAL COMMERCIAL DISTRICT
PROPOSED USE:	CHURCH
REQUIRED FRONT SETBACK:	70 FT. (35 FT IF NO PARKING IN FRONT YARD)
PROPOSED FRONT SETBACK:	EXISTING - 35.06 FT.
REQUIRED SIDE SETBACK:	15 FT.
PROPOSED SIDE SETBACK:	EXISTING - 28.80 FT.
REQUIRED REAR SETBACK:	50 FT.
PROPOSED REAR SETBACK:	EXISTING - 203.84 FT.
PARKING LOT SETBACK:	20.00 FT., 10.00 FT.(SIDE/REAR)
PROPOSED PARKING SETBACK:	10.00 FT. (SIDE)
MAX. LOT COVERAGE:	35% BUILDING 75% IMPERVIOUS
BUILDING FOOTPRINT:	
EXISTING CHURCH:	31,212 S.F.(7.75%)
IMPERVIOUS COVERAGE:	
CHURCH BUILDING:	31,212 S.F.
EXISTING PAVING:	96,800 S.F.
PROPOSED PAVING:	23,101 S.F.
TOTAL:	151,113 S.F. (37.54%)
TOTAL (W/ FUTURE PAVING):	178,759 S.F. (44.41%) (TOTAL SITE BUILD-OUT)

**PARKING DATA**

PARKING REQUIRED:	1 SPACE FOR EACH 3 SEATS IN MAIN WORSHIP AREA 601 SEATS / 3 SEATS PER SPACE = 201 SPACES 201-300 SPACES REQUIRES 7 BARRIER-FREE SPACES 301-400 SPACES REQUIRES 8 BARRIER-FREE SPACES
EXISTING PARKING:	217 SPACES (INCLUDING 8 BARRIER-FREE SPACES)
PROPOSED PARKING:	68 SPACES
FUTURE PARKING:	40 SPACES

**GENERAL NOTES**

- ALL OUTDOOR LIGHTS SHALL BE SHIELDED TO REDUCE GLARE AND SHALL BE ARRANGED TO NOT INTERFERE WITH THE VISION OF PERSONS ON ADJACENT ROADWAYS OR ADJACENT PROPERTY.
- ALL SIGNS SHALL MEET LOCAL MUNICIPALITY ORDINANCE REQUIREMENTS.
- 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 OF 75,000 POUNDS.
- DELIVERIES SHALL NOT OCCUR ON SUNDAYS DURING SERVICE TIMES TO AVOID TRAFFIC CONFLICTS.

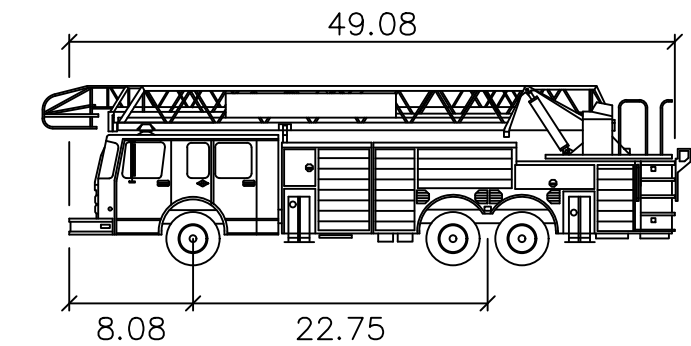
BEFORE YOU DIG  
CALL MISS DIG  
1-800-4-A-DIG  
A MESSAGE FROM  
THE MICHIGAN DEPARTMENT OF TRANSPORTATION  
SHOWING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES.  
THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS  
APPARENT OR IF THE LOCATION OR DEPTH DIFFERS SIGNIFICANTLY FROM  
THE PLANS.

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

PROJECT: COMMUNITY BIBLE CHURCH PARKING LOT  
PREPARED FOR: COMMUNITY BIBLE CHURCH  
7372 GRAND RIVER AVENUE  
BRIGHTON, MI. 48114  
810-227-2255  
TITLE: SITE PLAN

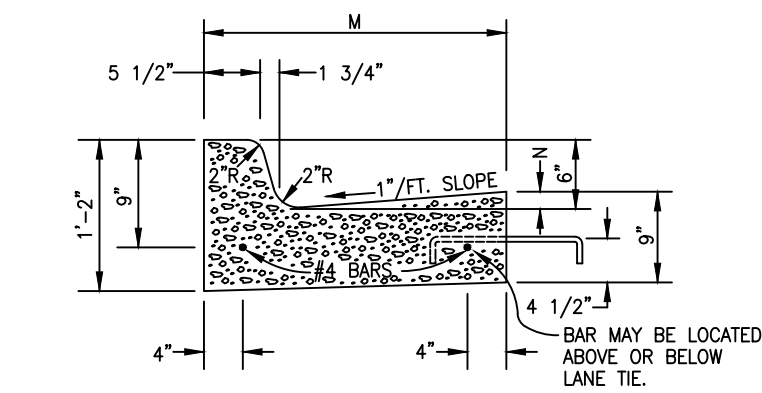
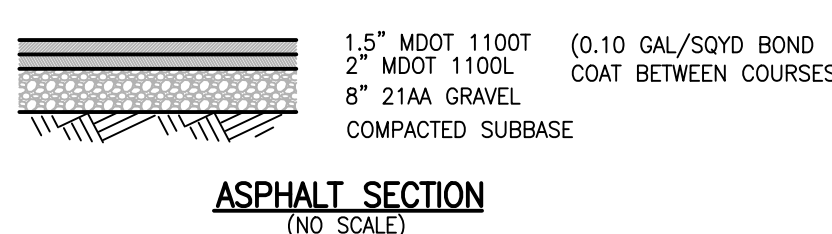
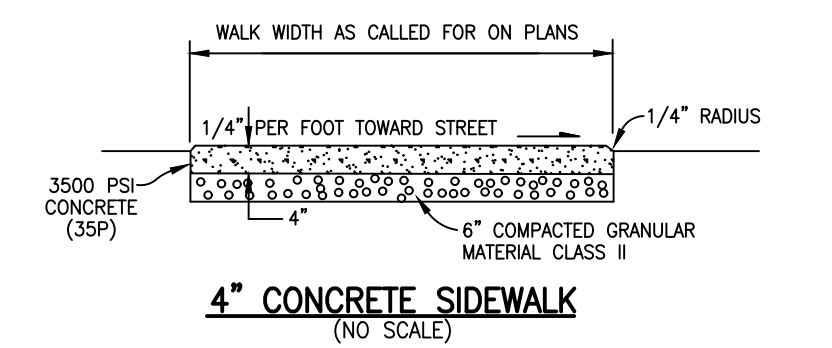
NO.	BY	REVISION	DATE

DESIGNED BY: ST  
DRAWN BY: ST  
CHECKED BY:  
SCALE: 1" = 40'  
JOB NO. 14-047-7  
DATE: 11/22/21  
SHEET NO. C3



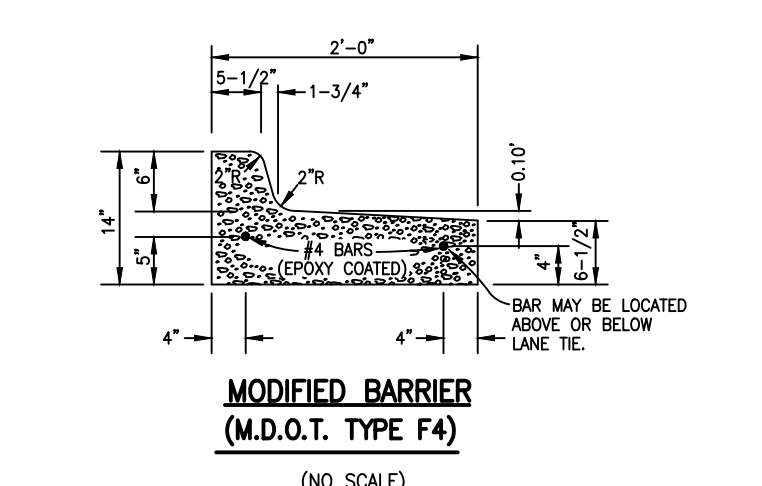
Genoa Fire Truck feet

Width	: 8.25
Track	: 8.25
Lock to Lock Time	: 6.00
Steering Angle	: 32.00

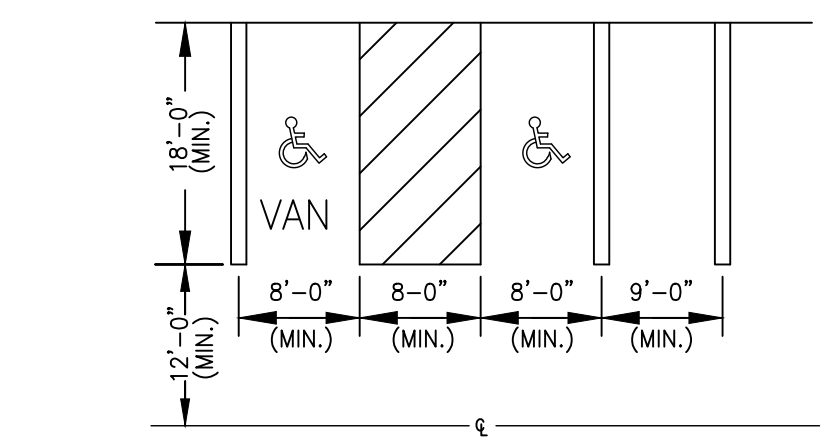


DETAIL	DIMENSIONS	LANE TIES	CONCRETE CURED/LIN.F.T.
F1	1'-8"	2/8" AS SHOWN	0.0484
F2	1'-8"	2/8" OMITTED	0.0484
F3	1'-8"	1/2" AS SHOWN	0.0484
F4	2'-0"	1 3/8" OMITTED	0.0610
F5	2'-8"	2/8" AS SHOWN	0.0117
F6	3'-8"	1 3/8" OMITTED	0.0252

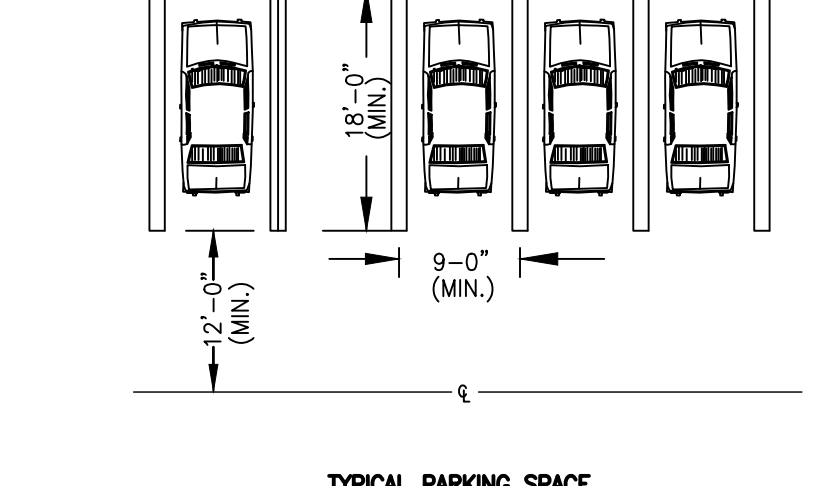
CONCRETE CURB & GUTTER TYPE F (NO SCALE)



MODIFIED BARRIER (M.D.O.T. TYPE F4) (NO SCALE)



TYPICAL BARRIER FREE PARKING SPACE (NO SCALE)

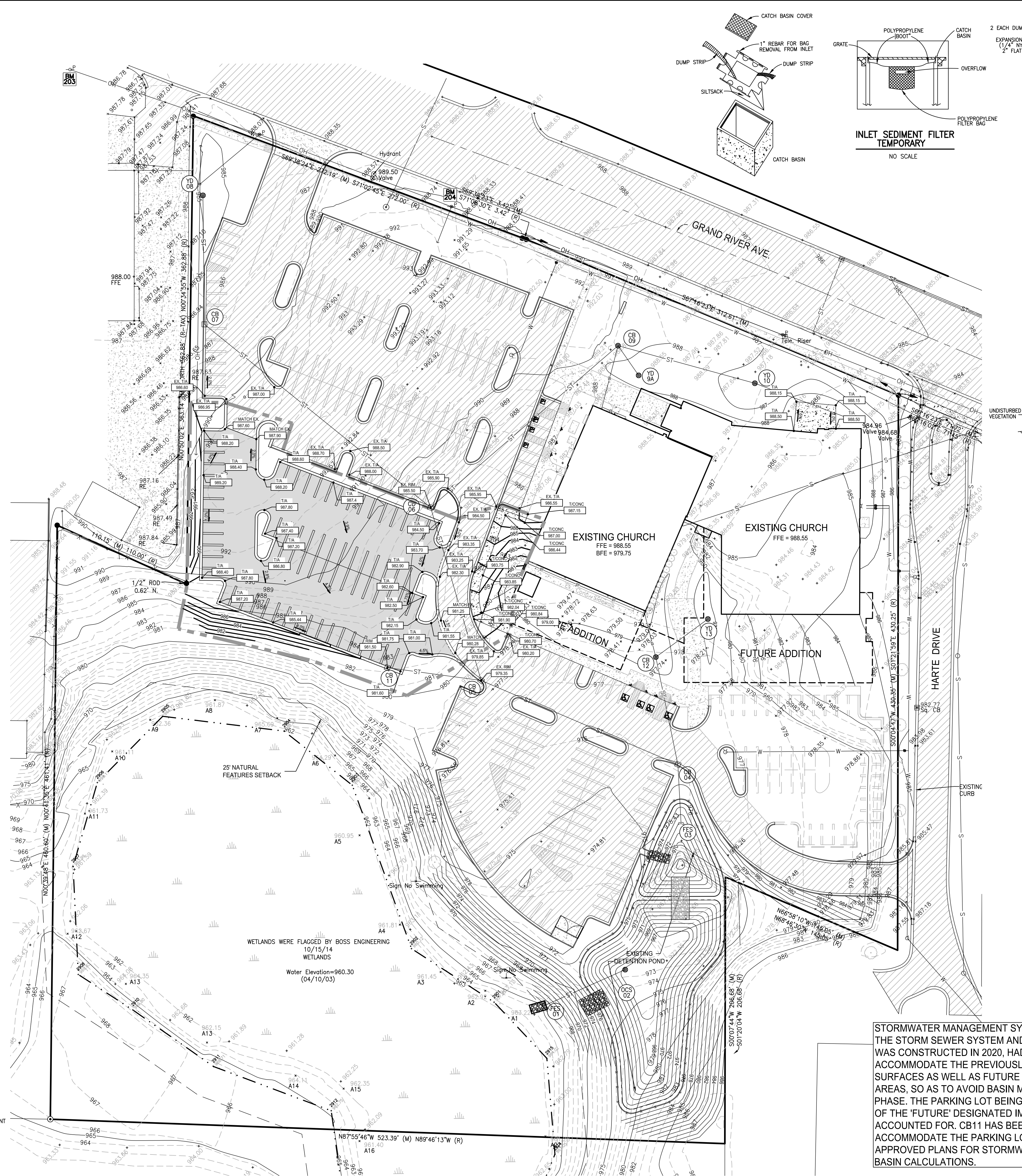


TYPICAL PARKING SPACE (NO SCALE)

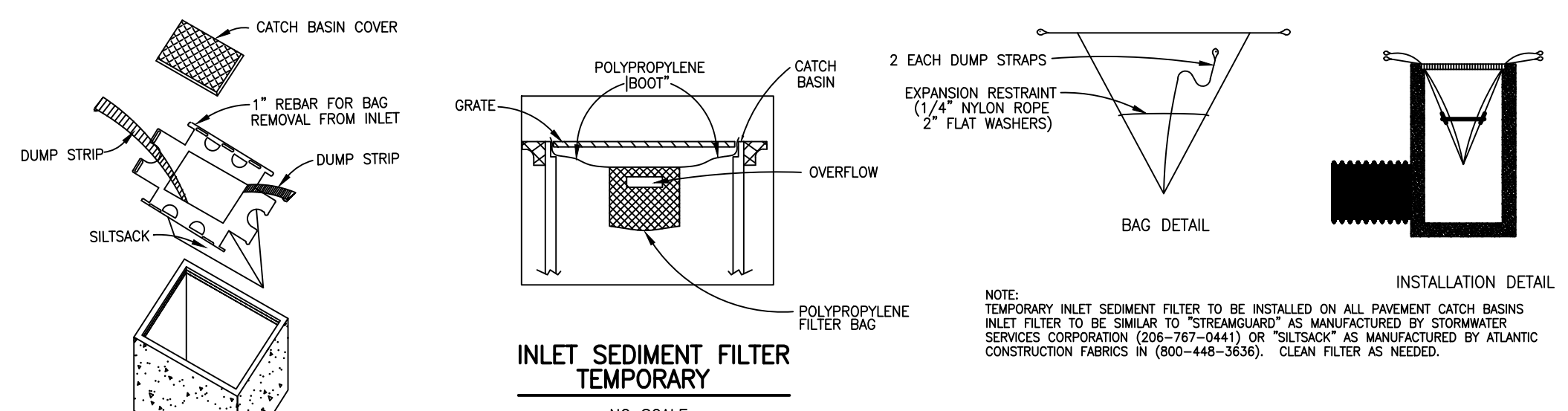


**LIVINGSTON COUNTY SOIL EROSION PERMIT TEMPLATE  
TEMPORARY CONTROLS AND SEQUENCE**

- 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.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, 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 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 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 RIP RAPPED 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 BURRAP AND PEA STONE FILTER MAY BE USED. THREE LAYERS OF BURRAP FIBER AND A FILTER OF PEA STONE MINIMUM 1 FT. IN DEPTH CAN BE USED. DUE TO THE POROSITY OF THE BURRAP FILTER THE MINIMUM OF 1 FT. OF STONE IS VERY IMPORTANT. THE CONTROL SHALL BE INSPECTED AS SOON AS THE STRUCTURE IS BUILT AND INSPECTED DAILY.
  - BURRAP 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 BARTLED 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 DRAIN. 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 1" 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.
  - 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  
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.
- 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 (G).

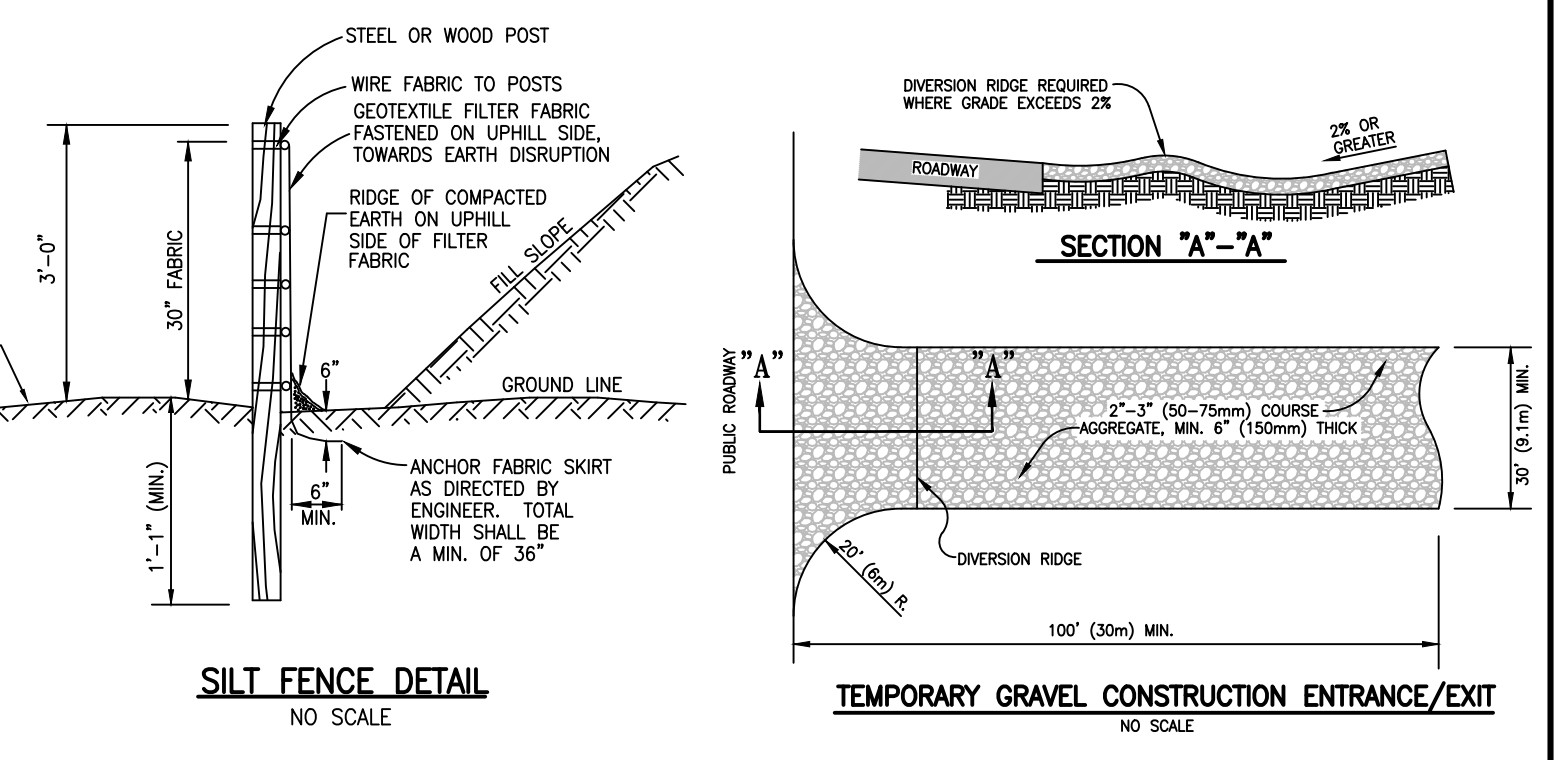


**STORMWATER MANAGEMENT SYSTEM NOTE:**  
THE STORM SEWER SYSTEM AND DETENTION BASIN THAT WAS CONSTRUCTED IN 2020, HAD BEEN DESIGNED TO ACCOMMODATE THE PREVIOUSLY PROPOSED IMPERVIOUS SURFACES AS WELL AS FUTURE PARKING AND BUILDING AREAS, SO AS TO AVOID BASIN MODIFICATIONS FOR EACH PHASE. THE PARKING LOT BEING CONSTRUCTED WAS ONE OF THE 'FUTURE' DESIGNATED IMPERVIOUS SURFACE AREAS ACCOUNTED FOR. CB11 HAS BEEN DESIGNED TO ACCOMMODATE THE PARKING LOT. REFER TO PREVIOUSLY APPROVED PLANS FOR STORMWATER CALCULATIONS AND BASIN CALCULATIONS.



**LEGEND**

PROPOSED (PR)	EXISTING (EX)	CONTOUR
1/2" XXXXX	+922.08	CONTOUR
FF	FF	STORM DRAINAGE FLOW
FG	FG	SPOT ELEVATION
T/A	T/A	FINISHED FLOOR ELEVATION
T/C	T/C	TOP OF ASPHALT
T/W	T/W	TOP OF CURB - CONCRETE
F/L	F/L	TOP OF WALK
T/P	T/P	FLOW LNE
B/P	B/P	TOP OF PIPE
RM	RM	BOTTOM OF PIPE
HW	HW	RM ELEVATION
MH	MH	INVERT ELEVATION
IN	IN	MANHOLE STRUCTURE
CB	CB	INLET STRUCTURE
RY	RY	CATCHMENT STRUCTURE
ES	ES	REARWARD STRUCTURE
GV	GV	END-SECTION
HY	HY	GATEVALVE STRUCTURE
UP	UP	HYDRANT
SN	SN	UTILITY POLE
ST	ST	SANITARY SEWER
WM	WM	SANITARY LEAD
ST	ST	STORM SEWER
WU	WU	WATER MAIN
CL	CL	WATER LEAD
OH	OH	OVERHEAD WIRE
CL	CL	MANHOLE
CB	CB	INLET / CATCHBASIN
FL	FL	FLARED END-SECTION
HY	HY	HYDRANT UTILITY POLE
ST	ST	FENC SIGN
ST	ST	STORM SEWER LABEL
ST	ST	LIMITS OF GRADING/CLAIRING
ST	ST	WETLAND BOUNDARY



**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.

ACTIVITY	1 DAY	2 DAYS	30 DAYS	10 DAYS	5 DAYS	1 DAY
1. INSTALL SILT FENCE/SILT SACKS AS SHOWN ON PLANS.						
2. SITE DEMO AND ROUGH GRADING						
3. INSTALL PAVEMENT, CURBS, SIDEWALKS						
4. FINE GRADE BUILDING, TOPSOIL, SEED/SOD AS APPLICABLE.						
5. REMOVE ALL EROSION CONTROL STRUCTURES.						
6. REMOVE ACCUMULATED SILT FROM ALL EXISTING DRAINAGE.						

**PROPOSED CONST. SCHEDULE FOR THE YEAR 2022**

ACTIVITY	APRIL	MAY	JUNE
MASS GRADING	█		
PAVING		█	
FINAL GRADING			█
SEED & MULCH			█

**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**

1	STRIPPING & 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 MATTING	REQUIRES ESTABLISHMENT OF VEGETATION COVER EFFECTIVE FOR BRANCHMENTS WITH LOW VELOCITY SOILY PAVED IN SMALL QUANTITIES BY HYDROSEEDING PERSONNEL SHOULD INCLUDE PREPARED TOPSOIL BED
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, TRAP MINORING PRODSION PERMITS CONSTRUCTION TRAFFIC IN ADVERSE WEATHER MAY BE USED AS PART OF PERMANENT SOIL CONSTRUCTION OF PAVED AREAS
15	PAVING	PROTECTS AREAS WHICH CANNOT OTHERWISE BE PROTECTED, BUT INCREASES RUNOFF VELOCITY PRODUCE SURFACE WILL KEEP SLOW VELOCITY
16	CURBS & GUTTERS	KEEPS HIGH VELOCITY RUNOFF ON PAVED AREAS FROM LEAVING PAVED SURFACE COLLECTS AND CONDUCTS RUNOFF TO ENCLOSED DRAINAGE SYSTEM OR PREPARED DRAINWAY
36	CATCH BASIN, DRAIN INLET	COLLECTS HIGH VELOCITY CONCENTRATED RUNOFF MAY USE FILTER CLOTH OVER INLET
40	INLET SEDIMENT FILTER	EASY TO SHAKE COLLECTS SEDIMENT MAY BE CLEANED AND EXPANDED AS NEEDED
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 = 0.87 AC (38,030 SFT)  
NOTE: LCDC SESC PERMIT REQUIRED PRIOR TO CONSTRUCTION

**BEBOSS Engineering**  
Engineers Surveyors Planners Landscape Architects  
3121 E. GRAND RIVER AVE.  
HOWELL, MI. 48843  
517.546.4636 FAX 517.548.1670

PROJECT: COMMUNITY BIBLE CHURCH PARKING LOT  
PREPARED FOR: COMMUNITY BIBLE CHURCH  
17372 GRAND RIVER AVENUE  
BRIGHTON, MI 48114  
810-227-2255

TITLE: GRADING & SESC PLAN

NO.	BY	DATE	REVISION	FEET

DESIGNED BY: ST  
DRAWN BY: ST  
CHECKED BY:  
SCALE: 1" = 40'  
JOB NO. 14-047-7  
DATE: 11/22/21  
SHEET NO. C4

**BEBOSS Engineering**



**GENERAL LANDSCAPE NOTES:**

- ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY AND SHALL BE NURSERY GROWN. ALL SIZES AND MEASUREMENTS SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS. ALL PLANT MATERIAL SHALL BE OF SELECTED SPECIMEN QUALITY AND HAVE A NORMAL HABIT OF GROWTH. ALL PLANT MATERIAL IS SUBJECT TO APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED STOCK OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLAN BALLS SHALL BE FIRM, INTACT AND SECURELY WRAPPED AND BOUND.
- ALL PLANT BEDS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND OTHER EXTRANEOUS OBJECTS AND POOR SOILS TO A MINIMUM DEPTH OF 12 INCHES AND BACKFILLED TO GRADE WITH PLANTING MIX (SEE BELOW).
- PLANTING MIXTURE SHALL CONSIST OF 4 PARTS TOPSOIL FROM ON SITE, 1 PART PEAT, AND 5 POUNDS OF SUPERPHOSPHATE PER CUBIC YARD OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED TO A UNIFORM CONSISTENCY.
- ALL PLANT BEDS AND INDIVIDUAL PLANTS SHALL BE MULCHED WITH A 4 INCH LAYER OF SHREDDED BARK MULCH.
- ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACCEPTED, IN WRITING, BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD OF TIME ALL DEAD PLANTS AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION AS DETERMINED BY THE LANDSCAPE ARCHITECT DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL REQUIREMENTS.
- EDGING, WHERE NOTED ON THE PLANS, SHALL BE BLACK ALUMINUM EDGING, 3/16 INCHES BY 4 INCHES. INSTALL PER MANUFACTURER'S INSTRUCTIONS. ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
- SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPRISED OF A BLEND OF AT LEAST TWO KENTUCKY BLUEGRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4 INCH, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10 INCHES BY 18 INCHES. SOD SHALL BE KEPT MOIST AND LAID WITHIN 36 HOURS AFTER CUTTING.
- ALL AREAS OF THE SITE THAT BECOME DISTURBED DURING CONSTRUCTION AND ARE NOT TO BE PAVE, STONED, LANDSCAPED, OR SODDED SHALL BE SEEDED AND MULCHED.

SEED MIXTURE SHALL BE AS FOLLOWS:

KENTUCKY BLUEGRASS	30%
(CHOOSE 3 VARIETIES: ADELPHI, RUGBY, GLADE OR PARADE)	30%
RUBY RED OR DAWSON RED FINE FESCUE	20%
ATLANTA RED FESCUE	20%
PENNFINE PERENNIAL RYE	20%

THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 POUNDS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL LAYER SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-20-10 ANALYSIS:

10% NITROGEN: A MINIMUM OF 25% FROM A UREA-FORMALDEHYDE SOURCE
20% PHOSPHATE
10% POTASH: SOURCE TO BE POTASSIUM SULFATE OR POTASSIUM NITRATE.

THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 POUNDS OF BULK FERTILIZER PER 1000 SQUARE FEET.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RESEEDED AND SUCH RESEEDING SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEEDING AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.

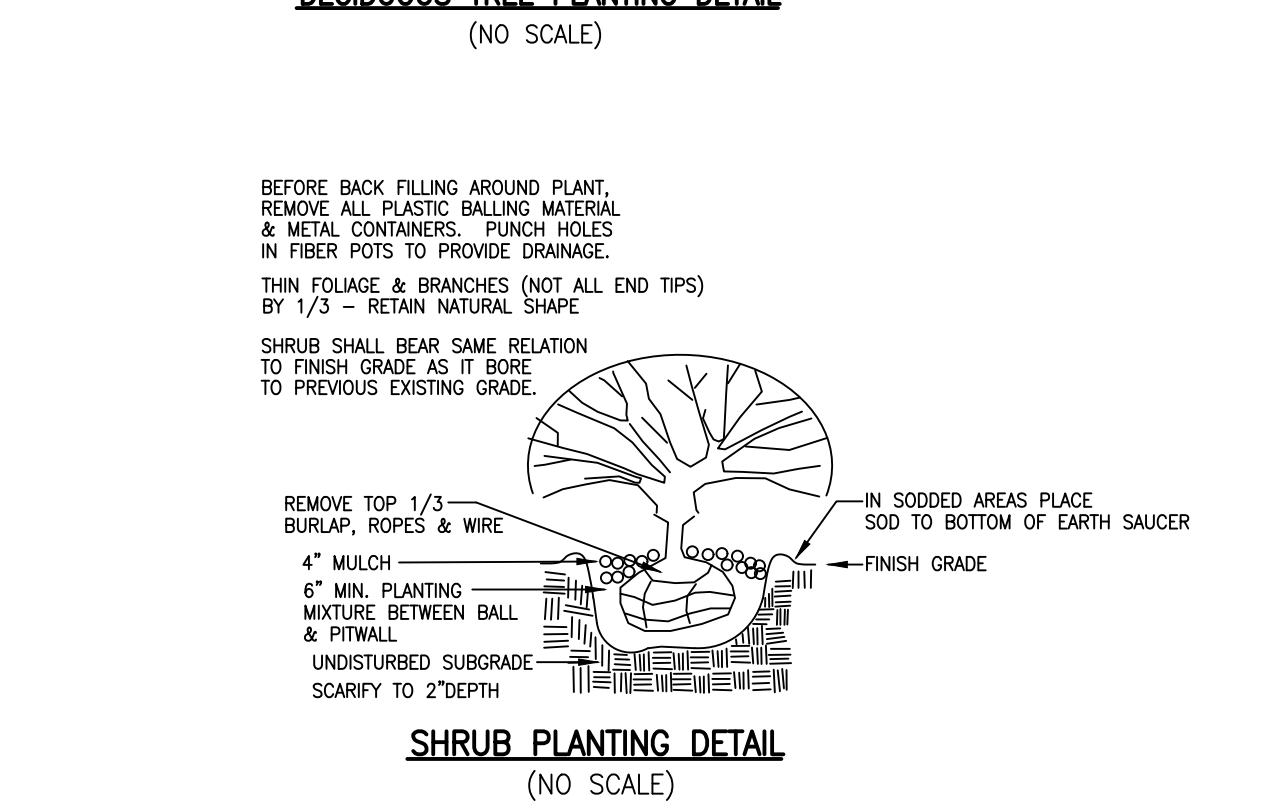
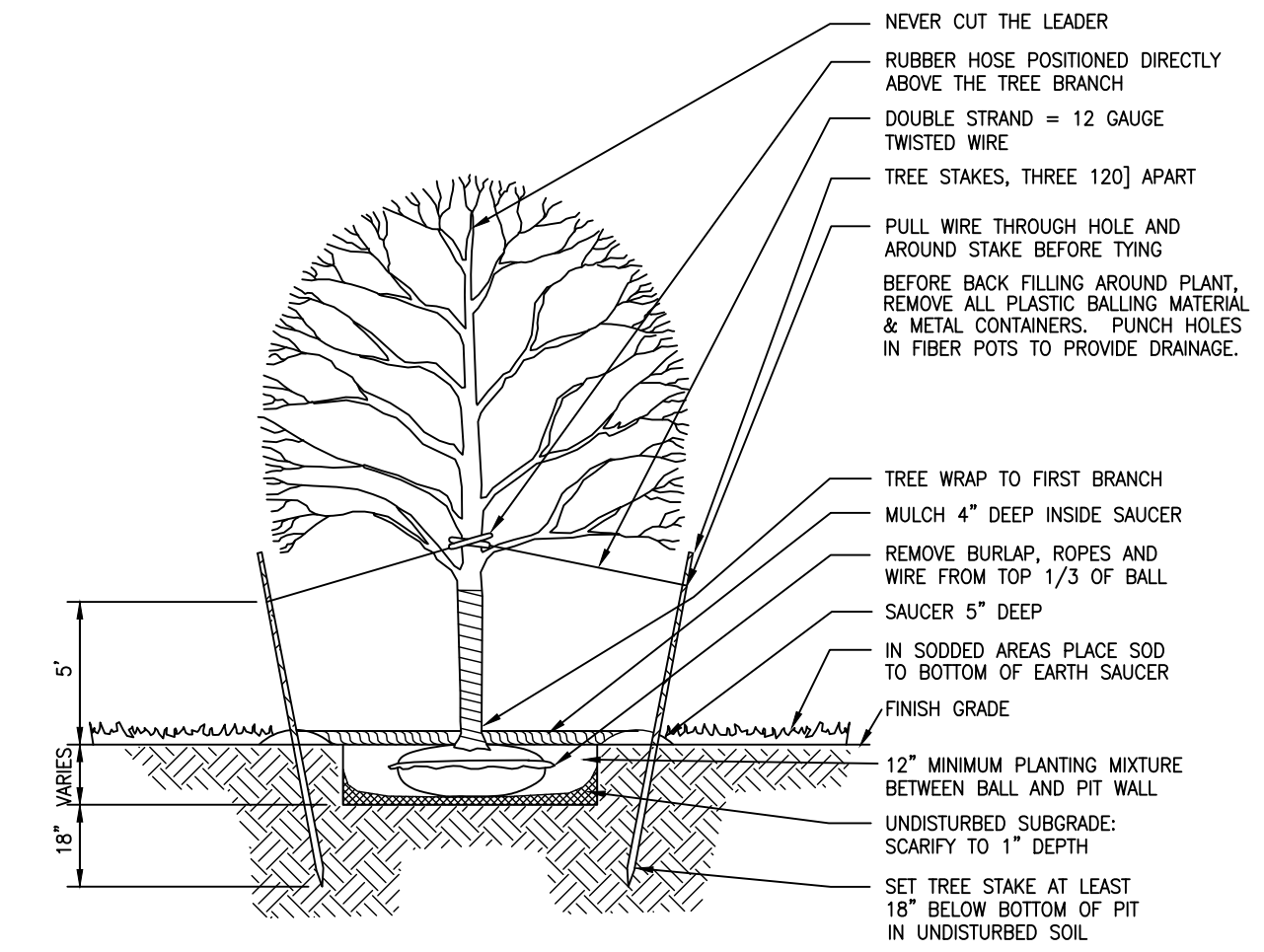
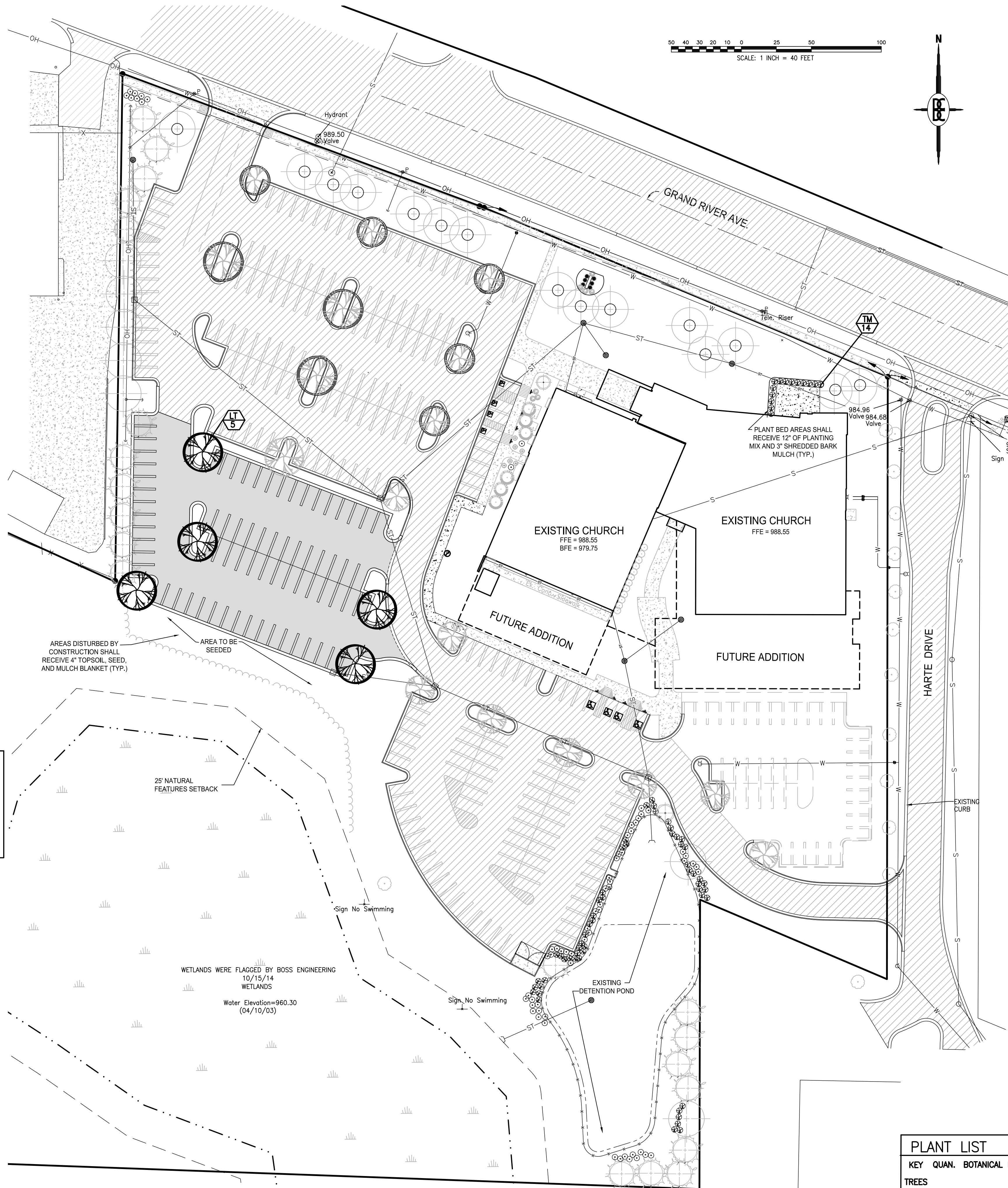
- ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 4 INCH LAYER OF CLEAN, FRIABLE TOPSOIL. THIS SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.
- ALL PLANT MATERIALS SHALL BE FREE OF WEEDS, INSECTS AND DISEASE.
- FRONT YARD AREA TO BE IRRIGATED BY UNDERGROUND IRRIGATION SYSTEM.
- UPRIGHT ARNOLD TULIPTREE SPECIFIED ALONG FIRE APPARATUS ACCESS ROAD. THESE TREES ARE TYPICALLY 8-10 FEET WIDE. ALL TREES WITHIN PARKING LOTS TO BE MAINTAINED AT PROPER HEIGHT TO NOT IMPEDE VIEWS OR ACCESS.

**LANDSCAPE REQUIREMENTS**

**PARKING LOT**

REQUIRED:  
1 CANOPY TREE AND 100 SF LANDSCAPE AREA PER 15 PARKING SPACES  
68 SPACES PROPOSED/15 = 4.5 TREES REQUIRED

PROVIDED:  
5 TREES



**PLANT LIST**

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
<b>TREES</b>					
LT 5		<i>Liriodendron tulipifera 'Aureomarginatum'</i>	Majestic Beauty Tulip Tree	2 1/2" Cal	B&B
<b>SHRUBS</b>					
TM 14		<i>Taxus x media 'Densiformis'</i>	Dense Spreading Yew	24" HL.	B&B

BEFORE YOU DIG CALL MISS DIG

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

PROJECT: COMMUNITY BIBLE CHURCH PARKING LOT  
 PREPARED FOR: COMMUNITY BIBLE CHURCH  
 7372 GRAND RIVER AVENUE  
 BRIGHTON, MI. 48114  
 810-227-2255  
 TITLE: LANDSCAPE PLAN

NO.	BY	REVISION	PER	DATE

DESIGNED BY: JA  
 DRAWN BY: JA  
 CHECKED BY:  
 SCALE: 1" = 40'  
 JOB NO. 14-047-7  
 DATE: 11/22/21  
 SHEET NO. C5





### D-Series Size 0 LED Area Luminaire



Catalog Number: \_\_\_\_\_  
 Name: \_\_\_\_\_  
 Title: \_\_\_\_\_

#### Specifications

EPA: 0.95 ft<sup>2</sup> (0.09m<sup>2</sup>)

Length: 26" (660mm)

Width: 13" (330mm)

Height: 3" (76mm)

Height: 7" (178mm)

Weight (max): 16 lbs (7.3kg)

**Introduction**

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

#### Ordering Information

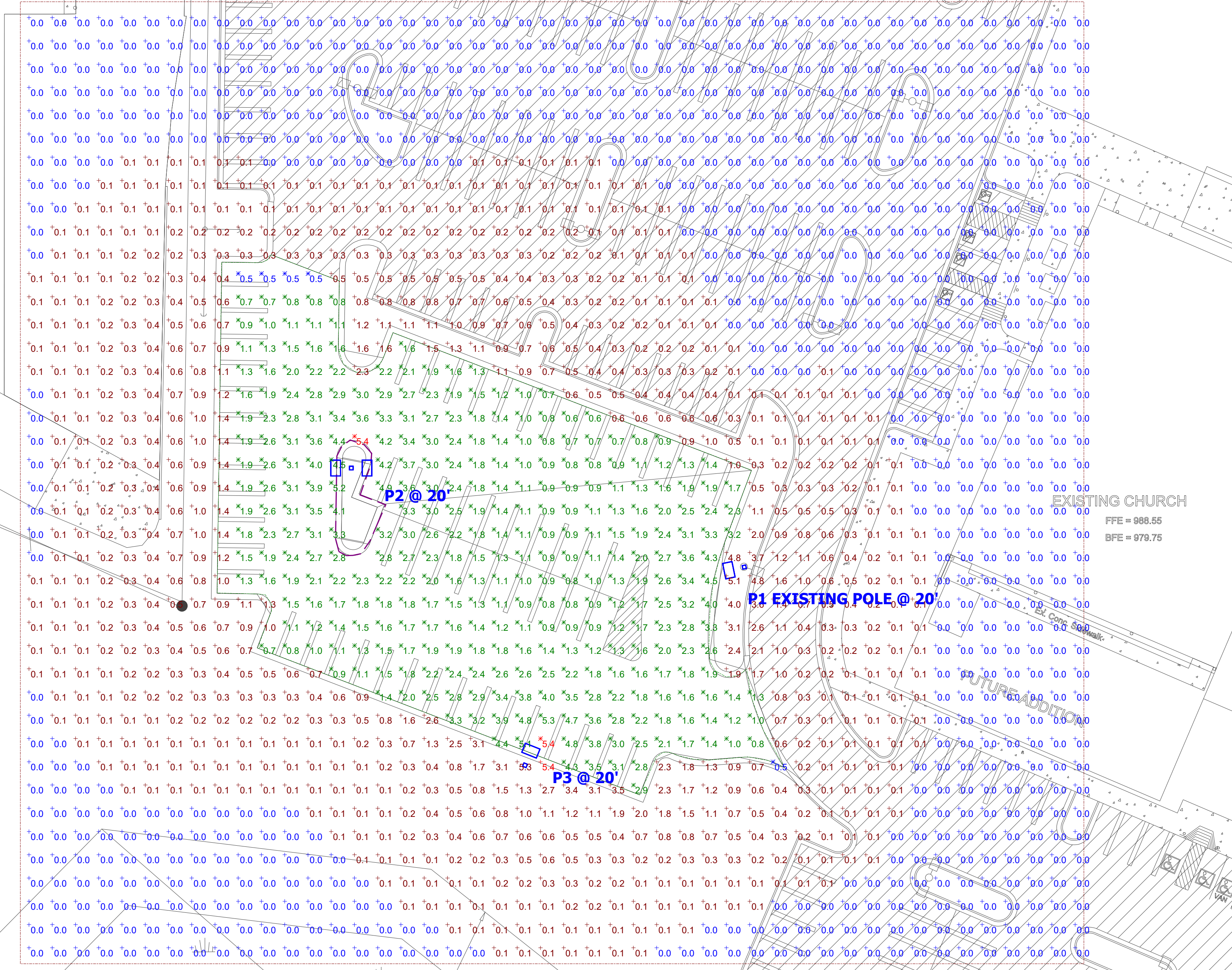
**EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD**

Series	LEDs	Color temperature	Photometric	Voltage	Mounting
DSX0 LED	Forward optics P1 P5 P2 P6 P3 P7 P4 Rotated optics P10 P12 P11 P13	30K 5000K 40K 4000K 50K 5000K	T15 Type I short (Auto-metric) T25 Type II short T2M Type II medium T35 Type III short T3M Type III medium T4M Type IV medium T5M Forward throw medium T5VS Type V very short	T35 Type V short T5M Type V medium T5W Type V wide BLC Backlight control LCCO Left corner control RCCO Right corner control 247 347 400	MVOLT (100V-277V) KVOLT (277V-480V) 120" 200" 240" 277" 347" 400"

**Shipped included:** SPA Square pole mounting, RPA Round pole mounting, WBA Wall bracket, SPUBA Square pole universal mounting adapter, RPUUBA Round pole universal mounting adapter.

**Shipped separately:** XMA DDBXD-U Mount arm mounting bracket/adaptor (Specify finish %).

Control options	Photometric	Shipped installed	Finish
<b>Shipped installed</b> NLTAIR2 slight ARI generation 2 enabled (1) PIRHN Hivesec, high/low motion/ambient sensor PER MEHA dual-lock receptacle only (control ordered separate) PER5 Five-pin receptacle only (control ordered separate) PER7 Seven-pin receptacle only (leads exit fixture) (control ordered separate) DMG 0-10V dimming extend out back of housing for external control (control ordered separate)	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 56" PIRHN High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 56" PIRHCV High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 18" PIRHFCV High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 18" FAO Field adjustable output	<b>Shipped installed</b> HS Hivesec-hub shield SF Single face (120, 277, 347V) DF Double face (200, 240, 480V) L90 Left rotated optics R90 Right rotated optics DDL Diffused drop lens HA 50°C ambient operation BAA Buy America/On Act Compliant <b>Shipped separately</b> BS Best supplies EGS External glare shield	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHTXD Textured white



Plan View  
Scale - 1" = 25ft

Statistics						
Description	Symbol	Avg	Max	Min	Avg/Min	Max/Min
Grade @ 0'	+	0.5 fc	5.4 fc	0.0 fc	N/A	N/A
New Parking Lot	X	2.0 fc	5.4 fc	0.5 fc	4.0:1	10.8:1

**General Note**

- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
- CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"
- LIGHTING ALTERNATES REQUIRE NEW PHOTOMETRIC CALCULATION AND RESUBMISSION TO CITY FOR APPROVAL.

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

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

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

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

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

MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

Schedule									
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor	Wattage
□	<b>P1 EXISTING POLE</b>	1	Lithonia Lighting	DSX0 LED P7 40K T4M MVOLT	DSX0 LED P7 40K T4M MVOLT	LED	17969	0.9	166
□	<b>P2</b>	1	Lithonia Lighting	DSX0 LED P7 40K T5W MVOLT	DSX0 LED P7 40K T5W MVOLT	LED	18933	0.9	332
□	<b>P3</b>	1	Lithonia Lighting	DSX0 LED P7 40K T2M MVOLT	DSX0 LED P7 40K T2M MVOLT	LED	18318	0.9	166





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

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

APPLICANT NAME & ADDRESS: Catholic Healthcare International, 2464 Taylor Rd, Suite 317, Wildwood, MO 63040  
*If applicant is not the owner, a letter of Authorization from Property Owner is needed.*

OWNER'S NAME & ADDRESS: Catholic Healthcare International, 2464 Taylor Rd, Suite 317, Wildwood, MO 63040

SITE ADDRESS: 3280 Chilson Road PARCEL #(s): 4711-20-100-020

APPLICANT PHONE: (636) 220-6550 OWNER PHONE: (636) 220-6550

OWNER EMAIL: C.H.I. Contact: Jere Palazzolo, jpalazzolo@chi-usa.com

LOCATION AND BRIEF DESCRIPTION OF SITE: West of Chilson Rd, approximately 1,800 ft south of Crooked Lake Rd. Site consists of approximately 40 acres of rolling topography. The Western(rear) portion of the site contains small wetlands and is wooded. The southeastern portion of the site is primarily open meadow with stands of trees mixed in.

BRIEF STATEMENT OF PROPOSED USE: Site is a Prayer Campus and all associated drives and parking areas to support the Prayer Campus. The layout of the drives is such that it works well with existing topography to minimize earth disruption as well as meanders around trees to preserve as many as feasible and maintain the character of the site.

THE FOLLOWING BUILDINGS ARE PROPOSED: A 352 sqft utility shed to house the site's maintenance equipment (mower, garden supplies, etc.)

**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:  President, Catholic Healthcare International

ADDRESS: 2464 Taylor Road, Suite 317, Wildwood, MO 63040

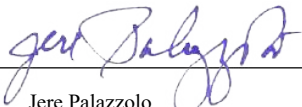


**Contact Information** - Review Letters and Correspondence shall be forwarded to the following:

1.) Scott Tousignant of Boss Engineering at scottt@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: October 15, 2021  
PRINT NAME: Jere Palazzolo PHONE: (636) 220-6550  
ADDRESS: 2464 Taylor Road, Suite 317, Wildwood, MO 63040



# GENOA CHARTER TOWNSHIP

## Special Land Use Application

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

APPLICANT NAME & ADDRESS: Catholic Healthcare International, 2464 Taylor Road, Suite 317, Wildwood, MO 63040  
*Submit a letter of Authorization from Property Owner if application is signed by Acting Agent.*

APPLICANT PHONE: (636 ) 220-6550 EMAIL: jpalazzolo@chi-usa.com

OWNER NAME & ADDRESS: Catholic Healthcare International, 2464 Taylor Road, Suite 317, Wildwood, MO 63040

SITE ADDRESS: 3280 Chilson Road PARCEL #(s): 4711-20-100-020

OWNER PHONE: (636 ) 220-6550 EMAIL: jpalazzolo@chi-usa.com

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

Site located west of Chilson Road, approximately 1,800 feet south of Crooked Lake Road. Located on approximately 40 acres, surrounded by CE zoning to the north/south/west with RR zoning to the east across Chilson Road. The site contains rolling topography with wetlands and woodlands on the west side of the site and open area with stands of trees on the southeast side of the site (area of development).

### Proposed Use:

Prayer Campus with associated drives and parking. The Prayer Campus contains prayer trails, Stations of the Cross Trail, a mural wall with altar, and religious landscape/garden statues (including that of St. Padre Pio).

### 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 purpose of the Country Estate Zoning is to retain the rural atmosphere while accommodating very low density development.

The layout of this site is such that it is meant to work with the natural features of this site in order to preserve the atmosphere and surroundings.

The proposed use for this site is low density and does maintain the vast majority of the site as natural.

- 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 only building being proposed is being located significantly setback off of Chilson Road and is a 16' x 22' utility shed. The site drives are designed to match the existing topography as closely as possible to minimize earth disturbance. The drives meander around trees in order to preserve the sites natural beauty and thus maintain the appearance from Chilson Road.

- 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?

Emergency vehicle access is via a paved drive within the site with access off of Chilson Road. There are no facilities being proposed on site that require water and sewer services. This site has no impact on schools. The waste generated by this site is minimal and anticipated to be serviced by typical weekly waste streetside pickup. Stormwater management is located on-site.

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

There will be a minimal increase in traffic for any religious services held on site. The site and use highlights the natural beauty of the property so the intent is to have minimal lighting and noise generated by the use. No fumes, odors, smoke, vibration and other such nuisances will be generated by this site.

- 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.

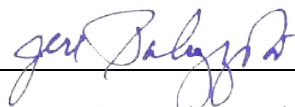
3.03.02(l): This site meets the minimum lot size req. as it is a 40 acre site. This site layout meets the 50' parking lot setback req.

7.02.02: N/A

8.02.02: N/A

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

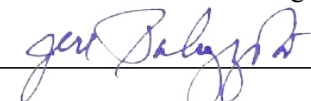
BY:  President, Catholic Healthcare International  
ADDRESS: 2464 Taylor Road, Suite 317, Wildwood, MO 63040

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

Scott Tousignant, P.E. of Boss Engineering at scottt@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: October 15, 2021  
PRINT NAME: Jere Palazzolo PHONE: (636) 220-6550



## NOTICE OF PUBLIC HEARING (SPECIAL USE)

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

November 24, 2021

To Whom It May Concern:

Please be advised that the Planning Commission of Genoa Charter Township will conduct a public hearing on Monday, December 13, 2021 commencing at 6:30 p.m. This public hearing is to be held at the Township Hall located at 2911 Dorr Road, Brighton, Michigan, as required under the provisions of the Michigan Zoning Enabling Act.

As required by state law, you are receiving this notice because you have been identified as an owner or occupant of real property within 300 feet of the subject parcel. The property in question is located at 3280 Chilson Road on the west side of Chilson Road south of Crooked Lake Road. **The applicant is requesting a special use permit for a proposed prayer campus with outdoor uses including Stations of the Cross, a mural wall with altar, prayer trails, religious landscape/garden statues, a 352 sq. ft. utility building and related driveways and parking. The request is petitioned by Catholic Healthcare International.**

You are invited to attend this hearing. Members of the public will be able to speak during the public hearing and public comment portions of the meeting. To provide for orderly public participation a person wishing to speak must state their name and request to be recognized by the Planning Commission Chairperson. The Chairperson will recognize all persons wishing to speak during the public hearing and public comment. If, prior to the meeting, members of the public have certain questions or wish to provide input on any business that will be addressed at the meeting then such persons may contact the Planning Commissioners through Kelly VanMarter, Community Development Director by email to [Kelly@genoa.org](mailto:Kelly@genoa.org), or by mail at 2911 Dorr Road, Brighton, Michigan 48116.

A copy of the meeting materials may be found in the Packet link on the Township's webpage located at <https://www.genoa.org/government/boards/planningcommission>.

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

### SUPERVISOR

Bill Rogers

### CLERK

Paulette A. Skolarus

### TREASURER

Robin L. Hunt

### TRUSTEES

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lowe

### MANAGER

Michael C. Archinal

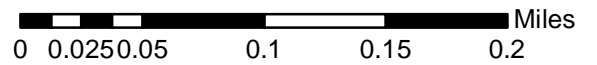
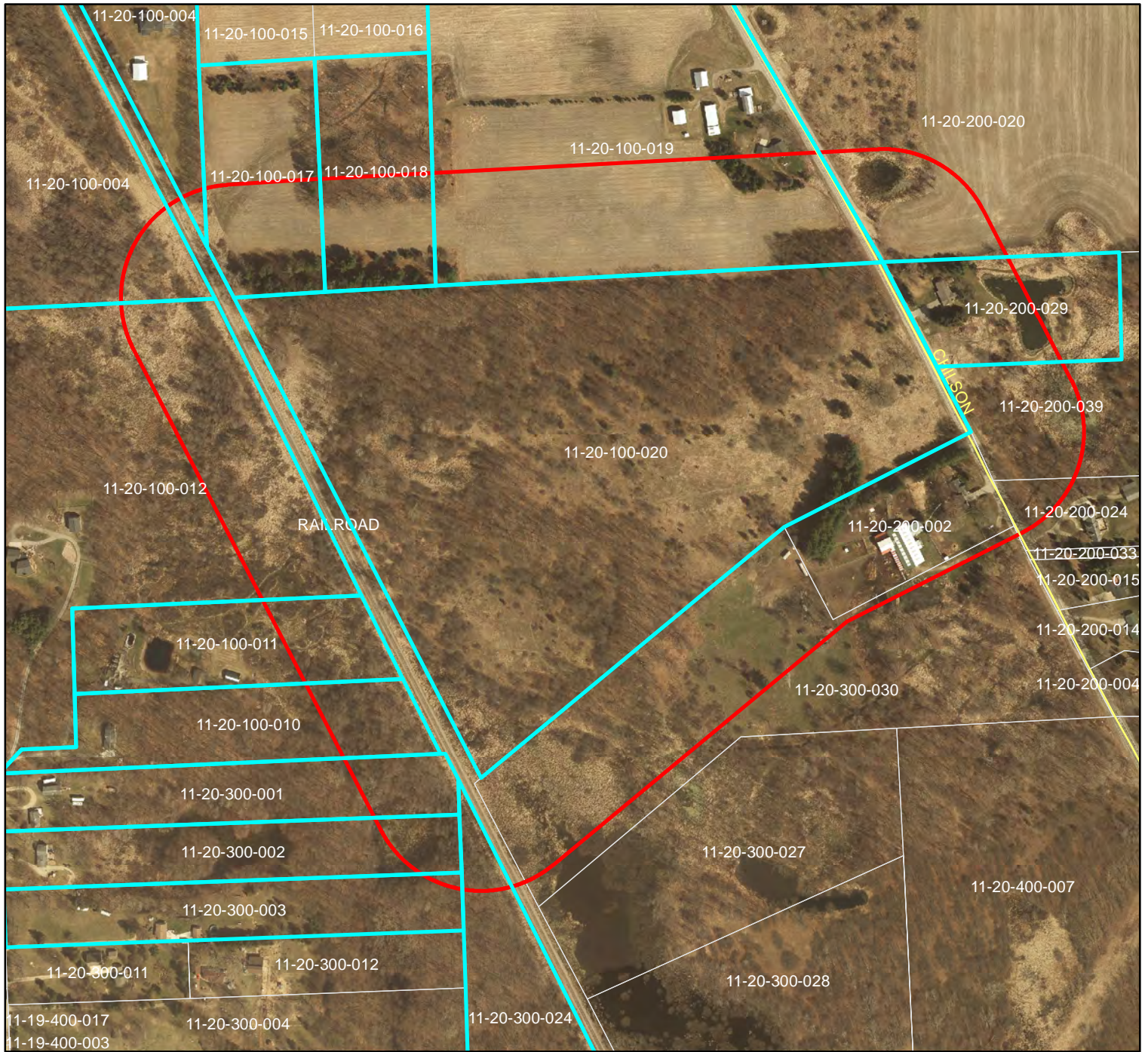
Sincerely,

Kelly VanMarter

Assistant Township Manager / Community Development Director



# 300 Foot Buffer for Noticing



Special Use: Catholic Healthcare International

Address: 3280 Chilson Road

Parcel: 4711-20-100-020

Meeting Date: February 8, 2021



January 14, 2021



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

November 22<sup>nd</sup>, 2021

Ms. Kelly Van Marter, AICP  
Genoa Township Planning Commission  
2911 Dorr Road  
Brighton, Michigan 48116

Re: Catholic Healthcare International Church-Special Land Use and Site Plan Review

Dear Ms. Van Marter,

We have received the review letters from the Brighton Area Fire Authority dated November 9<sup>th</sup>, 2021, Tetra Tech dated November 17<sup>th</sup>, 2021, and SAFEbuilt dated November 15<sup>th</sup>, 2021 for the Catholic Healthcare International ("CHI") site and offer the following comments.

As noted in our original filings, this submission is being made under protest and with a reservation of all rights, claims, and defenses, specifically including those set forth in the current federal litigation in *Catholic Healthcare International v. Genoa Township*, Case No. 5:21-cv-11303-JEL-DRG, which includes the reserved right to construct the St. Padre Pio adoration chapel on Catholic Healthcare International Inc.'s ("CHI") property—the property which is the subject of this submission—should CHI ultimately prevail in the federal litigation.<sup>1</sup>

## **Tetra Tech**

### **General**

1. We acknowledge that any future projects proposed for the site will need to be approved by the Township, subject of course to CHI prevailing in its federal litigation that is currently pending against the Township. A focus of that litigation is the chapel. Thus, the additional development planned for this property is the St. Padre Pio chapel (and it is included on the plans to so indicate). No other improvements are planned at this time.

2. It is the intent of the property owner to construct the St. Padre Pio Chapel on this site, which consists of 95 seats, upon CHI prevailing in its federal litigation against the Township. This chapel is planned to hold Mass and Eucharistic adoration. It will have 95 seats, which would warrant 32 parking spaces per the Township Ordinance Sec. 14.04 (1 space for each 3 seats). The plan shows just beyond 20% excess on these 32 spaces (the Planning Commission previously approved this number of parking spaces for this property). Given the current litigation regarding the subject property, the chapel is not proposed as part of this submittal but rather just the remaining outdoor religious components (outdoor mural wall and altar, trails, etc.). Ordinary outdoor Mass is anticipated to occur without the Chapel but is anticipated to draw the same numbers or less (approximately 50 or less) as Mass and Eucharistic adoration in the Chapel (on days where weather permits). Therefore, it is believed that the number of parking spaces for outdoor Mass is comparable to that of a Mass within the Chapel and 39 spaces is sufficient. CHI believes that for the proposed typical and routine use of this property as a prayer campus, 39 spaces are sufficient and will result in negligible traffic along Chilson Road. In other words, with only 39 spaces to park vehicles, traffic is not an issue.

3. Given that the experience/use of this site, as proposed, is outdoor, use of the site is reliant on weather conditions. Cold weather will greatly reduce the public's use of the site. It is expected that bathroom facilities are not needed during cold months. During warm weather months, the owner will provide a portable bathroom.

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<sup>1</sup> Please see the letter from CHI attached as Enclosure 1 for additional comments and questions related to this application.



During special events, additional portable bathrooms will be utilized if warranted. In the future, the chapel will contain a bathroom and water supply and thus the need for the portable bathrooms during typical site use will be eliminated.

### **Drainage and Grading**

1. No plan revisions needed.

### **Traffic**

1. The site's commercial drive approach had been previously approved by LCRC, which included the St. Padre Pio Chapel. We want the commercial drive approach to continue to be designed to accommodate a Chapel on the site. We will approach the LCRC about re-approval of the commercial drive approach.

2. As stated in the previous Site plan application, and as mentioned in the Environmental Impact Assessment, for the planned special events where parking may exceed the 39 spaces, a registration website will be used to gauge event attendance prior to the event occurring. Should the event garner enough interest beyond what the parking spaces provided can support, then a shuttle service will be provided from a nearby church.

### **SAFEbuilt**

#### **Summary**

1. The denial of the previous Special Use Application was for four reasons (all of which CHI contests) as listed in the Motion for Denial in the May 3rd, 2021 meeting minutes and as restated below. As noted and for the reasons stated below (which are not exhaustive), the Township's reasons for the prior denial will be addressed more fully by CHI in the current federal litigation.

*1. The proposed use involving a 95 seat, 6,090 square foot church with associated parking lot, site lighting, building lighting, and outdoor accessory structures and uses that is planned for daily gatherings and outdoor special events with an unknown number of visitors is not consistent with the following goals, objectives and policies of the Master Plan:*

- a. The use does not "Promote harmonious and organized development consistent with adjacent land uses";*
- b. The proposed use is located within the rural reserve area outside of the growth boundary and is contrary to the purpose of the rural reserve area which is an area that is to be "maintained at a relatively low intensity rural character of development, typically more than 2 acres per dwelling unit, that will not adversely impact natural features and agricultural uses";*
- c. The proposed use is not consistent with the following description of the Agricultural/Country Estate planned areas: "These areas shall remain in agricultural use, or develop as single family residential on estate lots. Many of the areas are prime farmland or have significant natural limitations such as wetlands or severe soil limitations. As these areas are not planned for sanitary sewer, they can only support low density residential development. This classification is recommended for single family residences on lots no smaller than 5 acres."*

The Chapel is not specifically a part of these plans, but its future location is identified on the plans as CHI intends to build it upon prevailing in the federal litigation. As part of this submission for the prayer campus, the site contains a parking lot for the public to utilize the outdoor religious site features. These features highlight the natural features of the site and thus promote harmony with the adjacent uses in that this is a low-density development that does not impact the natural features of the area nor agricultural uses. Indeed, this beautiful, natural, and rural prayer campus will enhance the neighborhood and the entire Township community. Regarding line item c above, we are submitting this application as a Special Use because that is what the Township has directed via its lawsuit filed in state court. The statement relied upon above is that "These areas shall remain in agricultural use, or develop as a single family residential on estate lots." However, the Township's Zoning Ordinance expressly allows Essential Public Services, Parks, and Foster homes/day care homes as permitted uses in the CE district as well as golf courses, underground pipeline



storage, public service utility buildings, schools, and churches as Special Uses. None of these would be consistent with the Master Plan Statement of being for “agricultural use, or develop as single family residential on estate lots.”

*2. The proposed use involving a 95 seat, 6,090 square foot church with associated parking lot, site lighting, building lighting, and outdoor accessory structures and uses that is planned for daily gatherings, and outdoor special events with an unknown number of visitors is in direct contrast with all aspects of the statement of purpose for the Country Estate zoning district which states that “The Country Estate (CE) District is established as a district where the principal use is residential, with smaller scale farming and raising of horses and livestock typically an accessory use. The health, safety and welfare contribution of this district is to retain the rural atmosphere and quality of life while accommodating compatible, very low density, residential development”.*

The definition of CE zoning describes the desire to “retain the rural atmosphere.” This proposed project is doing just that by maintaining the property’s natural features. It is a low-density project that is aimed at highlighting the natural features of the site. Although the proposed work is not residential or agricultural, per the Zoning Ordinance Section 3.03, other uses are allowed either by Permit by right or Special Use (uses which would be far more disruptive to the “rural atmosphere” than CHI’s proposal). We are seeking a use that is allowed via Special Use and constrained by the additional requirements of said special use in Section 3.03.02(l).

*3. The amount of traffic, visitors, lighting, noise, and activity associated with the use is not compatible with and will significantly alter the existing and intended character of the general vicinity. Events previously held at the site were described as having heavy traffic with cars parked on the roadway causing hazardous conditions.*

We are seeking approval to construct a commercial drive approach and parking lot to accommodate the public seeking to access and utilize this site. Construction of a drive and parking facilities will alleviate any past issues of cars parking on the side of Chilson Road.

*4. The impacts of the proposed use and activities will be detrimental to the natural environment, public health, safety or welfare by reason of excessive production of traffic, noise, lighting or other such nuisance.*

The proposed development does not impact the natural environment as it is designed to accommodate the natural limitations of the site. Indeed, the prayer campus enhances and improves the natural environment. Additionally, CHI is removing minimal trees. The property will have minimal grading. It will generate minimal stormwater from improved surfaces. CHI is avoiding wetland impacts, providing adequate setbacks, and buffering from the road and adjacent properties per the Township Ordinance. Public health and safety or welfare is not being impacted by traffic. Construction of the site entrance sign and drive approach will further enhance vehicular safety. Cars will not be parked on Chilson Road. Any lighting on the property will be minimal, and the proposed lighting plan meets Township Ordinances. Typical site use will generate no noise as it consists of individuals walking trails and praying. Any outdoor Mass or other events will need to meet Township Noise Ordinance levels, which they will.

2.
  - a. Acknowledged. No plan revisions needed.
  - b. Outdoor Mass will likely be conducted no more than weekly, but CHI asserts that it will not self-impose limitations that are not reasonably required by Township Ordinances (see Encl. 1). Vehicles arriving for outdoor Mass will be limited by the site parking spaces (a very modest number). The two currently planned special events are May 25 (St. Padre Pio Birthday Mass & Reception) and September 23 (St. Padre Pio Feast Day Mass & Reception). Based on past experience, the number of attendees for these two special events is anticipated to be approximately 200 to 400 persons. A registration

website will be utilized for these events to gauge the necessity of a shuttle service for this site. These events will be well under the Township's 1,000-person Assembly Ordinance threshold.

c. Acknowledged. Engineer and Fire comments to be addressed.

3.

a. The existing fence is owned by the adjacent property to the south. A picture of this fence is provided in this submittal below. It is a basic post and wire mesh fence. This subject site is utilizing existing vegetation and proposed double row of evergreen trees as screening.



b. Acknowledged.

4.

a. A representative photo has been supplied for the utility shed. It is a prefabricated shed building by Tuff Shed and is in their Premier PRO Series. It has a max height of 16.5' and is 16' x 24' (we have slightly increased the size of this shed to match one of the standard manufacturer's sizes.

b. The intent of the site is to provide an outdoor Mass and prayer campus capable of accommodating the equivalent number of persons as a 95-seat chapel. There is no ordinance requiring the site to have 39 spaces. However, when the Chapel is eventually constructed (following the conclusion of the federal litigation), the Township Ordinance for said use would require 39 spaces. Consequently, that is the number we have chosen. Additionally, we have provided for future parking around the outer perimeter of the circle drive. This future parking is based on potential future (and unknown at this time) needs, and should the need arise in the future, a traffic study could then be conducted prior to the construction of said spaces to determine if improvements to Chilson Road are needed. Currently, no traffic study is required.

c. Acknowledged, we are proposing to utilize existing trees as part of the greenbelt trees. The portion of the site along Chilson Road that currently does not have trees is proposed to have a staggered double row.

d. Acknowledged. The site contains and maintains a lot of natural vegetation and trees such that we do not believe the landscape island is necessary.

e. The sign location is known but the actual sign is not designed. The sign will need to go through the appropriate sign application process with the Township prior to its construction. Please identify that process in detail.

f. There are no ITE Manual sites that are directly applicable to outdoor religious worship. The most applicable standard to use is that of a Public Park or Church. The Church section within the 10th Edition of the ITE Manual calculates trip ends either via units of floor area, attendees, or seats. Since there is no physical building with seats, we cannot apply this standard. The current plan shows that the primary use of this site is the religious nature trails and landscape statue areas for reflection. This is similar to that of a Public Park that has trails. In looking at the Public Park in the ITE Manual, based on acreage of a park of 40 acres, the peak hour generator (in the worst-case scenario, weekday or weekend) is 44 trip ends (17 entering and 27 exiting based on a directional distribution of 39% entering and 61% exiting). This occurred on a Sunday peak hour generator. Saturday was slightly lower at 34 trip ends, with weekday trip ends during the peak hour generator of 19 trip ends. With respect to the outdoor Mass and any special events, the site is self-limited to 39 parking spaces. In sum, traffic is not an issue and no traffic impact study is required for the modest use of this property.

g. Acknowledged. Comments will be addressed.

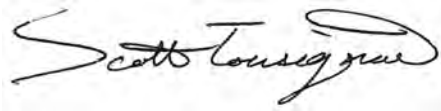
### **Brighton Area Fire Authority**

No comments need addressing.

Feel free to contact us should you have any questions, or if you are in need of any additional information. Moreover, we would request a prompt response to our questions noted above.

Sincerely,

BOSS ENGINEERING COMPANY

A handwritten signature in black ink that reads "Scott Tousignant". The signature is written in a cursive style with a large, sweeping initial "S".

---

Scott Tousignant, PE  
Project Manager

Enclosure 1: Letter from CHI



November 22, 2021

Ms. Kelly Van Marter, AICP  
Genoa Township Planning Commission  
2911 Dorr Road  
Brighton, Michigan 48116

Re: Catholic Healthcare International Church-Special Land Use and Site Plan Review

Dear Ms. Van Marter,

As you know, the Township and Catholic Health Care International (“CHI”) are currently involved in litigation directly related to CHI’s use of its 40-acre property located on Chilson Road (the property that is the subject of this current submission).

Following the Township’s denial of CHI’s request to construct the St. Pio Chapel and prayer campus, CHI sued the Township in federal court alleging various federal and state constitutional violations and a violation of the Religious Land Use and Institutionalized Persons Act, 42 U.S.C. § 2000cc *et seq.* (“RLUIPA”). Consequently, it is and remains CHI’s position that the Township had no legitimate basis for denying the original application.

This new application, which is submitted under protest and with the reservation of all rights and claims, is for the sole purpose of resolving the litigation that the Township filed against CHI in the 44th Circuit Court for Livingston County. (*Genoa Charter Township v. Catholic Healthcare International, Inc.* Case No. 21-31255-CZ). In that state court action, the Township asked the county circuit court to order CHI “to remove a 12-foot-tall stone structure [the image of Our Lady of Grace], altar, and 14 stations of the cross housing structures that have been installed at the [CHI] Property” and to prevent CHI from holding religious worship on their property, claiming that a Livingston County (not Township) permit (which CHI has never used) “forbids” this, until CHI obtains the “necessary permits, including land use permits and building permits for the structures.”

CHI was advised by the Township and its attorney that it had to undergo, yet again, the burdensome, costly, discriminatory, and subjective approval process that CHI is now undertaking here to resolve the state court litigation. And it is for this reason only that CHI submitted this application, and thus it did so under protest and subject to its reservation of all rights, claims, and defenses.

In fact, the Township and CHI submitted a stipulated order to the circuit court advising the court of the status of the parties’ efforts to resolve the state court lawsuit as follows:

The parties hereby advise the Court that [CHI] intends to submit, under protest and with a reservation of all rights, claims, and defenses, by October 15, 2021, a special application for land use, site plan, and associated documents to permit the display of religious symbols and the use of [CHI's] private property for religious worship. This submission will include the prayer trails with prayer stations, Stations of the Cross, altar, mural wall with the image of Our Lady of Grace, and a commercial driveway with parking. As noted, [CHI] reserves all rights, claims, and defenses, specifically including those set forth in the current federal litigation in *Catholic Healthcare International v. Genoa Township*, Case No. 5:21-cv-11303- JEL-DRG, which includes the reserved right to construct the St. Pio adoration chapel on [CHI's] property should [CHI] ultimately prevail in the federal litigation.

CHI made its submission to the Township on October 15, 2021. Yet, based on the Township's response so far, it appears that the Township's goal is to prevent CHI from using this property for religious worship no matter what. Unfortunately, it appears that this new application process may well trigger yet another round of federal litigation against the Township. Time will tell.

Consequently, all of the responses set forth by CHI through Boss Engineering, CHI's expert consultants, are provided under protest and with a reservation of all rights, claims, and defenses.

Indeed, to properly address, in full, your questions posed to Boss Engineering, CHI requests that the Township answer for us the following questions (and provide the applicable Township Ordinance citation in support).

Why is CHI's 40-acre property a "church[] or temple[ or a] *similar* place[] of worship"? The only applicable definition in the Zoning Ordinance defines a "Church or temple" as "[a]ny structure *wherein* persons regularly assemble for religious activity." § 25.02. There is no "church or temple" or any other "similar" "structure" on the property nor proposed here, so why is a special land use application necessary? If people gathered at a private residence for the purpose of outdoor religious worship, does that transform that property into a church or temple or similar place of worship requiring this burdensome and costly application process that the Township is requiring CHI to undergo? If not, why not?

How many people are permitted to gather outdoors on private property to engage in religious worship? The Township's assembly ordinance permits assemblies up to 1,000 people before a special permit is necessary. See <https://www.genoa.org/government/ordinances/ordinance-assembly> ("An ordinance to license, regulate and control, in the interest of the public health, safety and welfare, outdoor assemblies of persons in excess of 1,000 in number, to provide penalties for violations thereof and to repeal all ordinances or parts of ordinances inconsistent therewith.").

Private residences in the same neighborhood as the CHI property are permitted to hold secular events with numbers that will far exceed the number of people who will be engaging in religious worship on CHI's property. What is the number of people that the Township will permit on CHI's 40-acre property for outdoor religious worship? And what is that number based upon? Once we know that number, then we can explain more fully the events that CHI would like to

hold in greater detail, and it will permit a better evaluation of the traffic issue. CHI should not be discriminated against nor treated less favorably because its assemblies or events are for the purpose of religious worship. The Township's Park, for example, is on a parcel of land that is smaller (38 acres) than CHI's property. Yet, there are over 200 parking spaces for this park.<sup>1</sup> How many people are permitted to gather at any one time at this park? That would be a good number to start with for CHI's property.

Here, CHI is proposing only 39 parking spaces. There is no basis to question this limited parking or the traffic that it will generate on Chilson Road, particularly when the Township would permit neighboring property owners to hold a secular event (like a "Family Fun Day") with many times that number of cars going to the property.

CHI believes that secular events such as the recent "Family Fun Day" held at 3800 Chilson Road (approximately 1 mile away from CHI's property) this past September are great events and should continue. Similarly, CHI should be permitted to hold religious assemblies on its private property that are at least similar in size and scope to the secular assemblies permitted on neighboring properties and other properties throughout the Township, and CHI should be permitted to do so under the same terms and conditions. Upon information and belief, the owners of the property located at 3800 Chilson Road did not have to go through this burdensome and costly application process, nor should CHI have to. Similarly, CHI should not have to endure the burdens and costs associated with this current application in order for CHI to engage in its religious activity.<sup>2</sup>

During the state court proceedings, you testified under oath as to the following:

Q: So looking at the property that CHI has, if it had been a private residence you could put up 14 bird houses, \$50 per, a picnic table for \$50 permit, and a ten foot by 12-foot stone wall outside of the setbacks for \$50, correct?

A: That's correct.

Q: And it wouldn't require the \$2,875 application fee, correct?

A: Single family residential is a permitted use so they do not need to pay that fee.

---

<sup>1</sup> It should be noted that CHI has included with its application curbs and gutters for the parking as this is what the Township demanded previously. As you can see from the pictures provided in Enclosure 1 to this letter, the Township does not have curbs and gutters for all of the parking spaces at its park. Why is the Township requiring curbs and gutters for the CHI property? CHI requests an exemption from that costly requirement. Additionally, the Township permits parking on dirt surfaces (without curbs and gutters) at the recently developed Fillmore Park and at the Three Fires Elementary School located on Crooked Lake Drive. See Enclosure 2. How come the Township does not permit CHI to use a dirt drive/entrance and dirt parking without curbs and gutters like these secular properties?

<sup>2</sup> Attached to this response letter as Enclosure 3 are images/photographs from this "Family Fun Day" event showing the large number of people gathered on this private property – property which does not have a commercial parking lot; consequently, many vehicles have to park on grassy areas.

In other words, unlike CHI's religious displays, which are structurally no different in size or scope, displaying these secular symbols/items on private residential property does not require a costly special land use application or the Township Board's prior approval as these secular items are "permitted." Why isn't the display of religious symbols and associated outdoor religious worship a "permitted use" on private property like CHI's property?

While it is not possible to fully answer the questions you demand of us without the Township providing answers to the above questions, CHI, through Boss Engineering, submits the responses included with this package subject to these objections and the previously noted reservation of rights.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Jere Palazzolo". The signature is fluid and cursive, with the first name "Jere" and last name "Palazzolo" clearly distinguishable.

Jere Palazzolo  
President

Enclosures 1-3



Township Park  
(No Curbs and Gutters)



## Dirt Driveways/Parking



(Fillmore Park)



(Three Fires Elementary School)



**“Family Fun Day”**  
September 18, 2021  
3800 Chilson Road





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

December 9, 2021

Jere Palazzolo  
President  
Catholic Healthcare International  
2464 Taylor Road, Suite 317  
Wildwood, MO 63021

Mr. Palazzolo,

Upon the advice of counsel, Genoa Charter Township will not issue a response to your demand for answers due to the pending litigation referenced in your letter.

Sincerely,

Kelly VanMarter  
Community Development Director/Assistant Township Manager

Cc: Planning Commission  
Brian Borden, Safebuilt (via email)

**SUPERVISOR**

Bill Rogers

**CLERK**

Paulette A. Skolarus

**TREASURER**

Robin L. Hunt

**TRUSTEES**

Jean W. Ledford

H. James Mortensen

Terry Croft

Diana Lowe

**MANAGER**

Michael C. Archinal

Melanie Johnson, 3990 Chilson Road, Howell 48843 248-685-0903

Dear Genoa Planning Commission,

I am very concerned about the proposal put forth by Catholic Healthcare International, CHI at 3280 Chilson, Howell, MI.

In this season of updating the Master Plan, I am concerned about the outcomes and possible rezoning of current CE zoning. This area in Genoa Township may already be in danger of discouraging small family farms. The residents' primary concern has focused on the control of urban sprawl. CHI's special use permit should be paused until the applicant can offer in writing a clear understanding on the guidelines for use of this location. Why would CHI limit their vision (patron attendance) by building anything on this site?

The applicant's request for non-curbed parking is upsetting. A requirement for the use of this site is that the activities contained should be **low intensity** (few people). The applicant gave examples of parks that do not require curbed parking; that is a misrepresentation as the areas sited are in fact zoned to be an allowable **higher** level of **intensity**. Besides being given a property, why would CHI choose to invest monies into this site when we have the expectation of **low intensity**? How would the Planning Commission define low intensity (75 parking spaces max)? The applicant should be made aware of those parameters that may limit their eventual proposed developments and agree to them in writing before such application is approved.

The applicant has previously stated its intentions regarding use of the property by describing it as a "**low density** development" (few buildings). Considering setbacks and wetlands, CHI's apparent intent – for now – is to develop the site to maybe five buildings; this application is just for an outbuilding, and 39 spaces. A repeated phrase by the applicant "As demand increases," presents a very slippery slope. CHI apparently believes that it would have greater grounds to sue should Genoa Township not approve its eventual additions to initial developments.

This last September 23<sup>rd</sup>, one local church held a Padre Pio feast event. It was not held on the 3280 Chilson Road site, where it had been planned. I drove to the St. Joseph Catholic Church, Howell and the event drew around 50 cars on a

cold, rainy Tuesday. So, when considering demand for the 3280 site that had no icons yet installed it was already generating more participation than what 39 spots would support. I found out later that at least one other local church held a feast day event as well; I would assume the other church(s) would have also used the 3280 Chilson Road site. I guess that would be a day CHI would need to stagger events or bus people which is not allowed.

The referenced Family Fun Day, which I have attended several times, is only a few hours once a year. This is also not a public business, and a special land use permit was not necessary as it is a home on more than five acres.

Padre Pio is a very popular saint. I believe it was stated by Mr. Palazzolo that there are three million Padre Pio Prayer Group members worldwide. On YouTube you can see the myriad of Padre Pio videos a good example is "Following Padre Pio." Last week they posted a video and that video received 8,000 views in just one day. The famous method actor, Shia Labeouf, is studying Capuchin monks for his portrayal of Padre Pio in Able Ferrara's next film. If someone were to suggest a park and statues of Martin Luther King Jr., George Washington, or Amelia Earhart, I would oppose those as well. This proposal with its numerous monuments/icons/statues is not a fit in this rural neighborhood community. I foresee increasing demand for this site, it is time for the applicant to acknowledge this simple fact.

As I was leaving the Master Plan open house, I was speaking to another visitor, and mentioned that I was opposed to the Padre Pio project. He said, "I'm for it, why would you oppose a small church?" I replied, "Yes it was a small church, but it is a big deal, I mean a very big deal." In response he said, "Yeah it is a big deal." Faithful Catholics know what this project is all about. A tourist park using shuttle buses, even without a church.

"The intent of the site is to provide an outdoor Mass and prayer campus capable of accommodating the equivalent number of persons as a 95-seat chapel. There is no ordinance requiring the site to have 39 spaces. However, when the Chapel is eventually constructed (following the conclusion of the federal litigation), the Township Ordinance for said use would require 39 spaces. Consequently, that is the number we have chosen."

“Additionally, we have provided for future parking around the outer perimeter of the circle drive. This future parking is based on potential future (and unknown at this time) needs, and should the need arise in the future, a traffic study could then be conducted prior to the construction of said spaces to determine if improvements to Chilson Road are needed. Currently, no traffic study is required.”

Page 4 of the Boss Engineering report in this packet.

Nothing I have listened to or read has led me to believe this project can maintain its **low intensity requirement**.

Thank you for giving me the opportunity to share my perspectives.

Sincerely,

Melanie Johnson

P. S. I am not opposed to this project coming to Genoa Township, I just think after hearing their mission loud and clear and seeing how litigious things will get and have been, this is a recipe for loss on both sides. Genoa Township yes, but in a properly zoned area that is able to meet CHI's needs.





December 9, 2021

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>	Catholic Healthcare International Prayer Campus – Special Land Use and Site Plan Review #2
<b>Location:</b>	3280 Chilson Road – west side of Chilson Road, south of Crooked Lake Road
<b>Zoning:</b>	CE Country Estate District

Dear Commissioners:

At the Township’s request, we have reviewed the revised submittal from Catholic Healthcare International requesting special land use and site plan review/approval for a “prayer campus” (site plan most recently dated 11/22/21).

**A. Summary**

1. In accordance with Section 19.07, the Township may view the removal of a chapel building as a change in conditions. However, the current request indicates that use of the property will be quite similar to the project previously denied.
2. **Special Land Use standards of Section 19.03:**
  - a. Master Plan – There is no reference to institutional uses in the Agriculture/Country Estate future land use category.
  - b. Compatibility and Impacts – Not more than weekly outdoor mass is expected to attract approximately 50 people, while the two currently planned events are anticipated to draw 200 to 400 people.
  - c. Public Facilities and Services – We request the applicant describe how refuse removal will be handled for the larger planned events. The applicant must address any comments provided by the Township Engineer and Brighton Area Fire Authority.
3. **Use Requirements of Section 3.03.02(I):**
  - a. If additional uses/buildings are proposed in the future, they will be subject to the applicable review procedures and regulations of the Zoning Ordinance.
4. **Site Plan Review:**
  - a. The applicant based the amount of parking provided on that required for a 95-seat chapel building.
  - b. Given the potential need for shuttle services during larger planned events, the applicant may wish to provide additional parking or incorporate a banked parking plan into the project.
  - c. The Planning Commission may allow existing trees to remain in lieu of planting 5 new greenbelt trees.
  - d. The Planning Commission may allow the parking lot layout without internal landscape islands.
  - e. The Township may require a traffic impact assessment based on the directional trips generated in the peak hour for the planned events.
  - f. The applicant must address any comments provided by the Township Engineer and/or Brighton Area Fire Authority.



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

## **B. Proposal/Process**

The applicant proposes to construct a “prayer campus” on the approximately 40-acre subject site. Per the initial submittal materials, this includes “prayer trails, Stations of the Cross, a mural wall with altar, and religious landscape/garden statues.”

The revised submittal references “no more than weekly” outdoor mass, and two larger planned events related to St. Padre Pio.

The project also includes a 384-square foot accessory building (utility shed) to store maintenance equipment.

Churches, temples, and similar places of worship are allowed with special land use approval in the CE District. Such uses are also subject to the requirements of Section 3.03.02(1).

Despite the exclusion of a church/temple building, we are of the opinion that the proposed use entails a “similar place of worship.”

Additionally, a similar special land use/site plan request was denied by the Township Board earlier this year. Per Section 19.07:

*No application for a special land use permit which has been denied wholly or in part shall be resubmitted for a period of one (1) year from the date of denial, except on the grounds of new evidence or proof of changed conditions relating to all of the reasons noted for the denial found to be valid by the Township Board*

In this instance, the Township may view removal of the chapel building as a change in conditions. However, the current request indicates that use of the property will be quite similar to the project previously denied, even with removal of the chapel building.

Procedurally, the Planning Commission is to review the special land use, site plan, and impact assessment, and provide a recommendation on each to the Township Board following a public hearing.

The Township Board has the final review/approval authority over each aspect.

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

Section 19.03 of the Zoning Ordinance identifies the review criteria for all special land uses, as follows:

- 1. Master Plan.** The Township Master Plan and Future Land Use Map identify the subject site, as well as the adjacent properties on the west side of Chilson Road, as Agriculture/Country Estate.

This category is intended for “agricultural use” or “single family residential on estate lots” (5-acre minimum). The Plan further states that such areas “have significant natural limitations such as wetlands or severe soil limitations” and that “these areas are not planned for sanitary sewer.”

The subject site possesses these characteristics (wetlands, wooded areas, no sanitary sewer). It is also situated within the Rural Reserve area of the growth management boundary, which states that such areas are to “be maintained at a relatively low intensity rural character of development that will not adversely impact natural features and agricultural uses.”

There is no reference to institutional uses under the Agriculture/Country Estate future land use category.

- 2. Compatibility.** The subject site is currently undeveloped. The surrounding area includes single-family residences on relatively large lots, as well as active agricultural land.

The north and west sides of the site contain areas of woodlands and wetlands that are to be preserved as part of the site’s development. There is also a tree line along the south side that will be mostly preserved. Protection of these areas will help to buffer adjacent uses.

The revised submittal notes that outdoor mass will occur “no more than weekly” with an anticipated attendance of “approximately 50 or less.”

Additionally, “the two currently planned special events are May 25 (St. Padre Pio Birthday Mass & Reception) and September 23 (St. Padre Pio Feast Day Mass & Reception.” The anticipated attendance for these events is “approximately 200 to 400 persons.”

- 3. Public Facilities and Services.** Vehicular access will be provided via an improved driveway along Chilson Road. Public water and sanitary are not available for the site, though neither appear to be necessary (pending input from the Township Engineer).

The submittal materials note that refuse removal will occur via typical weekly streetside pickup. Our concern related to this aspect is whether typical curbside pickup will be sufficient for the planned events given the number of people anticipated. As such, the applicant should describe any additional efforts they will undertake to ensure proper refuse removal during and following such events.

The Commission should consider any comments provided by the Township Engineer and Brighton Area Fire Authority with respect to this criterion.

- 4. Impacts.** Our primary concern under this criterion is related to the potential off-site impacts of the planned events given the number of people anticipated, particularly impacts upon the roadway.

In response, the revised materials note that if attendance is expected to exceed parking capacity, the applicant will provide for a shuttle service.

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

#### **D. Use Requirements**

Section 3.03.02(l) identifies the use requirements applicable to churches, temples, and similar places of worship, as follows:

- 1. Minimum lot area shall be three (3) acres plus an additional fifteen thousand (15,000) square feet for each one hundred (100) persons of seating capacity.**

The site contains approximately 40 acres of lot area; however, in the absence of a building, there is no seating capacity to speak of. As such, this requirement does not apply to the current request.

The site plan does depict a “future chapel location.” Based on the information contained in the submittal, this standard would likely be met for a future chapel building.

- 2. Buildings of greater than the maximum height allowed in Section 3.04, Dimensional Standards, may be allowed provided front, side and rear yards are increased above the minimum required yards by one foot for each foot of building height that exceeds the maximum height allowed. The maximum height of a steeple shall be sixty (60) feet.**

The only building proposed at this time is a 384-square foot accessory building. As such, this requirement is not applicable to the current request.

- 3. Wherever an off-street parking area is adjacent to a residential district, there shall be a minimum parking lot setback of fifty (50) feet with a continuous obscuring wall, fence and/or landscaped area at least four (4) feet in height shall be provided. The Township Board may reduce this buffer based on the provision of landscaping, the presence of existing trees or in consideration of topographic conditions.**

The proposed parking areas exceed the minimum setback requirement. Parking lot screening is provided via existing vegetation and new plantings. There is also an existing fence along the south side lot line, though it does not obscure sightlines to the parking lot.

- 4. Private schools and child day care centers may be allowed as an accessory use to churches, temples and similar places of worship where the site has access to a paved public roadway.**

The current project does not include a private school or child care center, though the site does have access to a paved public roadway.

If the applicant wishes to propose such uses in the future, including the future chapel depicted on the site plan, they will be subject to the applicable review procedures and regulations outlined in the Township Zoning Ordinance.

#### **E. Site Plan Review**

- 1. Dimensional Requirements.** The elements depicted on the site plan are in accordance with the applicable dimensional standards of the CE District.
- 2. Building Materials and Design.** The only building proposed as part of the project is a 384-square foot accessory building intended for storage of maintenance items.

The revised submittal includes details of this building, as requested.

- 3. Pedestrian Circulation.** In accordance with Section 12.05 of the Zoning Ordinance and the Township Pathways Plan, public walkways are not required (nor are they proposed) along this portion of Chilson Road.

Internally, the plan includes 7-foot wide concrete sidewalks along the edge of the proposed parking lot.

Additionally, there are 4 trails throughout the site, including the Stations of the Cross (see Sheet 4A). A detail on Sheet 4 indicates that walking trails are 5 feet wide and surfaced with limestone.

- 4. Vehicular Circulation.** Access is provided via an improved driveway to/from Chilson Road. the project includes a deceleration/acceleration lane for southbound traffic.

Internal circulation includes both one-way and two-way traffic, with sufficient drive aisle widths provided for both. Sheet 4 also includes a truck turning template for a fire truck.

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

- 5. Parking.** The parking standards for places of worship (Section 14.04) are based on seating within the main unit of worship. Given that the proposed place of worship is outdoors and does not include fixed seating, there is no specific standard to apply.

The revised submittal notes that the parking required for the future chapel was used to help determine the number of spaces needed. In this instance, a 95 seat chapel would require 32 parking spaces, and 39 are provided.

As previously noted, the 39 spaces may not be sufficient for the larger events planned at the site. As such, the applicant will utilize a shuttle service as needed.

As this is a somewhat unusual situation, the applicant may wish to provide additional parking, or incorporate a banked parking plan into the proposal (similar to that described in Section 14.02.05).

With respect to the design, the parking lot includes curbing and looped striping, as well as the required number of barrier-free spaces (based on the 39 total spaces provided).

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

Standard	Required	Proposed	Notes
Front yard greenbelt	20' width 14 canopy trees	50' width 9 canopy trees Existing trees	PC may allow existing trees to be preserved in lieu of 5 new tree plantings
Parking lot	4 canopy trees 390 SF internal landscaped area	4 canopy trees Existing trees 0 SF internal landscaped area	PC may allow proposal without internal landscape islands

The plan also includes 36 evergreen trees planted in a staggered manner along the south side lot line to serve as buffering for the adjacent property.

- 7. Exterior Lighting.** The lighting plan depicts 13 light poles along the driveway/parking lot.

Details note the use of downward-directed LED fixtures mounted at a height of 20 feet (both of which meet the requirements of Section 12.03). Photometric readings on-site and along property lines also comply with Ordinance standards.

- 8. Signs.** The site plan identifies a temporary address/future monument sign on the south side of the driveway.

The required setback is provided, and the note indicates a 4' x 4' sign; however, no other information is provided. The revised submittal notes that the actual sign has not yet been designed.

Lastly, the applicant has acknowledged the need to apply for and obtain a sign permit from the Township prior to installation.

- 9. Impact Assessment.** The submittal includes a revised Impact Assessment dated November 22, 2021.

In summary, the Assessment notes that the proposed project is not expected to have an adverse impact upon natural features, stormwater, surrounding land, public services/utilities, or traffic and pedestrians.

While the regular use of the site does not meet appear to meet the threshold for a traffic study, the planned events may warrant consideration of a traffic impact assessment, per Section 18.07.09.

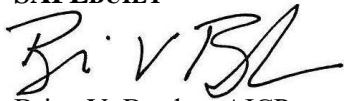
More specifically, a traffic assessment is required for projects that could generate 50-99 directional trips during a peak hour.

The Township should consider any additional comments provided by the Township Engineer on this aspect of the project.

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

Respectfully,

**SAFE BUILT**



Brian V. Borden, AICP  
Michigan Planning Manager



December 8, 2021

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

**Re: Catholic Healthcare International Prayer Campus  
Special Land Use and Site Plan Review No. 2**

Dear Mrs. Van Marter:

Tetra Tech conducted a review of the proposed Catholic Healthcare International Prayer Campus special land use and site plan last dated November 22, 2021. The plans and impact assessment were submitted by Boss Engineering on behalf of Catholic Healthcare International. The site is on a 40-acre parcel located on the southwest side of Chilson Road, approximately 1,500 feet south of Crooked Lake Road. The petitioner is proposing a prayer campus in the southeast corner of the property. The prayer campus will include a parking lot, access drive, and storm drainage improvements. There are no occupiable structures proposed as part of the site development.

After reviewing the site and impact assessment we offer the following:

**GENERAL NOTES**

1. The site plan includes the location of a future chapel. Any future improvements will need to be approved by the Township at that time. A complete master plan for the property should be provided to fully understand the vision of the development and assess whether the proposed improvements are properly designed. The master plan should include any proposed future buildings.
2. The Petitioner has noted that portable bathrooms will be used for outdoor mass and special events at the site. More detail should be provided on how these portable bathrooms will be maintained if they will be used for an extended period. The review from the Livingston County Health Department did not include any review of proposed sanitary services to be regularly used on the site.
3. The cover letter provided by the Petitioner notes that they request an exemption from using curb and gutter for their drive and parking lot. The design standards and ordinance require curb and gutter; therefore, we cannot support a variance from this standard. Any deviation from the zoning ordinance must be applied for and approved through the zoning board of appeals.
4. The Livingston County Health Department has noted that there is an old test well that was drilled in 2000 that will need to be plugged by a registered water well drilling contractor as part of this project. The location of the test well and a note indicating its proposed abandonment should be added to the site plan.



**TRAFFIC**

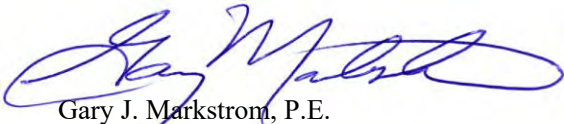
1. The driveway to the site will need to be reviewed and approved by the Livingston County Road Commission. An updated approval letter from the LCRC will be required for the Township's file.
2. The Petitioner has proposed that the site will have occasional large events. The Petitioner is proposing that for events where more than 39 parking spaces are required, a shuttle service will be provided from a nearby church. The response letter from the Petitioner noted that events will have between 200-400 attendees. Section 18.07.09 of the Zoning Ordinance requires that a Traffic Impact Assessment be provided for projects which could generate 50-99 directional trips during a peak hour or requires a traffic impact statement for projects which generate over 100 directional trips during the peak hour. More detail will need to be provided on how this traffic will be handled, whether this is at the subject site or shuttle bus location.

**DRAINAGE AND GRADING**

1. The Livingston Country Drain Commission has updated their drainage standards, which will go into effect by the end of the year. Part of their new standards requires that infiltration testing is required to determine site suitability for infiltration. Infiltration testing will be required since the Petitioner is proposing the use of bioswales for storm drainage. More guidance for infiltration testing is attached to this letter.

We recommend the Planning Commission consider our comments in their action on the proposed site plan and special land use application. Please call or email if you have any questions.

Sincerely,



Gary J. Markstrom, P.E.  
Vice President



Shelby Byrne  
Project Engineer

Attachment

- 7) Situations where site use is inconsistent with the capture and use of stormwater or other physical conditions on site that preclude the use of plants for evapotranspiration or bioinfiltration.
- 8) Retention and/or use of stormwater onsite or discharge of stormwater onsite by infiltration having an adverse effect on the site, gradient of surface or subsurface water, receiving watershed, or water body ecological processes.
- 9) Federal, state or local requirements or permit conditions that prohibit water collection or make it technically infeasible to apply LID practices.

\* Adapted from EPA Section 438 Technical Guidance December 2009.

## **Infiltration Testing**

The infiltration testing must provide information related to the conditions at the bottom of the infiltration BMP. General infiltration test guidelines are as follows:

1. Any test used to determine infiltration rates for BMPs, shall be performed at the location and extend to the bottom elevation of the proposed infiltration BMP.
2. Infiltration tests must not be conducted in the rain, within 24 hours of significant rainfall events (>0.5 inches), when the ground is frozen, or when the temperature is below freezing.
3. Infiltration tests should be conducted in the field.
4. All infiltration rates used for the design of BMPs must be certified by a Professional Engineer licensed in the State of Michigan and submitted to the WRC's office.
5. Following all testing, the surface must be restored.
6. Additional infiltration tests may be necessary due to subsurface variability, water table depth or topography. The WRC's office will determine if more tests will be required.

Infiltration tests may include, but not limited to, the following methods:

1. Test Pits used in conjunction with any of the infiltration tests listed below
  - a. Double-ring Infiltrometer test – estimate for vertical movement of water through the bottom of the test area
    - i. ASTM 2003 Volume 4.08, Soil and Rock (I): Designation D 3385-03, Standard Test Method for Infiltration Rate of Soils in Field Using a Double-Ring Infiltrometer
    - ii. ASTM 2002 Volume 4.09, Soil and Rock (II): Designation D 5093-90, Standard Method of Field Measurement of Infiltration Rate Using a Double-Ring Infiltrometer with a Sealed-Inner Ring
  - b. Percolation tests – estimate for vertical movement of water through the bottom and sides of the test area

- c. Encased falling head permeability test – estimate for vertical movement of water through the bottom of the test area
  - d. Guelph permeameter
  - e. Constant head permeameter (Amoozemeter)
2. When using test pits, a minimum of 2 infiltration tests are required per test pit.
3. Soil Borings
- a. The use of soil borings to determine infiltration rates is discouraged. If soil borings are used in lieu of test pits, a safety factor of 2 is applied to the final  $K_{sat}$  value. This is due to the limited sample and the inability to test in-situ soil characteristics when performing a soil boring.

Note: Other tests selected by the design engineer that can accurately represent the in-situ infiltration rate may be used at the discretion of this office.

The following infiltration ( $K_{sat}$ ) values shall be used to determine the appropriate design methods for infiltration BMPs:

K <sub>sat</sub> Values	
$K_{sat} \geq 0.50 \text{ in/hr}$	No supplemental measures are required for Infiltration BMPs to provide the infiltration volume
$0.50 \text{ in/hr} \geq K_{sat} \geq 0.24 \text{ in/hr}$	Install supplemental measures, which may include subsoil amendment, or an underdrain placed at the top of the storage bed layer to ensure dewatering in the event underlying soils fail to provide adequate drawdown or dewatering time. If underdrains are selected, design shall allow stormwater to percolate through the soils first, with the underdrain serving as a secondary outlet, by placing the underdrain in the upper level of the BMP, with pipe perforations located along the underdrain invert.
$K_{sat} \leq 0.24 \text{ in/hr}$	<b><u>Soils are not suitable for infiltration. Alternative volume reducing LID practices must be used to the MEP to reduce stormwater volume.</u></b>

## BMP Volume Calculations

The most practical way to reduce stormwater runoff is to incorporate infiltration based structural BMPs. Infiltration based BMPs include bioretention basin/rain garden, vegetated bioswales, porous pavement, infiltration basins, subsurface infiltration beds, dry wells, and infiltration trenches. These BMPs share the common feature of storing stormwater on the surface or in a subsurface matrix and allowing the water infiltrate over a period of 24 to 48 hours depending on the BMP. For BMPs that incorporate vegetation, stormwater runoff is also reduced through evapotranspiration. Other structural BMPs, such as vegetated roofs and water harvesting / reuse systems can also provide volume reduction and be used to meet the Channel Protection Volume Requirement ( $V_{CP-R}$ ) The basic calculations for the  $V_{CP-R}$  achieved for BMPs are as follows:





# BRIGHTON AREA FIRE AUTHORITY

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

---

November 30, 2021

Kelly VanMarter  
Genoa Township  
2911 Dorr Road  
Brighton, MI 48116

RE: Catholic Healthcare International Church  
3280 Chilson 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 November 24, 2021 and the drawings are dated November 22, 2021. The project is for a new Catholic Prayer Campus on Chilson Rd. The plan review is based on the requirements of the International Fire Code (IFC) 2018 edition.

The fire authority has no additional comments related to the site plan for the proposed parking lot and campus development. Additional comments shall be required should the chapel be proposed or any additional changes be made to the site plan dated November 22, 2021, related to site access, building construction, or life safety.

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

Cordially,

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

Rick Boisvert, FM, CFPS  
Fire Marshal

cc: Amy Ruthig [amy@genoa.org](mailto:amy@genoa.org)

**From:** [Matt Bolang](#)  
**To:** [Amy Ruthig](#)  
**Cc:** [Aaron Aumock](#)  
**Subject:** RE: CHI Prayer Campus Submittal  
**Date:** Tuesday, November 23, 2021 2:00:57 PM  
**Attachments:** [image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[3280 Chilson Road - Test Well.pdf](#)

---

Hi Amy,

It doesn't sound like they are planning for any water or wastewater needs for this project and the proposal all seems pretty low impact. My only comment is that there still exists an old test well that was drilled in 2000 for the purposes of evaluating groundwater for a proposed church, which never happened. This well needs to be properly plugged by a registered water well drilling contractor. Attached are the permit documents we have on file for this well that indicates location and well construction details. If the township planning commission were to grant approval, I would recommend that the plugging of this well be a prerequisite.

Please let me know if you have any questions.

-Matt

**Matt Bolang, MSA, REHS**

**Deputy Health Officer**

**Director of Environmental Health**

Livingston County Health Department

2300 East Grand River

Howell, MI 48843

517-552-6870 | [www.lchd.org](http://www.lchd.org)



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---

**From:** Amy Ruthig <amy@genoa.org>  
**Sent:** Wednesday, November 17, 2021 5:09 PM  
**To:** Matt Bolang <MBolang@livgov.com>  
**Subject:** [EXT] CHI Prayer Campus Submittal

**"The e-mail below is from an external source. Please do not open attachments or click links from an**

unknown or suspicious origin."

---

Good Afternoon,

I have attached a new submittal for the CHI Prayer Campus project for your review.

This project is schedule to be heard at the December 13<sup>th</sup>, 2021 Planning Commission Meeting.

Please contact me if you have any questions.

Thank You,

Amy Ruthig  
Zoning Official



Genoa Charter Township  
2911 Dorr Road, Brighton, Michigan 48116  
**Office: 810-227-5225 Ext. 114 Direct: 810-224-5824**  
E-mail: [amy@genoa.org](mailto:amy@genoa.org), Url: [www.genoa.org](http://www.genoa.org)





Livingston County Health Department

Environmental Health Division • Fax (517) 546-9853 • Phone (517) 546-9858

2300 East Grand River Ave • Howell, Michigan 48843-7579

WATER SUPPLY PERMIT

GENOA

00

2300 CHILSON

02/10/10

PERMIT NUMBER: 00-1901 TW

TOWNSHIP: GENOA

PROPERTY ADDRESS: 2300 CHILSON ROAD  
HOWELL, MI 48843

LOCATED BETWEEN: 1/4 MILES S OF CROOKED LAKE, W. SIDE

SURVEY: 40

ACREAGE: 40

# OF ROOMS: 4

TAX ID#: 4711-70 100 00  
SECTION #: 10

LOT #:   
PARCEL #:   
SCALED PLOT INCLUDED:

OWNER: GLENN MILLER  
ADDRESS: 6774 W GRAND RIVER  
CITY, STATE, ZIP: BRIGHTON, MI 48114  
PHONE: 517/546-3981

CONTRACTOR:  
ADDRESS:  
CITY, STATE, ZIP:  
PHONE:

ENVIRONMENTAL SANITARIAN: *[Signature]* DATE: 10-00  
--- THIS PERMIT EXPIRES TWO YEARS FROM DATE OF ISSUANCE ---

MUNICIPAL WELL: NO PRIVATE WELL: YES  
RESIDENTIAL OR COMMERCIAL PROPERTY: R

INFO DESCRIPTION COMMENTS

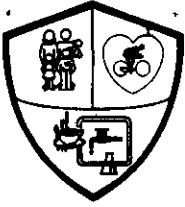
See attached letter provided by Glenn Miller dated 1/6/04.

SPECIAL RIGHTS: ALL WELLS SHALL BE DRILLED BY A LICENSED MI WELL DRILLER & BY CONSTRUCTED IN ACCORDANCE TO PART 172, OF ACT 368 OF THE P.W.C.A. & BE GROUTED ENTIRE LENGTH OF CASING AS PER RULE 1340 AND 175 AS AMENDED. A WELL SHALL BE DRILLED TO A DEPTH THAT WILL IDENTIFY A PROTECTED SUSTAINABLE WATER SUPPLY (MIN 10' CLAY PROTECTION); AND MUST PUMP MIN OF 4 HRS OR UNTIL A STABILIZED PUMPING RATE HAS BEEN ACHIEVED. MUST SUBMIT ACCEPTABLE: 1 BACT ANALYSIS 3 CHEM/INTEGRATE ANALYSIS 2 V.C. ANALYSIS 4 COMPLETE METALS SCAN 5 WELL LOG & 6 WELL DRILLING NOTIFICATION. THIS DOES NOT MEAN THIS PROP. IS A RUSTLEABLE LOT. IF WELL IS TERMINATED IN BEDROCK - ARSENIC/BARIUM TEST MUST BE COLLECTED.

10-23-00 site visit revealed well had been drilled prior to issuance of permit!  
11-30-00 creating for more info!

FINAL APPROVAL: ENVIRONMENTAL SANITARIAN DATE:

Feb 6, 2003 Site visit confirmed SIRC well in pressure w/cap => well not being used at this time! Left cap!  
Feb 7th 2003 Frank with IS on a monthly basis from the Catholic Process - He is maintaining their property while RAYSON HUBBES on this property!



# LIVINGSTON COUNTY HEALTH DEPARTMENT

ENVIRONMENTAL HEALTH DIVISION

2300 E Grand River • Howell, Michigan 48843-7579

(517) 546-9858 • Fax (517) 546-9853

## Application to Install Sewage Disposal and/or Water Supply Facilities For Single or Two Family Dwellings Only

Please Print or Type - See Reverse Side

New Construction

Replacement

OBSERVATION  
WELL-TEST

Septic Permit #

Well Permit #

00-1901 TW

### I. LOCATION OF BUILDING

Address 3280 CHILSON ROAD Phone (517) 548-3576

City/Village Howell Zip Code 48843 Township GENOA Section # 20

Between 1/4 m S. OF CROOKED LAKE RD and WEST SIDE

Subdivision — Lot(s) # —

Acreage 40 Parcel # —

No. of Bedrooms — Tax Code # 11-20-100-08

Den/Office room proposed  yes  no

Will the plumbing elevation be lower than the septic tank making it necessary to install a sewage lift pump  
 yes  no

### A. OWNER, (Proposed)

Name CATHOLIC DIOCESE OF LANSING Phone (517) 546-3981

Address C/O GLENN MILLER - CONSULTING GEOLOGIST / 6236 W GRAND RIVER

City/State BRIGHTON, MICH Zip Code 48114

### B. CONTRACTOR for Sewage Disposal System

Name N/A Phone ( )

Address N/A Zip Code

### C. CONTRACTOR for Water Supply

Name CRIBLEY DRILLING Co. Inc Phone (734) 426-4720

Address 8300 DEXTER CHILSON RD Zip Code 48130

City/State DEXTER, MICH Zip Code

### D. BUILDER

Name N/A Phone ( )

Address N/A Zip Code

I hereby apply for this permit and have authorization to do so I understand this is a construction permit only and the sewage disposal system and/or well is not to be put into service until final written approval has been granted I further state the information given herein is accurate and complete

Glenn Miller - CONSULTING GEOLOGIST 17 Oct 2000

Applicant's Signature

Date

\*\*\*\*\*For Office Use Only\*\*\*\*\*

Receipt # 150041

Amount \$ 5.00

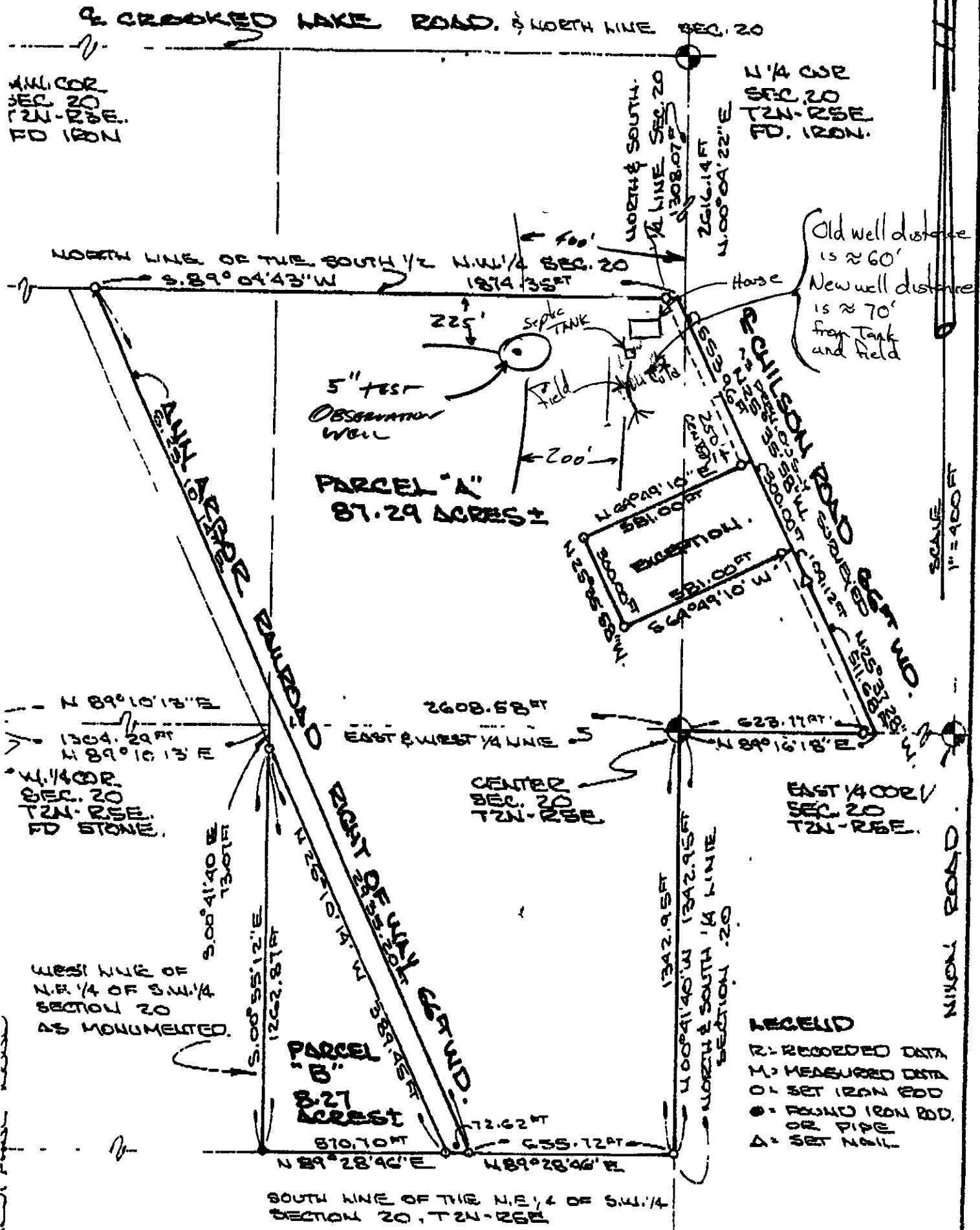
Payer MILLER

CASH

Mauleyn Sutton 548 3576 (517) \$650,000.00

350X660  
M14-228

**CERTIFICATE OF SURVEY**



Old well distance is  $\approx 60'$   
New well distance is  $\approx 70'$  from Tank and field

- LEGEND**
- R: RECORDED DATA
  - M: MEASURED DATA
  - O: SET IRON ROD
  - : FOUND IRON ROD OR PIPE
  - ▲: SET NAIL

SCALE 1" = 400 FT

N. 1/4 COR. SEC. 20 T2N-R5E. FD IRON.

N. 1/4 COR. SEC. 20 T2N-R5E. FD. IRON.

N. 1/4 COR. SEC. 20 T2N-R5E. FD STONE.

WEST LINE OF N.E. 1/4 OF S.W. 1/4 SECTION 20 AS MONUMENTED.

SOUTH LINE OF THE N.E. 1/4 OF S.W. 1/4 SECTION 20, T2N-R5E

Glenn Miller

*Consulting Geologist*

6236 WEST GRAND RIVER • BRIGHTON, MICHIGAN 48114

TELEPHONE (517) 546-3981

FAX (517) 546-1919

06 Jan 2004

RECEIVED

JAN 08 2004

LIV. CTY. HEALTH DEPT

Livingston County Environmental  
Health Department  
2300 E. Grand River  
Howell, Mich 48843

Attn: ✓ Mr. Matt Bolang  
Groundwater Specialist

Re: Catholic Diocese of Lansing  
Former Herrel Sutton Property  
3280 Chilson Road  
Howell, Mich. 48843  
Sec 20 / Genoa Township  
Livingston County, Michigan  
½ Mile S of Crooked Lake Road  
40.01 Acres

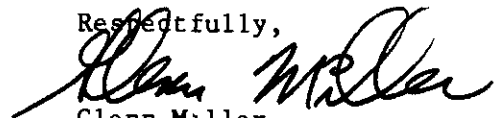
Thanks for your call inquiring about the status of the Test Well that was drilled 11 October 2000.

This Test Well was drilled for the determination of an adequate Water Supply for a proposed future Catholic Church Facility. It is anticipated that this Well will become an Observation Well for permanent Potable Water Supply and observation for the dedicated Fire Protection Well.

The Diocese of Lansing anticipates that a Church will be constructed on this Site in the next ten (10) years

Appreciate your continued cooperation with yours truly, and with the Catholic Diocese of Lansing.

Respectfully,



Glenn Miller  
Consulting Geologist  
Hydrologist

cc: Catholic Diocese of Lansing  
300 W. Ottawa Street  
Lansing, Mich. 48933

Mr. Paul Garriepy, Director  
Properties & Cemeteries  
(517) 342-2534

*"One Test is Worth a Thousand Expert Opinions"*



CATHOLIC DIOCESE OF LANSING

300 WEST OTTAWA STREET  
LANSING, MI 48933 1577  
PH (517) 342 2440

October 27, 2004

Mr Mathew Bolang  
2300 East Grand River, Suite 102  
Howell, Michigan 48843

Dear Mr Bolang

This letter is a follow-up to our telephone conversation of October 26, 2004 concerning this active well located at 3280 Chilson Road, Genoa Township

As I indicated to you, the Diocese of Lansing has commissioned a study of the land and a site plan for its future use is being developed I do not anticipate any final decision made in the next two years

If at all possible, we would appreciate your office allowing us to keep the well active and in place while the Diocese goes through it's own internal planning and development process What use the Diocese will employ for the land will depend on many factors, availability of funds, demographics, staffing, and other needs in the other counties which comprise the Diocese of Lansing

By July 1, 2007, I should be able to tell you if development of this land is imminent or still long term and the issue of closing/capping the well could be revisited at that time

If you have any questions, please do not hesitate to call me

Sincerely,

A handwritten signature in cursive script that reads "Paul D. Garriépy".

Paul D Garriépy  
Director of Properties and Cemeteries

PDG/jam

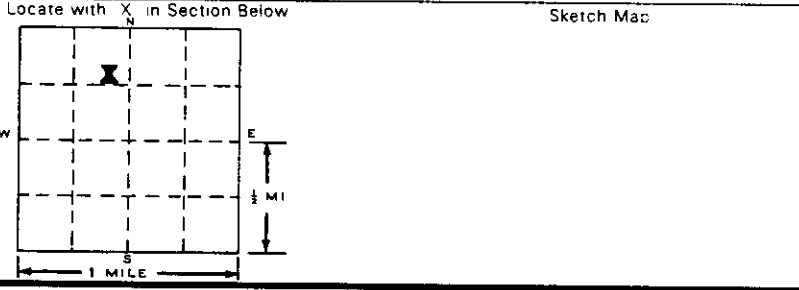
cc Glen Miller

MICHIGAN DEPARTMENT OF PUBLIC HEALTH  
WATER WELL AND PUMP RECORD

0019017N  
PERMIT NUMBER

1 LOCATION OF WELL						
County	Township Name	Fraction	Section Number	Town Number	Range Number	
LIVINGSTON	GENOA	NE 1/4 SE 1/4 NW 1/4	20	T2 N/S	R5 E/W	

Distance And Direction From Road Intersection  
 Intersection of N. P.L. & C.L. Chilson Road, West 250',  
 Thence South 225',  
 225' S. of N. P.L. = 1565' S. of C.L. Crooked Lake Rd.  
 400' W. of C.L. Chilson Road  
 Street Address & City of Well Location



2 FORMATION DESCRIPTION	THICKNESS OF STRATUM	DEPTH TO BOTTOM OF STRATUM
Yellowish Tan- <del>Y</del> Gray to <del>1</del> <sup>1</sup> / <sub>2</sub> Silty, <del>3</del> <sup>3</sup> / <sub>4</sub> V.F., Sandy, <del>4</del> <sup>4</sup> / <sub>8</sub> CLAY	10'	10'
Tan- <del>5</del> <sup>5</sup> / <sub>8</sub> Clayey, <del>2</del> <sup>2</sup> / <sub>8</sub> V.F., <del>7</del> <sup>7</sup> / <sub>8</sub> Fine SAND	18'	28'
Tan- <del>5</del> <sup>5</sup> / <sub>8</sub> Clayey, <del>5</del> <sup>5</sup> / <sub>8</sub> V.F., <del>5</del> <sup>5</sup> / <sub>8</sub> Fine, <del>2</del> <sup>2</sup> / <sub>8</sub> Medium, <del>1</del> <sup>1</sup> / <sub>8</sub> Coarse SAND	13'	41'
Gray- <del>5</del> <sup>5</sup> / <sub>8</sub> Clayey, <del>1</del> <sup>1</sup> / <sub>8</sub> V.F., <del>7</del> <sup>7</sup> / <sub>8</sub> Fine, <del>1</del> <sup>1</sup> / <sub>8</sub> Medium SAND	27'	68'
Gray- <del>5</del> <sup>5</sup> / <sub>8</sub> Clayey, <del>1</del> <sup>1</sup> / <sub>8</sub> V.F., <del>5</del> <sup>5</sup> / <sub>8</sub> Fine SAND	57'	122'
Gray- <del>2</del> <sup>2</sup> / <sub>8</sub> Gravelly, <del>1</del> <sup>1</sup> / <sub>8</sub> Silty, <del>2</del> <sup>2</sup> / <sub>8</sub> V.F., <del>1</del> <sup>1</sup> / <sub>8</sub> Fine, Sandy, <del>3</del> <sup>3</sup> / <sub>8</sub> CLAY	23'	145'
Tan-LIMESTONE	4'+	152'

**RECEIVED**  
 NOV 12 2000  
 LIV. CTY. HEALTH DEPT.

**NOTE: Screens 12' Total. 4'-10 Slot-Top, 4'-12 Slot-Mid, 4'-12 Slot-Bottom. Sandpacked w/ #3 K & H Sand, 16 Slot, 60K Retention**

USE A 2ND SHEET IF NEEDED

15 Remarks elevation source of data etc  
 700 # Sand. Drill to 152, Filled Hole Back w/ #4 Sand 1000 lbs.

17 Rig Operator's Name  
 Kurt Wing

3 OWNER OF WELL  
**Herral & Marilyn Sutton**  
 Address **3200 Chilson Road**  
**Howell, Mich. 48843**  
 Address Same As Well Location?  Yes  No

4 WELL DEPTH Date Completed  
 122 FT 10 11 00  
 New Well  
 Replacement Well

5  Cable tool  Rotary  Driven  Dug  
 Hollow rod  Auger  Jetted

6 USE  Domestic  Type I Public  Type III Public  
 Irrigation  Type IIa Public  Heat pump  
 Test Well  Type IIb Public  Observation Well

7 CASING Diameter  Steel  Threaded  Welded  
 Plastic  Height Above/Below Surface 3.25 ft  
 5 in to 110 ft depth Weight 58-21 lbs/ft  
 Grooved Drill Hole Diameter 8 3/4 in to 105 ft depth  
 Drive Shoe  Yes  No

8 SCREEN  Not Installed  
 Type 8.8 Diameter 4"  
 Slot/Gauze 10-Top, 12-Mid, Length 12"  
 Set between 12-Top ft and 122 ft  
 FITTINGS  K Packer  Lead Packer  Bremer Check  
 Blank above screen ft Other Threaded

9 STATIC WATER LEVEL 30.5 ft below land surface  Flow

10 PUMPING LEVEL below land surface  
40.0 ft after 4 hrs pumping at 55 GPM  
44.5 ft after     hrs pumping at 80 GPM **Air**

11 WELL HEAD COMPLETION  Pitless adapter  3' above grade  
 Basement offset  Approved pit

12 WELL GROUTED?  No  Yes From 0 to 105 ft  
 Neat cement  Bentonite  Other  
 No. of bags of cement 8 Additives

13 Nearest source of possible contamination  
 Type Septic Tank & Drainfield Distance 200 ft Direction East  
 Well disinfected upon completion?  Yes  No  
 Was old well plugged?  Yes  No

14 PUMP  Not Installed  Pump Installation Only  
 Manufacturer's name \_\_\_\_\_  
 Model number \_\_\_\_\_ HP \_\_\_\_\_ Volts \_\_\_\_\_  
 Length of Drop Pipe \_\_\_\_\_ ft capacity \_\_\_\_\_ GPM  
 TYPE  Submersible  Jet  
 PRESSURE TANK  
 Manufacturer's name \_\_\_\_\_  
 Model number \_\_\_\_\_ Capacity \_\_\_\_\_ Gallons

16 WATER WELL CONTRACTOR'S CERTIFICATION  
 This well was drilled under my jurisdiction and his report is true to the best of my knowledge and belief

**Cribler Drilling Co., Inc.** 81-1872  
 REGISTERED BUSINESS NAME REGISTRATION NO  
 Address **8300 Dexter Chilson Rd, Howell, Mich. 48130**  
 Signed [Signature] Date \_\_\_\_\_  
 AUTHORIZED REPRESENTATIVE

Authority Completion Penalty  
 Act 368 PA 1978 Required  
 Conviction of a violation of any provision is a misdemeanor



Well & Pump Report

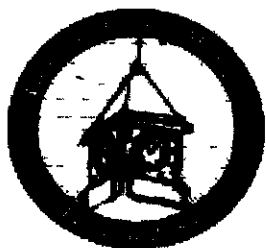
Permit # \_\_\_\_\_  
Well First Yes No  
(Circle One)

Geological Survey No \_\_\_\_\_

1 LOCATION OF WELL			3 OWNER OF WELL <u>Glenn Miller</u>																							
County	Township Name	Fraction 1/4 1/4 1/4	Section Number	Town Number	Range Number																					
Subdivision _____ Lot# _____ Address <u>3280 Chilson Rd</u> City <u>Hawell</u> Zip <u>49943</u>			Address _____ Address Same As Well Location? Yes No																							
Locate with "X" in Section Below 			4 WELL DEPTH <u>122</u> FT Date Completed <u>12/11/05</u>																							
<p style="text-align: right; font-size: 2em;"><i>523-3556</i></p>			5 DRILLING METHOD <u>Rotary</u>																							
2 FORMATION DESCRIPTION			6 USE																							
THICKNESS OF STRATUM			Domestic irrigation Type II IIA IIB IIII <u>Test well other</u>																							
DEPTH TO BOTTOM OF STRATUM			7 CASING																							
<table border="1"> <tr> <td><u>Yellow Clay</u></td> <td><u>0<sup>10</sup></u></td> <td><u>10</u></td> </tr> <tr> <td><u>Yellow SAND</u></td> <td><u>10<sup>22</sup></u></td> <td><u>32</u></td> </tr> <tr> <td><u>Yellow SANDY Clay</u></td> <td><u>32<sup>3</sup></u></td> <td><u>45</u></td> </tr> <tr> <td><u>SAND</u></td> <td><u>45<sup>41</sup></u></td> <td><u>72</u></td> </tr> <tr> <td><u>Gray SAND</u></td> <td><u>72<sup>6</sup></u></td> <td><u>122</u></td> </tr> <tr> <td><u>Gray Clay</u></td> <td><u>122<sup>74</sup></u></td> <td><u>149</u></td> </tr> <tr> <td><u>Red Rock</u></td> <td><u>149<sup>84</sup></u></td> <td><u>155</u></td> </tr> </table>			<u>Yellow Clay</u>	<u>0<sup>10</sup></u>	<u>10</u>	<u>Yellow SAND</u>	<u>10<sup>22</sup></u>	<u>32</u>	<u>Yellow SANDY Clay</u>	<u>32<sup>3</sup></u>	<u>45</u>	<u>SAND</u>	<u>45<sup>41</sup></u>	<u>72</u>	<u>Gray SAND</u>	<u>72<sup>6</sup></u>	<u>122</u>	<u>Gray Clay</u>	<u>122<sup>74</sup></u>	<u>149</u>	<u>Red Rock</u>	<u>149<sup>84</sup></u>	<u>155</u>	Diameter <u>5</u> " to <u>110</u> ft depth Diameter _____ " to _____ ft depth Grouted Drill Hole Diameter <u>9</u> " to <u>105</u> ft depth _____ " to _____ ft depth Height: <u>Above</u> Surface <u>3</u> Weight <u>5000</u> Drive Shoe Yes <u>No</u>		
<u>Yellow Clay</u>	<u>0<sup>10</sup></u>	<u>10</u>																								
<u>Yellow SAND</u>	<u>10<sup>22</sup></u>	<u>32</u>																								
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<p style="font-size: 1.5em;"><i>SHALE AS PER LADR-1</i></p>			8 SCREEN																							
<p style="font-size: 1.5em;"><i>Sand #3 K&amp;E Went 60 thru 16 slot screen (60% retention)</i></p>			Type <u>S.C.</u> Diameter <u>4</u> " Normal Slot <u>10</u> <u>12</u> <u>12</u> Length <u>12</u> ft T M B Set Between <u>112</u> ft and <u>125</u> ft FITTINGS _____ Blank above screen _____ ft																							
			9 STATIC WATER LEVEL <u>33</u> ft below land surface Flow Yes <u>No</u>																							
			10 PUMPING LEVEL below land surface <u>33</u> ft after <u>2</u> hrs pumping at <u>12</u> G.P.M. DD <u>0</u> <u>122</u> ft after _____ hrs pumping at <u>50</u> G.P.M. <u>not avail</u>																							
			11 WELL HEAD COMPLETION																							
			12 WELL GROUTED? <u>Yes</u> No From <u>0</u> to <u>105</u> ft. bags of cement Additives <u>8 Bags Benfield</u>																							
			13 Nearest source of contamination Type _____ Distance _____ ft Direction _____ Well disinfected upon completion? Yes No Was old well plugged? Yes No																							
			14 PUMP Manufacturers name _____ Model number _____ HP _____ VOLTS _____ Length of Drop Pipe _____ ft capacity _____ G.P.M. Type _____ PRESSURE TANK Manufacturers Name _____ Model Number _____ Capacity _____ Gallons MS _____ PS _____																							

Rig Operator <u>Kurt &amp; Mike</u>	\$ _____
Footage <u>152</u> @ \$ <u>1.60</u> per foot	\$ <u>243.20</u>
Development <u>17.00</u>	\$ <u>17.00</u>
% of Screen Cost <u>15.00</u>	\$ <u>15.00</u>
Hours _____ Rate per hour <u>6.00</u>	\$ <u>6.00</u>
Total	\$ <u>277.20</u>

Other Information  
750 SRA: #1  
1000 SAND # 4.5



**Livingston County Health Department-Environmental Health Division**

2300 E. Grand River, Suite 102  
Howell, MI 48843-7850  
517.548.9858 \* 517.546.9853 FAX  
http //co livingston mi us/health

**Review #:** REV2004-01370  
APPLIED 10/8/2004  
ISSUED 10/12/2004

**Building Review**

**SITE ADDRESS** 3280 CHILSON RD.  
**PARCEL NO** 4711-20-100-020  
**TOWNSHIP** Genoa Township



**DIRECTIONS TO SITE**  
W SIDE/S OF CROOKED LAKE

**OWNER**

ROMAN CATHOLIC BISHOP CARL MEN  
300 WOTTAWA  
LANSING MI 48933

**BUILDER**

PAULSON'S CONSTRUCTION  
PO BOX 2287  
HOWELL MI 48844

PRIMARY 517-545-8851

**Environmental Sanitarian** John A Wilson

**Issued Date** October 12, 2004

**PROJECT DESCRIPTION**

**Review Type: Septic & Well**

**DEMO**

**Information:**

Use	Residential	Demolition	Yes
Type Sewage Disposal	On-site	Accessory Structure	
Water Supply	On-site	Structure Type	
		Number of Bedrooms	0 to 0
		Amount of Fixtures	0
		Type of Fixtures	

**Comments**

**Issue Permit**      **10/12/2004** PRIOR TO FINAL CONSTRUCTION APPROVAL, TWO EXISTING WELLS - 1 SERVING THE EXISTING HOUSE AND THE SECOND WELL USED AS TEST WELL SHALL BE ABANDONED AS PER PART 127 OF THE GROUND WATER QUALITY CONTROL ACT ALSO THE SEPTIC TANK AND SYSTEM SHALL BE ABANDONED AS PER LCDPH REQUIREMENTS WRITTEN CONFIRMATION IS REQUIRED FOR THE ABOVE 3 ITEMS

**Complete**          **12/09/2004** Residential well was properly abandoned There still exists a test well on the property, intended to be used as an observation point for the eventual development of a large public supply

**Environmental Sanitarian** Matthew J. Bolang

**Final Date** December 09, 2004

**IMPACT ASSESSMENT  
FOR  
SITE PLAN PETITION  
"CATHOLIC HEALTHCARE INTERNATIONAL – PRAYER CAMPUS"  
GENOA TOWNSHIP, LIVINGSTON COUNTY  
MICHIGAN**

Prepared for:

**CATHOLIC HEALTHCARE INTERNATIONAL  
2464 TAYLOR ROAD, SUITE 317  
WILDWOOD, MISSOURI 63040  
(636) 220-6550**

Prepared by:

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

October 15, 2021  
Revised: November 22, 2021

**20-477 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. As noted in the cover letter, Catholic Healthcare International, Inc. ("CHI") is submitting this document (and associated documents) under protest and with a reservation of all rights, claims, and defenses, specifically including those set forth in the current federal litigation in *Catholic Healthcare International v. Genoa Township*, Case No. 5:21-cv-11303-JEL-DRG, which includes the reserved right to construct the St. Pio adoration chapel on CHI's property should CHI ultimately prevail in the federal litigation. (See also the cover/response letter submitted along with this assessment).

## 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 :

Scott Tousignant, P.E.

BOSS ENGINEERING COMPANY

Civil Engineers, Land Surveyors, Landscape Architects and Planners

3121 E. Grand River

Howell, MI 48843

(517) 546-4836

Prepared For :

Catholic Healthcare International

Jere Palazzolo

2464 Taylor Road, Suite 317

Wildwood, MO 63040

(636) 220-6550

### **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 40.01-acre site is located on the west side of Chilson Road, just south of Crooked Lake Road. The subject property is currently empty of any buildings or structures. The western and northern portion of the property is wooded with meadow in the southeast & central portion of the site. There are wetlands along the western edge of the property. There are residential properties and farmland bordering the north and south property lines, as well as a railroad just off the western property line. The site is within the Country Estate zoning area.

**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.**

Resources utilized to study the natural features of the site included an on-site visit, aerial photos from Google Earth, a web soil survey prepared by the USDA, Wetlands Inventory Maps prepared by the MDEGLE as well as resources prepared by the Huron River Watershed Council and other Livingston County Natural resources agencies.

The eastern half of the site primarily slopes to a low point on the southeastern corner of the property. The western half of the site sheet flows to the wooded areas and wetland areas in the rear of the site. The soils on site consist of loam, loamy sands, sandy loams, and complex soils.

The Livingston County Drain Commissioner's "Procedures and Design Criteria for Stormwater Management Systems and Soil Erosion Sedimentation Control Program" was followed throughout the design process. The reading states preservation of the natural environment and use of vegetated swales as the first and third most preferred best management practices, respectively. Thus, careful consideration was taken to ensure a site with minimal earth disturbance and drainage patterns that followed the pre-developed site. As a result, minimal tagged trees will need to be removed on the site for the construction of the site drive and parking. Bioswales will be implemented on site to provide a natural filtration method of any additional runoff. The bioswales are located at a current low spot as well as on the downslope prior to the wetland on site. These locations allow the site to maintain its current drainage pattern.

**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.**

The site will utilize two bioswales to control stormwater runoff. Curb and gutter is being utilized around the parking lots and drives to direct stormwater to its proper location. Trench drains are being utilized to get the stormwater to the opposite side of the sidewalk behind the curb. The benefit of utilizing the trench drain and swales in this situation is that it maximizes the amount of stormwater contact with the swales and vegetation thereby increasing infiltration and treatment potential prior to entering into the bioswale areas. Additionally, proper sedimentation control devices such as tracking mats, silt fence, and seeding with mulch will be utilized during construction to control erosion and sedimentation. Given the small amount of proposed impervious area compared to the overall site area, there will be minimal impact on the storm runoff. In addition to sedimentation control devices being used, there will also be weekly inspections from a certified stormwater operator to ensure it is properly maintained and functioning throughout construction.

**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 site will see an increase in use regardless of the facility, due to it being a vacant site. There is currently a line of trees along the southern property line. This will help to reduce any disturbances to the home adjacent to the southern property line. In addition to these existing trees, an entire double-staggered row of evergreen trees is being proposed along the south property line near the rear of the site and near the front parking lot in order to ensure an adequate buffer is obtained along the entire property line. The site lighting is kept to a minimum amount, that of which is required by the Township Ordinance. This lighting will be off as often as possible to reduce and minimize any light pollution from this site. Refer to the lighting plan in the Site Plan package for proposed photometrics.

This Prayer Campus contains outdoor elements such as a mural wall with altar, Stations of the Cross Trail and multiple other prayer trails, and various religious garden/landscape statues including that of St. Padre Pio. The mural wall includes an altar in front and is located within the looped drive on site. This will serve as an area for visitors to reflect and meditate and for special functions to be held outside. Occasional outdoor Mass will be held at this mural wall and altar location. The Magnificent Tree of Padre Pio is a large tree located on the site that will be featured with a landscape Statue of Padre Pio sitting underneath it. This statue will be incorporated into the landscape with boulders, and other vegetation. Part of St. Padre Pio's story involves a tree so the purpose is to utilize the site's natural environment and features to showcase St. Padre Pio's story. There is also a Stations of the Cross Trail between the two proposed parking lots. An existing large stand of trees is being used as the setting for the Stations of the Cross trail. Along the trail will be wood posts with decorative wood frames that contain the pictures depicting the route Jesus took to the Cross. This setting offers a natural environment for meditation and reflection for visitors. The wooded areas on the western and northern side of the property contain nature trails with various prayer and meditative components that will be worked into the landscape. These will include prayer plaques, landscape/garden statues, and similar components.

There is one building currently proposed for the site as part of this project and that is a 16' x 24' utility shed. This building is being located centrally on the site tucked against the existing treelines internal to the site and is of no visual impact to neighboring properties. Moreover, it will be designed to resemble a barn and will thus be harmonious with surrounding uses.

**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.**

Public schools will not be impacted by the Prayer Campus. The impact on police protection will be negligible. The Brighton Area Fire Authority's needs are being accommodated in the road layout of the site, allowing for adequate access into the site. 39 parking spaces are proposed for this outdoor Prayer Campus.

On a regular basis, the Prayer Campus is a low volume site. The 39 parking spaces will easily accommodate the regular use of this Prayer Campus, and this is particularly true for the winter months (December through March), as this is an outdoor Prayer Campus.

**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 public water or sanitary sewer facilities on this site. Storm water is being controlled/maintained on-site with the use of bioswales to promote infiltration and preserve the natural drainage patterns of the site.

**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.

**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 Institute of Transportation Engineers Trip Generation Manual 10<sup>th</sup> Edition Volume 2 Part 2 does not contain a trip generation model for a religious outdoor Prayer Campus such as this. For determining parking, it is anticipated that an outdoor Mass will generate a level of interest to be serviced by 39 parking spaces. On a regular basis, the Prayer Campus is a low volume site. The 39 parking spaces will easily accommodate the regular use of this Prayer Campus, and this is particularly true for the winter months (December through March), as this is an outdoor Prayer Campus. A typical visit will usually last about an hour, which provides a reasonable timeframe for visitors to experience and walk through some prayer trails and reflect with quiet meditation throughout. It will not be uncommon for some visitors to stay on-site for a few hours at a time. So given the use of the site, it lends itself to generally longer visits which results in fewer overall vehicle trip ends in a peak hour.

CHI intends to hold two special events each year at the prayer campus: St. Pio's Feast Day (on or about September 23rd) and St. Pio's Birthday (on or about May 25th). These events may require additional parking if pre-registration numbers show that parking beyond the 39 spaces will be needed. Accordingly, in order to mitigate any traffic issues, including reducing traffic on Chilson Road and preventing parking on this road, overflow parking will be provided at a nearby church and CHI will utilize a shuttle service. These special religious events are typically attended by numbers less than those that attend other secular events that are permitted on private residences located along Chilson Road and near CHI's property, and the number of attendees at CHI's special religious events will be less than the number permitted by the Township's assembly ordinance, which requires special permits for outdoor assemblies "in excess of 1,000 in number."

The traffic counts section on Livingston County Road Commission's website was used to analyze Chilson Roads annual average daily traffic. The most recent data shows Chilson Road has an AADT of 2,500 between E Coon Lake Road and Beck Road. Chilson Road did experience an annual growth of -26% in 2014 due to the I-96 ramp on Latson Road being constructed. Chilson Road had an AADT of 4,505 prior to the construction of the ramp. The increased traffic generated by the Prayer Campus will have little overall impact to Chilson Road and Chilson Road has been shown to handle much larger AADT volumes in the past.

**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 ITE Trip Generation Manual, 10<sup>th</sup> Edition, does not contain any uses directly applicable to using property for outdoor religious expression and worship. The Church Land Use (560) in the ITE Manual calculates trip ends either via units of building floor area, number of attendees, or number of seats. Neither of which are applicable to an outdoor religious site such as this. Given the use of the site for nature trails as its primary use, a Public Park (411) in the ITE Manual is most applicable. Given the subject property is 40 acres in area, the site is projected to generate 44 trip ends on the peak hour generating event on a Sunday. The distribution was 39% entering the site while 61% exiting the site resulting in 17 inbound directional trips and 27 outbound directional trips. Saturday was slightly lower at 34 trip ends and weekdays lower still at 19 trip ends during the peak hour generator.

Although the site is over 10 acres in size, there are only 39 parking spaces provided for use. Any outdoor Mass, (which may be held weekly but more likely to occur about once or twice a month) or any prayer trail use is capped at 39 spaces. Any event/Mass being held is typically a minimum of 1 hour in duration, so quick vehicular turnover will not occur within a 1-hour period. The parking spaces provided are significantly below the 100 inbound or 100 outbound directional trip threshold as is the ITE Manual projections for a Public Park use.

Additionally, and as previously stated, for the two events per year that are planned, should pre-registration numbers show 39 spaces not to be sufficient, off-site parking and shuttle service will be provided to ensure traffic issues are mitigated.

In sum, traffic is not an issue.

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

N/A

**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

ITE Trip Generation Manual, 10<sup>th</sup> Edition

**PROPERTY DESCRIPTION:**

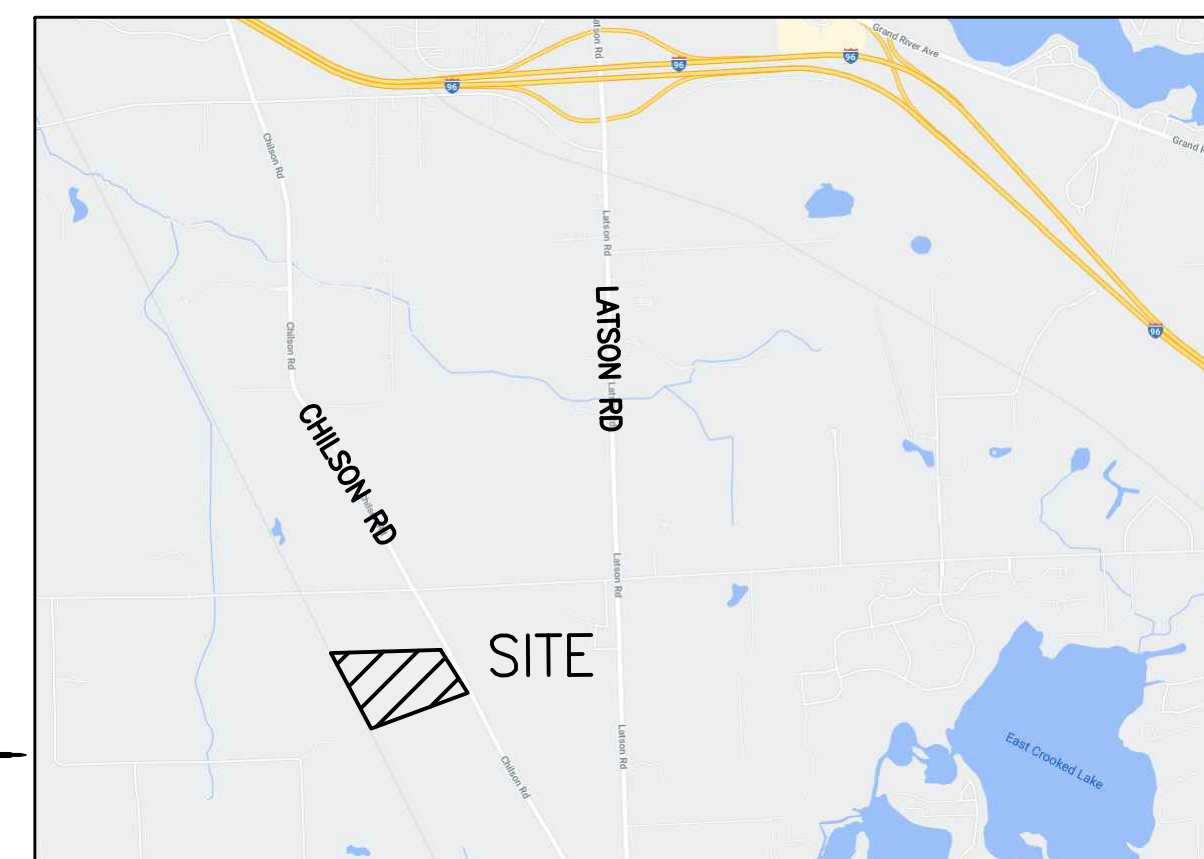
40 Acres Description:

A part of the Northeast 1/4, Northwest 1/4 and Southwest 1/4 of Section 20, T2N-R5E, Genoa Township, Livingston County, Michigan, described as follows: Commencing at the Center of said Section 20, said Point lying S 00 degrees 04'22" W along the North-South 1/4 line of said Section, 2616.14 feet; thence N 89 degrees 16'18" E, 623.77 feet to the centerline of Chilson Road; thence N 25 degrees 37'28" W along said centerline, 511.68 feet; thence continuing along said centerline, N 25 degrees 35'58" W, 409.12 feet to the Point of Beginning of the Parcel to be described; thence S 64 degrees 49'10" W, 581.00 feet; thence S 52 degrees 45'14" W, 1157.74 feet to the Eastern Line of the Ann Arbor Railroad; thence N 25 degrees 10'14" W along said line, 1566.05 feet; thence N 89 degrees 04'43" E, 1874.35 feet to said centerline; thence S 25 degrees 35'58" E along said centerline, 553.96 feet to the Point of Beginning, containing 40.01 acres more or less and subject to the rights of the Public over existing Chilson Road. Description subject to a stake Survey in the field.

Prepared By: Mathew A. Brady P.S. P.O. Box 400 Brighton, Michigan 48116

# SITE PLAN FOR CATHOLIC HEALTHCARE INTERNATIONAL PRAYER CAMPUS

## PART OF NE,NW, & SW 1/4, SECTION 20 GENOA TOWNSHIP, LIVINGSTON COUNTY, MI

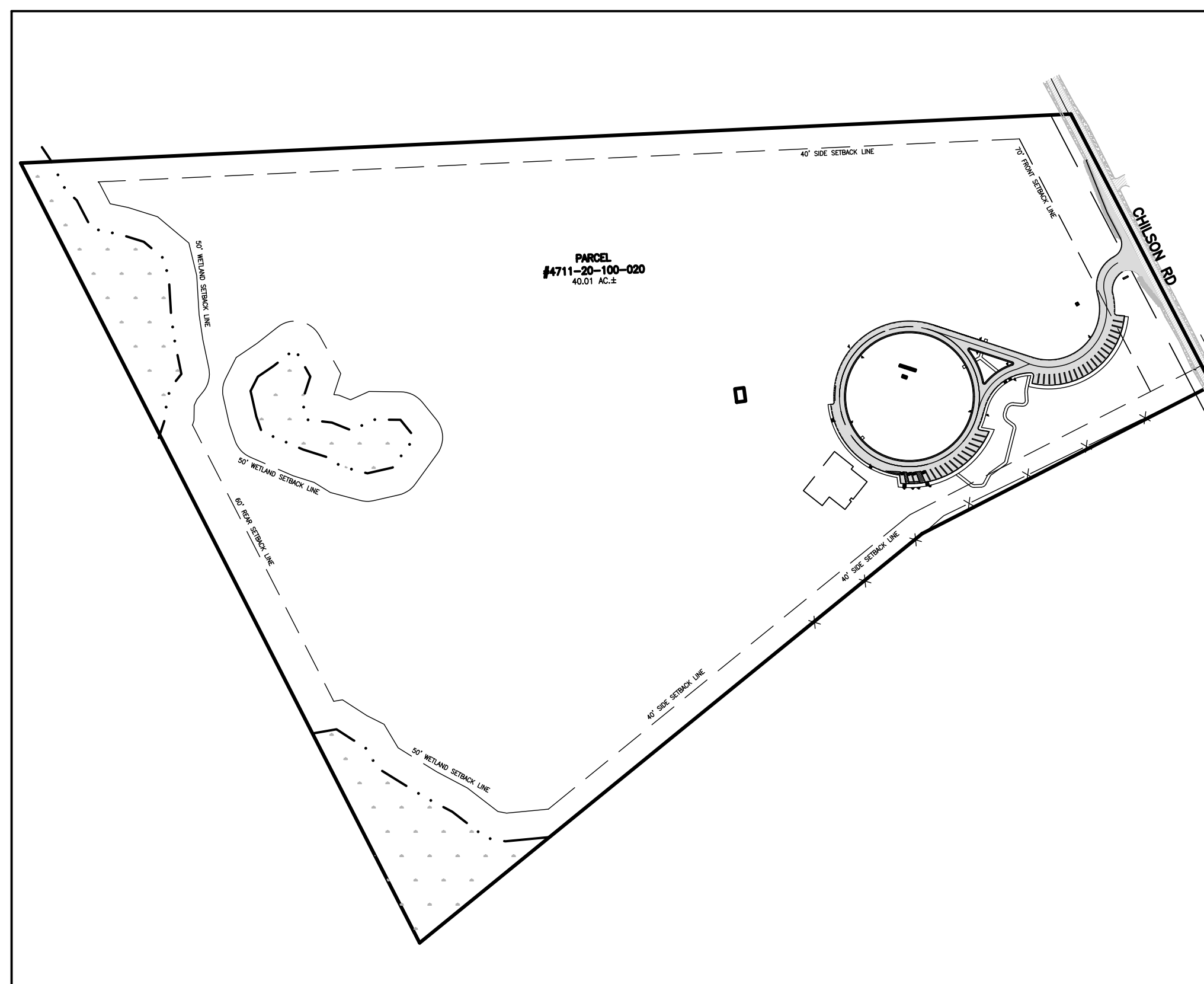


**LOCATION MAP**

NO SCALE

**CONSTRUCTION NOTES**

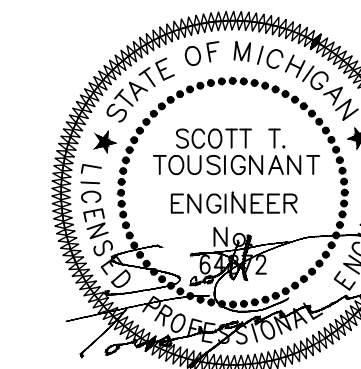
- THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING NOTES AND ANY WORK INVOLVED SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
1. THE CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL, MUNICIPALITY, COUNTY, STATE AND ALL OF ITS SUB CONSULTANTS, PUBLIC AND PRIVATE UTILITY COMPANIES, AND LANDOWNERS 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 SEEDS 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

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	NATURAL FEATURES PLAN
3	EXISTING CONDITIONS & DEMOLITION PLAN
4	SITE PLAN
4A	OVERALL SITE PLAN
5	GRADING & SOIL EROSION CONTROL PLAN
6	DRAINAGE PLAN & BIOSWALE CALCULATIONS
7	LANDSCAPE PLAN
DRAWINGS BY OTHERS	
1	GASSER BUSH ASSOCIATES - LIGHTING PHOTOMETRIC PLAN



**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.

**FEDERAL LITIGATION STATEMENT**

THIS SUBMISSION IS BEING MADE UNDER PROTEST AND WITH A RESERVATION OF ALL RIGHTS, CLAIMS, AND DEFENSES, SPECIFICALLY INCLUDING THOSE SET FORTH IN THE CURRENT FEDERAL LITIGATION IN CATHOLIC HEALTHCARE INTERNATIONAL V. GENOA TOWNSHIP, CASE NO. 5:21-cv-11303-JEL-DRG, WHICH INCLUDES THE RESERVED RIGHT TO CONSTRUCT THE ST. PADRE PIO ADORATION CHAPEL ON CATHOLIC HEALTHCARE INTERNATIONAL INC.'S ("CHI") PROPERTY-THE PROPERTY WHICH IS THE SUBJECT OF THIS SUBMISSION-SHOULD CHI ULTIMATELY PREVAIL IN THE FEDERAL LITIGATION. THE PROPOSED FUTURE LOCATION OF THE ST. PADRE PIO ADORATION CHAPEL IS OUTLINED IN THE ATTACHED SITE PLAN, AND IT IS THE SAME LOCATION THAT WAS IDENTIFIED IN THE PREVIOUS APPLICATION THAT GENOA TOWNSHIP DENIED AND WHICH IS THE SUBJECT OF THE FEDERAL LITIGATION.

<b>ARCHITECT</b>	<b>CONTRACTOR</b>	<b>ON-SITE PROJECT SUPERVISOR</b>
SWANSON DESIGN STUDIOS 329 EAST GRAND RIVER AVE LANSING, MI 48906 CONTACT: MARY SWANSON PHONE: 517-482-9039 EMAIL: MSWANSON@SWANSONDESIGN.COM	TO BE DETERMINED	TO BE DETERMINED

PREPARED FOR:

CATHOLIC HEALTHCARE INTERNATIONAL  
2464 TAYLOR ROAD SUITE 317  
WILDWOOD, MO 63040  
CONTACT: JERE PALAZZOLO  
PHONE: 636-220-6550

PREPARED BY:

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

FOR SITE PLAN APPROVAL ONLY!  
NOT FOR CONSTRUCTION

		<b>1</b>	
1	ST	PER TOWNSHIP REVIEW	11/22/21
NO	BY	CK	REVISION
		DATE	ISSUE DATE: 10/15/21
		JOB NO: 20-477-3	



**NATURAL FEATURES NARRATIVE:**

SEVERAL NATURAL FEATURES WERE IDENTIFIED DURING AN ON-SITE VISIT TO THE PROPERTY ON AUGUST 23, 2019 THAT INCLUDE WETLANDS AND A VARIETY OF WOODLAND STANDS. BELOW IS A BRIEF DESCRIPTION OF EACH NATURAL FEATURE, LABELED AS ZONES 'A'-'E'. ALTHOUGH THE TOTAL SITE IS MEASURED AT 46.88 ACRES, THE ZONES DESCRIBED BELOW ARE APPROXIMATELY 41.11 ACRES WHEN ADDED TOGETHER. NOTE THAT EACH ZONE IS MEASURED TO AN APPROXIMATE SIZE AND THAT ZONES ARE SEPARATED BY A PATH THAT IS ROUGHLY 12' WIDE AND IS NOT ACCOUNTED FOR IN THE CALCULATIONS.

**WETLAND "A"**

AN ESTIMATED 1.24 ACRE "FRESHWATER EMERGENT WETLAND" AS DESCRIBED BY THE NATIONAL WETLANDS INVENTORY, CONTIGUES OFF-SITE AND IS PART OF A MUCH LARGER WETLAND WHICH QUALIFIES IT AS A REGULATED WETLAND. THE DOMINANT PLANT SPECIES ARE RED OSIER DOGWOOD, GRAY DOGWOOD, SENSITIVE FERN, AND REED CANARY GRASS. THIS WETLAND BORDERS THE RAILROAD CORRIDOR AT THE WEST PROPERTY LINE. A DRAINAGE CHANNEL RUNS PARALLEL TO THE RAILROAD TRACKS AND WETLAND 'A' IS A COLLECTOR BASIN OF THE DRAINAGE CHANNEL.

**WETLAND "B"**

AN ESTIMATED 1.05 ACRE "FRESHWATER EMERGENT WETLAND" THAT IS COMPOSED OF COMPOSED OF HYDRIC CARLISLE MUCK SOILS. THIS WETLAND ALSO CONTIGUES OFF SITE TO THE NORTH AND IS A REGULATED WETLAND AS IT HAS A HYDRIC CONNECTION TO WETLAND A VIA DRAINAGE DITCH. THE DOMINANT PLANT SPECIES ARE GRAY DOGWOOD, SENSITIVE FERN, AND REED CANARY GRASS.

**WETLAND "C"**

AN ESTIMATED 0.99 ACRE "LOWLAND HARDWOOD" WETLAND, ACCORDING TO THE EGLE WETLAND MAP VIEWER. THIS WETLAND IS DOMINATED BY REED CANARY GRASS WITH A FEW BUTTON BUSH SHRUBS SCATTERED THROUGHOUT.

**ZONE "A"**

ZONE "A" IS A STAND OF HEALTHY AND MATURE WHITE PINE TREES THAT AVERAGE APPROXIMATELY 20' AT DIAMETER BREAST HEIGHT IN SIZE. THE TREES ARE PLANTED ON AVERAGE 10-15' APART FROM ONE ANOTHER.

**ZONE "B"**

ZONE "B" IS APPROXIMATELY 8.4 ACRES IN SIZE AND IS MOSTLY OPEN SPACE AND MANAGED LAWN AREAS WITH MINIMAL SLOPES. THE SOILS CONSIST MOSTLY OF BOYER OSHTEMO SANDY LOAMS. THERE ARE FEW TREES IN THIS ZONE, THOUGH A MURAL WALL OF MATURE AND MOSTLY HEALTHY BOX ELDER TREES IS LOCATED IN THE CENTER OF THE SITE THAT WILL BE PROTECTED.

**ZONE "C"**

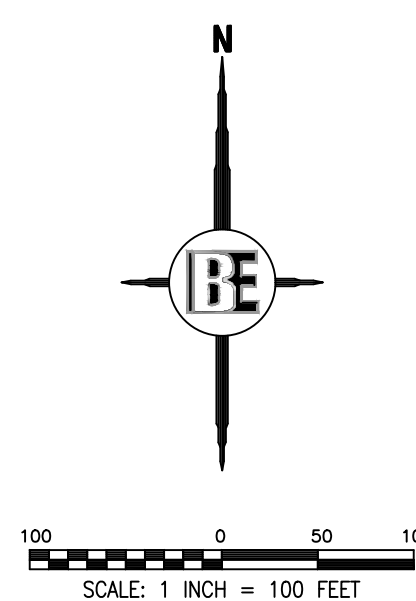
ZONE "C" IS APPROXIMATELY 9.7 ACRES IN SIZE. THE TREES CONSIST OF MATURE RED OAK, BLACK CHERRY, BLACK WALNUT, AND SHAGBARK HICKORY RANGING FROM 10-20' AT DIAMETER BREAST HEIGHT. THE UNDERSTORY IS RELATIVELY OPEN WITH SOME BLACK RASPBERRY BRAMBLES AND MULTIFLORA ROSES OCCUPYING THE OPEN SPACES. THERE ARE HICKORY AND OAK SAPLINGS SPREAD THROUGHOUT INDICATING A HEALTHY FUTURE FOR SUCCESSION. SOILS ARE WASHTENAW SILT LOAMS AND BOYER OSHTEMO SAND LOAMS WITH MINIMAL SLOPES.

**ZONE "D"**

ZONE "D" IS APPROXIMATELY 2.72 ACRES IN SIZE AND IS WHAT APPEARS TO BE MOUNDED EARTH LIKELY FROM MASS GRADING EFFORTS THAT WERE EXECUTED MANY YEARS AGO. THE AREA IS MOSTLY OPEN SPACE WITH 3:1 SLOPES LEADING TO THE TOP. PLANT SPECIES INCLUDE GOLDEN ROD, VARIOUS ASTERS, AND SEVERAL EASTERN RED CEDAR TREES. THERE ARE SEVERAL CRABAPPLE TREES PLANTED THROUGHOUT.

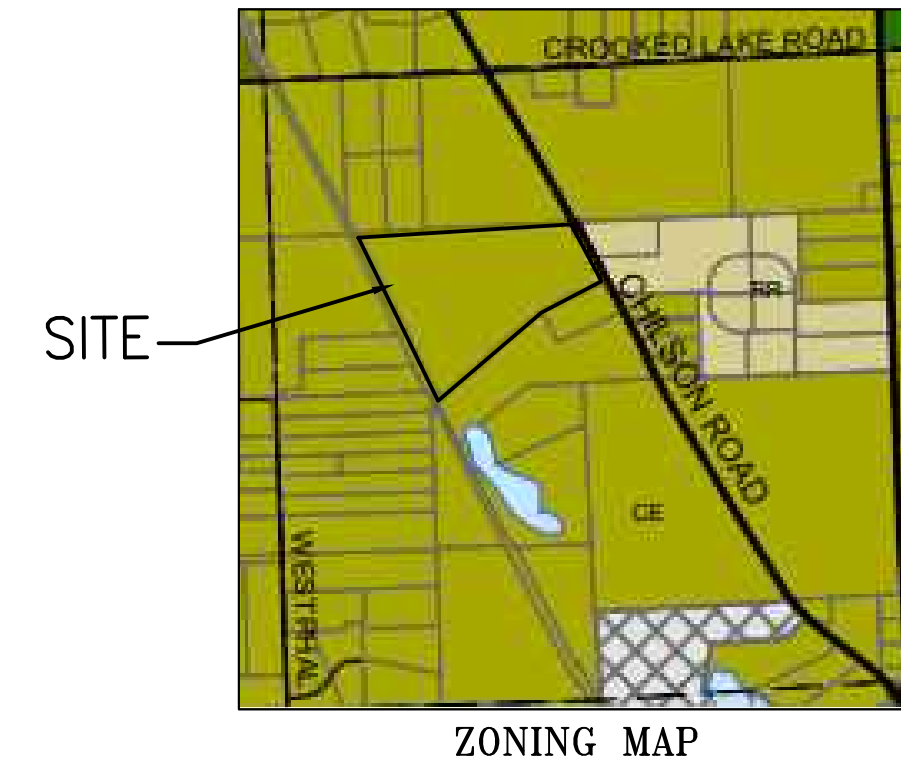
**ZONE "E"**

ZONE "E" IS APPROXIMATELY 18 ACRES IN SIZE WITH MATURE BLACK CHEERY, RED OAK, SHAGBARK HICKORY RANGING FROM 12-20' AT DIAMETER BREAST HEIGHT. THERE ARE SEVERAL LANDMARK TREES THAT INCLUDE RED OAK AND BLACK CHERRY. THE UNDERSTORY INCLUDES BRAMBLE, POKEWED, HONEYSUCKLE, A FEW HICKORY AND OAK SAPLINGS, AND AN OCCASIONAL CELESTRIS VINE. THERE IS ALSO A STAND OF AMERICAN ELM TREES. THERE IS A GENTLE SLOPE TO THE LAND THAT DRAINS STORMWATER TO THE WEST. IN THE NORTHEAST, THERE APPEARS TO BE REMNANTS OF AN OLD BUILDING FOUNDATION THAT HAS BEEN DEMOLISHED AND SET INTO A PILE OF RUBBLE ATOP A SMALL HILL.



**LEGEND**

PROPOSED (PR)	EXISTING (EX)	DESCRIPTION
000	000	CONTOUR
T/C	922.08	SPOT ELEVATION
XXXXXX		FINISHED FLOOR ELEVATION
FF	FF	FINISHED GRADE ELEVATION
FG	FG	TOP OF ASPHALT
T/A	T/A	TOP OF CURB / CONCRETE
T/C	T/C	TOP OF WALK
T/W	T/W	FLOW LINE
F/L	F/L	TOP OF PIPE
T/P	T/P	BOTTOM OF PIPE
B/P	B/P	RM ELEVATION
RM	RM	INVERT ELEVATION
INV	INV	MANHOLE STRUCTURE
MH	MH	INLET STRUCTURE
IN	IN	CATCHBASIN STRUCTURE
CB	CB	REARWARD STRUCTURE
RY	RY	END-SECTION
ES	ES	GATEWAY STRUCTURE
OV	OV	HYDRANT
HY	HY	UTILITY POLE
UP	UP	SANITARY SEWER
SN	SN	SANITARY LEAD
SL	SL	FORCE MAIN
FM	FM	PRESSURE SEWER
PS	PS	STORM SEWER
ST	ST	WATER MAIN
WM	WM	WATER LEAD
WL	WL	FIBER OPTIC
FO	FO	OVERHEAD WIRE
OH	OH	CABLE
C	C	ELECTRIC
E	E	GAS
G	G	TELEPHONE
T	T	FENCE
F	F	SILT FENCE
S	S	WETLAND BOUNDARY
W	W	LIMITS OF GRADING/CLEARING
M	M	MANHOLE
IN	IN	INLET / CATCHBASIN
FL	FL	FLARED END-SECTION
GV	GV	GATE VALVE
OV	OV	HYDRANT
UP	UP	UTILITY POLE
SN	SN	NOT FIELD VERIFIED
SL	SL	TO BE REMOVED
NS	NS	SANITARY SEWER LABEL
SS	SS	STORM SEWER LABEL
WM	WM	WATER MAIN LABEL
SC	SC	SOIL EROSION CONTROL MEASURE
P	P	(P=PERMANENT, T=TEMPORARY)
C	C	CONCRETE
A	A	ASPHALT
M	M	MODIFIED CURB



- GENERAL SURVEY NOTES:**
- BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. RECORDED BEARINGS WERE ESTABLISHED FROM LIVINGSTON ENGINEERING SURVEY JOB NO. 19208, AS RECORDED IN 20195-0113, 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 WITH GPS USING OPUS GPS POST-PROCESSING. (NAVD88 DATUM)
  - CONTOURS ARE SHOWN AT 1 FOOT INTERVALS.
  - 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.
  - 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.

**SITE BENCHMARKS (NAVD88 DATUM):**  
 -BM #200 = BOSS NAIL/TAG S/S 24" OAK TREE. ELEV.=959.08  
 -BM #201 = BOSS NAIL/TAG S/S P-POLE CENTER OF SITE. ELEV.=958.47

**Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
B4	Boyer-Oshtemo loamy sands, 2 to 8 percent slopes	2.2	8.3%
B8	Boyer-Oshtemo loamy sands, 2 to 8 percent slopes	7.8	24.2%
B9	Boyer-Oshtemo loamy sands, 0 to 2 percent slopes	2.1	5.5%
C1	Carlisle mssd, 0 to 2 percent slopes	1.8	3.9%
F1B	Flu-Boyer complex, 2 to 6 percent slopes	3.9	15.9%
F1D	Flu-Boyer complex, 12 to 18 percent slopes	0.9	2.3%
G1	Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil	2.9	6.2%
M1A	Maumee loam, 0 to 2 percent slopes	7.0	18.8%
M1B	Maumee loam, 2 to 6 percent slopes	3.7	9.9%
M1C	Maumee loam, 6 to 12 percent slopes	0.7	1.8%
W1	Washtenaw silt loam	2.2	6.0%
Totals for Area of Interest		37.3	100.0%

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

**PROJECT:** CATHOLIC HEALTHCARE INTERNATIONAL - PRAYER CAMPUS  
**PREPARED FOR:** CATHOLIC HEALTHCARE INTERNATIONAL  
 2464 TAYLOR ROAD, SUITE 317  
 WILLOWOOD, MO 63090  
 314-922-2136

**TITLE:** NATURAL FEATURES PLAN

**DATE:** 11/22/21  
**DESIGNED BY:** JH  
**DRAWN BY:** JH  
**CHECKED BY:**  
**SCALE:** 1" = 100'  
**JOB NO:** 20-477-3  
**DATE:** 10-15-2021  
**SHEET NO. 2**

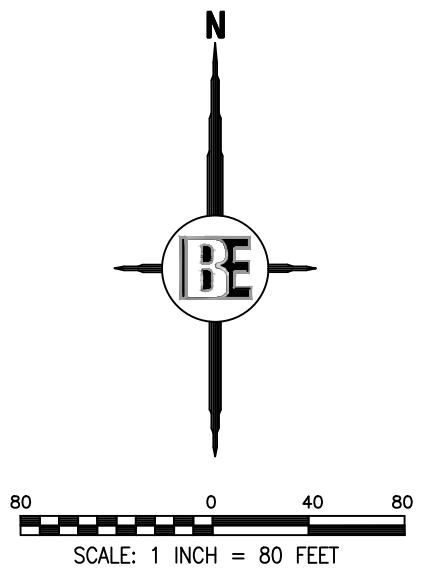
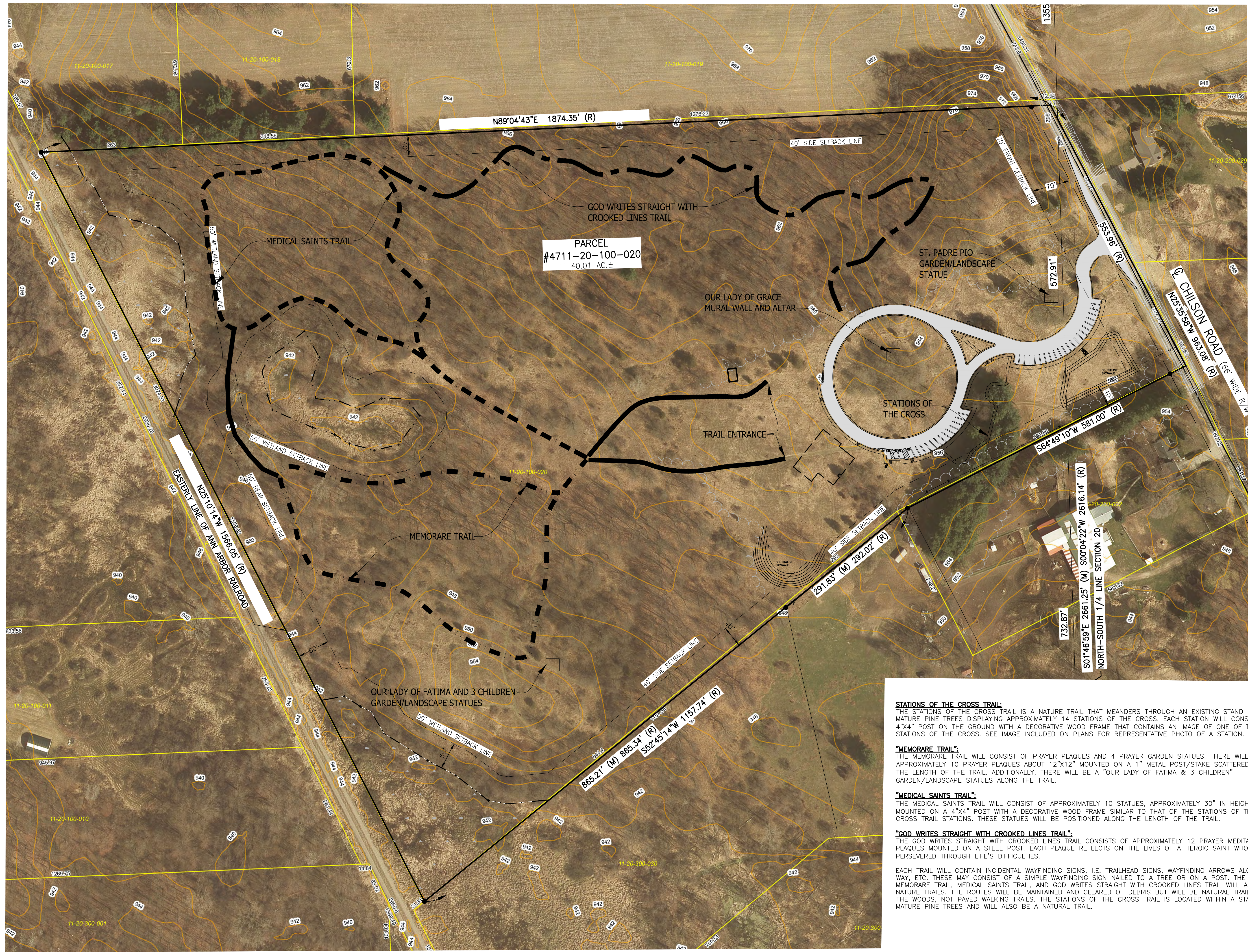












THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE FOR THE LOCATION AND ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ANY CONFLICTS ARE FOUND. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE LOCAL, STATE, AND FEDERAL AGENCIES.

BEBOSS Engineering  
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PROJECT: CATHOLIC HEALTHCARE INTERNATIONAL - PRAYER CAMPUS  
 PREPARED FOR: CATHOLIC HEALTHCARE INTERNATIONAL  
 2464 TAYLOR ROAD, SUITE 317  
 WILLOWOOD, IN 46090  
 317-932-2136

TITLE: OVERALL SITE PLAN

NO.	BY	DATE	REVISION PER
1	ST	11/22/21	PER TWP REVIEW

DESIGNED BY: ST  
 DRAWN BY: ST  
 CHECKED BY:  
 SCALE: 1" = 100  
 JOB NO: 20-477-3  
 DATE: 10-15-2021  
 SHEET NO. 4A

**STATIONS OF THE CROSS TRAIL:**  
 THE STATIONS OF THE CROSS TRAIL IS A NATURE TRAIL THAT MEANDERS THROUGH AN EXISTING STAND OF MATURE PINE TREES DISPLAYING APPROXIMATELY 14 STATIONS OF THE CROSS. EACH STATION WILL CONSIST OF A 4"x4" POST ON THE GROUND WITH A DECORATIVE WOOD FRAME THAT CONTAINS AN IMAGE OF ONE OF THE STATIONS OF THE CROSS. SEE IMAGE INCLUDED ON PLANS FOR REPRESENTATIVE PHOTO OF A STATION.

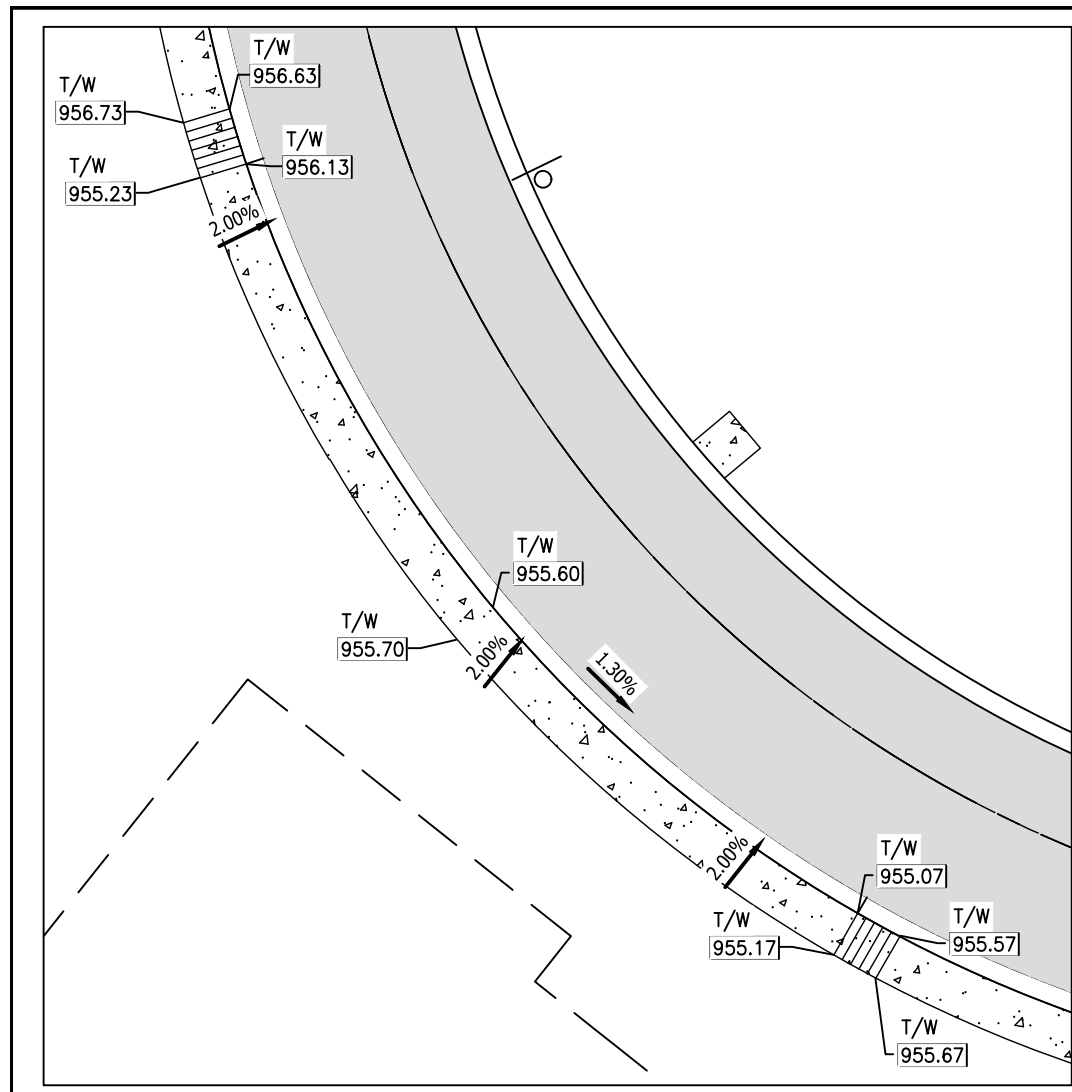
**"MEMORARE TRAIL":**  
 THE MEMORARE TRAIL WILL CONSIST OF PRAYER PLAQUES AND 4 PRAYER GARDEN STATUES. THERE WILL BE APPROXIMATELY 10 PRAYER PLAQUES ABOUT 12"x12" MOUNTED ON A 1" METAL POST/STAKE SCATTERED ALONG THE LENGTH OF THE TRAIL. ADDITIONALLY, THERE WILL BE A "OUR LADY OF FATIMA & 3 CHILDREN" GARDEN/LANDSCAPE STATUES ALONG THE TRAIL.

**"MEDICAL SAINTS TRAIL":**  
 THE MEDICAL SAINTS TRAIL WILL CONSIST OF APPROXIMATELY 10 STATUES, APPROXIMATELY 30" IN HEIGHT, MOUNTED ON A 4"x4" POST WITH A DECORATIVE WOOD FRAME SIMILAR TO THAT OF THE STATIONS OF THE CROSS TRAIL STATUES. THESE STATUES WILL BE POSITIONED ALONG THE LENGTH OF THE TRAIL.

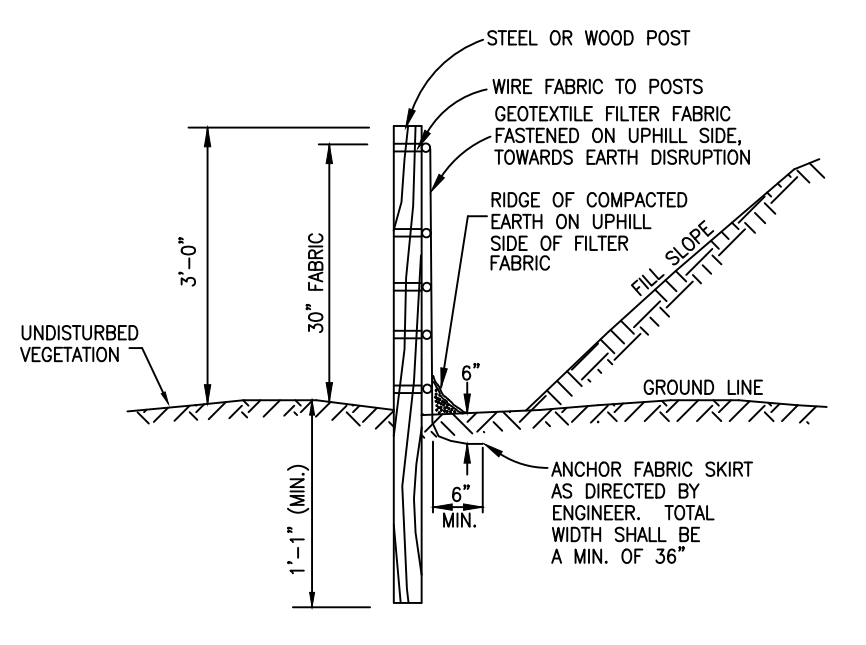
**"GOD WRITES STRAIGHT WITH CROOKED LINES TRAIL":**  
 THE GOD WRITES STRAIGHT WITH CROOKED LINES TRAIL CONSISTS OF APPROXIMATELY 12 PRAYER MEDITATION PLAQUES MOUNTED ON A STEEL POST. EACH PLAQUE REFLECTS ON THE LIVES OF A HEROIC SAINT WHO PERSEVERED THROUGH LIFE'S DIFFICULTIES.

EACH TRAIL WILL CONTAIN INCIDENTAL WAYFINDING SIGNS, I.E. TRAILHEAD SIGNS, WAYFINDING ARROWS ALONG THE WAY, ETC. THESE MAY CONSIST OF A SIMPLE WAYFINDING SIGN NAILED TO A TREE OR ON A POST. THE MEMORARE TRAIL, MEDICAL SAINTS TRAIL, AND GOD WRITES STRAIGHT WITH CROOKED LINES TRAIL WILL ALL BE NATURE TRAILS. THE ROUTES WILL BE MAINTAINED AND CLEARED OF DEBRIS BUT WILL BE NATURAL TRAILS IN THE WOODS, NOT PAVED WALKING TRAILS. THE STATIONS OF THE CROSS TRAIL IS LOCATED WITHIN A STAND OF MATURE PINE TREES AND WILL ALSO BE A NATURAL TRAIL.

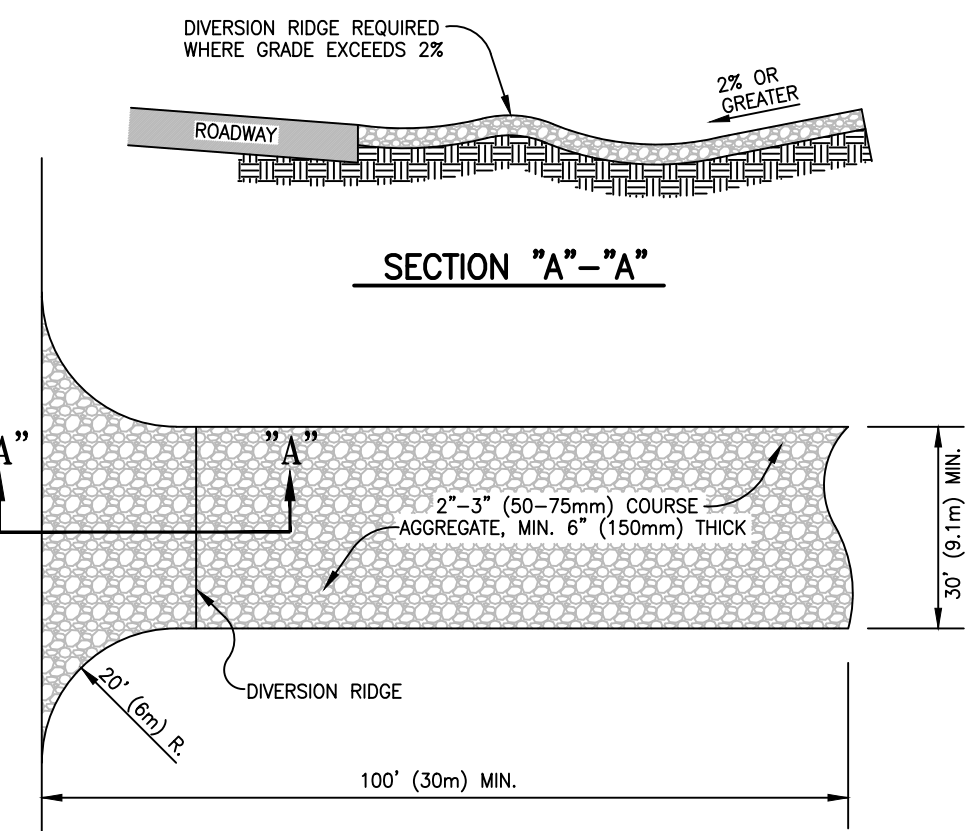




**ADA SIDEWALK DETAIL**  
1:20 SCALE



**SILT FENCE DETAIL**  
NO SCALE

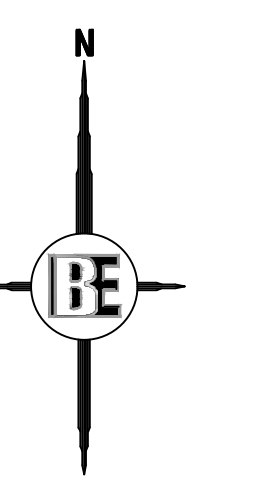


**SECTION "A"-A"**  
**TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT**  
NO SCALE

**SOIL EROSION CONTROL MEASURES**

1	STRIPING & STOOPLING (95%)	DITCHES MAY BE STOOPLER ABOVE BARRON AREAS TO ACT AS A DIVERSION. STOOPLER SHOULD BE TEMPORARY (SEE SHEET).
6	SEEDING WITH MULCH AND/OR MATING	FACILITATES ESTABLISHMENT OF VEGETATION COVER. EFFORTS FOR BARRONING WITH LOW VELOCITY. EARLY PRACTICE IN SMALL QUANTITIES BY EXPERIENCED PERSONNEL. SHOULD INCLUDE STOOPLING (SEE SHEET).
14	AGGREGATE COVER	STABILIZES SOIL SURFACE, HELPS MINIMIZE EROSION. FURNISHES PROTECTION FROM TRAFFIC IN BARRON AREAS. MAY BE USED AS PART OF PERMANENT BASE CONSTRUCTION OF PAVED AREAS.
54		USES GEOTEXTILE FABRIC AND POST OR POLES. BEST TO CONSTRUCT AND LOCATE AS NECESSARY. (SEE DETAIL THIS SHEET).

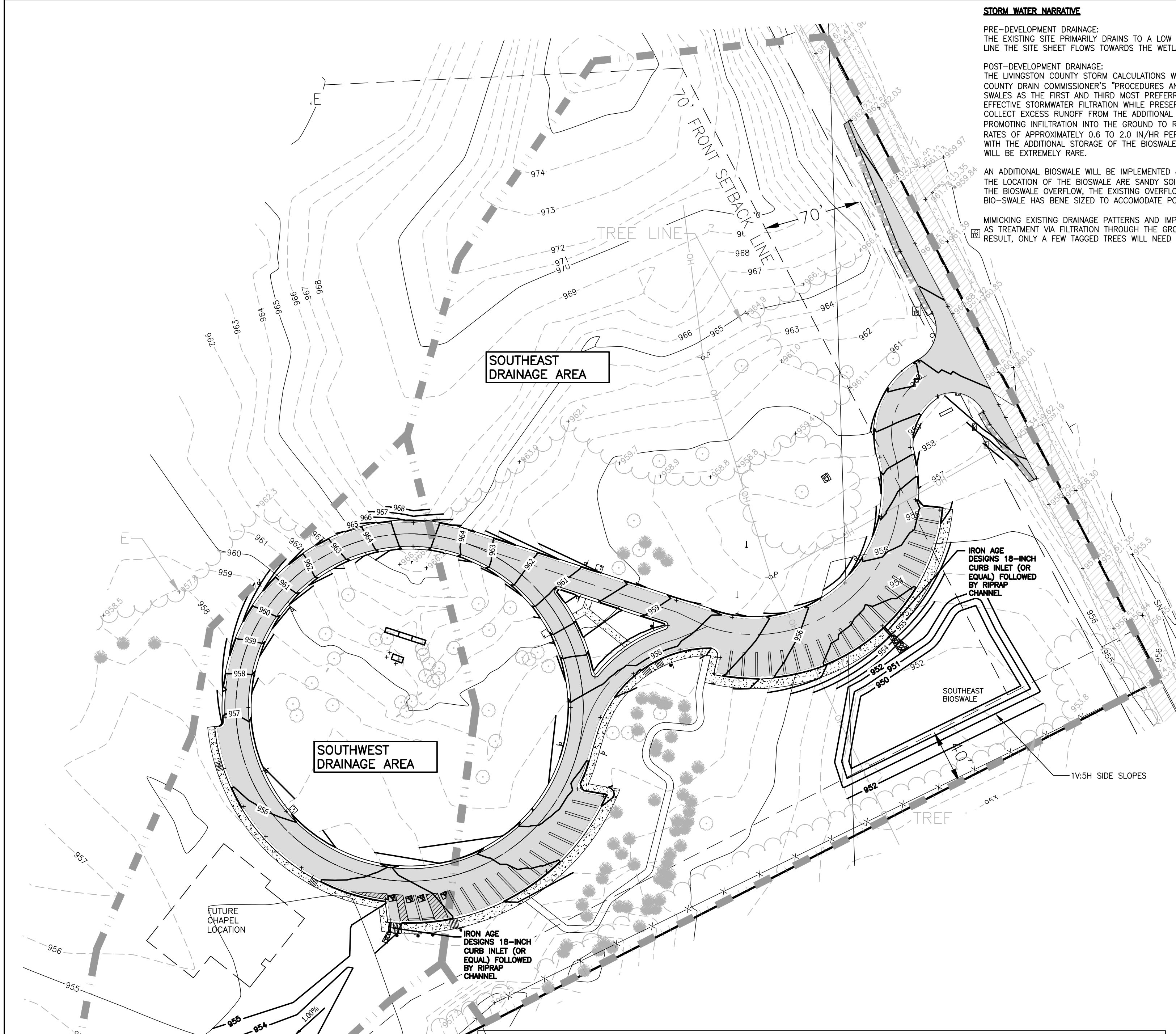
T= TEMPORARY P= PERMANENT  
**TOTAL DISTURBED AREA= 4.25 AC.**



**LEGEND**

PROPOSED (PR)	EXISTING (EX)	CONTOUR
900	+922.08	CONTOUR
T/C	XXXXXX	SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
T/A	T/A	FINISHED GRADE ELEVATION
T/C	T/C	TOP OF ASPHALT
T/W	T/W	TOP OF CURB / CONCRETE
F/L	F/L	TOP OF WALK
T/P	T/P	FLOW LINE
B/P	B/P	TOP 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
OV	OV	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
F	F	FENCE
X	X	SILT FENCE
W	W	WETLAND BOUNDARY
L	L	LIMITS OF GRADING/CLEARING
MANHOLE	MANHOLE	MANHOLE
INLET / CATCHBASIN	INLET / CATCHBASIN	INLET / CATCHBASIN
FLARED END-SECTION	FLARED END-SECTION	FLARED END-SECTION
GATE VALVE	GATE VALVE	GATE VALVE
HYDRANT	HYDRANT	HYDRANT
UTILITY POLE	UTILITY POLE	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
F	F	FENCE
X	X	SILT FENCE
W	W	WETLAND BOUNDARY
L	L	LIMITS OF GRADING/CLEARING
MANHOLE	MANHOLE	MANHOLE
INLET / CATCHBASIN	INLET / CATCHBASIN	INLET / CATCHBASIN
FLARED END-SECTION	FLARED END-SECTION	FLARED END-SECTION
GATE VALVE	GATE VALVE	GATE VALVE
HYDRANT	HYDRANT	HYDRANT
UTILITY POLE	UTILITY POLE	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
F	F	FENCE
X	X	SILT FENCE
W	W	WETLAND BOUNDARY
L	L	LIMITS OF GRADING/CLEARING
MANHOLE	MANHOLE	MANHOLE
INLET / CATCHBASIN	INLET / CATCHBASIN	INLET / CATCHBASIN
FLARED END-SECTION	FLARED END-SECTION	FLARED END-SECTION
GATE VALVE	GATE VALVE	GATE VALVE
HYDRANT	HYDRANT	HYDRANT
UTILITY POLE	UTILITY POLE	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
F	F	FENCE
X	X	SILT FENCE
W	W	WETLAND BOUNDARY
L	L	LIMITS OF GRADING/CLEARING
MANHOLE	MANHOLE	MANHOLE
INLET / CATCHBASIN	INLET / CATCHBASIN	INLET / CATCHBASIN
FLARED END-SECTION	FLARED END-SECTION	FLARED END-SECTION
GATE VALVE	GATE VALVE	GATE VALVE
HYDRANT	HYDRANT	HYDRANT
UTILITY POLE	UTILITY POLE	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
F	F	FENCE
X	X	SILT FENCE
W	W	WETLAND BOUNDARY
L	L	LIMITS OF GRADING/CLEARING
MANHOLE	MANHOLE	MANHOLE
INLET / CATCHBASIN	INLET / CATCHBASIN	INLET / CATCHBASIN
FLARED END-SECTION	FLARED END-SECTION	FLARED END-SECTION
GATE VALVE	GATE VALVE	GATE VALVE
HYDRANT	HYDRANT	HYDRANT
UTILITY POLE	UTILITY POLE	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
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WL	WL	WATER LEAD
FO	FO	FIBER OPTIC
OH	OH	OVERHEAD WIRE
C	C	CABLE
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G	G	GAS
T	T	TELEPHONE
F	F	FENCE
X	X	SILT FENCE
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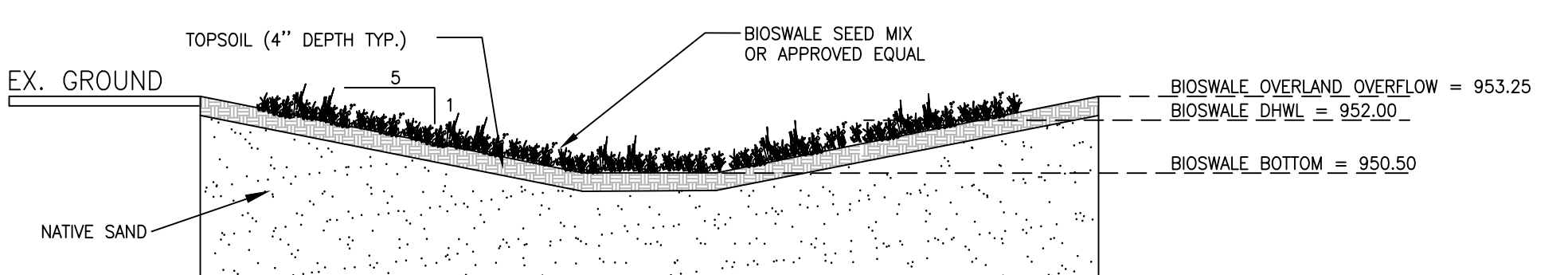
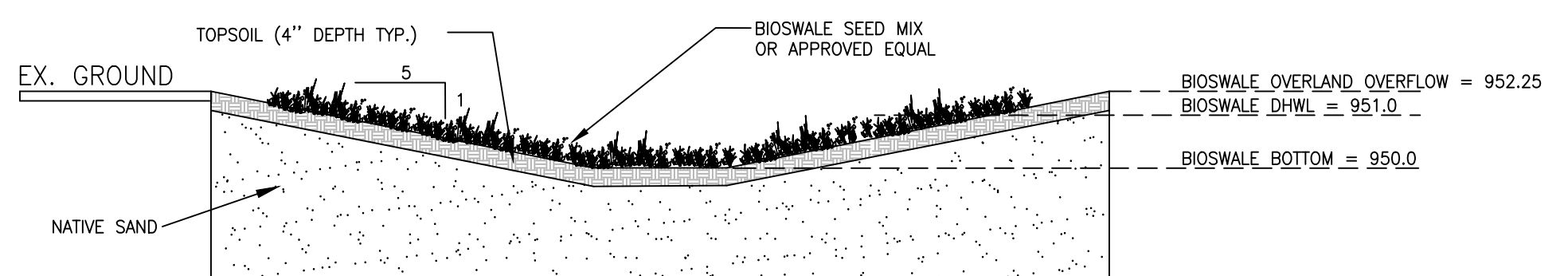
**STORM WATER NARRATIVE**

**PRE-DEVELOPMENT DRAINAGE:**  
THE EXISTING SITE PRIMARILY DRAINS TO A LOW POINT ON THE SOUTHEAST CORNER OF THE SITE ADJACENT TO CHILSON ROAD, APPROXIMATELY 650 FEET WEST OF THE EASTERN PROPERTY LINE. THE SITE SHEET FLOWS TOWARDS THE WETLANDS ALONG THE WESTERN PROPERTY LINE.

**POST-DEVELOPMENT DRAINAGE:**  
THE LIVINGSTON COUNTY STORM CALCULATIONS WERE USED TO DETERMINE THE DIFFERENTIAL STORM WATER RUNOFF IN PRE-DEVELOPMENT AND POST-DEVELOPMENT CONDITIONS. LIVINGSTON COUNTY DRAIN COMMISSIONER'S "PROCEDURES AND DESIGN CRITERIA FOR STORMWATER MANAGEMENT SYSTEMS..." STATES PRESERVATION OF THE NATURAL ENVIRONMENT AND USE OF VEGETATED SWALES AS THE FIRST AND THIRD MOST PREFERRED BEST MANAGEMENT PRACTICES, RESPECTIVELY. FOLLOWING THIS IDEOLOGY, TWO BIOSWALES WILL BE UTILIZED ON THE SITE TO PROVIDE EFFECTIVE STORMWATER FILTRATION WHILE PRESERVING THE NATURAL ENVIRONMENT AND DRAINAGE PATTERN. A BIOSWALE WILL BE IMPLEMENTED IN THE EXISTING LOW SPOT ON THE SITE TO COLLECT EXCESS RUNOFF FROM THE ADDITIONAL IMPERVIOUS SURFACE. THE BIOSWALE WILL BE A SHALLOW DEPRESSION IN THE GROUND THAT CAN STORE UP TO 2.0 FEET OF WATER WHILE PROMOTING INFILTRATION INTO THE GROUND TO REDUCE RUNOFF. THE EXISTING SOILS AT THE LOCATION OF THE BIOSWALE ARE SANDY SOILS IN HYDROLOGICAL GROUP 'B' WITH INFILTRATION RATES OF APPROXIMATELY 0.6 TO 2.0 IN/HR PER THE NRCS WEB SOIL SURVEY. IN THE UNLIKELY EVENT THAT THE BIOSWALE OVERFLOWS, EXISTING OVERFLOW PATTERNS WILL BE FOLLOWED. WITH THE ADDITIONAL STORAGE OF THE BIOSWALE SUPPORTING OVER TWO TIMES THE AMOUNT OF INCREASED RUNOFF WHEN INCLUDING FREEBOARD, ANY EVENT RESULTING IN AN OVERFLOW WILL BE EXTREMELY RARE.

AN ADDITIONAL BIOSWALE WILL BE IMPLEMENTED JUST SOUTHWEST OF THE PROPOSED CIRCLE DRIVE TO CONTAIN THE RUNOFF FROM THE DRIVE AND THE SIDEWALK. THE EXISTING SOILS AT THE LOCATION OF THE BIOSWALE ARE SANDY SOILS IN HYDROLOGICAL GROUP 'B' WITH INFILTRATION RATES OF APPROXIMATELY 0.6 TO 2.0 IN/HR PER THE NRCS WEB SOIL SURVEY. SHOULD THE BIOSWALE OVERFLOW, THE EXISTING OVERFLOW ROUTE WILL BE FOLLOWED. CURRENTLY, EXISTING RUNOFF FLOWS WESTERLY TOWARD THE WOODED AREAS. IT SHALL BE NOTED THAT THIS BIOSWALE HAS BEEN SIZED TO ACCOMMODATE POTENTIAL FUTURE IMPERVIOUS SURFACES FROM A SIDEWALK AND CHAPEL.

MIMICKING EXISTING DRAINAGE PATTERNS AND IMPLEMENTING A BIOSWALE ARE BOTH STORM WATER BMP'S. THE BIOSWALE WILL PROVIDE TREATMENT VIA THE VEGETATION ABOVE GROUND AS WELL AS TREATMENT VIA FILTRATION THROUGH THE GROUND. THE SITE WAS DESIGNED TO PRESERVE THE NATURAL ENVIRONMENT AS BEST AS POSSIBLE, WHICH IS THE MOST PREFERRED BMP. AS A RESULT, ONLY A FEW TAGGED TREES WILL NEED TO BE REMOVED.



DRAINAGE AREA	STAGE	AREA (AC)	COMPOUND C
SOUTHEAST	PRE-DEVELOPMENT	5.45	0.22
	POST-DEVELOPMENT	5.45	0.31
SOUTHWEST	PRE-DEVELOPMENT	2.16	0.2
	POST-DEVELOPMENT	2.16	0.34

**LIVINGSTON COUNTY RUNOFF CALCULATIONS FOR THE SOUTHWEST BIOSWALE**

**PRE-DEVELOPMENT DRAINAGE AREA**

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
2.16	0.2	0.43
0.00	0.7	0.00
0.00	0.9	0.00

COMPOUND C: 0.20  
TOTAL DRAINAGE AREA: 2.16 ACRES

K1 = Ax C (Design Constant) 0.432  
Qa = MAXALLOW OUTFLOW (0.10 CFS / ACRE) 0.216 CFS

DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF (K+G)	OUTFLOW DURATION x Qa	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2750	1188	65	1123
10	600	7.86	4714	2037	130	1907
15	900	6.88	6188	2673	194	2479
20	1200	6.11	7333	3168	259	2909
30	1800	5.00	9000	3888	389	3499
60	3600	3.24	11647	5032	778	4254
90	5400	2.39	12913	5578	1166	4412
120	7200	1.90	13655	5899	1555	4344
180	10800	1.34	14488	6259	2333	3926

PRE-DEVELOPMENT REQUIRED 100 YEAR VOLUME = 4412 CF

**POST-DEVELOPMENT DRAINAGE AREA**

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
1.74	0.2	0.35
0.00	0.7	0.00
0.42	0.9	0.38

COMPOUND C: 0.34  
TOTAL DRAINAGE AREA: 2.16 ACRES

K1 = Ax C (Design Constant) 0.7344  
Qa = MAXALLOW OUTFLOW (0.10 CFS / ACRE) 0.216 CFS

DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF (K+G)	OUTFLOW DURATION x Qa	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2750	2020	65	1955
10	600	7.86	4714	3462	130	3333
15	900	6.88	6188	4544	194	4350
20	1200	6.11	7333	5386	259	5126
30	1800	5.00	9000	6610	389	6221
60	3600	3.24	11647	8554	778	7776
90	5400	2.39	12913	9483	1166	8317
120	7200	1.90	13655	10028	1555	8473
180	10800	1.34	14488	10640	2333	8307

POST-DEVELOPMENT REQUIRED 100 YEAR VOLUME = 8473 CF

**RUNOFF VOLUME INCREASE= 4061 CF**

**LIVINGSTON COUNTY RUNOFF CALCULATIONS FOR THE SOUTHEAST BIOSWALE**

**PRE-DEVELOPMENT DRAINAGE AREA**

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
5.32	0.2	1.06
0.00	0.7	0.00
0.13	0.9	0.12

COMPOUND C: 0.22  
TOTAL DRAINAGE AREA: 5.45 ACRES

K1 = Ax C (Design Constant) 1.199  
Qa = MAXALLOW OUTFLOW (0.10 CFS / ACRE) 0.545 CFS

DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF (K+G)	OUTFLOW DURATION x Qa	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2750	3237	164	3174
10	600	7.86	4714	5652	327	5325
15	900	6.88	6188	7419	491	6928
20	1200	6.11	7333	8793	654	8139
30	1800	5.00	9000	10791	981	9810
60	3600	3.24	11647	13665	1962	12003
90	5400	2.39	12913	15483	2943	12540
120	7200	1.90	13655	16373	3924	12449
180	10800	1.34	14488	17371	5886	11485

PRE-DEVELOPMENT REQUIRED 100 YEAR VOLUME = 12540 CF

**POST-DEVELOPMENT DRAINAGE AREA**

AREA (ACRES)	IMPERVIOUS FACTOR	ACRE IMPERVIOUS
4.60	0.2	0.92
0.00	0.7	0.00
0.84	0.9	0.76

COMPOUND C: 0.31  
TOTAL DRAINAGE AREA: 5.45 ACRES

K1 = Ax C (Design Constant) 1.6895  
Qa = MAXALLOW OUTFLOW (0.10 CFS / ACRE) 0.545 CFS

DURATION MINUTES	DURATION SECONDS	INTENSITY (IN/HR)	INCHES	INFLOW VOLUME IN RUNOFF (K+G)	OUTFLOW DURATION x Qa	STORAGE VOLUME INFLOW - OUTFLOW
5	300	9.17	2750	4646	164	4483
10	600	7.86	4714	7965	327	7638
15	900	6.88	6188	10454	491	9963
20	1200	6.11	7333	12390	654	11736
30	1800	5.00	9000	15206	981	14225
60	3600	3.24	11647	19678	1962	17716
90	5400	2.39	12913	21817	2943	18874
120	7200	1.90	13655	23070	3924	19146
180	10800	1.34	14488	24477	5886	18591

POST-DEVELOPMENT REQUIRED 100 YEAR VOLUME = 19146 CF

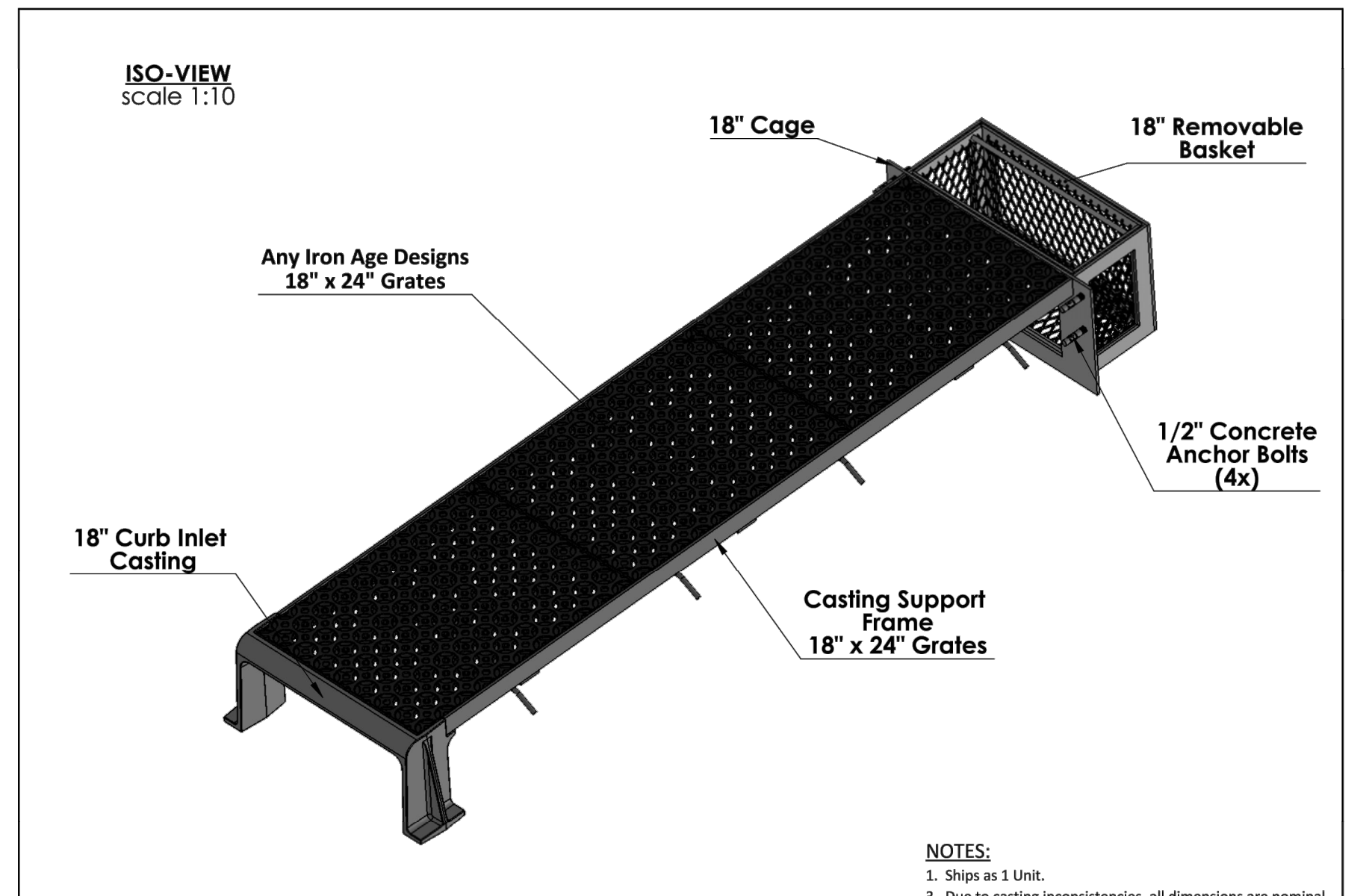
**RUNOFF VOLUME INCREASE= 6607 CF**

**BIO-SWALE STORAGE PROVIDED**

ELEV.	AREA (FT <sup>2</sup> )	DEPTH (FT)	VOLUME (FT <sup>3</sup> )	TOTAL VOLUME	FREEBOARD ELEVATION
953	7459	1	6,019	10,116	DESIGN HIGHWATER ELEVATION
952	4579	1	3,495	4,097	DESIGN HIGHWATER ELEVATION
951	2410	0.5	603	603	
950.5					

**BIO-SWALE STORAGE PROVIDED**

ELEV.	AREA (FT <sup>2</sup> )	DEPTH (FT)	VOLUME (FT <sup>3</sup> )	TOTAL VOLUME	FREEBOARD ELEVATION
952	10280	1	9,233	16,464	DESIGN HIGHWATER ELEVATION
951	8185	1	7,231	7,231	DESIGN HIGHWATER ELEVATION
950	6277	0	0	0	



**18" Curb Inlet with Basket Assembly**

Material: Cast Ductile Iron Castings/Mild Steel  
Edge Finish: Raw / Powder Coat  
Fits: Iron Age Custom Frame  
Product ID: CURBIN3-18

Weight: approx. 300 lbs.  
Edge Thickness: 1.500"

Free Area: XX.XX"sq (approx) (XX.XX%)  
Gallon/Min: sq area x FDA (approx): x1.33x GPM

By: MS Date: 10/31/19  
Job No: XXXXXXXX Scale: NTS  
© Registration: XX-1-XXX-123

Notes:  
1. Ships as 1 Unit.  
3. Due to casting inconsistencies, all dimensions are nominal.  
© 2019 Iron Age Designs  
Made in USA

**LEGEND**

**PROPOSED (PR)**

- 000 T/C
- XXXXXX
- FF
- FG
- T/A
- T/C
- T/W
- F/L
- T/P
- B/P
- RM
- INV
- MH
- IN
- CB
- RY
- ES
- OV
- HY
- UP
- SN
- SL
- FM
- PS
- ST
- WM
- WL
- CO
- CH
- C
- E
- T
- L
- F
- SB
- TBR
- SR
- SLZ
- SAT
- ASPH
- MOD CURB

**EXISTING (EX)**

- +922.08
- FF
- T/A
- T/C
- T/W
- F/L
- T/P
- B/P
- RM
- INV
- MH
- IN
- CB
- RY
- ES
- OV
- HY
- UP
- SN
- SL
- FM
- PS
- ST
- WM
- WL
- CO
- CH
- C
- E
- T
- L
- F
- SB
- TBR
- SR
- SLZ
- SAT
- ASPH
- MOD CURB

**CONTOUR**

**SPOT ELEVATION**

**FINISHED FLOOR ELEVATION**

**FINISHED GRADE ELEVATION**

**TOP OF ASPHALT**

**TOP OF CURB / CONCRETE**

**TOP OF WALK**

**FLOW LINE**

**TOP OF PIPE**

**BOTTOM OF PIPE**

**FIN ELEVATION**

**INVERT ELEVATION**

**MANHOLE STRUCTURE**

**INLET STRUCTURE**

**CATCHBASIN STRUCTURE**

**REARWARD STRUCTURE**

**END-SECTION**

**GATEVALVE STRUCTURE**

**HYDRANT**

**UTILITY POLE**

**SANITARY SEWER**

**SANITARY LEAD**

**FORCE MAIN**

**PRESSURE SEWER**

**STORM SEWER**

**WATER MAIN**

**WATER LEAD**

**FIBER OPTIC**

**OVERHEAD WIRE**

**CABLE**

**ELECTRIC**

**GAS**

**TELEPHONE**

**SIGN**

**SILT FENCE**

**WETLAND BOUNDARY**

**LIMITS OF GRADING/CLEARING**

**MANHOLE**

**INLET / CATCHBASIN**

**FLARED END-SECTION**

**GATE VALVE**

**HYDRANT**

**UTILITY POLE**

**SIGN**

**NOT FIELD VERIFIED TO BE REMOVED**

**SANITARY SEWER LABEL**

**STORM SEWER LABEL**

**WATER MAIN LABEL**

**SOIL EROSION CONTROL MEASURE (P=PERMANENT, T=TEMPORARY)**

**CONCRETE**

**ASPHALT**

**MODIFIED CURB**

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

PROJECT: CATHOLIC HEALTHCARE INTERNATIONAL - PRAYER CAMPUS  
PREPARED FOR: CATHOLIC HEALTHCARE INTERNATIONAL  
2464 TAYLOR ROAD, SUITE 317  
WILMWOOD, MO 63490  
314-922-2136

TITLE: DRAINAGE PLAN & BIOSWALE CALCULATIONS

DATE	REVISION	PER	TWP	BY
11/22/21	1	ST		ST

DESIGNED BY: ST  
DRAWN BY: ST  
CHECKED BY:  
SCALE: 1" = 50'  
JOB NO: 20-477-3  
DATE: 10-15-2021  
SHEET NO. 6



**GENERAL LANDSCAPE SPECIFICATIONS:**

- ALL PLANT MATERIAL SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE GOVERNING MUNICIPALITY. ALL STOCK SHALL BE NURSERY GROWN, CONFORMING TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK", AND IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. STOCK SHALL EXHIBIT NORMAL GROWTH HABIT AND BE FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN-SCALD, INJURIES, ABRASIONS, OR DISFIGUREMENT. ALL PLANT MATERIAL SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT.
- ALL PLANT MATERIALS SHALL BE BALLED AND BURLAPPED OR CONTAINER STOCK. NO BARE ROOT STOCK IS PERMITTED. ALL PLANT BALLS SHALL BE FIRM, INTACT, AND SECURELY WRAPPED AND BOUND.
- ALL PLANT BED MATERIALS SHALL BE EXCAVATED OF ALL BUILDING MATERIALS, OTHER EXTRANEOUS OBJECTS, AND POOR SOILS TO A MINIMUM DEPTH OF 12-INCHES AND BACKFILLED TO GRADE WITH SPECIFIED PLANTING MIX (SEE BELOW).
- PLANTING MIXTURE SHALL CONSIST OF 5 PARTS TOPSOIL FROM ON-SITE (AS APPROVED), 4 PARTS COARSE SAND, 1 PART SPHAGNUM PEAT MOSS (OR APPROVED COMPOST), AND 5 LBS OF SUPERPHOSPHATE FERTILIZER PER CU. YD. OF MIX. INGREDIENTS SHALL BE THOROUGHLY BLENDED FOR UNIFORM CONSISTENCY.
- ALL PLANT BEDS AND INDIVIDUAL PLANTS, NOT OTHERWISE NOTED SHALL BE MULCHED WITH A 4-INCH LAYER OF SHREDDED BARK MULCH. EDGE OF MULCH BEDS AS SHOWN. DECIDUOUS TREES IN LAWN AREAS SHALL RECEIVE A 6-FT DIAMETER CIRCLE OF MULCH AND CONIFER TREES 8-FT (PLANTED CROWN OF TREE) UNLESS OTHERWISE NOTED.
- LANDSCAPE STONE SHALL BE INSTALLED WHERE NOTED OR INDICATED (HATCHED). STONE SHALL BE 3/4"-1 1/4" WASHED RIVER GRAVEL OR AS SELECTED AND SHALL BE INSTALLED TO A MINIMUM DEPTH OF 3-INCHES.
- ALL LANDSCAPE BEDS, UNLESS OTHERWISE NOTED SHALL BE INSTALLED OVER WEED BARRIER FABRIC - WATER PERMEABLE FILTRATION FABRIC OF NON-WOVEN POLYPROPYLENE OR POLYESTER FABRIC. FABRIC SHALL BE OF SUITABLE THICKNESS FOR APPLICATION.
- ALL PLANTS AND PLANT BEDS SHALL BE THOROUGHLY WATERED UPON COMPLETION OF PLANTING AND STAKING OPERATIONS.
- THE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF 1 YEAR FROM THE DATE THE WORK IS ACCEPTED, IN WRITING, BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, WITHIN A SPECIFIED PERIOD OF TIME, ALL DEAD PLANTS, AND ALL PLANTS NOT IN A VIGOROUS, THRIVING CONDITION, AS DETERMINED BY THE LANDSCAPE ARCHITECT, DURING AND AT THE END OF THE GUARANTEE PERIOD. REPLACEMENT STOCK SHALL CONFORM TO THE ORIGINAL SPECIFICATIONS.
- EDGING SHALL BE PROVIDED FOR ALL LANDSCAPE BEDS NOT ADJACENT TO CONCRETE PAVEMENT. EDGING SHALL BE BLACK ALUMINUM EDGING, 3/16-INCH X 4-INCH. INSTALL PER MANUFACTURER'S INSTRUCTIONS, ALL EDGING SHALL BE INSTALLED IN STRAIGHT LINES OR SMOOTH CURVES WITHOUT IRREGULARITIES.
- SOD SHALL BE DENSE, WELL ROOTED TURF, FREE OF WEEDS. IT SHALL BE COMPRISED OF A BLEND OF AT LEAST TWO KENTUCKY BLUE GRASSES AND ONE FESCUE. IT SHALL HAVE A UNIFORM THICKNESS OF 3/4-INCH AT TIME OF PLANTING, AND CUT IN UNIFORM STRIPS NOT LESS THAN 10-INCHES BY 18-INCHES. SOD SHALL BE KEPT MOIST AND LAD WITHIN 36-HOURS AFTER CUTTING.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ALL SODDED AREAS THAT BROWN-OUT OR HAVE NOT FIRMLY KNITTED TO THE SOIL BASE WITHIN A PERIOD OF 1 MONTH SHALL BE REPLACED BY THE CONTRACTOR, AT NO COST TO THE OWNER.

- ALL AREAS OF THE SITE THAT BECOME DISTURBED DURING CONSTRUCTION AND ARE NOT TO BE PAVED, STONED, LANDSCAPED, OR SODDED SHALL BE SEEDED AND MULCHED.  
SEE MIXTURE SHALL BE AS FOLLOWS:  
KENTUCKY BLUEGRASS (CHOOSE 3 VARIETIES - ADELPHI, RUGBY, GLADE, OR PARADE) 30%  
RUBY RED OR DAWSON RED FINE FESCUE 30%  
ATLANTA RED FESCUE 20%  
PENNFINE PERENNIAL RYE 20%

THE ABOVE SEED MIXTURE SHALL BE SOWN AT A RATE OF 250 LBS PER ACRE. PRIOR TO SEEDING, THE TOPSOIL SHALL BE FERTILIZED WITH A COMMERCIAL FERTILIZER WITH A 10-0-10 ANALYSIS:

- 10% NITROGEN - MIN 25% FROM A UREA FORMALDEHYDE SOURCE
- 0% PHOSPHATE
- 10% POTASH - SOURCE POTASSIUM SULFATE OR POTASSIUM NITRATE

THE FIRST FERTILIZER APPLICATION SHALL BE AT A RATE OF 10 LBS PER 1000 SQ FT OF BULK FERTILIZER.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A DENSE LAWN OF PERMANENT GRASSES, FREE OF LUMPS AND DEPRESSIONS. ANY PART OF THE AREA THAT FAILS TO SHOW A UNIFORM GERMINATION SHALL BE RE-SEEDING AND SUCH RE-SEEDING SHALL CONTINUE UNTIL A DENSE LAWN IS ESTABLISHED. DAMAGE TO SEEDED AREAS RESULTING FROM EROSION SHALL BE REPAIRED BY THE CONTRACTOR.

- ALL AREAS OF THE SITE SCHEDULED FOR SEEDING OR SODDING SHALL FIRST RECEIVE A 6-INCH LAYER OF CLEAN, FRAGILE TOPSOIL. THE SOIL SHALL BE DISCED AND SHALL BE GRADED IN CONFORMANCE WITH THE GRADING PLAN.

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL UTILITIES AND TO INFORM THE LANDSCAPE ARCHITECT OF ANY CONFLICTS PRIOR TO COMMENCING LANDSCAPING.



**LEGEND**

PROPOSED (PR)	EXISTING (EX)	
900 T/C	900.08	CONTOUR
XXXXXX		SPOT ELEVATION
FF	FF	FINISHED FLOOR ELEVATION
FS	FS	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
RM	RM	RM 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
OV	OV	GATEVALVE STRUCTURE
HY	HY	HYDRANT
UP	UP	UTILITY POLE
SN	SN	SANITARY SEWER
SL	SL	SANITARY LEAD
FM	FM	FORCE MAN
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
T	T	TELEPHONE
X	X	FENCE
S	S	SILT FENCE
W	W	WETLAND BOUNDARY
L	L	LIMITS OF GRADING/CLEARING
M	M	MANHOLE
I	I	INLET / CATCHBASIN
F	F	FLARED END-SECTION
G	G	GATE VALVE
H	H	HYDRANT
U	U	UTILITY POLE
N	N	NOT FIELD VERIFIED
TBR	TBR	TO BE REMOVED
SS	SS	SANITARY SEWER LABEL
SSM	SSM	STORM SEWER LABEL
WM	WM	WATER MAIN LABEL
SE	SE	SOIL EROSION CONTROL MEASURE
P	P	(P=PERMANENT, T=TEMPORARY)
C	C	CONCRETE
A	A	ASPHALT
M	M	MODIFIED CURB

**LANDSCAPE LEGEND**

EXISTING DECIDUOUS TREE	PROPOSED DECIDUOUS TREE
EXISTING EVERGREEN TREE	PROPOSED ORNAMENTAL TREE
PROPOSED CONIFER TREE	PROPOSED DECIDUOUS SHRUB
PROPOSED CONIFER SHRUB	PROPOSED ORNAMENTAL GRASS
PROPOSED PERENNIAL FORB	PROPOSED TREE PROTECTION
PROPOSED LANDSCAPE BOULDER	

**LANDSCAPE REQUIREMENTS:**

**GREENBELT REQUIREMENTS ALONG CHILSON ROAD:**  
PER SECTION 12.02 OF THE LANDSCAPE ORDINANCE, (14) CANOPY TREES ARE REQUIRED ALONG CHILSON ROAD IN THE FRONT YARD GREENBELT, AS THERE IS EXISTING VEGETATION IN THIS LOCATION, GAPS DO EXIST. THIS PLAN PROPOSES THE INSTALLATION OF (9) NEW CANOPY TREES TO FILL THE GAPS WHILE MAINTAINING THE EXISTING TREES FOR SCREENING PURPOSES.

**PARKING LOT SCREENING:**  
PER SECTION 12.02 OF THE LANDSCAPE ORDINANCE, (4) CANOPY TREES AND 380 SF OF LANDSCAPED AREA IS TO BE INTRODUCED FOR THE PARK LOTS. THIS PLAN INCLUDES (4) CANOPY TREES AT THE PERIMETER OF THE EASTERN PARKING LOT, AND (51) SF OF LANDSCAPED AREA AT THE WEST END OF WESTERN PARKING LOT.

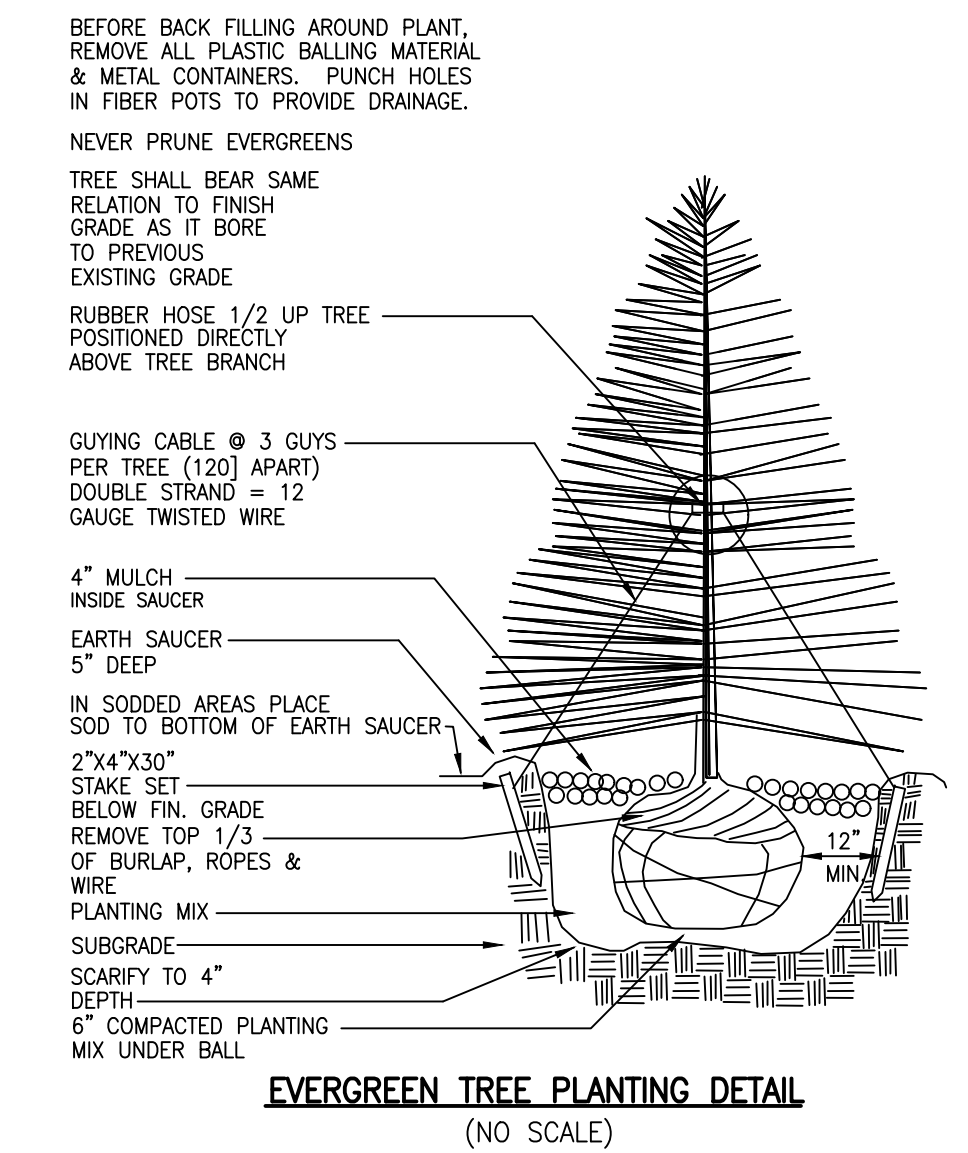
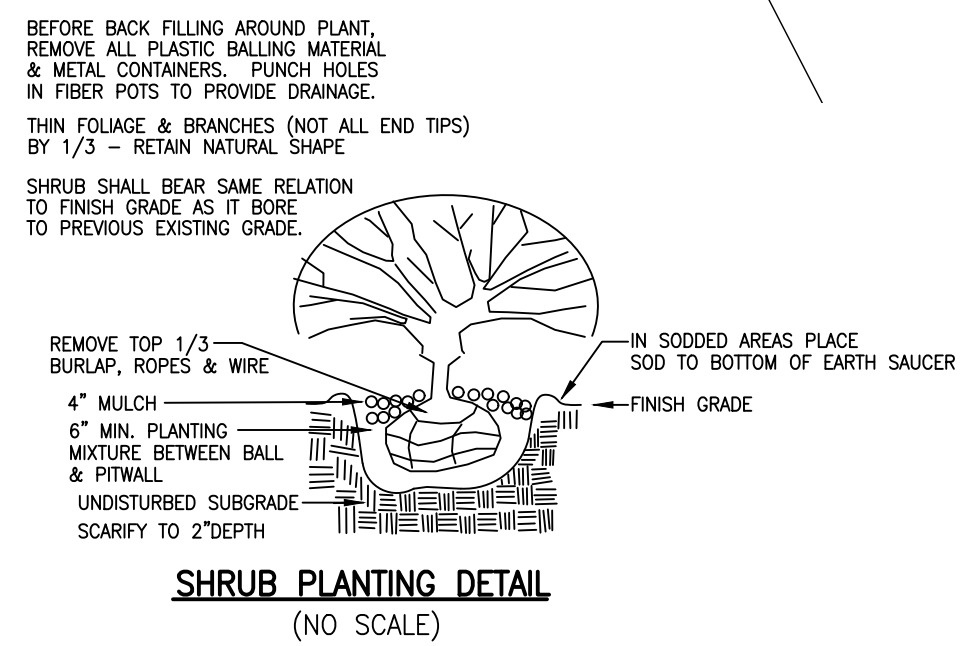
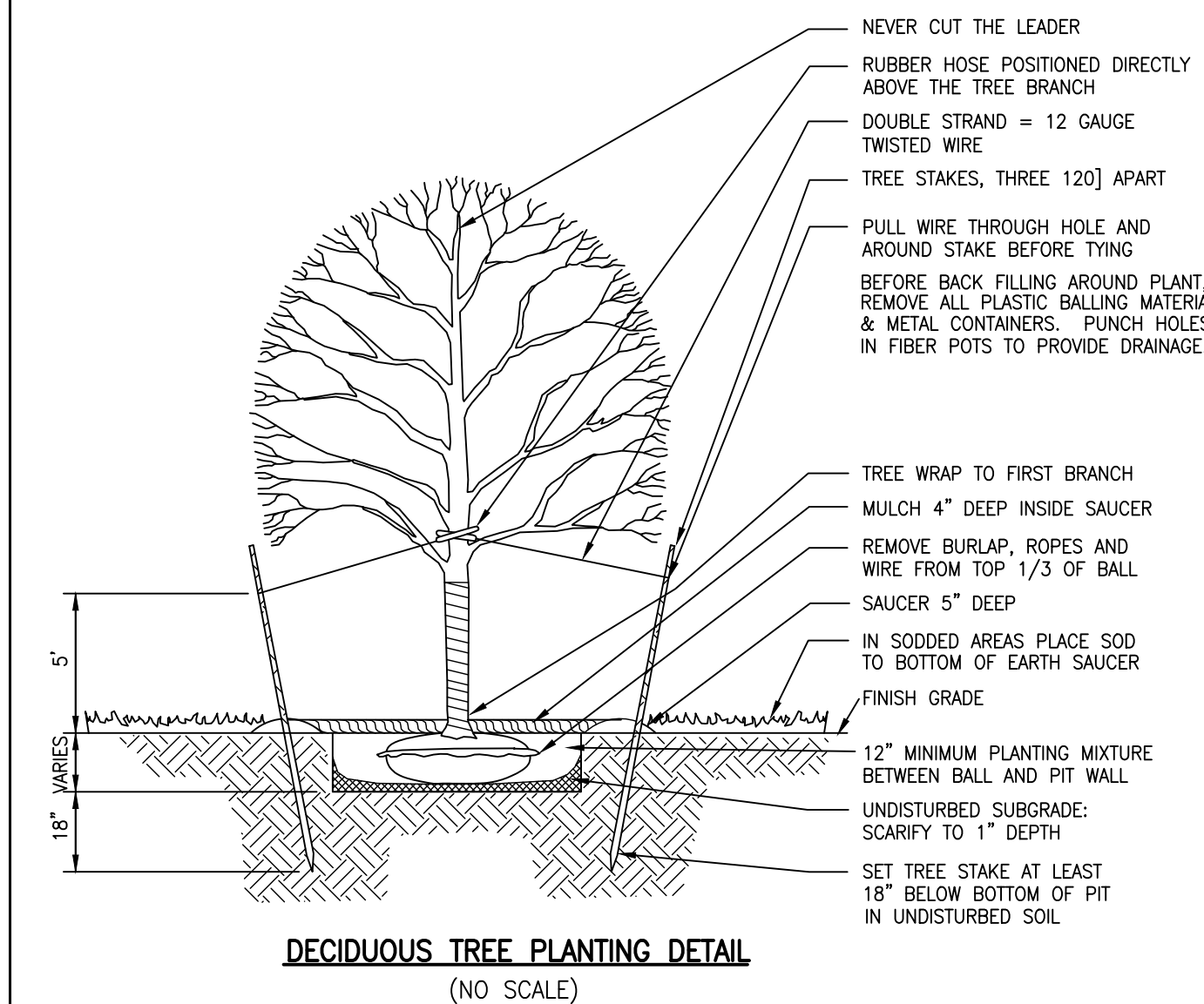
**BIOSWALE PLANTING PLAN**  
THE BIOSWALE BASIN SHALL BE SEED. CONTRACTOR TO ADHERE TO THE "CARDNO NATIVE PLANT NURSERY INSTALLATION AND MAINTENANCE GUIDELINES" FOR PURPOSES OF INSTALLING AND MAINTAINING THE PLANTING AREA.

**RETENTION BASIN SEED MIXES**

KEY	QUAN.	MIX NAME	SIZE
SM	14,000 SF COVERAGE	STORMWATER MIX	SEED

**PLANT LIST**

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	REMARK
AC	36	Abies concolor	White Fir	8' HT	B&B
QT	4	Quercus macrocarpa	'Stylin' Honey Locust	2.5" col.	B&B
QM	2	Quercus macrocarpa	Bur Oak	2.5" col.	B&B
TC	7	Tilia cordata	'Glenleven' Littleleaf Linden	2.5" col.	B&B



THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE DRAWINGS ARE ONLY APPROXIMATE. NO GUARANTEE IS MADE FOR THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THEREFORE, THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT LOCATION AND ELEVATION OF EXISTING UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN ANY CONFLICTS ARE FOUND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO THE PLANNING.

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

PROJECT: CATHOLIC HEALTHCARE INTERNATIONAL - PRAYER CAMPUS  
PREPARED FOR: CATHOLIC HEALTHCARE INTERNATIONAL  
2464 TAYLOR ROAD, SUITE 317  
WILLOWOOD, MO 63090  
314-922-2136

TITLE: LANDSCAPE PLAN

NO.	BY	DATE	PER TWP REVIEW	REVISION PER
1	BT	11/22/21		

DESIGNED BY: JH  
DRAWN BY: JH  
CHECKED BY:  
SCALE: 1" = 50'  
JOB NO: 20-477-3  
DATE: 10-15-2021  
SHEET NO. 7



Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Mounting Height
	A	13	Lithonia Lighting	DSX0 LED P5 30K T4M MVOLT	DSX0 LED P5 30K T4M MVOLT	LED	1	10613	0.9	89	20'-0"

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
ENTRANCE	✕	1.0 fc	2.7 fc	0.1 fc	27.0:1	10.0:1	0.4:1
OVERALL	+	0.1 fc	3.5 fc	0.0 fc	N/A	N/A	0.0:1
PARKING	✕	1.6 fc	3.0 fc	0.7 fc	4.3:1	2.3:1	0.5:1
PROPERTY LINE	+	0.0 fc	0.1 fc	0.0 fc	N/A	N/A	0.0:1
ROUNDABOUT	✕	1.6 fc	3.2 fc	0.6 fc	5.3:1	2.7:1	0.5:1
ROUNDABOUT PARKING	✕	1.8 fc	2.9 fc	1.2 fc	2.4:1	1.5:1	0.6:1

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

**Specifications**

EPA: 0.95 ft<sup>2</sup> (0.088)

Length: 26" (660mm)

Width: 13" (330mm)

Height: 15" (381mm)

Height: 7" (178mm)

Weight (max): 16 lbs (7.2kg)

**Introduction**

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

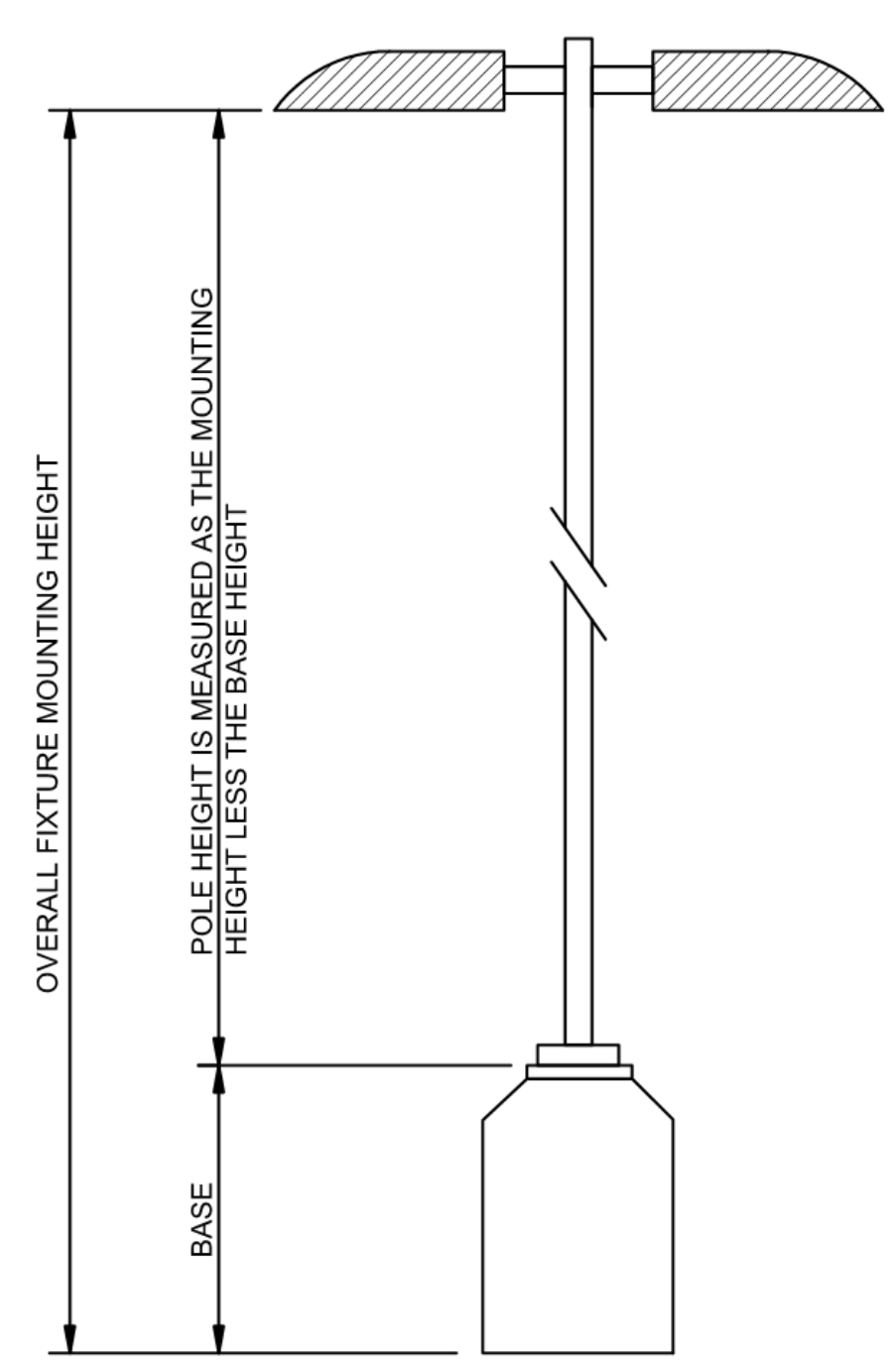
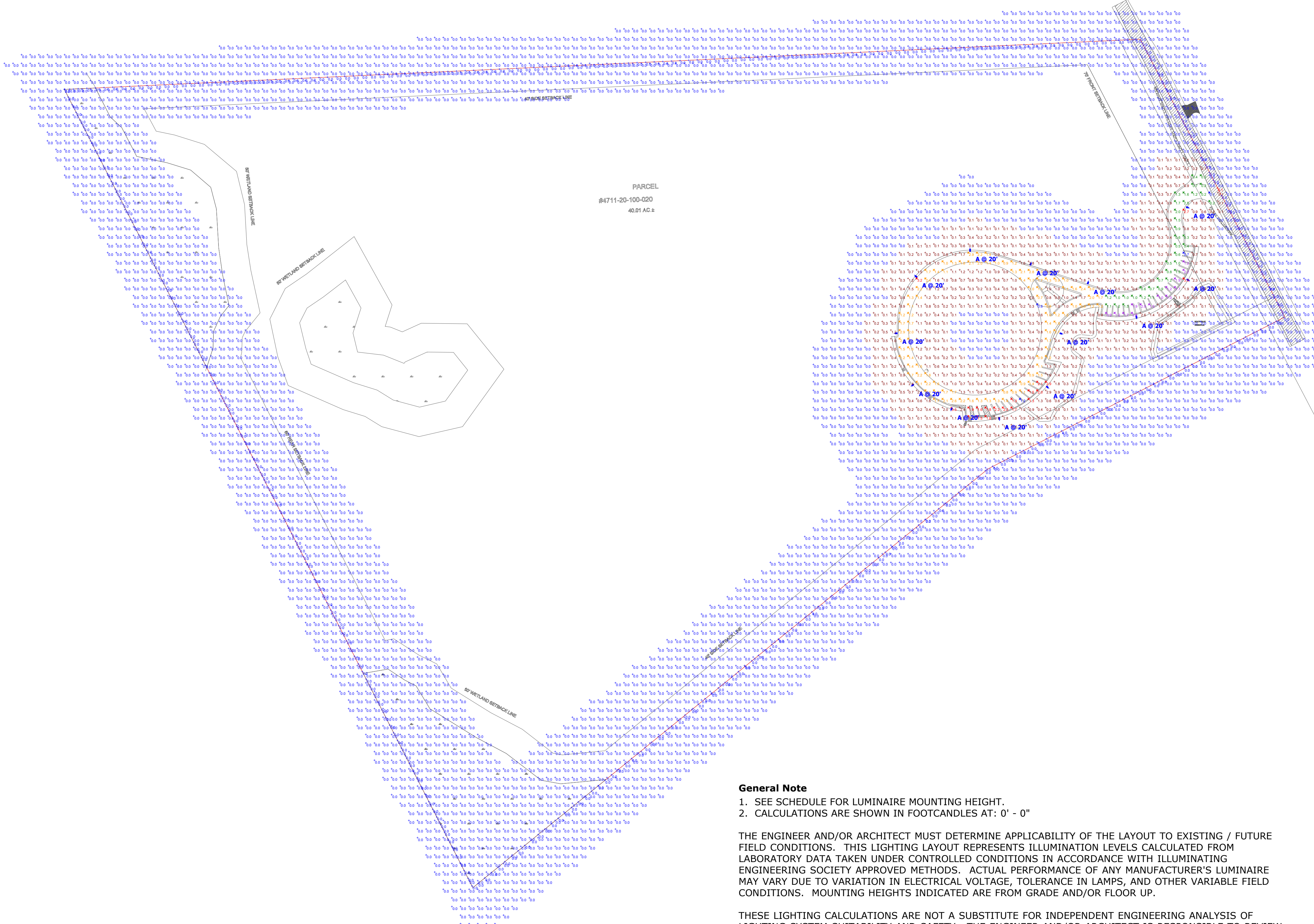
**Ordering Information** EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAR2 PIRHN DDBXD

Code	Label	Color temperature	Beam spread	Wattage	Mounting
DSX0 LED	Forward optics	30K 3000 K	T35 Type II short (shorter)	T35 Type II short (shorter)	MVOLT**
P1	P4	40K 4000 K	T25 Type II short	T25 Type II short	SPA
P2	F5	50K 5000 K	T38 Type II medium	T38 Type II medium	RPA
P3	F6		T35 Type II short	BLC Backlight control	WBA
Rotated optics	T1M		Type II medium	LECO Left corner cast	SPUMBA
P10	F12		Type II medium	RCCO Right corner cast	RPMBA
P11	F13		Type II medium		

**Shipped separately**

KMA DDBXD - Add any mounting bracket/adapter specify first!

LITHONIA LIGHTING  
One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SEER (7378) • FAX: 770-932-2222  
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**General Note**

- SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
- CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"

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

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

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

**Drawing Note**

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

**Mounting Height Note**

MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

**Ordering Note**

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

**Alternates Note**

THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.



**GENOA CHARTER TOWNSHIP  
PLANNING COMMISSION  
SPECIAL MEETING / PUBLIC HEARING  
OCTOBER 25, 2021  
6:30 P.M.  
MINUTES**

CALL TO ORDER: Chairman Grajek called the meeting of the Genoa Charter Township Planning Commission to order at 6:31 p.m. Present were Chris Grajek, Jeff Dhaenens, Marianne McCreary, Eric Rauch and Glynis McBain. Absent was Jim Mortensen. Also present were Kelly VanMarter, Community Development Director/Assistant Township Manager; and Jill Bahm and Sri Komaragiri of Giffels Webster.

PLEDGE OF ALLEGIANCE: The pledge of allegiance was recited.

APPROVAL OF AGENDA:

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

CALL TO THE PUBLIC: The call to the public was made at 6:32 pm.

Chairman Grajek provided rules for speaking to the Planning Commission.

Ms. Andrea Shorkey of 5135 Glenway Drive, Brighton stated she lives in close proximity to the DNR tree farm and the peaceful nature of the forest is what drove her to her home. She is concerned about the proposed gravel pit and the dust that will come from the mining. The Township Master Plan states that this site poses environmental problems.

Ms. Theresa Coloske of 5195 Glenway Drive, Brighton stated that the proposed Brighton orchard will be right across from the street from her. There are 13 gravel pits in Livingston County. She is not opposed to gravel pits, but she does not want it in a residential neighborhood. She has walked door-to-door in the neighboring neighborhoods and obtained signatures and 99 percent of the residents she contacted signed a petition against this proposed gravel pit. There are also traffic issues in this area already. She is opposed to this project. She provided the Planning Commission with a letter and the signatures she has gathered.

Ms. Coloske spoke for Michael Marko of 5195 Glenway Drive who was unable to attend tonight's meeting. He stated this area was previously mined so he is wondering what is left to be mined.

She also spoke for Mr. Tom Liberati who lives in Country Club Manor. He believes that the Township has the authority to stop this proposal.

Mr. Dave Snow of 4546 Golf View Drive, Brighton is opposed to the gravel pit project. He agrees with what Ms. Coloske stated. The traffic is already an issue and the gravel trucks will cause damage to the road.

Mr. Craig Hagen of 5180 Glenway Drive stated that if this gravel project is a reality, he will be 250 feet from the border where all of the gravel, silica sand and other unwanted materials will be put into the air and ground. The Township has an opportunity to stop this.

Mr. Brian Blaker 4764 Oak Tree Court stated there were 700 or 800 citizens at the DNR meeting last month who were against the gravel pit going into a subdivision. Senate Bill 429 that was passed by the Senate will take away the zoning rights of local governments for aggregate. There is approximately \$400 million in real estate that is in danger if this project is approved. Gravel pit operations do not belong in a densely populated area.

Ms. Deborah Snow of 4546 Golf View Drive questioned what the community would gain for having the gravel pit. She asked why no representatives from the Township were at the meeting to listen to the DNR's presentation last month.

Ms. Elaine Thayer of 5345 Urbana Drive stated that in 1959 when this area was a dump, a lot of hazardous materials were placed there. She is concerned that when the area is mined, those items will be brought up. She is concerned about the traffic and how the gravel trucks will affect the roadways.

McKenzie Adams of 5154 Walnut Hills Drive stated she just moved to the area from Plymouth. She values the nature and peace and would be sad to see that gone. She is strongly opposed to the gravel pit.

Some members of the call to the public had questions regarding the process of reviewing and approving the proposed gravel pit. Ms. VanMarter stated that she is available and encouraged residents to contact her and she can provide the details of the process.

The call to the public was closed at 6:57 pm.

**OPEN PUBLIC HEARING # 1...** Discussion of 2021 Master Plan update as presented by Giffels Webster.

Ms. Jill Bahm and Sri Komaragiri of Giffels Webster were present.

Ms. Bahm described the purpose of the Master Plan and the process that occurs with its update. State law requires a community's Master Plan to be reviewed every five years; however, it does not need to be changed.

Ms. Komaragiri reviewed the draft Master Plan that has been prepared and presented to the Township. They reviewed the plans of surrounding regions, such as Livingston County, and some aspects from their plans can be used in determining proposed changes for the Township's Master Plan. She reviewed the demographics of the Township, noting that 46 percent of the



households are median-aged married couples with no children. Other data presented was education levels of residents, population decrease, local economy, workforce and employment sectors, median household income, medium housing value, and age of housing.

Ms. Komaragiri reviewed the natural features of the Township, such as geology, topography, soils, the tree canopy, wetlands, lakes, rivers, and streams.

There was a discussion regarding the data that was presented. It was noted that some of it may change due to the COVID-19 Pandemic. Much of this information was put together prior to March of 2020.

There was a discussion regarding planning for higher density residential development in the Township. Ms. Komaragiri noted that there may be a need in the Township that could be due to the higher density neighboring communities, such as the City of Brighton and the City of Howell.

Ms. Bahm reviewed the information that was gathered at the joint Planning Commission and Township Board meeting, which included what each of the participants thought were the current strengths and weaknesses for both residential and non-residential.

The Vision, Goals, and Objectives prepared by Giffels Webster were reviewed for housing and neighborhoods, economic development, natural features, transportation, and public facilities and services. Commissioners provided their feedback on what was presented as well as their ideas for each of the areas. Ms. VanMarter noted that at the joint meeting, there was a discussion regarding bringing residential zoning along Grand River so she would like this to be noted in the Goals section. This would allow for high density housing, which could equate to affordable housing. She would also like to see information regarding county roadways inside subdivisions in the Township. Many times after the development is complete, the roadway needs maintenance, but neither the Livingston County Road Commission nor the residents are able to make the repairs.

All Commissioners agree that the Township can obtain good feedback from the Master Plan Open House meeting next month. The residents will let the Township know what they would like to see with regard to housing, services, shopping, restaurants, etc.

Some of these areas may need to be amended also due to the COVID-19 Pandemic.

Ms. Komaragiri reviewed their proposed format for the upcoming open house.

## ADMINISTRATIVE BUSINESS

### **Staff Report**

Ms. VanMarter stated there are no items for the November 8, 2021 Planning Commission meeting so it will be canceled.

**Approval of the October 12, 2021 Planning Commission meeting minutes**

Needed changes were noted.

**Moved** by Commissioner McCreary, seconded by Commissioner Dhaenens, to approve the minutes of the October 12, 2021 Planning Commission Meeting with the corrections noted. **The motion carried unanimously.**

**Member Discussion**

There were no items to discuss this evening.

**Adjournment**

**Moved** by Commissioner McBain, seconded by Commissioner Dhaenens, to adjourn the meeting at 9:07 pm. **The motion carried unanimously.**

Respectfully Submitted,

Patty Thomas, Recording Secretary



THE PEOPLE

Public Input

# Leadership Visioning Summary

The Master Plan update process was re-started in July 2021 with a joint meeting with members of the Planning Commission, Township board, ZBA and Staff. The purpose of the “Leadership meeting” was to understand how the current leadership of the township felt, and what board and committee members would like the Master Plan to focus on. The group completed two exercises in order to identify and prioritize township’s strengths and weaknesses.



## Step 1. Identify

The first asked Individuals to write down what they felt were strengths and weaknesses within the community with a specific focus on residential and non-residential (primarily commercial) areas. Post-it notes were placed in two categories: strengths (“what’s working”) and weaknesses (“what needs work”).

## Step 2. Prioritize

For the second exercise, participants were given dots and asked to vote on the top 5 strengths and weaknesses as counted in the previous exercise.



TABLE 2.1. GENOA TOWNSHIP STRENGTHS AND WEAKNESSES	
 Strengths What is working?	 Weaknesses What needs work?
<b>Residential</b>	
Variety of housing	Lack of starter/age in place homes
Zoning code enforcement	Affordability
High quality subdivisions (PUD)	Road/connectivity to commercial
Large lots	Pedestrian connections (sidewalks/bikes)
<b>Non-residential</b>	
Variety of businesses/divers tax base	Vacancies/state of buildings
Good zoning standards	/Lack of groceries/ variety of retail
Good planning	Traffic

Source: Giffels Webster



TABLE 2.2. RESIDENTIAL STRENGTHS &amp; WEAKNESSES

Strengths: What is working?		Weaknesses: What needs work?	
Topic	No. of votes	Topic	No. of votes
Variety of housing	9	Lack of starter/age in place home s	12
Zoning code enforcement	6	Affordability	6
High quality subdivisions (PUD)	5	Road/connectivity to commercial	6
Large lots	5	Pedestrian connections (sidewalks/bikes)	6
Waterfront homes	4	Small business growth / downtown	4
Location	4	Density/big city vibe	2
Tax base	3	Zoning restrictions	2
Natural feature preservation	2	Broadband	2
Variety of retail (near res)	1	Green development	1
Not many vacancies	1	Safety	1
Density	1	Lake access for non-residents	1
Schools	1		
Safe and Friendly	1		

TABLE 2.3. NON-RESIDENTIAL STRENGTHS &amp; WEAKNESSES

Strengths: What is working?		Weaknesses: What needs work?	
Topic	No. of votes	Topic	No. of votes
Variety of businesses/divers tax base	9	Vacancies/state of buildings	11
Good zoning standards	9	Lack of groceries/ variety of retail	6
Brighton-Howell connector (location)	5	Traffic	6
Good planning	5	Commercial zoning enforcement	5
Twp government/staff	2	Sidewalks/connectivity	4
Access to grand river bus.	2	Industrial/commercial requirements	2
Medical/professional services	2	Lack of professional jobs	2
Large commercial opportunities	1	Broadband/technology	2
Occupancy	1	Lack of senior center	1
Interest in area/demographics	1	Commercial outside GR corridor	1
		Cross easement disconnects	1
		Inconsistent tax rates	1
		"Rural forever" attitude	

Source: Giffels Webster

# Open House Summary

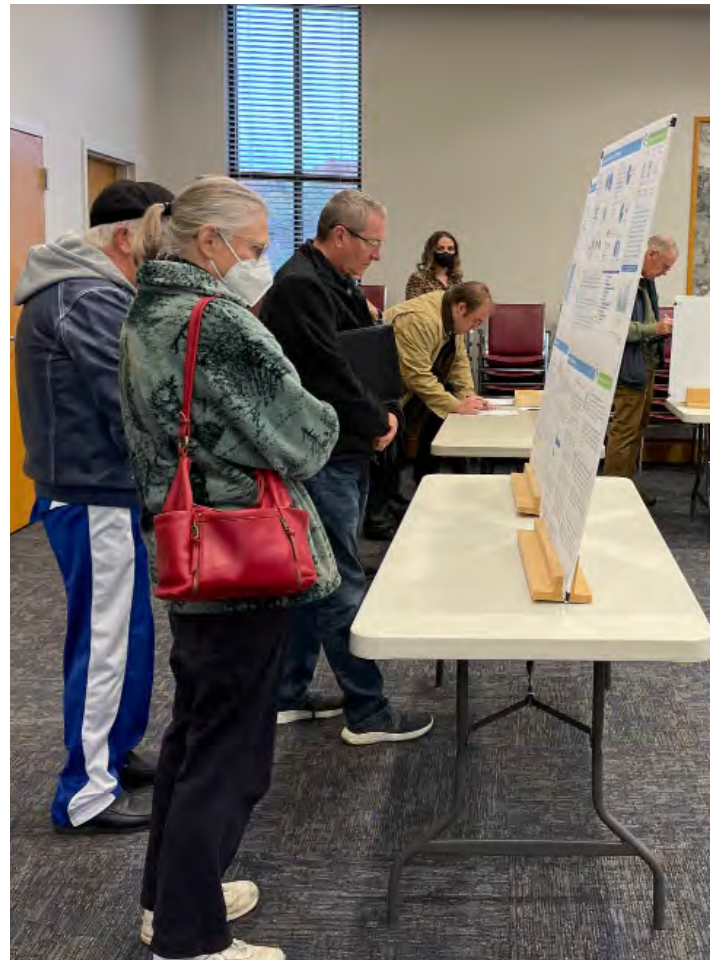
Genoa Township conducted an open house on November 10, 2021, at the Township Hall to collect input for the master plan update. A summary of existing conditions of the township that includes current demographic data, local economy, natural features is provided for context. A summary of the market assessment summary that was initially conducted in 2020 and updated in 2021 is also included.

The information provided at the open house was hosted on a website that was made available for the residents for a week following the open house. The website included a survey with the same questions asked at the open house. This was intended to provide an extended opportunity for the residents to provide input at their convenience. Please refer to the appendix for a copy of the posters from the open house.

The information and the questions at the open house were framed based on Planning Commission's guidance and input from their October 25, 2021. At that meeting, the Planning Commission discussed the community's identity, vision, and goals for the next 10-15 years. They supported the idea of identifying and protecting the community character. Community character guides the way we regulate the development and redevelopment of land.

Open house participants (in-person and online) were asked about their perception of community, potential locations to identify gateways around the township, preference about their housing styles, recommended non-motorized improvements, and their general thoughts of 2015 adopted future land use map and proposed goals. Majority of questions were rating-based.

Representatives from the Township's various boards and commissions attended the meeting. Approximately 40 people participated in-person; there were 285 views of the project website between November 7-December 7. seventeen responses were gathered. A number of participants provided their responses in groups. Most participants are within the 55-74 age group living in a household of two adults and no kids.



Source: Giffels Webster, 2021



## Community Character.

Participants were asked to identify three things they identify/love about Genoa and things that would make people more connected with Genoa. A majority of residents identify the Township as a small town with access to nature, recreation and a quiet place to raise family with convenient access to urban communities. Participants supported maintaining the rural character, creating more annual community events and providing affordable housing. This was also the top priority goal.

## Gateways.

Gateways reinforce community identity. The respondents were provided potential gateway locations and precedent images of elements that contribute to a gateway. A majority of the responses supported creating gateways at entry points to the township along Grand River Avenue by using landscape elements.

FIG. 2.1. POTENTIAL GATWAYS

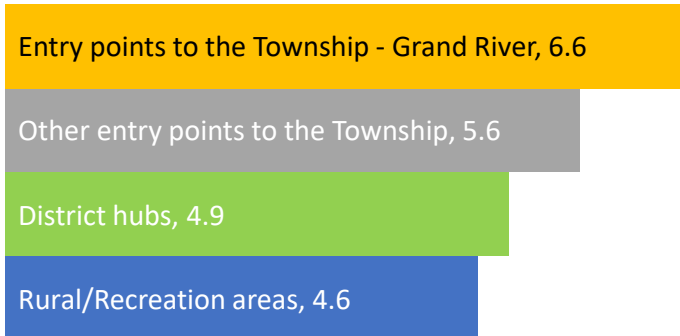
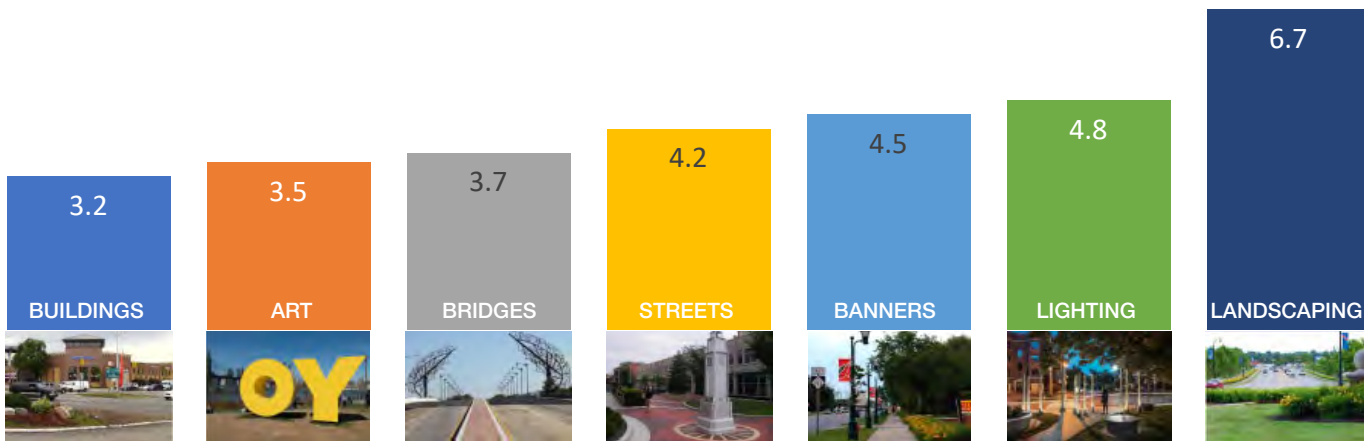


FIG. 2.2. PREFERRED GATEWAY ELEMENTS



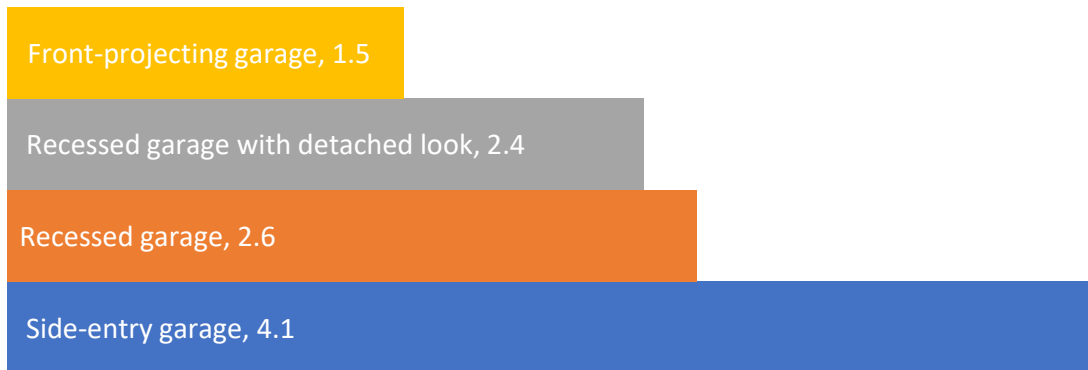
## Transportation Connectivity.

A greenways plan was prepared a number of years ago for southeast Livingston County. This plan illustrates a prioritized non-motorized system of paths and conservation corridors containing significant natural features. The respondents were asked if they agree with recommended priority ratings. The response was neutral. The responses indicate a strong support for sidewalk connections along Challis, Chilson Road and safe non-motorized access to elementary schools.

## Housing.

The residents were presented images of different single-family styles including the typical front projecting garage style. There was clear support for side-entry garage-style housing. The response was split when asked about their preference to allow accessory dwelling units within single-family districts.

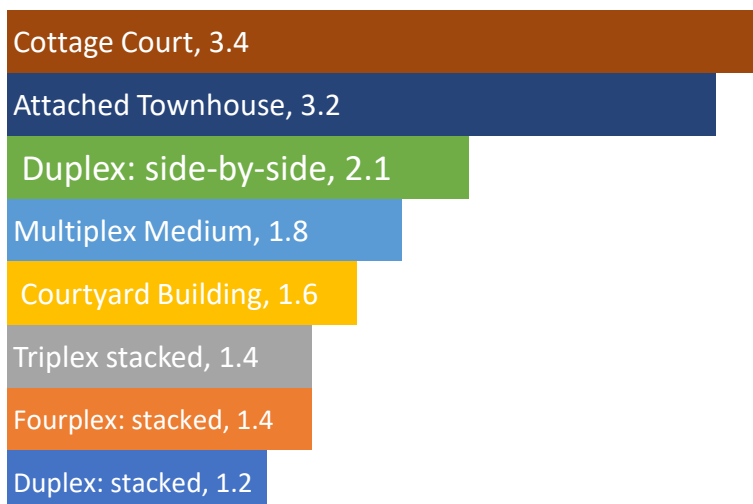
FIG. 2.3. PREFERRED SINGLE FAMILY HOUSING STYLES



## Missing Middle Housing.

It is a range of multi-unit or clustered housing types compatible in scale with single-family homes that help meet the growing demand for walkable urban living. The participants were introduced to different style of missing middle housing using precedent images and asked their like on a scale of 1 to 10 (1 being 'I don't like it all). They support a need for diverse housing in general within the township with cottage court style and attached townhomes as their preferred style.

FIG. 2.4. PREFERRED MISSING MIDDLE HOUSING STYLES





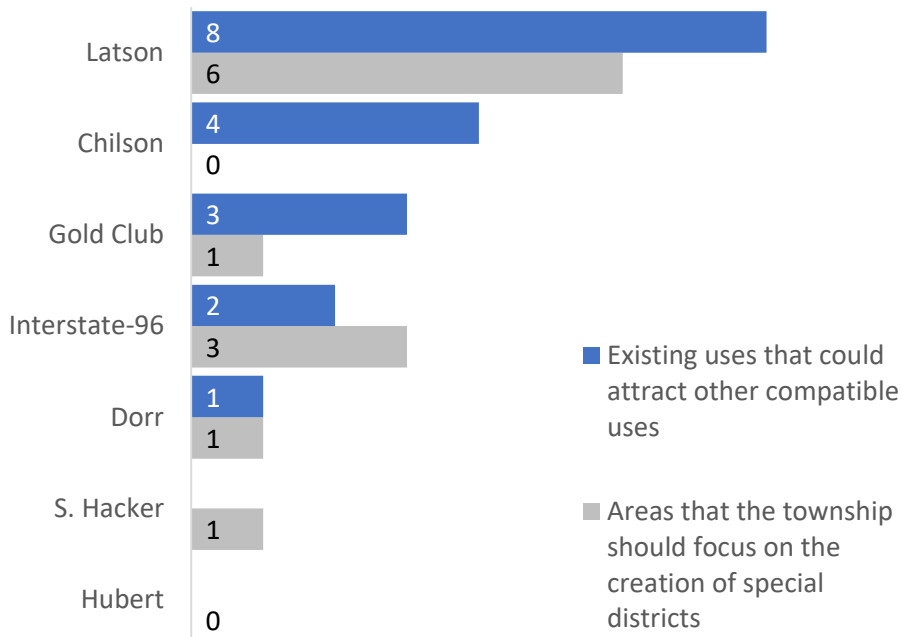


Source: Giffels Webster, 2021

### Grand River Corridor.

This poster was intended to get high-level input about identifying areas along Grand River Avenue for creating a potential special district (mixed-use town center developments). Seven locations were provided for input. Examples of potential uses are provided. There is strong support for Latson/Grand River intersection followed by Chilson/Grand River intersection.

FIG. 2.1. PUBLIC INPUT-GRAND RIVER CORRIDOR



## Future Land Use.

A copy of the 2015 Future Land Use Map was provided and the participants were asked to identify if there are any areas where they envision a different use in the township than what is shown on the map currently. There were no areas recommended for change. However, a majority of respondents emphasized their support to keep the area near Brighton Lake Road and Chilson Road as low-density residential.

## Goals and Objectives.

The participants were provided a list of six goals (Housing is proposed to be added with this update, the rest of the goals were updated from the previous master plan). They were asked to rate them by their importance. The goal related to Natural feature is rated as most important by participants.



Source: Giffels Webster, 2021

FIG. 2.6. PRIORITY GOALS







Source: Giffels Webster, 2021