



**ACME TOWNSHIP PLANNING COMMISSION MEETING  
ACME TOWNSHIP HALL  
3593 Bunker Hill Rd, Williamsburg MI 49690  
(Former Acme Laundromat at US-31 & Bunker Hill Rd)  
May 21<sup>st</sup>, 2019 7:00 p.m.**

**CALL TO ORDER WITH PLEDGE OF ALLEGIANCE at 7:00 PM**

**ROLL CALL: Members present:** K. Wentzloff (Chair), S. Feringa (Vice Chair), D. Rosa, D. VanHouten, B. Balentine, D. White

**Members excused:** M. Timmins

**Staff present:** S. Winter, Planning & Zoning Administrator, V. Donn, Recording Secretary

**A. LIMITED PUBLIC COMMENT:** Open at 7:01 pm

Brian Kelley, 4893 Ridge Crest (Submitted written comments to be added to packet)

Richard Rudlaff, 12701 Mastique Beach Blvd., Fort Myers, Fl.

Limited Public Comment closed at 7:07 pm

**B. APPROVAL OF AGENDA:**

**Motion by Feringa to approve agenda as presented, supported by White. Motion carried unanimously.**

**C. INQUIRY AS TO CONFLICTS OF INTEREST:** None

**D. SPECIAL PRESENTATIONS:** None

**E. CONSENT CALENDAR:**

1. **RECEIVE AND FILE:** none

2. **ACTION:** none

**F. ITEMS REMOVED FROM THE CONSENT CALENDAR:** None

**G. CORRESPONDENCE:** None

**H. PUBLIC HEARINGS:** None

**I. OLD BUSINESS:** None

**J. NEW BUSINESS:**

1. **SUP 2019-01 Minor Amendment for Flintfields Horse Park (PZR 2019-08)**

Winter explained this is an application from Flintfield for a minor amendment to a special use permit to shift two existing show rings and adding an adjacent warmup ring. The shift would cause the rings to encroach into the existing drainage basin for the property, so this calls for refiguring and enlarging the basin. Additionally, it is for a new pavilion to be approved under the standards of the Zoning Ordinance. The Pavilion had been constructed without prior approval. Gosling-Czubak has reviewed the proposed changes to the previously approved use, to include the reconfiguring of the arena layout and verified the plans are consistent with modifications of adding 8,778 cubic feet to the stormwater basin to increase to 20,095 cubic feet. A Soil Erosion and Sedimentation Control Permit has been submitted and reviewed. There is correspondence from Grand Traverse Metro Fire Department that they have received a copy of the site plans for

review and are also working on emergency access for areas around the site with Dusty Christensen from Mansfield Land Use Consultants in Traverse City, a consultant for the horse show. Winter suggested the horse show do a master plan of future uses and any changes that will be done.

**Motion by Balentine to approve Special Use Permit minor amendment application SUP 2019-01, submitted by Mansfield Land Use Consultants, on behalf of Traverse City Horseshows LLC, to shift two existing show rings, construct a warmup ring adjacent, to add a pavilion over an existing spectator viewing area, and to reconstruct the storm water drainage basin as necessary and indicated on the submitted site plans, for the Great Lakes Equestrian Festival operated at Flintfields Horse Park, 6535 Bates Rd, Williamsburg, MI 49690, with the following conditions that must be met prior to issuing a land use permit: Submit approval of the site plan by the Grand Traverse Metro Fire Department, and the final set of site plan drawings be updated to reflect the applicable conditions, stamped by a licensed engineer, architect, or landscape architect, and signed by the Planning Commission Chair and Applicant, supported by White. Motion carried unanimously.**

**K. PUBLIC COMMENT & OTHER PC BUSINESS:** Opened at 7:35 pm

Brian Kelley, 4893 Ridge Crest

Public Comment closed at 7:38 pm

**1. Planning & Zoning Administrator Report – Shawn Winter**

Winter reported Lindsey Wolf will be the new Planning & Zoning Administrator and is starting June 17. She has a background in zoning and planning.

**2. Township Board Report – Doug White: No report**

**3. Parks & Trails Committee Report:** Wentzloff reported the Bayside Park dedication was held and it was announced Iron Belle Trail Fund pledged to match half of what is needed for the Tart Trail if the DNR Trust Fund Grant is received. Winter informed the board approved and signed the application for the Tribal 2% Grant for estimated \$39,000 to go towards trails amenities.

**ADJOURN: Motion by Balentine to adjourn, seconded by VanHouten. Meeting adjourned at 7:42 pm**



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**3593 Bunker Hill Rd, Williamsburg MI 49690**  
**(Former Acme Laundromat at US-31 & Bunker Hill Rd)**  
**May 21<sup>st</sup>, 2019 7:00 p.m.**

**CALL TO ORDER**  
**WITH PLEDGE OF ALLEGIANCE**

**ROLL CALL:**

- A. LIMITED PUBLIC COMMENT:** Members of the public may address the Commission regarding any subject of community interest during public comment periods by filling out a Public Comment Card and submitting it to the Secretary. Public comments are limited to three minutes per individual. Comments during other portions of the agenda may or may not be entertained at the moderator's discretion
- B. APPROVAL OF AGENDA:**
- C. INQUIRY AS TO CONFLICTS OF INTEREST:**
- D. SPECIAL PRESENTATIONS:**
- E. CONSENT CALENDAR:** The purpose of the consent calendar is to expedite business by grouping non-controversial items together for one Commission motion without discussion. A request to remove any item for discussion later in the agenda from any member of the Commission, staff or public shall be granted.
  - 1. RECEIVE AND FILE:** none
  - 2. ACTION:** none
- F. ITEMS REMOVED FROM THE CONSENT CALENDAR**
  - 1.** \_\_\_\_\_
  - 2.** \_\_\_\_\_
- G. CORRESPONDENCE:**
- H. PUBLIC HEARINGS:**
- I. OLD BUSINESS:**
- J. NEW BUSINESS:**
  - 1.** SUP 2019-01 Minor Amendment for Flintfields Horse Park (PZR 2019-08)
- K. PUBLIC COMMENT & OTHER PC BUSINESS**
  - 1.** Planning & Zoning Administrator Report – Shawn Winter
  - 2.** Township Board Report – Doug White
  - 3.** Parks & Trails Committee Report – Marcie Timmins

**ADJOURN:**

To: Acme Township Planning Commission  
From: Brian Kelley

Date: May 21, 2019

**Good evening,**

**Over the years I have watched Acme township bend over backwards to work with the Flint Fields. The zoning ordinance was even modified to accomodate the events. So it is strange that construction would occur without township approval. Why would that happen, when we all know the township would accomodate the site?**

**There is a branch of Yuba creek on this property. It is plainly visible on google maps. It appears to extend deep into the development and even overlay the proposed modification area.**

**Do any of the plan views clearly show it? If not, why not? Why is there no narrative concerning this sensitive site feature, and how it will be protected? Why does the packet not contain a storm water review?**

**Some of you may recall that this happened with the RV park. Some PC members suggested it was just a GIS anomaly. In fact, the DEQ had performed a formal determination that Yuba creek did run through the center of the proposed RV park expansion. That was communicated to the RV park in writing but they chose not to share it with the PC. In fact, they denied it was a branch of the creek.**

**Do any of the plan views clearly show it? If not, why not? Why does the packet not contain a storm water review?**

**Thank you,**

**Brian Kelley**



<b>Acme Township</b>			
<b>Planning &amp; Zoning Report No. 2019-07</b>			
<b>Prepared:</b>	May 7, 2019	<b>Pages:</b>	
<b>Meeting:</b>	May 21, 2019	<b>Attachments:</b>	Yes
<b>Subject:</b>	SUP 2019-01 Min. Amd. – Flintfields Horse Park		

**Application No.:** SUP 2019-01 Minor Amendment

**Project:** Flintfields Horse Park – site modification  
6535 Bates Rd, Williamsburg, MI 49690

**Request:** SUP Minor Amendment and Site Plan Review to modify the location of two competition rings, add of a warm up ring and spectator pavilion

**Applicant:** Traverse City Horse Shows LLC  
15355 De Havilland Court, Wellington, FL 33414  
Submitted by Mansfield Land Use Consultants

**Owner:** Traverse City Horse Shows LLC  
15355 De Havilland Court, Wellington, FL 33414

**I. OVERVIEW**

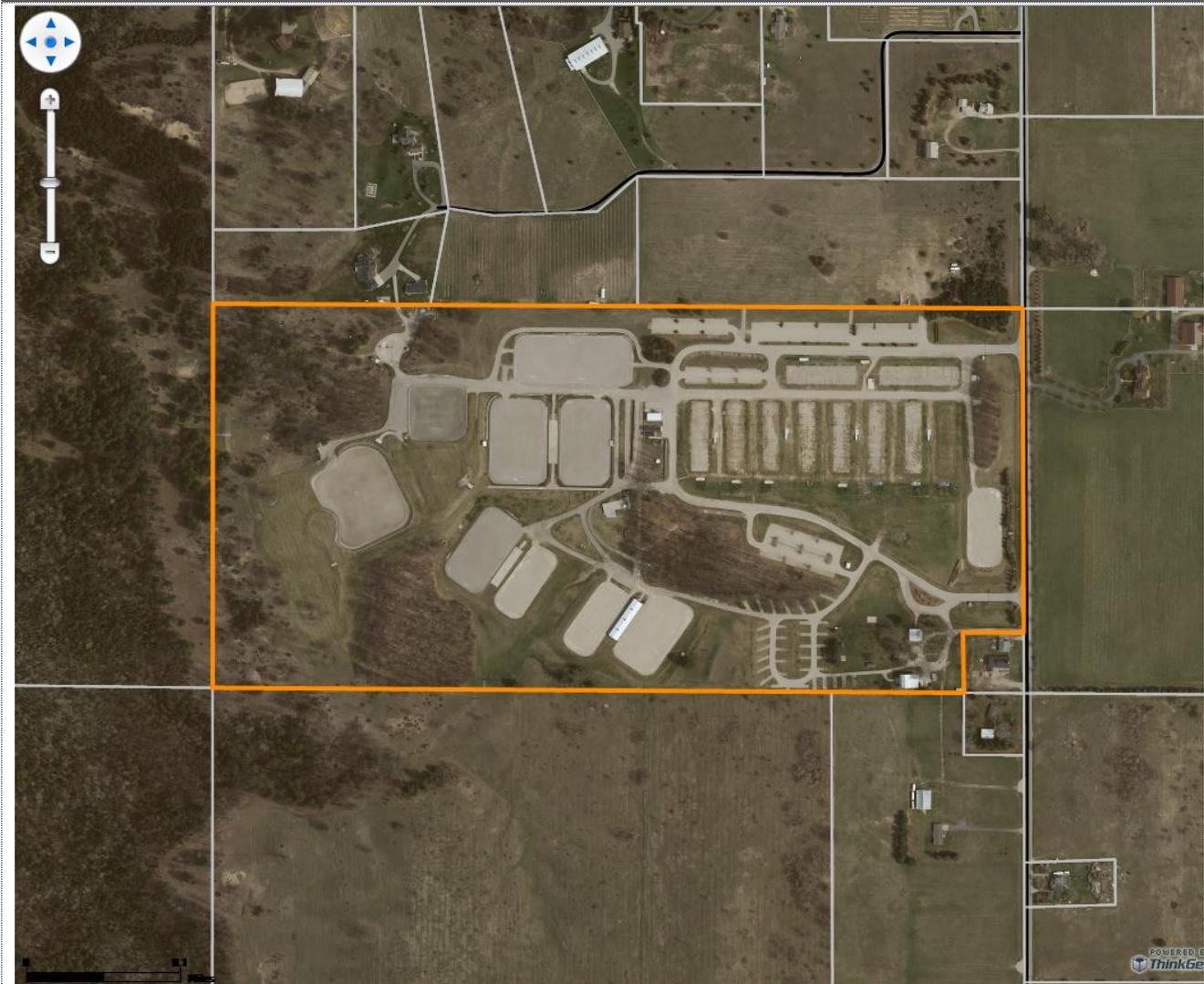
**General Description and Recommendation**

The Applicant is proposing to shift two existing competition rings in the southwest corner of the property to the south to accommodate an adjacent warm up ring, and to add a spectator pavilion over an existing concrete pad between two other competition rings to the north. The shifting of the rings will encroach into the existing drainage basin which will be modified to increase capacity. This request requires approval of a minor amendment to the existing special use permit that governs the development of the property, and its subsequent amendments.

The proposed use is consistent with the intent and purpose of the zoning district as well as the future land use category. Staff recommends approval of the site plan with consideration of the conditions mentioned in the suggested motion at the end of this report.

Subject Property Location	
Address	Parcel Number
6535 Bates Rd	28-01-014-008-01
Legal Description	
S 1/2 OF NW 1/4 EXC SCHOOL LOT IN SE COR 208.7' SQ. SEC 31 T28N R9W Split on 01/17/2007 from 01-014-009-00, 01-014-008-00;	

Aerial Image



Existing Conditions of Subject Property		
Zoning	Existing Uses	
A-1: Agricultural	Flintfields Horse Park – Great Lakes Equestrian Festival	
Area	Existing Permits / Prior Approvals	
83.295 acres	<b>SUP 2006-12P</b>	To construct and occupy an equestrian facility
	<b>2010</b>	Administrative amendment to replace two office trailers with 21' x 46' pavilion
	<b>SUP 2012-05P</b>	Minor amendment to upgrade campground, food handling, portable restrooms, overflow parking, and a 34' x 64' pavilion
	<b>SUP 2014-03P</b>	Minor Amendment to allow additional open space uses: equestrian-related events, polo, outdoor recreation camp, Acme Fall Festival
	<b>SUP 2014-07P</b>	Minor Amendment to allow organized meeting space for weddings, birthday parties, corporate events, and similar
	<b>SUP 2015-05</b>	Minor Amendment to increase extend the equestrian festival from four to eight weeks

Adjacent Zoning and Land Uses		
Location	Zoning	Land Use
North:	A-1	Residential, Karin Flint
North:	A-1	Vacant, Traverse City Horse Shows LLC
North:	A-1	Residential, Ray & Carol Herman
Northeast:	A-1	Agriculture, Chuck & Carol Walters
East:	A-1	Residential/Agriculture, Chuck & Carol Walter
Southeast:	A-1	Institutional, Bates Missionary Church
South:	A-1	Residential, Ted & Val Donn
South:	A-1	Residential, Stadium Jumping Inc
South:	A-1	Vacant, Grand Traverse Band of Ottawa & Chippewa Indians
Southwest:	A-1	Vacant, Grand Traverse Band of Ottawa & Chippewa Indians
West:	A-1	Vacant, Walter H Wistrand Trust

**Relationship to Master Plan**

**Future Land Use Category – Agricultural**

The Agricultural category comprises land that is under active agricultural use and that is resistant to demographic and economic pressures that make other agricultural land likely for future development. Agricultural land is usually not served by public sewer or water supply and is generally distant from the high-density areas of the Township which is planned for and accommodated south of M-72. The terrain of existing agricultural lands consists of gently rolling hills and level fields interspersed occasionally with small forest areas. Land uses adjacent to the streams and wetlands of Yuba Creek should use sound environmental stewardship and ecological practices in order to conserve natural resources and protect highly sensitive ecosystems as well as ground- and surface water. Acme Township’s farmlands contribute substantially to the local and regional economy, open space, and natural resource base of the community, and so this category also encourages the establishment of linkages and corridors for wildlife habitat.

A major objective of this land use category is to create a long-term business environment for agriculture in Acme Township. This category also aims to ensure that agriculture contributes to the character of Acme Township; contributes to Acme Township’s and Grand Traverse County’s economies, now and in the future; and prevents the loss of agricultural lands by encouraging the use of PDR and TDR programs and other means.

The intended uses in this category include, but are not limited to: farms under active cultivation; farmsteads and accessory structures; agriculture-related industries; agriculture-based enterprises; nurseries and greenhouses; and other agriculture-friendly forms of development. Land uses in the Agricultural areas should comport with the policies and actions outlined in the Cornerstone entitled, “Support the Continuation of Agricultural Operations and Preservation of Farmland.” Residential development should use conservation designs through cluster housing, open-space development, or planned unit development. The Township contemplates that residential developments must work around extant agricultural uses, and in some circumstances the current density of 1 dwelling unit per 5 acres should be lowered to 1 dwelling unit per 2 or 2.5 units if cluster and/or open space (farmland) subdivisions are used. The PDR-eligibility map is overlain on the Future Land Use Map (Figure 20) in order to qualify for state funding.

*(p. 69-70, Acme Township Community Master Plan, adopted August 11, 2014)*

## II. SUBMITTED APPLICATION MATERIALS

The tables below present the items submitted with the application for the proposed project. These items have been reviewed in accordance with the processes set forth in the Zoning Ordinance.

Drawings		
Sheet	Title	Date (revised)
C1.0	Coversheet	03.04.19
C2.0	Existing Conditions & Construction Area Plan	03.04.19
C3.0	Soil Erosion & Sedimentation Plan	03.04.19
C4.0	Overall Site & Dimension Plan	03.04.19
C4.1	Site & Dimension Plan – Arena Alignment	03.04.19
C5.0	Grading & Storm Plan	03.04.19
n/a	Pavilion Cover Sheet	03.04.19
1	Elevations	03.04.19
2	Post Layout Plan, Roof Framing Plan	03.04.19
3	Cross Section A/3, Detail A-A/3	03.04.19

Agency Reviews		
Agency	Status	Permit No. (Date)
Grand Traverse County Soil Erosion & Sedimentation Control	<b>Pending</b>	
Grand Traverse Metro Fire Department Review	<b>Pending</b>	
Gosling-Czubak Storm Water Plan Review	<b>Pending</b>	

Additional Documentation	
Submitted With Application Packet	
-	SUP/Site Plan Review Application Form

## III. ZONING ORDINANCE REVIEW AND FINDINGS

Listed below are the applicable sections of the Zoning Ordinance that pertain to the proposed project. Items that do not satisfy the standards required by the Zoning Ordinance have been indicated with **bold, red text**.

Zoning District	
§ 6.12	A-1: Agricultural District
§ 6.12.1	<p><b>Intent and Purpose</b></p> <p>This District is intended to preserve, enhance, and stabilize areas within the Township which are presently used predominantly for farming purposes or areas which, because of their soil, drainage, or natural flora characteristics, should be preserved for low intensity land uses. It is the further purpose of this District to promote the protection of the existing natural environment, preserve the essential characteristics and economical value of these areas as agricultural lands, provide increased market opportunities for local and regional producers by clustering supporting operations such as processing, packaging, distributing, buying, and, research and development that complement and add value to the agricultural sector, and</p>

provide opportunities for agricultural-related entrepreneurial ventures. Generally accepted agricultural and management practices which may generate noise, dust, odors, and other associated conditions may be used and are protected by the Michigan Right to Farm Act. It is explicitly the purpose of this zone to preserve a suitable long-term working environment for farming operations while minimizing conflicts between land uses. It is the further purpose of this District to promote the protection of the existing natural environment, and to preserve the essential characteristics and economical value of these areas as agricultural lands.

§ 6.12.3

**Uses Permitted By Special Use Permit**

**w. The following agricultural tourism uses are permitted by special use permit**

1. Small-scale entertainment (e.g. fun houses, haunted houses, or similar) and small mechanical rides.
2. Organized meeting space for use by weddings, birthday parties, corporate picnics, and other similar events.

*Note: Flintfields proceeds the amendment that added the language in § 6.12.3 above (adopted 05.01.12, effective 05.13.12)*

§ 9.1.3(a) Special Uses – Basis For Determination (General Standards)	
Standard	Finding
1. Be designed, constructed, operated and maintained so as to insure that public services and facilities affected by a proposed land use or activity will be capable of accommodating increased service and facility loads caused by the land use or activity to protect the natural environment and conserve natural resources and energy to insure compatibility with adjacent uses of land, and to promote the use of land in a socially and economically desirable manner.	<b>Satisfied:</b> The request is a minor modification to the site of an existing development that has already been approved for the both for the use and site plan. The request does not increase the intensity of the use or the overall operation.
2. Be designed to protect natural resources, the health, safety, and welfare and the social and economic well-being of those who will use the land use or activity under consideration, residents and landowners immediately adjacent to the proposed land use or activity, and the community as a whole.	<b>Satisfied:</b> The improvements include an enlarged redesign of the existing storm water basin to accommodate the proposed improvements with additional capacity. All other standards addressed in previous approvals. The spectator pavilion will need to meet all building codes enforced by the GT County Construction Codes Office, as well as Metro Fire as part of their annual inspection.
3. Be related to the valid exercise of the police power, and purposes which are affected by the proposed use or activity.	<b>Satisfied:</b> The requirements of § 9.1.3, those associated with the original review and subsequent amendments, as well as the requirements for the proposed amendment are a valid exercise of the police power.

§ 9.1.3(a) Special Uses – Basis For Determination (General Standards)	
Standard	Finding
4. Be necessary to meet the intent and purpose of the zoning ordinance, be related to the standards established in the ordinance for the land use or activity under consideration, and be necessary to insure compliance with those standards.	<b>Satisfied:</b> The proposed improvements will meet all applicable zoning standards and conditions associated with past approvals.
5. Meet the standards of other governmental agencies where applicable, and that the approval of these agencies has been obtained or is assured. The applicant shall have the plan reviewed and approved by the Grand Traverse Metro Fire Department prior to the review by the Planning Commission.	<b>Not Satisfied:</b> <b>GT County SESC Permit: Pending</b> <b>GT Metro Fire Dept. Review: Pending</b> <b>GC Storm Water Review: Pending</b>

**IV. REPORT SUMMARY**

The Applicant is proposing to shift two (2) existing show rings along the south of the facility southwest to accommodate a new warm-up/exercise arena adjacent to them. This will cause the shifted show rings to encroach into a drainage basin for the property. The proposal intends to reconfigure the basin with greater capacity to accommodate additional run-off from some new gravel. The capacity in the proposed basin will exceed that which is required for the current build-out of the facility to accommodate future developments, which will in turn need to be approved at a later date.

The application also includes a new pavilion over an existing concrete pad for spectator viewing. The structure will not add any additional run-off since its covering an existing paved surface, and the use will stay the same: spectator viewing location. It must be noted that the pavilion has already been constructed without approval. The property owner has been notified with a warning letter that failing to gain proper approvals for such projects can invalidate their special use permit, which would prevent them from operating the facility as intended. Metro Fire and Grand Traverse Construction Codes Office are aware as well since their offices would have needed to issue proper approvals, but I am not sure what course of action they have pursued, if any. The inclusion of the already built pavilion into this application request is to clean up the issue with the proper approval. That does not mean the Planning Commission must grant approval of the structure since it is already constructed. However, staff sees no reason why the pavilion should not be approved under the standards of the Zoning Ordinance.

The plans have been submitted to Gosling-Czubak who is reviewing the storm water management system. Given the small amount of additional impervious surfaces being added to the development and significantly increased basin volume in roughly the same location, no unaddressable issues are foreseen.

The Grand Traverse County Environmental Health Department confirmed on May 16, 2019 that an application for a soil erosion and sedimentation control permit has been submitted and reviewed. The inspector indicated that the work on the application was complete and was awaiting final processing from their office before issuing. All fees and surety bonds have been paid, the site has been visited, and no issues were identified that were not addressed in the sediment control plans.

Grand Traverse Metro Fire Department confirmed on May 16, 2019 that they have received a copy of the site plans for review. Kathy Fordyce, Fire Inspector/Plans Examiner, initially stated they have not finished the review,

but have said they will be submitting documentation that the Applicant may proceed with the development as proposed in the site plan since the pavilion structure is over an existing spectator viewing area, and due to the fact that they perform an extensive annual inspection before the facility is allowed to operate for the season. However, after speaking with Assistant Fire Chief/Fire Marshall Brian Belcher, she called back indicating more issues need to be clarified before she will issue approval. Assistant Fire Chief Belcher had received a phone call indicating there are additional planned improvements to recently acquired adjacent properties that include a campground. No indication has been given to staff regarding the timing of these improvements. This will be important for the Planning Commission to understand since a campground will require a major amendment to the special use permit, and/or a separate special use permit approval, along with Michigan Department of Environment, Great Lakes, and Energy (formerly MDEQ). Failure to obtain proper approvals will violate the existing special use permit and zoning ordinance.

*Suggested Motion for Consideration:*

Motion to approve Special Use Permit minor amendment application SUP 2019-01, submitted by Mansfield Land Use Consultants, on behalf of Traverse City Horseshows LLC, to shift two existing show rings, construct a warm-up ring adjacent, to add a pavilion over an existing spectator viewing area, and to reconstruct the storm water drainage basin as necessary and indicated on the submitted site plans, for the Great Lakes Equestrian Festival operated at Flintfields Horse Park, 6535 Bates Rd, Williamsburg, MI 49690, with the following conditions that must be met prior to issuing a land use permit:

1. Submit the Soil Erosion and Sedimentation Control Permit;
2. Submit approval of the site plan by the Grand Traverse Metro Fire Department;
3. Submit an approved review of the storm water management system by Gosling-Czubak;
4. The final set of site plan drawings be updated to reflect the applicable conditions, stamped by a licensed engineer, architect, or landscape architect, and signed by the Planning Commission Chair and Applicant.



## Special Use Permit/Site Plan Review Application

Township of Acme, Grand Traverse County, Michigan

6042 Acme Road, Williamsburg, MI 49690

Phone: (231) 938-1350 Fax: (231) 938-1510 Web: [www.acmetownship.org](http://www.acmetownship.org)

Planning & Zoning Administrator: Shawn Winter Email: [swinter@acmetownship.org](mailto:swinter@acmetownship.org)

### Owner Information (please type or print

clearly): Name: Traverse City Horse Shows, LLC Phone: \_\_\_\_\_

Mailing Address: 15355 De Havilland Court

City: Wellington State: FL Zip: 33414

Email Address: matt@mmg.management

### Applicant Information (please type or print

clearly): Name: Traverse City Horse Shows Phone: \_\_\_\_\_

Mailing Address: 15355 De Havilland Court

City: Wellington State: FL Zip: 33414

Email Address: matt@mmg.management

### A. Property Information:

1. **Address:** 6535 Bates Road, Williamsburg, MI 49690

2. **Parcel Number/Property Description:**

28-01-014-008-01

3. **Current Zoning of Property:**

A-1 Agricultural

4. **If this project is one phase of a larger development and/or property subject to an existing/previous Site Plan Review, Special Use Permit, or Variance, what is/are the applicable permit number(s)?**

Permit number 2006-12P, with minor amendments: 2012-05P, 2014-03, and 2015-05 SUP

5. **Provide proof of current property ownership.** If applicant is not the current property owner, also provide written permission to act as agent of, and complete contact information for the current property owner.

**6. Proposed Use/Change to Property**

Realignment/reconstruction of riding arenas, Construction of viewing pavilion

**7. Estimated Start and Completion Dates:**

May 6, 2019 - July 3, 2019

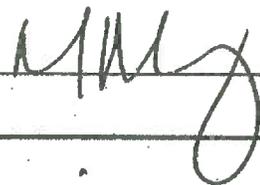
**B. Application Packet Requirements: REFER TO ACME TOWNSHIP ZONING ORDINANCE AND COMPLETE ATTACHED CHECKLIST**

**C. Fees:** Include initial fee as required by the Acme Township Ordinance #2004-01

**D. Fee Escrow Policy Acknowledgement:** Provide completed and signed form with initial escrow fee deposit.

**E. Affidavit:** The undersigned affirms that he/she is the \_\_\_\_\_ (owner, agent, lessee, or other interested party) involved in this petition and that the foregoing answers, statements and information are in all respects true and, to the best of his/her knowledge, correct. By making this application, the undersigned grants all officials, staff and consultants of Acme Township access to the subject property as required and appropriate to assess site conditions in support of a determination as to the suitability of the proposed project and/or current or future Special Use Permit and Zoning Ordinance compliance.

Signed: \_\_\_\_\_



Date: \_\_\_\_\_

5/6/19

**FOR TOWNSHIP USE ONLY**

Application Number: SUP 2019-01

Date Received: May 26, 2019

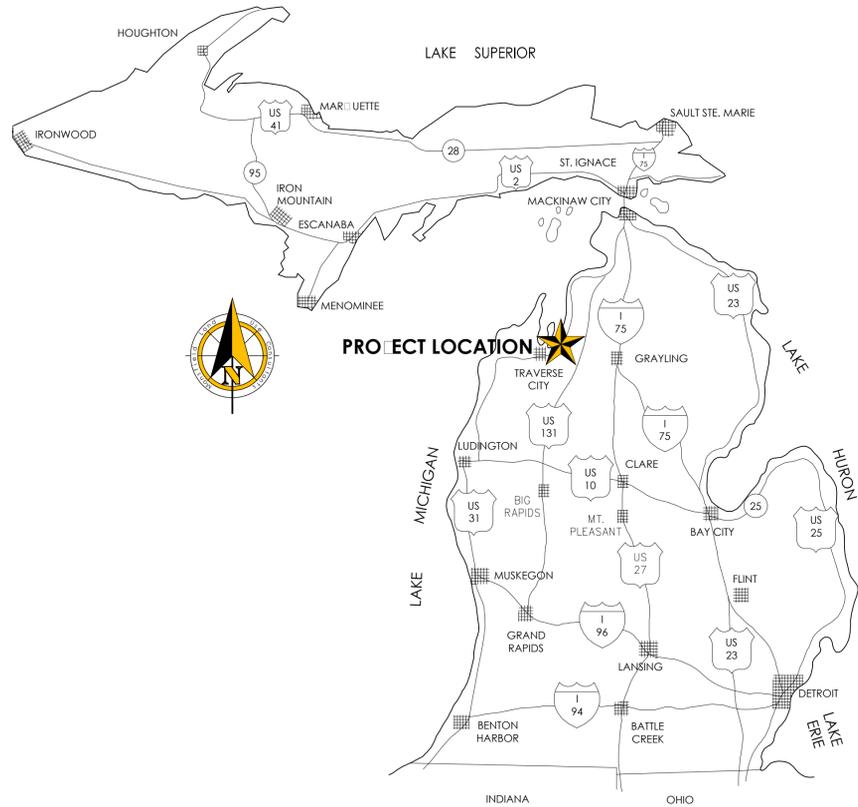
Public Hearing/Meeting: May 21, 2019

Date of Advertising: N/A

T&A Account: 103

**NOTES:**

- Minor Amendment



MICHIGAN LOCATION MAP

**PUBLIC AGENCIES AND UTILITIES**

**GRAND TRAVERSE COUNTY DEPARTMENT OF PUBLIC WORKS (DPW)**

Manager: John Divor  
 Address: 2650 Lafranier Rd., Traverse City, MI 49686  
 Telephone: 231-995-6039

**GRAND TRAVERSE COUNTY ROAD COMMISSION**

Manager: James Cook  
 Address: 1881 Lafranier Rd., Traverse City, MI 49686  
 Telephone: 231-922-4848

**GRAND TRAVERSE COUNTY SOIL EROSION AND SEDIMENTATION CONTROL**

Supervisor: Bruce Remai  
 Address: 2650 Lafranier Rd., Traverse City, MI 49686  
 Telephone: 231-995-6042

**CHERRYLAND ELECTRIC COOPERATIVE (ELEC.)**

Engineer: Frank Seipker  
 Address: 5930 US-31 S., Traverse City, MI 49684  
 Telephone: 231-486-9220

**CONSUMERS ENERGY (ELEC.)**

Engineer: Chuck Walkonis  
 Address: 821 Hastings St., Traverse City, MI 49686  
 Telephone: 231-929-6228

**DTE ENERGY (GAS)**

Manager: Sandra O'Neil  
 Address: 700 Hammond Rd., Ste. 2, Traverse City, MI 49686  
 Telephone: 231-932-2829

**CHARTER COMMUNICATIONS (T.V.)**

Manager: Rob Nowak  
 Address: 701 S. Airport Rd., Traverse City, MI 49686  
 Telephone: 231-941-3766

**POLICE AGENCIES**

EMERGENCIES: 911  
 Michigan State Police: 231-946-4646  
 Grand Traverse County Sheriff: 231-995-5001

**FIRE DEPARTMENTS**

EMERGENCIES: 911  
 Grand Traverse Metro: 231-947-3000  
 Grand Traverse Rural: 231-943-9721

**STANDARD PLAN LEGEND**

DESCRIPTION	EXISTING	PROPOSED
GROUND CONTOUR	605	613
SPOT ELEVATION	613.2	613.50
CONTOUR FROM USGS TOPOGRAPHIC MAP		613.50
TOP OF CURB ELEVATION	+ 613.5	613.00
PAVEMENT (OR GUTTER FLOW LINE) ELEVATION	613.0	613.00
DIRECTION OF SURFACE FLOW		←
DRAINAGE HIGH POINT		HP.
DRAINAGE LOW POINT		LP.
WATER MAIN	—	—
SANITARY FORCE MAIN	—	—
SANITARY SEWER	—	—
STORM SEWER	—	—
GAS MAIN	—	—
OVERHEAD ELECTRIC	—	—
PROPERTY LINE	—	—
TREE LINE	—	—
PINE LINE	—	—
EDGE OF WETLAND	—	—
EDGE OF WATER	—	—
C/L OR DRAINAGE DITCH OR WATER LINE	—	—
SILT FENCE		—
DETENTION BASIN BERM		—
MANHOLE (MH)	○	●
CATCH BASIN (CB)	⊗	⊗
CLEAN OUT (CO)	⊙	⊙
RISER	⊕	⊕
GATE VALVE	⊕	⊕
FIRE HYDRANT ASSEMBLY	⊕	⊕
CURB STOP & BOX	⊗	⊗
POLE, POWER OR ELECTRIC	⊗	⊗
LIGHT POLE	⊗	⊗
SIGN	⊗	⊗
BENCH MARK (BM)	⊕	⊕
U/G UTILITY SIGN	⊕	⊕
GUY ANCHOR	⊕	⊕
SOIL EROSION CONTROL MEASURE (MICHIGAN UNIFIED KEYING SYSTEM) P=PERMANENT T=TEMPORARY		⊕
IRON FOUND / IRON SET	●	○
CONCRETE MONUMENT	○	○
GOVERNMENT CORNER	⊕	⊕
NAIL FOUND / NAIL SET	▲	△
RECORD / MEASURED	(R)	(M)
FENCE	— x —	— x —
WOOD STAKE	□	□

**SITE INFORMATION:**

DEVELOPER: TRAVERSE CITY HORSE SHOWS, LLC  
 15355 DE HAVILLAND COURT  
 WELLINGTON, FL 33414

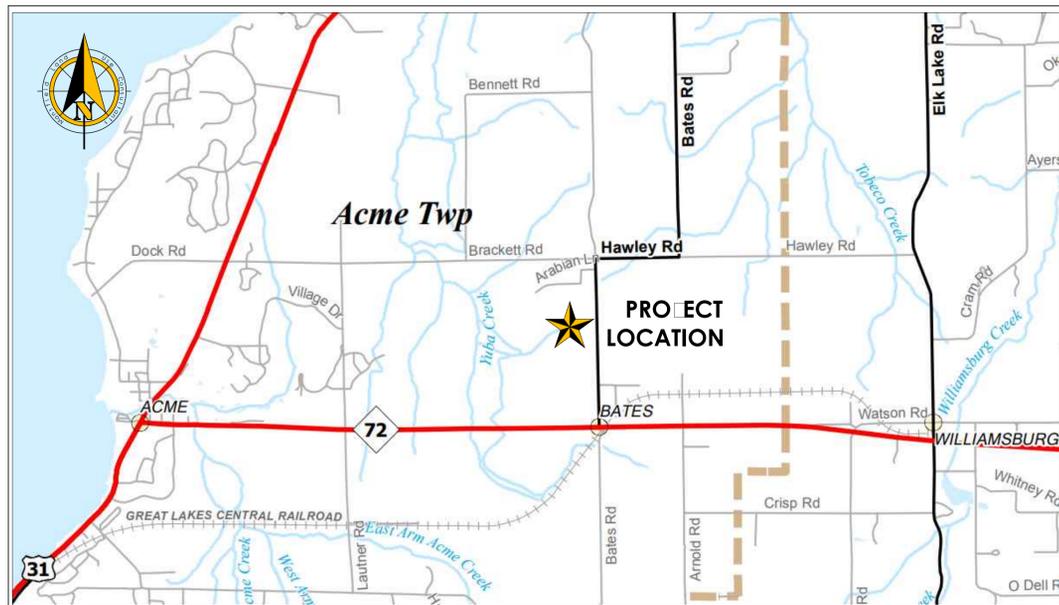
PARCEL ID: 28-01-014-008-01  
 TRAVERSE CITY HORSE SHOWS, LLC  
 15355 DE HAVILLAND COURT  
 WELLINGTON, FL 33414

ADDRESS: 6535 BATES ROAD  
 TAX DESC.: S 1/2 OF NW 1/4 EXC SCHOOL LOT IN SE COR 208.7  
 S1, SEC 31 T28N R9W  
 AREA: 83 ACRES ±

ZONED: A-1  
 SETBACKS:  
 FRONT: 50'  
 SIDE: 25'  
 REAR: 40'

**VICINITY MAP**

SCALE: 1" = 2,640' (1/2 MILE)



**PLAN INDEX**

- C1.0 COVER SHEET
- C2.0 EXISTING CONDITIONS & CONSTRUCTION AREA PLAN
- C3.0 SOIL EROSION & SEDIMENTATION PLAN
- C4.0 OVERALL SITE & DIMENSION PLAN - ARENA REALIGNMENT
- C4.1 SITE & DIMENSION PLAN
- C5.0 GRADING & STORM PLAN

# FLINTFIELDS HORSE PARK

Acme Township, Grand Traverse County, Michigan

830 Comingsway Dr., Ste. 201  
 P.O. Box 4015  
 Traverse City, MI 49685  
 Phone: 231-946-9310  
 www.mmaeps.com  
 info@mmaeps.com

**Mansfield**  
 &  
**Land Use Consultants**

REV#	DATE	DES	DRN	CHK	BY	DESCRIPTION
01	06-25-14	dmc	mmmm	dim		Original design

Traverse City Horse Shows, LLC  
 Horse Park Improvements  
**COVER SHEET**  
 Section 31, Town 28 North, Range 09 West  
 Acme Township, Grand Traverse County, Michigan

CONCEPTUAL

DATE: dmc

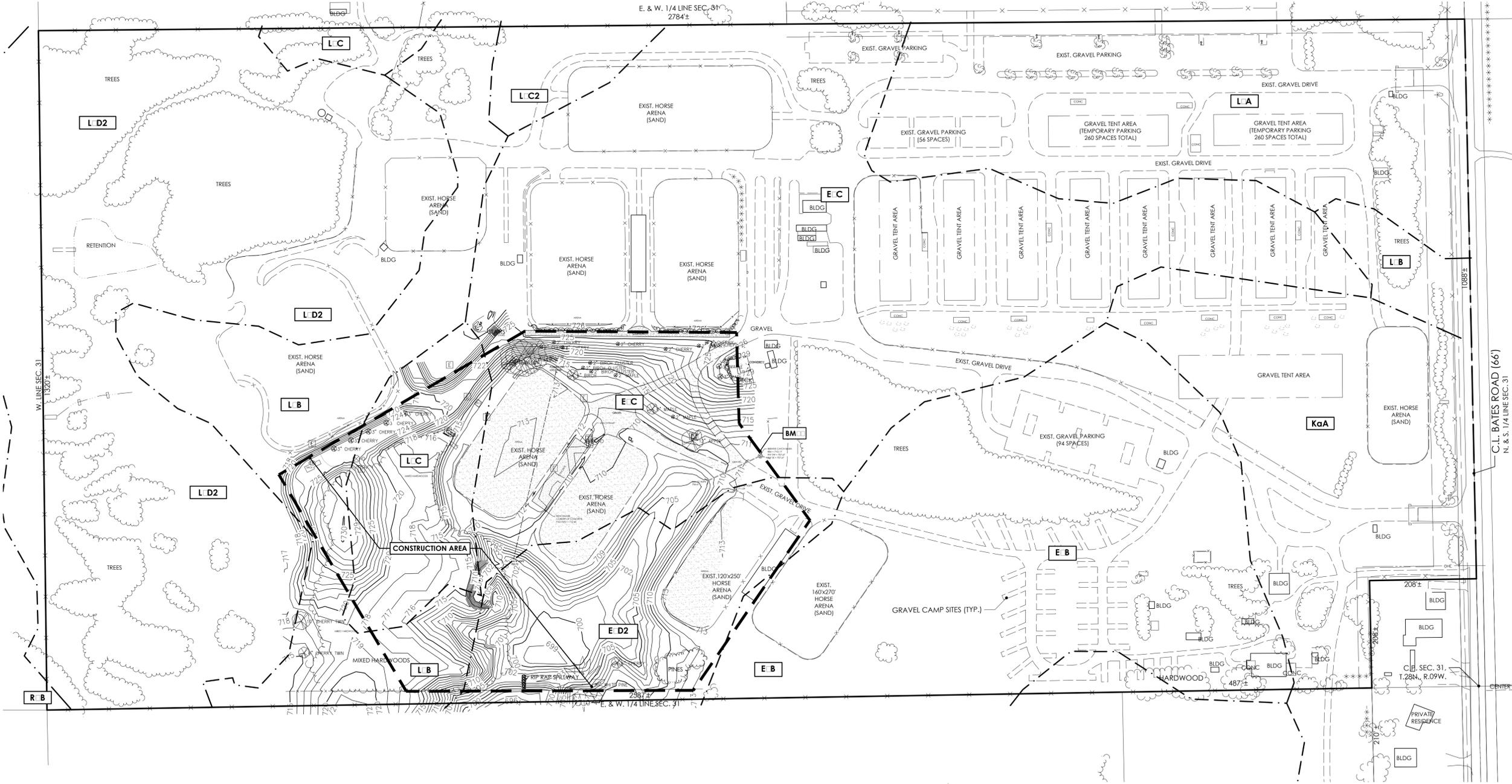
DATE: dmc

DATE: 03.04.19

PROJECT: 19039

DATE: 0

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BM: ELEV 800.00 (NAVD 88)  
 BEHIVE CATCH BASIN RIM  
 N 8 11.1 B E 800.1 B2

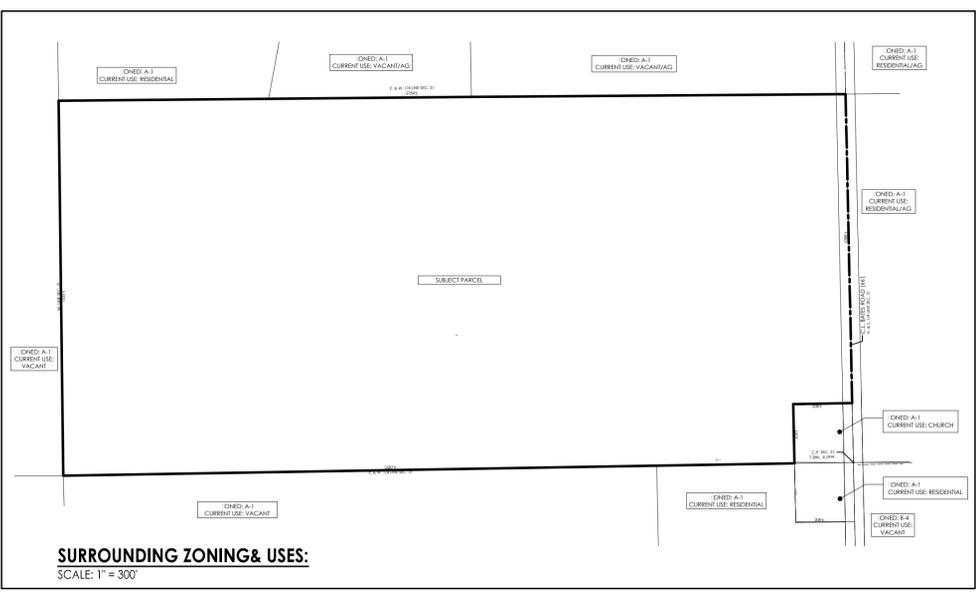
830 Cottageview Dr., Ste. 201  
 P.O. Box 4015  
 Traverse City, MI 49685  
 Phone: 231-946-9510  
 www.mansfield.com  
 info@mansfield.com

**Mansfield**  
 Land Use Consultants

REV	DATE	DES	DRN	CHK	DESC
01	06-25-14	djm	mmmm	djm	Original design

Traverse City Horse Shows, LLC  
 Horse Park Improvements  
**EXISTING CONDITIONS CONSTRUCTION AREA PLAN**  
 Section 31, Town 28 North, Range 09 West  
 Acme Township, Grand Traverse County, Michigan

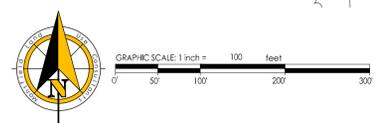
CONCEPTUAL  
 dmc  
 19039  
 C2.0



**SURROUNDING ZONING & USES:**  
 SCALE: 1" = 300'

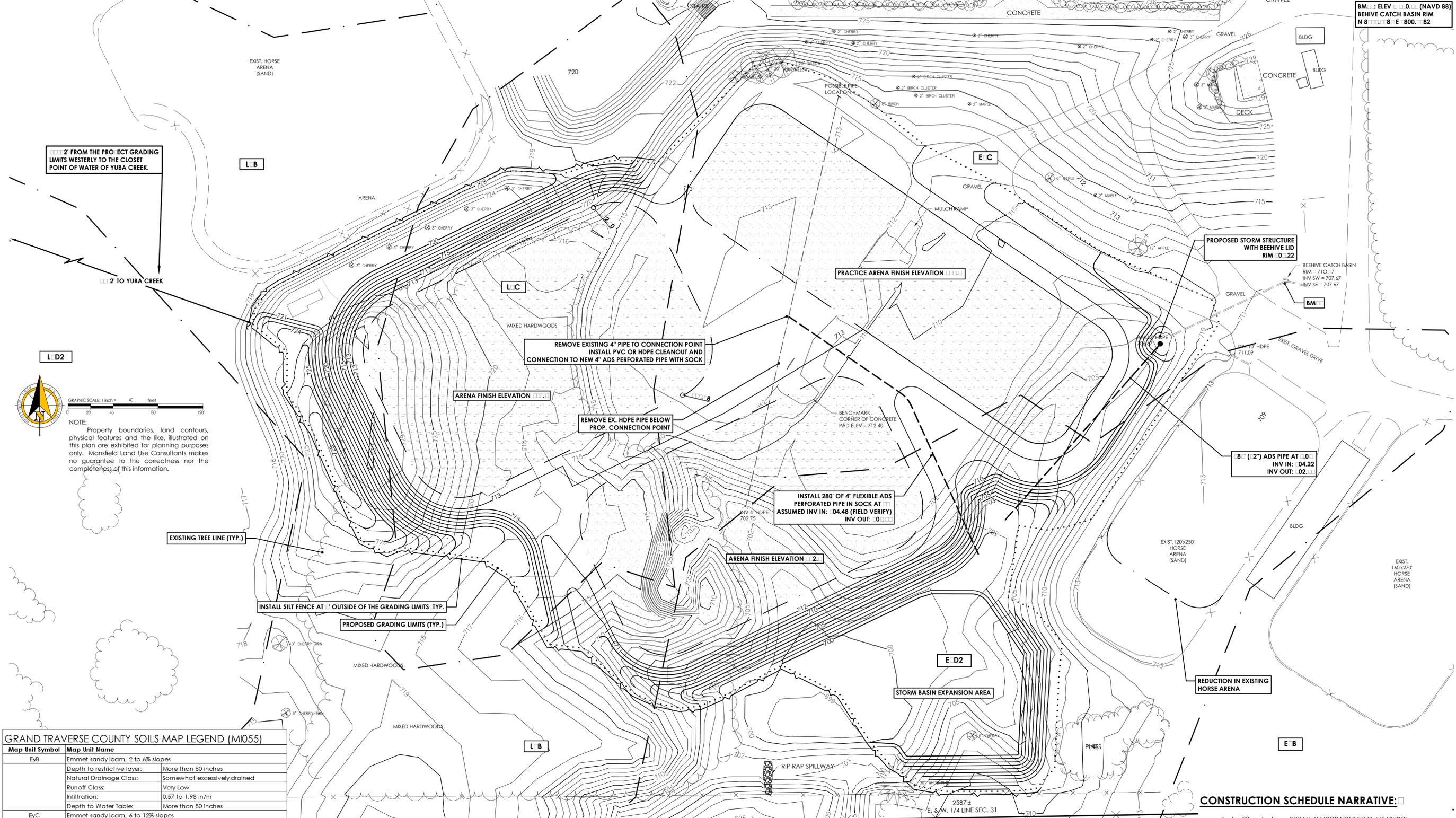
**GRAND TRAVERSE COUNTY SOILS MAP LEGEND (M1055)**

Map Unit Symbol	Map Unit Name
EyB	Emmet sandy loam, 2 to 6% slopes Depth to restrictive layer: More than 80 inches Natural Drainage Class: Somewhat excessively drained Runoff Class: Very Low Infiltration: 0.57 to 1.98 in/hr Depth to Water Table: More than 80 inches
EyC	Emmet sandy loam, 6 to 12% slopes Depth to restrictive layer: More than 80 inches Natural Drainage Class: Well drained Runoff Class: Low Infiltration: 0.57 to 1.98 in/hr Depth to Water Table: More than 80 inches
KaA	Kalkaska loamy sand, 0 to 2% slopes Depth to restrictive layer: More than 80 inches Natural Drainage Class: Somewhat excessively drained Runoff Class: Negligible Infiltration: 5.95 to 19.98 in/hr Depth to Water Table: More than 80 inches
LkA	Leelanau-Kalkaska loamy sands, 0 to 2% slopes Depth to restrictive layer: More than 80 inches Natural Drainage Class: Well drained Runoff Class: Negligible Infiltration: 1.98 to 5.95 in/hr Depth to Water Table: More than 80 inches
LkB	Leelanau-Kalkaska loamy sands, 2 to 6% slopes Depth to restrictive layer: More than 80 inches Natural Drainage Class: Well drained Runoff Class: Negligible Infiltration: 1.98 to 5.95 in/hr Depth to Water Table: More than 80 inches
LkC	Leelanau-Kalkaska loamy sands, 6 to 12% slopes Depth to restrictive layer: More than 80 inches Natural Drainage Class: Well drained Runoff Class: Very Low Infiltration: 1.98 to 5.95 in/hr Depth to Water Table: More than 80 inches
LkC2	Leelanau-Kalkaska loamy sands, 6 to 12% slopes, moderately eroded Depth to restrictive layer: More than 80 inches Natural Drainage Class: Well drained Runoff Class: Very Low Infiltration: 1.98 to 5.95 in/hr Depth to Water Table: More than 80 inches
LkD2	Leelanau-Kalkaska loamy sands, 12 to 18% slopes, moderately eroded Depth to restrictive layer: More than 80 inches Natural Drainage Class: Well drained Runoff Class: Very Low Infiltration: 1.98 to 5.95 in/hr Depth to Water Table: More than 80 inches
RcB	Richter loams, 2 to 6% slopes, overwash Depth to restrictive layer: More than 80 inches Natural Drainage Class: Somewhat poorly drained Runoff Class: Low Infiltration: 0.57 to 1.98 in/hr Depth to Water Table: About 6 to 18 inches



NOTE: Property boundaries, land contours, physical features and the like, illustrated on this plan are exhibited for planning purposes only. Mansfield Land Use Consultants makes no guarantee to the correctness nor the completeness of this information.

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± 2' FROM THE PROJECT GRADING LIMITS WESTERLY TO THE CLOSEST POINT OF WATER OF YUBA CREEK.

± 2' TO YUBA CREEK

L D2



GRAPHIC SCALE: 1 inch = 40 feet

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**GRAND TRAVERSE COUNTY SOILS MAP LEGEND (M055)**

Map Unit Symbol	Map Unit Name
EyB	Emmet sandy loam, 2 to 6% slopes
	Depth to restrictive layer: More than 80 inches
	Natural Drainage Class: Somewhat excessively drained
	Runoff Class: Very Low
	Infiltration: 0.57 to 1.98 in/hr
	Depth to Water Table: More than 80 inches
EyC	Emmet sandy loam, 6 to 12% slopes
	Depth to restrictive layer: More than 80 inches
	Natural Drainage Class: Well drained
	Runoff Class: Low
	Infiltration: 0.57 to 1.98 in/hr
	Depth to Water Table: More than 80 inches
LkB	Leelanau-Kalkaska loamy sands, 2 to 6% slopes
	Depth to restrictive layer: More than 80 inches
	Natural Drainage Class: Well drained
	Runoff Class: Negligible
	Infiltration: 1.98 to 5.95 in/hr
	Depth to Water Table: More than 80 inches
LkC	Leelanau-Kalkaska loamy sands, 6 to 12% slopes
	Depth to restrictive layer: More than 80 inches
	Natural Drainage Class: Well drained
	Runoff Class: Very Low
	Infiltration: 1.98 to 5.95 in/hr
	Depth to Water Table: More than 80 inches
LkD2	Leelanau-Kalkaska loamy sands, 12 to 18% slopes, moderately eroded
	Depth to restrictive layer: More than 80 inches
	Natural Drainage Class: Well drained
	Runoff Class: Very Low
	Infiltration: 1.98 to 5.95 in/hr
	Depth to Water Table: More than 80 inches

**CONSTRUCTION NOTES:**

- ALL TEMPORARY AND PERMANENT CONSTRUCTION MEASURES SHALL MEET ALL REQUIREMENTS AND CONDITIONS OF THE APPROVED S.E.S.C. PERMIT FROM GRAND TRAVERSE COUNTY THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.
- SILT FENCE SHALL BE INSTALLED IN THE APPROPRIATE AREAS OF CONSTRUCTION PRIOR TO THE BEGINNING OF CONSTRUCTION IN THAT AREA AND SHALL BE MAINTAINED THROUGHOUT THE PROJECT DURATION UNTIL PERMANENT VEGETATION IS ESTABLISHED AND THE SITE IS STABILIZED. THE CONTRACTOR MUST REMOVE THE SILT FENCE UPON COMPLETION.
- THE CONTRACTOR SHALL OBTAIN ALL REQUIRED ACCESS PERMITS FOR ACCESS ONTO NORTH LONG LAKE RD. ANY TEMPORARY CONSTRUCTION ACCESS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION.
- ALL STUMPS AND UNDERGROUND ORGANIC MATERIAL SHALL BE COMPLETELY REMOVED WITH AN EXCAVATOR AND SHALL NOT BE BURIED ON SITE.
- ANY REQUIRED STOCKPILES SHALL BE LOCATED INLAND, AWAY FROM DRAINAGE WAYS, WETLANDS OR OTHER WATER SOURCES. DORMANT STOCKPILES SHALL BE SEEDDED TO PREVENT SEDIMENTATION AND AIRBORNE EROSION.
- CARE SHOULD BE TAKEN TO PREVENT MATERIAL MOVEMENT ONTO ADJACENT PROPERTIES OR WATER BODIES.
- CARE SHOULD BE TAKEN TO MAINTAIN EXISTING ROADSIDE DRAINAGE DURING CONSTRUCTION.
- ALL SLOPES 3:1 OR STEEPER SHALL BE RESTORED WITH MULCH BLANKET.
- THE CONTRACTOR SHALL USE WATER OR DUST PALLIATIVE TO CONTROL DUST ON AND ADJACENT TO THE PROJECT SITE. MAINTAIN THE NORTH LONG LAKE RD ENTRANCE BY REGULAR SWEEPING, AS NECESSARY UNTIL THE SITE IS PERMANENTLY STABILIZED.
- MINIMIZE DISTURBANCE TO ALL EXISTING VEGETATION EXCEPT WHERE NOTED OTHERWISE. ALL EARTH WORK SHALL BE COMPLETED IN A MANNER THAT LIMITS THE EXPOSED AREA OF DISTURBED LAND FOR THE SHORTEST PERIOD OF TIME.

**CONSTRUCTION SCHEDULE NARRATIVE:**

- TO TO INSTALL TEMPORARY S.E.S.C. MEASURES
  - TO TO INSTALL CONSTRUCTION ENTRANCE
  - TO TO SITE CLEARING, GRUBBING & STUMP REMOVAL
  - TO TO SITE REMOVALS
  - TO TO STORM BASIN & PERMANENT S.E.S.C. MEASURES
  - TO TO RESTORATION - STORM BASIN
  - TO TO SITE GRADING
  - TO TO INSTALL SANITARY SEWERS & COMMUNITY SYSTEMS
  - TO TO INSTALL STORM SEWERS
  - TO TO INSTALL ALL UNDERGROUND PRIVATE UTILITIES
  - TO TO INSTALL CONCRETE CURB & GUTTER
  - TO TO INSTALL 22A ROAD GRAVEL
  - TO TO INSTALL TREES, LANDSCAPING & IRRIGATION
  - TO TO INSTALL HMA PAVEMENT
  - TO TO RESTORATION - SITE
  - TO TO INSTALL SIGNS, FENCES, PAVT MARKINGS, CLEANUP
  - TO TO REMOVE TEMPORARY S.E.S.C MEASURES
- THE FINAL CONSTRUCTION SCHEDULE IS SUBJECT TO CHANGE BASED ON PERMIT APPROVALS, OWNER & CONTRACTOR SCHEDULES, ETC.

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Phone: 231-946-9510  
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info@mansfieldps.com

**Mansfield**  
Land Use Consultants

REV	DATE	DES	DRN	CHK	DESC
01	06-25-14	dim	mmmm	dim	Original design

Traverse City Horse Shows, LLC  
Horse Park Improvements  
**SOIL EROSION SEDIMENTATION PLAN**  
Section 31, Town 28 North, Range 09 West  
Acme Township, Grand Traverse County, Michigan

CONCEPTUAL

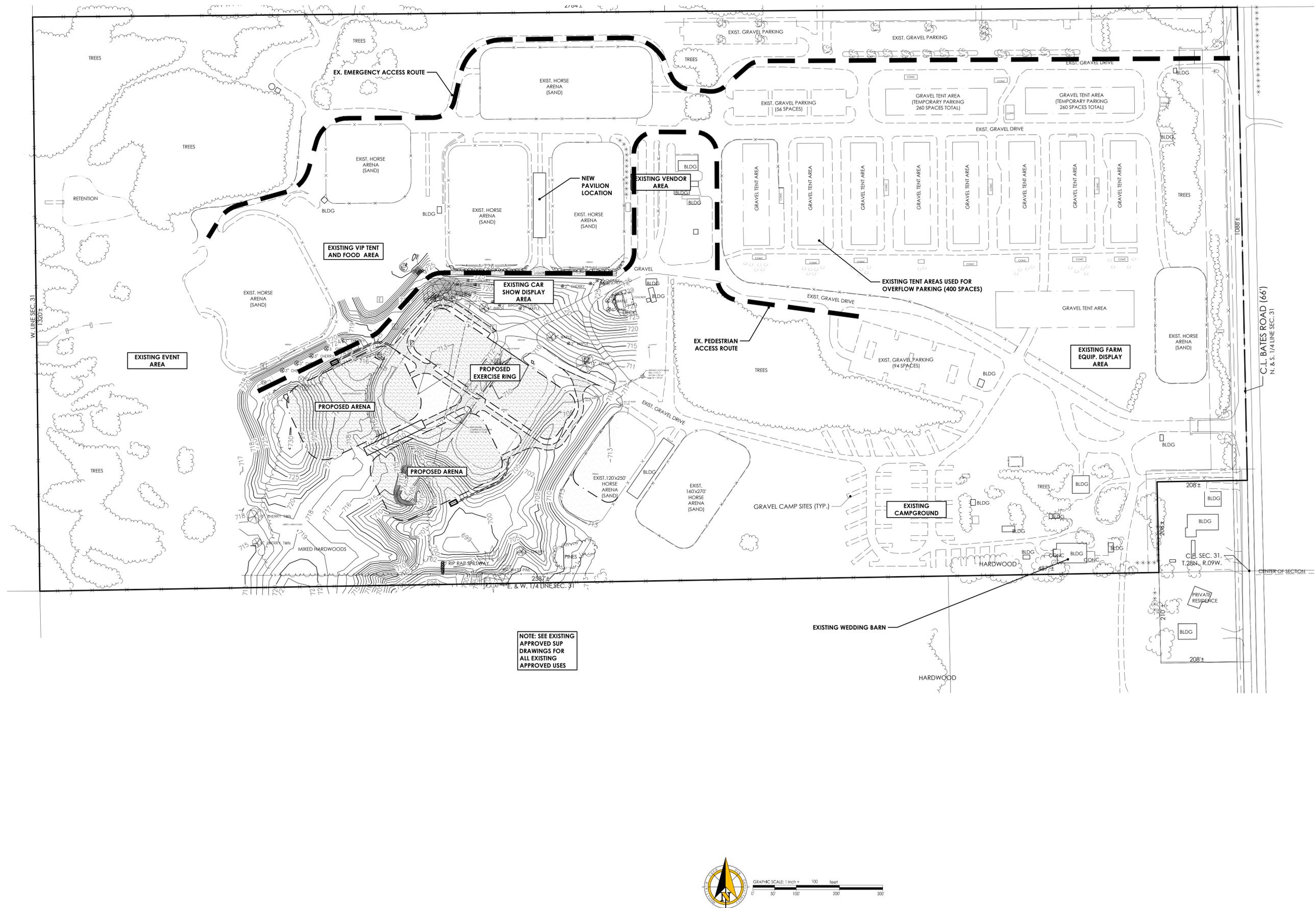
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DR: mmm CDD: CREATED: 03.04.19

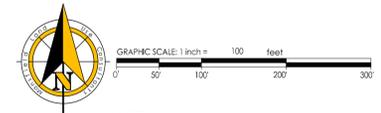
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NOTE: SEE EXISTING APPROVED SUP DRAWINGS FOR ALL EXISTING APPROVED USES



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# Mansfield

Land Use Consultants

REV	DATE	DES	DRN	CHK	DESC
01	04-25-14	dmc	mmmm	dmc	Original design

Traverse City Horse Shows, LLC  
Horse Park Improvements  
**OVERALL SITE DIMENSION PLAN**  
Section 31, Town 28 North, Range 09 West  
Acme Township, Grand Traverse County, Michigan

CONCEPTUAL

PXL: dmc

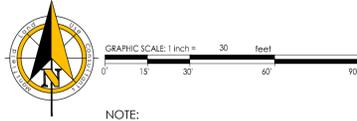
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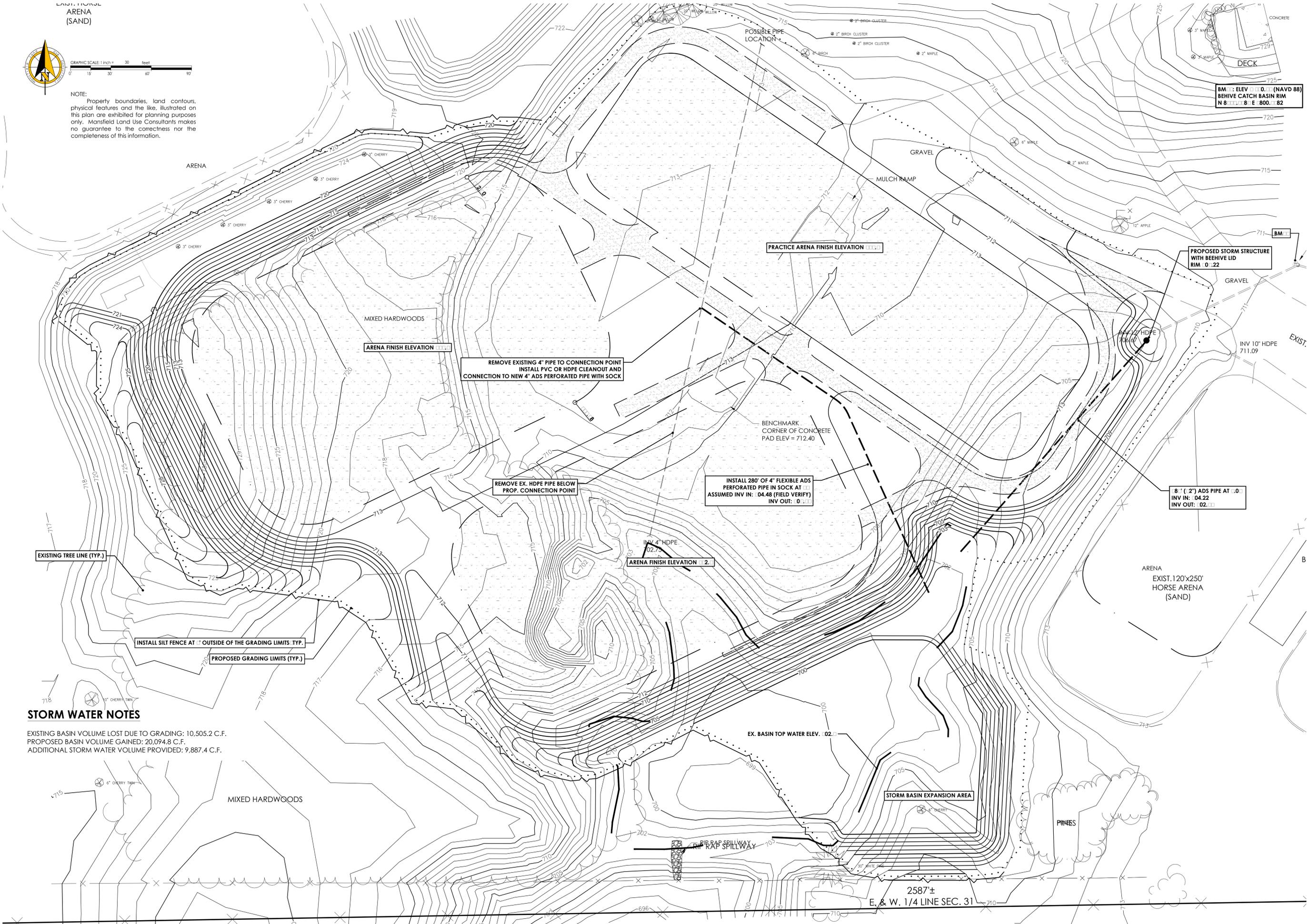
C4.0



LAST HORSE  
ARENA  
(SAND)



NOTE:  
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only. Mansfield Land Use Consultants makes  
no guarantee of the correctness nor the  
completeness of this information.



BM: ELEV 0.0 (NAVD 88)  
BEHIVE CATCH BASIN RIM  
N 8 E 800 .82

PROPOSED STORM STRUCTURE  
WITH BEEHIVE LID  
RIM D .22

REMOVE EXISTING 4" PIPE TO CONNECTION POINT  
INSTALL PVC OR HDPE CLEANOUT AND  
CONNECTION TO NEW 4" ADS PERFORATED PIPE WITH SOCK

REMOVE EX. HDPE PIPE BELOW  
PROP. CONNECTION POINT

INSTALL 280' OF 4" FLEXIBLE ADS  
PERFORATED PIPE IN SOCK AT  
ASSUMED INV IN: 04.48 (FIELD VERIFY)  
INV OUT: 0.1

8" (2") ADS PIPE AT .0  
INV IN: 04.22  
INV OUT: 02.1

INSTALL SILT FENCE AT 1' OUTSIDE OF THE GRADING LIMITS TYP.

PROPOSED GRADING LIMITS (TYP.)

**STORM WATER NOTES**

EXISTING BASIN VOLUME LOST DUE TO GRADING: 10,505.2 C.F.  
PROPOSED BASIN VOLUME GAINED: 20,094.8 C.F.  
ADDITIONAL STORM WATER VOLUME PROVIDED: 9,887.4 C.F.

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info@mansfieldps.com

**Mansfield**  
Land Use Consultants

REV	DATE	DES	DRN	CHK	DESC
01	06-25-14	dmm	mmmm	dmm	Original design

Traverse City Horse Shows, LLC  
Horse Park Improvements  
**GRADING & STORM PLAN**  
Section 31, Town 28 North, Range 09 West  
Acme Township, Grand Traverse County, Michigan

CONCEPTUAL

PAX: dmc

DR: mmm CDD: dmc CREATED: 03.04.19

JOB NO.: 19039

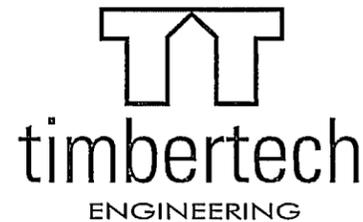
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C:\Users\user\appdata\local\temp\mch\mch\11881\19039\plans\dwg\CS31 GRAD STORM.dwg (CS31 GRAD STORM) - May 06, 2019 2:23pm - Metric

# 30'x150' Rectangle Wood Pavilion

Flintfields Horse Park  
6535 Bates Road  
Williamsburg, MI 49690

## DESIGN ENGINEER:



**East:** 22 Denver Road, Suite B Denver, PA 17517  
717.335.2750 Fax: 717.335.2753

**West:** 406 S Main Street, PO Box 509 Kouts, IN 46347  
219.766.2499 Fax: 219.766.2394

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## Drawing Index

- Cover Page - Notes
- Page 1 - Elevations
- Page 2 - Post Layout Plan, Roof Framing Plan
- Page 3 - Cross Section A/3, Detail A-A/3
- Page 4 - Detail B-B/4
- Page 5 - Detail B-B/5, Detail C-C/5
- Page 6 - Detail D-D/6, Detail E-E/6, Angle "A1"
- Page 7 - Detail F-F/7
- Page 8 - View 1 Detail F-F/7, View 2 Detail F-F/7
- Page 9 - Detail G-G/9
- Page 10 - Angle "A2", Angle "A3", Detail H-H/10
- Page 11 - Angle "A4", Plate "P1"
- Page 12 - Notes

### GENERAL NOTES

All notes do not necessarily apply due to different requirements on each project. This plan is intended to reflect only the structural design of this building. The contractor shall review all applicable local, state, and federal building codes prior to the start of construction to ensure building conformance. Timber Tech Engineering, Inc. is not responsible for information pertaining to this project if not shown on drawings or listed below. Revisions to the plans shall be approved by engineer of record. All standards indicated in these notes shall adhere to the referenced standards chapter of the governing code listed below.

### DESIGN REQUIREMENTS

1. Governing Code:  
Including, not limited to: IBC 2015 (ASCE 7-10)  
Risk Category II
2. Dead Loads:

A. Roof	10 psf
B. Floor	n/a psf
C. Other	n/a psf
3. Live Loads:

A. Roof (See also note #4)	50 psf
B. Floor	n/a psf
C. Other	n/a psf
4. Snow Loads:

A. Ground Snow (Pg)	60 psf
B. Flat Roof Snow (Pf)	50 psf
C. Snow Exposure Factor (Ce)	1.0
D. Snow Load Risk Factor (I)	1.0
E. Unbalanced Snow	
i. Windward Roof	0 psf
ii. Leeward Roof	60 psf
5. Wind Load

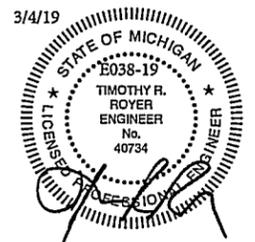
A. Ultimate Wind Speed (V ult)	115 mph
B. Wind Exposure Category	C
C. Enclosure Category	Open
6. Earthquake Design Data:  
(Analysis based on equivalent lateral force procedure)

A. Spectral Response Acceleration at 1 sec, S	0.031
B. Spectral Response Acceleration at short periods, S	0.048
C. Seismic Importance Factor, I	1.0
D. Site Class	D
E. Seismic Design Category	A
F. Basic Structural System	Cantilevered Column: Timber Frame
G. Response Modification Factor (R)	1.5
H. Deflection Amplification Factor (Cd)	1.5

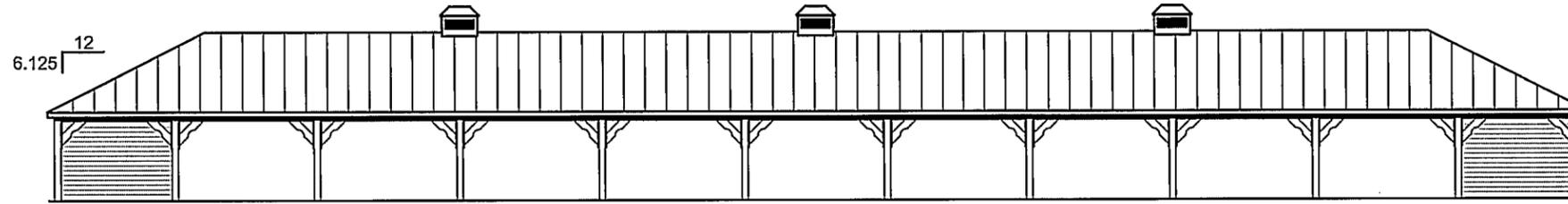
### WOOD

1. General Requirements
  - A. Structural wood members and connections shall be of sufficient size or capacity to carry all design loads without exceeding the allowable design values specified in "The National Design specification for Wood Construction" (NDS), and its "Supplement" by the American Wood Council (AWC).
  - B. Wood members used for load supporting purposes shall have the grade mark of a lumber grading agency certified by the American Lumber Standards Committee.
2. Heavy Timbers
  - A. Structural solid sawn timbers shall be designed, fabricated and installed in accordance with the NDS by AWC.
  - B. Structural glued laminated soft wood timbers shall conform with the "American National Standard or Structural Glued Laminated Timber", (ANSI/AITC 190.1).
  - C. Structural decking shall conform to the NDS.
  - D. Glued laminated columns shall be manufactured with laminating combinations that will provide a minimum design value of 1,850 psi for compressive stress (Fc), and 2,200 psi for bending stress (Fb).
3. Dimension Lumber
  - A. All lumber species, graded visually or mechanically, shall comply with the NDS by AWC, and the "American Softwood Lumber Standard" (PS 20) by the U.S. Department of Commerce.
  - B. The minimum grade and species for posts, beams, headers, and other primary structural members shall be Dense Select Structural Southern Pine, unless specified otherwise.
  - C. Lumber used for secondary framing shall be #1 Southern Yellow Pine (SYP) or better.
  - D. Mechanically laminated columns shall conform with ANSI/ASAE EP 559.
4. Pressure Preservative Treatment (PPT)
  - A. Pressure treatment to be performed according to the American Wood Preservers' Association (AWPA) standards.
  - B. Pressure treated members shall have the inspection mark of an agency accredited by the American Lumber Standards Committee.
  - C. Preservative: Ammonia Copper Quaternary ammonia (ACQ) or Copper Boron Azole (CBA)
  - D. Minimum waterborne treatment retention shall be 0.4 pcf for members above ground, and 0.6 pcf for members in contact with earth.
  - E. Treat indicated items and the following:
    1. Wood members exposed to weather or insect infestation.
    2. Wood members in direct contact with earth or concrete.
    3. Wood members exposed to high moisture content (>19% for dimension lumber, >16% for glued laminated timber).
    4. Wood members less than 12 inches above grade.
  - F. Field treat newly exposed wood where cutting, drilling or notching pressure treated lumber.
  - G. Metal connectors used in treated wood shall be hot-dip galvanized as per ASTM A153.
5. Connections shall be designed and constructed according to the NDS by AWC and shall conform to the following:
  - A. The minimum connection shall be two #10x3 1/2" wood screws, or as detailed on the drawings.
  - B. Other connections as per standard construction practice.

TTE DRAWING NUMBER: E038-19

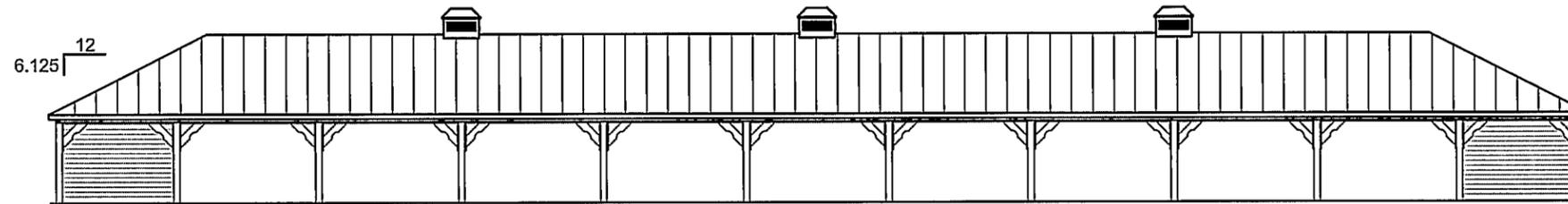


Timothy R. Royer, P.E. MI Eng.# 40734  
Expiration Date: 10/31/2019



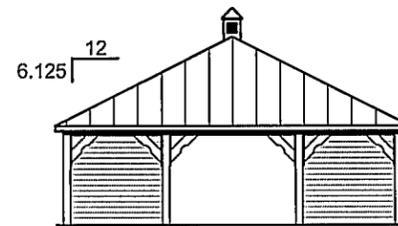
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Scale  $\frac{1}{16}'' = 1'-0''$



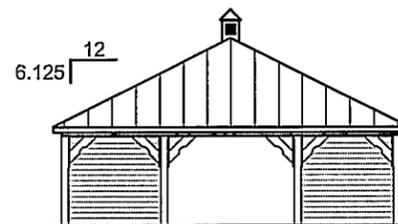
Rear Elevation

Scale  $\frac{1}{16}'' = 1'-0''$



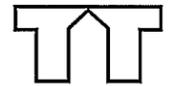
Left Elevation

Scale  $\frac{1}{16}'' = 1'-0''$



Right Elevation

Scale  $\frac{1}{16}'' = 1'-0''$



**timbertech**

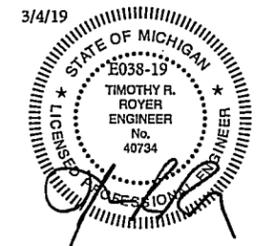
ENGINEERING

East: 22 Denver Road, Suite B Denver, PA 17517  
Ph: 717-335-2750 Fax: 717-335-2753  
West: 406 S Main Street, PO Box 509 Kouts, IN 46347  
Ph: 219-766-2499 Fax: 219-766-2394

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Timothy R. Royer MI Eng. Cert # 40734  
Expiration Date: 10-31-2019

Contractor:  
Country Lane Woodworking  
191 Jalyn Drive  
New Holland, PA 17557  
PH: (717) 351-9250

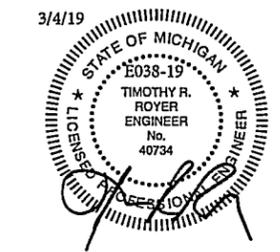
Drawing Title:  
Elevations

Project:  
30'x150' Wood Pavilion for:  
Flintfields Horse Park  
6535 Bates Road  
Williamsburg, MI 49690

Revisions:	Date:	By:

Drawing Number: E038-19 Page: 1 of 12  
Engineered By: D. Reznik Start Date: 2/26/19  
Drafted By: K. Salyer Certified Date: 3/4/19

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Timothy R. Royer MI Eng. Cert # 40734  
 Expiration Date: 10-31-2019

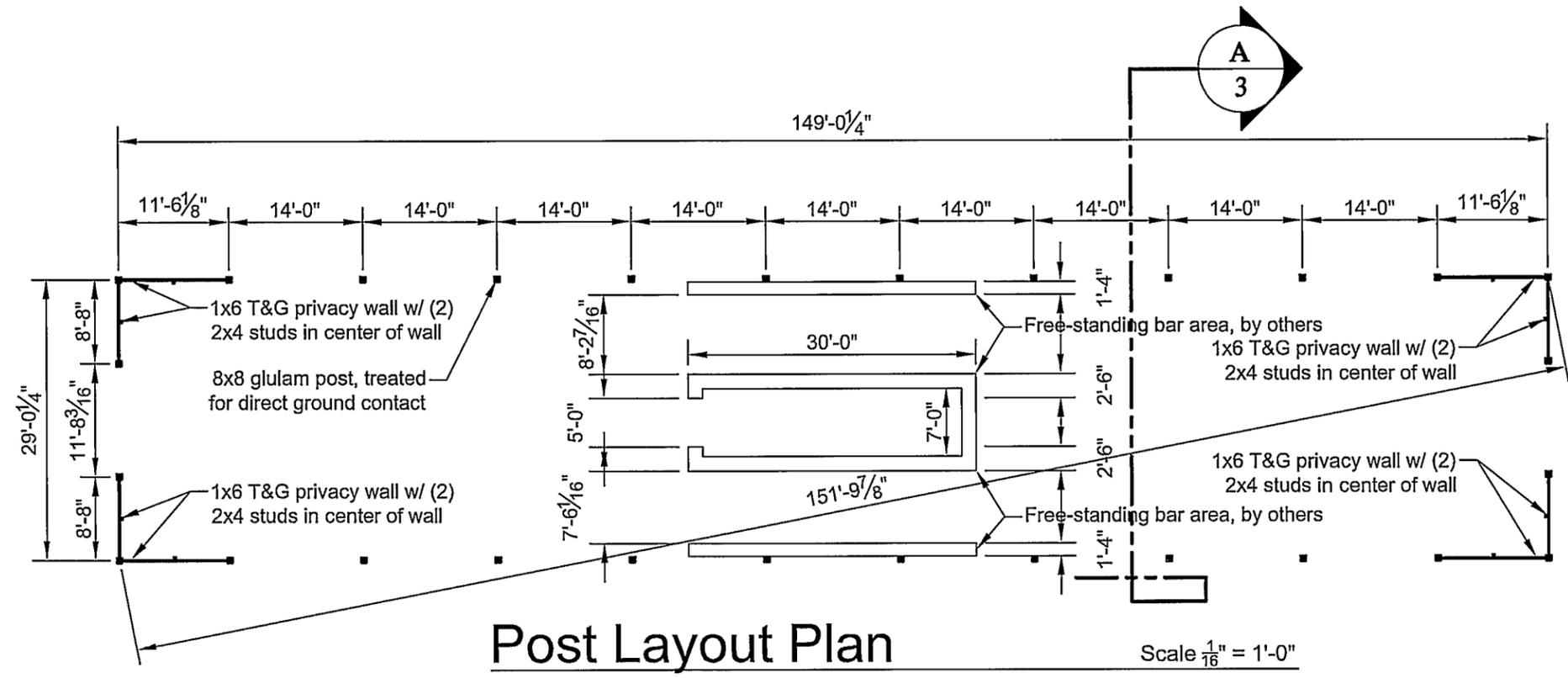
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 PH: (717) 351-9250

Drawing Title:  
 Post Layout Plan  
 Roof Framing Plan

Project:  
 30'x150' Wood Pavilion for:  
 Flintfields Horse Park  
 6535 Bates Road  
 Williamsburg, MI 49690

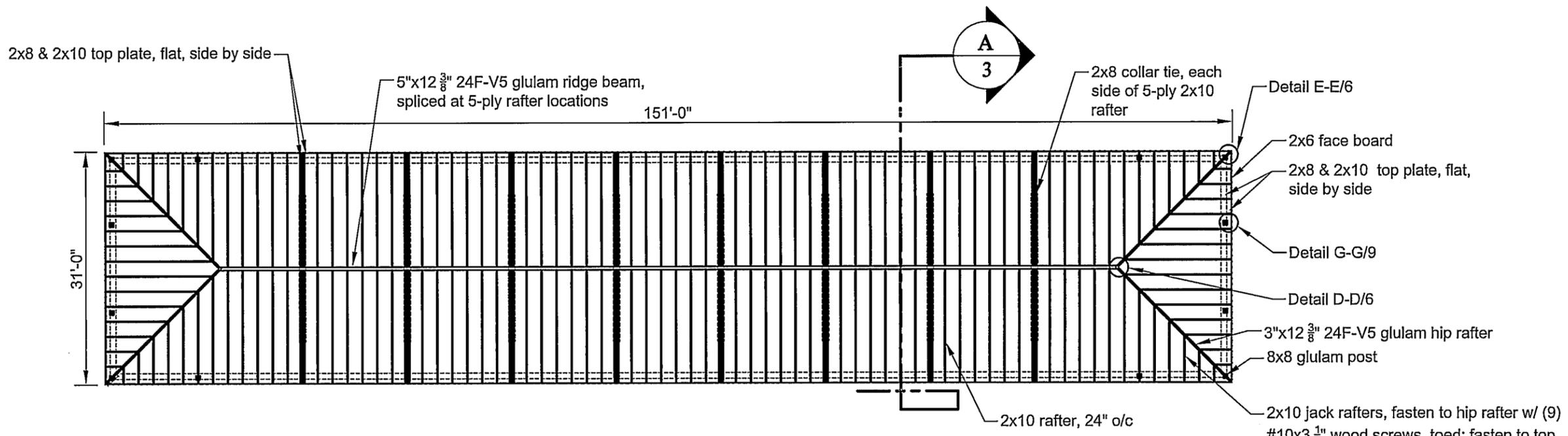
Revisions:	Date:	By:

Drawing Number: E038-19 Page: 2 of 12  
 Engineered By: D. Reznik Start Date: 2/26/19  
 Drafted By: K. Salyer Certified Date: 3/4/19



Post Layout Plan

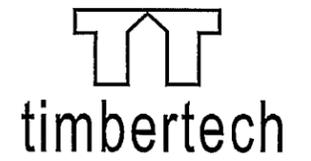
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Roof Framing Plan

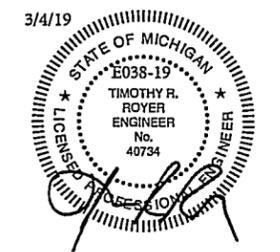
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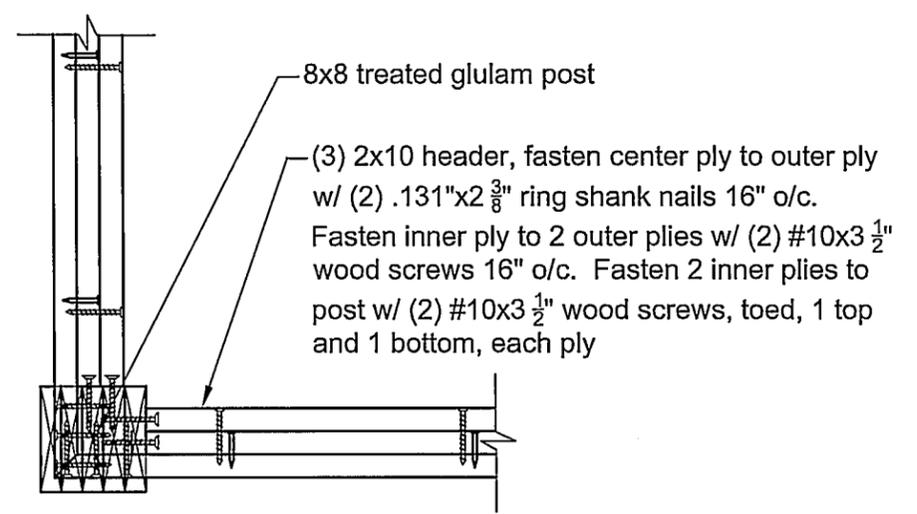
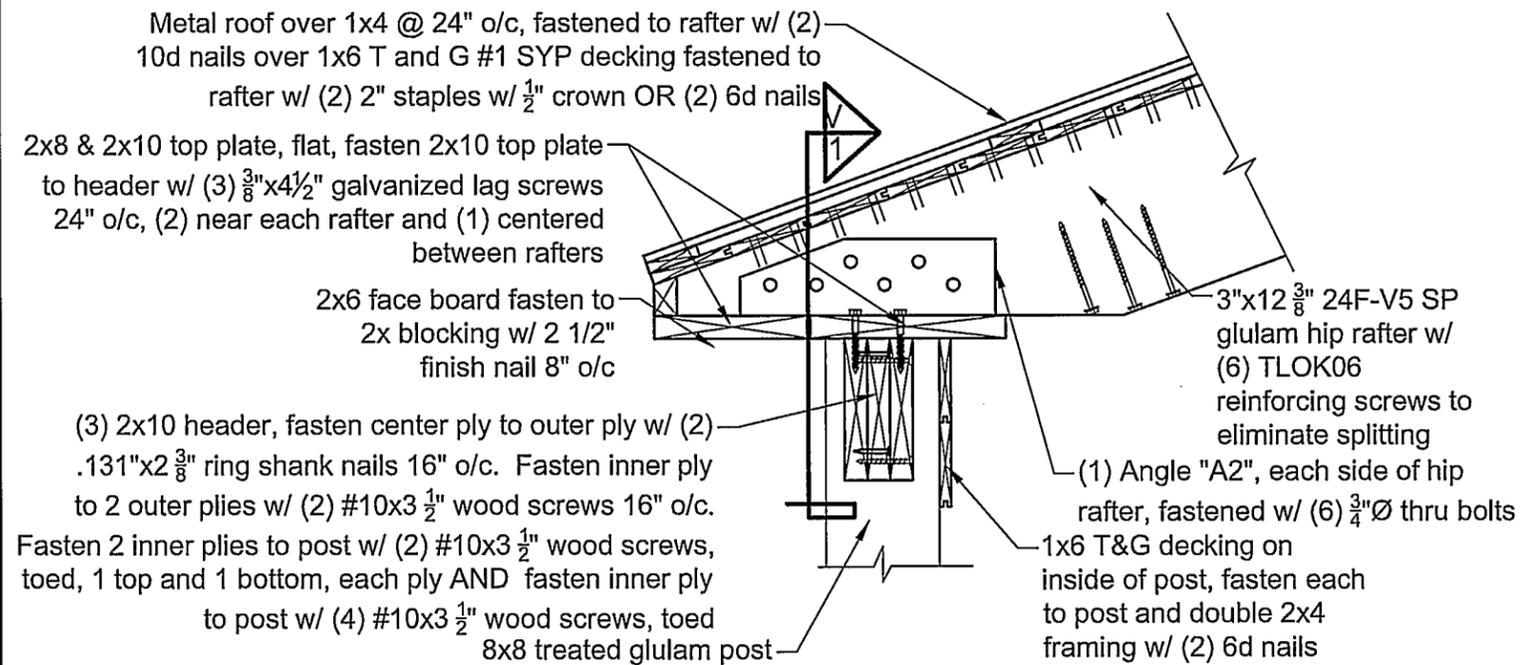
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Drawing Title:  
 Detail B-B/4

Project:  
 30'x150' Wood Pavilion for:  
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 6535 Bates Road  
 Williamsburg, MI 49690

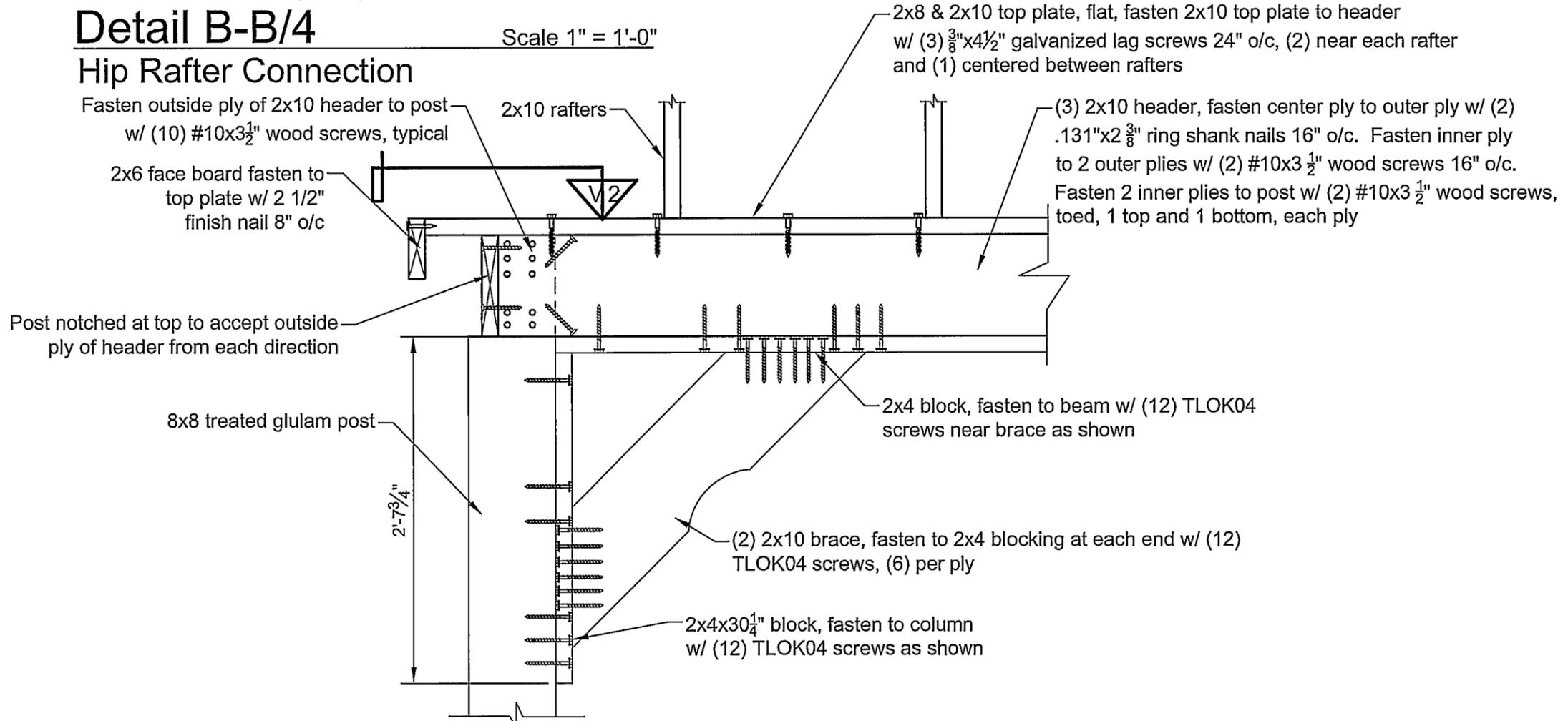
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Drawing Number: E038-19 Page: 4 of 12  
 Engineered By: D. Reznik Start Date: 2/26/19  
 Drafted By: K. Salyer Certified Date: 3/4/19



**View 2 Detail B-B/4** Scale 1" = 1'-0"

**Detail B-B/4** Scale 1" = 1'-0"  
**Hip Rafter Connection**



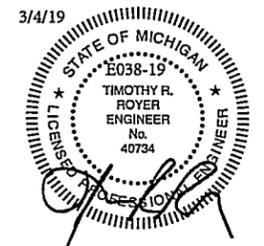
**View 1 Detail B-B/4** Scale 1" = 1'-0"



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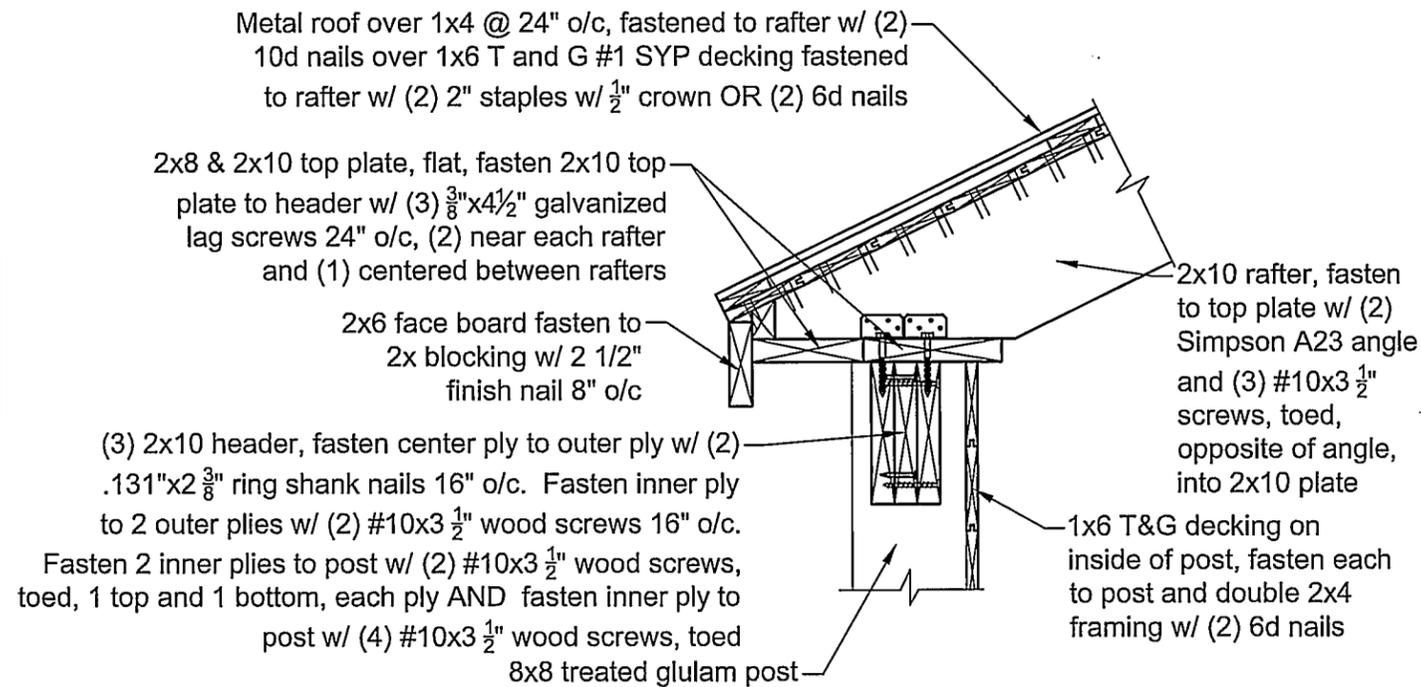
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Drawing Title:  
 Detail B-B/5  
 Detail C-C/5

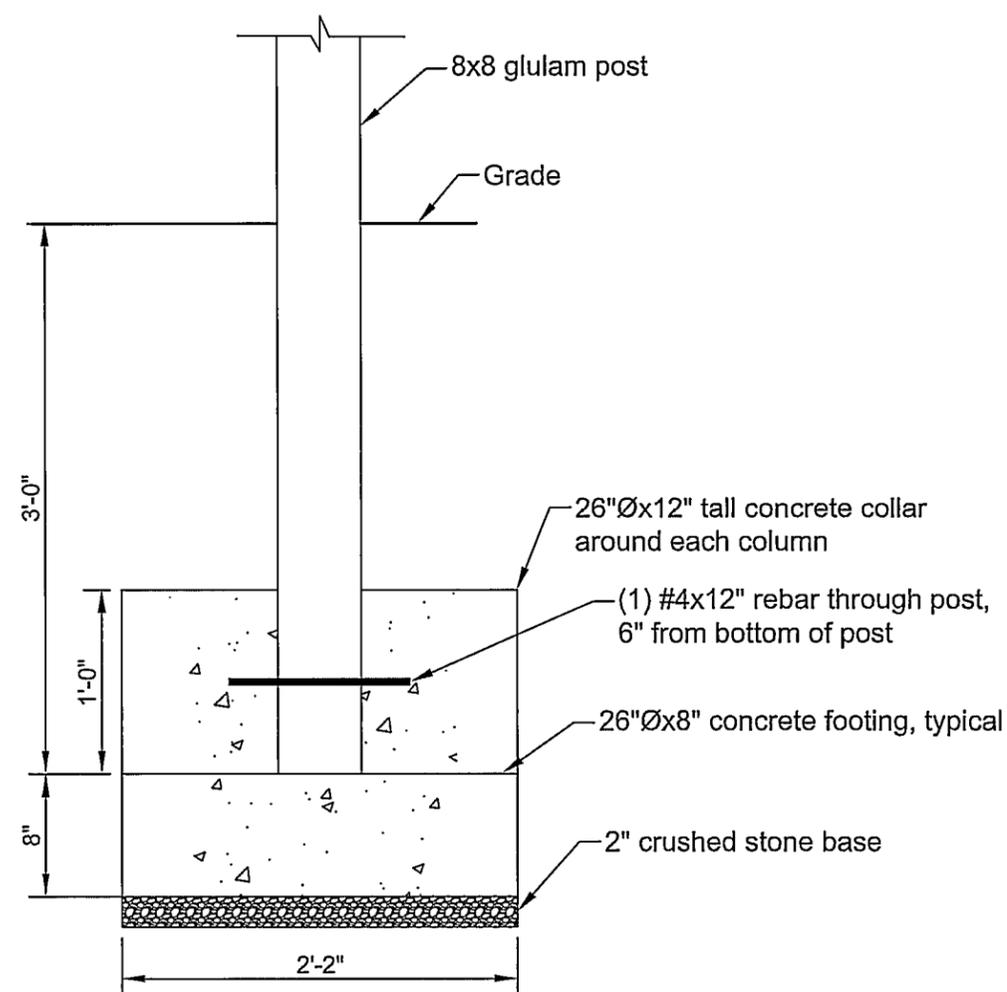
Project:  
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Revisions:	Date:	By:
Drawing Number: E038-19	Page: 5 of 12	
Engineered By: D. Reznik	Start Date: 2/26/19	
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**Detail B-B/5**  
 Typical Single Rafter

Scale 1" = 1'-0"

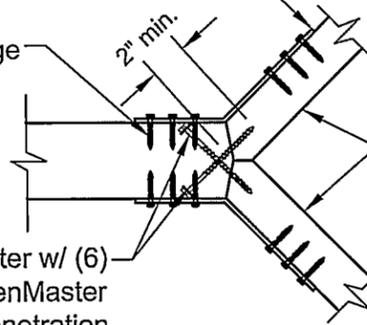


**Detail C-C/5**

Scale 1" = 1'-0"

Angle "A3", each side of ridge, fasten to ridge and hip w/ (13) SDS 25200 screws each, (26 total per angle)

5"x12 $\frac{3}{8}$ " 24F-V5 SP glulam ridge



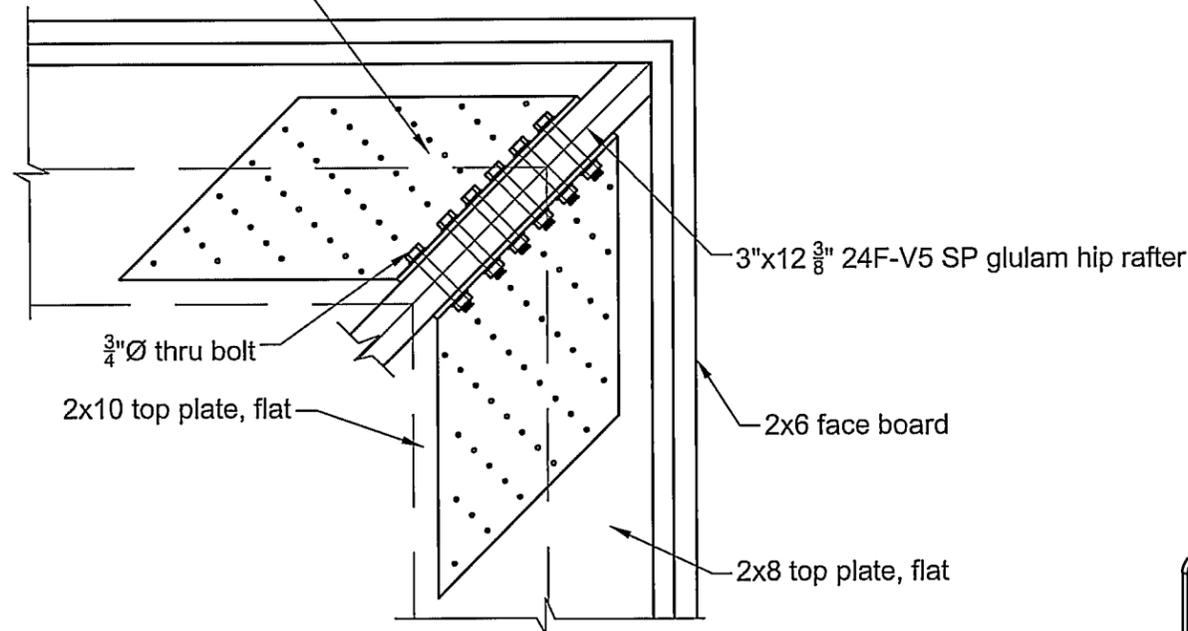
3"x12 $\frac{3}{8}$ " 24F-V5 SP glulam hip rafter

Fasten ridge to each hip rafter w/ (6) LOG006 Olylog fasteners by FastenMaster as shown, ensure 2" min. penetration

**Detail D-D/6**

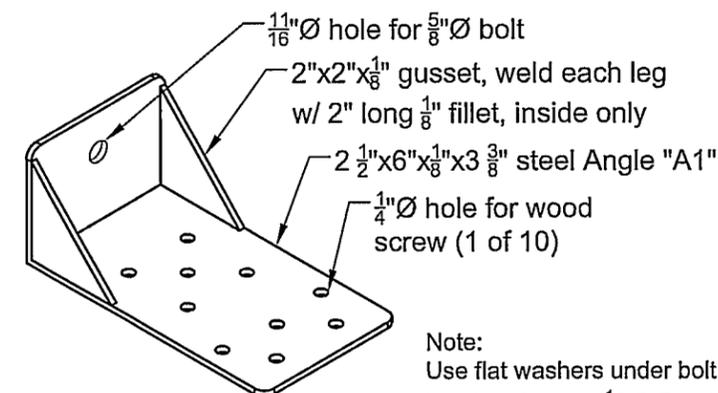
Scale 1" = 1'-0"

(1) steel angle "A2" each side of hip, fasten to rafter w/ (6)  $\frac{3}{4}$ "  $\varnothing$  thru bolts and fasten to top plate w/ (41) SDS 25112 screws



**Detail E-E/6**

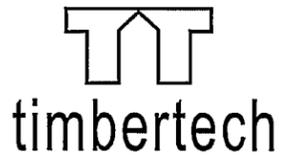
Scale 1" = 1'-0"



Note:  
Use flat washers under bolt head and nut (1  $\frac{1}{16}$ " O.D. min.)

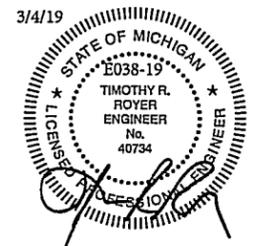
**Angle "A1"**

Scale 3" = 1'-0"



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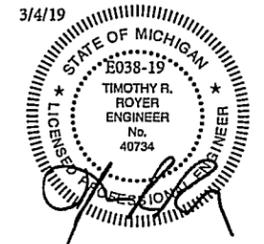
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Drawing Title:  
Detail D-D/6  
Detail E-E/6  
Angle "A1"

Project:  
30'x150' Wood Pavilion for:  
Flintfields Horse Park  
6535 Bates Road  
Williamsburg, MI 49690

Revisions:	Date:	By:
Drawing Number: E038-19	Page: 6 of 12	
Engineered By: D. Reznik	Start Date: 2/26/19	
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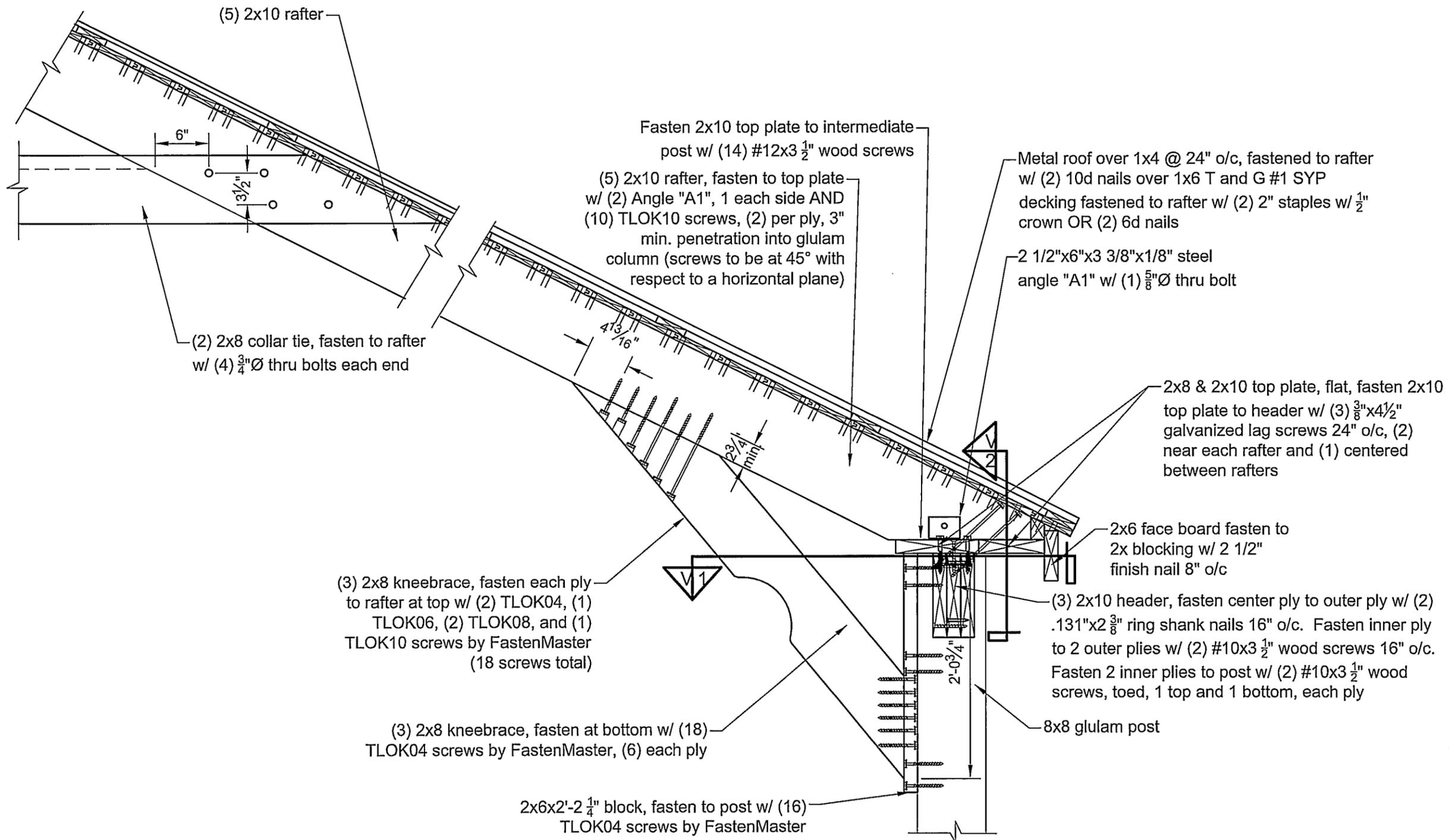
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Drawing Title:  
 Detail F-F/7

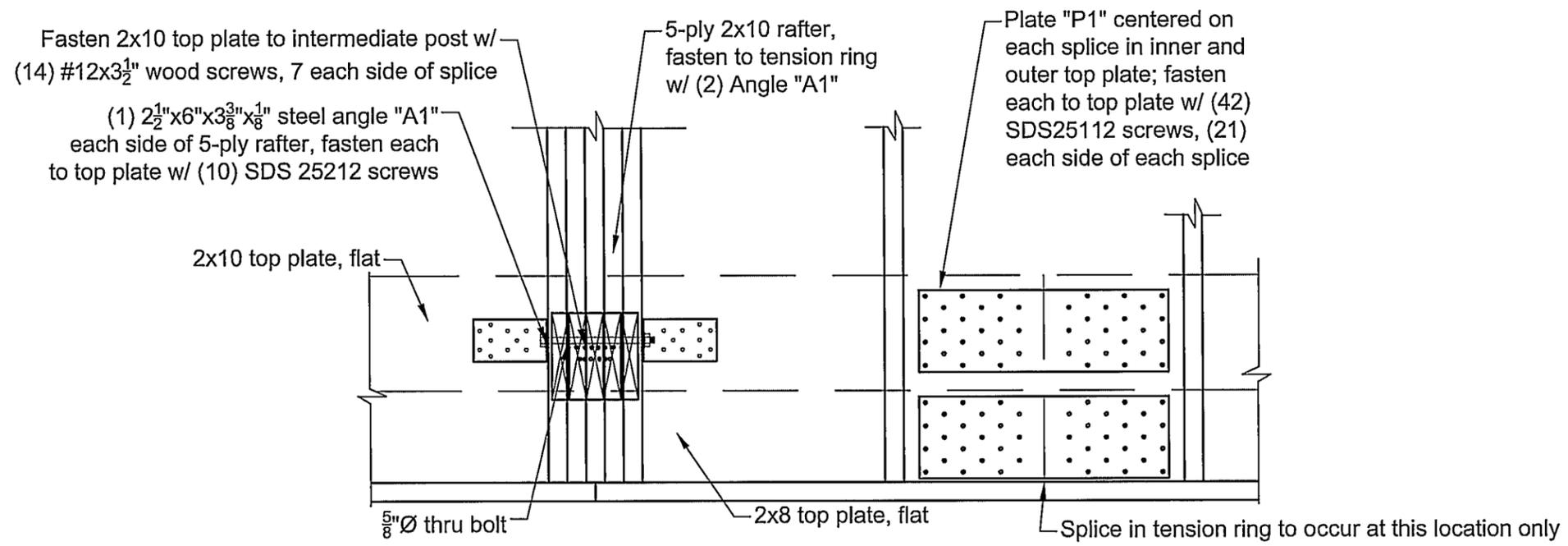
Project:  
 30'x150' Wood Pavilion for:  
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 6535 Bates Road  
 Williamsburg, MI 49690

Revisions:	Date:	By:
Drawing Number: E038-19	Page: 7 of 12	
Engineered By: D. Reznik	Start Date: 2/26/19	
Drafted By: K. Salyer	Certified Date: 3/4/19	

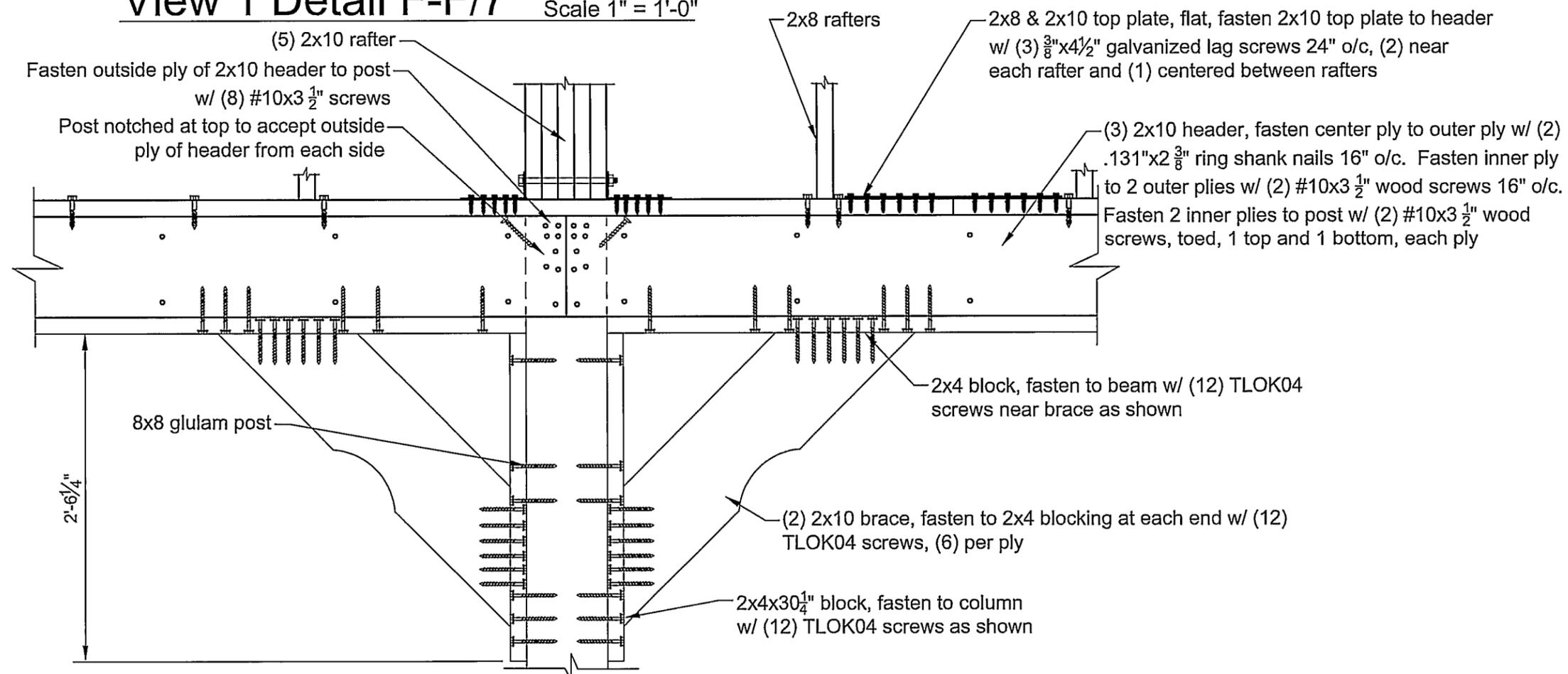


**Detail F-F/7**  
**5-Ply Rafter**

Scale 1" = 1'-0"



**View 1 Detail F-F/7** Scale 1" = 1'-0"

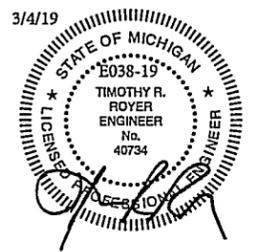


**View 2 Detail F-F/7** Scale 1" = 1'-0"



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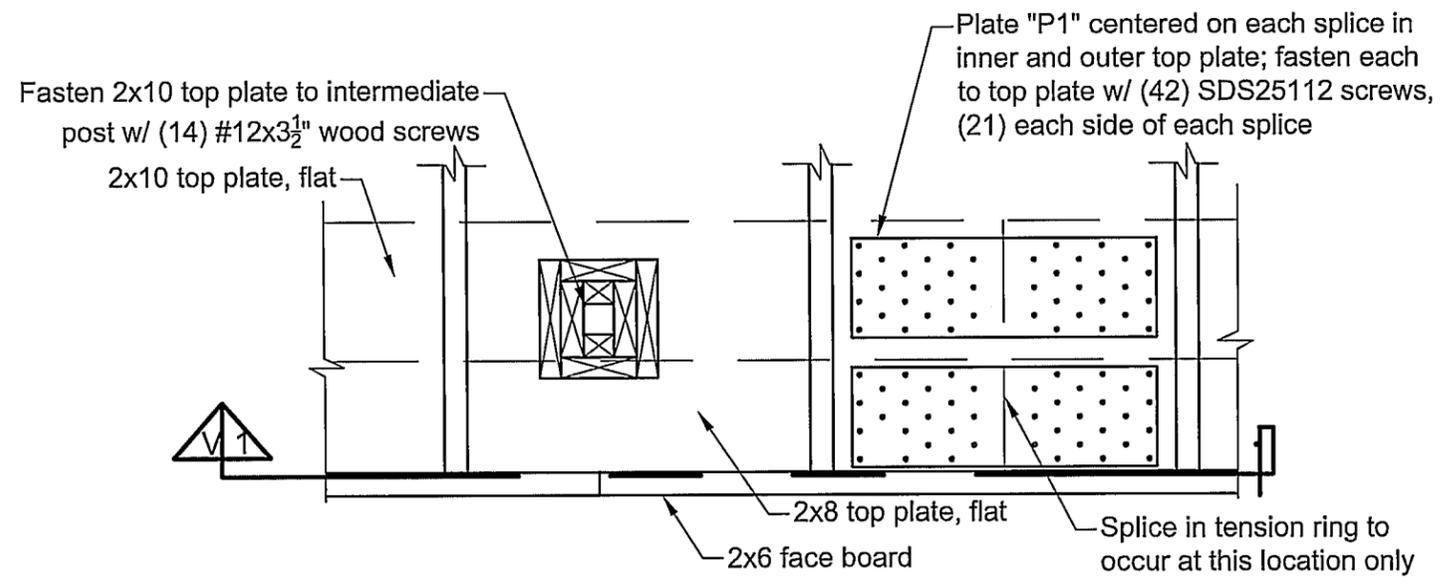
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Drawing Title:  
View 1 Detail F-F/7  
View 2 Detail F-F/7

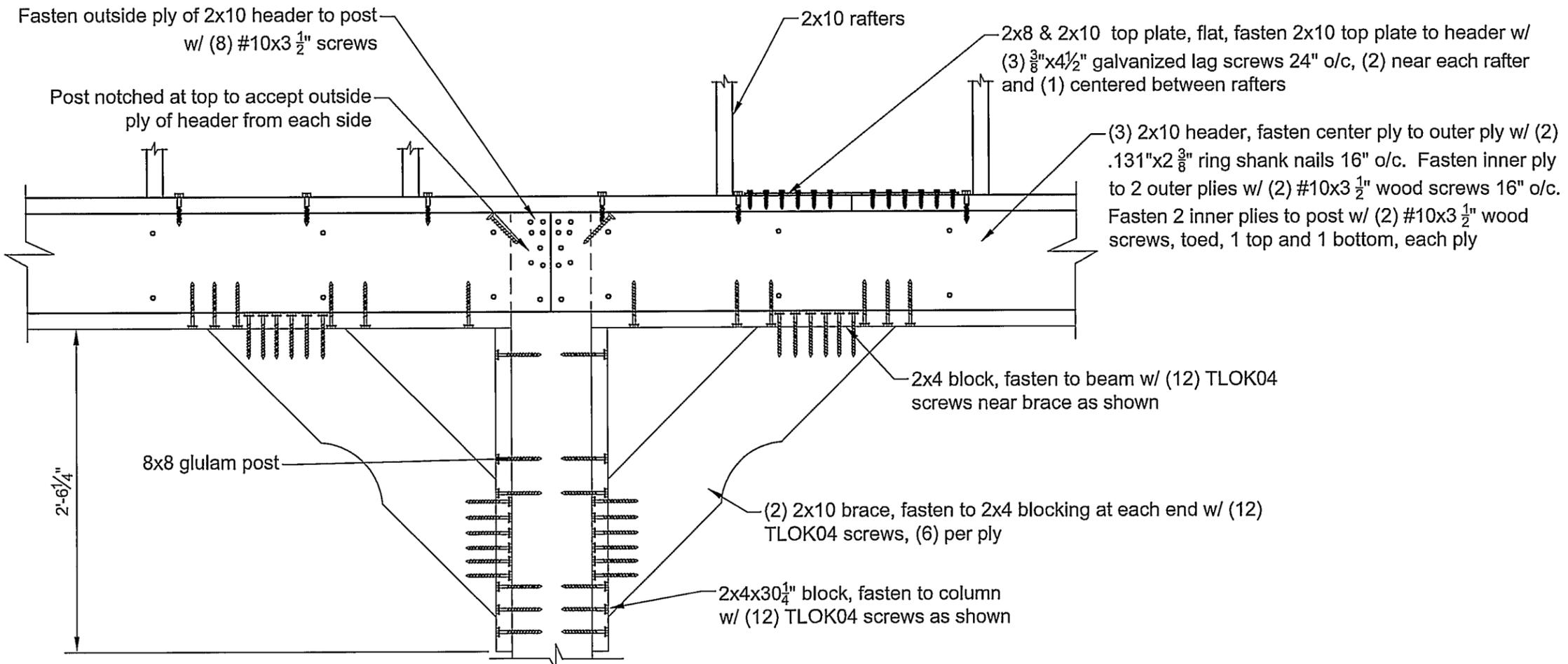
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Revisions:	Date:	By:

Drawing Number: E038-19 Page: 8 of 12  
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**Detail G-G/9** Scale 1" = 1'-0"

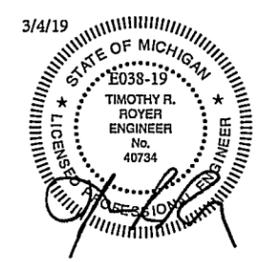


**View 1 Detail G-G/9** Scale 1" = 1'-0"



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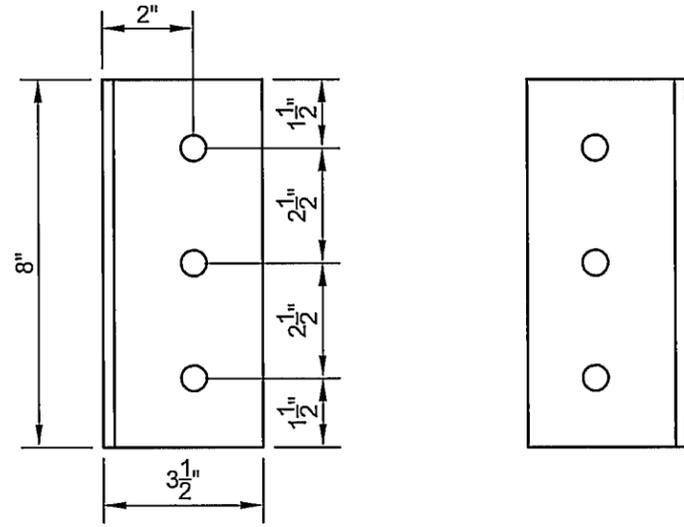
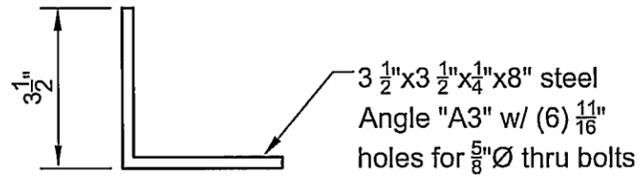
Drawing Title:  
 Detail G-G/9

Project:  
 30'x150' Wood Pavilion for:  
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 6535 Bates Road  
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Angle "A4"

Scale 3" = 1'-0"

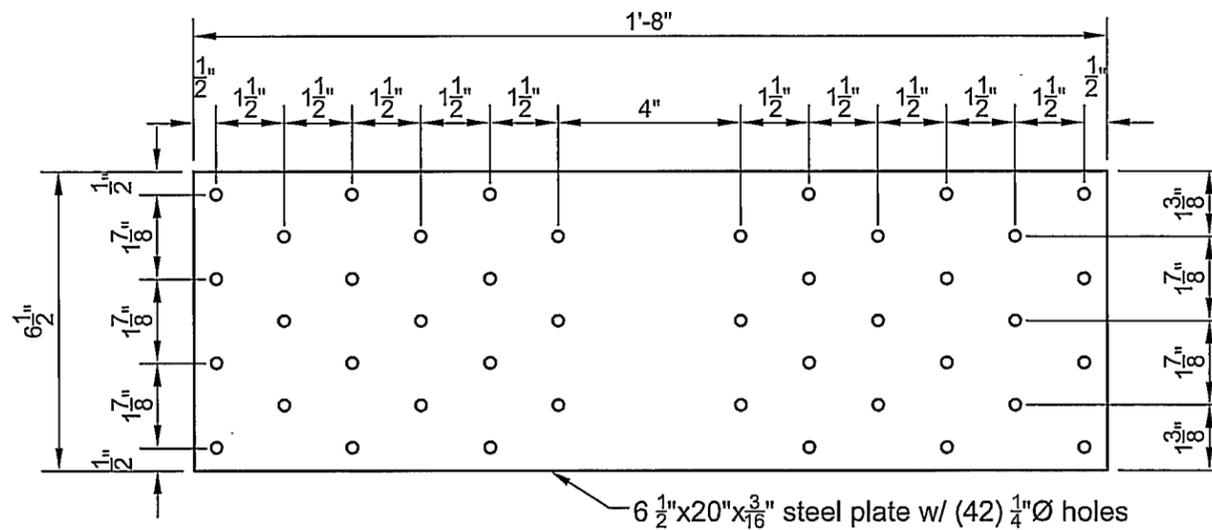


Plate "P1"

Scale 3" = 1'-0"



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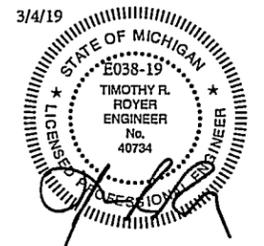
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Drawing Title:  
Angle "A4"  
Plate "P1"

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Drawing Number: E038-19 Page: 11 of 12  
Engineered By: D. Reznik Start Date: 2/26/19  
Drafted By: K. Salzer Certified Date: 3/4/19

**EARTHWORK**

**1. Requirements**

- A. Provide a construction grade extending ten feet beyond building exterior walls or an alternative method per Section 1804.3 of the IBC.
- B. Excavate for foundations to subgrade elevations regardless of character of materials and obstructions encountered, unless otherwise approved by the structural engineer.
- C. Perform excavation work in compliance with applicable requirements of authorities having jurisdiction.

**2. Materials**

- A. Satisfactory soil: ASTM D2487 unified soil classification groups GW, GP, GM, SW, SP, and SM; free of rock or gravel larger than two inches in any dimension, debris, waste, frozen materials, vegetation, or other deleterious matter.
- B. Unsatisfactory soil: ASTM D2487 unified soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT.
- C. Backfill and fill: satisfactory soil materials.

**3. Execution**

- A. Footings have been designed for an assumed allowable loadbearing pressure of 2,000 psf on supporting soil at 1 foot deep into grade. Pressure may be increased 20% for each additional 1 ft of width and/or depth to a maximum of 6,000 psf. The contractor shall verify this assumption, and shall immediately notify the structural engineer in writing of any deficiency.
- B. Place backfill and fill in layers not more than eight inches in loose depth at optimum moisture content. Compact each layer under footings and slabs to a dry density of at least 95 percent of maximum dry density as determined by ASTM D155.
- C. Bottom of exterior footings shall be a minimum of 36 inches below finished grade, unless noted otherwise

**CAST-IN-PLACE CONCRETE**

1. Concrete work shall conform to the following specifications by The American Concrete Institute (ACI).

- A. "Building Code Requirements for Structural Concrete" (ACI 318).
- B. "Hot Weather Concreting" (ACI 318).
- C. "Cold Weather Concreting" (ACI 318).

2. Materials used shall adhere to the following:

- A. Portland Cement: ASTM C150, type 1.
- B. Fly Ash: ACI 318.
- C. Aggregates: ASTM C33, maximum aggregate size is one inch.
- D. Fiberglass reinforcement: PCI MNL 128 Standard.
- E. Air-entraining admixture: ACI 318.
- F. Chemical admixtures: ASTM C494, water reducing. All concrete, except footings, shall contain a water reducing admixture. No admixtures containing calcium chloride are permitted. All other additives shall not be used without prior approval of the structural engineer.
- G. Vapor retarder: Clear 8-mil thick polyethylene.

3. Proportion normal-weight (145 pcf) concrete mixes to provide the following properties:

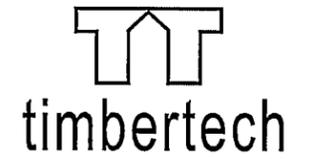
- A. Compressive strength: 3,000 psi at 28 days (unless noted otherwise).
- B. Slump limit: 4 inches (3 inches for slab-on-grade) at point of placement.
- C. Water-cement ratio: 0.45 maximum at point of placement.
- D. Air content: 5 to 7 percent for concrete exposed to freezing and thawing, 2 to 4 percent elsewhere.

4. Reinforcing steel shall be fabricated, detailed and placed in accordance with the ACI 318, and shall conform to the following:

- A. Deformed reinforcing bars: ASTM A615/A 615M with a minimum yield strength of 60,000 psi (grade 60).
- B. Welded wire fabric (WWF): ASTM A185, flat sheets, not rolls.
- C. Ties/Stirrups: ASTM A615/A615M, grade 40.

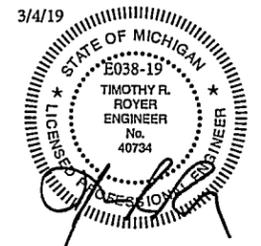
5. Concrete work shall be executed according to the following:

- A. Maintain tolerances and surface irregularities within ACI 117 limits of class A for concrete exposed to view, and class C for other concrete surfaces. Floor slabs shall be screeded, floated and steel troweled to a smooth, dense and plane surface.
- B. Accurately position, support, and secure reinforcement.
  - 1. Reinforcing bars shall lap 48 bar diameters at splices in concrete unless otherwise noted.
  - 2. Provide corner bars to match all continuous reinforcing in concrete and masonry.
  - 3. Reinforcing bar hooks shall be ACI standard.
  - 4. WWF shall have ends lapped one full mesh, and shall extend onto supporting walls.
  - 5. Chairs, bolsters, bar supports, and spacers shall be sized and shaped for strength and support of reinforcement during concrete placement.
- C. Provide minimum concrete cover on reinforcing bars as follows:
  - 1. Cast against earth.....3"
  - 2. Exposed to earth or weather (#5 or smaller)...1 1/2"
  - 3. Exposed to earth or weather (#6 or larger).....2"
  - 4. Slabs and walls not exposed.....3/4"
- D. The contractor shall be responsible for stability and integrity of all excavations and existing structures.



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Revisions:	Date:	By:
Drawing Number: E038-19	Page: 12 of 12	
Engineered By: D. Reznik	Start Date: 2/26/19	
Drafted By: K. Salyer	Certified Date: 3/4/19	

## Site Storm Water Calculations:

Project & No.: **Bates Horse Park Arena Changes**

Project No.: **19039**

Location: **Acme Township**

Client: **Traverse City Horse Shows**

Rational =  $Q = C i A$

Intensity =  $i = 100\text{-yr, 24-hour duration} =$  5.08 in (Bulletin 71)      Intensity  $i =$  0.212 in/hr

Coefficient =  $C =$  weighted C (Per Table 2: Runoff Coefficients)

Area =  $A =$  varies per drainage area (ac.)      (Varies based on drainage areas)

Unit Conversion = 86,400

Soils Type = Predominant USDA Soils: EyC (Emmet Sandy Loam 6-12%)

Infiltration Rate = 1.00 in/hr (1.0"/12") ft x 24-hr x A (sft) = cft

**AREA 1                      0.00 ac.**

POSTDEVELOPMENT CONDITIONS						
NO.	Area Type	C	i	A (ac.)	conversion	Q (cft)
1	Gravel	0.60	0.212	0.40 ac.	86,400	4389 cft
				On-Site Total =	0.40 ac.	Total Q = 4389 cft

<b>Required 100-yr Post Development Total Q =</b>	4389 cft
<b>Required 2x100-yr Post Development Total Q =</b>	8778 cft
<b>Pre Development Q =</b>	0 cft
<b>Required Additional Storage =</b>	8778 cft
<b>Provided Additional Basin Storage =</b>	9887 cft
<b>Excess Storage =</b>	1109 cft



May 21, 2019

Mr. Shawn Winter, Zoning Administrator  
Acme Township  
6042 Acme Road  
Williamsburg, MI 49690

Re: Flintfields Stormwater Changes

Dear Shawn:

Per your request, we have reviewed the proposed changes at the Flintfields Horse Park on Bates Road for impact to the stormwater management system. Proposed changes to the previously approved use generally include reconfiguring the arena layout and gravel access drives and modifying the storm water basin.

The impervious surfaces within the construction zone include a small amount of concrete and gravel drives. The net changes proposed to these areas include a reduction in concrete of about 1500 sft and additional gravel area of 17,500 sft. Calculations provided by the applicant's consultant, Mansfield Land Use Consultants, show an additional volume of 8,778 cubic feet is required to accommodate the stormwater runoff from this area for the back to back 100-year storm. The proposed modifications to the stormwater retention basin provide an additional 20,095 cubic feet.

We have verified that the areas and volumes of proposed changes shown on the plans are consistent with the calculations provided by the applicant. The proposed changes to the stormwater management system can comfortably accommodate the additional runoff generated from the site construction area.

Feel free to contact me with any questions.

Sincerely,

GOSLING CZUBAK

Robert M. Verschaeve, P.E.  
Project Manager



# GRAND TRAVERSE COUNTY ENVIRONMENTAL HEALTH SOIL EROSION AND SEDIMENTATION CONTROL (SESC) PERMIT

Issued under the authority of Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act, (1994 PA 451, as amended) and/or Grand Traverse County SESC Ordinance.

**Property Owner (Permittee):** TRAVERSE CITY HORSE SHOWS, LLC  
Mailing Address: 15355 DE HAVILLAND CT  
City, State, Zip: WELLINGTON, FL 33414  
Phone: 941-915-3457

**Permit #:** 19-00439  
**Type:** COMMERCIAL  
**Date Issued:** 05/14/19  
**Site Priority:** Moderate (3)  
**Expiration:** 11/14/19  
**Fee:** \$1,560.00  
**Receipt #:** 47960  
**Renewal:** \_\_\_\_\_

**Contractor/On-Site Responsible Person:**  
Name: TRAVERSE CITY HORSE SHOWS, LLC  
Mailing Address: 15355 DE HAVILLAND CT  
City, State, Zip: WELLINGTON, FL 33414  
Phone: 941-915-3457  
Email: MATT@MMG.MANAGEMENT

**DEQ PERMIT (if applicable)**  
**Permit #:** \_\_\_\_\_  
**Issue Date:** \_\_\_\_\_

**PROJECT LOCATION**  
Site Address: 6535 BATES RD Township: ACME  
Tax Number: 01-014-008-01 Section: 31 Town: 28N Range: 9W  
Subdivision: \_\_\_\_\_ Lot #: \_\_\_\_\_

**PERMITTED ACTIVITY:**  
**EXCAVATION AND GRADING FOR REALIGNMENT/RECONSTRUCTION OF RIDING ARENAS.**

- PERMIT CONDITIONS**
1. The permitted activity shall be completed in accordance with the approved plans and specifications, and the attached general and specific conditions.
  2. This permit does not waive the necessity for obtaining all other required federal, state, or local permits.
  3. Permittee shall notify the permitting agency within one week after completing the permitted activity or one week prior to the permit expiration date, whichever comes first.

**THIS PERMIT ALONG WITH THE SOIL EROSION SITE PLAN AND GREEN CARD MUST BE POSTED AT THE PROJECT SITE**

## GENERAL CONDITIONS

In accordance with Rule 1709 promulgated under the authority of Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and in addition to the information on the attached plan(s) and special conditions, the following general conditions apply to the earth change authorized by this permit:

- Design, construct, and complete the earth change in a manner that limits the exposed area of disturbed land for the shortest period of time.
- Remove sediment caused by accelerated soil erosion from runoff water before it leaves the site of the earth change.
- Temporary or permanent control measures shall be designed and installed to convey water around, through, or from the earth change at a non-erosive velocity.
- Install temporary soil erosion and sedimentation control measures before or upon commencement of the earth change activity and maintain the measures on a daily basis. Remove temporary soil erosion and sedimentation control measures after permanent soil erosion measures are in place and the area is stabilized. ("Stabilized" means the establishment of vegetation or the proper placement, grading, or covering of soil to ensure its resistance to soil erosion, sliding, or other earth movement.)
- Complete permanent soil erosion control measures for the earth change within five calendar days after final grading or upon completion of the final earth change. If it is not possible to permanently stabilize the earth change, then maintain temporary soil erosion and sedimentation control measures until permanent soil erosion control measures are in place and the area is stabilized.

## SPECIFIC CONDITIONS

**THIS PERMIT IS APPROVED ACCORDING TO THE SITE PLAN RECEIVED ON MAY 6, 2019 WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:**

1. **INSTALL SILT FENCE AS SHOWN ON SITE PLAN PER MANUFACTURER'S SPECIFICATIONS, PROPERLY TRENCHED 6 INCHES AND ENDS WRAPPED (SEE ATTACHED HANDOUT).**
2. **ALL SPOIL AND DEBRIS PILES SHALL BE STORED BEHIND THE SILT FENCE SO AS NOT TO ALLOW SEDIMENT OR DEBRIS FROM ENTERING THE FLOOD PLAIN OR LAKE AS SHOWN ON THE SITE PLAN.**
3. **IF WIND EROSION BECOMES AN ISSUE, A WATER TRUCK WILL BE REQUIRED.**
4. **INSTALL EROSION CONTROL BLANKETS, PROPERLY STAKED DOWN, ON ANY SLOPE 3:1 OR GREATER PER MANUFACTURER'S SPECIFICATIONS (SEE ATTACHED HANDOUT).**
5. **WITHIN 5 DAYS OF FINAL GRADING, PLACE SEED AND STRAW MULCH OVER ALL DISTURBED AREAS. IT IS HIGHLY RECOMMENDED TO PLACE 4 INCHES OF TOPSOIL ON ALL DISTURBED AREAS TO SPEED VEGETATION GROWTH. A LACK OF TOPSOIL MAY INHIBIT VEGETATION GROWTH AND DELAY SITE STABILIZATION.**
6. **ANY VEGETATION SHALL BE WELL ESTABLISHED AND SHOW SIGNIFICANT GROWTH IN ORDER TO FINAL THIS PERMIT.**

  
\_\_\_\_\_  
SESC Issuing Sanitarian  
BRENT WHEAT, 231-995-6015

05/14/19  
\_\_\_\_\_  
Issue Date

## Shawn Winter

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**From:** Kathy Fordyce <kfordyce@gtmetrofire.org>  
**Sent:** Monday, May 20, 2019 1:26 PM  
**To:** Shawn Winter  
**Subject:** FW: Traverse City Horse Shows, LLC

*Kathy Fordyce*  
Fire Inspector II / Fire Plans Examiner  
Grand Traverse Metro Fire Dept.

TX: 231-947-3000 X 1236  
FX: 231-947-8728

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**From:** Kathy Fordyce  
**Sent:** Thursday, May 16, 2019 4:12 PM  
**To:** Dusty Christensen  
**Subject:** RE: Traverse City Horse Shows, LLC

Dusty,

Here is what I am looking for:

1. Emergency access to each of the proposed arenas.
2. Emergency access to the bleachers on the South side of the West Arena.
3. Dead ends are not acceptable, either approved turnarounds are required or access roads that continue on uninterrupted back to Bates Rd.
4. Emergency access roads cannot be congested with people and horses, the emergency access roads shall be separate from people and horse moving roads. This is something that needs to be addressed complex wide.
5. Emergency access roads shall be marked as such with approved signage.
6. Emergency access road widths.

Thank you,

*Kathy Fordyce*  
Fire Inspector II / Fire Plans Examiner  
Grand Traverse Metro Fire Dept.

TX: 231-947-3000 X 1236  
FX: 231-947-8728

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**From:** Dusty Christensen [<mailto:dusty@maaeps.com>]  
**Sent:** Thursday, May 16, 2019 10:52 AM  
**To:** Kathy Fordyce  
**Subject:** RE: Traverse City Horse Shows, LLC

Hi Kathy,

Here are PDFs of the site plan and building drawings.

Thanks,

Dusty Christensen, LLA  
**Mansfield Land Use Consultants**  
830 Cottageview Drive, Suite 201  
Traverse City, MI 49685  
office: (231) 946-9310 ext. 1008  
cell: (231) 360-7021

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**From:** Kathy Fordyce <[kfordyce@gtmetrofire.org](mailto:kfordyce@gtmetrofire.org)>  
**Sent:** Thursday, May 16, 2019 10:43 AM  
**To:** Dusty Christensen <[dusty@maaeps.com](mailto:dusty@maaeps.com)>  
**Subject:** Traverse City Horse Shows, LLC

Hello Dusty,

Please submit an electronic copy of the Site Plan as well.

Thank you,

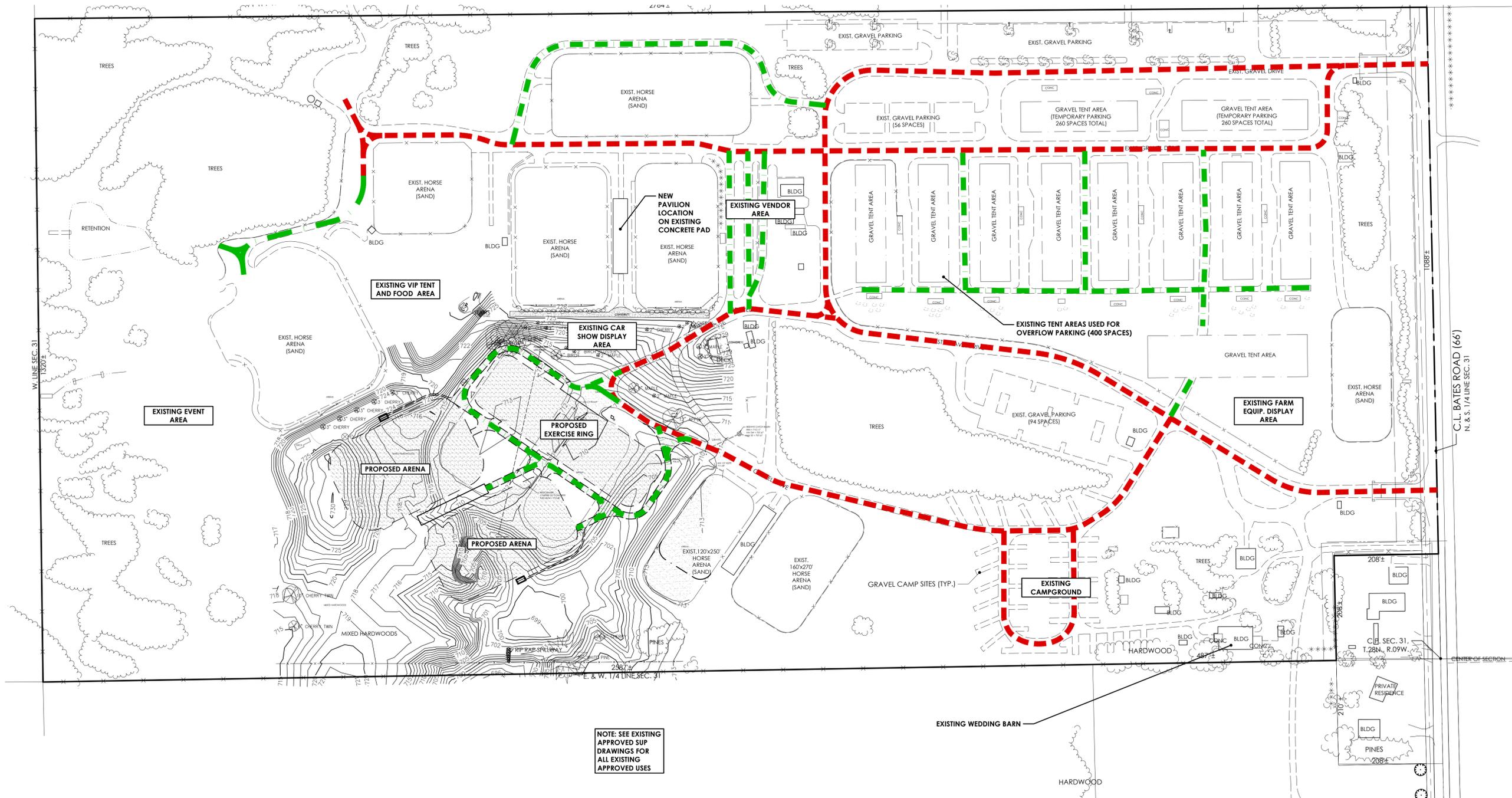
*Kathy Fordyce*  
Fire Inspector II / Fire Plans Examiner  
Grand Traverse Metro Fire Dept.

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**EMERGENCY SERVICES ACCESS ROUTES:**

- - - - - FIRE TRUCK AND AMBULANCE ROUTE (28' min. inside turning radius and 20' width drive lane)
- - - - - AMBULANCE ROUTE

NOTE: SEE EXISTING APPROVED SUP DRAWINGS FOR ALL EXISTING APPROVED USES



GRAPHIC SCALE: 1 inch = 100 feet  
0 50 100 200 300

NOTE: Property boundaries, land contours, physical features and the like, illustrated on this plan are exhibited for planning purposes only. Mansfield Land Use Consultants makes no guarantee to the correctness nor the completeness of this information.

830 Cottageview Dr., Ste. 201  
P.O. Box 4015  
Traverse City, MI 49685  
Phone: 231-946-9310  
www.mmaeps.com  
info@mmaeps.com

**Mansfield**  
Land Use Consultants

REV#	DATE	DES	DRN	CHK	DESC
01	04-25-14	dmc	mmmm	dmc	Original design

Traverse City Horse Shows, LLC  
Horse Park Improvements  
**EMERGENCY SERVICES ACCESS EXHIBIT**  
Section 31, Town 28 North, Range 09 West  
Acme Township, Grand Traverse County, Michigan

CONCEPTUAL

PXL: dmc

DR: mmm CGL: cbs/tdc CSK/tdc 03.04.19

JOB NO: 19039

## Shawn Winter

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**From:** Kathy Fordyce <kfordyce@gtmetrofire.org>  
**Sent:** Tuesday, May 21, 2019 3:48 PM  
**To:** Dusty Christensen  
**Cc:** Shawn Winter  
**Subject:** Horse Park Improvements Site Plan

Dusty,

I received the revised site plan regarding the list of requirements to be met. Some of the items were addressed with the revised site plans, however, there are still several yet to work on. I will be discussing these with Chief Belcher after doing more research and then draft a formal site plan review hopefully within the next couple of days.

If you have any further questions or concerns, please don't hesitate to call.

Regards,

*Kathy Fordyce*  
Fire Inspector II / Fire Plans Examiner  
Grand Traverse Metro Fire Dept.

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FX: 231-947-8728

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