



**Planning Commission
Regular Meeting
March 20, 2018
7:00p.m.**

1. CALL MEETING TO ORDER
2. PLEDGE OF ALLEGIANCE
3. ROLL CALL
4. APPROVAL OF MINUTES
 - 2-20-2018 Regular Planning Commission Meeting
5. CORRESPONDENCE / BOARD REPORTS
 - Boards and Commissions Expiration Dates
6. APPROVAL OF AGENDA
7. PUBLIC COMMENT: Restricted to (3) minutes regarding issues not on this agenda
8. PUBLIC HEARINGS
9. NEW BUSINESS
10. OTHER BUSINESS
 - A. SPR 2018-02 Target out lot for Aspen Dental. Bluegrass Retail Management, LLC 4097 Bluegrass Rd.
Action: Review for final approval
 - B. SPR 2018-03 Cold Storage Accessory Building Eikenhout Inc. PID 14-011-30-004-03.
Action: Review for final approval
 - C. SPA 2018-01 Amendment to site plan SPR 2017-08 for location of sidewalks along Broomfield Rd. *Action: Consider Approval of a modified sidewalk plan.*
 - D. SPR 2017-04 Coyne Cold Storage N. Harris (Crawford) PID 14-010-30-003-03
Owner Coyne LLC *Action: Review for information*
 - E. Proposed RFP for Zoning Ordinance Update. *Action: Review and approve for advertising.*
11. EXTENDED PUBLIC COMMENT: Restricted to 5 minutes regarding any issue
12. FINAL BOARD COMMENT
13. ADJOURNMENT

CHARTER TOWNSHIP OF UNION
Planning Commission
Regular Meeting

A regular meeting of the Charter Township of Union Planning Commission was held on February 20, 2018 at the Township Hall.

Meeting was called to order at 7:00 p.m.

Roll Call

Present: Buckley, Darin, Fuller, LaBelle II, Mielke, Shingles, Squattrito, & Webster

Others Present

Township Planner, Peter Gallinat and Secretary, Jennifer Loveberry

Approval of Minutes

Webster moved **Buckley** supported the approval of the January 16, 2018 regular meeting minutes with corrections. **Vote: Ayes: 8 Nays: 0. Motion carried.**

Correspondence / Reports

- ZBA – Updates by Mielke
- Webster - Sidewalk / Pathway Prioritization Committee updates, next meeting 3/12/18.

Approval of Agenda

Webster moved **Darin** supported approval of the agenda as amended, adding 10C – Discussion of memo by the Township Planner. **Vote: Ayes: 8 Nays 0. Motion carried.**

Public Comment

Open 7:11 p.m.

No comments were offered.

Public Hearings

New Business

- A. SPR 2018-02 Target out lot for Aspen Dental. Bluegrass Retail Management, LLC**
Location: 4097 Bluegrass Rd.

Webster moved **Fuller** supported to approve to postponing SPR 2018-02, per the request of the applicant. **Vote: Ayes: 8 Nays 0. Motion carried.**

- B. SPR 2018-03 Cold Storage Accessory Building Eikenhout Inc. PID 14-011-30-004-03**

Fuller moved **Buckley** supported to postpone SPR 2018-03 Eikenhout Inc., PID 14-011-30-004-03 on the condition that the applicant provides a plan set that combines the parcels meeting the requirements of the zoning ordinance 8.1b, submit a new site plan showing sidewalks, and obtain all outside approvals. **Vote: Ayes: 8 Nays 0. Motion carried.**

C. SPA 2018-01 Amendment to site plan SPR 2017-08 for location of sidewalks along Broomfield Rd.

Webster moved **LaBelle II** supported to postpone action until the March meeting, per the request of the applicant. **Vote: Ayes: 5 Nays 3. Motion carried.**

Other Business

A. Election of Officers for 2018

Fuller nominated Squattrito as Chair, he accepted, there were no other nominations.

Shingles moved **Darin** supported to approve the nomination of Squattrito as Chair of the Planning Commission for 2018. **Vote: Ayes: 8 Nays 0. Motion carried.**

Buckley nominated Mielke as Vice Chair, he accepted, there were no other nominations.

Shingles moved **Fuller** supported to approve the nomination of Mielke as Vice Chair of the Planning Commission for 2018. **Vote: Ayes: 8 Nays 0. Motion carried.**

Buckley nominated Fuller as Secretary, he accepted, there were no other nominations.

Mielke moved **Darin** supported to approve the nomination of Fuller as Secretary of the Planning Commission for 2018. **Vote: Ayes: 8 Nays 0. Motion carried.**

Mielke nominated Darin as Vice Secretary, he accepted, there were no other nominations.

Mielke moved **Buckley** supported to approve the nomination of Darin as Vice Secretary of the Planning Commission for 2018. **Vote: Ayes: 8 Nays 0. Motion carried.**

B. Review Planning Commission Bylaws

Webster moved **Mielke** supported to approve the changes made to the Bylaws at the February 20, 2018 meeting. **Vote: Ayes: 8 Nays 0. Motion carried.**

C. Discussion of memo regarding Township Planner recommendations

Discussion was held by the Planning Commissioners.

Extended Public Comment

Open 9:48 p.m.

No comments were offered.

Final Board Comment

Shingles – Glad to be back on the Planning Commission to serve the community.

Mielke – Commented sidewalk committee is greatly appreciated and addressed question to Township Planner regarding postponed Agenda Item – Target sidewalk question.

Adjournment – Chairman Squattrito adjourned the meeting at 9:51 p.m.

APPROVED BY:

Alex Fuller - Secretary
Mike Darin – Vice Secretary

(Recorded by Jennifer Loveberry)

Board Expiration Dates

Planning Commission Board Members (9 Members) 3 year term			
#	F Name	L Name	Expiration Date
1-BOT Representative			11/20/2020
2-Chair	Phil	Squatrito	2/15/2020
3- Vice Chair	Bryan	Mielke	2/15/2021
4-Secretary	Alex	Fuller	2/15/2020
5 - Vice Secretary	Mike	Darin	2/15/2019
6	Stan	Shingles	2/15/2021
7	Ryan	Buckley	2/15/2019
8	Denise	Webster	2/15/2020
9	Doug	LaBelle II	2/15/2019
Zoning Board of Appeals Members (5 Members, 2 Alternates) 3 year term			
#	F Name	L Name	Expiration Date
1-Chair	Tim	Warner	12/31/2019
2-PC Rep / Vice Chair	Bryan	Mielke	2/18/2021
3-Vice Secretary	Jake	Hunter	12/31/2019
4	Andy	Theisen	12/31/2019
5	Paul	Gross	12/31/2018
Alt. #1	John	Zerbe	12/31/2019
Alt. #2	Taylor	Sheahan-Stahl	2/15/2021
Board of Review (3 Members) 2 year term			
#	F Name	L Name	Expiration Date
1	Doug	LaBelle II	12/31/2018
2	James	Thering	12/31/2018
3	Bryan	Neyer	12/31/2018
Alt #1	Mary Beth	Orr	1/25/2019
Citizens Task Force on Sustainability (4 Members) 2 year term			
#	F Name	L Name	Expiration Date
1	Laura	Coffee	12/31/2018
2	Mike	Lyon	12/31/2018
3	Jay	Kahn	12/31/2018
4	Phil	Mikus	11/20/2020
Construction Board of Appeals (3 Members) 2 year term			
#	F Name	L Name	Expiration Date
1	Colin	Herron	12/31/2019
2	Richard	Klumpp	12/31/2019
3	Andy	Theisen	12/31/2019
Hannah's Bark Park Advisory Board (2 Members from Township) 2 year term			
1	Mark	Stuhldreher	12/31/2018
2	John	Dinse	12/31/2019
Chippewa River District Library Board 4 year term			
1	Ruth	Helwig	12/31/2019
2	Lynn	Laskowsky	12/31/2021



Board Expiration Dates

EDA Board Members (11 Members) 4 year term			
#	F Name	L Name	Expiration Date
1	Thomas	Kequom	4/14/2019
2	James	Zalud	4/14/2019
3	Richard	Barz	2/13/2021
4	Robert	Bacon	1/13/2019
5	Ben	Gunning	11/20/2020
6	Marty	Figg	6/22/2018
7	Sarvjit	Chowdhary	1/20/2022
8	Cheryl	Hunter	6/22/2019
9	Vance	Johnson	2/13/2021
10	Michael	Smith	2/13/2021
11	Mark	Perry	3/26/2018
Mid Michigan Area Cable Consortium (2 Members)			
#	F Name	L Name	Expiration Date
1	Kim	Smith	12/31/2020
2	Vacant		
Cultural and Recreational Commission (1 seat from Township) 3 year term			
#	F Name	L Name	Expiration Date
1	Brian	Smith	12/31/2019
Sidewalks and Pathways Prioritization Committee (2 year term)			
#	F Name	L Name	Expiration Date
1 BOT Representative	Phil	Mikus	7/26/2019
2 PC Representative	Denise	Webster	8/15/2018
3 Township Resident	Sherrie	Teall	8/15/2019
4 Township Resident	Jeremy	MacDonald	10/17/2018
5 Member at large	Barbara	Anderson	8/15/2019



Peter Gallinat, Township Planner
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Phone 989-772-4600 Ext. 241
Fax 989-773-1988

TO: Planning Commission
FROM: Township Planner

New Business

SUBJECT: A) SPR 2018-02 out lot for Aspen Dental 4097 Bluegrass Rd.

Applicant: Bluegrass Retail Management LLC

Owner: Target Corporation (Applicant has authorization to seek approval)

Location: 4097 Bluegrass Rd. MT PLEASANT, MI 48858

Current Zoning: B-4 (General Business District)

Adjacent Zoning: MP City to the north, B-5/B-4 to the south across the road, B-4 to the east, MP city to the west.

Future Land Use/Intent: Commercial: Shopping, office and professional services with mixed residential uses.

Current Use: Retail

Reason for Request: Aspen Dental

History: Current property is used for a Target retail store. This use has site plan approval from last decade. Currently the project has outside approval from ICTC, Isabella County Drain office for storm water management, Township Utilities, Mt. Pleasant Fire Department, and Isabella County Road Commission.

The City of Mt. Pleasant has expressed a need for a cross access plan between Target and the Mt. Pleasant Shopping Center. The Township has met with the developer of the current project to express the need for cross access between the two sites. The Township has been in contact with Target on the issue.

Objective of board: Final site plan was received 19 days (02-01-2018) before our regular scheduled meeting on February 20, 2018. The Planning Commission shall study the site plan and shall, within sixty days of its submittal to the Zoning Official, either approve or disapprove the proposed site plan. If the site plan is disapproved, the reasons for disapproval shall be stated.

Recommend at this time to review the plan for information and to approve at the March PC meeting. Reasons below

- Give Township further time to work with Target on cross access between the City and Township.

Peter Gallinat
Twp Planner

Union Township Site Plan Review Application 2015 Revision

FILL OUT THE FOLLOWING

- I. This application is for (circle one): Preliminary Site Plan Review; Final Site Plan Review;
- II. Applicant Name Bluegrass Retail Management, LLC
- III. Applicant Address 30200 Telegraph RD, Suite 205 Bingham Farms, MI 48025
- IV. Applicant Phone (248) 646-9999 Owner Phone _____
- V. Applicant is (circle) Contractor Architect/Engineer; Developer; Land Owner (skip V& VI)
Other
- VI. Land Owner Name Target Corporation
- VII. Land Owner Address 1000 Nicollet Mall, TPN-12H, Minneapolis, MN 55403
- VIII. Project/Business Name Target Outlet
- IX. Fill out check list that follows. You must check off that each item has been included in the drawing. If an item is not going to be included in the construction, note that in the comment area. For the first three items, check off if you have made the required submittals to other reviewing agencies.

SUBMITTALS TO OTHER AGENCIES		OFF
Storm water management plan approval prior to application. Reviewed by the County Engineer	<input checked="" type="checkbox"/>	Copy of Union Township Storm Water Management Plan available upon request. Submit (2) copies of plan and calculations directly to the Isabella County Engineer, contact Bruce Rohrer at (989) 772 0911, ext. 231. Any review fees are additional.
All curb cuts, acceleration/deceleration lanes, additional drives, and other matters pertaining to roads to be approved by MDOT or Isabella County Road Commission prior to application.	<input checked="" type="checkbox"/>	MDOT (M 20, BR 127 sites) at (989) 773 7756. Contact Isabella County Road Commission (all other county roads) at (989) 773 7131. Submit (3) copies.
Mt. Pleasant Fire Dept.	<input checked="" type="checkbox"/>	Sgt Randy Keeler (989) 779-5122, (2) copies
Isabella Co Transportation Commission (ICTC)	<input checked="" type="checkbox"/>	Rick (989) 773 2913, (2) copies
WELLHEAD PROTECTION REPORTING FORMS (Required for all Site Plans)		
Hazardous Substances Reporting Form Part I and II (Forms included in this packet)		Kim Smith (989) 772-4600 ext 224 ksmith@uniontownshipmi.com
PERMIT INFORMATION - DEQ Check List		
SITE PLAN REQUIREMENTS	1 Of	Comments - (also indicate any features which will not be included in the development or are not applicable)
Name and addresses of Property Owner	<input checked="" type="checkbox"/>	
Name and Address of Applicant	<input checked="" type="checkbox"/>	
Provide Construction Type (per Mi Building Code) and if sprinkled, (assume Type IVb, un-sprinkled if not provided)	<input checked="" type="checkbox"/>	

Union Township Site Plan Review Application 2015 Revision

The date, north arrow and scale. The scale shall be not less than 1"= 20' for property under three (3) acres and not more than 1"=40' for property greater than three acres.	<input checked="" type="checkbox"/>	
All lot and/or property lines are to be shown and dimensioned, including building setback lines	<input checked="" type="checkbox"/>	
The location and dimensions of all existing and proposed: fire hydrants (within 400 feet of building) - - -	<input checked="" type="checkbox"/>	
drives, -----	<input checked="" type="checkbox"/>	
sidewalks, (required) -----	<input checked="" type="checkbox"/>	
curb openings, -----	<input checked="" type="checkbox"/>	
acceleration/deceleration lanes, -----		
signs, -----	<input checked="" type="checkbox"/>	
exterior lighting on buildings and parking lots, - -	<input checked="" type="checkbox"/>	
parking areas (Including handicapped parking spaces, barrier-free building access, unloading areas), -----	<input checked="" type="checkbox"/>	
recreation areas, -----		
common use areas, -----	<input checked="" type="checkbox"/>	
areas to be conveyed for public use and purpose. -	<input checked="" type="checkbox"/>	
Elevation of building front, side, and back. Include Sign size, height, and design. Canopy heights extending over driveways accommodate Public Transportation	<input checked="" type="checkbox"/>	
Source of utilities. Public water and sewer approval by Union Township Utility Coordinator prior to application.	<input checked="" type="checkbox"/>	Note: Union Township policy is to issue sewer and water permits after application for a building permit. Applicant is advised to contact the utility department for availability prior to site plan review. The township does not coordinate other utility matters. Applicant to assure himself that site is suitable for septic systems, contact Central Michigan District Health Department
All dumpsters shall be screened from public view with an opaque fence or wall no less than six feet in height. Show location. (Note most refuse contractors require concrete pad to place dumpsters upon)	<input checked="" type="checkbox"/>	
The location and right-of-way width of all abutting roads, streets, alleys and easements.	<input checked="" type="checkbox"/>	
A locational sketch drawn to scale giving the section number and the nearest crossroads.	<input checked="" type="checkbox"/>	

Union Township Site Plan Review Application 2015 Revision

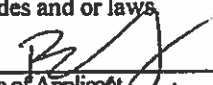
The zoning of the subject property and the abutting properties.	<input checked="" type="checkbox"/>	
The location, height and type of fences and walls.	<input checked="" type="checkbox"/>	
The location and detailed description of landscaping.	<input checked="" type="checkbox"/>	
For multiple family and mobile home parks, contour intervals shall be shown (two foot intervals for average slopes ten percent and under and five foot intervals for slopes over ten percent). Topography, however, is encouraged to be shown on all site plans.	<input checked="" type="checkbox"/>	
The location of all existing and proposed structures on and within one hundred feet of the subject property's boundary.	<input checked="" type="checkbox"/>	
For apartments, provide a count of bedrooms per building and total count of bedrooms for the project.	<input checked="" type="checkbox"/>	

APPLICANT COMMENTS

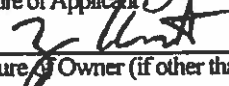
A 4,000 SF Dental office has been proposed within the existing Target parking lot. Along with the building associated parking, lighting, landscaping and stormwater facilities have been proposed.

Union Township Site Plan Review Application 2015 Revision

I submit the site plan and this application as a true representation of existing and proposed conditions. I agree to install all features as shown and to abide by conditions placed upon approval of this plan by the Union Township Planning Commission . False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and / or removal of work installed. Any changes to the Site Plan now or in the future must be approved by the Union Township Planning Commission or Zoning Administrator. Approval of this plan shall not constitute the right to violate any provisions of the Union Township Zoning Ordinance 1991-5, or other applicable building or state codes and or laws.


Signature of Applicant

1/26/18
Date


Signature of Owner (if other than applicant)

1/30/2018
Date

PLEASE PLACE OUR REVIEW ON THE 02/20/2018 (INSERT DATE)
PLANNING COMMISSION MEETING. An owners representative WILL / WILL NOT attend. You will not receive a reminder of the scheduled meeting.

Union Township Site Plan Review Application 2015 Revision

<u>Township use</u>	Review Comments
File # _____	_____
Fee Paid initial _____	_____
Receipt # _____	_____
Date received _____	_____
Date review completed by Zoning Administrator _____	
Place on the _____ Planning Commission Agenda	
Planning Commission Decision _____	

CHARTER TOWNSHIP OF UNION

SITE PLAN REVIEW HAZARDOUS SUBSTANCES REPORTING FORM

This form must be completed and submitted as part of the site plan for facilities which may use, store, or generate hazardous substances or polluting materials (including petroleum-based products)

Name of business: Proposed Dental Office

Name of business owner(s): Bluegrass Retail Management, LLC

Street and mailing address: 30200 Telegraph RD, Suite 205 Bingham Farms, MI 48025
(248) 646-9999


Telephone: _____

Fax: _____

Email: _____

I affirm that the information submitted is accurate.

Owner(s) signature and date:


Authorized Agent

Information compiled by:

Stonefield Engineering and Design

Part 1: Management of Hazardous Substances and Polluting Materials

1. Y Will the proposed facility store, use or generate hazardous substances or polluting materials (including petroleum-based products) now or in the future? If yes, please complete this form and submit with your site plan. A catalogue and map of natural resources on and near the site, including an assessment of groundwater vulnerability is required to be submitted with your plan.
2. Y N ~~Will the facility be~~
on-site?
3. Y N Will any hazardous substances or polluting materials be stored on-site? If yes, identify the storage location on the site plan. Describe the size and type of secondary containment structure here or on an attached page. Submit a map and/or diagram of facilities on the site related to groundwater protection, including secondary containment structures, loading/unloading areas, drinking water wells, septic systems, underground storage tanks and storm drain inlets.
4. Y N Will the new underground storage tanks be located less than 2000 feet from a drinking water well serving more than a single household?
5. Y N Are existing underground storage tanks on-site less than 200 feet from a drinking water well serving more than a single household?
- If the answer to questions 4 or 5 are yes, you may be in violation of the State of Michigan underground storage tank regulations . For specific requirements, please contact the MDEQ Underground Storage Tank Division. District Office Telephone: 989-894-6200 (Saginaw Bay District Office)
6. Y N Will the interior of the facility have general purpose floor drains? (general purpose floor drains should not be connected to a sanitary sewer system, stormwater drainage system, dry well or septic system). If yes, will the floor drain connect to: (circle one)
- a. on-site holding tank
b. on-site system
- The on-site system must be approved by the MDEQ.
Contact: MDEQ Waste Management Division.
District Office telephone: 989-894-6200 (Saginaw Bay District Office)
7. Y N Will hazardous substances or polluting materials be stored, used, or handled out-of doors near storm drains which discharge to lakes, streams, or wetlands? If yes, describe the type of catch basin or spill containment facilities which will be used (use an attached sheet with diagram if appropriate).

cc: Charter Township of Union Department of Public Works



PERMIT INFORMATION

www.michigan.gov/deqpermits

The Department of Environmental Quality (DEQ) has prepared a list of key questions to help identify what DEQ permits, licenses, or approvals of a permit-like nature may be needed. By contacting the appropriate offices indicated, you will help reduce the possibility that your project or activity will be delayed due to the untimely discovery of additional permitting requirements later in the construction process. While this list covers the existence of permits and approvals required from the DEQ, it is not a comprehensive list of all legal responsibilities. A useful way to learn whether other requirements will apply is to go through the Self-Environmental Assessment in the Michigan Guide to Environmental, Health, and Safety Regulations, online at: <http://www.michigan.gov/ehsguide>. Please call the Environmental Assistance Center at 800-862-9278 to talk with any of the DEQ programs noted below.

KEY QUESTIONS	Yes <input type="checkbox"/>	No <input type="checkbox"/>	PROGRAM, WEBPAGE AND CONTACTS
MISCELLANEOUS CONSTRUCTION			
<i>Air Quality Permit to Install:</i> Will your business involve the installation or construction of any process equipment that has the potential to emit air contaminants (e.g. dry sand blasting, boilers, standby generators)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Air Quality Division (AQD), <u>Permit Section</u>
<i>Asbestos Notification:</i> Does the project involve renovating or demolishing all or portions of a building? Notification is required for asbestos removal and required for all demolitions even if the structure never contained asbestos.	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	AQD, <u>Asbestos Program</u>
<i>Land and Water Featured Programs (Water Resources Division) - USACE Consolidated Permits:</i> Please consult the <u>Land and Water Management Decision Tree</u> document to evaluate whether your project needs a land and water management permit (i.e., Does the project involve filling, dredging, placement of structures, draining, or use of a wetland?).	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Water Resources Division (WRD), <u>Joint Permit Application</u>
<i>Soil Erosion and Sedimentation Control:</i> Does the project involve an earth change activity (including land balancing, demolition involving soil movement, and construction)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Soil Erosion and Construction Storm Water</u> , or Contact your <u>Local Agency</u>
<i>NPDES Storm Water Discharge from Construction Sites Notice of Coverage:</i> Does the project involve construction which will disturb one or more acres that come into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	NPDES <u>Storm Water Permits Program</u> , or appropriate <u>DEQ District Office</u>
<i>Public Swimming Pool Construction (Spas/Hot Tubs) Permits:</i> Will your business involve the construction or modification of a public swimming pool, spa or hot tub?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Public Swimming Pool Program</u> , or appropriate <u>DEQ District Office</u>
<i>Threatened and Endangered Species:</i> Does the project involve activities that would destroy a protected species of plant or animal or disturb a protected animal species?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Endangered Species Assessment, Threatened and Endangered Species Program</u> , 517-373-1552
Does the project involve <i>construction</i> or alteration of any <i>sewage collection or treatment</i> facility?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Appropriate <u>District Office</u> , WRD, Part 41 <u>Construction Permit Program</u>
Does the project involve construction of a facility that landfills, transfers, or processes of any type of <i>solid non-hazardous waste</i> on-site, or places <i>industrial residuals/sludge</i> into or onto the ground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Office of Waste Management and Radiological Protection (OWMRP), <u>Solid Waste</u> , Appropriate <u>DEQ District Office</u>
Does the project involve the construction of an on-site treatment, storage, or disposal facility for <i>hazardous waste</i> ?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Hazardous Waste Section, Treatment, Storage and Disposal</u>
WATER SUPPLY (More information, see: http://www.michigan.gov/deqwater, select "drinking water")			
I am buying water from my community water supply (i.e. city of Detroit or Grand Rapids)	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Contact your <u>Local Water Utility</u>
I have a private or other water supply well (Type III)	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Contact your (District or County) <u>Local Health Department</u>
I have a Non-Community Water Supply (Type II)	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Guide</u> , Contact your (District or County) <u>Local Health Department</u>
I am a community water supply (Type I)	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Community Water Supply</u> , <u>DEQ District Office Community Water Supply Program</u>

WASTEWATER MANAGEMENT			
Storm Water Discharge to Wetlands: Will storm water be collected, stored, or treated in a wetland area from a public road, industrial, commercial, or multi-unit residential development?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Great Lakes: Does the project involve construction, filling, or dredging below the Ordinary High Water Mark of one of the Great Lakes?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Inland Lakes and Streams: Does the project involve any dredging, filling, placement of structures, or the operation of a marina within an inland waterbody (e.g. lake, river, stream, drain, creek, ditch, or canal), enlargement of a waterbody, or excavation of a pond within 500 feet of a waterbody?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Storm Water Ponds and Discharges to Inland Lakes/Streams, or Great Lakes: Will storm water from any road or any other part of the development be discharged either directly or ultimately to an inland waterbody, or one of the Great Lakes; or will a storm water pond be constructed within 500 feet of an inland waterbody?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Does the project involve placement of fill, earth moving, or placement of structures within the 100-year floodplain of a watercourse?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Does the project involve construction of a building or septic system in a designated Great Lakes high risk erosion area?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Shoreland Management</u>
Does the project involve dredging, filling, grading, or other alteration of the soil, vegetation, or natural drainage, or placement of permanent structures in a designated environmental area?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Shoreland Management</u>
Does the project propose any development, construction, silvicultural activities or contour alterations within a designated critical dune area?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Sand Dune Management</u>
Does the project involve construction of a dam, weir or other structure to impound flow?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Dam Safety Program</u>
CONSTRUCTION PERMITS (SECTOR SPECIFIC)			
Does the project involve the construction or alteration of a water supply system or sewage disposal system for a manufactured housing project?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Office of Drinking Water & Municipal Assistance (ODWMA)
Does the project involve a subdivision or site condominium project utilizing individual on-site subsurface disposal systems or individual wells?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA
Does the project involve the construction or modification of a campground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Campgrounds program</u>
Does the project involve the construction or modification of a public swimming pool?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Swimming pools program</u>
OPERATIONAL PERMITS			
Renewable Operating Permit: Does your facility have the potential to emit any of the following: 100 tons per year or more of any criteria pollutant; 10 tons per year or more of any hazardous air pollutant; or 25 tons per year or more of any combination of hazardous air pollutants?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	AQD, <u>Permit Section</u>
NPDES: Does the project involve the discharge of any type of wastewater to a storm sewer, drain, lake, stream, or other surface water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, Appropriate <u>DEQ District Office</u> , or <u>National Pollutant Discharge Elimination (NPDES) Permit Program</u>
Does the facility have industrial activity that comes into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Permits Section</u> , or appropriate <u>DEQ District Office</u>
Does the project involve the discharge of wastewaters into or onto the ground (e.g. subsurface disposal or irrigation)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Groundwater Permits Program</u>
Does the project involve the drilling or deepening of wells for waste disposal?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Office of Oil, Gas and Minerals (OOGM)</u>
Does the project involve landfilling, transferring, or processing of any type of solid non-hazardous waste on-site, or placing industrial residuals/sludge into or onto the ground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>OWMRP</u> or Appropriate <u>DEQ District Office</u>

Does the project involve the on-site treatment, storage, or disposal of hazardous waste?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Hazardous and Liquid Waste</u>
Does the project require a site identification number (EPA number) for regulated waste activities (used oil, liquid waste, hazardous waste, universal waste, PCBs)? (<u>Web Site</u>)	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, Appropriate <u>DEQ District Office</u>
Does the project involve the receipt, possession, manufacture, use, storage, transport, transfer, release, or disposal of radioactive material in any form?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Radioactive Material and Standards Unit</u>
Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP <u>Radioactive Material and Standards Unit</u>
Do you desire to develop a withdrawal of over 2,000,000 gallons of water per day from any source other than the Great Lakes and their connecting waterways? Or, do you desire to develop a withdrawal of over 5,000,000 gallons of water per day from the Great Lakes or their connecting waterways?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, DWEHS, <u>Source Water Protection Unit</u>
CHEMICAL ADDITION PROJECTS			
Are you using chemicals or materials in, or in contact with, drinking water at any point in the water works system?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, Appropriate <u>DEQ District Office, Public Water Supply Program</u>
Are you applying a chemical treatment for the purpose of aquatic nuisance control (pesticide/herbicide etc) in a water body (i.e. lake, pond or river)? (5.	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Aquatic Nuisance Control and Remedial Action Unit</u>
Are you applying materials to a water body for a water resource management project (i.e. mosquito control treatments, dye testing, or fish reclamation projects)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Surface Water Assessment Section</u>
OPERATIONAL PERMITS (SECTOR SPECIFIC)			
Does the project involve the transport of some other facility's non-hazardous liquid waste?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Transporter Program</u>
Does the project involve the transport hazardous waste?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Transporter Program</u>
Does your facility have an electric generating unit that sells electricity to the grid and burns a fossil fuel?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	AQD, <u>Acid Rain Permit Program</u>
Is the project a dry cleaning establishment utilizing perchloroethylene or a flammable solvent in the cleaning process?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	DEQ, AQD, <u>Dry Cleaning Program</u>
Does your laboratory test potable water as required for compliance and monitoring purposes of the Safe Drinking Water Act?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	DEQ, <u>Laboratory Services Certifications</u>
Does the project involve the generation of medical waste or a facility that treats medical waste prior to its disposal?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Medical Waste Regulatory Program</u>
Does the project involve transport of septic tank, cesspool, or dry well contents or the discharge of septage or sewage sludge into or onto the ground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Septage Program</u>
Do you store, haul, shred or process scrap tires?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Scrap Tire Program</u>
Does the project involve the operation of a public swimming pool?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Public Swimming Pools Program</u>
Does the project involve the operation of a campground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Campgrounds</u>
Do you engage in the business of hauling bulk water for drinking or household purposes (except for your own household use)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Water Hauler Information</u>
PERSONAL LICENSES/CERTIFICATIONS			
Are you designated by your facility to be the Certified Operator to fulfill the requirements of a wastewater discharge permit (NPDES including Storm	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Operator Training, Storm Water Program</u>

Water or Groundwater)?		
Are you a drinking water operator in charge of a water treatment or water distribution system, back-up operator, or shift operator?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	WRD, <u>Operator Training</u>
Are you a water-well drilling contractor, pump installer, dewatering well contractor or dewatering well pump installer?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	WRD, <u>Well Construction Unit</u>
OIL, GAS AND MINERALS		
Do you want to operate a central production facility (applies to oil and gas production facilities where products of diverse ownership are commingled)?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Petroleum Geology and Production Unit</u>
Does the project involve the removal of sand from a sand dune area within two (2) miles of a Great Lakes shoreline?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, Minerals and Mapping Unit, <u>Sand Dune Mining Program</u>
Does the project involve the diversion and control of water for the mining and processing of low-grade iron ore?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the surface or open-pit mining of metallic mineral deposits?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the mining of nonferrous mineral deposits at the surface or in underground mines?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve mining coal?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Do you want to change the status of an oil or gas well (i.e. plug the well)?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve drilling of oil, gas, brine disposal, secondary recovery, or hydrocarbon storage wells?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve plugging or deepening of an oil or gas well, or conveying rights in the well as an owner to another person?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve changing the status or plugging of a mineral well?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the drilling or deepening of wells for brine production, solution mining, storage, or as test wells?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOWMRP, <u>Radioactive Protection Programs</u>
STORAGE TANKS (CONSTRUCTION AND OPERATION)		
Does the project involve the installation of an aboveground storage tank for a flammable or combustible liquid (under 200 degrees Fahrenheit)?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Michigan Department of Licensing and Regulatory Affairs (DLARA) - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a compressed natural gas dispensing station with storage?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a liquefied petroleum gas container filling location or storage location that has a tank with a capacity of more than 2,000 gallons or has two (2) or more tanks with an aggregate capacity of more than 4,000 gallons?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation, removal, or upgrade of an underground storage tank containing a petroleum product or a hazardous substance?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a hydrogen system?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>

Union Township Site Plan Review Application 2015 Revision

UNION TOWNSHIP CONSTRUCTION CONTACTS

**Building & Zoning Permits
Sign Permit
Water and Sewer review
Site Plan Review**

Charter Township of Union
2010 S. Lincoln Rd
Mt. Pleasant, MI 48858

(989) 772 4600 (switchboard)
(989) 773 1988 (FAX)

Building Official
Randy Robinson - Ext. 227
rrobinson@uniontownshipmi.com

Zoning Administrator
Peter Gallinat - Ext. 241
pgallinat@uniontownshipmi.com

Public Works Coordinator
Kim Smith - Ext. 224
ksmith@uniontownshipmi.com

Road Permits
(submit (2) copies of site plan directly to proper authority prior to Site Plan Review)

State Highways M 20 and US 127 (portions of E. Pickard Rd, E Remus Rd, and Mission Rd)

MDOT
1212 Corporate Drive
Mt. Pleasant, MI 48858
(989) 773-7756 FAX 775 6329

All other roads

Isabella County Road Commission
2261 E. Remus Rd
Mt. Pleasant, MI 48858
(989) 773 7131 (FAX) 772 2371

ICTC
2100 E Transportation Dr
Mt. Pleasant, MI 48858
(989)772-9441

Union Township Site Plan Review Application 2015 Revision

Storm Water Management Plan

Submit (2) copies of Storm Water Management Plan directly to county engineer prior to Site Plan Review
Code - Union Township Ord. 1992-9 Storm Water Management

Isabella County Building

Resource Management
ATTN: Bruce Rohrer PE
200 N. Main St.
Mt. Pleasant, MI 48858

(989) 772 0911 Ext. 231 (FAX) 773 7431

Plumbing, Electrical, Mechanical Permits

Isabella County Building

Inspections

ATTN: (SEE FOLLOWING LIST)

200 N. Main St.

Mt. Pleasant, MI 48858

(989) 772 0911 Ext. (SEE FOLLOWING) (FAX) 773 7431

Electrical Inspector
Tim Wardwell - Ext. 230

Plumbing and Mechanical Inspector
Doug Elias - Ext. 228

Fire Department Review

Sgt. Randy Keeler

804 E. High St.

Mt. Pleasant, MI 48858

((989) 779-5122 (FAX) 773 4020

rkeeler@mt-pleasant.org

Addressing

Isabella County Building Official (989) 772 0911, Ext 228

Miscellaneous

Phone - GTE (800) 483 5600, Verizon (800) 483 4000

Gas/Electric - Consumer Energy (800) 572 4788, MichCon (800) 477 4747 Central MI Dist. Health Dept. (989) 773

5921

Miss Dig (800) 482 7171



COMMERCIAL REAL ESTATE SERVICES

Matt Friday
Senior Vice President

CBRE, Inc.

August 18, 2017

Gabe Schuchman
ALIRG USA
30200 Telegraph Rd
Suite 205
Bingham Farms MI 48025

1900 LaSalle Plaza
800 LaSalle Ave
Minneapolis, MN 55402

+1 612 336 4209 Tel
+1 952 831 8023 Fax

Matt.friday@cbre.com
www.cbre.com/matt.friday

**Re: NON-BINDING LETTER OF INTENT REGARDING PROPOSED SALE OF
EXCESS LAND AT TARGET STORE T-924 MT PLEASANT MI**

Dear Gabe:

The purpose of this letter is to set forth some of the basic terms and conditions of the potential purchase by the undersigned (“Buyer”) of a portion of property located at the site of the Target store referred to above. The terms set forth in this letter are non-binding and subject to the approval of Target’s management. Such terms may be incorporated into an “Option Agreement” negotiated and signed by the parties, as contemplated below.

1. **Seller:** Target Corporation (“Target” or “Seller”), a Minnesota corporation
2. **Buyer:** Alrig USA Acquisitions, LLC. (“Buyer”), a Michigan limited liability company.
3. **Property:** The real property (“Property”) located near the Target store located at the 4097 E. Blue Grass Road, Mt Pleasant MI consisting of approximately 0.7 ± acres of land, identified on the preliminary site plan attached hereto as Exhibit A (the “Site Plan”).
4. **Purchase Price:** The Purchase Price shall be payable in all cash (by wire transfer of immediately available funds) at closing.
5. **Property Condition:** “AS IS, WHERE IS, AND WITH ALL FAULTS”
6. **Use:** Development of an approximately 3,750 square foot building single tenant building initially intended to be used for Aspen Dental. Buyer must operate the Property in accordance with all matters of record, all applicable governmental requirements and

the use restrictions set forth on Exhibit B, which will be incorporated into a separate agreement or declaration to be recorded against the Property at Closing. Such use restrictions will be effective for 60 years.

7. **Investigation of Property:** Following the effective date of the Option Agreement, Buyer will have until January 5, 2018 (“**Inspection Period Expiration Date**”) to inspect and investigate the Property (the “**Inspection Period**”).
8. **Option Term and Fee:** Upon execution of the Option Agreement, Buyer must deposit into escrow ten thousand dollars (the “**Initial Option Deposit**”) with a title company approved by Target (“**Title Company**”) of which one thousand dollars) is immediately non-refundable. To continue the term of the option through February 1, 2018 (“**Option Expiration Date**”), Buyer must make a second deposit in the amount of ten thousand dollars (“**Additional Option Deposit**”) on or before the Inspection Period Expiration Date. At 5:00 p.m. Minneapolis time on the Inspection Period Expiration Date, the Additional Option Deposit and the Initial Deposit (collectively, the “**Option Deposit**”) will become non-refundable. If Buyer exercises its option, the closing will occur no later than the Option Expiration Date and the Option Deposit will be credited towards the Purchase Price.
9. **Title/Escrow Fees/Seller’s Expenses:** Target will provide a commitment for title insurance. The premium for any title insurance policy desired by Buyer, including endorsements, will be paid by Buyer. Target will pay any recording and transfer fees. Escrow fees will be divided evenly between Target and Buyer.

Buyer must reimburse Target for any out-of-pocket costs incurred by Target relating to the following items (“**Seller’s Expenses**”) (a) the issuance and/or cancellation of the title commitment, (b) fees paid to outside consultants relating to the preparation and review of the survey, subdivision and/or site plan of the Property, (c) Buyer’s pursuit of permits, approvals or other governmental authorizations, (d) fees paid to outside consultants for review of development plans, (e) preparation of any documentation necessitated in furtherance of the development plans, (f) preparation and review of exhibits by outside consultants, and (g) fees incurred by Target in obtaining so-called ownership and encumbrance report(s) from the Title Company.

10. **Subdivision and Platting/Survey:** If it is necessary to cause the Property to be platted or subdivided either separately or in conjunction with the balance of the Target property, Buyer will be responsible, at its sole cost and expense, as a condition to closing, to cause such platting or subdivision procedure to be satisfied. Buyer will provide Target with a copy of an ALTA survey of the Property and the balance of the Target store tract at Buyer’s expense. Any updates to the survey will be paid by Buyer.

11. Signage:

Freestanding Signage on Property Unless restricted by recorded documents or governmental requirements, Buyer may place one freestanding sign on the Property.

Presence on Shopping Center Signage Buyer may not place a panel on shared shopping center signage.

Building Signage Unless restricted by recorded documents or governmental requirements, Buyer may place building signage on up to 2 sides of the building.

12. Public Entitlements: Buyer, at Buyer's sole cost and expense, will be responsible for obtaining all government approvals and permits. Target may terminate the Option if (a) Buyer has not submitted all of its applications for public entitlements by October 31, 2017 or (b) Target determines that development of the Property in accordance with Buyer's plans will cause the balance of the Target store tract to violate any governmental requirements.

13. Repurchase Agreement: At closing, pursuant to a separate Repurchase Agreement, Target will be granted the right to re-acquire the Property for the Purchase Price if (i) construction has not commenced within 12 months of closing, or (ii) construction is not completed within 24 months of commencement.

14. Development/Use Restriction Agreements Buyer must operate and develop the Property in accordance with all governmental requirements, all matters of record and the use restrictions set forth on Exhibit B.

At or before closing, the Property may be encumbered with the following:

At closing, Target will record a separate declaration or other agreement governing the operation, improvement and development of the Property, including relevant matters contemplated by this letter ("Declaration").

15. Parking: The parking ratio requirement for the Property set forth in the Declaration/Amendment to Governing Document(s) will be 4 spaces/1,000 square feet for retail use and 10 spaces/1000 square feet for restaurant use.

16. Building Height/Floor Area: The building height set forth in the Declaration or Amendment to Governing Document(s) will be limited to 22 feet or one story with a 24 foot architectural feature limited to 25% of the length of the wall and the total gross floor area of all improvements on the Property will be limited to 3750 square feet.

17. Maintenance and Easements:

Reservation of Easements by Seller

In the Declaration, Target will reserve easements (as there are currently public dedicated easements that exist) at closing over the Property to maintain the following:

- Existing utilities and facilities that benefit the balance of the Target store tract.
- An access easement allowing access to the Property
- Storm Water Drainage

Easements to be Granted to Buyer

In the Declaration, Buyer will be granted easements at closing over the balance of the Target store tract for the following:

- An access easement allowing access to the Property
- Storm Water Drainage
- Utility lines

Maintenance of Property

Pursuant to the Declaration, Buyer will maintain the building and grounds on the Property at its sole cost and expense, unless existing agreements provide otherwise.

Maintenance Fees

All costs associated with maintaining the Property and the balance of the Target store tract will be equitably allocated between Buyer and Target. Buyer shall pay Target an annual fee of \$2,500 with regards to maintenance of the common area. The fees paid by Buyer to Target will be subject to a 10% increase every 5 years. The maintenance fees will be in addition to any share pertaining to the Property under any other agreements.

18. Development Plans: Within thirty (30) days from the execution of the Option Agreement, Buyer will submit to Target for approval a professionally prepared (a) full site plan overlay (including the balance of the Target store tract) showing finished grades, drainage scheme, location of building(s) and other supportive facilities, (b) architectural drawings for the proposed improvements (including elevations for the exposed sides of the building, color scheme and materials), (c) a traffic engineer's opinion of impact of the proposed improvements, (d) an engineer's proposed infrastructure improvements plan and utility relocation plan (if applicable), (e) an access and utility easement proposal (if applicable), (f) the survey described in paragraph 10 above, and (g) the preliminary plat described in paragraph 10 above. Parking ratios

should be described on the site plan overlay and delineated per Target's requirements and city code and labeled on a grid. A preliminary proposed site plan is attached hereto as Exhibit A.

Development plans must not (i) require the building on the balance of the Target store tract to be modified in order to address building code fire resistance requirements, nor (ii) negatively impact any governmental requirements, conditions, or variances associated with the balance of the Target store tract.

Target's approval of the Development plans may be contingent upon Buyer providing a letter of credit, issued by a bank approved by Target, naming Target as beneficiary. The letter credit will be in the amount of 125% of the estimated cost to complete the construction work to be performed on the balance of the Target Tract.

19. **Construction Black-Out Dates:** No construction will be permitted on the Property during the months of October, November, December or January.
20. **Review of Offer(s)/Right to Reject:** Target expressly reserves the right, in its sole discretion, to review and/or reject any or all expressions of interest or offers to purchase the Property, and/or to terminate discussions with any person or entity at any time with or without notice.
21. **Real Estate Tax Proration:** All real estate taxes and current installments of special assessments payable in the calendar year during which the Closing occurs shall be prorated as of the Closing Date (regardless of the year with respect to which the same have been assessed), and any real estate taxes and installments of special assessments that may be or are payable after the calendar year during which the Closing occurs shall be assumed by Buyer without reduction in or credit against the Purchase Price. If the actual amount of real estate taxes payable in the calendar year during which the Closing occurs is not available, then a proration shall be made based on the preceding calendar year's amount and no further adjustment shall be made following the Closing.
22. **Brokers:** Any real estate brokerage commission payable to CBRE Inc. ("Broker") in connection with a closing of the sale contemplated hereby will be paid in accordance with a separate agreement between Target and Broker. If Buyer is represented by a co-broker, said co-broker will be paid by Broker in accordance with a separate agreement between Broker and co-broker.
23. **Proposal remains subject to:** Target's internal management approvals.

As stated above, the Property will be conveyed "AS IS, WHERE IS, AND WITH ALL FAULTS." Target will not provide any representations or warranties related to the environmental condition or the physical status of the site or improvements. Buyer must perform its own due diligence and to determine the condition and suitability of the Property for Buyer's intended use without any reliance upon information provided by Target. Upon the execution of the Option Agreement, Target may provide to Buyer, for informational purposes only, copies of its environmental assessment reports, if any, obtained in connection with marketing the Property.

This letter does not and is not intended to contractually bind the parties and neither party has the right to make a claim against the other based upon this letter or based upon "part performance," "detrimental reliance," obligations of "good faith" or "fair dealing," or other causes of action. This letter solely represents an expression of the basic terms and conditions that may be incorporated into an Option Agreement, if executed by both parties, in both party's sole discretion. This letter does not require either party to negotiate in good faith or proceed to the completion of an Option Agreement.

If the foregoing reflects your understanding of our discussions, please indicate by signing the second copy of this letter in the place indicated and return it to me. If I have not received a signed copy of this letter by August 11, 2017 this proposal will be withdrawn.

Very truly yours,



Matthew Friday
Senior Vice President

Cc: Zack Kartak (Target)



Purchaser:

Agreed and Accepted: _____

Print Name: Gabriel Schuckman

Date: 8/18/17

EXHIBITS

Exhibit A: Preliminary Site Plan

Exhibit B: Use Restrictions

Peter Gallinat

From: Kim Smith
Sent: Thursday, February 08, 2018 8:53 AM
To: Peter Gallinat
Cc: Harvey, Mitchell; Angela Schofield; Modestow, Jake
Subject: RE: 4097 East Blue Grass, Union Township MI Union Township MI
Attachments: FW: 4097 East Blue Grass, Union Township MI Union Township MI

Peter,

Good morning, I have reviewed the site plan for Aspen Dental , which you provided to me on February 7, 2018, via email. For the purpose of site plan approval only this parcel has township water available under the north lane of Bluegrass Road. The site plan provided shows water being serviced from a private line belonging to Target. This project will be required to hookup to the Township 12" water main located on the north side of Bluegrass Road. Prior to permits being issued for this project full plans and profiles for the water lead will need to be reviewed and approved by the Township Department of Public Works.

Township sewer is available on the south side of Bluegrass Road and for the purpose of site plan approval only the layout provided on the site plan is satisfactory.

Prior to permits being issued for this project full plans and profiles for the sewer lead will need to be reviewed and approved by the Township Department of Public Works.

Thank you,

Kim Smith



Department of Public Works
Charter Township of Union
2010 S. Lincoln Road
Mt. Pleasant, MI 48858
Phone (989) 772-4600 ext. 224
Fax (989) 773-1988
Visit us on the Web at
<http://www.uniontownshipmi.com>

"This institution is an equal opportunity provider, and employer."

From: Peter Gallinat
Sent: Wednesday, February 07, 2018 12:31 PM

Sam Ber Engineering

Bruce E. Rohrer, P.E.
957 Morey Drive
Mt. Pleasant, Michigan 48883
(989) 330-2150

February 7, 2018

Peter Galliant
Charter Township of Union Planner
2010 S. Lincoln Road
Mt. Pleasant, MI 48858

RE: Storm Water Management Plan for Proposed Dental Office/ Target Out Lot

Dear Mr. Galliant:

I have reviewed the Storm Water Management Plan prepared by Mitchell Harvey, E.I.T., of Stonefield Engineering & Design, LLC for the above captioned project located in part of the NW ¼ of Section 26, Union Township, located at 4097 East Bluegrass Road. The proposed plan is consistent with the Union Township Storm Water Ordinance because it is within the Target Store storm water plan limits and actually reduces the discharge by increasing grassed areas.

If you have any questions or need any further information, please feel free to contact me in my office.

Sincerely,



Bruce E. Rohrer, P.E.
Consulting Engineer
Isabella County

BER/taw

cc: Mitchell Harvey, E.I.T.,
Stonefield Engineering & Design, LLC



LOCATION MAP
SCALE 1" = 2,000'±

SITE DEVELOPMENT PLANS FOR TARGET OUTLOT PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID 14-026-10-011-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

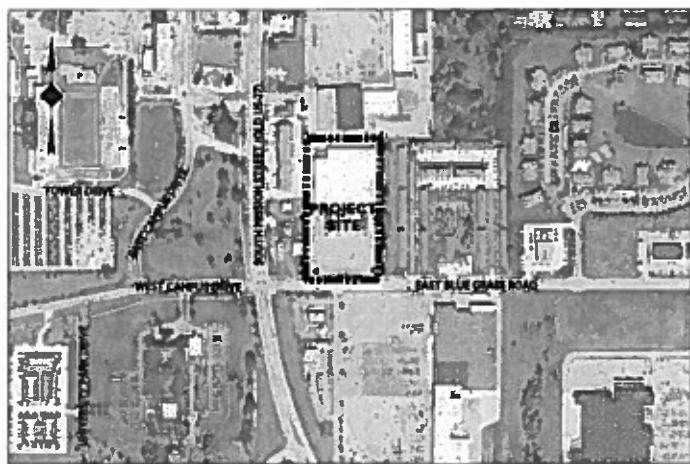
See comments
Patrick J. Gaffney, P. E.
Isabella County Road
Commission
02-05-2018

APPLICANT

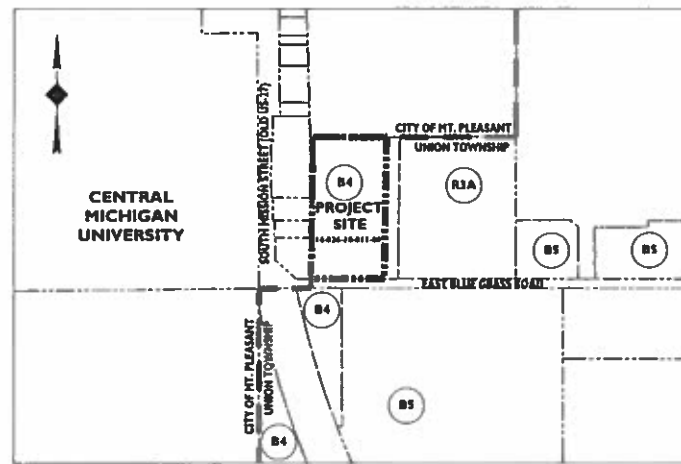
ALING USA ACQUISITIONS, LLC
2690 TELEGRAPH RD, SUITE 305
BUSHAM FARMS, MI 48811
(313) 448-0999

OWNER

TARGET CORPORATION
PO BOX 1458
MUSKEGON, MI 49869



AERIAL MAP
SCALE 1" = 300'±



TAX / ZONING / OTHER MAP
SCALE 1" = 300'±

PLANS PREPARED BY:



Royal Oak, MI · Long Island City, NY · Rutherford, NJ
www.stonefielddeng.com

28454 Woodward Avenue, Royal Oak, MI 48067
Phone 248.247.1115



Know what's below
Call before you dig.

PLAN REFERENCE MATERIALS:

- 1 THIS PLAN SET REPRESENTS THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
 - ALTA AND TOPOGRAPHIC SURVEY PREPARED BY BOWE PROFESSIONAL SERVICES COMPANY DATED 04/22/10
 - ARCHITECTURAL PLANS PREPARED BY XXXX DATED: _____
 - GEOTECHNICAL REPORT
 - AERIAL MAP OBTAINED FROM BOWLE EARTH PRO
 - LOCATION MAP OBTAINED FROM USGS ONLINE
 - ZONING INFORMATION OBTAINED FROM THE UNION TOWNSHIP ZONING MAP
- 2 ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
EXISTING CONDITIONS PLAN	C-2
DEVELOPMENT PLAN	C-3
SITE PLAN	C-4
GRADING PLAN	C-5
STORMWATER MANAGEMENT PLAN	C-6
UTILITY PLANS	C-7
LANDSCAPE PLAN	C-8
LANDSCAPE PLAN	C-9
SOIL EROSION & SEDIMENT CONTROL PLAN	C-10
CONSTRUCTION DETAILS	C-11

NO.	DATE	BY	DESCRIPTION
1	04/22/10	XXX	EXHIBITION FOR SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Royal Oak, MI · Long Island City, NY · Rutherford, NJ
www.stonefielddeng.com

28454 Woodward Avenue, Royal Oak, MI 48067
Phone 248.247.1115

SITE DEVELOPMENT PLANS
TARGET OUTLOT
PROPOSED DENTAL OFFICE

PARCEL ID: 14-026-10-011-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN



SCALE: ALL DIMS PROJECT IN: IN/FEET

COVER SHEET

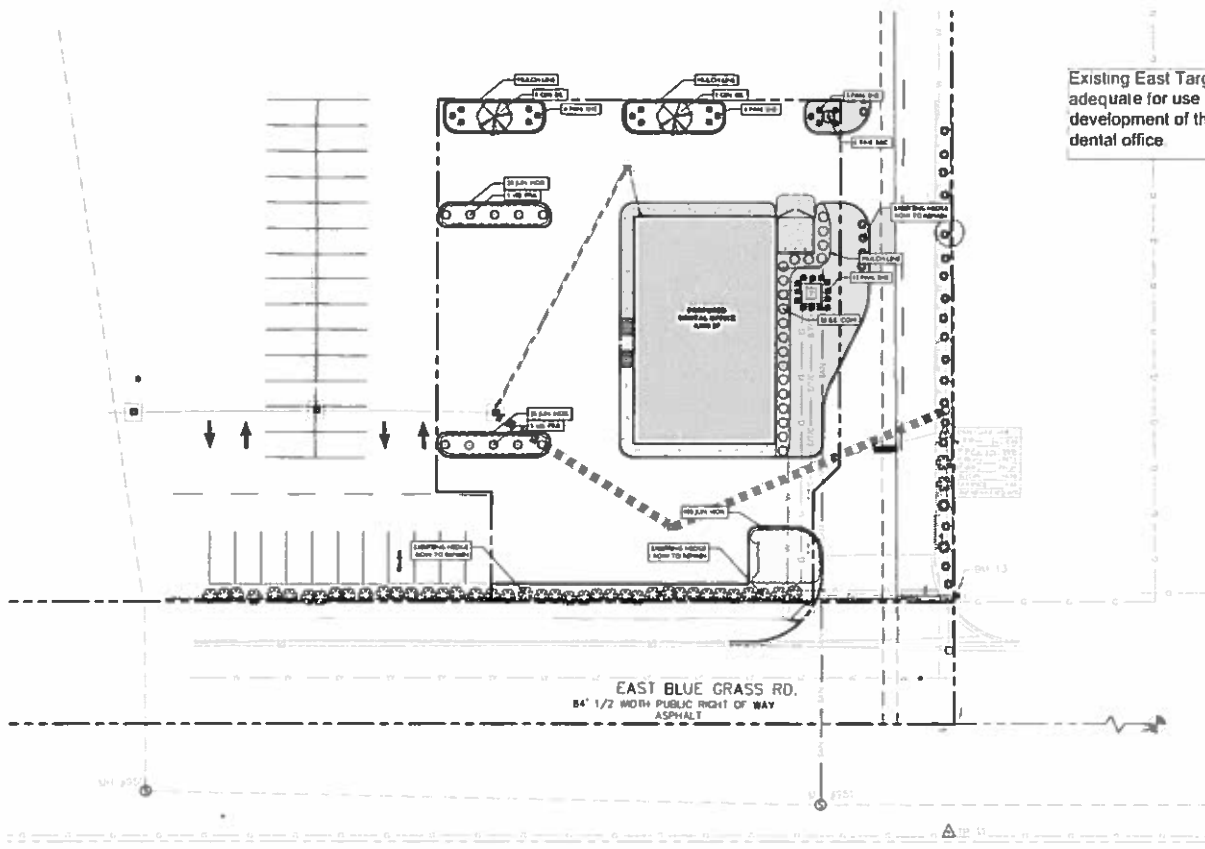
DATE: _____

C-1

PLANT SCHEDULE					
PLANT KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
DECIDUOUS TREES (BY TOTAL)					
DR 1A	3	DRHO BEECH 'NORFOLK BRITV'	NORFOLK BRITV	1 1/2" CAL.	AAA
TALL SHRUBS (BY TOTAL)					
TA 1A	1	TAMM SACCAFA SPREADING	SPREADING BRUSHY WAX	3" 3/4" CAL.	AAA
VE 1A	10	VERBENA FLORIBUNDA	FRANZOSE VERBENA	3" 3/4" CAL.	AAA
AL 1A	10	ALY ELABRA 'CORNFEST 4'	CORNFEST BIRDSEED	3" 3/4" CAL.	AAA
SHRUBS COVERED (BY TOTAL)					
JAL 1A	100	JUNIPERO HORIZONTALIS	SPREADING JUNIPER	1 GAL.	MP D.C.
GRASSES (BY TOTAL)					
GR 1A	10	PANICUM HIRAGATUM BREVICOLOM	BREVICOLOM SWITCH GRASS	1 GAL.	MP D.C.

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN QUANTITIES SHOWN ON THE LANDSCAPE PLAN AND BETWEEN THE PLANT LIST, THE PLANT LIST SHALL GOVERN.

TREE KEY		
PLANT KEY	PLANT KEY	COMMON NAME
DR 1A	DRHO BEECH	NORFOLK BRITV



Existing East Target Drive is adequate for use of additional development of the proposed dental office.

INSTALLATION NOTES:
 1. THE CONTRACTOR SHALL PROVIDE A GROUND JOB AS SHOWN FROM EXISTING TO THE PROPOSED BOUNDARY FROM L-1000 S.A.S. FROM TO CONSTRUCTION, BOUND IS TO BE REPORTED TO THE PROJECT LANDSCAPE ARCHITECT AND OWNER AND APPROVED, BEFORE PROCEEDING WITH CONSTRUCTION AND BEFORE ANY CONSTRUCTION BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE PUBLIC UTILITIES AND THE PUBLIC WORKS DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE PUBLIC UTILITIES AND THE PUBLIC WORKS DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE PUBLIC UTILITIES AND THE PUBLIC WORKS DEPARTMENT.

- LANDSCAPING NOTES:**
1. THE CONTRACTOR SHALL REMOVE ALL EXISTING GRASS AND LANDSCAPE PLANT TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE ON THE PLAN SET.
 2. THE CONTRACTOR SHALL REMOVE ALL EXISTING LANDSCAPE PLANT WITH A MINIMUM 1' RADIUS OF REMOVAL AND 10' RADIUS OF REMOVAL.
 3. THE CONTRACTOR SHALL REMOVE ALL EXISTING LANDSCAPE PLANT WITH A MINIMUM 1' RADIUS OF REMOVAL.
 4. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING LANDSCAPE PLANT UNLESS INDICATED OTHERWISE ON THE PLAN SET.
 5. THE CONTRACTOR IS REQUIRED TO LOCATE ALL UTILITY LINES IN AREA OF LANDSCAPING. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITY LINES AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE PUBLIC UTILITIES AND THE PUBLIC WORKS DEPARTMENT.
 6. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING LANDSCAPE PLANT UNLESS INDICATED OTHERWISE ON THE PLAN SET. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING LANDSCAPE PLANT UNLESS INDICATED OTHERWISE ON THE PLAN SET. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING LANDSCAPE PLANT UNLESS INDICATED OTHERWISE ON THE PLAN SET.



NO.	DATE	BY	DESCRIPTION
1			

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
 engineering & design
 May, Okla. 74
 Long Island City, NY
 1344 Woodland Avenue, Long Okla. 74 0047
 Phone 361.37.1115

SITE DEVELOPMENT PLANS
TARGET OUTLOT
PROPOSED DENTAL OFFICE

PARCEL ID: 1431411141
 1344 WOODLAND AVENUE
 LONG ISLAND CITY, NEW YORK
 QUEENSBORO COUNTY, NEW YORK

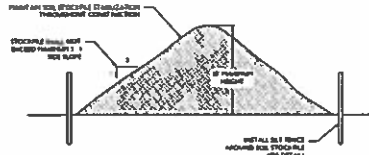
STONEFIELD
 engineering & design

SCALE: 1" = 30' PROJECT NO: 1431411141
 TITLE: LANDSCAPING PLAN
 SHEET NO: C-9



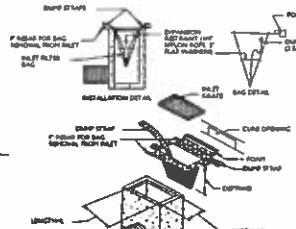
LOCATION MAP

SCALE: 1" = 2,000'±

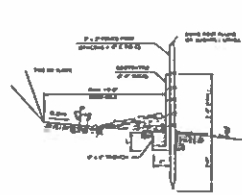


SOIL STOCKPILE DETAIL

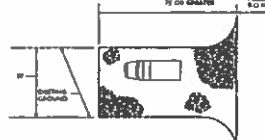
NOT TO SCALE



INLET FILTER BAG DETAIL



SILT FENCE DETAIL



STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE

NOTES:
1. STOCKPILE SHALL BE DEFINED AS 400' TO CONSTRUCT MATERIALS STORAGE ON LOTS OR AT CONSTRUCTION SITES.
2. STOCKPILE SHALL BE DEFINED AS 400' TO CONSTRUCT MATERIALS STORAGE ON LOTS OR AT CONSTRUCTION SITES.
3. STOCKPILE SHALL BE DEFINED AS 400' TO CONSTRUCT MATERIALS STORAGE ON LOTS OR AT CONSTRUCTION SITES.

NOTES:
1. SILT FENCE SHALL BE DEFINED AS 400' TO CONSTRUCT MATERIALS STORAGE ON LOTS OR AT CONSTRUCTION SITES.
2. SILT FENCE SHALL BE DEFINED AS 400' TO CONSTRUCT MATERIALS STORAGE ON LOTS OR AT CONSTRUCTION SITES.
3. SILT FENCE SHALL BE DEFINED AS 400' TO CONSTRUCT MATERIALS STORAGE ON LOTS OR AT CONSTRUCTION SITES.

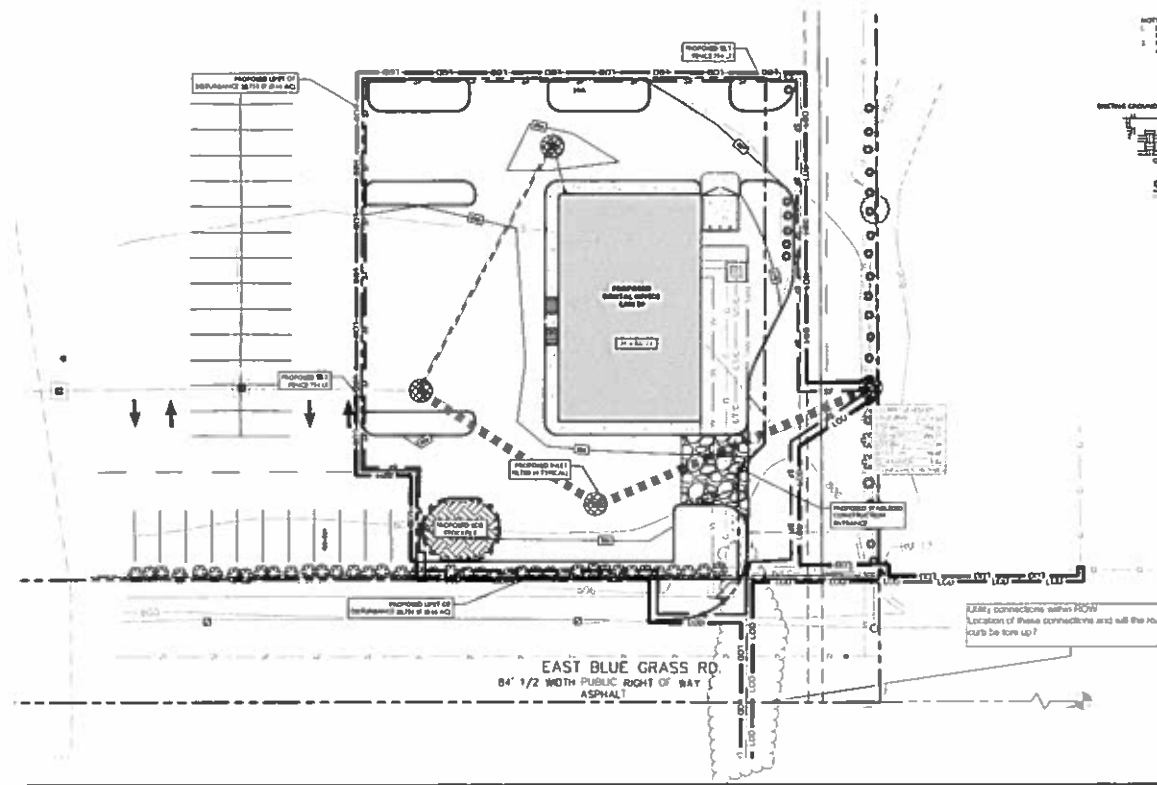
SYMBOL	DESCRIPTION
---	PROPERTY BOUNDARY
- - - -	ADJACENT PROPERTY BOUNDARY
---	PROPOSED LIMIT OF DISTURBANCE
---	PROPOSED SILT FENCE
---	PROPOSED TREE PROTECTION FENCE
---	PROPOSED STOCKPILE & EQUIPMENT STORAGE
---	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
---	PROPOSED EROSION CONTROL MEASURES

- SOIL EROSION AND SEDIMENT CONTROL NOTES**
1. THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL, IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
 2. THE CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL, IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL, AND QUALITY STANDARDS.
 3. THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES, BEFORE AND AFTER A PRESCRIPTION SHEET ISSUES. FROM 1. WITHIN THE CONTRACTOR SHALL MAINTAIN AN EROSION CONTROL LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.

- ENVIRONMENTAL NOTES**
1. THERE ARE NO SENSITIVE SPECIES ON SITE.
 2. THERE ARE NO SENSITIVE SPECIES ON SITE.
 3. THERE ARE NO SENSITIVE SPECIES ON SITE.
 4. THERE ARE NO SENSITIVE SPECIES ON SITE.
 5. ALL REMEDIATION MEASURES ARE BASED ON THE DATA.

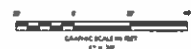
31A - LINDSEY LOAM	
SOIL CHARACTERISTICS	LOD
WATERLOGGING RISK GROUP	LOD
DEPTH TO RESTRICTIVE LAYER	4-6 INCHES
SOIL PERMEABILITY	6-8 INCHES
DEPTH TO WATER TABLE	1-2 INCHES

- SEQUENCE OF CONSTRUCTION**
1. INSTALL SILT FENCE AND CONSTRUCTION ENTRANCE (2) DAYS.
 2. INSTALL STOCKPILE AND EQUIPMENT STORAGE (2) DAYS.
 3. DEMOLITION AND SET ALL DISTURBED AREAS AND INSTALL GRASS.
 4. INSTALL SILT FENCE (2) DAYS.
 5. INSTALL CONSTRUCTION ENTRANCE (2) DAYS.
 6. CONSTRUCT EROSION CONTROL MEASURES (2) DAYS.
 7. LANDSCAPE, REVEGETATION AND SOIL RESTORATION (2) DAYS.
 8. REMOVE SILT FENCE (2) DAYS.
- NOTE: THE SEQUENCE OF CONSTRUCTION AND IS REFERRED TO ACT AS A GENERAL GUIDE TO THE CONTRACTOR THROUGHOUT ALL DISTURBED AREAS SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL MAINTAIN CONSTRUCTION LOGS THROUGHOUT CONSTRUCTION.



EAST BLUE GRASS RD.
64' 1/2" WIDTH PUBLIC RIGHT OF WAY
ASPHALT

Utility connections within ROW
Location of these connections and will the road curb be torn up?



NO.	DATE	BY	DESCRIPTION
1			

NOT APPROVED FOR CONSTRUCTION

STONEFIELD
engineering & design

Raymond W. Long, P.E., State Engineer
Long, Raymond W. Long, P.E., State Engineer
1944 Woodland Avenue, Ring City, MO 64867
Phone 361.307.1115

SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE

PARCEL ID: 14434-14434-14434
COUNTY: HAMILTON COUNTY, INDIANA
HAMILTON COUNTY, INDIANA

MOORE ENGINEERING & ARCHITECTURE

STONEFIELD
engineering & design

SCALE: 1" = 10'
PROJECT: 14434-14434-14434

SOIL EROSION & SEDIMENT CONTROL PLAN

04/20/20

C-10



Mount Pleasant Fire Department
804 E. High Street
Mount Pleasant, Mi 48858

Union Township Site Plan Review

Friday February 9, 2018

Dental Office-Target Outlet

4097 E Bluegrass RD
Parking Lot
Mt. Pleasant, MI 48858

A Site Plan Review was conducted on Friday February 9, 2018 and revealed the following requirements listed below.

ORDER TO COMPLY: Since these conditions are contrary to code, you must correct them upon receipt of this notice. Please provide our department the documentation that verifies compliance with the code.

This list shall not be considered all-inclusive, as other requirements may be necessary, additional requirements are located in Chapter 5 and appendixes B, C, and D of the 2012 Edition of the International Fire Code.

If you have any questions regarding this matter, please feel free to contact me at (989) 779-5122.

Violation Code

1 PROPERTY Identification

Proposed Dental Office
Target Outlet Parking Lot
4097 E. Bluegrass Rd.

4000 square Feet

ACCESS ROAD 150 FT Buildings within 150ft of Access Road

All portions of a building are required to be within 150 feet of an approved Fire Department access road, in accordance with Chapter 5, Section 503.1.1 of the 2012 Edition of the International Fire Code.

Site Plan meets above requirements.

ACCESS AND WATER Road and Water Supply

When fire apparatus access roads or water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2 of the 2012 Edition of the International Fire Code.

Union Township Site Plan Review

ACCESS ROAD LOAD Designed and Maintained to Support the

All fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities in accordance with Chapter 5, Sections 503.2.3 and 503.4 of the 2012 Edition of the International Fire Code.

BUILDING IDENTIFICATION Buildings Shall Have Address

Provide address identification numbers in accordance with Chapter 5, Sections 505.1 of the 2012 Edition of the International Fire Code or applicable to the City of Mt. Pleasant code of ordinances 150.01 Land Usage.

DUMPSTERS Dumpster Locations

Dumpster's and containers with an individual capacity of 1.5 cubic yards or more shall not be stored in buildings or placed within 5 feet of combustible walls, openings or combustible roof eave lines in accordance with Chapter 3, Section 304, and 304.3.3 of the 2012 Edition of the International Fire Code.

Appears as though site plan shows dumpster closer than 5 feet, verify distance.

KNOX BOX Knox Box Requirements and Location

Provide a Knox Key entry device and install it in approved location by the Fire Code Official, as in accordance with Chapter 5, Section 506.1, 506.1.1 and 506.2 of the 2012 Edition of the International Fire Code. (Go to Knoxbox.com and search by fire department or zip code - select "Mt. Pleasant Fire Department" and place order for the type of Knox box desired.)

WATER SUPPLY (GPM) Capable of Supplying the Required Fire

Provide fire hydrants capable of supplying the required fire flow in accordance with Chapter 5, Section 507 of the 2012 Edition of the International Fire Code. The number and spacing of fire hydrants is based on the construction type and square footage of the building in accordance with Appendix B and C and tables B105.1 and C105.1 of the 2012 Edition of the International Fire Code. (Contact Fire Department to verify locations.)

4000 square feet - 1750 gpm 1 hydrant required (existing hydrant on site)

Site Plan meets above requirements.

Keeler, Randy
Lieutenant
Mount Pleasant Fire Department

Peter Gallinat

From: Rick Collins [rcollins@ictcbus.com]
Sent: Wednesday, February 07, 2018 2:53 PM
To: Peter Gallinat; Modestow, Jake; Harvey, Mitchell
Subject: RE: 4097 East Blue Grass, Union Township MI Union Township MI

Peter,

I have spoken with Jake. I have no issue with the proposal.

Rick

From: Peter Gallinat [mailto:pgallinat@uniontownshipmi.com]
Sent: Wednesday, February 07, 2018 12:29 PM
To: Modestow, Jake <jmodestow@stonefieldeng.com>; Harvey, Mitchell <mharvey@stonefieldeng.com>
Cc: Rick Collins <rcollins@ictcbus.com>
Subject: FW: 4097 East Blue Grass, Union Township MI Union Township MI

Jake & Mitch,

These were comments I received back from ICTC

From: Rick Collins [mailto:rcollins@ictcbus.com]
Sent: Wednesday, February 07, 2018 12:12 PM
To: Peter Gallinat
Subject: RE: 4097 East Blue Grass, Union Township MI Union Township MI

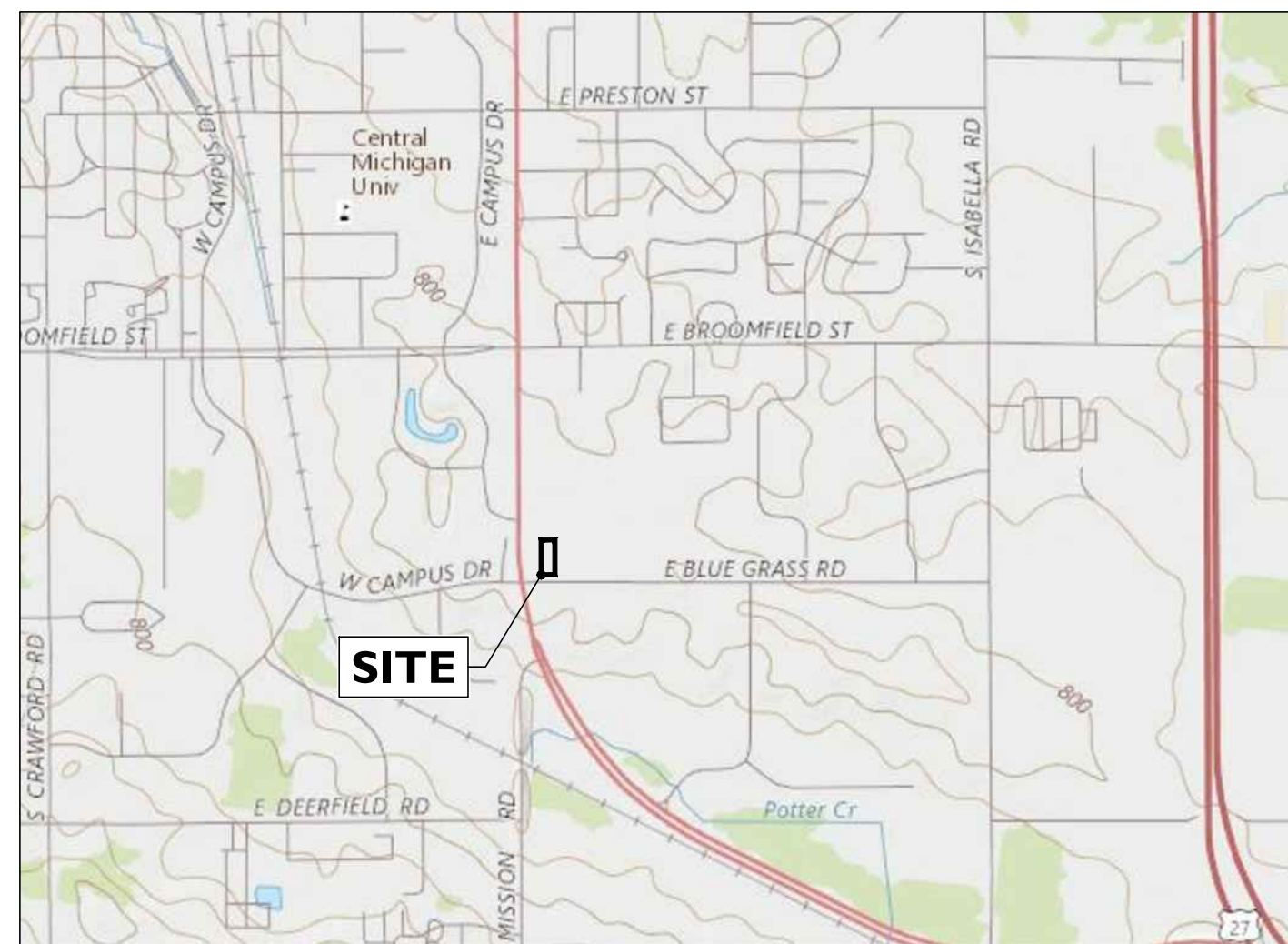
Peter,

My only concern would be with curbside loading and unloading to the main entrance to the building. It appears that the access into the Aspen parking lot will be on the North side of the building so for a bus to load with its passenger door facing the building it would have to enter the parking lot North of the building, travel South past the entrance of the building, turn around and head back North to the front door. Is that an accurate interpretation of the drawing? If there is a way for a bus to enter South of the building and be facing North at the lobby door area than I have no issue.



Rick Collins | Executive Director
2100 E. Transportation Dr | Mt. Pleasant, MI 48858
Phone 989.773.6766 | Fax 989.773.1873
rcollins@ictcbus.com
Visit our website at ictcbus.com

From: Peter Gallinat [mailto:pgallinat@uniontownshipmi.com]
Sent: Wednesday, February 07, 2018 10:56 AM
To: Rick Collins <rcollins@ictcbus.com>
Subject: FW: 4097 East Blue Grass, Union Township MI Union Township MI



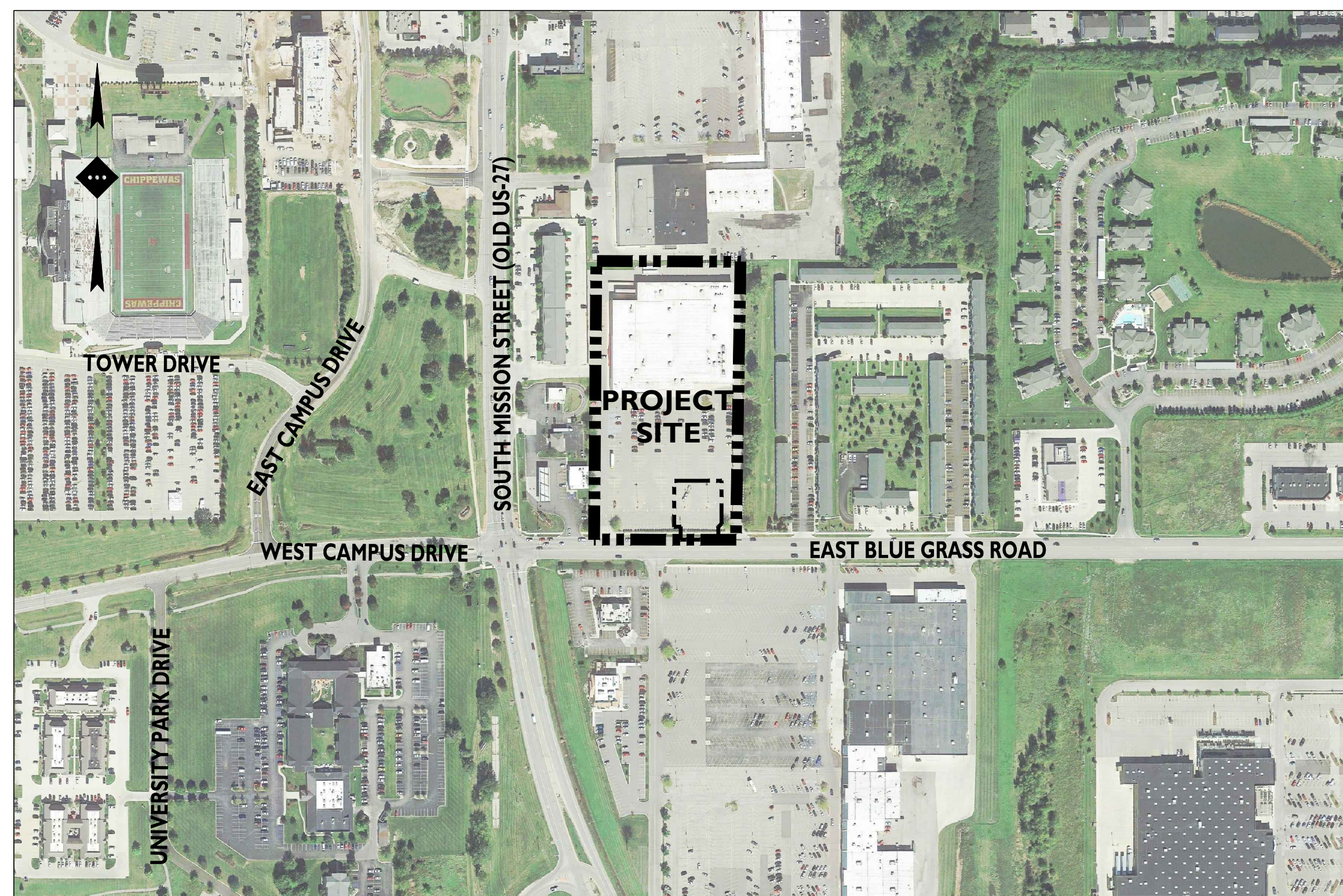
LOCATION MAP
SCALE: 1" = 2,000'±

SITE DEVELOPMENT PLANS FOR TARGET OUTLOT

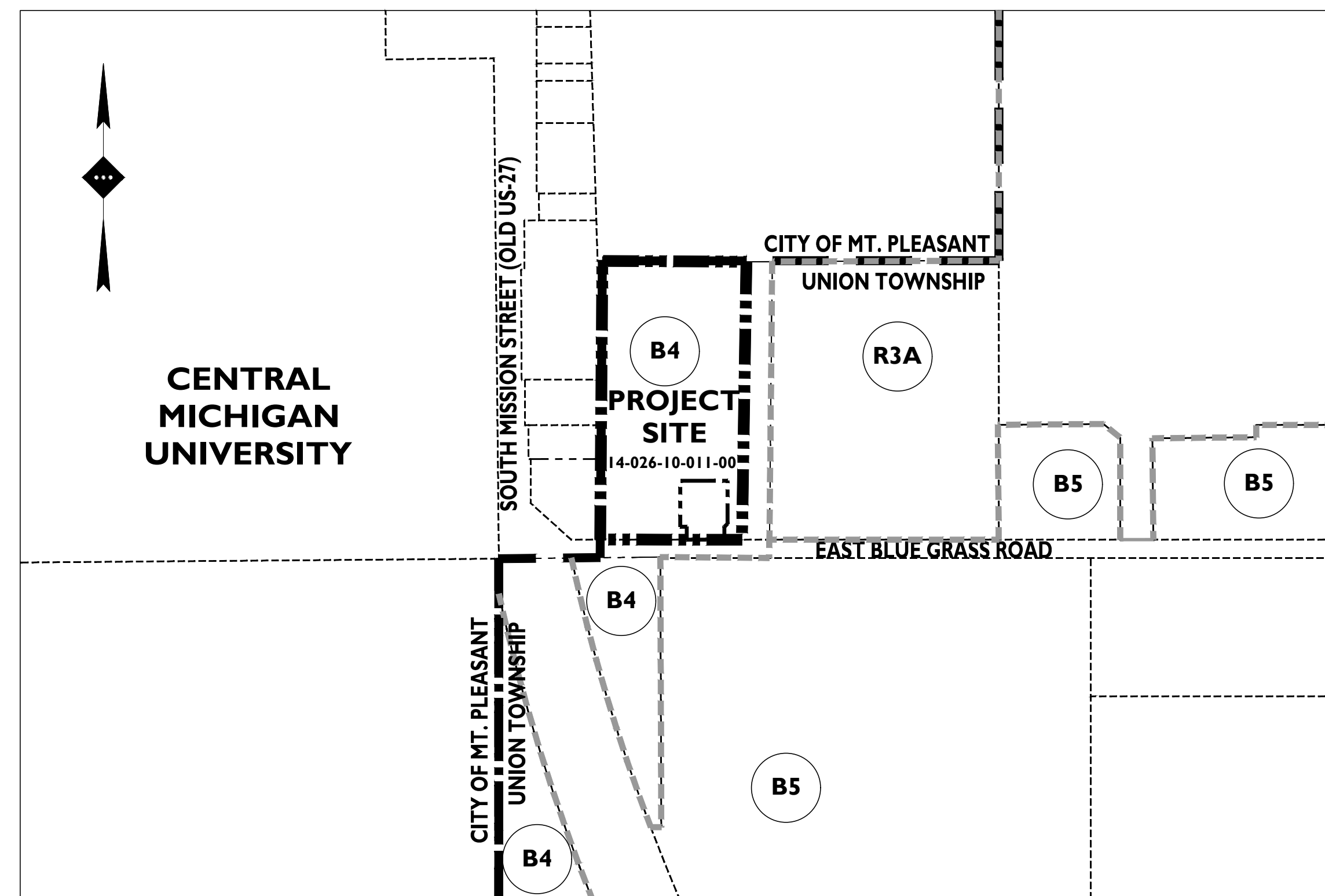
PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-011-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

APPLICANT
BLUEGRASS RETAIL MANAGEMENT LLC
30200 TELEGRAPH RD, SUITE 205
BINGHAM FARMS, MI 48025
(248) 646-9999



AERIAL MAP
SCALE: 1" = 300'±



TAX & ZONING MAP
SCALE: 1" = 300'±

PLANS PREPARED BY:



Royal Oak, MI · New York, NY · Rutherford, NJ · Princeton, NJ
www.stonefieldeng.com

28454 Woodward Avenue, Royal Oak, MI 48067
Phone 248.247.1115



Know what's below
Call before you dig.

PLAN REFERENCE MATERIALS:

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
 - ALTA AND TOPOGRAPHIC SURVEY PREPARED BY ROWE PROFESSIONAL SERVICES COMPANY DATED: 01/23/2018
 - ARCHITECTURAL PLANS PREPARED BY DETROIT ARCHITECTURAL GROUP
 - TENANT WORK LETTER
 - GEOTECHNICAL REPORT
 - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO
 - LOCATION MAP OBTAINED FROM USGS ONLINE
 - ZONING INFORMATION OBTAINED FROM THE UNION TOWNSHIP ZONING MAP.
- ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
EXISTING CONDITIONS PLAN	C-2
DEMOLITION PLAN	C-3
SITE PLAN	C-4
GRADING PLAN	C-5
STORMWATER MANAGEMENT PLAN	C-6
UTILITY PLAN	C-7
LIGHTING PLAN	C-8
LANDSCAPE PLAN	C-9
SOIL EROSION & SEDIMENT CONTROL PLAN	C-10
CONSTRUCTION DETAILS	C-11 & C-12

SITE DEVELOPMENT PLANS

TARGET OUTLOT
PROPOSED DENTAL OFFICE BUILDING
WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-011-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN



Royal Oak, MI · New York, NY · Rutherford, NJ · Princeton, NJ
www.stonefieldeng.com

28454 Woodward Avenue, Royal Oak, MI 48067
Phone 248.247.1115

NOT APPROVED FOR CONSTRUCTION

ISSUE	DATE	BY	DESCRIPTION
1	01/23/2018	MPH	SUBMISSION FOR SITE PLAN APPROVAL

MICHIGAN LICENSE No. 6201063062
LICENSED PROFESSIONAL ENGINEER



SCALE: AS SHOWN PROJECT ID: M-17043

TITLE:

COVER SHEET

DRAWING:

C-1

MANHOLE SCHEDULE:

<p>MHH 613 TYPE: STORM COVER: FLAT GRATE RIM= 805.13 6" CPP SW INV.=800.81 36" RCP W INV.=799.38 36" RCP E INV.=799.38</p>	<p>MHH 767 TYPE: STORM COVER: SOLID RIM= 806.90 36" RCP N INV.=798.70 36" RCP W INV.=798.70 36" RCP S INV.=798.65</p>	<p>MHH 950 TYPE: SANITARY COVER: SOLID RIM= 804.15 6" PVC N INV.=795.85 8" PVC E INV.=795.45</p>
<p>MHH 614 TYPE: STORM COVER: FLAT GRATE RIM= 805.12 36" RCP E INV.=799.72 36" RCP W INV.=799.72</p>	<p>MHH 844 TYPE: STORM COVER: CURB INLET RIM= 804.14 12" SL C W INV.=800.54 12" SL C E INV.=800.54</p>	<p>MHH 951 TYPE: SANITARY COVER: SOLID RIM= 805.15 8" PVC W INV.=794.55 8" PVC E INV.=794.50</p>
<p>MHH 615 TYPE: STORM COVER: FLAT GRATE RIM= 805.09 4" CPP N INV.=802.34 36" RCP E INV.=800.09 36" RCP W INV.=800.09</p>	<p>MHH 867 TYPE: STORM COVER: CURB INLET RIM= 804.77 12" SL C E INV.=800.87 12" SL C W INV.=800.87</p>	<p>MHH 952 TYPE: SANITARY COVER: SOLID RIM= 803.83 8" PVC E INV.=792.78 8" PVC N INV.=792.93 8" PVC W INV.=792.83</p>
<p>MHH 719 TYPE: STORM COVER: SOLID RIM= 805.32 36" RCP E INV.=798.87 36" RCP N INV.=799.07 12" SL C W INV.=799.32</p>	<p>MHH 896 TYPE: STORM COVER: FLAT GRATE RIM= 805.08 36" RCP W INV.=800.08 36" RCP E INV.=800.08</p>	

SURVEY NOTES:

BEARINGS ESTABLISHED FROM PREVIOUSLY RECORDED SURVEY WHICH CREATED THE PARENT PARCEL, RECORDED IN LIBER 4, PAGE 633, ISABELLA COUNTY RECORDS.

WE DO NOT WARRANT THE LOCATION OF ALL TOPOGRAPHICAL SITE FEATURES. THE TOPOGRAPHIC FEATURES, AS SHOWN HEREON, ARE BASED UPON VISIBLE EVIDENCE OBSERVED IN THE FIELD AND FIELD LOCATED SURFACE UTILITY STRUCTURES IN WINTER SNOW CONDITIONS. WE DO NOT WARRANT THE LOCATION OF THE UNDERGROUND PORTION OF THE UTILITIES. THE UNDERGROUND IMPROVEMENTS, AS SHOWN HEREON, ARE APPROXIMATE SINCE THEY ARE NOT VISIBLE FROM THE SURFACE AND COMPLETELY ACCURATE RECORDS OF ALL UTILITIES ARE NOT AVAILABLE. RECORDS FOR THIS SURVEY WERE OBTAINED FROM UTILITY DRAWINGS PROVIDED BY UTILITY COMPANY RESPONSES TO MISS DIG TICKET NO. 807347017-008, SUBMITTED 12/13/2017 AND THE CITY OF MT. PLEASANT, UNION TOWNSHIP, CHARTER COMMUNICATIONS AND THE ISABELLA COUNTY DRAIN COMMISSION HAVE NOT RESPONDED TO THE MISS DIG REQUEST AT THE TIME OF THIS SUBMITTAL. MISS DIG SHOULD BE CONTACTED PRIOR TO ANY CONSTRUCTION.

BENCHMARK DATA TABLE:

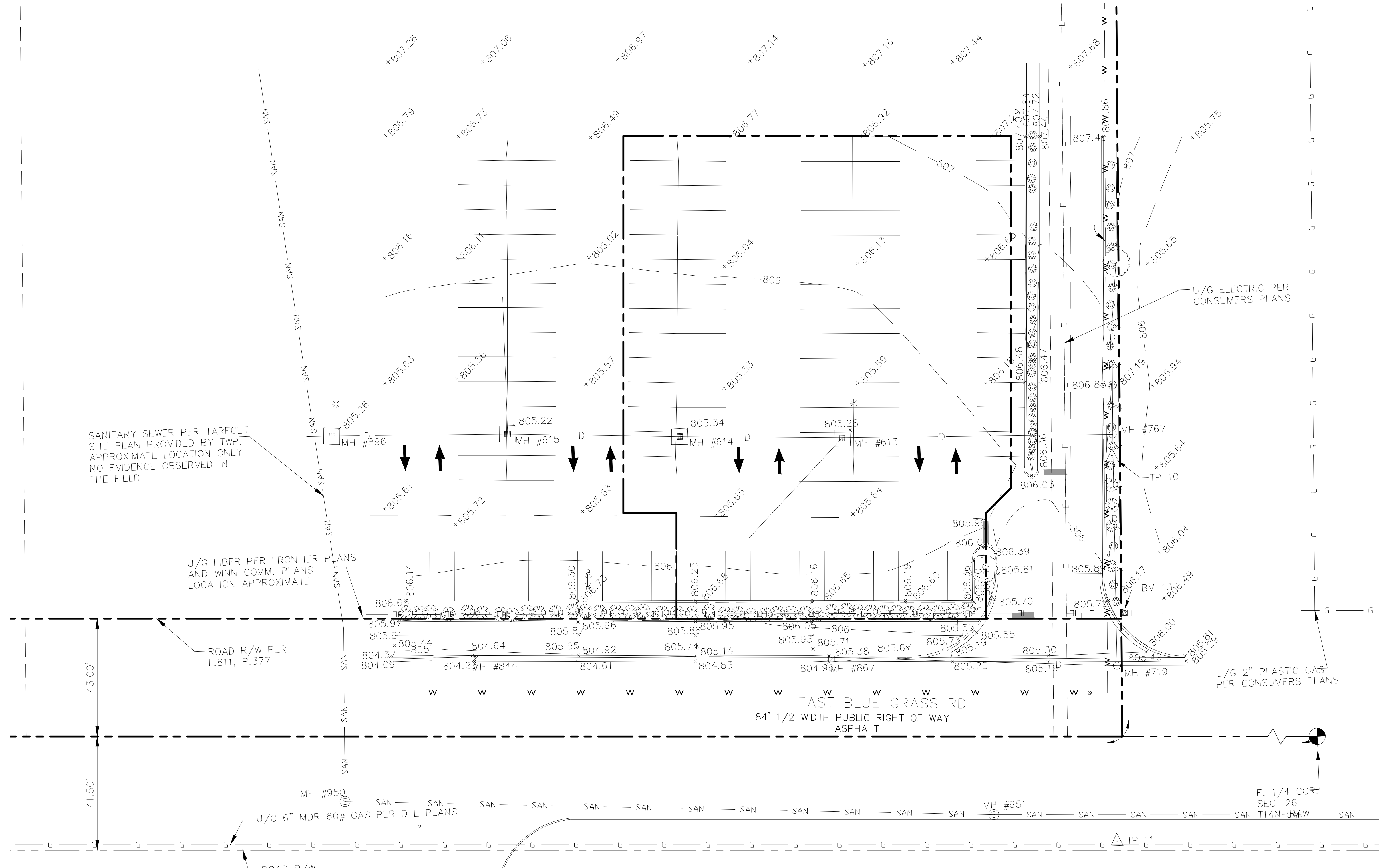
NUMBER	NORTHING	EASTING	DESCRIPTION
BM 12	756489	13017842	SET MARKER SQUARE ON NLY EDGE OF CONCRETE BASE OF LIGHT POLE, 100± S. OF SLY BACK OF CRUB OF BLUEGRASS RD., 250' W. OF DICK'S SPORTING GOOD ENTRANCE
BM 13	756646	13017840	SET R/R SPIKE IN POWER POLE, 15± N. OF NLY EDGE OF BIT OF BLUEGRASS RD., 27± E. OF CENTERLINE OF ENTRANCE TO TARGET, 5± S. OF N-S CHAIN LINK FENCE.

TRAVERSE POINT DATA TABLE:

NUMBER	NORTHING	EASTING	DESCRIPTION
TP 10	756703.5208	13017838.1431	SET IRON WITH 'ROWE TRAV' CAP 3± W. OF N-S CHAIN LINK FENCE, 75± N. OF EDGE OF BIT OF BLUEGRASS RD., 3' E OF BACK OF CURB
TP 11	756563.1590	13017834.8100	SET IRON WITH 'ROWE TRAV' CAP 8± S. OF SLY BACK OF CURB OF BLUEGRASS RD., 24± E. OF CENTERLINE OF ELY ENTRANCE TO TARGET, 5± N. OF NLY EDGE OF SIDEWALK

SECTION CORNER DATA TABLE:

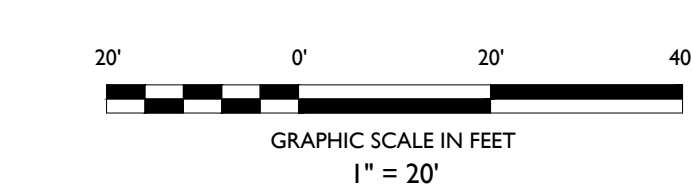
NUMBER	NORTHING	EASTING	DESCRIPTION
QCOR 9	756493.8073	13022459.0831	EAST 1/4 CORNER, SECTION 26, T14N-R4W, UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN, FND. REMON IN MON. BOX
QCOR 8	756625.5222	13017167.5709	WEST 1/4 CORNER, SECTION 26, T14N-R4W, UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN, FND. REMON IN MON. BOX



SYMBOL	DESCRIPTION
[Symbol]	CATCH BASINS IN CURB LINE
[Symbol]	CATCH BASINS IN PARKING LOT
[Symbol]	MANHOLE
[Symbol]	WATER SHUTOFF (SERVICE VALVE)
[Symbol]	SIGN
[Symbol]	STREET SIGN
[Symbol]	DECIDUOUS TREE
[Symbol]	ORNAMENTAL SHRUB
[Symbol]	METAL POST
[Symbol]	RED "TARGET" BALL
[Symbol]	UTILITY POLE
[Symbol]	LIGHT POLE / ORNAMENTAL LIGHT
[Symbol]	BENCHMARK
[Symbol]	TRAVERSE POINT
[Symbol]	SECTION CORNER
[Symbol]	FOUND SURVEY MONUMENTATION
[Symbol]	PARCEL BOUNDARY LINE
[Symbol]	PLATTED LOT LINE
[Symbol]	EASEMENT (AS NOTED)
[Symbol]	EASEMENT CENTERLINE
[Symbol]	RIGHT-OF-WAY
[Symbol]	CONCRETE CURB
[Symbol]	EDGE OF CONCRETE (CONC.)
[Symbol]	EDGE OF ASPHALT (ASPH.)
[Symbol]	FENCE (AS NOTED)
[Symbol]	WALL (AS NOTED)
[Symbol]	OVERHEAD UTILITY LINE
[Symbol]	GAS LINE
[Symbol]	SANITARY LINE
[Symbol]	STORM LINE
[Symbol]	WATER LINE
[Symbol]	UNDERGROUND UTILITY LINE
[Symbol]	CONTOUR

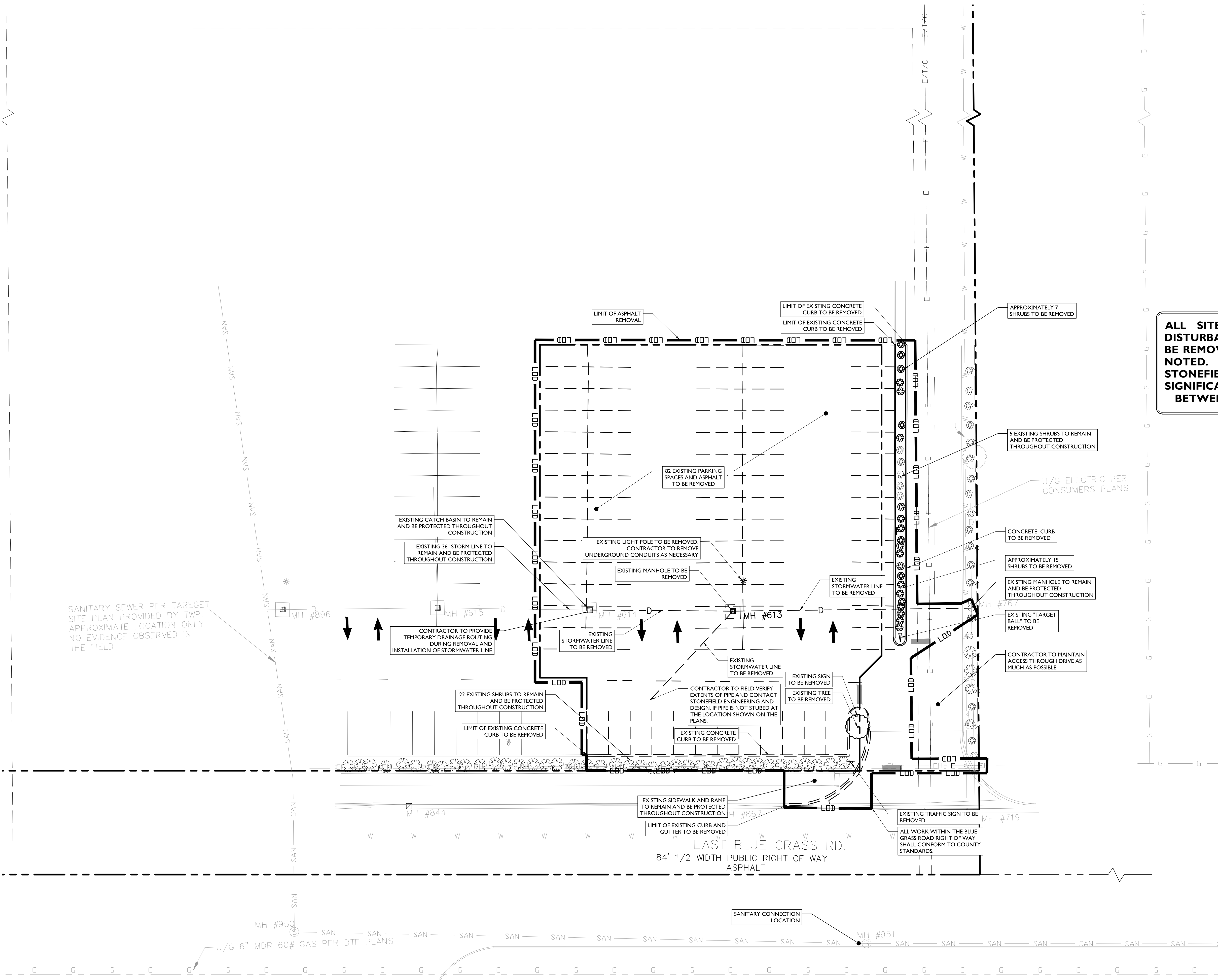
SURVEY NOTES:

1. THE SURVEY LISTED WITHIN THE PLAN REFERENCES ON THE COVER SHEET SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THE SURVEY AND ASSOCIATED DOCUMENTS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF THE SURVEY AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.



SUBMISSION FOR SITE PLAN APPROVAL		DATE	BY
ISSUE		01/12/2018	MPH
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STONEFIELD engineering & design		28454 Woodward Avenue, Royal Oak, MI 48067 Phone 248.247.1115	
SITE DEVELOPMENT PLANS			
TARGET OUTLOT			
PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS			
PARCEL ID: 14-026-10-011-00 4097 EAST BLUE GRASS ROAD UNION TOWNSHIP ISABELLA COUNTY, MICHIGAN			
MICHIGAN LICENSE No. 6201063062 LICENSED PROFESSIONAL ENGINEER			
STONEFIELD engineering & design		SCALE: 1" = 20' PROJECT ID: M-17043	
TITLE: EXISTING CONDITIONS PLAN			
DRAWING: C-2			

V:\P\2017\10-14-2017\14-026-10-011-00\14-026-10-011-00-001.DWG



SYMBOL	DESCRIPTION
- - - - -	FEATURE TO BE REMOVED / DEMOLISHED
— LOD —	LIMIT OF DISTURBANCE

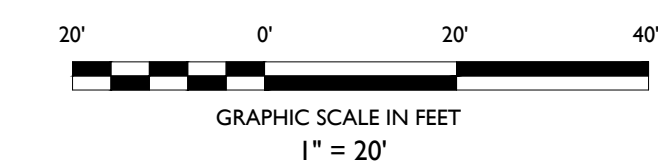
ALL SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE INDICATED ON THIS PLAN ARE TO BE REMOVED / DEMOLISHED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS



Know what's below
Call before you dig.

DEMOLITION NOTES

1. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
2. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
3. EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE, AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.
6. CONTRACTOR TO USE TEST PITS FOR UTILITY CROSSINGS ON-SITE AND NOTIFY STONEFIELD ENGINEERING AND DESIGN OF ANY DISCREPANCIES.



ISSUE	DATE	BY	DESCRIPTION
1	01/21/2018	MPH	SUBMISSION FOR SITE PLAN APPROVAL

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SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-01 L-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN

MICHIGAN LICENSE No. 6201063062
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
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SCALE: 1" = 20' PROJECT ID: M-17043

TITLE:
DEMOLITION PLAN

DRAWING:
C-3

TABLE OF LAND USE AND ZONING		
PARCEL ID: 14-026-10-011-00		
GENERAL BUSINESS DISTRICT (B-4)		
PROPOSED USE	PERMITTED USE	
DENTAL OFFICE		
ZONING REQUIREMENT	REQUIRED	PROPOSED
MINIMUM LOT AREA	12,000 SF (0.28 AC)	23,790 SF (0.55 AC)
MINIMUM LOT WIDTH	80 FT	112.9 FT
MAXIMUM BUILDING HEIGHT	35 FT	25 FT
MINIMUM FRONT YARD SETBACK	50 FT	55.5 FT
MINIMUM SIDE YARD SETBACK	20 FT	21.4 FT
MINIMUM REAR YARD SETBACK	25 FT	40.8 FT
MAXIMUM BUILDING COVERAGE	30% (7,137 SF)	16.8% (4,000 SF)
MINIMUM FRONT PARKING SETBACK	10 FT	6.0 FT (EN)

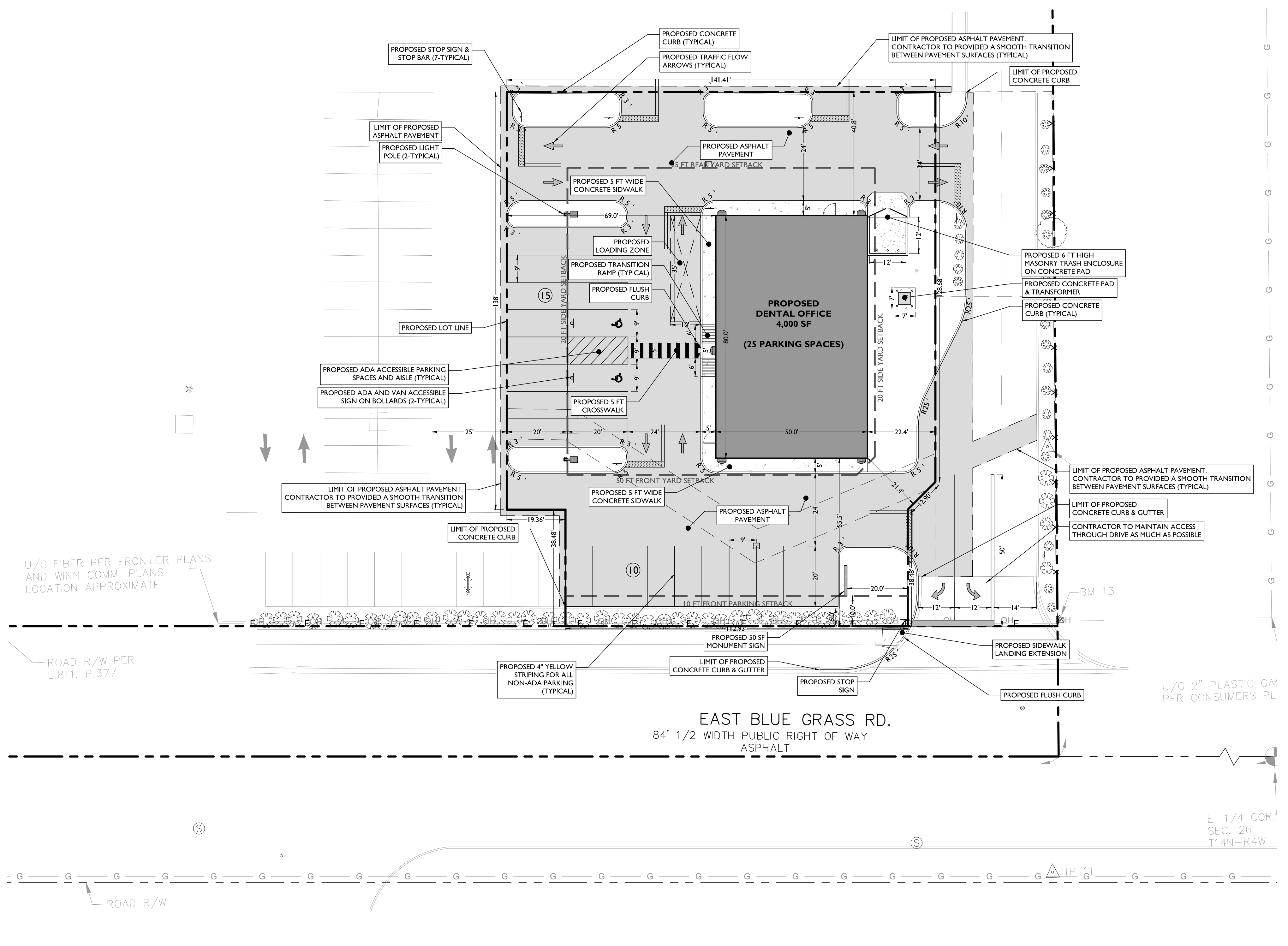
(EN) EXISTING NON-COMFORMITY

OFF-STREET PARKING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 10-2-(2)	DENTAL OFFICE: 8 SPACES PER DOCTOR (3 DOCTORS) (81 DOCTORS) = 24 SPACES	25 SPACES
§ 10-5	90° PARKING: 9 FT X 20 FT (180 SF)	9 FT X 20 FT (180 SF) 24 FT AISLE
§ 10-7	LOADING AREA: NUMBER OF LOADING SPACES: 0 TO 10,000 SF FLOOR AREA = 1 SPACE LOADING AREA SIZE: 10 FT X 35 FT	10 FT X 35 FT

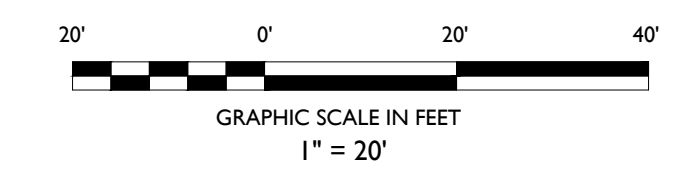
PARKING STALL TOTALS	
TARGET BUILDING SIZE	89,500 SF
PROPOSED DENTAL OFFICE BUILDING SIZE	4,000 SF
EXISTING STALLS	444
STALLS TO BE REMOVED	82
TOTAL STALLS	362
STALLS REQUIRED BY CITY*	358

* (89,500 SF) (1 SPACE / 250 SF) = 358 SPACES

SYMBOL	DESCRIPTION
---	PROPERTY LINE
- - -	SETBACK LINE
---	PROPOSED CURB
---	PROPOSED FLUSH CURB
---	PROPOSED SAWCUT LINE
○	PROPOSED SIGNS / BOLLARDS
■	PROPOSED BUILDING
▨	PROPOSED ASPHALT
▩	PROPOSED CONCRETE
□	PROPOSED AREA LIGHT
⌋	PROPOSED BUILDING DOORS



- GENERAL NOTES**
- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
 - ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
 - THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
 - THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC, WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
 - THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
 - THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
 - SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



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SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-011-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN

MICHIGAN LICENSE No. 6201063062
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

SCALE: 1" = 20' PROJECT ID: M-17043

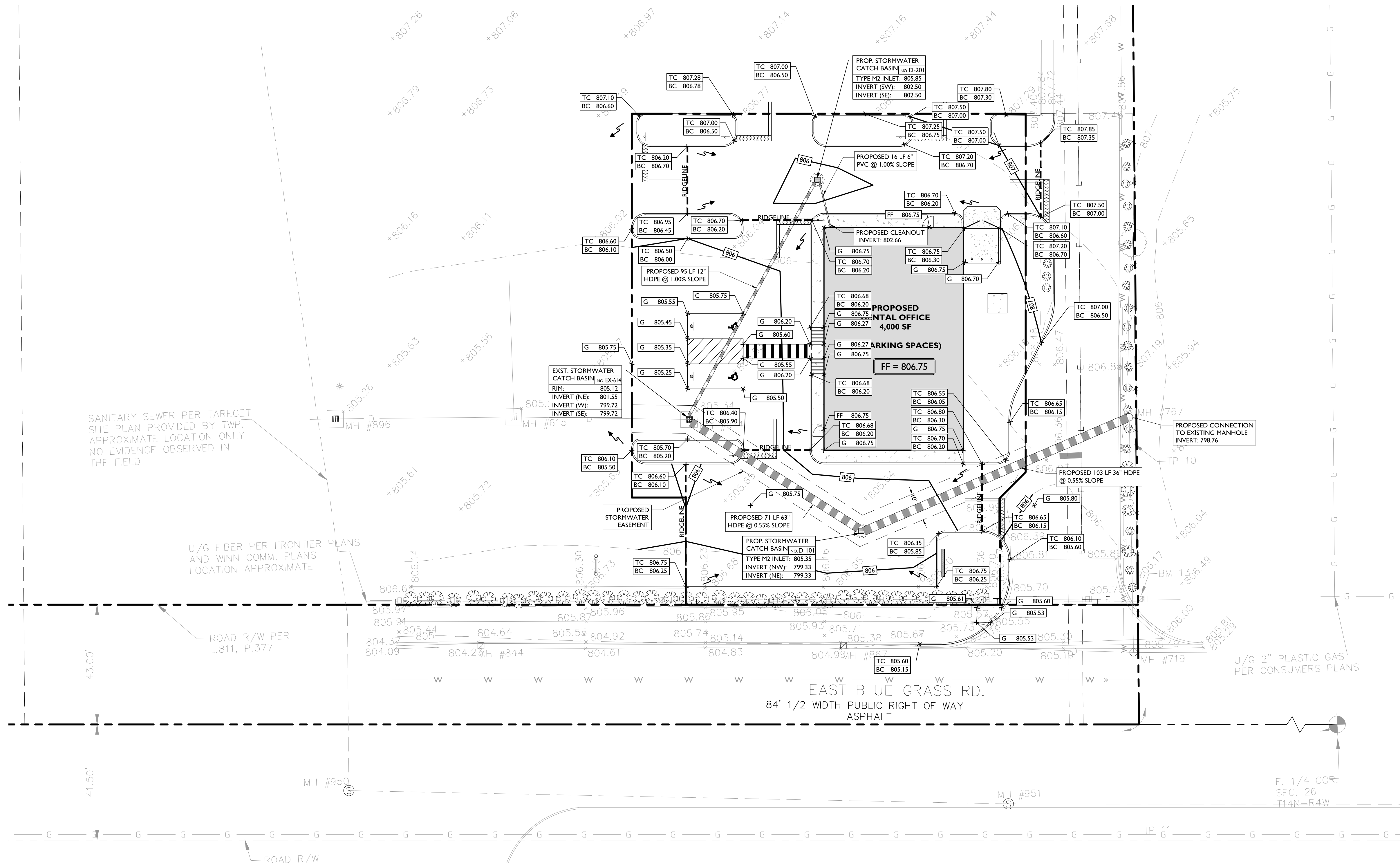
TITLE:
SITE PLAN

DRAWING:
C-4

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MANHOLE SCHEDULE:

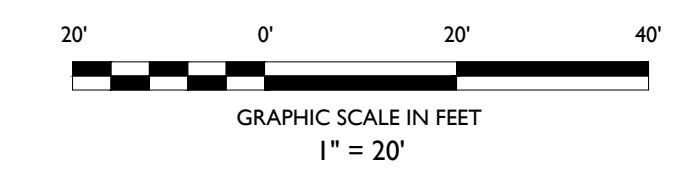
<p>MHH 613 TYPE: STORM COVER: FLAT GRATE RIM= 805.13 6" CPP SW INV.=800.83 36" RCP W INV.=799.38 36" RCP E INV.=799.38</p>	<p>MHH 767 TYPE: STORM COVER: SOLID RIM= 806.90 36" RCP N INV.=798.70 36" RCP W INV.=798.70 36" RCP S INV.=798.65</p>	<p>MHH 950 TYPE: SANITARY COVER: SOLID RIM= 804.15 6" PVC N INV.=795.85 8" PVC E INV.=795.45</p>
<p>MHH 614 TYPE: STORM COVER: FLAT GRATE RIM= 805.12 36" RCP E INV.=799.72 36" RCP W INV.=799.72</p>	<p>MHH 844 TYPE: STORM COVER: CURB INLET RIM= 804.14 12" SLC W INV.=800.54 12" SLC E INV.=800.54</p>	<p>MHH 951 TYPE: SANITARY COVER: SOLID RIM= 805.15 8" PVC W INV.=794.55 8" PVC E INV.=794.50</p>
<p>MHH 615 TYPE: STORM COVER: FLAT GRATE RIM= 805.09 4" CPP N INV.=802.34 36" RCP E INV.=800.09 36" RCP W INV.=800.09</p>	<p>MHH 867 TYPE: STORM COVER: CURB INLET RIM= 804.77 12" SLC E INV.=800.87 12" SLC W INV.=800.87</p>	<p>MHH 952 TYPE: SANITARY COVER: SOLID RIM= 803.83 8" PVC E INV.=792.78 8" PVC N INV.=792.93 8" PVC W INV.=792.83</p>
<p>MHH 719 TYPE: STORM COVER: SOLID RIM= 805.33 36" RCP E INV.=798.87 36" RCP N INV.=799.07 12" SLC W INV.=799.32</p>	<p>MHH 896 TYPE: STORM COVER: FLAT GRATE RIM= 805.08 36" RCP W INV.=800.08 36" RCP E INV.=800.08</p>	



SYMBOL	DESCRIPTION
---	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
---	PROPOSED GRADING RIDGELINE
←	PROPOSED DIRECTION OF DRAINAGE FLOW
x G 100.00	PROPOSED GRADE SPOT SHOT
x TC 100.50 BC 100.00	PROPOSED TOP OF CURB / BOTTOM OF CURB SPOT SHOT
x FF 100.00	FINISHED FLOOR SPOT SHOT
[Symbol]	PROPOSED STORMWATER STRUCTURES
[Symbol]	PROPOSED STORMWATER PIPING

- GRADING NOTES**
- ALL SOIL AND MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS. ANY GROUNDWATER DEWATERING PRACTICES SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE DISCHARGE OF DEWATERED GROUNDWATER. ALL SOIL IMPORTED TO THE SITE SHALL BE CERTIFIED CLEAN FILL. CONTRACTOR SHALL MAINTAIN RECORDS OF ALL MATERIALS BROUGHT TO THE SITE.
 - THE CONTRACTOR IS REQUIRED TO PROVIDE TEMPORARY AND/OR PERMANENT SHORING WHERE REQUIRED DURING EXCAVATION ACTIVITIES INCLUDING BUT NOT LIMITED TO UTILITY TRENCHES. TO ENSURE THE STRUCTURAL INTEGRITY OF NEARBY STRUCTURES AND STABILITY OF THE SURROUNDING SOILS.
 - PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 4 INCHES TO 7 INCHES ABOVE EXISTING GRADES UNLESS OTHERWISE NOTED. THE CONTRACTOR WILL SUPPLY ALL STAKEOUT CURB GRADE SHEETS TO STONEFIELD ENGINEERING & DESIGN, LLC. FOR REVIEW AND APPROVAL PRIOR TO POURING CONCRETE.
 - THE CONTRACTOR IS RESPONSIBLE TO SET ALL PROPOSED UTILITY COVERS AND RESET ALL EXISTING UTILITY COVERS WITHIN THE PROJECT LIMITS TO PROPOSED GRADE IN ACCORDANCE WITH ANY APPLICABLE MUNICIPAL, COUNTY, STATE AND/OR UTILITY AUTHORITY REGULATIONS.
 - MINIMUM SLOPE REQUIREMENTS TO PREVENT PONDING SHALL BE AS FOLLOWS:
 - CURB GUTTER: 0.50%
 - CONCRETE SURFACES: 1.00%
 - ASPHALT SURFACES: 1.00%
 - A MINIMUM SLOPE OF 1.00% SHALL BE PROVIDED AWAY FROM ALL BUILDINGS. THE CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE FROM THE BUILDING IS ACHIEVED AND SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF THIS CONDITION CANNOT BE MET. FOR PROJECTS WHERE BASEMENTS ARE PROPOSED, THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE DEPTH TO GROUNDWATER AT THE LOCATION OF THE PROPOSED STRUCTURE. IF GROUNDWATER IS ENCOUNTERED WITHIN THE BASEMENT AREA, SPECIAL CONSTRUCTION METHODS SHALL BE UTILIZED AND REVIEWED/APPROVED BY THE CONSTRUCTION CODE OFFICIAL. IF SUMP PUMPS ARE REQUIRED, ALL DISCHARGES SHALL BE CONNECTED DIRECTLY TO THE PUBLIC STORM SEWER SYSTEM WITH APPROVAL FROM THE GOVERNING STORM SEWER SYSTEM AUTHORITY.

- ADA NOTES**
- THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION WITHIN THE ADA PARKING SPACES AND ACCESS AISLES.
 - THE CONTRACTOR SHALL PROVIDE COMPLIANT SIGNAGE AT ALL ADA PARKING AREAS IN ACCORDANCE WITH STATE GUIDELINES.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 5.00% RUNNING SLOPE AND A MAXIMUM OF 2.00% CROSS SLOPE ALONG WALKWAYS WITHIN THE ACCESSIBLE PATH OF TRAVEL (SEE THE SITE PLAN FOR THE LOCATION OF THE ACCESSIBLE PATH). THE CONTRACTOR IS RESPONSIBLE TO ENSURE THE ACCESSIBLE PATH OF TRAVEL IS 36 INCHES WIDE OR GREATER UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 2.00% SLOPE IN ANY DIRECTION AT ALL LANDINGS. LANDINGS INCLUDE, BUT ARE NOT LIMITED TO, THE TOP AND BOTTOM OF AN ACCESSIBLE RAMP. AT ACCESSIBLE BUILDING ENTRANCES, AT AN AREA IN FRONT OF A WALKUP PATH, AND AT TURNING SPACES ALONG THE ACCESSIBLE PATH OF TRAVEL, THE LANDING AREA SHALL HAVE A MINIMUM CLEAR AREA OF 60 INCHES BY 60 INCHES UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL MAINTAIN A MAXIMUM 8.33% RUNNING SLOPE AND A MAXIMUM 2.00% CROSS SLOPE ON ANY CURB RAMPS ALONG THE ACCESSIBLE PATH OF TRAVEL. WHERE PROVIDED, CURB RAMP FLARES SHALL NOT HAVE A SLOPE GREATER THAN 10.00% IF A LANDING AREA IS PROVIDED AT THE TOP OF THE RAMP. FOR ALTERATIONS, A CURB RAMP FLARE SHALL NOT HAVE A SLOPE GREATER THAN 8.33% IF A LANDING AREA IS NOT PROVIDED AT THE TOP OF THE RAMP. CURB RAMPS SHALL NOT RISE MORE THAN 6 INCHES IN ELEVATION WITHOUT A HANDRAIL. THE CLEAR WIDTH OF A CURB RAMP SHALL BE NO LESS THAN 36 INCHES WIDE.
 - ACCESSIBLE RAMPS WITH A RISE GREATER THAN 6 INCHES SHALL CONTAIN COMPLIANT HANDRAILS ON BOTH SIDES OF THE RAMP AND SHALL NOT RISE MORE THAN 30" IN ELEVATION WITHOUT A LANDING AREA IN BETWEEN RAMP RUNS. LANDING AREAS SHALL ALSO BE PROVIDED AT THE TOP AND BOTTOM OF THE RAMP.
 - A SLIP RESISTANT SURFACE SHALL BE CONSTRUCTED ALONG THE ACCESSIBLE PATH AND WITHIN ADA PARKING AREAS.
 - THE CONTRACTOR SHALL ENSURE A MAXIMUM OF 1/4 INCHES VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN 1/4 INCHES AND 1/2 INCHES EXISTS, CONTRACTOR SHALL ENSURE THAT THE TOP 1/2 INCH CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1 UNIT VERTICAL AND 2 UNITS HORIZONTAL (2:1 SLOPE).
 - THE CONTRACTOR SHALL ENSURE THAT ANY OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG THE ACCESSIBLE PATH SHALL NOT ALLOW PASSAGE OF A SPHERE GREATER THAN 1/4 INCH.



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SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-01-L-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN

MICHIGAN LICENSE No. 6201063062
LICENSED PROFESSIONAL ENGINEER

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SCALE: 1" = 20' PROJECT ID: M-17043

TITLE:
GRADING PLAN

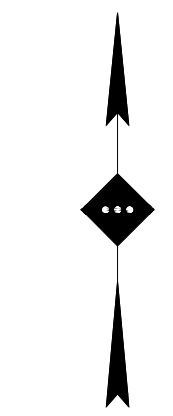
DRAWING:
C-5

DRAINAGE AND UTILITY NOTES

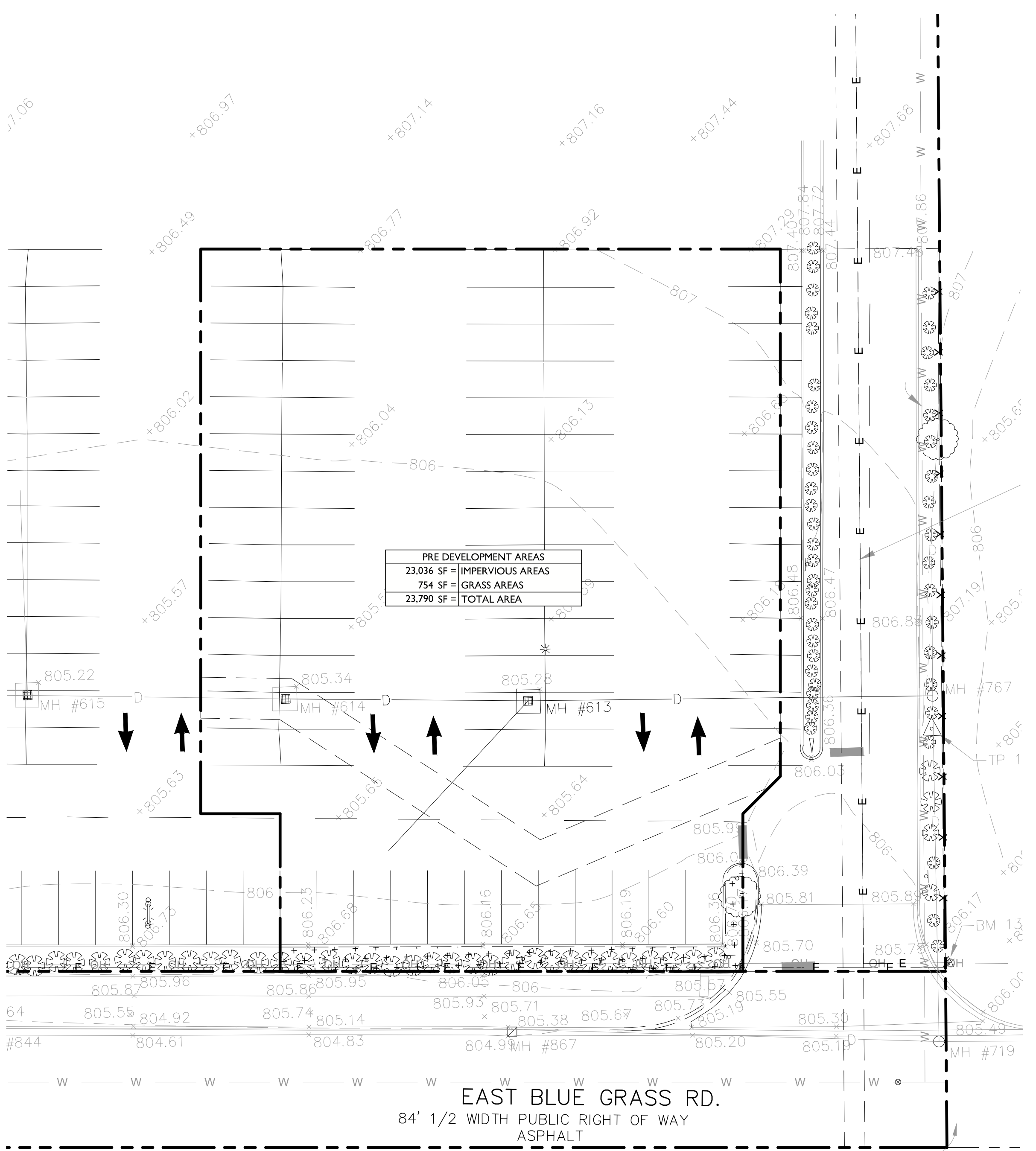
1. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
2. CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP GRADIENT.
3. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
4. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES

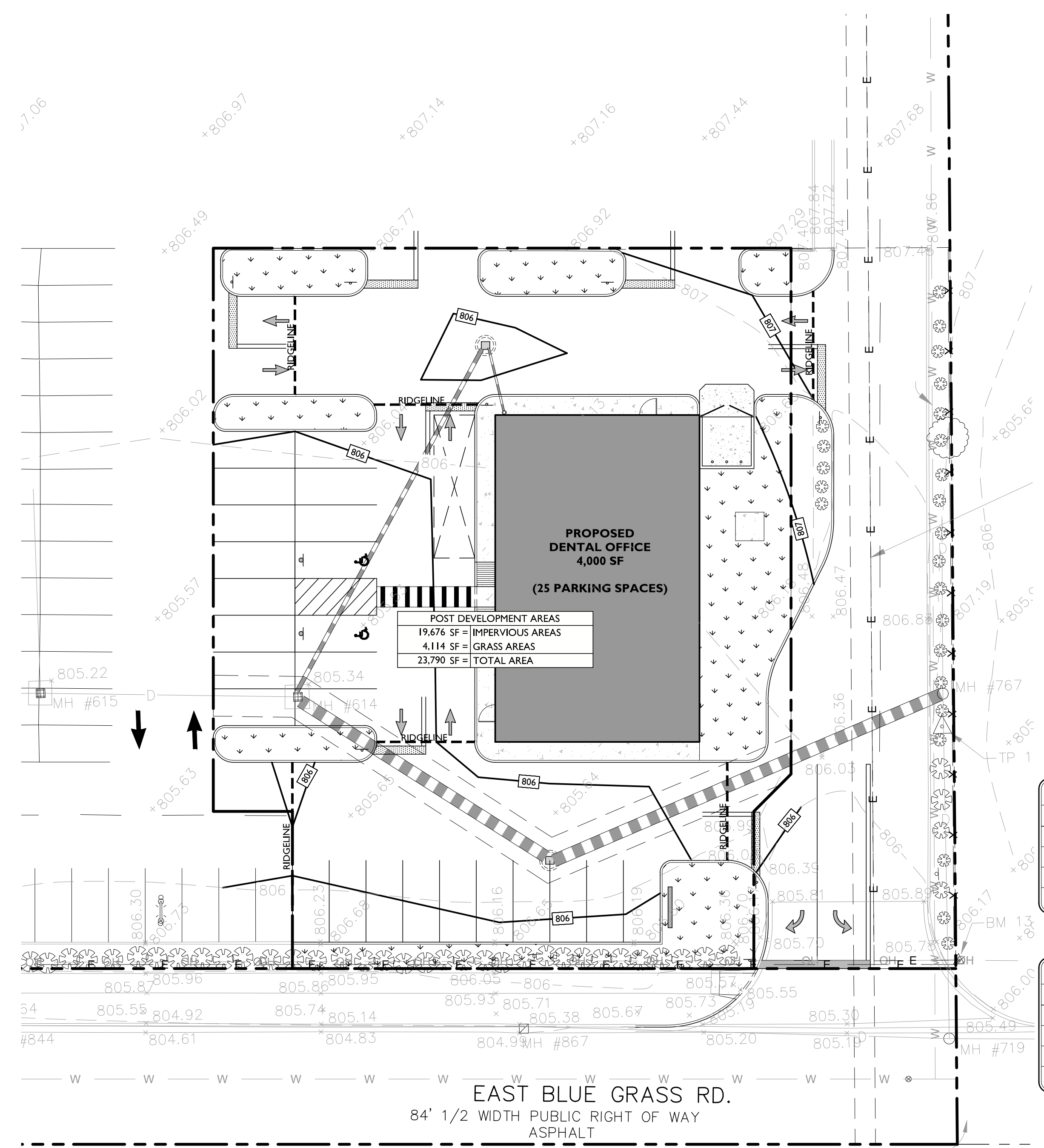
1. THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION. THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
2. THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC, AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.



SYMBOL	DESCRIPTION
	PROPERTY LINE
	PROPOSED GRADING CONTOUR
	PROPOSED GRADING RIDGE LINE
	PROPOSED STORMWATER STRUCTURES
	PROPOSED STORMWATER PIPING



PRE-DEVELOPMENT DRAINAGE MAP



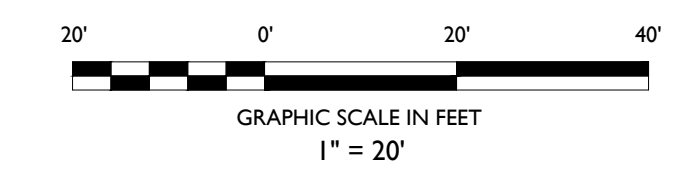
POST-DEVELOPMENT DRAINAGE MAP

SITE PIPE STORAGE SUMMARY*		
	PRE-DEVELOPMENT	POST-DEVELOPMENT
36" PIPE ON SITE	179 LF	199 LF
CROSS SECTION	7.07 SF	7.07 SF
STORAGE	1,265.53 CF	1,406.93 CF
ADDITIONAL STORAGE		+ 141.4 CF

* BASED ON THE "TARGET" 36" STORAGE PIPES LOCATED ON SITE.

SITE RUNOFF SUMMARY		
	PRE-DEVELOPMENT	POST-DEVELOPMENT
Q=C*I*A	0.929	0.838
C (VALUE)	4.36	4.36
I (INTENSITY)*	0.55	0.55
A (AREA)	2.23 CFS	2.01 CFS
Q (FLOW RATE)		

* FOR THE REQUIRED 25 YEAR STORM



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SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-011-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN

MICHIGAN LICENSE No. 6201063062
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
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SCALE: 1" = 20' PROJECT ID: M-17043

TITLE:
STORMWATER MANAGEMENT PLAN

DRAWING:
C-6

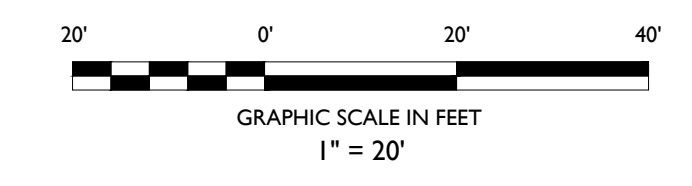
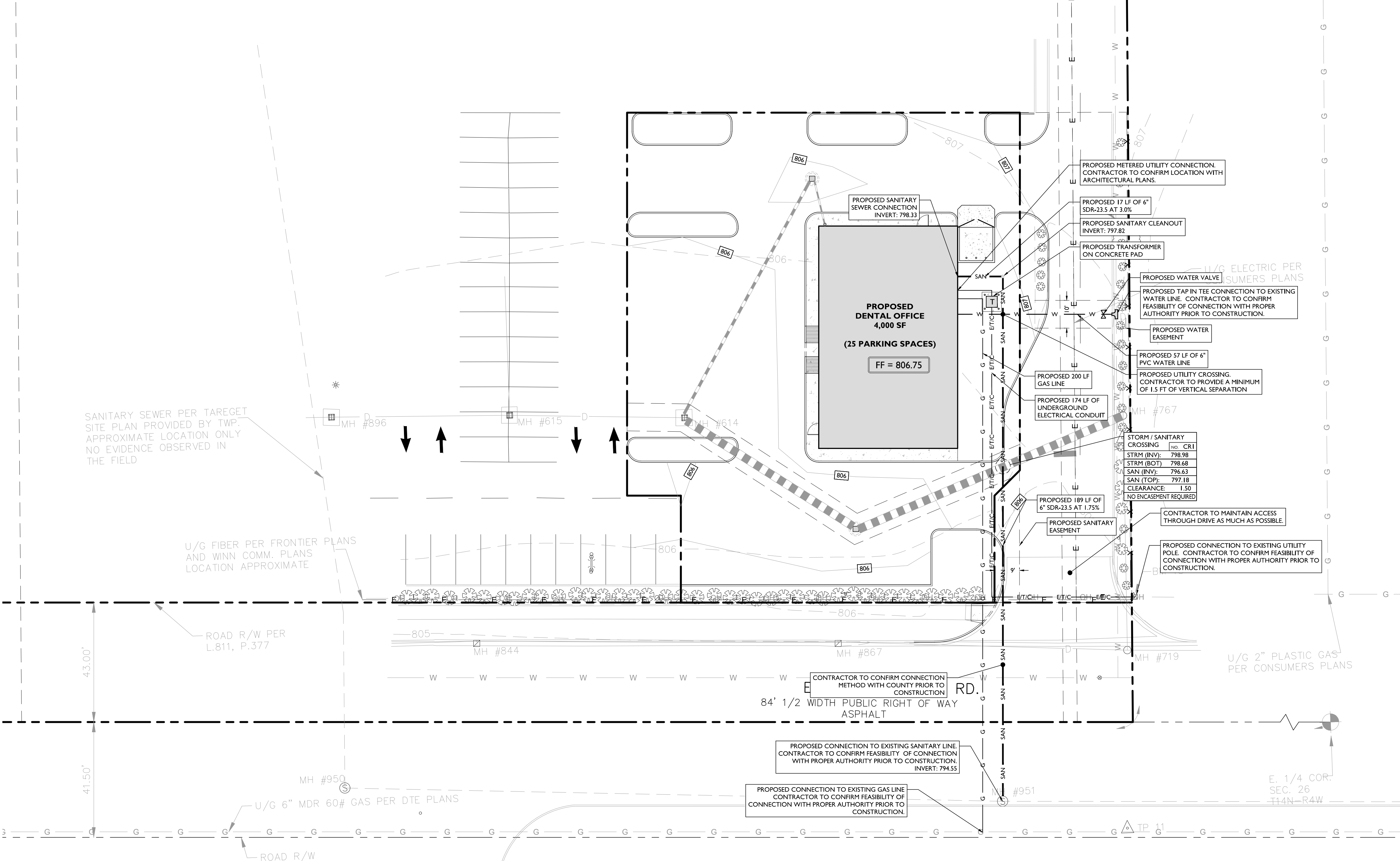
MANHOLE SCHEDULE:

<p>MH# 613 TYPE: STORM COVER: FLAT GRATE RIM= 805.13 4" CPV N INV.=800.83 36" RCP W INV.=799.38 36" RCP E INV.=799.38</p>	<p>MH# 767 TYPE: STORM COVER: SOLID RIM= 806.90 36" RCP N INV.=798.70 36" RCP W INV.=798.70 36" RCP S INV.=798.65</p>	<p>MH# 950 TYPE: SANITARY COVER: SOLID RIM= 804.15 8" PVC N INV.=795.85 8" PVC E INV.=795.45</p>
<p>MH# 614 TYPE: STORM COVER: FLAT GRATE RIM= 805.12 36" RCP E INV.=799.72 36" RCP W INV.=799.72</p>	<p>MH# 844 TYPE: STORM COVER: CURB INLET RIM= 804.14 12" SLC W INV.=800.54 12" SLC E INV.=800.54</p>	<p>MH# 951 TYPE: SANITARY COVER: SOLID RIM= 805.15 8" PVC N INV.=794.55 8" PVC E INV.=794.50</p>
<p>MH# 615 TYPE: STORM COVER: FLAT GRATE RIM= 805.09 4" CPV N INV.=802.34 36" RCP E INV.=800.09 36" RCP W INV.=800.09</p>	<p>MH# 867 TYPE: STORM COVER: CURB INLET RIM= 804.77 12" SLC E INV.=800.87 12" SLC W INV.=800.87</p>	<p>MH# 952 TYPE: SANITARY COVER: SOLID RIM= 803.83 8" PVC E INV.=792.78 8" PVC N INV.=792.93 8" PVC W INV.=792.83</p>
<p>MH# 719 TYPE: STORM COVER: SOLID RIM= 805.32 36" RCP E INV.=798.87 36" RCP N INV.=799.07 12" SLC W INV.=799.32</p>	<p>MH# 896 TYPE: STORM COVER: FLAT GRATE RIM= 805.08 36" RCP W INV.=800.08 36" RCP E INV.=800.08</p>	

25' ELECTRIC AND GAS EASEMENT
L.811, P.374

SYMBOL	DESCRIPTION
---	PROPERTY LINE
— SAN —	PROPOSED SANITARY LATERAL
— W —	PROPOSED DOMESTIC WATER SERVICE
— E/T/C —	PROPOSED ELECTRICAL/DATA CONDUITS
— OH —	PROPOSED OVERHEAD WIRES
— G —	PROPOSED GAS LINE
⊗	PROPOSED VALVE
⊕	PROPOSED WATER TEE / BEND
⊙	PROPOSED SANITARY MANHOLE / CLEANOUT
⊕	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
 - A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
 - CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST POINT AND WORK UP GRADIENT.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - CONTRACTOR SHALL NOTIFY THE COUNTY ROAD DEPARTMENT PRIOR TO CONSTRUCTION WITHIN THE RIGHT OF WAY.



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SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-01 L-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN

MICHIGAN LICENSE No. 6201063062
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

SCALE: 1" = 20' PROJECT ID: M-17043

TITLE:
UTILITY PLAN

DRAWING:
C-7

LED AREA LIGHTS - PATRIOT® (XPT3)

LUMINAIRE ORDERING INFORMATION

TYPICAL ORDER EXAMPLE: **XPT3 FT LED 128 450 CW UE WHT PCR**

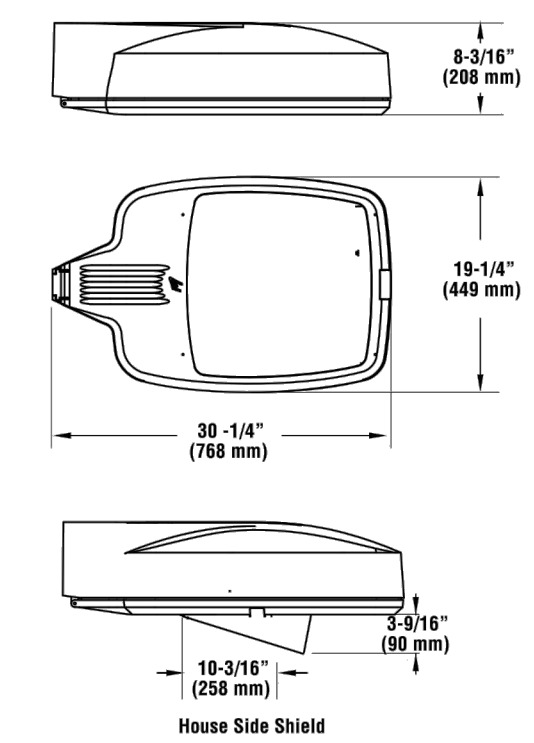
Prefix	Distribution	Light Source	# of LEDs	Drive Current	Color Temperature	Input Voltage	Finish	Options
XPT3 - LED	3 - Type III	LED	128	350 - 350mA	CW - Cool White (5000K)	UE - Universal Voltage (120-277V)	BLK - Black BRZ - Bronze GPT - Graphite MDY - Metallic Silver PLP - Platinum Plus CVC - Silver Verde Green WHT - White	PCR - Photometric Control Recessed TB - Terminal Block MS - Impact Motion Sensor
Footnote	1 - Type V FT - Forward Throw			400 - 400mA	NW - Neutral White (4000K)	347-480V		

- NOTES:**
- This is a non-heat-dissipating optic. For retrofit applications in which the original metal luminaire product was retained and LED version will require a non-standard orientation, consult factory.
 - Photocell must be ordered separately - see Accessories.
 - Factory installed PCB option required.
 - Wiring must be located in the back of pole.
 - Black only House Side Shields add to future EPA.

Single	1.5	3.0	4.5
Order Number	122141	122142	122143
Description	PC100 - Photocell	PC100 - Photocell	PC100 - Photocell
Order Number	122144	122145	122146
Description	PC200 - Photocell	PC200 - Photocell	PC200 - Photocell
Order Number	122147	122148	122149
Description	PC300 - Photocell	PC300 - Photocell	PC300 - Photocell
Order Number	122150	122151	122152
Description	PC400 - Photocell	PC400 - Photocell	PC400 - Photocell
Order Number	122153	122154	122155
Description	PC500 - Photocell	PC500 - Photocell	PC500 - Photocell
Order Number	122156	122157	122158
Description	PC600 - Photocell	PC600 - Photocell	PC600 - Photocell
Order Number	122159	122160	122161
Description	PC700 - Photocell	PC700 - Photocell	PC700 - Photocell
Order Number	122162	122163	122164
Description	PC800 - Photocell	PC800 - Photocell	PC800 - Photocell
Order Number	122165	122166	122167
Description	PC900 - Photocell	PC900 - Photocell	PC900 - Photocell
Order Number	122168	122169	122170
Description	PC1000 - Photocell	PC1000 - Photocell	PC1000 - Photocell

Note: House Side Shield adds to future EPA. Consult factory.

DIMENSIONS



BUG LISTING

Drive Current	Color Temp.	Lumens	Watts	LER	BUG Rating
XPT3 - TYPE 3					
350	CW	12,534	141	89	B2-U0-G2
450	CW	14,589	180	81	B2-U0-G2
XPT3 - TYPE 5					
350	CW	12,125	142	85	B3-U0-G2
450	CW	14,378	187	77	B4-U0-G2
XPT3 - TYPE FT					
350	CW	12,657	144	86	B1-U0-G3
450	CW	15,791	187	84	B1-U0-G3

Project Name: _____ Fixture Type: _____ 10/19/16
 Catalog #: _____ LSI INDUSTRIES INC. © 2016

SPECIFICATIONS FOR FIXTURE "A"

Catalog #: _____ Project: _____
 Prepared By: _____ Date: _____



WPSLS40W
40 Watt LED Slim Wall Pack

The Slim Wall Light Series has a slim, low profile design with attractive architectural styling. A quick and easy mounting system is bottom hinged to prevent leakage. The LED placement and mounting position results in a glare free design.

Features & Specifications

Performance	4500K
Delivered Lumens	4,047
Efficacy	105.7
Wattage	38.28

Optical System

- High-performance Chip On Board (COB) LEDs behind clear tempered glass for maximum light output.
- 4500K color temperature.
- Minimum CRI of 75.
- Zero uplight.

Electrical

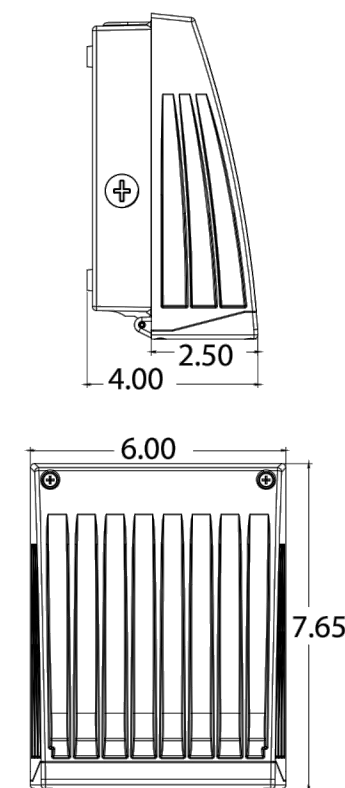
- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (10% - 100%) standard.
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz
- L70 Calculated Life: >100k Hours
- Total harmonic distortion: <20%
- Power factor: >85
- Input power stays constant over life.
- Driver Off-State Power is 0 watts.
- Chip On Board (COB) LEDs with integrated circuit board mounted directly to the housing to maximize heat dissipation and promote long life.
- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.
- Minimum 2.5kV surge rating.

Controls

- Optional 120V electronic button Photocell.
- Apertures for field or factory installed photocell.



Dimensions



LSI Industries Inc. 6200 Alliance Rd. Cincinnati, OH 45242 • www.lsiindustries.com • (513) 372-3200 • ©LSI Industries Inc. All Rights Reserved. 05/16/17

SPECIFICATIONS FOR FIXTURE "B"

PROPOSED LUMINAIRES SCHEDULE

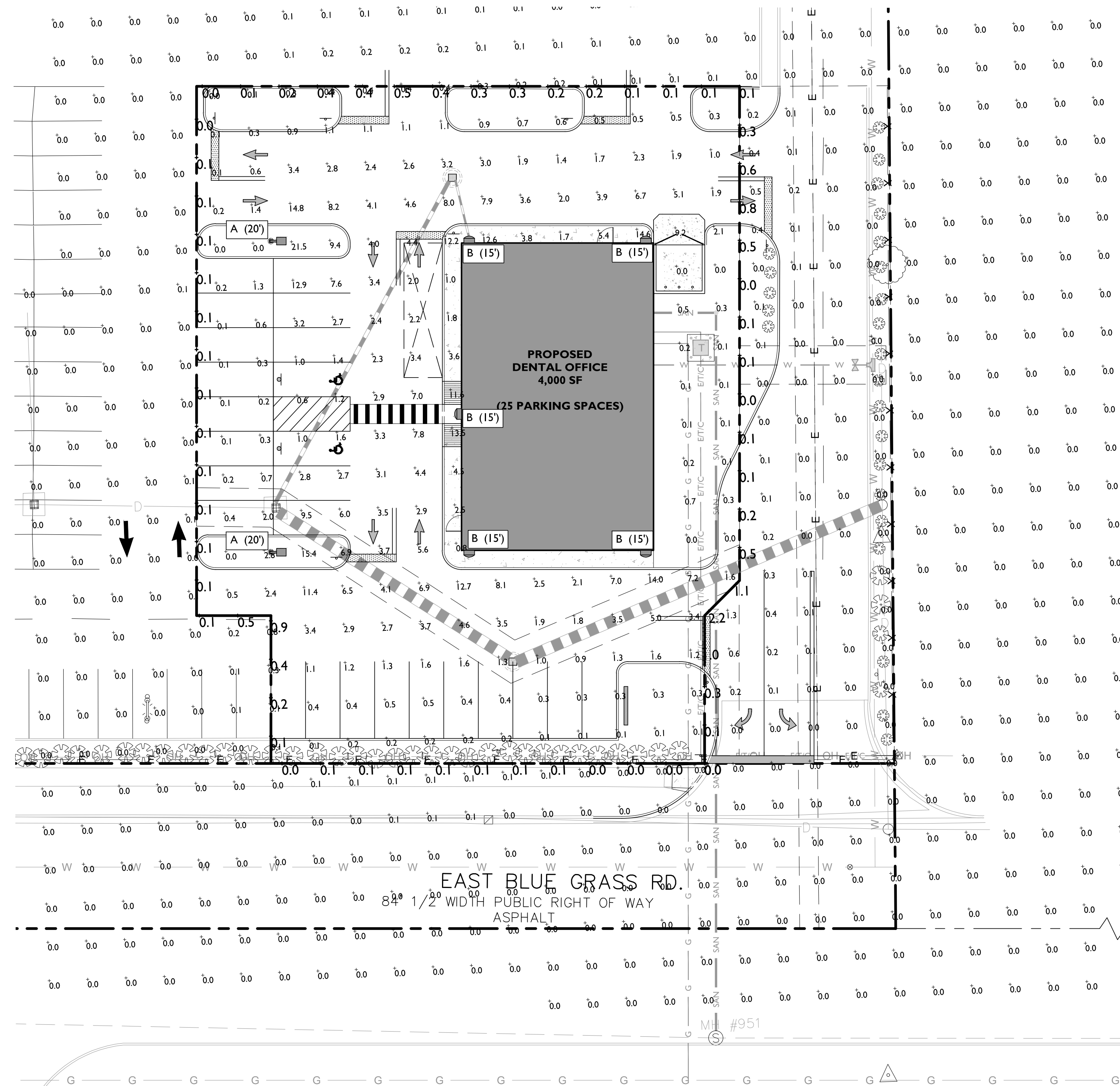
SYMBOL	LABEL	QUANTITY	SECURITY LIGHTING	DISTRIBUTION	LLF	WATTS	MANUFACTURER	IES FILE
A		2	PATRIOT SERIES SINGLE AREA LIGHT - FT - 128 LED	FT	0.90	143	LSI INDUSTRIES	XPT3-FT-LED-128-350-CW-UEIES
B		5	LSI INDUSTRIES SLIM WALL PACK	WT	0.90	80	LSI INDUSTRIES	WPSLL-80-45.IES

LIGHTING STATISTICS

DESCRIPTION	AVERAGE	MINIMUM	MAXIMUM	AVG/MIN	MAX/MIN
FULL SITE	0.67 FC	0.0 FC	21.5 FC	N/A	N/A
PROPERTY LINE	0.24 FC	0.0 FC	2.2 FC	N/A	N/A
PARKING AREA	2.93 FC	0.1 FC	15.1 FC	29.30	151.00 FC

LIGHTING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 10.6	LIGHTING SHALL BE ARRANGED TO REFLECT AWAY FROM ADJOINING PROPERTIES	PROVIDED

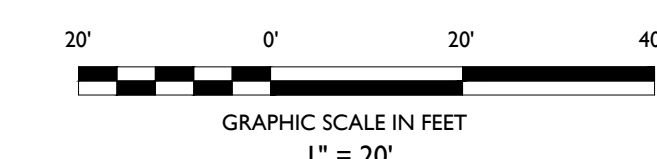


GENERAL LIGHTING NOTES

- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
- WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
- UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.90
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
- THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.

ALL LIGHTING CALCULATIONS ARE BASED SOLELY UPON THE PROPOSED LIGHTING SHOWN. NO EXISTING LIGHTING WAS INCLUDED WITHIN THE CALCULATIONS.

ALL PROPOSED AREA LIGHT POLES, ELECTRICAL CONNECTION SHALL BE CONNECTED TO THE PROPOSED BUILDING ELECTRICAL METER.



SYMBOL

- A (XX') PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
- XX PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
- PROPOSED AREA LIGHT
- PROPOSED BUILDING MOUNTED LIGHT

DATE	BY	DESCRIPTION
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SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-011-00
 4097 EAST BLUE GRASS ROAD
 UNION TOWNSHIP
 ISABELLA COUNTY, MICHIGAN

MICHIGAN LICENSE NO. 6201063062
 LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

SCALE: 1" = 20' PROJECT ID: M-17043

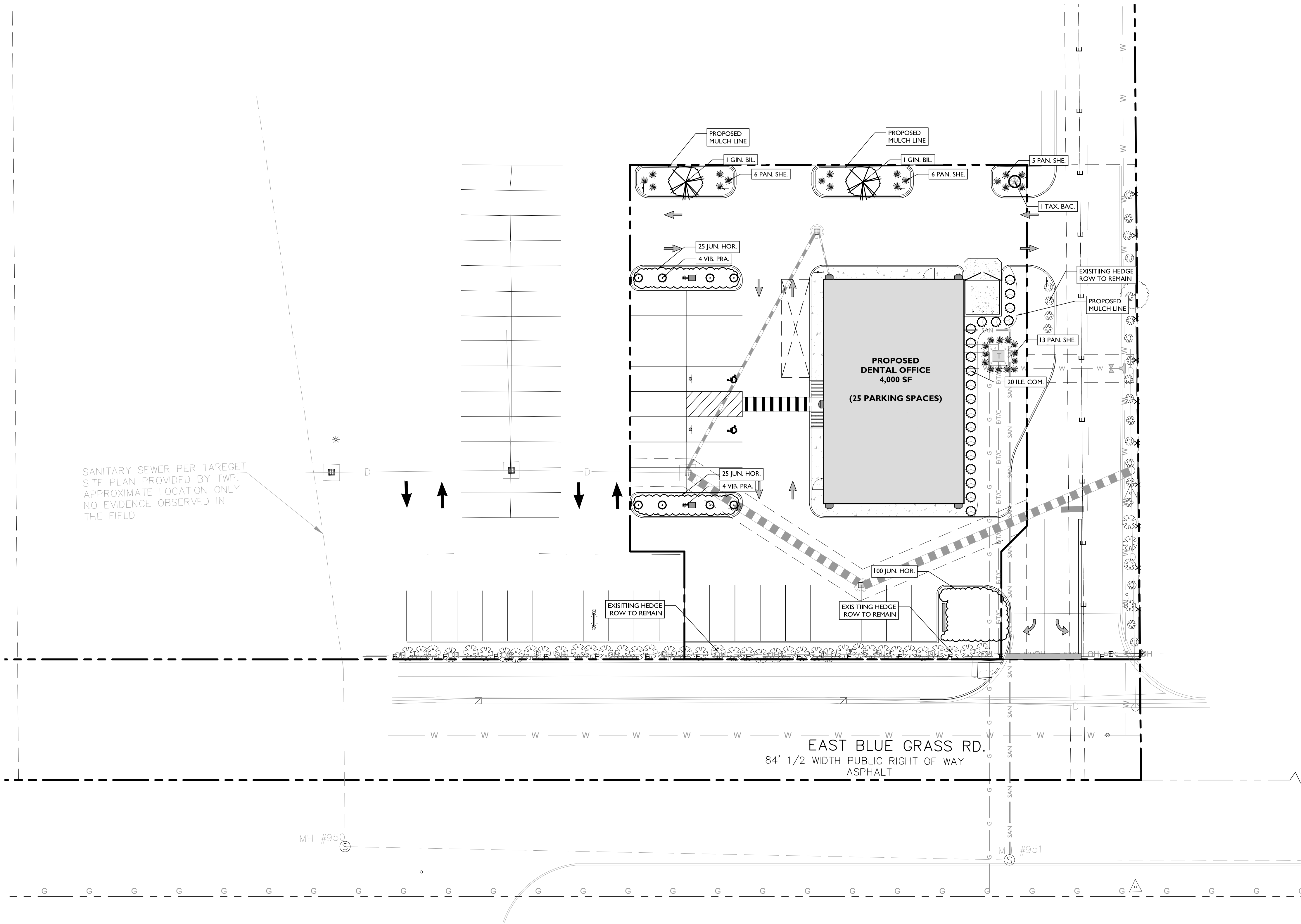
TITLE:
LIGHTING PLAN

DRAWING:
C-8

PLANT SCHEDULE					
PLANT KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
DECIDUOUS TREES (2 TOTAL)					
GIN. BIL.	2	GINKGO BIBOBA "PRINCETON SENTRY"	PRINCETON SENTRY	2.5" CAL.	B&B
SHRUBS (29 TOTAL)					
TAX. BAC.	1	TAXUS BACCATA RAPENDENS	SPREADING ENGLISH YEW	24"-36" CAL.	B&B
VIB. PRA.	8	VIBURNUM PRAGANESE	PRAGANESE VIBURNUM	24"-36" CAL.	B&B
I.L.E. COM.	20	ILEX GLABRA "COMPACT A"	COMPACT INKBERRY	24"-36" CAL.	B&B
GROUND COVERS (150 TOTAL)					
JUN. HOR.	150	JUNIPERUS HORIZONTALS	SPREADING JUNIPERS	1 GAL.	18" O.C.
GRASSES (30 TOTAL)					
PAN. SHE.	30	PANICUM VARGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	1 GAL.	18" O.C.

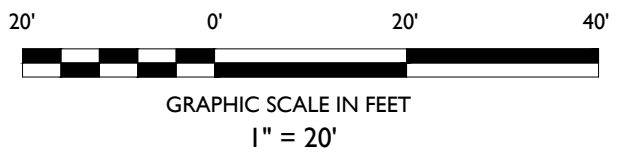
NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.

TREE KEY		
PLANT KEY	PLANT KEY	COMMON NAME
	GIN. BIL.	PRINCETON SENTRY



IRRIGATION NOTE:
IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

- LANDSCAPING NOTES**
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED.
 - THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM 3 INCH LAYER OF MULCH.
 - THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1 SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
 - THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
 - THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING AREAS.



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4097 EAST BLUE GRASS ROAD
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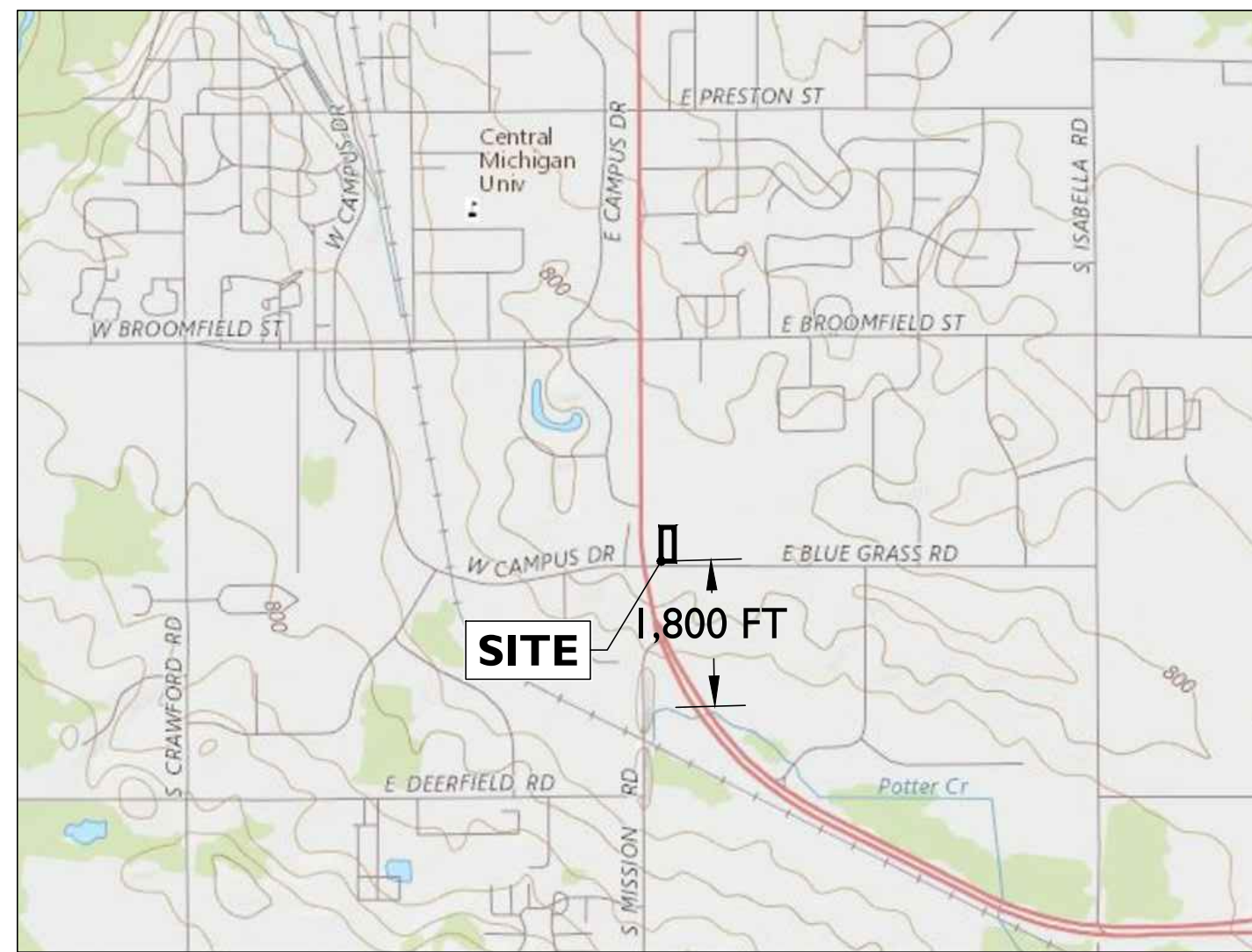
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SCALE: 1" = 20' PROJECT ID: M-17043

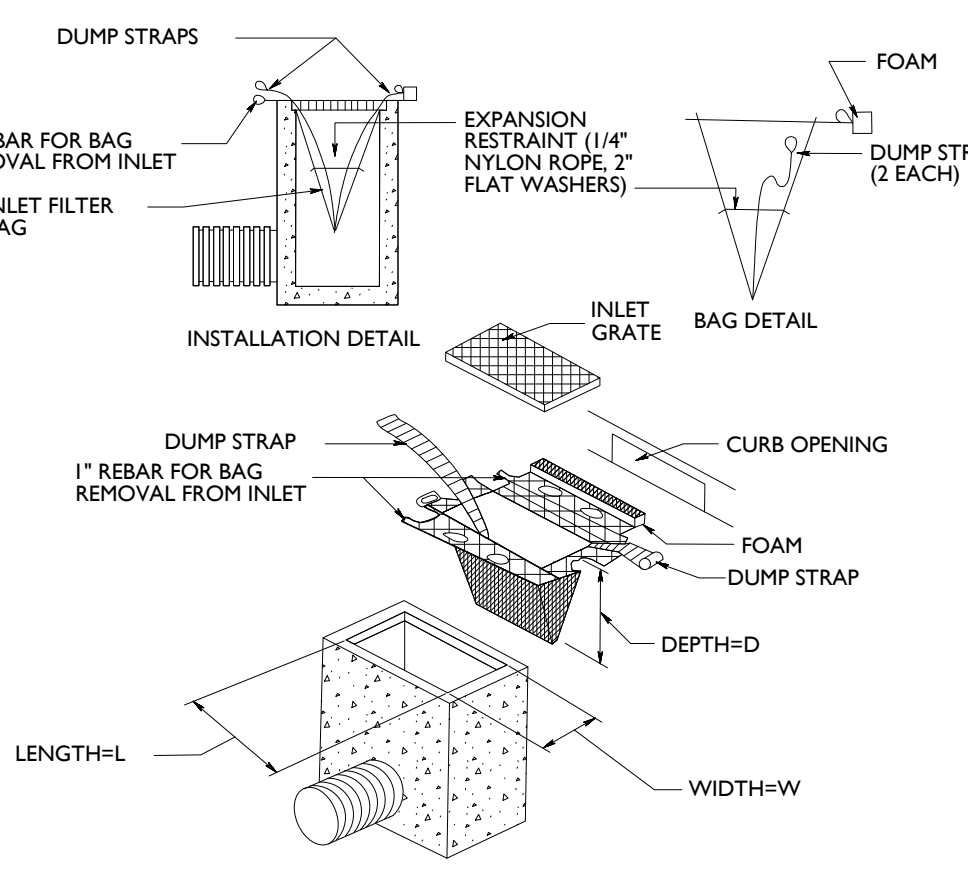
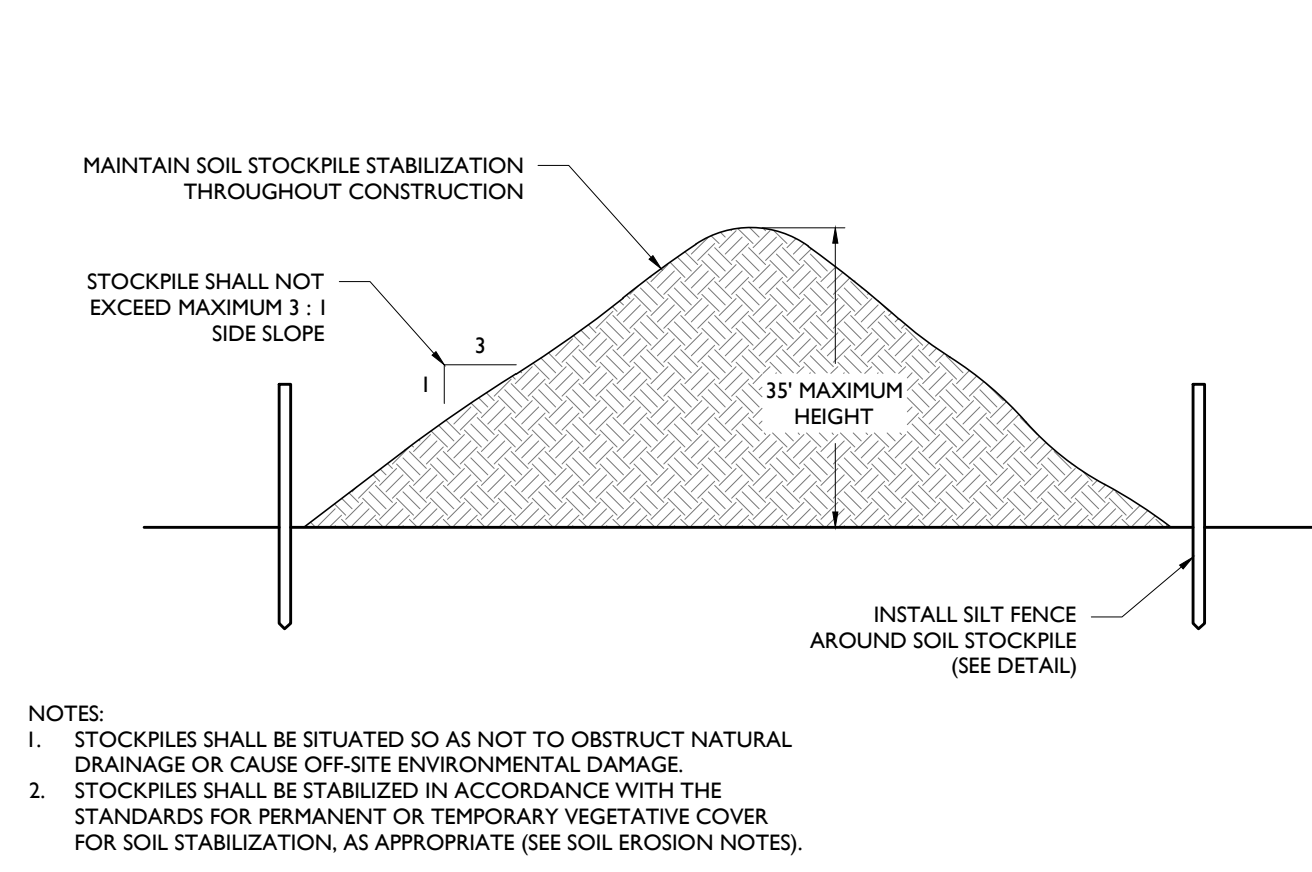
TITLE:
LANDSCAPING PLAN

DRAWING:
C-9

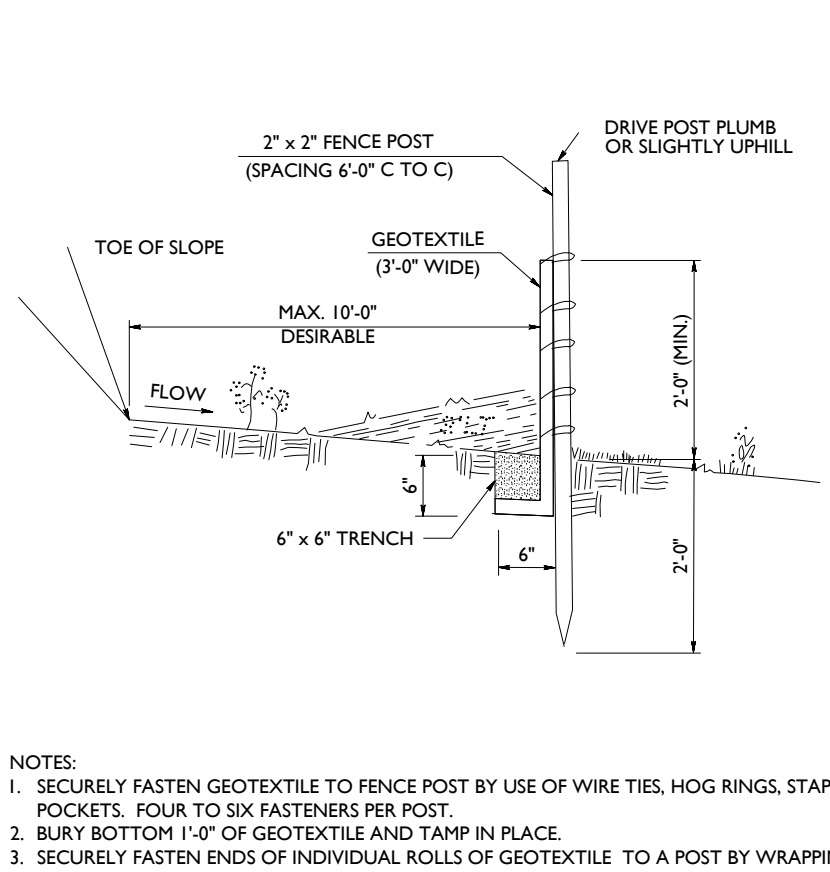


LOCATION MAP

SCALE: 1" = 2,000'±

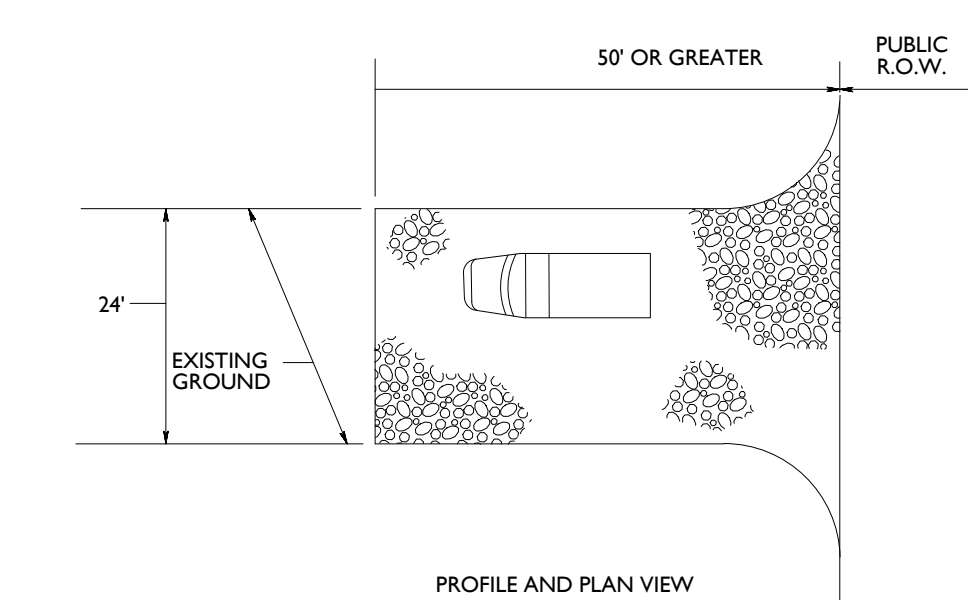


INLET FILTER BAG DETAIL



SILT FENCE DETAIL

SYMBOL	DESCRIPTION
---	PROPERTY BOUNDARY
- - -	ADJACENT PROPERTY BOUNDARY
---	PROPOSED LIMIT OF DISTURBANCE
---	PROPOSED SILT FENCE
---	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
---	PROPOSED INLET PROTECTION FILTER



STABILIZED CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

SOIL EROSION AND SEDIMENT CONTROL NOTES

- THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR QUALITY STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN 1 INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.

ENVIRONMENTAL NOTES:

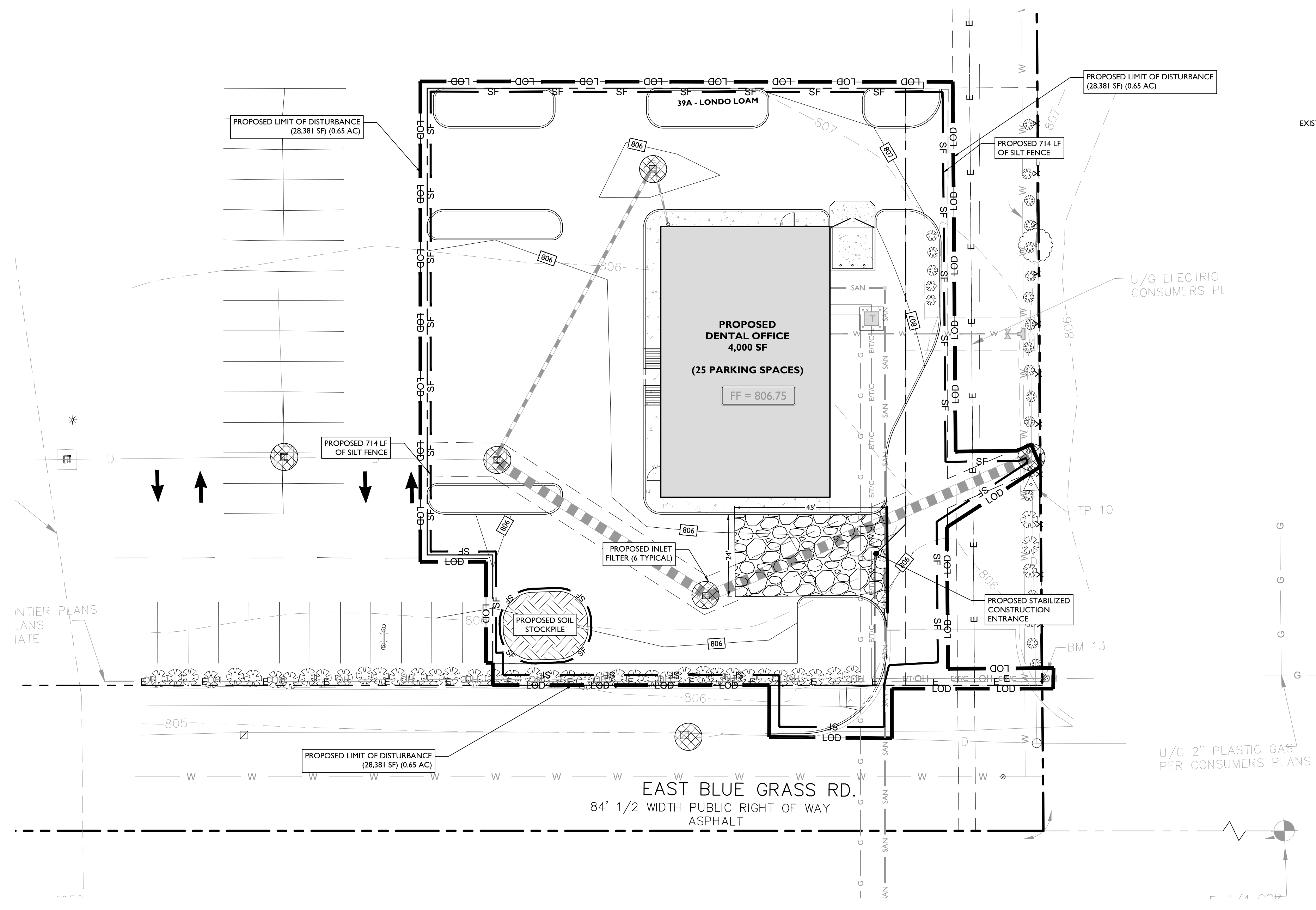
- THERE ARE NO RIPARIAN ZONES ON SITE
- NO PORTION OF THIS SITE LIES WITHIN A FLOOD HAZARD AREA
- THERE ARE NO WETLANDS ON SITE
- THERE ARE NO STREAMS OR WATERWAYS ON SITE
- ALL ELEVATIONS SHOWN ARE BASED ON NAVD 1988 DATUM

39A - LONDO LOAM	
SOIL CHARACTERISTICS	
HYDROLOGIC SOIL GROUP	C/D
DEPTH TO RESTRICTIVE LAYER	>78 INCHES
SOIL PERMEABILITY	0.80 IN/HR
DEPTH TO WATER TABLE	9.1 IN

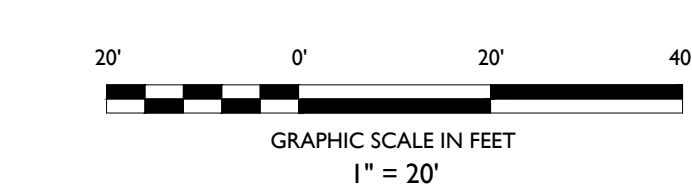
SEQUENCE OF CONSTRUCTION

- INSTALL SILT FENCE AND CONSTRUCTION ENTRANCE (2 DAYS).
- ROUGH GRADING AND TEMPORARY SEEDING (20 DAYS).
- EXCAVATE AND INSTALL DRAINAGE PIPING, AND INLETS (20 DAYS).
- INSTALL INLET FILTERS (1 DAY).
- BUILDING CONSTRUCTION AND SITE IMPROVEMENTS (90 DAYS).
- CONSTRUCT RIGHT OF WAY IMPROVEMENTS (1 DAY).
- LANDSCAPING IMPROVEMENTS AND FINAL SEEDING (7 DAYS).
- REMOVE SOIL EROSION MEASURES (1 DAY).

NOTE: TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUIDE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO TOWNSHIP AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY.



EAST BLUE GRASS RD.
84' 1/2 WIDTH PUBLIC RIGHT OF WAY ASPHALT



NO.	DATE	BY	DESCRIPTION
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UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN

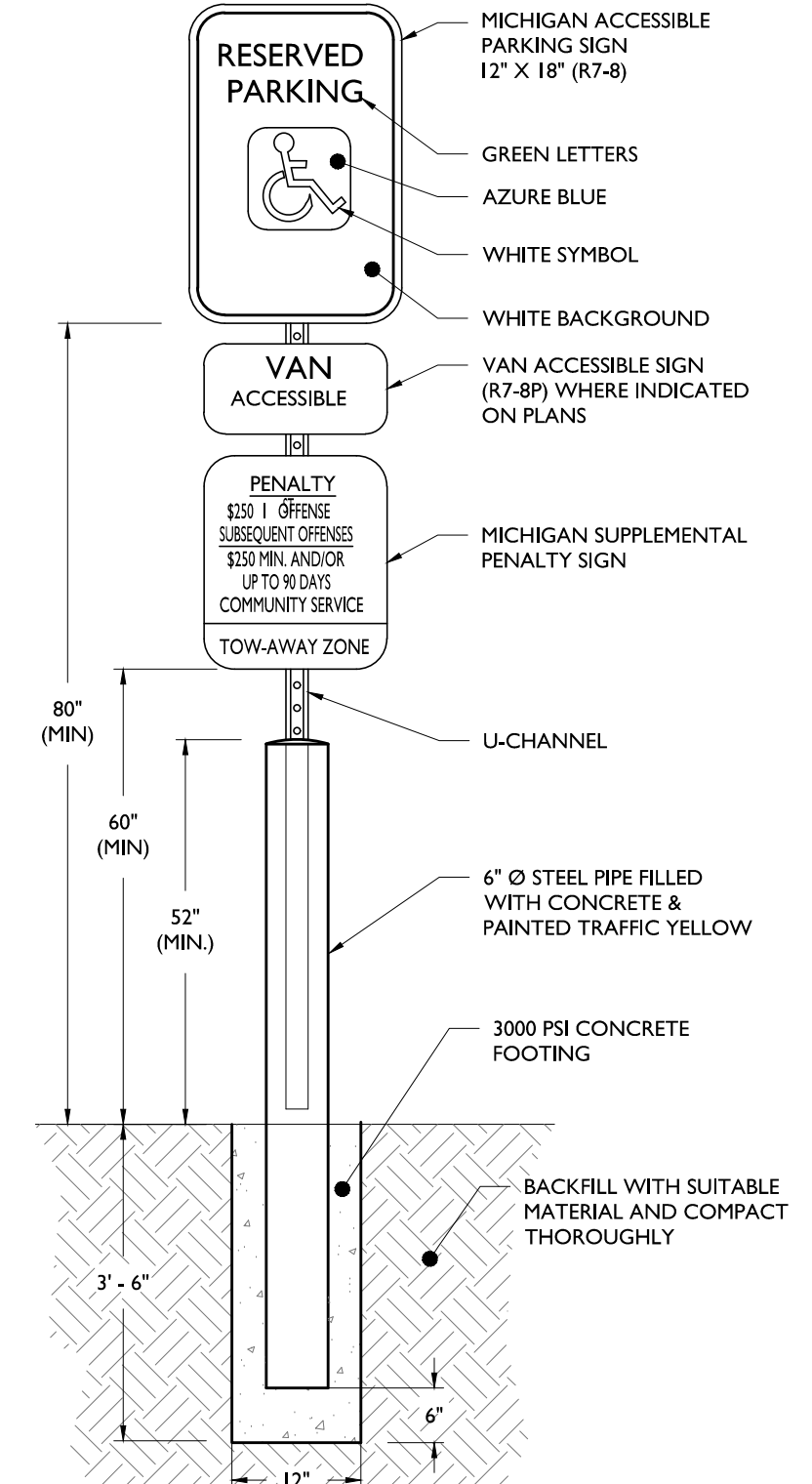
MICHIGAN LICENSE No. 6201063062
LICENSED PROFESSIONAL ENGINEER

STONEFIELD engineering & design

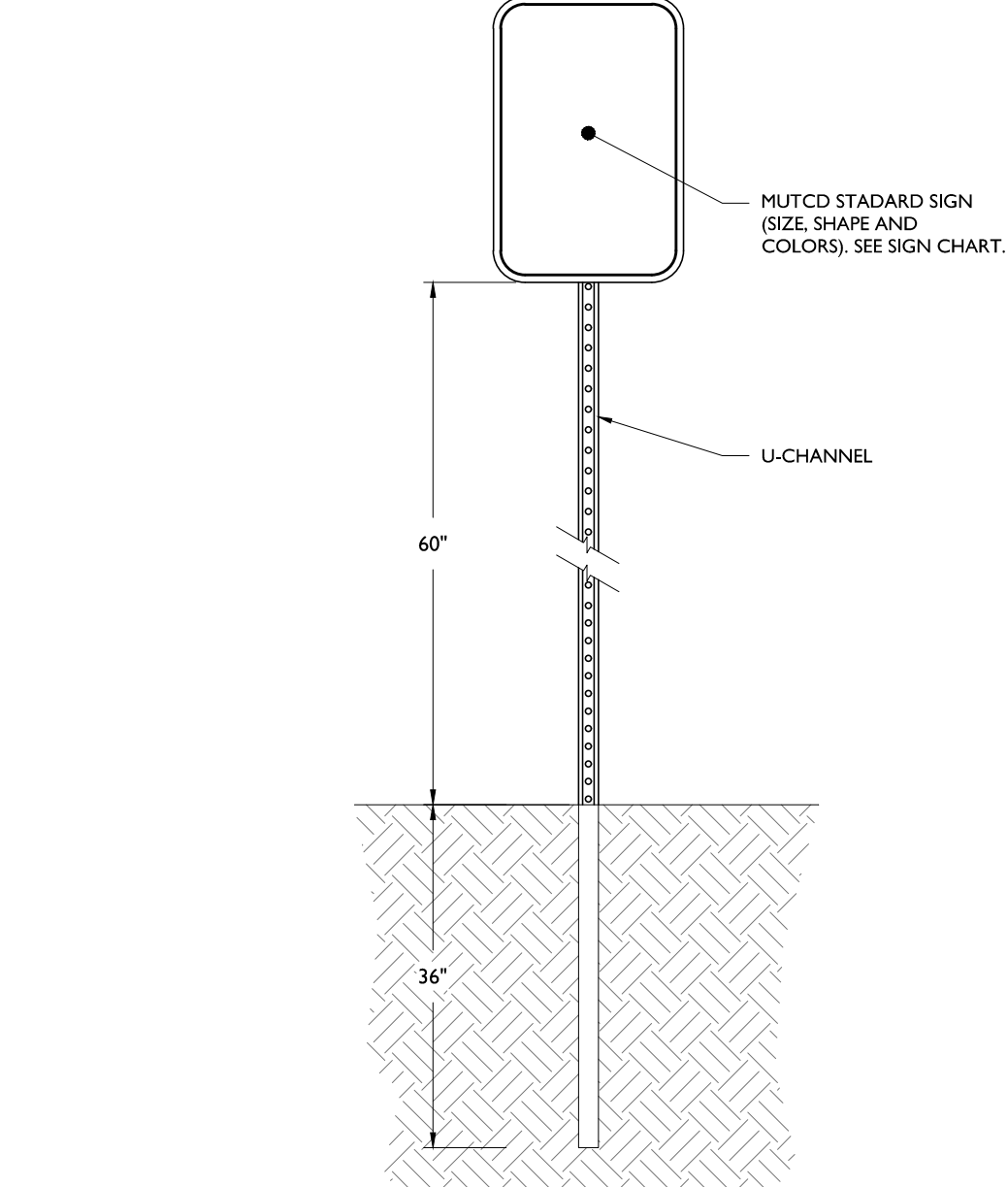
SCALE: 1" = 20' PROJECT ID: M-17043

TITLE:
SOIL EROSION & SEDIMENT CONTROL PLAN

DRAWING:
C-10



ACCESSIBLE PARKING SIGN WITH BOLLARD DETAIL
NOT TO SCALE

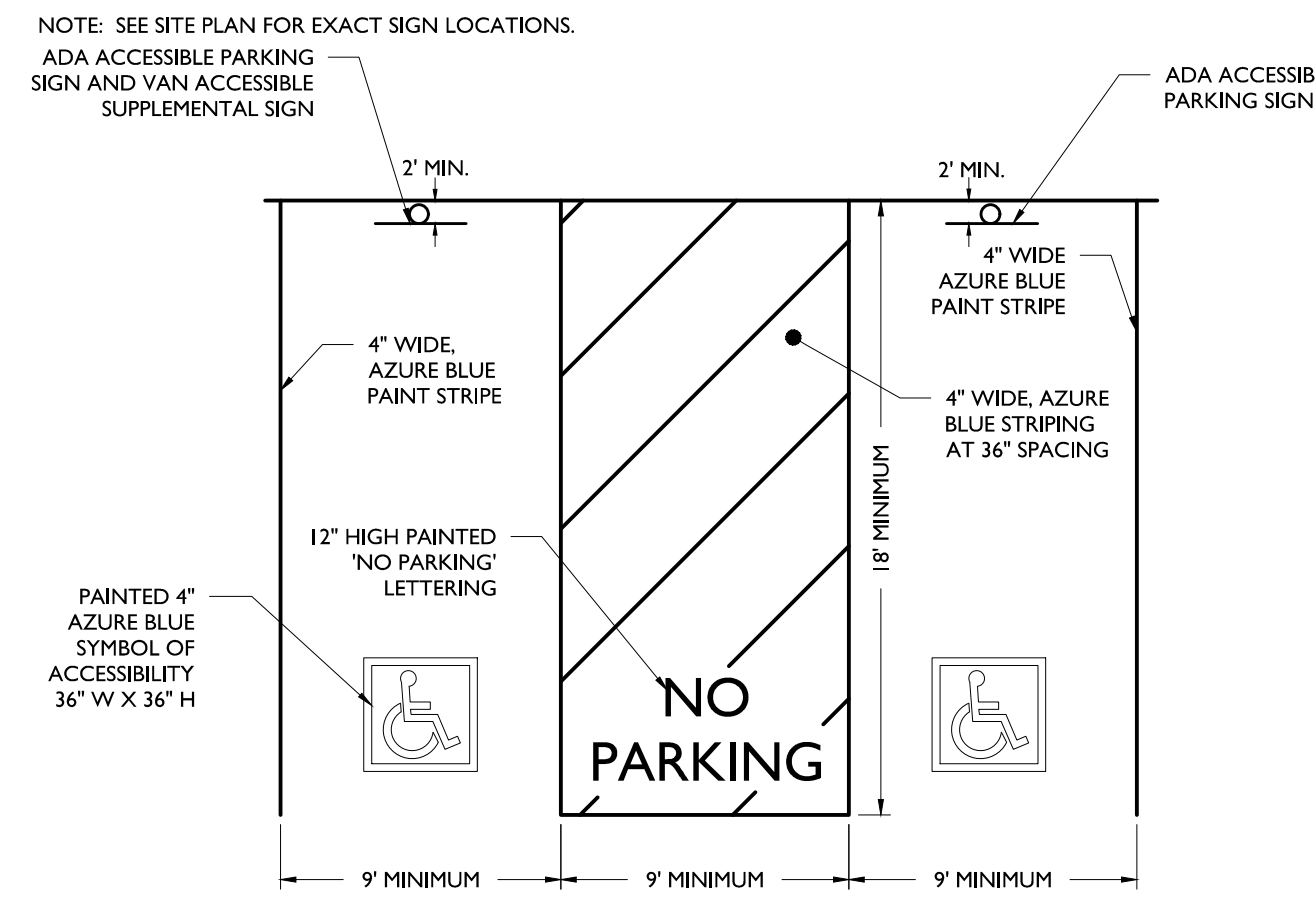


SIGN POST DETAIL
NOT TO SCALE

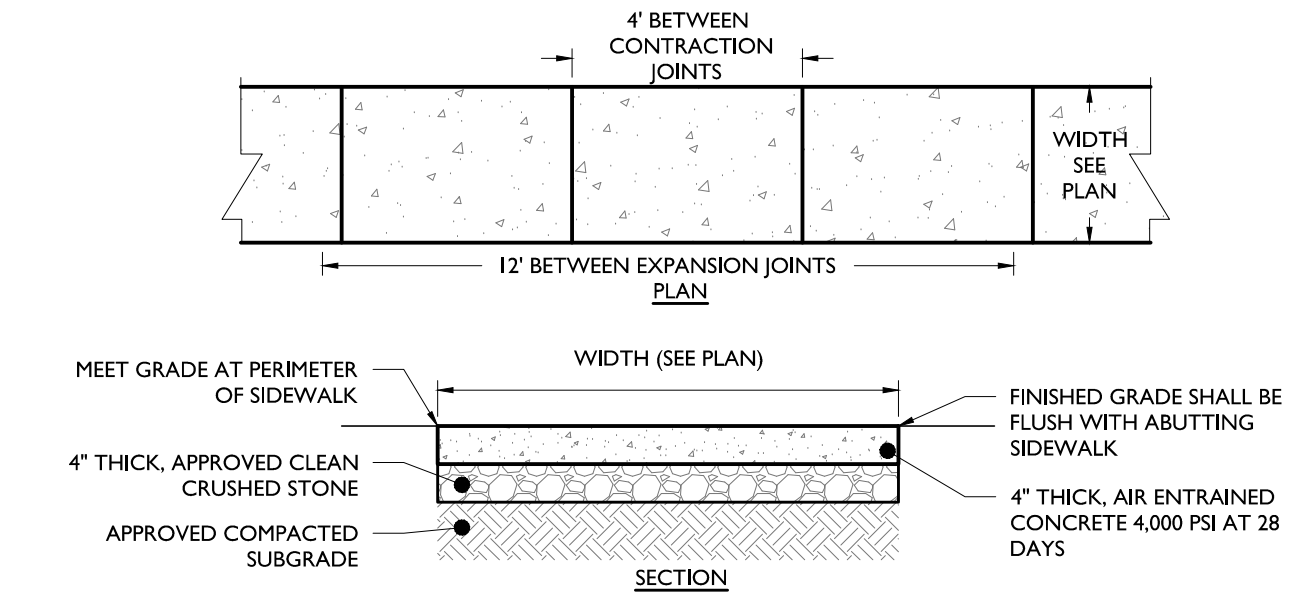
M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
		LEGEND	BACKGROUND		
STOP SIGN (R1-1)		RED	WHITE	36" x 36"	GROUND

NOTE:
1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.
2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.

SIGN DATA TABLE
NOT TO SCALE

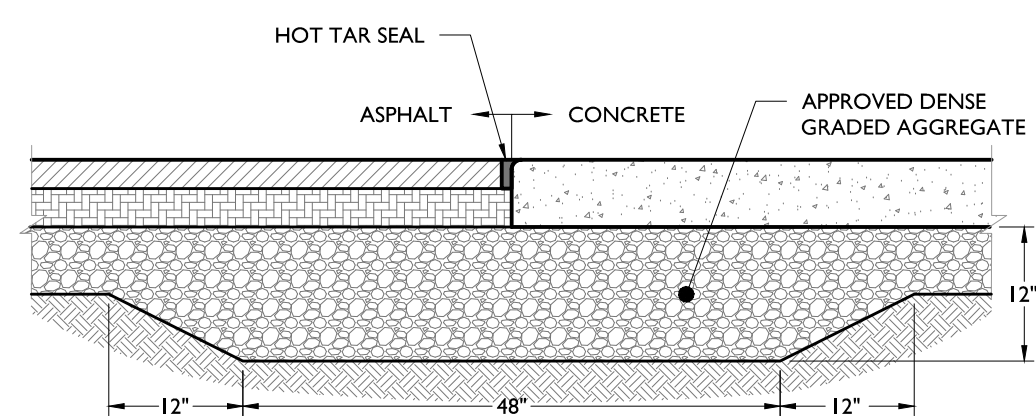


ACCESSIBLE PARKING STALL MARKINGS
NOT TO SCALE

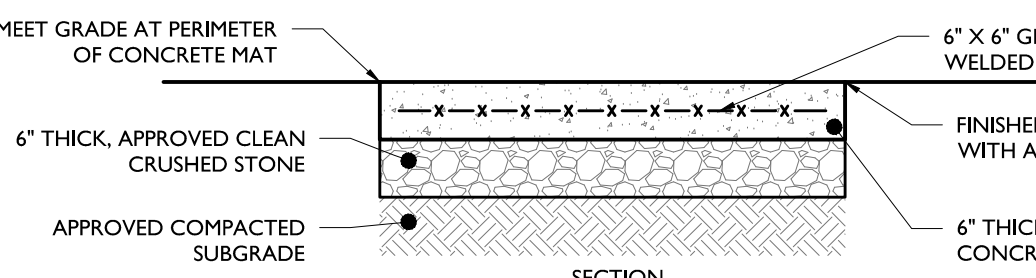


CONCRETE WALKWAY DETAIL
NOT TO SCALE

NOTES:
1. MAXIMUM CROSS SLOPE SHALL BE 1/4" PER FOOT.
2. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE.
3. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.
4. EXPANSION JOINT SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.

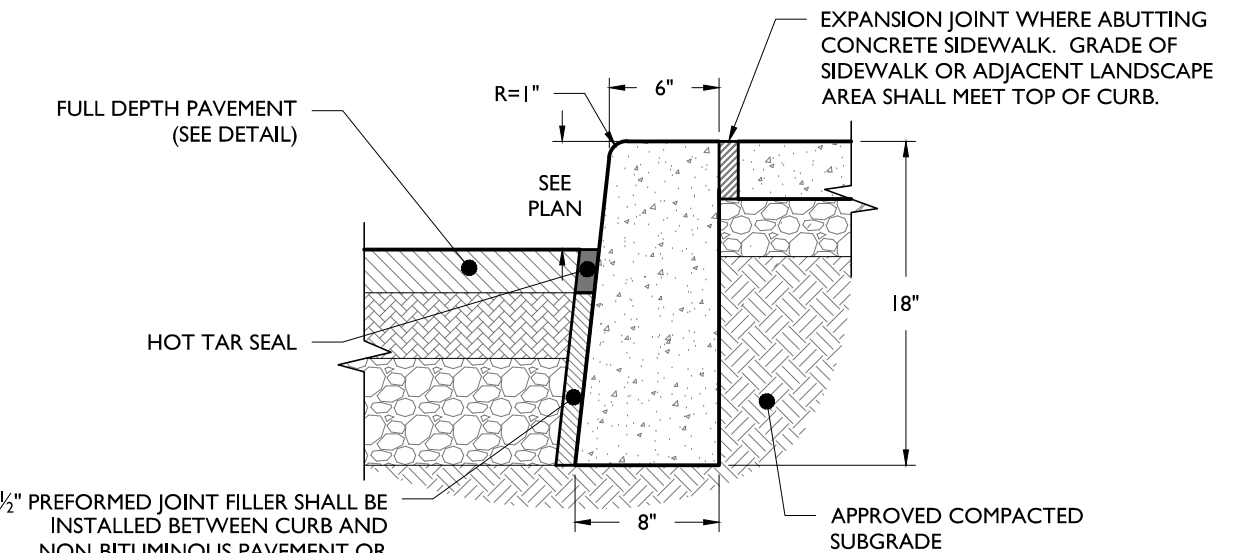


CONCRETE TO ASPHALT TRANSITION DETAIL
NOT TO SCALE



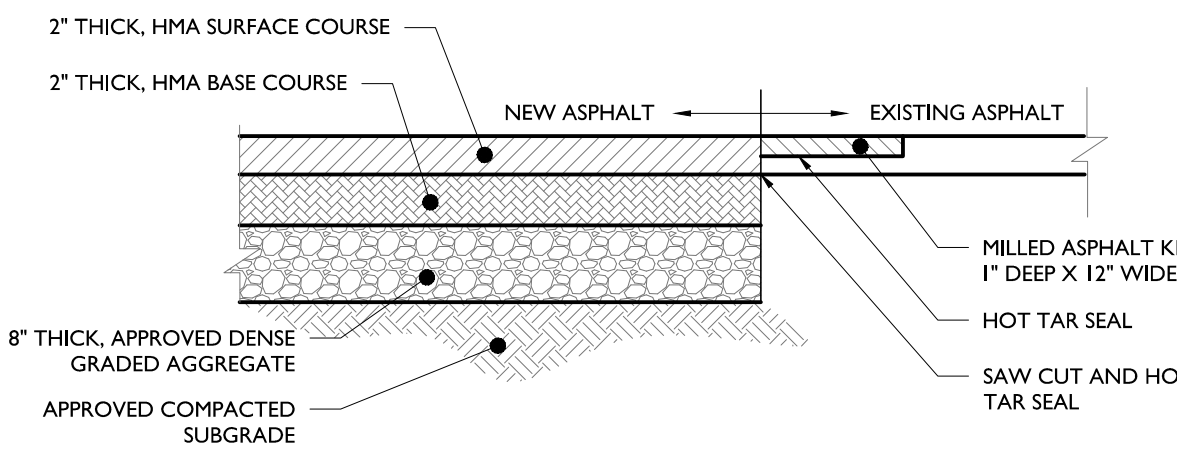
REINFORCED 6" CONCRETE MAT
NOT TO SCALE

NOTES:
1. 1/2" EXPANSION JOINTS WITH WATER SEAL SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE. LONGITUDINAL REBAR TO BE CUT AT EXPANSION JOINTS.
2. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT MID-POINT BETWEEN EXPANSION JOINTS OR 6' INTERVALS MAX.
3. CONCRETE SHALL RECEIVE BROOM FINISH.
4. ALL EXPOSED CORNERS TO HAVE 12" CHAMFER.



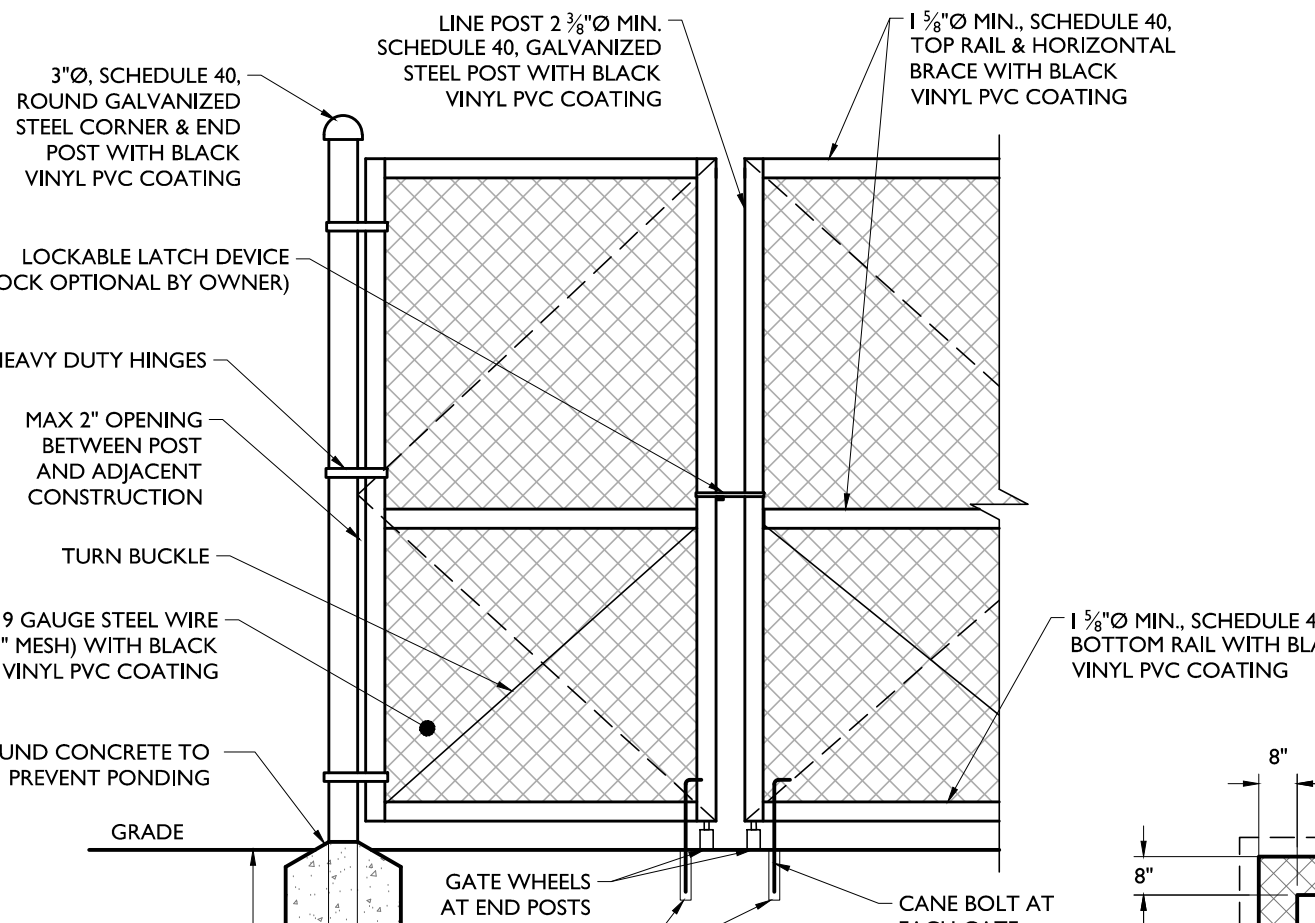
CONCRETE CURB DETAIL
NOT TO SCALE

NOTES:
1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.
2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.
3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.
4. 18" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.

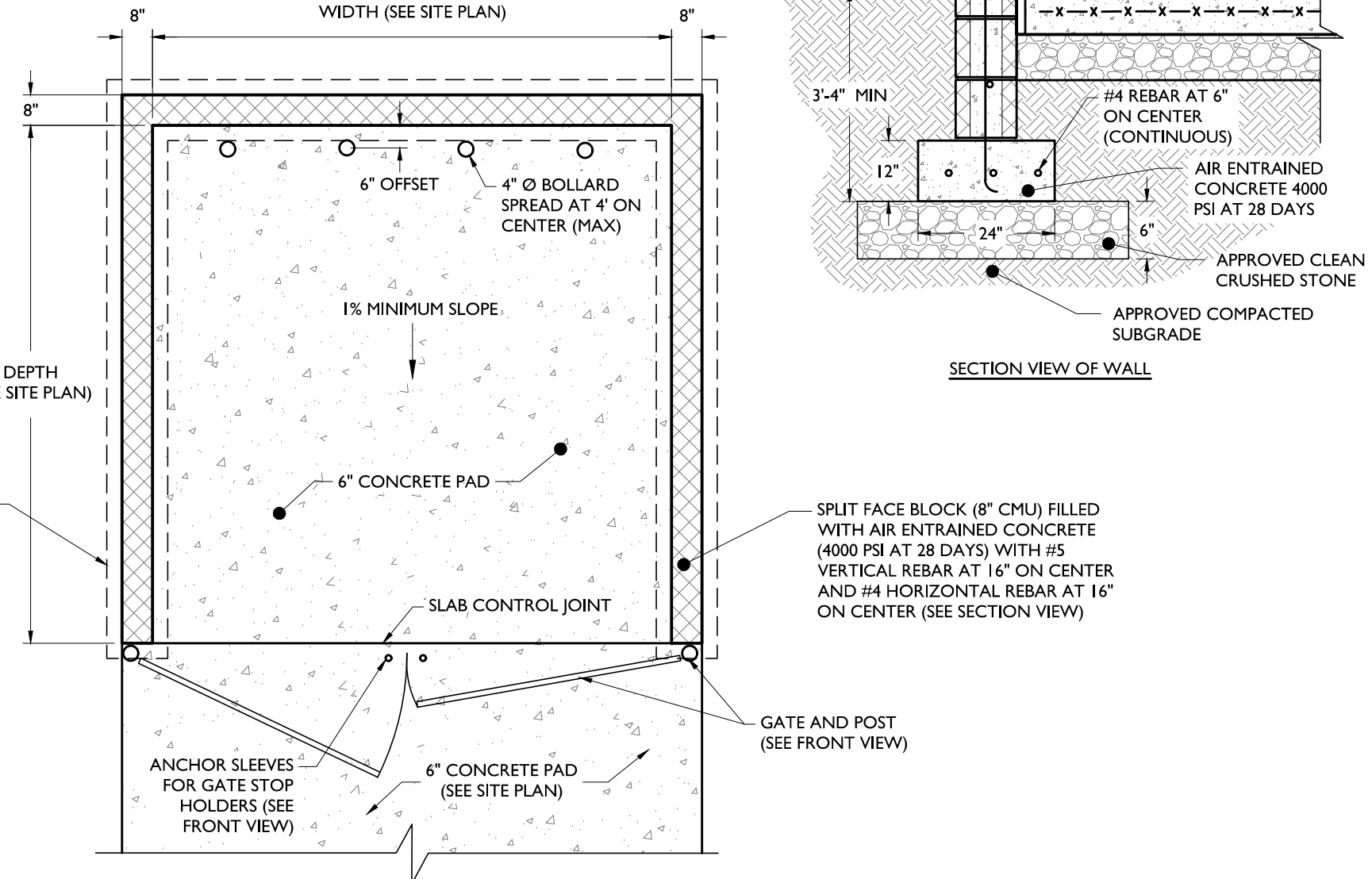


FULL DEPTH ASPHALT PAVEMENT DETAIL
NOT TO SCALE

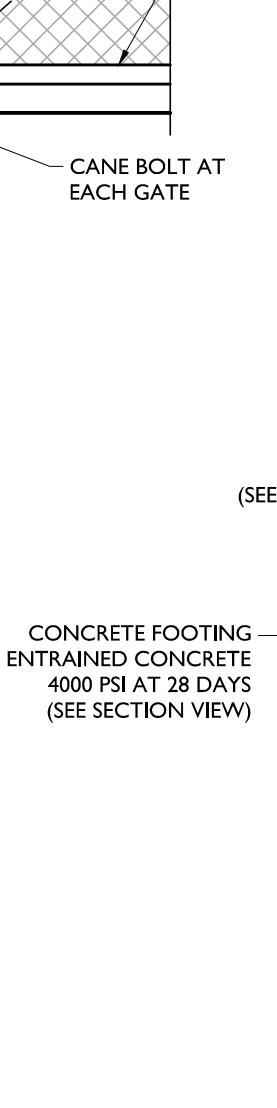
NOTE:
1. HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
2. CONTRACTOR TO REFER TO GEOTECHNICAL REPORT PRIOR TO CONSTRUCTION.
3. CONTRACTOR TO MATCH EXISTING PAVEMENT CROSS SECTION.



FRONT VIEW OF GATE



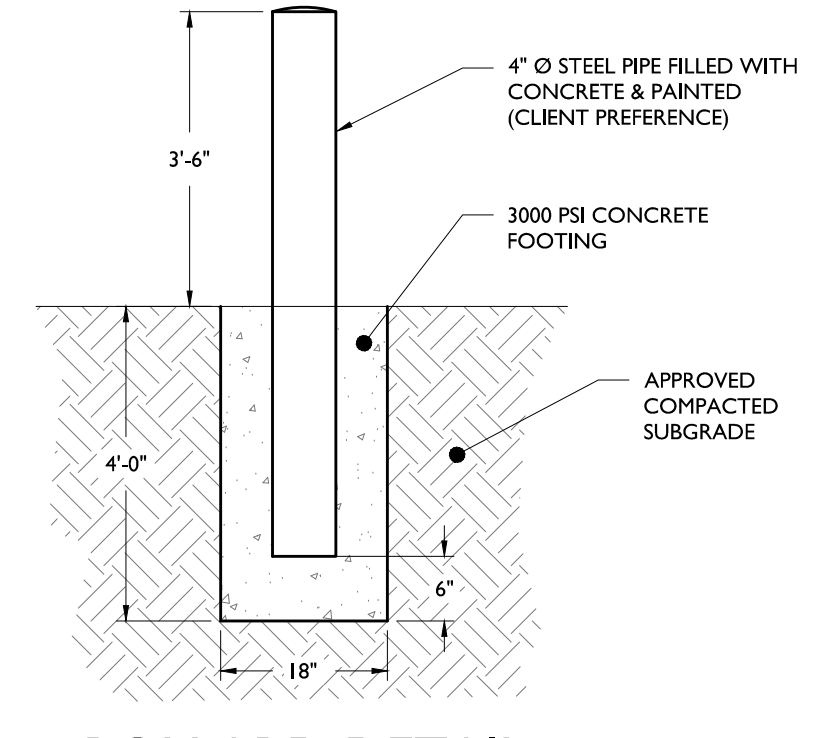
SECTION VIEW OF WALL



PLAN VIEW

TRASH / RECYCLE ENCLOSURE DETAIL
NOT TO SCALE

NOTE:
BLOCK COLOR TO MATCH BUILDING OR AS SPECIFIED BY OWNER



BOLLARD DETAIL
NOT TO SCALE



TRANSITION RAMP DETAIL
NOT TO SCALE

NOTES:
1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%
2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.
3. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.

VP100176101-10-01-11-00-14097 EAST BLUE GRASS ROAD, HOUSTON, TEXAS 77060

SUBMISSION FOR SITE PLAN APPROVAL		DESCRIPTION	
NO.	DATE	BY	
1	01/11/2018	MPH	
	ISSUE		

NOT APPROVED FOR CONSTRUCTION

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engineering & design

Royal Oak, MI • New York, NY • Rutherford, NJ • Princeton, NJ
www.stonefielddesign.com

28454 Woodward Avenue, Royal Oak, MI 48067
Phone 248.247.1115

SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-011-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN

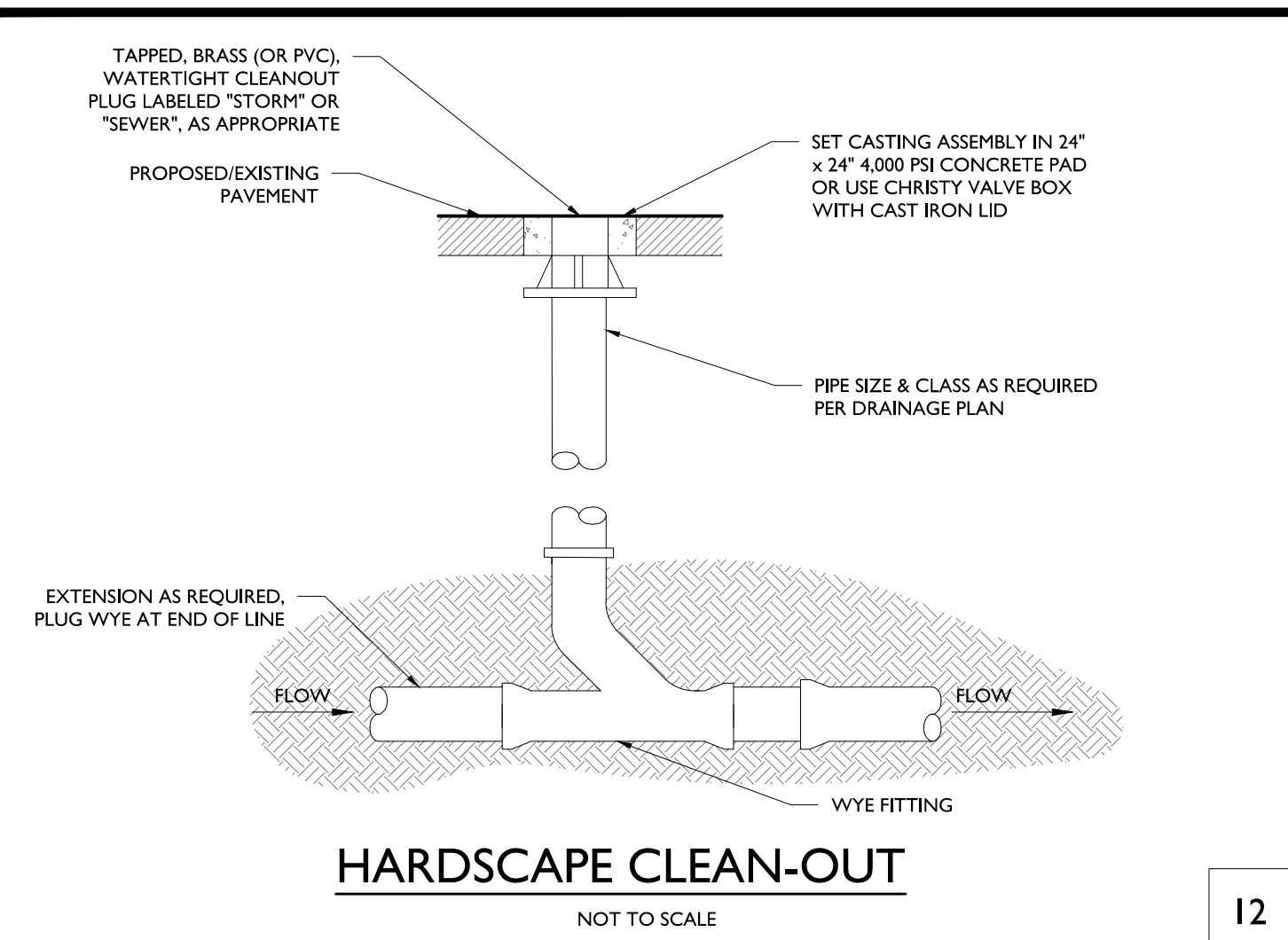
MICHIGAN LICENSE NO. 6201063062
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

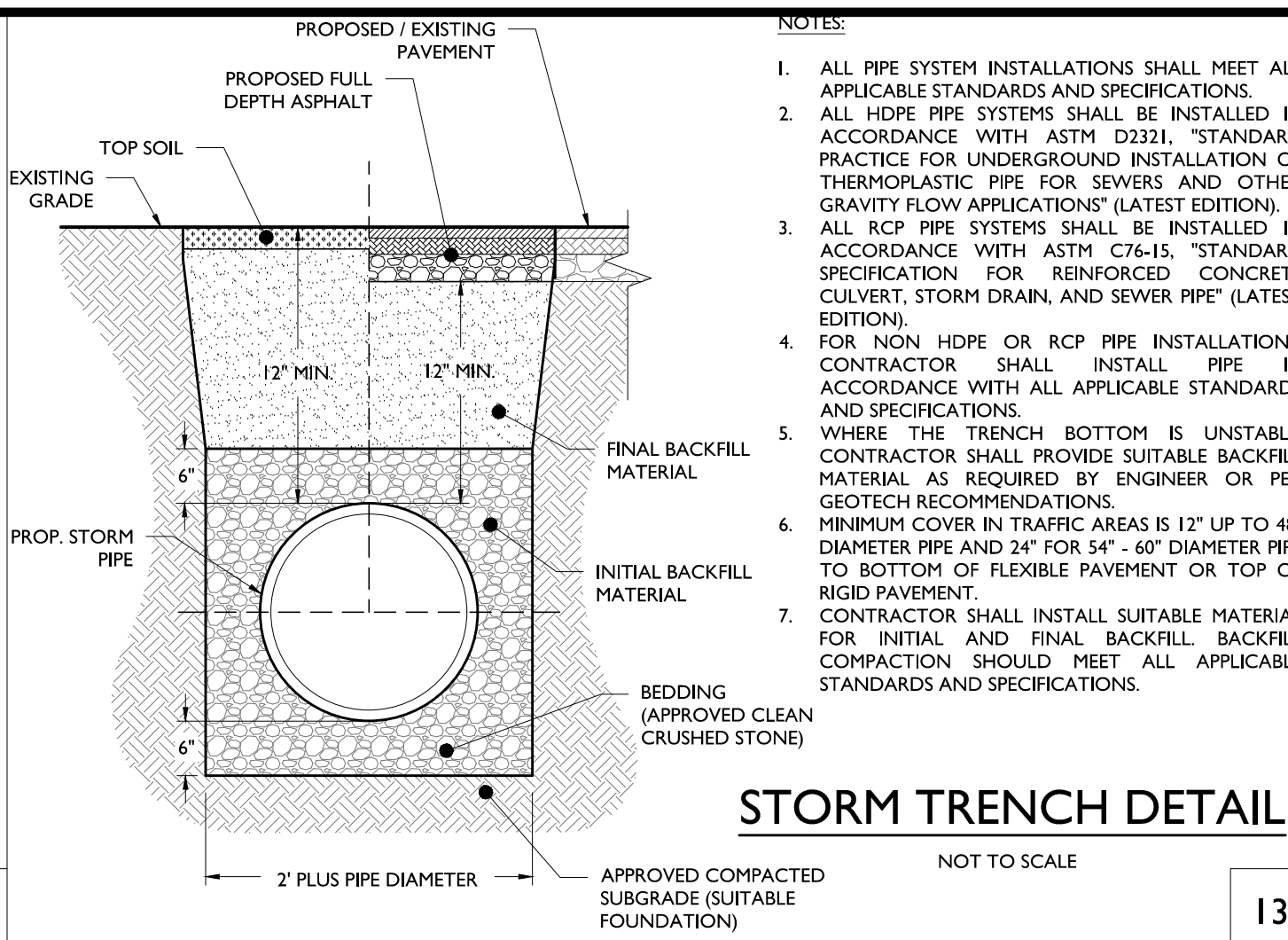
SCALE: AS SHOWN PROJECT ID: M-17043

TITLE:
CONSTRUCTION DETAILS

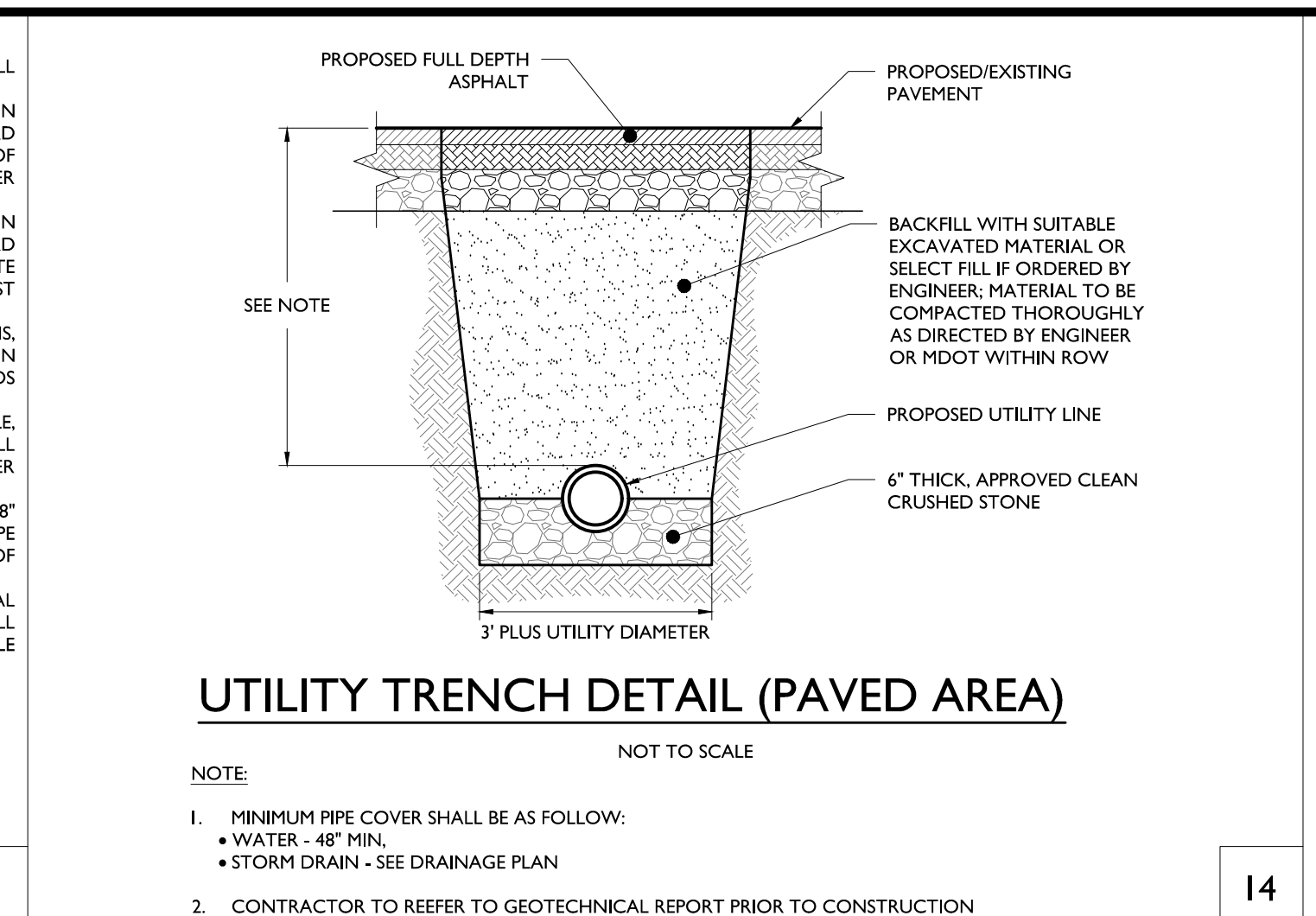
DRAWING:
C-11



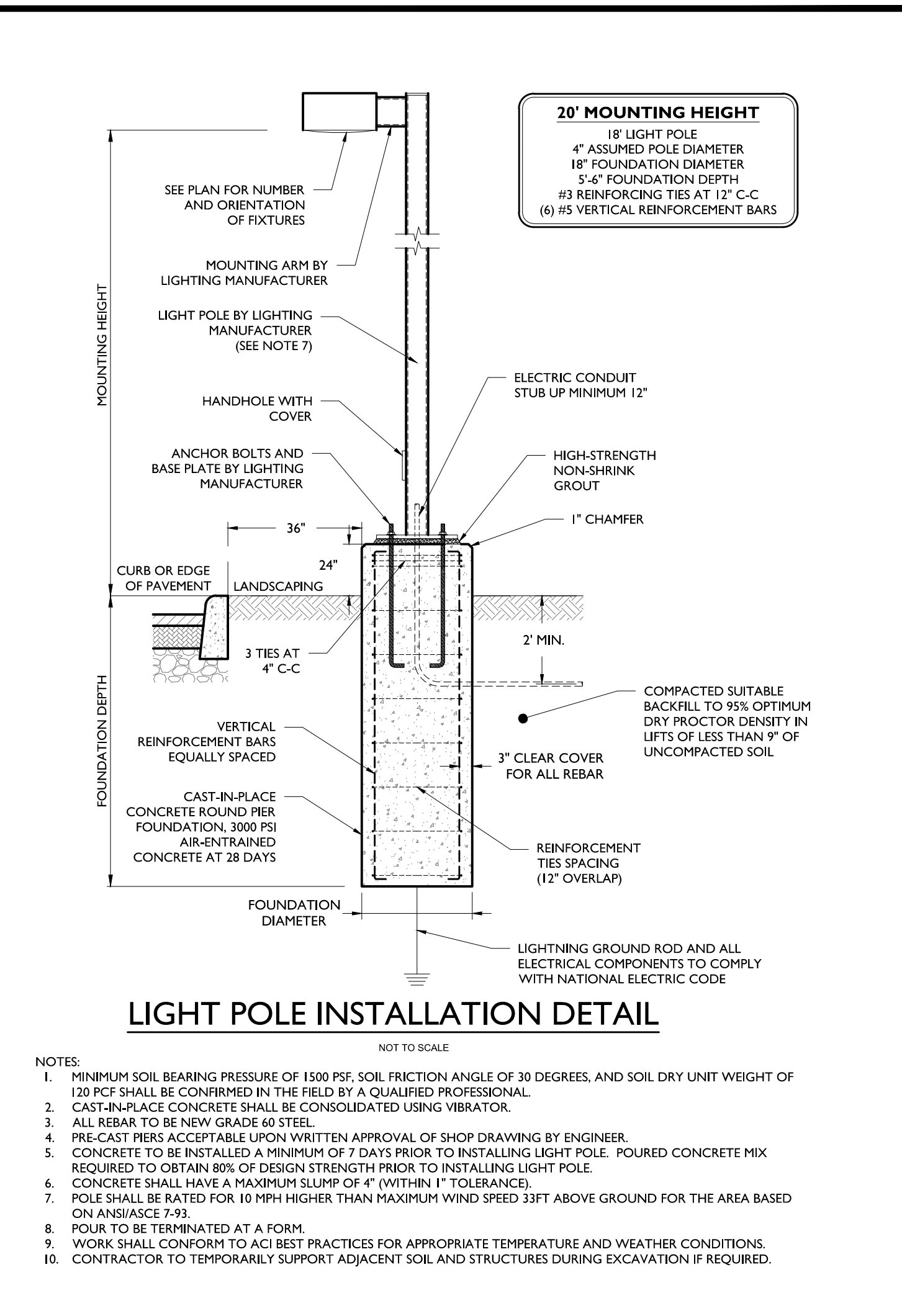
12



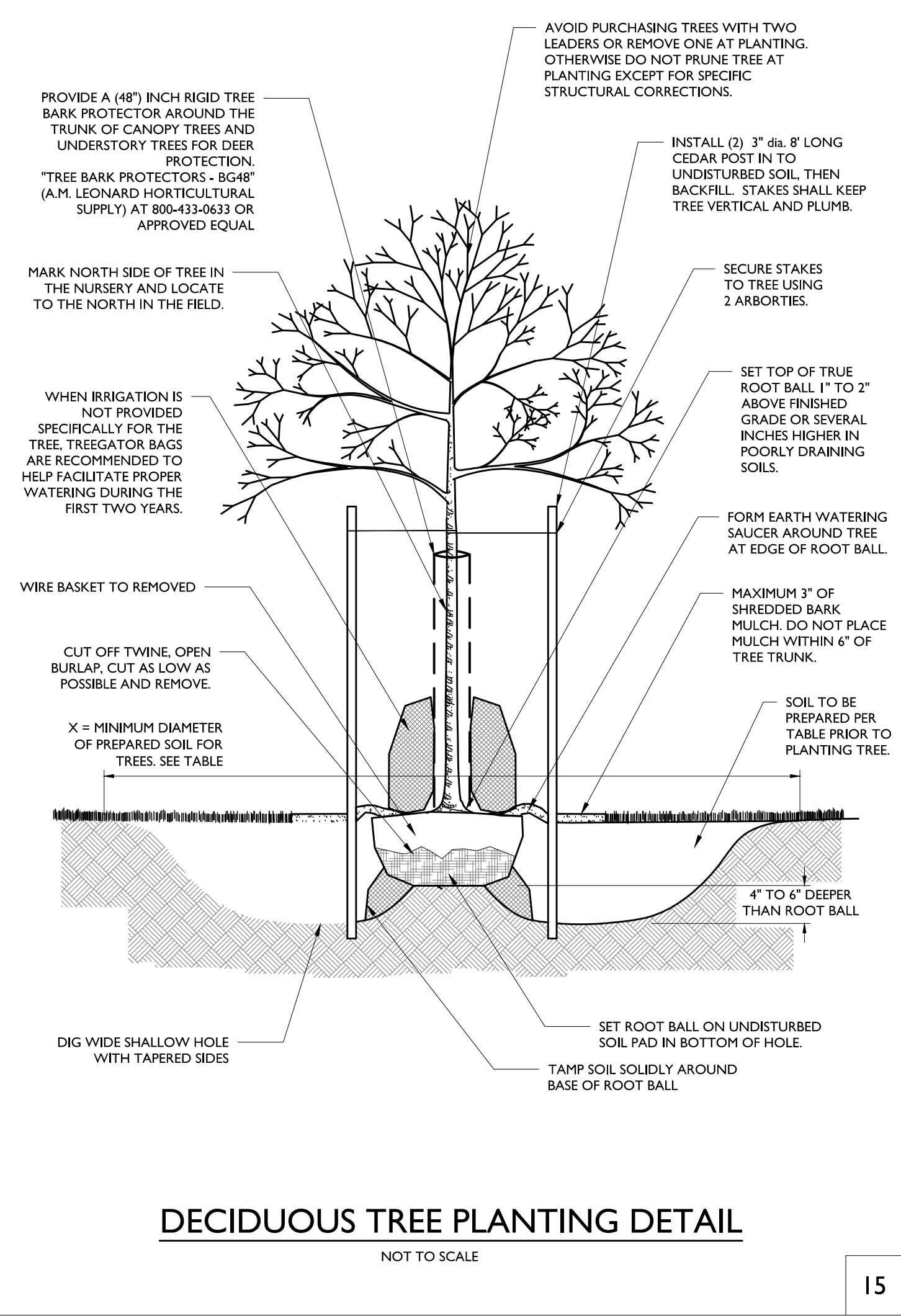
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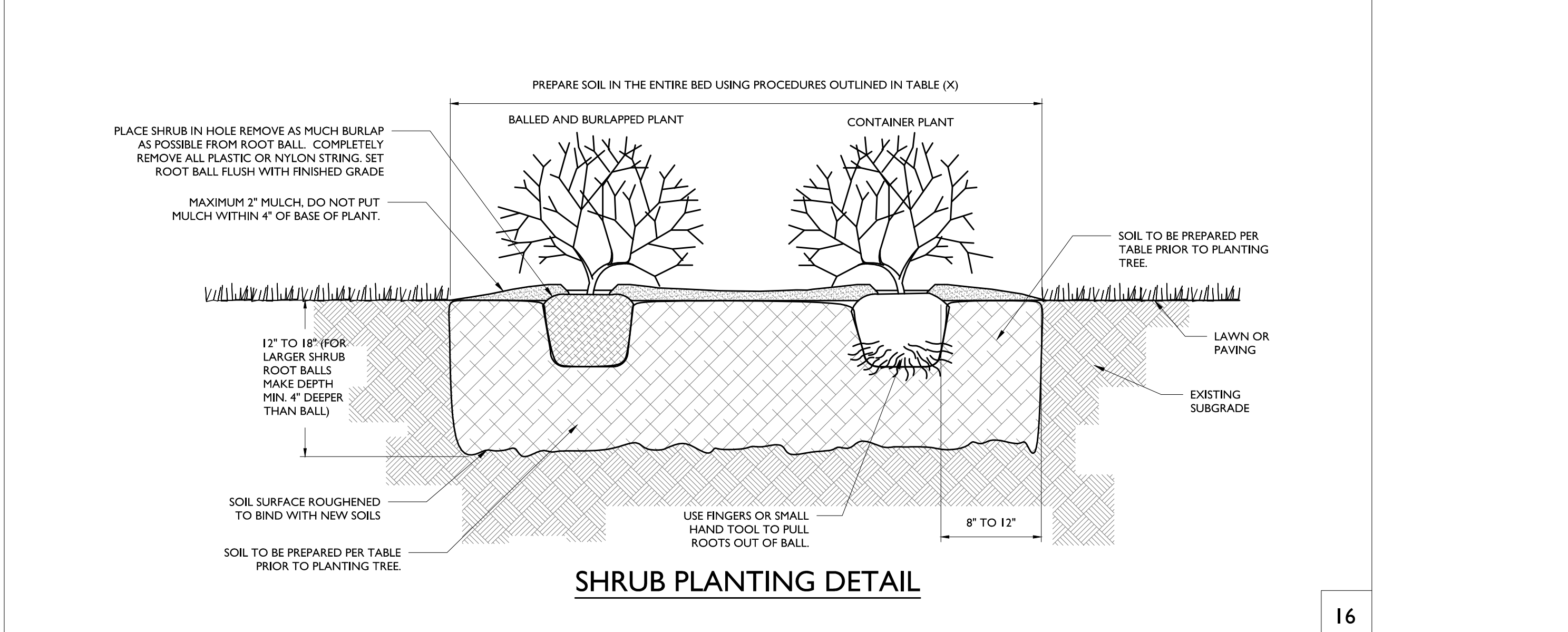
14



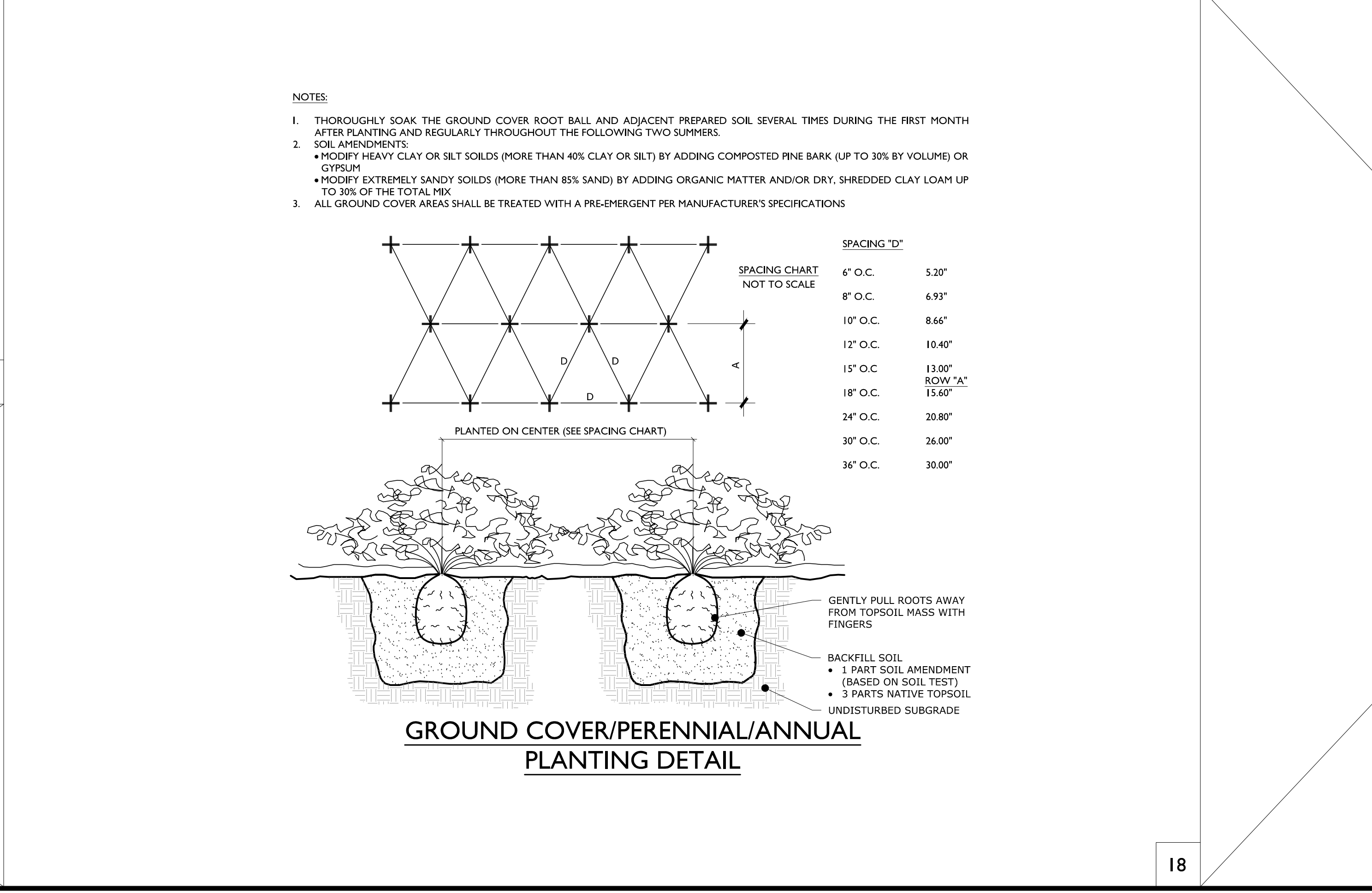
17



15



16



18

NO.	DATE	ISSUE	BY	DESCRIPTION
1	01/21/2018	ISSUE		

NOT APPROVED FOR CONSTRUCTION

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www.stonefielddesign.com

28454 Woodward Avenue, Royal Oak, MI 48067
Phone 248.247.1115

SITE DEVELOPMENT PLANS

TARGET OUTLOT

PROPOSED DENTAL OFFICE BUILDING WITH ASSOCIATED IMPROVEMENTS

PARCEL ID: 14-026-10-011-00
4097 EAST BLUE GRASS ROAD
UNION TOWNSHIP
ISABELLA COUNTY, MICHIGAN

MICHIGAN LICENSE No. 6201063062
LICENSED PROFESSIONAL ENGINEER

STONEFIELD
engineering & design

SCALE: AS SHOWN PROJECT ID: M-17043

TITLE:
CONSTRUCTION DETAILS

DRAWING:
C-12

V:\P\17043\17043-01\17043-01-001.dwg

Proposed Building

ASPEN DENTAL

UNION TOWNSHIP,
 ISABELLA CITY
 MOUNT PLEASANT, MI

SIGNAGE TO BE DETERMINED

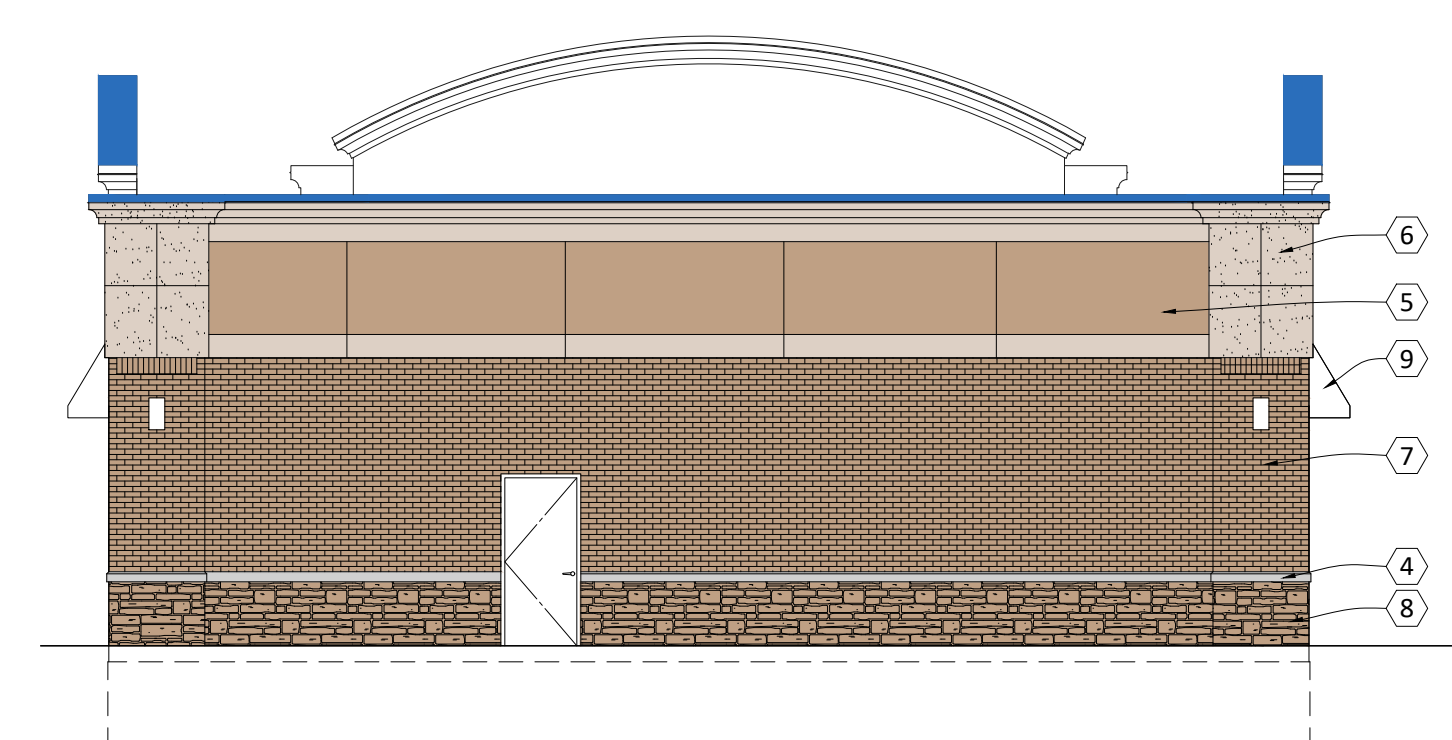
— 50 SQUARE FOOT AGGREGATE SIGNAGE ALLOWED

EXTERIOR FINISH KEY

①	THERMALLY BROKEN ALUM. FRAME CLEAR ANOD. ALUM. FRAME w/ INSULATED GLAZING
②	SIGNAGE BY TENANT EACH SIGN TO BE 50 SF MAX TOTAL SIGNAGE NOT TO EXCEED 150 SF PROVIDE 1/2" PLYWOOD SUBSTRATE AS REQ'D
③	PREFINISHED METAL COPING MFR. UNA-CLAD COLOR: ELECTRIC BLUE (OR EQUIVALENT)
④	PRECAST SILL MFR. STONECAST COLOR: LIMESTONE (OR EQUIVALENT)
⑤	EIFS #2 MFR. DRYVIT COLOR: 382 TAMANCE
⑥	EIFS #1 MFR. DRYVIT COLOR: 110 VAN DYKE
⑦	MODULAR BRICK VENEER MFR. PINE HALL BRICK COLOR: BROWN'S FERRY (OR EQUIVALENT)
⑧	STONE VENEER MFR. DUTCH QUALITY COLOR: SIERRA DRYSTACK (OR EQUIVALENT)
⑨	ALUMINUM AWNING ON METAL FRAME (NIC)



PRELIMINARY SOUTH ELEVATION
 SCALE: 1/8" = 1'-0" 5



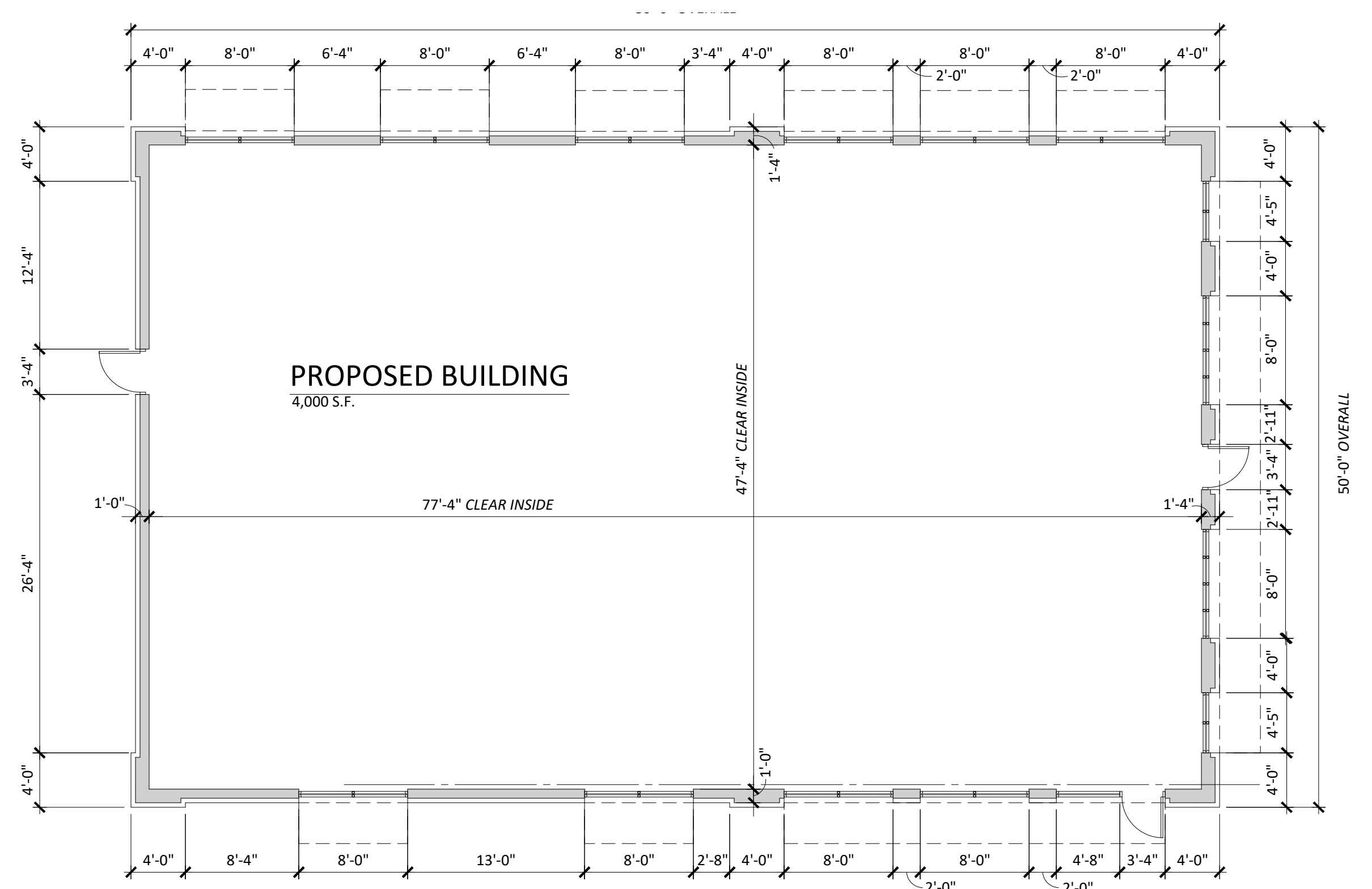
PRELIMINARY NORTH ELEVATION
 SCALE: 1/8" = 1'-0" 4



PRELIMINARY WEST ELEVATION
 SCALE: 1/8" = 1'-0" 3



PRELIMINARY EAST ELEVATION
 SCALE: 1/8" = 1'-0" 2



PRELIMINARY FLOOR PLAN
 SCALE: 1/8" = 1'-0" 1

REV	DATE	REVIEW	ISSUED
REV	01-26-18	REVIEW	
REV		ISSUED	

This drawing is an instrument of service, remains the property of Detroit Architectural Group, Inc. Any changes, publication, or unauthorized use is prohibited unless expressly approved.

SEAL:

DRAWN BY: RY
 CHECKED BY: XXX
 IN CHARGE: XXX

SHEET NAME:
 PRELIMINARY PLAN

JOB NO:
 18-24

SHEET NO:
 PP-1



Peter Gallinat, Township Planner
pgallinat@uniontownshipmi.com
2010 South Lincoln
Mt. Pleasant, MI 48858
Phone 989-772-4600 Ext. 241
Fax 989-773-1988

TO: Planning Commission
FROM: Township Planner

New Business

SUBJECT: B) SPR 2018-03 Eikenhout Inc. PID 14-011-30-004-03.

Applicant: CMS&D Surveying and Engineering

Owner: Eikenhout Inc.

Location: PID 14-011-30-004-03 MT PLEASANT, MI 48858

Current Zoning: B-4 General Business District.

Adjacent Zoning: MP City to the south across the road, I-1 to the west, B-4 to the north, and B-4 to the east.

Future Land Use/Intent: Commercial: Shopping, office and professional services with mixed neighborhood commercial uses.

Current Use: Vacant aside from parking used by neighboring parcel.

Reason for Request: Applicant request to construct new accessory building for cold storage.

History:

Objective of board: Final site plan was received 14 days (02-06-2018) before our regular scheduled meeting on February 20, 2018. The Planning Commission shall study the site plan and shall, within sixty days of its submittal to the Zoning Official, either approve or disapprove the proposed site plan. If the site plan is disapproved, the reasons for disapproval shall be stated.

Recommend at this time to review the application for information only and to approve in March 2018. Reasons stated below:

- Sidewalks not shown on plan
- Outside agency approval of Utilities, and Isabella County Drain office have not been received.
- The proposed building would be located on a parcel without a principal building.

Peter Gallinat
Twp Planner

RECEIVED
FEB 08 2018
 BY: P. D.

Union Township Site Plan Review Application 2015 Revision

FILL OUT THE FOLLOWING

- I. This application is for (circle one) Preliminary Site Plan Review Final Site Plan Review
- II. Applicant Name KING COURT LLC (EIKENHOUT INC.)
- III. Applicant Address 4269 CORPORATE DR, MT. PLEASANT, MI 48858
- IV. Applicant Phone 989-773-4224 Owner Phone SAME
- V. Applicant is (circle) Contractor Architect/Engineer Developer Land Owner (skip V & VI)
Other
- VI. Land Owner Name KING COURT LLC
- VII. Land Owner Address P.O. BOX 2806, GRAND RAPIDS, MI 49501-2806
- VIII. Project/Business Name EIKENHOUT PROPOSED EXPANSION
- IX. Fill out check list that follows. You must check off that each item has been included in the drawing. If an item is not going to be included in the construction, note that in the comment area. For the first three items, check off if you have made the required submittals to other reviewing agencies.

SUBMITTALS TO OTHER AGENCIES		Off
Storm water management plan approval prior to application. Reviewed by the County Engineer	X	Copy of Union Township Storm Water Management Plan available upon request. Submit (2) copies of plan and calculations directly to the Isabella County Engineer, contact Bruce Rohrer at (989) 772 0911, ext. 231. Any review fees are additional.
All curb cuts, acceleration/deceleration lanes, additional drives, and other matters pertaining to roads to be approved by MDOT or Isabella County Road Commission prior to application.	X	MDOT (M 20, BR 127 sites) at (989) 773 7756. Contact Isabella County Road Commission (all other county roads) at (989) 773 7131. Submit (3) copies.
Mt. Pleasant Fire Dept.	X	Sgt Randy Keeler (989) 779-5122, (2) copies
Isabella Co Transportation Commission (ICTC)	X	Rick (989) 773 2913, (2) copies
WELLHEAD PROTECTION REPORTING FORMS (Required for all Site Plans)		
Hazardous Substances Reporting Form Part I and II (Forms included in this packet)	X	Kim Smith (989) 772-4600 ext 224 ksmith@uniontownshipmi.com
PERMIT INFORMATION - DEQ Check List	X	
SITE PLAN REQUIREMENTS		
	I	Comments - (also indicate any features which will not be included in the development or are not applicable)
	Of	
Name and addresses of Property Owner	X	
Name and Address of Applicant	X	
Provide Construction Type (per Mi Building Code) and if sprinkled, (assume Type IVb, un-sprinkled if not provided)	X	

Union Township Site Plan Review Application 2015 Revision

The date, north arrow and scale. The scale shall be not less than 1"= 20' for property under three (3) acres and not more than 1"=40' for property greater than three acres.	X	
All lot and/or property lines are to be shown and dimensioned, including building setback lines	X	
The location and dimensions of all existing and proposed: fire hydrants (within 400 feet of building) - - - - drives,----- sidewalks, (required) ----- curb openings, ----- acceleration/deceleration lanes, ----- signs, ----- exterior lighting on buildings and parking lots, - - parking areas (Including handicapped parking spaces, barrier-free building access, unloading areas), ----- recreation areas, ----- common use areas, ----- areas to be conveyed for public use and purpose. -	X X X X X X X X X X X X X X	
Elevation of building front, side, and back. Include Sign size, height, and design. Canopy heights extending over driveways accommodate Public Transportation	X	
Source of utilities. Public water and sewer approval by Union Township Utility Coordinator prior to application.	X	Note: Union Township policy is to issue sewer and water permits after application for a building permit. Applicant is advised to contact the utility department for availability prior to site plan review. The township does not coordinate other utility matters. Applicant to assure himself that site is suitable for septic systems, contact Central Michigan District Health Department
All dumpsters shall be screened from public view with an opaque fence or wall no less than six feet in height. Show location. (Note most refuse contractors require concrete pad to place dumpsters upon)	X	
The location and right-of-way width of all abutting roads, streets, alleys and easements.	X	
A locational sketch drawn to scale giving the section number and the nearest crossroads.	X	

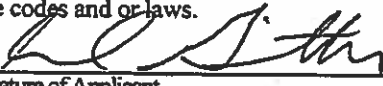
Union Township Site Plan Review Application 2015 Revision

The zoning of the subject property and the abutting properties.	X	
	X	
The location, height and type of fences and walls.	X	
	X	
The location and detailed description of landscaping.	X	
For multiple family and mobile home parks, contour intervals shall be shown (two foot intervals for average slopes ten percent and under and five foot intervals for slopes over ten percent). Topography, however, is encouraged to be shown on all site plans.	X	
The location of all existing and proposed structures on and within one hundred feet of the subject property's boundary.	X	
For apartments, provide a count of bedrooms per building and total count of bedrooms for the project.	X	

APPLICANT COMMENTS

Union Township Site Plan Review Application 2015 Revision

I submit the site plan and this application as a true representation of existing and proposed conditions. I agree to install all features as shown and to abide by conditions placed upon approval of this plan by the Union Township Planning Commission . False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and / or removal of work installed. Any changes to the Site Plan now or in the future must be approved by the Union Township Planning Commission or Zoning Administrator. Approval of this plan shall not constitute the right to violate any provisions of the Union Township Zoning Ordinance 1991-5, or other applicable building or state codes and or laws.



Signature of Applicant

2/7/18

Date

Signature of Owner (if other than applicant)

Date

PLEASE PLACE OUR REVIEW ON THE FEBRUARY 20, 2018 (INSERT DATE)
PLANNING COMMISSION MEETING. An owners representative WILL / WILL NOT attend. You will not receive a reminder of the scheduled meeting.

Union Township Site Plan Review Application 2015 Revision

<u>Township use</u>	Review Comments
File # _____	_____
Fee Paid initial _____	_____
Receipt # _____	_____
Date received _____	_____
Date review completed by Zoning Administrator _____	
Place on the _____ Planning Commission Agenda	
Planning Commission Decision _____	_____

Part 1: Management of Hazardous Substances and Polluting Materials

1. Y N Will the proposed facility store, use or generate hazardous substances or polluting materials (including petroleum-based products) now or in the future? If yes, please complete this form and submit with your site plan. A catalogue and map of natural resources on and near the site, including an assessment of groundwater vulnerability is required to be submitted with your plan.
2. Y N Will the hazardous substances or polluting materials be reused or recycled on-site??
3. Y N Will any hazardous substances or polluting materials be stored on-site? If yes, identify the storage location on the site plan. Describe the size and type of secondary containment structure here or on an attached page. Submit a map and/or diagram of facilities on the site related to groundwater protection, including secondary containment structures, loading/unloading areas, drinking water wells, septic systems, underground storage tanks and storm drain inlets.
4. Y N Will the new underground storage tanks be located less than 2000 feet from a drinking water well serving more than a single household?
5. Y N Are existing underground storage tanks on-site less than 200 feet from a drinking water well serving more than a single household?
- If the answer to questions 4 or 5 are yes, you may be in violation of the State of Michigan underground storage tank regulations. For specific requirements, please contact the MDEQ Underground Storage Tank Division. District Office Telephone: 989-894-6200 (Saginaw Bay District Office)
6. Y N Will the interior of the facility have general purpose floor drains? (general purpose floor drains should not be connected to a sanitary sewer system, stormwater drainage system, dry well or septic system). If yes, will the floor drain connect to: (circle one)
- a. on-site holding tank
b. on-site system
- The on-site system must be approved by the MDEQ.
Contact: MDEQ Waste Management Division.
District Office telephone: 989-894-6200 (Saginaw Bay District Office)
7. Y N Will hazardous substances or polluting materials be stored, used, or handled out-of doors near storm drains which discharge to lakes, streams, or wetlands? If yes, describe the type of catch basin or spill containment facilities which will be used (use an attached sheet with diagram if appropriate).

cc: Charter Township of Union Department of Public Works

Part II: Types and Quantities of Hazardous Substances and Polluting Materials Used, Stored or Generated On-Site

Please list the hazardous substances and polluting materials (including chemicals, hazardous materials, petroleum products, hazardous wastes and other polluting materials) which are expected to be used, stored or generated on -site. Quantities should reflect the maximum volumes on hand at any time. Attach additional pages if necessary to list all hazardous substances and polluting materials.

Common Name	CHEMICAL NAME (components)	Form	MAX QUANTITY ON HAND AT ONE TIME	TYPE OF STORAGE CONTAINERS		
<p>KEY:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> <p>LIQ. = liquid</p> <p>P.LIQ = pressurized liquid</p> <p>S = solids</p> <p>G = gas</p> <p>PG = pressurized gas</p> </td> <td style="width: 50%;"> <p>KEY:</p> <p>AGT = above ground tank</p> <p>DM = drums</p> <p>UGT = underground tank</p> <p>CY = cylinders</p> <p>CM = metal cylinders</p> <p>OW = wooden or composition container</p> <p>TP = portable tank</p> </td> </tr> </table>					<p>LIQ. = liquid</p> <p>P.LIQ = pressurized liquid</p> <p>S = solids</p> <p>G = gas</p> <p>PG = pressurized gas</p>	<p>KEY:</p> <p>AGT = above ground tank</p> <p>DM = drums</p> <p>UGT = underground tank</p> <p>CY = cylinders</p> <p>CM = metal cylinders</p> <p>OW = wooden or composition container</p> <p>TP = portable tank</p>
<p>LIQ. = liquid</p> <p>P.LIQ = pressurized liquid</p> <p>S = solids</p> <p>G = gas</p> <p>PG = pressurized gas</p>	<p>KEY:</p> <p>AGT = above ground tank</p> <p>DM = drums</p> <p>UGT = underground tank</p> <p>CY = cylinders</p> <p>CM = metal cylinders</p> <p>OW = wooden or composition container</p> <p>TP = portable tank</p>					

CHARTER TOWNSHIP OF UNION

SITE PLAN REVIEW HAZARDOUS SUBSTANCES REPORTING FORM

This form must be completed and submitted as part of the site plan for facilities which may use, store, or generate hazardous substances or polluting materials (including petroleum-based products)

Name of business: EIKENHOUT INC

Name of business owner(s): ~~BRIAN ROSENBERGER~~ Joel Gritter, Treasurer

Street and mailing address: 4269 CORPORATE DRIVE
MT. PLEASANT, MI 48858


Telephone: 989-773-4224

Fax: 989-773-2243

Email: brosenberger@eikenhout.com

I affirm that the information submitted is accurate.

Owner(s) signature and date:


2/7/18

Information compiled by:



PERMIT INFORMATION

www.michigan.gov/deqpermits

The Department of Environmental Quality (DEQ) has prepared a list of key questions to help identify what DEQ permits, licenses, or approvals of a permit-like nature may be needed. By contacting the appropriate offices indicated, you will help reduce the possibility that your project or activity will be delayed due to the untimely discovery of additional permitting requirements later in the construction process. While this list covers the existence of permits and approvals required from the DEQ, it is not a comprehensive list of all legal responsibilities. A useful way to learn whether other requirements will apply is to go through the Self-Environmental Assessment in the Michigan Guide to Environmental, Health, and Safety Regulations, online at: <http://www.michigan.gov/ehsguide>. Please call the Environmental Assistance Center at 800-662-9278 to talk with any of the DEQ programs noted below.

KEY QUESTIONS:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	PROGRAM, WEBPAGE AND CONTACTS
MISCELLANEOUS CONSTRUCTION			
<i>Air Quality Permit to Install:</i> Will your business involve the installation or construction of any process equipment that has the potential to emit air contaminants (e.g. dry sand blasting, boilers, standby generators)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Air Quality Division (AQD), <u>Permit Section</u>
<i>Asbestos Notification:</i> Does the project involve renovating or demolishing all or portions of a building? Notification is required for asbestos removal and required for all demolitions even if the structure never contained asbestos.	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	AQD, <u>Asbestos Program</u>
<i>Land and Water Featured Programs (Water Resources Division) - USACE Consolidated Permits:</i> Please consult the <u>Land and Water Management Decision Tree</u> document to evaluate whether your project needs a land and water management permit (i.e., Does the project involve filling, dredging, placement of structures, draining, or use of a wetland?).	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Water Resources Division (WRD), <u>Joint Permit Application</u>
<i>Soil Erosion and Sedimentation Control:</i> Does the project involve an earth change activity (including land balancing, demolition involving soil movement, and construction)?	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>	<u>Soil Erosion and Construction Storm Water</u> , or Contact your <u>Local Agency</u>
<i>NPDES Storm Water Discharge from Construction Sites Notice of Coverage:</i> Does the project involve construction which will disturb one or more acres that come into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	NPDES <u>Storm Water Permits Program</u> , or appropriate <u>DEQ District Office</u>
<i>Public Swimming Pool Construction (Spas/Hot Tubs) Permits:</i> Will your business involve the construction or modification of a public swimming pool, spa or hot tub?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Public Swimming Pool Program</u> , or appropriate <u>DEQ District Office</u>
<i>Threatened and Endangered Species:</i> Does the project involve activities that would destroy a protected species of plant or animal or disturb a protected animal species?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Endangered Species Assessment, <u>Threatened and Endangered Species Program</u> , 517-373-1552
Does the project involve <i>construction</i> or alteration of any <i>sewage collection or treatment</i> facility?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Appropriate <u>District Office</u> , WRD, Part 41 <u>Construction Permit Program</u>
Does the project involve construction of a facility that landfills, transfers, or processes of any type of <i>solid non-hazardous waste</i> on-site, or places <i>industrial residuals/sludge</i> into or onto the ground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Office of Waste Management and Radiological Protection (OWMRP), <u>Solid Waste</u> , Appropriate <u>DEQ District Office</u>
Does the project involve the construction of an on-site treatment, storage, or disposal facility for <i>hazardous waste</i> ?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, Hazardous Waste Section, <u>Treatment, Storage and Disposal</u>
WATER SUPPLY (More information, see: http://www.michigan.gov/deqwater, select "drinking water")			
I am buying water from my community water supply (i.e. city of Detroit or Grand Rapids)	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>	Contact your <u>Local Water Utility</u>
I have a private or other water supply well (Type III)	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Contact your (District or County) <u>Local Health Department</u>
I have a Non-Community Water Supply (Type II)	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Guide</u> , Contact your (District or County) <u>Local Health Department</u>
I am a community water supply (Type I)	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>Community Water Supply</u> , <u>DEQ District Office Community Water Supply Program</u>

WASTEWATER MANAGEMENT			
<i>Storm Water Discharge to Wetlands:</i> Will storm water be collected, stored, or treated in a wetland area from a public road, industrial, commercial, or multi-unit residential development?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
<i>Great Lakes:</i> Does the project involve construction, filling, or dredging below the Ordinary High Water Mark of one of the Great Lakes?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
<i>Inland Lakes and Streams:</i> Does the project involve any dredging, filling, placement of structures, or the operation of a marina within an inland waterbody (e.g. lake, river, stream, drain, creek, ditch, or canal), enlargement of a waterbody, or excavation of a pond within 500 feet of a waterbody?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
<i>Storm Water Ponds and Discharges to Inland Lakes/Streams, or Great Lakes:</i> Will storm water from any road or any other part of the development be discharged either directly or ultimately to an inland waterbody, or one of the Great Lakes; or will a storm water pond be constructed within 500 feet of an inland waterbody?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Does the project involve placement of fill, earth moving, or placement of structures within the 100-year <i>floodplain</i> of a watercourse?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Does the project involve construction of a building or septic system in a designated Great Lakes <i>high risk erosion area</i> ?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Shoreland Management</u>
Does the project involve dredging, filling, grading, or other alteration of the soil, vegetation, or natural drainage, or placement of permanent structures in a designated <i>environmental area</i> ?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Shoreland Management</u>
Does the project propose any development, construction, silvicultural activities or contour alterations within a designated <i>critical dune area</i> ?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Sand Dune Management</u>
Does the project involve construction of a <i>dam</i> , weir or other structure to impound flow?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Dam Safety Program</u>
CONSTRUCTION PERMITS (SECTOR SPECIFIC)			
Does the project involve the construction or alteration of a water supply system or sewage disposal system for a manufactured housing project?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Office of Drinking Water & Municipal Assistance (ODWMA)
Does the project involve a subdivision or site condominium project utilizing individual on-site subsurface disposal systems or individual wells?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA
Does the project involve the construction or modification of a campground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Campgrounds program</u>
Does the project involve the construction or modification of a public swimming pool?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Swimming pools program</u>
OPERATIONAL PERMITS			
Renewable Operating Permit: Does your facility have the potential to emit any of the following: 100 tons per year or more of any criteria pollutant; 10 tons per year or more of any hazardous air pollutant; or 25 tons per year or more of any combination of hazardous air pollutants?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	AQD, <u>Permit Section</u>
NPDES: Does the project involve the discharge of any type of wastewater to a storm sewer, drain, lake, stream, or other surface water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, Appropriate <u>DEQ District Office</u> , or <u>National Pollutant Discharge Elimination (NPDES) Permit Program</u>
Does the facility have industrial activity that comes into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Permits Section</u> , or appropriate <u>DEQ District Office</u>
Does the project involve the discharge of wastewaters into or onto the ground (e.g. subsurface disposal or irrigation)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Groundwater Permits Program</u>
Does the project involve the drilling or deepening of wells for waste disposal?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Office of Oil, Gas and Minerals (OOGM)
Does the project involve landfilling, transferring, or processing of any type of solid non-hazardous waste on-site, or placing industrial residuals/sludge into or onto the ground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	<u>OWMRP</u> or Appropriate <u>DEQ District Office</u>

Does the project involve the on-site treatment, storage, or disposal of hazardous waste?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Hazardous and Liquid Waste</u>
Does the project require a site identification number (EPA number) for regulated waste activities (used oil, liquid waste, hazardous waste, universal waste, PCBs)? (<u>Web Site</u>)	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, Appropriate <u>DEQ District Office</u>
Does the project involve the receipt, possession, manufacture, use, storage, transport, transfer, release, or disposal of radioactive material in any form?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Radioactive Material and Standards Unit</u>
Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP <u>Radioactive Material and Standards Unit</u>
Do you desire to develop a withdrawal of over 2,000,000 gallons of water per day from any source other than the Great Lakes and their connecting waterways? Or, do you desire to develop a withdrawal of over 5,000,000 gallons of water per day from the Great Lakes or their connecting waterways?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, DWEHS, <u>Source Water Protection Unit</u>
CHEMICAL ADDITION PROJECTS			
Are you using chemicals or materials in, or in contact with, drinking water at any point in the water works system?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, Appropriate <u>DEQ District Office, Public Water Supply Program</u>
Are you applying a chemical treatment for the purpose of aquatic nuisance control (pesticide/herbicide etc) in a water body (i.e. lake, pond or river)? (5.	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Aquatic Nuisance Control and Remedial Action Unit</u>
Are you applying materials to a water body for a water resource management project (i.e. mosquito control treatments, dye testing, or fish reclamation projects)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Surface Water Assessment Section</u>
OPERATIONAL PERMITS (SECTOR SPECIFIC)			
Does the project involve the transport of some other facility's non-hazardous liquid waste?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Transporter Program</u>
Does the project involve the transport hazardous waste?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Transporter Program</u>
Does your facility have an electric generating unit that sells electricity to the grid and burns a fossil fuel?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	AQD, <u>Acid Rain Permit Program</u>
Is the project a dry cleaning establishment utilizing perchloroethylene or a flammable solvent in the cleaning process?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	DEQ, AQD, <u>Dry Cleaning Program</u>
Does your laboratory test potable water as required for compliance and monitoring purposes of the Safe Drinking Water Act?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	DEQ, <u>Laboratory Services Certifications</u>
Does the project involve the generation of medical waste or a facility that treats medical waste prior to its disposal?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Medical Waste Regulatory Program</u>
Does the project involve transport of septic tank, cesspool, or dry well contents or the discharge of septage or sewage sludge into or onto the ground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Septage Program</u>
Do you store, haul, shred or process scrap tires?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP, <u>Scrap Tire Program</u>
Does the project involve the operation of a public swimming pool?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Public Swimming Pools Program</u>
Does the project involve the operation of a campground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Campgrounds</u>
Do you engage in the business of hauling bulk water for drinking or household purposes (except for your own household use)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Water Hauler Information</u>
PERSONAL LICENSES/CERTIFICATIONS			
Are you designated by your facility to be the Certified Operator to fulfill the requirements of a wastewater discharge permit (NPDES including Storm	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Operator Training, Storm Water Program</u>

Water or Groundwater)?			
Are you a drinking water operator in charge of a water treatment or water distribution system, back-up operator, or shift operator?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Operator Training</u>
Are you a water-well drilling contractor, pump installer, dewatering well contractor or dewatering well pump installer?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Well Construction Unit</u>
OIL, GAS AND MINERALS			
Do you want to operate a central production facility (applies to oil and gas production facilities where products of diverse ownership are commingled)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Petroleum Geology and Production Unit</u>
Does the project involve the removal of sand from a sand dune area within two (2) miles of a Great Lakes shoreline?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, Minerals and Mapping Unit, <u>Sand Dune Mining Program</u>
Does the project involve the diversion and control of water for the mining and processing of low-grade iron ore?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the surface or open-pit mining of metallic mineral deposits?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the mining of nonferrous mineral deposits at the surface or in underground mines?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve mining coal?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Do you want to change the status of an oil or gas well (i.e. plug the well)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve drilling of oil, gas, brine disposal, secondary recovery, or hydrocarbon storage wells?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve plugging or deepening of an oil or gas well, or conveying rights in the well as an owner to another person?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve changing the status or plugging of a mineral well?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the drilling or deepening of wells for brine production, solution mining, storage, or as test wells?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OOWMRP, <u>Radioactive Protection Programs</u>
STORAGE TANKS (CONSTRUCTION AND OPERATION)			
Does the project involve the installation of an aboveground storage tank for a flammable or combustible liquid (under 200 degrees Fahrenheit)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Michigan Department of Licensing and Regulatory Affairs (DLARA) - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a compressed natural gas dispensing station with storage?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a liquefied petroleum gas container filling location or storage location that has a tank with a capacity of more than 2,000 gallons or has two (2) or more tanks with an aggregate capacity of more than 4,000 gallons?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation, removal, or upgrade of an underground storage tank containing a petroleum product or a hazardous substance?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a hydrogen system?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>

Union Township Site Plan Review Application 2015 Revision

UNION TOWNSHIP CONSTRUCTION CONTACTS

**Building & Zoning Permits
Sign Permit
Water and Sewer review
Site Plan Review**

Charter Township of Union
2010 S. Lincoln Rd
Mt. Pleasant, MI 48858

(989) 772 4600 (switchboard)
(989) 773 1988 (FAX)

Building Official
Randy Robinson - Ext. 227
rrobinson@uniontownshipmi.com

Zoning Administrator
Peter Gallinat - Ext. 241
pgallinat@uniontownshipmi.com

Public Works Coordinator
Kim Smith - Ext. 224
ksmith@uniontownshipmi.com

Road Permits
(submit (2) copies of site plan directly to proper authority prior to Site Plan Review)

State Highways M 20 and US 127 (portions of E. Pickard Rd, E Remus Rd, and Mission Rd)

MDOT
1212 Corporate Drive
Mt. Pleasant, MI 48858
(989) 773-7756 FAX 775 6329

All other roads

Isabella County Road Commission
2261 E. Remus Rd
Mt. Pleasant, MI 48858
(989) 773 7131 (FAX) 772 2371

ICTC
2100 E Transportation Dr
Mt. Pleasant, MI 48858
(989)772-9441

Union Township Site Plan Review Application 2015 Revision

Storm Water Management Plan

Submit (2) copies of Storm Water Management Plan directly to county engineer prior to Site Plan Review Code - Union Township Ord. 1992-9 Storm Water Management

Isabella County Building

Resource Management
ATTN: Bruce Rohrer PE
200 N. Main St.
Mt. Pleasant, MI 48858

(989) 772 0911 Ext. 231 (FAX) 773 7431

Plumbing, Electrical, Mechanical Permits

Isabella County Building
Inspections
ATTN: (SEE FOLLOWING LIST)
200 N. Main St.
Mt. Pleasant, MI 48858
(989) 772 0911 Ext. (SEE FOLLOWING) (FAX) 773 7431

Electrical Inspector
Tim Wardwell - Ext. 230

Plumbing and Mechanical Inspector
Doug Elias - Ext. 228

Fire Department Review

Sgt. Randy Keeler
804 E. High St.
Mt. Pleasant, MI 48858
(989) 779-5122 (FAX) 773 4020
rkeeler@mt-pleasant.org

Addressing

Isabella County Building Official (989) 772 0911, Ext 228

Miscellaneous

Phone - GTE (800) 483 5600, Verizon (800) 483 4000
Gas/Electric - Consumer Energy (800) 572 4788, MichCon (800) 477 4747 Central MI Dist. Health Dept. (989) 773 5921
Miss Dig (800) 482 7171

Peter Gallinat

From: Rick Collins [rcollins@ictcbus.com]
Sent: Friday, February 16, 2018 9:48 AM
To: Peter Gallinat; info@cms-d.com
Subject: Eikenhout

I have no issues with the Eikenhout proposal.



Rick Collins | Executive Director
2100 E. Transportation Dr | Mt. Pleasant, MI 48858
Phone 989.773.6766 | Fax 989.773.1873
rcollins@ictcbus.com
Visit our website at ictcbus.com

Peter Gallinat

From: Pat Gaffney [PGaffney@isabellaroads.com]
Sent: Friday, February 02, 2018 3:30 PM
To: Shanee Thayer
Cc: tbebee@cms-d.com; Peter Gallinat
Subject: RE: Eikenhout Project

Tim,

The Eikenhout location is not on any roads that are under the road commission's jurisdiction.

Patrick J. Gaffney, PE
Engineer Superintendent
Isabella CRC
989-773-7131 x115
989-772-2371 fax
pgaffney@isabellaroads.com

From: Shanee Thayer [mailto:info@cms-d.com]
Sent: Thursday, February 01, 2018 3:44 PM
To: Pat Gaffney
Subject: Eikenhout Project

Pat,

We are submitting a project for Eikenhout to Union Township Planning Commission. As required by the Township, please review the project and let us know if you have any comments or questions.

Thank you

Shanee Thayer
Office Manager
Central Michigan Surveying & Development Co.
510 W. Pickard Rd, Suite C
Mt. Pleasant, MI 48858
Phone: (989) 775-0756



**Mount Pleasant Fire Department
804 E. High Street
Mount Pleasant, Mi 48858**

Union Township Site Plan Review

Friday February 9, 2018

Eikenhout, Inc.

4269 Corporate DR
Mt. Pleasant, MI 48858

A Site Plan Review was conducted on Friday February 9, 2018 and revealed the following requirements listed below.

ORDER TO COMPLY: Since these conditions are contrary to code, you must correct them upon receipt of this notice. Please provide our department the documentation that verifies compliance with the code.

This list shall not be considered all-inclusive, as other requirements may be necessary, additional requirements are located in Chapter 5 and appendixes B, C, and D of the 2012 Edition of the International Fire Code.

If you have any questions regarding this matter, please feel free to contact me at (989) 779-5122.

Violation Code

1 PROPERTY Identification

Eikenhout Inc
4269 Corporate Dr.

Project Scope: Proposed steel cold storage building with approximately 8,160 square feet.

ACCESS AND WATER Road and Water Supply

When fire apparatus access roads or water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2 of the 2012 Edition of the International Fire Code.

ACCESS ROAD 150 FT Buildings within 150ft of Access Road

All portions of a building are required to be within 150 feet of an approved Fire Department access road, in accordance with Chapter 5, Section 503.1.1 of the 2012 Edition of the International Fire Code.

Site plan meets requirements.

Union Township Site Plan Review

ACCESS ROAD LOAD Designed and Maintained to Support the

All fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities in accordance with Chapter 5, Sections 503.2.3 and 503.4 of the 2012 Edition of the International Fire Code.

BUILDING IDENTIFICATION Buildings Shall Have Address

Provide address identification numbers in accordance with Chapter 5, Sections 505.1 of the 2012 Edition of the International Fire Code or applicable to the City of Mt. Pleasant code of ordinances 150.01 Land Usage.

DUMPSTERS Dumpster Locations

Dumpster's and containers with an individual capacity of 1.5 cubic yards or more shall not be stored in buildings or placed within 5 feet of combustible walls, openings or combustible roof eave lines in accordance with Chapter 3, Section 304, and 304.3.3 of the 2012 Edition of the International Fire Code.

FDC HORN STROBE Horn Strobe Above FDC

Provide a horn strobe above the Fire Department Connection. Fire Prevention Ordinance 93.12(A)

FDC LOCATION FDC Location and Distance

Fire Department connections shall be located on the street side of buildings, fully visible and recognizable from the street or nearest point of fire department vehicle access or as other wise approved by the fire chief. The fire department connection shall be located within 150 feet of a fire hydrant , in accordance with Chapter 9, Section 912.2.1 of the 2012 Edition of the International Fire Code and the Fire Prevention Ordinance 93.12 Provide a 5" Storz Fire Department Connection with a 30 degree downturn.

FDC to be located on the south east side of the building near the south entrance and facing street side.

FDC MAINTENANCE FDC Maintained and Unobstructed

Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other fixed or moveable object. Access to fire department connections shall be approved by the fire chief as in accordance with Chapter 9, Section 912.3 of the 2012 Edition of the International Fire Code.

HYDRANT DISTANCE Hydrant maximum distance from buildings

Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official. Exceptions: 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m). 2. For

Union Township Site Plan Review

buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

Site plan meets requirements.

KNOX BOX Knox Box Requirements and Location

Provide a Knox Key entry device and install it in approved location by the Fire Code Official, as in accordance with Chapter 5, Section 506.1, 506.1.1 and 506.2 of the 2012 Edition of the International Fire Code. (Go to Knoxbox.com and search by fire department or zip code - select "Mt. Pleasant Fire Department" and place order for the type of Knox box desired.)

WATER SUPPLY (GPM) Capable of Supplying the Required Fire

Provide fire hydrants capable of supplying the required fire flow in accordance with Chapter 5, Section 507 of the 2012 Edition of the International Fire Code. The number and spacing of fire hydrants is based on the construction type and square footage of the building in accordance with Appendix B and C and tables B105.1 and C105.1 of the 2012 Edition of the International Fire Code. (Contact Fire Department to verify locations.)

Required fire flow 2000gpm, 50% reduction for sprinkled building. 1000gpm. Site plan meets required fire flow.

Keeler, Randy
Lieutenant
Mount Pleasant Fire Department

PROPOSED EXPANSION OF OUTSIDE AND INSIDE STORAGE

EIKENHOUT INC.

CMS & D
 SURVEYING / ENGINEERING
 510 W. PICKARD STREET - SUITE C
 MT. PLEASANT, MICHIGAN 48858
 PHONE: (989) 775-5012
 FAX: (989) 775-5012
 EMAIL: info@cms-d.com



COVER SHEET
 EIKENHOUT INC.
 4269 CORPORATE DRIVE
 SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
 UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

B-4 ZONE (LIGHT INDUSTRIAL)	
MINIMUM FRONT YARD SETBACK	50 FT (A)
MINIMUM SIDE YARD SETBACK	20 FT (B)
MINIMUM REAR YARD SETBACK	25 FT (B)
MAXIMUM BUILDING HEIGHT	35 FT
MINIMUM LOT AREA	12,000 SFT
MINIMUM LOT WIDTH	80 FT
MINIMUM LOT COVERAGE (%)	30%

I-1 ZONE (LIGHT INDUSTRIAL)	
MINIMUM FRONT YARD SETBACK	75 FT (A)
MINIMUM SIDE YARD SETBACK	30 FT (C)
MINIMUM REAR YARD SETBACK	50 FT (C)
MAXIMUM BUILDING HEIGHT	35 FT
MINIMUM LOT AREA	43,560 SFT
MINIMUM LOT WIDTH	100 FT
MINIMUM LOT COVERAGE (%)	40%

- A. OFF-STREET PARKING SHALL BE PERMITTED TO OCCUPY A PORTION OF THE REQUIRED FRONT YARD, PROVIDED THAT THERE SHALL BE MAINTAINED A MINIMUM UNOBSTRUCTED AND LANDSCAPED SETBACK OF TEN (10) FEET BETWEEN THE NEAREST POINT OF THE OFF STREET PARKING AREAS, EXCLUSIVE OF ACCESS DRIVEWAYS AND THE NEAREST RIGHT-OF-WAY LINE AS INDICATED ON THE MAJOR THOROUGHFARE PLAN.
- B. A LOT IN THE B-4 AND B-5 DISTRICT WILL PROVIDE A SIDE AND REAR YARD OF AT LEAST FORTY (40) FEET WHEN ABUTTING A RESIDENTIAL DISTRICT.
- C. A LOT IN THE I-1 OR I-2 DISTRICT WILL PROVIDE A SIDE AND REAR YARD OF AT LEAST SIXTY (60) FEET IN DEPTH WHEN ABUTTING A RESIDENTIAL USE OR DISTRICT.

MISS DIG:
 FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL "MISS DIG" 1-800-482-7171 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. ALL "MISS DIG" PARTICIPATING MEMBERS WILL BE APPROPRIATELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

UTILITY NOTE:
 THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-482-7171) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. UNDERGROUND SERVICE LEADS FOR GAS, ELECTRIC, TELEPHONE AND CABLE MAY BE ACROSS PROPERTY, NO INFORMATION AVAILABLE PLEASE CALL MISS DIG.

LEGEND	
SYMBOLS	
○ BOLLARD	⊠ GAS RISER
⊠ CATCH BASIN (CURB INLET)	⊠ GUY ANCHOR
⊠ CATCH BASIN (ROUND)	⊠ HYDRANT - EXISTING
⊠ CATCH BASIN (SQUARE)	⊠ HYDRANT - PROPOSED
○ CLEAN OUT	⊠ LIGHT POLE
→ DRAINAGE FLOW	⊠ GAS MARKER
⊠ ELECTRICAL BOX	⊠ FIBER OPTIC CABLE
● FOUND CONC. MONUMENT	⊠ SANITARY SEWER MANHOLE
○ FOUND IRON	● SET IRON
⊠ GAS MAIN VALVE	⊠ SIGN
⊠ SOIL BORING	⊠ STORM SEWER MANHOLE
⊠ TELEPHONE RISER	⊠ TREE - CONIFEROUS
⊠ TREE - DECIDUOUS	⊠ UTILITY POLE
⊠ WATER MAIN VALVE	⊠ WATER SHUT-OFF
⊠ WATER WELL	⊠ TRAFFIC LIGHT POLE

LINES	
—ELEC—	BURIED ELECTRICAL CABLE
—PHONE—	BURIED TELEPHONE CABLE
—DITCH-CL—	CENTERLINE OF DITCH
—FM—	FORCE MAIN
—GAS—	GAS MAIN
—RD-CL—	ROAD CENTERLINE
—8" SAN—	SANITARY SEWER
—12" SS—	STORM SEWER
—EX-TOS—	TOE OF SLOPE
—EX-TOB—	TOP OF BANK
—OHE—	UTILITIES - OVERHEAD
—UTIL—	UTILITIES - UNDERGROUND
—8" WM—	WATER MAIN

HATCH PATTERNS	
[Hatch Pattern]	ASPHALT - EXISTING
[Hatch Pattern]	ASPHALT - PROPOSED
[Hatch Pattern]	CONCRETE
[Hatch Pattern]	GRAVEL
[Hatch Pattern]	LANDSCAPING
[Hatch Pattern]	RIP-RAP



LOCATION SKETCH
 NOT TO SCALE

SHEET INDEX	
SHEET 1.....	COVER SHEET
SHEET 2.....	TOPOGRAPHIC SURVEY
SHEET 3.....	SITE & HORIZONTAL PLAN
SHEET 4.....	GRADING, DRAINAGE & SOIL EROSION PLAN
SHEET 5.....	CONSTRUCTION DETAILS #1

FLOOD PLAIN NOTE:
 THIS PROPERTY IS LOCATED IN ZONE X WHICH ARE AREAS DETERMINED TO BE OUTSIDE 500 YEAR FLOOD-PLAIN AS INDICATED BY FIRM MAP PANEL 26073C0307D EFFECTIVE DATE FEBRUARY 5, 2014

BENCHMARK:
BENCHMARK #1
 NAIL IN POWER POLE
 ELEV. = 101.09
BENCHMARK #2
 NAIL IN POWER POLE
 ELEV. = 100.00

DEVELOPER: EIKENHOUT, INC.
 4269 CORPORATE DRIVE
 MT. PLEASANT, MI 48858
 PHONE: (989) 773-4224
 FAX: (989) 773-2243
 Brian Rosenberger
 e-mail: brosenberger@eikenhout.com

CONSULTANT: CENTRAL MICHIGAN SURVEYING & DEVELOPMENT CO., INC.
 510 WEST PICKARD STREET, SUIT C
 MT. PLEASANT, MICHIGAN 48858
 CONTACT PERSON: TIMOTHY E BEBEE
 PHONE: (989) 775-0756
 FAX: (989) 775-5012
 e-mail info@cms-d.com

CHARTER COMMUNICATIONS
 915 E. BROOMFIELD ROAD
 MT. PLEASANT, MI 48858
 (989) 621-4932
 RANDY BUNKER
 rbunker@chartercom.com

CONSUMERS ENERGY
 1325 WRIGHT AVENUE
 ALMA, MI 48801
 (989) 466-4282
 KIM STUDD
 kimberly.studd@cmsenergy.com

FRONTIER
 345 PINE STREET
 ALMA, MI 48801
 (989) 463-0392
 MARK A. MARSHALL
 Mark.Marshall@fr.com

DTE ENERGY
 4420 44TH ST., S.E., SUITE B
 KENTWOOD, MI 49512
 (616) 954-4623
 MARY JO MCKERSIE
 mckersiem@dteenergy.com

MT. PLEASANT FIRE DEPARTMENT
 804 EAST HIGH STREET
 MT. PLEASANT, MI 48858
 (989) 779-5100 EXT 5122
 SGT. RANDY KEELER
 rkeeler@mt-pleasant.org

CHARTER TOWNSHIP OF UNION
 PUBLIC WATER/PUBLIC SEWER
 2010 N. LINCOLN ROAD
 MT. PLEASANT, MI 48858
 (989) 772-4600 EXT 24
 KIM SMITH
 ksmith@uniontownshipmi.com

CHARTER TOWNSHIP OF UNION
 PLANNING & ZONING
 2261 EAST REMUS ROAD
 MT. PLEASANT, MI 48858
 (989) 772-0911
 ROBERT WILLOUGHBY
 drain@isabellacounty.org

ISABELLA COUNTY ROAD COMMISSION
 2261 EAST REMUS ROAD
 MT. PLEASANT, MI 48858
 (989) 773-7131 EXT 115
 PATRICK GAFFNEY
 P.Gaffney@isabellaroads.com

DESCRIPTION PROVIDED:
 14-011-30-004-03
 T14N-R4W, SECTION 11, UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN, COMMENCING N.87°-10'-57"W., 159 FEET ALONG EAST-WEST 1/4 LINE; THENCE S.00°-31'-10"W., 1314.08 FEET ALONG THE CENTERLINE OF PACKARD ROAD; THENCE N.87°-54'-00"W., 424.41 FEET ALONG THE SOUTH 1/8 LINE FROM THE INTERIOR 1/4 CORNER OF SECTION 11; THENCE N.87°-54'-00"W., 185.98 FEET; THENCE N.00°-42'-00"E., 535.26 FEET TO CENTERLINE OF CORPORATE WAY; THENCE S.87°-52'-16"E., 199.06 FEET TO CENTERLINE OF PARK PLACE DRIVE; THENCE S.02°-06'-00"W., 535 FEET ALONG THE CENTERLINE OF PARK PLACE TO P.O.B., EXCEPT I.C.R.C. R.O.W.
 AND
 14-011-30-001-03
 T14N-R4W, SECTION 11, UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN, PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, BEGINNING AT A POINT S.00°-51'-27"W., 1345.62 FEET ALONG THE WEST SECTION LINE; THENCE S.87°-54'-00"E., 1598.17 FEET ALONG THE SOUTH EAST-WEST 1/8 LINE; THENCE N.00°-42'-00"E., 33.01 FEET FROM THE WEST 1/4 CORNER OF SECTION 11; THENCE S.87°-54'-00"E., 280 FEET; THENCE N.00°-42'-00"E., 208.71 FEET; THENCE N.87°-54'-00"W., 280.00 FEET; THENCE S.00°-42'-00"W., 208.71 FEET TO P.O.B.

REVISIONS:
 SUBMITTALS:
 SUBMITTAL TO UNION TWP SITE PLAN 2-6-18

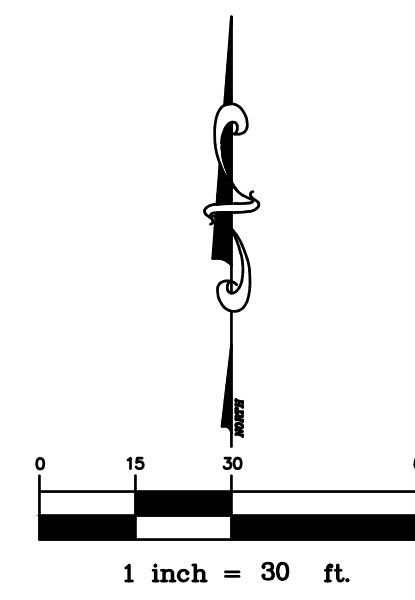
JOB NUMBER:	1801-001
DRAWN BY:	USE
DESIGNED BY:	TELB
CHECKED BY:	TELB
SCALE:	N/A
SHEET NUMBER:	1 of 5

WEST 1/4 COR.,
SEC. 11, T14N-R4W

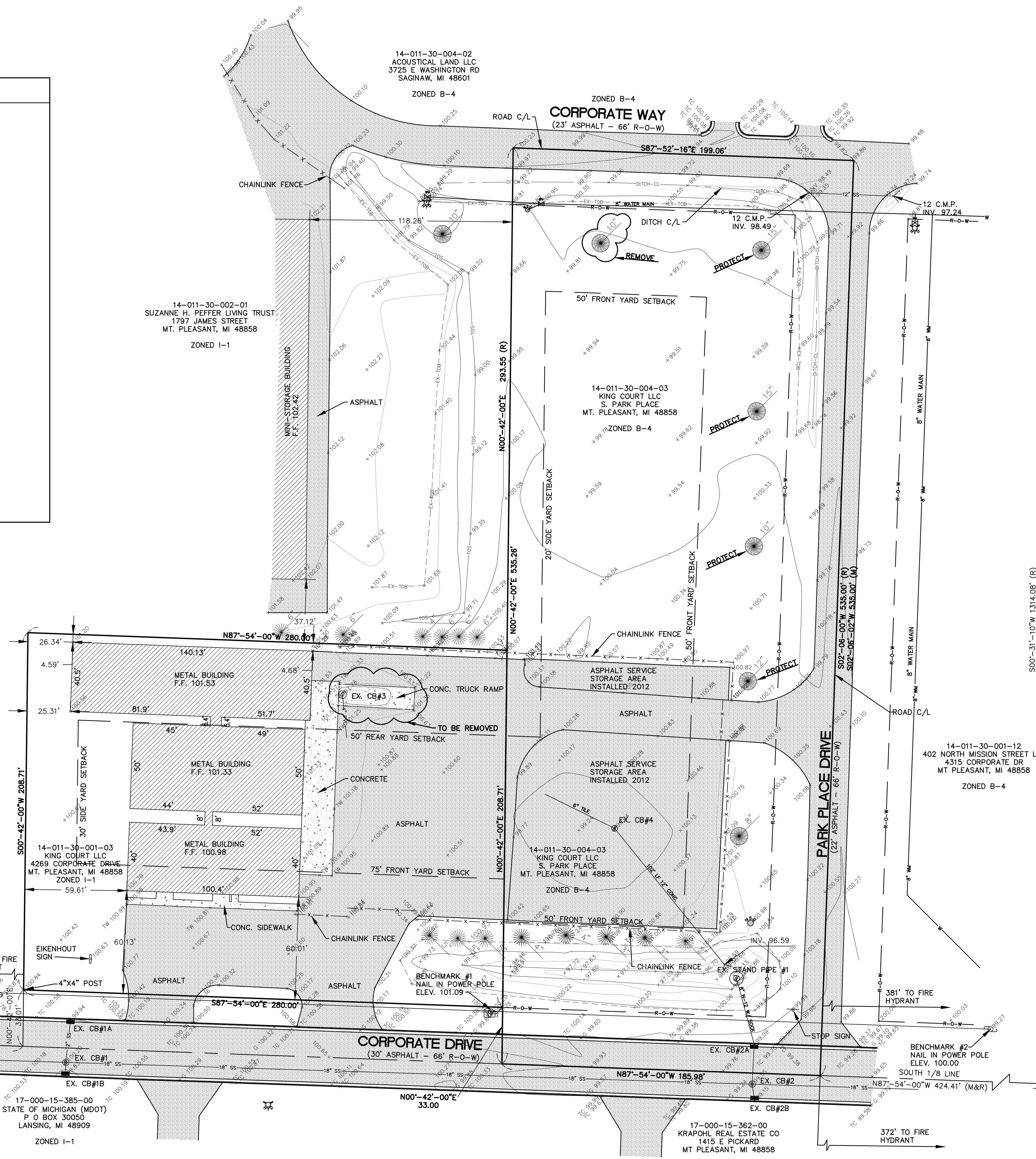
INTERIOR 1/4 COR.,
SEC. 11, T14N-R4W
N87-10'-57"W 159.00' (R)
N87-10'-08"W 157.66' (M)
E-W 1/4 LINE

STRUCTURES TABLE	
EX. CB#1	RIM 100.20 INV. 12" RCP N 95.09 INV. 18" RCP E 93.09 INV. 12" RCP S 95.19 INV. 18" RCP W 93.09
EX. CB#1A	RIM 99.94 INV. 12" RCP S 95.74
EX. CB#1B	RIM 99.83 INV. 12" RCP N 95.87
EX. CB#2	RIM 99.55 INV. 12" RCP N 94.90 INV. 18" RCP E 93.50 INV. 12" RCP S 94.98 INV. 18" RCP W 93.51
EX. CB#2A	RIM 99.09 INV. 12" RCP S 95.23 PROP. INV. 8" N-12 95.50
EX. CB#2B	RIM 99.15 INV. 12" RCP N 95.44
EX. CB#3	RIM 97.78 INV. 4" PVC S 96.85
EX. CB#4	2" DIA CONC CASTING 2850 E.J.I.W. TYPE M-2 RIM RIM 99.04 INV. 12" CONC. SE 96.94 INV. 6" TILE NW 96.99
EX. STAND PIPE#1	8" STAND PIPE NO GRATE RIM 96.64 INV. 95.36

S00-51'-27"W 1345.62'
WEST SECTION LINE



14-011-30-001-01
TRIPLE THREAT INC
4265 CORPORATE DR
MT PLEASANT, MI 48858
ZONED I-1



S00-31'-10"W 134.08' (R)
S00-31'-00"W 1313.28' (M)
PACKARD ROAD
(22' ASPHALT - 66' R-O-W)

CMS & D
SURVEYING / ENGINEERING
510 W. PICKARD STREET SUITE C
MT PLEASANT, MI 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com



TOPOGRAPHIC SURVEY
EIKENHOUT INC.
4269 CORPORATE DRIVE
SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

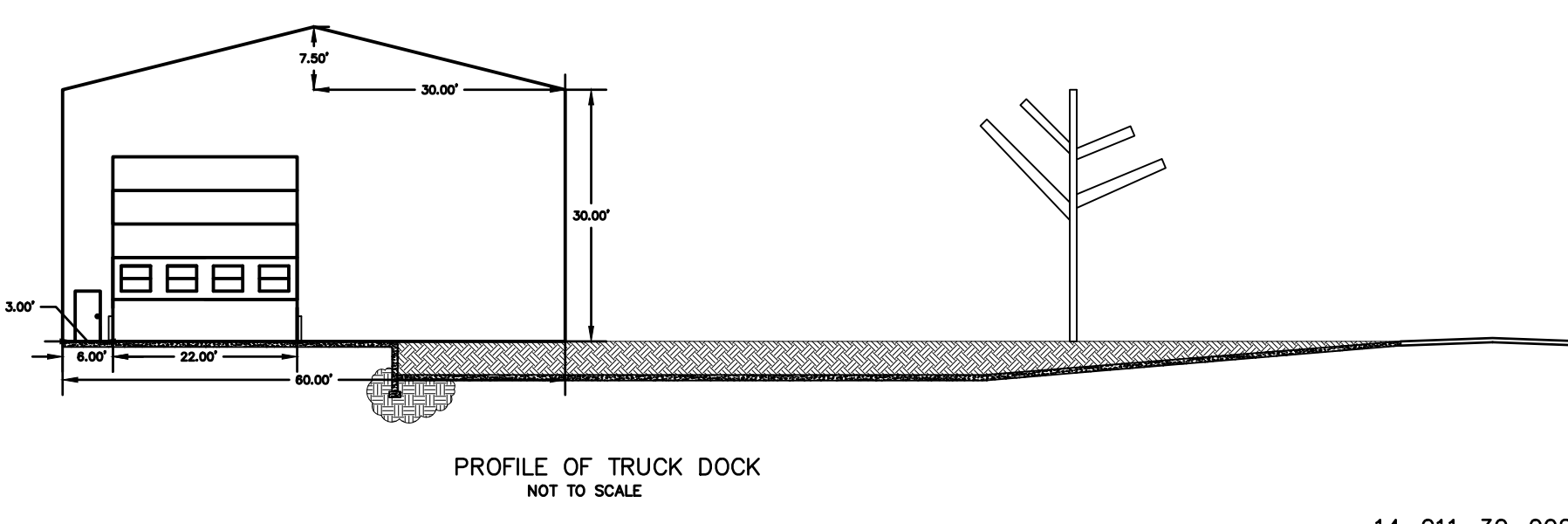
SUBMITTALS:
SUBMITTAL TO UNION TWP SITE PLAN 2-6-18

JOB NUMBER:
1801-001
DRAWN BY:
JSE
DESIGNED BY:
TELB
CHECKED BY:
TELB

SCALE:
1" = 30'
SHEET NUMBER:
2 OF 5

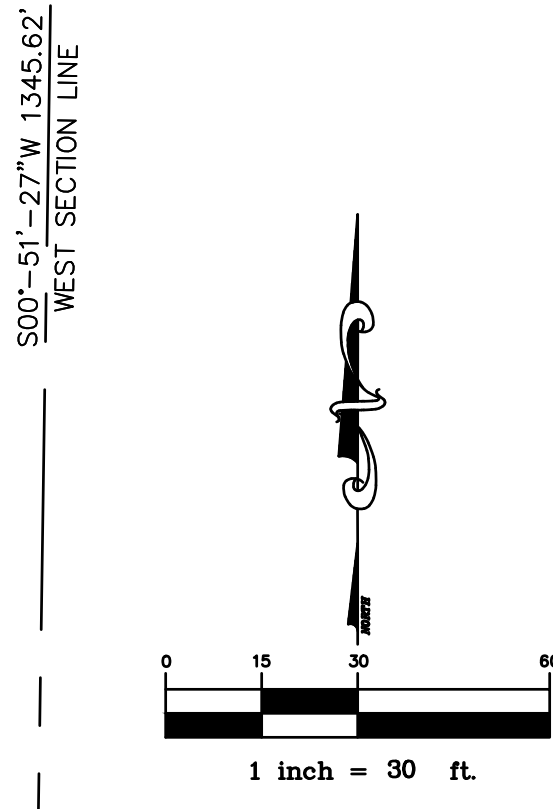
WEST 1/4 COR.,
SEC. 11, T14N-R4W

INTERIOR 1/4 COR.,
SEC. 11, T14N-R4W
N87°-10'-57"W 159.00' (R)
N87°-10'-08"W 157.66' (M)
E-W 1/4 LINE



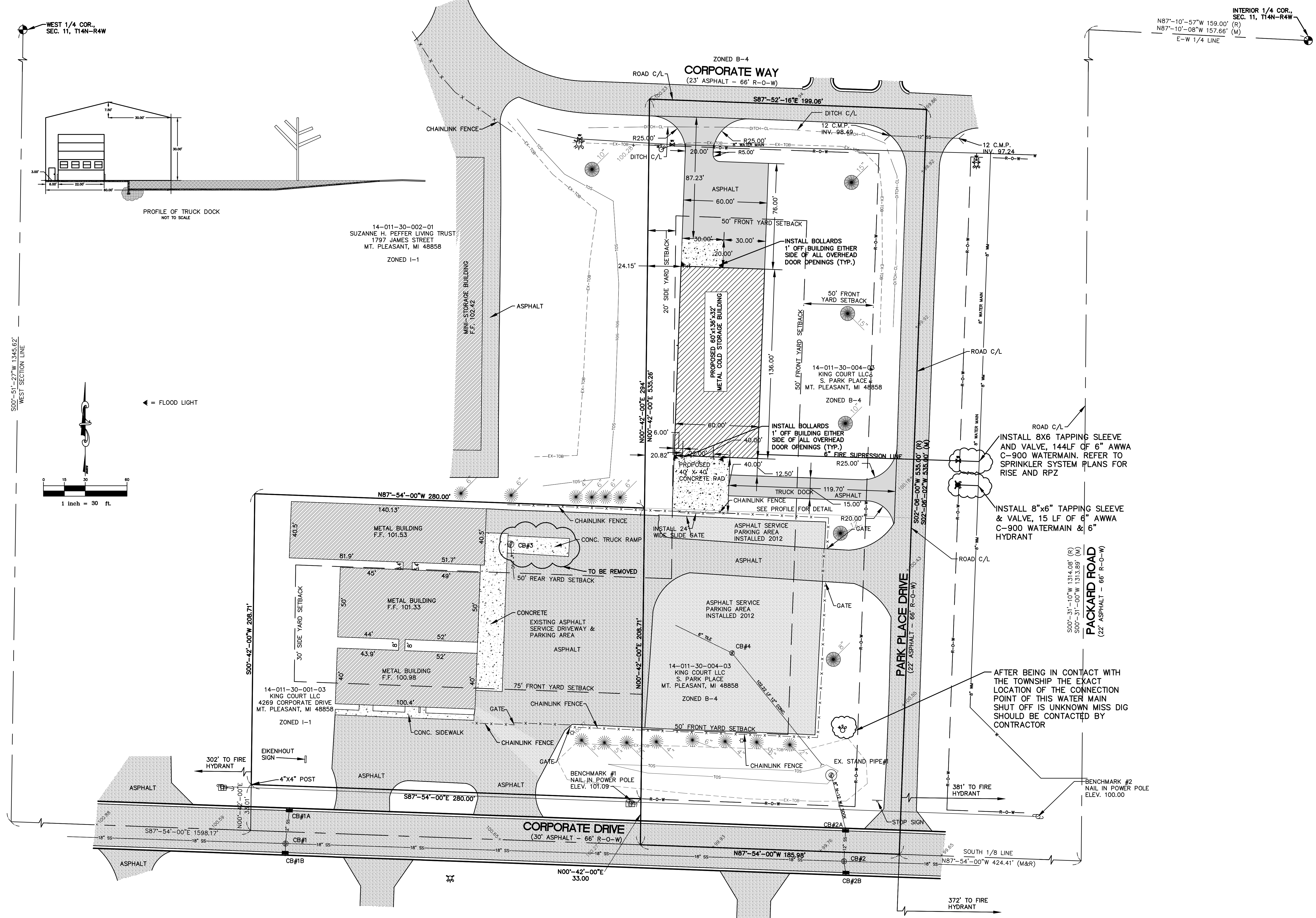
PROFILE OF TRUCK DOCK
NOT TO SCALE

14-011-30-002-01
SUZANNE H. PEPPER LIVING TRUST
1797 JAMES STREET
MT. PLEASANT, MI 48858
ZONED I-1



← = FLOOD LIGHT

500'-51'-27"W 1345.62'
WEST SECTION LINE




INSTALL 8X6 TAPPING SLEEVE AND VALVE, 144LF OF 6" AWWA C-900 WATERMAIN. REFER TO SPRINKLER SYSTEM PLANS FOR RISE AND RPZ

INSTALL 8"x6" TAPPING SLEEVE & VALVE, 15 LF OF 6" AWWA C-900 WATERMAIN & 6" HYDRANT

AFTER BEING IN CONTACT WITH THE TOWNSHIP THE EXACT LOCATION OF THE CONNECTION POINT OF THIS WATER MAIN SHUT OFF IS UNKNOWN MISS DIG SHOULD BE CONTACTED BY CONTRACTOR

500'-31'-10"W 1314.08' (R)
500'-31'-00"W 1313.89' (M)
PACKARD ROAD
(22' ASPHALT - 66' R-O-W)

CMS & D
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510 W. PICKARD STREET - SUITE C
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com



SITE & HORIZONTAL PLAN
EIKENHOUT INC.
4269 CORPORATE DRIVE
SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

SUBMITTALS:	SUBMITTAL TO UNION TMP SITE PLAN 2-6-18
JOB NUMBER:	1801-001
DRAWN BY:	JSE
DESIGNED BY:	TELB
CHECKED BY:	TELB

SCALE
1" = 30'

SHEET NUMBER
3 OF 5

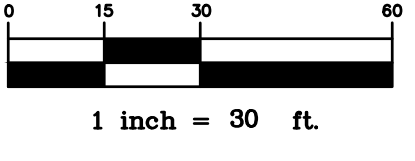
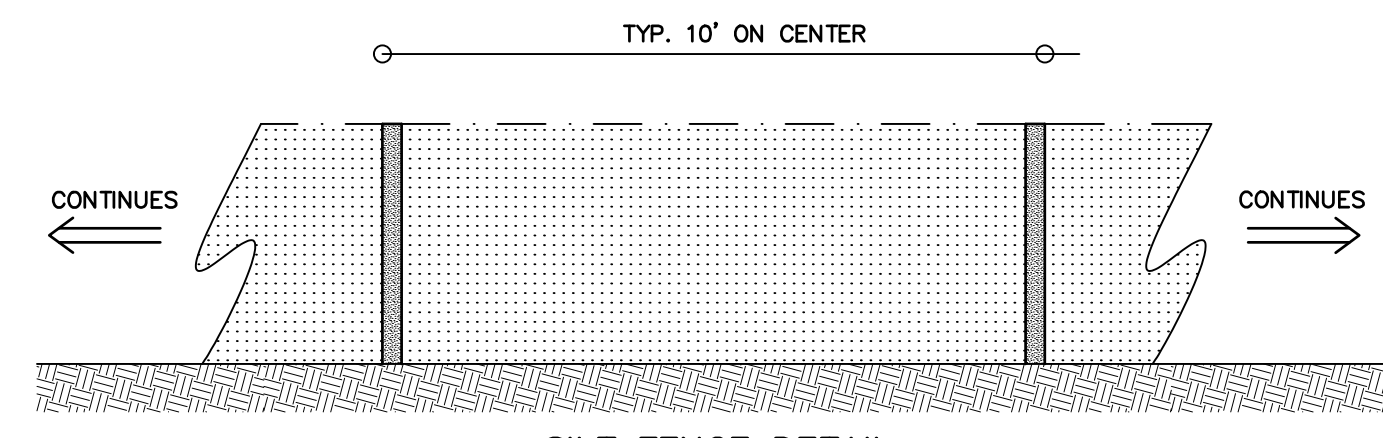
WEST 1/4 COR.,
SEC. 11, T14N-R4W

MICHIGAN UNIFIED KEYING SYSTEM
SOIL EROSION & SEDIMENTATION CONTROL MEASURES

- 7 Hydro-seeding
Effective on large areas
Match seeding agent used to provide immediate
protection until grass is rooted
Should include prepared topsoil bed
- 15 Paving
Protects areas which cannot otherwise be protected, but increases runoff
irregular surface will help slow velocity
- 55 Geotextile Silt Fence
Controls and Contains sediment from sheet flow conditions.
Fabric must be "taped" into the soil 6" or more to prevent underflow.
Must be constructed of adequate strength filter fabric and stakes.

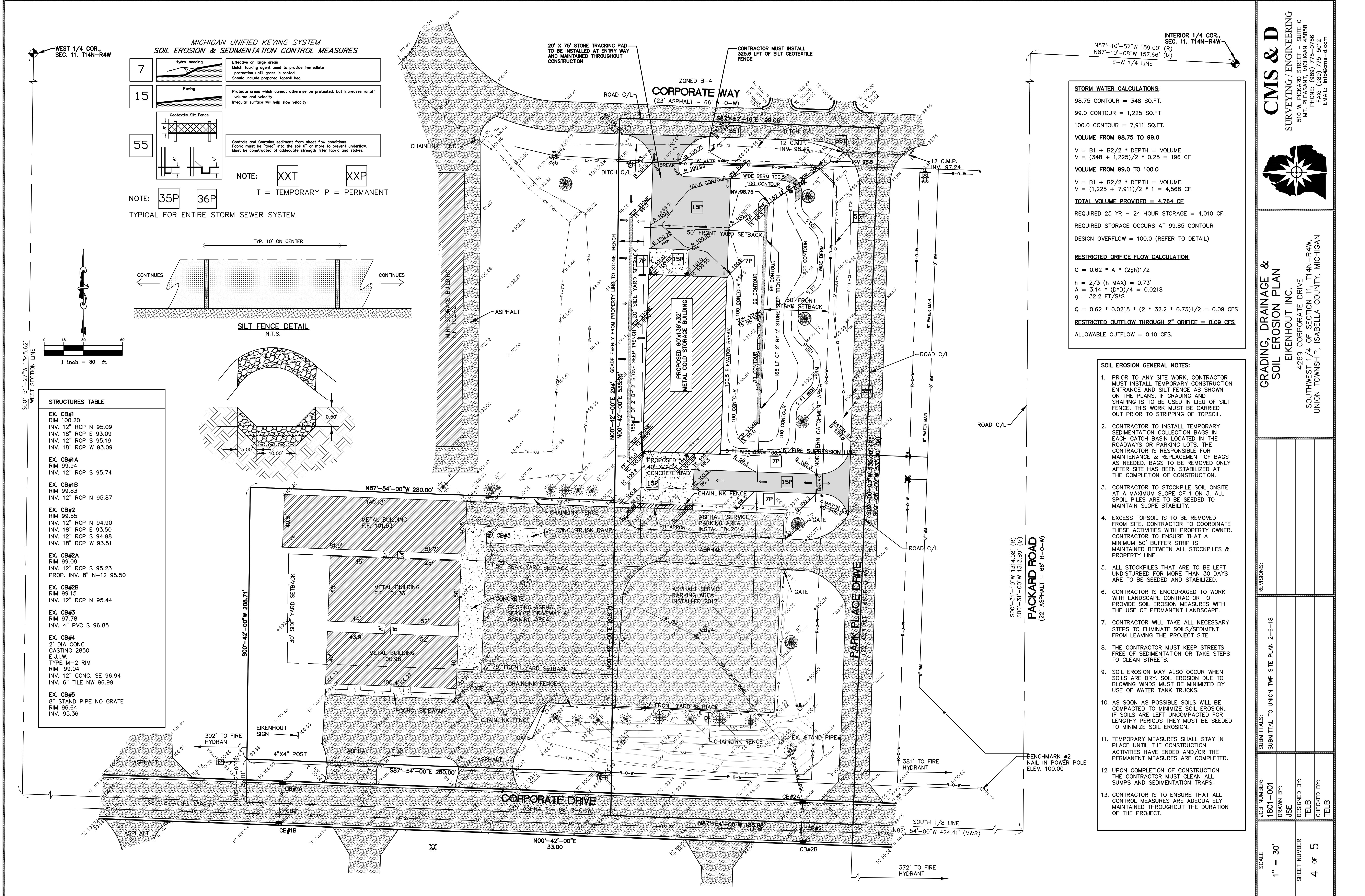
NOTE: **XXT** **XXP**
T = TEMPORARY P = PERMANENT

NOTE: **35P** **36P**
TYPICAL FOR ENTIRE STORM SEWER SYSTEM



STRUCTURES TABLE

EX. CB#1	RIM 100.20 INV. 12" RCP N 95.09 INV. 18" RCP E 93.09 INV. 12" RCP S 95.19 INV. 18" RCP W 93.09
EX. CB#1A	RIM 99.94 INV. 12" RCP S 95.74
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EX. CB#2	RIM 99.55 INV. 12" RCP N 94.90 INV. 18" RCP E 93.50 INV. 12" RCP S 94.98 INV. 18" RCP W 93.51
EX. CB#2A	RIM 99.09 INV. 12" RCP S 95.23 PROP. INV. 8" N-12 95.50
EX. CB#2B	RIM 99.15 INV. 12" RCP N 95.44
EX. CB#3	RIM 97.78 INV. 4" PVC S 96.85
EX. CB#4	2" DIA CONC CASTING 2850 E.J.I.W. TYPE M-2 RIM RIM 99.04 INV. 12" CONC. SE 96.94 INV. 6" TILE NW 96.99
EX. CB#5	8" STAND PIPE NO GRATE RIM 96.64 INV. 95.36



STORM WATER CALCULATIONS:
98.75 CONTOUR = 348 SQ.FT.
99.0 CONTOUR = 1,225 SQ.FT.
100.0 CONTOUR = 7,911 SQ.FT.
VOLUME FROM 98.75 TO 99.0
 $V = B1 + B2/2 * DEPTH = VOLUME$
 $V = (348 + 1,225)/2 * 0.25 = 196 CF$
VOLUME FROM 99.0 TO 100.0
 $V = B1 + B2/2 * DEPTH = VOLUME$
 $V = (1,225 + 7,911)/2 * 1 = 4,568 CF$
TOTAL VOLUME PROVIDED = 4,764 CF
REQUIRED 25 YR - 24 HOUR STORAGE = 4,010 CF.
REQUIRED STORAGE OCCURS AT 99.85 CONTOUR
DESIGN OVERFLOW = 100.0 (REFER TO DETAIL)

RESTRICTED ORIFICE FLOW CALCULATION
 $Q = 0.62 * A * (2gh)^{1/2}$
 $h = 2/3 (h MAX) = 0.73'$
 $A = 3.14 * (D^2)/4 = 0.0218$
 $g = 32.2 FT/S^2$
 $Q = 0.62 * 0.0218 * (2 * 32.2 * 0.73)^{1/2} = 0.09 CFS$
RESTRICTED OUTFLOW THROUGH 2" ORIFICE = 0.09 CFS
ALLOWABLE OUTFLOW = 0.10 CFS.

- SOIL EROSION GENERAL NOTES:**
- PRIOR TO ANY SITE WORK, CONTRACTOR MUST INSTALL TEMPORARY CONSTRUCTION ENTRANCE AND SILT FENCE AS SHOWN ON THE PLANS. IF GRADING AND SHAPING IS TO BE USED IN LIEU OF SILT FENCE, THIS WORK MUST BE CARRIED OUT PRIOR TO STRIPPING OF TOPSOIL.
 - CONTRACTOR TO INSTALL TEMPORARY SEDIMENTATION COLLECTION BAGS IN EACH CATCH BASIN LOCATED IN THE ROADWAYS OR PARKING LOTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE & REPLACEMENT OF BAGS AS NEEDED. BAGS TO BE REMOVED ONLY AFTER SITE HAS BEEN STABILIZED AT THE COMPLETION OF CONSTRUCTION.
 - CONTRACTOR TO STOCKPILE SOIL ON SITE AT A MAXIMUM SLOPE OF 1 ON 3, ALL SPOIL PILES ARE TO BE SEEDED TO MAINTAIN SLOPE STABILITY.
 - EXCESS TOPSOIL IS TO BE REMOVED FROM SITE. CONTRACTOR TO COORDINATE THESE ACTIVITIES WITH PROPERTY OWNER. CONTRACTOR TO ENSURE THAT A MINIMUM 50' BUFFER STRIP IS MAINTAINED BETWEEN ALL STOCKPILES & PROPERTY LINE.
 - ALL STOCKPILES THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN 30 DAYS ARE TO BE SEEDED AND STABILIZED.
 - CONTRACTOR IS ENCOURAGED TO WORK WITH LANDSCAPE CONTRACTOR TO PROVIDE SOIL EROSION MEASURES WITH THE USE OF PERMANENT LANDSCAPE.
 - CONTRACTOR WILL TAKE ALL NECESSARY STEPS TO ELIMINATE SOILS/SEDIMENT FROM LEAVING THE PROJECT SITE.
 - THE CONTRACTOR MUST KEEP STREETS FREE OF SEDIMENTATION OR TAKE STEPS TO CLEAN STREETS.
 - SOIL EROSION MAY ALSO OCCUR WHEN SOILS ARE DRY. SOIL EROSION DUE TO BLOWING WINDS MUST BE MINIMIZED BY USE OF WATER TANK TRUCKS.
 - AS SOON AS POSSIBLE SOILS WILL BE COMPACTED TO MINIMIZE SOIL EROSION. IF SOILS ARE LEFT UNCOMPACTED FOR LENGTHY PERIODS THEY MUST BE SEEDED TO MINIMIZE SOIL EROSION.
 - TEMPORARY MEASURES SHALL STAY IN PLACE UNTIL THE CONSTRUCTION ACTIVITIES HAVE ENDED AND/OR THE PERMANENT MEASURES ARE COMPLETED.
 - UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR MUST CLEAN ALL SUMPS AND SEDIMENTATION TRAPS.
 - CONTRACTOR IS TO ENSURE THAT ALL CONTROL MEASURES ARE ADEQUATELY MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

CMS & D
SURVEYING / ENGINEERING
510 W. PICKARD STREET - SUITE C
MICHIGAN CITY, INDIANA 46360
PHONE: (888) 776-0756
FAX: (888) 776-5012
EMAIL: info@cems-d.com

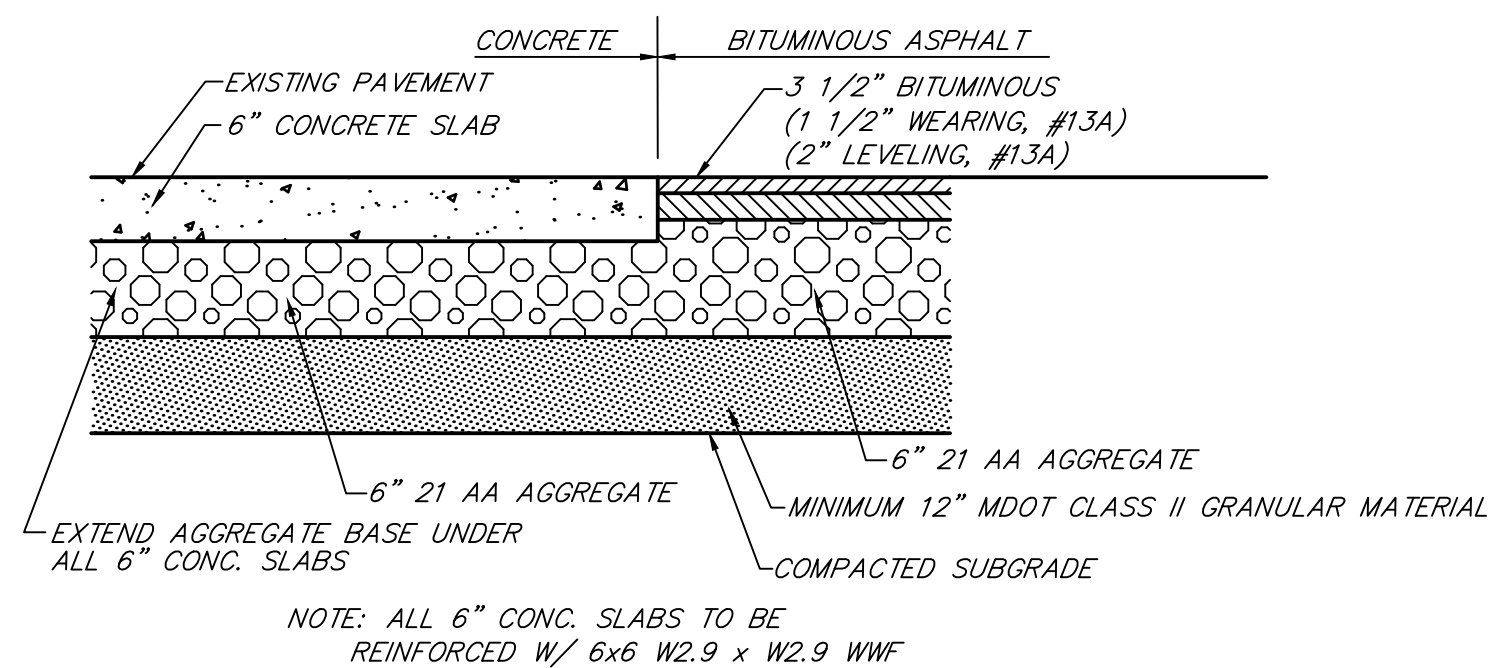
GRADING, DRAINAGE & SOIL EROSION PLAN
EIKENHOUT INC.
4269 CORPORATE DRIVE
SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

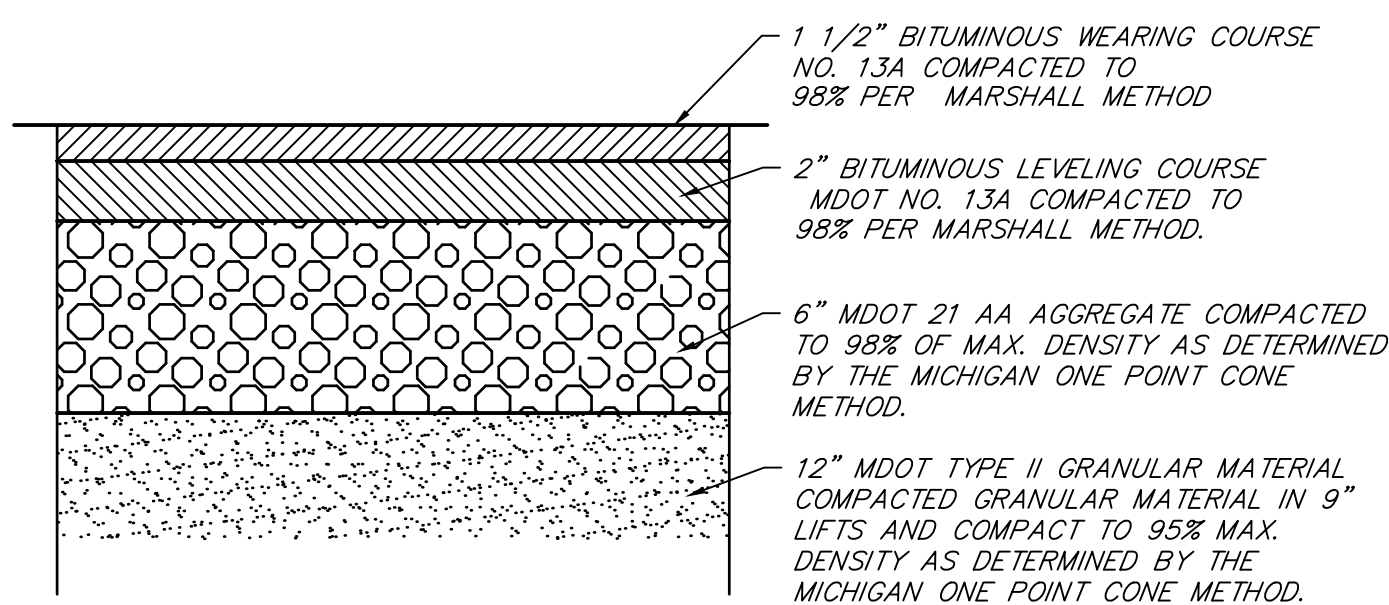
SUBMITTALS:	1801-001	SCALE:	1" = 30'
JOB NUMBER:	USE	DRAWN BY:	USE
DESIGNED BY:	TELB	CHECKED BY:	TELB

SUBMITTALS TO UNION TWP SITE PLAN 2-6-18

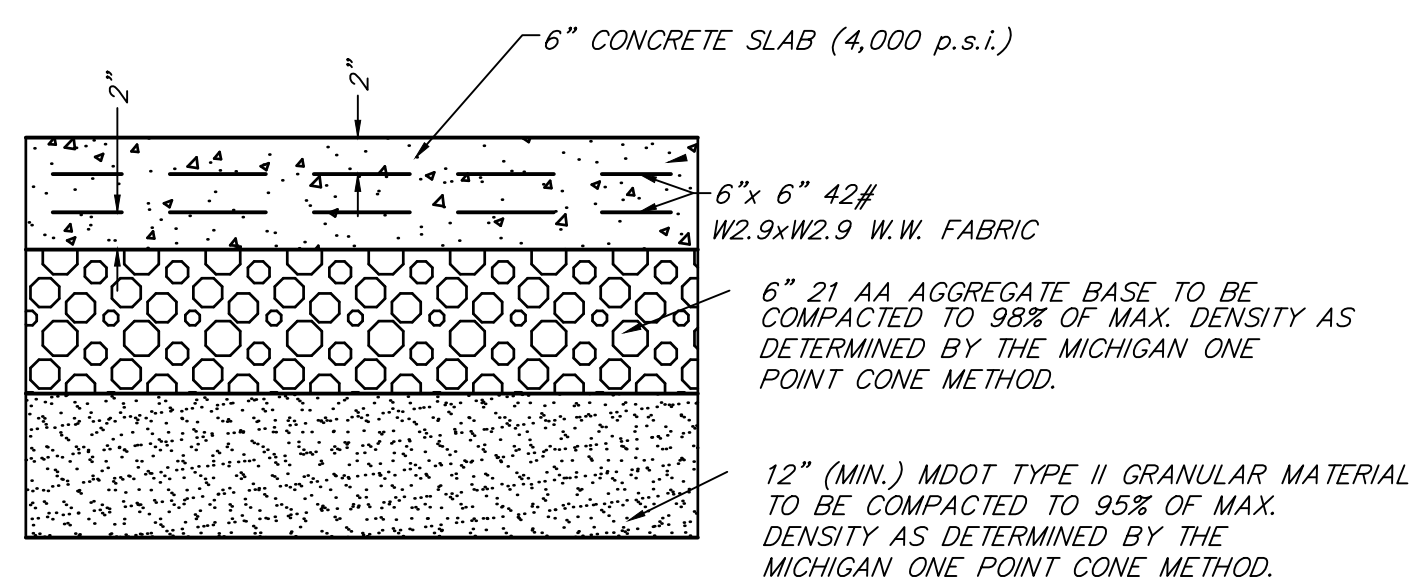
SHEET NUMBER	4 OF 5
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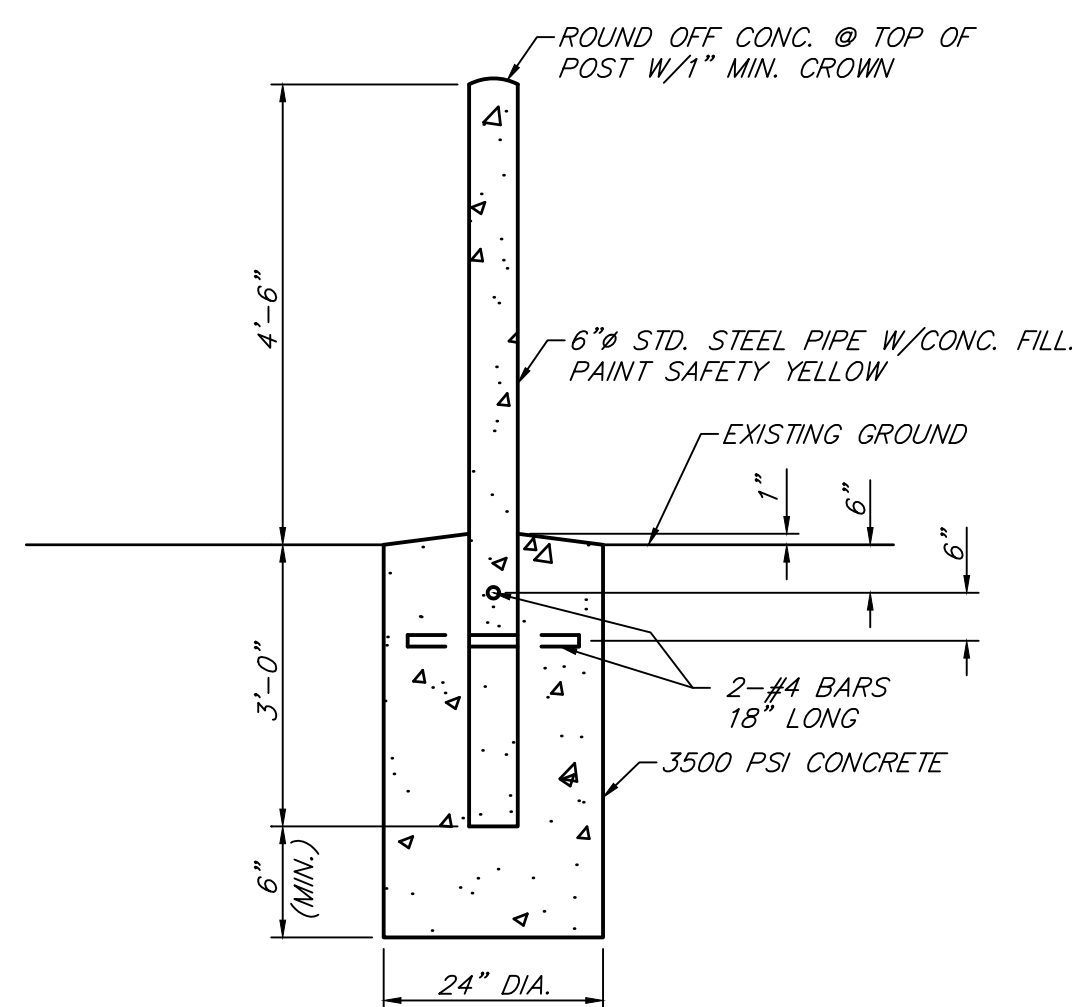
TYPICAL 6" CONCRETE SLAB CROSS-SECTION
NOT TO SCALE



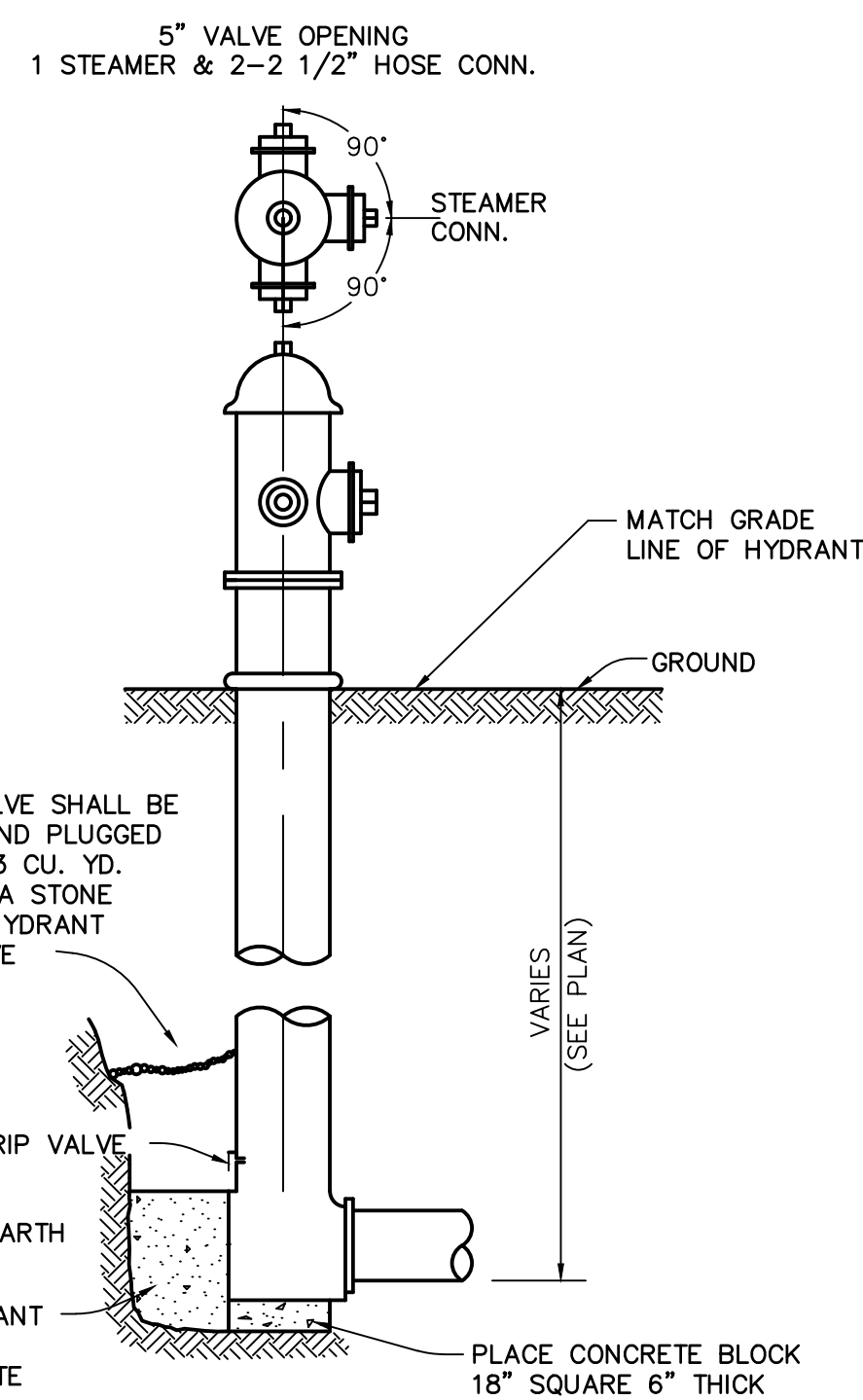
ASPHALT PAVEMENT CROSS-SECTION
NOT TO SCALE



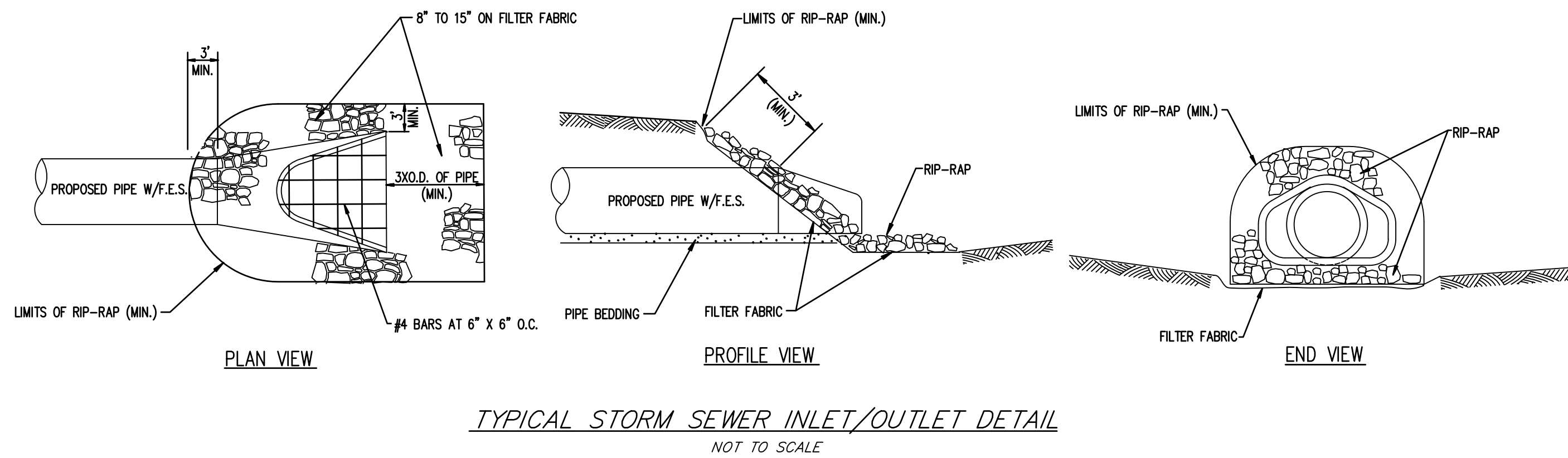
CONCRETE PAD/ENTRANCE RAMP CROSS-SECTION
NOT TO SCALE



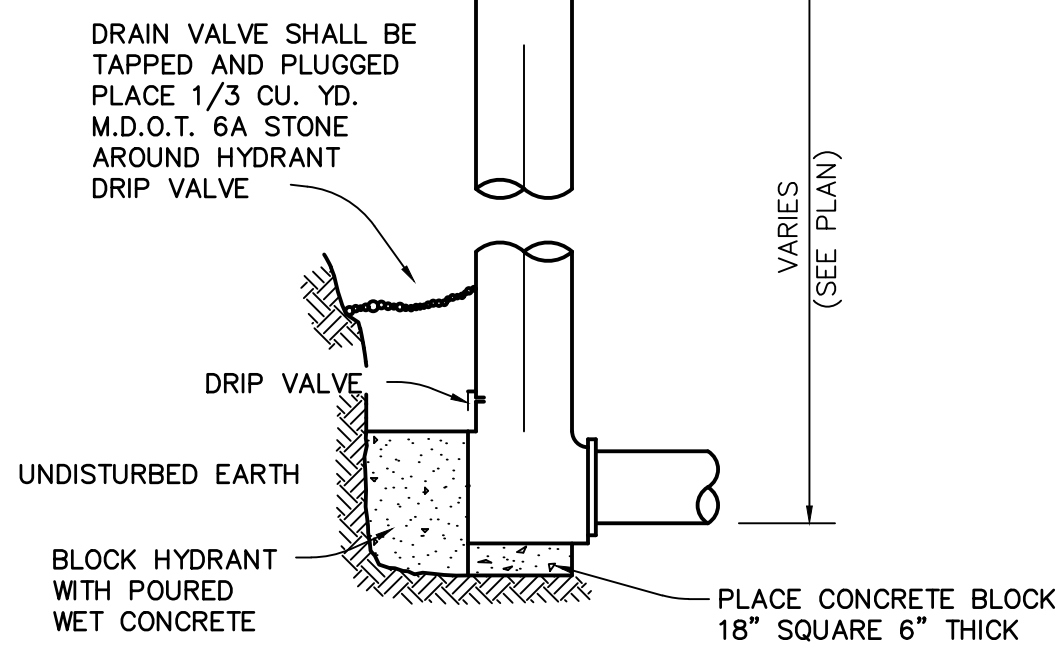
BOLLARD DETAIL
NOT TO SCALE



DETAIL OF SETTING HYDRANT
NOT TO SCALE



TYPICAL STORM SEWER INLET/OUTLET DETAIL
NOT TO SCALE



GENERAL NOTES:

THE SANITARY SEWER AND WATERMAIN MUST CONFORM TO THE UNION TOWNSHIP STANDARDS AND SPECIFICATIONS. SHOULD THERE BE A CONFLICT BETWEEN THE PLANS, NOTES, DETAILS AND SPECIFICATIONS, THE UNION TOWNSHIP STANDARDS SHALL GOVERN. THE CONTRACTOR WILL NOTIFY THE ENGINEER AS SOON AS A CONFLICT IS FOUND. INSTALLATION OF THESE UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UNION TOWNSHIP DEPARTMENT OF PUBLIC WORKS.

ELECTRIC SERVICES TO THE BUILDING AND PARKING LOT LIGHTING SHALL BE UNDERGROUND.

ALL SERVICE LINES ARE SHOWN FOR REFERENCE ONLY. THE EXACT LOCATIONS TO BE DETERMINED BY THE OWNER AND/OR UTILITY COMPANY.

INSTALLATION OF GAS, ELECTRIC AND TELEPHONE SERVICES (INCLUDING TRANSFORMER PAD LOCATIONS) SHALL BE COORDINATED BY THE CONTRACTOR WITH THE RESPECTIVE UTILITY COMPANIES AND THE ARCHITECT/ENGINEER

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS REQUIRED FOR WORKING WITHIN THE ROAD RIGHT-OF-WAY PRIOR TO COMMENCING CONSTRUCTION, WITHIN THESE AREAS.

THE PROPOSED ELEVATIONS SHOWN ARE TOP OF WALK, TOP OF CURB, FINISHED ASPHALT SURFACE AND GUTTER PAN ELEVATIONS, UNLESS OTHERWISE NOTED.

ALL DRIVEWAY APPROACHES SHALL BE CONSTRUCTED IN ACCORDANCE UNION TOWNSHIP STANDARDS.

CONSTRUCTION PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF MICHIGAN, COUNTY OF ISABELLA AND UNION TOWNSHIP.

DIMENSIONS SHOWN ON THE PLANS ARE GIVEN TO THE BACK OF CURB, FACE OR BACK OF WALK OR THE BUILDING OUTSIDE LINES.

GENERAL NOTES:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-482-7171) A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY CONSTRUCTION OR PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR WHERE POSSIBLE CONFLICTS EXIST PRIOR TO BEGINNING CONSTRUCTION.

THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY GROUND CONDITIONS, EXISTING UTILITIES, LOT AND BUILDING DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THE PLANS. ARRANGE TO HAVE UTILITIES IDENTIFIED AND FLAGGED BEFORE STARTING CONSTRUCTION. THE OWNER ASSUMES NO LIABILITY FOR THE LOCATION OF UTILITIES. ALL DAMAGES MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

ALL CONSTRUCTION UNDER EXISTING OR PROPOSED PAVEMENT, EXISTING OR PROPOSED UTILITIES (INCLUDING LEADS), SHALL BE COMPLETELY BACKFILLED WITH SAND IN 9" LAYERS, AND COMPACTED TO NOT LESS THAN 95% OF ITS MAXIMUM UNIT WEIGHT, AS DETERMINED BY THE MODIFIED PROCTOR METHOD. THE COST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR EACH ITEM.

THE CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENTATION CONTROL ACT NUMBER 347 P.A. OF 1972, AS AMENDED.

GEOTEXTILE FILTER SHALL BE USED AT ALL CATCH BASINS FOR SOIL AND SEDIMENTATION CONTROL. ALL CATCH BASINS SHALL BE CLEANED UPON COMPLETION OF THE PROPOSED PROJECT. COST FOR CLEANING THE CATCH BASINS SHALL BE INCLUDED IN THE COSTS FOR THE DRAINAGE STRUCTURES.

TOPSOIL SHALL BE STOCKPILED ON THE SITE AND USED AS TOPSOIL SURFACES AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. TOPSOIL WILL NEED TO BE SPREAD IN THE BASIN AREA TO A MINIMUM DEPTH OF 6 INCHES. THE BERMS SHOWN ON THE PLANS WILL NEED TO BE TOPSOIL OR TO HAVE A MINIMUM OF 6 INCHES ON TOPSOIL SPREAD OVER THEM. THE CURB ISLANDS WILL BE FILLED AS SPECIFIED WITH TOPSOIL. THE INTENT IS FOR THE CONTRACTOR AND THE LANDSCAPER TO USE THE EXISTING TOPSOIL TO COMPLETE THE PROJECT PRIOR TO HAULING ANY TOPSOIL ONTO THE SITE. UNSUITABLE TOPSOILS MUST BE DISPOSED OF. DURING THE CLEANUP, ANY REMAINING STOCKPILES WILL NEED TO BE REMOVED. SOIL EROSION MEASURES MUST BE TAKEN TO ASSURE THAT THESE STOCKPILES ARE STABILIZED.

THE CONTRACTOR SHALL SEED AND FERTILIZE DITCH BANKS, SOILS PILES OR BANKS AND ANY OTHER DISTURBED AREAS AS SHOWN ON THE PLANS.

THE CONTRACTOR SHALL BACKFILL, COMPACT AND FINE GRADE ALL AREAS BETWEEN THE CURBS AND PAVEMENT AND THE PROPERTY LINES WITH TOPSOIL SUITABLE FOR LANDSCAPING. THE GRADES IN THESE AREAS WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE UNPAVED AREAS SHALL BE SMOOTHLY GRADED AND THE SURFACE STABILIZED BY SEEDING AS STATED ON THE PLANS. THE MAXIMUM DESIRABLE SLOPE IS 3 HORIZONTAL TO 1 VERTICAL, UNLESS OTHERWISE STATED.

THE CONTRACTOR SHALL FURNISH AND INSTALL PLAIN RIP-RAP BANK PROTECTION IN AREAS WHERE BANK EROSION WILL MOST LIKELY OCCUR OR AS DIRECTED BY THE ENGINEER.

BROKEN CONCRETE AND DEBRIS SHALL BE CONSIDERED WASTE TO BE DISPOSED OF BY THE CONTRACTOR.

ALL DEWATERING REQUIRED FOR CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE BID.

ALL JOINTS AT INTERSECTION APPROACHES AND DRIVEWAYS SHALL BE SAWCUT WITH BUTT-JOINTS. THE COST SHALL BE INCLUDED WITH THE PAYMENT FOR EXCAVATION.

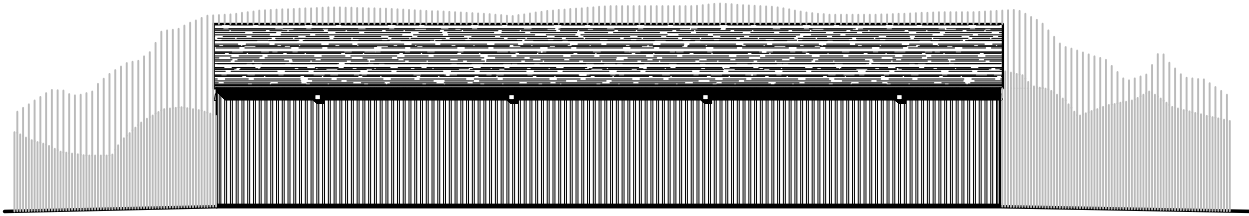
THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES ON THE PROJECT. THE COST IS TO BE INCLUDED IN THE LUMP SUM FEE.

ALL WATER VALVE BOXES, ELECTRICAL BOXES, GAS VALVES AND ANY OTHER EXISTING UTILITY STRUCTURES ON THE SITE SHALL BE ADJUSTED TO FINISHED GRADE. THE COST SHALL BE INCLUDED IN THE LUMP SUM FEE.

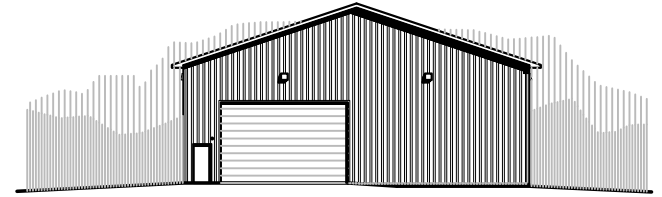
CMS & D
SURVEYING / ENGINEERING
510 W. PICKARD STREET - SUITE C
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

CONSTRUCTION DETAILS #1
EIKENHOUT INC.
4269 CORPORATE DRIVE
SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

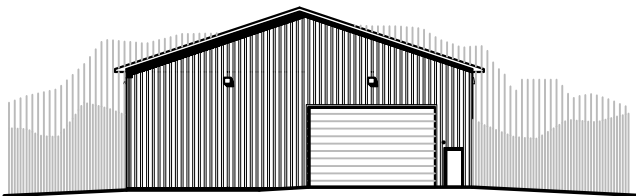
REVISIONS:			
SUBMITTALS:			
JOB NUMBER:	1801-001	SCALE:	1" = 30'
DRAWN BY:	USE	SHEET NUMBER:	5 OF 5
DESIGNED BY:	TELB		
CHECKED BY:	TELB		



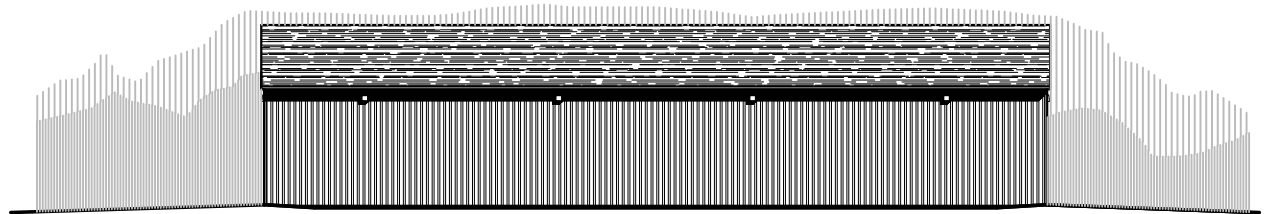
EAST ELEVATION
NO SCALE



SOUTH ELEVATION
NO SCALE



NORTH ELEVATION
NO SCALE



WEST ELEVATION
NO SCALE

REVISED: △ - △ - △ - <input type="checkbox"/> PRELIMINARY <input type="checkbox"/> BID <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> RECORD	SHEET TITLE SCHEMATIC ELEVATIONS	PROJECT NO. 201801
	PROJECT EIKENHOUT STORAGE CORPORATE WAY MT. PLEASANT, MI	SCALE NO SCALE
	DATE 2/4/18	SHEET NUMBER SEI
W S G William Stuart Gallaher Architect (989) 773-7680		73

PROPOSED EXPANSION OF OUTSIDE AND INSIDE STORAGE

EIKENHOUT INC.

CMS & D
 SURVEYING / ENGINEERING
 510 W. PICKARD STREET - SUITE C
 MT. PLEASANT, MICHIGAN 48858
 PHONE: (989) 775-5012
 FAX: (989) 775-5012
 EMAIL: info@cms-d.com



COVER SHEET
 EIKENHOUT INC.
 4269 CORPORATE DRIVE
 SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
 UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN



LOCATION SKETCH
 NOT TO SCALE

B-4 ZONE (LIGHT INDUSTRIAL)	
MINIMUM FRONT YARD SETBACK	50 FT (A)
MINIMUM SIDE YARD SETBACK	20 FT (B)
MINIMUM REAR YARD SETBACK	25 FT (B)
MAXIMUM BUILDING HEIGHT	35 FT
MINIMUM LOT AREA	12,000 SFT
MINIMUM LOT WIDTH	80 FT
MINIMUM LOT COVERAGE (%)	30%

I-1 ZONE (LIGHT INDUSTRIAL)	
MINIMUM FRONT YARD SETBACK	75 FT (A)
MINIMUM SIDE YARD SETBACK	30 FT (C)
MINIMUM REAR YARD SETBACK	50 FT (C)
MAXIMUM BUILDING HEIGHT	35 FT
MINIMUM LOT AREA	43,560 SFT
MINIMUM LOT WIDTH	100 FT
MINIMUM LOT COVERAGE (%)	40%

A. OFF-STREET PARKING SHALL BE PERMITTED TO OCCUPY A PORTION OF THE REQUIRED FRONT YARD, PROVIDED THAT THERE SHALL BE MAINTAINED A MINIMUM UNOBSTRUCTED AND LANDSCAPED SETBACK OF TEN (10) FEET BETWEEN THE NEAREST POINT OF THE OFF STREET PARKING AREAS, EXCLUSIVE OF ACCESS DRIVEWAYS AND THE NEAREST RIGHT-OF-WAY LINE AS INDICATED ON THE MAJOR THOROUGHFARE PLAN.

B. A LOT IN THE B-4 AND B-5 DISTRICT WILL PROVIDE A SIDE AND REAR YARD OF AT LEAST FORTY (40) FEET WHEN ABUTTING A RESIDENTIAL DISTRICT.

C. A LOT IN THE I-1 OR I-2 DISTRICT WILL PROVIDE A SIDE AND REAR YARD OF AT LEAST SIXTY (60) FEET IN DEPTH WHEN ABUTTING A RESIDENTIAL USE OR DISTRICT.

MISS DIG:
 FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL "MISS DIG" 1-800-482-7171 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. ALL "MISS DIG" PARTICIPATING MEMBERS WILL BE APPROPRIATELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

UTILITY NOTE:
 THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-482-7171) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. UNDERGROUND SERVICE LEADS FOR GAS, ELECTRIC, TELEPHONE AND CABLE MAY BE ACROSS PROPERTY, NO INFORMATION AVAILABLE PLEASE CALL MISS DIG.

LEGEND
 SYMBOLS

○ BOLLARD	⊠ GAS RISER	⊙ SOIL BORING
⊠ CATCH BASIN (CURB INLET)	⊠ GUY ANCHOR	⊙ STORM SEWER MANHOLE
⊙ CATCH BASIN (ROUND)	⊠ HYDRANT - EXISTING	⊠ TELEPHONE RISER
⊠ CATCH BASIN (SQUARE)	⊠ HYDRANT - PROPOSED	⊙ TREE - CONIFEROUS
⊙ CLEAN OUT	⊠ LIGHT POLE	⊙ TREE - DECIDUOUS
⊠ DRAINAGE FLOW	⊠ GAS MARKER	⊠ UTILITY POLE
⊠ ELECTRICAL BOX	⊠ FIBER OPTIC CABLE	⊠ WATER MAIN VALVE
⊙ FOUND CONC. MONUMENT	⊠ SANITARY SEWER MANHOLE	⊠ WATER SHUT-OFF
⊙ FOUND IRON	⊠ SET IRON	⊠ WATER WELL
⊠ GAS MAIN VALVE	⊠ SIGN	⊠ TRAFFIC LIGHT POLE

LINES		HATCH PATTERNS	
—ELEC—	BURIED ELECTRICAL CABLE	[Pattern]	ASPHALT - EXISTING
—PHONE—	BURIED TELEPHONE CABLE	[Pattern]	ASPHALT - PROPOSED
—DITCH-CL—	CENTERLINE OF DITCH	[Pattern]	CONCRETE
—FM—	FORCE MAIN	[Pattern]	GRAVEL
—GAS—	GAS MAIN	[Pattern]	LANDSCAPING
—RD-CL—	ROAD CENTERLINE	[Pattern]	RIP-RAP
—8" SAN—	SANITARY SEWER		
—12" SS—	STORM SEWER		
—EX-TOS—	TOE OF SLOPE		
—EX-TOB—	TOP OF BANK		
—OHE—	UTILITIES - OVERHEAD		
—UTIL—	UTILITIES - UNDERGROUND		
—8" WM—	WATER MAIN		

DESCRIPTION PROVIDED:

14-011-30-004-03
 T14N-R4W, SECTION 11, UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN, COMMENCING N.87°-10'-57"W., 159 FEET ALONG EAST-WEST 1/4 LINE; THENCE S.00°-31'-10"W., 1314.08 FEET ALONG THE CENTERLINE OF PACKARD ROAD; THENCE N.87°-54'-00"W., 424.41 FEET ALONG THE SOUTH 1/8 LINE FROM THE INTERIOR 1/4 CORNER OF SECTION 11; THENCE N.87°-54'-00"W., 185.98 FEET; THENCE N.00°-42'-00"E., 535.26 FEET TO CENTERLINE OF CORPORATE WAY; THENCE S.87°-52'-16"E., 199.06 FEET TO CENTERLINE OF PARK PLACE DRIVE; THENCE S.02°-06'-00"W., 535 FEET ALONG THE CENTERLINE OF PARK PLACE TO P.O.B., EXCEPT I.C.R.C. R.O.W.

AND

14-011-30-001-03
 T14N-R4W, SECTION 11, UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN, PART OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4, BEGINNING AT A POINT S.00°-51'-27"W., 1345.62 FEET ALONG THE WEST SECTION LINE; THENCE S.87°-54'-00"E., 1598.17 FEET ALONG THE SOUTH EAST-WEST 1/8 LINE; THENCE N.00°-42'-00"E., 33.01 FEET FROM THE WEST 1/4 CORNER OF SECTION 11; THENCE S.87°-54'-00"E., 280 FEET; THENCE N.00°-42'-00"E., 208.71 FEET; THENCE N.87°-54'-00"W., 280.00 FEET; THENCE S.00°-42'-00"W., 208.71 FEET TO P.O.B.

SHEET INDEX

SHEET 1.....COVER SHEET
SHEET 2.....TOPOGRAPHIC SURVEY
SHEET 3.....SITE & HORIZONTAL PLAN
SHEET 4.....GRADING, DRAINAGE & SOIL EROSION PLAN
SHEET 5.....CONSTRUCTION DETAILS #1

FLOOD PLAIN NOTE:
 THIS PROPERTY IS LOCATED IN ZONE X WHICH ARE AREAS DETERMINED TO BE OUTSIDE 500 YEAR FLOOD-PLAIN AS INDICATED BY FIRM MAP PANEL 26073C0307D EFFECTIVE DATE FEBRUARY 5, 2014

BENCHMARK:

BENCHMARK #1
 NAIL IN POWER POLE
 ELEV. = 101.09

BENCHMARK #2
 NAIL IN POWER POLE
 ELEV. = 100.00

DEVELOPER: EIKENHOUT, INC.
 4269 CORPORATE DRIVE
 MT. PLEASANT, MI 48858
 PHONE: (989) 773-4224
 FAX: (989) 773-2243
 Brian Rosenberger
 e-mail: brosenberger@eikenhout.com

CONSULTANT: CENTRAL MICHIGAN SURVEYING & DEVELOPMENT CO., INC.
 510 WEST PICKARD STREET, SUIT C
 MT. PLEASANT, MICHIGAN 48858
 CONTACT PERSON: TIMOTHY E BEBEE
 PHONE: (989) 775-0756
 FAX: (989) 775-5012
 e-mail info@cms-d.com

CHARTER COMMUNICATIONS
 915 E. BROOMFIELD ROAD
 MT. PLEASANT, MI 48858
 (989) 621-4932
 RANDY BUNKER
 rbunker@chartercom.com

CONSUMERS ENERGY
 1325 WRIGHT AVENUE
 ALMA, MI 48801
 (989) 466-4282
 KIM STUDD
 kimberly.studd@cmsenergy.com

FRONTIER
 345 PINE STREET
 ALMA, MI 48801
 (989) 463-0392
 MARK A. MARSHALL
 Mark.Marshall@fr.com

DTE ENERGY
 4420 44TH ST., S.E., SUITE B
 KENTWOOD, MI 49512
 (616) 954-4623
 MARY JO MCKERSIE
 mckersiem@dteenergy.com

MT. PLEASANT FIRE DEPARTMENT
 804 EAST HIGH STREET
 MT. PLEASANT, MI 48858
 (989) 779-5100 EXT 5122
 SGT. RANDY KEELER
 rkeeler@mt-pleasant.org

CHARTER TOWNSHIP OF UNION
 PUBLIC WATER/PUBLIC SEWER
 2010 N. LINCOLN ROAD
 MT. PLEASANT, MI 48858
 (989) 772-4600 EXT 24
 KIM SMITH
 ksmith@uniontownshipmi.com

CHARTER TOWNSHIP OF UNION
 PLANNING & ZONING
 2261 EAST REMUS ROAD
 MT. PLEASANT, MI 48858
 (989) 772-4600 EXT 241
 PETER GALLINAT
 pgallinat@uniontownshipmi.com

DRAIN COMMISSIONERS OFFICE
 ISABELLA COUNTY BUILDING
 200 NORTH MAIN STREET ROOM 140
 MT. PLEASANT, MI 48857
 (989) 772-0911
 ROBERT WILLOUGHBY
 drain@isabellacounty.org

ISABELLA COUNTY ROAD COMMISSION
 2261 EAST REMUS ROAD
 MT. PLEASANT, MI 48858
 (989) 773-7131 EXT 115
 PATRICK GAFFNEY
 P.Gaffney@isabellaroads.com

REVISIONS:

NO.	DATE	DESCRIPTION

SUBMITTALS:
 SUBMITTAL TO UNION TWP SITE PLAN 2-6-18

JOB NUMBER:	1801-001
DRAWN BY:	USE
DESIGNED BY:	TELB
CHECKED BY:	TELB

SCALE: N/A

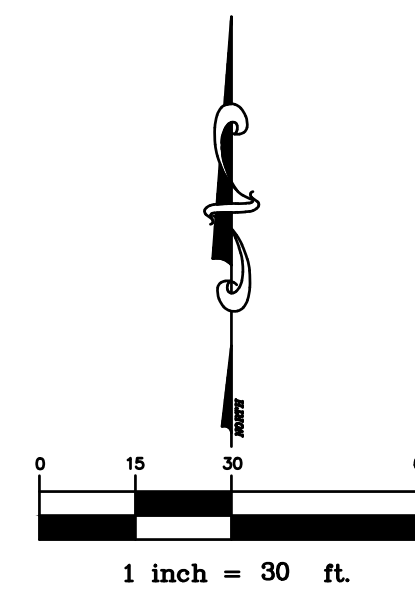
SHEET NUMBER: 1 of 5

WEST 1/4 COR.,
SEC. 11, T14N-R4W

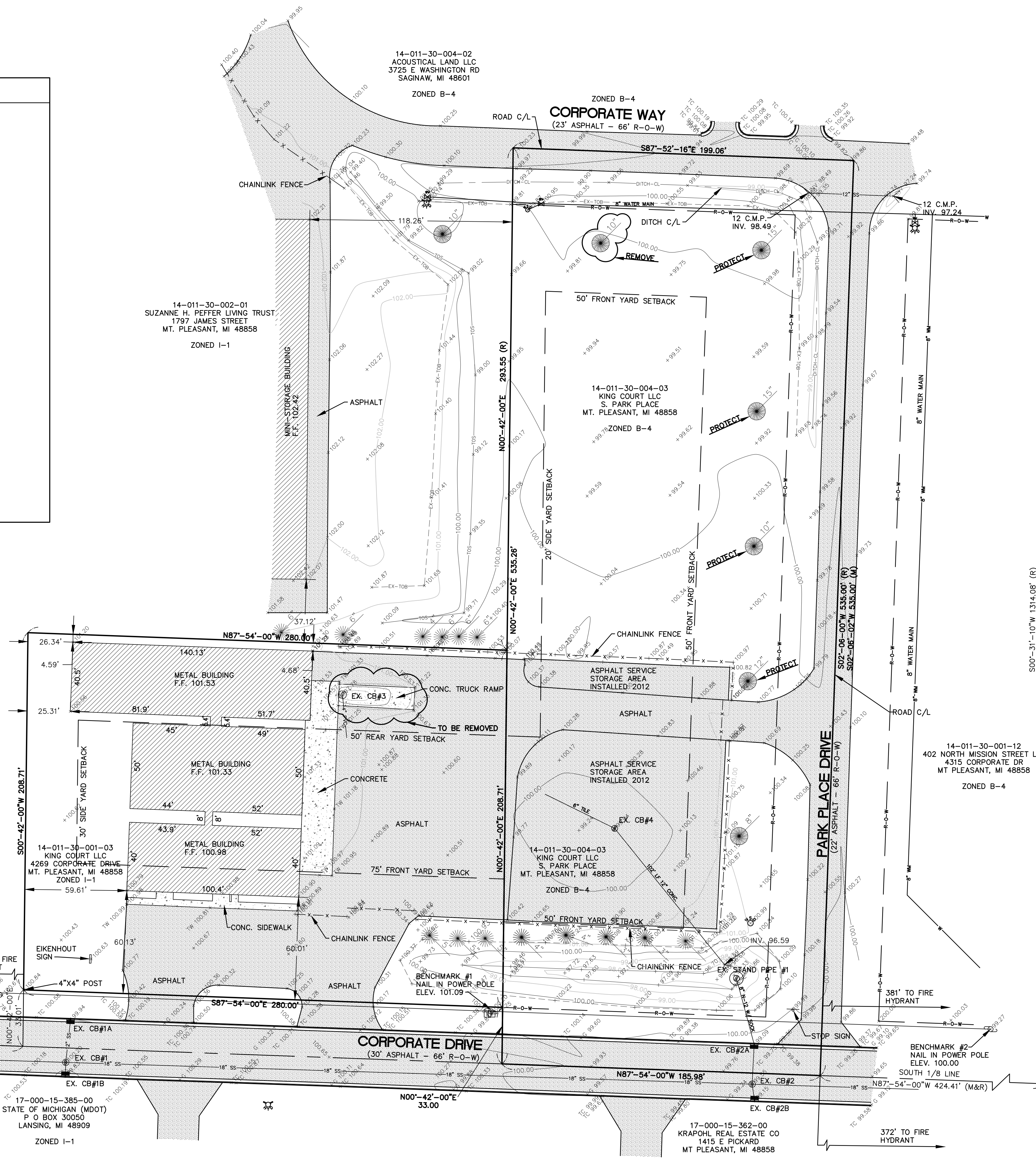
INTERIOR 1/4 COR.,
SEC. 11, T14N-R4W
N87-10'-57"W 159.00' (R)
N87-10'-08"W 157.66' (M)
E-W 1/4 LINE

STRUCTURES TABLE	
EX. CB#1	RIM 100.20 INV. 12" RCP N 95.09 INV. 18" RCP E 93.09 INV. 12" RCP S 95.19 INV. 18" RCP W 93.09
EX. CB#1A	RIM 99.94 INV. 12" RCP S 95.74
EX. CB#1B	RIM 99.83 INV. 12" RCP N 95.87
EX. CB#2	RIM 99.55 INV. 12" RCP N 94.90 INV. 18" RCP E 93.50 INV. 12" RCP S 94.98 INV. 18" RCP W 93.51
EX. CB#2A	RIM 99.09 INV. 12" RCP S 95.23 PROP. INV. 8" N-12 95.50
EX. CB#2B	RIM 99.15 INV. 12" RCP N 95.44
EX. CB#3	RIM 97.78 INV. 4" PVC S 96.85
EX. CB#4	2" DIA CONC CASTING 2850 E.J.I.W. TYPE M-2 RIM RIM 99.04 INV. 12" CONC. SE 96.94 INV. 6" TILE NW 96.99
EX. STAND PIPE#1	8" STAND PIPE NO GRATE RIM 96.64 INV. 95.36

S00-51'-27"W 1345.62'
WEST SECTION LINE



14-011-30-001-01
TRIPLE THREAT INC
4265 CORPORATE DR
MT PLEASANT, MI 48858
ZONED I-1



S00-31'-10"W 134.08' (R)
S00-31'-00"W 1313.28' (M)
PACKARD ROAD
(22' ASPHALT - 66' R-O-W)

17-000-15-385-00
STATE OF MICHIGAN (MDOT)
P O BOX 30050
LANSING, MI 48909
ZONED I-1

17-000-15-362-00
KRAPOHL REAL ESTATE CO
1415 E PICKARD
MT PLEASANT, MI 48858

CMS & D
SURVEYING / ENGINEERING
510 W. PICKARD STREET SUITE C
MT PLEASANT, MI 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com



TOPOGRAPHIC SURVEY
EIKENHOUT INC.
4269 CORPORATE DRIVE
SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

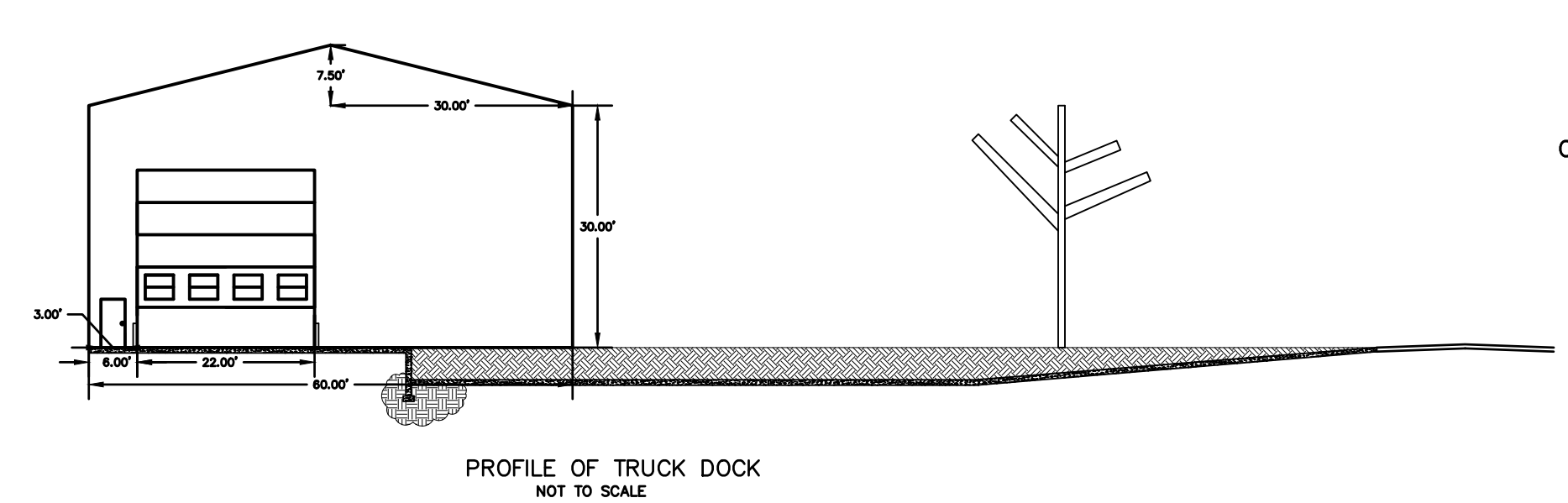
SUBMITTALS:
SUBMITTAL TO UNION TWP SITE PLAN 2-6-18

JOB NUMBER:
1801-001
DRAWN BY:
JSE
DESIGNED BY:
TELB
CHECKED BY:
TELB

SCALE:
1" = 30'
SHEET NUMBER:
2 OF 5

WEST 1/4 COR.,
SEC. 11, T14N-R4W

INTERIOR 1/4 COR.,
SEC. 11, T14N-R4W
N87°-10'-57"W 159.00' (R)
N87°-10'-08"W 157.66' (M)
E-W 1/4 LINE



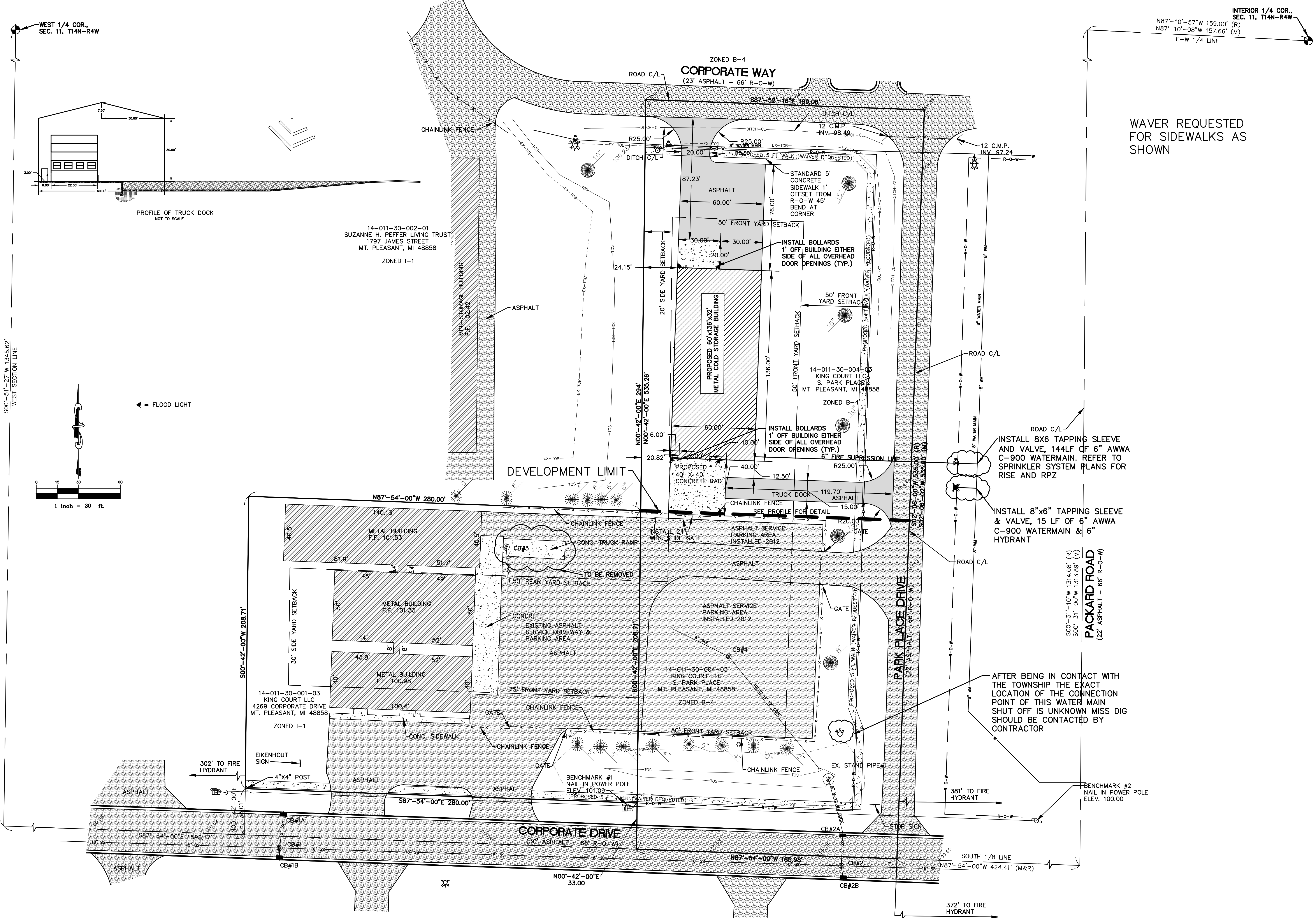
PROFILE OF TRUCK DOCK
NOT TO SCALE

14-011-30-002-01
SUZANNE H. PEPPER LIVING TRUST
1797 JAMES STREET
MT. PLEASANT, MI 48858
ZONED I-1



← = FLOOD LIGHT

500'-51'-27"W 1345.62'
WEST SECTION LINE



CMS & D
SURVEYING / ENGINEERING
510 W. PICKARD STREET - SUITE C
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

SITE & HORIZONTAL PLAN
EIKENHOUT INC.
4269 CORPORATE DRIVE
SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

SUBMITTALS:		REVISIONS:	
SUBMITTAL TO UNION TWP SITE PLAN 2-6-18			
JOB NUMBER: 1801-001	DRAWN BY: JSE		
SCALE: 1" = 30'	DESIGNED BY: TELB		
SHEET NUMBER: 3 OF 5	CHECKED BY: TELB		



REVISIONS:
COMMENTS FROM ICDC 2-7-18

SUBMITTALS:
SUBMITTAL TO UNION TWP SITE PLAN 2-6-18
SUBMITTAL ICDC & UNION TWP SITE PLAN 2-9-18

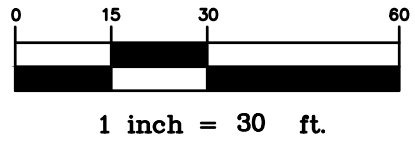
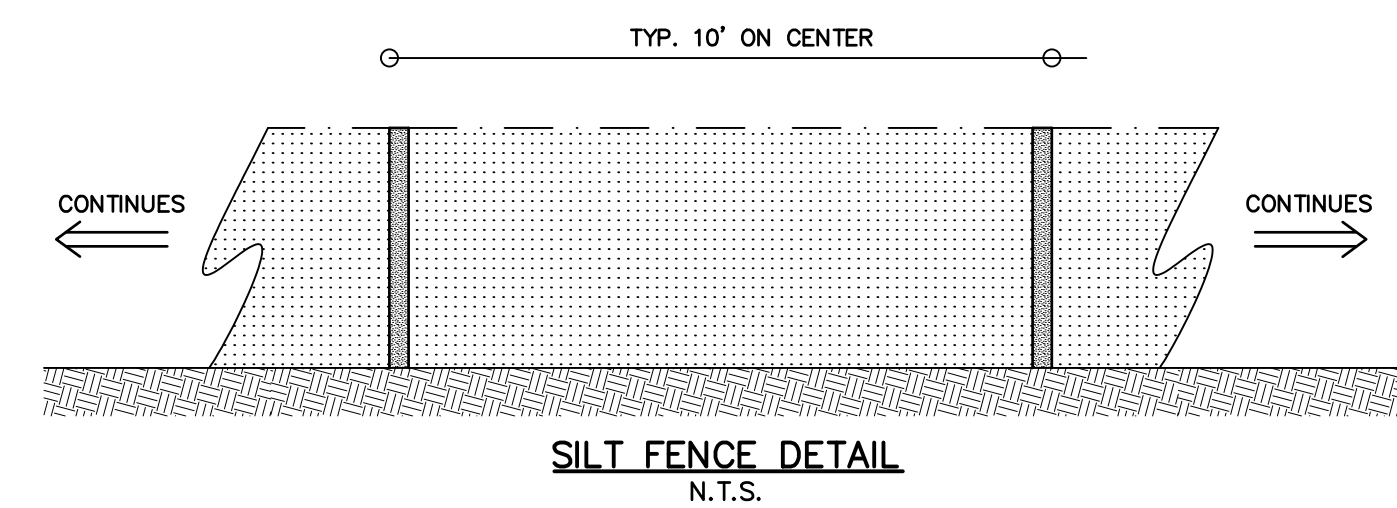
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1801-001
DRAWN BY:
USE
DESIGNED BY:
TELB
CHECKED BY:
TELB

SCALE:
1" = 30'
SHEET NUMBER:
4 OF 5

**MICHIGAN UNIFIED KEYING SYSTEM
SOIL EROSION & SEDIMENTATION CONTROL MEASURES**

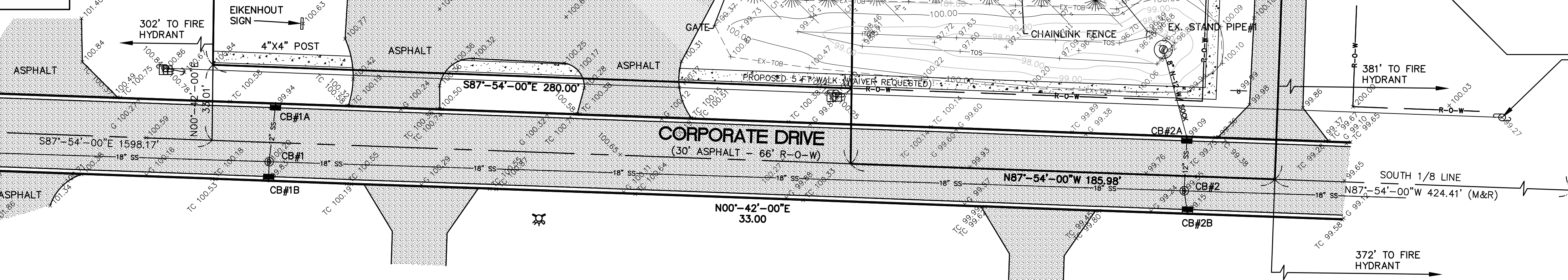
7		Effective on large areas. Match tracking agent used to provide immediate protection until grass is rooted. Should include prepared topsoil bed.
15		Protects areas which cannot otherwise be protected, but increases runoff volume and velocity. Irregular surface will help slow velocity.
55		Controls and Contains sediment from sheet flow conditions. Fabric must be "toed" into the soil 6" or more to prevent underflow. Must be constructed of adequate strength filter fabric and stakes.

NOTE: **35P** **36P** T = TEMPORARY P = PERMANENT
TYPICAL FOR ENTIRE STORM SEWER SYSTEM



STRUCTURES TABLE

EX. CB#1	RIM 100.20 INV. 12" RCP N 95.09 INV. 18" RCP E 93.09 INV. 12" RCP S 95.19 INV. 18" RCP W 93.09
EX. CB#1A	RIM 99.94 INV. 12" RCP S 95.74
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EX. CB#2A	RIM 99.09 INV. 12" RCP S 95.23 PROP. INV. 8" N-12 95.50
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EX. CB#3	RIM 97.78 INV. 4" PVC S 96.85
EX. CB#4	2" DIA CONC CASTING 2850 E.J.I.W. TYPE M-2 RIM RIM 99.04 INV. 12" CONC. SE 96.94 INV. 6" TILE NW 96.99
EX. CB#5	8" STAND PIPE NO GRATE RIM 96.64 INV. 95.36



STORM WATER CALCULATIONS:
98.75 CONTOUR = 348 SQ.FT.
99.0 CONTOUR = 1,225 SQ.FT.
100.0 CONTOUR = 7,911 SQ.FT.
VOLUME FROM 98.75 TO 99.0
 $V = B1 + B2/2 * DEPTH = VOLUME$
 $V = (348 + 1,225)/2 * 0.25 = 196 CF$
VOLUME FROM 99.0 TO 100.0
 $V = B1 + B2/2 * DEPTH = VOLUME$
 $V = (1,225 + 7,911)/2 * 1 = 4,568 CF$
TOTAL VOLUME PROVIDED = 4,764 CF
REQUIRED 25 YR - 24 HOUR STORAGE = 4,010 CF.
REQUIRED STORAGE OCCURS AT 99.85 CONTOUR
DESIGN OVERFLOW = 100.0 (REFER TO DETAIL)

RESTRICTED ORIFICE FLOW CALCULATION
 $Q = 0.62 * A * (2gh)^{1/2}$
 $h = 2/3 (h MAX) = 0.73'$
 $A = 3.14 * (D^2)/4 = 0.0218$
 $g = 32.2 FT/S^2$
 $Q = 0.62 * 0.0218 * (2 * 32.2 * 0.73)^{1/2} = 0.09 CFS$
RESTRICTED OUTFLOW THROUGH 2" ORIFICE = 0.09 CFS
ALLOWABLE OUTFLOW = 0.10 CFS.

- SOIL EROSION GENERAL NOTES:**
- PRIOR TO ANY SITE WORK, CONTRACTOR MUST INSTALL TEMPORARY CONSTRUCTION ENTRANCE AND SILT FENCE AS SHOWN ON THE PLANS. IF GRADING AND SHAPING IS TO BE USED IN LIEU OF SILT FENCE, THIS WORK MUST BE CARRIED OUT PRIOR TO STRIPPING OF TOPSOIL.
 - CONTRACTOR TO INSTALL TEMPORARY SEDIMENTATION COLLECTION BAGS IN EACH CATCH BASIN LOCATED IN THE ROADWAYS OR PARKING LOTS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE & REPLACEMENT OF BAGS AS NEEDED. BAGS TO BE REMOVED ONLY AFTER SITE HAS BEEN STABILIZED AT THE COMPLETION OF CONSTRUCTION.
 - CONTRACTOR TO STOCKPILE SOIL ON SITE AT A MAXIMUM SLOPE OF 1 ON 3, ALL SPOIL PILES ARE TO BE SEEDED TO MAINTAIN SLOPE STABILITY.
 - EXCESS TOPSOIL IS TO BE REMOVED FROM SITE. CONTRACTOR TO COORDINATE THESE ACTIVITIES WITH PROPERTY OWNER. CONTRACTOR TO ENSURE THAT A MINIMUM 50' BUFFER STRIP IS MAINTAINED BETWEEN ALL STOCKPILES & PROPERTY LINE.
 - ALL STOCKPILES THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN 30 DAYS ARE TO BE SEEDED AND STABILIZED.
 - CONTRACTOR IS ENCOURAGED TO WORK WITH LANDSCAPE CONTRACTOR TO PROVIDE SOIL EROSION MEASURES WITH THE USE OF PERMANENT LANDSCAPE.
 - CONTRACTOR WILL TAKE ALL NECESSARY STEPS TO ELIMINATE SOILS/SEDIMENT FROM LEAVING THE PROJECT SITE.
 - THE CONTRACTOR MUST KEEP STREETS FREE OF SEDIMENTATION OR TAKE STEPS TO CLEAN STREETS.
 - SOIL EROSION MAY ALSO OCCUR WHEN SOILS ARE DRY. SOIL EROSION DUE TO BLOWING WINDS MUST BE MINIMIZED BY USE OF WATER TANK TRUCKS.
 - AS SOON AS POSSIBLE SOILS WILL BE COMPACTED TO MINIMIZE SOIL EROSION. IF SOILS ARE LEFT UNCOMPACTED FOR LENGTHY PERIODS THEY MUST BE SEEDED TO MINIMIZE SOIL EROSION.
 - TEMPORARY MEASURES SHALL STAY IN PLACE UNTIL THE CONSTRUCTION ACTIVITIES HAVE ENDED AND/OR THE PERMANENT MEASURES ARE COMPLETED.
 - UPON COMPLETION OF CONSTRUCTION THE CONTRACTOR MUST CLEAN ALL SUMPS AND SEDIMENTATION TRAPS.
 - CONTRACTOR IS TO ENSURE THAT ALL CONTROL MEASURES ARE ADEQUATELY MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.

NOTE: STORM WATER TO BE DIRECTED TO 4" CONC MANHOLE WITH SUMP PUMP. WATER TO BE DISCHARGED TO EASTERN DETENTION AREA.

CONTRACTOR MUST INSTALL 325.6 LFT OF SILT GEOTEXTILE FENCE

20' X 75' STONE TRACKING PAD TO BE INSTALLED AT ENTRY WAY AND MAINTAINED THROUGHOUT CONSTRUCTION

ZONED B-4
CORPORATE WAY
(23' ASPHALT - 66' R-O-W)

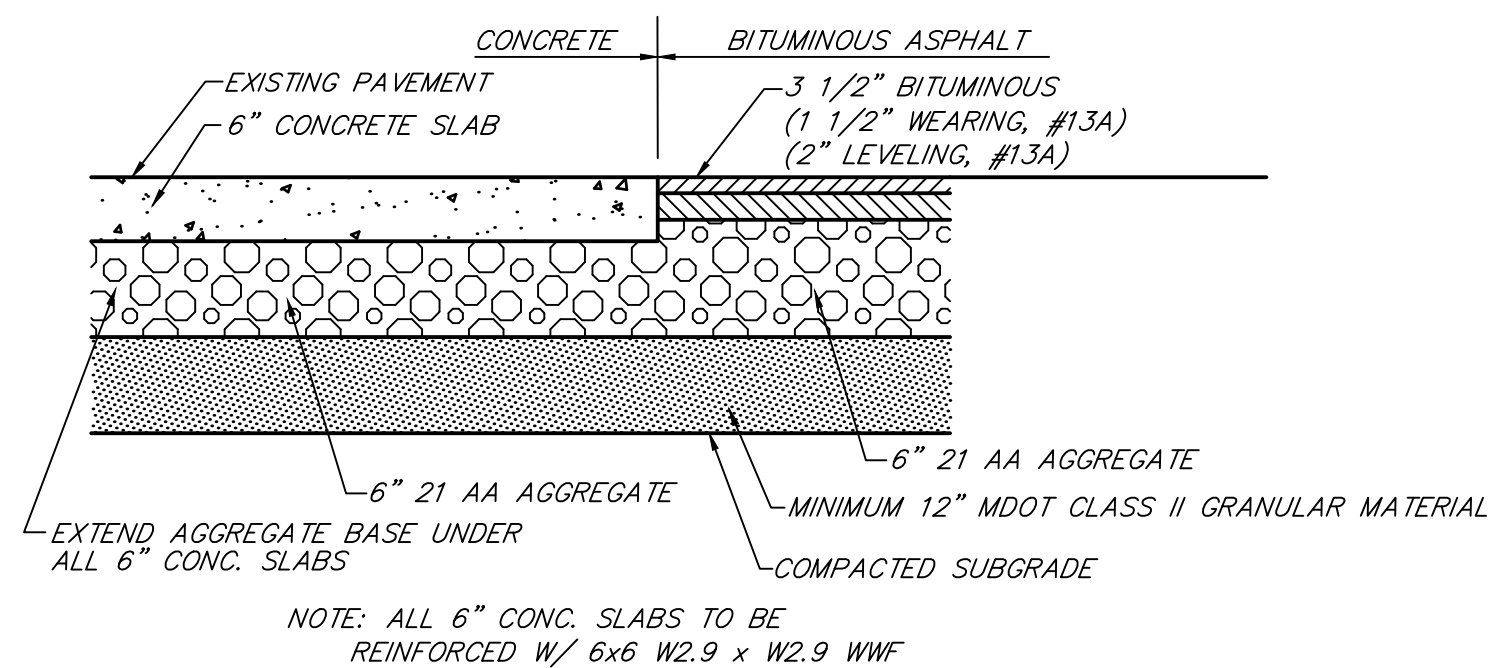
500'-31"-10"W 1314.08' (R)
500'-31"-00"W 1313.89' (M)
PACKARD ROAD
(22' ASPHALT - 66' R-O-W)

502'-06"-00"W 535.00' (R)
502'-16"-02"W 535.00' (M)
PARK PLACE DRIVE
(22' ASPHALT - 66' R-O-W)

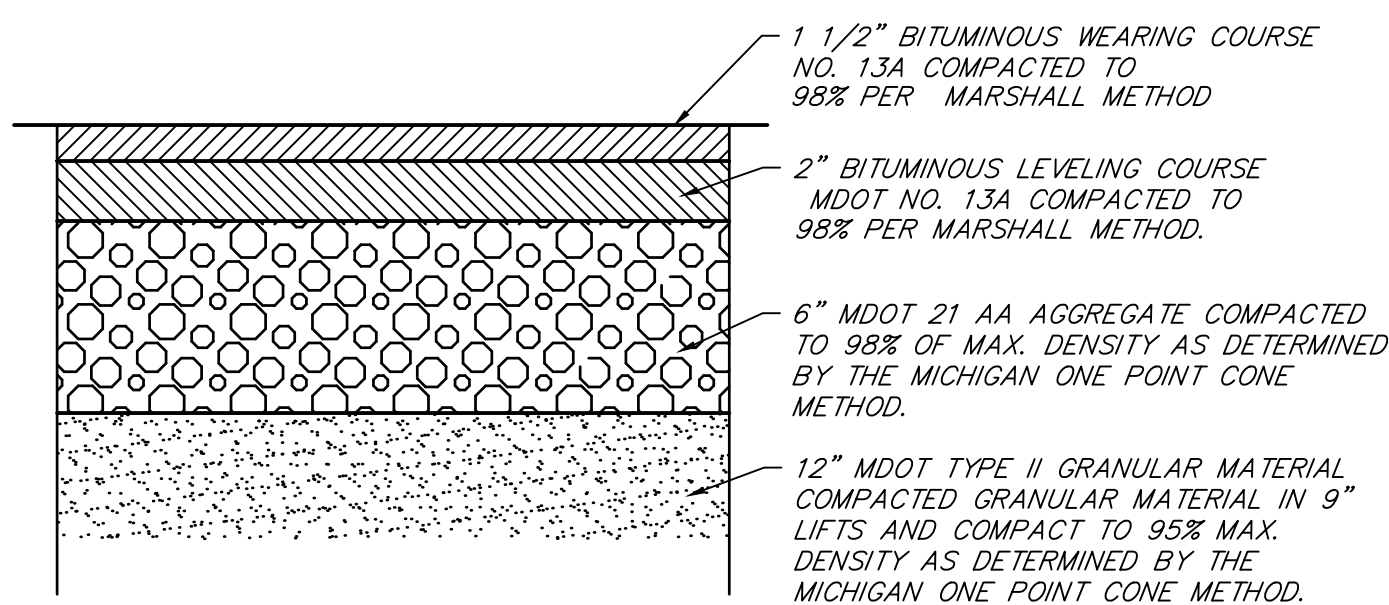
307' TO FIRE HYDRANT

372' TO FIRE HYDRANT

BENCHMARK #2
NAIL IN POWER POLE
ELEV. 100.00

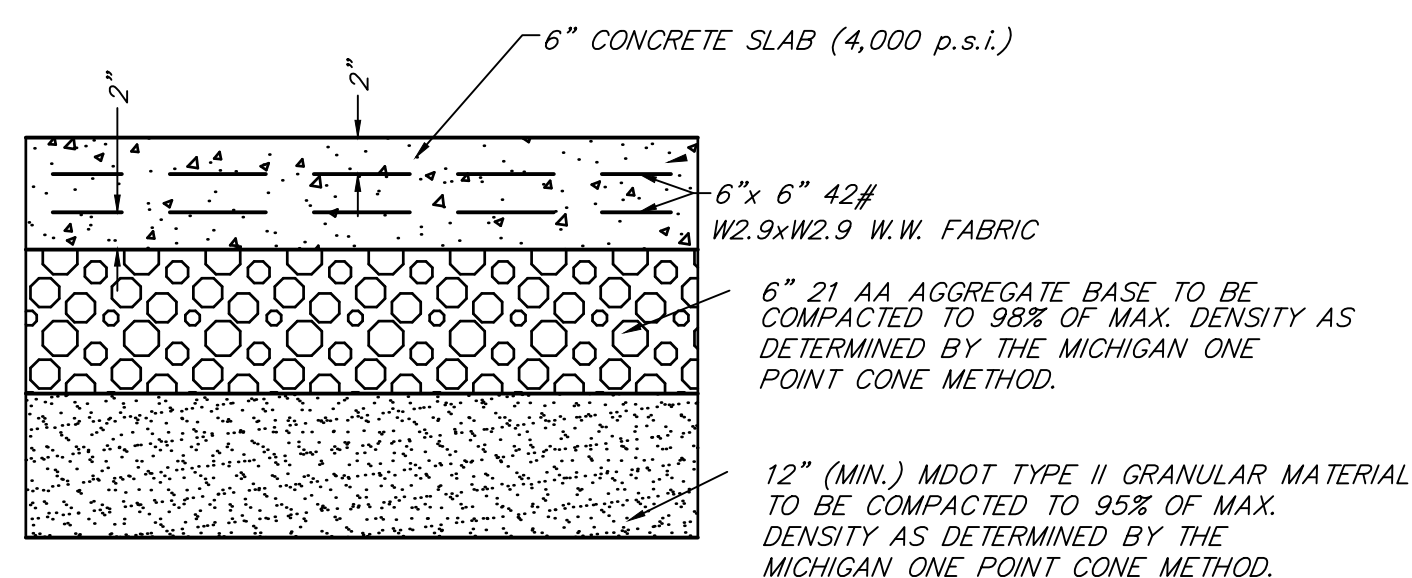


TYPICAL 6" CONCRETE SLAB CROSS-SECTION
NOT TO SCALE

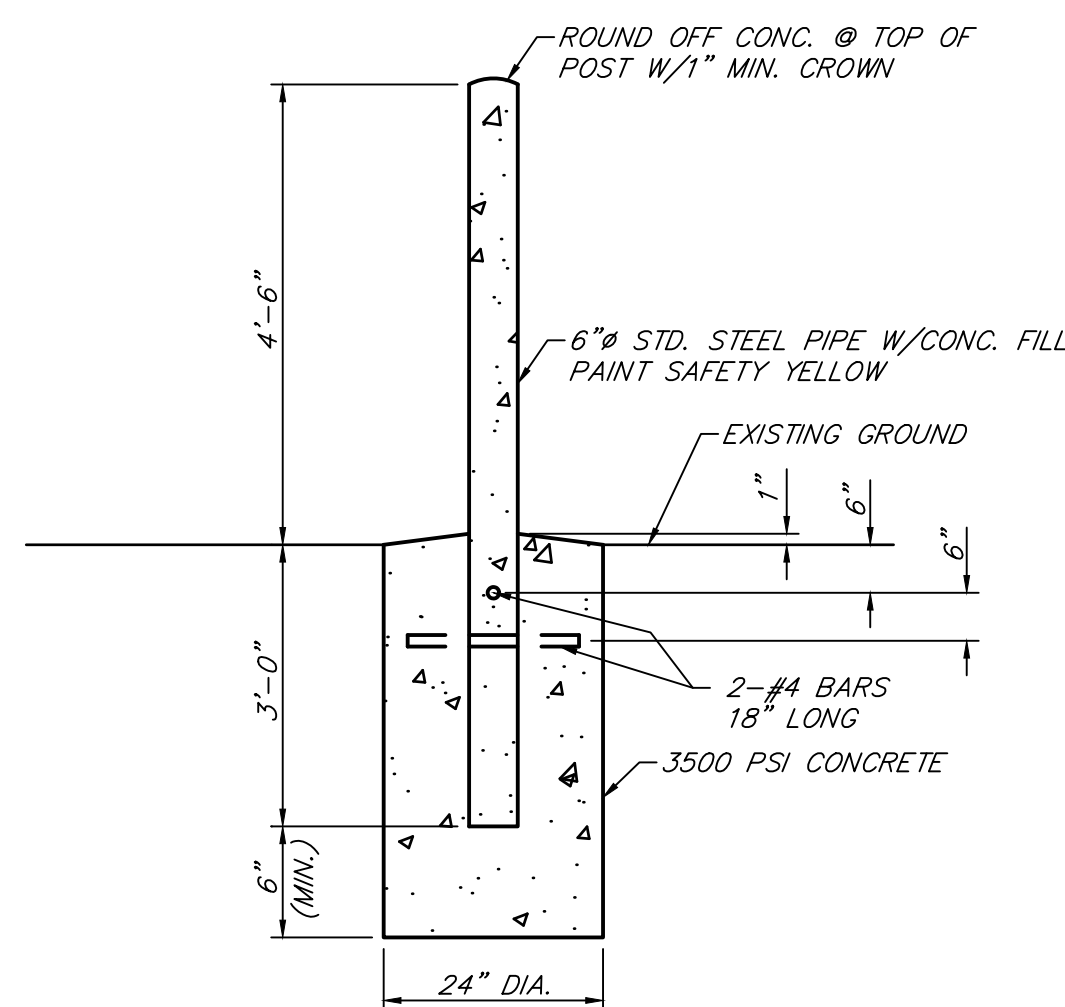


NOTE: COMPACTION TESTS ARE REQUIRED. RESULTS SHALL BE SUBMITTED TO OWNER PRIOR TO FINAL ACCEPTANCE OF SUB-BASE, BASE AND ASPHALT MATERIALS.

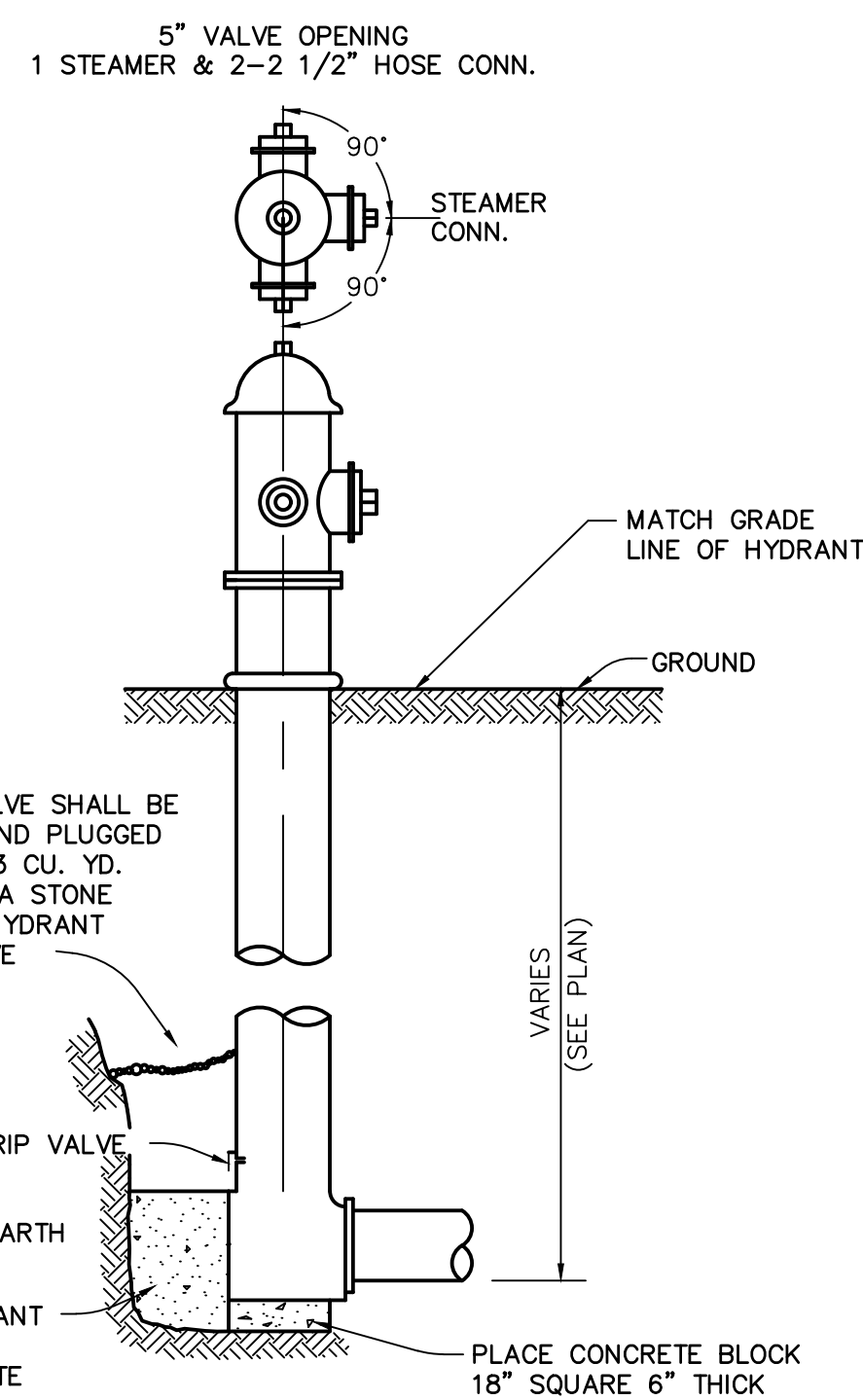
ASPHALT PAVEMENT CROSS-SECTION
NOT TO SCALE



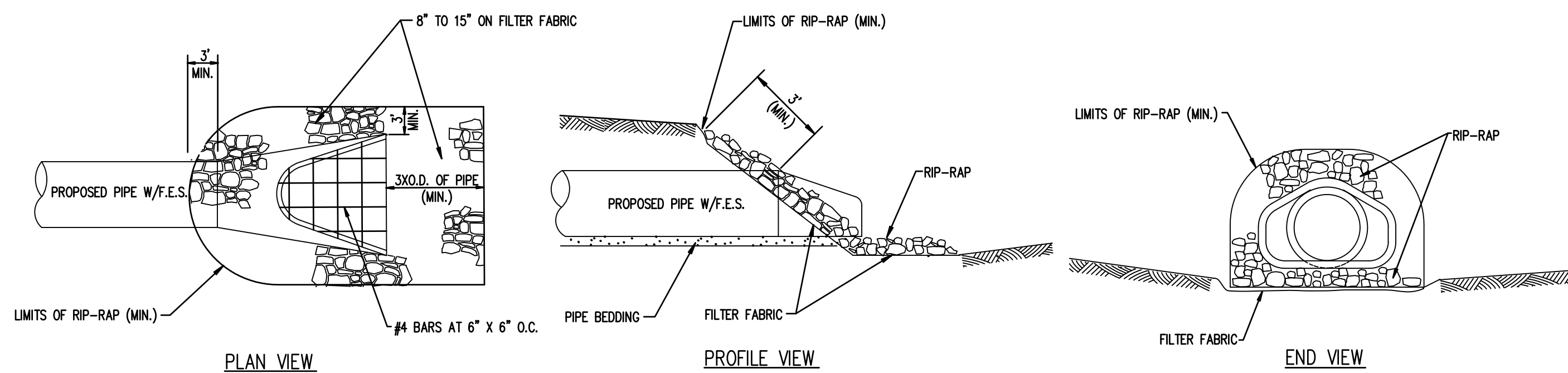
CONCRETE PAD/ENTRANCE RAMP CROSS-SECTION
NOT TO SCALE



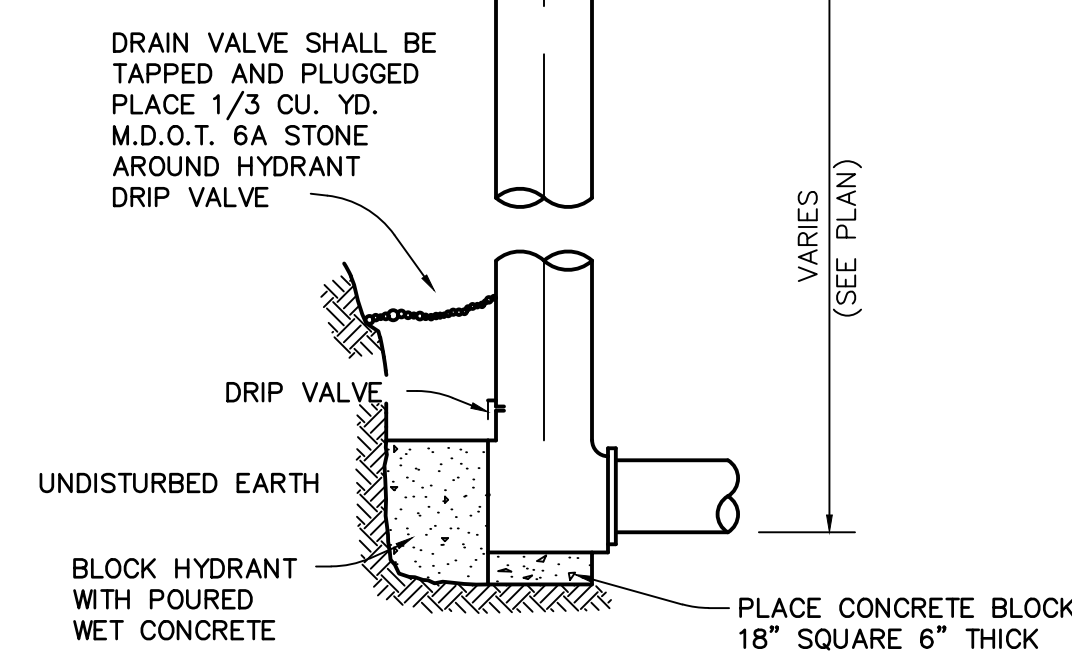
BOLLARD DETAIL
NOT TO SCALE



DETAIL OF SETTING HYDRANT
NOT TO SCALE



TYPICAL STORM SEWER INLET/OUTLET DETAIL
NOT TO SCALE



GENERAL NOTES:

THE SANITARY SEWER AND WATERMAIN MUST CONFORM TO THE UNION TOWNSHIP STANDARDS AND SPECIFICATIONS. SHOULD THERE BE A CONFLICT BETWEEN THE PLANS, NOTES, DETAILS AND SPECIFICATIONS, THE UNION TOWNSHIP STANDARDS SHALL GOVERN. THE CONTRACTOR WILL NOTIFY THE ENGINEER AS SOON AS A CONFLICT IS FOUND. INSTALLATION OF THESE UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR WITH THE UNION TOWNSHIP DEPARTMENT OF PUBLIC WORKS.

ELECTRIC SERVICES TO THE BUILDING AND PARKING LOT LIGHTING SHALL BE UNDERGROUND.

ALL SERVICE LINES ARE SHOWN FOR REFERENCE ONLY. THE EXACT LOCATIONS TO BE DETERMINED BY THE OWNER AND/OR UTILITY COMPANY.

INSTALLATION OF GAS, ELECTRIC AND TELEPHONE SERVICES (INCLUDING TRANSFORMER PAD LOCATIONS) SHALL BE COORDINATED BY THE CONTRACTOR WITH THE RESPECTIVE UTILITY COMPANIES AND THE ARCHITECT/ENGINEER

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS REQUIRED FOR WORKING WITHIN THE ROAD RIGHT-OF-WAY PRIOR TO COMMENCING CONSTRUCTION, WITHIN THESE AREAS.

THE PROPOSED ELEVATIONS SHOWN ARE TOP OF WALK, TOP OF CURB, FINISHED ASPHALT SURFACE AND GUTTER PAN ELEVATIONS, UNLESS OTHERWISE NOTED.

ALL DRIVEWAY APPROACHES SHALL BE CONSTRUCTED IN ACCORDANCE UNION TOWNSHIP STANDARDS.

CONSTRUCTION PROCEDURES SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF MICHIGAN, COUNTY OF ISABELLA AND UNION TOWNSHIP.

DIMENSIONS SHOWN ON THE PLANS ARE GIVEN TO THE BACK OF CURB, FACE OR BACK OF WALK OR THE BUILDING OUTSIDE LINES.

GENERAL NOTES:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-482-7171) A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY CONSTRUCTION OR PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR WHERE POSSIBLE CONFLICTS EXIST PRIOR TO BEGINNING CONSTRUCTION.

THE LOCATION OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY GROUND CONDITIONS, EXISTING UTILITIES, LOT AND BUILDING DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THE PLANS. ARRANGE TO HAVE UTILITIES IDENTIFIED AND FLAGGED BEFORE STARTING CONSTRUCTION. THE OWNER ASSUMES NO LIABILITY FOR THE LOCATION OF UTILITIES. ALL DAMAGES MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

ALL CONSTRUCTION UNDER EXISTING OR PROPOSED PAVEMENT, EXISTING OR PROPOSED UTILITIES (INCLUDING LEADS), SHALL BE COMPLETELY BACKFILLED WITH SAND IN 9" LAYERS, AND COMPACTED TO NOT LESS THAN 95% OF ITS MAXIMUM UNIT WEIGHT, AS DETERMINED BY THE MODIFIED PROCTOR METHOD. THE COST IS TO BE INCLUDED IN THE UNIT PRICE BID FOR EACH ITEM.

THE CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENTATION CONTROL ACT NUMBER 347 P.A. OF 1972, AS AMENDED.

GEOTEXTILE FILTER SHALL BE USED AT ALL CATCH BASINS FOR SOIL AND SEDIMENTATION CONTROL. ALL CATCH BASINS SHALL BE CLEANED UPON COMPLETION OF THE PROPOSED PROJECT. COST FOR CLEANING THE CATCH BASINS SHALL BE INCLUDED IN THE COSTS FOR THE DRAINAGE STRUCTURES.

TOPSOIL SHALL BE STOCKPILED ON THE SITE AND USED AS TOPSOIL SURFACES AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. TOPSOIL WILL NEED TO BE SPREAD IN THE BASIN AREA TO A MINIMUM DEPTH OF 6 INCHES. THE BERMS SHOWN ON THE PLANS WILL NEED TO BE TOPSOIL OR TO HAVE A MINIMUM OF 6 INCHES ON TOPSOIL SPREAD OVER THEM. THE CURB ISLANDS WILL BE FILLED AS SPECIFIED WITH TOPSOIL. THE INTENT IS FOR THE CONTRACTOR AND THE LANDSCAPER TO USE THE EXISTING TOPSOIL TO COMPLETE THE PROJECT PRIOR TO HAULING ANY TOPSOIL ONTO THE SITE. UNSUITABLE TOPSOILS MUST BE DISPOSED OF. DURING THE CLEANUP, ANY REMAINING STOCKPILES WILL NEED TO BE REMOVED. SOIL EROSION MEASURES MUST BE TAKEN TO ASSURE THAT THESE STOCKPILES ARE STABILIZED.

THE CONTRACTOR SHALL SEED AND FERTILIZE DITCH BANKS, SOILS PILES OR BANKS AND ANY OTHER DISTURBED AREAS AS SHOWN ON THE PLANS.

THE CONTRACTOR SHALL BACKFILL, COMPACT AND FINE GRADE ALL AREAS BETWEEN THE CURBS AND PAVEMENT AND THE PROPERTY LINES WITH TOPSOIL SUITABLE FOR LANDSCAPING. THE GRADES IN THESE AREAS WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

THE UNPAVED AREAS SHALL BE SMOOTHLY GRADED AND THE SURFACE STABILIZED BY SEEDING AS STATED ON THE PLANS. THE MAXIMUM DESIRABLE SLOPE IS 3 HORIZONTAL TO 1 VERTICAL, UNLESS OTHERWISE STATED.

THE CONTRACTOR SHALL FURNISH AND INSTALL PLAIN RIP-RAP BANK PROTECTION IN AREAS WHERE BANK EROSION WILL MOST LIKELY OCCUR OR AS DIRECTED BY THE ENGINEER.

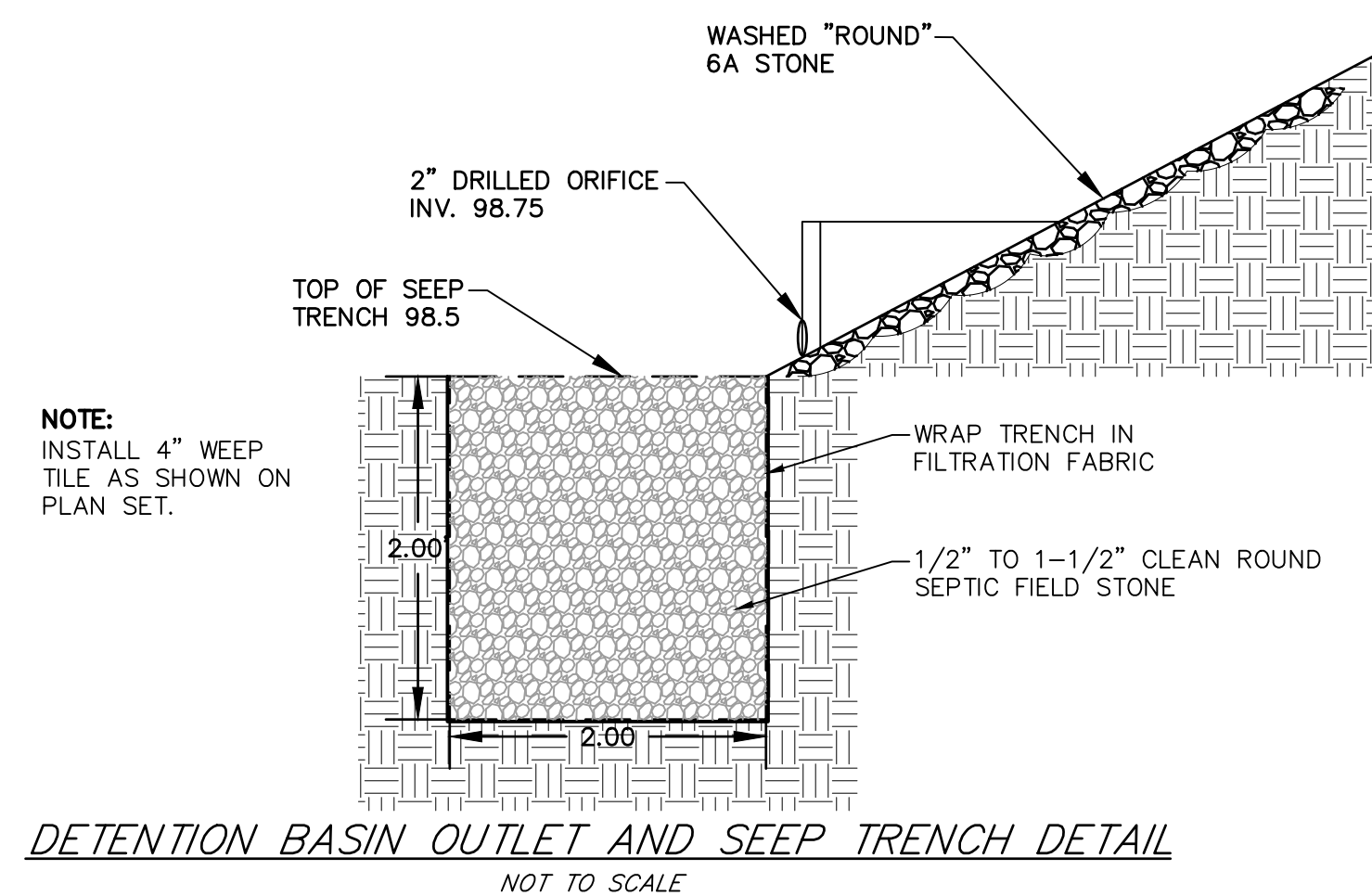
BROKEN CONCRETE AND DEBRIS SHALL BE CONSIDERED WASTE TO BE DISPOSED OF BY THE CONTRACTOR.

ALL DEWATERING REQUIRED FOR CONSTRUCTION SHALL BE INCLUDED IN THE UNIT PRICE BID.

ALL JOINTS AT INTERSECTION APPROACHES AND DRIVEWAYS SHALL BE SAWCUT WITH BUTT-JOINTS. THE COST SHALL BE INCLUDED WITH THE PAYMENT FOR EXCAVATION.

THE CONTRACTOR SHALL MAINTAIN LOCAL TRAFFIC AT ALL TIMES ON THE PROJECT. THE COST IS TO BE INCLUDED IN THE LUMP SUM FEE.

ALL WATER VALVE BOXES, ELECTRICAL BOXES, GAS VALVES AND ANY OTHER EXISTING UTILITY STRUCTURES ON THE SITE SHALL BE ADJUSTED TO FINISHED GRADE. THE COST SHALL BE INCLUDED IN THE LUMP SUM FEE.



NOTE: INSTALL 4" WEEP TILE AS SHOWN ON PLAN SET.

DETENTION BASIN OUTLET AND SEEP TRENCH DETAIL
NOT TO SCALE

CMS & D
SURVEYING / ENGINEERING
510 W. PICKARD STREET - SUITE C
MT. PLEASANT, MICHIGAN 48858
PHONE: (989) 775-0756
FAX: (989) 775-5012
EMAIL: info@cms-d.com

CONSTRUCTION DETAILS #1
EIKENHOUT INC.
4269 CORPORATE DRIVE
SOUTHWEST 1/4 OF SECTION 11, T14N-R4W,
UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:			
SUBMITTALS:			
JOB NUMBER:	1801-001	SCALE:	1" = 30'
DRAWN BY:	USE	SHEET NUMBER:	5 OF 5
DESIGNED BY:	TELB	CHECKED BY:	TELB



Peter Gallinat, Township Planner
pgallinat@uniontownshipmi.com
2010 South Lincoln
Mt. Pleasant, MI 48858
Phone 989-772-4600 Ext. 241
Fax 989-773-1988

TO: Planning Commission
FROM: Township Planner

NEW Business

SUBJECT: C) SPA 2018-01 Amendment to SPR 2017-08 for location of sidewalks along Broomfield Rd.

Applicant: Richard Figg

Owner: Richard Figg

Location: 1313 E. Broomfield Rd.

Current Zoning: R-1 (Rural Residential)

Adjacent Zoning: R-1 to the north, AG to the south across the road, R-2A to the east, and R-2A to the west.

Future Land Use/Intent: A-3 Agricultural buffer existing agricultural or undeveloped land from new development. Desired uses in this area follow the existing zoning.

Current Use: Riverwood Resort

Reason for Request: Applicant proposes modified sidewalk location

History: SPR 2017-08 was approved in October of 2017. Plan was approved with 4ft wide sidewalks to be installed along the entire parcel on E. Broomfield Rd. Applicant has proposed installing 10 feet of a 4ft sidewalk as a change from before.

Objective of board: Approve a modification to the sidewalk location on SPR 2017-08 or leave as already approved.

Recommend at this time consideration for a 5 ft wide sidewalk installed from the eastern boundary of the parcel to the fifth driveway headed west on Broomfield Rd.

Peter Gallinat
Twp Planner

Union Township Site Plan Review Application

FILL OUT THE FOLLOWING

- I. This application is for (circle one) Preliminary Site Plan Review Final Site Plan Review **** See attached Exhibit 1**
- II. Applicant Name Richard Figg
- III. Applicant Address 1315 E. Broomfield Road, Mt. Pleasant, MI 48858
- IV. Applicant is (circle) Contractor Architect/Engineer Developer Land Owner(skip 5& 6)
- V. Land Owner Name _____
- VI. Land Owner Address _____
- VII. Fill out check list that follows. You must check off that each item has been included in the drawing. If an item is not going to be included in the construction, note that in the comment area (for example, under sidewalks write "none" in the comment area if you are not installing any sidewalks). For the first three items, check off if you have made the required submittals to other reviewing agencies. **** See Comments**

SUBMITTALS TO OTHER AGENCIES	?	Off
Storm water management plan approval prior to application. Reviewed by the County Engineer	?	Copy of Union Township Storm Water Management Plan available upon request. Submit (2) copies of plan and calculations directly to the Isabella County Engineer, contact Bruce Rohrer at (989) 77 20911, ext. 231. Any review fees are additional.
All curb cuts, acceleration/deceleration lanes, additional drives, and other matters pertaining to roads to be approved by MDOT or Isabella County Road Commission prior to application.		MDOT (M 20 sites) at (989) 773 7756. Contact Isabella County Road Commission (all other county roads) at (989) 773 71131. Submit (3) copies.
Mt. Pleasant Fire Dept.		Lt. Steve Martin (989) 773 0808, (2) copies
Isabella Co Transportation Commission (ICTC)		Jan Bauman (989) 773 2913 Ext 3, (2) copies
SITE PLAN REQUIREMENTS	?	Comments - (also indicate any features which will not be included in the development or are not applicable)
Name and addresses of Property Owner		

Union Township Site Plan Review Application

Name and Address of Applicant		
The date, north arrow and scale. The scale shall be not less than 1"=20' for property under three (3) acres and not more than 1"=40' for property greater than three acres.		
All lot and/or property lines are to be shown and dimensioned, including building setback lines		
<p>The location and dimensions of all existing and proposed:</p> <ul style="list-style-type: none"> drives, - - - - - sidewalks, - - - - - curb openings, - - - - - acceleration/deceleration lanes, - - - - - signs, - - - - - exterior lighting on buildings and parking lots, - - parking areas (Including handicapped parking spaces, barrier-free building access, unloading areas), - - - - - recreation areas, - - - - - common use areas, - - - - - areas to be conveyed for public use and purpose. - - 		
Elevation of building front, side, and back. Include Sign size, height, and design. Canopy heights extending over driveways accommodate Public Transportation		
Source of utilities. Public water and sewer approval by Union Township Utility Committee prior to application.		<p>Note: Union Township policy is to issue sewer and water permits after application for a building permit. Applicant is advised to contact the utility department for availability prior to site plan review. The township does not coordinate other utility matters. Applicant to assure himself that site is suitable for septic systems, contact Central Michigan District Health Department (773</p>

Union Township Site Plan Review Application


	5921)	
All dumpsters shall be screened from public view with an opaque fence or wall no less than six feet in height. Show location. (Note most refuse contractors require concrete pad to place dumpsters upon)		
The location and right-of-way width of all abutting roads, streets, alleys and easements.		
A locational sketch drawn to scale giving the section number and the nearest crossroads.		
The zoning of the subject property and the abutting properties.		
The location, height and type of fences and walls.		
The location and detailed description of landscaping.		
For multiple family and mobile home parks, contour intervals shall be shown (two foot intervals for average slopes ten percent and under and five foot intervals for slopes over ten percent). Topography, however, is encouraged to be shown on all site plans.		
The location of all existing and proposed structures on and within one hundred feet of the subject property's boundary.		

COMMENTS

These standards have all been addressed via the approval previously granted on 10/24/2017.

Union Township Site Plan Review Application

I submit the site plan and this application as a true representation of existing and proposed conditions. I agree to install all features as shown and to abide by conditions placed upon approval of this plan by the Union Township Planning Commission . False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and / or removal of work installed. Any changes to the Site Plan now or in the future must be approved by the Union Township Planning Commission or Zoning Administrator. Approval of this plan shall not constitute the right to violate any provisions of the Union Township Zoning Ordinance 1991-5, or other applicable building or state codes and or laws.


Signature of Applicant

January 24, 2018
Date

Signature of Owner (if other than applicant)

Date

PLEASE PLACE OUR REVIEW ON THE February 20, 2018 (INSERT DATE)
PLANNING COMMISSION MEETING. You will not receive a reminder of the scheduled meeting.

Union Township Site Plan Review Application

<u>Township use</u>	Comments
File # _____	_____
Fee Paid initial _____	_____
Receipt # _____	_____
Date received _____	_____
Date review completed by Zoning Administrator _____	_____
Place on the _____ Planning Commission Agenda	_____
Planning Commission Decision _____	_____

Union Township Site Plan Review Application

UNION TOWNSHIP CONSTRUCTION CONTACTS

Building & Zoning Permits
Sign Permit
Water and Sewer review
Site Plan Review

Charter Township of Union
2010 S. Lincoln Rd
Mt. Pleasant, MI 48858

(989) 772 4600 (switchboard)
(989) 773 1988 (FAX)
Email- chartertwpunion@voyager.net

Building inspector
Randy Robinson - Ext. 27

Zoning Administrator
Woody Woodruff - Ext. 41

Public Works Coordinator
Kim Smith - Ext. 24

Road Permits
(submit (2) copies of site plan directly to proper authority prior to Site Plan Review)

State Highways (M 20, US 27, E. Pickard , Mission Rd)

MDOT
1601 N. Mission Rd
Mt. Pleasant, MI 48858
(989) 773 7756 FAX 775 6329

All other roads

Isabella County Road Commission
2261 E. Remus Rd
Mt. Pleasant, MI 48858

Union Township Site Plan Review Application

(989) 773 7131 (FAX) 772 2371

Union Township Site Plan Review Application

Storm Water Management Plan
(Submit (2) copies of Storm Water Management Plan directly to county engineer prior to Site Plan Review) Code -
Union Township Ord. 1992-9 Storm Water Management

Isabella County Building

Resource Management
ATTN: Bruce Rohrer PE
200 N. Main St.
Mt. Pleasant, MI 48858

(989) 772 0911 Ext. 231 (FAX) 773 7431

Plumbing, Electrical, Mechanical Permits

Isabella County Building
Inspections
ATTN: (SEE FOLLOWING LIST)
200 N. Main St.
Mt. Pleasant, MI 48858
(989) 772 0911 Ext. (SEE FOLLOWING) (FAX) 773 7431

Plumbing Inspector
Jerry Russell - Ext. 229

Electrical Inspector
Cory Borland - Ext. 230

Mechanical Inspector
Howard Slasor - Ext. 228

Fire Department Review

L.I. Steve Martin
804 E. High St.
Mt. Pleasant, MI 48858
(989) 77 5121 (FAX) 773 4020

Miscellaneous

Phone - GTE (800) 483 5600, Verizon (800) 483 4000

Union Township Site Plan Review Application

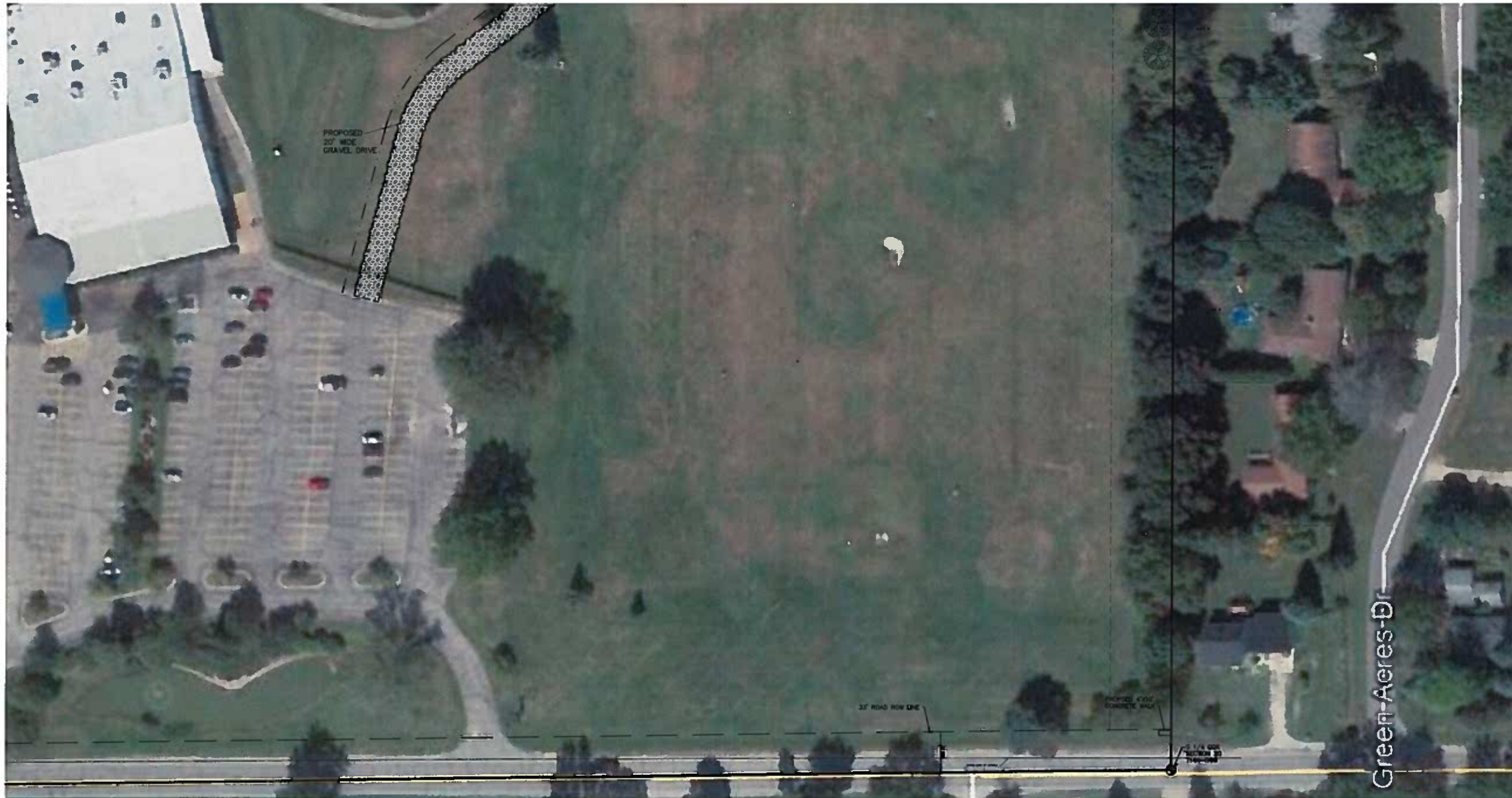
Gas/Electric - Consumer Energy (800) 572 4788, MichCon (800) 477 4747

Central MI Dist. Health Dept. (989) 773 5921

Miss Dig (800) 482 7171

EXHIBIT 1

1. This application is a request to amend the site plan approved by the Planning Commission on October 24, 2017. The only modification sought and shown in the amended site plan drawing is a more modest sidewalk construction project. The plan previously approved included a requirement that the applicant "...construct sidewalks along Broomfield Road...".
2. The reasons for a more modest sidewalk construction project include, but are not limited to, the following:
 - a. At the original hearing the Planning Commission we concerned that the Township Board was considering a new policy that would allow for no exceptions to the sidewalk construction requirement of the Charter Township of Union Zoning Ordinance Section 8.325.
 - b. The Township has created a Sidewalk and Pathway Prioritization Committee. While the prior site plan approval compels the construction of a sidewalk along Broomfield Road the length of applicant's property that sidewalk would connect with no other pedestrian pathway or sidewalk. It would be an isolated pathway that may or may not comport with the priorities the Sidewalk and Pathway Prioritization Committee will establish. The Planning Commission should consider delaying this investment until it is determined whether this project fits within the overall plan for sidewalk and pathway construction in the Township.



○	EXISTING MANHOLE/CATCHBASIN
○	EXISTING MANHOLE
▽	EXISTING HYDRANT
M	EXISTING VALVE
---	EXISTING SANITARY SEWER
---	EXISTING STORM SEWER
---	EXISTING WATERMAIN
---	EXISTING FENCE LINE
---	EXISTING UNDERGROUND ELECTRIC LINE
---	EXISTING UNDERGROUND GAS LINE
---	EXISTING UNDERGROUND TELEPHONE LINE
---	EXISTING CENTERLINE
---	EXISTING OVERHEAD ELECTRICAL WIRES
---	EXISTING MAILBOX / NEWSPAPER BOX
---	EXISTING SIGN
⊕	EXISTING DECIDUOUS TREES
⊗	EXISTING CONIFEROUS TREES
⊙	EXISTING UTILITY POWER POLE
⊞	EXISTING TELEPHONE RISER

ZONING INFORMATION	
ZONED- R1 (ONE-FAMILY RESIDENTIAL)	
SETBACKS-	
FRONT- 50'	
REAR- 50'	
SIDES = 50' OR 200' FROM THE NEAREST HOUSE	

D AND M SITE



Peter Gallinat, Township Planner
pgallinat@uniontownshipmi.com
2010 South Lincoln
Mt. Pleasant, MI 48858
Phone 989-772-4600 Ext. 241
Fax 989-773-1988

TO: Planning Commission
FROM: Township Planner

New Business

SUBJECT: D) SPR 2018-04 Cold Storage N. Harris(Crawford Rd.) PID 14-010-30-003-03

Coyne LLC

Applicant: CMS&D Surveying and Engineering

Owner: Coyne LLC

Location: N. Harris(Crawford Rd.) Mt. Pleasant, MI 48858 PID 14-010-30-003-03

Current Zoning: I-2 General Industrial District, R-1 One Family Rural Residential District

Adjacent Zoning: R-2A to the north, I-2 to the east, MP city to the west across the road, Industrial to the south (City of Mt. Pleasant.)

Future Land Use/Intent: Industrial: Areas for factories and research facilities.

Current Use: vacant property

Reason for Request: Applicant proposes construction of five (5) 4,992sft cold storage pole buildings

History: Property is currently vacant. Applicant has rezoned a total of 6.76 acres to R-1. The Planning Commission conducted a preliminary review of the project last June before the property had been rezoned. Project will be located on portion of the parcel that is zoned I-2. R-1 parcel will be split from the I-2 portion. At this time I have received comments back from the Isabella County Transportation Commission, Mt. Pleasant Fire Department, and a Franchise agreement between the City of Mt. Pleasant and Union Township has been agreed upon. At this time I have not received approval comments from Township Utilities, Isabella County Road Commission or Isabella County Drain Office.

Objective of board: Final site plan was received 14 days (03-06-2018) before our regular scheduled meeting on March 20, 2018. The Planning Commission shall study the site plan and shall, within sixty days of its submittal to the Zoning Official, either approve or disapprove the proposed site plan. If the site plan is disapproved, the reasons for disapproval shall be stated.

Recommend at this time to review site plan but not give final approval until the following agencies approval has been received.

- Final approval from Isabella County Drain Office for Storm Water Management, Township Utilities, and Isabella County Road Commission.

Peter Gallinat
Twp Planner

Union Township Site Plan Review Application 2015 Revision

INSTRUCTIONS

- All items in this list must be included in the drawing unless exempted by ordinance or specifically noted as not included. Incomplete submissions may not be forwarded to the Planning Commission for review. All features of the plan must conform to the Union Township Zoning Ordinance 1991-5 and other state and local ordinances and laws as applicable. Union Township Well Head Protection documents are a part of Site Plan Review and required with your Site Plan submission.
 - To expedite this process you should make Storm Water Management and Road Permit Applications as soon as possible, and submit a copy of the site plan to the Mt. Pleasant Fire Department. Site plans received prior to these outside approvals may be reviewed as Preliminary Site Plan Reviews and may require a Final Site Plan Review submission after receiving outside agency approvals. You may elect to receive a Preliminary Review by the Planning Commission prior to other submittals. Contact the appropriate agency for their submission requirements and any required forms.
 - **Special Use Permits:** Uses requiring a Special Use Permit have both a special use permit approval process and a site plan review. The fee for a Special Use Permit is in addition to the site plan review fee*. This form and a Special Use Permit Application must accompany application for a Special Use Permit. The Planning Commission will make a recommendation to the Charter Township of Union Board who has approval authority, thus requiring two meetings, one of the commission and one of the board. If desired, the applicant may elect to have the Public hearing with a preliminary plan showing sufficient detail to determine the impact on the surrounding properties, and address other issues of concern, and then proceed to final Site Plan Review. In this approach the commission will make its finding subject to final site plan approval at the first meeting, and the applicant will return with a detailed drawing meeting all the elements of site plan review, including submission to outside agencies.
 - **SUBMISSION DEADLINE:** Ten copies of the site plan and this completed check list must be submitted no less than 14 days prior to the Planning Commission meeting. The Planning Commission meets at 7:00 PM on the third Tuesday of each month. A Site Plan Review fee* must accompany each submission. You will not receive any notification prior to your scheduled meeting; it is your responsibility to show up at the meeting. If you are uncertain, call the Zoning administrator at (989) 772-4600 ext 41
 - Applicants may submit a single copy of the plan and check list prior to the submission deadline to the zoning administrator for review and comment.
 - Land Owner (or his / her agent) is responsible to apply for all permits, including Building, Grading and Zoning permit, Sign Permit, Water and Sewer, and Land Divisions (if applicable) AFTER Planning Commission review and approval. The proposed use shall be constructed per the submitted plan including any conditions of approval. Minor revisions may be approved by the zoning administrator. Consult with the township before implementing any changes to the approved site plan.
-

Union Township Site Plan Review Application 2015 Revision

The date, north arrow and scale. The scale shall be not less than 1"= 20' for property under three (3) acres and not more than 1"=40' for property greater than three acres.	✓	
All lot and/or property lines are to be shown and dimensioned, including building setback lines	✓	
The location and dimensions of all existing and proposed: fire hydrants (within 400 feet of building) - - - -	✓	
drives, -----	✓	
sidewalks, (required) -----	✓	
curb openings, -----	✓	
acceleration/deceleration lanes, -----	N/A	
signs, -----	✓	
exterior lighting on buildings and parking lots, - -	✓	
parking areas (Including handicapped parking spaces, barrier-free building access, unloading areas), -----	✓	
recreation areas, -----	✓	
common use areas, -----	N/A	
areas to be conveyed for public use and purpose. -	N/A	
Elevation of building front, side, and back. Include Sign size, height, and design. Canopy heights extending over driveways accommodate Public Transportation	✓	
Source of utilities. Public water and sewer approval by Union Township Utility Coordinator prior to application.	✓	Note: Union Township policy is to issue sewer and water permits after application for a building permit. Applicant is advised to contact the utility department for availability prior to site plan review. The township does not coordinate other utility matters. Applicant to assure himself that site is suitable for septic systems, contact Central Michigan District Health Department
All dumpsters shall be screened from public view with an opaque fence or wall no less than six feet in height. Show location. (Note most refuse contractors require concrete pad to place dumpsters upon)	✓	
The location and right-of-way width of all abutting roads, streets, alleys and easements.	✓	
A locational sketch drawn to scale giving the section number and the nearest crossroads.	✓	

Union Township Site Plan Review Application 2015 Revision

I submit the site plan and this application as a true representation of existing and proposed conditions. I agree to install all features as shown and to abide by conditions placed upon approval of this plan by the Union Township Planning Commission . False or inaccurate information placed upon this plan may be cause for revocation of any permits issued pursuant to site plan approval and / or removal of work installed. Any changes to the Site Plan now or in the future must be approved by the Union Township Planning Commission or Zoning Administrator. Approval of this plan shall not constitute the right to violate any provisions of the Union Township Zoning Ordinance 1991-5, or other applicable building or state codes and or laws.



Daniel R. [Signature]
Signature of Applicant

3/6/18
Date

Signature of Owner (if other than applicant)

Date

PLEASE PLACE OUR REVIEW ON THE 3-20-18 (INSERT DATE)
PLANNING COMMISSION MEETING. An owners representative WILL NOT attend. You
will not receive a reminder of the scheduled meeting.

CHARTER TOWNSHIP OF UNION

SITE PLAN REVIEW HAZARDOUS SUBSTANCES REPORTING FORM

This form must be completed and submitted as part of the site plan for facilities which may use, store, or generate hazardous substances or polluting materials (including petroleum-based products)

Name of business: COYNE OIL CORPORATION

Name of business owner(s): DAVID COYNE AND MARK COYNE

Street and mailing address: 914 WEST PICKARD STREET, MT. PLEASANT, MI 48858
989-772-2270

Telephone: _____

Fax: 989-772-0344

Email: david.d.coyne@gmail.com

I affirm that the information submitted is accurate.



Owner(s) signature and date:

David Coyne

Information compiled by:

Part II: Types and Quantities of Hazardous Substances and Polluting Materials Used, Stored or Generated On-Site

Please list the hazardous substances and polluting materials (including chemicals, hazardous materials, petroleum products, h azardous wastes and other polluting materials) which are expected to be used, stored or generated on -site. Quantities should reflect the maximum volumes on hand at any time. Attach additional pages if necessary to list all hazardous substances and polluting materials.

Common Name	CHEMICAL NAME (components)	Form	MAX QUANTITY ON HAND AT ONE TIME	TYPE OF STORAGE CONTAINERS		
<p>KEY:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>LIQ. = liquid</p> <p>P.LIQ = pressurized liquid</p> <p>S = solids</p> <p>G = gas</p> <p>PG = pressurized gas</p> </td> <td style="width: 50%; vertical-align: top;"> <p>KEY:</p> <p>AGT = above ground tank</p> <p>DM = drums</p> <p>UGT = underground tank</p> <p>CY = cylinders</p> <p>CM = metal cylinders</p> <p>DW = wooden or composition container</p> <p>TP = portable tank</p> </td> </tr> </table>					<p>LIQ. = liquid</p> <p>P.LIQ = pressurized liquid</p> <p>S = solids</p> <p>G = gas</p> <p>PG = pressurized gas</p>	<p>KEY:</p> <p>AGT = above ground tank</p> <p>DM = drums</p> <p>UGT = underground tank</p> <p>CY = cylinders</p> <p>CM = metal cylinders</p> <p>DW = wooden or composition container</p> <p>TP = portable tank</p>
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NO HAZARDOUS SUBSTANCES AND POLLUTING MATERIALS WILL BE STORED OR USED ON THIS SITE

WASTEWATER MANAGEMENT			
<i>Storm Water Discharge to Wetlands:</i> Will storm water be collected, stored, or treated in a wetland area from a public road, industrial, commercial, or multi-unit residential development?	Y <input checked="" type="checkbox"/>	N <input type="checkbox"/>	WRD, <u>Joint Permit Application</u>
<i>Great Lakes:</i> Does the project involve construction, filling, or dredging below the Ordinary High Water Mark of one of the Great Lakes?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
<i>Inland Lakes and Streams:</i> Does the project involve any dredging, filling, placement of structures, or the operation of a marina within an inland waterbody (e.g. lake, river, stream, drain, creek, ditch, or canal), enlargement of a waterbody, or excavation of a pond within 500 feet of a waterbody?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
<i>Storm Water Ponds and Discharges to Inland Lakes/Streams, or Great Lakes:</i> Will storm water from any road or any other part of the development be discharged either directly or ultimately to an inland waterbody, or one of the Great Lakes; or will a storm water pond be constructed within 500 feet of an inland waterbody?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Does the project involve placement of fill, earth moving, or placement of structures within the 100-year <i>floodplain</i> of a watercourse?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Joint Permit Application</u>
Does the project involve construction of a building or septic system in a designated Great Lakes <i>high risk erosion area</i> ?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Shoreland Management</u>
Does the project involve dredging, filling, grading, or other alteration of the soil, vegetation, or natural drainage, or placement of permanent structures in a designated <i>environmental area</i> ?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Shoreland Management</u>
Does the project propose any development, construction, silvicultural activities or contour alterations within a designated <i>critical dune area</i> ?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Sand Dune Management</u>
Does the project involve construction of a <i>dam</i> , weir or other structure to impound flow?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Dam Safety Program</u>
CONSTRUCTION PERMITS (SECTOR SPECIFIC)			
Does the project involve the construction or alteration of a water supply system or sewage disposal system for a manufactured housing project?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Office of Drinking Water & Municipal Assistance (ODWMA)
Does the project involve a subdivision or site condominium project utilizing individual on-site subsurface disposal systems or individual wells?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA
Does the project involve the construction or modification of a campground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Campgrounds program</u>
Does the project involve the construction or modification of a public swimming pool?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	ODWMA, <u>Swimming pools program</u>
OPERATIONAL PERMITS			
Renewable Operating Permit: Does your facility have the potential to emit any of the following: 100 tons per year or more of any criteria pollutant; 10 tons per year or more of any hazardous air pollutant; or 25 tons per year or more of any combination of hazardous air pollutants?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	AQD, <u>Permit Section</u>
NPDES: Does the project involve the discharge of any type of wastewater to a storm sewer, drain, lake, stream, or other surface water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, Appropriate <u>DEQ District Office</u> , or <u>National Pollutant Discharge Elimination (NPDES) Permit Program</u>
Does the facility have industrial activity that comes into contact with storm water that enters a storm sewer, drain, lake, stream, or other surface water?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Permits Section</u> , or appropriate <u>DEQ District Office</u>
Does the project involve the discharge of wastewaters into or onto the ground (e.g. subsurface disposal or irrigation)?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	WRD, <u>Groundwater Permits Program</u>
Does the project involve the drilling or deepening of wells for waste disposal?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	Office of Oil, Gas and Minerals (OOGM)
Does the project involve landfilling, transferring, or processing of any type of solid non-hazardous waste on-site, or placing industrial residuals/sludge into or onto the ground?	Y <input type="checkbox"/>	N <input checked="" type="checkbox"/>	OWMRP or Appropriate <u>DEQ District Office</u>

Water or Groundwater)?		
Are you a drinking water operator in charge of a water treatment or water distribution system, back-up operator, or shift operator?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	WRD, <u>Operator Training</u>
Are you a water-well drilling contractor, pump installer, dewatering well contractor or dewatering well pump installer?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	WRD, <u>Well Construction Unit</u>
OIL, GAS AND MINERALS		
Do you want to operate a central production facility (applies to oil and gas production facilities where products of diverse ownership are commingled)?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Petroleum Geology and Production Unit</u>
Does the project involve the removal of sand from a sand dune area within two (2) miles of a Great Lakes shoreline?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping Unit, Sand Dune Mining Program</u>
Does the project involve the diversion and control of water for the mining and processing of low-grade iron ore?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the surface or open-pit mining of metallic mineral deposits?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the mining of nonferrous mineral deposits at the surface or in underground mines?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve mining coal?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Do you want to change the status of an oil or gas well (i.e. plug the well)?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve drilling of oil, gas, brine disposal, secondary recovery, or hydrocarbon storage wells?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve plugging or deepening of an oil or gas well, or conveying rights in the well as an owner to another person?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Permits and Bonding Unit</u>
Does the project involve changing the status or plugging of a mineral well?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve the drilling or deepening of wells for brine production, solution mining, storage, or as test wells?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OOGM, <u>Minerals and Mapping</u>
Does the project involve decommissioning or decontamination of tanks, piping, and/or appurtenances that may have radioactive levels above background?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	OWMRP, <u>Radioactive Protection Programs</u>
STORAGE TANKS (CONSTRUCTION AND OPERATION)		
Does the project involve the installation of an aboveground storage tank for a flammable or combustible liquid (under 200 degrees Fahrenheit)?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	Michigan Department of Licensing and Regulatory Affairs (DLARA) - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a compressed natural gas dispensing station with storage?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a liquefied petroleum gas container filling location or storage location that has a tank with a capacity of more than 2,000 gallons or has two (2) or more tanks with an aggregate capacity of more than 4,000 gallons?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation, removal, or upgrade of an underground storage tank containing a petroleum product or a hazardous substance?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>
Does the project involve the installation of a hydrogen system?	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DLARA - <u>Storage Tank Unit, 517-335-7211</u>

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Storm Water Management Plan

Submit (2) copies of Storm Water Management Plan directly to county engineer prior to Site Plan Review
Code - Union Township Ord. 1992-9 Storm Water Management

Isabella County Building

Resource Management
ATTN: Bruce Rohrer PE
200 N. Main St.
Mt. Pleasant, MI 48858

(989) 772 0911 Ext. 231 (FAX) 773 7431

Plumbing, Electrical, Mechanical Permits

Isabella County Building
Inspections
ATTN: (SEE FOLLOWING LIST)
200 N. Main St.
Mt. Pleasant, MI 48858
(989) 772 0911 Ext. (SEE FOLLOWING) (FAX) 773 7431

Electrical Inspector
Tim Wardwell - Ext. 230

Plumbing and Mechanical Inspector
Doug Elias - Ext. 228

Fire Department Review

Sgt. Randy Keeler
804 E. High St.
Mt. Pleasant, MI 48858
(989) 779-5122 (FAX) 773 4020
rkeeler@mt-pleasant.org

Addressing

Isabella County Building Official (989) 772 0911, Ext 228

Miscellaneous

Phone - GTE (800) 483 5600, Verizon (800) 483 4000
Gas/Electric - Consumer Energy (800) 572 4788, MichCon (800) 477 4747 Central MI Dist. Health Dept. (989) 773 5921
Miss Dig (800) 482 7171

COYNE LLC

COLD STORAGE SITE PLAN

CMS & D
 SURVEYING / ENGINEERING
 510 W. PICKARD STREET - SUITE C
 MT. PLEASANT, MICHIGAN 48858
 PHONE: (989) 775-0756
 FAX: (989) 775-5012
 EMAIL: info@cms-d.com



COVER SHEET
 COYNE LLC
 PART OF THE SOUTHWEST 1/4
 SECTION 10, T14N-R4W
 UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

I-2 ZONE	
MINIMUM FRONT YARD SETBACK	75 FT (A)
MINIMUM SIDE YARD SETBACK	20 FT (C)
MINIMUM REAR YARD SETBACK	50 FT (C)
MINIMUM LOT FRONTAGE	100 FT
MINIMUM LOT AREA (SQ FT)	50,000 SQ FT
MAXIMUM BUILDING HEIGHT	35 FT
MAXIMUM LOT COVERAGE (%)	--

- A. OFFSTREET PARKING SHALL BE PERMITTED TO OCCUPY A PORTION OF THE REQUIRED FRONT YARD, PROVIDED THAT THERE SHALL BE MAINTAINED A MINIMUM UNOBSTRUCTED AND LANDSCAPED SETBACK OF 10 FEET BETWEEN THE NEAREST POINT OF THE OFFSTREET PARKING AREAS, EXCLUSIVE OF ACCESS DRIVEWAYS AND THE NEAREST RIGHT-OF-WAY LINE AS INDICATED ON THE MAJOR THOROUGHFARE PLAN
- C. A LOT IN THE I-1 OR I-2 DISTRICT WILL PROVIDE A SIDE AND REAR YARD OF AT LEAST 60 FEET INDEPTH WHEN ABUTTING A RESIDENTIAL USE OR DISTRICT

MISS DIG.

FOR PROTECTION OF UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL "MISS DIG" 1-800-482-7171 A MINIMUM OF 3 WORKING DAYS PRIOR TO ANY EXCAVATION. ALL "MISS DIG" PARTICIPATING MEMBERS WILL BE APPROPRIATELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM.

UTILITY NOTE:

THE UTILITY LOCATIONS AS HEREON SHOWN ARE BASED ON FIELD OBSERVATIONS AND A CAREFUL REVIEW OF MUNICIPAL AND UTILITY COMPANY RECORDS. HOWEVER, IT IS NOT POSSIBLE TO DETERMINE THE PRECISE LOCATION AND DEPTH OF UNDERGROUND UTILITIES WITHOUT EXCAVATION. THEREFORE, WE CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE BURIED UTILITY INFORMATION HEREON SHOWN. THE CONTRACTOR SHALL CALL "MISS DIG" (1-800-282-7171) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THESE UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND SHALL MAKE EVERY EFFORT TO PROTECT AND OR RELOCATE THEM AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER/SURVEYOR AS SOON AS POSSIBLE IN THE EVENT A DISCREPANCY IS FOUND. UNDERGROUND SERVICE LEADS FOR GAS, ELECTRIC, TELEPHONE AND CABLE MAY BE ACROSS PROPERTY, NO INFORMATION AVAILABLE PLEASE CALL MISS DIG.



LOCATION SKETCH
NOT TO SCALE

SHEET INDEX	
SHEET 1.....	COVER SHEET
SHEET 2.....	TOPOGRAPHIC SURVEY
SHEET 3.....	LARGE SCALE TOPOGRAPHY SURVEY
SHEET 4.....	SITE PLAN
SHEET 5.....	GRADING, STORM WATER, SOIL EROSION
SHEET 6.....	PUBLIC WATER MAIN PLAN-PROFILE

PROJECT HORIZONTAL & VERTICAL CONTROL			
SOUTHWEST CORNER OF SECTION 10	N. 5269.908	E. 2955.112	
WEST 1/4 CORNER OF SECTION 10	N. 7917.055	E. 2914.552	
CAPPED IRON CP#50	N. 6651.296	E. 2925.978	ELEV. 793.38
CAPPED IRON CP#51	N. 6902.897	E. 2922.018	ELEV. 791.19

FLOOD ZONE CLASSIFICATION:
 SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION X BY THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT, ON FLOOD INSURANCE RATE MAP NO. 26073C0306D WITH AN EFFECTIVE DATE OF FEBRUARY, 05, 2014 FOR ISABELLA COUNTY, MICHIGAN COMMUNITY NO. 260812 IN MT. PLEASANT, ISABELLA COUNTY, STATE OF MICHIGAN WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PREMISES IS SITUATED. FLOOD ELEVATION ± 447.7

SITE:	N HARRIS MT. PLEASANT, MI, 48858
CLIENT:	COYNE OIL CORPORATION P.O. BOX 9 914 WEST PICKARD STREET MT. PLEASANT, MI 48858 CONTACT PERSON: DAVE COYNE PHONE: (989) 772-2270
CONSULTANT:	CENTRAL MICHIGAN SURVEYING & DEVELOPMENT CO., INC. 510 W. PICKARD STREET - SUITE C MT. PLEASANT, MI 48858 CONTACT PERSON: TIMOTHY E BEEBE PHONE: (989) 775-0756 FAX: (989) 775-5012 EMAIL: info@cms-d.com

CHARTER COMMUNICATIONS 915 E. BROOMFIELD ROAD MT. PLEASANT, MI 48858 (989) 621-4932 RANDY BUNKER rbunker@chartercom.com	CHARTER TOWNSHIP OF UNION PUBLIC WATER/PUBLIC SEWER 2010 N. LINCOLN ROAD MT. PLEASANT, MI 48858 (989) 772-4600 EXT 24 KIM SMITH ksmith@uniontownshipmi.com
CONSUMERS ENERGY 1325 WRIGHT AVENUE ALMA, MI 48801 (989) 466-4282 KIM STUDDT kimberly.studdt@cmsenergy.com	CHARTER TOWNSHIP OF UNION PLANNING & ZONING 200 NORTH LINCOLN ROAD MT. PLEASANT, MI 48858 (989) 772-4600 EXT 241 PETER GALLINAT pgallinat@uniontownshipmi.com
FRONTIER 345 PINE STREET ALMA, MI 48801 (989) 463-0392 MARK A. MARSHALL Mark.Marshall@ftr.com	DRAIN COMMISSIONERS OFFICE ISABELLA COUNTY BUILDING 200 NORTH MAIN STREET ROOM 140 MT. PLEASANT, MI 48857 (989) 772-0911 ROBERT WILLOUGHBY drain@isabellacounty.org
DTE ENERGY 4420 44TH ST., S.E., SUITE B KENTWOOD, MI 49512 (616) 954-4623 MARY JO MCKERSE mckersiem@dteenergy.com	ISABELLA COUNTY ROAD COMMISSION 2261 EAST REMUS ROAD MT. PLEASANT, MI 48858 (989) 773-7131 EXT 115 PATRICK GAFFNEY Pgaffney@isabellaroads.com
MT. PLEASANT FIRE DEPARTMENT 804 EAST HIGH STREET MT. PLEASANT, MI 48858 (989) 779-5100 EXT 5122 SGT. RANDY KEELER rkeeler@mt-pleasant.org	

LEGEND		
SYMBOLS		
○ BOLLARD	☐ GAS RISER	● SOIL BORING
☐ CATCH BASIN (CURB INLET)	☐ GUY ANCHOR	⊕ STORM SEWER MANHOLE
⊙ CATCH BASIN (ROUND)	☒ HYDRANT - EXISTING	☐ TELEPHONE RISER
☐ CATCH BASIN (SQUARE)	☒ HYDRANT - PROPOSED	● TREE - CONIFEROUS
⊙ CLEAN OUT	☐ LIGHT POLE	● TREE - DECIDUOUS
→ DRAINAGE FLOW	☐ MAILBOX	☐ UTILITY POLE
☐ ELECTRICAL BOX	⊕ MONITORING WELL	☒ WATER MAIN VALVE
● FOUND CONC. MONUMENT	⊕ SANITARY SEWER MANHOLE	☒ WATER SHUT-OFF
○ FOUND IRON	⊕ SET IRON	☐ WATER WELL
☒ GAS MAIN VALVE	☐ SIGN	☐ WOOD STAKE

LINETYPES		HATCH PATTERNS	
—ELEC—	BURIED ELECTRICAL CABLE	▨	ASPHALT - EXISTING
—PHONE—	BURIED TELEPHONE CABLE	▨	ASPHALT - PROPOSED
—DITCH—CL—	CENTERLINE OF DITCH	▨	CONCRETE
—FM—	FORCE MAIN	▨	GRAVEL
—GAS—	GAS MAIN	▨	LANDSCAPING
—RD—CL—	ROAD CENTERLINE	▨	RIP-RAP
—8" SAN—	SANITARY SEWER		
—12" SS—	STORM SEWER		
—EX-TOS—	TOE OF SLOPE		
—EX-TOP—	TOP OF BANK		
—OHE—	UTILITIES - OVERHEAD		
—UTL—	UTILITIES - UNDERGROUND		
—12" WM—	WATER MAIN		

PARCEL DESCRIPTION:
 A PARCEL OF LAND IN THE SOUTH 1/2 OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF SECTION 10, T14 N., R4 W., UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN DESCRIBED AS FOLLOWS: TO FIX THE POINT OF BEGINNING, COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION; THENCE N.00°-33'-37"W., ON AND ALONG THE WEST LINE OF SAID SECTION, 1323.74 FEET; THENCE N.89°-24'-55"E., ON AND ALONG THE SOUTH 1/8 LINE OF SAID SECTION, 478.96 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE N.00°-33'-37"W., PARALLEL WITH SAID WEST SECTION LINE, 451.40 FEET; THENCE N.37°-18'-47"E., 268.17 FEET; THENCE N.89°-18'-54"E., ON AND ALONG THE NORTH LINE OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION, 596.59 FEET TO A POINT ON A CURVE TO THE LEFT HAVING A RADIUS OF 2013.00 FEET; THENCE SOUTHWESTERLY, ALONG THE ARC OF SAID CURVE, 716.11 FEET TO A POINT ON SAID CURVE, TO SAID ARC BEING SUBTENDED BY A CHORD BEARING S.20°-38'-08"W., 712.34 FEET TO SAID POINT; THENCE S.89°-24'-55"W., ON AND ALONG THE SOUTH 1/8 LINE OF SAID SECTION, 503.67 FEET; BACK TO THE POINT OF BEGINNING, CONTAINING 8.88 ACRES OF LAND AND BEING SUBJECT TO AND TOGETHER WITH ANY EASEMENTS, RESTRICTIONS OR RIGHTS OF WAY OF RECORD.

REVISIONS:

SUBMITTALS:
SUBMITTAL TO UNION TOWNSHIP 3-7-18

SCALE
N/A

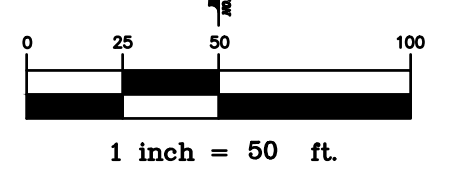
JOB NUMBER:
1612-183

DRAWN BY:
JSE

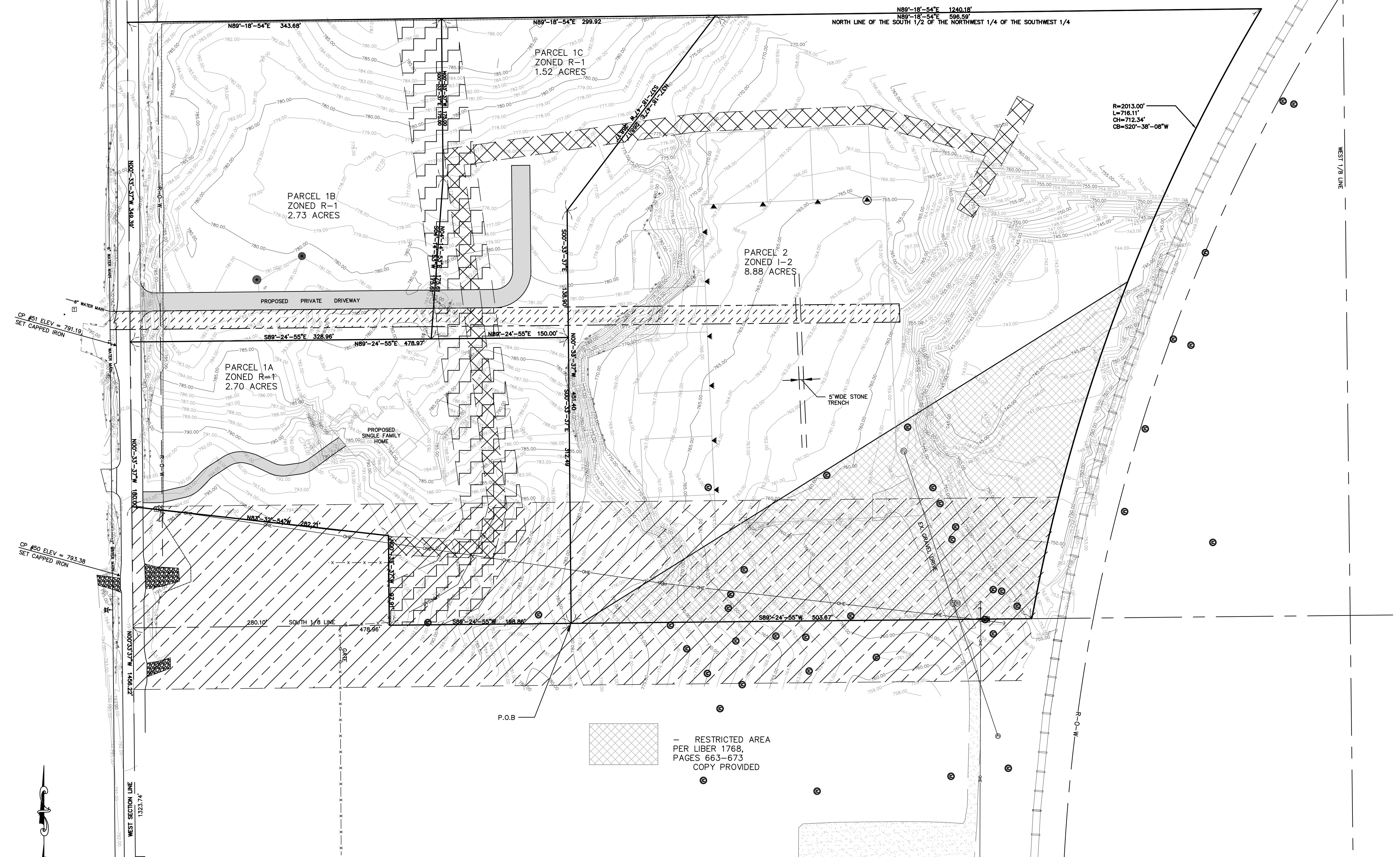
DESIGNED BY:
TB/MK

CHECKED BY:
TB/MK

SHEET NUMBER
1 OF 6



SOUTHWEST CORNER
SECTION 10
T.14 N. - R.4 W.



— RESTRICTED AREA
PER LIBER 1768,
PAGES 663-673
COPY PROVIDED

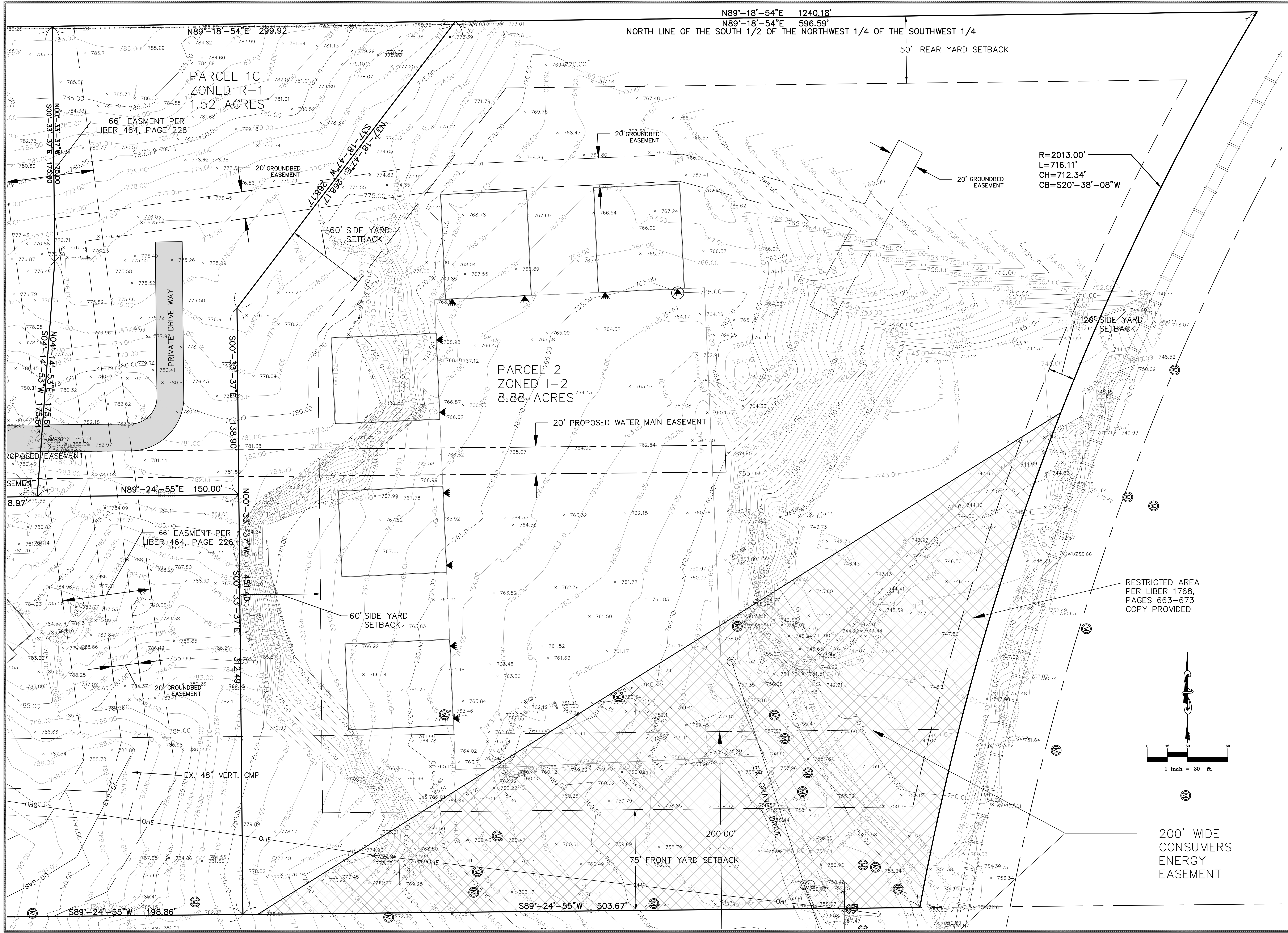
REVISIONS:

SUBMITTALS:

JOB NUMBER: 1705-075	SUBMITTAL TO UNION TOWNSHIP 3-7-18
DRAWN BY: JSE	
DESIGNED BY: TB/MK	
CHECKED BY: TB/MK	

SCALE

1" = 50'
SHEET NUMBER
2 of 6



CMS & D
 SURVEYING / ENGINEERING
 510 W. PICKARD STREET - SUITE C
 MT. PLEASANT, MICHIGAN 48858
 PHONE: (989) 775-0756
 FAX: (989) 775-5012
 EMAIL: info@cms-d.com



LARGE SCALE TOPOGRAPHY SURVEY
 COYNE LLC
 PART OF THE SOUTHWEST 1/4 OF
 SECTION 10, T14N-R4W
 UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

NO.	DATE	DESCRIPTION

SUBMITTALS:

JOB NUMBER:	1705-075
DRAWN BY:	USE
DESIGNED BY:	TB/MK
CHECKED BY:	TB/MK

SCALE:

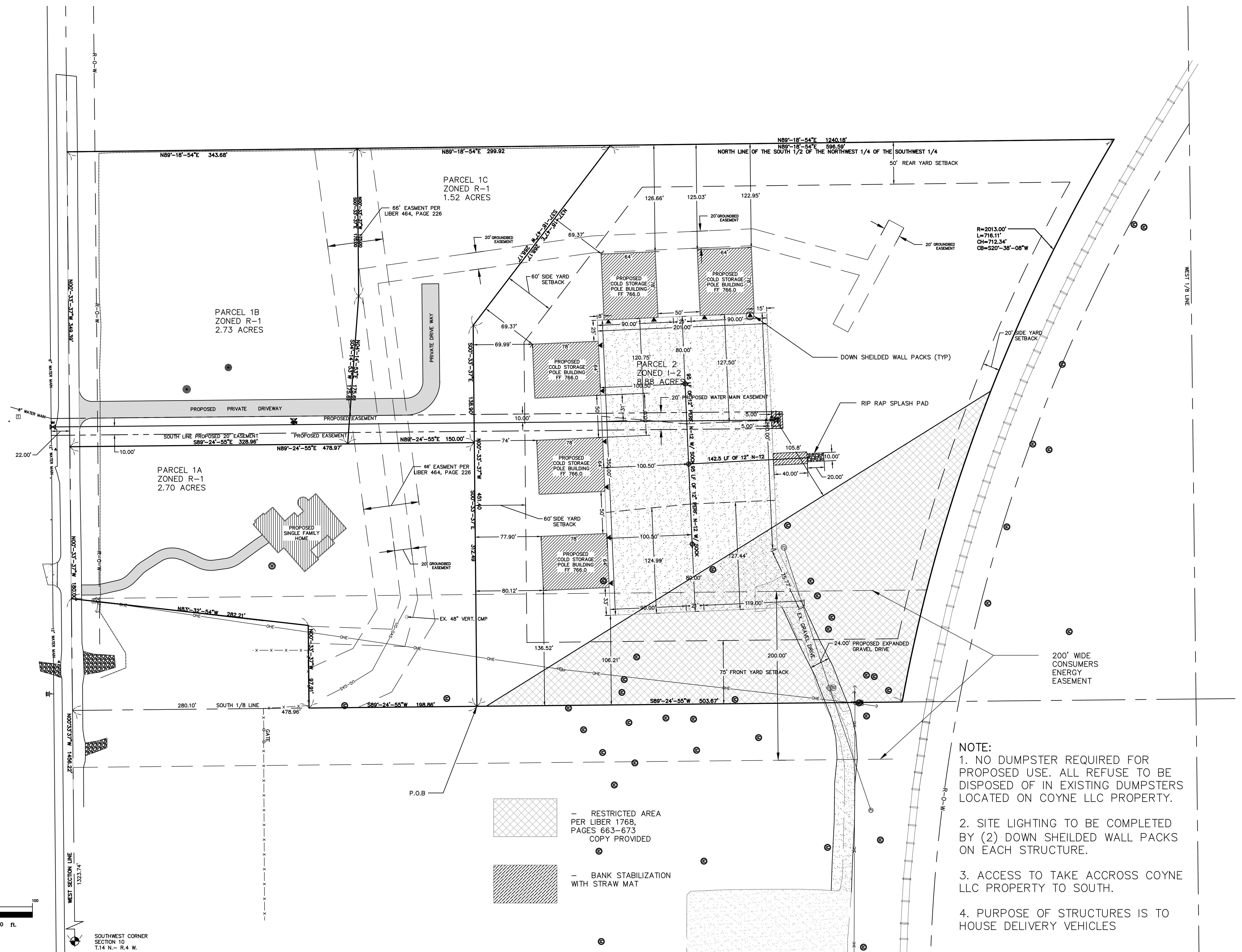
1" = 30'

SHEET NUMBER:

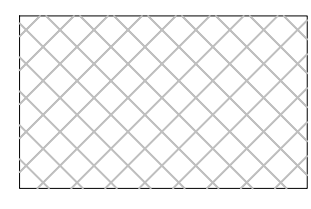
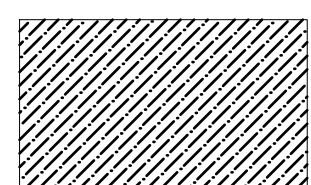
3 of 6



SITE PLAN
COYNE LLC
 PART OF THE SOUTHWEST 1/4 OF
 SECTION 10, T14N-R4W
 UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN



- NOTE:**
1. NO DUMPSTER REQUIRED FOR PROPOSED USE. ALL REFUSE TO BE DISPOSED OF IN EXISTING DUMPSTERS LOCATED ON COYNE LLC PROPERTY.
 2. SITE LIGHTING TO BE COMPLETED BY (2) DOWN SHEILDLED WALL PACKS ON EACH STRUCTURE.
 3. ACCESS TO TAKE ACCROSS COYNE LLC PROPERTY TO SOUTH.
 4. PURPOSE OF STRUCTURES IS TO HOUSE DELIVERY VEHICLES

 - RESTRICTED AREA PER LIBER 1768, PAGES 663-673 COPY PROVIDED
 - BANK STABILIZATION WITH STRAW MAT

SCALE	1" = 50'
SHEET NUMBER	4 OF 6
JOB NUMBER:	1705-075
DRAWN BY:	JSE
DESIGNED BY:	TB/MK
CHECKED BY:	TB/MK
REVISIONS:	REVISIONS BASED ON CITY COMMENTS 1-30-18
SUBMITTAL TO CITY OF MT PLEASANT ENG. 1-18-18	REVISIONS BASED ON CITY COMMENTS 1-30-18
SUBMITTAL TO CITY OF MT PLEASANT ENG. 1-31-18	REVISIONS BASED ON CITY COMMENTS 1-30-18



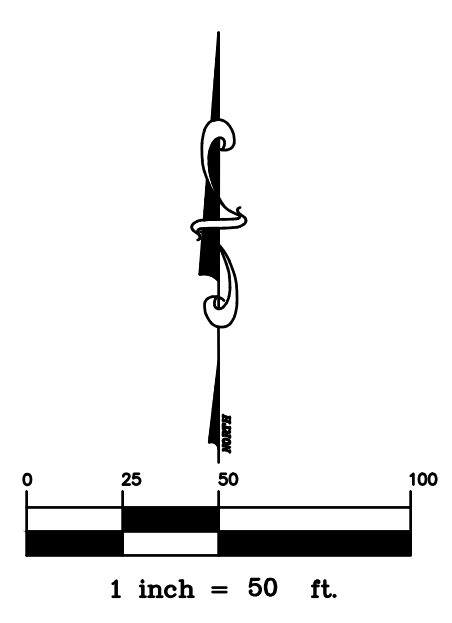
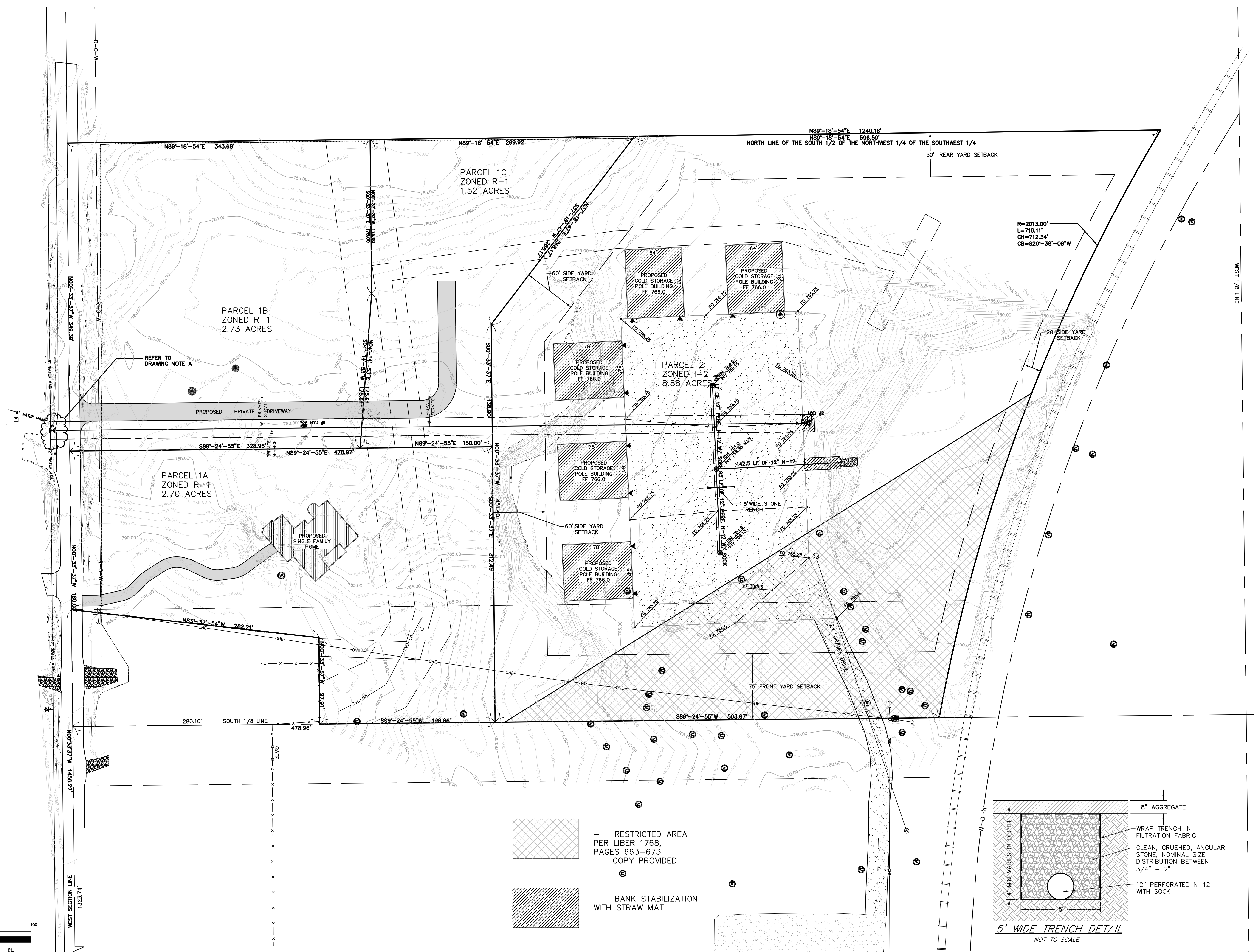
GRADING, STORM WATER, SOIL EROSION
 COYNE LLC
 PART OF THE SOUTHWEST 1/4
 SECTION 10, T14N-R4W
 UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

REVISIONS:

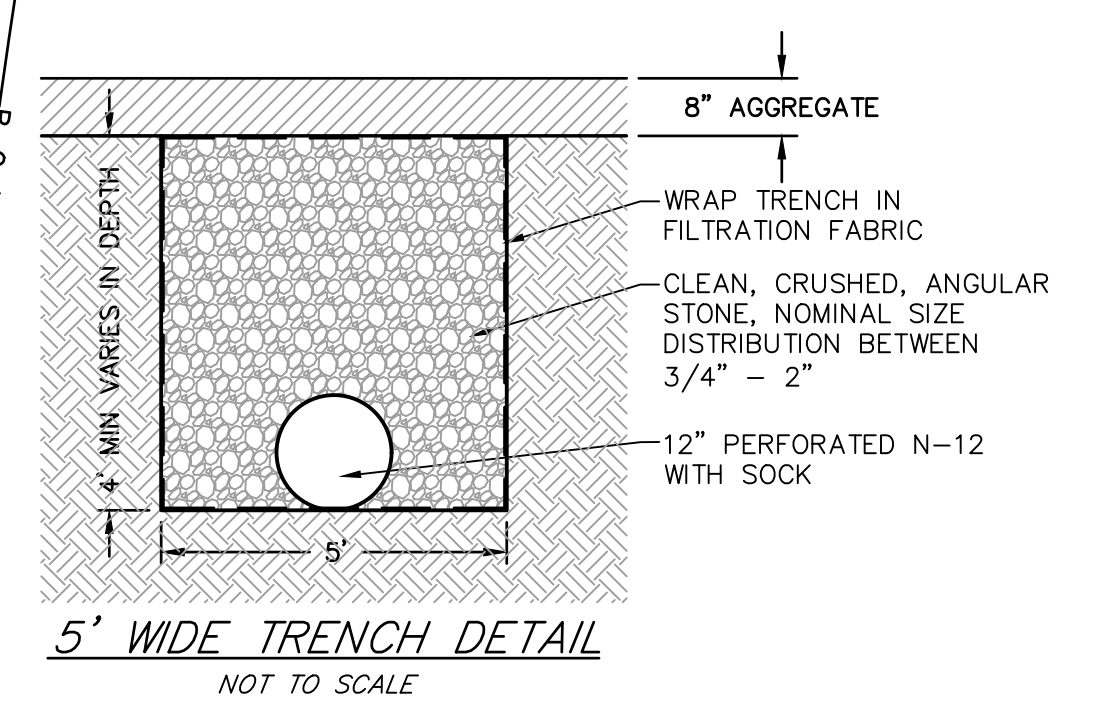
SUBMITTALS:
 SUBMITTAL TO UNION TOWNSHIP 3-7-18

JOB NUMBER:
 1705-075
 DRAWN BY:
 JSE
 DESIGNED BY:
 TB/MK
 CHECKED BY:
 TB/MK

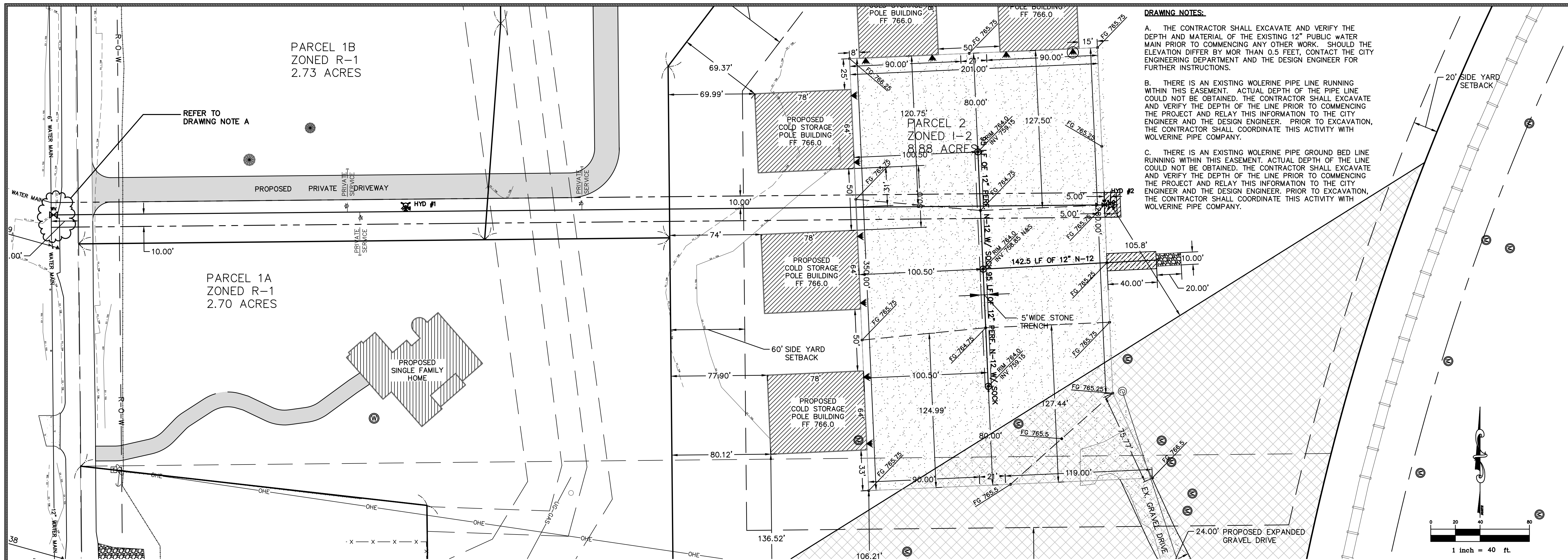
SCALE:
 1" = 50'
 SHEET NUMBER:
 5 of 6



- RESTRICTED AREA PER LIBER 1768, PAGES 663-673 COPY PROVIDED
- BANK STABILIZATION WITH STRAW MAT



SOUTHWEST CORNER
 SECTION 10
 T.14 N. - R.4 W.

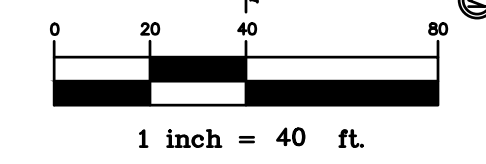


DRAWING NOTES:

A. THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE DEPTH AND MATERIAL OF THE EXISTING 12" PUBLIC WATER MAIN PRIOR TO COMMENCING ANY OTHER WORK. SHOULD THE ELEVATION DIFFER BY MORE THAN 0.5 FEET, CONTACT THE CITY ENGINEERING DEPARTMENT AND THE DESIGN ENGINEER FOR FURTHER INSTRUCTIONS.

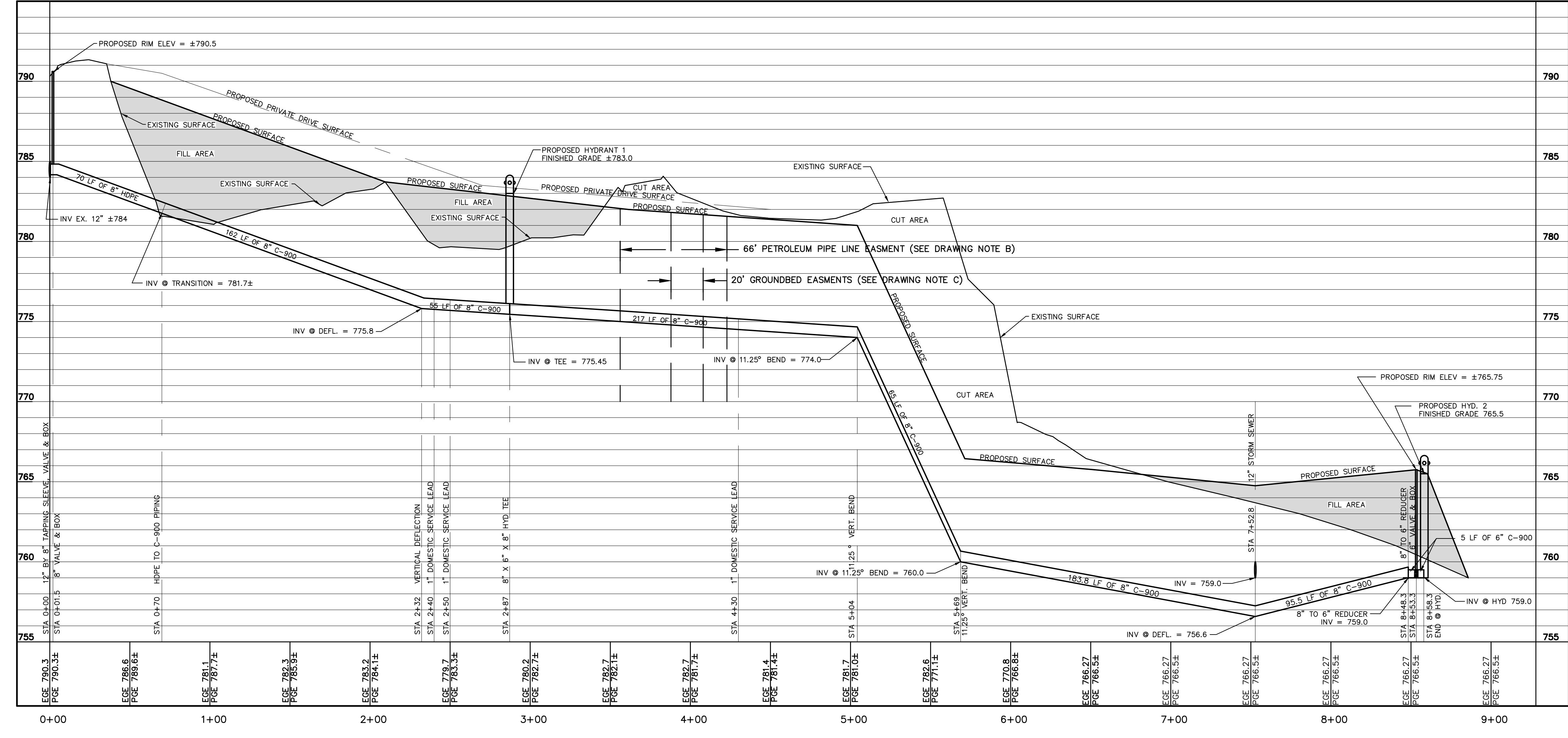
B. THERE IS AN EXISTING WOLVERINE PIPE LINE RUNNING WITHIN THIS EASEMENT. ACTUAL DEPTH OF THE PIPE LINE COULD NOT BE OBTAINED. THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE DEPTH OF THE LINE PRIOR TO COMMENCING THE PROJECT AND RELAY THIS INFORMATION TO THE CITY ENGINEER AND THE DESIGN ENGINEER. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH WOLVERINE PIPE COMPANY.

C. THERE IS AN EXISTING WOLVERINE PIPE GROUND BED LINE RUNNING WITHIN THIS EASEMENT. ACTUAL DEPTH OF THE LINE COULD NOT BE OBTAINED. THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE DEPTH OF THE LINE PRIOR TO COMMENCING THE PROJECT AND RELAY THIS INFORMATION TO THE CITY ENGINEER AND THE DESIGN ENGINEER. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL COORDINATE THIS ACTIVITY WITH WOLVERINE PIPE COMPANY.



CMS & D
 SURVEYING / ENGINEERING
 510 W. PICKARD STREET - SUITE C
 MT. PLEASANT, MICHIGAN 48858
 PHONE: (989) 775-0756
 FAX: (989) 775-5012
 EMAIL: info@cms-d.com

PUBLIC WATER MAIN PLAN - PROFILE
 COYNE LLC
 PART OF THE SOUTHWEST 1/4
 SECTION 10, T14N-R4W
 UNION TOWNSHIP, ISABELLA COUNTY, MICHIGAN

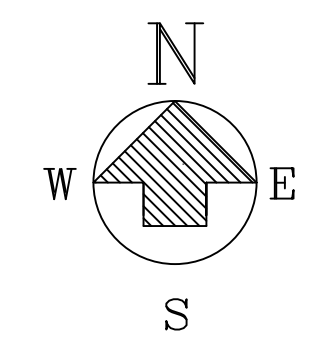
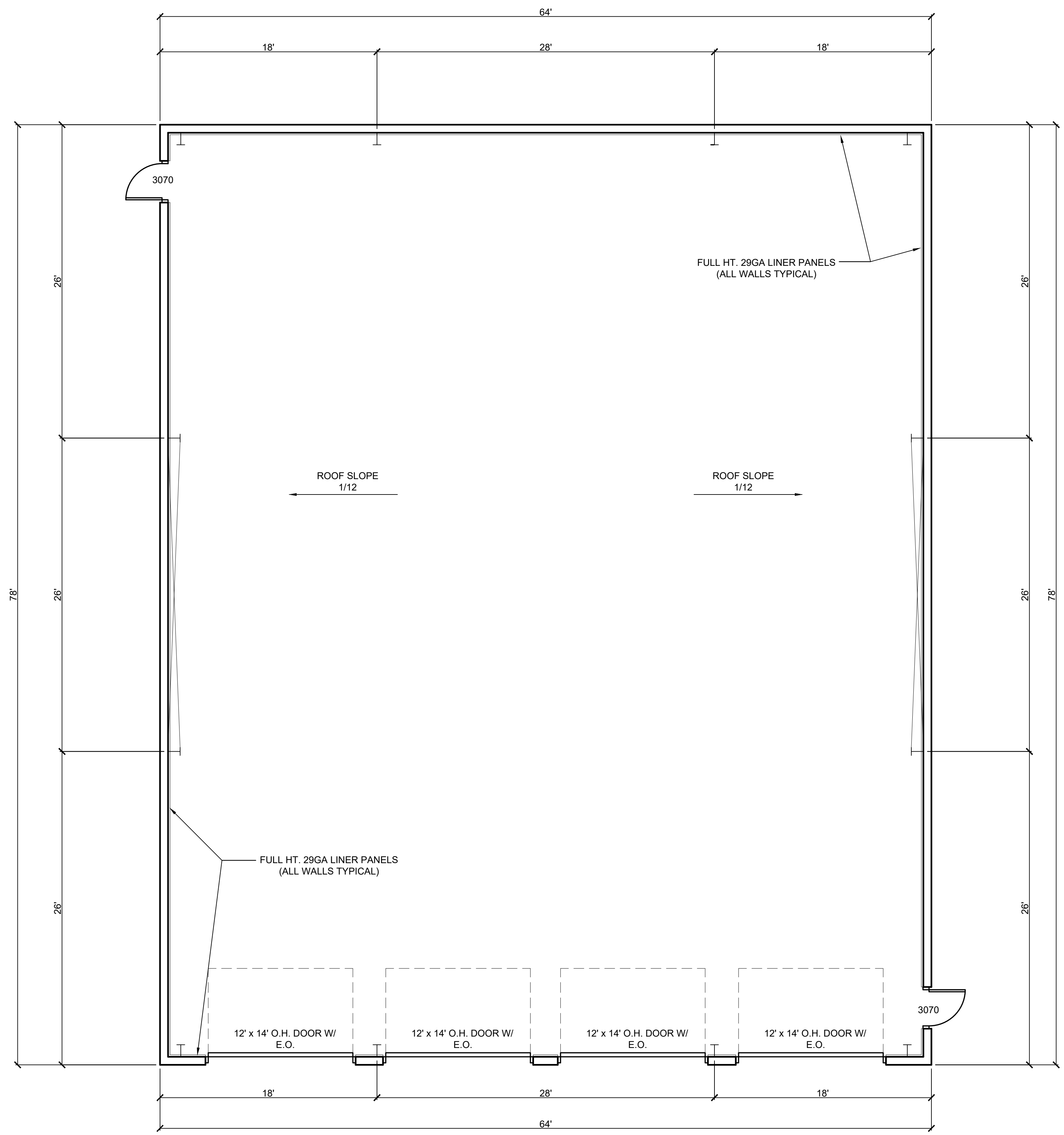


- NOTES:**
- 18" MINIMUM VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN WATERMAIN AND ALL UTILITY CROSSINGS. WHERE LESS IS PROVIDED, CONCRETE SADDLES WILL BE REQUIRED.
 - CONTRACTOR MAY ADJUST HYDRANTS TO BURY BY ADDING MECHANICAL JOINTS, INSTALLED IN ACCORDANCE WITH CITY OF MT. PLEASANT STANDARDS.
 - CONTRACTOR SHALL VERIFY THE ELEVATION OF THE EXISTING WATERMAIN PRIOR TO CONSTRUCTION. SHOULD DIFFERENCES BETWEEN THE FIELD MEASUREMENTS AND PLANS OCCUR, THE ENGINEER SHALL BE NOTIFIED.
 - ALL WATERMAIN CONSTRUCTED WITHIN THE INFLUENCE OF EITHER PROPOSED OR EXISTING ROADS, DRIVEWAYS OR PARKING AREAS SHALL BE COMPLETELY BACKFILLED WITH M.D.O.T CLASS II SAND (MODIFIED) IN MAXIMUM 12" LIFTS. BACKFILL DENSITY SHALL BE AS SPECIFIED IN THE ASPHALT PAVEMENT CROSS SECTION.
 - CARE IS TO BE TAKEN WHEN INSTALLING WATER SERVICE LEADS TO BUILDINGS TO INSURE THAT ACCEPTABLE UTILITY CROSSING CLEARANCES ARE MAINTAINED.
 - CONTRACTOR SHALL CALL "MISS DIG" A MINIMUM OF 3 DAYS PRIOR TO COMMENCING ANY CONSTRUCTION WORK.
 - ALL MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN COMPLIANCE WITH CITY OF MT. PLEASANT STANDARDS.
 - ALL WATERMAIN TO BE AWWA C-900, OTHER THAN THE INITIAL 70 LF OF HDPE FOR DIRECTIONAL BORE.
 - THE CONTRACTOR IS REQUIRED TO ADJUST ALL FIRE HYDRANTS, VALVES, AND WATER SHUTOFF TO FINISH GRADE.
 - CONTRACTOR TO ENSURE A MINIMUM OF 5'-6" OF COVER OVER ALL WATER LEADS AND A MINIMUM OF 6'-0" OF COVER OVER ALL WATER MAINS.
 - PRIOR TO CONNECTION OF EXISTING WATERMAIN TO THE NEW WATERMAIN ALL NEW WATERMAIN SHALL BE FLUSHED, CHLORINATED AND PRESSURE TESTED IN ACCORDANCE TO CITY OF MT. PLEASANT SPECIFICATIONS.
 - ALL BUILDINGS SHALL HAVE A 1" DOMESTIC SERVICE LEAD TO BE COORDINATED WITH PLUMBER. REFER TO ARCHITECTURAL PLANS.
 - ALL FIRE HYDRANTS SHALL BE BURIED A MINIMUM OF 6 FEET FROM THE FINISHED GRADE OF THE FIRE HYDRANT TO THE TOP OF THE PIPE.
 - ALL WATERMANS MUST BE FLUSHED AND CLEANED OF SAND AND DEBRIS USING THE "POLY PIG" METHOD OF FLUSHING.
 - ALL SERVICE LEADS ARE TO BE CAPPED, AS SHOWN.
 - PRESSURE TESTING MUST BE DONE IN ACCORDANCE WITH CITY OF MT. PLEASANT SPECIFICATION AND NOT MORE THAN 2,500 LF OF WATERMAIN WILL BE TESTED AT ONE TIME.
 - DISINFECTING OF WATERMANS WILL BE DONE IN ACCORDANCE TO ALL CITY OF MT. PLEASANT SPECIFICATIONS AND WILL BE COMPLETED AFTER ALL WATERMAIN HAS BEEN FLUSHED AND PRESSURE TESTED.
 - OWNER AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY AND FOLLOWED WITH WRITTEN DESCRIPTION OF FIELD FINDINGS NOTING SPECIFIC ELEVATIONS AND CONDITIONS THAT DIFFER FROM PLANNED DESIGNS. 2+ FEET OF EXISTING CONDITIONS IS TO BE CORRECTED WITHOUT COST DEFLECTION AND ACCEPTED AS FIELD CONDITIONS.

NOTE:
 EGE - EXISTING GROUND ELEVATION
 PGE - PROPOSED GROUND ELEVATION
 VERTICAL SCALE 1" = 4'
 HORIZONTAL SCALE 1" = 40'

**PUBLIC WATERMAIN
 PLAN + PROFILE**

SCALE	1" = 40'
SHEET NUMBER	6 OF 6
JOB NUMBER:	1705-075
DRAWN BY:	USE
DESIGNED BY:	TB/MK
CHECKED BY:	TB/MK
REVISIONS:	
SUBMITTAL TO UNION TOWNSHIP	3-7-18



FLOOR PLAN
SCALE: 3/16" = 1'-0"



REVISIONS		
TAG	DATE	CHANGE

JBS JOB NUMBER:
DRAWING NAME: FLOORPLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 3-2-2018

ENGINEER'S SEAL:

COYNE OIL
CORPORATION
TRUCK BUILDING
INTERLOCHEN, MICHIGAN

COMMERCIAL/INDUSTRIAL
CONSTRUCTION

JBS Contracting Inc.
1680 GOVER PARKWAY
MT. PLEASANT, MI 48858
PH. (989) 773-0770
FAX (989) 772-9272

SCALE:
3/16" = 1'-0"

A1
COYNE OIL
TRUCK BUILDING

JBS JOB NUMBER:
DRAWING NAME: ELEVATIONS
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 3-2-2018

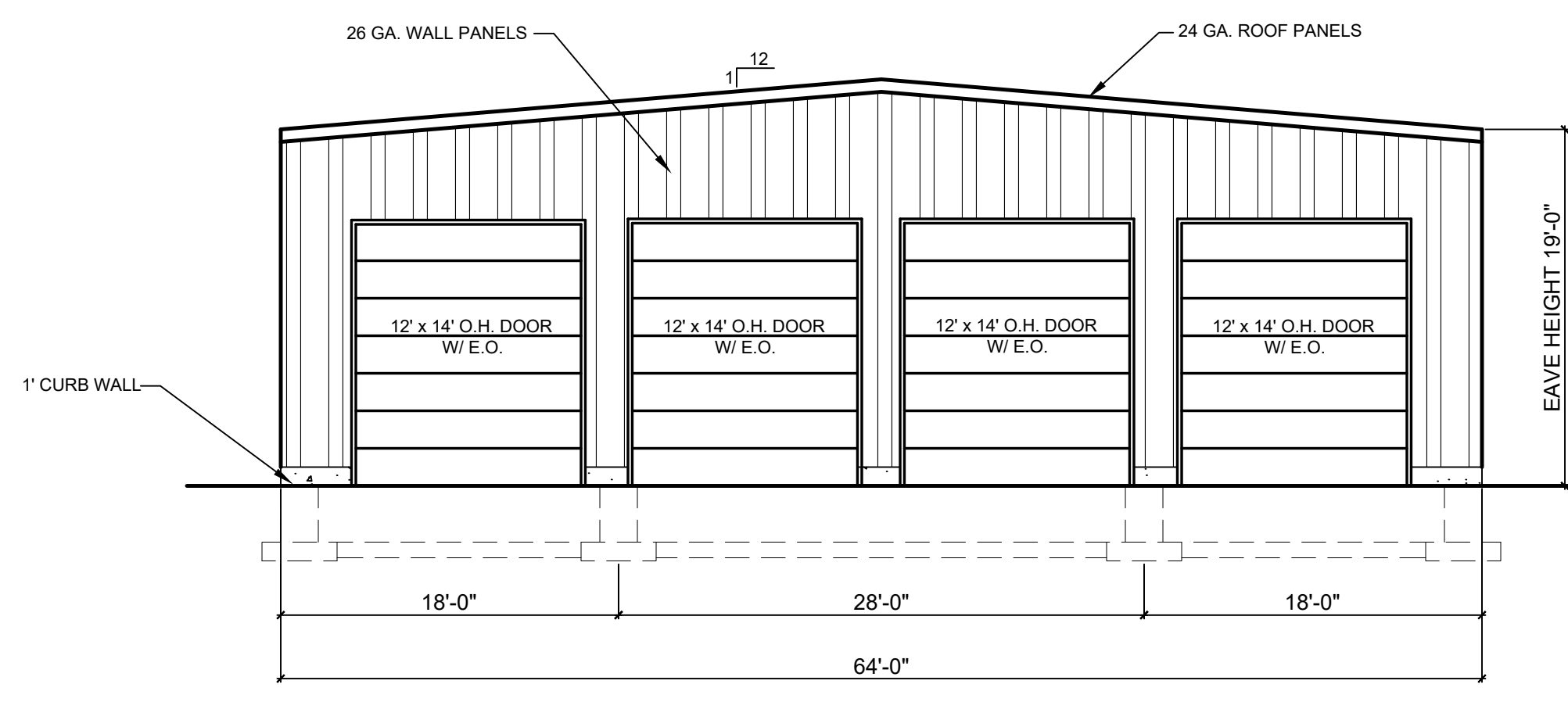
ENGINEER'S SEAL:

COYNE OIL
CORPORATION
TRUCK BUILDING
INTERLOCHEN, MICHIGAN

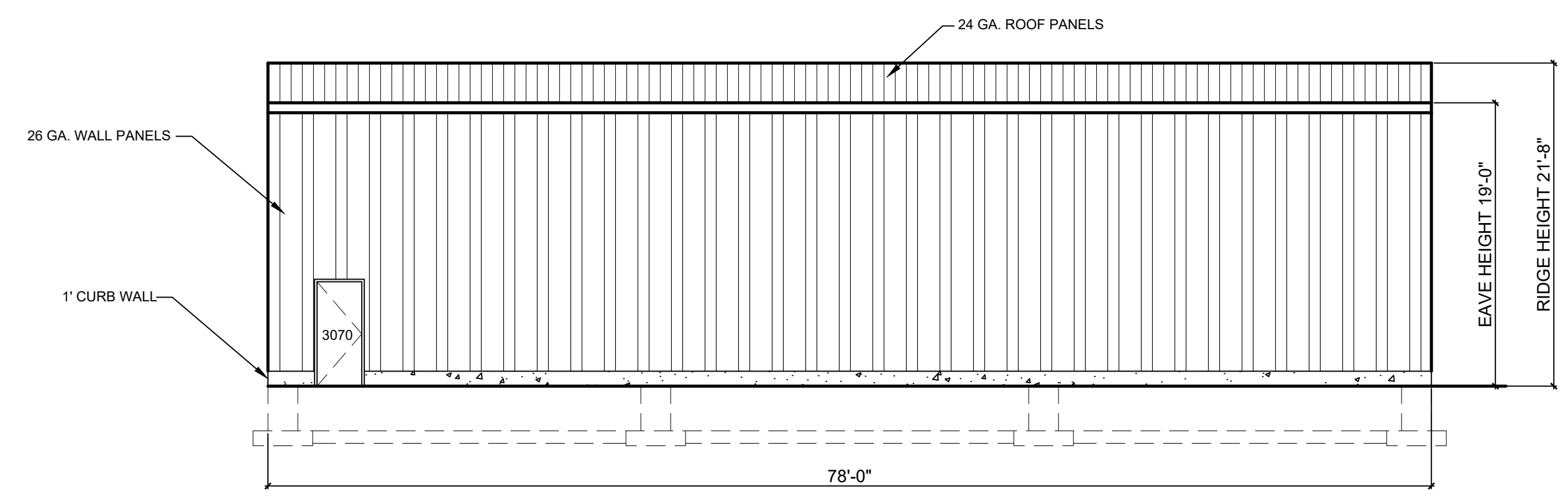
COMMERCIAL/INDUSTRIAL
CONSTRUCTION

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-0770
FAX: (989) 772-9272

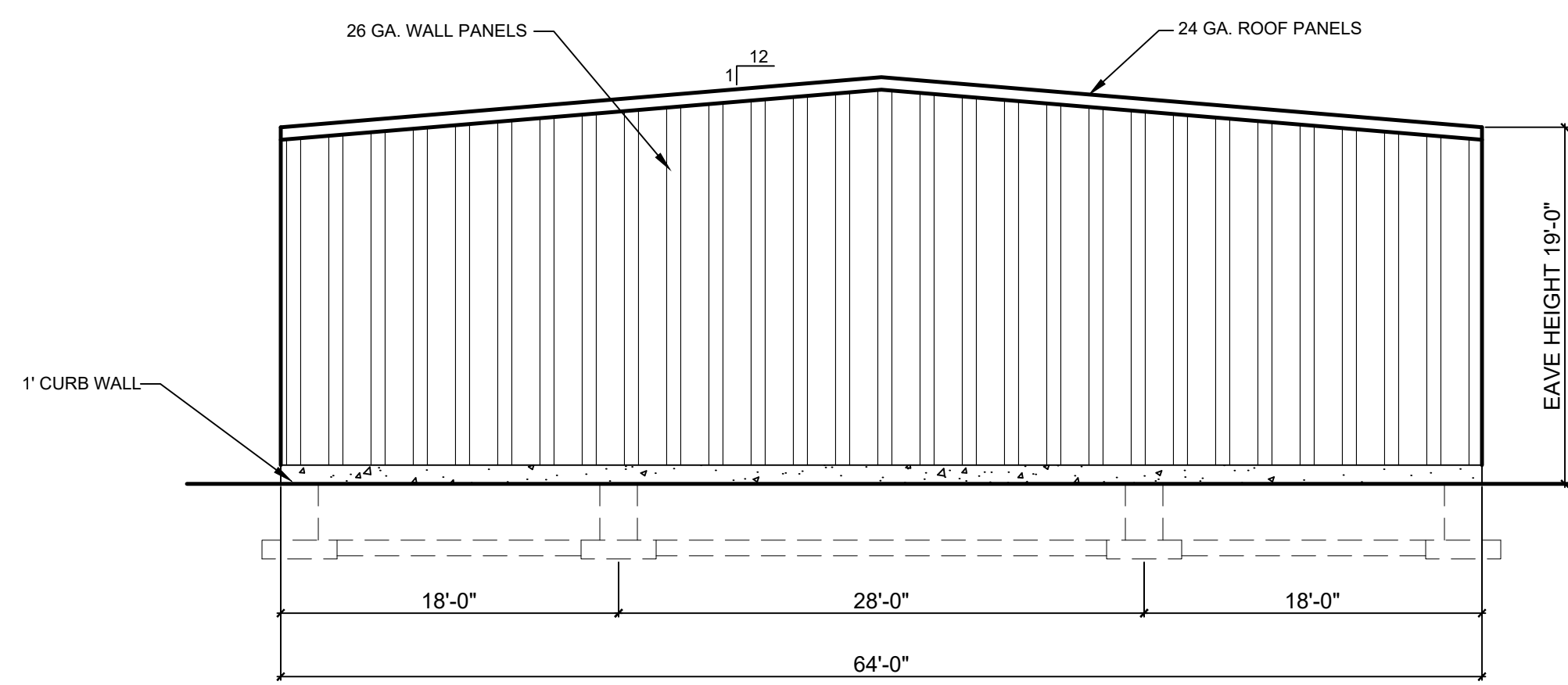
SCALE:
1/8" = 1'-0"



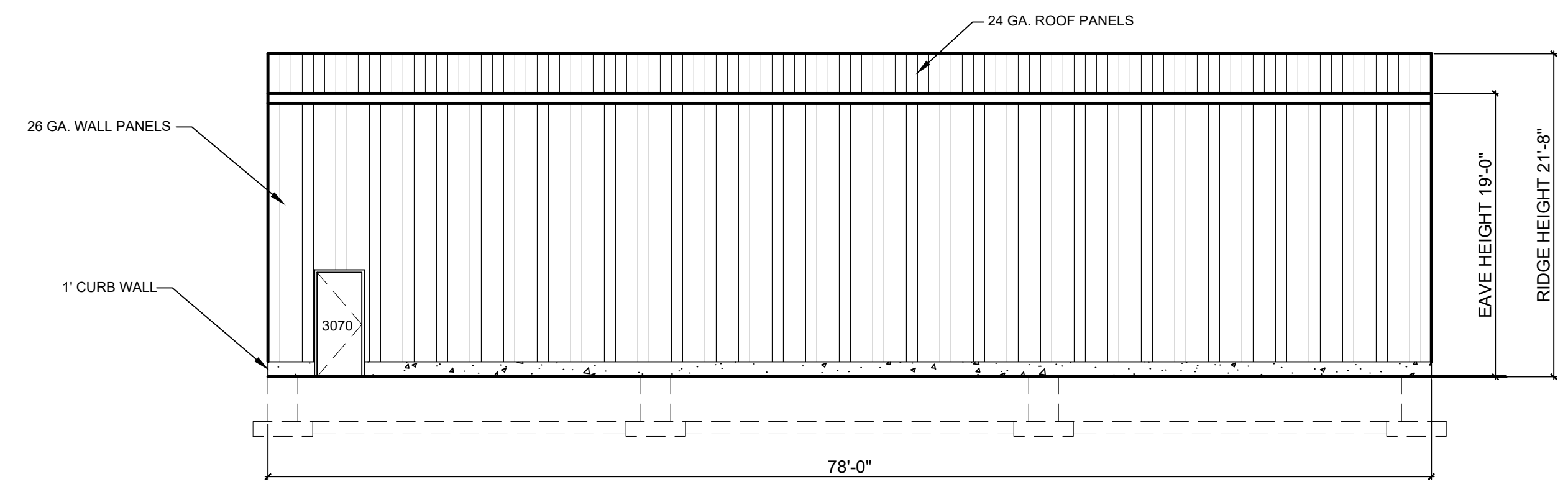
SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



EAST ELEVATION
SCALE: 1/8" = 1'-0"



NORTH ELEVATION
SCALE: 1/8" = 1'-0"



WEST ELEVATION
SCALE: 1/8" = 1'-0"

REVISIONS		
TAG:	DATE:	CHANGE:



A2
COYNE OIL
TRUCK BUILDING



Mount Pleasant Fire Department
804 E. High Street
Mount Pleasant, Mi 48858

Union Township Site Plan Review

Monday March 12, 2018

Coyne Oil Corporation

914 W Pickard RD
Mt. Pleasant, MI 48858

A Site Plan Review was conducted on Monday March 12, 2018 and revealed the following requirements listed below.

ORDER TO COMPLY: Since these conditions are contrary to code, you must correct them upon receipt of this notice. Please provide our department the documentation that verifies compliance with the code.

This list shall not be considered all-inclusive, as other requirements may be necessary, additional requirements are located in Chapter 5 and appendixes B, C, and D of the 2012 Edition of the International Fire Code.

If you have any questions regarding this matter, please feel free to contact me at (989) 779-5122.

Violation Code

1 PROPERTY Identification
Coyne Oil Truck
Cold Storage Buildings

Print Received: 3/9/18

ACCESS AND WATER Road and Water Supply

When fire apparatus access roads or water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2 of the 2012 Edition of the International Fire Code.

ACCESS ROAD 150 FT Buildings within 150ft of Access Road

All portions of a building are required to be within 150 feet of an approved Fire Department access road, in accordance with Chapter 5, Section 503.1.1 of the 2012 Edition of the International Fire Code.

Site Plan meets requirements above.

Union Township Site Plan Review

ACCESS ROAD LOAD Designed and Maintained to Support the

All fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities in accordance with Chapter 5, Sections 503.2.3 and 503.4 of the 2012 Edition of the International Fire Code.

HYDRANTS GUARDS Hydrants Subject to Impact

Where fire hydrants are subject to impact by a motor vehicle, guard posts or other approved means shall be provided in accordance with Chapter 5, Section 507.5.6 and with Section 312 of the 2012 Edition of the International Fire Code.

HYDRANT DISTANCE Hydrant maximum distance from buildings

Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official. Exceptions: 1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m). 2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

Site Plan meets requirements above.

WATER SUPPLY (GPM) Capable of Supplying the Required Fire

Provide fire hydrants capable of supplying the required fire flow in accordance with Chapter 5, Section 507 of the 2012 Edition of the International Fire Code. The number and spacing of fire hydrants is based on the construction type and square footage of the building in accordance with Appendix B and C and tables B105.1 and C105.1 of the 2012 Edition of the International Fire Code. (Contact Fire Department to verify locations.)

Proposed buildings at 4,4992 sq. ft. Type IIB/IIB construction . Fire flow less than 1750gpm, one hydrant required.

Site Plan meets requirements above. Location of hydrant on site plan approved.

ACCESS ROAD TURN AROUND Turn Around Required when Road in

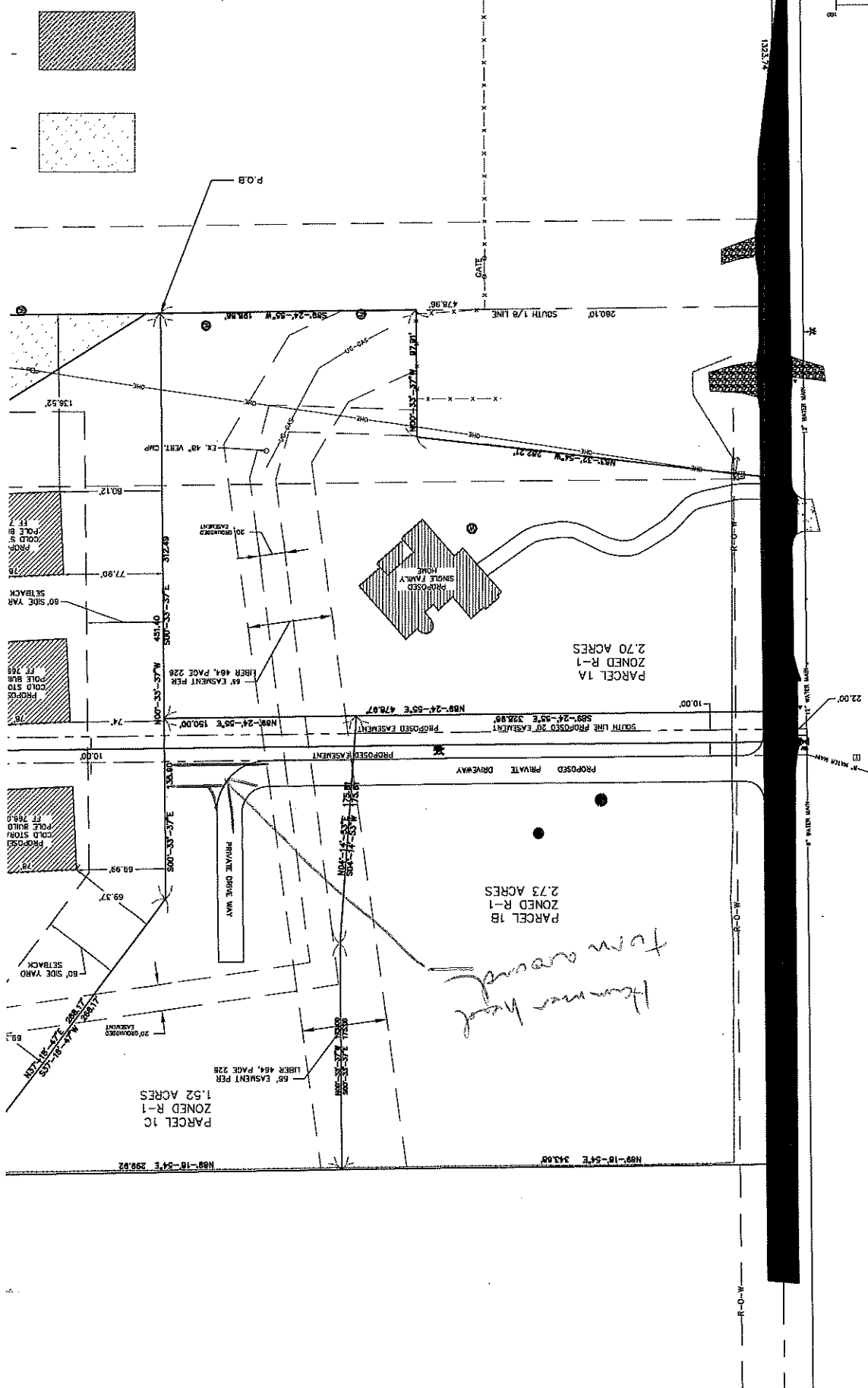
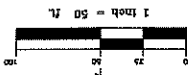
Provide an approved turn around for dead end fire apparatus access roads in excess of 150' in Length in accordance with Chapter 5, Section 503.2.5 and appendix D, Section D103.4 of the 2012 Edition of the International Fire Code.

Provide hammer head type turn around on private drive off from Harris Street.

Union Township Site Plan Review

Keeler, Randy
Lieutenant
Mount Pleasant Fire Department

SOUTHWEST CORNER
SECTION 10
T14 N - R4 W



*Hammer head
turn around*

From: [Peter Gallinat](#)
To: [Jennifer Louchery](#)
Subject: FW: Coyne Cold Storage Site Plan
Date: Friday, March 16, 2018 3:29:20 PM

From: Shanee Thayer [<mailto:info@cms-d.com>]
Sent: Tuesday, March 13, 2018 11:21 AM
To: Peter Gallinat
Subject: Fw: Coyne Cold Storage Site Plan

Peter,

Below is approval from ICTC on Coyne Cold Storage.

Shanee Thayer
Office Manager
Central Michigan Surveying & Development Co.
510 W. Pickard Rd, Suite C
Mt. Pleasant, MI 48858
Phone: (989) 775-0756

From: [Rick Collins](#)
Sent: Monday, March 12, 2018 9:18 AM
To: [Shanee Thayer](#)
Subject: RE: Coyne Cold Storage Site Plan

Good morning,

I still have no issues with the Coyne Oil Storage plans.



Rick Collins | Executive Director
2100 E. Transportation Dr | Mt. Pleasant, MI 48858
Phone 989.773.6766 | Fax 989.773.1873
rcollins@ictcbus.com
Visit our website at ictcbus.com

From: Shanee Thayer [<mailto:info@cms-d.com>]
Sent: Monday, March 12, 2018 8:46 AM
To: Rick Collins <rcollins@ictcbus.com>
Subject: Re: Coyne Cold Storage Site Plan

Rick,

We are submitting this plan for final approval. Below is your email for the preliminary submittal. Nothing about the layout has changed.

Please review and let me know if you have any questions.

Shanee Thayer
Office Manager
Central Michigan Surveying & Development Co.
510 W. Pickard Rd, Suite C
Mt. Pleasant, MI 48858
Phone: (989) 775-0756

From: [Rick Collins](#)
Sent: Friday, September 29, 2017 4:52 PM
To: [Peter Gallinat](#); [Shanee Thayer](#)
Subject: Coyne Cold Storage Site Plan

I have no issue with the plan for Coyne Cold Storage.



Rick Collins | Executive Director
2100 E. Transportation Dr | Mt. Pleasant, MI 48858
Phone 989.773.6766 | Fax 989.773.1873
rcollins@ictcbus.com
Visit our website at ictcbus.com

This email has been checked for viruses by AVG antivirus software.
www.avg.com

|

**REQUEST FOR PROPOSALS
PLANNING CONSULTING SERVICES
REVIEW AND AMEND THE ZONING ORDINANCE
CHARTER TOWNSHIP OF UNION**

The Charter Township of Union is requesting proposals from qualified professional planning firms to review and update all 32 sections of the Township Zoning Ordinance. The existing and current Township Zoning Ordinance was adopted in 1991. Since that time the Ordinance has been amended as the Township deemed necessary.

In 2016 the Township conducted a survey of the residents in the township on a wide variety of issues. The last survey done was in 2009. Those issues included residents' thoughts on Zoning and Planning in the Township. The Township greatly appreciates the enthusiastic participation received from residents in the survey. The Township continues to use data from this recent survey in their decision making process.

This past year the Township began the task of reviewing and updating their Master Plan that was adopted in 2011. The adoption of this new plan is expected at the end of 2017. Considering the current age of the Zoning Ordinance, data received in the 2016 survey, and the newly updated Master Plan, the Township believes now is the time to review and amend the Zoning Ordinance.

The Charter Township of Union has a population of 12,927. (2010 U.S. Census) It is located in the heart of Central Mid-Michigan. The Township surrounds the City of Mt. Pleasant in its entirety. The Township enjoys working relations with neighboring governments and entities which includes: Isabella Township; Lincoln Township; Deerfield Township; Chippewa Township; The City of Mt. Pleasant; Central Michigan University; Isabella County; and the Saginaw Chippewa Indian Tribe. Considering the diversity of the Township's neighbors, the Township when possible strives to have cohesive and comparable policies to its neighbors.

SCOPE OF WORK

The qualified consultant shall be responsible for the following task:

- Reviewing and recommending updated revisions to all 32 section of the Charter Township of Union Zoning Ordinance as listed below
 1. Title, Purpose, and Interpretation
 2. Districts and Zoning Maps
 3. Definitions
 4. Amendments
 5. Board of Appeals
 6. Permits and Fees
 7. Administration and Enforcement
 8. General Provisions
 9. Non-Conforming Uses
 10. Parking and Loading Spaces

11. Billboards and Signs
 12. Site Plan Review
 13. Agricultural District
 14. R-1 Rural Residential District
 15. R-2A One and Two Family, Low Density Residential District
 16. R-2B One and Two Family, Medium Density Residential District
 17. R-3A Multiple Family Residential District
 18. R-3B Medium Density Multiple –Family Residential District
 19. R-4 Mobile Home Park District
 20. R-5 Mobile or Modular Home District
 21. Required conditions for AG, R-1, R-2A, R-2B, R-3A, R-3B, R-4, R-5
 22. B-4 General Business District
 23. B-5 Highway Business District
 24. B-6 Auto-related Highway Business District
 25. B-7 Retail and Service Highway Business District
 26. I-1 Light Industrial District
 27. I-2 General Industrial District
 28. Office Service District
 29. Schedule of Lot, Yard, and Area requirements for Commercial and Industrial Districts
 30. Special Use Permits
 31. Planned Unit Development (P.U.D.)
 32. Miscellaneous Provisions
- Indicate the need for additional sections commonly found in modern Zoning Ordinances that are not shown but needed. Indicate the need to eliminate or combining other sections of the Zoning Ordinance to reduce redundancy and enhance readability of the Zoning Ordinance.
 - The qualified consultant will be responsible for identifying and making outreach to affected stakeholders for input in the amendment process.
 - Identify sections that could be or should be from a practical stand point amended and adopted ahead of the final entire Zoning Ordinance Adoption (Text Amendments adopted during the review)
 - Indicated and recommend the best modern practices for the Township to use in enforcing the new Zoning Ordinance once completed.
 - Ensure that the new Zoning Ordinance will support the Township Master Plan.

ADDITIONAL SERVICES REQUIRED

The Township greatly desires the input and involvement from the community for this project. The proposal should recommend best practices for community involvement and input during the Zoning Ordinance review and amendment process. This would expand beyond just the mandated by State law public hearings.

PROJECT SCHEDULE

The proposal should include a schedule of estimated target dates that identifies tasks completed or benchmarks achieved through the process. It should begin with the contract awarded and end with the adoption of the new Zoning Ordinance by the Township Board of Trustees. This schedule should include any meetings, public hearing, or work sessions with any Township board(s) whether required by state law or not.

QUALIFICATIONS

The proposal shall include a statement of qualifications. The statement should include the name, address, and brief history of the firm. The resumes of key personnel that would be assigned to the project, along with a list of their responsibilities within the project should also be provided. In addition, related experience during the last five (5) years should be provided (include the name of the community, contact person, email, and phone number).

PROJECT COST AND CONTRACT

The proposal should include the following cost information: the lump sum project cost with a breakdown illustrating the cost of various deliverables; an estimate of the amount of staff time required to complete the project, including the approximate time expected to be allocated to each staff member; the number of meetings/site visits included in the project cost; projected monthly billing amounts after each month of service; and the firm's fee schedule for additional work.

The Township expects a professional services contract with a not-to-exceed fee for the required services. The contract will provide for the monthly billing on a time and materials basis for the services provided. In addition, the contract will include language to allow the project to be terminated or amended by joint agreement of the parties with full compensation being made the consultant for expenses incurred and work completed to termination date.

PROPOSAL EVALUTION

Once proposals are received they will be reviewed by township staff and the Charter Township of Union Planning Commission which will make a recommendation to the Township Board of Trustees.

The proposals will be evaluated on the criteria listed below. Firms are encouraged to structure the proposals to address the information in the order listed.

- I. Understanding of the Project - Township staff and the Planning Commission will review brief statement of the firm's understanding of the project in regards to the scope of services.
- II. Public Input and Engagement - Township staff and the Planning Commission will give comparative consideration to the quality of public input as well as the firm's experience in community engagement.
- III. Qualifications of the Personnel - Township staff and the Planning Commission will consider the qualifications of the individuals assigned to the project, including the staff time to be devoted to the project.
- IV. Qualifications of the Firm - Township staff and the Planning Commission will review the firm's experience in similar projects in the last five (5) years, as described previously.

- V. Project Schedule - Township staff and the Planning Commission will evaluate the proposed schedule, as described earlier, for feasibility in meeting the Township's time frame.
- VI. Project Cost - Township Staff and the Planning Commission will review the total cost, as well as the value of services provided by the firm, including the level of the personnel and their time that would be devoted to the project.

DELIVERABLES

At the conclusion of services the selected consultant shall provide 3 copies of the updated Zoning Ordinance along with electronic copies of the Zoning Ordinance in editable Microsoft format and PDF.

SUBMITTAL INSTRUCTIONS

In order to be considered, please include ten (10) hard copies of the completed proposal in a sealed envelope along with a flash drive containing a digital copy of the completed proposal, clearly marked: REQUEST FOR PROPOSALS – ZONING ORDINANCE REVIEW AMEND received by TBD by mail or hand delivery to:

Peter Gallinat
Township Planner
2010 S. Lincoln Rd.
Mt. Pleasant, MI 48858

Proposals arriving after the date and time will remain unopened and will be disqualified. Any proposal may be withdrawn by giving written notice to the Township Planner Peter Gallinat before stated proposal opening time. Please forward any questions regarding the RFP to

Peter Gallinat
Township Planner
2010 S. Lincoln Rd.
Mt. Pleasant, MI 48858
pgallinat@uniontownshipmi.com

Any and all questions may be fielded to the above contact during the RFP process. All questions must be made in writing and received by TBD. Answers to any and all questions will be posted as they are received on the Township website www.uniontownshipmi.com for the benefit of all interested firms. It is the responsibility of the interested firms to check the website for the new questions and answers prior to submitting proposals. The names of firms and individuals submitting questions will not be disclosed.

Any and all acceptable bids will be publically opened at TBD at the Charter Township of Union Hall located at 2010 S. Lincoln Rd. Mt. Pleasant, MI 48858 in the conference room. The name of each firm and cost of services that each firm bid at will be read out loud.

RESERVATIONS

The Charter Township of Union reserves the right to accept any, reject any, or reject all proposals submitted. A firm submitting a proposal does not obligate the Township to award any contract for services to that firm. The Township will select the proposal which it deems to be in the best interest of the Township. The Township will not be responsible for or reimburse any cost the firm incurs during the RFP process.