

AGENDA

Grand Haven Charter Township Planning Commission

Monday, April 17, 2017 – 7:00 p.m.

** Note the New Meeting Time **

- I. Call to Order
- II. Roll Call
- III. Pledge to the Flag
- IV. Approval of the March 20, 2017 Meeting Minutes
- V. Correspondence
- VI. Public Comments/Questions on Agenda Items Only (Limited to 3 minutes)
- VII. New Business
 - A. Site Plan Review – Parking Lot – Seavers Finishing
- VIII. Public Hearing
 - A. Special Land Use – Outdoor Pond – McAlpine
 - B. Site Condo – Single Family – Brucker Beach Woods
 - C. Special Land Use – Gas Station – SpartanNash
 - D. PUD – Housing for the Elderly – Village at Rosy Mound
- IX. Old Business
 - A. Special Land Use – Outdoor Pond – McAlpine
 - B. Site Condo – Single Family – Brucker Beach Woods
 - C. Special Land Use – Gas Station – SpartanNash
 - D. PUD – Housing for the Elderly – Village at Rosy Mound
- X. Reports
 - A. Attorney’s Report
 - B. Staff Report
 - C. Other
- XI. Extended Public Comments/Questions on Non-Agenda Items Only (Limited to 4 minutes)
- XII. Adjournment

Note: Persons wishing to speak at public hearings, on agenda items, or extended comments, must fill out a “Speakers Form” located on the counter. Completed forms must be submitted to the Zoning Administrator prior to the meeting.

MEETING MINUTES
GRAND HAVEN CHARTER TOWNSHIP
PLANNING COMMISSION
MARCH 20, 2017

I. CALL TO ORDER

Cousins called the meeting of the Grand Haven Charter Township Planning Commission to order at 7:00 p.m.

II. ROLL CALL

Members present: Cousins, LaMourie, Robertson, Kieft, Taylor, Wilson, Reenders, Chalifoux,
and Wagenmaker

Members absent: None

Also present: Community Development Director Fedewa and Attorney Bultje

Without objection, Cousins instructed Fedewa to record the minutes.

III. PLEDGE TO THE FLAG

IV. APPROVAL OF MINUTES

Without objection, the minutes of the January 17, 2017 meeting were approved with the revision to correct the Attorney name.

V. CORRESPONDENCE – None

VI. PUBLIC COMMENTS ON AGENDA ITEMS ONLY

VII. PUBLIC HEARING

A. Special Land Use – Single Family Dwelling in AG District – Schmidt

Cousins opened the public hearing at 7:03pm.

Fedewa provided an overview through a memorandum dated March 16th.

Reenders recused himself due to a conflict of interest; he will be performing an agricultural activity on the subject property.

The applicant, David Schmidt, was present and available to answer questions:

- Intends to construct the house this summer after Rye grass is planted.

There being no public comment Cousins closed the public hearing at 7:08pm.

VIII. OLD BUSINESS

A. Special Land Use – Single Family Dwelling in AG District – Schmidt

The application was discussed by Commissioners and focused on:

- Confirmed the existing dwelling was constructed over 100 years ago, and is abandoned.
- Property is legally nonconforming because a dwelling exists on property zoned Agricultural and does not have an active agricultural activity. Thus, a Special Land Use permit is required to become conforming under the current Zoning Ordinance.

Motion by Wilson, supported by Taylor, to **conditionally approve** the Special Land Use application to allow a Single Family Dwelling in the AG District for property located at 16064 Winans Street, based on the application meeting applicable requirements and standards set forth by the Grand Haven Charter Township Zoning Ordinance. The motion is subject to, and incorporates, the following report and conditions:

1. No building permits shall be issued until the property is engaged in an active agricultural activity that is permitted in the AG zoning district. The applicant shall schedule a site inspection with the Zoning Administrator to confirm the activity.
2. No building permits shall be issued until the applicant obtains a demolition permit from the Township to remove the existing dwelling.
3. Pursuant to Section 19.07.39.D the right to continue to occupy and use the single family residence is dependent upon the active conduct of another of the Agricultural District's permitted or special land uses. If such use is discontinued, then the special land use for the single family residence may be revoked by the Township and the dwelling from that time considered as a nonconforming use.

Which motion carried unanimously.

Report

1. This approval is based on the affirmative findings that each of the following standards has been fulfilled:
 - A. The proposed use is consistent with, and promotes the intent and purpose of this Ordinance.
 - B. The proposed use is of such location, size, density, and character as to be compatible with adjacent uses of land and the orderly development of the district in which situated and of adjacent districts.
 - C. The proposed use does not have a substantially detrimental effect upon, nor substantially impair the value of, neighborhood property.
 - D. The proposed use is reasonably compatible with the natural environment of the subject premises and adjacent premises.

- E. The proposed use does not unduly interfere with provision of adequate light or air, nor overcrowd land or cause a severe concentration of population.
 - F. The proposed use does not interfere or unduly burden water supply facilities, sewage collection and disposal systems, park and recreational facilities, and other public services.
 - G. The proposed use is such that traffic to, from, and on the premises and the assembly of persons relation to such use will not be hazardous, or inconvenient to the neighborhood, nor unduly conflict with the normal traffic of the neighborhood, considering, among other things: safe and convenient routes for pedestrian traffic, particularly of children, the relationship of the proposed use to main thoroughfares and to streets and intersections, and the general character and intensity of the existing and potential development of the neighborhood.
 - H. The proposed use is consistent with the health, safety, and welfare of the Township.
2. The application meets the site plan review standards of Section 23.06 of the Zoning Ordinance. Specifically, the Planning Commission finds as follows:
- A. The uses proposed will not adversely affect the public health, safety, or welfare. Uses and structures located on the site take into account topography, size of the property, the uses on adjoining property and the relationship and size of buildings to the site.
 - B. The site will be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this ordinance.
 - C. Safe, convenient, uncontested, and well defined vehicular and pedestrian circulation is provided for ingress/egress points and within the site. Drives, streets and other circulation routes are designed to promote safe and efficient traffic operations within the site and at ingress/egress points.
 - D. The arrangement of public or private vehicular and pedestrian connections to existing or planned streets in the area are planned to provide a safe and efficient circulation system for traffic within the township.
 - E. Removal or alterations of significant natural features are restricted to those areas which are reasonably necessary to develop the site in accordance with the requirements of this Ordinance. The Planning Commission has required that landscaping, buffers, and/or greenbelts be preserved and/or provided to ensure that proposed uses will be adequately buffered from one another and from surrounding public and private property.
 - F. Areas of natural drainage such as swales, wetlands, ponds, or swamps are protected and preserved insofar as practical in their natural state to provide areas for natural habitat, preserve drainage patterns and maintain the natural characteristics of the land.
 - G. The site plan provides reasonable visual and sound privacy for all dwelling units located therein and adjacent thereto. Landscaping shall be used, as appropriate, to accomplish these purposes.
 - H. All buildings and groups of buildings are arranged so as to permit necessary emergency vehicle access as requested by the fire department.
 - I. All streets and driveways are developed in accordance with the Ottawa County Road Commission specifications, as appropriate.
 - J. Appropriate measures have been taken to ensure that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Provisions have been made to accommodate storm water, prevent erosion and the formation of dust.

- K. Exterior lighting is arranged so that it is deflected away from adjacent properties and so it does not interfere with the vision of motorists along adjacent streets, and consists of sharp cut-off fixtures.
- L. All loading and unloading areas and outside storage areas, including areas for the storage of trash, which face or are visible from residential districts or public streets, are screened.
- M. Entrances and exits are provided at appropriate locations so as to maximize the convenience and safety for persons entering or leaving the site.
- N. The site plans conform to all applicable requirements of County, State, Federal, and Township statutes and ordinances.
- O. The general purposes and spirit of this Ordinance and the Master Plan of the Township are maintained.

IX. NEW BUSINESS

Reenders rejoined the Commission.

A. Speedway PUD Extension

Wilson recused himself due to a conflict of interest; he is a secondary applicant on the subject PUD project.

Fedewa provided an overview through a memorandum dated March 15th.

Motion by Robertson, supported by Chalifoux, to recommend the Township Board **approve** the requested 6-month extension (*i.e., September 28, 2017*) for the Speedway PUD based on the request meeting the applicable requirements of Section 17.04.7.A of the Grand Haven Charter Township Zoning Ordinance. **Which motion carried unanimously.**

B. Appoint 2 Members to the Zoning Ordinance Joint Review Committee

Wilson rejoined the Commission.

Without objection Cousins and Wagenmaker were appointed to the Zoning Ordinance Joint Review Committee.

X. REPORTS

A. Attorney Report

- Bultje provided a summary of the NOCH lawsuit oral arguments that occurred on March 6th. It is anticipated a ruling will be received in the coming weeks.

B. Staff Report

- The Brucker Beach Woods project will likely reapply soon to convert the public road to private. This would enable the developer to save 100+ trees by locating the stormwater swales within the right-of-way.

C. Other

- Cousins described information that was learned from two Medical Marijuana workshops he attended. The workshops described the recent Acts the Michigan Legislature adopted in December 2016, that identify 5 facility types. The topic will be discussed in depth this year because permits for these facilities will be issued by the state beginning December 15, 2017.

Communities that elect to opt-out of allowing any facilities do not need to take any action. However, if a community wants 1 or more of these facility types there are certain steps and ordinance changes that must take place. It is noted that communities that allow these facilities will receive a portion of the sales tax revenue that will be generated from the sales at provisioning centers.

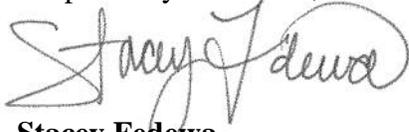
- Taylor indicated she continues to be in communication with the Grand Haven Area Public School district to stay apprised of how the Township's population growth is impacting the district. She also mentioned that administrators and staff members of the district praised Fedewa for providing them with timely updates on new residential developments.

XI. EXTENDED PUBLIC COMMENTS ON NON-AGENDA ITEMS ONLY – None

XII. ADJOURNMENT

Without objection, the meeting adjourned at 7:30 p.m.

Respectfully submitted,



Stacey Fedewa
Acting Recording Secretary



Community Development Memo

DATE: April 13, 2017
TO: Planning Commission
FROM: Stacey Fedewa, Community Development Director
RE: Site Plan Review – Seavers Finishing – Parking Lot Expansion

BACKGROUND

Seavers Finishing, located at 16900 Hayes is a growing industrial business that is requesting additional parking. Unfortunately, it is difficult to determine exactly how many spaces are on the site because over the years the employees have created new spaces by parking on the grass, leading to them becoming gravel, and as the rest of the lot deteriorates the loose material is being pushed onto the “new” spaces causing the two types of parking lots to amalgamate.

Staff’s best estimate based on 2014 aerials is there were 35 spaces. The Applicant is now requesting to refresh the parking lot, expand in the necessary locations, and improve the maneuverability of the site. Therefore, the total spaces requesting to be paved now are 65, which includes the existing 35 that staff was able to identify.



ZONING REQUIREMENTS

The size of the spaces shown on the plan are compliant with Township requirements.

There are two parking calculations used for this site:

1. 1 space for every 1,000 sqft of industrial area
2. 1 space for every 200 sqft of administrative office space

It's unclear exactly how large the administrative office space is, but even a conservative estimate of 10% still allows substantially more parking than is requested.

The overall building size is 50,793 sqft, and if 5,000 of that is dedicated to administrative offices then the following parking spaces would be allowed:

1. $45,793 \div 1,000 = 46$ spaces
 2. $5,000 \div 200 = 25$ spaces
- Total = 71 spaces

Also, the Ottawa County Water Resources Commissioner has approved the stormwater discharge calculations, so their last step is obtaining approval from the Township.

MOTION

Based on this information, staff recommends the Planning Commission approve the requested parking lot expansion. If the Planning Commission agrees with this recommendation the following motion can be offered:

Motion to approve the Seavers Finishing Site Plan Review application to expand the parking lot to a total of 65 spaces, which includes the existing and proposed spaces. This is based on the application meeting the requirements and standards set forth by the Grand Haven Charter Township Zoning ordinance.

Please contact me if this raises questions.

REPORT

1. The application meets the site plan review standards of Section 23.06 of the Zoning Ordinance. Specifically, the Planning Commission finds as follows:
 - A. The uses proposed will not adversely affect the public health, safety, or welfare. Uses and structures located on the site take into account topography, size of the property, the uses on adjoining property and the relationship and size of buildings to the site.

- B. The site will be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this ordinance.
- C. Safe, convenient, uncontested, and well defined vehicular and pedestrian circulation is provided for ingress/egress points and within the site. Drives, streets and other circulation routes are designed to promote safe and efficient traffic operations within the site and at ingress/egress points.
- D. The arrangement of public or private vehicular and pedestrian connections to existing or planned streets in the area are planned to provide a safe and efficient circulation system for traffic within the township.
- E. Removal or alterations of significant natural features are restricted to those areas which are reasonably necessary to develop the site in accordance with the requirements of this Ordinance. The Planning Commission has required that landscaping, buffers, and/or greenbelts be preserved and/or provided to ensure that proposed uses will be adequately buffered from one another and from surrounding public and private property.
- F. Areas of natural drainage such as swales, wetlands, ponds, or swamps are protected and preserved insofar as practical in their natural state to provide areas for natural habitat, preserve drainage patterns and maintain the natural characteristics of the land.
- G. The site plan provides reasonable visual and sound privacy for all dwelling units located therein and adjacent thereto. Landscaping shall be used, as appropriate, to accomplish these purposes.
- H. All buildings and groups of buildings are arranged so as to permit necessary emergency vehicle access as requested by the fire department.
- I. All streets and driveways are developed in accordance with the Ottawa County Road Commission specifications, as appropriate.
- J. Appropriate measures have been taken to ensure that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Provisions have been made to accommodate storm water, prevent erosion and the formation of dust.
- K. Exterior lighting is arranged so that it is deflected away from adjacent properties and so it does not interfere with the vision of motorists along adjacent streets, and consists of sharp cut-off fixtures.
- L. Entrances and exits are provided at appropriate locations so as to maximize the convenience and safety for persons entering or leaving the site.
- M. The site plans conform to all applicable requirements of County, State, Federal, and Township statutes and ordinances.
- N. The general purposes and spirit of this Ordinance and the Master Plan of the Township are maintained.

Clear Form

Print



GRAND HAVEN CHARTER TOWNSHIP

SITE PLAN REVIEW APPLICATION

Application Type	Fee	Escrow*	Sewer Escrow**	
Overlay Zone	\$110	\$2,000	Main Extension	\$5,000
Non-Overlay Zone	\$100	\$1,000	Lift Station	\$2,000

Applicant Information

Name HUGHES BUILDERS INC
 Phone 231-773-0077 Fax 231-773-0909
 Address 23279 E LAKEVIEW AVE
 Email Address bobtufels@hughesbuildersinc.net

Owner Information (If different from applicant)

Name SEAUERS FINISHING
 Phone 231-773-0077 Fax 231-773-0909
 Address 16900 MAYES ST

Property Information

Address/Location 16900 MAYES ST GRAND HAVEN
 Parcel Number 70-07-04-200-054 Size (acres) 2.79 ACRES
 Current Zoning FZ Master-Planned Zoning _____

Description of Proposed Use/Request (attach additional pages as needed)

ADD 17 PARKING SPOTS TO
EXISTING DRIVE ON NORTH SIDE
OF BUILDING

NOTE: The architect, engineer, planner, or designer shall be responsible for utilizing the Township Ordinance books and following all applicable requirements, including those of Chapter 23 of the Zoning Ordinance. Initially, submit five copies of the required information for staff review. Once staff has granted tentative approval, additional copies will be required as requested by staff.

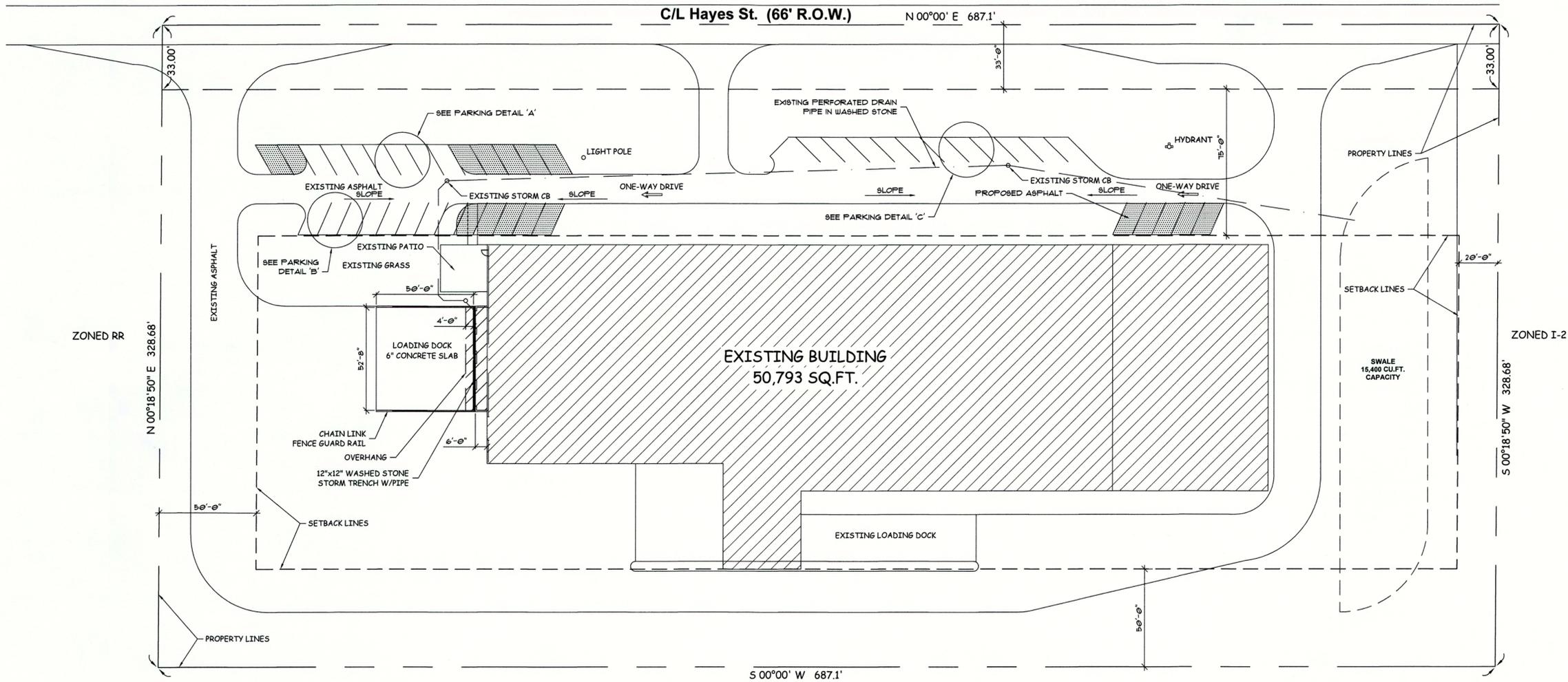
I hereby attest the information on this application is, to the best of my knowledge, true and accurate.

[Signature]
 Signature of applicant

4-13-17
 Date

* To cover cost of legal and consulting fees, may be increased as necessary

** If approval of this application requires/includes the extension of a municipal sanitary sewer main, an additional \$5,000.00 escrow fee shall be required, and an additional \$2,000.00 escrow fee shall be required for the installation of a lift station.



APPROVED BY: _____ DATE: _____

Consulting Engineer
Stephen W. Parker, P.E.
 3279 E. Laketon Ave.
 Muskegon, Michigan
 (231)-773-0077



SEAL 4/13/17
Stephen W. Parker

General Contractor
Hughes Builders, Inc.
 3279 E. Laketon Ave.
 Muskegon, Michigan
 (231)-773-0077



THIS DOCUMENT IS THE PROPERTY OF HUGHES BUILDERS, INC. AND IS CONFIDENTIAL. ANY UNAUTHORIZED USE OR REPRODUCTION HEREOF WITHOUT WRITTEN CONSENT IS PROHIBITED BY LAW.

SEEVER FINISHING
 16900 HAYES ST., GRAND HAVEN TWP., MI
Site Plan

DRAWN BY: **S. PARKER**

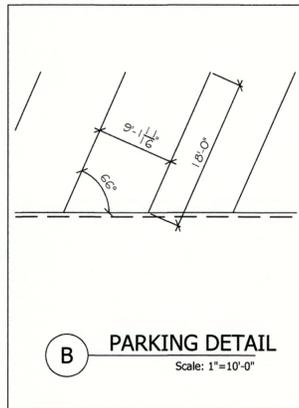
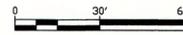
REVISED
 1-16-2017
 SCALE: 1"=20'-0"
 PROJECT NO: A 16105
 DWG. NO. **ST-1**

ZONED RR



SITE PLAN

SCALE: 1" = 30'-0"



ORIGINAL SITE DRAINAGE CALCULATIONS

DETENTION POND DESIGN CALCULATION
 Site Location: 16900 Hayes St., Grand Haven Twp. Percent Imperviousness: 57% (I)
 Proposed Runoff "C" Value: 0.60
 Maximum Allowable Outflow (CFS): 0.00 (G)
 Storm Recurrence Interval (Yrs): 25

A	B	C	D	E	F	G	H
Duration (Minutes)	Duration (Hours)	25-Year Total Rainfall (Inches)	25-Year Rainfall Intensity (Inch/Hr)	Proposed Runoff (CFS)	Proposed Runoff Volume (CFH)	Maximum Allowable Outflow (CFS)	Required Detention Storage (CFH)
5	0.08	0.53	6.36	10.63	3,189	0.00	3,189
10	0.17	0.93	5.58	9.33	5,595	0.00	5,595
15	0.25	1.20	4.80	8.00	7,220	0.00	7,220
20	0.33	1.36	4.08	6.82	8,182	0.00	8,182
30	0.50	1.65	3.30	5.51	9,927	0.00	9,927
40	0.67	1.8	2.70	4.51	10,820	0.00	10,820
50	0.83	1.95	2.34	3.91	11,732	0.00	11,732
60	1.00	2.09	2.09	3.49	12,574	0.00	12,574

Maximum: 12,574

- A) Duration of the storm event in minutes.
- B) Duration of the storm event in hours.
- C) Total amount of rainfall during a 25-year recurrence storm event for the given duration in Column A & B (ref. midwestern climatological center rainfall Atlas-Bulletin 71).
- D) Average rainfall intensity during the 25-year recurrence storm event. Calculated by dividing Column C by Column B.
- E) The unrestricted 25-year recurrence discharge flow rate from the proposed site under fully developed conditions. Calculated by multiplying Intensity (D) and Drainage Area (I).
- F) The unrestricted storm event for the given duration in Column A and B. Calculated by multiplying the Proposed Runoff Flow Rate (E) by the Storm Duration (A) and by 60 seconds/minute.
- G) The maximum allowable discharge from the site is determined by multiplying the drainage area by 0.15 CFS per acre or if the proposed outlet is restrictive by determining the sites share of the existing outlet capacity on a contributing area basis.
- H) The required retention storage is determined by multiplying the difference flow rate (Inflow (F) - Outflow (G)) by the corresponding duration (A) and by 60 seconds/minute. The amount of storage required for various storm durations will vary based on rainfall intensity, the size of the drainage area, and the allowable discharge. The maximum volume of storage for the various storm durations will be the required detention storage volume.
- I) Proposed percent imperviousness. This assumption will be used to determine the proposed runoff coefficient. Impervious surface will be assumed to have a value of 0.9 and pervious a value of 0.2
- J) Contributing Drainage to the proposed detention or retention system.

Calculation By: *Stephen W. Parker PE*
 Date: *Jan. 13, 2017*

SITE DRAINAGE CALCULATIONS W/ EXTRA ASPHALT

DETENTION POND DESIGN CALCULATION
 Site Location: 16900 Hayes St., Grand Haven Twp. Percent Imperviousness: 59% (I)
 Proposed Runoff "C" Value: 0.61
 Maximum Allowable Outflow (CFS): 0.00 (G)
 Storm Recurrence Interval (Yrs): 25

A	B	C	D	E	F	G	H
Duration (Minutes)	Duration (Hours)	25-Year Total Rainfall (Inches)	25-Year Rainfall Intensity (Inch/Hr)	Proposed Runoff (CFS)	Proposed Runoff Volume (CFH)	Maximum Allowable Outflow (CFS)	Required Detention Storage (CFH)
5	0.08	0.53	6.36	10.88	3,263	0.00	3,263
10	0.17	0.93	5.58	9.54	5,726	0.00	5,726
15	0.25	1.20	4.80	8.21	7,388	0.00	7,388
20	0.33	1.36	4.08	6.98	8,373	0.00	8,373
30	0.50	1.65	3.30	5.64	10,159	0.00	10,159
40	0.67	1.8	2.70	4.62	11,083	0.00	11,083
50	0.83	1.95	2.34	4.00	12,006	0.00	12,006
60	1.00	2.09	2.09	3.57	12,868	0.00	12,868

Maximum: 12,868

- A) Duration of the storm event in minutes.
- B) Duration of the storm event in hours.
- C) Total amount of rainfall during a 25-year recurrence storm event for the given duration in Column A & B (ref. midwestern climatological center rainfall Atlas-Bulletin 71).
- D) Average rainfall intensity during the 25-year recurrence storm event. Calculated by dividing Column C by Column B.
- E) The unrestricted 25-year recurrence discharge flow rate from the proposed site under fully developed conditions. Calculated by multiplying Intensity (D) and Drainage Area (I).
- F) The unrestricted storm event for the given duration in Column A and B. Calculated by multiplying the Proposed Runoff Flow Rate (E) by the Storm Duration (A) and by 60 seconds/minute.
- G) The maximum allowable discharge from the site is determined by multiplying the drainage area by 0.15 CFS per acre or if the proposed outlet is restrictive by determining the sites share of the existing outlet capacity on a contributing area basis.
- H) The required retention storage is determined by multiplying the difference flow rate (Inflow (F) - Outflow (G)) by the corresponding duration (A) and by 60 seconds/minute. The amount of storage required for various storm durations will vary based on rainfall intensity, the size of the drainage area, and the allowable discharge. The maximum volume of storage for the various storm durations will be the required detention storage volume.
- I) Proposed percent imperviousness. This assumption will be used to determine the proposed runoff coefficient. Impervious surface will be assumed to have a value of 0.9 and pervious a value of 0.2
- J) Contributing Drainage to the proposed detention or retention system.

Calculation By: *Stephen W. Parker PE*
 Date: *Jan. 13, 2017*

NOTE: Contract limits shall be 20' (twenty feet) beyond the outside of the building; 10' (ten feet) beyond the edge of asphalt, gravel, and concrete surfaces; and all swale and site drainage areas, unless otherwise noted. Contract limits shall include tree and shrub removal within the specified areas.

CONTRACTOR SHALL CONTACT MISSDIG (800) 482-7171, 3 DAYS IN ADVANCE OF CONSTRUCTION, FOR EXISTING UNDERGROUND UTILITY LOCATIONS.





GRAND HAVEN CHARTER TOWNSHIP

Community Development Memo

DATE: April 10, 2017
 TO: Planning Commission
 FROM: Stacey Fedewa, Community Development Director
 RE: Special Land Use Application – Outdoor Pond at 16319 Fillmore Street

PROPERTY DETAILS			
Property Address	Parcel Number	Parcel Size	Application Type
16319 Fillmore	70-07-34-400-19	5 Acres	Outdoor Pond
Existing Zoning	Existing Land Use	Existing Infrastructure	Existing Site Improvements
AG	Single Family Residential	Paved Roadway Private water well Private septic system	Single Family Dwelling 2 Accessory Buildings
Master-Planned Zoning	Surrounding Zoning & Land Uses		
	Direction	Zoning	Land Use
Low Density Residential	N	AG	Hiawatha Forest
	S	RR	Single Family Residential
	E	AG	Single Family Residential
	W	RR	Single Family Residential

BACKGROUND

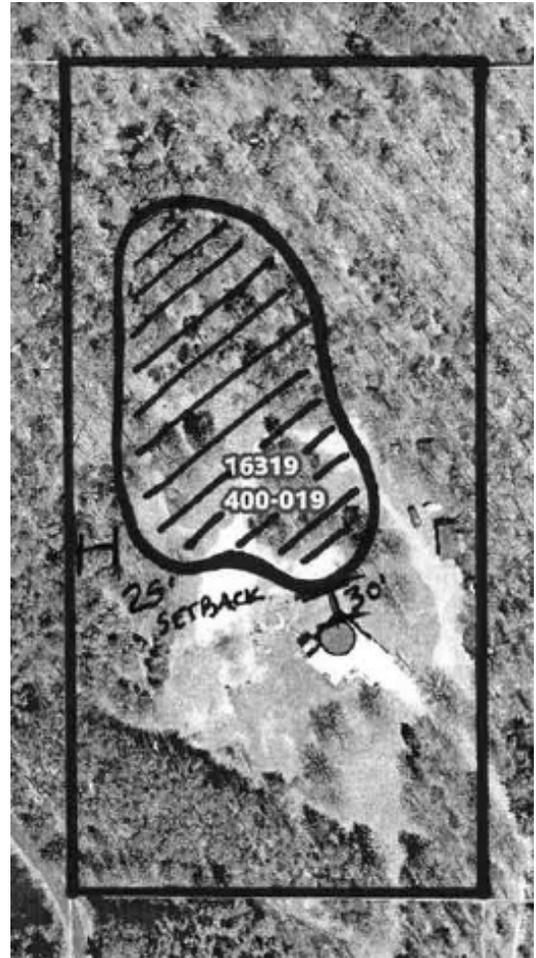
The property owner, Shawn McAlpine, submitted a Special Land Use application to construct an Outdoor Pond at 16319 Fillmore Street. A contractor has agreed to a barter situation where he will dig the pond and accept the spoils in exchange for payment.

PROJECT DETAILS

Specifics regarding the pond construction include:

- The ¾ acre pond would be used for personal recreation purposes.

- The approximate dimensions of the pond are 150' x 200'.
- Proposed to be setback at least 25' from lot lines (where only 20' is required), and 30' from the dwelling and accessory buildings (where only 10' feet of isolation distance is required from the well).
- Will have a 1:3 slope for the first 5 feet of depth.
- Intends to have a total pond depth of about 12'.
- Will use an aeration device to prevent stagnant water.



SPECIAL LAND USE REQUIREMENTS		
Section 19.07.29A Provisions	Compliance	
Used for recreation, pleasure, or agricultural only	Meets standard	
Compliance with setback requirements of zoning district (AG)	Meets standard	
To protect the safety of the general public the PC can require the pond to be enclosed by a wall or fence.	Not enclosed—Planning Commission has discretion	
Constructed to applicable requirements of Conservation District, OCWRC, and MDEQ	CD	n/a
	OCWRC	n/a
	MDEQ	n/a
Slope of the banks must be a minimum of 1:3	Meets standard	
Pond shall not cause or contribute to the erosion of any adjacent, abutting, or nearby land.	Staff unaware of any issues	
Pond shall not create stagnant water	Aeration Unit	

SAMPLE MOTIONS

If the Planning Commission finds the application meets the applicable standards, the following motion can be offered:

Motion to approve the Outdoor Pond Special Land Use application for 16319 Fillmore Street, based on the application meeting applicable requirements and standards set forth by the Grand Haven Charter Township Zoning Ordinance. This motion is subject to, and incorporates, the following report.

If the Planning Commission finds the application does not meet the applicable standards, the following motion can be offered:

Motion to deny the Outdoor Pond Special Land Use application, and direct staff to draft a formal motion and report for those discussion points which will be reflected in the meeting minutes. This will be reviewed and considered for adoption at the next meeting.

If the Planning Commission finds the applicant must make revisions to the application, the following motion can be offered:

Motion to table the Outdoor Pond Special Land Use application, and direct the applicant to make the following revisions:

1. *List the revisions.*

Please contact me prior to the meeting with questions or concerns.

REPORT (TO BE USED WITH A MOTION FOR APPROVAL)

1. This approval is based on the affirmative findings that each of the following Special Land Use standards has been fulfilled:
 - A. The proposed use is consistent with, and promotes the intent and purpose of this Ordinance.
 - B. The proposed use is of such location, size, density, and character as to be compatible with adjacent uses of land and the orderly development of the district in which situated and of adjacent districts.
 - C. The proposed use does not have a substantially detrimental effect upon, nor substantially impair the value of, neighborhood property.

- D. The proposed use is reasonably compatible with the natural environment of the subject premises and adjacent premises.
 - E. The proposed use does not unduly interfere with provision of adequate light or air, nor overcrowd land or cause a severe concentration of population.
 - F. The proposed use does not interfere or unduly burden water supply facilities, sewage collection and disposal systems, park and recreational facilities, and other public services.
 - G. The proposed use is such that traffic to, from, and on the premises and the assembly of persons relation to such use will not be hazardous, or inconvenient to the neighborhood, nor unduly conflict with the normal traffic of the neighborhood, considering, among other things: safe and convenient routes for pedestrian traffic, particularly of children, the relationship of the proposed use to main thoroughfares and to streets and intersections, and the general character and intensity of the existing and potential development of the neighborhood.
 - H. The proposed use is consistent with the health, safety, and welfare of the Township.
2. The application meets the site plan review standards of Section 23.06 of the Zoning Ordinance. Specifically, the Planning Commission finds as follows:
- A. The uses proposed will not adversely affect the public health, safety, or welfare. Uses and structures located on the site take into account topography, size of the property, the uses on adjoining property and the relationship and size of buildings to the site.
 - B. The site will be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this ordinance.
 - C. Safe, convenient, uncontested, and well defined vehicular and pedestrian circulation is provided for ingress/egress points and within the site. Drives, streets and other circulation routes are designed to promote safe and efficient traffic operations within the site and at ingress/egress points.
 - D. The arrangement of public or private vehicular and pedestrian connections to existing or planned streets in the area are planned to provide a safe and efficient circulation system for traffic within the township.
 - E. Removal or alterations of significant natural features are restricted to those areas which are reasonably necessary to develop the site in accordance with the requirements of this Ordinance. The Planning Commission has required that landscaping, buffers, and/or greenbelts be preserved and/or provided to ensure that proposed uses will be adequately buffered from one another and from surrounding public and private property.
 - F. Areas of natural drainage such as swales, wetlands, ponds, or swamps are protected and preserved insofar as practical in their natural state to provide areas for natural habitat, preserve drainage patterns and maintain the natural characteristics of the land.

- G. The site plan provides reasonable visual and sound privacy for all dwelling units located therein and adjacent thereto. Landscaping shall be used, as appropriate, to accomplish these purposes.
- H. All buildings and groups of buildings are arranged so as to permit necessary emergency vehicle access as requested by the fire department.
- I. All streets and driveways are developed in accordance with the Ottawa County Road Commission specifications, as appropriate.
- J. Appropriate measures have been taken to ensure that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Provisions have been made to accommodate storm water, prevent erosion and the formation of dust.
- K. Exterior lighting is arranged so that it is deflected away from adjacent properties and so it does not interfere with the vision of motorists along adjacent streets, and consists of sharp cut-off fixtures.
- L. All loading and unloading areas and outside storage areas, including areas for the storage of trash, which face or are visible from residential districts or public streets, are screened.
- M. Entrances and exits are provided at appropriate locations so as to maximize the convenience and safety for persons entering or leaving the site.
- N. The site plans conforms to all applicable requirements of County, State, Federal, and Township statutes and ordinances.
- O. The general purposes and spirit of this Ordinance and the Master Plan of the Township are maintained.

Clear Form

Print



GRAND HAVEN CHARTER TOWNSHIP

SPECIAL LAND USE APPLICATION

Application Type	Fee	Escrow*
Original	\$125	\$1,000
Amendment	\$100	\$500

Sewer Escrow**	
Main Extension	\$5,000
Lift Station	\$2,000

Applicant Information

Name SHAWN MCALPINE
 Phone 616-843-5900 Fax N/A
 Address 16319 FILLMORE ST WEST OLIVE MI 49460
 Email Address SHAWN.MCALPINE@GENTEX.COM

Owner Information (If different from applicant)

Name _____
 Phone _____ Fax _____
 Address _____

Property Information

Address/Location 16319 FILLMORE ST WEST OLIVE MI 49460
 Parcel Number 70-07-34 - 400 - 019 Size (acres) 5.034
 Current Zoning RESIDENTIAL Master-Planned Zoning _____

Description of Proposed Use/Request (attach additional pages as needed)

3/4 ACRE OUTDOOR POND. SETBACK MAP INCLUDED. WILL STAY 30' FROM STRUCTURES AND 25' FROM PROPERTY LINES. MAX DIMS WILL BE 150x250 WITH ROUNDED EDGES. A SLOPE OF 1:3 WILL BE USED TO 6' DEPTH. DEPTH WILL BE 12'. PLANNED USE OF AERATION DEVICE

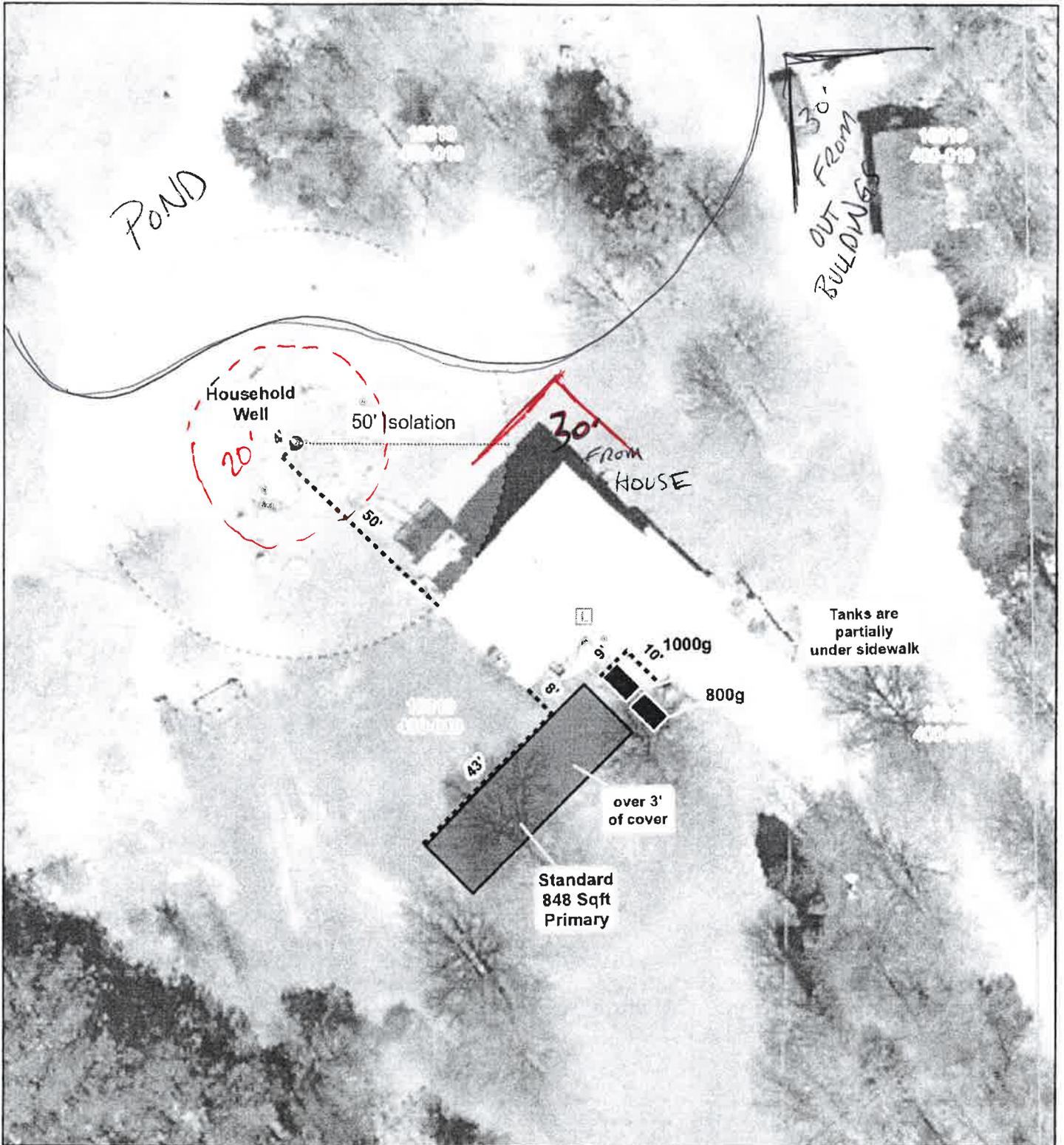
NOTE: The architect, engineer, planner, or designer shall be responsible for utilizing the Township Ordinance books and following all applicable requirements, including those of Chapters 19 and 23 of the Zoning Ordinance. Initially, submit five copies of the required information for staff review. Once staff has granted tentative approval, additional copies will be required as requested by staff.

I hereby attest the information on this application is, to the best of my knowledge, true and accurate.


 Signature of applicant

3/31/17
 Date

* To cover cost of legal and consulting fees, may be increased as necessary
 ** If approval of this application requires/includes the extension of a municipal sanitary sewer main, an additional \$5,000.00 escrow fee shall be required, and an additional \$2,000.00 escrow fee shall be required for the installation of a lift station.



OTTAWA COUNTY HEALTH DEPARTMENT

Real Estate Transfer Evaluation

Address: 16319 Fillmore Street

Parcel: 70-07-34-400-019

Date: 5/23/2016

EH Specialist: Ryan McCarthy



1:480

1in. = 40 ft.

www.miOttawa.org

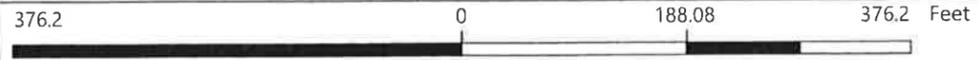
12251 James Street Holland, Michigan 49424 (616) 393-5645 Fax (616) 393-5643



Legend

- Parcels

Notes



NAD_1983_StatePlane_Michigan_South_FIPS_2113_Feet_Intl
© Latitude Geographics Group Ltd.

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION



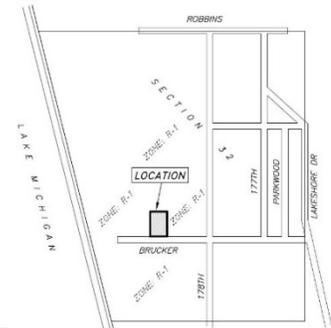
Community Development Memo

DATE: April 12, 2017
TO: Planning Commission
FROM: Stacey Fedewa, Community Development Director
RE: Revised Site Condo Application – Brucker Beach Woods

BACKGROUND

In November 2016, the Township approved the Brucker Beach Woods site condominium application to develop 7 single family lots with a public road.

This development included bio-swales (*stormwater disposal through infiltration*) outside the road right-of-way and a valley gutter system.



PROPOSED AMENDMENTS

The Zoning Ordinance requires any Site Condominium amendments to move through the same process as the original (*see right text box*).

The developer is proposing to convert the road to private instead of public. Doing so, will reduce the number of trees being removed for the following reasons:

1. Bio-swales can now be located inside the right-of-way instead of outside, which will also provide more front yard for the property owners.
2. Private roads do not have to be as wide as public roads.
 - a. Public road = 30 feet in width
 - b. Private road = 20 feet in width
3. Private roads can exclude the requirements for curb and gutter (*see Section 4.3.G of the Private Road Ordinance*), and the OCWRC has confirmed this site

SECTION 18.10

Any proposed changes to an approved final site condominium project plan shall be reviewed by the Planning Commission and reviews and approved by the Township Board as provided by this Chapter for the original review and approval of preliminary and final plans.

does not need valley gutters. Therefore, they were removed, which reduces the overall impervious surface, and allows the bio-swales to function more naturally.

For your information, the developer has also changed the street name from Garbrecht Court to Brucker Woods Court. This change was approved by the OCRC and Fire/Rescue, and does not require approval from the Planning Commission.

Lastly, the Township can only consider the proposed amendments to the site condominium plan. The original approved plan continues to remain valid regardless of the outcome for the proposed amendments.

SAMPLE MOTIONS

If the Planning Commission finds the revised Brucker Beach Woods Site Condominium application meets the applicable standards, the following motion can be offered:

Motion to recommend to the Township Board approval with conditions of the revised Brucker Beach Woods Site Condominium development. This is based on the application meeting the requirements and standards set forth by the Grand Haven Charter Township Zoning Ordinance, Master Plan, and Private Roads and Driveways Ordinance. This action is based upon the findings and other information included in the Planning Commission report. Approval is subject to the following conditions:

1. Shall comply with the same conditions found in the 11/28/2016 Township Board meeting minutes.
2. The developer shall enter into a Private Road Maintenance Agreement with the Township. The Agreement shall be reviewed and approved by the Township Board prior to receiving a final occupancy permit.
3. The developer shall provide the Township with a copy of the Declaration of Joint Maintenance and Easement for the private road, which shall be approved by the Township Attorney before being recorded with the Ottawa County Register of Deeds. This shall be completed before a final occupancy permit is issued.

If the Planning Commission finds the Brucker Beach Woods Site Condominium application does not meet the applicable standards, the following motion can be offered:

Motion to recommend to the Township Board denial of the Brucker Beach Woods Site Condominium development, and direct staff to draft a formal motion and report with those discussion points which will be reflected in the meeting minutes. This will be reviewed and considered for adoption at the next meeting.

If the Planning Commission finds the applicant must make revisions to the Site Condominium application, the following motion can be offered:

Motion to table the Brucker Beach Woods Site Condominium application, and direct the applicant to make the following revisions:

1. *List the revisions.*

Please contact me if this raises questions.

REPORT (TO BE USED WITH A MOTION FOR APPROVAL)

1. This approval is based on the affirmative findings that each of the following standards has been fulfilled:

- A. The proposed use is consistent with, and promotes the intent and purpose of this Ordinance.
- B. The proposed use is of such location, size, density, and character as to be compatible with adjacent uses of land and the orderly development of the district in which situated and of adjacent districts.
- C. The proposed use does not have a substantially detrimental effect upon, nor substantially impair the value of, neighborhood property.
- D. The proposed use is reasonably compatible with the natural environment of the subject premises and adjacent premises.
- E. The proposed use does not unduly interfere with provision of adequate light or air, nor overcrowd land or cause a severe concentration of population.
- F. The proposed use does not interfere or unduly burden water supply facilities, sewage collection and disposal systems, park and recreational facilities, and other public services.
- G. The proposed use is such that traffic to, from, and on the premises and the assembly of persons relation to such use will not be hazardous, or inconvenient to the neighborhood, nor unduly conflict with the normal traffic of the neighborhood, considering, among other things: safe and convenient routes for pedestrian traffic, particularly of children, the relationship of the proposed use to main thoroughfares and to streets and intersections, and the general character and intensity of the existing and potential development of the neighborhood.
- H. The proposed use is consistent with the health, safety, and welfare of the Township.

2. The application meets the site plan review standards of Section 23.06 of the Zoning Ordinance. Specifically, the Planning Commission finds as follows:
 - A. The uses proposed will not adversely affect the public health, safety, or welfare. Uses and structures located on the site take into account topography, size of the property, the uses on adjoining property and the relationship and size of buildings to the site.
 - B. The site will be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this ordinance.
 - C. Safe, convenient, uncontested, and well defined vehicular and pedestrian circulation is provided for ingress/egress points and within the site. Drives, streets and other circulation routes are designed to promote safe and efficient traffic operations within the site and at ingress/egress points.
 - D. The arrangement of public or private vehicular and pedestrian connections to existing or planned streets in the area are planned to provide a safe and efficient circulation system for traffic within the township.
 - E. Removal or alterations of significant natural features are restricted to those areas which are reasonably necessary to develop the site in accordance with the requirements of this Ordinance. The Planning Commission has required that landscaping, buffers, and/or greenbelts be preserved and/or provided to ensure that proposed uses will be adequately buffered from one another and from surrounding public and private property.
 - F. Areas of natural drainage such as swales, wetlands, ponds, or swamps are protected and preserved insofar as practical in their natural state to provide areas for natural habitat, preserve drainage patterns and maintain the natural characteristics of the land.
 - G. The site plan provides reasonable visual and sound privacy for all dwelling units located therein and adjacent thereto. Landscaping shall be used, as appropriate, to accomplish these purposes.
 - H. All buildings and groups of buildings are arranged so as to permit necessary emergency vehicle access as requested by the fire department.
 - I. All streets and driveways are developed in accordance with the Ottawa County Road Commission specifications, as appropriate.
 - J. Appropriate measures have been taken to ensure that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Provisions have been made to accommodate storm water, prevent erosion and the formation of dust.
 - K. Exterior lighting is arranged so that it is deflected away from adjacent properties and so it does not interfere with the vision of motorists along adjacent streets, and consists of sharp cut-off fixtures.

- L. Entrances and exits are provided at appropriate locations so as to maximize the convenience and safety for persons entering or leaving the site.
 - M. The site plans conform to all applicable requirements of County, State, Federal, and Township statutes and ordinances.
 - N. The general purposes and spirit of this Ordinance and the Master Plan of the Township are maintained.
3. The application meets the site condominium project review standards of Section 18.03 of the Zoning Ordinance. Specifically, the Planning Commission finds as follows:
- A. The project plan provides adequate common elements and maintenance provisions, use and occupancy restrictions, utility systems and streets, and project layouts and design.
 - B. The project plan complies with the Condominium Act, other applicable laws, ordinances, and regulations.
 - C. The building site for each site condominium unit complies with all applicable provisions of the ordinance including minimum lot area, minimum lot width, required front, side, and rear yards, and maximum building height.
 - D. The project plans public street will be paved and developed to the minimum design, construction, inspection, approval, and maintenance requirements for platted public streets as required by the Ottawa County Road Commission.
 - E. The project will provide public water facilities to the site condominium units, and is in accordance with Township standards.
 - F. The project provides for private septic system and drain field located within the condominium unit's building site, and have been approved by the Ottawa County Department of Health.
 - G. The project will provide the required street light fixture within the cul-de-sac.

Clear Form

Print



GRAND HAVEN CHARTER TOWNSHIP

SITE CONDOMINIUM PROJECT APPLICATION

Application Type	Fee	Escrow*	Sewer Escrow**	
Site Condominium	\$250	\$500	Main Extension	\$5,000
	\$200		Lift Station	\$2,000

Fee reduced ~~SKF~~

Applicant Information

Name Brucker Beach Woods, LLC

Phone (616) 638-2986 Fax _____

Address 13786 Lake Sedge Drive

Email Address Steve.Davis1011@gmail.com

Owner Information (If different from applicant)

Name Same

Phone _____ Fax _____

Address _____

Property Information

Address/Location Vacant Land - Southeast 1/4, Section 32, Town 8 North, Range 16 West

Parcel Number 70 - 03 - 32 - 400 - 004 Size (acres) 6.29

Current Zoning R-1 Master-Planned Zoning R-1

Adjacent Zoning North: R-1 South: R-1 East: R-1 West: R-1

Other Information

Number of Proposed Lots? 7

Present Use of the Subject Property? Vacant

Number & Type of Existing Structures? 0

Subject Property Located on a Paved Road? Yes

Municipal Water within 2,700 Feet of Subject Property? Yes

Municipal Sewer within 2,700 Feet of Subject Property? No

Description of Proposed Use/Request (attach additional pages as needed)

Single-family residential development

NOTE: The architect, engineer, planner, or designer shall be responsible for utilizing the Township Ordinance Books and following all applicable requirements, including those of Chapter 18 and 23 of the Zoning Ordinance, as well as Section 66 of the Condominium Act. Initially, submit five copies of the required information for staff review. Once staff has granted tentative approval, additional copies will be required as requested by staff.

I hereby attest the information on this application is, to the best of my knowledge, true and accurate.

Signature of applicant

Date

7.23.17

* To cover cost of legal and consulting fees, may be increased as necessary

** If approval of this application requires/includes the extension of a municipal sanitary sewer main, an additional \$5,000.00 escrow fee shall be required, and an additional \$2,000.00 escrow fee shall be required for the installation of a lift station.

For Office Use Only

Date Received _____

Fee Paid? _____

Materials Received: Site Plans _____

Location Map _____

Survey _____

Legal Description _____

Narrative _____

Landscape Plan _____

Master Deed _____

Condo Bylaws _____

Dated copy of approved minutes sent to applicant? _____

Date Sent _____

PLANNING COMMISSION USE ONLY

Approval _____

Tabled _____

Denied _____

Conditional Approval _____

The following conditions shall be met for approval:

Signature of Planning Commission Chair

Date

BRUCKER BEACH WOODS – SITE CONDOMINIUMS – NARRATIVE OF AMENDMENTS

Project Narrative:

The revised site plan for Brucker Beach Woods has taken the bio-swales from outside the ROW to the inside of the ROW. As a public road this was not an option. Going private allows for this to occur. This is the only change to the plan. OCRC and Water Resources have reviewed plan to ensure that it meets all their requirements. This will allow a better development as more trees can be saved thus creating to more private feel/character which is more consistent with the neighborhood.

Exhibit B changes:

Sheet 1: Cover sheet – no changes other than date and road name

Sheet 2: Survey Plan – change the word public to private on road.

- change date
- change road name to Brucker Woods Court

Sheet 3: Site Plan & Cross Section – change the word public to private (on road and in notes)

- change date
- change road name to Brucker Woods Court

Sheet 4: Utility Plan – change the word public to private (on road and in notes)

- change date
- change road name to Brucker Woods Court

Master Deed:

1. The word “public” to be replaced with the word “private” on all page that it appears.
2. Section 4.1 add (J) Private Road: Brucker Woods Court shall be a private road. Any and all Real Estate within the boundaries starting at the center line of the road to the most lateral points of the road ROW shall be considered a common element. Developer has/will be entering into road maintenance agreement with the Township of Grand Haven.

NOTE: all easements related to road are covered in Section 8: Easements.

Bylaws:

1. Master Deed - Schedule B: Revised site Plan
2. Master Deed – Schedule B: Revised Exhibit B

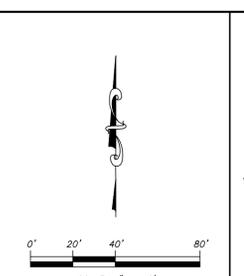
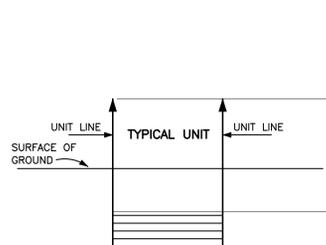
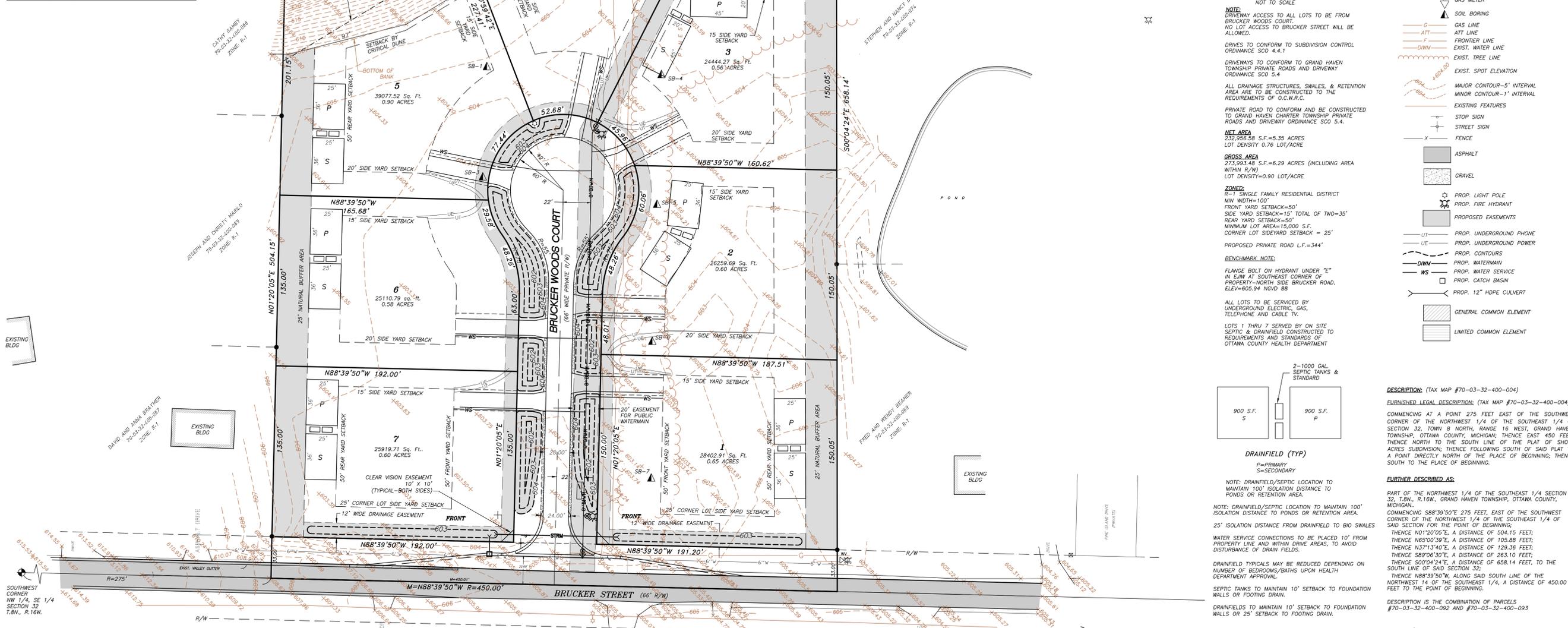
NOTE: Repair and maintenance of road covered in Section 4.4 of Bylaws

BRUCKER BEACH WOODS

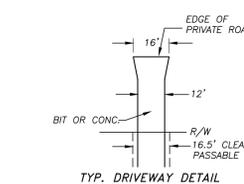
SOIL BORING LOG

Brucker Street Development
Grand Haven Township, Michigan

SB-1	08/11/2016
0' - 0.5'	Topsoil, medium to fine-grained sand
0.5' - 1.7'	Fine-grained sand, light gray
1.7' - 3.0'	Fine-grained sand, brown
3.0' - 7.7'	Fine-grained sand, light tan
7.7'	Moist
Mottling observed at 2.7' (32")	
SB-2	08/11/2016
0' - 0.5'	Topsoil, medium to fine-grained sand
0.5' - 1.1'	Fine-grained sand, brown
1.1' - 7.5'	Fine-grained sand, light tan
7.5'	Moist
Mottling observed at 3.1' (37")	
SB-3	08/19/2016
0' - 0.5'	Topsoil, medium to fine-grained sand
0.5' - 1.5'	Fine-grained sand, light brown
1.5' - 2.0'	Fine-grained sand, brown
2.0' - 7.0'	Fine-grained sand, light tan
7.0'	Moist
Mottling observed at 2.7' (32")	
SB-4	08/19/2016
0' - 0.5'	Topsoil, medium to fine-grained sand
0.5' - 2.0'	Fine-grained sand, tan
2.0' - 7.0'	Fine-grained sand, light tan
7.0'	Moist
Mottling observed at 2.8' (34")	
SB-5	08/19/2016
0' - 0.5'	Topsoil, medium to fine-grained sand
0.5' - 1.5'	Fine-grained sand, tan
1.5' - 7.0'	Fine-grained sand, light tan
7.0'	Moist
Mottling observed at 2.7' (32")	
SB-6	08/19/2016
0' - 0.5'	Topsoil, medium to fine-grained sand
0.5' - 1.5'	Fine-grained sand, tan
1.5' - 7.0'	Fine-grained sand, light tan
7.0'	Moist
Mottling observed at 2.7' (32")	
SB-7	08/19/2016
0' - 0.5'	Topsoil, medium to fine-grained sand
0.5' - 1.5'	Fine-grained sand, tan
1.5' - 6.0'	Fine-grained sand, light tan
6.0'	Moist
Mottling observed at 2.8' (34")	



DEVELOPER:
BRUCKER BEACH WOODS, LLC
CONTACT: STEVE DAVIS
13788 LAKE SEDGE DRIVE
GRAND HAVEN, MI 49417
PH: (616) 638-2986



NOTE:
DRIVEWAY ACCESS TO ALL LOTS TO BE FROM BRUCKER WOODS COURT. NO LOT ACCESS TO BRUCKER STREET WILL BE ALLOWED.
DRIVES TO CONFORM TO SUBDIVISION CONTROL ORDINANCE SCO 4.4.1.
DRIVEWAYS TO CONFORM TO GRAND HAVEN TOWNSHIP PRIVATE ROADS AND DRIVEWAY ORDINANCE SCO 5.4.

NET AREA:
232,906.58 S.F.=5.35 ACRES
LOT DENSITY=0.76 LOT/ACRE

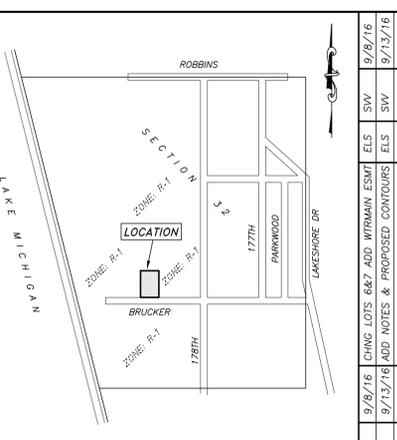
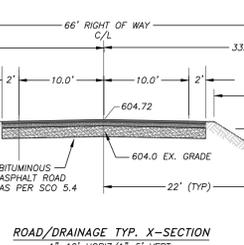
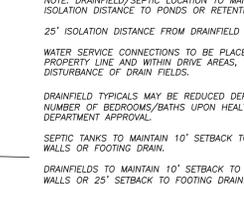
GROSS AREA:
273,993.48 S.F.=6.29 ACRES (INCLUDING AREA WITHIN R/W)
LOT DENSITY=0.90 LOT/ACRE

ZONING:
R-1 SINGLE FAMILY RESIDENTIAL DISTRICT
MIN WIDTH=100'
FRONT YARD SETBACK=50'
SIDE YARD SETBACK=15' TOTAL OF TWO=35'
REAR YARD SETBACK=50'
MINIMUM LOT AREA=15,000 S.F.
CORNER LOT SIDEYARD SETBACK = 25'
PROPOSED PRIVATE ROAD L.F.=344'

BENCHMARK NOTE:
FLANGE BOLT ON HYDRANT UNDER "E" IN E/W AT SOUTHEAST CORNER OF PROPERTY-NORTH SIDE BRUCKER ROAD. ELEV=605.94 NGVD 88

ALL LOTS TO BE SERVICED BY UNDERGROUND ELECTRIC, GAS, TELEPHONE AND CABLE TV.

LOTS 1 THRU 7 SERVED BY ON SITE SEPTIC & DRAINFIELD CONSTRUCTED TO REQUIREMENTS AND STANDARDS OF OTTAWA COUNTY HEALTH DEPARTMENT



LOCATION MAP
NO SCALE
SECTION 32, T8N, R16W,
OTTAWA COUNTY, MICHIGAN

LEGEND

●	FOUND IRON
○	POWER POLE
⊕	TELEPHONE RISER
⊕	EXIST. FIRE HYDRANT
⊕	WATER VALVE
⊕	GAS METER
▲	SOIL BORING
— G —	GAS LINE
— ATT —	ATT LINE
— F —	FRONTIER LINE
— DIMW —	EXIST. WATER LINE
—	EXIST. TREE LINE
—	EXIST. SPOT ELEVATION
—	MAJOR CONTOUR-5' INTERVAL
—	MINOR CONTOUR-1' INTERVAL
—	EXISTING FEATURES
—	STOP SIGN
—	STREET SIGN
— X —	FENCE
—	ASPHALT
—	GRAVEL
—	PROP. LIGHT POLE
—	PROP. FIRE HYDRANT
—	PROPOSED EASEMENTS
— UT —	PROP. UNDERGROUND PHONE
— UE —	PROP. UNDERGROUND POWER
—	PROP. CONTOURS
— DIMW —	PROP. WATERMAIN
— WS —	PROP. WATER SERVICE
—	PROP. CATCH BASIN
—	PROP. 12" HDPE CULVERT
—	GENERAL COMMON ELEMENT
—	LIMITED COMMON ELEMENT

DESCRIPTION: (TAX MAP #70-03-32-400-004)
FURNISHED LEGAL DESCRIPTION: (TAX MAP #70-03-32-400-004)
COMMENCING AT A POINT 275 FEET EAST OF THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 32, T8N, R16W, GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN; COMMENCING S88°39'50"E 275 FEET, EAST OF THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION FOR THE POINT OF BEGINNING; THENCE N01°20'05"E, A DISTANCE OF 504.15 FEET; THENCE N65°00'39"E, A DISTANCE OF 105.88 FEET; THENCE N37°13'40"E, A DISTANCE OF 129.36 FEET; THENCE S00°04'24"E, A DISTANCE OF 263.10 FEET; THENCE S00°04'24"E, A DISTANCE OF 658.14 FEET; TO THE SOUTH LINE OF SAID SECTION 32; THENCE N88°39'50"W, ALONG SAID SOUTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4, A DISTANCE OF 450.00 FEET TO THE POINT OF BEGINNING.

FURTHER DESCRIBED AS:
PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 SECTION 32, T8N, R16W, GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN; COMMENCING S88°39'50"E 275 FEET, EAST OF THE SOUTHWEST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION FOR THE POINT OF BEGINNING; THENCE N01°20'05"E, A DISTANCE OF 504.15 FEET; THENCE N65°00'39"E, A DISTANCE OF 105.88 FEET; THENCE N37°13'40"E, A DISTANCE OF 129.36 FEET; THENCE S00°04'24"E, A DISTANCE OF 263.10 FEET; THENCE S00°04'24"E, A DISTANCE OF 658.14 FEET; TO THE SOUTH LINE OF SAID SECTION 32; THENCE N88°39'50"W, ALONG SAID SOUTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4, A DISTANCE OF 450.00 FEET TO THE POINT OF BEGINNING.

DESCRIPTION: IS THE COMBINATION OF PARCELS #70-03-32-400-092 AND #70-03-32-400-093

NO.	DATE	DESCRIPTION	BY	CHK'D	DATE
1	9/8/16	CHANG LOTS 6&7 ADD WATERMAIN	ELS	SW	9/13/16
2	9/13/16	ADD NOTES & PROPOSED CONTOURS	ELS	SW	9/19/16
3	9/19/16	ADD UPDATED SOIL BORING CHART	ELS	SW	10/4/16
4	10/4/16	ADD CURVE DATA	CAG	SW	10/25/16
5	10/25/16	UPDATE PRIVATE TO "PUBLIC"	NSS	SW	11-09-16
6	11-09-16	REV. AS PER TOWNSHIP REVIEW	NSS	SW	11-22-16
7	11-22-16	REMOVE SIDEWALK/ADD FENCE	NSS	SW	1-28-17
8	1-28-17	SHIFT DRAINFIELDS	NSS	SW	3-14-17
9	3-14-17	QC/C COMMENTS	NSS	SW	3-14-17
10	3-22-17	CHANGED TO PRIVATE ROAD	NSS	SW	3-22-17
11	4-05-17	CHANGED ROAD NAME	NSS	SW	4-05-17

DATE: 8-05-16
DRAWN BY: NSS
CHECKED BY: NSS
DESIGNED BY: NSS

2534 Black Creek Road
Muskegon, MI 49444
Ph: (231) 777-3447
Fax: (231) 773-3453
Service@WestshoreConsulting.com

WESTSHORE CONSULTING
Engineers • Scientists • Surveyors • Planners

"BRUCKER BEACH WOODS"
PRELIMINARY SITE CONDOMINIUM
SITE PLAN

PART OF SE 1/4 SECTION 32, T8N, R16W, MICHIGAN
OTTAWA COUNTY, MICHIGAN

SITE PLAN
PROJECT: 04230-0001
SHEET: 1 OF 1

OTTAWA COUNTY CONDOMINIUM SUBDIVISION PLAN NO.
EXHIBIT "B" TO THE MASTER DEED OF:

BRUCKER BEACH WOODS

FIRST AMENDMENT

BEING PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4,
SECTION 32, TOWN 8 NORTH, RANGE 16 WEST, TOWNSHIP OF
GRAND HAVEN, COUNTY OF OTTAWA, STATE OF MICHIGAN

DEVELOPER:
BRUCKER BEACH WOODS, LLC
13786 LAKE SEDGE DRIVE
GRAND HAVEN, MI 49417
CONTACT: STEVE DAVIS
PHONE: (616) 638-2986

ENGINEER:
WESTSHORE CONSULTING
2534 BLACK CREEK ROAD
MUSKEGON, MI. 49444-2674

CONDOMINIUM SUBDIVISION PLANS SHALL BE
NUMBERED CONSECUTIVELY WHEN RECORDED BY
THE REGISTER OF DEEDS AND SHALL BE
DESIGNATED _____ COUNTY
SUBDIVISION PLAN NUMBER _____.

DESCRIPTION:

DESCRIPTION: (TAX MAP #70-03-32-400-004)

FURNISHED LEGAL DESCRIPTION: (TAX MAP #70-03-32-400-004)

COMMENCING AT A POINT 275 FEET EAST OF THE SOUTHWEST CORNER
OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 32,
TOWN 8 NORTH, RANGE 16 WEST, GRAND HAVEN TOWNSHIP, OTTAWA
COUNTY, MICHIGAN; THENCE EAST 450 FEET; THENCE NORTH TO THE
SOUTH LINE OF THE PLAT OF SHORE ACRES SUBDIVISION; THENCE
FOLLOWING SOUTH OF SAID PLAT TO A POINT DIRECTLY NORTH OF THE
PLACE OF BEGINNING; THENCE SOUTH TO THE PLACE OF BEGINNING.

FURTHER DESCRIBED AS:

PART OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 SECTION 32,
T.8N., R.16W., GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN..
COMMENCING S88°39'50"E 275 FEET, EAST OF THE SOUTHWEST CORNER
OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION
FOR THE POINT OF BEGINNING; (SAID POINT OF BEGINNING LOCATED
S00°06'30"E 1337.40 FEET AND N88°39'45"W 2377.58 FEET FROM THE
EAST 1/4 CORNER.)

THENCE N01°20'05"E, A DISTANCE OF 504.15 FEET;
THENCE N65°00'39"E, A DISTANCE OF 105.88 FEET;
THENCE N37°13'40"E, A DISTANCE OF 129.36 FEET;
THENCE S89°06'30"E, A DISTANCE OF 263.10 FEET;
THENCE S00°04'24"E, A DISTANCE OF 658.14 FEET, TO THE SOUTH
LINE OF SAID SECTION 32;
THENCE N88°39'50"W, ALONG SAID SOUTH LINE OF THE NORTHWEST
14 OF THE SOUTHEAST 1/4, A DISTANCE OF 450.00 FEET TO THE
POINT OF BEGINNING.

PARCEL CONTAINS 6.29 ACRES, MORE OR LESS.

DESCRIPTION IS THE COMBINATION OF PARCELS #70-03-32-400-092
AND #70-03-32-400-093

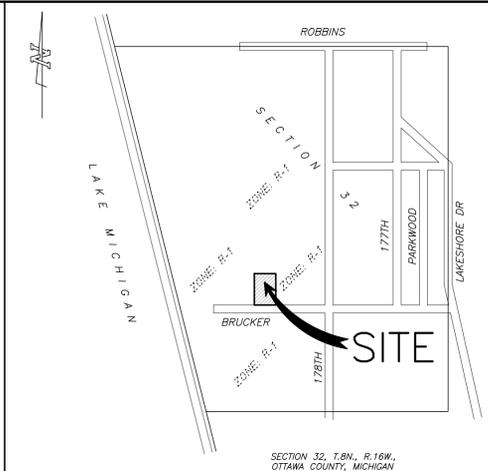
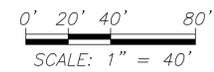
SHEET INDEX

1	COVER SHEET
2	SURVEY PLAN
3	SITE PLAN & CROSS SECTION
4	UTILITY PLAN

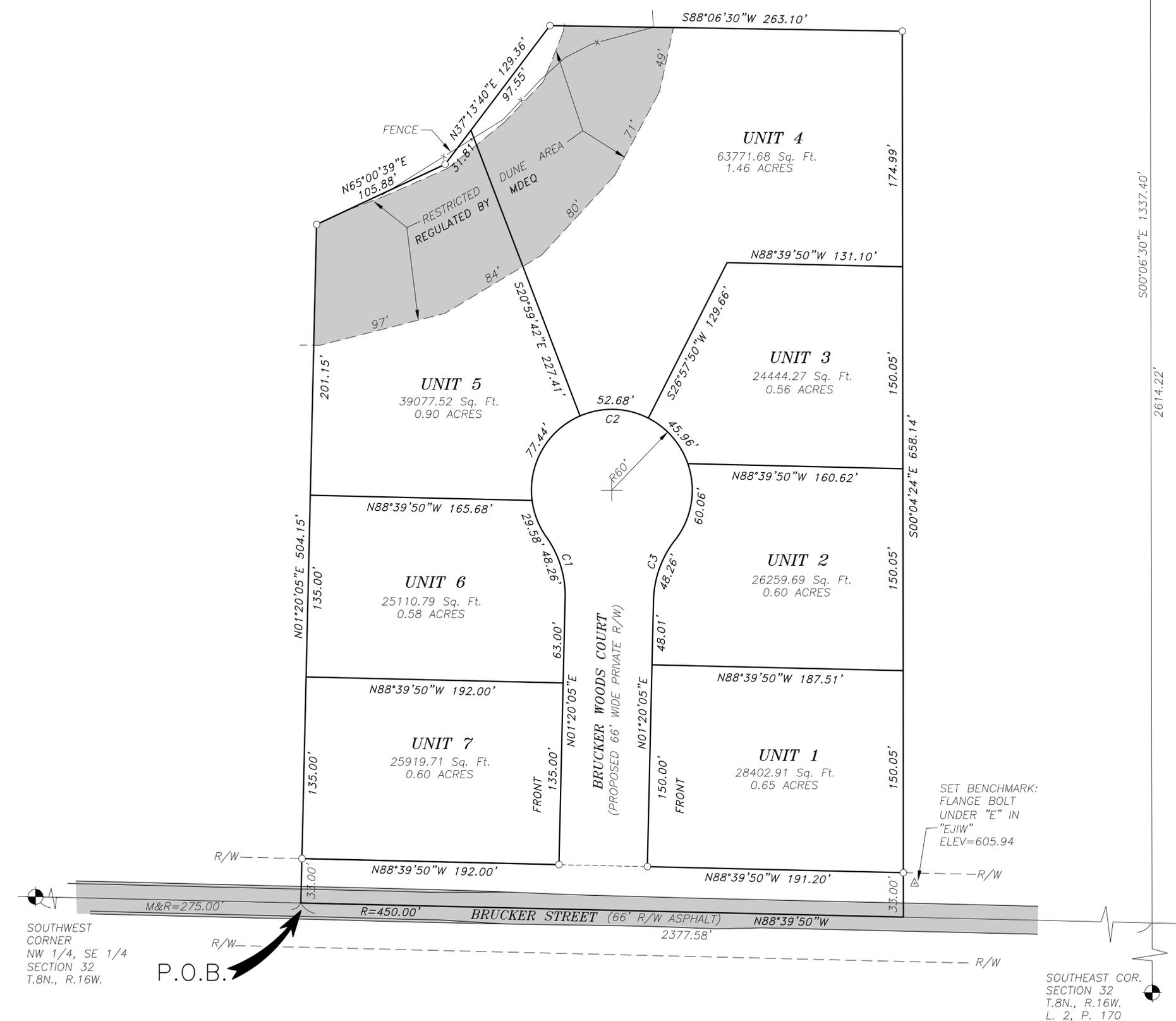
DATE	10/10/16	10/10/16	10/10/16	10/10/16	10/10/16	10/10/16	10/10/16
NO.	1	2	3	4	???	NO.	DATE
DESIGNED BY:	MDM/GPB	MDM/GPB	MDM/GPB	MDM/GPB	MDM/GPB	DESIGNED BY:	DATE
CHECKED BY:	SVV	SVV	SVV	SVV	SVV	CHECKED BY:	DATE
DRAWN BY:	ELS	ELS	ELS	ELS	ELS	DRAWN BY:	DATE
NOTES	REV. LOTS/DRAINAGE	NOTES	DATE				
CHANGED ROAD NAME	CHANGED ROAD NAME	CHANGED ROAD NAME	CHANGED ROAD NAME	CHANGED ROAD NAME	CHANGED ROAD NAME	CHANGED ROAD NAME	DATE
DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION	DATE
BY	BY	BY	BY	BY	BY	BY	DATE
CHK'D	CHK'D	CHK'D	CHK'D	CHK'D	CHK'D	CHK'D	DATE
WESTSHORE CONSULTING Engineers • Scientists • Surveyors • Planners							
PROPRIETOR: BRUCKER BEACH WOODS, LLC 13786 LAKE SEDGE DRIVE GRAND HAVEN, MI 49417							
PROJECT NAME: "BRUCKER BEACH WOODS" SITE CONDOMINIUM PART OF SECTION 32, T8N., R16W, OTTAWA COUNTY, MICHIGAN							
COVER SHEET							
PROJECT # 04230-0001 SHEET # 1 OF 4							

STEPHEN V. VALLIER LLS 28428 DATE:
WESTSHORE CONSULTING
2534 BLACK CREEK ROAD
MUSKEGON, MI. 49444-2674

E 1/4 CORNER
SECTION 32
T.8N., R.16W.
L. 4, P. 221



NO.	DATE	DESCRIPTION	BY	CHK'D	DATE
1	10/10/16				
2	11-14-16				
3	3-23-17	REV. LOTS/DRAINAGE	NSS	SVV	11-14-16
4	4-06-17	CHANGED TO PRIVATE ROAD	NSS	SVV	3-23-17
		CHANGED ROAD NAME	NSS	SVV	4-06-17



SOUTHWEST CORNER
NW 1/4, SE 1/4
SECTION 32
T.8N., R.16W.

P.O.B.

SOUTHEAST COR.
SECTION 32
T.8N., R.16W.
L. 2, P. 170

NOTES

- BOUNDARY AS SHOWN PER NAD 83 MICHIGAN STATE PLANE CO-ORDINATES SOUTH ZONE
- BENCHMARK INFORMATION:
FLANGE BOLT UNDER "E" IN EJIW
ELEV=605.94' U.S.G.S. DATUM
- FLOOD PLAIN INFORMATION
SUBJECT DOES NOT LAY WITHIN A DESIGNATED FLOOD ZONE BY FEMA MAP OF GRAND HAVEN TOWNSHIP COMMUNITY
PANEL #26139C0086E DATED: 12/16/11
- COORDINATES BASED ON STATE PLANE COORDINATES, SOUTH ZONE, NAD 83.

LEGEND

- = LIMITS OF OWNERSHIP
- 19 = UNIT NUMBER
- = SET CONCRETE MONUMENT
- △ = BENCHMARK
- x — = FENCE

CURVE	LENGTH	RADIUS	CHORD	DIRECTION	DELTA
C1	48.26'	75.00'	47.43'	N17°16'01"W	36°52'06"
C2	265.72'	60.00'	96.00'	N88°39'55"W	253°44'23"
C3	48.26'	75.00'	47.43'	S19°46'10"W	36°52'06"

SURVEYOR'S CERTIFICATE:
I, STEPHEN V. VALLIER, LICENSED LAND SURVEYOR OF THE STATE OF MICHIGAN HEREBY CERTIFY:
THAT THE SUBDIVISION PLAN KNOWN AS BRUCKER BEACH WOODS, FIRST AMENDMENT, CONDOMINIUM PLAN NO. _____, GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, STATE OF MICHIGAN, AS SHOWN ON THE ACCOMPANYING DRAWINGS REPRESENTS A SURVEY ON THE GROUND MADE UNDER MY DIRECTION, THAT THERE ARE NO EXISTING ENCROACHMENTS UPON THE LANDS AND THE PROPERTY HEREIN DESCRIBED.
THAT THE REQUIRED MONUMENTS AND IRON MARKERS HAVE BEEN LOCATED IN THE GROUND AS REQUIRED BY RULES PROMULGATED UNDER SECTION 142 OF ACT NO. 59 OF THE PUBLIC ACTS OF 1978.
THAT THE ACCURACY OF THIS SURVEY IS WITHIN THE LIMITS REQUIRED BY THE RULES PROMULGATED UNDER SECTION 142 OF ACT NO. 59 OF THE PUBLIC ACTS OF 1978.
THAT THE BEARINGS, AS SHOWN, ARE NOTED ON THE SURVEY PLAN AS REQUIRED BY THE RULES PROMULGATED UNDER SECTION 142 OF ACT NO. 59 OF THE PUBLIC ACTS OF 1978.

STEPHEN V. VALLIER LLS 28428 DATE:
WESTSHORE CONSULTING
2534 BLACK CREEK ROAD
MUSKEGON, MI. 49444-2674



PROPRIETOR:
BRUCKER BEACH WOODS, LLC
13786 LAKE SEBASTIAN DRIVE
GRAND HAVEN, MI 49417

PROJECT NAME:
"BRUCKER BEACH WOODS" SITE CONDOMINIUM PART OF SECTION 32, T8N., R16W, OTTAWA COUNTY, MICHIGAN

SURVEY SHEET

PROJECT # 04230-0001
SHEET # 2 OF 4



GRAND HAVEN CHARTER TOWNSHIP

Community Development Memo

DATE: April 13, 2017
 TO: Planning Commission
 FROM: Stacey Fedewa, Community Development Director
 RE: Special Land Use Application – Gasoline Station – 17200 Robbins Road

PROPERTY DETAILS			
Property Address	Parcel Number	Parcel Size	Application Type
17200 Robbins Rd	70-03-33-100-047	7 Acres (Overall) 0.6 Acres (Gas Station)	Gasoline Station Change in Use-Minor (Overlay Zone)
Existing Zoning	Existing Land Use	Existing Infrastructure	Existing Site Improvements
C-1 Commercial	Gasoline Station	Paved Roadway Municipal Water Sanitary Sewer Stormwater Sewer	Overall: 10 Buildings Project Site: 1 gas station, 2 canopies, 4 fuel pumps
Master-Planned Zoning	Surrounding Zoning & Land Uses		
	Direction	Zoning	Land Use
Regional Commercial	N	Commercial (City)	Walgreen's
	S	Commercial (Twp)	Motor Vehicle Repair
	E	Commercial (City)	Bank
	W	Commercial (Twp)	Pizza Hut

BACKGROUND

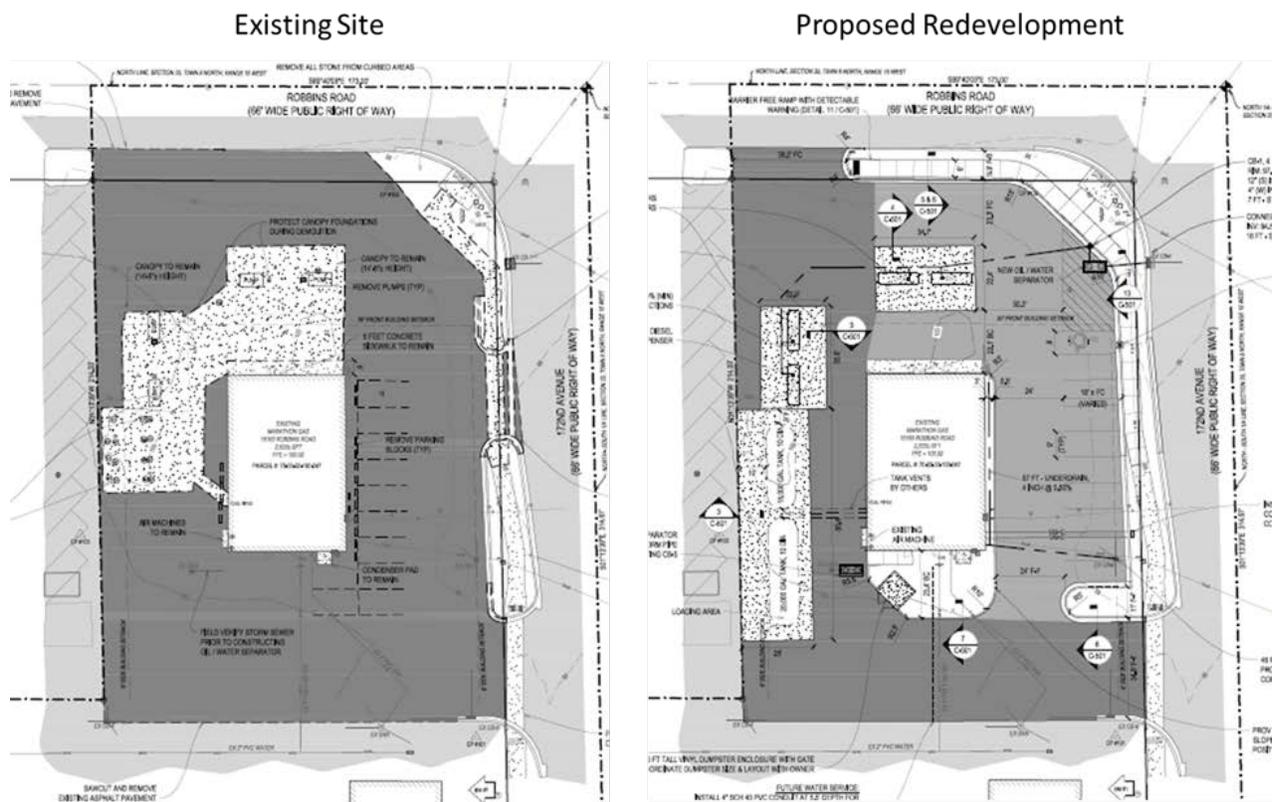
In October 2015, Robbins Road Real Estate LLC (the “Property Owner” purchased the former “VandenBerg” property with the intention of redeveloping the entire 7 acres. The first part of this redevelopment is a lease to Spartan Stores Fuel LLC (the “Developer”).

The redevelopment of a site in the Overlay Zone is uncommon, and it does not appear the Township has addressed a legally nonconforming site quite like this before. It is staff’s understanding the existing gas station did not receive a permit from the Township before it was constructed—the reasons for which are unknown.

The Overlay Zone requires a project to be determined as a Change in Use-Minor and Change in Use-Major. A Minor occurs when one permitted use is replaced by another permitted use. A Major occurs when one permitted use is replaced with a special land use, a special land use is replaced by a different special land use, or the property is rezoned for a different permitted or special land use. Unfortunately, this project does not fall into any of those categories.

The only difference between Minor and Major requirements is the submission of a Special Land Use application and must comply with architectural requirements. Based on these unique circumstances, staff determined a hybrid-type approach would be taken. The Developer will not be expanding the existing building, so architectural improvements are not required regardless of a Minor or Major designation. Because the site has never received a Special Land Use permit for a gas station on the site the Developer was required to submit a Special Land Use application for this project.

Proceeding in this fashion appears to accomplish the intentions of the Minor and Major designations.



ZONING COMPLIANCE

It is noted that numerous items of this project site are legally nonconforming, which staff will delineate within this memo when it impacts other requirements. Additionally, because the nonconformities impact the Overlay Zone requirements and Special Land Use requirements, each subject will be described along with its compliance and nonconformities.

Access Management Improvements

Essentially, the Access Management requirements of the Overlay Zone focus on reducing curb-cuts and creating additional space between driveways with the intention of reducing traffic conflicts.

There are 3 existing points of access on the project site.

1. The opening on Robbins Road will be reshaped, defined, and compliant with City requirements.
2. The northernmost opening on 172nd Avenue will be closed.
3. The southernmost opening on 172nd Avenue will remain in place, but is subject to additional reviews and possible relocation or reconstruction when the remainder of the site is redeveloped.

Landscaping Improvements

The existing site does not have landscaping, and the proposed site will add as much landscaping that is possible based on current conditions.

- The existing stones around the sidewalk will be removed and converted to grass. And the sidewalk will be extended onto Robbins Road.
- A true refuse enclosure will be constructed at the rear of the building and will be well landscaped with a tree, shrubs, and flowering plants.
- Tall grasses and flowering plants are proposed along the east wall of the building.
- Landscaping is also being provided near the existing pylon sign and will meet the requirements of the Clear Vision Ordinance.
- An interior landscape island is also being provided near the south driveway.

OTHER PERTINENT DETAILS

Architectural Improvements

Although this site is redeveloping as a Change in Use-Minor, which does not require architectural improvements, the Developer will voluntarily bring the building into closer compliance with the Overlay Zone requirements. These will include replacing the metal siding with a “wood-look” siding and trim, as well as replacing the light fixtures on the building.

Parking Schedule

The Developer is proposing 10 spaces, which complies with the Overlay Zone requirements for parking. Comparatively, outside the overlay zone a total of 16 parking spaces could be provided.

Signage

At this time, the Developer will reface the existing pylon sign and add their logo to the fueling canopies. All of which will comply with Township regulations.

It is noted, the Developer may reopen their signage discussions when the remainder of the site is redeveloped as a Commercial PUD by the Property Owner because they desire additional signage than what is currently allowed.

Construction Timeline

The lease officially changed hands the first week of April. Part of this includes the former tenant removing their underground storage tanks, and the new Developer replacing them with their own new tanks.

This is not a quick, simple, or easy task to achieve. Part of this change will require a lane closure on 172nd because the extra liquid materials will be discharged into the sanitary sewer system. All of the appropriate permits have been obtained, or will be issued soon, in order to accomplish this task. This part of the project does not require Planning Commission approval, which is why this part of the work has begun. After the tanks are replaced the Developer will also install new fuel pump stations.

The Developer has a quick construction timeline with site improvements beginning shortly after receiving approval from the Township, anticipate it will take 6 – 8 weeks, and therefore plans to reopen mid- to late-June.

VARIANCE NEEDED

The unique nonconforming nature of this site, in conjunction with the Overlay Zone requirements, has led to the need for the Developer to apply for a variance. One of the purposes of the Overlay Zone is an emphasis on aesthetics and reducing the visual impact of buildings through landscaping.

The Developer is proposing to plant landscaping along the eastern edge of the building, and then place 10 parking spaces along the eastern lot line. While this satisfies the Overlay Zone requirement, it also creates one because the parking spaces would be located within the required side yard.

There are two Sections of the Ordinance that impact this topic—24.02.2, which does not allow parking with the required side yard; and 20.19.5.B, which requires a commercially zoned corner lot to have a side street setback of at least 40 feet.

A 40-foot side street setback would eliminate the ability to have parking spaces on the eastern half of the site, and there is not enough room on the remainder to install 10 spaces.

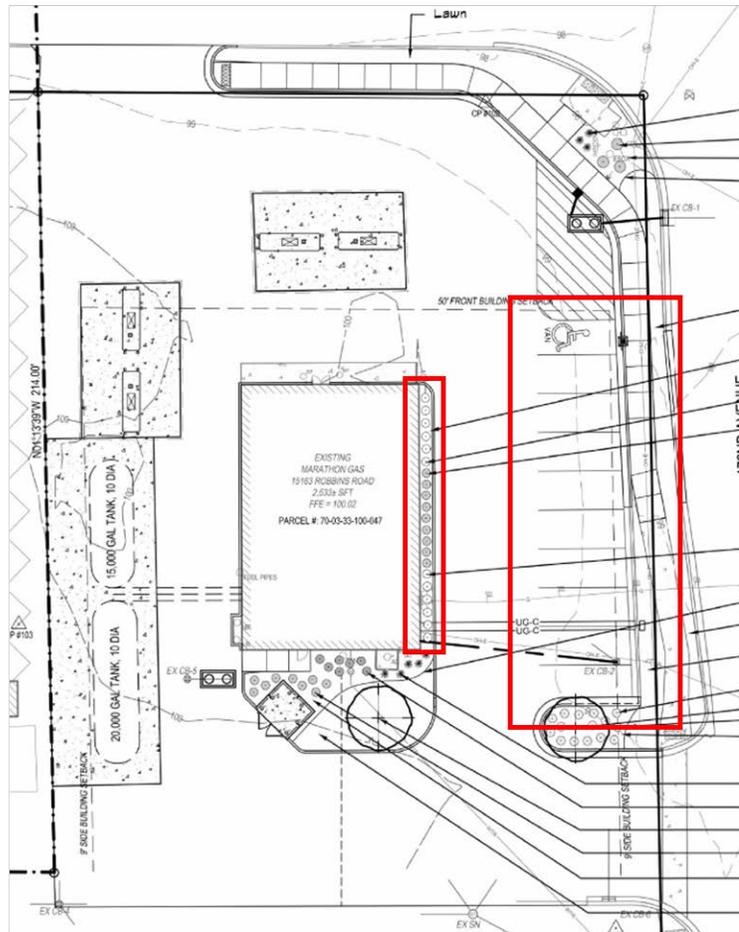
Furthermore, the ZBA will need to determine where emphasis of the Ordinance be placed—Overlay Zone landscaping or parking in the required side yard.

What's Next

If the Planning Commission conditionally approves this application staff recommends the motion direct the Developer to commence construction, but delay striping the parking lot and installing the landscaping along the eastern wall of the building until the ZBA makes a determination.

Furthermore, staff recommends the motion indicate that if the ZBA does not grant the variance then the Developer can revise the plan to move the parking spaces against the building wall and remove the landscaping against the eastern wall of the building, and allow staff to approve the plan administratively.

Landscaping & Parking Space – Subject of Variance



SAMPLE MOTIONS

If the Planning Commission finds the Spartan Stores Fuel LLC Special Land Use application meets the applicable standards, the following motion can be offered:

Motion to conditionally approve the Spartan Stores Fuel LLC application for a Gasoline Station at 17200 Robbins Road. This is based on the application meeting the requirements and standards set forth by the Grand Haven Charter Township Zoning Ordinance, Master Plan, and Robbins Road Sub-Area Plan. This action is based upon the findings and other information included in the Planning Commission report. Approval is subject to the following conditions:

1. The Developer shall apply for a variance to address the location of the parking spaces. In the interim, the Developer is permitted to commence construction, but shall not stripe the parking lot, or install landscaping along the eastern wall of the building, until the Zoning Board of Appeals has made a determination.

2. If the Zoning Board of Appeals denies the variance request, the Developer is authorized to revise the site plan, relocate the parking to the eastern wall of the building, and remove the landscaping along that same wall. The Zoning Administrator is authorized to approve this revision administratively.
3. Approval and compliance with all requirements of the Ottawa County Road Commission, Ottawa County Water Resources Commissioner, City of Grand Haven, and applicable divisions of the State of Michigan such as the Department of Environmental Quality and Bureau of Fire Services.

If the Planning Commission finds the Spartan Stores Fuel LLC Special Land Use application does not meet the applicable standards, the following motion can be offered:

Motion to deny the Spartan Stores Fuel LLC Special Land Use application, and direct staff to draft a formal motion and report with those discussion points which will be reflected in the meeting minutes. This will be reviewed and considered for adoption at the next meeting.

If the Planning Commission finds the applicant must make revisions to the Special Land Use application, the following motion can be offered:

Motion to table the Spartan Stores Fuel LLC application, and direct the applicant to make the following revisions:

1. *List the revisions.*

REPORT OF FINDINGS (TO BE USED WITH A MOTION FOR APPROVAL)

1. The Project meets the site plan review standards of Section 23.06 of the Zoning Ordinance. Specifically, pursuant to Section 23.06.7, the Planning Commission finds as follows:
 - A. The uses proposed will not adversely affect the public health, safety, or welfare. Uses and structures located on the site take into account topography, size of the property, the uses on adjoining property and the relationship and size of buildings to the site. The site will be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this ordinance.
 - B. Safe, convenient, uncontested, and well defined vehicular and pedestrian circulation is provided for ingress/egress points and within the site. Drives, streets and other circulation routes are designed to promote safe and efficient traffic operations within the site and at ingress/egress points.
 - C. The arrangement of public or private vehicular and pedestrian connections to existing or planned streets in the area are planned to provide a safe and efficient circulation system for traffic within the township.
 - D. Removal or alterations of significant natural features are restricted to those areas which are reasonably necessary to develop the site in accordance with the requirements of this

Ordinance. The Planning Commission has required that landscaping, buffers, and/or greenbelts be preserved and/or provided to ensure that proposed uses will be adequately buffered from one another and from surrounding public and private property.

- E. Areas of natural drainage such as swales, wetlands, ponds, or swamps are protected and preserved insofar as practical in their natural state to provide areas for natural habitat, preserve drainage patterns and maintain the natural characteristics of the land.
 - F. The site plan provides reasonable visual and sound privacy for all dwelling units located therein and adjacent thereto. Landscaping shall be used, as appropriate, to accomplish these purposes.
 - G. All buildings and groups of buildings are arranged so as to permit necessary emergency vehicle access as requested by the fire department.
 - H. All streets and driveways are developed in accordance with the Ottawa County Road Commission specifications, as appropriate.
 - I. Appropriate measures have been taken to ensure that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Provisions have been made to accommodate storm water, prevent erosion and the formation of dust.
 - J. Exterior lighting is arranged so that it is deflected away from adjacent properties and so it does not interfere with the vision of motorists along adjacent streets, and consists of sharp cut-off fixtures.
 - K. All loading and unloading areas and outside storage areas, including areas for the storage of trash, which face or are visible from residential districts or public streets, are screened.
 - L. Entrances and exits are provided at appropriate locations so as to maximize the convenience and safety for persons entering or leaving the site.
 - M. The site plan conforms to all applicable requirements of County, State, Federal, and Township statutes and ordinances.
 - N. The general purposes and spirit of this Ordinance and the Master Plan of the Township are maintained.
2. This approval is based on the affirmative findings that each of the following Special Land Use standards has been fulfilled:
- A. The proposed use is consistent with, and promotes the intent and purpose of this Ordinance.
 - B. The proposed use is of such location, size, density, and character as to be compatible with adjacent uses of land and the orderly development of the district in which situated and of adjacent districts.
 - C. The proposed use does not have a substantially detrimental effect upon, nor substantially impair the value of, neighborhood property.
 - D. The proposed use is reasonably compatible with the natural environment of the subject premises and adjacent premises.
 - E. The proposed use does not unduly interfere with provision of adequate light or air, nor overcrowd land or cause a severe concentration of population.
 - F. The proposed use does not interfere or unduly burden water supply facilities, sewage collection and disposal systems, park and recreational facilities, and other public services.

- G. The proposed use is such that traffic to, from, and on the premises and the assembly of persons relation to such use will not be hazardous, or inconvenient to the neighborhood, nor unduly conflict with the normal traffic of the neighborhood, considering, among other things: safe and convenient routes for pedestrian traffic, particularly of children, the relationship of the proposed use to main thoroughfares and to streets and intersections, and the general character and intensity of the existing and potential development of the neighborhood.
 - H. The proposed use is consistent with the health, safety, and welfare of the Township.
3. The Planning Commission also finds the Project complies with the US-31 and M-45 Area Overlay Zone findings and statement of purpose found in Section 15A.01 of the Zoning Ordinance:
- A. Accommodates a variety of uses permitted by the underlying zoning, but ensure such uses are designed to achieve an attractive built and natural environment.
 - B. Provides architectural and site design standards that are more demanding than required elsewhere in the Township in order to promote harmonious development and complement the natural characteristics in the western sections of the Township.
 - C. Promotes public safety and efficient flow of vehicular traffic by minimizing conflicts from turning movements resulting from the proliferation of unnecessary curb cuts and driveways.
 - D. Ensures safe access by emergency vehicles.
 - E. Encourages efficient flow of traffic by minimizing the disruption and conflicts between through traffic and turning movements.
 - F. Preserve the capacity along US-31/M-45 and other roads in the Overlay Zone by limiting and controlling the number and location of driveways, and requiring alternate means of access through shared driveways, service drives, and access via cross streets.
 - G. Reduces the number and severity of crashes by improving traffic operations and safety.
 - H. Requires coordinated access among adjacent lands where possible.
 - I. Provides landowners with reasonable access, although the access may be restricted to a shared driveway, service drive, or via a side street, or the number and location of access points may not be the arrangement most desired by the landowner or applicant.
 - J. Requires demonstration that prior to approval of any land divisions, the resultant parcels is accessible through compliance with the access standards herein.
 - K. Preserves woodlands, view sheds, and other natural features along the corridor.
 - L. Ensures that distractions to motorists are minimized by avoiding blight and clutter while providing property owners and businesses with appropriate design flexibility and visibility.
 - M. Implements the goals expressed in the US-31/M-45 Corridor Study.
 - N. Establishes uniform standards to ensure fair and equal application.
 - O. Addresses situations where existing development within the Overlay Zone does not conform to the standards of this chapter.
 - P. Promotes a more coordinated development review process with the Michigan Department of Transportation and the Ottawa County Road Commission.

Clear Form

Print



GRAND HAVEN CHARTER TOWNSHIP

SPECIAL LAND USE APPLICATION

Application Type	Fee	Escrow*	Sewer Escrow**	
Original	\$125	\$1,000	Main Extension	\$5,000
Amendment	\$100	\$500	Lift Station	\$2,000

Applicant Information

Name Spartan Stores Fuel, LLC - Brett Parker
 Phone (616) 878-8507 Fax _____
 Address 850 76th Street, SW, Grand Rapids, MI 49518
 Email Address Brett_Parker@SpartanStores.com

Owner Information (If different from applicant)

Name Robbins Road Real Estate, LLC & Bowling Family Investment LLC
 Phone (616) 726-2703 Fax _____
 Address PO Box 1029, Saugatuck, MI 49453

Property Information

Address/Location 17200 Robbins Road
 Parcel Number 70 - 03 - 33 - 100 - 047 Size (acres) 6.63 (partial)
 Current Zoning C-1 with Overlay Master-Planned Zoning Regional Commercial

Description of Proposed Use/Request (attach additional pages as needed)

Maintain existing gas station use. Site and building improvements.

NOTE: The architect, engineer, planner, or designer shall be responsible for utilizing the Township Ordinance books and following all applicable requirements, including those of Chapters 19 and 23 of the Zoning Ordinance. Initially, submit five copies of the required information for staff review. Once staff has granted tentative approval, additional copies will be required as requested by staff.

I hereby attest the information on this application is, to the best of my knowledge, true and accurate.

Digitally signed by Brett Parker
 DN: cn=Brett Parker, o=SpartanStores, ou=Real Estate, email=Brett.Parker@SpartanStores.com, c=US
 Date: 2017.01.23 07:28:31 -0500

Signature of applicant

1/23/17

Date

* To cover cost of legal and consulting fees, may be increased as necessary

** If approval of this application requires/includes the extension of a municipal sanitary sewer main, an additional \$5,000.00 escrow fee shall be required, and an additional \$2,000.00 escrow fee shall be required for the installation of a lift station.

March 29, 2017 (Revised)

Stacey Fedewa – Community Development Director
Grand Haven Charter Township
13300 168th Avenue
Grand Haven, MI 49417

Re: D&W Quick Stop - Site Plan Submittal
Grand Haven, MI
PDI Project #1605068

Dear Stacey:

In addition to the previously submitted plans for the above project, we have prepared the following information summarizing project conformance with Chapter 15A of the zoning ordinance (US-31 & M-45 area overlay zone).

Based on our previous discussion, including the December 19th and March 1st “pre-application” meetings, the project is classified as a “Change in Use-Minor” relative to Section 15A.03A Applicability Matrix. This matrix triggers compliance with landscaping improvements, access management improvements, and “discretionary” improvements.

- Section 15A.06 Access Standards
 - The applicant (Spartan Nash) will lease a portion of the existing larger parcel, and will have one (1) “dedicated” driveway (existing) on Robbins Rd. The 172nd Ave. driveway provides access to the project, but is part of an off-site shared access point.
 - As part of the proposed project improvements, an existing driveway on 172nd Ave. will be closed to comply with this section.
 - Minimum driveway spacing per this section is “not applicable” as the driveways are existing access points today.
- Section 15A.08 Dimensional Standards
 - This section does not apply, as the existing building setbacks and yard dimensions will not change from existing conditions.
- Section 15A.09 Woodland Protection
 - This section does not apply, as the existing site condition is entirely impervious surface.
- Section 15A.10 Landscaping and Overall Site Design
 - The perimeter paved drives and parking areas will contain curbing
 - Parking provided does not exceed the minimum requirement of one (1) space per 200 sf “useable” area.
 - Greenspace and plantings have been added south of the C-store building.

March 29, 2017 (Revised)
Stacey Fedewa - Grand Haven Charter Township
Site Plan Summary
PDI Project #1605068

- Plantings have been added where space allows at modified 172nd Ave. driveway and intersection of Robbins and 172nd Ave.
- Section 15A.11 Architecture
 - This section does not apply to “Change in Use – Minor”, but we have attempted to demonstrate a change to bring the existing building closer to compliance from its current condition, as follows:
 - The existing building is a pre-engineered metal building, with metal siding on three (3) sides.
 - The existing metal siding will be replaced with a cement-fiber “wood-look” type siding and trim, similar to many buildings within the Township and City of Grand Haven (surrounding area). This would meet the intent of the ordinance “south” of Hayes Rd., even though this site is “north” of Hayes Rd.
 - The proposed EIFS on gable ends and eave fascia of the building represent less than 20% of each façade facing a public street.
 - The Robbins Rd. elevation complies with window requirement (greater than 15%, less than 80%). The 172nd Ave. elevation is not proposed to change, so this requirement does not change from its existing condition.
 - Fueling canopy style will remain the same, including the existing LED canopy lighting (no site lighting modifications proposed).

We feel that the site and building plans, as submitted, comply with the applicable regulations of your township zoning ordinance, and address the staff comments memo dated 3-24-2017.

Should you have any questions, or require any additional information, please do not hesitate to contact me at (616) 785-5567 or via email at jwalsh@paradigmae.com.

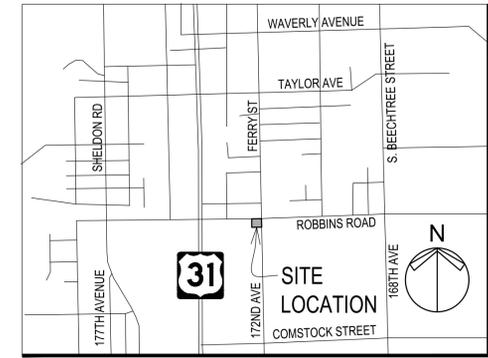
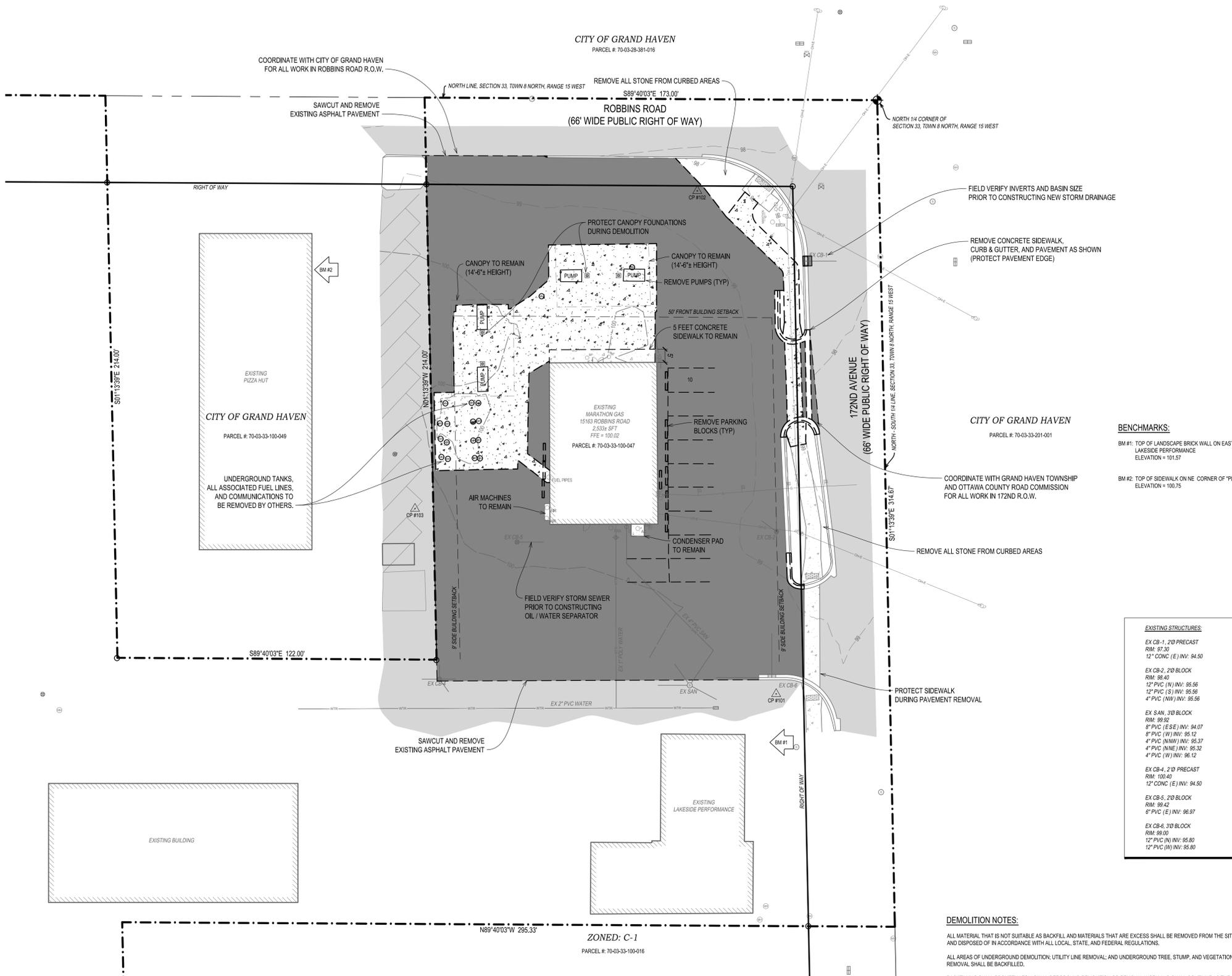
Respectfully Submitted,

PARADIGM DESIGN, INC.



John R. Walsh, P.E.
Principal Engineer

Cc: Brett Parker (Spartan Nash)



LOCATION MAP
NOT TO SCALE

DEVELOPMENT REFERENCE:

OWNER: SPARTAN STORES FUEL, LLC
850 76TH STREET
GRAND RAPIDS, MI 49518

CIVIL ENGINEER: PARADIGM DESIGN
550 3 MILE ROAD N.W., SUITE B
GRAND RAPIDS, MI 49544
(616) 785-5656

SURVEYOR: PARADIGM DESIGN
550 3 MILE ROAD N.W., SUITE B
GRAND RAPIDS, MI 49544
(616) 785-5656

SURVEY DESCRIPTION:

PARCEL 2

A PARCEL OF LAND BEING PART OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 33, TOWN 8 NORTH, RANGE 16 WEST, GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH 1/4 CORNER OF SAID SECTION 33, THENCE SOUTH 01 DEGREES 13 MINUTES 39 SECONDS EAST 314.67 FEET ALONG THE NORTH AND SOUTH 1/2 LINE OF SECTION 33, THENCE NORTH 89 DEGREES 40 MINUTES 03 SECONDS WEST 295.33 FEET PARALLEL WITH THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 33, THENCE SOUTH 01 DEGREES 13 MINUTES 39 SECONDS EAST 345.33 FEET PARALLEL WITH THE NORTH AND SOUTH 1/2 LINE OF SECTION 33, THENCE NORTH 89 DEGREES 42 MINUTES 11 SECONDS WEST 386.55 FEET, THENCE NORTH 00 DEGREES 19 MINUTES 57 SECONDS EAST 280.00 FEET, THENCE SOUTH 89 DEGREES 40 MINUTES 03 SECONDS EAST 53.00 FEET PARALLEL WITH THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 33, THENCE NORTH 00 DEGREES 19 MINUTES 57 SECONDS EAST 243.00 FEET, THENCE SOUTH 89 DEGREES 40 MINUTES 03 SECONDS EAST 45.00 FEET PARALLEL WITH THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 33, THENCE NORTH 00 DEGREES 19 MINUTES 57 SECONDS EAST 137.00 FEET TO A POINT ON THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 33 AND BEING LOCATED SOUTH 89 DEGREES 40 MINUTES 03 SECONDS EAST 886.50 FEET FROM THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 33, THENCE SOUTH 89 DEGREES 40 MINUTES 03 SECONDS EAST 300.91 FEET ALONG THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 33, THENCE SOUTH 01 DEGREES 13 MINUTES 39 SECONDS EAST 214.00 FEET PARALLEL WITH THE NORTH AND SOUTH 1/2 LINE OF SECTION 33, THENCE SOUTH 89 DEGREES 40 MINUTES 03 SECONDS EAST 122.00 FEET PARALLEL WITH THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 33, THENCE NORTH 01 DEGREES 13 MINUTES 39 SECONDS WEST 214.00 FEET PARALLEL WITH THE NORTH AND SOUTH 1/2 LINE OF SECTION 33 TO THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 33, THENCE SOUTH 89 DEGREES 40 MINUTES 03 SECONDS EAST 173.00 FEET ALONG THE NORTH LINE OF THE NORTHWEST 1/4 OF SECTION 33 TO THE POINT OF BEGINNING.

BENCHMARKS:

BM #1: TOP OF LANDSCAPE BRICK WALL ON EAST SIDE OF LAKESIDE PERFORMANCE
ELEVATION = 101.57

BM #2: TOP OF SIDEWALK ON NE CORNER OF "PIZZA HUT"
ELEVATION = 100.75

EXISTING STRUCTURES:

EX CB-1, 2ND PRECAST
RM: 97.30
12" CONC (E) INV: 94.50

EX CB-2, 2ND BLOCK
RM: 98.40
12" PVC (N) INV: 95.56
12" PVC (S) INV: 95.59
4" PVC (NW) INV: 95.56

EX SAN, 3RD BLOCK
RM: 99.92
8" PVC (ESE) INV: 94.07
8" PVC (W) INV: 95.12
4" PVC (NW) INV: 95.37
4" PVC (NW) INV: 95.32
4" PVC (W) INV: 96.12

EX CB-4, 2ND PRECAST
RM: 100.40
12" CONC (E) INV: 94.50

EX CB-5, 2ND BLOCK
RM: 99.42
8" PVC (E) INV: 96.97

EX CB-4, 3RD BLOCK
RM: 98.00
12" PVC (N) INV: 95.80
12" PVC (W) INV: 95.80

EXISTING LEGEND

BENCHMARK	CONTROL POINT	SIGN
PROPERTY IRON	BOLLARD POST	MANHOLE
WATER		
VALVE	UTILITY POLE	METER
CURB STOP	GUY WIRE	"MISS DIG" FLAG - GAS
SANITARY SEWER		
PIT	METER	
MANHOLE	PEDESTAL	STORM SEWER
PEDESTAL	PEDESTAL SIGNAL	MANHOLE
		CURB CATCH BASIN
		ROUND CATCH BASIN
TELEPHONE		
TRAFFIC		
		CONCRETE PAVEMENT
		ASPHALT PAVEMENT
		PROPERTY LINE
		CONTOUR LINE
		OVERHEAD ELECTRIC
		STORM SEWER
		WATER MAIN
		NATURAL GAS

DEMOLITION NOTES:

ALL MATERIAL THAT IS NOT SUITABLE AS BACKFILL AND MATERIALS THAT ARE EXCESS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

ALL AREAS OF UNDERGROUND DEMOLITION, UTILITY LINE REMOVAL, AND UNDERGROUND TREE, STUMP, AND VEGETATION REMOVAL SHALL BE BACKFILLED.

BACKFILLING SHALL PROMPTLY FOLLOW UNDERGROUND DEMOLITION OR REMOVAL WORK AND SHALL CONTINUE AS THE DEMOLITION PROGRESSES.

CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING FOR AND OBTAINING ALL NECESSARY DEMOLITION PERMITS AND PAYING FOR ANY ASSOCIATED PERMIT FEES.

NOTIFY ARCHITECT/ENGINEER OF ANY OTHER UNDERGROUND MATERIALS OR EQUIPMENT ENCOUNTERED DURING EXCAVATION NOT SPECIFICALLY NOTED ON THE DRAWINGS(S).

PRIVATE UTILITY REMOVAL - CONTRACTOR TO COORDINATE PRIVATE UTILITY (GAS, ELECTRIC, PHONE, CABLE, ETC.) REMOVAL WITH APPROPRIATE AUTHORITY. ALTHOUGH ALL PRIVATE UTILITY SERVICES MAY NOT BE SHOWN ON THIS DRAWING, CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SERVICE TO RIGHT-OF-WAY LINE.

PUBLIC UTILITY REMOVAL - CONTRACTOR TO COORDINATE PUBLIC UTILITY (WATER, SEWER, STORM) REMOVAL WITH APPROPRIATE UTILITY COMPANY. ALTHOUGH ALL PUBLIC UTILITY SERVICES MAY NOT BE SHOWN ON THIS DRAWING, CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SERVICE TO RIGHT-OF-WAY LINE.

WHERE CURBING OR PAVEMENT IS INDICATED TO BE REMOVED, IT SHALL BE SAWCUT FULL DEPTH. REMOVE TO THE NEAREST JOINT IF THE JOINT IS WITHIN 3 FEET OF THE REMOVAL LINE. VERIFY REMOVAL LIMITS WITH ENGINEER PRIOR TO BEGINNING WORK.

DEMOLITION LEGEND

(Symbol)	DEMOLITION ITEMS
(Symbol)	PAVEMENT REMOVAL
(Symbol)	CONCRETE REMOVAL
(Symbol)	CURB REMOVAL
(Symbol)	REMOVE THESE ITEMS

ARCHITECTS • ENGINEERS

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PROJECT

SPARTAN STORES FUEL, LLC

15163 ROBBINS ROAD
GRAND HAVEN, MI 49417

OWNER

SPARTAN STORES FUEL, LLC

SpartanNash.

850 76TH STREET
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1605068

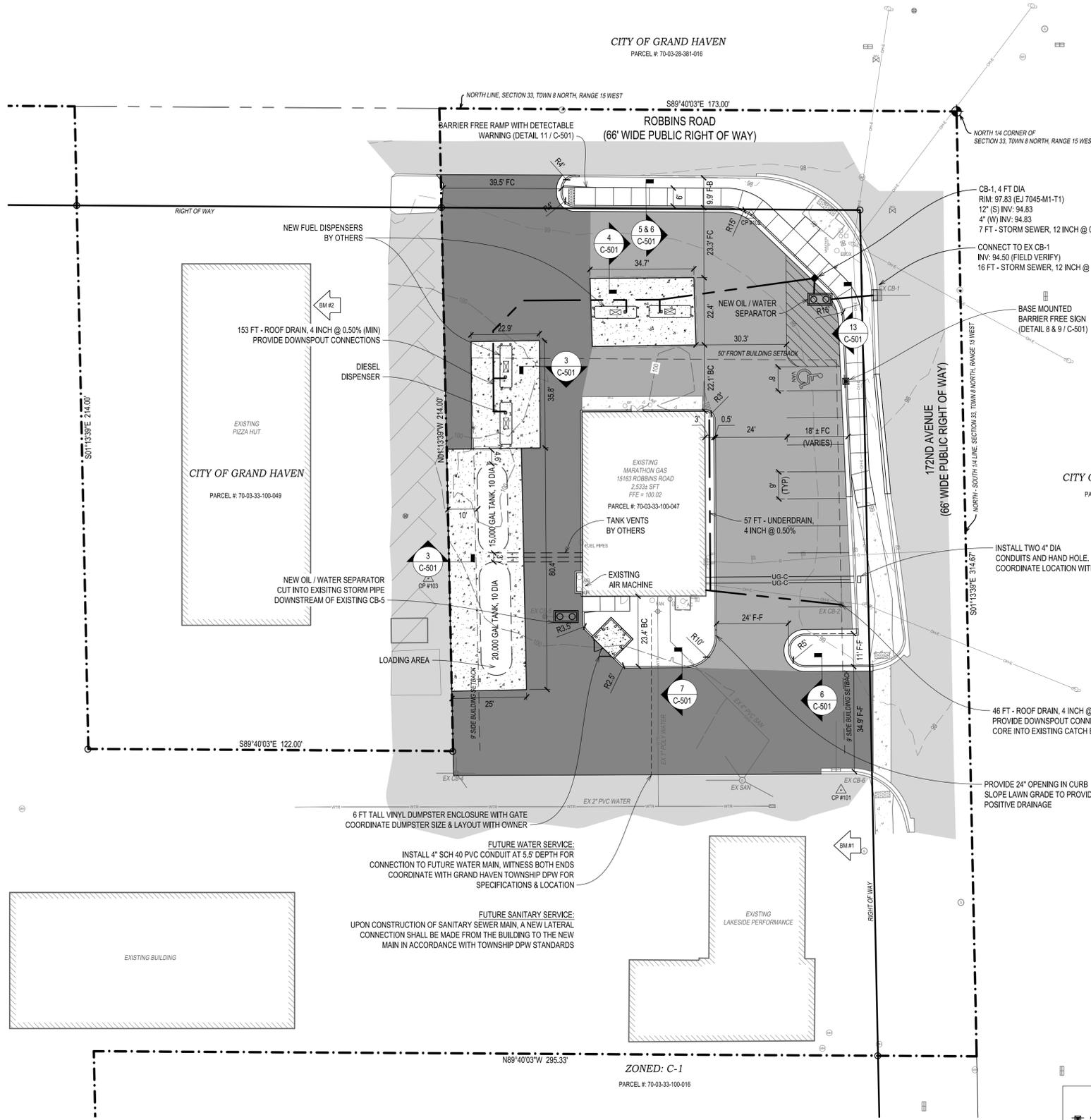
SHEET

EXISTING CONDITIONS & DEMOLITION PLAN
C-101

811

Know what's below. Call before you dig.

NOTE: ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS FROM FIELD DATA AND AVAILABLE INFORMATION. THEY SHOULD NOT BE INTERPRETED AS EXACT LOCATIONS NOR SHOULD THEY BE ASSUMED TO BE THE ONLY UTILITIES IN THE AREA.



CITY OF GRAND HAVEN
PARCEL # 70-03-28-381-016

CITY OF GRAND HAVEN
PARCEL # 70-03-33-100-049

CITY OF GRAND HAVEN
PARCEL # 70-03-33-201-001

ZONED: C-1
PARCEL # 70-03-33-100-016

GENERAL NOTES:
REFER TO ARCHITECTURAL FOUNDATION PLAN FOR DETAILING OF BUILDING AND EXACT BUILDING DIMENSIONS.
OWNER HAS SUBMITTED FOR AND IS IN THE PROCESS OF OBTAINING THE FOLLOWING SITE RELATED PERMITS:
AGENCY: GRAND HAVEN TOWNSHIP, OTTAWA COUNTY ROAD COMMISSION, WATER RESOURCE COMMISSION, CITY OF GRAND HAVEN
PERMIT #:
SITE PLAN APPROVAL, DRIVEWAY CLOSURE: 172ND, STORM DRAINAGE, ROBBINGS ROAD ROW
UPON AWARD OF CONTRACT, CONTRACTOR WILL BE RESPONSIBLE TO CHECK WITH ENGINEER AND JURISDICTION ON STATUS OF THE PERMIT(S) LISTED ABOVE.
CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL SITE RELATED PERMITS NOT BEING OBTAINED BY THE OWNER. CONTRACTOR IS REQUIRED TO COMPLETE THE APPLICATION, AND SUBMIT NECESSARY DRAWINGS, FEES, ETC. TO THE APPROPRIATE JURISDICTION. CONTRACTOR SHALL PAY ALL FEES RELATED TO PERMIT(S) AND SECURE PERMIT(S) IN HIS NAME.
CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL SITE UTILITY CONNECTIONS AND INSPECTIONS WITH THE PROPER JURISDICTION AND PAY ALL ASSOCIATED FEES.
THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING WATER, SANITARY SEWER, AND STORM SEWER CROSSINGS AND CONNECTION POINTS PRIOR TO CONSTRUCTION. CONTACT ENGINEER WITH ANY DISCREPANCIES.
ALL DIMENSIONS SHOWN TO CONCRETE CURB AND GUTTER ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
CONCRETE GUTTER PAN TO TIP IN THE DIRECTION OF THE ADJACENT PAVEMENT.
ALL PAVEMENT MARKINGS SHALL BE 4" WIDE. STANDARD PARKING SPACES SHALL BE MARKED IN YELLOW AND BARRIER FREE SPACES IN BLUE. EACH BARRIER FREE SPACE SHALL BE PROVIDED WITH A PAINTED PAVEMENT SYMBOL, AND A SIGN PER THE MANUAL OF UNIFORM TRAFFIC CONTROLS.
REFERENCE SOILS REPORT FOR BORING LOGS AND PREPARATION AND CONSTRUCTION PROCEDURES FOR SUBBASE AND DESIGN PAVED AREAS.
ALL MDT REFERENCES ARE TO THE 2012 EDITION.

GENERAL STORM SEWER NOTES:
STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PER ASTM C78 CLASS III. JOINTS SHALL BE RUBBER O-RING PER ASTM C443.
UNDERDRAIN (4" - 10") SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE TYPE S, PER AASHTO M252 AND PRE-WRAPPED WITH A GEOTEXTILE FILTER SOCK. PAVEMENT SUBGRADE TO BE GRADED TO SLOPE TOWARDS THE PROPOSED SPT TRENCHES THROUGHOUT SITE.
STORM SEWER PIPE FOR ROOF DRAIN CONNECTIONS OR WHERE INDICATED TO BE PVC SHALL MEET THE REQUIREMENTS OF ASTM D3034, SDR 26. JOINTS TO BE ELASTOMERIC SEALS IN ACCORDANCE WITH ASTM F477.
MATERIALS, INSTALLATION, AND TESTING OF THE STORM SEWER SYSTEM SHALL CONFORM TO OTTAWA COUNTY STANDARDS.

GENERAL WATER SERVICE NOTES:
DOMESTIC SERVICE SHALL BE COPPER, TYPE K, ANNEALED AND SOFT TEMPER PER ASTM B-88. FITTINGS SHALL CONFORM TO ASTM B-88.
MINIMUM DEPTH OF BURY SHALL BE 60".
MATERIALS, INSTALLATION, AND TESTING OF WATER SERVICE LINES SHALL CONFORM TO GRAND HAVEN TOWNSHIP STANDARDS AND THE STATE PLUMBING CODE.

GENERAL PRIVATE UTILITY NOTES:
PROPOSED PRIVATE UTILITY SERVICE AS SHOWN ARE SCHEMATIC ONLY. ACTUAL LOCATION TO BE COORDINATED WITH INDIVIDUAL UTILITY COMPANY AND APPROVED BY OWNER.
CONTRACTOR SHALL COORDINATE LOCATION OF ALL PRIVATE UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.) WITH THE LOCAL UTILITY COMPANIES AND THE MECHANICAL DRAWINGS. COORDINATE ALL PRIVATE UTILITY LOCATIONS WITH ALL SUB-SURFACE SITE UTILITIES SHOWN ON THIS PLAN.

GENERAL SANITARY SERVICE NOTES:
SANITARY SEWER SERVICE LATERAL AND FITTINGS SHALL BE PVC PER ASTM D3034, SDR 35. JOINTS TO BE ELASTOMERIC SEALS IN ACCORDANCE WITH ASTM F477.
MATERIALS, INSTALLATION, AND TESTING OF SANITARY SEWER SERVICES SHALL CONFORM TO GRAND HAVEN TOWNSHIP STANDARDS.

EXISTING STRUCTURES:

EX CB-1, 2'Ø PRECAST RIM: 97.30 12" CONC (E) INV: 94.50
EX CB-2, 2'Ø BLOCK RIM: 98.40 12" PVC (N) INV: 95.56 12" PVC (S) INV: 95.56 4" PVC (NW) INV: 95.56
EX SAN, 3'Ø BLOCK RIM: 99.92 8" PVC (E S E) INV: 94.07 8" PVC (W) INV: 95.12 4" PVC (NW) INV: 95.37 4" PVC (NE) INV: 95.32 4" PVC (W) INV: 95.12
EX CB-4, 2'Ø PRECAST RIM: 100.40 12" CONC (E) INV: 94.50
EX CB-5, 2'Ø BLOCK RIM: 99.42 6" PVC (E) INV: 96.97
EX CB-6, 3'Ø BLOCK RIM: 99.00 12" PVC (N) INV: 95.80 12" PVC (W) INV: 95.80

SITE DATA:

SITE: APPROXIMATE 0.6 ACRES
ZONED: C-1 COMMERCIAL
USE: GASOLINE STATION

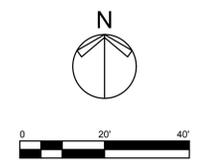
FRONT BUILDING SETBACK: 50'
SIDE BUILDING SETBACK: 9'

PARKING DATA:
REQUIRED PARKING:
1 SPACE / 150 SF UFA
1300 SF UFA = 9 SPACES

PROPOSED PARKING: 18 SPACES
(INCLUDES 1 BARRIER FREE SPACE)

PROPOSED LEGEND

	CONCRETE SIDEWALK (SEE DETAIL 5 / C-501)	
	CONCRETE PAVEMENT	
	STANDARD DUTY ASPHALT (SEE DETAIL 1 / C-501)	
	HEAVY DUTY ASPHALT (SEE DETAIL 2 / C-501)	
	LANDSCAPE CURB (SEE DETAIL 7 / C-501)	
	STANDARD CURB & GUTTER (SEE DETAIL 6 / C-501)	
	INVERTED CURB & GUTTER (SEE DETAIL 6 / C-501)	
	STORM SEWER	
	CONDUIT	
	SANITARY SEWER	



NOTE: ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS FROM FIELD DATA AND AVAILABLE INFORMATION. THEY SHOULD NOT BE INTERPRETED AS EXACT LOCATIONS NOR SHOULD THEY BE ASSUMED TO BE THE ONLY UTILITIES IN THE AREA.

ARCHITECTS • ENGINEERS

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PHONE (616) 785-5656
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BRIAN T. SINNOTT
MI - REGISTRATION #6201092169
EXP. DATE 10/31/2017

PROJECT

SPARTAN STORES FUEL, LLC

15163 ROBBINGS ROAD
GRAND HAVEN, MI 49417

OWNER

SPARTAN STORES FUEL, LLC

850 76TH STREET
GRAND RAPIDS, MI 49518

RELEASE DATE

DATE	DESCRIPTION
01-20-17	SN REVIEW
01-24-17	BIDS & CONSTRUCTION
03-30-17	PC SUBMITTAL

PROJECT

1605068

SHEET

SITE LAYOUT & UTILITY PLAN

C-102

NOTE: CONTRACTOR IS TO SWEEP STREET IMMEDIATELY SHOULD SEDIMENT FROM SITE BE TRACKED ONTO STREET. PROVIDE CATCH BASIN INLET FILTERS AS NECESSARY WITHIN STREET AND DOWNSTREAM OF SITE.



NOTE: CONTRACTOR IS TO SWEEP STREET IMMEDIATELY SHOULD SEDIMENT FROM SITE BE TRACKED ONTO STREET. PROVIDE CATCH BASIN INLET FILTERS AS NECESSARY WITHIN STREET AND DOWNSTREAM OF SITE.

GENERAL SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE SOIL EROSION PERMIT FROM THE PROPER GOVERNING AUTHORITY.

A CONTRACTOR / INSPECTOR SHALL INSPECT THE SOIL EROSION/SEDIMENT CONTROL DEVICES ONCE EACH WEEK AND/OR WITHIN 24 HOURS OF A PRECIPITATION EVENT WHICH RESULTS IN A STORM DISCHARGE FROM THE SITE.

ALL DISTURBED NON-PAVEMENT AREAS MUST BE RESTORED WITH TOPSOIL, SEED, FERTILIZER, AND MULCH UNLESS SODDED.

ALL SLOPES STEEPER THAN 1:3 SHALL USE AN EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S150BN) OR EQUAL. ALL SLOPES BETWEEN 1:4 AND 1:3 SHALL USE AN EROSION CONTROL BLANKET (NORTH AMERICAN GREEN D57S) OR EQUAL, UNLESS INDICATED OTHERWISE ON PLANS.

SEEDING SHOULD BE PREPARED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR / INSPECTOR SHALL INSPECT THE AREA AFTER SEEDING IS COMPLETED. AREAS THAT ARE BARE OR NOT MULCHED PROPERLY WILL NEED TO BE SPOT SEEDING AND/OR REMULCHED.

SILT FENCE SHOULD BE TRENCHED IN, BACKFILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT WHEN THE SEDIMENT ACCUMULATES TO 10 TO 12" TO THE HEIGHT OF THE FENCE. CONTRACTOR WILL HAVE TO REMOVE, REPLACE, RETRENCH, OR REBACKFILL THE FENCE IF IT FALLS. IT WOULD ALSO BE NECESSARY TO REINSTALL IF ANY PORTION OF THE FENCING WAS DAMAGED BY CONSTRUCTION MACHINERY.

INLET FILTERS SHALL BE SILT SACKS, DANDY BAGS, OR APPROVED EQUAL. INLET FILTERS SHOULD BE INSPECTED FOR BUILDUP OF SILT AND OTHER DEBRIS. THIS IS EVIDENT IF STRUCTURE IS CAUSING FLOODING. MAINTENANCE WOULD CONSIST OF REMOVING OF SEDIMENTS OR REPLACING FILTER AS NECESSARY.

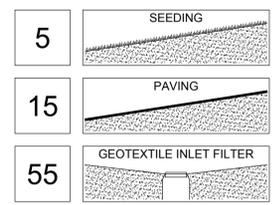
SOIL EROSION CONTROL METHODS SHOWN ARE A GUIDELINE AND DO NOT RELIEVE THE CONTRACTOR FROM ADDITIONAL METHODS THAT MAY BE REQUIRED BY THE SOIL EROSION CONTROL PERMIT.

CONSTRUCTION OF THE DETENTION BASIN(S) SHALL BE ONE OF THE FIRST ITEMS AND SHALL BE USED AS A TEMPORARY SEDIMENTATION BASIN UNTIL THE SITE IS STABILIZED. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL ACCUMULATED SEDIMENT AND RESTORATION OF THE BASIN PRIOR TO ACCEPTANCE BY THE OWNER.

THE CONTRACTOR WILL ENGAGE A CERTIFIED STORM WATER OPERATOR IN ACCORDANCE WITH EPA PHASE II RULES TO MEET REQUIREMENTS OF THE PERMIT. THIS OPERATOR WILL INSPECT THE JOB SITE AS REQUIRED BY RULE, NOTIFY JOB SITE SUPERINTENDENT OF ANY DEFICIENCIES, AND ENTER FINDINGS IN THE JOB SITE INSPECTION JOB BOOK.

TOTAL DISTURBED AREA = 0.56 ACRES

**UNIFIED KEYING SYSTEM
SOIL EROSION AND
SEDIMENTATION CONTROL MEASURES**



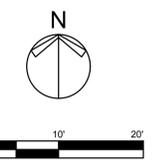
CONSTRUCTION SEQUENCE

	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.
SEDIMENT CONTROL												
STORM UTILITIES												
SITE CONSTRUCTION												
FINISH GRADING												
LANDSCAPING												

YEAR: 2017

PROPOSED LEGEND

SIGN	CATCH BASIN	OIL / WATER SEPARATOR (SEE DETAIL 13 / C-501)
MANHOLE	CLEAN OUT	PIPE CAP
CONCRETE SIDEWALK (SEE DETAIL 5 / C-501)	CONCRETE PAVEMENT	STANDARD DUTY ASPHALT (SEE DETAIL 1 / C-501)
HEAVY DUTY ASPHALT (SEE DETAIL 2 / C-501)	LANDSCAPE CURB (SEE DETAIL 7 / C-501)	STANDARD CURB & GUTTER (SEE DETAIL 6 / C-501)
INVERTED CURB & GUTTER (SEE DETAIL 6 / C-501)	STORM SEWER	CONDUIT
SANITARY SEWER	PERMANENT SOIL EROSION & SEDIMENTATION CONTROL MEASURE	TEMPORARY SOIL EROSION & SEDIMENTATION CONTROL MEASURE
PROPOSED SPOT GRADE	CON CONCRETE GRADE	BW BACK OF WALK GRADE
BIT BITUMINOUS GRADE	TC TOP OF CURB GRADE	FL FLOW LINE GRADE
FW FRONT OF WALK GRADE	TYP TYPICAL MEASURE	
FG FINISHED GROUND		
RIM STRUCTURE RIM ELEVATION		
MX MATCH EXISTING ELEVATION		



811
Know what's below.
Call before you dig.

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ARCHITECTS • ENGINEERS

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BRIAN T. SINNOTT
MI REGISTRATION #6201092169
EXP. DATE 10/31/2017

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OWNER

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SpartanNash.

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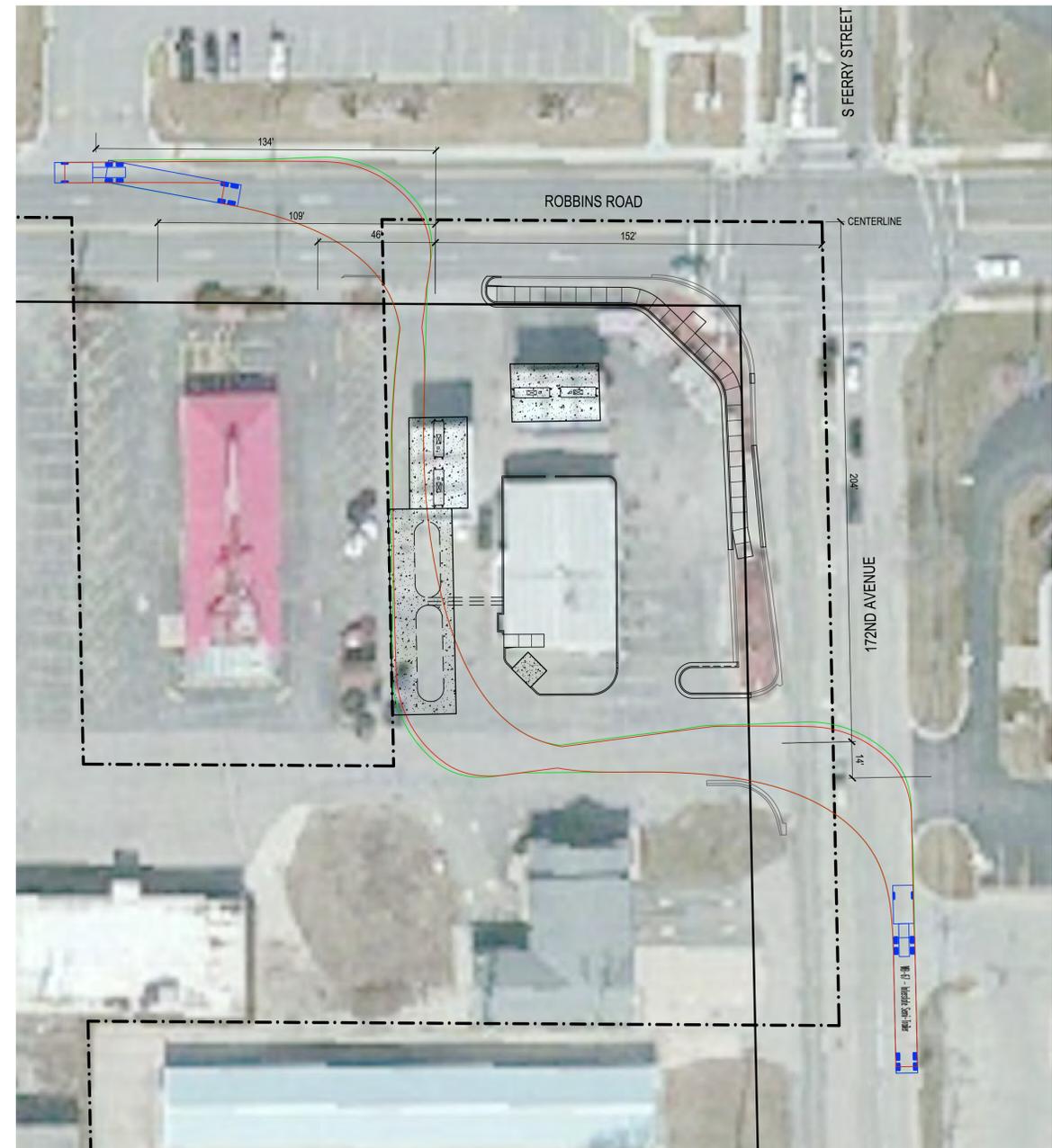
SHEET

SITE GRADING & SWPP PLAN

C-103



REGIONAL PLAN



ACCESS PLAN



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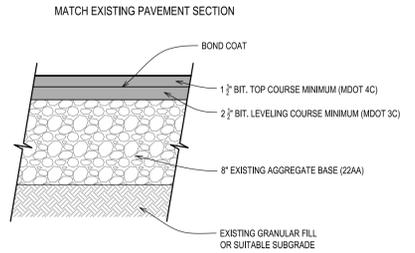
DATE	DESCRIPTION
03-30-17	PC SUBMITTAL

PROJECT

1605068

SHEET

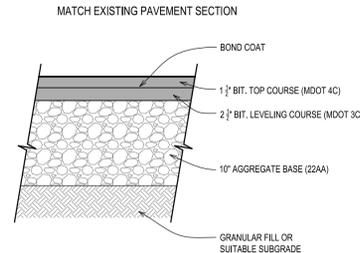
ACCESS PLAN
C-104



*NOTIFY OWNER AND ENGINEER IF EXISTING PAVEMENT SECTION DOES NOT MATCH PROPOSED SECTION

1 STANDARD DUTY BITUMINOUS PAVEMENT SECTION

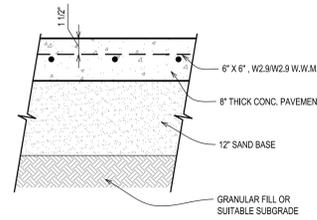
NOT TO SCALE



*NOTIFY OWNER AND ENGINEER IF EXISTING PAVEMENT SECTION DOES NOT MATCH PROPOSED SECTION

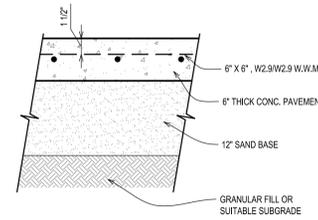
2 HEAVY DUTY BITUMINOUS PAVEMENT SECTION

NOT TO SCALE



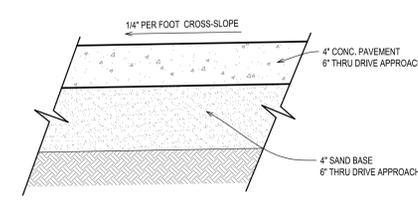
3 HEAVY DUTY CONCRETE PAVEMENT SECTION

NOT TO SCALE



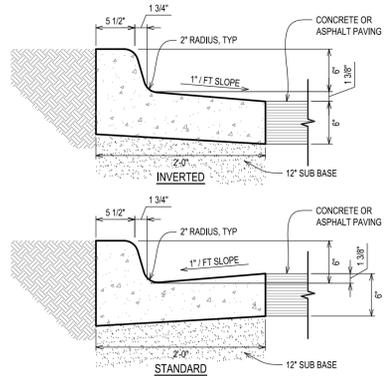
4 STANDARD DUTY CONCRETE PAVEMENT SECTION

NOT TO SCALE



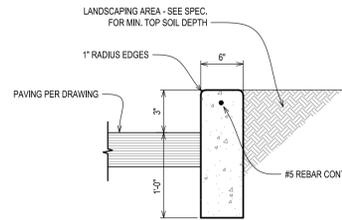
5 CONCRETE SIDEWALK

NOT TO SCALE



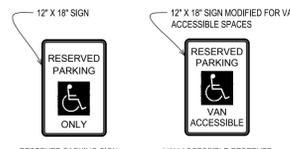
6 24\"/>

NOT TO SCALE



7 LANDSCAPE CURB

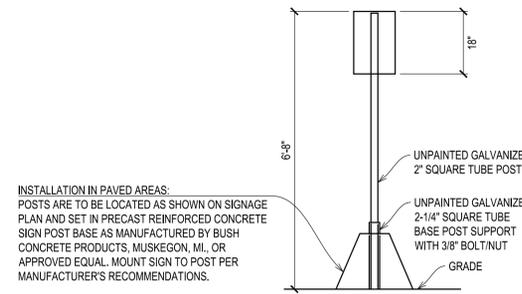
NOT TO SCALE



SIGN MATERIALS:
GENERAL: SIGNS SHALL CONFORM WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
MOUNTING HARDWARE: STAINLESS STEEL.
PANEL MATERIAL: ALUMINUM SHEET.
SIGN FACE: REFLECTORIZED BACKGROUND, REFLECTORIZED LEGEND.

8 BARRIER FREE SIGNS

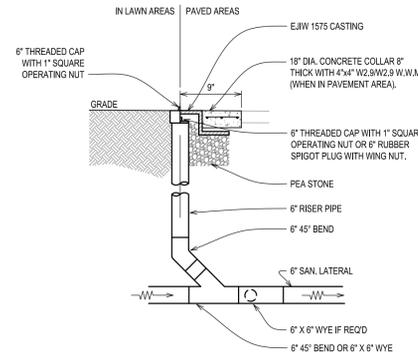
NOT TO SCALE



NOTE: SIGN, POLE AND BASE FURNISHED AND INSTALLED BY CONTRACTOR.

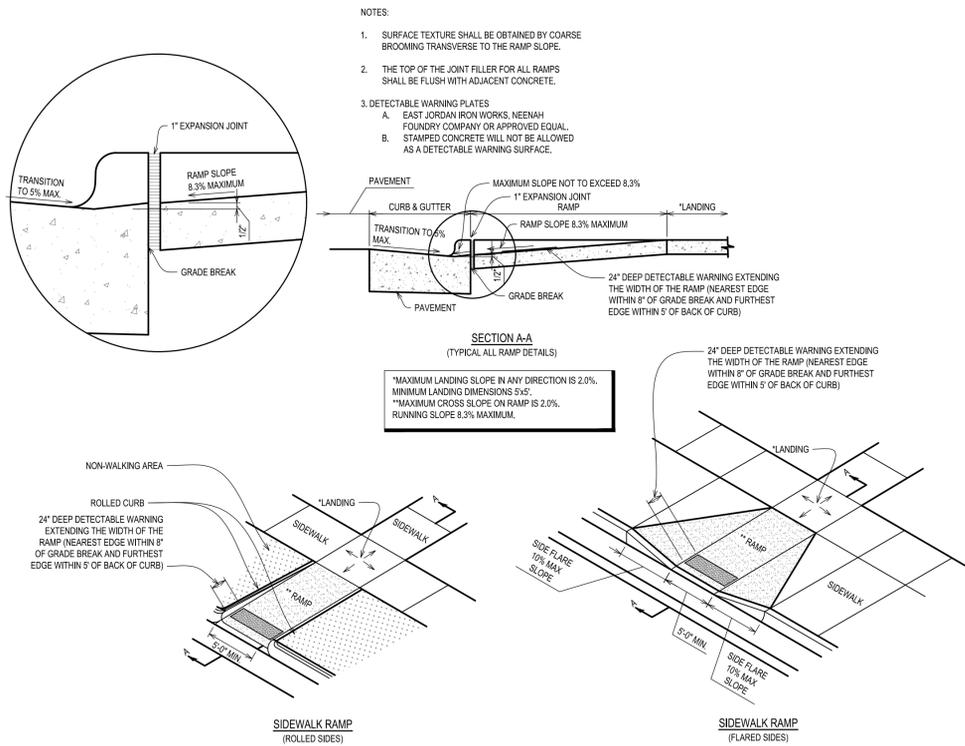
9 SIGN MOUNTING

NOT TO SCALE



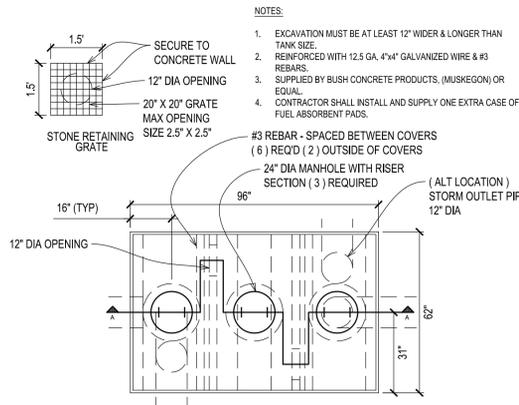
10 GRAVITY SEWER CLEAN-OUT

NOT TO SCALE



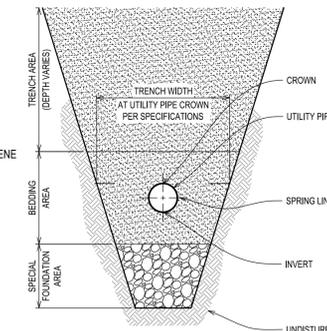
11 SIDEWALK RAMP

NOT TO SCALE



12 1,000 GALLON OIL/WATER SEPARATOR

NOT TO SCALE



13 UTILITY TRENCH

NOT TO SCALE

UTILITY TRENCH BACKFILL MATERIALS:

TRENCH AREA: FROM 12\"/>

INTERNAL PIPE DIA.	TRENCH WIDTH \"
6\"/>	

UTILITY TRENCH EXCAVATION AND BACKFILL METHODS:

EXCAVATION: SURPLUS MATERIAL SHALL BECOME PROPERTY OF CONTRACTOR FOR DISPOSAL.
SPECIAL FOUNDATION AREA BACKFILL: NOTIFY ENGINEER WHEN SOIL UNDER BEDDING AREA IS MUCK, SILT, ORGANIC CONTENT SOIL, OR HIGHLY SATURATED PLASTIC SOIL TO DETERMINE REQUIRED DEPTH OF SPECIAL FOUNDATION AREA. COMPACT TO 95% OF MAXIMUM DENSITY PER ASTM D1557 (MODIFIED PROCTOR) IN LAYERS NOT EXCEEDING 6 INCHES.
BEDDING AREA AND TRENCH AREA BACKFILL: COMPACT TO 95% OF MAXIMUM DENSITY PER ASTM D1557 (MODIFIED PROCTOR) IN LAYERS NOT EXCEEDING 6 INCHES.

PAVEMENT MATERIALS:

SUBGRADE UNDERCUTTING BACKFILL: MDOT 902.08, GRANULAR MATERIAL CLASS II, OR SUITABLE ON SITE GRANULAR MATERIAL APPROVED BY ENGINEER.
SAND BASE: MDOT 902.08, GRANULAR MATERIAL CLASS II, OR SUITABLE ON SITE GRANULAR MATERIAL APPROVED BY ENGINEER.
AGGREGATE BASE: MDOT 902.06, 22A AGGREGATE.
BOND COAT: MDOT 904.03, SS-1h OR CSS-1h.
BITUMINOUS LEVELING COURSE: MDOT BITUMINOUS MIXTURE 13A, PERFORMANCE GRADE 58-28 ASPHALT CEMENT.
BITUMINOUS TOP COURSE: MDOT BITUMINOUS MIXTURE 13A, PERFORMANCE GRADE 58-28 ASPHALT CEMENT.
CONCRETE: MDOT 601, GRADE P1 OR HE.
WELDED WIRE FABRIC: MDOT 905.06.
CONCRETE JOINT FILLER: MDOT 914.03.
CONCRETE JOINT SEALANT: MDOT 914.04.

PAVEMENT CONSTRUCTION METHODS:

SITE PREPARATION AND EARTHWORK: MDOT 205.03.A, 205.03E (SUBGRADE UNDERCUTTING TYPE II), AND 205.03.F-205.03.H.
AGGREGATE BASE: MDOT 302.03.
BOND COAT: MDOT 902.03.D.
BITUMINOUS LEVELING AND TOP COURSES: MDOT 502.03.A, 502.03.C, 502.03.E-502.03.K. VIBRATORY ROLLERS PROHIBITED.
CONCRETE PAVEMENT: MDOT 602.
CONCRETE CURB AND GUTTER: MDOT 802.03. PLACE EXPANSION JOINTS AT SPRING LINE OF PAVEMENT, AT JUNCTION WITH EXISTING CURB, AT JUNCTION WITH ADJACENT CONCRETE PAVEMENT, AND EVERY 100 FEET. PLACE PLANE OF WEAKNESS JOINT EVERY 10 FEET.
CONCRETE PAVEMENT JOINTS: PLACE EXPANSION JOINTS ALONG WALLS, AROUND DRAINAGE STRUCTURES, AND WHERE SHOWN ON PLANS. LOCATE CONTROL JOINTS IN A 25\"/>

ARCHITECTS • ENGINEERS

paradigm design

550 3 MILE N.W.
SUITE B
GRAND RAPIDS, MI 49544

PHONE (616) 785-5656
WEB PARADIGMAE.COM

BRIAN T. BINNITT
MI - REGISTRATION #6201092169
EXP. DATE 10/31/2017

PROJECT

SPARTAN STORES FUEL, LLC

15163 ROBBINS ROAD
GRAND HAVEN, MI 49417

OWNER

SPARTAN STORES FUEL, LLC

SpartanNash.

850 76TH STREET
GRAND RAPIDS, MI 49518

RELEASE DATE

DATE	DESCRIPTION
01-20-17	SN REVIEW
01-24-17	BIDS & CONSTRUCTION
03-30-17	PC SUBMITTAL

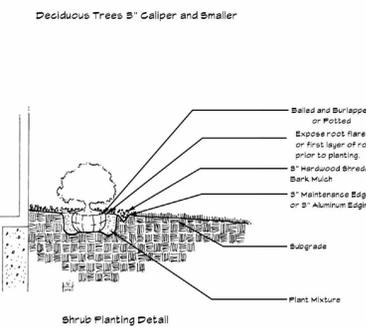
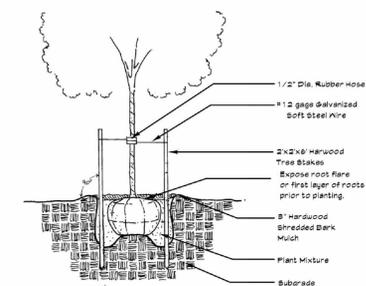
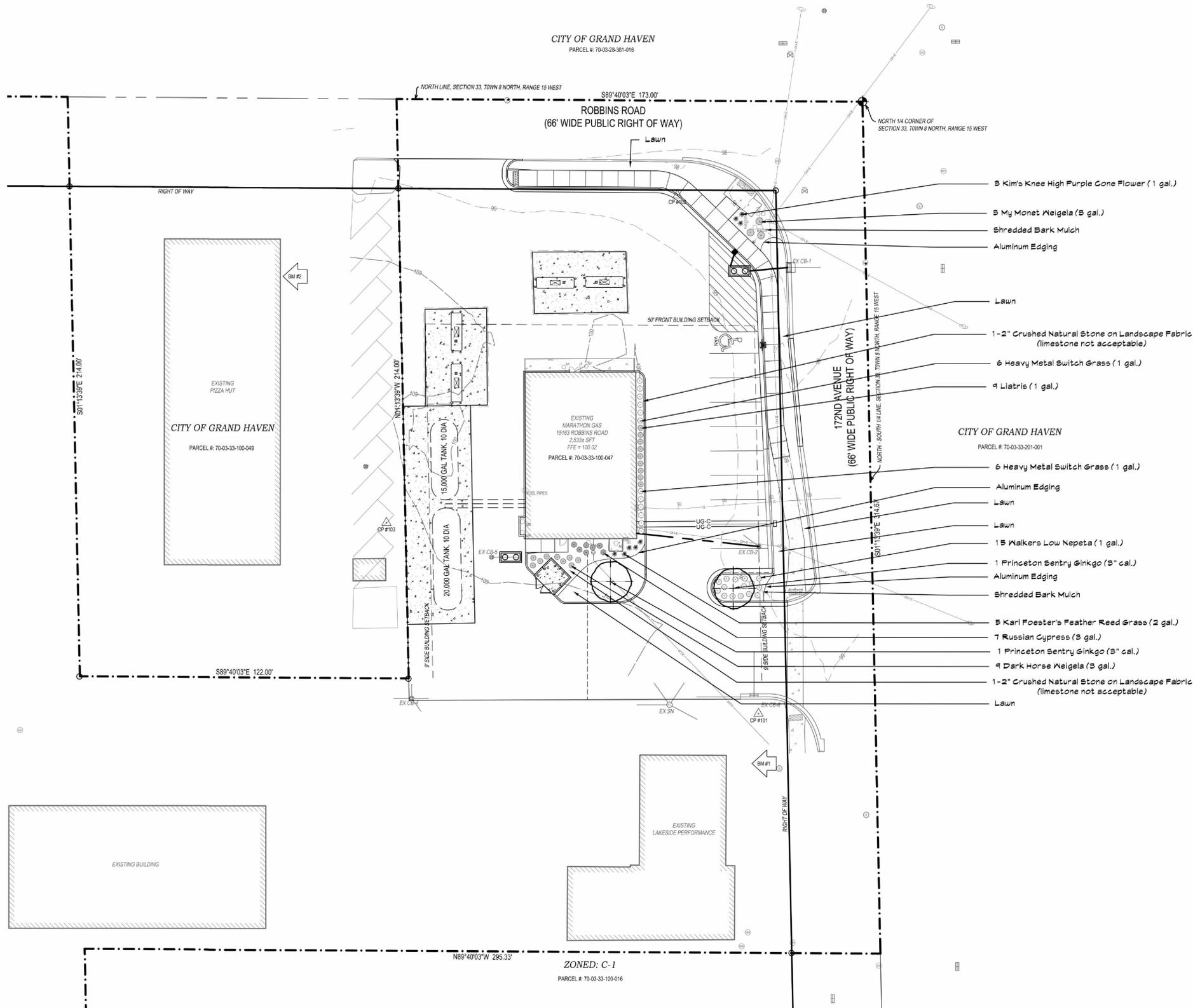
PROJECT

1605068

SHEET

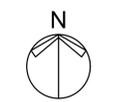
DETAIL

C-501



Notes:

- All landscaping shall be installed by a qualified Landscape Contractor to the size specified on the landscape plan. Smaller sizes will be rejected.
- All plantings shall be mulched with 3\"/>



NOTE: ALL UTILITIES SHOWN ARE APPROXIMATE LOCATIONS FROM FIELD DATA AND AVAILABLE INFORMATION. THEY SHOULD NOT BE INTERPRETED AS EXACT LOCATIONS NOR SHOULD THEY BE ASSUMED TO BE THE ONLY UTILITIES IN THE AREA.

ARCHITECTS • ENGINEERS

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PHONE (616) 785-5656
WEB PARADIGMAE.COM

STATE OF MICHIGAN
JOYCE E. WEISE
LANDSCAPE ARCHITECT
No. 1202
LICENSED LANDSCAPE ARCHITECT

Joyce E. Weise

Landscape Plan Drawn By:
Joyce E. Weise P.L.A., A.S.L.A.

PROJECT

SPARTAN STORES FUEL, LLC

15163 ROBBINS ROAD
GRAND HAVEN, MI 49417

OWNER

SPARTAN STORES FUEL, LLC

SpartanNash.

850 76TH STREET
GRAND RAPIDS, MI 49518

RELEASE DATE

DATE	DESCRIPTION
03-30-17	PC SUBMITTAL

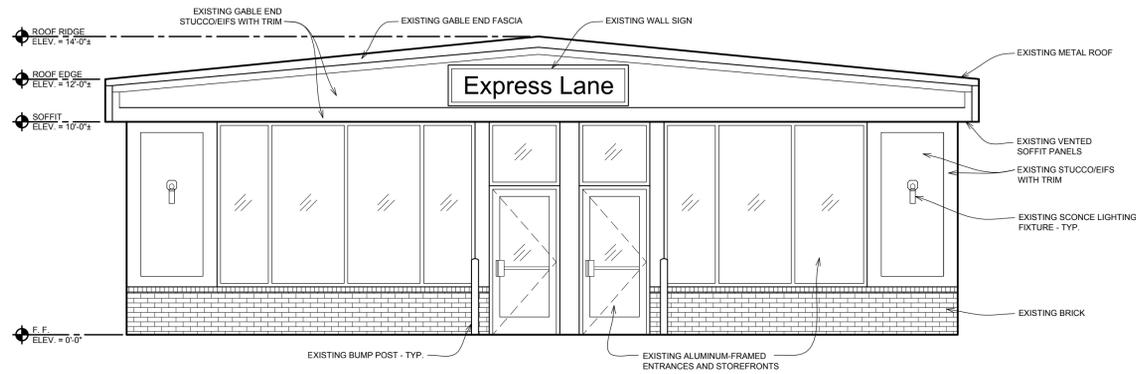
PROJECT

1605068

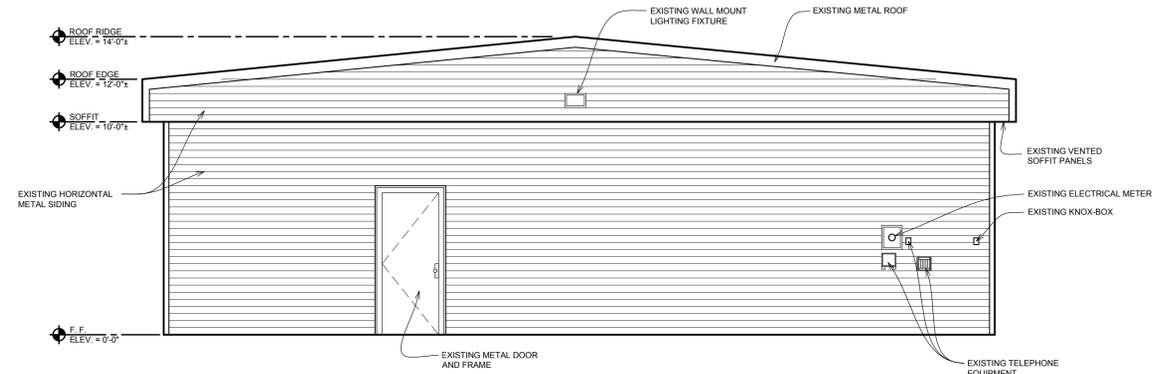
SHEET

LANDSCAPE PLAN

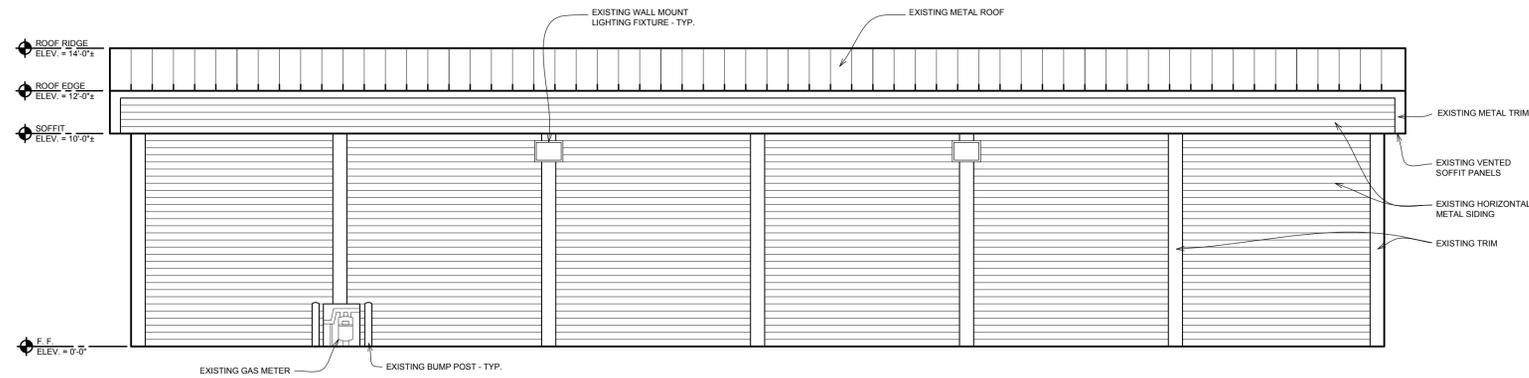
L-101



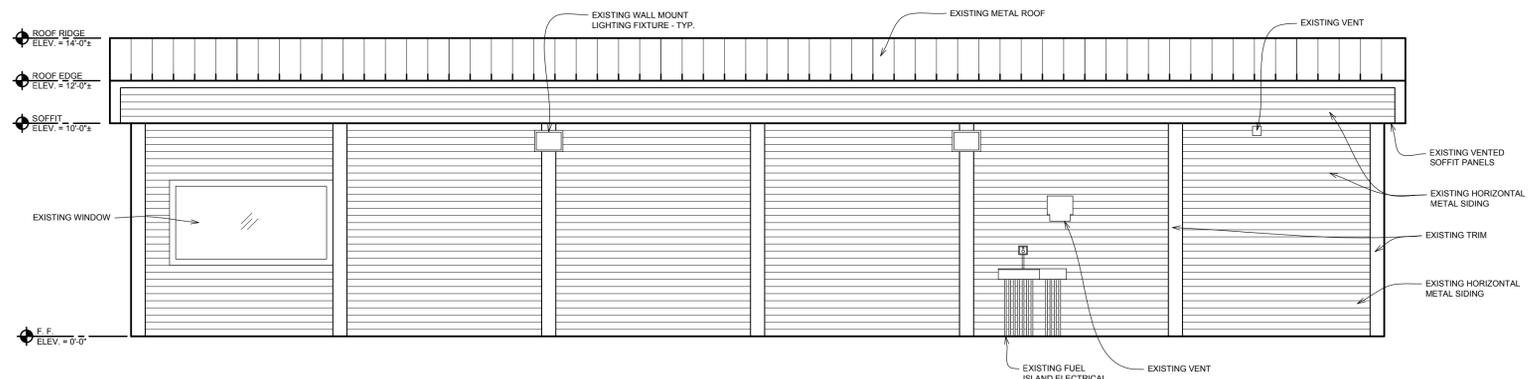
NORTH ELEVATION - EXISTING
SCALE: 1/4"=1'-0"



SOUTH ELEVATION - EXISTING
SCALE: 1/4"=1'-0"



EAST ELEVATION - EXISTING
SCALE: 1/4"=1'-0"



WEST ELEVATION - EXISTING
SCALE: 1/4"=1'-0"

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(616) 785 - 5656
PARADIGMAE.COM

WILLIAM H. BRUNNER, A.I.A.
MI - REGISTRATION# 1301059018
EXP. DATE# 10/31/2017

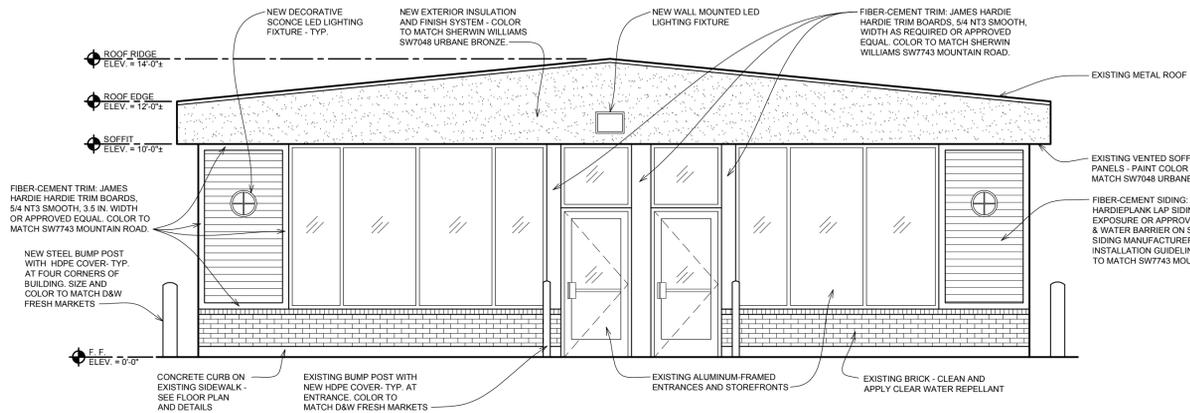
SPARTAN STORES FUEL, LLC
15163 ROBBINS ROAD
GRAND HAVEN, MI 49417

SPARTAN STORES FUEL, LLC
 SpartanNash.
850 76TH STREET
GRAND RAPIDS, MI 49518

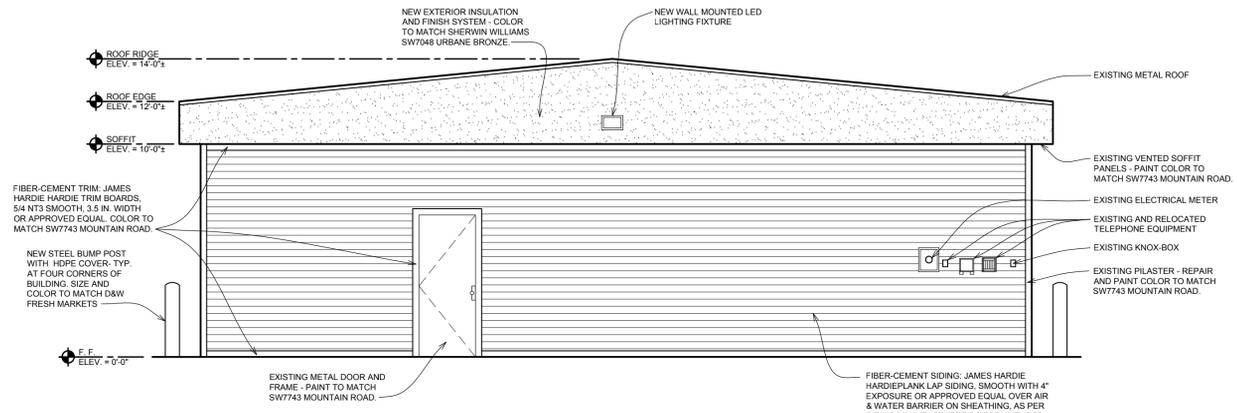
DATE	DESCRIPTION
02-07-17	FOR PERMITS
03-17-17	PC SUBMITTAL
03-24-17	FOR PERMITS

1605068

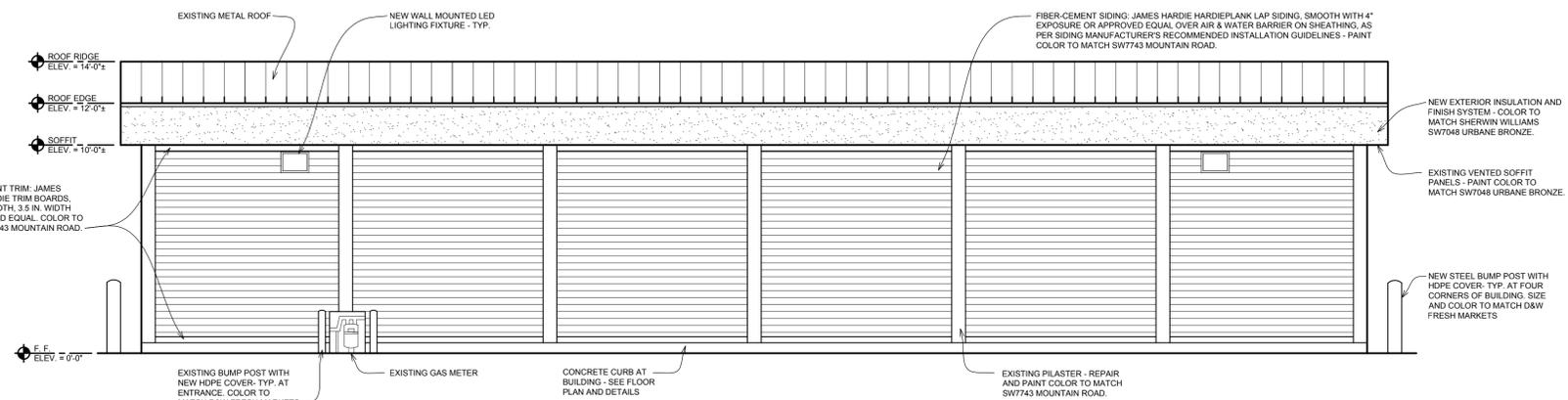
EXISTING EXTERIOR ELEVATIONS
A-201



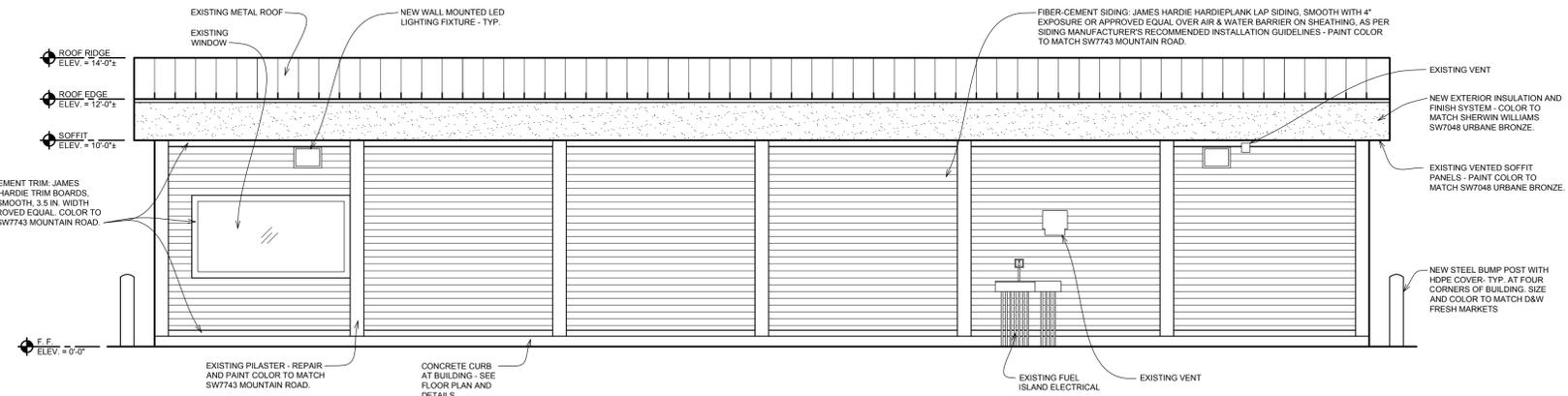
NORTH ELEVATION - PROPOSED
SCALE: 1/4"=1'-0"



SOUTH ELEVATION - PROPOSED
SCALE: 1/4"=1'-0"



EAST ELEVATION - PROPOSED
SCALE: 1/4"=1'-0"



WEST ELEVATION - PROPOSED
SCALE: 1/4"=1'-0"

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PARADIGMAE.COM

WILLIAM H. BRUNNER, A.I.A.
MI - REGISTRATION# 1301059015
EXP. DATE# 10/31/17

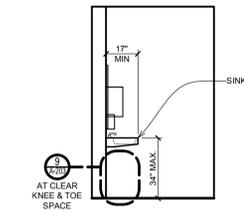
SPARTAN STORES FUEL, LLC
15163 ROBBINS ROAD
GRAND HAVEN, MI 49417

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 SpartanNash.
850 76TH STREET
GRAND RAPIDS, MI 49518

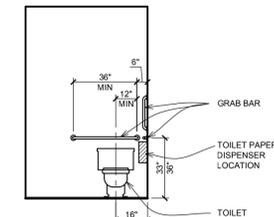
DATE	DESCRIPTION
02-07-17	FOR PERMITS
03-17-17	PC SUBMITTAL
03-24-17	COLOR REVISIONS
03-24-17	FOR PERMITS

1605068

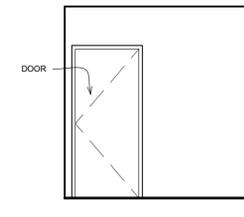
PROPOSED EXTERIOR ELEVATIONS
A-202



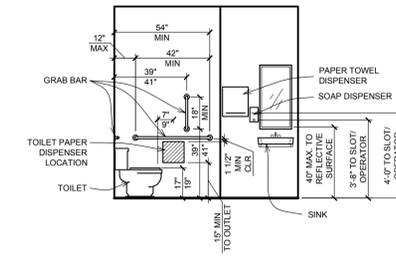
1 NORTH ELEVATION MEN'S RESTROOM
A-101 SCALE: 1/2"=1'-0"



2 SOUTH ELEVATION MEN'S RESTROOM
A-101 SCALE: 1/2"=1'-0"



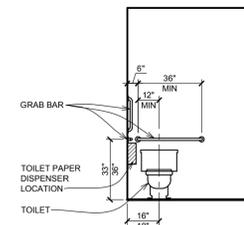
3 EAST ELEVATION MEN'S RESTROOM
A-101 SCALE: 1/2"=1'-0"



4 WEST ELEVATION MEN'S RESTROOM
A-101 SCALE: 1/2"=1'-0"

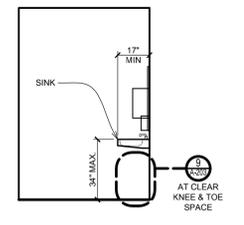
TOILET ROOM ELEVATION NOTES

- ALL DIMENSIONS ON THESE ELEVATIONS ARE REQUIRED TO INSURE COMPLIANCE W/ BARRIER FREE CODE - CONFIRM W/ LOCAL STATE B.F. CODES.
- PROVIDE TWO H.C. GRAB BARS MOUNTED 33" - 36" AFF.
 - 42" LONG ON SIDEWALL STARTING 12" FROM THE REAR WALL.
 - 36" LONG ON REAR WALL, 24" TO FLUSH SIDE, 12" TO WALL SIDE.
 - 18" LONG VERTICAL ON SIDEWALL STARTING 39"-41" FROM FLOOR, AND 40" OFF OF BACK WALL.
 - 1-1/2" CLEAR BETWEEN WALL AND BAR.
 - BAR TO WITHSTAND 250# OF FORCE AND DEFLECTION NOT TO EXCEED 1/2".

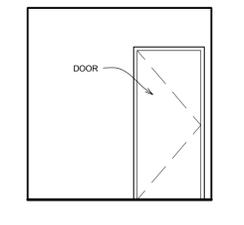


5 NORTH ELEVATION WOMEN'S RESTROOM
A-101 SCALE: 1/2"=1'-0"

NOTE: REFER TO MEN'S RESTROOM ELEVATIONS AND DETAILS FOR ADDITIONAL FIXTURE AND ACCESSORY INFORMATION AND CLEARANCES.

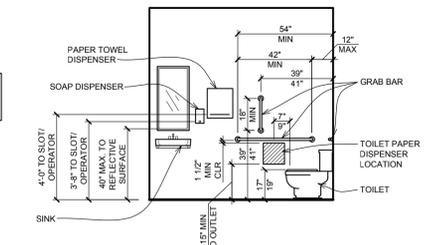


6 SOUTH ELEVATION WOMEN'S RESTROOM
A-101 SCALE: 1/2"=1'-0"

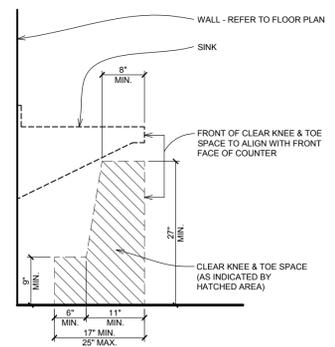


7 EAST ELEVATION WOMEN'S RESTROOM
A-101 SCALE: 1/2"=1'-0"

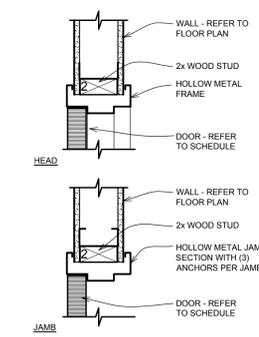
NOTE: REFER TO MEN'S RESTROOM ELEVATIONS AND DETAILS FOR ADDITIONAL FIXTURE AND ACCESSORY INFORMATION AND CLEARANCES.



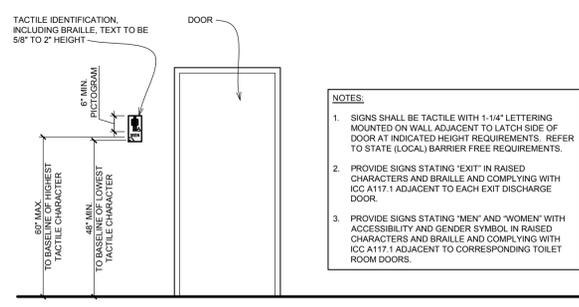
8 WEST ELEVATION WOMEN'S RESTROOM
A-101 SCALE: 1/2"=1'-0"



9 INTERIOR DETAIL
A-203 SCALE: 3/4"=1'-0"



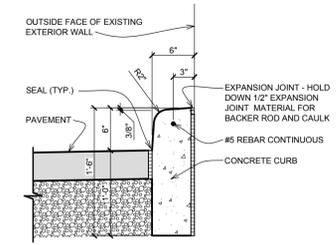
10 INTERIOR DOOR
A-101 SCALE: 1 1/2"=1'-0"



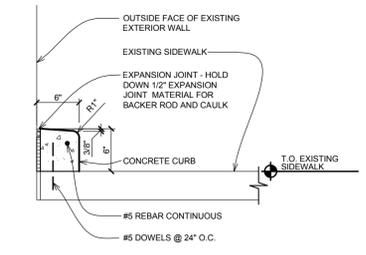
11 TOILET ROOM SIGNAGE
A-101 SCALE: 3/8"=1'-0"

NOTES:

- SIGNS SHALL BE TACTILE WITH 1-1/4" LETTERING MOUNTED ON WALL ADJACENT TO LATCH SIDE OF DOOR AT INDICATED HEIGHT REQUIREMENTS. REFER TO STATE (LOCAL) BARRIER FREE REQUIREMENTS.
- PROVIDE SIGNS STATING "EXIT" IN RAISED CHARACTERS AND BRAILLE AND COMPLYING WITH ICC A117.1 ADJACENT TO EACH EXIT DISCHARGE DOOR.
- PROVIDE SIGNS STATING "MEN" AND "WOMEN" WITH ACCESSIBILITY AND GENDER SYMBOL IN RAISED CHARACTERS AND BRAILLE AND COMPLYING WITH ICC A117.1 ADJACENT TO CORRESPONDING TOILET ROOM DOORS.



12 CONC. CURB AT BUILDING
A-101 SCALE: 1"=1'-0"



13 CONC. CURB ON EXISTING SIDEWALK
A-101 SCALE: 1"=1'-0"

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WILLIAM H. BRUNNER, A.I.A.
MI - REGISTRATION# 1301029015
EXP. DATE# 10/31/2017

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GRAND HAVEN, MI 49417

SPARTAN STORES FUEL, LLC
SpartanNash.
850 76TH STREET
GRAND RAPIDS, MI 49518

DATE	DESCRIPTION
02-07-17	FOR PERMITS
03-17-17	FOR PERMITS
03-24-17	FOR PERMITS

1605068

INTERIOR ELEVATIONS
A-203



D-Series Size 1 LED Wall Luminaire

Specifications Luminaire
 Width: 13.34" (341.4mm)
 Depth: 10.1" (256.5mm)
 Height: 6.35" (162.7mm)

Back Box (BBW, ELCW)
 Width: 13.34" (341.4mm)
 Depth: 4" (101.6mm)
 Height: 6.35" (162.7mm)

Shipping Information
 Example: DSWX1 LED 20C 1000 40K T3M MVOLT DBTDX

Part	Qty	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
DSWX1 LED	1	1000	40K	T3M	MVOLT	DBTDX	

Accessories
 00061 Base
 00062 Mounting
 00063 Back Box
 00064 Back Box

MILLENIUM ROUND MR13 SERIES - LOW PROFILE HOUSING

Specifications
 Diameter: 13.34" (341.4mm)
 Depth: 10.1" (256.5mm)
 Height: 6.35" (162.7mm)

Shipping Information
 Example: MR13CL-PP-MW-20L40K-DV

Part	Qty	Part No.	Part Name	Part No.	Part Name	Part No.	Part Name
MR13CL-PP-MW-20L40K-DV	1						

Accessories
 00061 Base
 00062 Mounting
 00063 Back Box
 00064 Back Box

Schedule

Label	Manufacturer	Catalog Number	Description	Wattage
SA	EXISTING	EXISTING	EXISTING GAS CANOPY LIGHTING TO REMAIN.	
SB	Lithonia Lighting	DSWX1 LED 20C 530 50K TFTM MVOLT	DSWX1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE TFTM OPTIC, 500K, @ 530mA MOUNTED AT 10' AFG	34.9
SC	Kenall	MR13CL-PP-MW-13L40K-DV	Millennium Round	15

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
SITE LIGHTING	+	2.5 fc	27.9 fc	0.0 fc	N/A	N/A

ORDERING INFORMATION (EX. MR13CL-PP-MW-20L40K-DV)

Model	Lens Type	Finish	Lamp Type	Voltage	Options	Accessories
MR13CL-PP-MW-20L40K-DV	PP	White	DSWX1 LED	120V	None	None

STATISTICS

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
SITE LIGHTING	+	2.5 fc	27.9 fc	0.0 fc	N/A	N/A

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15163 ROBBINS ROAD
 GRAND HAVEN, MI 49417

SPARTAN STORES FUEL, LLC

850 76TH STREET
 GRAND RAPIDS, MI 49518

DATE	DESCRIPTION
1-20-17	EN REVIEW
3/30/17	PC SUBMITTAL

1605068

ELECTRICAL SITE LIGHTING CALCULATIONS

ES101



Community Development Memo

DATE: April 13, 2017
 TO: Planning Commission
 FROM: Stacey Fedewa, Community Development Director
 RE: PUD – Housing for the Elderly – Village at Rosy Mound

PROPERTY DETAILS			
Property Address	Parcel Number	Parcel Size	Application Type
14110 Lakeshore*	70-07-04-100-028 70-07-04-200-025 70-07-04-400-028	26.92 Acres	Mixed-Use PUD Housing for the Elderly
Existing Zoning	Existing Land Use	Existing/Proposed Infrastructure	Existing Site Improvements
Service Professional (SP)	Undeveloped Land	Paved Roadway Municipal Water Sanitary Sewer	N/A
Master-Planned Zoning	Surrounding Zoning & Land Uses		
	Direction	Zoning	Land Use
Medium-High Density Residential PUD	N	SP & R-1	OCRC & School
	S	R-1	Single Family Subdivision
	E	I-1 & I-1A	Multiple Industrial
	W	R-1	Rosy Mound Park & Standard Sand Corp

* The property addresses will change after the land divisions are completed. The applicant has all the information necessary for the division, but is waiting to apply until their financing is approved through MSHDA and they take title to the property (*have a purchase agreement contingent upon receiving PUD approval from the Township*).

The following is a comprehensive list of each document included in the packet:

- PUD Application
 - Detailed Site Layout (Site Plan)
- Civil Plans
 - Site Analysis
 - Existing Site Conditions
 - Tree Survey/Demo
 - Aerial Analysis
 - Fire Truck Turning
 - SESC & Grading
 - Utility
 - Easements
 - Multiple Landscape Plans
 - Parallel Plan

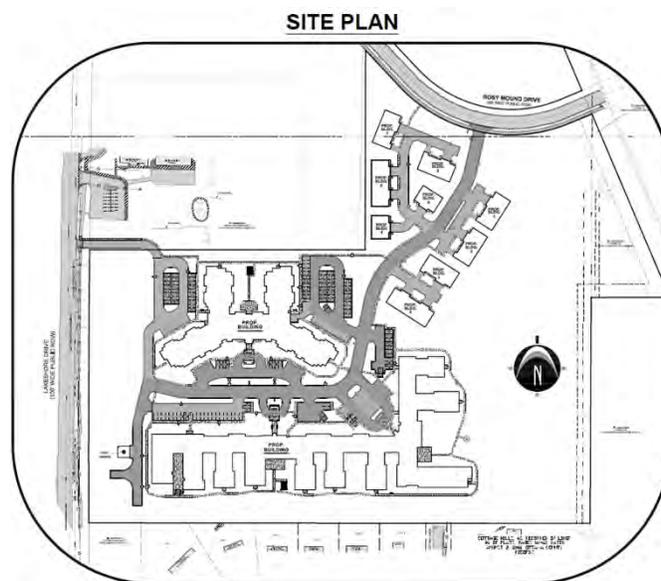
- Architectural Plans
 - Miscellaneous Site Details
 - Maintenance Garage & Signage
 - Site Lighting Fixtures
 - Photometric
 - Congregate Floor Plans & Elevations
 - Assisted Living Floor Plans & Elevations
 - Cottage Floor Plans & Elevations
- Project Narratives
 - Ordinance Compliance
 - Departure Requests
 - Traffic Analysis
 - Parking Study
 - Unit Size Analysis
 - Green Building Policy
 - Protected Species Evaluation
- Color Renderings
- Draft of Open Space Conveyance

BACKGROUND

In 2016, the Ottawa County Road Commission (OCRC) accepted the proposal from RW Properties I LLC (the “Developer”) to purchase their nearly 27 acres of land. The OCRC heard multiple proposals and ultimately settled on the senior living campus proposed by the Developer.

The Developer has a purchase agreement with the OCRC, with the sale being contingent upon receiving PUD approval from the Township. Furthermore, the Developer has applied to the Michigan State Housing Development Authority (MSHDA) for state/federal funding, which will allow the Developer to offer an affordable rental rate for certain units with the rest remaining at the standard market-rate. In order to accomplish this, the Township has had to confirm that a Payment in Lieu of Taxes (PILOT) agreement will be signed. Keep in mind, the existing land is tax-exempt, so even a reduction in taxes will still add property tax revenue.

Throughout this memo, the Commission will find numerous references to site constraints, and how they determined the site design of the project. There is steep topography at Lakeshore Drive, limited site distance on Rosy Mound, a steep change in elevation from the buildable area to the wetland at the bottom of the bank, very large right-of-way due to US-31 and the railroad, accommodating concerns of the adjacent subdivision, etc.



PUD PROPOSAL – HOUSING FOR THE ELDERLY

The development falls under the “Housing for the Elderly” category of the PUD Chapter. Unfortunately, the Zoning Ordinance does not specifically address that land use, so staff had to determine similar land uses to establish a basic set of standards for which to review.

The development would consist of 3 specific building types—Congregate, Assisted Living, and Cottages. In response, staff selected the following land uses to establish the base standards:

- Congregate = R-4, Multiple-family dwellings, Permitted use
- Assisted Living = R-3, Nursing or convalescent homes, Special land use
- Cottages (2 units) = R-3.5, Two-family dwellings, Special land use
- (3+ units) = R-3.5, Multiple-family dwellings, Permitted use

Congregate Apartment Building



- Land Area for Use = 6.96 acres
- Total No. Units = 116
- Building Height = 3 stories, 37'-6"
- Building Footprint = 49,441 sqft
- Total Parking Spaces = 98 spaces
(40 open, 24 garages, 36 carports)

Congregate – Most Common Unit Plans



There are 12 unit types that range in size from 685 sqft for a 1 bed/1 bath to 1,364 sqft for a 2 bed/2 bath. That said, there are two unit types that account for two-thirds of the total number of units—46 are proposed as 685 sqft 1 bed/1 bath units, and 31 units are proposed as 937 sqft 2 bed/1.5 bath. There are less than 10 units dedicated to the other types.

Now, the minimum floor area for R-4 apartments is 884 sqft, so a departure has been requested for this subject. However, the Developer notes that a variety of common areas and services are also being provided to the residents, and these amenities are not typically offered to traditional apartment

buildings. Based on that, approximately 15,000 sqft of additional floor area is available to residents, which equates to an extra 130 sqft per unit. A departure is being requested for the room sizes.

Common areas and amenities for this building include (*a full list is identified in the plan sets and project narratives*)—theater, salon, arts & crafts, guest suite, lounge, fitness, laundry, storage, etc.

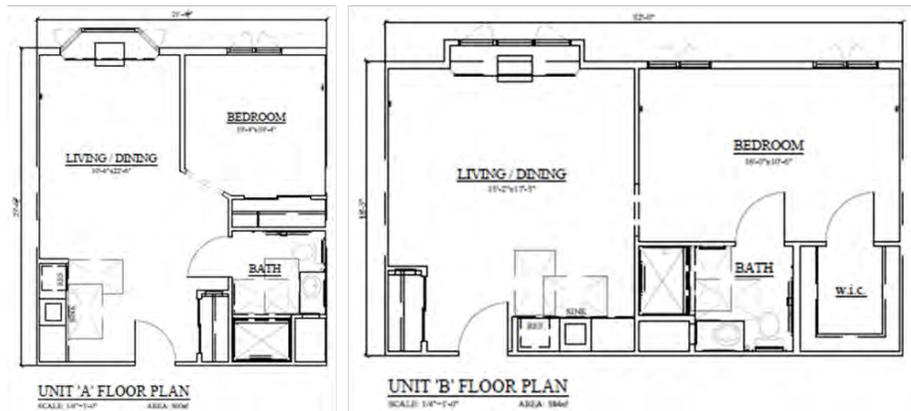
Assisted Living Facility



- Land Area for Use = 11.43 acres
- Total No. Units = 110
- Building Height = 1 story, 18'-0"
- Building Footprint = 96,348 sqft
- Total Parking Spaces = 55 spaces

Assisted Living – Most Common Unit Plans

There are 8 unit types that range in size from 249 sqft studio to an 811 sqft unit with 2 bed/2 bath. State and federal law only require a minimum room size of 200 sqft for nursing and convalescent homes, which is the synonymous land use for the Assisted Living building. Thus, all room sizes for this building are compliant. There are 2 unit types that account for 80% of total—58 are proposed as 500 sqft 1 bed/1 bath units, and 29 units are proposed as 584 sqft 1 bed/1bath.



Cottages



- Land Area for Use = 8.53 acres
- Total No. Units = 27 (2 two-unit bldgs, 5 three-unit bldgs, 2 four-unit bldgs)
- Building Height = 1 story, 15'-8"
- Building Footprints = 1,404 sqft for each unit
37,908 sqft total
- Total Parking Spaces = 54 spaces
(1 garage space + 1 driveway space per unit)

Cottages will all have a gross floor area of 1,404 sqft. Of which, 1,122 sqft is living area and 282 sqft is dedicated to a garage. This exceeds the minimum floor area requirements for attached dwellings.

Open Space

The PUD Ordinance requires a minimum 20% open space, but due to site conditions and regulated wetlands the Developer is offering to set aside **12.03 acres of designated open space (or 45% of total site)**. This is 123% more open space than what is required.

See next page for an image depicting the designated open space.

Cottages – Typical Unit Plan



Designated Open Space to be Preserved (Dark Green)



“Roads” & Parking

Due to site constraints, staff and the Developer spent an extensive amount of time deciding how the road network would be accomplished because a 66’ right-of-way was prohibitive. The best solution that staff, the Developer, and OCRC agreed upon was constructing the driving surfaces to public road standards, but in actuality have them be classified as a driveway. This solution satisfied Fire/Rescue concerns about maneuvering the site, Community Development concerns about building separations and ingress/egress spacing, and the Developers concerns about having to eliminate certain buildings if a right-of-way is required. The Developer is requesting a departure for this hybrid-type road system.

There is still enough room for public utility easements, so if the Township needs to perform work on the municipal water or sanitary sewer lines they will be able too, and since the “road” network is private the Developer is responsible for maintenance

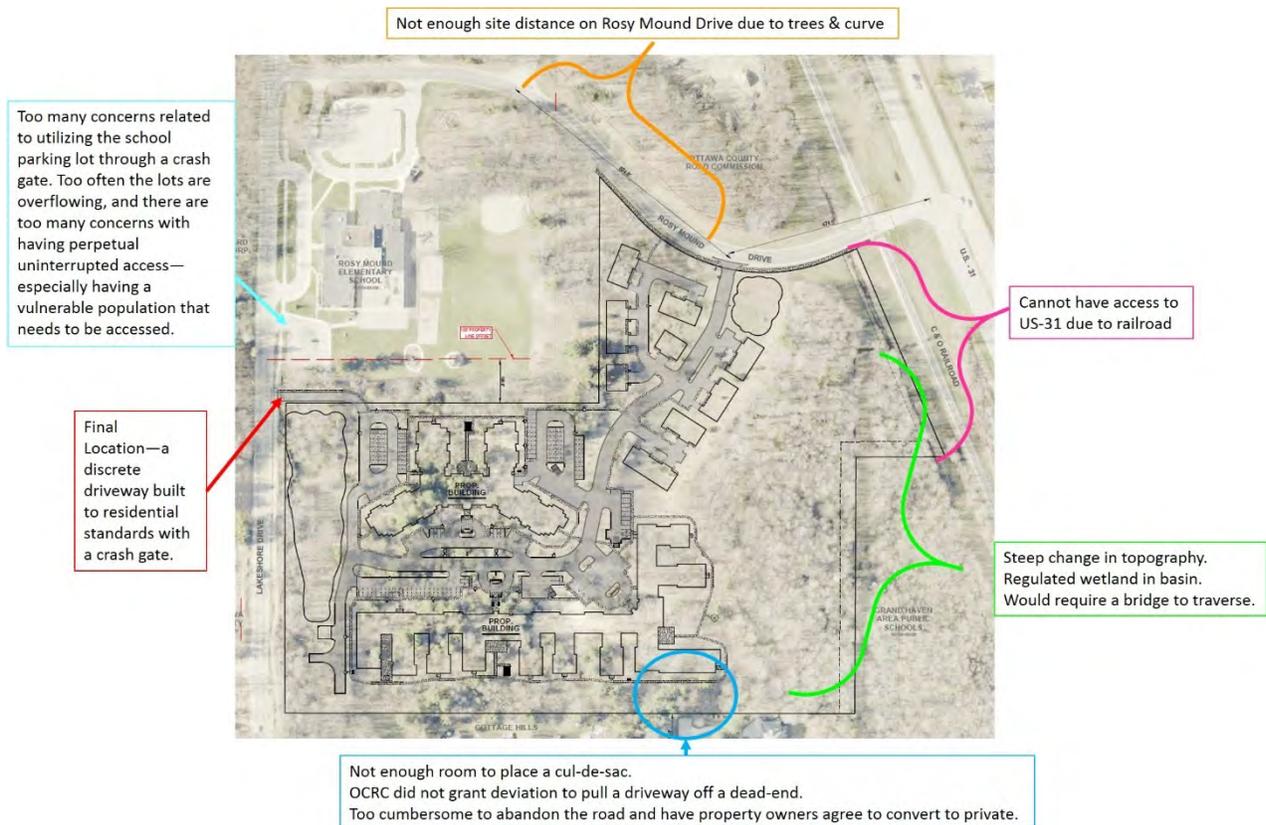
As for the number of parking spaces permitted by right (*i.e., outside of the Overlay Zone*), those permitted under the Overlay Zone regulations, and those being proposed by the Developer, which is a pleasant surprise:

Land Use	Permitted by Right	Permitted in Overlay Zone	Proposed
Congregate	75	705	98
Assisted Living	55	481	55
Cottages	54	178	27
Total	184	1,364	180

It should be noted, the Developer is proposing drastically less than what is permitted by the Overlay Zone (*1 space/200 sqft useable floor area*), and less than what is permitted by right.

Emergency Access Road

By far, the most challenging aspect of this project site was identifying a suitable location for an emergency vehicle access point on another public roadway. Below, is a graphic that shows all the site constraints that ultimately led to the final location that has been approved by staff, OCRC, and the Developer.

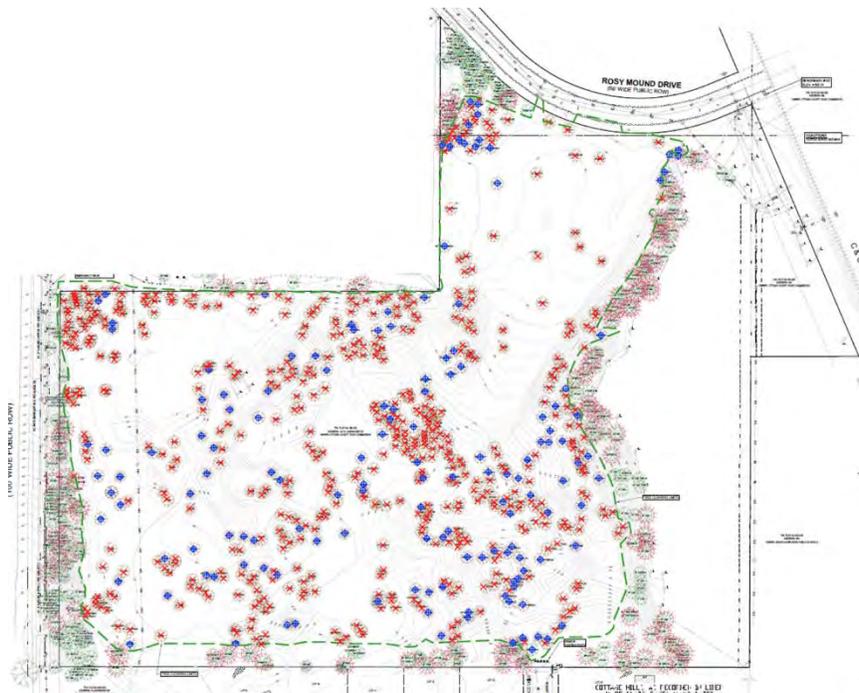


The Township requires at least two points of access for any development over 24 premises. As described in the above graphic there are very limited options for a second access point.

Woodland Protection & Landscaping

The Developer performed an extensive tree survey of this heavily wooded project site. Emphasis was made to preserve as much natural woodland as possible along the Cottage Hills Subdivision boundary line and along Lakeshore Drive. Although the figures below regarding tree removal seems extensive there are still an exceptional number of existing trees that will remain on the property—especially considering 12.03 acres of land will be set aside as open space.

The Overlay Zone differentiates between a Heritage Tree, Landmark Tree, and Protected Tree. There are no Heritage Trees on the property. The Overlay Zone has a list of trees that have been deemed Landmark based on their horticultural qualities and caliper size. A Protected Tree is any other tree 8+” in caliper size. Keep in mind, the tree survey was only conducted on the buildable land (aka *Construction Zone*), and it was not conducted within the regulated wetland, which is approximately 6 acres in size.



Tree Type	Preserved or Added	Removed
Heritage	0	0
Landmark	104	146
Protected	N/A	509
New Landscaping	348	N/A

Based on the above there is a net loss of approximately 203 trees within the construction zone.

The interior landscape islands were addressed slightly differently too. Due to compactness of the site, and the need to provide good visibility for the residents who drive, it was found the best placement of trees was toward the perimeter of the paved areas. Additionally, because many of the resident drivers could have limited mobility it is counterintuitive to create more distance from the parking spaces to the entrance ways. Thus, a departure is being requested on interior landscape islands.

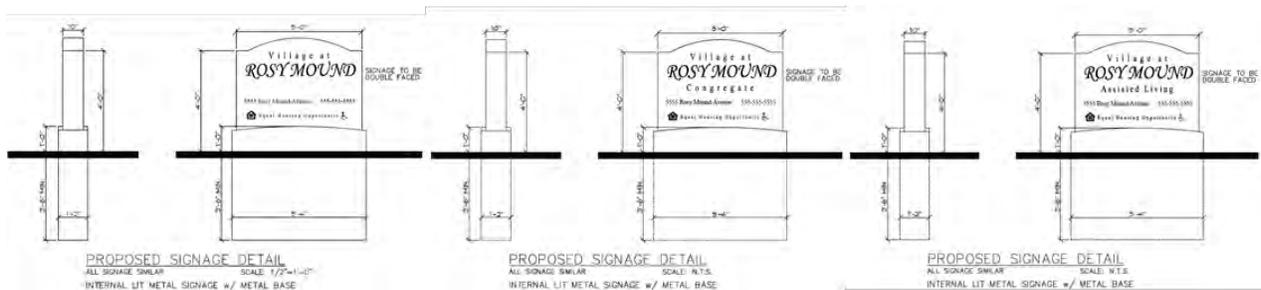
Architecture

The Overlay Zone has different architectural requirements based on the type of land use—Commercial, Office, and Institutional; Industrial; and Multiple Family. Technically, the Congregate and Cottages are Multiple Family and the Assisted Living is Institutional. However, the stronger architectural requirements for 1 out of 3 land uses did not make sense especially because the Assisted Living building will have the least amount of visibility from public roadways.

Based on this, staff directed the Developer to follow the Multiple Family architectural requirements for all buildings, and request a departure.

Signage

The Developer is proposing to use the same signage plan as the one found on their Ferry Street development. The size complies with the basic zoning regulations, will be internally illuminated, and have landscaping around the base.



Sustainable Development & Traffic

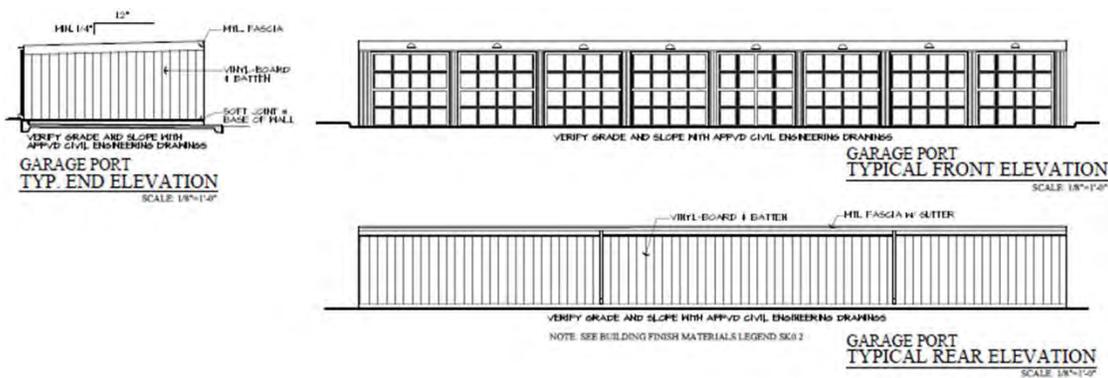
The Developer proposes to build the site in accordance with MSHDAs Affordable Green New Construction policy. Geothermal heating will be used, water conservation through plumbing fixtures, ENERGY STAR appliances and hot water heaters, high efficient lighting with daylight sensors on outdoor lighting, HVAC will be appropriately sized to ACCA standards, many of the interior construction materials will utilize low or no volatile organic compounds, will have an efficient irrigation system, and landscaping will be appropriate to the site's soil and microclimate and the policy prohibits the use of any invasive species.

The site is not expected to generate any significant amount of traffic, and it was determined a traffic study was not required because the site will not generate 100+ trips during peak hours, or 1,000+ daily trips. The Developer provided an estimate, which was then reviewed by Commissioner LaMourie, who found the site will likely generate approximately 634 trips per day with the highest number of peak hour trips being 28 during the PM rush hour.

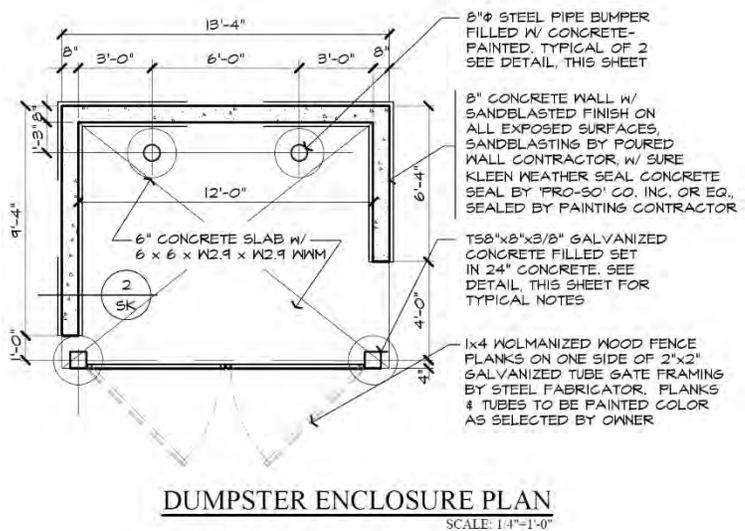
STAFF REQUEST FOR CERTAIN CONSIDERATION

During the design process of this site there were a handful of minor subjects that staff and the Developer did not agree on, and both decided to provide the Planning Commission with the information to make the decision.

- The Overlay Zone requires accessory structures to have similar architectural features as the main buildings. However, the proposed garage ports and carports are basic metal structures.
 - Staff believes the two structure types should be modified to meet some type of higher architectural and/or building material standard.
 - The Developer believes it is cost prohibitive and unnecessary to build high-end garage ports and carports.



- The Landscaping requirements indicate that refuse containers must be screened by a wood or masonry solid wall or live conifer landscape material. The Developer is proposing an 8" concrete wall with sandblasted finish.
 - Staff does not consider a concrete wall to be masonry because the common understanding of masonry is block or stone being stacked on top of each other to create a wall.



- Staff does not consider a concrete wall to be masonry because the common understanding of masonry is block or stone being stacked on top of each other to create a wall.
 - The Developer believes this does constitute masonry, it is utilized at their other sites, is easy to maintain, does not get damaged easily, and the concrete is generally screened from the proposed landscaping surrounding the container.
- The Overlay Zone requires the garages of Multiple Family housing types to be varied and/or recessed to reduce the emphasis on the garages along the street edge.

- Staff believes the garages should be varied or recessed in some fashion.
- The Developer believes there is variation because of the building placements on the site, and the residents utilizing the garages need as much visibility as possible when maneuvering in, and out, of the garage, and recessing the garage would reduce their visibility and possible lead them to damage their Cottage or vehicle.
- Section 17.05.6 describes Transition Area requirements. The Developer requests the Planning Commission find that a 30’ undisturbed existing woodlot and approximately 100+ feet of separation from the Assisted Living facility and Cottage Hills Subdivision homes is sufficient to meet this requirement.

COMPLETE LIST OF REQUESTED DEPARTURES

Below is a list of all the departures being requested from the Developer along with staff comments. Each of these will need to be considered and a finding made for each request, which will be incorporated into the recommendation made to the Board on this project. It should be noted—although the following list may seem extensive the majority are specifically related to site constraints or having to translate Housing for the Elderly into other land uses that are similar, but not exact (*i.e.*, “square peg/round hole” scenario).

No.	Section	Request	Staff Comments
1	11.04	Convert the method of setback measurement from lot line to building, and replace it with building separation.	Due to the uniqueness of the site, and MSHDA requirements to have separate parcels for each use, staff found the best way to measure setbacks is via building separation instead of lot lines.
2	15A.04.5	Waive the requirement to receive separate special land use approval to relocate an existing overhead utility pole and electrical line.	There is an existing utility pole that needs to be relocated to accommodate the site. There will not be any new overhead utility lines, and the remaining utilities will all be buried.
3	15A.10.3	Allow the landscaping that must abut the walls to be planted 36” away from the building next to the stone maintenance strip.	MSHDA requires a certain distance that landscaping must be planted from the building, and the Developer’s preferred building design does not include downspouts, thus the maintenance strip is used to capture runoff. Generally, the additional distance still satisfies the intent of the regulation, which is to reduce the visual mass.

4	15A.10.5	Remove the requirement that 75% of interior landscape islands be inside the parking lot and instead be along the perimeter.	As discussed above, the proposed parking lots are not expansive, and creating additional distance for the residents to walk from their vehicle to the building is counterintuitive to a development catering to residents that may have limited mobility.
5	15A.10.11	Not requested by Developer.	Staff recommends the Planning Commission consider a departure from the deferred parking requirements that does not obligate the Township or Developer to identify additional parking spaces or draft an agreement regarding the parking.
6	15A.11 15A.11.3	Allow the Assisted Living facility to be considered Multiple Family like the Congregate and Cottages for architectural purposes.	As discussed above, the Assisted Living facility has the least amount of visibility, but is technically an Institutional Use and would require a higher architectural standard than the other two uses. Staff did not see a benefit to requiring 1 out of 3 building types to have more architecture than the other buildings, which may reduce the cohesiveness of the site.
7	15A.13.1.B	Remove the requirement to vary the location, or recess the Cottage garage.	As discussed above, the Developer believes a recessed garage will reduce the visibility of the tenants and lead to damaged garages and vehicles.
8	17.05.1.E	<ul style="list-style-type: none"> ▪ Find the use of driveways built to OCRC road standards is permitted in order to remove the right-of-way requirement. ▪ Find the separation between points of ingress/egress is sufficient and accommodates vehicular circulation. 	<ul style="list-style-type: none"> ▪ As discussed above, due to site constraints it was not feasible to have a 66' right-of-way, so it was requested to build the driving surface to OCRC standards, but allow them to be a driveway in order to remove the right-of-way. ▪ Site constraints do not allow for the access points to meet the Township or OCRC spacing requirements. However, staff is generally comfortable with the proposed locations and the Developer made numerous revisions to improve internal circulation.
9	19.07.28.D	Allow the Assisted Living facility to have frontage on the proposed driving surface instead of fronting onto a paved road like Lakeshore Drive.	The Assisted Living facility will still front on a driving surface that is built to OCRC road standards, but is proposing to not have a right-of-way. If the Planning Commission approves that request it should also approve this one. Furthermore, due to steep topography and site distance it is not feasible to have the Assisted Living building front onto Lakeshore Drive.

10	19.07.28.H	Allow parking spaces to be in front of the Assisted Living facility.	The SLU provisions require parking to be in the side or rear yard. Although a true front yard does not exist for this building it seems sensible to have the parking in the front to reduce the impact to the Cottage Hills Subdivision, provide more direct access to the building and adjacent driving surface, and maintain the natural landscape for residents to enjoy when looking out their windows.
11	20.12.5 20.12.6	Allow a 6’-6” tall decorative fence for the Assisted Living Memory Care Courtyard.	Typically, the maximum fence height is 6’. However, due to the special needs of Memory Care patients and the Developer’s operation experience a 6’-6” fence is able to provide the safety and security of these patients.
12	21.02	<ul style="list-style-type: none"> ▪ Allow a 3-story 37’-6” height for the Congregate building. ▪ Reduce the minimum floor area requirement for the Congregate units from 884 sqft to 685 sqft. 	<ul style="list-style-type: none"> ▪ The Accessibility regulations require first floor apartments to be on grade and not “garden” style to ensure people with disabilities and limited mobility can have uninterrupted access to their living quarters. Therefore, a 3-story departure should be approved, and the Commission will need to determine if a 2’-6” height departure is reasonable. ▪ Unlike a typical apartment building the Congregate offers additional amenities and common areas that could be calculated as part of the minimum floor area.
13	24.04.2	Allow the minimum size of a parking space to be 10’x20’ instead of the required 9’x18’.	The Developer has supplied documentation from MSHDA that requires a minimum parking space size of 10’x20’ to assist elderly residents with parking maneuvers.

SAMPLE MOTIONS

If the Planning Commission finds the Village at Rosy Mound PUD application meets the applicable standards, the following motion can be offered:

Motion to direct staff to draft a formal motion and report, which will recommend **conditional approval** of the Village at Rosy Mound PUD application, with those Zoning Ordinance compliance departures which were discussed and will be reflected in the meeting minutes. This will be reviewed and considered for adoption at the next meeting. Lastly, the Planning Commission directs staff to publish the notice of public hearing for the Township Board. Minimally, the project will be subject to the following conditions:

1. Must obtain permits from all applicable agencies including the OCRC, OCWRC, State of Michigan etc. Permits shall be obtained before building permits are issued.
2. The Developer shall enter into a PUD Contract with the Township, which will be drafted by the Township Attorney and approved by the Township Board prior to receiving a building permit.
3. The Developer shall enter into a modified version of the typical Private Road Maintenance Agreement with the Township, which will be drafted by the Township Attorney and approved by the Township Board prior to receiving a building permit.
4. The Township and Developer shall enter into a Payment in Lieu of Taxes (PILOT) agreement pursuant to the MSHDA requirements. The Agreement shall be drafted by the Township Attorney and approved by the Township Board prior to receiving a building permit.
5. The Developer shall provide documentation from the Grand Haven Board of Light and Power regarding streetlights—if they will be metered or if a Special Assessment Lighting District is required. This subject must be satisfied prior to receiving an occupancy certificate.
6. The Developer shall incorporate additional shielding to light fixtures along the southern boundary line that abuts the Cottage Hills Subdivision as well as the Northwest corner of the site that abuts the Rosy Mound Elementary School to ensure light does not spill into the adjacent dwellings.
7. Revise Sheet C-205 to reflect the true open space figures presented on Sheet L-100. This will ensure there is no confusion regarding the proposed 12.03 acres of designated open space.
8. *List additional conditions.*

If the Planning Commission finds the Village at Rosy Mound PUD application does not meet the applicable standards, the following motion can be offered:

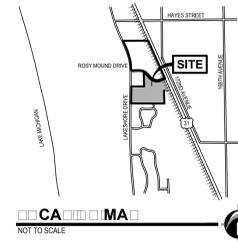
Motion to recommend to the Township Board **denial** of the Village at Rosy Mound PUD, and direct staff to draft a formal motion and report with those discussion points which will be reflected in the meeting minutes. This will be reviewed and considered for adoption at the next meeting.

If the Planning Commission finds the applicant must make revisions to the PUD application, the following motion can be offered:

Motion to **table** the Village at Rosy Mound PUD application, and direct the applicant to make the following revisions:

1. *List the revisions.*

Please contact me if this information raises questions.

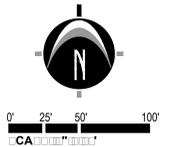


1. WETLANDS DETERMINED BY KING & MACGREGOR ENVIRONMENTAL, INC. ON 10/20/2015
2. THERE IS NO TRUE DRAINAGE COURSE ON SITE. ALONG THE EASTERN RIDGE LINE, HALF THE RUNOFF IS DIRECTED TO THE WETLANDS. MOST OF THE SITE RUN-OFF STAYS ON SITE AND NATURALLY INFILTRATES, WHILE THERE IS A PORTION WHICH FLOWS TO ROSY MOUND AND THE ELEMENTARY SCHOOL PROPERTY. SEE FLOW ARROWS.
3. PRELIMINARY GEOTECHNICAL EVALUATION COMPLETED ON 12/21/2016 BY SOILS & STRUCTURES. BORINGS WILL BE COMPLETED IN JANUARY 2017.



UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS 'PLANS' WERE OBTAINED FROM AVAILABLE AERIAL RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.



- Catch Basin - Round
- Catch Basin - Square
- Cable Riser
- Culvert
- Guy Anchor
- Hydrant
- Iron - Set
- Iron - Found
- Miss Dig Flag - Gas
- Manhole
- Post
- Phone Riser
- Sign
- Sanitary Sewer Manhole
- Utility Pole
- Underground Gas Marker
- Water Valve
- Overhead Utility
- Fence
- Railroad
- Asphalt
- Concrete
- Building
- Flow Arrow

811 Know what's below. CALL before you dig.

UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "TRAIL" WERE OBTAINED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND COVER OF ALL UTILITIES AND SERVICE LINES PRIOR TO NEW CONNECTIONS.

NEDERVELD

www.nederveld.com
800.222.1868

GRAND RAPIDS
217 Grandville Ave., Suite 302
Grand Rapids, MI 49503
Phone: 616.575.5190

ANN ARBOR
CHICAGO
COLUMBUS
HOLLAND
INDIANAPOLIS
ST. LOUIS

Reenders Inc.
Dennis Reenders
Park Place Ctr.
950 Taylor Ave.
Grand Haven, MI 49417

Title: PUD Submittal V. Date: 10.25.16
Drawn: Brad M. Checked: John C. S. Date: 10.25.16
Title: Township Review V. Date: 01.08.17
Drawn: Brad M. Checked: John C. S. Date: 01.08.17
Title: Township Review V. Date: 03.08.17
Drawn: Brad M. Checked: John C. S. Date: 03.08.17
Title: Township Re-Submittal V. Date: 04.10.17
Drawn: Brad M. Checked: John C. S. Date: 04.10.17

	Catch Basin - Round
	Catch Basin - Square
	Cable Riser
	Culvert
	Guy Anchor
	Hydrant
	Iron - Set
	Iron - Found
	Miss Dig Flag - Gas
	Manhole
	Post
	Phone Riser
	Sign
	Sanitary Sewer Manhole
	Utility Pole
	Underground Gas Marker
	Weedland Marker
	Water Valve
	Overhead Utility
	Fence
	Railroad
	Asphalt
	Concrete
	Building

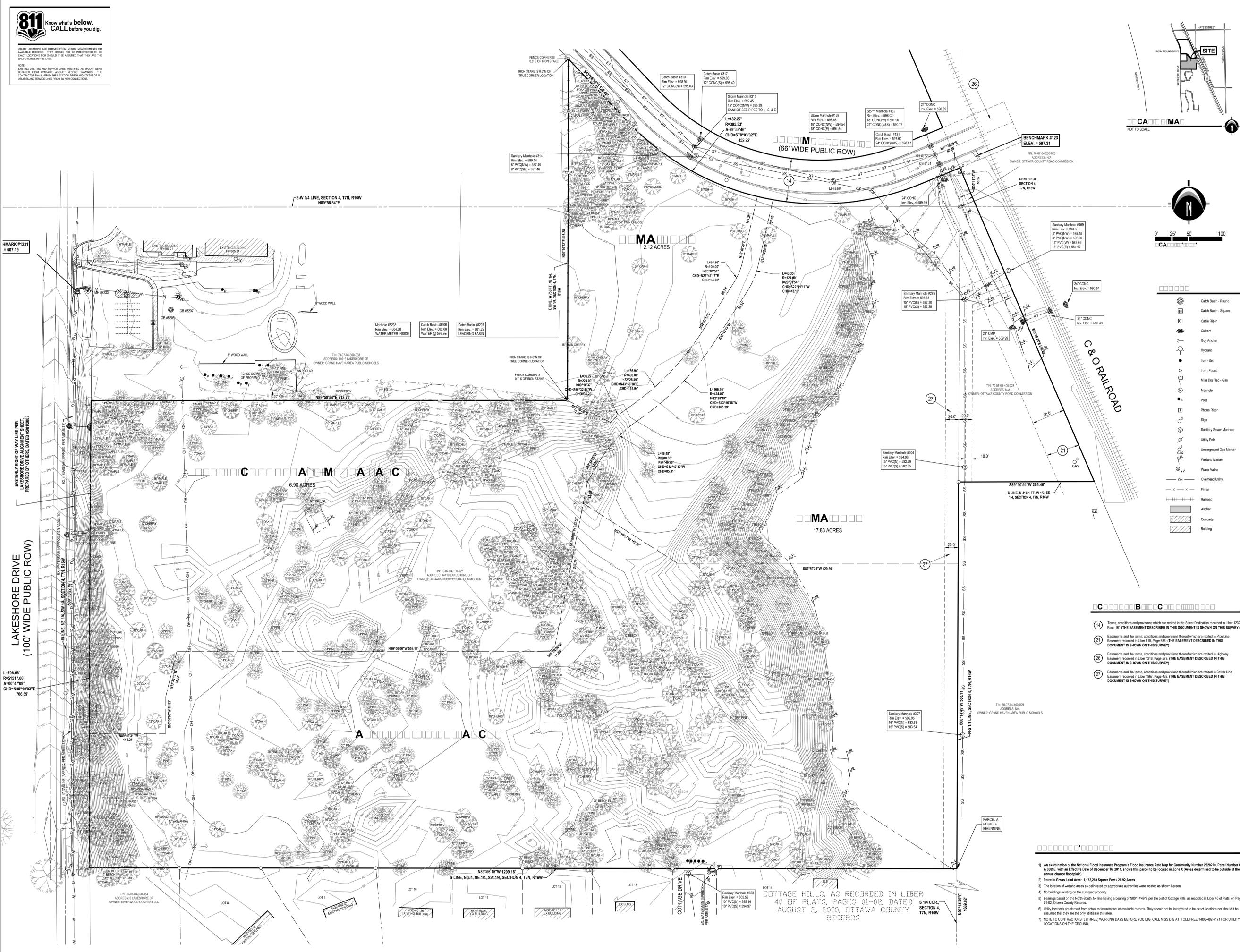
14110 Lakeshore Dr
PART OF SECTION 4, T7N, R16W, GRAND HAVEN
TOWNSHIP, OTTAWA COUNTY, MICHIGAN

AM

AM

15201307

C2



CA MA
NOT TO SCALE

0' 25' 50' 100'
CA

C B C

- 14 Terms, conditions and provisions which are recited in the Street Dedication recorded in Liber 1232, Page 161 (THE EASEMENT DESCRIBED IN THIS DOCUMENT IS SHOWN ON THIS SURVEY)
- 21 Easements and the terms, conditions and provisions thereof which are recited in Pipe Line Easement recorded in Liber 510, Page 656 (THE EASEMENT DESCRIBED IN THIS DOCUMENT IS SHOWN ON THIS SURVEY)
- 26 Easements and the terms, conditions and provisions thereof which are recited in Highway Easement recorded in Liber 1218, Page 679 (THE EASEMENT DESCRIBED IN THIS DOCUMENT IS SHOWN ON THIS SURVEY)
- 27 Easements and the terms, conditions and provisions thereof which are recited in Sewer Line Easement recorded in Liber 1967, Page 482 (THE EASEMENT DESCRIBED IN THIS DOCUMENT IS SHOWN ON THIS SURVEY)

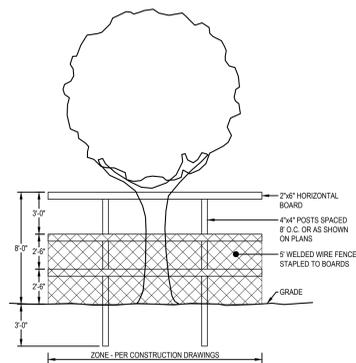
- 1) An examination of the National Flood Insurance Program's Flood Insurance Rate Map for Community Number 262275, Panel Number 0088E & 0089E, with an Effective Date of December 16, 2011, shows this parcel to be located in Zone X (Area determined to be outside of the 0.2% annual chance floodplain).
- 2) Parcel A Gross Land Area: 1,172,269 Square Feet / 26.92 Acres
- 3) The location of weedland areas as delineated by appropriate authorities were located as shown herein.
- 4) No buildings existing on the surveyed property.
- 5) Bearings based on the North-South 1/4 line having a bearing of N00°14'49"E per the plat of Cottage Hills, as recorded in Liber 40 of Plats, on Pages 01-02, Otsego County Records.
- 6) Utility locations are derived from actual measurements or available records. They should not be interpreted to be exact locations nor should it be assumed that they are the only utilities in this area.
- 7) NOTE TO CONTRACTORS: 3 (THREE) WORKING DAYS BEFORE YOU DIG, CALL MISS DIG AT TOLL FREE 1-800-482-7111 FOR UTILITY LOCATIONS ON THE GROUND.

LOT 14
COTTAGE HILLS, AS RECORDED IN LIBER
40 OF PLATS, PAGES 01-02, DATED
AUGUST 2, 2000, OTTAWA COUNTY
RECORDS



UTILITY LOCATIONS ARE DERIVED FROM ACTUAL MEASUREMENTS OR AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATIONS NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THIS AREA.

NOTE: EXISTING UTILITIES AND SERVICE LINES IDENTIFIED AS "PLAN" WERE DERIVED FROM AVAILABLE AS-BUILT RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY THE LOCATION, DEPTH AND STATUS OF ALL UTILITIES AND SERVICE LINES PRIOR TO ANY CONNECTIONS.



ALL TREE PROTECTION SHALL BE INSTALLED BY THE CONTRACTOR AND APPROVED BY THE OWNER PRIOR TO COMMENCEMENT OF DEMOLITION AND NEW CONSTRUCTION.

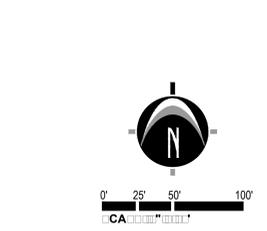
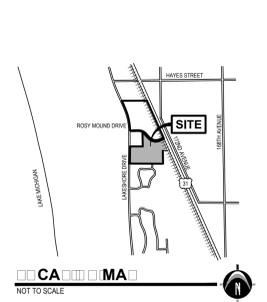
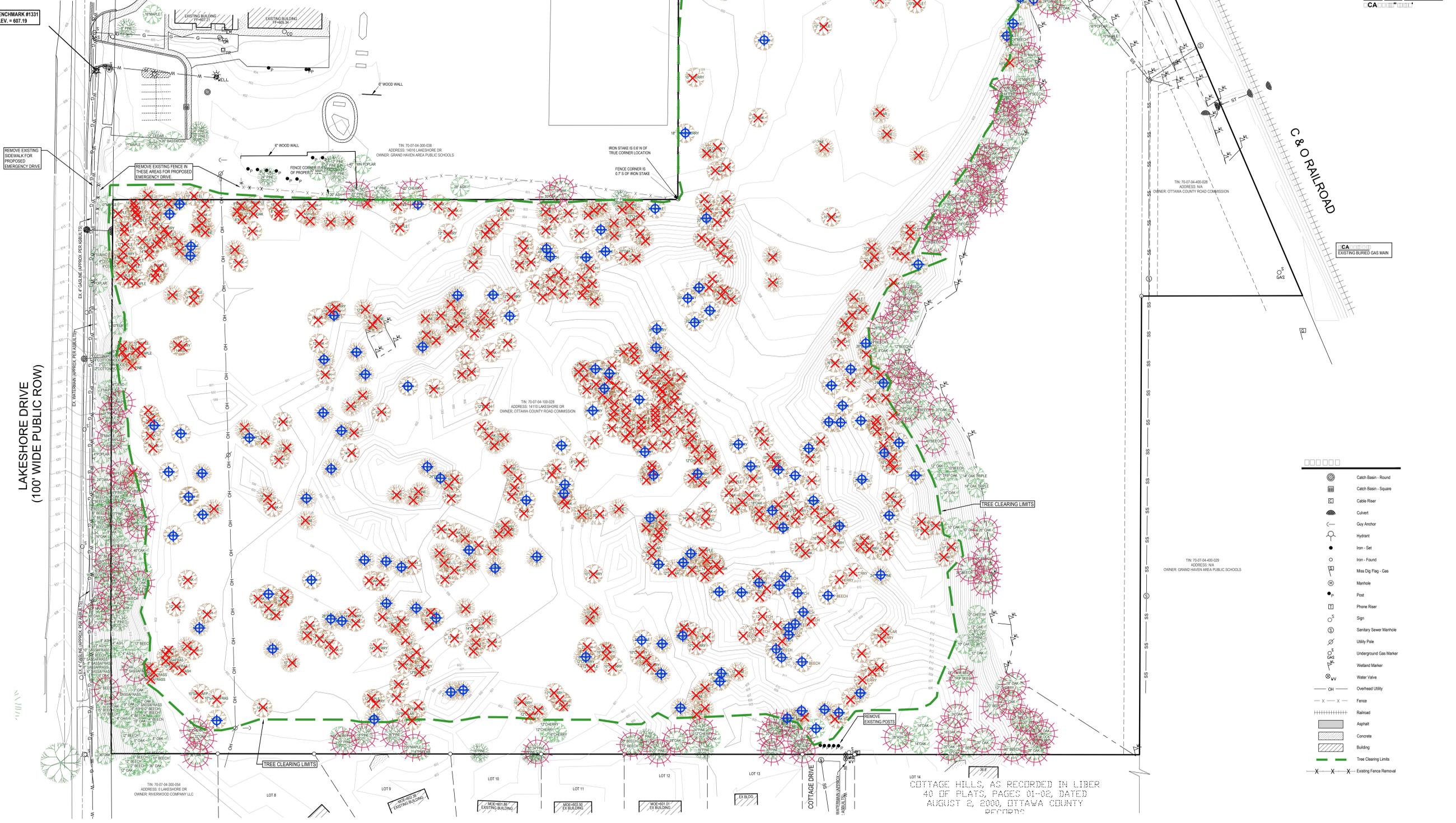


- EVERGREEN TREE TO REMAIN
- EVERGREEN TREE TO BE REMOVED
- DECIDUOUS TREE TO REMAIN
- DECIDUOUS TREE TO BE REMOVED
- LANDMARK / HERITAGE PROTECTED TREE FENCING (104 TOTAL)
- TREE CLEARING LIMITS
- LANDMARK TREE TO BE REMOVED (146 TOTAL)
- NON-LANDMARK TREE TO BE REMOVED (493 TOTAL)

REPLACEMENT RATIOS:

TREE	PROP.	RATIO
ASH	59	92%
MAPLE	28	20%

- ENSURE FENCING IS INSTALLED TO PREVENT REMOVAL OF TREES OUTSIDE THE CONSTRUCTION ZONE. FENCING SHALL EXTEND 10' BEYOND THE Drip LINE OF THE TREE CANOPY.
- TREES WERE MEASURED AT DIAMETER BREST HEIGHT (D.B.H.)
- WHERE PRACTICAL, EXISTING TREES THAT ARE IN GOOD HEALTH AND ABOVE 3" IN CALIPER ALONG THE FRONTAGE SHALL BE PRESERVED



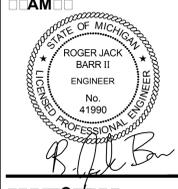
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www.nederveld.com
800.222.1868
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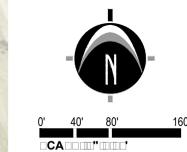
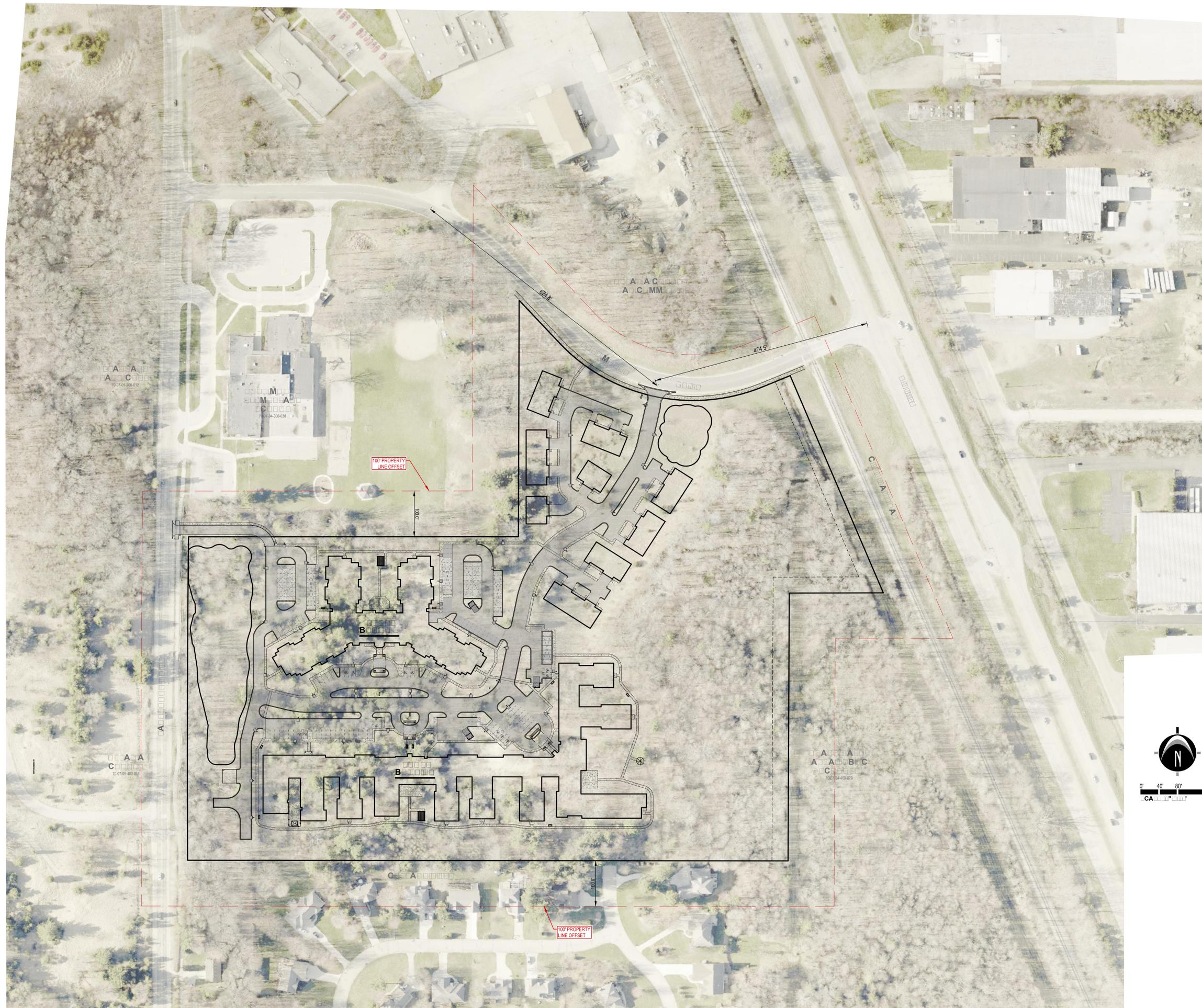
Reenders Inc.
Dennis Reenders
Park Place Ctr.
950 Taylor Ave.
Grand Haven, MI 49417

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14110 Lakeshore Dr
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TOWNSHIP, OTTAWA COUNTY, MICHIGAN



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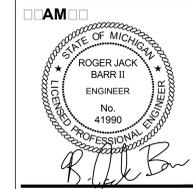
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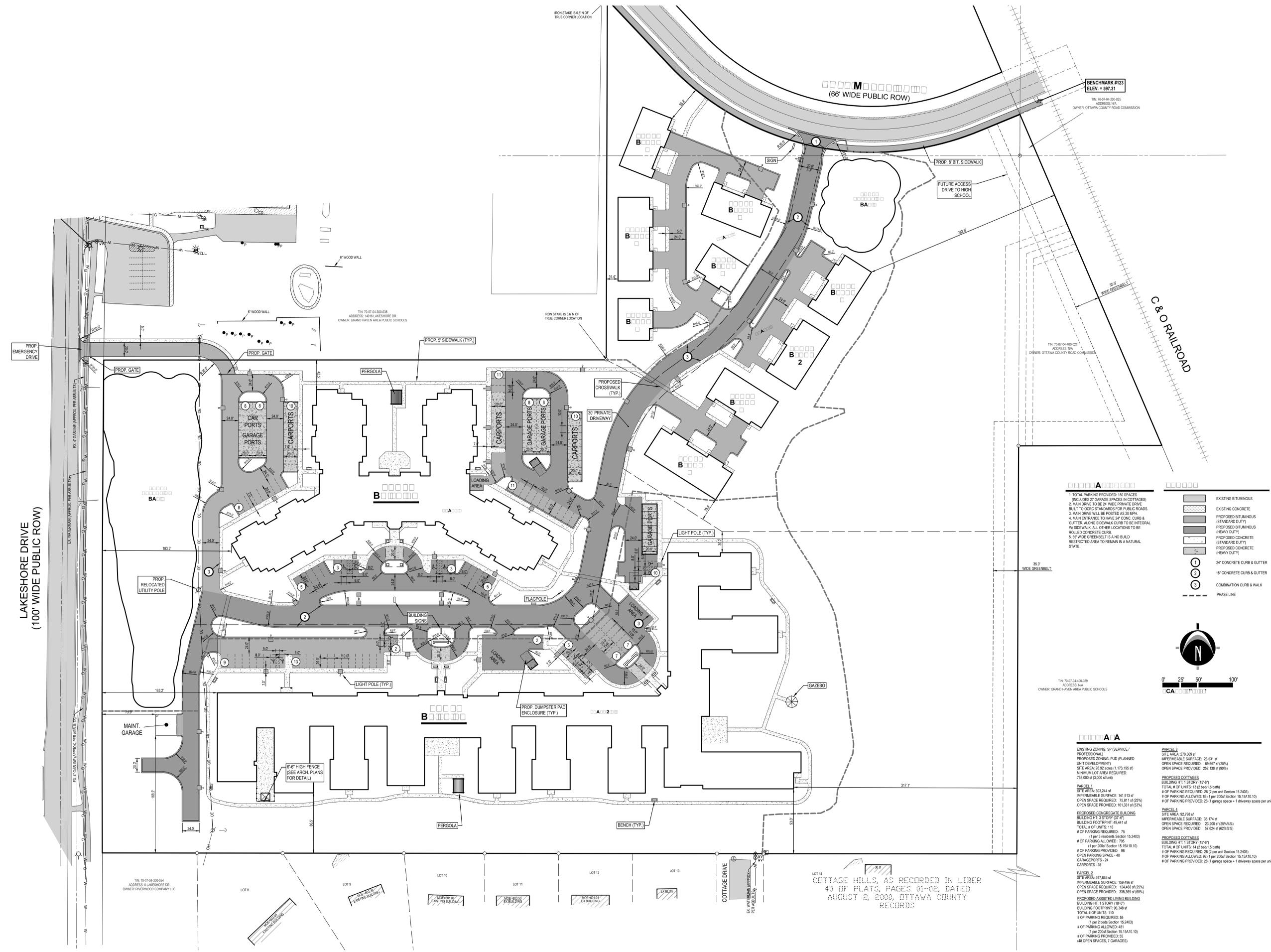
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15201307
C2



LEGEND

- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED BITUMINOUS (STANDARD DUTY)
- PROPOSED BITUMINOUS (HEAVY DUTY)
- PROPOSED CONCRETE (STANDARD DUTY)
- PROPOSED CONCRETE (HEAVY DUTY)
- 24" CONCRETE CURB & GUTTER
- 18" CONCRETE CURB & GUTTER
- COMBINATION CURB & WALK
- PHASE LINE

NOTES

- TOTAL PARKING PROVIDED: 180 SPACES (INCLUDES 27 GARAGE SPACES IN COTTAGES)
- MAIN DRIVE TO BE 24' WIDE PRIVATE DRIVE BUILT TO OCCR STANDARDS FOR PUBLIC ROADS.
- MAIN DRIVE WILL BE POSTED AS 20 MPH.
- MAIN ENTRANCE TO HAVE 24" CONC. CURB & GUTTER ALONG SIDEWALK CURB TO BE INTEGRAL W/ SIDEWALK. ALL OTHER LOCATIONS TO BE ROLLED CONCRETE CURB.
- 30' WIDE GREENBELT IS A NO BUILD RESTRICTED AREA TO REMAIN IN A NATURAL STATE.

SCALE
 0' 25' 50' 100'

ORIENTED NORTH

EXISTING ZONING: SP (SERVICE / PROFESSIONAL)
 PROPOSED ZONING: PLD (PLANNED UNIT DEVELOPMENT)
 SITE AREA: 26.92 acres (1,173,195 sq ft)
 MINIMUM LOT AREA REQUIRED: 788,000 sq ft (3,000 sf/lot)

PARCEL 1
 SITE AREA: 303,244 sq ft
 IMPERMEABLE SURFACE: 141,913 sq ft
 OPEN SPACE REQUIRED: 75,811 sq ft (25%)
 OPEN SPACE PROVIDED: 153,131 sq ft (53%)

PROPOSED CONCRETE BUILDING
 BUILDING HT: 3 STORY (37'-0")
 BUILDING FOOTPRINT: 40,441 sq ft
 TOTAL # OF UNITS: 116
 # OF PARKING REQUIRED: 75
 (1 per 2 residential Section 15.2403)
 # OF PARKING ALLOWED: 705
 (1 per 2000 Section 15.15A10.10)
 # OF PARKING PROVIDED: 58
 OPEN PARKING SPACE: 40
 GARAGE SPACES: 24
 CARPORTS: 36

PARCEL 2
 SITE AREA: 407,865 sq ft
 IMPERMEABLE SURFACE: 159,496 sq ft
 OPEN SPACE REQUIRED: 124,466 sq ft (25%)
 OPEN SPACE PROVIDED: 338,369 sq ft (88%)

PROPOSED ASSISTED LIVING BUILDING
 BUILDING HT: 1 STORY (10'-0")
 BUILDING FOOTPRINT: 36,348 sq ft
 TOTAL # OF UNITS: 110
 # OF PARKING REQUIRED: 55
 (1 per 2 beds Section 15.2403)
 # OF PARKING ALLOWED: 481
 (1 per 2000 Section 15.15A10.10)
 # OF PARKING PROVIDED: 55
 (40 OPEN SPACES, 7 GARAGES)

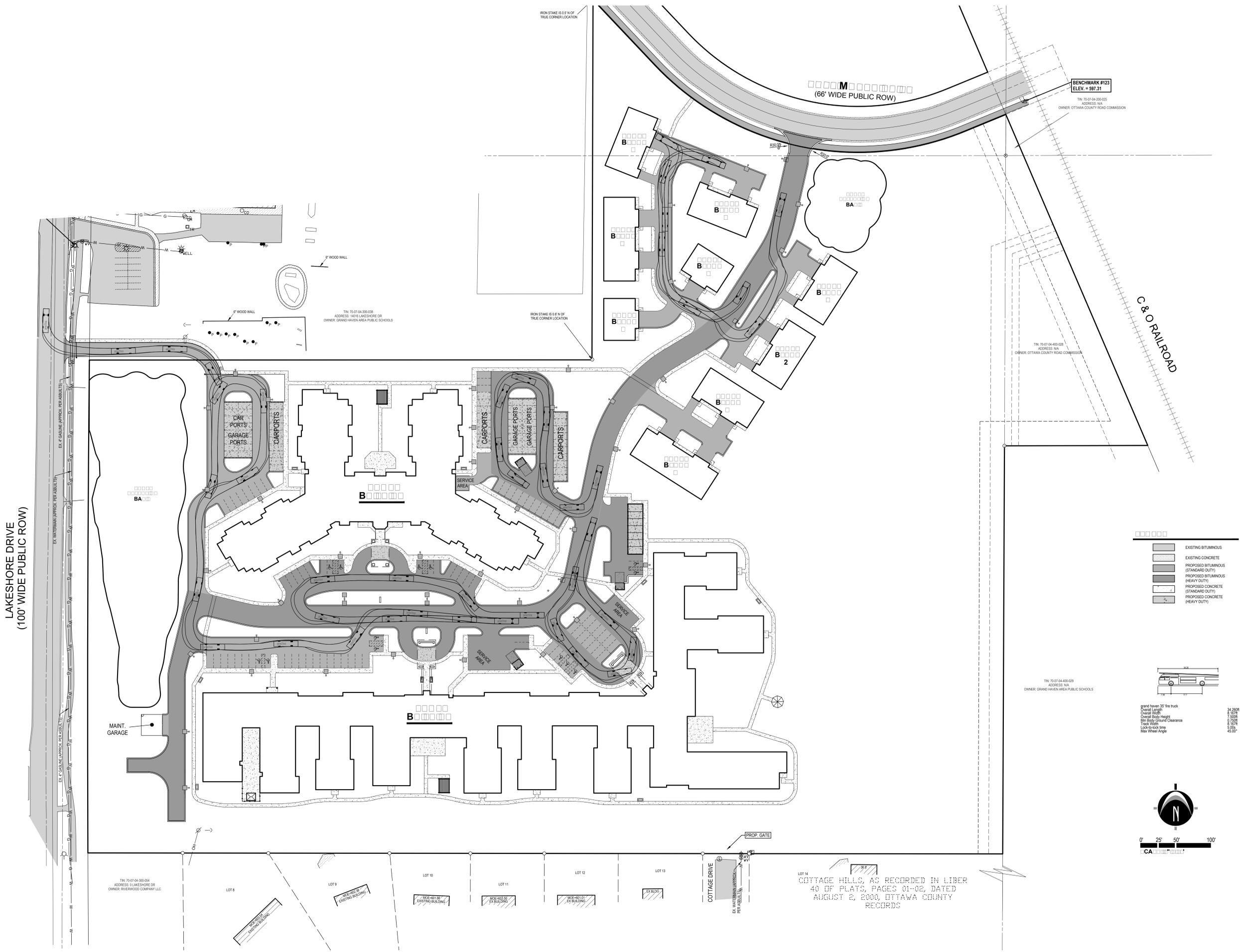
PARCEL 3
 SITE AREA: 278,669 sq ft
 IMPERMEABLE SURFACE: 26,521 sq ft
 OPEN SPACE REQUIRED: 69,667 sq ft (25%)
 OPEN SPACE PROVIDED: 252,138 sq ft (90%)

PROPOSED COTTAGES
 BUILDING HT: 1 STORY (10'-0")
 TOTAL # OF UNITS: 13 (2 bed/1 1/2 bath)
 # OF PARKING REQUIRED: 26 (2 per unit Section 15.2403)
 # OF PARKING ALLOWED: 86 (1 per 2000 Section 15.15A10.10)
 # OF PARKING PROVIDED: 26 (1 garage space + 1 driveway space per unit)

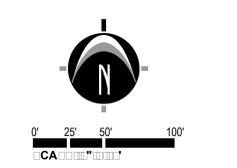
PARCEL 4
 SITE AREA: 40,708 sq ft
 IMPERMEABLE SURFACE: 35,174 sq ft
 OPEN SPACE REQUIRED: 23,220 sq ft (25%/N/A)
 OPEN SPACE PROVIDED: 57,524 sq ft (100%/N/A)

PROPOSED COTTAGES
 BUILDING HT: 1 STORY (10'-0")
 TOTAL # OF UNITS: 14 (2 bed/1 1/2 bath)
 # OF PARKING REQUIRED: 28 (2 per unit Section 15.2403)
 # OF PARKING ALLOWED: 92 (1 per 2000 Section 15.15A10.10)
 # OF PARKING PROVIDED: 29 (1 garage space + 1 driveway space per unit)

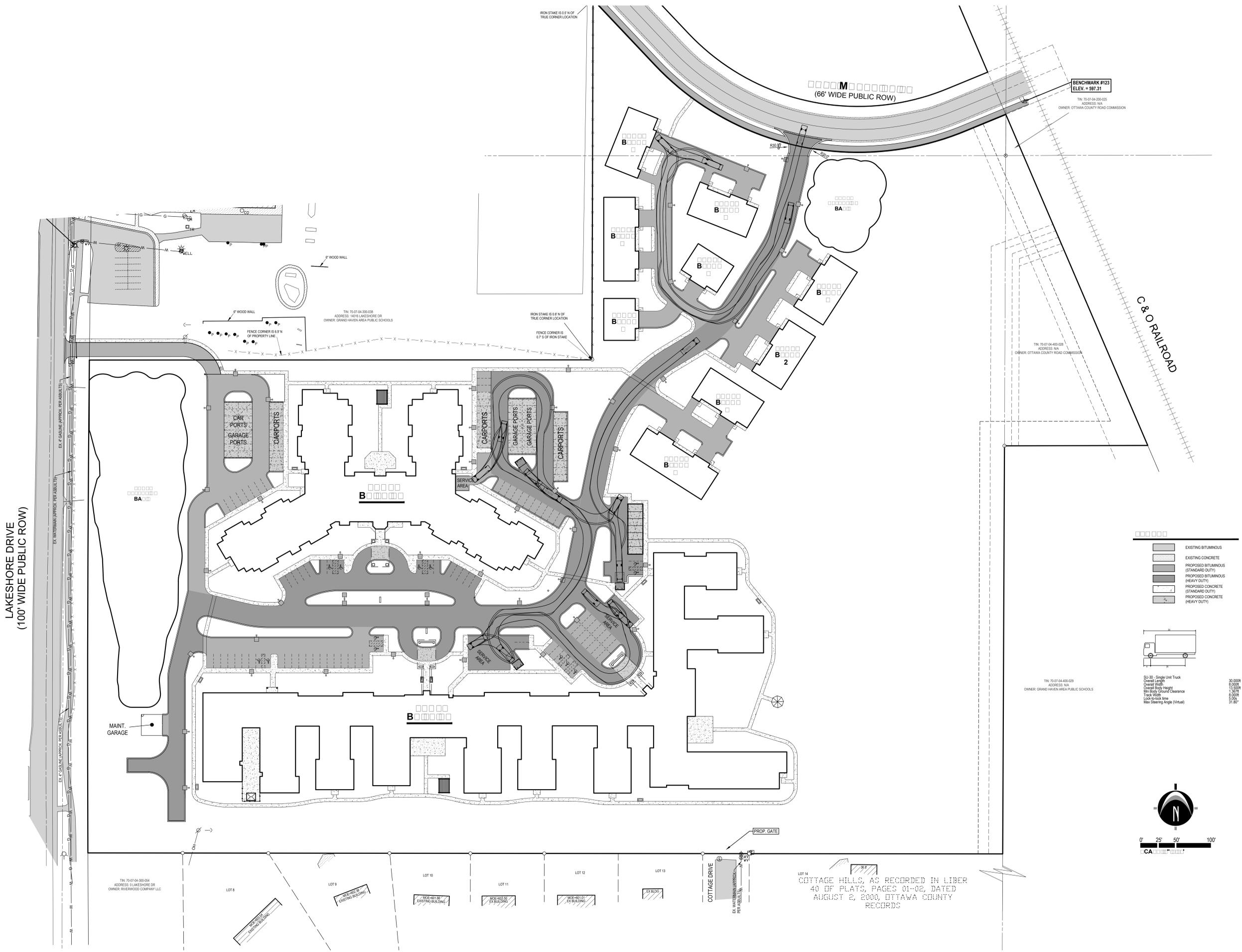
COTTAGE HILLS, AS RECORDED IN LIBER 40 OF PLATS, PAGES 01-02, DATED AUGUST 2, 2000, OTTAWA COUNTY RECORDS



- EXISTING BITUMINOUS
- EXISTING CONCRETE
- PROPOSED BITUMINOUS (STANDARD DUTY)
- PROPOSED BITUMINOUS (HEAVY DUTY)
- PROPOSED CONCRETE (STANDARD DUTY)
- PROPOSED CONCRETE (HEAVY DUTY)



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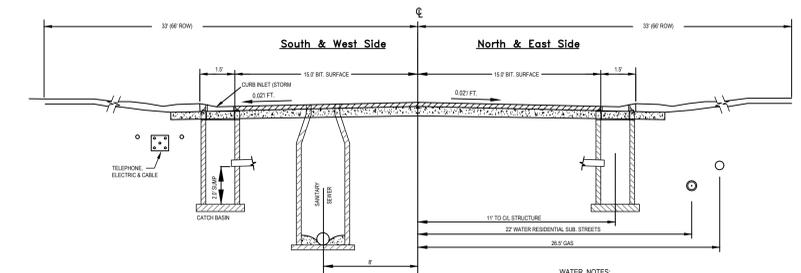
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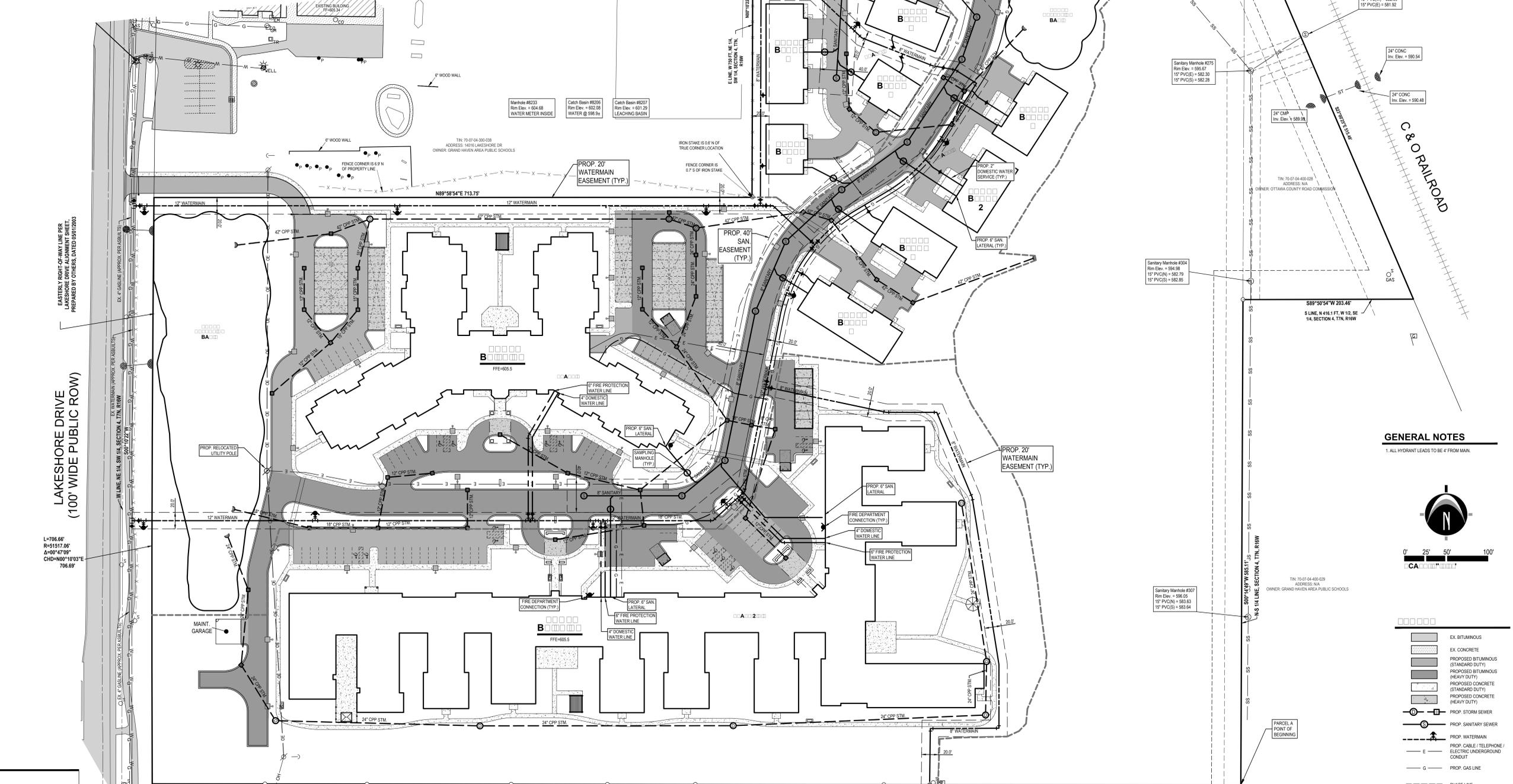
14110 Lakeshore Dr
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STATE OF MICHIGAN
 ROGER JACK
 SARR II
 No. 41990
 LICENSED PROFESSIONAL ENGINEER

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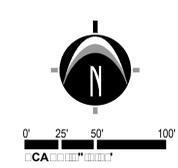


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GENERAL NOTES

1. ALL HYDRANT LEADS TO BE 4' FROM MAN.



- EX BITUMINOUS
- EX CONCRETE
- PROPOSED BITUMINOUS (STANDARD DUTY)
- PROPOSED BITUMINOUS (HEAVY DUTY)
- PROPOSED CONCRETE (STANDARD DUTY)
- PROPOSED CONCRETE (HEAVY DUTY)
- PROP. STORM SEWER
- PROP. SANITARY SEWER
- PROP. WATERMAIN
- PROP. CABLE TELEPHONE / ELECTRIC UNDERGROUND CONDUIT
- PROP. GAS LINE
- PHASE LINE

811 Know what's below.
 CALL before you dig.

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LOT 9
 LOT 10
 LOT 11
 LOT 12
 LOT 13

14110 Lakeshore Dr
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COTTAGE HILLS, AS RECORDED IN LIBER 48 OF PLATS, PAGES 01-02, DATED AUGUST 2, 2000, OTTAWA COUNTY RECORDS

S 1/4 COR. SECTION 4, T1N, R16W

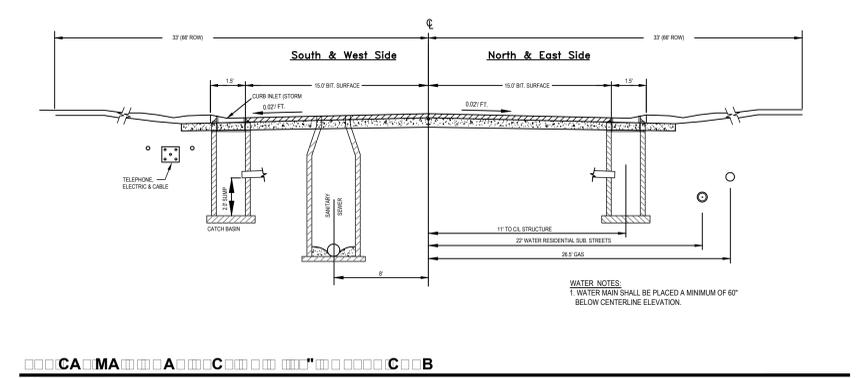
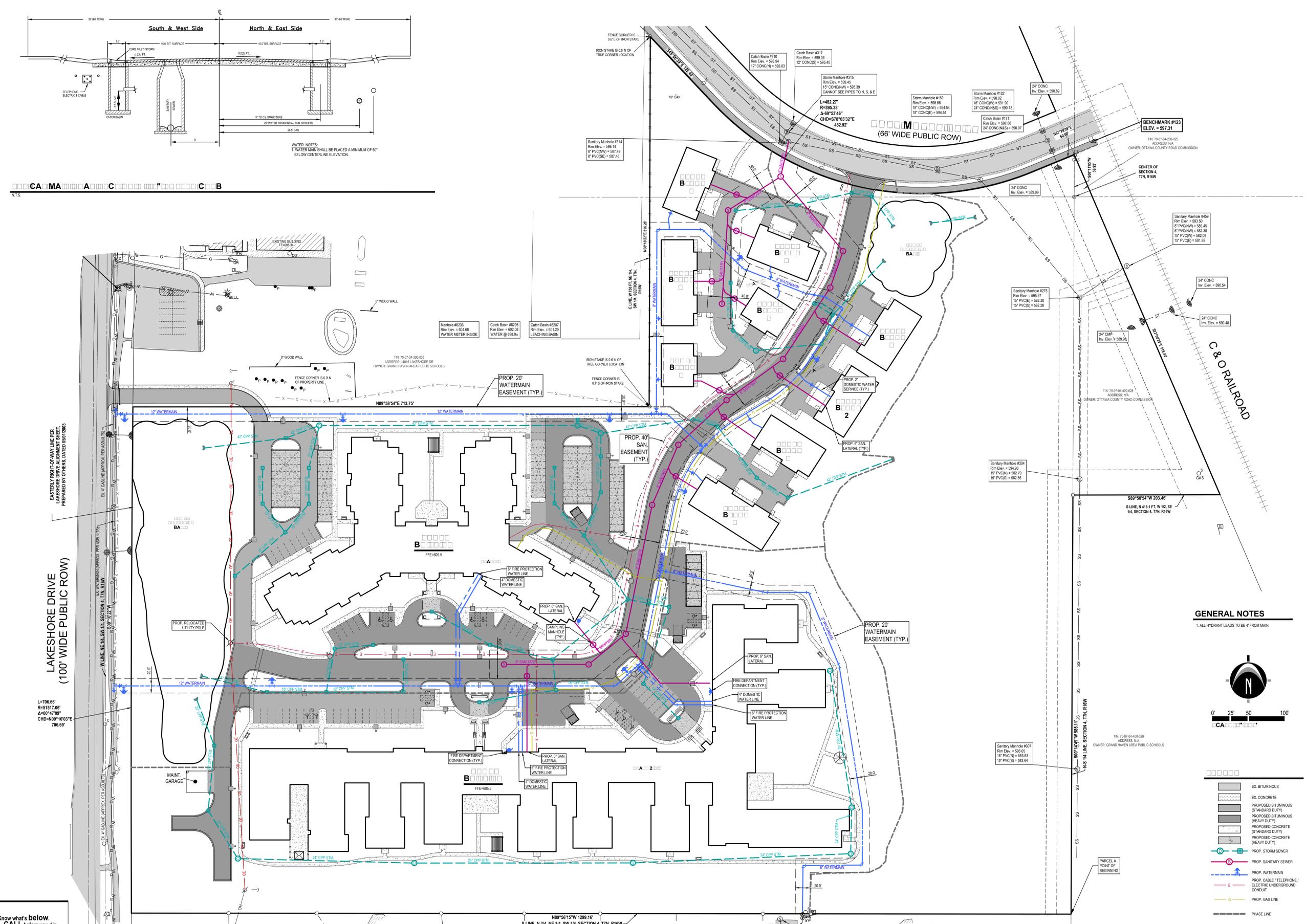
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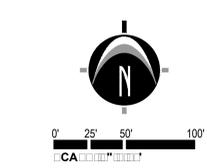
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GENERAL NOTES

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- PROP. STORM SEWER
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- PROP. CABLE TELEPHONE / ELECTRIC UNDERGROUND CONDUIT
- PROP. GAS LINE
- PHASE LINE

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LOT 14
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 AUGUST 2, 2000, OTTAWA COUNTY
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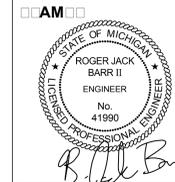
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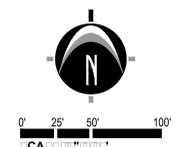
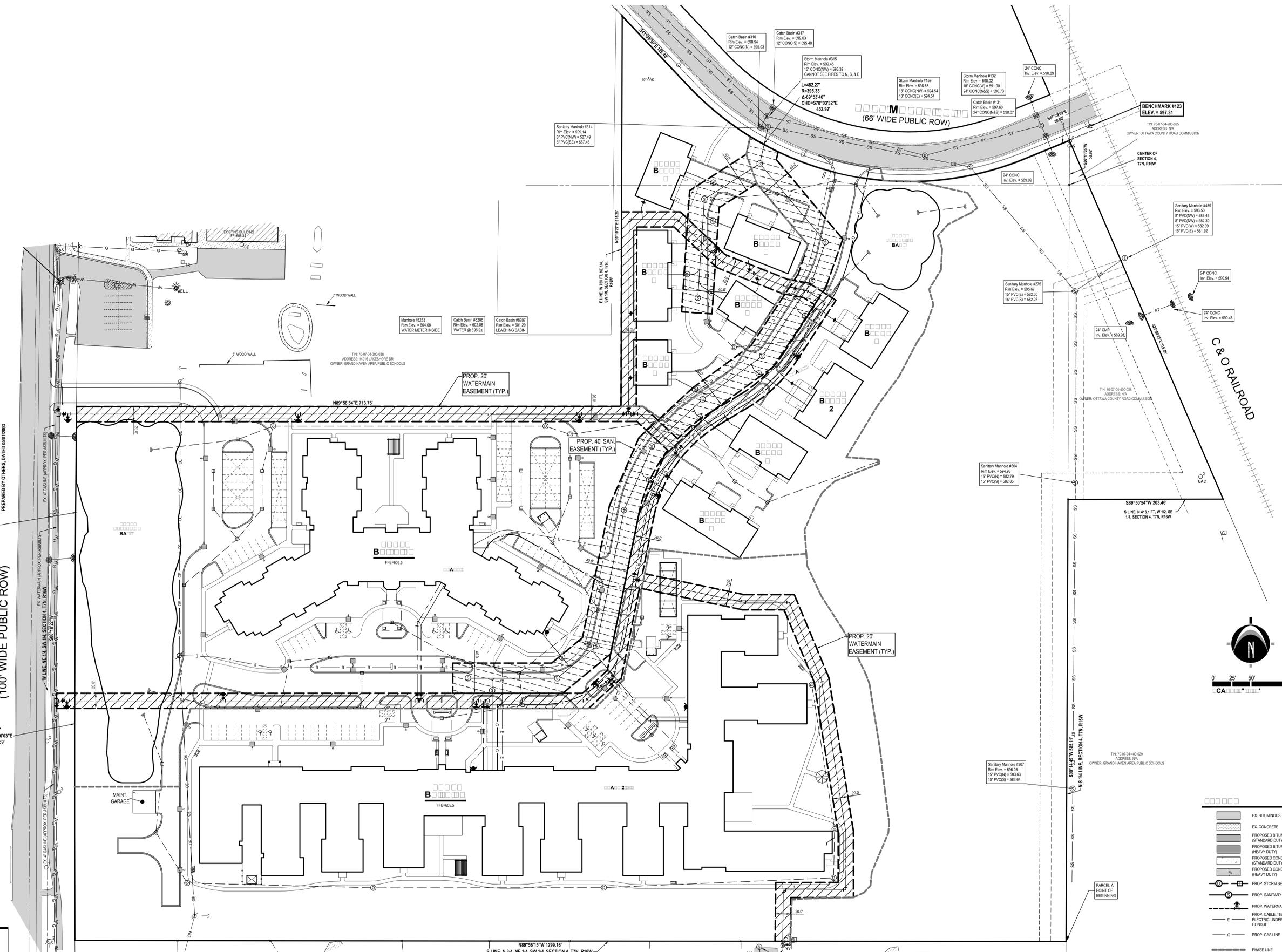
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C



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- EX CONCRETE
- PROPOSED BITUMINOUS (STANDARD DUTY)
- PROPOSED BITUMINOUS (HEAVY DUTY)
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- PROP. STORM SEWER
- PROP. SANITARY SEWER
- PROP. WATERMAIN
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- PROP. GAS LINE
- PHASE LINE
- PROP. 20' WATERMAIN EASEMENT
- PROP. 40' SAN SEWER EASEMENT

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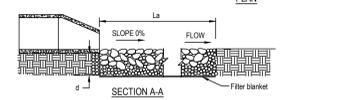
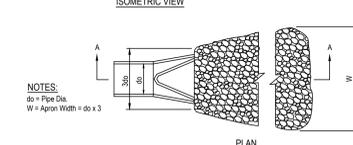
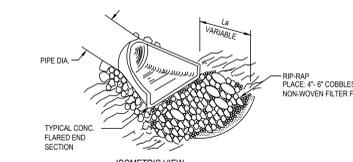
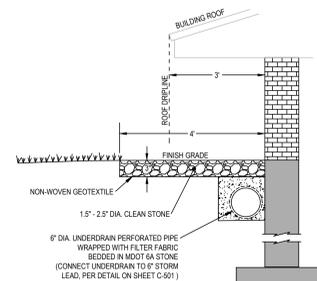
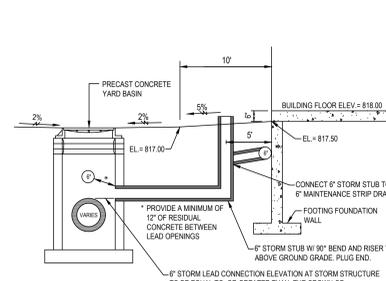
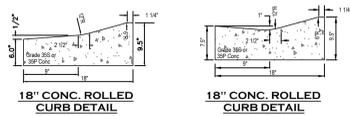
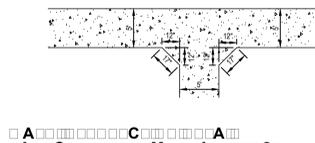
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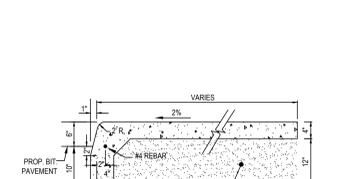
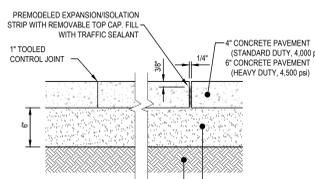
TIN: 70-07-04-300-054
ADDRESS: 8 LAKESHORE DR
OWNER: REINWOOD COMPANY LLC

LOT 9
LOT 10
LOT 11
LOT 12
LOT 13

COTTAGE HILLS, AS RECORDED IN LIBER
48 OF PLATS, PAGES 01-02, DATED
AUGUST 2, 2000, OTTAWA COUNTY
RECORDS



NOTES:
1. La is the length of the rip-rap apron + (50%) + 6
2. L is 1.5 times the minimum stone diameter but not less than 6"
3. A filter blanket or filter fabric should be installed between the rip-rap and soil foundation.

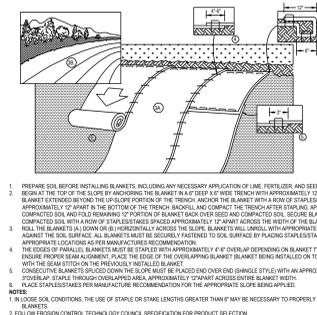
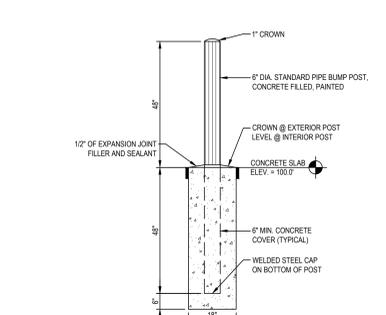


NOTE:
1. LIGHT BROOM FINISH
2. LOCATE CONTROL JOINTS AND EXPANSION JOINTS PER ACI STANDARDS
3. PANEL SIZE SHALL NOT EXCEED 8 FEET
4. PANELS SHALL BE KEPT AS SQUARE AS POSSIBLE WITH THE LENGTH NEVER EXCEEDING 1.25X THE WIDTH
5. 1 GAL/10.0 LB FIBER REINFORCEMENT
6. AIR ENTRAINMENT - Fx = 1%
7. SLUMP F ± 1"

NOTE: DUB-DOWNS TO BE PROVIDED AT ALL BARRIER FREE PARKING SPACES.

NOTES:
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 4\"/>

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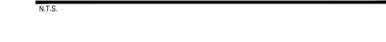
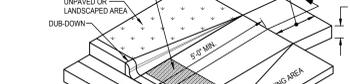
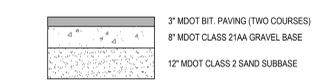


NOTE:
1. REFER TO GEOTECHNICAL REPORT FOR FINAL PAVEMENT DESIGN SPECIFICATION
2. MAIN MATURE TO BE TIER 1 OR TIER 2
3. BINDER GRADE TO BE A MINIMUM OF PG 58-28

NOTE: DUB-DOWNS TO BE PROVIDED AT ALL BARRIER FREE PARKING SPACES.

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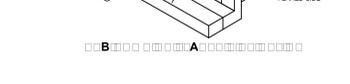
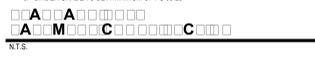


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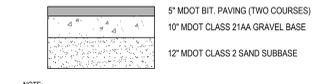


NOTE:
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2. MAIN MATURE TO BE TIER 1 OR TIER 2
3. BINDER GRADE TO BE A MINIMUM OF PG 58-28

NOTE: DUB-DOWNS TO BE PROVIDED AT ALL BARRIER FREE PARKING SPACES.

NOTES:
1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED
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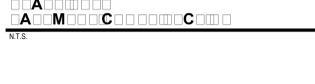


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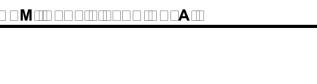
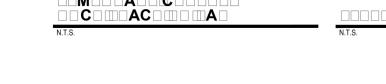
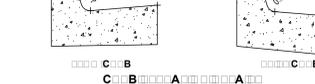


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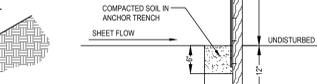
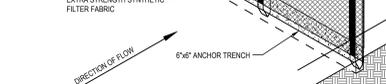
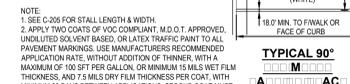
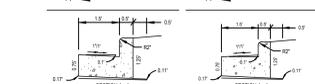


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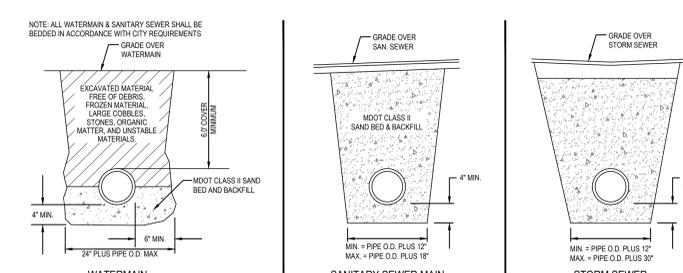


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NOTE: TRENCH TO BE BACKFILLED AS NOTED ON DETAIL EXCEPT WHEN W.M. IS WITHIN PAVED AREAS. IN PAVED AREAS W.M. SHALL HAVE FULL SAND BACKFILL.

NOTES:
1. ALL CATCH BASINS SHOULD BE PROVIDED WITH A MINIMUM 3\"/>

2. ALL STORM SEWERS SHALL BE LEAD-TYPE PIPE AND SHALL BE SMOOTH-LINED CORRUGATED POLYETHYLENE PIPE (SLOPP), WITH PERFORATED PIPE WITH SOCK MEETING THE REQUIREMENTS OF THE MICHIGAN PLUMBING CODE, ASBTO 1032 AND M-206, ASTM F-2061, F-3048, D-2012, F-477, F-2487, D-2060 AND F-1417. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS AND ASTM D-2021

3. UNDERGROUND SHALL BE PERFORATED PIPE WITH SOCK, MEETING THE REQUIREMENTS OF ASBTO 1032 AND THE GEOTEXTILE SHALL MEET ASBTO 1038 REQUIREMENTS.
4. ALL FLARED END SECTIONS SHALL BE CONCRETE.
5. ALL CATCH BASINS AND MANHOLES SHALL BE CONCRETE, CONFORMING TO ASTM C-493 WITH BUTYL RUBBER GASKETED JOINTS WITH BOOT-TYPE PIPE CONNECTIONS CONFORMING TO ASTM C-602 FOR ALL PIPE CONNECTIONS 30\"/>

6. ALL CATCH BASINS ARE DRAWN AND WILL BE STAGED AT CENTER OF CASTING.

7. ALL CONSTRUCTION AND MATERIAL SPECIFICATIONS INCLUDED FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE MDOCT CONSTRUCTION AND MATERIALS SPECIFICATIONS (LATEST EDITION) AND THE ORDINANCES OF THE TOWNSHIP WHERE CONFLICTS OCCUR IN THE ABOVE, THE TOWNSHIP SHALL BE THE GOVERNING AUTHORITY.

8. SOIL BORINGS HAVE BEEN PERFORMED BY THE OWNER AND SHALL BE PROVIDED TO THE CONTRACTOR. VARIATION IN EXISTING SOIL CONDITIONS MAY IMPACT THE EARTHWORK QUANTITIES IF UNUSUAL SOILS ARE ENCOUNTERED DURING CONSTRUCTION.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING WATER AND SEWERAGE SYSTEM RESULTING FROM NON-COMPLIANCE WITH THE APPLICABLE STANDARDS OR THROUGH GENERAL NEGLIGENCE.

10. ALL WORK INCLUDING BUREAU AND TESTING COSTS REQUIRED FOR REMOVAL, ALLOCATION OR REPAIR OF CONSTRUCTION OF PUBLIC UTILITIES, SHALL BE DONE BY AND AT THE EXPENSE OF THE CONTRACTOR AND INCLUDED IN THE PRICE FOR THE VARIOUS WORK ITEMS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL NECESSARY PERMITS FROM THE TOWNSHIP AND COUNTY AND ANY OTHER AGENCY FOR ALL WORK DONE BY THE CONTRACTOR.

11. ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE REPAIRED OR CORRECTED BY THE CONTRACTOR OR OTHER APPROVED METHOD PRIOR TO ACCEPTANCE BY THE TOWNSHIP OR OWNER WITHOUT ANY ADDITIONAL COST TO THE TOWNSHIP OR OWNER.

12. ALL LAWN AREAS REMOVED OR DESTROYED SHALL BE REPLACED WITH TOPSOIL AND SOIL WHERE NEEDED AND MULCHED IF SATISFACTORY REESTABLISHMENT OF LAWN DOES NOT OCCUR.

13. ALL PUNCH LIST AND DEFICIENCY WORK SHALL BE COMPLETED WITHIN 1 MONTH OF THE END OF CONSTRUCTION.

14. THE CONTRACTOR SHALL OBTAIN A STREET CLOSURE PERMIT FROM THE TOWNSHIP BEFORE BEGINNING WORK WITHIN ANY PUBLIC STREET RIGHT-OF-WAY.

15. THESE PLANS HAVE BEEN OBSERVED FOR CONFORMANCE WITH THE TOWNSHIP PRESENTATION AND SHOULD NOT BE USED FOR LAYOUT. CONTACT THE ENGINEER IF ANY DISCREPANCIES BETWEEN THE PLAN AND ELECTRONIC DATA ARE DISCOVERED.

16. THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LIGHTS, BARRICADES, FLAGMEN, ETC. AS REQUIRED TO PERFORM THE REQUIRED WORK. THE INSTALLATION AND OPERATION OF ALL TEMPORARY TRAFFIC CONTROL AND TEMPORARY TRAFFIC CONTROL DEVICES AS REQUIRED SHALL BE PROVIDED BY THE CONTRACTOR WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS. THE CONTRACTOR SHALL MAINTAIN ADEQUATE TRAFFIC CONTROL THROUGHOUT THE PROJECT AND SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND STANDARDS OF REGULATION.

17. ALL WORK CONTRACTED SHALL AT ALL TIMES BE SUBJECT TO THE DIRECT INSPECTION OF THE TOWNSHIP, OWNER AND THEIR REPRESENTATIVES. THE TOWNSHIP AND OWNER RESERVES THE RIGHT TO HALT ALL CONSTRUCTION ACTIVITY FOR NON-COMPLIANCE OF ANY KIND.

18. PRICES BID PER FOOT FOR ALL PIPES IS COMPACTED IN PLACE, REPOSE OF SOIL OR ROCK CONDITIONS.

19. PRIOR TO CONSTRUCTION OF ANY WORK, THE CONTRACTOR SHALL OBTAIN A STREET CLOSURE PERMIT FROM THE TOWNSHIP BEFORE BEGINNING WORK WITHIN ANY PUBLIC STREET RIGHT-OF-WAY.

20. NO BUILDING MATERIAL, EQUIPMENT, VEHICLES OR CHEMICALS SHALL BE STORED OR PLACED OUTSIDE LIMITS OF WORK/RESIDUAL.

21. STORMWATER POLLUTION PREVENTION TRENCHES SHALL BE IN PLACE PRIOR TO COMMENCING CLEARING OPERATIONS, EXISTING GRADING, OR ANY OTHER TYPE OF CONSTRUCTION ACTIVITY.

22. CONSTRUCTION POLLUTION PREVENTION TRENCHES SHALL BE IN PLACE PRIOR TO COMMENCING CLEARING OPERATIONS, EXISTING GRADING, OR ANY OTHER TYPE OF CONSTRUCTION ACTIVITY.

23. ALL TREES WITHIN THE GRADING LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED.

24. CONTRACTOR TO FIELD VERIFY AND SCOUR EXISTING SANITARY SEWER MAINS TO DETERMINE ELEVATION, SLOPE, CONDITION AND PHYSICAL CONNECTION TO PUBLIC SANITARY SEWER MAIN PRIOR TO CONNECTION OF NEW LATERAL SERVICE.

- = CREDITED OPEN SPACE
524,026 SQ.FT. (12.03 AC.)
- = LANDSCAPE AREA
242,521 SQ.FT. (5.57 AC.)
- = INTERIOR LANDSCAPE ISLANDS

PARKING AREAS:
 L1 OVERALL = 19,431 S.F.
 L1 LANDSCAPED AREA = 2,120 S.F. (10.9%)
 L2 OVERALL = 14,734 S.F.
 L2 LANDSCAPED AREA = 2,468 S.F. (16.8%)
 L3 OVERALL = 12,543 S.F.
 L3 LANDSCAPED AREA = 1,379 S.F. (11.0%)
 L4 OVERALL = 11,488 S.F.
 L4 LANDSCAPED AREA = 1,682 S.F. (14.6%)
 L5 OVERALL = 7,473 S.F.
 L5 LANDSCAPED AREA = 1,395 S.F. (18.7%)
 L6 OVERALL = 25,209 S.F.
 L6 LANDSCAPED AREA = 2,979 S.F. (11.8%)

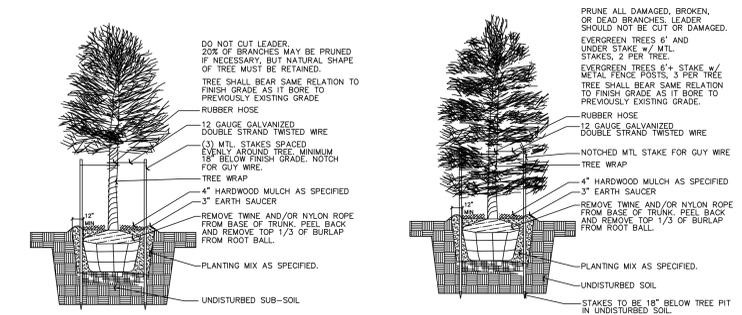
TOTAL OVERALL PARKING AREA = 90,888 S.F.
 TOTAL PARKING LANDSCAPED AREA = 12,023 S.F. (13.2%)
 REQUIRED INTERIOR LANDSCAPING:
 1 SF. / 15 SF. OF PARKING LOT AREA = 6.67%



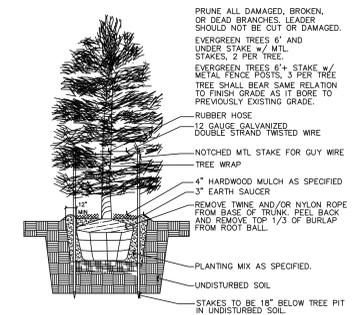
Title: PUD Submittal	V. Date: 10.25.16
Drawn: Brad M.	Checked: John C.
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Title: Township Re-Submittal	V. Date: 04.10.17
Drawn: Brad M.	Checked: John C.

14110 Lakeshore Dr
 PART OF SECTION 4, 7TH, R18W, GRAND HAVEN GRAND
 GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN

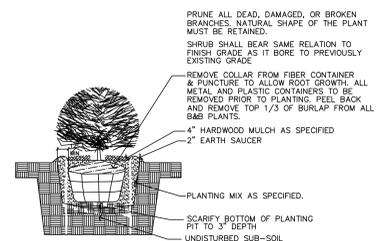
15201307



Deciduous Tree Planting Detail
 NO SCALE



Evergreen Tree Planting Detail
 NO SCALE



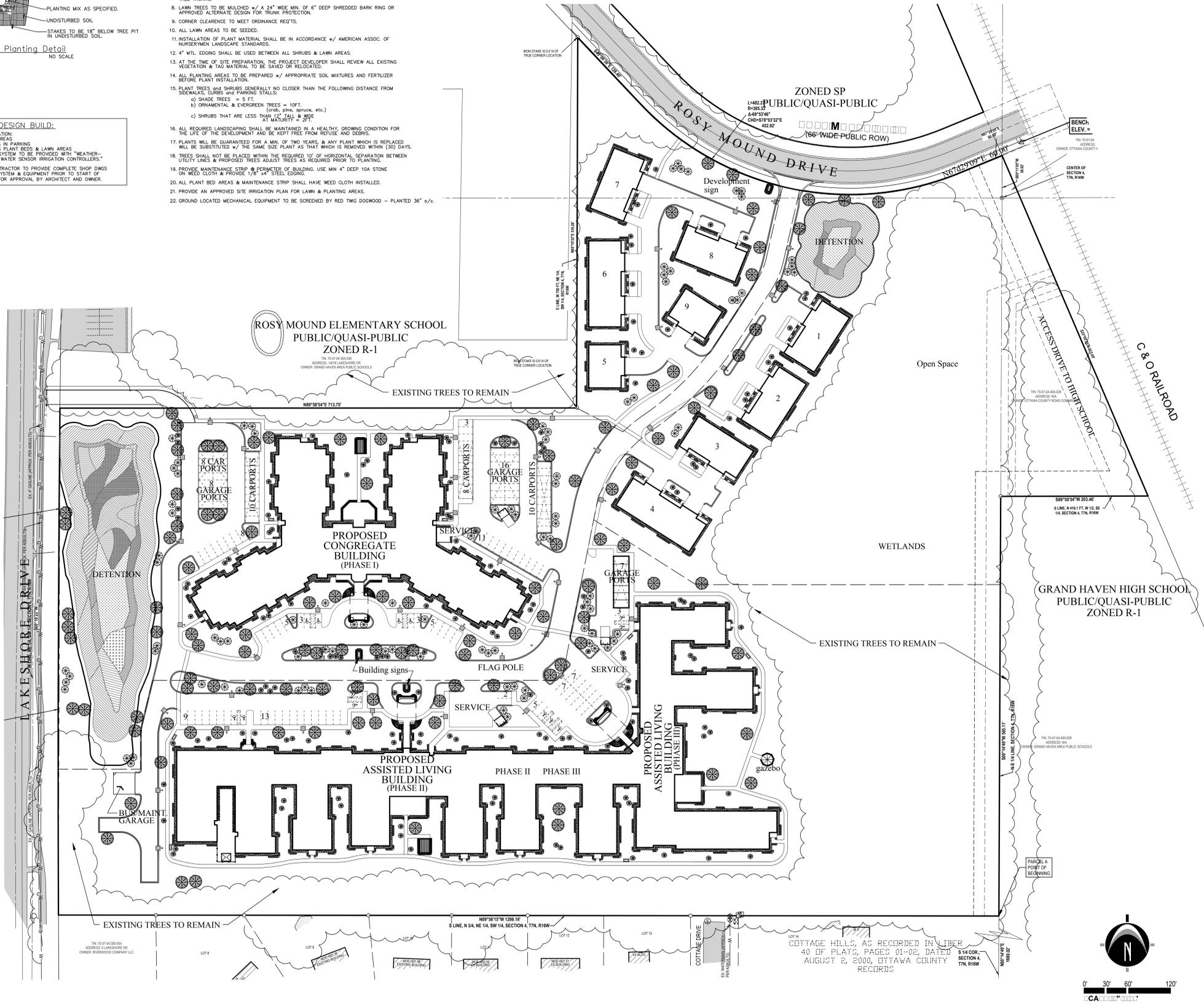
Shrub Planting Detail
 NO SCALE

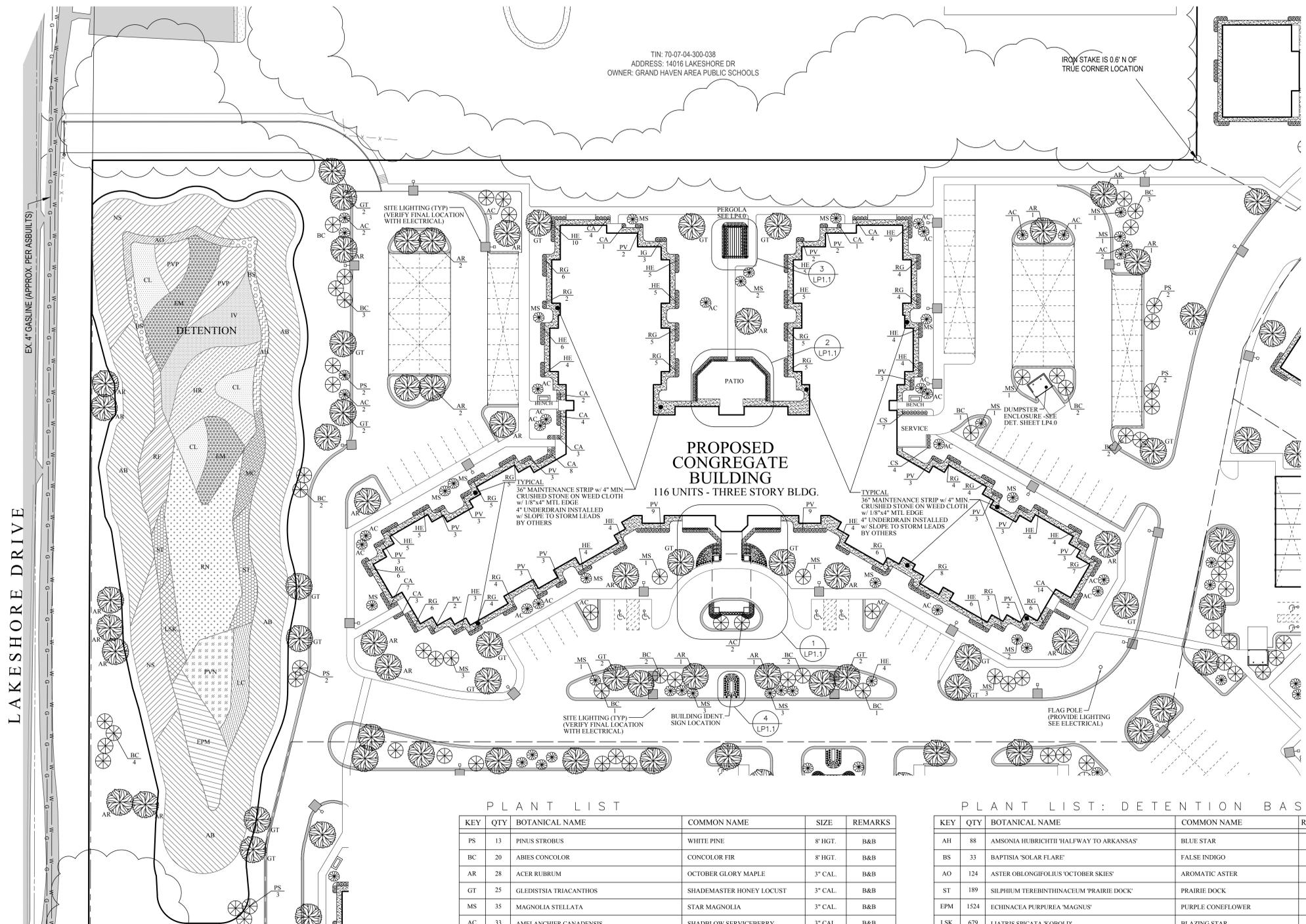
IRRIGATION DESIGN BUILD:

- PROVIDE IRRIGATION:
 - A. ALL LAWN AREAS
 - B. ALL ISLANDS IN PARKING
 - C. SPLIT ZONES PLANT BEDS & LAWN AREAS
 - D. IRRIGATION SYSTEM TO BE PROVIDED WITH "WEATHER"-RESPONDING WATER SENSOR IRRIGATION CONTROLLERS.
- IRRIGATION CONTRACTOR TO PROVIDE COMPLETE SHOP DWGS OF IRRIGATION SYSTEM & EQUIPMENT PRIOR TO START OF CONSTRUCTION FOR APPROVAL BY ARCHITECT AND OWNER.

LANDSCAPE GENERAL NOTES:

- ALL CONSTRUCTION & PLANT MATERIAL LOCATIONS TO BE ADJUSTED ON SITE IF NECESSARY AS APPROVED BY THE C.O. & OWNER.
- ANY SUBSTITUTION OF PLANT MATERIAL OR ALTERATION IN PLANT SIZES OR SPECIFICATIONS TO BE CONFIRMED BY THE DEVELOPER & APPROVED BY THE TOWNSHIP.
- ALL LARGE EVERGREENS TO BE STAKED, GUYED, & WRAPPED.
- PLANT BEDS TO BE MULCHED & DRESSED w/ 4" OF SHREDED HARDWOOD BARK MULCH.
- EVERGREEN GROUPINGS MAY VARY IN HEIGHT AS SPECIFIED IN THE PLANT MATERIALS LIST.
- DIG SHRUB PITS 12" LARGER THAN ROOT BALLS & TREE PITS 24" LARGER THAN ROOT BALLS. BACKFILL w/ ONE PART TOPSOIL & ONE PART SOIL FROM EXCAVATED PLANTING HOLE.
- REMOVE ALL TWINE & WIRE FROM TREE & SHRUB EARTH BALLS & ALL TWINE AND WIRE FROM TREE TRUNKS.
- LAWN TREES TO BE MULCHED w/ A 24" WIDE MIN. OF 6" DEEP SHREDED BARK RING OR APPROVED ALTERNATE DESIGN FOR TRUNK PROTECTION.
- CORNER CLEARANCE TO MEET ORDINANCE RECS.
- ALL LAWN AREAS TO BE SEEDED.
- INSTALLATION OF PLANT MATERIAL SHALL BE IN ACCORDANCE w/ AMERICAN ASSOC. OF NURSERYMEN LANDSCAPE STANDARDS.
- 4" MTL EDGING SHALL BE USED BETWEEN ALL SHRUBS & LAWN AREAS.
- AT THE TIME OF SITE PREPARATION, THE PROJECT DEVELOPER SHALL REVIEW ALL EXISTING VEGETATION & TAG MATERIAL TO BE SAVED OR RELOCATED.
- ALL PLANTING AREAS TO BE PREPARED w/ APPROPRIATE SOIL MIXTURES AND FERTILIZER BEFORE PLANT INSTALLATION.
- PLANT TREES and SHRUBS GENERALLY NO CLOSER THAN THE FOLLOWING DISTANCE FROM SIDEWALKS, CURBS and PARKING STALLS:
 - a) SHADE TREES = 5 FT.
 - b) ORNAMENTAL & EVERGREEN TREES = 10FT. (ORBS, PINN, SPRUCE, etc.)
 - c) SHRUBS THAT ARE LESS THAN 1/2" TALL & WIDE AT MATURE = 2 FT.
- ALL REQUIRED LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY, GROWING CONDITION FOR THE LIFE OF THE DEVELOPMENT AND BE KEPT FREE FROM REFUSE AND DEBRIS.
- PLANTS WILL BE GUARANTEED FOR A MIN. OF TWO YEARS, & ANY PLANT WHICH IS REPLACED WILL BE SUBSTITUTED w/ THE SAME SIZE PLANT AS THAT WHICH IS REMOVED WITHIN 120 DAYS.
- TREES SHALL NOT BE PLACED WITHIN THE REQUIRED 10' OF HORIZONTAL SEPARATION BETWEEN UTILITY LINES & PROPOSED TREES ADJUST TREES AS REQUIRED PRIOR TO PLANTING.
- PROVIDE MAINTENANCE STRIP & PERIMETER OF BUILDING. USE MIN 4" DEEP 10A STONE ON WEED CLOTH & PROVIDE 1/8" x 4" STEEL EDGING.
- ALL PLANT BED AREAS & MAINTENANCE STRIP SHALL HAVE WEED CLOTH INSTALLED.
- PROVIDE AN APPROVED SITE IRRIGATION PLAN FOR LAWN & PLANTING AREAS.
- GROUND LOCATED MECHANICAL EQUIPMENT TO BE SCREENED BY RED TWO DOGWOOD - PLANTED 36" @ 6'.





LAKESHORE DRIVE

TIN: 70-07-04-300-038
 ADDRESS: 14016 LAKESHORE DR
 OWNER: GRAND HAVEN AREA PUBLIC SCHOOLS

IRON STAKE IS 0.6' N OF TRUE CORNER LOCATION

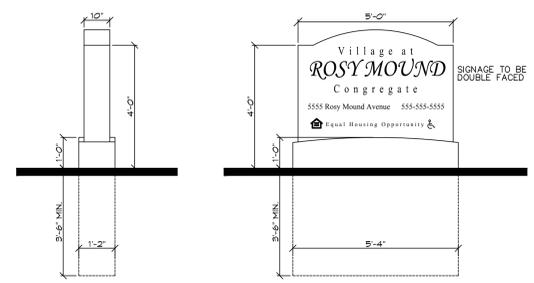
PROPOSED CONGREGATE BUILDING
 116 UNITS - THREE STORY BLDG.

PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
PS	13	PINUS STROBUS	WHITE PINE	8' HGT.	B&B
BC	20	ABIES CONCOLOR	CONCOLOR FIR	8' HGT.	B&B
AR	28	ACER RUBRUM	OCTOBER GLORY MAPLE	3" CAL.	B&B
GT	25	GLEDITSIA TRIACANTHOS	SHADEMASTER HONEY LOCUST	3" CAL.	B&B
MS	35	MAGNOLIA STELLATA	STAR MAGNOLIA	3" CAL.	B&B
AC	33	AMELANCHIER CANADENSIS	SHADDBLOW SERVICEBERRY	3" CAL.	B&B
CS	11	CORNUS STOLENIFERA	RED TWIG DOGWOOD	4" HGT.	B&B
CA	140	CALAMAGROSTIS	KARL FOERSTER	24" HGT.	B&B
PV	96	PANICUM VIRGATUM 'NORTHWIND'	SWITCHGRASS	3 GAL.	24" o/c
HE	96	HYDRANGEA 'ENDLESS SUMMER'	ENDLESS SUMMER HYDRANGEA	3 GAL.	36" o/c
AJ	16	ASTILBE JAPONICA 'MAINZ'	MAINZ ASTILBE	1 GAL.	24" o/c
RG	213	RUDBECKIA 'GOLDSTURM'	BLACK-EYED SUSAN	1 GAL.	24" o/c
RC	42	ARALIA CORDATA 'SUN KING'	SUN KING SPIKENARD	1 GAL.	24" o/c
LS	26	LIGULARIA STENOCEPHALA 'LITTLE ROCKET'	LITTLE ROCKET LIGULARIA	1 GAL.	24" o/c
BM	56	BRUNNERA MACROPHYLLA 'JACK FROST'	JACK FROST BRUNNERA	1 GAL.	24" o/c

PLANT LIST: DETENTION BASIN

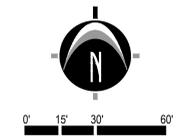
KEY	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
AH	88	AMSONIA HUBRICHTII 'HALFWAY TO ARKANSAS'	BLUE STAR	24" o/c
BS	33	BAPTISIA 'SOLAR FLARE'	FALSE INDIGO	48" o/c
AO	124	ASTER OBLONGIFOLIUS 'OCTOBER SKIES'	AROMATIC ASTER	24" o/c
ST	189	SILPHIUM TEREBINTHINACEUM 'PRAIRIE DOCK'	PRAIRIE DOCK	30" o/c
EPM	1524	ECHINACEA PURPUREA 'MAGNUS'	PURPLE CONEFLOWER	12" o/c
LSK	679	LIATRIS SPICATA 'ROBOLD'	BLAZING STAR	12" o/c
LC	365	LOBELIA CARDINALIS 'BLACK TRUFFLE'	CARDINAL FLOWER	18" o/c
MC	163	MONARDA 'CAMBRIDGE SCARLET'	BEE BALM	24" o/c
RF	577	RUDBECKIA FULGIDA VAR. SULLIVANTH 'GOLDSTURM'	BLACK-EYED SUSAN	18" o/c
RN	278	RUDBECKIA NITIDA 'AUTUMN SUN'	CUTLEAF CONEFLOWER	48" o/c
PVN	210	PANICUM VIRGATUM 'NORTHWIND'	SWITCHGRASS	30" o/c
CL	456	CHELONE LYONII 'HOT LIPS'	TURTLEHEAD-PINK	24" o/c
EM	415	EUPATORIUM MACULATUM 'GATEWAY'	JOE PYE WEED	30" o/c
HR	517	HELENIUM 'RED JEWEL'	HELEN'S FLOWER	24" o/c
IV	480	IRIS VERSICOLOR 'GERALD DARBY'	IRIS	24" o/c
PVP	625	PHYSOTEGIA VIRGINIANA 'PINK MANNERS'	OBEDIENT PLANT	18" o/c
AB		AMMOPHILA BREVILIGULATA	AMERICAN BEACHGRASS	
NS	538	NEPETA 'SIX HILLS GIANT'	NEPETA	36" o/c



PROPOSED SIGNAGE DETAIL
 ALL SIGNAGE SIMILAR SCALE: N.T.S.
 INTERNAL LIT METAL SIGNAGE w/ METAL BASE
 CONFIRM ALL INFORMATION ON SIGN w/ OWNERSHIP

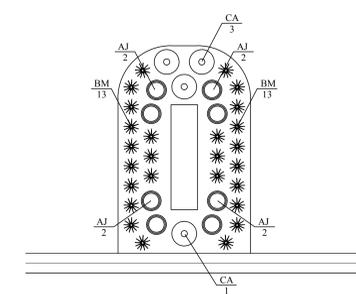
GENERAL NOTES:
 - ALL LANDSCAPE BEDS TO BE DRESSED WITH SHREDDED HARDWOOD BARK MULCH - 4" DEPTH (TYP.)
 - ALL LANDSCAPE BEDS AND MAINTENANCE STRIPS TO BE EDGED w/ 1/8"x4" MTL. EDGING (TYP.)

SEE SHEETS LP FOR GENERAL LANDSCAPE NOTES AND ADDITIONAL LANDSCAPE MATERIAL.

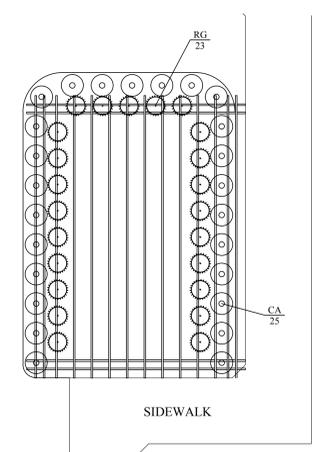


14110 Lakeshore Dr
 PART OF SECTION 4, T7N, R16W, GRAND HAVEN GRAND
 GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN

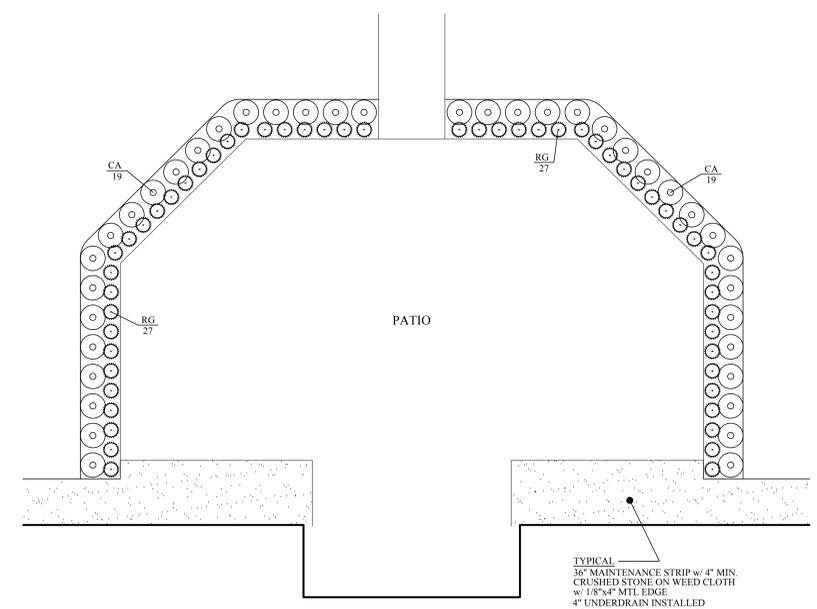
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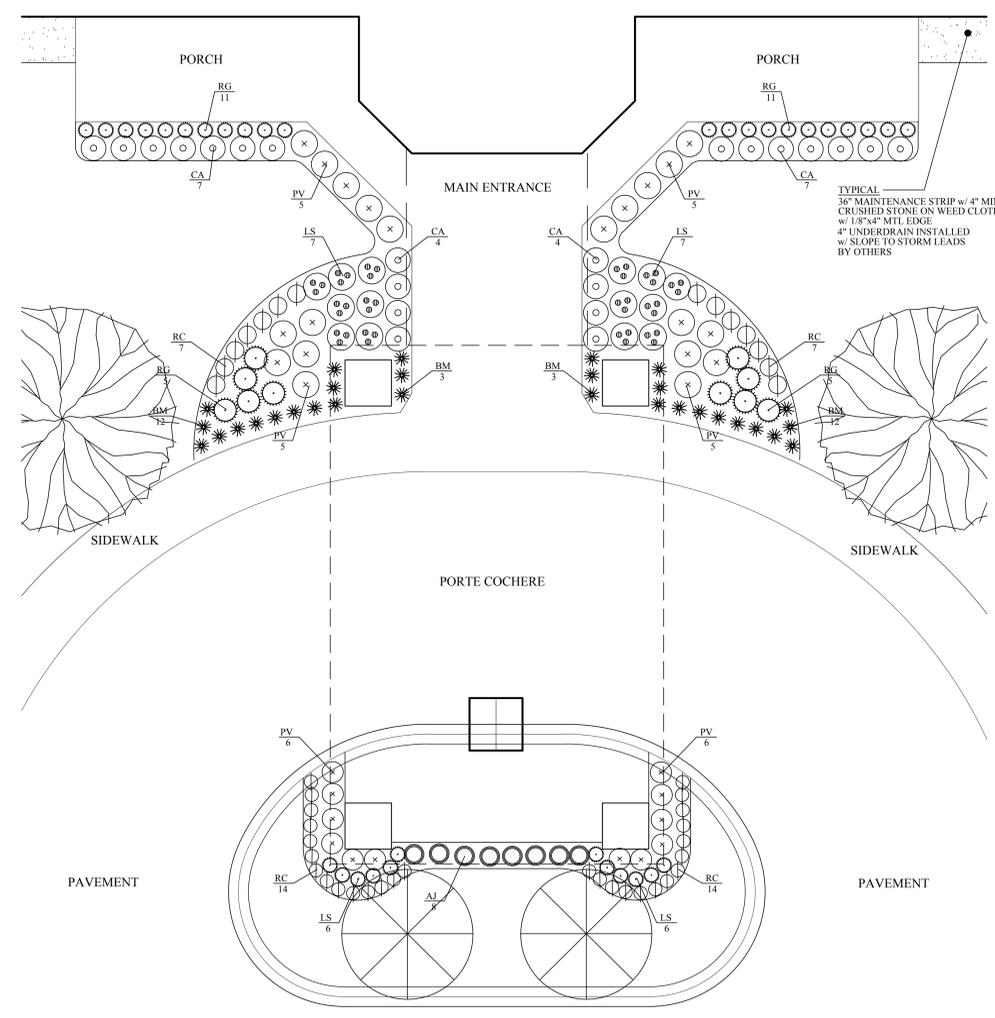
4
 LP1.1
 ENLARGED BUILDING SIGN
 CONGREGATE LANDSCAPE PLAN
 SCALE: 3/16" = 1'-0"



3
 LP1.1
 ENLARGED PERGOLA
 CONGREGATE LANDSCAPE PLAN
 SCALE: 3/16" = 1'-0"



2
 LP1.1
 ENLARGED PATIO
 CONGREGATE LANDSCAPE PLAN
 SCALE: 3/16" = 1'-0"



1
 LP1.1
 ENLARGED MAIN ENTRANCE
 CONGREGATE LANDSCAPE PLAN
 SCALE: 3/16" = 1'-0"

SEE SHEETS LP & LP1.0 FOR GENERAL LANDSCAPE NOTES AND ADDITIONAL LANDSCAPE MATERIAL.

TYPICAL
 36" MAINTENANCE STRIP w/ 4" MIN. CRUSHED STONE ON WEED CLOTH w/ 1/8"x4" MTL EDGE. 4" UNDERDRAIN INSTALLED w/ SLOPE TO STORM LEADS BY OTHERS

TYPICAL
 36" MAINTENANCE STRIP w/ 4" MIN. CRUSHED STONE ON WEED CLOTH w/ 1/8"x4" MTL EDGE. 4" UNDERDRAIN INSTALLED w/ SLOPE TO STORM LEADS BY OTHERS

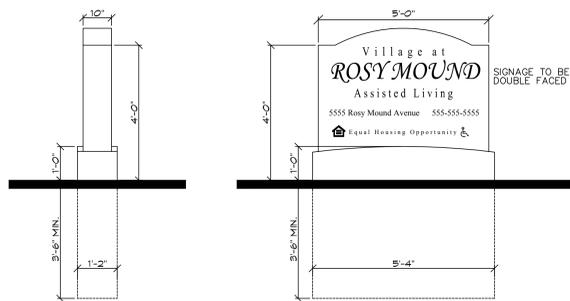
14110 Lakeshore Dr
 PART OF SECTION 4, T7N, R16W, GRAND HAVEN GRAND
 GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN

AM

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PLANT LIST

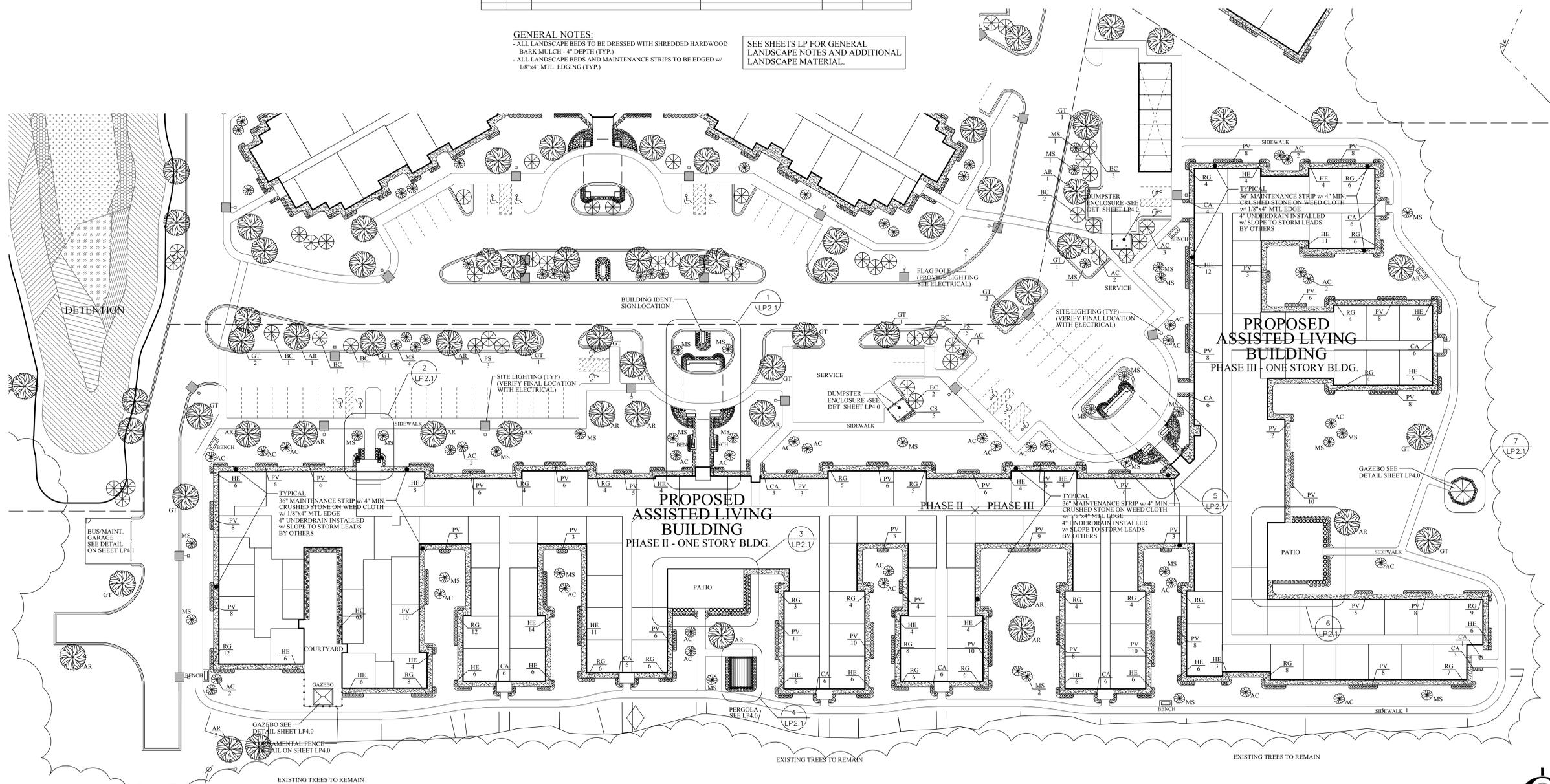
KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
PS	5	PINUS STROBUS	WHITE PINE	8' HGT.	B&B
BC	12	ABIES CONCOLOR	CONCOLOR FIR	8' HGT.	B&B
AR	17	ACTER RUBRUM	OCTOBER GLORY MAPLE	3" CAL.	B&B
GT	18	GLEDISIA TRIACANTHOS	SHADEMASTER HONEY LOCUST	3" CAL.	B&B
MS	34	MAGNOLIA STELLATA	STAR MAGNOLIA	3" CAL.	B&B
AC	37	AMELANCHIER CANADENSIS	SHADBLow SERVICEBERRY	3" CAL.	B&B
CS	5	CORNUS STOLENIFERA	RED TWIG DOGWOOD	4" HGT.	B&B
CA	214	CALAMAGROSTIS	KARL FOERSTER	24"HGT	B&B
TM	8	TAXUS MEDIA 'CHADWICKI'	CHADWICK'S YEW	24"SPD	B&B
PV	314	PANICUM VIRGATUM 'NORTHWIND'	SWITCHGRASS	3 GAL.	24" o/c
HE	155	HYDRANGEA 'ENDLESS SUMMER'	ENDLESS SUMMER HYDRANGEA	3 GAL.	36" o/c
AJ	19	ASTILBE JAPENICA 'MAINZ'	MAINZ ASTILBE	1 GAL.	24" o/c
RG	239	RUBBECKIA 'GOLDSTURM'	BLACK-EYED SUSAN	1 GAL.	24" o/c
RC	86	ARALIA CORDATA 'SUN KING'	SUN KING SPIKENARD	1 GAL.	24" o/c
LS	56	LIGULARIA STENOCEPHALA 'LITTLE ROCKET'	LITTLE ROCKET LIGULARIA	1 GAL.	24" o/c
BM	62	BRUNNERA MACROPHYLLA 'JACK FROST'	JACK FROST BRUNNERA	1 GAL.	24" o/c
HC	63	HOULTYNYIA CORDATA 'VARIEGATA'	CHAMELEON PLANT	1 GAL.	24" o/c
SSB	34	SEDUM SPECTAOLILE BRILLIANT	BRILLIANT SEDUM	1 GAL.	24" o/c
EP	6	ECHINACEA PURUREA 'VINTAGE WINE'	VINTAGE WINE PURPLE CONE FLOWER	1 GAL.	24" o/c



PROPOSED SIGNAGE DETAIL
ALL SIGNAGE SIMILAR SCALE: N.T.S.
INTERNAL LIT METAL SIGNAGE w/ METAL BASE
CONFORM ALL INFORMATION ON SIGN w/ OWNERSHIP

GENERAL NOTES:
- ALL LANDSCAPE BEDS TO BE DRESSED WITH SHREDDED HARDWOOD BARK MULCH - 4" DEPTH (TYP.)
- ALL LANDSCAPE BEDS AND MAINTENANCE STRIPS TO BE EDGED w/ 1/8"x4" MTL. EDGING (TYP.)

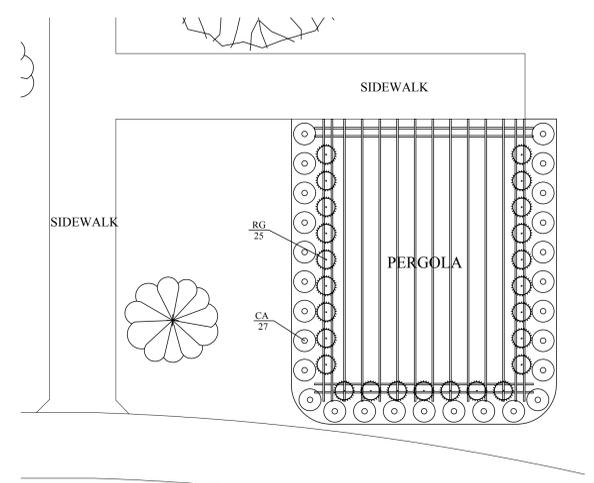
SEE SHEETS LP FOR GENERAL LANDSCAPE NOTES AND ADDITIONAL LANDSCAPE MATERIAL.



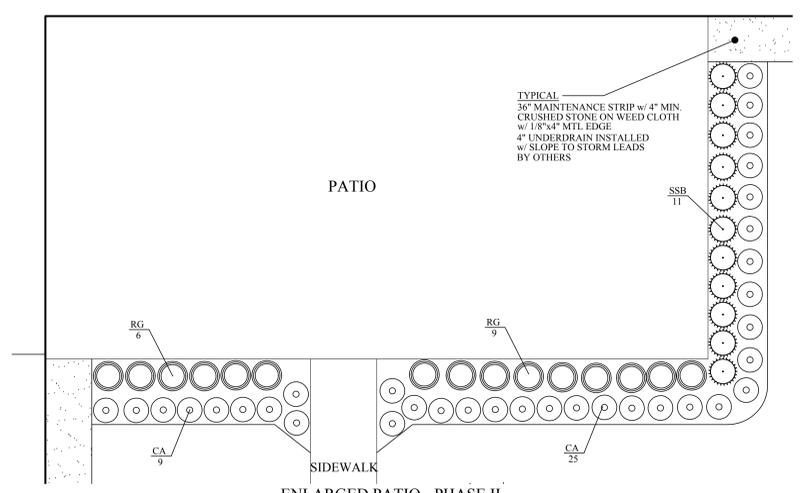
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Drawn: Brad M. Checked: John C. S. Date: 10.25.16
Title: Township Review V. Date: 01.06.17
Drawn: Brad M. Checked: John C. S. Date: 01.06.17
Title: Township Review V. Date: 03.08.17
Drawn: Brad M. Checked: John C. S. Date: 03.08.17
Title: Township Re-Submittal V. Date: 04.10.17
Drawn: Brad M. Checked: John C. S. Date: 04.10.17

14110 Lakeshore Dr
PART OF SECTION 4, T7N, R16W, GRAND HAVEN GRAND
GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN

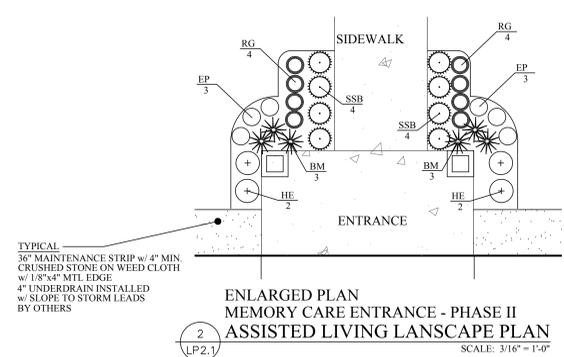
15201307
2



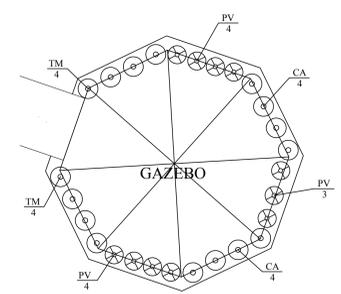
4 ENLARGED PERGOLA - PHASE II ASSISTED LIVING LANDSCAPE PLAN SCALE: 3/16" = 1'-0"



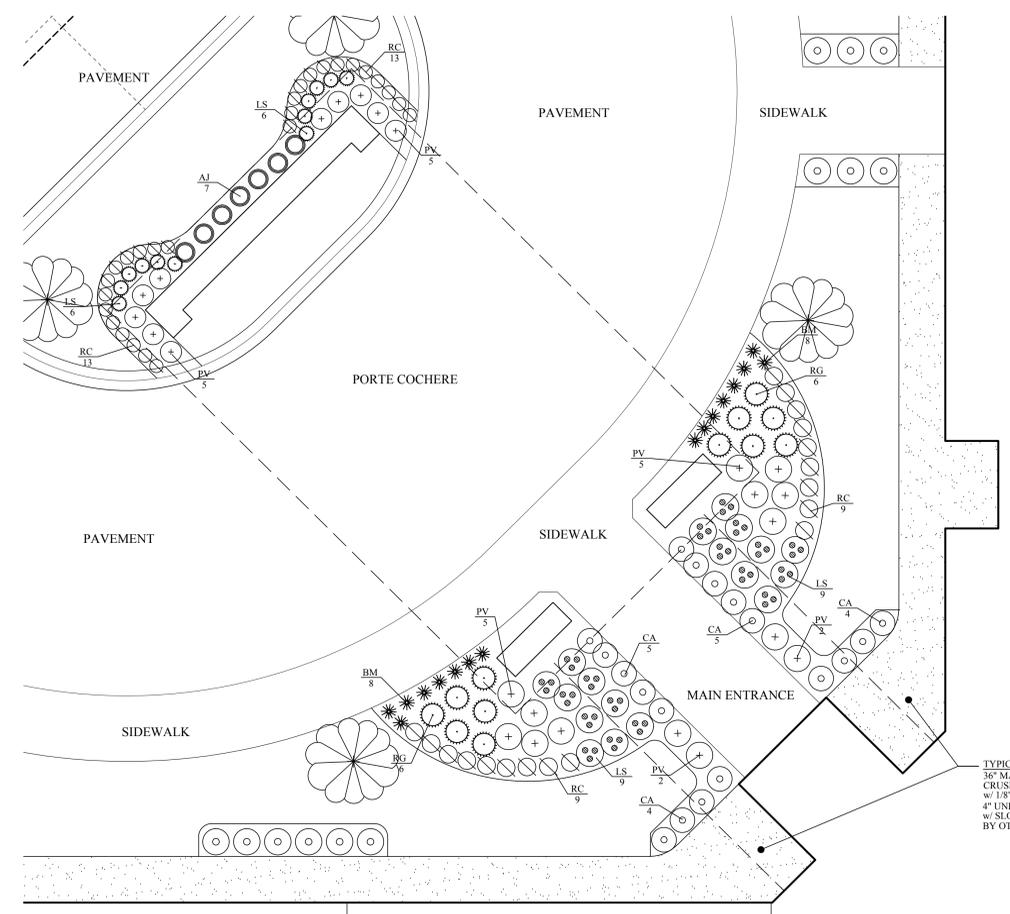
3 ENLARGED PATIO - PHASE II ASSISTED LIVING LANDSCAPE PLAN SCALE: 3/16" = 1'-0"



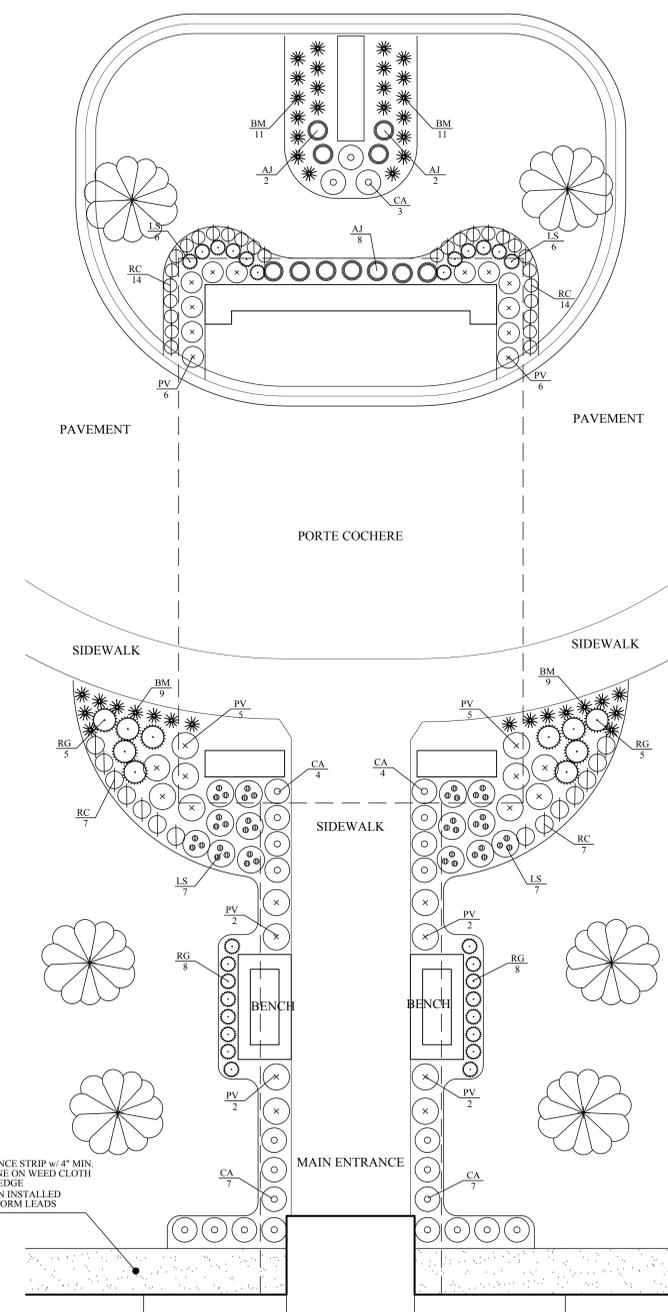
2 ENLARGED PLAN MEMORY CARE ENTRANCE - PHASE II ASSISTED LIVING LANDSCAPE PLAN SCALE: 3/16" = 1'-0"



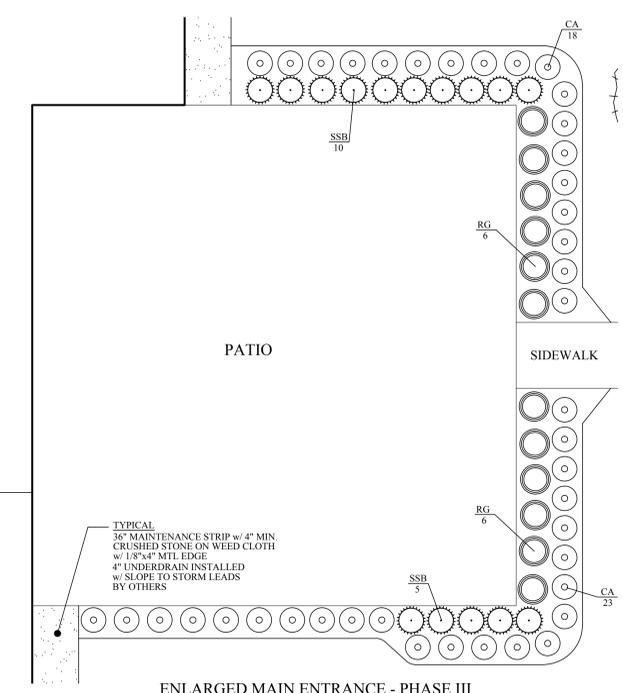
7 ENLARGED GAZEBO - PHASE III ASSISTED LIVING LANDSCAPE PLAN SCALE: 3/16" = 1'-0"



5 ENLARGED MAIN ENTRANCE - PHASE III ASSISTED LIVING LANDSCAPE PLAN SCALE: 3/16" = 1'-0"



1 ENLARGED MAIN ENTRANCE - PHASE II ASSISTED LIVING LANDSCAPE PLAN SCALE: 3/16" = 1'-0"



6 ENLARGED MAIN ENTRANCE - PHASE III ASSISTED LIVING LANDSCAPE PLAN SCALE: 3/16" = 1'-0"

SEE SHEETS LP & LP2.0 FOR GENERAL LANDSCAPE NOTES AND ADDITIONAL LANDSCAPE MATERIAL.

PLANT LIST

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
PS	10	PINUS STROBUS	WHITE PINE	8' HGT.	B&B
BC	12	ABIES CONCOLOR	CONCOLOR FIR	8' HGT.	B&B
AR	14	ACER RUBRUM	OCTOBER GLORY MAPLE	3" CAL.	B&B
GT	11	GLEDITSIA TRIACANTHOS	SHADEMASTER HONEY LOCUST	3" CAL.	B&B
MS	12	MAGNOLIA STELLATA	STAR MAGNOLIA	3" CAL.	B&B
AC	12	AMELANCHIER CANADENSIS	SHADBLOW SERVICEBERRY	3" CAL.	B&B
CA	203	CALAMAGROSTIS	KARL FOERSTER	24"HGT	B&B
PV	232	PANICUM VIRGATUM 'NORTHWIND'	SWITCHGRASS	24"HGT	B&B
AJ	8	ASTILBE JAPENICA 'MAINZ'	MAINZ ASTILBE	1 GAL.	24" o/c
BM	24	BRUNNERA MACROPHYLLA 'JACK FROST'	JACK FROST BRUNNERA	1 GAL.	24" o/c

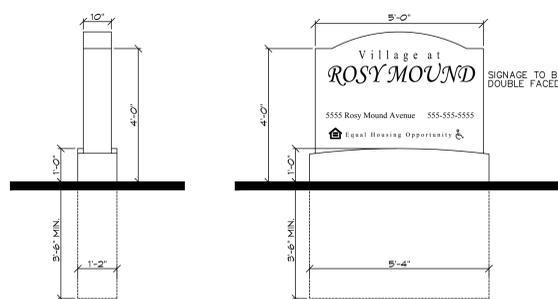
PLANT LIST: DETENTION BASIN

KEY	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
AO	178	ASTER OBLONGIFOLIUS 'OCTOBER SKIES'	AROMATIC ASTER	24" o/c
ST	108	SILPHIUM TEREBINTHINACEUM 'PRAIRIE DOCK'	PRAIRIE DOCK	30" o/c
MC	131	MONARDA 'CAMBRIDGE SCARLET'	BEE BALM	24" o/c
RN	104	RUDBECKIA NITIDA 'AUTUMN SUN'	CUTLEAF CONEFLOWER	48" o/c
AB		AMMOPHILA BREVILIGULATA	AMERICAN BEACHGRASS	
NS	251	NEPETA 'SIX HILLS GIANT'	NEPETA	36" o/c

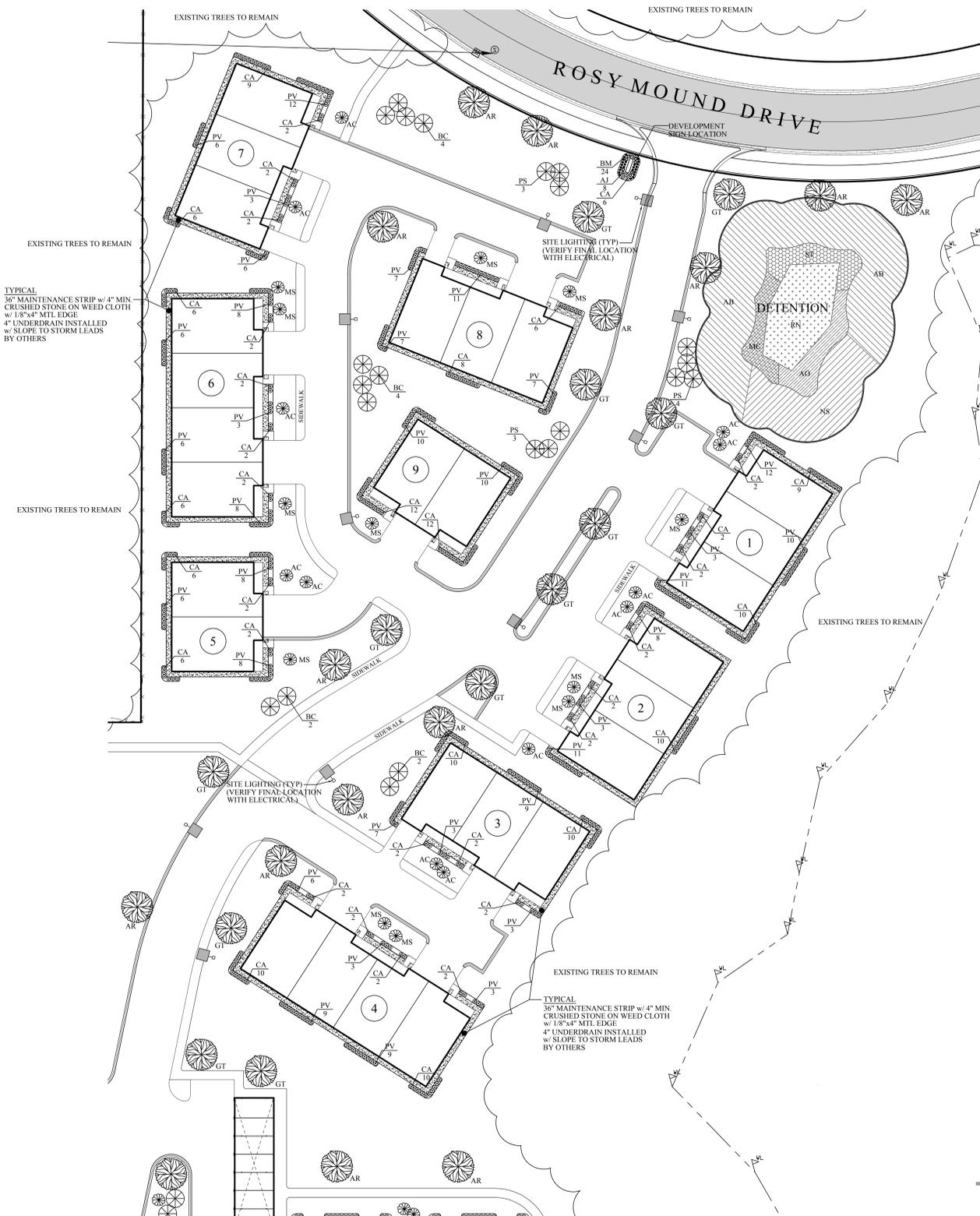
GENERAL NOTES:

- ALL LANDSCAPE BEDS TO BE DRESSED WITH SHREDDED HARDWOOD BARK MULCH - 4" DEPTH (TYP.)
- ALL LANDSCAPE BEDS AND MAINTENANCE STRIPS TO BE EDGED W/ 1/8"x4" MTL. EDGING (TYP.)

SEE SHEETS LP FOR GENERAL LANDSCAPE NOTES AND ADDITIONAL LANDSCAPE MATERIAL.



PROPOSED SIGNAGE DETAIL
 ALL SIGNAGE SIMILAR SCALE: 1/2"=1'-0"
 INTERNAL LIT METAL SIGNAGE w/ METAL BASE
 CONFIRM ALL INFORMATION ON SIGN w/ OWNERSHIP



14110 Lakeshore Dr
 PART OF SECTION 4, T7N, R16W, GRAND HAVEN GRAND
 GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN

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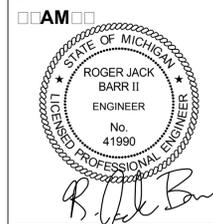
www.nederveld.com
800.222.1868
GRAND RAPIDS
217 Grandville Ave., Suite 302
Grand Rapids, MI 49503
Phone: 616.575.5190

ANN ARBOR
CHICAGO
COLUMBUS
HOLLAND
INDIANAPOLIS
ST. LOUIS

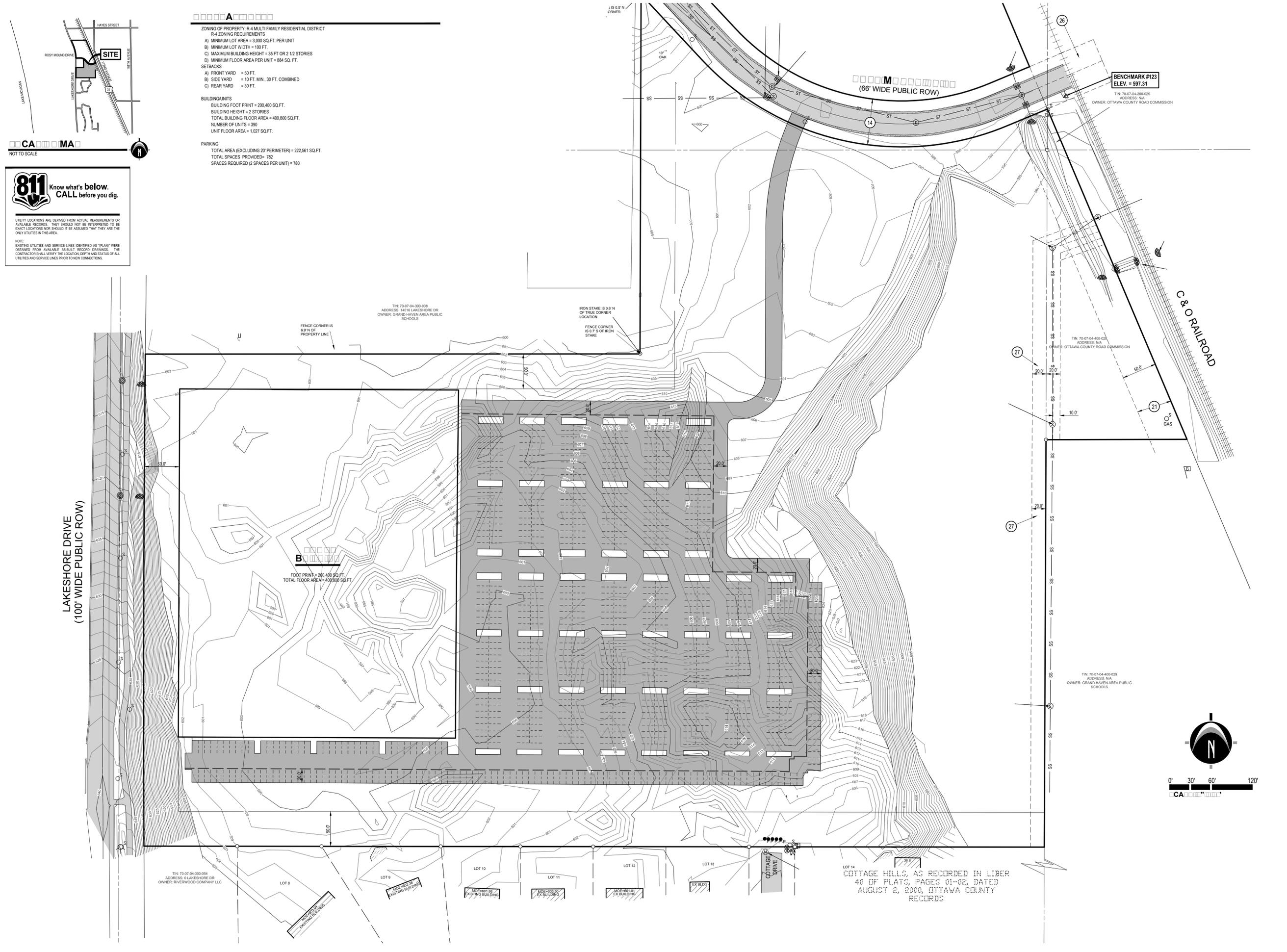
Reenders Inc.
Dennis Reenders
Park Place Cir.
950 Taylor Ave.
Grand Haven, MI 49417

Title: Township Site Plan Submittal V. Date: 09.06.16
Drawn: Brad Checked: John S. Date: 09.06.16
Title: Township Site Plan Re-Submittal V. Date: 04.10.17
Drawn: Brad Checked: John S. Date: 04.10.17

14110 Lakeshore Dr
PART OF SECTION 4, T7N, R16W, GRAND HAVEN GRAND
GRAND HAVEN TOWNSHIP, OTTAWA COUNTY, MICHIGAN



15201307



Clear Form

Print



GRAND HAVEN CHARTER TOWNSHIP

PLANNED UNIT DEVELOPMENT (PUD) APPLICATION

Application Type	Fee	Escrow*	Sewer Escrow**
Overlay Zone	\$310	\$2,500	Main Extension \$5,000
Non-Overlay Zone	\$300	\$1,500	Lift Station \$2,000

Applicant Information

Name RW Properties I LLC
 Phone 616-842-2425 Fax 616-842-8939
 Address 950 Taylor Avenue, Grand Haven, MI 49417
 Email Address swoodruff@reendersinc.com

Owner Information (If different from applicant)

Name Ottawa County Road Commission - Brett Laughlin, Managing Director
 Phone 616-842-5400 Fax 616-850-7237
 Address 14100 Lakeshore Drive, Grand Haven, MI 49417

Property Information

Address/Location 14100 Lakeshore Drive, laying south of Rosy Mound Drive, btw US31 & Lakeshore Dr.
 Parcel Number 70 - 07 - 04 - 100 - 028 * Size (acres) 26.92
 Current Zoning Service Professional Zoning Requested Residential PUD
 Adjacent Zoning North: SP/R-1 South: R-1 East: Industrial/R-I West: R-I
 Master-Planned Zoning Medium-High Density Residential PUD Consistent with Master Plan? Yes

and Parcel # 70-07-04-400-028

Other Information

Does Property Abut Township Border? No
 Present Use of the Subject Property? Vacant
 Number & Type of Existing Structures? None
 Subject Property Located on a Paved Road? Yes
 Municipal Water within 2,700 Feet of Subject Property? Yes
 Municipal Sewer within 2,700 Feet of Subject Property? Yes

NOTE: The architect, engineer, planner, or designer shall be responsible for utilizing the Township Ordinance Books and following the procedures and requirements as specified in Chapters 17 and 23 (and Chapter 15A if located in the Overlay Zone), and any other applicable ordinances. Initially, submit five copies of the required information for staff review. Once staff has granted tentative approval, additional copies will be required as requested by staff.

I hereby attest the information on this application is, to the best of my knowledge, true and accurate.

Shirley Woodruff
 Signature of applicant

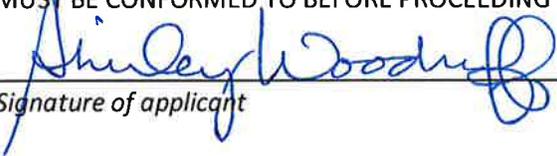
8/11/16
 Date

** To cover cost of legal and consulting fees, may be increased as necessary*

*** If approval of this application requires/includes the extension of a municipal sanitary sewer main, an additional \$5,000.00 escrow fee shall be required, and an additional \$2,000.00 escrow fee shall be required for the installation of a lift station.*

NOTICE

IF I PLAN TO SPLIT THE PARCEL(S) AFTER THE ZONING APPROVALS ARE GRANTED, I REALIZE THAT I MUST APPLY FOR A LAND DIVISION WITH THE ASSESSING DEPARTMENT. ALL LAND DIVISION REQUIREMENTS MUST BE CONFORMED TO BEFORE PROCEEDING WITH FURTHER DEVELOPMENT.


Signature of applicant

8/11/16
Date

For Office Use Only

Date Received _____

Fee Paid? _____

Materials Received: Site Plans _____

Location Map _____

Survey _____

Legal Description _____

Dated copy of approved minutes sent to applicant? _____

Date Sent _____

PLANNING COMMISSION USE ONLY

Approval _____

Tabled _____

Denied _____

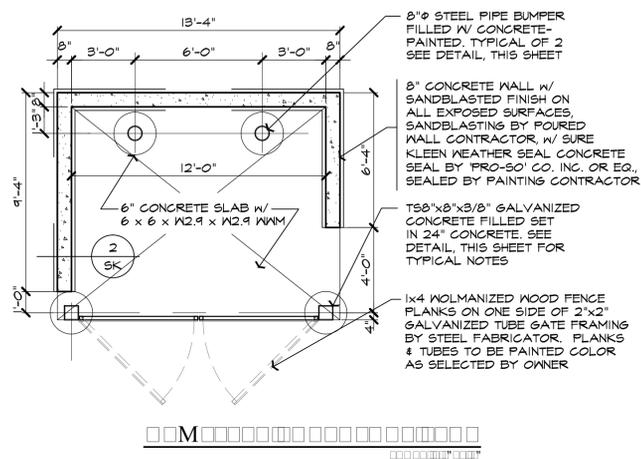
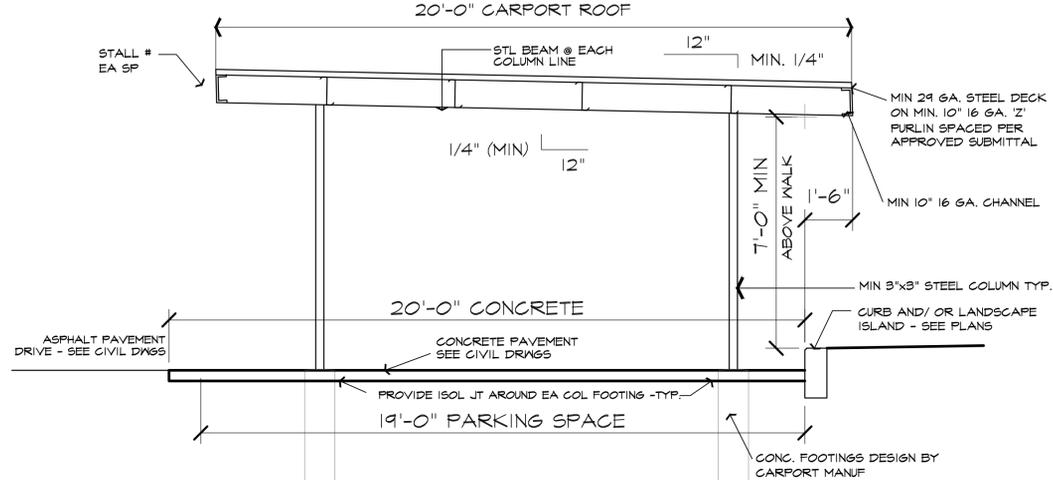
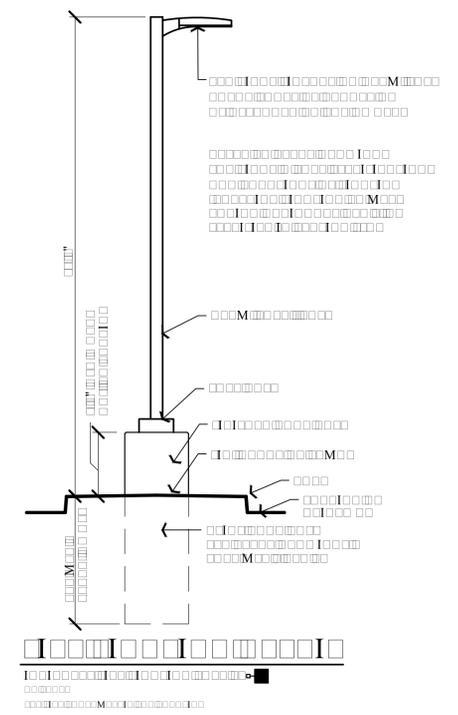
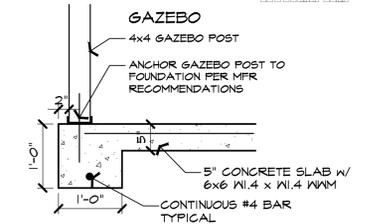
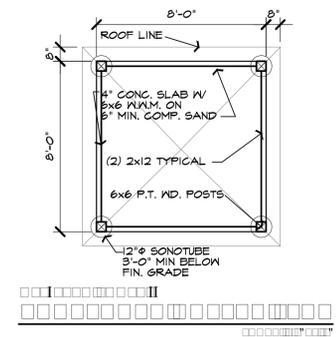
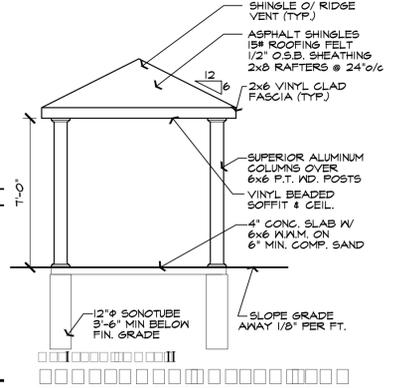
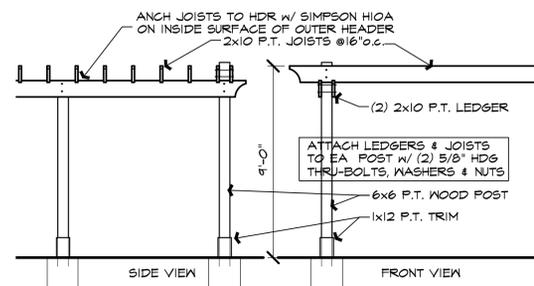
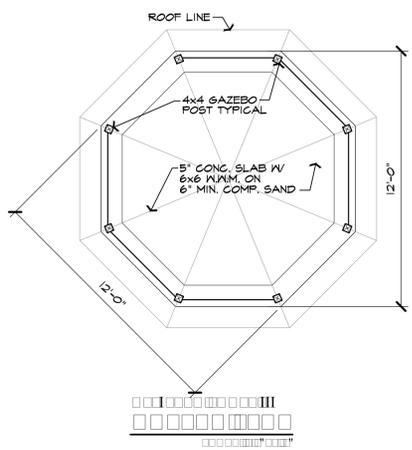
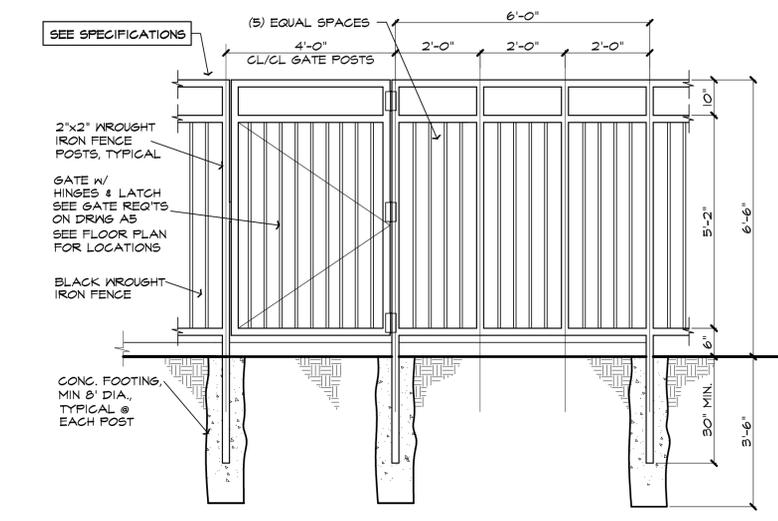
Conditional Approval _____

The following conditions shall be met for approval:

Signature of Planning Commission Chair

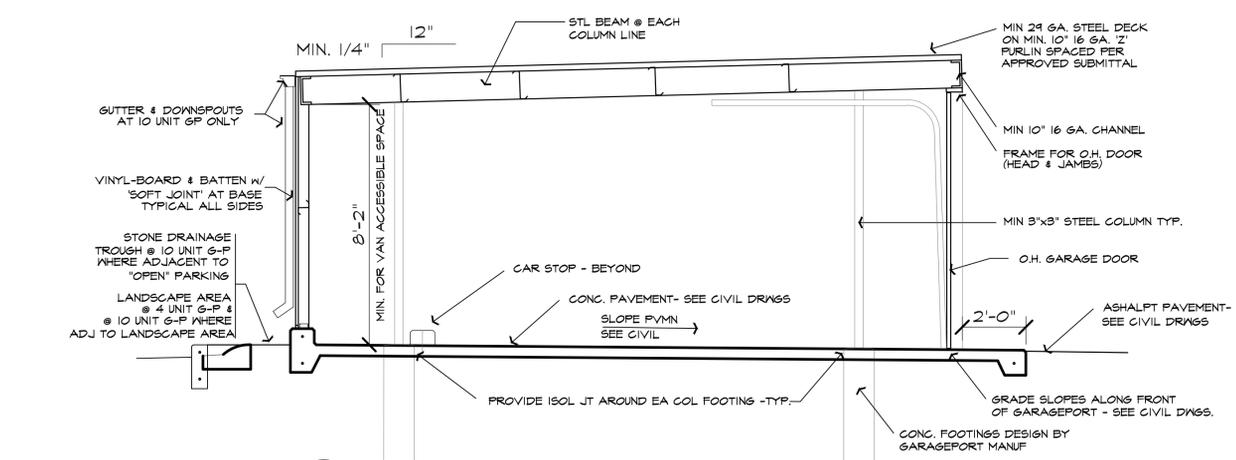
Date

STATE OF MICHIGAN
REGISTERED ARCHITECT
No. 18780
DANIEL A. TOSCH



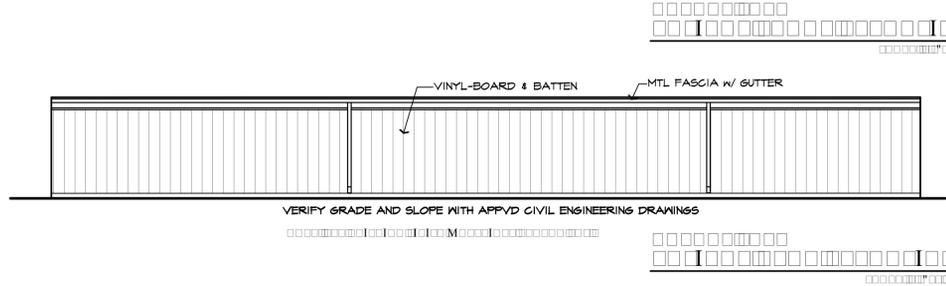
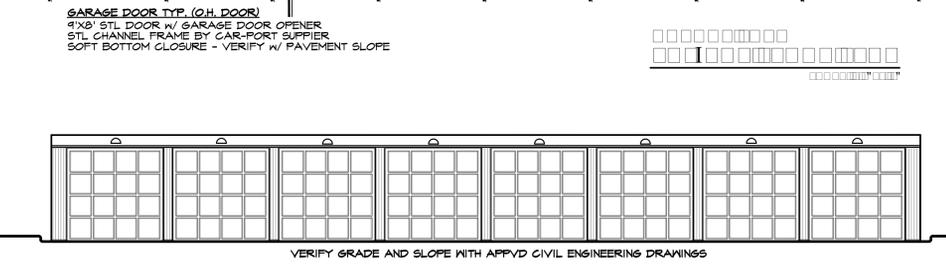
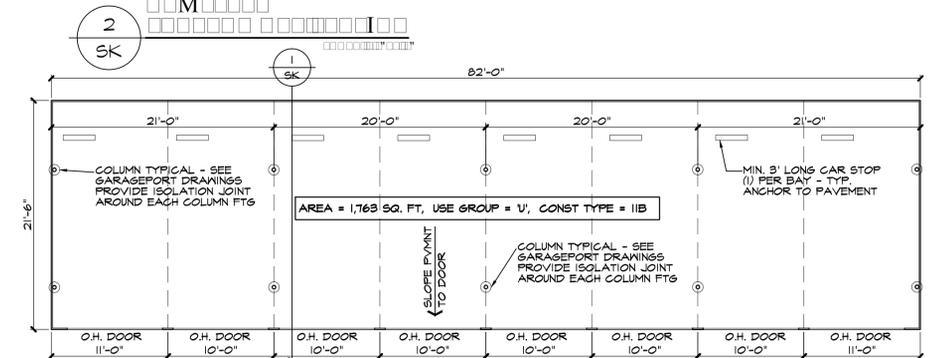
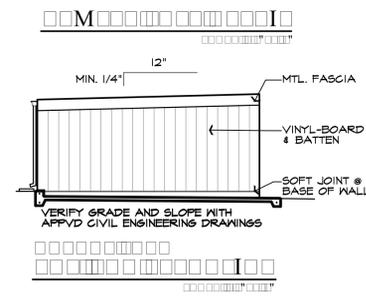
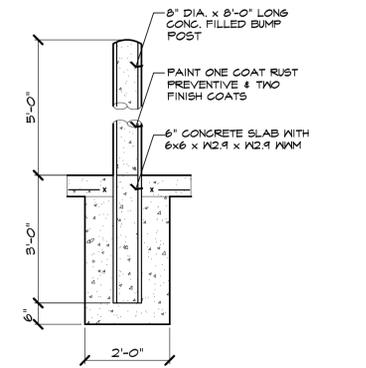
PROPOSED CARPORT DETAIL
SCALE: 3/8"=1'-0"

CARPORT DESIGN SHALL BE PROVIDED BY THE CARPORT MANUFACTURER. CARPORT DESIGN SHALL INCLUDE SUPERSTRUCTURE & FOUNDATIONS. PROVIDE COMPLETE SUBMITTAL INCLUDING SHOP DRAWINGS BEARING THE SIGNATURE & SEAL OF THE RESPONSIBLE DESIGN PROFESSIONAL LICENSED IN THE STATE THE PROJECT IS TO BE CONSTRUCTED SEE PROJECT TITLE SHEET FOR MIN DESIGN LOADS.

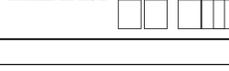
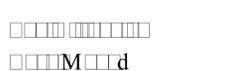
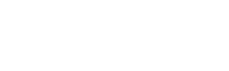
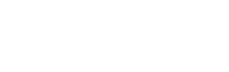


PROPOSED GARAGEPORT SECTION
SCALE: 3/8"=1'-0"

GARAGEPORT DESIGN SHALL BE PROVIDED BY THE GARAGEPORT MANUFACTURER. GARAGEPORT DESIGN SHALL INCLUDE SUPERSTRUCTURE, WALL PANELS & FOUNDATIONS. PROVIDE COMPLETE SUBMITTAL INCLUDING SHOP DRAWINGS BEARING THE SIGNATURE & SEAL OF THE RESPONSIBLE DESIGN PROFESSIONAL LICENSED IN THE STATE THE PROJECT IS TO BE CONSTRUCTED SEE PROJECT TITLE SHEET FOR MIN DESIGN LOADS.



STATE OF MICHIGAN
REGISTERED ARCHITECT
No. 18780
DANIEL A. TOSCH



3130C LED IMPACT RESISTANT SQUARE BOLLARD WEDGE TOP

LED IP65

DESCRIPTION
The 3130C BOLLARD is a low level area lighting luminaire that combines visual appeal with superior performance and unequal quality. It is designed to work in building perimeter areas and public spaces completing a wide variety of architectural styles. Superior performance extends to the detailed finish of the lowers. Matte black finish of top surface provides IES cut off performance with gloss white on bottom extends reflective light to economize on spacing of fixtures. Custom finish available on top lower surface.

The 3130C BOLLARD offers a patented impact resistant mounting and leveling design ensuring life long performance. Four leveling pads within the base mounting plate are easily accessible through the access panel. The leveling pads provide full contact with the concrete pad, providing a high degree of stability. The base mounting plate is fully welded to the bollard post, providing complete structural support from all directions, giving the bollard superior vandal resistance.

Motion Sensing Bi-Level Switching (BLS option) is now possible through the use of a fixture-integrated microwave occupancy sensor. Mounted in the head of the fixture, within the sealed light engine compartment, the sensor is protected from moisture damage, as well as potential damage due to vandalism. The sensor provides up to 20' of motion coverage in the 360 deg area around the bollard (see diagram on the next page). When motion is detected bollard will illuminate at full output (72 watts). After approx 5 min, bollard will drop to 19 Watts (660 lumens).

ORDERING INFORMATION

Series	Height	Lamp type	Color	Voltage	Distribution	Options*
3130C	H24	4COB*	20K	MVOLT (120-277 volt)	SYM Symmetrical 360°	BLS** Bi-Level Switching (Motion Activated) GFCI Receptacle; 120 volt only Emergency Operation (1387.5 lumen output; 90 minutes) ELM** 0-10V Dimming (Dims to 10%) LDIM Includes Trailing Edge ELV Dimming (Dims to 40%; 120 volt only)
	H36	8COB*	30K	2000°K Color Temp	FT* Forward Throw	
	H42	40K	40K	4000°K Color Temp		
		50K	5000°K Color Temp	347		
		AMBLW	Limited wavelength Ambient 59 Nanometers			

3130C H36 8COB 50K MVOLT SYM BL

Series	Height	Lamp type	Color	Voltage	Distribution	Options*
3130C	H24	4COB*	20K	MVOLT (120-277 volt)	SYM Symmetrical 360°	BLS** Bi-Level Switching (Motion Activated) GFCI Receptacle; 120 volt only Emergency Operation (1387.5 lumen output; 90 minutes) ELM** 0-10V Dimming (Dims to 10%) LDIM Includes Trailing Edge ELV Dimming (Dims to 40%; 120 volt only)
	H36	8COB*	30K	2000°K Color Temp	FT* Forward Throw	
	H42	40K	4000°K Color Temp	277		
		50K	5000°K Color Temp	347		
		AMBLW	Limited wavelength Ambient 59 Nanometers			

FINISH

Finish	Code	Material
BL	Black	STG Steel Gray
BZ	Bronze	TVG Terra Verde Green
DBB	Dark Bronze	WH White
DN	Natural Aluminum	CF Custom
GN	Green	Circ. Undercoat
GR	Gray	Optional Louvers Painted*
SND	Sand	—/PL Louvers painted to match fixture top only

MOUNTING

NOTES:
1. 4COB for use with 20K and AMBLW only, 20K and AMBLW require 4COB.
2. Required with ELM or BLS.
3. FT not available with BLS.
4. BLS is not available with ELM, LDIM or DIM.
5. ELM and BLS require 120 or 277 voltage, not MVOLT or 347.
6. Only available with 1320 lumens package (250mA).
7. ELM not available on 24" height.
8. Add zinc undercoat for hand environments.
9. Louvers will be black unless otherwise specified (top only).

ACCESSORIES

1. 4COB for use with 20K and AMBLW only, 20K and AMBLW require 4COB.
2. Required with ELM or BLS.
3. FT not available with BLS.
4. BLS is not available with ELM, LDIM or DIM.
5. ELM and BLS require 120 or 277 voltage, not MVOLT or 347.
6. Only available with 1320 lumens package (250mA).
7. ELM not available on 24" height.
8. Add zinc undercoat for hand environments.
9. Louvers will be black unless otherwise specified (top only).

HYREL 9144 Dearing Avenue, Second Floor • Chatsworth, CA 91311 • www.hyrel.com ©2014-2017 Acuity Brands Lighting, Inc. Phone: 866.533.9901 Rev. 02/15/17 3130C COB

D-Series Size 0 LED Area Luminaire

INTRODUCTION
The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 65% and expected service life of over 100,000 hours.

ORDERING INFORMATION

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	10C 10 LEDs (no engine)	350 350 mA	30K 3000K	T25 Type I short	MVOLT†	SPMA Square pole mounting
	20C 20 LEDs (no engine)	700 700 mA	40K 4000K	T25 Type I short	208†	RPA Round pole mounting
	40C 40 LEDs (two engines)	1000 1000 mA (1 A)†	50K 5000K	T35 Type II short	247†	SPUBA Square pole universal mounting adapter†
			AMBC Amber phosphor converted	T4M Type IV medium	480†	SPUBA Round pole universal mounting adapter†
				FTM Forward throw medium		
				T19S Type V short		

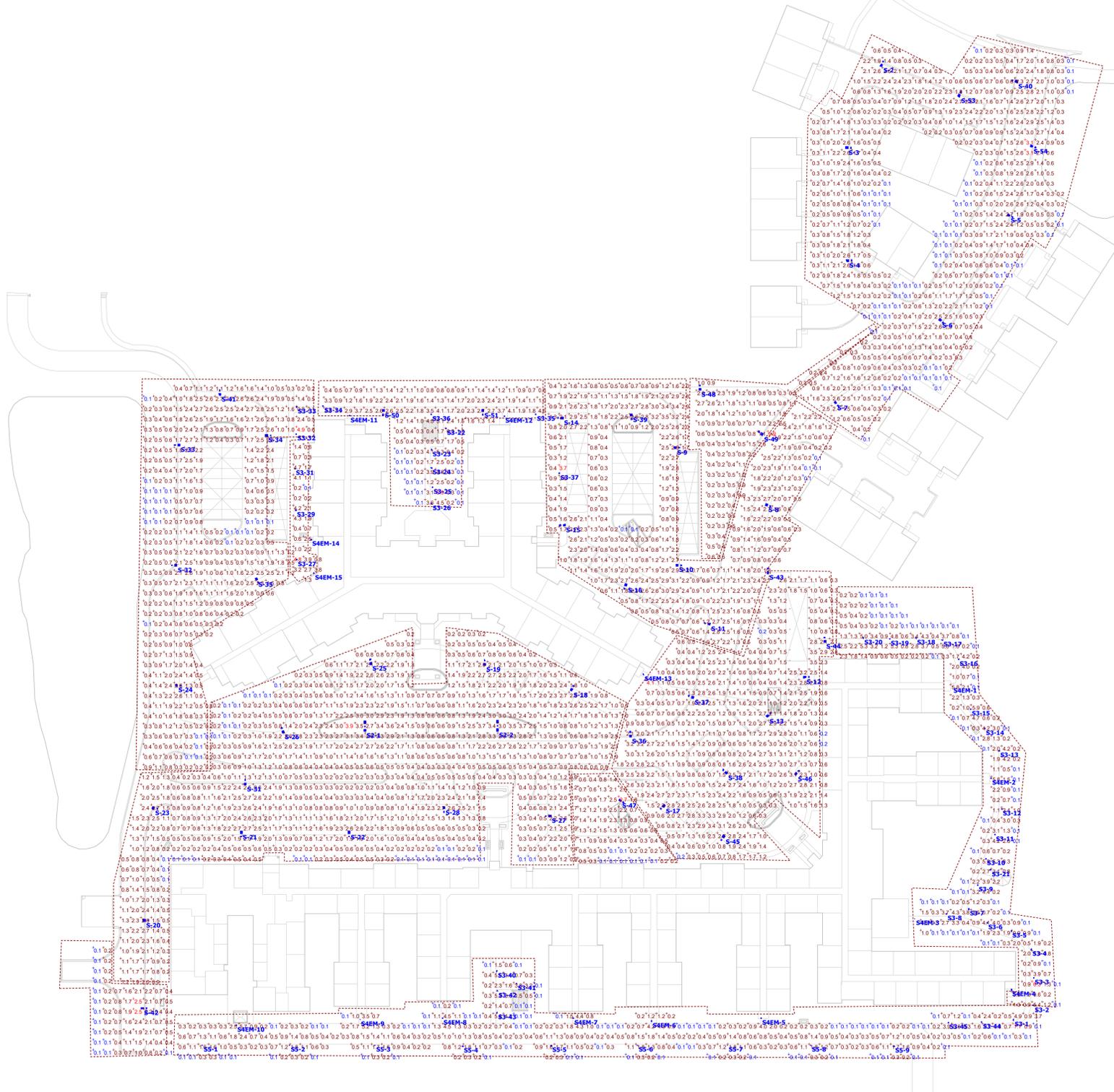
EXAMPLE: DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD

CONTROL OPTIONS

Control options	Other options	Finish required
Shipped installed PER NEMA twist-lock receptacle only (no controls) † PER Fire-wire receptacle only (no controls) † PERF Seven-wire receptacle only (no controls) † DMG 0-10V dimming driver (no controls) † DGR Dimmable and controllable via RDM** (no controls) † PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" † PIR Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" † PIR/FCV Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 16" †	PHR/FCV Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 16" † BL30 Bi-level switched dimming, 50% ** † BL50 Bi-level switched dimming, 50% ** † PM120D Part night, dim 50% ** † PM150D Part night, dim 50% ** † PM180D Part night, dim 50% ** † PM120T Part night, dim 1 hr † FAD Field adjustable output †	Shipped installed HS House-side shield † SF Single face (1A0, 277, 347) † DF Double face (208, 240, 480) † LH Left rotated optics † RO Right rotated optics † DOL Diffused drop lens † BS Bird spikes

CONTROLS & SHIELDS

NOTES:
1. DSX0 LED requires 200V or 277V and must be ordered with 200V or 277V control. PIR and PHR/FCV specify the SensorSwitch SSGR-15-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-30-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-45-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-60-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-75-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-90-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-105-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-120-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-135-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-150-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-165-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-180-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-195-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-210-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-225-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-240-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-255-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-270-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-285-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-300-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-315-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-330-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-345-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-360-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-375-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-390-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-405-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-420-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-435-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-450-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-465-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-480-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-495-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-510-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-525-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-540-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-555-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-570-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-585-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-600-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-615-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-630-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-645-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-660-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-675-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-690-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-705-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-720-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-735-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-750-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-765-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-780-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-795-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-810-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-825-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-840-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-855-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-870-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-885-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-900-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-915-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-930-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-945-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-960-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-975-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-990-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1005-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1020-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1035-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1050-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1065-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1080-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1095-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1110-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1125-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1140-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1155-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1170-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1185-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1200-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1215-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1230-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1245-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1260-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1275-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1290-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1305-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1320-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1335-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1350-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1365-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1380-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1395-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1410-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1425-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1440-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1455-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1470-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1485-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1500-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1515-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1530-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1545-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1560-COP control. 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PIR and PHR/FCV specify the SensorSwitch SSGR-1800-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1815-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1830-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1845-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1860-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1875-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1890-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1905-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1920-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1935-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1950-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1965-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1980-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-1995-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2010-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2025-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2040-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2055-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2070-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2085-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2100-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2115-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2130-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2145-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2160-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2175-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2190-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2205-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2220-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-2235-COP control. 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PIR and PHR/FCV specify the SensorSwitch SSGR-4725-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4740-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4755-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4770-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4785-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4800-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4815-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4830-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4845-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4860-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4875-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4890-COP control. PIR and PHR/FCV specify the SensorSwitch SSGR-4905-COP control. PIR and



Plan View
Scale: 1" = 60ft

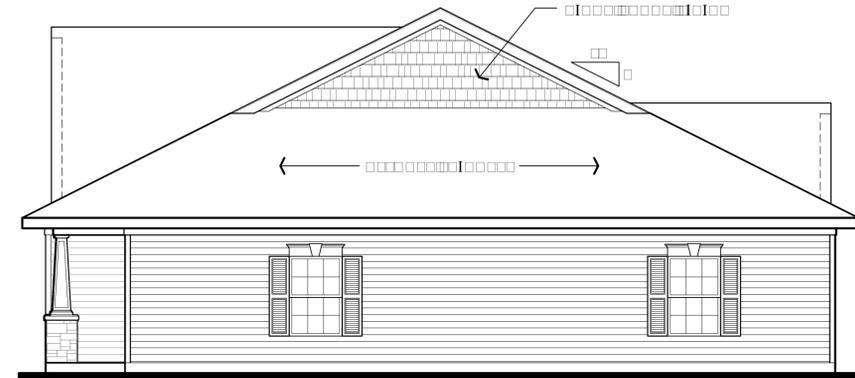
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
□	S	50	Lithonia Lighting	DSXO LED 20C 1000 40K T2M MVOLT	DSXO LED with 20 LEDs @1000 mA, 4000K, Type 2 Medium Optics	LED	1	DSXO_LED_20C_1000_40K_T2M_MVOL.LT.ies	7665	0.95	72
□	S2	2	Lithonia Lighting	DSXO LED 20C 1000 40K T2M MVOLT	DSXO LED with 20 LEDs @1000 mA, 4000K, Type 2 Medium Optics	LED	1	DSXO_LED_20C_1000_40K_T2M_MVOL.LT.ies	7665	0.95	144
○	S3	41	Hydrel	3100 8COB 40K SYM 250mA	9"DIA. X 36"H. LED BOLLARD LIGHT DIFFUSED LENS	NICHIA 30K LED COB LAMP	1	3100_8COB_40K_SYM_250mA.ies	1318	0.95	72.35
□	S4EM	15	Lithonia Lighting	OLW14	GENERAL PURPOSE LED WALLPACK	LED	1	OLW14.ies	1493	0.95	18
□	S5	9	Lithonia Lighting	DSXWPM LED 10C 350 40K T2M MVOLT	DSXWPM LED WITH (1) 10 LED LIGHT ENGINES, TYPE T2M OPTIC, 4000K, @ 350mA.	LED	1	DSXWPM_LED_10C_350_40K_T2M_MVOL.LT.ies	1448	0.95	13.3

Note
1. Total power load for site lighting is 5306 watts.

Statistics

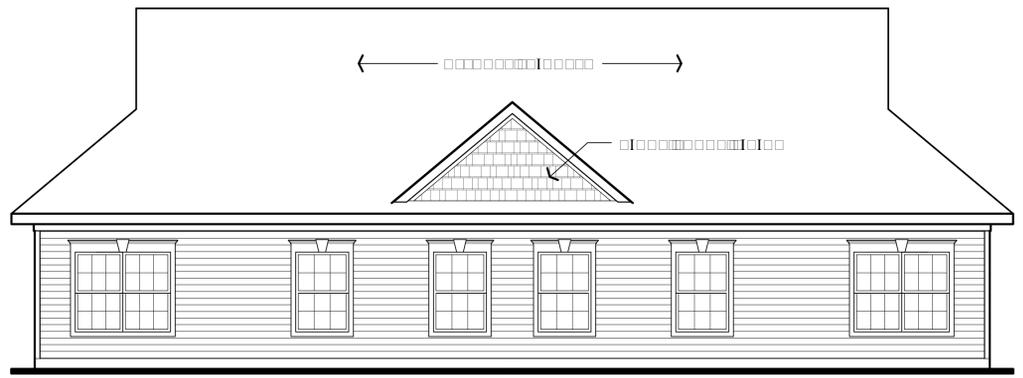
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
East Walkway	+	1.4 fc	6.3 fc	0.1 fc	63.0:1	14.0:1
Main Entry	+	1.0 fc	3.1 fc	0.1 fc	31.0:1	10.0:1
North Walk	+	1.6 fc	5.9 fc	0.1 fc	59.0:1	16.0:1
Northeast Parking	+	1.5 fc	3.7 fc	0.1 fc	37.0:1	15.0:1
Northeast Walk	+	0.9 fc	2.9 fc	0.1 fc	29.0:1	9.0:1
Northwest Parking	+	1.0 fc	4.9 fc	0.1 fc	49.0:1	10.0:1
Northwest Walkway	+	1.9 fc	4.8 fc	0.1 fc	48.0:1	19.0:1
South East Parking	+	1.5 fc	4.1 fc	0.2 fc	20.5:1	7.5:1
South Emergency Drive	+	0.8 fc	7.7 fc	0.1 fc	77.0:1	8.0:1
South Parking	+	0.9 fc	2.7 fc	0.1 fc	27.0:1	9.0:1
South Parking	+	1.2 fc	3.9 fc	0.1 fc	39.0:1	12.0:1
Turnaround	+	0.8 fc	2.5 fc	0.1 fc	25.0:1	8.0:1

MI 16790
 DANIEL A. TOSCH
 ARCHITECT
 No. 16790
 REGISTERED ARCHITECT

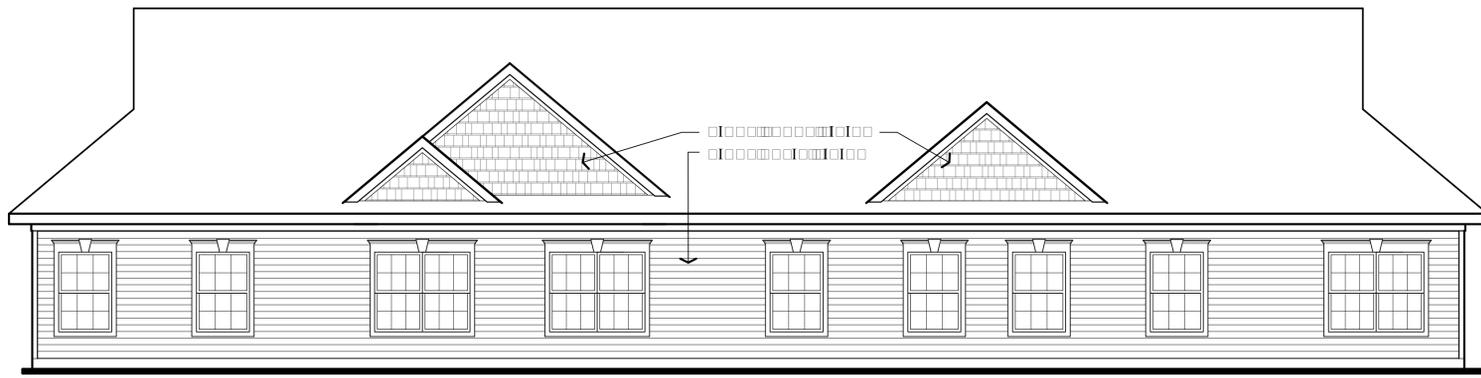


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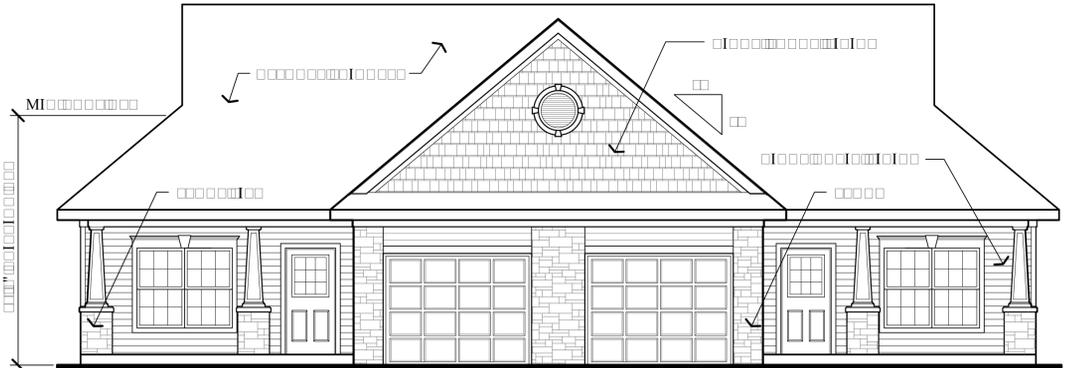
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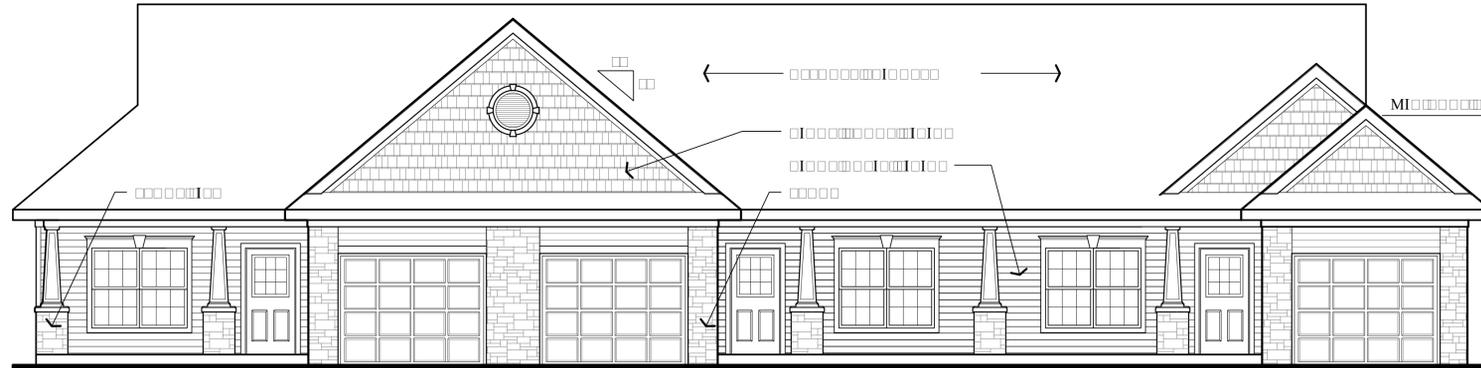
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248-540-5940

The Village at Rosy Mound

Grand Haven Township, MI

developer: REENDERS, INC.



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THE VILLAGE AT ROSY MOUND

The Rosy Mound PUD development plans include as the first phase, a Congregate building which will provide 116 units of independent rental housing for those 55 years of age and older. Designed specifically with seniors in mind, the congregate building will include one and two bedroom apartments and provide optional services such as housekeeping, laundry and meals. These units range in size from 685 to 1,364 square feet in size. In addition to the living units, the building contains many common areas that are available for the residents' use such as library, game and billiards room, fitness center, arts and craft room, theater, laundry rooms, clinic, resident storage, guest suite, hair salon and central and private dining rooms. The Village units will each have a covered deck or patio and the building will provide a large central outdoor patio with tables, chairs and umbrellas. There is also space within the building for administrative uses including offices, commercial kitchen, service laundry, and maintenance.

We have secured financing under the MSHDA Gap Funding Program NOFA and provided all local approvals are obtained, site preparation and construction of the Congregate building will commence in October of 2017 and be completed in the fall of 2018.

The second component of the development will be a 110 unit senior assisted living, offering studio, one and two bedroom apartments to area seniors over the age of 62 that require personalized assistance and care. These units range in size from 249 to 811 square feet and most do not have any kitchens facilities. In addition to the living units, the building contains many common areas such as living room/lounge areas, dining rooms, billiards room, activities room, fitness room, hair salon, and spa room for the residents and administrative, care and maintenance areas.

The assisted living building will be built in two phases as demand for additional assisted living units is evident in the market area. It is currently anticipated that the first phase of the assisted living building will be started in the Summer of 2019 and opened in Spring 2020 with the second phase to be started within two additional years.

The third component of the development will be 9 single-story buildings containing 27 Cottage units with attached garages. The Cottages will be two bedroom, one and one-half bath units with a living area of 1,122 square feet. The first 4 buildings containing the 13 Cottages located on the east side of the entrance drive closest to the congregate building will be constructed in conjunction with the Congregate building in 2017-2018 with the remaining units to be built in response to market demand.



April 10, 2017

Ordinance Narrative | Section 23.06.7

**Village of Rosy Mound
Grand Haven Township, Ottawa County, MI**

15.2306 SECTION 23.06 FINAL SITE PLAN REVIEW

7. Site plans which relate to all uses or structures (permitted and special land uses) shall not be approved unless the Planning Commission affirmatively determines that each of the following standards have been fulfilled:
 - A. The uses proposed will not adversely affect the public health, safety, or welfare. Uses and structures located on the site shall take into account topography, size of the property, the uses on adjoining property and the relationship and size of buildings to the site. The site shall be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this Ordinance.
 - This project by its nature will promote the public health, safety, and welfare of the Township residents by providing varying tiers of elderly residences and care. The project is situated on a large property and will utilize area between two dunes to locate the structures while preserving natural wooded buffers and wetlands while providing a transition from institutional uses (elementary school, Road Commission) to residences to the south.
 - B. Safe, convenient, uncontested, and well-defined vehicular and pedestrian circulation shall be provided for ingress/egress points and within the site. Drives, streets and other circulation routes shall be designed to promote safe and efficient traffic operations within the site and at ingress/egress points.
 - The sites main ingress/egress point will be onto Rosy Mound Road which will provide convenient access to Lakeshore Drive and US 31. Care has been taken to try to align driveways off the main drive where possible and to limit the number of intersections. Fire truck and commercial truck turning plans have been provided to demonstrate the maneuverability of the site. An emergency access drive will be constructed through the elementary school property to Lakeshore Drive.
 - C. The arrangement of public or private vehicular and pedestrian connections to existing or planned street in the area shall be planned to provide a safe and efficient circulation system for traffic within the Township.
 - An internal pedestrian sidewalk system is being proposed which will connect through the Elementary School to the walk along Lakeshore Drive. There will also be a sidewalk along Rosy Mound for future connection. The sites main ingress/egress point will be onto Rosy Mound Road which will provide convenient access to Lakeshore Drive and US 31

- D. Removal or alteration of significant natural features shall be restricted to those areas which are reasonably necessary to develop the site in accordance with the requirements of this Ordinance. The Planning Commission may require that landscaping, buffers, and/or greenbelts be preserved and/or provided to ensure that proposed uses will be adequately buffered from one another and from surrounding public and private property.
- The proposed project will leave intact a large area of wooded wetlands along with a natural wooded buffer along the south property line and natural wooded slope along Lakeshore Dr. As many trees will be preserved and protected as possible.
- E. Areas of natural drainage such as swales, wetlands, ponds, or swamps shall be protected and preserved insofar as practical in their natural state to provide areas for natural habitat, preserve drainage patterns and maintain the natural characteristics of the land.
- The proposed project will leave intact a large area of wooded wetlands. While there is no true drainage course on the site, the proposed discharge from the projects detention basins will be directed toward the wetlands, thereby enhancing the wetland features. Currently the development area's runoff is either directed toward the neighboring properties or infiltrates in natural low spots.
- F. The site plan shall provide reasonable visual and sound privacy for all dwelling units located therein, and adjacent thereto. Fences, walls, barriers, and landscaping shall be used, as appropriate, to accomplish these purposes.
- All Buildings and Dwelling Units have been designed to provide the maximum setbacks from the adjacent properties and roadways, while utilizing the existing trees and topography as a natural buffer. All dwelling units are designed to have a minimum of R-19 insulation in the exterior walls with insulated, double pane windows. Site landscape materials have been designed to provide variety and visual interest for residents and visitors. All exposed mechanical/electrical equipment will be screened from view, using landscape materials and architectural screens.
- G. All buildings and groups of buildings shall be arranged so as to permit necessary emergency vehicle access as requested by the Fire/Rescue Department.
- Care has been taken to design the site to provide the needed emergency vehicle access throughout the site. A fire truck turning plan is provided to demonstrate the maneuverability of the site. An emergency access drive is provided through the Elementary School lot to Lakeshore Drive, as well as a widened main entrance drive to provide additional clearance for emergency vehicles.
- H. All streets and driveways shall be developed in accordance with the Township Subdivision Control Ordinance, the Ottawa County Road Commission, or Michigan Department of Transportation specifications, as appropriate, unless developed as a private road in accordance with the requirements for private roads in this Ordinance or any other Township Ordinance. Except that the Planning Commission may impose more stringent requirements than those for the Road Commission or Department of Transportation with respect to driveway location and spacing. In addition, sidewalks may be required if determined to be necessary or appropriate for pedestrians and non-motorized vehicles.
- The main shared driveway will be constructed to OCRC road standards while operating as a private driveway. Sidewalks have been provided throughout the site for pedestrian access and mobility.
- I. Appropriate measures shall be taken to ensure that removal of surface water will not adversely affect neighboring properties of the public storm drainage system. Provisions shall be made to accommodate stormwater, prevent erosion and the formation of dust. The use of detention/retention ponds may be required. Surface water on all paved areas

shall be collected at intervals so that it will not obstruct the flow of vehicular or pedestrian traffic or create puddles in paved areas. Catch basins may be required to contain oil filters or traps to prevent contaminants from being discharged to the natural drainage system.

- The stormwater collection and treatment system will be designed to OCWRC standards and will reduce the amount of stormwater runoff that is currently flowing to neighboring properties. All catch basins will have sumps and hoods and captured runoff will be directed to one of two detention basins onsite. The low flow discharge from the basins will be routed to the wetlands.

J. Exterior lighting shall be arranged so that it is deflected away from adjacent properties and so that it does not interfere with the vision of motorists along adjacent streets. Lighting of buildings or structures shall be minimized to reduce light pollution and preserve the rural character of the Township.

- All Site Lighting will be designed to comply with Chapter 20A "Outdoor Lighting Requirements" of the Grand Haven Charter Township Zoning Ordinance and the submittal Photometric Plan. All Site Lighting fixtures will be energy efficient LED luminaires with fully shielded design classification which will minimize glare and obtrusive light.

K. All loading and unloading areas and outside storage areas, including areas for the storage of trash, which face or are visible from Residential Districts of public streets, shall be screened by a vertical screen consisting of structural or plant materials no less than six (6) feet in height. The finished side of any wall, fence, or other screen shall face adjacent properties.

- Loading areas and dumpster facilities will not be visible from the neighboring residences to the south or from either Lakeshore Drive or Rosy Mound Road. The dumpster enclosures will be properly screened.

L. Entrances and exits shall be provided at appropriate locations so as to maximize the convenience and safety for persons entering or leaving the site. The number of entrances to and exits from the site shall be determined with reference to the number of dwelling units or other land uses within the site, the nature and location of the surrounding streets, the effect of traffic in the area, nearby topography, and other factors. In those instances where the Planning Commission finds that an excessive number of ingress or egress points may occur on abutting street, thereby diminishing the carrying capacity of such street, and compromising public safety, the Planning Commission may limit such access points and require service access drives within the site.

- There will be one main entrance/exit onto Rosy Mound Road. Due to sight distances a second entrance was not advisable from the OCRC. Due to topography constraints an entrance/exit onto Lakeshore Drive was not feasible. There will be a second emergency only connection through the Elementary School lot to Lakeshore Drive.

M. Site plans shall conform to all applicable requirements of County, State, Federal, and Township statutes and ordinances. Approval may be conditioned on the applicant receiving necessary County, State, Federal, and Township permits before final site plan approval or an occupancy permit is granted.

- The intent is to conform to all applicable requirements of County, State, Federal, and Township statutes and ordinances. We are currently in the process of working with OCRC and OCWRC for their approval

- N. Appropriate fencing may be required by the Planning Commission around the boundaries of the development if deemed necessary to minimize or prevent trespassing or other adverse effects on adjacent lands.
- We do not anticipate the need for fences to minimize or prevent trespassing or other adverse effects on adjacent lands due to the nature of this project
- O. The general purposes and spirit of this Ordinance and the Master Plan of the Township shall be maintained.
- It is our intent to maintain the general purpose and spirit of the Ordinance by complying as fully as possible, and working within the purpose and spirit of the Ordinance otherwise. This project does comply with the Master Plan of the Township for this parcel.

April 10, 2017

Narrative | Departure Requests

Village of Rosy Mound Grand Haven Township, Ottawa County, MI

11.04 – Request departure from the 50' rear yard setback for the cottages to the internal parcel line due to the cottage area being regulated as R-3.5. A 30' rear yard setback to the internal parcel line is provided due to the unusual lot configuration and the need to add the internal parcel lines for the project funding.

12.04 - Request departure from the minimum floor area per dwelling unit of 884 square feet. In the Congregate Building we are proposing a unit square footage of the following:

Typical Unit Plans (See Sheet SK1.1, SK1.4 and SK1.5 for Supplemental Information)

Unit "A" (1BR):	685 sf	w/o Balcony/Patio
	741 sf	w/Balcony/Patio
Unit "B" (2BR):	937 sf	w/o Balcony/Patio
	993 sf	w/Balcony/Patio
Unit "b3" (2BR)	1106 sf	w/o Balcony/Patio
	1162 sf	w/Balcony/Patio

We believe this reduced square footage for the 1 Bedroom Unit is appropriate for this zone and development due to approximately 14,000 s.f. of shared common area included throughout the building. This shared area provides additional amenities and services such as Laundry/Lounge, Central Dining Room, Salon, Billiards, Library/Computer Room, Fitness Room, Theater, Clinic, Arts & Crafts, and Resident Storage Areas, which will reduce the need for the additional square footage in each unit. This also allows for a reduced area for the residents to clean and maintain.

15A.04.5 – Request departure from requiring a separate special land use permit to relocate an existing utility pole. We are proposing to relocate an existing approximately 10' to gain clearance from one of the proposed buildings. The option of routing the lines underground was explored and would require the line to either be below the detention basin or under pavement. Both these options are not preferable to the utility company or the developer.

15A.10.3 – Request departure to allow plantings along the maintenance strip instead of along the building wall. This will allow the design to still reduce the visual impact of the walls while complying with MSHDA requirements for planting distance from windows and maintain the preferred building design without downspouts.

15A.10.5 – Request departure from the requirement that 75% of the required parking lot landscaping be within the interior of the parking lot and not the edges. Due to the layout of the parking areas, which have a large portion of the spaces either covered or garages, there is limited need or availability to add islands to break up the parking areas. These parking areas are relatively small and not an expanse of multiple rows of parking.

15A.11 & 15A.11.3.C – Request departure to allow for the use of vinyl siding for the Assisted Living Building. This facility is intended to complement the adjacent building to maintain the Residential Character of the Development.

15A.13.1.B – Request departure garage locations to be varied and/or recessed. This is needed due to the type of resident (seniors), for their safety based on operational experience, and to help avoid hitting building walls if the garages were recessed.

17.05.1.E – Request departure to provide flexibility with the distance separating driveways off of the main private drive. The drive will be constructed to OCRC standards but will operate more like a circulation aisle of a parking lot. An effort has been made to space out the driveway connections, reduce the opening widths, and to align them where practical. Backing out into the main shared drive has been reduced or eliminated. The layout and configuration that we have provided will provide better safety and circulation than other large residential developments, such as the Timber View Apartments. This request for departure is based off details 2 & 8 from the OCRC Rules for Driveways, Banners & Parades.

17.05.2.A.4 – Request departure to treat the shared private drive as a road for compliance with the ordinance. The shared private drive will be constructed as a 30' wide road built to OCRC standards.

17.05.6 – Request departure for the use of existing trees and vegetation along the south property line as a transition area. The current grading would provide a minimum of 30' undisturbed natural buffer.

19.07.28.D – Request departure for two parcels which front on Lakeshore Drive, but egress from parking lots will be onto Rosy Mound. The request is due to the site constraint of the large slope along Lakeshore Drive preventing a safe egress drive being constructed. The two parcels will have egress from a shared private drive which connects to Rosy Mound. Utilizing a roadway would require dedicating right-of-way and due to the uniqueness of the site, it is not feasible to have a right-of-way

19.07.28.E – Request departure for the setback of the Maintenance Garage and the Assisted Living Building to the interior parcel lines. Due to the funding requirements for this project, the PUD needs to be divided into separate parcels. The 75' setback is maintained from the Assisted Living building and Maintenance Garage to the residential abutters to the south, and to the Lakeshore Drive ROW. The interior parcel lines need to be encompass the detention basin and shared private drive for the Congregate Building.

19.07.28.H – Request departure for parking at the front of the buildings. While this is not technically the front yard, due to the shared private drive, parking at the front of the two main buildings provides convenience and ease of access for the residents and visitors, most of which will be elderly. The parking has also been separated into smaller lots so there is not one large parking field in the front of the buildings.

20.12.5-6 – Request departure for a fence height of 6'-6" for the Memory Care Courtyard. This is needed for residence safety based on operational experience.

21.02 – Request departure for a 3 story building greater than 35 feet in height. The proposed congregate building will be 3 stories and a mid-roof height of 37'-6". The height above 35' will be architectural features and a sloped roof. The impact of the additional height will be mitigated by the grade difference to Lakeshore Dr. and the large setback from both Lakeshore Dr. and Rosy Mound Road. The site will also transition to a single story building adjacent to the residential development to the south.

24.04.2 – Request departure for parking spaces sized 10'x20' due to MSHDA requirement for the larger spaces. This will assist the elderly residents with parking maneuvers. The applicable MSHDA requirement has been attached.

Township – Traffic Study

Village of Rosy Mound

Grand Haven Township, Ottawa County, MI

Reference: 15A.05.7 Traffic Study

Based on our examination of similar existing properties that we currently manage we do not believe that a traffic impact study is necessary. Our estimates show that the traffic generated by the congregate building would come out to .75 trips per unit, per day. This would be 87 trips per day for the 116 units in Phase I, with the majority of these trips falling during non-peak hours. Upon completion the 2 phases of the assisted living we would be looking at an additional 96 units of general assisted, and 18 units of memory care. We believe that this would generate roughly another 137 trips daily. These trips would be spread throughout the entire day, and would primarily consist of our 3 shifts of employees, supplier drops offs, and visitors. We do not ever anticipate the peak hour traffic to exceed 100 vehicle trips or approach the 1000 daily trips.

Township – Parking Policy

Village of Rosy Mound

Grand Haven Township, Ottawa County, MI

Reference: 15A.05.13 Parking Study

A survey of the parking requirements at the ten senior independent/congregate developments managed by Heritage Property Management was conducted in June on 2016. The ten developments represented 984 units of which 939 units were occupied. The number of resident cars registered at that time was 563, or 60% of the unit residents had a car. The percentage of resident cars per unit at the various developments ranged from a low of 52% to a high 68%.

The Michigan State Housing Development Authority requires a minimum of 80% parking spaces for a senior living development, or 93 spaces.

The parking requirement for The Village at Rosy Mound was determined as follows:

Resident Parking	116 units x 60%	70
Staff Parking		3
Visitor Parking		25
TOTAL PARKING SPACES		98

Township – Green Building Policy

Village of Rosy Mound

Grand Haven Township, Ottawa County, MI

The Village at Rosy Mound will be designed and constructed in accordance with the Michigan State Housing Development Authority's Affordable Green New Construction policy.

The policy covers site improvements which require landscaping appropriate to the site's soil and microclimate and prohibits the use of any invasive species and the use of efficient irrigation.

The development will focus on water conservation with the use of water conserving plumbing fixtures.

The development will focus on energy efficient with the use of ENERGY STAR appliances and hot water heaters, will use high efficient lighting throughout and will install daylight sensors on outdoor lighting. Heating and cooling equipment will be appropriately size to ACCA standards.

The development will use interior paints, primers, adhesives and sealants, and carpet system that utilize low or no volatile organic compounds.

The development will provide for the collection and storage of materials for recycling and will provide the tenants and staff with a Manual that explains the intent, benefits, use and maintenance of green building features.

MSHDA STANDARDS OF DESIGN

02000 Site Work

2001.13 Parking Ratios

- Parking for developments for senior residents shall be provided in the following ratio: 1.0 space per unit or greater.
- Parking for developments providing congregate services and marketed as “congregate” developments may be provided at 0.8 space per unit or greater.

02001.17 Parking Spaces

- Parking spaces shall be a minimum of 10' in width X 20' in length.

02001.3 Patios

- Dwelling units at grade shall have patios with a minimum area of 45 sq. ft.
- Patios shall be concrete. (Refer also to **00150 C**)

02001.6 Maintenance Strips

- A maintenance strip, not less than 18” in width, to protect siding from mowing operations, shall be provided along all non-masonry building facades.

02870 Seating

- In housing for senior residents, exterior seating and common area seating shall have backs and arms.



King & MacGregor
Environmental,
Inc.

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162 Kuivila Road
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Phone: 906/367-0171

email: kme@king-macgregor.com

June 9, 2016

Sent Via Email

Ms. Shirley Woodruff
Reenders, Inc
950 Taylor Avenue
Grand Haven, MI 49417

Re: Amended Protected Species Evaluation – 14110 Lakeshore Drive

Dear Ms. Woodruff:

Pursuant to your request, an additional site investigation was conducted on June 2, 2016 to re-evaluate the site in response to the Michigan Natural Features Inventory (MNFI) Rare Species Review and evaluation, dated May 23, 2016 (attached). This site evaluation was conducted on the above-referenced 27-acre site to identify potential habitat for the following federally-protected and/or state-protected species:

Pitcher's thistle (*Cirsium pitcher*), Threatened
Rufa red knot (*Calidris canutus rufa*), Threatened
Indiana bat (*Myotis sodalis*), Endangered,
Northern long-eared bat (*Myotis septentrionalis*), Threatened
Wild rice (*Zizania aquatic* var. *aquatic*), Threatened

This habitat evaluation included a review of information gathered from the United States Fish and Wildlife Service (USFWS) and MNFI databases and in-office review and two site evaluations. The intent of this report is to provide a brief description of the subject species and a brief evaluation of potential habitat observed at the site. Species of special concern are not addressed in this report.

Pitcher's Thistle

Pitcher's Thistle is a threatened plant that grows only on shorelines or sand dunes of the Great Lakes. This shoreline plant requires open, windblown sand dunes or low, open beach ridges. Pitcher's Thistle withstands the desert like environment of Michigan's sand dunes by having a root capable of penetrating more than 6 feet into the sand. The silvery hairs covering the plant aid in water retention and sunlight reflection. MNFI indicates that suitable habitat exists within a 1.5-mile search buffer (Lake Michigan shoreline).

The subject 27-acre parcel is predominately forested with small areas of stabilized dune features. Two small areas of open (un-vegetated) sand were identified within the central portion of the site. These areas of sand appear to have been created by past earth moving activities and/or pedestrian traffic. No dune blow outs are present within the site. The small areas of open sand are not exposed to significant wind erosion or other dune processes, therefore, are not potential habitat areas for this plant. No pitcher's thistle was observed within the parcel. Therefore, this project will have "no effect" on pitcher's thistle.

Rufa Red Knot

The rufa red knot is a threatened bird species that migrates annually between its breeding grounds in the Canadian Arctic and several wintering regions, including the southeast United States, the northwest Gulf of Mexico, northern Brazil and Tierra del Fuego at the southern tip of South America. This shore bird occurs primarily along the coasts but also migrates across areas of open-ocean as well as over land. In the United States, knots use both coastal and interior routes during migration, including the Central, Mississippi and Atlantic flyways. The MNFI indicates that appears to be suitable habitat within 1.5 miles of the subject site (Lake Michigan shoreline).

The subject 27-acre parcel does not contain any breeding, loafing or feeding habitat for this shore bird. Therefore, this project will have “no effect” on rufa red knot.

Indiana Bat

The Indiana bat is an endangered species that prefers to roost and brood in trees with exfoliating/peeling bark, or cavities in dead snags or dying trees located primarily in wetlands, floodplain/riparian forests, burr oak forests, and oak openings. Maternity and roost trees are usually found in the open or exposed to solar radiation. Understory clearance is also a factor for Indiana bat ingress and egress. Thick forest canopies not only limit solar exposure, they may inhibit flight and therefore access to potential roost sites. Foraging typically occurs over slow-moving, wooded streams and rivers as well as in the canopy of mature trees. Upland areas isolated from floodplains and non-wooded streams are generally avoided.

The subject 27-acre site contains mixed deciduous forest, pine stands and open field areas. A forested wetland with some emergent openings is located on the eastern property line. The site does not contain any riparian zones.

Several trees were observed with exfoliating or peeling bark at locations with exposure to solar radiation. These potential roost trees are not located near riparian areas therefore are considered to be potential but unlikely habitat for this bat species. Therefore, it is our opinion that this project will have “no effect” on the Indiana bat.

However, to avoid impacts to this species, it is recommended that tree clearing be limited to after October 1 and before April 1 when these bats are located in hibernacula and not in tree cover. Should tree clearing need to be conducted during the spring/summer months, additional surveys (mist netting and/or acoustical) are normally required prior to receiving approvals from the US Fish & Wildlife Service and/or Michigan Department of Natural Resources to proceed with tree cutting activities.

Northern Long-Eared Bat

The northern long-eared bat is a threatened species that hibernates in caves and mines; swarming in surrounding wooded areas in autumn. During late spring and summer, this species roosts and forages in upland forests. The northern long-eared bat has more flexible habitat requirements than the Indiana bat, generally using forested areas for feeding and brooding.

The subject 27-acre site contains mixed deciduous forest, pine stands and open field areas that contain potential roost and/or brood habitat for the northern long-eared bat. However, MNFI indicates that no known hibernacula or roost trees have been documented within the 1.5-mile search buffer. Therefore, it is our opinion that this project will have "no effect" on the northern long-eared bat.

However, the USFWS recommends that tree clearing be conducted after October 1 and before March 31 in order to avoid potential or inadvertent impacts to the northern long-eared bat.

Wild Rice

Wild-rice is found in rivers, streams, lakes, ponds. It usually occurs in water less than 2 feet deep in areas with a slight current over a mucky or silty bottom.

The subject parcel does not contain any habitat meeting the requirements of wild rice.

Please be advised the information provided in this report is a professional opinion. The ultimate decision of whether potential habitat for the above described protected species is present lies with the USFWS, Michigan Department of Natural Resources or Michigan Department of Environmental Quality.

Thank you for the opportunity to provide this threatened/endangered species evaluation. If you have any questions, please contact me at your convenience.

Sincerely,



King & MacGregor Environmental, Inc.
Matthew MacGregor

Mr. John R. Vigna
King & MacGregor Environmental, Inc.
2520 Woodmeadow Drive SE
Grand Rapids, MI 49546
616-957-1231

May 23, 2016

Re: Rare Species Review #1802 – Senior Living/Elderly Care Development, Grand Haven Township, Ottawa County, MI (T7N, R16W Section 4).

Mr. Vigna:

The location for the proposed project was checked against known localities for rare species and unique natural features, which are recorded in the Michigan Natural Features Inventory (MNFI) natural heritage database. This continuously updated database is a comprehensive source of existing data on Michigan's endangered, threatened, or otherwise significant plant and animal species, natural plant communities, and other natural features. Records in the database indicate that a qualified observer has documented the presence of special natural features. The absence of records in the database for a particular site may mean that the site has not been surveyed. The only way to obtain a definitive statement on the status of natural features is to have a competent biologist perform a complete field survey.

Under Act 451 of 1994, the Natural Resources and Environmental Protection Act, Part 365, Endangered Species Protection, "a person shall not take, possess, transport, ...fish, plants, and wildlife indigenous to the state and determined to be endangered or threatened," unless first receiving an Endangered Species Permit from the Michigan Department of Natural Resources (MDNR), Wildlife Division. Responsibility to protect endangered and threatened species is not limited to the lists below. Other species may be present that have not been recorded in the database.



MSU EXTENSION

Michigan Natural Features Inventory

PO Box 13036
Lansing MI 48901

(517) 284-6200
Fax (517) 373-9566

mnfi.anr.msu.edu

Legally protected species have been documented within 1.5 miles of the proposed activity and it is **possible** that negative impacts will occur. Keep in mind that **MNFI cannot fully evaluate this project without visiting the project site**. MNFI offers several levels of Rare Species Reviews, including field surveys which I would be happy to discuss with you.

Sincerely,

Michael A. Sanders

Michael A. Sanders
Rare Species Review Specialist
Michigan Natural Features Inventory

Comments for Rare Species Review #1802: It is important to note that it is the applicant's responsibility to comply with both state and federal threatened and endangered species legislation. Therefore, if a state listed species occurs at a project site, and you think you need an endangered species permit please contact: Lori Sargent, Nongame Wildlife Biologist, Wildlife Division, Michigan Department of Natural Resources, P.O. Box 30444, Lansing, MI 48909, 517-284-6216, or SargentL@michigan.gov. If a federally listed species is involved and, you think a permit is needed, please contact Barb Hosler, Endangered Species Program, U.S. Fish and Wildlife Service, East Lansing office, 517-351-6326, or Barbara_Hosler@fws.gov.

Special concern species and natural communities are not protected under endangered species legislation but efforts should be taken to minimize any or all impacts. Species classified as special concern are species whose numbers are getting smaller in the state. If these species continue to decline they would be recommended for reclassification to threatened or endangered status.

Please consult MNFI's Rare Species Explorer for additional information regarding the listed species: <http://mnfi.anr.msu.edu/explorer/search.cfm>.

Table 1: Legally protected species within 1.5 miles of RSR #1802

SNAME	SCOMNAME	G_RANK	S_RANK	Firstobs	Lastobs	USESA	SPROT	ELCAT
<i>Zizania aquatica var. aquatica</i>	Wild rice	G5T5	S2S3	1984	1988-08-12		T	Plant
<i>Cirsium pitcheri</i>	Pitcher's thistle	G3	S3	1985-07-25	2015-10-01	LT	T	Plant

Of concern: The federally threatened **Pitcher's thistle** (*Cirsium pitcheri*) has been documented near the project site. Pitcher's thistle grows on open sand dunes and occasionally on lag gravel associated with dunes. All of its habitats are along the Great Lakes shores, or in very close proximity. This monocarpic (once-flowering) plant produces a rosette that will mature to flowering in 2-8 years, after which the plant dies. Seeds germinate in June, and most seedlings (rosettes) appear within 1-3 meters of parent plants. The taproot of this thistle, which can reach 2 m in length, enhances its ability to survive the often desiccating conditions of its dune habitat. Pitcher's thistle blooms from approximately late-June to early September. Pitcher's thistle can be locally extirpated by destruction or major disturbance of its habitat (e.g. by shoreline development, vehicular or ORV traffic, heavy foot traffic and/or intensive recreation).

Note: a quick survey of the project area, particularly in any blowout areas should be conducted to determine presence/absence of this species.

Table 2: Special Concern Species and other Rare Natural Features within 1.5 miles of RSR #1802

SNAME	SCOMNAME	G_RANK	S_RANK	Firstobs	Lastobs	USESA	SPROT	ELCAT
Mesic Northern Forest		G4	S3	1985-07-25	2012-08-17			Community
Great Lakes Marsh		G2	S3	1984	2009-09-18			Community
Open Dunes	Beach/shoredunes, Great Lakes Type	G3	S3	1985-07-25	2012-08-17			Community
<i>Pisidium cruciatum</i>	Ornamanted peaclam	GU	SNR	1959-08-25	1959-08-25		SC	Animal
<i>Pisidium simplex</i>	A fingernail clam	G5	SNR	1959-08-25	1959-08-25		SC	Animal
<i>Corispermum pallasii</i>	Pallas' bugseed	GNR	SNR	2015-10-01	2015-10-01		SC	Plant

Codes to accompany tables:

State Protection Status Code Definitions (SPROT)

E: Endangered

T: Threatened

SC: Special concern

Global Heritage Status Rank Definitions (GRANK)

The priority assigned by NatureServe's national office for data collection and protection based upon the element's status throughout its entire world-wide range. Criteria not based only on number of occurrences; other critical factors also apply. Note that ranks are frequently combined.

G1 = critically imperiled globally because of extreme rarity (5 or fewer occurrences range-wide or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extinction.

G2 = imperiled globally because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extinction throughout its range.

G3: Either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g. a single western state, a physiographic region in the East) or because of other factor(s) making it vulnerable to extinction throughout its range; in terms of occurrences, in the range of 21 to 100.

G4: Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5: Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

Q: Taxonomy uncertain

State Heritage Status Rank Definitions (SRANK)

The priority assigned by the Michigan Natural Features Inventory for data collection and protection based upon the element's status within the state. Criteria not based only on number of occurrences; other critical factors also apply. Note that ranks are frequently combined.

S1: Critically imperiled in the state because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extirpation in the state.

S2: Imperiled in state because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extirpation from the state.

S3: Rare or uncommon in state (on the order of 21 to 100 occurrences).

S4 = apparently secure in state, with many occurrences.

S5 = demonstrably secure in state and essentially ineradicable under present conditions.

SX = apparently extirpated from state.

Rare Species Review #1802
King & MacGregor Environmental, Inc.
Senior Living/Elderly Care Facility
Ottawa County, MI
May 24, 2016

For projects involving Federal funding or a Federal agency authorization

The following information is provided to assist you with **Section 7 compliance** of the Federal Endangered Species Act (ESA). The ESA directs all Federal agencies "to work to conserve endangered and threatened species. Section 7 of the ESA, called "Interagency Cooperation," is the means by which Federal agencies ensure their actions, including those they authorize or fund, do not jeopardize the existence of any listed species."

This project falls within the range of four (4) federally listed/proposed species which have been identified by the U.S. Fish and Wildlife Service (USFWS) to occur in **Ottawa County, Michigan**. The project falls within the range of the federally endangered **Indiana bat** (*Myotis sodalis*), the federally threatened **Northern long-eared bat** (*M. septentrionalis*), the federally threatened **rufa red knot** (*Calidris canutus rufa*), and the federally threatened **Pitcher's thistle** (*Cirsium pitcheri*).

Federally Endangered

Indiana Bat – although there are no documented occurrences, there appears to be suitable habitat within the 1.5 mile search buffer. Indiana bats are found only in the Eastern United States and are typically confined to the southern three tiers of counties in Michigan. Indiana bats that summer in Michigan winter in caves in Indiana and Kentucky. This species forms colonies and forages in riparian and mature floodplain habitats. Nursery roost sites are usually located under loose bark or in hollows of trees near riparian habitat. Indiana bats typically avoid houses or other artificial structures and typically roost underneath loose bark of dead elm, maple and ash trees. Other dead trees used include oak, hickory and cottonwood.

Foraging typically occurs over slow-moving, wooded streams and rivers as well as in the canopy of mature trees. Movements may also extend into the outer edge of the floodplain and to nearby solitary trees. A summer colony's foraging area usually encompasses a stretch of stream over a half-mile in length. Upland areas isolated from floodplains and non-wooded streams are generally avoided.

Conservation strategies: The suggested seasonal tree cutting range for Indiana bat is between October 1 and March 31 (i.e., no cutting April 1-September 30). This applies throughout the Indiana bat range in Michigan.

Federally Threatened

Northern Long-eared Bat - Northern long-eared bat numbers in the northeast US have declined up to 99 percent. Loss or degradation of summer habitat, wind turbines, disturbance to hibernacula, predation, and pesticides have contributed to declines in Northern long-eared bat populations. However, no other threat has been as severe to the decline as White-nose Syndrome (WNS). WNS is a fungus that thrives in the cold, damp conditions in caves and mines where bats hibernate. The disease is believed to disrupt the hibernation cycle by causing bats to repeatedly awake thereby depleting vital energy reserves. This species was federally listed in May 2015 primarily due to the threat from WNS.

Also called northern bat or northern myotis, this bat is distinguished from other *Myotis* species by its long ears. In Michigan, northern long-eared bats hibernate in abandoned mines and caves in the Upper Peninsula; they also commonly hibernate in the Tippy Dam spillway in Manistee County. This species is a regional migrant with migratory distance largely determined by locations of suitable hibernacula sites. Northern long-eared bats typically roost and forage in forested areas. During the summer, these bats roost singly or in colonies underneath bark, in cavities or in crevices of both living and dead trees. These bats seem to select roost trees based on

suitability to retain bark or provide cavities or crevices. Common roost trees in southern Lower Michigan included species of ash, elm and maple. Foraging occurs primarily in areas along woodland edges, woodland clearings and over small woodland ponds. Moths, beetles and small flies are common food items. Like all temperate bats this species typically produces only 1-2 young per year.

Although no known hibernacula or roost trees have been documented within 1.5 miles of the project area, this activity occurs within the designated WNS zone (i.e., within 150 miles of positive counties/districts impacted by WNS). In addition, suitable habitat does exist in the 1.5 mile search buffer. The USFWS has prepared a dichotomous key to help determine if this action may cause prohibited take of this bat. Please consult the USFWS Endangered Species Page for more information.

Conservation strategies: When there are no known roost trees or hibernacula in the project area, we encourage you to conduct tree-cutting activities and prescribed burns in forested areas during October 1 through March 31 when possible, but you are not required by the ESA to do so. When that is not possible, we encourage you to remove trees prior to June 1 or after July 31, as that will help to protect young bats that may be in forested areas, but are not yet able to fly.

Pitcher's Thistle – there is suitable habitat within the 1.5 mile search buffer. Pitcher's thistle grows on open sand dunes and occasionally on lag gravel associated with dunes. All of its habitats are along the Great Lakes shores, or in very close proximity. This monocarpic (once-flowering) plant produces a rosette that will mature to flowering in 2-8 years, after which the plant dies. Seeds germinate in June, and most seedlings (rosettes) appear within 1-3 meters of parent plants. The taproot of this thistle, which can reach 2 m in length, enhances its ability to survive the often desiccating conditions of its dune habitat. Pitcher's thistle blooms from approximately late-June to early September. Pitcher's thistle can be locally extirpated by destruction or major disturbance of its habitat (e.g. by shoreline development, vehicular or ORV traffic, heavy foot traffic and/or intensive recreation).

Rufa Red Knot - although there are no documented occurrences, there appears to be suitable habitat within the 1.5 mile search buffer. The rufa red knot is one of the longest-distance migrants in the animal kingdom, flying some 18,000 miles annually between its breeding grounds in the Canadian Arctic to the wintering grounds at the southern-most tip of South America. Primarily occurring along the Atlantic and Gulf coasts, small groups of this shorebird regularly use the interior of the United States such as the Great Lakes during the annual migration. The Great Lakes shorelines provide vital stopover habitat for resting and refueling during their long annual journey.

The largest concentration of rufa red knots is found in May in Delaware Bay, where the birds stop to gorge on the eggs of spawning horseshoe crabs; a spectacle attracting thousands of birdwatchers to the area. In just a few days, the birds nearly double their weight to prepare for the final leg of their long journey to the Arctic. This species may be especially vulnerable to climate change which affects coastal habitats due to rising sea levels.

USFWS Section 7 Consultation Technical Assistance can be found at:

<http://www.fws.gov/midwest/endangered/section7/sppranges/michigan-cty.html>

The website offers step-by-step instructions to guide you through the Section 7 consultation process with prepared templates for documenting "no effect." as well as requesting concurrence on "may affect, but not likely to adversely affect" determinations.

Please let us know if you have questions.

Mike Sanders
Environmental Review Specialist/Extension
Sander75@msu.edu
517-284-6215

DEVELOPMENT COVENANT

THIS DEVELOPMENT COVENANT ("Covenant") is made this ____ day of _____, 2017, by ROSY MOUND LIMITED DIVIDEND HOUSING ASSOCIATION LIMITED PARTNERSHIP, LP, a Michigan limited partnership, with offices at 950 Taylor, Grand Haven, MI 49417 ("Developer"), with reference to the following:

RECITALS

A. Developer proposes to develop a senior living community ("Development") on that real property legally described on Exhibit A (the "Property"), which Property is located within the Charter Township of Grand Haven ("Township").

B. As a condition to the Township's approval of the Development, the Township Zoning Ordinance requires that the Developer designate certain Open Space on the Property and that the Developer enter into this Covenant with respect to the preservation, management, and maintenance of the Open Space. The Open Space is legally described and depicted on the Site Plan ("Site Plan") attached as Exhibit B.

COVENANTS

NOW, THEREFORE, the Developer covenants as follows:

1. Preservation and Use of Open Space.
 - a. The Open Space shall remain in its existing natural state (largely wooded wetlands) and shall remain undeveloped and protected from all forms of development, except: (i) as set forth on the Site Plan, and (ii) for storm detention basins, storm sewer structures and improvements, water main structures and improvements, and electric utilities structures and improvements.
 - b. The Open Space shall be utilized solely for the benefit of the Developer and the residents of the Property. Permitted uses of the Open Space shall include walking, bird watching, observation of wildlife, observation of nature, and similar unobtrusive activities.
 - c. The permitted uses of the Open Space shall not be amended without the written consent of the Township.

2. Maintenance of Open Space.

a. The Developer shall maintain the Open Space in its existing natural state.

b. If the Developer fails to maintain the Open Space as required under this Agreement or if the Open Space becomes a nuisance, then the Township shall be entitled to undertake any required maintenance on behalf of the Developer. In such event, the Developer shall pay any costs incurred by the Township in connection with such maintenance. If the Developer fails to pay such costs within 60 days of the Township's demand therefor, the Township shall be entitled to place a lien on the Property in order to recover such costs.

3. Recording. This Covenant may be recorded in the Office of the Ottawa County Register of Deeds.

4. Enforceability. This Covenant shall be enforceable only by the Developer and the Township and no other person shall have the right to enforce any provision contained herein.

5. Governing Law. This Covenant shall be governed by, and construed and interpreted in accordance with, the laws of the State of Michigan.

6. Run with the Land. This Covenant shall run with the land and be binding on all successors, assigns, and transferees of Developer.

IN WITNESS WHEREOF, the Developer has caused this Covenant to be executed and delivered as of the day and year first above written.

**ROSY MOUND LIMITED DIVIDEND
HOUSING ASSOCIATION LIMITED
PARTNERSHIP, LP, a Michigan limited
partnership**

By: _____

Shirley A. Woodruff

Title: Authorized Agent

{Notary on next page}

STATE OF MICHIGAN

COUNTY OF OTTAWA

On March ___, 2017, before me, a Notary Public, in and for said County, personally appeared Shirley A. Woodruff, Authorized Agent, who acknowledged the execution of the foregoing instrument as her free act and deed.

Notary Public

County, Michigan
My commission expires: _____

Drafted By and When Recorded Return to:

Jeffrey W. Beswick, Esq.

VARNUM LLP

233 Washington Avenue; Suite 205

Grand Haven, MI 49417

616/846-9936

