

CHARTER TOWNSHIP OF GARFIELD
PLANNING COMMISSION MEETING

Wednesday, July 11, 2018 - 7:00 pm
Garfield Township Hall
3848 Veterans Drive
Traverse City, MI 49684
Ph: (231) 941-1620

A G E N D A

Call Meeting to Order

Roll Call of Commission Members

1. Review and Approval of the Agenda - Conflict of Interest
2. Minutes
 - a. June 13, 2018
 - b. June 27, 2013
3. Correspondence
4. Reports
 - a. Township Board
 - b. Planning Commissioners
 - c. Planning Department
5. Business to Come Before the Commission
 - a. PD 2018-73 - Conceptual Review Young Supply Co.
 - b. PD 2018-69 - Aspen Pines Multi-Family SUP - Intro
 - c. PD 2018-70 - Serra Automotive Noise Study - Intro
 - d. PD 2018-72 - LaFranier Service Drive
 - e. PD 2018-71 - U-Haul - Findings of Fact
6. Public Comment
7. Items for Next Agenda - July 25, 2018
 - a. R-1-Amendment Institutional Uses - Public Hearing
8. Adjournment

Joe Robertson, Secretary
Garfield Township Planning Commission
3848 Veterans Drive
Traverse City, MI 49684

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**CHARTER TOWNSHIP OF GARFIELD
PLANNING COMMISSION MEETING
June 13, 2018**

Call Meeting to Order: Chair Racine called the meeting to order at 7:00pm at the Garfield Township Hall, 3848 Veterans Drive, Traverse City, MI 49684.

Roll Call of Commission Members:

Present: Joe McManus, Steve Duell, Gil Uithol, Joe Robertson, Chris DeGood, Pat Cline, and John Racine

Staff Present: Rob Larrea, Erik Perdonik

1. **Review and Approval of the Agenda – Conflict of Interest (7:00)**
Cline moved and DeGood seconded to approve the agenda as presented.

*Yeas: Cline, DeGood, Duell, Uithol. McManus, Robertson, Racine
Nays: None*

2. **Minutes (7:01)**

a. **May 23, 2018 Regular Meeting Minutes**

Uithol moved and Duell seconded to approve the minutes of the May 23, 2018 Regular Meeting as presented.

*Yeas: Uithol, Duell, DeGood, Robertson, Cline, McManus, Racine
Nays: None*

3. **Correspondence (7:03)**
None

4. **Reports (7:03)**

Township Board Report

Duell reported that the Board approved traffic control signage for the township and approved the Master Plan for 63 day review. The board tabled the Boardman Lake Loop Trail maintenance agreement for more information and passed a resolution for SAD road improvements at Eaglehurst Drive.

Planning Commissioners

DeGood reported that the Parks Commission met at Silver Lake Park and Commissioners saw where vegetation was removed along Silver Lake Road and discussed a new buffer. Bids will be sought for crack sealing on the trails and on the tennis courts.

Planners Department

No report

5. **Business to Come Before the Commission**

a. **PD 2018-63 Conceptual Review Brickways – Multi-Family Proposed (7:08)**

The applicant requests a conceptual review of a multi-family residential project on the recently rezoned 3.52 acre parcel. Jeff Cockfield representing the Brickways organization proposes three buildings with six units each for a total of 18 units. The elevation was an issue in planning the project as was the road location and alignment so the buildings are set north of the road. Cockfield said that the stormwater plan is still being worked out but sewer and water is nearby and will be extended into the property. Commissioners discussed the project and asked about a one story building vs. a two story building. Concerns were shared with the placement of sewer and water but staff said that a Township Engineer and the DEQ would be required to review the lines. Amenities were also discussed. Commissioners had a positive response to the proposed project and Cockfield will work with staff on details of the project.

b. **PD 2018-58 U-Haul Findings of Fact (7:27)**

Comments were heard from representatives of the applicant. Commissioners discussed the proposed amendments and did not feel that they met the intent of the Ordinance. After discussion, Commissioners decided to have an attorney review the findings of fact in the matter.

DeGood moved and Duell seconded to refer the matter and the Findings of Fact back to staff to consult the township attorney for a legal review of the matter.

*Yeas: DeGood, Duell, Uithol, McManus, Robertson, Cline, Racine
Nays: None*

7. **Public Comment (8:21)**

Jeffrey Schostak and Bill Rank commented on the proposed U-Haul.

Pastor Carey Waldey commented that Living Hope Church is not allowed where it is right now according to current zoning. He asked for suggestions regarding his property and how to proceed since he cannot expand a non-conforming use. Commissioners directed staff to look at options for the next meeting.

8. **Items For Next Agenda – June 27, 2018 (8:54)**

To be determined.

Larrea said that the ordinance pertaining to service drives will be reviewed once again. Commissioners held a lengthy discussion regarding the placement of service drives and which roads should be included in the ordinance.

9. **Adjournment**

DeGood moved to adjourn the meeting at 8:02pm.

Joe Robertson, Secretary
Garfield Township Planning
Commission
3848 Veterans Drive
Traverse City, MI 49684

**CHARTER TOWNSHIP OF GARFIELD
PLANNING COMMISSION MEETING
June 27, 2018**

Call Meeting to Order: Vice Chair McManus called the meeting to order at 7:00pm at the Garfield Township Hall, 3848 Veterans Drive, Traverse City, MI 49684.

Roll Call of Commission Members:

Present: Joe McManus, Steve Duell, Gil Uithol, Joe Robertson, Chris DeGood, and Pat Cline

Absent and Excused: John Racine

Staff Present: Rob Larrea, Erik Perdonik

1. **Review and Approval of the Agenda – Conflict of Interest (7:00)**
Duell moved and Robertson seconded to approve the agenda as presented.

*Yeas: Duell, Robertson, Cline, DeGood, Uithol. McManus
Nays: None*

2. **Minutes (7:01)**
a. None

3. **Correspondence (7:01)**
None

4. **Reports (7:02)**
Township Board Report
Duell reported that the board adopted the Amended Board Appointment Policy and approved the Boardman Trail Maintenance Agreement. The board also passed a healthcare contribution resolution and a resolution accepting the grant for GIS mapping for the water and sewer infrastructure.

Planning Commissioners

McManus said that he spoke with a business owner in Blair Township and there is lots of activity in that township along the M-37 corridor. He suggests that staff continue to communicate with Blair Township as it pertains to growth in the area. Larrea added that the VA Clinic is looking at two parcels in Garfield Township and Blair Township and will choose one to locate a new clinic.

Planners Department

Larrea said that there is interest from several developers to create outlot buildings in the CP Shopping Center District as soon as it is adopted by the Planning Commission.

5. **Business to Come Before the Commission**

a. **PD 2018-65 Continued Discussion – Proposed Amendment to Zoning Ordinance Sec. 512 (7:11)**

Larrea said that the proposed amendment to service drives is not yet ready for public hearing since several questions were raised by staff after it was drafted. This proposed draft moves away from access drives and emphasizes access management instead. The intent of the original draft was to limit accesses on Hartman and Hammond Roads and US 31 and to allow flexibility for access separation. Staff asked if single family homes should be exempted from this access separation. By exempting a land division along county roads, certain property rights would be eliminated thus creating a problem. Commissioners discussed the issue and agreed to exempt single family lots created by a land division since those splits should be allowed to have a driveway access to their property. Staff would also encourage those splitting lots gain more splits by placing a private road access on the property. Larrea asked commissioners about accesses on other county roads and discussion took place on those roads. The Planning Commission agreed that other county roads could have a 300 foot separation between accesses. The 300 feet would be mandatory on Hammond and Hartman Roads and US 31, but would be subject to Planning Commission or staff approval on all other county roads. Staff will continue to work on this proposed amendment and bring it back for commissioner review.

b. **PD 2018-66 – Introduction – Proposed Amendment to Zoning Ordinance Sec. 313 (7:48)**

Larrea said that it was brought to the attention of the planning staff that institutional uses in the R-1 zoning district may have been inadvertently omitted with the adoption of the new zoning ordinance. Most churches in the recent past have located in the A- Agricultural District. This proposed amendment would allow institutional uses in the R-1 District by special use permit. The standard of compatibility would be enforced and may be the only limiting factor. Renovations to an existing church exterior would also need a special use permit.

Duell moved and Robertson seconded THAT the proposed amendment to the R-1 zoning district as attached to PD Report 2018-66 BE SCHEDULED for a Public Hearing to be held on July 25, 2018.

*Yeas: Duell, Robertson, Uithol, DeGood, Cline, McManus
Nays: None*

6. **Public Comment (7:57)**

Carey Waldie, Pastor of Living Hope Church, spoke regarding the proposed amendment to Section 313. He brought up issues with the setbacks and asked for a definition of "large scale church."

Mark Martin of East River Road commented on the Amendment to Zoning Ordinance Section 313. He asked that the setbacks be grandfathered for the church since they have been using a ten foot setback since 1972.


7. **Items For Next Agenda – July 11, 2018 (8:04)**

- a. Introduction – Serra Automotive (Boon Street) Preliminary Noise Study
- b. Introduction – Aspen Pines (Floresta St and Barlow St.) Multi-Family Special Use Permit

8. **Adjournment**

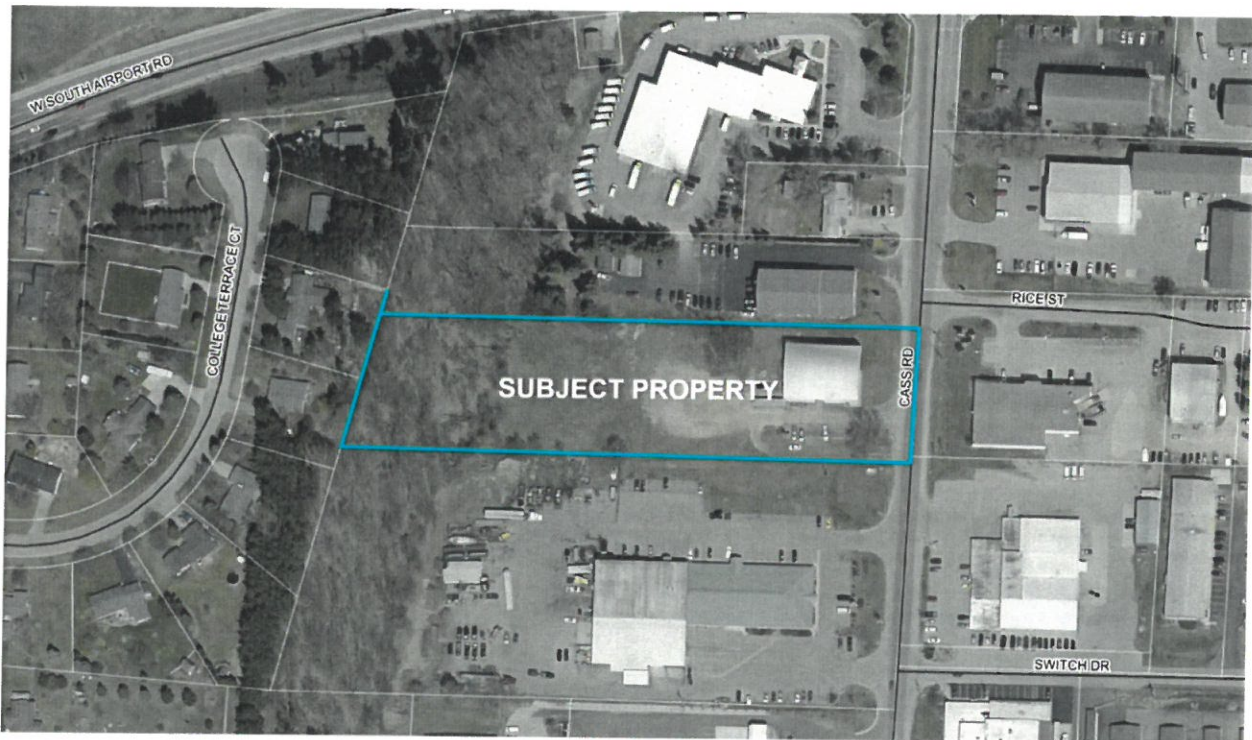
Uithol moved to adjourn the meeting at 8:10pm.

Joe Robertson, Secretary
Garfield Township Planning
Commission
3848 Veterans Drive
Traverse City, MI 49684

 Charter Township of Garfield Planning Department Report No. 2018-73			
Prepared:	July 02, 2018	Pages:	1 of 1
Meeting:	July 11, 2018 Planning Commission	Attachments:	<input checked="" type="checkbox"/>
Subject:	Conceptual Review-Young Supply Co. (Cass Rd) Proposed Warehouse		
Applicant:	Anthony Vallan-Young Supply Co.		

STAFF COMMENT:

This application is for a conceptual review of a new 20,617-square foot warehouse and showroom, with a truckwell, rear outdoor storage, and associated parking and site improvements on an approximately 3-acre property at 3153 Cass Road. The plan calls for demolishing the existing building.



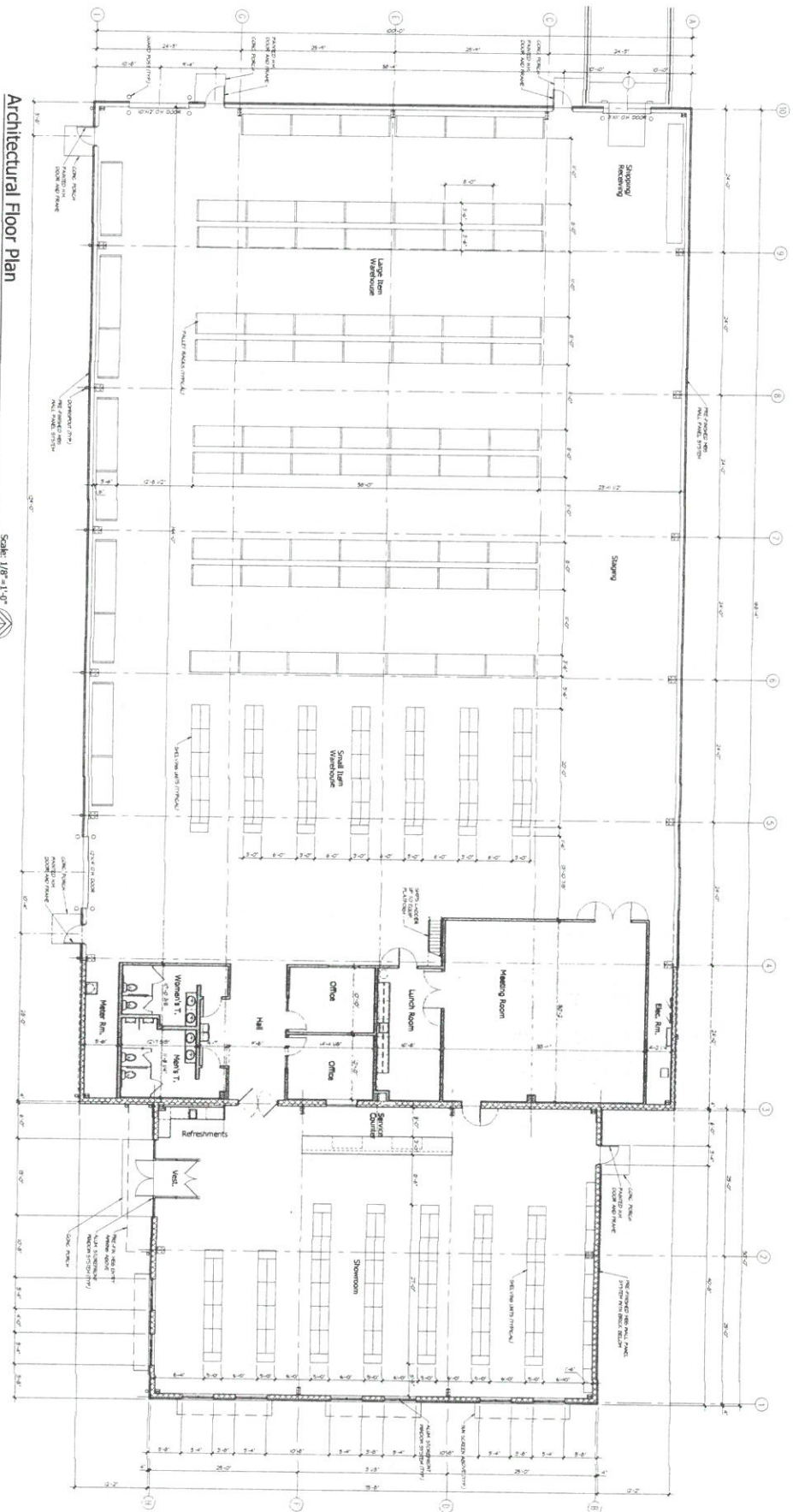
The subject property is zoned I-G General Mixed Use Industrial Business, which allows each of the proposed uses listed in the application by right. Because it appears that the uses proposed are permitted by right, it is unclear why a conceptual review is necessary in this case. The Planning Commission has no jurisdiction over by right site plan reviews. Hopefully, the applicant will shed additional light on what they are seeking approval for when they introduce the concept. Although Staff is assuming wholesale operations will take place at the site, perhaps it is the case that some retail component is being proposed that requires a Special Use Permit.

ACTION REQUESTED:

The conceptual review process is intended to provide an opportunity for dialogue between the Planning Commission and the applicant. No formal action is requested.

Attachments:

1. Conceptual Site Plan Provided by Applicant.



Architectural Floor Plan

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



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4280 Centred - Suite 204
 Centred, MD 21613
 (586) 266-9100
 FAX (586) 266-9130
 WWW.VIRBIDIA.COM

PREPARED FOR
 NEW FACILITY FOR
 Young Supply
 Co.

3153 Oak Road
 Centred Township, MI
 48815
 11144 E.P.
 Chad Kasper
 278219
 Thomas Charles Thomas



SHEET NUMBER
A2.1
 ARCHITECTURAL FLOOR PLAN
 PROJECT NUMBER
 17-116

 Charter Township of Garfield Planning Department Report No. 2018-69			
Prepared:	June 26, 2018	Pages:	Page 1 of 6
Meeting:	July 11, 2018 Planning Commission	Attachments:	<input checked="" type="checkbox"/>
Subject:	Aspen Pines Multi-Family Residential Special Use Permit-Introduction		
File No.	SUP-2018-04	Parcel No.	05-340-026-10
Applicant/Owner:	Sean McCardel Construction, Inc.		
Agent:	Petra Kuehnis, Mansfield Land Use Consultants		

BRIEF OVERVIEW:

- Floresta St (between Barlow St and Linden Ave; no street address assigned)
- 0.77 acres in area
- Vacant; partially wooded
- R-3 Multi-Family Residential District

PURPOSE OF APPLICATION:

This application requests approval of a Special Use Permit for a two-story, 8-unit multi-family structure; with 8 associated (*optional*) single-car, detached garages; and a 16-space paved parking lot. Multi-family dwellings are permitted via Special Use Permit in the R-3 Multi-Family Residential District. This application was conceptually reviewed by the Planning Commission at their February 14, 2018 Regular Meeting, and it appears that Commissioners generally viewed the conceptual proposal in a favorable light.

Zoomed-out aerial image of the subject property (property lines highlighted in blue):



Zoomed-in aerial image of the subject property (property lines highlighted in blue):



SITE DESIGN AND ZONING COMPLIANCE OVERVIEW:

Eight (8) one-bedroom, one-bathroom, 650-square-foot units are proposed; four (4) units per floor. The first-floor units each have a patio at the front of the structure, and the second-floor units each have a balcony directly above the first-floor patios. Eight (8) detached, single-car garages are offered but not included, which raises some potential issues with regard to permitted uses and parking that will be discussed later in this report.

During the conceptual review, the applicant stated that the units will be offered for rent at market rate and will be marketed to young professionals. The applicant also stated that each unit will include luxury flooring and countertops. It appears that all standard appliances are provided along with washers and dryers within each unit.

In the section that follows, issues that Staff considers to be of potential concern at this point are highlighted in red:

Amenities Generally:

Because the proposed detached garages are not included with the apartment units, they should not be regarded as an amenity. Furthermore, there do not appear to be any significant quality of life features proposed for the site. For context, recently approved multi-family developments in the Township have included features such as dog parks, playgrounds, pools, tennis courts, and walking trails.

Bicycle Parking:

As required by the Ordinance, two u-racks are proposed for bicycle parking.

Density:

With 8 units proposed on 0.77 buildable acres, the density of this project is approximately 10.38 units per acre, which is slightly above the maximum of 10 anticipated in High Density Residential areas in the proposed Master Plan, but below the maximum of 15 in the current Master Plan. Commissioners may want to discuss the appropriateness of proposed density in the context of neighborhood compatibility.

Design Generally:

As proposed, the backs of the garages will be facing Floresta Street. From a design and neighborhood compatibility standpoint, this appears to be a less than ideal layout; however, the proposed "Type C" landscape buffer along Floresta Street will provide screening to some extent. Commissioners may want to discuss this issue. A simple redesign of the project could resolve these issues.

Dumpster Enclosure:

The proposed dumpster enclosure encroaches into the west side-yard setback and should be relocated to a location outside of the setback area.

Considering that the distance between the north edge of the parking lot and parking spaces is 24 feet, a trash collection truck may have a difficult time accessing and exiting the dumpster area without driving a significant distance in reverse.

Ingress and Egress/Traffic:

A single 20-foot wide driveway entrance on Floresta Street is proposed and a driveway permit will be required from the Road Commission.

Although a Fire Department site plan review has been provided, it does not address the ingress and egress aspect of the project.

Landscaping:

The "Type C" buffers along the west and north property lines meet the quantity requirements and intent of the Ordinance. However, when it comes to the buffers along the east and south lines, there are several issues: First, because the adjacent land use at the east property line appears to be single-family residential, a "Type D" buffer is required under the Ordinance, but the applicant has instead proposed a "Type C" buffer.

Second, the crediting of the existing trees clustered at the southeast corner of the property leaves the south and east lines relatively bare in comparison to the west and north lines. The intent of the Ordinance is to create continuous buffers with the plantings dispersed across the buffer-yards. In addition, it appears that the proposal credits the existing cluster of trees for both the south and east yard requirements, but the trees are really located within the south buffer yard.

As a Special Use Permit, the Planning Commission does have the authority to require additional landscaping at any location if determined to be necessary to meet the intent of the Ordinance. An updated landscaping plan that complies with the Ordinance will be required prior to a public hearing being held.

Lighting:

The color temperature of all proposed fixtures is 3000K, which meets the requirements of the Ordinance.

Furthermore, the photometric plan indicates that none of the proposed fixtures will create illumination levels that exceed the standards of the Ordinance.

Open Space:

The Zoning Ordinance requires that 300 square feet of open space be provided per dwelling unit. Therefore, with eight (8) units proposed, a minimum 2,400 square feet of open space is required. The applicant is proposing 4,307 square feet of open space, which is comprised primarily of the grassy setback and side-yard areas at the east and west sides of the apartment structure.

The Ordinance defines open space as follows:

A typically vegetative area designed, depending upon the particular situation, for environmental, scenic, or recreational enjoyment, but not including supplemental setback areas, parking areas, drainage basins or areas within individual lots. Open space shall be consolidated and contiguous to the greatest extent reasonably possible so as to provide usable park-like areas.

In light of the definition above, it does not appear that the applicant's proposed open space (Sheet C1.1) meets the requirements or intent of the Ordinance. For example, the side-yard areas may not exactly be "usable park-like areas." Commissioners may want to discuss this issue. Staff is of the opinion that this standard could be met with a simple redesign as well.

Parking/Garages:

If only the 16-space parking lot is considered, then parking is provided at 2.0 spaces per unit, which is the maximum allowed under the Zoning Ordinance. However, if we count the additional eight (8) spaces within the proposed single-car garages, the proposal exceeds the maximum at 3.0 spaces per unit. Because the garages are proposed to be *optional*, it is not entirely clear whether those spaces should be counted towards the per-unit parking count; however, Staff is of the opinion that the parking count should be regarded as 3.0 spaces per unit. Commissioners should discuss this issue. Section 550 of the Ordinance requires that pervious pavement or pavers be used for the spaces that exceed the maximum.

Pedestrian Circulation:

A public sidewalk five (5) feet in width is proposed along the entire frontage of the property on Floresta Street. In addition, a private sidewalk five (5) feet in width is also proposed to connect the public sidewalk to a third proposed sidewalk (7 feet in width) along the southern edge of the parking lot.

Permitted Uses:

Because the proposed garages are not included with the rental of the apartment units, it may become the case that some tenants opt not to pay for use of a garage, thus leaving garages vacant. This may potentially lead to self-storage on the property, which is not a use permitted in the R-3 District. A note should be included on the site plan stating that the garages are only to be used by residents of the complex and cannot be rented by nonresidents for self-storage.

Sewer and Water:

As is required in R-3 District, the site will be served by municipal water and sewer. The leads for each run north and south directly down the center of the proposed access drive and parking area to an existing water main and 6-inch sanitary sewer.

Snow Storage:

Snow storage is provided at the east and west edges of the parking lot, which appears to be a logical place considering the proposed site layout.

Stormwater:

Parking lot stormwater runoff will be managed completely onsite via three (3) shallow retention basins located within the setback areas, with two (2) asphalt spillways at the east and west edges of the parking lot. Roof runoff from the apartment structure will be managed via a 3-foot deep french drain surrounding the perimeter. Similarly, roof runoff from the detached garages will be managed via a 2-foot deep french drain surrounding the perimeter of each.

ACTION REQUESTED:

The purpose of the introductory meeting is to accept the application and to identify any concerns that should be addressed prior to holding a public hearing on the application. As such, following an opportunity for applicant presentation and Commissioner discussion, the following motion is offered for consideration:

MOTION THAT application SUP-2018-04, submitted by Sean McCardel Construction Incorporated, for a Special Use Permit for a Multi-Family Development at Parcel ID: 05-340-026-10, BE ACCEPTED, and BE SCHEDULED for a public hearing to be held on the earliest Regular Meeting date that legal notice requirements allow, subject to the following additional information being provided by the applicant:



1. An updated site plan indicating that the dumpster area no longer encroaches into the setback area.
2. Additional detail regarding the maneuverability of emergency vehicles within the site.
3. An updated landscape plan indicating full compliance with the requirements of the Zoning Ordinance.
4. An updated site plan containing a note that makes clear that the detached garages shall not be used by nonresidents for self-storage purposes.

Any additional information that the Planning Commission determines to be necessary should be added to this motion.



Site Plan Overlay - Aspen Pines

Legend

-  Garfield Roads 2017
-  Garfield Parcels 2018

This map is based on digital databases prepared by Garfield Township. The Township does not warrant, expressly or impliedly, that the information on this map is current or positionally accurate. Always contact a surveyor to be sure of where your property lines are located.

Garfield Charter Township
 3848 Veterans Drive
 Traverse City, MI 49684
 Phone: 231.941.1620
 Fax: 231.941.1688
www.garfield-twp.com



NOT A LEGAL SURVEY

Garfield Township Planning Dept: 6/26/2018

Joseph and Kaylee Erlewein
830 Floresta St.
Traverse City, MI 49686

February 16, 2018

Garfield Township Board of Commissioners
3848 Veterans Drive
Traverse City, MI 49684

To Whom It May Concern:

We are writing this letter as the homeowners next to the proposed apartment complex on Floresta Street and Barlow in Garfield Township.

We have owned our home for 11 years. When we purchased our house, the property beside us was wooded and had not been for sale for decades. The property to our west was not zoned commercial and has since been joined with the property on Barlow and so zoned to be so. We were never informed of the zoning change and discovered this based on our own research.


As the need for more affordable housing arises, we understand the need to build more small homes, duplexes and apartment around. However, we hope that the township takes into consideration the fact that a single family with 4 children lives next door. This section of the neighborhood does not have apartment buildings, but single family homes, duplexes and trailers with families. As you move forward and approve plans for an apartments to be built next door to us, we hope that you take this under advisement and require that a solid fence of at least 6-8 feet high be built on the edge of the property to ensure the safety of our kids and their friends.

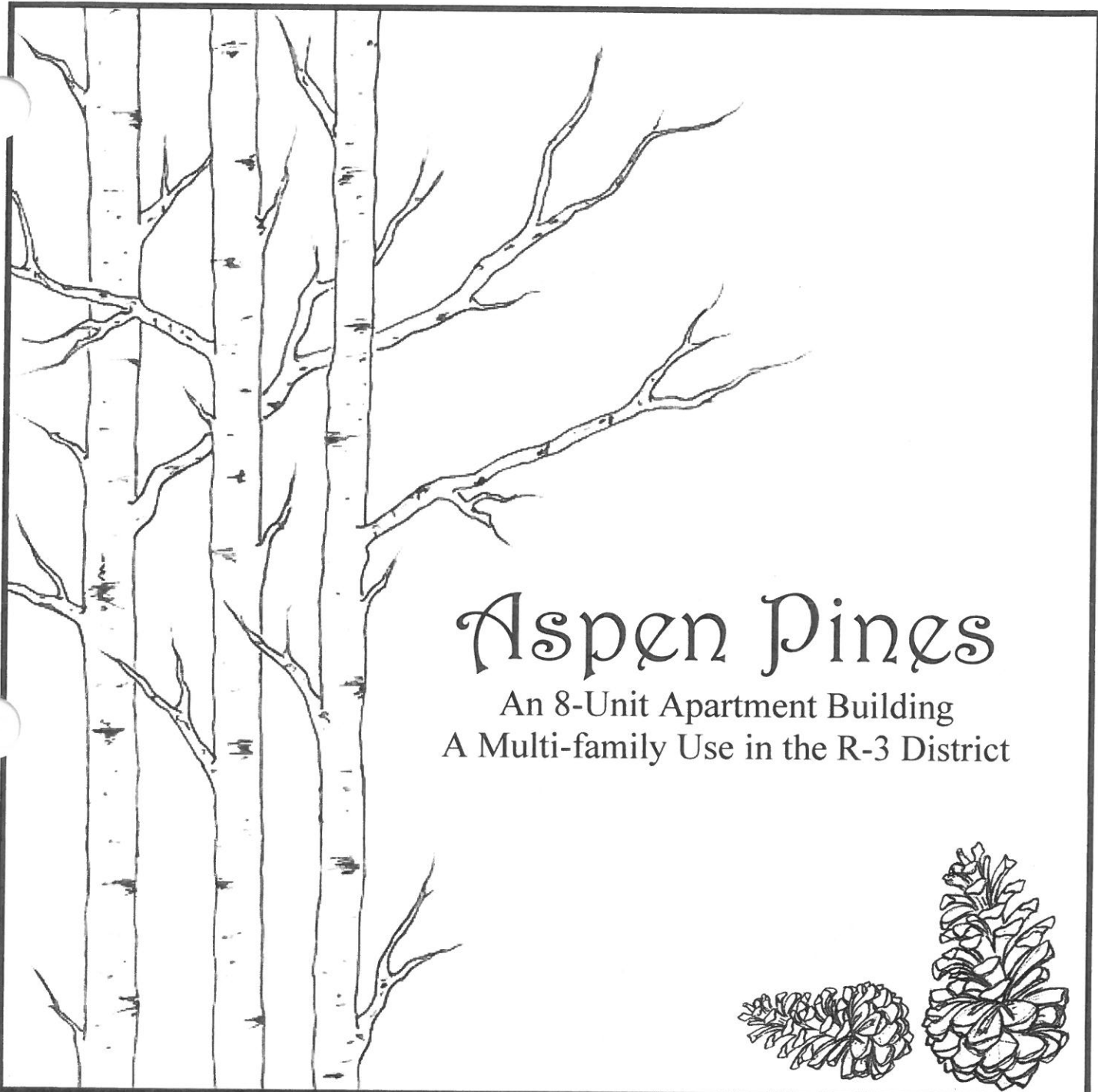
Thank you for your time and consideration of neighbors as plans move forward.

Sincerely,



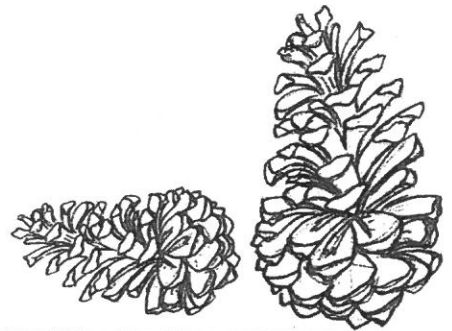
Kaylee Erlewein and Joe Erlewein





Aspen Pines

An 8-Unit Apartment Building
A Multi-family Use in the R-3 District



Submitted to
The Charter Township of Garfield
3848 Veterans Drive
Traverse City, MI 49684
231-941-1620

Mansfield
Land Use Consultants

830 Cottageview Drive
Traverse City, MI 49684
p: 231-946-9310
f: 231-946-8926
t: www.maaeps.com

5/8/2018, 6/8/2018, 7/2/2018

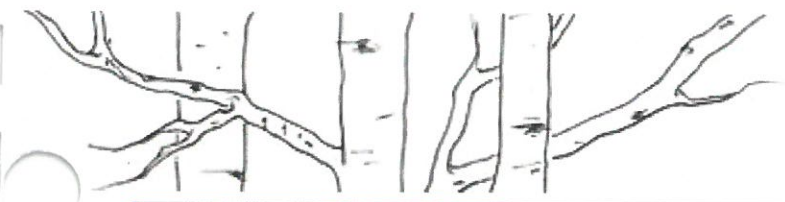
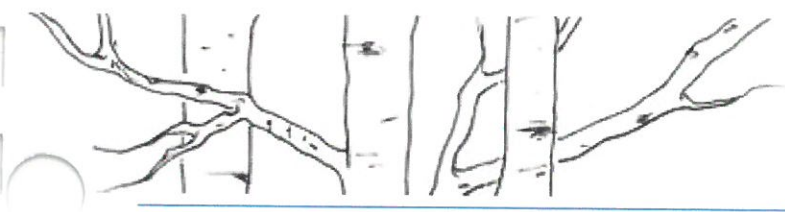


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Project Team

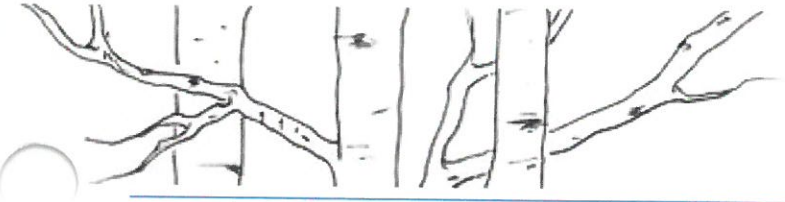
Applicant (property owner):

Sean McCardel Construction, Inc.
Sean McCardel
310 Water Watch Lane
Traverse City, MI 49686
Phone: (231) 631-7111
Email: sean.smccardel@gmail.com

Planning and Engineering Consultant:

Mansfield Land Use Consultants
Petra Kuehnis, Landscape Architect
830 Cottageview Drive, Suite 201
Traverse City, MI 49685
Phone: (231) 946-9310
Email: dougm@maaeps.com





Application for Special Use Permit





Charter Township of Garfield

Grand Traverse County

3848 VETERANS DRIVE
TRAVERSE CITY, MICHIGAN 49684
PH: (231) 941-1620 • FAX: (231) 941-1588

SPECIAL USE PERMIT APPLICATION

APPLICANT INFORMATION

Name: Sean McCardel Construction, Inc.
Address: 310 ~~310~~ Water Watch Lane
Traverse City, MI 49686
Phone Number: (231) 933-7111 Email: sean.smccardel@gmail.com

AGENT INFORMATION

Name: Mansfield Land Use Consultants - Petra Kuehnis
Address: 830 Cottageview Drive Suite 201
Traverse City, MI 49684
Phone Number: (231) 946-9310 x1003 Email: petrak@maaeps.com

OWNER INFORMATION

Name: SEAN MCCARDEL CONSTRUCTION, INC
Address: 310 WATER WATCH LANE
TRAVERSE CITY, MICH 49686
Phone Number: 231 631 7111 Email: SEAN.S.MCCARDEL@GMAIL.COM

Please select one person to be contact person for all correspondence and questions:

Applicant Agent Owner

PROPERTY INFORMATION

Address of Subject Property: Floresta Street
Property Identification Number: 28-05-340-026-10
Zoning District: R-3 Area of Property (Ac.): 0.77 acres
Existing Use(s): vacant
Proposed Use(s): Eight (8) unit multi-family housing with detached garages
Estimated Start Date: 10/15/18 Estimated Completion Date: 7/15/18

SITE PLAN CHECKLIST

Submit with this application along with two full-sized and one 11x17" copies of the proposed site plan for initial review. Use this section to check that your site plan includes all required elements. Minimum requirements include:

- Existing site conditions including structures, impervious surfaces, natural features, springs, lakes, ponds, other water courses, wetlands, floodplain elevations and other natural features
- Site Plan to scale, preferably 1" = 50'
- Topography (existing and proposed) at two (2) foot contour intervals
- Parcel dimensions
- Property Legal Description
- Required Setbacks
- Location and extent of all proposed uses and structures, including signage, fences, and berms
- Lot coverage percentage permitted and proposed
- Street right-of-way, type (public/private) widths, and names on and adjacent to site, existing and proposed
- Dumpster locations and enclosure details
- Non-Motorized Paths
- Utilities, above and below ground, existing and proposed
- Structures and uses, existing and proposed
- Snow storage areas
- Grading/drainage plan (sealed by a registered professional engineer) including direction arrows for surface water runoff, grading limits, existing and proposed storm drains, and retention basin capacity data table
- Location, size, and number of off street parking and loading spaces
- Landscape Plan which shall utilize the base information of the site plan and shall illustrate buffer areas, proposed planting locations, and required versus proposed material list.
- A photometric grid plan indicating foot-candle point values for all illuminated portions of the site and extending 10-feet beyond the property line. Do NOT include lighting "contour" lines. Include a table demonstrating average and maximum illumination levels. Indicate all fixture heights. Include complete fixture specification sheets for all exterior lighting including all catalog numbers and ordering options.
- Architectural plans including floor plan and building elevation
- Project phasing (if applicable) **N/A**

Section 5. Additional Information

If applicable, provide the following further information:

	<u>Yes</u>	<u>No</u>	<u>Not Applicable</u>
A. Sanitary Sewer Service			
1. Does project require extension of public sewer line?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, has a Utility Agreement been prepared?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Will a community wastewater system be installed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, has a Utility Agreement been prepared?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If yes, provide construction plans and specifications			
3. Will on-site disposal be used?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, is it depicted on plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B. Water Service			
1. Does project require extension of public water main?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, has a Utility Agreement been prepared?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Will a community water supply be installed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, has a Utility Agreement been prepared?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If yes, provide construction plans and specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
C. Public utility easements required?			
If yes, show on plan.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D. Storm Water Review / Soil Erosion			
1. Soil Erosion Plans approved by Soil Erosion Office? <i>pending</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If so, attach approval letter.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If no, are alternate measures shown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Storm Water Plans approved by Township Engineer? <i>pending</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If so, attach approval letter.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If no, are alternate measures shown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Note: Alternate measures must be designed and sealed by a registered Engineer.			
E. Roads and Circulation			
1. Are interior public streets proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If yes, Road Commission approval letter attached?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Will public streets connect to adjoining properties or future streets?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Are private roads or <u>interior drives</u> proposed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Will private drives <u>connect to adjoining</u> properties service roads?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Has the <u>Road Commission</u> or MDOT approved curb cuts? <i>pending</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, attach approved permit.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Emergency Services			
1. GT Metro Fire Department approval letter attached? <i>pending</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. GT County Sheriff approval letter attached? <i>pending</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IMPACT ASSESSMENT

Written statements, on separate sheet of paper, to include the following information:

- A written illustrative description of the environmental characteristics of the site prior to development, i.e., topography, soils, vegetative cover, drainage, streams, creeks or ponds.
- Types of uses and other man-made facilities.
- The number of people to be housed, employed, visitors or patrons and vehicular and pedestrian traffic.
- Phasing of the project including ultimate development proposals. *one phase*
- Natural features which will be retained, removed and/or modified including vegetation, drainage, hillsides, streams, wetlands, woodlands, wildlife and water. The description of the areas to be changed shall include their effect on the site and adjacent properties. An aerial photo may be used to delineate the areas of change.
- The method to be used to serve the development with water and sanitary sewer facilities.
- The method to be used to control drainage on the site and from the site. This shall include runoff control during periods of construction.
- If the public sewers are not available to the site, the Applicant shall submit a current approval from the Health Department or other responsible public agency indicating approval of plans for sewage treatment. *N/A*
- The method to be used to control any increase in effluent discharge to the air or any increase in noise level emanating from the site. Consideration of any nuisance that would be created within the site or external to the site whether by reason of dust, noise, fumes, vibration, smoke or lights. *N/A*
- An indication of how the proposed use conforms with existing and potential development patterns and any adverse effects.
- Name(s) and address(es) of person(s) responsible for preparation of statement.
- Description of measures to control soil erosion and sedimentation during grading and construction operations and until a permanent ground cover is established. Recommendations for such measures may be obtained from the County Soil Conservation Service.
- Type, direction, and intensity of outside lighting.
- General description of deed restrictions (including easements), if any. *N/A*

BASIS FOR DETERMINATION

Indicate, on a separate sheet of paper, how your proposed special use will comply/meet/facilitate each of the following general and specific Basis for Determination from Section 8.1.3 of the Zoning Ordinance. The Planning Commission must determine that each of these standards are satisfied in order to grant approval.

Section 8.1.3

1. GENERAL STANDARDS

- a) Be designed, constructed, operated and maintained so as to be harmonious, compatible, and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the area in which it is proposed.
- b) Not be hazardous or disturbing to existing or future uses in the same general vicinity and will be a substantial improvement to property in the immediate vicinity and to the community as a whole.
- c) Be served adequately by essential facilities and services, such as highways, streets, police, fire protection, drainage structures, refuse disposal, water and sewage facilities, or schools.
- d) Not create excessive additional requirements at public cost for public facilities and services.
- e) Not involve uses, activities, processes, materials, and equipment or conditions of operation that will be detrimental to any persons, property, or the general welfare by fumes, glare or odors.

2. SPECIFIC STANDARDS

- a) That the applicant may legally apply for site plan review.
- b) That all required information has been provided.
- c) That the proposed development conforms to all regulations of the zoning district in which it is located.
- d) That the plan meets the requirements of Garfield Township for fire and police protection, water supply, sewage disposal or treatment, storm drainage and other public facilities and services.
- e) That the plan meets the standards of other governmental agencies where applicable, and that the approval of these agencies has been obtained or is assured.
- f) That natural resources will be preserved to a maximum feasible extent, and that areas to be left undisturbed during construction shall be so indicated on the site plan and at the site per se.
- g) That the proposed development property respects floodways and flood plains on or in the vicinity of the subject property and open space areas as designated on the future land use map of Garfield Township.
- h) That the soil conditions are suitable for excavation and site preparation, and that organic, wet or other soils which are not suitable for development will either be undisturbed or modified in an acceptable manner.
- i) That the proposed development will not cause soil erosion or sedimentation problems.
- j) That the drainage plan for the proposed development is adequate to handle anticipated storm water runoff, and will not cause undue runoff onto neighboring property or overloading of water courses in the area.
- k) That grading or filling will not destroy the character of the property or the surrounding area, and will not adversely affect the adjacent or neighboring properties.

SPECIFIC STANDARDS (CONTINUED)

- l) That phases of development are in a logical sequence, so that any one phase will not depend upon a
- m) subsequent phase for adequate access, public utility services, drainage or erosion control.
- n) That the plan provides for the proper expansion of existing facilities such as public streets, drainage systems and water sewage facilities.
- o) That landscaping fences or walls may be required by the Planning Commission in pursuance of the objectives of this Ordinance.
- p) That parking layout will not adversely affect the flow of traffic within the site, or to and from the adjacent streets.
- q) That vehicular and pedestrian traffic within the site, and in relation to streets and sidewalks serving the site, shall be safe and convenient.
- r) That outdoor storage of garbage and refuse is contained, screened from view and located so as not to be a nuisance to the subject property or neighboring properties.
- s) That the proposed site is in accord with the spirit and purpose of this Ordinance and not inconsistent with, or contrary to, the objectives sought to be accomplished by this Ordinance and the principles of sound planning.

COMPLETED APPLICATION INCLUDES:

- Application
- Site Plan
- Impact Assessment
- Basis for Determination
- Fee \$ _____
- Escrow Amount \$ _____
- Electronic Copies

Application and written documents

- Word
- PDF

Development and Site Plans

- DWG

REVIEW PROCESS

Upon submission of such a request, Township staff will review the materials submitted and will, within five (5) working days, forward a determination of sufficiency to the Applicant. In the event the materials are not adequate, they will be returned to the Applicant for further work. Once the materials are revised, staff will again review for adequacy and will forward a determination to the Applicant within five (5) working days. This procedure will be repeated until an adequate application is received.

Once an application is deemed to be complete and submitted according to application schedule, the Applicant shall submit twelve (12) 24"x36" plan sets, two (2) 11"x17" plan sets, and all other application materials to proceed with Planning Commission review. The Planning Commission will confirm that the application is complete and schedule a public hearing as necessary.

Upon holding a public hearing, the Planning Commission may approve, approve with conditions, or deny the proposed special use. The Planning Commission may impose such additional conditions and safeguards deemed necessary for the general welfare for the protection of individual property rights, and for insuring that the intent and objectives of this Ordinance will be observed. The breach of any condition, safeguard or requirement shall automatically invalidate the permit granted.

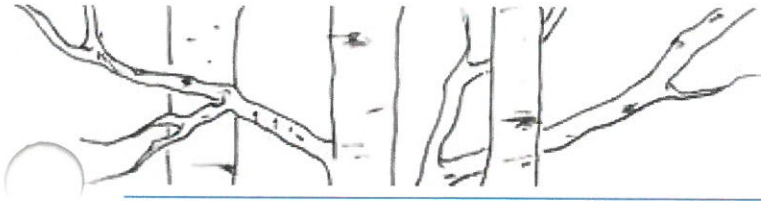
AFFIDAVIT:

The undersigned affirms that he/she or they is (are) the owner, or authorized agent of the owner, involved in the application and all of the information submitted in this application, including any supplemental information, is in all respects true and correct. The undersigned further acknowledges that willful misrepresentation of information will terminate this permit application and any permit associated with this document.

Owner Signature: Sean McCord Date: 5/10/18

Applicant Signature: _____ Date: _____

Agent Signature: Petra Kuehnis Date: 5.8.2018
Petra Kuehnis, Mansfield Land Use Consultants



Letter of Agency



May 8, 2018

**Re: Aspen Pines
Letter of Agency**

To whom it may concern,

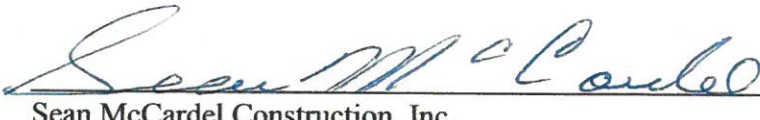
The purpose of this letter is to acknowledge that Mansfield Land Use Consultants is authorized to work as my agent with regards to planning and engineering services relating to regulatory agency reviews and permitting for the proposed *Aspen Pines* Residential Apartment Project located on Floresta Street in Garfield Township, Michigan.

Mansfield Land Use Consultants contact information is as follows:

Doug Mansfield, President
830 Cottageview Drive, Suite 201
Traverse City, MI 49684
dougm@maaeps.com
(231) 218-5560

This authorization is valid for a period of one (1) year from the date of signature.

Sincerely,

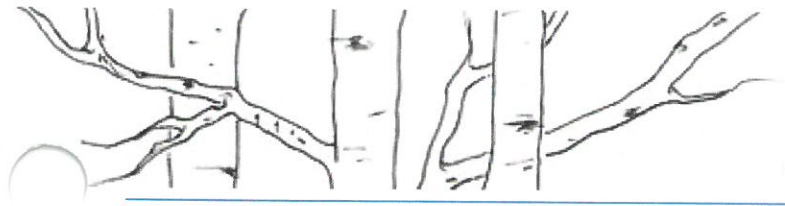
 

Sean McCardel Construction, Inc.

Date

Sean McCardel

310 ~~228~~ Water Watch Lane
Traverse City, MI 49686
Phone: 231-631-7111
Email: www.smccardel.com



Impact Assessment

The applicant is proposing to construct an 8-unit apartment building with detached garages and 16 surface parking spaces. The apartment units are one-bedroom, one-bathroom stacked flats with private individual entrances. The new residences would be accessed by a new driveway along Floresta Street.

The 0.77-acre project site is located on Floresta Street, just east of Barlow Street. The area is an established neighborhood of gridded streets and public utilities with a mix of residential, commercial and industrial uses including single-family, multi-family and mobile homes, offices, retail and manufacturing.

Surrounding land uses include existing single-family residential homes to the north and east, and vacant land zoned for commercial uses to the south and west.

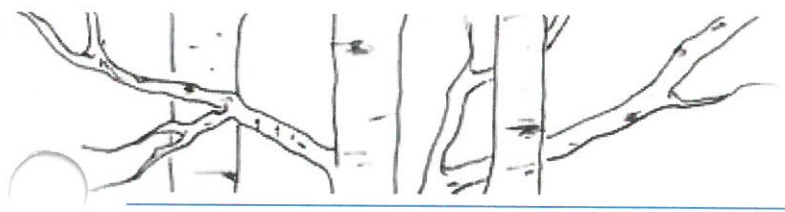
The project site is a vacant parcel. The ground is flat with excellent draining Rubicon sandy soils. The site is partially wooded, and trees of good quality will be preserved during construction where feasible.

The project will be served by municipal sewer and water. Stormwater will be managed on site per the standards of the ordinance.

The proposed multifamily residential use is the primary intended use within the R-3 zoning district within which the project is located -providing for medium to high density residential uses.

This project was presented as a Sketch Plan Review at the February 14th, 2018 Planning Commission meeting, at which it was well received, with Commissioners commenting that it is a needed use in the area.





Regulations Summary

Project Address:

Floresta Street
Traverse City, MI 49684

Project Parcel:

Part of Tax ID 28-05-340-026-10

Project Size:

0.77 acres

Lots 26, 27, and 28, except the East 40 feet of Lot 28, 1st Addition to Wedgewood, according to the recorded plat thereof as recorded in Uber 6 of Plats, page 26.

Existing Zoning:

R-3 Multiple Family Residential

Existing Land Use:

vacant land

Proposed Land Use:

An 8-Unit Multifamily Residential Building and Accessory Structures

Underlying R-3 (MULTIPLE FAMILY RESIDENTIAL)

The R-3 (Multiple Family Residential) districts provide areas for medium to high density one and two family residential dwelling units mixed with a variety of multiple family residential dwelling types, including apartments and group housing, where adequate public facilities and services exist with capacity to serve such development. The districts are composed mainly of areas containing an existing mix of these dwelling types as well as areas within which such development appears likely and desirable. They are intended to encourage more intensive development in and near the core areas of the township. The R-3 districts are designed to encourage a suitable neighborhood environment for family life by including among the permitted uses such facilities as schools, places of worship and parks that will promote a sense of community, urban vitality and the efficient provision of infrastructure. R-3 district regulations are designed to allow for market and design flexibility while preserving the neighborhood character and permitting applicants to cluster development in order to preserve environmentally sensitive and natural land areas.

Use Permitted by Special Use Permit:

Multiple Family Dwellings

Township Comprehensive Master Plan, Future Land Use:

Community Commercial

Areas outside of planned commercial centers occupied by or suitable for the development of commercial activities intended to serve the area-wide community.

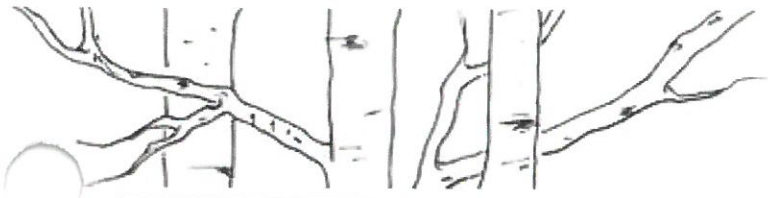




Regulations Summary *continued*

	R-3 zoning	proposed	
Minimum Lot Size:	32,000sf <i>(4,000sf per each dwelling unit)</i>	33,541.20sf	
Minimum Lot Width:	130ft <i>(70ft per dwelling unit for the first 2 units, 10ft per each additional for the next 6 units)</i>	200ft	
Height:	3 stories / 40ft	2 stories /	
Front Yard Setback:	25ft	25ft	
Side Yard Setback:	20ft	20ft	
Rear Yard Setback:	20ft	20ft	
Maximum Lot Coverage:	35%	18%	
Min. Building X-Section:	24ft	26ft	
Parking	minimum	maximum	provided
Multiple Family	12 spaces	16 spaces	16 surface parking spaces

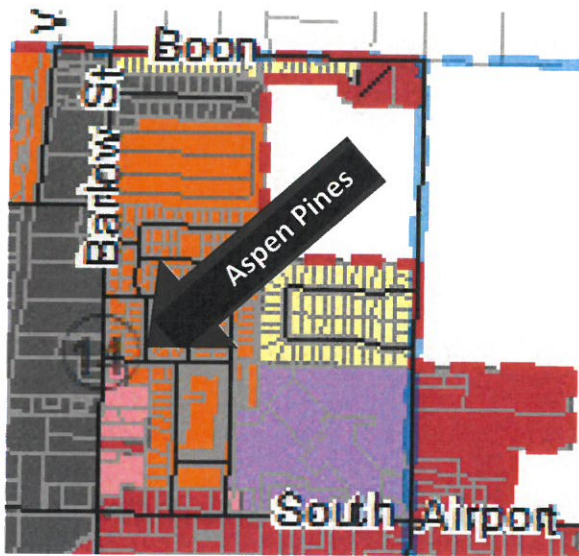




MAP -Garfield Township Zoning Map

Charter Township of Garfield
Grand Traverse County, Michigan

Zoning Map



Legend

- Inner - Outer Airport Overlay Boundary
- Parcel Line
- Section Line
- A-1 Agricultural
- R-R Rural Residential
- R-1 One-Family Res
- R-2 Two-Family Res
- R-3 Multi-Family Res
- R-M Mobile Home Res
- C-O Office Commercial
- C-L Local Commercial
- C-G General Commercial
- C-H Highway Commercial
- C-P Planning Shopping
- I-G General Industrial
- I-L Limited Industrial
- P-R Park-Recreation
- GTC - Grand Traverse Commons
- Conditionally Zoned
- Township Line

MAP -Garfield Township Master Plan



**Map A - Comprehensive Plan
Future Land Use map
Planning Commission Approved 1/10/07**

**Garfield Charter Township
Planning Department**

3848 Veterans Dr
Traverse City, MI 49684
Phone 231-941-1620
Fax 231-941-1588
Plot Date: January 25, 2007

MAP LEGEND

- Community Commercial

Community Commercial

Areas outside of planned commercial centers occupied by or suitable for the development of commercial activities intended to serve the area-wide community.



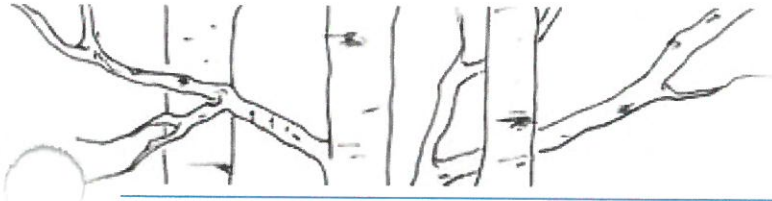


Aspen Pines

8-Unit Apartment Building
Special Use Permit Application

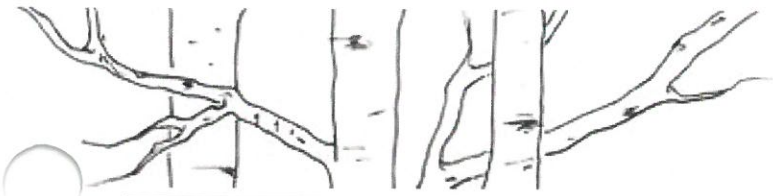
MAP - Street Map vicinity





MAP -Air Photo vicinity

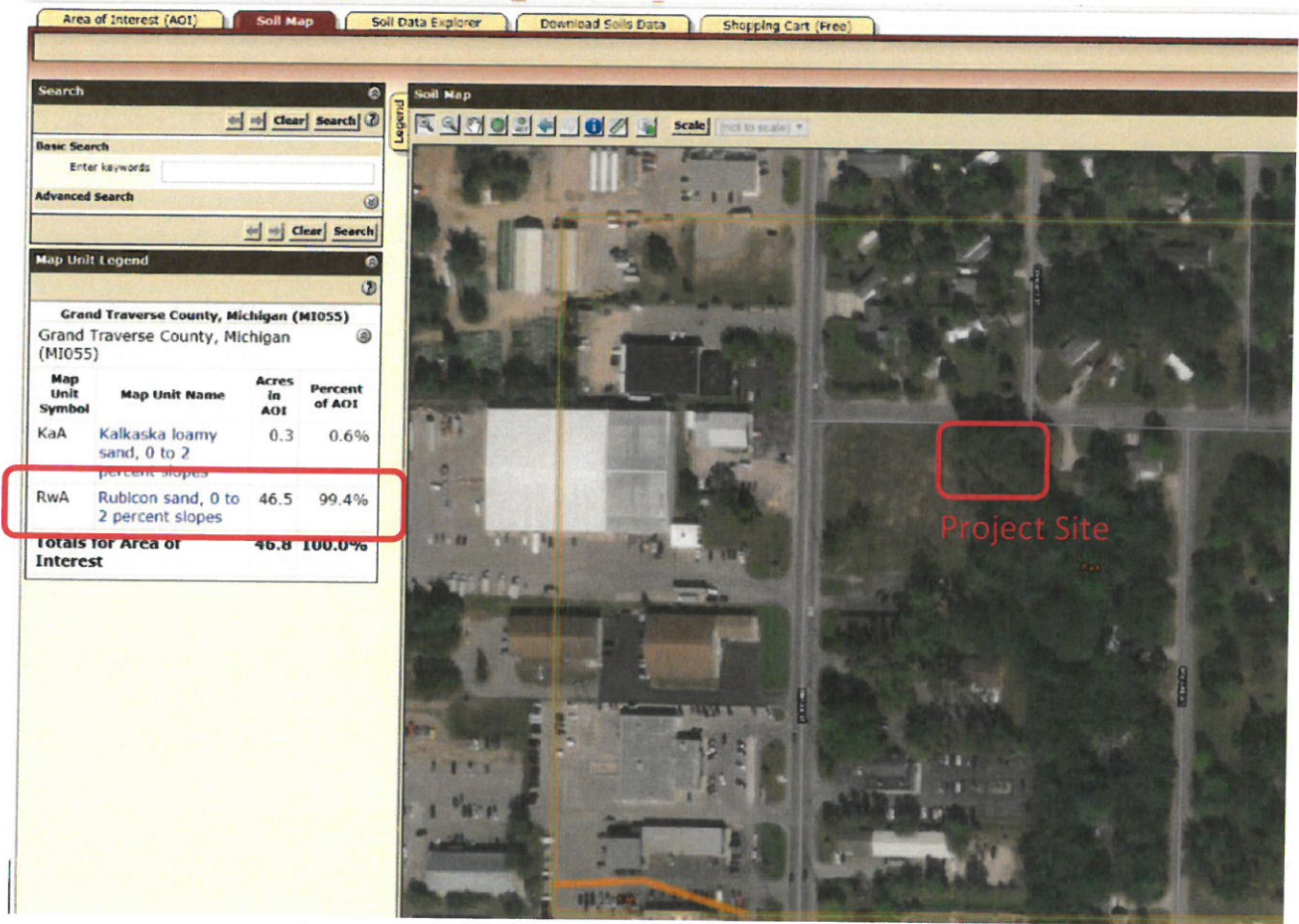


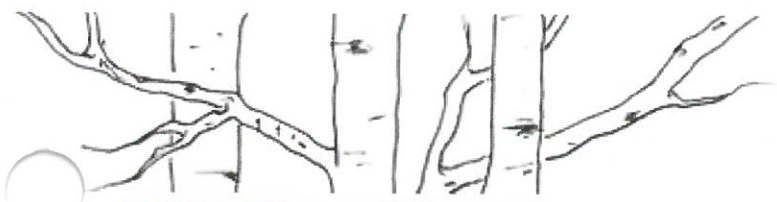


AIR PHOTO –Existing Conditions



MAP -Soils





BASIS FOR DETERMINATION

Section 8.1.3

1. GENERAL STANDARDS

- a) Be designed, constructed, operated and maintained so as to be harmonious, compatible, and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the area in which it is proposed.

The proposed multifamily residential use is the primary intended use within the R-3 zoning district within which the project is located -providing for medium to high density residential uses.

- b) Not be hazardous or disturbing to existing or future uses in the same general vicinity and will be a substantial improvement to property in the immediate vicinity and to the community as a whole.

The project parcel is bordered by the same R-3 Residential zoning district to the north and east, and is bordered by C-L, Local Commercial zoning to the south and west.

The proposed residential use is consistent with the existing residential uses, as well as future multifamily and commercial uses as allowed per the surrounding zoning.

- c) Be served adequately by essential facilities and services, such as highways, streets, police, fire protection, drainage structures, refuse disposal, water and sewage facilities, or schools.

The project is served by an existing County Road (Floresta Street), Rubicon sandy soils provide for excellent stormwater drainage and constructability, the site meets standards for accessibility of emergency vehicles to maneuver, and the site is serviced by municipal sewer and water with a fire hydrant located on the property..

- d) Not create excessive additional requirements at public cost for public facilities and services.

The proposed eight residential units proposed as part of this project is within the allowable density per zoning and will not require additional municipal services beyond the infrastructure currently in place.

- e) Not involve uses, activities, processes, materials, and equipment or conditions of operation that will be detrimental to any persons, property, or the general welfare by fumes, glare or odors.

The proposed residential use is consistent with zoning and the existing residential uses.



2. SPECIFIC STANDARDS

- a) That the applicant may legally apply for site plan review.

The applicant has an option to buy the project parcel

- b) That all required information has been provided.

This application is complete with the pending some preliminary reviews by regulatory agencies.

- c) That the proposed development conforms to all regulations of the zoning district in which it is located.

The proposed multifamily residential use is the primary intended use within the R-3 Zoning District and conforms to the standards of the ordinance.

- d) That the plan meets the requirements of Garfield Township for fire and police protection, water supply, sewage disposal or treatment, storm drainage and other public facilities and services.

The plan was developed to meet the published standards for municipal services. See attached reviews by municipal services agencies.

- e) That the plan meets the standards of other governmental agencies where applicable, and that the approval of these agencies has been obtained or is assured.

The plan was developed to meet the published standards for regulatory agencies. See attached reviews by regulatory agencies.

- f) That natural resources will be preserved to a maximum feasible extent, and that areas to be left undisturbed during construction shall be so indicated on the site plan and at the site per se.

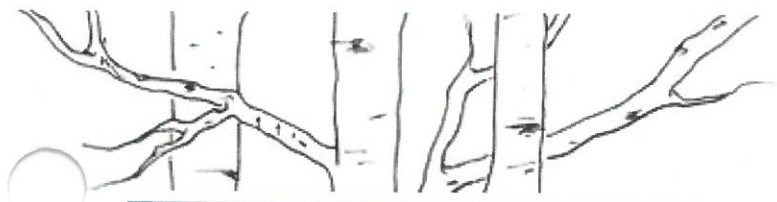
The project site is flat with excellent draining soils, and is partially wooded. Existing trees of good quality will be preserved as feasible.

- g) That the proposed development property respects floodways and flood plains on or in the vicinity of the subject property and open space areas as designated on the future land use map of Garfield Township.

There are no flood planes or floodways on or near the project parcel

- h) That the soil conditions are suitable for excavation and site preparation, and that organic, wet or other soils which are not suitable for development will either be undisturbed or modified in an acceptable manner.





The site consists entirely of Rubicon sands which provides for excellent drainage, excavation and site preparation.

- i) That the proposed development will not cause soil erosion or sedimentation problems.

The project site does not contain slopes or soils prone to erosion. Soil erosion permitting and associated prevention measures per published standards will be implemented at construction.

- j) That the drainage plan for the proposed development is adequate to handle anticipated storm water runoff, and will not cause undue runoff onto neighboring property or overloading of water courses in the area.

The site consists entirely of Rubicon sands which provides for excellent drainage. Drainage plans are designed and permitted per the Counties published standards and will not impact neighboring properties.

- k) That grading or filling will not destroy the character of the property or the surrounding area, and will not adversely affect the adjacent or neighboring properties.

The project site is flat, as is the surrounding area. The proposed site plan maintains grades similar to those existing on site.

- l) That phases of development are in a logical sequence, so that any one phase will not depend upon a subsequent phase for adequate access, public utility services, drainage or erosion control.

This project will be completed in one phase.

- n) That the plan provides for the proper expansion of existing facilities such as public streets, drainage systems and water sewage facilities.

The project is located in an established neighborhood with all utilities existing along the street frontage. Site soils are Rubicon sand which provides for excellent drainage.

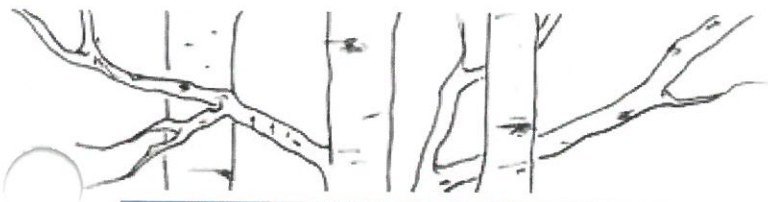
- o) That landscaping fences or walls may be required by the Planning Commission in pursuance of the objectives of this Ordinance.

A landscape fence has been provided along the eastern property boundary to buffer off street parking from the existing residential use. Landscape plantings meet the standards of the Type "C" buffer requirements.

- p) That parking layout will not adversely affect the flow of traffic within the site, or to and from the adjacent streets.

The parking lot layout has been designed per the published dimensional standards of regulatory agencies to accommodate internal flow and site access.





Aspen Pines
8-Unit Apartment Building
Special Use Permit Application

- q) That vehicular and pedestrian traffic within the site, and in relation to streets and sidewalks serving the site, shall be safe and convenient.

Sidewalks are provided along the frontage of the project with connections to the structures within the site.

- r) That outdoor storage of garbage and refuse is contained, screened from view and located so as not to be a nuisance to the subject property or neighboring properties.

The site plan provides for a screened dumpster enclosure adjacent the commercially zoned property to the west.

- s) That the proposed site is in accord with the spirit and purpose of this Ordinance and not inconsistent with, or contrary to, the objectives sought to be accomplished by this Ordinance and the principles of sound planning.

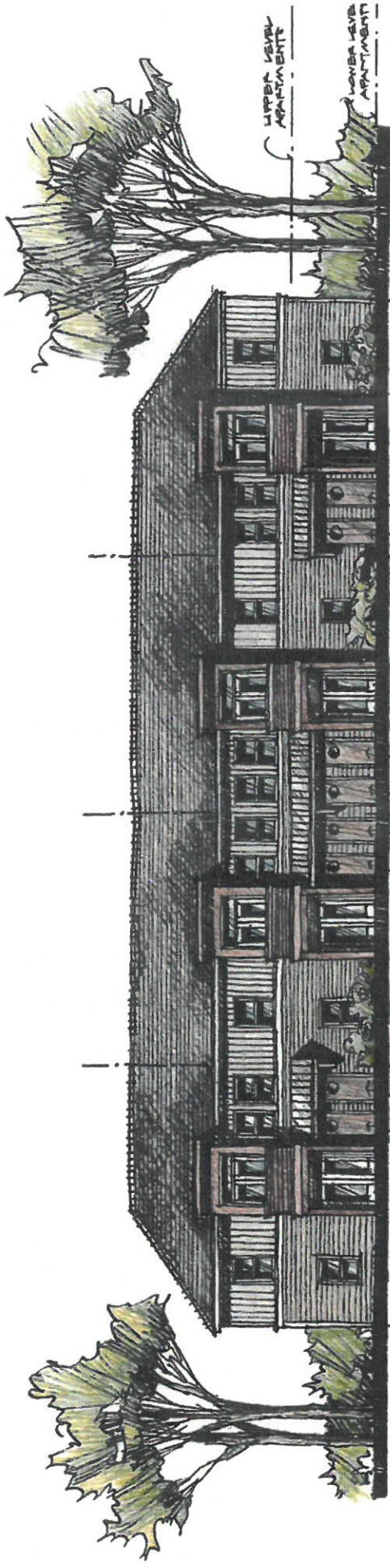
The proposed 8-unit apartment building meets the standards of the Township Ordinance in both land use type and density.





Architectural Plan





1/2 BATH W/L BATHRY
2 UNITS

1/2 BATH W/L BATHRY
2 UNITS

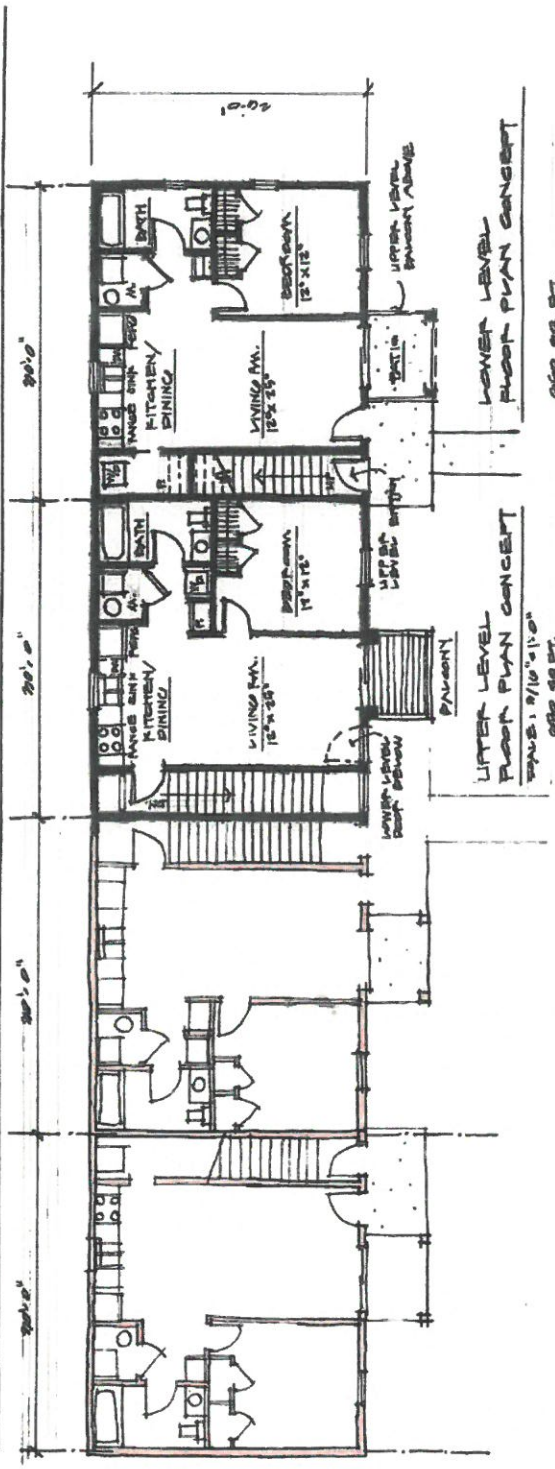
1/2 BATH W/L BATHRY
2 UNITS

1/2 BATH W/L BATHRY
2 UNITS

UPPER LEVEL APARTMENT

LOWER LEVEL APARTMENT

EXTERIOR ELEVATION CONCEPT



UPPER LEVEL CONCEPT FLOOR PLAN

LOWER LEVEL CONCEPT FLOOR PLAN

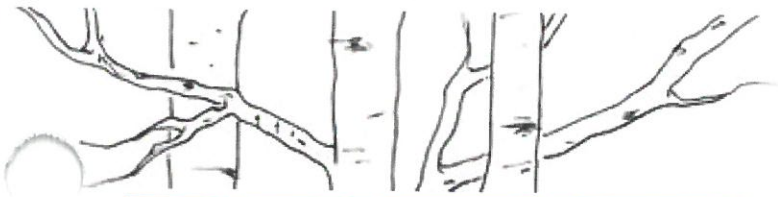
850 sq. FT.

850 sq. FT.

TWO STORY FLOOR PLAN CONCEPT - 8 APARTMENT UNITS (+ 1st FLOOR)

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

TWO 4/17/10



Aspen Pines
8-Unit Apartment Building
Special Use Permit Application

Site Plan



DESCRIPTION	EXISTING	PROPOSED
GROUND CONTOUR	695	613
SPOT ELEVATION	613.2	613.0
CONTOUR FROM 6605 TOPOGRAPHIC MAP	613.0	613.0
PAYMENT (OR OUTLET LOW LINE ELEVATION)	613.0	613.0
DIRECTION OF SURFACE FLOW		IP
DRAINAGE IMPONABLE		IP
DRAINAGE LOW POINT		IP
WATER MAIN		IP
SEWER MAIN		IP
SEWER SERVICE		IP
STONE/SLIP		IP
GAS MAIN		IP
OVERHEAD ELECTRIC		IP
PROPERTY LINE		IP
TREE LINE		IP
PRE-DRY		IP
EDGE OF WETLAND		IP
EDGE OF WATER		IP
C/A OR DRAINAGE DEPTH OR WATER LINE		IP
SET BACK		IP
ORIENTATION MARK (EM)		IP
MANHOLE (MH)		IP
CATCH BASIN (CB)		IP
CLEAN OUT (CO)		IP
SEWER		IP
GATE VALVE		IP
FIRE HYDRANT ASSEMBLY		IP
CURB STOP & BOX		IP
POLL POWER OR ELECTRIC		IP
LIGHT POLE		IP
SIGN		IP
BENCH MARK (BM)		IP
UTILITY SIGN		IP
CITY ANCHOR		IP
SOIL EROSION CONTROL MEASURE (MICHIGAN UNIFIED EROSION CONTROL PERFORMANCE STANDARD)		IP
WORK LOGGING / IRON SET		IP
CONCRETE MOVEMENT		IP
GOVERNMENT CORNER		IP
NAIL FOUND / NAIL SET		IP
RECORD / MEASURED	(R)	(M)
FINISH		IP
WOOD SHED		IP

PUBLIC AGENCIES AND UTILITIES:
GRAND TRAVERSE COUNTY DEPARTMENT OF PUBLIC WORKS (DPW)
 Address: 2650 Laframboise Rd., Traverse City, MI 49686
 Telephone: 231-995-5039
 Manager: Jim Cook
 Address: 2650 Laframboise Rd., Traverse City, MI 49686
 Telephone: 231-995-5048

GRAND TRAVERSE COUNTY ROAD COMMISSION
 Address: 2650 Laframboise Rd., Traverse City, MI 49686
 Telephone: 231-995-5048

GRAND TRAVERSE COUNTY SOIL EROSION AND SEDIMENTATION CONTROL
 Address: 2650 Laframboise Rd., Traverse City, MI 49686
 Telephone: 231-995-5042

GARFIELD TOWNSHIP PLANNING DEPARTMENT
 Planning Director: Ross Lamore, ACP
 Address: 3846 Veterans Dr., Traverse City, MI 49684
 Telephone: 231-941-1200

MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT)
 Engineer: Gary Niemi, P.E.
 Address: 2084 US-31 S., Traverse City, MI 49684
 Telephone: 231-941-1888

TRAVERSE CITY LIGHT & POWER (TCLAP)
 Operations Mgr: Blake Wilson
 Address: 142 E. State St., Traverse City, MI 49686
 Telephone: 231-932-4544

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

AIS (TELEPHONE)
 Area Engineer: Kathy Dahm-Besser
 Address: 142 E. State St., Traverse City, MI 49686
 Telephone: 231-941-2707

CHARTER COMMUNICATIONS (CABLE)
 Manager: Mike Grogan
 Address: 201 S. Mission Rd., Traverse City, MI 49686
 Telephone: 231-941-3266

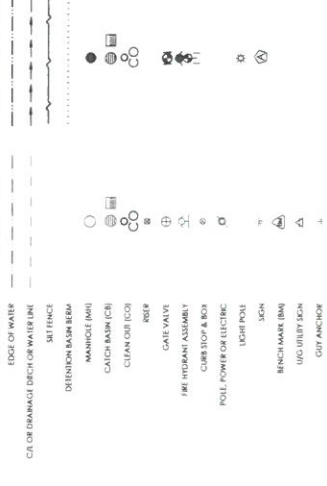
POLICE AGENCIES:
 EMERGENCIES: 911
 Michigan State Police: 231-946-4646
 Grand Traverse County Sheriff: 231-995-3001

FIRE DEPARTMENTS:
 EMERGENCIES: 911
 Grand Traverse Melita: 231-947-3000
 Grand Traverse Hurst: 231-943-9721



MICHIGAN LOCATION MAP
 SCALE: 1" = 200' (1" = 0.48 KM)

NO.	DATE	DESCRIPTION
1	01/15/11	Initial Design
2	02/15/11	Final Design
3	03/15/11	Construction
4	04/15/11	Final Inspection
5	05/15/11	As-Built
6	06/15/11	Final Report
7	07/15/11	Final Review
8	08/15/11	Final Approval
9	09/15/11	Final Sign-off
10	10/15/11	Final Close-out



Section 14, 4 Town Range, 11 West
Garfield Township, Grand Traverse County, Michigan

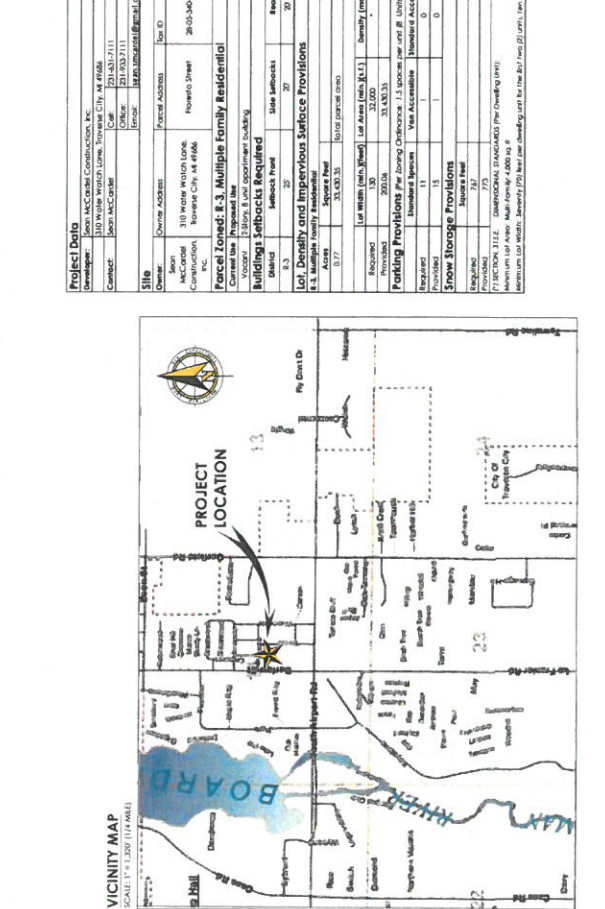
Seon McCordel Construction, LLC
Proposed Apartment Building
COVER SHEET

Project Data	Site	Lot	Building	Soil	Water	Other
Developer: Seon McCordel Construction, LLC 310 Woods Wilson Lane, Traverse City, MI 49686 Phone: 231-946-4646 Fax: 231-946-4646 Email: info@seonmccordel.com	Owner: Seon McCordel Construction, LLC 310 Woods Wilson Lane, Traverse City, MI 49686 Phone: 231-946-4646 Fax: 231-946-4646 Email: info@seonmccordel.com	Parcel Address: 2650 Laframboise Rd., Traverse City, MI 49686 Parcel ID: 2650-360-020-0	Site Address: 2650 Laframboise Rd., Traverse City, MI 49686 Site ID: 2650-360-020-0	Site Address: 2650 Laframboise Rd., Traverse City, MI 49686 Site ID: 2650-360-020-0	Site Address: 2650 Laframboise Rd., Traverse City, MI 49686 Site ID: 2650-360-020-0	Site Address: 2650 Laframboise Rd., Traverse City, MI 49686 Site ID: 2650-360-020-0
Parcel Data: Parcel ID: 2650-360-020-0 Parcel Area: 265,000 sq. ft. Parcel Zoning: R-10 Parcel Use: Residential	Site Data: Site ID: 2650-360-020-0 Site Area: 265,000 sq. ft. Site Zoning: R-10 Site Use: Residential	Lot Data: Lot ID: 2650-360-020-0 Lot Area: 265,000 sq. ft. Lot Zoning: R-10 Lot Use: Residential	Building Data: Building ID: 2650-360-020-0 Building Area: 265,000 sq. ft. Building Zoning: R-10 Building Use: Residential	Soil Data: Soil ID: 2650-360-020-0 Soil Type: R-10 Soil Use: Residential	Water Data: Water ID: 2650-360-020-0 Water Type: R-10 Water Use: Residential	Other Data: Other ID: 2650-360-020-0 Other Type: R-10 Other Use: Residential

VICINITY MAP
 SCALE: 1" = 200' (1" = 0.48 KM)

NO.	DATE	DESCRIPTION
1	01/15/11	Initial Design
2	02/15/11	Final Design
3	03/15/11	Construction
4	04/15/11	Final Inspection
5	05/15/11	As-Built
6	06/15/11	Final Report
7	07/15/11	Final Review
8	08/15/11	Final Approval
9	09/15/11	Final Sign-off
10	10/15/11	Final Close-out

PRELIMINARY
 18057
 C1.0



VICINITY MAP
 SCALE: 1" = 200' (1" = 0.48 KM)

GENERAL CONSTRUCTION NOTES:

- 1. MISS DIG**
FOR PROTECTION OF UNDERGROUND UTILITIES AND IN ACCORDANCE WITH PUBLIC ACTS 33, 377A, THE SALES, SERVICES, AND INCIDENTS PRIOR TO BEGINNING EACH EXCAVATION AREA WHERE PUBLIC UTILITIES ARE LOCATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITIES OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" ALERT SYSTEM.
- 2. EXISTING UTILITIES**
EXISTING PUBLIC UTILITIES AND UNDERGROUND STRUCTURES SUCH AS PIPE LINES, ELECTRIC CONDUITS, SWIRKS AND CABLES SHALL BE IDENTIFIED AND MARKED PRIOR TO EXCAVATION. THE CONTRACTOR SHALL PROVIDE SUPPORT FOR ANY UTILITY WITHIN THE EXCAVATION. PROTECT EXISTING UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY UTILITIES.
- 3. PROTECTING UTILITIES**
THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL OBTAIN ASSISTANCE FROM THE APPROPRIATE UTILITY COMPANY IN LOCATING EXISTING UTILITIES. THE CONTRACTOR SHALL PROVIDE SUPPORT FOR ANY UTILITY WITHIN THE EXCAVATION. PROTECT EXISTING UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ANY UTILITIES.
- 4. SAFETY**
THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS GOVERNING THE FURNISHING OF NECESSARY PREPARATIONS TO PROTECT THE LIFE AND HEALTH OF EMPLOYEES AND THE PUBLIC IN THE PERFORMANCE OF THE WORK.
- 5. SOIL EROSION & SEDIMENTATION CONTROL**
THE CONTRACTOR SHALL MEET WITH THE SOIL EROSION CONTROL OFFICE BEFORE STARTING CONSTRUCTION TO REVIEW THE TEMPORARY SOIL EROSION CONTROL MEASURES AND REQUIREMENTS. THE SOIL EROSION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE DISTURBED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE DISTURBED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE DISTURBED AREAS.
- 6. PROPERTY CORNERS**
EXISTING KNOWN PROPERTY CORNERS ARE REFERRED ON THE PLANS. IF A PROPERTY CORNER IS DELIBERATELY OBLITERATED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RECONSTRUCTION OF THE CORNER AT HIS OWN EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RECONSTRUCTION OF THE CORNER AT HIS OWN EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RECONSTRUCTION OF THE CORNER AT HIS OWN EXPENSE.
- 7. SURVEY DATUM**
ALL ELEVATIONS ARE BASED ON N.A.S.D. 1988, UNLESS OTHERWISE SPECIFIED.
- 8. RESTORATION WORK**
ALL EXCAVATED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION. MULCH BARRIERS SHALL BE INSTALLED IN AREAS AS DESIGNATED AND SHALL BE INCORPORATED INTO THE FINISH. ALL EXCAVATIONS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION. MULCH BARRIERS SHALL BE INSTALLED IN AREAS AS DESIGNATED AND SHALL BE INCORPORATED INTO THE FINISH. ALL EXCAVATIONS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
- 9. REMOVAL ITEMS**
THE CONTRACTOR SHALL REMOVE ALL LAWN, LANDSCAPE PLANTINGS, SHRUBS, COMMERCIAL SIGNS, ETC., AS REQUIRED, UNLESS SPECIFICALLY NOTED FOR REMOVAL ON THE PLANS. ALL REMOVALS, DRIVES, CONCRETS, DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED WITH NEW BY THE CONTRACTOR AT HIS OWN EXPENSE.
- 10. CONSTRUCTION SIGNAGE & TRAFFIC CONTROL**
LOCAL TRAFFIC AND CONSTRUCTION TRAFFIC SHALL BE MAINTAINED AT ALL TIMES TO THE SATISFACTION OF THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING TRAFFIC THROUGH THE USE OF WATER TRUCKS OR DUST PALMATE. PAYMENT FOR TRUCKS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE. TRAFFIC CONTROL SHALL BE PROVIDED SEPARATELY. DUST SHALL BE CONTINUOUSLY CONTROLLED TO THE SATISFACTION OF THE OWNER.
- 11. DUST CONTROL**
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTROLLING DUST ON THE PROJECT THROUGH THE USE OF WATER TRUCKS OR DUST PALMATE. PAYMENT FOR TRUCKS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE. TRAFFIC CONTROL SHALL BE PROVIDED SEPARATELY. DUST SHALL BE CONTINUOUSLY CONTROLLED TO THE SATISFACTION OF THE OWNER.
- 12. PROTECTIVE FENCE**
THE CONTRACTOR SHALL PROVIDE FENCE AROUND ALL OPEN EXCAVATIONS THAT ARE LEFT UNPROTECTED FOR ANY OTHER TRAFFIC OR SHALL BE LEFT UNPROTECTED.
- 13. EXCESS MATERIALS**
EXCESS MATERIALS SHALL BE REMOVED BY THE CONTRACTOR OR BY THE OWNER. EXCESS MATERIALS SHALL BE REMOVED BY THE CONTRACTOR OR BY THE OWNER. EXCESS MATERIALS SHALL BE REMOVED BY THE CONTRACTOR OR BY THE OWNER.
- 14. SAWCUTTING PAVEMENT**
THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAWCUTTING PAVEMENT TO THE DEPTH OF THE EXISTING PAVEMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SAWCUTTING PAVEMENT TO THE DEPTH OF THE EXISTING PAVEMENT.
- 15. DEWATERING**
ANY REQUIRED Dewatering for site work, including the use of stone or gravel for dewatering, shall be included in the lump sum contract price.
- 16. UTILITY SEPARATION**
UTILITY SEPARATION SHALL BE MAINTAINED AND VERTICAL SEPARATION BETWEEN ALL WATER MAINS AND SANITARY SEWER MAINS SHALL BE MAINTAINED AS BETWEEN THE CLOSEST POINTS OF EACH PIPE.
- 17. RECYCLING**
THE CONTRACTOR IS ENCOURAGED TO RECYCLE ANY MATERIALS OR PRODUCTS THAT ARE REUSABLE OR CAPABLE OF BEING RECYCLED.

GENERAL GRADING CONSTRUCTION NOTES:

- 1. QUALITY OF WORK**
ALL CONSTRUCTION WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE CURRENT M.D.O. ALL CONSTRUCTION WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE CURRENT M.D.O.
- 2. SUBGRADE PREPARATION**
SUBGRADE SHALL BE PREPARED FOR FINISH GRADE. FINISH GRADE SHALL BE PREPARED FOR FINISH GRADE. FINISH GRADE SHALL BE PREPARED FOR FINISH GRADE. FINISH GRADE SHALL BE PREPARED FOR FINISH GRADE.
- 3. AGGREGATE BASE MATERIAL**
AGGREGATE BASE TO BE USED ON THE PROJECT MUST MEET SPECIFICATION FOR M.D.O. 277 AND MUST BE APPROVED BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION. AGGREGATE BASE TO BE USED ON THE PROJECT MUST MEET SPECIFICATION FOR M.D.O. 277 AND MUST BE APPROVED BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION.
- 4. BITUMINOUS PAVEMENT (HMA)**
THE CONTRACTOR SHALL OBTAIN THE OWNER'S REPRESENTATIVE 48 HOURS PRIOR TO PLACEMENT OF BITUMINOUS PAVEMENT. BITUMINOUS PAVEMENT SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT M.D.O. STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- 5. REMOVAL OF ORGANICS**
ALL TREES, LIMBS, BRUSH AND ROOTS THEREOF, SHALL BE REMOVED FROM WITHIN THE SET GRADING. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING GROUND COVER ON ALL AREAS DISTURBED BY CONSTRUCTION.
- 6. FILL CHANGES**
ANY CHANGES IN SPECIFICATIONS OR CONSTRUCTION METHODS MUST BE REVIEWED AND APPROVED BY THE ARCHITECT AND OWNER AND SHALL NOT BE CONSIDERED UNLESS APPROVED THEREBY.
- 7. DRAINAGE**
DRAINAGE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE, AS REQUIRED, ALL DRAINAGE CURBS OR STRUCTURES DAMAGED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO REPAIR OR REPLACE, AS REQUIRED, ALL DRAINAGE CURBS OR STRUCTURES DAMAGED DURING CONSTRUCTION.
- 8. PUBLIC EASEMENTS**
PUBLIC UTILITY SHALL BE WITHIN 10 FEET OF THE EASEMENT CENTERLINE ON THE UTILITY.
- 9. WATER SERVICES**
THE DOMESTIC WATER AND THE PROTECTION MUST BE SEPARATE SERVICES TO EACH BUILDING.
- 10. UTILITY SEPARATION**
SEPARATION OF ALL UTILITY SERVICES SHALL BE MAINTAINED AS BETWEEN THE CLOSEST POINTS OF EACH PIPE FROM SANITARY AND SEWER MAINS. MAINTAINMENTS ARE BETWEEN THE CLOSEST POINTS OF EACH PIPE.
- 11. NO DISRUPTION OF SERVICE**
THE CONTRACTOR SHALL NOT DISRUPT THE WATER MAIN SERVICE TO THE SURROUNDING CUSTOMERS. ANY REQUIRED DISRUPTION IN SERVICE SHALL BE COMMUNICATED AND COORDINATED WITH THE C.C. DPW BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT DISRUPT THE WATER MAIN SERVICE TO THE SURROUNDING CUSTOMERS.
- 12. SALVAGED MATERIALS**
ALL EQUIPMENT AND MATERIALS THAT ARE CURRENTLY OPERATED AND MAINTAINED BY THE C.C. DPW AND IS TYPE THAT THE DPW DOES NOT WANT THE SALVAGED MATERIALS, THE CONTRACTOR SHALL PROPERLY DISPOSE OF THE MATERIALS.

GENERAL WATER MAIN CONSTRUCTION NOTES:

- 1. STANDARDS**
CONSTRUCTION SHALL CONFORM TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS 2017 GRAND TRAVERSE COUNTY STANDARD TECHNICAL SPECIFICATIONS AND CONSTRUCTION DETAILS.
- 2. DATUM**
ALL ELEVATIONS SHALL BE BASED ON USGS OR NAVD DATUM.
- 3. DETAILS**
PIPE BEDDING, THIRST BLOCK, HYDRANT, VALVES, WATER MAINHOLES, AND ALL APPURTENANCES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DETAILS.
- 4. PUBLIC EASEMENTS**
PUBLIC UTILITY SHALL BE WITHIN 10 FEET OF THE EASEMENT CENTERLINE ON THE UTILITY.
- 5. WATER SERVICES**
THE DOMESTIC WATER AND THE PROTECTION MUST BE SEPARATE SERVICES TO EACH BUILDING.
- 6. UTILITY SEPARATION**
SEPARATION OF ALL UTILITY SERVICES SHALL BE MAINTAINED AS BETWEEN THE CLOSEST POINTS OF EACH PIPE FROM SANITARY AND SEWER MAINS. MAINTAINMENTS ARE BETWEEN THE CLOSEST POINTS OF EACH PIPE.
- 7. NO DISRUPTION OF SERVICE**
THE CONTRACTOR SHALL NOT DISRUPT THE WATER MAIN SERVICE TO THE SURROUNDING CUSTOMERS. ANY REQUIRED DISRUPTION IN SERVICE SHALL BE COMMUNICATED AND COORDINATED WITH THE C.C. DPW BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT DISRUPT THE WATER MAIN SERVICE TO THE SURROUNDING CUSTOMERS.
- 8. SALVAGED MATERIALS**
ALL EQUIPMENT AND MATERIALS THAT ARE CURRENTLY OPERATED AND MAINTAINED BY THE C.C. DPW AND IS TYPE THAT THE DPW DOES NOT WANT THE SALVAGED MATERIALS, THE CONTRACTOR SHALL PROPERLY DISPOSE OF THE MATERIALS.

GENERAL SANITARY SEWER CONSTRUCTION NOTES:

- 1. STANDARDS**
CONSTRUCTION SHALL CONFORM TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS 2017 GRAND TRAVERSE COUNTY STANDARD TECHNICAL SPECIFICATIONS AND CONSTRUCTION DETAILS.
- 2. CONNECTIONS**
NO CONNECTION RECEIVING STORM WATER OR GROUNDWATER SHALL BE MADE TO SANITARY SEWERS.
- 3. DATUM**
ALL ELEVATIONS SHALL BE BASED ON USGS OR NAVD DATUM.
- 4. DETAILS**
PIPE BEDDING, BEDDING SWIRLS, DROFF CONNECTIONS, BARRIERS, MANHOLES COVERS, AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DETAILS.
- 5. PUBLIC EASEMENTS**
PUBLIC UTILITY SHALL BE WITHIN 10 FEET OF THE EASEMENT CENTERLINE ON THE UTILITY.
- 6. UTILITY SEPARATION**
SEPARATION OF ALL UTILITY SERVICES SHALL BE MAINTAINED AS BETWEEN THE CLOSEST POINTS OF EACH PIPE FROM SANITARY AND SEWER MAINS. MAINTAINMENTS ARE BETWEEN THE CLOSEST POINTS OF EACH PIPE.
- 7. NO DISRUPTION OF SERVICE**
THE CONTRACTOR SHALL NOT DISRUPT THE SANITARY SEWER SERVICE TO THE SURROUNDING CUSTOMERS. ANY REQUIRED DISRUPTION IN SERVICE SHALL BE COMMUNICATED AND COORDINATED WITH THE C.C. DPW BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT DISRUPT THE SANITARY SEWER SERVICE TO THE SURROUNDING CUSTOMERS.
- 8. SALVAGED MATERIALS**
ALL EQUIPMENT AND MATERIALS THAT ARE CURRENTLY OPERATED AND MAINTAINED BY THE C.C. DPW AND IS TYPE THAT THE DPW DOES NOT WANT THE SALVAGED MATERIALS, THE CONTRACTOR SHALL PROPERLY DISPOSE OF THE MATERIALS.

GENERAL STORM SEWER CONSTRUCTION NOTES:

- 1. CONSTRUCTION STANDARDS**
ALL MATERIAL, CONSTRUCTION, METHOD, TESTING AND INSPECTION SHALL BE IN ACCORDANCE WITH THE CURRENT M.D.O. CONSTRUCTION STANDARDS UNLESS OTHERWISE SPECIFIED.
- 2. CONNECTIONS**
NO CONNECTIONS SHALL BE MADE TO SANITARY SEWERS.
- 3. STRUCTURE ADJUSTMENTS**
CONNECTIONS TO EXISTING CONCRETE BOX AND STRUCTURES SHALL BE TO THE FINISH GRADE ELEVATIONS. THE LOCATION AND RELATIONS SHOWN ARE BASED UPON PLAN GRADES AND ARE SUBJECT TO CHANGE.
- 4. UTILITY SEPARATION**
ALL STORM SEWERS SHALL MAINTAIN A MINIMUM OF 10' HORIZONTAL SEPARATION AND 12' VERTICAL SEPARATION FROM WATER MAINS. CALCULATIONS ARE BETWEEN THE CLOSEST POINTS OF EACH PIPE.

Blow Storm Water Calculations

Project: 17000 17th Ave, Grand Traverse County
 Location: 17000 17th Ave, Grand Traverse County
 Date: 08/11/2017
 Designer: J. J. Mansfield
 Checker: J. J. Mansfield
 Title: Storm Water Calculations

Area: 1.25 Acres
 Runoff Coefficient: 0.55
 Time of Concentration: 15.00 min
 Peak Discharge: 1.25 cfs

Storm 1: 1.25 cfs
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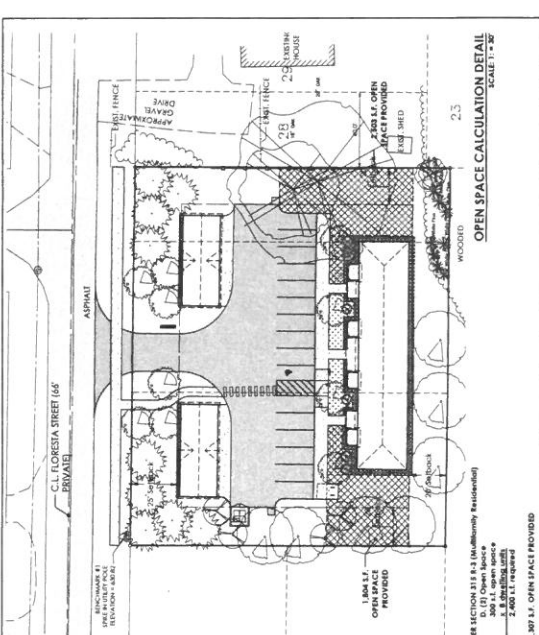
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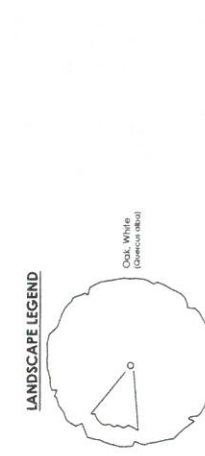
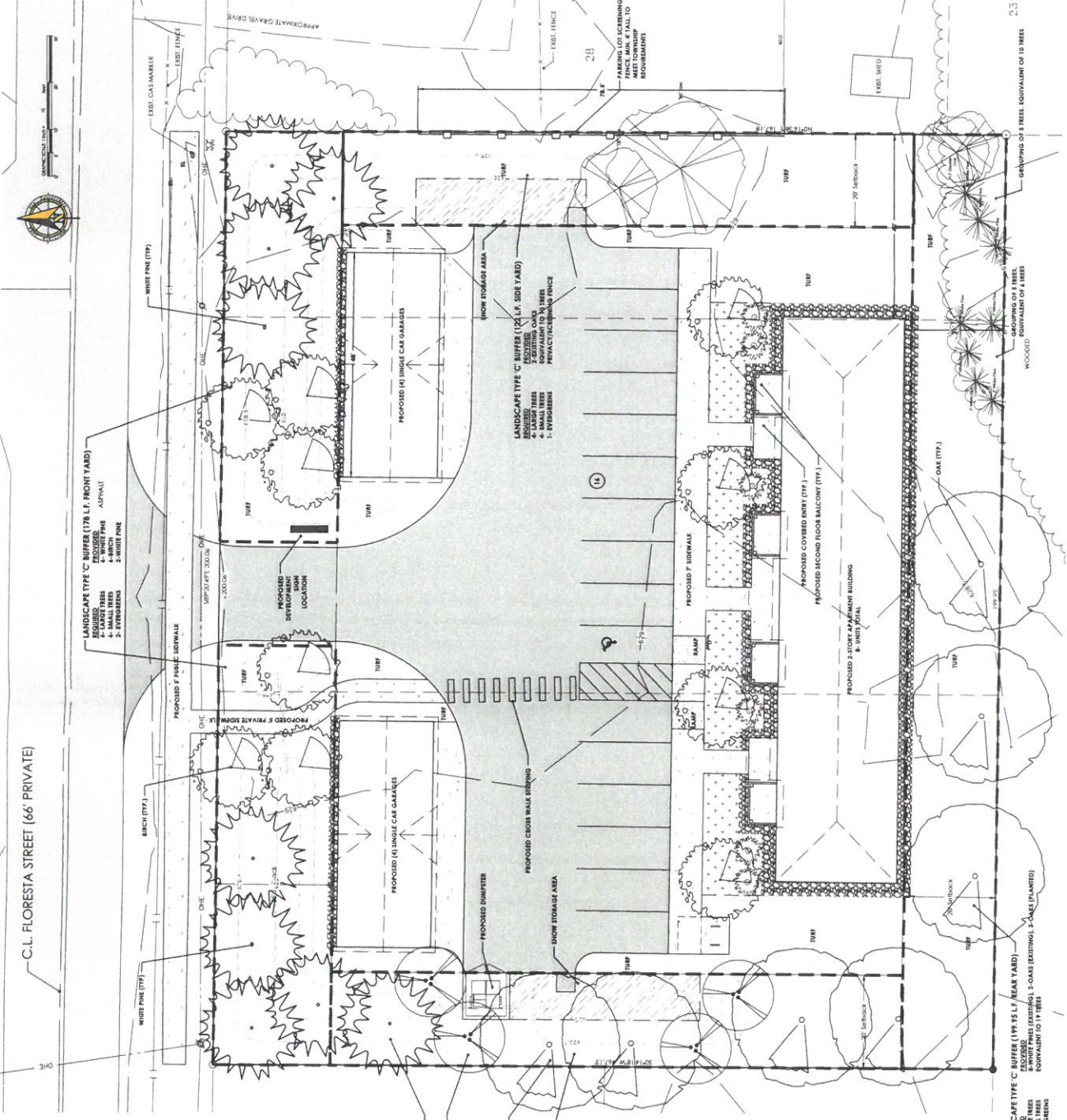
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OPEN SPACE CALCULATION DETAIL
 SCALE 1/8"
 2.3
 PRE SECTION 218 B.2 (McAlumbus Rebuilding)
 D. (L) Open Space
 2.300 L.F. OPEN SPACE PROVIDED
 2.300 L.F. REQUIRED

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PLANT LIST

COMMON NAME	SCIENTIFIC NAME	SIZE	ESTIMATED QUANTITY
Oak, White	Quercus alba	6" B&B	10
Pine, White	Pinus strobus	6" B&B	9
Birch, Whitebarked Highbush	Viburnum acerifolium	6" B&B	4
Serviceberry	Amelanchier canadensis	6" B&B	4
Juniper, Sea Green	Juniperus chinensis Sea Green	3 gallon	6
Pachysandra	Pachysandra terminalis	6" B&B	10

SEE SHEET C1.2 FOR TREE AND SHRUB PLANTING DETAIL

PLANTING NOTES:

1. All plantings shall be installed in accordance with the Michigan Nurseries Act and the Michigan Department of Natural Resources (DNR) Planting Standards.

2. All plantings shall be installed in accordance with the Michigan Nurseries Act and the Michigan Department of Natural Resources (DNR) Planting Standards.

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IRRIGATION NOTE:

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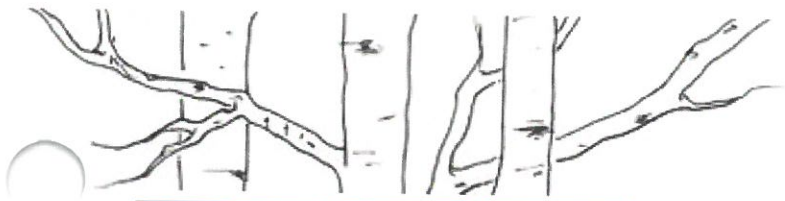
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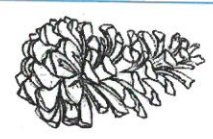
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LANDSCAPING PREPARED BY:
Sean McCordel Construction, LLC
18057
L1.0



Photometric Plan



LNC2 SERIES

Cat.# LNC2-18LU-4K-4

Job
ASPEN PINES

Type
A



HUBBELL
Outdoor Lighting

Approvals

SPECIFICATIONS

The small sized LNC2 is designed for perimeter illumination for safety, security and identification. No uplight and prismatic lenses offer neighbor friendly lighting at typical mounting heights of 8-15'. Units have protective polyester finish for long lasting appearance. Ideal for schools, factories, hospitals, warehouses and retail applications. Energy efficient LEDs provide up to 85% energy savings when compared to traditional light sources with little to no maintenance.

Construction:

Rugged die-cast aluminum housing protects components and provides an architectural appearance. Casting thermally conducts LED heat to optimize performance and long life. Powder paint finish provides durability in outdoor environments.

Electrical:

- 120V-277V universal voltage 50/60Hz 0-10V dimming drivers
- 347V and 480V dimmable driver option in 12L-070 configuration
- Minimum operating temperature is -40°C/-40°F (excludes 12L-035 and P15 configurations)
- Drivers have greater than .90 power factor and less than 20% Total Harmonic Distortion
- Driver RoHS and IP66
- 10kA surge protector

LED(s) CCT:

- 3000K CCT nominal, 4000K CCT nominal, 5000K CCT nominal (70 CRI)
- 9, 12 and 18 LED configurations available see pages 2 and 3 for electrical and photometric details

Optical:

Zero uplight distributions using individual acrylic LED optics provide IES type II, III and IV distributions. Optional (CS) acrylic diffuser available for reduced glare. Prismatic refractor lens provides ~10% uplight for increased vertical FC and forward light projection ideal for security lighting.

Lumen Maintenance:

L96 at 60,000hrs (Projected per IESNA TM-21-11), see table on page 2 for all values

Installation:

Quick-mount adapter provides easy installation to wall or to recessed junction boxes (4" square junction box). Designed for direct j-box mount. Optional 1/2" conduit hubs available (standard for sensor, SiteSync and battery versions).

Options/Controls:

- Universal button photocontrol
- Occupancy sensor options available for complete on/off and dimming control
- SiteSync pre-commissioned wireless controls (with or without sensor)
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Dual Driver and Dual Power Feed option for 18L-070 versions

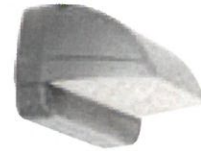
Listings:

- Listed to UL1598 and CSAC22.2#250.0-24 for wet locations

Warranty:

Five year limited warranty (for more information visit: <https://www.hubbell.com/hubbell/lighting/en/warranty>)

PRODUCT IMAGE(S)



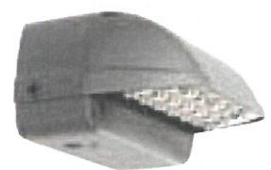
Standard 9, 12, and 18L Version*



Prismatic Version



Conduit Hubs, Sensor & SiteSync Version

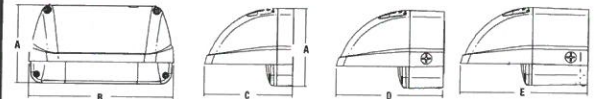


Battery Backup Version

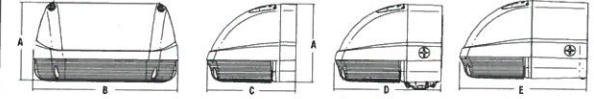
*Shown with CS acrylic diffuser

DIMENSIONS

9, 12, 18L units



Prismatic Refractor Units



A	B	C	D	E
5.54"	10.16"	6.33"	7.64"	9.10"
40.7 mm	258 mm	160.7 mm	194 mm	231 mm

BASE MODEL 7.0 lbs / 3.2 kg

PC SENSOR 7.5 lbs / 3.4 kg • BBU MODELS 9.5 lbs / 4.3 kg

SHIPPING INFORMATION (Stock)

Catalog Number	G.W(kg)/CTN	Carton Dimensions			Carton Qty. per Master Pack
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)	
LNC2-12LU	14.3 (6.5)	14.5 (37)	11.4 (29)	8.4 (21.5)	2
LNC2-18LU	14.8 (6.7)	14.9 (38)	11.4 (29)	8.4 (21.5)	2

CERTIFICATIONS/LISTINGS



C US

Turtle Friendly

*3000K and warmer CCTs only

ORDERING INFORMATION – ORDERING EXAMPLE: LNC2-12L-4K-070-3-1-DB-PCU-EH-CS

LNC2

18L

3K

4

U

SERIES	LED SELECTION	CCT/CRI	DRIVE CURRENT	VOLTAGE	MOUNTING	CONTROL OPTIONS	OPTIONS
LNC2 Small LitePak LNC2	9L 9 LEDs 12L 12 LEDs 18L 18 LEDs P15 15w Prismatic Refractor P25 25w Prismatic Refractor P35 35w Prismatic Refractor	3K 3000K, 70 CRI 4K 4000K, 70 CRI 5K 5000K, 70 CRI AM Amber (350mA only)	070 700mA 035 350mA (12L & 18L only) IES DISTRIBUTION 2' IES Type II 3' IES Type III 4' IES Type IV FT Forward Throw (Prismatic Refractor only)	U 120V-277V 1 120V 2 208V 3 240V 4 277V 5 ^B 480V F ^B 347V	Leave Blank for down position NV ² Inverted FINISH DB Dark Bronze Textured BL Black Textured GYS Gray Smooth PS Platinum Silver Smooth WH White Textured CC Custom Color	SCP ^{4,5} Occupancy Sensor Programmable (Dim) PCU Universal Button Photocontrol SWP ^{3,6} SiteSync Pre-Commission SWPM SiteSync Pre- ^{5,6,7} Commission w/ OCC Sensor SPECIFY SCP HEIGHT 8F Up to 8ft mount height 20F Up to 20ft mount height	EH ³ Battery Backup Unit with Heater (-30°C) E ³ Battery Backup Unit (0°C) F ³ Fuse & Fuse-holder (not available with Battery Backup) CS Comfort Shield (N/A with Prismatic Refractor) 2DR Dual Driver (18L - 700mA only) 2PF Dual Power Feed (18L - 700mA only) CH Conduit Hubs

1 IES distributions only available with 9L, 12L, and 18L versions
2 Not available with occupancy sensor, battery backup or prismatic refractor options
3 Must specify voltage (120 or 277 only for E & EH)
4 Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120-277V only
5 PCU option not applicable, included in sensor
6 18L - 700mA versions only. Must specify group and zone information at time of order
7 Specify time delay; dimming level and mounting height
8 12L - 700mA version only



Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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STOCK ORDERING INFORMATION

Catalog Number	System Watts	Delivered Lumens	Distribution	Voltage	CCT	# Drivers/ Current	Weight lbs. (kg)	Finish	Options
LNC2-12LU-4K-3-1	29w	2,662	3	120-277V	4000K	1@700mA	7.0 (13.3)	Dark Bronze	*
LNC2-12LU-5K-3-1	29w	2,868	3	120-277V	5000K	1@700mA	7.0 (13.3)	Dark Bronze	*
LNC2-12LU-5K-3-1-PC-U	29w	2,868	3	120-277V	5000K	1@700mA	7.0 (13.3)	Dark Bronze	Photocell*
LNC2-18LU-4K-3-1	42w	3,806	3	120-277V	4000K	2@700mA	7.0 (13.3)	Dark Bronze	*
LNC2-18LU-5K-3-1	42w	4,106	3	120-277V	5000K	2@700mA	7.0 (13.3)	Dark Bronze	*
LNC2-18LU-5K-3-1-PC-U	42w	4,106	3	120-277V	5000K	2@700mA	7.0 (13.3)	Dark Bronze	Photocell*
LNC2-P35-4K-PCU	37w	4,025	FT	120-277V	4000K	1@900mA	7.0 (13.3)	Dark Bronze	Photocell
LNC2-P35-PCU	37w	4,108	FT	120-277V	5000K	1@900mA	7.0 (13.3)	Dark Bronze	Photocell

*Frosted acrylic comfort shield/lens included with unit

REPLACEMENT PART/ACCESSORIES

CATALOG NUMBER	DESCRIPTION
LNC2-CS	Frosted acrylic comfort shield/lens, reduces glare and improves uniformity with only 15% lumen reduction
SCP-REMOTE*	Remote control for SCP option. Order at least one per project to program and control fixtures

*Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, 120V or 277V only

PERFORMANCE DATA

Standard 9, 12 and 18L Versions

# OF LEDS	DRIVE CURRENT	SYSTEM WATTS	DIST. TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 80 CRI)					
				LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G	
9	700mA	21W	2	2,083	97	1	0	1	2,072	97	1	0	1	1,927	90	1	0	1	
				3	1,972	92	0	0	1	1,962	92	0	0	1	1,825	85	0	0	1
				4	2,097	98	0	0	1	2,087	98	0	0	1	1,941	91	0	0	1
2	350mA	14W	2	1,513	110	0	0	1	1,506	109	0	0	1	1,440	104	0	0	1	
				3	1,433	104	0	0	1	1,426	103	0	0	1	1,364	99	0	0	1
				4	1,524	110	0	0	1	1,543	112	0	0	1	1,476	107	0	0	1
	700mA	29W	2	2,777	97	1	0	1	2,763	97	1	0	1	2,570	90	1	0	1	
				3	2,629	92	1	0	1	2,616	91	1	0	1	2,433	85	1	0	1
				4	2,797	98	1	0	1	2,783	97	1	0	1	2,588	90	1	0	1
18	350mA	21W	2	2,270	107	1	0	1	2,259	106	1	0	1	2,074	97	1	0	1	
				3	2,149	101	0	0	1	2,138	100	0	0	1	1,963	92	0	0	1
				4	2,286	107	0	0	1	2,275	107	0	0	1	2,125	100	0	0	1
	700mA	43W	2	4,261	99	1	0	1	4,240	98	1	0	1	3,943	91	1	0	1	
				3	4,033	93	1	0	1	4,014	93	1	0	1	3,733	86	1	0	1
				4	4,290	99	1	0	1	4,270	99	1	0	1	3,971	92	1	0	1

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application. LNC2-12L battery mode produces 1,546 initial lumens. Meets UL924 90 minute discharge pattern.

PERFORMANCE DATA

Prismatic Refractor

# OF LEDS	DRIVE CURRENT	SYSTEM WATTS	DIST. TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 80 CRI)				
				LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G	LUMENS	LPW ¹	B	U	G
1	350mA	13W	FT	1,741	132	0	3	2	1,706	129	0	3	2	1,648	125	0	3	2
	600mA	25W		2,929	117	1	3	2	2,806	112	1	3	2	2,773	111	1	3	2
	900mA	37W		4,108	112	1	3	3	4,025	110	1	3	3	3,889	106	1	3	3

PROJECTED LUMEN MAINTENANCE

Standard 9, 12 and 18L Versions

Ambient Temp.	OPERATING HOURS					
	0	25,000	50,000	TM-21-11 ¹ L96 60,000	100,000	L70 (hours)
25°C / 77°F	1.00	0.98	0.97	0.96	0.95	>791,000
40°C / 104°F	0.99	0.98	0.96	0.96	0.95	>635,000

1. Projected per IESNA TM-21-11 * (Nichia 219B, 700mA, 85°C Ts, 10,000hrs)
References the extrapolated performance projections for the LNC-12LU-5K base model in a 40°C
at, based on 10,000 hours of LED testing per IESNA LM-80-08.

Prismatic Refractor

Ambient Temp.	OPERATING HOURS					
	0	25,000	50,000	TM-21-11 ¹ L96 60,000	100,000	L70 (hours)
25°C / 77°F	1.00	0.94	0.89	0.87	0.80	>160,000
40°C / 104°F	0.99	0.93	0.88	0.86	0.78	>150,000



Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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ELECTRICAL DATA

Standard 9, 12 and 18L Versions

# OF LEDS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	CURRENT (Amps)	SYSTEM POWER (w)
9	700mA	120	0.18	21
		277	0.08	21
12	350mA	120	0.12	14
		277	0.05	14
	700mA	120	0.24	29
		277	0.10	29
		347	0.08	29
		480	0.06	29
18	350mA	120	0.18	21
		277	0.08	21
	700mA	120	0.36	43
		277	0.16	43

Prismatic Refractor

# OF LEDS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	CURRENT (Amps)	SYSTEM POWER (w)
1	350mA	120	0.11	13
		277	0.05	13
	600mA	120	0.21	25
		277	0.09	25
	900mA	120	0.31	37
		277	0.13	37

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

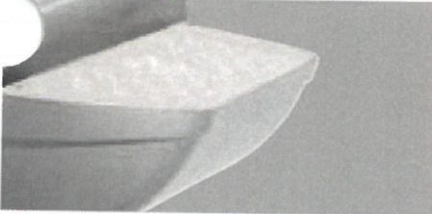
Standard 9, 12, 18L and Prismatic Versions

AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99
50°C	122°F	0.98

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

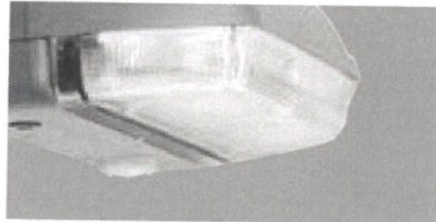
NV - Inverted Mounting Options

(Requires Factory Installed lens Option)



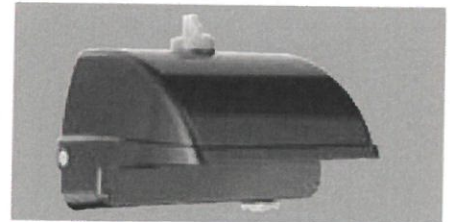
Inverted mounting capabilities for uplighting applications. Specially designed frosted acrylic diffuser option softens output, improves uniformity and protects LED lenses.

SCP - Programmable Occupancy Sensor



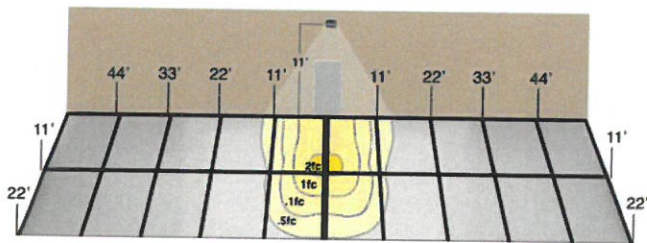
Sensor offers greater control and energy savings with SCP programmable sensor with adjustable delay and dimming levels (Factory default is 10%)
Visit: <http://www.hubbellighting.com/solutions/controllers/> for control application information

SWP & SWPM - SiteSync™



When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project locations Group information, and Operating schedules. For more detailed information please visit www.HubbellLighting.com/products/sitesync or contact Hubbell Lighting tech support at (800) 345-4928.

LNC2 - BATTERY BACK UP

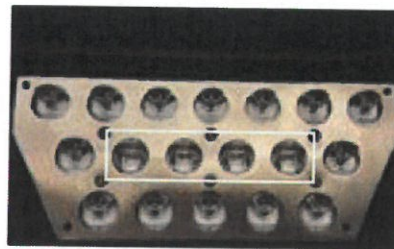


11' Mounting Height

Provides Life Safety Code average illuminance of 1.0 fc. Assumes open space with no obstructions and mounting height of 11'.

Diagrams for illustration purposes only, please consult factory for application layout.

E & EH EMERGENCY BATTERY BACKUP



Standard versions utilize 9, 12 or 18 High Power LEDs to generate 1,600 - 4,200 lumens in Normal Mode and use 4 LEDs for up to 700 lumens in Emergency Mode. Prismatic refractor versions utilize 1 COB LED to generate approximately 900 lumens in emergency mode.



HUBBELL
Outdoor Lighting

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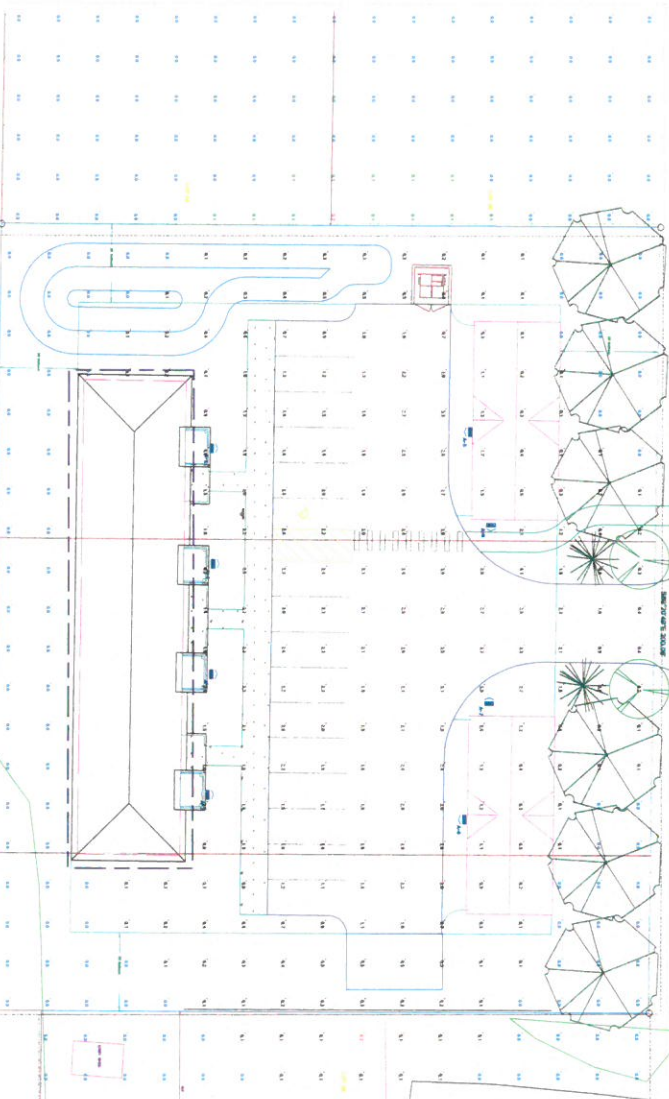
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

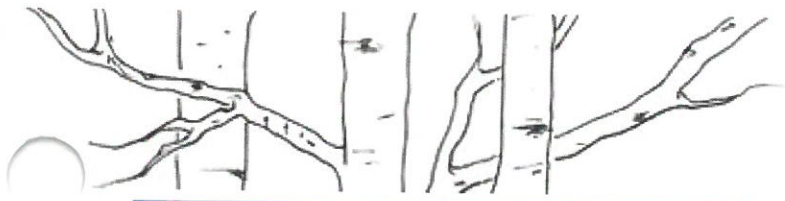
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Schedule		Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	8	Hubbell Outdoor	LNCC2-18LU-3K-4	Cast Aluminum LED Wall-Pack - Type IV	18- NICHIA 3000K LEDs	1	LNCC2-18LU-5K-4iles	3993	1	43.3	

Luminaire Locations												
No.	Label	X	Y	Z	MH	Orientation	Tilt	X	Y	Z	Aim	
1	A	10256.27	9851.34	20.00	20.00	0.00	0.00	10256.27	9851.51	0.00		
2	A	10344.42	9850.54	20.00	20.00	0.00	0.00	10344.42	9850.70	0.00		
3	A	10313.70	9851.34	20.00	20.00	0.00	0.00	10313.70	9851.51	0.00		
4	A	10285.58	9851.74	20.00	20.00	0.00	0.00	10285.58	9851.91	0.00		
5	A	10252.05	9917.60	12.00	12.00	179.54	0.00	10252.05	9917.44	0.00		
6	A	10350.64	9916.40	12.00	12.00	180.00	0.00	10350.64	9916.23	0.00		
7	A	10321.65	9922.20	12.00	12.00	270.28	0.00	10321.49	9922.21	0.00		
8	A	10275.17	9922.55	12.00	12.00	90.00	0.00	10275.33	9922.55	0.00		

Statistics									
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min			
Calc Zone #3	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A			
Entire Site	+	1.0 fc	8.7 fc	0.0 fc	N/A	N/A			
Light Trespass A	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A			



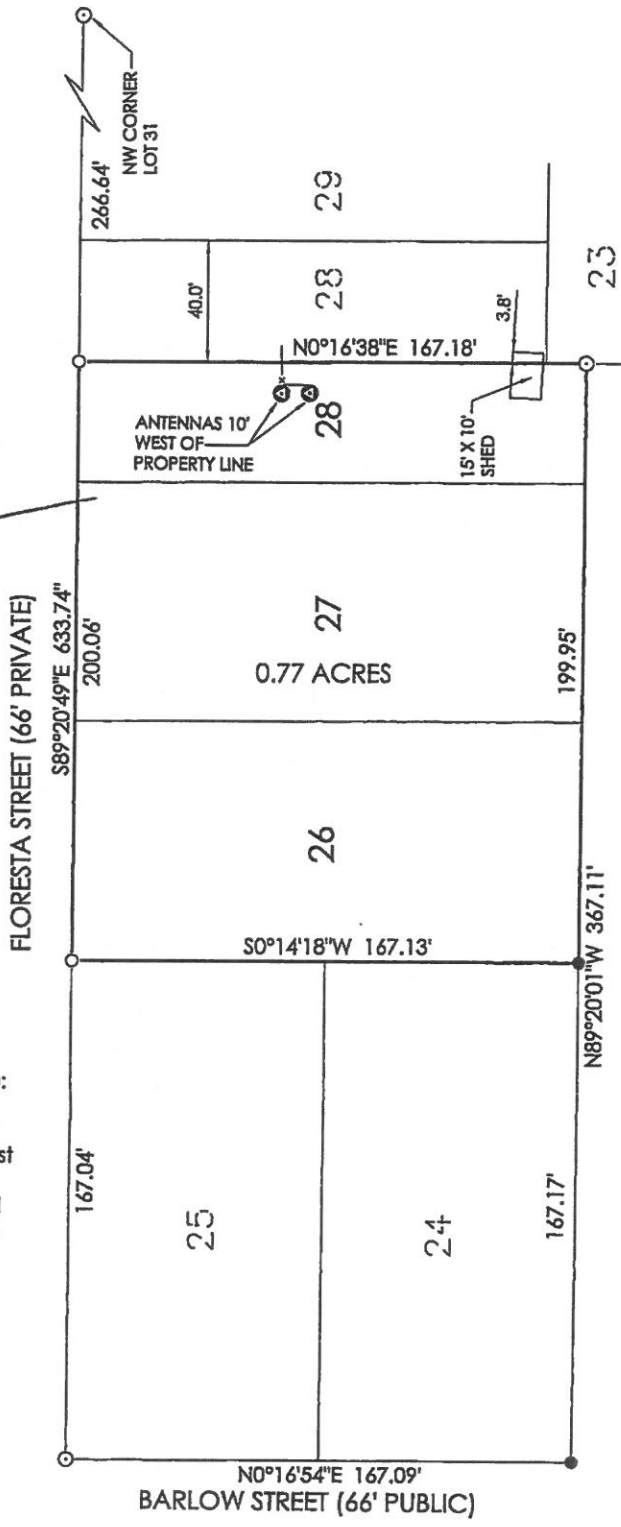


Aspen Pines
8-Unit Apartment Building
Special Use Permit Application

Survey



CERTIFICATE OF SURVEY



DESCRIPTION AS PROVIDED:

Lots 26, 27, and 28, except the East 40 feet of Lot 28, 1st Addition to Wedgewood, according to the recorded plat thereof as recorded in Liber 6 of Plats, page 26.



- Legend**
- Iron Found
 - Iron Set
 - ⊙ Concrete Monument
 - ⊕ Government Corner
 - ⊙ Nail Found
 - ⊙ Nail Set
 - (R) Record
 - (M) Measured
 - *- Fence

I, Michael K. Gelsert, a Professional Surveyor in the State of Michigan, do hereby certify: That I have surveyed and mapped the herein described parcel(s), that the ratio of closure of the unadjusted field observations is within the accepted limits and that I have fully complied with the requirements of P.A. 132 of 1970, as amended.

Sean McCordel

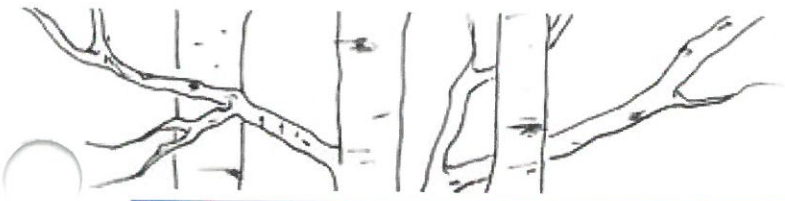
Mansfield
Land Use Consultants
Planners - Civil Engineers - Surveyors

PO Box 4015
830 Cottageview Dr., Suite 201
Traverse City, MI, 49685
Ph: (231) 946-9310
Fax: (231) 946-8926
www.manspa.com

BEARING BASIS: Assumed

Lots 26, 27 and part of 28
First Addition to Wedgewood
Garfield Township, Grand Traverse County, Michigan

DRNMKG CKDMKG
1/29/2018
18005
SHT 1 OF 1



Municipal Reviews



From: Petra Kuehnis
To: ["rrohloff@gtcrc.org"](mailto:rrohloff@gtcrc.org)
Subject: Aspen Pines Apartment -preliminary review
Date: Friday, May 04, 2018 12:06:00 PM
Attachments: [Aspen Pines Apartment siteplan.pdf](#)
[Floresta Concept.PDF](#)
[Aspen Pines Apartment airphoto.pdf](#)

Ron,

Attached are plans relating to a new project proposed on Floresta Street in Garfield Township. The Township permitting process requires regulatory agencies such as the Road Commission to provide preliminary review for feasibility as part of their municipal special use permitting process.

Would you please review the attached site plan and provide a letter of preliminary concept review with the understanding that formal Road Commission driveway permitting will be required after Township special use permit is granted?

We are asking for one driveway on Floresta Street to serve eight one-bedroom apartment units, and a sidewalk located within the road right-of-way. Please call me with any questions. Thank you.

Petra Kuehnis, RLA
Mansfield Land Use Consultants
*830 Cottageview Drive -Suite 201
Traverse City, MI 49684
(231) 946-9310 x1003 office
(231) 631-1916 mobile*



Mail Processing Center
 Federal Aviation Administration
 Southwest Regional Office
 Obstruction Evaluation Group
 10101 Hillwood Parkway
 Fort Worth, TX 76177

Aeronautical Study No.
 2018-AGL-8557-OE

Issued Date: 05/23/2018

Sean McCardel
 Sean McCardel Construction
 338 Water Watch Lane
 Traverse City, MI 49686

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Building Aspen Pines Apartment
 Location: Traverse City, MI
 Latitude: 44-44-12.55N NAD 83
 Longitude: 85-36-15.56W
 Heights: 629 feet site elevation (SE)
 30 feet above ground level (AGL)
 659 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 1.

This determination expires on 11/23/2019 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

For further assistance, please contact our office at (718) 553-4199, or Dianne.Marin@FAA.GOV. In any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-AGL-8557-OE.

Signature Control No: 364167664-366003315

Dianne Marin
Technician

(DNE)

Attachment(s)
Case Description
Map(s)

2-story/30-foot high, 8-unit apartment building





Notice of Proposed Construction or Alteration - Off Airport

[Add a new Case Off Airport - Desk Reference Guide V_2017.4.0](#)

[Add a New Case Off Airport for Wind Turbines - Met Towers - Desk Reference Guide V_2017.4.0](#)

Project Name: SEAN -000466594-18

Sponsor: Sean McCardel Construction

Project Summary : SEAN -000466594-18

Structure	City, State	Lat/Long	Map	Actions	7460-2 Received	Latest Letter
Aspen Pines Apartment Work In Progress 2018-AGL-8557-OE	Traverse City, MI	44° 44' 12.55" N 85° 36' 15.56" W	<input checked="" type="checkbox"/> Show Map	Clone Upload a PDF Add 7460-2		None

[Mapping - Desk Reference Guide V_2014.4.0](#) [Attaching Documents - Desk Reference Guide V_2014.2.0](#)

[Upload a PDF to the Project](#)

Draft: Cases that have been saved by the user but have not been submitted to the FAA.

Waiting: Wind Turbine/Met Tower cases that have not been submitted to the FAA and are waiting for an action from the user, either to verify the map or attach specific documents

Accepted: Cases that have been submitted to the FAA.

Add Letter: Cases that have been reviewed by the FAA and require additional information from the user.

Work in Progress: Cases that are being evaluated by the FAA.

Interim: Cases that have been reviewed by the FAA and require resolution from the user.

Determined: Cases that have a completed aeronautical study and an FAA determination.

Terminated: Cases that are no longer valid.

Please allow the FAA a minimum of 45 days to complete a study.

Case Transfer:

- Use the check box(es) to select the case(s) you want to transfer.
- Select the "Transfer Cases button" to open the "Manage Transfer Cases" screen.

Note: Drafts and cases in Add and Terminated status can not be transferred.

[Click here to contact the appropriate representative.](#)



Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2014.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	<input type="text" value="44"/> Deg <input type="text" value="44"/> M <input type="text" value="12.55"/> S <input type="button" value="N ▼"/>
Longitude:	<input type="text" value="85"/> Deg <input type="text" value="36"/> M <input type="text" value="15.56"/> S <input type="button" value="W ▼"/>
Horizontal Datum:	<input type="button" value="NAD83 ▼"/>
Site Elevation (SE):	<input type="text" value="629"/> (nearest foot)
Structure Height :	<input type="text" value="28"/> (nearest foot)
Traverseway:	<input type="button" value="No Traverseway ▼"/> <small>(Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway</small>
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes

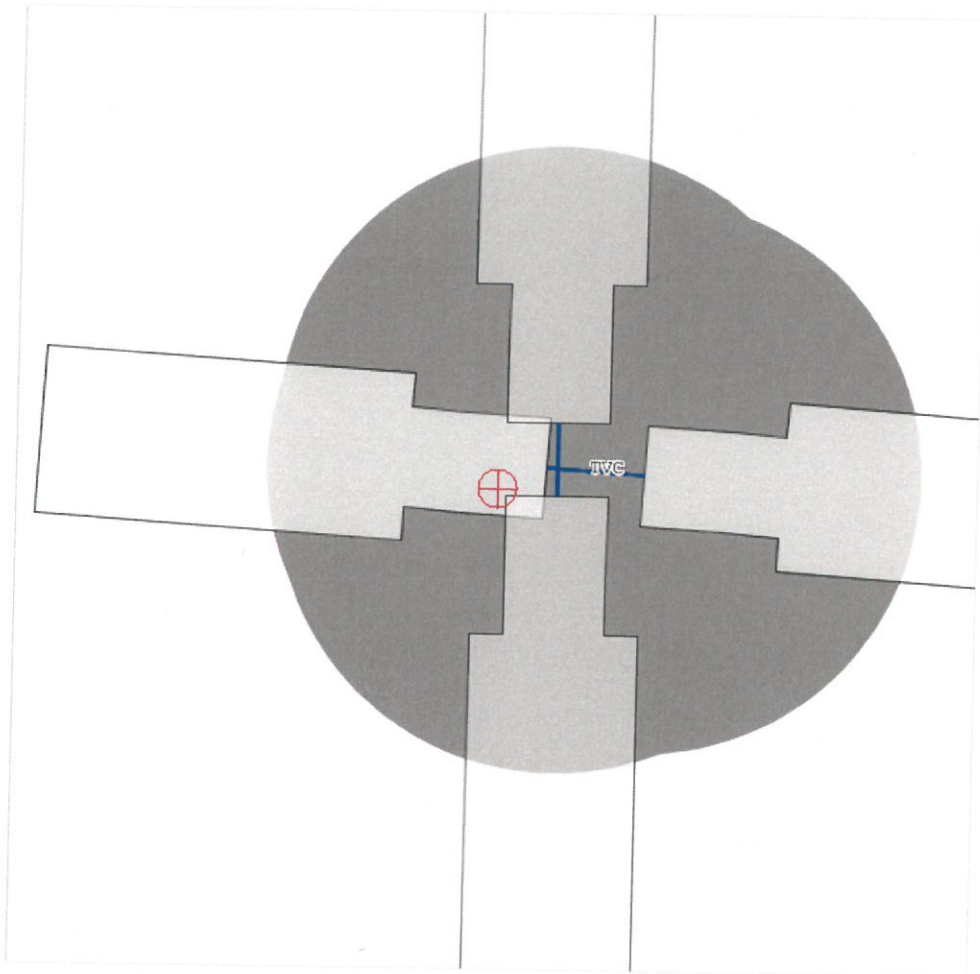
Results

You exceed the following Notice Criteria:

Your proposed structure exceeds an instrument approach area by 34 feet and aeronautical study is needed to determine if it will exceed a standard of subpart C of 14CFR Part 77. The FAA, in accordance with 77.9, requests that you file.

Your proposed structure is in proximity to a navigation facility and may impact the assurance of navigation signal reception. The FAA, in accordance with 77.9, requests that you file.

The FAA requests that you file





GRAND TRAVERSE METRO FIRE DEPARTMENT

FIRE PREVENTION BUREAU

897 Parsons Road ~ Traverse City, MI 49686
Phone: (231) 922-2077 Fax: (231) 922-4918 ~ Website: www.gtfire.org Email: Info@gtfire.org

SITE PLAN REVIEW

ID #P-1199-5907-M6431

DATE: 5/14/18

1. 505.1 Address identification.

New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

- Provide address on the street side of the building according to the above criteria.

Project may proceed with township approval process.



GRAND TRAVERSE METRO FIRE DEPARTMENT

FIRE PREVENTION BUREAU

897 Parsons Road ~ Traverse City, MI 49686
Phone: (231) 922-2077 Fax: (231) 922-4918 ~ Website: www.gtfire.org Email: Info@gtfire.org

SITE PLAN REVIEW RECORD

ID # P-1199-5907-M6431

DATE: 5/14/18

PROJECT NAME: Aspen Pines Apartments

PROJECT ADDRESS: Floresta St.

TOWNSHIP: Garfield

APPLICANT NAME: Petra Kuehnis

APPLICANT COMPANY: Mansfield Land Use Consultants

APPLICANT ADDRESS: 830 Cottageview

APPLICANT CITY: Traverse City STATE: MI ZIP: 49684

APPLICANT PHONE # 946-9310x1003

FAX #

REVIEW FEE: **\$75.00**

Reviewed By: Kathy Fordyce, Plan Reviewer

This review is based solely on the materials submitted for review and does not encompass any outstanding information. Compliance with all applicable code provisions is required and is the responsibility of the permit holder. Items not listed on the review do not negate any requirements of the code nor the compliance with same. Inspection requests must be made a minimum of 48 hours prior to needed inspection. This plan review is based on the 2015 International Fire Code, as adopted.

**GRAND TRAVERSE COUNTY ENVIRONMENTAL HEALTH
SOIL EROSION AND SEDIMENTATION CONTROL
PERMIT DETERMINATION FORM**

PART 91, SOIL EROSION & SEDIMENTATION CONTROL, ACT 451 OF 1994,
AS AMENDED & GTCHD SOIL EROSION SEDIMENTATION CONTROL ORDINANCE

Office Use Only	Receipt # 45640
	Amount \$ 50.00

Land Owner Name (Print) Sean McCordel Construction, Inc.		(Signature)	
Address 338 Water Watch Lane			
City Traverse City	State MI	Zip Code 49686	Phone (231) 933-7111
Email sean.smccordel@gmail.com		Cell Phone (231) 631-7111	

SITE LOCATION INFORMATION:

Section 14	Town 27N	Range 11W	Township Garfield	City/Village Traverse City	County Grand Traverse
Subdivision Wedgewood	Lot No. 26, 27	Tax ID Number 28-05-340-026-10		Street Address Floresta Street	

PROPOSED EARTH CHANGE: Project Type: Residential **Multi-family** Commercial

Describe Project An 8-unit apartment building with detached garages, one driveway and parking area	Size of Earth Change (acres or square feet) 0.70 acres
Name of and Distance to Nearest Lake, Stream, or Drain Boardman Lake - 2100ft west	Date Project to be Completed Summer 2019

-----DEPARTMENT USE ONLY: COMPLETED BY SANITARIAN-----

THE FOLLOWING CRITERIA DO NOT APPLY:

M PA 451, PART 91 REQUIREMENTS

- Within 500' of Lake or Stream
- Acreage (Soil Disturbance of 1 Acre or More)

GTCHD SESC REQUIREMENTS

- Within 500 ft of Regulated Wetlands
- Within 500 ft of County Drain
- Slopes of 20% or Greater
- Group D Hydrologic Soils

COMMENTS:

Rubicon Sand 0-27% Slope
>2000' to Boardman Lake

OFFICE REVIEW FIELD INSPECTION

Based on information provided by the Land Owner, the requirement for a Soil Erosion/Sedimentation Control (SESC) Permit has been reviewed in accordance with Part 91, Act 451 of 1994 and the Grand Traverse County Soil Erosion and Sedimentation Control Ordinance, as amended. Grand Traverse County Health Department, County Enforcing Agency, has determined that a SESC Permit is:

NOT REQUIRED REQUIRED

Reviewed by Erik Carpenter REITS	Print Name Erik Carpenter REITS	Date 6/17/14
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