

ENVIRONMENTAL ASSESSMENT WORKSHEET

Project: Pinnacle

Location: City of Chaska, MN

Prepared February 19, 2020

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Environmental Assessment Worksheet

This Environmental Assessment Worksheet (EAW) form and EAW Guidelines are available at the Environmental Quality Board's website at:

Cumulative potential effects can either be addressed under each applicable EAW Item or can be addresses collectively under EAW Item 19.

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

1. **Project title:** Pinnacle

2. **Proposer:**

Contact person: Paul Heuer
Title: Director of Land Planning and Entitlement
Pulte Homes of Minnesota, LLC ("Pulte")
Address: 7500 Flying Cloud Drive, Suite 670
City, State, ZIP: Eden Prairie, MN 55344
Phone: 952- 229-0722
Fax: N/A
Email: paul.heuer@pultegroup.com

3. **RGU:**

Contact person: Mr. Kevin Ringwald
Title: Planning & Development Director
Address: One City Hall Plaza
City, State, ZIP: Chaska, MN 55318
Phone: 952.448.9200
Fax: N/A
Email: kringwald@chaskamn.com

4. **Reason for EAW Preparation: (check one)**

Required:

- EIS Scoping
 Mandatory EAW

Discretionary:

- Citizen petition
 RGU discretion
 Proposer initiated

If EAW or EIS is mandatory give EQB rule category subpart number(s) and name(s):

EAW, Minnesota Rules 4410.4300, Subp. 19. Residential Development.

5. Project Location:

County: Carver County

City/Township: City of Chaska

PLS Location (1/4, 1/4, Section, Township, Range): SE 1/4, Section 5, T 115, R 23

GPS Coordinates: Latitude 44.795216, Longitude -93.607815

Watershed (81 major watershed scale): Carver County WMO

Tax Parcel Numbers: 300053800

The Project comprises one existing parcel that will be platted and subdivided for the proposed residential development. Legal description for the existing parcel, current location address, and existing land use are included herein. Figures 1 and 2 identify the location of the Project within Carver, and Figure 3 shows the existing conditions of the Project site. **All Figures are found in Appendix A.**

Current address: 1084 Cardinal Street, Chaska, MN 55318

Existing land use: Agricultural

Legal description: P/O SE1/4 SECT 5 DESC AS: BEG AT NW CORN SE1/4 SECT 5 TH S88*E ON N LINE OF SE1/4 1253.47' TO NE CORN NW1/4 OF SE1/4 OF SECT 5 TH S ON E LINE NW1/4 SE1/4 190.17' TH S88*E 650' ON S LINE OF HAMMERS ADDN TH CONT N79*E ON S LINE OF HAMMERS ADDN 101.98' TH SECT 5 TH N89*W ON S LINE OF SE1/4 204.34' TO A PT ON S LINE 257.66' ELY FROM SW CORN SE1/4 SE1/4 TH N3*W 257.97' TH N83*W 147.68' TH N5*W 177.20' TH N72*W 88.47' TO A PT ON E LINE OF SW1/4 SE1/4 473.11' NLY FROM SE CORN OF SW1/4 SE1/4 SECT 5 TH N72*

Attachments:

Four appendices are attached that support the information and analysis contained in the following Items of this EAW.

- Appendix A: Figures
- Appendix B: Agency Correspondence
- Appendix C: Traffic Impact Study (TIS)

6. Project Description:

- a. *Provide the brief project summary to be published in the EQB Monitor, (approximately 50 words).*

The Pinnacle Project (“Project”) is a new neighborhood for active seniors aged 55 and older. The proposed Project is located on approximately 86-acres in the City of Chaska. The neighborhood will be developed with approximately 268 detached single-level homes with a large private amenity center. Homes in the neighborhood will offer one-level living with homeowner association-maintained yards and snow removal, public roads, park land, sidewalks and open space.

- b. *Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion include a description of the existing facility. Emphasize: 1) construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes, 2) modifications to existing equipment or industrial processes, 3) significant demolition, removal or remodeling of existing structures, and 4) timing and duration of construction activities.*

The PulteGroup (“Project Proposer”) is planning a new neighborhood for active seniors ages 55 and older that will be named Pinnacle. The Project is located in the City of Chaska on approximately 86-acres and will create approximately 268 new lots upon which detached homes will be constructed. The new neighborhood will include a network of curvilinear roadways and cul-de-sacs which connect and surround pockets of open spaces including wetlands, ponds, bluffs, park land, open space, and the private recreation center at heart of the development. The arrival drive will be constructed with a parkway design including landscaped medians which connects to Trunk Highway (TH) 41 on the eastern edge of the site.

The neighborhood will be managed by a homeowner’s association and will offer low-to-no maintenance home exteriors and yards to meet the demands of the growing senior population. National and regional market trends have demonstrated that the baby-boomer population is interested in downsizing from their existing homes, they desire reduced housing maintenance, and they are seeking out single-level living. The proposed Project will provide detached single-level homes in an amenity rich neighborhood with social and recreational activities. The Project will benefit from its proximity to Chaska businesses, the downtown district, and community area parks and trails, making it a well-suited location for seniors to be able to live a healthy and dynamic lifestyle.

Existing Site Conditions

The proposed Project is located on one existing parcel in the City of Chaska. The subject parcel is approximately 86-acres and is currently used as homestead and for agricultural production. The existing farmstead is one of the last remaining large agricultural tracts near Chaska’s downtown district, and the site is generally surrounded by existing suburban development that are all served with municipal utilities. The proposed Project will develop approximately 61.9 acres of the site with new homes, lawns, roads and open spaces while preserving the remaining acreage with the existing bluffs on the Southwestern edge of the Site. There is an existing home on the property that is on the City’s historic register, but the structure has been altered over the years and has significant deferred maintenance.

Concept Plan (Appendix A, Figure 4)

The Concept Plan of the proposed Project is attached in Appendix A as Figure 4, which will be reviewed and approved by the City of Chaska consistent with the schedule identified in Table 2. The Concept Plan provides a layout of the lots, curvilinear local roadway network, natural features, recreation center and trail system. The proposed Project includes an arrival drive that will connect to TH 41 on the northeast corner of the site. The recreation center is planned near the center of the neighborhood and is connected to the residential lots by roads, sidewalks and trails. Near the southeastern corner of the site Outlot J is identified which is adjacent to the existing municipal cemetery. Some encroachment has been identified near this border, and land will be deeded from the Project Proposer to the City so that all burials are located within the extents of the cemetery parcel borders. The Project Proposer will follow the City of Chaska’s development review process for a Planned Residential Development (PRD) that includes formal Concept Plan Review.

As illustrated on the Concept Plan, there are three different lot sizes that will hold a variety of detached homes. A brief description of each housing style and corresponding lot sizes are provided in the following table.

Table 1: Pinnacle Lot Tabulation and Description

Lot Width	Number of Lots (Units)	Description
44-Foot Lots	123	The homes planned for these lots will be 34-feet wide and range in size from 1,300 to 1,700 square feet. The homes typically have two bedrooms and a two-car garage. All homes will be slab on grade (no basements).
50-Foot Lots	89	The homes planned for these lots will be 40-feet wide and range in size from 1,680 to 1,960 square feet (excluding basements). The homes typically have two bedrooms and a two-car garage. This versatile product line also offers many options such as a third bedroom, a bonus room, and/or a finished basement.

60-Foot Lots	56	The homes planned for these lots will be the same product line as for the 50-foot wide lots. However, all of homes on 60-foot wide lots will have basements and three-car garages. These lots are typically in the premium locations with the most attractive views.
TOTAL Units	268	

Infrastructure and Site Improvements

The site will be mass graded to prepare for construction. Existing wooded bluffs on the southwestern edge of the site will be preserved. Site development work will include grading, sanitary sewer, water, storm water, roads, electric, gas, phone and cable. The subject property is in a fully developed area of the City and municipal water and sewer are available to the site.

In conjunction with utility installation the new roads will be graded and constructed. Any off-site improvements, including any improvements to local road connections or access to TH 41 will be completed as recommended in the attached Traffic Impact Study (“TIS”) provided in Appendix C or as agreed with MnDOT. Currently, the available access points for the property are Moers Drive to the northwest, Liberty Heights Drive to the north, and Cardinal Street to the northeast.

The Project Proposer plans to create a main entrance/arrival drive into the Project from TH 41 to welcome residents with a landscaped Parkway, entrance monument and entry green. This additional access will relieve area traffic congestion. The access is complex given that Crown of Glory Lutheran Church (the “Church”) owns the property between the subject site and TH 41. However, after much discussion between the City, the Church, and the Project Proposer, a solution was agreed upon which benefits all parties while providing safe public access to each affected site.

Additional engineering and review will be required as part of the land use development process. A permit from MnDOT will be required since the proposed access location is on Minnesota TH 41.

Further details regarding the construction plans can be found in the Development Plan Set in Appendix D.

Construction and Timing of Site Development Activities

The Project will be a phased development and installation of utilities and roadways will be completed concurrently with each phase. Site grading, utility installation and roads are anticipated to be sequenced roughly from east to west. Phase I will include the development of the main access from TH 41. The remaining roads will be phased appropriately from east to west and will be constructed consistent with the recommendations of the City and/or Traffic Impact Study (TIS) provided in Appendix C.

Upon completion of Phase I site development work, the model homes, entry monuments, entry landscaping and Recreation Center will be constructed.

The estimated development schedule for the residential development is shown in the below table.

Table 2: Estimated Project Schedule Summary

Schedule	Activity
Winter 2020	Preliminary Plat Review
Winter/Spring 2020	Final Plat Phase I
Summer/Fall 2020	Site development work Phase I
2021	Phase II Development
2022	Phase III Development
2023	Phase IV Development (if necessary)

c. *Project magnitude:*

Table 4: Project Magnitude

Total Project Acreage	~86 acres
Linear project length	N/A
Number and type of residential units	268 residential units
Commercial building area (in square feet)	N/A
Industrial building area (in square feet)	N/A
Institutional building area (in square feet)	N/A
Other uses – specify (in square feet)	N/A
Structure height(s)	Detached single-level homes will be approximately 25-feet in height. The height of the recreation center is to be determined.

d. *Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.*

The location of the proposed Project has been identified by the City as a desirable location for residential infill development. This Project serves as an opportunity to develop housing stock not currently met by the market in Chaska for active adults. The proposed Project will therefore be an age-restricted owner-occupied residential neighborhood for residents aged 55 years and older. The proposed Project is designed with attention to surrounding land uses and organized around open space and trail planning in the City’s 2040 Comprehensive Plan. Neighborhood sidewalks, trails, landscape, park space and other amenities will establish a walkable and attractive development that promotes social connection and a healthy lifestyle.

e. *Are future stages of this development including development on any other property planned or likely to happen?* Yes No

If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

- f. *Is this project a subsequent stage of an earlier project?* Yes No

If yes, briefly describe the past development, timeline and any past environmental review.

N/A

7. Cover types:

Estimate the acreage of the site with each of the following cover types before and after development:

Table 5: Cover Type

	Before acres	After acres		Before acres	After acres
Wetlands	0.46	0	Lawn/landscaping	.5	41.69
Deep water/streams	0	0	Impervious surface	1.3	17
Wooded/forest	5.66	4.78	Stormwater Pond	0	14.5
Brush/Grassland	0	0	Other (describe): Cemetery Parcel	0	0.4
Cropland	78	0	Other (describe): Potential Park Expansion	0	0.6
			TOTAL	86	86

8. Permits and approvals required:

List all known local, state and federal permits, approvals, certifications and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.

Table 6: Required Permits and Status [City to review and update as needed]

<u>Units of Government</u>	<u>Type of application</u>	<u>Status</u>
State		
Minnesota Pollution Control Agency (MPCA)	National Pollutant Discharge Elimination System (NPDES) Stormwater Construction Permit	To be applied for

<u>Units of Government</u>	<u>Type of application</u>	<u>Status</u>
	Demolition	To be applied for
Minnesota Department of Health (MDH)	Watermain plan review	To be submitted
	Water Supply Connection	To be applied for
Minnesota Department of Transportation (MnDOT)	Access Permit	To be applied for
Regional		
Metropolitan Council	Sanitary Sewer Connection	To be applied for
Local		
Carver County	Pre-Demolition Permit	To be applied for
City of Chaska	Rezoning to PRD	To be applied for
	Preliminary Planned Residential Development (PRD)	To be applied for
	Final Planned Residential Development	To be applied for
	Preliminary Plat	To be applied for
	Final Plat	To be applied for
	SWPPP	To be applied for
	Demolition Permit	To be applied for
	Building Permits	To be applied for
	Sign Permit	To be applied for
	HVAC, Plumbing, Electrical Permits	To be applied for
	Fire sprinkler and alarm permits	To be applied for
	Historic Site Alteration Permit	- Complete
Carver County Watershed Management Organization	Stormwater permit	To be applied for

Cumulative potential effects may be considered and addressed in response to individual EAW Item Nos. 9-18, or the RGU can address all cumulative potential effects in response to EAW Item No. 19. If addressing cumulative effect under individual items, make sure to include information requested in EAW Item No. 19

9. Land use:

a. Describe:

- i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, prime or unique farmlands.

The Project site is currently in agricultural use with the majority of it cultivated for crops. A small historic farmstead sits at the east side of the site adjacent to Cardinal Street. The site is bordered on the west by bluff land perched above West Chaska Creek which drains to the Minnesota River. To the south is Veterans Park and Firemen’s Park. To the east of the site is Cardinal Street, the Church, and TH 41. To the north is suburban low-density residential neighborhoods. Figure 6 in Appendix A shows the existing land use of the proposed Project area.

- ii. Plans. Describe planned land use as identified in comprehensive plan (if available) and any other applicable plan for land use, water, or resources management by a local, regional, state, or federal agency.

Comprehensive Plan

The City of Chaska is in the final steps of having its Draft 2040 Comprehensive Plan adopted. As required by the Metropolitan Land Planning Act, Cities are required to update their plans on a decennial basis. The 2040 Plan will update the City’s previously adopted Plan to reflect the its goals and objectives with respect to land use and development over the next 20-year planning period. Final adoption of the 2040 Plan is expected to occur prior to any entitlements or Project approvals granted on the site.

The City’s Draft 2040 Comprehensive Plan Future Land Use Map (Figure 6) designates the Project parcel as Low-Density Residential use, which is consistent with the proposed Project. The definition of this land use designation includes residential development with a density between two and five units/acre. The proposed project has an estimated gross density of 3.1 units per acre, and a net density of 4.3 units per acre. The Comprehensive Plan further states that pedestrian amenities and connections along with pedestrian-scale design should encourage walkability of the neighborhood and connection to the broader community, which is accomplished as demonstrated in the attached Concept Plan (Figure 4).

In addition to Land Use, the City emphasizes the importance of incorporating open space and park areas into new development as well as capitalizing on opportunities to create a

connected trail/sidewalk system. The proposed Project incorporates these elements and has planned to incorporate trail connections that are interconnected with the City's trail system.

- iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

The Project Site parcel is currently zoned O for Open Development. (See Figure 7 in Appendix A.) According to Chaska's Zoning Ordinance, "The intent of this District is to provide a "holding zone" for land which is currently served by trunk sanitary sewer facilities, but which has not yet been developed for urban use." As new development is proposed for these areas, "...the "O" District will be rezoned to the appropriate zoning district. The basic guideline for evaluating each rezoning proposal shall be the Chaska Comprehensive Plan. Other determinants may include existing development, proximity to principal roadways, natural features, market conditions, and resident's opinion."

The Project site will be rezoned to accommodate the new development. As the proposed Project aligns with the 2040 Future Land Use Plan, rezoning will be consistent with the City's adopted policy plan. Since the Project is a master planned development, the proposed Project will require further approvals related to Planned Residential Development (PRD) and other entitlements for the 86-acre parcel.

The Project site is not located within a FEMA designated floodplain or included within the City's Floodplain Overlay District.

- b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

The Project Concept Plan (Figure 4) illustrates how the development is designed to incorporate neighborhood social and recreation amenities as well as link to public community trails and parks. The proposed development is a logical extension of the existing low-density residential development pattern to the north and is compatible with the parks and lakes that are adjacent to the south. The Project is near downtown Chaska where future residents of the neighborhood are anticipated to patronize local area businesses.

The site design is further enhanced by the relationship to nearby parks and trails and by proposed access directly to TH 41. Attention to neighborhood sidewalks, street trees, and landscape design will provide comfort, safety, and a scenic quality for the development. This approach will establish an attractive and active setting encouraging residents to walk or cycle to nearby conveniences, park space, and other destinations.

As identified on the Concept Plan, there is an existing cemetery, the Mount Pleasant Cemetery, southeast of the Project site. The Cemetery was formerly established in 1863 and the earliest known burials there date to 1858. The City of Chaska has managed the cemetery since 1974. It is commonly rumored at early cemeteries that private burial graves were placed beyond their designated boundaries, with no formal records. Due to the possibility of such burials, the City

investigated the periphery of the cemetery property using ground-penetrating radar technology. No proposed development will disturb or impact the cemetery or plotted burials. To ensure existing burials are protected, the Project Proposers will dedicate any land found to possibly contain graves adjacent to the cemetery to the City for proper preservation and protection into perpetuity.

- c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

As discussed in Item 9b, there are no incompatible land uses that require mitigation. Investigations were completed using ground-penetrating radar to survey for potential burials outside the Cemetery. That investigation did not reveal clear graves; however, multiple locations along the northern boundary gave ambiguous results. This portion of the current Project parcel and adjacent to the Mount Pleasant Cemetery will be deeded to the City to mitigate for any potential burial locations that may exist beyond the current cemetery parcel boundary. The land deeded to the City will be incorporated into all development approval processes.

10. **Geology, soils and topography/land forms:**

- a. *Geology - Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.*

According to the Minnesota Geologic Atlas, general geologic conditions of the site are consistent with geologic conditions in Carver County, which is “an undulating till plain with numerous lakes and marshy areas (Meyer, 2007; Lusardi, 2009).” The site borders the Minnesota River valley floodplain and rises approximately 800 feet above in surface elevation. Depth to bedrock is affected by both surface topography and several buried pre-glacial valleys; bedrock is estimated to be at a depth of 300-350 feet below ground level at the Project location.

The Project location is not in area where a shallow aquifer is present; therefore, it is assumed that groundwater will not to be encountered during Project construction.

The Project site has no known issues with sinkholes and Karst Geologic Formations or shallow limestone formations. The subsurface geologic conditions below the site pose no known limitations or challenges to the proposed Project.

- b. *Soils and topography - Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability or other soils limitations, such as steep slopes, highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational*

activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

Table 8 identifies soils found at the Project site, as determined by the NRCS web soil survey and derived from the Carver County Soil Survey (See Figure 8 in Appendix A). The site is relatively flat, with some areas of slope and topography as demonstrated in the soil descriptions found in the following table. Generally, soils are mostly Lester-Kilkenny loam with clay and moderately well-drained.

Table 8: NRCS Soil Classifications; Pinnacle Project Parcels

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AE	Hawick loamy sand, 20 to 40 percent slopes	0.2	0.2%
HM	Hamel loam, 0 to 2 percent slopes	6.6	7.6%
KB	Kilkenny-Lester loams, 2 to 6 percent slopes	3.3	3.7%
KB2	Lester-Kilkenny loams, 2 to 6 percent slopes, eroded	31.6	35.9%
KC	Lester-Kilkenny loams, 6 to 12 percent slopes	12.7	14.4%
KC2	Lester-Kilkenny complex, 6 to 10 percent slopes, moderately eroded	21.2	24.1%
KD2	Lester-Kilkenny complex, 10 to 16 percent slopes, moderately eroded	4.2	4.8%
KE2	Lester-Kilkenny complex, 16 to 22 percent slopes	1.5	1.7%
KF	Lester-Kilkenny complex, 22 to 40 percent slopes	6.6	7.5%
MN	Minneiska loam	0.1	0.1%
Totals for Area of Interest		88.0	100.0%

The topography adjacent to and around the western perimeter of the Project site includes areas of steep slopes and bluff lands that are depicted with a heavy red buffer line on the Concept Plan. In some locations in the City, areas of bluff land and steep slopes have experienced slope failure and erosion. It appears that overland drainage from the top of the slopes is a major determining factor in estimating future issues. To mitigate potential future issues, the Proposed Project reduces the drainage areas to the west by approximately 6.55 acres which is equivalent to a 39% reduction of the drainage area. To demonstrate the flow direction and the drainage area west of the bluff

Figures 9 and 10 are provided. The Figures show the existing drainage areas given existing conditions to the west, and the proposed drainage conditions post-construction. In addition to reducing the drainage area, the bluff land will be further protected through land dedication by the Project Proposer and through implementation of the City's bluff land ordinance. A portion of the bluff ridge is further protected in open space which surrounds the Proposed Project's Recreation Center, further reducing the potential impact from the development. The Project Proposer will be required to include provisions within the homeowners' documents that the bluff-ridge setbacks/buffer areas shall be maintained, and no improvements shall be permitted to encroach within the setback area.

Site work including excavation and/or grading will be necessary to construct the new residential neighborhood, amenity building, roads and access, and stormwater management features. Engineering has not been completed. Therefore, earthwork balance is unknown at this stage. During the site work, Best Management Practices (BMPs) will be used as specified within the Stormwater Pollution Prevention Plan (SWPPP) that will be developed for the site as a required condition of the NPDES permit. At this time, it is unknown how much soil correction will be required as part of the construction process, but the site is anticipated to balance through the grading process.

NOTE: For silica sand projects, the EAW must include a hydrogeologic investigation assessing the potential groundwater and surface water effects and geologic conditions that could create an increased risk of potentially significant effects on groundwater and surface water. Descriptions of water resources and potential effects from the project in EAW Item 11 must be consistent with the geology, soils and topography/land forms and potential effects described in EAW Item 10.

11. Water resources:

- a. Describe surface water and groundwater features on or near the site in a.i. and a.ii. below.
 - i. Surface water - lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within 1 mile of the Project. Include DNR Public Waters Inventory number(s), if any.

The MnDNR NWI Wetland Index identifies one Freshwater Emergent Wetland in the northeast corner of the Project site approximately 0.2 acres in size. Two additional wetlands and one stormwater pond were identified onsite through an independent wetland delineation process conducted by the Project Proposer. See Figure 12 in Appendix A for the locations of these wetlands and ponds.

There are no other public waterbodies or streams that are identified on the DNR's Public Waters Inventory (PWI) within boundaries of the Project site. Within one (1) mile of the

Project site there are 3 Public Waterbodies on the public waters inventory map. The associated PWI numbers and names (if applicable) are provided in the table below:

Table 9: PWI in Proximity to Project

Public Water Name	Type	PWI Number(s)	Water Quality Impairments
Fireman’s Lake	Surface Water Body	10-226 P	
Brickyard Clayhole	Surface Water Body	10-225 W	
Chaska Creek	Watercourse		Impaired

Of the three waterbodies listed, only Chaska Creek is listed in the MPCA 303d Impaired list. As described in subsection iii (b) of this item, the Project will be required to prepare a SWPPP. The SWPPP must include all additional stormwater Best Management Practices (BMPs) for discharges to impaired waters since the runoff from the Project site drains to Fireman’s and Brickyard Lakes. To ensure protection of the receiving waters and to meet the City’s ordinance requirements, the stormwater management plan will be developed to meet standards for rate control, water quantity, and water quality.

- ii. Groundwater – aquifers, springs, seeps. Include: 1) depth to groundwater; 2) if project is within a MDH wellhead protection area; 3) identification of any onsite and/or nearby wells, including unique numbers and well logs if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

The City of Chaska sources its water primarily from the Jordan aquifer via high-capacity wells. According to the City’s Local Water Supply Plan, the Project site is partially located within St. Lawrence bedrock geology and partially in the Tunnel City – Wonewoc bedrock geology. A Geotech study conducted in August 2019 measured depth to groundwater on the site to range between 4.5 feet and 13.75 feet from the surface. The report also determined the soil profile to be conducive for encountering perched water conditions and to anticipate seasonal and annual fluctuations of groundwater when planning for development construction. This indicates that groundwater may impact construction excavations. If water is encountered and pooling occurs during construction, it is recommended that sump pumps be utilized to dewater the construction area. Any required permits will be acquired by the Project Proposer if dewatering is needed.

There are no known active wells located on the Project site as indicated by the Minnesota Well Index managed by the Minnesota Department of Health (MDH). There are two sealed wells located on site that will not be disturbed as part of site development activities. The site is currently served by the municipal water supply.

The site is not in a Wellhead Protection Area (WHPA). There are no known wells located on the Project site; it is currently served by the municipal water supply

b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects in Item b.i. through Item b.iv. below.

- i. Wastewater - For each of the following, describe the sources, quantities and composition of all sanitary, municipal/domestic and industrial wastewater produced or treated at the site.
 - 1) If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.

The proposed Project will be connected to the regional sanitary sewer system. While additional on-site and adjacent sanitary sewer infrastructure improvements may be necessary to support the proposed Project, the overall trunk and interceptor system is expected to be adequate to serve the proposed Project. The section addressing sanitary sewer in the City’s 2040 Comprehensive Sewer Plan planned for additional development intensity on the site consistent with the City’s future land use plan. The Project Proposer will be required to provide adequate on-site infrastructure and connections to the system to serve the proposed Project. The following table provides estimated flows based on the proposed Project.

The estimated increase in wastewater flow was calculated utilizing the Sewer Availability Charge Procedure Manual 2017, Metropolitan Council Environmental Services. The following table provides estimated flows based upon the Concept Site Plan attached in Figure 4.

Table 10: Estimated Sanitary Sewer Flow Rates (SAC)

Use	Units	Rate (Gallons per Day)	SAC Units	Total Gallons per Day (gpd)
Detached Residential (55+)	268 Units	274	1 SAC per Unit	73,432
Total Maximum				76,432 GPD

The estimated generated wastewater flow is anticipated to fall within the range for which the City planned based upon the land use designations. The wastewater will not be pretreated prior to entering the system and will be conveyed by a gravity sanitary sewer system to the Metropolitan Council’s Interceptor trunk line where it will eventually be discharged to the Blue Lake WWTP in Shakopee. The wastewater flows from the development of the proposed Project have been accounted for in the Metropolitan Council’s trunk sewer and treatment plant capacities.

- 2) If the wastewater discharge is to a subsurface sewage treatment systems (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.

There are no SSTS proposed as a result of the Project.

- 3) If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent limitations to mitigate impacts. Discuss any effects to surface or groundwater from wastewater discharges.

The proposed Project will not discharge wastewater to a surface water body.

- ii. Stormwater - Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater discharges. Describe stormwater pollution prevention plans including temporary and permanent runoff controls and potential BMP site locations to manage or treat stormwater runoff. Identify specific erosion control, sedimentation control or stabilization measures to address soil limitations during and after project construction.

The existing condition of the Project site is predominantly agricultural land use. There are three small wetlands and one stormwater pond located on the Project site, as shown on the wetland delineation (See Figure 12). Existing surface water runoff generated onsite during storm events generally infiltrates onsite into natural drainageways. The Project site is located within the boundaries of the Carver County Watershed Management Organization (CCWMO). The Project site is adjacent to the boundary of the Lower Minnesota River Watershed District (LMRWD) where stormwater runoff eventually flows to the Minnesota River.

The Project's post-development condition will be required to fulfill the regulations of the CCWMO as well as City requirements. At a minimum, the developed condition of the Project will be required to manage and control rates of stormwater runoff, provide water quality treatment and stormwater volume storage within the Project site consistent with CCWMO rules. As noted in Item 10.b., the City has experienced areas of slope failure and erosion on steep slopes within the City. The Proposed Project will improve the existing condition by reducing the drainage area to the west by approximately 6.55 acres (Figures 9 and 10). The stormwater generated onsite due to increased impervious surfaces associated with residential homes, amenity buildings, and parkland, will be managed through the stormwater basins constructed as part of the development that are designed and located to minimize potential impact to adjacent sensitive slope areas (see Figure 4). The stormwater system will be designed to manage at least the minimum standards as required through the CCWMO permitting process.

A SWPPP must be prepared as part of the NPDES Construction Permit required for the Project. The SWPPP must include all stormwater Best Management Practices (BMPs) and requirements that ensure protection of the receiving water and meet the City's ordinance requirements. The stormwater management plan will be developed to meet

standards for rate control, quantity and quality. During the construction, BMPs must be utilized and will include, but not be limited to: bio-rolls as sediment control along swales, silt fence as down gradient perimeter control, rock entrance and berm to prevent off-site vehicle sediment tracking, inlet protection devices to prevent sediment from entering the storm sewer system, wood-fiber blanket to prevent erosion along slopes, proper restoration in accordance with MPCA regulations, and a seed mix as directed by the City. A complete list of BMPs will be described in the SWPPP.

- iii. Water appropriation - Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation.

The proposed Project will require the extension of municipal water to provide connections to the new residential homes and recreation center as identified in the Concept Plan (Figure 4) submitted by the Project Proposers. Water supply will be provided by municipal connection to the existing municipal system.

Each residential unit will be served by an individual water supply connection. The City will verify proper water main sizes to ensure adequate system pressures and available fire flows under varying system demands.

The Draft 2040 Comprehensive Plan includes a Water Supply Plan that determined future water demand based on typical total per capita water use which was estimated at 130 gallons/capita/day (GPCD). Since part the Project will be age-restricted, it is assumed that the average household size will be 2.0 persons per household. The following demand based on the Project is provided:

Table 11: Estimated Water Supply – GPD

Use	Units/Square Footage	Rate (gal/capita/day)	Persons-per-household (SAC equivalent)	GPD (Gallons Per Day)
Detached Residential (55+)	268 Units	130	2.0	69,680
Total Maximum				69,680 GPD

The Project Proposer is considering reuse of storm pond water for a separate joint irrigation system. Such systems are environmentally more sustainable reducing reliance on ground water for irrigation use and promoting localized ground water recharge.

iv. Surface Waters

- a) Wetlands - Describe any anticipated physical effects or alterations to wetland features such as draining, filling, permanent inundation, dredging and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed and identify those probable locations.

Nearly the entire site is dry with no natural public waterbodies located on the Project site. Natural drainageways and low points existing on the site will provide areas for future stormwater management and infiltration. As previously discussed in Item 10.a.i and 10.a.ii., three wetlands were delineated on the property. Due to their locations and difficulty in keeping them hydrated post development, all three wetlands totaling approximately 0.46-acres, will be filled. The Project Proposer will follow proper mitigation and replacement rules, if applicable.

- b) Other surface waters- Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.

There are no known lakes, rivers, streams, intermittent channels, or county/judicial ditches located on the Project site. The site is not in a FEMA flood hazard zone.

12. Contamination/Hazardous Materials/Wastes:

- a. Pre-project site conditions - Describe existing contamination or potential environmental hazards on or in close proximity to the project site such as soil or groundwater contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

A query of the Minnesota Pollution Control Agency’s (MPCA) “What in my Neighborhood” data search identified no known existing contamination or potential environmental hazards on or near the Project site. See Figure 11 in Appendix A. A Phase I Environmental Site Assessment was recently completed. The Phase I identified three Recognized Environmental Conditions (REC) as follows:

- Two above ground fuel storage tanks;
- One floor drain in the shop; and
- A discarded storage tank was observed in a wooded area.

These are RECs that are commonly identified on old farmsteads and the items will be removed from the site for the development of the proposed Project. No further mitigation is required.

- b. Project related generation/storage of solid wastes - Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

The proposed Project is a residential development and will primarily generate municipal solid waste and household hazardous waste.

The Seven-County Waste Coordinating Board estimates municipal solid waste generation of approximately 1.8 pounds per person per day. The following analysis provides a calculation based on the number of units shown on the Concept Site Plan.

Table 12: Estimated Municipal Waste

Land Use	Concept Site Plan	Rate (lbs/per capita/day)	Persons Per Household	Concept Site Plan Total (lbs./day)
Detached Residential (55+)	268 Units	1.8	2.0	804
TOTAL	268 Units			804

The homeowners’ association for the residential neighborhood will contract collectively for solid waste management and will be required to participate in recycling services. The proposed Project is consistent with existing neighborhoods and services and will not negatively impact or alter the current system.

- c. Project related use/storage of hazardous materials - Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spill or release of hazardous materials. Identify measures to avoid, minimize or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

As identified within the description, development of the proposed Project and related site work will be required to adhere to all City, NPDES, and other regulatory permits necessary to complete the work. Storage of hazardous materials on the site during construction will be limited to construction vehicles and machinery which may be left onsite through the duration of construction depending on phasing and activity, as well as temporary storage tanks, such as for diesel fuel or hydraulic fluids. Construction vehicles, as well as associated storage of their fuels, will be required to follow a spill prevention plan, if required. All demolition shall follow proper protocol for storage and disposal of waste as regulated by the MPCA, if applicable, the City, or any other agency.

- d. Project related generation/storage of hazardous wastes - Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of hazardous waste including source reduction and recycling.

The Project development process should not create or generate any hazardous waste. During the construction process, as identified in Item 8, compliance with the NPDES permit and the City's ordinances will be required. The developer will follow proper processes and standards for disposal of any toxic or hazardous materials, such as gas, oil, etc., present on the construction site. Once residents are living on the property, generation of household hazardous waste may occur. Carver County provides recycling and disposal of hazardous wastes convenient to Chaska residents.

13. Fish, wildlife, plant communities, and sensitive ecological resources (rare features):

- a. Describe fish and wildlife resources as well as habitats and vegetation on or in near the site.

The existing land use of the Project site is agricultural use and surrounding property is predominantly suburban development. The site is relatively flat sitting above stream corridors below to the south and west where topography and natural landscape provide a buffer between the streambed below and cropland above. The land is primarily cleared of large vegetation and currently in cultivated cropland. There are no permanent waterbodies such as lakes or streams on the Project site.

- b. Describe rare features such as state-listed (endangered, threatened or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (LA-____) and/or correspondence number (ERDB #20200074) from which the data were obtained and attach the Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe the results.

Correspondence from the MnDNR Natural Heritage Review Service notes the proposed Project site is located approximately two miles from a calcareous fen (Seminary Fen ID #20977). This fen is documented to contain several state-listed threatened plants that may be affected by changes to groundwater hydrology and quality. The proposed Project does not pose a threat to groundwater quality or change drainage patterns that would affect the hydrology of the Seminary Fen. Stormwater ponds on the property will capture runoff from the residential development and allow treatment and infiltration at the site. Additional protection will be achieved through the protection of the bluffs on the southwestern edge of the development site.

- c. Discuss how the identified fish, wildlife, plant communities, rare features and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

The Project will disturb approximately 75-acres of the site and include grading, grubbing, and some tree clearing. Post construction, the Project will include a landscape and planting plan to revegetate the site with native/non-invasive species where possible. Care will be taken to select plant species that are appropriate to the area, including approved seed mixes hardy to the conditions and climate.

The Project will not introduce any invasive species to the site during construction. Construction contractors will be directed to properly manage onsite equipment to ensure development does not spread noxious weeds through construction vehicle traffic. If any invasive species are encountered during the grading/site grubbing process, they will be removed, and proper mitigation implemented to eliminate them from the site.

- d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

A query using the Minnesota Natural Heritage Information System (NHIS) did not identify any wildlife, plant communities, or sensitive ecological resources on the proposed Project site. As discussed in Item 13.b., a calcareous fen is located approximately two miles from the site. The proposed Project is not expected to negatively impact this fen due to the distance and physical separation of the two locations. Hydrologic patterns and groundwater quality will not be impacted by the proposed Project.

14. Historic properties:

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include: 1) historic designations, 2) known artifact areas, and 3) architectural features. Attach letter received from the State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

As provided in the attached correspondence dated May 10, 2019 from the Minnesota State Historical Preservation Office (SHPO), there are several historic properties and one (1) archeological artifact noted to be in the vicinity (within one mile) of the project site. (See Appendix B.) According to the listed coordinates within the correspondence from SHPO, it is determined that the location of the archaeological artifact is outside of the project site boundaries and is near County Road 10 and will not be impacted by the construction of the proposed Project.

The City of Chaska is known for having a high quantity of historic structures in the area, and it is therefore not surprising to see a list of historic structures in the vicinity of the project area contained in the initial data search with SHPO.

Nearly all of the historic resources listed will not be impacted by the proposed Project. However, the Hammers Farmhouse/Saloon is a listed historic resource on the property of the proposed Project, and it will be directly impacted by the proposed development. This historic resource is planned to be preserved and sold to a new property owner. Opportunities to preserve and/or restore the buildings will be investigated by the new owner. A City permit to alter the site has been obtained by the Project Proposer.

15. Visual:

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

There are no identified scenic views or vistas on or near the Project site. However, there are existing residential neighborhoods near the Project property that may be impacted by light pollution and construction activities. Site construction is anticipated to occur during daylight hours, and therefore

there is no anticipated glare or intense light that will be generated during the site construction process. Post construction, the site will be developed with uses compatible to surrounding suburban development. All proposed lighting will be required to follow City regulations for light fixture intensity and design. Visual impacts upon completion of the proposed Project to the existing residential neighborhood to the north and to the Church property to the east is therefore not expected to be significant. The type of development proposed will be single-level residences and recreation center for the residential community. Setbacks and landscaping will soften impacts to adjacent properties.

16. Air:

- a. Stationary source emissions - Describe the type, sources, quantities and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health or applicable regulatory criteria. Include a discussion of any methods used assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

There are no industrial or light industrial users or generators of hazardous air pollutants proposed as part of this Project.

- b. Vehicle emissions - Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g. traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.

The proposed Project is comprised of low-density residential development and will generate an increase in carbon monoxide levels associated with a typical increase in passenger vehicle trips. The proposed Project does not require an indirect source permit. No baseline air quality monitoring or modeling is proposed and no measures to mitigate for the increase in vehicle related emissions are being considered.

- c. Dust and odors - Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

Limited dust and odors consistent with the development of a residential project will be generated during the construction process on the site. The contractors will be required to control dust by using watering trucks or other methods as agreed to with the City to protect adjacent neighborhoods. The adjacent residential neighborhoods are the nearest receptors of the dust and odors, which should be monitored throughout the construction process by the City and Project Proposer.

17. Noise

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area, 2) nearby sensitive receptors, 3) conformance to state noise standards, and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

During construction of the Project there will be additional noise generated beyond existing conditions. The existing area is primarily developed with residential, commercial, and industrial uses that generate typical noise levels associated with these land uses. The nearest noise receptors to the Project site are residential homes to the north and southeast, and church located to the east. Site work and grading will produce the most noticeable increase in noise generated and grading may occur through the duration of the project on a phase-by-phase basis. Noise typical of heavy equipment operation would also occur during site development. However, construction noise will be required to comply with Chaska City Code Chapter 15 Section 52 which restricts construction noise to 7:00 am to 9:00 pm Monday through Friday and 8:00 am and 9:00 pm on weekends and holidays. Construction noise impacts may have a temporary nuisance effect on neighboring residents. Upon completion of development, noise levels are anticipated to be consistent with residential noise levels. Mitigation of the short-term impacts can be managed through proper coordination and construction planning.

Post construction, the site will be used for low-density residential use and is not anticipated to generate noise that exceeds the MPCA's noise standards for residential areas.

18. Transportation

- a. Describe traffic-related aspects of project construction and operation. Include: 1) existing and proposed additional parking spaces, 2) estimated total average daily traffic generated, 3) estimated maximum peak hour traffic generated and time of occurrence, 4) indicate source of trip generation rates used in the estimates, and 5) availability of transit and/or other alternative transportation modes.

The Project site will generate traffic during site development and construction of the homes. Construction traffic would primarily use TH 41, Victoria Drive and Cardinal Street as the main access points into and out of the site during construction.

The proposed Project includes a series of internal streets that will be developed to accommodate residential access into and out of the development. Victoria Drive will remain the primary collector access for residential development traffic. Direct access onto southbound TH 41 (in either the form of Right-In/Right-Out Only Access, or Right-In Only Access) is undetermined at this stage. TH 41 will carry site traffic to and from US 212 via its interchange.

Other streets that will see traffic to and from the site include Meadow Lane, Bavaria Road, Moers Drive, and Liberty Heights Drive.

1) *Existing and Proposed Additional Parking Spaces:*

Existing parking spaces: **0 spaces**

Proposed parking spaces: Approx. 1.5 off-street parking spaces per Active Adult residential unit (assuming some have 1, some have 2)
Therefore, proposed parking stalls = 275 x 2 = **550 spaces**

2) *Estimated Total Average Daily Traffic Generated:*

1,370 trips per day (assuming approximately 275 units of Senior Adult Housing – Detached land use)

3) *Estimated Maximum Peak Hour Traffic Generated:*

108 trips/hour during midday peak hour 12:00 noon. – 1:00 p.m.)

4) *Source of trip generation rates:*

ITE Trip Generation Manual, Tenth Edition (2017)

5) *Availability of Transit and/or other Alternative Transportation Modes:*

The only transit routes nearby are along the north and east legs of the intersection at TH 41 & Victoria Drive (Crosstown Blvd); according to the City of Chaska Parks & Trails Map, there are bike routes along both sides of TH 41 and along Victoria Drive.

- b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project’s impact on the regional transportation system. *If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW.* Use the format and procedures described in the Minnesota Department of Transportation’s Access Management Manual, Chapter 5 (available at: <http://www.dot.state.mn.us/accessmanagement/resources.html>) or a similar local guidance.

Trips generated by an active adult community will have a less intense impact on nearby intersections during peak hours, especially at TH 41 and Victoria Drive, when compared to a non-age restricted single-family residential development. Workday commuting is less prevalent in the active adult community than the traditional single-family residential development. The active adult community will choose to travel during middays rather than during the peak periods, thus lessening the peak hour demand at adjacent intersections. The Project site as proposed will not generate traffic that cannot be handled by the existing or proposed street system, as tested for the 2024 Build conditions. Further, the limited trip generation of the site will not place an adverse increase of traffic along TH 41.

A complete traffic analysis of existing and future volumes is included in Appendix C of this document.

- c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

The traffic impact study (TIS) associated with this development models traffic to and from the site in year 2024 Build conditions. Traffic is distributed to and from the site via street access intersections that work to comply with MnDOT access guidelines and sight distance requirements. Alignments of streets and collectors have been recommended that promote reasonable traffic control and access management. Internal streets have been recommended with a hierarchy of ROW, on-street parking (where applicable), trails and sidewalks, responsible traffic control (including roundabouts) and traffic calming features. Pedestrian and bicycle trails have been recommended with increased conspicuity and enhanced features, depending on projected use.

See the full TIS in Appendix C for more detail.

19. Cumulative potential effects:

(Preparers can leave this item blank if cumulative potential effects are addressed under the applicable EAW Items)

- a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

The Project site is located in the City of Chaska and is guided for low-density residential development in the Draft 2040 Comprehensive Plan. This EAW considered potential cumulative impacts of proposed development and any known future phases of development. Beyond the analysis conducted and provided, there are no known or projected cumulative impacts as a result of the proposed Project that were not reviewed and considered as part of this process.

- b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

As stated in previous items, there are no known projects in the foreseeable future that will further compound environmental effects of the proposed Project.

- c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

Based on available information and existing planning efforts completed by the City, there are no anticipated or known cumulative environmental impacts that cannot be effectively mitigated if proper permitting and development processes are followed.

20. Other potential environmental effects:

If the project may cause any additional environmental effects not addressed by items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

Since the proposed Project is an age-restricted senior development the City requested additional information regarding the potential increase in demand for Emergency Services from the Project Proposer. The Project Proposer has developed age-restricted neighborhoods throughout the Country; however, they do not have any evidence that their neighborhoods significantly increase the demand for Emergency Services. The Project Proposer has concluded that this is likely due to their target market which are active seniors, who often require no or limited medical assistance. For example, there is a similarly designed project being developed in the City of Corcoran, Minnesota and of the more than 90 buyers, so far the majority are in their 60's and are seeking an active lifestyle. Given that the target market for the Proposed Project is similar, there are no significant increases to demand for Emergency Services expected as a result of the proposed Project. There are no other known potential environmental impacts anticipated as a result of the Project development.

RGU CERTIFICATION. *(The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.)*

I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature _____

Date _____

Title _____