SAINT PAUL
PLANNING & ECONOMIC DEVELOPMENT

DEPARTMENT OF PLANNING & ECONOMIC DEVELOPMENT
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Saint Paul, MN 55102
Tel: 651-266-6565

May 10, 2022

TO: Interested Review Parties and EQB Distribution List

FROM: Nicolle Goodman, Director of Planning and Economic Development, City of St. Paul

SUBJECT: Scoping Environmental Assessment Work (EAW) and Draft Order for the Alternative Urban Areawide Review (AUAR): Hillcrest Golf Course Redevelopment

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As the Responsible Government Unit (RGU), the City of St. Paul has determined that an Alternative Urban Areawide Review (AUAR) is required for the proposed Hillcrest development site. This document constitutes the Draft Order and Scoping Environmental Assessment Worksheet (EAW) for public comment as part of the AUAR process as described in Minnesota Rule 4410.3610, Subp 5a.

The Draft Order for the AUAR is intended to set the boundaries of the AUAR and identify the scenarios to be analyzed for review in the AUAR. A Scoping EAW is included with this review.

Pursuant to Minnesota Rules 4410.3610, Subp. 5a, the purpose of providing comments on a Scoping EAW for an AUAR is to suggest additional development scenarios that include alternatives to the specific project or projects proposed to be included in the review. This could include comments related to development at sites outside the suggested proposed geographic boundary. The comments must provide reasons why a suggested development scenario or alternative is potentially environmentally superior to those identified in the RGU's draft order. The Scoping EAW does not include the environmental analysis at this point, but rather outlines what will be discussed in the AUAR in relation to the scenarios. The full AUAR will include the environmental analysis after the Scoping EAW process is completed.

A copy of the Scoping document has been submitted to the Minnesota Environmental Quality Board (EQB) for publication and its availability for review in the EQB Monitor on May 10, 2022. The 30-day public comment period will begin on May 17, 2022 and will close at 4:00pm on June 16, 2022.

AUAR Study Area

The AUAR study area is the former Hillcrest Golf Course located in northeastern St. Paul along the border with the City of Maplewood. The study area encompasses approximately 113 acres in Section 23, Township 29N, Range 22W. The AUAR study area is shown on **Figure 1**.

Development Scenarios

Three development scenarios will be studied in the AUAR. One scenario is in conformance with St. Paul's Comprehensive Plan and two reflect the *Hillcrest Master Plan* that is being developed. The development scenarios are defined below:

Land Use	Scenario 1 – Comprehensive Plan	Scenario 2 – Master Plan	Scenario 3 – Master Plan Max Intensity
Light Industrial	708,000 sf	840,000 sf	1,000,000 sf
Multi-family residential (includes low, medium, and high densities)	960 units	960 units	2,615 units
Low Density	*180 units*	*180 units*	*315 units*
Medium Density	*360 units*	*360 units*	*900 units*
High Density	*420 units*	*420 units*	*1,400 units*

The development scenarios also include public infrastructure including but not limited to roadways, pedestrian facilities, stormwater features, and green space. The City of St. Paul zoning allows for first floor commercial along with the high density residential. The commercial component of the mixed use in this area is small with no discernable impact as compared to the underlying residential use that is contemplated in both scenarios. However it should be noted in this Order that a commercial component could be part of each scenario.

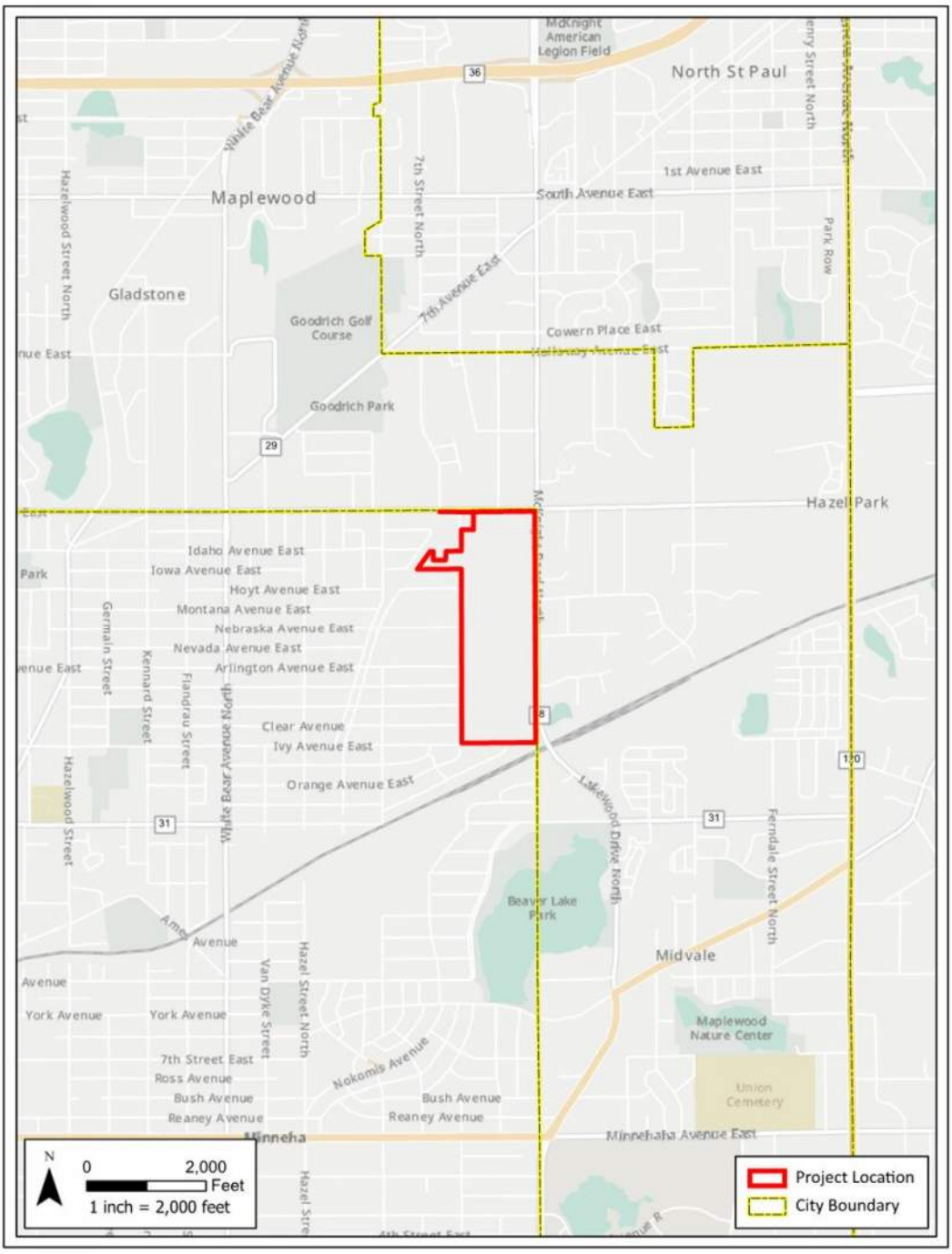
Public Comment

The public is invited to comment on the proposed development boundary and scenarios to be evaluated in the AUAR prior to issuance of a final AUAR order. Please note that the Scoping EAW does not include the environmental analysis of these scenarios, but rather a description of the scenarios, boundary, and what will be included in the AUAR. The 30-day comment period will begin on May 17, 2022 and will close at 4:00pm on June 16, 2022.

Comments should be addressed to:

Bill Dermody
City Planner, Planning and Economic Development
25 W 4th Street – 14th Floor
St. Paul, MN 55102
Bill.Dermody@stpaul.gov

Figure 1. AUAR Study Area



SCOPING ENVIRONMENTAL ASSESSMENT WORKSHEET
HILLCREST GOLF COURSE REDEVELOPMENT STUDY AREA

For:

St. Paul Port Authority

DATE

May 10, 2022

By:

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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: http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm. The EAW form is being used to delineate the issues and analysis to be reviewed in an Alternative Urban Areawide Review (AUAR). Where the AUAR guidance provided by the EQB indicated that an AUAR response should differ notably from what is required for an EAW, the guidance is noted in *italics.*
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.

1. Project Title

Hillcrest Golf Course Redevelopment

2. Proposer

Proposer: St. Paul Port Authority
Contact Person: Monte Hillman
Title: Sr. Vice President – Real Estate Development
Address: 400 N Wabasha Street
City, Sate, Zip: St. Paul, MN 55102
Phone: 651-204-6237
Email: mmh@sppa.com

3. RGU

RGU: City of St. Paul
Contact Person: Bill Dermody
Title: Principal City Planner
Address: 25 W. 45th Street – 14th Floor
City, Sate, Zip: St. Paul, MN 55102
Phone: 651-266-6617
Email: Bill.Dermody@stpaul.gov

4. Reason for EAW Preparation

Required:
X EIS Scoping /AUAR 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):
Minnesota Rules, Part 4410.3610, subpart 5a (Alternative Urban Areawide Review Process; Additional procedures required when certain large specific projects reviewed)

5. Project Location

County: Ramsey
City/Township: City of St. Paul
PLS Location (¼, ¼, Section, Township, Range): NE ¼ and SE ¼ of S23, T29N, R22W
Watershed (81 major watershed scale): No. 2 - Upper Mississippi River Basin
GPS Coordinates: X: -93.007664, Y: 44.986588

Tax Parcel Number(s): 232922120003, 232922120004, 232922120006, 232922410002, 232922410001, 232922140002

At minimum, attach each of the following to the AUAR:

- A map clearly depicting the boundaries of the AUAR and any subdistricts used the AUAR analysis (**Figure 1**)
- US Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries **(Figure 2**)
- A cover type map as required for Item 7 (**Figure 3**)
- Land use and planning and zoning maps as required in conjunction with Item 9 **(Figure 4 and 5**)

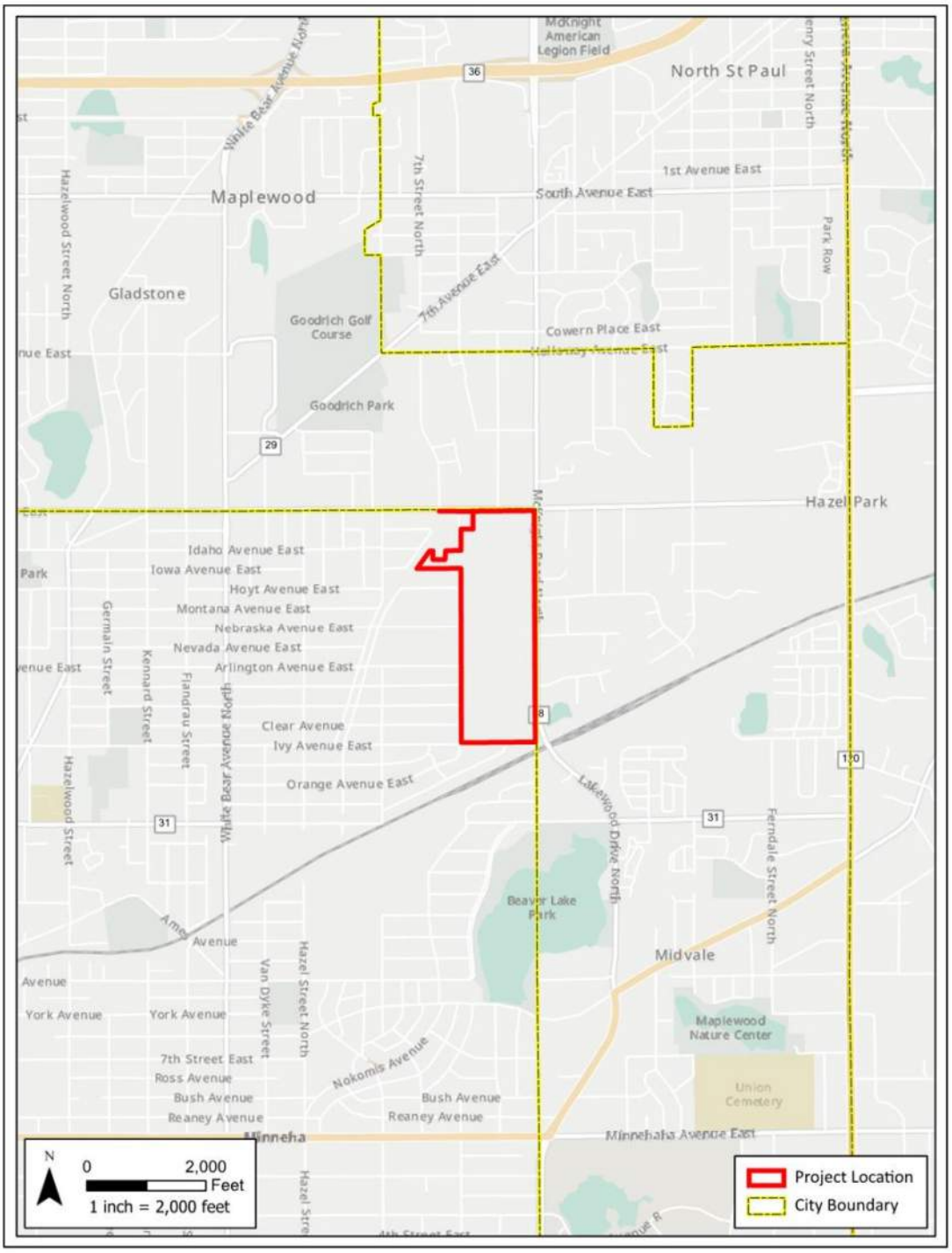

Figure 1 - Project Location Map

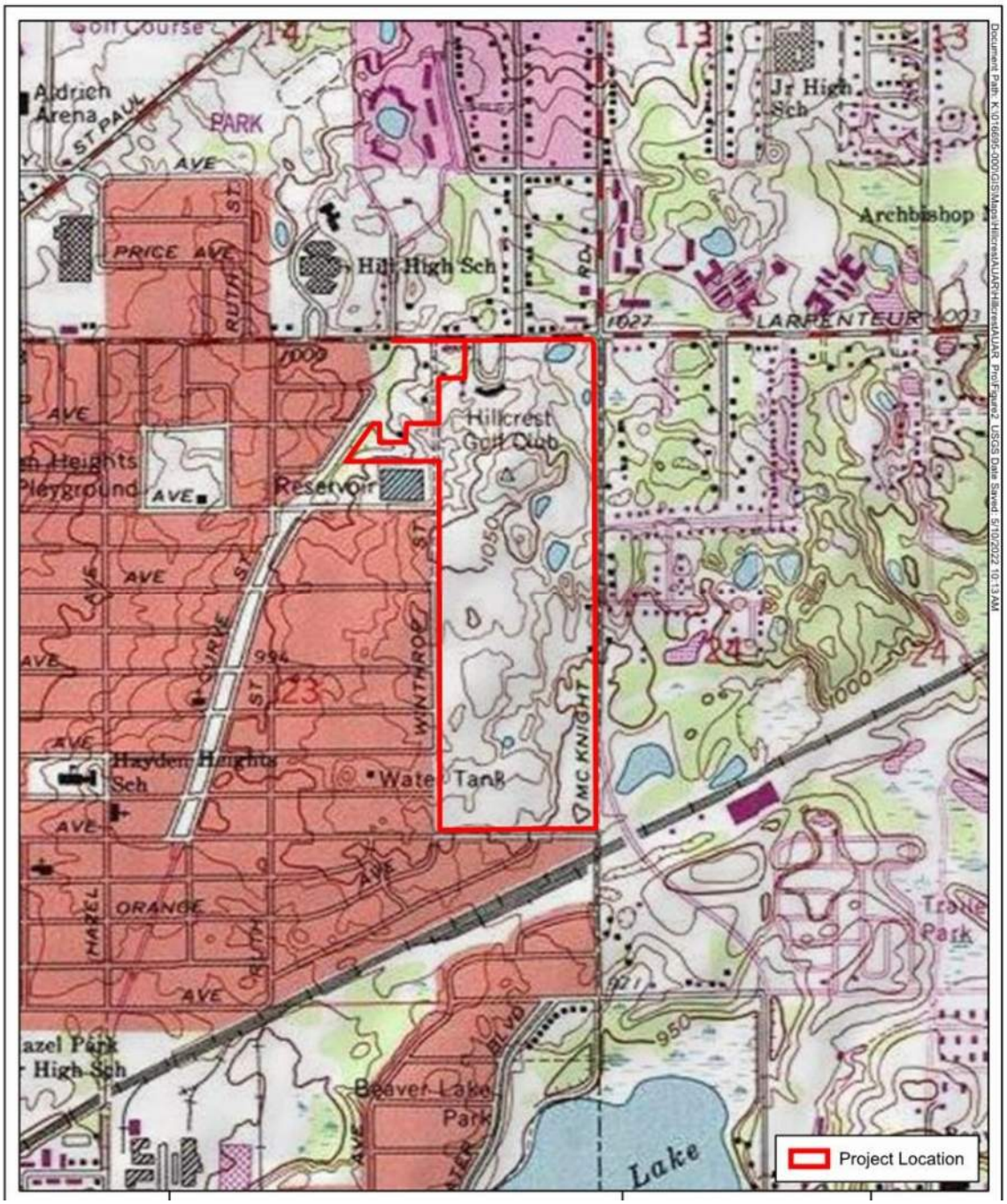

Figure 2 - USGS Map

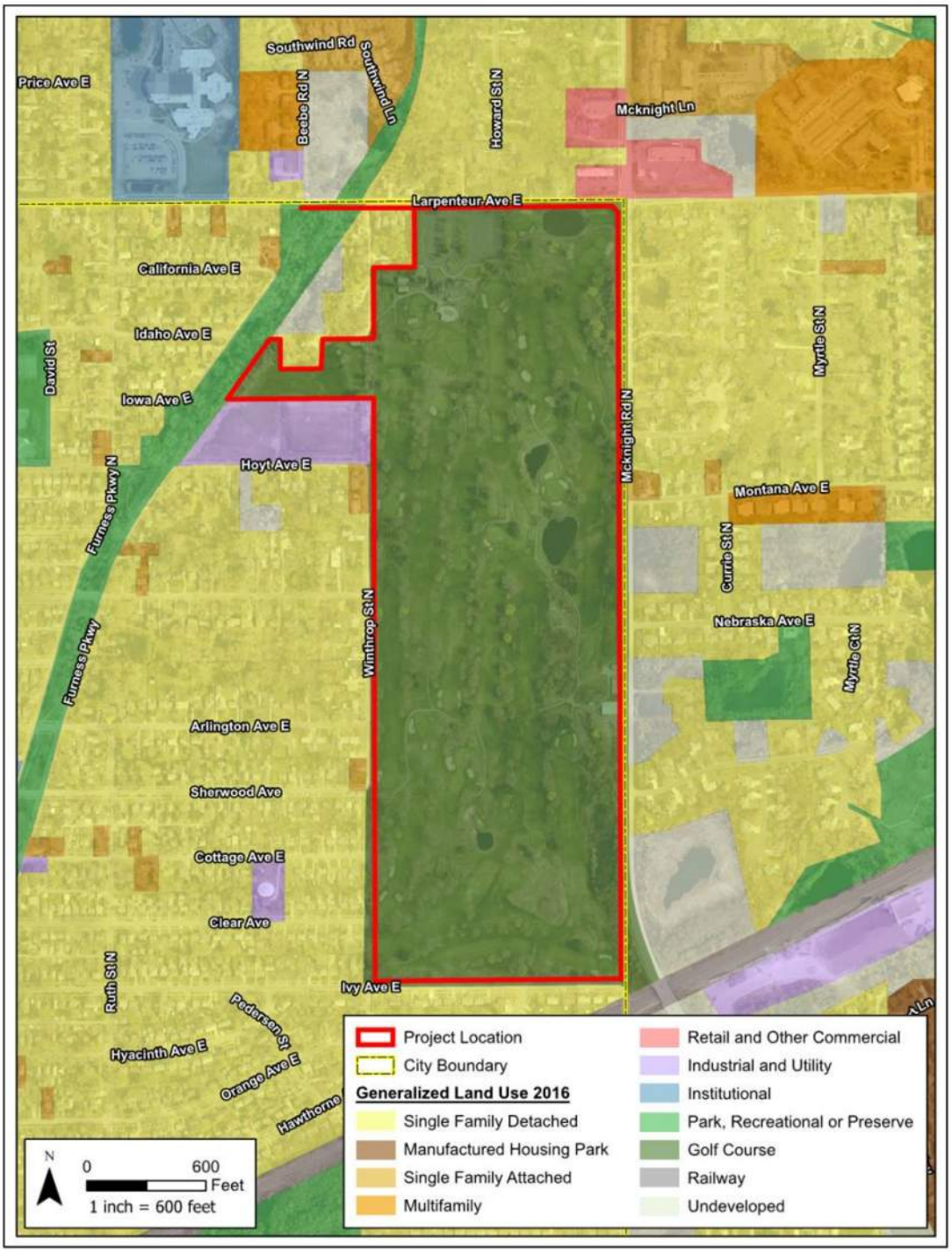

Figure 3 - Existing Land Use Map

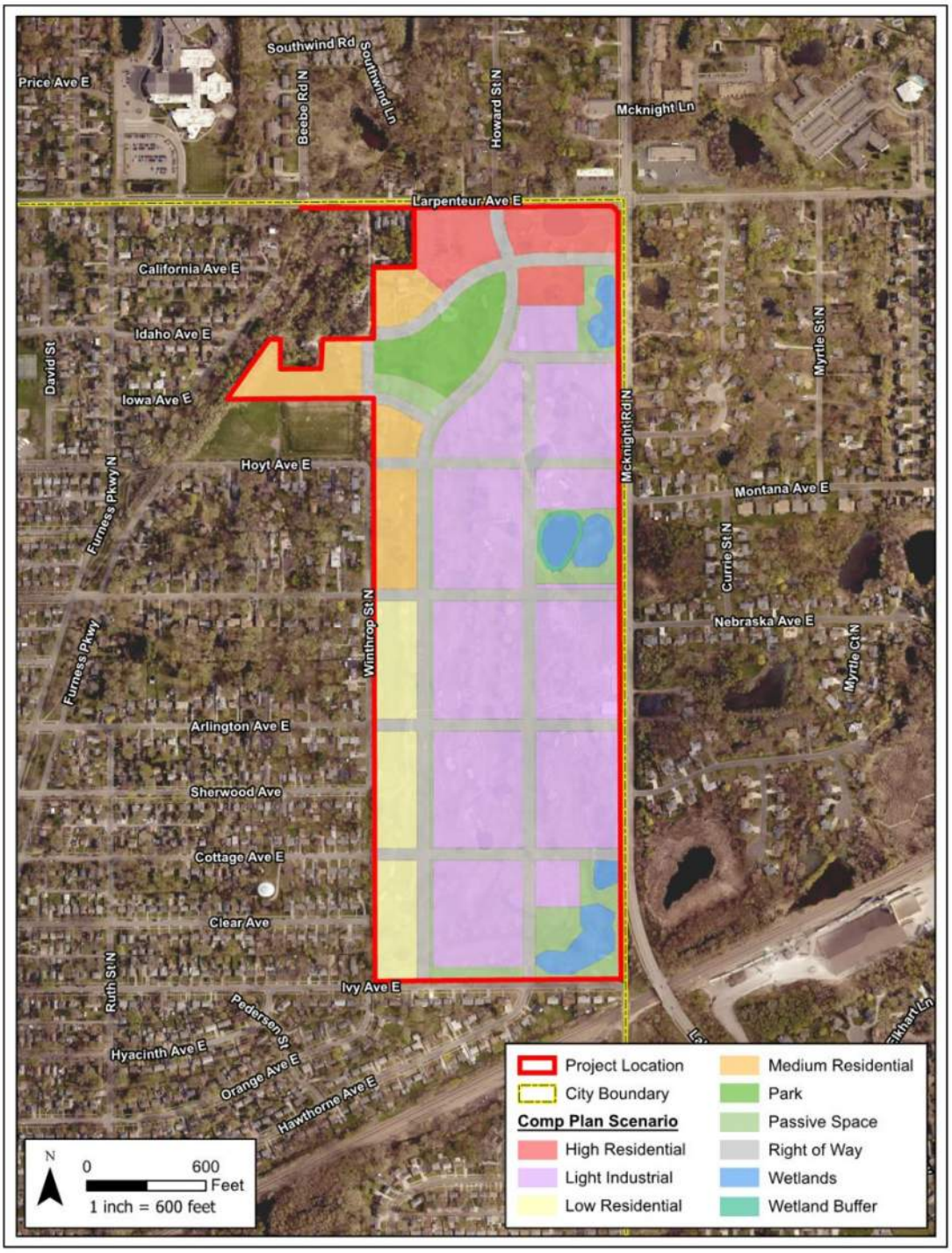

Figure 4 - Comprehensive Plan Development Scenario 1

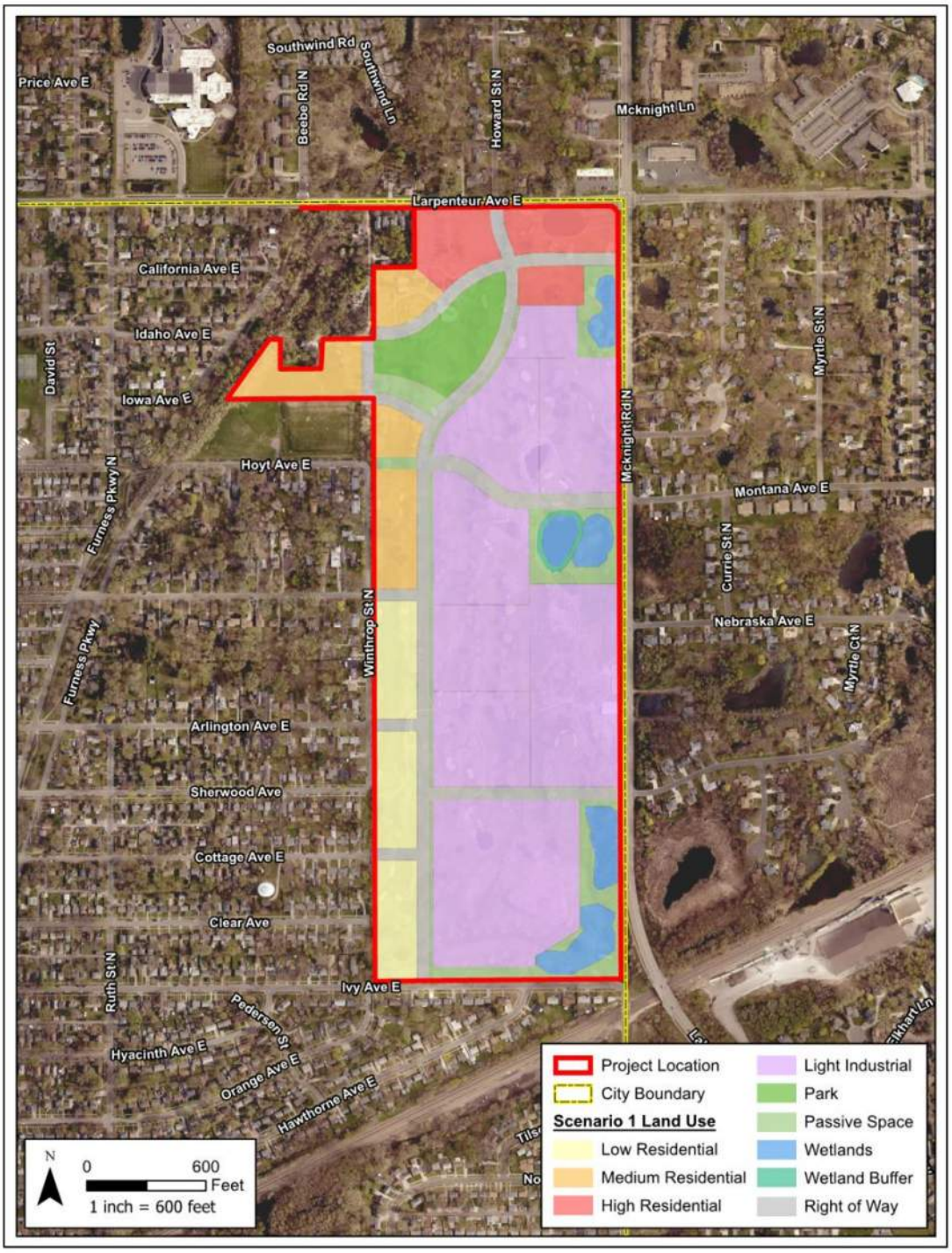

Figure 5 - Scenarios 2 and 3

6. Project Description

AUAR Guidance: Instead of the information called for on the EAW form, the description section of an AUAR should include the following elements for each major development scenario included:

- *Anticipated types and intensity (density) of residential and commercial/warehouse/light industrial development throughout the AUAR area.*
- *Infrastructure planned to serve development (roads, sewers, water, stormwater system, etc.). Roadways intended primarily to serve as adjoining land uses within an AUAR area are normally expected to be reviewed as part of an AUAR. More "arterial" types of roadways that would cross an AUAR area are an optional inclusion in the AUAR analysis; if they are included, a more intensive level of review, generally including an analysis of alternative routes, is necessary.*
- *Information about the anticipated staging of various developments, to the extent known, and of the infrastructure, and how the infrastructure staging will influence the development schedule.*

The AUAR study area is the former Hillcrest Golf Course located in northeastern St. Paul along the border with the City of Maplewood (**Figure 1**). The study area encompasses approximately 113 acres, which are included in the draft Hillcrest Master Plan (Hillcrest MP) which is currently under review by the St. Paul City Council.

The St. Paul Port Authority (SPPA) is proposing to develop the former Hillcrest Golf Course into a mixed residential, light industrial, and commercial development. Three development scenarios have been evaluated in this AUAR (**Table 1**) (**Figures 4** and **5**). All three scenarios have similar land uses but contemplate different development intensities or block lengths.

Scenario 1 is consistent with the Comprehensive Plan. It includes mixed residential, light industrial, and commercial developments. These land uses are in conformance with the Comprehensive Plan. Scenario 1 follows the Comprehensive Plan related to establishing the right-of-way grid with block lengths of 600 feet as depicted in **Figure 4.**

Scenarios 2 and 3 are consistent with the Hillcrest MP and have similar land uses to Scenario 1. However, Scenarios 2 and 3 accommodate the light industrial development with longer block lengths. Scenario 3 evaluates a maximum intensity development design for purposes of this environmental review.

Table 1 - Overview of Development Scenarios.

Land Use	Scenario 1 – Comprehensive Plan	Scenario 2 – Master Plan	Scenario 3 – Master Plan Max Intensity
Light Industrial	708,000 sf	840,000 sf	1,000,000 sf
Multi-family residential (includes low, medium, and high densities) *	960 units	960 units	2,615 units
Low Density	*180 units*	*180 units*	*315 units*
Medium Density	*360 units*	*360 units*	*900 units*
High Density	*420 units*	*420 units*	*1,400 units*

sf = square feet

** Note: The neighborhood nodes contemplated in the MP and Comprehensive Plan allow for mixed-use areas that provide shops, services, and neighborhood-scale civic and institutional uses. These potential commercial uses are enveloped into the overall analysis and do not result in a significant enough difference in use to identify an intensity of development as compared to the residential and industrial uses analyzed for purposes of the AUAR.*

The intent of the AUAR is to identify the worst-case potential impacts and the mitigation required to compensate for those impacts. Redevelopment of the site would include new infrastructure, including water service, sewer, stormwater, streets and utilities. These services would connect into existing public services within and around the study area. A more detailed discussion of infrastructure needs will be included in the AUAR.

The proposed development within the study area is anticipated to start between August 2022 and July 2023 with mass grading starting. Infrastructure construction is anticipated to occur from Spring 2023 to July 2026, and development of individual lots is expected to begin in the Fall of 2023 and last until the year 2030.

7. Cover Types

AUAR Guidance: The following information should be provided:

- *A cover type map, at least at the scale of a USGS topographic map, depicting:*
  - *Wetlands (identified by Circular 39 type)*
  - *Watercourses (rivers, streams, creeks, ditches)*
  - *Lakes (identify public waters status and shoreland management classification)*
  - *Woodlands (break down by classes where possible)*
  - *Grassland (identify native and old field)*
  - *Cropland*
  - *Current development*

- *An "overlay" map showing anticipated development in relation to the cover types. This map should also depict any "protection areas," existing or proposed, that will preserve sensitive cover types. Separate maps for each major development scenario should be generally provided.*

The study area encompasses approximately 113 acres of a former golf course. The existing and proposed land cover types will be determined using existing aerial photography and wetland delineations along with a map of anticipated development scenarios. These cover types will be included in the AUAR.

8. Permits and Approvals

AUAR Guidance: A listing of major approvals (including any comprehensive plan amendments and zoning amendments) and public financial assistance and infrastructure likely to be required by the anticipated types of development projects should be given for each major development scenario. This list will help orient reviewers to the framework that will protect environmental resources. The list can also serve as a starting point for the development of the implementation aspects of the mitigation plan to be developed as part of the AUAR.

The anticipated government permits and approvals required for the proposed actions are provided in **Table 2**.

Table 2 - Anticipated Permits and Approvals

Unit of Government	Type of Application	Status
Federal		
US Army Corps of Engineers	Section 404 Permit	To be applied for
	Wetland delineation concurrence	In process
State		
Pollution Control Agency	National Pollutant Discharge Elimination System Storm Water Permit	To be applied for
	Sanitary Sewer Permit	To be applied for
	Section 401 Water Quality Certification Permit	To be applied for if Section 404 permit is needed
	Approval of remediation and cleanup plans, as applicable	To be applied for
Department of Agriculture	Approval of remediation and cleanup plans, as applicable	To be applied for
Department of Natural Resources	Temporary dewatering for construction (Public Works Permit)	To be applied for
Department of Health	Well sealing / abandonment permit	To be applied for
	Review of geothermal plans	To be obtained, if needed
	Watermain plan review	To be applied for
	Public Water Supply Certification	To be applied for
	Asbestos abatement/removal	To be applied for
State Historic Preservation Office	Coordination, if federal permits are needed with development	To be applied for, as needed

Regional/ County/ Local		
Ramsey County	Right-of-Way Permits	To be applied for
	Road access permit	To be applied for
City of St. Paul	Alternative Urban Areawide Review	In process
	Site plan review	To be applied for
	Rezoning ordinance	To be applied for
	Preliminary and final plat approvals	To be applied for
	Development agreements	To be applied for
	Signage and striping permits	To be applied for
	Sidewalk permits	To be applied for
	Bridge permits	To be applied for, as needed
	Building permits	To be applied for
	Retaining wall permit	To be applied for, as needed
	Excavation and grading permits	To be applied for
	Roads and road base permits	To be applied for
	Certificate of Occupancy	To be applied for
	Ordinance permit for construction of public improvements	To be applied for
	Right-of-way excavation and obstruction permits	To be applied for
	Sanitary sewer utility connection permits	To be applied for
	Storm sewer connection permit	To be applied for
	Wetland Conservation Act approval	In process
	Conditional use permit for wetland impacts	To be applied for
City of Maplewood	Right-of-way permit	To be applied for
	Excavation permit	To be applied for
	Sanitary sewer utility connection permit	To be applied for
	Storm sewer connection permit	To be applied for
Watershed District	Permit for stormwater management, erosion and sediment control, wetland management	To be applied for
Metropolitan Council	Sanitary sewer extension permit	To be applied for
	Sanitary sewer permit to connect	To be applied for
St. Paul Regional Water Services	Plumbing permits	To be applied for
	Watermain installation	To be applied for

9. Land Use

a. Existing and Planned Land Uses and Zoning

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 study area is the former Hillcrest Golf Course that operated from 1921 to 2017. The current landscape reflects this past use including mature trees, wetlands, and hills interspersed with remnants of the golf course – flat areas where the tee boxes were positioned in front of cleared fairways (now overgrown) and formerly manicured putting greens. Upon its closure, in 2017, the site was deemed a brownfield due to decades of mercury containing fungicide spray that was used to keep the manicured appearance of the golf course. Due to the current mercury contamination, the site will require remediation prior to any development.

The study area is in St. Paul's Greater East Side adjacent to the City of Maplewood. St. Paul's Greater East Side and the City of Maplewood are primarily comprised of single-family residences (**Figure 1**). There are also small commercial properties at the northwest and northeast corners of McKnight Road and Larpenteur Avenue, which the City of Maplewood has designated for business and medium density development in their 2040 Comprehensive Plan.

There is a range of local and regional parks nearby including Nebraska Park, Sterling Oaks Park, Hayden Heights Recreation Center, Maryland Avenue Open Space, Furness Parkway, Phalen Regional Park, and Maplewood Nature Center (**Figure 6**). There are also bikeway facilities designated along Larpenteur Avenue, Furness Parkway, and Arlington Avenue. There is no farmland within or adjacent to the study area.

Figure 6 - Parks and Bikeway Facilities

ii. Planned land use. 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.

The *Hillcrest Master Plan* (MP) is being developed specifically for this site. The MP defines land use and block length. Along with the Comprehensive Plan scenario, the scenarios in the AUAR provide an analysis of different densities of various land uses. The scenarios proposed within the study area provide a new five-acre city park in the northern portion of the study area, surrounded by a mix of dense housing and light industrial use. Lower or medium density housing is located along the western edge of the site, adjacent to the Hayden Heights neighborhood. Select streets are extended into the site and the blocks are reoriented north south to create a narrow series of blocks with medium or lower density housing that face onto Winthrop and Howard Street (the main north - south street).

Higher density housing is located around the neighborhood node, where there is nearby access to transit, adjacent to a new park. Light industrial uses are the other main component of the Hillcrest MP.

Development in the study area is subject to the City's stormwater management program as well as the Ramsey-Washington Metro Watershed District (RWMWD) plan and policies.

The proposed redevelopment will be reviewed for compatibility with the plan as part of the AUAR.

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

The study area is zoned R2 One-Family Residential. A rezoning ordinance is proposed to accompany the Hillcrest MP to allow for more intense light industrial uses, residential and mixed residential-commercial uses that align with the Comprehensive Plan's designated land uses.

The area is not within any shoreland, floodplain, or other special overlay zoning districts.

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

AUAR Guidance: The extent of conversion of existing farmlands anticipated in the AUAR should be described.

If any farmland will be preserved by special protection programs, this should be discussed. If development of the AUAR will interfere or change the use of any existing designated parks, recreation areas, or trails, this should be described in the AUAR. The RGU may also want to discuss under this item any proposed parks, recreation areas, or trails to be developed in conjunction with development of the AUAR area.

The AUAR must include a statement of certification from the RGU that its comprehensive plan complies with the requirements set out at Minnesota Rules, part 4410.3610, subpart 1. The AUAR document should discuss the proposed AUAR area development in the context of the comprehensive plan. If this has not been done as part of the responses to Items 6, 9, 11, 18, and others, it must be addressed here; a brief synopsis should be presented here if the material has been presented in detail under other items. Necessary amendments to comprehensive plan elements to allow for any of the development scenarios should be noted. If there are any management plans of any other local, state, or federal agencies applicable to the AUAR area, the document must discuss the compatibility of the plan with the various development scenarios studied, with emphasis on any incompatible elements.

Scenario 1 is in conformance with the Comprehensive Plan. Scenarios 2 and 3 are consistent with the land use, but not the block lengths in the Comprehensive Plan. The AUAR will include discussion of any impacts to existing or development of new parks and trails and compatibility with nearby land uses, zoning, and relevant plans.

c. Measures to Mitigate Incompatibility

Any zoning inconsistencies for any of the development scenarios will be addressed through the City's variance or conditional use permit modification process. Mitigation will be regulated through the City's development review process. Proposed project plans will address relevant mitigation measures before final approval by the City.

10. Geology, Soils, and Topography/Landforms

AUAR Guidance: A map should be included to show any groundwater hazards identified. A standard soils map for the area should be included.

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.

Information from the Ramsey County Geologic Atlas, the Ramsey Council Soil Survey, and the Minnesota Well Index will be used for this analysis.

The study area is underlain by till and collapsed till and supraglacial sediment. The deposits within the study area are mostly sandy loam and clay loam to silty clay or sand in some areas. The upper layer of sediment within the study area is hummocky from the site previously being used as a golf course and consists of loam, sandy loam, clay loam and mucky loam. Bedrock was encountered at varying depths below ground surface (bgs) within the study area. The depth to bedrock in the site vicinity ranges from 100 to 150 feet bgs and is comprised of middle and upper Ordovician, and Decorah shale in the western portions of the site, Platteville and Glenwood formations in the central and northern portions of the site, and St. Peter sandstone in the southern portions of the site. The upper most aquifer is the Platteville aquifer and groundwater is approximately 5 to15 feet bgs.

Based on the geologic atlas, there are no known sinkholes, unconfined/shallow aquifers, or karst conditions located within the study area.

No further analysis for geology and soils will be included in the AUAR.

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 soil limitations, such as steep slopes or 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.

AUAR Guidance: The number of acres to be graded and number of cubic yards of soil to be moved need not be given; instead, a general discussion of the likely earthmoving needs for development of the area should be given, with an emphasis on unusual or problem areas. In discussing mitigation measures, both the standard requirements of the local ordinances and any

special measures that would be added for AUAR purposes should be included. A standard soils map for the area should be included.

The site soil information was retrieved from the U.S. Department of Agriculture Web Soil Survey database. According to the Web soil survey, the study area is comprised of 11 soil types and open water (**Table 3**). The hydric soils rating indicates that most (96.2 percent) of the study area is comprised of non-hydric or predominantly non-hydric soils (**Figure 7**). The erosion hazard rating indicates that most of the study area is comprised of non-highly erodible soils (93.4 percent) meaning that some erosion is not likely, but erosion-control measures may be needed. Approximately 4.1 percent of the area is comprised of highly erodible soils, and 1.0 percent of the project area is comprised of potentially erodible soils meaning erosion is likely and that erosion control measures are advised (**Figure 8**).

Table 3 - Soil Types and Respective Coverages within the Study

Map unit symbol	Map unit name	Acres within study area	Percent of study area	Percent hydric	Erosion hazard rating
342C	Kingsley sandy loam, 6 to 12 percent slopes	67.9	59.9	0	Non-Highly Erodible
153B	Santiago silt loam, 2 to 6 percent slopes	18.9	16.7	0	Non-Highly Erodible
342B	Kingsley sandy loam, 2 to 6 percent slopes	9.8	8.6	3	Non-Highly Erodible
342D	Kingsley sandy loam, 12 to 18 percent slopes	4.8	4.2	0	Highly Erodible
266	Freer silt loam	3.6	3.2	5	Non-Highly Erodible
189	Auburndale silt loam	1.8	1.6	95	Non-Highly Erodible
W	Water	1.7	1.5	0	Unknown
544	Cathro muck	1.2	1.1	97	Non-Highly Erodible
1055	Aquolls and histosols, ponded	1.2	1.1	100	Non-Highly Erodible
153C	Santiago silt loam, 6 to 15 percent slopes	1.1	1.0	0	Potentially Erodible
1027	Udorthents, wet substratum	0.9	0.8	0	Non-Highly Erodible
861C	Urban land-Kingsley complex, 3 to 15 percent slopes	0.4	0.3	0	Non-Highly Erodible
Total	**--**	**113.3**	**100.0**		**--**

Figure 7 - Hydric Soils

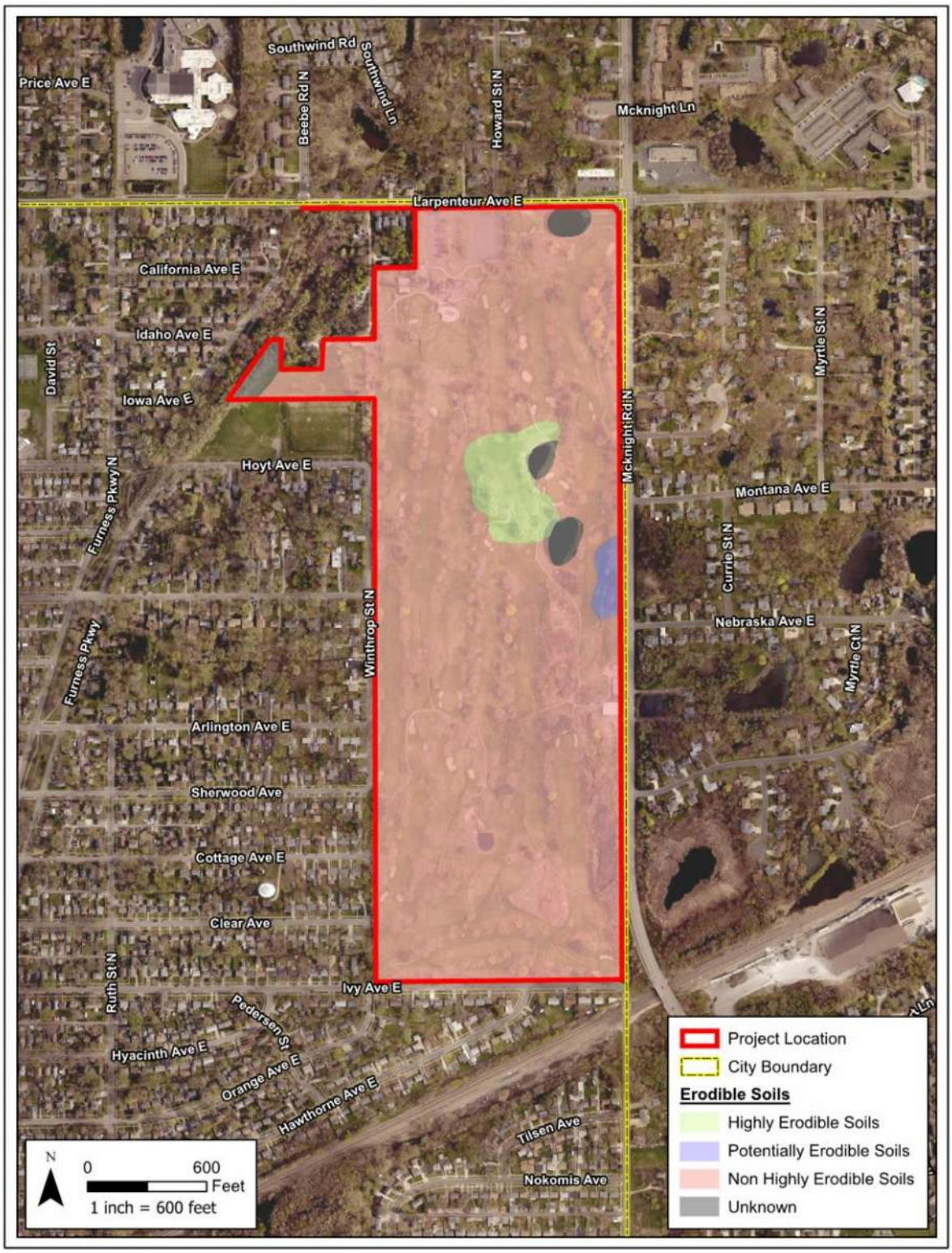

Figure 8 - Highly Erodible Soils

A geotechnical evaluation for the study area began in 2019 which determined that the soil profile is conducive for encountering perched water conditions. Geotechnical studies are currently ongoing, with a final report expected in 2022. The existing grades of the site ranges from 994 to 1061 feet above mean sea level. Generally, the elevations are highest in the west-central portion with gradual slopes downward toward the north and south and steeper downward slopes towards the east.

The AUAR will identify measures to protect soils from erosion during excavation and construction of the site.

11. Water Resources

AUAR Guidance: The information called for on the EAW form should be supplied for any of the infrastructure associated with the AUAR development scenarios, and for any development expected to physically impact any water resources. Where it is uncertain whether water resources will be impacted depending on the exact design of future development, the AUAR should cover the possible impacts through a "worst case scenario" or else prevent impacts through the provisions of the mitigation plan.

a. Surface Water and Groundwater Features:

i. Surface Water: Lakes, streams, wetlands, intermittent channels, and county/judicial ditches. All surface water features should be described and identified on a map of the project area. 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 one mile of the project. Include DNR Public Waters Inventory number(s), if any.

A Level 2 wetland field delineation was completed in spring of 2020. Based on the delineation, there are 11 water resources (i.e., 10 wetlands and one wet ditch) comprising approximately 5.6 acres of the study area (**Figure 9 and Table 4**).

Figure 9 - USFWS NWI and MNDNR Public Waters

Table 4 - Wetlands within the Study Area

ID	Eggers and Reed	Circular 39 (Cowardin)	NWI*	DNR PWI**	County Soil Survey (Hydric/Non-Hydric)***	Wetland Size (acres)
Wetland A	Shallow open water	Type 5 PUBG	Yes	NA	**W**	0.69 ac
Wetland B	Shallow Marsh	Type 3 PEMC	Yes	NA	342C	0.44 ac
Wetland C	Shallow Marsh	Type 3 PEMC	Yes	NA	**1055**	0.93 ac
Wetland D	Shallow open water	Type 5 PUBG	Yes	NA	**W**	0.79 ac
Wetland E	Wet Meadow/ Shrub Carr	Type 2/7 PEMB/PSSA	No	NA	**189**	0.49 ac
Wetland F	Shallow Marsh / Shrub Carr	Type 3/6 PEMC/PSSA	Yes	NA	342C	0.13 ac
Wetland G	Shallow open water	Type 5 PUBG	No	NA	**W**	0.39 ac
Wetland H	Deep Marsh	Type 4 PEMF	Yes	NA	**544**	1.44 ac
Wetland I	Shallow open water	Type 5 PUBG	**Yes**	NA	266/**544**	0.26 ac
Wetland J	Seasonally flooded Basin	Type 1 PEMA	No	NA	1027	0.05 ac
Wet Ditch 1	NA	NA	No	NA	342C	0.04 ac

** "Yes" indicates wetland is mapped in the NWI and "No" indicates the wetland is not mapped in the NWI.*
*** "NA" indicates the wetland is not mapped in the PWI. Numbers listed are the DNR ID, indicating the wetland is mapped in the PWI.*
****Bolded numbers indicate hydric soils.*

There are no MNDNR Public Waters within the study area; however, there are three unnamed Public Water Wetlands (62022600, 62022700, and 62024200) within one mile of the AUAR study area (**Figure 9**).

There are no Minnesota Pollution Control Agency (MPCA) 303d impaired waters within the project area or within a mile of the study area. The study area is not within a Federal Emergency Management Agency (FEMA) floodplain.

ii. Groundwater: aquifers, springs, and seeps. Include 1) depth to groundwater; 2) if project is within a MDH well protection area; and 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 Preliminary Geotechnical Evaluation Report by Braun Intertec dated August 2019 indicates that the groundwater elevation within the study area varies from 979 ft to 1028 ft, or 5 ft to 15 ft below the surface. The depth of groundwater used for potable water sources within the study

area is 200 ft to over 500 ft below the surface in the St. Peter and Prairie Du Chien-Jordan aquifers.

The northern two-thirds of the study area falls within the Moderate Vulnerability portion of the North St. Paul Drinking Water Supply Management Area (DWSMA).

The AUAR will further investigate the status of the wells located within the study area and will provide mitigation strategies for all inactive and active wells within the study area.

b. Project Effects on Water Resources and Measures to Minimize or Mitigate the Effects

i. Wastewater: For each of the following, describe the sources, quantities, and composition of all sanitary, municipal/domestic, and industrial wastewaters projected or treated at the site.

AUAR Guidance: Observe the following points of guidance on an AUAR:

- *Only domestic wastewater should be considered in an AUAR—industrial wastewater would be coming from industrial uses that are excluded from review through an AUAR process.*
- *Wastewater flows should be estimated by land use subareas of the AUAR area; the basis of flow estimates should be explained.*
- *The major sewer system features should be shown on a map and the expected flows should be identified.*
- *If not explained under Item 6, the expected staging of the sewer system construction should be described.*
- *The relationship of the sewer system extension to the RGU's comprehensive sewer plan and (for metro area AUARs) to Metropolitan Council regional systems plans, including MUSA expansions, should be discussed. For non-metro area AUARs, the AUAR must discuss the capacity of the RGU's wastewater treatment system compared to the flows from the AUAR area; any necessary improvements should be described.*
- *If on-site systems will serve part of the AUAR, the guidance in the February 2000 edition of the EAW Guidelines on page 16 regarding item 18b under Residential development should be followed.*

1) Wastewater Subsurface Sewer Treatment Systems (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 entire study area is served by the St. Paul municipal sanitary sewer collection system. The system conveys flow via gravity sewer lines to the Metropolitan Council interceptor system and eventually to the Metropolitan Wastewater Treatment Plant (Metro WWTP). The Metro WWTP is an advanced secondary treatment plant with chlorination/dechlorination which discharges treated effluent to the Mississippi River. As of September 2021, the Metro WWTP treats an average of 161 million gallons of wastewater per day and has a capacity of 314 million gallons per day.

No land uses that would generate wastewater requiring pretreatment are anticipated in the AUAR study area. The AUAR will evaluate the estimated wastewater flows for the proposed development scenarios and the existing sanitary sewer system will be evaluated to determine if there is adequate capacity to convey wastewater. Appropriate mitigation measures will be identified, if needed.

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

Not applicable.

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

Not applicable.

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.

AUAR Guidance: For an AUAR the following additional guidance should be followed in addition to that in EAW Guidelines:

- *It is expected that an AUAR will have a detailed analysis of stormwater issues.*
- *A map of the proposed stormwater management system and of the water bodies that will receive stormwater should be provided.*
- *The* description *of the stormwater systems would identify on-site and "regional" detention ponding and also indicate whether the various ponds will be new water bodies or converted existing ponds or wetlands. Where on-site ponds will be used but have not yet been designed, the discussion should indicate the design standards that will be followed.*
- *If present in or adjoining the AUAR area, the following types of water bodies must be given special analyses:*
- *Lakes: Within the Twin Cities metro area, a nutrient budget analysis must be prepared for any "priority lake" identified by the Metropolitan Council. Outside of the metro area, lakes needing a nutrient budget analysis must be determined by consultation with the MPCA and DNR staffs.*
- *Trout streams: If stormwater discharges will enter or affect a trout stream, an evaluation of the impacts on the chemical composition and temperature regime of the stream and the consequent impacts on the trout population (and other species of concern) must be included.*

The area is currently serviced by a network of wetlands with four discharge points from the study area (**Figure 10**). The east and northeast portions of the site drain to existing wetlands and ponds that outlet through existing culverts and storm sewer at McKnight Road and Larpenteur Avenue. Runoff from the west side of the site sheet flows either to the adjacent neighborhoods off Winthrop Street into a storm sewer along the existing residential roadways, or a storm sewer along Furness Parkway. The southern portion of the site sheet flows to existing storm sewer along Ivy Avenue. There is an existing drainage issue at the discharge point on Ivy Avenue east of Hawthorne Avenue. Stormwater directed to this area is collected by two catch basins at the east end of Ivy and discharges into the north ditch of the railroad right-of-way. The discharge into an unmaintained and inaccessible ditch section on railroad property has causes intermittent right-of-way flooding on Ivy Avenue and reported impacts to railroad signal systems.

Figure 10 - Existing Stormwater Discharge Points

Storm sewer at the western discharge point connects into the Beltline Interceptor System which outlets to the Mississippi River. The rest of the site drains through a storm sewer that reaches Beaver Lake. Beaver Lake also outflows to the Beltline Interceptor System, therefore the entire site's ultimate discharge location is the Mississippi River. Beaver Lake was delisted as impaired for nutrients by the MPCA in 2014. Water quality at the outlets of the Beltline Interceptor is monitored by the RWMWD in collaboration with the Metropolitan Council.

The pre- and post-construction impervious surface areas will be estimated in the AUAR. The AUAR will address stormwater rates and volumes for the study area and any temporary and permanent stormwater runoff controls will be identified that reflect the stormwater management plan anticipated by the Hillcrest Master Plan.

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.

AUAR Guidance: If the area requires new water supply wells, specific information about that appropriation and its potential impacts on groundwater levels should be given; if groundwater levels would be affected, any impacts resulting on other resources should be addressed.

Construction dewatering will likely be required for development of the study area because groundwater is present 5 ft to 15 ft below the ground surface in some areas based on soil borings.

Water mains to service the study area are provided within adjacent right-of-way. The AUAR will evaluate the redevelopment's impact on water supply.

iv. Surface Waters

1) **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.**

   Wetland impact is anticipated with development in the study area. The City of St. Paul is the local governmental unit (LGU) that administers the Wetland Conservation Act (WCA). Wetlands will also be regulated through the US Army Corps of Engineers (USACE) and Ramsey-Washington Metro Watershed District (RWMWD).

   The AUAR will evaluate potential wetland impact and outline mitigation measures.

2) **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.

AUAR Guidance: Water surface use need only be addressed if the AUAR area would include or adjoin recreational water bodies.

No other surface waters exist within the study area.

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 Phase I ESA conducted within the study area in 2019 identified the following recognized environmental conditions (RECs) on-site:

- Petroleum products (i.e., heating oil, gasoline, and diesel) stored in above ground and underground tanks.
- Lubricants, hydraulic fluid, and other oils stored in containers ranging in size from one pint to 55-gallons.
- Contamination from historic petroleum tank leaks is likely. Potential for identified and unidentified petroleum contamination on-site.
- Agricultural chemicals were stored, mixed, and applied on-site. Potential for soil or groundwater contamination from agricultural chemicals.
- Mercury contamination in the soil from the use and storage of mercury-based fungicide products.

Addendums to the Phase I ESA identified 10 high risk areas (HRAs) within the study area including:

- Agricultural chemical storage buildings loading areas.
- Damaged floors in the three agricultural chemical storage buildings.
- Agricultural chemical mixing/washout area.
- Drainage area adjacent to mixing/washout area.
- Berms on eastern portion of the study area.
- Golf greens and practice greens constructed before 1994.
- Tee boxes.
- Fairways.
- The primary pesticide/fertilizer storage building.
- The loading area associated with the pesticide/fertilizer building.

No further analysis will be included in the AUAR.

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.

AUAR Guidance: Generally, only the estimated total quantity of municipal solid waste generated and information about any recycling or source separation programs of the RGU need to be included.

The AUAR will provide information on the estimated quality of municipal solid waste to be generated by the development scenarios and will discuss recycling and source separation programs to be implemented.

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 spills or releases 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.

AUAR Guidance: Not required for an AUAR. Potential locations of storage tanks associated with commercial uses in the AUAR should be identified (e.g., gasoline tanks at service stations).

The AUAR will identify any potential future storage tank locations anticipated as part of the proposed development.

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 wastes including source reduction and recycling.

AUAR Guidance: Not required for an AUAR.

Not applicable.

13. Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)

a. Fish and Wildlife Resources

AUAR Guidance: The description of fish and wildlife resources should be related to the habitat types depicted on the cover types of maps. Any differences in impacts between development scenarios should be highlighted in the discussion.

Minimal wildlife habitat is located within the AUAR study area. Wildlife species that may occur within the study area include those known to use human-disturbed habitats. No Minnesota DNR native plant communities or Minnesota County Biological Survey sites of biodiversity significance have been identified within the study area. The AUAR will address cover types for the existing and proposed conditions.

b. Rare Features

AUAR Guidance: For an AUAR, prior consultation with the DNR Division of Ecological Resources for information about reports of rare plant and animal species in the vicinity is required. Include the reference numbers called for on the EAW form in the AUAR and include the DNR's response letter. If such consultation indicates the need, an on-site habitat survey for rare species in the appropriate portions of the AUAR area is required. Areas of on-site surveys should be depicted on a map, as should any "protection zones" established as a result.

A review of the state-listed threatened and endangered species lists indicated that there are records of the Species of Concern leadplant flower moth (*Schinia lucens*) that encompass the entire study area and extends into the one-mile buffer. Also, there are records of the state threatened Blanding's turtle (*Emydoidea blandingii*), state threatened Clinton's bulrush (*Trichophorum clintonii*), state threatened tubercled rein orchid (*Plantathera flava* var. *herbolia*), Species of Concern yellow pimpernel (*Taenidia integerrima*), and the federally endangered and state watchlist rusty patched bumble bee (RPBB; *Bombus affinis*) within the one-mile buffer.

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) service indicated that the federally threatened northern long-eared bat (NLEB; *Myotis septentrionalis*), federally endangered rusty patched bumble bee, and candidate species for listing monarch butterfly (*Danaus plexippus*) may occur within or near the study area.

The results of the Natural Heritage Database Information System will be provided, and mitigation measures will be discussed in the AUAR.

c. Effects on Fish, Wildlife, Plant Communities, Rare Features, and Ecosystems

The AUAR will investigate the potential for impacts to state-listed and federally listed species that may be present within the AUAR study area.

d. Measures to Avoid, Minimize, or Mitigate Adverse Effects to fish, wildlife, plant communities, and sensitive ecological resources.

The AUAR will address any potential mitigation measures identified by the DNR to minimize and avoid adverse impacts to any state-listed species. Measures to minimize impacts to federally listed species that may be present on the site will also be included in the AUAR as appropriate.

14. Historical 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 Minnesota 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.
AUAR Guidance: Contact with the State Historic Preservation Office and State Archaeologist is required to determine whether there are areas of potential impacts to these resources. If any exist, an appropriate site survey of high probability areas is needed to address the issue in more detail. The mitigation plan must include mitigation for any impacts identified.

A Phase IA Cultural Resource Assessment was completed for the study area in 2021. The results of this study and coordination with the Minnesota State Historical Society (SHPO) will be included in the AUAR along with any potential mitigation measures.

15. Visual

Scenic views or vistas may include spectacular viewing points along lakes, rivers, or bluffs; virgin timber tracts; prairie remnants; geological features; waterfalls; specimen trees; or plots of wildflowers. 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.
AUAR Guidance: Any impacts on scenic views and vistas present in the AUAR should be addressed. This would include both direct physical impacts and impacts on visual quality or

integrity. If any non-routine visual impacts would occur from the anticipated development this should be discussed here along with appropriate mitigation.

No significant views as identified by the Comprehensive Plan are within or near the study area.

The AUAR will discuss site lighting and any visual impacts.

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 to 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.

AUAR Guidance: This item is not applicable to an AUAR. Any stationary air emissions source large enough to merit environmental review requires individual review.

Not applicable.

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.

AUAR Guidance: Although the MPCA no longer issues Indirect Source Permits, traffic-related air quality may still be an issue if the analysis in Item 18 indicates that development would cause or worsen traffic congestion. The general guidance from the EAW form should still be followed. Questions about the details of air quality analysis should be directed to MPCA staff.

Motor vehicles emit airborne pollutants (such as mobile source air toxics [MSATs]), thereby affecting air quality. The Environmental Protection Agency (EPA) regulates air pollutants including ozone, particulate matter, carbon monoxide, nitrogen dioxide, lead, and sulfur dioxide. Potential impacts resulting from these pollutants are assessed by comparing estimated concentrations to National Ambient Air Quality Standards (NAAQS). Advances in vehicle technology and fuel regulations will result in reduced vehicle emissions.

No further air quality analysis is anticipated for the AUAR.

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 orders.

AUAR Guidance: Dust and odors need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any dust control ordinances in effect.

The AUAR will include discussion of dust control ordinance and Best Management Practices that would be applicable during construction.

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.
AUAR Guidance: Construction noise need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any construction noise ordinances in effect.

If the area will include or adjoin major noise sources, a noise analysis is needed to determine if any noise levels in excess of standards would occur, and if so, to identify appropriate mitigation measures. With respect to traffic-generated noise, the noise analysis should be based on the traffic analysis of Item 18.

Per the AUAR guidelines, construction noise does not need to be addressed unless there are unusual circumstances that warrant it. No unusual circumstances are anticipated that would warrant a detailed noise analysis.

A sound level increase of 3 dBA is barely discernible to the human ear, a 5 dBA increase is clearly discernible, and a 10 dBA increase is perceived as being twice as loud. For example, if the sound level of light traffic is 60 dBA and the sound level of heavy traffic is 70 dBA, the heavy traffic will be perceived as twice as loud as the light traffic.

Traffic volumes in the project area are either on roadways that do not have receivers that are sensitive to noise, or the traffic levels attributable to the project are well below the amount that would generate a sound increase that could be noticeable. The change in traffic noise levels is not anticipated to be readily perceptible. No further noise analysis is anticipated for the AUAR.

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) source of trip generation rates used in the estimates; and 5) availability of transit and/or other alternative transportation modes.

The daily, AM peak hour, and PM peak hour traffic generation of the AUAR study area will be estimated, and a traffic impact study evaluating the traffic impacts of the AUAR study area will be completed. The traffic impact study will include intersection capacity analyses for intersections immediately adjacent to the AUAR study area along Larpenteur Avenue, McKnight Road, and Ivy Avenue. Neighborhood street traffic will also be analyzed. The availability of transit and other transportation modes will also be documented in the AUAR. A summary of the traffic and transportation analysis will be included in the AUAR.

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.

AUAR Guidance: For AUAR reviews, a detailed traffic analysis will be needed, conforming to the MnDOT guidance as listed on the EAW form. The results of the traffic analysis must be used in the response to Items 16 and 17.

A traffic impact study will be completed for the AUAR and use traffic modeling developed as part of the Hillcrest Master Plan process. The traffic impact study will estimate traffic generation, evaluate traffic impacts, and determine potential improvements and mitigations. The traffic impact study will include intersection capacity analyses for intersections immediately adjacent to the AUAR study area immediately adjacent to the AUAR study area along Larpenteur Avenue, McKnight Road, and Ivy Avenue.

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

The AUAR will address any mitigation measures identified through the traffic analysis.

19. Cumulative Potential Effects

AUAR Guidance: Because the AUAR process by its nature is intended to deal with cumulative potential effects from all future developments within the AUAR area, it is presumed that the responses to all items on the EAW form automatically encompass the impacts from all anticipated developments within the AUAR area.

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.

   Cumulative effects are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or persons undertakes such actions.” The geographic areas considered for cumulative effects are those areas adjacent to the AUAR study area, and the timeframe considered includes projects that would be constructed in the reasonably foreseeable future.

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.

   No reasonably foreseeable future projects that may interact with the environmental effects of the Hillcrest Study Area.

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.

   Due to the lack of additional foreseeable projects in the vicinity, cumulative potential effects will not be addressed in the AUAR.

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.

In all scenarios the goal is to pursue carbon neutrality, responsible material and waste stream management, and effective, integrated, and visible stormwater treatment. The carbon neutrality aim for the proposed scenarios will help the City reach its goals to reduce carbon emissions citywide by 50 percent from 2019 to 2030, and to achieve carbon neutrality by 2050. The development plans will be evaluated for the goal to pursue carbon neutrality.

No other potential environmental effects are anticipated as a result of the construction and operation of any of the proposed development scenarios.