

MITIGATION INITIATIVES

***Mitigation Plan.** The final AUAR document must include an explicit mitigation plan. At the RGU's option, a draft plan may be include in the draft AUAR document; of course, whether or not there is a separate item for a draft mitigation plan, proposed mitigation must be addressed through the document.*

It must be understood that the mitigation plan in the final document takes on the nature of a commitment by the RGU to prevent potentially significant impacts from occurring from specific projects. It is more than just a list of ways to reduce impacts—it must include information about how the mitigation will be applied and assurance that it will. Otherwise, the AUAR may not be adequate and/or specific projects may lose their exemption from the individual review. The RGU's final action on the AUAR must specifically adopt the mitigation plan; therefore, the plan has a "political" as well as a technical dimension.

This Mitigation Plan identifies initiatives that address potential impacts resulting from future development within the AUAR Project area. This mitigation plan specifies the controls, procedures, and other steps that may be implemented to protect or minimize potential negative impacts. In order to mitigate the potential environmental impacts identified in the Chanhassen AUAR, The City of Chanhassen will commit to implementing the mitigation initiatives identified in this plan.

Intent of Mitigation Plan

New development generates impacts on the environment and on existing development. These impacts result from construction activities associated with new development (i.e. erosion, dust, noise) as well as post construction associated with the activities and design of the development (i.e. traffic, runoff, pollution, infrastructure demand). This plan identifies existing tools and policies that the City of Chanhassen has in place to address the types of impacts that may result through development of the Chanhassen AUAR project area. The plan also identifies additional initiatives that will need to be implemented to mitigate potential environmental impacts resulting from projected development of the project area.

There are multiple ways in which Mitigation Initiatives may be implemented such as:

- Enforcing existing zoning and subdivision ordinances and other development regulations at the time of development concept submittals, preliminary and final platting, and during construction monitoring activities;
- Referencing and implementing policy directions during the review and approvals of development projects;
- Facilitating additional study as regional transportation planning initiatives become more finalized or as other regional developments alter travel patterns/behaviors.
- Planning and building public infrastructure (local roads, parks, trunk sewer systems and water systems) in conjunction with private development initiatives;
- Maintaining and updating of existing plans and studies for the community;
- Requiring additional field work/investigations as part of pre development planning where potential environmental or cultural resources may exist but have not been verified.

General Mitigation Initiatives

This section identifies a series of mitigation initiatives that are general in nature and apply to all public and private development within the AUAR.

1. All permits identified in the AUAR (See question #8) as well as other necessary permits that may be required will be secured by the City, or private parties as appropriate, for all development activities within the project area.
2. The City will follow its own regulations, ordinances, plans, and policies currently in place in the review and approval of all development activities within the project area. These items include *The 2020 Comprehensive Land Use Plan*, *the official zoning and subdivision ordinances* and *the Bluff Creek Overlay ordinance*. In addition, the *Bluff Creek Watershed Natural Resource Management Plan*, *the Surface Water Management Plan*, *the Public Water Supply and Distribution System Plan (currently being revised)* and *the Comprehensive Sewer Policy Plan* will be used as technical resources in reviewing development activities and developing associated public infrastructure.
3. The City will extend public sewer and water services in a manner consistent with existing plans and policies for delivering trunk sanitary sewer service and water main systems. Abandonment and closure of individual well and septic systems will follow existing local and state regulations.
4. The City will work with Mn/DOT and Carver County to periodically monitor traffic as generated from development within the project area as well as regional development initiatives that will affect the project area. Regional roadway improvements such as TH 212/312 and improvements to County Roads (Audubon Rd., Lyman Blvd., Pioneer Trail and future Powers Blvd. extension) will alter travel patterns. Performing traffic counts and monitoring traffic movements will help in facilitating future local roadway improvements.
5. The City will provide for adequate regional and local stormwater ponds and trunk facilities to protect water resources and water quality as guided by the *Storm Water Management Plan* and *Bluff Creek Watershed Natural Resource Management Plan*. [National Pollutant Discharge Elimination System (NPDES) Phase II with individual site development]
6. The City will implement a development tracking mechanism to monitor development within the AUAR Project Area and its conformance with the development scenario.
7. The City will enforce its parkland dedication practices consistent with the goals and policies outlined in the *2020 Comprehensive Plan* and the *Bluff Creek Watershed Natural Resource Management Plan* and the requirements of the subdivision ordinance.
8. The City will follow existing zoning regulations including Floodplain Overlay (Article V), Wetland Protection (Article VI), Shoreland Management (Article VII), Bluff Protection (Article XXVIII) and Bluff Creek Overlay (Article XXXI) to protect natural and environmental resources from potential impacts resulting from the Development Scenario. The City will reference policies and strategies outlined in the *2020 Comprehensive Plan*, *Comprehensive Stormwater Management Plan* and *Bluff Creek Watershed Natural Resource Management Plan* as technical resources during the review of specific development projects.

Focused Mitigation Initiatives

Mitigation initiatives that are explicitly intended to mitigate or minimize impacts on a particular resource or action are outlined by topic in this section.

Fish, Wildlife and Ecologically Sensitive Resources

The bluff creek ordinance contains provisions that require a detailed analysis of habitat conditions prior to development. This analysis is provided as part of the preparation of development plans. Staff will verify the findings of the work and will work with developers to design projects in a manner that protects and preserves these habitat areas. Implementation of the bluff creek ordinance will protect resources within the bluff creek corridor (See Figure 4 Significant Habitat Areas of the AUAR Document.)

Other areas within the project area maintain significant wildlife or ecologically sensitive resources. The most prominent resources are identified in Figure 4. The identification of these areas provide advance notice to developers to plan developments in a manner that protects their ecological function. The *City's 2020 Comprehensive Plan*, the *Bluff Creek Watershed Natural Resources Management Plan*, the Bluff Creek zoning overlay and the Planned Unit Development (PUD) zoning mechanism (Article VIII) provide the City with the necessary tools to be flexible with subdivision design in order to preserve these areas. A cooperative approach to planning and design will be implemented to protect other wildlife and sensitive resources.

In addition to implementing existing plans, policies and regulations, the City will actively work with non-profit groups focused on preserving quality open spaces and environmental resources that are identified with this AUAR and future more detailed development planning initiatives.

Water Resources (wetlands, creeks, lakes) and Surface Water Management

Increased stormwater runoff will result from future development in the project area. *The Surface Water Management Plan* and watershed regulations establish standards for surface water runoff. Key policy directives relative to the protection of water resources and the management of surface water runoff include:

- Maintaining discharge rates at or below current levels.
- Pre-treatment of runoff prior to discharge to wetlands, in accordance with wetland classification requirements.
- Conformance to NURP (National Urban Runoff Pond) standards.
- Conformance to NPDES Phase II requirements as outlined in the EPA Clean Water Act.

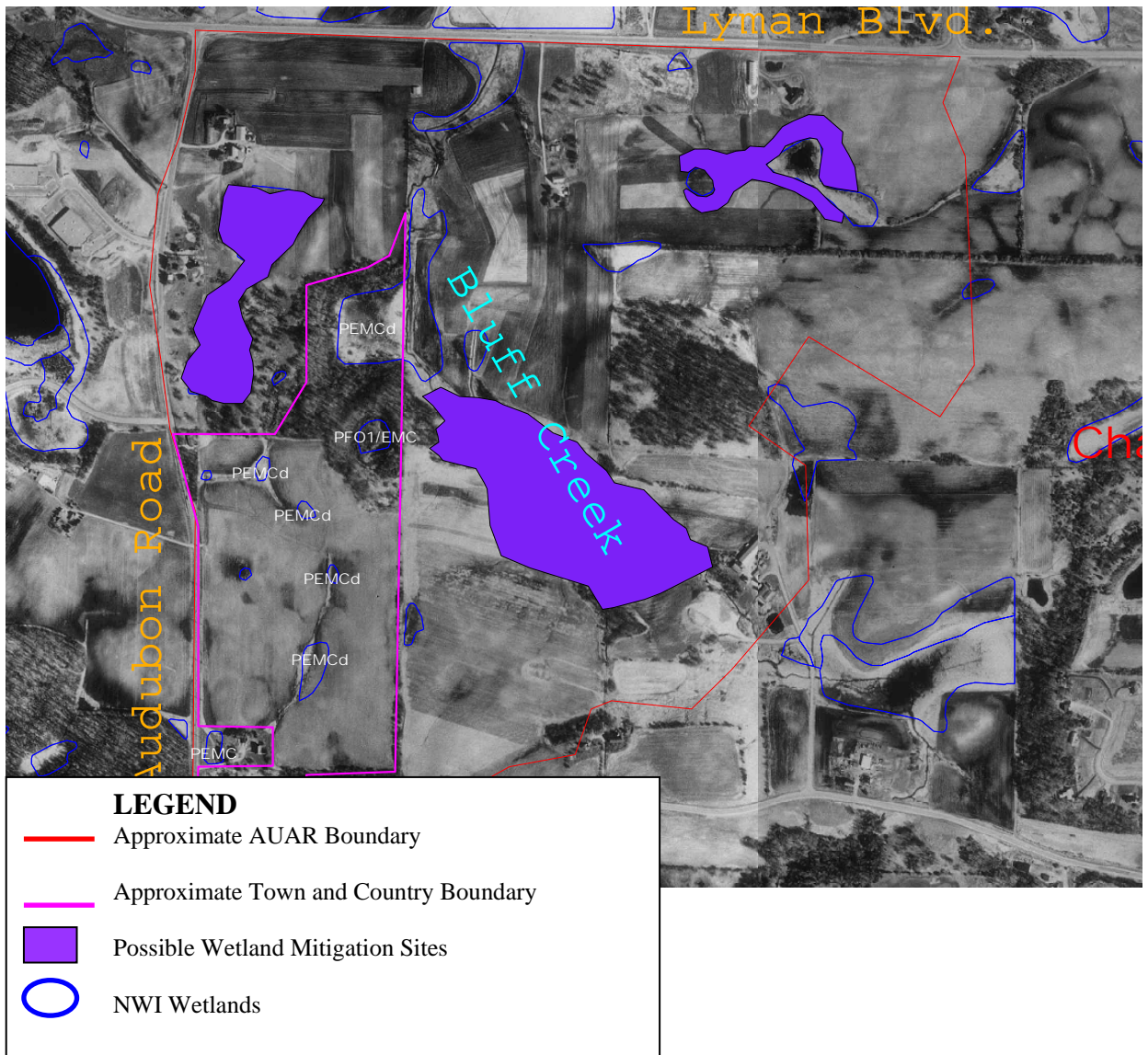
Additional strategies and policies that direct development in a manner that minimizes impervious surface coverage are outlined in the *2020 Comprehensive Plan*, *The Bluff Creek Watershed Natural Resource Management Plan*, *the Wetland Conservation Act* and *the City's Wetland Protection Ordinance*.

Projects within the AUAR that impact wetlands will be subject to regulation under the City of Chanhassen Wetland Ordinance, Wetland Conservation Act, Chapter 103G Waters of the State (i.e. Department of Natural Resources), and possibly Section 404 of the Clean Water Act (i.e. the U. S. Army Corps of Engineers). Should wetland impacts be part of a project within the AUAR

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these regulatory programs have sequencing requirements which require applicants to demonstrate that wetlands impacts have been avoided and minimized to the extent practicable and if impacts cannot be avoided these programs require replacement of wetlands impacted by fill or excavation.

The City of Chanhasen will also examine the feasibility of creating a wetland bank within the AUAR as described in Minn. Rules 8420.0700 Subpart 8. Three areas within the AUAR could be utilized to create a wetland bank. These areas are located where wetlands have been drained by agricultural activity and could be restored by breaking drain tiles, adjacent to existing wetlands where topography allows for creation of new wetlands and along the Bluff Creek floodplain where agricultural drain tiles could be disabled to restore emergent wetland. The general location of these areas are illustrated below.



Erosion and Sedimentation

The City of Chanhassen utilizes “Best Management Practices” as outlined in various resources and by the Metropolitan Pollution Control Agency (MPCA). During construction activities and prior to the maturing of vegetative cover over disturbed ground, proper techniques will be used to control erosion and sedimentation. The City’s existing code provides the regulatory tools for this initiative. Land use management and zoning tools (PUD, density transfers, Bluff Creek Overlay) will be implemented to direct development to less erosion prone areas of the site.

Wastewater

The development scenarios identified in this AUAR are consistent with the *City of Chanhassen Comprehensive Sewer Policy Plan* dated November, 1998. The City of Chanhassen through its site development plan review process will monitor and verify estimated wastewater flows for general conformance to the Sewer Policy Plan. In addition each development will be responsible for the following:

- Conformance to the City of Chanhassen Comprehensive Sewer Policy Plan.
- Metropolitan Council Environmental Services (MCES) Sanitary Sewer Extension Permit(s)
- Sewer Access Charges (SAC) related to their proposed development.
- The proportional share of the costs of Trunk Sanitary Sewer Mains.
- Construction of local sewer mains to serve the development.

Water Supply

Public water supply will be provided to the study area by the extension of trunk water lines to be constructed through a process to be determined and implemented by the City of Chanhassen. Existing water lines are located to the North of the project study area. The City of Chanhassen through their draft *Water Supply, Treatment, and distribution System Master Plan* have identified the need to install a 12-inch regional trunk water line along Audubon and Pioneer Trail, and a 16-inch regional trunk water line along future Powers Blvd and Lyman Blvd. These trunk water lines will be used to supply water to the development area through a local system of water lines to be constructed as development occurs. The phasing of trunk water lines will be dependent upon the area’s to be developed, the size, density and type of land use that occurs. Trunk water supply infrastructure needs will be determined by the City of Chanhassen. Each development will be responsible for the following:

- Conformance to the City of Chanhassen Water Supply, Treatment and Distribution System Master Plan (Draft).
- Minnesota Department of Health permit(s) for the extension of water supply systems.
- Water Access Charges (WAC) related to their development.
- The proportional share of the costs of Trunk Water Supply lines.
- Construction of local water supply lines.

Public Infrastructure

Questions have been raised about the timing of future private development projects relative to the timing of public infrastructure improvements. In many cases where development is occurring contiguous to the City's developed area, the extension of public improvements occurs in conjunction with the proposed development project. In the case of the AUAR project area, pressures for development suggest that projects may occur in a non-contiguous pattern. Also, the timing of the construction of new TH 212/312 will potentially impact the timing of needed roadway improvements in areas where development may not occur for several years. To address this issue, a mitigation initiative will be for the City to examine the feasibility of building key public infrastructure (east/west and north/south collector roadways, trunk sanitary and storm sewer and primary water mains) as a public improvement project prior to development. This type of feasibility study will require funding that can be provided out of the City's budget.

As part of the infrastructure mitigation initiatives, the City will update its storm water management plan to address storm water management in the AUAR project area in greater detail.

Traffic/Transportation Mitigation Initiatives

There are a number of specific traffic/transportation initiatives needed to adequately address potential development impacts. As discussed in the AUAR Question 21-Traffic and Appendix 5-Traffic Analysis, the mitigation approaches outlined below depend on a Build/No-Build of TH 212/312 as well as consideration of the Town and County Homes Concept Plan as approved.

1. Proposed improvements to accommodate Scenario E-2¹ (the Town and Country Homes development proposal or TAZ 2 and 3) traffic include the following:
 - a. Construct the East-West Collector road from the eastern boundary of TAZ's 2 and 3 to Audubon Road at Butternut Drive prior to development of TAZ's 2 and/or 3.
 - b. Construct dual westbound left-turn lanes on Lyman at Audubon and provide two southbound through lanes on Audubon.
 - c. Construct dedicated northbound and southbound left turn lanes and a northbound right turn lane at the intersection of Audubon/Butternut.
 - d. Prior to construction of any additional TAZ's adjacent to the East-West Collector Road, it is recommended that the Collector Road be extended to Powers Boulevard.
 - e. It is not expected that signalization will be required at the intersection of Audubon/Butternut when the Collector Road is extended to Powers Boulevard, but it should be monitored periodically to determine if it meets signal warrants.
 - f. Consider reviewing the signal timing of the Audubon/Pioneer Trail intersection to minimize delay on southbound/westbound Audubon.

¹ Scenario E-2 is used to refer to traffic generated by the Town and Country development proposal. This development was evaluated in greater detail because it is assumed that this will be the first project to develop.

2. Proposed improvements to accommodate the AUAR development traffic include the following:
 - a. With the improvements already planned, the planned TH 212/312 interchange at the east end of the AUAR Development will be able to accommodate project traffic at acceptable levels of service.
 - b. Improvements to Lyman Boulevard to include adding right- and left-turn lanes on the eastbound and westbound (Lyman Boulevard) approaches to intersections with North Audubon Road, the North Connector, and Powers Boulevard.
 - c. Improvements to Audubon Road include adding right- and left-turn lanes on the northbound and southbound (Audubon Road) approaches to the intersection with Lakeview Drive.
 - d. Improvements recommended for the Pioneer Trail realignment include adding right- and left-turn lanes on the eastbound and westbound (Pioneer Trail) approaches to intersections with the South Connector, Bluff Creek Drive, and Powers Boulevard.
 - e. Powers Boulevard between Lyman Boulevard and Pioneer Trail will require a four-lane cross section with exclusive right- and left-turn lanes at intersections with Lyman Boulevard, the westbound 212/312 Ramp, the eastbound TH 212/312 Ramp, and Pioneer Trail. The Highway Capacity Manual recommends that dual left-turn lanes be installed when volumes exceed 300 vehicles per hour; however, it is not always the optimal situation and should be evaluated on a case-by-case basis. Although Mn/DOT may typically require that dual left-turn lanes be provided when left-turn volumes exceed 300 vehicles per hour, proposed operational conditions at the Powers Boulevard/TH 212/312 ramp do not necessitate this provision. Based on the proposed configuration of this intersection combined with the low volume of opposing and side street traffic volumes the southbound left-turn volumes can be served by a single lane.
 - f. When signal warrants are met, the following intersections will need to be signalized prior to the full build out of the proposed AUAR development:
 - Powers Boulevard/Lyman Boulevard
 - Powers Boulevard/westbound TH 212/312 Ramp
 - Powers Boulevard/eastbound TH 212/312 Ramp
 - Pioneer Trail/Bluff Creek Drive
 - g. The following intersections may need to be signalized at or following full build out of the proposed AUAR development:
 - Pioneer Trail/Powers Boulevard
 - Pioneer Trail/South Connector
 - Lyman Boulevard/North Connector
 - Lyman Boulevard/North Audubon Road
 - Audubon Road/Butternut Drive
 - Audubon Road/Lakeview Drive

It is recommended to periodically review the aforementioned intersections to determine when signal warrants are met.

3. When plans for reconstruction of existing roads or construction of new roads are developed, incorporate design considerations that will mitigate noise impacts. These design considerations would include landscaping, berming and speed limit controls.
4. Coordinate development of perimeter road connections (such as where a collector roadway within the project area connects to Audubon, Lyman or Pioneer Trail) with Carver County, the City of Chaska and adjacent neighborhoods.
5. Southwest Metro Transit is planning for a park and ride lot on the southeast corner of Hwy 101 and TH 212/312. The City of Chanhassen maintains a strong relationship with SW Metro Transit and will ensure site plans are reviewed by SW Metro Transit and transit oriented design is considered as part of subdivision design. This initiative will evaluate the possibility of providing circulator service to new developments within the project area to reduce single occupant auto trips.
6. Ensure subdivisions include plans for Pedestrian and Bicycle movement in and through the project area as well as linkages to the greater community. Roadway designs will meet the City's current design standards for on-street and off-street trail connections. The City will work with Carver County to preserve Right-of-Way (ROW) for off road trails.

TH 212/312 Impacts

The building of TH 212/312 will have a significant impact on the project area. The TH 212/312 project has an extensive inventory of environmental documentation that includes a number of mitigation measures. The "TH 212 Southwest Corridor Final Environmental Impact Statement Section 4 (f) Evaluation" was completed in June of 1993. This documentation is currently being updated and should be referenced in conjunction with the Chanhassen AUAR relative to impacts generated by TH 212/312.

Land Use Management Initiatives

The project area is unique because of its topographical features and the Bluff Creek corridor. This uniqueness poses challenges to development. Efforts to minimize impacts on the Bluff Creek corridor and to maintain as much of the pristine environmental presence of the site will have to come from combined public and private actions. The City of Chanhassen is well positioned from a regulatory position to guide development in a manner that achieves the objectives of the *2020 Comprehensive Plan* and *Bluff Creek Watershed Natural Resource Management Plan*. Specific strategies that enable the City to achieve these objectives include:

Transfer of density—this approach to development would enable a developer to move units within a development project from areas that are desired to be preserved (such as the high quality woodland in the center of the project area shown in Figure 4) to areas that are less sensitive. The developer would not loose density in the project by interjecting a broader mix of units and lot sizes.

Clustering of housing units—this is a conservation development approach used to minimize development impacts on adjacent resource areas. Although it is more widely used in rural developments, it can be used in urban settings to obtain the same resource protection results. Clustering in an urban setting will also reduce infrastructure thereby reducing up front and longer term maintenance costs. In general terms, clustering requires smaller lot sizes, reduced street widths to balance increased protection areas. This would likely be used in conjunction with a transfer of

density when properties have environmental protection areas and involve a Planned Unit Development (PUD) process.

As the project area develops, there will be a need for park improvements. If the Chaska School District is to locate a school facility in the project area, the City will work with the school district to jointly develop a community park in conjunction with open space and recreation needs of the school facility. If the Chaska School district decides not to locate a school facility in the project area, the City will still build a park facility; however, the park facility may be smaller in area (5 to 10 acres) with the remaining portions of the land area reverting to a residential use. The City will use its existing park dedication policies to help fund these improvements.

Monitoring of Development in the AUAR Area and Future Updates to the AUAR

The AUAR assumes a hypothetical development scenario. Because it is based on assumptions, it is important that actual development be monitored and compared to the development that was assumed in the development scenario. Tracking of this development will be done through the City's existing GIS system. The developer as part of the final plat process will submit electronic plats consistent with city development requirements in a compatible form to the City's GIS system. This data will enable the City to maintain an ongoing inventory of platted lots and the ability to directly tie building permits to the lots so that occupied housing units could be tracked in the development area. The City's existing GIS system has the capacity to perform this task.

As required by Minnesota Rule 4410.3610 Subpart 7, to remain valid, the AUAR must be updated if any of the following events should occur:

Five years have passed since the AUAR and mitigation plan were adopted and all development within the project area has not been given final approval.

A comprehensive plan amendment is proposed that would allow an increase in development than what was assumed in the development scenario.

Total development within the area would exceed the maximum levels assumed in the environmental analysis document.

Development within any subarea delineated in the AUAR would exceed the maximum levels assumed for that subarea in the document.

A substantial change is proposed in public facilities intended to service development in the area that may result in increased adverse impacts on the environment.

Development or construction of public facilities will occur differently than assumed in the development scenario such that it will postpone or alter mitigation plans or increase the development magnitude.

New information demonstrates that important assumptions or background conditions used in the analysis presented in the AUAR are substantially in error and that environmental impacts have consequently been substantially underestimated.

The RGU determines that other substantial changes have occurred that may affect the potential for, or magnitude of, adverse environmental impacts.