

Appendix F: Response to Comments on the Draft AUAR document

AUAR Guidelines: The final AUAR document must include a section specifically responding to each timely and substantive comment on the draft that indicates the way in which the comment has been addressed. Similar comments may be combined for purposes of responding.

The Woodbury Northeast Draft Alternative Urban Areawide Review (Draft AUAR) was distributed to the Environmental Quality Board (EQB) and persons and agencies on the official Environmental Quality Board (EQB) mailing list in accordance with EQB rules on November 26, 2008.

The 30-day comment period expired on December 31, 2008. Seven agencies, one local unit of government, one private organization, and three citizens submitted comment letters on the Draft AUAR. One of the agencies and the local unit of government requested an extension of the public comment period; the City of Woodbury granted the extension. Copies of all comment letters submitted are included in Appendix E.

Responses are generally confined to substantive issues that “address the accuracy and completeness of the information provided in the draft analysis and draft mitigation plan, potential impacts that warrant further analysis, further information that may be required in order to secure permits for specific projects in the future, mitigation measures or procedures necessary to prevent significant environmental impacts within the area when actual development occurs, and the need to analyze additional development scenarios” (Minnesota Rules Part 4410.3610, Subp. 5). Although comments and recommendations that do not address these areas need not have a response, they have been duly noted for the record and are not necessarily specifically addressed in the responses. As required by MN Rules, the RGU has provided replies to comments that are *substantive* (involving matters with major or practical importance) and where necessary, note any correction(s) to be made to the appropriate sections of the AUAR or Mitigation Plan.

Responses to comments are organized by AUAR Item number. The substantive comments regarding each AUAR item are summarized and the agencies, organizations, and citizens submitting similar comments are listed. This method assures consistency in the responses and allows the reviewer to easily identify the major issues raised amongst the comment letters received. A general response to each substantive comment follows.

ITEM 8. PERMITS AND APPROVALS

8-1 Comment Summary: If a Clean Water Act (CWA) Section 404 Individual Permit is required by the USACE for any development related activities, then an MPCA CWA Section 401 Water Quality Certification must also be obtained.

Agencies/Persons Commenting: Minnesota Pollution Control Agency

Response: Comment noted. The list of permits and approvals (Table 8-1) has been amended to reflect the potential need for the CWA Section 401 Water Quality Certification.

8-2 Comment Summary: The AUAR should, at the very least, acknowledge the potential permit and stormwater management implications of Total Maximum Daily Load (TMDL) studies for Lake Saint Croix and Lake Pepin.

Agencies/Persons Commenting: Washington Conservation District

Response: The following information was added to the response to Item 17 of the AUAR: Although not within the AUAR area, Lake St Croix receives runoff from the project area prior to discharging to the St Croix River. Lake St Croix is included in the 2008 303(d) TMDL list as impaired for aquatic recreation due to eutrophication. The MPCA is in the process of completing a TMDL Study and Implementation plan for this lake with a target date of 2011. The implementation plan will set waste load allocations to areas tributary to Lake St Croix, potentially including the City of Woodbury.

The steps listed in the mitigation plan for this AUAR are intended to reduce total phosphorus, total suspended sediments and volume loads at the boundary of the AUAR area to baseline conditions per nondegradation requirements. These are in line with the goal of removing Lake St Croix from the impaired waters list. Although it should be noted that State, regional, or local units of government may require additional measures beyond those set in this AUAR mitigation plan for complying with the future TMDL implementation plan for Lake St Croix.

The St Croix River discharges to Lake Pepin. The Lake Pepin TMDL implementation plan is currently being written which may have a waste load allocation for Woodbury that affects the AUAR area.

ITEM 9. LAND USE

- 9-1 Comment Summary:** The three development scenarios each would result in 4.6 million to 5.0 million square feet of commercial built space, accommodating 8,300 to 10,900 jobs. The Metropolitan Council's forecasts assume commercial development in this area and, according to the AUAR, are assumed in the City's 2020 Comprehensive Plan. The three scenarios would also result in zero to 555 high density (multifamily) housing units.

If scenarios 2 or 3 are chosen, the City will need to review and potentially revise their forecasts. The City could address this growth in the 2030 comprehensive plan update, or in a future comprehensive plan amendment.

Agencies/Persons Commenting: Metropolitan Council

Response: Comment noted. The City will follow Metropolitan Council requirements regarding its Comprehensive Plan.

- 9-2 Comment Summary:** Under the Mitigation Plan, the forest land in the southeastern corner of the study area is proposed as a buffer area. While we do not own this portion of the AUAR study area, we think that the mitigation plan should be amended to maintain some flexibility to develop a portion of this property, particularly given that a portion of this parcel is currently being used for agriculture.

Agencies/Persons Commenting: Stonehenge USA

Response: Figures 10-2, 10-3, and 10-4 of the Draft AUAR show three scenarios with differing extents of areas for protection; none of the scenarios propose protecting the agricultural area on the subject property. Figure 10-3 does not show the area of the knoll or the forested area between two agricultural areas as protected. Analyzing these three different scenarios in the AUAR provides some flexibility with regard to future development, possibly allowing development between the agricultural areas. Ultimately, these types of decisions will be made as development plans are submitted and reviewed for approval.

- 9-3 Comment Summary:** The draft AUAR identifies several properties within or near the AUAR study area with actual or potential soil and/or ground water contamination. State law requires that persons properly manage contaminated soil and water they uncover or disturb - even if they are not the party responsible for the contamination. Developers considering construction on or near contaminated properties should begin working early in their planning process with the MPCA's Petroleum Brownfields Program and/or the Voluntary Investigation and Cleanup Program to receive necessary technical assistance in managing (investigating, remediating, mitigating, etc.) contamination. For some properties, special construction might be needed to prevent the further spreading of the contamination and/or prevent petroleum vapors from entering buildings or utility corridors. Information regarding the Petroleum Brownfields Program can be found at: http://www.pca.state.mn.us/programs/vpic_p.html#factsheets. Information regarding the VIC Program can be found at: <http://www.pca.state.mn.us/cleanup/vic.html>.

Agencies/Persons Commenting: Minnesota Pollution Control Agency

Response: Comment noted. The information provided by the MPCA has been added to the Potential Environmental Hazards section of AUAR Item 9.

- 9-4 Comment Summary:** The section pertaining to compatibility with land uses indicates that the City of Lake Elmo land use plan guides the areas adjacent to the study area for business park Development and urban residential, and further notes that "these land uses should be compatible with development that occurs in the AUAR area and vice versa since they are both non-residential land uses". The urban residential area referenced in the AUAR is a sewered residential development area which is planned for a density of 3.5 dwelling units per acre. This use classification is residential and not necessarily compatible with the commercial/office development and related road improvements proposed.

Agencies/Persons Commenting: City of Lake Elmo

Response: The statement from Item 9 referenced in the comment has been revised in the AUAR to read "these land uses should be compatible with development that occurs in the AUAR area and vice versa since they are both *urban* land uses". The City believes the width of the I-94 corridor provides an adequate separation between the differing urban land uses and as stated in Item 9, that the existing interstate will likely produce a greater impact on adjacent land uses than development in the AUAR area across the interstate.

ITEM 10. LAND COVER

- 10-1 Comment Summary:** The "small wooded knob or hill located north of the large forested parcel" that is being recommended for protection in Scenarios 1 and 3 are situated centrally within our land and the proposed roadway infrastructure so that preservation may not be possible without compromising the functional and economic viability of reasonable future development. There would also be a significant grading challenge possibly requiring costly and unsightly retaining walls if the knob is to be preserved. We recommend that areas be identified only for possible protection under each development scenario.

Agencies/Persons Commenting: Stonehenge USA

Response: See response to Comment 9-2 above.

- 10-2 Comment Summary:** A thorough assessment of cover types and protection of natural areas has been completed for AUAR. The WCD encourages:

- open space protection (and avoidance of impervious area increases) as part of overall stormwater management strategy.
- development of long-term management plans of protected open space, including noxious weed and desirable species management. A long-term implementation/mitigation plan should include a funding strategy for these maintenance activities.
- maximization of the use of trees in the proposed development area.

Agencies/Persons Commenting: Washington Conservation District

Response: Comment noted.

ITEM 11. FISH, WILDLIFE, AND ECOLOGICALLY SENSITIVE RESOURCES

- 11-1 **Comment Summary:** Scenarios 1 and 3 propose a surface water infiltration and conveyance pathway (as depicted on Figures 10-2 and 10-4) through the forested area community 5A, located along the area's southeastern border, and proposed to be preserved. At present, the ecological status of community 5A is one of the highest quality natural communities remaining in the area. Figures 17-2 and 17-3 indicate that a significant swath through the center of the wooded parcel is proposed to be utilized as a surface water conveyance route.

The conveyance pathway as proposed would be expected to result in a deterioration of the health of the wooded community through habitat fragmentation; and fluctuation of the local water table resulting in the die-off of surrounding trees and further invasion of nonnative species into the area. Council staff recommends that the surface water management area pathway be constructed in an area (alternative route) and fashion that will result in fewer direct and indirect impacts to Community 5A.

Agencies/Persons Commenting: Metropolitan Council

Response: The proposed conveyance path has been revised on Figures 10-2, 10-4, and 17-3 to match the existing overflow from subwatershed VB-13.1 north into VB-9 along Hudson Road. This revision largely minimizes the impact to the forested area community 5A and instead utilizes existing cultivated areas. Also, the proposed conveyance path has been shown following existing natural drainage routes to make the most efficient use of the land, minimize grading and excavation and take advantage of undisturbed soils. It should be noted that existing 2 ft contours from aerial photography seem to be in conflict with preliminary field investigation throughout VB-13.1. Further survey work and analysis of existing topography should be completed throughout VB-13.1 to confirm existing drainage patterns. The City will require that development in the area maintain existing drainage patterns. As development proceeds, the actual location of the ponding/infiltration/conveyance system may be relocated. As described in Item 17, if the developer believes alterations to the system as shown on Figure 17-3 are unavoidable due to site constraints on individual parcels, the City will consider either alterations to the specific location of the conveyance system or inclusion of constructed best management practices.

- 11-2 **Comment Summary:** In Section 11.5 of the Mitigation Plan, it is recommended that habitat fragmentation should be avoided if possible. The term "if possible" is a concern since it does not seem to acknowledge the need to balance this desirable outcome with the realities of future development. We would suggest a phrase such as "to the extent practical" be substituted.

Agencies/Persons Commenting: Stonehenge USA

Response: The text states "should be avoided if possible" which provides for the flexibility requested and does acknowledge the balance required to avoid habitat fragmentation. The phrase

“to the extent practical” does not stress the importance that the City places on this goal.

- 11-3 Comment Summary:** Wild turkeys should be included as a wildlife species under the Planted and Cultivated, Herbaceous, and Woodland/Forest Topic.

Agencies/Persons Commenting: Minnesota Department of Natural Resources

Response: AUAR Item 11 has been revised to include wild turkeys in the habitat topics indicated by the DNR.

ITEM 12. PHYSICAL IMPACTS ON WATER RESOURCES

- 12-1 Comment Summary:** The first paragraph in this section (page 30) indicates that no wetland delineations been conducted within the AUAR boundary. MFRA has completed a wetland delineation of the 342-acre Red Rock Territory parcel as well as the parcel to the south and occupied by the Black Diamond Company. The wetland boundaries have been reviewed and verbally approved by the VBWD.

Agencies/Persons Commenting: Stonehenge USA

Response: Text in AUAR Item 12 has been revised to reflect the wetland delineation completed for the 342-acre Red Rock Territory parcel and the Black Diamond Company parcel to the south.

- 12-2 Comment Summary:** In the third paragraph (page 31), in the wetlands subsection, it is stated that “excavation is only allowed within isolated wetlands”. It is our understanding that the VBWD District Rules do not restrict excavation to isolated wetlands and furthermore, the Army Corps of Engineers does not regulate excavation activities within Type 1 and 2 wetlands.

Agencies/Persons Commenting: Stonehenge USA

Response: That paragraph in Item 12 of the AUAR has been revised as follows: The WCA regulates excavation, fill, and drainage in most wetland types. The VBWD rules and regulations incorporate the WCA rules, but VBWD rules also have additional wetland restrictions that are not included in the WCA. All projects will comply with VBWD rules and regulations including rules for dredging, ditching and excavation.

- 12-3 Comment Summary:** In the fifth paragraph (page 31) it is stated that “there are no Manage 3 wetlands within the AUAR area”. MFRA has completed a MNRAM of the delineated wetlands on the 342-acre Red Rock Territory parcel and identified one Manage 3 wetland. This assessment was approved by the VBWD.

Agencies/Persons Commenting: Stonehenge USA

Response: The sentence referred to has been revised in AUAR Item 12 to read: Manage 3 wetlands are the lowest quality and require a 25 foot buffer.

- 12-4 Comment Summary:** Table 12-2 Wetland Inventory, Assessment, and Impact Summary. Per MFRA MNRAM assessment of the wetlands on the 342-acre Red Rock Territory parcel and the VBWD approval, the following wetlands be reclassified. Below is the VBWD wetland identification number, the VBWD classification, and the approved category. The reclassification of wetlands from the Manage 2 to Manage 1 will result in an increase in wetland buffer width, while the reclassification from a Manage 1 to Manage 2 will result in a decrease in wetland buffer width.

Wetland 82-028-21-02-009-A, Manage 2 to Manage 1

Wetland 82-028-21-01-006-A, Manage 1 to Manage 2

Wetland 82-028-21-01-013-A, Manage 1 to Manage 2

During development process Stonehenge USA wishes to seek reduced buffer width in return for enhanced buffer ecology.

Agencies/Persons Commenting: Stonehenge USA

Response: As indicated in the AUAR, per VBWD requirements a wetland delineation and functions and values assessment will need to be approved (officially) prior to development occurring in the AUAR area. At this point if wetland reclassification is warranted for these or other wetlands, it can occur. Also note that the Mitigation Plan references the need to follow VBWD and WCA requirements prior to development. Requests for variances to required buffer widths will be considered during the development approval process.

- 12-5 Comment Summary:** Full sequencing under WCA and other wetland regulations is required. WCD staff anticipates ongoing involvement as part of the Technical Evaluation Panel (TEP). Further evaluation of impacts and development of a more detailed mitigation plan for direct and indirect (especially stormwater impacts for wetlands used as part of the regional drainage system) impacts is encouraged.

Development and implementation of a buffer management strategy is encouraged. This strategy can be integrated with management of nearby protected open space discussed in Item 10.

Agencies/Persons Commenting: Washington Conservation District

Response: The City is aware of WCA requirements, which in this part of the City are administered by the VBWD. Any developments submitted for approval will be required to comply with WCA and VBWD rules. Regarding buffers, the VBWD requires an average 60 foot buffer around wetlands classified as Preserve; an average 40 foot buffer around Manage 1 wetlands; an average 30 foot buffer around Manage 2 wetlands; and an average 25 foot buffer around Manage 3 wetlands. Current VBWD rules also require the establishment or protection of a minimum 16.5 foot wide upland buffer around wetlands for all permitted activities; however the City of Woodbury's minimum 25-foot wetland buffer is a more restrictive requirement that will apply to new development.

- 12-6 Comment Summary:** A sentence (first paragraph, page 30) states, "Using wetlands for this purpose [part of the natural storm drainage system] will involve balancing the city's economical implementation of its flood control system against the need to maintain wetland function and values." As the Local Government Unit (LGU) responsible for administering the Wetland Conservation Act (WCA) in the Northeast Area of Woodbury, the VBWD would need to have more information prior to approving any wetland impacts.

The WCA requires that all direct or indirect impacts to wetlands that may destroy or diminish the wetland be avoided and does not allow any provisions for economic implications. A sequencing analysis (following these principles in descending order: avoiding, minimizing, rectifying, reducing, and replacing the wetland) is required for any wetland impact. If a conversion of a wetland to a stormwater pond is approved by the LGU after obtaining agreement from the Technical Evaluation Panel, wetland replacement would be required. The WCA allows sequencing flexibility if alternatives have been considered and the proposed replacement wetland is certain to provide equal or greater functions and public values.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: The WCA states “Economic considerations alone do not justify adversely effective actions.” It does not state that economic implications cannot be considered at all. The City of Woodbury is not proposing through this AUAR or the draft Surface Water Management Plan to alter any wetlands within the City including wetlands within VBWD without following the proper sequencing analysis and obtaining appropriate approvals. The City of Woodbury also requires appropriate stormwater ponding upstream of any wetland that is part of the surface water management system.

- 12-7 Comment Summary:** According to Table 12-2, the City proposes to utilize a highly susceptible wetland classified by the VBWD as Preserve (82-028-21-002-A) for a stormwater pond. The VBWD is unlikely to support this proposal and the City should revise its plans.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: The text states that the wetland will be utilized in the local stormwater management system, not that it will be used as a stormwater pond. The City is continuing to propose to locate ponding adjacent to wetland 82-028-21-01-002-A (it is assumed that this is the wetland VBWD referred to in comment letter, though the 01 was omitted from text). Prior to discharging to this wetland, rate control to predevelopment levels must occur for the 100-year event as well as conformance to VBWD and City requirements.

- 12-8 Comment Summary:** The VBWD and City classifications of several wetlands (82-028-21-01-015-A, 82-028-21-002-A, 82-028-21-01-014-A) appear to be significantly different. When permit applications are submitted to the VBWD, the VBWD will review the wetland classifications. Pre-application meetings are highly recommended.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: The purpose of the limited wetland assessment completed by the City of Woodbury for the draft Surface Water Management Plan and referenced in this section of the AUAR was not to propose a management standard for these wetlands in conflict with VBWD. The purpose of the assessment was to analyze the function and values of wetlands that had been identified previously to be the general location of a regional stormwater storage area and determine the impact to functions and values of these wetlands if they remained the location for proposed regional storage. The assessment was used to identify wetlands that may require mitigation because of the importance of the area for regional storage and because no other feasible alternatives exist for the necessary storage. Prior to development occurring in the AUAR area the developer will need to obtain official approval for any wetland delineation and classification change. Also note that the Mitigation Plan references the need to follow VBWD and WCA requirements prior to development.

ITEM 13. WATER USE

- 13-1 Comment Summary:** We would like reiterate our concerns about potential negative impacts on Valley Creek from the tentative sites previously identified for high capacity wells that provide water to this area.

Agencies/Persons Commenting: Minnesota Department of Natural Resources

Response: Statements that summarize the following have been added to AUAR Item 13. The City of Woodbury has established a long-term monitoring program, using DNR input and recommendations, for their East Well Field wells and Valley Creek. Nine dedicated monitoring

wells and a stream gauging station have been installed for the purposes of collecting continuous information regarding groundwater levels and stream flow conditions. Data has been collected since 2002 and is expected to continue for the foreseeable future in order to ensure that withdrawals from the East Well Field do not negatively impact Valley Creek. Additionally, the City has been undertaking studies to examine the possibility of moving proposed future well sites to the southwest portion of Woodbury, outside of the groundwater watershed for Valley Creek. These efforts are part of Woodbury’s continued commitment to protect the area’s natural resources.

ITEM 14. WATER RELATED LAND USE MANAGEMENT DISTRICTS

14-1 Comment Summary: With regards to potential variances to height restrictions, the current language implies that variances would be discouraged where we believe that it will be in the best interests of all stakeholders, including the developer, if the stated variances would be “encouraged”, or alternatively “appropriate”; provided that standard variance finding can be met.

Agencies/Persons Commenting: Stonehenge USA

Response: The City may consider variances to the height restrictions as stated in the AUAR and believes the current language is appropriate: “Given the anticipated intensity of development and the proximity to I-94, the city may consider variances to the height restriction within the shoreland area of Markgrafs Lake and DNR Wetland 82-88W of up to 65 feet. Variances will only be contemplated by the city if the standard variance findings could be met.”

14-2 Comment Summary: The City needs to discuss how the proposed development scenarios will affect the 100-year flood levels established by the VBWD for several basins within the AUAR study area.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: The following information has been added to AUAR Item 14 to address the 100-year flood levels:

Valley Branch Watershed District (VBWD) has established 100-year flood levels for several of the basins in the AUAR area. As a part of the City of Woodbury’s draft Surface Water Management Plan 100-year flood levels were set for the basins intended to be used as a part of the regional system. The City utilizes the 6.3-inch, 24-hour event for setting 100-year flood levels. Table 14-1 lists these flood levels. Refer to Figure 17-2 for locations of proposed regional basins. Note that the VBWD flood levels are based on the greater of the 100-year, 6-inch, 24-hour rainfall event and the 10-day, 7.2-inch runoff event.

Table 14-1: 100-year Flood Levels

Basin ID	VBWD Flood Level	City of Woodbury 100-year Flood Level
VB-P2	931.0	929.5
VB-P6.1	919.2	921.8
VB-P7	915.1	911.8
VB-P9	894.6	895.9
VB-P10	895.1	893.2
VB-P10.1	894.6	893.9
VB-P13	886.2	882.4
VB-P13.1	896.0	899.2

The 100-year flood levels modeled by the City are based on Scenario 2, the scenario with the most impervious surface that generates runoff. Actual 100-year flood levels may vary depending on the impervious surfaces proposed at the development scale and the use of distributed infiltration practices. The City's 100-year flood levels are greater than VBWD's for VB-P6.1, VB-P9, and VB-P13.1.

ITEM 16. EROSION AND SEDIMENTATION

16-1 Comment Summary: Enhanced soil erosion and sediment controls are needed to protect downstream resources, especially when downstream areas will be used for stormwater retention and infiltration. Grading should be minimized to protect existing high infiltration capacity soils. Preservation of existing topsoil and soil structure is encouraged to the extent possible.

Additional suggested BMPs:

- Minimize exposed soils. Phase grading of the site.
- Avoid compaction of soil disturbance in areas with high infiltration capacity soils.
- Avoid grading and exposure of soils on steep slopes.
- Divert construction site runoff away from proposed retention and infiltration BMPs.
- Conduct regular inspections (in partnership with the VBWD) and enforce compliance with the NPDES permit.

Agencies/Persons Commenting: Washington Conservation District

Response: The City agrees with the WCD. In fact, the current Mitigation Plan accomplishes several of the BMPs suggested by the WCD. Given that this area is on a schedule for full build out to be accomplished over a 20 to 30 year time frame, it is likely that many of the suggested BMPs would be implemented during development of the AUAR area as smaller, individual sites are constructed. In addition, the current plan of development will allow for phased development of transportation and utility improvements. As indicated in the AUAR, the Metropolitan Council's Minnesota Small Sites Best Management Practices Manual will serve as the minimum guidelines for erosion control measures.

ITEM 17. WATER QUALITY: SURFACE WATER RUNOFF

17-1 Comment Summary: To satisfy the requirement of maintaining a minimum 10 feet separation between the bottom of the pond/infiltration area and the bedrock, we propose a soil boring to a depth of 10 feet below the proposed pond/infiltration basin pond instead of drilling to the bedrock as suggested in Section 17.6 (page 145). Based on the geotechnical exploration done by the City for the lift station project and the excavation for the gravel mine it is understood that the bedrock is of adequate depth for the intended development activity. Furthermore, we understand that the Twin Cities Silica is proposing a boring in the gravel mining area to investigate the presence of karst/bedrock within 70 feet of existing grade level.

Agencies/Persons Commenting: Stonehenge USA

Response: The depth to bedrock map from the geologic atlas shows a portion of the AUAR area to have a depth to bedrock less than 50 feet, with the remainder showing a depth of 50-100 feet. While it's quite possible (if not likely) that bedrock will be at least 10 feet below the bottom of the ponds, any drilling done to determine that should ideally go to 15 to 20 feet below the proposed bottom of the infiltration area to verify separation to bedrock and will require a 10 foot separation between the bottom of the pond/infiltration area and the bedrock in accordance to the

Minnesota Stormwater Manual.

- 17-2 **Comment Summary:** We understand that Tables 17-2 and 17-3 were developed based on Scenario 2, the scenario with the most impervious surface that generates the most runoff. It should be recognized that actual runoff rates will be based on the actual impervious surface shown on the development plan.

Agencies/Persons Commenting: Stonehenge USA

Response: AUAR Item 17 has been revised to reflect the comment.

- 17-3 **Comment Summary:** We suggest revising the third paragraph of Section 17 under “Nondegradation” to read “Development within the AUAR area will be required to comply with the city of Woodbury’s draft Surface Water Management Plan *once it is ratified and enacted* and measures in the restricted discharge water plan, including any amendments to the plan after Minnesota Pollution Control Agency comments.”

Agencies/Persons Commenting: Stonehenge USA

Response: The NE AUAR area will be subject to the requirements of the draft Surface Water Management Plan (SWMP) through the implementation of this AUAR Mitigation Plan, regardless of the timeframe for adoption of the SWMP.

- 17-4 **Comment Summary:** In the second paragraph of Section 17 Mitigation Strategy we recommend replacing unavoidable with impractical. This revision should be made to the final paragraph of Section 17, as well.

Agencies/Persons Commenting: Stonehenge USA

Response: “Unavoidable” remains in the AUAR text to stress the importance of the continuous ponding/infiltration/conveyance system for achieving necessary mitigation.

- 17-5 **Comment Summary:** Page 146. Paragraph 17.9. We suggest the following sentence be added to this paragraph: “Use of rural street sections and other features to minimize impervious surface will be encouraged, to the extent practical.” The use of road right-of-ways will be a critical factor in achieving the reports impervious surface goals.

Agencies/Persons Commenting: Stonehenge USA

Response: Mitigation strategy 17.9 states: “Work with developers to integrate low impact development (LID) into their future projects to minimize impervious surface.” The City of Woodbury supports the use of a variety of techniques to minimize impervious surface including the use of rural street sections to accomplish LID goals. Specific techniques are not listed in the mitigation strategy to allow more flexibility in implementation.

- 17-6 **Comment Summary:** Will the City of Woodbury follow the non-degradation rules for treating stormwater directed to the St. Croix? Additional contaminants may compromise the lake sturgeon recovery efforts in the St. Croix.

Agencies/Persons Commenting: Minnesota Department of Natural Resources

Response: Per the AUAR, page 53: The city’s MS4 general permit gives specific requirements that the city must follow to bring discharges to the St. Croix River into compliance. As a part of

their pollutant loading assessment and restricted discharge water plan the city developed measures to restrict the discharges to the extent necessary to preserve the characteristics making the listed water an ORVW.

17-7 Comment Summary: Lake St. Croix, a receiving water for runoff from the AUAR area, is included on the 2008 303(d) Total Maximum Daily Load (TMDL) list of impaired waters as being impaired for aquatic recreation due to eutrophic conditions. Under the CWA, this impaired status requires that a TMDL study and implementation plan for the lake be completed, and the MPCA is currently working on a plan for doing this. Once an implementation plan is in place, targeted for 2011, waste load allocations will be given out to permitted sources throughout the watershed, including the city of Woodbury. With this in mind, the city should take all possible measures during development to reduce or eliminate phosphorous and sediment loading to Lake St. Croix. Steps should also be taken to minimize loading to wetlands and other lakes to prevent them from being listed as impaired. It should also be noted that a Lake Pepin TMDL implementation plan is currently in the process of being formulated, which could include a load allocation for the city of Woodbury.

It should also be noted that while the draft AUAR (pages 45-46) adequately discusses non-degradation of the St. Croix River as required by Minn. R. 7050.0180, the non-degradation rules may not be sufficiently protective to meet future TMDL goals for Lake St. Croix.

Agencies/Persons Commenting: Minnesota Pollution Control Agency

Response: See response to Comment 8-2. The text of AUAR Item 17 has been revised as noted to discuss Lake St Croix TMDL and Lake Pepin.

17-8 Comment Summary: The WCD applauds the city's main goal to avoid a typical "pond, pipe and pump" surface water management system in the AUAR area." An innovative, volume control and load reduction based approach is needed to minimize long-term adverse impacts. The AUAR does not define the volume control requirements that would be necessary to achieve the goals of no increase of discharge to ORVW waters relative to baseline (1989). Additional analysis is suggested to determine what volume control requirements are actually needed. Further, achieving the 20% St. Croix Basin's phosphorus reduction goals are encouraged. Additional evaluation and assessment would be needed to document activities needed to achieve this load reduction goal.

Agencies/Persons Commenting: Washington Conservation District

Response: The following has been added to the text in AUAR Item 17 to address both volume control requirements and the St. Croix Basin phosphorus reduction:

As described previously, the majority of the existing land cover in the AUAR area is row crop agriculture. Using the input values from Woodbury's Loading Assessment the annual runoff volume generated for row crop land use is:

$$0.14 \text{ runoff coefficient} * 33.1 \text{ in/year average annual precipitation} = 4.6 \text{ in/year}$$

In comparison, commercial land use with no volume control generates:

$$0.46 * 33.1 = 15.2 \text{ in/year}$$

This is the land use type with the largest percentage of impervious surfaces and includes "places to work" and "places to shop" on the land use scenarios.

It is necessary to annualize Woodbury's infiltration standard in order to determine its efficacy in maintaining runoff volume to less than or equal to baseline conditions. This was done by considering nine rainfall increments ranging from 0 to 6.0 inches. On average 91% of all rainfall events are less than 2.35 inches (1-year event) and these rainfalls generate 84% of the average annual runoff. The rainfall percentages were developed from 1977-2005 rainfall data from April-November. For each rainfall increment the runoff that is generated is determined and reduced by the percentage that is infiltrated under the City's standard. The annual runoff volume reduction for each rainfall increment is then weighted by the amount of runoff volume that occurs in that increment. For instance, for events between 0 and 0.2 inches the entire runoff volume is infiltrated but these events only result in 5% of the annual runoff volume. Application of the 1-inch off impervious standard to commercial development results in 75% runoff volume reduction annually. Therefore the runoff generated for commercial with application of the City's requirement is:

$$75\% * 15.2 = 11.4 \text{ in/year reduction}$$
$$15.2 - 11.4 = 3.8 \text{ in/year generated}$$

This is slightly less than the 4.6 in/year generated by agriculture row crop annually in compliance with nondegradation guidelines.

The steps listed in the mitigation plan for this AUAR are intended to reduce total phosphorus, total suspended sediments and volume loads at the boundary of the AUAR area to baseline conditions per nondegradation requirements. These are in line with the goal of removing Lake St Croix from the impaired waters list. Although it should be noted that additional measures may be required beyond those set in this AUAR mitigation plan for complying with the future TMDL implementation plan for Lake St Croix.

The St Croix River discharges to Lake Pepin. The Lake Pepin TMDL implementation plan is currently being written which may have a waste load allocation for Woodbury that affects the AUAR area.

- 17-9 Comment Summary:** As alluded to above, Lake St. Croix is listed as impaired for nutrients. Recognition and discussion of integration of future TMDL loading requirements in the AUAR is suggested. TMDL load reduction requirements would effect requirements under the MS4 SWPPP and activities regulated under the NPDES General Permit for construction activities.

Agencies/Persons Commenting: Washington Conservation District

Response: See response to Comment 8-2.

- 17-10 Comment Summary:** A discussion of runoff curve number assumptions is encouraged. Often post-development curve numbers are underestimated because soil compaction and impervious area connections are not fully taken into consideration. Presuming the same Hydrologic Soil Group (HSG) in a post-development scenario may not be appropriate unless topsoil restoration and soil compaction mitigation is implemented during construction.

Agencies/Persons Commenting: Washington Conservation District

Response: Water quality calculations in Woodbury's Loading Assessment and referenced in the AUAR use average annual runoff coefficients derived from detailed site specific study results from the upper Midwest, generally accepted literature values from credible sources, knowledge of local conditions and professional judgment. Since the values were verified based on an actual monitoring study in Michigan, it was felt that they are indicative of pre- and post-development conditions.

Water quantity calculations in Woodbury's draft Surface Water Management Plan and referenced in the AUAR are based on curve numbers from the Natural Resources Conservation Service (NRCS) TR-55 publication. A proposed condition curve number of 92 was utilized for post-development commercial land use, associated with 85% impervious surfaces. Woodbury's ordinance requires development to have less than or equal to 70% impervious surfaces, therefore this curve number is conservative. Also the steps outlined in the mitigation plan are intended to address the increase in runoff volume associated with development.

17-11 Comment Summary: Additional BMPs will most likely be needed outside of the proposed conveyance areas. Additional recognition of the importance (and scope) of distributed practices throughout the site is suggested.

Agencies/Persons Commenting: Washington Conservation District

Response: Comment noted. Text has been added in AUAR Item 17 to reflect the comment.

17-12 Comment Summary: The last paragraph needs to be revised to note that VBWD has established the 100-year flood level of Fahlstrom Pond at Elevation 870. A cooperative agreement between VBWD and the Minnesota Department of Transportation (MnDOT) allows the MnDOT to redirect the entire West Lakeland Storage Site watershed (16,171 acres) to Fahlstrom Pond by closing a gate in a structure north of Interstate 94 (Structure 2B of the VBWD Project 1007). If the gate were closed for a long enough period of time, the West Lakeland Storage Site would overflow to Fahlstrom Pond. If the gate were closed under 100-year flooding conditions, Fahlstrom Pond could reach its overflow elevation of 870, and back up into the MnDOT Interstate 94 drainage system. Since MnDOT can operate the Structure 2B gate at any time, the VBWD set the 100-year flood elevation for Fahlstrom Pond at Elevation 870 in 1988.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: AUAR text in Item 17 has been revised to accurately reflect the 100-year flood level elevation of Fahlstrom Pond.

17-13 Comment Summary: The volume control standards should be clarified. The listed VBWD volume control standard is more stringent than the actual VBWD standard. The AUAR study area is not within the Valley Creek or Lake Edith watersheds. Therefore, the VBWD's volume control rule requires the following:

- For the 1 inch 24-hour design storm event, the stormwater runoff volume from the developed site shall not exceed the existing runoff volume at all points where the discharges leave the site.
- Runoff equal to the 0.5 inch from the new impervious surfaces created from the project must be infiltrated.

In 2009 the VBWD managers will consider revising this volume control standard to be more consistent with requirements suggested by the MPCA and Met Council, which would require runoff equal to 1" from the new impervious surfaces created from the project to be infiltrated.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: Infiltration requirement has been revised in the AUAR text as noted.

17-14 Comment Summary: Please provide documentation that supports the AUAR claim that meeting the standards listed on page 46 "is expected to provide adequate protection to the downstream system after proposed development in any of the three scenarios."

Agencies/Persons Commenting: Valley Branch Watershed District

Response: Since volume control is the primary concern for downstream waterbodies, additional discussion has been added to the AUAR to address the City’s infiltration requirement proposed in the draft SWMP. Meeting “Standard 4. Nondegradation - No increase in annual total phosphorus, total suspended solids and runoff volume loadings from the Baseline (1989) conditions” should provide adequate downstream system protection after proposed development.

17-15 Comment Summary: Please review the following and make necessary revisions to the figures and analyses. The drainage divides and flow paths shown on Figure 17-1 are not consistent with those determined by the VBWD. Most significantly, the VBWD believes that subwatershed VB-13.1 drains to the north into subwatershed VB-9 rather than into VB-13, based on the two-foot topography. Pond VB-13.1 overflows to the north at approximately elevation 897. The overflow to the east is at approximately elevation 899. This is significant because VB-9 than drains to VB-10, which conveys runoff through a different culvert under Manning Avenue than VB-13 does.

Only a drainage diversion conforming to VBWD rules – including the peak discharge, volume control and wetland rules – will be approved by VBWD. Therefore, the conflict in drainage paths needs to be resolved before the analysis and pond characteristics on page 48 can be reviewed in order to give some sort of indication of whether the proposal might conform to VBWD rules.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: Figure 17-1 and Table 17-1 have been revised as noted.

17-16 Comment Summary: Please correctly list the VBWD volume control requirements. See previous comment. It’s likely, but not necessarily the case, that the City standard provides more control than that required by the VBWD.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: AUAR text revised as noted.

17-17 Comment Summary: Please clarify the general soil types within the AUAR study area. The second paragraph after Table 17-4 states that the soils in the study area are loams and clay loams. Clay loams would not have high infiltration rates and soil corrections would likely be required. Table 16-1 identifies the soils are mostly silt loams and sandy loams, which are appropriate for infiltration techniques.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: AUAR text revised to match Table 16-1 which identifies the soils as mostly silt loams and sandy loams.

17-18 Comment Summary: Please review the following and revise the figure and AUAR as necessary. Figure 17-2 indicates the proposed drainage for the study area. The figure illustrates the diversion of existing VB-7 drainage from VB-9 into VB-13.1 and the diversion of existing VB13.1 drainage from VB-9 into VB-13. (The draft Woodbury Surface Water Management Plan shows drainage from VB-7A being conveyed to VB-9 in the future.) As previously stated, only a drainage diversion conforming to the VBWD rules – including the peak discharge, volume control, and wetland rules – will be approved by the VBWD. Therefore, these proposed diversions are unlikely to be approved. The City should evaluate the effects of the proposed diversions and/or continue to convey the runoff in its natural flow pattern.

The figure also shows a trunk storm sewer proposed along the north boundaries of VB-3, VB-

11.1 and VB-11. This may be only for infrastructure planning purposes. However, if the proposed trunk storm sewer maintains drainage patterns and will conform to VBWD rate and volume control rules, it is acceptable.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: AUAR text and Figure 17.2 have been revised to reflect this comment. VB-7 is shown draining to VB-9. VB-13.1 is also shown draining to VB-9. It should be noted that existing 2 ft contours from aerial photography seem to be in conflict with preliminary field investigation throughout VB-13.1. Further survey work and analysis of existing topography should be completed throughout VB-13.1 to confirm existing drainage patterns and if water discharges to VB-9 or to VB-13. The City will require that development in the area maintain existing drainage patterns.

The trunk storm sewer shown along the northern boundary of VB-3, 11.1 and 11 is shown more for the purposes of direction of flow than a means of conveyance. The City's intended surface water management system for this area is more accurately reflected in Figure 17.3.

17-19 Comment Summary: Please review the following and revise the figure and AUAR as necessary. Figure 17.3 shows the proposed ponding/infiltration/conveyance system of the study area. As previously stated, the VBWD flow patterns are not consistent with those shown in the AUAR. The wetland complex in drainage area VB13.1 appears to drain north, rather than east. The proposed conveyance system should maintain existing drainage patterns. In addition, attempts should be made to preserve direct and indirect negative impacts to the high quality natural community in this area. The VBWD cannot approve the proposed drainage patterns based on the information provided in the draft AUAR.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: AUAR text and Figure 17.3 have been revised to show flow from VB-13.1 draining north to VB-9 instead of east to VB-13. It should be noted that existing 2 ft contours from aerial photography seem to be in conflict with preliminary field investigation throughout VB-13.1. Further survey work and analysis of existing topography should be completed throughout VB-13.1 to confirm existing drainage patterns. The City will require that development in the area maintain existing drainage patterns.

17-20 Comment Summary: Please revise the two figures so that they consistently show the conveyance out of subwatershed VB-7. Figure 17-2 shows runoff being conveyed to VB-13.1, while Figure 17-3 shows it flowing into VB-9. The draft Woodbury Surface Water Management Plan shows drainage from VB-7A being conveyed to VB-9.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: See response to Comment 17-18.

17-21 Comment Summary: Please note the following. The text suggests that the black outline of the yellow conveyance system is a proposed 100-year flood level. If the intent is to show proposed 100-year flood levels on Figure 17-3, the black outlines are much too small/low and not all inclusive. If Woodbury proposes the shown black outlines as the 100-year flood levels, then less storage volume will be provided in Woodbury and more runoff will be shed into Afton, which is unlikely to conform to VBWD rules.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: The following text has been added to the AUAR to clarify the black outline on the conveyance system: The black line outside the profile represents the conveyance route elevation plus two feet, which is a prospective 100-year elevation that protects vegetation. Note that the black line isn't intended to strictly represent the entire flood storage needed to meet the stormwater requirements, but rather as a concept. Additional BMPs will most likely be needed upstream of the conveyance system distributed throughout the site.

17-22 Comment Summary: The listed minimum control measures upstream of wetlands need to be changed to include conformance to VBWD requirements. See Table C-2 of the VBWD Rules. Because the VBWD limits the inflow runoff volumes entering wetlands, infiltration measures are required that may exceed those required by Woodbury.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: AUAR text revised to include a bullet that reads: "Conformance with VBWD requirements."

17-23 Comment Summary: The table should be revised to accurately list the tributary area of Rest Area Pond (17,781 acres) and watershed:lake ratio (1411:1). While other sections of the AUAR discuss the St. Croix River as the ultimate receiving water body for the area draining to Rest Area Pond, this section does not. This section should be amended to include designation of the St. Croix River as the ultimate receiving water body for the tributary area of Rest Area Pond.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: AUAR text revised as noted.

17-24 Comment Summary: See previous comments.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: AUAR text revised as noted.

ITEM 19. GEOLOGIC HAZARDS AND SOIL CONDITIONS

19-1 Comment Summary: Please see comment above under Section 17.6.

Agencies/Persons Commenting: Stonehenge USA

Response: See response to Comment 17-1.

19-2 Comment Summary: The WCD recognizes the effort the City has put forth to identify and address potential issues associated with Karst Topography.

Agencies/Persons Commenting: Washington Conservation District

Response: Comment noted.

19-3 Comment Summary: Please note the following. The second full paragraph on page 61 discusses the difference in wetland classifications for wetland 82-028-21-01-002-A. The VBWD

classified the wetland as a Preserve wetland, largely due to its amphibian habitat. Woodbury classified it as a low quality wetland, due to the lack of quality vegetation. As discussed elsewhere in the AUAR, wetland hydrologic characteristics need to be maintained. The VBWD will enforce the VBWD hydrologic standards.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: See response to Comment 12-7. Conformance with WCA, VBWD and City requirements is required prior to discharge to wetlands as noted in AUAR Item 17.

ITEM 21. TRAFFIC

21-1 Comment Summary: Mn/DOT has been involved in development of the traffic study and comments have been effectively addressed. Mn/DOT's review does not constitute a specific approval for access or new roadway improvements. No impacts to I-94 right-of-way will be allowed.

Agencies/Persons Commenting: Minnesota Department of Transportation

Response: Comment noted. All appropriate approvals for access and impacts to the freeway system will be obtained from Mn/DOT as necessary.

21-2 Comment Summary: Requests for new interchanges must be evaluated against the Council's interchange evaluation criteria and review procedures. Cottage Grove Drive is a minor collector and does not continue on a direct alignment south of CSAH 16 (Valley Creek Road). This could be an issue in meeting interchange criteria.

Agencies/Persons Commenting: Metropolitan Council

Response: Cottage Grove Drive is now called Settler's Ridge Parkway. Settler's Ridge Parkway is continuous from I-94 south to Bailey Road (CSAH 18) and continues as Cottage Grove Drive south of Bailey Road to the City limits. The City of Woodbury will follow all appropriate procedures and obtain all necessary approvals if a new interchange is required in the future.

21-3 Comment Summary: AUAR states that "Mn/DOT and Met Council will develop a System Optimization Strategy, which will establish long term vision for each trunk highway corridor in the metro area." This study is now referred to as a "Metro Highway System Investment Strategy (MHSIS)".

Agencies/Persons Commenting: Metropolitan Council

Response: Comment noted.

21-4 Comment Summary: General concern that intensity of development assumed for analysis is substantially greater than what will occur. Request that language be added that (1) analyses are based on worst case, (2) high likelihood that actual impacts will be less, (3) city will regularly review level of traffic growth.

Agencies/Persons Commenting: Stonehenge USA

Response: Early on, the maximum square footage was assumed by City ordinances. In December 2007, land use intensity for all three land use scenarios was reduced to reflect a more realistic land use intensity. The City points out that the most intensive land use scenario was chosen for the transportation study for the AUAR to ensure that actual traffic would not exceed what was

assumed for the analysis completed. Text within Section 21-2.3 Trip Generation states: “The most intensive land use, Scenario #2 or the “Retail Scenario”, was chosen for further study and was assumed for this transportation study. This scenario was chosen as a conservative approach to ensure that actual development traffic would not exceed that assumed for this analysis.” In addition that section states: “Office development was assumed for the Places to Work areas shown on Scenario 2 because it is the most intense use from a traffic perspective. In fact, the Places to Work areas are expected to be a mix of office, office/warehouse and office/showroom and may include light industrial, warehouse and distribution uses.”

In addition, Section 21-7, Mitigation Summary, states: “The city will implement an on-going traffic management plan to monitor actual traffic volumes and any operational issues that may develop in and around the AUAR area. This monitoring program is intended to give the city, county and other agencies the opportunity to evaluate actual traffic volumes within the AUAR area and their cumulative impacts on the transportation system. A traffic analysis will be required for all developments within the AUAR area. The analysis will need to document site-generated traffic, trip distribution of site generated traffic, and the intersection assignment of site-generated traffic. This information will be used by the city to determine the impacts of a proposed development and reasonable mitigation measures that are related to the development.” The City believes this language is appropriate to address the concerns raised in Comment 21.4.

- 21-5 Comment Summary:** Request language to “Anticipated Infrastructure and Development Staging” section: “magnitude of development that could be accommodated by 2020 is subject to refinement based on specific development proposals and overall traffic growth.”

Agencies/Persons Commenting: Stonehenge USA

Response: See response to Comment 21-4.

- 21-6 Comment Summary:** The assumption of 100% office in places to work is unreasonable.

Agencies/Persons Commenting: Stonehenge USA

Response: The actual mix of office, warehouse, showrooms, etc is unknown. 100% office was chosen to be conservative. In the second paragraph under 21-2.3 Trip Generation, it is noted that “Office development was assumed for the Places to Work areas because it is the most intense use from a traffic perspective. In fact Places to Work areas are expected to be a mix of office, office/warehouse, and office/showroom.”

- 21-7 Comment Summary:** Page 102: first sentence, third paragraph, because of excessively intense land use, disagree with the word “necessary” in “roadway improvements are necessary” phrase.

Agencies/Persons Commenting: Stonehenge USA

Response: See response to Comment 21-4.

- 21-8 Comment Summary:** Page 105: second paragraph under 2020 post development, suggest revision to indicate the type and location of developments permitted by 2020 is subject to change.

Agencies/Persons Commenting: Stonehenge USA

Response: See response to Comment 21-4. In addition, Section 21.7, Mitigation Summary, states : “The level of development assumed for the AUAR area for the 2020 Build scenario was capped at a level of development sustainable by improvements on local, county and state roadways such that no improvements would be necessary to the freeway or freeway ramps as a result of traffic from development within the AUAR area.” The City believes this language

addresses the concern in Comment 21-8 and points to the fact that the development cap is a reflection of roadway capacity and reasonable improvements and not a reflection of the specific development. The type and location of development is only capped in how that development actually impacts the roadway system.

- 21-9 Comment Summary:** Page 148: second bullet refers to capping level of development for 2020 to a magnitude sustainable by improvements not on the interstate. Request language that actual development is subject to change, based on actual future development and traffic.

Agencies/Persons Commenting: Stonehenge USA

Response: See response to Comment 21-8.

- 21-10 Comment Summary:** Westbound flyover, question location shown on drawing.

Agencies/Persons Commenting: Stonehenge USA

Response: Discussion of flyover under Mitigation Strategy 21.5 states that “the new ramps would enter and exit I-94 between Cottage Grove Drive and Manning Avenue.” The actual location would be determined through continued study. The location on the drawing is presented for illustrative purposes only.

- 21-11 Comment Summary:** Page 158: 5th paragraph says implementation will be assured through developer agreements. Expects that these will be reasonable. Request two types of qualification in AUAR: (1) intensity of land use exceeds what most likely will occur, (2) traffic impacts and roadway improvements are subject to change.

Agencies/Persons Commenting: Stonehenge USA

Response: See response to Comment 21-4.

- 21-12 Comment Summary:** Washington County has been involved in the development of the traffic study. All issues have been adequately addressed.

Agencies/Persons Commenting: Washington County Public Works

Response: Comment noted.

- 21-13 Comment Summary:** In 2009, the County will begin an I-94 alternatives analysis study to identify future transit needs and opportunities along the corridor.

Agencies/Persons Commenting: Washington County Public Works

Response: Noted. The City looks forward to participating in this important regional study.

- 21-14 Comment Summary:** Realignment of Hudson Road to the south brings high volume traffic closer to our neighborhood. Concern with plans for some form of noise barriers to reduce the noise impact on residential areas.

Agencies/Persons Commenting: Roger Clark

Response: Item 24, Noise, addresses concerns and potential impacts from traffic related noise. Mitigation Strategy 24.2 states that the city will “Ensure that appropriate structure setbacks take into account the actual speed of the roadway, building placement, and the character of the setback area (i.e., the provision of berms)” to adequately protect areas from the impact of local and county road noise impacts.

21-15 Comment Summary: Lakeview Drive/Hudson Road intersection during PM rush hour, making the left turn onto Hudson Road is difficult. Plans for a signal?

Agencies/Persons Commenting: Roger Clark

Response: Section 21-7.3, Year 2020 Post Development Recommended Improvements, as well as Mitigation Strategy 21.3 suggest closing the median to allow only right-in-right-out, or creating a ¾ access intersection where left turns from Hudson Rd are still allowed, but no left turns are allowed from Lake View Drive. These suggested improvements are taken directly from the Traffic Impact Study completed for the AUAR. A previous study determined that the installation of a traffic signal at the intersection was necessary and funding has been obtained from adjacent property owners. The text in both above referenced areas has been revised to reflect the installation of a signal at this intersection.

21-16 Comment Summary: Traffic information lacks discussion of amenities for pedestrians and bicycles.

Agencies/Persons Commenting: City of Lake Elmo

Response: Mitigation Strategy 21.9 states that the City will “Prioritize alternative travel modes within the AUAR area and require project proposers to address alternative travel modes (e.g., bus, bicycle, and pedestrian foot-traffic) by identifying appropriate and safe accommodations in developer’s site plans.” The City has also completed a year long study of roadway designs, and has developed design guidelines it intends to use for new roads in the future. Each new roadway design includes provisions for bike lanes and pedestrian walkways.

21-17 Comment Summary: Improving transit opportunities is another method to reduce vehicle volumes.

Agencies/Persons Commenting: City of Lake Elmo

Response: Mitigation Strategy 21.13 states that the City will “Continue to coordinate with Metro Transit, Washington County and adjacent communities to support the expansion of park-and-ride capacity and the provision of new and enhanced transit service in the I-94 corridor.”

21-18 Comment Summary: Traffic management plans can reduce vehicle trips.

Agencies/Persons Commenting: City of Lake Elmo

Response: The City is supportive of such strategies. The City’s draft 2030 Comprehensive Plan includes discussion on Transportation Demand Management.

21-19 Comment Summary: Trip generation did not include reductions for modal choice.

Agencies/Persons Commenting: City of Lake Elmo

Response: Reductions were taken for pass-by and internal trips. Modal choice may further reduce number of trips if reverse commuting or other forms of transit become viable in the future.

21-20 Comment Summary: Based on 2005 Lake Elmo Comprehensive Plan, volumes shown on Hudson Blvd appear low for 2020 and 2030 analysis.

Agencies/Persons Commenting: City of Lake Elmo

Response: Comment noted. The City will continue to update the traffic analysis through the AUAR process every 5 years and will make appropriate changes based on new information.

21-21 Comment Summary: Agree with need for long range plan for I-94 and corridor study. Decisions on new access to interstate should not be made as part of individual projects.

Agencies/Persons Commenting: City of Lake Elmo

Response: The first bullet under Mitigation Strategy 21.5.2 states that “The analysis of 2030 conditions indicate that major improvements are necessary along the I-94 and I-494 / I-694 corridors, including access changes along I-94. The scope of these improvements will be defined in a regional corridor study that addresses these improvements and ultimate access solutions along I-94. In addition to the I-94 Corridor Study, Mn/DOT Metro District and the Metropolitan Council will develop a System Optimization Strategy (SOS), which will establish a long-term vision for each trunk highway corridor in the Metropolitan Area. The findings from the strategy will help guide Mn/DOT Metro District’s Transportation System Plan (TSP) as well as the Metropolitan Councils Transportation Policy Plan (TPP) in their determination of future system needs. The SOS will confine the future size of the highway system, recognizing that there are limits to how much it can expand.”

- 21-22 Comment Summary:** Relocation of Hudson Blvd/CSAH 19 intersection and I-94 interchange will require more study.

Agencies/Persons Commenting: City of Lake Elmo

Response: Comment noted. See response to Comment 21-20.

- 21-23 Comment Summary:** Why did 2030 use the critical lane analysis instead of detailed Synchro?

Agencies/Persons Commenting: City of Lake Elmo

Response: 2030 analysis was required by Mn/DOT. Critical lane analysis was deemed most appropriate given the 20+ year horizon; the size of the study area; and the lack of certainty about land uses, phasing and development intensity. Future updates of AUAR may include full Synchro type analysis of ultimate conditions.

- 21-24 Comment Summary:** Improvements along Manning Ave and I-94 will require more study as they may impact Hudson Blvd.

Agencies/Persons Commenting: City of Lake Elmo

Response: Comment noted. See response to Comment 21-20.

- 21-25 Comment Summary:** A new overpass or interchange would have major impacts to Lake Elmo. Neither are in Lake Elmo comp plan.

Agencies/Persons Commenting: City of Lake Elmo

Response: Comment noted. See response to Comment 21-20.

- 21-26 Comment Summary:** Comments related to I-94 corridor in general: collaborative review by all impacted agencies and communities needed; City’s comprehensive plan does not identify a need for additional access points; improvements to existing access points must be considered on case-by-case basis, with involvement by all impacted communities and agencies.

Agencies/Persons Commenting: City of Lake Elmo

Response: Comment noted. As stated in the Mitigation Plan for Item 21 Traffic, Involvement by Other Agencies section: Mn/DOT, Washington County, and the City of Woodbury agree that a long-range plan for I-94 is needed to address overall corridor needs from I-494 to the Wisconsin border. It is anticipated that Mn/DOT will lead this study in the near future with cooperation from the county and adjacent communities along the corridor. Implementing improvements will require significant planning and coordination with adjacent communities and agencies.

ITEM 24. NOISE

24-1 Comment Summary: In Section 24.1 it is recommended that the City “discourage designated outdoor use, such as decks and patios” where State daytime noise standards are exceeded. We believe that there are numerous situations such as outdoor patios at restaurants, balconies on hotels, or outdoor break/dining areas as part of office buildings where such outdoor uses are appropriate.

Agencies/Persons Commenting: Stonehenge USA

Response: This issue can be revisited during site plan review. As stated in the AUAR, the distances displayed in Table 24-2 can be used as a guide to determine appropriate setbacks for any new designated outdoor uses along these roadways. Appropriate setbacks also need to take into account the actual speed of the roadway, building placement, and the character of the setback area (i.e., the provision of berms). The mitigation strategies for this section have been revised. Mitigation Strategy 24.1 has been deleted. Mitigation Strategy 24.2 will become 24.1 has been revised to read: Ensure that appropriate structure setbacks for designated outdoor uses take into account noise levels, the actual speed of the roadway, building placement, and the character of the setback area (i.e., the provision of berms).

ITEM 27. COMPATIBILITY WITH PLANS AND REGULATIONS

27-1 Comment Summary: The AUAR should evaluate and provide the information requested in this comment letter to conclude that the development scenarios will be compatible with the VBWD Plan.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: Revisions have been made to the AUAR to address the VBWD comment letter. Development within the AUAR area will be required to comply with the VBWD Plan.

ITEM 28. IMPACT ON PUBLIC INFRASTRUCTURE AND SERVICES

28-1 Comment Summary: More information should be included in the AUAR. Because the AUAR does not appear to have evaluated the flooding effects due to the stormwater runoff volumes produced by the various development scenarios, Woodbury cannot determine whether the proposed mitigation methods and downstream stormwater management infrastructure are adequate.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: See responses to Comment 14-2 and Comment 17-8. Table 14-2 has been added to the text in AUAR Item 14 to show the 100-year flood levels for the basins within the AUAR area. Information has also been added to AUAR Item 17.

MITIGATION PLAN (MP)

MP-1 Comment Summary: Please review the following and revise the AUAR. The required replacement ratio for wetland impacts has recently become much more complicated. This paragraph should be revised to state that the replacement ratio is typically 2.5:1. According to the Wetland Conservation Act, if impacts cannot be avoided, the impacted wetland must be

replaced at a 2:1 minimum ratio if the replacement wetland is created in advance of the impact and the replacement wetland is of the same type as the impacted wetland. The minimum replacement ratio increases to 2.5:1 for impacts when the replacement wetland is not constructed in advance of the impact and when the replacement wetland is of a different type than the impacted wetland.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: Revised as noted.

MP-2 Comment Summary: See previous comments for Question 17.

Agencies/Persons Commenting: Valley Branch Watershed District

Response: Revised as noted in responses to comments re: AUAR Item 17.

MP-3 Comment Summary: Under Mitigation Strategies, a series of points are presented, which begin with the statement, "The City will:" As stated under prior comments, we believe this statement is too absolute, with no qualification related to actual future traffic needs. We request this statement be revised to indicate that all subsequent actions to implement transportation improvements are subject to change based on actual traffic growth and associated impacts.

Agencies/Persons Commenting: Stonehenge USA

Response: With the use of "The City will", the City is indicating its commitment to ensuring that impacts will be mitigated as stated. Regarding actual future traffic improvement needs, see response to Comments 21-4 and 21-8.

GENERAL COMMENTS (GC)

GC-1 Comment Summary: Keep the woods south of Hudson Road, western part of AUAR area. Prefers Scenario 2 or 3.

Agencies/Persons Commenting: Erica Suski

Response: As indicated in the footnote under Table 6-1 Scenario 1 Acreage, Units and Developed Square Footage in AUAR Item 6, the portion of the AUAR area that includes the woods referred to by the commenter is intended for future acquisition or dedication for park and open space because a large part of it is comprised of the woods and a wetland. No development is assumed in this area.

A development scenario is not selected in the AUAR process. The City of Woodbury, as the AUAR responsible governmental unit (RGU), is required to define the development scenarios to be reviewed through the AUAR process. The intent is to identify land use alternatives and develop a comprehensive mitigation plan that would anticipate and address the impacts of any potential level of development.

The outcome of any AUAR is not to identify a "preferred" scenario or for the city to ultimately select one scenario over another, but to use a number of scenarios that constitute a range of development intensities to explicitly outline the environmental impacts of potential future development within the AUAR area. Future development plans may be different than any of the AUAR scenarios, yet if any future development plan represented an intensity of development

greater than any of the scenarios, additional environmental review would be required. If a project comes forward with impacts equal to or less than those reviewed in the AUAR, then further environmental review would not be needed; therefore, a scenario with lesser impacts would be within the scope of what was analyzed in the AUAR.

GC- 2 Comment Summary: I look out at the woods from my kitchen. I firmly oppose the re-zoning of this land for anything.

Agencies/Persons Commenting: Dana Hawthorne

Response: Comment noted though the City does believe the best approach is to regulate the land use for this area to open space despite the current land use designation of high density residential. See response to GC-1.

GC- 3 Comment Summary: The AUAR adequately addresses land use issues and environmental issues including groundwater, Valley Creek, and Karst conditions.

Agencies/Persons Commenting: Washington County Public Works

Response: Comment noted.

GC-4 Comment Summary: What are the plans for the gravel pit in this quadrant?

Agencies/Persons Commenting: Minnesota Department of Natural Resources

Response: The owners are working on a new restoration plan; however, the new restoration plan has not been submitted to the city for review. The date of closing has not been established and will likely depend on the timing of development in the surrounding area. The parcel will likely develop similar to surrounding areas as a commercial land use.

GC-5 Comment Summary: As a more general comment on planning for development, we would like to note that higher density developments with increased amounts of open space create the least amount of environmental impacts and facilitate more ready mitigation of those impacts that do occur. Such high density, low impact development should be encouraged whenever possible. The MPCA advocates the use of Low Impact Design (LID) practices to aid in the minimization of stormwater impacts. LID is a stormwater management approach and site-design technique that emphasizes water infiltration, values water as a resource and promotes the use of natural system to treat water runoff. Examples include:

- Special ditches, arranged in a series, that soak up more water
- Vegetated filter strips at the edges of paved surfaces
- Residential or commercial rain gardens designed to capture and soak in stormwater
- Porous pavers, concrete and asphalt
- Narrower streets
- Rain barrels and cisterns
- Green roofs

Additional information on LID practices can be found on the MPCA website at:
<http://www.pca.state.mn.us/water/stormwater/stormwater-lid.html>.

Agencies/Persons Commenting: Minnesota Pollution Control Agency

Response: These strategies have been listed in the mitigation strategy as potential methods for mitigation runoff volumes from stormwater.

GC-6 Comment Summary: Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the project proposer to secure any required permits and to comply with any requisite permit conditions.

Agencies/Persons Commenting: Minnesota Pollution Control Agency

Response: Comment noted.

GC-7 Comment Summary: Supports Scenario 3. Concerns with other scenarios regarding removing trees, increased traffic, places to work near residential, high density residential near single family neighborhood, disconnecting wetland from a proposed green space area.

Agencies/Persons Commenting: Roger Clark

Response: Comments noted. See responses to Comments 21-14 and 21-15 regarding traffic concerns. See response to GC-1 regarding other concerns.

GC-8 Comment Summary: Of the two development options that have been proposed as an alternative to the current Woodbury Comprehensive Plan, the Third Scenario (the “Gateway” scenario) appears to be the most compatible with City of Lake Elmo’s future land use plan for this area.

Agencies/Persons Commenting: City of Lake Elmo

Response: Comment noted. See response to GC-1.

GC-9 Comment Summary: Comments regarding Woodbury Lakes shopping complex signal light issues.

Agencies/Persons Commenting: Roger Clark

Response: Comments noted.