E. Public Utilities & Facilities

E.1 Executive Summary

King County mapping currently shows that portions of the site are located in a category 1 Critical Aquifer Recharge Area. However, due to the wellhead protection area, the City of Maple Valley recognizes the entire site as being located within a Critical Aquifer Recharge Area. Generally speaking, both the County and City requirements contain detailed mitigative measures for development within these areas. Additionally, a number of activities and uses are prohibited in critical aquifer recharge areas. Several of these activities include underground and above ground storage tanks, and site mining. In addition, the County lists golf courses as one of these activities. However, it should be noted that exceptions are made for expansion of existing uses if it is demonstrated through a special study that the proposed expansion will not negatively impact groundwater quality or recharge.

The 2005 King County Surface Water Design Manual (KCSWDM) manual applies to the site. The property is located within a Conservation Flow Control Area. Therefore, the Level 2 flow control standards apply to the site in sizing the flow control facilities. Additionally, the northwestern portion of the property is located within the Basic Water Quality Treatment Area, while the southeastern portion of the site is located within the Sensitive Lake Treatment Area.

As there are large areas comprised of the highly permeable outwash soils, infiltration is the recommended method for controlling stormwater runoff for this project. Infiltrating stormwater runoff can be accomplished by employing Low Impact Development (LID) measures throughout the site, and/or by providing a large centralized infiltration facility.

King County is currently proposing to rezone the property to a high density development. As the increased density will result in a higher amount of impervious surfaces, a significant increase in stormwater runoff is anticipated. This proposal could result in more than 50 percent total impervious area for the site. Therefore, in order to conform to the Critical Aquifer Recharge Areas requirements contained within the City of Maple Valley Municipal Code, infiltration of surface water is required. With infiltration as the primary mechanism for discharging flow, the proposed stormwater systems would be mimicking the existing infiltration that occurs on the site. As a result, flows from the developed site would not be tributary to the existing downstream conveyance systems and would also conform to the City's Critical Aquifer Recharge Area requirements. Therefore, stormwater impacts to the surrounding area are anticipated to be minimal.

The City of Maple Valley would like to have the property annexed into the City limits, and developed into a low density development. The City of Maple Valley's land use proposal has roughly half the amount of proposed dwelling units than King County's proposal. Therefore, it is anticipated that this will result in less impervious area (roadways, sidewalks, driveways, rooftops, decks, etc.). As the amount of stormwater runoff can be directly attributed to impervious area, less stormwater runoff is also anticipated. Based on this reduction in stormwater runoff, it is anticipated that the size of the stormwater detention and water quality facilities would be smaller than those required as part of the King County Land Use Proposal.

With infiltration as the primary mechanism for discharging flow, the proposed stormwater systems would continue to mimic the existing infiltration that occurs on the site. As a result, flows from the developed site would not be tributary to the existing downstream conveyance systems and would also conform to the City's Critical Aquifer Recharge Area requirements. Therefore, stormwater impacts to the surrounding area are anticipated to be minimal.

The property is located within the Covington Water District. The site is presently surrounded by existing water systems. Therefore, a connection to this system could be readily made upon development of the property.

King County is currently proposing to rezone the property to a high density development. Altering the current land use to a denser population will increase the water demand that was originally anticipated for this site. This has the potential to impact the capacity (size, etc.) of the existing water distribution systems, as well as the necessary water supply (wells, etc.) and storage systems. In discussions with the District, in order to determine the impacts associated with this increase, a thorough investigation would need to be performed. The results of the water availability analysis will determine if any deficiencies occur within the water distribution, supply, and/or storage systems.

The City of Maple Valley would like to have the property annexed into the City limits, and developed into a low density development. The City of Maple Valley's land use proposal has roughly half the amount of proposed dwelling units as King County's proposal. Therefore, it is anticipated that the amount of water necessary to supply domestic service to the site will be less than that required as part of the King County Land Use Proposal. Based on this reduction, it is anticipated that the potential impacts to the water supply (wells, etc.) and storage systems would also decrease from those required as part of the King County Land Use Proposal.

Sanitary sewer service will be provided by the Soos Creek Water and Sewer District. The site is presently surrounded by existing sanitary sewer systems. Therefore, a connection to these systems could be readily made upon development of the property.

King County is currently proposing to rezone the property to a high density development. Altering the current land use to a denser population will cause a dramatic increase in the amount of sewage that is discharged from the site. This has the potential to impact the capacity (size, etc.) of the existing sanitary sewer distribution systems, as well as the capacity of the sewage treatment facility. The impacts that the developed site may have on the existing sewage infrastructure is currently unknown. Therefore, the District will need to perform a thorough investigation in order to determine these impacts.

The City of Maple Valley would like to have the property annexed into the City limits, and developed into a low density development. The City of Maple Valley's land use proposal has roughly half the amount of proposed dwelling units as King County's proposal. Therefore, it is anticipated that the amount of sewage that is discharged from the site will be less than that of the King County Land Use Proposal. Based on this reduction, it is anticipated that the potential impacts to the existing sanitary sewer distribution systems, as well as the impacts to the sewage

treatment facility would also decrease from those required as part of the King County Land Use Proposal.

E.2 Storm Drainage

A. Background

1. Existing Drainage Conditions

a. Existing Drainage Basins

The property is located within the Duwamish-Green River Watershed. This watershed is comprised of a number of separate sub-watersheds, with the site being located in the Middle Green River Sub-Watershed (see attached Figure E.1). Within this sub-watershed, the property is bisected by two basins (see attached King County iMAP Data, Figure E.6).

The northwestern portion of the property is located within the Jenkins Creek Basin (see attached King County Basin Reconnaissance Program Summary – Volume II, Figure E.2). Surface water flow from this portion of the property ultimately enters a stream that is located to the west of the site. This stream has good salmonid habitat, particularly for rearing, and is excellent for resident trout. There are no problems listed in this stream, and the only recommendation is to maintain an undisturbed riparian corridor. Also discussed is the presence of the Cranmar Trout Farm, which is located downstream of the property, and has constructed a series of five diversion weirs to help attenuate future increased peak flows on this stream (see attached Figure King County Basin Reconnaissance Program Summary – Volume II, Figure E.3).

The southeastern portion of the property is located within the Covington Creek Basin (see attached King County Basin Reconnaissance Program Summary – Volume II, Figure E.4). Surface water flows from this portion of the property eventually enter Lake Sawyer, which is located downstream of the property to the south. There are no problems listed for this lake (see attached King County Basin Reconnaissance Program Summary – Volume II, Figure E.5).

b. Existing Drainage Patterns

Drainage within the undeveloped portions of the property generally sheet-flow overland to a number of low lying pockets scattered throughout the site, where flow infiltrates into the substratum.

Within the developed portions of the site, which include the existing maintenance facility in the northwestern corner of the site, and the mining operations in the southeastern corner of the site, there are a variety of stormwater collection and conveyance systems. These systems consist primarily of open channel swales, catch-basins, and underground piping. These systems convey flow to infiltration systems located intermittently throughout the site, where flow is fully infiltrated into the substratum.

The site also contains two water hazards incorporated as part of the golf course. These hazards are located in the mid-western portion of the site, and have been lined so that they are capable of holding water in the highly permeable on-site soils. The water contained within these hazards is

used for irrigation and storage purposes, and there is no surface water discharge from these water features.

There is a wetland located in the northeastern portion of the property. In overflow conditions, discharge from this wetland enters the current mining area, where it is captured by the existing drainage system and eventually infiltrated into the substratum. During the site design process, the proposed drainage systems will be required to fully account for the overflow from this wetland.

There is some off-site area that contributes drainage to the property. These areas are located to the northeast of the site (see attached Figure E.6). The majority of this flow is tributary to the on-site wetland that is located in the northeastern portion of the property. During the site design process, the proposed drainage systems will be required to fully account for these off-site flows.

2. Resource Review

A number of resources have been investigated to determine the constraints and problems that may impact the development of the property.

a. Wellhead Protection Area

The Washington State Department of Health (DOH) is the lead agency for wellhead protection program development and administration, and the Washington Administration Code (WAC) requires wellhead protection measures for Group A public water systems that use groundwater as their source. Additionally, the Covington Water District has developed a Wellhead Protection Plan (WHPP) to identify land uses and potential contaminant sources, and also identify management strategies to eliminate or reduce the risk of contaminating the public water supply.

Travel path zones are used by these agencies to manage potential sources of contamination that may impact a water supply. These zones identify the estimated time that a contaminant may take to arrive at the water supply well. The property is located partially within the one (1) year and five (5) year time of groundwater travel, which are designated as Zones 1 and 2 respectively.

Additionally, the property is fully located within the ten (10) year time of groundwater travel, which is designated as Zone 3 (see attached King County iMAP Data, Figure E.7). The City of Maple Valley identifies areas located within the ten (10) year time of groundwater travel as being within a Critical Aquifer Recharge Area (MV Municipal Code 18.60.030). Therefore, this area may be subject to certain restrictions as further defined in the Critical Aquifer Recharge Area discussion (see following Section E.1.A.2.b).

b. Critical Aquifer Recharge Area

King County mapping currently shows that portions of the site are located in a category 1 Critical Aquifer Recharge Area. However, due to the wellhead protection area, the City of Maple Valley recognizes the entire site as being located within a Critical Aquifer Recharge Area (see previous Section E.1.A.2.a for additional information).

The requirements that pertain to this critical aquifer recharge area slightly differ in the County and City codes (KC Ordinance 15051 and MV Municipal Code 18.60.255). Currently, the County requirements apply to the site. This may change in the immediate future as the property becomes annexed into the City. However, generally speaking both the County and City requirements contain detailed mitigative measures for development within these areas (see attached Figure E.22 for excerpts from KC Ordinance 15051, and Figure E.23 for MV Municipal Code 18.60.255). Additionally, a number of activities and uses are prohibited in critical aquifer recharge areas. Several of these activities include underground and above ground storage tanks, and site mining. In addition, the County lists golf courses as one of these activities. However, it should be noted that exceptions are made for expansion of existing uses if it is demonstrated through a special study that the proposed expansion will not negatively impact groundwater quality or recharge.

c. Critical Basin

The site is located within a critical basin, which is identified as a medium quality environmental condition (see attached King County iMAP Data, Figure E.8). The medium categorization applies to sites that could contain high or moderate development intensity, and has either moderate or low biological value. No additional drainage requirements associated with this critical basin were found in either the County or City code.

d. Sensitive Areas

There are no landslides, coal mines, seismic areas, erosion areas, or 100-year flood plains located on the site, or within ¼ mile of the site (see attached King County iMAP Data, Figure E.9).

King County data shows a stream located roughly ¼ mile to the west of the site, and a mapped wetland is depicted approximately 900 feet to the west of the property (see attached King County iMAP Data, Figure E.9). King County data does not show any mapped streams or wetlands located on the site. However, it is important to note that the County data excludes wetlands that are under an acre in size, wetlands where the property owners denied access, etc. Therefore, not all the wetlands that exist throughout the County are shown on this mapping. As discussed previously, there is a wetland located in the northeastern portion of the site. For additional information, see the detailed discussion regarding this on-site wetland that is contained within Section C of this report.

The property does contain areas that are susceptible to groundwater contamination (see attached King County iMAP Data, Figure E.9). As the permeability of the on-site soils are high, groundwater protection is an issue that warrants close attention during the site development process (KCSWDM Section 5.4.1).

e. Drainage Complaints

There are several drainage complaints located on-site or within ¼ mile of the site (see attached King County iMAP Data, Figure E.10 and E.11). The majority of these complaints were filed over 10 years ago, and are therefore no longer applicable (KCSWDM Section 2.3.1.1).

Two of the more recent complaints, Complaint #2007-0096 and #2007-0349, deal with fees and a water quality audit (see attached Figures E12). Complaint #2006-0360 deals with boards

missing from a fence, and Complaint #2000-0782 deals with some missing storage material (see attached Figure E.13 – E.15). Therefore, none of these complaints actually deal with inadequate stormwater conveyance capacity or flooding issues.

f. P-Suffix Conditions and Special District Overlays

The County has converted the vast majority of p-suffix conditions to King County Title 21A zoning requirements, replaced them by County Special District Overlays (SDOs), or otherwise converted them to King County Code. In a review of these County conditions and codes, and in review of the City codes, no additional drainage requirements were found that would apply to this property.

g. Community Planning Area

The property is located within the Tahoma/Raven Heights Community Planning Area. No additional drainage requirements associated with this community plan were found within the County or City codes.

3. Drainage Requirements

The site is currently located within King County. Therefore, the County drainage requirements apply to the site. This may change in the immediate future as the property becomes annexed into the City. However, since the 2005 King County Surface Water Design Manual (KCSWDM) has been adopted by the City of Maple Valley (City Municipal Code 14.30.010), both the County and the City are utilizing this drainage manual. Consequently, future development must conform to the requirements outlined in this manual.

The property is located within a Conservation Flow Control Area (see attached King County iMAP Data, Figure E.16). Additionally, no drainage problems have been identified downstream of the site (see discussion regarding *Drainage Complaints*). Therefore, the Level 2 flow control standards apply to the site in sizing the flow control facilities. This entails matching historic durations for 50% of the 2-year through 50-year peaks, and matching historic peak flow rates during the 2-year and 10-year events.

The northwestern portion of the property is located within the Basic Water Quality Treatment Area (see attached King County iMAP Data, Figure E.17). The goal of these requirements are to remove 80% of the total suspended solids for a typical rainfall year. The southeastern portion of the site is located within the Sensitive Lake Treatment Area (see attached King County iMAP Data, Figure E.17). The goal for these requirements are to remove 50% of the annual average total phosphorus.

The Soil Conservation Service (SCS) Soils Survey for the King County Area indicates that the site is composed of Everett gravelly sandy loam soils (see attached Figure E.18). These soils are a Vashon Outwash material that is excessively drained and highly permeable. However, due to the mining operations on the property, there have also been a number of soil investigations that have been performed. Consequently, a number of test pits have been excavated throughout the property. These investigations show that there are pockets of Vashon Till within a relatively large area located near the southwestern property corner, and also along the eastern portion of the

property (see attached Figures E.19 – E.21). These till soils are primarily characterized as having low permeability.

As there are large areas comprised of the highly permeable outwash soils, infiltration is the recommended method for controlling stormwater runoff for this project. Consequently, special care shall be taken during the site development process to locate the stormwater facilities in the outwash soils. Infiltrating stormwater runoff can be accomplished by employing Low Impact Development (LID) measures throughout the site, and/or by providing a large centralized infiltration facility. Both of these approaches are elaborated upon in the following discussions.

a. Low Impact Development (LID)

Low Impact Development (LID) is an innovative method of handling stormwater runoff. This method is designed to have less environmental impact by mimicking the natural hydrology of a site. As oppose to conventional methods which employ a large centralized end-of-pipe stormwater facility, LID manages stormwater at its source by integrating a variety of smaller stormwater controls located throughout the urban landscape (streetscapes, rooftops, yards, open space, etc.). Use of these techniques helps to reduce off-site runoff, and aid in adequate groundwater recharge.

The KCSWDM contains LID measures which are referred to as flow control BMPs (KCSWDM Section 5.1). The use of these flow control BMPs is required on all projects that are non-subdivision projects. Implementation of these flow control BMPs are not required for subdivision projects, but are incentive-based. This means that credits are given when the flow control BMPs are employed. These credits can be used to qualify for elimination of the flow control facility (KCSWDM Section 1.2.3.1), or they can be used to reduce the size of the stormwater control facility by reducing the target surfaces subject to the flow control or water quality facility.

Upon employing LID measures, it is expected that the site could consist of numerous bioretention areas that have been blended into the landscape in the vicinity of single-family residences or parking areas. Additional LID measures employed on the site may also include roof gardens, methods for capturing and using rainwater, and use of permeable pavement in low traffic areas, parking areas, and walking paths.

b. Infiltration

Use of centralized end-of-pipe stormwater facilities could also be used. This is the traditional method of controlling stormwater, which would also be appropriate for this project. These facilities could be the sole method to achieving the required detention and water quality measures, or could be utilized in combination with LID measures that would substantially reduce the size of the facilities.

As the soils throughout the site are highly permeable, it is recommended that infiltration be utilized as the primary means of discharging flow from these facilities (KCSWDM Section 5.4). However, as the permeability of the Everett soils are typically very high, groundwater protection is an issue that would warrant close attention during the site development process (KCSWDM Section 5.4.1).

B. King County Land Use Proposal

King County is currently proposing to rezone the property to urban residential R-8 zoning (base density of 8 dwelling units per acre). This zoning, coupled with the the use of residential density incentives and the Transfer of Development Rights, could result in a maximum of 1,872 new dwelling units (12 dwelling units per acre). Commercial/retail area is also required (see Section A.8 for additional information). This is a much denser land use than the current rural residential RA-5 zoning (one home per five acres), which would yield from 21 to 31 new single family homes (see Section A.4 for additional information). As a result of this higher density, it is anticipated that there will be significantly more impervious area (roadways, sidewalks, driveways, rooftops, decks, etc.) created upon development of the property.

These impervious surfaces prevent stormwater from soaking into the ground. Therefore, the amount of stormwater runoff can be directly attributed to impervious area. As the increased density will result in a higher amount of impervious surfaces, a significant increase in stormwater runoff is anticipated.

This proposal could result in more than 50 percent total impervious area for the site. In order to conform to the Critical Aquifer Recharge Areas requirements contained within the City of Maple Valley Municipal Code 18.60.255(A), infiltration of surface water is required (see attached Figure E.23).

Currently, there is no surface water discharge from the site, as virtually all runoff is being infiltrated into the substratum (see Section E.1.A.1.b). Consequently, stormwater from the site is not tributary to the existing downstream conveyance systems located along the lower elevations of the property (see attached Figure E.24). Therefore, using infiltration to discharge developed flow would also minimize impacts to these downstream conveyance systems (see Section E.1.A.3.a & b). Given the highly permeable soils that exist throughout a good portion of the site, it appears that this could be fully achieved (see Section E.1.A.3).

With infiltration as the primary mechanism for discharging flow, the proposed stormwater systems would be mimicking the existing infiltration that occurs on the site. As a result, flows from the developed site would not be tributary to the existing downstream conveyance systems and would also conform to the City's Critical Aquifer Recharge Area requirements. Therefore, stormwater impacts to the surrounding area are anticipated to be minimal.

C. City of Maple Valley Land Use Proposal

The City of Maple Valley would like to have the property annexed into the City limits, and developed under the R-6 development standards (6 dwelling units per acre). This could result in a maximum of 936 new dwelling units on the site (see Section A.12 for additional information). This is also a much denser land use than the current rural residential RA-5 zoning (one home per five acres), which would yield from 21 to 31 new single family homes (see Section A.4 for additional information).

As this proposal will also dramatically increase the density of the property, the previously discussed impacts and corresponding mitigation measures discussed for the King County Land Use Proposal apply (see Section E.1.B for additional information). However, the City of Maple

Valley's land use proposal has roughly half the amount of proposed dwelling units (936 dwelling units vs. 1,872 dwelling units). Therefore, it is anticipated that this will result in less impervious area (roadways, sidewalks, driveways, rooftops, decks, etc.) than the King County Land Use Proposal. As the amount of stormwater runoff can be directly attributed to impervious area, less stormwater runoff is also anticipated.

Based on this reduction in stormwater runoff, it is anticipated that the size of the stormwater detention and water quality facilities would be smaller than those required as part of the King County Land Use Proposal. With infiltration as the primary mechanism for discharging flow, the proposed stormwater systems would continue to mimic the existing infiltration that occurs on the site. As a result, flows from the developed site would not be tributary to the existing downstream conveyance systems and would also conform to the City's Critical Aquifer Recharge Area requirements. Therefore, stormwater impacts to the surrounding area are anticipated to be minimal.

E.3 Water

A. Background

The property is located within the Covington Water District. The comprehensive plan for this District is the February 2007 Water System Plan Update. In an effort to accurately predict future water demand, this plan contains projected increases in population based on land use planning efforts that were obtained from local agencies.

The property is currently in King County, and therefore the District's comprehensive plan utilized the 2004 King County Comprehensive Plan to determine the anticipated future increase in population. Within the 2004 King County Comprehensive Plan, the County designated the property as having a rural residential land use. Consequently, the District has based the anticipated future water demand on this land use.

Based on these anticipated future water demands, the District's comprehensive plan states that no additional water rights or supplies (wells, etc.) are required to meet the water demand for the next 20-years, and the existing reservoirs have sufficient storage for present and future demands.

The site is presently surrounded by existing water systems (see attached Figure E.25). Therefore, a connection to this system could be readily made upon development of the property. Additionally, the property is located within the District's 770 zone. Due to the high pressure that is associated with this zone, individual pressure reducing valves (PRV's) will be required for each individual water service.

B. King County Land Use Proposal

King County is currently proposing to rezone the property to urban residential R-8 zoning (base density of 8 dwelling units per acre). This zoning, coupled with the the use of residential density incentives and the Transfer of Development Rights, could result in a maximum of 1,872 new dwelling units (12 dwelling units per acre). Commercial/retail area is also required (see Section A.8 for additional information). This is a much denser land use than the current rural residential

RA-5 zoning (one home per five acres), which would yield from 21 to 31 new single family homes (see Section A.4 for additional information).

Altering the current land use to a denser population will increase the water demand that was originally anticipated for this site. This has the potential to impact the capacity (size, etc.) of the existing water distribution systems, as well as the necessary water supply (wells, etc.) and storage systems.

In discussions with the District, in order to determine the impacts associated with this increase, a thorough investigation would need to be performed. The District stated that this investigation would occur when a request for water availability is submitted.

There are currently three fire marshals that govern over this property (King County, City of Maple Valley, and District 47). Given this situation, the District recommended that prior to submitting for water availability, these fire marshals should discuss the fire flow that will be required for this site. The outcome of this discussion would determine the required fire flow that is analyzed as part of the water availability application.

The results of the water availability analysis will determine if any deficiencies occur within the water distribution, supply, and/or storage systems. It would then be the responsibility of this project (i.e. not the District) to fix all of these deficiencies.

As a result, impacts to the existing water systems are presently unknown. As previously discussed, it appears that the mechanism to determine these impacts is to apply for water availability. As part of this process, once the necessary forms are submitted and the fees are paid, it generally takes 4 to 6 weeks for the District to evaluate their system and determine the full extent of the potential impacts.

C. City of Maple Valley Land Use Proposal

The City of Maple Valley would like to have the property annexed into the City limits, and developed under the R-6 development standards (6 dwelling units per acre). This could result in a maximum of 936 new dwelling units on the site (see Section A.12 for additional information). This is also a much denser land use than the current rural residential RA-5 zoning (one home per five acres), which would yield from 21 to 31 new single family homes (see Section A.4 for additional information).

As this proposal will also dramatically increase the density of the property, the previously discussed impacts and corresponding mitigation measures discussed for the King County Land Use Proposal apply (see Section E.2.B for additional information). However, the City of Maple Valley's land use proposal has roughly half the amount of proposed dwelling units (936 dwelling units vs. 1,872 dwelling units). Therefore, it is anticipated that the amount of water necessary to supply domestic service to the site will be less than that required as part of the King County Land Use Proposal.

Based on this reduction, it is anticipated that the potential impacts to the water supply (wells, etc.) and storage systems would also decrease from those required as part of the King County

Land Use Proposal. As discussed previously, a thorough investigation would need to be performed to determine the impacts of this land use proposal on the water distribution, storage and supply systems.

E.4 Sanitary Sewer

A. Background

Sanitary sewer service will be provided by the Soos Creek Water and Sewer District. The property is currently located outside the District service area. However, this will change as the property is brought into the Urban Growth Area (UGA).

The site is presently surrounded by existing sanitary sewer systems (see attached Figure E.26). A portion of the gravity sanitary sewer system under 228th Avenue SE is relatively shallow. This may necessitate some additional challenges during site design (filling, etc.). However, these systems appear to have adequate depth to provide gravity service for the site. Therefore, a connection to these systems could be readily made upon development of the property.

B. King County Land Use Proposal

King County is currently proposing to rezone the property to urban residential R-8 zoning (base density of 8 dwellings per acre). This zoning, coupled with the the use of residential density incentives and the Transfer of Development Rights, could result in a maximum of 1,872 new dwelling units (12 dwelling units per acre). Commercial/retail area is also required (see Section A.8 for additional information). This is a much denser land use than the current rural residential RA-5 zoning (one home per five acres), which would yield from 21 to 31 new single family homes (see Section A.4 for additional information).

Altering the current land use to a denser population will cause a dramatic increase in the amount of sewage that is discharged from the site. This has the potential to impact the capacity (size, etc.) of the existing sanitary sewer distribution systems, as well as the capacity of the sewage treatment facility.

As the property is currently located outside the UGA, the District has not planned for the site to enter their existing sanitary sewer system. Therefore, the impacts that the developed site may have on the existing sewage infrastructure is currently unknown. The District will need to perform a thorough investigation in order to determine these impacts. In discussions with the District, they stated that this investigation will occur when a request for sewer availability is submitted.

The District also made it clear that they did not want to speculate on potential impacts to their distribution system (pipes, etc.) and treatment facility. However, it was reasonable to expect that the property would be assessed with an increased fee in the form of a General Facilities Charge (GFC), as the site is currently located outside the UGA and the District service area. Additionally, it is reasonable to expect that this project would be required to fix any downstream problem areas (i.e. undersized pipes, etc.).

As a result, impacts to the existing sanitary systems are presently unknown. As previously discussed, it appears that the mechanism to determine these impacts is to apply for sewer availability. As part of this process, once the necessary forms and fees are paid, it generally takes several months for the District to evaluate their system and determine the full extent of the potential impacts.

C. City of Maple Valley Land Use Proposal

The City of Maple Valley would like to have the property annexed into the City limits, and developed under the R-6 development standards (6 dwelling units per acre). This could result in a maximum of 936 new dwelling units on the site (see Section A.10 for additional information). This is also a much denser land use than the current rural residential RA-5 zoning (one home per five acres), which would yield from 21 to 31 new single family homes (see Section A.4 for additional information).

As this proposal will also dramatically increase the density of the property, the previously discussed impacts and corresponding mitigation measures discussed as part of the King County Land Use Proposal still apply (see Section E.III.B for additional information). However, the City of Maple Valley's land use proposal has roughly half the amount of proposed dwelling units (936 dwelling units vs. 1,872 dwelling units). Therefore, it is anticipated that the amount of sewage that is discharged from the site will be less than that of the King County Land Use Proposal.

Based on this reduction, it is anticipated that the potential impacts to the existing sanitary sewer distribution systems, as well as the impacts to the sewage treatment facility would also decrease from those required as part of the King County Land Use Proposal. As discussed previously, a thorough investigation would need to be performed to determine the full extent of impacts that this land use proposal will have on the sanitary sewage systems.