WEST LINN CITY COUNCIL

FINAL ORDER

AP-12-03

IN THE MATTER OF AN APPEAL OF A CONDITIONAL USE, CLASS II DESIGN REVIEW, CLASS II PARKS DESIGN REVIEW, FLOOD MANAGEMENT AREA, WATER RESOURCES AREA AND WILLAMETTE RIVER GREENWAY PERMITS FOR THE PROPOSED INSTALLATION OF A WATER TRANSMISSION LINE FROM THE CITY LIMITS UNDER THE WILLAMETTE RIVER, THROUGH MARY S. YOUNG STATE PARK TO THE CITY'S NORTHERN BOUNDARY BORDERING THE CITY OF LAKE OSWEGO VIA MAPLETON DRIVE AND HIGHWAY 43.

Background Facts

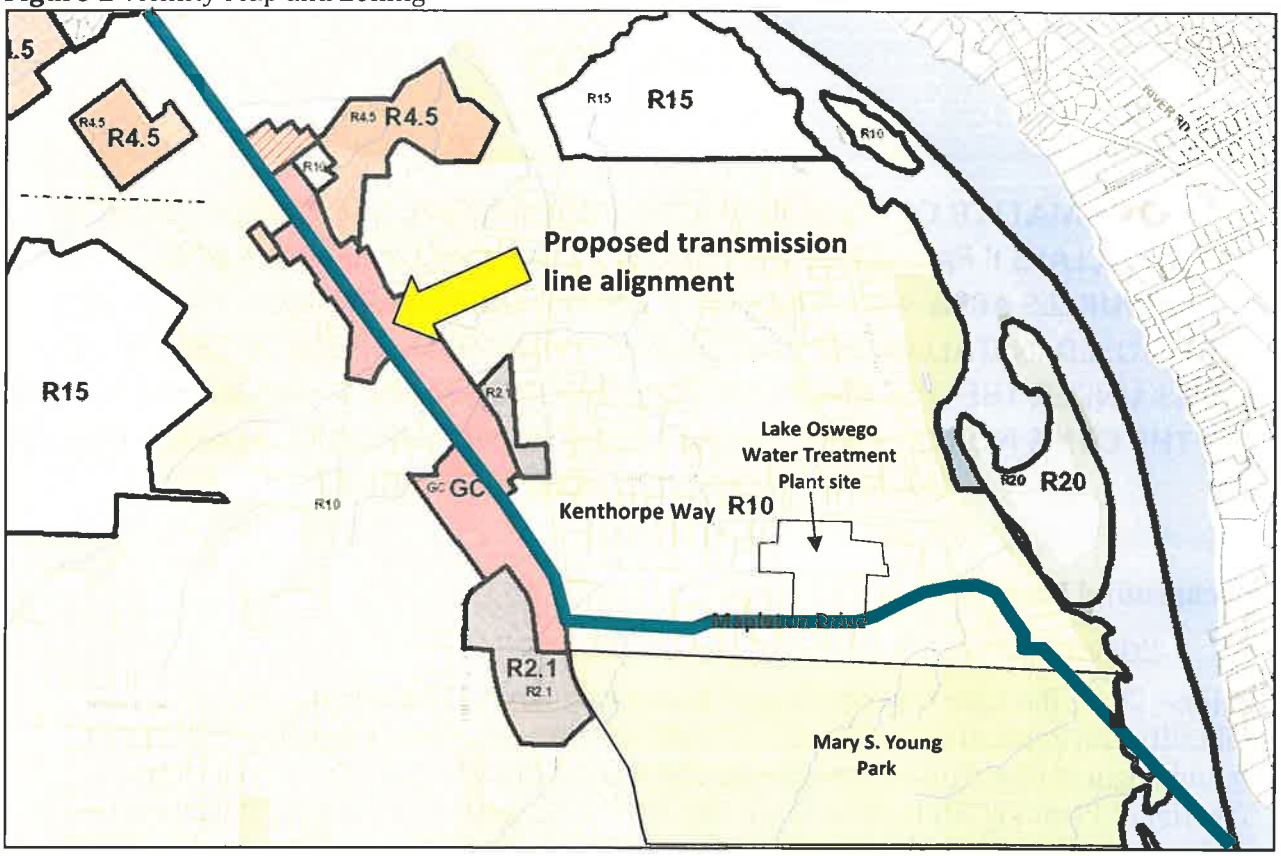
Project Description

In June, 2012, the Lake Oswego/Tigard Water Partnership (Partnership or applicant) submitted an application to install a 42-inch-diameter raw-water pipeline (RWP) that would begin in Gladstone on the Clackamas River, extend to the Lake Oswego Water Treatment Plant (WTP) in West Linn. The RWP would extend under the Willamette River via horizontal directional drilling (HDD) at an approximate depth of 60 feet. The boring would continue at a depth between 60 and 34 feet under the wetlands and streams in Mary S Young Park. Then the RWP would rise gradually toward the surface as it extends toward two Oregon Parks and Recreation District (OPRD) -owned lots (tax lots 100 and 200 that are not part of Mary S. Young State Park) at the south end of Mapleton Drive, until arriving at the terminus of drilling operations/staging area on tax lot 200, 7-feet below grade.

The applicant proposes to transition to an open-cut trench on OPRD tax lot 200 at a depth of approximately 5- to 7-feet that would extend north and west along Mapleton Drive, terminating at the Lake Oswego Water Treatment Plant (WTP) at 4260 Kenthorpe Way. A Finished Water Pipe (FWP) leading from the plant to destinations in Lake Oswego and Tigard would be installed via open–cut trench from the WTP to Mapleton Drive and then west at a depth of approximately 5- to 7-feet beneath Mapleton Drive, to its intersection with Highway 43 where it would then extend north in the Highway 43 right-of-way, in an open-cut trench, to Lake Oswego. Following construction, Mapleton Drive, Kenthorpe Way and affected portions of Highway 43 would be repaved to their existing width.

Surrounding Land Use and Zoning: As shown of Figure 1 below, the subject property lies within the R-10, R-4.5 and GC zoning districts. Residential and commercial uses surround the RWP/FWP alignment through Mary S. Young State Park and along Mapleton Drive and Highway 43 (see Table 1). Areas proposed to accommodate the pipeline along State Highway 43 are generally characterized by commercial uses with single-family uses near the northern end of the City limits.

Figure 1 Vicinity Map and Zoning



Source: **Applicant submittal, 2011**

Table 1 Surrounding Land Use and Zoning

DIRECTION FROM SITE	LAND USE	ZONING
North	Single-family residential, Commercial	R-10, R-4.5, GC
East	Single-family residential, Mary S. Young State Park	R-10, R-20
South	Single-family residential, Mary S. Young State Park	R-10
West	Single-family and multi-family residential, and Commercial	R-10, R-2.1, GC

The proposed alignment spans nine streams protected as Water Resource Areas (WRAs) in the City: Arbor Creek, Robinwood Creek (2 branches), Fern Creek, Robin Creek (2 branches), Gans Creek, Trillium Creek, and Heron Creek. All of these streams are in pipes buried beneath paved streets.

The Planning Commission's Decision

On October 17, 18 and 25, 2012, the Planning Commission conducted a duly noticed public hearing considering this application as well as the WTP application, AP-12-02. After the first hearing, a member of the public requested that the record be left open pursuant to ORS 197.763(6)(b) based on new evidence submitted at the continued hearing. The Commission granted this request, leaving the record open for seven days for all parties to respond to the new evidence. The applicant waived the additional seven day final written argument period provided by ORS 197.763(6)(e).

When the Commission reconvened the hearing on November 1, 2012, the applicant responded with rebuttal argument, followed by questions from the Planning Commission for City staff. The hearing was then closed, and after some deliberation, the Planning Commission voted to deny the application. As will be discussed in greater detail below, the Planning Commission concluded that the proposal was not consistent with the "overall needs of the community," the site was not suitable to accommodate the 42- to 48-inch diameter pipe, and that a number of applicable comprehensive plan goals and policies were not satisfied. A final order was signed and entered by the Planning Commission on November 26, 2012.

The City Council's Review

On December 10, 2012, the Partnership appealed the Planning Commission's decision. The City Council opened the public hearing on January 14, 2013 for public testimony. The matter was then continued until January 15, to give all parties an opportunity to submit further oral testimony. At the close of the hearing on January 15, the record was left open for all parties to submit additional written testimony until January 22. The record was then closed to all parties and the Partnership was given until January 25 to submit final written argument. The City Council reconvened on January 28 for the purpose of making a decision. As the City Council was deliberating, new evidence was presented that required the record to be reopened for an additional seven days to allow all parties to submit any additional written responses. The Council record consists of all materials submitted before the record was closed on to all parties on February 4 and the Partnership submitted additional final written argument on February 8. After discussion, on February 11, the Council voted to uphold the appeal and reverse the Planning Commission's decision.

Procedural Challenges

A number of procedural challenges were raised during this proceeding including:

Ex Parte Contacts

STOP LLC and others have asserted that Mayor Kovash's statement at the January 28 hearing regarding discussions with neighborhood representatives outside the record does not comport with the disclosure requirements of ORS 227.180(3) and that he must therefore recuse himself from participating in the decision. The Council elected to respond to the Mayor's ex parte contact by leaving the record open for response. That is exactly what the law requires. ORS 227.180(3) provides:

> No decision or action of a planning commission or city governing body shall be invalid due to ex parte contact or bias resulting from ex parte contact with a

member of the decision-making body, if the member of the decision-making body receiving the contact:

> (a) Places on the record the substance of any written or oral ex parte communications concerning the decision or action; and
>
> (b) Has a public announcement of the content of the communication and of the parties' right to rebut the substance of the communication made at the first hearing following the communication where action will be considered or taken on the subject to which the communication related.

The substance of the contact was placed in the record[1] and rebuttal was offered in the 7 day period.[2] This fully meets the legal standard. The law does not provide for cross-examination. If anyone wished to challenge the mayor's statements that he did not believe that 7 neighborhood associations opposed the project, they could do so, as Mr. Froode did.

City Council Bias

In written submittals Mr. Gary Hitesman argued that he intended to challenge the ability of the City Council to make an impartial decision. Mr. Hitesman did not proceed with voicing this objection during the time provided at the public hearings and for that reason, the City Council finds that no formal challenge was made. Further, for the reasons set out in the Partnership's January 11 letter responding to this issue, the Council finds that Mr. Hitesman's allegations are not supported by any facts contained in the record and in any event they provide an insufficient basis to preclude particular council members from participating due to bias. Finally, the City Council finds that because Mr. Hitesman did not explain the objection or otherwise provide evidence of bias during the public hearing or open record periods, the objection was not raised with sufficient specificity to allow the Council to respond.

Notice Issues

Karie Oakes and others raised the issue that the notice of the appeal hearing did not state the grounds for the appeal; state that the hearing is *de novo*; and, state that both the record and application was available for review. The CDC does not require that an appeal application state grounds for the appeal[3] and the applicant did not state any. Consequently, no grounds were included in the notice. (The applicant's appeal submittal did outline a series of issues they intended to discuss at the appeal hearing. These items are the subject of a January 3, 2013, memo from staff to City Council. Furthermore, the location of the

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[1] The Mayor, according to his statement in the record of this case, said that he spoke with two people – One was concerned that "LOT treat WL citizens right" and the other "knew nothing about LOT." Mayor Kovash email dated February 5, 2013. That is sufficient.

[2] Mr. Froode took advantage of this opportunity in his email of February 4, 2013 to say that one of the supposed opposition neighborhood associations did not, in fact, oppose and that those who did, did so "in one form or another" (such as, perhaps, to urge further discussions). Moreover, he suggests that not all such associations "had quorums or are active" as well. The Mayor's point appears to be well-taken.

[3] 99.250(D) states, "The appeal or review application *may* state grounds for appeal or review." (emphasis added)

applicant's submittal materials is referenced in the notice and was available for review at least 10 days prior to the hearing). The content of the notice regarding public testimony could only pertain to a *de novo* hearing and the staff memo, available 10 days prior to the hearing, states that the appeal will be *de novo*. Finally, the notice indicated that the application was available for review. During the hearing, the City's Attorney opined that the notice met the legal requirements and the Council agrees.

City Charter Vote Required for a Public Park (Move to Pipeline Approval)

STOP LLC, David Froode and others asserted that locating the pipeline installation staging area on two parcels located directly north of Mary S. Young ("MSY") Park required voter approval under Chapter XI, Section 46 of the West Linn Charter. The City Council finds that by its express terms, this charter provision applied to parks and open spaces that are "city-owned." The two parcels north of MSY Park are owned by the State of Oregon and thus activities occurring on those parcels do not trigger the charter voter requirement. Further, the Partnership has established that activities occurring on the two northern parcels will not reduce the total amount of city owned park space in any manner, nor will it interfere with the use of land designated by the City for parks. This issue was fully analyzed in a memo from the Partnership dated January 11, 2013, staff was advised by the City Attorney that this proposal did not trigger the charter, and the City Council concurs.

APPROVAL CRITERIA AND FINDINGS OF FACT

The findings supporting the City Council's decision are based on the staff report dated October 17, 2012, which are restated largely here, along with additional findings responding to particular objections raised during the proceedings. The applicable standards are identified in italics with the City Council's findings following based entirely on consideration of the pipeline application and other evidence contained within the record.

The applicant's proposal described above qualifies as a major utility per Chapter 2 of the CDC:

> *"A utility facility or service that will have, or the installation of which will have, a significant impact on the surrounding uses or the community in terms of generating or disrupting traffic, interfering with access to adjacent properties, creating noise or causing adverse visual effects. "Major utility" includes, but is not limited to, a substation, pump station, water storage tank, sewer plant, transmission lines for water, drainage or sewerage collection systems, gas or electric, or other similar use."*

A major utility, such as the raw- and finished-water lines, are allowed as a conditional use in the R-10, R-4.5 and General Commercial districts pursuant to CDC sections 11.060, 14.060, and 19.060. Further, a conditional use is subject to the provisions in CDC Chapter 55 (per CDC subsections 60.070(B) and 60.030(B). Due to its location, the proposed water transmission line is subject to the following additional CDC approval standards: CDC Chapter 56 (Parks Design Review), CDC Chapter 27 (Flood Management Areas), CDC Chapter 28 (Willamette River Greenway), and CDC Chapter 32 (WRAs).

Following construction, the raw and finished-water pipes would be undetectable above-ground except for occasional manhole covers located within the public rights-of-way. However, the construction of the proposed project over the course of 8-months will create environmental impacts (most notably at the 7,715 square foot staging area on the OPRD lots) and could potentially affect residents and travelers along the proposed pipeline alignment. Accordingly, much of staff's review is concerned with the methods to avoid, minimize, and mitigate construction impacts.

APPLICABLE SPECIFIC APPROVAL CRITERIA AND FINDINGS OF FACT

The findings supporting the City Council's decision are based on the staff findings which are restated largely here, along with additional findings responding to particular objections raised during the proceedings. The applicable standards are identified in italics, followed by the City Council's findings. The findings are based entirely on evidence contained within the record.

KEY CONCERNS

Impacts during construction.

Construction of the RWP/FWP will create temporary noise and inconvenience for residents, businesses, and drivers along the pipeline alignment. Construction impacts are expected to be greatest at the HDD staging area and along the rights-of- way where construction activity would affect travelers and area residents.

The applicant supplied a series of detailed plans (Construction Management Plan, Construction Noise Analysis Memo, and Traffic Management Plan) and technical memoranda (Water Resource Area and Habitat Conservation Area Technical Memorandum; Horizontal Directional Drill Disturbance Evaluation; Seismic and Geologic Hazards; and, Erosion Control and Sediment Plan) to offer solutions to mitigate potential impacts during construction as well as to provide technical documentation addressing the long-term safety issues of the RWP/FWP facility.

Mr. Eric Jones and others testified that replacement of the AC line would probably result in asbestos contamination of air and water. The applicant does not propose a connection, temporary or otherwise, between the new ductile iron line and the existing AC line. As such, there would be no potential for asbestos contamination of drinking water. To ensure construction worker safety, removal of the AC pipe must be done in accordance with DEQ rules, OAR 340-248, and OSHA regulations. These regulations require, among other things, keeping the pipe material wet to prevent release of fibers.

Traffic.

While the proposed use, an underground transmission line, is not expected to generate any long-term additional traffic, traffic from the construction activities related to its installation may have an adverse impact on the community. The applicant prepared several traffic studies that considered the traffic impacts associated with the construction management plan. (DKS Associates, June 18, 2012, August 14, 2012, January 4, 2013, and LOTWP

memorandum dated November 1, 2012. The Partnership also contracted with Greenlight Engineering, a traffic engineering and transportation planning firm, to peer review the earlier submittals. See Greenlight Engineering memorandum January 4, 2013. Greenlight concluded that the traffic management plan "is well designed, safe, utilizes recognized best management practices and minimizes inconvenience and maximizes safety for West Linn residents." Greenlight concluded that the mitigation measures proposed in the traffic management plan can accommodate the anticipated construction traffic without any significantly adverse traffic capacity issues. In addition to the traffic control and mitigation measures recommended by DKS, Greenlight proposed additional mitigation measures to further enhance the safety and livability of West Linn residents. The Partnership will implement the mitigation measures recommended in the construction management plan and the supplemental mitigation measures Greenlight recommended. Condition of Approval 2 imposes this obligation.

Periodic traffic delays and inconveniences during construction are proposed to be mitigated by limited construction, on a daily basis, to one discrete 150- to 200-foot long section of the affected street. As provided in the Construction Management Plan, the applicant's contractor will notify Tualatin Valley Fire and Rescue (TVF&R), the provider of fire and emergency services within West Linn, of access closures such that emergency access to within 200-feet of all homes, as required by TVF&R, will be maintained at all times.

During the two-day long pipe pullback phase when the 42-inch raw water line is pulled through the drilled hole from Gladstone, 144 total trips are expected over a 24- to 48-hour period. Most of these trips will be trucks hauling the drilling mud from the site. This activity will go on continuously for up to 48 hours.

The traffic management plan identifies existing conditions as well as proposed access and traffic control strategies for all travel modes and satisfactorily demonstrates an acceptable level of automobile and non-automobile circulation for the duration of the proposed construction. As such, the Partnership has committed to construction management practices such as:

- Bussing construction workers to the job site from a remote location, thus keeping additional cars from parking along Mapleton Drive and Kenthorpe Way;
- Providing access for emergency responders at all times of the day and night and daily contact with TVF&R on the status of emergency access; and
- Providing pedestrian access and bicycle access around the work zones and to Mary S. Young Park at all times.

Noise. Proposed night work along Highway 43 to reduce traffic impacts as called for the Oregon Department of Transportation (ODOT) could result in noise impacts for area residents. The approximately 48 hour, continuous HDD pull through phase at the staging area on the OPRD lots is estimated to generate a maximum of 66 dBA with the installation of a sound wall. Despite the fact that construction noise is exempt from the Municipal Code and DEQ standards, ENVIRON has recommended a range of measures to reduce the

number and volume of noise sources, including a 16-foot tall sound wall and, potentially, the relocation of adjacent homeowners to a hotel for that period. A special permit from the City Manager is required for the pull through phase as well as for nighttime work on Highway 43.

Environmental impact. There are a number of small streams that bisect the RWP and FWP route along Mapleton Drive and Highway 43. These streams are all located in culverts that cross under the roadway. The RWP and FWP will either be trenched above or drilled underneath these culverts to avoid any disturbance or WRA functions and values. The trenching and drilling processes on Mapleton and Highway 43 will be exclusively in areas that have already been disturbed (i.e., roadway pavement, road shoulders and parking areas) within the right-of-way through these WRAs and will be bracketed by erosion control measures. No impacts on adjacent storm drainage channels, streamside vegetation, and water quality or water quantity are expected. (See Findings 14, 23, 32 and 34).

The applicant's proposal avoids impacts to the Willamette River and WRAs in Mary S. Young Park by tunneling beneath these areas. The record contains a technical memorandum prepared by ecologists which demonstrates that the HDD that will occur 65 feet below grade when it travels under the ordinary high watermark of the Willamette River and approximately 7 feet below grade, the shallowest depth of the bore, when it approaches the HDD staging area in the northern OPRD property – outside of all WRAs. Therefore, the HDD boring phase of the project will not disturb the soils, wetlands, and vegetation associated with nearby WRAs.

The drilling staging area on the OPRD lots is proposed to occur in a high Habitat Conservation Area (HCA) located 450-feet from the ordinary high water mark of the Willamette River. The objective of CDC Chapter 28, which regulates HCAs, is to avoid or minimize development in high HCAs. Per Subsection 28.110(A)(2), development is supposed to be directed to areas outside of the HCA or areas of lesser HCAs unless there is no option (see Finding 22). Initially it was believed that the RWP could transition to a trench in the Mapleton Drive ROW, which is classified as a medium HCA. Further study revealed that existing buried sewage pipelines which feed the nearby City of West Linn sewage pump station located on Tax Lot 101, block the use of the southern or lower portion of the Mapleton Drive ROW. As previously noted, the approximately 7,715 square-foot staging would result in removal of 19 non-significant trees which the city arborist determined to be in "fair" to "very poor" condition and adjacent understory. The impacted area would be revegetated using native plant materials following construction. In staff's opinion (with which the Council agrees), this would provide adequate mitigation (see Finding 14 and 23).

With the exception of the staging area where the pipeline would surface, due to installation of the pipe via deep boring, and by trenching primarily on paved areas of rights-of-way, the proposal appears to have no impact on the Willamette River, associated riparian areas, WRAs or HCAs.

Related code interpretations:

WRA Disturbance – Chapter 32 limits the amount of disturbance allowed in a WRA. The evidence in the record establishes that using HDD construction methods well below (34 to roughly 60 feet) a WRA will have no effect on the resources protected by the WRA. Protected WRA's include the drainage channel, creek, wetlands, and the required setback and transition areas that exist above ground while the wetland component of a WRA can extend below-ground to a depth that is, "inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions[4]." This definition provides a limit upon which to measure the below-ground extent of wetlands and therefore, WRAs. The applicant's plans demonstrate that their RWP alignment avoids WRAs by going around (beneath) them and containing impacts to WRAs in Mapleton Drive and Highway 43 to already disturbed areas of the right-of-way. Therefore, the maximum disturbance limitations contained in Chapter 32 do not apply.

HCA disturbance – CDC 28.110(L)(3) limits the development of utilities in those portions of HCAs that include WRAs to no more than 25-feet wide, and disturbance of no more than 200 linear feet of WRA, whichever is greater. The applicant proposes to locate the HDD staging area on OPRD tax lot 200, in the HCA, but outside of a WRA and therefore this standard does not apply to the project. Revegetation of this temporarily disturbed HCA, per 32.050(F), is proposed.

Earthquake hazards. The proposed pipeline alignment passes through moderate- and high-relative earthquake hazard areas in the City of West Linn. The City has historically relied on design and construction techniques to mitigate such earthquake hazard risks. The applicant's seismic design study states that the pipeline will be built to withstand a one in 2,473 year earthquake episode, consistent with standards used for hospitals and other emergency response buildings and in accordance with the "Pipeline Research Council International Guidelines for the Seismic Design and Assessment of Natural Gas and Liquid Hydrocarbon Pipelines." The RWP/FWP would provide greater resilience in an extraordinary earthquake, compared to the existing RWP/FWP. The Council finds the applicant has appropriately addressed the seismic risk.

CHAPTER 11, R-10 SINGLE-FAMILY RESIDENTIAL DETACHED ZONING DISTRICT

11.060 CONDITIONAL USES

The following are conditional uses which may be allowed in this zoning district subject to the provisions of Chapter 60 CDC, Conditional Uses.

[4] CDC 2.030, Wetlands: "Those areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands are those areas identified and delineated by a qualified wetland specialist as set forth in the 1987 Corps of Engineers Wetland Delineation Manual. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including but not limited to irrigation and drainage ditches, grass-lines swales, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities."

9. *Utilities, major.*

Finding No. 1: The requested raw water pipeline (RWP) and finished water pipeline (FWP) are defined under CDC Chapter 2 as "Utilities, Major" since they are transmission lines for water. The CDC defines a major utility as:

> *A utility facility or service that will have, or the installation of which will have, a significant impact on the surrounding uses or the community in terms of generating or disrupting traffic, interfering with access to adjacent properties, creating noise or causing adverse visual effects. "Major utility" includes, but is not limited to, a substation, pump station, water storage tank, sewer plant, transmission lines for water, drainage or sewerage collection systems, gas or electric, or other similar use.*

Major utilities are permitted in the R-10 zoning district pursuant to the conditional use criteria established in CDC Chapter 60.

11.080 DIMENSIONAL REQUIREMENTS, CONDITIONAL USES

Except as may otherwise be established by this code, the appropriate lot size for a conditional use shall be determined by the approval authority at the time of consideration of the application based upon the criteria set forth in CDC 60.070(A) and (B).

Finding No. 2: The permanent raw water lines within the OPRD lots will be placed below ground and will be separated from other utilities in this area in accordance with West Linn Public Works Standards for below-ground utilities.

Similarly, the raw- and finished-water lines proposed within the Mapleton Drive and Highway 43 rights-of-way will also be below ground and will be separated from other utilities in the right-of-way per West Linn Public Works Standards. The applicant has stated that some existing utilities within the Mapleton Drive and Highway 43 rights-of-way will need to be relocated to accommodate the proposed transmission line; therefore coordination with affected utility providers will be ongoing.

The criteria in CDC 60.070(A) and (B) are addressed below. The criterion is met.

11.090 OTHER APPLICABLE DEVELOPMENT STANDARDS

A. The following standards apply to all development including permitted uses:

1. *Chapter 35 CDC, Temporary Structures and Uses.*
2. *Chapter 42 CDC, Clear Vision Areas.*

B. The provisions of Chapter 55 CDC, Design Review, apply to all uses except detached single-family dwellings, residential homes and residential facilities.

Finding No. 3: The completed project will be underground; therefore, the CDC 42, Clear Vision Areas, does not apply. Regarding CDC 35, Temporary Structures, the applicant does not propose to locate any temporary structures on property associated with this pipeline installation. Rather, the temporary construction trailer will be located on the water treatment plant property and has been reviewed and approved as part of the plant

expansion approval set out in AP-12-02. The portion of the OPRD lots that will be used for HDD staging will have a gravel surface. See finding number 15 regarding CDC Chapter 55. These criteria, to the extent they apply, are met.

CHAPTER 14, R-4.5 SINGLE-FAMILY RESIDENTIAL ATTACHED AND DETACHED/DUPLEX ZONING DISTRICT

14.060 CONDITIONAL USES

The following are conditional uses which may be allowed in this zoning district subject to the provisions of Chapter 60 CDC, Conditional Uses.

14. Utilities, major.

Finding No. 4:

The requested raw water pipeline (RWP) and finished water pipeline (FWP) are defined under CDC Chapter 2 as "Utilities, Major" since they are transmission lines for water. The CDC defines a major utility as:

> *A utility facility or service that will have, or the installation of which will have, a significant impact on the surrounding uses or the community in terms of generating or disrupting traffic, interfering with access to adjacent properties, creating noise or causing adverse visual effects. "Major utility" includes, but is not limited to, a substation, pump station, water storage tank, sewer plant, transmission lines for water, drainage or sewerage collection systems, gas or electric, or other similar use.*

Major utilities are permitted in the R-4.5 zoning district pursuant to the conditional use criteria established in CDC Chapter 60.

14.090 OTHER APPLICABLE DEVELOPMENT STANDARDS

A. The following standards apply to all development including permitted uses:

2. Chapter 35 CDC, Temporary Structures and Uses.

6. Chapter 42 CDC, Clear Vision Areas.

B. The provisions of Chapter 55 CDC, Design Review, apply to all uses except detached single-family dwellings. (Ord. 1590 § 1, 2009)

Finding No. 5: The completed project will be underground; therefore, the CDC 42, Clear Vision Areas, does not apply. Regarding CDC 35, Temporary Structures, the applicant does not propose to locate any temporary structures on property associated with this pipeline installation. Rather, the temporary construction trailer will be located on the water treatment plant property and has been reviewed and approved as part of the plant expansion approval set out in AP-12-02. The portion of the OPRD lots that will be used for HDD staging will have a gravel surface. See finding number 15 regarding CDC Chapter 55. These criteria, to the extent they apply, are met.

CHAPTER 19, GENERAL COMMERCIAL, GC ZONING DISTRICT

19.060 CONDITIONAL USES

The following are conditional uses which may be allowed in this zoning district subject to the provisions of Chapter 60 CDC, Conditional Uses.

10. Utilities, major.

Finding No. 6:

The requested raw water pipeline (RWP) and finished water pipeline (FWP) are defined under CDC Chapter 2 as "Utilities, Major" since they are transmission lines for water. The CDC defines a major utility as:

> *A utility facility or service that will have, or the installation of which will have, a significant impact on the surrounding uses or the community in terms of generating or disrupting traffic, interfering with access to adjacent properties, creating noise or causing adverse visual effects. "Major utility" includes, but is not limited to, a substation, pump station, water storage tank, sewer plant, transmission lines for water, drainage or sewerage collection systems, gas or electric, or other similar use.*

Major utilities are permitted in the GC zoning district pursuant to the conditional use criteria established in CDC Chapter 60.

19.090 OTHER APPLICABLE DEVELOPMENT STANDARDS

A. The following standards apply to all development including permitted uses:

2. Chapter 35 CDC, Temporary Structures and Uses.

5. Chapter 42 CDC, Clear Vision Areas.

B. The provisions of Chapter 55 CDC, Design Review, apply to all uses except detached single-family dwellings.

Finding No. 7: The completed project will be underground; therefore, CDC Chapter 42, Clear Vision Areas, does not apply. Regarding CDC Chapter 35, Temporary Structures, the applicant does not propose to locate any temporary structures on property associated with this pipeline installation. Rather, the temporary construction trailer will be located on the water treatment plant property and has been reviewed and approved as part of the plant expansion approval set out in AP-12-02. The portion of the OPRD lots that will be used for HDD staging will have a gravel surface. See finding number 15 regarding CDC Chapter 55. These criteria, to the extent they apply, are met.

CHAPTER 60 CONDITIONAL USES

60.070 APPROVAL STANDARDS AND CONDITIONS

60.070(A). The Planning Commission shall approve, approve with conditions, or deny an application for a conditional use, except for a manufactured home subdivision in which case the approval standards and conditions shall be those specified in CDC 36.030, or to enlarge or alter a conditional use based on findings of fact with respect to each of the following criteria:

1. *The site size and dimensions provide:*
    a. *Adequate area for the needs of the proposed use; and*
    b. *Adequate area for aesthetic design treatment to mitigate any possible adverse effect from the use on surrounding properties and uses.*

Finding No. 8:

Major utilities are conditional uses pursuant to CDC 11.060(9), 14.060(14) and 19.060(10), and CDC 2.030 states that a major utility is:

> A utility facility or service that will have, or the installation of which will have, a significant impact on the surrounding uses or the community in terms of generating or disrupting traffic, interfering with access to adjacent properties, creating noise or causing adverse visual effects. "Major utility" includes, but is not limited to, a substation, pump station, water storage tank, sewer plant, transmission lines for water, drainage or sewerage collection systems, gas or electric, or other similar use.

The definition of major utility requires the City to take the significant impacts associated with installation into account when determining whether the site size and dimensions provide adequate area to mitigate "any possible adverse effect[s] from the use on surrounding properties and uses." The Council finds that, as the definition of major utility recognizes, such utilities are distinctly different from other conditional uses because in many circumstances it is the construction of the utility itself that impacts the adjacent properties more than the end use on the site. Thus, to approve the project the Council must determine that there is: 1) adequate area to mitigate any possible adverse effect from the post-construction use on surrounding properties and uses, and 2) there are adequate measures taken to mitigate for the possible adverse effects of the installation of the utility on surrounding properties and uses.

Post-construction Use of Pipeline

The Highway 43 right-of-way between Mapleton and Arbor Drives varies between 67- and 96-feet wide and contains sufficient width to accommodate the applicant's proposed FWP. The Mapleton Drive right-of-way is approximately 50-feet wide. Although the applicant's proposal would compete for space with existing utilities beneath Mapleton Drive, the city engineer has determined that sufficient space exists for relocated utilities to be safely placed above or below the applicant's proposed pipeline and therefore adequate area for the proposed use exists.

The sole surface indication of the applicant's RWP and FWP will be occasional manhole covers in the Mapleton Drive and Highway 43 right-of-way. As such, there is no adverse design treatment to mitigate for regarding the post-construction use.

Installation of Pipeline

The applicant proposes installing the RWP under the Willamette River from Gladstone and making "landfall" in Mary S. Young Park at a depth of approximately 60 feet below grade. The 42-inch RWP would rise gradually toward the surface as it makes its way northwest,

toward two OPRD-owned parcels (tax lots 100 and 200) at the south end of Mapleton Drive, until arriving at the terminus of HDD operations at tax lot 200, 7-feet below grade. The RWP would "daylight" and transition to a 5-7 foot deep open cut/trench in two OPRD-owned parcels north of Mary S. Young Park and then proceed within the Mapleton Drive rights-of-way to the Lake Oswego Water Treatment Plant (LOWTP) at 4260 Kenthorpe Way. From the LOWTP the FWP would continue west on Mapleton Drive then north on Highway 43 to Lake Oswego.

The Council finds that some of the adverse effects of the pipeline installation and construction on surrounding properties are mitigated by the applicant's CMP. The following list includes some of the requirements in the CMP aimed at mitigating adverse effects:

General

- Conduct a preconstruction assessment (video documentation) to ensure areas impacted by construction are restored to equal or better quality.
- Retain a certified arborist available to observe, manage tree care, and direct the contractor on tree protection measures during construction as needed to ensure that impacts to trees are minimized.
- Conduct work between the hours of 7:00 am to 7:00 pm weekdays and 9:00 am to 5:00 pm Saturdays (except work on Highway 43). Activities outside of these hours will require approval from the City of West Linn.
- Conduct Highway 43 pipeline work between the hours of 8:00 pm and 5:00 am.
- Limit the length of the construction zone on Mapleton Drive and Highway 43 to 150 feet and 200 feet, respectively.
- Employ erosion control best management practices (BMPs, otherwise known as mitigation measures) and plans per West Linn, Clackamas County, and DEQ standards per an approved 1200-C permit. These approved BMPs will prevent tracking or flowing of sediments onto public rights-of-way and control construction dust.
- Conduct nighttime construction lighting for Highway 43 pipeline work per Section 00225 of the Oregon Standard Specifications for Construction.
- Use temporary site security fencing around the perimeter of construction areas to provide both site security and public safety functions.

Public Outreach

- Develop a communications plan with West Linn Public Works, TVF&R, the Robinwood Neighborhood Association, and other impacted stakeholders.
- Provide the City of West Linn with copies of all written correspondence and notice of telephone contacts from citizens regarding construction.
- Employ a representative to answer questions, coordinate special needs, and ensure impacts are kept to a minimum. Contact info will be provided with 2 week and 48 hour notices.
- Provide a minimum of 60 days notice to all property owners within 500 feet of staging area for drilling the Willamette River pipeline crossing.

- Hold up to two meetings per month with residents and members of the Robinwood Neighborhood Association to address residents' needs and concerns.
- Retain the services of an ombudsman to promote communication among all project stakeholders.
- Attend weekly coordination meetings with TVF&R and West Linn Police.
- Notify TVF&R on a daily basis for all construction activities and locations (in a manner acceptable to TVF&R).
- Notify all affected public agencies, commercial property owners, tenants, and residents no less than 2 weeks before the start of construction activities. Notice to be provided via email, door hangers, or phone calls.
- Notify all affected public agencies, commercial property owners, tenants, and residents a second time within 48 hours of construction activities. Notice to be provided via email, door hangers, or phone calls.

Traffic

- Use only two haul routes to and from the WTP and pipeline construction areas. These haul routes are Highway 43 and McVey/Stafford Rd to and from I-205.
- Provide a 5-foot wide pedestrian and bicycle access way around the work zone.
- Provide pedestrian access at all times to all trails in MSY Park from the end of Mapleton Drive.
- Provide a 12-foot wide access for emergency vehicles to pass through the work zone (except at 4 locations on Mapleton Drive where not feasible due to the pipeline alignment).
- Re-open and maintain fully functional streets (i.e., no road closures or equipment on the roadway) outside of work hours.
- Limit the duration of any residential driveway closure resulting from construction activities to no more than one work shift at a time.
- Provide temporary parking within 200 feet of a resident's home during the time that any residential driveway is not accessible.
- Comply with the Americans with Disabilities Act, to the extent practical, for all pedestrian access around or through the construction work area to homes and businesses.
- Maintain at least one driveway or access for vehicles to every business that has operating hours which overlap with nighttime construction hours.
- Work with Tri-Met to provide continued public transportation service on Highway 43 and to maintain or relocate bus stops as required to maintain service.
- Provide 24-hour per day, 7-day per week vehicular access to all streets impacted by construction on Highway 43 that do not have secondary access (dead-end streets).
- Bus all craft-level workers to and from all construction work areas on Mapleton Drive, Kenthorpe Way, and Highway 43 to minimize traffic impacts.
- Construction vehicles shall only make right turns in or out of Mapleton Drive at the intersection of Mapleton Drive and Highway 43 (no left turns allowed).
- Construction vehicle traffic shall be approximately evenly split between Mapleton Drive and Kenthorpe Way to decrease the traffic impact on any single street. During

Mapleton Drive open-cut pipeline work, the WTP Contractor shall only use Kenthorpe Way to access the site.

Noise

- Offer a relocation package for residents who live in the immediate vicinity of the HDD staging area during the 24- to 48-hour HDD pullback phase.
- Install a minimum 16-foot tall noise wall around the perimeter of the HDD construction site except the west side which will remain open for access.
- Provide advanced notice to stakeholders when unusually noisy construction activities or approved activities outside of normal work hours are anticipated.
- Minimize reverse direction travel and use broadband, ambient-sensing backup alarms on all on-site equipment requiring backup indicators as permissible by OSHA requirements.
- Conduct any jack-hammering for pipeline construction work within public rights-of-way within a noise tent or sound enclosure.
- Minimize banging dump truck tailgates with procedural methods or with the use of rubber gaskets.
- Use portable noise barriers or enclosures around discrete, stationary equipment during nighttime work.
- Place stationary equipment as far from affected residences as possible.
- Use properly sized and maintained mufflers, engine intake silencers, and engine enclosures (for cranes, excavators, generators, etc.). Equipment shall be equipped with a "residential" or "critical" grade silencer if possible.
- Use acoustical blankets, pads, straps, and/or boards to control metal-on-metal noises such as picking up drill pipe if possible.
- Limit dumping of materials onto the ground, especially metallic or other hard materials, and when possible move/place materials with a crane or excavator rather than by dumping. This restriction does not apply to the dumping of excavated or imported backfill material.
- Minimize the idling of heavy mobile equipment and dump trucks.

The City Council finds that the mitigation strategies listed above, if enforced through the imposition of conditions of approval, are an effective means of minimizing negative impacts to surrounding residents and businesses. The peer review conducted by Bill Hawkins of CH2MHill concludes that the Plan offers a "comprehensive and sound approach to impact mitigation that equals and in some cases, exceed mitigation measures typically provided for projects of similar size and scope."

Although the City Council generally agrees with this conclusion, it has identified a number of areas where additional mitigation is required to mitigate identified adverse effects. For example, the Planning Commission and a number of opponents asserted that the heavy equipment activity resulting from installation of the pipeline would create safety concerns for children walking along Mapleton Drive to and from school during the 3-month construction period and for vehicles on Nixon Avenue. To address these concerns, the City Council has imposed Conditions of Approval 15, 4, 12, 2, and 13. Condition 15 requires the applicant to provide a 5-foot wide pedestrian and bicycle access way around the work zone

for elementary and secondary school children to get to school during construction, and Condition 4 requires the applicant to restore damaged pedestrian, bicycle, and vehicle facilities when construction concludes. To provide for safe vehicle transit the Council has imposed Conditions 12 and 2, which require additional traffic control and safety measures at the intersection of Nixon Avenue and Mapleton Drive and require a Traffic Control Management Plan. In addition, to mitigate for potential degradation of Nixon Avenue due to the additional vehicle traffic, the Council has imposed Condition 13. The City Council also believes that contractors who violate the terms of the Construction Management Plan should be subject to penalties; therefore, Condition 15 also imposes penalties. The project plans show that the new pipe and service lines will be installed on a parallel alignment. The applicant believes this can be done without taking the existing pipe out of service until the final changeover is made, likely in a single work shift. To further accommodate residents who may have special needs the City Council has imposed Condition of Approval 15 requiring the identification of those with special needs and accommodation of their access needs. The applicant has also agreed to create a hotline that will be in operation 24-hours per day, seven days per week during construction.

The Planning Commission found that noise impacts associated with the 24- to 48-hour continuous "pullback" phase of the HDD operation would have adverse impacts on surrounding properties. The Council finds that the Construction Management Plan (CMP) will include offering a temporary relocation package to provide shelter for residents who live in the immediate vicinity of the HDD staging area during the 24- to 48-hour HDD pullback phase. With the addition of Conditions of approval 3, 7, 8, and 11, the Council finds that noise and impacts associated with the HDD are adequately mitigated.

In addition, the applicant has proposed a business promotion plan to help keep the Robinwood Business district "Open for Business" during construction. This includes not only keeping all lanes of traffic and all accesses onto Highway 43 open during the business hours of 5 am to 8 pm, but also providing custom signage to help guide customers to businesses that are open during construction hours. Although the City Council finds that this plan is a good start, retaining consistency with the overall business community requires an enhanced "Shop Local" Marketing Plan that must be distributed to the Chair of the Robinwood Neighborhood Association, all businesses located along Highway 43 within the Robinwood neighborhood boundaries, and the City Manager. Condition 18 is imposed to accomplish this objective. In addition, Condition 9 requires the applicant to replace the existing 6-inch asbestos cement water distribution line in Mapleton Drive with an 8-inch ductile iron water distribution line due to the applicant's conflicting alignment. The upgraded pipe provided by Condition 10, and the requirement that the applicant convey its 24-inch transmission line to the City pursuant to Condition 19, may allow the City to avoid future construction disruptions on Highway 43 associated with upgrading the City's own water pipelines.

To the extent that the CMP does not provide a means of limiting the noise impacts on residents, protecting residents from construction traffic, accommodating residents with special needs, and mitigating the disruption to businesses, the City Council has added Conditions of Approval 2, 3, 4, 5, 7, 8, 9, 11, 12, 13, 15, 18, and 19. The Council determines that reasonable measures have been taken to mitigate the identified adverse effects, and

that with the conditions of approval the proposal will adequately "mitigate any possible adverse effect from the use on surrounding properties and uses."

2. The characteristics of the site are suitable for the proposed use considering size, shape, location, topography, and natural features.

Finding No. 9: The applicant's proposed RWP and FWP will traverse nearly two miles within the City of West Linn; it will begin in the middle of the Willamette River and extend to the City's northern boundary with Lake Oswego. Throughout this alignment, the pipeline is proposed to be installed entirely within publicly-owned land or public rights-of-way; the paved width of Mapleton Drive is 16-feet at minimum and the paved width of Highway 43 is 45-feet at minimum. Although the alignment is constrained by the horizontal dimensions of Mary S. Young Park, OPRD parcels, and the Mapleton Drive and Highway 43 rights-of-way, placement below ground enables the applicant to adjust the depth of its pipe, or relocated utilities, to ensure that sufficient space for the proposal and existing utilities is available.

The applicant's proposed RWP and FWP alignment is the preferred alternative among a number of route alternatives evaluated. The applicant examined alternative routes through Mary S. Young Park, Mark Lane, and Cedar Island and concluded that the proposed route least impacts the environmental resources protected by the CDC. Additionally, the proposed alternative is shorter than other alternatives examined; therefore, this route should reduce the footprint of construction and the potential disturbance to adjacent residents and people relying on the affected streets.

The proposed alignment spans nine protected WRAs in the City: Arbor Creek, Robinwood Creek (2 branches), Fern Creek, Robin Creek (2 branches), Gans Creek, Trillium Creek, and Heron Creek. The proposal does not encroach beyond the edge of disturbed areas in the vicinity of existing roadway pavement, unpaved road shoulders or parking areas so disturbance of the WRAs will be minimized. Disturbance to HCAs is confined to the area of HDD operations and the transition from HDD to open trench on OPRD tax lots 100 and 200. Approximately 7,715 square feet of this HDD staging area will be disturbed, including the removal of 19 non-significant trees and adjacent understory (shrubs, groundcover, etc.). The applicant proposes revegetation of the site following construction; this proposal is required by Condition of Approval 6. All other natural resources and associated water resources will be avoided and unaffected.

The topography along the proposed alignment includes a gradual elevation gain of 125 feet from the Willamette River to the WTP. Most of the gain is in the first 1,200 feet of the RWP route in the Mapleton Drive ROW from the OPRD lots. Nonetheless, the placement of the pipes below ground and the pressurization of the water system ensure that the topography will have little influence on the proposal's ability to transmit water.

The Planning Commission identified seismic risk in the area as making the topography unsuitable to accommodate the proposed pipeline. The Planning Commission found a potential for seismically induced liquefaction and lateral spreading of soils in this area as

the result of a deep-seated pre-historic landslide as well as the potential for slope failure north and east of the plant." The Planning Commission went on to find that the existence of the historic landslide suggested that a buttress of more consolidated and stable soils is not present east of the plant site.

At the outset, the Council notes that construction of the proposed pipelines and plant will eliminate the most significant seismic risks associated with the existing plant facilities and pipelines. Elimination of these risks contributes to making the site suitable for the proposed use.

After the Planning Commission's decision, Dr. Scott Burns of Portland State University provided an independent peer review considering the area's susceptibility to landslides caused by earthquakes or other heavy rain events. The evidence of landslides in the area occurred as part of the Missoula Floods, approximately 15,000 calendar years ago, and since that time it has endured a substantial number of earthquakes. Dr. Burns' analysis states:

> I see little danger posed to the pipeline and water treatment plant from lateral spread related to these landslide slopes or even the steep slopes of the area that have no landslides on them. To have a lateral spread, one needs to have water saturated soils from high ground water tables, and these Missoula Flood sediments are basically well drained.

According to Dr. Burns, the small historic landslide to the east of the plant was climatically induced and occurred as a result of heavy rainfall in 1996, resulting in a slide of less than 200 cubic yards of material, and such events will not affect the pipeline or treatment plant. Dr. Stephen Dickenson of New Albion Geotechnical, Inc. and formerly a professor at Oregon State University reviewed the liquefaction and lateral spreading studies concluding that ground displacements have been well identified and appropriate mitigated. The City Council has reviewed these studies and concludes that the pipeline has been designed to withstand seismically or climatically induced events.

Therefore, based on this evidence, the City Council finds that the characteristics of the site are suitable for the proposed use.

3. The granting of the proposal will provide for a facility that is consistent with the overall needs of the community.

Finding No. 10: The Planning Commission interpreted the term "community" to include the City of West Linn and a facility that is consistent with the community needs is one that "is designed and sized to serve the needs of the residents and land uses within the city." The primary purpose of the proposed pipeline is to serve Lake Oswego and Tigard rather than the overall needs of West Linn and this regional scale of the proposal indicates that the pipelines are not "of a scale to serve the community of West Linn." A number of opponents made similar claims.

The City Council interprets the term "community" more broadly. When words are not defined within the CDC, they are to be given the meaning set forth in Webster's Third New International Dictionary, which includes the following definition of "community:"

1. A unified body of individuals: as
a. State, Commonwealth
b. The people with common interests living in a particular area
c. An interacting population of various kinds of individuals
d. A group of people with a common characteristic or interest living together within a larger society – the region itself
e. A group linked by a common policy

The "overall" needs of the community must look at what is in the best interest of the City of West Linn as a whole. Considering the term "community" in the context with "overall," this term does not suggest that a use must be exclusive and cannot serve the needs of West Linn while also serving the needs of Lake Oswego and Tigard, in addition to those of West Linn.

In order to identify which "overall needs" require protection, the Council considers the goals and values protected within the Comprehensive Plan, other adopted City plans and policies, as well as general municipal needs, such as fiduciary, public infrastructure, and public safety needs. Thus, one of the "overall needs of the community" identified in the Water System Master Plan is the need for a clean and safe water supply that will benefit the City of West Linn as a whole.

With regard to the water system, the Planning Commission interpreted the term "overall needs" to mean that the conferred benefit must exist, for the life of the project. The Council finds that when determining whether the "overall needs" are met, the decision-maker will consider both the short and long term needs that are being met by the project. The new pipelines and plant enhance the existing interconnectivity between West Linn's water systems and Lake Oswego's water system with facilities that will be seismically secure. This is critical because, as the Water System Master Plan explains, the City of West Linn has a deficiency in its emergency supply capability. Expanding and securing the intertie with Lake Oswego is the preferred means of meeting West Linn's need for emergency water as described in the Water System Master Plan. If it was possible for West Linn to obtain the necessary development permits to install a new parallel transmission main across the river, which is the next best Water System Master Plan option, the cost for West Linn would be about $11.6 million and would provide far less redundancy and reliability. The Council finds that the provision of 4 mgd through the intertie that is available until at least 2041 is a benefit that will last for 25 years or more, and it should be considered as an asset that helps to meet a need of the West Linn community for emergency water. The intertie gives West Linn access to water from a system designed to be much more reliable than the system in place today. Condition of Approval 17 requires amending the existing intergovernmental agreement between West Linn and Lake Oswego to ensure that it cannot be terminated without mutual written consent of all parties. Condition of Approval 10 requires the applicant to provide a new pipeline and a third intertie pump so that the intertie can be used to its maximum capacity.

Further, the $5 million dollar fee for use of right-of-way within the city was not part of the proposal that the Planning Commission considered. This fee can be used for water system improvements to meet needs identified in the Water System Master Plan. These water system improvements will benefit the entire City of West Linn, including both residents and businesses. Some opponents asserted that the proposed right-of-way use fees exceed the limits of ORS 221.260, and that the fees have not been approved by the Lake Oswego or Tigard City Councils. ORS 221.260 only applies to franchises, which is not the function of the right-of-way use fee. The Partnership understands that identifying the limits or terms for an appropriate right-of-way use fee is entirely within the control of the City of West Linn. Condition of Approval 16 is imposed to ensure the City and the Partnership execute an intergovernmental agreement securing this fee. To aid in meeting the needs of the Water System Master Plan, the applicant is also conveying its 24-inch transmission line along Highway 43, and other abandoned lines as required by Conditions of Approval 5 and 19.

For the reasons stated above, the City Council finds that with additional conditions, the pipelines will be consistent with the "overall needs of the community."

4. Adequate public facilities will be available to provide service to the property at the time of occupancy.

Finding No. 11: The applicant proposes the installation of a public facility on public lands and within the public rights-of-way. The criterion is not applicable.

5. The applicable requirements of the zone are met, except as modified by this chapter.

Finding No. 12: The proposed RWP and FWP are permitted as conditional uses in the R-10, R-4.5 and GC zoning districts. The dimensional standards for conditional uses are based upon the criteria in CDC Section 60.070(A) and (B). Findings regarding these Sections are found above. The criterion is met.

6. The supplementary requirements set forth in Chapters 52 to 55 CDC, if applicable, are met.

Finding No. 13: CDC Chapters 52-54 are not applicable to the applicant's proposal for an underground utility transmission line (Chapter 52 regards signs, of which none are proposed or required; Chapter 53 regards sidewalks, of which none are proposed or required; and, Chapter 54 regards landscaping, of which none is proposed or required). See also Finding 15 regarding the applicable sections of CDC Chapter 55. The criterion is met.

7. The use will comply with the applicable policies of the Comprehensive Plan.

Finding No. 14:

The CDC is consistent with and implements the policies of the Comprehensive Plan. The City Council finds that, with the conditions proposed, the application will meet all of the

provisions of the CDC and the Plan. Outlined below are additional policies that the proposal will comply with that might not be immediately apparent. In addition, the applicant's proposal satisfies several supplemental documents to the Comprehensive Plan, including the Transportation Systems Plan, Water System Master Plan and the Robinwood Neighborhood Plan, which are outlined below.

Some of the testimony received suggested that the applicant has been overly selective in its compliance with the goals and policies, seeking to limit itself to consideration of only the ones that it meets. Other than citing a laundry list of additional plan policies, none of the testimony explained why particular goals and policies are not met or are even applicable. The plan does not require compliance with all of the Comprehensive Plan policies, but rather only those that are "applicable." Determining which plan policies applied to this application was first articulated by staff as part of the pre-application process. From there, the City went through all of the goals and policies and evaluated which ones were applicable in its various staff reports.

The Council Goals

The Comprehensive Plan contains a preamble called "Council Goals" adopted in February 5, 2003 that appears before the table of contents page within the Comprehensive Plan. The Plan does not explain the role of these Council Goals but the Introduction portion of the Plan does contain instructions for using the plan and states:

> The goals and policies contained within this plan have the force of law and the City is obligated to adhere to them in implementing the Plan. Additional information about City goals, policies, and recommended action measures follows.
>
> Goal. A statement indicating a desired end or aspiration including the direction the City will follow to achieve that end. The City's goals must be consistent with the Statewide Planning Goals.
>
> Policy. A statement indicating a definitive course of action to implement City goals. A policy may not be the only action the City can take to implement the goals. The City must follow relevant policies when developing other plans or ordinances that affect land use, such as public facility plans, zoning, and development standards.
>
> Recommended Action Measure. A statement outlining a specific City activity, action, project or standard, which if executed, would implement goals and policies. Recommended action measures also refer to courses of action the City desires other jurisdictions to take regarding specific issues, and help define the relationship the City desires to have with other jurisdictions and agencies in implementing the Comprehensive Plan. These statements are suggestions to City decision-makers as ways to implement the goals and policies. Completion of projects, adoption of standards, or the creation of

certain relationships or agreements with other jurisdictions and agencies will depend on a number of factors such as City priorities, finances, and staff availability.

Nothing in the instructions or the substantive portions of the plan make any mention of the 2003 Council Goals contained within the preamble. Further, CDC 60.070(C) requires compliance with the applicable "policies" of the Plan and makes no mention of the goals, whether they are titled Council Goals or otherwise. Therefore, the City Council finds that if the 2003 City Council had intended the 2003 Council Goals to qualify as "applicable policies," they would have been included within the introductory portions of the plan as having the force of law and would have been specifically referenced within the substantive portions of the Comprehensive Plan. For these reasons the 2003 Council Goals are not "applicable policies" that must be considered in order to evaluate compliance.

If the Council Goals are applicable, many of the Council Goals mirror or are implemented by various goals or policies contained within the Comprehensive Plan that are addressed below. For example, Council Goal #2 requires promotion of citizen involvement and establishment of policies that give neighbors control over their future. Goal 1 Citizen Involvement identifies goals and policies requiring that citizens are allowed to participate in land use proceedings and encourages neighborhoods to adopt neighborhood plans. Findings addressing the other Council Goals are cross-referenced as follows:

1. Maintain and protect West Linn's quality of life and livability. – See responses to Goal 2, Section 1, Policy 9 below.

***

6. Promote land use policies, both locally and regionally, that are based on the concepts of sustainability, carrying capacity, and environmental quality. – See responses to Goal 2, Section 1, Policy 9 below.

***

10. Pursue City policies predicated on the assumption that growth should pay 100% of the cost impacts it creates. – See discussion of Goal 11, Policy 11 below.

11. Assert through both planning and policy that compatibility with existing development should be a primary goal in West Linn's land use process. See responses addressing Comprehensive Plan Goal 2, Section 3, Policy 6 and Robinwood Plan Goal and Policy 3.9.

The one exception where a Council Goal is not reflected in the body of the Comprehensive Plan relates to Stafford. Council Goal 9 provides: "Oppose urbanization of the Stafford Triangle and pursue policies that would permanently retain that area as a rural buffer between West Linn and neighboring communities." The Lake Oswego Plan contains a policy opposing urbanization of Stafford. However, both Lake Oswego and West Linn have an obligation under Goal 11 to plan for provision of urban services for areas designated as urban reserves such as Stafford. Before provision of service can actually occur, areas designated urban reserve within Stafford would have to retain their reserve designation, which is currently pending review by the Oregon Court of Appeals, these reserve areas

would need to be brought into the urban growth boundary, annexed by voter approval, and plans amended to accommodate development. Further, the application submitted by the Partnership requests approval for the installation of raw- and finished-water transmission lines under existing City standards and criteria. The Council finds that the intended use of the water transmitted through the pipeline, and potential distribution to the Stafford Triangle, is not relevant to any of the applicable standards or criteria. Finally, even though there may be a remote possibility that water from the proposed transmission line could serve a portion of the Stafford area, the City recently approved a conditional use approval for Trillium School along Rosemont Road which serves students from Stafford. The Trillium School approval was consistent with the Comprehensive Plan and presumably Council Goal 9, this proposal is similarly consistent with Council Goal 9.

For the reasons set out above, the Council Goals do not apply and if they do apply, they are met.

Goal 1 Citizen Involvement identifies goals and policies requiring that citizens are allowed to participate in land use proceedings and encourages neighborhoods to adopt neighborhood plans.

Goal 1: Citizen Involvement

> *Policy 4: Provide timely and adequate notice of proposed land use matter to the public to ensure that all citizens have an opportunity to be heard on issues and actions that affect them.*
>
> *Policy 5: Communicate with citizens through a variety of print and broadcast media early in and throughout the decision-making process...*

CDC Chapter 99 specifies the public involvement necessary for quasi-judicial projects such as this. It calls for a meeting with the neighborhood (CDC 99. 038), a notice of a public hearing regarding the proposal (CDC 99.080), and a public hearing. The applicant conducted the required meeting with the Robinwood Neighborhood Association on March 15, 2012, to present their proposal and to hear comments from members of the audience. In addition, between December 2011 and January 2012, the applicant visited each business and multi-family complex along the Highway 43 portion of the alignment to deliver a letter and informational packet about the project. This informational packet was also mailed to residents along Mapleton Drive in January 2012.

The applicant placed signs, visible from the public right-of-way, along the finished-water alignment that identified the site as potentially the subject of a proposed development and which included the name and contact information of the applicant. Section 14 of the applicant's submittal summarizes the coordination with the Neighborhood.

In addition, the Partnership provided financial support to retain the services of a private land use planner to work exclusively with the Robinwood Neighborhood Association on this project. The Council's intent was to provide the Neighborhood with professional assistance to maximize citizen involvement for this project. This planner met with Neighborhood representatives, reviewed the City code and the application, helped the association identify potential mitigation measures, and provided the Neighborhood with a

report on the application. Therefore, the citizen involvement policies of Goal 1 are satisfied.

Goal 2: Land Use Planning

Residential Development

Policy 5. - New construction and remodeling shall be designed to be compatible with the existing neighborhood through appropriate design and scale.

This is not a traditional land use where compatibility in terms of design and scale is relevant because the facility will be located entirely underground and will not be visible within the existing neighborhood. Therefore, Policy 5 is inapplicable.

Policy 8: Protect residentially zoned areas from the negative impacts of commercial, civic, and mixed-use development, and other potentially incompatible land uses.

The applicant proposes the installation of a below-ground public utility; for the reasons referred to in Policy 5 above, Policy 8 is not applicable.

Policy 9: Foster land use planning that emphasizes livability and carrying capacity.

This plan policy is directed at city action when it adopts various land use regulations implementing the plan rather than to the review of particular proposals to determine if they comply with the plan and code. Cities use their development codes to regulate land use planning and West Linn has done so in this case by determining that major utilities are a conditional use. By following these codes, applicants know the rules by which they will be held accountable. By stipulating that public facilities are a conditional use within the R-10 and R-4.5 zones, West Linn has decided that these uses can be made compatible through proper mitigation. The site and facility design conditions foster the planning envisioned under this policy, i.e., to make the proposed uses compatible with the residential area and to provide water service for the neighborhood, city and region, thereby advancing the carrying capacity of each of these areas. Carrying capacity is usually associated with the capacity of land and facilities to accommodate development. In this case, the Partnership is providing an element of that carrying capacity itself. Further, the evidence from experience and qualified civil, transportation, environmental, seismic, architects, landscape architects and planners, representing both the applicant and the City's own staff, have concluded that the proposed uses are compatible with values of livability and are supported within the City's existing infrastructure carrying capacity. Finally, providing a safe and reliable redundant, emergency water source is essential to enhancing the livability of the City. To the extent that this policy applies, it is met.

Section 3, Mixed-Use Commercial Development

Goal 4 - Protect surrounding residential areas from possible adverse effects such as loss of privacy, noise, lights, and glare.

This section applies to commercial mixed-use developments and does not apply to a major utility use proposed in a residential zone. The Background of these Findings and this section highlight the small amount of land dedicated to commercial and business

development within the city and note that efforts to expand the "employment or shopping opportunities" within the City could alter the "primarily residential character of the City." The pipeline is a not a commercial or mixed use. Although it will provide some construction jobs, it will not directly provide any employment or shopping opportunities. Thus, these sections do not apply. To the extent they do apply, the pipelines will not result in any greater loss of privacy, noise, lights or glare than could be expected to result if the land were developed with residences. To the extent that this Goal applies, it is met.

Policy 4(e) - Require that any redevelopment of existing land or buildings be completed in a manner which conforms to the adopted neighborhood plan.

As noted above, this goal applies to commercial mixed-use developments and does not apply to a major utility use. Additionally, as discussed in greater detail below, the proposals conform to the Robinwood Neighborhood Plan. To the extent that this policy applies, it is met.

Policy 4(f) – Integrates aesthetically pleasing commercial development with residential uses.

Policy 6 – Commercial development shall be planned at a scale that relates to its location in the district.

As explained above, these two policies are not applicable because this is not commercial development. Further the pipeline located entirely underground has no impacts resulting from aesthetics or scale. For these reasons, these two policies do not apply and to the extent that they do, they are met.

Section 4, Industrial- Background and Findings - West Linn does not contain any additional lands suitable for large-scale industrial development. There are no remaining undeveloped areas in the City of at least 10 acres in size, relatively level terrain, adequate public services (particularly transportation), and suitable buffering from the residential development that characterizes most of the City.

This section is not a City goal or policy, but is a finding directed at areas zoned for industrial development. The applicant is not proposing an industrial development; therefore this statement does not apply.

Intergovernmental Coordination

1. Provide a coordinated approach to problems that transcend local government boundaries.

2. Encourage and support other agencies to help implement the City's Comprehensive Plan.

Policy 1: Maintain effective coordination with other local governments, special districts, state and federal agencies, Metro, the West Linn-Wilsonville School District, and other governmental and quasi-public organizations.

Policy 2: Coordinate the City's plans and programs with affected governmental units in developing solutions to environmental quality problems, hazardous physical conditions, natural resource management programs, public facilities and services programs, transportation planning, annexation proceedings, and other municipal concerns with intergovernmental implications.

The Comprehensive Plan policies under this Goal specify coordination with other agencies to develop solutions to our public facility problems that "transcend local government boundaries." It states that the Lake Oswego water supply is one of those facilities. This policy provides further support for the Council's interpretation of "community" as discussed in Finding 9 above. The Water System Master Plan and this particular application are examples of such coordination required under the Comprehensive Plan. Further, TVF&R, the emergency services agency that will be affected by this proposal, presented testimony throughout the process that it is satisfied with the applicant's approach.

In addition, the cities of West Linn and Lake Oswego are parties to an Intergovernmental Agreement (IGA) permitting the mutual use of the West Linn-Lake Oswego emergency water intertie, which provides a backup source of water for both cities during times of emergency. The cities of Lake Oswego and Tigard (the Partnership) have approved an updated IGA that, pending West Linn Council and South Fork Water Board approval, provides for new operating terms that allow for the continued, reliable use of the intertie in the event the proposal is approved.

Consistent with Policy 2 above, the City is coordinating with Lake Oswego to upgrade a 6-inch asbestos cement water line in Mapleton Drive and Kenthorpe Way during this proposal. If approved, Lake Oswego will contribute a portion of the cost to upgrade this line to an 8-inch ductile iron water line as outlined in the West Linn Water System Master Plan. Additionally, the Regional Water Providers Consortium has endorsed the Partnership's proposal (Section 18) and has declared it a "model of integrated water supply planning, as anticipated by the Regional Water Supply Plan of 2004." These policies are met.

Goal 5: Open Spaces, Scenic and Historic Areas and Natural Resources

Scenic and Historic Areas

Policy 1: Promote site design standards for development that enhances the urban landscape and prevents or minimizes obscuring views enjoyed by the community.

Policy 2: Preserve prominent scenic views as seen from public streets, parks, and open spaces in a manner consistent with other goals and policies to protect natural resources.

The applicant's proposal for an underground water transmission line will not be visible and therefore, the scenic and historic area policies of Goal 5 are not applicable.

Natural Resources

Policy 2: Where appropriate, require the planting of trees as a condition of approval for any land development proposal, consistent with the City's street tree ordinance and recommendations of the City Arborist.

The proposal requests approval to remove 19 non-significant trees, which the city arborist determined to be in "fair" to "very poor" condition, to accommodate temporary staging for the horizontal-directional-drilling rig within the regulated HCA on OPRD-owned tax lot 200. The applicant proposes to fully mitigate for the loss of these trees using native trees and vegetation. This policy is satisfied.

Policy 3: Provide buffer areas around heritage trees, significant trees, and tree clusters to ensure their preservation.

No heritage trees, significant trees, or significant tree clusters will be impacted by this proposal. This policy does not apply.

Policy 4: Require the areas containing tree clusters, significant trees, and native vegetation along natural drainage courses and waterways in areas of new development be maintained to the maximum extent possible to preserve habitats, prevent erosion, and maintain water quality.

No significant tree clusters, significant trees will be impacted by this proposal. Native vegetation disturbed by construction within the HCA overlay and subject to compliance with CDC 32 will be restored using native trees and the applicant will fund additional tree planting activity within Mary S. Young Park. The Council is also requiring revegetation in Condition of Approval 6. This policy is met.

Policy 5: Preserve important wildlife habitat by requiring clustered development or less dense zoning in areas with wetlands and riparian areas, natural drainageways, and significant trees and tree clusters.

Native vegetation disturbed by construction within the HCA overlay and subject to compliance with CDC 32 will be restored using native trees and the applicant will fund additional tree planting activity within Mary S. Young Park. Revegetation is required by Condition of Approval 6. This policy is met.

Policy 6: Restore, enhance, and expand the existing habitats found along rivers and streams, including planting native trees to reduce water temperatures.

Native vegetation disturbed by construction within the HCA overlay and subject to compliance with CDC 32 will be restored using native trees and the applicant will fund additional tree planting activity within Mary S. Young Park. Revegetation is required by Condition of Approval 6. This policy is met.

Policy 7: Enhance and expand vegetation, particularly native species, on hillsides and in natural areas to prevent erosion and improve wildlife habitat.

Native vegetation disturbed by construction within the HCA overlay and subject to compliance with CDC 32 will be restored using native trees and the applicant will fund additional tree planting activity within Mary S. Young Park. Revegetation is required by Condition of Approval 6. This policy is met.

Policy 8: Require and enforce erosion control standards for new development

The construction teams will implement and maintain erosion control practices within the HCA and along the entire project length, consistent with adopted West Linn Public Works Standards. This policy is met.

Policy 9: Maintain and improve existing storm water detention and treatment standards to ensure that the impact of new development does not degrade water quality and wildlife habitat.

The construction teams will implement and maintain erosion control practices within the HCA and along the entire project length, consistent with adopted West Linn Public Works Standards. Because post-construction structures and uses will be fully below ground, the applicant will not create any additional storm water control demand. This policy is met.

Policy 10: Manage open space, habitat, and ecological/scientific areas as identified in the West Linn Goal 5 inventory and protection plan in order to preserve their unique qualities.

The construction teams will implement and maintain erosion control practices within the HCA and along the entire project length, consistent with adopted West Linn Public Works Standards, to preserve habitat qualities. This policy is met.

Policy 11: Control activities and uses within the areas identified above to maintain ecological values, while providing for compatible recreational and educational activities.

Recreational and educational activities occurring in Mary S. Young Park or other City-owned park or open spaces will not be impacted by this proposal. Therefore, this policy does not apply.

Policy 12: Protect open space areas along hillsides and areas with potential erosion hazards through development controls and appropriate zoning.

The construction teams will implement and maintain erosion control practices within the HCA and along the entire project length, consistent with adopted West Linn Public Works Standards. This policy, to the extent it applies, is met.

Policy 14: Prohibit access by wheeled motorized vehicles onto the Willamette and Tualatin River beach areas except on public boat launch pads still in active use.

No motorized vehicles are proposed to access either the Willamette or Tualatin River beach areas. This policy does not apply.

Policy 17: Work with other jurisdictions to coordinate efforts related to river planning.

This policy is directed to the City of West Linn that has planning jurisdiction over the Willamette River Greenway and other local rivers. This policy does not apply.

Policy 20: Comply with the provisions of a State Goal 5 natural resources inventory.

The proposed raw- and finished-water transmission lines in West Linn will pass through a number of natural resources. Consequently, the proposal must also satisfy: the flood management area regulations in Chapter 27 of the CDC; the Willamette River and HCA regulations in Chapter 28 of the CDC; and, the WRA regulations of Chapter 32 of the CDC. Findings regarding these standards are found later in these findings.

Goal 6: Air, Water and Land Resources Quality

Water Quality

Policy 1: Require that new development be designed and constructed to prevent degradation of surface and groundwater quality by runoff

Policy 5: Where feasible, use open, naturally vegetated drainageways to reduce stormwater runoff and improve water quality.

Policy 6: Meet the goals of Title 3 of the Metro Urban Growth Management Functional Plan

Policy 7: Require up-to-date erosion control plans for all construction and actively enforce applicable City codes and regulations.

As proposed, the raw- and finished-water transmission lines will be constructed completely underground and will not result in additional surface water runoff. Title 3 is directed to City action and is implemented by the City through its Water Resource (WRA) and HCA regulations. Compliance with the WRA and HCA regulations establishes compliance with Title 3. Additionally, the proposed construction activities are subject to the erosion control standards in CDC Chapter 31 (see Findings 26-29 later in this report).

Noise Control

Policy 2: Require development proposals that are expected to generate noise to incorporate landscaping and other techniques to reduce noise impacts to levels compatible with surrounding land uses.

Policy 3: Require new commercial, industrial and public facilities to be designed and landscaped to meet Department of Environmental Quality (DEQ) and City noise standards.

Policy 4: As part of the land use application submittal for a noise generating use, require the applicant to include a statement from a licensed acoustical engineer, and, if necessary, from DEQ, declaring that all applicable standards can be met.

The proposed raw- and finished-water transmission lines are proposed to be installed completely underground and will not generate noise audible aboveground. Construction associated with the pipeline installation will temporarily generate continuous, moderate to loud noise audible to properties adjacent the HDD rig and proposed pipeline alignment. The applicant has prepared a construction noise analysis in consultation with a licensed acoustical engineer, to identify and mitigate temporary construction noise impacts. The City Council imposes Condition of Approval 3, based on the recommendations from the acoustical engineering analysis, to mitigate noise impacts imposed during construction. See also Finding 7. For these reasons, these policies are met.

Goal 7: Areas Subject to Natural Disasters and Hazards

Policy 1: Require development and associated alterations to the surrounding land to be directed away from hazardous areas.

Policy 2: Restrict development except where design and construction techniques can mitigate adverse effects.

Policy 3: Require soils and geologic studies for development in hazardous areas.

Policy 4: Promote slope and soil stability and the use of natural drainageways in areas with landslide potential by retaining existing vegetation in those areas to the greatest extent possible.

Policy 5: Follow state and regional designations and construction standards regarding earthquake hazards.

Policy 6: Retain storage capacity of flood waters by protecting flood plains.

Policy 7: Prohibit any alteration to the landscape or development that would result in a rise in elevation of the 100-year flood plain.

Policy 8: Minimize impacts to natural vegetation within the flood plain by restricting development and related human activity.

Policy 11: Meet the goals of Title 3 of the Metro Urban Growth Management Functional Plan to protect floodplains and other hazard areas.

Policy 12: Refer to current seismic information during development review, including in the pre-application meeting, and when enacting new regulations governing the location of structures and land uses.

The applicant proposes design and construction techniques that mitigate earthquake hazard risks, as outlined in their site specific seismic analysis. Staff requested a site specific site hazard evaluation to recommended construction and installation techniques to mitigate seismic issues at the site. The applicant's complete draft geotechnical report and site hazard evaluation is contained in the applicant's submittal dated June 25, 2012, Section 17 and subsequent technical reports from Geotechnical Engineers, New Albion and Dr. Scott Burns.

The Council notes that construction of the proposed pipelines and plant will eliminate the most significant seismic risks associated with the existing plant facilities and pipelines. The applicant proposes design and construction techniques that mitigate earthquake hazard risks, as outlined in their site specific seismic analysis. The application thoroughly addresses flood, geologic hazards and homeland security risks to the use and site. The application addresses seismic safety concerns and provides subsequent technical reports from Geotechnical Engineers, New Albion and Dr. Scott Burns. Seismic risks associated with the pipeline have been evaluated by professional geologists and a peer review of those findings as well as an evaluation of the geologic conditions existing on the site have been independently reviewed by qualified experts. All experts concluded that the proposed design and seismic hazard mitigation techniques are proven and appropriate to achieve the performance objective of facilities that remain operable and occupiable after a magnitude 9.0 Cascadia Subduction Zone (CSZ) earthquake.

Finally, the pipeline is proposed to be routed through steep slopes near the east end of Mapleton Drive. Because this work will occur entirely within the paved portion of Mapleton Drive, the proposal retains all native vegetation within the public right-of-way.

For these reasons, the City Council finds these policies are met.

Goal 8: Parks and Recreation

Goal 3 – Assure the availability and the reasonable accessibility of recreational lands and facilities to all West Linn residents.

This is a goal rather than a policy containing no specific requirements. Construction and operation of the transmission line will have no effect on the ability of the public to access or

use Mary S. Young Park, existing nature trails, or other nearby natural areas. Moreover, installation of the pipeline through the use of horizontal directional drilling as proposed will have no effect on the ability of the public to access or use Mary S. Young Park, existing nature trails, Willamette River beaches or Cedar Island. See also memo from Ed Sullivan dated Jan. 11, 2013 discussing the Charter vote requirements. To the extent this goal applies, it is met.

Policy 8. Require land divisions and major developments to set aside or dedicate land based on standards that provide for:

- *An area composed of developable lands that may provide active recreational space;*
- *An adequate passive open space area to protect natural resources at the site and protect development from hazard areas; and,*
- *A link between existing public-owned parks or open space areas and/or public rights-of-way.*

CDC Chapter 56 includes standards applicable to development within City parks and open spaces. Findings regarding these standards are found below. Additionally, the applicant's proposal is not a development contemplated under this policy to set aside or dedicate recreational land. Moreover, the proposal will not result in an impact to the City's park system sufficient to justify a dedication as described in Policy 8. These plan policies are met.

Goal 9: Economic Development

Policy 5: Maintain public facilities (specifically right-of-way improvements) in established commercial and industrial districts to promote economic activity.

Policy 8: Maximize the use of regional, state, and federal funding for infrastructure planning and development.

The applicant's proposed raw- and finished-water transmission lines will pass through residential and commercial districts in West Linn. The applicant's construction management and traffic control plan propose to ensure that access to local businesses along Highway 43 will be provided during all daytime and nighttime construction hours. Because West Linn relies on emergency water from the West Linn-Lake Oswego intertie, commercial uses in West Linn will benefit from a reliable source of water for fire suppression, public health and sanitation in the event of a loss of the City's water supply. See also Finding 9.

Additionally, the Regional Water Providers Consortium has endorsed the Partnership's proposal and has declared it a "model of integrated water supply planning, as anticipated by the Regional Water Supply Plan of 2004." These plan policies are met.

Goal 11: Public Facilities and Services

Policy 1: Establish as the City's first priority, the maintenance of existing services and infrastructure in all areas within the existing City limits.

Policy 5: Where appropriate, monitor, coordinate with, and regulate the activities of the following as they affect existing and future residents and businesses:

- *Water supply*
- *Fire and rescue protection*

Policy 6: Encourage cooperation and coordination between all public service agencies to maximize the orderly and efficient development and provision of all services.

Policy 11: Assure that costs for new infrastructure and the maintenance of existing infrastructure are borne by the respective users except when it is determined that improvements are of benefit to the whole community, or that a different financing mechanism is more appropriate

Policy 12: Whenever feasible, utilize environmentally sensitive materials and construction techniques in public facilities and improvements.

As proposed, the existing intertie will be on an abandoned line. However, Condition of Approval 10 requires the applicant to construct a replacement water line connection and install a third pump at the existing intertie pump station. Thus, the applicant's water transmission upgrade will result in improved supply reliability of a new West Linn-Lake Oswego emergency water supply intertie because the intertie will be able to operate at maximum capacity. The proposal would also improve fire suppression capacity for TVF&R, pending approval of a new IGA that gives the City access to water under certain circumstances and construction of a new intertie.

The applicant's proposal includes letters of support from both the Regional Water Providers Consortium and Clackamas River Water Providers, both of whom praise the Partnership for their efforts in coordinated regional water supply planning. Additionally, the City of West Linn is coordinating the replacement of 6-inch asbestos cement water lines on Mapleton Drive and Kenthorpe Way in conjunction with the Partnership's proposal.

Infrastructure and maintenance costs of the proposed raw- and finished-water lines will be borne by residents of Lake Oswego and Tigard, ensuring that the proposal complies with Policy 11. The applicant's proposal avoids impacts to the Willamette River, riparian areas, and wetlands in Mary S. Young Park by boring beneath these areas and eliminates direct impacts to WRAs along Mapleton Drive and Highway 43 by containing all construction activity through environmentally sensitive areas to paved or disturbed areas of the public rights-of-way. No surface activities will occur in Mary S. Young Park. Therefore, these plan policies are satisfied.

Water System

Policy 2: Coordinate water service to future users to allow for the most efficient provision of service within the City and projected subsequent expansion of the City limits within the Urban Growth Boundary as it existed in October 2002, calculated to serve a build out population not to exceed 31,000.

Policy 3: Require funding for the installation of new water storage and distribution facilities to be the responsibility of the property owners/developers or those receiving

direct benefit from those facilities. Where appropriate, the City may participate in the development of those facilities to the extent that they benefit residents or businesses in addition to those directly involved, or if they improve the overall efficiency of the system.

The West Linn Water System Master Plan recommends improving the capacity and reliability of the Lake Oswego emergency supply connection as the most economical means of meeting the City's supply and reliability needs. The applicant's proposal is consistent with this recommendation. The applicant has presented an updated IGA to West Linn, Tigard, and the South Fork Water Board outlining the details associated with this water sharing agreement. The West Linn City Council has agreed to wait to make a decision on this IGA until the Partnership's land use applications have been decided.

The applicant proposes to fully fund the installation of the raw- and finished-water transmission lines, and it has proposed to partner with the City of West Linn to replace 6-inch asbestos cement water lines in Mapleton Drive and Kenthorpe Way. These policies are met.

Storm Drainage

Policy 2: Require adequate maintenance of culverts and drainageways in coordination with property owners to ensure that the natural drainage system operates at maximum efficiency.

The applicant will be able to avoid disturbance to any storm water pipes, culverts or adjacent storm water facilities or WRAs by keeping virtually all work in the paved portions of the existing ROWs of Mapleton Drive and Highway 43, and tunneling over or under storm pipes that run perpendicular to the street. Staff notes that the application states in Section 10, page 4 of the submittal that "*the presence of large storm drain culverts perpendicular to the roadway along the pipeline alignment may require short lengths of pipe installation via trenchless construction methods.*" This language applies to construction on both Mapleton Drive and Highway 43. It will entail trenching the RWP or FWP over or boring under the storm water pipe that bisects the street. Both methods will ensure that the storm line will be undisturbed and will function without interruption. The fact that there will be no modification of existing storm drainage facilities (including culverts or pipes), or any increase or decrease in storm water runoff during the construction phase or in post construction, means that the current function of the existing facilities will not be diminished. This policy is met.

Policy 3: Protect downstream areas from increased storm water runoff by managing runoff from upstream development and impacts on adjacent natural drainageways and their associated vegetation.

WRAs, roadside swales and other elements of the storm drainage system will not be part of the work areas. Work will be confined to the road surface and available adjacent areas. The edge of the work areas will be protected with full erosion control measures to avoid sedimentation of WRA and storm water, consistent with the Public Works Development Standards. The function of WRAs, roadside swales and other elements of the storm drainage system, as the means of conveyance of storm water, will not be interfered with. Similarly, native vegetation in these areas will not be modified. Once the trenched route is

complete, backfilled and paved over, the RWP/FWP will not be noticeable and will have no effect on any WRAs, roadside swales and other elements of the storm drainage system. This policy is met.

Policy 4: Require that construction practices for all land development projects, private and public, be conducted in such a way as to avoid exposing cuts, grading areas, and trenches to stormwater so that soil erosion is minimized, and soil will not be washed into natural drainage areas.

Policy 7: Require that riparian vegetation along the streams and drainageways be maintained and preserved or re-established where necessary. In order to maintain or operate public facilities, selective cutting, trimming, and thinning will be allowed along waterways.

Regarding policies 4 and 7, the transition from the HDD tunnel to a trench or open cut will result in temporary surface disturbance on OPRD owned tax lots 100 and 200. The disturbance will cover an area of 7,715 square feet. It will involve the removal of 19 trees (assessed in the arborist's report as being in fair to very poor condition determined by the City's arborist to be not significant), removal of adjacent understory (bushes, groundcover, etc.) and grading and excavation of the trench. This work will be followed by backfilling the trench and restoration and revegetation of the site with native groundcover, plants, shrubs, and trees. All of the work and staging areas will be contained by erosion control measures.

The construction practices are designed to minimize impacts to water resources. By tunneling the RWP below the riverbed from Meldrum Bar under the Willamette River and then continuing at a depth between 60 and 34 feet under the wetlands and stream corridors in Mary S. Young Park before daylighting the RWP on tax lot 200, there is no impact on overlying resources. On tax lot 200 the RWP transitions to a trench. Whereas concern about trenching is rooted in the expectation that the trench would cross and disturb a creek or wetland, the trenching process on Mapleton and Highway 43 will be exclusively in ROW that is already disturbed (i.e., roadway pavement, shoulder and parking). The area surrounding the ROW through these WRAs will be protected by utilizing erosion control measures. No impacts on adjacent storm drainage channels, streamside vegetation, and water quality or water quantity are expected. These policies are met.

Private Utilities and Telecommunications

Policy 1: Work closely with the appropriate utility and telecommunications companies to keep them informed of new developments and redevelopment. The City will likewise expect the private utility companies to report any changes in their plans or policies that could have an impact on the City or its Comprehensive Plan

Policy 3: Encourage undergrounding of existing facilities.

Policy 4: Require utilities to remove abandoned facilities.

Policy 6: As part of franchise agreements, the City shall seek full and free access to the services being offered in the community.

An August 23, 2012, memorandum from Eric Day of the Lake Oswego-Tigard Water Partnership, explains that the applicant has been in contact with other private utility

providers and will continue to work closely with them. The Council finds that these lines of communication will avoid or minimize service interruptions during the construction phase. West Linn Public Works is currently discussing options with the applicant for the reuse of the existing raw- and finished-water transmission lines and if the abandoned pipe needs to be removed; Condition of Approval 5 is imposed. Finally, rather than entering into a franchise-type agreement, the City Council imposed as Condition of Approval 16, the payment of a community impact fee. These policies are satisfied.

Goal 12: Transportation

- *General Policies*
  - *1. Protect the entire rights-of-way of existing City streets for present and future public use*
    - *Evaluate land development projects to determine possible adverse traffic impacts and to ensure that all new development contributes a fair share toward on-site and off-site transportation system improvement remedies.*
    - *Require infrastructure improvements to mitigate traffic impacts of the proposed development.*
  - *2. Design and construct transportation facilities to meet the requirements of the Americans with Disabilities Act.*
- *Streets*
  - *Policies*
    - *4. Ensure that adequate access for emergency services vehicles is provided throughout the City.*
    - *8. Ensure that development brings adjacent road frontages to illumination levels that are identified with the CDC and City Engineering standards and specifications for street lighting.*

The City Council finds that the completed trenched FWP and the trenched and tunneled RWP will not have a permanent adverse traffic impact on transportation. Impacts from the installation of underground pipes will not increase permanent vehicle trips and, therefore, will not necessitate road improvements. Thus, the Council finds that the restoration (repairing cuts and repaving) of Mapleton Drive and Highway 43; which the applicant has agreed to do (see Condition of Approval 4) sufficiently mitigates the temporary impacts of the construction activities. The required repaving of Mapleton Drive, Kenthorpe Way and Hwy 43 adequately protect these rights-of-way for future use and the other conditions regarding noise, hours of operation and traffic management sufficiently mitigate the temporary construction impacts.

During construction, the Mapleton Drive trench/open cut construction phase is expected to generate a maximum of 86 additional trips (ADT) per day (7am-7pm). The Highway 43 trench/open cut construction phase is expected to generate a maximum of 86 additional trips (ADT) per day (8pm-5am).

The HDD construction, centered at the east end of Mapleton Drive near Mary S. Young Park, is expected to vary in its trip generation depending on the phase of the work. Preliminary site assembly and pilot bore drilling is expected to generate 12 trips per day. During the two-day long pipe pullback phase when the 42-inch raw water line is pulled through the tunnel from Gladstone, 144 total trips are expected over the 24- to 48-hour period. Most of these trips will be trucks hauling the drilling mud from the site. This activity will go on continuously for up to 48 hours. Once the pullback phase is complete, an additional 12 trips per day will be required for HDD demobilization. Up to 32 trips per day may occur as part of daily construction management and inspections.

The applicant has also supplied detailed CMP and traffic control to address construction-related trip generation and access impacts and to manage private site access, construction routes, traffic control, and emergency vehicle access. The City Council finds that these plans reflect a comprehensive, thoughtful and adequate approach to satisfying these policies. See also Finding 7 for further discussion of mitigation requirements.

Regarding the Oregon Highway 43 Conceptual Design Plan, street lighting will be provided contiguous to the WTP but not along the pipeline corridors. The Council finds that because the pipeline will be underground and does not create any permanent transportation impacts, the Highway 43 Concept Plan, which is intended to guide development of transportation improvements, does not apply and does not require the applicant to install street lighting.

Noise impacts have been addressed in the Construction Management Plan and explained in depth in the Noise Analysis by ENVIRON. The study recognizes that construction noise is permitted so long as it meets Municipal Code section 5.487 Sound Levels and Noise. For these reasons, these policies are satisfied.

d) The erection, excavation, demolition, alteration or repair of any building or structure at any time other than during the following hours, except by special permit granted by the City Manager:

(i) Between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday;

(ii) Between the hours of 9:00 a.m. and 5:00 p.m. on Saturday and Sunday

Despite the fact that daytime construction noise is exempt from the Municipal Code standards, ENVIRON has recommended a range of measures to reduce the number and volume of noise sources. The approximately 48 hour, continuous HDD pull through phase at the staging area on the OPRD lots is estimated to generate a maximum of 66 dBA with the installation of a sound wall. Despite the fact that construction noise is exempt from the Municipal Code and DEQ standards, ENVIRON has recommended a range of measures to reduce the number and volume of noise sources, including a 16-foot tall sound wall and, potentially, the relocation of adjacent homeowners to a hotel for that period. Once the project is complete, the RWP and FWP will not generate measurable noise. A special permit from the City Manager is required for the pull through phase as well as for nighttime work on Highway 43. The City Council finds that the noise impacts are adequately addressed through conditions of approval and these policies are satisfied.

- *Bicycles*
  - *Policies*
    - *3. Provide striped and signed bicycle lanes on all arterial and collector roadways consistent with the policies of the Transportation System Plan.*
    - *5. Design new streets and retrofit older streets to enhance safety for bicyclists using the roadways.*
- *Pedestrians*
  - *Policies*
    - *1. Promote a comprehensive cohesive network of pedestrian paths, lanes and routes that accomplish the following objectives:*
      - *Connects the four commercial centers in Willamette, Bolton, Robinwood and Tanner Basin.*
      - *Provides connections to schools, recreation facilities, community centers, and transit facilities.*
      - *Use off-street pedestrian short-cut pathways to provide routes where physical constraints or existing development preclude the construction of streets with sidewalks.*
      - *Provide safe, secure and desirable walkway routes, with a preferred spacing of no more than 330 feet, between elements of the pedestrian network.*
      - *Eliminate gaps in the existing walkways network and provide pedestrian linkages between neighborhoods.*
    - *2. Employ a variety of methods to promote safe and convenient pedestrian access in addition to, or instead of, sidewalks in older developed areas of West Linn without sidewalks.*
    - *3. Pursue all available funding sources for pedestrian projects. Coordinate with Clackamas County, ODOT, the School District, Metro and other agencies to obtain funding to complete walkway network improvements.*
    - *7. The City will enforce regulations requiring developers to include pedestrian facilities and walkway connections within proposed developments and to adjacent land uses and rights-of-way in accordance with adopted policies and standards. Developer agreements for the provision of walkways will be implemented and enforced as needed.*
- *Freight and Goods Movement*
  - *Policies*
    - *2. Discourage non-local freight trips on Highway 43 through West Linn; encourage local freight trips to be made during non-peak hours.*

The applicant will, upon completion of the pipeline, restore any impacted pedestrian and bicycle facilities on Highway 43 and elsewhere to their original state (Condition of Approval 4).

During the construction phase, interim bicycle and pedestrian facilities will be provided per the applicant's CMP. The plan makes provisions for both modes of transportation on Mapleton Drive, Kenthorpe Way and Highway 43. The CMP also maintains access to Mary S. Young Park throughout the construction period including the HDD phase.

Freight and goods movement and transit and school bus access will be facilitated under the Traffic Control Strategies. Periodic delays and inconveniences during the construction are mitigated by the fact that construction will be limited, on a daily basis, to one discrete 150- to 200-foot long section of an affected street. The applicant's contractor will be required to notify TVF&R of access closures. Emergency access to within 150-feet of all homes, as required by TVF&R will be maintained at all times. These policies are satisfied.

- *Goal 13: Energy Conservation*
    - *Policies*
        - *6. Encourage the use of energy-conscious design and materials in all public facilities.*
        - *7. Encourage the construction and maintenance of sidewalks and bike paths/ways to promote alternative modes of transportation.*

City Council anticipates that the replacement of an older asbestos-cement water line with a new ductile-iron line will reduce water loss and will conserve energy and resources.

Because the pipeline will not create any additional bicycle or pedestrian trips, the City Council finds that there is not a sufficient basis to require the applicant to construct new bicycle and pedestrian facilities.

- *Goal 14: Urbanization*
    - *Policies*
        - *1. Promote cooperation between the City, County, and regional agencies to ensure that urban development is coordinated with public facilities and services within the Urban Growth Boundary.*
        - *6. Oppose the formation of a new service district within the Urban services Boundary and outside of the Urban Growth Boundary.*
        - *9. Ensure that new development pays for needed new infrastructure and impacts to existing infrastructure.*

As noted above, the cities of Lake Oswego and Tigard have signed an intergovernmental agreement, which would, upon execution, oblige the Partnership to provide emergency water to the City of West Linn through at least 2041. This IGA will help address water supply reliability deficiencies as discussed in the 2008 West Linn Water System Master Plan.

Regarding Policy 9 above, the City of West Linn benefits from the existing water pipeline infrastructure per the current IGA agreement and the existing intertie. The applicant's

proposal offers an opportunity to improve the supply capacity and reliability of this intertie consistent with the recommendations of the 2008 West Linn Water System Master Plan.

Infrastructure improvements and/or restoration proposed by the applicant also include the replacement of an existing 6-inch asbestos-cement water line along Mapleton Drive and Kenthorpe Way, repaving Mapleton Drive and Kenthorpe Way, and repaving affected portions of Highway 43.

- *Goal 15: Willamette River Greenway*
    - *Policies*

        4. *Require a conditional use permit for any intensification of uses, changes in use or developments within the Willamette River Greenway boundary except as otherwise provided by the Willamette River Greenway Zone, subject to the following:*

            - *Where feasible, provide the maximum landscaped area, open space, or vegetation between the activity and the river.*
            - *Where feasible, provide access to and along the river by appropriate legal means.*

        6. *Require adequate public access to the river as part of the development of public land.*

        7. *Preserve identified scenic qualities and views.*

        8. *Protect the natural vegetative fringe along the river.*

        10. *Require non-water related or dependent structures to be set back from the river in accordance with an established setback line in order to protect, maintain, and preserve the Willamette River Greenway.*

The Willamette River Greenway resource is not impacted by this application except for the temporary construction activity associated with the transition from the HDD to the open cut trench on OPRD-owned tax lots 100 and 200. This temporary activity will occur in a high HCA area located 450 feet from the ordinary high water mark of the Willamette River.

The objective of CDC Chapter 28 is to avoid or minimize development in high HCAs. Per Subsection 28.110(A)(2), development is supposed to be directed to areas outside of the HCA or areas of lesser HCAs unless there is no option. Initially it was believed that the RWP could transition to a trench in the Mapleton Drive ROW, which is classified as a medium HCA. Further study revealed that existing buried sewage pipelines which feed the nearby City of West Linn sewage pump station located on tax lot 101, block the use of the southern or lower portion of the Mapleton Drive ROW. Thus, the policies are met.

Per CDC Chapter 28.110(D) development of high HCA lands is permitted when it can be shown that the use is water dependent. Staff finds that the RWP is water dependent in that it, "requires access to, or use of, the river[s]," consistent with the definition for water-dependent uses established in Chapter 2 of the CDC. Furthermore, this disturbance is the minimum necessary to avoid the existing City of West Linn pump station and sewage lines in tax lot 100.

Following construction, the disturbed area is proposed to be revegetated with native plant materials and trees (see Condition of Approval 6).

The City Council notes that the potential exists for temporary impacts to the WRG and associated WRAs (wetlands, streams, etc.) during the HDD tunneling. In the applicant's technical memorandum, ecologist Ethan Rosenthal, et al, explains the HDD process and identifies the very small risks associated with HDD (see pages 2-3). Throughout the HDD process, pressurized drilling fluids are continuously pumped through the drilling equipment to stabilize the bore, cool the cutting tools, lubricate the drill pipe, and transport soil cuttings back to the entry location on tax lots 100 and 200. The pressurized drilling fluids are comprised of 97-99 percent water, with the remaining fluid additives consisting mainly of the non-toxic chemical bentonite.

The memo in the application Section 6 concedes that while under normal conditions the drilling fluid will be restricted to the borehole (page 3, paragraph 3) there is a slight chance of leaching into adjacent soils in the event of a hydrofracture. In paragraph 4, Rosenthal, et al explains that, *"As resistance to hydrofracture is primarily dependent on depth and soil strength, it is worth noting that substrates of sufficient strength to resist hydrofracture are anticipated for large portions of the RWP alignment."*

A reader may also interpret the statement to mean that while large portions of the HDD route can resist hydrofracture, smaller portions of the HDD route may not. This hazard is noted on page 7, paragraph 1 of the applicant's June 25, 2012 submittal, Section 10: "Construction Management Plan for Raw Water and Finished Water Pipelines in West Linn": *"The risk of hydrofracture is limited to the first several hundred feet of the HDD alignment...."*

Ecologist Ethan Rosenthal, et al, provide a solution: containing the bore hole within a casing for the first 200 feet or so until the bore hole is at a depth of 35 feet where the external pressure of the soil and rock surrounding the bore hole will be greater than the pressure inside the bore hole. To reduce the risk even further, Rosenthal states that the contractor will use a "down hole pressure tracking system" which will monitor real time fluid pressure just behind the drill bit. If drilling pressure spikes above the limiting pressure, the driller will be required to shut-off the pump immediately – effectively preventing the uncontrolled release of drilling mud/solutions. Staff and the Council are satisfied with the analysis and mitigation measures.

As previously noted, the temporary construction activity will cover an area of 7,715 square feet. It will involve the removal of 19 trees (assessed in the arborist's report as being in fair to very poor condition), removal of adjacent understory (bushes, groundcover, etc.) and grading and excavation of the pipe trench. This will be followed by backfilling the trench, site restoration and revegetation. All of the work and staging areas will be contained by erosion control measures. The temporary construction area is shown in the applicant's June 25, 2012 submittal, Section 5, Figure 3.

By tunneling the RWP from Meldrum Bar in Gladstone under the Willamette River at a depth of 60-feet below the riverbed and then transitioning to a minimum depth of 34-feet beneath the wetlands and stream corridors in Mary S. Young Park, before daylighting in a trench seven feet below grade on tax lot 200, the Council finds that there is no permanent

impact to the above mentioned resources (Willamette River and adjacent HCAs (wetlands, riparian areas) and WRAs).

Public access between Mapleton Drive and Mary S. Young Park is proposed to be accommodated through the construction phase and is proposed to be fully restored upon completion of construction. Throughout the construction phase, the applicant proposes the maintenance of full public access and use of the Willamette River shoreline in Mary S. Young Park and publicly owned lands adjacent to tax lots 100 and 200. This policy is met.

Robinwood Neighborhood Plan

- *Goal 1: Willamette Drive shall provide superior transportation facilities for all modes of transportation*
    - *Policies*
        - *1.1. Provide continuous and wide transportation facilities on both sides of Willamette Drive.*
        - *1.3. Beautify the length of Willamette Drive with a comprehensive and consistent streetscape.*
        - *1.4. Provide a continuous bike lane along Willamette Drive.*
- *Goal 3: Preserve the character of existing single-family residential neighborhoods in Robinwood:*
    - *Policies*
        - *3.3. Provide appropriate pedestrian facilities along residential streets.*
        - *3.4. Implement green street concepts for residential streets.*
        - *3.7. Use pedestrian shortcuts to connect existing streets.*
        - *3.9. Ensure that the Lake Oswego Water treatment Facility on Kenthorpe Drive remains compatible with the surrounding residential areas and provides benefits to Robinwood's residents as well as those of Lake Oswego.*
- *Goal 4: Preserve and maintain natural areas within Robinwood and allow public access to them where appropriate.*
    - *Policies*
        - *4.1. Preserve natural riparian corridors through Robinwood and enhance their value as wildlife habitat.*
        - *4.3. Properly maintain publicly-owned natural areas.*
- *Goal 5: Use Robinwood's parks for the benefit and enjoyment of the neighborhood's residents.*
    - *Policies*
        - *5.2. Provide better access from Robinwood to Mary S. Young Park and its amenities*
- *Goal 6: Encourage cooperation between Robinwood and other City neighborhoods, organizations, public agencies, and commercial property owners and businesses.*

Once the pipelines are installed, backfilled and paved over there will be no visible evidence of them in the neighborhood, with the possible exception of the occasional manhole cover. As previously noted, impacts to riparian corridors are expected to be negligible since the

work will be largely done within the existing paved and disturbed areas of the rights-of-way. The containment of construction work on tax lot 100 and 200 and within the street ROWs, as well as the subsequent restoration of tax lot 100 and 200 with native plants and trees, addresses the Neighborhood Plan's desire to preserve and maintain the neighborhood's natural areas. The Construction Management Plan ensures continued access, throughout the construction phase, to Mary S. Young Park and the Willamette River per Goals 4 and 5 of the Neighborhood Plan.

The application also addresses the neighborhood plan, in the long-term sense, through the facilities that will be provided or improved as conditions of approval or offered voluntarily. Improvements include repaving Mapleton Drive, Kenthorpe Way and affected portions of Highway 43. The streets will be repaved to their existing width. No sidewalks will be added. The proposed transportation facility improvements satisfy the Neighborhood Plan's ambition to achieve an efficient multi-modal street system that still preserves the character of the neighborhood. These improvements will also benefit drivers, bicyclists and pedestrians with smoother travel surfaces. These policies are met.

Water Master Plan

The City of West Linn Water System Master Plan recommends improving the emergency supply capacity and reliability of the Lake Oswego Emergency Supply Connection to meet West Linn's water supply need. The following is taken from the summary of the Water Supply Evaluation on page ES-5 of the West Linn Water System Master Plan:

> *(Page ES-5) Water Supply Evaluation – A comprehensive and system wide supply system evaluation of City supply facilities was completed that included consideration of a number of approaches, methodologies and solution option development. The supply analysis was completed based on capacity needs, reliability, and redundancy and included consideration of piping, pumping, aquifer storage and finished water storage options. The analysis considered the following four solution approaches:*
>
> - *Solution Approach A: Construction of a new 8.4 million gallon Bolton Reservoir*
> - *Solution Approach B: Build back-up supply transmission from SFWB*
> - *Solution Approach C: Improve the emergency supply capacity and reliability of the Lake Oswego Emergency Supply Connection*
> - *Solution Approach D: Aquifer Storage and Recovery (ASR)*
>
> *The four solution approaches presented above provide varying degrees of certainty, risks, and costs. Based on input from and discussion with City staff and policy makers it is recommended that Solution Approach C be pursued. Once fully developed and implemented this approach most economically meets the City's supply and reliability needs...*

The applicant's proposal to install new raw- and finished-water pipelines would result in additional water capacity potentially available to West Linn in the event of an emergency through at least 2041. Opponents' contentions to the contrary throughout the process are without merit. To realize this potential, execution of an IGA offered by the cities of Lake

Oswego and Tigard would need to be approved by West Linn City Council and the South Fork Water Board, and a new intertie will need to be constructed to replace the existing intertie pipe connection that will be abandoned if the proposed project is implemented. These actions would advance the objective established in the West Linn Water System Master Plan.

Furthermore, the proposal would result in the replacement of more than 3,000-feet of 6-inch asbestos cement water line in Mapleton Drive and Kenthorpe Way, which is identified as a high priority capital maintenance project in the Water System Master Plan.

For all of the reasons above, the proposal will comply with the applicable policies of the Comprehensive Plan. The criteria in CDC 60.070(A) are met.

60.070(B). An approved conditional use or enlargement or alteration of an existing conditional use shall be subject to the development review provisions set forth in Chapter 55 CDC.

Finding No. 15: The purpose and intent of design review is explained in CDC section 55.010:

> *The purpose of the design review provisions is to establish a process and standards for the review of development proposals in order to conserve and enhance the appearance of the City and to promote functional, safe, and innovative site development. Attention will be paid to the proposal's scale, layout and design, its compatibility with the surrounding natural environment, and the character of the surrounding neighborhood or area. The intent is to ensure that there is general compatibility between adjoining uses, that private and common outdoor space is provided, that vehicular access and circulation are safe, and that areas of public use are made aesthetically attractive and safe. Also of concern are the needs of persons with disabilities.*

Once installed, the entire RWP and FWP are completely underground, which means that there will be nothing visible from the public right-of-way to review, with the exception of manhole covers. Consequently, most of the criteria contained in Chapter 55 are not applicable.

Regarding compatibility, review of the approval criteria 55.100(B)(6)(b) reveals that compatibility is concerned with architectural compatibility or the visual relationship of the proposed structure with adjacent structures:

> *The proposed structure(s) scale shall be <u>compatible</u> with the existing structure(s) on site and on adjoining sites. Contextual design is required. Contextual design means respecting and incorporating prominent architectural styles, building lines, roof forms, rhythm of windows, building scale and massing, materials and colors of surrounding buildings in the proposed structure.*

There is also another section of the approval criteria that makes use of the term "Compatible":

C. *Compatibility between adjoining uses, buffering, and screening.*

1. *In addition to the compatibility requirements contained in Chapter 24 CDC, buffering shall be provided between different types of land uses; for example, buffering between single-family homes and apartment blocks. However, no buffering is required between single-family homes and duplexes or single-family attached units. The following factors shall be considered in determining the adequacy of the type and extent of the buffer:*
    a. *The purpose of the buffer, for example to decrease noise levels, absorb air pollution, filter dust, or to provide a visual barrier.*
    b. *The size of the buffer required to achieve the purpose in terms of width and height.*
    c. *The direction(s) from which buffering is needed.*
    d. *The required density of the buffering.*
    e. *Whether the viewer is stationary or mobile.*

2. *On-site screening from view from adjoining properties of such things as service areas, storage areas, and parking lots shall be provided and the following factors will be considered in determining the adequacy of the type and extent of the screening:*
    a. *What needs to be screened?*
    b. *The direction from which it is needed.*
    c. *How dense the screen needs to be.*
    d. *Whether the viewer is stationary or mobile.*
    e. *Whether the screening needs to be year-round.*

3. *Rooftop air cooling and heating systems and other mechanical equipment shall be screened from view from adjoining properties.*

This criterion asks whether the proposed use or structure is compatible with surrounding uses or structures. If it is not compatible, it seeks out the appropriate distance, or the appropriate screening or buffering needed to successfully separate or buffer those different uses and structures. The City Council finds that this section has no relevance to a buried utility. Both the RWP and FWP will be invisible below ground meaning that this criterion does not apply.

Regarding "*Relationship to the Natural and Physical Environment*" and 55.100(B)(1)(2), in particular, the City Council finds that an area approximately 7,715 square feet in size on tax lots 100 and 200, designated as HCA, is proposed to be graded and used as a staging area for boring operations and excavation of a trench. This would result in removal of 19 trees and adjacent understory (shrubs, groundcover, etc.). Upon completion of the boring and trenching, the area is proposed to be restored and revegetated with native groundcover, plants, shrubs, and trees. None of the nineteen trees proposed to be removed are considered to be significant according to the project arborist who was accompanied on the site visit by the City of West Linn's arborist. Additionally, there are no heritage trees along the pipeline route or otherwise affected by this application.

55.100(B)(3) regarding the preservation of natural topography and drainage, the City Council finds that site clearing and grading will occur prior to the HDD phase, however, that phase is temporary and once complete, the original topography will be restored and, as stated above, revegetated.

There are no drainageways that will be impacted or modified by this project either temporarily or permanently. To underscore the protection of drainageways, there are a number of small streams that bisect the RWP and FWP route along Mapleton but the applicant will trench over or bore under existing culverts to avoid any disturbances. Streams bisecting Highway 43 in pipes are deep enough that the FWP can be trenched above them.

Regarding 55.100(B)(4) and the requirement that projects not be placed in areas subject to slumping or sliding based on the City's hazard map, staff finds that no slump or slide areas are along the RWP or FWP route. The RWP and FWP route is within a moderate to high-risk earthquake hazard area per the West Linn Natural Hazards Map. In response, the applicant undertook a seismic design study. All experts concluded that the proposed design and seismic hazard mitigation techniques are proven and appropriate to achieve the performance objective of the pipeline to remain operable and occupiable after a magnitude 9.0 Cascadia Subduction Zone (CSZ) earthquake, consistent with standards used for hospitals and other emergency response buildings and in accordance with the "Pipeline Research Council International Guidelines for the Seismic Design and Assessment of Natural Gas and Liquid Hydrocarbon Pipelines."

Regarding 55.100(M) and the requirement that the developer make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities, the applicant supplied a list of affected utility providers in the area and outlined the coordination efforts to date. The applicant held meetings and phone conversations to: provide an overview of the project, discuss possible utility conflicts, and request as-built drawings. Furthermore, the applicant will continue to coordinate through written correspondence with each respective utility agency that will need to relocate facilities.

Regarding 55.125 and the understanding that the City may require a Traffic Impact Analysis (TIAs) in situations where ODOT determines that a project will have operational impacts on a State Highway: the City has requested that the applicant provide a traffic management plan due to the fact that all traffic impacts are related to temporary construction activity. The traffic management plan identifies existing conditions as well as proposed access and traffic control strategies for all travel modes and satisfactorily demonstrates an acceptable level of automobile and non-automobile circulation for the duration of the proposed construction.

The criteria in CDC 60.060(B) and CDC 55 are met.

60.070(C). The Planning Commission may impose conditions on its approval of a conditional use which it finds are necessary to assure the use is compatible with other uses in the vicinity. These conditions may include, but are not limited to, the following:

1. Limiting the hours, days, place, and manner of operation.

2. Requiring design features which minimize environmental impacts such as noise, vibration, air pollution, glare, odor, and dust.

3. Requiring additional setback areas, lot area, or lot depth, or width.

4. Limiting the building height, size or lot coverage, or location on the site.

5. Designating the size, number, location and design of vehicle access points.

6. Requiring street right-of-way to be dedicated and the street to be improved including all steps necessary to address future street improvements identified in the adopted Transportation System Plan.

7. Requiring participation in making the intersection improvement or improvements identified in the Transportation System Plan when a traffic analysis (compiled as an element of a conditional use application for the property) indicates the application should contribute toward.

8. Requiring landscaping, screening, drainage, and surfacing of parking and loading areas.

9. Limiting the number, size, location, height, and lighting of signs.

10. Limiting or setting standards for the location and intensity of outdoor lighting.

11. Requiring berming, screening, or landscaping and the establishment of standards for their installation and maintenance.

12. Requiring and designating the size, height, location, and materials for fences.

13. Requiring the protection and preservation of existing trees, soils, vegetation, watercourses, habitat areas, and drainage areas.

Finding No. 16: The City Council imposes Conditions of Approval 2, 3, 11, 12, 13, and 15 to ensure the project mitigates for environmental impacts, such as glare and, noise and impacts caused by construction traffic in and through the residential and commercial areas adjacent the proposed raw- and finished-water lines.

60.090 ADDITIONAL CRITERIA FOR TRANSPORTATION FACILITIES (TYPE II) –

A. Construction, reconstruction, or widening of highways, roads, bridges or other transportation facilities that are (1) not designated in the adopted West Linn Transportation System Plan ("TSP") or (2) not designed and constructed as part of an approved, active, development order are allowed in all zoning districts subject to the conditional use and all other applicable provisions of the CDC and satisfaction of all of the following criteria:

1. The project and its design are consistent with West Linn's adopted TSP and consistent with the State Transportation Planning Rule, OAR 660-012 ("the TPR").

2. The project design is compatible with abutting land uses in regard to noise generation and public safety and is consistent with the applicable zoning and development standards and criteria for the abutting properties.

3. The project design minimizes environmental impacts to identified wetlands, wildlife habitat, air and water quality, cultural resources, and scenic qualities, and a site with fewer environmental impacts is not reasonably available.

4. The project preserves or improves the safety and function of the facility through access management, traffic calming, or other design features.

5. The project includes provisions for bicycle and pedestrian access and circulation consistent with the comprehensive plan, the requirements of this chapter, and the TSP.

Finding No. 16.5: STOP LLC and others have argued that replacement of the pipeline within Highway 43 requires compliance with CDC 60.090, setting forth additional criteria for "transportation facilities" including analyzing whether the project complies with the Transportation Planning Rule, the City's Transportation System Plan (TSP) and other standards. Opponents argue that compliance with the TSP requires full street vehicular and pedestrian improvements along the length of Highway 43. See also findings regarding Robinwood Plan policies 1.1, 1.3 and 1.4.

The Council finds that the Partnership's water pipeline[5] does not qualify as a "Transportation facility." "Transportation facilities" is defined in CDC 2.030 to include:

> Facilities and amenities are used for transporting people and goods. Typical uses include streets, highways, sidewalks, transit stops and stations, bicycle and pedestrian facilities, bike lanes, and operation, maintenance, preservation, and construction of these facilities. See CDC Chapter 02, Definitions, transportation facilities.

Although one could conclude that the conveyance of water for public consumption is a "good" that is transported through the pipeline, the examples contained within this provision suggest that these types of facilities are those that transport goods above-ground and was not intended to apply to utilities. To conclude otherwise would subject any private or public utility provider, including the City of West Linn, which maintains lines running within or underneath Highway 43 or other city right-of-way to a full and complete roadway upgrade as a result of repairing or replacing a line. The Transportation Planning Rule, and all of Goal 12, which is implemented by these provisions, specifically excludes water systems. OAR 660-012-0005(30).

The applicant's traffic analysis indicates that the level of service thresholds for Highway 43 will not be altered by this proposal and thus, the transportation impacts from this proposal do not justify imposing any Highway 43 improvement upgrades. Therefore, these obligations do not apply.

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[5] See definition of "Utility, major" above.

56.100 APPROVAL STANDARDS – CLASS II DESIGN REVIEW

The approval authority shall make findings with respect to the following criteria when approving, approving with conditions, or denying a Class II parks design review application.

Finding No. 17: The City Council agrees with the applicant's findings relative to this application. Regulations in Chapter 56 were not designed to respond to a tunneled utility through Mary S. Young Park with no surface disturbance. Section 56.020(C)(10) does reference minor upgrades to utilities but this work is contemplated in the context of surface excavation and grading, none of which will take place in Mary S. Young Park with this proposal. Therefore, the City Council finds that the standards in this Chapter are not applicable.

Chapter 27 – Flood Management Areas

27.010 PURPOSE

The purpose of this chapter is to create a Flood Management Area Overlay Zone in order to protect flood management areas that are identified on the flood management area map incorporated by reference as a part of this chapter. Flood management areas contain land identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Clackamas County, Oregon, and incorporated areas," dated June 17, 2008, with accompanying Flood Insurance Maps; the area of inundation for the February 1996 flood based on data provided by Metro; and lands that have physical or documented evidence of flooding within recorded history. Flood management areas provide the following functions: protect life and property from dangers associated with flooding; flood storage, reduction of flood velocities, reduction of flood peak flows and reduction of wind and wave impacts; maintain water quality by reducing and sorting sediment loads, process chemical and organic wastes and reduce nutrients; recharge, store, and discharge groundwater; provide plant and animal habitat; and support riparian ecosystems. (Ord. 1522, 2005; Ord. 1565, 2008)

27.020 APPLICABILITY

A flood management area permit is required for all development in the Flood Management Area Overlay Zone. The standards that apply to flood management areas apply in addition to State or federal restrictions governing floodplains or flood hazard areas.

Finding No. 18: The City Council finds that the HDD to open cut/trench transition site on tax lots 100 and 200 is within the 100 year floodplain which is part of the Flood Management Area Overlay Zone. Chapter 2 defines Flood Management Areas as: *"All lands contained in the Flood Management Area Overlay Zone, which include: lands within the 100-year floodplain, flood area, and floodway as shown on the FEMA flood insurance map dated June 17, 2008; the area of inundation for the February 1996 flood; and lands which have documented evidence of flooding."* Consequently, a Flood Management Area permit is required.

27.045 CRITICAL FACILITIES

Construction of new critical facilities shall be, to the greatest extent possible, located outside the limits of the SFHA. Construction of new critical facilities shall only be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Flood-proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Finding No. 19: The RWP is one part of a larger critical facility that includes the Raw-water intake station (RIPS) on the Clackamas River in Gladstone, the FWP, and the Lake Oswego Water Treatment Plant (WTP) in West Linn. The applicant examined Willamette River crossing alternatives (open-cut trench, HDD and aerial crossing) and concluded that there is no feasible way to bring water from the east side of the Willamette River to the west side of the river without crossing a SFHA, as floodplains abut the river in its entirety.

According to the applicant, the open-cut method would impact both the floodplain and floodway, and a pipe suspended from a bridge over the river would not only be prohibitively expensive but would also require permanent supporting piers within the floodplain and river. The applicant asserts, and the City Council agrees, that the HDD method has the advantage of creating no water turbidity issues during construction, no impact to endangered fish species, and will be located between 7- and 65-feet below ground. There will be no permanent above ground structures and no changes in surface grade from present conditions. Finally, the RWP is an impermeable steel pipe with welded joints and is designed to carry water from the Clackamas River, and not toxic substances. The criterion is met.

27.060 APPROVAL CRITERIA

The Planning Director shall make written findings with respect to the following criteria when approving, approving with conditions, or denying an application for development in flood management areas.

A. Development, excavation, and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations.

B. No net fill increase in any floodplain is allowed. All fill placed in a floodplain shall be balanced with an equal amount of soil material removal. Excavation areas shall not exceed fill areas by more than 50 percent of the square footage. Any excavation below bankful stage shall not count toward compensating for fill.

C. Excavation to balance a fill shall be located on the same parcel as the fill unless it is not reasonable or practicable to do so. In such cases, the excavation shall be located in the same drainage basin and as close as possible to the fill site, so long as the proposed excavation and fill will not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis.

D. Minimum finished floor elevations must be at least one foot above the design flood height or highest flood of record, whichever is higher, for new habitable structures in the flood area.

E. Temporary fills permitted during construction shall be removed.

F. Prohibit encroachments, including fill, new construction, substantial improvements, and other development in floodways unless certification by a professional civil engineer licensed to practice in the State of Oregon is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

G. All proposed improvements to the floodplain or floodway which might impact the flood-carrying capacity of the river shall be designed by a professional civil engineer licensed to practice in the State of Oregon.

H. New culverts, stream crossings, and transportation projects shall be designed as balanced cut and fill projects or designed not to significantly raise the design flood elevation. Such projects shall be designed to minimize the area of fill in flood management areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.

I. Excavation and fill required for the construction of detention facilities or structures, and other facilities, such as levees, specifically shall be designed to reduce or mitigate flood impacts and improve water quality. Levees shall not be used to create vacant buildable land.

J. The applicant shall provide evidence that all necessary permits have been obtained from those federal, State, or local governmental agencies from which prior approval is required. (Ord. 1522, 2005)

Finding No. 20: The City Council adopts the applicant's findings in its June 25, 2012, submittal, Section 4. The City Council finds that the RWP will be underground and that no permanent modifications to existing grades or the topography will take place. As a result, the flood flow characteristics will remain unchanged by the development. Furthermore, the applicant submitted certification by a professional civil engineer stating that the proposal will not result in any increase in flood levels under any circumstance. The criteria are met.

Chapter 28 – Willamette and Tualatin River Protection
28.110 APPROVAL CRITERIA

No application for development on property within the protection area shall be approved unless the decision-making authority finds that the following standards have been met or can be met by conditions of approval. The development shall comply with the following criteria as applicable:

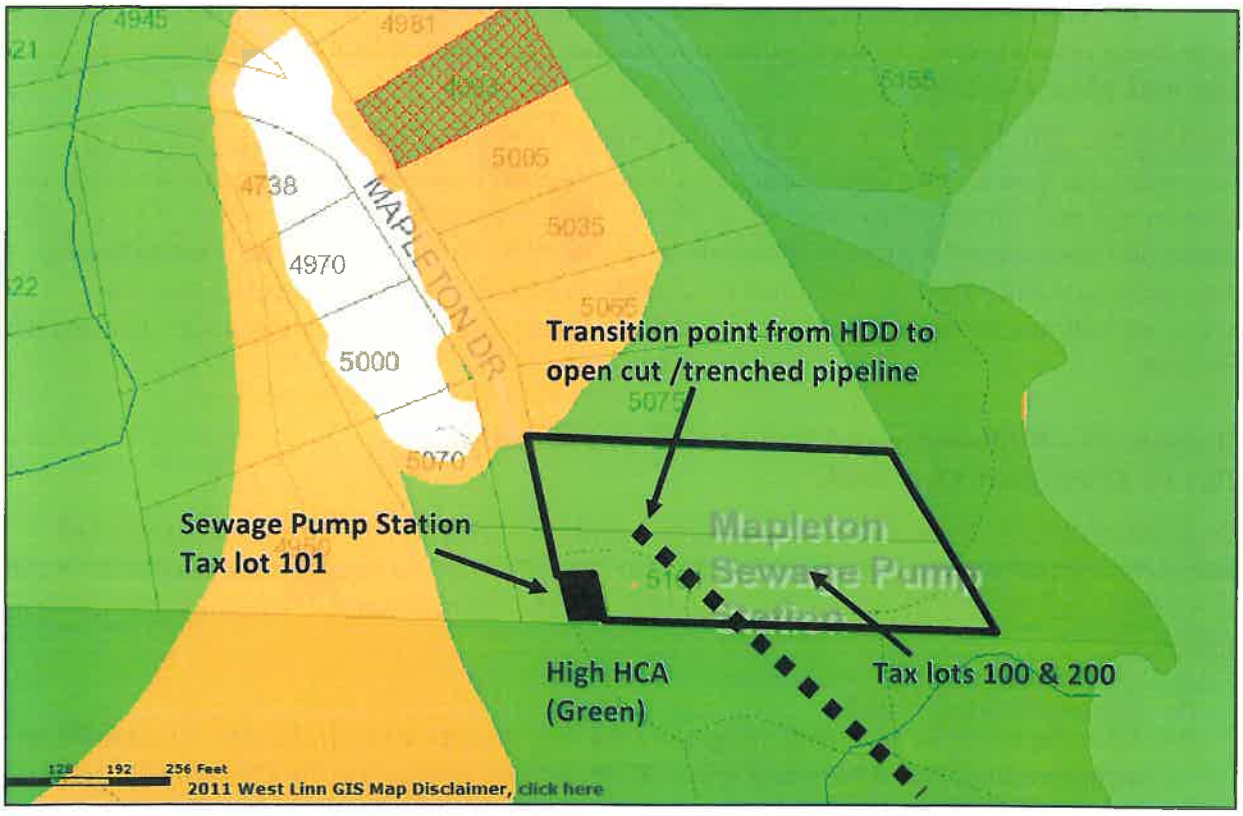
A. Development: All sites.

1. Sites shall first be reviewed using the HCA Map to determine if the site is buildable or what portion of the site is buildable. HCAs shall be verified by the Planning Director per CDC 28.070 and site visit. Also, "tree canopy only" HCAs shall not constitute a

development limitation and may be exempted per CDC 28.070(A). The municipal code protection for trees and Chapters 55 and 85 CDC tree protection shall still apply.

2. *HCAs shall be avoided to the greatest degree possible and development activity shall instead be directed to the areas designated "Habitat and Impact Areas Not Designated as HCAs," consistent with subsection (A)(3) of this section.*
3. *If the subject property contains no lands designated "Habitat and Impact Areas Not Designated as HCAs" and development within HCA land is the only option it shall be directed towards the low HCA areas first, then medium HCA areas and then to high HCA as the last choice. The goal is to, at best, avoid or, at least, minimize disturbance of the HCAs. (Water-dependent uses are exempt from this provision.)*
4. *All development, including exempted activities of CDC 28.040, shall have approved erosion control measures per Chapter 31 CDC in place prior to site disturbance and be subject to the requirements of CDC 32.070 and 32.080 as deemed applicable by the Planning Director.*

Finding No. 21: The City Council agrees with and adopts the applicant's findings relative to this chapter, as contained in their June 25, 2012 submittal, Section 4. The City Council finds that the proposed transition between the HDD pipeline and the open cut/trenched pipeline on tax lot 100 and 200 is in a High HCA area. Subsequent Finding 22 demonstrates why it is necessary to locate in this high HCA. There is no "non-HCA" or lower level HCA on these two properties. Findings also show that the HDD/open-cut trench is water dependent and therefore exempt from this provision. The applicant has provided an Erosion Control Plan which is accepted by the City and these criteria are met.



D. Development of lands designated for industrial, commercial, office, public and other non-residential uses.

1. *Development of lands designated for industrial, multi-family, mixed use, commercial, office, public and other non-single-family residential uses shall be permitted on the following land designations and in the following order of preference with "a" being the most appropriate for development and "d" being the least appropriate:*
   - *a "Habitat and Impact Areas Not Designated as HCAs"*
   - *b Low HCA*
   - *c Moderate HCA*
   - *d High HCA*
2. *Developing HCA land.*
   - *a. Where non-HCA or areas designated as "Habitat and Impact Areas Not Designated as HCAs" are lacking or are in such limited supply as to render uses allowed by the underlying zone (e.g., general industrial) functionally impractical, the HCA may be utilized and built upon but shall emphasize "b" and "c" designations.*
   - *b. Where it is proposed that a "d" or high HCA classification be used, the property owner must demonstrate that the proposed use is clearly a water-dependent use. Proximity to the river for the purpose of views is not valid grounds. However, public interpretive facilities of historic facilities such as the government locks will be permitted as well as wildlife interpretive facilities and ADA-accessible platforms.*

Finding No. 22: The objective of CDC Chapter 28 is to avoid or, to the greatest extent possible, minimize development in HCAs. Development is to be directed to areas out of the HCA or areas of lower quality HCAs unless there is no option.

Initially it was thought that the RWP could transition to a trench in the Mapleton Drive ROW, which is in a more desirable medium HCA. Further study revealed that existing sewage pipelines that feed the nearby City sewage pump station, located on tax lot 101, block the development of a RWP HDD/Open cut trench transition facility in the Mapleton Drive ROW.

Per CDC Chapter 28.110(D), development of high HCA lands is permitted when it can be shown that the use is clearly "water dependent." CDC Section 2.030 defines Water-dependent uses as, "Any use that requires access to, or use of, the rivers." The applicant's proposed raw-water transmission line requires access to and use of water from the Clackamas River to serve its intended function of supplying water to the Lake Oswego Water Treatment Plant and then to residents in Lake Oswego and Tigard and West Linn. Therefore, the work in the high HCA of tax lots 100 and 200 is allowed.

The applicant proposes to revegetate temporarily disturbed areas of tax lots 100 and 200 following the completion of construction with native plant materials and trees (see applicant's June 25, 2012 submittal, Section 5, Figures 4 and 5). The criteria are met.

L. *Roads, driveways, utilities, or passive use recreation facilities. Roads, driveways, utilities, public paths, or passive use recreation facilities may be built in those portions of HCAs that include wetlands, riparian areas, and water resource areas when no other practical alternative exists but shall use water-permeable materials unless City engineering standards do not allow that. Construction to the minimum dimensional standards for roads is required. Full mitigation and revegetation is required, with the applicant to submit a mitigation plan pursuant to CDC 32.070 and a revegetation plan pursuant to CDC 32.080. The maximum disturbance width for utility corridors is as follows:*

1. *For utility facility connections to utility facilities, no greater than 10 feet wide.*
2. *For upgrade of existing utility facilities, no greater than 15 feet wide.*
3. *For new underground utility facilities, no greater than 25 feet wide, and disturbance of no more than 200 linear feet of water quality resource area, or 20 percent of the total linear feet of water quality resource area, whichever is greater.*

Finding No. 23: The City Council concurs with the applicant's response to these criteria. Although the applicant's proposed utility facility can be described as a water-dependent use in a high-HCA area, the pipeline alignment will not include disturbance of wetlands, riparian areas or other WRAs. As will be discussed in findings responding to Chapter 32, later in this report, the HDD alignment passes beneath wetlands, riparian areas and WRAs at sufficient depth to avoid impact, as described below, therefore these criteria are not applicable. Full revegetation will be undertaken at the HCA site. Although mitigation is not required since no wetland, riparian area, or WRAs are within the work area, the applicant has, by cooperative agreement with OPRD and West Linn, committed to funding $90,000 of environmental restoration activities within Mary S. Young Park.

According to the applicant's proposal, "the RWP enters West Linn approximately 65-feet below Mary S. Young Park. The top of the RWP rises to approximately 30-feet below grade where WRA-C ends (at the boundary between the southern and northern OPRD lots – see applicant's June 25, 2012 submittal, Section 6, Figure 2). Consequently, the HDD is between 65- and 30-feet below the HCA and WRA between the Willamette River and the northern OPRD lot..."

Staff has reviewed the applicant's boring logs in the location of Wetland A and concurs that there is no potential for boring activities to drain the wetland and no other potential impacts are likely:

> The project draft geotechnical report (GeoDesign 2012) shows that below Wetland A there is a layer of soft silt alluvium roughly 10-feet thick. Below this silt layer, substrates transition to soft and medium hard basalts. At 50- to70-feet below the wetland, where the bore will occur, substrates are medium hard to vary hard basalt. Due to the substantial depth of the bore below the wetland and because the bore will be going through a thick layer of hard rock, there is no potential for boring activities to drain the wetland and no other potential impacts are likely (applicant's June 25, 2012 submittal, Section 6, p. 4).

The Council agrees. Therefore, the criterion is met.

M. Structures. All buildings and structures in HCAs and riparian areas, including all exterior mechanical equipment, should be screened, colored, or surfaced so as to blend with the riparian environment. Surfaces shall be non-polished/reflective or at least expected to lose their luster within a year. In addition to the specific standards and criteria applicable to water-dependent uses (docks), all other provisions of this chapter shall apply to water dependent uses, and any structure shall be no larger than necessary to accommodate the use.

Finding No. 24: The proposed transmission line will be completely below-ground and therefore there are no aboveground structures to provide screening for. The criterion is not applicable.

U. Protect riparian and adjacent vegetation. Vegetative ground cover and trees upon the site shall be preserved, conserved, and maintained according to the following provisions:

1. *Riparian vegetation below OHW removed during development shall be replaced with indigenous vegetation, which shall be compatible with and enhance the riparian environment and approved by the approval authority as part of the application.*
2. *Vegetative improvements to areas within the protection area may be required if the site is found to be in an unhealthy or disturbed state by the City Arborist or his designated expert. "Unhealthy or disturbed" includes those sites that have a combination of native trees, shrubs, and groundcover on less than 80 percent of the water resource area and less than 50 percent tree canopy coverage in the primary and secondary habitat conservation area to be preserved. "Vegetative improvements" will be documented by submitting a revegetation plan meeting CDC 28.160 criteria that will result in the primary and secondary habitat conservation area to be preserved having a combination of native trees, shrubs, and groundcover on more than 80 percent of its area, and more than 50 percent tree canopy coverage in its area. The vegetative improvements shall be guaranteed for survival for a minimum of two years. Once approved, the applicant is responsible for implementing the plan prior to final inspection.*
3. *Tree cutting shall be prohibited in the protection area except that:*

a. *Diseased trees or trees in danger of falling may be removed with the City Arborist's approval; and*

b. *Tree cutting may be permitted in conjunction with those uses listed in CDC 28.030 with City Arborist approval; to the extent necessary to accommodate the listed uses;*

c. *Selective cutting in accordance with the Oregon Forest Practices Act, if applicable, shall be permitted with City Arborist approval within the area between the OHW and the greenway boundary provided the natural scenic qualities of the greenway are maintained.*

Finding No. 25: The City Council finds that the transition area on tax lots 100 and 200 is above the Ordinary High Water Mark of the Willamette River and is therefore excused from the provisions of subsection U(1). The site was not described as "Unhealthy or disturbed" so subsection U(2) does not apply.

Section U(3) allows tree removal for those uses listed in Subsection 28.030(C). Subsection 28.030(C) states that the uses are those uses allowed by the underlying zone; which in the case of tax lots 100 and 200 is R-10. Major utilities are allowed as conditional uses in the R-10 zone so an application to remove trees is allowed with City Arborist review so long as the Arborist finds that it will not compromise the scenic qualities of the greenway. The City Arborist has approved the removal of 19 non-significant trees. The area of tree loss will be behind a 400-foot deep screen of other trees that extend to the river. The trees will be replaced as part of the applicant's revegetation plan. The criteria are met.

Chapter 31 – Erosion Control
31.060 APPROVAL CRITERIA

The City Engineer or designee shall make a written finding, as applicable, with respect to the following criteria when approving, approving with conditions, or denying an erosion control permit.

A. The erosion and sediment control plan shall follow the guidelines of the Erosion Prevention and Sediment Control Plans, Technical Guidance Handbook *(Clackamas County Department of Utilities, most current edition).*

Finding No. 26: The City Council agrees with and adopts the findings of the applicant found in Technical Memorandum 13 prepared by Kennedy/Jenks Consultants. In response to 31.060(A) requirement that the guidelines of the *Erosion Prevention and Sediment Control Plans, Technical Guidance Handbook* be followed, Kennedy/Jenks states that those guidelines do not exist and propose Water Environment Services' (WES) standards instead. According to City of West Linn Public Works Department, WES provides erosion control, water quality and storm water management services for Clackamas County, so it is appropriate to use their standards. This criterion is met.

B. All developments shall be designed to minimize the disturbance of natural topography, vegetation, and soils.

Finding No. 27: The project boring is in sensitive locations under and beside the river. It involves open-cut trenching the RWP from the HDD transition on tax lots 100 and 200 to the WTP and then open-cut trenching the FWP from the WTP to Lake Oswego. Except for the transition area which possesses natural topography, the entire route proposed for trenching is developed Mapleton Drive and Highway 43 rights-of-way with no vegetation or natural topography being disturbed. The disturbance area on tax lots 100 and 200 is limited to a small area (approximately 7,715 square feet) to allow the RWP to transition from the daylighted HDD to an open cut/trench. Once the connection is completed the site will be regraded and revegetated. The criterion is met.

C. Designs shall minimize cuts and fills.

Finding No. 28: Cuts and/or fills are not proposed for this project. The criterion does not apply.

D. The plan shall prevent erosion by employing prevention practices such as non-disturbance, construction phasing, seeding and mulch covers.

E. The plan shall be designed to allow no more than 10 percent cumulative increase in natural stream turbidities, as measured relative to a control point immediately upstream of the turbidity-causing activity. However, limited duration activities necessary to address an emergency or to accommodate essential dredging, construction, or other legitimate activities, and that cause the standard to be exceeded, may be authorized provided all practicable turbidity control techniques have been applied.

F. The applicant shall actively manage and maintain erosion control measures and utilize techniques described in the permit to prevent erosion and control sediment during and following development. Erosion prevention and sediment control measures required by the permit shall remain in place until disturbed soil areas are permanently stabilized by landscaping, grass, approved mulch, or other permanent soil stabilizing measure.

G. No mud, dirt, rock, or other debris shall be deposited upon a public street or any part of the public stormwater system, surface water system, water quality resource area, or any part of a private stormwater system or surface water system that drains or connects to the public stormwater or surface water system.

H. Projects with a minimum development size of one acre, including subdivisions, apartments, commercial and industrial, shall meet the following requirements:

1. The erosion prevention and sediment control plan is designed by a certified erosion control specialist; and

2. The developer enters into an agreement with the City stating that in the event an erosion emergency occurs and is not repaired within 24 hours of the time the City notifies the developer, the City may hire a contractor or employ City staff to repair the erosion problem and bill the developer 125 percent of the cost to the City.

Finding No. 29: The applicant's erosion control plan will follow the Water Environment Services *Erosion Prevention and Sediment Control – Planning and Design Manual* and as such addresses items D-G above. Regarding item H above, the applicant is proposing a utility transmission line and not a subdivision, apartment, commercial or industrial use and therefore H does not apply. The criteria are met.

Chapter 32 – Water Resource Area Protection
32.030 Prohibited Uses

Prohibited uses in water resource areas include the following:

A. Any new lawn area or garden area consisting primarily of non-native vegetation.

B. Planting of any species identified as nuisance or prohibited plants on the Metro Native Plant List.

C. Uncontained areas of hazardous materials as defined by the Department of Environmental Quality and dumping of any materials of any kind.

D. Trimming and removal of existing native vegetation from the transition and setback area unless it is to reestablish native vegetation in place of non-native or invasive vegetation pursuant to CDC 32.020(D)(7), or if the vegetation constitutes a hazard to life or property pursuant to CDC 32.020(D)(2). (Ord. 1545, 2007)

Finding No. 29.5: The applicant does not propose to introduce a new lawn or garden, introduce plants Metro considers to be nuisance or prohibited vegetation, and will install native vegetation in conjunction with the HDD area revegetation plan. Mr. Carl Edwards testified that the proposed HDD activity was a prohibited use. Although Mr. Edwards did not offer any specifics as to the alleged prohibited use, one might conclude that he was referring to the potential for uncontained hazardous materials.

In the applicant's technical memorandum, ecologist Ethan Rosenthal, et al, explains the HDD process and identifies the very small risks associated with HDD (see pages 2-3). Throughout the HDD process, pressurized drilling fluids are continuously pumped through the drilling equipment to stabilize the bore, cool the cutting tools, lubricate the drill pipe, and transport soil cuttings back to the entry location on tax lots 100 and 200. The pressurized drilling fluids are comprised of 97-99 percent water, with the remaining fluid additives consisting mainly of the non-toxic chemical bentonite.

To limit the slight potential for hydrofracture associated with the pullback, ecologist Ethan Rosenthal, et al, recommended containing the bore hole within a casing for the first 200 feet or so until the bore hole is at a depth of 35 feet where the external pressure of the soil and rock surrounding the bore hole will be greater than the pressure inside the bore hole. To reduce the risk even further, Rosenthal states that the contractor will use a "down hole pressure tracking system" which will monitor real time fluid pressure just behind the drill bit. If drilling pressure spikes above the limiting pressure, the driller will be required to shut-off the pump immediately – effectively preventing the uncontrolled release of drilling mud/solutions.

In addition, the fueling of construction equipment will occur off-site and not within a WRA. Construction BMPs will be used to contain any leakage of fuels or oils from construction equipment operating within a WRA. Staff and the Council are satisfied with the analysis and find that that the proposed pipeline construction will not result in the release of uncontained hazardous materials into a WRA. The criteria are met.

32.050 APPROVAL CRITERIA

No application for development on property containing a water resource area shall be approved unless the decision-making authority finds that the following standards have been satisfied, or can be satisfied by conditions of approval.

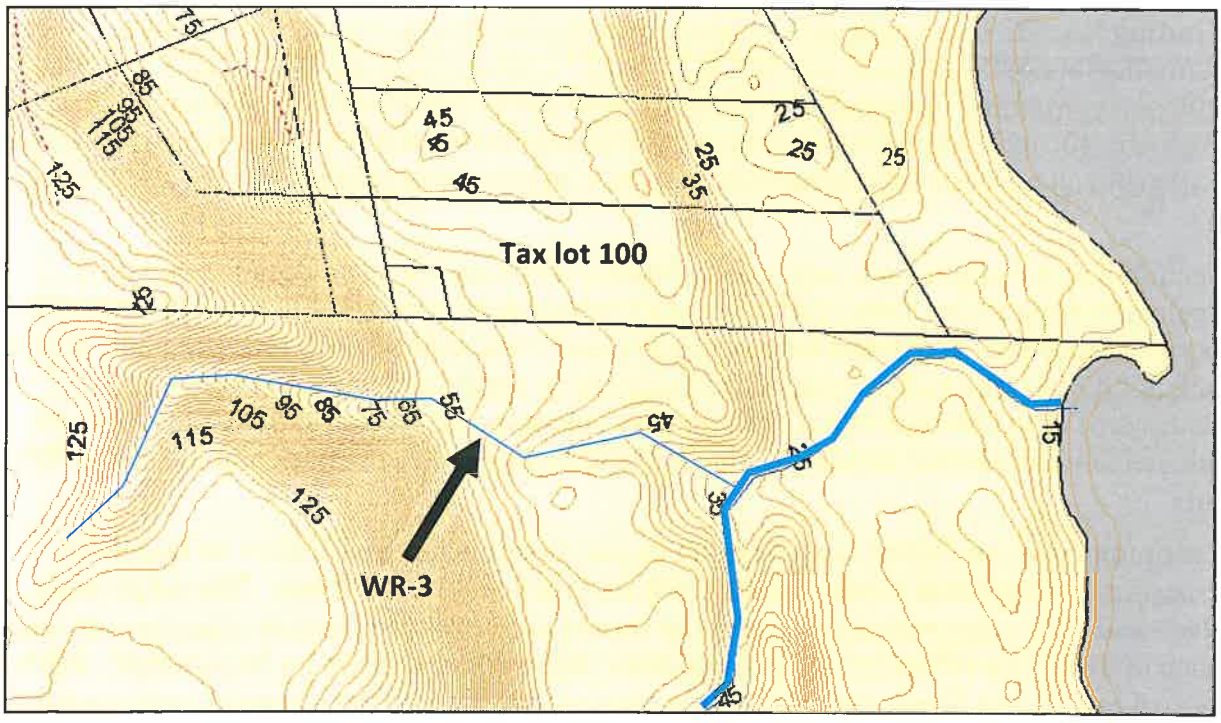
A. Proposed development submittals shall identify all water resource areas on the project site. The most currently adopted Surface Water Management Plan shall be used as the basis for determining existence of drainageways. The exact location of drainageways identified in the Surface Water Management Plan, and drainageway classification (e.g., open channel vs. enclosed storm drains), may have to be verified in the field by the City Engineer. The Local Wetlands Inventory shall be used as the basis for determining existence of wetlands. The exact

location of wetlands identified in the Local Wetlands Inventory on the subject property shall be verified in a wetlands delineation analysis prepared for the applicant by a certified wetlands specialist. The Riparian Corridor Inventory shall be used as the basis for determining existence of riparian corridors.

Finding No. 30: The applicant correctly identified all streams shown on the Surface Water Management Plan. In addition, a small tributary of Turkey Creek which runs just south of tax lot 100 was identified by the applicant as "WR-3." This stream does not appear on the Surface Water Management Plan. This is a small seasonal or intermittent stream that carries water during brief periods after rainfall. Applying the combined 65 foot transition and setbacks of this chapter, the transition and setbacks would not reach or apply to the HDD work area 165 feet to the north.

Another correction to City mapping is appropriate in that the riparian corridor protection, which is supposed to extend 100 feet from the edge of Turkey Creek, is shown on the City of West Linn's GIS map extending 270 feet northwards from the creek's edge. (Staff concluded that the GIS map agrees with the adopted 2002 Riparian Corridor Inventory and the City Council agrees.) Even if the mapped riparian corridor is allowed to exist as shown, it does not reach the HDD work area perimeter on tax lots 100 and 200 which is a further 45 feet north.

There are no wetlands in, or adjacent to, the HDD work area. The RWP travels at a depth of 65 feet below the wetlands and Turkey Creek and Mary S. Young Creek in Mary S. Young Park.



B. Proposed developments shall be so designed as to maintain the existing natural drainageways and utilize them as the primary method of stormwater conveyance through the project site unless the most recently adopted West Linn Surface Water Management Plan calls

for alternate configurations (culverts, piping, etc.). Proposed development shall, particularly in the case of subdivisions, facilitate reasonable access to the drainageway for maintenance purposes.

Finding No. 31: Construction of the RWP will take place below Mary S. Young Creek, Turkey Creek and WR-3 (shown above) and associated wetlands in Mary S. Young Park. The RWP will transition at the HDD work area on tax lots 100 and 200 then travel over Heron Creek (which is piped further under the ROW) within the existing paved or disturbed ROW of Mapleton Drive. Construction of the FWP will occur over Gans, Robin, Fern, Robinwood, and Arbor Creeks plus associated unnamed tributaries (WR-8, WR-6) (see Figure 1 of applicant's June 25, 2012 submittal, Section 5 by David Evans and Associates). With regard to Trillium Creek, construction activity will consist of tunnel and thus result in no disturbance. No drainageways will be used for storm water conveyance for this project and none shall be modified. The criterion is met.

C. Development shall be conducted in a manner that will minimize adverse impact on water resource areas. Alternatives which avoid all adverse environmental impacts associated with the proposed action shall be considered first. For unavoidable adverse environmental impacts, alternatives that reduce or minimize these impacts shall be selected. If any portion of the water quality resource area is proposed to be permanently disturbed, the applicant shall prepare a mitigation plan as specified in CDC 32.070 designed to restore disturbed areas, either existing prior to development or disturbed as a result of the development project, to a healthy natural state.

Finding No. 32: The applicant's proposal minimizes adverse impacts on WRAs by tunneling beneath wetlands and WRAs in Mary S. Young Park and OPRD tax lots 100 and 200 and containing open-cut trench activities to paved portions of the Mapleton Drive and Highway 43 rights-of-way where the project passes through WRAs. Therefore, the project will avoid all adverse environmental impacts to WRAs along Mapleton Drive and Highway 43.

Section 6 of the applicant's proposal contains a technical memorandum prepared by ecologists from David Evans and Associates, which demonstrates that the HDD that will occur between 65- to 34-feet below the park and 7 feet below OPRD lots 100 and 200 and will not disturb the soils, wetlands, and vegetation associated with nearby WRAs. Consistent with CDC 32.050(C), the applicant has selected an alternative that avoids all adverse environmental impacts to the WRAs associated with the park and the two OPRD lots.

Testimony was submitted regarding the impact the pipeline would have on two WRA crossings on Mapleton Drive, namely Trillium Creek and Heron Creek. The 60 percent RWP and FWP alignment drawings in the record and show the pipeline alignment through each of these two WRAs but by passing under these areas, there is no disturbance. With regard to Trillium Creek, the applicant proposed that the FWP be tunneled underneath the Trillium Creek culvert in the Mapleton Drive right-of-way to avoid any disturbances to this resource. Entry and exit bore pits for the pipeline tunnel will be located on either side of the creek, at a sufficient distance to ensure that there will be no surface impacts to the resource. The FWP alignment (as shown in the 60 percent alignment drawings) and the

bore pits required for the tunnel will be completely located within areas already disturbed (i.e., pavement and parking) in the Mapleton Drive right-of-way. There will be no impacts on adjacent storm drainage channels, streamside vegetation, and water quality or water quantity as a result of the proposed pipeline installation. As for Heron Creek, the applicant has proposed that the RWP be installed over the top of the Heron Creek culvert via open-cut construction methods in the Mapleton Drive right-of-way to avoid any disturbances to this resource. The RWP alignment (as shown in the 60 percent alignment drawings) is completely contained within paved or developed areas in the Mapleton Drive right-of-way. There will be no impacts on adjacent storm drainage channels, streamside vegetation, and water quality or water quantity as a result of the proposed pipeline installation.

The mitigation requirements of Section 32.070 do not apply. The criterion is met.

D. Water resource areas shall be protected from development or encroachment by dedicating the land title deed to the City for public open space purposes if either: (1) a finding can be made that the dedication is roughly proportional to the impact of the development; or (2) the applicant chooses to dedicate these areas. Otherwise, these areas shall be preserved through a protective easement. Protective or conservation easements are not preferred because water resource areas protected by easements have been shown to be harder to manage and, thus, more susceptible to disturbance and damage. Required 15-foot-wide structural setback areas do not require preservation by easement or dedication.

Finding No. 33: WRAs will not be impacted by development through the applicant's proposal. The criterion does not apply.

E. The protected water resource area shall include the drainage channel, creek, wetlands, and the required setback and transition area. The setback and transition area shall be determined using the following table:

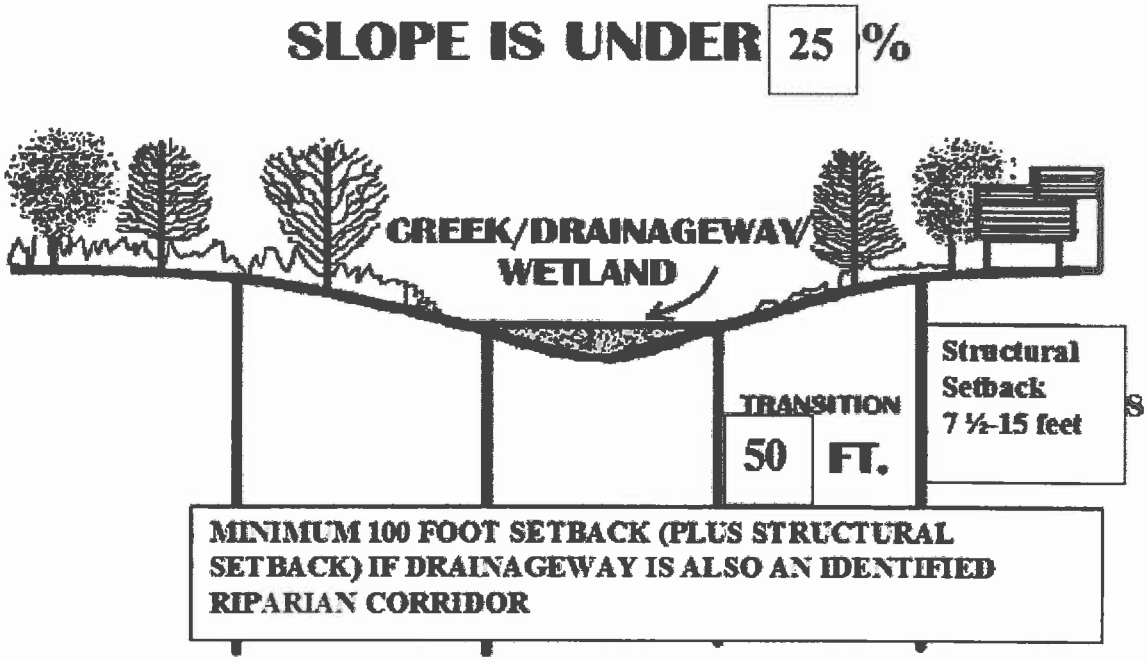
Table 32-1. Required Widths of Setback and Transition Area

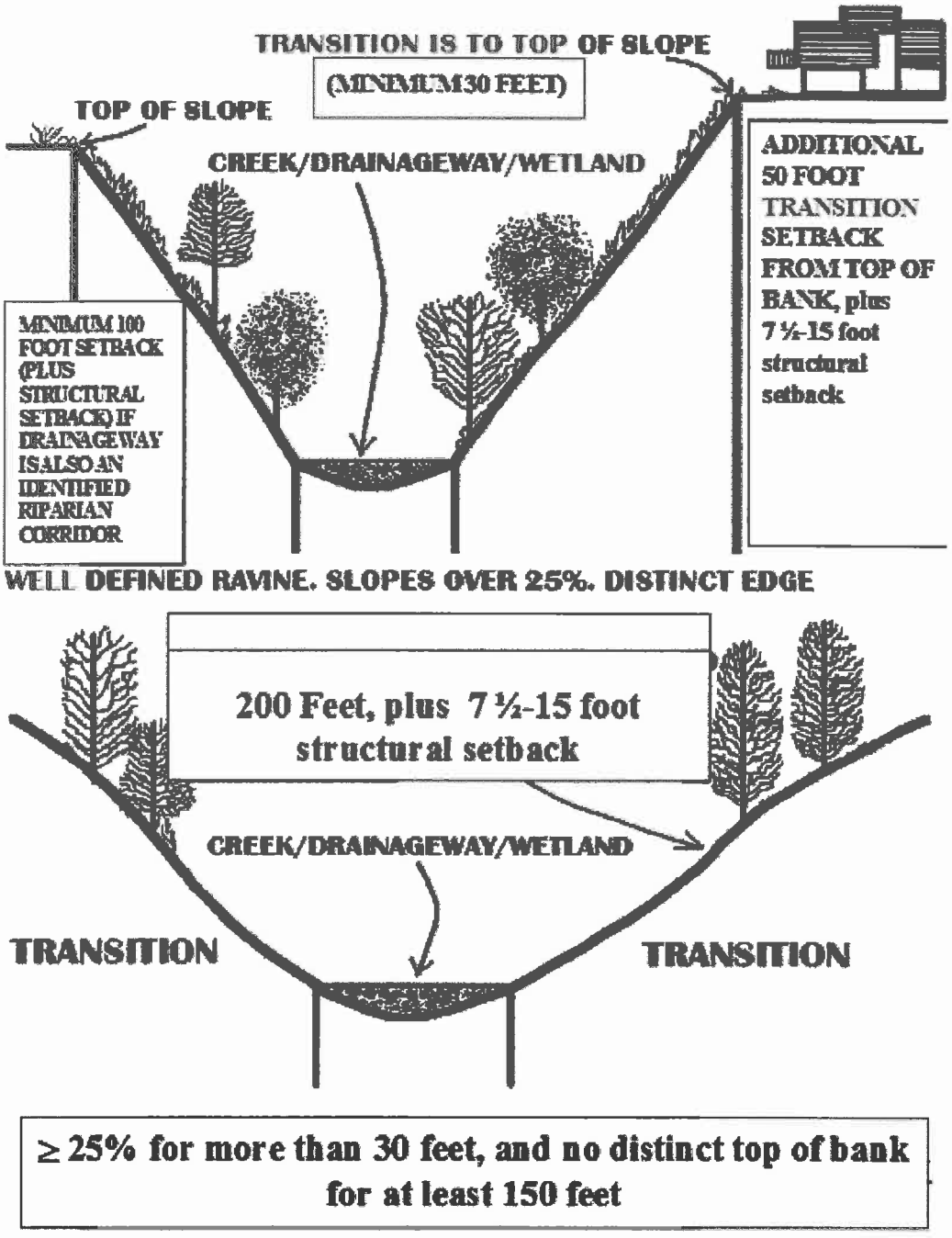
Protected Water Feature Type (See Chapter 02 CDC, Definitions)	***Slope Adjacent to Protected Water Feature***	***Starting Point for Measurements from Water Feature***	***Width of Setback and Transition Area on Each Side of the Water Feature***
Wetland, Major Drainageway, Minor Drainageway	*0% – 25%*	• *Edge of bankful flow or 2-year storm level* • *Delineated edge of wetland*	*50 feet plus structural setback.*
Wetland, Major Drainageway, Minor Drainageway	*≥ 25% to a distinct top of ravine[1]*	• *Edge of bankful flow or 2-year storm level* • *Delineated edge of wetland*	*Distance from starting point of measurement to top of ravine[1] (30 feet minimum), plus an additional 50-foot setback, plus structural setback.*
Wetland, Major	*≥ 25% for more than*	• *Edge of bankful*	*200 feet, plus structural setback*

Drainageway, Minor Drainageway	*30 feet, and no distinct top of ravine for at least 150 feet*	*flow or 2-year storm level* • *Delineated edge of wetland*	
Riparian Corridor	*any*	• *Edge of bankful flow or 2-year storm level*	*100 feet or the setback required under major and minor drainageway provisions, whichever is greater, plus structural setback*
Formerly Closed Drainage Channel Reopened (see CDC 32.050(N))	*n/a*	• *Edge of bankful flow or 2-year storm level*	*Variable: See CDC 32.050(N)*

[1]*Where the protected water feature is confined by a ravine or gully, the top of ravine is the location where the slope breaks at least 15 percent and the slope beyond the break remains less than 25 percent for at least 50 feet.*

At least three slope measurements along the water feature, at no more than 100-foot increments, shall be made for each property for which development is proposed. Depending upon the width of the property, the width of the protected corridor will vary.





F. Roads, driveways, utilities, or passive use recreation facilities may be built in and across water resource areas when no other practical alternative exists. Construction shall minimize impacts. Construction to the minimum dimensional standards for roads is required. Full mitigation and revegetation is required, with the applicant to submit a mitigation plan pursuant to CDC 32.070 and a revegetation plan pursuant to CDC 32.080. The maximum disturbance width for utility corridors is as follows:

1. *For utility facility connections to utility facilities, no greater than 10 feet wide.*
2. *For upgrade of existing utility facilities, no greater than 15 feet wide.*

3. For new underground utility facilities, no greater than 25 feet wide, and disturbance of no more than 200 linear feet of water quality resource area, or 20 percent of the total linear feet of water quality resource area, whichever is greater.

Finding No. 34: The applicant has identified WRAs in Section 5, Figures 1 and 2 of its application. As outlined earlier in this report, the applicant's proposal includes boring beneath WRAs in Mary S. Young Park and OPRD tax lots 100 and 200 and containing the open-cut trench portion of the transmission line to the Mapleton Drive and Highway 43 rights-of-way. Where the alignment passes through WRAs in the paved or developed portions of Mapleton Drive and Highway 43, the applicant proposes to trench over or tunnel underneath piped streams and therefore the alignment will not disturb WRAs. The criterion is satisfied.

Alternative routes were considered for the RWP and FWP but the use of existing paved streets (Mapleton Drive and Highway 43) was seen as being the least disruptive, particularly since the streams in those corridors are piped whereas routes outside of the ROWs would have required traversing open channel WRAs with the attendant adverse environmental consequences.

G. Prior to construction, the water resource area shall be protected with an anchored chain link fence (or approved equivalent) at its perimeter and shall remain undisturbed except as specifically allowed by an approved water resource area permit. Such fencing shall be maintained until construction is complete. The water resource area shall be identified with City-approved permanent markers at all boundary direction changes and at 30- to 50-foot intervals that clearly delineate the extent of the protected area.

Finding No. 35: Because all pipeline passage over or under the streams or WRAs will be at locations where the streams are piped, there is no need for cyclone fencing. Condition of Approval 8, the applicant will be required to contain the HDD transition area within cyclone fencing. The nearest WRA to that fence is the riparian corridor associated with Turkey Creek. The riparian area edge will be 45-feet away from the fenced work area. The criterion is met.

H. Paved trails, walkways, or bike paths shall be located at least 15 feet from the edge of a protected water feature except for approved crossings. All trails, walkways, and bike paths shall be constructed so as to minimize disturbance to existing native vegetation. All trails, walkways, and bike paths shall be constructed with a permeable material and utilize low impact development (LID) construction practices.

Finding No. 36: The applicant proposes none of the above-listed bicycle and/or pedestrian facilities as part of this project and therefore, the criterion does not apply.

I. Sound engineering principles regarding downstream impacts, soil stabilization, erosion control, and adequacy of improvements to accommodate the intended drainage through the

drainage basin shall be used. Storm drainage shall not be diverted from its natural watercourse. Inter-basin transfers of storm drainage shall not be permitted.

J. Appropriate erosion control measures based on Chapter 31 CDC requirements shall be established throughout all phases of construction.

Finding No. 37: The applicant's Erosion Control Plan will prevent downstream impacts and erosion. No diversion of storm drainage will occur nor will any inter-basin transfers. During the pull-back phase of HDD beneath the Willamette River, mud and water are being pulled back through the HDD pipe and there will be a considerable volume of material exiting the bore hole on tax lot 100 and 200. The applicant proposes that this material be contained and collected by vacuum trucks and driven off site for disposal during a brief 48 hour period. The erosion control measures will contain any possible releases of drilling mud associated with this phase. The criterion is met.

K. Vegetative improvements to areas within the water resource area may be required if the site is found to be in an unhealthy or disturbed state, or if portions of the site within the water resource area are disturbed during the development process. "Unhealthy or disturbed" includes those sites that have a combination of native trees, shrubs, and groundcover on less than 80 percent of the water resource area and less than 50 percent tree canopy coverage in the water resource area. Vegetative improvements will be documented by submitting a revegetation plan meeting CDC 32.080 criteria that will result in the water resource area having a combination of native trees, shrubs, and groundcover on more than 80 percent of its area, and more than 50 percent tree canopy coverage in its area. Where any existing vegetation is proposed to be permanently removed, or the original land contours disturbed, a mitigation plan meeting CDC 32.070 criteria shall also be submitted. Interim erosion control measures such as mulching shall be used to avoid erosion on bare areas. Upon approval of the mitigation plan, the applicant is responsible for implementing the plan during the next available planting season.

Finding No. 38: The applicant states that the project will not disturb any WRA so no vegetative improvements are required. The City Council agrees. The applicant will however be revegetating the 7,715 square-foot disturbed area on tax lots 100 and 200, where the HDD transitions to an open cut trench. The criterion is met.

L. Structural setback area. Where a structural setback area is specifically required, development projects shall keep all foundation walls and footings at least 15 feet from the edge of the water resource area transition and setback area if this area is located in the front or rear yard of the lot, and seven and one-half feet from the edge of the water resource area transition and setback area if this area is located in the side yard of the lot. Structural elements may not be built on or cantilever over the setback area. Roof overhangs of up to three feet are permitted in the setback. Decks are permitted within the structural setback area.

Finding No. 39: The City Council agrees with the applicant's finding that no above ground structures are proposed so structural setbacks does not apply.

M. Stormwater treatment facilities may only encroach a maximum of 25 feet into the outside boundary of the water resource area; and the area of encroachment must be replaced by adding an equal area to the water quality resource area on the subject property. Facilities that infiltrate stormwater on site, including the associated piping, may be placed at any point within the water resource area outside of the actual drainage course so long as the forest canopy and the areas within 10 feet of the driplines of significant trees are not disturbed. Only native vegetation may be planted in these facilities.

Finding No. 40: No storm water treatment facilities are proposed for the underground RWP and FWP. Therefore this criterion does not apply.

N. As part of any proposed land division or Class II design review application, any covered or piped drainageways identified on the Surface Water Quality Management Plan Map shall be opened, unless the City Engineer determines that such opening would negatively impact the affected storm drainage system and the water quality within that affected storm drainage system in a manner that could not be reasonably mitigated by the project's site design. The design of the reopened channel and associated transition area shall be considered on an individualized basis, based upon the following factors:

1. *The ability of the reopened storm channel to safely carry storm drainage through the area.*
2. *Continuity with natural contours on adjacent properties.*
3. *Continuity of vegetation and habitat values on adjacent properties.*
4. *Erosion control.*
5. *Creation of filters to enhance water quality.*
6. *Provision of water temperature conducive to fish habitat.*
7. *Consideration of habitat and water quality goals of the most recently adopted West Linn Surface Water Management Plan.*
8. *Consistency with required site mitigation plans, if such plans are needed.*

The maximum required setback under any circumstance shall be the setback required as if the drainageway were already open.

Finding No. 41: The Council finds that this provision is intended to apply to circumstances where the proposed development, including as contemplated by a land division, will have a material affect or impact on the covered or piped drainageways such that it is prudent, practical and beneficial to open the drainageway. In this case, the proposed pipeline will pass over or under the drainageways and have no material affect on any of them. Moreover, all of the WRAs (streams) that are bisected by the RWP or FWP are in pipes buried beneath paved streets and daylighting these streams would require the construction of nine bridges along Mapleton Drive and Highway 43 which would entail considerable cost and would not improve water quality. Daylighting streams beneath Mapleton Drive and Highway 43 would also require significant utility relocation. The Council finds that because the pipeline will not have a material effect on any of the identified drainage ways and that daylighting them is not prudent, practical or beneficial, this section does not apply.

O. The decision-making authority may approve a reduction in applicable front yard setbacks abutting a public street to a minimum of 15 feet and a reduction in applicable side yard setbacks abutting a public street to seven and one-half feet if the applicant demonstrates that the reduction is necessary to create a building envelope on an existing or proposed lot of at least 5,000 square feet.

Finding No. 42: The criterion does not apply as no above grade structures are being built.

P. Storm drainage channels not identified on the Surface Water Management Plan Map, but identified through the development review process, shall be subject to the same setbacks as equivalent mapped storm drainage channels. (Ord. 1545, 2007)

Finding No. 43: The unnamed and unmapped stream in Mary S. Young Park, identified as WR-3 by the applicant, is duly noted in the applicant's submittal and by City staff. A combined transition and setback of 65-feet has been applied to WR-3 since the slope adjacent to the stream is in the 0-25% range. The 65-foot transition and setback boundary is 90- to 100-feet shy of the HDD work area on tax lot 100 and 200. The City Council finds that the unidentified stream exists beyond the required setback distance established in P above and the criterion is therefore met.

DECISION

On the basis of the above findings, the Council approves these applications, subject to the following conditions:

1. Approved plans. The project, including relocated utilities, shall conform to the Site Plan, except where revised by the Draft 60% Alignment, dated September 18, 2012; the pedestrian and circulation plan, except where revised by the Draft 60% Alignment, dated September 18, 2012; the Tree Protection Plan; and the Erosion Control and Sediment Plan, except as modified in conformance with these conditions of approval.
2. Safe Operations, Traffic Control and Management Plans. The applicant shall implement all applicable provisions and recommendations of the Safe Operations Plan and the Traffic Control and Management Plan and recommendations in the DKS Traffic Memorandum, including revisions. The applicant shall also implement the following Greenlight recommendations:
    a. The applicant shall appoint a neighborhood construction impact coordinator or Ombudsman, to the neighborhood that can field and respond to concerns raised by the neighborhood before and during construction.
    b. The applicant will designate a 20 MPH maximum contractor speed limit on Mapleton Drive, Kenthorpe Way, and Old River Road. Additionally, this maximum speed limit will be a part of all contractor documents associated with the Water Treatment Plant and pipeline projects.
3. Noise.

a. The ENVIRON Noise Mitigation recommendations contained in Sections 11 and 10 shall be implemented.

b. Noise generating construction activities outside the hours of 7:00 AM to 7:00 PM on weekdays or 9:00 AM to 5:00 PM on weekends may only be permitted with written approval from the City Manager. Any request to the City Manager to extend work hours shall include justification for the proposed construction outside allowed work hours, beginning and end dates, a description of the equipment and activities proposed during that time, and documentation that this information was presented at least 7 days earlier to the Robinwood Neighborhood Association president, unless emergency work is required that makes advanced notice impracticable.

c. Back up beepers shall be not permitted for construction activities outside of the hours of 7:00 AM to 7:00 PM on weekdays or 9:00 AM to 5:00 PM on weekends; spotters or other alternative methods approved by OSHA will be required.

4. Street restoration.

a. The applicant shall be responsible for full-width street restoration along Mapleton Drive from tax lot 2900 (at the east end of Mapleton Drive) to its intersection with Highway 43.

b. The applicant shall also restore any damaged bike paths and pedestrian walkways to their original condition.

c. The applicant shall be responsible for street restoration along Old River Road in those locations impacted by the replacement intertie connection.

d. All street, utility, bicycle path and pedestrian walkway restoration will be subject to review and approval by the Public Works Director in accordance with the City of West Linn Public Works Design Standards.

5. Abandoned facilities. The West Linn Public Works Director shall identify water system facilities abandoned by the applicant and place the facilities into three categories: 1) facilities that require removal by the applicant, 2) facilities allowed to remain in the right of way, and 3) facilities to be conveyed to West Linn. The applicant agrees to convey abandoned facilities to West Linn upon the request of the Public Works Director.

6. Revegetation. Following construction, the disturbed portion of tax lots 100 and 200 shall be revegetated with native plant materials and trees in accordance with a revegetation plan approved by the Planning Department consistent with CDC Section 32.080.

7. HDD Disturbance Evaluation. Methods and recommendations from the Horizontal Directional Drill Disturbance Evaluation in the applicant's June 25, 2012 submittal, Section 6 shall be followed.

8. HDD area fencing. The applicant shall contain the HDD transition and staging area within cyclone fencing for the duration of the use of that site.

9. AC pipe replacement in Mapleton Drive. The applicant shall replace the existing 6-inch asbestos cement water distribution line in Mapleton Drive between Nixon Avenue and Hwy 43 with an 8-inch ductile iron water distribution line (including fire hydrants and service lines to the meter boxes) as a result of the applicant's conflicting alignment. The design and specifications of this water line replacement will be subject to the review and approval by the West Linn Public Works Director.

10. Connection to intertie pump station. The applicant shall construct a replacement water line connection from the existing intertie pump station at 20225 Old River Road to the new 48-inch finished-water line and install a third pump at the pump station. The applicant is responsible for all costs of the water line connection and the third intertie pump. The design and specifications of the replacement water line connection and third intertie pump are subject to review and approval by the West Linn Public Works Director.

11. Construction lighting. All lighting in the HDD staging area shall be located and shielded to avoid glare and off-site trespass.

12. Traffic control at intersection of Nixon Ave. and Mapleton Dr. Before the applicant commences any open cut pipeline construction on Mapleton Drive, the West Linn Public Works Director shall evaluate the applicant's proposed traffic control and safety plan for the intersection of Nixon Avenue and Mapleton Drive. If the Public Works Director determines additional traffic control and safety measures are needed, those measures shall be implemented by the applicant.

13. Nixon Avenue Protections. Construction vehicles may not use Nixon Avenue. Not more than 30 days before the applicant commences any open cut pipeline construction on Mapleton Drive, the applicant shall create a digital video record of the pre-construction pavement conditions on Nixon Avenue. A similar video record shall be made of the post-construction pavement conditions within thirty days of completion of construction of the open-cut pipeline on Mapleton. If the Public Works Director determines local residential traffic detoured onto Nixon Avenue during construction has caused observable, additional damages to paved surfaces, the applicant shall repair those areas of damage, to the satisfaction of the Public Works Director, not more than 60 days after receiving notice from the Director. If the applicant fails to make necessary repairs within 60 days, the Public Works Director may cite the applicant pursuant to West Linn Municipal Code 3.300(5).

14. Removal of construction offices and staging. The applicant shall be required to remove all materials, staging and offices associated with project construction immediately after the completion of project construction.

15. Construction Management Plan. The applicant and its agents shall comply with the provisions of the CMP as set forth in Exhibit A attached to these conditions. Prior to the issuance of any occupancy or building permits, the Plan terms shall be confirmed to include:

a. a process for identifying special needs persons, for communicating with such persons, and accommodating access needs of special needs persons residing along those portions of Mapleton Drive, Kenthorpe Way and Highway 43 directly affected by project construction.

b. a 5-foot wide pedestrian and bicycle access way around the work zone to ensure safe passage for citizens and schoolchildren.

c. during construction, the applicant shall provide for contact person(s), accessible by telephone on a 24-hour, 7-day per week basis. Contact person(s) shall be authorized to take action to address the issue raised. Contact information shall be made available to all affected residents and businesses.

A copy of the Plan, as set forth in Exhibit A, and if amended, shall be provided to the West Linn Public Works Director. The applicant shall incorporate the provisions of the terms as set out in Exhibit A into its construction contracts. Failure to comply with Exhibit A may result in issuance of a stop work order until the violation is remedied. Failure to remedy the violation may result in enforcement actions with penalties up to $1,000.00 per day. Failure to comply with Exhibit A terms shall be deemed a nuisance subject to abatement pursuant to West Linn Municipal Code 5.495(2). The City Manager shall report to the City Council any violations and the amount of any penalties imposed.

16. Community Impact Fee. The applicant shall enter into an intergovernmental agreement with West Linn in lieu of a franchise or other licensing fee for the use of public streets in West Linn. That agreement shall require a one-time payment of $5 million to be used for West Linn water system improvements to meet the overall needs of the community.

17. Intertie Agreement. The intergovernmental agreement between the applicant and the City of West Linn regarding the intertie shall be modified to provide that:

a. the agreement shall not be terminated without the written consent of all parties,

b. the agreement shall require written consent of all parties to amend paragraph 8 of the agreement related to the quantity of water to be supplied.

c. the intertie may be used for the benefit of all parties in perpetuity.

18. Shop Local Marketing Plan. Prior to the issuance of any City right-of-way permits for work required in conjunction with the proposed pipeline on Highway 43, the applicant shall receive approval of a "Shop Local" Marketing Plan from the City's Economic Development Director. This Plan shall require implementation of the business retention strategies found on pages 62-70 and 164 of Exhibit 'E' prior to the beginning of construction on Highway 43. The Marketing Plan shall be distributed via regular mail to the Chair of the Robinwood Neighborhood Association, all businesses located along Highway 43 within the Robinwood neighborhood boundaries, and the City Manager.

19. Transmission Lines. Following construction of the 48-inch transmission line and decommissioning of the existing 24-inch transmission line located in the Hwy 43 right-of-way, the applicant shall convey ownership of the 24-inch water transmission line, in its existing condition, to the City of West Linn.

Notes to applicant.

- Expiration of Approval. This approval shall expire three years from the effective date of this decision.
- Additional Permits Required. Your project will require the following additional City permits:
  - Public improvement permit: contact Engineering at (503) 723-5501 or prich@westlinnoregon.gov
  - Public works permit: contact Engineering at (503) 723-5501 or prich@westlinnoregon.gov
  - On-Site Utilities: contact the Building Division at (503) 656-4211, jnomie@westlinnoregon.gov.

This decision may be appealed to the Land Use Board of Appeals under the applicable rules and statutes.

J. Kovash
JOHN KOVASH, MAYOR

Feb 18, 2013
DATE

This decision was mailed on February 19, 2013.

Therefore, this decision becomes effective at 5 p.m., March 12, 2013.

LOTWP Construction Management Plan Requirements
Conditions of Approval Exhibit A

General

- Conduct a preconstruction assessment (video documentation) to ensure areas impacted by construction are restored to equal or better quality.
- Retain a certified arborist available to observe, manage tree care, and direct the contractor on tree protection measures during construction as needed to ensure that impacts to trees are minimized.
- Conduct work between the hours of 7:00 am to 7:00 pm weekdays and 9:00 am to 5:00 pm Saturdays (except work on Highway 43). Activities outside of these hours will require approval from the City of West Linn.
- Conduct Highway 43 pipeline work between the hours of 8:00 pm and 5:00 am.
- Limit the length of the construction zone on Mapleton Drive and Highway 43 to 150 feet and 200 feet, respectively.
- Employ erosion control best management practices (BMPs, otherwise known as mitigation measures) and plans per West Linn, Clackamas County, and DEQ standards per an approved 1200-C permit. These approved BMPs will prevent tracking or flowing of sediments onto public rights-of-way and control construction dust.
- Conduct nighttime construction lighting for Highway 43 pipeline work per Section 00225 of the Oregon Standard Specifications for Construction.
- Use temporary site security fencing around the perimeter of construction areas to provide both site security and public safety functions.

Public Outreach

- Develop a communications plan with West Linn Public Works, TVF&R, the Robinwood Neighborhood Association, and other impacted stakeholders.
- Provide the City of West Linn with copies of all written correspondence and notice of telephone contacts from citizens regarding construction.
- Employ a representative to answer questions, coordinate special needs, and ensure impacts are kept to a minimum. Contact info will be provided with 2 week and 48 hour notices.
- Provide a minimum of 60 days notice to all property owners within 500 feet of staging area for drilling the Willamette River pipeline crossing.
- Hold up to two meetings per month with residents and members of the Robinwood Neighborhood Association to address residents' needs and concerns.
- Retain the services of an ombudsman to promote communication among all project stakeholders.
- Attend weekly coordination meetings with TVF&R and West Linn Police.
- Notify TVF&R on a daily basis for all construction activities and locations (in a manner acceptable to TVF&R).
- Notify all affected public agencies, commercial property owners, tenants, and residents no less than 2 weeks before the start of construction activities. Notice to be provided via email, door hangers, or phone calls.

- Notify all affected public agencies, commercial property owners, tenants, and residents a second time within 48 hours of construction activities. Notice to be provided via email, door hangers, or phone calls.

Traffic

- Use only two haul routes to and from the WTP and pipeline construction areas. These haul routes are Highway 43 and McVey/Stafford Rd to and from I-205.
- Provide a 5-foot wide pedestrian and bicycle access way around the work zone.
- Provide pedestrian access at all times to all trails in MSY Park from the end of Mapleton Drive.
- Provide a 12-foot wide access for emergency vehicles to pass through the work zone (except at 4 locations on Mapleton Drive where not feasible due to the pipeline alignment).
- Re-open and maintain fully functional streets (i.e., no road closures or equipment on the roadway) outside of work hours.
- Limit the duration of any residential driveway closure resulting from construction activities to no more than one work shift at a time.
- Provide temporary parking within 200 feet of a resident's home during the time that any residential driveway is not accessible.
- Comply with the Americans with Disabilities Act, to the extent practical, for all pedestrian access around or through the construction work area to homes and businesses.
- Maintain at least one driveway or access for vehicles to every business that has operating hours which overlap with nighttime construction hours.
- Work with Tri-Met to provide continued public transportation service on Highway 43 and to maintain or relocate bus stops as required to maintain service.
- Provide 24-hour per day, 7-day per week vehicular access to all streets impacted by construction on Highway 43 that do not have secondary access (dead-end streets).
- Bus all craft-level workers to and from all construction work areas on Mapleton Drive, Kenthorpe Way, and Highway 43 to minimize traffic impacts.
- Construction vehicles shall only make right turns in or out of Mapleton Drive at the intersection of Mapleton Drive and Highway 43 (no left turns allowed).
- Construction vehicle traffic shall be approximately evenly split between Mapleton Drive and Kenthorpe Way to decrease the traffic impact on any single street. During Mapleton Drive open-cut pipeline work, the WTP Contractor shall only use Kenthorpe Way to access the site.

Noise

- Offer a relocation package for residents who live in the immediate vicinity of the HDD staging area during the 24- to 48-hour HDD pullback phase.
- Install a minimum 16-foot tall noise wall around the perimeter of the HDD construction site except the west side which will remain open for access.
- Provide advanced notice to stakeholders when unusually noisy construction activities or approved activities outside of normal work hours are anticipated.

- Minimize reverse direction travel and use broadband, ambient-sensing backup alarms on all on-site equipment requiring backup indicators as permissible by OSHA requirements.
- Conduct any jackhammering for pipeline construction work within public rights-of-way within a noise tent or sound enclosure.
- Minimize banging dump truck tailgates with procedural methods or with the use of rubber gaskets.
- Use portable noise barriers or enclosures around discrete, stationary equipment during nighttime work.
- Place stationary equipment as far from affected residences as possible.
- Use properly sized and maintained mufflers, engine intake silencers, and engine enclosures (for cranes, excavators, generators, etc.). Equipment shall be equipped with a "residential" or "critical" grade silencer if possible.
- Use acoustical blankets, pads, straps, and/or boards to control metal-on-metal noises such as picking up drill pipe if possible.
- Limit dumping of materials onto the ground, especially metallic or other hard materials, and when possible move/place materials with a crane or excavator rather than by dumping. This restriction does not apply to the dumping of excavated or imported backfill material.
- Minimize the idling of heavy mobile equipment and dump trucks.