ATTACHMENT 3
STAFF REPORT FOR CUP-12-02/DR-12-04

FILE NO.: **AP-12-02 and AP-12-03**

REQUEST: **Appeal of Planning Commission decision in CUP-12-02 and CUP-12-04 denying application to expand Water Treatment Plant and install new Raw- and Finished-water transmission line**

CITY OF West Linn

22500 Salamo Road
West Linn, OR 97068

STAFF REPORT
FOR THE PLANNING COMMISSION

FILE NUMBER:	CUP-12-02/DR-12-04
HEARING DATE:	April 18, 2012
REQUEST:	Conditional Use and Class II Design Review to expand the existing City of Lake Oswego water treatment plant at 4260 Kenthorpe Way
APPROVAL CRITERIA:	Community Development Code (CDC) Chapters 11, R-10; 60, Conditional Uses; and, 55, Design Review
STAFF REPORT PREPARED BY:	Chris Kerr, Senior Planner/Zach Pelz, Associate Planner

Planning Director's Initials _____ City Engineer's Initials KQL

EXECUTIVE SUMMARY

The applicant requests Conditional Use and Design Review approval to modify, upgrade and expand the existing Lake Oswego water treatment plant (WTP) located at 4260 Kenthorpe Way. The proposed project is part of a larger, multi-jurisdictional project to increase treated water capacity for the residents in Lake Oswego and Tigard. A pipeline will be necessary to convey water to and from the WTP; however, with the exception of the lines on site, the pipeline will require a separate Conditional Use approval from the City.

The most significant features of the new plant include: a proposed new administration building, a new underground water reservoir, new settling facilities, and new treatment facilities (see the project description on page 7 for other proposed project components). To accommodate the expanded plant, the applicant proposes to increase the size of the site from 6 acres to 9.2 acres. The proposal includes sustainable development techniques, such as green street designs, permeable surfaces, green roofs, compact site design, and minimal driveways. The upgraded facility is expected to be safer and more efficient than the current one due to modernization of the operations, utilizing the latest technologies and compliance with the current codes from outside agencies.

While staff are not aware of any reports that the existing WTP has had significantly negative impacts on the neighbors, water treatment plants have the potential to adversely impact the surrounding community. Many of the potential negative impacts are mitigated by the proposed increase in site size, burying the water reservoir, and by compressing the facilities in the center of the property. This enables larger setbacks of the plant facilities from adjoining properties, enhanced buffering, and greater noise attenuation. In addition, the proposed site plan includes a public trail connection from north to south and large areas of open space that will be available to the public.

Potential impacts of concern to staff are noise (which is discussed in the Analysis Section and addressed by proposed Conditional of Approval 4), construction related impacts (see the Analysis Section and proposed Condition of Approval 2), the proposed loss of six of the 41 significant trees on site (see the Analysis Section and Finding 16), and public safety. Tualatin Valley Fire & Rescue (TVF&R) has reviewed and commented on the application and requested that during the design process, prior to issuance of building permits, that the applicant meet with them to review the type, amount, location and transport of hazardous materials so that the site may be designed to be as safe as reasonably practicable. The outcome of this work would be reflected in a Hazardous Material Management Plan (see the Analysis section and proposed Condition of Approval 3).

The applicant did not submit a plan for the operation and maintenance of stormwater facilities; this is addressed by proposed Condition of Approval 8. Also, compliance of the proposed refuse and recycling facilities with the CDC standards of cannot be determined at this time. This is addressed by see proposed Condition of Approval 11.

Staff has reviewed the applicant's proposal relative to all applicable CDC requirements (see the Approval Criteria and Findings addendum for details) and finds that there are sufficient grounds for approval, subject to the recommended Conditions of Approval (see page 19).

TABLE OF CONTENTS

Exhibits:

GENERAL INFORMATION

APPLICANT:	Lake Oswego-Tigard Water Supply Partnership Eric Day 4101 Kruse Way Lake Oswego, OR 97035
APPLICANTS/ REPRESENTATIVES:	Joel Komarek City of Lake Oswego 4101 Kruse Way Lake Oswego, OR 97035
PROPERTY OWNER:	City of Lake Oswego PO Box 369 Lake Oswego, OR 97034
SITE LOCATION:	4260 Kenthorpe Way
LEGAL DESCRIPTION:	Clackamas County Assessor's Map 2-1E-24BD, tax lots 00300, 00401, 01200, 01300, 01400, and 01500
SITE SIZE:	9.24 acres
ZONING:	R-10, Single-family Residential Detached
COMP PLAN DESIGNATION:	Low-density Residential
120-DAY PERIOD:	The application was deemed complete on February 21, 2012. The 120-day maximum application-processing period ends June 20, 2012.
PUBLIC NOTICE:	Public notice was mailed to the Robinwood Neighborhood Association and to affected property owners on March 29, 2012. The property was posted with a sign on April 6, 2012. In addition, the application has been posted on the City's website and was published in the West Linn Tidings on April 5, 2012. The notice requirements have been satisfied.

BACKGROUND

In an effort to develop a sustainable and cost effective supply of clean drinking water for their residents, the Cities of Lake Oswego and Tigard entered into a partnership to jointly construct, store and supply water. The Lake Oswego/Tigard Water Partnership (LOTWP) proposes a system of facility upgrades and new facilities that would begin in Gladstone on the Clackamas River, connect with the Lake Oswego Water Treatment Plant (WTP) in West Linn and pump treated water to Lake Oswego and then Tigard. In addition to providing water to Lake

Oswego and Tigard, the system would implement a critical component of the City's approved Water Master Plan by increasing the backup or emergency water supply when a need arises.

The applicant's current request is for the proposed modifications to the WTP in West Linn. The pipelines necessary to convey water to the WTP and on to Lake Oswego will be the subject of a separate application.

Previous approvals. The WTP has occupied the subject site since 1967. Since then, the City of Lake Oswego has received approval from the City of West Linn for five modifications to the facility:

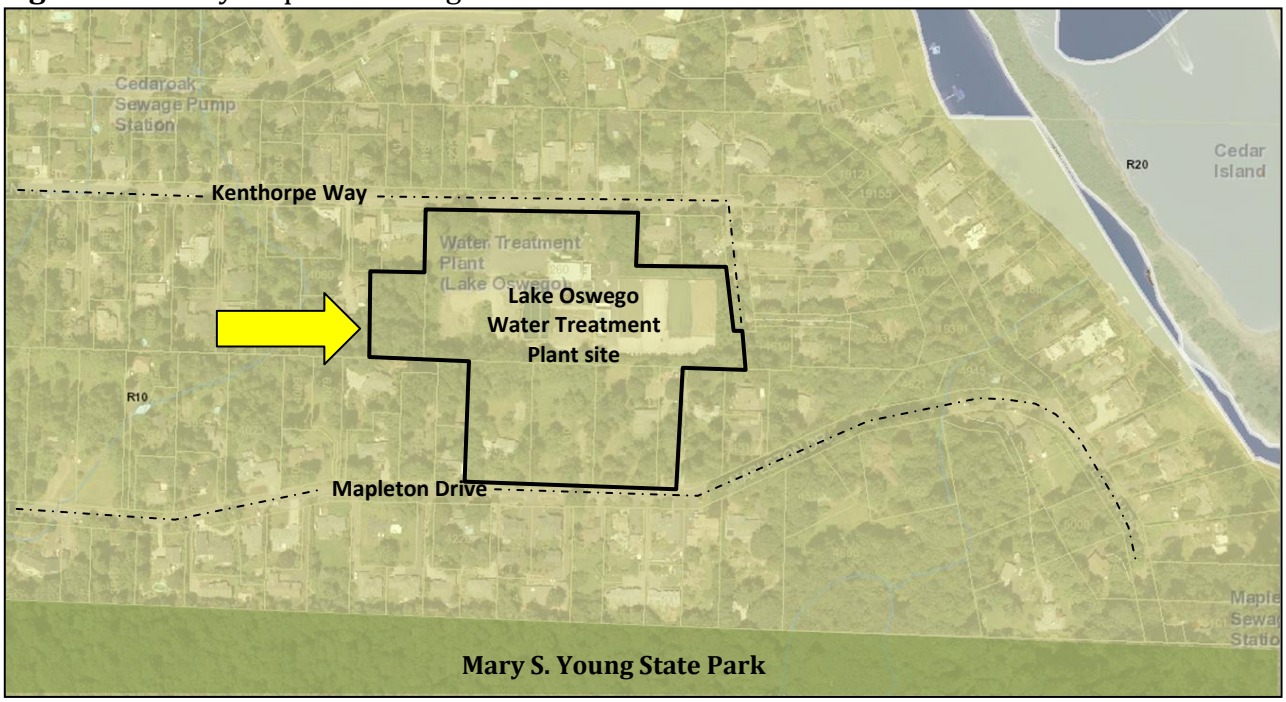
- 1980: The City approved a Conditional Use and Design Review application for WTP expansion consisting of an additional sediment basin, two mixed media filters and a new service pump. Through this approval, the plant's capacity increased from 10 to 16 million gallons per day (MGD). (See Exhibit PC-3, Section 4, page 8).
- 1988: The City approved a Conditional Use and Design Review application to allow construction of on-site drying beds.
- 1996: The Planning Commission approved a Conditional Use and Design Review application for remodeling and updating the WTP. The City Council upheld the decision on appeal. The approved modifications included: installing a sodium hypochlorite facility inside the existing operations building; improving chemical feed systems to reduce corrosion in pipes and household plumbing; improving residuals with more on-site recycling of process water; and, reinforcing and remodeling the existing building to ensure seismic and ADA compliance.
- 1997: The Planning Director approved a 6-month extension of the previous Conditional Use approval.
- 2011: The Planning Director approved a lot line adjustment to consolidate Lake Oswego owned lots at the WTP site into a single parcel (which has not been completed to date).

Good neighbor Plan (GNP). The applicant has worked with members of the Robinwood Neighborhood Association (RNA) and others over a 20-month period (April 2010 to December 2011) to develop a GNP to guide facility and site design, construction and operation. This entailed:

- Presentations and discussions at regular monthly meetings of the RNA;
- Open houses and tours of the treatment plant;
- Three planning workshops;
- Two surveys of neighbors and property owners;
- A tour of the Wilsonville water treatment plant for the RNA;
- Consultations with the City of West Linn (City Council presentation, City Managers' meeting presentation, Utility Advisory Board, and Parks and Recreation Advisory Board);
- Design team member "backyard visits" with 14 treatment plant neighbors;
- A design open house; and
- A meeting with the RNA to present the project proposal as required by the CDC.

Surrounding Land Use and Zoning: As shown of Figure 1 below, the subject property lies within the R-10 zoning district. Residential uses surround the site and Mary S. Young State Park lies approximately .1 mile to the south (see Table 1).

Figure 1 Vicinity Map and Zoning



Source: **West Linn GIS, 2011**

Table 1 Surrounding Land Use and Zoning

DIRECTION FROM SITE	LAND USE	ZONING
North	Single-family residential, Cedar Oak Primary School	R-10
East	Single-family residential	R-10, R-20
South	Single-family residential, Mary S. Young State Park	R-10
West	Single-family residential	R-10

Site Conditions:

The site contains the WTP including an operations building, filters, a sediment drying pad, a sedimentation basin, solids lagoons, a CO2 storage tank, a lime saturator and lime silo, and a parking lot accessed off of Kenthorpe Way. There are also two residences in the southern portion of the site accessed off of Mapleton Drive (see Exhibit PC-3, Section 21, Figures 1.1 and 2.0, Site Analysis Vicinity Map). There are many trees on site, including 41 significant trees or tree clusters (as determined by the City Arborist) (see Exhibit PC-3, Section 21, Figures 2.5-2.8 and 6.0). The topography of the site is relatively flat, with a gradient of less than two percent from west to east.

Project Description:

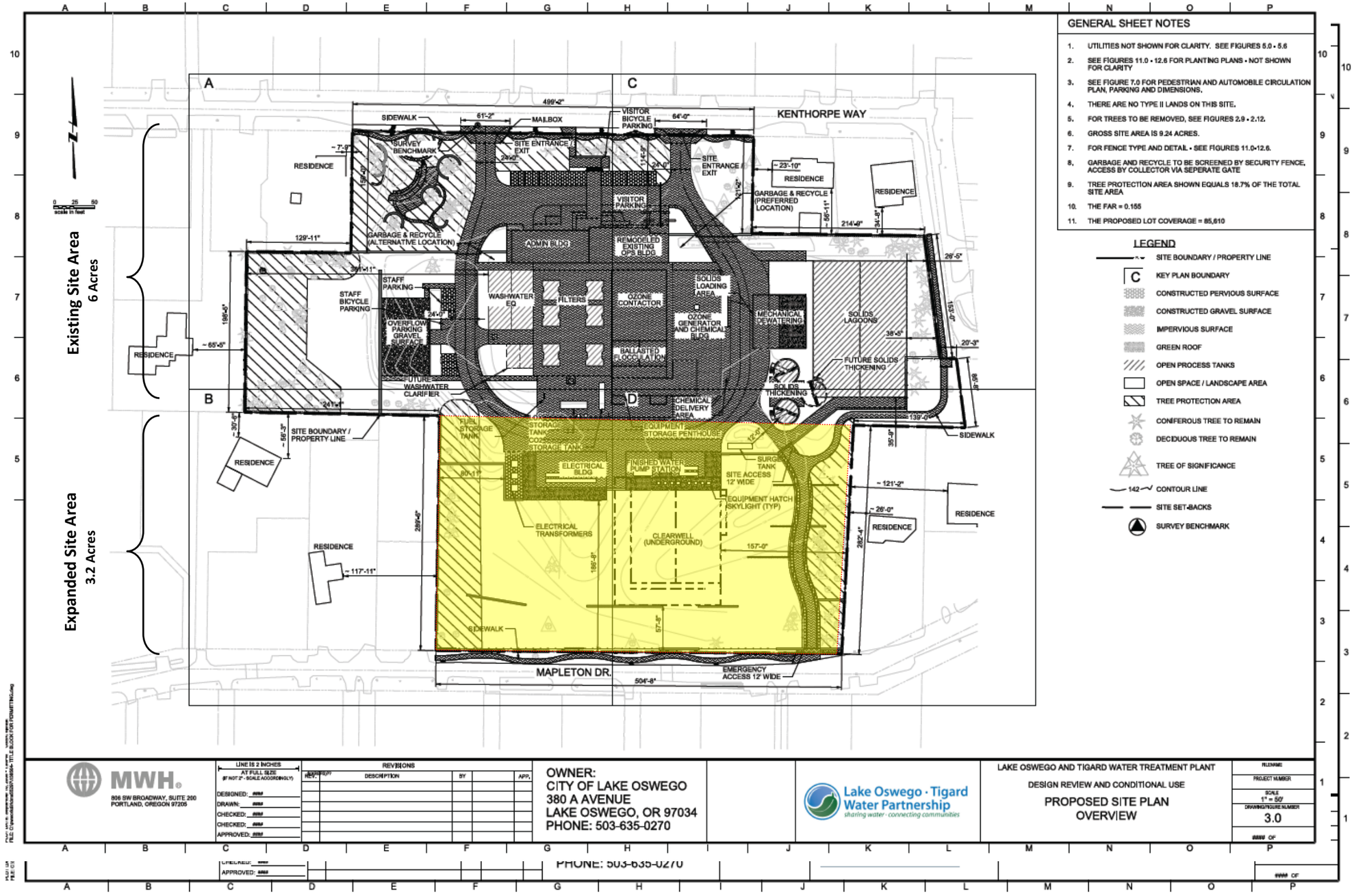
The applicant requests approval to upgrade and expand their current WTP as part of a much larger, far reaching project to increase treated water capacity for the residents in Lake Oswego and Tigard. The expanded WTP would receive untreated water from the Clackamas River via a new raw water pipeline beneath the Willamette River from Gladstone to West Linn. Treated water would be sent through a pipeline from the WTP through West Linn to a proposed reservoir in Lake Oswego. A portion of the water would then be pumped to Tigard. (The new pipelines are not subject to this application except for the segments on the subject site). The primary site access will be off of Kenthorpe Way with an emergency access off of Mapleton Drive.

The applicant requests approval of the items listed below. Please see Figure 2 and Exhibit PC-3, Section 23, figures 3.0-3.4 for more detail on the proposed location of these facilities. Also see the elevation drawings, Exhibit PC-3, Section 21, figures 10.0-10.8 and Exhibit PC-3, Section 23, Figure 10.2.

1. Expanding the site size from 6 acres to 9.2 acres (see illustration in Figure 2 below);
2. A new administration building and modifications to the existing operations building (see Figure 2 below);
3. New raw water settling facilities;
4. Replacement of six existing filters;
5. The addition of ozone contact facilities;
6. A new 3 million gallon underground water storage reservoir (clearwell) with an above ground indoor water pump station;
7. New solids handling systems – solids thickeners and mechanical dewatering;
8. New chemical storage and feed systems;
9. New washwater handling systems;
10. Addition of second PGE power supply;
11. New finished and raw water pipes on the WTP site (see Exhibit PC-3, Section 21, figure 5);
12. Vehicle and bicycle parking;
13. Relocated fuel storage tank;
14. A backup generator that will be installed indoors to replace a larger existing emergency backup generator;
15. The existing high service pump station and roof mounted fans and the CO2 storage tank and associated compressor will be replaced and relocated, respectively, with appropriate noise attenuation features;
16. Liquid Oxygen tank;
17. Stormwater facilities;
18. Landscaping (see Exhibit PC-3, Section 23, Figures 12.1-12.4);
19. Site grading (see Exhibit PC-3, Section 21, figures 4-4.4) and removal of trees to accommodate the proposed facilities (Exhibit PC-3, Section 22, Tree Area);
20. Installation of site lighting (see Exhibit PC-3, Section 23, figure 5.5);
18. Construction of a pedestrian walkway along the eastern side of the site linking to a new emergency access off of Mapleton Drive (See Figure 2 and Exhibit PC-3, Section 23, Figure3.0);
21. A garbage and recycling area; and

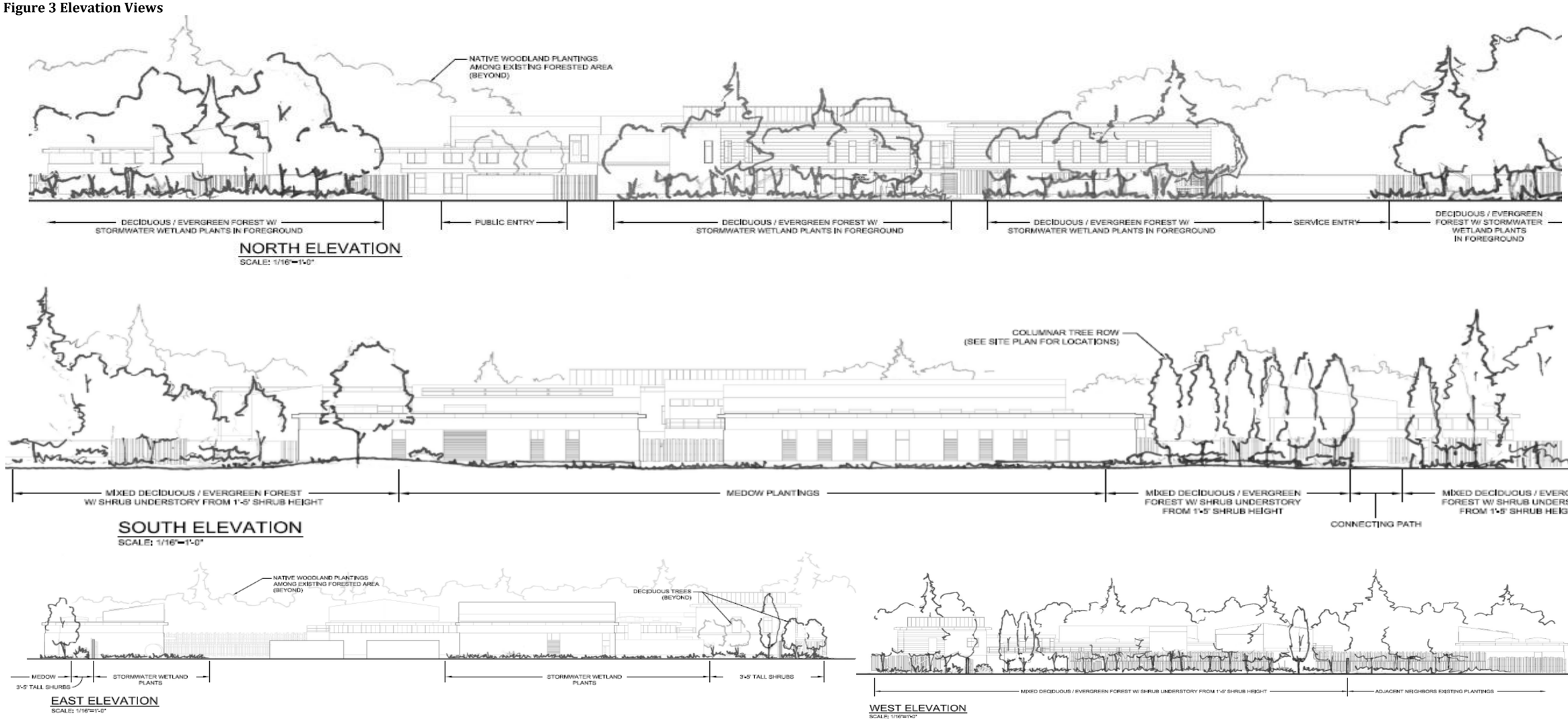
22. Frontage improvements along Kenthorpe Way and Mapleton Dr. (Exhibit PC-3, Section 23, figures 3.0-3.4).

Figure 2 Proposed redevelopment site plan (Exhibit PC-3, Section 23, Figure 3.0)



Source: Applicant's Submittal, Exhibit PC-3, Section 23

Figure 3 Elevation Views



Source: Applicant submittal, 2012

APPROVAL CRITERIA AND ANALYSIS

As previously noted, the applicant is proposing to upgrade and expand the WTP located at 4260 Kenthorpe Way. Chapter 2 of the CDC defines major utilities as:

> *"A utility which may have a significant impact on the surrounding uses or the community in terms of generating traffic or creating noise or visual effects and includes utility, substation, pump station, water storage tank, sewer plant, or other similar use essential for the proper function of the community."*

Major utilities, such as the WTP are allowed as conditional uses in the R-10 zoning district pursuant to CDC Section 11.060. An expansion of a conditional use requires a new approval per CDC sections 60.030(B), 60.050(B), and 60.070(B):

> *"Any change in the conditional use plan or conditions of approval shall require a new application and hearing pursuant to the provisions set forth in this chapter and CDC 99.120(B)."*

Further, an approved conditional use or an enlargement or alteration of an existing conditional use is subject to the provisions in CDC Chapter 55 (per CDC sections 60.070(B) and 60.030(B)).

As stated in the background section, the proposed WTP expansion would be part of an expanded regional water treatment and distribution system that begins in Gladstone and ends in Tigard. While the primary functions of the plant will remain the same, the applicant is proposing significant upgrades that represent a nearly complete redevelopment of the property. This proposal would ultimately expand the plant's water treatment capacity from 16 mgd (million gallons per day) to 38 mgd. The most significant features of the new plant include: a new administration building, a new underground water reservoir, new settling facilities, and new treatment facilities (see project description for other proposed project components). To accommodate the expanded plant, the applicant proposes to increase the site size from 6 acres to 9.2 acres. Construction of the project is expected to take between 24 and 36 months to complete.

By increasing the site size, burying the water reservoir, and by compressing the facility in the center of the property, the proposed site plan provides larger setbacks from adjoining properties, enhanced buffering, greater noise attenuation, a public trail connection from north to south, and large areas of open space that will be available to the public. The proposal includes sustainable development techniques, such as green street designs, permeable surfaces, green roofs, compact site design, and minimal driveways. The upgraded facility is expected to be safer and more efficient than the current one due to modernization of the operations, utilizing the latest technologies and compliance with the current codes from outside agencies.

While there is general agreement that, for over 40 years, the WTP has not significantly impacted its neighbors, major water plants have potential to impact the surrounding community. Identified potential impacts must be successfully mitigated in order to be permitted under the CDC's Conditional Use criteria. The following section addresses potential impacts that have been raised to date.

KEY CONCERNS

In response to issues raised by staff and community, the applicant prepared a detailed response to several key concerns associated with this project. The following reflects the applicant's responses. Additional details can be found in the narrative provided by the applicant (see Exhibit PC-3, Section 4) and in the Approval Criteria and Findings addendum.

Transportation. The WTP site generates traffic by a combination of employee commutes, operations and maintenance trips, and deliveries. Currently, the plant has 8.25 full time equivalent employees: a plant manager, six plant operators, and one part-time 'on call' operator. Typically, the plant is staffed from 5:00 AM to midnight every day from September through May and from 5:00 AM to 1:00 AM, June through August. Employees work four 10-hour shifts per week.

Currently, WTP activity generates approximately 14 to 15 Average Daily Trips (ADTs). See Exhibit PC-3, Section 10, Vehicle Trip Generation. Chemical delivery and sludge de-watering and removal accounts for approximately 0.38 ADTs, or less than 3% of all ADTs. Chemical deliveries occur during normal business hours (8:00 AM – 5:00 PM) and do not occur on weekends, except in an emergency. On average, one chemical delivery truck drives to and from the WTP each week. Additional vehicle trips to and from the WTP include delivery of chemicals and other materials, on-site maintenance of electronics, elevator maintenance, HVAC maintenance, school visits, and miscellaneous trips. The WTP manager calculates that this activity generates approximately 2 additional ADTs.

The upgraded WTP is expected to generate 16 to 17 employee-commute ADTs. This is an increase of approximately 4 employee-commute ADTs above current levels. Chemical delivery and sludge removal at the upgraded WTP will generate approximately 0.7 ADTs, a 0.32 ADT increase over present operations, or less than 2% of the projected WTP generated traffic. The total projected daily traffic is approximately 19 ADTs. This is an increase of approximately 4 ADTs over present observed levels. However, if the two houses along Mapleton Drive are 'absorbed' into the WTP site and no longer function as dwellings, the estimated 10 ADTs otherwise generated from those houses would result in a net decrease of 16 ADTs as a result of the proposal.

Also, the total anticipated ADTs for the plant are significantly less than the ADTs that would be expected to be generated by a single-family development on the same parcel. The 9.24 acre site is zoned R-10 and could be subdivided to yield an estimated 28 single-family homes. Assuming each home would generate 10 ADTs, the potential subdivision would generate 280 ADTs, or more than 14 times as many trips as the proposed WTP. The WTP-related truck trips that occur each week may be comparable to the number of truck trips, such as garbage collection, package delivery and service truck trips, which a 28-unit single-family subdivision might create or which occur in the RNA neighborhood today.

Although the WTP-related trips include a low level of truck traffic that differs in character from the trips generated by the surrounding neighborhood, total trips generated by the WTP at current and proposed capacity will not constitute a significant impact on the neighborhood.

The vehicle and heavy truck traffic required during construction could, however, adversely impact the neighborhood. Consequently, staff requested, and the applicant provided, a detailed Construction Management Plan (described in greater detail below) in addition to the

Good Neighbor Plan which address employee parking (off-site), construction traffic access management, truck wash areas, equipment storage areas, and a 24-hours a day/7 days a week construction hotline to address complaints. Implementation of these plans will be required of the applicant throughout construction.

Circulation. The circulation hierarchy of the site starts with the main loop road serving operations vehicles and equipment coming in and out of the plant via Kenthorpe Way on a daily basis. Secondary vehicular and pedestrian routes are designed to avoid conflict with this loop and create an easy, logical pedestrian movement in and out of the plant buildings. Pedestrian routes in both the public and private areas are clearly delineated using indicative materials, surface treatments, and signage limited to certain key locations and building facades. In the plant's accessible areas, the design provides opportunities for walking as well as rest, in the form of trails and small-scale seating areas on the Mapleton side of the property, where much of the area will remain forested or be planted, a pedestrian trail makes access to Kenthorpe and nearby schools and parks more convenient.

Emergency access has been provided consistent with the recommendation from TVFR, with a new second emergency access route doubling as a pedestrian trail. This new accessway will be closed to daily vehicular traffic but it will serve as a vital accessway into the WTP facility in case Kenthorpe Way is closed, and vice versa.

Frontage improvements. West Linn requires the construction of frontage improvements, including drive lane widths and sidewalks. To meet this standard, the WTP site will include sidewalks on both the Kenthorpe Way and Mapleton Drive frontages as well as a pedestrian connection between Kenthorpe Way and Mapleton Drive. See Exhibit PC-3, Section 23, figures 3.0B-C for cross section of the proposed right-of-way improvements. This is addressed by recommended Condition of Approval 16.

Staff requested several frontage improvement measures from the applicant that are consistent with City codes and which are contextually sensitive with the surrounding environment. These include providing 'green street' improvements along both rights-of-way, substituting pedestrian- scaled lighting rather than large, unnecessary street lights, meandering sidewalks to preserve existing trees, and not requiring dedication of right-of-way or pavement widening along either street.

Noise. The proposed WTP is expected to satisfy the City's noise limitation standards. The current WTP meets all applicable local and state noise standards, and the proposed updated WTP will meet noise standards through a range of mitigation measures. ENVIRON International Corporation completed an assessment of the current and potential future operational sound levels at five locations along the perimeter of the WTP site (Exhibit PC-3, Section 11, page 5). They identified the regulatory noise limits applicable to operation of the WTP, and analyzed the results of sound level measurements taken near both the existing WTP and the Willamette River Water Treatment Plant(WRWTP) in Wilsonville, Oregon (this facility was used for comparison because the water processes it employs were designed by the engineering team working on the WTP and are very similar to those proposed for the WTP), as well as the methods and conclusions of the noise assessment of the proposed updated WTP. See Exhibit PC-3, Section 11, Noise Analysis.

Chapter 5.487 of the West Linn Municipal Code (WLMC 5.487) defines noises that are considered a nuisance, such as noise from dogs and amplified music. Both these subjective

nuisance-based noise standards and the quantitative noise standards contained in Oregon Administrative Rules (OAR) 340-035 apply to this project.

Noise from traffic on public roads and construction activities is exempt from the noise regulations (per OAR 340-035-0035(5)). However, the City's nuisance code restricts construction to the hours between 7 AM to 7 PM Monday through Friday and 9 AM to 5 PM weekends and holidays (WLMC Subsection 5.487(B)(4)). With regards to potential noise impacts from ongoing operations, CDC Section 55.110(B)(11) requires a determination of existing ambient sound levels for proposed land uses that may generate noise. Therefore, ENVIRON measured existing sound levels at locations representing residences near the existing and proposed updated WTP.

The sound level measurements of typical daytime operations at the existing WTP easily complied with the state's daytime noise limit of 55 dBA at each of the measurement locations. Because the sound levels of the typical operations at the WTP and WRWTP easily complied with the daytime noise limits at nearby locations, the sound levels of typical operations at the upgraded WTP should also meet the daytime noise limit of 55 dBA.

ENVIRON compared the sound levels measured during daytime operations at both the existing WTP and the WRWTP to the state's nighttime noise limits. The measured sound levels of the typical operations at the existing WTP comply with the nighttime noise limit of 50 dBA. However, ENVIRON was not able to reach a definitive conclusion regarding nighttime compliance at the WRWTP based on the available measurement data, due to non-plant related noise generated by the architectural water feature along the west side of the WRWTP and a gravel producing operation to the east. Consequently, ENVIRON recommends consideration of one or more of the following noise mitigation techniques and practices during final WTP design (see also Condition of Approval 4):

- Installation of noise source equipment indoors, when feasible;
- Use of appropriate noise attenuation features on buildings, including acoustical louvers on air intakes/outlets and silencers on exhaust stacks;
- Use of appropriate noise attenuation features such as acoustical enclosures or barriers, pipe lagging around noisy pipes or ducts for equipment installed outside; and
- Selection of quieted equipment, particularly for HVAC systems.

With careful design and implementation of noise mitigation measures, noise levels from typical, ongoing plant operations are expected to comply with the nighttime noise limits. In addition to typical continuous operations, ENVIRON considered potential future sound levels associated with the intermittent on-site operations described previously. The sludge pond operations, lime silo vibratory system, and lime building blower are not expected to be required with the proposed WTP. Similarly, a smaller backup generator that will be installed indoors will replace the existing emergency backup generator. The existing high service pump station and roof mounted fans and the CO2 storage tank and associated compressor will be replaced and relocated, respectively, with appropriate noise attenuation features incorporated into these plant modifications.

Therefore, ENVIRON concluded that the only remaining intermittent operation of concern that will persist for the proposed WTP is truck mounted equipment associated with periodic chemical delivery unloading and weekly garbage pickup.

To meet the daytime noise limits at all property boundaries and thereby remedy this remaining concern, ENVIRON recommended the use of "plant air" (i.e., compressors installed inside a plant building) in lieu of truck-mounted compressors to eliminate the excessive noise associated with chemical unloading. Additionally, chemical unloading should be restricted to daytime hours only (this is addressed by proposed Condition of Approval 4).

ENVIRON recommends that the design considerations for intermittent noisy activities should include the following:

- Installation of backup generator indoors
- Use of "plant" air for chemical unloading operations.

Most of the existing exterior noise-producing intermittent activities will be eliminated or are expected to be far enough from neighboring properties to comply with both the daytime and nighttime noise limits. Based on this analysis, ENVIRON concluded that the upgraded WTP should comply with all daytime noise limits established by OAR 340-035.

Staff recommends Condition of Approval 4, based on the recommendations of the acoustical engineer; these include the ENVIRON Noise Mitigation recommendations and a post-construction noise analysis to document that noise limits have been met.

Visual Impacts. Chapter 55, Class II Design Review, requires the applicant to demonstrate that a proposed conditional use is functionally and physically integrated into the neighborhood in which it will be located (see findings 4-6 for details). The applicant reports that the landscaping, site design, and architecture of the proposed WTP are designed to minimize adverse visual impacts while maintaining the functionality of the WTP. The WTP has been a significant feature within the neighborhood for more than 40 years. The intent of Design Review is to analyze how the proposed changes will ensure that the proposed WTP remains compatible with the neighborhood.

According to the applicant, the question that designers and neighbors worked to address was "How does one mitigate potential impacts in a way that is both functional and aesthetically pleasing?" For example, it may be functionally desirable to open up the site layout to allow for easier access between buildings and operations, but the consequence of doing so may create adverse aesthetic impacts, which would negatively affect neighborhood livability. On the other hand, complete screening of the WTP to eliminate visual impacts is not possible considering the need for daily and emergency access. A balance is required.

Due to the industrial nature of the uses and buildings, the applicant centered as many buildings as possible in the interior of the site and proposed "landscape layering" and other screening to minimize the appearance of the plant. The idea of landscape layering is to establish a variety of attractive screens and filters that soften the presence of the WTP for the community, and maintaining an overall transparency and cohesiveness while avoiding disconnectedness or an alien appearance. One specific example of this concept is the proposed approach to fencing. Taller security fencing is proposed to be subdued behind layers of vegetation within the core WTP area, distant from street view. The street edges along Kenthorpe Way and Mapleton Drive are proposed to be delineated by split-rail fencing and good neighbor fencing which contribute to a residential neighborhood character. In addition to fencing, other layers that subtly screen and secure the site are the preserved woodland edges, vegetated stormwater facilities, and the buildings themselves, which create a continuous façade shielding the most intensive plant operations from view.

The landscape design's planting concept follows a sustainable approach which promotes the use of native species which are adapted to the Northwest climate and do not require significant irrigation, maintenance, or spraying. There are six different planting types being proposed: Woodland with native trees and understory planting; Meadow with native grasses, perennials and wildflowers; Orchard with flowering non-fruiting accent trees and understory; Rain Garden, where stormwater runoff will be treated and detained in depressed wetland-like planted swales and basins; and Green-roof, where native meadow plantings will be re-applied to roof surfaces with other drought tolerant succulents. According to the applicant, the proposed site plan reflects a collaborative effort to balance the most viable engineering concepts with greatest realization possible of the neighborhood goals for visual presence. Summarized site strategies, developed with neighborhood involvement, are as follows:

- Maintain the north edge of the property as the front door and public entry: this keeps the southern edge of the property along Mapleton Drive free from new WTP circulation patterns, thus maintaining the buffer created by the current distance from the plant's south edge.
- Centralize the plant layout: Several space-saving alternatives have resulted in a much smaller plant footprint. With this configuration, the site layout provides for setbacks from the south, east, and west that significantly exceed requirements. This aspect of the design allows landscaping and distance to be maintained as the primary buffers.
- Screen the internal plant activity with building edges, walls, and artful screening elements which tie the architectural design and the landscape design together. Buildings placed on the WTP edge will be designed to integrate into the residential context using materials, color, orientation, form, and proportion. Site-specific constructed screens will also be employed to mitigate views. These will be comprised of vertically oriented reclaimed wood slats on timber or steel frames, tying into the semi-wooded nature of the site. Lastly, low walls in the landscape, inspired by dry-stacked rubble walls typical of a farm or orchard inferred by the fruit trees that are now growing on site, will reinforce the site's semi-rural character and draw the viewer's eye towards the foreground. Together with the buffers of distance and landscape, these landscape and architectural elements will serve as visual mitigation.

Architecture. The applicant states that the proposed architectural design is intended to reflect the building materials articulation, scale, and forms that occur in the neighborhood. The neighborhood is primarily made up of single-story ranch-style homes, most of which were constructed in the 1960s. Predominant roof forms found throughout the neighborhood tend to be low slope shed roofs and gable roofs, as well as a few flat roofs, and the predominant cladding is lapped siding or vertical board and batten wood siding. Many of these ranch-style homes sit with their broad side facing the street, with their long, low pitched roof forms overhanging facades with lap siding, ultimately displaying a common pattern of horizontality. This horizontality is proposed to be carried throughout the design of the plant.

The primary materials for building facades are proposed to be brick and horizontally articulated metal siding. Light colored composite panels and wood are secondary materials for elements like soffits, accents, and screens. New process buildings on the edge of the plant include the Electrical Building, the Finished Water Pump Station (FWPS), and the Mechanical Dewatering Building. Process buildings on the interior of the plant such as the Chemical Building will also employ these design elements, though in modified form.

The proposed natural earth-toned brick atop a cast in place concrete stem wall rising from the landscape to a height of 12 to 16 feet is proportional to the residential scale. These walls will be long and low, with windows and louvers appropriately placed to break up the form and activate the edge. Above the brick will be a recessed frieze, clad in a light colored composite panel material. The predominant roof form is proposed as a long plane that is topped with a garden roof system helping to integrate the buildings with the landscape below. These buildings will be articulated by shed roof forms; these volumes are essentially mechanical penthouses to keep all of the equipment indoors, out of view, acoustically isolated, and weather protected. These penthouses will be pushed to the far interior side of the process building and be constructed with shed roofs sloping to a high side towards the plant interior. They will be dark, allowing the form to recede from view.

The face of the WTP to visitors will be the façade created by the Administration and Operations Buildings. This complex will be both a professional work environment and a reception and education area. The renovation of the existing Operations Building and construction of the new adjoining Administration Building creates the visual effect of one building. Though still buffered from Kenthorpe Way by landscape design and setback distance, the new façade will face the community. A new main entrance will be designed where the new addition is joined with the renovated existing building. Its materiality will draw from the same palette of materials as described for the process buildings, and it will take similar cues from the neighborhood context in terms of form and horizontality, but more so than the other buildings on the site, it will be designed to be outward-facing and inviting. Together with wide buffers, these site design, landscape, and architectural elements will serve as visual mitigation.

Significant Trees. The WTP site includes a variety of trees including significant trees. Most noteworthy are the mature Oregon White Oaks, Western Red Cedars, and Giant Sequoias, as well as exotics including American Sweetgum, Deodar Cedar, Red Oak, and Spruce. Remnant orchards of apple and cherry are found on the southern side of the site.

Trees are regulated by CDC 55.090(B)(1) &(2), CDC 54, WLMC 8.500 (West Linn Community Tree Ordinance. No. 1503), WLMC 8.610-8.620 (Tree Removal Permit), WLMC 8.710.798 (Heritage Trees) and the "West Linn Tree Technical Manual". The WTP site does not contain any Heritage Trees, but the City Arborist identified 41 significant trees or significant tree clusters on-site (See Exhibit PC-3, Section 22, Tree Area). The proposed site development would entail removal of up to six significant trees, the loss of which would be mitigated. The combined Diameter-at-Breast-Height (DBH) for these trees is 182 inches. Based on the 182 inches of significant tree DBH removal, mitigation would require 182 inches of DBH replacement. The project proposes to achieve this mitigation by planting 91 sapling trees at 2-inch caliper for a total of 182 inches. In addition to the 91 trees needed for significant tree mitigation, an additional 217 trees will also be planted. This will result in a total of approximately 308 trees being planted on-site. The applicant proposes to remove exotic species where appropriate and return the site, to the greatest extent possible, to a native Northwest environment.

Public Safety. Key safety concerns have centered on construction safety, pedestrian and vehicle safety, hazardous materials, and emergency response. The site can be divided into three zones: the "unsecured" zone along Kenthorpe Way, the secure plant zone, and the "unsecured" zone along Mapleton Drive. While preserving the screen of trees along Kenthorpe Way, a small water feature, meandering pathways, seating niches, and a secluded

rain garden are integrated into this public zone. By placing occupied spaces along the plant perimeter, both public and plant safety is reinforced.

To date, the applicant has implemented a full suite of measures that have prevented safety problems. In over 40 years of operations, staff is not aware of any safety violations or safety related complaints from Tualatin Valley Fire & Rescue (TVF&R), the City, State, Federal agencies, or neighbors. The applicant proposes further measures to minimize any safety risks associated with the proposed WTP during construction and future operations.

In 1996, neighbors raised questions concerning vehicle traffic along Kenthorpe Way and plant safety, in particular the use of chemicals to process and purify water. To address pedestrian and vehicle safety concerns along Kenthorpe Way, Lake Oswego implemented a construction management plan to guide the 1996 approved upgrade to the WTP. There were no reported significant conflicts between neighborhood pedestrians and drivers during the construction period. Similarly, since the 1996 construction phase ended, there have been no reported significant conflicts involving trucks delivering materials to the WTP and local vehicular or pedestrian traffic.

The applicant prepared a Hazard Materials Management Plan (HMMP), consistent with the Oregon Fire Code and with state law in 1996. The WTP operators have implemented the HMMP and procedures are closely coordinated with the local emergency responders: Tualatin Valley Fire & Rescue (TVFR) and West Linn Police Department. Consequently, there have been no significant safety violations involving hazardous materials. There is no use or storage of chlorine gas on-site. The WTP's drinking water disinfection process was converted years ago to use a liquid sodium hypochlorite (bleach) solution rather than chlorine gas. TVFR inspects the plant facilities at least annually. In event of an emergency, the noted emergency responders would initiate communications with plant neighbors.

The applicant has prepared a Hazard Materials Inventory Statement (HMIS) for the proposed plant that includes but is not limited to: product name, amount, type of location (above ground, below ground, in a building etc.), container sizes, and, amount in use (closed & open systems). See Exhibit PC-3, Section 18.

TVFR advised the applicant that it is more appropriate to discuss and consider hazardous materials during the design process rather than the preliminary phase of design and land use review. During the design process, prior to issuance of building permits, TVFR requests that the applicant meet with them to review the type, amount, location and transport of hazardous materials so that the site may be designed to be as safe as is reasonably practicable. This would yield an updated Hazardous Materials Management Plan (see recommended Condition of Approval 3).

In addition to meeting the requirements of the Oregon Fire Code and the West Linn Building Department, WTP staff will implement the following neighborhood communication strategies:

- Treatment plant staff will continue to provide information and answer neighbors' questions about chemicals used and stored on-site, and transported through the neighborhood.
- The HMIS and HMMP will be available at the WTP for review and inspection by the public during the normal business hours of 8 AM to 5 PM.
- An open house/tour at the treatment plant will be held once or twice per year.

- Neighbors will be informed about the pertinent plant activities through community meetings, website and email updates, mailings and presentations at Robinwood Neighborhood Association meetings. With the proposed additional safety measures for construction, vehicle safety, emergency access, and hazardous materials, the applicant believes that it has proposed an appropriate response to reasonable West Linn and neighborhood concerns regarding public safety during construction and during future WTP operations.

The WTP is an "essential facility" (*buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind snow, or earthquakes,* Oregon Structural Specialty Code 1606). As such, the WTP must be designed to meet site specific seismic conditions. While a final site specific seismic analysis will be required during the building permit phase of this project, the Planning Director requested a preliminary geotechnical investigation to better understand the potential for hazards at this site.

The Draft Geotechnical Engineering Report (Exhibit PC-3, Section 17) identifies the key geotechnical issue at the site as seismic liquefaction of the saturated silty sand deposit during the modeled earthquake events; a condition which is consistent with other 'High Zone A' seismic sites in the region. Other key geotechnical issues include increased lateral and uplift pressure and complex shoring required to construct and demolish structures while maintaining continuous plant operations.

The Draft Geotechnical report recommends auger-cast piles as the preferred liquefaction mitigation and foundation supporting elements for water holding main treatment structures. Additional seismic mitigation details are proposed during the building permit phase of the project. See Condition of Approval 15.

Construction Management. Construction of the upgraded treatment plant is proposed to occur during the 2013 through 2015 timeframe with the heaviest construction activity occurring over an estimated 26 month period; June 2013 through July 2015. Mitigating the potential impacts of construction on the neighborhood is a concern. The applicant provided a preliminary Construction Management Plan (CMP). See Exhibit PC-3, Section 23, Construction Management Plan. The applicant states that they will refine the CMP through the final design phase and will require the contractor to meet all requirements of the CMP and all public safety requirements. The CMP includes the provisions described below:

- Traffic control/safety: This plan will include haul routes and details for establishment of temporary traffic control changes and signage in compliance with City requirements and the Manual on Uniform Traffic Control Devices
- Neighborhood safety: Only materials directly related to construction activities will be permitted on site. Use, transport and storage of hazardous materials will be minimized and quantities will not exceed consumer levels. On site fuel transfer will be limited to designated construction staging areas and construction equipment will be stored in these staging areas overnight. Typically, the contractor will not store fuel, oil, or other hazardous materials on site but will bring fuel to the site via maintenance vehicles on a daily basis.
- Public street access maintenance: Access to private properties along Kenthorpe Way and Mapleton Drive will be maintained throughout the construction period, with few

exceptions. When the need for temporary interruptions to normal access to private properties are identified, advance notice will be provided to affected property owners in accordance with the approved traffic control and management plan and communication plan.

- Noise: Construction-related noise will meet City of West Linn noise ordinances for construction work. The Applicant anticipates work outside of the City of West Linn approved construction hours (M-F, 7am-7pm and Sat-Sun, 9am-5pm) to minimize the frequency and duration of plant outages. The Applicant will notify West Linn Public Works, City Management and the Chair of the Robinwood Neighborhood Association seven days prior to work outside of approved construction hours.
- A digital video record to document existing conditions within the public right-of-way abutting the project site. This record will establish the preconstruction condition of visible surface improvements and conditions within the public rights-of-way that abut the property boundaries of the WTP site.
- A communications plan will be developed that includes detailed information of communication means, methods, schedules and key contacts for the project. A copy of this plan will be provided to the West Linn Public Works Department, Chairs of each Neighborhood Association within West Linn and posted to the project website.

Staff believes that the impacts of this proposed plant will be minimal if it is constructed in accordance with the plans submitted as supplemented with the recommended conditions of approval. Staff has reviewed the applicant's proposal relative to all applicable CDC requirements and finds that there are sufficient grounds for approval, subject to the conditions below. Please see the Addendum, Approval Criteria and Findings, for detailed findings.

Public comments: Please see Exhibit PC-4 for public comments.

RECOMMENDATION

Staff recommends approval of the proposed project subject to the following conditions:

1. Approved plans. The project shall conform to the Site Plan, Exhibit PC-3, Section 23, Figure 3.0; the Grading Plan, Exhibit PC-3, Section 21, Figure 4.0; the Utility Plan, Exhibit PC-3, Section 21, Figure 5.0; the Lighting Plan, Exhibit PC-3, Section 23, Figure 5.5; the building elevations depicted on figures 10.0-10.8, Exhibit PC-3, Section 21 and Exhibit PC-3, Section 23, Figure 10.2; the Planting Plan, Exhibit PC-3, Section 23, Figure 12.1-12.4; the sidewalk and stormwater collection alternative, Exhibit PC-3, Section 23, Figure 3.0A; the street improvement plans, Exhibit PC-3, Section 23, Figures 3.0B and C and the Hardscape and Material Plan, Exhibit PC-3, Section 23, Figures 14.0 and 14.1, except as modified by these conditions of approval.
2. Construction Management and Good Neighbor plans. The applicant shall implement applicable provisions of the Construction Management Plan, Exhibit PC-3, Section 23 and Good Neighbor Plan, Exhibit PC-3, Section 8.
3. Hazardous Materials Management plan. Prior to issuance of building permits and approval of final construction drawings, submit to the Planning Department an updated

Hazardous Materials Management Plan for the approved WTP that has been reviewed by Tualatin Valley Fire & Rescue and satisfies all applicable regulations, including compliance with applicable state regulations governing the handling of hazardous materials.

4. Noise.

   a. The ENVIRON Noise Mitigation recommendations contained in Exhibit PC-3, Section 11 shall be implemented.

   b. Chemical unloading shall only be allowed between 7:00 AM and 7:00 PM on weekdays and 9 AM to 5 PM on weekends.

   c. The applicant shall submit a follow-up noise study to the Planning Director that is prepared by a licensed professional acoustical engineer, between three and six months after the issuance of the first certificate of occupancy, identifying whether the facility meets the noise standards in OAR 340-035. If the noise standards are not met, the applicant shall submit evidence of remedial action within 60 days that achieves compliance.

   d. Noise generating construction activities outside the hours of 7 PM to 7 AM on weekdays or 9 AM to 5 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.

   e. Reverse signal alarms shall be not permitted for construction activities outside of the hours of 7 PM to 7 AM on weekdays or 9 AM to 5 PM; spotters or other alternative methods approved by OSHA working will be required.

5. Pedestrian path. The applicant shall install a No Parking sign at the beginning of the through-site pedestrian path at both Mapleton Drive and Kenthorpe Way. (The applicant may choose any Manual on Uniform Traffic Control Devices (MUTCD) approved marking they deem appropriate for this application.)

6. Emergency access gate. The emergency access gate on Mapleton Drive shall be located 30 feet from the Mapleton Drive right-of-way line to preserve clear vision for pedestrians and bicyclists exiting the site onto Mapleton Drive.

7. Bicycle parking. Bicycle parking facilities in the visitor and employee parking areas shall provide capacity for 12 bicycles. At least three of the bicycle parking spaces shall be covered.

8. Stormwater.

   a. Prior to the issuance of a public works permit, the applicant shall submit to the City Engineer the final stormwater operations and maintenance plan pursuant to CDC Section 33.030(C).

   b. Vegetated swales along Kenthorpe Way and Mapleton Drive shall be located between the street and sidewalk except in those areas where an alternate

configuration is necessary to protect mature trees, as determined by the City Arborist in consultation with the City Engineer.

c. At time of building permit submittal, the applicant shall execute a stormwater maintenance agreement with the Public Works Department and record a public storm drainage access easement for all stormwater treatment and detention facilities located on private property.

9. Fire flow. At the time of building permit submittal, the applicant shall provide detailed fire flow calculations for each building on site that satisfy TVF&R requirements.

10. Sewage system.

a. The WTP shall not generate flows in excess of 60 GPM to the City's sanitary system, unless an analysis prepared by the applicant and approved by the City Engineer demonstrates that the City has sufficient capacity to serve the increased flow.

b. Prior to final occupancy, the applicant shall install a wastewater flow meter to allow the City to track WTP discharges into the City's sanitary sewer system. The wastewater flow meter shall be installed at a location as near as possible to the point of connection with the public sewer system and where the City staff can access it. The wastewater flow meter shall be owned and maintained by the facility owner.

11. Garbage and recycling facilities.

a. At time of building permit submittal, the applicant shall submit construction plans which demonstrate compliance with refuse and recycling standards of CDC subsections 55.100(O)(3) and (4). The applicant shall provide construction details which demonstrate that the trash containers will be located on a level Portland cement concrete pad, at least four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment. The pad shall be designed to discharge surface water runoff to avoid ponding.

b. Prior to building permit issuance, the applicant shall submit construction details as necessary to determine whether the design of garbage and recycling facilities are consistent with Metro standards.

12. Overhead utilities. Prior to building permit issuance, the applicant shall pay a fee-in-lieu of undergrounding overhead utilities along Kenthorpe Way and Mapleton Drive equal to the estimated cost of performing such work as accepted by the City Engineer.

13. Fencing. Fencing shall not exceed three feet in height within front yard setbacks.

14. Parking. Prior to the issuance of any site development permits, a specific parking plan for construction workers shall be provided to the Planning Director that identifies the location of the off-site parking location for workers, consistent with applicable City regulations. On-street vehicle parking is prohibited during construction.

15. Geotechnical Engineering Report. All methods and recommendations found in the Geotechnical Engineering Report Exhibit PC-3, Section 17, shall be implemented unless superseded by any follow-up report prepared by a civil engineer and approved by the City Engineer, consistent with applicable regulations.

16. Street Improvements.

a. The applicant shall construct street improvements in accordance with the street improvements in Exhibit PC-3, Section 23, figures 3.0-3.4.

b. A public sidewalk easement shall be recorded over all pedestrian areas specified for public use.

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 permits:

  - Signs: At time of sign permit submittal, the applicant will need to demonstrate compliance with CDC 55.100(L)(2)(3)(4) and (6). Pedestrian and vehicle circulation signs must be consistent with the travel mode and direction shown in Exhibit PC-3, Section 21, Figure 8.0.
  - Public improvement permit: contact Pat in Engineering at (503) 723-5501 or prich@westlinnoregon.gov
  - Public works permit: contact Pat in Engineering at (503) 723-5501 or prich@westlinnoregon.gov
  - On-Site Utilities: contact the Building Division at (503) 656-4211, jnomie@westlinnoregon.gov.
  - Building permit, the final permit after others are completed and conditions of approval are fulfilled. Contact the Building Division at (503) 656-4211, jnomie@westlinnoregon.gov.
  - Electrical permit: Contact Clackamas County (Electrical permits are not issued by the City of West Linn)

- Final inspection for occupancy: Call the Building Division's Inspection Line at (503) 722-5509.

ADDENDUM
APPLICABLE APPROVAL CRITERIA AND FINDINGS

Except where otherwise noted, Staff concurs with the analysis and findings provided by the applicant in their application in Exhibit PC-3, Section 4.

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.

9. *Utilities, major.*

FINDING NO. 1:
The requested water treatment plant meets the CDC definition of a major utility and therefore may be permitted in this 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 Planning Commission is the approval authority and will determine if the site area is appropriate for the proposed use pursuant to the applicable sections of CDC Chapter 60. See Findings No. 4 and 5 regarding CDC 60.070(A) and (B). Those findings support staff's determination that the site area is adequate for the proposed use.

11.090 OTHER APPLICABLE DEVELOPMENT STANDARDS

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

1. *Chapter 34, CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses.*
2. *Chapter 35 CDC, Temporary Structures and Uses.*
3. *Chapter 42 CDC, Clear Vision Areas.*
4. *Chapter 44 CDC, Fences.*
5. *Chapter 46 CDC, Off-street Parking, Loading and Reservoir Areas.*
6. *Chapter 48 CDC, Access, Egress and Circulation.*
7. *Chapter 54 CDC, Landscaping.*

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:
Findings regarding the above "Other Applicable Development Standards" are included under the associated Chapters later in this report.

CHAPTER 60, CONDITIONAL USES

60.070 APPROVAL STANDARDS AND CONDITIONS

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. 4:
Staff finds that with the larger site area proposed (from 6 acres to 9.2 acres), there is adequate area for the proposed use. Since WTP operations began over 40 years ago, the applicant has received all required land use approvals from the City and has responsibly operated a water treatment facility on the northern portion of the property, with no documented code complaints from the City or surrounding neighbors.

As part of this proposal, the applicant is proposing to expand and upgrade the facility to treat more water (from 16 mgd to 38 mgd). To accommodate the expansion, the applicant proposes to increase the size of the subject property by approximately 50 percent (from 6 acres to 9.2 acres). The overall lot coverage is proposed at 14 percent compared to the current lot coverage of 8 percent.

The proposed site plan will allow for an increase in the amount and type of buffering beyond what current exists on the property. The site plan also shows buildings and facilities which support the upgraded WTP contained within the applicant's site. Additionally, the proposal places buildings and facilities near the center of the site, away from adjacent residences. The closest point to a building or structure from the property boundaries is proposed as follows:

The applicant's site design locates noise generating facilities so as to minimize impacts to adjacent properties. Additionally, an acoustical study was provided indicating that the proposed facility will likely meet all applicable noise standards. Proposed Condition of Approval 4c would require demonstration of compliance with the noise standards after operations of the upgraded facility begin (also see Finding 10). Based on these factors, staff finds that there is adequate area for the use and the design treatments required to mitigate any adverse impacts from the use.

Also, although the setback and other dimensional requirements for uses permitted outright in the R-10 Zoning District are not applicable to this conditional use request, the applicant's proposal meets or exceeds all these standards as shown below.

Setback	Required (ft) R-10	Proposed at closest point to a building or structure (ft)
Front (Kenthorpe)	20’	114’ to Administration Building; 46 to parking lot
Side – interior	7.5’	301’ to Washwater Equalizer; 80 to Electrical Transformers
Side – Street (Kenthorpe)	15’	156’ to Mechanical Dewatering
Rear (Mapleton)	20’	200’ to Finished Water Pump Station

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

FINDING NO. 5:

Size. As described in Finding No. 1, staff finds that the size of the site is suitable for the proposed use.

Shape. The 6-parcel site is cross-shaped, which permits more immediate adjacency of off-site structures than would be permitted by a square-shaped lot. In working with the Robinwood Neighborhood Association, the applicant has proposed a consolidation of prominent structures toward the center of the site. As stated above, although the R-10 base zone setbacks are not applicable to this conditional use proposal, the applicant’s site plan meets or exceeds the setback requirements for uses permitted outright in this zone. These include the FAR, lot size, setbacks, etc. Staff finds that the shape of the property is appropriate for the proposed use.

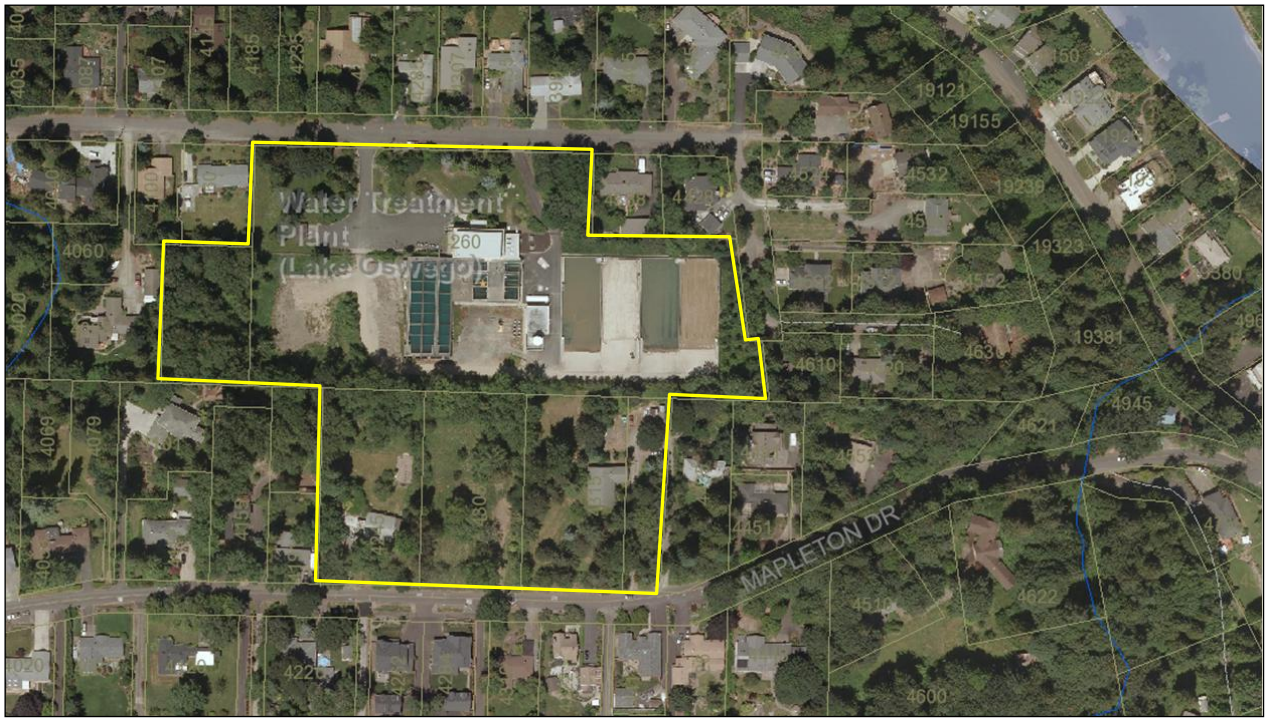
Location. The WTP has existed at this location since 1967. The WTP received approval from the City of West Linn to expand and/or upgrade in 1980, 1988, and 1996 to increase processing capacity or to modify the water treatment process. A majority of homes in the Kenthorpe Tracts Plat were built in 1973, with the average age of homes dating to 1972. A majority of homes in the Maple Grove Plat were constructed in 1955, with the average age of all homes dating to 1943. Staff is not aware of any significant negative impacts that the existing facility has had on the neighborhood.

Another important consideration about the site location is to note that the City of West Linn’s emergency inter-tie with Lake Oswego is located, and must continue to be located, on the finished water side of the WTP.

Staff finds that the location of the site remains suitable for the proposed use.

Topography. The WTP site is relatively flat with less than 2 percent slopes throughout. The WTP sits on a mid-elevation bench (approximately 130-feet above sea level) between the Willamette River and Highway 43. Staff finds that the topography of the site continues to be suitable for the proposed use.

Figure 4: Aerial image of Applicant's site



Source: West Linn GIS 2012

Natural features. The site does not contain areas identified as habitat conservation areas; significant Goal 5 riparian areas; Goal 5 wetlands; significant streams or stream corridors; heritage trees; or, Type I or II Lands. There is a small, unregulated drainage swale in the northwestern corner of the property. The site does contain 41 trees that have been deemed significant by the City Arborist. The applicant is proposing to remove 6 significant trees in order to develop the property. Staff finds the use is appropriate for the site given the lack of natural resources and the tree preservation efforts outlined later in this report.

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

FINDING NO. 6:
Staff finds that the proposal will further numerous needs of the community; the principal benefit to West Linn residents will be the implementation of the City's approved Water Master Plan which calls for improving the emergency supply capacity and reliability. The Master Plan states that:

"The City's existing emergency supply connection to Lake Oswego is interruptible and its delivery capacity is dependent on Lake Oswego's supply and demand conditions at the time of the City's need. Under peak use and high demand conditions, the actual capacity of this connection may approach zero as Lake Oswego's current maximum water demands are approaching the existing supply system's capacity. The City of Lake Oswego is currently in discussions with the City of Tigard concerning long-term-water supplies. With the Tigard/Lake Oswego emergency supply connection operational, Lake Oswego could supply

*an equal amount of water to the City through the West Linn/Lake Oswego supply connection. A preliminary review indicates that this connection may have a hydraulic capacity in excess of 6 mgd, potentially making an equal amount available to the City in an emergency event. Pursuing this option involves negotiating intergovernmental agreements (IGA) and probable participation in funding a portion of the transmission system intertie improvement. A preliminary review of potential project costs associated with this approach indicates that it has a lower cost …. Based on input from and discussions with City staff and policy makers it is recommended that Solution Approach C be pursued….**It was further directed to pursue development of reliable emergency supply capacity with the cities of Lake Oswego, Tigard and others in accordance with Solution Approach C.**" (bold added)*

As described in this report, the proposed upgrades to the WTP are consistent with the recommendations of the City's approved Water Master Plan. Staff concurs with the applicant's response to this criterion, which may be found in Exhibit PC-3, Section 4, page 30, and the West Linn Water System Master Plan, which is paraphrased here:

> In 1984, West Linn entered into an intergovernmental agreement with the City of Lake Oswego and the South Fork Water Board (SFWB) to construct, operate and maintain an intertie between the Lake Oswego water supply system and the West Linn and SFWB system. An 18-inch diameter intertie between the Lake Oswego system and the 24-inch diameter transmission line in the City was constructed. In 2001, the intertie was improved with the construction of an intertie pump station with a capacity of approximately 6 mgd. The pump station can be used to pump emergency supply from the Lake Oswego distribution system into the Bolton and Robinwood pressure zones. The pump station provided water to the City from November 2001 to April 2002 during the upgrade of the City's I-205 transmission main from the SFWB and has subsequently provided supply for short durations (City of West Linn Water System Master Plan, November 2008; p. 2-4).

Expanding the WTP capacity from 16 mgd to 38 mgd, as proposed, will increase the availability of backup or emergency water supply, providing greater certainty that West Linn will have a reliable source of backup or emergency water when a need arises.

Staff also finds that the project will meet the needs of the community by furthering dozens of Comprehensive Plan policies; see finding 10. Specific site improvements that directly benefit the City include: right-of-way improvements along both Kenthorpe Way and Mapleton Drive, environmentally sustainable storm water features such as pervious materials and green roofs, community open spaces that will include, lighting and benches, construction of an important public trail connection joining Kenthorpe and Mapleton. Creation of this path will eliminate the need for the City of West Linn to construct this intra-neighborhood connection, which will provide a benefit to children walking to and from Cedaroak Park Primary School. While these improvements are not required of the applicant under the CDC, the applicant has offered them for the benefit of the community.

In staffs' opinion, a reliable source of drinking water for residents in Lake Oswego and Tigard provided by the proposed plant expansion will likely produce numerous additional benefits for the regional and local community. The upgrades to the facility will permit more

environmentally friendly and sustainable operations. Additional water capacity in Lake Oswego and Tigard will allow these cities to accommodate new population anticipated in the region and will reduce pressure on non-urbanized areas. Reducing development pressure on non-urbanized areas reduces the expense of new public infrastructure and maintenance, preserves natural resources and wildlife habitat and conserves agricultural farmland. Lower infrastructure and maintenance costs mean fewer new taxes and fees; preservation of resources and wildlife habitat ensure opportunities for recreation; and, conservation of farmland promotes employment in the local economy and reduces the cost of local agricultural goods.

Some have argued that further use of Clackamas River water during periods of low summer flows will be potentially damaging to dependent fish. But this issue is beyond the scope of this report.

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

FINDING NO. 7:
As detailed below, staff finds that all public facilities will be available to provide service to the property at the time of occupancy and the criterion is met. Staff concurs with the applicant's response to this criterion, which may be found in Exhibit PC-3, Section 4, page 30.

Water. The City does not provide water service to the plant. The WTP currently supplies its own potable water and water for fire protection and will continue under this proposal. The two existing homes along Mapleton that are proposed to become part of the WTP site are currently serviced by the City; therefore this proposal will represent a reduction in current and future long-term water demands.

Sanitary Sewer. There is an existing sanitary sewer system along the project frontages on Kenthorpe Way and Mapleton Drive. The WTP is connected to the sanitary sewer system on Kenthorpe Way. The current flows from the WTP to the sanitary sewer are up to 60 gallons per minute (gpm). The applicant is proposing to introduce water from the following sources into the City's sanitary sewer system:

- Reject water from the mechanical dewatering process;
- "Domestic" amenities in the existing Operations Building and in the new Administration Building and the maintenance areas;
- Seal water from pumps;
- Floor drains; and,
- Analyzer drains, if detailed design determines that they cannot be located to allow them to drain to a recycle location.

Staff is proposing Condition 11b, in order to ensure that there is adequate infrastructure for the proposed use and to accurately account for, and receive fees for, all sewage needs.

Stormwater drainage. The applicant proposes stormwater management facilities that are designed to West Linn Public Works and CDC standards. The applicant is proposing to integrate three methods to reduce the total area of impervious surfaces and capture, slow down and absorb runoff into the site design to reduce impacts associated with runoff and imitate a pre-development condition: green roofs, pervious paving, and vegetated stormwater facilities.

Streets. The West Linn Transportation System Plan (TSP) classifies Kenthorpe Way as a local street. The typical cross-section for such a street includes a 56-foot wide right-of-way with 32-feet of pavement and a 6-foot wide sidewalk with planter strip on both sides of the street. The current right-of-way width on Kenthorpe Way is 50-feet and the pavement width varies between 22- and 25-feet; the pavement width at the dead end portion is 15-feet wide. The right-of-way and pavement width, including bicycle and pedestrian facilities are currently below the typical standard for a local street. There is flexibility, however, in the CDC and Public Works Design Standards (PWDS) to reduce the right-of-way, pavement width and sidewalk width and to eliminate bicycle lanes where such a design is more appropriate.

Staff requested several measures from the applicant that are consistent with City codes and which are more contextually sensitive to the surrounding environment. These include providing 'green street' improvements along both rights-of-way, substituting pedestrian-scaled lighting rather than large, unnecessary street lights, meandering the sidewalk to preserve the existing trees, and not requiring dedication of right-of-way or pavement widening along either street.

The applicant proposes to increase average daily trips (ADT) on Kenthorpe Way by 4 vehicular trips; 0.32 of which are deliveries or truck trips. See Finding Number 48 for a more detailed analysis of the proposed street design and City specifications.

The TSP classifies Mapleton Drive as a collector-constrained street. The typical cross-section for this type of street includes a 48-foot wide right-of-way with 36 feet of pavement, parking on one side and a bike lane on the other. A 6-foot wide sidewalk with no planter strip is required on both sides of the street in this typical cross-section.

The current right-of-way width on Mapleton Drive is 50-feet with a pavement width that varies between 16- and 20 feet. There are no curbs, sidewalks or bike lanes on either side of this roadway. Although the right-of-way exceeds the City standard, the 16-20-foot pavement width is below the 36-foot standard pavement width for this typical cross-section. Again, there is flexibility in the CDC and PWDS to reduce these standards where it is determined that an alternative configuration is more appropriate and the applicant has done so, as described above.

The applicant's plans (Exhibit PC-3, Section 23, Figures 3.0-3.4) show the proposed street improvements on Mapleton Drive and Kenthorpe Way. These plans respond to requests from adjacent property owners to keep the street in its current, rural-like state and desires by the City to protect mature trees fronting the applicant's property.

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

FINDING NO. 8:
The applicable requirements of the zone are found in Findings 1-3; this criterion is met.

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

FINDING NO. 9:
The applicable requirements of these chapters are found in Findings Number 13-69 and 129-145; this criterion is met.

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

FINDING NO. 10:
The CDC is consistent with and implements the policies of the Comprehensive Plan. Staff finds that, with the conditions proposed, the application will meet all of the provisions of the CDC; as such it will be furthering more goals, policies and action measures than can be mentioned in this report. Outlined below are additional policies that the proposal will comply with that might not be immediately apparent. Additionally, the applicant's proposal satisfies several supplemental documents to the Comprehensive Plan, including the Transportation Systems Plan, Water Master Plan and the Robinwood Neighborhood Plan; which are also outlined below.

Goal 1 Citizen Involvement

- *Policy 2 – Support neighborhood associations as a forum for discussion and advice on issues affecting the community.*
- *Policy 3 – Encourage individuals to organize and work in groups to develop recommended programs or positions on various issues.*
- *Policy 4 – Provide timely and adequate notice of proposed land use matters 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.*

Each of the above policies was furthered during the processing of this application. All Code requirements were met with regard to meetings and notice. Additionally, the applicant completed an extensive citizen information and outreach program over a twenty month period (detailed in their 'Good Neighbor Plan' (Exhibit PC-3, Section 8); including the following neighborhood meetings:

- Presentations and discussion at regular monthly meetings of the RNA:
  - Monthly between April 2010 – January 2012
  - April 16, 2011 Lake Oswego and Tigard Mayors meeting with Robinwood neighbors
- Open houses and tours at the treatment plant:
  - June 24, 2010 Water Treatment Process Recommendation Open House
  - July 24, 2010 Water Treatment Plant Open House
- Three planning workshops:

    - August 24, 2010 Maple Grove Plat property owners
    - October 27, 2010 First Good Neighbor Plan meeting
    - December 1, 2010 Second Good Neighbor Plan meeting
- Two surveys of neighbors and property owners:
    - August 4 – October 8, 2010
    - December 1, 2010 – January 12, 2011
- RNA tour of Wilsonville's water treatment plant:
    - December 11, 2010
- Consultations with the City of West Linn:
    - April 5, 2010 West Linn City Council presentation
    - May 4, 2010 West Linn, Gladstone, Tigard, Lake Oswego City Managers' meeting presentation
    - September 15, 2010 West Linn Utility Advisory Board
    - August 25, 2011 West Linn Parks and Recreation Advisory Committee
    - December 12, 2011 West Linn Utility Advisory Board
- Design team "backyard visits" with 14 treatment plant neighbors:
    - July 13, 2011 – August 21, 2011
- Design open house:
    - October 27, 2011
- Neighborhood meeting required by West Linn development code:
    - November 10, 2011

Furthermore, at the request of the Robinwood Neighborhood Association, the West Linn City Council took the unprecedented step of hiring 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, and helped the association identify potential mitigation measures, and provided the Neighborhood with a report on the application.

Goal 2 Land Use Planning

- *Section 1, Residential Development. Policy 8 – Protect residentially zoned areas from the negative impacts of commercial, civic, and mixed-use development, and other potentially incompatible land uses.*

As described throughout this report, the application provides extensive buffering, compact site design, increased structural setbacks, reduction in FARs, and a construction management plan to mitigate any potential negative impacts from this use. The uncertainties with noise impacts are proposed to be addressed by proposed Condition of Approval 4.

- *Section 5, Intergovernmental Coordination*

Specifies that the City shall coordinate with the outside jurisdictions on specific issues, including:

- *Water supply with the South Fork Water Board and the City of Lake Oswego.*

And includes the following goals:

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 the 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. The Water Master Plan and this particular application are examples of such coordination required under the Comprehensive Plan.

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

- *Natural Environment*
  - *Policy 1 – Implement site design standards that prescribe how to place roadways and buildings to preserve trees.*
  - *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.*
  - *Policy 3 – Provide buffer areas around heritage trees, significant trees, and tree clusters to ensure their preservation.*
  - *Policy 8 – Require and enforce erosion control standards for new development.*
  - *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.*

CDC Subsection 55.100(B)(2) provides guidance and regulations governing the placement of roadways and buildings in relation to trees. West Linn regulates heritage trees, significant trees, and significant tree clusters. CDC 55.100(B)(2) acknowledges that not all trees are significant and that even if the City Arborists determines that a tree is significant, not all significant trees will be protected. The West Linn Arborist has determined that the site contains 41 significant trees or significant tree clusters.

The applicant proposes to save 35 of the 41 significant trees on site and will mitigate for the tree loss, consistent with West Linn regulations. See Exhibit PC-3, Section 22, Tree Protection Plan. Six significant trees, totaling 182 inches DBH are proposed to be removed. Based on the 182 inches of significant tree DBH removal, mitigation will require 182 inches of DBH replacement. The applicant proposes conducting this replacement by planting 91 sapling

trees at 2 inch caliper per tree for a total of 182 inches. In addition, approximately 217 other trees will be planted. This will result in a total of approximately 308 trees being planted on-site. Detailed planting plans, including a plant schedule are located in Exhibit, Section 21, Figures 11.0-12.0 and Exhibit PC-3, Section 23, Figures 12.1-12.4.

There are no heritage trees on site. Adequate buffers are proposed around the significant trees and tree clusters to be preserved to ensure their protection.

Goal 6 Air, Water, and Land Resources Quality

- *Section 2 Water Quality*
    - *Policy 1 – Require that new development be designed and constructed to prevent degradation of surface and groundwater quality by runoff.*
    - *Policy 4 – Require that new development be connected to the City's sanitary sewer system.*
    - *Policy 5 – Where feasible, use open, naturally vegetated drainageways to reduce stormwater runoff and improve water quality.*
    - *Policy 7 – Require up to date erosion control plans for all construction and actively enforce applicable City codes and regulations.*
    - *Policy 8 – Encourage the use of alternative permeable materials for construction of parking areas to reduce stormwater runoff and improve water quality.*

The existing storm water system is proposed to be upgraded and will include three methods to reduce the total area of impervious surfaces and capture, slow down and absorb runoff into the site design to reduce impacts associated with runoff and imitate a pre-development condition: green roofs, pervious paving, and vegetated stormwater facilities. The proposed 'green street' filtration system should improve water quality. The application includes a preliminary Erosion Control and Sediment Prevention Plan (ECSP) and includes permeable paving materials for employee and guest parking areas and a portion of the emergency access road from Mapleton Drive.

- *Section 3 Land Resources*
    - *Policy 3 – Require adequate screened and enclosed space for recycling, solid waste storage, and compacting and require proper access to these areas.*

All recycling, solid waste and compacting will be screened and have proper access (see proposed Condition of Approval 11.

- *Section 4 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 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 City's noise standards are based on Department of Environmental Quality (DEQ) regulations. The applicant proposes to design and landscape the site to be consistent with DEQ daytime and nighttime noise limits in a residential neighborhood. The application contains a noise study prepared by ENVIRON, a licensed acoustical engineering firm. The acoustical engineer concluded that the proposed WTP can meet DEQ daytime standards. However, ENVIRON was not able to reach a definitive conclusion regarding nighttime compliance at the WRWTP based on the available measurement data, due to non-plant related noise generated by the architectural water feature along the west side of the WRWTP and a gravel producing operation to the east. Consequently, ENVIRON recommends consideration of one or more of the following noise mitigation techniques and practices during final WTP design:

- Installation of noise source equipment indoors, when feasible;
- Use of appropriate noise attenuation features on buildings, including acoustical louvers on air intakes/outlets and silencers on exhaust stacks;
- Use of appropriate noise attenuation features such as acoustical enclosures or barriers, pipe lagging around noisy pipes or ducts for equipment installed outside; and
- Selection of quieted equipment, particularly for HVAC systems.

With careful design and implementation of noise mitigation measures, noise levels from typical, ongoing plant operations are expected to comply with the nighttime noise limits. In addition to typical continuous operations, ENVIRON considered potential future sound levels associated with the intermittent on-site operations described previously. The sludge pond operations, lime silo vibratory system, and lime building blower are not expected to be required with the proposed WTP. Similarly, a smaller backup generator that will be installed indoors will replace the existing emergency backup generator. The existing high service pump station and roof mounted fans and the CO2 storage tank and associated compressor will be replaced and relocated, respectively, with appropriate noise attenuation features incorporated into these plant modifications.

Therefore, ENVIRON concluded that the only remaining intermittent operation of concern that will persist for the proposed WTP is truck mounted equipment associated with periodic chemical delivery unloading and weekly garbage pickup.

To meet the daytime noise limits at all property boundaries and thereby remedy this remaining concern, ENVIRON recommended the use of "plant air" (i.e., compressors installed inside a plant building) in lieu of truck-mounted compressors to eliminate the excessive noise associated with chemical unloading. Additionally, chemical unloading should be restricted to daytime hours only (this is addressed by proposed Condition of Approval 4).

ENVIRON recommends that the design considerations for intermittent noisy activities should include the following:

- Installation of backup generator indoors
- Use of "plant" air for chemical unloading operations.

Most of the existing exterior noise-producing intermittent activities will be eliminated or are expected to be far enough from neighboring properties to comply with both the daytime and nighttime noise limits. Based on this analysis, ENVIRON concluded that the upgraded WTP should comply with all daytime noise limits established by OAR 340-035.

Staff recommends Condition of Approval 4, based on the recommendations of the acoustical engineer; these include the ENVIRON Noise Mitigation recommendations and a post-construction noise analysis to document that noise limits have been 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.*

The WTP has occupied this location for 40 years. Staff requested a site specific site hazard evaluation which provides the recommended construction and installation techniques to mitigate seismic issues at the site. The Public Safety section of the staff analysis (p. 16 of this report) includes a summary of the seismic issues and mitigation measures. The applicant's complete draft geotechnical report and site hazard evaluation is contained in Exhibit PC-3, Section 17. This document is included with the application and will guide the future development of the site.

Goal 8 Parks and Recreation

- *Policy 8 – Require land divisions and major developments to set aside or dedicate land based on standards that provide for:*
    a. *An area composed of developable lands that may provide active recreational space;*
    b. *An adequate passive open space area to protect natural resources at the site and protect development from hazard areas; and,*
    c. *A link between existing public-owned parks or open space areas and/or public rights-of-way.*

Although not required as part of the application, the applicant proposes the creation of a pedestrian path from the eastern end of Kenthorpe Way to Mapleton Drive, thereby fulfilling the intent of this series of goals and recommendations. Additionally, large open spaces along both frontages are being provided, with pedestrian lighting and benches accessible to the public.

Goal 9 Economic Development

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

The variety of public improvements being received by the City in conjunction with this project represent an example of the City partnering with another agency for infrastructure improvements at no cost to the City. Improvements include the right-of-way improvements, pedestrian paths, benches, and lighting benefiting the public, and additional water capacity in the facility itself.

Goal 11 Public Facilities and Services

- *Policy 2 – Development shall not be approved unless: a) the proposal has adequate access to the transportation, storm drainage, potable water, and sewer systems; and, b) these infrastructures have adequate capacity to serve the development.*
- *Policy 5 – Where appropriate, monitor, coordinate with, and regulate the activities of the following, as they affect existing and future residents and businesses: a) water supply… e) fire and rescue protection…*
- *Policy 10 – Assure all visible public facilities are constructed with attractive design and materials where appropriate.*
- *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.*

The WTP is an existing element of West Linn's infrastructure as it provides West Linn residents with a water intertie for emergency purposes. The applicant will continue to provide the water intertie to West Linn consistent with the water system plans for each jurisdiction. As outlined in Finding 6, the Water Master Plan states the need to improve the emergency supply capacity and reliability of the Lake Oswego emergency supply connection and recommends: *"This solution approach includes developing a coordinated emergency supply plan that allows the City to fully meet its emergency supply capacity needs through the existing emergency supply connection from the City of Lake Oswego's water system in the Robinwood neighborhood near Lake Oswego's water treatment plant. The City's existing emergency supply connection to Lake Oswego is interruptible and its delivery capacity is dependent on Lake Oswego's supply and demand conditions at the time of the City's need. Under peak use, high demand conditions the actual capacity of this connection may approach zero as Lake Oswego's current maximum water demands are approaching the existing supply system's capacity."*

The West Linn water supply was interrupted in December 2011, a low flow time of the year, demonstrating the importance of securing a reliable source of emergency water. Expansion of the WTP would provide West Linn with a reliable source of emergency water for many years to come.

The design team conducted a neighborhood compatibility analysis, which identified several dominant architectural themes, such as, low buildings relying on horizontality and the use of wood, brick, and earth tones. The proposed WTP buildings complement these themes by emphasizing horizontal planes, building elevation within the height limits of the R-10 zone, and the use of wood, brick and metal – all in earth tones.

The proposed project includes the following environmentally sensitive improvements: use of porous paving surfaces, recycled materials, green roofs, stormwater facilities that make use of existing topography and a "Green Streets" approach to frontage improvements. Where possible, heat will be scalped from a warm area of the plant and ducted to a cooler area of the plant.

The applicant will be paying for the costs of the improvements in the right-of-way as well as all required system development charges (SDCs). Additionally, the City will directly benefit from the expanded capacity at the plant.

- *Section 2 – Water System*
  - *Policy 1 – Establish the City's Water Master Plan, 1999, which is a supporting document of the Comprehensive Plan, as a guide for development of future water storage and distribution facilities. A list of the planned water system projects shall be included in the public facilities plan summary required under Public Facilities and Services General Action Item 1.*

Although Policy 1 above describes the 1999 Water Master Plan, the most recently updated version is the 2008 Plan. That Master Plan encourages the integration of the Lake Oswego intertie into the West Linn water system; it states, "It was further directed to pursue development of reliable emergency supply capacity with the cities of Lake Oswego, Tigard and others in accordance with Solution Approach C." (2008 Water Master Plan, Page 6-15) Clearly, the proposed plans will directly further this directive from the Water Master Plan.

- *Section 3 – Storm Drainage*
  - *Policy 1 – Where possible, require storm water runoff within development areas to be pretreated, using natural channels as points of discharge from local runoff collection systems. The Storm Drainage Master Plan, West Linn, Oregon, 1996, will be the key reference for determining drainage corridors and is a supporting document of the Comprehensive Plan.*
  - *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.*
  - *Policy 4 – Seek alternatives to the use of impervious surfaces within areas of dense standing trees and shrubs next to natural drainage courses and in other natural areas.*
  - *Policy 6 – Require that construction practices for all land development projects, private and public, be conducted in such as 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 8 – Encourage use of permeable surfaces in developments.*
- *Section 4 – Fire and Police*
  - *Policy 1 – Ensure that police and fire protection service providers are closely involved with land use decisions that have implications for the provision of emergency services and crime prevention.*

As previously noted, the site plan includes multiple examples of techniques that will further these provisions of the Plan. These include green streets, green roofs, pervious surface areas, and clustering of the development to reduce impervious surface areas. The applicant has met with TVF&R, which has approved of the plans with a proposed Conditions of Approval 3 and 10.

Goal 12 Transportation

- *Policy 8 – Ensure that development brings adjacent road frontages to illumination levels that are identified within the CDC and City Engineering standards and specifications for street lighting.*

The applicant discussed providing additional lighting on the streets fronting Kenthorpe Way but, after consulting with staff, and with consideration of neighborhood desires, it was decided to only have street lights provided at the entrance drives. Lighting will be provided for pedestrians via low bollard lighting fixtures.

- *Bicycles*
  - *Policy 4 – Require new commercial, industrial, and institutional development to provide on-site facilities for bicycle parking and storage.*

The plans provide the required bicycle parking and staff is including Condition of Approval 7 requiring that 25% of the bike parking be covered, per CDC Section 46.150(D).

- *Pedestrians*
  - *Policy 1 – Provide a comprehensive cohesive network of pedestrian paths, lanes, and routes that accomplishes the following objectives: a) connects the four commercial centers in Willamette, Bolton, Robinwood, and Tanner Basin; b) provides connections to schools, recreation facilities, community centers, and transit facilities; c) use off-street pedestrian "short-cut" pathways to provide routes where physical constraints or existing development preclude the construction of streets with sidewalks; d) provide safe, secure, and desirable walkway routes, with a preferred spacing of no more than 330 feet, between elements of the pedestrian network; e) eliminate gaps in the existing walkway network and provide pedestrian linkages between neighborhoods. Preference will be given to funding projects that eliminate gaps along arterial and collector streets.*
  - *Policy 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.*

The WTP proposal provides a pedestrian path that would connect the eastern end of Kenthorpe Way to Mapleton Drive. Creation of this path will eliminate the need for the City of West Linn to construct this intra-neighborhood connection, which will provide a benefit to children walking to and from Cedaroak Park Primary School. The application proposes to use a 'green streets' approach to frontage improvements that will be in keeping with the stated goal of providing alternatives to traditional sidewalks in older neighborhoods, such as Robinwood.

Goal 13 Energy Conservation

- *Policy 6 – Encourage the use of energy-conscious design and materials in all public facilities.*
- *Policy 7 – Encourage the construction and maintenance of sidewalks and bike paths/ways to promote alternative modes of transportation.*

Green roofs are included in the proposal as is capturing heat from warm areas of the plant and ducting it to cooler areas. The WTP site will include a pedestrian path connecting the eastern end of Kenthorpe Way to Mapleton Drive providing a more efficient pedestrian route (0.8 miles shorter), which will provide a benefit to children walking to and from Cedaroak Park Primary School, and may result in fewer automobile trips. Sidewalks will be provided along the Kenthorpe Way and Mapleton Drive frontages. An employee bike parking area will be created within the WTP's secured area.

Robinwood Neighborhood Plan

- *Goal 3, Policy 3.3 – Provide appropriate pedestrian facilities along residential streets.*
- *Goal 3, Policy 3.4 – Implement "green street" concepts for residential streets.*
- *Goal 3, Policy 3.7 – Use pedestrian shortcuts to connect existing streets.*
- *Goal 3, Policy 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.*

As noted above, the applicant's proposal includes pedestrian facilities along Kenthorpe Way and Mapleton Drive that are designed to complement the neighborhood's character while improving safety for pedestrians. City of West Linn staff worked with the applicant in designing pedestrian facilities along Kenthorpe Way and Mapleton Drive that: protect the mature vegetative buffers between the site and adjacent residences, improve stormwater quality and detention capabilities from existing and newly created impervious surfaces, are consistent with the 'green street' guidance established in Policy 3.4 of the Robinwood Neighborhood Plan, and that complement the existing low-volume characteristic of this part of the neighborhood. The resulting proposed street improvements provide a 6-foot wide pedestrian sidewalk along Kenthorpe Way and Mapleton Drive separated from the vehicle travel lanes by a curbside drainage swale and/or rain garden.

One action measure listed under Policy 3.4 speaks to the possibility of undergrounding overhead utility lines. As residential development has occurred, utility lines have been placed underground. In situations where existing overhead utility lines run continuously along a street frontage, such as along Kenthorpe Way and Mapleton Drive, West Linn provides an option of fee-in-lieu of undergrounding a small section of overhead utility lines. This avoids the disruptive effect of road cuts and service interruption to residents that a piece-meal approach to undergrounding utilities creates. The applicant proposes to leave the overhead utility lines in place and pay a fee (based on an estimate of the cost to bury the lines in lieu of undergrounding overhead utilities) at this time; see Condition of Approval 12. However, a proposed new secondary power feed will be buried in the Kenthorpe Way right-of-way.

As a direct response to Policy 3.7, as previously mentioned, the applicant proposes a through-site pedestrian connection between Kenthorpe Way and Mapleton Drive that would be approximately 0.8 miles shorter than the existing pedestrian route between the segments of Kenthorpe Way and Mapleton Drive that abut the WTP property.

Policy 3.9 recognizes the probability of future development of the WTP and guides development in a manner that is compatible with surrounding residential uses and is

beneficial to the neighborhood residents. The applicant proposes: dense, layered landscape screening; a compressed site layout; architectural styles complementary to the neighborhood and materials common within the Robinwood neighborhood including the use of wood, brick and earth tones; a construction management plan that ensures communication between project management and affected property owners; a pedestrian connection between Kenthorpe Way and Mapleton Drive and 'green street' improvements, as elements that will ensure compatibility and afford benefit to area residents.

The high level of landscape screening between the WTP operations and abutting residential properties is possible because the project designers, in consultation with neighbors, compressed WTP operations towards the center of the site; thereby providing large perimeter setbacks in which to grow dense landscape buffers.

Regarding compatibility during construction, the applicant has provided a Construction Management Plan that ensures continuous access to residential streets and homes and includes a mechanism for the applicant to notify residents of potential impacts from scheduled construction activity.

Robinwood residents will benefit from the through-site pathway connecting Kenthorpe Way and Mapleton Drive as well as the improved 'green street-scape' improvements that will improve the aesthetic and functional capabilities of the street. Finally, residents will benefit from the availability of an emergency water supply through the Lake Oswego intertie.

West Linn Water System Master Plan

As discussed under Finding 6, 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 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 expand their treatment capacity from 16 mgd to 38 mgd would improve the emergency supply capacity and reliability of the Lake Oswego Emergency Supply Intertie and directly further the direction established in the West Linn Water Master Plan.

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. 11:
Findings 13-69 detail the proposal in light of applicable standards from CDC Chapter 55.

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. 12:
By increasing the site size, burying the water reservoir, and by compressing the facility in the center of the property, the proposed site plan provides larger setbacks from adjoining properties, enhanced buffering, greater noise attenuation, a public trail connection from north

to south, and large areas of open space that will be available to the public. The proposal includes sustainable development techniques, such as green street designs, permeable surfaces, green roofs, compact site design, and minimal driveways. The upgraded facility is expected to be safer and more efficient than the current one due to modernization of the operations, utilizing the latest technologies and compliance with the current codes from outside agencies.

While there is general agreement that, for over 40 years, the WTP has not significantly impacted its neighbors, major water plants have potential to impact the surrounding community. Identified potential impacts must be successfully mitigated in order to be permitted under the CDC's Conditional Use criteria. The recommended conditions of approval of this report are intended to minimize the impact from the proposed use on adjacent properties. Many of the above-listed conditions (e.g., design that minimizes noise, vibration, air pollution; screening; the location and intensity of outdoor lighting; etc.) have been offered by the applicant through their work with the Robinwood Neighborhood.

CHAPTER 55, DESIGN REVIEW

55.100 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 design review application.
A. The provisions of the following chapters shall be met:

1. *Chapter 33 CDC, Stormwater Quality and Detention.*
2. *Chapter 34 CDC, Accessory Structures, Accessory Dwelling Units, and Accessory Uses.*
3. *Chapter 38 CDC, Additional Yard Area Required; Exceptions to Yard Requirements; Storage in Yards; Projections into Yards.*
4. *Chapter 40 CDC, Building Height Limitations, Exceptions.*
5. *Chapter 42 CDC, Clear Vision Areas.*
6. *Chapter 44 CDC, Fences.*
7. *Chapter 46 CDC, Off-Street Parking, Loading and Reservoir Areas.*
8. *Chapter 48 CDC, Access, Egress and Circulation.*
9. *Chapter 52 CDC, Signs.*
10. *Chapter 54 CDC, Landscaping.*

FINDING NO. 13:
Findings regarding the applicable criteria from the above referenced CDC Chapters can be found later in the staff report under the respective chapter headings.

B. Relationship to the natural and physical environment.

1. *The buildings and other site elements shall be designed and located so that all heritage trees, as defined in the municipal code, shall be saved. Diseased heritage trees, as determined by the City Arborist, may be removed at his/her direction.*

FINDING NO. 14:
The City Arborist has confirmed that no heritage trees exist on the subject site and therefore this criterion does not apply.

2. *All heritage trees, as defined in the municipal code, all trees and clusters of trees ("cluster" is defined as three or more trees with overlapping driplines; however, native oaks need not have an overlapping dripline) that are considered significant by the City Arborist, either individually or in consultation with certified arborists or similarly qualified professionals, based on accepted arboricultural standards including consideration of their size, type, location, health, long term survivability, and/or numbers, shall be protected pursuant to the criteria of subsections (B)(2)(a) through (f) of this section. In cases where there is a difference of opinion on the significance of a tree or tree cluster, the City Arborist's findings shall prevail. It is important to acknowledge that all trees are not significant and, further, that this code section will not necessarily protect all trees deemed significant.*

    a. *Non-residential and residential projects on Type I and II lands shall protect all heritage trees and all significant trees and tree clusters by either the dedication of these areas or establishing tree conservation easements. Development of Type I and II lands shall require the careful layout of streets, driveways, building pads, lots, and utilities to avoid heritage trees and significant trees and tree clusters, and other natural resources pursuant to this code. The method for delineating the protected trees or tree clusters ("dripline + 10 feet") is explained in subsection (B)(2)(b) of this section. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply.*

FINDING NO. 15: The site does not contain Type I and/or Type II lands. This portion of the criterion does not apply. Also see Finding 16.

    b. *Non-residential and residential projects on non-Type I and II lands shall set aside up to 20 percent of the area to protect trees and tree clusters that are determined to be significant, plus any heritage trees. Therefore, in the event that the City Arborist determines that a significant tree cluster exists at a development site, then up to 20 percent of the non-Type I and II lands shall be devoted to the protection of those trees, either by dedication or easement. The exact percentage is determined by establishing the driplines of the trees or tree clusters that are to be protected. In order to protect the roots which typically extend further, an additional 10-foot measurement beyond the dripline shall be added. The square footage of the area inside this "dripline plus 10 feet" measurement shall be the basis for calculating the percentage (see figure below). The City Arborist will identify which tree(s) are to be protected. Development of non-Type I and II lands shall also require the careful layout of streets, driveways, building pads, lots, and utilities to avoid significant trees, tree clusters, heritage trees, and other natural resources pursuant to this code. Exemptions of subsections (B)(2)(c), (e), and (f) of this section shall apply. Please note that in the event that more than 20 percent of the non-Type I and II lands comprise significant trees or tree clusters, the developer shall not be required to save the excess trees, but is encouraged to do so.*

FINDING NO. 16:
Staff concurs with the applicant's response to this criterion: The proposal is for a non-residential project on non-Type I or Type II lands. The City Arborist has determined that

there are 41 significant trees and tree clusters on site. Although the site layout maximizes the preservation of the significant trees, six significant trees are proposed to be removed. The applicant proposes to fully mitigate for the loss of significant trees in compliance with the West Linn Tree Technical Manual.

The applicant proposes to save the following clusters of trees (see Exhibit PC-3, Section 12, Figure 1):

- Northwest corner of site along Kenthorpe Way;
- Trees along western site boundary; and
- Trees along the eastern property boundary.

The applicant proposes to clear trees in the following areas:

- Trees around the sediment drying pond (Exhibit PC-3, Section 21, Figure 2.9)
- Trees near the proposed clearwell and construction staging area (Exhibit PC-3, Section 21, Figures 2.10 and 2.11)
- The row of interior trees along planted in 1996 (Exhibit PC-3, Section 21, Figures 2.10 and 2.11)
- A small cluster of trees near the interior northeast corner of the site (Exhibit PC-3, Section 21, Figure 2.11), and
- Trees along Kenthorpe Way that were planted per the 1996 land use approval (Exhibit PC-3, Section 21, Figures 2.9 and 2.11).

According to the applicant's submittal, the combined area of the dripline of the trees to be protected, plus an additional 10-feet diameter for each tree, is 72,700 square feet, or 18 percent of the total site area/non-Type I or Type II lands on site. The criterion is met.

c. *Where stubouts of streets occur on abutting properties, and the extension of those streets will mean the loss of significant trees, tree clusters, or heritage trees, it is understood that tree loss may be inevitable. In these cases, the objective shall be to minimize tree loss. These provisions shall also apply in those cases where access, per construction code standards, to a parcel is blocked by a row or screen of significant trees or tree clusters.*

FINDING NO. 17:
The applicant's proposal does not include the extension of any streets. The criterion does not apply.

d. *For both non-residential and residential development, the layout shall achieve at least 70 percent of maximum density for the developable net area. The developable net area excludes all Type I and II lands and up to 20 percent of the remainder of the site for the purpose of protection of stands or clusters of trees as defined in subsection (B)(2) of this section.*

FINDING NO. 18:
CDC Section 5.020 lists the allowed densities for each of the City's zoning districts. Because the CDC uses 'dwelling units per net acre' as its density metric, there are no density standards for non-residential development. Staff research confirms that this provision was included in the CDC in response to Metro's requirement that new housing development should meet, at

least, this 70 percent standard; non-residential development was erroneously added to the language of this CDC provision. This criterion does not apply.

e. For arterial and collector street projects, including Oregon Department of Transportation street improvements, the roads and graded areas shall avoid tree clusters where possible. Significant trees, tree clusters, and heritage tree loss may occur, however, but shall be minimized.

FINDING NO. 19:
The West Linn Transportation System Plan (TSP) identifies Kenthorpe Way as a local street and Mapleton Drive as a collector street. The applicant is proposing pedestrian improvements in the Mapleton Drive right-of-way (Exhibit PC-3, Section 23, figures 3.0-3.4) which do not impact significant trees, tree clusters or heritage trees. The criterion is met.

f. If the protection of significant tree(s) or tree clusters is to occur in an area of grading that is necessary for the development of street grades, per City construction codes, which will result in an adjustment in the grade of over or under two feet, which will then threaten the health of the tree(s), the applicant will submit evidence to the Planning Director that all reasonable alternative grading plans have been considered and cannot work. The applicant will then submit a mitigation plan to the City Arborist to compensate for the removal of the tree(s) on an "inch by inch" basis (e.g., a 48-inch Douglas fir could be replaced by 12 trees, each four-inch). The mix of tree sizes and types shall be approved by the City Arborist.

FINDING NO. 20:
No new street grading is proposed. This criterion does not apply.

3. The topography and natural drainage shall be preserved to the greatest degree possible.

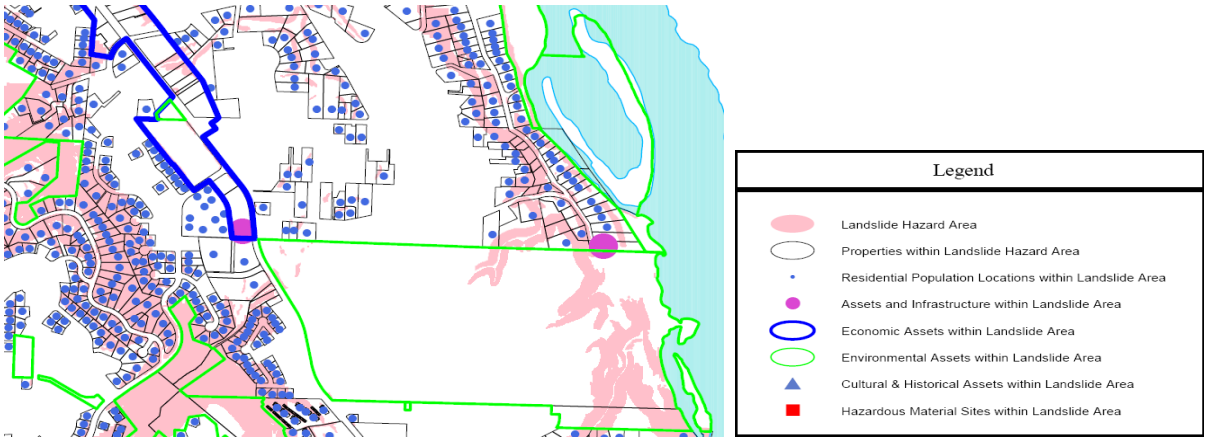
FINDING NO. 21
The subject site is relatively flat and exhibits an overall gradient of less than 2 percent between the west and east property lines. Stormwater runoff drains primarily toward the north and northwest of the site. Additionally, a small swale exists near the northwest quadrant of the site.

The applicant's plans indicate that stormwater runoff will continue to drain toward the north and northwest of the site. Furthermore, the applicant proposes a new stormwater treatment facility in the area of the existing swale. The stormwater treatment facility is required to accommodate runoff from the newly proposed impervious surface. Staff finds that the proposal will result in relatively limited modification to the site topography and natural drainage. The criterion is met.

4. The structures shall not be located in areas subject to slumping and sliding. The Comprehensive Plan Background Report's Hazard Map, or updated material as available and as deemed acceptable by the Planning Director, shall be the basis for preliminary determination.

FINDING NO. 22
As shown on Map 16 (Landslide Vulnerability Analysis) of the City of West Linn Natural Hazards Mitigation Plan, shown in Figure 5 below, the Applicant's site is not located within an area identified as vulnerable to landslides. The criterion is met.

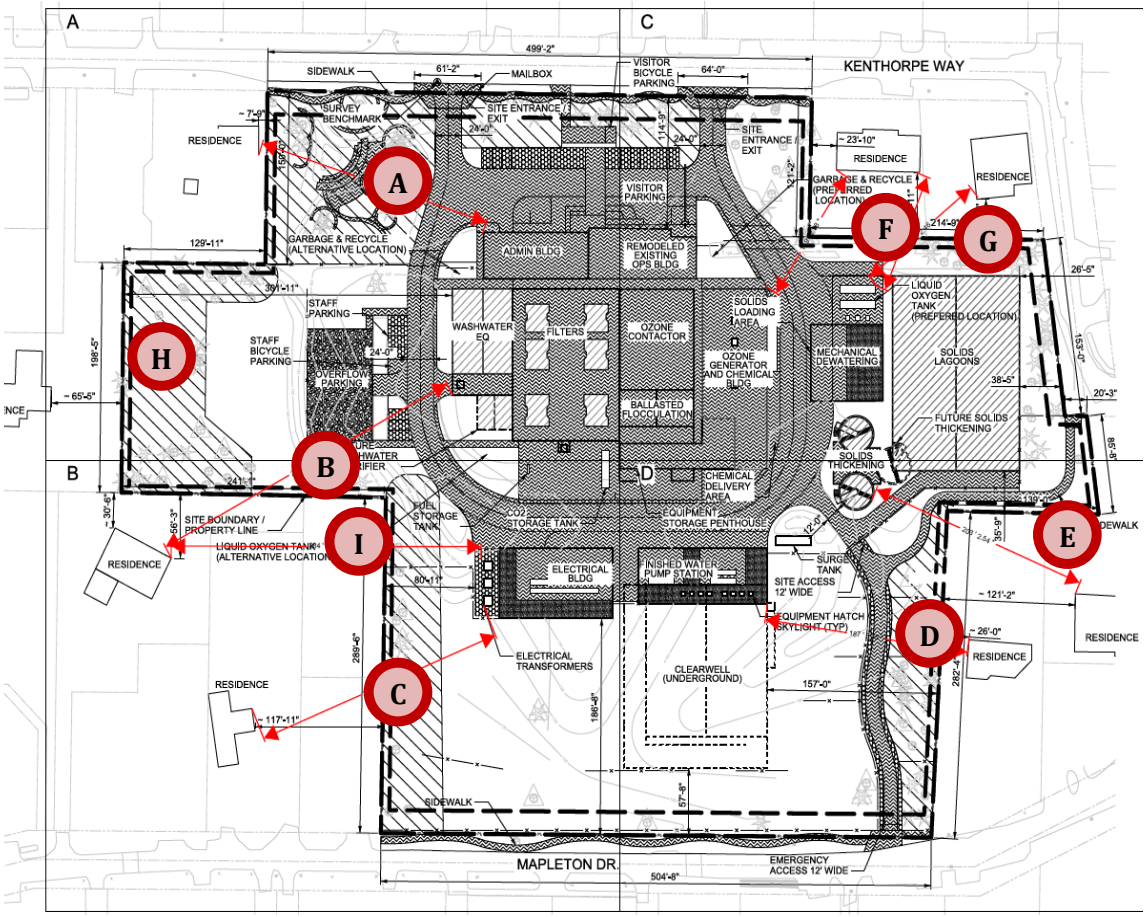
Figure 5 Landslide Vulnerability Map (Map 16 West Linn Natural Hazards Mitigation Plant)



5. *There shall be adequate distance between on-site buildings and on-site and off-site buildings on adjoining properties to provide for adequate light and air circulation and for fire protection.*

FINDING NO. 23
According to the Applicant's proposed site plan, the minimum distance between any on-site and off-site building is 104-feet (distance between liquid oxygen tank and adjacent residences at the northeast corner of the site). The approximate distance between off-site and on-site buildings/structures is listed in the table below:

Map Location: off- and on-site features	**Approx. Distance (ft)**
A: residence in NW and Administration Building	216
B: residence in SW and Washwater Equalizer	294
C: residence in SW and Electrical Transformers	230
D: residence in SE and Finished Water Pump Station	187
E: residence in SE and Solids Thickening Facilities	203
F: residence in NE and Chemical Building	119
G: residence in NE and Liquid Oxygen Tank	>104
H: residence in W and Washwater Equalizer	370
I: residence in SW and Electrical Transformers	284



The separation of on- and off-site buildings provides ample distance for light and air circulation. Additionally, the applicant proposes a looped service driveway with emergency/fire access to all site facilities, and with emergency/fire access from both Kenthorpe Way and Mapleton Drive. The criterion is met.

6. *Architecture.*

   a. *The predominant architecture of West Linn identified in the West Linn vision process was contemporary vernacular residential designs emphasizing natural materials: wood with brick and stone detail. Colors are subdued earth tones: greys, brown, off-whites, slate, and greens. Pitched roofs with overhanging eaves, decks, and details like generous multi-light windows with oversized trim are common. Also in evidence are the 1890s Queen Anne style homes of the Willamette neighborhood. Neo-traditional homes of the newer subdivisions feature large front porches with detailed porch supports, dormers, bracketed overhanging eaves, and rear parking for cars. Many of these design elements have already been incorporated in commercial and office architecture.*

FINDING NO. 24

Staff concurs with the applicant's response on page 54 of Section 4, Exhibit PC-3: The emphasis in subsection (6)(a) is on taking architectural cues from vernacular residential design and incorporating them into neo-traditional residential design. There is also an acknowledgement that some of these residential design elements can be incorporated into

commercial and office architecture. The WTP is not a commercial building nor is it an office complex; it is a major utility with a variety of non-office uses necessary to process raw water into finished water. The second floor of the Administration Building will contain about 1,300 square feet of office uses but the balance of the WTP complex will be devoted to processing water. However, as discussed below, the applicant conducted a visual analysis of the surrounding neighborhood and has incorporated several of the significant architectural design elements into the WTP design, such as, wood, brick, earth tones, modulated roofs and horizontal planes.

The criterion is met.

b. The proposed structure(s) scale shall be compatible 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.

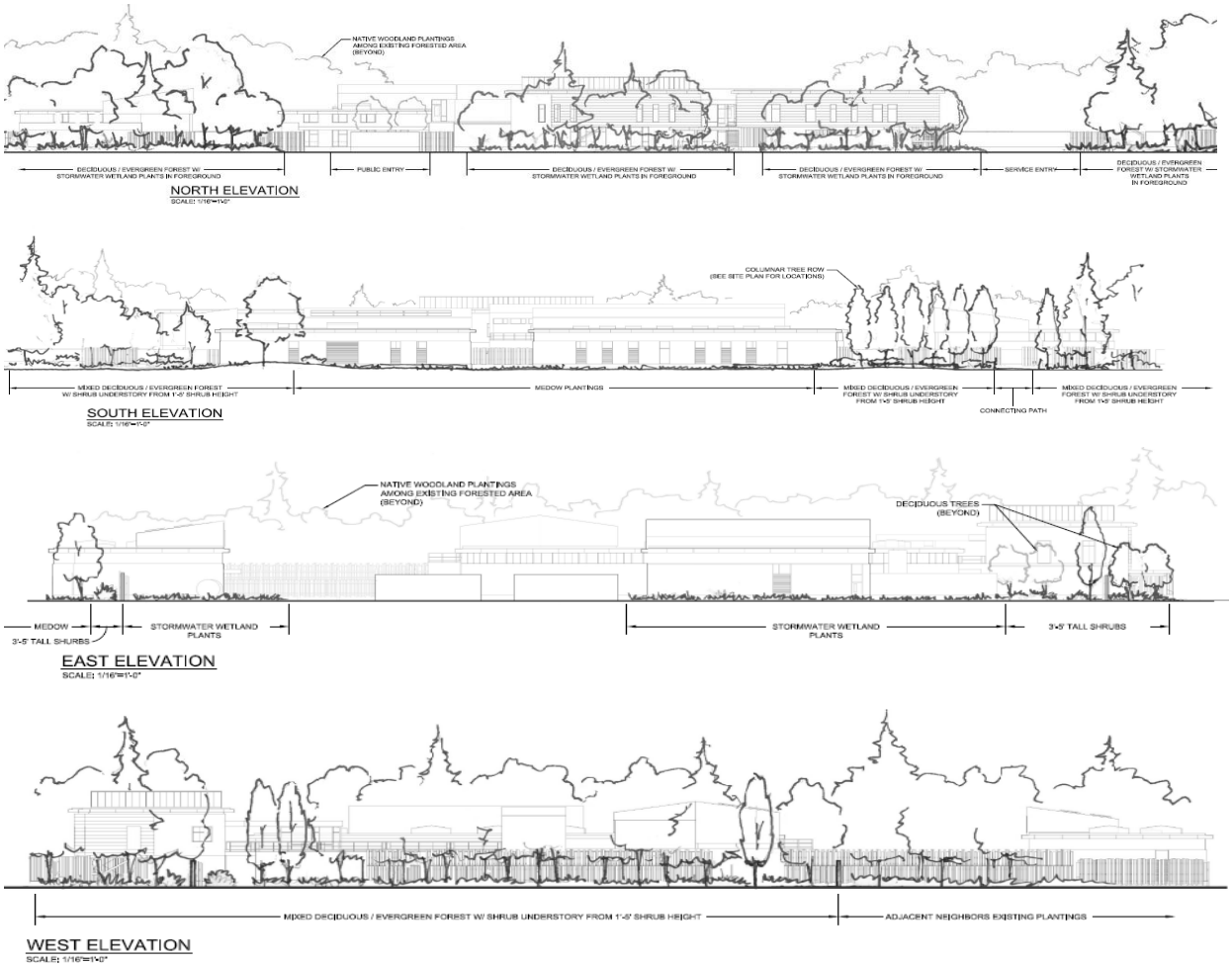
FINDING NO. 25
Staff concurs with the applicant's response on page 54 of Exhibit PC-3, Section 4: From the existing neighborhood, the WTP design draws cues regarding material articulation, scale, and form. The neighborhood is primarily made up of single-story ranch-style homes, most of which were constructed in the 1960's. Predominant roof forms found throughout the neighborhood tend to be low slope shed roofs, gable roofs, as well as a few flat roofs, and the predominant cladding tends to be lapped siding or vertical batten wood siding. Many of these ranch-style homes sit with their broad side facing the street, with their long, low pitched roof forms overhanging an abundant use lap siding, ultimately displaying a common pattern of horizontality. This language of horizontality is proposed to be carried throughout the design aesthetic of the plant.

The criterion is met.

c. While there has been discussion in Chapter 24 CDC about transition, it is appropriate that new buildings should architecturally transition in terms of bulk and mass to work with, or fit, adjacent existing buildings. This transition can be accomplished by selecting designs that "step down" or "step up" from small to big structures and vice versa (see figure below). Transitions may also take the form of carrying building patterns and lines (e.g., parapets, windows, etc.) from the existing building to the new one.

FINDING NO. 26
As shown on figures 10.0 and 10.1 of the applicant's submittal (Exhibit PC-3, Section 21 and figure 10.2 in Exhibit PC-3, Section 23), the new buildings carry patterns, materials and lines from other buildings in the neighborhood throughout their design. Additionally, building elevations slope gradually from approximately 30-feet at the north end of the site to approximately 20-feet near the south end of the site. While there is no step down transition between the northern-most site buildings and the adjacent residences to the north, there is more than 200-feet of separation and mature site vegetation along Kenthorpe Way to act as a natural transition between these uses. The criterion is met.

Figure 6 Proposed site elevations (Exhibit PC-3, Figures 10.0 and 10.1)



d. Contrasting architecture shall only be permitted when the design is manifestly superior to adjacent architecture in terms of creativity, design, and workmanship, and/or it is adequately separated from other buildings by distance, screening, grade variations, or is part of a development site that is large enough to set its own style of architecture.

FINDING NO. 27

Staff concurs with the applicant's response: The functional character of the dominant architectural form in the neighborhood is residential; the dominant form of the WTP is a public utility. The functionalities are in contrast but that does not mean that the architectural design also is in contrast. The applicant's design goal was to create an architectural design that does not contrast with the surroundings and which is manifestly superior to the adjacent architecture. The applicant proposes to create an architectural form that is both functional and sympathetic to the surrounding properties. To accomplish this blending, the design team compressed the process activity into the center of the site, thereby exaggerating the setbacks; it created building that are more horizontal than vertical; it selected cladding materials, such as wood and brick, that reflect the materiality and tone of the neighborhood; and it employed extensive landscaping and buffering to screen the WTP functions from the surrounding properties.

The criterion is met.

e. Human scale is a term that seeks to accommodate the users of the building and the notion that buildings should be designed around the human scale (i.e., their size and the average range of their perception). Human scale shall be accommodated in all designs by, for example, multi-light windows that are broken up into numerous panes, intimately scaled entryways, and visual breaks (exaggerated eaves, indentations, ledges, parapets, awnings, engaged columns, etc.) in the facades of buildings, both vertically and horizontally.

The human scale is enhanced by bringing the building and its main entrance up to the edge of the sidewalk. It creates a more dramatic and interesting streetscape and improves the "height and width" ratio referenced in this section.

FINDING NO. 28
The applicant proposes a site configuration that is inconsistent with the suggestion to bring buildings and main entrances to the edge of the sidewalk for two reasons; 1) few buildings in the neighborhood have their main entrance along the edge of the front setback (compatibility); and, 2) according to the applicant, during discussions with the neighborhood there was not support for the notion of bringing the buildings closer to the property line.

The applicant proposes to achieve a sense of human scale by creating an interrupted front plane of the Operations and Administration Buildings, using multiple windows, varied surface textures and tones, a soffit, and a prominent public entryway in the center of the building. The applicant also proposes a water feature to direct visitors to the central entryway leading into an open lobby. Access from the site into the central entryway will be along a clearly marked pedestrian walkway from Kenthorpe Way and across the visitor parking lot. The criterion is met.

f. The main front elevation of commercial and office buildings shall provide at least 60 percent windows or transparency at the pedestrian level to create more interesting streetscape and window shopping opportunities. One side elevation shall provide at least 30 percent transparency. Any additional side or rear elevation, which is visible from a collector road or greater classification, shall also have at least 30 percent transparency. Transparency on other elevations is optional. The transparency is measured in lineal fashion. For example, a 100-foot-long building elevation shall have at least 60 feet (60 percent of 100 feet) in length of windows. The window height shall be, at minimum, three feet tall. The exception to transparency would be cases where demonstrated functional constraints or topography restrict that elevation from being used. When this exemption is applied to the main front elevation, the square footage of transparency that would ordinarily be required by the above formula shall be installed on the remaining elevations at pedestrian level in addition to any transparency required by a side elevation, and vice versa. The rear of the building is not required to include transparency. The transparency must be flush with the building elevation.

FINDING NO. 29
The applicant's proposed use is a major utility and not an office or commercial building. The criterion does not apply.

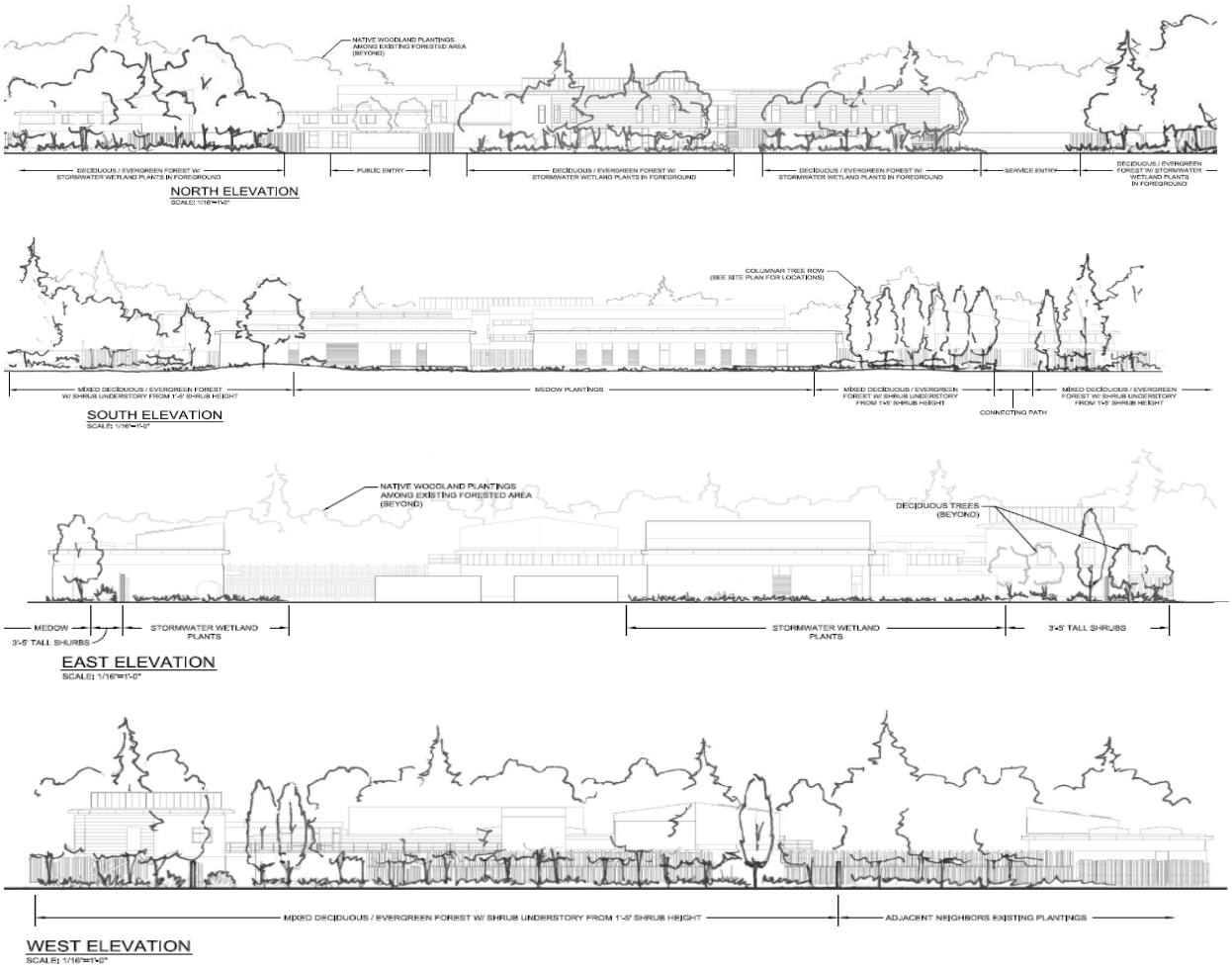
g. Variations in depth and roof line are encouraged for all elevations.

To vary the otherwise blank wall of most rear elevations, continuous flat elevations of over 100 feet in length should be avoided by indents or variations in the wall. The use of decorative brick, masonry, or stone insets and/or designs is encouraged. Another way to vary or soften this elevation is through terrain variations such as an undulating grass area with trees to provide vertical relief.

FINDING NO. 30

The applicant's proposal includes a variety of roof forms (flat roofs, with and without parapets, shed roofs, gable roofs, skylights, and green roofs) as well as vertical interruptions to horizontal building facades that serve to vary the roof line and depth along all proposed elevations. Figure 7 below and Figure 10.0-10.8 of the applicant's submittal (Exhibit PC-3, Section 21) illustrate the varied depth and roof line along proposed site elevations. The criterion is met.

Figure 7 Proposed site elevations (sheet 10.0 and 10.1 from Applicant submittal)



h. Consideration of the micro-climate (e.g., sensitivity to wind, sun angles, shade, etc.) shall be made for building users, pedestrians, and transit users, including features like awnings.

FINDING NO. 31
The applicant's proposal includes pedestrian accessways to the site which are flanked by trees and other landscaping. The Planting Plan Overview (Exhibit PC-3, Section 21, Figure 12) illustrates how landscaping is proposed which will improve comfort for users of the building and other pedestrians. The criterion is met.

i. The vision statement identified a strong commitment to developing safe and attractive pedestrian environments with broad sidewalks, canopied with trees and awnings.

FINDING NO. 32
Staff concurs with the applicant's response: The WTP site layout provides sidewalks along Kenthorpe Way and Mapleton Drive that meander between a "green-street" and extensive site landscaping. The emergency access/pedestrian path also winds through a lightly and heavily landscaped area that includes several protected significant trees. Attention to crime vulnerable areas is discussed in Finding 47 below. Consequently, the site design is consistent with the commitment to develop attractive, tree-lined, and safe pedestrian environments.

The criterion is met.

j. Sidewalk cafes, kiosks, vendors, and street furniture are encouraged. However, at least a four-foot-wide pedestrian accessway must be maintained per Chapter 53 CDC, Sidewalk Use.

FINDING NO. 33
Staff concurs with the applicant's response: The WTP is a major utility, allowed conditionally, within a residential zone. The R-10 zoning district does not encourage sidewalk cafes and vendors. Kiosks and street furniture are more frequently found in commercial zones or public parks. However, consistent with subjection (6)(j), the WTP site design provides pedestrian accessways that are 6-feet wide along both Kenthorpe Way and Mapleton Drive and along the emergency access/pedestrian path.

The criterion is met.

7. Transportation Planning Rule (TPR) compliance. The automobile shall be shifted from a dominant role, relative to other modes of transportation, by the following means:

a. Commercial and office development shall be oriented to the street. At least one public entrance shall be located facing an arterial street; or, if the project does not front on an arterial, facing a collector street; or, if the project does not front on a collector, facing the local street with highest traffic levels. Parking lots shall be placed behind or to the side of commercial and office development. When a large and/or multi-building development is occurring on a large undeveloped tract (three plus acres), it is acceptable to focus internally; however, at least 20 percent of the main adjacent right-of-way shall have buildings contiguous to it unless waived per subsection (B)(7)(c) of this section. These buildings shall be oriented to the adjacent street and include pedestrian-oriented transparencies on those elevations.

For individual buildings on smaller individual lots, at least 30 lineal feet or 50 percent of the building must be adjacent to the right-of-way unless waived per subsection (B)(7)(c) of this section. The elevations oriented to the right-of-way must incorporate pedestrian-oriented transparency.

FINDING NO. 34

The applicant proposes to expand a major utility, not a commercial or office development. The criterion does not apply.

d. Accessways, parking lots, and internal driveways shall accommodate pedestrian circulation and access by specially textured, colored, or clearly defined footpaths at least six feet wide. Paths shall be eight feet wide when abutting parking areas or travel lanes. Paths shall be separated from parking or travel lanes by either landscaping, planters, curbs, bollards, or raised surfaces. Sidewalks in front of storefronts on the arterials and main store entrances on the arterials identified in CDC 85.200(A)(3) shall be 12 feet wide to accommodate pedestrians, sidewalk sales, sidewalk cafes, etc. Sidewalks in front of storefronts and main store entrances in commercial/OBC zone development on local streets and collectors shall be eight feet wide.

FINDING NO. 35

The applicant's proposed site plan shows the accommodation of pedestrian circulation along accessways, in parking lots and internal driveways through the use of clearly defined pedestrian pathways that are between 6- and 8-feet wide. The pedestrian pathway along Kenthorpe Way is proposed to connect through the visitor parking area and to the main public entrance of the Administration Building via an 8- to 18-foot wide colored or textured paving material, which will clearly stand out from the parking lot surface. Separation between the parking and pedestrian path is proposed through the use of a 6-inch curb with an ADA accessible ramp. The criterion is met.

e. Paths shall provide direct routes that pedestrians will use between buildings, adjacent rights-of-way, and adjacent commercial developments. They shall be clearly identified. They shall be laid out to attract use and to discourage people from cutting through parking lots and impacting environmentally sensitive areas.

FINDING NO. 36

Staff concurs with the applicant's response: There are three proposed paths on site: a short pathway through the landscaped area between Kenthorpe Way and the visitor parking area, a small path form the visitors parking area through the stormwater facility to Kenthorpe Way, and the pedestrian path from Kenthorpe Way south to Mapleton Drive via, in part, the emergency access road. The first two paths connect the public right-of-way to the WTP Administration and Operations Buildings. The path leading from Kenthorpe Way to the WTP entrance through the visitor parking area varies from 8- to 18-feet and will be of a color or texture different than the visitor parking lot surface. The stormwater facility at the northwest corner of the site is within a small swale, which is not an identified stream corridor or regulated natural area. The applicant welcomes visitors to this area that is designed to be a quiet reflective area within the neighborhood. The Kenthorpe Way to Mapleton Drive path winds around the secured WTP core area and then travels southward through a grove of five significant trees that the applicant has protected (see applicant submittal Exhibit PC-3, Section 23, Figure 3.4). Therefore, the applicant proposes to provide pedestrian paths between rights-of-way and the WTP facility that are attractive to use, provide direct access through a parking area and do not impact any regulated environmentally sensitive area.

The criterion is met.

f. At least one entrance to the building shall be on the main street, or as close as possible to the main street. The entrance shall be designed to identify itself as a main point of ingress/egress.

FINDING NO. 37
The public entrance to the WTP is via Kenthorpe Way. This primary visitor entry is proposed to be gently elevated above the parking lot level. Pedestrian pathways lead visitors to the WTP main entrance. The criterion is met.

Figure 8 Applicant's rendering of proposed primary visitor entrance

g. Where transit service exists, or is expected to exist, there shall be a main entrance within a safe and reasonable distance of the transit stop. A pathway shall be provided to facilitate a direct connection.

FINDING NO. 38
TriMet has no plans to extend service near the WTP vicinity. The criterion does not apply.

h. Projects shall bring at least part of the project adjacent to or near the main street right-of-way in order to enhance the height-to-width ratio along that particular street. (The "height-to-width ratio" is an architectural term that emphasizes height or vertical dimension of buildings adjacent to streets. The higher and closer the building is, and the narrower the width of the street, the more attractive and intimate the streetscape becomes.) For every one foot in street width, the adjacent building ideally should be one to two feet higher. This ratio is considered ideal in framing and defining the streetscape.

FINDING NO. 39
CDC Section 55.100(B)(7)(i) recognizes that while the architectural standards in 55.100(B)(7) apply to public facilities, these uses, due to their functional requirements, cannot readily be configured to meet them (architectural standards). 55.100(B)(7)(i) further states that in these situations, attempts shall be made to make the design sympathetic to surrounding properties by landscaping, setbacks, buffers, and all reasonable architectural means.

The existing Operations Building is set back 114-feet from the Kenthorpe Way right-of-way. The applicant proposes a remodeled Operations Building that is set back the same distance as the existing one and a new Administrative Building that will be set back an equal distance to continue the horizontal plane of the Operations Building.

Kenthorpe Way includes a 50-foot wide right-of-way with a pavement width that varies between 22 and 25-feet (see Exhibit PC-3, Section 23, figure 3.0). The Administration Building

is proposed to be 29-feet tall and the Operations Building is proposed to be 35-feet tall. Applying the height and width ratio, as suggested in this section, would result in Administration and Operations Buildings between 44- and 50-feet tall. Because the intent of CDC Chapters 55 and 60 strive to maintaining compatibility with surrounding uses and because of the additional flexibility provided in 55.100(B)(7)(i) for public facilities, staff finds that this portion of this criterion is not applicable.

i. These architectural standards shall apply to public facilities such as reservoirs, water towers, treatment plants, fire stations, pump stations, power transmission facilities, etc. It is recognized that many of these facilities, due to their functional requirements, cannot readily be configured to meet these architectural standards. However, attempts shall be made to make the design sympathetic to surrounding properties by landscaping, setbacks, buffers, and all reasonable architectural means.

FINDING NO. 40

Staff concurs with the applicant's response: The WTP complex is a major public utility. The primary purpose of this facility is to process raw water into finished potable water and to pump the finished water into the delivery system. The majority of the actual work accomplished on-site will occur in or around structures that do not necessarily lend themselves to the architectural standards articulated in CDC subsection 55.100(B)(7). The applicant and their design team, in consultation with the neighbors, made significant efforts to: assess the visual character of the neighborhood, design a complex that reflects the design qualities of the neighborhood, compress WTP operation into the center of the site, and provide a high degree of landscape plant and structural materials to buffer the neighborhood from the WTP day-to-day operations.

The criterion is met.

j. Parking spaces at trailheads shall be located so as to preserve the view of, and access to, the trailhead entrance from the roadway. The entrance apron to the trailhead shall be marked: "No Parking," and include design features to foster trail recognition.

FINDING NO. 41

The applicant does not propose to locate any parking at either head of the through-site pedestrian path. The entry point to the path from Mapleton Drive will occur via the emergency access road, which must be kept clear at all times. The applicant proposes to construct wooden swing gates across the emergency access with a 6-foot wide opening for pedestrian access. Asphalt paving will foster recognition of the trail in these areas.

Recommended condition of approval 5 requires the applicant to mark the beginning of the through-site pedestrian path (on Mapleton Drive and Kenthorpe Way) as 'No Parking'.

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.

FINDING NO. 42

The applicant's plans indicate the presence of buffers which serve primarily to decrease noise and to provide a visual buffer from adjacent properties; according to the applicant's submittal, and verified by staff in the field, the WTP does not generate significant amounts of dust or air pollution.

The applicant proposes to decrease off-site noise and visual impacts by:

- Placing WTP operations facilities near the center of the site; to maximize distance between noise generating and more visually prominent buildings, and adjacent residences; and,
- Placing site landscaping, such as fences, walls, plantings and stormwater facilities in various layers, between adjacent properties and the center of the site, throughout the site.

While noise buffering such as sound reducing walls, fences, vegetation and the placement of noise generating equipment indoors serves to minimize the noise impacts on adjacent residences, visual buffering serves to soften the presence of the WTP for the community. As proposed, visual buffers maintain transparency and cohesiveness while avoiding disconnectedness and alienation.

The applicant has proposed a system of buffers that are sensitive to the requirements for neighborhood compatibility, as expressed in this Chapter as well as Chapter 60, while minimizing off-site noise impacts.

Due to the industrial nature of the uses and buildings, the applicant centered as many buildings as possible in the interior of the site and proposed "landscape layering" and other screening to minimize the appearance of the plant. The idea of landscape layering is to establish a variety of attractive screens and filters that soften the presence of the WTP for the community, and maintaining an overall transparency and cohesiveness while avoiding disconnectedness or an alien appearance. One specific example of this concept is the proposed approach to fencing. Taller security fencing is proposed to be subdued behind layers of vegetation within the core WTP area, distant from street view. The street edges along Kenthorpe Way and Mapleton Drive are proposed to be delineated by split-rail fencing and good neighbor fencing which contribute to a residential neighborhood character. In addition to fencing, other layers that subtly screen and secure the site are the preserved woodland edges, vegetated stormwater facilities, and the buildings themselves, which create a continuous façade shielding the most intensive plant operations from view.

The landscape design's planting concept follows a sustainable approach which promotes the use of native species which are adapted to the Northwest climate and do not require significant irrigation, maintenance, or spraying. There are six different planting types being proposed: Woodland with native trees and understory planting; Meadow with native grasses, perennials and wildflowers; Orchard with flowering non-fruiting accent trees and understory; Rain Garden, where stormwater runoff will be treated and detained in depressed wetland-

like planted swales and basins; and Green-roof, where native meadow plantings will be re-applied to roof surfaces with other drought tolerant succulents. According to the applicant, the proposed site plan reflects a collaborative effort to balance the most viable engineering concepts with greatest realization possible of the neighborhood goals for visual presence. Summarized site strategies, developed with neighborhood involvement, are as follows:

- Maintain the north edge of the property as the front door and public entry: This keeps the southern edge of the property along Mapleton Drive free from new WTP circulation patterns, thus maintaining the buffer created by the current distance from the plant's south edge.
- Centralize the plant layout: Several space-saving alternatives have resulted in a much smaller plant footprint. With this configuration, the site layout provides for setbacks from the south, east, and west that significantly exceed requirements. This aspect of the design allows landscaping and distance to be maintained as the primary buffers.
- Screen the internal plant activity with building edges, walls, and artful screening elements which tie the architectural design and the landscape design together. Buildings placed on the WTP edge will be designed to integrate into the residential context using materials, color, orientation, form, and proportion. Site-specific constructed screens will also be employed to mitigate views. These will be comprised of vertically oriented reclaimed wood slats on timber or steel frames, tying into the semi-wooded nature of the site. Lastly, low walls in the landscape, inspired by dry-stacked rubble walls typical of a farm or orchard inferred by the fruit trees that are now growing on site, will reinforce the site's semi-rural character and draw the viewer's eye towards the foreground. Together with the buffers of distance and landscape, these landscape and architectural elements will serve as visual mitigation.

  The criterion is met.

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.*

FINDING NO. 43
Staff concurs with the applicant's response: In addition to the site buffering requirements in (C)(1) above, site specific uses such as, visitor, staff and overflow parking; waste and recycling service areas; fuel storage tank; electrical transformers; solids thickeners; liquid oxygen tanks; chemical delivery area; and solids loading area, should be screened from public rights-of-way and from abutting residential properties year-round. Because the visitor parking area must be accessible to WTP visitors, 100 percent screening between the visitor parking area and Kenthorpe is unnecessary.

Uses specific to the internal operations of the WTP, such as staff and overflow parking, storage tanks, electrical transformers, and chemical and solids loading areas will be completely screened because they will be placed to the interior of the WTP complex and will be surrounded by solid building walls, architectural screening walls, rolling gates or a good neighbor fence. The three solids thickeners will be approximately ten feet tall, exceeding the height of the architectural fencing by 2-feet. The thickeners are approximately 55-feet from the nearest WTP property line and the existing mature vegetation along the property line will not be removed.

The criterion is met.

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

FINDING NO. 44
The applicant proposes the screening of all roof mounted HVAC equipment within rooftop penthouses that will screen this equipment from adjacent properties. The criterion is met.

3. *Structures or on-site activity areas which generate noise, lights, or glare shall be buffered from adjoining residential uses in accordance with the standards in subsection C of this section where applicable.*

FINDING NO. 45
The applicant has demonstrated compliance with the applicable provision of subsection C above. The criterion is met.

4. *Businesses or activities that can reasonably be expected to generate noise in excess of the noise standards contained in West Linn Municipal Code Section 5.487 shall undertake and submit appropriate noise studies and mitigate as necessary to comply with the code. (See CDC 55.110(B)(11) and 55.120(M).)*

   If the decision-making authority reasonably believes a proposed use may generate noise exceeding the standards specified in the municipal code, then the authority may require the applicant to supply professional noise studies from time to time during the user's first year of operation to monitor compliance with City standards and permit requirements.

FINDING NO. 46
The applicant enlisted the services of ENVIRON (licensed acoustical engineer) to evaluate; the existing threshold noise levels at the existing WTP site, the noise generation at the Willamette River Water Treatment Plant (WRWTP) (equipment and process similar to proposed), and to project what types of noise attenuation measures might be necessary to comply with Department of Environmental Quality (DEQ) standards for this use.

At some point in the future, the upgraded WTP will need to operate 24-hours per day as normal operation to meet increasing water demands. In this case, the WTP must meet nighttime (more restrictive) noise limits. To estimate whether the upgraded plant will meet these limits, current noise generation at the existing WTP as well as the WRWTP were compared to nighttime noise limits (Exhibit PC-3, Section 11, page11).

In their noise study, the applicant's acoustical engineer expects that, because the sound levels of typical operations at the existing WTP and WRWTP easily complied with the daytime noise limits at nearby locations, typical operations of an updated WTP would also comply with the daytime noise limit of 55dBA (L50). Because neither the WTP nor WRWTP operated at night,

daytime operations were compared to nighttime noise limits to assess potential future compliance with nighttime noise limits. Typical WTP operations would comply with the nighttime noise limit of 50dBA; however, sound levels at the WRWTP exceeded the nighttime noise limit.

Although the noise study indicates that ambient noise from a decorative water feature on the WRWTP site is likely responsible for the excessive nighttime noise levels, these sources were not noted. As such, the acoustical engineer recommends the WTP incorporate some or all of the following noise mitigation techniques and practices:

- Installation of noisy equipment indoors, when feasible
- Use of appropriate noise attenuation features on buildings, including acoustical louvers on air intakes/outlets and silencers on exhaust stacks
- For equipment installed outside, use of appropriate noise attenuation features such as acoustical enclosures or barriers, pipe lagging around noisy pipes or ducts, etc.
- Selection of quieted equipment, particularly for HVAC systems

The acoustical engineer reports that with implementation of careful design and noise mitigation measures, noise levels from typical, ongoing plant operations are expected to comply with the nighttime noise limits.

With regard to intermittent/noisy activities, all activity except truck mounted equipment associated with chemical delivery unloading and weekly garbage pickup are proposed indoors and are therefore not expected to be of concern to noise generation. Further, of these activities, the applicant proposes to install 'plant air' (i.e., compressors installed inside a plant building) which will eliminate the need for truck mounted compressors and is expected to eliminate much of the noise associated with chemical unloading (Exhibit PC-3, Section 11, page 13). The Applicant's acoustical engineer recommends the following design elements to mitigate noise from intermittent noisy activities:

- Install backup generator indoors
- Use of 'plant air' for chemical unloading operations

The applicant's acoustical engineer concludes their report by stating that because the proposed WTP will eliminate, move indoors or locate far enough from neighboring properties most of the exterior noise-producing intermittent activities on the site, the upgraded WTP is expected to comply with both the daytime and nighttime noise limits.

A recommended Condition of Approval 4 requires the applicant to submit a follow-up noise study, conducted by a licensed professional acoustical engineer, six months from the start of operation of the upgraded plant, verifying that the upgraded facility meets DEQ noise standards.

G. Demarcation of public, semi-public, and private spaces. The structures and site improvements shall be designed so that public areas such as streets or public gathering places, semi-public areas, and private outdoor areas are clearly defined in order to establish persons having a right to be in the space, to provide for crime prevention, and to establish maintenance responsibility. These areas may be defined by:

1. A deck, patio, fence, low wall, hedge, or draping vine;

2. *A trellis or arbor;*
3. *A change in level;*
4. *A change in the texture of the path material;*
5. *Sign; or*
6. *Landscaping.*

Use of gates to demarcate the boundary between a public street and a private access driveway is prohibited.

FINDING NO. 47

Staff concurs with the applicant's response: The WTP is not intended to be a public park or a public space; it is a public utility with a secure core area that is not intended for public use and with perimeter spaces, which the public may use. The secure core area will be enclosed by buildings and by architectural security walls and good neighbor fences with integrated security chain link. See fence details in Exhibit PC-3, Section 23, figures 14.0 and 14.1.

With consideration given to scale and existing conditions, a restrained collection of public, semi-public and private amenities provide small-scale spaces that preserve the quiet atmosphere and forested quality of the site, and are appropriate within the framework of the WTP and neighborhood. The site can be divided into three zones: the public sidewalks along Kenthorpe Way and Mapleton Drive, the semi-public "unsecured" zone on Kenthorpe and Mapleton, and the private secure core zone.

The Kenthorpe Way and Mapleton Drive street frontages will include meandering sidewalks and native and ornamental landscape plant materials that are intended for public enjoyment and use. Along Kenthorpe Way the landscaping will extend southward to the visitor parking lot and will include an ADA accessible textured path connecting Kenthorpe Way to the primary entrance of the facility, the focal point of which is a low linear water feature. While preserving the screen of trees along Kenthorpe Way, a small water feature, meandering pathways, seating niches, and a secluded rain garden are integrated sensitively into this open space.

The Mapleton side of the property includes open space, where much of the site perimeter will remain forested and/or planted. The woodland/orchard character is complemented by low site walls, and forested trail, making access to Kenthorpe and nearby schools and parks much easier. A centerpiece of this open space is the meandering emergency accessway and pedestrian pathway. See Section 21, Figures 12.0-12.4. The emergency access road will be closed to all vehicles other than emergency vehicles. TVFR has expressed a strong preference against bollards. An opening between the swing gates will allow direct pedestrian access to the pathway.

Within the secure WTP core, private space includes the process and non-process buildings. For these reasons, the proposed site plan defines public, semi-public and private spaces by means of landscaping, textured materials, low walls, water features and fences, consistent with subsection (G).

The criterion is met.

I. Public facilities. An application may only be approved if adequate public facilities will be available to provide service to the property prior to occupancy.

1. Streets. Sufficient right-of-way and slope easement shall be dedicated to accommodate all abutting streets to be improved to the City's Improvement Standards and Specifications. The City Engineer shall determine the appropriate level of street and traffic control improvements to be required, including any off-site street and traffic control improvements, based upon the transportation analysis submitted. The City Engineer's determination of developer obligation, the extent of road improvement and City's share, if any, of improvements and the timing of improvements shall be made based upon the City's systems development charge ordinance and capital improvement program, and the rough proportionality between the impact of the development and the street improvements.

In determining the appropriate sizing of the street in commercial, office, multi-family, and public settings, the street should be the minimum necessary to accommodate anticipated traffic load and needs and should provide substantial accommodations for pedestrians and bicyclists. Road and driveway alignment should consider and mitigate impacts on adjacent properties and in neighborhoods in terms of increased traffic loads, noise, vibrations, and glare.

The realignment or redesign of roads shall consider how the proposal meets accepted engineering standards, enhances public safety, and favorably relates to adjacent lands and land uses. Consideration should also be given to selecting an alignment or design that minimizes or avoids hazard areas and loss of significant natural features (drainageways, wetlands, heavily forested areas, etc.) unless site mitigation can clearly produce a superior landscape in terms of shape, grades, and reforestation, and is fully consistent with applicable code restrictions regarding resource areas.

Streets shall be installed per Chapter 85 CDC standards. The City Engineer has the authority to require that street widths match adjacent street widths. Sidewalks shall be installed per CDC 85.200(A)(3) for commercial and office projects, and CDC 85.200(A)(16) and 92.010(H) for residential projects, and applicable provisions of this chapter.

Based upon the City Manager's or Manager's designee's determination, the applicant shall construct or cause to be constructed, or contribute a proportionate share of the costs, for all necessary off-site improvements identified by the transportation analysis commissioned to address CDC 55.125 that are required to mitigate impacts from the proposed development. Proportionate share of the costs shall be determined by the City Manager or Manager's designee, who shall assume that the proposed development provides improvements in rough proportion to identified impacts of the development.

FINDING NO. 48

The Applicant's traffic report (Exhibit PC-3, Section 10) indicates an increase in vehicular traffic to and from the site by 5 average daily trips (ADT); of this increase, 0.3 ADT are expected to be generated from delivery vehicles and heavy trucks. Due to the modest increase in ADT, the low-volume characteristics of both Kenthorpe Way and Mapleton Drive, and the City's desire to preserve mature trees, the City Engineer has determined the following street improvements to be proportionate to the applicant's expected impact and accommodating to anticipated vehicle load with substantial accommodation for pedestrians and bicycles:

- Kenthorpe Way – between east property line of (Assessor's Map 21E24BD) tax lot 500 and west property line of (Assessor's Map 21E24BD) tax lot 200 (approx. 400-feet)
    - 16-foot wide structural and pavement improvement with curb per 2010 City of West Linn Public Works Standards
    - 6-foot wide vegetated swale
    - 6-foot wide concrete meandering sidewalk
    - Public easement where sidewalk occupies applicant's property
- Kenthorpe Way – between south property line of (Assessor's Map 21E24BD) tax lot 100 and southern terminus of Kenthorpe Way right-of-way
    - 6-foot wide concrete sidewalk with curb and gutter on westernmost side of right-of-way

Although not required under the CDC due to the lack of a clear nexus between the impacts of the development, the site plans include the following street improvements along Mapleton Drive:

- Mapleton Drive – between east property line of (Assessor's Map 21E24BD) tax lot 1101 and west property line of (Assessor's Map 21E24BD) tax lot 1501
    - 18-foot wide structural and pavement improvement with curb per 2010 City of West Linn Public Works Standards
    - 6-foot wide vegetated swale
    - 6-wide concrete sidewalk
    - Public easement where sidewalk occupies applicant's property

These improvements were recommended to the applicant by City Staff after reviewing the requirements under the City's Transportation Systems Plan (TSP) and the existing conditions. The Pedestrian Plan of the City's TSP identifies this segment of Mapleton as being one of the City's "Pedestrian Deficiency Locations" and includes sidewalks on both sides of the street. The approved TSP identifies sidewalk construction on Mapleton on the Pedestrian Master Plan Projects List (Table 5-2; #26).

A condition of approval is proposed (Conditions of Approval 16) ensuring that an easement is recorded for those portions of the pedestrian path that are on private property that are intended for public use, as indicated in Figure 3.0, Exhibit PC-3, Section 23.

See the right-of-way profile in Exhibit PC-3, Section 23, figure 3.0B and C, for details of the proposed street improvements.

2. *Drainage. A registered civil engineer shall prepare a plan and statement which shall be supported by factual data that clearly shows that there will be no adverse impacts from increased intensity of runoff off site or the plan and statement shall identify all off-site impacts and measures to mitigate those impacts. The plan and statement shall, at a minimum, determine off-site impacts from a 25-year storm. The City Engineer shall adjust storm drainage facilities for applications which contain permeable parking surfaces based*

upon a quantitative analysis of the increased water retention and water quality characteristics of the permeable parking surface. Catch basins shall be installed and connected to pipelines leading to storm sewers or drainageways. All plans will then be reviewed by the City Engineer.

FINDING NO. 49

The existing site is approximately 9.24 acres and contains approximately 1.51 acres of impervious surfaces, or 16 percent of the total site. The proposed design will increase the overall impervious areas of the site by approximately 1.45 acres, bringing the total impervious areas of the site to 2.96 acres; an increase in the overall impervious area of 16 percent (32 percent total; below the 35 percent maximum impervious area requirement).

The applicant's stormwater plan (Exhibit PC-3, Section 16) indicates that sufficient stormwater facilities have been proposed to accommodate the impacts outlined in Subsection 2 above.

Proposed Condition of Approval 8 would require the proposed vegetated swales along Kenthorpe Way and Mapleton Drive to be located between the street and sidewalk except in those areas where an alternate configuration is necessary to protect mature trees. Additionally, this Condition requires the applicant to execute a stormwater maintenance agreement with the City of West Linn, and record a public storm drainage easement, for all stormwater treatment and detention facilities located on private property.

3. *Municipal water. A registered civil engineer shall prepare a plan for the provision of water which demonstrates to the City Engineer's satisfaction the availability of sufficient volume, capacity, and pressure to serve the proposed development's domestic, commercial, and industrial fire flows. All plans will then be reviewed by the City Engineer.*

FINDING NO. 50

Staff concurs with the applicant's response: A 6-inch asbestos cement (AC) water main resides along the project frontage on Kenthorpe Way and a 4-inch AC water main exists in Mapleton Drive. The WTP does not use potable water from the West Linn water mains. All potable water circulating around the upgraded WTP will continue to be finished water taken from the WTP itself. WTP finished water is currently used for fire flow purposes and will be used in the expanded WTP as well.

Proposed Condition of Approval 9 requires the applicant to provide, at time of building permit submittal, detailed fire flow calculations for each building on site that satisfy TVF&R requirements.

4. *Sanitary sewers. A registered civil engineer shall prepare a sewerage collection system plan which demonstrates sufficient on-site capacity to serve the proposed development. The City Engineer shall determine whether the existing City system has sufficient capacity to serve the development.*

FINDING NO. 51

The current flows from the WTP deliver up to 60 gallons per minute to the sanitary sewer system on Kenthorpe Way. The applicant proposes to contribute wastewater, to the existing sanitary system, from the following sources after the expansion:

- Reject water from the mechanical dewatering process;

- Domestic amenities (sinks, toilets, showers, etc.) in the existing Operations Building and in the new Administration Building and the maintenance areas;
- Seal water from pumps;
- Floor drains; and,
- Analyzer drains if detailed design determines that they cannon be located to allow them to drain to a recycle location.

The applicant's plans do not indicate whether sewer system capacity exists to serve the proposed use. Therefore, proposed Condition of Approval 10 would require the applicant to demonstrate, at time of building permit submittal, that the proposed use will not generate flows in excess of 60 GPM to the City's sanitary system.

Also, under recommended Condition of Approval 10, the applicant would be required to install, prior to final occupancy, a wastewater flow meter to allow the City to track WTP discharges into the City's sanitary sewer system. The wastewater flow meter shall be installed at a location as near as possible to the point of connection with the public sewer system and where the City can access it for reading purposes. The wastewater flow meter shall be owned and maintained by the facility owner.

5. Solid waste and recycling storage areas. Appropriately sized and located solid waste and recycling storage areas shall be provided. Metro standards shall be used.

FINDING NO. 52
The applicant's plans indicate a preferred garbage and recycling area that is at least 950 square feet in size. The garbage and recycling area is proposed to be located behind sight obscuring security fencing as shown in Exhibit PC-3, Section 14, Detail 1 on the east side of the Operations Building; accessible behind a secured gate (see Exhibit PC-3, Section 23, Figure 3.3). The applicant proposes an alternative location on the west side of the building, also accessible behind a secured gate (see Exhibit PC-3, Section 23, Figure 3.1). The applicant did not supply construction details at this time, so staff is unable to determine their conformance with applicable standards. Therefore proposed Condition of Approval 11a requires, at time of building permit submittal, the applicant submit construction plans which demonstrate compliance with refuse and recycling standards of CDC subsections 55.100(O)(3) and (4). The applicant shall provide construction details which demonstrate that the trash containers will be located on a level Portland cement concrete pad, at least four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment. The pad needs be designed to discharge surface water runoff to avoid ponding.

J. Crime prevention and safety/defensible space.

1. Windows shall be located so that areas vulnerable to crime can be surveyed by the occupants.

FINDING NO. 53
Staff concurs with the applicant's response: The first and second story windows of the proposed Administration and Operations buildings face northward towards Kenthorpe Way, west toward the stormwater facility and east toward tax lot 200. Windows in the southern walls of the Electrical and Finished Water Pump Stations Buildings face south toward the open

meadow and landscape area above the clearwell (Exhibit PC-3, Section 21, Figure 10.0 and 10.1).

Windows in these locations promote surveillance of the site three areas of special interest: 1) the public and service driveways, visitor parking area, building entryway, landscaping and stormwater feature along Kenthorpe Way; 2) south of the WTP interior is an open meadow and emergency access/pedestrian accessway; and, 3) the through-site pedestrian path connecting Kenthorpe Way with Mapleton Drive.

The criterion is met.

2. *Interior laundry and service areas shall be located in a way that they can be observed by others.*

FINDING NO. 54
Public access to locker rooms, mudrooms and the WTP kitchen is limited to WTP employees and therefore these areas are not crime vulnerable areas. The criterion does not apply

3. *Mailboxes, recycling, and solid waste facilities shall be located in lighted areas having vehicular or pedestrian traffic.*

FINDING NO. 55
The WTP mailbox is located along Kenthorpe Way and is illuminated by the WTP visitor parking lot driveway light. Because the recycling and solid waste facilities are not in areas accessible to public vehicular or pedestrian traffic, lighting is not proposed. The criterion is met.

4. *The exterior lighting levels shall be selected and the angles shall be oriented towards areas vulnerable to crime.*

FINDING NO. 56
The applicant's lighting plan (Exhibit PC-3, Section 23, Figures 5.5) indicates that site lighting will be directed to areas of concern within the WTP core, and visitor parking area. Additionally, the applicant proposes to install low-level lighting along the thickeners and solids lagoon to illuminate the through-site pathway. The criterion is met.

5. *Light fixtures shall be provided in areas having heavy pedestrian or vehicular traffic and in potentially dangerous areas such as parking lots, stairs, ramps, and abrupt grade changes.*

FINDING NO. 57
The applicant proposes to illuminate heavy pedestrian and vehicle use areas, such as parking lots, stairs into the building and the main entrance ramp. Additionally, although not intended for heavy pedestrian or vehicle use, the applicant also proposes to illuminate pedestrian pathways (see Exhibit PC-3, Section 23, Figure 5.5). The criterion is met.

6. *Fixtures shall be placed at a height so that light patterns overlap at a height of seven feet which is sufficient to illuminate a person. All commercial, industrial, residential, and public facility projects undergoing design review shall use low or high pressure sodium bulbs and be able to demonstrate effective shielding so that the light is directed downwards rather than omni-directional. Omni-directional lights of an ornamental nature may be used in general commercial districts only.*

FINDING NO. 58

Staff concurs with the Applicant's response: Exhibit PC-3, Section 23, Figures 5.5 depict how the Kenthorpe Way driveways, visitor parking lot and east side pedestrian path are illuminated at a 7-foot above grade standard. The lighting fixtures will be fully shielded and will use low-pressure sodium bulbs. Within the WTP compound and away from abutting properties, the applicant proposes to install metal halide bulbs that are fully shielded. Along the pedestrian path and within the accessible water feature, the applicant proposes to use low pressure sodium bulbs.

The criterion is met.

7. *Lines of sight shall be reasonably established so that the development site is visible to police and residents.*

FINDING NO. 59

Staff concurs with the Applicant's response: The lines of sight from Kenthorpe Way to the WTP and from Mapleton Drive to the WTP are unobstructed (see Exhibit PC-3, Section 21, Figure 10.0). The line of sight from Kenthorpe Way and Mapleton Drive to the pedestrian path connecting the emergency accessway and Kenthorpe Way, however, is obstructed.

While the trail from Kenthorpe to Mapleton is a desired community feature, trail alignment options are limited by the WTP uses on-site. The West Linn Comprehensive Plan encourages the creation of a trail network in West Linn and the draft West Linn Trails Plan further encourages the construction of a local trail connecting Mapleton Drive and Kenthorpe Way. To minimize impacts to the neighborhood, the WTP design has been moved to the center of the site. For security reasons, it is not possible to build a pedestrian path through the core area of the WTP. Consequently, the pedestrian path must go to the east of the WTP operations area.

It is not possible to construct a path around the WTP core so that it does not have an unobstructed view. Consequently, the applicant proposes that a reasonable solution to the problem is to light this portion of the pathway so that the pathway is safe and defensible.

Lines of sight have been reasonably established for policing by law enforcement and residents. The criterion is met.

8. *Security fences for utilities (e.g., power transformers, pump stations, pipeline control equipment, etc.) or wireless communication facilities may be up to eight feet tall in order to protect public safety. No variances are required regardless of location.*

FINDING NO. 60

Staff concurs with the applicant's response: The perimeter good neighbor fence will be six feet high (see Exhibit PC-3, Section 23, Figure 14.0). The location of all utilities is behind the architectural security fencing and/or buildings surrounding the core area. These interior security fences are not located within the lot setback.

The criterion is met.

K. *Provisions for persons with disabilities.*

1. *The needs of a person with a disability shall be provided for. Accessible routes shall be provided between all buildings and accessible site facilities. The accessible route shall be the most practical direct route between accessible building entries, accessible site facilities, and the accessible entry to the site. An accessible route shall connect to the public right-of-way and to at least one on-site or adjacent transit stop (if the area is served by transit). All*

facilities shall conform to, or exceed, the Americans with Disabilities Act (ADA) standards, including those included in the Uniform Building Code.

FINDING NO. 61

Staff concurs with the applicant's response: ADA Accessibility Guidelines (ADAAG) apply to the public areas of the utility. Public sidewalks and the pedestrian pathways will be designed, consistent with West Linn Public Works Standards to comply with ADA requirements. Two ADA accessible parking stalls flank the pedestrian walkway leading from the visitor parking area to the primary entrance of the remodeled Operations Building (see Exhibit PC-3, Section 21, Figure 7.0).

Both parking stalls are connected by a grade level pathway to the proposed sidewalk on Kenthorpe Way. An ADA compliant ramp leads directly from roadway level into the primary public building entrance. An elevator connects the first and second floors of the Operations Building. The first floor lobby of the Administration Building is connected to the first floor of the Operations Building by a level hallway. The second floors of the Administration and Operations Buildings are also connected by an ADA accessible hallway (see Exhibit PC-3, Section 21, Figures 9.2 and 9.3). Consequently, the proposal complies with CDC 55.100(K) by providing ADA compliant pedestrian access around the site, parking stalls, and access into and through the publicly accessible spaces of the Administration and Operations Buildings.

The criterion is met.

L. Signs.

1. *Based on considerations of crime prevention and the needs of emergency vehicles, a system of signs for identifying the location of each residential unit, store, or industry shall be established.*
2. *The signs, graphics, and letter styles shall be designed to be compatible with surrounding development, to contribute to a sense of project identity, or, when appropriate, to reflect a sense of the history of the area and the architectural style.*
3. *The sign graphics and letter styles shall announce, inform, and designate particular areas or uses as simply and clearly as possible.*
4. *The signs shall not obscure vehicle driver's sight distance.*
5. *Signs indicating future use shall be installed on land dedicated for public facilities (e.g., parks, water reservoir, fire halls, etc.).*
6. *Signs and appropriate traffic control devices and markings shall be installed or painted in the driveway and parking lot areas to identify bicycle and pedestrian routes.*

FINDING NO. 62

The applicant proposes to provide three types of signage: a monument sign at the service entry and at the parking entrance; a building mounted sign at the Administration Building; and pole mounted signs at both entries to the pedestrian pathway. The general locations for this sign system are shown in Section 21, Figure 8.0. However, the applicant is not proposing any particular sign designs at this preliminary stage of design. Lake Oswego will apply for a sign permit after approval of the building permits and prior to issuance of an occupancy permit for the Administration or Operations Buildings. The signs will need to demonstrate

compliance with CDC 55.100(L)(2)(3)(4) and (6). Pedestrian and vehicle circulation signs need to be consistent with the travel mode and direction shown in PC-3, Section 21, Figure 8.0. Traffic control devices are not proposed other than secure access gates. Individual buildings and loading areas within the core are will be signed and marked consistent with the requirements of Tualatin Valley Fire and Rescue.

M. Utilities. The developer shall make necessary arrangements with utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting, and cable television, shall be placed underground, as practical. The design standards of Tables 1 and 2 above, and of subsection 5.487 of the West Linn Municipal Code relative to existing high ambient noise levels shall apply to this section.

FINDING NO. 63

Staff concurs with the applicant's response: Subsection (M) requires placing electrical wires underground, "as practical". The existing overhead utility lines are shown in Exhibit PC-3, Section 21, Figures 5.0-5.4. All electrical lines within the WTP property will be located underground. Portland General Electric (PGE) Company will provide the WTP with a secondary power supply connected to a separate power transformer. The secondary power supply will be placed underground in the Kenthorpe Way right-of-way (see Exhibit PC-3, Section 21, Figure 5.1).

In situations where existing overhead utility lines run continuously along a street frontage, such as along Kenthorpe Way and Mapleton Drive, West Linn provides an option of a fee in-lieu-of undergrounding a small section of an overhead utility line. This avoids the disruptive effect of road cuts and service changes to residents that a piece-meal approach to undergrounding utilities creates. Consequently, the applicant proposes to leave the overhead utility lines in place and pay a fee, determined by West Linn or PGE, in-lieu-of undergrounding overhead utilities at this time.

Proposed Condition of Approval 12, requires that prior to building permit issuance the applicant to pay the appropriate fee-in-lieu of undergrounding overhead utilities on Kenthorpe Way and Mapleton Drive.

N. Wireless communication facilities (WCFs). (This section only applicable to WCFs.) WCFs as defined in Chapter 57 CDC may be required to go through Class I or Class II design review. The approval criteria for Class I design review is that the visual impact of the WCF shall be minimal to the extent allowed by Chapter 57 CDC. Stealth designs shall be sufficiently camouflaged so that they are not easily seen by passersby in the public right-of-way or from any adjoining residential unit. WCFs that are classified as Class II design review must respond to all of the approval criteria of this chapter.

FINDING NO. 64

The applicant proposes a WCF for on-site communications and to gather radio telemetry with off-site components of the WTP. CDC Section 2.030 defines a WCF as "an unstaffed facility for the transmission or reception of radio frequency signals usually consisting of…" The WCF regulations here and in Chapter 57 do not apply to the Applicant's proposal.

O. Refuse and recycling standards.

1. *All commercial, industrial and multi-family developments over five units requiring Class II design review shall comply with the standards set forth in these provisions. Modifications to these provisions may be permitted if the Planning Commission determines that the changes are consistent with the purpose of these provisions and the City receives written evidence from the local franchised solid waste and recycling firm that they are in agreement with the proposed modifications.*
2. *Compactors, containers, and drop boxes shall be located on a level Portland cement concrete pad, a minimum of four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment at the time of construction. The pad shall be designed to discharge surface water runoff to avoid ponding.*

FINDING NO. 65

As previously mentioned, the applicant proposes to locate the trash container behind the architectural security wall as shown in Exhibit PC-3, Section 23, Figure 14, Detail 1, on the east side of the Operations Building; accessible behind a secured gate. The applicant proposes an alternative location on the west side of the building, also accessible behind a secured gate (see Exhibit PC-3, Section 23, Figure 3.1). The applicant did not supply construction details at this time.

As previously noted, proposed Condition of Approval 11,requires, at time of building permit submittal, the applicant to provide construction details which demonstrate that the trash containers will be located on a level Portland cement concrete pad, at least four inches thick, at ground elevation or other location compatible with the local franchise collection firm's equipment. The pad needs to be designed to discharge surface water runoff to avoid ponding.

3. *Recycling and solid waste service areas.*
    a. *Recycling receptacles shall be designed and located to serve the collection requirements for the specific type of material.*
    b. *The recycling area shall be located in close proximity to the garbage container areas and be accessible to the local franchised collection firm's equipment.*
    c. *Recycling receptacles or shelters located outside a structure shall have lids and be covered by a roof constructed of water and insect-resistive material. The maintenance of enclosures, receptacles and shelters is the responsibility of the property owner.*
    d. *The location of the recycling area and method of storage shall be approved by the local fire marshal.*
    e. *Recycling and solid waste service areas shall be at ground level and/or otherwise accessible to the franchised solid waste and recycling collection firm.*
    f. *Recycling and solid waste service areas shall be used only for purposes of storing solid waste and recyclable materials and shall not be a general storage area to store personal belongings of tenants, lessees, property management or owners of the development or premises.*
    g. *Recyclable material service areas shall be maintained in a clean and safe condition.*

FINDING NO. 66

The applicant proposes to locate recycling and solid waste collection boxes alongside the trash containers in either the preferred or alternative location described above. As previously noted, the Applicant did not supply construction details.

Proposed Condition of Approval 11 requires, at time of building permit submittal, the applicant to submit construction plans which demonstrate compliance with (O)(3) and (4) above.

4. *Special wastes or recyclable materials.*

    a. *Environmentally hazardous wastes defined in ORS 466.005 shall be located, prepared, stored, maintained, collected, transported, and disposed in a manner acceptable to the Oregon Department of Environmental Quality.*

    b. *Containers used to store cooking oils, grease or animal renderings for recycling or disposal shall not be located in the principal recyclable materials or solid waste storage areas. These materials shall be stored in a separate storage area designed for such purpose.*

FINDING NO. 67
The applicant has prepared an HMMP and will be responsible for meeting all DEQ regulations for any hazardous wastes.

5. *Screening and buffering.*

    a. *Enclosures shall include a curbed landscape area at least three feet in width on the sides and rear. Landscaping shall include, at a minimum, a continuous hedge maintained at a height of 36 inches.*

    b. *Placement of enclosures adjacent to residentially zoned property and along street frontages is strongly discouraged. They shall be located so as to conceal them from public view to the maximum extent possible.*

    c. *All dumpsters and other trash containers shall be completely screened on all four sides with an enclosure that is comprised of a durable material such as masonry with a finish that is architecturally compatible with the project. Chain link fencing, with or without slats, will not be allowed.*

FINDING NO. 68
Staff concurs with the applicant's response: All dumpsters, trash collection boxes, recycling and solid waste areas will be behind the architecture security wall shown in Exhibit PC-3, Section 23, Figure 14.0, Detail 1. These areas will be obscured from public view. Consequently, no additional screening and buffering is needed to satisfy the requirements and intent of subsection (O)(5).

These criteria are met.

6. *Litter receptacles.*

    a. *Location. Litter receptacles may not encroach upon the minimum required walkway widths.*

b. Litter receptacles may not be located within public rights-of-way except as permitted through an agreement with the City in a manner acceptable to the City Attorney or his/her designee.

c. Number. The number and location of proposed litter receptacles shall be based on the type and size of the proposed uses. However, at a minimum, for non-residential uses, at least one external litter receptacle shall be provided for every 25 parking spaces for first 100 spaces, plus one receptacle for every additional 100 spaces. (Ord. 1547, 2007; Ord. 1604 § 52, 2011)

FINDING NO. 69
The applicant proposes to provide 17 vehicle parking spaces for visitors and 7 vehicle parking spaces for staff. Based on the 24 total parking spaces, the applicant is required to place 1 external littler receptacle. The applicant proposes to place 1 litter receptacle near the pedestrian walkway in the visitor parking area (see Exhibit PC-3, Section 23, Figure 3.1). The criterion is met.

CHAPTER 33, STORMWATER QUALITY AND DETENTION

33.040 APPROVAL CRITERIA

A. Stormwater quality facilities shall meet non-point source pollution control standards required by the Public Works Design Standards.

FINDING NO. 70
The applicant proposes to design WTP stormwater quality facilities to meet the non-point source pollution control standards specified in the West Linn Public Works Standards.

B. Design of stormwater detention and pollution reduction facilities and related detention and water quality calculations shall meet Public Works Design Standards and shall be prepared by a professional engineer licensed to practice in the State of Oregon.

FINDING NO. 71
A professional engineer, licensed to practice in the State of Oregon, prepared the preliminary stormwater detention and pollution reduction facilities and related detention and water quality calculations using the City of West Linn Public Works Design Standards and the City of West Linn Community Development Code (see Exhibit PC-3, Section 16). The criterion is met.

C. Soil stabilization techniques, erosion control, and adequate improvements to accommodate the intended drainage through the drainage basin shall be used. Storm drainage shall not be diverted from its natural watercourse unless no feasible alternatives exist. Interbasin transfers of storm drainage will not be permitted.

FINDING NO. 72
The preliminary plan shows that stormwater drainage will not be diverted from the natural watercourse. The applicant will be required to demonstrate that all WTP stormwater management features have been designed using the soil stabilization, erosion

control and drainage techniques found in the City of West Linn Public Works Design Standards and the City of West Linn Community Development Code.

E. Stormwater detention and treatment facilities shall be vegetated with plants from the Metro's Native Plant List as described in CDC 33.070.

FINDING NO. 73
The Applicant proposes to vegetate stormwater facilities using native plants allowed by the City of Portland Stormwater Management Manual (see Exhibit PC-3, Section 21, Figure 11). The City allows the use of the Portland Stormwater Management manual. The criterion is met.

F. Projects must either stockpile existing topsoil for reuse on the site or import topsoil, rather than amend subsoils. Soil amendments are allowed only where the applicant can demonstrate they are the only practical alternative for enabling the soil to support healthy plantings, promoting better stormwater treatment, or improving soil infiltration capacity (where appropriate).

FINDING NO. 74
The applicant's final construction documents will be required to demonstrate that planting practices will use either stockpiled soil or, if necessary, imported topsoil.

G. Interim erosion control measures, such as mulching, shall be placed immediately upon completion of grading of the facilities. (Ord. 1463, 2000)

FINDING NO. 75
The applicant proposes interim erosion control measures consistent with the "Erosion Prevention and Sediment Control: Planning and Design Manual" published by Clackamas County Water Environment Services, December 2008. The criterion is met.

33.060 MAINTENANCE AND ACCESS REQUIREMENTS
Maintenance and access requirements shall meet Public Works Design Standards. (Ord. 1463, 2000)

FINDING NO. 76
At the time of building permit submittal the Applicant will be required to demonstrate compliance with the City of West Linn Public Works Design Standards regarding maintenance and access standards.

CHAPTER 42, CLEAR VISION AREAS

42.020 CLEAR VISION AREAS REQUIRED, USES PROHIBITED

A. A clear vision area shall be maintained on the corners of all property adjacent to an intersection as provided by CDC 42.040 and 42.050.

B. A clear vision area shall contain no planting, fence, wall, structure or temporary or permanent obstruction (except for an occasional utility pole or tree) exceeding three feet in

height, measured from the top of the curb, or, where no curb exists, from the street centerline grade, except that trees exceeding this height may be located in this area, provided all branches below eight feet are removed. (Ord. 1192, 1987)

FINDING NO. 77

Staff partially concurs with the applicant's response: "The property is not located on an intersection corner. Thirty-foot clear vision triangles from the driveways onto Kenthorpe Way, which are 24 feet wide or more, are shown in Exhibit PC-3, Section 23, Figures 3.1 and 3.3. "

"The landscape planting plans, Exhibit PC-3, Section 23, Figures 12.1-12.4 provide for plant materials that are three feet tall or less at maturity or include trees with branches 8 feet or more above grade level. The clear vision triangle for the 20-foot wide emergency access road will depend upon the location of the emergency access gate. The gate could be located 30 feet back from the property line, consistent with subsection CDC 42.050. Or, because emergency vehicles will use the road only during emergency situations, the gate could be located closer to the right-of-way."

Because it is important that pedestrians and bicyclists using the emergency access portion of the through-site path have clear vision of vehicles and other pedestrians using Mapleton Drive, the applicant needs to locate the emergency access gate 30-feet from the Mapleton Drive right-of-way line. Proposed Condition of Approval 6 provides for this.

CHAPTER 44, FENCES

44.020 SIGHT-OBSCURING FENCE; SETBACK AND HEIGHT LIMITATIONS

A. A sight- or non-sight-obscuring fence may be located on the property line or in a yard setback area subject to the following:

1. The fence is located within:

- *a. A required front yard area, and it does not exceed three feet, except pillars and driveway entry features subject to the requirements of Chapter 42 CDC, Clear Vision Areas, and approval by the Planning Director;*
- *b. A required side yard which abuts a street and it is within that portion of the side yard which is also part of the front yard setback area and it does not exceed three feet;*
- *c. A required side yard which abuts a street and it is within that portion of the side yard which is not also a portion of the front yard setback area and it does not exceed six feet provided the provisions of Chapter 42 CDC are met;*
- *d. A required rear yard which abuts a street and it does not exceed six feet; or*
- *e. A required side yard area which does not abut a street or a rear yard and it does not exceed six feet.*

FINDING NO. 78

The applicant's plans show a 6-foot good neighbor fence along the east and west property lines to the point of intersection with Kenthorpe Way. These fences are outside of the clear vision triangles for the two site driveways on Kenthorpe Way. Within the Mapleton Drive setback, the Applicant proposes a 3-foot tall split rail fence (see Exhibit PC-3, Section 23, Figures 12.1 – 12.4 and 14.0 and 14.1).

Proposed Condition of Approval 13, required the portions of the good neighbor fence within the site's front yard setback to be no greater than 3-feet tall.

44.030 SCREENING OF OUTDOOR STORAGE

A. All service, repair, and storage activities carried on in connection with any commercial, business or industrial activity and not conducted within an enclosed building shall be screened from view of all adjacent properties and adjacent streets by a sight-obscuring fence.

B. The sight-obscuring fence shall be in accordance with provisions of Chapter 42 CDC, Clear Vision Areas, and shall be subject to the provisions of Chapter 55 CDC, Design Review.

FINDING NO. 79

Staff concurs with the applicant's response: All WTP service, repair and storage activities will occur within the secured core of the facility which will be screened from view of all adjacent properties and adjacent streets by means of sight obscuring architectural security walls, architectural security wall gates, visual screening fence or building walls (see Exhibit PC-3, Section 23, Figures 14.0 and 14.1 for wall, gate and fence detail). The fences and wall are outside of clear vision areas and are subject to Class II Design Review. Therefore, the WTP proposal screens outdoor storage, service and repairs areas consistent with CDC 44.030.

The criteria are met.

44.040 LANDSCAPING

Landscaping which is located on the fence line and which impairs sight vision shall not be located within the clear vision area as provided in Chapter 42 CDC.

FINDING NO. 80

The applicant proposes landscaping in the clear vision areas that will either grow to less than 3 feet at maturity or that will be pruned so that branches are higher than 8 feet off the ground. The criterion is met.

44.050 STANDARDS FOR CONSTRUCTION

A. The structural side of the fence shall face the owner's property; and

B. The sides of the fence abutting adjoining properties and the street shall be maintained. (Ord. 1291, 1990)

FINDING NO. 81

Staff concurs with the Applicant's response: The proposed good neighbor fence, see Exhibit PC-3, Section 23, Figure 14.0, will be constructed so that the structural side of the fence faces the WTP. Any chain link element in a good neighbor fence will be located on the WTP property side [of the good neighbor fence]. The City of Lake Oswego will be responsible for maintaining both sides of any fence in good condition.

The criterion is met.

CHAPTER 46, OFF-STREET PARKING, LOADING AND RESERVIOR AREAS

46.060 STORAGE IN PARKING AND LOADING AREAS PROHIBITED

Required parking spaces shall be available for the parking of passenger automobiles of residents, customers, patrons and employees only, and the required parking spaces shall not be used for storage of vehicles or materials or for the parking of trucks connected with the business or use with the exception of small (under one-ton) delivery trucks or cars.

FINDING NO. 82

Staff concurs with the applicant's response: The designated parking areas are reserved for visitors and employees. They will not be used for vehicle or material storage. The overflow parking area is not required for employee use on a daily basis and WTP operational vehicles and materials will be stored here on an as-needed basis. All storage areas are internal to the WTP central code and not visible to the public.

The criterion is met.

46.070 MAXIMUM DISTANCE ALLOWED BETWEEN PARKING AREA AND USE

A. Off-street parking spaces for single- and two-family dwellings shall be located on the same lot with the dwelling.

B. Off-street parking spaces for uses not listed in subsection A of this section shall be located not farther than 200 feet from an entryway to the building or use they are required to serve, measured in a straight line from the building, with the following exceptions:

1. Shared parking areas for commercial uses which require more than 40 parking spaces may provide for the spaces in excess of the required 40 spaces up to a distance of 300 feet from the entryway to the commercial building or use.

2. Industrial and manufacturing uses which require in excess of 40 spaces may locate the required spaces in excess of the 40 spaces up to a distance of 300 feet from the entryway to the building.

3. Employee parking areas for carpools and vanpools shall be located closer to the entryway to the building than general employee parking.

4. Stacked or valet parking is allowed if an attendant is present to move vehicles. If stacked parking is used for required parking spaces, the applicant shall ensure that an attendant will always be present when the lot is in operation. The requirements for minimum or maximum spaces and all parking area development standards continue to apply for stacked parking.

5. All disabled parking shall be placed closest to building entrances than all other parking. Appropriate ADA curb cuts and ramps to go from the parking lot to the ADA-accessible entrance shall be provided unless exempted by ADA code. (Ord. 1547, 2007)

FINDING NO. 83

Staff concurs with the applicant's response: There are no residential uses on site. Employee and visitor parking areas are approximately 50 feet from their respective building entrances. There are no parking areas in excess of 40 spaces. There are no designated carpool or vanpool areas. Valet and stacked parking is not proposed. The two ADA parking spaces are closest to the pedestrian access point into Administration and Operations buildings (see Exhibit PC-3, Section 21, Figure 7.0). An ADA accessible ramp leads from the parking lot into the Operations and Administration Buildings. Consequently, the proposal is consistent with CDC 46.0709.

The criterion is met.

46.090 MINIMUM OFF-STREET PARKING SPACE REQUIREMENTS

Commercial.	
Professional offices, banks and savings and loans, and government offices.	*One space for every 350 sq. ft. of gross area*
Industrial.	
Manufacturing use; may include assembly and distribution.	*One space per employee. (Multi-shift businesses only need to provide for peak shift number of employees on site at one time.)*

FINDING NO. 84

Staff concurs with the Applicant's response: The WTP currently has eleven marked parking spaces, including one ADA space. The parking lot also accommodates seven or more cars in an unmarked paved area during overflow times. The parking space calculation table in CDC 46.090 does not include a water treatment plant; therefore CDC 46.100, Parking Requirements for Unlisted Uses, applies. Consequently, the design team calculated parking space demand using a combination of building square footage and employee count for similar uses.

The WTP will eventually employ approximately 12-13 FTEs who will work shifts over the 24-hour period. It is not anticipated that more than half of the employees will be on site at the same time. Although the WTP is not an industrial facility, subsection (E)(1) of Table CDC 46.090 provides that one parking space shall be provided for each employee, however, in the case of multiple shifts, fewer spaces are permitted. Consequently, there will be seven employee parking spaces inside the secured core of the WTP (see Exhibit PC-3, Section 21, Figure 7.0).

To calculate the correct number of office and visitor parking spaces, the design team used the square footage calculation method as provided in CDC 46.080(B). The second story of the Administration and Operations Buildings provide space for offices, a laboratory, control room, conference room, training room and office/visitor support areas. The total square footage of the second stories of both buildings is approximately 5,884 square feet. At a ratio of one parking space for every 350 square feet of gross area, the WTP public area should provide 16.8 parking spaces which, when rounded up, equals 17 parking spaces. Consequently, the visitor's parking area provides 17 parking spaces.

The criterion is met.

F. Maximum parking. While it is important to establish minimum standards to ensure that adequate parking is available, it is equally important to establish maximum parking standards to reduce paved impermeable areas, to reduce visual impact of parking lots, and to encourage alternate modes of transportation. For these reasons, parking spaces (except for single-family and two-family residential uses) shall not exceed the minimum by more than 10 percent except by variance.

FINDING NO. 85

The Applicant proposes to supply the minimum required parking for this use. The criterion is met.

H. For office, industrial, and public uses where there are more than 20 parking spaces for employees on the site, at least 10 percent of the required employee parking spaces shall be reserved for carpool use before 9:00 a.m. on weekdays. The spaces will be the closest to the building entrance, except for any disabled parking and those signed for exclusive customer use. The carpool/vanpool spaces shall be clearly marked "Reserved – Carpool/Vanpool Before 9:00 a.m."

FINDING NO. 86

The WTP requires 7 employee parking spaces. The criterion does not apply.

46.120 DRIVEWAYS REQUIRED ON SITE

Any school or other meeting place which is designed to accommodate more than 25 people at one time shall provide a 15-foot-wide driveway designed for continuous forward flow of passenger vehicles for the purpose of loading and unloading passengers. Depending on functional requirements, the width may be increased with Planning Director approval.

FINDING NO. 87

Staff concurs with the applicant's response: The WTP is not a school but groups of 25 or more school children visit the site frequently, sometimes arriving by bus. The school visitors may be dropped off directly in front of the primary WTP entryway. The WTP also hosts meetings, primarily meetings of Lake Oswego staff or technical groups who generally arrive by car. The proposed driveway from Kenthorpe Way has a 24-foot travel lane and provides for the continuous flow of traffic from one entry point to the other. Consequently, the WTP driveway design accommodates a continuous flow of traffic as required by CDC 46.120.

The criterion is met.

46.130 OFF-STREET LOADING SPACES

Buildings or structures to be built or substantially altered, which receive and distribute material or merchandise by truck, shall provide and maintain off-street loading and maneuvering space. The dimensional standard for loading spaces is a minimum of 14 feet wide by 20 feet long or proportionate to accommodate the size of delivery trucks that typically serve the proposed use as follows:

FINDING NO. 88

Staff concurs with the Applicant's response: Table 46.130 does not identify the WTP as a use requiring off-street loading spaces. However, the WTP receives weekly deliveries of materials by truck; therefore the site design provides a chemical delivery area and solids loading area, see Exhibit PC-3, Section 21, Figure 7.0. The drive lanes are 24 feet wide for

more than 1200 feet in length. The loading areas can accommodate delivery vans and trucks as well as semi-trailers.

The criterion is met.

46.150 DESIGN AND STANDARDS

The following standards apply to the design and improvement of areas used for vehicle parking, storage, loading, and circulation:

A. Design standards.

1. "One standard parking space" means a minimum for a parking stall of eight feet in width and 16 feet in length. These stalls shall be identified as "compact." To accommodate larger cars, 50 percent of the required parking spaces shall have a minimum dimension of nine feet in width and 18 feet in length (nine feet by 18 feet). When multi-family parking stalls back onto a main driveway, the stalls shall be nine feet by 20 feet.

FINDING NO. 89

All proposed parking spaces, except for ADA spaces, measure 9-feet by 18-feet. The criterion is met.

2. Disabled parking and maneuvering spaces shall be consistent with current federal dimensional standards and subsection B of this section and placed nearest to accessible building entryways and ramps.

FINDING NO. 90

The applicant proposes 2 ADA spaces nearest the pedestrian entryway leading to the primary visitor entrance. The applicant proposes to design these spaces to meet Federal and local standards. The criterion is met.

4. Service drives shall be designed and constructed to facilitate the flow of traffic, provide maximum safety of traffic access and egress, and maximum safety of pedestrians and vehicular traffic on the site.

FINDING NO. 91

Staff concurs with the applicant's response: The service drives are located off of Kenthorpe Way. The drive lanes are a minimum of 24-feeet wide, accommodating two-way traffic. The pedestrian access across the parking lot to Kenthorpe Way is clearly marked. The 24-foot wide service drive continues through the secured area of the WTP providing safe traffic movement and emergency access throughout the site.

The criterion is met.

5. Each parking and/or loading space shall have clear access, whereby the relocation of other vehicles to utilize the parking space is not required.

FINDING NO. 92

Staff concurs with the applicant's response: Loading spaces in the WTP interior are accessible from two directions. The visitor parking area is served by a 24-foot wide travel lane which provides for clear access into the parking spaces.

The criterion is met.

6. Except for single- and two-family residences, any area intended to be used to meet the off-street parking requirements as contained in this chapter shall have all parking spaces clearly marked using a permanent paint. All interior drives and access aisles shall be clearly marked and signed to show direction of flow and maintain vehicular and pedestrian safety. Permeable parking surface spaces may have an alternative delineation for parking spaces.

FINDING NO. 93

The applicant is proposing permeable surfaces for the employee and visitor parking areas. All required parking spaces as well as all drive lanes and access aisles are proposed to be clearly marked (see Exhibit PC-3, Section 21, Figure 7.0).

The criterion is met.

7. Except for residential parking, and parking for public parks and trailheads, at least 50 percent of all areas used for the parking and/or storage and/or maneuvering of any vehicle, boat and/or trailer shall be improved with asphalt or concrete surfaces according to the same standards required for the construction and acceptance of City streets. The remainder of the areas used for parking may use a permeable paving surface designed to reduce surface runoff. Parking for public parks or trailheads may use a permeable paving surface designed to reduce surface runoff for all parking areas. Where a parking lot contains both paved and unpaved areas, the paved areas shall be located closest to the use which they serve.

FINDING NO. 94

The applicant proposes impervious asphalt drive lanes that cover at least 50 percent of the total parking/drive area. The visitor and employee parking spaces will be covered with a pervious surface. The criterion is met.

9. Access drives from the street to off-street parking or loading areas shall be designed and constructed to facilitate the flow of traffic and provide maximum safety for pedestrian and vehicular traffic on the site. The number of access drives shall be limited to the minimum that will allow the property to accommodate and service the anticipated traffic. Access drives shall be clearly and permanently marked and defined through use of rails, fences, walls, or other barriers or markers on frontage not occupied by service drives.

FINDING NO. 95

The WTP currently has two unconnected access drives onto Kenthorpe Way. The applicant proposes to connect these two driveways to provide more direct and continuous flow of traffic through the site. Additionally, the applicant proposes a well marked pedestrian path between Kenthorpe Way and the WTP primary visitor entrance. The criterion is met.

10. Access drives shall have a minimum vision clearance as provided in Chapter 42 CDC, Clear Vision Areas.

FINDING NO. 96

The applicant has proposed clear vision areas that are designed in accordance with CDC Chapter 42 (see Exhibit PC-3, Section 21, Figure 7.0). The criterion is met.

11. Parking spaces along the boundaries of a parking lot or adjacent to interior landscaped areas or sidewalks shall be provided with a wheel stop at least four inches high located two feet back from the front of the parking stall. Alternately, landscaped areas or sidewalks adjacent to the parking stalls without wheel stops shall be two feet wider.

FINDING NO. 97

Staff concurs with the applicant's response: The parking spaces in the visitor parking lot abut the central Kenthorpe Way landscaped area. Consequently, each of the 17 parking spaces will have a wheel stop at least 4 inches high located two feet back from the front of the parking stall. The employee parking area does not abut a landscape area or sidewalk.

The criterion is met.

12. Off-street parking and loading areas shall be drained in accordance with plans and specifications approved by the City Engineer. Storm drainage at commercial sites may also have to be collected to treat oils and other residue.

FINDING NO. 98

The City Engineer has determined that the applicant's stormwater report accommodates the drainage for off-street parking and loading as required above. The criterion is met..

13. Artificial lighting on all off-street parking facilities shall be designed to deflect all light downward away from surrounding residences and so as not to create a hazard to the public use of any road or street.

FINDING NO. 99

The applicant proposes fully shielded parking area lights that will be directed downward as described in Exhibit PC-3, Section 13. The criterion is met.

14. Directional arrows and traffic control devices which are placed on parking lots shall be identified and installed.

FINDING NO. 100

The applicant does not propose the installation of traffic control devices. Direction arrows are proposed as outlined in Exhibit PC-3, Section 21, Figure 7.0. The criterion is met.

16. Visitor or guest parking must be identified by painted "GUEST" or "VISITOR."

FINDING NO. 101

The applicant proposes to label the visitor parking lot as required by this section. The criterion is met.

17. The parking area shall have less than a five percent grade. No drainage across adjacent sidewalks or walkways is allowed.

FINDING NO. 102

Staff concurs with the applicant's response: The entire slope grade is less than 2 percent. Stormwater on the western end of the visitor parking lot will flow towards Catchment Area A while run-off on the eastern end of the visitor parking lot, including the pedestrian walkway, will flow toward Catchment Area B. (Exhibit PC-3, Section 16, 3.0). Consequently, drainage will not cross the interior walkway.

The criterion is met.

18. Commercial, office, industrial, and public parking lots may not occupy more than 50 percent of the main lot frontage of a development site. The remaining frontage shall comprise buildings or landscaping. If over 50 percent of the lineal frontage comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet wide and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. The defensible space of the parking lot should not be compromised.

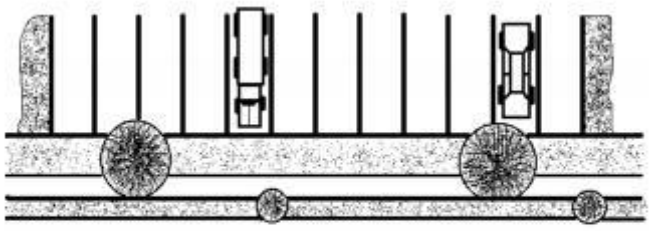
FINDING NO. 103

Staff concurs with the applicant's response: The Kenthorpe Way frontage is approximately 500 across. The width of the visitor parking lot is approximately 180 feet. Therefore, the visitor parking lot width is less than 50% of the Kenthorpe Way frontage. The depth of the Kenthorpe Way landscaping is 150 feet on the west, 121 feet on the east and approximately 46 feet in the middle. Consequently, the visitor parking lot is consistent with the intent of subsection (A)(18).

The criterion is met.

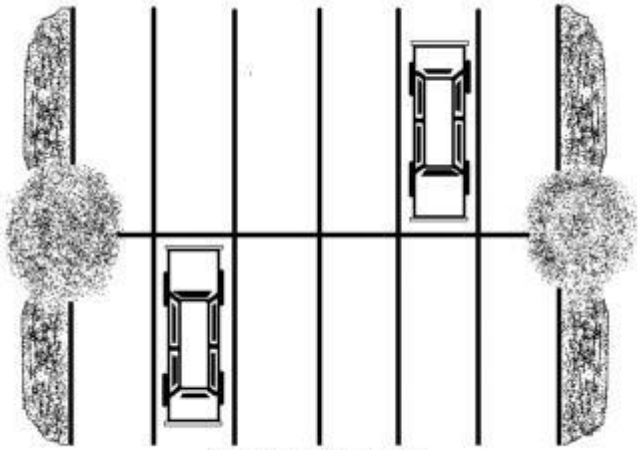
19. Areas of the parking lot improved with asphalt or concrete surfaces shall be designed into areas of 12 or less spaces through the use of defined landscaped area. Groups of 12 or less spaces are defined as:

a. Twelve spaces in a row, provided there are no abutting parking spaces, as in the case when the spaces are abutting the perimeter of the lot; or



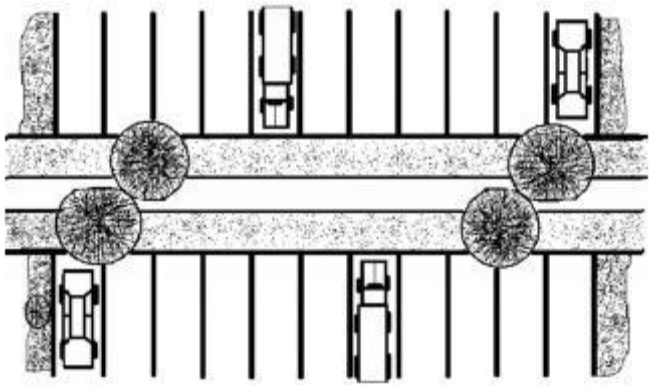
12 SPACES IN A ROW

b. Twelve spaces in a group with six spaces abutting together; or



6 SPACES X 2 = 12

c. Two groups of twelve spaces abutting each other, but separated by a 15-foot wide landscape area including a six-foot-wide walkway.



12 SPACES X2 WITH LANDSCAPING

d. Parking areas improved with a permeable parking surface may be designed using the configurations shown in subsections (A)(19)(a), (b) and (c) of this section except that groups of up to 18 spaces are allowed.

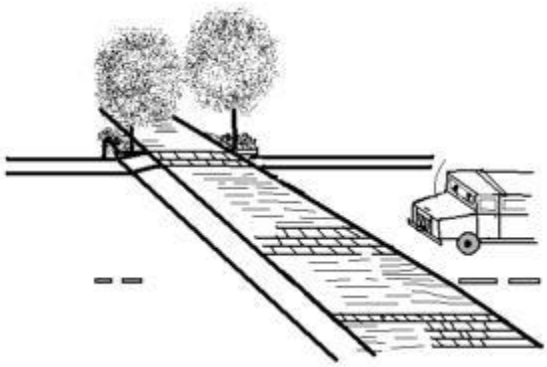
FINDING NO. 104

Staff concurs with the applicant's response: The employee parking area has seven spaces. The visitor parking area has 17 spaces. Both parking areas will be improved with a permeable parking surface. Subsection (A)(19)(d) provides that groups of 18 spaces are allowed. Consequently, both the employee and visitor parking areas are consistent with sub section (A)(19).

The criterion is met.

20. Pedestrian walkways shall be provided in parking areas having 20 or more spaces. Walkways or sidewalks shall be constructed between major buildings/activity areas (an example in multi-family housing: between recreation center, swimming pool, manager's office, park or open space areas, parking lots, etc.) within a development, between adjacent developments and the new development, as feasible, and between major buildings/activity areas within the development and adjacent streets and all adjacent transit stops. Internal parking lot circulation

and design should maintain ease of access for pedestrians from streets and transit stops. Walkways shall be constructed using a material that visually contrasts with the parking lot and driveway surface. Walkways shall be further identifiable to pedestrians and motorists by grade separation, walls, curbs, surface texture (surface texture shall not interfere with safe use of wheelchairs, baby carriages, shopping carts, etc.), and/or landscaping. Walkways shall be six feet wide. The arrangement and layout of the paths shall depend on functional requirements.



RAISED SIDEWALK/TEXTURED SURFACE
AUTOMOBILE BECOMES SUBSERVIENT
TO THE PEDESTRIAN

FINDING NO. 105

This section applies to parking areas with 20 or more spaces. Although this criterion does not apply to the applicant's proposal, the site has been designed to meet this standard.

21. The parking and circulation patterns are easily comprehended and defined. The patterns shall be clear to minimize traffic hazards and congestion and to facilitate emergency vehicles.

FINDING NO. 106

The circulation system provides looped two-way access from Kenthorpe Way, through the visitor parking lot, and back onto Kenthorpe Way. Similarly, the internal WTP circulation patterns provides a two-way loop through the secured area. TVF&R staff reviewed the applicant's circulation plan (see Exhibit PC-3, Section 21, Figure 7.0). The criterion is met.

22. The parking spaces shall be close to the related use.

FINDING NO. 107

The applicant proposes employee parking spaces that are 24-feet from the employee entrance and visitor parking spaces that are approximately 46-feet from the WTP public entrance. The criterion is met.

23. Permeable parking spaces shall be designed and built to City standards.

FINDING NO. 108

The applicant proposes permeable parking spaces that will be built to West Linn Public Works Standards. At time of building permit submittal the applicant will demonstrate the design of permeable parking spaces that are consistent with City of West Linn standards.

B. Accessible parking standards for persons with disabilities. If any parking is provided for the public or visitors, or both, the needs of the people with disabilities shall be based upon the following standards or current applicable federal standards, whichever are more stringent:

1. Minimum number of accessible parking space requirements (see following table):

MINIMUM REQUIRED NUMBER OF TOTAL PARKING SPACES	***TOTAL NUMBER OF ACCESSIBLE SPACES***	***NUMBER OF VAN-ACCESSIBLE SPACES REQUIRED, OF TOTAL***	***SPACES SIGNED "WHEELCHAIR USE ONLY"***
1 – 25	*1*	*1*	*–*

2. Location of parking spaces. Parking spaces for the individual with a disability that serve a particular building shall be located on the shortest possible accessible circulation route to an accessible entrance to a building. In separate parking structures or lots that do not serve a particular building, parking spaces for the persons with disabilities shall be located on the shortest possible circulation route to an accessible pedestrian entrance of the parking facility.
3. Accessible parking space and aisle shall meet ADA vertical and horizontal slope standards.
4. Where any differences exist between this section and current federal standards, those standards shall prevail over this code section.
5. One in every eight accessible spaces, but not less than one, shall be served by an access aisle 96 inches wide.
6. Van-accessible parking spaces shall have an additional sign marked "Van Accessible" mounted below the accessible parking sign. A van-accessible parking space reserved for wheelchair users shall have a sign that includes the words "Wheelchair Use Only." Van-accessible parking shall have an adjacent eight-foot-wide aisle. All other accessible stalls shall have a six-foot-wide aisle. Two vehicles may share the same aisle if it is between them. The vertical clearance of the van space shall be 96 inches.

FINDING NO. 109

The applicant proposes to provide seven employee parking spaces and 17 visitor spaces; two of the visitor spaces will be ADA compliant and one of the ADA spaces is proposed to be a minimum of 96-inches wide. The ADA spaces abut the pedestrian walkway that leads into the WTP public entrance and are nearest the public entryway. The criterion is met.

C. Landscaping in parking areas. Reference Chapter 54 CDC, Landscaping.

FINDING NO. 110

See discussion regarding CDC Chapter 54 below.

D. Bicycle facilities and parking.

1. Provisions shall be made for pedestrian and bicycle ways if such facilities are shown on an adopted plan.
2. Bicycle parking facilities shall either be lockable enclosures in which the bicycle is stored, or secure stationary racks which accommodate bicyclist's locks securing the frame and both wheels. The bicycle parking shall be no more than 50 feet from the entrance to the building, well-lit, observable, and properly signed.
3. Bicycle parking must be provided in the following amounts:

LAND USE CATEGORY	***MINIMUM REQUIRED BICYCLE PARKING SPACES***	***MINIMUM COVERED AMOUNT***
Libraries, Museums, Government Offices, etc.	*2, or 1.5 spaces per 1,000 gross sq. ft., whichever is greater*	*25%*

FINDING NO. 111

An employee bicycle parking area is proposed adjacent the employee parking area and a visitor bicycle parking area is provided in the Kenthorpe Way landscaped area directly across from the WTP public entrance, adjacent to the visitor parking area (see Exhibit PC-3, Section 23, Figure 3.0). Based on the applicant's estimate of approximately 5,800 square feet of office space, as a proposed condition of approval 7 the Applicant will be required to ensure that bicycle parking in the visitor and employee parking areas provide capacity for 12 bicycles. Furthermore, at least 3 of the bicycle parking spaces will be required to l be covered.

F. (See Figures 1 and 2 below.)
Figure 1. MINIMUM STANDARDS FOR PARKING LOT LAYOUT

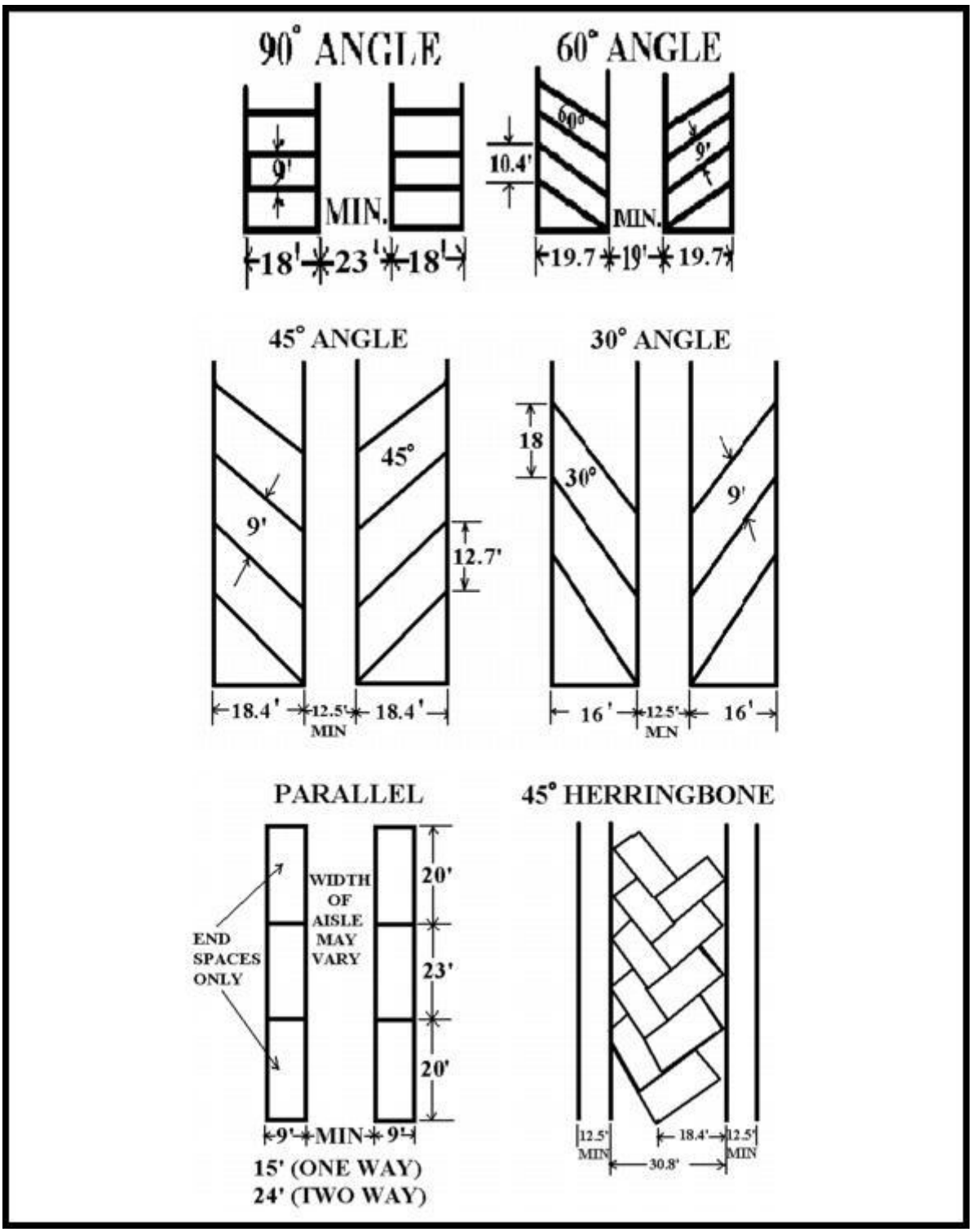
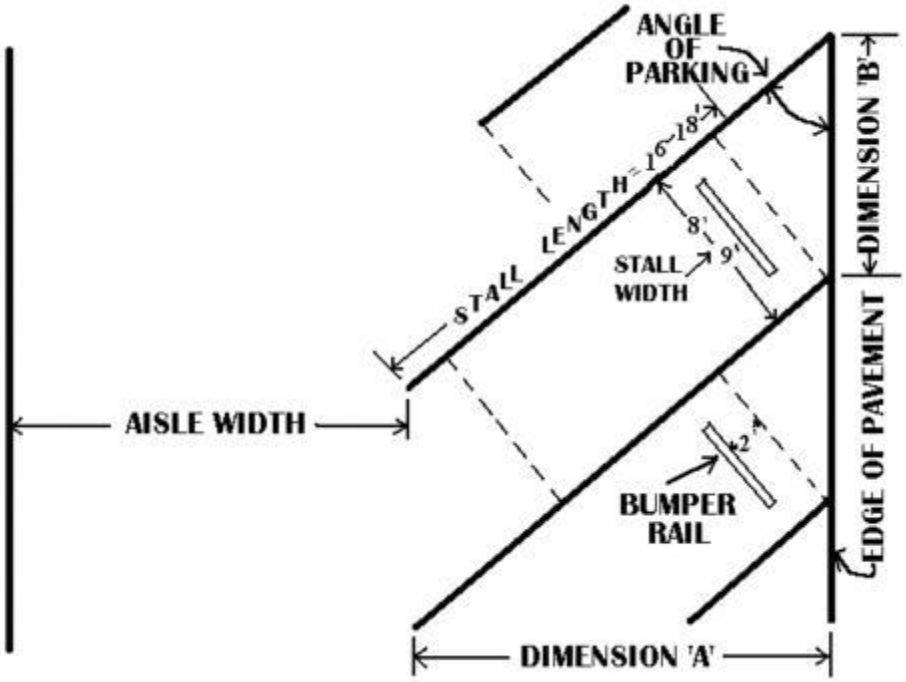


Figure 2. MINIMUM DISTANCE FOR PARKING STALLS



ANGLE OF PARKING	DIRECTION OF PARKING	AISLE WIDTH		DIMENSION 'A'		DIMENSION 'B'	
		STALL WIDTH		STALL WIDTH		STALL WIDTH	
		9.0'	8.0'	9.0'	8.0'	9.0'	8.0'
30°	DRIVE-IN	12.5'	12.5'	16.8'	13.8'	18.0'	16.0'
45°	DRIVE-IN	12.5'	12.5'	19.1'	17.0'	12.7'	11.3'
60°	DRIVE-IN	19.0'	18.0'	20.1'	17.8'	10.4'	9.2'
60°	BACK-IN	17.0'	17.0'	20.1'	17.8'	10.4'	9.2'
90°	DRIVE-IN	23.0'	23.0'	18.0'	16.0'	9.0'	8.0'
90°	BACK-IN	22.0'	22.0'	18.0'	16.0'	9.0'	8.0'

FINDING NO. 112
The parking stalls in both the employee parking lot and the visitor parking lot will be 90-degree stalls. Each stall is a minimum of 18 feet deep and a minimum of 9 feet wide. The aisle width of each parking area exceeds 23 feet. Therefore, the design of both the employee and visitor parking areas complies with the design requirements of subsection (F). The criterion is met.

CHAPTER 48, ACCESS, EGRESS AND CIRCULATION

48.025 ACCESS CONTROL

A. Purpose. The following access control standards apply to public, industrial, commercial and residential developments including land divisions. Access shall be managed to maintain an adequate level of service and to maintain the functional classification of roadways as required by the West Linn Transportation System Plan. Major roadways, including arterials and collectors, serve as the primary system for moving people and goods within and through the City. Access management is a primary concern on these roads. Local streets and alleys provide access to individual properties. If vehicular access and circulation are not properly designed, these roadways will be unable to accommodate the needs of development and serve their transportation function. The regulations in this section further the orderly layout and use of land, protect community character, and conserve natural resources by promoting well-designed road and access systems and discouraging the unplanned subdivision of land.

B. Access control standards.

1. Traffic impact analysis requirements. The City or other agency with access jurisdiction may require a traffic study prepared by a qualified professional to determine access, circulation and other transportation requirements. (See also CDC 55.125, Traffic Impact Analysis.)

FINDING NO. 113
Based on the applicant's low anticipated trip generation the proposal does not warrant a TIA. The criterion is met.

2. The City or other agency with access permit jurisdiction may require the closing or consolidation of existing curb cuts or other vehicle access points, recording of reciprocal access easements (i.e., for shared driveways), development of a frontage street, installation of traffic control devices, and/or other mitigation as a condition of granting an access permit, to ensure the safe and efficient operation of the street and highway system. Access to and from off-street parking areas shall not permit backing onto a public street.

FINDING NO. 114
The City has not suggested closing or consolidating curb cuts or access points. TVF&R has requested an emergency access point from Mapleton Drive. There are currently three access points onto the Lake Oswego property from Mapleton drive; only the one used for the emergency access will remain. There are currently two access points from the WTP site onto Kenthorpe which alleviates any backing onto Kenthorpe Way due to the looped circulation scheme proposed (see Exhibit PC-3, Section 21, Figure 7.0). The criterion is met.

3. Access options. When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided by one of the following methods (planned access shall be consistent with adopted public works standards and TSP). These methods are "options" to the developer/subdivider.
a) Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted.
b) Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., "shared driveway"). A public access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive.
c) Option 3. Access is from a public street adjacent to the development parcel. If practicable, the owner/developer may be required to close or consolidate an existing access point as a condition

of approving a new access. Street accesses shall comply with the access spacing standards in subsection (B)(6) of this section.

FINDING NO. 115

The applicant proposes to pursue Option 3; access from a public street adjacent to the development. The criterion is met.

5. Double-frontage lots. When a lot has frontage onto two or more streets, access shall be provided first from the street with the lowest classification. For example, access shall be provided from a local street before a collector or arterial street. When a lot has frontage opposite that of the adjacent lots, access shall be provided from the street with the lowest classification.

FINDING NO. 116
The WTP fronts Kenthorpe Way and Mapleton Drive. The TSP identifies Kenthorpe Way as a local street and Mapleton Drive as a Collector-constrained. The WTP currently has and proposes to continue to take access onto Kenthorpe Way. The criterion is met.

6. Access spacing. The access spacing standards found in Chapter 8 of the adopted Transportation System Plan (TSP) shall be applicable to all newly established public street intersections, private drives, and non-traversable medians.

FINDING NO. 117
The WTP currently has two driveway accesses on Kenthorpe Way and three on Mapleton Drive. The driveway configuration on Kenthorpe is proposed to remain as it is today and the applicant is proposing to eliminate two of the driveways on Mapleton Drive. The applicant does not propose to establish any additional public street intersections or private drives. The criterion is not applicable.

7. Number of access points. For single-family (detached and attached), two-family, and duplex housing types, one street access point is permitted per lot, when alley access cannot otherwise be provided; except that two access points may be permitted corner lots (i.e., no more than one access per street), subject to the access spacing standards in subsection (B)(6) of this section. The number of street access points for multiple family, commercial, industrial, and public/institutional developments shall be minimized to protect the function, safety and operation of the street(s) and sidewalk(s) for all users. Shared access may be required, in conformance with subsection (B)(8) of this section, in order to maintain the required access spacing, and minimize the number of access points.

FINDING NO. 118

Staff concurs with the applicant's response: The WTP proposal does not create any new access points onto Kenthorpe Way. Because the driveways form a two-way loop, vehicles do not have to back into a public street. The proposed upgraded WTP will generate fewer than 20 ADTs, far less than what the site could generate if fully developed to the required residential density. The emergency access road relies on the location of an existing driveway and will

only be accessible to emergency vehicles. Consequently, the proposed access strategy protects the function, safety and operation of the abutting public streets.

The criterion is met

C. Street connectivity and formation of blocks required. In order to promote efficient vehicular and pedestrian circulation throughout the City, land divisions and large site developments shall produce complete blocks bounded by a connecting network of public and/or private streets, in accordance with the following standards:

1. Block length and perimeter. The maximum block length shall not exceed 800 feet or 1,800 feet along an arterial.

2. Street standards. Public and private streets shall also conform to Chapter 92 CDC, Required Improvements, and to any other applicable sections of the West Linn Community Development Code and approved TSP.

3. Exception. Exceptions to the above standards may be granted when blocks are divided by one or more pathway(s), in conformance with the provisions of CDC 85.200(C), Pedestrian and Bicycle Trails, or cases where extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations preclude implementation, not just inconveniences or design challenges.

FINDING NO. 119

Staff concurs with the applicant's response: The West Linn TSP does not propose creating new blocks by joining Kenthorpe Way and Mapleton Drive in this area. However, the Robinwood Neighborhood Plan, Goal 3, Policy 3.9, suggests mitigating negative impacts of the WTP upgrade on the surrounding neighborhood with "*positive contributions to transportation connectivity between Kenthorpe and Mapleton Drives*." Consequently, the proposed site design includes a lighted, secure pedestrian pathway along the east side of the WTP property connecting Kenthorpe Way and Mapleton Drive.

The criterion is met.

48.040 MINIMUM VEHICLE REQUIREMENTS FOR NON-RESIDENTIAL USES

Access, egress, and circulation system for all non-residential uses shall not be less than the following:

A. Service drives for non-residential uses shall be fully improved with hard surface pavement:

1. With a minimum of 24-foot width when accommodating two-way traffic; or

2. With a minimum of 15-foot width when accommodating one-way traffic. Horizontal clearance shall be two and one-half feet wide on either side of the driveway.

3. Meet the requirements of CDC 48.030(E)(3) through (6).

4. Pickup window driveways may be 12 feet wide unless the Fire Chief determines additional width is required.

B. All non-residential uses shall be served by one or more service drives as determined necessary to provide convenient and safe access to the property and designed according to CDC

48.030(A). In no case shall the design of the service drive or drives require or facilitate the backward movement or other maneuvering of a vehicle within a street, other than an alley.

C. All on-site maneuvering and/or access drives shall be maintained pursuant to CDC 46.130.

D. Gated accessways to non-residential uses are prohibited unless required for public safety or security.

FINDING NO. 120

Staff concurs with the Applicant's response:

The access, egress, and circulation system for the WTP complex is provided as follows:

A. The two driveway access points from Kenthorpe Way are 24 feet wide; the width is carried through the interior of the WTP complex, providing two-way traffic opportunities through the facility. See Exhibit PC-3, Section 2321, Figures 3.1 – 3.4. There are no one-way drive lanes or pick-up windows. CDC 48.030(E) applies only to multi-family projects. However, assuming that these multi-family standards are to be applied to a non-residential project, the WTP access driveways will:

- be a minimum of 24 feet wide;
- provide a vertical clearance of a minimum of 13 feet 6 inches;
- provide circular, rather than one-way travel, that has an average grade of less than 7%;
- provide a minimum centerline turning radius of 45 degrees for the curve; and
- provide an approach grade of less than 10% because the average site grade is less than 2%.

B . The WTP facility provides two driveways from Kenthorpe Way. In no case will any service vehicle be required to maneuver backwards into a street or alley.

C . The internal access road provides chemical delivery and solids loading areas, consistent with CDC 46.130 requirements for off-street loading spaces. See Exhibit PC-3, Section 21, Figure 7.0.

D. Gated accessways are required for public safety and security at the WTP. The WTP is a critical public facility, providing clean drinking water to tens of thousands of people on a daily basis and emergency water to West Linn. In addition, water-processing activities, which occur within the secure WTP core area, require professional management and oversight and these work spaces are not readily accessible to the public. Consequently, three security gates, consistent with the requirements of the TVFR, will control the interior of the WTP complex. See Exhibit PC-3, Section 18. The emergency access road from Mapleton Drive will also be controlled by swing gates with a pedestrian entryway, as recommended by the neighbors and by TVFR. See Exhibit PC-3, Section 23,Figure 14.1, Detail 2.

The criterion is met.

48.050 ONE-WAY VEHICULAR ACCESS POINTS

Where a proposed parking facility plan indicates only one-way traffic flow on the site, it shall be accommodated by a specific driveway serving the facility, and the entrance drive shall be situated closest to oncoming traffic, and the exit drive shall be situated farthest from oncoming traffic.

FINDING NO. 121

The Applicant proposes a 24-foot wide, two-way driveway to serve both the employee and visitor parking areas. The criterion does not apply.

48.060 WIDTH AND LOCATION OF CURB CUTS AND ACCESS SEPARATION REQUIREMENTS

A. Minimum curb cut width shall be 16 feet.

B. Maximum curb cut width shall be 36 feet, except along Highway 43 in which case the maximum curb cut shall be 40 feet. For emergency service providers, including fire stations, the maximum shall be 50 feet.

FINDING NO. 122

The existing curb cuts on Kenthorpe Way are non-conforming to the current 36-wide standard; Kenthorpe Way curb cuts are 59-feet wide on the west driveway and 39-feet wide on the east driveway. The applicant proposes *to continue the use of this curb cut arrangement as granted through a previous conditional use approval in 1996. The criterion does not apply.*

C. No curb cuts shall be allowed any closer to an intersecting street right-of-way line than the following:

1. *On an arterial when intersected by another arterial, 150 feet.*
2. *On an arterial when intersected by a collector, 100 feet.*
3. *On an arterial when intersected by a local street, 100 feet.*
4. *On a collector when intersecting an arterial street, 100 feet.*
5. *On a collector when intersected by another collector or local street, 35 feet.*
6. *On a local street when intersecting any other street, 35 feet.*

FINDING NO. 123

Kenthorpe Way is a local street. The existing curb cut on the eastern side of the site is approximately 200-feet from the point where Kenthorpe Way turns south, exceeding the 35-foot minimum standard for a local street. The criterion is met.

D. There shall be a minimum distance between any two adjacent curb cuts on the same side of a public street, except for one-way entrances and exits, as follows:

1. *On an arterial street, 150 feet.*
2. *On a collector street, 75 feet.*
3. *Between any two curb cuts on the same lot on a local street, 30 feet.*

FINDING NO. 124

The existing curb cuts on Kenthorpe Way, approved in 1996, are approximately 180 feet apart, exceeding the 30-foot minimum standard for a local street. The criterion is met.

E. A rolled curb may be installed in lieu of curb cuts and access separation requirements.

FINDING NO. 125

The applicant is proposing the use of curb cuts. The criterion does not apply.

F. Curb cuts shall be kept to the minimum, particularly on Highway 43. Consolidation of driveways is preferred. The standard on Highway 43 is one curb cut per business if consolidation of driveways is not possible.

FINDING NO. 126

The Applicant proposes the same number of curb cuts on Kenthorpe Way as granted through their 1996 approval. The criterion is met.

G. Adequate line of sight pursuant to engineering standards should be afforded at each driveway or accessway.

FINDING NO. 127

Kenthorpe Way is generally straight and generally level in proximity to the WTP. The two access driveways were designed in 1996 to meet West Linn engineering standards with regard to line of sight; no changes are proposed. The criterion does not apply.

48.080 BICYCLE AND PEDESTRIAN CIRCULATION

A. Within all multi-family developments (except two-family/duplex dwellings), each residential dwelling shall be connected to vehicular parking stalls, common open space, and recreation facilities by a pedestrian pathway system having a minimum width of six feet and constructed of an all-weather material. The pathway material shall be of a different color or composition from the driveway. (Bicycle routes adjacent to the travel lanes do not have to be of different color or composition.)

B. Bicycle and pedestrian ways within a subdivision shall be constructed according to the provisions in CDC 85.200(A)(3).

C. Bicycle and pedestrian ways at commercial or industrial sites shall be provided according to the provisions of Chapter 55 CDC, Design Review.

FINDING NO. 128

Staff concurs with the applicant's response: The WTP is not a multi-family project, a subdivision, or a commercial or industrial site; it is a major utility. The site plan provides employee and visitor bicycling areas, sidewalks along both Kenthorpe Way and Mapleton Drive frontages, and a pedestrian path connecting the two streets in accordance with the requirements of Chapter 55 CDC.

The criterion is met.

CHAPTER 54, LANDSCAPING

54.020 APPROVAL CRITERIA

A. Every development proposal requires inventorying existing site conditions which include trees and landscaping. In designing the new project, every reasonable attempt should be made to preserve and protect existing trees and to incorporate them into the new landscape plan. Similarly, significant landscaping (e.g., bushes, shrubs) should be integrated. The rationale is that saving a 30-foot-tall mature tree helps maintain the continuity of the site, they are qualitatively superior to two or three two-inch caliper street trees, they provide immediate micro-climate benefits (e.g., shade), they soften views of the street, and they can increase the attractiveness, marketability, and value of the development.

FINDING NO. 129

Staff concurs with the Applicant's response:

The applicant's professional arborist prepared an inventory of trees consistent with the West Linn Tree Technical Manual. (See Exhibit PC-3, Section 22, Tree Protection Plan). The West Linn Arborist determined that there are 41 significant trees or significant tree clusters. By compressing WTP functions to the center of the site, the applicant has been able to protect 35 of the 41 significant trees. The significant trees are protected in clusters along the northeast and northwest corners of the Kenthorpe Way frontage and around the property perimeter.

Conflicts inevitably arise in a development code between the desire to protect vegetation on the one hand and the need to allow future development and the associated construction demands on the other hand. To help mediate this conflict CDC 55.100(B)(2) makes it clear that significant trees should be protected but that not all significant shall be saved. One area of conflict is along Kenthorpe Way. The proposed site design protects the significant trees and tree clusters, along with the non-protected vegetation, at the northeast and northwest site corners. Although the City Arborist did not identify any significant trees in the landscaped area between the current visitors' parking lot and the WTP Operations Building, the present landscaping provides a desirable visual buffer. However, CDC 55.100(B)(7), implementing the Transportation System Rule (TPR) strongly encourages pedestrian access from public right-of-ways to the primary building entryway.

Consequently, the applicant has proposed a pedestrian walkway from Kenthorpe Way directly to the WTO public entrance, as required. One significant tree to the east of the Operations Building will be removed to provide the necessary driveway turning radius for delivery trucks and emergency vehicles. Similarly, a conflict between vegetation protection and site functionality arises in the south end of the site. The City Arborist identified significant trees along the southern perimeter of the site and within the open area in the south-center.

The WTP must store finished water to pump into the system for both daily customers and for emergency back-up in West Linn. Such storage requires a holding tank with 3 MG of storage capacity. One way to create such capacity is to erect a large tank above ground; but this solution would not be possible with a 35-foot height limitation in the zone and it would present a very large blank wall facing Mapleton Drive. The alternative is to bury the tank, a clearwell, in a 30-foot deep hole. The excavation and construction staging will necessitate the removal of designated significant trees.

The design team considered moving the clearwell to the east and to the west but in each direction there are more significant trees. The location of the clearwell was also

determined by the need to build an emergency access lane from Mapleton to the WTP facilities. See the TVFR memorandum in Exhibit PC-3, Section 18. As a result, five significant trees in the southern side of the site will be removed. Creative site planning, responsive to neighborhood concerns forced the WTP facilities into the center of the site.

The design decision results in the protection of 35 out of 41 significant trees, primarily along the site perimeter. Together with the non-significant bushes and trees along the site frontages and residential perimeter, the WTP site design has made every reasonable to effort incorporate existing vegetation into the landscape plan.

The criterion is met.

B. To encourage tree preservation, the parking requirement may be reduced by one space for every significant tree that is preserved in the parking lot area for a maximum reduction of 10 percent of the required parking. The City Parks Supervisor or Arborist shall determine the significance of the tree and/or landscaping to determine eligibility for these reductions.

FINDING NO. 130

No significant trees are proposed to be removed to accommodate the parking area. The criterion does not apply.

C. Developers must also comply with the municipal code chapter on tree protection.

FINDING NO. 131

The applicant has provided an Arborist Report and Tree Protection Plan in conformance with the Municipal Code. See Exhibit PC-3, Section 22, Tree Protection Plan. The criterion is met.

D. Heritage trees. Heritage trees are trees which, because of their age, type, notability, or historical association, are of special importance. Heritage trees are trees designated by the City Council following review of a nomination. A heritage tree may not be removed without a public hearing at least 30 days prior to the proposed date of removal. Development proposals involving land with heritage tree(s) shall be required to protect and save the tree(s). Further discussion of heritage trees is found in the municipal code.

FINDING NO. 132

The City Arborist has determined that there are no heritage trees on site. The determination is corroborated by the Lake Oswego Arborists report. The criterion does not apply.

2. Non-residential uses. A minimum of 20 percent of the gross site area shall be landscaped. Parking lot landscaping may be counted in the percentage.

FINDING NO. 133

The applicant proposes to landscape 57 percent (5.27 acres) of the total WTP site area, excluding parking lot areas (see Exhibit PC-3, Section 16, Table G-3, page 4). The criterion is met.

3. All uses (residential uses (non-single-family) and non-residential uses):

a. The landscaping shall be located in defined landscaped areas which are uniformly distributed throughout the parking or loading area. There shall be one shade tree planted for every eight parking spaces. These trees shall be evenly distributed throughout the parking lot to provide shade. Parking lots with over 20 spaces shall have a minimum 10 percent of the interior

of the parking lot devoted to landscaping. Pedestrian walkways in the landscaped areas are not to be counted in the percentage. The perimeter landscaping, explained in subsection (E)(3)(d) of this section, shall not be included in the 10 percent figure. Parking lots with 10 to 20 spaces shall have a minimum five percent of the interior of the parking lot devoted to landscaping. The perimeter landscaping, as explained above, shall not be included in the five percent. Parking lots with fewer than 10 spaces shall have the standard perimeter landscaping and at least two shade trees. Non-residential parking areas paved with a permeable parking surface may reduce the required minimum interior landscaping by one-third for the area with the permeable parking surface only.

FINDING NO. 134

The applicant does not propose shading the employee parking area as it contains seven spaces. The Applicant proposes 17 spaces in the visitor parking area. According to (3)(a), 5 percent of the interior of the parking area, excluding pedestrian accessways (approximately 138 square feet) shall be dedicated to landscaping. The applicant proposes to retain the existing dense foliage as well as plant new landscaping in the visitor parking area that is well in excess of the requirement. The criterion is met.

b. The landscaped areas shall not have a width of less than five feet.

FINDING NO. 135

Staff concurs with the applicant's response: All landscaped areas are deeper than five feet wide, including the landscaping between the pedestrian path and the property perimeter, which is approximately eight feet wide at its narrowest.

The criterion is met.

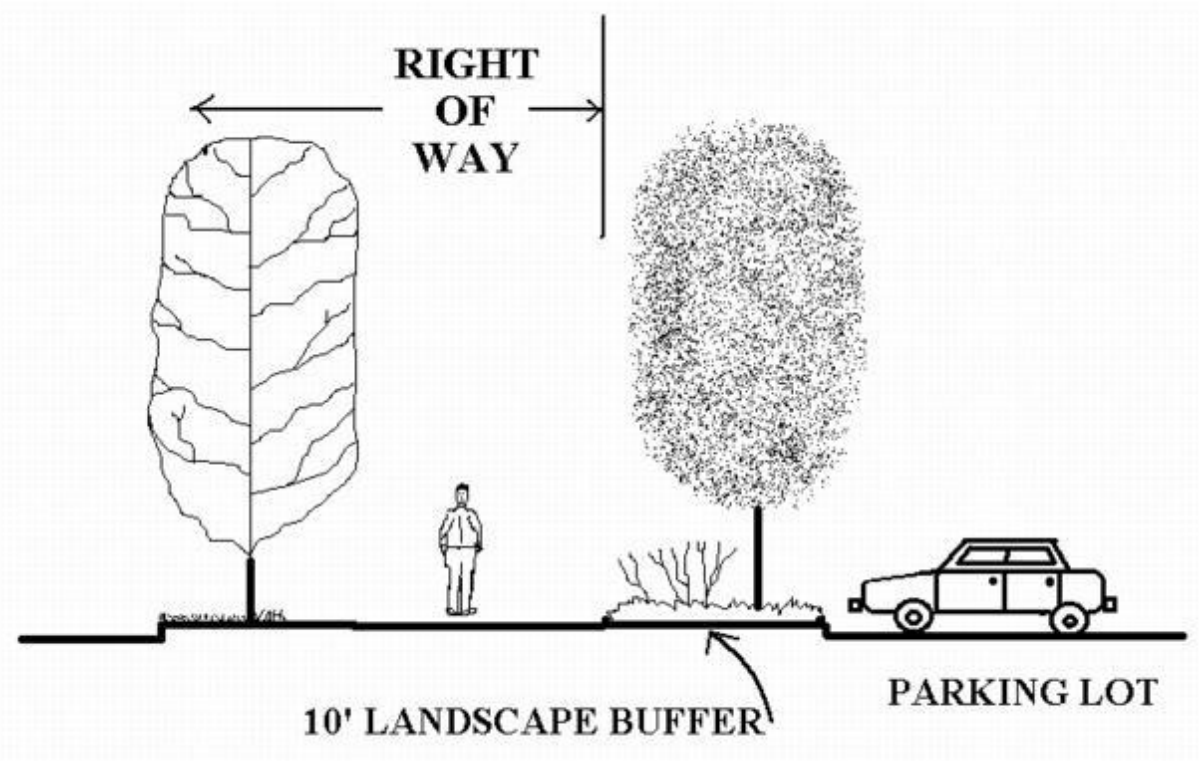
c. The soils, site, proposed soil amendments, and proposed irrigation system shall be appropriate for the healthy and long-term maintenance of the proposed plant species.

FINDING NO. 136

Staff concurs with the Applicant's response: The planting soils will be topsoil and the irrigation system will reach all landscaped areas. See Exhibit PC-3, Section 21, Figures 11.0 – 13.5. The WTP will be able to provide ample water for the irrigation system.

The criterion is met.

d. A parking, loading, or service area which abuts a street shall be set back from the right-of-way line by perimeter landscaping in the form of a landscaped strip at least 10 feet in width. When a parking, loading, or service area or driveway is contiguous to an adjoining parcel, there shall be an intervening five-foot-wide landscape strip. The landscaped area shall contain:



1) Street trees spaced as appropriate to the species, not to exceed 50 feet apart on the average;

2) Shrubs, not to reach a height greater than three feet, six inches, spaced no more than five feet apart on the average; or

3) Vegetative ground cover such as grass, wildflowers, or other landscape material to cover 100 percent of the exposed ground within two growing seasons. No bark mulch shall be allowed except under the canopy of low level shrubs.

FINDING NO. 137

Staff concurs with the applicant's response: The visitor parking landscape area provides approximately 46-feet of separation from the Kenthorpe Way right-of-way. Parking, loading, service areas, and driveways are not contiguous to abutting properties.

The criterion is met.

e. If over 50 percent of the lineal frontage of the main street or arterial adjacent to the development site comprises parking lot, the landscape strip between the right-of-way and parking lot shall be increased to 15 feet in width and shall include terrain variations (e.g., one-foot-high berm) plus landscaping. This extra requirement only applies to one street frontage.

FINDING NO. 138

The WTP frontage along Kenthorpe Way is approximately 500-feet wide. The WTP visitor parking area is proposed to be approximately 182-feet wide; less than 50 percent of the 500-foot frontage width. The criterion does not apply.

g. All areas in a parking lot not used for parking, maneuvering, or circulation shall be landscaped.

FINDING NO. 139

The applicant indicates that all areas within the two parking lots are used for parking maneuvering, or circulation, consistent with subsection (g). The criterion is met.

h. The landscaping in parking areas shall not obstruct lines of sight for safe traffic operation.

FINDING NO. 140

The proposed landscaping does not overhang either parking area or the drive lanes. Consistent with the clear vision standards, no vegetation within the clear vision areas will be taller than three feet at maturity unless the limbs and vegetation are pruned to a height of eight feet. The criterion is met.

i. Outdoor storage areas, service areas (loading docks, refuse deposits, and delivery areas), and above-ground utility facilities shall be buffered and screened to obscure their view from adjoining properties and to reduce noise levels to acceptable levels at the property line. The adequacy of the buffer and screening shall be determined by the criteria set forth in CDC 55.100(C)(1).

FINDING NO. 141

Staff concurs with the applicant's response: The applicant responded to the requirements of CDC 55.100(C)(1). All of the WTP storage areas, service areas and process utility functions are buffered and screened by building walls, architectural security fencing, visual screening barriers, existing vegetation and a dense planting of new vegetation, including approximately 308 new trees.

The criterion is met.

j. Crime prevention shall be considered and plant materials shall not be located in a manner which prohibits surveillance of public and semi-public areas (shared or common areas).

FINDING NO. 142

Staff concurs with the applicant's response: All areas accessible to the public have open lines of sight or, in the case of the pedestrian path, are illuminated (see Finding 53 regarding crime prevention).

The criterion is met.

k. Irrigation facilities shall be located so that landscaped areas can be properly maintained and so that the facilities do not interfere with vehicular or pedestrian circulation.

FINDING NO. 143

The applicant's irrigation plan provides for adequate plant maintenance and all irrigation lines are underground, thereby minimizing conflict with vehicular and pedestrian circulation. See Exhibit PC-3, Section 21, Figures 11.0 and 13 – 13.5. The criterion is met.

l. For commercial, office, multi-family, and other sites, the developer shall select trees that possess the following characteristics:
1) Provide generous "spreading" canopy for shade.
2) Roots do not break up adjacent paving.
3) Tree canopy spread starts at least six feet up from grade in, or adjacent to, parking lots, roads, or sidewalks unless the tree is columnar in nature.
4) No sticky leaves or sap-dripping trees (no honey-dew excretion).

5) No seed pods or fruit-bearing trees (flowering trees are acceptable).
6) Disease-resistant.
7) Compatible with planter size.
8) Drought-tolerant unless irrigation is provided.
9) Attractive foliage or form all seasons.

FINDING NO. 144

The applicant selected trees that are consistent with subsection (l) standards. See Exhibit PC-3, Section 21, figure 11.0 for a plant schedule. The criterion is met.

m. Plant materials (shrubs, ground cover, etc.) shall be selected for their appropriateness to the site, drought tolerance, year-round greenery and coverage, staggered flowering periods, and avoidance of nuisance plants (Scotch broom, etc.).

FINDING NO. 145

The applicant selected native plant materials that are drought tolerant and provide year- or staggered year-round foliage. None of the plants are classified as nuisance plants. See Exhibit PC-3, Section 21, figure 11.0 for a plant schedule. The criterion is met.