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## STAFF REPORT

### PLANNING COMMISSION PUBLIC HEARING

DATE: DECEMBER 3, 2008

**FILE NO.:** DR-08-01/VAR-08-01/WAP-08-01

**REQUEST:** CLASS II DESIGN REVIEW, WATER RESOURCES  
AREA PERMIT, AND A CLASS II VARIANCE FOR  
AMOUNT OF DEVELOPMENT PROPOSED IN THE  
WATER RESOURCE AREA, FOR A 70-UNIT HOTEL AT  
2400-2450 WILLAMETTE FALLS DRIVE

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**ADDITIONAL EXHIBITS SEE PAGE 44 AND ABOVE OF  
NOVEMBER 5, 2008 STAFF REPORT**



**City of West Linn  
PLANNING & BUILDING DEPT.  
STAFF REPORT**

TO: West Linn Planning Commission (for November 5, 2008 meeting)

FROM: West Linn Planning Staff (Tom Soppe, Associate Planner)

DATE: Report completed November 5, 2008

FILE NO: DR-08-01/VAR-08-01/ WAP-08-01

SUBJECT: 71-unit hotel at 2400-2450 Willamette Falls Drive, requiring Class II Design Review, Water Resources Area Permit due to the presence of a natural drainageway and wetlands on site, and a Class II Variance for the amount of square footage proposed for development within the drainageway and wetlands transition area

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

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**SPECIFIC DATA**

**OWNER/  
APPLICANT** Vic Patel, VKNW, Inc., 12700 SE McLoughlin Blvd., Milwaukie, OR 97222

**CONSULTANTS:** Dale Gulliford, Jr., Schott & Associates, Inc., P.O. Box 589, Aurora, OR 97002

Steven P. Elkins, Steven P. Elkins Architects, Inc. P.S., 11000 NE 33<sup>rd</sup> Place, Ste. 101, Bellevue, WA 98004

Mike Coyle, Faster Permits, 833 SE Main St., #242, Portland, OR 97214

**LOCATION:** 2400-2450 Willamette Falls Drive

**SITE SIZE:** 1.58 acres

**LEGAL  
DESCRIPTION:** Clackamas County Assessor's Map 2-1E-35DD, tax lots 3400 and 3500, and Clackamas County Assessor's Map 2-1E-35D, tax lots 2000 and 5300

**ZONING:** GC



**COMP PLAN****DESIGNATION:** Commercial**APPROVAL****CRITERIA:** CDC Chapter 32, Natural Drainageway Protection; Chapter 55, Design Review; Chapter 75 Variance**120-DAY****PERIOD:** The application was complete upon submittal of neighborhood meeting materials on September 25, 2008. Therefore the 120-day period ends on January 23, 2009.**PUBLIC NOTICE:** Public notice was mailed to the Willamette Neighborhood Association and to affected property owners on October 8, 2008. The property was posted with a sign on October 14, 2008. The application has also been posted on the City's website. Therefore, notice requirements have been satisfied.**EXECUTIVE SUMMARY:**

The applicant proposes a 71-unit, 4-story, 43,388 square foot hotel at a currently undeveloped site (except for a driveway) at 2400-2450 Willamette Falls Drive. The site is approximately 1.58 acres in size. The site is on the north side of the street, stretching from the intersection of 6<sup>th</sup> Street and Willamette Falls Drive to just west of the intersection of 7<sup>th</sup> Street and Willamette Falls Drive (both 6<sup>th</sup> and 7<sup>th</sup> head only south, not north, from Willamette Falls, so the site is not on a corner lot). The site is zoned General Commercial (GC), and is surrounded by other GC sites on the north side of Willamette Falls Drive, stretching west to 10<sup>th</sup> Street and east to 5<sup>th</sup> Street. The site backs to I-205, across which are R-10 zoned residential areas further up a steep hill. Across Willamette Falls Drive lie R-10 zoned residential areas. This section of Willamette Falls Drive consists of both the main arterial of Willamette Falls Drive and a frontage road that provides access to houses on the south side of the street. The right of way (ROW) is approximately 120 feet wide. The main arterial of Willamette Falls Drive is approximately 40 feet wide in front of the site.

The site is quite flat, but there is a steep slope up to I-205 behind the site in the ODOT ROW. Bernert Creek traverses the western area and south frontage of the site, and wetlands along the creek corridor also comprise a significant area of the southern and western areas of the site. Bernert Creek is a significant riparian corridor, so the setback is 100 feet from the top of bank. Therefore the entire site except a thin strip along the north central and northeast areas of the site lies within the water resource areas and their transition area. CDC 32.090 allows a hardship provision of up to 5,000 square feet of developed water resource area for properties such as this one that are partly within the transition area and can otherwise not be developed. This provision exists to allow "economically viable" use of the land. Because much of the site except for the narrow strip at the rear consists of the water resource area, the applicant has applied for a Class II Variance to avoid the regulations in 32.090 that require development on a site partially within the transition area to stay at 5,000 square feet or less and to keep a 15 foot setback from the wetlands/drainageway. A Water Resources Area permit has also been applied for due to the



presence of and proximity to the water resources, and the applicant has applied for a Class II Design Review as this is a new commercial building.

The proposed building footprint is 10,847 square feet, and the parking lot and driveway areas are proposed to be approximately 26,000 square feet. The hotel is proposed for the east portion of the site, separated from Willamette Falls Drive by the wetland and creek. There is an existing driveway that crosses the creek above a culverted area of the creek at the west end of the site. The applicant proposes to use this driveway and to not build another. The parking lot, proposed to stretch across the north end of the site from the building to the west boundary of the site, will connect this driveway to the hotel building. Part of the north-south aisle at the east end of the parking lot will pass through a porte cochere which will be used as the main entrance to the building. The site plan has been modified, moving the building further west than it was on the original site plan to preserve the significant Oregon White Oak tree at the northeast corner of the site.

The second Class II Variance (VAR-08-09) is no longer being requested as the revised site plan preserves the significant Oregon White Oak tree.

## **PUBLIC COMMENTS**

### **Mr. and Mrs. Michael A. Boyd, 2475 Willamette Falls Drive, July 7, 2008**

My husband and myself live at 2475 Willamette Falls Drive, directly across from the proposed hotel site requested by VKNW, Inc. We are both retired and my husband has owned this property for more than 28 years.

We strongly disapprove of the construction of a hotel- a 7-day a week- 24 hour business- on a year-round waterway wetland.

We have seen deer, nesting ducks and birds as well as other wildlife at this site.

The construction, use, and increased traffic will definitely have a negative impact on the quality of life in that little wetland- as well as ours across from it.

That green space must surely help with the clean-air quality from the above freeway traffic and the already extreme amount of traffic on Willamette Falls Drive.

It is our understanding that West Linn and the state of Oregon are trying to preserve these places and we feel this building request should be denied.

### **Willamette Neighborhood Association, September 10, 2008**

The WNA does not support the Holiday Inn Express application because of the following concerns:

1. Feasibility of wetland mitigation by developer-discussions and feedback from area residents and professionals questioned that there were no other wetland areas that could be mitigated to balance out what will be filled in at the building site.



2. Preservation of the oak tree on the applicant's property-discussions from area residence supported keeping the tree and moving the building to keep it.
3. Proximity to the bus stop for young children and proximity to their school due to the transient nature of the motel clientele was a concern for some area residents and may require rerouting the school buses.
4. Variance requested for the height needed for a 4 story structure-discussions of residents did not support the additional height of the building over and above the code for esthetic reasons. It was also suggested the some additional screening from tree plantings in the divider between Willamette Falls Drive and the residential Willamette Falls Drive should be considered to help screen some of the homes facing the proposed hotel.
5. Inadequacy of parking spaces for the hotel and the adjacent lawyers' office parking agreement-this discrepancy of parking spaces to rooms seemed unusual and concerning to area residents. The hotel owners admitted to making an agreement with the neighboring law office to give them some of their required parking spaces in return for some of the property to fulfill their parking lot needs. So in essence, the parking lot needs of the hotel will not actually be met.
6. Apprehension for the preservation of the character of the Willamette district-some neighbors felt that the hotel at this particular location was more in the neighborhood and less in the town area. They questioned the success of the hotel because of the location.

**Don Hatch, 6260 Summerlinn Way, September 26, 2008**

I am unable to attend the neighborhood meeting for health reasons. I was disappointed to see your (referring to WNA) lack of support for the Holiday Inn Express. West Linn could use more businesses to help with the taxes. The Inn might even have helped the stability of the businesses of WF Drive which seem to open and close with regularity. A small Inn like this would have little traffic impact. Maybe if it was located north of the freeway you would have approved of it as you did Mr. Parker's 800 car parking garage with the traffic pattern aimed for Summerlinn Drive to Blankenship. Why fight against what is beneficial to the community as a whole?

**Vicki Handy, No address given, October 20, 2008**

I feel very uncomfortable with this addition to the 10<sup>th</sup> Street exit area. The traffic is already a serious problem and the new marketplace is not even in full operations. Unless we have a new on/off ramp scenario, I frankly don't think our current infrastructure can manage it. Also, I live off of Willamette Falls Drive. Already there are days that I cannot get onto the road because it is so congested. I am all for supporting the economic growth of Willamette, but I would rather focus on the existing businesses and all of the vacant business spaces than to support a new large structure. Please include my comments in the Nov. 5<sup>th</sup> meeting.

**RECOMMENDATION**

Based upon staff findings and findings contained in the applicant's submittal in the City record,

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staff finds and recommends that there are sufficient grounds to approve this application with the following conditions:

1. The applicant shall plant only native plants in the stormwater treatment facility proposed on site and in the raingarden between the sidewalk and street (see Condition 2).
2. The applicant shall install an 8-foot wide sidewalk along Willamette Falls Drive, with a minimum 6-foot wide raingarden swale strip between the sidewalk and the street. The sidewalk shall be connected to the existing sidewalk to the east. Appropriate street trees and street lighting shall be planted in the raingarden swale strip. Applicant shall provide half-street improvements to the satisfaction of the Engineering Department. The infield implementation of the actual half-street construction shall be determined by the City Engineer.
3. A 6 foot wide sidewalk shall be installed connecting the building to Willamette Falls Drive.
4. The existing drainageway culvert under the existing driveway shall be replaced to the satisfaction of the Sewer and Storm Division of the Public Works Department.
5. The water line shall be installed to allow for eventual looping west to 8<sup>th</sup> Court. This and other aspects of connecting the site to the water system shall be done to the satisfaction of the Water Division of the Public Works Department.
6. The gravel parking spaces at the southwest corner of the site shall no longer be used for parking, as these areas will be occupied partly by vegetative buffer restoration area and partially by right of way improvements. Up to 9 spaces at the west end of the proposed parking lot may be shared with the law office currently using the gravel parking area to be abandoned. Any parking sharing agreed to in the future by the applicant must conform to the provisions of the CDC, including Chapter 46.
7. All pavement in the parking lot that is proposed to be pervious shall be constructed of hard-surfaced materials, not gravel.
8. All areas of the site not proposed for development that are within the drainageway, wetlands, and their 50-foot transition areas shall be placed in a conservation easement protecting them from further development.
9. Alternate methods of construction mitigating the limited fire access shall be approved by the Building Official and the TVFR Fire Marshal at the time of building permit issuance. The building permit shall not be issued unless all alternative methods deemed necessary by the Building Official and the Fire Marshal are proposed by the applicant in the building permit submittal.
10. The section of the driveway between Willamette Falls Driveway and the fork in the driveway shall be 24 feet wide. The driveway approach shall be designed and constructed per the current City of West Linn Public Works standards.



# SUPPLEMENTAL FINDINGS

DR-08-01/VAR-08-01/WAP-08-01/VAR-08-09

## 32.050 APPROVAL CRITERIA

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

- A. *Proposed development submittals shall identify all water resource areas on the project site. The most currently adopted Surface Water Management Plan) shall be used as the basis for determining existence of drainageways. The exact location of drainageways identified in the Surface Water Management Plan, and drainageway classification (e.g., open channel vs. enclosed storm drains), may have to be verified in the field by the City Engineer. The Local Wetlands Inventory shall be used as the basis for determining existence of wetlands. The exact location of wetlands identified in the Local Wetlands Inventory on the subject property shall be verified in a wetlands delineation analysis prepared for the applicant by a certified wetlands specialist. The Riparian Corridor inventory shall be used as the basis for determining existence of riparian corridors.*

### FINDING NO. 1:

The site plan depicts locations of the drainageway and wetlands on the property. The criterion is met.

- B. *Proposed developments shall be so designed as to maintain the existing natural drainageways and utilize them as the primary method of stormwater conveyance through the project site unless the most recently adopted West Linn Surface Water Management Plan calls for alternate configurations (culverts, piping, etc.). Proposed development shall, particularly in the case of subdivisions, facilitate reasonable access to the drainageway for maintenance purposes.*

### FINDING NO. 2:

The development will use the existing driveway across the wetland/drainageway area of the site and will otherwise be developed outside this area of the site. The proposed stormwater treatment facility will drain to the natural drainageway/wetland area of the site. Condition of Approval 4 requires the replacement of the current culvert under the existing driveway to the satisfaction of the Sewer and Storm Division of the Public Works Department; this will enhance the drainageway here as the Division plans to demand an open-bottomed culvert. The criterion is met.

- C. *Development shall be conducted in a manner that will minimize adverse impact on water resource areas. Alternatives which avoid all adverse*



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

**FINDING NO. 3:**

No wetlands will be affected except the area at the southeast edge of the site where the City-required sidewalk will intrude into the wetland area. This wetland area will be mitigated for in Fields Bridge Park, and other vegetated areas of the transition area to be affected by development will be mitigated for on site and in Fields Bridge Park. The applicant already has proposed mitigation in Fields Bridge Park and on site in the mitigation plan. Condition of Approval 6 ensures that impervious surfaces that have been added to the plan due to subsequent site plan modifications, Condition of Approval 2, and Condition of Approval 3 will be mitigated for as well in Fields Bridge Park. There are over 41,000 square feet of mitigation areas available in Fields Bridge Park. 32,074.45 acres are already proposed to be employed for mitigation in Fields Bridge Park by the submitted mitigation plan, and the changes to the site plan made by further modifications and required by conditions of approval 2 and 3 will increase the amount of square footage for which to mitigate, by approximately 2,500 square feet. Therefore the needs can be met within the 41,000+ square feet available for mitigation at Fields Bridge Park, as confirmed by the Parks Director. Staff adopts the applicant's findings regarding the alternatives analysis and mitigation plan. See findings 16-17 regarding the mitigation plan and findings 47-52 regarding the square footage variance. The criterion is met.

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

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

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



**FINDING NO. 4:**

The site is very constrained as it is a narrow site north-to-south, with an entire east-west swath covered by drainageway and wetlands, and the northeast corner of the site is undevelopable due to the presence of the site's only significant tree, a large Oregon White Oak. Most of the site is water resource and transition area. The applicant is utilizing the hardship provisions of 32.090 and is also applying for a variance because the site is too constrained to be reasonably developed while meeting even the hardship provisions. See Finding No. 19 regarding the hardship provisions and findings 47-52 regarding the variance. A conservation easement shall be placed over all of the areas of the site that are within the water resources and their transition areas and that remain undeveloped per the final site plan. This is required by Condition of Approval 8 to comply with (D) above.

- F. Roads, driveways, utilities, or passive use recreation facilities may be built in and across water resource areas when no other practical alternative exists. Construction shall minimize impacts. Construction to the minimum dimensional standards for roads is required. Full mitigation and revegetation is required, with the applicant to submit a mitigation plan pursuant to CDC Section 32.070 and a revegetation plan pursuant to CDC Section 32.080. The maximum disturbance width for utility corridors is as follows:*
- a. For utility facility connections to utility facilities, no greater than 10 feet wide.*
  - b. For upgrade of existing utility facilities, no greater than 15 feet wide.*
  - c. For new underground utility facilities, no greater than 25 feet wide, and disturbance of no more than 200 linear feet of Water Quality Resource Area, or 20% of the total linear feet of Water Quality Resource Area, whichever is greater.*

**FINDING NO. 5:**

There will be only one driveway across the wetland/drainageway area to provide access between the site and the street. The applicant plans to use the existing driveway as to minimize effects on the wetland. The driveways around the parking lot will replace vegetative area surrounding the wetland/drainageway area, and these will be mitigated for per the mitigation plan; see Finding No. 19. Utilities will connect through the existing driveway. The criterion is met.

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



**FINDING NO. 6:**

There will be building in the transition area under the hardship provisions of 32.090, as most of the site is in the water resource areas and their transition areas. The water resource areas and the sections of their transition areas where development will not occur will be surrounded by chain link fencing. This fencing will be erected prior to construction and will remain throughout construction. The criterion can therefore be met as outlined.

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

**FINDING NO. 7:**

There will be no trails, walkways, or bike paths besides the driveway and sidewalk. The criterion is not applicable.

- I. Sound engineering principles regarding downstream impacts, soil stabilization, erosion control, and adequacy of improvements to accommodate the intended drainage through the drainage basin shall be used. Storm drainage shall not be diverted from its natural watercourse. Inter-basin transfers of storm drainage shall not be permitted.*

**FINDING NO. 8:**

The stormwater plan proposes to match the post-development peak flow with the pre-development peak flow. Interbasin transfer will not occur, and the storm drainage on site will continue to flow to the drainageway/wetland on site after treatment. Staff adopts the applicant's finding and finds the criterion is met.

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

**FINDING NO. 9:**

The applicant has submitted an erosion control plan. The criterion is met.

- K. Vegetative improvements to areas within the water resource area may be required if the site is found to be in an unhealthy or disturbed state, or if portions of the site within the water resource area are disturbed during the development process. "Unhealthy or disturbed" includes those sites that have a combination of native trees, shrubs, and groundcover on less than 80% of the water resource area and less than 50% tree canopy coverage in the water resource area. "Vegetative improvements" will be documented by submitting a revegetation plan meeting CDC Section 32.080 criteria that will result in the water resource area having a combination of native trees,*



*shrubs, and groundcover on more than 80% of its area, and more than 50% tree canopy coverage in its area. Where any existing vegetation is proposed to be permanently removed, or the original land contours disturbed, a mitigation plan meeting CDC Section 32.070 criteria shall also be submitted. Interim erosion control measures such as mulching shall be used to avoid erosion on bare areas. Upon approval of the mitigation plan, the applicant is responsible for implementing the plan during the next available planting season.*

**FINDING NO. 10:**

A revegetation plan and mitigation plan have been submitted, for which staff has adopted the applicant's findings. See staff findings 18-19 below.

- L. Structural Setback area: where a structural setback area is specifically required, development projects shall keep all foundation walls and footings at least 15 feet from the edge of the water resource area transition and setback area if this area is located in the front or rear yard of the lot, and 7 ½ feet from the edge of the water resource area transition and setback area if this area is located in the side yard of the lot. Structural elements may not be built on or cantilever over the setback area. Roof overhangs of up to three feet are permitted in the setback. Decks are permitted within the structural setback area.*

**FINDING NO. 11:**

See Finding No. 19 under 32.090, as this is a constrained site which needs to employ the hardship provisions of this section to be developed. The setback cannot be maintained from the transition area as the combination of the water resource areas and the transition areas constitute most of the site. The criterion is not applicable.

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

**FINDING NO. 12:**

The stormwater treatment facility will be within the water resource area, because most of the site is within the water resource area. The facility has to be more than 25 feet within the water resource area because the runoff will drain to the water resource as required by this chapter, so the facility has to be between the building/parking lot area and the water resource. The applicant has applied for the hardship provisions of 32.090, which make some of the other demands of Chapter 32



including this one irrelevant. Condition of Approval 1 ensures only native plantings will be placed in the stormwater treatment facility, making the development compliant with this criterion.

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

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

**FINDING NO. 13:**

The only piped/culverted water resource area on site is the area culverted beneath the driveway on site. The driveway is the only access to the buildable area of the site, as the water resource areas otherwise line the front of the site along Willamette Falls Drive. The existing driveway will be used as the single access to the site, so the culvert will remain. The criterion is not applicable.

O. *The decision-making authority may approve a reduction in applicable front yard setbacks abutting a public street to a minimum of fifteen feet and a reduction in applicable side yard setbacks abutting a public street to 7 ½ feet if the applicant demonstrates that the reduction is necessary to create a building envelope on an existing or proposed lot of at least 5,000 square*



*feet.*

**FINDING NO. 14:**

The site is in the GC zone but is across the street from R-10, so the 20 foot front setback of R-10 applies. The area of the first 20-plus feet of the site's front consists of water resource area. Therefore the development actually has to be pushed further to the back, not further to the front. The criterion is not applicable.

- P. Storm Drainage Channels not identified on the Surface Water Management Plan Map, but identified through the development review process, shall be subject to the same setbacks as equivalent mapped storm drainage channels.*

**FINDING NO. 15:**

No other water resource areas besides drainageway and wetlands in front have been identified. The criterion is not applicable.

**32.070 MITIGATION PLAN**

*A mitigation plan shall be required if any portion of the water resource area is proposed to be permanently disturbed by development.*

- A. All mitigation plans must contain an alternatives analysis demonstrating that:*
- 1. No practicable alternatives to the requested development exist that will not disturb the water resource area; and,*
  - 2. Development in the water resource area has been limited to the area necessary to allow for the proposed use; and,*
  - 3. An explanation of the rationale behind choosing the alternative selected, including how adverse impacts to the water resource area will be avoided and/or minimized.*

**FINDING NO. 16:**

Staff adopts the applicant's findings. Parking lot landscaping and the on-site restoration area count towards the 20% landscaping.

- B. A mitigation plan shall contain the following information:*
- 1. A description of adverse impacts that will be caused as a result of development.*
  - 2. An explanation of how adverse impacts to resource areas will be avoided, minimized, and/or mitigated in accordance with, but not limited to, the revegetation provisions of CDC Section 32.050(K).*



3. *A list of all responsible parties including, but not limited to, the owner, applicant, contractor, or other persons responsible for work on the development site.*
  4. *A map showing where the specific mitigation activities will occur.*
  5. *An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, reporting, and a contingency plan. All in-stream work in fish-bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife water work periods.*
  6. *Assurances shall be established to rectify any mitigation actions that are not successful. This may include bonding or other surety.*
  7. *Evidence that a Joint Permit Application (to the U.S. Army Corps and OR DSL) if impacts to wetlands are greater than 0.10 acres, has been submitted and accepted for review.*
- C. *Mitigation of any water resource areas that are not wetlands that are permanently disturbed shall be accomplished by creation of a mitigation area equal in size to the area being disturbed. Mitigation areas may be land that is either*
1. *On-site, not within the water resource area, and is characterized by existing vegetation qualifying that does not meet the standard set forth in CDC Section 32.050(K), or*
  2. *Off-site, and is characterized by existing vegetation that does not meet the standard set forth in CDC Section 32.050(K). The applicant shall prepare and implement a revegetation plan for the mitigation area pursuant to CDC Section 32.080, and which shall result in the area meeting the standards set forth in CDC Section 32.050(K). Adequacy of off-site mitigation areas on city property must be consistent with and meet approval of the City Department of Parks and Recreation. Any off-site mitigation occurring on privately-owned land shall be protected with a conservation easement.*
- D. *The Mitigation Plan for any wetland area to be disturbed shall be 1) prepared and implemented with the guidance of professionals with experience and credentials in wetland areas and values, and 2) be consistent with requirements set forth by regulatory agencies (U.S. Army Corps and OR DSL) in a Joint Permit Application, if such an Application is necessary for the disturbance. Where the alternatives analysis demonstrates that there are no practicable alternatives for mitigation on site, off-site mitigation*



*shall be located as follows:*

- 1. As close to the development site as is practicable above the confluence of the next downstream tributary, or if this is not practicable;*
  - 2. Within the watershed where the development will take place, or as otherwise specified by the City in an approved wetland mitigation bank.*
- E. To ensure that the mitigation area will be protected in perpetuity, proof that the area has been dedicated to the City or a conservation easement has been placed on the property where the mitigation is to occur is required.*

**FINDING NO. 17:**

Staff adopts the applicant's findings. The sidewalk impacts to the wetlands will be less than 0.10 acres, so (B)(7) above does not apply. Except for this sidewalk along Willamette Falls Drive and its intersection with the sidewalk to the building at the east end of the site, all impacts will be to the vegetative buffer and not the wetland itself.

Fields Bridge Parks is an approved wetland mitigation bank. The amount of square footage available in Fields Bridge Park for mitigation is greater than what is demanded by this proposal. The Parks Director has confirmed that these additional mitigation needs can be accommodated within the mitigation bank areas of Fields Bridge Park as shown on the "Offsite Mitigation Areas" map. The applicant proposes to provide as much mitigation area on site as is possible on this small site, and the rest will be provided in Fields Bridge Park.

**32.080 REVEGETATION PLAN REQUIREMENTS**

*Metro's native plant list is incorporated by reference as a part of CDC Chapter 32, and all plants used in revegetation plans shall be plants found on the Metro native plant list. Performance standards for planting upland, riparian and wetland plants include the following:*

- A. Native trees and shrubs will require temporary irrigation from June 15 to October 15 for the three years following planting.*
- B. Invasive non-native or noxious vegetation shall be removed within the area to be revegetated prior to planting.*
- C. Replacement trees must be at least one-half inch in caliper, measured at 6 inches above the ground level for field grown trees or above the soil line for container grown trees (the one-half inch minimum size may be an average caliper measure, recognizing that trees are not uniformly round) unless they are oak or madrone, which may be one gallon size. Shrubs must be in at least a one-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.*



- D. *Trees shall be planted between 8 and 12 feet on-center and shrubs shall be planted between 4 and 5 feet on-center, or clustered in single species groups of no more than 4 plants, with each cluster planted between 8 and 10 feet on center. When planting near existing trees, the dripline of the existing tree shall be the starting point for plant spacing requirements.*
- E. *Shrubs must consist of at least two different species. If 10 trees or more are planted, then no more than 50% of the trees may be of the same species.*
- F. *The responsible party shall provide an appropriate level of assurance documenting that 80 percent survival of the plants has been achieved after three years, and shall provide annual reports to the Planning Director on the status of the revegetation plan during the three year period.*

**FINDING NO. 18:**

Staff adopts the applicant's findings. Replacement trees are not needed as no significant trees will be removed. There is an area in the southwestern section of the site currently used for parking by the law office building to the west per the applicant's sales agreement for this land, which was bought from this business. This area will partly be taken up by areas designated for vegetative restoration, and partly taken up by right of way improvements. The gravel parking area will become partly street, partly raingarden/planter strip, partly sidewalk, and partly vegetative buffer restoration area as required by this criterion. Condition of Approval 6 prohibits parking here as continuing this use would be incompatible with the vegetative restoration of the wetland buffer here.

**32.090 REDUCTION IN STANDARDS FOR HARDSHIP**

*The purpose of CDC Section 32.090 is to ensure that compliance with CDC Chapter 32 does not cause unreasonable hardship. To avoid such instances, the requirements of CDC Chapter 32 may be reduced. Reductions are also allowed when strict application of CDC Chapter 32 would deprive an owner of all economically viable use of land. The decision making authority may impose such conditions as are deemed necessary to limit any adverse impacts that may result from granting relief.*

- A. *Lots located completely inside the water resource area. Development may occur on lots located completely within the water resource area that are recorded with the County Assessor's Office on or before the effective date of this ordinance. Development shall disturb the minimum necessary area to allow the proposed use or activity, and in any situation no more than 5,000 square feet of the water resource area, including access roads and driveways, subject to the erosion and sediment control standards in CDC Chapter 31, and subject to a finding that the proposed development does not increase danger to life and property due to flooding and erosion.*



B. *Lots located partially inside the water resource area. A reduction to avoid the loss of all economically viable use of a vacant lot recorded with the County Assessor's Office on or before the effective date of this ordinance that is partially inside the water resource area is permitted. Development on such lots shall not disturb more than 5,000 square feet of the water resource area, including access roads and driveways, subject to the erosion and sediment control standards of CDC Chapter 31. Applicants must demonstrate the following:*

1. *Without the proposed reduction, the applicant would be denied economically viable use of the subject property. To meet this criterion, the applicant must show that no other application could result in permission for an economically viable use of the subject property. Evidence to meet this criterion shall include a list of uses allowed on the subject property.*
2. *The proposed intrusion is the minimum necessary to allow economically viable use of the subject property.*
3. *The proposed reduction will comply with CDC Chapter 31, Erosion Control;*

C. *If a reduction in standards is granted pursuant to criteria of CDC 32.090(B), the reduction shall be subject to the following conditions:*

1. *The minimum width of the water resource area's transition and setback area shall be 15 feet on each side of a wetland or drainage course.*
2. *As mitigation for the permanent disturbance of any portion of the normally required water resource area, an equal area on the property which would not normally be within the water resource area shall be revegetated to meet the standards of CDC 32.050(K). If there does not exist enough site area to meet this requirement, the applicant shall revegetate the entire area of the property that would not normally be within the water resource area, adjacent to the actual water resource area, and is not proposed for permanent disturbance to meet the standards of CDC 32.050(K)*

C. *Any further reduction of the standards of this chapter shall require approval of a Variance pursuant to CDC Chapter 75.*

**FINDING NO. 19:**

The site is partially within the water resource and transition areas, but the area outside the transition area is so limited as to constrain the property to the extent that more than 5,000 square feet of the transition area must be developed in order for the property to be viably used for the



commercial land uses for which it is zoned. The applicant has applied for a variance for this reason. See findings 47-52 for responses to the variance criteria.

#### **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. (ORD. 1408)*

A. *The provisions of the following chapters shall be met:*

1. *Chapter 33, Storm Water Quality and Detention. ( OR D. 1463)*

#### **FINDING NO. 20:**

The applicant's site plan shows a stormwater treatment facility for all new impervious surfaces on site that will drain to the drainageway, and the street improvements required by Condition of Approval 2 ensure that a raingarden will also be built along the street to treat street and sidewalk runoff, in place of a planter strip. Condition of Approval 1 also requires native plants to be planted in the on-site facility. Because of spatial constraints on site, the on-site stormwater facility will encroach 25 feet into the transition area of the water resource area, but development on site will be mitigated for by the mitigation plan (see Finding No. 19). The criteria of Chapter 33 are met.

2. *Chapter 34, Accessory Structures.*

3. *Chapter 38, Additional Yard Area Required.*

4. *Chapter 40, Building Height Limitations and Exceptions.*

5. *Chapter 42, Clear Vision Areas.*

6. *Chapter 44, Fences & Screening Outdoor Storage.*

#### **FINDING NO. 21:**

There will be no accessory structures. The building meets height limits, and no additional yard area is required. The proposal meets clear vision requirements as no structures are proposed near the intersection of the existing driveway and Willamette Falls Drive. The trash area will be screened. The criteria are met.

7. *Chapter 46, Off-Street Parking and Loading.*

#### **FINDING NO. 22:**

There are 73 spaces provided in the proposed parking lot. There are 71 units in the proposed hotel. 46.090(C)(7) requires one space per unit for hotels and motels. Required parking is required to be within 200 feet of the building. Chapter 46 also has a provision that required parking can be reduced by 10% if the site is adjacent to a transit stop, as this site is. Therefore, only 63 spaces are required instead of the base requirement of 71 due to the presence of transit. 64 of the spaces provided are within 200 feet of the building, if the porte cochiere is counted as part of the building.



The CDC defines “building” as “Any structure used or intended for supporting or sheltering any use or occupancy.” This definition does not appear to exclude the porte cochiere; therefore it can count as part of the building. Since 64 spaces are required and 63 are within 200 feet of the porte cochiere and/or main building, the requirements for number of spaces and distance of spaces from the building are met. The base minimum of 71 is not exceeded by more than 10 percent, which is also forbidden by Chapter 46. Driveways are over 15 feet wide, meeting the requirement of 46.120. Three disabled parking spaces are required for a development with 71 total required parking spaces, and three spaces have been provided. As a hotel with more than 10,000 square feet and less than 100,000 square feet, one loading berth is required by 46.130. One berth of sufficient size has been provided. The final site plan includes parking spaces that meet space sizing requirements in Chapter 46. The applicant proposes pervious pavement; the code requires parking lots and driveways to be hard surfaced, so Condition of Approval 7 requires that they use a pervious pavement that is hard surfaced (as opposed to gravel or something similar).

The informal “parking area” that the applicant has an agreement to share with the law office building to the west is not part of the 73 proposed spaces on site, as it consists of several informal spaces along the edge of the street, west of the site driveway but out of the clear vision area for the driveway. See Exhibit PC-4 in the original staff report, the sales agreement in which the applicant bought this land from the law office owners. In item 12 of the conditions of that agreement, there is an agreement to allow the seller parking at this southwest corner of the site, unless the City does not allow this due to otherwise inadequate parking for a land use proposed on site by the applicant. There is a condition of approval, Condition of Approval 6, which requires the abandonment of this parking area, but this is to ensure wetland buffer revegetation criteria and street improvement criteria are met, not to fulfill the parking criteria discussed in this finding; see findings 18 and 43. The law office building has approximately 1,300-1,600 square feet. CDC 46.090(C)(5) requires professional offices to have one space per every 350 square feet. Therefore the office only needs 5 parking spaces at most per code. The office’s existing parking lot on its own property has 13 spaces. Therefore the parking agreement is not relevant per code as the office already has enough spaces per 46.090(C)(5). However, since there are 73 spaces proposed in the new parking lot with only 63 needed per code, the applicant may share up to 10 of the spaces at the west end of the lot with the law office building, as provided as well in Condition of Approval 6. The criteria of Chapter 46 are met with or without such an agreement..

8. *Chapter 48, Access.*

**FINDING NO. 23:**

The section of the driveway that provides the only access to the street (and therefore needs to be two-way) is 23 feet wide, so Condition of Approval 10 requires it to be 24 feet wide to be compliant with 48.040(A)(1), which requires this width for two-way driveways. Condition of Approval 10 also requires the driveway approach to be built to City standards; the applicant’s site plan currently does not show a curb radius that is to City standards. The remainder of the travel lanes, which can be one way and have a minimum required width of 15 feet, are proposed to be 23 feet in width. The porte cochiere area has been designed to allow a fire turnaround were fire trucks can park, to the west of the porte cochiere. While their concerns have not been formally submitted in writing at this time, TVFR staff has commented to City staff that they have enough access concerns with the site plan to warrant improvements in the construction of the building. TVFR has



confirmed to staff that alternate methods of construction can sufficiently mitigate the limited fire access without further changes to the site plan. Condition of Approval 9 requires building construction standards to satisfy TVFR and the building official, ensuring that whatever alternate construction methods are needed to make the building fire safe are employed at the time of building permit issuance. The main driveway can also serve as a service driveway. The criterion is met.

9. *Chapter 52, Signs.*

**FINDING NO. 24:**

On wall signs are proposed. For these or any other signs proposed, the applicant will have to get a separate permanent sign permit after the application is approved. The criterion is not applicable at this time.

10. *Chapter 54, Landscaping.*

**FINDING NO. 25:**

Staff adopts the applicant's findings regarding meeting the landscaped area square footage required. The landscaped areas in the parking lot are over 5 feet wide, and the trash/recycling facility is screened. The criterion is met.

**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.*
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 2(a-f) below. 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) below. Exemptions of subsections (c), (e), and (f) below shall apply.*

- 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 (c), (e), and (f) below 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.*
- 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.*
- 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 CDC Section 55.100(B)(2).*

- 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.*
  - 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 4-inch). The mix of tree sizes and types shall be approved by the City Arborist.*
- 3. The topography and natural drainage shall be preserved to the greatest degree possible. (ORD. 1408)*
  - 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.*
  - 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. 26:**

There are no heritage trees on site. The City Arborist has determined that there are also no significant trees on site, except for the large Oregon White Oak tree which is located near the border of the site and the property to the east. The site plan has been modified to move the building west, so it is outside the dripline of this tree. There is adequate distance between the proposed building and other buildings off site. The proposed building will be the only building on site. The site is not in an area subject to slumping and sliding. The topography will not change severely, and the site will still drain to the natural drainageway on site. The criteria are 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.*
- 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.*
- c. *While there has been discussion in Chapter 24 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.*
- 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.*
- 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 (e.g., his/her 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, 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. 27:**

There is currently no structure on site. The proposed architecture and colors are compatible with the older neighborhood of Willamette near the site and are not incompatible with newer commercial buildings in the area. The colors are mainly subdued earth tones. The building is taller than nearby buildings, but its distance from nearby buildings is enough that this does not pose an incongruous or unattractive look. The building is next to the slope up to I-205 within the ODOT ROW, which will de-emphasize its height. To make use of space with sufficient viability on a constrained site, the applicant has fulfilled his need to come close to the height limit, but still does not exceed the height limit. The architecture as proposed is varied enough on each building side that human scale is able to be appreciated. The criteria are 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% of 100) 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. (ORD. 1463)*



**FINDING NO. 28:**

The original plan has been modified to have over 60% transparency with 3 foot tall windows, complying with this standard. The front will have 75% transparency, and the sides 35% transparency, exceeding the 30% that is required for at least one side. The criterion is met.

- 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.*

- 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. 29:**

Staff adopts the applicant's analysis and finds the criteria are 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. 30:**

Staff adopts the applicant's findings. An 8-foot sidewalk is required by Condition of Approval 2, with a 6 foot raingarden strip with trees separating the sidewalk from the street.

- 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, Sidewalk Use.*

**FINDING NO. 31:**

Unlike the nearby historic Willamette downtown area, this is a commercial site that is separated from the street by a wetland. This is not a downtown atmosphere. While as much connection as possible is being forged between the building and street, the features listed in (j) are arguably not appropriate for the site. The wetland and drainageway constraints on site prevent the building from being built along the street itself.



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, 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 (3+ 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 CDC Section 55.100(B)(7)(c). 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 CDC Section 55.100(B)(7)(c). The elevations oriented to the right-of-way must incorporate pedestrian-oriented transparency. (ORD. 1425)*
  - b. *Multi-family projects shall be required to keep the parking at the side or rear of the buildings or behind the building line of the structure as it would appear from the right-of-way inside the multi-family project. For any garage which is located behind the building line of the structure, but still facing the front of the structure, architectural features such as patios, patio walls, trellis, porch roofs, overhangs, pergolas, etc. shall be used to downplay the visual impact of the garage, and to emphasize the rest of the house and front entry. (ORD. 1442)*
- The parking may be positioned inside small courtyard areas around which the units are built. These courtyard spaces encourage socialization, defensible space, and can provide a central location for landscaping, particularly trees, which can provide an effective canopy and softening effect on the courtyard in only a few years. Vehicular access and driveways through these courtyard areas is permitted. (ORD. 1408)*



- c. *Commercial, office, and multi-family projects shall be built as close to the adjacent main right-of-way as practical to facilitate safe pedestrian and transit access. Reduced frontages by buildings on public right-of-ways (a, b, c, above) may be allowed due to extreme topographic (e.g., slope, creek, wetlands, etc.) conditions or compelling functional limitations, not just inconveniences or design challenges. (ORD. 1408)*

**FINDING NO. 32:**

This project, separated from the street by a wetland, is exempt from (a) via (c). Subsection (b) only applies to multi-family projects. The criteria are met.

- d. *Accessways, parking lots, and internal driveways shall accommodate pedestrian circulation and access by specially textured, colored, or clearly defined foot paths 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 Section 85.200(A)(3)(e) 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.*
- 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. (ORD. 1425)*

**FINDING NO. 33:**

Condition of Approval 3 requires a 6 foot pedestrian path to connect the building to Willamette Falls Drive. This is provided on the final site plan. Condition of Approval 2 requires an 8-foot wide sidewalk on the arterial Willamette Falls Drive. Criterion (d) is met upon the application of these conditions of approval. Criterion (e) is met as well by Condition of Approval 2, regarding connection to the ROW. Spatial limitations, building layouts, and wetland and drainageway locations prevent the practical possibility of trails connecting this to nearby commercial properties and undeveloped GC-zoned properties. Criterion (e) 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. 34:**

The location of the wetlands and drainageway prevent the entrance from being closer to the street than it is proposed to be. The port cochere is designed to be distinctive as the main point of access to the building.

- 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. (ORD. 1425)*

**FINDING NO. 35:**

There is transit service and the sidewalks required by conditions of approval 2 and 3 provide a safe paved path to the closest stops; these will be as direct as possible considering the location of the drainageway and wetlands, and the applicant's environmentally appropriate plan of using only the existing point of access across the wetlands. The criterion is met.

- 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. (ORD. 1425)*

**FINDING NO. 36:**

The building cannot be any closer to the street than it is proposed because of the location of the drainageway and wetlands. The criterion is met as much as possible.

- 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. (ORD. 1408)*
- 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. 37:**

There are no trailheads or public facilities. The criteria are not applicable.

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

1. *In addition to the compatibility requirements contained in Chapter 24, buffering shall be provided between different types of land uses; for example, buffering between single-family homes and apartment blocks. However, no buffering is required between single-family homes and duplexes or single-family attached units. The following factors shall be considered in determining the adequacy of the type and extent of the buffer:*
  - a. *The purpose of the buffer, for example to decrease noise levels, absorb air pollution, filter dust, or to provide a visual barrier.*
  - b. *The size of the buffer required to achieve the purpose in terms of width and height.*
  - c. *The direction(s) from which buffering is needed.*
  - d. *The required density of the buffering.*
  - e. *Whether the viewer is stationary or mobile.*
2. *On-site screening from view from adjoining properties of such things as service areas, storage areas, and parking lots shall be provided and the following factors will be considered in determining the adequacy of the type and extent of the screening:*
  - a. *What needs to be screened?*
  - b. *The direction from which it is needed.*
  - c. *How dense the screen needs to be.*
  - d. *Whether the viewer is stationary or mobile.*
  - e. *Whether the screening needs to be year around.*



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

**FINDING NO. 38:**

Staff adopts the applicant's findings regarding these criteria and finds the criteria are met.

***D. Privacy and noise.***

1. *Structures which include residential dwelling units shall provide private outdoor areas for each ground floor unit which is screened from view by adjoining units.*
2. *Residential dwelling units shall be placed on the site in areas having minimal noise exposure to the extent possible. Natural appearing sound barriers shall be used to lessen noise impacts where noise levels exceed the design standards of Table 1 below.*
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 Section 55.100(C) where applicable. Businesses or activities that can reasonably be expected to generate noise shall undertake and submit appropriate noise studies and mitigate as necessary. (See Sections 55.110(B)(11) and 55.120(M).)*

*To protect the health, safety, and welfare of the citizens of West Linn, the following design standards are established in Tables 1 and 2. In the case of land uses that are expected to be close to adopted noise standards, followup studies in the first year of operation may be required by a conditional of approval or required by the Planning Director as appropriate in order to monitor compliance. (ORD. 1442)*

*Ambient degradation associated with new noise sources. Any new commercial or industrial development to be built on a vacant or previously unused industrial or commercial site shall not cause or permit the operation of a noise source if the noise levels generated, or indirectly caused by that noise source, would increase the ambient statistical noise levels, L50 or L10, by more than 5 dBA in any one hour. In some instances, the ambient degradation standard may establish lower allowable dBA levels than those established in Table 1, and in those instances, the lower level shall apply. Ambient noise levels shall be determined by a licensed acoustical engineer. (ORD. 1442)*



**FINDING NO. 39:**

Criteria (1) and (2) do not apply to this commercial project. The sound study concludes that the activities associated with the proposed use at the site will not violate CDC rules regarding maximum ambient or intermittent sound, as heard by sensitive residential uses across Willamette Falls Drive. Therefore further buffering is not needed. The criteria are met.

*E. Private outdoor area. This section only applies to multi-family projects.*

*F. Shared outdoor recreation areas. This section only applies to multifamily projects and projects with 10 or more duplexes or single-family attached dwellings on lots under 4,000 square feet. In those cases, shared outdoor recreation areas are calculated on the duplexes or single-family attached dwellings only. It also applies to qualifying PUDs under the provisions of Section 24.170. (ORD. 1463)*

**FINDING NO. 40:**

These criteria do not apply to this commercial project.

*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. (ORD. 1463)*

**FINDING NO. 41:**

The entire site consists of one hotel. There are no separate residential uses, and rooms/suites of the hotel do not have their own outdoor spaces. Staff adopts the applicant's finding and finds that the criterion is met appropriately.



**H. Public transit.**

1. *Provisions for public transit may be required where the site abuts an existing or planned public transit route. The required facilities shall be based on the following:*
  - a. *The location of other transit facilities in the area.*
  - b. *The size and type of the proposed development.*
  - c. *The rough proportionality between the impacts from the development and the required facility. (ORD. 1442)*
2. *The required facilities shall be limited to such facilities as the following:*
  - a. *A waiting shelter with a bench surrounded by a three-sided covered structure, with transparency to allow easy surveillance of approaching buses.*
  - b. *A turnout area for loading and unloading designed per regional transit agency standards. (ORD. 1442)*
  - c. *Hard-surface paths connecting the development to the waiting and boarding areas.*
  - d. *Regional transit agency standards shall, however, prevail if they supersede these standards. (ORD. 1442)*
3. *The transit stop shall be located as close as possible to the main entrance to the shopping center, public or office building, or multifamily project. The entrance shall not be more than 200 feet from the transit stop with a clearly identified pedestrian link.*
4. *All commercial business centers (over 3 acres) and multi-family projects (over 40 units) may be required to provide for the relocation of transit stops to the front of the site if the existing stop is within 200-400 yards of the site and the exaction is roughly proportional to the impact of the development. The commercial or multi-family project may be required to provide new facilities in those cases where the nearest stop is over 400 yards away. The transit stop shall be built per 8(b) above. (ORD. 1442)*
5. *If a commercial business center or multi-family project is adjacent to an existing or planned public transit, the parking requirement may be reduced by the multiplier of .9 or ten percent. If a*



*commercial center is within 200 feet of a multi-family project, with over 80 units and pedestrian access, the parking requirement may be reduced by ten percent or by a .90 multiplier. (ORD. 1425)*

6. *Standards of Section 85.200(D), "Transit Facilities," shall also apply.*

**FINDING NO. 42:**

The nearest transit stops are on both sides of the street just east of the site. One is in front of the next site to the east, which is a separate commercial building, and the other is across the street in front of residential properties on Willamette Falls Drive. This project is not over 3 acres and is not a commercial business center or multi-family project, so the stops do not have to be moved closer to the project. Due to the sidewalks required in conditions of approval 2 and 3, the building will be connected via hard surface paths to the transit stops. The required parking requirement has been reduced by 10% as discussed in (5) above, due to the site being adjacent to the transit stops. Therefore the requirement is only 64 instead of 71, and 64 spaces have been provided within the required 200 foot distance in Chapter 46 (see Finding No. 22 above). There are 9 other spaces provided for a total of 73, but these 9 spaces are further than 200 feet from the building. The criterion is met.

**I. Public facilities.**

*An application may only be approved only if adequate public facilities will be available to provide service to the property prior to occupancy. (ORD.1544)*

1. *Streets. Sufficient right-of-way and slope easement shall be dedicated to accommodate all abutting streets to be improved to 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. (ORD. 1442) (ORD. 1526)*

*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. (ORD. 1442)*

*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, reforestation, and is fully consistent with applicable code restrictions regarding resource areas.*

*Streets shall be installed per Chapter 85 standards. City Engineer has the authority to require that street widths match adjacent street widths. Sidewalks shall be installed per Section 85.200(A)(3)(e) for commercial and office projects, and Sections 85.200(A)(16) and 92.010(H) for residential projects, and applicable provisions of Chapter 55, Design Review.*

*Based upon the City Manager or Manager's designee 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. (ORD. 1544)*

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.*



3. *Municipal water. A registered civil engineer shall prepare a plan for the provision of water which demonstrates to 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.*
4. *Sanitary sewers. A registered civil engineer shall prepare a sewerage collection system plan which demonstrates sufficient onsite capacity to serve the proposed development. The City Engineer shall determine whether the existing City system has sufficient capacity to serve the development.*
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. 43:**

The applicant will provide an 8-foot wide sidewalk and minimum 6-foot wide planter strip to be built as a raingarden that also includes appropriate street trees, per Condition of Approval 2. The applicant's proposed half-street improvements include widening this side of Willamette Falls Drive. The Engineering Department has yet to determine whether the existing street pavement has to be replaced as well. Therefore the applicant will provide half street improvements to the satisfaction of the Engineering Department per Condition of Approval 2, allowing the Department to make this determination. The utility plan and site plan show the above criteria to be met. Condition of Approval 5 also requires the water line in the driveway/parking area to be installed in a way that allows for a line looping west to 8<sup>th</sup> Court to eventually be installed connecting to it.

The applicant's site plan shows a stormwater treatment facility for all new impervious surfaces on site that will drain to the drainageway, and the street improvements required by Condition of Approval 2 ensure that a raingarden will also be built along the street to treat street and sidewalk runoff, in place of a planter strip. Condition of Approval 1 also requires native plants to be planted in the on-site facility. Because of spatial constraints on site, the on-site stormwater facility will encroach 25 feet into the transition area of the water resource area, but development on site will be mitigated for by the mitigation plan (see Finding No. 19).

There is currently a gravel area adjacent to the ROW in the southwest area of the site used informally for parking by the law office building to the west. After the improvements discussed here are constructed, access to the parking area would involve vehicles driving through the street trees, curb, and raingarden planter strip. Therefore Condition of Approval 6 prohibits this area from continued use as a parking area.

The criteria are met.

*J. Crime prevention and safety/defensible space.*



1. *Windows shall be located so that areas vulnerable to crime can be surveyed by the occupants.*
2. *Interior laundry and service areas shall be located in a way that they can be observed by others.*
3. *Mail boxes, recycling, and solid waste facilities shall be located in lighted areas having vehicular or pedestrian traffic.*
4. *The exterior lighting levels shall be selected and the angles shall be oriented towards areas vulnerable to crime.*
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.*
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. Omnidirectional lights of an ornamental nature may be used in general commercial districts only.*
7. *Lines of sight shall be reasonably established so that the development site is visible to police and residents.*
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. (ORD. 1408)*

**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 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. 44:**

Staff adopts the applicant's findings and finds the criteria are 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. 45:**

There will be no residential units and only one business, so (1) is not applicable. Presumably the corporate logo, as shown on the applicant's color and material examples (pictures of the Astoria Holiday Inn Express) will comprise the sign. This will be sufficiently compatible with the architecture and surroundings. The signs will be on-wall only, so they will not obscure drivers' sight. Pedestrian routes will be obvious and there are no separate bike routes within the site. The applicant will eventually have to apply for a permanent sign application separately and be tested against all Chapter 52 criteria at that time. The above criteria are met at this time.

- 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 sub-section 5.484(C) of the West Linn Municipal Code relative to existing high ambient noise levels shall apply to this section. (ORD. 1442)*



- N. *Wireless Communication Facilities (WCF). This section only applicable to WCFs.) WCFs as defined in CDC Chapter 57 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 CDC Chapter 57. 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. 46:**

The applicant has agreed to the provisions of (M). (N) is not applicable to this project as no WCFs are proposed.

**75.060 THE APPROVAL CRITERIA**

*The appropriate approval authority shall approve a variance request if all the following criteria are met and corresponding findings of fact prepared. The approval authority may impose appropriate conditions to ensure compliance with the criteria. The approval authority shall deny the variance if any of the criteria are not met.*

*75.060.1. Exceptional or extraordinary circumstances apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape, legally existing prior to the date of this ordinance, topography, or other circumstances over which the applicant has no control.*

**FINDING NO. 47:**

Staff adopts the applicant's findings regarding the variance to development more than 5,000 square feet of the water resource transition area and the breeching of the 15 foot setback from the wetland/drainageway. This variance is needed due to the shape of the site and the percentage of the site comprised of water resource areas and their transition areas, and is also needed to fulfill parking requirements while still keeping development away from the significant Oregon White Oak tree at the northeast corner of the site. It would be impossible to develop the site viably while disturbing only 5,000 square feet or less of the transition areas, as is required by the hardship provisions in Chapter 32 (see Finding No. 19). The criterion is met.

*75.060.2. The variance is necessary for the preservation of a property right of the applicant, which is substantially the same as a right possessed by owners of other property in the same zone or vicinity.*

**FINDING NO. 48:**

The variance for the amount of square footage gives the applicant the right to develop this property using more than a small amount of land of the property. Allowing more than a small amount of land for development is the norm on other GC zoned properties around the City and has occurred in many of the surrounding and nearby GC parcels on Willamette Falls Drive and 8<sup>th</sup> Court. The criterion is met.



*75.060.3. The authorization of the variance will not be materially detrimental to the purposes and standards of this Code, will not be inconsistent with all other regulatory requirements, and will not conflict with the goals and policies of the West Linn Comprehensive Plan.*

**FINDING NO. 49:**

Staff adopts the applicant's finding regarding the Community Development Code for the transition area square footage/setback variance, and adds that while this is a variance to the hardship provisions of 32.090, the variance is within the spirit of 32.090. 32.090 was written to allow properties to be developed that would otherwise have hardships being viably developed due to the amount of the property comprised by water resource areas and their transition zones. 32.090 limits such properties to disturbance of 5,000 square feet of water resource areas and their transition areas and requires a 15-foot setback from the water resource. Unlike most properties affected by water resource areas and most properties to which 32.090 applies, this is a commercial site. Few commercial uses, when their building or buildings are combined with required parking and driveway areas, can be expected to have close to 5,000 square feet of developed area or less. And only 0.17 acres of the site are not within the drainageway and transition area, with this 0.17 acre area itself being very irregular shaped and at the rear of the site. Unlike most such properties as well, the site's only significant tree requires that development not be allowed in the northeast corner of the site, furthest away from the water resource areas. The variance is within the ultimate intent of 32.090's purpose of allowing properties that are partially, mostly, or completely within water resources areas and transition areas to be viably developed. The site plan was designed to have as minimal effect as possible on the water resources area and transition area, and effects will be mitigated for both on and off site.

The Comprehensive Plan Goals and Policies relevant to the requested include the following:

Goal 2 Land Use Planning, Commercial/Mixed Use Development Goal 2:

Consider the development of commercial and office facilities in West Linn that will increase employment opportunities, reduce dependence on services outside of the City, and promote energy-efficient travel and land use patterns, while recognizing that there will be limits imposed by West Linn's topography and limited available land.

This variance is compatible with this goal as it allows enough development on site to increase employment activities and to have a viably sized commercial operation adjacent to a transit stop.

Goal 2 Land Use Planning, Commercial/Mixed Use Development Policy 4

Design and locate existing or proposed commercial uses in a manner that:

- a. Protects remaining natural spaces, significant stands of trees, wildlife corridors, streams/riparian zones, and historic resources.
- b. Encourages the use of alternative transportation.

Allowing a larger development at this site encourages greater use of the transit line that serves this site. While remaining natural spaces that are part of this water resource area/transition area will be developed due to this variance, they will be mitigated for on and off site.



Goal 5, Scenic Environment Goal 1:

Preserve and enhance scenic views and sites.

The water resource area will still be mainly preserved on site. The on-site mitigation and landscaping and the off-site mitigation will improve parts of this site and Fields Bridge Park. The variance allows the significant tree, which is from a relatively rare and hard-to-grow native species, to survive.

Goal 5, Natural Environment goals 1 and 2, and policies 4-77 and 10-11 respectively:

Encourage and assist in the preservation of permanent natural areas for fish and wildlife habitat in suitable, scientific/ecological areas.

Protect sensitive environmental features such as steep slopes, wetlands, and riparian lands, including their contributory watersheds.

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

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

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

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

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

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

The drainageway and wetlands themselves will be barely affected. The vegetative buffer will be developed but will be mitigated for. The only area of the wetland itself to be developed is for the City ROW's sidewalk, not the hotel development itself. The variance allows viable development of the site while still preserving the resources on site as much as possible. Non-native species will be replaced with native species as part of the on-site and off-site mitigation. The native significant tree and the habitat it provides will be preserved due to this variance that allows the parking to be clustered closer to the water resource area.

Goal 6, Water Quality Goal 1, and policies 1, 2, and 5 respectively:



Maintain or improve the quality of West Linn's water resources.

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

Require that City construction projects, maintenance activities, and operating procedures be designed and operated so as to not degrade surface or ground water quality.

This will maintain the quality of the water resource areas as mitigation on-site and off-site will restore habitat, and all impervious surfaces will be treated. The drainageway will remain naturally vegetated, and treated stormwater from the site will be drained there. The criterion is met.

*75.060.4. The variance request is the minimum variance, which would alleviate the exceptional and extraordinary circumstance.*

**FINDING NO. 50:**

Staff adopts the applicant's findings for the transition area square footage variance, and finds that this is the minimum variance, especially since the applicant is proposing using the existing driveway across the water resource area and building no new connections to the ROW across the water resources. The criterion is met.

*75.060.5. The exceptional and extraordinary circumstance does not arise from the violation of this ordinance.*

**FINDING NO. 51:**

The circumstances that have caused the need for the variance have not arisen from the violation of this ordinance. The criterion is met.

*75.060.6 The variance will not impose physical limitations on other properties or uses in the area, and will not impose physical limitations on future use of neighboring vacant or underdeveloped properties as authorized by the underlying zoning classification.*

**FINDING NO. 52:**

Staff adopts the applicant's findings concluding that this criterion is met. The variance does not allow any height limitations or property line setbacks to be breached, it only allows for more than 5,000 square feet of the transition area on site to be developed and for the setback from the water resource area within the site to be breached. Effects on the transition area will be mitigated on and off site. Despite the variance, the development will be kept in the central and northern sections of the site away from the water resource areas on the south end of the site, keeping effects on residential properties to the south minimal. The criterion is met for both variances.



## EXHIBITS

PC-1	FINAL SITE PLAN SUBMITTAL.....	P41-43
PC-2	TVFR RESPONSE.....	P44-46
PC-3	APPLICANT AGREEMENT TO EXTEND 120 DAY PERIOD.....	P47
PC-4	APPLICANT FURTHER RESONSE TO TVFR.....	P48-55
PC-5	TVFR EMAIL RE PORTE COCHIERE.....	P56
PC-6	NOVEMBER 5 MEMO.....	P57
PC-7	APPLICANT RESPONSE TO TVFR.....	P58-63
PC-8	TVFR SUBMITTAL.....	P64-66
PC-9	APPLICANT RESUBMITTAL .....	67-127

ADDITIONAL EXHIBITS  
SEE PAGE 44 AND ABOVE  
OF NOVEMBER 5, 2008  
STAFF REPORT



**Soppe, Tom**

**From:** Brad Kaul [bradkaul@spe-architects.com]  
**Sent:** Monday, November 17, 2008 4:26 PM  
**To:** karen.mohling@tvfr.com  
**Cc:** Soppe, Tom; Vic Patel (private); Mike Coyle; Steve Elkins Office  
**Subject:** Re: Holiday Inn  
**Attachments:** Site Plan - Fire Dept. Revs 11-17-08.pdf

Karen,  
Thanks for the response letter you sent out on Friday.

I have attached a revised site plan per your last comment letter. It is clear that any talk of using the Porte Cochere was in error. Therefore, the attached plan has scaled back the porte cochere and provided a 40 foot aisle that allows for a parallel approach by the fire apparatus. We also no longer have a dead end fire apparatus road due to the 40 foot aisle. We hope this is more than adequate but if not please let us know what more you would need.

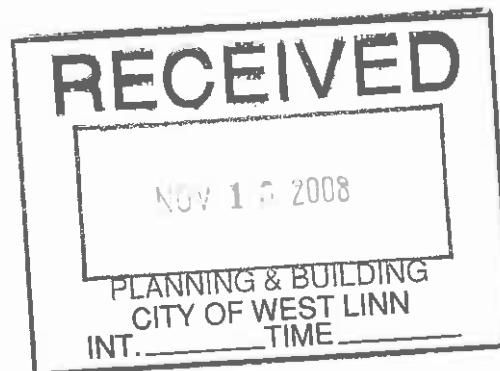
As for the 150 foot rule, how much increase do you typically provide for fire sprinklers? The code leaves the increase at the discretion of the fire code official. We ask for an increase of only 50 feet (though we typically are allowed to double the length).

As stated in Appendix D we need two fire apparatus access roads. We have two provided. One is the parking lot and the other is Willamette Falls Drive. I show a proposed location of a new hydrant on the Southeast corner and a location for access to the East side of the property that is unencumbered by the neighboring property located along Willamette Falls Drive. If we are allowed a distance of 200' from either "fire access lane" we meet the requirements of access to the site by fire apparatus.

As stated in the code, one access point meets the requirements of min 15 feet away from the building and max of 30 feet from the building and all sides of the building are within 200 feet (actually the distance is 180 feet) of the fire access lane.

What are your thoughts? I will call tomorrow before noon to discuss. E-mails can give the wrong impression.

Brad Kaul, AIA  
Steven P. Elkins Architects  
11000 NE 33rd Place, Suite #101  
Bellevue, WA 98004  
P:425-827-3252  
F:425-889-9174



----- Original Message -----

**From:** Soppe, Tom  
**To:** Brad Kaul ; Vic Patel (private) ; Mike Coyle  
**Sent:** Friday, November 07, 2008 4:47 PM  
**Subject:** FW: Holiday Inn

Vic, Brad, Mike,

Good news below. Thanks again for attending in person or phone today.

Tom Soppe  
Associate Planner

P-41

11/18/2008



City of West Linn  
22500 Salamo Road  
West Linn, OR 97068

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**From:** Mohling, Karen A. [mailto:Karen.Mohling@tvfr.com]  
**Sent:** Friday, November 07, 2008 4:26 PM  
**To:** Soppe, Tom  
**Subject:** Holiday Inn

Tom,

I consulted with my coworkers about the conditions that would make the porto cochere (sp?) acceptable as a part of the fire access roadway –

And the consensus is if it meets height and width requirements (15' and 24' work) and is non combustible construction we can accept that.

And make sure the required turning radius fits into design.

Can you please pass this information on to the applicant? Thank you.

Karen Mohling

Deputy Fire Marshal

TVF&R

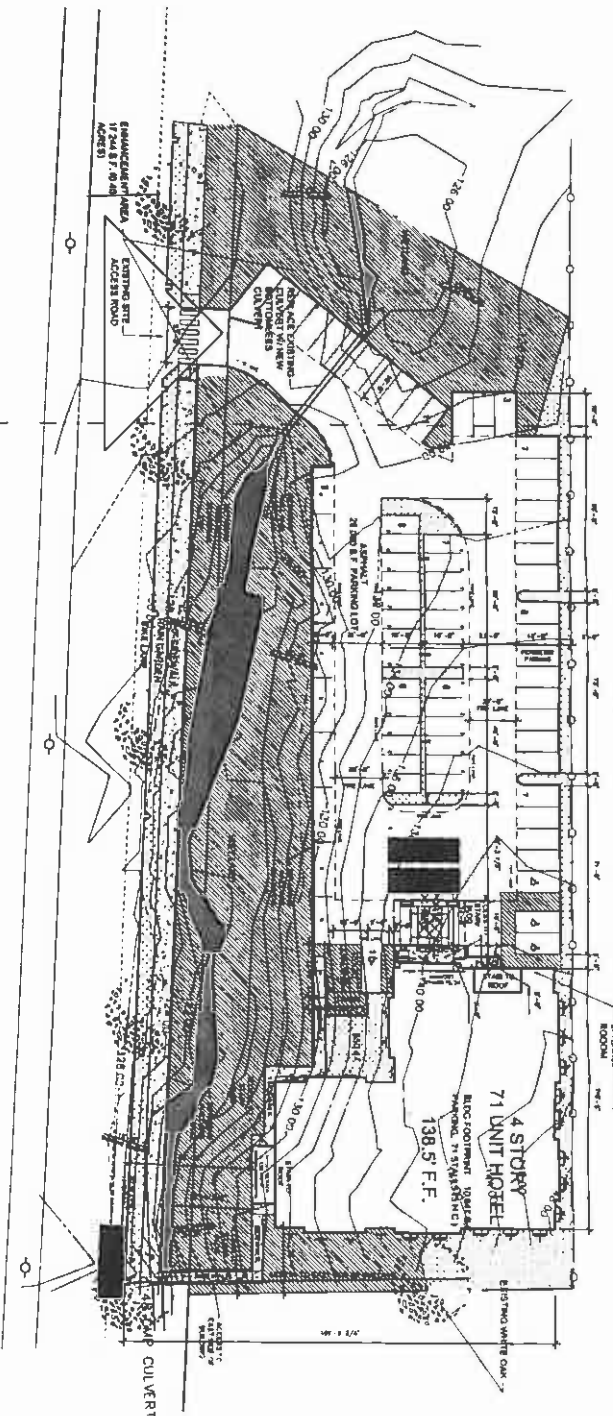
503-612-7012

P-42



1' = 20' SCALE

INTERSTATE 205 R.O.W.



SITE PLAN

1' = 20' SCALE

1' = 20' SCALE

<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p> <p>15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING</p>	<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p> <p>15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING</p>
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<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p> <p>15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING</p>	<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p> <p>15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING 15' SETBACK FROM EXISTING</p>
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<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p>		<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p>	
<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p>		<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p>	
<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p>		<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p>	
<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p>		<p>OWNER: [REDACTED]</p> <p>DESIGNER: [REDACTED]</p> <p>DATE: [REDACTED]</p> <p>PROJECT: [REDACTED]</p>	

PERMIT

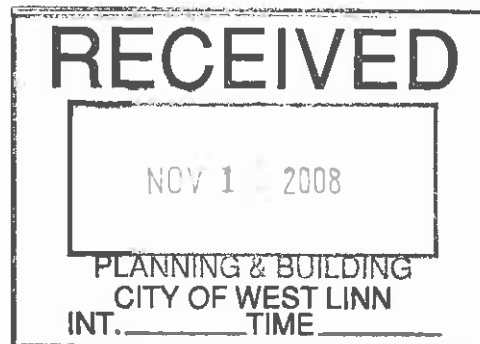




**TUALATIN VALLEY FIRE & RESCUE - SOUTH DIVISION**  
COMMUNITY SERVICES • OPERATIONS • FIRE PREVENTION

November 14, 2008

Tom Soppe  
Associate Planner  
City of West Linn  
22500 Salamo Road  
West Linn, OR 97068



Re: Holiday Inn Express – Willamette Falls Dr.

Dear Mr. Soppe;

After reviewing the letter of November 11, 2008 from the applicant that is in response to Fire Plan review of October 29<sup>th</sup> there are still outstanding issues that need to be clarified. Until Tualatin Valley Fire & Rescue is able to determine that the equivalent degree of protection is being provided with the alternate means and methods (AMM), we can not endorse this project. Additionally, any alternate method of construction will need to be approved by the Building Official.

My responses to the applicant are in ***bold italics***:

- 1) **FIRE APPARATUS ACCESS ROAD DISTANCE FROM BUILDING AND TURNAROUNDS:** Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (IFC 503.1.1)  
***The roadway under the Porte Cochere can be considered a part of the proposed fire access so no fire department turnaround is required. The fire access roadway still does not extend to 150 feet to all parts of the building. The limited fire department access to fight fire and to ladder the back of the building (for occupant rescue) has not been adequately addressed.***
- 2) **ADDITIONAL ACCESS ROADS – COMMERCIAL:** Where buildings exceed 30 feet in height or three stories in height shall have at least two separate means of fire apparatus access. (IFC D104)
  - ***The applicant has proposed a class I standpipe that is already required so it offers no additional fire protection.***
  - ***The applicant has proposed two fire walls – please indicate type and location for approval.***
  - ***The fire rating of the proposed fire partitions is not indicated.***
  - ***If there are 2 firewalls installed, draft stopping every 3,000 sf would not add any additional fire protection.***
- 3) **REMOTENESS:** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses. (IFC D104.3)
- 4) **AERIAL FIRE APPARATUS ACCESS:** Buildings or portions of buildings or facilities exceeding 30 feet in height above the lowest level of fire department vehicle access shall be provided with approved fire

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apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet in the immediate vicinity of any building or portion of building more than 30 feet in height. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. (IFC D105)

***Even with the use of the Porte Cochere as part of the fire apparatus access, the aerial access is still substandard – the aerial can only be employed at two points ( one on either side of the PC), and not along the entire length of one side of the building.***

- 5) **FIRE APPARATUS ACCESS ROADS WITH FIRE HYDRANTS:** Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet. (IFC D103.1)
- 6) **NO PARKING SIGNS:** Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Roads 26 feet wide or less shall be posted on both sides as a fire lane. Roads more than 26 feet wide to 32 feet wide shall be posted on one side as a fire lane. Signs shall read "NO PARKING - FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (IFC D103.6) No parking signs may be required.
- 7) **SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 60,000 pounds live load (gross vehicle weight). You may need to provide documentation from a registered engineer that the design will be capable of supporting such loading. (IFC D102.1)
- 8) **TURNING RADIUS:** The inside turning radius and outside turning radius shall be not less than 28 feet and 48 feet respectively, measured from the same center point. (IFC 503.2.4 & D103.3)

***The sub-standard turning radius at the front of the building is mentioned but not adequately addressed.***

- 9) **PAINTED CURBS:** Where required, fire apparatus access roadway curbs shall be painted red and marked "NO PARKING FIRE LANE" at approved intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background. (IFC 503.3) Painted curbs may be required.
- 10) **COMMERCIAL BUILDINGS - REQUIRED FIRE FLOW:** The required fire flow for the building shall not exceed 3,000 gallons per minute (GPM) or the available GPM in the water delivery system at 20 psi, whichever is less as calculated using IFC, Appendix B. A worksheet for calculating the required fire flow is available from the Fire Marshal's Office. (IFC B105.2) Please provide a completed fire flow worksheet for approval; also, please provide a current fire flow test of the nearest fire hydrant demonstrating available fire flow at 20 psi residual pressure. Fire Flow calculation worksheets and instructions are available on our website: [www.tvfr.com](http://www.tvfr.com).
- 11) **FIRE HYDRANT NUMBER AND DISTRIBUTION:** The minimum number and distribution of fire hydrants available to a building shall not be less than that listed in Appendix C, Table C 105.1. Provide site plan with locations of hydrants for approval.

**Considerations for placing fire hydrants may be as follows:**

- Existing hydrants in the area may be used to meet the required number of hydrants as approved. Hydrants that are up to 600 feet away from the nearest point of a subject building that is protected with fire sprinklers may contribute to the required number of hydrants.
- Hydrants that are separated from the subject building by railroad tracks shall not contribute to the required number of hydrants unless approved by the fire code official.
- Hydrants that are separated from the subject building by divided highways or freeways shall not contribute to the required number of hydrants. Heavily traveled collector streets only as approved by the fire code official.

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- Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the fire code official.
- 12) **FIRE HYDRANT DISTANCE FROM AN ACCESS ROAD:** Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway. (IFC C102.1)
  - 13) **REFLECTIVE HYDRANT MARKERS:** Fire hydrant locations shall be identified by the installation of reflective markers. The markers shall be blue. They shall be located adjacent and to the side of the centerline of the access road way that the fire hydrant is located on. In case that there is no center line, then assume a centerline, and place the reflectors accordingly. (IFC 508.5.4)
  - 14) **FIRE HYDRANT/FIRE DEPARTMENT CONNECTION:** A fire hydrant shall be located within 100 feet of a fire department connection (FDC). Fire hydrants and FDC's shall be located on the same side of the fire apparatus access roadway. FDCs shall normally be remote except when approved by the fire code official. (IFC 912.2)
  - 15) **ACCESS AND FIRE FIGHTING WATER SUPPLY DURING CONSTRUCTION:** Approved fire apparatus access roadways and fire fighting water supplies shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (IFC 1410.1 & 1412.1)
  - 16) **KNOX BOX:** A Knox Box for building access may be required for this building. Please contact the Fire Marshal's Office for an order form and instructions regarding installation and placement. (IFC 506)
  - 17) Complete the Building Survey Form prior to the issuance of the Building Permit:  
[http://www.tvfr.com/Dept/fm/brochures/document\\_files/building\\_survey\\_form\\_ifc.pdf](http://www.tvfr.com/Dept/fm/brochures/document_files/building_survey_form_ifc.pdf)
  - 18) ***For your code alternate request, please demonstrate how the Holiday Inn project is exceeding the minimum code requirements and meeting the level of safety that is prescribed by the Fire Code.***

If you have questions, please call me at (503) 612-7012.

Sincerely,

*Karen Mohling*

Karen Mohling  
Deputy Fire Marshal

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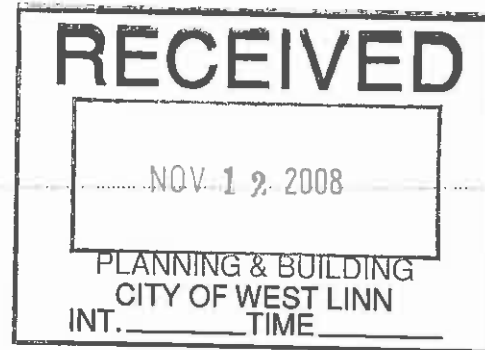
**Soppe, Tom**

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**From:** vipul patel [vcp16@hotmail.com]  
**Sent:** Wednesday, November 12, 2008 2:18 PM  
**To:** Soppe, Tom  
**Subject:** RE: postponed until December 3

On behalf of VKnorthwest investments inc. I Vipul Patel would like to extend the 120-period four weeks from Jan. 23 Feb. 20 due to the four week continuance of the hearing from Nov. 5 to Dec. 3.

Vipul (vic) Patel  
503-449-8165



---

**Subject:** RE: postponed until December 3  
**Date:** Wed, 12 Nov 2008 14:09:43 -0800  
**From:** tsoppe@westlinnoregon.gov  
**To:** vcp16@hotmail.com

Do you mean that you want to extend the 120-period four weeks from Jan. 23 to Feb. 20 due to the four week continuance of the hearing from Nov. 5 to Dec. 3? If so, please say it that way so it is clear in the record and we can't be accused later of doing something that wasn't your intent. Sorry to be nitpicky. If that's not what you mean, let me know.

Tom Soppe  
Associate Planner  
City of West Linn  
22500 Salamo Road  
West Linn, OR 97068

---

**From:** vipul patel [mailto:vcp16@hotmail.com]  
**Sent:** Wednesday, November 12, 2008 2:06 PM  
**To:** Soppe, Tom  
**Subject:** RE: postponed until December 3

On behalf of VKnorthwest investments and I vipul patel will like to get a extension for the next planning commission meeting for December 3, 2008.

Vipul (vic) patel  
503-449-8165

---

**Subject:** postponed until December 3  
**Date:** Thu, 6 Nov 2008 08:32:42 -0800  
**From:** tsoppe@westlinnoregon.gov  
**To:** vcp16@hotmail.com  
**CC:** BBrown@westlinnoregon.gov

P-47

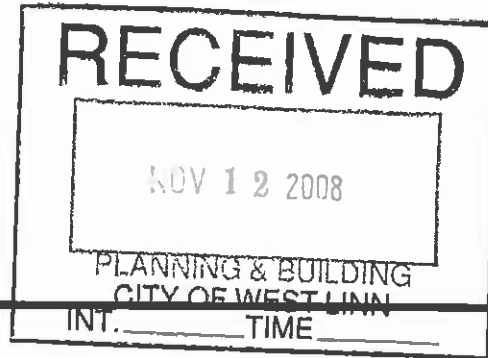
11/12/2008





11000 NE 33rd Place, Suite 101  
Bellevue, WA 98004-1460

425.827.3252 phone  
425.889.9174 fax  
e-mail: steve@spe-architects.com



November 11, 2008

Tom Soppe  
Associate Planner  
City of West Linn  
22500 Salamo Road  
West Linn, OR 97068

**Re: Holiday Inn Express – Willamette Falls Dr.**

Dear Mr. Soppe;

In response to the letter from Tualatin Valley Fire & Rescue – South Division and the meeting on November 7<sup>th</sup>, attached is a revised site plan that further addresses the concerns of the fire department. We think that this is a viable site plan that not only addresses the Fire Department but all requirements that we are aware of to date. Below is the response to the letter dated October 29, 2008:

- 1) **FIRE APPARATUS ACCESS ROAD DISTANCE FROM BUILDING AND TURNAROUNDS:** Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (IFC 503.1.1)

***Applicant Response:*** As discussed in the meeting on November 7<sup>th</sup> – Turnaround provided under porte cochere. In doing so, the porte cochere shall be constructed of non-combustible materials and rated 1-hr. The Porte Cochere is an independent structure not supported by the building. The Porte Cochere shall be a minimum of 15'-0" clear unobstructed height. The porte cochere shall be a minimum of 24'-0" wide (actually 30'-0" wide to allow for radius).



less than 20 feet. Where fire apparatus roadways are less than 26 feet wide, "NO PARKING" signs shall be installed on both sides of the roadway and in turnarounds as needed. Where fire apparatus roadways are more than 28 feet wide but less than 32 feet wide, "NO PARKING" signs shall be installed on one side of the roadway and in turnarounds as needed. Where fire apparatus roadways are 32 feet wide or more, parking is not restricted. (IFC 503.2.1)

**Applicant Response:** No parking will be allowed in the fire apparatus access road. This areas is clearly marked on the site plan and the no parking will be labled on the ground and with signs where needed.

- 6) **FIRE APPARATUS ACCESS ROADS WITH FIRE HYDRANTS:** Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet. (IFC D103.1)

**Applicant Response:** *We request that hydrant locations be selected during the building permit phase.*

- 7) **NO PARKING SIGNS:** Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Roads 26 feet wide or less shall be posted on both sides as a fire lane. Roads more than 26 feet wide to 32 feet wide shall be posted on one side as a fire lane. Signs shall read "NO PARKING - FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (IFC D103.6) No parking signs may be required.

**Applicant Response:** *We will add a note to the "general notes" section of our drawings to make sure that signs are specified correctly as stated above. We request that we can provide this during building permit submittal.*

- 8) **SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 60,000 pounds live load (gross vehicle weight). You may need to provide documentation from a registered engineer that the design will be capable of supporting such loading. (IFC D102.1)



- 2) **ADDITIONAL ACCESS ROADS – COMMERCIAL:** Where buildings exceed 30 feet in height or three stories in height shall have at least two separate means of fire apparatus access. (IFC D104)

**Applicant Response:** *As discussed in the meeting on November 7<sup>th</sup> – If two access roads cannot be provided, additional life safety measures must be approved by the Fire Department and Building Official to compensate. The following is the list of proposed life safety upgrades:*

- 1) *Class 1 standpipes in all stairway landings*
  - 2) *(2) fire walls added to the building.*
  - 3) *All incidental use areas that would otherwise have smoke barriers due to sprinkler exceptions shall be constructed as fire partitions and have rated doors as required.*
  - 4) *Manual fire alarm boxes added, though not required in sprinklered buildings.*
  - 5) *Draftstopping in Floor/Ceiling and Roof/Ceiling every 3000 s.f. , though not required in sprinklered buildings)*
- 3) **REMOTENESS:** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses. (IFC D104.3)

**Applicant Response:** See above.

- 4) **AERIAL FIRE APPARATUS ACCESS:** Buildings or portions of buildings or facilities exceeding 30 feet in height above the lowest level of fire department vehicle access shall be provided with approved fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet in the immediate vicinity of any building or portion of building more than 30 feet in height. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. (IFC D105)

**Applicant Response:** No power lines exist along the fire access road. The fire apparatus access road is 30 feet wide at the Porte Cochere and satisfies the requirement for parallel access and is within the min. max range required.

- 5) **FIRE APPARATUS ACCESS ROAD WIDTH AND VERTICAL CLEARANCE:** Fire apparatus access roads shall have an unobstructed width of not



**Applicant Response:** *The fire apparatus road will be an asphalt parking lot. We will submit a cross section for asphalt paving for "heavy loads" during the building permit process.*

- 9) **BRIDGES:** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO *Standard Specification for Highway Bridges*. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official. (IFC 503.2.6)

**Applicant Response:** *No bridges exist on site. We do not have an "elevated surface". The drive aisles are located on grade and the entrance crosses a culvert as is typical along this street. This is not more of a bridge than a water pipe or storm detention pipe buried underground.*

- 10) **TURNING RADIUS:** The inside turning radius and outside turning radius shall be not less than 28 feet and 48 feet respectively, measured from the same center point. (IFC 503.2.4 & D103.3)

**Applicant Response:** *The turning radius at the Porte Cochere cannot be more than 16 feet and 39 feet respectively. The radius on the west side is 26 feet and 49 feet respectively.*

- 11) **PAINTED CURBS:** Where required, fire apparatus access roadway curbs shall be painted red and marked "NO PARKING FIRE LANE" at approved intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background. (IFC 503.3) Painted curbs maybe required.

**Applicant Response:** *Fire Line is marked on the site plan submitted and the colors required here will be described in the building permit process.*

- 12) **GRADE:** Fire apparatus access roadway grades shall not exceed 10 percent. Intersections and turnarounds shall be level (maximum 5%) with the exception of crowning for water run-off. When fire sprinklers are installed, a maximum grade of 15% may be allowed. (IFC 503.2.7 & D103.2)



**Applicant Response:** *Per the grading plan provided by civil. No grades exceed the values required above.*

- 13) **GATES:** Gates securing fire apparatus roads shall comply with all of the following: (IFC D103.5)

Minimum unobstructed width shall be 16 feet, or two 10 foot sections with a center post or island.

Gates shall be set back at minimum of 30 feet from the intersecting roadway.

Gates shall be of the swinging or sliding type

Manual operation shall be capable by one person

Electric gates shall be equipped with a means for operation by fire department personnel

Locking devices shall be approved.

**Applicant Response:** *No gates are part of this project.*

- 14) **COMMERCIAL BUILDINGS - REQUIRED FIRE FLOW:** The required fire flow for the building shall not exceed 3,000 gallons per minute (GPM) or the available GPM in the water delivery system at 20 psi, whichever is less as calculated using IFC, Appendix B. A worksheet for calculating the required fire flow is available from the Fire Marshal's Office. (IFC B105.2) ***Please provide a completed fire flow worksheet for approval; also, please provide a current fire flow test of the nearest fire hydrant demonstrating available fire flow at 20 psi residual pressure. Fire Flow calculation worksheets and instructions are available on our website: [www.tvfr.com](http://www.tvfr.com).***

**Applicant Response:** *This will be submitted once Design review is approved and building permits are allowed to be submitted.*

- 15) **FIRE HYDRANT NUMBER AND DISTRIBUTION:** The minimum number and distribution of fire hydrants available to a building shall not be less than that listed in Appendix C, Table C 105.1. ***Provide site plan with locations of hydrants for approval.***

**Applicant Response:** *Site plan with hydrant locations will be provided once Design review is approved and building permits are allowed to be submitted.*

**Considerations for placing fire hydrants may be as follows:**

- Existing hydrants in the area may be used to meet the required number of hydrants as approved. Hydrants that are up to 600 feet away from the nearest point of a subject building that is protected with fire sprinklers may contribute to the required number of hydrants.



Location of existing hydrants will be provided during the building permit review. If we do not have existing hydrants that conform, we will provide the required hydrants as required.

- ◆ Hydrants that are separated from the subject building by railroad tracks shall not contribute to the required number of hydrants unless approved by the fire code official.

No railroad tracks exist on site.

- ◆ Hydrants that are separated from the subject building by divided highways or freeways shall not contribute to the required number of hydrants. Heavily traveled collector streets only as approved by the fire code official.

If additional hydrants need to be located on site this can be done through the building permit phase.

- ◆ Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the fire code official.

**Applicant Response:** *No bridges are part of this design (we have a culvert)*

- 16) **FIRE HYDRANT DISTANCE FROM AN ACCESS ROAD:** Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway. (IFC C102.1)

**Applicant Response:** *This will not be a problem and will be addressed in the building permit phase.*

- 17) **REFLECTIVE HYDRANT MARKERS:** Fire hydrant locations shall be identified by the installation of reflective markers. The markers shall be blue. They shall be located adjacent and to the side of the centerline of the access road way that the fire hydrant is located on. In case that there is no center line, then assume a centerline, and place the reflectors accordingly. (IFC 508.5.4)

**Applicant Response:** *This will not be a problem and will be addressed in the building permit phase.*

- 18) **FIRE HYDRANT/FIRE DEPARTMENT CONNECTION:** A fire hydrant shall be located within 100 feet of a fire department connection (FDC). Fire hydrants and FDC's shall be located on the same side of the fire apparatus access roadway. FDCs shall normally be remote except when approved by the fire code official. (IFC 912.2)

**Applicant Response:** *The FDC has not been located at this time. This will not be a problem and will be addressed in the building permit phase.*

- 19) **ACCESS AND FIRE FIGHTING WATER SUPPLY DURING CONSTRUCTION:** Approved fire apparatus access roadways and fire fighting



water supplies shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (IFC 1410.1 & 1412.1)

***Applicant Response:*** *We will add a note to the "general notes" section of our drawings to make sure that the contractor stages construction accordingly.*

- 20) **KNOX BOX:** A Knox Box for building access may be required for this building. For gates securing an emergency access road a Knox box or Knox padlock will be required; a Knox switch will be required for electrically operated gates. Please contact the Fire Marshal's Office for an order form and instructions regarding installation and placement. (IFC 506)

***Applicant Response:*** *Knox box locations is detailed on the building plans at the door to the sprinkler riser room. No gates are being used on this project.*

- 21) Complete the Building Survey Form prior to the issuance of the Building Permit:  
[http://www.tvfr.com/Dept/fm/brochures/document\\_files/building\\_survey\\_form\\_ifc.pdf](http://www.tvfr.com/Dept/fm/brochures/document_files/building_survey_form_ifc.pdf)

- 22) ***Resubmit plans for final approval.***

If you have questions, please call me at (425) 827-3252.

Sincerely,

Brad Kaul  
Steven P. Elkins Architects Inc PS







**Soppe, Tom**

---

**From:** Mohling, Karen A. [Karen.Mohling@tvfr.com]  
**Sent:** Friday, November 07, 2008 4:26 PM  
**To:** Soppe, Tom  
**Subject:** Holiday Inn

Tom,

I consulted with my coworkers about the conditions that would make the porto cochere (sp?) acceptable as a part of the fire access roadway –

And the consensus is if it meets height and width requirements (15' and 24' work) and is non combustible construction we can accept that.

And make sure the required turning radius fits into design.

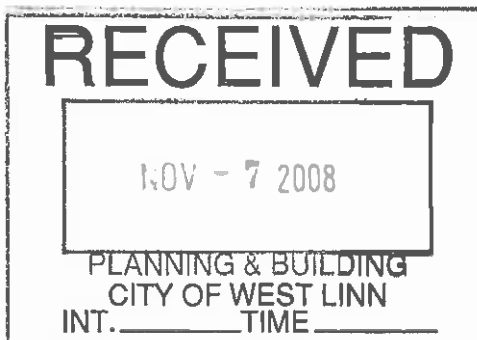
Can you please pass this information on to the applicant? Thank you.

Karen Mohling

Deputy Fire Marshal

TVF&R

503-612-7012



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## Memorandum

**TO:** Planning Commission  
**FROM:** Tom Soppe, Associate Planner  
**DATE:** November 5, 2008  
**SUBJECT:** Postponement for DR-08-01 et al. (Holiday Inn Express)

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As discussed in the previous memo, the applicant submitted revised civil engineering drawings, a revised water resources area report, and other revised documents based on the new site plan that preserves the significant Oregon White Oak Tree, on October 24. Staff has analyzed these, but on November 3 Tualatin Valley Fire and Rescue (TVFR) submitted a three-page letter listing multiple major issues with the site plan that needed to be changed before they could endorse the proposal. Staff will be meeting with TVFR on November 7 to discuss these items.

Staff recommends that the Planning Commission request that the applicant agree to a 28-day extension of the 120-day review period and postpone review of this project to your December 3 meeting. This would be to allow time for the applicant to address the life and safety issues raised by TVFR, time for the preparation of subsequent revised staff report and recommendation on this request, and time for citizen review of any additional plan changes. Plan changes may be necessary as a result of meeting the Oregon Fire Code requirements that TVFR assists the City in applying and conforming to with new development proposals.

PC-Memo-DR-08-01 delay fire



**Soppe, Tom**

**From:** Brad Kaul [bradkaul@spe-architects.com]  
**Sent:** Tuesday, November 04, 2008 4:55 PM  
**To:** Brown, Bryan; Soppe, Tom; Vic Patel (private); Mike Coyle  
**Cc:** karen.mohling@tvfr.com  
**Subject:** Re: memo from fire district  
**Attachments:** Holiday Inn Express- fire doc.doc

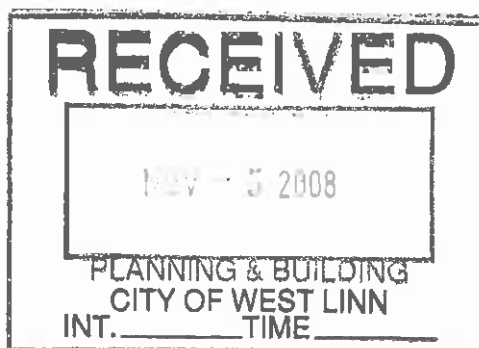
Bryan-

I just went through the letter from the Fire Department. Most of this stuff is standard issue that we will take of during the building permit process. I saw two issues that would affect the proposed site plan

- 1) 26 foot wide apparatus road. During our conversations with Mr. Renfro, we need only provide a 20 foot wide fire access road. The actual area provided is 23'-0" wide aisle required by parking lot code. Therefore, we would need to increase the width of the upper most fire lane from 23 feet to 26 feet.
- 2) We originally submitted the plans in 2007 with two access points onto Willamette Falls Drive. The city rejected this and required that we only have one access off of Willamette Falls Drive. What gives?
- 3) All other issues have been addressed on the document attached.

We can review these items on Friday.

Brad Kaul, AIA  
 Steven P. Elkins Architects  
 11000 NE 33rd Place, Suite #101  
 Bellevue, WA 98004  
 P:425-827-3252  
 F:425-889-9174



----- Original Message -----

**From:** Brown, Bryan  
**To:** Brad Kaul ; Soppe, Tom ; Vic Patel (private) ; Mike Coyle  
**Cc:** karen.mohling@tvfr.com  
**Sent:** Tuesday, November 04, 2008 4:23 PM  
**Subject:** RE: memo from fire district

Thanks Brad for that information. Hopefully you will be able to provide input or participate in discussions by phone.

Bryan

**From:** Brad Kaul [mailto:bradkaul@spe-architects.com]  
**Sent:** Tuesday, November 04, 2008 4:10 PM  
**To:** Brown, Bryan; Soppe, Tom; Vic Patel (private); Mike Coyle  
**Cc:** karen.mohling@tvfr.com  
**Subject:** Re: memo from fire district

Bryan,

We sent two copies of the plans to Jerry Renfro at the Tualatin Fire on May 30th 2007!!!! We have phone logs confirming that we have spoken to him before submitting these items and after. We were never notified of any concerns.

P-58

11/5/2008





**TUALATIN VALLEY FIRE & RESCUE - SOUTH DIVISION**  
COMMUNITY SERVICES • OPERATIONS • FIRE PREVENTION

October 29, 2008

Tom Soppe  
Associate Planner  
City of West Linn  
22500 Salamo Road  
West Linn, OR 97068

**Re: Holiday Inn Express – Willamette Falls Dr.**

Dear Mr. Soppe;

Thank you for the opportunity to review the proposed site plan surrounding the above named development project. Tualatin Valley Fire & Rescue does not endorse the proposal until the following items have been addressed and approved:

- 1) **FIRE APPARATUS ACCESS ROAD DISTANCE FROM BUILDING AND TURNAROUNDS:** Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (IFC 503.1.1)

Turnaround is provided.

- 2) **ADDITIONAL ACCESS ROADS – COMMERCIAL:** Where buildings exceed 30 feet in height or three stories in height shall have at least two separate means of fire apparatus access. (IFC D104)

This requirement conflicts with the requirement from the city that only allows only one access to the site. The site plan for this project originally had two access points but the city required us to change. Which requirement supersedes the other?

- 3) **REMOTENESS:** Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses. (IFC D104.3)

See above.

- 4) **AERIAL FIRE APPARATUS ACCESS:** Buildings or portions of buildings or facilities exceeding 30 feet in height above the lowest level of fire department vehicle access shall be provided with approved fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet in the immediate vicinity of any building or portion of

P-59



building more than 30 feet in height. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet and a maximum of 30 feet from the building, and shall be positioned parallel to one entire side of the building. (IFC D105)

No powerlines exist along the fire access road. The access road can be increased from 23 feet to 26 feet.

- 5) **FIRE APPARATUS ACCESS ROAD WIDTH AND VERTICAL CLEARANCE:** Fire apparatus access roads shall have an unobstructed width of not less than 20 feet. Where fire apparatus roadways are less than 26 feet wide, "NO PARKING" signs shall be installed on both sides of the roadway and in turnarounds as needed. Where fire apparatus roadways are more than 28 feet wide but less than 32 feet wide, "NO PARKING" signs shall be installed on one side of the roadway and in turnarounds as needed. Where fire apparatus roadways are 32 feet wide or more, parking is not restricted. (IFC 503.2.1)

No parking will be allowed in the fire apparatus access road. This areas is clearly marked on the site plan and the no parking will be labled on the ground.

- 6) **FIRE APPARATUS ACCESS ROADS WITH FIRE HYDRANTS:** Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet. (IFC D103.1)
- 7) **NO PARKING SIGNS:** Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Roads 26 feet wide or less shall be posted on both sides as a fire lane. Roads more than 26 feet wide to 32 feet wide shall be posted on one side as a fire lane. Signs shall read "NO PARKING - FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (IFC D103.6) No parking signs may be required.

We will add a note to the "general notes" section of our drawings to make sure that signs are specified correctly as stated above. We will do this during building permit submittal.

- 8) **SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 60,000 pounds live load (gross vehicle weight). You may need to provide documentation from a registered engineer that the design will be capable of supporting such loading. (IFC D102.1)

The fire apparatus road will be an asphalt parking lot. We will submit a cross section for asphalt paving for "heavy loads" during the building permit process.

- 9) **BRIDGES:** Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO *Standard Specification for Highway Bridges*. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the fire code

P-60



official. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the fire code official. (IFC 503.2.6)

No bridges exist on site. We do not have an "elevated surface". The drive aisles are located on grade and the entrance crosses a culvert as is typical along this street. This is not more of a bridge than a water pipe or storm detention pipe buried underground.

- 10) **TURNING RADIUS:** The inside turning radius and outside turning radius shall be not less than 28 feet and 48 feet respectively, measured from the same center point. (IFC 503.2.4 & D103.3)

The turning radius required can be provided and this will be shown on the building permit submittal once design review is approved.

- 11) **PAINTED CURBS:** Where required, fire apparatus access roadway curbs shall be painted red and marked "NO PARKING FIRE LANE" at approved intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background. (IFC 503.3)  
Painted curbs maybe required.

Fire Line is marked on the site plan submitted and the colors required here will be described in the building permit process.

- 12) **GRADE:** Fire apparatus access roadway grades shall not exceed 10 percent. Intersections and turnarounds shall be level (maximum 5%) with the exception of crowning for water run-off. When fire sprinklers are installed, a maximum grade of 15% may be allowed. (IFC 503.2.7 & D103.2)

Per the grading plan provided by civil. No grades exceed the values required above.

- 13) **GATES:** Gates securing fire apparatus roads shall comply with all of the following: (IFC D103.5)  
Minimum unobstructed width shall be 16 feet, or two 10 foot sections with a center post or island.  
Gates shall be set back at minimum of 30 feet from the intersecting roadway.  
Gates shall be of the swinging or sliding type  
Manual operation shall be capable by one person  
Electric gates shall be equipped with a means for operation by fire department personnel  
Locking devices shall be approved.

No gates are part of this project.

- 14) **COMMERCIAL BUILDINGS - REQUIRED FIRE FLOW:** The required fire flow for the building shall not exceed 3,000 gallons per minute (GPM) or the available GPM in the water delivery system at 20 psi, whichever is less as calculated using IFC, Appendix B. A worksheet for calculating the required fire flow is available from the Fire Marshal's Office. (IFC B105.2) ***Please provide a completed fire flow worksheet for approval; also, please provide a current fire flow test of the nearest fire hydrant demonstrating available fire flow at 20 psi residual pressure. Fire Flow calculation worksheets and instructions are available on our website: [www.tvfr.com](http://www.tvfr.com).***

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This will be submitted once Design review is approved and building permits are allowed to be submitted.

- 15) **FIRE HYDRANT NUMBER AND DISTRIBUTION:** The minimum number and distribution of fire hydrants available to a building shall not be less than that listed in Appendix C, Table C 105.1. ***Provide site plan with locations of hydrants for approval.***

Site plan with hydrant locations will be provided once Design review is approved and building permits are allowed to be submitted.

**Considerations for placing fire hydrants may be as follows:**

- Existing hydrants in the area may be used to meet the required number of hydrants as approved. Hydrants that are up to 600 feet away from the nearest point of a subject building that is protected with fire sprinklers may contribute to the required number of hydrants.

Location of existing hydrants will be provided during the building permit review. If we do not have existing hydrants that conform, we will provide the required hydrants as required.

- Hydrants that are separated from the subject building by railroad tracks shall not contribute to the required number of hydrants unless approved by the fire code official.

No railroad tracks exist on site.

- Hydrants that are separated from the subject building by divided highways or freeways shall not contribute to the required number of hydrants. Heavily traveled collector streets only as approved by the fire code official.

If additional hydrants need to be located on site this can be done through the building permit phase.

- Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the fire code official.

No bridges are part of this design (we have a culvert)

- 16) **FIRE HYDRANT DISTANCE FROM AN ACCESS ROAD:** Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway. (IFC C102.1)

This will not be a problem and will be addressed in the building permit phase.

- 17) **REFLECTIVE HYDRANT MARKERS:** Fire hydrant locations shall be identified by the installation of reflective markers. The markers shall be blue. They shall be located adjacent and to the side of the centerline of the access road way that the fire hydrant is located on. In case that there is no center line, then assume a centerline, and place the reflectors accordingly. (IFC 508.5.4)

This will not be a problem and will be addressed in the building permit phase.

- 18) **FIRE HYDRANT/FIRE DEPARTMENT CONNECTION:** A fire hydrant shall be located within 100 feet of a fire department connection (FDC). Fire hydrants and FDC's shall be located on the same side of the fire apparatus access roadway. FDCs shall normally be remote except when approved by the fire code official. (IFC 912.2)

The FDC has not been located at this time. This will not be a problem and will be addressed in the building permit phase.

- 19) **ACCESS AND FIRE FIGHTING WATER SUPPLY DURING CONSTRUCTION:** Approved fire apparatus access roadways and fire fighting water supplies shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (IFC 1410.1 & 1412.1)

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We will add a note to the "general notes" section of our drawings to make sure that the contractor stages construction accordingly.

- 20) **KNOX BOX:** A Knox Box for building access may be required for this building. For gates securing an emergency access road a Knox box or Knox padlock will be required; a Knox switch will be required for electrically operated gates. Please contact the Fire Marshal's Office for an order form and instructions regarding installation and placement. (IFC 506)

Knox box locations is detailed on the building plans at the door to the sprinkler riser room. No gates are being used on this project.

- 21) Complete the Building Survey Form prior to the issuance of the Building Permit:  
[http://www.tvfr.com/Dept/fm/brochures/document\\_files/building\\_survey\\_form\\_ifc.pdf](http://www.tvfr.com/Dept/fm/brochures/document_files/building_survey_form_ifc.pdf)

- 22) ***Resubmit plans for final approval.***

If you have questions, please call me at (503) 612-7012.

Sincerely,

*Karen Mohling*

Karen Mohling  
Deputy Fire Marshal

A-63

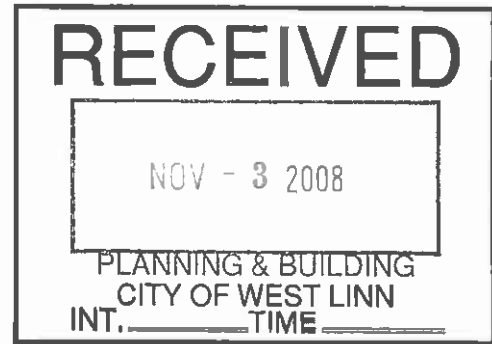




**TUALATIN VALLEY FIRE & RESCUE - SOUTH DIVISION**  
COMMUNITY SERVICES • OPERATIONS • FIRE PREVENTION

October 29, 2008

Tom Soppe  
Associate Planner  
City of West Linn  
22500 Salamo Road  
West Linn, OR 97068



**Re: Holiday Inn Express – Willamette Falls Dr.**

Dear Mr. Soppe;

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P-64



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[http://www.tvfr.com/Dept/fm/brochures/document\\_files/building\\_survey\\_form\\_ifc.pdf](http://www.tvfr.com/Dept/fm/brochures/document_files/building_survey_form_ifc.pdf)
  - 22) ***Resubmit plans for final approval.***

If you have questions, please call me at (503) 612-7012.

Sincerely,

*Karen Mohling*

Karen Mohling  
Deputy Fire Marshal

*P 666*





CITY OF

# West Linn

## Memorandum

**TO:** Planning Commission

**FROM:** Tom Soppe, Associate Planner

**DATE:** October 24, 2008

**SUBJECT:** Alternative site plan and new comment for DR-08-01

---

Attached is an alternative site plan submitted by the applicant on October 16. Unlike the site plan discussed in the staff report, it may be possible for staff to recommend approval of this site plan as it saves the significant Oregon White Oak tree while simultaneously providing enough parking to meet Chapter 46 requirements. While the applicant has expressed a preference for this site plan shortly after submitting it, the applicant has also acknowledged that further analysis and a modified staff report would be needed in order to have a hearing to approve or deny this site plan instead of the original site plan. Because of this need for staff and neighborhood review, the applicant needs to request a postponement and equivalent extension of the 120-day period for this site plan to be considered.

Staff recommends that the Planning Commission request that the applicant agree to a 14-day extension of the 120-day review period and postpone review of this project to your November 19 meeting to allow time for adequate preparation of a revised staff report and citizen review of the new plan. The applicant submitted revised civil engineering drawings, a revised water resources area report, and other revised documents based on the new site plan at 1:20 on October 24. Staff had not had time to review these at the time of this memo, so they are not attached.

Also attached is a comment submitted by Vicki Handy on October 20.

PC-Memo-DR-08-01 alt site plan

P67

Distributed 10/24/08 w agenda



## RECEIVED

THE UNIVERSITY OF CHICAGO

# TRAINING & POWERING CITY OF WEST LANSING

CON'ACT WITH CONCERNING BUREAU. THE FOLLOWING THE ACT

NEW YORK: 1973

COMBINE ON THE V A  
BAND PARTICLE PRODUCER TO GET A 3 1/2  
INCH

DEFEPPED SUBMITTAL

2000

## SYSTEM DESIGN

TD	Cover Board
AO1	ITE PLAN
AO2	ITE DETAILS
AO3	ITE ANALYSIS
ALL	GOOD AS - ITB OK

PRESENTED BY

**CANALS**  
C.P.A.R.  
6000 80 Ave. QALOA N  
LAWRENCE, ONT M9V 1J1  
1-907-441-8008  
1-907-744-5721

## STAIRS KEY

[illegible]

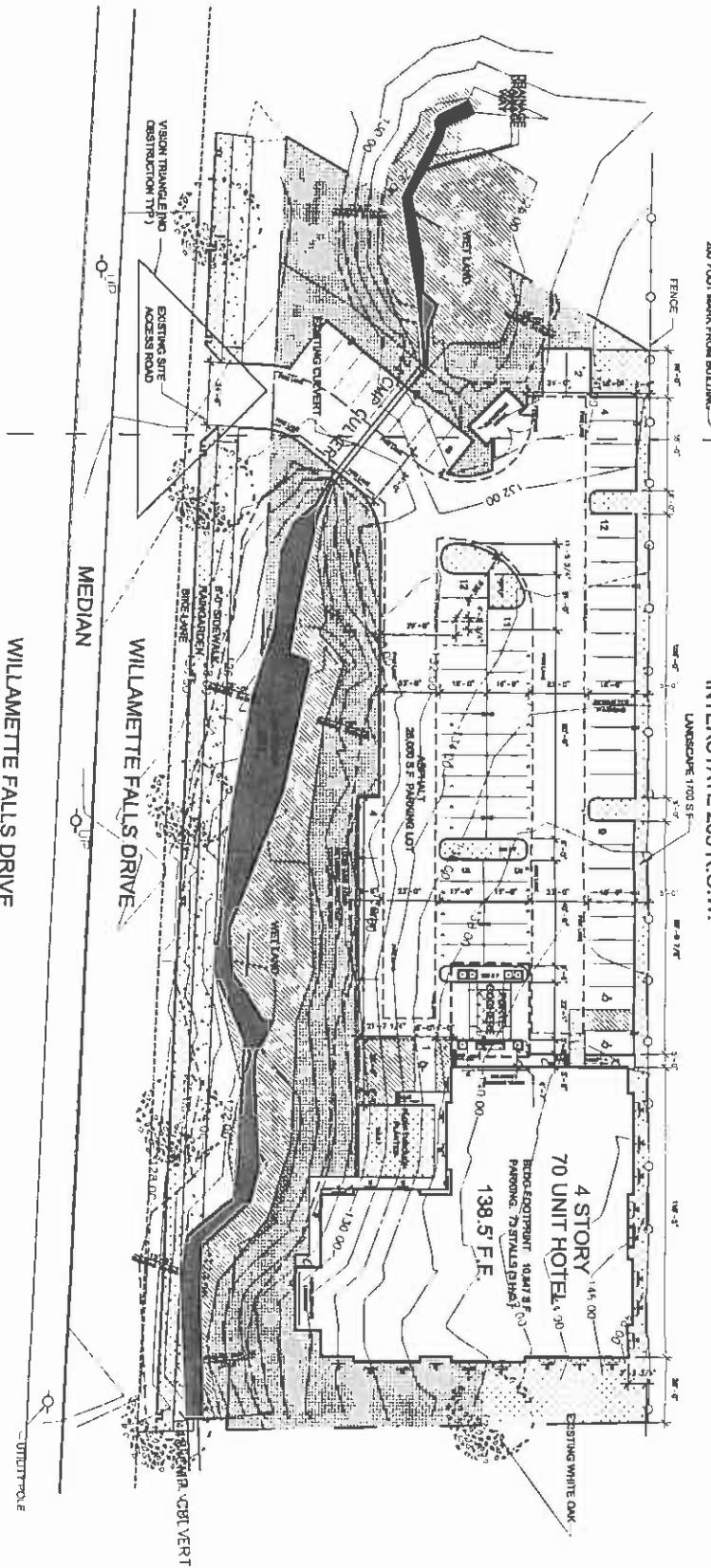
# NOTES

Figure 15. Proposed site for new 1000-bed hospital.

## COVER SHEET

# T1.0





## SITE PLAN

SCALE: 1" = 20'-0"



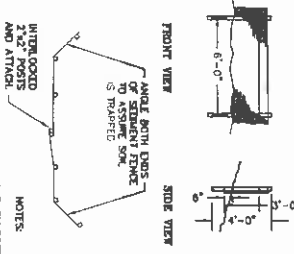
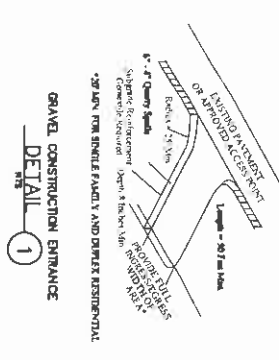
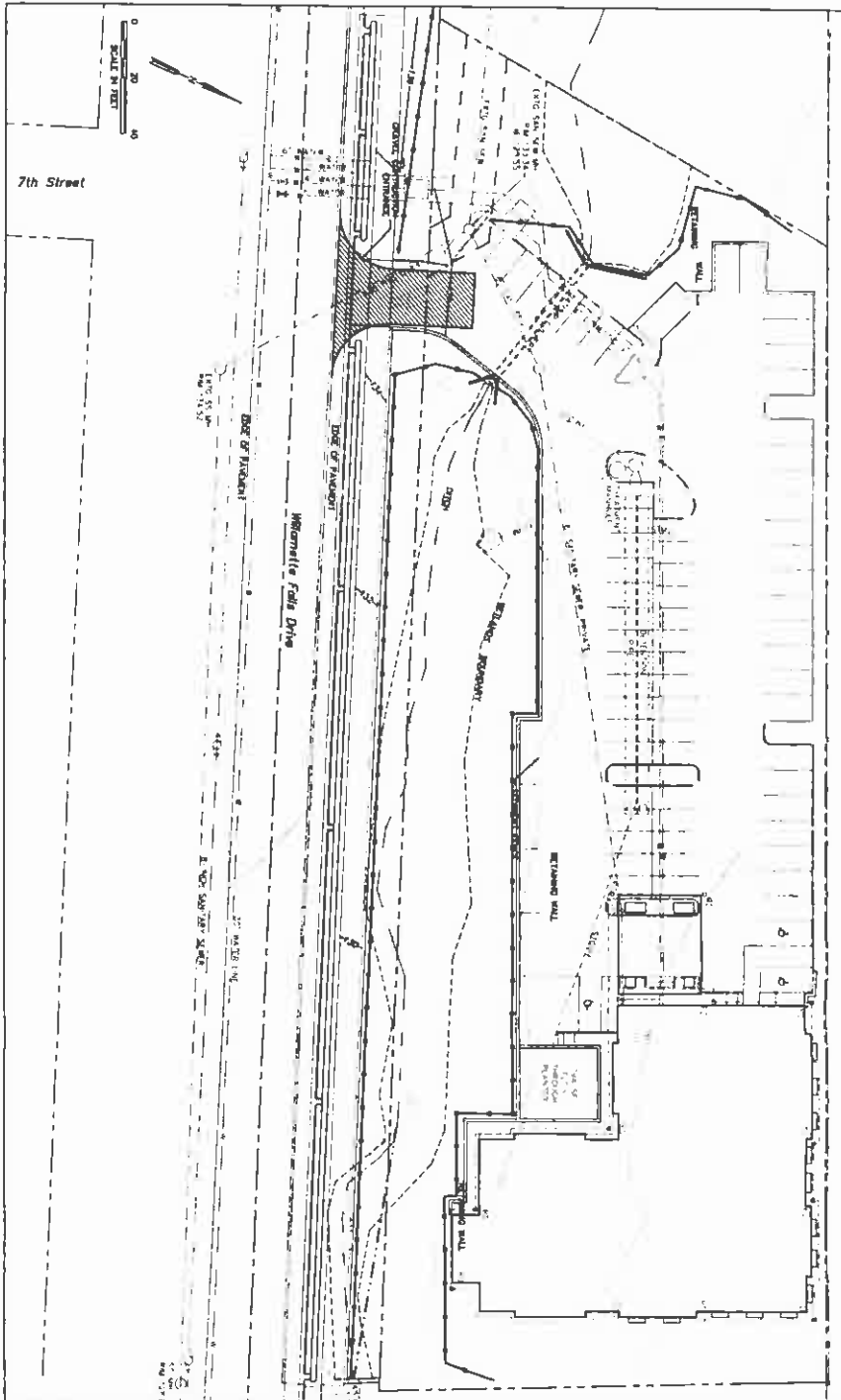
## SINGLE-FAMILY HOMES

[illegible][illegible]









- NOTES:
1. BUY BOTTOM OF FILTER FABRIC 6" MIN.
  2. 2" X 2" PINE OR STEEL POST
  3. STITCHED LOGS TO BE INSTALLED
  4. UNITS, SIZE OF STITCH, ALL AREAS OF FILTER FABRIC TRUCK



DATE	BY	REVISION
10/22/08	WJ	1

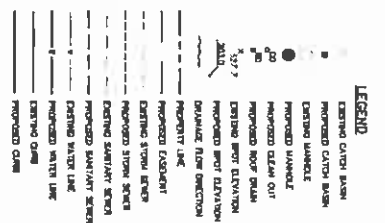
**T.R.T. ENGINEERING, INC.**  
 2400/2450 WILAMETTE FALLS DRIVE  
 WEST LINN, OREGON 97136

**HOLIDAY INN EXPRESS**  
 2400/2450 WILAMETTE FALLS DRIVE  
 WEST LINN, OREGON

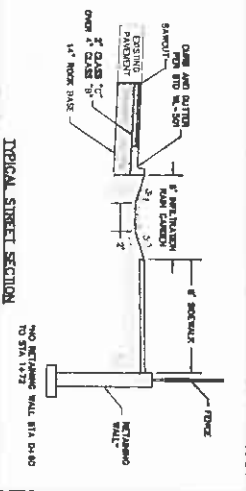
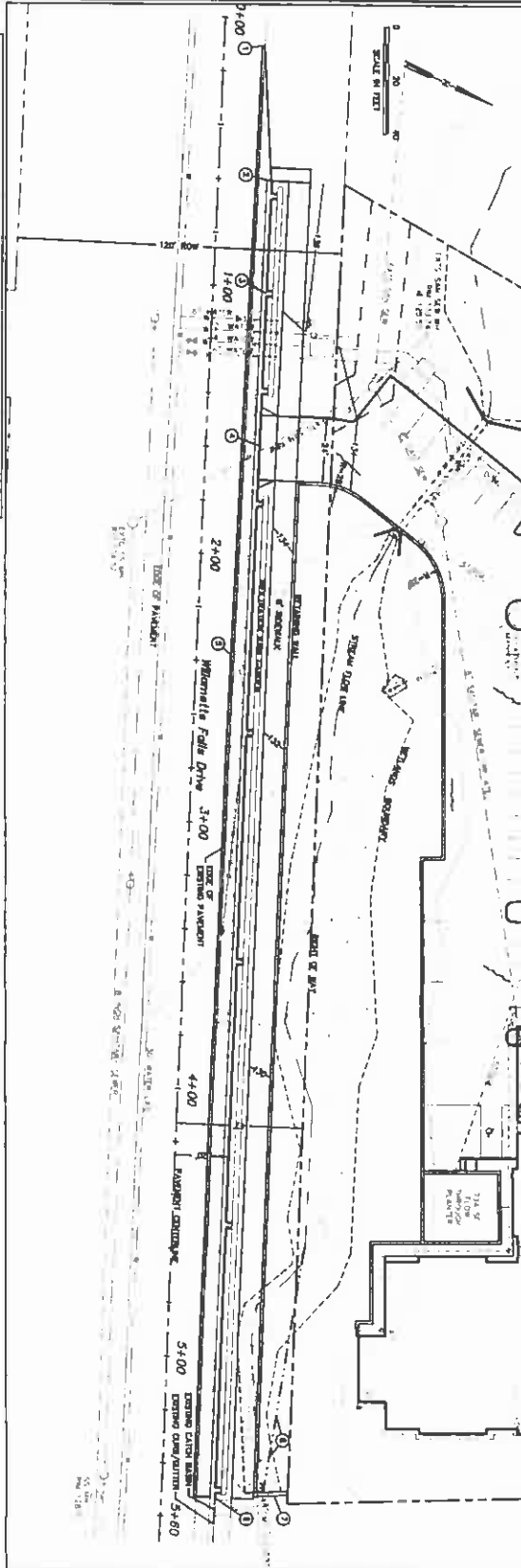
**EROSION CONTROL PLAN**  
 C-2  
 PROJECT NO.

WEST, EROSION 10/22/08





- ### CONSTRUCTION NOTES
1. 11-01-10 REIN. PAVEMENT THICKEN
  2. 11-01-00 REIN. CLAM, ALTHOR AND SOUTHWICK REIN. TYPICAL SECTION
  3. REINFORC. CONCRETE CLAM BUILT REIN. DETAIL
  4. 11-1-04-08 CONSTRUCT 2' CIRCUMFER. OVERLAY FOR SD DRAINAGE 10'-50-04
  5. SAW CUT 1" FROM EDGE OF EXISTING PAVEMENT
  6. 11-01-02-10 NEW CLAM, COTTON AND REINFORC. DETAIL TO EXISTING CLAM, BUILT AND DETAIL
  7. CONSTRUCT NEW REINFORC. 1" EXISTING ALTHOR
  8. REINFORC. STIFFEN FLOW TO EXISTING CLAM DET

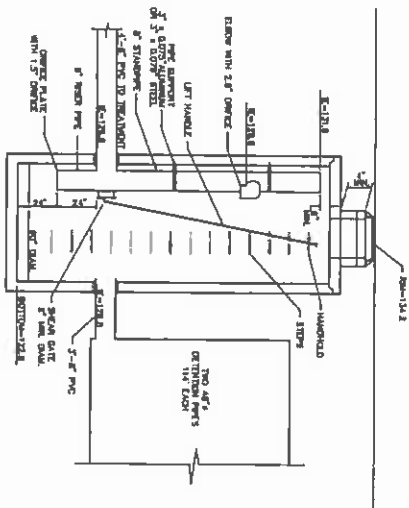
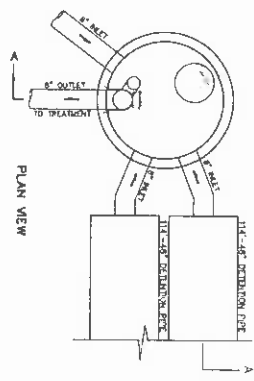
[illegible]

**TRT ENGINEERING, INC.**  
1000 N.E. 44th STREET  
PORTLAND, OREGON 97214  
PHONE (503) 224-7707  
FAX (503) 224-7700

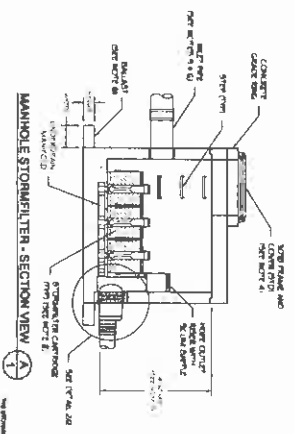
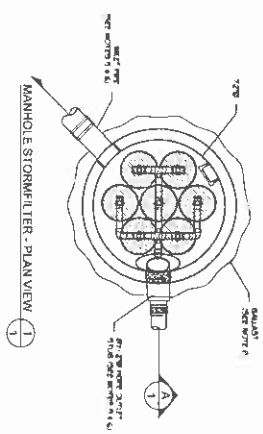
HOLIDAY INN EXPRESS  
2400/2450 WILLAMETTE FALLS  
WEST UNIV, OREGON 97068  
PUBLIC STREET IMPROVEMENT  
PLAN AND PROFILE

CLAIMED NO.  
C-3  
PRODUCT NO.

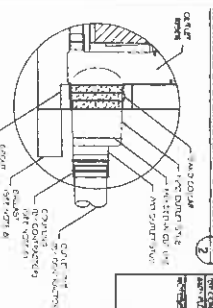
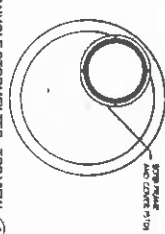




SECTION A-A  
FLOW CONTROL STRUCTURE  
DETAIL 1



PRECAST 72" MANHOLE STORMFILTER  
PLAN AND SECTION VIEWS  
STANDARD DETAIL 1

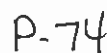
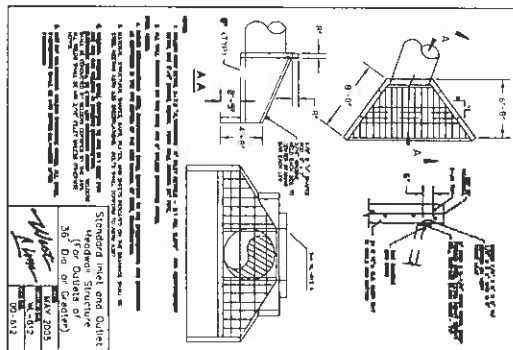
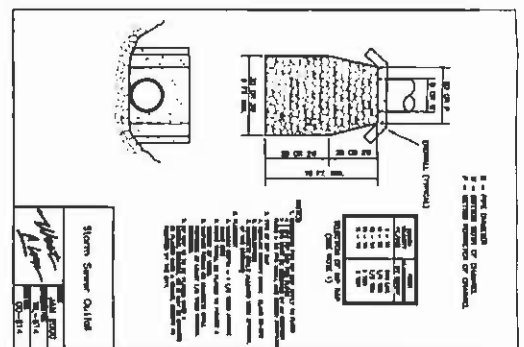


PRECAST 72" MANHOLE STORMFILTER  
TOP AND SECTION VIEWS, NOTES AND DATA  
STANDARD DETAIL 2

## GENERAL NOTES

1. STORMFILTERS FOR CONCRETE SYSTEMS ARE AVAILABLE IN 12" DIA. OR 18" DIA. SIZES. STANDARD DETAIL, 12" DIA. SIZES. STANDARD DETAIL, 18" DIA. SIZES.
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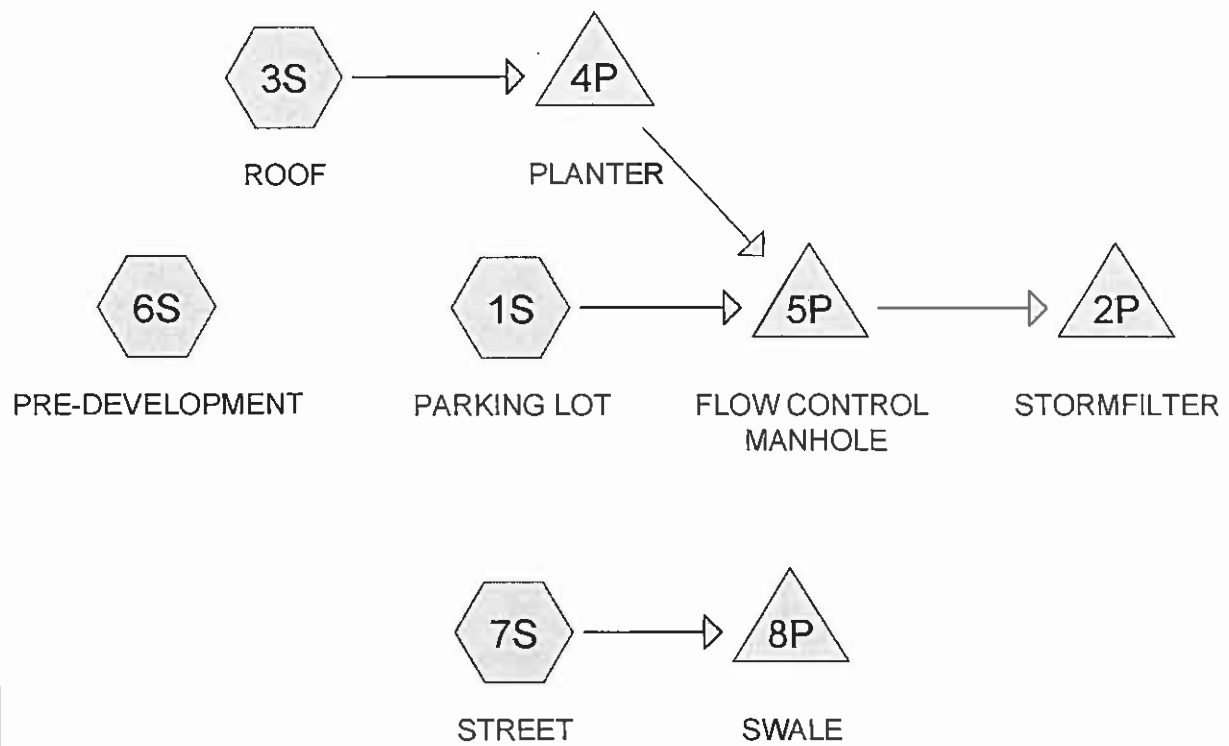












Drainage Diagram for PATEL  
 Prepared by TRT Engineering 5/17/2008  
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### Area Listing (all nodes)

<u>Area (acres)</u>	<u>CN</u>	<u>Description (subcats)</u>
0.589	79	50-75% Grass cover, Fair, HSG C (6S)
0.880	98	(1S,3S)
0.223	98	PAVEMENT (7S)
<hr/>		
1.692		

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Type IA 24-hr 10-YEAR Rainfall=3.40"

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Time span=0.00-24.00 hrs, dt=0.03 hrs, 801 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PARKING LOT**

Runoff Area=25,660 sf Runoff Depth>3.16"  
Tc=5.0 min CN=98 Runoff=0.48 cfs 0.155 af

**Subcatchment 3S: ROOF**

Runoff Area=12,680 sf Runoff Depth>3.16"  
Tc=5.0 min CN=98 Runoff=0.24 cfs 0.077 af

**Subcatchment 6S: PRE-DEVELOPMENT**

Runoff Area=25,660 sf Runoff Depth>1.48"  
Tc=10.0 min CN=79 Runoff=0.19 cfs 0.073 af

**Subcatchment 7S: STREET**

Runoff Area=9,720 sf Runoff Depth>3.16"  
Tc=5.0 min CN=98 Runoff=0.18 cfs 0.059 af

**Pond 2P: STORMFILTER**

Inflow=0.19 cfs 0.149 af  
Primary=0.19 cfs 0.149 af

**Pond 4P: PLANTER**

Peak Elev=0.75' Storage=0.013 af Inflow=0.24 cfs 0.077 af  
Discarded=0.04 cfs 0.065 af Primary=0.07 cfs 0.008 af Outflow=0.11 cfs 0.073 af

**Pond 5P: FLOW CONTROL MANHOLE**

Peak Elev=129.17' Storage=0.041 af Inflow=0.48 cfs 0.164 af  
Outflow=0.19 cfs 0.149 af

**Pond 8P: SWALE**

Peak Elev=127.89' Storage=0.016 af Inflow=0.18 cfs 0.059 af  
Discarded=0.04 cfs 0.054 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.054 af

**Total Runoff Area = 1.692 ac Runoff Volume = 0.364 af Average Runoff Depth = 2.58"**  
**34.81% Pervious Area = 0.589 ac 65.19% Impervious Area = 1.103 ac**



**Subcatchment 1S: PARKING LOT**

Runoff = 0.48 cfs @ 7.86 hrs, Volume= 0.155 af, Depth> 3.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr 10-YEAR Rainfall=3.40"

Area (sf)	CN	Description
25,660	98	
25,660		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, PARKING LOT

**Subcatchment 3S: ROOF**

Runoff = 0.24 cfs @ 7.86 hrs, Volume= 0.077 af, Depth> 3.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr 10-YEAR Rainfall=3.40"

Area (sf)	CN	Description
12,680	98	
12,680		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, ROOF

**Subcatchment 6S: PRE-DEVELOPMENT**

Runoff = 0.19 cfs @ 8.03 hrs, Volume= 0.073 af, Depth> 1.48"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr 10-YEAR Rainfall=3.40"

Area (sf)	CN	Description
25,660	79	50-75% Grass cover, Fair, HSG C
25,660		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,



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Type IA 24-hr 10-YEAR Rainfall=3.40"

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**Subcatchment 7S: STREET**

Runoff = 0.18 cfs @ 7.86 hrs, Volume= 0.059 af, Depth&gt; 3.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr 10-YEAR Rainfall=3.40"

Area (sf)	CN	Description
9,720	98	PAVEMENT
9,720		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

**Pond 2P: STORMFILTER**

Inflow Area = 0.880 ac, Inflow Depth > 2.03" for 10-YEAR event  
 Inflow = 0.19 cfs @ 8.93 hrs, Volume= 0.149 af  
 Primary = 0.19 cfs @ 8.93 hrs, Volume= 0.149 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs

**Pond 4P: PLANTER**

Inflow Area = 0.291 ac, Inflow Depth > 3.16" for 10-YEAR event  
 Inflow = 0.24 cfs @ 7.86 hrs, Volume= 0.077 af  
 Outflow = 0.11 cfs @ 8.31 hrs, Volume= 0.073 af, Atten= 54%, Lag= 27.3 min  
 Discarded = 0.04 cfs @ 4.80 hrs, Volume= 0.065 af  
 Primary = 0.07 cfs @ 8.31 hrs, Volume= 0.008 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 0.75' @ 8.31 hrs Surf.Area= 0.018 ac Storage= 0.013 af

Plug-Flow detention time= 138.8 min calculated for 0.073 af (95% of inflow)  
 Center-of-Mass det. time= 102.6 min ( 764.6 - 661.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.036 af	28.00'W x 28.00'L x 2.00'H Prismatic

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	2.000 in/hr Exfiltration over Horizontal area
#2	Primary	0.67'	4.0" Horiz. Orifice/Grate Limited to weir flow C= 0.600

Discarded OutFlow Max=0.04 cfs @ 4.80 hrs HW=0.02' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.07 cfs @ 8.31 hrs HW=0.75' (Free Discharge)  
 ↑2=Orifice/Grate (Weir Controls 0.07 cfs @ 0.90 fps)

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### Pond 5P: FLOW CONTROL MANHOLE

Inflow Area = 0.880 ac, Inflow Depth > 2.23" for 10-YEAR event  
 Inflow = 0.48 cfs @ 7.86 hrs, Volume= 0.164 af  
 Outflow = 0.19 cfs @ 8.93 hrs, Volume= 0.149 af, Atten= 59%, Lag= 64.2 min  
 Primary = 0.19 cfs @ 8.93 hrs, Volume= 0.149 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 129.17' @ 8.93 hrs Surf.Area= 0.021 ac Storage= 0.041 af

Plug-Flow detention time= 192.7 min calculated for 0.148 af (91% of inflow)  
 Center-of-Mass det. time= 126.8 min ( 783.4 - 656.6 )

Volume	Invert	Avail.Storage	Storage Description
#1	126.80'	0.066 af	48.0"D x 228.00'L Horizontal Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	126.80'	8.0" x 4.0' long Culvert CMP, square edge headwall, Ke= 0.500 Outlet Invert= 126.70' S= 0.0250 '/ Cc= 0.900 n= 0.013
#2	Device 1	126.80'	1.5" Horiz. Orifice/Grate Limited to weir flow C= 0.600
#3	Device 1	128.80'	2.8" Vert. Orifice/Grate C= 0.600
#4	Device 1	131.60'	8.0" Horiz. Orifice/Grate Limited to weir flow C= 0.600

Primary OutFlow Max=0.19 cfs @ 8.93 hrs HW=129.17' (Free Discharge)

- 1=Culvert (Passes 0.19 cfs of 2.40 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.09 cfs @ 7.41 fps)
- 3=Orifice/Grate (Orifice Controls 0.10 cfs @ 2.42 fps)
- 4=Orifice/Grate ( Controls 0.00 cfs)

### Pond 8P: SWALE

Inflow Area = 0.223 ac, Inflow Depth > 3.16" for 10-YEAR event  
 Inflow = 0.18 cfs @ 7.86 hrs, Volume= 0.059 af  
 Outflow = 0.04 cfs @ 10.22 hrs, Volume= 0.054 af, Atten= 79%, Lag= 141.8 min  
 Discarded = 0.04 cfs @ 10.22 hrs, Volume= 0.054 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 127.89' @ 10.22 hrs Surf.Area= 0.049 ac Storage= 0.016 af

Plug-Flow detention time= 209.6 min calculated for 0.054 af (91% of inflow)  
 Center-of-Mass det. time= 145.5 min ( 807.4 - 661.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	127.44'	0.026 af	2.00'W x 452.00'L x 0.64'H Prismatic Z=3.0

Device	Routing	Invert	Outlet Devices
#1	Primary	127.94'	1.5' long (Profile 1) Broad-Crested Rectangular Weir Head (feet) 0.49 0.98 1.48 Coef. (English) 2.92 3.37 3.59
#2	Discarded	0.00'	0.750 in/hr Exfiltration over Surface area



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*Type IA 24-hr 10-YEAR Rainfall=3.40"*

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Discarded OutFlow Max=0.04 cfs @ 10.22 hrs HW=127.89' (Free Discharge)  
↑2=Exfiltration (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=127.44' (Free Discharge)  
↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

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Time span=0.00-24.00 hrs, dt=0.03 hrs, 801 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PARKING LOT**Runoff Area=25,660 sf Runoff Depth>4.16"  
Tc=5.0 min CN=98 Runoff=0.62 cfs 0.204 af**Subcatchment 3S: ROOF**Runoff Area=12,680 sf Runoff Depth>4.16"  
Tc=5.0 min CN=98 Runoff=0.31 cfs 0.101 af**Subcatchment 6S: PRE-DEVELOPMENT**Runoff Area=25,660 sf Runoff Depth>2.28"  
Tc=10.0 min CN=79 Runoff=0.32 cfs 0.112 af**Subcatchment 7S: STREET**Runoff Area=9,720 sf Runoff Depth>4.16"  
Tc=5.0 min CN=98 Runoff=0.24 cfs 0.077 af**Pond 2P: STORMFILTER**Inflow=0.32 cfs 0.205 af  
Primary=0.32 cfs 0.205 af**Pond 4P: PLANTER**Peak Elev=0.89' Storage=0.016 af Inflow=0.31 cfs 0.101 af  
Discarded=0.04 cfs 0.067 af Primary=0.20 cfs 0.025 af Outflow=0.23 cfs 0.092 af**Pond 5P: FLOW CONTROL MANHOLE**Peak Elev=130.02' Storage=0.057 af Inflow=0.79 cfs 0.229 af  
Outflow=0.32 cfs 0.205 af**Pond 8P: SWALE**Peak Elev=127.98' Storage=0.020 af Inflow=0.24 cfs 0.077 af  
Discarded=0.04 cfs 0.062 af Primary=0.03 cfs 0.005 af Outflow=0.07 cfs 0.067 af**Total Runoff Area = 1.692 ac Runoff Volume = 0.494 af Average Runoff Depth = 3.51"****34.81% Pervious Area = 0.589 ac 65.19% Impervious Area = 1.103 ac**



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Type IA 24-hr 100-YEAR Rainfall=4.40"

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**Subcatchment 1S: PARKING LOT**

Runoff = 0.62 cfs @ 7.86 hrs, Volume= 0.204 af, Depth> 4.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr 100-YEAR Rainfall=4.40"

Area (sf)	CN	Description
25,660	98	
25,660		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, PARKING LOT

**Subcatchment 3S: ROOF**

Runoff = 0.31 cfs @ 7.86 hrs, Volume= 0.101 af, Depth> 4.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr 100-YEAR Rainfall=4.40"

Area (sf)	CN	Description
12,680	98	
12,680		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, ROOF

**Subcatchment 6S: PRE-DEVELOPMENT**

Runoff = 0.32 cfs @ 8.02 hrs, Volume= 0.112 af, Depth> 2.28"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr 100-YEAR Rainfall=4.40"

Area (sf)	CN	Description
25,660	79	50-75% Grass cover, Fair, HSG C
25,660		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

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Type IA 24-hr 100-YEAR Rainfall=4.40"

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**Subcatchment 7S: STREET**

Runoff = 0.24 cfs @ 7.86 hrs, Volume= 0.077 af, Depth&gt; 4.16"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr 100-YEAR Rainfall=4.40"

Area (sf)	CN	Description
9,720	98	PAVEMENT
9,720		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

**Pond 2P: STORMFILTER**

Inflow Area = 0.880 ac, Inflow Depth > 2.80" for 100-YEAR event  
 Inflow = 0.32 cfs @ 8.64 hrs, Volume= 0.205 af  
 Primary = 0.32 cfs @ 8.64 hrs, Volume= 0.205 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs

**Pond 4P: PLANTER**

Inflow Area = 0.291 ac, Inflow Depth > 4.16" for 100-YEAR event  
 Inflow = 0.31 cfs @ 7.86 hrs, Volume= 0.101 af  
 Outflow = 0.23 cfs @ 8.08 hrs, Volume= 0.092 af, Atten= 25%, Lag= 13.4 min  
 Discarded = 0.04 cfs @ 3.54 hrs, Volume= 0.067 af  
 Primary = 0.20 cfs @ 8.08 hrs, Volume= 0.025 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 0.89' @ 8.08 hrs Surf.Area= 0.018 ac Storage= 0.016 af

Plug-Flow detention time= 126.9 min calculated for 0.092 af (91% of inflow)  
 Center-of-Mass det. time= 61.5 min ( 717.2 - 655.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.036 af	28.00'W x 28.00'L x 2.00'H Prismatic

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	2.000 in/hr Exfiltration over Horizontal area
#2	Primary	0.67'	4.0" Horiz. Orifice/Grate Limited to weir flow C= 0.600

Discarded OutFlow Max=0.04 cfs @ 3.54 hrs HW=0.02' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.19 cfs @ 8.08 hrs HW=0.89' (Free Discharge)  
 ↑2=Orifice/Grate (Orifice Controls 0.19 cfs @ 2.23 fps)

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**Pond 5P: FLOW CONTROL MANHOLE**

Inflow Area = 0.880 ac, Inflow Depth > 3.12" for 100-YEAR event  
 Inflow = 0.79 cfs @ 7.93 hrs, Volume= 0.229 af  
 Outflow = 0.32 cfs @ 8.64 hrs, Volume= 0.205 af, Atten= 59%, Lag= 42.6 min  
 Primary = 0.32 cfs @ 8.64 hrs, Volume= 0.205 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 130.02' @ 8.64 hrs Surf.Area= 0.017 ac Storage= 0.057 af

Plug-Flow detention time= 173.3 min calculated for 0.205 af (90% of inflow)  
 Center-of-Mass det. time= 99.1 min ( 746.4 - 647.3 )

Volume	Invert	Avail.Storage	Storage Description
#1	126.80'	0.066 af	48.0"D x 228.00'L Horizontal Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	126.80'	8.0" x 4.0' long Culvert CMP, square edge headwall, Ke= 0.500 Outlet Invert= 126.70' S= 0.0250 ' /' Cc= 0.900 n= 0.013
#2	Device 1	126.80'	1.5" Horiz. Orifice/Grate Limited to weir flow C= 0.600
#3	Device 1	128.80'	2.8" Vert. Orifice/Grate C= 0.600
#4	Device 1	131.60'	8.0" Horiz. Orifice/Grate Limited to weir flow C= 0.600

Primary OutFlow Max=0.32 cfs @ 8.64 hrs HW=130.02' (Free Discharge)

- 1=Culvert (Passes 0.32 cfs of 2.85 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.11 cfs @ 8.64 fps)
- 3=Orifice/Grate (Orifice Controls 0.22 cfs @ 5.05 fps)
- 4=Orifice/Grate ( Controls 0.00 cfs)

**Pond 8P: SWALE**

Inflow Area = 0.223 ac, Inflow Depth > 4.16" for 100-YEAR event  
 Inflow = 0.24 cfs @ 7.86 hrs, Volume= 0.077 af  
 Outflow = 0.07 cfs @ 8.90 hrs, Volume= 0.067 af, Atten= 68%, Lag= 62.6 min  
 Discarded = 0.04 cfs @ 8.90 hrs, Volume= 0.062 af  
 Primary = 0.03 cfs @ 8.90 hrs, Volume= 0.005 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 127.98' @ 8.90 hrs Surf.Area= 0.055 ac Storage= 0.020 af

Plug-Flow detention time= 227.4 min calculated for 0.067 af (87% of inflow)  
 Center-of-Mass det. time= 136.4 min ( 792.1 - 655.7 )

Volume	Invert	Avail.Storage	Storage Description
#1	127.44'	0.026 af	2.00'W x 452.00'L x 0.64'H Prismatic Z=3.0

Device	Routing	Invert	Outlet Devices
#1	Primary	127.94'	1.5' long (Profile 1) Broad-Crested Rectangular Weir Head (feet) 0.49 0.98 1.48 Coef. (English) 2.92 3.37 3.59
#2	Discarded	0.00'	0.750 in/hr Exfiltration over Surface area



**PATEL**

*Type IA 24-hr 100-YEAR Rainfall=4.40"*

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Discarded OutFlow Max=0.04 cfs @ 8.90 hrs HW=127.98' (Free Discharge)  
↑2=Exfiltration (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.03 cfs @ 8.90 hrs HW=127.98' (Free Discharge)  
↑1=Broad-Crested Rectangular Weir (Weir Controls 0.03 cfs @ 0.58 fps)

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**PATEL**

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Type IA 24-hr TREATMENT Rainfall=0.83"

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Time span=0.00-24.00 hrs, dt=0.03 hrs, 801 points

Runoff by SCS TR-20 method, UH=SCS

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: PARKING LOT**Runoff Area=25,660 sf Runoff Depth>0.63"  
Tc=5.0 min CN=98 Runoff=0.10 cfs 0.031 af**Subcatchment 3S: ROOF**Runoff Area=12,680 sf Runoff Depth>0.63"  
Tc=5.0 min CN=98 Runoff=0.05 cfs 0.015 af**Subcatchment 6S: PRE-DEVELOPMENT**Runoff Area=25,660 sf Runoff Depth>0.63"  
Tc=10.0 min CN=79 Runoff=0.00 cfs 0.001 af**Subcatchment 7S: STREET**Runoff Area=9,720 sf Runoff Depth>0.63"  
Tc=5.0 min CN=98 Runoff=0.04 cfs 0.012 af**Pond 2P: STORMFILTER**Inflow=0.04 cfs 0.031 af  
Primary=0.04 cfs 0.031 af**Pond 4P: PLANTER**Peak Elev=0.04' Storage=0.001 af Inflow=0.05 cfs 0.015 af  
Discarded=0.04 cfs 0.015 af Primary=0.00 cfs 0.000 af Outflow=0.04 cfs 0.015 af**Pond 5P: FLOW CONTROL MANHOLE**Peak Elev=127.23' Storage=0.004 af Inflow=0.10 cfs 0.031 af  
Outflow=0.04 cfs 0.031 af**Pond 8P: SWALE**Peak Elev=127.48' Storage=0.001 af Inflow=0.04 cfs 0.012 af  
Discarded=0.02 cfs 0.012 af Primary=0.00 cfs 0.000 af Outflow=0.02 cfs 0.012 af**Total Runoff Area = 1.692 ac Runoff Volume = 0.059 af Average Runoff Depth = 0.42"**  
**34.81% Pervious Area = 0.589 ac 65.19% Impervious Area = 1.103 ac**



**Subcatchment 1S: PARKING LOT**

Runoff = 0.10 cfs @ 7.89 hrs, Volume= 0.031 af, Depth> 0.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr TREATMENT Rainfall=0.83"

Area (sf)	CN	Description
25,660	98	
25,660		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, PARKING LOT

**Subcatchment 3S: ROOF**

Runoff = 0.05 cfs @ 7.89 hrs, Volume= 0.015 af, Depth> 0.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr TREATMENT Rainfall=0.83"

Area (sf)	CN	Description
12,680	98	
12,680		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, ROOF

**Subcatchment 6S: PRE-DEVELOPMENT**

Runoff = 0.00 cfs @ 21.43 hrs, Volume= 0.001 af, Depth> 0.03"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr TREATMENT Rainfall=0.83"

Area (sf)	CN	Description
25,660	79	50-75% Grass cover, Fair, HSG C
25,660		Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,



**PATEL**

Type IA 24-hr TREATMENT Rainfall=0.83"

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**Subcatchment 7S: STREET**

Runoff = 0.04 cfs @ 7.89 hrs, Volume= 0.012 af, Depth&gt; 0.63"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
Type IA 24-hr TREATMENT Rainfall=0.83"

Area (sf)	CN	Description
9,720	98	PAVEMENT
9,720		Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

**Pond 2P: STORMFILTER**

Inflow Area = 0.880 ac, Inflow Depth > 0.42" for TREATMENT event  
 Inflow = 0.04 cfs @ 8.45 hrs, Volume= 0.031 af  
 Primary = 0.04 cfs @ 8.45 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs

**Pond 4P: PLANTER**

Inflow Area = 0.291 ac, Inflow Depth > 0.63" for TREATMENT event  
 Inflow = 0.05 cfs @ 7.89 hrs, Volume= 0.015 af  
 Outflow = 0.04 cfs @ 7.77 hrs, Volume= 0.015 af, Atten= 24%, Lag= 0.0 min  
 Discarded = 0.04 cfs @ 7.77 hrs, Volume= 0.015 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 0.04' @ 8.08 hrs Surf.Area= 0.018 ac Storage= 0.001 af

Plug-Flow detention time= 7.6 min calculated for 0.015 af (100% of inflow)  
 Center-of-Mass det. time= 5.5 min ( 727.4 - 721.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	0.036 af	28.00'W x 28.00'L x 2.00'H Prismatic

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	2.000 in/hr Exfiltration over Horizontal area
#2	Primary	0.67'	4.0" Horiz. Orifice/Grate Limited to weir flow C= 0.600

Discarded OutFlow Max=0.04 cfs @ 7.77 hrs HW=0.02' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.04 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' (Free Discharge)  
 ↑2=Orifice/Grate ( Controls 0.00 cfs)

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### Pond 5P: FLOW CONTROL MANHOLE

Inflow Area = 0.880 ac, Inflow Depth > 0.42" for TREATMENT event  
 Inflow = 0.10 cfs @ 7.89 hrs, Volume= 0.031 af  
 Outflow = 0.04 cfs @ 8.45 hrs, Volume= 0.031 af, Atten= 60%, Lag= 33.6 min  
 Primary = 0.04 cfs @ 8.45 hrs, Volume= 0.031 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 127.23' @ 8.45 hrs Surf.Area= 0.013 ac Storage= 0.004 af

Plug-Flow detention time= 32.3 min calculated for 0.031 af (99% of inflow)  
 Center-of-Mass det. time= 28.4 min ( 750.3 - 721.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	126.80'	0.066 af	48.0"D x 228.00'L Horizontal Cylinder

Device	Routing	Invert	Outlet Devices
#1	Primary	126.80'	8.0" x 4.0' long Culvert CMP, square edge headwall, Ke= 0.500 Outlet Invert= 126.70' S= 0.0250 ' Cc= 0.900 n= 0.013
#2	Device 1	126.80'	1.5" Horiz. Orifice/Grate Limited to weir flow C= 0.600
#3	Device 1	128.80'	2.8" Vert. Orifice/Grate C= 0.600
#4	Device 1	131.60'	8.0" Horiz. Orifice/Grate Limited to weir flow C= 0.600

Primary OutFlow Max=0.04 cfs @ 8.45 hrs HW=127.23' (Free Discharge)

- 1=Culvert (Passes 0.04 cfs of 0.46 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.04 cfs @ 3.14 fps)
- 3=Orifice/Grate ( Controls 0.00 cfs)
- 4=Orifice/Grate ( Controls 0.00 cfs)

### Pond 8P: SWALE

Inflow Area = 0.223 ac, Inflow Depth > 0.63" for TREATMENT event  
 Inflow = 0.04 cfs @ 7.89 hrs, Volume= 0.012 af  
 Outflow = 0.02 cfs @ 8.30 hrs, Volume= 0.012 af, Atten= 52%, Lag= 24.7 min  
 Discarded = 0.02 cfs @ 8.30 hrs, Volume= 0.012 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 0.00-24.00 hrs, dt= 0.03 hrs  
 Peak Elev= 127.48' @ 8.30 hrs Surf.Area= 0.023 ac Storage= 0.001 af

Plug-Flow detention time= 11.8 min calculated for 0.012 af (100% of inflow)  
 Center-of-Mass det. time= 10.0 min ( 731.9 - 721.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	127.44'	0.026 af	2.00'W x 452.00'L x 0.64'H Prismatic Z=3.0

Device	Routing	Invert	Outlet Devices
#1	Primary	127.94'	1.5' long (Profile 1) Broad-Crested Rectangular Weir Head (feet) 0.49 0.98 1.48 Coef. (English) 2.92 3.37 3.59
#2	Discarded	0.00'	0.750 in/hr Exfiltration over Surface area



**PATEL**

*Type IA 24-hr TREATMENT Rainfall=0.83"*

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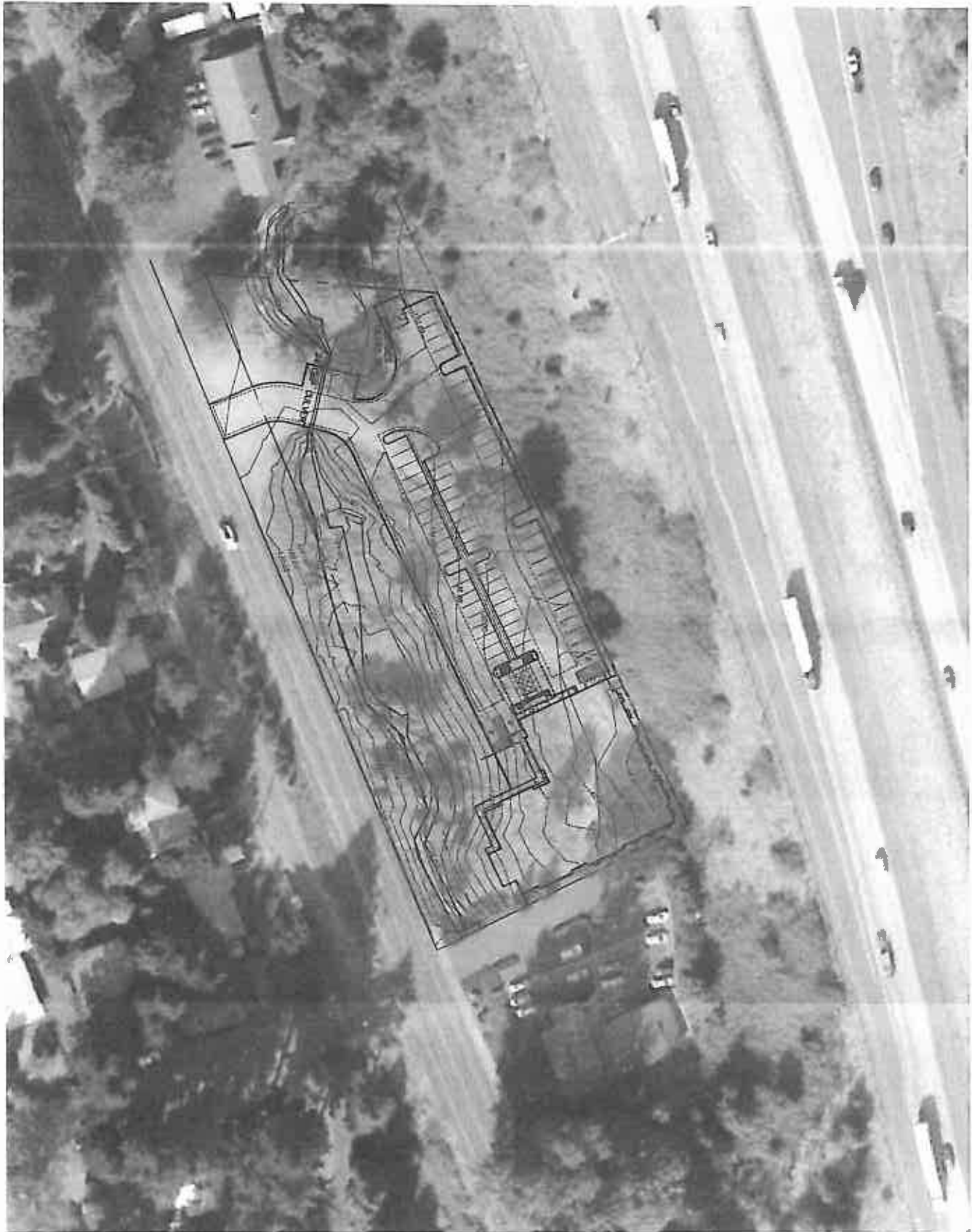
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Discarded OutFlow Max=0.02 cfs @ 8.30 hrs HW=127.48' (Free Discharge)  
↑2=Exfiltration (Exfiltration Controls 0.02 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=127.44' (Free Discharge)  
↑1=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

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**WATER RESOURCE AREA REPORT  
FOR  
HOLIDAY INN EXPRESS**

**Prepared for:**  
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12700 SE McLoughlin Blvd  
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503-504-5566  
Attn: Vic Patel

**Prepared by:**  
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March 2008

Project #1920

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## SCHOTT & ASSOCIATES

### Ecologists & Wetlands Specialists

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#### INTRODUCTION

The approximate 1.58-acre subject property is located northeast of Willamette Falls Drive in West Linn, Clackamas County, Oregon (SE ¼, SE 1/4 of T2S, R1E, Sec. 35, Tax lots 3400, 3500, and Parcels 1 & 4). The irregular shaped subject property is situated between Willamette Falls drive to the southeast and the Interstate 205 right-away to the northwest. Commercial buildings are located to the northeast and southwest of the subject property. The vacant road grade of Willamette Falls Drive, which encompasses Parcel 1 and part of Parcel 4, is still visible and extends along the northwest boundaries of Tax Lots 3400 and 3500.

#### EXISTING CONDITIONS

A drainage way flowed from northwest to southeast onto Parcel 1 where it flowed into an onsite pond on the eastern portion of the parcel. The pond overlapped onto Parcel 4 where stormwater flow was directed into a 24-inch culvert that extended beneath the abandoned road grade. The culvert emptied onto the southwestern corner of Lot 3400 where the drainage resumed its meander path. The drainage flowed through a depression that extended across Tax Lots 3400 and 3500. The depression was created as a result of the construction of the abandoned Willamette Falls Drive and the currently used Willamette Falls Drive. The property in these tax lots sloped down from the two road grades at 0-10% on old fill material into the small floodplain that flanks the drainage. The vegetation in the western two-thirds of Tax lots 3400 and 3500 consisted of grass and forb species. The drainage way exited the property through a second culvert that extended offsite to the northeast beneath Willamette Falls Drive.

Approximately 8.2% of the 1.58 acre water resource area is comprised of canopy cover of trees 6 inches or more in diameter at breast height. Woody vine and juvenile trees species occupy approximately 15.2% of the water resource area, while the remainder (76.6%) is covered by grasses and forbs. The canopy layer is comprised of mature Oregon ash (*Fraxinus latifolia*), big-leaf maple (*Acer macrophyllum*), English hawthorn (*Crataegus monogyna*), pine (*Pinus sp.*), and Oregon white oak (*Quercus garryana*). The woody vine, shrub, and juvenile tree species included Himalayan blackberry (*Rubus discolor*), English hawthorn (*Crataegus monogyna*), willow (*Salix sp.*), hazelnut (*Corylus cornuta*), and black hawthorn (*Crataegus douglasii*). Grass and forb species consisted of reed canary grass (*Phalaris arundinacea*), tall fescue (*Festuca arundinacea*), teasel (*Dipsacus Thapsus*), velvet grass (*Holcus lanatus*), common horsetail (*Equisetum arvense*), bull thistle (*Cirsium vulgare*), orchard grass (*Dactylis glomerata*), European bittersweet (*Solanum dulcamara*), and bracken fern (*Pteridium aquilinum*).

The depression on the east side of the road was an extension of the upstream section of Parcels 1 and 4. The flood plain in the depression in these two parcels was wider than the downstream sections. This is due to the two artificial constraints the road grades impose. There were sections of fill on both



the north and south sides of this section as well. The vegetation in this portion of the subject property consisted of mature deciduous trees, non-native shrubs and woody vine species, ferns, and grasses.

The Local Wetland Inventory (LWI) for the City of West Linn indicates a drainage way flowing through two wetlands separated by an abandoned road on the subject property (BE-01 & BE-02). The Clackamas County Soil Survey indicated Woodburn silt loam on 3 to 8 percent slopes. The Woodburn series is not listed to be hydric. The topographic map indicates there to be an old road grade extending from southwest to northeast through the middle of the subject property, and a drainage flowing from northwest to southeast. The topographic map also shows the drainage to flow through a well defined northwest to southeast situated swale.

Based on the vegetation, soils and hydrology data collected onsite, 0.25 acres (10,734.99 sf) of PEM/Sloped wetland were found onsite. The wetland boundaries were flagged. The flagging was surveyed by Burton Engineering, a Professional Land Surveyor (PLS).

## METHODS

The analysis method used for the site visit is based on the City of West Linn Proposed Water Quality Resource Area and Wetland Code Revisions, Water Resource Area Protection Chapter 32. Pursuant to § 32.050 (A) an assessment by a qualified wetland specialist (Schott & Associates, Inc.) was conducted. The property was surveyed by Burton Engineering & Surveying, a registered professional Land Surveyor (PLS).

## 32.050 – APPROVAL CRITERIA

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

- A. Proposed development submittals shall identify all water resource areas on the project site. The most currently adopted Storm Drainage Master Plan shall be used as the basis for determining existence of drainage ways. The exact location drainage ways identified in the Storm Drainage Master Plan, and drainage way classification may have to be verified by the City Engineer. The Local Wetlands Inventory shall be used as the basis for determining existence of wetlands. The exact location of wetlands identified in the Local Wetland Inventory shall be verified in a wetlands delineation analysis prepared for the applicant by a certified wetlands specialist.

*An Existing Conditions Map and a copy of the Wetland Delineation Report (Prepared by Schott & Associates, Inc.) has been attached to this application, which show the location of all water resource areas on the project site. A copy of the West Linn Local Wetland Inventory has been provided as well.*

- B. Proposed developments shall be so designed as to maintain the existing natural drainage ways and utilize them as the primary method of stormwater conveyance through the project



site unless the Storm Drainage Master Plan calls for alternate configurations. Proposed development shall, particularly in the case of subdivisions, facilitate reasonable access to the drainage way for maintenance purposes.

*The proposed development plan was designed to maintain the existing drainage way and will be utilized as the primary method of stormwater conveyance through the project site.*

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

*See Alternative Analysis and Mitigation Plan below.*

- D. Wetlands, natural drainage ways and transition areas should be protected from development or encroachment by dedicating the land title deed to the City for open space purposes if either 1) a finding can be made that the dedication is roughly proportional to the impact of the development; or, 2) the applicant chooses to dedicate these areas. Otherwise, these areas shall be preserved through a protective easement. Protective or conservation easements are not preferred because natural drainage and transition areas protected by easements have shown to be harder to manage and, thus, more susceptible to disturbance and damage.

*The applicants are not proposing to impact the onsite water features however, a large portion of the transition zone will be impacted by the proposed development. A deed restriction will be provided during the application process.*

- E. The protected water resource area shall include the drainage channel, creek, wetlands, and the transition zone.

*The drainage channel, wetlands, and transition zone have been shown on the Existing Condition Map (Attached). The transition zone was measured from the edge of the delineated wetlands however, the slopes of the banks surrounding the wetlands are greater than 25%. The starting measurement to the top of the bank was greater than 30 feet in most areas, but never more than 150 feet.*

- F. Roads, driveways, utilities, or passive use recreation facilities may be built in the transition zone and across drainage ways when no other practical alternative exists. Construction shall minimize impacts. Construction to the minimum dimensional standards for roads is required. Full mitigation and revegetation is required, with the applicant to submit a



mitigation plan pursuant to CDC Section 32.070 and a revegetation plan pursuant to CDC Section 32.080.

*The proposed ingress/egress road to access the site is an existing road crossing between the two onsite water features. The crossing currently has a 55-foot long 24-inch culvert that conveys flow between the two water features. The original plan called for two access points rather than one. Limiting the plan to one access point minimizes impacts to the transition zone and eliminates the need for a Wetland Removal-Fill Permit Application that would be required to be submitted if a second access point was proposed. The existing road crossing is currently the only way to access the northern portion of the site, which is where the majority of the development is proposed. Based on the current site plan, the existing culvert will not need to be lengthened to accommodate the proposed access road. A full mitigation and revegetation plan pursuant to CDC Section 32.070 and 32.080 has been included with this application, respectively (See below).*

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

*A chain link fence will be erected prior to construction to protect the onsite water resource area. Because a large portion of the Vegetated Corridor is proposed to be impacted by the development, the fence will be erected along the boundary of the construction limits. The fence will remain until construction of the Holiday Inn Express is complete.*

*Permanent survey stakes shall be established at 30 to 50-foot intervals along transition area. The stakes will be placed at all boundary direction changes, which will clearly delineate the extent of the protected area.*

- H. Paved trails, walkways, or bike paths shall be located at least 15 feet from the edge of a protected water feature except for approved crossings. All trails, walkways, and bike paths shall be constructed so as to minimize disturbance to existing native vegetation.

*No paved trails, walkways, or bike paths are proposed at this time.*

- I. Sound engineering principles regarding downstream impacts, soil stabilization, erosion control, and adequacy of improvements to accommodate the intended drainage through the drainage basin shall be used. Storm drainage should not be diverted from its natural watercourse. Inter-basin transfers of storm drainage shall not be permitted.



*There will be no downstream impacts as a result of the proposed development. The stormwater plan proposes to match the post development peak flow rates with pre-existing flow rates.*

*The existing vegetation currently provides good soil stabilization within the water resource and the Vegetated Corridor. Most of the Transition Zone is vegetated by grasses and forbs, which are good short term erosion control as long as it is healthy and provides complete coverage on slopes that aren't too steep and have suitable soil. The remainder of the area consists of shrubs and trees with a grass and forb understory, which provides better long-term erosion control. The proposed mitigation plan (See below) will add native trees, shrubs, forbs, and grass species to the Transition Zone. The addition of these plantings will further bolster the already good soil stabilization in place.*

*The Erosion Control Plan (See Attached) proposes to establish a sediment fence along the eastern and southern sides of the construction area. The fence will also extend along the eastern side of the existing access road to Willamette Falls Drive. A second fence will be installed on the west side of the access road, around the western water resource.*

*As previously stated, the post development rates of flow will match the pre-development rates of flow. The existing drainage way will not be diverted, dewatered, or altered by the proposed development. Inter-basin transfer is not possible at the project site because there is only one drainage way and one outlet.*

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

*See Erosion & Control Plan.*

K.

*Much of the natural drainage way is considered to be "disturbed" or "unhealthy based on CDC Section 32.050 (K) standards. The transition area does not have a combination of native trees, shrubs, and groundcover on less than 80% of the water resource area and less than 50% tree canopy coverage in the water resource area. However, we do not recommend enhancing these portions of the water resource. Much of the wetland/drainage areas contain reed canary grass and other non-native or nuisance species. Reed canary grass is very difficult to eradicate and the best measure needed to do so will require a wetland removal-fill permit. To rid the area of reed canary grass, the transition area will need to be graded to strip the topsoil. The topsoil would then have to be carried offsite and disposed. Stringent erosion control techniques will then be implemented to prevent onsite erosion and downstream sedimentation. Finally, a re-vegetation plan would be implemented, consisting of a native planting scheme and several years of monitoring. A second option would be to spray the area with an herbicide such as Garalon-5. This method has been used in the past and yields mixed results. Spraying an herbicide within or*



*near a water resource should be avoided if possible. The applicant does not propose to impact any portion of the water resource area and therefore, we do not recommend the aforementioned measures being used.*

- L. Due to site constraints, it is impossible to maintain a 15-foot setback area from all foundations walls and footings from the transition area. The proposed site plan would impact approximately 32,074.45 sf (0.74 acres) of onsite transition area, which is far more than what the CDC Chapter 32 allows. The applicant intends to apply for a variance from the City of West Linn in order to develop the subject property.*
- M. No Stormwater Treatment Facilities will encroach in to any of the onsite wetlands/drainage ways.*
- N. The only "piped" or "covered" drainage way located onsite is the 24-inch culvert currently extending between the onsite water features. Opening this part of the drainage way will leave the building area without access.*
- O. The proposed Holiday Inn Express is zoned General Commercial therefore there are no required front yard setbacks for this development.*

### **32.070 MITIGATION PLAN**

A mitigation plan shall be required if any portion of the water resource areas is proposed to be permanently disturbed by development.

- A. All mitigation plans must contain an alternative analysis demonstrating that:
  - 1. No practicable alternatives to the requested development exist that will not disturb the water resource area, and;
  - 2. Development in the water resource areas has been limited to the area necessary to allow for the proposed use; and,
  - 3. an explanation of the rationale behind choosing the alternative selected, including how adverse impacts to the water resource area will be avoided and/or minimized.

*Three alternative plans have been provided to illustrate the limited buildable space and the minimum requirements of the Holiday Inn franchise. The three alternative plans include a "No Build Site Plan", a "Reduced Impact Site Plan", and the "Preferred Site Plan".*

*The "No Build Site Plan" is insufficient because of the limited buildable space. Avoidance of the transitional zone is impossible for this project therefore, the applicant are forced to look to alternative plans that satisfy the franchise requirements. It would be impossible to construct any type of commercial development without impacting the onsite transitional zone.*

*The second alternative (Reduced Impact Site Plan) consists of one two-way ingress/egress point that accesses Willamette Falls Drive from the southwest property*



corner, a 4-story 67 unit hotel (10,500 sf) located in the northeast corner, and a 67 space parking lot extending along the northern portion of the property. The remaining 17,480.21 sf of undeveloped property is proposed to be revegetated with native vegetation listed in the Metro native plant list.

In the "Preferred Site Plan", the amount of the parking was also reduced from 30,000 sf to 25,000 sf, which in turn minimized the amount of transitional zone from 18,550 sf to 17,480.21 sf. Although the amount of parking was reduced, the Holiday Inn Express franchise has a parking lot requirement of 1.1 stalls per 1 unit (Hotel room). This requirement will be superseded by the City of West Linn's minimum ratio of 1 stall per 1 unit.

The preferred site plan was chosen over the "No Build Site Plan" and the "Reduced Impact Site Plan" because it meets the City of West Linn requirements and those of the Holiday Inn Express franchise. The specific reasons the "

1. The hotel building footprint has been minimized by constructing the building as tall as possible, which minimizes the sprawl of the building. Incidentally, the number of units has been reduced to the minimum allowed per franchise requirements.
2. One entrance to the site is proposed. The original plan called for two entrances but the two entrance plan would require an extension of the culvert located in the southeast corner of the site. By extending the culvert the wetland and drainage way would be impacted, which is not desired by the applicant. A single entrance eliminates the need for a second porte cochere.
3. The "Preferred Site Plan" will result in a smaller parking lot and smaller building footprint from that of a maximum impact plan. Minimization of these two impacts results in lesser impacts to the Vegetated Corridor. The amount of parking area (Impervious surface i.e. parking lot, sidewalk, hard surfaces) is reduced from 31,865 sf to 25,000 sf. Areas of pervious surfaces (Not included the pervious asphalt) is increased from 24,809 sf to 32,480 sf.
4. Measures to further lessen impacts include paving the parking lot with pervious surface, which will reduce the amount of storm run-off.
5. The parking lot provides more area to be landscaped than what is required by the city.

B. A mitigation plan shall contain the following information:

1. A description of adverse impacts that will be caused as a result of development.

Unavoidable adverse impacts will result from the proposed impacts, which include the loss of 32,074.45 sf (0.74 acres) of transition zone on the project site. The impacts are unavoidable due to the size of subject property, location of the drainage/wetlands, and the minimum parking and room requirements set forth by the Holiday Inn Express franchise. Onsite vegetation that will be lost due to the proposed development includes



*big-leaf maple (Acer macrophyllum), Himalayan blackberry (Rubus discolor), English hawthorn (Crataegus monogyna), hazelnut (Corylus cornuta), bull thistle (Cirsium vulgare), orchard grass (Dactylis glomerata), European bittersweet (Solanum dulcamara), and bracken fern (Pteridium aquilinum). Of the 8 species previously listed, the blackberry, hawthorn, thistle, orchard grass, and European bittersweet are introduced species not on Metro's native plants list. The native species such as big-leaf maple, hazelnut, and bracken fern are present, but in few numbers. The majority of the onsite vegetation is non-native and/or invasive species that comprise a low level and structural diversity habitat.*

2. An explanation of how adverse impacts to resource areas will be avoided, minimized, and/or mitigated in accordance with, but not limited to, the re-vegetation provisions of CDC Section 32.050(K).

*Although much of the transition zone will be impacted by development, the site development plan demonstrates how the applicant proposes to avoid the onsite drainage and associated wetlands. Additional adverse impacts to the water resource areas will be avoided by utilizing the existing road crossing for ingress/egress, erecting a multi-floor hotel to minimize sprawl, eliminating all but one building entrance, and reducing the number of parking spaces. By utilizing the existing road crossing for ingress and egress a second access point will not be needed. A second access point would impact the existing drainage/wetland area on the eastern side of the property, which would require a wetland removal/fill permit application. Silt fences will be placed between the wetlands and construction areas, which will create work area isolation. Exposed areas should be covered in straw to prevent erosion and sedimentation.*

3. A list of all responsible parties including, but not limited to, the owner, applicant, contractor, or other persons responsible for work on the development site.

Owners: VKNW, Inc., Attn: Vic Patel  
12700 SE McLoughlin Blvd  
Milwaukie, OR. 97222  
503.504.5566: Office  
503.788.9473: Fax

Applicant: Same as above

Contractor: Bob Wright  
2333 NW Vaughn  
Portland, OR 97210  
503.484.1111: Office  
503.484.1119: Fax



Architect: Steven P Elkins Architects Inc PS  
11000 NE 33rd Place, Suite 101  
Bellevue, WA 98004-1460  
425.827.3252: Office  
425.889.9174: Fax

Engineer: Tim Turner  
2636 SE Market St.  
Portland, OR 97214  
503.235.7592 Office

Monitoring: Schott & Associates, Inc.  
Attn: Dale R. Gulliford, Jr.  
21018 NE Hwy 99E, P.O. Box 589  
Aurora, OR 97002  
503.678.6007: Office  
503.678.6011: Fax

4. A map showing where the specific mitigation activities will occur.

*Onsite Rehabilitation Plan and Offsite Mitigation Area are attached.*

5. An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, reporting, and a contingency plan.

*See the "Planting Schedule and Construction Sequence", "Goals", "Objectives", "Success Criteria", "Mitigation Monitoring", and "Contingency Plan" sections below.*

6. Assurances shall be established to rectify any mitigation actions that are not successful. This may include bonding or other surety.

*A bond will be provided during the City review process.*

7. Provide evidence that this application has been or will be submitted soon to DSL and Army Corps.

*This project does not fall under the jurisdiction of DSL or the COE therefore no applications need be submitted.*

- C. Mitigation of any water resource areas that are not wetlands that are permanently disturbed shall be accomplished by creation of a mitigation area equal in to the area being disturbed. Mitigation areas maybe onsite or offsite. The applicant shall prepare and implement a revegetation plan for the mitigation area pursuant to CDC Section 32.080, and which shall result in the areas meeting the standards set forth in CDC Section 32.050(K). The City



Department of Parks and Recreation shall prepare an inventory of potential off-site re-vegetation candidate areas on City Park property. Any offsite mitigation occurring on privately owned land shall be protected with a conservation easement.

*The applicant proposes to re-vegetate the remaining 17,480.21 sf of onsite transition zone and mitigating the 32,074.45 sf (0.74 acres) of onsite transition zone impacts to an offsite location. A Revegetation Plan for both onsite and offsite areas can be found below (32.080 Revegetation Plan Requirements). In meetings with Ken Worchester from the City Parks and Recreation Department, it was agreed upon that Fields Bridge Park would be a suitable offsite mitigation location. The park, owned by the City of West Linn, has areas that do not meet the standards set forth in CDC Section 32.050(K). The applicant proposes to re-vegetate 32,074.45 sf of the park in areas designated for mitigation (See Mitigation Plan). There is no one contiguous "disturbed" area large enough to mitigate for all of the impacts so we have proposed to re-vegetate multiple small "disturbed" areas to meet our 1:1 mitigation ratio (See Mitigation Plan).*

*Four areas have been selected because of the presence of Japanese knotweed, which is an exotic invasive species the City wishes to eliminate. The fourth, fifth, sixth, and seventh areas are degraded and would benefit from enhancement. Poison oak will be eradicated out of Area 8 however; no plantings will be installed (See below).*

- D. The Mitigation Plan for any wetland area to be disturbed shall be prepared and implemented with the guidance of professionals with experience and credentials in wetland areas and values. Where the alternatives analysis demonstrates that there are no practicable alternatives for mitigation onsite, off-site mitigation shall be located as follows:
1. As close to the development site as is practicable above the confluence of the next downstream tributary, or if this is not practicable;
  2. Within the watershed where the development will take place, or as otherwise specified by the City in an approved wetland mitigation bank.

*The onsite water resources are not proposed to be impacted however the Vegetated Corridor will be impacted by the development of the Holiday Inn Express. Offsite mitigation for the Vegetated Corridor impacts has been approved for areas of Fields Bridge Park by the City of West Linn.*

- E. To ensure that the mitigation area will be protected in perpetuity, proof that the area has been dedicated to the City or a conservation easement has been placed on the property where the mitigation is to occur is required.

*There are no wetland impacts therefore no wetland creation is required.*



### 32.080 Revegetation Plan Requirements

Metro's native plant list is incorporated by reference as a part of CDC Chapter 32, and all plants used in revegetation plans shall be plants found on the Metro native plant list. Performance standards for planting upland and riparian plants include the following:

- A. Native trees and shrubs will require temporary irrigation from June 15 to October 15 for the three years following planting.

*A temporary irrigation system will be setup in both the onsite and offsite mitigation areas. The irrigation system layout and installation will be implemented by the landscape contractor.*

- B. Invasive non-native or noxious vegetation shall be removed within the area to be re-vegetated prior to planting.

*The removal of invasive non-native or noxious vegetation is outlined below in "Onsite Revegetation Plan & Offsite Mitigation" section.*

- C. Replacement trees must be at least one-half inch in caliper, measured at 6 inches above the ground level for field grown trees or above the soil line for container grown trees (the one-half inch minimum size may be an average caliper measure, recognizing that trees are not uniformly round) unless they are oak or madrone, which may be one gallon size. Shrubs must be in at least a one-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.

*See Planting Legends for "Offsite Mitigation Fields Bridge Park" and "Mitigation/Enhancement Planting Plan for the Holiday Inn Express".*

- D. Trees shall be planted between 8 and 12 feet on-center and shrubs shall be planted between 4 and 5 feet on-center, or clustered in single species groups of no more than 4 plants, with each cluster planted between 8 and 10 feet on center. When planting near existing trees, the dripline of the existing trees shall be the starting point for plant spacing requirements. A copy of this report shall be supplied to the landscape contractor.

*See Planting Legends for "Offsite Mitigation Fields Bridge Park" and "Mitigation/Enhancement Planting Plan for the Holiday Inn Express". A copy of this report shall be supplied to the landscape contractor.*

- E. Shrubs must consist of at least two different species. If 10 trees or more are planted, then no more than 50% of the trees may be of the same species. The proposed Revegetation Plan requires three trees species and four shrub species.

*See Planting Legends for "Offsite Mitigation Fields Bridge Park" and "Mitigation/Enhancement Planting Plan for the Holiday Inn Express".*



- F. A deposit of 125% of the cost of the plantings shall be submitted to the City. The deposit will be returned after five years have passed and 80 percent survival of the plants has been achieved.

*A deposit for 125% of the cost of the plantings will be submitted to the City. The cost of the plantings will be based on current market prices at the time of the submittal review.*

#### **Onsite Revegetation Plan & Offsite Mitigation**

Both onsite revegetation and offsite mitigation are proposed for the impact of 32,074.45 sf (0.74 acres) of impact for the proposed 10,847 sf 4 floor, 71 unit Holiday Inn Express. Mitigation will involve 32,074.45 sf (0.74 acres) of enhancement at Fields Bridge Park and 17,480.21 sf of enhancement on the subject property. Enhancement and mitigation will include the removal of invasive vegetation, grading of soils if needed, and revegetation of plants found on the Metro native plant list.

Offsite Mitigation Areas 1-7 actually total 41,785 sf, which is an additional 9,711 sf of enhancement area however; we have included the additional area to compensate for portions of the mitigation areas that are currently in good condition or currently have existing, mature native trees present. Mitigation Area 7 has a line of mature evergreen trees along the southwestern boundary. These trees are to remain and plants will be installed on the perimeter of the drip-line. Forbs and low growing shrubs may be installed within their drip-line if needed.

#### *Onsite Nuisance/Prohibited Species*

The remaining transition area on the east side of the property not impacted by development is currently vegetated by tall fescue, velvet grass, perennial rye grass, and reed canary grass. The transition area west of the water resource areas consists of Himalayan blackberry, hazelnut, English hawthorn, snowberry, red alder and assorted grasses. Himalayan blackberry and English hawthorn are listed on the nuisance plant list and reed canary grass is listed on prohibited plant list.

#### *Offsite Nuisance/Prohibited Species*

Currently, the offsite mitigation areas have a variety of invasive/nuisance species that will be removed prior to installing native vegetation. Mitigation Area 1 is currently void of tree and shrub species, but does contain knotweed that is listed on Metro's nuisance plant list (See Offsite Mitigation Locations).

Mitigation Areas 2 and 3 contain knotweed as well but are also vegetated by reed canary grass, which is found on Metro's prohibited plant list.

Area 4A was also covered by knotweed and reed canary grass. Area 4B had several undesirable species such as field bindweed, Himalayan blackberry, and reed canary grass.

Area 5 and the planter strip contain Himalayan blackberry, Queen Anne's lace, velvet grass, English plantain, field bindweed, Canada thistle. All of the plants found at Area 5 and the planter strip are listed in Metro's nuisance and prohibited plant list except for velvet grass (Invasive species) and English plantain (Exotic).



Area 6A-C contained mixed grass and forb species with very little canopy coverage and was in degraded condition.

Area 7 was a mix of invasive and native species including red alder, Himalaya blackberry, bracken fern, velvet grass, and tall fescue. Ken Worchester indicated that Area 7 had been previously enhanced with western red cedar however; invasive species were still present in high numbers and not all of the enhancement plantings have survived. Red cedar and unidentified deciduous saplings were observed in Area 7. The saplings had no leaves or any signs of new growth, but most of the cedars appeared to be alive and well.

Area 8 is a small area that is not slated for enhancement but the removal of poison oak is required.

#### *Removal & Control of Nuisance/Prohibited Species*

The onsite and offsite species present in the enhancement areas that are listed on the City of Portland nuisance and prohibited plant list will need to be removed and controlled after the completion of enhancement. These species include giant knotweed, reed canary grass, Himalayan blackberry, Canada thistle, field morning glory, Queen Anne's lace, and poison oak.

The Himalaya blackberry, reed canary grass, and field bindweed spread rapidly and can wreak havoc on mitigation/enhancement projects. These species should be controlled via appropriate herbicides. The herbicides should be applied by a licensed applicator during appropriate conditions. The application should start at the bottom of any slope and work towards the top and only applied to areas where these species are found. Prior to applying the herbicide the undesirable species should be grubbed away from all native plant species or in this case species that are to remain.

Reed canary grass will be sprayed with Rodeo prior to any excavation, but only in the buffer areas. Follow-up treatments will occur on an as-needed basis. Dense native herbaceous vegetation and the development of a healthy tree and shrub layer will help control establishment of reed canary grass, however, if stands do establish, immediate measures should be taken to ensure control of this species.

The most effective way to rid Area 8 of poison oak is to cut the main stalk and apply herbicide to the plant. The herbicide should be a mix a 1.3:1 ratio of Round-up and Crossbow herbicides, and the mixed with a small amount of surfactant (Fabric softener). The surfactant helps cut through the waxy surface of the poison oak leaf, which in turn facilitates the application of the herbicide. This application should take place in late August or early September. Note: This application should not be applied to poison oak if growing on or near tree saplings however; the mature fir trees in Area 8 will not be affected by the mixture.

An application of Round-up will decimate field bindweed. The plant will turn black and die after the first application.

The Himalayan blackberry within 25 feet of the water resource areas should be removed by hand (grubbed) prior to any herbicide application. This will help prevent any accidental contamination of the water resource areas by the herbicide.



Queen Anne's lace (*Daucus carota*), Canada thistle (*Cirsium arvense*), horsetail (*Equisetum arvense*), and blue bindweed (*Solanum dulcamara*) are also present and listed as nuisance plants on the Portland Plant List, which are somewhat detrimental to the mitigation but removal is not required.

#### *Planting Requirements*

Three trees species are proposed for both the offsite mitigation areas at Fields Bridge Park and the Willamette Falls Drive project site. The tree species proposed offsite include Douglas-fir, big-leaf maple, and red alder. The onsite enhancement area is proposed to be planted with red alder, big-leaf maple, and vine maple.

Offsite, the Douglas fir plantings should be heavily concentrated in Mitigation Area 4B and Mitigation Area 7. Both of these areas have suitable soils and existing Douglas-fir trees in the vicinity.

Big-leaf maples plantings are appropriate in offsite Mitigation Areas 1 – 7 and throughout the onsite enhancement area. The big-leaf maples will provide excellent shade near water resource areas such as the Tualatin River and pond located in the southeast corner of the park.

Red alder trees are the most ubiquitous of all the proposed tree species proposed and may be planted in the onsite enhancement and any of the offsite mitigation areas. Red alders grow quickly and will help shade the other species in the first few years of growth.

The vine maple trees planted in the onsite enhancement area should be planted near the toe of the banks of the drainage and in areas that receive partial shade. Vine maple is a small tree that prefers moist soils and indirect sunlight however it is known to grow in open areas.

Four shrub species are proposed to be planted in the offsite mitigation areas. These species include snowberry, hazelnut, Indian plum, and tall Oregon grape. The snowberry, hazelnut, and sword fern are proposed in the onsite enhancement area.

The snowberry shrub prefers dry soils and partial sunlight. This shrub species will do well in most of the offsite mitigation areas, especially Mitigation Areas 4B and 7. Snowberry should be planted on the upper reaches of the stream banks in the onsite enhancement area. This species should be planted in clusters of 3 – 5 plants.

The hazelnut shrub is a common native species found in the region. This shrub prefers moist to dry soils and can thrive in various light conditions. Hazelnut can be planted in all of the offsite mitigation area and on the upper slopes of the onsite stream banks.

Tall Oregon grape is a suitable shrub planting at both the onsite and offsite locations because it prefers dry soils and full sunlight. Tall Oregon grape is also pleasing to the eye and provides berries for local wildlife. Existing tall Oregon grape shrubs were observed at the offsite mitigation site. This shrub would be best planted in offsite Mitigation Areas 2, 3, 4A, 5, and in most of the onsite enhancement area.



Indian plum is proposed in the offsite mitigation location but not in the onsite enhancement area. Indian plum is generally a tall, slender shrub that grows in moist soils and in partial sunlight conditions. It would be best planted in Mitigation Areas 1, 4A, 4B, and 7. The plant produces edible plums and existing individuals were observed during our site visits.

The invasive species should be controlled prior to any plantings. All the plantings should occur during the winter of 2006 – 2007.

### **Planting Schedule and Construction Sequence**

Dense planting with small stock is preferred to sparse planting with large stock. Plantings should be installed between February 1 and May 1, or between October 1 and November 15. When plantings must be installed outside these times, additional measures may be needed to assure survival. Plantings should be placed in groups ranging from three to seven of the same species to encourage massing. Groupings of different species can be placed next to each other, as long as the species are appropriate for the given hydrologic conditions.

Trees, shrubs, and groundcovers should be adequately mulched with an appropriate material (e.g. compost or straw) to retain moisture and discourage weed growth around newly installed plant material.

Planting trees, shrubs, and rhizomes will occur during the first winter upon completion of the site grading, but no later than the beginning of March. The mitigation area will be hydro seeded at the same time the shrubs and trees are planted.

The enhancement/mitigation site will be irrigated by using a temporary irrigation line. The line will be under ground with sprinkler heads at intervals of approximately 30 feet. The sprinklers may be adjusted to ensure that full coverage is provided but we recommend that 20-foot spraying radius be the average. The enhancement/mitigation site will be watered twice a month for 3 to 4 hours, during the evening. The intent of this system is not to pamper the plants but to give the adequate water to survive the summer months during the critical first years. Watering will also be temperature dependent. If the weather forecast calls for temperatures above 87 degrees Fahrenheit, the plants must be watered the night before.

### **Goals**

The goal of the enhancement plan is to enhance 32,074.45 sf (0.74 acres) at Fields Bridge Park and 17,480.21 sf of enhancement on the subject property. It is also a goal to replace low quality upland such as the existing onsite Vegetated Corridor, with an Vegetated Corridor that provides high functional capacity and values of functions.

### **Objectives**

The objective is to replace a low to moderate-quality Vegetated Corridor to a high value and functional Vegetated Corridor at both the project site and the enhancement areas in Fields Bridge Park.



The enhancement areas will be created to provide wildlife habitat and thermoregulation functions for the Tualatin River, and the onsite drainage way and wetland.

#### **Success Criteria**

A survivorship of 80% is proposed for the tree and shrub plantings after three years. Invasive species should not exceed 20% cover.

#### **Mitigation Monitoring**

A three-year monitoring effort of the mitigation area is proposed. The monitoring biologist will complete a field investigation of the site and submit an annual written report to the City of West Linn.

The following explains the timing of the monitoring, the photograph documentation, and the vegetation assessment.

##### *Timing*

The monitoring methods will involve a yearly site visit from the monitoring biologist to inspect the sites and do a stem count and species inventory. This should be at the middle of the growing season (near the end of August). If the plants of the mitigation sites appear to be stressed, the monitoring biologist may suggest irrigation during the summer months.

##### *Photographs*

Permanent photo-stations will be established at the mitigation sites. These photo points will be placed in such a way as to give an overview of the general condition of the site. These photo points will be shown on the mitigation plan.

##### *Vegetation Assessment*

Percent survivorship of woody species will be estimated by counting the dead of each species, and then subtracting that number from the number planted. This number will be divided by the number planted, then multiplied by 100 to obtain the percentage of survivorship.

Canopy cover or herbaceous species (Quadrat sampling) will be estimated by the monitoring biologist using five one sq. micro-plots.



**Table 1. Performance Standards, Monitoring Methods, Contingencies**

Performance Standard	Monitoring Methods	Contingency
Survival of planted species	Stem Counts Species inventory	Plant additional vegetation, weed control, substrate amendment, herbivore control
Herbaceous cover	Arial cover (quadrant sampling)	Plant additional vegetation, weed control, substrate amendment, herbivore
Woody cover	Arial cover (line intercept sampling) Arial cover (belt- transect or large area plot sampling)	Plant additional vegetation, weed control substrate amendment, herbivore control

### **Contingency Plan**

Numerous problems can prevent a mitigation area from developing as proposed. Contingency measures will be designed and implemented once the problems have been identified. Possible corrections include animal disturbances, or incorrect species for the local conditions. The vegetation will be monitored by the project biologist. If, during the monitoring process problems are identified corrective measures will be determined and implemented. If survival of planted individuals proves to be inadequate then additional vegetation and/or weed control will be needed to insure the 80% survival at the end of the three years. Herbivore control may also be needed.

Plant mortality may come from many causes. The main causes are weak nursery stock and water stress. If survivorship of any planted species falls below 80%, the cause of the mortality will be assessed. If the mortality is due to inappropriate placement of the plant in relation to the hydrology of the site, adjustments to the replanting site will be recommended by the monitoring biologist. In the event of weak nursery stock, the mortality should be immediately evident (within a few days) and should be detected in the review of the planting.

The contingency measures for herbivory and plant mortality (often linked) are to replant the affected plants and protect them. Plantings can be surrounded by plant cages formed by 3' chicken wire to protect them from damage from beavers and nutria. If the individual plant cages are not sufficient to deter the beavers, fencing the entire area with 3' chicken wire may be needed to ensure success of the site. If small rodent girdling of the plantings is the problem, the base of the tree may need to be protected with a rodent guard.

In the event of an extended drought, irrigation may be necessary to ensure establishment of the plantings. If mortality is due to water stress, watering of the site will be done up to 7 times during the period from July 1 to August 31.

Invasive species will be controlled before planting takes place. If cover of invasive species becomes greater than 20%, more dramatic control measures will need to take place. These include cutting the



canes of Himalayan blackberry in summer and applying, by painting or daubing (not spraying) new sprouts with an herbicide approved for use near water and in wetlands. This application should be done in 2 months after cutting and again in late summer or early fall (if needed). Reed canary grass will be sprayed with Rodeo prior to any excavation. Areas not graded will also be sprayed. Follow-up treatments will occur on an as-needed basis.

Dense native herbaceous vegetation and the development of a healthy tree and shrub layer will help control establishment of reed canary grass, however, if stands do establish, immediate measures should be taken to ensure control of this species. Close mowing of the grass and direct application of approved herbicide should keep the grass from overtaking the mitigation area.

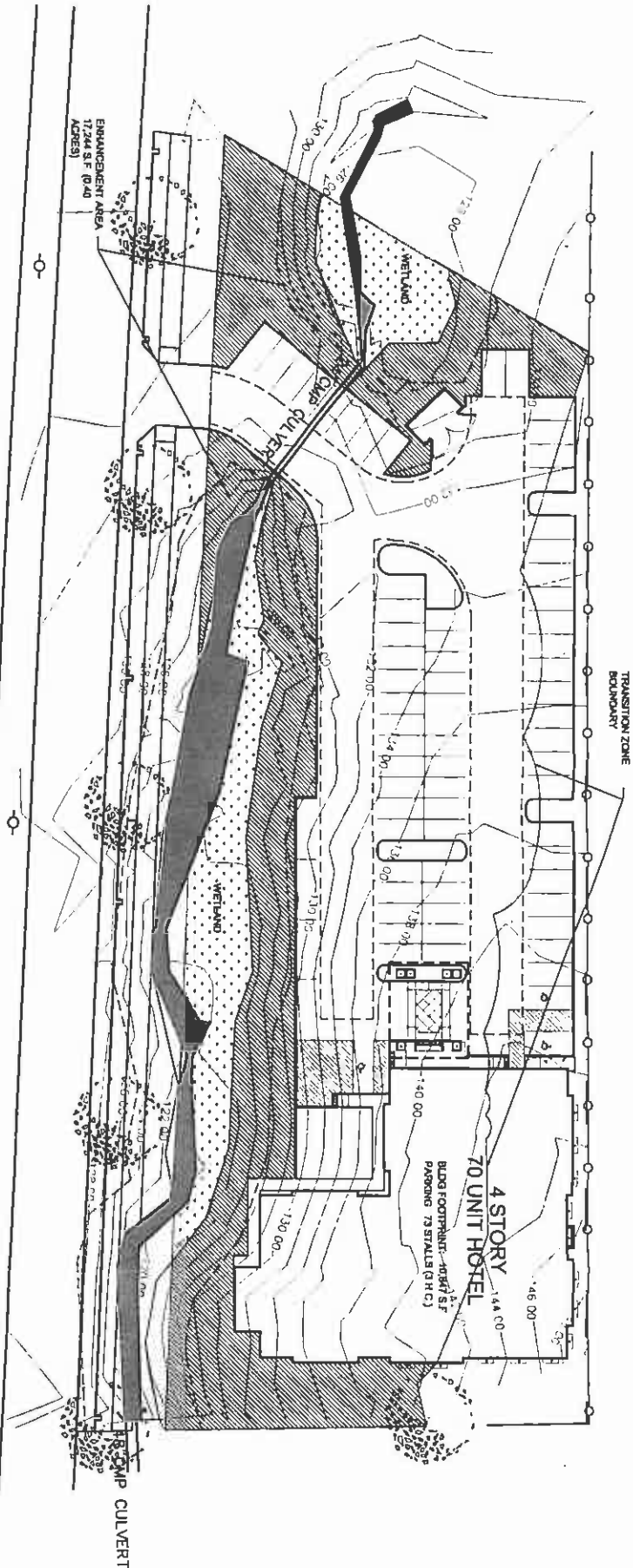


## **APPENDIX D: Onsite Enhancement Area**

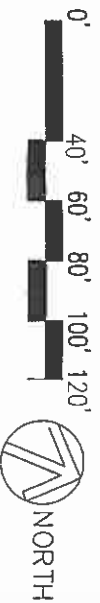


# INTERSTATE 205

TRANSITION ZONE  
BOUNDARY



WETLAND MAP AND SURVEY PROVIDED BY BURTON ENGINEERING (PLS)  
ONSITE ENHANCEMENT AREA - HOLIDAY INN EXPRESS  
WEST LNN, OREGON - PROJECT #1920

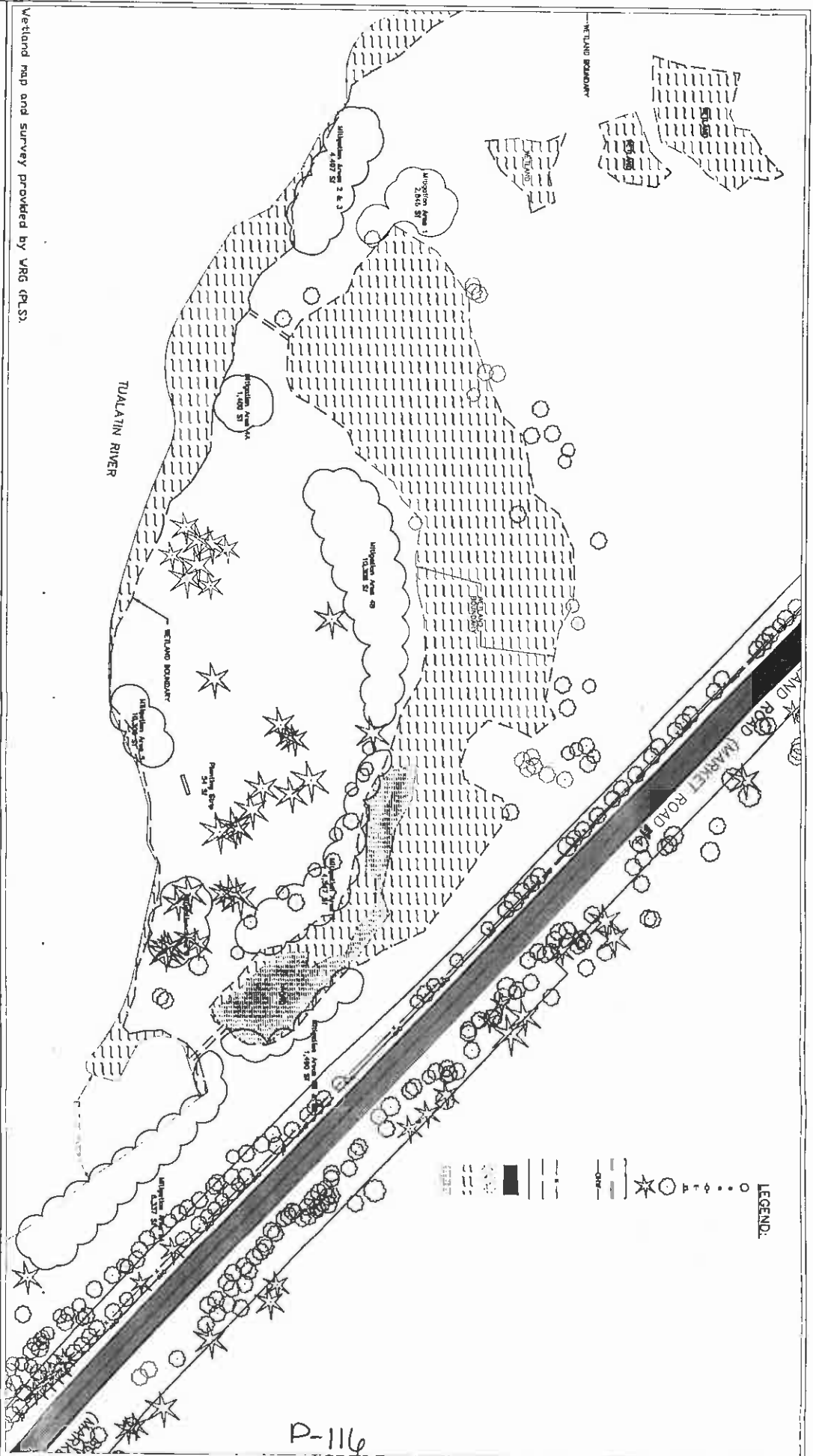




## APPENDIX E: Offsite Mitigation Areas

P-115





OFFSITE MITIGATION AREAS - FIELDS BRIDGE PARK, WEST LINN, OR

P-116



## APPENDIX F: Planting Legends

P-117



**Mitigation/Enhancement Planting Plan for the Holiday Inn Express**  
**Willamette Falls Drive, West Linn, Oregon**  
**17,480.21 sf (0.40 acres)**

Plant Communities	Plant Category	Water Requirements	Light Requirements	Minimum Rooting Size	Minimum Plant Height	On Center/ Seeding rate	Spacing Format	Qty.
Red alder ( <i>Alnus rubra</i> )	Tree	Moist	Sun	1 gal.	3'	10'	Single	58
Big-leaf maple ( <i>Acer macrophyllum</i> )	Tree	Dry	Sun	2 gal.	3'	10'	Single	58
Vine maple ( <i>Acer circinatum</i> )	Tree	Moist	Part	2 gal.	2'	10'	Single	59
Hazelnut ( <i>Corylus cornuta</i> )	Shrub	Dry	Part	1 gal.	1.5'	5'	Single	174
Common snowberry ( <i>Symphoricarpos albus</i> )	Shrub	Dry	Part	1 gal.	1.5'	5'	Cluster (3-5)	450
Tall Oregon grape ( <i>Mahonia aquifolium</i> )	Shrub	Dry	Sun	1 gal.	6"	5'	Single	250
Blue wild rye ( <i>Elymus glaucus</i> )	Grass	Dry	Part	Seed	n/a	Variable	Mass	60%
Native red fescue ( <i>Festuca rubra</i> var. <i>rubra</i> )	Grass	Dry	Part	Seed	n/a	Variable	Mass	30%
Large leafed lupine ( <i>Lupinus polyphylus</i> )	Grass	Moist	Shade	Seed	n/a	Variable	Mass	10%



**PLANTING LEGEND  
FOR OFFSITE MITIGATION  
FIELDS BRIDGE PARK  
32,074 sf (0.74 acres)**

Plant Communities	Plant Category	Water Requirements	Light Requirements	Minimum Rooting Size	Minimum Plant Height	On Center/ Seeding rate	Spacing Format	Qty.
<b>Riparian Forest (RF)</b>								
Douglas fir ( <i>Pseudotsuga menziesii</i> )	Tree	Dry	Sun	2 gal.	3'	12'	Single	122
Red alder ( <i>Alnus rubra</i> )	Tree	Moist	Sun	2 gal.	2'	12'	Single	100
Big-leaf maple ( <i>Acer macrophyllum</i> )	Tree	Dry	Sun	2 gal.	3'	12'	Single	100
Hazelnut ( <i>Corylus cornuta</i> )	Shrub	Dry	Part	1 gal.	2"	8'	Cluster	267
Snowberry ( <i>Symphoricarpos albus</i> )	Shrub	Dry	Part	1 gal.	1.5'	4'	Clusters of 15	1069
Indian plum ( <i>Oemleris cerasiformis</i> )	Shrub	Moist	Shade	2 gal.	2'	8'	Single	267
Tall Oregon grape ( <i>Mahonia aquifolium</i> )	Shrub	Dry	Sun	1 gal.	6"	5'	Single	428

P-119



**PLANTING LEGEND  
FOR OFFSITE MITIGATION  
FIELDS BRIDGE PARK  
32,074 sf (0.74 acres)**

Plant Communities	Plant Category	Water Requirements	Light Requirements	Minimum Rooting Size	Minimum Plant Height	On Center/ Seeding rate	Spacing Format	Qty.
<b>Riparian Forest (RF)</b>								
Native California brome ( <i>Bromus carinatus</i> )	Grass	Dry	Sun	Seed	NA	15-30 lbs/acre	Mass	NA
Blue wildrye ( <i>Elymus glaucus</i> )	Grass	Dry	Part	Seed	NA	15-30 lbs/acre	Mass	NA
Lupine ( <i>Lupinus albicaulus</i> )	Herb	Dry	Sun	Seed	NA	15-30 lbs/acre	Mass	NA
Western yarrow ( <i>Achillea millefolium</i> )	Herb	Dry to moist	Part	Seed	NA	15-30 lbs/acre	Mass	NA

P-128



## APPENDIX G: Slope Map

P-121





11000 NE 33<sup>rd</sup> Place, Suite 101  
Bellevue, WA 98004-1460

425.827.3252 phone  
425.889.9174 fax  
e-mail: [steve@spe-architects.com](mailto:steve@spe-architects.com)

---

Willamette Neighborhood Association  
1852 - 4<sup>th</sup> Ave  
West Linn OR 97068

October 23, 2008

Dear W.N.A.,

The owner of the proposed Holiday Inn Express has asked me (Steven P. Elkins Architects) to do everything I can to save the existing Oak tree. I am happy to say that we have come up with a revised site plan that does just that. The old plan showed the building only 5'-0" from the East property line while this new plan shows the building 28'-0" from the East property line. Not only will this allow us to save the tree but it also allows significant landscaping between the building and the property to the East.

We have asked W.N.A. president Beth Kieres to distribute this bulletin to the neighborhood association to keep you up to date. If there are any questions or comments, let us know. Otherwise, we will see you all at the planning commission meeting.

We look forward to working with the Neighborhood Association as we progress through this process.

Best Regards,

Brad Kaul, AIA  
Steve Elkins Architects Inc P.S.  
On behalf of Vic Patel, property owner

P-122





1100 N.E. 1st Ave. Suite 100  
Portland, Oregon 97232  
TEL: 503.222.1111  
FAX: 503.222.1111

Member, American Institute  
of Architects

Project Name: \_\_\_\_\_  
Client: \_\_\_\_\_  
Date: \_\_\_\_\_

Design Team:  
Designer: \_\_\_\_\_  
Checker: \_\_\_\_\_  
In-charge: \_\_\_\_\_  
Project Manager: \_\_\_\_\_  
Architect: \_\_\_\_\_  
Engineer: \_\_\_\_\_  
Surveyor: \_\_\_\_\_  
Landscape Architect: \_\_\_\_\_  
Civil Engineer: \_\_\_\_\_  
Mechanical Engineer: \_\_\_\_\_  
Electrical Engineer: \_\_\_\_\_  
Structural Engineer: \_\_\_\_\_  
Other: \_\_\_\_\_

Owner: \_\_\_\_\_  
Vic Patel

12700 SE 14th Avenue  
Maple Ridge, OR 97222

Project: \_\_\_\_\_  
Holiday Inn Express  
2400 Birch Willamette Falls  
West Linn, OR 97138

Site: \_\_\_\_\_  
Date: \_\_\_\_\_  
Scale: \_\_\_\_\_  
Sheet: \_\_\_\_\_

1. 1/4" = 1'-0"

2. 1/8" = 1'-0"

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## Soppe, Tom

**From:** Brad Kaul [bradkaul@spe-architects.com]  
**Sent:** Wednesday, October 22, 2008 11:19 AM  
**To:** Soppe, Tom  
**Subject:** Re: alt site plan  
**Attachments:** 0800 A0-1 Site Plan.pdf

rec'd 10-22

Tom,  
I am going to stop by on Friday.

I am in the process of redoing all of the submittals to reflect the new site plan. I have completed the Site Plan and Landscape Plan.

The wetland reports are completed (they are virtually identical except for the area of enhancement/resource area swapped 200 s.f. +/-). We are already proposing to mitigate an extra 9,000 s.f. so this is mute and an insignificant change.

The Civil drawings should be done today.

I am also redesigning the trash area to get out of the 15'-0" setback. Attached is a copy of the plan.

Also, I have talked with the neighborhood association and they are going to publish a bulletin that will inform everybody of the proposed changes to save the tree and address some of the concerns that had been left unresolved at the meeting.

Last, we cannot afford to delay the meeting. The constant delays and last minute issues coming from the city is not right.

Brad Kaul, AIA  
Steven P. Elkins Architects  
11000 NE 33rd Place, Suite #101  
Bellevue, WA 98004  
P:425-827-3252  
F:425-889-9174

----- Original Message -----

**From:** Soppe, Tom  
**To:** Soppe, Tom ; Brad Kaul  
**Cc:** Steve Elkins Office ; Vic Patel (private) ; Brown, Bryan  
**Sent:** Wednesday, October 22, 2008 10:55 AM  
**Subject:** RE: alt site plan

Brad, Vic,

Have you decided whether to postpone to allow everything to be redone as a referendum on the new site plan instead of the old, as discussed below? That is what we recommend and it would prevent us from starting a hearing on the old one if the old one is becoming irrelevant anyway.

Thanks for keeping me updated,

Tom Soppe  
Associate Planner  
City of West Linn  
22500 Salamo Road

P-124

10/28/2008





INTERSTATE 205 R.O.W.

LANDSCAPE 1700 SF

4 STORY  
70 UNIT HOTEL

REDGE TOPRINT 10475 SF  
PARKING 72 STALLS (1764)

138.5' F.F.

EXISTING WHITE OAK

P 125

WILLAMETTE FALLS DRIVE

MEDIAN

WILLAMETTE FALLS DRIVE

7TH STREET

SITE PLAN

SINGLE FAMILY HOMES

RECEIVED

OCT 22 2008

PLANNING & BUILDING  
CITY OF WEST LINN  
INT. TIME

Vic Patel

ALTERNATE  
SITE PLAN

A0.1

0' 10' 15' 20' 25' 30'

PERMIT



**Soppe, Tom**

**From:** Brown, Bryan  
**Sent:** Monday, October 20, 2008 2:16 PM  
**To:** Soppe, Tom  
**Subject:** FW: WNA Minutes October

Please add these comments to the Hotel application record. Thanks.  
Bryan

**From:** Wyatt, Kirsten  
**Sent:** Monday, October 20, 2008 1:09 PM  
**To:** Brown, Bryan  
**Subject:** FW: WNA Minutes October

~~~~~  
Kirsten Wyatt  
City of West Linn  
[kwyatt@westlinnoregon.gov](mailto:kwyatt@westlinnoregon.gov)  
(t) 503-657-0331  
(f) 503-650-9041  
<http://westlinnoregon.gov>



**From:** WNA [mailto:[willametteneighborhood@gmail.com](mailto:willametteneighborhood@gmail.com)]  
**Sent:** Monday, October 20, 2008 12:31 PM  
**To:** Wyatt, Kirsten  
**Subject:** Fwd: WNA Minutes October

Kirsten, I have more comments for the Holdiay Inn. Thank you.\

Beth

----- Forwarded message -----  
**From:** Vicki Handy <[vickihandy@aol.com](mailto:vickihandy@aol.com)>  
**Date:** Mon, Oct 20, 2008 at 11:21 AM  
**Subject:** Re: WNA Minutes October  
**To:** [willametteneighborhood@gmail.com](mailto:willametteneighborhood@gmail.com)

Elizabeth -

Could you possibly resend in an earlier Word doc. I cannot open the Word 07 version. I look forward to reviewing the minutes. Coming to the meetings is difficult for us because the West Linn Boy Scout Troop 149 meets each Wednesday night.

I really appreciate the extra effort.

Regarding the Holiday Inn Express: I feel very uncomfortable with this addition to the 10th Street Exit

P-126

10/20/2008



area. The traffic is already a serious problem and the new marketplace is not even in full operations. Unless we have a new on/off ramp scenario, I frankly don't think our current infrastructure can manage it. Also, I live off of Willamette Falls Drive. Already there are days that I cannot get onto the road because it is so congested. I am all for supporting the economic growth of Willamette, but I would rather focus on the existing businesses and all of the vacant business spaces than to support a new large structure. Please include my comments in the Nov. 5th meeting.

Sincerely,  
Vicki Handy

-----Original Message-----

From: WNA <[willametteneighborhood@gmail.com](mailto:willametteneighborhood@gmail.com)>

To: Beth Kieres <[kierese@comcast.net](mailto:kierese@comcast.net)>

Sent: Fri, 17 Oct 2008 8:16 pm

Subject: WNA Minutes October

Dear WNA,

Please view attached minutes from the October meeting of the WNA. In addition to the information in the minutes I would like to take the opportunity to update you on events going on in our neighborhood.

One important event is an upcoming public hearing on Wednesday November 5, 2008 starting at 7pm in the Council Chambers of City Hall. At that meeting the Planning Commission will be hearing the proposed Holiday Inn Express by VKNW, Inc. Design Review, Water Resources Area Permit, Class II Variance for the amount of square footage to be developed, and Class II Variance for removal of the only significant tree on the property are to be presented. The neighborhood did submit notes to the Planning Commission from the meeting in September. Those minutes can be viewed on the city website.

Another land use issue coming up pertains to the property owned by Joe Mitchoff at 2150-70-72 13th Street in West Linn, directly behind the Albertsons off Blankenship road. They are submitting a design review and land use application and will be presenting at the November WNA meeting on 11/12/08 at 7pm at the Pacific West Bank in Willamette Marketplace.

Finally, if you haven't had the chance to go down to Willamette Park and view the new Centennial Path please go see it. It turned out great. The path will be adorned with native trees and a few benches that can be donated by individuals, families, or businesses. If anyone is interested in this please contact James Manning at [jmann1066@aol.com](mailto:jmann1066@aol.com)

--

Sincerely,  
Elizabeth Kieres, President  
Willamette Neighborhood Association

---

BUY *Indiana Jones and the Kingdom of the Crystal Skull* on DVD today!

P-127

10/20/2008



ADDITIONAL  
EXHIBITS SEE PAGE  
44 AND ABOVE OF  
NOVEMBER 5, 2008  
STAFF REPORT