



City of Tualatin

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June 13, 2016

CITY ENGINEER'S REVIEW FINDING AND DECISION FOR AR16-0004, TUALATIN WEST REMODEL

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I. RECOMMENDATION

Based on the FINDING presented, the City Engineer approves the preliminary plans of AR16-0004, Tualatin West Remodel with the following conditions:

A. PRIOR TO ISSUANCE OF BUILDING PERMITS:

- PFR-1 Obtain a City of Tualatin erosion control permit in accordance with code section TMC 3-5-060.
- PFR-2 Submit PDFs of final site and permit plans.
- PFR-3 Submit for and obtain a Flood Hazard Area Development Permit based on the latest FIRM and a Base Flood Elevation of 127.9 feet based on NAVD 1988, including a 1st elevation certificate with survey, plans that show proposed development indicated that balanced cut and fill will be maintained, and conforming to construction requirements including TDC 70.170 through 70.180).
- PFR-4 Submit plans that show the centerline of Nyberg Creek and 15 feet on the development's side of the creek on site plans.

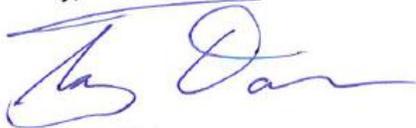
B. PRIOR TO A CERTIFICATE OF OCCUPANCY:

- PFR-5 The applicant shall complete all private improvements.
- PFR-6 Submit a last elevation certificate that shows the as-built construction with photos.
- PFR-7 Grant a dedication of the Nyberg Creek Greenway as cited in TDC 72.030(3).

II. APPEAL

Requests for review of this decision must be received by the Engineering Division within the 14-day appeal period ending on **June 27, 2016 at 5 PM**. Issues must have been described with adequate clarity and detail with identification of the associated Tualatin Municipal or Development Code section to afford a decision maker an opportunity to respond to the issue. A request for review must be submitted on the form provided by the City, as detailed in TDC 31.076, and signed by the appellant.

Sincerely,

A handwritten signature in blue ink, appearing to read "Tony Doran".

Tony Doran, EIT
Engineering Associate

III. STANDARDS AND APPLICABLE CRITERIA

Tualatin Municipal Code (TMC)

Title 03: Utilities and Water Quality

Tualatin Development Code (TDC)

Chapter 70: Flood Plain District (FP)

Chapter 72: Natural Resource Protection Overlay District (NRPO)

Chapter 73: Community Design Standards

Chapter 74: Public Improvement Requirements

IV. CONCLUSIONS

A. TMC TITLE 03: UTILITIES AND WATER QUALITY

I. TMC 3-5 ADDITIONAL SURFACE WATER MANAGEMENT STANDARDS

1. TMC 3-5-010 POLICY.

It is the policy of the City to require temporary and permanent measures for all construction projects to lessen the adverse effects of construction on the environment. The contractor shall properly install, operate and maintain both temporary and permanent works as provided in this chapter or in an approved plan, to protect the environment during the term of the project. In addition, these erosion control rules apply to all properties within the City, regardless of whether that property is involved in a construction or development activity. Nothing in this chapter shall relieve any person from the obligation to comply with the regulations or permits of any federal, state, or local authority...

2. TMC 3-5-050 EROSION CONTROL PERMITS.

(1) Except as noted in subsection (3) of this section, no person shall cause any change to improved or unimproved real property that causes, will cause, or is likely to cause a temporary or permanent increase in the rate of soil erosion from the site without first obtaining a permit from the City and paying prescribed fees...

3. TMC 3-5-060 PERMIT PROCESS.

(1) Applications for an Erosion Control Permit. Application for an Erosion Control Permit shall include an Erosion Control Plan which contains methods and interim facilities to be constructed or used concurrently and to be operated during construction to control erosion. The plan shall include either:

(a) A site specific plan outlining the protection techniques to control soil erosion and sediment transport from the site to less than one ton per acre per year as calculated using the Soil Conservation Service Universal Soil Loss Equation or other equivalent method approved by the City Engineer, or

(b) Techniques and methods contained and prescribed in the Soil Erosion Control Matrix and Methods, outlined in TMC 3-5.190 or the Erosion Control Plans - Technical Guidance Handbook, City of Portland and Unified Sewerage Agency, January, 1991.

(2) Site Plan. A site specific plan, prepared by an Oregon registered professional engineer, shall be required when the site meets any of the following criteria:

- (a) greater than five acres;**
- (b) greater than one acre and has slopes greater than 20 percent;**
- (c) contains or is within 100 feet of a City-identified wetland or a waterway identified on FEMA floodplain maps; or**
- (d) greater than one acre and contains highly erodible soils.**

FINDING:

The applicant has submitted plans that indicate small areas of disturbance within existing planters and trash area. The applicant will obtain a City of Tualatin Erosion Control Permit.

This criterion is satisfied with conditions of approval PFR-1.

B. TDC CHAPTER 70: FLOODPLAIN DISTRICT (FP)

I. TDC SECTION 70.030 DEFINITIONS.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter most reasonable application...

(22) Substantial Improvement. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- (a) Before the improvement or repair is started; or...**

FINDING:

The applicant has indicated that the proposed project is not a "substantial improvement" because its value is less than 50% of the current market value of the property. The Architectural Review application indicated the value of improvements as \$47,000 and Washington County's Market Bldg Value is indicated at \$1,021,140, therefore the improvements are approximately 5% of the structure's value and not considered substantial for this section of code.

This criterion is satisfied.

II. TDC SECTION 70.110 DEVELOPMENT PERMIT REQUIRED.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established by TDC 70.050. The permit shall be for all structures, including manufactured homes, as set forth in the "Definitions," and for all other development, including fill and other activities, also as set forth in the "Definitions."

I. TDC SECTION 70.120 APPLICATION FOR DEVELOPMENT PERMIT.

Application for a development permit shall be made on forms furnished by the City Engineer and may include, but not be limited to, plans in duplicate, drawn to scale, showing the nature, location, dimensions and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:

- (1) Elevation, in relation to mean sea level, of the lowest floor (including basement) of all structures;
- (2) Elevation, in relation to mean sea level, to which any structure has been flood proofed;
- (3) Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in TDC 70.180; and
- (4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

II. TDC SECTION 70.140 DUTIES AND RESPONSIBILITIES OF THE CITY ENGINEER.

Duties of the City Engineer shall include but not be limited to those listed in this Section.

- (1) Permit Review.
 - (a) Review all development permits to determine that the permit requirements of this Chapter have been satisfied.
 - (b) Review all development permits to determine that all necessary permits have been obtained from those Federal, State or local governmental agencies from which prior approval is required.
 - (c) Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of TDC 70.190(1) are met.
- (2) Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with TDC 70.050, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the City Engineer shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer TDC 70.180, SPECIFIC STANDARDS, and TDC 70.190 FLOODWAYS.
- (3) Information to Be Obtained and Maintained.
 - (a) Where base flood elevation data is provided through the Flood Insurance Study or as required under subsection (2), obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.

- (b) For all new or substantially improved flood proofed structures:**
 - (i) Verify and record the actual elevation (in relation to mean sea level); and**
 - (ii) Maintain the flood proofing certifications required by TDC 70.120(3).**
- (c) Maintain for public inspection all records pertaining to the provisions of this Chapter.**
- (4) Alteration of Watercourses.**
 - (a) Notify adjacent communities and the State coordinating agency (Department of Land Conservation and Development) prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.**
 - (b) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.**
- (5) Interpretation of FIRM Boundaries. Make interpretations when needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in TDC 70.150.**

III. TDC SECTION 70.170 GENERAL STANDARDS.

In all areas of special flood hazards, the following standards are required:

- (1) Anchoring.**
 - (a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.**
 - (b) All manufactured dwellings must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques.)**
- (2) Construction Materials and Methods.**
 - (a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.**
 - (b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.**
 - (c) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.**
 - (d) AH Zone Drainage. Adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.**
- (3) Utilities.**
 - (a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.**
 - (b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.**

- (c) On-site waste disposal systems shall be located so as to avoid impairment to them or contamination from them during flooding.**

IV. TDC SECTION 70.180 SPECIFIC STANDARDS.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in TDC 70.050, "BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD," or TDC 70.140(2), "USE OF OTHER BASE FLOOD DATA," the following provisions are required:

(2) Nonresidential Construction.

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated at least one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

- (a) Be floodproofed so that below the base flood level the structure is watertight, with walls substantially impermeable to the passage of water.**
- (b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.**
- (c) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and review of the structural design, specifications and plans. Such certification shall be provided to the official as set forth in TDC 70.140(3)(b).**
- (d) Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - (i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.**
 - (ii) The bottom of all openings shall be no higher than one foot above grade.**
 - (iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.****
- (e) Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).**

FINDING:

This site includes zones "AH" floodplain base flood elevation of 123 feet based on FEMA FIRM 410227 0002 D, dated February 19, 1987. The submitted elevation certificate substantiates that the top of bottom floor is at 122.05 feet based on the 1929 NGVD datum. A revision to the FIRM has been determined by FEMA and as responsible managers of the local floodplain the best known information will be used. This revision shows the Base Flood Elevation for this building to be 127.9 feet based on the NAVD 1988. To compare to the 1929 datum to 1988 within Tualatin, one add 3.52 feet to convert, therefore the top of bottom floor is equivalently 125.57 feet. The structure is 2.33 feet beneath the floodplain.

The applicant will obtain a Flood Hazard Area Development Permit (FHADP) based on the latest FIRM. The FHADP requires a 1st elevation certificate (with survey, plans that shows proposed development indicated that balanced cut and fill will be maintained to the Base Flood Elevation of 127.9 feet, and conforms to construction requirements including TDC 70.170 through 70.180) prior to a building permit and a last elevation certificate (that shows the as-built construction with photos) prior to occupancy.

This criterion is satisfied with conditions of approval PFR-3 and -6

C. TDC CHAPTER 72: NATURAL RESOURCE PROTECTION OVERLAY DISTRICT (NRPO)

I. TDC 72.030 (3) CREEK GREENWAYS (NRPO-GC)

- (a) Except as provided in Subsections (b-d), the NRPO-GC District shall have a width of 50 feet centered on the centerline of Hedges Creek from SW Ibach Street to the western boundary of the Wet-lands Protection District and from the eastern boundary of the Wetlands Protection District to the Tualatin River, and centered on Nyberg Creek from SW Tonka Street to the Tualatin River.**
- (b) The NRPO-GC District shall have a width of 30 feet centered on the centerline of Nyberg Creek from SW Boones Ferry Road to SW Tonka Street.**
- (c) Property owners on opposite sides of a creek may enter into a written agreement to allow the NRPO-GC District to be off-center, but in no case shall it be less than 15 feet on one side of the creek. Such agreement shall be binding on property owners, their heirs and assigns; shall be approved by City Council and shall be placed on permanent file with the City Recorder.**

II. TDC 72.060 DEVELOPMENT RESTRICTIONS IN GREENWAYS AND NATURAL AREAS.

- (1) Except as provided in Subsection (2), no building, structure, grading, excavation, placement of fill, vegetation removal, impervious surface, use, activity or other development shall occur within Riverbank, Creek and Other Greenways, and Wetland and Open Space Natural Areas.**
- (2) The following uses, activities and types of development are permitted within Riverbank, Creek and Other Greenways, and Wetland and Open Space Natural Areas provided they are designed to minimize intrusion into riparian areas:**

- (a) Public bicycle or pedestrian ways, subject to the provisions of TDC 72.070.**
 - (b) Public streets, including bridges, when part of a City approved transportation plan, and public utility facilities, when part of a City approved plan and provided appropriate restoration is completed.**
 - (c) Except in Wetland Natural Areas, private driveways and pedestrian ways when necessary to afford access between portions of private property that may be bisected by a Greenway or Open Space Natural Area.**
 - (d) Except in Creek Greenways and Wetland Natural Areas, outdoor seating for a restaurant within the Central Urban Renewal District, but outside of any sensitive area or its vegetated corridor.**
 - (e) Public parks and recreational facilities including, but not limited to, boat ramps, benches, interpretive stations, trash receptacles and directional signage, when part of a City-approved Greenway or Natural Area enhancement plan.**
 - (f) Landscaping, when part of a landscape plan approved through the Architectural Review process. City initiated landscape projects are exempt from the Architectural Review process. Landscaping in Greenways and Natural Areas shall comply with the approved Plant List in the Parks and Recreation Master Plan. When appropriate, technical advice shall be obtained from the Oregon Department of Fish and Wildlife, U.S. Soil Conservation Service, or similar agency, to ensure the proposed landscaping will enhance the preservation of any existing fish or wildlife habitats in the vicinity.**
 - (g) Wildlife protection and enhancement, including the removal of non-native vegetation and replacement with native plant species.**
 - (h) Except in Wetland Natural Areas, public boating facilities, irrigation pumps, water-related and water-dependent uses including the removal of vegetation necessary for the development of water-related and water-dependent uses, and replacement of existing structures with structures in the same location that do not disturb additional riparian surface.**
 - (i) In Wetland Natural Areas, perimeter mowing and other cutting necessary for hazard prevention.**
- (3) The City may, through the subdivision, conditional use, architectural review, or other development approval process, attach appropriate conditions to approval of a development permit. Such conditions may include, but are not limited to:**
- (a) Use of Greenways and Natural Areas for storm drainage purposes;**
 - (b) Location of approved landscaping, pedestrian and bike access areas, and other non-building uses and activities in Greenways and Natural Areas;**
 - (c) Setback of proposed buildings, parking lots, and loading areas away from the Greenway and Natural Area boundary.**
- (4) Greenways and Natural Areas in which an access easement is owned by the City, but retained in private ownership, shall be maintained by the property owner in their natural state and may only be modified if a landscape and maintenance plan complies with the approved Plant List in the Parks and Recreation Master Plan, and has been approved through the Architectural Review process or by the Parks and Recreation Director when Architectural Review is not required.**

(5) The Parks and Recreation Director shall be included as a commentor when a development application proposes dedication of Greenway or Natural Area property to the City or when development is pro-posed on Greenway or Natural Areas property maintained by the Parks and Recreation Department.

FINDING:

The applicant will show the centerline of Nyberg Creek and 15 feet on both sides of the creek on site plans. The applicant will grant a dedication of the Nyberg Creek Greenway as cited in TDC 72.030(3).

This criterion is satisfied with conditions of approval PFR-4 and -7.

A. TDC CHAPTER 73: COMMUNITY DESIGN STANDARDS

III. TDC SECTION 73.270 GRADING.

(1) After completion of site grading, top-soil is to be restored to exposed cut and fill areas to provide a suitable base for seeding and planting.

(2) All planting areas shall be graded to provide positive drainage.

(3) Neither soil, water, plant materials nor mulching materials shall be allowed to wash across roadways or walkways.

(4) Impervious surface drainage shall be directed away from pedestrian walkways, dwelling units, buildings, outdoor private and shared areas and landscape areas except where the landscape area is a water quality facility.

FINDING:

The applicant has submitted plans that indicate small areas of disturbance within existing planters and trash area. The applicant will obtain a City of Tualatin Erosion Control Permit.

This criterion is satisfied with conditions of approval PFR-1.

B. TDC CHAPTER 74: PUBLIC IMPROVEMENT REQUIREMENTS

IV. TDC SECTION 74.120 PUBLIC IMPROVEMENTS.

(1) Except as specially provided, all public improvements shall be installed at the expense of the applicant. All public improvements installed by the applicant shall be constructed and guaranteed as to workmanship and material as required by the Public Works Construction Code prior to acceptance by the City. No work shall be undertaken on any public improvement until after the construction plans have been approved by the City Engineer and a Public Works Permit issued and the required fees paid.

V. TDC SECTION 74.130 PRIVATE IMPROVEMENTS.

All private improvements shall be in-stalled at the expense of the applicant. The property owner shall retain maintenance responsibilities over all private improvements.

VI. TDC SECTION 74.140 CONSTRUCTION TIMING.

(1) All the public improvements required under this chapter shall be completed and accepted by the City prior to the issuance of a Certificate of Occupancy; or, for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.

(2) All private improvements required under this chapter shall be approved by the City prior to the issuance of a Certificate of Occupancy; or for subdivision and partition applications, in accordance with the requirements of the Subdivision regulations.

The applicant will construct all public and private improvements required by this development.

This criterion is satisfied with conditions of approval PFR-5.

**VII. TDC SECTION 74.650 WATER QUALITY, STORM WATER
DETENTION AND EROSION CONTROL.**

The applicant shall comply with the water quality, storm water detention and erosion control requirements in the Surface Water Management Ordinance. If required:

(1) On subdivision and partition development applications, prior to approval of the final plat, the applicant shall arrange to construct a permanent on-site water quality facility and storm water detention facility and submit a design and calculations indicating that the requirements of the Surface Water Management Ordinance will be satisfied and obtain a Stormwater Connection Permit from Clean Water Services; or

(3) For on-site private and regional non-residential public facilities, the applicant shall submit a stormwater facility agreement, which will include an operation and maintenance plan provided by the City, for the water quality facility for the City's review and approval. The applicant shall submit an erosion control plan prior to issuance of a Public Works Permit. No construction or disturbing of the site shall occur until the erosion control plan is approved by the City and the required measures are in place and approved by the City.

FINDING:

This redevelopment doesn't require any additional stormwater treatment or detention.

A CWS Service Provider Letter (SPL) indicating that no site assessment or service provider letter is required is included with the Architectural Review application and that this doesn't meet their definition for development.

A CWS Memorandum was received dated May 3, 2016 for development on this site that stated no further review is required by them and that the memo satisfies the requirement for a Stormwater Connection Permit Authorization Letter.

This criterion is satisfied.