



## Wilsonville City Hall Development Review Board Panel B

Monday, August 28, 2017 - 6:30 P.M.

I. **Call To Order:**

II. **Chairman's Remarks:**

III. **Roll Call:**

Aaron Woods Richard Martens Shawn O'Neil Samuel Scull Samy Nada

IV. **Citizen's Input:**

V. **Consent Agenda:**

**A. Approval of minutes of the June 26, 2017 meeting**

Documents:

[June 26 2017 Minutes.pdf](#)

VI. **Public Hearing:**

**A. Resolution No. 339**

**Coca Cola Parking: TreCore Construction Management LLC -Applicant for Swire Coca Cola - Owner.** The applicant is requesting approval of a Stage II Final Plan Revision, Site Design Review and Type C Tree Removal Plan for the addition of a parking area for approximately 23 passenger vehicle spaces at the southeast corner of Barber Street and Kinsman Road. The site is located on Tax Lot 103 of Section 14C, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon. Staff: Daniel Pauly

Case Files: DB17-0021 Stage II Final Plan Revision  
DB17-0022 Site Design Review  
DB17-0023 Type C Tree Removal Plan

Documents:

[DB17-0021 et seq SR.Exhibits.pdf](#)

**B. Resolution No. 340**

**Villebois Piazza Temporary Use Permit (TUP): Rudy Kadlub, Costa Pacific Communities - Applicant for RCS Villebois Development - Owner.** The applicant is requesting approval of a Class 3 Temporary Use Permit for existing mailboxes, one coffee cart and potentially up to six food carts in the future. The

subject site is located at the Villebois Piazza on Tax Lots 101, 102 and 2800 of Section 15AC, T3S, R1W, Clackamas County, Oregon. Staff: Charles Tso

Case File: DB17-0024 Class III Temporary Use Permit

Documents:

[DB17-0024 SR.Exhibits.pdf](#)

**C. Resolution No. 341**

**Marion's Carpet Warehouse: Bob Schatz, Allusa Architecture - Applicant for Bergaso Properties - Owner.** The applicant is requesting approval of a Stage I Preliminary Plan, Stage II Final Plan, Setback Waiver, Site Design Review, Class 3 Sign Permit and Type C Tree Plan for construction of a tilt-up slab warehouse with retail space on SW Boones Ferry Road. The subject property is located on Tax Lot 1300 of Section 14A, T3S, R1W, Clackamas County, Oregon. Staff: Kimberly Rybold

Case Files: DB17-0001 Stage I Preliminary Plan  
DB17-0002 Stage II Final Plan Revision  
DB17-0003 Setback Waiver  
DB17-0004 Site Design Review  
DB17-0005 Class 3 Sign Permit  
DB17-0006 Type C Tree Removal Plan

Documents:

[DB17-0001 et seq SR. Exhibits.pdf](#)  
[Exhibit B1 Applicant Materials.pdf](#)  
[Exhibit B2 Drawings and Plans.pdf](#)

**VII. Board Member Communications:**

**A. Recent City Council Action Minutes**

Documents:

[Recent City Council Action Minutes.pdf](#)

**VIII. Staff Communications:**

**IX. Adjournment**

Assistive Listening Devices (ALD) are available for persons with impaired hearing and can be scheduled for this meeting. The City will also endeavor to provide the following services, without cost, if requested at least 48 hours prior to the meeting.

- Qualified sign language interpreters for persons with speech or hearing impairments.
- Qualified bilingual interpreters.
- To obtain such services, please call the Planning Assistant at 503 682-4960



**DEVELOPMENT REVIEW BOARD MEETING**

**MONDAY, AUGUST 28, 2017**

**6:30 PM**

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V. Consent Agenda:

- A. Approval of minutes from the June 26, 2017  
DRB Panel B meeting

**Wilsonville City Hall  
29799 SW Town Center Loop East  
Wilsonville, Oregon**

**Development Review Board – Panel B  
Minutes–June 26, 2017 6:30 PM**

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**I. Call to Order**

Chair Shawn O’Neil called the meeting to order at 6:32 p.m.

**II. Chair’s Remarks**

The Conduct of Hearing and Statement of Public Notice were read into the record.

**III. Roll Call**

Present for roll call were: Shawn O’Neil, Richard Martens, Aaron Woods, Samy Nada, and Samuel Scull

Staff present: Daniel Pauly and Barbara Jacobson

**IV. Citizens’ Input** This is an opportunity for visitors to address the Development Review Board on items not on the agenda. There were no comments.

**V. Consent Agenda:**

A. Approval of minutes of May 22, 2017 meeting

**Daniel Pauly, Senior Planner**, stated Mr. Woods had noted on Page 11, the first sentence under Board Member Communications should be corrected to read, “Heberlein was elected as DRB Panel ~~B~~ A Chair.”

**Samuel Scull moved to approve the May 22, 2017 DRB Panel B meeting minutes as corrected. Samy Nada seconded the motion, which passed unanimously.**

**VI. Public Hearing:**

**A. Resolution No. 336 Meridian Creek Middle School Electronic Readerboard: West Linn-Wilsonville School District - Applicant/Owner.** The applicant is requesting approval of a Class 3 Sign Permit and Waiver to allow the previously approved manual change message center on the monument sign for Meridian Creek Middle School to be converted to a digital sign. The subject property is legally described as Tax Lot 2000 of Section 18, Township 3 South, Range 1 East, Willamette Meridian, City Of Wilsonville, Clackamas County, Oregon.  
Staff: Daniel Pauly

Case Files: DB17-0018 Class 3 Sign Permit with Waiver

The following items were entered into the record:

- Exhibit A3: Memorandum dated June 23, 2017 from Daniel Pauly in response to Exhibit B3 from the Applicant.
- Exhibit A4: Picture of two readerboard size options displayed at the back of the meeting room by Staff.
- Exhibit B3: Memorandum dated June 21, 2017 from Keith Liden, Bainbridge, regarding the requested modification and enlargement of the previously approved middle school sign.

**Chair O’Neil** called the public hearing to order at 6:36 p.m. and read the conduct of hearing format into the record. Aaron Woods, Richard Martens, Samy Nada, and Chair O’Neil declared for the record that

they had visited the site. No board member, however, declared a conflict of interest, bias, or conclusion from a site visit. No board member participation was challenged by any member of the audience.

**Daniel Pauly, Senior Planner**, announced that the criteria applicable to the application were stated on pages 1 and 2 of the Staff report, which was entered into the record. Copies of the report were made available to the side of the room.

**Mr. Pauly** presented the Staff report via PowerPoint, briefly reviewing and noting the project's location and surrounding features with these key comments:

- When the middle school came to DRB Panel A initially in February 2016, the school district elected to make the readerboard manual like most of the readerboards for Wilsonville schools. Because the Applicant now wished to switch to a digital readerboard, a waiver was required, so it was before the DRB. The Applicant was requesting one two additional waivers: one for the electronic changeable copy sign, and the other for the approximate 5 sq-ft sign area increase as noted in the memorandum sent out earlier in the week.
- After last month's discussion, and having been involved when the current Sign Code was adopted, he said he wanted to review the strange language the Code had under prohibited signs. Approximately 15 different types of signs were on the prohibited signs list, and two had particular language stating that digital readerboards were prohibited, but could be approved by the DRB: changeable copy signs and signs that moved in the wind, like the changeable banners approved via waiver through the DRB for World of Speed.
- In hindsight, the two types of prohibited signs probably should have been separated more clearly in the Code to differentiate between signs prohibited outright in all circumstances, and signs that could be approved if deemed appropriate and that satisfied the purpose of the Sign Code by meeting waiver criteria.
  - For the subject sign, a waiver and some specific conditions were required. One condition required automatic dimming technology. Because new technology resulted in brighter lighting even at the same wattage, this technology ensured that digital signs would have a similar brightness and visual impact as a static or backlit sign. Automatic dimming technology would allow for adjusting the light level on rainy days and also for adhering to the City's luminance limits.
- In addition, changing image and changeable copy were specifically defined in the Sign Code, but might not be readily understood. A changing image sign was outright prohibited and defined as a sign that through lighting or other means had the appearance of movement or copy change frequency of less than 15 minutes. A changeable copy sign with a copy frequency change of 15 minutes or more could be conditionally permitted by the DRB. That 15 minutes was significantly more than similar regulations in other jurisdictions, but it reflected the idea that these signs were equivalent of static signs, but the DRB needed to review them carefully to ensure that the conditions that would keep them of a similar impact to a static sign were met.
- He provided a brief history of why changes were made to the Sign Code in 2012, explaining that the changes enabled Staff to review and administer some sign and sign change approvals, while certain review and approvals were still required to come before the DRB, including monument signs more than 8-ft high and changeable copy signs.
- Due to concerns about how future technology changes might impact the community, the Planning Commission wanted to ensure the DRB could discuss whether to allow a changeable copy sign. However, the intent was not necessarily to prohibit the signs, but that was where it ended up in the Code. The language outside of the context of the Code heading made a lot more sense than looking at the actual Prohibited Code section heading; however, that was where it was and at the time, Staff did not see any reason to move it to a different section. After speaking with City Attorney Barbara Jacobson and Planning Director Chris

Neamtzu, it made sense to make some minor Code edits to clarify which of those signs was outright prohibited versus conditionally permitted.

- He noted that for any signs requiring a waiver, content could not be considered and the sign should not impact safety, but particularly traffic safety. The Board must consider whether the sign improved function and aesthetic design, and whether it would be as compatible and complementary as a sign that would be approvable without the waiver.
- As outlined in the Applicant's memorandum, it was not caught right away that the original sign design was actually over the allowed size limit.
  - For context, a building of this size in a commercial/industrial area would be allowed to have a 64 sq ft sign. When the Code was written, there was concern that size of sign would be too large in a residential area because schools were generally across the street or adjacent to residential areas, so a specific requirement limited any signs in the Public Facilities Zone, which included schools adjacent to residentially-zoned land, to 32 sq ft. However, the location of the subject sign was unique. Schools like Boeckman Creek, Boones Ferry, the high school, Wood Middle School, and Lowry, all had their signs in frontages directly adjacent to or across the street from residential developments.
    - The proposed middle school was unique in that a city park would be across the street in the future. It was also removed a bit from residential property to the north that was not expected to be developed anytime soon. Because the context of the proposed sign was different, Staff believed it made sense to allow it.
    - The Applicant wanted to keep the same technology throughout the school district so the readerboard could be operated consistently and easily by anyone. Any reduction required to get under the 32 sq ft mandate would come from the address portion of the sign, which could be done.
  - The main issue in looking at whether the function of the sign deserved a sign waiver was to look at the sign's legibility. He displayed a photo, entered into the record as Exhibit A4, to show the legibility of two different sign sizes, noting the 13.3 sq ft sign would be closer to the door, and the smaller 8 sq ft sign would be toward the windows. It was a difference of about 5 sq ft.
    - The school district said they could meet the Code, but all things being equal, the larger sign would be more legible and possibly more proportional to the rest of the sign. He also displayed a blow up of the proposed text to show how it would fit on the different sizes of sign.

**Samy Nada** asked if any other existing signs in the city ~~that~~ had been approved at the same size.

**Mr. Pauly** responded he was sure there were, but he had not done an inventory of signs that were 8 sq ft high and could not readily identify any. He confirmed the Code was the same as it had been on May 22, 2017. No Code amendments had been made since that date, so the Board was operating under the same parameters as the last meeting.

**Chair O'Neil** noted Mr. Pauly had mentioned a consideration of proposed Code changes and asked if it was likely those changes would be made.

**Mr. Pauly** responded he was not able to say at this point as it was very preliminary and had not been discussed with the decision-makers. The suggested changes would not really change the policy but would better reflect the legislative intent. Looking at the legislative intent always involved a three-pronged test: looking at the precise language in the regulation, the surrounding language to see if that provided clarification, and the legislative intent. In looking at the legislative record, it was clear that this was coming. Changeable copy signs were essentially allowed; the City Council wanted them reviewed carefully when they did come up, but not to necessarily prevent them entirely.

**Barbara Jacobson, City Attorney**, stated she had nothing to add and confirmed the Code was exactly as it was the last time these issues were discussed, and was what the Board would consider tonight as well.

**Chair O'Neil** called for the Applicant's presentation.

**Keith Liden, Bainbridge, 1000 SW Broadway, Suite 1700, Portland, OR, 97205**, stated Mr. Pauly had described the application quite thoroughly, so he would not go over anything there.

- He noted the memorandum dated June 21, 2017 was really as a follow up to when the Applicant was informed that the sign waiver also needed to address the sign area. The Applicant had not known that that would be an issue, and was only focused on the changeable readerboard sign when completing the initial application.
- When approaching the school on 63<sup>rd</sup>, the district wanted people to realize that the school parking lot was the driveway immediately adjacent to the sign and not to turn into the school, then have to backtrack and work their way around to the parking lot. The Applicant believed the additional size for the address portion of the sign was appropriate so it could be seen as people were coming down 63<sup>rd</sup> to give them more advance warning.
- He agreed the bigger sign's location was unique relative to residential properties. The sign would be approximately 400 ft or so east of the established residential area, the Landover subdivision on the west side of the school boundary. Additionally, an EFU property currently outside of the urban growth boundary (UGB) was located to the northwest. The sign was probably about 40 ft from the property line, but more than 400 ft from the current existing residence. As noted, a future community park was the intended use in the Public Facilities Zone across the street, so there were significant distances between the sign and any residential use, and the Applicant believed this small, additional area should not represent a problem in this specific case. He noted Section 4.15602(08)A did allow the DRB to grant a waiver for the proposed sign area request along with the readerboard sign.
- The Applicant believed the waiver request was a small departure from what the City's ordinance normally required, and that the additional size for the address would be beneficial in helping to identify the school and parking lot.

**Richard Martens** asked how far the sign would be located from Advance Rd.

**Mr. Liden** responded it was at least 400 ft. He had measured the distance from the sign to the house on the 5-acre parcel, which was about 400 ft, so the measurement to the road was probably 400 ft to 500 ft.

**Samuel Scull** asked if the sign was facing north/south.

**Mr. Liden** replied the sign was oriented so it could be read when traveling towards it on 63<sup>rd</sup> Ave, so people traveling north/south would be able to see it.

**Chair O'Neil** called for public testimony in favor of, opposed, and neutral to the application. Seeing none, he closed the public hearing at 7:01 pm.

**Samy Nada moved to accept the Staff report with the addition of Exhibits A3, A4, and B3, and approve Resolution No. 336 with Option 2, as described in Exhibit B3. Aaron Woods seconded the motion.**

**Aaron Woods** stated the signs displayed at the back of the room were pretty descriptive when looking at the smaller versus the larger one. He could see that the larger sign, especially when traveling down 63<sup>rd</sup> at night, would be more advantageous. From an aesthetic standpoint, the larger sign, in reference to the readerboard, would look much better.



**Mr. Nada** agreed, adding that the fact that the sign was away from the main streets and would only be visible to those going to the school or future city park gave him grounds to accept the application as proposed because as it would not be seen from main streets.

**Chair O'Neil** referred to his comments at the May 22, 2017 meeting, reiterating that he had a hard time with who the applicant was, even though he was supposed to ignore that. He noted that the City had not made any Code changes yet, as stated by Mr. Pauly. His concerns were clearly set forth in the minutes. He had a real problem with the precedent being set and with how the community would be reviewing the proposed sign if they knew it was in their neighborhood or if it was a different applicant. He was resubmitted those issues, as well as everything he had raised on May 22<sup>nd</sup>. He understood his colleagues' disagreement with him, noting it was important that there be changes, not a discussion; but until Staff and the City came up with that he would have to remain consistent with what he had stated previously.

**Mr. Pauly** clarified that Exhibits A3, B3, and A4 were to be entered into the record.

**The motion passed 4 to 1 with Chair O'Neil opposed.**

**Chair O'Neil** read the rules of appeal into the record.

## **VII. Board Member Communications**

### **A. Recent City Council Action Minutes**

**Daniel Pauly, Senior Planner**, highlighted the Council action minutes noting the adoption of the budget, as well as the Transit Master Plan and Frog Pond Master Plan, which would pave the way for both DRBs to hear some land use applications out in the Frog Pond area. He clarified that the Frog Pond Master Plan had been approved on first reading with direction for some clarification on one item and was expected to be approved at the next Council meeting.

**Barbara Jacobson, City Attorney** explained a special assessment needed to be imposed for the Frog Pond area to cover some of the infrastructure costs, and that was still to come before Council. Otherwise, the rest of the Frog Pond Master Plan was approved.

**Mr. Pauly** confirmed builders had been in touch with the planning office already and very much in touch with property owners in Frog Pond as well. Construction was not expected this summer as it was already too late, but applications were anticipated late this year or early next year for construction to begin next summer.

## **VIII. Staff Communications**

**Daniel Pauly, Senior Planner**, noted that he had been asked to get a photo of the Board after the meeting.

## **IX. Adjournment**

The meeting adjourned at 7:10 p.m.

Respectfully submitted,

Paula Pinyerd, ABC Transcription Services, Inc. for  
Shelley White, Planning Administrative Assistant

**DEVELOPMENT REVIEW BOARD MEETING**

**MONDAY, AUGUST 28, 2017**

**6:30 PM**

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**VI. Public Hearing:**

- A. Resolution No. 339. Coca Cola Parking: TreCore Construction Management LLC – Applicant for Swire Coca Cola - Owner.** The applicant is requesting approval of a Stage II Final Plan Revision, Site Design Review and Type C Tree Removal Plan for the addition of a parking area for approximately 23 passenger vehicle spaces at the southeast corner of Barber Street and Kinsman Road. The site is located on Tax Lot 103 of Section 14C, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon. Staff: Daniel Pauly

Case Files: DB17-0021 Stage II Final Plan Revision  
DB17-0022 Site Design Review  
DB17-0023 Type C Tree Removal Plan

**DEVELOPMENT REVIEW BOARD  
RESOLUTION NO. 339**

**A RESOLUTION ADOPTING FINDINGS AND CONDITIONS APPROVING A STAGE II FINAL PLAN REVISION, SITE DESIGN REVIEW AND TYPE C TREE REMOVAL PLAN FOR THE ADDITION OF A PARKING AREA FOR APPROXIMATELY 23 PASSENGER VEHICLE SPACES AT THE SOUTHEAST CORNER OF BARBER STREET AND KINSMAN ROAD. THE SITE IS LOCATED ON TAX LOT 103 OF SECTION 14C, TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN, CITY OF WILSONVILLE, CLACKAMAS COUNTY, OREGON. TRÉCORE CONSTRUCTION MANAGEMENT LLC – APPLICANT FOR SWIRE COCA COLA – OWNER.**

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated August 17, 2017, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel B at a scheduled meeting conducted on August 28, 2017, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report dated August 17, 2017, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations for:

DB17-0021, DB17-0022, DB17-0023 Class III Stage II Final Plan Revision, Site Design Review request, and Type C Tree Plan for additional vehicle parking spaces at Coca Cola.

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 28<sup>th</sup> day of August, 2017 and filed with the Planning Administrative Assistant on \_\_\_\_\_. This resolution is final on the 15<sup>th</sup> calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03)*.

\_\_\_\_\_  
Shawn O’Neil, Chair - Panel B  
Wilsonville Development Review Board

Attest:

\_\_\_\_\_  
**Shelley White, Planning Administrative Assistant**



Exhibit A1  
Staff Report  
Wilsonville Planning Division  
Coca Cola Parking Expansion 2017

Development Review Board Panel 'B'  
Quasi-Judicial Public Hearing

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<b>Hearing Date:</b>	August 28, 2017
<b>Date of Report:</b>	August 17, 2017

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<b>Application Nos.:</b>	DB17-0021 Stage II Final Plan Revision DB17-0022 Site Design Review DB17-0023 Type C Tree Removal Plan
<b>Request/Summary:</b>	The Development Review Board is being asked to review a Class 3 Stage II Final Plan Revision, Site Design Review, and Type C Tree Removal Plan
<b>Location:</b>	Southeast corner of Barber Street and Kinsman Road The property is specifically known as Tax Lot 0103, Section 14C, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon
<b>Owner:</b>	Swire Coca Cola
<b>Applicant</b>	TréCore Construction Management, LLC
<b>Comprehensive Plan Designation:</b>	Industrial
<b>Zone Map Classification:</b>	PDI (Planned Development Industrial)
<b>Staff Reviewers:</b>	Daniel Pauly AICP, Senior Planner Steve Adams PE, Development Engineering Manager Kerry Rappold, Natural Resources Program Manager
<b>Staff Recommendation:</b>	<u>Approve with conditions</u> the requested revised State II Final Plan, Site Design Review request, and Type C Tree Plan.

**Applicable Review Criteria:**

<b><u>Development Code:</u></b>	
Section 4.008	Application Procedures-In General
Section 4.009	Who May Initiate Application
Section 4.010	How to Apply
Section 4.011	How Applications are Processed
Section 4.014	Burden of Proof
Section 4.031	Authority of the Development Review Board
Subsection 4.035 (.04)	Site Development Permit Application
Subsection 4.035 (.05)	Complete Submittal Requirement
Section 4.110	Zones
Section 4.117	Standards Applying to Industrial Development in All Zones
Section 4.118	Standards Applying to Planned Development Zones
Section 4.135	Planned Development Industrial Zone (PDI)
Sections 4.133.00 through 4.133.05	Wilsonville Road Interchange Area Management Plan (IAMP) Overlay Zone
Section 4.140	Planned Development Regulations
Section 4.154	On-site Pedestrian Access and Circulation
Section 4.155	Parking, Loading, and Bicycle Parking
Section 4.167	Access, Ingress, and Egress
Section 4.171	Protection of Natural Features and Other Resources
Section 4.175	Public Safety and Crime Prevention
Section 4.176	Landscaping, Screening, and Buffering
Sections 4.199.20 through 4.199.60	Outdoor Lighting
Sections 4.300 through 4.320	Underground Utilities
Sections 4.400 through 4.440 as applicable	Site Design Review
Sections 4.600-4.640.20	Tree Preservation and Protection
<b><u>Other Planning Documents:</u></b>	
Wilsonville Comprehensive Plan	

## Vicinity Map



### Background/Summary:

Coca Cola has continued to expand in Wilsonville over the years and is currently in need of additional parking for employees. Coca Cola requests to add 23 vehicle parking spaces and associated improvement in the northwest portion of their property near the intersection of Barber Street and Kinsman Road. As the request involves the addition of more than 10 parking spaces the City's Development Code requires review by the Development Review Board.



## Traffic:

Traffic is expected to be minimally impacted by the additional parking area. A waiver to the traffic report requirement has been granted by the Community Development Director.

## Discussion Points:

### Review Process

While the proposal may seem relatively minor compared to the entire Coca Cola campus, Subsection 4.030 (.01) B. 1. limits administrative review to requests involving the addition or subtraction of ten or fewer parking spaces. The proposed addition of over 20 parking spaces thus requires DRB review.

## Conclusion and Conditions of Approval:

Staff has reviewed the Applicant's analysis of compliance with the applicable criteria. The Staff report adopts the applicant's responses as Findings of Fact except as noted in the Findings. Based on the Findings of Fact and information included in this Staff Report, and information received from a duly advertised public hearing, Staff recommends that the Development Review Board approve the proposed application (DB17-0021 through DB17-0023) with the following conditions:

### Planning Division Conditions:

#### Request A: DB17-0021 Stage II Final Plan Revision

**PDA 1.** The approved final plan control the issuance of all building permits and shall restrict the nature, location and design of all uses. Minor changes in an approved preliminary or final development plan may be approved by the Planning Director through the Class I Administrative Review Process if such changes are consistent with the purposes and general character of the development plan. All other modifications, including extension or revision of the stage development schedule, shall be processed in the same manner as the original application and shall be subject to the same procedural requirements. See Finding A11.

**PDA 2.** All travel lanes shall be constructed to be capable of carrying a twenty-three (23) ton load. See Finding A43.

**PDA 3.** The applicant shall perform an ADA parking audit to ensure the ratio of ADA spaces to total passenger vehicle spaces is 1 ADA space for every 50 spaces. If not met ADA spaces shall be created as needed. Such audit and any necessary addition of ADA spaces shall occur prior to use of the new parking area. See Finding A25.

#### Request B: DB17-0022 Site Design Review

**PDB 1.** Construction, site development, and landscaping shall be carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. Minor revisions may be approved by the Planning Director through administrative review pursuant to Section 4.030. See Finding B3.



<b>PDB 2.</b>	All landscaping required and approved by the Board shall be installed prior to use of the parking area, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City will be returned to the applicant. See Finding B11.
<b>PDB 3.</b>	The approved landscape plan is binding upon the applicant/owner. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, pursuant to the applicable sections of Wilsonville's Development Code. See Finding B12.
<b>PDB 4.</b>	All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered as allowed by Wilsonville's Development Code. See Findings B11.
<b>PDB 5.</b>	<p>The following requirements for planting of shrubs and ground cover shall be met:</p> <ul style="list-style-type: none"> <li>• Non-horticultural plastic sheeting or other impermeable surface shall not be placed under landscaping mulch.</li> <li>• Native topsoil shall be preserved and reused to the extent feasible.</li> <li>• Surface mulch or bark dust shall be fully raked into soil of appropriate depth, sufficient to control erosion, and shall be confined to areas around plantings.</li> <li>• All shrubs shall be well branched and typical of their type as described in current AAN Standards and shall be equal to or better than 2-gallon containers and 10" to 12" spread.</li> <li>• Shrubs shall reach their designed size for screening within three (3) years of planting.</li> <li>• Ground cover shall be equal to or better than the following depending on the type of plant materials used: gallon containers spaced at 4 feet on center minimum, 4" pot spaced 2 feet on center minimum, 2-1/4" pots spaced at 18 inch on center minimum.</li> <li>• No bare root planting shall be permitted.</li> <li>• Ground cover shall be sufficient to cover at least 80% of the bare soil in required landscape areas within three (3) years of planting.</li> <li>• Appropriate plant materials shall be installed beneath the canopies of trees and large shrubs to avoid the appearance of bare ground in those locations.</li> </ul>

	<ul style="list-style-type: none"> <li>Compost-amended topsoil shall be integrated in all areas to be landscaped, including lawns. See Finding B21.</li> </ul>
<b>PDB 6.</b>	All trees shall be balled and burlapped and conform in size and grade to “American Standards for Nursery Stock” current edition. See Finding B19.
<b>PDB 7.</b>	Plant materials shall be installed to current industry standards and be properly staked to ensure survival. Plants that die shall be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City. See Finding B23.
<b>PDB 8.</b>	The chosen pole light luminaires shall be less than 100 watts and mounted on poles 40 feet tall or less. The lighting shall comply with Oregon Energy Specialty Code, Exterior Lighting. See Finding B29.

**Request C: DB17-0023 Type C Tree Plan**

<b>PDC 1.</b>	This approval for removal applies only to the four trees identified in the Applicant’s submitted materials. All other trees on the property shall be maintained unless removal is approved through separate application.
<b>PDC 2.</b>	The Applicant shall submit an application for a Type ‘C’ Tree Removal Permit on the Planning Division’s Development Permit Application form, together with the applicable fee. In addition to the application form and fee, the Applicant shall provide the City’s Planning Division an accounting of trees to be removed within the project site, corresponding to the approval of the Development Review Board. The applicant shall not remove any trees from the project site until the tree removal permit, including the final tree removal plan, have been approved by the Planning Division staff.
<b>PDC 3.</b>	The Applicant/Owner shall install the two Douglas fir as shown in the applicant’s plan set, Exhibit B2, and in addition replace the proposed arborvitae in the new planter island with an appropriate deciduous parking lot tree, and plant one additional deciduous tree near the edge of the parking area. Deciduous trees shall be at least 2” caliper at planting, conifer trees at least 6’ in height at planting. All planted trees shall meet requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade. See Findings C9, C10, and C12.
<b>PDC 4.</b>	The permit grantee or the grantee’s successors-in-interest shall cause the replacement trees to be staked, fertilized and mulched, and shall guarantee the trees for two (2) years after the planting date. A “guaranteed” tree that dies or becomes diseased during the two (2) years after planting shall be replaced.
<b>PDC 5.</b>	Prior to site grading or other site work that could damage trees, the Applicant/Owner shall install six-foot-tall chain-link fencing around the drip line of preserved trees. The fencing shall comply with Wilsonville Public Works Standards Detail Drawing RD-1230. See Finding C14.

*The following Conditions of Approval are provided by the Engineering, Natural Resources, or Building Divisions of the City’s Community Development Department or Tualatin Valley Fire and Rescue, all of*

*which have authority over development approval. A number of these Conditions of Approval are not related to land use regulations under the authority of the Development Review Board or Planning Director. Only those Conditions of Approval related to criteria in Chapter 4 of Wilsonville Code and the Comprehensive Plan, including but not limited to those related to traffic level of service, site vision clearance, recording of plats, and concurrency, are subject to the Land Use review and appeal process defined in Wilsonville Code and Oregon Revised Statutes and Administrative Rules. Other Conditions of Approval are based on City Code chapters other than Chapter 4, state law, federal law, or other agency rules and regulations. Questions or requests about the applicability, appeal, exemption or non-compliance related to these other Conditions of Approval should be directed to the City Department, Division, or non-City agency with authority over the relevant portion of the development approval.*

**Natural Resources Division Conditions:**

<p><b>NR 1.</b> Natural Resource Division Requirements and Advisories listed in Exhibit C1 apply to the proposed development.</p>
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## **Master Exhibit List:**

The following exhibits are hereby entered into the public record by the Development Review Board as confirmation of its consideration of the application as submitted. This is the exhibit list that includes exhibits for Planning Case File DB17-0021 through DB17-0023.

### Planning Staff Materials

- A1.** Staff report and findings (this document)
- A2.** Staff's Presentation Slides for Public Hearing (to be presented at Public Hearing)

### Materials from Applicant

- B1.** Applicant's Narrative
- B2.** Drawings and Plans
- B3.** Preliminary Drainage Report
- B4.** Signed Application Form

### Development Review Team Correspondence

- C1.** Natural Resource Requirements and Advisories
- C2.** Traffic Report Waiver Letter dated July 26, 2017

**Procedural Statements and Background Information:**

1. The statutory 120-day time limit applies to this application. The application was received on June 29, 2017. On July 26, 2017 the application was deemed complete. The City must render a final decision for the request, including any appeals, by November 23, 2017.
2. Surrounding land uses are as follows:

Compass Direction	Zone:	Existing Use:
North:	PDI	SMART Central/WES Park and Ride
East:	PDI	Industrial
South:	PDI	Industrial
West:	PDI	Industrial

3. Previous Planning Approvals:

86PC31 Stage I and II/Build Phase I  
 87PC20 Stage I Modification/Build Phase II  
 87DR17 Site Design Review – Phase II  
 90AR35 Solid Waste Area  
 AR07-0030 Class I Administrative Review of Landscape Plan  
 DB08-0019 Stage I Modification  
 DB08-0020 Stage II  
 DB08-0021 Type “C” Tree Removal Plan  
 DB08-0022 Site Design Review – Phase III  
 DB16-0001 et. al. Warehouse Expansion 2016  
 AR16-0035 Cooling Tower and Landscape/Stormwater Revisions  
 AR16-0080 Minor Revisions to Parking Area and Related Landscaping  
 AR17-0016/TR17-0034 → Additional Truck Drive Lane off Kinsman Road and Additional Truck Parking

4. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

## Findings:

NOTE: Pursuant to Section 4.014 the burden of proving that the necessary findings of fact can be made for approval of any land use or development application rests with the applicant in the case.

### General Information

#### Application Procedures-In General Section 4.008

**Criteria:** This section lists general application procedures applicable to a number of types of land use applications and also lists unique features of Wilsonville's development review process.

**Response:** The application is being processed in accordance with the applicable general procedures of this Section.

#### Initiating Application Section 4.009

**Criterion:** "Except for a Specific Area Plan (SAP), applications involving specific sites may be filed only by the owner of the subject property, by a unit of government that is in the process of acquiring the property, or by an agent who has been authorized by the owner, in writing, to apply."

**Response:** The application has been submitted on behalf of the property owner, Swire Coca Cola and is signed by an authorized representative.

#### Pre-Application Conference Subsection 4.010 (.02)

**Criteria:** This section lists the pre-application process

**Response:** A Pre-application conference was held on June 22, 2017 in accordance with this subsection.

#### Lien Payment before Approval Subsection 4.011 (.02) B.

**Criterion:** "City Council Resolution No. 796 precludes the approval of any development application without the prior payment of all applicable City liens for the subject property. Applicants shall be encouraged to contact the City Finance Department to verify that there are no outstanding liens. If the Planning Director is advised of outstanding liens while an application is under consideration, the Director shall advise the applicant that payments must be made current or the existence of liens will necessitate denial of the application."

**Response:** No applicable liens exist for the subject property. The application can thus move forward.

#### General Submission Requirements Subsection 4.035 (.04) A.

**Criteria:** “An application for a Site Development Permit shall consist of the materials specified as follows, plus any other materials required by this Code.” Listed 1. through 6. j.

**Response:** The applicant has provided all of the applicable general submission requirements contained in this subsection.

#### Zoning-Generally Section 4.110

**Criteria:** “The use of any building or premises or the construction of any development shall be in conformity with the regulations set forth in this Code for each Zoning District in which it is located, except as provided in Sections 4.189 through 4.192.” “The General Regulations listed in Sections 4.150 through 4.199 shall apply to all zones unless the text indicates otherwise.”

**Response:** This proposed development is in conformity with the applicable zoning district and general development regulations listed in Sections 4.150 through 4.199 have been applied in accordance with this Section.

### Request A: DB17-0021 Stage II Final Plan Revision

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

#### Planned Development Regulations-Generally

##### Planned Development Purpose Subsection 4.140 (.01)

**A1. Criterion:** The proposed Stage II Final Plan shall be consistent with the Planned Development Regulations purpose statement.

**Response:** The proposed changes are on a industrial campus setting, which has evolved over the years allowing flexibility.

##### Ownership Requirements Subsection 4.140 (.03)

**A2. Criterion:** “The tract or tracts of land included in a proposed Planned Development must be in one (1) ownership or control or the subject of a joint application by the owners of all the property included.”

**Response:** The land included in the proposed Stage II Final Plan Revision is under the single ownership of Swire Coca Cola, a representative of which has signed the application.

##### Professional Design Team Subsection 4.140 (.04)

**A3. Criteria:** “The applicant for all proposed Planned Developments shall certify that the professional services of the appropriate professionals have been utilized in the planning process for development. One of the professional consultants chosen by the applicant

shall be designated to be responsible for conferring with the planning staff with respect to the concept and details of the plan.”

**Response:** As can be found in the applicant’s submitted materials, appropriate professionals have been involved in the planning and permitting process.

## **Stage II Final Plan Submission Requirements and Process**

### Development Review Board Role

Subsection 4.140 (.09) B.

**A4. Criterion:** “the Development Review Board shall determine whether the proposal conforms to the permit criteria set forth in this Code, and shall approve, conditionally approve, or disapprove the application”.

**Response:** The Development Review Board is considering all applicable permit criteria set forth in the Planning and Land Development Code and staff is recommending the Development Review Board approve the application with conditions of approval.

### Stage I Conformance, Submission Requirements

Subsection 4.140 (.09) C.

**A5. Criteria:** “The final plan shall conform in all major respects with the approved preliminary development plan, and shall include all information included in the preliminary plan plus the following:” listed 1. through 6.

**Response:** The Stage II plans, as revised, substantially conform to the approved Stage I Master plan for the Coca Cola campus simply adding additional parking. The applicant has provided the required drawings and other documents showing all the additional information required by this subsection.

### Stage II Final Plan Detail

Subsection 4.140 (.09) D.

**A6. Criterion:** “The final plan shall be sufficiently detailed to indicate fully the ultimate operation and appearance of the development or phase of development.”

**Response:** The applicant has provided sufficiently detailed information to indicate fully the ultimate operation and appearance of the new parking area, including a detailed site plan and landscape plans.

### Expiration of Approval

Subsection 4.140 (.09) I. and Section 4.023

**A7. Criterion:** This subsection and section identify the period for which Stage II approvals are valid.

**Response:** The Stage II Approval, along other associated applications, will expire two (2) years after approval, unless an extension is approved in accordance with these subsections.



Consistency with Plans  
Subsection 4.140 (.09) J. 1.

**A8. Criteria:** “The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council.”

**Response:** The subject property is zoned Planned Development Industrial consistent with the Industrial designation in the Comprehensive Plan. To staff’s knowledge, the location, design, size, and uses are consistent with other applicable plans, maps, and ordinances, or will be by specific conditions of approval.

Traffic Concurrency  
Subsection 4.140 (.09) J. 2.

**A9. Criteria:** “That the location, design, size and uses are such that traffic generated by the development at the most probable used intersection(s) can be accommodated safely and without congestion in excess of Level of Service D, as defined in the Highway Capacity Manual published by the National Highway Research Board, on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets. Immediately planned arterial and collector streets are those listed in the City’s adopted Capital Improvement Program, for which funding has been approved or committed, and that are scheduled for completion within two years of occupancy of the development or four year if they are an associated crossing, interchange, or approach street improvement to Interstate 5.” Additional qualifiers and criteria listed a. through e.

**Response:** A traffic waiver has been granted as the proposed parking area is expected to have a minimal effect on level of service. See Exhibit C2.

Facilities and Services Concurrency  
Subsection 4.140 (.09) J. 3.

**A10. Criteria:** “That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services.”

**Response:** Facilities and services, including stormwater utilities, are available and sufficient to serve the proposed development.

Adherence to Approved Plans  
Subsection 4.140 (.09) L.

**A11. Criteria:** “The applicant shall agree in writing to be bound, for her/himself and her/his successors in interest, by the conditions prescribed for approval of a development. The approved final plan and stage development schedule shall control the issuance of all building permits and shall restrict the nature, location and design of all uses. Minor changes in an approved preliminary or final development plan may be approved by the Director of Planning if such changes are consistent with the purposes and general

character of the development plan. All other modifications, including extension or revision of the stage development schedule, shall be processed in the same manner as the original application and shall be subject to the same procedural requirements.”

**Response:** Condition of Approval PDA 1 ensures adherence to approved plans except for minor revisions approved by the Planning Director.

## **Standards Applying in All Planned Development Zones**

### Underground Utilities

Subsection 4.118 (.02)

**A12. Criteria:** “Underground Utilities shall be governed by Sections 4.300 to 4.320. All utilities above ground shall be located so as to minimize adverse impacts on the site and neighboring properties.”

**Response:** All additional utilities on the property are required to be underground.

### Waivers

Subsection 4.118 (.03)

**A13. Criteria:** “Notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purposes and objectives of Section 4.140, and based on findings of fact supported by the record may” waive a number of standards as listed in A. through E.

**Response:** No waivers are being requested.

### Other Requirements or Restrictions

Subsection 4.118 (.03) E.

**A14. Criteria:** “Notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purposes and objectives of Section 4.140, and based on findings of fact supported by the record may adopt other requirements or restrictions, inclusive of, but not limited to, the following:” Listed 1. through 12.

**Response:** No additional requirements or restrictions are recommended pursuant to this subsection.

### Impact on Development Cost

Subsection 4.118 (.04)

**A15. Criteria:** “The Planning Director and Development Review Board shall, in making their determination of compliance in attaching conditions, consider the effects of this action on availability and cost. The provisions of this section shall not be used in such a manner that additional conditions, either singularly or cumulatively, have the effect of unnecessarily increasing the cost of development. However, consideration of these factors shall not prevent the Board from imposing conditions of approval necessary to meet the minimum requirements of the Comprehensive Plan and Code.”

**Response:** It is staff's professional opinion that the determination of compliance or attached conditions do not unnecessarily increase the cost of development, and no evidence has been submitted to the contrary.

#### Requiring Tract Dedications Subsection 4.118 (.05)

**A16. Criteria:** "The Planning Director, Development Review Board, or on appeal, the City Council, may as a condition of approval for any development for which an application is submitted, require that portions of the tract or tracts under consideration be set aside, improved, conveyed or dedicated for the following uses:" Recreational Facilities, Open Space Area, Easements."

**Response:** No additional tracts are being required for the purposes given.

#### Habitat Friendly Development Practices Subsection 4.118 (.09)

**A17. Criteria:** "To the extent practicable, development and construction activities of any lot shall consider the use of habitat-friendly development practices, which include:

A. Minimizing grading, removal of native vegetation, disturbance and removal of native soils, and impervious area;

B. Minimizing adverse hydrological impacts on water resources, such as using the practices described in Part (a) of Table NR-2 in Section 4.139.03, unless their use is prohibited by an applicable and required state or federal permit, such as a permit required under the federal Clean Water Act, 33 U.S.C. §§1251 et seq., or the federal Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit;

C. Minimizing impacts on wildlife corridors and fish passage, such as by using the practices described in Part (b) of Table NR-2 in Section 4.139.03; and

D. Using the practices described in Part (c) of Table NR-2 in Section 4.139.03."

**Response:** The grading will be limited to that needed for the proposed improvements, no significant native vegetation would be retained by an alternative site design, the City's stormwater standards will be met limiting adverse hydrological impacts on water resources, no impacts on wildlife corridors or fish passages have been identified.

### Planned Development Industrial (PDI) Zone

#### Typically Permitted Uses Subsection 4.135 (.02)

**A18. Criteria:** These subsections establish the typically permitted uses in the PDI Zone.

**Response:** The existing manufacturing and warehousing and associated uses remain unchanged on the property. The proposal is to add additional parking to support these established industrial uses.

Industrial Performance Standards  
Subsection 4.135 (.05)

**A19. Criteria:** This subsection establishes a variety of performance standards for all uses in the PDI zone.

**Response:** The proposed additional parking area does not change the current development's compliance with the listed performance standards.

**Wilsonville Road Interchange Area Management Plan (IAMP) Overlay Zone**

Where IAMP Regulations Apply  
Section 4.133.02

**A20. Criteria:** "The provisions of this Section shall apply to land use applications subject to Section 4.004, Development Permit Required, for parcels wholly or partially within the IAMP Overlay Zone, as shown on Figure I-1. Any conflict between the standards of the IAMP Overlay Zone and those contained within other chapters of the Development Code shall be resolved in favor of the Overlay Zone."

**Response:** The subject property is wholly within the IAMP Overlay Zone, as shown on Figure I-1, the IAMP standards are thus being applied.

IAMP Permitted Land Uses  
Section 4.133.03

**A21. Criterion:** "Uses allowed in the underlying zoning districts are allowed subject to other applicable provisions in the Code and this Section."

**Response:** Existing uses consistent with the underlying PDI zone remain.

Access Management Applicability  
Subsections 4.133.04 (.01) – (.03)

**A22. Criterion:** "The provisions of Section 4.133.04 apply to:

(.01) Development or redevelopment proposals for parcels two (2) acres or less that are subject to the requirements of Section 4.004 Development Permit.

(.02) Planned Development applications, pursuant to Section 4.140, as part of Preliminary Approval (Stage One).

(.03) Final Approval (Stage Two) Planned Development applications, pursuant to Section 4.140, to the extent that subsequent phases of development differ from the approved preliminary development plan, or where one or more of the following elements are not identified for subsequent phases:

A. Land uses.

B. Building location.

C. Building size.

D. Internal circulation."

**Response:** The additional parking remains consistent with the Stage I approval and access points to the public right-of-way are not changing.

Traffic Impact Analysis  
 Subsection 4.133.01 (.01)

**A23. Criteria:** This subsection lists the requirements for a Traffic Impact Analysis in the IAMP Overlay Zone.

**Response:** A waiver to the otherwise required Traffic Impact Analysis has been approved by the Community Development Director. See Exhibit C2.

**On-site Pedestrian Access and Circulation**

On-site Pedestrian Access and Circulation  
 Section 4.154

**A24. Criteria:** This section establishes standards for on-site pedestrian access and circulation.

**Explanation of Finding:** A connection is provided to the existing pathway adjacent to the parking area. Due to the limited size of the parking area no new internal pathways are required.

**Parking and Loading**

Parking Design Standards  
 Section 4.155 (.02) and (.03)

**A25. Criteria:** These subsections list a number of standards affecting the design of parking areas.

**Response:** The applicable standards are met as follows:

Standard	Met	Explanation
Subsection 4.155 (.02) General Standards		
B. All spaces accessible and usable for Parking	☒	Standard parking lot design, 9' by 18' spaces, 24' drive aisle
I. Sturdy bumper guards of at least 6 inches to prevent parked vehicles crossing property line or interfering with screening or sidewalks.	☒	The applicant indicates curbs will be used to prevent interference with landscaping and walkways.
J. Surfaced with asphalt, concrete or other approved material.	☒	Surfaced with asphalt.
Drainage meeting City standards	☒	Drainage is professionally designed and being reviewed to meet City standards
K. Lighting won't shine into adjoining structures or into the eyes of passers-by.	☒	Lighting is proposed to be fully shielded
N. No more than 40% of parking compact spaces.	☒	All parking spaces are proposed to be standard spaces.
O. Where vehicles overhand curb,	☒	All parking area planting areas are greater

planting areas at least 7 feet in depth.		than 7 feet in depth.
Subsection 4.155 (.03) General Standards		
A. Access and maneuvering areas adequate.	<input checked="" type="checkbox"/>	Access drive and drive aisle are 24 feet, providing an adequate 12 foot travel lane in each direction.
A.1. Loading and delivery areas and circulation separate from customer/employee parking and pedestrian areas.	<input checked="" type="checkbox"/>	The proposed parking area is separated from truck delivery areas.
Circulation patterns clearly marked.	<input checked="" type="checkbox"/>	Design is typical of commercial parking lot design and intuitive to a driver familiar with typical commercial parking lots.
A.2. To the greatest extent possible, vehicle and pedestrian traffic separated.	<input checked="" type="checkbox"/>	Vehicle and pedestrian traffic are clearly delineated and separated except for crosswalks.
C. Safe and Convenient Access, meet ADA and ODOT Standards.	<input checked="" type="checkbox"/>	The proposed parking and access allow ADA and ODOT standards to be met.
For parking areas with more than 10 spaces, 1 ADA space for every 50 spaces.	<input checked="" type="checkbox"/>	Condition of Approval PDA 3 requires a parking audit of all the Coca Cola's campus to determine if additional ADA spaces are needed, and if they are needed that they are added.
D. Where possible, parking areas connect to adjacent sites.	<input checked="" type="checkbox"/>	The proposed parking area connects to the adjacent existing parking area.
Efficient on-site parking and circulation	<input checked="" type="checkbox"/>	The parking area was carefully and professionally designed for safety and efficiency and is a typical design with standard parking space and drive aisle size and orientation.

## Parking Area Landscaping

Minimizing Visual Dominance of Parking  
Subsection 4.155 (.03) B.

**A26. Criteria:** "Parking and loading or delivery areas shall be landscaped to minimize the visual dominance of the parking or loading area, as follows:"

**Response:** The parking and loading areas are landscaped consistent with this subsection.

10% Parking Area Landscape Requirement  
Subsection 4.155 (.03) B. 1.

**A27. Criteria:** “Landscaping of at least ten percent (10%) of the parking area . . . This landscaping shall be considered to be part of the fifteen percent (15%) total landscaping required in Section 4.176.03 for the site development.”

**Response:** The new parking area is surrounded by landscaping far surpassing the 10% minimum.

Landscape Screening of Parking  
Subsection 4.155 (.03) B. 1.

**A28. Criteria:** “parking area designed to be screened from view from the public right-of-way and adjacent properties.”

**Response:** As indicated on sheet C.11 of Exhibit B2 an English laurel hedge, matching an existing one, will be installed as the required screening.

Tree Planting Area Dimensions  
Subsection 4.155 (.03) B. 2.

**A29. Criteria:** “Landscape tree planting areas shall be a minimum of eight (8) feet in width and length”

**Response:** The proposed tree planting island is the size of a standard parking space, 9’ by 18’, meeting the minimum required dimensions.

Parking Area Tree Requirement  
Subsection 4.155 (.03) B. 2. and 2. a.

**A30. Criteria:** “Landscape tree planting areas shall be . . . spaced every (8) parking spaces or an equivalent aggregated amount. a. Trees shall be planted in a ratio of one (1) tree per eight (8) parking spaces or fraction thereof, except in parking areas of more than two hundred (200) spaces where a ratio of one (1) tree per six (six) spaces shall be applied as noted in subsection (.03)(B.)(3.)”

**Response:** With 23 spaces three addition trees are required. One tree is required to be planted in the near planting island, one tree adjacent to the parking area, and a number of existing mature trees surround the area and will shade the parking area.

Parking Area Landscape Plan  
Subsection 4.155 (.03) B. 2. a.

**A31. Review Criteria:** “A landscape design that includes trees planted in areas based on an aggregated number of parking spaces must provide all area calculations.”

**Response:** An appropriate landscape design has been provided. See sheet C.11 of Exhibit B2.

Parking Area Tree Clearance  
Subsection 4.155 (.03) B. 2. b.

**A32. Review Criteria:** “Except for trees planted for screening, all deciduous interior parking lot trees must be suitably sized, located, and maintained to provide a branching minimum of seven (7) feet clearance at maturity.”

**Finding:** These criteria are satisfied.

**Details of Finding:** All trees required for planting in the parking area will be varieties that could typically be maintained to provide a 7 foot clearance.

## Other Development Standards

Access, Ingress, and Egress  
Section 4.167

**A33. Criterion:** “Each access onto streets or private drives shall be at defined points as approved by the City and shall be consistent with the public's health, safety and general welfare. Such defined points of access shall be approved at the time of issuance of a building permit if not previously determined in the development permit.”

**Response:** Existing access to the public right-of-way is being kept the same.

Natural Features and Other Resources  
Section 4.171

**A34. Criteria:** This section provides for the protection of a number of natural features and other resources including: general terrain preparation, hillsides, trees and wooded areas, high voltage powerline easements and rights of way and petroleum pipeline easements, earth movement hazard areas, soil hazard areas, historic resources, and cultural resources.

**Response:** The property is generally flat with a number of mature trees. Trees have been considered as part of site planning and a number of trees are being retained which will help screen and shade the proposed parking area. No other hillsides, powerline easements, etc. needing protection exist on the site.

## Public Safety and Crime Prevention

Design for Public Safety  
Subsection 4.175 (.01)

**A35. Criteria:** “All developments shall be designed to deter crime and insure public safety.”

**Response:** Staff finds no evidence and has not received any testimony that the design of the site and buildings would lead to crime or negatively impact public safety.

Surveillance and Access  
Subsection 4.175 (.03)

**A36. Criterion:** “Areas vulnerable to crime shall be designed to allow surveillance. Parking and loading areas shall be designed for access by police in the course of routine patrol duties.”



**Response:** The proposed parking area is visible from the street and is accessible to the police on routine patrol.

Lighting to Discourage Crime  
Subsection 4.175 (.04)

A37. **Criterion:** "Exterior lighting shall be designed and oriented to discourage crime."

**Response:** The applicant will install lighting for the new parking area sufficient to discourage crime.

## Landscaping Standards

Landscaping Standards Purpose  
Subsection 4.176 (.01)

A38. **Criteria:** "This Section consists of landscaping and screening standards and regulations for use throughout the City. The regulations address materials, placement, layout, and timing of installation. The City recognizes the ecological and economic value of landscaping and requires the use of landscaping and other screening or buffering to:" Listed A. through K.

**Response:** In complying with the various landscape standards in Section 4.176 the applicant has demonstrated the revised Stage II Final Plan is in compliance with the landscape purpose statement.

Landscape Code Compliance  
Subsection 4.176 (.02) B.

A39. **Criteria:** "All landscaping and screening required by this Code must comply with all of the provisions of this Section, unless specifically waived or granted a Variance as otherwise provided in the Code. The landscaping standards are minimum requirements; higher standards can be substituted as long as fence and vegetation-height limitations are met. Where the standards set a minimum based on square footage or linear footage, they shall be interpreted as applying to each complete or partial increment of area or length"

**Response:** No waivers or variances to landscape standards have been requested. Thus all landscaping and screening must comply with standards of this section.

Intent and Required Materials  
Subsections 4.176 (.02) C. through I.

A40. **Criteria:** These subsections identify the various landscaping standards, including the intent of where they should be applied, and the required materials.

**Response:** As shown on sheet C.11 of Exhibit B2 required materials for each landscaping standard is provided as follows. In all area appropriate groundcover is provided for areas without not otherwise occupied by shrubs and trees:

**Area Description:** Along south boundary of new parking area

**Landscaping Standard:** Low Screen

**Comments on Intent:** Screens parking lot.

**Required Materials:** 3 foot hedge 95% opaque year round, trees every 30 feet or as required to provide canopy over landscape area.

**Materials Provided:** English Laurel hedge matching existing, existing trees. One additional tree and shrubs in new planting island.

#### Landscape Area and Locations

Subsection 4.176 (.03)

**A41. Criteria:** “Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable.”

**Response:** The percent of landscaping continues to be exceeded and dispersed around the Coca Cola Campus.

#### Landscape Plans

Subsection 4.176 (.09)

**A42. Criteria:** “Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated.”

**Response:** Applicant’s sheet C.11 provides the required information.

### Other Development Standards

#### Access Drives and Travel Lanes

Subsection 4.177 (.01) E.

**A43. Criteria:** This subsection sets standards for access drives and travel lanes.

**Response:**

- All access drives are designed to provide a clear travel lane, free from obstructions.
- All travel lanes will be asphalt. Condition of Approval PDA 2 will ensure they are capable of carrying a 23-ton load.
- Emergency access lanes are improved to a minimum of 12 feet.

## Outdoor Lighting

Sections 4.199.20 through 4.199.60

**A44. Criterion:** This section states that the outdoor lighting ordinance is applicable to “Installation of new exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas” and “Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas.” In addition the exempt luminaires and lighting systems are listed.

**Response:** The proposal is required to meet the Outdoor Lighting Standards. See Request B, Findings B26 through B31.

## Underground Installation

Sections 4.300-4.320

**A45. Criteria:** These sections list requirements regarding the underground installation of utilities.

**Response:** Any new utilities will be underground.

### Request B: DB17-0022 Site Design Review

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

## Site Design Review

### Excessive Uniformity, Inappropriateness Design

Subsection 4.400 (.01) and Subsection 4.421 (.03)

**B1. Criteria:** “The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards.” “Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefor.”

**Explanation of Finding:** Staff summarizes the compliance with this subsection as follows:

**Excessive Uniformity:** The proposed parking area is typical design and is not of scale that would lead to excessive uniformity.

**Inappropriate or Poor Design of the Exterior Appearance of Structures:** No new exterior structures are proposed.

**Inappropriate or Poor Design of Signs:** No signs are proposed.

**Lack of Proper Attention to Site Development:** The appropriate professional services have been used to design the parking area, demonstrating appropriate attention being given to site development.

**Lack of Proper Attention to Landscaping:** Landscaping , has been professionally designed and includes a variety of plant materials, all demonstrating appropriate attention being given to landscaping.

#### Purposes and Objectives

Subsection 4.400 (.02) and Subsection 4.421 (.03)

**B2. Criteria:** “The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards.” “The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:” Listed A through J.

**Explanation of Finding:** The applicant has demonstrated compliance with the listed purposes and objectives. In short, the proposal provides a practical design appropriate for a parking area.

#### Development Review Board Jurisdiction

Section 4.420

**B3. Criteria:** The section states the jurisdiction and power of the Development Review Board in relation to site design review including the application of the section, that development is required in accord with plans, and variance information.

**Response:** Condition of Approval PDB 1 ensure construction, site development, and landscaping are carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. No variances are requested from site development requirements.

#### Design Standards

Subsection 4.421 (.01)

**B4. Criteria:** “The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural styles is not included in these standards.” Listed A through G.

**Response:** The applicant has provided sufficient information demonstrating compliance with the standards of this subsection.

## Applicability of Design Standards Subsection 4.421 (.02)

- B5. Criteria:** “The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures.”  
**Response:** Design standards have been applied to all site features.

## Conditions of Approval Subsection 4.421 (.05)

- B6. Criterion:** “The Board may attach certain development or use conditions in granting an approval that are determined necessary to insure the proper and efficient functioning of the development, consistent with the intent of the Comprehensive Plan, allowed densities and the requirements of this Code.”  
**Response:** No additional conditions of approval are recommended to ensure the proper and efficient functioning of the parking area.

## Submission Requirements Section 4.440

- B7. Criteria:** “A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:” Listed A through F.  
**Response:** The applicant has submitted the required additional materials, as applicable.

## Time Limit on Approval Section 4.442

- B8. Criterion:** “Site design review approval shall be void after two (2) years unless a building permit has been issued and substantial development pursuant thereto has taken place; or an extension is granted by motion of the Board.  
**Response:** The Applicant has indicated that they will pursue development within two (2) years and it is understood that the approval will expire after 2 years if a building permit hasn’t been issued unless an extension has been granted by the board.

## Landscape Installation or Bonding Subsection 4.450 (.01)

- B9. Criterion:** “All landscaping required by this section and approved by the Board shall be installed prior to issuance of occupancy permits, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and

complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned to the applicant.”

**Response:** Condition of Approval PDB 2 assures installation or appropriate security.

#### Approved Landscape Plan

Subsection 4.450 (.02)

**B10. Criterion:** “Action by the City approving a proposed landscape plan shall be binding upon the applicant. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, as specified in this Code.”

**Response:** Condition of Approval PDB 3 provides ongoing assurance this criterion is met.

#### Landscape Maintenance and Watering

Subsection 4.450 (.03)

**B11. Criterion:** “All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered with Board approval.”

**Response:** Condition of Approval PDB 4 ensures landscaping is continually maintained in accordance with this subsection.

#### Modifications of Landscaping

Subsection 4.450 (.04)

**B12. Criterion:** “If a property owner wishes to add landscaping for an existing development, in an effort to beautify the property, the Landscape Standards set forth in Section 4.176 shall not apply and no Plan approval or permit shall be required. If the owner wishes to modify or remove landscaping that has been accepted or approved through the City’s development review process, that removal or modification must first be approved through the procedures of Section 4.010.”

**Response:** Condition of Approval PDB 3 provides ongoing assurance that this criterion is met by preventing modification or removal without the appropriate City review.

### Natural Features and Other Resources

#### Protection

Section 4.171

**B13. Criterion:** This section provides for the protection of a number of natural features and other resources including: general terrain preparation, hillsides, trees and wooded areas, high voltage powerline easements and rights of way and petroleum pipeline easements, earth movement hazard areas, soil hazard areas, historic resources, and cultural resources.

**Response:** The proposed design of the site provides for protection of natural features and other resources consistent with the proposed revised Stage II Final Plan for the site as well as the purpose and objectives of site design review. See Finding A34 under Request A.

## Landscaping

### Landscape Standards Code Compliance

Subsection 4.176 (.02) B.

**B14. Criteria:** “All landscaping and screening required by this Code must comply with all of the provisions of this Section, unless specifically waived or granted a Variance as otherwise provided in the Code. The landscaping standards are minimum requirements; higher standards can be substituted as long as fence and vegetation-height limitations are met. Where the standards set a minimum based on square footage or linear footage, they shall be interpreted as applying to each complete or partial increment of area or length”

**Response:** No waivers or variances to landscape standards have been requested. Thus all landscaping and screening must comply with standards of this section.

### Intent and Required Materials

Subsections 4.176 (.02) C. through I.

**B15. Criteria:** These subsections identify the various landscaping standards, including the intent of where they should be applied, and the required materials.

**Response:** The minimum or higher standard has been applied throughout different landscape areas of the site and landscape materials are proposed to meet each standard in the different areas. Site Design Review is being reviewed concurrently with the revised Stage II Final Plan which includes an analysis of the functional application of the landscaping standards. See Finding A40 under Request A.

### Landscape Area and Locations

Subsection 4.176 (.03)

**B16. Criteria:** “Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable.”

**Response:** Consistent with the proposed revised Stage II Final Plan revision for the site, the landscape minimum continues to be exceeded and landscaping is in a wide variety of areas.

Buffering and Screening  
Subsection 4.176 (.04)

- B17. Criteria:** “Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.
- A. All intensive or higher density developments shall be screened and buffered from less intense or lower density developments.
- B. Activity areas on commercial and industrial sites shall be buffered and screened from adjacent residential areas. Multi-family developments shall be screened and buffered from single-family areas.
- C. All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties.
- D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit.
- E. In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking.
- F. In any zone any fence over six (6) feet high measured from soil surface at the outside of fenceline shall require Development Review Board approval.”
- Response:** Consistent with the proposed revised Stage II Final Plan, adequate screening is proposed. See Finding A40 under Request A.

Shrubs and Groundcover Materials  
Subsection 4.176 (.06) A.

- B18. Criteria:** This subsection establishes plant material and planting requirements for shrubs and ground cover.
- Response:** Condition of Approval PDB 5 requires that the detailed requirements of this subsection are met.

Plant Materials-Trees  
Subsection 4.176 (.06) B.

- B19. Criteria:** This subsection establishes plant material requirements for trees.
- Response:** The plants material requirements for trees will be met as follows:
- Condition of Approval PDB 6 requires all trees to be B&B (Balled and Burlapped) and be the appropriate size.
  - Condition of Approval PDB 5 requires all plant materials to conform in size and grade to “American Standard for Nursery Stock” current edition.”

Types of Plant Species  
Subsection 4.176 (.06) E.

- B20. Criteria:** This subsection discusses use of existing landscaping or native vegetation, selection of plant materials, and prohibited plant materials.
- Response:** The applicant has provided sufficient information in their landscape plan (sheet



C.11) showing the proposed landscape design meets the standards of this subsection.

Tree Credit

Subsection 4.176 (.06) F.

**B21. Criteria:** “Existing trees that are in good health as certified by an arborist and are not disturbed during construction may count for landscaping tree credit as follows: Existing

trunk diameter	Number of Tree Credits
18 to 24 inches in diameter	3 tree credits
25 to 31 inches in diameter	4 tree credits
32 inches or greater	5 tree credits:”

Maintenance requirements listed 1. through 2.

**Response:** The applicant is not requesting any of preserved trees be counted as tree credits pursuant to this subsection.

Exceeding Plant Standards

Subsection 4.176 (.06) G.

**B22. Criterion:** “Landscape materials that exceed the minimum standards of this Section are encouraged, provided that height and vision clearance requirements are met.”

**Response:** The selected landscape materials do not violate any height or visions clearance requirements.

Landscape Installation and Maintenance

Subsection 4.176 (.07)

**B23. Criteria:** This subsection establishes installation and maintenance standards for landscaping.

**Response:** The installation and maintenance standards are or will be met as follows:

- Plant materials are required to be installed to current industry standards and be properly staked to ensure survival
- Plants that die are required to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City.
- Condition of Approval PDB 4 ensures proper irrigation.

Landscape Plans

Subsection 4.176 (.09)

**B24. Criterion:** “Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated.”

**Response:** Applicant’s sheet C.11 in Exhibit B2 provides the required information.

Completion of Landscaping  
Subsection 4.176 (.10)

**B25. Criterion:** “The installation of plant materials may be deferred for a period of time specified by the Board or Planning Director acting on an application, in order to avoid hot summer or cold winter periods, or in response to water shortages. In these cases, a temporary permit shall be issued, following the same procedures specified in subsection (.07)(C)(3), above, regarding temporary irrigation systems. No final Certificate of Occupancy shall be granted until an adequate bond or other security is posted for the completion of the landscaping, and the City is given written authorization to enter the property and install the required landscaping, in the event that the required landscaping has not been installed. The form of such written authorization shall be submitted to the City Attorney for review.”

**Response:** The applicant has not requested to defer installation of plant materials.

## Outdoor Lighting

Applicability  
Sections 4.199.20 and 4.199.60

**B26. Criterion:** Section 4.199.20 states that the outdoor lighting ordinance is applicable to “Installation of new exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas” and “Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas.” In addition the exempt luminaires and lighting systems are listed. Section 4.199.60 identifies the threshold for major additions.

**Response:** The additional lighting does not qualify as a major addition, only new luminaires need to be evaluated under the outdoor lighting ordinance.

Outdoor Lighting Zones  
Section 4.199.30

**B27. Criterion:** “The designated Lighting Zone as indicated on the Lighting Overlay Zone Map for a commercial, industrial, multi-family or public facility parcel or project shall determine the limitations for lighting systems and fixtures as specified in this Ordinance.”

**Response:** The project site is within LZ 2 and the proposed outdoor lighting systems will be reviewed under the standards of this lighting zone.

Optional Lighting Compliance Methods  
Subsection 4.199.40 (.01) A.

**B28. Criteria:** “All outdoor lighting shall comply with either the Prescriptive Option or the Performance Option below.

**Response:** The applicant has elected to comply with the Performance Option.

## Prescriptive Option

Subsection 4.199.40 (.01) B. 1.

**B29. Criteria:** “The maximum luminaire lamp wattage and shielding shall comply with Table 7.” For LZ 2 the Maximum wattage for fully shielded is 100 watts. Except for those exemptions listed in Section 4.199.20(.02), the exterior lighting for the site shall comply with the Oregon Energy Efficiency Specialty Code, Exterior Lighting. The maximum pole height shall be consistent with Table 8. Each luminaire shall be set back from all property lines at least 3 times the mounting height of the luminaire:

**Response:** The flat lens LED is fully shielded. The selected light fixture has different wattage options. Condition of Approval PDB 8 ensure the wattage is less than 100 watts. The Condition of Approval also ensures the Oregon Energy Efficiency Specialty is met and the mounting height does not exceed 40 feet. All adjoining properties are the same base and lighting zone, so the development is exempt from the setback from property lines.

## Lighting Curfew

Subsection 4.199.40 (.02) D.

**B30. Criteria:** “All prescriptive or performance based exterior lighting systems shall be controlled by automatic device(s) or system(s) that:

1. Initiate operation at dusk and either extinguish lighting one hour after close or at the curfew times according to Table 10; or
2. Reduce lighting intensity one hour after close or at the curfew time to not more than 50% of the requirements set forth in the Oregon Energy Efficiency Specialty Code unless waived by the DRB due to special circumstances; and
3. Extinguish or reduce lighting consistent with 1. and 2. above on Holidays.

The following are exceptions to curfew:

- a. Exception 1: Building Code required lighting.
- b. Exception 2: Lighting for pedestrian ramps, steps and stairs.
- c. Exception 3: Businesses that operate continuously or periodically after curfew.”

In Table 10 the Lighting Curfew for LZ 3 is Midnight.

**Response:** The associated use operates regularly after curfew.

## Standards and Submittal Requirements

Sections 4.199.40 and 4.199.50

**B31. Criteria:** These sections identify the Outdoor Lighting Standards for Approval and Submittal Requirements.

**Response:** All required materials have been submitted.

## Request D: DB15-0044 Type C Tree Removal Plan

### Type C Tree Removal-General

Tree Related Site Access  
Subsection 4.600.50 (.03) A.

- C1. Criterion:** “By submission of an application, the applicant shall be deemed to have authorized City representatives to have access to applicant’s property as may be needed to verify the information provided, to observe site conditions, and if a permit is granted, to verify that terms and conditions of the permit are followed.”

**Response:** It is understood the City has access to the property to verify information regarding trees.

Review Authority  
Subsection 4.610.00 (.03) B.

- C2. Criterion:** “Type C. Where the site is proposed for development necessitating site plan review or plat approval by the Development Review Board, the Development Review Board shall be responsible for granting or denying the application for a Tree Removal Permit, and that decision may be subject to affirmance, reversal or modification by the City Council, if subsequently reviewed by the Council.”

**Response:** The requested removal is connected to site plan review by the Development Review Board for new development. The tree removal is thus being reviewed by the DRB.

Conditions of Approval  
Subsection 4.610.00 (.06) A.

- C3. Criterion:** “Conditions. Attach to the granting of the permit any reasonable conditions considered necessary by the reviewing authority including, but not limited to, the recording of any plan or agreement approved under this subchapter, to ensure that the intent of this Chapter will be fulfilled and to minimize damage to, encroachment on or interference with natural resources and processes within wooded areas;”

**Response:** No additional conditions are recommended pursuant to this subsection.

Completion of Operation  
Subsection 4.610.00 (.06) B.

- C4. Criterion:** “Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:” “Fix a reasonable time to complete tree removal operations;”

**Response:** It is understood the tree removal will be completed concurrently with construction of the making area, which is a reasonable time frame for tree removal.

Security for Permit Compliance  
Subsection 4.610.00 (.06) C.

C5. **Criterion:** “Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:” “Require the Type C permit grantee to file with the City a cash or corporate surety bond or irrevocable bank letter of credit in an amount determined necessary by the City to ensure compliance with Tree Removal Permit conditions and this Chapter. 1. This requirement may be waived by the Planning Director if the tree removal must be completed before a plat is recorded, and the applicant has complied with WC 4.264(1) of this Code.”

**Response:** No bond is anticipated to be required to ensure compliance with the tree removal plan as a bond is required for overall landscaping.

Tree Removal Standards  
Subsection 4.610.10 (.01)

C6. **Criteria:** “Except where an application is exempt, or where otherwise noted, the following standards shall govern the review of an application for a Type A, B, C or D Tree Removal Permit:” Listed A. through J.

**Response:** The standards of this subsection are met as follows:

- **Standard for the Significant Resource Overlay Zone:** The proposed tree removal is not within the Significant Resource Overlay Zone.
- **Preservation and Conservation:** The applicant has taken tree preservation into consideration, and has limited tree removal to trees that are necessary to remove for development.
- **Development Alternatives:** No significant wooded areas or trees would be preserved by design alternatives.
- **Land Clearing:** Land clearing is not proposed, and will not be a result of this development application.
- **Residential Development:** The proposed activity does not involve residential development, therefore this criteria does not apply.
- **Compliance with Statutes and Ordinances:** The necessary tree replacement and protection is planned according to the requirements of tree preservation and protection ordinance.
- **Relocation or Replacement:** Tree removal is limited to where it is necessary for construction.
- **Limitation:** A tree survey has been provided.
- **Additional Standards:** A tree survey has been provided, and no utilities are proposed to be located where they would cause adverse environmental consequences.

Review Process  
Subsection 4.610.40 (.01)

C7. **Criteria:** “Approval to remove any trees on property as part of a site development application may be granted in a Type C permit. A Type C permit application shall be

reviewed by the standards of this subchapter and all applicable review criteria of Chapter 4. Application of the standards of this section shall not result in a reduction of square footage or loss of density, but may require an applicant to modify plans to allow for buildings of greater height. If an applicant proposes to remove trees and submits a landscaping plan as part of a site development application, an application for a Tree Removal Permit shall be included. The Tree Removal Permit application will be reviewed in the Stage II development review process, and any plan changes made that affect trees after Stage II review of a development application shall be subject to review by DRB. Where mitigation is required for tree removal, such mitigation may be considered as part of the landscaping requirements as set forth in this Chapter. Tree removal shall not commence until approval of the required Stage II application and the expiration of the appeal period following that decision. If a decision approving a Type C permit is appealed, no trees shall be removed until the appeal has been settled."

**Response:** The plan is being reviewed concurrently with the Stage II Final Plan.

#### Tree Maintenance and Protection Plan

Section 4.610.40 (.02)

**C8. Criteria:** "The applicant must provide ten copies of a Tree Maintenance and Protection Plan completed by an arborist that contains the following information:" Listed A. 1. through A. 7.

**Response:** The applicant has submitted the necessary copies of a Tree Maintenance and Protection Plan. See sheet C.5, Exhibit B2.

### Replacement and Mitigation

#### Tree Replacement Requirement

Subsection 4.620.00 (.01)

**C9. Criterion:** "A Type B or C Tree Removal Permit grantee shall replace or relocate each removed tree having six (6) inches or greater d.b.h. within one year of removal."

**Response:** Four trees are proposed for removal; two trees are proposed to be planted. Condition of Approval PDC 3 Requires the proposed arborvitae in the new planter area be replaced by an appropriate deciduous parking lot tree, and one additional deciduous tree be planted near the edge of the parking area.

#### Basis for Determining Replacement

Subsection 4.620.00 (.02)

**C10. Criteria:** "The permit grantee shall replace removed trees on a basis of one (1) tree replanted for each tree removed. All replacement trees must measure two inches (2") or more in diameter."

**Response:** Four trees are proposed for removal; two trees are proposed to be planted. Condition of Approval PDC 3 requires the proposed arborvitae in the new planter area to be replaced by an appropriate deciduous parking lot tree, and one additional deciduous

tree be planted near the edge of the parking area. Trees will meet the minimum caliper requirement or will be required to by Condition of Approval.

#### Replacement Tree Requirements

Subsection 4.620.00 (.03)

**C11. Criteria:** "A mitigation or replacement tree plan shall be reviewed by the City prior to planting and according to the standards of this subsection.

A. Replacement trees shall have shade potential or other characteristics comparable to the removed trees, shall be appropriately chosen for the site from an approved tree species list supplied by the City, and shall be state Department of Agriculture Nursery Grade No. 1 or better.

B. Replacement trees must be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date.

C. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced.

D. Diversity of tree species shall be encouraged where trees will be replaced, and diversity of species shall also be maintained where essential to preserving a wooded area or habitat."

**Response:** Conditions of approval ensure the relevant requirements are met.

#### Replacement Tree Stock Requirements

Subsection 4.620.00 (.04)

**C12. Criteria:** "All trees to be planted shall consist of nursery stock that meets requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade."

**Response:** Condition of Approval PDC 3 ensures the appropriate quality.

#### Replacement Trees Locations

Subsection 4.620.00 (.05)

**C13. Criteria:** "The City shall review tree relocation or replacement plans in order to provide optimum enhancement, preservation and protection of wooded areas. To the extent feasible and desirable, trees shall be relocated or replaced on-site and within the same general area as trees removed."

**Response:** The applicant proposes or is required to mitigate for all removed trees on site and in the appropriate locations for the proposed development.

## Protection of Preserved Trees

### Tree Protection During Construction

Section 4.620.10

**C14. Criteria:** “Where tree protection is required by a condition of development under Chapter 4 or by a Tree Maintenance and Protection Plan approved under this subchapter, the following standards apply:” Listed A. through D.

**Response:** Condition of Approval PDC 5 assure the applicable requirements of this Section will be met.



**Coca-Cola Bottling Company  
Employee Parking Expansion  
Wilsonville, Oregon**

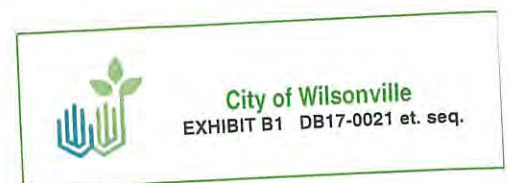
**Permit Submittal  
Project Narrative**

**Prepared for:**  
**Coca-Cola Bottling Company**  
9750 SW Barber St, Wilsonville, OR 97070

**Prepared by:**  
**Hood River Consulting Engineers**  
1784 May Street, Hood River, Oregon 97031  
(541) 436-4723

Project Engineer:  
Adam Goddin, P.E.

Original: June 29, 2017





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# Hood River Consulting Engineers, Inc.

*A Service Disabled Veteran Owned Small Business*



## 1. SUMMARY

Chris Horne, Trecore Construction, is the applicant for a Site Design Review, a Type C Tree Removal Permit, and a Stage III Final Plan Modification from the City of Wilsonville, Oregon for a proposed 23-stall off-street parking lot at the Coca-Cola Bottling Company located at 9750 Southwest Barber Street, Wilsonville, Oregon, Tax Lot 31W14C 00103. The 7710-square foot parking area will provide for employees of the Coca-Cola Bottling Company facility. The immediate need is for six full-time employees with future new-hires creating demand for the remaining seventeen stalls. All proposed site plan improvements will be consistent with the style and scale of other Coca-Cola existing parking areas and have been designed according to the City of Wilsonville Development Codes.



## **2. BACKGROUND INFORMATION**

The Coca-Cola Bottling Company Employee Parking Lot Construction Project involves the construction of 23-stall asphalt concrete parking lot at the northwest corner of the Coca-Cola Bottling Company property located at 9750 Southwest Barber Street, Wilsonville, Oregon. The proposed improvements will better serve the parking needs of the facility and will be connected to existing parking. Construction is estimated to begin in September 2017 and finish by October 2017.

The northwest portion of the site will be left in natural open space to provide buffering from Southwest Barber Street and Southwest Kinsman Road. Consideration has been made in the layout and design of the proposed site improvements to minimize the number of trees to be removed. The 23-stall addition will connect to an existing employee parking area and improvements include landscaping and an 800-square foot raingarden drainage facility to treat stormwater runoff in accordance with the City of Wilsonville Stormwater Standards. The parking lot will have security lighting and delineated parking stalls. Proposed site lighting and landscaping will comply with the City of Wilsonville requirements. The added parking will complement the existing building operation and will not require additional trip generation or traffic studies. No public water or sanitary sewer improvements are anticipated.



### **3. DISCUSSION OF KEY ISSUES**

#### **Site Access/Transportation**

Access to the propose parking lot will be through the existing driveway located at Southwest Barber Street. Secondary access via Southwest Kinsman Road is also available.

#### **Pedestrian Walkways**

A pedestrian access way is proposed with this project along the south side of the lot to promote safe, direct, and convenient pedestrian connectivity to the existing sidewalk located pedestrian walkway located along the adjacent existing parking lot.

#### **Stormwater and Utility Infrastructure**

Stormwater runoff from the development will be captured via sheet flow and conveyed through a concrete channel to the proposed 800-square foot rain garden drainage facility. The proposed project will increase the existing impervious area but with the performance of the proposed raingarden, no impacts to the existing downstream conveyance and detention system are anticipated. Refer to the Preliminary Drainage Report prepared by Hood River Consulting Engineers, Inc and included with this application.



## 4. CODE CRITERIA

### Industrial Development Standards and Commercial Zoning

- **Industrial Development Standards in All Zones: Section 4.117**
- **Planned Development Industrial (PDI) Zone: Sections 4.135**

The Coca-Cola Bottling Facility uses as Warehouse/Storage/Office complies with PDI-Planned Development Industrial Zone Section 4.135.

### Planned Development Standards and Regulations for all Planned Development (PD) Zones

- **Standards applying to all Planned Development (PD) Zones: Section 4.118**

Per Section 4.118.03.C tree removals standards will not be waived and this project proposes to remove trees as part of the site development application via Type C Tree Removal Permit.

- **Planned Development Regulations: Section 4.140**

This project intends to develop the site in an attractive, efficient, environmentally friendly, and useful way. The professional services utilized in this planning process include both a registered engineer and land surveyor license by the State of Oregon. Per section 4.140.07.B.1 a boundary and topographic survey has been provided in the included design drawings on **Existing Conditions C.3**. Due to the scope of this project, this project intends to wave the Traffic Study. Per 4.140.09.C. the following information is available in the included design drawings

1. The location of drainage facilities; **Stormwater Plan C.7**
2. Preliminary landscaping plan; **Landscaping Plan C.11**
4. Topographic information as set forth in Section 4.035; **Existing Conditions C.3**
5. A map indicating the types and locations of all proposed uses; **Proposed Conditions C.4**
6. A grading plan; **C.6 Grading Plan**



**General Development Regulations and Standards**

▪ **On-Site Pedestrian Access and Circulation: Section 4.154**

A pedestrian access way is proposed with this project along the south side of the lot to promote safe, direct, and convenient pedestrian connectivity to the existing sidewalk located pedestrian walkway located along the adjacent existing parking lot. This existing pathway is clearly marked with contrasting paint.

▪ **Parking, Loading, and Bicycle Parking: Section 4.155**

The primary design objective of this project it to enhance parking capacity while providing efficient parking, vehicle circulation and attractive, safe pedestrian access as well as mitigating view from the public right of way at Southwest Barber Street and Southwest Kinsman Road. The landscaping requirement of at least 10% of the area to be screened from view will be met with the proposed 1895 square feet (35%). One internal planting area is proposed with the rest of the proposed landscaping bordering the perimeter of the area and screen the parking are from the public right of way.

▪ **Landscaping, Screening, and Buffering: Section 4.176**

This projects design incorporates the Low Screen Landscaping Standard to adequate soften the visual impact of the parking area on the nearby street rights-of-way. The landscaping requirement of at least 10% of the area to be screened from view will be met with the proposed 1895 square feet (35%). One internal planting area is proposed with the rest of the proposed landscaping bordering the perimeter of the area and screen the parking are from the public right of way. See Landscaping Plan C.11.

▪ **Outdoor Lighting: Sections 4.199 through 4.199.60**

The proposed lighting is consistent with the existing lighting of the adjacent parking lot. This provided lighting will not to shine into adjoining structures or into the eyes of passers-by.

▪ **Protection of Natural and Other Features: Section 4.171**

This design has minimized the removal of trees to preserve as much scenic character as possible. No natural hazards are expected to impact this project. No historical or cultural are expected to be adversely affected by this project.



## Hood River Consulting Engineers, Inc.

*A Service Disabled Veteran Owned Small Business*



- **Public Safety and Crime Prevention: 4.175**

The exterior lighting on this project has been designed and orientated to discourage crime.

### **Site Design Review (Detailed Review of Architecture, Landscaping, and other Design Elements)**

- **Site Design Review: Sections 4.400 through 4.450**

The design of this parking area has paid special attention to location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of the parking area so that it is safe, convenient, does not detract from the neighboring properties.

### **Tree Preservation and Protection**

- **Type C Tree Permit: Section 4.610.40**

The tree removal associated with this proposed parking area is necessary for the construction of the proposed site improvements. The tree removal and tree protection plan is available on Sheet C.5 Demolition and Temporary Erosion and Sediment Control Plan. The Landscaping Plan on Sheet C.11 shows the location of the proposed replacement trees.

### **Definitions of Terms**

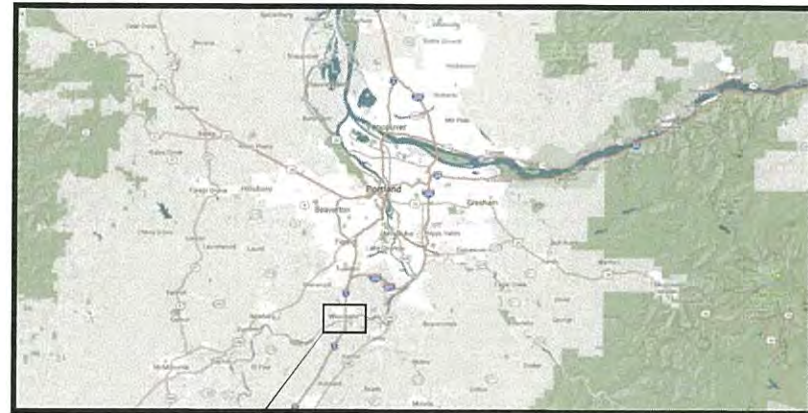
- **Definitions of Terms: Section 4.001**

The definitions listed in Section 4.001 comply with the intent of the terms used in this submittal package.



# COCA-COLA BOTTLING CO. EMPLOYEE PARKING WILSONVILLE, OREGON

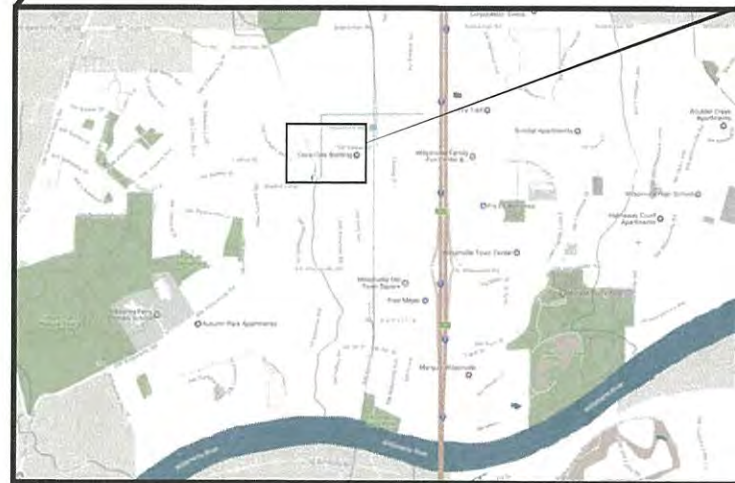
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LOCATION MAP  
NOT TO SCALE



PROJECT LOCATION  
NOT TO SCALE



VICINITY MAP  
NOT TO SCALE

### SHEET INDEX

- C.1 - COVER SHEET AND SHEET INDEX
- C.2 - GENERAL NOTES
- C.3 - EXISTING CONDITIONS AND DEMOLITION PLAN
- C.4 - PROPOSED CONDITIONS
- C.5 - DEMOLITION AND TEMPORARY EROSION CONTROL PLAN
- C.6 - GRADING PLAN
- C.7 - STORM PLAN
- C.8 - RAIN GARDEN PLAN
- C.9 - PAVING PLAN
- C.10 - STRIPING PLAN
- C.11 - LANDSCAPING PLAN
- C.12 - LIGHTING PLAN
- C.13 - HORIZONTAL CONTROL PLAN
- C.14- TEMPORARY EROSION AND SEDIMENT CONTROL DETAILS
- C.15 - STORMWATER DETAILS
- C.16 - PAVING DETAILS

COCA-COLA  
BOTTLING CO.  
9750 SW BARBER ST.  
WILSONVILLE, OR  
97070

**Hood River  
Consulting  
Engineers,  
Inc.**



No.	Revision/Issue	Date
1		6/28/17

Hood River Consulting Engineers, Inc.  
1784 May Street  
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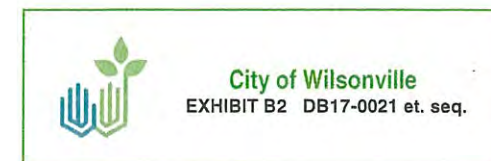
EXPIRES:	
DATE:	6/28/17

COVER SHEET AND  
SHEET INDEX

PROJECT NO. 17-042	SHEET
DATE 6/28/17	C.1
SCALE NTS	



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CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY  
NOTIFICATION CENTER IS 1-800-332-2344 (OR 811))



**NOTES**

**GENERAL NOTES**  
 THESE DRAWINGS, THE PRELIMINARY DRAINAGE REPORT, ADDENDA, AND ANY OTHER PROVIDED DOCUMENTS, TOGETHER ARE COMPLEMENTARY DOCUMENTS (DOCUMENTS), WHICH DESCRIBE THE DESIGN INTENT AND THE CONSTRUCTION OF THIS PROJECT.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A COMPLETE AND FULLY FUNCTIONING PROJECT WHICH MEETS THE DESIGN INTENT, AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE DOCUMENTS AND ALL APPLICABLE CODES.

THE USE OF SUBCONTRACTORS IS THE ELECTION OF THE CONTRACTOR. ANY REFERENCE TO OR REQUIREMENT OF THE CONTRACTOR EXTENDS TO ANY SUBCONTRACTOR THE CONTRACTOR ELECTS TO PARTICIPATE IN THE REFERENCED PART OF THE PROJECT. HOWEVER, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PERFORMANCE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DOCUMENTS.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL DRAWINGS PROJECT MANUAL, ADDENDA, ETC. IN ORDER TO ASSURE THE COORDINATION OF ALL WORK AFFECTING EACH TRADE, AND TO REQUIRE THE SAME FROM THE ELECTED SUBCONTRACTORS. FAILURE OF ANY SUBCONTRACTOR TO REVIEW AND COORDINATE THE WORK REQUIRED BY THE DOCUMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING ALL WORK SO REQUIRED AS PART OF THE CONTRACT.

THE CONTRACTOR SHALL LAYOUT AND SEQUENCE THE INSTALLATION OF THE WORK SO THAT THE DIFFERENT SYSTEMS DO NOT OBSTRUCT THE INSTALLATION OF SUCCESSIVE WORK. IN GENERAL, SYSTEMS INSTALLED FIRST SHOULD BE KEPT AS HIGH AND TIGHT TO STRUCTURE AS POSSIBLE SO AS TO LEAVE SPACE AVAILABLE FOR SYSTEMS WHICH FOLLOW.

CONDITIONS AND DIMENSIONS SHOWN ON THESE DRAWINGS AS "EXISTING" ARE ASSUMED TO BE ACCURATE BASED ON AVAILABLE INFORMATION. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS, AND NOTIFY THE ENGINEER OF ANY DEVIATIONS OR CONFLICTS BETWEEN THESE DRAWINGS AND ACTUAL CONDITIONS AND DIMENSIONS.

THE DRAWINGS INCLUDE, BUT ARE NOT LIMITED TO IDENTIFICATION, ORGANIZATION, POSITION, ASSEMBLY AND CONSTRUCTION OF MATERIALS, PRODUCTS AND SYSTEMS USED IN THE PROJECT.

THE DOCUMENTS ARE ORGANIZED FOR CONVENIENCE ONLY, AND DO NOT INTEND TO DIVIDE THE WORK BETWEEN THE CONTRACTOR AND/OR SUBCONTRACTORS. DELEGATION OF WORK TO SUBCONTRACTORS IS THE CHOICE AND RESPONSIBILITY OF THE CONTRACTOR.

IF DISCREPANCIES ARE FOUND TO EXIST WITHIN THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND REQUEST CLARIFICATION.

ALL ITEMS SHOWN OR REQUIRED IN THESE DOCUMENTS ARE NEW UNLESS OTHERWISE NOTED.

THE DRAWINGS AND REFERENCED DETAILS HAVE BEEN DIMENSIONED IN ORDER TO ESTABLISH CONTROL AND GUIDELINES FOR ACCURATE FIELD LAYOUT. WHERE NO METHOD OF DETERMINING A LOCATION IS GIVEN, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR CLARIFICATION PRIOR TO INSTALLATION.

WHERE DIMENSIONS ARE NOTED TO BE VERIFIED IN THE FIELD (VIF) THE DIMENSIONS SHOWN IS THE DESIGN BASIS, BUT MAY DIFFER FROM ACTUAL CONDITIONS. PRIOR TO PROCEEDING WITH THE WORK THE CONTRACTOR SHALL VERIFY THESE DIMENSIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE DESIGN BASIS AND ACTUAL DIMENSIONS.

DRAWINGS SHALL NOT BE SCALED.

DETAILS ARE KEYS TO LOCATIONS WHICH ARE TYPICAL FOR THE CONDITIONS REPRESENTED, AND AT SPECIAL CONDITIONS. DETAILS APPLY TO ALL LOCATIONS WHICH ARE SIMILAR AND ARE NOT OTHERWISE DETAILED. IF FURTHER CLARIFICATIONS IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR CLARIFICATION PRIOR TO PROCEEDING WITH THE WORK.

ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF OREGON OCCUPATIONAL SAFETY AND HEALTH DIVISION AND THE SAFETY STANDARDS OF THE STATE OF OREGON BUREAU OF LABOR AND INDUSTRIES, AND OTHER APPLICABLE REGULATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MEET ALL REQUIREMENTS OF THE STATE OF OREGON ADMINISTRATIVE RULES.

THE MATERIALS USED FOR AND THE INSTALLATION OF ALL WARNING AND TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE 2015 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, CURRENT EDITION. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE A "COMPETENT PERSON" AS DEFINED IN THE REGULATIONS TO BE ON THE PROJECT SITE DURING ALL TRENCHING OPERATIONS. THE "COMPETENT PERSON" APPOINTED BY THE CONTRACTOR SHALL FULFILL ALL REQUIREMENTS OF THE REGULATIONS.

PRIOR TO OPENING AN EXCAVATION, THE CONTRACTOR SHALL ARRANGE FOR FIELD LOCATION OF UTILITY INSTALLATIONS SUCH AS SEWER, TELEPHONE, FUEL, ELECTRIC, GAS, WATER LINES, OR ANY OTHER UNDERGROUND INSTALLATIONS THAT REASONABLY MAY BE EXPECTED TO BE ENCOUNTERED DURING THE EXCAVATION WORK. WHEN EXCAVATION OPERATIONS APPROACH THE ESTIMATED LOCATION OF UNDERGROUND INSTALLATIONS, THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF THE INSTALLATIONS BY SAFE AND ACCEPTABLE MEANS. WHILE THE EXCAVATION IS OPEN, UNDERGROUND INSTALLATIONS SHALL BE PROTECTED, SUPPORTED, OR REMOVED AS NECESSARY TO SAFEGUARD WORKERS.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL PHYSICAL BARRIER PROTECTION AT ALL EXCAVATIONS. ALL WELLS, PITS, SHAFTS, ETC. SHALL BE BARRICADED OR COVERED. FURTHER, NO TRENCHES SHALL BE LEFT OPEN AT ANY TIME UNLESS GUARDED WITH ADEQUATE BARRICADES, WARNING LAMPS, AND SIGNS. PROPER TRAFFIC AND PEDESTRIAN CONTROL SHALL BE PROVIDED BY THE CONTRACTOR.

**PROJECT SAFETY**

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, INCLUDING EXCAVATION SAFETY. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION AS IT RELATES TO PROJECT AND WORK SAFETY.

THE CONTRACTOR SHALL MAINTAIN LOCAL ACCESS TO AREA BUSINESSES AND EMERGENCY TRAFFIC THROUGHOUT THE LIFE OF THE PROJECT AND COORDINATE CONSTRUCTION ACTIVITIES CLOSELY WITH AREA BUSINESSES TO KEEP THEM INFORMED OF OPERATIONS THAT MAY IMPACT THEIR USE OF STREETS OR ROADWAYS.

ALL SIGNS, BARRICADES, BARRIERS, LIGHTS, CONES, TRENCH BOXES, SHORING/BRACING AND OTHER SUCH "DEVICES" REQUIRED TO WARN, PROTECT, OR DIRECT THE PUBLIC AND WORKMEN DURING THE LIFT OF THE CONTRACT SHALL BE FURNISHED, INSTALLED, MOVED, AND REMOVED BY THE CONTRACTOR. WHEN CONDITIONS WARRANT THEIR USE, FLAG-PERSONS SHALL ALSO BE PROVIDED BY THE CONTRACTOR.

**MATERIALS SUBMITTALS**

THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, SAMPLES OF MATERIALS, AND/OR MANUFACTURER'S DATA SHEETS AS DEEMED NECESSARY BY THE ENGINEER.

ALL SUBMITTALS OR RESUBMITTALS SHALL BE ACCOMPANIED BY AND FURNISHED IN ACCORDANCE WITH THE TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURERS CERTIFICATES OF COMPLIANCE FORM PROVIDED AT THE END OF THESE GENERAL REQUIREMENTS. ALL SUBMITTALS SHALL BE SUBMITTED AT A TIME SUFFICIENTLY EARLY TO ALLOW REVIEW OF SAME BY THE ENGINEER.

**QUALITY CONTROL**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING HIS/HER OWN CONSTRUCTION TESTING, MONITORING, AND QUALITY CONTROL PROGRAM TO ENSURE THE MATERIALS USED ON THE PROJECT AND IN THE CONTRACTORS OPERATIONS ARE IN COMPLIANCE WITH THESE STANDARD SPECIFICATIONS, THE 2015 CITY OF WILSONVILLE PUBLIC WORKS CONSTRUCTION STANDARDS, THE CITY OF WILSONVILLE STANDARD DRAWINGS, AND THE 2015 CITY OF WILSONVILLE STORMWATER & SURFACE WATER STANDARDS (SECTION 3). THE CONTRACTOR WILL PERFORM TESTS AND USE TEST METHODS AS REQUIRED IN THE 2015 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.

A WRITTEN QUALITY CONTROL PROGRAM SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO ANY WORK BEING PERFORMED. THE PLAN SHALL DESCRIBE HOW THE CONTRACTOR WILL MONITOR AND ENSURE QUALITY CONTROL THROUGHOUT THE WORK. MATERIALS, EQUIPMENT, OR WORK THAT FAILS TO MEET THESE STANDARD SPECIFICATIONS AND THE CITY OF WILSONVILLE STANDARD PLANS SHALL NOT BE USED IN THE WORK.

THE ENGINEER WILL AT ALL TIMES HAVE ACCESS TO THE WORK. IN ADDITION, AUTHORIZED REPRESENTATIVES AND AGENTS OF ANY PARTICIPATING STATE AGENCY SHALL BE PERMITTED TO REVIEW ALL WORK, MATERIALS, INVOICES OF MATERIALS, AND OTHER RELEVANT DATA AND RECORDS. THE CONTRACTOR WILL PROVIDE PROPER FACILITIES FOR SUCH ACCESS AND OBSERVATION OF THE WORK AND ALSO FOR ANY REVIEW OR TESTING THEREOF. THE CONTRACTOR SHALL NOTIFY TESTING PERSONNEL, INCLUDING TESTING PERSONNEL PROVIDED BY THE ENGINEER, AT LEAST 24 HOURS IN ADVANCE OF OPERATIONS TO ALLOW FOR PERSONNEL ASSIGNMENTS AND TEST SCHEDULING. ALL MATERIALS TO BE TESTED SHALL BE PROVIDED BY THE CONTRACTOR AT HIS/HER EXPENSE. AFTER TESTS ARE COMPLETED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING TEST AREAS TO MATCH ORIGINAL CONDITIONS. THE CONTRACTOR SHALL PAY FOR ALL ADDITIONAL REVIEWS AND RETESTING REQUIRED BECAUSE OF DEFECTIVE WORK OR ILL-TIMED NOTICES. TESTS OR REVIEWS BY THE ENGINEER OR OTHERS SHALL NOT RELIEVE THE CONTRACTOR FROM HIS/HER OBLIGATIONS TO PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THESE STANDARD SPECIFICATIONS AND CITY OF THE WILSONVILLE STANDARDS & SPECIFICATIONS FOR CONSTRUCTION. THESE DOCUMENTS DO NOT MAKE THE ENGINEER, OR OTHERS, AN INSURER OF THE CONTRACTOR'S WORK.

**REVIEW OF WORK**

IT IS NOT THE INTENT OF THE ENGINEER TO PROVIDE CONTINUOUS OR FULL-TIME OBSERVATION OF ALL WORK. WHEN REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL EMAIL THE ENGINEER A DAILY REPORT OF HIS WORK PROGRESS AND PROPOSED WORK SCHEDULE FOR THE NEXT TWO DAYS WITHIN 24 HOURS OF ENGINEER'S REQUEST.

**COOPERATION WITH OTHERS**

THE CONTRACTOR SHALL COOPERATE WITH THE RESIDENTS AND BUSINESS OWNERS IN THE AREA TO PROVIDE GOOD ACCESS TO PRIVATE PROPERTY WHENEVER POSSIBLE. BARRICADES, TRAFFIC CONES, BLINKERS, AND SIGNING SHALL BE USED TO DIRECT THE PUBLIC THROUGH THE WORK AREA SAFELY.

**PROTECTION OF EXISTING FACILITIES**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND PERPETUATION OF EXISTING LAND SURVEY, PROPERTY, OR CONSTRUCTION MONUMENTS. THE CONTRACTOR SHALL GIVE THE SURVEYOR A MINIMUM OF 48 HOUR NOTICE PRIOR TO WORKING IN THE VICINITY OF ANY SUCH MONUMENT THAT HE/SHE MAY DISTURB SO THE SURVEYOR CAN ARRANGE FOR SUCH MONUMENTS TO BE REFERENCED. WHEN PROPER NOTICE IS PROVIDED, THE SURVEYOR SHALL HAVE ANY DISTURBED MONUMENTS RESTORED FOLLOWING CONSTRUCTION. SHOULD THE CONTRACTOR FAIL TO PROVIDE ADEQUATE NOTICE TO THE SURVEYOR, HE/SHE SHALL BE RESPONSIBLE FOR THE EXPENSE OF HAVING THE DISTURBED MONUMENT RESTORED BY A QUALIFIED SURVEYOR.

THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, REFERENCE POINTS, AND STAKES SET BY OTHERS. IN THE CASE OF WILLFUL OR CARELESS DESTRUCTION BY THE CONTRACTOR, HE/SHE SHALL BE CHARGED WITH THE RESULTING EXPENSE OF REPLACEMENT AND SHALL BE RESPONSIBLE FOR ANY MISTAKES OR LIABILITY THAT MAY BE CAUSED BY THE LOSS OR DISTURBANCE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACTUAL LOCATING AND PROTECTING OF EXISTING UTILITIES. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF WORK, SHALL CONTACT EXISTING UTILITY COMPANIES SUCH AS WATER, SEWER, POWER, TELEPHONE, GAS, ETC., TO HAVE THE UTILITY COMPANIES LOCATE ALL UTILITIES WHICH WILL BE AFFECTED BY THE WORK TO BE PERFORMED. THE CONTRACTOR SHALL GIVE 48-HOUR NOTIFICATION IN ACCORDANCE WITH OREGON ADMINISTRATIVE RULES CHAPTER 952, DIVISION 1. THE "CALL BEFORE YOU DIG" NUMBER IS 1-800-332-2344 OR 811. THE CONTRACTOR SHALL PERFORM ALL NECESSARY COORDINATION WORK WITH THE UTILITY COMPANIES IN PERFORMING THE WORK AND SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY THE CONTRACTOR'S OPERATIONS. THE CONTRACTOR SHALL MAKE ANY ADVANCE EXPLORATION NECESSARY TO PROTECT ALL EXISTING UTILITIES AND TO PROPERLY PLAN THE INSTALLATION OF PIPELINES OR OTHER WORK TO THE DESIGN LINE AND GRADE. THE OWNER OF THE UTILITIES SHALL NORMALLY BE RESPONSIBLE FOR TAKING THE UTILITY OUT OF SERVICE IF NECESSARY FOR THE PERFORMANCE OF THE WORK; I.E., SHUTTING VALVES, ETC. IN THE CASE OF WATER VALVES, THE OWNER OF THE WATER SYSTEM MAY OPERATE THE VALVES OR REQUEST THE CONTRACTOR TO DO SO. WHEN THE CONTRACTOR IS REQUESTED TO DO SO, THE CONTRACTOR SHALL OPERATE WATER VALVES AS A NORMAL PART OF THE WORK. ALL WATER VALVES SHALL BE OPERATED AS INSTRUCTED BY THE OWNER OF THE VALVES. IT CAN BE EXPECTED THAT SOME VALVES MAY NOT FULLY OPERATE PROPERLY WHICH MAY REQUIRE THAT ADDITIONAL VALVES BE OPERATED. THIS SITUATION SHALL BE CONSIDERED A NORMAL REQUIREMENT OF THE WORK.

THE CONTRACTOR SHALL RECEIVE PRIOR APPROVAL FROM THE APPROPRIATE AUTHORITY OR UTILITY OWNER BEFORE ANY PUBLIC OR PRIVATE UTILITY SERVICE IS INTERRUPTED. THE CONTRACTOR SHALL GIVE A MINIMUM OF 4 HOUR NOTICE TO ALL UTILITY CUSTOMERS WHO WILL BE AFFECTED BY THE CONTRACTOR'S OPERATIONS. NO UTILITY SERVICE SHALL BE DISCONNECTED OR INTERRUPTED FOR MORE THAN 9 HOURS OR AS REQUIRED BY THE UTILITY OWNER, WHICHEVER IS LESS, IN ANY 24-HOUR PERIOD. WHEN DISRUPTION OF SERVICE WILL BE LONGER THAN 9 HOURS IN ANYONE DAY, THE CONTRACTOR SHALL PROVIDE SAFE AND APPROPRIATE TEMPORARY SERVICE. ALL TEMPORARY SERVICE SHALL BE COORDINATED WITH THE UTILITY OWNER. WHEN REGULAR UTILITY SERVICE INTERRUPTION IS REQUIRED DURING THE COURSE OF THE WORK, THE CONTRACTOR SHALL SUBMIT A WRITTEN PLAN TO THE ENGINEER AND UTILITY OWNER WHICH DETAILS PROPOSED WORK PLAN NOTIFICATION PROCEDURES, AND ESTIMATED EXTENT OF SERVICE INTERRUPTION. THE CONTRACTOR MUST OBTAIN WRITTEN APPROVAL OF HIS PLAN FROM THE UTILITY OWNER PRIOR TO INTERRUPTING THE UTILITY SERVICE. AS A MINIMUM, NOTIFICATION SHALL INCLUDE DOOR HANGERS AND PUBLIC NOTIFICATION IN THE NEWSPAPER AND RADIO, AS APPROPRIATE. PERSONAL CONTACT SHALL BE MADE WHERE PRACTICAL. THE CONTRACTOR SHALL MAKE EVERY EFFORT POSSIBLE TO PROVIDE CONTINUOUS UTILITY SERVICE TO ALL UTILITY CUSTOMERS.

THE CONTRACTOR SHALL ARRANGE HIS/HER WORK SCHEDULE SUCH THAT ALL PHASES OF WORK, ONCE STARTED, SHALL BE DILIGENTLY PURSUED UNTIL COMPLETED. THE INTENT IS THAT THE WORK AREA SHALL NOT BE DISTURBED FOR UNDUE

PERIODS OF TIME. WORK SHALL NOT BE LEFT UNCOMPLETED. IF THE ENGINEER DETERMINES THAT WORK IS NOT BEING DILIGENTLY COMPLETED, HE/SHE SHALL REQUEST THE CONTRACTOR TO COMPLETE SAID WORK. CLEANING UP SHALL BE A CONTINUING PROCESS FROM THE START OF THE WORK TO FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR SHALL, AT ALL TIMES, AT HIS/HER OWN EXPENSE AND WITHOUT FURTHER ORDER, KEEP PROPERTY ON WHICH WORK IS IN PROGRESS FREE FROM ACCUMULATIONS OF WASTE MATERIAL OR RUBBISH CAUSED BY EMPLOYEES OR BY THE WORK, AND AT ALL TIMES DURING THE CONSTRUCTION PERIOD SHALL MAINTAIN STRUCTURE SITES, RIGHTS-OF-WAY, EASEMENTS, ADJACENT PROPERTY, AND THE SURFACES OF STREETS AND ROADS ON WHICH WORK IS BEING DONE IN A SAFE CONDITION FOR THE CONTRACTOR'S WORKERS AND THE PUBLIC. ACCUMULATIONS OF WASTE MATERIALS THAT MIGHT CONSTITUTE A FIRE HAZARD WILL NOT BE PERMITTED. SPILLAGE FROM THE CONTRACTOR'S HAULING VEHICLES ON TRAVELED PUBLIC OR PRIVATE ROADS SHALL BE PROMPTLY CLEANED UP. THE CONTRACTOR SHALL TAKE APPROPRIATE ACTION TO CONTROL DUST CAUSED BY HIS/HER OPERATIONS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, WATERING OF EXPOSED AREAS, CLEANING OF ROADWAYS, ETC. THIS IS CONSIDERED A NORMAL PART OF THE CONSTRUCTION PROJECT. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL, AT HIS/HER OWN EXPENSE, REMOVE ALL TEMPORARY STRUCTURES, RUBBISH, WASTE MATERIAL, EQUIPMENT, AND SUPPLIES RESULTING FROM HIS/HER OPERATIONS. HE/SHE SHALL LEAVE SUCH LANDS IN A NEAT AND ORDERLY CONDITION THAT IS AT LEAST AS GOOD AS THE CONDITION IN WHICH HE/SHE FOUND THEM PRIOR TO HIS/HER OPERATIONS. THE CONTRACTOR SHALL REPLACE OR RESTORE, EQUIVALENT TO THEIR ORIGINAL CONDITION, ALL SURFACES OR EXISTING FACILITIES DISTURBED BY HIS WORK, WHETHER WITHIN OR OUTSIDE OF THE WORK AREAS. RESTORATION WORK WILL INCLUDE, BUT IS NOT LIMITED TO, ROADWAYS, UTILITIES, STRUCTURES, LANDSCAPING, ETC.



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 97070

**Hood River  
 Consulting  
 Engineers,  
 Inc.**



No.	Revision/Issue	Date
1		6/28/17

Hood River Consulting Engineers, Inc.  
 1784 May Street  
 Hood River, OR 97031  
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 adam@hoodriverengineers.com  
 www.hoodriverengineers.com

EXPIRES:	
DATE:	6/28/17

General Notes

PROJECT NO. 17-042	SHEET  C.2
DATE 6/28/17	
SCALE NTS	



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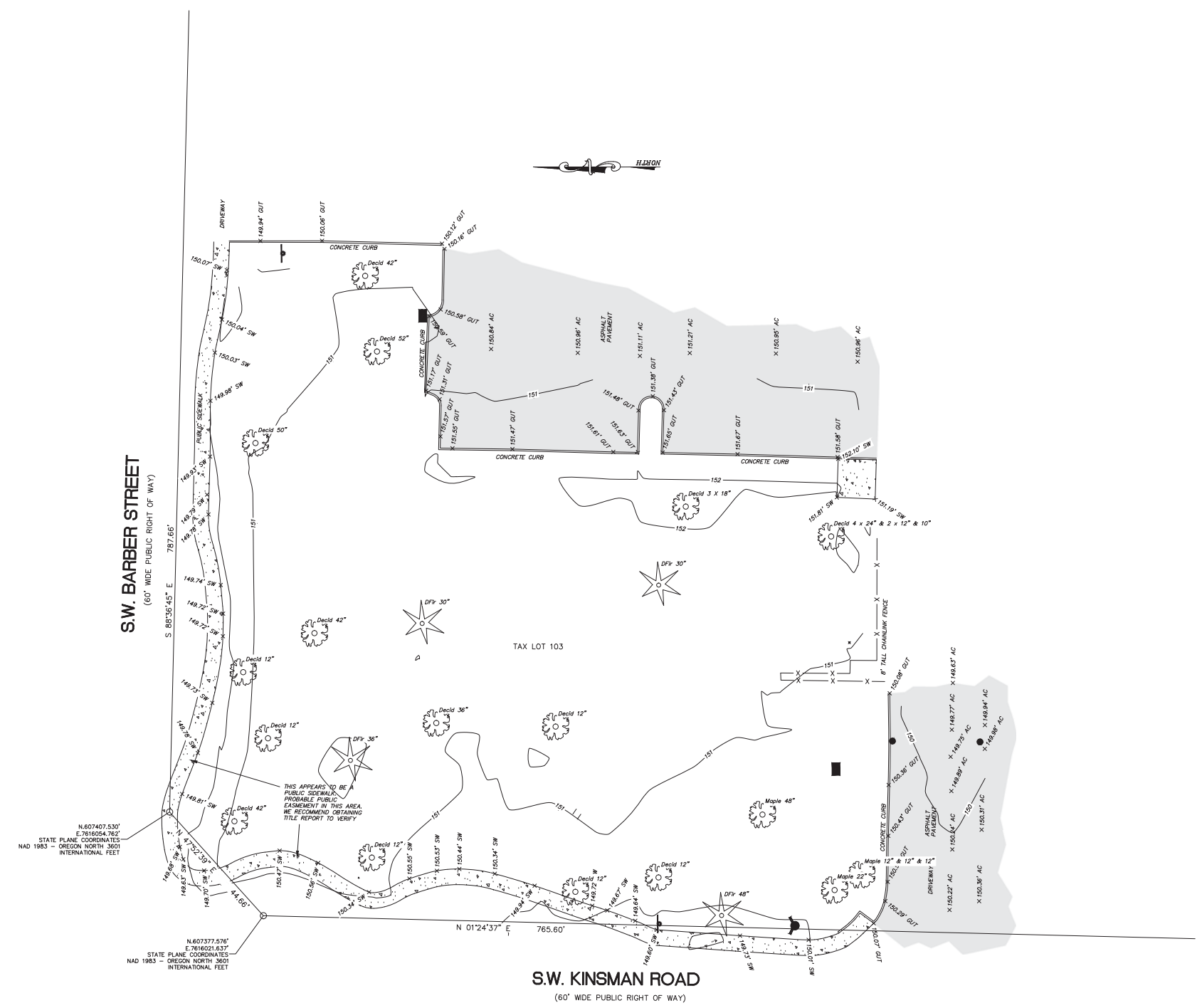
EXISTING CONDITIONS: NORTH PARKING EXPANSION AREA

FOR PERMIT ONLY

**TOPOGRAPHIC SURVEY**  
 FOR:  
 HOOD RIVER CONSULTING ENGINEERS, INC.  
 SITUATED IN THE SW 1/4 OF SECTION 14  
 T.3S, R.1W, W.M.  
 CITY OF WILSONVILLE  
 CLACKAMAS COUNTY, OREGON  
 TAX MAP 3 1 W 14C  
 MAY 22, 2017

- NOTES:**
1. VERTICAL DATUM IS NAVD 88, BASED ON OPUS SOLUTION OF STATIC GPS OBSERVATIONS.
  2. THE BOUNDARIES AS SHOWN ON THIS MAP ARE BASED ON RECORD DATA AND FOUND MONUMENTS. THIS MAP DOES NOT REPRESENT A SURVEY TO BE RECORDED, BUT WAS DONE FOR SITE/TOPO INFORMATION ONLY.
  3. THIS SURVEY IS MADE FOR THE ORIGINAL PURCHASER OF THE SURVEY ONLY. ANDY FARIS & ASSOCIATES, INC. ASSUMES NO LIABILITY FOR INFORMATION SHOWN HEREON TO ANY OTHER INSTITUTIONS OR SUBSEQUENT PURCHASERS OF THE PROPERTY.
  4. SURVEY IS VALID ONLY IF PRINT HAS SEAL AND SIGNATURE OF SURVEYOR.
  5. THE LOCATION AND OR EXISTENCE OF UTILITY SERVICE LINES AS SHOWN ON THIS MAP ARE BASED ON FIELD OBSERVATION ONLY. THERE MAY EXIST ADDITIONAL SERVICE LINES NOT SHOWN ON THIS SURVEY.
  6. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
  7. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR. THERE MAY EXIST EASEMENTS, CONDITIONS, OR RESTRICTIONS THAT COULD AFFECT THE TITLE OF THIS PROPERTY. NO ATTEMPT HAS BEEN MADE IN THIS SURVEY TO SHOW SUCH MATTERS THAT MAY AFFECT TITLE.

- LEGEND:**
- COMMUNICATIONS MANHOLE
  - FIRE HYDRANT
  - IRRIGATION CONTROL BOX
  - WATER VALVE
  - BOLLARD
  - SIGN
  - FENCE LINE AS NOTED
  - 000.00 SW X SIDEWALK - SPOT ELEVATION
  - 000.00 GUT X GUTTER FLOWLINE - SPOT ELEVATION
  - 000.00 AC X AC PAVEMENT - SPOT ELEVATION



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**Hood River  
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 www.hoodriverengineers.com

EXPIRES:	
DATE:	6/28/17

Existing Conditions

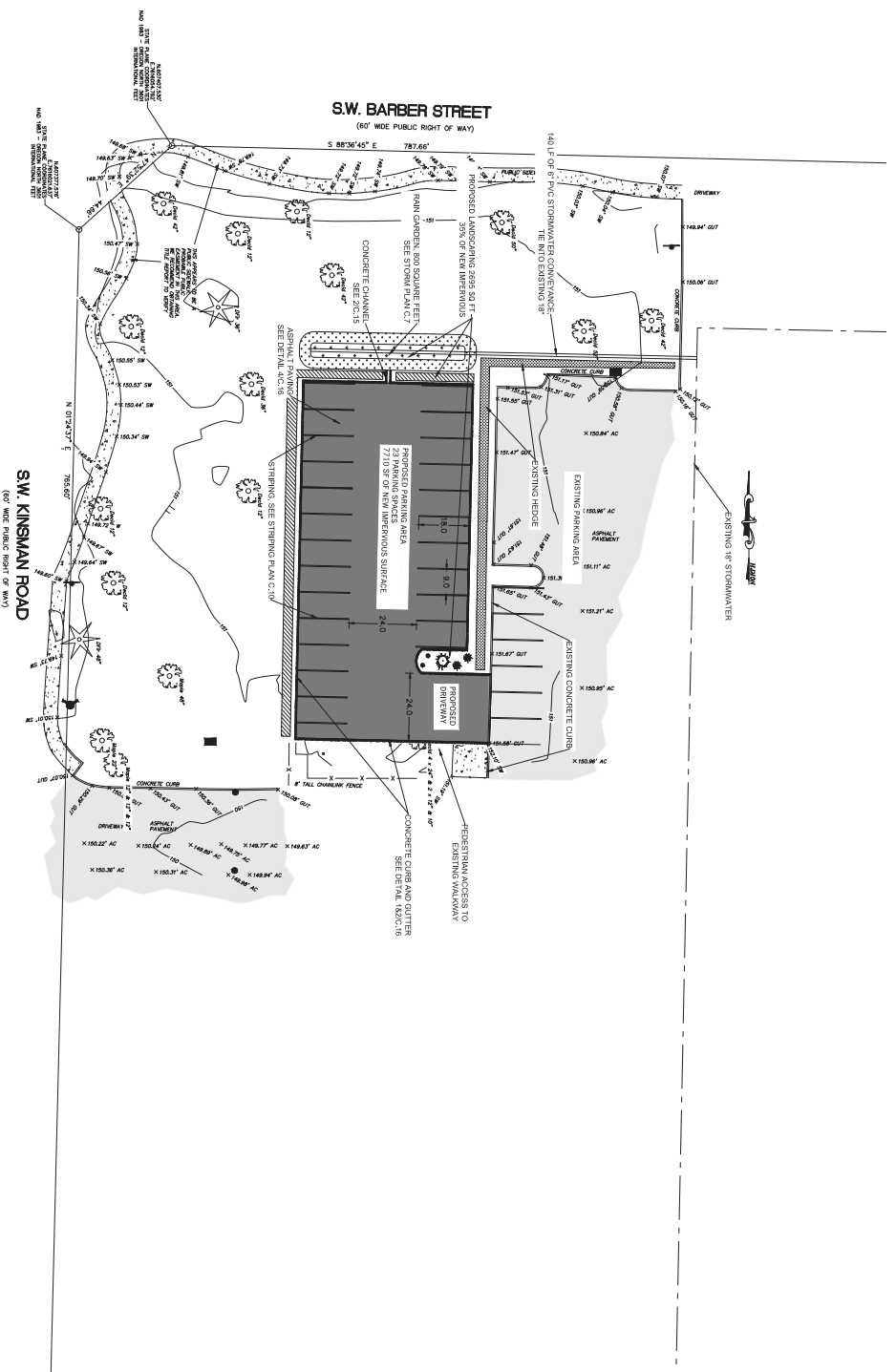
PROJECT NO. 17-042	SHEET
DATE 6/28/17	C.3
SCALE 1" = 20.'	



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NORTH PARKING EXPANSION AREA

FOR PERMIT ONLY



**ATTENTION:** REQUIREMENTS TO FOLLOW RULES ADOPED BY THE REGIONAL UTILITY AUTHORITY CENTER. HOUST RULES ARE SET FORTH IN LAW SECS. 81.0001 THROUGH 81.0005. CALLING THE CENTER ABOUT THE TELEPHONE NUMBER FOR THE REGIONAL UTILITY AUTHORITY CENTER IS 1-800-352-2244 (OR 811)



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WILSONVILLE, OR 97070

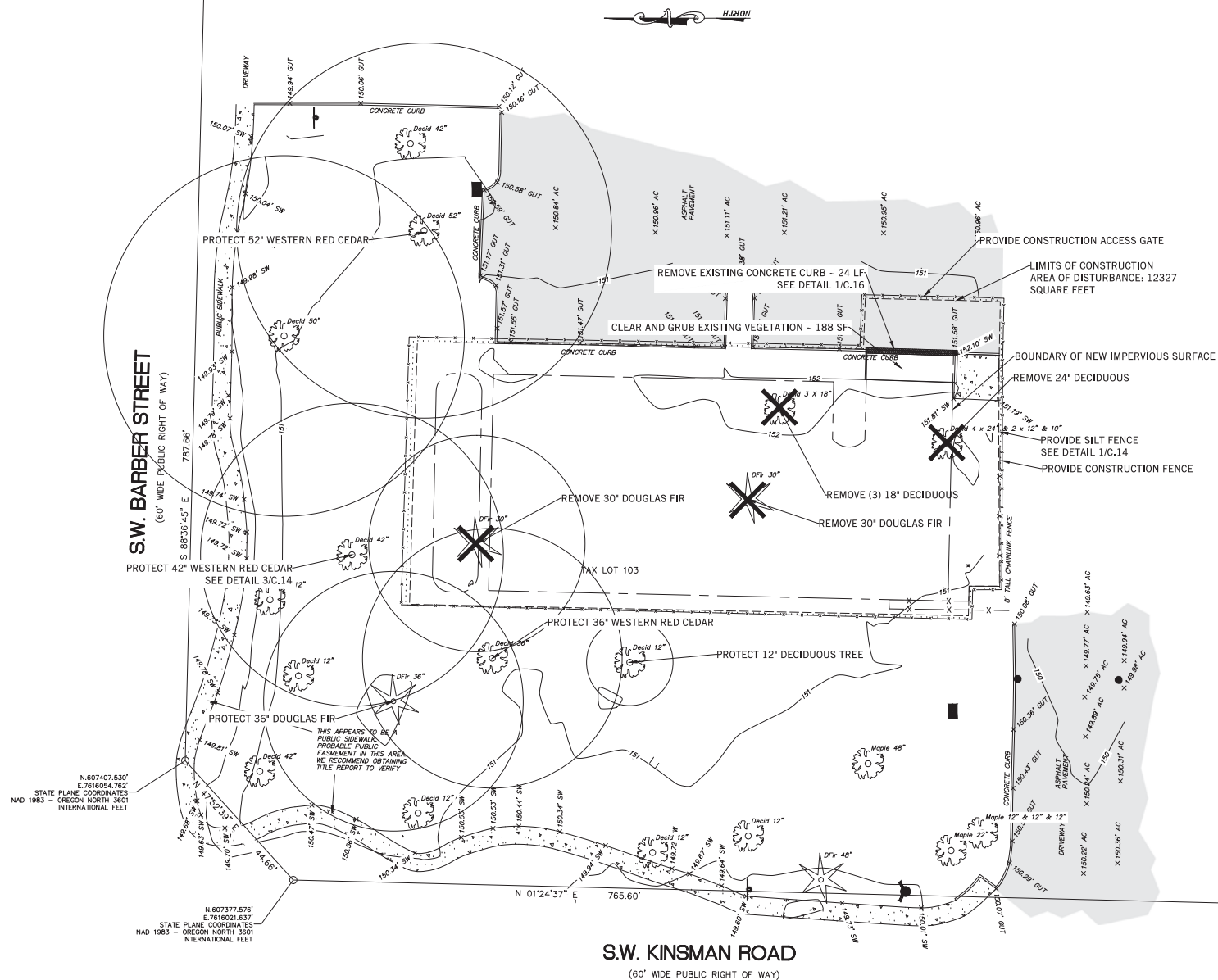
Hood River Consulting Engineers, Inc.  
1794 King Street 7031  
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adam@hoodriverengineers.com  
www.hoodriverengineers.com

NO.	Revision/Issue	Date
1		6/28/17

PROJECT	6/28/17
DATE	6/28/17

Product No	171042	Sheet	C-4
Rev	6/28/17		
Scale	1" = 20'		

NORTH PARKING EXPANSION AREA



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**DEMOLITION NOTES:**

1. EXISTING CONDITIONS SHOWN ON THE PLAN ARE BASED UPON THE SURVEY, THE BEST AVAILABLE PUBLIC RECORDS AND/OR PRIVATE RECORDS AS SUPPLIED BY THE OWNER AND/OR DATA OBTAINED VERBALLY FROM OWNERS OR OFFICIALS ASSOCIATED WITH THE PARTICULAR UTILITY. UNDERGROUND FACILITIES NOT SHOWN ON THE DRAWINGS MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK.
2. IF CHANGED CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD PROMPTLY OF (1) PREEXISTING CONDITIONS DIFFERING FROM THOSE INDICATED IN THE PLANS, OR (2) PREEXISTING UNKNOWN CONDITIONS, OR AN UNUSUAL NATURE, DIFFERING FROM THOSE ORIGINALLY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE CONTRACT.
3. THE CONTRACTOR IS RESPONSIBLE FOR REVIEW OF ALL UTILITY PURVEYOR, AND CITY OR STATE RECORDS RELATIVE TO THE EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR AVOIDING DAMAGE TO THESE FACILITIES AND SHALL RESTORE ALL DAMAGED UTILITIES AT CONTRACTOR'S OWN EXPENSE.
4. PROTECT FROM HARM ANY TREES, OR OTHER OBJECTS SELECTED TO REMAIN.
5. RESTORE ANY IMPROVEMENTS DAMAGED BY THIS WORK TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO OWNER. REPAIR ANY DAMAGE TO ADJACENT STRUCTURES, UTILITIES, SITE, AND WORK OF THIS CONTRACT TO REMAIN AT NO ADDITIONAL COST TO OWNER.
6. NO BLASTING ON SITE. DO NOT USE EXPLOSIVES.
7. SPRINKLE DEBRIS AS NECESSARY TO LIMIT DUST TO LOWEST PRACTICAL LEVEL. DO NOT SPRINKLE TO EXTENT THAT WOULD CAUSE FLOODING OR CONTAMINATED RUNOFF.
8. REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION. CARE SHALL BE TAKEN THAT DAMAGE DOES NOT OCCUR TO EXISTING PAVEMENT WHICH IS TO REMAIN IN PLACE AND THAT ALL PAVEMENT REMOVALS ARE ACCOMPLISHED BY MAKING A NEAT VERTICAL SAW CUT AT THE BOUNDARIES OF THE AREA TO BE REMOVED.
9. REMOVE TREES, GROWTH, AND UNDERBRUSH AS REQUIRED FOR NEW CONSTRUCTION AND AS INDICATED. REMOVAL OPERATIONS SHALL BE PERFORMED IN A MANNER TO PROTECT PROPERTY.
10. MAKE CUTS AT CLOSEST PAVING JOINT.
11. THE CONTRACTOR WILL BE RESPONSIBLE FOR FURNISHING, SETTING, AND MARKING ALL LINE AND LOCATION STAKES, INCLUDING OFFSETS AND GENERAL CONSTRUCTION STAKING. WHEN WORK REQUIRING CONTROL IS BEING PERFORMED, ALL NECESSARY RELATED EQUIPMENT, SUPPLIES AND INSTRUMENTS SHALL BE ON SITE. A QUALIFIED LAYOUT ENGINEER, SURVEYOR, OR TECHNICAL SPECIALIST MUST BE ASSIGNED TO THE CONTRACTOR'S CREW FOR THIS WORK.
12. TRAFFIC: DO NOT OBSTRUCT WALKS OR PUBLIC WAYS WITHOUT THE WRITTEN PERMISSION OF GOVERNING AUTHORITIES.
13. THE REFUSE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER CONSISTENT WITH ALL GOVERNMENT REGULATIONS. IN NO CASE SHALL REFUSE MATERIAL BE LEFT ON THE PROJECT SITE, SHOVED ONTO ADJUTING PRIVATE PROPERTIES, OR BE BURIED IN EMBANKMENTS OR TRENCHES ON THE PROJECT SITE. DEBRIS SHALL NOT BE DEPOSITED IN ANY STREAM OR BODY OF WATER, WETLAND, OR IN ANY STREET OR ALLEY, OR UPON ANY PRIVATE PROPERTY EXCEPT BY WRITTEN CONSENT OF THE PRIVATE PROPERTY OWNER. MAINTAIN HAULING ROUTES CLEAN AND FREE OF ANY DEBRIS RESULTING FROM DEMOLITION WORK ON THIS PROJECT.

**SOIL EROSION SEDIMENTATION CONTROL NOTES:**

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS OF CLACKAMAS COUNTY, OREGON AND THE CITY OF WILSONVILLE, OREGON.
2. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN, CONSTRUCTION. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTATION OF SILT OFF THE SITE.
3. SOIL MATERIALS, DURING CONSTRUCTION SHALL BE CONTAINED, AND NOT BE ALLOWED TO COLLECT ON ANY OFF-PERIMETER AREAS OR IN WATERWAYS.
4. ALL MUD, DIRT OR OTHER MATERIALS TRACKED OR SPILLED ONTO EXISTING STATE-COUNTY-CITY OR PRIVATE ROADS AND FACILITIES FROM THIS SITE, DUE TO CONSTRUCTION SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR/BUILDER.
5. PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREAS SHALL BE COMPLETED WITHIN (15) FIFTEEN CALENDAR DAYS AFTER FINAL GRADING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY PROTECT A DISTURBED AREA IMMEDIATELY AFTER GRADING OPERATIONS, TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED.
6. DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR TO DETERMINE THE EFFECTIVENESS OF THESE EFFORTS. ANY NECESSARY REMEDIES INCLUDING SILT REMOVAL AND CORRECTIVE ACTIONS IN EROSION PROTECTION SHALL BE PERFORMED IMMEDIATELY.
7. EROSION CONTROL MEASURE SHOWN ARE THE MINIMUM REQUIRED. CONTRACTOR IS RESPONSIBLE FOR ADDITIONAL EROSION CONTROL MEASURE AS REQUIRED DURING EARTHWORK.

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DEMOLITION AND  
TEMPORARY EROSION  
AND SEDIMENT  
CONTROL PLAN

PROJECT NO. 17-042	SHEET
DATE 6/28/17	C.5
SCALE 1" = 20'	



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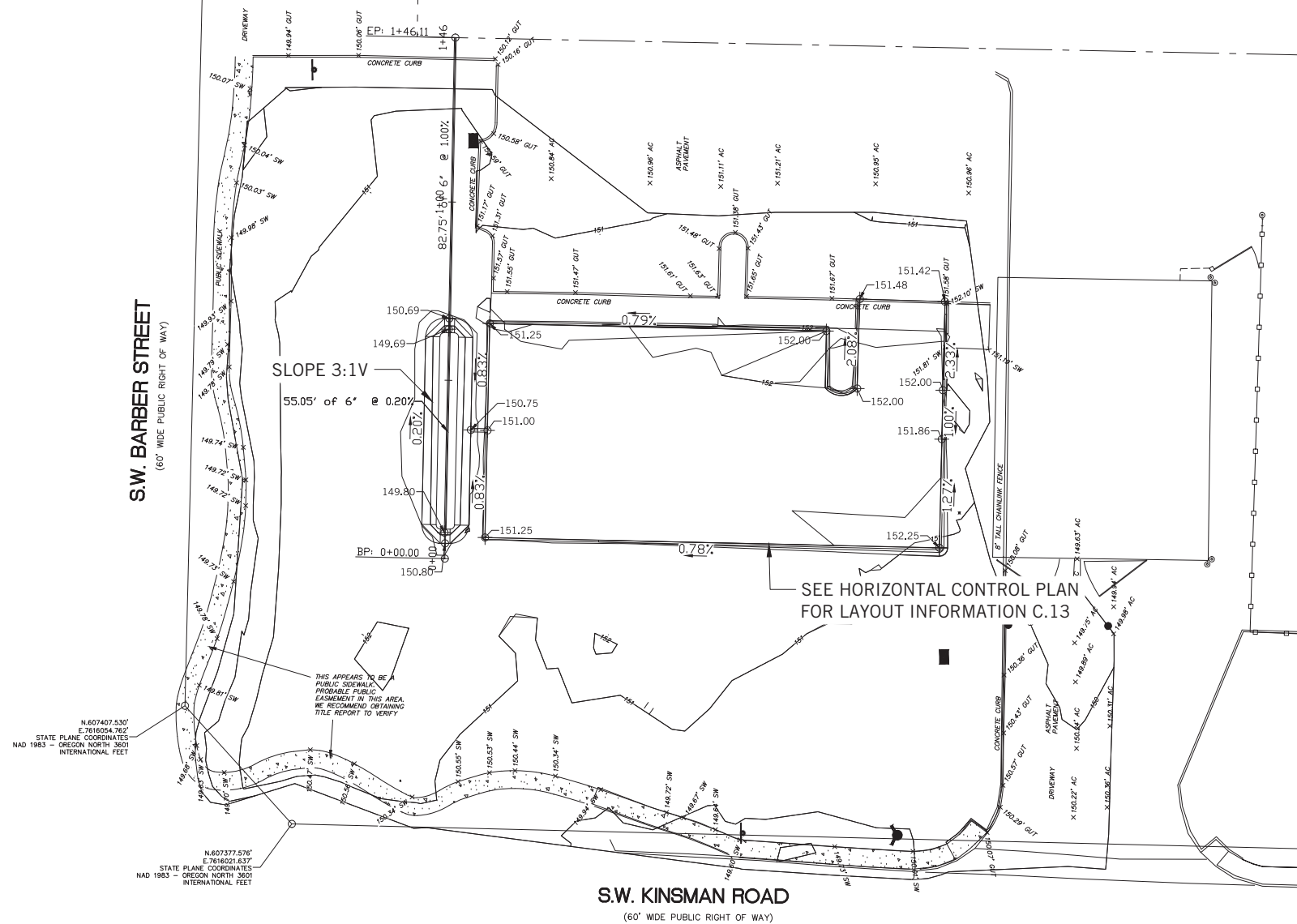
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NORTH PARKING EXPANSION AREA

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GRADING NOTES:

1. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL GRADING PERMITS FROM AUTHORITIES AND REGULATORY AGENCIES HAVING JURISDICTION OVER THIS SITE, AS REQUIRED, PRIOR TO BEGINNING WORK.
2. DO NOT COMMENCE EARTH-MOVING OPERATIONS UNTIL TEMPORARY EROSION- AND SEDIMENTATION-CONTROL MEASURES ARE IN PLACE.
3. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT, AND OTHER HAZARDS CREATED BY EARTH MOVING OPERATIONS.
4. UNIFORMLY GRADE AREAS TO A SMOOTH SURFACE, FREE OF IRREGULAR SURFACE CHANGES. COMPLY WITH COMPACTION REQUIREMENTS AND GRADE TO CROSS SECTIONS, LINES, AND ELEVATIONS INDICATED. PROVIDE A SMOOTH TRANSITION BETWEEN ADJACENT EXISTING GRADES AND NEW GRADES.
5. IF EXCAVATED MATERIALS INTENDED FOR FILL AND BACKFILL INCLUDE UNSATISFACTORY SOIL MATERIALS AND ROCK, REPLACE WITH SATISFACTORY SOIL MATERIALS.
6. ALL DISTURBED AREAS ARE TO RECEIVE SOD OR SEED. THESE AREAS SHALL BE WATERED BY THE CONTRACTOR UNTIL THE SOD OR SEED IS GROWING IN A HEALTHY MANNER. SEE LANDSCAPE PLAN FOR MORE INFORMATION.
7. WHEN EXCAVATING NEAR TREES AND PLANT-PROTECTION ZONES, DO NOT BREAK, TEAR, OR CHOP EXPOSED ROOTS. DO NOT USE MECHANICAL EQUIPMENT THAT RIPS, TEARS, OR PULLS ROOTS.



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GRADING PLAN

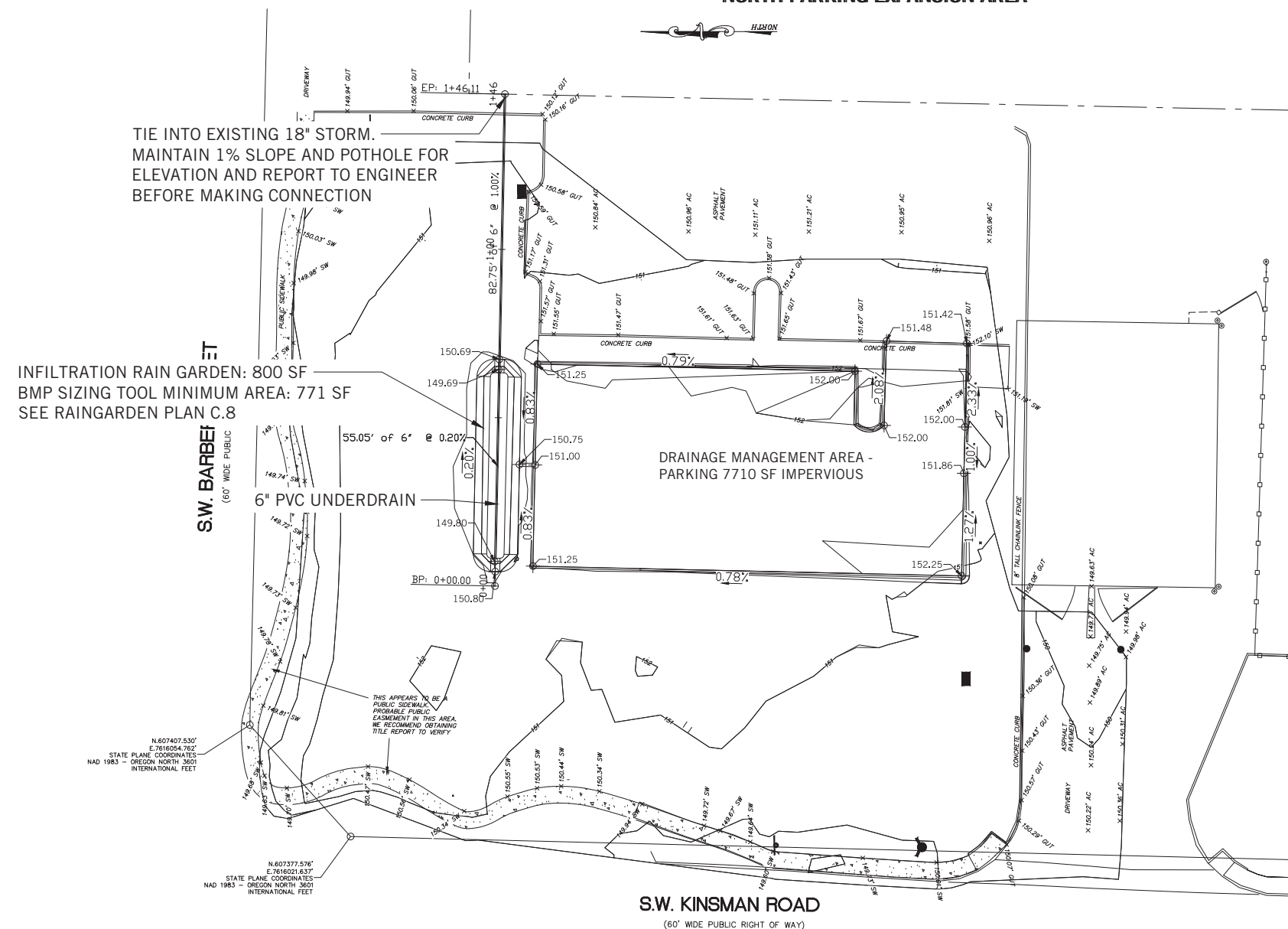
PROJECT NO. 17-042	SHEET
DATE 6/28/17	C.6
SCALE 1" = 20'	



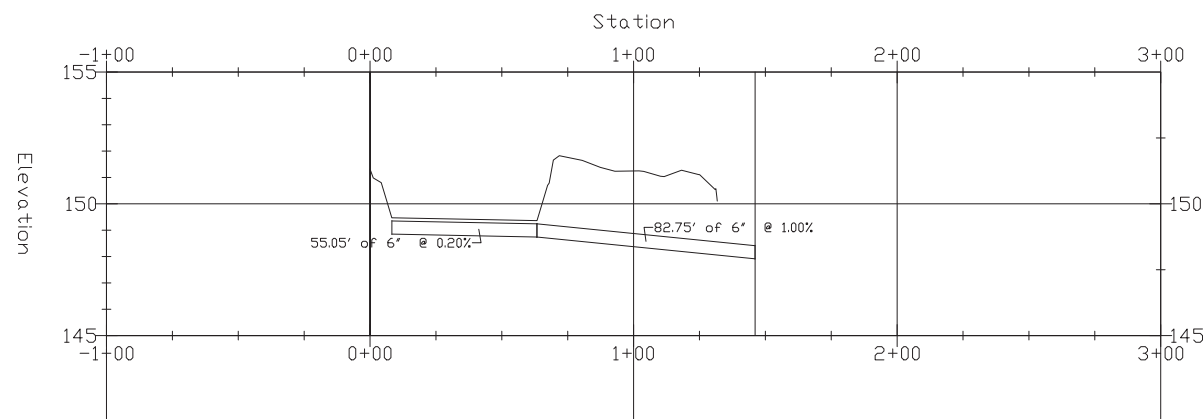
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NORTH PARKING EXPANSION AREA



STORM UNDERDRAIN PROFILE



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GENERAL STORM DRAINAGE NOTES

1. PROVIDE AND MAINTAIN TEMPORARY SEDIMENTATION COLLECTION FACILITIES TO ENSURE SEDIMENT OR OTHER HAZARDOUS MATERIAL DO NOT ENTER THE STORM DRAINAGE SYSTEM.
2. PRIOR TO FINAL INSPECTION AND ACCEPTANCE OF STORM DRAINAGE WORK, PIPES, AND STORM DRAIN STRUCTURES SHALL BE CLEANED AND FLUSHED. ANY OBSTRUCTIONS TO FLOW WITHIN THE STORM DRAIN SYSTEM, (SUCH AS RUBBLE, MORTAR, AND WEDGED DEBRIS), SHALL BE REMOVED AT THE NEAREST STRUCTURE. WASH WATER OF ANY SORT SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM OR SURFACE WATERS.
3. VEGETATION/LANDSCAPING IN THE RAIN GARDENS ARE AN INTEGRAL PART OF THE RUNOFF TREATMENT SYSTEM FOR THE PROJECT. SUCH DRAINAGE FACILITIES WILL NOT BE ACCEPTED UNTIL PLANTING IS COMPLETE. RUNOFF FROM ALL DRIVE SURFACES ARE CONSIDERED POLLUTION GENERATING IMPERVIOUS SURFACES AND SHALL BE ROUTED TO THE WATER QUALITY FACILITY AS NOTED ON THIS PLAN.
4. PVC PIPE AND FITTINGS SHALL BE PER ASTM D3034, SDR35 WITH RUBBER GASKET JOINTS.
5. BEDDING MATERIAL FOR PVC PIPE AND SHALL BE MINERAL AGGREGATE TYPE 22. BEDDING MATERIAL FOR PVC PIPE SHALL BE MECHANICALLY COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS MEASURED BY ASTM D-698.
6. PVC CONVEYANCE PIPE SHALL BE PLACED AT A MINIMUM SLOPE OF 1%.

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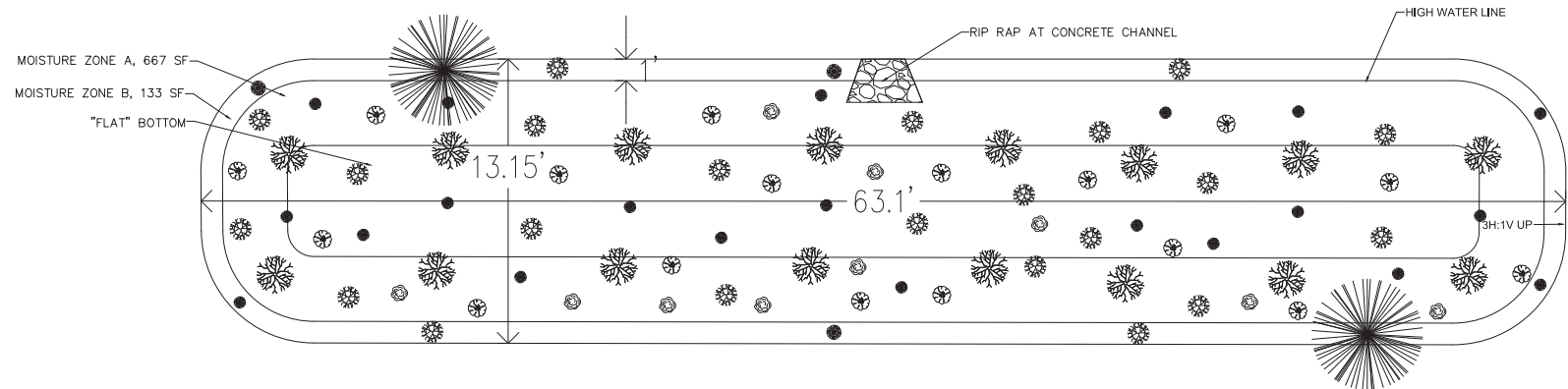
STORMWATER PLAN

PROJECT NO. 17-042	SHEET
DATE 6/28/17	C.7
SCALE 1" = 20'	



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**NORTH PARKING EXPANSION AREA**



**LANDSCAPE LEGEND**

- DOUGLAS FIR (*Pseudotsuga menziesii*) 6' HEIGHT MINIMUM  
2 TOTAL IN ZONE B
- INDIAN PLUM (*Omeria cerasiformis*) 30" HEIGHT MINIMUM  
10 TOTAL IN ZONE A
- NOOTKA ROSE (*Rosa nutkana*) 30" HEIGHT MINIMUM  
11 IN ZONE A & 4 IN ZONE B; 15 TOTAL
- OREGON GRAPE (*Mahonia aquifolium*) #1 CONTAINER MINIMUM  
10 IN ZONE A & 6 IN ZONE B; 16 TOTAL
- SNOWBERRY (*Symphoricarpos alba*) #1 CONTAINER MINIMUM  
23 TOTAL IN ZONE A
- SWORD FERN (*Polystichum munitum*)  
7 TOTAL IN ZONE A

MOISTURE ZONE A (667 SQ. FT.)						
	REQUIRED PLANT QUANTITIES PER 100 SQUARE FEET	ZONE SQUARE FOOTAGE	REQUIRED PLANT QUANTITIES	PROPOSED PLANT QUANTITIES	PROPOSED SPECIES BREAKDOWN	MINIMUM SIZES
LARGE SHRUBS/SMALL TREES	3	667	20.01	21	11 NOOTKA ROSE ( <i>Rosa nutkana</i> ) 10 INDIAN PLUM ( <i>Omeria cerasiformis</i> )	30" Height
SMALL SHRUBS	4	667	26.68	27	10 OREGON GRAPE ( <i>Mahonia aquifolium</i> ) 10 SNOWBERRY ( <i>Symphoricarpos alba</i> ) 7 SWORD FERN ( <i>Polystichum munitum</i> )	#1 container
GROUND COVER PLANTS	115	667	767.05	770	154 SLOUGH SEDGE ( <i>Carex obovata</i> ) 154 TUFTED HAIR GRASS ( <i>Deschampsia cespitosa</i> ) 154 DAGGER-LEAF RUSH ( <i>Juncus ensifolius</i> ) 154 SMALL FRUITED BULRUSH ( <i>Scirpus microcarpus</i> ) 154 SNOWBERRY ( <i>Symphoricarpos alba</i> )	#1 container
MOISTURE ZONE B (133 SQ. FT.)						
	REQUIRED PLANT QUANTITIES PER 100 SQUARE FEET	ZONE SQUARE FOOTAGE	REQUIRED PLANT QUANTITIES	PROPOSED PLANT QUANTITIES	PROPOSED SPECIES BREAKDOWN	MINIMUM SIZES
TREE	1	133	1.33	2	2 DOUGLAS FIR ( <i>Pseudotsuga menziesii</i> )	6' height
LARGE SHRUBS/SMALL TREES	3	133	3.99	4	4 NOOTKA ROSE ( <i>Rosa nutkana</i> )	30" Height
SMALL SHRUBS	4	133	5.32	6	6 OREGON GRAPE ( <i>Mahonia aquifolium</i> )	#1 container
GROUND COVER PLANTS	115	133	152.95	153	90 SWORD FERN ( <i>Polystichum munitum</i> ) 40 COASTAL STRAWBERRY ( <i>Fragaria chiloensis</i> ) 23 SNOWBERRY ( <i>Symphoricarpos alba</i> )	#1 container

**RAIN GARDEN NOTES:**

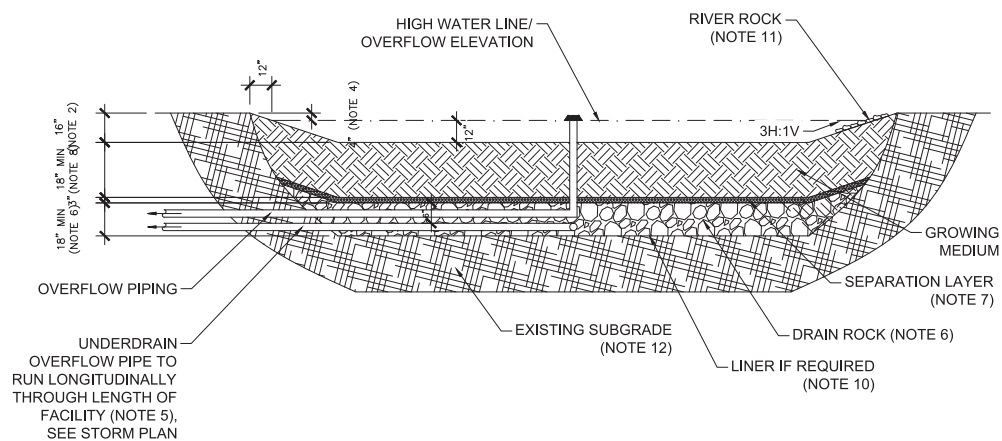
1. PROVIDE PROTECTION FROM ALL VEHICLE TRAFFIC, EQUIPMENT STAGING, AND FOOT TRAFFIC IN PROPOSED INFILTRATION AREAS PRIOR TO, DURING AND AFTER CONSTRUCTION. UNLESS REQUIRED BY SITE CONDITIONS, UNLINED RAIN GARDENS ARE PREFERRED TO ALLOW MAXIMUM INFILTRATION.
2. **DIMENSIONS:**  
-DEPTH OF BASIN (FROM TOP OF GROWING MEDIUM TO OVERFLOW ELEVATION); 16"  
-FLAT BOTTOM WIDTH: 2' MINIMUM  
-SIDE SLOPES OF RAIN GARDEN: 0.5% OR LESS
3. **SETBACKS (FROM MIDPOINT OF FACILITY):**  
-INFILTRATION RAIN GARDEN SHALL BE 10' FROM FOUNDATIONS AND 5' FROM PROPERTY LINES
4. **OVERFLOW:**  
-EMERGENCY OUTFLOW PATH FOR THE 100 YEAR DESIGN STORM SHALL BE IDENTIFIED IN THE STORMWATER MANAGEMENT PLAN
5. **PIPING:**  
-PERFORATED UNDER-DRAIN PIPING: SHALL RUN LONGITUDINALLY THROUGH LENGTH OF FACILITY, SHALL BE ABS SCH. 40, CAST IRON, OR PVC SCH. 40. MINIMUM DIAMETER IS 6". PIPING SHALL HAVE 1% GRADE AND FOLLOW THE UNIFORM PLUMBING CODE. PVC NOT ALLOWED ABOVE GROUND. WRAP UNDER-DRAIN IN FILTER FABRIC TO REDUCE TRANSPORT OF FINES.  
OVERFLOW PIPING: SHALL BE ABS SCH. 40, CAST IRON, OR PVC SCH. 40 AND SHALL NOT BE PERFORATED. MINIMUM DIAMETER IS 6". PIPING SHALL HAVE 1% GRADE AND FOLLOW THE UNIFORM PLUMBING CODE. PVC NOT ALLOWED ABOVE GROUND.
6. **DRAIN ROCK:**  
-SIZE: 1 1/2" TO 3/4" WASHED  
-DEPTH: 18"
7. **SEPARATION BETWEEN DRAIN ROCK AND GROWING MEDIUM:** SHALL BE A 3" LAYER OF 3/4" - 1/4" OPEN GRADED AGGREGATE.
8. **GROWING MEDIUM:**  
-DEPTH: 18" MINIMUM  
-SAND/LOAM/COMPOST 3-WAY MIX.  
-FACILITY SURFACE AREA MAY BE REDUCED BY 25% WHEN GROWING MEDIA DEPTH IS INCREASED TO 30" OR MORE.
9. **VEGETATION:** FOLLOW LANDSCAPE PLANS OR REFER TO PLANTING REQUIREMENTS IN APPENDIX A.
10. **WATERPROOF LINER (IF REQUIRED):** SHALL BE 30 MIL PVC OR EQUIVALENT.
11. **INSTALL RIVER ROCK SPLASH PAD OVER A NON-WOVEN GEOTEXTILE FABRIC TO TRANSITION FROM INLETS TO GROWING MEDIUM.** SIZE OF ROCK SHALL BE 1" - 3", 4 SQUARE FEET, 6" DEEP.
12. **SEASONAL HIGH GROUNDWATER SEPARATION:**  
-SEPARATION DISTANCE AS REQUIRED BY THE CITY.



Know what's below.  
Call before you dig.

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**Rain Garden Operations & Maintenance Plan**

What to Look For Structural Components	What to Do
Clogged inlets or outlets	• Remove sediment and debris from catch basins, trench drains and curb inlets and pipes to maintain at least 50% conveyance capacity at all times.
Cracked Drain Pipes	• Repair/seal cracks. Replace when repair is insufficient.
Check Dams	• Maintain 4 to 10 inch deep rock check dams at design intervals.
Vegetation	
Dead or strained vegetation	• Replant per original planting plan, or substitute from approved list. Irrigate as needed. Mulch banks annually. DO NOT apply fertilizers, herbicides, or pesticides.
Tall Grass and Vegetation	• Cut back grass and prune overgrowth 1-2 times per year. Remove cuttings.
Weeds	• Manually remove weeds. Remove all plant debris.
Growing/Filter Medium	
Gullies	• Fill, lightly compact, and plant vegetation to disperse flow.
Erosion	• Replace splash blocks or inlet gravel/rock.
Slope Slippage	• Stabilize 3:1 slopes/banks with plantings from approved list.
Ponding	• Rake, till, or amend to restore infiltration rate.

**Annual Maintenance Schedule:**

- Summer:**  
Make any structural repairs. Improve filter medium as needed. Clear drain. Irrigate as needed.
- Fall:**  
Replant exposed soil and replace dead plants. Remove sediment and plant debris.
- Winter:**  
Monitor infiltration/flow-through rates. Clear inlets and outlets/overflows to maintain conveyance.
- Spring:**  
Remove sediment and plant debris. Replant exposed soil and replace dead plants. Mulch.
- All seasons:**  
Weed as necessary.
- Maintenance Records:**  
Record date, description, and contractor (if applicable) for all structural repairs, landscape maintenance, and facility cleanup activities. Keep work orders and invoices on file and make available upon request of the inspector.
- Access:**  
Maintain ingress/egress to design standards.
- Infiltration/Flow Control:**  
All facilities shall drain within 72 hours. Record time/date, weather, and site conditions when ponding occurs.
- Pollution Prevention:**  
All sites shall implement best management practices to prevent hazardous or solid wastes or excessive oil and sediment from contaminating stormwater. Contact Oregon Emergency Response System (OERS) at 800-452-0311 for immediate assistance responding to spills. If necessary, responsible parties would then call the National Response Center at 800-424-8802. Record time/date, weather, and site conditions if site activities contaminate stormwater.
- Vectors (Mosquitoes & Rodents):**  
Stormwater facilities shall not harbor mosquito larvae or rats that pose a threat to public health or that undermine the facility structure. Monitor standing water for small wiggling sticks perpendicular to the water's surface. Note holes/burrows in and around facilities. Call Clackamas County Vector Control for immediate assistance to eradicate vectors. Record time/date, weather, and site conditions when vector activity observed.

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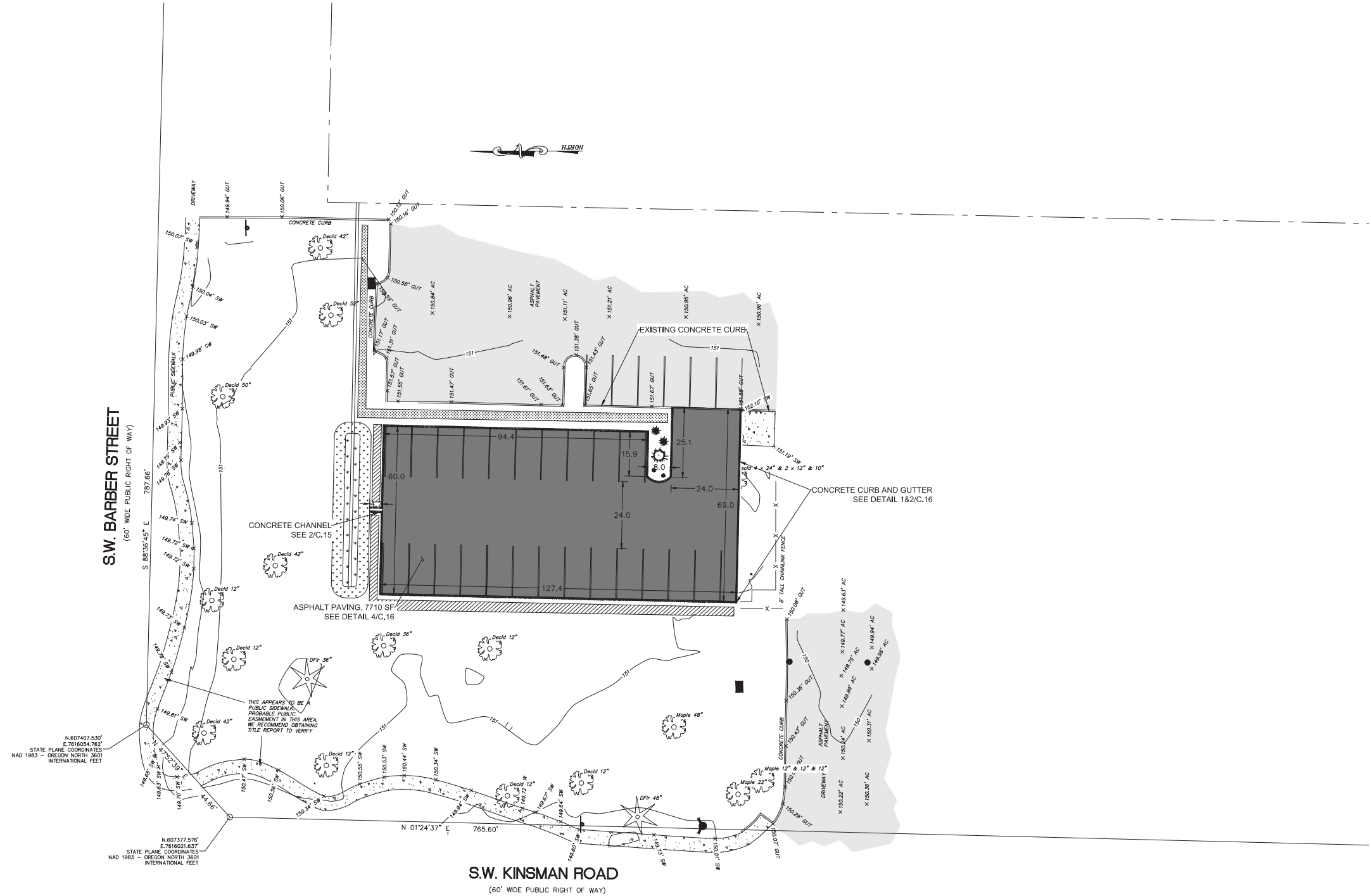
**RAINGARDEN PLAN**

PROJECT NO. 17-042	SHEET
DATE 6/28/17	C.8
SCALE NTS	



NORTH PARKING EXPANSION AREA

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S.W. BARBER STREET  
(60' WIDE PUBLIC RIGHT OF WAY)

S.W. KINSMAN ROAD  
(60' WIDE PUBLIC RIGHT OF WAY)

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PAVING PLAN

PROJECT NO. 17-042	SHEET
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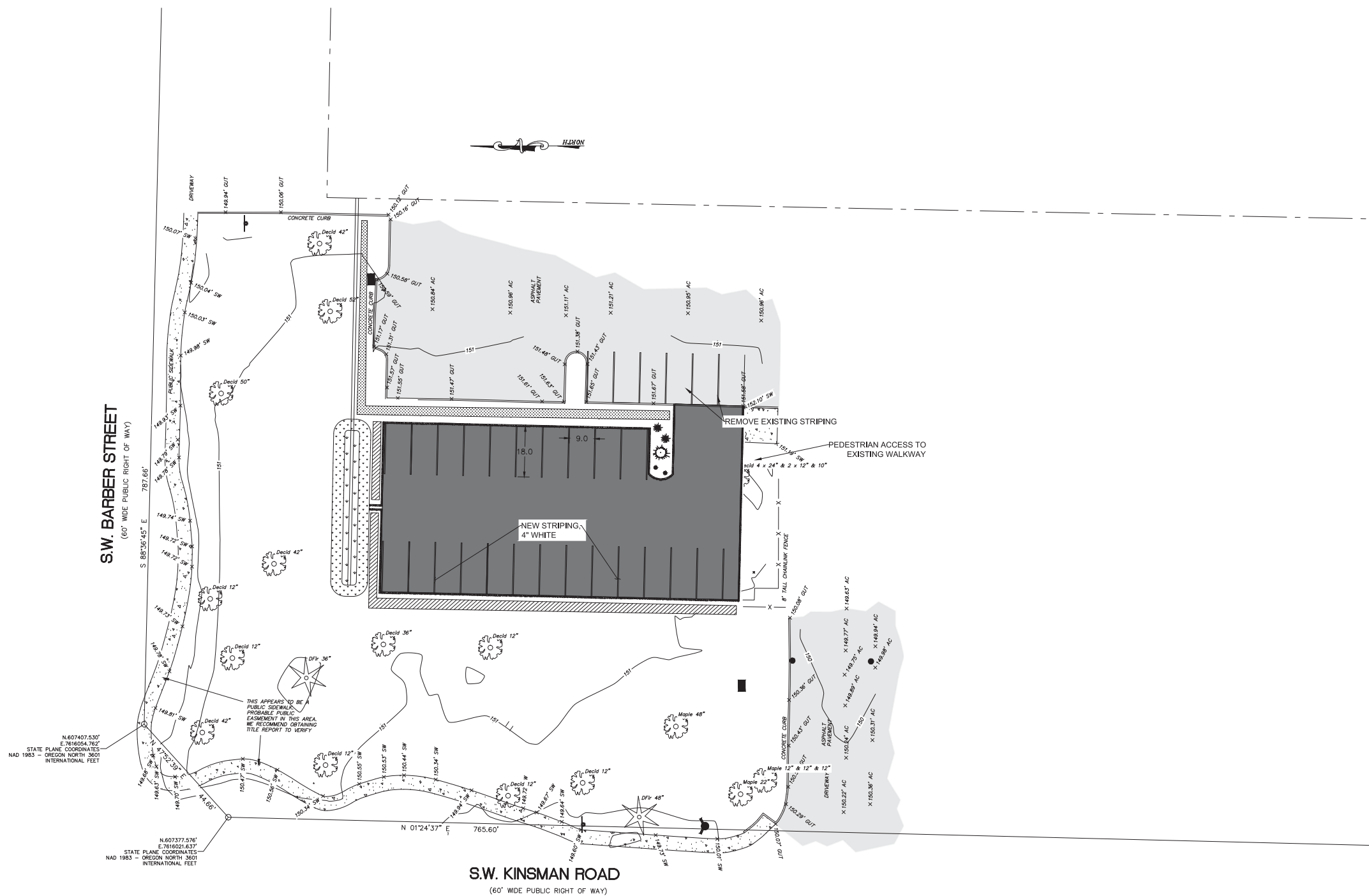


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STRIPING PLAN

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**PARKING AREA PLANT SCHEDULE**

**HEDGE:**

- 75 BUSHES:
  - 75 ENGLISH LAUREL (*Prunus laurocerasus*)
  - ~ 2'-6" SPACING ON CENTER, ~ 190'-0" LF, ~ 75 plants

**TREES/SHRUBS:**

- 1 LARGE TREE:
  - 1 ARBORVITAE (*Thuja spp.*)
  - MATCH SPIRALED PRUNING PATTERN TO EXISTING ARBORVITAE ON PROPERTY

- 4 SMALL SHRUBS:
  - 2 TIGER LILY (*Lilium lancifolium*)
  - 2 BOXWOOD (*Buxus spp.*)

**NOTES:**

AS "LOW SCREEN LANDSCAPING", PROPOSED LANDSCAPING SHALL SATISFY THE INTENT OUTLINED IN SECTION 4.176.02.D, CITY OF WILSONVILLE 2015 DEVELOPMENT CODE.

ALL REQUIRED GROUND COVER PLANTS AND SHRUBS MUST BE OF SUFFICIENT SIZE AND NUMBER TO MEET THESE STANDARDS WITHIN THREE (3) YEARS OF PLANTING.

NON-HORTICULTURAL PLASTIC SHEETING OR OTHER IMPERMEABLE SURFACE SHALL NOT BE PLACED UNDER MULCH. MATCH ALL MULCH SURROUNDING NEW LANDSCAPING, INCLUDING HEDGES, TO EXISTING MULCH AROUND LANDSCAPING. NATIVE TOPSOIL SHALL BE PRESERVED AND REUSED TO THE EXTENT FEASIBLE. SURFACE MULCH OR BARK DUST ARE TO BE FULLY RAKED INTO SOIL OF APPROPRIATE DEPTH, SUFFICIENT TO CONTROL EROSION, AND ARE CONFINED TO AREAS AROUND PLANTINGS.

ALL TREES SHALL BE WELL-BRANCHED AND TYPICAL OF THEIR TYPE AS DESCRIBED IN CURRENT AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS AND SHALL BE BALLED AND BURLAPPED. ALL SHRUBS SHALL BE WELL BRANCHED AND TYPICAL OF THEIR TYPE AS DESCRIBED IN CURRENT AAN STANDARDS AND SHALL BE EQUAL TO OR BETTER THAN 2-GALLON CONTAINERS AND 10" TO 12" SPREAD.

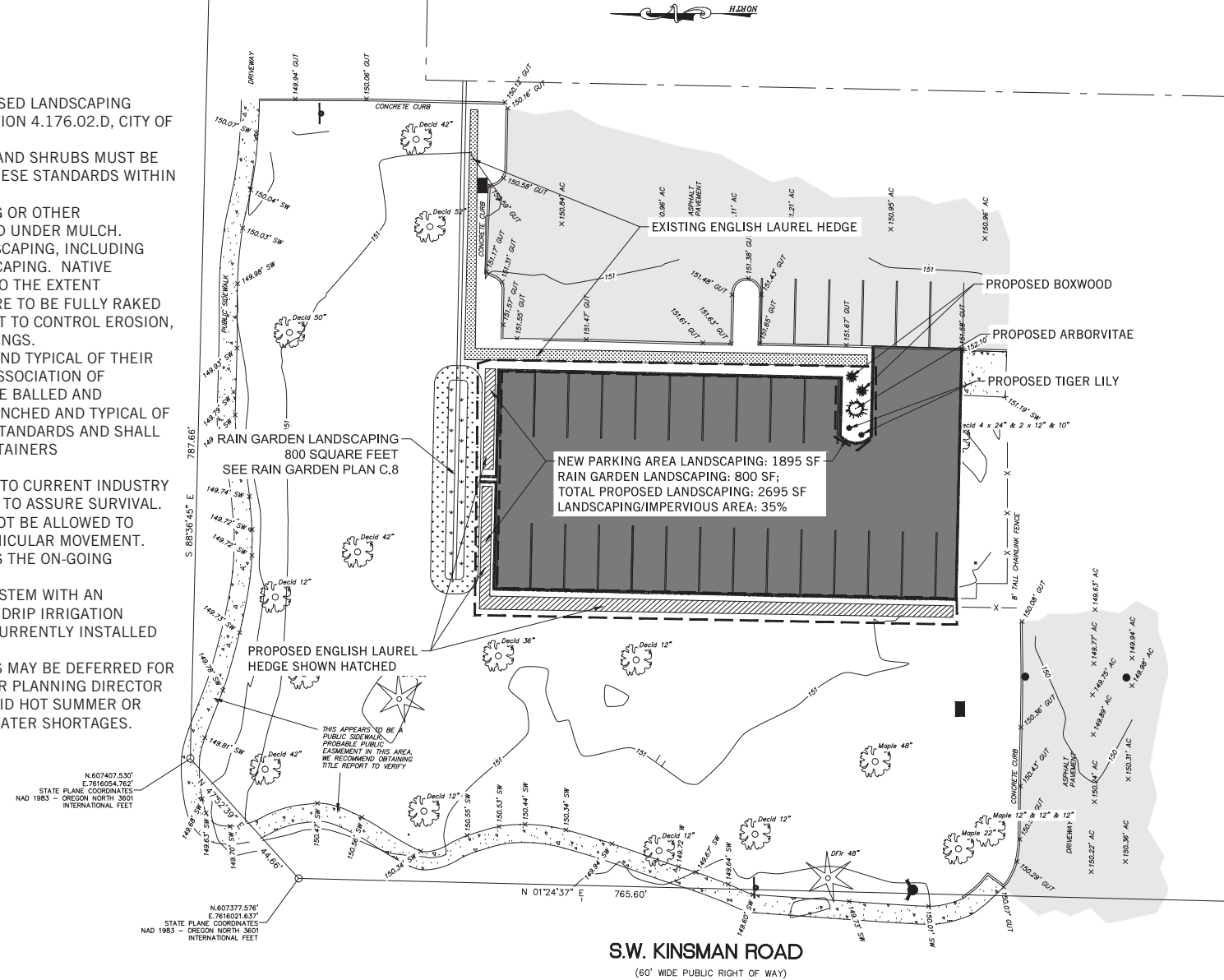
PLANT MATERIALS SHALL BE INSTALLED TO CURRENT INDUSTRY STANDARDS AND SHALL BE PROPERLY STAKED TO ASSURE SURVIVAL. SUPPORT DEVICES (GUY WIRES, ETC.) SHALL NOT BE ALLOWED TO INTERFERE WITH NORMAL PEDESTRIAN OR VEHICULAR MOVEMENT.

MAINTENANCE OF LANDSCAPED AREAS IS THE ON-GOING RESPONSIBILITY OF THE PROPERTY OWNER.

A PERMANENT, BUILT-IN, IRRIGATION SYSTEM WITH AN AUTOMATIC CONTROLLER. EITHER A SPRAY OR DRIP IRRIGATION SYSTEM, OR A COMBINATION OF THE TWO, IS CURRENTLY INSTALLED AND SHALL BE UTILIZED.

THE INSTALLATION OF PLANT MATERIALS MAY BE DEFERRED FOR A PERIOD OF TIME SPECIFIED BY THE BOARD OR PLANNING DIRECTOR ACTING ON AN APPLICATION, IN ORDER TO AVOID HOT SUMMER OR COLD WINTER PERIODS, OR IN RESPONSE TO WATER SHORTAGES.

**NORTH PARKING EXPANSION AREA**



FOR PERMIT ONLY

**RAIN GARDEN PLANT SCHEDULE**

- ZONE A:**
- 21 LARGE SHRUBS/SMALL TREES:
    - 11 NOOTKA ROSE (*Rosa nutkana*)
    - 10 INDIAN PLUM (*Omleria cerasiformis*)
  - 27 SMALL SHRUBS:
    - 10 OREGON GRAPE (*Mahonia aquifolium*)
    - 10 SNOWBERRY (*Symphoricarpus alba*)
    - 7 SWORD FERN (*Polystichum munitum*)
  - 770 GROUND COVER PLANTS:
    - 154 SLOUGH SEDGE (*Carex obnupta*)
    - 154 TUFTED HAIR GRASS (*Deschampsia cespitosa*)
    - 154 DAGGER-LEAF RUSH (*Juncus ensifolius*)
    - 154 SMALL FRUITED BULRUSH (*Scirpus microcarpus*)
    - 154 SNOWBERRY (*Symphoricarpus alba*)
- ZONE B:**
- 2 LARGE TREES:
    - 2 DOUGLAS FIR (*Pseudotsuga menziesii*)
  - 4 LARGE SHRUBS/SMALL TREES:
    - 4 NOOTKA ROSE (*Rosa nutkana*)
  - 6 SMALL SHRUBS:
    - 6 OREGON GRAPE (*Mahonia aquifolium*)
  - 153 GROUND COVER PLANTS:
    - 90 SWORD FERN (*Polystichum munitum*)
    - 40 COASTAL STRAWBERRY (*Fragaria chiloensis*)
    - 23 SNOWBERRY (*Symphoricarpus alba*)

**NOTE:**  
SPACE ALL NEW FOLIAGE EVENLY THROUGHOUT PLANTING ZONES.

PLANT A DOUGLAS FIR AT EACH LONG END OF THE RAIN GARDEN, AS FAR AWAY FROM THE INTAKE CHANNELS AS POSSIBLE.

SEE LANDSCAPING MEMO FOR GROWING MEDIUM AND PLANTING TIMING SPECIFICATIONS.

SEE C.8 FOR RAIN GARDEN DETAILS.

ALL DISTURBED AREAS ARE TO RECEIVE SOD OR SEED. THESE AREAS SHALL BE WATERED BY THE CONTRACTOR UNTIL THE SOD OR SEED IS GROWING IN A HEALTHY MANNER. SEE LANDSCAPE PLAN FOR MORE INFORMATION.

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1		6/28/17

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Hood River, OR 97031  
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adam@hoodriverengineers.com  
www.hoodriverengineers.com

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LANDSCAPING PLAN

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DATE 6/28/17	C.11
SCALE 1" = 20'	

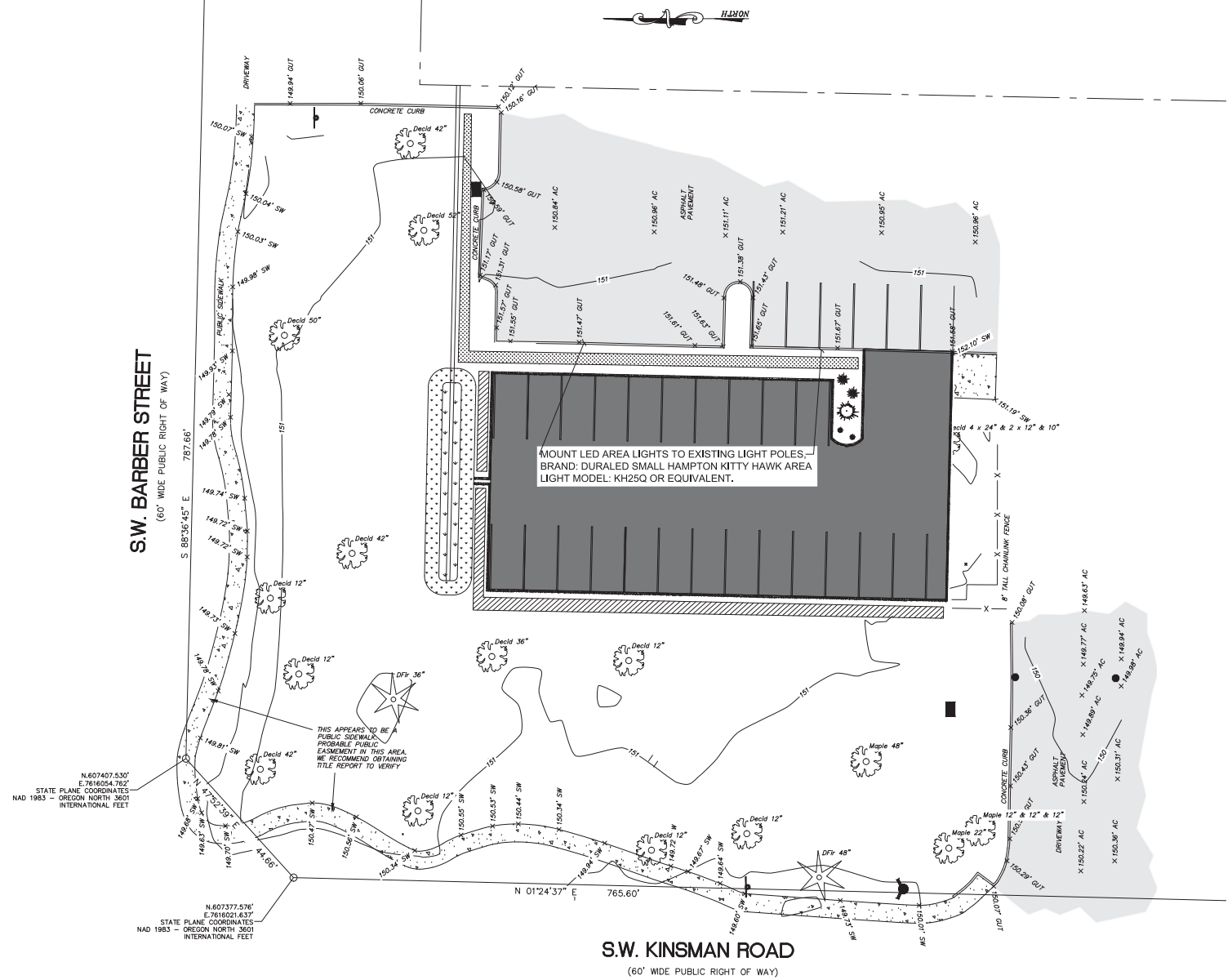


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LIGHTING PLAN

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SCALE 1" = 20'	

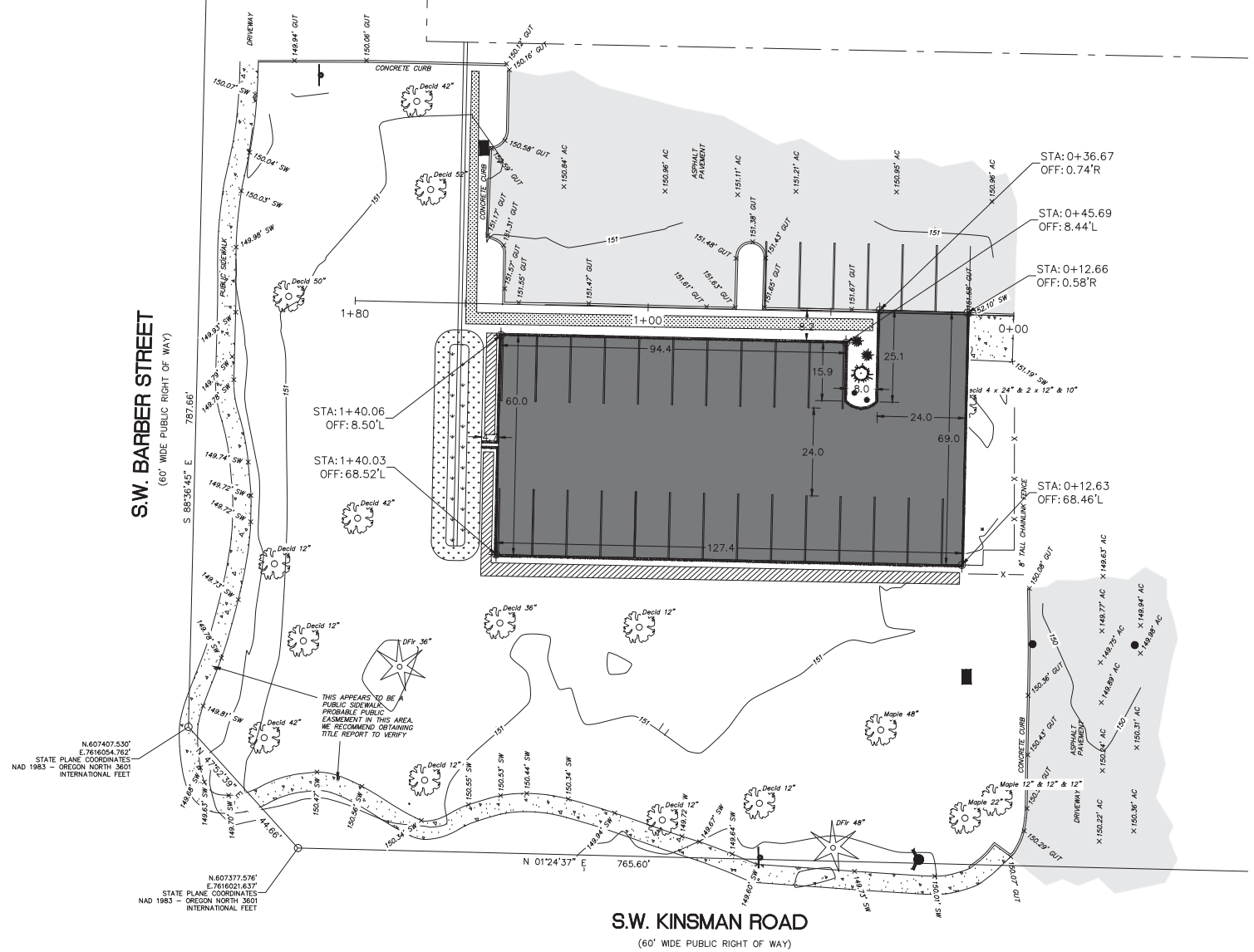


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HORIZONTAL  
CONTROL PLAN

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SCALE 1" = 20'	

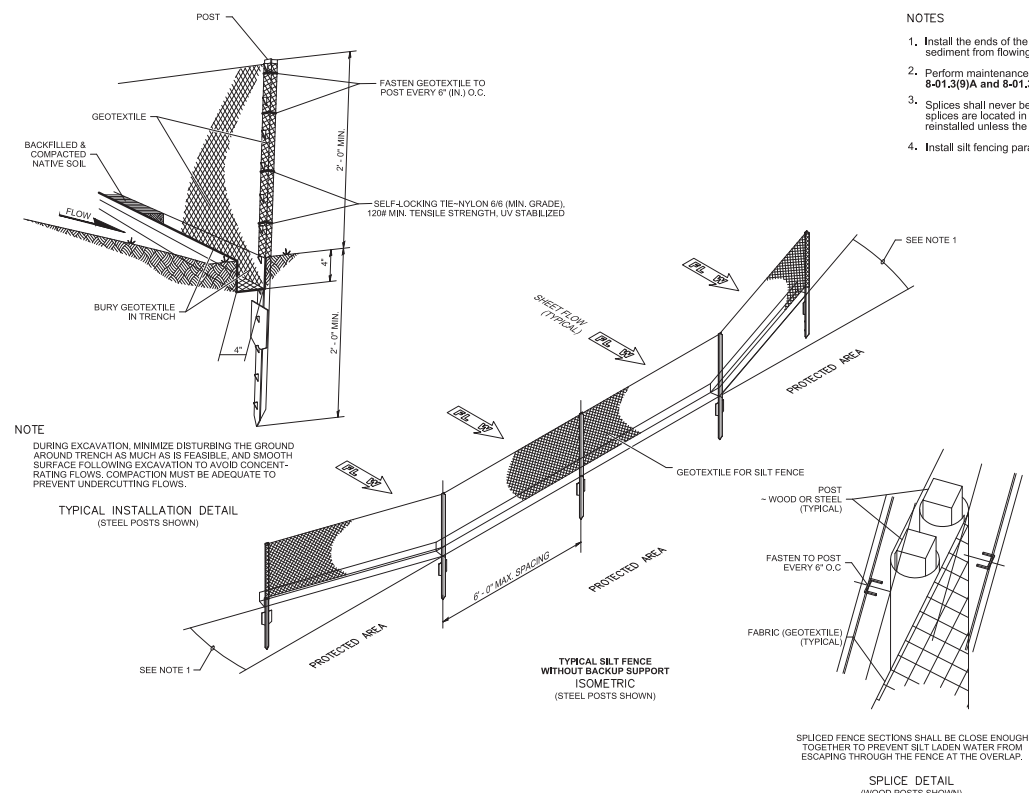
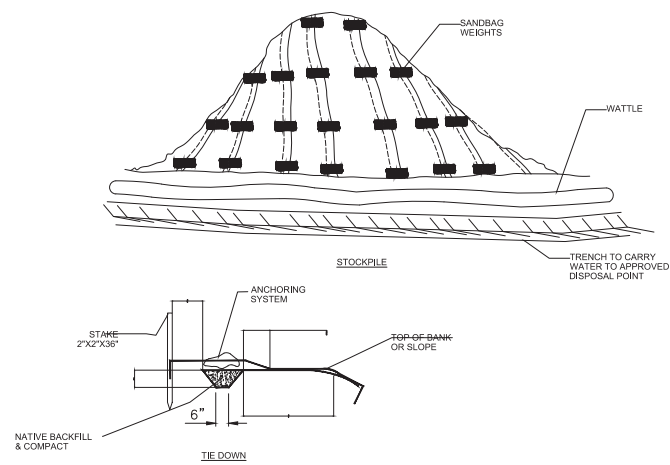


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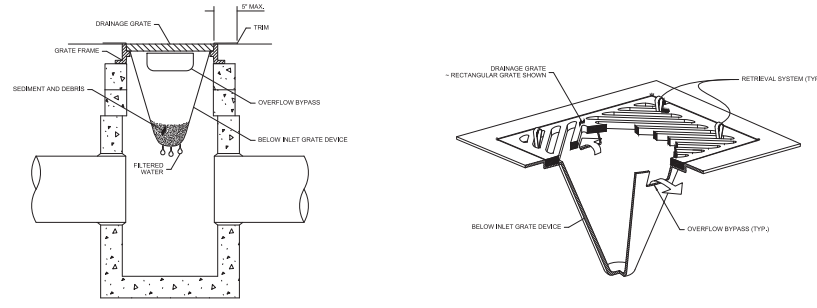


- NOTES
1. Install the ends of the silt fence to point slightly upslope to prevent sediment from flowing around the ends of the fence.
  2. Perform maintenance in accordance with **Standard Specifications 8-01.3(9)A and 8-01.3(15)**.
  3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation.
  4. Install silt fencing parallel to mapped contour lines.

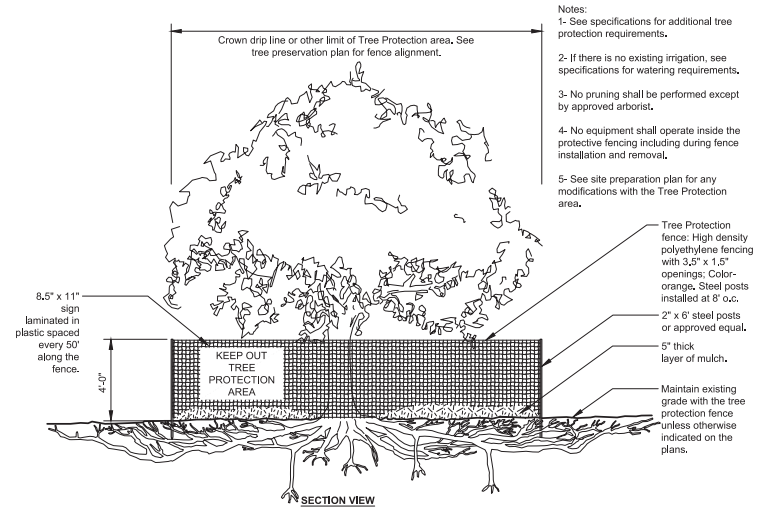
NOTE  
DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENTRATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS.

**1 SILT FENCE DETAIL**  
Scale: NTS

1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



**2 INLET PROTECTION DETAIL**  
Scale: NTS



- Notes:
- 1- See specifications for additional tree protection requirements.
  - 2- If there is no existing irrigation, see specifications for watering requirements.
  - 3- No pruning shall be performed except by approved arborist.
  - 4- No equipment shall operate inside the protective fencing including during fence installation and removal.
  - 5- See site preparation plan for any modifications with the Tree Protection area.

**3 TREE PROTECTION DETAIL**  
Scale: NTS

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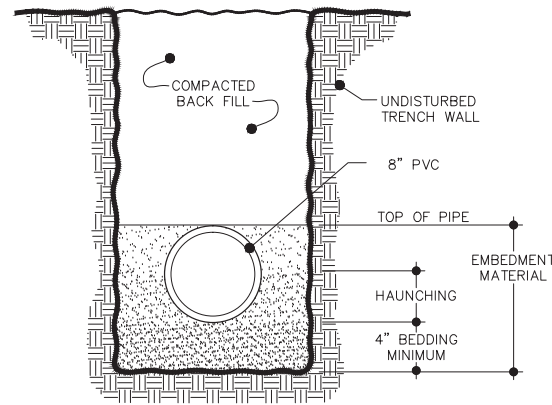
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TEMPORARY EROSION  
AND SEDIMENT  
CONTROL BMPS

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SCALE NTS	

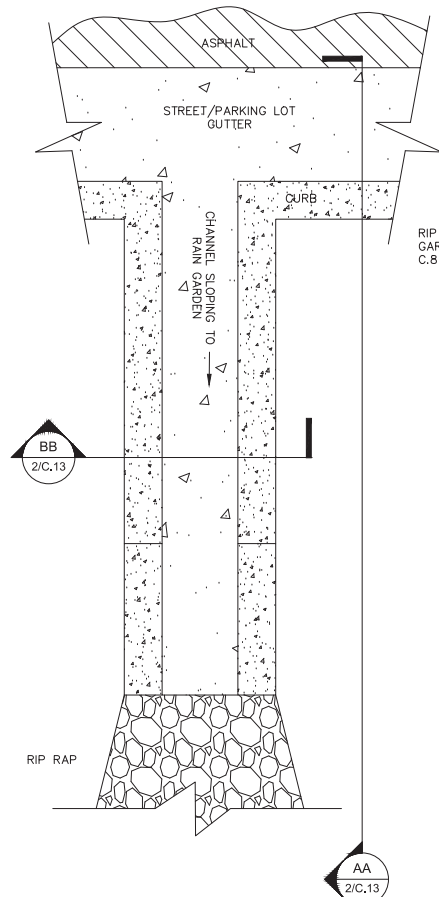
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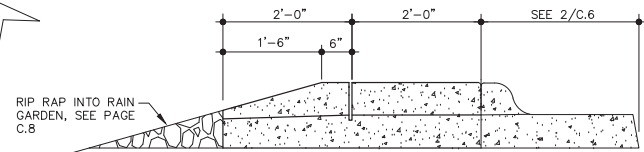


- NOTES:**
1. EMBEDMENT MATERIAL MUST BE CLASS I (#67 OR #78M WASHED STONE IS TYPICALLY USED).
  2. EMBEDMENT MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% STANDARD PROCTOR DENSITY FOR CLASS I MATERIAL.
  3. STANDARD BEDDING SHALL BE UTILIZED FOR ALL CASES WHERE TRENCH BOTTOMS ARE UNSTABLE DUE TO SOIL TYPE OR MOISTURE CONDITIONS.

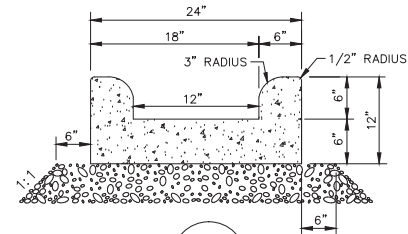
**1** BEDDING FOR STORMWATER PIPE  
Scale: NTS



**2** CONCRETE CHANNEL INTO RAIN GARDEN  
Scale: NTS



AA



BB

**A.B.C. UNDER STANDARD CONCRETE CHANNEL**

- ABC COMPOSITION:**
1. SCARIFY AND COMPACT 8" OF SOIL
  2. PLACE 12" OF AASHTO #57
  3. PLACE 6" OF AASHTO #67

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STORMWATER  
DETAILS

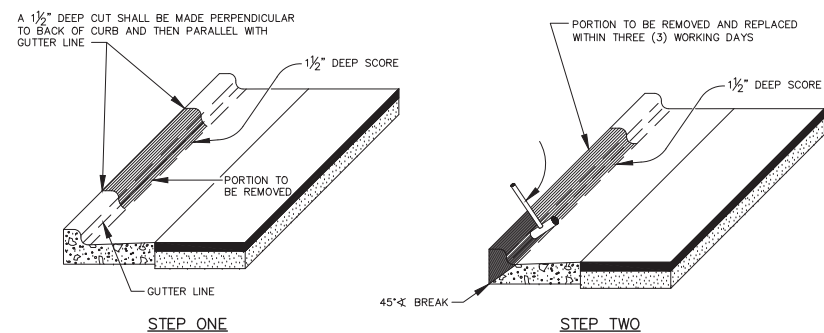
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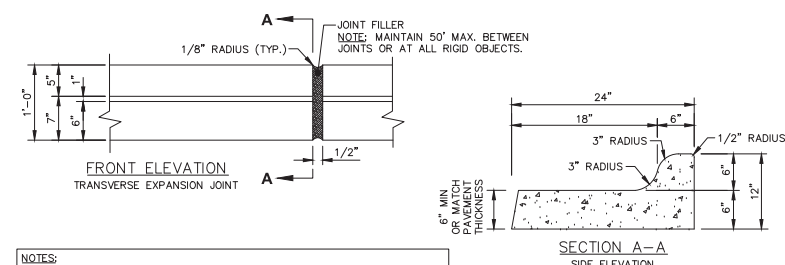
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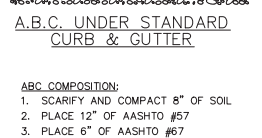


- NOTES:**
1. CURB AND GUTTER SECTION SHALL BE REMOVED IN ACCORDANCE WITH DRIVEWAY WIDTH APPROVED BY THE TOWN.
  2. IF PERPENDICULAR CUT IS WITHIN 12 INCHES FROM A JOINT, THEN THE PARALLEL CUT SHALL BE MADE TO THAT JOINT.

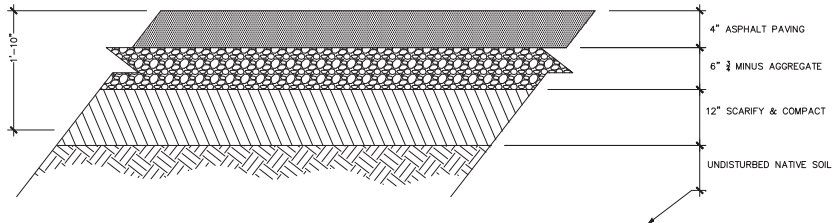
**1 CURB DEMOLITION**  
Scale: NTS



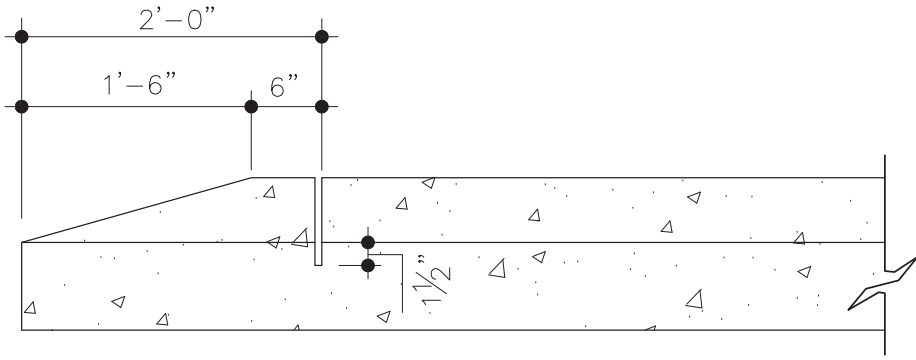
- NOTES:**
1. NOT FOR USE ALONG MEDIANS.
  2. CONCRETE SHALL BE COMMERCIAL MIX, MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI AT 28 DAYS AND INCORPORATE MICRO-REINFORCEMENT "FIBERMESH 300" OR APPROVED EQUAL.
  3. CONSTRUCTION JOINT SPACING SHALL BE NOT MORE THAN 12 FEET. JOINTS SHALL BE HAND SAWCUT, WHEN WET, THROUGH ENTIRE WIDTH AND FULL DEPTH OF CURB AND GUTTER.
  4. BASE ROCK TO BE 3/4" - 0 COMPACTED TO 95% OF AASHTO T-180 AND SHALL BE TO SUB GRADE STREETS STRUCTURE, OR 4" IN DEPTH, WHICHEVER IS GREATER.
  5. DRAINAGE BLOCKOUTS SHALL BE 3" I.D. PLASTIC PIPE WITH COUPLING AND DRAINAGE ACCESS THROUGH EXISTING CURB SHALL BE CORE DRILLED.
  6. BASE COURSE SHALL BE THOROUGHLY WATERED IMMEDIATELY PRIOR TO PLACEMENT OF CONCRETE WHEN THE MEASURED OR FORECASTED ASCENDING AIR TEMPERATURE IS 80 DEGREES OR GREATER.
  7. GUTTER PAN SHALL HAVE A NORMAL SLOPE OF 6.7% DESIGN (1" FALL OVER THE 15" GUTTER PAN), 6.0% MINIMUM, 8.0% MAXIMUM. GUTTER PAN SLOPE AT SIDEWALKS SHALL BE 2% AND 5% TO MATCH THE CROSS SLOPE OF STREET, THE FULL WIDTH OF THE CROSSWALK RAMP. THE MAXIMUM ALGEBRAIC GRADE BREAK BETWEEN THE SIDEWALK RAMP AND THE STREET CROSS SLOPE, INCLUDING THE GUTTER PAN, SHALL BE 11%.
  8. GUTTER STAMPS ARE REQUIRED AT LOCATIONS OF ALL SERVICE AND CONDUIT CROSSINGS (SEC. 201.2.24.D). MARKINGS SHALL BE STAMPED INTO FRESH CONCRETE OR SANDBLASTED INTO EXISTING CONCRETE.



**2 TYPICAL CURB & GUTTER**  
Scale: NTS



**3 ASPHALT PAVING SECTION**  
Scale: NTS



**4 CURB END**  
Scale: NTS

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**HOOD RIVER  
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PAVING DETAILS

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**Coca-Cola Bottling Company  
Employee Parking Expansion  
Wilsonville, Oregon**

**Permit Submittal  
Preliminary Drainage Report**

Prepared for:  
**Coca-Cola Bottling Company**  
9750 SW Barber St, Wilsonville, OR 97070

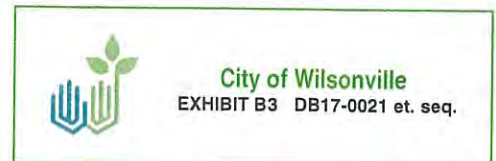
Prepared by:  
**Hood River Consulting Engineers**  
1784 May Street, Hood River, Oregon 97031  
(541) 436-4723

Project Engineer:  
Adam Goddin, P.E.

Original: June 9, 2017



EXPIRES: 6-30-17





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# 1. INTRODUCTION AND PURPOSE

The purpose of this report is to provide documentation of the stormwater drainage modification associated with the proposed employee parking at Coca-Cola Bottling Company facility located at 9750 SW Barber St in Wilsonville, Oregon. The analysis demonstrates that the proposed stormwater modifications are designed in general conformance with City of Wilsonville standards.

## 2. SITE ASSESSMENT AND PLANNING CHECKLIST

### 2.1 SITE INFORMATION

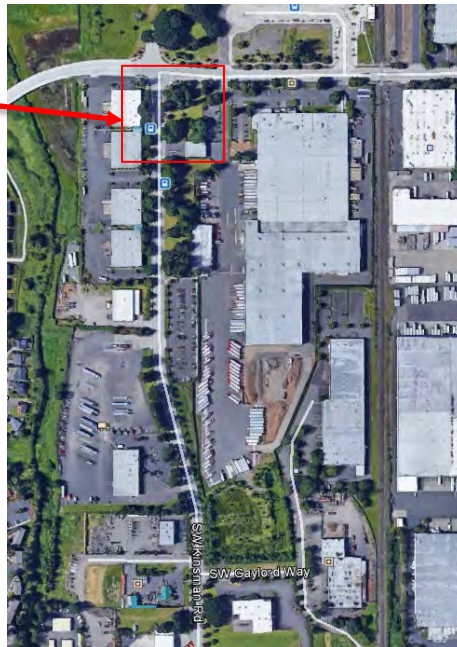
#### Applicant Contact

- Coca-Cola Bottling Company
- 9750 SW Barber St, Wilsonville, OR 97070

#### Project Location

- 9750 SW Barber St, Wilsonville, OR 97070
- Major Drainage Basin: WILLAMETTE/SANDY
- Vicinity Map of the site:

PROJECT LOCATION



#### Project Type

- EMPLOYEE PARKING

#### Size of site

- Size of site (acres): .28 ACRES

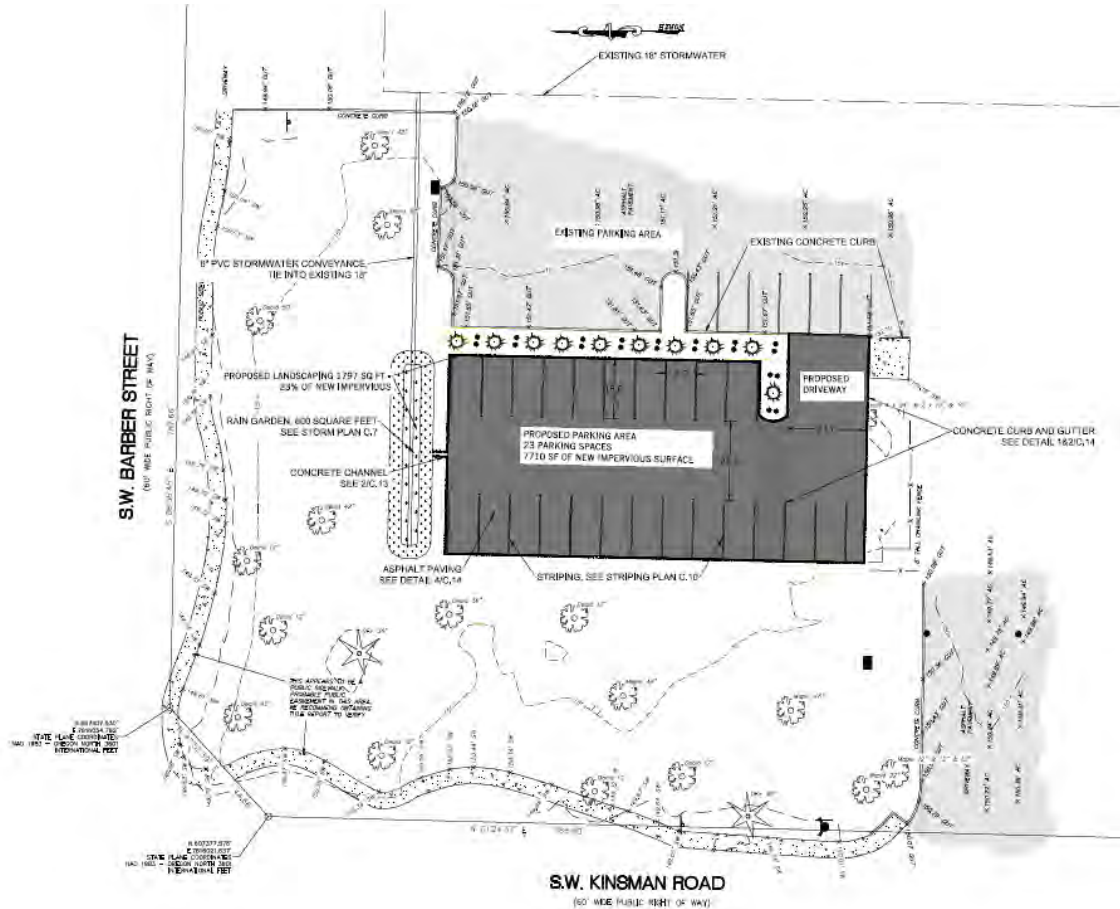
Document Title: PRELIMINARY DRAINAGE REPORT

Project Number / Title: 17-042 COCA-COLA BOTTLING COMPANY EMPLOYEE PARKING EXPANSION

## 2.2 SITE ASSESSMENT

### Topography

- Evaluate site and map slopes: Flat (0-10%)
- **TOPOGRAPHY:**





## Soils and Groundwater

Natural Resources Conservation Service (NRCS) Hydrologic Soil Type:

### Clackamas County Area, Oregon

**87A—Willamette silt loam, gravelly substratum, 0 to 3 percent slopes**

#### Map Unit Setting

*National map unit symbol:* 227p  
*Elevation:* 100 to 350 feet  
*Mean annual precipitation:* 40 to 60 inches  
*Mean annual air temperature:* 52 to 54 degrees F  
*Frost-free period:* 165 to 210 days  
*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Willamette, gravelly substratum, and similar soils:* 85 percent  
*Estimates are based on observations, descriptions, and transects of the map unit.*

#### Description of Willamette, Gravelly Substratum Setting

*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Stratified glaciolacustrine deposits

#### Typical profile

*H1 - 0 to 36 inches:* silt loam  
*H2 - 36 to 40 inches:* silty clay loam  
*H3 - 40 to 60 inches:* very gravelly loam

#### Properties and qualities

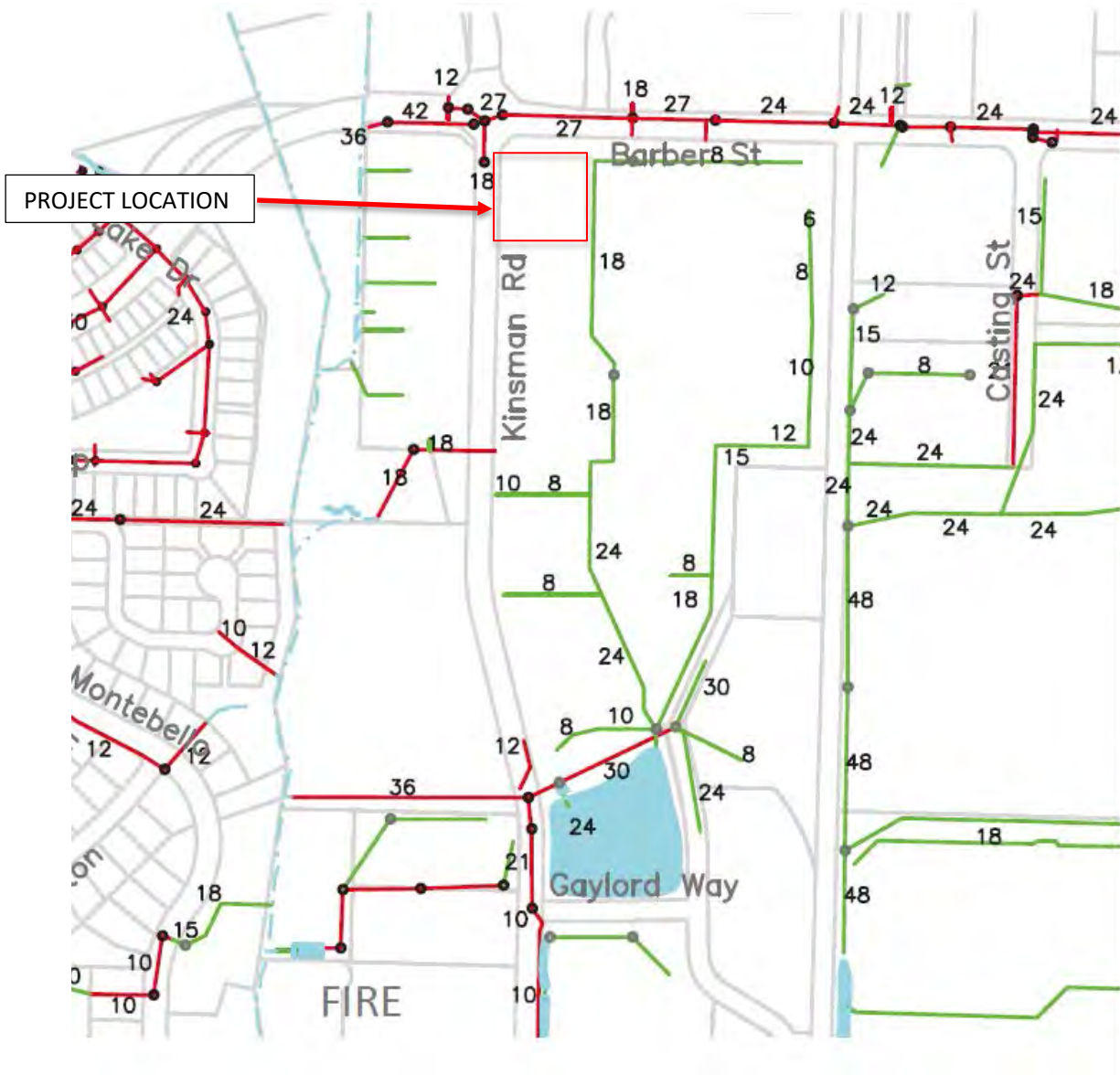
*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
***Natural drainage class:* Well drained**  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* High (about 9.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 2s  
*Land capability classification (nonirrigated):* 2s  
***Hydrologic Soil Group:* B**  
*Other vegetative classification:* Well drained < 15% Slopes (G002XY002OR)



EXISTING CONVEYANCE





2.3 SITE PLANNING DESIGN OBJECTIVES

Proposed Stormwater Management Strategy

- LID facilities to the MEP
- All onsite infiltration including retention of the 10-year storm event.
- LID facilities and infiltration are limited by the following conditions (include a geotechnical analysis of the site and report):
  - Stormwater management facility to be located on fill
  - Steep slopes
  - High Groundwater
  - Contaminated Soils
  - Conflict with required Source Controls (Section 301.12.00)

Check Minimum Facility Size Required

- A. Calculate surface area of onsite LID facility, as determined by BMP Sizing Tool or Engineered Method: **771 SF PER BMP SIZING TOOL – PROPOSED SIZE IS 800 SF**
- B. Calculate MEP surface area of onsite LID facility for sites with limiting conditions: total new/redeveloped impervious area (SF) x 0.10 = 771 SF
- C. Required surface area of onsite LID facility: smaller of [A] or [B]: 771 SF
- D. Proposed LID facility surface area: must be equal to or larger than [C] 800 SF

Facility Selection/Sizing

Proposed Facility Type(s)

Check all that apply, attach output from BMP Sizing Tool application, and show proposed facilities on Preliminary Site Plan.

LID facilities:

- Infiltration Stormwater Planter
- Filtration Stormwater Planter
- Infiltration Rain Garden
- Filtration Rain Garden
- Vegetated Filter Strip
- Vegetated Swale
- Detention Pond

Other Stormwater Management Facilities as approved:

- Infiltration Trench
- Manufactured Treatment Technology
- Underground Detention Tank



### 3. DRAINAGE ANALYSIS AND DESIGN

#### 3.1 BMP SIZING TOOL

WES BMP Sizing Software Version 1.6.0.1, August 2015

#### WES BMP Sizing Report

##### Project Information

Project Name	Coca Cola Employee Parking
Project Type	Industrial
Location	9750 SW Barber St, Wilsonville, OR 97070
Stormwater Management Area	8510
Project Applicant	COCA-COLA BOTTLING CO
Jurisdiction	CCSD1NCSA

##### Drainage Management Area

Name	Area (sq-ft)	Pre-Project Cover	Post-Project Cover	DMA Soil Type	BMP
DMA#1 PARKING	7,710	Grass	Conventional Concrete	B	INFILTRATION RAIN GARDEN

##### LID Facility Sizing Details

LID ID	Design Criteria	BMP Type	Facility Soil Type	Minimum Area (sq-ft)	Planned Areas (sq-ft)	Orifice Diameter (in)
INFILTRATION RAIN GARDEN	Flow Control and Treatment	Rain Garden - Infiltration	A1	771.0	800.0	0.0

##### Pond Sizing Details

1. FCWQT = Flow control and water quality treatment, WQT = Water quality treatment only
2. Depth is measured from the bottom of the facility and includes the three feet of media (drain rock, separation layer and growing media).
3. Maximum volume of the facility. Includes the volume occupied by the media at the bottom of the facility.
4. Maximum water storage volume of the facility. Includes water storage in the three feet of soil media assuming a 40 percent porosity.





### 3.2 Hydrologic Analysis Using the Santa Barbara Urban Hydrograph

To obtain a realistic and consistent hydrologic analysis for this development site, the Santa Barbara Urban Hydrograph (SBUH) analysis method for drainage planning and design has been employed. The physical characteristics of the site and the design storm have been used to determine the magnitude, volume, and duration of the runoff hydrograph

- a. **Design Storm:** Return frequency and duration specify the design storm event. The design storms is be based on two parameters:
  1. Total rainfall (depth in inches).
  2. Rainfall distribution (dimensionless).
  
- b. **Design Storm Distribution:** The total depth of rainfall for storms of 24-hour duration is shown in Table 3.3. The rainfall distribution used in the City is the design storm of 24-hour duration based on the standard National Resource Conservation Service (NRCS), formerly known as the Soil Conservation Service (SCS), type 1A rainfall distribution using Table 3.4.

**TABLE 3.3. RAINFALL DISTRIBUTION**

Recurrence Interval (years)	Total Precipitation Depth (inches)
2	2.50
5	3.00
10	3.45
25	3.90
50	4.25
100	4.50



**TABLE 3.4. DESIGN STORM DISTRIBUTION CHART1**

Hour	Percent Rainfall		Rainfall Depth (inches)					
			2-Year Storm	5-Year Storm	10-Year Storm	25-Year Storm	50-Year Storm	100-Year Storm
	Incremental	Cumulative	2.50	3.00	3.45	3.90	4.25	4.50
1	2.40	2.40	0.06	0.07	0.08	0.09	0.10	0.11
2	2.60	5.00	0.07	0.08	0.09	0.10	0.11	0.12
3	3.20	8.20	0.80	0.10	0.11	0.12	0.13	0.14
4	3.80	12.00	0.10	0.12	0.13	0.15	0.16	0.17
5	4.44	16.44	0.11	0.14	0.15	0.17	0.19	0.20
6	5.18	21.62	0.13	0.16	0.18	0.20	0.22	0.23
7	6.48	28.10	0.16	0.20	0.22	0.25	0.27	0.29
8	16.44	44.54	0.41	0.51	0.57	0.64	0.69	0.74
9	7.58	52.12	0.19	0.23	0.26	0.30	0.32	0.34
10	5.28	57.40	0.13	0.16	0.18	0.21	0.22	0.24
11	4.96	62.36	0.12	0.15	0.17	0.19	0.21	0.22
12	4.32	66.68	0.11	0.13	0.15	0.17	0.18	0.19
13	4.02	70.70	0.10	0.12	0.14	0.16	0.17	0.18
14	3.42	74.12	0.09	0.11	0.12	0.13	0.14	0.15
15	3.28	77.40	0.08	0.10	0.11	0.13	0.14	0.15
16	3.00	80.40	0.08	0.09	0.10	0.12	0.13	0.14
17	2.80	83.20	0.07	0.09	0.10	0.11	0.12	0.13
18	2.40	85.60	0.06	0.07	0.08	0.09	0.10	0.11
19	2.40	88.00	0.06	0.07	0.08	0.09	0.10	0.11
20	2.40	90.40	0.06	0.07	0.08	0.09	0.10	0.11
21	2.40	92.80	0.06	0.07	0.08	0.09	0.10	0.11
22	2.40	95.20	0.06	0.07	0.08	0.09	0.10	0.11
23	2.40	97.60	0.06	0.07	0.08	0.09	0.10	0.11
24	2.40	100.00	0.06	0.07	0.08	0.09	0.10	0.11

1. Source: *Subbasin Hydrologic Modeling Criteria*, Kramer, Chin, & Mayo, Inc. 1991.



### 3.3 SCS TR-55 Time of Concentration Computations Report

#### Sheet Flow Equation

-----

$$T_c = (0.007 * ((n * L_f)^{0.8}) / ((P^{0.5}) * (S_f^{0.4}))$$

Where:

T<sub>c</sub> = Time of Concentration (hours)

n = Manning's Roughness

L<sub>f</sub> = Flow Length (feet)

P = 2 yr, 24 hr Rainfall (inches)

S<sub>f</sub> = Slope (ft/ft)

=====

Subbasin: Parking Area

=====

#### Sheet Flow Computations

-----

-	Subarea A
Manning's Roughness:	.015
Flow Length (ft):	130
Slope (%):	.8
2 yr, 24 hr Rainfall (in):	2.50
Velocity (ft/sec):	0.69
Computed Flow Time (minutes):	3.13

=====

**Total TOC (minutes): 3.13**

=====



**Table 2-2a** Runoff curve numbers for urban areas <sup>1/</sup>

Cover description Cover type and hydrologic condition	Average percent impervious area <sup>2/</sup>	Curve numbers for hydrologic soil group			
		A	B	C	D
<i>Fully developed urban areas (vegetation established)</i>					
Open space (lawns, parks, golf courses, cemeteries, etc.) <sup>3/</sup> :					
Poor condition (grass cover < 50%) .....		68	79	86	89
Fair condition (grass cover 50% to 75%) .....		49	69	79	84
Good condition (grass cover > 75%) .....		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way) .....		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way) .....		98	98	98	98
Paved; open ditches (including right-of-way) .....		83	89	92	93
Gravel (including right-of-way) .....		76	85	89	91
Dirt (including right-of-way) .....		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only) <sup>4/</sup> .....		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders) .....		96	96	96	96
Urban districts:					
Commercial and business .....	85	89	92	94	95
Industrial .....	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses) .....	65	77	85	90	92
1/4 acre .....	38	61	75	83	87
1/3 acre .....	30	57	72	81	86
1/2 acre .....	25	54	70	80	85
1 acre .....	20	51	68	79	84
2 acres .....	12	46	65	77	82



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## 3.4 Autodesk Storm and Sanitary Analysis Calculations

Autodesk® Storm and Sanitary Analysis 2016 - Version 12.0.42 (Build 0)

\*\*\*\*\*

### Project Description

\*\*\*\*\*

File Name ..... CCW Storm and Sanitary Analysis.SPF

\*\*\*\*\*

### Analysis Options

\*\*\*\*\*

Flow Units ..... cfs  
 Subbasin Hydrograph Method. **Santa Barbara UH**  
 Time of Concentration..... **SCS TR-55**  
 Link Routing Method ..... Hydrodynamic  
 Storage Node Exfiltration.. Constant rate, wetted area  
 Starting Date ..... JUN-06-2017 00:00:00  
 Ending Date ..... JUN-07-2017 00:00:00  
 Report Time Step ..... 00:00:10

\*\*\*\*\*

### Element Count

\*\*\*\*\*

Number of rain gages ..... 1  
 Number of subbasins ..... 1  
 Number of nodes ..... 3  
 Number of links ..... 2

\*\*\*\*\*

### Raingage Summary

\*\*\*\*\*

Gage ID	Data Source	Data Type	Recording Interval
RainGage-25year	<b>25Year, 3.9in</b>	<b>SCS Type1</b>	6.00

\*\*\*\*\*

### Subbasin Summary

\*\*\*\*\*

Subbasin ID	Total Area acres	Imperv. Area %	Raingage
Sub-03	<b>0.18</b>	<b>100.00</b>	RainGage-25year

\*\*\*\*\*

### Node Summary

\*\*\*\*\*

Node ID	Element Type	Invert Elevation ft	Maximum Elev. ft	Ponded Area ft <sup>2</sup>	External Inflow
Jun-02	JUNCTION	0.00	1.50	0.00	
Out-01	OUTFALL	-1.50	-1.00	0.00	

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RainGarden STORAGE 0.00 1.33 800.00

\*\*\*\*\*  
Link Summary  
\*\*\*\*\*

Link ID	From Node	To Node	Element Type	Length ft	Slope %	Manning's Roughness
6inchPVC	Jun-02	Out-01	CONDUIT	140.0	1.0714	0.0150
Orifice-02	RainGarden	Jun-02	ORIFICE			

\*\*\*\*\*  
Cross Section Summary  
\*\*\*\*\*

Link ID	Shape	Depth/ Diameter ft	Width ft	No. of Barrels	Cross Sectional Area ft <sup>2</sup>	Full Flow Hydraulic Radius ft	Design Flow Capacity cfs
6inchPVC	CIRCULAR	0.50	0.50	1	0.20	0.13	0.50

	Volume acre-ft	Depth inches
Runoff Quantity Continuity		
Total Precipitation .....	0.057	3.893
Surface Runoff .....	0.054	3.655
Continuity Error (%) .....	0.000	

	Volume acre-ft	Volume Mgallons
Flow Routing Continuity		
External Inflow .....	0.000	0.000
External Outflow .....	0.000	0.000
Initial Stored Volume ...	0.000	0.000
Final Stored Volume .....	0.016	0.005
Continuity Error (%) .....	0.639	

\*\*\*\*\*  
Composite Curve Number Computations Report  
\*\*\*\*\*

-----  
Subbasin Sub-03  
-----

Soil/Surface Description	Area (acres)	Soil Group	CN
Composite Area & Weighted CN	0.18		98.00

\*\*\*\*\*  
Runoff Coefficient Computations Report  
\*\*\*\*\*

-----  
Subbasin Sub-03  
-----

Soil/Surface Description	Area (acres)	Soil Group	Runoff Coeff.
--------------------------	-----------------	---------------	------------------

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-	0.18	-	0.72
Composite Area & Weighted Runoff Coeff.	0.18		0.72

\*\*\*\*\*  
 SCS TR-55 Time of Concentration Computations Report  
 \*\*\*\*\*

### Sheet Flow Equation

$$T_c = (0.007 * ((n * L_f)^{0.8}) / ((P^{0.5}) * (S_f^{0.4})))$$

Where:

Tc = Time of Concentration (hrs)  
 n = Manning's Roughness  
 Lf = Flow Length (ft)  
 P = 2 yr, 24 hr Rainfall (inches)  
 Sf = Slope (ft/ft)

-----  
Subbasin Sub-03  
-----

### Sheet Flow Computations

	Subarea A	Subarea B	Subarea C
Manning's Roughness:	0.01	0.00	0.00
Flow Length (ft):	130.00	0.00	0.00
Slope (%):	0.80	0.00	0.00
2 yr, 24 hr Rainfall (in):	2.50	2.50	2.50
Velocity (ft/sec):	0.69	0.00	0.00
Computed Flow Time (minutes):	3.13	0.00	0.00
=====			
Total TOC (minutes):	<b>3.13</b>		
=====			

\*\*\*\*\*  
 Subbasin Runoff Summary  
 \*\*\*\*\*

Subbasin ID	Total Precip in	Total Runoff in	Peak Runoff cfs	Weighted Curve Number	Time of Concentration days hh:mm:ss
Sub-03	3.89	3.66	<b>0.16</b>	98.000	0 00:05:00

\*\*\*\*\*  
 Node Depth Summary  
 \*\*\*\*\*

Node ID	Average Depth Attained ft	Maximum Depth Attained ft	Maximum HGL Attained ft	Time of Max Occurrence days hh:mm	Total Flooded Volume acre-in	Total Time Flooded minutes	Retention Time hh:mm:ss
Jun-02	0.00	0.00	0.00	0 16:24	0	0	0:00:00
Out-01	0.00	0.01	-1.49	0 15:58	0	0	0:00:00
RainGarden	0.64	<b>1.00</b>	1.00	0 16:14	0	0	0:00:00

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\*\*\*\*\*  
Node Flow Summary  
\*\*\*\*\*

Node ID	Element Type	Maximum Lateral Inflow cfs	Peak Inflow cfs	Time of Peak Inflow Occurrence days hh:mm	Maximum Flooding Overflow cfs	Time of Peak Flooding Occurrence days hh:mm
Jun-02	JUNCTION	0.00	0.00	0 16:14	0.00	
Out-01	OUTFALL	0.00	0.00	0 15:58	0.00	
RainGarden	STORAGE	0.16	0.16	0 07:54	0.00	

\*\*\*\*\*  
Storage Node Summary  
\*\*\*\*\*

Storage Node ID	Maximum Poned Volume 1000 ft <sup>3</sup>	Maximum Poned Volume (%)	Time of Max Poned Volume days hh:mm	Average Poned Volume 1000 ft <sup>3</sup>	Average Poned Volume (%)	Maximum Storage Node Outflow cfs	Maximum Exfiltration Rate cfm	Time of Max. Exfiltration Rate hh:mm:ss	Total Exfiltrated Volume 1000 ft <sup>3</sup>
RainGarden	0.802	75	0 16:14	0.516	48	0.00	1.27	16:14:30	1.641

\*\*\*\*\*  
Link Flow Summary  
\*\*\*\*\*

Link ID	Element Type	Time of Peak Flow Occurrence days hh:mm	Maximum Velocity Attained ft/sec	Length Factor	Peak Flow during Analysis cfs	Design Flow Capacity cfs	Ratio of Maximum /Design Flow	Ratio of Maximum Flow Depth	Total Time Surcharged minutes	Reported Condition
6inchPVC	CONDUIT	0 15:58	0.00	1.00	0.00	0.50	0.00	0.01	0	Calculated
Orifice-02	ORIFICE	0 16:14			0.00			0.00		

\*\*\*\*\*  
Highest Flow Instability Indexes  
\*\*\*\*\*  
All links are stable.

Analysis began on: Wed Jun 07 15:52:14 2017  
Analysis ended on: Wed Jun 07 15:52:15 2017  
Total elapsed time: 00:00:01



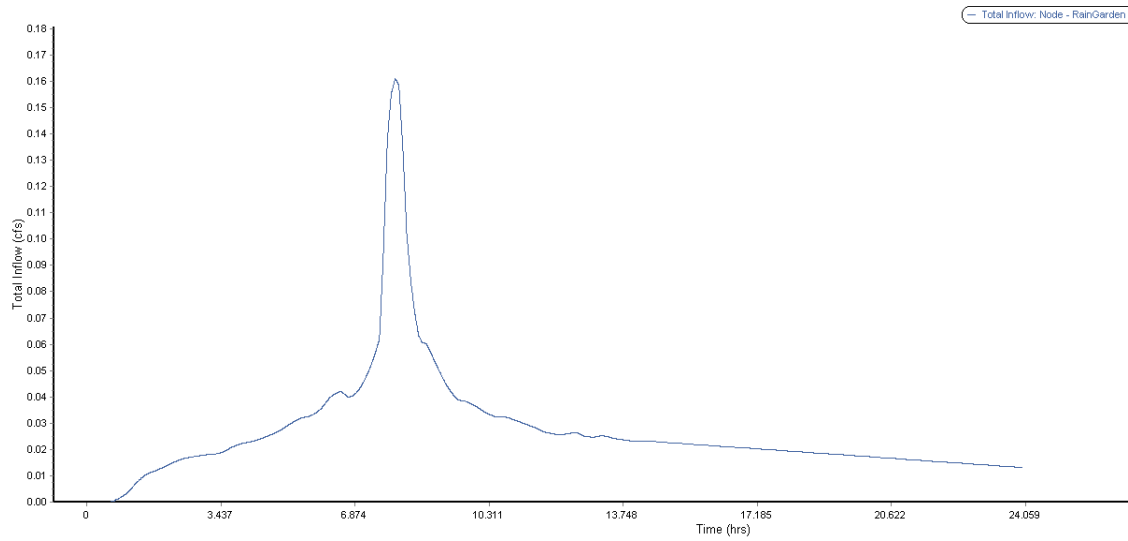


Figure 1 Raingarden Total Inflow



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## 3.5 Rain Garden Sizing Calculator

RAIN GARDEN SIZING CALCULATOR											
24 Hour Storm, SBUH Type 1A Rainfall Distribution											
<b>USER INPUTS</b>											
24 Hour Rainfall Depth =		3.9	in	Enter							
Drainage area =		7710	sf	Enter							
Drainage Area Runoff Coefficient =		0.9		0.9 - 0.98 for imp surface							
Native Soil Infiltration Rate =		1	in/hr	Enter							
Depth of Rock Trench Below Rain Garden (optional) =		18	inches	Enter, optional							
Void Ratio for RockTrench =		40%	%	Typically 40% for uniformly graded rock							
Rain Garden Area =		800	sf								
<b>CALCULATED DESIGN CRITERIA</b>											
Maximum Ponding Depth in Rain Garden =		5.19	in	Calculated							
Depth of Water Left in Rock Trench After 30 Hours =		10.35	in	Calculated							
Depth of Water Left in Rain Garden After 30 Hours =		0.00	in	Calculated							
<b>OTHER CALCULATED VALUES</b>											
Peak Rainfall Intensity =		1.26	in/hr	Calculated from distribution							
Ratio of Rain Garden to Drainage Area =		0.104		Calculated (aka Sizing Factor)							
Storage Capacity of Rock Trench =		480.00	cf	Calculated							
<b>SBUH HYDROGRAPH</b>											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Time (min)	Rainfall Depth (in)	Rainfall Intensity (in/hr)	Inflow Rate (cfs)	Inflow Volume (cf)	Runoff Depth (in)	Facility Infiltration Rate (cfs)	Inflow Rate - Facility Infiltration Rate (cfs)	Inflow Volume - Infiltration Volume (cf)	Cumulative Inflow Volume to be Stored (cf)	Rock Trench Ponding (if incl in design) (in)	Rain Garden Ponding Depth (in)
0	0.0000	0.00	0.00	0	0	0.0185185	-0.01852	-11.1111	0.00	0.00	0.00
10	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
20	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.01852	-11.1111	0.00	0.00	0.00
30	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
40	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
50	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
60	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
70	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
80	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
90	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
100	0.0156	0.09	0.02	9.0207	0.01404	0.0185185	-0.00348	-2.0904	0.00	0.00	0.00
110	0.0195	0.12	0.02	11.2759	0.01755	0.0185185	0.00027	0.1648	0.16	0.01	0.00
120	0.0195	0.12	0.02	11.2759	0.01755	0.0185185	0.00027	0.1648	0.33	0.01	0.00
130	0.0195	0.12	0.02	11.2759	0.01755	0.0185185	0.00027	0.1648	0.49	0.02	0.00
140	0.0195	0.12	0.02	11.2759	0.01755	0.0185185	0.00027	0.1648	0.66	0.02	0.00
150	0.0195	0.12	0.02	11.2759	0.01755	0.0185185	0.00027	0.1648	0.82	0.03	0.00
160	0.0195	0.12	0.02	11.2759	0.01755	0.0185185	0.00027	0.1648	0.99	0.04	0.00
170	0.0234	0.14	0.02	13.5311	0.02106	0.0185185	0.00403	2.4199	3.41	0.13	0.00
180	0.0234	0.14	0.02	13.5311	0.02106	0.0185185	0.00403	2.4199	5.83	0.22	0.00
190	0.0234	0.14	0.02	13.5311	0.02106	0.0185185	0.00403	2.4199	8.25	0.31	0.00
200	0.0234	0.14	0.02	13.5311	0.02106	0.0185185	0.00403	2.4199	10.67	0.40	0.00
210	0.0234	0.14	0.02	13.5311	0.02106	0.0185185	0.00403	2.4199	13.09	0.49	0.00
220	0.0234	0.14	0.02	13.5311	0.02106	0.0185185	0.00403	2.4199	15.51	0.58	0.00
230	0.0273	0.16	0.03	15.7862	0.02457	0.0185185	0.00779	4.6751	20.18	0.76	0.00
240	0.0273	0.16	0.03	15.7862	0.02457	0.0185185	0.00779	4.6751	24.86	0.93	0.00
250	0.0273	0.16	0.03	15.7862	0.02457	0.0185185	0.00779	4.6751	29.53	1.11	0.00
260	0.0273	0.16	0.03	15.7862	0.02457	0.0185185	0.00779	4.6751	34.21	1.28	0.00
270	0.0273	0.16	0.03	15.7862	0.02457	0.0185185	0.00779	4.6751	38.88	1.46	0.00
280	0.0273	0.16	0.03	15.7862	0.02457	0.0185185	0.00779	4.6751	43.56	1.63	0.00
290	0.0320	0.19	0.03	18.4924	0.02878	0.0185185	0.01230	7.3813	50.94	1.91	0.00
300	0.0320	0.19	0.03	18.4924	0.02878	0.0185185	0.01230	7.3813	58.32	2.19	0.00
310	0.0320	0.19	0.03	18.4924	0.02878	0.0185185	0.01230	7.3813	65.70	2.46	0.00
320	0.0320	0.19	0.03	18.4924	0.02878	0.0185185	0.01230	7.3813	73.08	2.74	0.00
330	0.0320	0.19	0.03	18.4924	0.02878	0.0185185	0.01230	7.3813	80.47	3.02	0.00
340	0.0320	0.19	0.03	18.4924	0.02878	0.0185185	0.01230	7.3813	87.85	3.29	0.00
350	0.0371	0.22	0.04	21.4242	0.03335	0.0185185	0.01719	10.3131	98.16	3.68	0.00
360	0.0371	0.22	0.04	21.4242	0.03335	0.0185185	0.01719	10.3131	108.47	4.07	0.00
370	0.0371	0.22	0.04	21.4242	0.03335	0.0185185	0.01719	10.3131	118.79	4.45	0.00
380	0.0371	0.22	0.04	21.4242	0.03335	0.0185185	0.01719	10.3131	129.10	4.84	0.00
390	0.0371	0.22	0.04	21.4242	0.03335	0.0185185	0.01719	10.3131	139.41	5.23	0.00

Document Title: PRELIMINARY DRAINAGE REPORT

Project Number / Title: 17-042 COCA-COLA BOTTLING COMPANY EMPLOYEE PARKING EXPANSION







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### 3.6 Analysis Conclusion

In conclusion, this site has been designed in accordance with the Stormwater & Surface Water Standards of the Wilsonville, Oregon and the analysis has shown that the rain garden does meet the design criteria for LID, water quality, flow control, and conveyance.



## 4. RAIN GARDEN LANDSCAPING SPECIFICATIONS

**Rain garden:**

Moisture zone A: **667 SQ. FT.** - periodically saturated, anaerobic and aerobic soils

Moisture zone B: **133 SQ. FT.** - infrequent inundation/saturation, if any; aerobic soils

Total: **800 SQ. FT.**

MOISTURE ZONE A (667 SQ. FT.)						
	REQUIRED PLANT QUANTITIES PER 100 SQUARE FEET	ZONE SQUARE FOOTAGE	REQUIRED PLANT QUANTITIES	PROPOSED PLANT QUANTITIES	PROPOSED SPECIES BREAKDOWN	MINIMUM SIZES
LARGE SHRUBS/SMALL TREES	3	667	20.01	21	11 NOOTKA ROSE ( <i>Rosa nutkana</i> ) 10 INDIAN PLUM ( <i>Omleria cerasiformis</i> )	30" Height
SMALL SHRUBS	4	667	26.68	27	10 OREGON GRAPE ( <i>Mahonia aquifolium</i> ) 10 SNOWBERRY ( <i>Symphoricarpus alba</i> ) 7 SWORD FERN ( <i>Polystichum munitum</i> )	# 1 container
GROUNDCOVER PLANTS	115	667	767.05	770	154 SLOUGH SEDGE ( <i>Carex obnupta</i> ) 154 TUFTED HAIR GRASS ( <i>Deschampsia cespitosa</i> ) 154 DAGGER-LEAF RUSH ( <i>Juncus ensifolius</i> ) 154 SMALL FRUITED BULRUSH ( <i>Scirpus microcarpus</i> ) 154 SNOWBERRY ( <i>Symphoricarpus alba</i> )	# 1 container
MOISTURE ZONE B (133 SQ. FT.)						
	REQUIRED PLANT QUANTITIES PER 100 SQUARE FEET	ZONE SQUARE FOOTAGE	REQUIRED PLANT QUANTITIES	PROPOSED PLANT QUANTITIES	PROPOSED SPECIES BREAKDOWN	MINIMUM SIZES
TREE	1	133	1.33	2	2 DOUGLAS FIR ( <i>Pseudotsuga menziesii</i> )	6' height
LARGE SHRUBS/SMALL TREES	3	133	3.99	4	4 NOOTKA ROSE ( <i>Rosa nutkana</i> )	30" Height
SMALL SHRUBS	4	133	5.32	6	6 OREGON GRAPE ( <i>Mahonia aquifolium</i> )	# 1 container
GROUNDCOVER PLANTS	115	133	152.95	153	90 SWORD FERN ( <i>Polystichum munitum</i> ) 40 COASTAL STRAWBERRY ( <i>Fragaria chiloensis</i> ) 23 SNOWBERRY ( <i>Symphoricarpus alba</i> )	# 1 container

**Design:**

All planting plans must have a minimum of 50 percent evergreen plants and at least two species from the Herbaceous and Small Shrubs/Groundcover plant communities.

**Timing:**

Containerized stock shall be installed only from February 1 through May 1 and October 1 through November 15. Bare root stock shall be installed only from December 15 through April 15. Seeding shall occur only between March 1 through May 15 and September 1 through October 15. Planting or seeding outside these times may require additional measures to ensure survival which shall be specified on the plans and require the City's approval.



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## **Monitoring:**

Site visits are necessary throughout the growing season to assess the status of the plantings, irrigation, mulching, etc. and ensure successful plant establishment.

## **Weed Control:**

The removal of non-native, invasive weeds shall be necessary throughout the maintenance period, or until a healthy stand of desirable vegetation is established.

## **Plant Replacement and Preservation:**

At the end of the maintenance period, all plants not in a healthy growing condition, will be noted and as soon as seasonal conditions permit, shall be removed from the site and replaced with plants of the same species and size as originally specified. Prior to replacement, the cause of loss (wildlife damage, poor plant stock, etc.) shall be documented with a description of the corrective actions taken.

## **Growing Medium Composition:**

The medium shall be a blend of loamy soil, sand, and compost that is 30 to 40 percent compost (by volume, with a measured pH of 5.5 to 7. It shall be loose, friable, well mixed, and homogeneous. It shall be free of wood pieces, plastic, screened and free of stones 1 inch (25 mm) or larger in any dimension; free of roots, plants, sod, clods, clay lumps, pockets of coarse sand, paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials harmful to plant growth; free of weeds and invasive plants including but not limited to: *Cirsium arvense* (Canadian Thistle), *Convolvulus* spp. (Morning Glory), *Cytisus scoparius* (Scotch Broom), *Dipsacus sylvestris* (Common Teasel), *Festuca arundinaceae* (Tall Fescue), *Hedera helix* (English Ivy), *Holcus canatus* (Velvet Grass), *Lolium* spp. (Rye Grasses), *Lotus corniculatus* (Bird's Foot Trefoil), *Lythrium salicaria* (Purple Loose Strife), *Melilotus* spp. (Sweet Clover), *Myriophyllum spicatum* (Eurasian Milfoil), *Phalaris arundinaceae* (Reed Canary Grass), *Rubus discolor* (Himalayan Blackberry), *Solanum* spp. (Nightshade), *Trifolium* spp. (Clovers), and not infested with nematodes, grubs, other pests, pest eggs, or other undesirable organisms and disease-causing plant pathogens; friable and with sufficient structure to give good tilth and aeration.

Continuous, air-filled, pore-space content on a volume/volume basis shall be at least 15 percent when moisture is present at field capacity. Soil shall have a field capacity of at least 15 percent on a dry weight basis. It shall have no visible free water. It shall be obtained from naturally well drained construction or mining sites where topsoil occurs at least 4 inches deep; it shall not be obtained from bogs, wetlands, or marshes.

Document Title: PRELIMINARY DRAINAGE REPORT

Project Number / Title: 17-042 COCA-COLA BOTTLING COMPANY EMPLOYEE PARKING EXPANSION



# Hood River Consulting Engineers, Inc.

*A Service Disabled Veteran Owned Small Business*



## **Growing Medium Installation:**

The growing medium shall be protected from all sources of contamination, including weed seeds, while at the supplier, in conveyance, and at the project site. The medium shall be placed in loose lifts, not to exceed 8 inches and each lift shall be compacted with a water-filled landscape roller. The material shall not otherwise be mechanically compacted. Weather permitting, plants shall be installed as soon as possible after placing and grading the growing medium in order to minimize erosion and further compaction. In all cases, the facility must be protected from foot or equipment traffic that is unrelated to the construction of the facility. Temporary fencing or walkways should be installed as needed to keep workers, pedestrians, and equipment out of the facility. Under no circumstances should materials and equipment be stored in the facility. Stormwater management facilities shall be kept clean and shall not be used as erosion and sediment control structures during construction. Placement of the growing medium will not be allowed when the ground is frozen or saturated or when the weather is determined to be too wet.

## **Watering:**

Water all plants during establishment to maintain all plantings in a healthy thriving condition. Fertilizers should generally be avoided in stormwater facilities. Fertilize all plants during establishment as needed with slow release, organic (low yield) material. The purpose of mulching soils is to conserve moisture, hold plantings and topsoil in place, limit weed establishment and moderate soil temperatures. Mulch for Vegetated Stormwater Facilities: The use of mulch in frequently inundated areas shall be limited to avoid any possible water quality impacts including the leaching of tannins and nutrients, and the migration of mulch into waterways. Mulches to be used shall be a stable and inert (non-leaching) matter of sufficient mass and density that it will not float in standard flows. Mulch cover should be maintained throughout the life of the stormwater facility with minimum thickness of 2 inches in depth.





**TABLE A-2: STORMWATER FACILITY PLANT LISTS:  
RAIN GARDENS AND SWALES (INFILTRATION AND FILTRATION)**

Rain Gardens and Swales (infiltration and filtration)	Zone		Origin			Type/Size		Context Factors					
	Moisture zone (A) Uniformly wet to moist	Moisture zone (B) Drier transitional area	NW native	NW native cultivar	Non-native adapted	(E)evergreen/(D)eciduous	Potential height	Typical on center spacing	Facilities < 3 feet wide	Fully-lined facility	Parking areas	Streets	Adjacent to buildings
<b>Plant Name</b> <b>Botanical, common</b>													
<b>Herbaceous Plants</b>													
<i>Carex obnupta</i> , Slough sedge	*		*			E	48"	12"		*	*	*	*
<i>Carex testacea</i> , New Zealand orange sedge	*				*	D	24"	12"		*	*	*	*
<i>Deschampsia cespitosa</i> , Tufted hair grass	*		*			D	36"	12"	*	*	*	*	*
<i>Elymus glaucus</i> , Blue wild rye	*	*	*			E	24"	12"	*	*	*	*	*
<i>Juncus ensifolius</i> , Dagger-leaf rush	*				*	D	10"	12"	*	*	*	*	*
<i>Juncus patens</i> , Spreading rush	*	*			*	E	36"	12"	*	*	*	*	*
<i>Scirpus microcarpus</i> , Small fruited bulrush	*		*			E	24"	12"	*	*	*	*	*
<b>Small Shrubs/Groundcover</b>													
<i>Arctostaphylos uva-ursi</i> , Kinnickinnick		*	*			E	6"	12"	*	*	*	*	*
<i>Cornus sericea</i> 'Kelsey', Kelsey dogwood	*	*		*		D	2'	12"	*	*	*	*	*
<i>Fragaria chiloensis</i> , Coastal strawberry		*	*			E	6"	12"	*	*	*	*	*
<i>Mahonia aquifolium</i> , Oregon grape	*	*	*			E	5'	3'		*	*	*	*
<i>Physocarpus capitatus</i> , Pacific ninebark	*		*			D	6'	3'		*			
<i>Polystichum munitum</i> , Sword fern	*	*	*			E	2'	2'	*	*	*	*	*
<i>Spirea betulifolia</i> , Birchleaf spiraea	*	*	*			D	2'	2'	*	*	*	*	*
<i>Symphoricarpos alba</i> , Snowberry	*	*	*			D	3'	3'	*	*	*	*	*
<b>Large Shrubs/Small Trees</b>													
<i>Cornus sericea</i> , Red-Twig dogwood	*	*	*			D	6'	4'					
<i>Holodiscus discolor</i> , Western serviceberry	*	*	*			D	6'	4'		*	*	*	
<i>Rosa nutkana</i> , Nootka rose	*	*	*			D	8'	4'		*		*	
<i>Omleria cerasiformis</i> , Indian plum	*		*			D	6'	4'		*	*	*	
<i>Ribes sanguineum</i> , Red flowering currant	*	*	*			D	8'	4'		*	*	*	*
<i>Salix sitchensis</i> , Sitka willow	*		*			D	15'	5'					
<i>Spirea douglasii</i> , Douglas spiraea		*	*			D	7'	4'		*	*	*	*
<b>Trees</b>													
<i>Acer circinatum</i> , Vine maple	*	*	*			D	15'	8'	*	*	*	*	*
<i>Alnus rubra</i> , Red alder	*	*	*			D	80'	20'					*
<i>Cornus nuttallii</i> , Pacific dogwood	*	*	*			D	20'	10'	*	*	*	*	*
<i>Fraxinus latifolia</i> , Oregon ash	*		*			D	30'	25'					
<i>Malus fusca</i> , Pacific crabapple	*		*			D	30'	10'	*	*			*
<i>Pseudotsuga menziesii</i> , Douglas fir	*	*	*			E	200'	30'					
<i>Thuja plicata</i> , Western red cedar	*	*	*			E	150'	20'			*		

RECEIVED

JUN 29 2017

Planning Division  
Development Permit Application



29799 SW Town Center Loop E, Wilsonville, OR 97070  
Phone: 503.682.4960 Fax: 503.682.7025  
Web: www.ci.wilsonville.or.us

Final action on development application or zone change is required within 120 days in accordance with provisions of ORS 227.175

A pre application conference is normally required prior to submittal of an application. Please visit the City's website for submittal requirements

Pre-Application Meeting Date: \_\_\_\_\_

Incomplete applications will not be scheduled for public hearing until all of the required materials are submitted.

**Applicant:**

Name: Nelson Melo  
Company: TreCore Construction Management, LLC  
Mailing Address: 4510 NE 68th Drive, Ste 104  
City, State, Zip: Vancouver, WA 98661  
Phone: 360-574-7661 Fax: \_\_\_\_\_  
E-mail: Nelson Chris@trecoreconstruction.com

**Authorized Representative:**

Name: Chris Horne  
Company: TreCore Construction Management, LLC  
Mailing Address: 4510 NE 68th Drive, Ste 104  
City, State, Zip: Vancouver, WA 98661  
Phone: 360-574-7661 Fax: \_\_\_\_\_  
E-mail: Chris Nelson@Trecoreconstruction.com

**Property Owner:**

Name: \_\_\_\_\_  
Company: Swire Coca-Cola  
Mailing Address: 9750 SW Barber St  
City, State, Zip: Wilsonville, OR 97070  
Phone: 503-312-8215 Fax: \_\_\_\_\_  
E-mail: mminetti@swirecc.com

**Property Owner's Signature:**

Printed Name: Mike Perelli Minetti Date: 6/29/17

**Applicant's Signature:** (if different from Property Owner)

Printed Name: Nelson Melo Date: 6/29/17

**Site Location and Description:**

Project Address if Available: 9750 SW Barber St, Wilsonville, OR 97070 Suite/Unit \_\_\_\_\_  
Project Location: \_\_\_\_\_  
Tax Map #(s): 31W 14C Tax Lot #(s): 103 County:  Washington  Clackamas

**Request:**

Construction of hardscape for an additional 20 parking spaces at Swire Coca-Cola Facility in Wilsonville, OR.

**Project Type:**  Class I  Class II  Class III

Residential  Commercial  Industrial  Other: \_\_\_\_\_

**Application Type(s):**

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> Annexation                          | <input type="checkbox"/> Appeal                     | <input type="checkbox"/> Comp Plan Map Amend | <input type="checkbox"/> Parks Plan Review              |
| <input type="checkbox"/> Final Plat                          | <input type="checkbox"/> Major Partition            | <input type="checkbox"/> Minor Partition     | <input type="checkbox"/> Request to Modify Conditions   |
| <input type="checkbox"/> Plan Amendment                      | <input type="checkbox"/> Planned Development        | <input type="checkbox"/> Preliminary Plat    | <input checked="" type="checkbox"/> Site Design Review  |
| <input type="checkbox"/> Request for Special Meeting         | <input type="checkbox"/> Request for Time Extension | <input type="checkbox"/> Signs               | <input checked="" type="checkbox"/> Stage II Final Plan |
| <input type="checkbox"/> SROZ/SRIR Review                    | <input type="checkbox"/> Staff Interpretation       | <input type="checkbox"/> Stage I Master Plan | <input type="checkbox"/> Variance                       |
| <input checked="" type="checkbox"/> Type C Tree Removal Plan | <input type="checkbox"/> Tree Permit (B or C)       | <input type="checkbox"/> Temporary Use       | <input type="checkbox"/> Other (describe) _____         |
| <input type="checkbox"/> Villebois SAP                       | <input type="checkbox"/> Villebois PDP              | <input type="checkbox"/> Villebois FDP       |   |
| <input type="checkbox"/> Zone Map Amendment                  | <input type="checkbox"/> Waiver(s)                  | <input type="checkbox"/> Conditional Use     |   |



## Natural Resource Findings, Conditions, and Requirements for Proposed Development

**From:** Kerry Rappold, Natural Resources Manager  
**To:** Daniel Pauly, Senior Planner  
**Date:** August 16, 2017  
**Proposal:** DB17-0021 – Addition of 20 Parking Spaces at Coca Cola Facility

### **Natural Resources Division Conditions:**

#### All Requests

<p><b>NR 1.</b> Natural Resource Division Requirements and Advisories listed in Exhibit C1 apply to the proposed development.</p>
---



City of Wilsonville  
EXHIBIT C1 DB17-0021 et. seq.

Exhibit C1  
Natural Resources Findings & Requirements

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Stormwater Management Requirements

1. Pursuant to the 2015 Public Works Standards, infiltration testing shall be conducted to determine the site's suitability for the proposed stormwater management facilities. Testing shall be conducted or observed by a qualified individual working under the supervision of a Professional Engineer, Registered Geologist, or Certified Engineering Geologist licensed in the State of Oregon.
2. Provide profiles, plan views, landscape information, and specifications for the proposed stormwater facilities consistent with the requirements of the 2015 Public Works Standards.
3. Pursuant to the 2015 Public Works Standards, the applicant shall submit an updated maintenance plan (including the City's stormwater maintenance and access easement) for the proposed stormwater facilities prior to approval for occupancy of the associated development.
4. Pursuant to the 2015 Public Works Standards, access shall be provided to all areas of the proposed stormwater facilities. At a minimum, at least one access shall be provided for maintenance and inspection.

Other Requirements

5. The applicant shall comply with all applicable state and federal requirements for the proposed construction activities (e.g., DEQ NPDES #1200-CN permit).



July 26, 2017

Attn: Adam Goddin, PE, PMP, LEED AP  
Hood River Consulting Engineers, Inc.  
1784 May Street  
Hood River, OR 97031

RE: ***Coca-Cola Bottling Plant  
23-stall Parking Expansion  
Request for Waiver of Traffic Study***

Dear Mr. Goddin,

This letter is in response to your request for approval of a waiver of the requirement for a traffic impact study (Study) in association with a proposed 23-space expansion of the parking area at the Coca-Cola Bottling Plant located at 9750 Southwest Barber Street.

In the information provided in your letter, dated July 5, 2017, you have stated that the proposed 23-space parking area expansion is in response to increase staffing at the facility. However, you have noted that shift changes occur at 5:30-6:30 a.m., 2:00-3:00 p.m. and 9:30-10:30 p.m. As such it is anticipated that this parking area expansion will have no PM Peak Hour impact on Wilsonville's transportation infrastructure.

Based on the above findings, a recommendation to waive the Study will be forwarded to the Development Review Board (DRB). Irrespective of the Staff recommendation to waive the analysis, the DRB may determine that a Study is necessary to make a recommendation or decision concerning the proposed project. A copy of this letter is being forwarded to the Planning Division and will be entered into the development application.

Sincerely,

A handwritten signature in blue ink that reads "Nancy Kraushaar".

**Nancy Kraushaar, PE**  
*Community Development Director*

cc: Chris Neamtzu, Planning Director  
Steve Adams, Development Engineer Manager



**City of Wilsonville**  
EXHIBIT C2 DB17-0021 et. seq.

**DEVELOPMENT REVIEW BOARD MEETING**

**MONDAY, AUGUST 28, 2017**

**6:30 PM**

---

VI. Public Hearing:

**B. Resolution No. 340. Villebois Piazza Temporary Use Permit (TUP): Rudy Kadlub, Costa Pacific Communities – Applicant for RCS Villebois Development – Owner.** The applicant is requesting approval of a Class 3 Temporary Use Permit for existing mailboxes, one coffee cart and potentially up to six food carts in the future. The subject site is located at the Villebois Piazza on Tax Lots 101, 102 and 2800 of Section 15AC, T3S, R1W, Clackamas County, Oregon. Staff: Charles Tso

Case File: DB17-0024 Class III Temporary Use Permit

**DEVELOPMENT REVIEW BOARD  
RESOLUTION NO. 340**

**A RESOLUTION ADOPTING FINDINGS AND CONDITIONS APPROVING A CLASS 3 TEMPORARY USE PERMIT REQUEST FOR EXISTING MAILBOXES, ONE COFFEE CART AND POTENTIALLY UP TO SIX FOOD CARTS IN THE FUTURE. THE SITE IS LOCATED AT THE VILLEBOIS PIAZZA ON TAX LOT 101, 102, AND 2800 OF SECTION 15AC, T3S-R1W, CLACKAMAS COUNTY; WILSONVILLE, OREGON. RCS VILLEBOIS DEVELOPMENT – OWNER. RUDY KADLUB, COSTA PACIFIC COMMUNITIES – APPLICANT.**

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated August 17, 2017, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel B at a scheduled meeting conducted on August 28, 2017, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report dated August 28, 2017, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations for:

DB17-0024 Class 3 Temporary Use Permit for mailboxes, one coffee cart and potentially up to six food carts at Villebois Piazza.

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 28<sup>th</sup> day of August, 2017 and filed with the Planning Administrative Assistant on \_\_\_\_\_. This resolution is final on the 15th calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03)*.

\_\_\_\_\_  
Shawn O’Neil, Chair - Panel B  
Wilsonville Development Review Board

Attest:

\_\_\_\_\_  
**Shelley White, Planning Administrative Assistant**



Exhibit A1  
Planning Division Staff Report  
Temporary Mailboxes and Coffee Cart for Villebois Piazza

Development Review Board Panel 'B'  
Quasi-Judicial Public Hearing

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<b>Hearing Date:</b>	August 28, 2017
<b>Date of Report:</b>	August 17, 2017
<b>Application Nos.:</b>	DB17-0024 Temporary Use Permit for Villebois Piazza
<b>Request/Summary:</b>	The Development Review Board is being asked to review a Class 3 Temporary Use Permit
<b>Location:</b>	Northwest and northeast side of Villebois Piazza, on the corner of SW Barber St. and SW Villebois Drive. The property is specifically known as Tax Lots 00101, 00102, and 02800 Section 15AC, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon.
<b>Owner/Applicant:</b>	RCS Villebois Development
<b>Applicant's Representative:</b>	Rudy Kadlub, Costa Pacific Communities
<b>Comprehensive Plan Designation:</b>	Residential
<b>Zone Map Classification:</b>	V (Village)
<b>Staff Reviewers:</b>	Daniel Pauly AICP, Senior Planner Charles Tso, Assistant Planner Steve Adams PE, Development Engineering Manager Kerry Rappold, Natural Resources Program Manager

**Staff Recommendation:** Approve with conditions the requested Temporary Use Permit.



## Applicable Review Criteria:

<u>Development Code:</u>	
Section 4.008	Application Procedures-In General
Section 4.009	Who May Initiate Application
Section 4.010	How to Apply
Section 4.011	How Applications are Processed
Section 4.014	Burden of Proof
Section 4.031	Authority of the Development Review Board
Subsection 4.035 (.04)	Site Development Permit Application
Subsection 4.035 (.05)	Complete Submittal Requirement
Section 4.110	Zones
Subsection 4.125 (.02)	Permitted Uses in the Village Zone
Subsection 4.125 (.03) D.	Permitted Accessory Uses in the Village Zone
Subsection 4.125 (.05) C.	Development Standards Applying to All Developments in the Village Zone
Subsection 4.125 (.06)	Standards Applying to Commercial Uses
Subsection 4.125 (.07)	Off-Street Parking, Loading and Bicycle Parking
Subsection 4.125 (.12)	Master Signage and Wayfinding
Section 4.154	On-site Pedestrian Access and Circulation
Section 4.156.01 through 4.156.11	Sign Regulations
Section 4.163	Temporary Structure and Uses
Section 4.175	Public Safety and Crime Prevention
Section 4.176	Landscaping, Screening, and Buffering
Sections 4.199.20 through 4.199.60	Outdoor Lighting
Sections 4.300 through 4.320	Underground Utilities

## Vicinity Map



## Background:

The City originally approved the development of the Villebois Piazza and its surrounding parcels in 2006 in case file DB06-0006.

Condition of Approval PDH 3 of Case File DB06-0006 reads:

“The Applicant/Owner shall accommodate building space for a central post office facility for approximately 1010 post office boxes at Building 1F and provide for two (2) parking spaces and (1) parking space along Villebois Drive within close proximity to the post office at Villebois Drive. See finding H35.”

As the need for postal service in the Village Center came and Building 1F did not have plans for construction the condition was modified to allow for temporary mail boxes until the building was constructed.

The modified condition of approval and revised final development plan were approved in Case Files DB08-0042 and DB08-0043. Condition of Approval PD 4 of this modified approval reads:

“Within sixty (60) months of the date of the action on Case File DB08-0043 the Applicant/Owner shall accommodate a central mailroom in a building on or immediately adjacent to Piazza Villebois approved by the City with sufficient mailboxes to serve all Villebois SAP Central residents. Until the central mailroom is constructed the Applicant shall provide temporary mail boxes in a centralized location near Piazza Villebois approved by the City. The number of temporary mailboxes shall be sufficient to serve current Villebois SAP Central residents and future residents that move in prior to the construction of the permanent central mailroom. Within one hundred twenty (120) days of the completion of the temporary centralized mail boxes all other temporary mail boxes and kiosks within Villebois SAP Central shall be removed and landscaping and other improvements shall be installed as approved in relevant Preliminary and Final Development Plans. All residences in the Villebois SAP Central, including Community Housing, shall utilize the temporary centralized mail boxes and future central mailroom for mail pickup. (Those persons with special needs who apply for and qualify for special services such as door to door service under federal standards are exempted.) Three (3) parking stalls shall be provided adjacent to the temporary centralized mail boxes and the future central mailroom. Upon request, the Planning Director, through administrative review subject to appeal, may extend the sixty (60) month time period for completion of the central mailroom upon finding that completion of the mailroom is not technically or financially feasible based on the number of residents at the time of the request for extension.”

The sixty- (60) month period ended February 11, 2014 and no extensions have been requested. Building 1F still has yet to be built. In addition, there is now interest in expanding interim temporary uses related to the future Building 1F to include food carts. When approached with the request for the food carts the City pointed out the outstanding issue of the expired approval of the interim mail kiosks at a time when the Village Center is seeing a significant amount of additional development.

Rather than having the applicant obtain an extension pursuant to the aforementioned condition of approval while pursuing a separate temporary use permit through the DRB for the proposed food trucks, the requests were combined into a single temporary use permit request to the Development Review Board. The proposed uses are closely related as they are both interim uses which are planned for inclusion in the future Building 1F. The temporary use will allow the uses to serve the growing neighborhood until the planned mixed use building is designed and built. The applicant requests a 24-month temporary use permit for the food carts and mailboxes to allow time for development of the building.

DB17-0024 Site Plan



Piazza Villebois

## **Summary:**

### Temporary Use Permit - Mailboxes

Temporary mailboxes serving the residents around the Piazza were approved as a temporary use for sixty (60) months in 2008. Since that approval expired in 2014, this proposal only requests to extend the temporary mailboxes for two (2) additional years.

### Temporary Use Permit – Food Carts

The proposed Temporary Use Permit would allow up to six (6) food/beverage carts to be placed across from the Piazza along SW Campanile Lane and SW Royal Scout Lane. One coffee cart, located on SW Royal Scout Lane, is ready to open for business upon the approval of this project. The Piazza is located within the Village Center as described in the Villebois Master Plan. The Village Center is intended to be the core of the community with a mix of residential, shopping, service and mixed-use buildings. The food carts will add retail destinations in the neighborhood accessible by walking and bicycling, enhancing the pedestrian-oriented neighborhood environment.

The remainder of the piazza remains the same.

Traffic and parking are not expected to be impacted by the mailboxes and the proposed coffee cart and future food carts. The addition of food carts will bring food and coffee options closer to Villebois residents and reduce the need to drive through the neighborhood to get food and beverages.

## **Discussion Points:**

### Length of Use

The length of use for the proposed Temporary Use Permit for the mailboxes and food carts is twenty-four (24) months. As Villebois is close to being completely built out, the Applicant hopes that future mixed-use building to house the permanent mailboxes will be designed and approved in the next two years.

### Visual Impact

Staff reviewed the visual impact of the proposed mailboxes and food carts and concluded that visual impact would be minimal. The food carts will be located on private property that is buffered by the Piazza from the public right-of-way, making it less visually conspicuous. The mailboxes have been at their current location since 2008 and the City has not received concerns about the mailboxes visual impact.

### Parking

Impact on on-street parking will be minimal. Since the mailboxes have been there since 2008, they are not expected to generate parking demand. A future mail room and commercial uses

around the Piazza were included in previous SAP Central traffic studies, the proposal will not generate any additional traffic that was not already studied. The proposed food carts are intended to serve local residents and workers in Villebois who can easily walk or bike to the food carts. In addition, the pedestrian-oriented design of Villebois will encourage customers to not drive and park near the food carts.

**Conclusion and Conditions of Approval:**

Staff has reviewed the Applicant’s application and provided analysis of compliance with the applicable criteria. The Staff Report adopts the applicant’s responses as Findings of Fact except as noted in the Findings. Based on the Findings of Fact and information included in this Staff Report, and information received from a duly advertised public hearing, Staff recommends that the Development Review Board approve the proposed application (DB17-0024) with the following conditions:

Planning Division Conditions:

Request A: DB17-0024 Temporary Mailboxes and Coffee Cart for Villebois Piazza

PD 1. The Applicant/Owner of the property shall ensure that the approved temporary use is established, operated, removed and the property restored to its pre-temporary use permit state in substantial compliance with the plans approved by the Development Review Board. Minor revisions may be approved by the Planning Director under a Class I administrative review process.
PD 2. No signage is approved with this decision. Future non-exempt signage will require additional review.
PD 3. Locations of additional food carts shall be reviewed by the City through Class I Administrative Review to ensure they do not interfere with traffic, parking, or other required features.

*The following Conditions of Approval are provided by the Engineering, Natural Resources, or Building Divisions of the City’s Community Development Department or Tualatin Valley Fire and Rescue, all of which have authority over development approval. A number of these Conditions of Approval are not related to land use regulations under the authority of the Development Review Board or Planning Director. Only those Conditions of Approval related to criteria in Chapter 4 of Wilsonville Code and the Comprehensive Plan, including but not limited to those related to traffic level of service, site vision clearance, recording of plats, and concurrency, are subject to the Land Use review and appeal process defined in Wilsonville Code and Oregon Revised Statutes and Administrative Rules. Other Conditions of Approval are based on City Code chapters other than Chapter 4, state law, federal law, or other agency rules and regulations. Questions or requests about the applicability, appeal, exemption or non-compliance related to these other Conditions of Approval should be directed to the City Department, Division, or non-City agency with authority over the relevant portion of the development approval.*

## **Master Exhibit List:**

The following exhibits are hereby entered into the public record by the Development Review Board as confirmation of its consideration of the application as submitted. This is the exhibit list that includes exhibits for Planning Case File DB17-0024.

### Planning Staff Materials

- A1.** Staff report and findings (this document)
- A2.** Staff's Presentation Slides for Public Hearing (to be presented at Public Hearing)

### Materials from Applicant

- B1.** Applicant's Narrative and Submitted Materials
  - Exhibit A. Application
  - Exhibit B. Narrative
  - Exhibit C. Site Plan

## Procedural Statements and Background Information:

1. The statutory 120-day time limit applies to this application. The application was received on July 11, 2017. On July 27, 2017 staff conducted a completeness review within the statutorily allowed 30-day review period and found the application to be complete. On July 27, 2017 the application was deemed complete. The City must render a final decision for the request, including any appeals, by November 24, 2017.
2. Surrounding land uses are as follows:

Compass Direction	Zone:	Existing Use:
North:	V	Vacant
East:	V	Mixed-Use Residential
South:	V	Village Center Information
West:	V	Vacant

3. Previous Planning Approvals:  
06DR06 Preliminary Development Plan for Phase I  
08DB42-43 Villebois SAP Central Mail Kiosks- Final Development Plan and  
Modification of Condition of Approval  
12DB56-59 Villebois Piazza Development
4. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.



## Findings:

NOTE: Pursuant to Section 4.014 the burden of proving that the necessary findings of fact can be made for approval of any land use or development application rests with the applicant in the case.

### General Information

#### Application Procedures-In General

Section 4.008

**Criteria:** This section lists general application procedures applicable to a number of types of land use applications and also lists unique features of Wilsonville's development review process.

**Response:** The application is being processed in accordance with the applicable general procedures of this Section.

#### Initiating Application

Section 4.009

**Criterion:** "Except for a Specific Area Plan (SAP), applications involving specific sites may be filed only by the owner of the subject property, by a unit of government that is in the process of acquiring the property, or by an agent who has been authorized by the owner, in writing, to apply."

**Response:** The application has been submitted on behalf of the property owner, RCS Villebois Development and is signed by Rudy Kadlub from Costa Pacific Communities.

#### Pre-Application Conference

Subsection 4.010 (.02)

**Criteria:** This section lists the pre-application process

**Response:** A Pre-application conference was not required.

#### Lien Payment before Approval

Subsection 4.011 (.02) B.

**Criterion:** "City Council Resolution No. 796 precludes the approval of any development application without the prior payment of all applicable City liens for the subject property. Applicants shall be encouraged to contact the City Finance Department to verify that there are no outstanding liens. If the Planning Director is advised of outstanding liens while an application is under consideration, the Director shall advise the applicant that payments must be made current or the existence of liens will necessitate denial of the application."

**Response:** No applicable liens exist for the subject property. The application can thus move forward.

## General Submission Requirements

Subsection 4.035 (.04) A.

**Criteria:** “An application for a Site Development Permit shall consist of the materials specified as follows, plus any other materials required by this Code.” Listed 1. through 6. j.

**Response:** The applicant has provided all of the applicable general submission requirements contained in this subsection.

## Zoning-Generally

Section 4.110

**Criteria:** “The use of any building or premises or the construction of any development shall be in conformity with the regulations set forth in this Code for each Zoning District in which it is located, except as provided in Sections 4.189 through 4.192.” “The General Regulations listed in Sections 4.150 through 4.199 shall apply to all zones unless the text indicates otherwise.”

**Response:** This proposed temporary uses are in conformity with the applicable zoning district and general development regulations listed in Sections 4.150 through 4.199 have been applied in accordance with this Section.

### **Request A: DB17-0024 Temporary Mailboxes and Coffee Cart for Villebois Piazza**

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

#### Regulations in the Village Zone

##### Permitted Uses in the Village Zone

Subsection 4.125 (.02)

**A1. Criteria:** This subsection lists the uses typically permitted in the Village Zone, including single-family detached dwellings, row houses, and non-commercial parks, playgrounds, and recreational facilities.

**Response:** This Mailboxes and food carts are permitted accessory and temporary uses in the Village Zone. Sales of food are also a permitted use in the Village Zone.

##### Permitted Accessory Uses in the Village Zone

Subsection 4.125 (.03)D

**A2. Criteria:** This subsection lists the permitted accessory uses in the Village Zone among which is “temporary uses per Section 4.163”.

**Response:** Temporary mailboxes are accessory to the existing and future residential development and temporary food carts are also permitted accessory uses. These temporary uses are being reviewed pursuant to Section 4.163.

## Village Zone Development Standards

### Subsection 4.125 (.05)C

**A3. Criteria:** Trailers, travel trailers, mobile coaches, or any altered variation thereof shall not be used for the purpose of conducting a trade or calling, or for storage of material, unless approved for such purpose as a temporary use.

**Response:** The food carts will be approved only as a temporary use for 24 months and will not be allowed to permanently conduct trade or selling goods in the Village Zone.

## Standards Applying to Commercial Uses

### Subsection 4.125 (.06)

**A4. Criteria:** This subsection establishes standards applying to commercial uses in the Village Zone including location standards and performance standards.

**Response:** The proposal does not exceed 3,500 sqft of commercial uses, not include drive-through facilities, and is adjacent to a street. Outdoor seating is also permitted although it is not proposed at this point. All business activities will be within buildings and will meet the performance standards of Section 4.135 (.05).

## Off-Street Parking and Loading and Bicycle Parking

### Subsection 4.125 (.07)

**A5. Criteria** “Except as required by Subsections (A) through (D), below, the requirements of Section 4.155 shall apply within the Village zone.”

**Response:** A future mail room and commercial uses around the Piazza were included in previous SAP Central traffic studies, the proposal will not generate any additional traffic that was not already studied. Most food cart customers will take their food and beverage orders to go. Since these food carts will be temporary and attract mostly foot traffic, staff expects that there is enough on-street parking near the Piazza to serve food cart customers.

## Master Signage and Wayfinding

### Subsection 4.125 (.12)

**A6. Criteria:** This subsection establishes signage and wayfinding standards for the Village Zone.

**Response:** No signage is proposed at this time. Future temporary signs for the food carts must comply with the SAP South Master Signage and Wayfinding Plan and general sign regulations in the Development Code.

## On-site Pedestrian Access and Circulation

### Section 4.154

**A7. Criteria:** This section establishes standards for on-site pedestrian access and circulation.

**Response:** The Villebois neighborhood was designed and built to be pedestrian-oriented. The existing sidewalk network provides easy and convenient access to the Piazza on foot. The foot carts and mailboxes will not have any impact on pedestrian access and circulation on site.

## Temporary Structure and Uses

### Temporary Use Permits-Generally Section 4.163

**A8. Criteria:** “The Development Review Board, after hearing as set forth in Section 4.012, may permit the temporary use of a structure or premises in any zone for a purpose or use that does not conform to the regulations prescribed elsewhere in this Code for the zone in which it is located, provided that such use be of a temporary nature and does not involve the erection of a substantial structure. A permit for such use may be granted in the form of a temporary and revocable permit, up to a five (5) year period, subject to a showing of good cause and such conditions as will safeguard the public health, safety, convenience and general welfare. Such permits may be renewable upon re-application to the Development Review Board, provided that the Board finds that the renewal is not likely to result in a permanent situation.”

**Response:** The proposed food carts and mailboxes will be located on a site intended to be developed into a mixed-use multi-family residential building (Building 1F in the Background Section), which will become the permanent home of the mailboxes. The applicant is requesting a Temporary Use Permit for the mailboxes and six (6) food carts up to 24 months to allow for a flexible time frame for the design and permitting of this future building.

### Application Requirements Subsection 4.163 (.02)

**A9. Criteria:** “Applications for Temporary Use Permits shall provide:” Listed A through D”

**Response:** The applicant has submitted the required information including a clear description of the planned use, a statement of the duration, a site plan (See Exhibit B1). Condition of Approval PD 1 will ensure restoration of the site to pre-TUP conditions.

### Just Cause for Temporary Use Subsection 4.163 (.03)

**A10. Criteria:** Factors and considerations for “good cause” include, but are not limited to:

- A. Availability of appropriately zoned land for the proposed use in the city.
- B. Availability of and need for the subject property for allowed uses.
- C. Market conditions, construction costs and other obstructions to the location of the use on appropriately zoned land.
- D. Due diligence of the applicant to site the use on appropriately zoned land,
- E. Circumstances of the applicant bearing on the need for the temporary use permit.

**Response:**

**Availability of Appropriate Zoned Land:** While sufficient commercial land and tenant spaces exist in the City for the sales of coffee and food, having temporary food carts on an

undeveloped parcel in the center of the Villebois neighborhood brings more food options to residents and workers in Villebois.

**Availability of and need of property for allowed used:** The lot on which the mailboxes and the food carts will locate next to the Piazza is owned by the Villebois Homeowners Association or RCS Villebois.

**Market Conditions, etc.:** No market conditions are in play. The proposed uses are simply complementary and accessory to the permitted uses.

**Due diligence to relocate use:** Not applicable. The use is only temporary.

**Circumstances of applicant:** The applicant owns the parcels adjacent to the Piazza. As the applicant continue to develop designs and plans for a future mixed-use building to house the mailboxes and ground floor retail uses permanently, temporary food carts will provide more amenities and bring more foot traffic to the area, making the Piazza more active and lively.

Other: The proposed temporary use is an appropriate and typical limited duration accessory use for mixed-use zones.

## Public Safety and Crime Prevention

Subsection 4.163 (.02)

**A11. Criteria:** “All developments shall be designed to deter crime and insure public safety.”

**Response:** Staff finds no evidence and has not received any testimony that the proposal would lead to crime or negatively impact public safety.

## Landscape Standards

### Landscape Standards and Compliance

Subsection 4.176 (.02) B.

**A12. Criteria:** “All landscaping and screening required by this Code must comply with all of the provisions of this Section, unless specifically waived or granted a Variance as otherwise provided in the Code. The landscaping standards are minimum requirements; higher standards can be substituted as long as fence and vegetation-height limitations are met. Where the standards set a minimum based on square footage or linear footage, they shall be interpreted as applying to each complete or partial increment of area or length”

**Response:** No waivers or variances to landscape standards have been requested. Thus all landscaping and screening must comply with standards of this section.

## Outdoor Lighting

Sections 4.199.20

**A13. Criteria:** This section states that the outdoor lighting ordinance is applicable to “Installation of new exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas” and “Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas.” In addition the exempt luminaires and lighting systems are listed.

**Response:** No additional outdoor lighting has been proposed. If the applicant wishes to add anything but exempt lighting, additional review by the City will be necessary.

#### Underground Utility Installation

Sections 4.300-4.320

**A14. Criteria:** These sections list requirements regarding the underground installation of utilities.

**Response:** All new utilities associated with the temporary use must be installed underground. No indication of overhead utilities is shown in the submitted materials and there no evidence conflict that the proposal will cause conflict with underground utilities.



29799 SW Town Center Loop E, Wilsonville, OR 97070  
 Phone: 503.682.4960 Fax: 503.682.7025  
 Web: [www.ci.wilsonville.or.us](http://www.ci.wilsonville.or.us)

Planning Division  
 Development Permit Application

Final action on development application or zone change is required within 120 days in accordance with provisions of ORS 227.175

A pre application conference is normally required prior to submittal of an application. Please visit the City's website for submittal requirements

Pre-Application Meeting Date: \_\_\_\_\_

Incomplete applications will not be scheduled for public hearing until all of the required materials are submitted.

**Applicant:**

Name: Rudy Kadlub  
 Company: Costa Pacific Communities  
 Mailing Address: 14350 SE Industrial Way  
 City, State, Zip: Clackamas, OR 97015  
 Phone: 503-314-8014 Fax: \_\_\_\_\_  
 E-mail: Rudy@CostaPacific.com

**Authorized Representative:**

Name: Rudy Kadlub  
 Company: Same as applicant  
 Mailing Address: \_\_\_\_\_  
 City, State, Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

**Property Owner:**

Name: Res Villebois Development, LLC  
 Company: \_\_\_\_\_  
 Mailing Address: 371 Centennial Pkwy Ste 200  
 City, State, Zip: Louisville, CO 80027  
 Phone: 303-533-1671 Fax: \_\_\_\_\_  
 E-mail: dvrash@RedCapitalSolutions.com

**Property Owner's Signature:**

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Applicant's Signature:** (if different from Property Owner)

Rudy Kadlub  
 Printed Name: RUDY KADLUB Date: 7.11.17

**Site Location and Description:**

Project Address if Available: Villebois Dr. and Royal Scot Ln. Wilsonville Suite/Unit \_\_\_\_\_  
 Project Location: Piazza Villebois  
 Tax Map #(s): \_\_\_\_\_ Tax Lot #(s): \_\_\_\_\_ County:  Washington  Clackamas

**Request:**

extension of use permit for temporary mailboxes in Villebois Village Center and permission to locate one or more food carts surrounding Piazza

**Project Type:** Class I  Class II  Class III

Residential  Commercial  Industrial  Other: USPS

**Application Type(s):**

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> Annexation                  | <input type="checkbox"/> Appeal                     | <input type="checkbox"/> Comp Plan Map Amend      | <input type="checkbox"/> Parks Plan Review            |
| <input type="checkbox"/> Final Plat                  | <input type="checkbox"/> Major Partition            | <input type="checkbox"/> Minor Partition          | <input type="checkbox"/> Request to Modify Conditions |
| <input type="checkbox"/> Plan Amendment              | <input type="checkbox"/> Planned Development        | <input type="checkbox"/> Preliminary Plat         | <input type="checkbox"/> Site Design Review           |
| <input type="checkbox"/> Request for Special Meeting | <input type="checkbox"/> Request for Time Extension | <input type="checkbox"/> Signs                    | <input type="checkbox"/> Stage II Final Plan          |
| <input type="checkbox"/> SROZ/SRIR Review            | <input type="checkbox"/> Staff Interpretation       | <input type="checkbox"/> Stage I Master Plan      | <input type="checkbox"/> Variance                     |
| <input type="checkbox"/> Type C Tree Removal Plan    | <input type="checkbox"/> Tree Permit (B or C)       | <input checked="" type="checkbox"/> Temporary Use | <input type="checkbox"/> Other (describe)             |
| <input type="checkbox"/> Villebois SAP               | <input type="checkbox"/> Villebois PDP              | <input type="checkbox"/> Villebois FDP            |   |
| <input type="checkbox"/> Zone Map Amendment          | <input type="checkbox"/> Waiver(s)                  | <input type="checkbox"/> Conditional Use          |   |





July 11, 2017

Costa Pacific Communities on behalf of RCS Villebois Development, LLC respectfully requests the extension of the Temporary Use Permit for the temporary Mailboxes on Villebois Drive which currently serve the residents of the Villebois Village Center. This mail center was located in this location (adjacent to the Piazza) at the request of the USPS in 2007. The intent is for the Mail Center to move into the mixed-use building which will eventually be built on Royal Scot Ln. This building will likely be one of the last buildings erected in the Village Center as the demand for services and retail will require the construction of all the roof tops currently planned for the Village Center, specifically, and Villebois in general. Because all the non-mixed-use properties in the Village Center have been approved for residential development it is the hope of the developer that the demand for this future building will be met as these properties are built out and occupied within the next 24 months.

In addition, this application requests the permission to add one or more (up to six) food/beverage carts on the private lanes surrounding the Piazza. In accordance with recommendations made by the City's retail consultant, Bob Gibbs, in December of 2016, carts are a good way to create traffic and determine the demand for future brick and mortar retail. The initial cart would primarily sell coffee and will be owned and operated by a Villebois Village Center resident.

We respectfully request approval of this Temporary Use Permit application.

Rudy Kadlub  
CEO  
Costa Pacific Communities

14350 SE Industrial Way  
Clackamas, OR 97015  
Phone: 503.646.8888  
Fax: 503.345.9634  
CCB #204731



City of Wilsonville  
EXHIBIT B1.B DB17-0024



# VILLEBOIS VILLAGE CENTER NO. 3

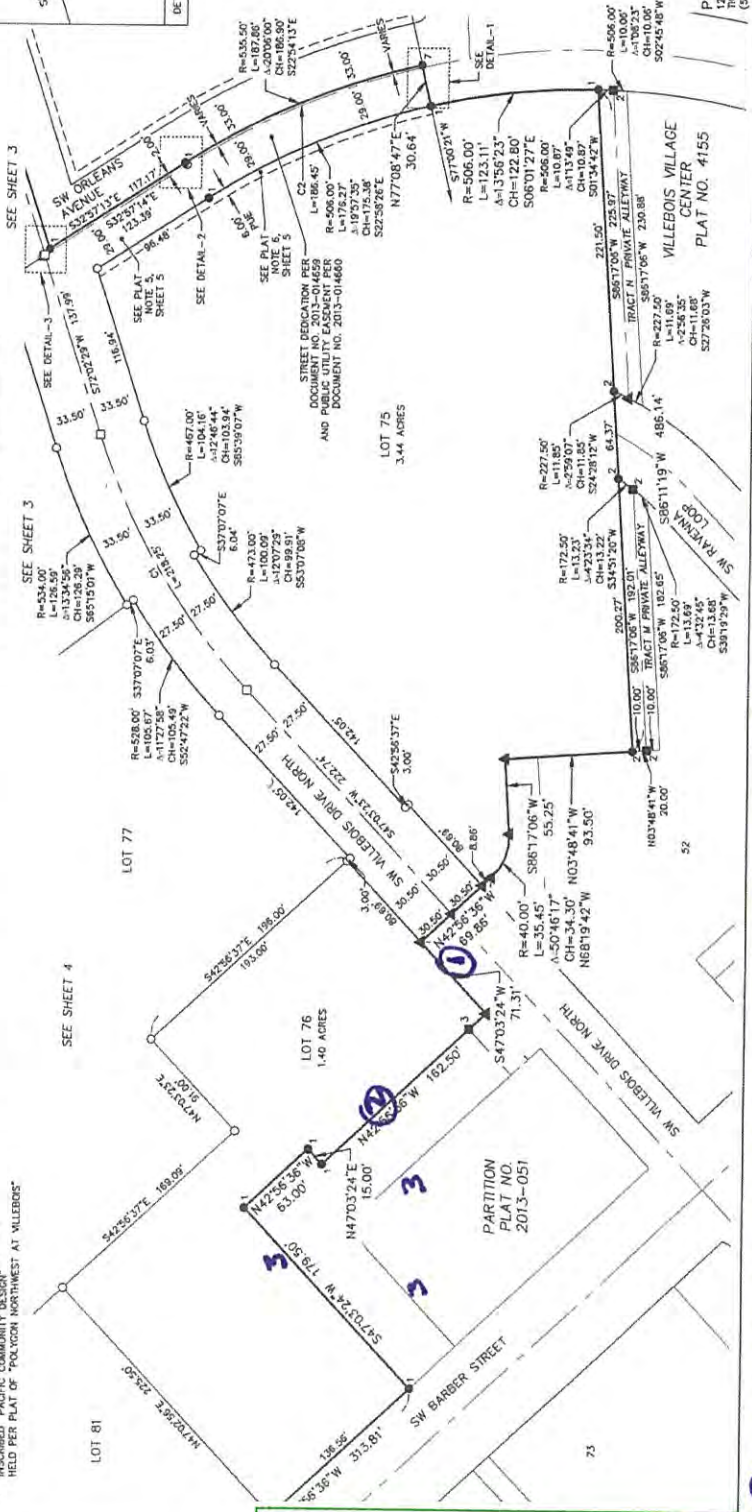
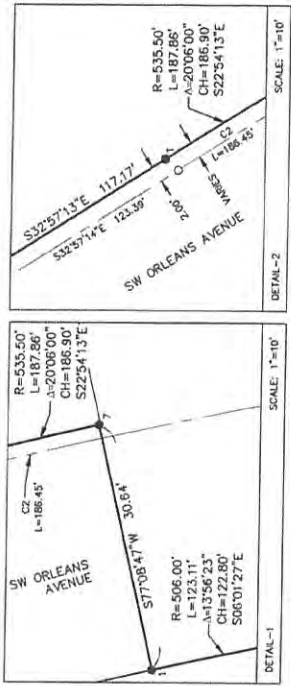
A REPLAT OF PARCEL 4, PARTITION PLAT NO. 2013-051,  
 LOCATED IN THE NORTHEAST AND NORTHWEST QUARTERS OF SECTION 15,  
 TOWNSHIP 3 SOUTH, RANGE 1 WEST, WILLAMETTE MERIDIAN,  
 CITY OF WILSONVILLE, CLACKAMAS COUNTY, STATE OF OREGON  
 SURVEYED: MARCH 17, 2014

RECORDED AS DOCUMENT NO. \_\_\_\_\_

## LEGEND

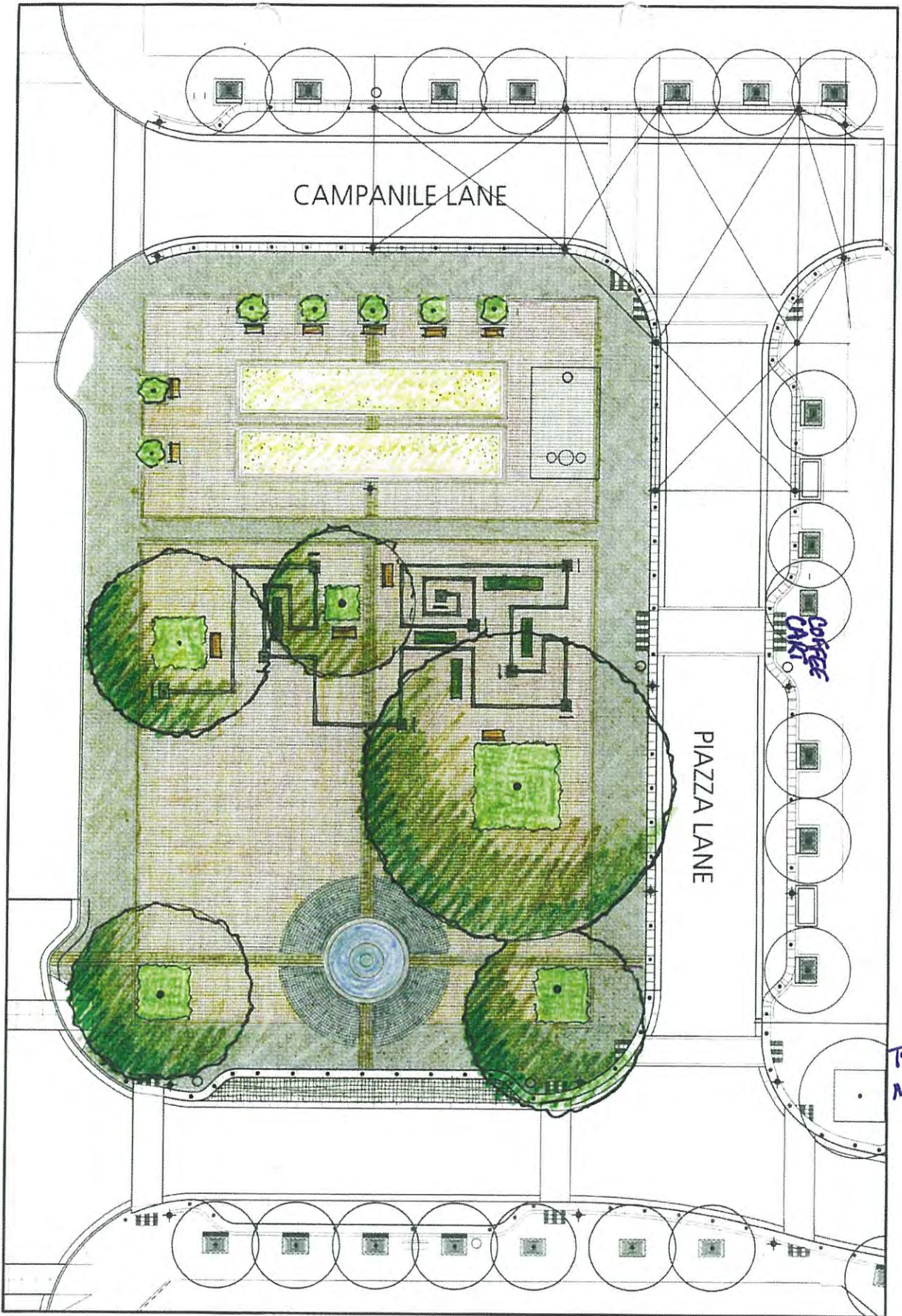
- SET 5/8" X 30" IRON ROD WITH ORANGE PLASTIC CAP INScribed "PACIFIC COMMUNITY DESIGN" SET ON MARCH 17, 2014
- SET 5/8" X 30" IRON ROD WITH ORANGE PLASTIC CAP INScribed "PACIFIC COMMUNITY DESIGN" SET ON MARCH 17, 2014
- SET 5/8" X 30" IRON ROD WITH ORANGE PLASTIC CAP WITH FUTURE PLAT AFTER STREET IMPROVEMENTS
- ① FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INScribed "PACIFIC COMMUNITY DESIGN" HELD PER PLAT OF "VILLEBOIS"
- ② FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INScribed "ALPHA COIL 15V"
- ③ FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INScribed "ALPHA COIL 15V"
- ④ FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER NO. 2"
- ⑤ FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INScribed "PACIFIC COMMUNITY DESIGN" HELD PER PLAT OF "TONGUIN WOODS AT VILLEBOIS NO. 4"
- ⑥ FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INScribed "PACIFIC COMMUNITY DESIGN" HELD PER PLAT OF "TONGUIN WOODS AT VILLEBOIS NO. 5"
- ⑦ FOUND 5/8" IRON ROD W/ ORANGE PLASTIC CAP INScribed "PACIFIC COMMUNITY DESIGN" HELD PER PLAT OF "POLYCON NORTHWEST AT VILLEBOIS"
- ▲ FOUND COPPER DISK IN CONCRETE HELD PER PLAT OF "VILLEBOIS VILLAGE CENTER"
- RADIAL BEARING DIRECTION, SEE BEARING AT FC ON MAP
- PUBLIC UTILITY EASEMENT

CURVE	RADIUS	LENGTH	DELTA	CHORD	BEARING
C1	500.50'	216.25'	24°59'08"	216.53'	S59°32'56"W
C2	535.00'	186.45'	19°59'03"	185.50'	S22°58'13"E



① LOCATION OF TEMPORARY MAILBOXES  
 ② LOCATION OF PROPOSED COFFEE CART  
 ③ POTENTIAL FUTURE CARTS

City of Wilsonville  
 EXHIBIT B1.C DB17-0024



**Piazza Villebois**  
 Plan View  
 Scale 1" = 20'-0"  
 Mayer/Reed

JANUARY 30, 2006



**DEVELOPMENT REVIEW BOARD MEETING**

**MONDAY, AUGUST 28, 2017**

**6:30 PM**

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VI. Public Hearing:

**C. Resolution No. 341. Marion's Carpet Warehouse: Bob Schatz, Allusa Architecture – Applicant for Bergaso Properties – Owner.** The applicant is requesting approval of a Stage I Preliminary Plan, Stage II Final Plan, Setback Waiver, Site Design Review, Class 3 Sign Permit and Type C Tree Plan for construction of a tilt-up slab warehouse with retail space on SW Boones Ferry Road. The subject property is located on Tax Lot 1300 of Section 14A, T3S, R1W, Clackamas County, Oregon. Staff: Kimberly Rybold

Case Files: DB17-0001 Stage I Preliminary Plan  
DB17-0002 Stage II Final Plan Revision  
DB17-0003 Setback Waiver  
DB17-0004 Site Design Review  
DB17-0005 Class 3 Sign Permit  
DB17-0006 Type C Tree Removal Plan

**DEVELOPMENT REVIEW BOARD  
RESOLUTION NO. 341**

**A RESOLUTION ADOPTING FINDINGS AND CONDITIONS APPROVING A STAGE I PRELIMINARY PLAN, STAGE II FINAL PLAN, SETBACK WAIVER, SITE DESIGN REVIEW, CLASS 3 SIGN PERMIT AND TYPE C TREE PLAN FOR CONSTRUCTION OF A TILT-UP SLAB WAREHOUSE WITH RETAIL SPACE ON SW BOONES FERRY ROAD. THE SUBJECT PROPERTY IS LOCATED ON TAX LOT 1300 OF SECTION 14A, T3S, R1W, CLACKAMAS COUNTY, OREGON. BOB SCHATZ, ALLUSA ARCHITECTURE – APPLICANT FOR BERGASO PROPERTIES LLC – OWNER.**

WHEREAS, an application, together with planning exhibits for the above-captioned development, has been submitted in accordance with the procedures set forth in Section 4.008 of the Wilsonville Code, and

WHEREAS, the Planning Staff has prepared staff report on the above-captioned subject dated August 17, 2017, and

WHEREAS, said planning exhibits and staff report were duly considered by the Development Review Board Panel B at a scheduled meeting conducted on August 28, 2017, at which time exhibits, together with findings and public testimony were entered into the public record, and

WHEREAS, the Development Review Board considered the subject and the recommendations contained in the staff report, and

WHEREAS, interested parties, if any, have had an opportunity to be heard on the subject.

NOW, THEREFORE, BE IT RESOLVED that the Development Review Board of the City of Wilsonville does hereby adopt the staff report dated August 17, 2017, attached hereto as Exhibit A1, with findings and recommendations contained therein, and authorizes the Planning Director to issue permits consistent with said recommendations for:

DB17-0001 through DB17-0006, Stage I Preliminary Plan, Stage II Final Plan, Setback Waiver, Site Design Review, Class 3 Sign Permit, and Type C Tree Removal Plan for the development of an approximately 27,400-square-foot tilt-up slab warehouse, including 3,500 square feet of retail use.

ADOPTED by the Development Review Board of the City of Wilsonville at a regular meeting thereof this 28<sup>th</sup> day of August, 2017 and filed with the Planning Administrative Assistant on \_\_\_\_\_. This resolution is final on the 15<sup>th</sup> calendar day after the postmarked date of the written notice of decision per *WC Sec 4.022(.09)* unless appealed per *WC Sec 4.022(.02)* or called up for review by the council in accordance with *WC Sec 4.022(.03)*.

\_\_\_\_\_  
Shawn O'Neil, Chair - Panel B  
Wilsonville Development Review Board

Attest:

---

**Shelley White, Planning Administrative Assistant**



Exhibit A1  
Staff Report  
Wilsonville Planning Division  
Marion's Carpets

Development Review Board Panel 'B'  
Quasi-Judicial Public Hearing

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<b>Hearing Date:</b>	August 28, 2017
<b>Date of Report:</b>	August 17, 2017

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<b>Application Nos.:</b>	DB17-0001 Stage I Preliminary Plan Revision DB17-0002 Stage II Final Plan DB17-0003 Setback Waiver DB17-0004 Site Design Review DB17-0005 Class 3 Sign Review DB17-0006 Type C Tree Removal Plan
<b>Request/Summary:</b>	The Development Review Board is being asked to review a Class 3 Stage I Preliminary Plan, Stage II Final Plan, Setback Waiver, Site Design Review, Sign Permit, and Type C Tree Removal Plan
<b>Location:</b>	West side of SW Boones Ferry Road, north of SW Barber Street. The property is specifically known as Tax Lot 1300, Section 14A, Township 3 South, Range 1 West, Willamette Meridian, City of Wilsonville, Clackamas County, Oregon.
<b>Owner:</b>	Bergaso Properties LLC
<b>Applicant:</b>	Bob Schatz Allusa Architecture
<b>Comprehensive Plan Designation:</b>	Industrial
<b>Zone Map Classification:</b>	PDI (Planned Development Industrial)
<b>Staff Reviewers:</b>	Kimberly Rybold, AICP, Associate Planner Steve Adams, PE, Development Engineering Manager Kerry Rappold, Natural Resources Program Manager Don Walters, Building Plans Examiner
<b>Staff Recommendation:</b>	<u>Approve with conditions</u> the requested revised Stage I Master Plan, State II Final Plan, Waiver, Site Design Review, Class 3 Sign Permit, and Type C Tree Removal Plan request.

**Applicable Review Criteria:**

<b><u>Development Code:</u></b>	
Section 4.008	Application Procedures-In General
Section 4.009	Who May Initiate Application
Section 4.010	How to Apply
Section 4.011	How Applications are Processed
Section 4.014	Burden of Proof
Section 4.031	Authority of the Development Review Board
Subsection 4.035 (.04)	Site Development Permit Application
Subsection 4.035 (.05)	Complete Submittal Requirement
Section 4.110	Zones
Section 4.117	Standards Applying to Industrial Development in All Zones
Section 4.116	Commercial Development Standards in All Zones
Section 4.118	Standards Applying to Planned Development Zones
Section 4.135	Planned Development Industrial Zone (PDI)
Section 4.140	Planned Development Regulations
Section 4.154	On-site Pedestrian Access and Circulation
Section 4.155	Parking, Loading, and Bicycle Parking
Section 4.167	Access, Ingress, and Egress
Sections 4.156.01 through 4.156.11	Sign Regulations
Section 4.171	Protection of Natural Features and Other Resources
Section 4.175	Public Safety and Crime Prevention
Section 4.176	Landscaping, Screening, and Buffering
Section 4.177	Street Improvement Standards
Section 4.179	Mixed Solid Waste and Recycling
Sections 4.199.20 through 4.199.60	Outdoor Lighting
Sections 4.300 through 4.320	Underground Utilities
Sections 4.400 through 4.440 as applicable	Site Design Review
Sections 4.600-4.640.20	Tree Preservation and Protection
<b><u>Other Planning Documents:</u></b>	
Wilsonville Comprehensive Plan	

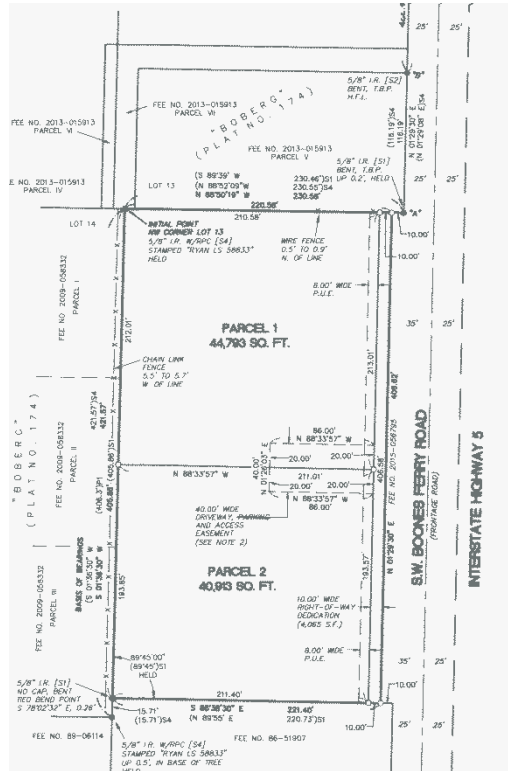
## Vicinity Map



### Background:

Subsequent to the submission of this application, a partition plat was approved for the subject property, dividing the existing self-service card lock fuel station on the south from the undeveloped property to the north. The development proposed with this application would occur on this northern parcel, identified as Parcel 1 on the approved partition plat. No changes are proposed on Parcel 2.





**Approved Partition Plat (Case File 17AR-0010)**

## Summary:

### Stage I Master Plan (DB17-0001)

The proposed Stage I Master Plan modification would allow a warehouse use with 3,500 square feet of retail space on the subject property. The subject area was previously limited to industrial use in 1998 as a part of the approval of the existing card lock fuel station to the south (Case File 98DB23).

### Stage II Final Plan (DB17-0002)

The proposed Stage II Final Plan reviews the function and design of the proposed Marion's Carpets warehouse, including assuring the proposal meets all the performance standards of the PDI Zone.

The PDI zone prohibits development not meeting an exhaustive list of performance standards including: wholly enclosed operations, no off-site vibrations, no off-site odors, screened outdoor storage, no heat or glare, no dangerous substances, no waste storage attracting pests, sewer conveyance meeting City standards, no noise violating the City's noise ordinance, no electrical disturbances, limits on air pollution, and no open burning. The proposed Marion's Carpets warehouse can meet all the performance standards.

The Level of Service (LOS) D standard for traffic will continue to be met by existing street improvements at the studied intersections with existing, planned, and this proposed development as follows:

- Boones Ferry Road/Barber Street – LOS A/C, Volume to Capacity: 0.57
- Boones Ferry Road/Project Access – LOS A/B, Volume to Capacity 0.06

Auto access to the site will be provided via a shared driveway easement with the Pacific Pride property to the south.

Pedestrian access to the site will be provided via a direct pathway from the proposed sidewalk along Boones Ferry Road to the building entrance. This pathway will cross the parking lot and will be differentiated from it through the use of concrete as the paving material. A six-foot walkway will extend along the front of the building from the customer entryway to the employee entrance.

The proposed carpet warehouse requires a minimum of 22 parking spaces and allows a maximum of 34. The applicant proposes the minimum of 22. The applicant proposes to locate a majority of the parking in front of the customer entrance to the warehouse, along the eastern portion of the site. Two parking spaces are located along the south side of the proposed building, near the loading area. The calculation of parking spaces is as follows:

Warehouse Area (23,866 sf)	Minimum 0.3 spaces per 1,000 square feet = 7.2
	Maximum 0.5 per 1,000 square feet = 11.9
Retail (3,500 sf)	Minimum 4.1 per 1,000 square feet = 14.35
	Maximum 6.2 per 1,000 square feet = 21.7
Total (rounded to nearest whole number):	Minimum 22 spaces
	Maximum 34 spaces

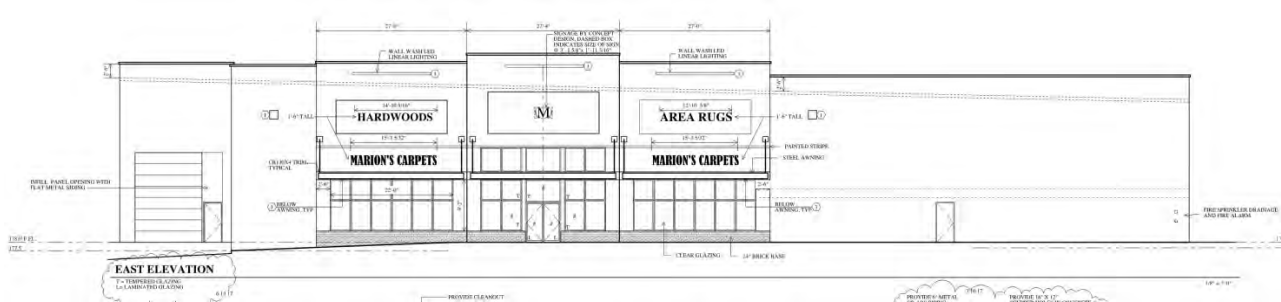
#### Setback Waiver (DB17-0003)

A waiver to reduce the side and rear yard setbacks from 30 feet to 10 feet is requested.

#### Site Design Review (DB17-0004)

The proposed building has been professionally designed in a manner that is consistent with newer development in Wilsonville’s industrial districts. This includes the use of building colors and materials to provide a defined base, middle, and top of the building, particularly along the east elevation which has the highest site visibility. The proposed windows and awnings provide visual interest along this building elevation.

The landscaping has also been professionally designed and provides the required screening and a variety of landscape materials meeting or exceeding City standards.



**Proposed Front (East) Elevation**

**Class 3 Sign Review (DB17-0005)**

Building signs are proposed on the east elevation. All proposed signs are, appropriately located on the buildings and are below the sign area allowed for the sign eligible building elevation. A freestanding sign is also proposed along SW Boones Ferry Road, which meets standards for the sign height and area allowed.



**Proposed Freestanding Sign**



**Proposed Building Signs**

## Type C Tree Plan (DB17-0006)

The northeast portion of the property contains a grove of predominately Douglas-fir and cedar trees, while a concentration of sweet cherry trees is present along the northwest portion of the site. However, the subject area is not preserved as part of the City's Significant Resource Overlay Zone. As such, the primary code language regarding the level of tree removal as part of development states, "no development application shall be denied solely because trees grow on the site. Nevertheless, tree preservation and conservation as a design principle shall be equal in concern and importance to other design principles." Wilsonville Code Subsection 4.610.10 (.01) B.

The arborist report identifies 45 trees on the Marion's Carpets site and nearby areas impacted by the proposal. The applicant proposes removing all 44 onsite trees. Almost half of the trees, 47 percent or 21 trees, are Douglas-fir. Other species represented by five or more individual trees include western redcedar (five trees) and sweet cherry (10 trees).

The applicant proposes mitigating for the tree removal by planting 45 trees on site.

### **Discussion Points:**

#### Tree Preservation

In order to accommodate the proposed building and required parking and landscaping, the applicant proposes to remove all of the trees presently located on the subject property. Staff carefully reviewed the applicant's materials to look for opportunities for preservation considering other design principles. Many of the existing trees are primarily located in a stand in the northeast portion of the site which is in generally good condition as an intact, undisturbed group. However, these trees have grown up competing with and adapting to one another over time, with some trees acting in a more dominant manner than others. As a result, the removal of some, but not all, of these trees could expose the remaining trees to elemental factors such as wind that may ultimately predispose them to failure. Pages 2 to 3 of the arborist report provides a detailed explanation of this grove and why these trees are proposed to be removed.

Industrial development of any scale on this site would likely require the removal of many of the site's trees, due to the presence and location of this grove. The majority of the trees on the site are rated as being in fair or poor condition, with only nine trees identified as being in good condition. Of the trees in good condition, staff believes preservation of trees 1 (30-inch diameter Douglas-fir), 7 (16-inch diameter western redcedar), 8 (40-inch diameter Douglas-fir), and 9 (26-inch western redcedar) may still be possible, as they are not within the footprint of the proposed building or parking lot. If preservation is achievable, reassessment of these trees would likely be needed at the time of site clearing by a Qualified Arborist in order to evaluate impacts that may result from exposure caused by adjacent tree removal. If tree 1 is to be preserved, the applicant

should coordinate with the City's Engineering Division to explore alternative sidewalk locations and materials to be used around the tree.

### Site Layout and Building Size

The subject property is just over one acre in size. The proposed building footprint, at 24,766 square feet, occupies more than half of the of the land area of the site. As a result, the remaining land area for landscaping and parking is limited, necessitating the use of a setback waiver in order to meet the requirements of the Development Code. The relationship of building size to the overall site area also affects the ability to preserve the tree groves onsite, as noted previously in the tree preservation section.

### Building Color

The submitted materials board shows three colors, Soleil, Egyptian Gold, and Christmas Ornament, to be used on the building. Christmas Ornament, which is a dark brown color, serves as an accent color around the main building entrance and along the base of the building. Soleil, a pale golden yellow, is proposed to be used above the storefront windows, generally near some of the wall signs. The majority of the building will be painted Egyptian Gold, a medium golden tone.

The subject property is prominently viewed from Boones Ferry Road and Interstate 5, and is adjacent to other industrial properties. Similar, newer industrial properties in the area generally feature earth tone colors that are light or muted in nature. While the applicant has submitted a materials board containing a paint swatch and building graphic, it is difficult to determine what the final look of the proposed paint color will be solely replying upon the materials board. As there is a lack of a clear violation of any City standards, staff defers to the applicant's choice for proposed paint colors.

### **Conclusion and Conditions of Approval:**

Staff has reviewed the Applicant's analysis of compliance with the applicable criteria. The Staff report adopts the applicant's responses as Findings of Fact except as noted in the Findings. Based on the Findings of Fact and information included in this Staff Report, and information received from a duly advertised public hearing, Staff recommends that the Development Review Board approve the proposed application (DB17-0001 through DB17-0006) with the following conditions:

#### **Planning Division Conditions:**

Request A: DB17-0001 Stage I Preliminary Plan Revision

No conditions for this request
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Request B: DB17-0002 Stage II Final Plan

<b>PDB 1.</b>	The approved final plan and stage development schedule shall control the issuance of all building permits and shall restrict the nature, location and design of all uses. Minor changes in an approved preliminary or final development plan may be approved by the Planning Director through the Class I Administrative Review Process if such changes are consistent with the purposes and general character of the development plan. All other modifications, including extension or revision of the stage development schedule, shall be processed in the same manner as the original application and shall be subject to the same procedural requirements. See Finding B16.
<b>PDB 2.</b>	All travel lanes shall be constructed to be capable of carrying a twenty-three (23) ton load. See Finding B79.

Request C: DB17-0003 Setback Waiver

No conditions for this request
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Request D: DB17-0004 Site Design Review

<b>PDD 1.</b>	Construction, site development, and landscaping shall be carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. Minor revisions may be approved by the Planning Director through administrative review pursuant to Section 4.030. See Finding D3.
<b>PDD 2.</b>	All landscaping required and approved by the Board shall be installed prior to occupancy of the proposed development unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City will be returned to the applicant. See Finding D10.
<b>PDD 3.</b>	The approved landscape plan is binding upon the applicant/owner. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, pursuant to the applicable sections of Wilsonville's Development Code. See Finding D11.
<b>PDD 4.</b>	All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered as allowed by Wilsonville's Development

	Code. See Findings D12 and D13.
<b>PDD 5.</b>	The following requirements for planting of shrubs and ground cover shall be met: <ul style="list-style-type: none"> <li>• Non-horticultural plastic sheeting or other impermeable surface shall not be placed under landscaping mulch.</li> <li>• Native topsoil shall be preserved and reused to the extent feasible.</li> <li>• Surface mulch or bark dust shall be fully raked into soil of appropriate depth, sufficient to control erosion, and shall be confined to areas around plantings.</li> <li>• All shrubs shall be well branched and typical of their type as described in current AAN Standards and shall be equal to or better than 2-gallon containers and 10 to 12 inch spread.</li> <li>• Shrubs shall reach their designed size for screening within 3 years of planting.</li> <li>• Ground cover shall be equal to or better than the following depending on the type of plant materials used: gallon containers spaced at 4 feet on center minimum, 4 inch pot spaced 2 feet on center minimum, 2-1/4 inch pots spaced at 18 inches on center minimum.</li> <li>• No bare root planting shall be permitted.</li> <li>• Ground cover shall be sufficient to cover at least 80 percent of the bare soil in required landscape areas within 3 years of planting.</li> <li>• Appropriate plant materials shall be installed beneath the canopies of trees and large shrubs to avoid the appearance of bare ground in those locations.</li> <li>• Compost-amended topsoil shall be integrated in all areas to be landscaped, including lawns. See Finding D19.</li> </ul>
<b>PDD 6.</b>	All trees shall be balled and burlapped and conform in grade to “American Standards for Nursery Stock” current edition. Tree size shall be a minimum of 1 ¾ inch caliper. See Finding D20.
<b>PDD 7.</b>	Plant materials shall be installed and irrigated to current industry standards and be properly staked to ensure survival. Plants that die shall be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City. See Finding D24.
<b>PDD 8.</b>	Final review of the proposed building lighting’s conformance with the Outdoor Lighting Ordinance will be determined at the time of Building Permit issuance.
<b>PDD 9.</b>	Lighting shall be reduced one hour after close, but in no case later than 10 p.m., to 50% of the requirements set forth in the Oregon Energy Efficiency Specialty Code. See Finding D33.

**Request E: DB17-0005 Class 3 Sign Permit**

<b>PDE 1.</b>	The approved sign shall be installed in a manner substantially similar to the plans approved by the DRB and stamped approved by the Planning Division.
<b>PDE 2.</b>	Prior to sign installation the Applicant/Owner shall submit coordinate with the City’s Engineering Division to ensure the proposed freestanding meets the City’s placement standards.
<b>PDE 3.</b>	The Applicant/Owner of the property shall obtain all necessary building and

	electrical permits for the approved signs, prior to their installation, and shall ensure that the signs are maintained in a commonly-accepted, professional manner.
<b>PDE 4.</b>	The proposed freestanding sign shall include the address number of the proposed building unless otherwise approved in writing by Tualatin Valley Fire and Rescue (TVF&R).

Request F: DB17-0006 Type C Tree Plan

<b>PDF 1.</b>	This approval for removal applies only to the 44 trees identified in the Applicant's submitted materials, as modified by Condition of Approval PDF 3 below. All other trees on the property shall be maintained unless removal is approved through separate application.
<b>PDF 2.</b>	The Applicant shall submit an application for a Type 'C' Tree Removal Permit on the Planning Division's Development Permit Application form, together with the applicable fee. In addition to the application form and fee, the Applicant shall provide the City's Planning Division an accounting of trees to be removed within the project site, corresponding to the approval of the Development Review Board. The applicant shall not remove any trees from the project site until the tree removal permit, including the final tree removal plan, have been approved by the Planning Division staff.
<b>PDF 3.</b>	Preservation of trees 1 (30-inch diameter Douglas-fir), 7 (16-inch diameter western redcedar), 8 (40-inch diameter Douglas-fir), and 9 (26-inch western redcedar), as shown on the Tree Removal Plan in Exhibits B1 and B2, should be evaluated at the time of site clearing by a Qualified Arborist in order to evaluate impacts that may result from exposure caused by adjacent tree removal. These trees shall be preserved if determined feasible by a Qualified Arborist.
<b>PDF 4.</b>	The Applicant/Owner shall install the required 44 mitigation trees, as shown in the Applicant's sheet L1, per Section 4.620 WC.
<b>PDF 5.</b>	The permit grantee or the grantee's successors-in-interest shall cause the replacement trees to be staked, fertilized and mulched, and shall guarantee the trees for two (2) years after the planting date. A "guaranteed" tree that dies or becomes diseased during the two (2) years after planting shall be replaced.
<b>PDF 6.</b>	Prior to site grading or other site work that could damage trees, the Applicant/Owner shall install six-foot-tall chain-link fencing around the drip line of preserved trees, including those trees identified in Condition of Approval PDF 3. Removal of the fencing around the trees identified in PDF 3 shall only occur if it is determined the trees are not feasible to retain. The fencing shall comply with Wilsonville Public Works Standards Detail Drawing RD-1230. See Finding F14.

*The following Conditions of Approval are provided by the Engineering, Natural Resources, or Building Divisions of the City's Community Development Department or Tualatin Valley Fire and Rescue, all of which have authority over development approval. A number of these Conditions of Approval are not related to land use regulations under the authority of the Development Review Board or Planning*



*Director. Only those Conditions of Approval related to criteria in Chapter 4 of Wilsonville Code and the Comprehensive Plan, including but not limited to those related to traffic level of service, site vision clearance, recording of plats, and concurrency, are subject to the Land Use review and appeal process defined in Wilsonville Code and Oregon Revised Statutes and Administrative Rules. Other Conditions of Approval are based on City Code chapters other than Chapter 4, state law, federal law, or other agency rules and regulations. Questions or requests about the applicability, appeal, exemption or non-compliance related to these other Conditions of Approval should be directed to the City Department, Division, or non-City agency with authority over the relevant portion of the development approval.*

**Engineering Division Conditions:**

Request B: DB17-0002 Stage II Final Plan

<b>PF 1.</b>	Public Works Plans and Public Improvements shall conform to the “Public Works Plan Submittal Requirements and Other Engineering Requirements” in Exhibit C1.
<b>PF 2.</b>	Adjacent to the proposed development Boones Ferry Road has not been fully improved to City Standards. Sufficient right-of-way to accommodate full street improvements was provided with a partition of the site in March 2017. Applicant shall complete half-street improvements to their frontage along Boones Ferry Road in conformance with the Public Works Standards and detail RD-1025. Applicant shall coordinate work with the City of Wilsonville’s street maintenance program.
<b>PF 3.</b>	With the half-street improvements to Boones Ferry Road Applicant shall be required to extend the City’s 8-inch water main under Boones Ferry Road from its current terminus east of the southerly property line to approximately 100 feet north of the northern property line tying into existing City water systems.
<b>PF 4.</b>	Applicant shall obtain sanitary sewer service by constructing a lateral service line to the existing sanitary sewer manhole located approximately 25 feet northeast of the site.
<b>PF 5.</b>	Stormwater shall be collected, treated and detained per Public Works Standards. There is an existing storm area drain located near the south property line. Applicant shall extend the public storm pipe to tie into a new curb inlet. Site storm facilities shall tie into this new curb inlet.
<b>PF 6.</b>	City Engineering accepts the clear drive aisle length of 18 feet from back of sidewalk as shown on plans dated 6-27-17 even though this length does not conform to Public Works Standards Detail RD-1105 due to the configuration of the drive aisle with the adjacent fueling station pavement.
<b>PF 7.</b>	A few early AutoCAD drawings showed trucks backing up onto Boones Ferry Road. This is not allowed. All truck backup movements shall be constrained to on site.

## Natural Resources Division Conditions:

### All Requests

<b>NR 1.</b> Natural Resource Division Requirements and Advisories listed in Exhibit C2 apply to the proposed development.
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## Building Division Conditions:

### All Requests

<b>BD 1.</b> <b>Backflow Location.</b> It is recommended - <i>not required</i> - that fire line backflow devices be located inside of the building being served and not in an underground vault. This eliminates the continuing maintenance problems with sump pumps and valve monitoring, and saves the project the cost of a vault installation, which can run \$10,000. Where the backflow device is placed in a vault a public utility waterline easement will be required that extends to the upstream edge of the vault. Without a vault the waterline easement will extend to the exterior wall of the building.
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<b>BD 2.</b> <b>Fire-Flow Requirements.</b> Fire calcs shall be submitted as part of the building permit application. Required fire-flow shall be figured using the methodology of the 2014 OFC Section B105. Tualatin Valley Fire & Rescue does not adapt the Occupancy Hazards Modifiers in sections B105.4 and B105.4.1. See the TVF&R <i>New Construction: Policy Intent Guide</i> .
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<b>BD 3.</b> <b>Fire Department Review.</b> The adequacy of the existing fire hydrants, the location and number of new hydrants, the proposed FDC location, any required No Parking Signage, and other fire department items require approval of TVF&R Deputy Fire Marshal Jason Arn. (Ph.503.259.1510) To facilitate that review it is recommended that before submittal for permits to the Engineering or Building Division, a site plan indicating all hydrants within 600 feet of the proposed building be submitted to Deputy Arn for review.
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## Master Exhibit List:

The following exhibits are hereby entered into the public record by the Development Review Board as confirmation of its consideration of the application as submitted. This is the exhibit list that includes exhibits for Planning Case File DB17-0001 through DB17-0006.

### Planning Staff Materials

- A1. Staff report and findings (this document)
- A2. Staff's Presentation Slides for Public Hearing (to be presented at Public Hearing)

### Materials from Applicant

- B1. Application Narrative  
Reduced Plan Set 8.5x11 (*same as Exhibit B2*)

Tree Maintenance and Protection Plan

Geotechnical Engineering Report

Sign Plan

Letter from Republic Services

Lighting Specifications

Traffic Impact Analysis

**B2.** Drawings and Plans

A1.0 Cover Sheet/Site Plan

A1.1 Truck Turning Plan and Landscaping Areas

A2.0 First Floor Plan

A2.1 Reflected Ceiling Plan (Lower Ceilings)

A2.2 Ceiling Grid Details

A3.0 Second Floor Plan

A3.1 Reflected Ceiling Plan (Main Ceiling)

A4.0 Roof Plan

A5.0 Elevations

A5.1 Interior Elevations

A6.0 Section

A6.1 Sections/Details

1 Tree Removal Plan

2 Grading and Utility Plan

L-1 Planting Plan

L-2 Irrigation Plan

Topographic Survey

**B3.** Materials Board (available at Public Hearing or available for viewing at City Hall during normal business hours)

Development Review Team Correspondence

**C1.** Engineering Findings, Conditions, and Requirements

**C2.** Natural Resource Findings, Conditions, and Requirements

**C3.** Building Division Conditions, Requirements, and Advisories

Other Correspondence

**D1.** N/A

## Procedural Statements and Background Information:

The statutory 120-day time limit applies to this application. The application was received on January 30, 2017. On February 17, 2017 staff conducted a completeness review within the statutorily allowed 30-day review period and found the application to be incomplete. On April 12, 2017, the applicant submitted new materials. On May 4, 2017 staff conducted a second completeness review and found the application to be incomplete. On May 26, 2017, the applicant submitted additional materials. On June 9, 2017 staff conducted a third completeness review and found the application to be incomplete. On June 29, 2017, the applicant submitted additional materials. On July 20, 2017 the application was deemed complete. The City must render a final decision for the request, including any appeals, by November 17, 2017.

1. Surrounding land uses are as follows:

Compass Direction	Zone:	Existing Use:
North:	PDI	Industrial
East:	--	Boones Ferry Road, Interstate 5
South:	PDI	Fuel Station
West:	PDI	Industrial

2. Previous Planning Approvals:  
98DB23 Zone Change, Stage I and Stage II Review, Site Design Review, Tree Removal Permit and Sign Review  
AR17-0002 Class II Administrative Review of Tentative Partition Plat  
AR17-0010 Class I Administrative Review of Final Partition Plat
3. The applicant has complied with Sections 4.013-4.031 of the Wilsonville Code, said sections pertaining to review procedures and submittal requirements. The required public notices have been sent and all proper notification procedures have been satisfied.

## Findings:

NOTE: Pursuant to Section 4.014 the burden of proving that the necessary findings of fact can be made for approval of any land use or development application rests with the applicant in the case.

### General Information

#### Application Procedures-In General Section 4.008

**Criteria:** This section lists general application procedures applicable to a number of types of land use applications and also lists unique features of Wilsonville's development review process.

**Response:** The application is being processed in accordance with the applicable general procedures of this Section.

#### Initiating Application Section 4.009

**Criterion:** "Except for a Specific Area Plan (SAP), applications involving specific sites may be filed only by the owner of the subject property, by a unit of government that is in the process of acquiring the property, or by an agent who has been authorized by the owner, in writing, to apply."

**Response:** The application was submitted on behalf of the property owner at the time of the application, Meadows 146 LLC, and is signed by an authorized representative.

#### Pre-Application Conference Subsection 4.010 (.02)

**Criteria:** This section lists the pre-application process.

**Response:** A pre-application conference was held on November 3, 2016 (PA16-0014) in accordance with this subsection.

#### Lien Payment before Approval Subsection 4.011 (.02) B.

**Criterion:** "City Council Resolution No. 796 precludes the approval of any development application without the prior payment of all applicable City liens for the subject property. Applicants shall be encouraged to contact the City Finance Department to verify that there are no outstanding liens. If the Planning Director is advised of outstanding liens while an application is under consideration, the Director shall advise the applicant that payments must be made current or the existence of liens will necessitate denial of the application."

**Response:** No applicable liens exist for the subject property. The application can thus move forward.

General Submission Requirements  
Subsection 4.035 (.04) A.

**Criteria:** “An application for a Site Development Permit shall consist of the materials specified as follows, plus any other materials required by this Code.” Listed 1. through 6. j.

**Response:** The applicant has provided all of the applicable general submission requirements contained in this subsection.

Zoning-Generally  
Section 4.110

**Criteria:** “The use of any building or premises or the construction of any development shall be in conformity with the regulations set forth in this Code for each Zoning District in which it is located, except as provided in Sections 4.189 through 4.192.” “The General Regulations listed in Sections 4.150 through 4.199 shall apply to all zones unless the text indicates otherwise.”

**Response:** This proposed development is in conformity with the applicable zoning district and general development regulations listed in Sections 4.150 through 4.199 have been applied in accordance with this Section.

**Request A: DB17-0001 Stage I Preliminary Plan**

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

**Planned Development Regulations**

Planned Development Purpose  
Subsection 4.140 (.01)

**A1. Criterion:** The proposed Stage I Master Plan shall be consistent with the Planned Development Regulations purpose statement which states, “The purposes of these regulations are to encourage the development of tracts of land sufficiently large to allow for comprehensive master planning, and to provide flexibility in the application of certain regulations in a manner consistent with the intent of the Comprehensive Plan and general provisions of the zoning regulations and to encourage a harmonious variety of uses through mixed use design within specific developments thereby promoting the economy of shared public services and facilities and a variety of complimentary activities consistent with the land use designation on the Comprehensive Plan and the creation of an attractive, healthful, efficient and stable environment for living, shopping or working.”

**Response:** The proposed development is consistent with this purpose statement.

Planned Development Lot Qualifications  
Subsection 4.140 (.02)

**A2. Criterion:** “Planned Development may be established on lots which are suitable for and of a size to be planned and developed in a manner consistent with the purposes and objectives of Section 4.140.”

**Response:** The lot of the subject development site is of sufficient size to be developed in a manner consistent the purposes and objectives of Section 4.140.

**A3. Criterion:** “Any site designated for development in the Comprehensive Plan may be developed as a Planned Development, provided that it is zoned “PD.” All sites which are greater than two (2) acres in size, and designated in the Comprehensive Plan for commercial, residential, or industrial use shall be developed as Planned Developments, unless approved for other uses permitted by the Development Code.”

**Response:** The property is less than two acres in size, but is designated for industrial use in the Comprehensive Plan and is zoned Planned Development Industrial. The property will be developed as a planned development consistent with this subsection.

Ownership Requirements  
Subsection 4.140 (.03)

**A4. Criterion:** “The tract or tracts of land included in a proposed Planned Development must be in one (1) ownership or control or the subject of a joint application by the owners of all the property included.”

**Response:** All the land subject to change under the proposal is under one ownership.

Professional Design Team  
Subsection 4.140 (.04)

**A5. Criteria:** “The applicant for all proposed Planned Developments shall certify that the professional services of the appropriate professionals have been utilized in the planning process for development.” “One of the professional consultants chosen by the applicant shall be designated to be responsible for conferring with the planning staff with respect to the concept and details of the plan.”

**Response:** As can be found in the applicant’s submitted materials, appropriate professionals have been involved in the planning and permitting process. Bob Schatz with Allusa Architecture is the project coordinator.

Planned Development Permit Process  
Subsection 4.140 (.05)

**A6. Criteria:** “All parcels of land exceeding two (2) acres in size that are to be used for residential, commercial or industrial development, shall, prior to the issuance of any building permit:

1. Be zoned for planned development;

2. Obtain a planned development permit; and
3. Obtain Development Review Board, or, on appeal, City Council approval.”

**Response:** The subject property is less than 2 acres in size, but is designated for industrial development in the Comprehensive Plan and is zoned Planned Development Industrial. The property is proposed to be developed as a planned development in accordance with this subsection.

#### Comprehensive Plan Consistency

Subsection 4.140 (.06)

**A7. Criteria:** “The planning staff shall prepare a report of its findings and conclusions as to whether the use contemplated is consistent with the land use designated on the Comprehensive Plan.” “The applicant may proceed to apply for Stage I - Preliminary Approval - upon determination by either staff or the Development Review Board that the use contemplated is consistent with the Comprehensive Plan.”

**Response:** The proposed project, as found elsewhere in this report, complies with the Planned Development Industrial zoning designation, which implements the Comprehensive Plan designation of ‘Industrial’ for this property. All other applicable Development Code criteria that implement the Comprehensive Plan are being met, or will be met as conditions of approval.

#### Application Requirements

Subsection 4.140 (.07)

**A8. Criteria:** This subsection establishes that the Development Review Board shall consider a Stage I Master Plan after completion or submission of a variety of application requirements.

**Response:** Review of the proposed revised Stage I Master Plan has been scheduled for a public hearing before the Development Review Board in accordance with this subsection and the applicant has met all the applicable submission requirements as follows:

- The property affected by the Stage I Master Plan is presently under the sole ownership of Bergaso Properties LLC, and was owned by Meadows 146 LLC at the time of the initial application submittal. The application is signed by an authorized representative of the previous property owner, Toija Beutler.
- The application for a revised Stage I Master Plan has been submitted on a form prescribed by the City.
- The professional design team and coordinator have been identified. See Finding A5.
- The applicant has stated the various uses involved in the Master Plan and their locations.
- The boundary affected by the Stage I Master Plan has been clearly identified and legally described.
- Sufficient topographic information has been submitted.
- A tabulation of the land area to be devoted to various uses has been provided.



- The proposed development will be built in a single phase.
- Any necessary performance bonds will be required.
- Waiver information has been submitted.

## Planned Development Industrial (PDI) Zone

### Typically Permitted Uses

Subsection 4.135 (.03)

**A9. Criteria:** This subsection lists the allowed uses in the PDI Zone.

**Response:** The proposal is to construct a wholesale warehouse for distribution of carpet, with limited office and retail sales space consistent with the zoning.

### Use Limitations

Subsection 4.135 (.03) O. 3.

**A10. Criterion:** “Retail uses, not to exceed 5000 square feet of indoor and outdoor sales, service or inventory storage area for a single building and 20,000 square feet of indoor and outdoor sales, service or inventory storage area for multiple buildings.”

**Response:** This application proposes 3,500 square feet of indoor retail use as a component of the overall development. No outdoor sales are proposed.

### Block and Access Standards

Subsections 4.135 (.04) and 4.131 (.03) 1.

**A11. Criteria:** “The Development Review Board shall determine appropriate conditions of approval to assure that adequate connectivity results for pedestrians, bicyclists, and motor vehicle drivers. Consideration shall be given to the use of public transit as a means of meeting access needs.”

**Response:** The proposed development will have a minimal impact on existing block size and access spacing.

## Request B: DB17-0002 Stage II Final Plan

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

## Planned Development Regulations-Generally

### Planned Development Purpose

Subsection 4.140 (.01)

**B1. Criterion:** The proposed Stage II Final Plan shall be consistent with the Planned Development Regulations purpose statement.

**Response:** The proposed development is consistent with this purpose statement.

Planned Developments Lot Qualifications  
Subsection 4.140 (.02)

**B2. Criterion:** “Planned Development may be established on lots which are suitable for and of a size to be planned and developed in a manner consistent with the purposes and objectives of Section 4.140.”

**Response:** The lot of the subject development site is of sufficient size to be developed in a manner consistent the purposes and objectives of Section 4.140.

**B3. Criterion:** “Any site designated for development in the Comprehensive Plan may be developed as a Planned Development, provided that it is zoned ‘PD.’ All sites which are greater than two (2) acres in size, and designated in the Comprehensive Plan for commercial, residential, or industrial use shall be developed as Planned Developments, unless approved for other uses permitted by the Development Code.”

**Response:** The property is less than two acres in size, but is designated for industrial development in the Comprehensive Plan and is zoned Planned Development Industrial. The property will be developed as a planned development in accordance with this subsection.

Ownership Requirements  
Subsection 4.140 (.03)

**B4. Criterion:** “The tract or tracts of land included in a proposed Planned Development must be in one (1) ownership or control or the subject of a joint application by the owners of all the property included.”

**Response:** The land included in the proposed Stage II Final Plan is under the single ownership of Bergaso Properties LLC, and was owned by Meadows 146 LLC at the time of the initial application submittal. The application is signed by an authorized representative of the previous property owner, Toija Beutler.

Professional Design Team  
Subsection 4.140 (.04)

**B5. Criteria:** “The applicant for all proposed Planned Developments shall certify that the professional services of the appropriate professionals have been utilized in the planning process for development.” “One of the professional consultants chosen by the applicant shall be designated to be responsible for conferring with the planning staff with respect to the concept and details of the plan.”

**Response:** As can be found in the applicant’s submitted materials, appropriate professionals have been involved in the planning and permitting process. Bob Schatz with Allusa Architecture has been designated the coordinator for the planning portion of the project.

Planned Development Permit Process  
Subsection 4.140 (.05)

**B6. Criteria:** “All parcels of land exceeding two (2) acres in size that are to be used for residential, commercial or industrial development, shall, prior to the issuance of any building permit:

1. Be zoned for planned development;
2. Obtain a planned development permit; and
3. Obtain Development Review Board, or, on appeal, City Council approval.”

**Response:** The subject property is less than 2 acres in size, but is designated for industrial development in the Comprehensive Plan and is zoned Planned Development Industrial. The property is proposed to be developed as a planned development in accordance with this subsection.

### Stage II Final Plan Submission Requirements and Process

Timing of Submission  
Subsection 4.140 (.09) A.

**B7. Criterion:** “Unless an extension has been granted by the Development Review Board, within two (2) years after the approval or modified approval of a preliminary development plan (Stage I), the applicant shall file with the City Planning Department a final plan for the entire development or when submission in stages has been authorized pursuant to Section 4.035 for the first unit of the development...”

**Response:** The applicant is submitting a Stage II Plan concurrently with a Stage I Master Plan.

Development Review Board Role  
Subsection 4.140 (.09) B.

**B8. Criterion:** “...the Development Review Board shall determine whether the proposal conforms to the permit criteria set forth in this Code, and shall approve, conditionally approve, or disapprove the application”.

**Response:** The Development Review Board is considering all applicable permit criteria set forth in the Planning and Land Development Code and staff is recommending the Development Review Board approve the application with conditions of approval.

Stage I Conformance, Submission Requirements  
Subsection 4.140 (.09) C.

**B9. Criteria:** “The final plan shall conform in all major respects with the approved preliminary development plan, and shall include all information included in the preliminary plan plus the following:” listed 1. through 6.

**Response:** The Stage II plan substantially conforms to the proposed revised Stage I Master plan, which has been submitted concurrently. The applicant has provided the required

drawings and other documents showing all the additional information required by this subsection.

#### Stage II Final Plan Detail

Subsection 4.140 (.09) D.

**B10. Criterion:** “The final plan shall be sufficiently detailed to indicate fully the ultimate operation and appearance of the development or phase of development.”

**Response:** The applicant has provided sufficiently detailed information to indicate fully the ultimate operation and appearance of the development, including a detailed site plan, landscape plans, and elevation drawings.

#### Submission of Legal Documents

Subsection 4.140 (.09) E.

**B11. Criterion:** “Copies of legal documents required by the Development Review Board for dedication or reservation of public facilities, or for the creation of a non-profit homeowner’s association, shall also be submitted.”

**Response:** No additional legal documentation is required for dedication or reservation of public facilities.

#### Expiration of Approval

Subsection 4.140 (.09) I. and Section 4.023

**B12. Criterion:** This subsection and section identify the period for which Stage II approvals are valid.

**Response:** The Stage II Approval, along other associated applications, will expire two (2) years after approval, unless an extension is approved in accordance with these subsections.

#### Consistency with Plans

Subsection 4.140 (.09) J. 1.

**B13. Criterion:** “The location, design, size and uses, both separately and as a whole, are consistent with the Comprehensive Plan, and with any other applicable plan, development map or Ordinance adopted by the City Council.”

**Response:** The subject property has previously been zoned Planned Development Industrial consistent with the Industrial designation in the Comprehensive Plan. To staff’s knowledge, the location, design, size, and uses are consistent with other applicable plans, maps, and ordinances, or will be by specific conditions of approval.

#### Traffic Concurrency

Subsection 4.140 (.09) J. 2.

**B14. Criteria:** “That the location, design, size and uses are such that traffic generated by the development at the most probable used intersection(s) can be accommodated safely and

without congestion in excess of Level of Service D, as defined in the Highway Capacity Manual published by the National Highway Research Board, on existing or immediately planned arterial or collector streets and will, in the case of commercial or industrial developments, avoid traversing local streets. Immediately planned arterial and collector streets are those listed in the City's adopted Capital Improvement Program, for which funding has been approved or committed, and that are scheduled for completion within two years of occupancy of the development or four year if they are an associated crossing, interchange, or approach street improvement to Interstate 5." Additional qualifiers and criteria listed a. through e.

**Response:** As shown in Traffic Impact Statement of Exhibit B1, the LOS D standard will continue to be met by existing street improvements at the studied intersections with existing, planned, and this proposed development as follows:

- Boones Ferry Road/Barber Street – LOS A/C, Volume to Capacity: 0.57
- Boones Ferry Road/Project Access – LOS A/B, Volume to Capacity 0.06

#### Facilities and Services Concurrency

Subsection 4.140 (.09) J. 3.

**B15. Criterion:** "That the location, design, size and uses are such that the residents or establishments to be accommodated will be adequately served by existing or immediately planned facilities and services."

**Response:** Facilities and services, including utilities, are available and sufficient to serve the proposed development.

#### Adherence to Approved Plans

Subsection 4.140 (.09) L.

**B16. Criterion:** "The applicant shall agree in writing to be bound, for her/himself and her/his successors in interest, by the conditions prescribed for approval of a development. The approved final plan and stage development schedule shall control the issuance of all building permits and shall restrict the nature, location and design of all uses. Minor changes in an approved preliminary or final development plan may be approved by the Director of Planning if such changes are consistent with the purposes and general character of the development plan. All other modifications, including extension or revision of the stage development schedule, shall be processed in the same manner as the original application and shall be subject to the same procedural requirements."

**Response:** Condition of Approval PDB 1 ensures adherence to approved plans except for minor revisions by the Planning Director.

## Commercial Development in Any Zone

### Wholly Enclosed Commercial Operations and Exceptions Subsection 4.116 (.05)

- B17. Criteria:** “All businesses, service or processing, shall be conducted wholly within a completely enclosed building; except for:” Listed A. through G.  
**Response:** All business is proposed to be conducted wholly within a completely enclosed building.

### Commercial Loading Facilities and Residential Districts Subsection 4.116 (.06)

- B18. Criterion:** “In any Commercial Development directly across the street from any Residential District, the loading facilities shall be at least twenty (20) feet from the street, shall be sited whenever practicable at the rear or side, and if facing a residential area, shall be properly screened. Screening shall be provided in a manner that is compatible with the adjacent residential development in terms of quality of materials and design. Such screening shall effectively minimize light glare and noise levels to those of adjacent residential areas.”  
**Response:** The proposed building is not located across the street from a Residential District.

### Commercial Uses to Meet Industrial Performance Standards Subsection 4.116 (.07)

- B19. Criterion:** “Uses shall be limited to those which will meet the performance standards specified in Section 4.135(.05), with the exception of 4.135(.05)(M.)(3).”  
**Response:** Industrial performance standards are met. See Finding B32.

### Commercial Development Generally Subsection 4.116 (.10)

- B20. Criteria:** This subsection lists general development standards for commercial development including setbacks, building height, lot size, lot coverage, and minimum frontage requirements.  
**Response:** A majority of the proposed building consists of an industrial use, and the general development standards for industrial uses are being applied. See Findings B33 and B34.

### Commercial Off-Street Parking Requirements Subsection 4.116 (.12)

- B21. Criterion:** “Off-Street Parking is to be as specified in Section 4.155.”  
**Response:** Off-street parking is being provided consistent with Section 4.155, see Findings B44 through B72.

Commercial Signs  
Subsection 4.116 (.13)

- B22. Criterion:** "Signs are subject to the standards of Sections 4.156.01 through 4.156.11."  
**Response:** Signs are being reviewed in accordance with Sections 4.156.01 through 4.156.11. See Request E.

Prohibited Uses  
Subsection 4.116 (.14)

- B23. Criteria:** This subsection lists prohibited uses including use of a trailer, RV, etc. as residence except as a temporary use during construction, and any use that violates the industrial performance standards.  
**Response:** No trailer, RV, etc. is contemplated for residence and industrial performance standards are met. See Finding B32.

### Standards Applying in All Planned Development Zones

Additional Height Guidelines  
Subsection 4.118 (.01)

- B24. Criteria:** "In cases that are subject to review by the Development Review Board, the Board may further regulate heights as follows:
- A. Restrict or regulate the height or building design consistent with adequate provision of fire protection and fire-fighting apparatus height limitations.
  - B. To provide buffering of low density developments by requiring the placement of three or more story buildings away from the property lines abutting a low density zone.
  - C. To regulate building height or design to protect scenic vistas of Mt. Hood or the Willamette River."
- Response:** Staff does not recommend the Development Review Board require a height less than the applicant proposes as the proposed height provides for fire protection access, does not abut a low density zone, and does not impact scenic views of Mt. Hood or the Willamette River.

Underground Utilities  
Subsection 4.118 (.02)

- B25. Criterion:** "Underground Utilities shall be governed by Sections 4.300 to 4.320. All utilities above ground shall be located so as to minimize adverse impacts on the site and neighboring properties."  
**Response:** All additional utilities on the property are required to be underground.

## Waivers

Subsection 4.118 (.03)

**B26. Criteria:** “Notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purposes and objectives of Section 4.140, and based on findings of fact supported by the record may” waive a number of standards as listed in A. through E.

**Response:** A setback waiver is being requested, see Request C.

## Other Requirements or Restrictions

Subsection 4.118 (.03) E.

**B27. Criteria:** “Notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purposes and objectives of Section 4.140, and based on findings of fact supported by the record may adopt other requirements or restrictions, inclusive of, but not limited to, the following:” Listed 1. through 12.

**Response:** No additional requirements or restrictions are recommended pursuant to this subsection. Performance standards and requirements of the PDI Zone address potential impacts from noise, odor, glare, etc.

## Impact on Development Cost

Subsection 4.118 (.04)

**B28. Criterion:** “The Planning Director and Development Review Board shall, in making their determination of compliance in attaching conditions, consider the effects of this action on availability and cost. The provisions of this section shall not be used in such a manner that additional conditions, either singularly or cumulatively, have the effect of unnecessarily increasing the cost of development. However, consideration of these factors shall not prevent the Board from imposing conditions of approval necessary to meet the minimum requirements of the Comprehensive Plan and Code.”

**Response:** It is staff’s professional opinion that the determination of compliance or attached conditions does not unnecessarily increase the cost of development, and no evidence has been submitted to the contrary.

## Requiring Tract Dedications

Subsection 4.118 (.05)

**B29. Criteria:** “The Planning Director, Development Review Board, or on appeal, the City Council, may as a condition of approval for any development for which an application is submitted, require that portions of the tract or tracts under consideration be set aside, improved, conveyed or dedicated for the following uses:” Recreational Facilities, Open Space Area, Easements.”

**Response:** No additional tracts are being required for the purposes given.



Habitat Friendly Development Practices  
Subsection 4.118 (.09)

- B30. Criteria:** “To the extent practicable, development and construction activities of any lot shall consider the use of habitat-friendly development practices, which include:
- A. Minimizing grading, removal of native vegetation, disturbance and removal of native soils, and impervious area;
  - B. Minimizing adverse hydrological impacts on water resources, such as using the practices described in Part (a) of Table NR-2 in Section 4.139.03, unless their use is prohibited by an applicable and required state or federal permit, such as a permit required under the federal Clean Water Act, 33 U.S.C. §§1251 et seq., or the federal Safe Drinking Water Act, 42 U.S.C. §§300f et seq., and including conditions or plans required by such permit;
  - C. Minimizing impacts on wildlife corridors and fish passage, such as by using the practices described in Part (b) of Table NR-2 in Section 4.139.03; and
  - D. Using the practices described in Part (c) of Table NR-2 in Section 4.139.03.”

**Response:** The grading will be limited to that needed for the proposed improvements, no significant native vegetation would be retained by an alternative site design, the City’s stormwater standards will be met limiting adverse hydrological impacts on water resources, and no impacts on wildlife corridors or fish passages have been identified.

### **Planned Development Industrial (PDI) Zone**

Typically Permitted Uses  
Subsection 4.135 (.03)

- B31. Criteria:** This subsection establishes the typically permitted uses in the PDI Zone.
- Response:** The proposed use is consistent with the Stage I Master Plan in Request A as well as with the purpose of the PDI zone as it includes industrial operations as well as associated and supportive uses.

### **Industrial Performance Standards**

Industrial Performance Standards  
Subsection 4.135 (.05)

- B32. Criteria:** “The following performance standards apply to all industrial properties and sites within the PDI Zone, and are intended to minimize the potential adverse impacts of industrial activities on the general public and on other land uses or activities. They are not intended to prevent conflicts between different uses or activities that may occur on the same property.” Standards listed A. through N.
- Response:** The proposed project meets the performance standards of this subsection as follows:
- Pursuant to standard A (enclosure of uses and activities), all non-parking/loading activities and uses will be completely enclosed.

- Pursuant to standard B (vibrations), there is no indication that the proposed development will produce vibrations detectable off site without instruments.
- Pursuant to standard C (emissions), there is no indication the odorous gas or other odorous matter would be produced by the proposed use.
- Pursuant to standard D (open storage), no outdoor storage is proposed.
- Pursuant to standard E (night operations and residential areas), the proposed use is not within 100 feet of a residential development.
- Pursuant to standard F (heat and glare), no exterior operations are proposed creating heat and glare.
- Pursuant to standard G (dangerous substances), there are no prohibited dangerous substances expected on the development site.
- Pursuant to standard H (liquid and solid wastes), staff has no evidence that the standards defined for liquid and solid waste in this subsection would be violated.
- Pursuant to standard I (noise), staff has no evidence that noise generated from the proposed operations would violate the City's Noise Ordinance and noises produced in violation of the Noise Ordinance would be subject to the enforcement procedures established in WC Chapter 6 for such violations.
- Pursuant to standard J (electrical disturbances), staff has no evidence that any prohibited electrical disturbances would be produced by the proposed project's operations.
- Pursuant to standard K (discharge of air pollutants), staff has no evidence that any prohibited discharge would be produced by the proposed project.
- Pursuant to standard L (open burning), no open burning is proposed on the development site.
- Pursuant to standard M (outdoor storage), no outdoor storage is proposed.
- Pursuant to standard N (unused area landscaping), no unused areas will be bare.

## Other Standards for the PDI Zone

### Lot Size and Maximum Coverage

Subsections 4.135 (.06) A and B.

**B33. Criteria:** These standards state that there is no minimum lot size or maximum lot coverage in the PDI zone provided that other Code standards (landscaping, parking, etc.) are met.

**Response:** The lots are of sufficient size to allow for the required amount of landscaping, parking, and other applicable site requirements along with lot coverage of the proposed development.

### Setbacks

Subsections 4.135 (.06) C. through E.

**B34. Criteria:** "Front Yard Setback. Thirty (30) feet. Structures on corner or through lots shall observe the minimum front yard setback on both streets. Setbacks shall also be

maintained from the planned rights-of-way shown on any adopted City street plan. Rear and Side Yard Setback. Thirty (30) feet. Structures on corner or through lots shall observe the minimum rear and side yard setback on both streets. Setbacks shall also be maintained from the planned rights-of-way shown on any adopted City street plan. No setback is required when rear or side yards abut a railroad siding.”

**Response:** A 60-foot front setback is proposed on the east side of the building. However, 10-foot setbacks are proposed on the rear and sides of the building. The applicant is requesting a waiver to these setbacks.

## On-site Pedestrian Access and Circulation

### Continuous Pathway System

Section 4.154 (.01) B. 1.

**B35. Criterion:** “A pedestrian pathway system shall extend throughout the development site and connect to adjacent sidewalks, and to all future phases of the development, as applicable.”

**Response:** There is a continuous walkway throughout the site that connects all of the primary building exits, the parking and surrounding area to the sidewalk.

### Safe, Direct, and Convenient

Section 4.154 (.01) B. 2.

**B36. Criteria:** “Pathways within developments shall provide safe, reasonably direct, and convenient connections between primary building entrances and all adjacent parking areas, recreational areas/playgrounds, and public rights-of-way and crosswalks based on all of the following criteria:”

**Response:** The plans show a pedestrian pathway directly from the Boones Ferry Road sidewalk to the parking lot and then to the main and employee entrances to the building.

### Free from Hazards/Smooth Surface

Section 4.154 (.01) B. 2. a.

**B37. Criterion:** “Pedestrian pathways are designed primarily for pedestrian safety and convenience, meaning they are free from hazards and provide a reasonably smooth and consistent surface.”

**Response:** The pathways will be constructed using concrete and will provide a smooth and consistent surface.

### Reasonably Direct

Section 4.154 (.01) B. 2. b.

**B38. Criterion:** “The pathway is reasonably direct. A pathway is reasonably direct when it follows a route between destinations that does not involve a significant amount of unnecessary out-of-direction travel.”

**Response:** The pathway from the Boones Ferry Road sidewalk travels directly west to the proposed building, providing a connection to the building's main entrance. There is no unnecessary out of direction travel.

#### Building Entrance Connectivity/Meets ADA

Section 4.154 (.01) B. 2. c.

**B39. Criterion:** "The pathway connects to all primary building entrances and is consistent with the Americans with Disabilities Act (ADA) requirements."

**Response:** An ADA parking space is provided proximate to the main building and is connected by pathways meeting ADA standards.

#### Vehicle/Pathway Separation

Section 4.154 (.01) B. 3.

**B40. Criterion:** "Except as required for crosswalks, per subsection 4, below, where a pathway abuts a driveway or street it shall be vertically or horizontally separated from the vehicular lane. For example, a pathway may be vertically raised six inches above the abutting travel lane, or horizontally separated by a row of bollards."

**Response:** The walkway adjacent to the building will be raised six inches above the adjacent parking lot to provide vertical separation.

#### Crosswalks

Section 4.154 (.01) B. 4.

**B41. Criterion:** "Where a pathway crosses a parking area or driveway, it shall be clearly marked with contrasting paint or paving materials (e.g., pavers, light-color concrete inlay between asphalt, or similar contrast)."

**Response:** There is a pathway proposed to cross the parking area connecting the sidewalk along Boones Ferry Road to the building entrance. The pathway that crosses the parking lot that will be flush with the asphalt parking lot and constructed of concrete.

#### Pathway Width and Surface

Section 4.154 (.01) B. 5.

**B42. Criterion:** "Primary pathways shall be constructed of concrete, asphalt, brick/masonry pavers, or other durable surface, and not less than five (5) feet wide. Secondary pathways and pedestrian trails may have an alternative surface except as otherwise required by the ADA."

**Response:** All proposed pathways are 5 feet or wider and will be constructed of concrete.

#### Pathway Signs

Section 4.154 (.01) B. 6.

**B43. Criterion:** "All pathways shall be clearly marked with appropriate standard signs."

**Response:** No pathways needing directional signage are proposed.

## Parking Area Design Standards

Minimum and Maximum Parking  
Section 4.155 (.03) G.

**B44. Criteria:** This subsection defines the minimum and maximum parking standards for various land uses.

**Response:** The proposed Marion’s Carpets facility requires a minimum of 22 parking spaces and allows a maximum of 34. The applicant proposes 22 spaces. The calculation of parking spaces is as follows:

Warehouse Area (23,866 sf)	Minimum 0.3 spaces per 1,000 square feet = 7.2
	Maximum 0.5 per 1,000 square feet = 11.9
Retail (3,500 sf)	Minimum 4.1 per 1,000 square feet = 14.35
	Maximum 6.2 per 1,000 square feet = 21.7
Total (rounded to nearest whole number):	Minimum 22 spaces
	Maximum 34 spaces

Other Parking Area Design Standards  
Subsections 4.155 (.02) and (.03)

**B45. Criteria:** These subsections list a number of standards affecting the design of parking areas.

**Response:** The applicable standards are met as follows:

Standard	Met	Explanation
Subsection 4.155 (.02) General Standards		
B. All spaces accessible and usable for parking	<input checked="" type="checkbox"/>	Standard parking lot design.
J. Sturdy bumper guards of at least 6 inches to prevent parked vehicles crossing property line or interfering with screening or sidewalks.	<input checked="" type="checkbox"/>	The parking lot will be surrounded by a six-inch curb.
K. Surfaced with asphalt, concrete or other approved material.	<input checked="" type="checkbox"/>	The parking lot will be surfaced with asphalt.
Drainage meeting City standards	<input checked="" type="checkbox"/>	Drainage is professionally designed and being reviewed to meet City standards.
L. Lighting won’t shine into adjoining structures or into the eyes of passersby.	<input checked="" type="checkbox"/>	Lighting is proposed to be fully shielded and subject to the City’s Outdoor Lighting Ordinance.
N. No more than 40% of parking compact spaces.	<input checked="" type="checkbox"/>	All parking spaces are proposed to be standard spaces.
Subsection 4.155 (.03) Minimum and Maximum Off-Street Parking Requirements		
A. Access and maneuvering areas adequate.	<input checked="" type="checkbox"/>	Access to the area is available to employees. Maneuvering area is plentiful.

A.1. Loading and delivery areas and circulation separate from customer/employee parking and pedestrian areas.	☒	A 12-foot by 35-foot loading area is designated on the site plan outside of the garage doors, separate from the main parking lot.
Circulation patterns clearly marked.	☒	Circulation patterns are identified on the landscaping and tree protection plan.
A.2. To the greatest extent possible, vehicle and pedestrian traffic separated.	☒	Vehicle and pedestrian traffic is clearly delineated and separated.
C. Safe and Convenient Access, meet ADA and ODOT Standards. For parking areas with more than 10 spaces, 1 ADA space for every 50 spaces.	☒	The proposed parking and access allow ADA and ODOT standards to be met. The applicant proposes 22 parking spaces, one of which is an ADA accessible space.
D. Efficient on-site parking and circulation.	☒	The proximity to the destination and pedestrian connections make the parking efficient. Adequate maneuvering area is provided making the circulation efficient.

### Other Parking Standards and Policies and Procedures

#### Parking Variances and Waivers Subsection 4.155 (.02) A. 1.-2.

- B46. Criteria:** “1. The Board shall have the authority to grant variances or planned development waivers to these standards in keeping with the purposes and objectives set forth in the Comprehensive Plan and this Code. 2. Waivers to the parking, loading, or bicycle parking standards shall only be issued upon a findings that the resulting development will have no significant adverse impact on the surrounding neighborhood, and the community, and that the development considered as a whole meets the purposes of this section.”
- Response:** The applicant has not requested variances or waivers pursuant to this subsection.

#### Multiple Use Parking Calculations Subsection 4.155 (.02) D.

- B47. Criterion:** “In the event several uses occupy a single structure or parcel of land, the total requirement for off-street parking shall be the sum of the requirements of the several uses computed separately, except as modified by subsection “E,” below.”
- Response:** As shown in Finding B37, each proposed use was factored in to the overall calculation of the required number of parking spaces.

#### Shared Parking Subsection 4.155 (.02) E.

- B48. Criterion:** “Owners of two (2) or more uses, structures, or parcels of land may utilize jointly the same parking area when the peak hours of operation do not overlap, provided

satisfactory legal evidence is presented in the form of deeds, leases, or contracts securing full and permanent access to such parking areas for all the parties jointly using them. “

**Response:** No shared parking with adjacent uses is proposed.

#### Off-Site Parking Allowance

Subsection 4.155 (.02) G.

**B49. Criterion:** “Off-Site Parking. Except for single-family dwellings, the vehicle parking spaces required by this Chapter may be located on another parcel of land, provided the parcel is within 500 feet of the use it serves and the DRB has approved the off-site parking through the Land Use Review. The distance from the parking area to the use shall be measured from the nearest parking space to the main building entrance, following a sidewalk or other pedestrian route. The right to use the off-site parking must be evidenced in the form of recorded deeds, easements, leases, or contracts securing full and permanent access to such parking areas for all the parties jointly using them.”

**Response:** No off-site parking was used for calculating the parking spaces provided.

#### Non-Parking Use of Parking Areas

Subsection 4.155 (.02) H.

**B50. Criterion:** “The conducting of any business activity shall not be permitted on the required parking spaces, unless a temporary use permit is approved pursuant to Section 4.163.”

**Response:** All parking areas are expected to be maintained and kept clear for parking unless a temporary use permit is granted or the Stage II approval is revised. Particularly no container or other storage is permitted in the parking areas.

#### Parking for Uses Not Listed

Subsection 4.155 (.02) M.

**B51. Criterion:** “Off-street parking requirements for types of uses and structures not specifically listed in this Code shall be determined by the Development Review Board if an application is pending before the Board. Otherwise, the requirements shall be specified by the Planning Director, based upon consideration of comparable uses.”

**Response:** The parking calculation is based on the listed uses of storage warehouse, wholesale establishment, rail or trucking freight terminal and retail stores.

#### On-Street Parking for Parking Calculations

Subsection 4.155 (.03) F.

**B52. Criterion:** “On-street parking spaces, directly adjoining the frontage of and on the same side of the street as the subject property, may be counted towards meeting the minimum off-street parking standards.”

**Response:** The parking calculations do not include any on-street parking.

Electrical Vehicle Charging Stations  
Subsection 4.155 (.03) H.

**B53. Criteria:** “1. Parking spaces designed to accommodate and provide one or more electric vehicle charging stations on site may be counted towards meeting the minimum off-street parking standards. 2. Modification of existing parking spaces to accommodate electric vehicle charging stations on site is allowed outright.”

**Response:** The applicant does not propose electrical charging stations.

Substituting Motorcycle Parking for Vehicle Parking  
Subsection 4.155 (.03) I.

**B54. Criteria:** “Motorcycle parking may substitute for up to 5 spaces or 5 percent of required automobile parking, whichever is less. For every 4 motorcycle parking spaces provided, the automobile parking requirement is reduced by one space.”

**Response:** The applicant does not propose motorcycle parking.

## Parking Area Landscaping

Minimizing Visual Dominance of Parking  
Subsection 4.155 (.03) B.

**B55. Criteria:** “Parking and loading or delivery areas shall be landscaped to minimize the visual dominance of the parking or loading area, as follows:”

**Response:** The proposed landscaping shields the loading area from off-site view. The applicant provides the required parking lot trees.

Landscape Screening of Parking  
Subsection 4.155 (.03) B. 1.

**B56. Criterion:** “Landscaping of at least ten percent (10%) of the parking area designed to be screened from view from the public right-of-way and adjacent properties. This landscaping shall be considered to be part of the fifteen percent (15%) total landscaping required in Section 4.176.03 for the site development.”

**Response:** A nine-foot landscaping area is proposed along Boones Ferry Road. The total area of the proposed parking landscaping area between the sidewalk and the parking lot is 1,300 square feet, greater than the 732 square feet that is required.

Parking Area Tree Requirement  
Subsection 4.155 (.03) B. 2. and 2. a.

**B57. Criteria:** “Landscape tree planting areas shall be minimum of eight (8) feet in width and length and spaced every (8) parking spaces or an equivalent aggregated amount. a. Trees shall be planted in a ratio of one (1) tree per eight (8) parking spaces or fraction thereof, except in parking areas of more than two hundred (200) spaces where a ratio of one (1) tree per six (six) spaces shall be applied as noted in subsection (.03)(B.) (3.)”



**Response:** All tree planting areas meet or exceed the 8 foot minimum width and length. Trees will be planted along the length of the drive aisle.

#### Parking Area Tree Clearance Subsection 4.155 (.03) B. 2. b.

**B58. Criterion:** “Except for trees planted for screening, all deciduous interior parking lot trees must be suitably sized, located, and maintained to provide a branching minimum of seven (7) feet clearance at maturity.”

**Response:** All trees in the parking area and along the walkways will be maintained to provide a 7 foot clearance.

### **Bicycle Parking-General Provisions**

#### Determining Minimum Bicycle Parking Subsection 4.155 (.04) A. 1.

**B59. Criterion:** “The required minimum number of bicycle parking spaces for each use category is shown in Table 5, Parking Standards.”

**Response:** The applicant proposes three bicycle parking spaces as required in Table 5.

#### Bicycle Parking for Multiple Uses Subsection 4.155 (.04) A. 3.

**B60. Criterion:** “When there are two or more primary uses on a site, the required bicycle parking for the site is the sum of the required bicycle parking for the individual primary uses.”

**Response:** The minimum required bicycle parking has been provided for each use as described in Finding B52.

#### Bicycle Parking Waivers Subsection 4.155 (.04) A. 4.

**B61. Criterion:** “Bicycle parking space requirements may be waived by the Development Review Board per Section 4.118(.03)(A.)(9.) and (10).”

**Response:** The applicant proposes no waivers to bicycle parking.

### **Bicycle Parking Standards**

#### Bicycle Parking Space Dimensions Subsection 4.155 (.04) B. 1.

**B62. Criterion:** “Each space must be at least 2 feet by 6 feet and be accessible without moving another bicycle.”

**Response:** The proposed bicycle parking spaces are three feet by six feet in size with adequate spacing provided.

Bicycle Maneuvering Area  
Subsection 4.155 (.04) B. 2.

**B63. Criterion:** “An aisle at least 5 feet wide shall be maintained behind all required bicycle parking to allow room for bicycle maneuvering. Where the bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way.”

**Response:** The bicycle racks are proposed to be located parallel to the building walkway, allowing room for bicycle maneuvering.

Spacing of Bicycle Racks  
Subsection 4.155 (.04) B. 3.

**B64. Criterion:** “When bicycle parking is provided in racks, there must be enough space between the rack and any obstructions to use the space properly.”

**Response:** The proposed bicycle racks are spaced appropriately for use.

Bicycle Racks and Lockers Anchoring  
Subsection 4.155 (.04) B. 4.

**B65. Criterion:** “Bicycle lockers or racks, when provided, shall be securely anchored.”

**Response:** The bike racks will be securely anchored as shown on page A1.0 of Exhibit B2.

Bicycle Parking Location  
Subsection 4.155 (.04) B. 5.

**B66. Criterion:** “Bicycle parking shall be located within 30 feet of the main entrance to the building or inside a building, in a location that is easily accessible for bicycles. For multi-tenant developments, with multiple business entrances, bicycle parking may be distributed on-site among more than one main entrance.”

**Response:** The exterior bike parking spaces are proposed approximately 40 feet from the building’s main entrance, but are located 15 feet from an employee entrance. The spaces are adjacent to the building’s primary walkway, providing convenient direct access to the building entrance from Boones Ferry Road.

## Long-term Bicycle Parking

Required Long-term Bicycle Parking  
Subsection 4.155 (.04) C. 2.

**B67. Criterion:** “For a proposed multi-family residential, retail, office, or institutional development, or for a park and ride or transit center, where six (6) or more bicycle parking spaces are required pursuant to Table 5, 50% of the bicycle parking shall be developed as long-term, secure spaces.”

**Response:** No long-term bicycle parking is required, however, two spaces are proposed inside the building.

## Minimum Off-Street Loading Requirements

### Determining Required Loading Berths

Subsection 4.155 (.05) A. 1.-2.

**B68. Criteria:** These subsections list the required number of loading berths based on use type and square feet of floor area. For commercial, industrial, and public utility uses of 5,000 to 30,000 square feet 1 loading berth is required.

**Response:** One loading berth is proposed along the south side of the building.

### Loading Berth Dimensions

Subsection 4.155 (.05) A. 3.

**B69. Criterion:** "A loading berth shall contain space twelve (12) feet wide, thirty-five (35) feet long, and have a height clearance of fourteen (14) feet. Where the vehicles generally used for loading and unloading exceed these dimensions, the required length of these berths shall be increased to accommodate the larger vehicles."

**Response:** As shown in the applicant's plan set, the loading berth meets the minimum dimension requirements.

### Existing Loading Berths

Subsection 4.155 (.05) A. 4.

**B70. Criterion:** "If loading space has been provided in connection with an existing use or is added to an existing use, the loading space shall not be eliminated if elimination would result in less space than is required to adequately handle the needs of the particular use."

**Response:** There are no existing uses requiring loading.

### Use of Off-Street Parking Areas for Loading

Subsection 4.155 (.05) A. 5.

**B71. Criterion:** "Off-street parking areas used to fulfill the requirements of this Ordinance shall not be used for loading and unloading operations except during periods of the day when not required to meet parking needs."

**Response:** Off-street parking areas are not proposed to be used for loading and unloading operations.

### Exception for On-Street Loading

Subsection 4.155 (.05) B.

**B72. Criteria:** "The Planning Director or Development Review Board may approve a loading area adjacent to or within a street right-of-way where it finds that loading and unloading operations:" Listed a. through e.

**Response:** No loading area adjacent or within a street right-of-way is proposed.

## Other Development Standards

### Access, Ingress, and Egress Section 4.167

**B73. Criterion:** “Each access onto streets or private drives shall be at defined points as approved by the City and shall be consistent with the public's health, safety and general welfare. Such defined points of access shall be approved at the time of issuance of a building permit if not previously determined in the development permit.”

**Response:** Access to Boones Ferry Road will be shared with the existing driveway that currently accesses the gas station to the south.

### Double-Frontage Lots Section 4.169

**B74. Criterion:** “Buildings on double frontage lots (i.e., through lots) and corner lots must meet the front yard setback for principal buildings on both streets or tracts with a private drive.”

**Response:** The subject property is not a double frontage lot.

### Natural Features and Other Resources Section 4.171

**B75. Criteria:** This section provides for the protection of a number of natural features and other resources including: general terrain preparation, hillsides, trees and wooded areas, high voltage powerline easements and rights of way and petroleum pipeline easements, earth movement hazard areas, soil hazard areas, historic resources, and cultural resources.

**Response:** The property is generally flat with some tree groves. Given the location of the tree groves and the impacts of removing some, but not all, of the trees in the groves, none of the existing trees are proposed to remain. The existing barn does not have any historic or cultural designations. No other hillsides, powerline easements, etc. needing protection exist on the site.

## Public Safety and Crime Prevention

### Design for Public Safety Subsection 4.175 (.01)

**B76. Criterion:** “All developments shall be designed to deter crime and insure public safety.”

**Response:** The applicant has not provided any summary findings in response to this criterion. Staff finds no evidence and has not received any testimony that the design of the site and buildings would lead to crime or negatively impact public safety.

Addressing and Directional Signing  
Subsection 4.175 (.02)

**B77. Criterion:** "Addressing and directional signing shall be designed to assure identification of all buildings and structures by emergency response personnel, as well as the general public."

**Response:** Addressing will be as required by Tualatin Valley Fire and Rescue.

Surveillance and Access  
Subsection 4.175 (.03)

**B78. Criterion:** "Areas vulnerable to crime shall be designed to allow surveillance. Parking and loading areas shall be designed for access by police in the course of routine patrol duties."

**Response:** Security cameras will be provided on the building.

Lighting to Discourage Crime  
Subsection 4.175 (.04)

**B79. Criterion:** "Exterior lighting shall be designed and oriented to discourage crime."

**Response:** Lighting has been designed in accordance with the City's outdoor lighting standards, which will provide sufficient lighting to discourage crime.

## Landscaping Standards

Landscaping Standards Purpose  
Subsection 4.176 (.01)

**B80. Criteria:** "This Section consists of landscaping and screening standards and regulations for use throughout the City. The regulations address materials, placement, layout, and timing of installation. The City recognizes the ecological and economic value of landscaping and requires the use of landscaping and other screening or buffering to:" Listed A. through K.

**Response:** In complying with the various landscape standards in Section 4.176 the applicant has demonstrated the Stage II Final Plan is in compliance with the landscape purpose statement.

Landscape Code Compliance  
Subsection 4.176 (.02) B.

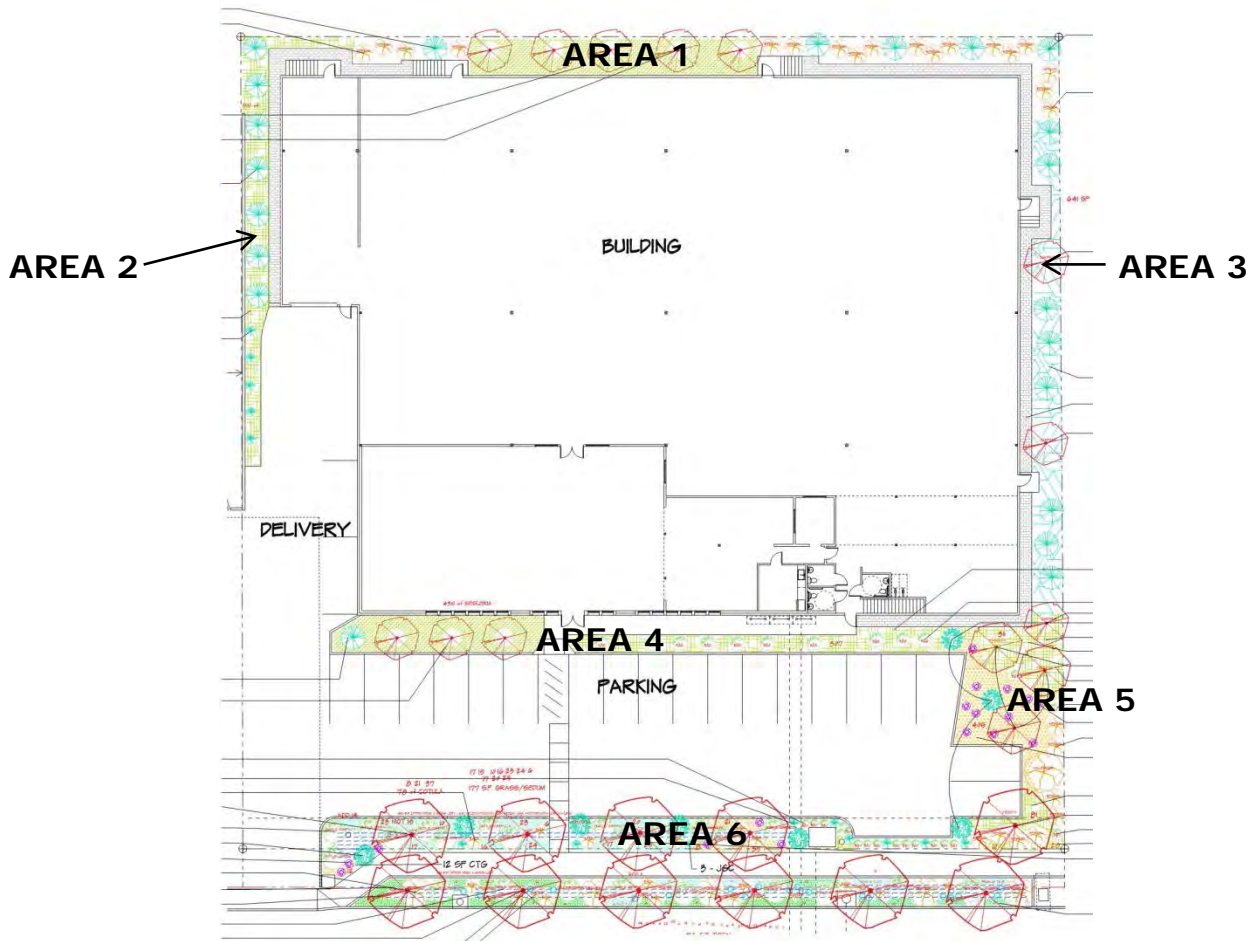
**B81. Criterion:** "All landscaping and screening required by this Code must comply with all of the provisions of this Section, unless specifically waived or granted a Variance as otherwise provided in the Code. The landscaping standards are minimum requirements; higher standards can be substituted as long as fence and vegetation-height limitations are met. Where the standards set a minimum based on square footage or linear footage, they shall be interpreted as applying to each complete or partial increment of area or length..."

**Response:** No waivers or variances to landscape standards have been requested. Thus all landscaping and screening must comply with standards of this section.

Intent and Required Materials  
 Subsections 4.176 (.02) C. through I.

**B82. Criteria:** These subsections identify the various landscaping standards, including the intent of where they should be applied, and the required materials.

**Response:** As shown on sheet L1 of Exhibit B2 required materials for each landscaping standard are provided as follows. In all area appropriate groundcover is provided for areas without not otherwise occupied by shrubs and trees:



**Landscape Area 1**

- Area Description:** Along west side of property
- Landscaping Standard:** General
- Comments on Intent:** No screening required
- Required Materials:** Fully cover, less than 30 feet deep, tree every 30 feet (may be grouped), 30 feet or deeper, one tree every 800 sf and 3 shrubs every 400 sf.
- Materials Provided:** Adequate shrubs and groundcover, trees include 5 Crimson Spire Oak and 5 Green Arrow Weeping Alaskan Cedar.

### Landscape Area 2

**Area Description:** Along south side of property  
**Landscaping Standard:** General  
**Comments on Intent:** No screening required  
**Required Materials:** Fully cover, less than 30 feet deep, tree every 30 feet (may be grouped), 30 feet or deeper, one tree every 800 sf and 3 shrubs every 400 sf.  
**Materials Provided:** Adequate shrubs and groundcover, trees include 6 Green Arrow Weeping Alaskan Cedar.

### Landscape Area 3

**Area Description:** Along north side of property  
**Landscaping Standard:** General  
**Comments on Intent:** No screening required  
**Required Materials:** Fully cover, less than 30 feet deep, tree every 30 feet (may be grouped), 30 feet or deeper, one tree every 800 sf and 3 shrubs every 400 sf.  
**Materials Provided:** Adequate shrubs and groundcover, trees include 2 Frans Fontaine European Hornbeam and 8 Green Arrow Weeping Alaskan Cedar.

### Landscape Area 4

**Area Description:** Adjacent to front of building  
**Landscaping Standard:** General  
**Comments on Intent:** No screening required  
**Required Materials:** Fully cover, less than 30 feet deep, tree every 30 feet (may be grouped), 30 feet or deeper, one tree every 800 sf and 3 shrubs every 400 sf.  
**Materials Provided:** Adequate shrubs and groundcover, trees include 3 Crimson Spire Oak.

### Landscape Area 5

**Area Description:** Along north side of parking lot  
**Landscaping Standard:** General  
**Comments on Intent:** No screening required  
**Required Materials:** Fully cover, less than 30 feet deep, tree every 30 feet (may be grouped), 30 feet or deeper, one tree every 800 sf and 3 shrubs every 400 sf.  
**Materials Provided:** Adequate shrubs and groundcover, trees include 5 Crimson Spire Oak and 5 Green Arrow Weeping Alaskan Cedar.

### Landscape Area 6

**Area Description:** Along east side of property  
**Landscaping Standard:** Low Screen  
**Comments on Intent:** Screens parking lot from sidewalk and street right-of-way  
**Required Materials:** 3-foot hedge 95 percent opaque year round, trees every 30 feet or as required to provide canopy over landscape area.

**Materials Provided:** A combination of Compact Inkberry Holly, Shrubby Hare's Ear, Gold Cone Common Columnar Juniper, Green Tower Boxwood and Canyon Blue Dwarf Arctic Willow create the low screen. Tree canopy is provided by 4 Karpick Red Maples and 1 City Sprite Zelkova.

#### Landscape Area and Locations Subsection 4.176 (.03)

**B83. Criteria:** "Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable."

**Response:** The applicant indicates that landscaping will cover 7,775 square feet of the site, covering over 17 percent of the site area. Landscaping is proposed throughout the site as listed in Finding B75 above.

#### Buffering and Screening Subsection 4.176 (.04)

**B84. Criteria:** "Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.

- A. All intensive or higher density developments shall be screened and buffered from less intense or lower density developments.
- B. Activity areas on commercial and industrial sites shall be buffered and screened from adjacent residential areas. Multi-family developments shall be screened and buffered from single-family areas.
- C. All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties.
- D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit.
- E. In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking.
- F. In any zone any fence over six (6) feet high measured from soil surface at the outside of fenceline shall require Development Review Board approval."

**Response:** The project site is not adjacent to residential areas. All exterior, roof and ground mounted, mechanical and utility equipment will be screened from ground level off-site view from adjacent streets or properties. No outdoor storage and no fences over 6 feet tall are proposed.



Landscape Plans  
Subsection 4.176 (.09)

**B85. Criteria:** "Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated."

**Response:** The applicant's sheets L1 and L2 provide the required information.

### Other Development Standards

Access Drives and Travel Lanes  
Subsection 4.177 (.01) E.

**B86. Criteria:** This subsection sets standards for access drives and travel lanes.

**Response:**

- All access drives are designed to provide a clear travel lane, free from obstructions.
- All travel lanes will be asphalt. Condition of Approval PDB 2 will ensure they are capable of carrying a 23-ton load.
- Emergency access lanes are improved to a minimum of 12 feet and the development is being reviewed and approved by the Fire District.

Outdoor Lighting  
Sections 4.199.20 through 4.199.60

**B87. Criteria:** This section states that the outdoor lighting ordinance is applicable to "Installation of new exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas" and "Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas." In addition the exempt luminaires and lighting systems are listed.

**Response:** The proposal is required to meet the Outdoor Lighting Standards. See Request D, Findings D27 through D34.

Underground Installation  
Sections 4.300-4.320

**B88. Criteria:** These sections list requirements regarding the underground installation of utilities.

**Response:** All utility lines will be underground.

## Request C: DB17-0003 Setback Waiver

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

### Waiver: Reduce Setback on North, West, and South Sides

Waiver of Typical Development Standards  
Subsection 4.118 (.03) A

**C1. Criteria:** This subsection establishes that “notwithstanding the provisions of Section 4.140 to the contrary, the Development Review Board, in order to implement the purpose and objectives of Section 4.140, and based on findings of fact supported by the record” may waive a number of typical development standards including height and yard requirements.

**Response:** The applicant requests to waive the required 30 foot setback on the north, south, and west sides of the development. The typical development standards able to be waived pursuant to this subsection include side and rear yard setbacks.

Purpose and Objectives of Planned Development Regulations  
Subsection 4.140 (.01) B.

**C2. Criteria:** This subsection establishes the purpose of the Planned Development Regulations which are as follows:

- To take advantage of advances in technology, architectural design, and functional land use design;
- To recognize the problems of population density, distribution and circulation and to allow a deviation from rigid established patterns of land uses, but controlled by defined policies and objectives detailed in the comprehensive plan;
- To produce a comprehensive development equal to or better than that resulting from traditional lot land use development.
- To permit flexibility of design in the placement and uses of buildings and open spaces, circulation facilities and off-street parking areas, and to more efficiently utilize potentials of sites characterized by special features of geography, topography, size or shape or characterized by problems of flood hazard, severe soil limitations, or other hazards;
- To permit flexibility in the height of buildings while maintaining a ratio of site area to dwelling units that is consistent with the densities established by the Comprehensive Plan and the intent of the Plan to provide open space, outdoor living area and buffering of low-density development.
- To allow development only where necessary and adequate services and facilities are available or provisions have been made to provide these services and facilities.

- To permit mixed uses where it can clearly be demonstrated to be of benefit to the users and can be shown to be consistent with the intent of the Comprehensive Plan.
- To allow flexibility and innovation in adapting to changes in the economic and technological climate.

**Response:** Pursuant to Subsection 4.118 (.03) A. waivers must implement or better implement the purpose and objectives listed in this subsection. The applicant specifically requests the setback waiver for flexibility in the design of the building, allowing for landscaping and parking requirements to be met in front of the proposed building.

### Request D: DB17-0004 Site Design Review

As described in the Findings below, the applicable criteria for this request are met or will be met by Conditions of Approval.

#### Site Design Review

Excessive Uniformity, Inappropriateness Design  
 Subsection 4.400 (.01) and Subsection 4.421 (.03)

**D1. Criteria:** “The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards.” “Excessive uniformity, inappropriateness or poor design of the exterior appearance of structures and signs and the lack of proper attention to site development and landscaping in the business, commercial, industrial and certain residential areas of the City hinders the harmonious development of the City, impairs the desirability of residence, investment or occupation in the City, limits the opportunity to attain the optimum use in value and improvements, adversely affects the stability and value of property, produces degeneration of property in such areas and with attendant deterioration of conditions affecting the peace, health and welfare, and destroys a proper relationship between the taxable value of property and the cost of municipal services therefor.”

**Response:** Staff summarizes the compliance with this subsection as follows:

**Excessive Uniformity:** The proposed development is unique to the particular development context and does not create excessive uniformity.

**Inappropriate or Poor Design of the Exterior Appearance of Structures:** The proposed building is designed in a manner that is consistent with newer industrial development in the PDI zone.

**Inappropriate or Poor Design of Signs:** Signs are typical of the type of development proposed found to be appropriate throughout the City.

**Lack of Proper Attention to Site Development:** The appropriate professional services have been used to design the site, demonstrating appropriate attention being given to site development.

**Lack of Proper Attention to Landscaping:** Landscaping is provided exceeding the area requirements, has been professionally designed by a landscape designer, and

includes a variety of plant materials, all demonstrating appropriate attention being given to landscaping.

## Purposes and Objectives

Subsection 4.400 (.02) and Subsection 4.421 (.03)

**D2. Criteria:** “The Board shall also be guided by the purpose of Section 4.400, and such objectives shall serve as additional criteria and standards.” “The City Council declares that the purposes and objectives of site development requirements and the site design review procedure are to:” Listed A through J.

**Response:** The applicant has provided sufficient information demonstrating compliance with the objectives of this subsection as follows:

- Pursuant to objective A (assure proper functioning of the site and high quality visual environment), the proposed building location and site layout would allow for landscaping and parking requirements to be met on the front portion of the site, creating a high quality visual environment that is compatible with other surrounding industrial uses.
- Pursuant to objective B (encourage originality, flexibility, and innovation), the proposed building and setback waiver encourages site flexibility in giving us extra room out front to comply to new landscaping and parking requirements. The front is the area people see and not the side or back of the building.
- Pursuant to objective C (discourage inharmonious development), the professional design of the proposed building and landscaping supports a high quality visual environment and thus prevents monotonous, drab, unsightly, and dreary development.
- Pursuant to objective D (conserve natural beauty and visual character), while the location of the existing tree groves in central portions of the site is such that preservation of individual trees outside of the building envelope, may be hazardous, the proposed building design and associated landscaping enhance the relationships with adjoining properties.
- Pursuant to objective E (protect and enhance City’s appeal), development of the site with a well-designed industrial building and high-quality landscaping will enhance the City’s appeal.
- Pursuant to objective F (stabilize property values/prevent blight), developing the site, which currently contains a poorly maintained barn at a visible location along Interstate 5, will enhance the site and the surrounding industrial properties, preventing future blight.
- Pursuant to objective G (insure adequate public facilities), the proposal does not impact the availability of public facilities, which are available and adequate for the subject property.
- Pursuant to objective H (achieve pleasing environments and behavior), the design of the building is such that the public area is clearly defined as being in the front of the front of the building. Design of this portion of the building at a visible location

along Interstate 5 will create a more pleasing and safe environment than currently exists.

- Pursuant to objective I (foster civic pride and community spirit), development of a high-quality industrial building at a visible location along Interstate 5 will contribute to civic pride and community spirit by adding aesthetic value.
- Pursuant to objective J (sustain favorable environment for residents), development of this site, currently occupied by a poorly maintained barn at a visible location along Interstate 5 will create a more favorable environment for residents.

#### Development Review Board Jurisdiction

##### Section 4.420

**D3. Criteria:** The section states the jurisdiction and power of the Development Review Board in relation to site design review including the application of the section, that development is required in accord with plans, and variance information.

**Response:** A condition of approval has been included to ensure construction, site development, and landscaping are carried out in substantial accord with the Development Review Board approved plans, drawings, sketches, and other documents. No building permits will be granted prior to development review board approval. No variances are requested from site development requirements.

#### Design Standards

##### Subsection 4.421 (.01)

**D4. Criteria:** “The following standards shall be utilized by the Board in reviewing the plans, drawings, sketches and other documents required for Site Design Review. These standards are intended to provide a frame of reference for the applicant in the development of site and building plans as well as a method of review for the Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specifications of one or more particular architectural styles is not included in these standards.” Listed A through G.

**Response:** The applicant has provided sufficient information demonstrating compliance with the standards of this subsection as follows:

- Pursuant to standard A (Preservation of Landscape), given the location of the existing tree groves relative to the buildable area of the site, the proposed development would provide a new landscaping plan meeting current standards in a fashion similar to other industrial properties in Wilsonville.
- Pursuant to standard B (Relation of Proposed Buildings to Environment), the site does not have extensive topographical change or other naturally sensitive areas. The proposed development would transform the presently underutilized industrial site with well-designed development consistent with other nearby industrial development.
- Pursuant to standard C (Drives, Parking, and Circulation), no new driveways are proposed in this application. The parking area is accessed via the existing

driveway. Safe and accessible routes are provided throughout the site with a parking lot in front of the existing building and a pedestrian walkway from the parking to the front door of the new building.

- Pursuant to standard D (Surface Water Drainage), no adverse impacts to surface water drainage will result from the proposal.
- Pursuant to standard E (Utility Service), no above ground utility installations are proposed. Stormwater and sanitary sewage disposal facilities are indicated on the applicant's grading and utility plan, shown in Exhibit B2.
- Pursuant to standard F (Advertising Features), the applicant has provided sufficient information on signs, and a sign permit is being reviewed concurrently with this request. See Request E.
- Pursuant to standard G (Special Features), there are no exposed storage areas except for the truck loading area. The truck loading area is screened from the neighboring property with landscaping and it is also set back from the front of the new building.

#### Applicability of Design Standards

Subsection 4.421 (.02)

**D5. Criterion:** "The standards of review outlined in Sections (a) through (g) above shall also apply to all accessory buildings, structures, exterior signs and other site features, however related to the major buildings or structures."

**Response:** Design standards have been applied to all buildings, structures, and other site features.

#### Conditions of Approval

Subsection 4.421 (.05)

**D6. Criterion:** "The Board may attach certain development or use conditions in granting an approval that are determined necessary to insure the proper and efficient functioning of the development, consistent with the intent of the Comprehensive Plan, allowed densities and the requirements of this Code."

**Response:** No additional conditions of approval are recommended to ensure the proper and efficient functioning of the development.

#### Color or Materials Requirements

Subsection 4.421 (.06)

**D7. Criterion:** "The Board or Planning Director may require that certain paints or colors of materials be used in approving applications. Such requirements shall only be applied when site development or other land use applications are being reviewed by the City."

**Response:** No specific paints or colors are being required. The applicant proposes the use of colors that match the other Marion's Carpets location, with major portions of the building painted Egyptian Gold, a medium golden tone. Paint color selection is subjective, as there are many choices to be utilized on any given building. The proposed color may

have a brighter tone than what is typically seen in the City's industrial zones. The applicant has submitted the required evidence for building color and materials; however, staff has some concern about the color choice as it is difficult to determine what the final look of the proposed paint color will be by solely relying upon the materials board. As there is a lack of a clear violation of any City standards, staff defers to the applicant's choice for proposed paint colors.

#### Submission Requirements

Section 4.440

**D8. Criteria:** "A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:" Listed A through F.

**Response:** The applicant has submitted the required additional materials, as applicable.

#### Time Limit on Approval

Section 4.442

**D9. Criterion:** "Site design review approval shall be void after two (2) years unless a building permit has been issued and substantial development pursuant thereto has taken place; or an extension is granted by motion of the Board.

**Response:** The Applicant has indicated that they will pursue development within two (2) years and it is understood that the approval will expire after 2 years if a building permit hasn't been issued unless an extension has been granted by the board.

#### Landscape Installation or Bonding

Subsection 4.450 (.01)

**D10. Criterion:** "All landscaping required by this section and approved by the Board shall be installed prior to issuance of occupancy permits, unless security equal to one hundred and ten percent (110%) of the cost of the landscaping as determined by the Planning Director is filed with the City assuring such installation within six (6) months of occupancy. "Security" is cash, certified check, time certificates of deposit, assignment of a savings account or such other assurance of completion as shall meet with the approval of the City Attorney. In such cases the developer shall also provide written authorization, to the satisfaction of the City Attorney, for the City or its designees to enter the property and complete the landscaping as approved. If the installation of the landscaping is not completed within the six-month period, or within an extension of time authorized by the Board, the security may be used by the City to complete the installation. Upon completion of the installation, any portion of the remaining security deposited with the City shall be returned to the applicant."

**Response:** Condition of Approval PDD 2 will assure installation or appropriate security.

Approved Landscape Plan  
Subsection 4.450 (.02)

**D11. Criterion:** “Action by the City approving a proposed landscape plan shall be binding upon the applicant. Substitution of plant materials, irrigation systems, or other aspects of an approved landscape plan shall not be made without official action of the Planning Director or Development Review Board, as specified in this Code.”

**Response:** Condition of Approval PDD 3 shall provide ongoing assurance this criterion is met.

Landscape Maintenance and Watering  
Subsection 4.450 (.03)

**D12. Criterion:** “All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing, in a substantially similar manner as originally approved by the Board, unless altered with Board approval.”

**Response:** Condition of Approval PDD 4 will ensure landscaping is continually maintained in accordance with this subsection.

Modifications of Landscaping  
Subsection 4.450 (.04)

**D13. Criterion:** “If a property owner wishes to add landscaping for an existing development, in an effort to beautify the property, the Landscape Standards set forth in Section 4.176 shall not apply and no Plan approval or permit shall be required. If the owner wishes to modify or remove landscaping that has been accepted or approved through the City’s development review process, that removal or modification must first be approved through the procedures of Section 4.010.”

**Response:** Condition of Approval PDD 4 shall provide ongoing assurance that this criterion is met by preventing modification or removal without the appropriate City review.

## Natural Features and Other Resources

Protection  
Section 4.171

**D14. Criteria:** This section provides for the protection of a number of natural features and other resources including: general terrain preparation, hillsides, trees and wooded areas, high voltage powerline easements and rights of way and petroleum pipeline easements, earth movement hazard areas, soil hazard areas, historic resources, and cultural resources.

**Response:** The proposed design of the site provides for protection of natural features and other resources consistent with the proposed Stage II Final Plan for the site as well as the purpose and objectives of site design review. See Finding B68 under Request B.



## Landscaping

### Landscape Standards Code Compliance Subsection 4.176 (.02) B.

- D15. Criterion:** “All landscaping and screening required by this Code must comply with all of the provisions of this Section, unless specifically waived or granted a Variance as otherwise provided in the Code. The landscaping standards are minimum requirements; higher standards can be substituted as long as fence and vegetation-height limitations are met. Where the standards set a minimum based on square footage or linear footage, they shall be interpreted as applying to each complete or partial increment of area or length”
- Response:** No waivers or variances to landscape standards have been requested. Thus all landscaping and screening must comply with standards of this section.

### Intent and Required Materials Subsections 4.176 (.02) C. through I.

- D16. Criteria:** These subsections identify the various landscaping standards, including the intent of where they should be applied, and the required materials.
- Response:** The minimum or higher standard has been applied throughout different landscape areas of the site and landscape materials are proposed to meet each standard in the different areas. Site Design Review is being reviewed concurrently with the Stage II Final Plan which includes a thorough analysis of the functional application of the landscaping standards. See Finding B75 under Request B.

### Landscape Area and Locations Subsection 4.176 (.03)

- D17. Criteria:** “Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures, and heights. The installation of native plant materials shall be used whenever practicable.”
- Response:** Consistent with the proposed Stage II Final Plan for the site, applicant’s sheet L1 indicates landscaping will cover over 17 percent of the. Landscaping is proposed in a variety of different areas described in Finding B75. A wide variety of plants have been proposed to achieve a professional design.

Buffering and Screening  
Subsection 4.176 (.04)

- D18. Criteria:** “Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.
- A. All intensive or higher density developments shall be screened and buffered from less intense or lower density developments.
  - B. Activity areas on commercial and industrial sites shall be buffered and screened from adjacent residential areas. Multi-family developments shall be screened and buffered from single-family areas.
  - C. All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties.
  - D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit.
  - E. In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking.
  - F. In any zone any fence over six (6) feet high measured from soil surface at the outside of fenceline shall require Development Review Board approval.”

**Response:** Consistent with the proposed Stage II Final Plan, adequate screening is proposed. See Finding B77 under Request B.

Shrubs and Groundcover Materials  
Subsection 4.176 (.06) A.

- D19. Criteria:** This subsection establishes plant material and planting requirements for shrubs and ground cover.

**Response:** This subsection indicates that shrubs should equal to or better than 2-gallon containers. Some of the proposed shrubs on the applicant’s planting plan (sheet L1, Exhibit B2) are proposed to be 1-gallon containers. Condition of Approval PDD 5 requires that the detailed requirements of this subsection are met.

Plant Materials-Trees  
Subsection 4.176 (.06) B.

- D20. Criteria:** This subsection establishes plant material requirements for trees.

**Response:** The plants material requirements for trees will be met as follows:

- Condition of Approval PDD 6 requires all trees to be B&B (Balled and Burlapped)
- This condition of approval requires all plant materials to conform in size and grade to “American Standard for Nursery Stock” current edition.”
- The applicant’s planting plan lists tree sizes meeting requirements.

Types of Plant Species  
Subsection 4.176 (.06) E.

**D21. Criteria:** This subsection discusses use of existing landscaping or native vegetation, selection of plant materials, and prohibited plant materials.

**Response:** The applicant has provided sufficient information in their landscape plan (sheet L1, Exhibit B2) showing the proposed landscape design meets the standards of this subsection.

Tree Credit  
Subsection 4.176 (.06) F.

**D22. Criteria:** “Existing trees that are in good health as certified by an arborist and are not disturbed during construction may count for landscaping tree credit as follows:

<u>Existing trunk diameter</u>	<u>Number of Tree Credits</u>
18 to 24 inches in diameter	3 tree credits
25 to 31 inches in diameter	4 tree credits
32 inches or greater	5 tree credits:”

Maintenance requirements listed 1. through 2.

**Response:** The applicant is not proposing to preserve any trees to be counted as tree credits pursuant to this subsection.

Exceeding Plant Standards  
Subsection 4.176 (.06) G.

**D23. Criterion:** “Landscape materials that exceed the minimum standards of this Section are encouraged, provided that height and vision clearance requirements are met.”

**Response:** The selected landscape materials do not violate any height or visions clearance requirements.

Landscape Installation and Maintenance  
Subsection 4.176 (.07)

**D24. Criteria:** This subsection establishes installation and maintenance standards for landscaping.

**Response:** The installation and maintenance standards are or will be met as follows:

- Plant materials are required to be installed to current industry standards and be properly staked to ensure survival
- Plants that die are required to be replaced in kind, within one growing season, unless appropriate substitute species are approved by the City.
- Irrigation Notes on the applicant’s sheet L2 provides for an irrigation system.

Landscape Plans  
Subsection 4.176 (.09)

**D25. Criteria:** "Landscape plans shall be submitted showing all existing and proposed landscape areas. Plans must be drawn to scale and show the type, installation size, number and placement of materials. Plans shall include a plant material list. Plants are to be identified by both their scientific and common names. The condition of any existing plants and the proposed method of irrigation are also to be indicated."

**Response:** Applicant's sheet L1 in Exhibit B2 provides the required information.

Completion of Landscaping  
Subsection 4.176 (.10)

**D26. Criterion:** "The installation of plant materials may be deferred for a period of time specified by the Board or Planning Director acting on an application, in order to avoid hot summer or cold winter periods, or in response to water shortages. In these cases, a temporary permit shall be issued, following the same procedures specified in subsection (.07)(C)(3), above, regarding temporary irrigation systems. No final Certificate of Occupancy shall be granted until an adequate bond or other security is posted for the completion of the landscaping, and the City is given written authorization to enter the property and install the required landscaping, in the event that the required landscaping has not been installed. The form of such written authorization shall be submitted to the City Attorney for review."

**Response:** The applicant has not requested to defer installation of plant materials.

## Outdoor Lighting

Applicability  
Sections 4.199.20 and 4.199.60

**D27. Criteria:** Section 4.199.20 states that the outdoor lighting ordinance is applicable to "Installation of new exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas" and "Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas." In addition the exempt luminaires and lighting systems are listed. Section 4.199.60 identifies the threshold for major additions.

**Response:** A new exterior lighting system is being installed for a new development. The Outdoor Lighting standards are thus applicable.

Outdoor Lighting Zones  
Section 4.199.30

**D28. Criteria:** "The designated Lighting Zone as indicated on the Lighting Overlay Zone Map for a commercial, industrial, multi-family or public facility parcel or project shall determine the limitations for lighting systems and fixtures as specified in this Ordinance."

**Response:** The project site is within LZ 2 and the proposed outdoor lighting systems will be reviewed under the standards of this lighting zone.

Optional Lighting Compliance Methods  
Subsection 4.199.40 (.01) A.

**D29. Criteria:** “All outdoor lighting shall comply with either the Prescriptive Option or the Performance Option below.

**Response:** The applicant has elected to comply with the Prescriptive Option.

Wattage and Shielding  
Subsection 4.199.40 (.01) B. 1.

**D30. Criteria:** “The maximum luminaire lamp wattage and shielding shall comply with Table 7.”

Table 7: Maximum Wattage And Required Shielding				
Lighting Zone	Fully Shielded	Shielded	Partly Shielded	Unshielded
LZ 2	100	35	39	Low voltage landscape lighting 50 watts or less

**Response:** As shown on the applicant’s lighting plans and corresponding cut sheets all lighting is proposed below the maximum allowed wattage. Condition of Approval PDD 8 will ensure that the requirements of the Outdoor Lighting Ordinance are met at the time of building permit issuance.

Compliance with Oregon Energy Efficiency Specialty Code  
Subsection 4.199.40 (.01) B. 2.

**D31. Criterion:** “Except for those exemptions listed in Section 4.199.20(.02), the exterior lighting for the site shall comply with the Oregon Energy Efficiency Specialty Code, Exterior Lighting.

**Response:** The applicant is complying with the Oregon Energy Efficiency Specialty Code.

Mounting Height  
Subsection 4.199.40 (.01) B. 3.

**D32. Criteria:** “The maximum pole or mounting height shall comply with Table 8.”

Table 8: Maximum Lighting Mounting Height In Feet			
Lighting Zone	Lighting for private drives, driveways, parking, bus stops and other transit facilities	Lighting for walkways, bikeways, plazas and other pedestrian areas	All other lighting
LZ 2	40	18	8

**Response:** All exterior mounted lighting on the building's front (east) elevation is mounted less than 40 feet high as shown on sheet A5.0 of Exhibit B2.

### Luminaire Setback

Subsection 4.199.40 (.01) B. 4.

**Criteria:** "Each luminaire shall be set back from all property lines at least 3 times the mounting height of the luminaire:

Exception 1: If the subject property abuts a property with the same base and lighting zone, no setback from the common lot lines is required.

Exception 2: If the subject property abuts a property which is zoned (base and lighting) other than the subject parcel, the luminaire shall be setback three times the mounting height of the luminaire, measured from the abutting parcel's setback line. (Any variance or waiver to the abutting property's setback shall not be considered in the distance calculation).

Exception 3: If the luminaire is used for the purpose of street, parking lot or public utility easement illumination and is located less than 3 mounting heights from the property line, the luminaire shall include a house side shield to protect adjoining property.

Exception 4: If the subject property includes an exterior column, wall or abutment within 25 feet of the property line, a luminaire partly shielded or better and not exceeding 60 lamp watts may be mounted onto the exterior column, wall or abutment or under or within an overhang or canopy attached thereto.

Exception 5: Lighting adjacent to SROZ areas shall be set back 3 times the mounting height of the luminaire, or shall employ a house side shield to protect the natural resource area."

**Response:** The subject property is bordered by the same base zoning and the same lighting zone on all sides. Staff understands the three times mounting height setback to only apply where the property abuts a lower lighting district.

### Lighting Curfew

Subsection 4.199.40 (.02) D.

**D33. Criteria:** "All prescriptive or performance based exterior lighting systems shall be controlled by automatic device(s) or system(s) that:

1. Initiate operation at dusk and either extinguish lighting one hour after close or at the curfew times according to Table 10; or
2. Reduce lighting intensity one hour after close or at the curfew time to not more

than 50% of the requirements set forth in the Oregon Energy Efficiency Specialty Code unless waived by the DRB due to special circumstances; and

3. Extinguish or reduce lighting consistent with 1. and 2. above on Holidays.

The following are exceptions to curfew:

- a. Exception 1: Building Code required lighting.
- b. Exception 2: Lighting for pedestrian ramps, steps and stairs.
- c. Exception 3: Businesses that operate continuously or periodically after curfew.”

In Table 10 the Lighting Curfew for LZ 2 is 10 p.m.

**Response:** Condition of Approval PDD 8 will ensure that the lighting curfew requirements are met.

## Standards and Submittal Requirements

Sections 4.199.40 and 4.199.50

**D34. Criteria:** These sections identify the Outdoor Lighting Standards for Approval and Submittal Requirements.

**Response:** All required materials have been submitted.

## Request E: DB17-0005 Class 3 Sign Plan

### Sign Review and Submission

#### Review Process

Subsection 4.031 (.01) M. and Subsection 4.156.02 (.03)

**E1. Criteria:** These subsections establish that Class III Sign Permits are reviewed by the Development Review Board.

**Response:** The application qualifies as a Class III Sign Permit and is being reviewed by the Development Review Board.

#### Class III Sign Permits Generally

Subsection 4.156.02 (.06)

**E2. Criterion:** “Sign permit requests shall be processed as a Class III Sign Permit when associated with new development, or redevelopment requiring DRB review, and not requiring a Master Sign Plan; when a sign permit request is associated with a waiver or non-administrative variance; or when the sign permit request involves one or more freestanding or ground mounted signs greater than eight (8) feet in height in a new location.”

**Response:** As the application involves a sign associated with new development requiring DRB review, the application qualifies as a Class III Sign Permit.

Class III Sign Permit Submission Requirements  
 Subsection 4.156.02 (.06) A.

**E3. Criteria:** This subsection identifies submission requirements for Class III Sign Permits, which includes the submission requirements for Class II sign permits.

**Response:** As indicated in the table below the applicant has satisfied the submission requirements:

Requirement	Submitted	Waiver Granted		Condition of Approval	Not Applicable	Additional findings/notes
		Info Already Available to City	Not Necessary for Review			
Completed Application Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sign Drawings or Descriptions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Documentation of Tenant Spaces Used in Calculating Max. Sign Area	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Drawings of Sign Placement	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Project Narrative	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Information on Any Requested Waivers or Variances	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**Class III Sign Permit Review Criteria**

Class II Sign Permit Review Criteria: Generally and Site Design Review  
 Subsection 4.156.02 (.05) E.

**E4. Criteria:** “Class III Sign Permits shall satisfy the sign regulations for the applicable zoning district and the Site Design Review Criteria in Sections 4.400 through 4.421,”

**Response:** As indicated in Findings D2, D4 and E12 through E27 the proposed signs satisfy the sign regulations for the applicable zoning district and the Site Design Review Criteria in Sections 4.400 through 4.421.



Class II Sign Permit Review Criteria: Compatibility with Zone  
Subsection 4.156.02 (.05) E. 1.

**E5. Criterion:** “The proposed signage is compatible with developments or uses permitted in the zone in terms of design, materials used, color schemes, proportionality, and location, so that it does not interfere with or detract from the visual appearance of surrounding development;”

**Response:** The proposed signs are typical of and compatible with development within the PDI zone. This includes a design and colors reflecting corporate identity, placement of the wall signs in recognizable sign bands, and proportionality to the building facades. No evidence exists nor has testimony been received that the subject signs would detract from the visual appearance of the surrounding development.

Class II Sign Permit Review Criteria: Nuisance and Impact on Surrounding Properties  
Subsection 4.156.02 (.05) E. 2.

**E6. Criterion:** “The proposed signage will not create a nuisance or result in a significant reduction in the value or usefulness of surrounding development;”

**Response:** There is no evidence, and no testimony has been received suggesting the subject sign would create a nuisance or negatively impact the value of surrounding properties.

Class II Sign Permit Review Criteria: Items for Special Attention  
Subsection 4.156.02 (.05) E. 3.

**E7. Criterion:** “Special attention is paid to the interface between signs and other site elements including building architecture and landscaping, including trees.”

**Response:** The proposed freestanding pole sign would be located within the landscape area in front of the building. No landscaping, including trees, will be altered as a result of this sign. The Applicant is proposing a sign and pole that is black with gold lettering, which will be compatible with the building’s color scheme and architecture.

## Sign Measurement

Measurement of Cabinet Signs and Similar  
Subsection 4.156.03 (.01) A.

**E8. Criteria:** “The area for signs enclosed by cabinet, frame, or other background (including lighted surface) not otherwise part of the architecture of a building or structure shall be the area of a shape drawn around the outer dimension of the cabinet, frame, or background.”

**Response:** The proposed freestanding sign has been measured consistent with this subsection.

Measurement of Individual Element Signs  
Subsection 4.156.03 (.01) B.

**E9. Criteria:** “The area for signs constructed of individual elements (letters, figures, etc.) attached to a building wall or similar surface or structure shall be the summed area of up to three squares, rectangles, circles, or triangles drawn around all sign elements.”

**Response:** The proposed wall signs have been measured consistent with this subsection.

Measurement of Sign Height Above Ground  
Subsection 4.156.03 (.02) A.

**E10. Criteria:** “The height above ground of a freestanding or ground-mounted sign is measured from the average grade directly below the sign to the highest point of the sign or sign structure except as follows:” Listed 1.-2.

**Response:** The proposed sign has been measured consistent with this subsection.

Measurement of Sign Height and Length  
Subsection 4.156.03 (.03) A.-B.

**E11. Criteria:** “Height of a sign is the vertical distance between the lowest and highest points of the sign.”

Length of a sign is the horizontal distance between the furthest left and right points of the sign.”

**Response:** The proposed sign has been measured consistent with this subsection.

## **Freestanding and Ground Mounted Signs in the PDC, PDI, and PF Zones**

General Allowance  
Subsection 4.156.08 (.01) A.

**E12. Criterion:** “One freestanding or ground mounted sign is allowed for the first two-hundred (200) linear feet of site frontage. One additional freestanding or ground mounted sign may be added for through and corner lots having at least two-hundred (200) feet of frontage on one street or right-of-way and one-hundred (100) feet on the other street or right-of-way.”

**Response:** The subject site has 213 feet of frontage on SW Boones Ferry Road and is eligible for one freestanding or ground mounted sign. Therefore, the Applicant’s request meets the requirements of this subsection.

Allowed Height  
Subsection 4.156.08 (.01) B.

**E13. Criteria:** “The allowed height above ground of a freestanding or ground mounted sign is twenty (20) feet except as noted in 1-2 below:

1. The maximum allowed height above ground for signs along the frontage of Interstate 5, and parallel contiguous portions of streets, as identified in Figure S-4, associated with multiple tenants or businesses may be increased by three (3) feet for each tenant space or ten thousand (10,000) square feet or more of gross floor area up to a maximum of thirty-five (35) feet.
2. The allowed height above ground for signs in the PDC-TC Zone, Old Town Overlay Zone, and PDI Zone is eight (8) feet, except those signs along the frontage of Interstate 5 and parallel contiguous portions of streets identified in Figure S-4."

**Response:** The proposed freestanding sign is located within the PDI Zone and is on property along Interstate 5 frontage as identified in Figure S-4 of Section 4.156, but does not have multiple tenants. Therefore, Code limits freestanding signs on this property to 20 feet in height. The Applicant is proposing a freestanding sign of 20 feet in height, and thus meets the requirements of this subsection.

#### Allowed Area

Subsection 4.156.08 (.01) C.

**E14. Criterion:** This subsection identifies the allowed area for freestanding signs.

**Response:** The proposed freestanding sign pertains to a single tenant within a building fronting along Interstate 5. As the building contains a single tenant, the maximum sign area is 64 square feet. The proposed freestanding sign is approximately 55 square feet in area, thus meeting the standards of this subsection.

#### Pole or Sign Support Placement

Subsection 4.156.08 (.01) D.

**E15. Criterion:** "Pole or sign support placement shall be installed in a full vertical position."

**Response:** The proposed freestanding monument sign and its foundation are proposed to be constructed in a full vertical position.

#### Extending Over Right-of-Way, Parking, and Maneuvering Areas

Subsection 4.156.08 (.01) E.

**E16. Criterion:** "Freestanding and ground mounted signs shall not extend into or above public rights-of-way, parking areas, or vehicle maneuvering areas."

**Response:** The subject freestanding sign is not proposed to extend into or above the listed areas.

#### Design of Freestanding Signs to Match or Complement Design of Buildings

Subsection 4.156.08 (.01) G.

**E17. Criterion:** "Freestanding and ground mounted signs shall be designed to match or complement the architectural design of buildings on the site."

**Response:** The freestanding sign is designed to match the graphics on the proposed wall signs and is coordinated with the design of the proposed structure.

#### Width vs. Height of Signs Over 8 Feet

Subsection 4.156.08 (.01) H.

**E18. Criterion:** “For freestanding and ground mounted signs greater than eight (8) feet in height, the width of the sign shall not exceed the height.”

**Response:** The proposed freestanding sign is 20’ in height by 8’1” in width, and therefore does not exceed the limitations set by this subsection.

#### Sign Setback

Subsection 4.156.08 (.01) J.

**E19. Criterion:** “Freestanding and ground mounted signs shall be no further than fifteen (15) feet from the property line and no closer than two (2) feet from a sidewalk or other hard surface in the public right-of-way.”

**Response:** The freestanding sign is proposed to be adjacent to the eastern property line. The hard surface of public right-of-way lies approximately 6 feet west of this property line, thus the proposed placement of this freestanding sign maintains the minimum distance from both the property line and public right-of-way. Condition of Approval PDE 2 ensures that the location of the subject sign will be coordinated with the City’s Engineering Division so that placement requirements are met.

#### Address Requirement

Subsection 4.156.08 (.01) K.

**E20. Criterion:** “Except for those signs fronting Interstate 5, freestanding and ground mounted signs shall include the address number of associated buildings unless otherwise approved in writing by the City and the Fire District.”

**Response:** Condition of Approval PDE 4 will ensure this criterion is met.

#### Design of Sign Based on Initial Tenant Configuration and Size

Subsection 4.156.08 (.01) L.

**E21. Criterion:** “When a sign is designed based on the number of planned tenant spaces it shall remain a legal, conforming sign regardless of the change in the number of tenants or configuration of tenant spaces.”

**Response:** The freestanding sign is designed to accommodate a single tenant. Should the number of tenants change in the future, the proposed sign will remain legal and conforming.

## Building Signs in the PDC, PDI, and PF Zones

Establishing whether Building Facades are Eligible for Signs  
 Subsection 4.156.08 (.02) A.

**E22. Criteria:** “Building signs are allowed on a facade of a tenant space or single tenant building when one or more of the following criteria are met:

1. The facade has one or more entrances open to the general public;
2. The facade faces a lot line with frontage on a street or private drive with a cross section similar to a public street, and no other buildings on the same lot obstruct the view of the building facade from the street or private drive; or
3. The facade is adjacent to the primary parking area for the building or tenant.”

**Response:** The east facade is sign eligible while the north, south and west are not as follows:

Façade	Sign Eligible	Criteria making sign eligible
North	No	
East	Yes	Entrance open to general public, faces a lot line with frontage on a street, adjacent to primary parking area.
South	No	
West	No	

Building Sign Area Allowed  
 Subsection 4.156.08 (.02) B.

**E23. Criteria:** This subsection includes a table identifying the sign area allowed for facades based on the linear length of the façade. Exceptions are listed 2 through 5.

**Response:** There are a total of five proposed building signs. The two “Marion’s Carpets” signs are 22.89 square feet each, the “Hardwoods” sign is 22.29 square feet in size, the “Area Rugs” sign is 19.3 square feet in size, and the “M” sign with laurel leaves is 6.06 square feet in size. The total proposed sign area for the proposed building is 93.43 square feet, which is within the allowance for the sign eligible façade as follows:

Façade	Linear Length	Sign Area Allowed
East	Approx. 171 feet	96 sf

Calculating Linear Length to Determine Sign Area Allowed.  
 Subsection 4.156.08 (.02) B. 6.

**E24. Criteria:** “For facades of a single tenant building the length the facade measured at the building line, except as noted in a. and b. below. For multi-tenant buildings the width of the façade of the tenant space shall be measured from the centerline of the party walls or

the outer extent of the exterior wall at the building line, as applicable, except as noted in a. and b. below. Applicants shall provide the dimensions needed to calculate the length. Each tenant space or single occupant building shall not be considered to have more than five (5) total facades.”

**Response:** As a roughly rectangular existing building with a single tenant the east building lines have been measured to determine the allowed sign area.

#### Building Sign Length Not to Exceed 75 Percent of Façade Length Subsection 4.156.08 (.02) C.

**E25. Criterion:** “The length of individual tenant signs shall not exceed seventy-five (75) percent of the length of the facade of the tenant space.”

**Response:** None of the signs exceed 75 percent of the length of the façade.

#### Building Sign Height Allowed Subsection 4.156.08 (.02) D.

**E26. Criterion:** “The height of building signs shall be within a definable sign band, fascia, or architectural feature and allow a definable space between the sign and the top and bottom of the sign band, fascia, or architectural feature.”

**Response:** All of the proposed building signs are within a definable architectural feature and have a definable space between the sign and the top and bottom of the architectural feature.

#### Building Sign Types Allowed Subsection 4.156.08 (.02) E.

**E27. Criterion:** “Types of signs permitted on buildings include wall flat, fascia, projecting, blade, marquee and awning signs. Roof-top signs are prohibited.”

**Response:** All the proposed building signs are wall flat, which is an allowable type.

### Request F: DB17-0006 Type C Tree Removal Plan

#### Type C Tree Removal-General

##### Tree Related Site Access Subsection 4.600.50 (.03) A.

**F1. Criterion:** “By submission of an application, the applicant shall be deemed to have authorized City representatives to have access to applicant’s property as may be needed to verify the information provided, to observe site conditions, and if a permit is granted, to verify that terms and conditions of the permit are followed.”

**Response:** It is understood the City has access to the property to verify information regarding trees.

## Review Authority

Subsection 4.610.00 (.03) B.

**F2. Criterion:** "Type C. Where the site is proposed for development necessitating site plan review or plat approval by the Development Review Board, the Development Review Board shall be responsible for granting or denying the application for a Tree Removal Permit, and that decision may be subject to affirmance, reversal or modification by the City Council, if subsequently reviewed by the Council."

**Response:** The requested removal is connected to site plan review by the Development Review Board for new development. The tree removal is thus being reviewed by the DRB.

## Conditions of Approval

Subsection 4.610.00 (.06) A.

**F3. Criterion:** "Conditions. Attach to the granting of the permit any reasonable conditions considered necessary by the reviewing authority including, but not limited to, the recording of any plan or agreement approved under this subchapter, to ensure that the intent of this Chapter will be fulfilled and to minimize damage to, encroachment on or interference with natural resources and processes within wooded areas;"

**Response:** No additional conditions are recommended pursuant to this subsection.

## Completion of Operation

Subsection 4.610.00 (.06) B.

**F4. Criterion:** "Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:" "Fix a reasonable time to complete tree removal operations;"

**Response:** It is understood the tree removal will be completed prior to construction of the proposed building, which is a reasonable time frame for tree removal.

## Security for Permit Compliance

Subsection 4.610.00 (.06) C.

**F5. Criterion:** "Whenever an application for a Type B, C or D Tree Removal Permit is granted, the reviewing authority shall:" "Require the Type C permit grantee to file with the City a cash or corporate surety bond or irrevocable bank letter of credit in an amount determined necessary by the City to ensure compliance with Tree Removal Permit conditions and this Chapter.

1. This requirement may be waived by the Planning Director if the tree removal must be completed before a plat is recorded, and the applicant has complied with WC 4.264(1) of this Code."

**Response:** No bond is anticipated to be required to ensure compliance with the tree removal plan as a bond is required for overall landscaping.

Tree Removal Standards  
Subsection 4.610.10 (.01)

**F6. Criteria:** “Except where an application is exempt, or where otherwise noted, the following standards shall govern the review of an application for a Type A, B, C or D Tree Removal Permit:” Listed A. through J.

**Response:** The standards of this subsection are met as follows:

- **Standard for the Significant Resource Overlay Zone:** The proposed tree removal is not within the Significant Resource Overlay Zone.
- **Preservation and Conservation:** The applicant has taken tree preservation into consideration. Given the location of the trees in groves, where individual trees are reliant upon surrounding trees and may pose a safety risk if preserved on an individual basis, most trees are proposed to be removed. Staff believes that trees 1, 7, 8, and 9, as shown on the applicant’s Tree Removal Plan in Exhibits B1 and B2, may not be affected by site construction, and have potential to be preserved. Condition of Approval PDF 3 ensures that the preservation of these trees is evaluated during construction.
- **Development Alternatives:** No significant wooded areas or trees would be preserved by design alternatives.
- **Land Clearing:** Land clearing is not proposed, and will not be a result of this development application.
- **Residential Development:** The proposed activity does not involve residential development, therefore this criteria does not apply.
- **Compliance with Statutes and Ordinances:** The necessary tree replacement and protection is planned according to the requirements of tree preservation and protection ordinance.
- **Relocation or Replacement:** The applicant proposes to plant 45 trees as replacement for the 44 proposed for removal.
- **Limitation:** Tree removal is limited to where it is necessary for construction or to address nuisances or where the health of the trees warrants removal.
- **Additional Standards:** A tree survey has been provided, and no utilities are proposed to be located where they would cause adverse environmental consequences.

Review Process  
Subsection 4.610.40 (.01)

**F7. Criteria:** “Approval to remove any trees on property as part of a site development application may be granted in a Type C permit. A Type C permit application shall be reviewed by the standards of this subchapter and all applicable review criteria of Chapter 4. Application of the standards of this section shall not result in a reduction of square footage or loss of density, but may require an applicant to modify plans to allow for buildings of greater height. If an applicant proposes to remove trees and submits a landscaping plan as part of a site development application, an application for a Tree



Removal Permit shall be included. The Tree Removal Permit application will be reviewed in the Stage II development review process, and any plan changes made that affect trees after Stage II review of a development application shall be subject to review by DRB. Where mitigation is required for tree removal, such mitigation may be considered as part of the landscaping requirements as set forth in this Chapter. Tree removal shall not commence until approval of the required Stage II application and the expiration of the appeal period following that decision. If a decision approving a Type C permit is appealed, no trees shall be removed until the appeal has been settled."

**Response:** The plan is being reviewed concurrently with the Stage II Final Plan.

#### Tree Maintenance and Protection Plan Section 4.610.40 (.02)

**F8. Criteria:** "The applicant must provide ten copies of a Tree Maintenance and Protection Plan completed by an arborist that contains the following information:" Listed A. 1. through A. 7.

**Response:** The applicant has submitted the necessary copies of a Tree Maintenance and Protection Plan as shown in Exhibit B1.

### Replacement and Mitigation

#### Tree Replacement Requirement Subsection 4.620.00 (.01)

**F9. Criterion:** "A Type B or C Tree Removal Permit grantee shall replace or relocate each removed tree having six (6) inches or greater d.b.h. within one year of removal."

**Response:** Forty-four trees are proposed for removal; 45 trees are proposed to be planted, exceeding a one to one ratio.

#### Basis for Determining Replacement Subsection 4.620.00 (.02)

**F10. Criterion:** "The permit grantee shall replace removed trees on a basis of one (1) tree replanted for each tree removed. All replacement trees must measure two inches (2") or more in diameter."

**Response:** Forty-four trees are proposed for removal; 45 trees are proposed to be planted, exceeding a one to one ratio. Trees will meet the minimum caliper requirement or will be required to by Condition of Approval PDF 4.

#### Replacement Tree Requirements Subsection 4.620.00 (.03)

**F11. Criteria:** "A mitigation or replacement tree plan shall be reviewed by the City prior to planting and according to the standards of this subsection.

A. Replacement trees shall have shade potential or other characteristics comparable to the removed trees, shall be appropriately chosen for the site from an approved tree

species list supplied by the City, and shall be state Department of Agriculture Nursery Grade No. 1 or better.

B. Replacement trees must be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date.

C. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced.

D. Diversity of tree species shall be encouraged where trees will be replaced, and diversity of species shall also be maintained where essential to preserving a wooded area or habitat."

**Response:** Condition of Approval PDF 5 ensures the relevant requirements are met.

### Replacement Tree Stock Requirements

Subsection 4.620.00 (.04)

**F12. Criterion:** "All trees to be planted shall consist of nursery stock that meets requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade."

**Response:** The planting notes on the applicant's sheet L1 in Exhibit B2 indicates the appropriate quality.

### Replacement Trees Locations

Subsection 4.620.00 (.05) A.

**F13. Criterion:** "The City shall review tree relocation or replacement plans in order to provide optimum enhancement, preservation and protection of wooded areas. To the extent feasible and desirable, trees shall be relocated or replaced on-site and within the same general area as trees removed."

**Response:** The applicant proposes to mitigate for all removed trees on site and in the appropriate locations for the proposed development.

## Protection of Preserved Trees

### Tree Protection During Construction

Section 4.620.10

**F14. Criteria:** "Where tree protection is required by a condition of development under Chapter 4 or by a Tree Maintenance and Protection Plan approved under this subchapter, the following standards apply:" Listed A. through D.

**Response:** Condition of Approval PDF 6 assures the applicable requirements of this Section will be met.

## Engineering Conditions and Requirements for Proposed Development

**From:** Steve Adams, PE Development Engineering Manager  
**To:** Kim Rybold, AICP  
**Date:** August 15, 2017  
**Proposal:** Marion Carpets

### Engineering Division Conditions:

Request D: DB17-0002 Stage II Final Plan

<b>PFA 1.</b>	Public Works Plans and Public Improvements shall conform to the "Public Works Plan Submittal Requirements and Other Engineering Requirements" in Exhibit C1.
<b>PFA 2.</b>	Adjacent to the proposed development Boones Ferry Road has not been fully improved to City Standards. Sufficient right-of-way to accommodate full street improvements was provided with a partition of the site in March 2017. Applicant shall complete half-street improvements to their frontage along Boones Ferry Road in conformance with the Public Works Standards and detail RD-1025. Applicant shall coordinate work with the City of Wilsonville's street maintenance program.
<b>PFA 3.</b>	With the half-street improvements to Boones Ferry Road Applicant shall be required to extend the City's 8-inch water main under Boones Ferry Road from its current terminus east of the southerly property line to approximately 100 feet north of the northern property line tying into existing City water systems.
<b>PFA 4.</b>	Applicant shall obtain sanitary sewer service by constructing a lateral service line to the existing sanitary sewer manhole located approximately 25 feet northeast of the site.
<b>PFA 5.</b>	Stormwater shall be collected, treated and detained per Public Works Standards. There is an existing storm area drain located near the south property line. Applicant shall extend the public storm pipe to tie into a new curb inlet. Site storm facilities shall tie into this new curb inlet.
<b>PFA 6.</b>	City Engineering accepts the clear drive aisle length of 18 feet from back of sidewalk as shown on plans dated 6-27-17 even though this length does not conform to Public Works Standards Detail RD-1105 due to the configuration of the drive aisle with the adjacent fueling station pavement.
<b>PFA 7.</b>	A few early AutoCAD drawings showed trucks backing up onto Boones Ferry Road. This is not allowed. All truck backup movements shall be constrained to on site.



Exhibit C1  
Public Works Plan Submittal Requirements  
and Other Engineering Requirements

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1. All construction or improvements to public works facilities shall be in conformance to the City of Wilsonville Public Works Standards - 2015.
2. Applicant shall submit insurance requirements to the City of Wilsonville in the following amounts:

<b>Coverage</b> ( <i>Aggregate, accept where noted</i> )	<b>Limit</b>
<b>Commercial General Liability:</b>	
▪ General Aggregate (per project)	\$3,000,000
▪ General Aggregate (per occurrence)	\$2,000,000
▪ Fire Damage (any one fire)	\$50,000
▪ Medical Expense (any one person)	\$10,000
<b>Business Automobile Liability Insurance:</b>	
▪ Each Occurrence	\$1,000,000
▪ Aggregate	\$2,000,000
<b>Workers Compensation Insurance</b>	<b>\$500,000</b>

3. No construction of, or connection to, any existing or proposed public utility/improvements will be permitted until all plans are approved by Staff, all fees have been paid, all necessary permits, right-of-way and easements have been obtained and Staff is notified a minimum of 24 hours in advance.
4. All public utility/improvement plans submitted for review shall be based upon a 22" x 34" format and shall be prepared in accordance with the City of Wilsonville Public Work's Standards.
5. Plans submitted for review shall meet the following general criteria:
  - a. Utility improvements that shall be maintained by the public and are not contained within a public right-of-way shall be provided a maintenance access acceptable to the City. The public utility improvements shall be centered in a minimum 15-ft. wide public easement for single utilities and a minimum 20-ft wide public easement for two parallel utilities and shall be conveyed to the City on its dedication forms.
  - b. Design of any public utility improvements shall be approved at the time of the issuance of a Public Works Permit. Private utility improvements are subject to review and approval by the City Building Department.
  - c. In the plan set for the PW Permit, existing utilities and features, and proposed new private utilities shall be shown in a lighter, grey print. Proposed public improvements shall be shown in bolder, black print.

- d. All elevations on design plans and record drawings shall be based on NAVD 88 Datum.
  - e. All proposed on and off-site public/private utility improvements shall comply with the State of Oregon and the City of Wilsonville requirements and any other applicable codes.
  - f. Design plans shall identify locations for street lighting, gas service, power lines, telephone poles, cable television, mailboxes and any other public or private utility within the general construction area.
  - g. As per City of Wilsonville Ordinance No. 615, all new gas, telephone, cable, fiber-optic and electric improvements etc. shall be installed underground. Existing overhead utilities shall be undergrounded wherever reasonably possible.
  - h. Any final site landscaping and signing shall not impede any proposed or existing driveway or interior maneuvering sight distance.
  - i. Erosion Control Plan that conforms to City of Wilsonville Ordinance No. 482.
  - j. Existing/proposed right-of-way, easements and adjacent driveways shall be identified.
  - k. All engineering plans shall be printed to PDF, combined to a single file, stamped and digitally signed by a Professional Engineer registered in the State of Oregon.
  - l. All plans submitted for review shall be in sets of a digitally signed PDF and three printed sets.
6. Submit plans in the following general format and order for all public works construction to be maintained by the City:
- a. Cover sheet
  - b. City of Wilsonville construction note sheet
  - c. General construction note sheet
  - d. Existing conditions plan.
  - e. Erosion control and tree protection plan.
  - f. Site plan. Include property line boundaries, water quality pond boundaries, sidewalk improvements, right-of-way (existing/proposed), easements (existing/proposed), and sidewalk and road connections to adjoining properties.
  - g. Grading plan, with 1-foot contours.
  - h. Composite utility plan; identify storm, sanitary, and water lines; identify storm and sanitary manholes.
  - i. Detailed plans; show plan view and either profile view or provide i.e.'s at all utility crossings; include laterals in profile view or provide table with i.e.'s at crossings; vertical scale 1"= 5', horizontal scale 1"= 20' or 1"= 30'.
  - j. Street plans.
  - k. Storm sewer/drainage plans; number all lines, manholes, catch basins, and cleanouts for easier reference
  - l. Water and sanitary sewer plans; plan; number all lines, manholes, and cleanouts for easier reference.
  - m. Detailed plan for storm water detention facility (both plan and profile views), including water quality orifice diameter and manhole rim elevations. Provide detail of inlet structure and energy dissipation device. Provide details of drain inlets, structures, and

- piping for outfall structure. Note that although storm water detention facilities are typically privately maintained they will be inspected by engineering, and the plans must be part of the Public Works Permit set.
- n. Detailed plan for water quality facility (both plan and profile views). Note that although storm water quality facilities are typically privately maintained they will be inspected by Natural Resources, and the plans must be part of the Public Works Permit set.
  - o. Composite franchise utility plan.
  - p. City of Wilsonville detail drawings.
  - q. Illumination plan.
  - r. Striping and signage plan.
  - s. Landscape plan.
7. Design engineer shall coordinate with the City in numbering the sanitary and stormwater sewer systems to reflect the City's numbering system. Video testing and sanitary manhole testing will refer to City's numbering system.
  8. The applicant shall install, operate and maintain adequate erosion control measures in conformance with the standards adopted by the City of Wilsonville Ordinance No. 482 during the construction of any public/private utility and building improvements until such time as approved permanent vegetative materials have been installed.
  9. Applicant shall work with City Engineering before disturbing any soil on the respective site. If 5 or more acres of the site will be disturbed applicant shall obtain a 1200-C permit from the Oregon Department of Environmental Quality. If 1 to less than 5 acres of the site will be disturbed a 1200-CN permit from the City of Wilsonville is required.
  10. The applicant shall be in conformance with all stormwater and flow control requirements for the proposed development per the Public Works Standards.
  11. A storm water analysis prepared by a Professional Engineer registered in the State of Oregon shall be submitted for review and approval by the City.
  12. The applicant shall be in conformance with all water quality requirements for the proposed development per the Public Works Standards. If a mechanical water quality system is used, prior to City acceptance of the project the applicant shall provide a letter from the system manufacturer stating that the system was installed per specifications and is functioning as designed.
  13. Storm water quality facilities shall have approved landscape planted and/or some other erosion control method installed and approved by the City of Wilsonville prior to streets and/or alleys being paved.
  14. The applicant shall contact the Oregon Water Resources Department and inform them of any existing wells located on the subject site. Any existing well shall be limited to irrigation purposes only. Proper separation, in conformance with applicable State standards, shall be

maintained between irrigation systems, public water systems, and public sanitary systems. Should the project abandon any existing wells, they shall be properly abandoned in conformance with State standards.

15. All survey monuments on the subject site, or that may be subject to disturbance within the construction area, or the construction of any off-site improvements shall be adequately referenced and protected prior to commencement of any construction activity. If the survey monuments are disturbed, moved, relocated or destroyed as a result of any construction, the project shall, at its cost, retain the services of a registered professional land surveyor in the State of Oregon to restore the monument to its original condition and file the necessary surveys as required by Oregon State law. A copy of any recorded survey shall be submitted to Staff.
16. Sidewalks, crosswalks and pedestrian linkages in the public right-of-way shall be in compliance with the requirements of the U.S. Access Board.
17. No surcharging of sanitary or storm water manholes is allowed.
18. The project shall connect to an existing manhole or install a manhole at each connection point to the public storm system and sanitary sewer system.
19. A City approved energy dissipation device shall be installed at all proposed storm system outfalls. Storm outfall facilities shall be designed and constructed in conformance with the Public Works Standards.
20. The applicant shall provide a 'stamped' engineering plan and supporting information that shows the proposed street light locations meet the appropriate AASHTO lighting standards for all proposed streets and pedestrian alleyways.
21. All required pavement markings, in conformance with the Transportation Systems Plan and the Bike and Pedestrian Master Plan, shall be completed in conjunction with any conditioned street improvements.
22. Street and traffic signs shall have a hi-intensity prismatic finish meeting ASTM 4956 Spec Type 4 standards.
23. The applicant shall provide adequate sight distance at all project driveways by driveway placement or vegetation control. Specific designs to be submitted and approved by the City Engineer. Coordinate and align proposed driveways with driveways on the opposite side of the proposed project site.
24. The applicant shall provide adequate sight distance at all project street intersections, alley intersections and commercial driveways by properly designing intersection alignments, establishing set-backs, driveway placement and/or vegetation control. Coordinate and align proposed streets, alleys and commercial driveways with existing streets, alleys and

commercial driveways located on the opposite side of the proposed project site existing roadways. Specific designs shall be approved by a Professional Engineer registered in the State of Oregon. As part of project acceptance by the City the Applicant shall have the sight distance at all project intersections, alley intersections and commercial driveways verified and approved by a Professional Engineer registered in the State of Oregon, with the approval(s) submitted to the City (on City approved forms).

25. Access requirements, including sight distance, shall conform to the City's Transportation Systems Plan (TSP) or as approved by the City Engineer. Landscaping plantings shall be low enough to provide adequate sight distance at all street intersections and alley/street intersections.
26. Applicant shall design interior streets and alleys to meet specifications of Tualatin Valley Fire & Rescue and Allied Waste Management (United Disposal) for access and use of their vehicles.
27. The applicant shall provide the City with a Stormwater Maintenance and Access Easement (on City approved forms) for City inspection of those portions of the storm system to be privately maintained. Stormwater or rainwater LID facilities may be located within the public right-of-way upon approval of the City Engineer. Applicant shall maintain all LID storm water components and private conventional storm water facilities; maintenance shall transfer to the respective homeowners association when it is formed.
28. The applicant shall "loop" proposed waterlines by connecting to the existing City waterlines where applicable.
29. Applicant shall provide a minimum 6-foot Public Utility Easement on lot frontages to all public right-of-ways. An 8-foot PUE shall be provided along Collectors. A 10-ft PUE shall be provided along Minor and Major Arterials.
30. For any new public easements created with the project the Applicant shall be required to produce the specific survey exhibits establishing the easement and shall provide the City with the appropriate Easement document (on City approved forms).
31. Mylar Record Drawings:

At the completion of the installation of any required public improvements, and before a 'punch list' inspection is scheduled, the Engineer shall perform a record survey. Said survey shall be the basis for the preparation of 'record drawings' which will serve as the physical record of those changes made to the plans and/or specifications, originally approved by Staff, that occurred during construction. Using the record survey as a guide, the appropriate changes will be made to the construction plans and/or specifications and a complete revised 'set' shall be submitted. The 'set' shall consist of drawings on 3 mil. Mylar and an electronic copy in AutoCAD, current version, and a digitally signed PDF.



# Natural Resource Findings, Conditions, and Requirements for Proposed Development

**From:** Kerry Rappold, Natural Resources Program Manager  
**To:** Kimberly Rybold, Associate Planner  
**Date:** August 11, 2017  
**Proposal:** DB17-0002 – Marion’s Carpets

## Natural Resources Division Conditions:

### All Requests

<b>NR 1.</b> Natural Resource Division Requirements and Advisories listed in Exhibit C2 apply to the proposed development.
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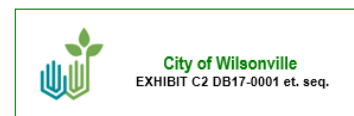


Exhibit C2  
Natural Resources Findings & Requirements

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Findings for DB17-0001 through DB 17-0006

Stormwater Management Requirements

1. Provide a drainage report, including the BMP Sizing Tool report, consistent with the requirements of the 2015 Public Works Standards.
2. Provide profiles, plan views, landscape information, and specifications for the proposed stormwater facilities consistent with the requirements of the 2015 Public Works Standards.
3. Pursuant to the 2015 Public Works Standards, the applicant shall submit a maintenance plan (including the City's stormwater maintenance and access easement) for the proposed stormwater facilities prior to approval for occupancy of the associated development.
4. Pursuant to the 2015 Public Works Standards, access shall be provided to all areas of the proposed stormwater facilities. At a minimum, at least one access shall be provided for maintenance and inspection.

Other Requirements

5. The applicant shall comply with all applicable state and federal requirements for the proposed construction activities (e.g., DEQ NPDES #1200–CN permit).

## Building Conditions, Requirements, & Advisories for Proposed Development

**Date:** 8/11/17  
**From:** Don Walters, Plans Examiner, Building Division  
**To:** Kim Rybold, AICP, Associate Planner  
**Proposal:** Marion's Carpet Warehouse  
**Case File:** DB17-0004

### Building Division Conditions:

<b>BD 1.</b>	<b>Backflow Location.</b> It is recommended - <i>not required</i> - that fire line backflow devices be located inside of the building being served and not in an underground vault. This eliminates the continuing maintenance problems with sump pumps and valve monitoring, and saves the project the cost of a vault installation, which can run \$10,000. Where the backflow device is placed in a vault a public utility waterline easement will be required that extends to the upstream edge of the vault. Without a vault the waterline easement will extend to the exterior wall of the building.
<b>BD 2.</b>	<b>Fire-Flow Requirements.</b> Fire calcs shall be submitted as part of the building permit application. Required fire-flow shall be figured using the methodology of the 2014 OFC Section B105. Tualatin Valley Fire & Rescue does not adapt the Occupancy Hazards Modifiers in sections B105.4 and B105.4.1. See the TVF&R <i>New Construction: Policy Intent Guide</i> .
<b>BD 3.</b>	<b>Fire Department Review.</b> The adequacy of the existing fire hydrants, the location and number of new hydrants, the proposed FDC location, any required No Parking Signage, and other fire department items require approval of TVF&R Deputy Fire Marshal Jason Arn. (Ph.503.259.1510) To facilitate that review it is recommended that before submittal for permits to the Engineering or Building Division, a site plan indicating all hydrants within 600 feet of the proposed building be submitted to Deputy Arn for review.





# MARIONS CARPETS WAREHOUSE

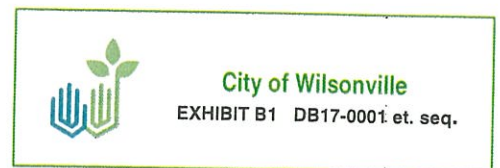
**28855 SW BOONS FERRY ROAD WILSONVILLE, OR**

Design review application paperwork submittal

Included: Narrative  
Reduced Plan Set  
Arborist Report  
Geotechnical Report  
Sign Plan  
Trash Service Approval Email  
Lighting Specifications

Owner:  
Carl Skoro  
1635 SE Grand  
Portland, OR 97214  
503.239.0528

Architect:  
Bob Schatz  
2118 SE Division Street  
Portland, OR 97202  
503.235.8585



# CITY OF WILSONVILLE

29799 SW Town Center Loop East  
Wilsonville, OR 97070  
Phone: 503.682.4960  
Fax: 503.682.7025

Web: [www.ci.wilsonville.or.us](http://www.ci.wilsonville.or.us)

Pre-Application meeting date:

## Planning Division Development Permit Application

Final action on development application or zone change is required within 120 days in accordance with provisions of ORS 227.175

A pre application conference is normally required prior to submittal of an application. Please visit the City's website for submittal requirements

Incomplete applications will not be scheduled for public hearing until all of the required materials are submitted.

### TO BE COMPLETED BY APPLICANT:

Please PRINT legibly

#### Applicant:

ALLUSA ARCHITECTURE : BOB SCHATZ

Address: 2118 SE DIVISION ST PORTLAND

Phone: 503 235 8585

Fax: \_\_\_\_\_

E-mail: BOB@ALLUSAARCHITECTURE.COM

#### Authorized Representative:

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

#### Property Owner:

MEADOWS 146, LLC

Address: 9760 SW FREEMAN DRIVE  
WILSONVILLE, OR 97070

Phone: 503.550.9877

Fax: 503 682.6499

E-mail: JDETTWILER@SSIWORLD.COM

#### Property Owner's Signature:

Toija J. Baultier

Printed Name: Toija J. Baultier Date: 2.14.17

#### Applicant's Signature (if different from Property Owner):

BOB SCHATZ

Printed Name: BOB SCHATZ Date: \_\_\_\_\_

#### Site Location and Description:

Project Address if Available: 28855 SW BOONJ FERRY ROAD Suite/Unit \_\_\_\_\_

Project Location: \_\_\_\_\_

Tax Map #(s): \_\_\_\_\_ Tax Lot #(s): \_\_\_\_\_ County:  Washington  Clackamas

#### Request:

Project Type: Class I  Class II  Class III

Residential  Commercial  Industrial  Other (describe below)

#### Application Type:

- |  |   |  |   |
|--|---|--|---|
| <input type="checkbox"/> Annexation                  | <input type="checkbox"/> Appeal                       | <input type="checkbox"/> Comp Plan Map Amend | <input type="checkbox"/> Conditional Use              |
| <input type="checkbox"/> Final Plat                  | <input type="checkbox"/> Major Partition              | <input type="checkbox"/> Minor Partition     | <input type="checkbox"/> Parks Plan Review            |
| <input type="checkbox"/> Plan Amendment              | <input type="checkbox"/> Planned Development          | <input type="checkbox"/> Preliminary Plat    | <input type="checkbox"/> Request to Modify Conditions |
| <input type="checkbox"/> Request for Special Meeting | <input type="checkbox"/> Request for Time Extension   | <input type="checkbox"/> Signs               | <input type="checkbox"/> Site Design Review           |
| <input type="checkbox"/> SROZ/SRIR Review            | <input type="checkbox"/> Staff Interpretation         | <input type="checkbox"/> Stage I Master Plan | <input type="checkbox"/> Stage II Final Plan          |
| <input type="checkbox"/> Type C Tree Removal Plan    | <input type="checkbox"/> Tree Removal Permit (B or C) | <input type="checkbox"/> Temporary Use       | <input type="checkbox"/> Variance                     |
| <input type="checkbox"/> Villebois SAP               | <input type="checkbox"/> Villebois PDP                | <input type="checkbox"/> Villebois PDP       | <input type="checkbox"/> Water                        |
| <input type="checkbox"/> Zone Map Amendment          | <input type="checkbox"/> Other                        |  |   |

RECEIVED  
FEB 15 2017

BY: \_\_\_\_\_



# **Narrative**

**Applicable Code Sections.**

Section 4.110	Zones
Section 4.135	Planned Development Industrial Zone (PDI)
Section 4.140	Planned Development Regulations
Section 4.154	On-site Pedestrian Access and Circulation
Section 4.155	Parking, Loading, and Bicycle Parking
Sections 4.156.01 through 4.156.11	Sign Regulations
Section 4.167	Access, Ingress, and Egress
Section 4.171	Protection of Natural Features and Other Resources
Section 4.175	Public Safety and Crime Prevention
Section 4.176	Landscaping, Screening, and Buffering
Section 4.177	Street Improvement Standards
Section 4.179	Mixed Solid Waste and Recyclables Storage
Sections 4.199.20 through 4.199.60	Outdoor Lighting
Sections 4.200 through 4.290	Land Divisions
Sections 4.300 through 4.320	Underground Utilities
Sections 4.400 through 4.440 as applicable	Site Design Review
Sections 4.600-4.640.20	Tree Preservation and Protection

**4.110 Zoning – Zones.**

E. Planned Development Industrial, which shall be designated "PDI."

*Response: The property at 28855 SW Boons Ferry Road, Wilsonville is located in a PDI Zone*

**4.118 Standards applying to all Planned Development Zones**

(.03) A. The board may, in order to implement the purposes and objectives of Section 4.140, and based on finding of fact supported by the record may: 3. Height and yard requirements. We are asking for an adjustment to the side and rear yard.

**4.135 PDI – Planned Development Zone**

(.03) Uses that are typically permitted:

B. Storage of wholesale distribution of agricultural and other bulk products provided that dust and odors are effectively contained within the site. *This project is for wholesale distribution of carpet AKA: "bulk products".*

O. Any use allowed in a PDC Zone, subject to the following limitations:

2. Office Complex Use (as defined in Section 4.001) shall not exceed 30% of total floor area within a project site.

*Response: The office use in this structure takes up 3.7% of the floor area.*

DESIGN REVIEW NARRATIVE

Marion's Carpet Warehouse - Wilsonville

*Total Building Area = 27,366 sf*

*Office Space (B occupancy) = 1,000 SF*

3. Retail uses, not to exceed 5000 square feet of indoor and outdoor sales, service or inventory storage area for a single building and 20,000 square feet of indoor and outdoor sales, service or inventory storage area for multiple buildings. *Response: The indoor retail area in this structure takes up 3,500 SF of floor area. There is not an exterior retail area.*

4. Combined uses under Subsections 4.135(.03)(O.)(1.) and (3.) shall not exceed a total of 5000 square feet of floor area in a single building  
*Response: Office + retail area = 4,500 sf.*

(.05) Performance Standards. The following performance standards apply to all industrial properties and sites within the PDI Zone, and are intended to minimize the potential adverse impacts of industrial activities on the general public and on other land uses or activities. They are not intended to prevent conflicts between different uses or activities that may occur on the same property.

- A. All uses and operations except storage, off-street parking, loading and unloading shall be confined, contained, and conducted wholly within completely enclosed buildings, unless outdoor activities have been approved as part of Stage II, Site Design or Administrative Review.  
*Response: All activities are indoor*
- B. Vibration: Every use shall be so operated that the ground vibration inherently and recurrently generated from equipment other than vehicles is not perceptible without instruments at any boundary line of the property on which the use is located. *Response: No vibrations are produced by the proposed/allowed uses*
- C. Emission of odorous gases or other odorous matter in quantities as detectable at any point on any boundary line of the property on which the use is located shall be prohibited. *Response: No detectable odors will be generated by the proposed/allowed uses.*
- D. Any open storage shall comply with the provisions of Section 4.176, and this Section. *Response: No open storage will be used by the proposed/allowed uses.*
- E. No building customarily used for night operation, such as a baker or bottling and distribution station, shall have any opening, other than stationary windows or required fire exits, within one hundred (100) feet of any residential district and any space used for loading or unloading commercial vehicles in connection with such an operation shall not be within one hundred (100) feet of any residential district. *Response: This*



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*project does not abut a residential development and will not be open for night operations.*

F. Heat and Glare:

1. Operations producing heat or glare shall be conducted entirely within an enclosed building. *Response: The propose/approved use does not produce heat or glare.*

2. Exterior lighting on private property shall be screened, baffled, or directed away from adjacent residential properties. This is not intended to apply to street lighting. *Response: This project is not adjacent to any residential properties also an electrical specification showing that lighting will not glare to neighboring properties is provided.*

G. Dangerous Substances: Any use which involves the presence, storage or handling of any explosive, nuclear waste product, or any other substance in a manner which would cause a health or safety hazard for any adjacent land use or site shall be prohibited. *Response: The propose/approved use does use any dangerous substances*

H. Liquid and Solid Wastes:

1. Any storage of wastes, which would attract insects or rodents or otherwise create a health hazard, shall be prohibited. *Response: The proposed use is warehousing of carpet and other flooring products and does not attract pests.*

2. Waste products which are stored outside shall be concealed from view from any property line by a sight-obscuring fence or planting as required in Section 4.176. *Response: Trash will be kept inside the structure. See site plan.*

3. No connection with any public sewer shall be made or maintained in violation of applicable City or State standards. *Response: The new public sewer will meet all of the applicable City and State standards and there are no existing sewer lines to review for uncompliance.*

4. No wastes conveyed shall be allowed to or permitted, caused to enter, or allowed to flow into any public sewer in violation of applicable City or State standards.

*Response: No trash waste will be allowed to flow into the public sewer system. The only things connected to the public sewer is three bathrooms, a lunch room sink and a mop sink.*

5. All drainage permitted to discharge into a street gutter, caused to enter or allowed to flow into any pond, lake, stream, or other natural water course shall be limited to surface waters or waters having similar characteristics as determined by the City,

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County, and State Department of Environmental Quality. *Response: no drainage will enter a pond, lake, stream or other natural watercourse as we don't have those features around our site. The only water entering the street drainage system is building roof storm water and parking lot storm water after it has traveled through a bio swale.*

6. All operations shall be conducted in conformance with the City's standards and ordinances applying to sanitary and storm sewer discharges. *Response: The public sewer will meet all of the applicable City and State standards.*

I. Noise: Noise generated by the use, with the exception of traffic noises from automobiles, trucks, and trains, shall not violate any applicable standards adopted by the Oregon Department of Environmental Quality and W.C. 6.204 governing noise control in the same or similar locations. *Response: The proposed/approved use does not generate excessive noise and will not violate the ODEQ standard. The use of the site is not manufacturing thus does not produce that type of noise.*

J. Electrical Disturbances. Except for electrical facilities wherein the City is preempted by other governmental entities, electrical disturbances generated by uses within the PDI zone which interfere with the normal operation of equipment or instruments within the PDI Zone are prohibited. Electrical disturbances which routinely cause interference with normal activity in abutting residential use areas are also prohibited. *Response: our operations are not high on the electrical use thus there will not be any electrical disturbances from our property.*

K. Discharge Standards: There shall be no emission of smoke, fallout, fly ash, dust, vapor, gases, or other forms of air pollution that may cause a nuisance or injury to human, plant, or animal life, or to property. *Response: There will no emission of smoke, fallout, fly ash, dust, vapor gasses or any other form of air pollution.*

L. Open burning is prohibited. *Response: There will not be any open burning on the property.*

M. Storage:

1. Outdoor storage must be maintained in an orderly manner at all times. *Response: There will not be any outdoor storage.*

N. Landscaping:

1. Unused property, or property designated for expansion or other future use, shall be landscaped and maintained as approved by the Development Review Board. Landscaping for unused property disturbed during construction shall include such things as plantings of ornamental shrubs, lawns, native plants, and mowed, seeded fieldgrass. *Response: We are maximizing the area of our property and fully landscaping and maintaining the landscaping on the entire property. There will not be any unused property.*

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(.06) Other Standards:

C. Front Yard Setback: Thirty (30) feet. Structures on corner or through lots shall observe the minimum front yard setback on both streets. Setbacks shall also be maintained from the planned rights-of-way shown on any adopted City street plan.  
*Response: The front yard setback is 60'*

D. Rear and Side Yard Setback: Thirty (30) feet. Structures on corner or through lots shall observe the minimum rear and side yard setbacks on both streets. Setbacks shall also be maintained from the planned rights-of-way shown on any adopted City street plan.  
*Response: We would like to request an adjustment to the side and rear yard setback to 10'-0". At the pre-application meeting it was indicated that this sort of adjustment is granted on a regular basis. The setback is 10' on 2-1/2 sides of the structure; the south side still has an area of 30' setback. The reason for asking for the adjustment is this being an industrial zone it would be better use for the owners of the property to maintain a 10 foot setback and allow the building to have better indoor space. The side and rear yard of the industrial building is not utilized with the business. The northern neighbor has a 10 foot side yard also and it is just the back of their building. The west neighbor has a small building for their lot size and mostly outdoor storage. Our south neighbor is a gas station with a very small building and the lot is mostly used for vehicle maneuvering to the gasoline pumps. We feel the adjustment to a 10 foot setback will not adversely affect two of our neighbors and we are matching the setback of the third neighbor.*

**Section 4.140. Planned Development Regulations**

(.01) Purpose

B It is the further purpose of the following section: We are proposing to reduce the side and rear yards of the development from 30 feet to 10 feet based on the following.

B1. We are looking to take advantage of the Architectural design and the Land use design of having our building closer to the rear and side property lines in order to better enhance the front of the building for better parking.

B2. In recognition of Population Density by deviating from the required 30 foot setback and giving that extra room at the front of the property we are considering both the openness of the front of the building and realizing that in this industrial neighborhood the spaces between buildings are likely to be not occupied. Lets preserve that open space between the building and the street.

B3. I believe that by reducing the side yard setback to 10 feet and thus designing a modern landscaping plan at the front of the property we are meeting current development standards which would consider not keeping any of these large trees.

B4. The side and rear setbacks of this warehouse building is not normally

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occupied thus placing ample space there is not taking advantage of the special features of the site. We are considering the design of the building to have the entrance on the eastern portion of the façade which gives a dominant presentation of the property from the street and freeway.

B5. We will not need to deviate from the maximum height allowed in our zone.

B6. We are proposing to develop where necessary to provide adequate space for the new business that will be occupying this location as well as giving room for adequate services and facilities which are available at the front of the building.

B7. We are proposing a warehouse space with a much smaller retail space. Although occupied by one tenant it is a bit of a mixed use as this section suggests.

B8. This is a great design to allow for flexibility for any future owners or occupants of this site. We have a smaller retail space up front with doors and windows and a larger warehouse space in the majority of the building. The building is designed with person access in the front and vehicle access on the side with ample room for trucks to park to unload.

(.02) Lot Qualification.

B. Any site designated for development in the Comprehensive Plan maybe developed as a Planned Development, provided that it is zoned "PD." All sites which are greater than two (2) acres in size, and designated in the Comprehensive Plan for commercial, residential, or industrial use shall be developed as Planned Developments, unless approved for other uses permitted by the Development Code. Smaller sites may also be developed through the City's PD procedures, provided that the location, size, lot configuration, topography, open space and natural vegetation of the site warrant such development. *Response: This property is currently being divided. The new site that this structure is located on is 44,793, which is just over 1 acre. The entire site is being developed; therefore a planned development is not applicable.*

#### **Section 4.154. On-site Pedestrian Access and Circulation.**

(.01) B. Standards. Development shall conform to all of the following standards:

1. Continuous Pathway System. A pedestrian pathway system shall extend throughout the development site and connect to adjacent sidewalks, and to all future phases of the development, as applicable. *Response: There is a continuous walkway throughout the site that connects all of the building exits, the parking and surrounding area to the sidewalk. The*

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*commonly used walkways will be concrete. The walkways along the side and back of the structure are to be used for emergency access only and those walkways will be landscaped pavers.*

2.
  - a. Pedestrian pathways are designed primarily for pedestrian safety and convenience, meaning they are free from hazards and provide a reasonably smooth and consistent surface. *Response: The pathways are made of concrete. They will be constructed as a smooth and consistent surface.*
  - b. The pathway is reasonably direct. A pathway is reasonably direct when it follows a route between destinations that does not involve a significant amount of unnecessary out-of-direction travel. *Response: The pathways are straight and direct...there is no unnecessary out of direction travel.*
  - c. The pathway connects to all primary building entrances and is consistent with the Americans with Disabilities Act (ADA) requirements. *Response: The pathways will meet the ADA standards with proper widths and slopes.*
  - d. All parking lots larger than three acres in size shall provide an internal bicycle and pedestrian pathway pursuant to Section 4.155(.03)(B).(3).(d.). *Response: N/A. Our parking lot is smaller than 3 acres.*
3. Vehicle/Pathway Separation. Except as required for crosswalks, per subsection 4, below, where a pathway abuts a driveway or street it shall be vertically or horizontally separated from the vehicular lane. For example, a pathway may be vertically raised six inches above the abutting travel lane, or horizontally separated by a row of bollards. *Response: our walkway will be crossing the parking lot and will be concrete within the asphalt parking lot.*
4. Crosswalks. Where a pathway crosses a parking area or driveway, it shall be clearly marked with contrasting paint or paving materials (e.g., pavers, light- color concrete inlay between asphalt, or similar contrast). *Response: There is a walkway at the front of the new building which is 6" higher than the asphalt parking lot. There is also a pathway that crosses the parking lot that will be flush with the asphalt parking lot and constructed of concrete.*
5. Pathway Width and Surface. Primary pathways shall be constructed of concrete, asphalt, brick/masonry pavers, or other durable surface, and not less than five (5) feet wide. Secondary pathways and pedestrian trails

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may have an alternative surface except as otherwise required by the ADA. *Response: The pathways/walkways are constructed of concrete and not less than 5'.*

6. All pathways shall be clearly marked with appropriate standard signs.  
*Response: Signage is not necessary to mark our pathways. It is visually obvious where the front door is because the steel entry awning is located above the front door and the walkway leads right to the front door.*

**Section 4.155. General Regulations - Parking, Loading and Bicycle Parking.**

(.02) General Provisions:

B. No area shall be considered a parking space unless it can be shown that the area is accessible and usable for that purpose, and has maneuvering area for the vehicles, as determined by the Planning Director. *Response: All of the parking spaces are in an accessible and usable area, see site plan.*

C. In cases of enlargement of a building or a change of use from that existing on the effective date of this Code, the number of parking spaces required shall be based on the additional floor area of the enlarged or additional building, or changed use, as set forth in this Section. Current development standards, including parking area landscaping and screening, shall apply only to the additional approved parking area. *Response: This is a new structure and the parking area was calculated specifically for the new areas. These are the calculations shown on the cover sheet:*

FOR WHOLESALE .3 MIN / 1,000 SQUARE FEET OF BUILDING  
FOR 22,866 SQUARE FEET OF WHOSALE + 1,000 SQUARE FEET OF OFFICE  
SPACE TO BE COUNTED AS WHOLESALE =  $23,866 = 7.2$  PARKING SPOTS

FOR RETAIL STORES  
4.1 PARKING SPOTS PER 1,000 SQUARE FEET OF BUILDING, THIS BUILDING  
WILL HAVE 3,500 SQUARE FEET OF RETAIL SO 14.4 PARKING SPOTS

PARKING REQUIREMENT TOTAL:  $7.2 + 14.4 = 21.6$  PARKING SPOTS = 22  
SPACES

D. In the event several uses occupy a single structure or parcel of land, the total requirement for off-street parking shall be the sum of the requirements of the several uses computed separately, except as modified by subsection "E," below. *Response: Each use was taken into consideration when determining parking spaces. See subsection C above.*

E. Owners of two (2) or more uses, structures, or parcels of land may utilize jointly the same parking area when the peak hours of operation do not overlap, provided satisfactory legal evidence is presented in the form of deeds, leases, or contracts using

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them. *Response: N/A.*

F. Off-street parking spaces existing prior to the effective date of this Code may be included in the amount necessary to meet the requirements in case of subsequent enlargement of the building or use to which such spaces are necessary. *Response: N/A All the used parking spaces are new.*

G. Off-Site Parking. Except for single-family dwellings, the vehicle parking spaces required by this Chapter may be located on another parcel of land.... *Response: N/A All of the new parking is located on THIS parcel.*

H. The conducting of any business activity shall not be permitted on the required parking spaces, unless a temporary use permit is approved pursuant to Section 4.163. *Response: All business activities will be preformed within the structure.*

I. Where the boundary of a parking lot adjoins or is within a residential district, such parking lot shall be screened by a sight-obscuring fence or planting. The screening shall be continuous along that boundary and shall be at least six (6) feet in height. *Response: N/A, this lot does is not adjacent to a residential district.*

J. Parking spaces along the boundaries of a parking lot shall be provided with a sturdy bumper guard or curb at least six (6) inches high and located far enough within the boundary to prevent any portion of a car within the lot from extending over the property line or interfering with required screening or sidewalks.

*Response: The parking lot is surrounded by a 6" curb or walkway.*

K. All areas used for parking and maneuvering of cars shall be surfaced with asphalt, concrete, or other surface, such as pervious materials (i. e. pavers, concrete, asphalt) that is found by the City's authorized representative to be suitable for the purpose. In all cases, suitable drainage, meeting standards set by the City's authorized representative, shall be provided. *Response: The parking lot will be surfaced with asphalt. We have a civil engineering plans showing the lot suitable for drainage.*

L. Artificial lighting which may be provided shall be so limited or deflected as not to shine into adjoining structures or into the eyes of passers-by. *Response: At the front of the building we are using can lights directed at the walking surface, lighting will be provided at the base of the columns to highlight the entry. LED lights are also provided on the elevation of the building for a wall wash. All of these lights are directed at the building, column or walking surface and none of which will shine onto adjoining structures or in the eyes of passers-by.*

M. Off-street parking requirements for types of uses and structures not specifically listed in this Code shall be determined by the Development Review Board if an application is pending before the Board. Otherwise, the requirements shall be specified by the Planning Director, based upon consideration of comparable uses. *Response: All of the uses are specified and utilized.*

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N. Up to forty percent (40%) of the off-street spaces may be compact car spaces as identified in Section 4.001 - "Definitions," and shall be appropriately identified.

*Response: All parking spaces are full sized.*

O. Where off-street parking areas are designed for motor vehicles to overhang beyond curbs, planting areas adjacent to said curbs shall be increased to a minimum of seven (7) feet in depth. This standard shall apply to a double row of parking, the net effect of which shall be to create a planted area that is a minimum of seven (7) feet in depth.

*Response: our offstreet parking areas are not designed to overhang beyond the curbs & planting areas. We also do not have double row parking spaces.*

#### (.03) Minimum and Maximum Off-Street Parking Requirements:

A. Parking and loading or delivery areas shall be designed with access and maneuvering area adequate to serve the functional needs of the site and shall:

1. Separate loading and delivery areas and circulation from customer and/or employee parking and pedestrian areas. Circulation patterns shall be clearly marked. *Response: A 12'x35' loading area is designated on the site plan outside of the garage doors.*
2. To the greatest extent possible, separate vehicle and pedestrian traffic. *Response: There are clearly designated pedestrian and vehicle areas. There is a walkway in front of the front doors and a walkway from the public sidewalk to the front door.*

B. Parking and loading or delivery areas shall be landscaped to minimize the visual dominance of the parking or loading area, as follows:

1. Landscaping of at least ten percent (10%) of the parking area designed to be screened from view from the public right-of-way and adjacent properties. This landscaping shall be considered to be part of the fifteen percent (15%) total landscaping required in Section 4.176.03 for the site development. *Response: The parking area is 7,320 sf (including the driving area). 10% is 732 Square feet. The landscaping area that is between the parking area the public sidewalk is 1,300 SF.*
2. Landscape tree planting areas shall be a minimum of eight (8) feet in width and length and spaced every eight (8) parking spaces or an equivalent aggregated amount.
  - a. Trees shall be planted in a ratio of one (1) tree per eight (8) parking spaces or fraction thereof, except in parking areas of more than two hundred (200) spaces where a ratio of one (1) tree per six (six) spaces shall be applied as noted in subsection (.03)(B.)(3.). A landscape design that includes trees planted in areas based on



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an aggregated number of parking spaces must provide all area calculations. *Response: We have 22 parking spaces. three trees are required. I have two trees between spots 17 and 18 and a third tree next to spot 19. There will also be trees along the whole drive isle.*

b. Except for trees planted for screening, all deciduous interior parking lot trees must be suitably sized, located, and maintained to provide a branching minimum of seven (7) feet clearance at maturity. *Response: The trees adjacent to the parking area and the walkways will be maintained to provide a branching min. of 7' clearance. See landscaping plan*

3. Due to their large amount of impervious surface, new development with parking areas of more than two hundred (200) spaces that are located in any zone, and that may be viewed from the public right of way, shall be landscaped to the following additional standards: *Response: N/A Our parking area only has 22 spaces.*

C. Off Street Parking shall be designed for safe and convenient access that meets ADA and ODOT standards. All parking areas which contain ten (10) or more parking spaces, shall for every fifty (50) standard spaces., provide one ADA- accessible parking space that is constructed to building code standards, Wilsonville Code 9.000. *Response: we have 22 spaces, one of which is an ADA accessible parking space.*

D. Where possible, parking areas shall be designed to connect with parking areas on adjacent sites so as to eliminate the necessity for any mode of travel of utilizing the public street for multiple accesses or cross movements. In addition, on-site parking shall be designed for efficient on-site circulation and parking. *Response: It doesn't make sense for this property to connect to adjacent parking areas although we do have a shared driveway with our south neighbor.*

E. In all multi-family dwelling developments, there shall be sufficient areas established to provide for parking and storage of motorcycles, mopeds and bicycles. *Response: N/A, this is not a multi-family development.*

F. On-street parking spaces, directly adjoining the frontage of and on the same side of the street as the subject property, may be counted towards meeting the minimum off-street parking standards. *Response: All counted parking will be on-site.*

G. Tables 5 shall be used to determine the minimum and maximum parking standards for various land uses. The minimum number of required parking spaces shown on Tables 5 shall be determined by rounding to the nearest whole parking space. For example, a use containing 500 square feet, in an area where the standard is one space for each 400 square feet of floor area, is required to provide one off-street parking space. If the same use contained more than 600 square feet, a second parking space would be required. Structured parking and on-street parking are exempted from the parking

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maximums in Table 5.

*Response: as indicated above, these are our parking calculations. They are also listed on the cover page:*

FOR WHOLESALE .3 MIN / 1,000 SQUARE FEET OF BUILDING  
FOR 22,866 SQUARE FEET OF WHOLESALE + 1,000 SQUARE FEET OF OFFICE  
SPACE TO BE COUNTED AS WHOLESALE =  $22,866 / 1,000 = 22.866 = 7.2$  PARKING SPOTS

FOR RETAIL STORES

4.1 PARKING SPOTS PER 1,000 SQUARE FEET OF BUILDING, THIS BUILDING  
WILL HAVE 3,500 SQUARE FEET OF RETAIL SO  $3,500 / 1,000 = 3.5$  PARKING SPOTS

PARKING REQUIREMENT TOTAL:  $7.2 + 14.4 = 21.6$  PARKING SPOTS = 22  
SPACES

H. Electrical Vehicle Charging Stations:

1. Parking spaces designed to accommodate and provide one or more electric vehicle charging stations on site may be counted towards meeting the minimum off-street parking standards. *Response: There will be no electrical vehicle charging stations on the property.*

I. Motorcycle parking:

1. Motorcycle parking may substitute for up to 5 spaces or 5 percent of required automobile parking, whichever is less. For every 4 motorcycle parking spaces provided, the automobile parking requirement is reduced by one space. *Response: We do not have any motorcycle spaces on our property.*

(.04) Bicycle Parking:

A. Required Bicycle Parking - General Provisions.

1. The required minimum number of bicycle parking spaces for each use category is shown in Table 5, Parking Standards.

*Response: (Our calculations are as follows)*

BICYCLE PARKING SPACES :

RETAIL =  $1 \text{ SPACE} / 4000 \text{ SF} = 3500 \text{ SF} = .875 \text{ SPACE FOR RETAIL}$   
WHOLESALE =  $1 \text{ SPACE PER } 20,000 \text{ SF} = 22,866 \text{ SF} = 1.14 \text{ SPACES}$   
OFFICE =  $1 / 5000 \text{ SF} = .02 \text{ SPACES}$   
 $1.144 + .875 + .02 = 2.04 \text{ BICYCLE PARKING SPACES} = 3 \text{ SPACES}$

B. Standards for Required Bicycle Parking

1. Each space must be at least 2 feet by 6 feet in area and be accessible without

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moving another bicycle. *Response: There are (3) 3'x6' bike parking spaces adjacent to the main walkway and they are flush to the building so bikes go sideways to the rack and there is no backing up space.*

2. An aisle at least 5 feet wide shall be maintained behind all required bicycle parking to allow room for bicycle maneuvering. Where the bicycle parking is adjacent to a sidewalk, the maneuvering area may extend into the right-of-way. *Response: the side of the bike is against the bike rack and therefore the back up space is not required.*

When bicycle parking is provided in racks, there must be enough space between the rack and any obstructions to use the space properly. *Response: The bike racks are placed appropriately for use.*

E. Bicycle lockers or racks, when provided, shall be securely anchored. *Response: The bike racks will be securely anchored, see details on page A1.0.*

F. Bicycle parking shall be located within 30 feet of the main entrance to the building or inside a building, in a location that is easily accessible for bicycles. For multi-tenant developments, with multiple business entrances, bicycle parking may be distributed on-site among more than one main entrance.

*Response: The exterior bike parking spaces are 40' from the main entrance & located directly on the walkway to the building. There is just not a good location within 30' of the main entrance that doesn't block windows, building features and access to the parking lot. The area we have chosen is convenient and in an obvious location. Although not required, we have provided interior bike parking spaces for the employees. The interior bike parking spaces are directly inside the employee entrance & within an accessible area.*

#### C. Long-term Bicycle Parking

1. Long-term bicycle parking provides employees, students, residents, commuters, and others who generally stay at a site for several hours a weather-protected place to park bicycles. *Response: No long-term bicycle parking spaces required although we are providing two inside the structure.*

2. For a proposed multi-family residential, retail, office, or institutional development, or for a park and ride or transit center, where six (6) or more bicycle parking spaces are required pursuant to Table 5, 50% of the bicycle parking shall be developed as long-term, secure spaces. Required long-term bicycle parking shall meet the following standards: *Response: 3 (short term) bike parking spaces are required therefore no long-term are required ...that said, there are two provided inside the structure and within sight of employees.*

### Section 4.156.01. Sign Regulations Purpose and Objectives

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*Response: We are required to apply for a Class III Sign Permit per (.06) E, below; we must meet the submission requirements for a Class II sign + any requested variances and wavers.*

D. Class II Sign Permit Submission Requirements: Application for a Class II Sign Permit shall include two (2) paper copies and one (1) electronic copy of the following in addition to all required fees:

1. Completed application form prescribed by the City and signed by the property owner or their authorized representative; *Response: provided*
2. Sign drawings or descriptions of all materials, sign area and dimensions used to calculate areas, lighting methods, and other details sufficient to judge the full scale of the signs and related improvements; *Response: provided*
3. Documentation of the lengths of building or tenant space facades used in calculating maximum allowed sign area; *Response: provided*
4. Drawings of all building facades on which signs are proposed indicating the areas of the facades on which signs will be allowed; *Response: provided*
5. Narrative describing the scope of the project, including written findings addressing all applicable review criteria, along with any other information showing how the proposed signage conforms with requirements for the applicable zone; *Response: provided*

E. Class II Sign Permit Review Criteria: Class II Sign Permits shall satisfy the sign regulations for the applicable zoning district and the Site Design Review Criteria in Sections 4.400 through 4.421, as well as the following criteria:

1. The proposed signage is compatible with developments or uses permitted in the zone in terms of design, materials used, color schemes, proportionality, and location, so that it does not interfere with or detract from the visual appearance of surrounding development; *Response: The design of this sign will not detract from the visual appearance of the surrounding development.*
2. The proposed signage will not create a nuisance or result in a significant reduction in the value or usefulness of surrounding development; and *Response: our signage will not result in the value or usefulness of the surrounding development.*
3. Special attention is paid to the interface between signs and other site elements including building architecture and landscaping, including trees.

*Response: Based on an email received, the original size of the pole sign has been modified to coordinate with the landscaping strip and driving isle adjacent to it.*

(.06) E. Class III Sign Permit. Sign permit requests shall be processed as a Class III

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Sign Permit when associated with new development, or redevelopment requiring DRB review, and not requiring a Master Sign Plan; when a sign permit request is associated with a waiver or non-administrative variance; or when the sign permit request involves one or more freestanding or ground mounted signs greater than eight (8) feet in height in a new location.

A. Class III Sign Permit Submission Requirements: Ten (10) paper and electronic copies of the submission requirements for Class II Sign Permits plus information on any requested waivers or variances in addition to all required fees.

*Response: No waivers or variances will be necessary*

B. Class III Sign Permit Review Criteria: The review criteria for Class II Sign Permits plus waiver or variance criteria when applicable. *Response: The Class II design criteria is provided although there will not be any waivers or variances.*

### **Section 4.156.03. Sign Measurement**

(.01) Sign Area:

A. Cabinet Signs and Similar: The area for signs enclosed by cabinet, frame, or other background (including lighted surface) not otherwise part of the architecture of a building or structure shall be the area of a shape drawn around the outer dimension of the cabinet, frame, or background.

1. If the cabinet, frame, or background is an irregular shape the signs perimeter shall be measured the same as an individual element sign under B. below.

*Response: Cabinet sizes are indicated graphically in the sign package included in this submittal. There are two cabinet signs, the first is a monogram M & two laurel leaves, which is 6.06 sf. The second cabinet sign is on the pole @ the property line. The size of the cabinet portion of the pole sign is 54 square feet.*

*Total Area of all Cabinet Signs: 60.06 sf*

B. Individual Element Signs: The area for signs constructed of individual elements (letters, figures, etc.) attached to a building wall or similar surface or structure shall be the summed area of up to three squares, rectangles, circles, or triangles drawn around all sign elements. *Response: Again, see the sign package included in this submittal. The following signs are signs with individual letter elements:*

*“MARION’S CARPETS” = 22.39 SF (x2) 44.78*

*“HARDWOODS” = 22.29 SF*

*“AREA RUGS” = 19.30*

*Total Area of all Signs with Individual Elements: 86.57 sf*

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C. Round or Three-Dimensional Signs: The area of a round or three-dimensional sign shall be the maximum surface area visible from any one location on the ground measured the same as A. above except if the maximum surface area is an irregular shape the signs perimeter shall be measured the same as an individual element sign under B. above. *Response: the letters do slightly protrude. Please see the sign package.*

D. Awning or Marquee Signs: *Response: There are no awning or marquee signs.*

E. Painted Wall Signs: *Response: There are no painted signs*

F. Temporary Signs: The area of temporary signs including banners, lawn signs, and rigid signs shall be calculated in the manner indicated in A. above. *Response: There are no temporary signs.*

G. Unless otherwise specified, the sign area of a two-sided sign, with two matching sides, shall be considered to be the area of one side. For example, the sign area of a two-sided sign having thirty-two (32) square feet per sign face shall be considered to be thirty-two (32) square feet, unless this code specifies otherwise. *Response: The pole sign is two sided, the area is shown above.*

#### (.02) Sign Height above Ground.

A. The height above ground of a freestanding or ground-mounted sign is measured from the average grade directly below the sign to the highest point of the sign or sign structure except as follows:

1. A freestanding or ground mounted sign on a man-made base, including a graded earth mound, shall be measured from the grade of the nearest pavement or top of any pavement curb to the highest point of the sign or sign structure. In all cases signs on a berm shall be allowed to be eight (8) feet in height from the top of the berm. *Response: The freestanding pole sign is being measured from the adjacent grade. The top of the sign is 20' from the adjacent grade & there is 13'-3" clearance below the sign.*

2. A freestanding or ground mounted sign placed below the elevation of the right-of-way it fronts shall be measured from the lowest point in the right-of-way along the frontage to the highest point of the sign. *Response: There are no signs placed below the elevation of the right of way.*

#### **Section 4.156.08. Sign Regulations in the PDC, PDI, and PF Zones.**

##### (.01) Freestanding and Ground Mounted Signs:

A. One freestanding or ground mounted sign is allowed for the first two-hundred (200) linear feet of site frontage. *Response: The site has 213 sf of street frontage... one*

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*freestanding sign is allowed*

B. The allowed height above ground of a freestanding or ground mounted sign is twenty (20) feet except as noted in 1-2 below. *Response: The freestanding sign will be 20' high.*

C. The maximum allowed area for each freestanding or ground-mounted sign is determined based on gross floor area and number of tenant spaces:

1. For frontages along streets other than those indicated in 2 below sign area allowed is calculated as follows:

a. The sign area allowed for signs pertaining to a single tenant:

*Gross Floor area in a Single Building = 26,000 sq. ft. or more*

*Maximum Allowed Sign Area = 64 sq. ft.*

*Response: The pole sign is 54 sf.*

D. Pole or sign support placement shall be installed in a full vertical position. *Response: The sign will be placed fully vertical.*

E. Freestanding and ground-mounted signs shall not extend into or above public rights-of-way, parking areas, or vehicle maneuvering areas. *Response: The sign is located fully on our property and not extending over the parking area.*

F. The location of free standing or ground-mounted signs located adjacent to or near the Public Right-of-Way shall be in compliance with the City's Public Works Standards for sight distance clearance. Prior to construction, the location of the sign shall be approved by the City of Wilsonville Engineering Division. *Response: during the permitting process I believe this will happen naturally.*

G. Freestanding and ground-mounted signs shall be designed to match or complement the architectural design of buildings on the site. *Response: The freestanding sign is designed to match the graphics on the structure and everything coordinates with the roman design of the structure.*

H. For freestanding and ground mounted signs greater than eight (8) feet in height, the width of the sign shall not exceed the height. *Response: our sign is 20' tall...the width is much less; see the graphics in the associated in the sign package.*

I. Along street frontages in the PDC-TC Zone and Old Town Overlay Zone monument style signs are required. *Response: N/A*

J. Freestanding and ground mounted signs shall be no further than fifteen (15) feet from

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the property line and no closer than two (2) feet from a sidewalk or other hard surface in the public right-of-way. *Response: The sign itself is over 2' from the sidewalk although it extends to the property line; the pole itself is also over 2' from the sidewalk.*

K. Except for those signs fronting Interstate 5, freestanding and ground mounted signs shall include the address number of associated buildings unless otherwise approved in writing by the City and the Fire District. *Response: This property IS along I-5 on SW Boons Ferry Road, just north of SW Barber Street. It IS indicated on the maps on page C-31, therefore an address number is not required on our pole sign.*

L. When a sign is designed based on the number of planned tenant spaces it shall remain a legal, conforming sign regardless of the change in the number of tenants or configuration of tenant spaces. *Response: There is only one tenant in this structure.*

#### (.02) Signs on Buildings.

A. Sign Eligible Facades: Building signs are allowed on a facade of a tenant space or single tenant building when one or more of the following criteria are met:

1. The facade has one or more entrances open to the general public; .  
*Response: There is one main entrance although the general public can use other entrances on the façade.*
2. The facade faces a lot line with frontage on a street or private drive with a cross section similar to a public street, and no other buildings on the same lot obstruct the view of the building facade from the street or private drive; or
3. The facade is adjacent to the primary parking area for the building or tenant.  
*Response: The façade is adjacent to the primary parking area for the building.*

#### B. Sign Area Allowed:

1. The sign area allowed for all building signs on a sign eligible façade is shown in the table below:

Linear Length of façade (Feet) greater than 72:

Sign Area Allowed: 36 sq. ft. plus 12 sq. ft. for each 24 linear feet or portion thereof greater than 72 up to a maximum of 200 sq. ft.

*Response: The total length of the façade is 171'. The sign area allowed is  $171 - 72 \text{ sf} = 99 \text{ sf}$ .  $99 / 24 = 4.125$  (round up to 5 = "portion thereof")  
 $5 \times 12 = 60 \text{ sf}$*



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$$36+60 = \underline{96 \text{ sf of signage allowed}}$$

*List of applicable Building Signs:*

*“MARION’S CARPETS” = 22.89 SF (x2) 45.78*

*“HARDWOODS” = 22.29 SF*

*“AREA RUGS” = 19.30*

*Monogram “M” = 6.06 sf*

*Total Area of all Signs with Individual Elements: 93.43 sf*

2. The sign area allowed for facades with a primary public entrance or with a frontage along a public street dominated by windows or glazing may be increased by transferring to the façade up to one half (1/2) the sign area allowed for adjacent facades up to fifty (50) square feet. In no case shall the allowed sign area exceed an area equal to the linear length of the façade. *Response: This isn't necessary. We meet the restrictions.*

3. The sign area allowed is increased as follows for signs at separate building entrances: *Response: There is one main building entrance.*

4. For businesses occupying multiple buildings in a campus setting, ... *Response: N/A*

5. If a façade otherwise not sign eligible faces a lot line with frontage on Interstate 5, the applicant can transfer sign area allowed from one (1) of the locations described in a. and b. below. In no case shall the allowed sign area exceed an area equal to the allowed sign area for a sign eligible façade of the same linear length.

a. The freestanding sign along the Interstate 5 frontage. This generally involves placing building signs on the subject façade in lieu of installing a freestanding sign.

b. Adjacent façade up to fifty (50) square feet, when a majority of the adjacent façade from which the sign area is being transferred is visible from Interstate 5.

*Response: The front façade is the one that is adjacent to I-5, therefore no frontage transfers will be requested.*

6. Calculating linear length of a façade for the purpose of determining maximum sign area allowed. For facades of a single tenant building the length the facade measured at the building line, except as noted in a. and b. below. For multi-tenant buildings the width of the façade of the tenant space shall be measured from the centerline of the party walls or the outer extent of the exterior wall at the building line, as applicable, except as

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noted in a. and b. below. Applicants shall provide the dimensions needed to calculate the length. Each tenant space or single occupant building shall not be considered to have more than five (5) total facades.

a. If a façade is curvilinear, stepped, or otherwise not a straight line, the façade shall be measured by drawing a straight line between the edges of the façade as shown in the figure below.

b. For an "L" shaped tenant space or single tenant building the longest leg of the interior of the "L" shall be basis for measuring the length of the L- shaped facade. Sign area allowed based on the longest leg can be distributed between legs.

*Response: The façade in which the majority of the signs are located was used to determine the 'façade length'. The length of the main façade is 171 sf.*

C. The length of individual tenant signs shall not exceed seventy-five(75) percent of the length of the facade of the tenant space. *Response: This building has one tenant & none of the signs are even close to 75% the length of the building.*

D. The height of building signs shall be within a definable sign band, fascia, or architectural feature and allow a definable space between the sign and the top and bottom of the sign band, fascia, or architectural feature. *Response: The signs that say "Marion's Carpet" are within the defined and detailed band across the front of the façade, the "M" emblem is directly in the center of the entryway. The 'secondary' signs that say "Area Rugs" & "Hardwoods" are set back from the "Marion's Carpet" signs, in a secondary area that is designated for the less prominent signage. All signage is adequately lit.*

E. Types of signs permitted on buildings include wall flat, fascia, projecting, blade, marquee and awning signs. Roof-top signs are prohibited. *Response: All of our proposed signs fall within the permitted guidelines.*

(.03) Additional signs. Notwithstanding the signs allowed based on the site in (.01) and (.02) above, the following signs may be permitted, subject to standards and conditions in this Code:

A. Directional Signs: In addition to exempt directional signs allowed under Subsection 4.156.05 (.02) C. freestanding or ground mounted directional signs six (6) square feet or less in area and four (4) feet or less in height: *Response: We are not providing directional signs*

B. Planned Development Signs. *Response: N/A*

C. Blade Signs. *Response: N/A there are no blade signs requested.*

D. Fuel or Service Station Price Signs: *Response: N/A*

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**Section 4.167. General Regulations - Access, Ingress and Egress.**

(.01) Each access onto streets or private drives shall be at defined points as approved by the City and shall be consistent with the public's health, safety and general welfare. Such defined points of access shall be approved at the time of issuance of a building permit if not previously determined in the development permit. *Response: The access onto the adjacent street, SW Boons Ferry road, will be shared through the existing driveway that accesses the adjacent gas station.*

**Section 4.171. General Regulations - Protection of Natural Features and Other Resources.**

(.02) General Terrain Preparation:

A. All developments shall be planned, designed, constructed and maintained with maximum regard to natural terrain features and topography, especially hillside areas, floodplains, and other significant landforms. *Response: Our site is relatively flat.*

B. All grading, filling and excavating done in connection with any development shall be in accordance with the Uniform Building Code. *Response: A civil engineer is designing the grading plan so that everything is to code.*

C. In addition to any permits required under the Uniform Building Code, all developments shall be planned, designed, constructed and maintained so as to:

1. Limit the extent of disturbance of soils and site by grading, excavation and other land alterations. *Response: The site is relatively flat although there will be minor grading for the parking area.*

2. Avoid substantial probabilities of: (1) accelerated erosion; (2) pollution, contamination, or siltation of lakes, rivers, streams and wetlands; (3) damage to vegetation; (4) injury to wildlife and fish habitats. *Response: There are no substantial probabilities of any negative affects on the above listed items.*

3. Minimize the removal of trees and other native vegetation that stabilize hillsides, retain moisture, reduce erosion, siltation and nutrient runoff, and preserve the natural scenic character. *Response: There are no hillsides that need to be stabilized or runoff type situations that need to have existing vegetation preserve. The current landscaping is more reflective of a forest than an industrial zoned parcel of land. All the vegetation will be removed from the site and all new landscaping will replace it and reflect the appropriate landscaping of the current zoning.*

(.03) Hillsides: All developments proposed on slopes greater than 25% shall be limited to .... *Response: The site slopes about 2.5%*

(.04) Trees and Wooded Areas.

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A. All developments shall be planned, designed, constructed and maintained so that:

1. Existing vegetation is not disturbed, injured, or removed prior to site development and prior to an approved plan for circulation, parking and structure location.

2. Existing wooded areas, significant clumps/groves of trees and vegetation, and all trees with a diameter at breast height of six inches or greater shall be incorporated into the development plan and protected wherever feasible.

*Response: as stated above; There are a lot of trees on the property, all of which will need to be removed. These extremely large trees are way larger than will be feasible for the existing zoning to remain. Please see the landscape plan.*

3. Existing trees are preserved within any right-of-way when such trees are suitably located, healthy, and when approved grading allows. *Response: unfortunately the one tree within the right of way cannot be saved because it is where the new sidewalk will be located. Also these large trees don't survive very well when they are isolated from their grove of trees.*

B. Trees and woodland areas to be retained shall be protected during site preparation and construction according to City Public Works design specifications, by:

1. Avoiding disturbance of the roots by grading and/or compacting activity.

*Response: All the existing landscaping will be removed in order to re-design the site to meet current zoning criteria.*

2. Providing for drainage and water and air filtration to the roots of trees which will be covered with impermeable surfaces. *Response: none of the trees will be preserved.*

3. Requiring, if necessary, the advisory expertise of a registered arborist/horticulturist both during and after site preparation. *Response: An arborist is involved in this project, see attached report.*

4. Requiring, if necessary, a special maintenance, management program to insure survival of specific woodland areas of specimen trees or individual heritage status trees. *Response: See the arborist report, none of the existing trees will remain on the property.*

(.05) High Voltage Powerline Easements and Rights of Way and Petroleum Pipeline Easements:

A. Due to the restrictions placed on these lands, no residential structures shall be allowed within high voltage powerline easements and rights of way and petroleum pipeline easements, and any development, particularly residential, adjacent to high voltage powerline easements and rights of way and petroleum pipeline easements

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shall be carefully reviewed.

B. Any proposed non-residential development within high voltage powerline easements and rights of way and petroleum pipeline easements shall be coordinated with and approved by the Bonneville Power Administration, Portland General Electric Company or other appropriate utility, depending on the easement or right of way ownership.

*Response: There is a public utility easement that is currently being recorded with the new land division and dedication. The required approvals will be obtained during the land division. The easement is in front of the property and not through the property and there is no association with this easement and residential property. There is not a petroleum pipeline easement.*

#### (.07) Standards for Earth Movement Hazard Areas:

A. No development or grading shall be allowed in areas of land movement, slump or earth flow, and mud or debris flow, except under one of the following conditions:

*Response: There is no grading in areas of land movement, slump or earthflow & mud or debris flow because none of these types of soil conditions are on our site.*

2. An engineering geologic study approved by the City establishing that the site is stable for the proposed use and development. The study shall include the following:

*Response: A geotechnical report has been completed with all of the required information. See report by Geo Pacific.*

B. Vegetative cover shall be maintained or established for stability and erosion control purposes. *Response: Temporary groundcover will be provided in all landscaped areas to aid in Erosion Control.*

C. Diversion of stormwater into these areas shall be prohibited. *Response: Stormwater will only be diverted into the stormwater planter box as specified by the civil engineer.*

D. The principal source of information for determining earth movement hazards is the State Department of Geology and Mineral Industries (DOGAMI) Bulletin 99 and any subsequent bulletins and accompanying maps. Approved site specific engineering geologic studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the earth movement hazards database. *Response: The soil conditions were considered in the geotechnical report. The appropriate methods were used to calculate the required treatment of the land, see included soils report.*

#### (.08) Standards for Soil Hazard Areas:

A. Appropriate siting and design safeguards shall insure structural stability and

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proper drainage of foundation and crawl space areas for development on land with any of the following soil conditions: wet or high water table; high shrink-swell capability; compressible or organic; and shallow depth-to-bedrock. *Response: A civil engineer was hired as well as a geotechnical engineer. They are working together to ensure that the design is stable and drains well. There also is not a crawl space so there is no concern for crawl space drainage.*

B. The principal source of information for determining soil hazards is the State DOGAMI Bulletin 99 and any subsequent bulletins and accompanying maps. Approved site-specific soil studies shall be used to identify the extent and severity of the hazardous conditions on the site, and to update the soil hazards database accordingly. *Response: see geotechnical report.*

(.09) Historic Protection: Purpose:

*Response: It was determined through the pre-application meeting that the barn and the trees have no cultural or historical value.*

(.10) Alteration and Development Criteria:

A. Demolition or alteration of any structure, or any change in any site or object which has been designated as a cultural resource....

*Response: It was determined through the pre-application meeting that the barn and the trees have no cultural or historical value.*

### **Section 4.175. Public Safety and Crime Prevention.**

(.01) All developments shall be designed to deter crime and insure public safety.

(.02) Addressing and directional signing shall be designed to assure identification of all buildings and structures by emergency response personnel, as well as the general public.

*Response: We only have one building and the front door is seen from the street and the driveway so we feel extra signage showing this is unnecessary.*

(.03) Areas vulnerable to crime shall be designed to allow surveillance. Parking and loading areas shall be designed for access by police in the course of routine patrol duties.

*Response: We are providing security cameras on the new building.*

(.04) Exterior lighting shall be designed and oriented to discourage crime.

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*Response: We are providing exterior lighting for nighttime decorative reasons and for crime prevention reasons.*

**Section 4.176. Landscaping, Screening, and Buffering.**

C. General Landscaping Standard.

2. Required materials. Shrubs and trees, other than street trees, may be grouped. Ground cover plants must fully cover the remainder of the landscaped area (see Figure 21: General Landscaping). The General Landscaping Standard has two different requirements for trees and shrubs:

- a. Where the landscaped area is less than 30 feet deep, one tree is required for every 30 linear feet. *Response: The north sideyard, west rear yard, south sideyard and landscaping between the parking lot and street are all less than 30 feet deep. In these areas trees are shown on the landscape plan as 1 tree per every 30 linear feet.*
- b. Where the landscaped area is 30 feet deep or greater, one tree is required for every 800 square feet and two high shrubs or three low shrubs are required for every 400 square feet. *Response: the north east corner of the property is over 30' deep. Landscaping is placed in that area to create more of a sense of space with landscaping per area vs a strip of landscaping, see landscaping plan.*

D. Low Screen Landscaping Standard.

The Low Screen Landscaping Standard is usually applied along street lot lines or in the area separating parking lots from street rights-of-way.

*Response: a low screen is provided between the parking area and the street, please see landscape plan. Note that codes also require trees along this area which is not low but will be provided.*

E – I Landscaping Standards. *Response: No High Screen, wall, berm, or fencing is required/provided on this project.*

(.03) Landscape Area. Not less than fifteen percent (15%) of the total lot area, shall be landscaped with vegetative plant materials. The ten percent (10%) parking area landscaping required by section 4.155.03(B)(1) is included in the fifteen percent (15%) total lot landscaping requirement. Landscaping shall be located in at least three separate and distinct areas of the lot, one of which must be in the contiguous frontage area. Planting areas shall be encouraged adjacent to structures. Landscaping shall be used to define, soften or screen the appearance of buildings and off-street parking areas. Materials to be installed shall achieve a balance between various plant forms, textures,

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and heights. The installation of native plant materials shall be used whenever practicable. *Response:*

*AREA OF SITE 44,890 SF*

*LANDSCAPING:*

*15% OF SITE AREA REQUIRED: 6,719 SF*

*LANDSCAPED AREA PROVIDED: 7,775 SF*

*PARKING AREA: 7,320 SF*

*10% OF PARKING AREA TO BE LANDSCAPED: 775 SF;*

*1,688 SF PROVIDED*

(.04) Buffering and Screening. Additional to the standards of this subsection, the requirements of the Section 4.137.5 (Screening and Buffering Overlay Zone) shall also be applied, where applicable.

- A. All intensive or higher density developments shall be screened and buffered from less intense or lower density developments. *Response: all of the surrounding properties are of the same zone.*
- B. Activity areas on commercial and industrial sites shall be buffered and screened from adjacent residential areas. Multi-family developments shall be screened and buffered from single-family areas. *Response: None of the adjacent properties are residential.*
- C. All exterior, roof and ground mounted, mechanical and utility equipment shall be screened from ground level off-site view from adjacent streets or properties. *Response: There will be no mechanical or utility equipment on the ground...it is all located on the roof. The roof has a parapet to hide the equipment.*
- D. All outdoor storage areas shall be screened from public view, unless visible storage has been approved for the site by the Development Review Board or Planning Director acting on a development permit. *Response: There are no outdoor storage areas.*
- E. In all cases other than for industrial uses in industrial zones, landscaping shall be designed to screen loading areas and docks, and truck parking. *Response: There landscaping along the property line to screen the adjacent property from the loading area.*
- F. In any zone any fence over six (6) feet high measured from soil surface at the outside of fence line shall require Development Review Board approval. *Response: There will be no fences that are over 6' high.*

(.05) Sight-Obscuring Fence or Planting. *Response: There are no triggers for a sight-*



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*obscuring fence or planting.*

(.06) Plant Materials.

*Response: Please see the landscape schedule on the landscaping plan. All specifics for both trees and shrubbery are laid out here.*

C. Where a proposed development includes buildings larger than twenty-four (24) feet in height ... *Response: Our building is over 24' in height. All of these code specifics have been added to the landscape schedule on the landscape plan.*

D. Street Trees. *Response: All specifics laid out in this section are specified on the landscape schedule on the landscape plan sheet. We have placed the trees along the street at 30' o.c.*

E. Types of Plant Species. *Response: All plantings specified are allowed in the plant lists stated in this code section.*

F. Tree Credit.

Existing trees that are in good health as certified by an arborist and are not disturbed during construction may count for landscaping tree credit as follows.... *Response: All existing trees will be removed; arborist report is included in this submittal. The applicant will need to work with the city in negotiating a fee to pay into the tree fund for Wilsonville.*

G. Exceeding Standards. Landscape materials that exceed the minimum standards of this Section are encouraged, provided that height and vision clearance requirements are met. *Response: We are planning on exceeding the minimum landscaping requirements by a little bit but we cannot exceed the tree requirements due to overcrowding on the site. Due to this we will provide funding to the tree fund for planting of trees elsewhere in Wilsonville.*

C. Irrigation.

*Response: Option 1 (shown below) has been chosen for an irrigation system. This is specified on the landscape schedule shown on the landscape plan.*

1. A permanent, built-in, irrigation system with an automatic controller. Either a spray or drip irrigation system, or a combination of the two, may be specified.

D. Protection. All required landscape areas, including all trees and shrubs, shall be protected from potential damage by conflicting uses or activities including vehicle parking and the storage of materials. *Response: The landscaping areas adjacent to the parking lot are protected by a 6" curb. All other landscaping is adequately protected by being off the main walking path.*

(.08) Landscaping on Corner Lots. *Response: N/A*

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(.09) Landscape Plans. *Response: The majority of the landscaping requires moderate irrigation. This is specified in the notes on the Landscape Schedule, also we are providing an irrigation plan for your review.*

(.11) Street Trees Not Typically Part of Site Landscaping. Street trees are not subject to the requirements of this Section and are not counted toward the required standards of this Section. Except, however, that the Development Review Board may, by granting a waiver or variance, allow for special landscaping within the right-of-way to compensate for a lack of appropriate on-site locations for landscaping. See subsection (.06), above, regarding street trees. *Response: The street trees are not calculated in the tree count for ON the property.*

(.12) Mitigation and Restoration Plantings. *Response: There are no significant native plants/vegetation on the property to save.*

### **Section 4.177. Street Improvement Standards.**

(.02) Street Design Standards.

A. All street improvements and intersections shall provide for the continuation of streets through specific developments to adjoining properties or subdivisions. *Response: This property is not at an intersection*

1. Development shall be required to provide existing or future connections to adjacent sites through the use of access easements where applicable. Such easements shall be required in addition to required public street dedications as required in Section 4.236(.04). *Response: The property is being divided currently. The driveway easement and the land division are being approved separately from this permit. There is a utility easement in the frontage of the property.*

B. The City Engineer shall make the final determination regarding right-of-way and street element widths using the ranges provided in Chapter 3 of the Transportation System Plan and the additional street design standards in the Public Works Standards. *Response: We have been emailing with Steve Adams and Mike Ward regarding the right of way and street elements. The drawings reflect the design that they have determined adequate.*

C. Rights-of-way.

1. Prior to issuance of a Certificate of Occupancy Building permits or as a part of the recordation of a final plat, the City shall require dedication of rights-of-way in accordance with the Transportation System Plan. All dedications shall be recorded with the County Assessor's Office. *Response: Our Engineer, Tim Turner from*

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*TRT Engineering, is working with the City to get all the necessary permits.*

2. The City shall also require a waiver of remonstrance against formation of a local improvement district, and all non-remonstrances shall be recorded in the County Recorder's Office as well as the City's Lien Docket, prior to issuance of a Certificate of Occupancy Building Permit or as a part of the recordation of a final plat. *Response: We have no intentions of forming a local improvement district. We will sign any paperwork saying so necessary to get a permit.*

3. In order to allow for potential future widening, a special setback requirement shall be maintained adjacent to all arterial streets. The minimum setback shall be 55 feet from the centerline or 25 feet from the right-of-way designated on the Master Plan, whichever is greater. *Response: The setback is currently 25' from the centerline of the street & we are dedicating another 10'. The dedication amount was decided by the City Engineers.*

D. Dead-end Streets. New dead-end streets or cul-de-sacs .... *Response: This property is not on a dead end street or a cul de sac.*

(.08). Access Drive and Driveway Approach Development Standards.

I. Driveways shall accommodate all projected vehicular traffic on-site without vehicles stacking or backing up onto a street. *Response: A diagram has been provided showing a semi truck pulling forward onto the property and into the parking area. The truck can then back up to the loading dock.*

E. Corner or clear vision area.

1. A clear vision area which meets the Public Works Standards shall be maintained on each corner of property at the intersection of any two streets, a street and a railroad or a street and a driveway. *Response: Care has been taken by TRT engineering to meet the clear corner vision requirements. Also our property is not near an intersection and we are not blocking any views at the intersection.*

F. Vertical clearance - a minimum clearance of 12 feet above the pavement surface shall be maintained over all streets and access drives. *Response: We don't have anything overhanging streets or access drives.*

G. Interim improvement standard. It is anticipated that all existing streets, except those in new subdivisions, will require complete reconstruction to support urban level traffic volumes. However, in most cases, existing and short-term projected traffic volumes do not warrant improvements to full Master Plan standards. Therefore, unless otherwise

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specified by the Development Review Board, the following interim standards shall apply. *Response: the existing road is adequate for existing traffic. We are expecting to cut a foot or two off the edge of the existing asphalt and repave from that cut to the new curb.*

1. Arterials - 24 foot paved, with standard sub-base. Asphalt overlays are generally considered unacceptable, but may be considered as an interim improvement based on the recommendations of the City Engineer, regarding adequate structural quality to support an overlay.

2. Half-streets are generally considered unacceptable. However, where the Development Review Board finds it essential to allow for reasonable development, a half-street may be approved. Whenever a half-street improvement is approved, it shall conform to the requirements in the Public Works Standards.

3. When considered appropriate in conjunction with other anticipated or scheduled street improvements, the City Engineer may approve street improvements with a single asphalt lift. However, adequate provision must be made for interim storm drainage, pavement transitions at seams and the scheduling of the second lift through the Capital Improvements Plan.

(.03) Sidewalks. Sidewalks shall be provided on the public street frontage of all development. Sidewalks shall generally be constructed within the dedicated public right-of-way, but may be located outside of the right-of-way within a public easement with the approval of the City Engineer.

A. Sidewalk widths shall include a minimum through zone of at least five feet. The through zone may be reduced pursuant to variance procedures in Section 4.196, a waiver pursuant to Section 4.118, or by authority of the City Engineer for reasons of traffic operations, efficiency, or safety. .  
*Response: We are providing plans showing new sidewalks where there currently are none.*

B. Within a Planned Development, the Development Review Board may approve a sidewalk on only one side. If the sidewalk is permitted on just one side of the street, the owners will be required to sign an agreement to an assessment in the future to construct the other sidewalk if the City Council decides it is necessary. *Response: We are providing sidewalks on one side of the street as we were asked to do by the traffic bureau.*

(.04) Bicycle Facilities. Bicycle facilities shall be provided to implement the Transportation System Plan, and may include on-street and off-street bike lanes, shared lanes, bike boulevards, and cycle tracks. The design of on-street bicycle facilities will vary according to the functional classification and the average daily traffic of the facility. *Response: We have not heard of any requirement to do bike lanes from Mike*

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*Ward.*

(.05) Multiuse Pathways. Pathways may be in addition to, or in lieu of, a public street. Paths that are in addition to a public street shall generally run parallel to that street, and shall be designed in accordance with the Public Works Standards or as specified by the City Engineer. Paths that are in lieu of a public street shall be considered in areas only where no other public street connection options are feasible, and are subject to the following standards. *Response: There are no 'multiuse pathways' required on this project.*

(.06) Transit Improvements Development on sites that are adjacent to or incorporate major transit streets shall provide improvements as described in this section to any bus stop .... *Response: No Transit stop is being requested/required for this property.*

(.07) Residential Private Access Drives. Residential Private Access Drives shall meet the following standards: *Response: N/A This is not a residential project.*

(.08) Access Drive and Driveway Approach Development Standards.

A. An access drive to any proposed development shall be designed to provide a clear travel lane free from any obstructions. *Response: The driveway is existing, it is free from obstructions.*

B. Access drive travel lanes shall be constructed with a hard surface capable of carrying a 23-ton load. *Response: The driveway is existing... it was built many years ago for Pacific Pride, which mainly services trucks and commercial vehicles.*

C. Where emergency vehicle access is required, approaches and driveways shall be designed and constructed to accommodate emergency vehicle apparatus and shall conform to applicable fire protection requirements. The City may restrict parking, require signage, or require other public safety improvements pursuant to the recommendations of an emergency service provider. *Response: The approach definitely accommodates emergency vehicles (as well as commercial trucks).*

D. Secondary or emergency access lanes may be improved to a minimum 12 feet with an all-weather surface as approved by the Fire District. All fire lanes shall be dedicated easements. *Response: there are no fire lanes*

E. Minimum access requirements shall be adjusted commensurate with the intended function of the site based on vehicle types and traffic generation. *Response: The existing driveway meets the minimum requirements.*

F. The number of approaches on higher classification streets (e.g., collector and arterial streets) shall be minimized; where practicable, access shall be taken first from a lower classification street. *Response: We are sharing the driveway with Pacific Pride to minimize the amount of access points to Boons Ferry Road.*

G. The City may limit the number or location of connections to a street, or impose

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access restrictions where the roadway authority requires mitigation to alleviate safety or traffic operations concerns. *Response: We are sharing the driveway with Pacific Pride to minimize the amount of access points to Boons Ferry Road. I am not sure what more we can do.*

H. The City may require a driveway to extend to one or more edges of a parcel and be designed to allow for future extension and inter-parcel circulation as adjacent properties develop. The City may also require the owner(s) of the subject site to record an access easement for future joint use of the approach and driveway as the adjacent property(ies) develop(s). *Response: During the land division an access easement will be given to both our property and to our south neighbor Pacific Pride. This will be a shared agreement that both parties will be using jointly.*

I. Driveways shall accommodate all projected vehicular traffic on-site without vehicles stacking or backing up onto a street. *Response: There is plenty of vehicular space on our site to maneuver the traffic that uses our space. There wont be any vehicles backing up onto the adjacent street or property. The driveway is just the access point to both properties and our property has a large parking lot and Pacific Pride has plenty of land around it's gasoline pumps for trucks to stop and maneuver.*

J. Driveways shall be designed so that vehicle areas, including but not limited to drive-up and drive-through facilities and vehicle storage and service areas, do not obstruct any public right-of-way. *Response: The driveway is existing and is working great and is not obstructing traffic. Drivers enter the lot through the driveway and then proceed to a parking spot, which is away from the driveway. After visiting the property drivers leave the parking spot and enter the driveway to exit the property. This in no way obstructs the public right of way.*

K. Approaches and driveways shall not be wider than necessary to safely accommodate projected peak hour trips and turning movements, and shall be designed to minimize crossing distances for pedestrians. *Response: The driveway is existing and has already met Wilsonville requirements for width.*

L. As it deems necessary for pedestrian safety, the City, in consultation with the roadway authority, may require traffic-calming features, such as speed tables, textured driveway surfaces, curb extensions, signage or traffic control devices, or other features, be installed on or in the vicinity of a site. *Response: this review is to be completed with the land division. We also have a traffic study that was done and there was no mention of traffic calming devices in the roadways.*

M Approaches and driveways shall be located and designed to allow for safe maneuvering in and around loading areas, while avoiding conflicts with pedestrians, parking, landscaping, and buildings. *Response: The driveway is existing and does not currently have any conflicts. Our new parking lot is to the north of the driveway, a driver can access the driveway from the road and then exit the driveway to the parking lot and park their vehicle. The landscaping is to the side and around the parking lot behind a 6" tall concrete curb as not to confuse the drivers to put their cars in those*

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*areas. The parking lot and car maneuvering areas meet the Wilsonville size requirements and we feel that meets the safe maneuvering space required.*

N. Where a proposed driveway crosses a culvert or drainage ditch, the City may require the developer to install a culvert extending under and beyond the edges of the driveway on both sides of it, pursuant applicable Public Works standards. *Response: The driveway does not cross a culvert or draining ditch.*

O. Except as otherwise required by the applicable roadway authority or waived by the City Engineer, temporary driveways providing access to a construction site or staging area shall be paved or graveled to prevent tracking of mud onto adjacent paved streets. *Response: a temporary driveway is not necessary as we can use the existing one.*

P. ...driveways proposed as part of a residential or mixed-use development shall meet local street spacing standards *Response: The existing driveway meets the standards as it is existing and was approved by Wilsonville already.*

(.09) Minimum street intersection spacing standards. *Response: we aren't working near a intersection*

(.10) Exceptions and Adjustments. *Response: N/A. Not needed*

### **Section 4.179. Mixed Solid Waste and Recyclables Storage in New Multi-Unit Residential and Non-Residential Buildings.**

(.01) All site plans for multi-unit residential and non-residential buildings submitted to the Wilsonville Development Review Board for approval shall include adequate storage space for mixed solid waste and source separated recyclables. *Response: The proposed waste storage areas are designed to meet the size requirements of this code section and have been approved by the local waste management company that will be servicing this building.*

(.02) The floor area of an interior or exterior storage area shall be excluded from the calculation of building floor area for purposes of determining minimum storage requirements. *Response: Understood*

(.03) The storage area requirement shall be based on the predominant use(s) of the building. If a building has more than one of the uses listed herein and that use occupies 20 percent or less of the floor area of the building, the floor area occupied by that use shall be counted toward the floor area of the predominant use(s). If a building has more than one of the uses listed herein and that use occupies more than 20 percent of the floor area of the building, then the storage area requirement for the whole building shall be the sum of the requirement for the area of each use. *Response: Mercantile and office make up less than 20% of the area. Trash area calculation is based off of warehouse use.*  
*warehouse = 22,866sf mercantile = 3500sf office = 1,000 sf*

*(mercantile + office = 4500 sf)*

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(.04) Storage areas for multiple uses on a single site may be combined and shared.

*Response: understood*

(.05) The specific requirements are based on an assumed storage height of four feet for solid waste/recyclables. Vertical storage higher than four feet but no higher than seven feet may be used to accommodate the same volume of storage in a reduced floor space. Where vertical or stacked storage is proposed, the site plan shall include drawings to illustrate the layout of the storage area and dimensions for the containers. *Response: The storage area for trash is kept inside the structure.*

(.06) The specific requirements for storage area are as follows:

A. *Response: N/A*

B. Non-residential buildings shall provide a minimum storage area of ten square feet, plus:

3. Wholesale / Warehouse / Manufacturing: Six square feet per 1,000 square feet GFA; and

*Response: 27,366 sf / 1000 sf = 27.3 27.3x6=165 SF*

*Total storage area = 175 SF*

(.07) The applicant shall work with the City's franchised garbage hauler to ensure that site plans provide adequate access for the hauler's equipment and that storage area is adequate for the anticipated volumes, level of service and any other special circumstances which may result in the storage area exceeding its capacity. The hauler shall notify the City by letter of their review of site plans and make recommendations for changes in those plans pursuant to the other provisions of this section.

*Response: The garbage hauler has been contacted and their approval letter is included in this submittal.*

**Section 4.199.20. Applicability.**

(.01) This Ordinance is applicable to:

A. Installation of new exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas.

B. Major additions or modifications (as defined in this Section) to existing exterior lighting systems in public facility, commercial, industrial and multi-family housing projects with common areas.

G. (.02) Exemption. The following luminaires and lighting systems are EXEMPT



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from these requirements:

- A. Interior lighting.
- B. Internally illuminated signs.
- C. Externally illuminated signs.
- D. Temporary lighting for theatrical, television, and performance areas.
- E. Lighting in swimming pools and other water features governed by Article 680 of the National Electrical Code.
- F. Building Code required exit path lighting.
- G. Lighting specifically for stairs and ramps.
- H. Temporary and seasonal lighting provided that individual lamps are 10 watts or less.
- H. Lighting required and/or regulated by the City (i.e. construction related activities), Federal Aviation Administration, U.S. Coast Guard or other Federal or State agency.
- I. Single-family residential lighting.
- J. Code Required Signs.
- K. American flag.
- L. Landscape lighting.
- M. Lights approved by the City through an Administrative Review Temporary Use Permit process.
- N. Public street lights.
- O. ATM security lighting.
- P. Those "Exceptions" listed in the "Exterior Lighting Power Allowance" provisions of the *Oregon Energy Efficiency Specialty Code*.

**Section 4.199.30. Lighting Overlay Zones.**

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(.02) The Lighting Zones

*Response: This is the zone we are in:*

LZ 2. Low-density suburban neighborhoods and suburban commercial districts, industrial parks and districts. This zone is intended to be the default condition for the majority of the City.

**Section 4.199.40- 60 Lighting**

*Response: There is a design/build contractor being hired to do the lighting systems. The electrician has developed a lighting plan for your review.*

**Section 4.200. Land Division**

*Response: The land division is not being reviewed under this permit. The previous owner is taking care of the land division and the land division should be complete by the completion of this review.*

**4.300 UNDERGROUND UTILITIES**

**Section 4.320. Requirements.**

(.01) The developer or subdivider shall be responsible for and make all necessary arrangements with the serving utility to provide the underground services (including cost of rearranging any existing overhead facilities). All such underground facilities as described shall be constructed in compliance with the rules and regulations of the Public Utility Commission of the State of Oregon relating to the installation and safety of underground lines, plant, system, equipment and apparatus. *Response: we don't have any costs associated with rearranging facilities because we are tapping to the existing underground facilities.*

(.02) The location of the buried facilities shall conform to standards supplied to the subdivider by the City. The City also reserves the right to approve location of all surface-mounted transformers. *Response: The transformers are to be buried in the vault and to conform to the city standards. There are no surface mounted transformers.*

(.03) Interior easements (back lot lines) will only be used for storm or sanitary sewers, and front easements will be used for other utilities unless different locations are approved by the City Engineer. Easements satisfactory to the serving utilities shall be provided by the developer and shall be set forth on the plat. *Response: there is no easement at the back of the property. There is an existing 8' utility easement at the front of the existing property. This land is being dedicated in the land division and a sidewalk is being built in this location. The existing underground utilities will remain in this location and a new easement is being created at the front property line, which will also be 8'. This new easement will be for any future underground utility lines.*

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#### **4.400 Purpose**

(.02) We are proposing to reduce the side and rear setbacks and wish to explain how this still meets the Purpose of this code.

A. The side setback being reduced will still meet the proper functioning of the site as it's what's inside and in front of the building that makes this building work. A 30 foot side yard will become an unused landscaped area if kept. Also any new buildings developed to the side or behind our building is likely to have the same situation where they have the front of the building more open and the sides and back more simple and unused. Due to this we don't feel we will be affecting our neighbors use either. This does maintain a high visual environment by giving us more room for our parking lot out front and allowing us room out front to create a beautiful new parking lot and landscaping areas that will better fit the industrial nature of the zone.

B. By reducing the side setback it encourages site flexibility in giving us extra room out front to comply to new landscaping and parking requirements. The front is the area people see and not the side or back of the building.

C. The side yards being reduced and planted with trees will in time cover a lot of the side and rear of the building with landscaping. The front of the building will receive more exciting and harmonious development than most of the industrial buildings of this location.

D. We fully agree in trying to conserve the city's natural beauty yet saving some of the grove of trees on this property is not in conjunction with the new zoning and with this new development. The existing trees are from a past era which does not fit within the new zoning regulations of this area. These types of trees require a grove or forest to survive and to reduce their population is putting them at risk of falling in a hard wind which puts property and lives at danger.

E. Just like in section D above we are hoping this design is showcasing Wilsonville's goal by meeting all the current parking and landscaping requirements which reflects meeting the appropriate planning codes. Also note in the design that we have the entrance and the awning on the southern parts of the building façade and a more solid part of the landscaping and new trees on the northern part of the façade. The two together will be a harmoniously created design.

F. We are thinking we are not only stabilizing property values but improving them with this development. A well established family ran Portland company is expanding their business to Wilsonville. This will be their only location outside of their headquarters in Portland. Being a family ran business they have great pride in quality and maintaining a positive image with their business. There will be no blight.

G. The available public facilities include the electrical power which is arriving via underground pipes and coupled at the site with a large underground vault. Water and sewer are all underground and not affected by any siting of the building. The parking lot is adequately sized per code to serve the building, this site being fully developed we are

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not anticipating additional facilities to serve future additions.

H. The back and sides of our building are flat, there are no spots for criminals to hide around a corner for example. Our building will also have full time surveillance on all 4 sides which is recorded on site and viewed both on site and on owners cell phones. The design of the building does make it clear that the public area is the parking lot and the concrete walkways and the general open area of the front of the building. The sides are gravel walkways or landscaping and the general public would know that is a private area. The entrance is very pleasant with a covered entry and very well decorated.

I. Our goal is to further foster civic pride in providing a beautiful new building that will be viewed from the I-5 Freeway and be a source of conversation of that new beautiful building in Wilsonville. I am unsure how this building, or any other non-government building can promote citizen participation in local government.

J. Our location will warehouse Carpet that will be installed in the homes of the local residents of Wilsonville. Marions Carpets sells great carpets at excellent prices, this certainly does help protect the peace, health and welfare of the residents of Wilsonville by giving them the opportunity to locally improve their homes.

#### **Section 4.421. Criteria and Application of Design Standards.**

##### Criteria and Application of Design Standards.

A. Preservation of Landscape. The landscape shall be preserved in its natural state, insofar as practicable, by minimizing tree and soils removal, and any grade changes shall be in keeping with the general appearance of neighboring developed areas.

*Response: The current landscaping is from a different era which was a different zoning that what is currently in place. Our proposal is not to preserve the existing landscaping but to provide a new landscaping plan that meets the current zoning and reflects a similar landscaping plan to other industrial properties in Wilsonville.*

B. Relation of Proposed Buildings to Environment. Proposed structures shall be located and designed to assure harmony with the natural environment, including protection of steep slopes, vegetation and other naturally sensitive areas for wildlife habitat and shall provide proper buffering from less intensive uses in accordance with Sections 4.171 and 4.139 and 4.139.5. The achievement of such relationship may include the enclosure of space in conjunction with other existing buildings or other proposed buildings and the creation of focal points with respect to avenues of approach, street access or relationships to natural features such as vegetation or topography. *Response: This property is not in an area with wildlife or sensitive areas. What has happened is the surrounding properties were developed over time to meet the current industrial zoning meeting current codes and this property is the last one that remains with a hint of a past era of large trees and forest type ground cover. Our goal is to match the type of landscaping of current codes and our current neighbors. This will achieve the*

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*relationship of conjunction with other existing buildings and relationship of the neighborhood.*

C. Drives, Parking and Circulation. With respect to vehicular and pedestrian circulation, including walkways, interior drives and parking, special attention shall be given to location and number of access points, general interior circulation, separation of pedestrian and vehicular traffic, and arrangement of parking areas that are safe and convenient and, insofar as practicable, do not detract from the design of proposed buildings and structures and the neighboring properties. *Response: No new driveways are being proposed in this application. The parking area and pedestrian circulation is off of the existing driveway. Care was taken to create safe and accessible routes throughout the site with a parking lot in front of the existing building and a walkway from the parking to the front door of the new building.*

D. Surface Water Drainage. Special attention shall be given to proper site surface drainage so that removal of surface waters will not adversely affect neighboring properties of the public storm drainage system. *Response: no drainage will be diverted off the property. Our civil engineer is designing all rain water to be diverted to two swales, one on site and the other is between the street curb and the sidewalk.*

E. Utility Service. Any utility installations above ground shall be located so as to have a harmonious relation to neighboring properties and site. The proposed method of sanitary and storm sewage disposal from all buildings shall be indicated. *Response: The utilities are underground. The storm and sewer disposal is indicated on the utility plan.*

F. Advertising Features. In addition to the requirements of the City's sign regulations, the following criteria should be included: the size, location, design, color, texture, lighting and materials of all exterior signs and outdoor advertising structures or features shall not detract from the design of proposed buildings and structures and the surrounding properties. *Response: The sign package includes all the necessary information and we focused on making any signage coordinate with the design of the building and be similar to signs of our neighbors.*

G. Special Features. Exposed storage areas, exposed machinery installations, surface areas, truck loading areas, utility buildings and structures and similar accessory areas and structures shall be subject to such setbacks, screen plantings or other screening methods as shall be required to prevent their being incongruous with the existing or contemplated environment and its surrounding properties. Standards for screening and buffering are contained in Section 4.176. *Response: There are no exposed storage areas except for the truck loading area. The truck loading area is screened from the neighboring property with landscaping and it is also set back from the front of the new building.*

### **Section 4.430. Location, Design and Access Standards for mixed Solid Waste and Recycling Areas**

(.02) Location Standards:

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- A. To encourage its use, the storage area for source separated recyclables shall be co-located with the storage area for residual mixed solid waste. *Response: recycling and trash are stored in the same area and are located inside the new building.*
- B. Indoor and outdoor storage areas shall comply with Uniform Building and Fire Code requirements. *Response: The trash area is interior and complies with the UBC and Fire codes and are located inside the new building.*
- C. Storage area space requirements can be satisfied with a single location or multiple locations and can combine with both interior and exterior locations. *Response: The storage area is inside and in one area.*
- D. Exterior storage areas can be located within interior side yard or rear yard areas. Minimum setback shall be three (3) feet. Exterior storage areas shall not be located within a required front yard setback, including double frontage lots. *Response: N/A (it's inside)*
- E. Exterior storage areas shall be located in central and visible locations on a site to enhance security for users. *Response: N/A (it's inside)*
- F. Exterior storage areas can be located in a parking area if the proposed use provides at least the minimum number of parking spaces required for the use after deducting the area used for storage. Storage areas shall be appropriately screened according to the provisions of Section 4.430 (.03), below. *Response: N/A (it's inside)*
- G. The storage area shall be accessible for collection vehicles and located so that the storage area will not obstruct pedestrian or vehicle traffic movement on the site or on public streets adjacent to the site. *Response: The storage area is just inside the loading bay. It is completely accessible. A discussion was made with the waste hauling company and a site plan was sent to them for review and they are finding it acceptable to have the waste and recycling facilities inside behind large garage doors.*

#### (.04) Access Standards.

- A. Access to storage areas can be limited for security reasons. However, the storage area shall be accessible to users at convenient times of the day and to collect service personnel on the day and approximate time they are scheduled to provide collection service. *Response: The storage area is readily accessible to the users and the trash/recycling collecting services and pick-up services will always happen during operating hours of the*

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*business.*

- B. Storage area shall be designed to be easily accessible to collection trucks and equipment, considering paving, grade and vehicle access. A minimum of ten (10) feet horizontal clearance and eight feet of vertical clearance is required if the storage area is covered. *Response: There is over 10' clearance horizontal and more than 8' vertical clearance to the trash area and the pick-up area is level with slight slopes for drainage.*
- C. Storage areas shall be accessible to collection vehicles without requiring backing out of a driveway onto a public street. If only a single access point is available to the storage area, adequate turning radius shall be provided to allow collection vehicles to safely exit the site in a forward motion. *Response: the trucks have enough room to back into the site... they will be able to drive out of the site without backing onto the street. See site plan for truck maneuvering clearances.*

**Section 4.440. Procedure.**

(.01) Submission of Documents. A prospective applicant for a building or other permit who is subject to site design review shall submit to the Planning Department, in addition to the requirements of Section 4.035, the following:

- A. A site plan, drawn to scale, showing the proposed layout of all structures and other improvements including, where appropriate, driveways, pedestrian walks, landscaped areas, fences, walls, off-street parking and loading areas, and railroad tracks. The site plan shall indicate the location of entrances and exits and direction of traffic flow into and out of off-street parking and loading areas, the location of each parking space and each loading berth and areas of turning and maneuvering vehicles. The site plan shall indicate how utility service and drainage are to be provided. *Response: we have a site plan that includes all of the necessary elements listed here including the maneuvering of trucks on the site to pull in head first, turn around on the site and head out of the site head first.*
- B. A Landscape Plan, drawn to scale, showing the location and design of landscaped areas, the variety and sizes of trees and plant materials to be planted on the site, the location and design of landscaped areas, the varieties, by scientific and common name, and sizes of trees and plant materials to be retained or planted on the site, other pertinent landscape features, and irrigation systems required to maintain trees and plant materials. An inventory, drawn at the same scale as the Site Plan, of existing trees of 4" caliper or more is required. However, when large areas of trees are proposed to be retained undisturbed, only a survey identifying the location and size of all perimeter trees in the mass in

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necessary. *Response: Both a landscape plan and an arborist plan/report is provided with all of the information listed above. A survey is provided with all of the existing trees located.*

- C. Architectural drawings or sketches, drawn to scale, including floor plans, in sufficient detail to permit computation of yard requirements and showing all elevations of the proposed structures and other improvements as they will appear on completion of construction. Floor plans shall also be provided in sufficient detail to permit computation of yard requirements based on the relationship of indoor versus outdoor living area, and to evaluate the floor plan's effect on the exterior design of the building through the placement and configuration of windows and doors.

*Response: An entire set of architectural drawings is provided including all elevations and floor plans.*

- D. A Color Board displaying specifications as to type, color, and texture of exterior surfaces of proposed structures. Also, a phased development schedule if the development is constructed in stages. *Response: The building is a tilt up concrete wall that is painted; paint samples are included on the color board. We are providing a black color sample of metal indicating the color of the aluminum storefront windows. The window glazing is clear glass (not tinted). We are providing a rendered elevation of the paint colors on the building. There is a steel awning and we are providing a paint sample of the steel but not a piece of steel.*

- E. A sign Plan, drawn to scale, showing the location, size, design, material, color and methods of illumination of all exterior signs. *Response: a sign package is being submitted indicating all of these things.*

- F. The required application fee.

## TREE PRESERVATION AND PROTECTION

### Section 4.600.30. Tree Removal Permit Required

(.01) Requirement Established. No person shall remove any tree without first obtaining a Tree Removal Permit (TRP) as required by this subchapter. *Response: a tree removal permit is being applied for.*

### Section 4.600.40. Exceptions

(.01) Exception from requirement.

C. City utility or roadwork in utility or road easements, in utility or road right-of-ways, or in public lands. However, any trees removed in the course of utility work shall be mitigated in accordance with the standards of this subchapter.



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*Response: This Exception applies for one tree.*

**Section 4.610.00. Application Review Procedure**

(.03) Reviewing Authority.

B. Type C. Where the site is proposed for development necessitating site plan review or plat approval by the Development Review Board, the Development Review Board shall be responsible for granting or denying the application for a Tree Removal Permit, and that decision may be subject to affirmance, reversal or modification by the City Council, if subsequently reviewed by the Council.

*Response: per the incomplete notice of our application we are required to apply for a type C permit.*

**Section 4.610.10. Standards For Tree Removal, Relocation Or Replacement**

C. Developmental Alternatives. Preservation and conservation of wooded areas and trees shall be given careful consideration when there are feasible and reasonable location alternatives and design options on-site for proposed buildings, structures or other site improvements. *Response: The existing trees on the property were from an era when the planning codes were much different from what they are now. The trees were part of a farm house and barn where people lived and worked a farm. Currently the zoning is for industrial use and the existing trees are not the proper type or in a location that works in harmony with an industrial building. For example the trees are large cedar and furs which don't work well as stand alone trees but in a grove or forest. Large trees such as these, especially when isolated from the protection of other similar trees, can post a threat to buildings and roads during wind or ice storms. Saving a few trees puts lives and property in danger with the trees being unstable outside of the protection of a grove and saving all the trees doesn't allow us to utilize the potential of the site. Due to this we feel it best to remove the trees and plant other trees which better contribute to the new industrial zoning of this land.*

D. Land Clearing. Where the proposed activity requires land clearing, the clearing shall be limited to designated street rights-of-way and areas necessary for the construction of buildings, structures or other site improvements. *Response: all clearing is limited to where the work is taking place. A new sidewalk will be put in place and there will be clearing for 100% of the area where that work is being done in the right of way.*

E. Residential Development. Where the proposed activity involves residential development, residential units shall, to the extent reasonably feasible, be designed and constructed to blend into the natural setting of the landscape. *Response:N/A*

F. Compliance With Statutes and Ordinances. The proposed activity shall comply with all applicable statutes and ordinances. *Response :understood, our goal is to meet all Statues and Ordinances.*

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G. Relocation or Replacement. The proposed activity shall include necessary provisions for tree relocation or replacement, in accordance with WC 4.620.00, and the protection of those trees that are not to be removed, in accordance with WC 4.620.10. *Response: no trees are being relocated, new trees are being provided on the site, see landscape plan.*

H. Limitation. Tree removal or transplanting shall be limited to instances where the applicant has provided completed information as required by this Chapter and the reviewing authority determines that removal or transplanting is necessary based on the criteria of this subsection. *Response: Our plan is to remove all trees, based on description in C above, and replace all landscaping to meet current codes.*

1. Necessary For Construction. Where the applicant has shown to the satisfaction of the reviewing authority that removal or transplanting is necessary for the construction of a building, structure or other site improvement, and that there is no feasible and reasonable location alternative or design option on-site for a proposed building, structure or other site improvement; or a tree is located too close to existing or proposed buildings or structures, or creates unsafe vision clearance. *Response: The existing tree plan is provided as well as the new landscape plan. No trees are being relocated, they're just too big. New trees will be planted on the site to meet the landscaping code. See the landscape plan.*

2. Disease, Damage, or Nuisance, or Hazard. Where the tree is diseased, damaged, or in danger of falling, or presents a hazard as defined in WC 6.208, or is a nuisance as defined in WC 6.200 et seq., or creates unsafe vision clearance as defined in this Code.

(a) As a condition of approval of Stage II development, filbert trees must be removed if they are no longer commercially grown or maintained. *Response: see arborist report*

3. Interference. Where the tree interferes with the healthy growth of other trees, existing utility service or drainage, or utility work in a previously dedicated right-of-way, and it is not feasible to preserve the tree on site. *Response: see arborist report.*

4. Other. Where the applicant shows that tree removal or transplanting is reasonable under the circumstances. *Response: See arborist report*

#### I. Additional Standards for Type C Permits.

1. Tree survey. For all site development applications reviewed under the provisions of Chapter 4 Planning and Zoning, the developer shall provide a Tree Survey before site development as required by WC 4.610.40, and provide a Tree Maintenance and Protection plan, unless specifically exempted by the Planning Director or DRB, prior to initiating site development. *Response: a tree survey is provided, see arborist report.*

#### **Section 4.610.40. Type C Permit**

(.02) The applicant must provide ten copies of a Tree Maintenance and Protection Plan

## DESIGN REVIEW NARRATIVE

### Marion's Carpet Warehouse - Wilsonville

completed by an arborist that contains the following information: *Response: The arborist report is making a record of all the existing trees but they will all be removed so a tree protection plan will not be needed.*

A. A plan, including a topographical survey bearing the stamp and signature of a qualified, registered professional containing all the following information:

1. Property Dimensions. The shape and dimensions of the property, and the location of any existing and proposed structure or improvement. *Response: This is provided in the set.*

2. Tree survey. The survey must include:

a. An accurate drawing of the site based on accurate survey techniques at a minimum scale of one inch (1") equals one hundred feet (100') and which provides a) the location of all trees having six inches (6") or greater d.b.h. likely to be impacted, b) the spread of canopy of those trees, (c) the common and botanical name of those trees, and d) the approximate location and name of any other trees on the property. *Response: See the arborist report and plan.*

b. A description of the health and condition of all trees likely to be impacted on the site property. In addition, for trees in a present or proposed public street or road right-of-way that are described as unhealthy, the description shall include recommended actions to restore such trees to full health. Trees proposed to remain, to be transplanted or to be removed shall be so designated. All trees to remain on the site are to be designated with metal tags that are to remain in place throughout the development. Those tags shall be numbered, with the numbers keyed to the tree survey map that is provided with the application. *Response: See Arborist report*

c. Where a stand of twenty (20) or more contiguous trees exist on a site and the applicant does not propose to remove any of those trees, the required tree survey may be simplified to accurately show only the perimeter area of that stand of trees, including its drip line. Only those trees on the perimeter of the stand shall be tagged, as provided in "b," above. *Response:N/A*

d. All Oregon white oaks, native yews, and any species listed by either the state or federal government as rare or endangered shall be shown in the tree survey. *Response: see tree survey, we are not showing any of those types of trees.*

3. Tree Protection. A statement describing how trees intended to remain will be protected during development, and where protective barriers are necessary, that they will be erected before work starts. Barriers shall be sufficiently substantial to withstand nearby construction activities. Plastic tape or similar forms of markers do not constitute "barriers." *Response: see arborist report, we are not saving any trees so any protection barriers will not be necessary.*

## DESIGN REVIEW NARRATIVE

### Marion's Carpet Warehouse - Wilsonville

4. Easements and Setbacks. Location and dimension of existing and proposed easements, as well as all setbacks required by existing zoning requirements. *Response: All setbacks and easements are indicated on the site plan.*

5. Grade Changes. Designation of grade changes proposed for the property that may impact trees. *Response. Minimal grade changes are occurring throughout the site. Most of the landscaping areas are staying at the existing grade. Since all the trees are being removed then there are no concerns for grade changes around existing trees.*

6. Cost of Replacement. A cost estimate for the proposed tree replacement program with a detailed explanation including the number, size and species. *Response: A cost estimate will need to be negotiated with the city planning bureau. The owners of this property understand that we cannot plant enough trees on the property to account for the trees removed and a payment to the city will need to be made to plant trees in other parts of Wilsonville.*

7. Tree Identification. A statement that all trees being retained will be identified by numbered metal tags, as specified in subsection "A," above in addition to clear identification on construction documents. *Response: understood. The arborist has labeled the trees and has put the same labels on her report and site plan.*

#### **Section 4.620.00. Tree Relocation, Mitigation, Or Replacement**

Oregon white oaks and other uniquely valuable trees with a smaller diameter.

(.03) Replacement Tree Requirements. A mitigation or replacement tree plan shall be reviewed by the City prior to planting and according to the standards of this subsection.

A. Replacement trees shall have shade potential or other characteristics comparable to the removed trees, shall be appropriately chosen for the site from an approved tree species list supplied by the City, and shall be state Department of Agriculture Nursery Grade No. 1 or better. *Response: Replacement trees on site will be reviewed and approved by the city planning bureau. We will work with the city planning bureau on mitigation on replacement trees outside of the property.*

B. Replacement trees must be staked, fertilized and mulched, and shall be guaranteed by the permit grantee or the grantee's successors-in-interest for two (2) years after the planting date. *Response: Our landscaping plan will show the proper details for staking, fertilization and mulching of the new trees.*

C. A "guaranteed" tree that dies or becomes diseased during that time shall be replaced. *Response: understood and we are putting these details on the landscaping plan.*

D. Diversity of tree species shall be encouraged where trees will be replaced,

## DESIGN REVIEW NARRATIVE

### Marion's Carpet Warehouse - Wilsonville

and diversity of species shall also be maintained where essential to preserving a wooded area or habitat. *Response: The new trees planted on the site are diverse, please see landscaping plan. If something different is requested let us know and we can make a change.*

(.04) All trees to be planted shall consist of nursery stock that meets requirements of the American Association of Nurserymen (AAN) American Standards for Nursery Stock (ANSI Z60.1) for top grade. *Response: nursery stock meeting the AAN will be supplied*

#### **Section 4.620.10. Tree Protection During Construction**

(.01) Where tree protection is required by a condition of development under Chapter 4 or by a Tree Maintenance and Protection Plan approved under this subchapter, the following standards apply:

A. All trees required to be protected must be clearly labeled as such. *Response: None of the existing trees are remaining so there will be no tree protection.*

B. Placing Construction Materials Near Tree. No person may conduct any construction activity likely to be injurious to a tree designated to remain, including, but not limited to, placing solvents, building material, construction equipment, or depositing soil, or placing irrigated landscaping, within the drip line, unless a plan for such construction activity has been approved by the Planning Director or Development Review Board based upon the recommendations of an arborist. *Response: understood and also there are no existing trees that will be protected.*

C. Attachments to Trees During Construction. Notwithstanding the requirement of WC 4.620.10(1)(A), no person shall attach any device or wire to any protected tree unless needed for tree protection. *Response: understood*

D. Protective Barrier. Before development, land clearing, filling or any land alteration for which a Tree Removal Permit is required, the developer shall erect and maintain suitable barriers as identified by an arborist to protect remaining trees. Protective barriers shall remain in place until the City authorizes their removal or issues a final certificate of occupancy, whichever occurs first. Barriers shall be sufficiently substantial to withstand nearby construction activities. Plastic tape or similar forms of markers do not constitute "barriers." The most appropriate and protective barrier shall be utilized. Barriers are required for all trees designated to remain, except in the following cases:

*Response: None of the trees will be remaining so no protection is necessary*

#### **Section 4.620.20. Maintenance And Protection Standards**

A. Pruning activities shall be guided by the most recent version of the ANSI 300 Standards for Tree, Shrub, and Other Woody Plant Maintenance. Information on these standards shall be available upon request from the Planning Department. *Response: The new trees and shrubs will be maintained. The owner also*

DESIGN REVIEW NARRATIVE

Marion's Carpet Warehouse - Wilsonville

*understands that any trees that die or are diseased during the first two years will be replaced.*

**B. Topping is prohibited.** *Response: The owner understands that none of the new trees on the site is to be topped.*

**PROJECT DESCRIPTION**

CONSTRUCT A 27,366 SF TILT-UP SLAB WAREHOUSE FOR CARPET, 3,500 SF OF THE BUILDING WILL BE USED FOR RETAIL SPACE AND 1,400 SF WILL BE OFFICE

**CODE SUMMARY**

TOTAL BUILDING AREA	27,366 SF
AREA PER FLOOR:	24,766 SF 1ST FLOOR
	2,600 SF 2ND FLOOR
FOOTPRINT:	24,766 SF
WAREHOUSE AREA (SI OCCUPANCY):	24,766 SF
MERCANTILE AREA (M OCCUPANCY):	3,500 SF
OFFICE AREA (O OCCUPANCY):	1,400 SF

CODE USED: 2014 OREGON, 2014 OFC, 2014 OMC, 2014 OSSC, KCA117.1-2009, 2010 NFPA 13, 2010 NFPA 72

SECTION 318. OCCUPANCY: TYPE M, S1 & B OCCUPANCIES

SECTION 414. HAZARDOUS MATERIALS: NONE

TABLE 601.1. FIRE RESISTIVE RATING: CONSTRUCTION TYPE - IIB

TABLE 503. ALLOWABLE BUILDING HEIGHTS & AREAS: M - 2 STORY & 12,500 SF / B - 3 STORY & 19,000 SF / S1 - 2 STORY & 17,500 SF (+ SPRINKLER INCREASE, SEE 506.3)

SECTION 566.3. AUTOMATIC SPRINKLER SYSTEM ON CEILING: THIS STRUCTURE IS ALLOWED TO BE 3 STORIES & 25,000 SF PER FLOOR WHEN A BUILDING IS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM. THE BUILDING AREA LIMITATION IS PERMITTED TO BE INCREASED BY AN ADDITIONAL 200%.

TABLE 602. FIRE RESISTIVE RATING FOR EXTERIOR WALLS: IIB - EXTERIOR WALLS MUST BE 2-HOUR FIRE RATED (MEETS CODE SEE 721.1(1)), NO OTHER WALLS ARE NOT REQUIRED TO BE RATED IN THIS SECTION

TABLE 705.8. MAX AREA OF EXTERIOR WALL OPENING: UNPROTECTED OPENINGS IN A SPRINKLERED BUILDING 45% OPENINGS ARE ALLOWED WHEN THE WALL IS 10'-15" FROM PROPERTY LINE

721.1(2) RATED FIRE-RESISTANCE PERIOD: 5" THICK SOLID CONCRETE WILL BE USED FOR ALL EXTERIOR WALLS - 2H FIRE RATED ASSEMBLY

SECTION 903. SPRINKLER SYSTEM: ESFR SPRINKLER SYSTEM

906. PORTABLE FIRE EXTINGUISHERS: ONE FIRE EXTINGUISHER WILL BE PROVIDED EVERY 1K SF & WITHIN 5 FEET TRAVEL DISTANCE

907.2. MANUAL FIRE ALARMS: REQUIRED

909. SMOKE CONTROL SYSTEM: NONE

OCCUPANT LOAD PER TABLE 1004.2:

OCCUPANT LOAD	AREA	LOAD	LOAD
WAREHOUSE	22,866	1500	46
MERCANTILE	3500	150	117
BUSINESS	1000	10	10
<b>TOTAL OCCUPANT LOAD</b>			<b>175 OCC.</b>

1006. EXIT ILLUMINATION: THE STRUCTURE IS REQUIRED TO HAVE 1 FOOT CANDLE OF LIGHT AT THE WALKING SURFACE TO BE POWERED BY THE PRIMARY ELECTRICAL SUPPLY. EMERGENCY BATTERY BACKUP IS REQUIRED

1011. EXIT SIGNS: REQUIRED

1041.3. COMMON PATH OF EGRESS TRAVEL: 75 FEET WITH SPRINKLER SYSTEM.

TABLE 1064.2. EXIT ACCESS TRAVEL DIST. 250 FEET ALLOWED WITH SPRINKLER SYSTEM.

1204. NATURAL VENTILATION: FOR ROOMS THAT DO NOT HAVE OPERABLE WINDOWS, A MECHANICAL VENTILATION MUST BE PROVIDED UNDER A SEPARATE MECHANICAL PERMIT

TABLE 2902.1. PLUMBING:

OCCUPANT LOAD	AREA	LOAD	WATER	CLOSETS	LAVS
WAREHOUSE	22,866	46	1	1	1
MERCANTILE	3500	117	1	1	1
BUSINESS	1000	10	1	1	1

THREE RESTROOMS ARE REQUIRED: (1) MESS, (1) WOMENS, (1) ADA UNSEX

**SPECIAL INSPECTIONS**

- 1 EPOXY ANCHORS

**PLANNING CODE SUMMARY**

ZONE: PLANNED DEVELOPMENT INDUSTRIAL (PD)

**PARKING:**  
FOR WHOLESALE: 3 MEN / 1,000 SQUARE FEET OF BUILDING  
FOR 22,866 SQUARE FEET OF WHOLESALE: 1,000 SQUARE FEET OF OFFICE SPACE TO BE COUNTED AS WHOLESALE - 22,866 = 7.2 PARKING SPOTS

**FOR RETAIL STORES:**  
4.1 PARKING SPOTS PER 1,000 SQUARE FEET OF BUILDING. THIS BUILDING WILL HAVE 5,500 SQUARE FEET OF RETAIL, 50.14 PARKING SPOTS

**FOR OFFICE:**  
4.1 PARKING SPOTS PER 1,000 SQUARE FEET OF BUILDING. THIS BUILDING WILL HAVE 1,400 SQUARE FEET OF OFFICE, 14.00 PARKING SPOTS

**PARKING REQUIREMENT TOTAL:** 7.2 + 14.4 + 21.6 = 43.2 PARKING SPOTS = 22 SPACES

USE: WHOLESALE AND INDUSTRIAL USE ALLOWED

RETAIL ALLOWED WITH A MAXIMUM OF 5,000 SQUARE FEET.

LANDSCAPING: 15% OF SITE MINIMUM

SITE IS 45,793 SQ FT (10.35) AC. FT. MINIMUM LANDSCAPING REQUIRED. 7,375 SF SHOWN

BUILDING SETBACKS: 10' MINIMUM BUT APPEALS HAVE BEEN GRANTED IN THE PAST TO ALLOW 10'-0" WHICH WE ARE APPLYING FOR

TRASH AREA: 20% OF THE TOTAL AREA (57,366 SF) = 5,473

MERCANTILE AND OFFICE MAKE UP LESS THAN 20% OF THE AREA.

TRASH AREA CALC CAN BE BASED OFF OF WHOLESALE USE.

WAREHOUSE AREA (SI OCCUPANCY): 22,866 SF

MERCANTILE AREA (M OCCUPANCY): 3,500 SF

OFFICE AREA (O OCCUPANCY): 1,400 SF

SIZE OF TRASH AREA: 27,366 SF 1000 = 27.3

27.3 / 4 = 6.825 = 1.488 = 175 SF

IMPERVIOUS AREA: 8,650 SQUARE FEET

PARKING LOT WALKWAYS: 2,280 SQUARE FEET

BUILDING: 27,366 SQUARE FEET

TOTAL: 33,696 SQUARE FEET

BICYCLE PARKING SPACES:

RETAIL = 1SPACE/6000 SF = 350 SP = 875 SPACE FOR RETAIL

WHOLESALE = 1SPACE PER 20,000 SF = 2,286 SF = 114 SPACES

OFFICE = 1SPACE/500 SF = 02 SPACES

1144 - 875 = 02 = 2.58 BICYCLE PARKING SPACES = 3 SPACES

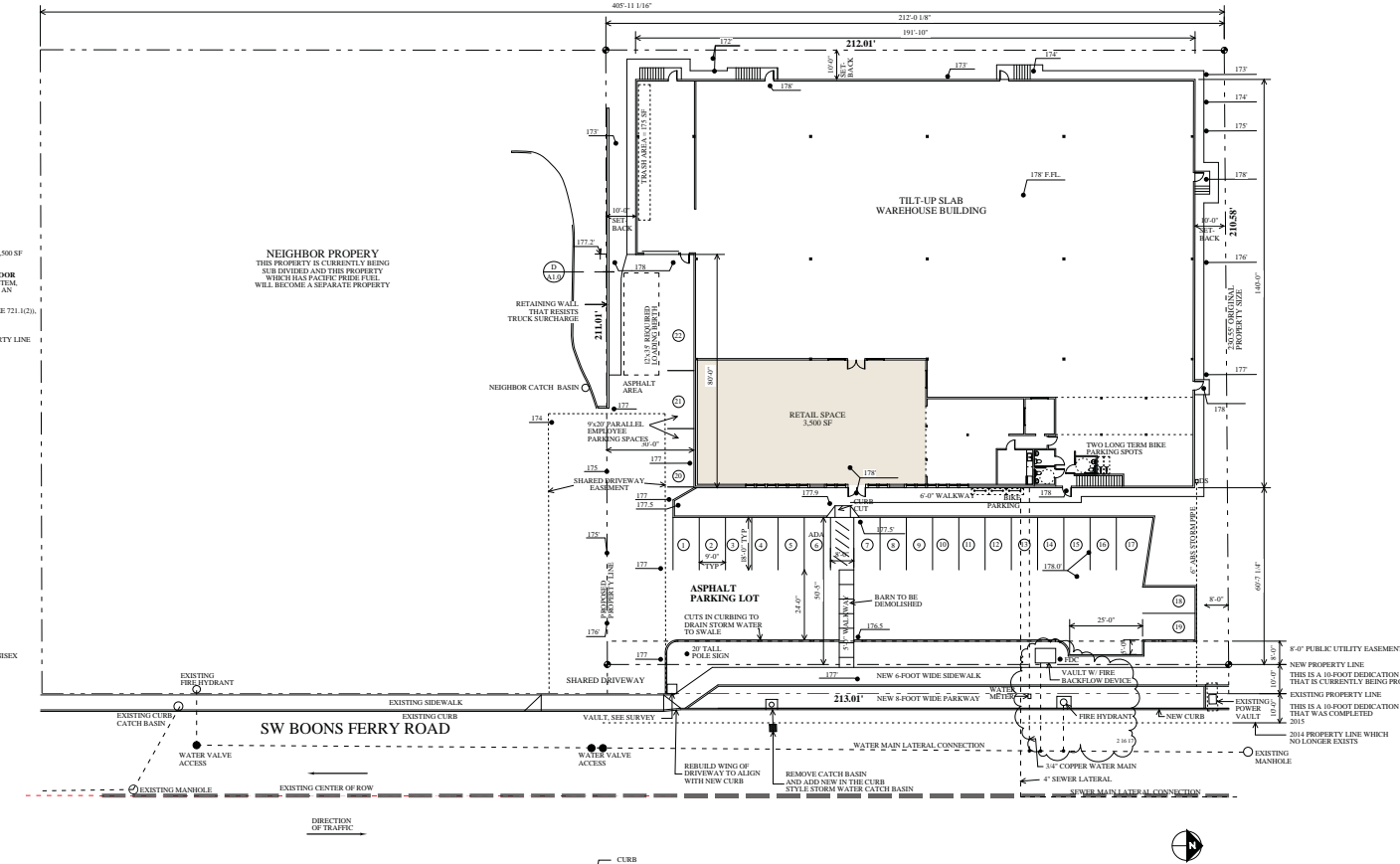
MECHANICAL ENGINEERING

ELECTRICAL ENGINEERING

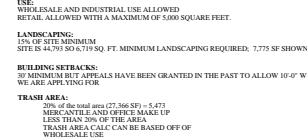
PLUMBING ENGINEERING

FIRE SPRINKLER DESIGN

**DEFERRED SUBMITTALS**



**SITE PLAN**



**A. BICYCLE PARKING**

NOTE: EACH RACK HOLDS TWO BICYCLE



**B. WALL MOUNTED BIKE PARKING**

1 SPOT PER RACK



**C. EGRESS STAIR**

1'-2" x 1'-0"



**D. RETAINING WALL @ PROPERTY LINE**

1'-2" x 1'-0"

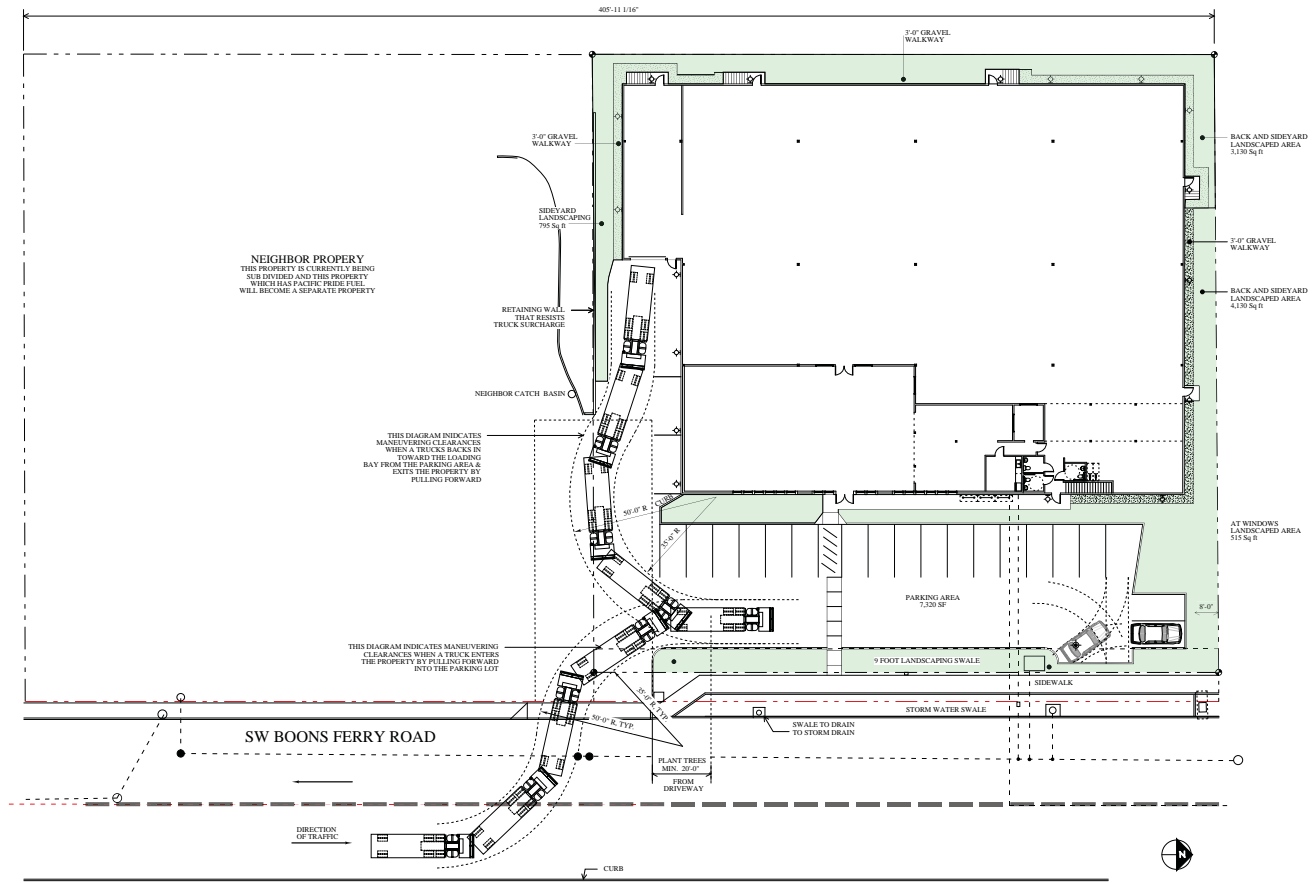


MARIONS CARPETS WAREHOUSE  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR

**ALLUSA**  
ARCHITECTURE  
PHOTO: (503) 225-3510 FAX: (503) 225-0315 ALLUSA@ARCHITECTURE.COM

DATE: 7 12 17  
DATE: 6 27 17  
DATE: 5 10 17  
DATE: 2 23 17

SHEET  
**A1.0**  
OF 11  
COVER SHEET



**TRUCK TURNING PLAN & LANDSCAPING AREAS.** SEE LANDSCAPING PLANS FOR PLANTINGS

1.340

**SITE FEATURES**

- SEE THE REFLECTED CEILING PLAN FOR EXTERIOR LIGHTING NEAR ENTRY.
- SCENCE DIRECTED AT WALKING SURFACE SWITCHED WITH A PHOTOVOLTAIC SENSOR  
LITRONIX CSW LED 100 1000 40K 2M MVOLT DBL XD
- BOLLARD LIGHT DIRECTED AT WALKING SURFACE WITH A PHOTOVOLTAIC SENSOR  
LITRONIX SBKX 12VKT MVOLT H30 DBL B LPI

**MARIONS CARPETS WAREHOUSE**  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR



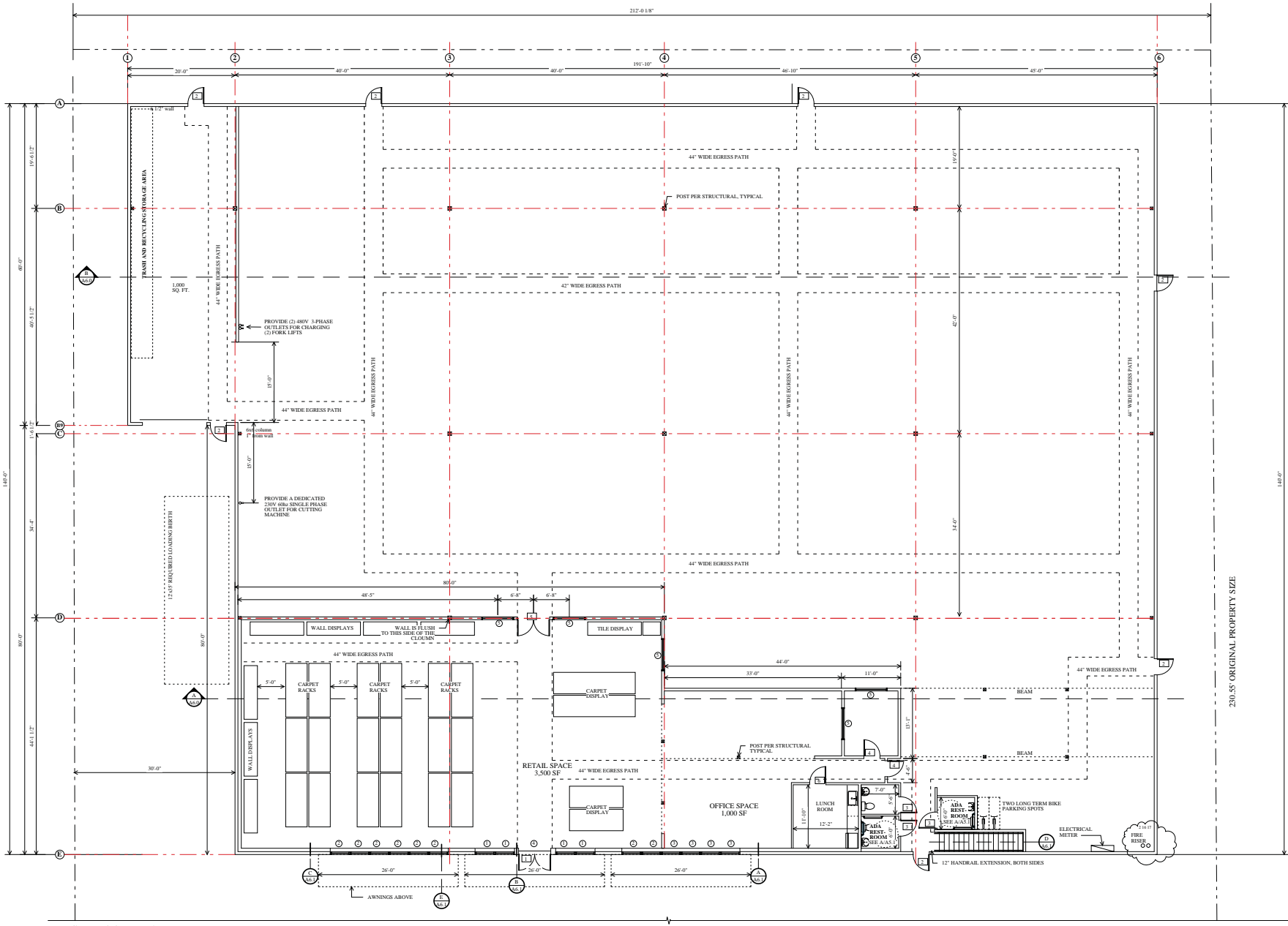
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DATE: 2 23 17  
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 OF 11  
 TRUCK TURNING

SHEET

Phone: (503) 235-3539 Fax: (503) 235-0435 Allusa@allusa.com





**FIRST FLOOR PLAN**

**WINDOW SCHEDULE**  
SEE ELEVATIONS

1	3'-8" WIDE X 5'-0" TALL (LOWER WINDOW)
2	3'-8" WIDE X 3'-8" TALL (MIDDLE WINDOW)
3	3'-8" WIDE X 4'-4" TALL (UPPER WINDOW)
4	3'-8" WIDE X 5'-6" TALL (LOWER WINDOW)
5	3'-8" WIDE X 3'-8" TALL (UPPER WINDOW)

**STOREFRONT WINDOWS:**  
KAWNEER TOPAS 2645S  
COLOR: BLACK

6	7'-0" WIDE X 5'-6" TALL (LOWER WINDOW)
7	7'-0" WIDE X 3'-8" TALL (MIDDLE WINDOW)
8	6'-0" WIDE X 4'-4" TALL (UPPER WINDOW)
9	6'-0" WIDE X 4'-0" TALL (MIDDLE WINDOW)
10	6'-0" WIDE X 4'-0" TALL (UPPER WINDOW)
11	6'-0" WIDE X 4'-0" TALL FIXED WINDOW

**DOOR SCHEDULE**

1	(2) 3'-0" X 7'-0" ENTRY DOOR WITH TEMPERED GLAZING WITH LOCK & A KEYS (HARDWARE AT THE FLOOR. SEE DETAIL E.A.S.1). THRESHOLD NOT TO EXCEED 1/2". PROVIDE SIGN THAT STATES THIS DOOR IS TO REMAIN UNLOCKED DURING BUSINESS HOURS
2	3'-0" X 7'-0" INSULATED STEEL DOOR WITH LOCK & A KEYS DEADBOLT THAT UNLOCKS FROM THE INSIDE UPON EXITING WITHOUT A KEY. THRESHOLD NOT TO EXCEED 1/2". SEE DETAIL E.A.S.1
3	3'-0" X 7'-0" RESTROOM DOOR. DOOR TO BE OPENABLE FROM THE INSIDE WITH ONE OPERATION AND WITHOUT ANY SPECIAL EFFORT. USE DEADBOLT W/ LEVER ON INSIDE AND OCCUPIED VACANT INDICATOR ON OUTSIDE. THRESHOLD NOT TO EXCEED 1/2". SEE DETAIL E.A.S.1
4	3'-0" X 7'-0" DOOR WITH CLASSROOM LOCK. SEE DETAIL E.A.S.1
5	(2) 3'-0" X 7'-0" DOOR - SEE DETAIL E.A.S.1
6	3'-0" X 7'-0" DOOR WITH NO LOCK. SEE DETAIL E.A.S.1

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DATE: 2 23 17

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OF 11  
1ST FLOOR PLAN

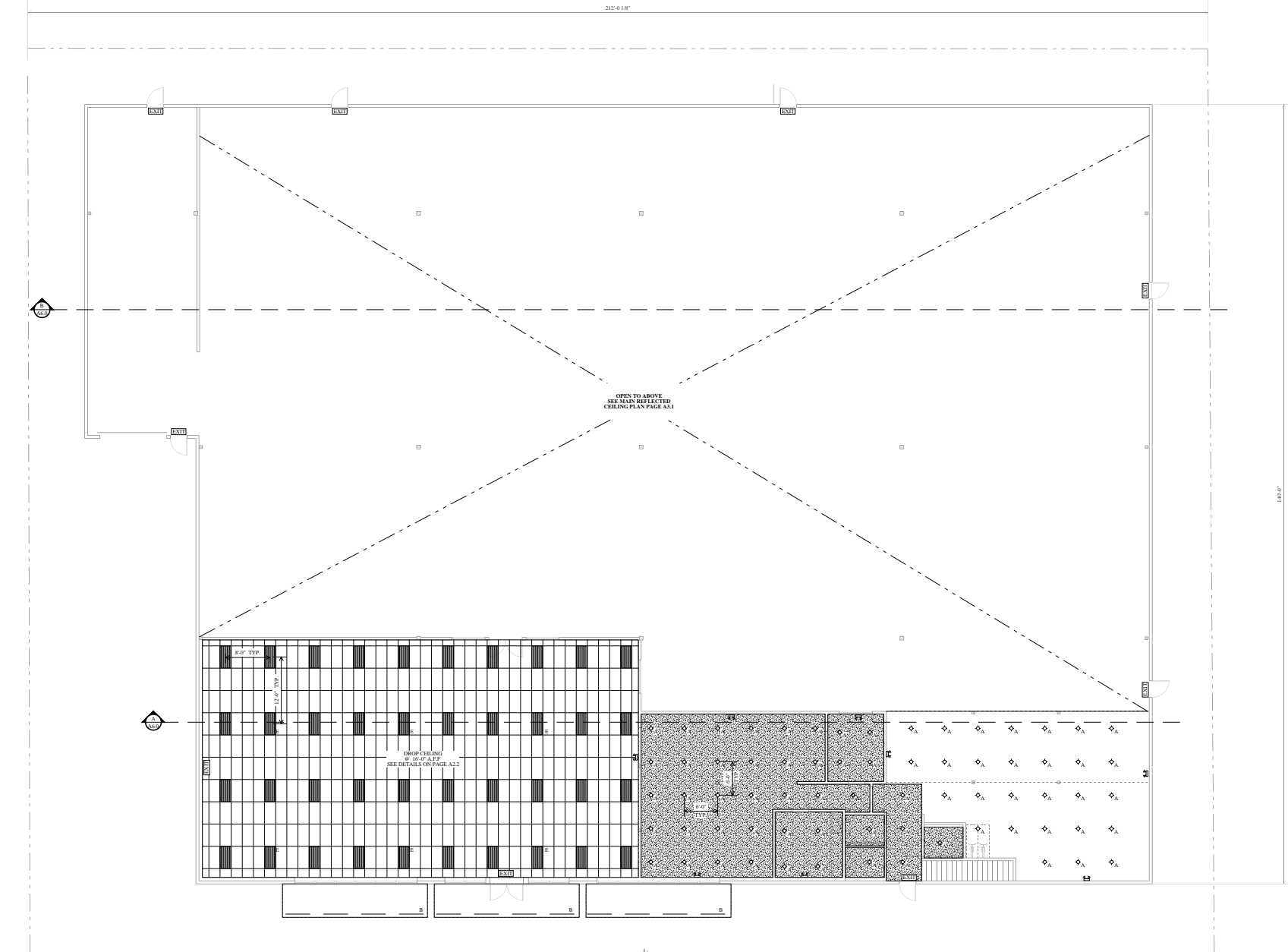


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MARIONS CARPETS WAREHOUSE  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR

230.55' ORIGINAL PROPERTY SIZE

1/8" = 1'-0"



REFLECTED CEILING PLAN (LOWER CEILINGS)

**LIGHTING SCHEDULE**

- ◊ INDOOR CAN LIGHT
- ◻ OUTDOOR STRIP LIGHT
- ◇ CHANDLER

2x4 LED TROFFER  
LITHONIA  
LITH-024V-YN  
4000 KELVIN

E - EMERGENCY LIGHTING FIXTURE WITH BATTERY BACK-UP TO MAINTAIN ONE FOOT-CANDLE OF ILLUMINATION FOR 90 MINUTES DURING A POWER OUTAGE  
 LITHONIA ELM2 EMERGENCY LIGHTING FIXTURE WITH BATTERY BACK-UP TO MAINTAIN ONE FOOT-CANDLE OF ILLUMINATION FOR 90 MINUTES DURING A POWER OUTAGE

EXIT ILLUMINATED EXIT SIGNAGE WITH LETTERS MIN. 6" TALL & 3/4" STROKE ON A HIGH CONTRAST BACKGROUND PER CODE, OSGI, ILL. W/ 90 MINUTE BATTERY BACK-UP POWER & ILLUMINATION FOR GIBBS

1/8" = 1'-0"

DATE: 7 12 17  
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 DATE: 3 10 17

DATE: 2 23 17

SHEET

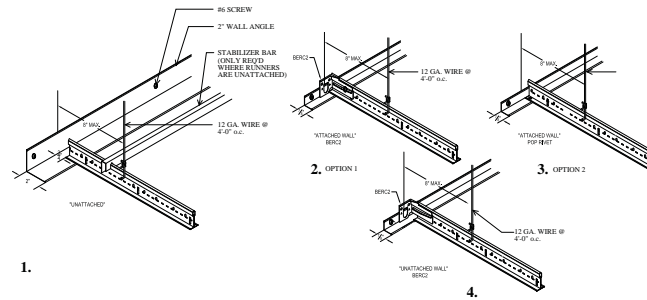
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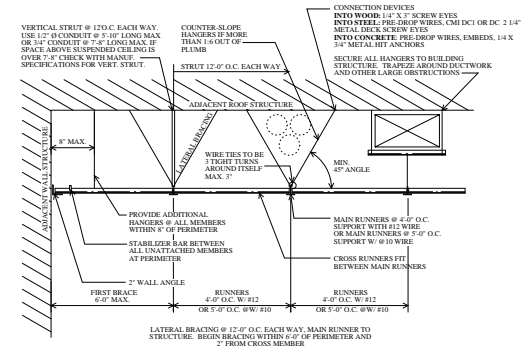
REFLECTED CEILING PLAN - LOWER

MARIONS CARPETS WAREHOUSE  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR

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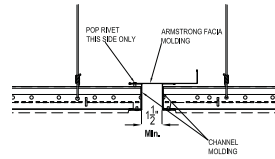


**A. CEILING GRID DETAILS @ ATTACHED & UNATTACHED ENDS**



**B. TYPICAL LATERAL BRACING FOR SUSPENDED CEILING**

N.T.S.



IF THE CEILING IS OVER 2,500 S.F., PROVIDE SEISMIC SEPARATION JOINTS TO DIVIDE THE CEILING INTO AREAS LESS THAN 2,500 S.F. & ALLOW 7/8" MIN. LATERAL MOVEMENT & 1" MOVEMENT FOR THE PORTIONS OF CEILING LOCATED ON EITHER SIDE OF THE SEPARATION JOINT. EACH 2,500 S.F. CEILING IS TO BE ATTACHED TO A 2" ANGLE ON TWO ADJACENT SIDES.

**C. SEISMIC SEPARATION JOINT**

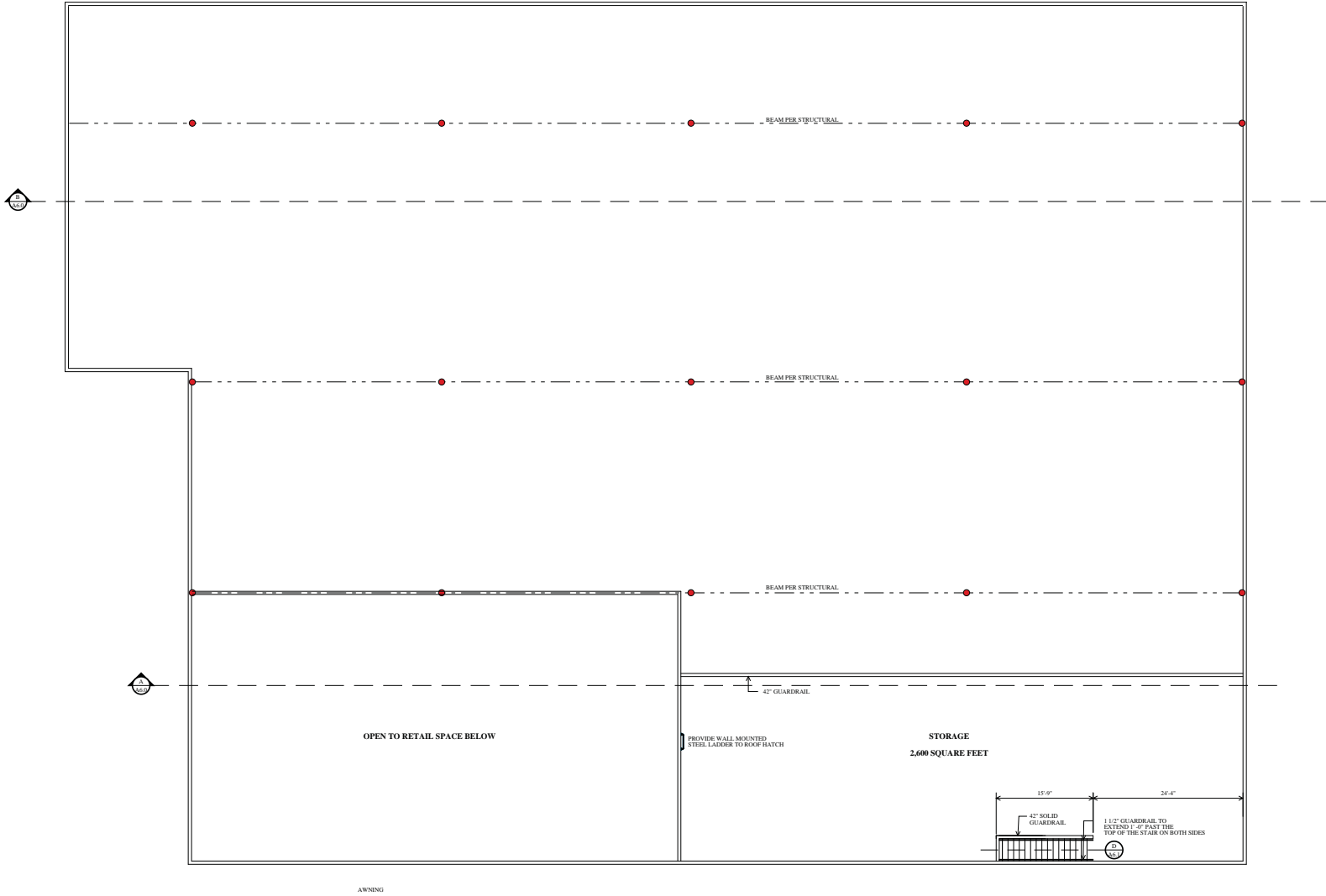
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OF 11  
CEILING  
GRID  
DETAILS

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MARIONS CARPETS WAREHOUSE  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR



AWNING

SECOND FLOOR PLAN

1/4" = 1'-0"

DATE: 7 12 17  
 DATE: 6 27 17  
 DATE: 3 10 17

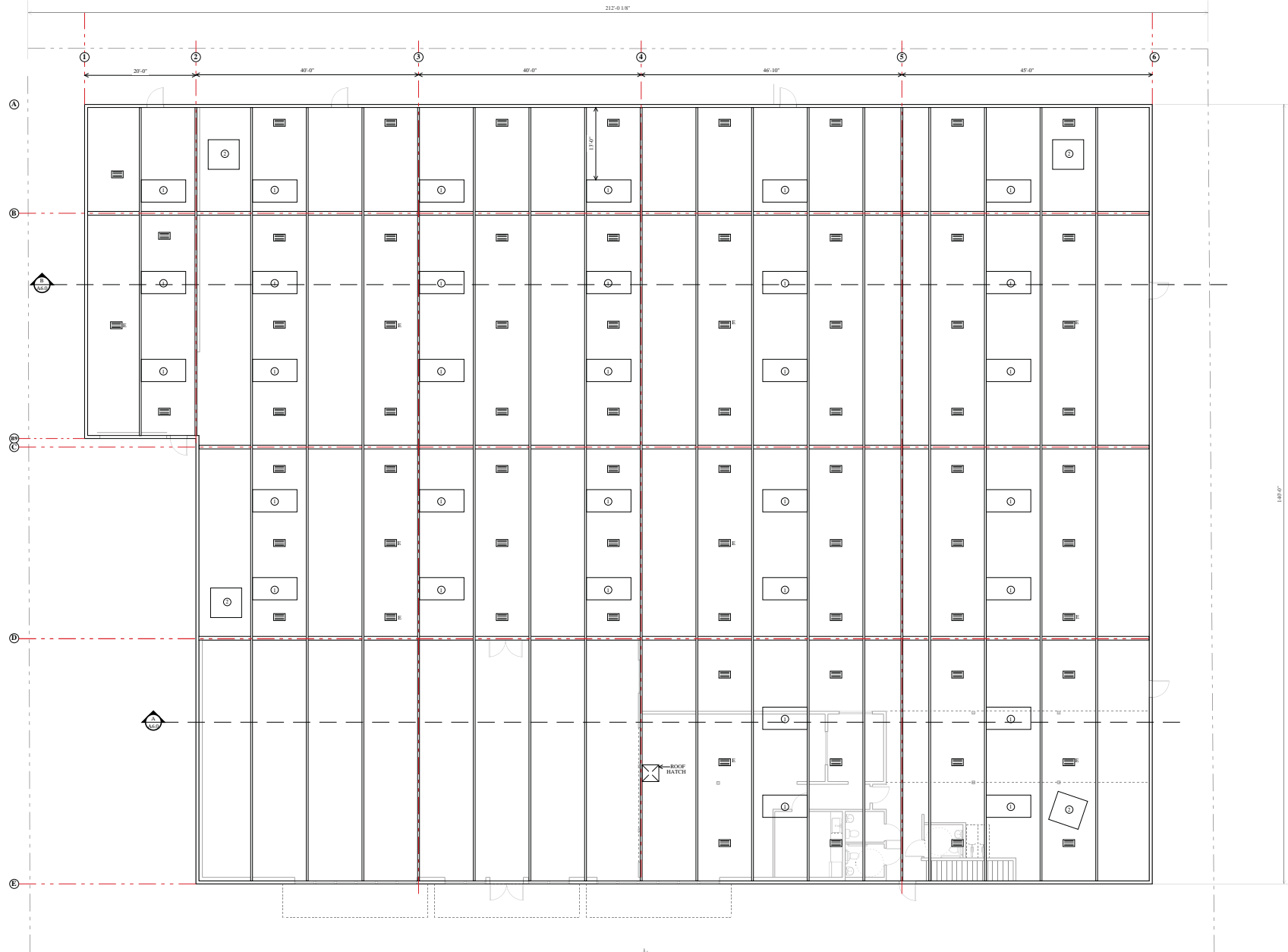
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 OF 11  
 2ND FLOOR  
 PLAN



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MARIONS CARPETS WAREHOUSE  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR



**NOTES**

- SKYLIGHTS:  
ARCHITECTURAL SPECIALTIES  
48" X 36"  
MODEL NUMBER D06CM-5201
- 199,000 BTU GAS FURNACE SUSPENDED FROM CEILING, OPERATED WITH MANUAL TURN 60 MINUTE TIMER ACCESS @ FIRST FLOOR LEVEL UNDER FIRESPACE

- ▬ LIGHTS:  
LITHONIA BIG HIGH BAY (LED LIGHT)  
BIG LUMEN HET 1 LENS (NO) 20VOLT OZIO SIKELVYN
- E = EMERGENCY LIGHTING FIXTURE WITH BATTERY BACK UP TO MAINTAIN ONE FOOT CANDLE OF ILLUMINATION FOR 90 MINUTES DURING A POWER OUTAGE

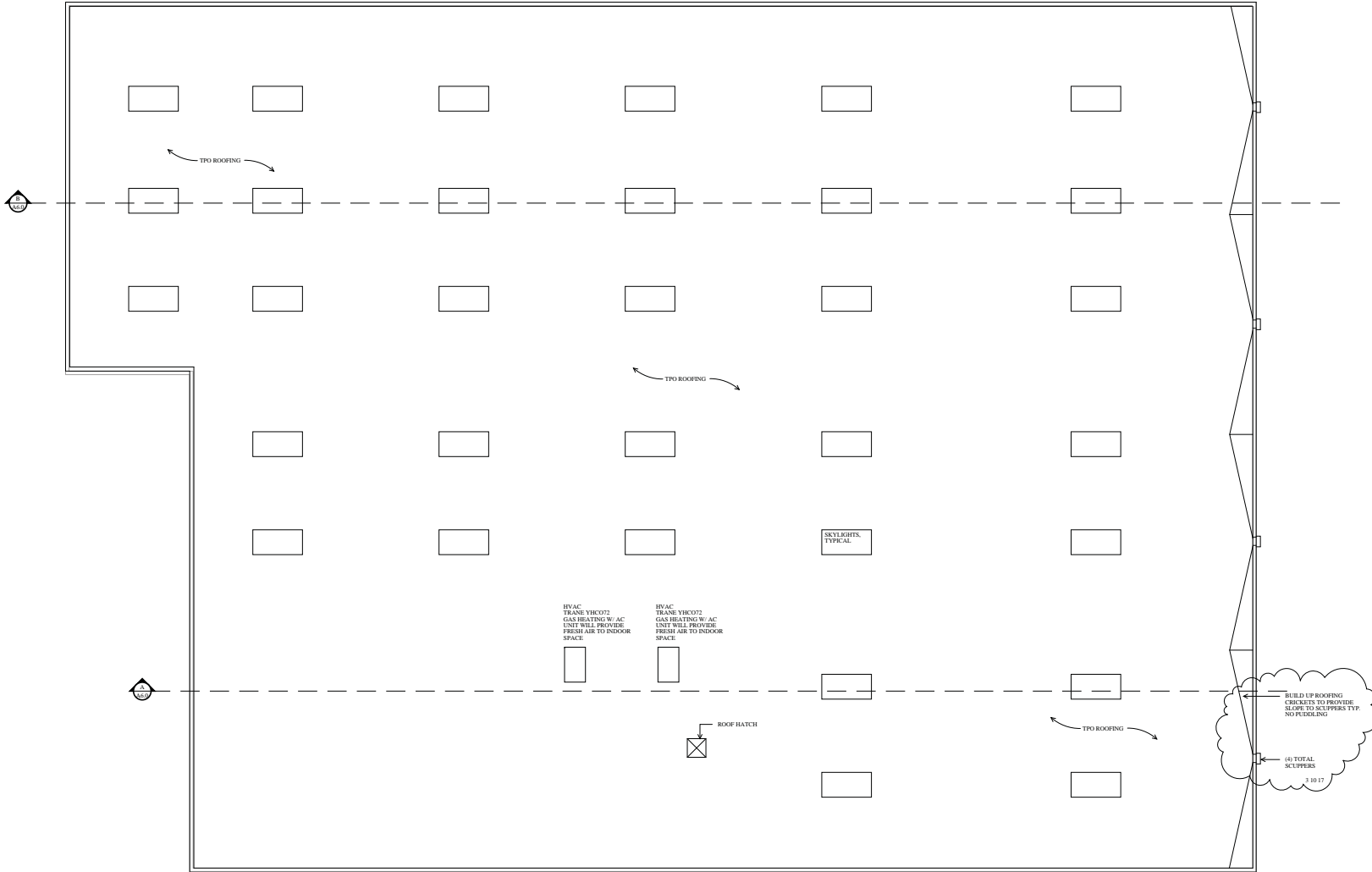
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DATE: 3 10 17

DATE: 2 23 17

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OF 11  
REFLECTED  
CEILING PLAN  
MAIN CEILING

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**MARIONS CARPETS WAREHOUSE**  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR



ROOF PLAN

1/4" = 1'-0"

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 DATE: 6 27 17  
 DATE: 3 10 17

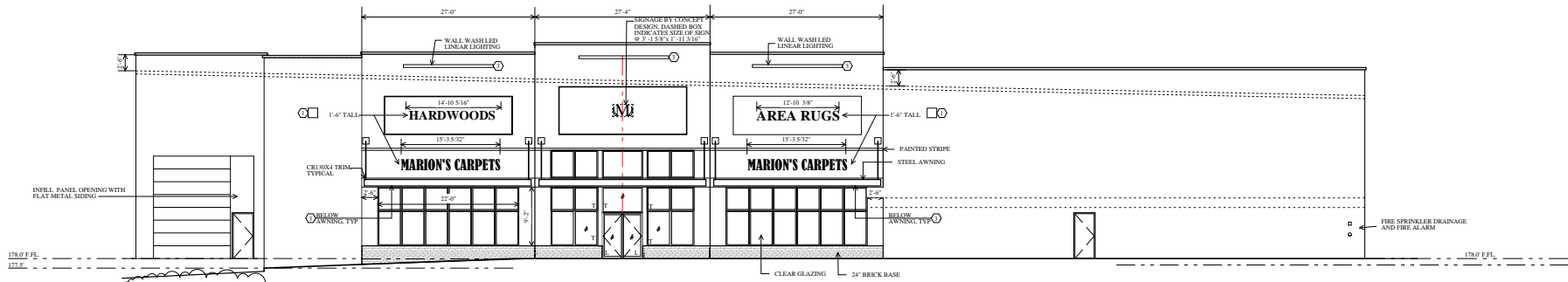
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 OF 11  
 ROOF PLAN



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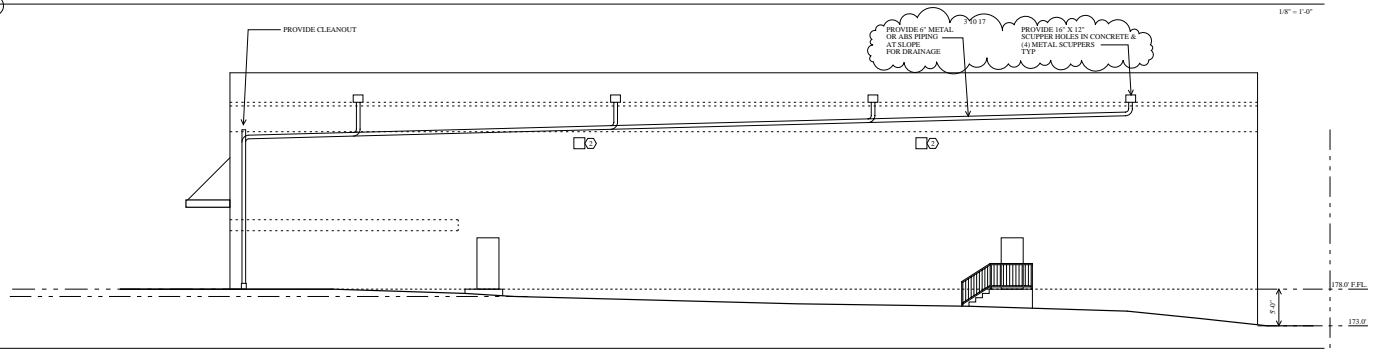
MARIONS CARPETS WAREHOUSE  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR



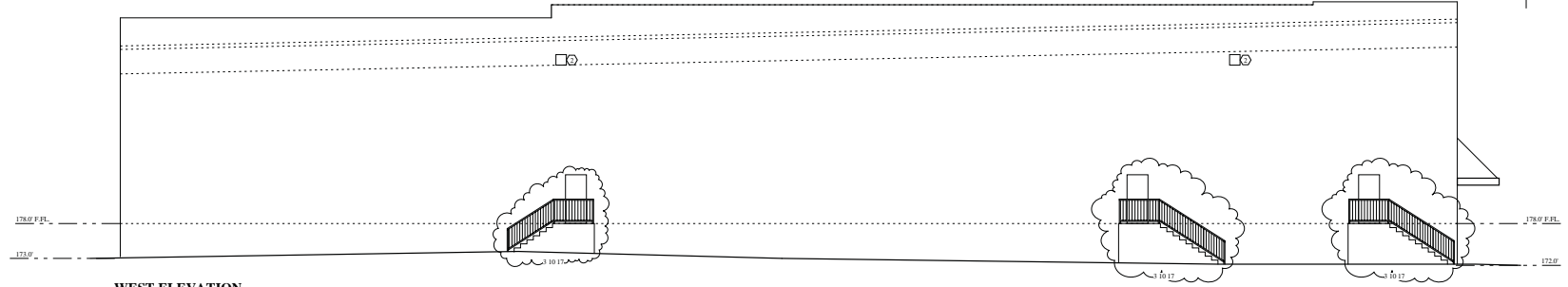
**EAST ELEVATION**  
 1/4" TEMPERED GLAZING  
 1/2" LAMINATED GLAZING  
 6/11/17

**LIGHTING FIXTURES**

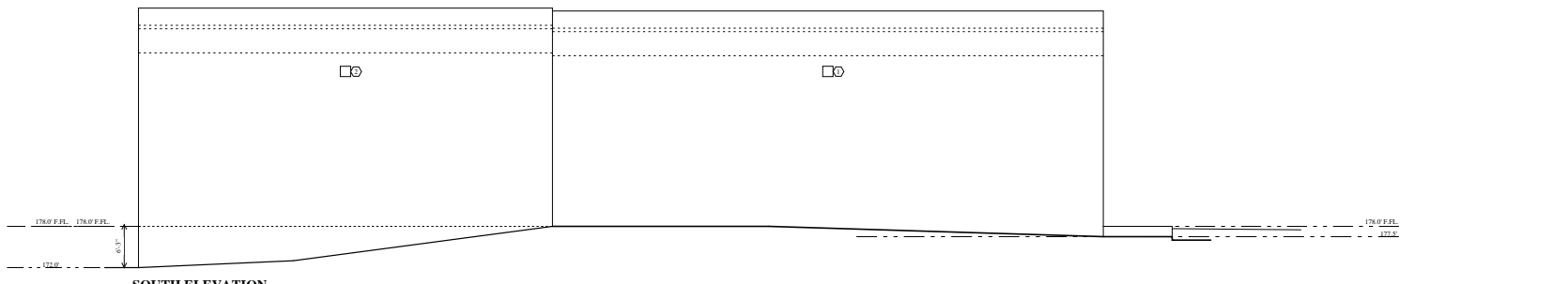
- ① ATLAS - WPMZLED 43 WATT LED WALL PAK  
3' ABOVE FINISH FLOOR
- ② ATLAS - WPMZLED 27 WATT LED WALL PAK  
2' ABOVE FINISH FLOOR
- ③ PHILIPS COLOR KINETICS 350-000011-10  
VAVA LINEAR MR  
CONTROLLED WITH A TIMER



**NORTH ELEVATION**



**WEST ELEVATION**



**SOUTH ELEVATION**

**MARION'S CARPETS WAREHOUSE**  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR

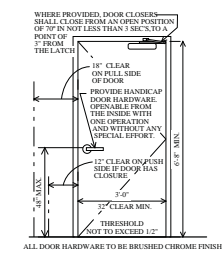


DATE: 7 12 17  
 DATE: 6 27 17  
 DATE: 3 10 17

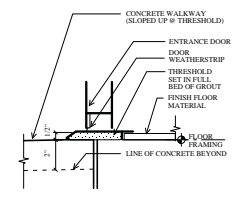
DATE: 2 23 17  
 SHEET  
**A5.0**  
 OF 11  
 ELEVATIONS

Phone: (503) 235-3536 Fax: (503) 235-0435 Allusa@allusa.com

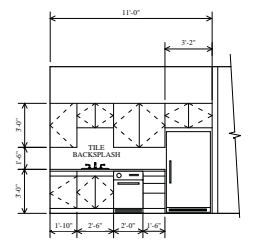
1/8" = 1'-0"



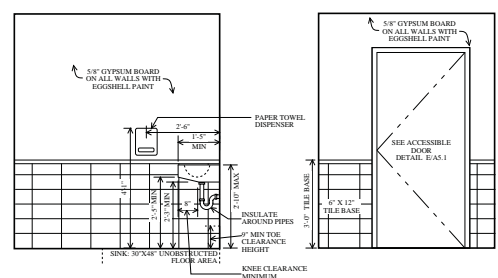
**E. ACCESSIBLE DOOR**  
 ALL DOOR HARDWARE TO BE BRUSHED CHROME FINISH  
 PULL SIDE OF DOOR MANEUVERING CLEARANCES: 5'-0" IN THE DIRECTION OF TRAVEL, 3'-6"  
 PUSH SIDE OF DOOR MANEUVERING CLEARANCES: 4'-0" IN THE DIRECTION OF TRAVEL, 3'-6"



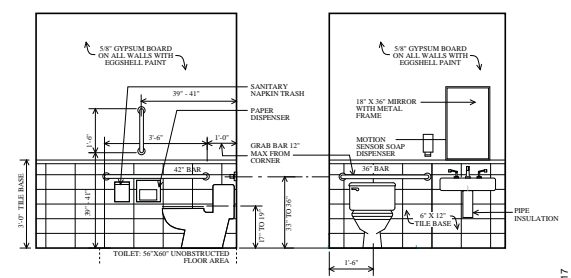
**D. DOOR THRESHOLD**  
 3" = 1'-0"



**C. LUNCH ROOM**  
 1/4" = 1'-0"



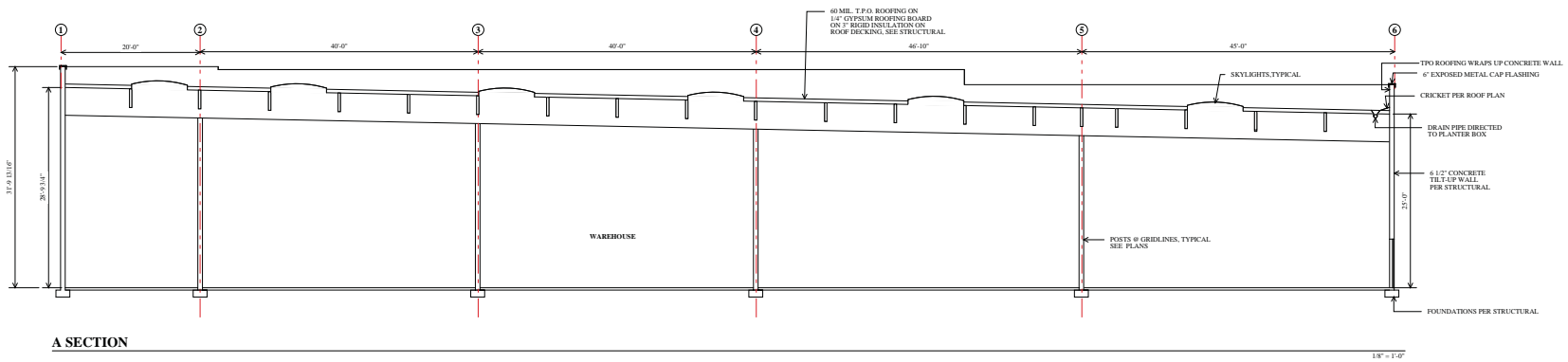
**A. COMMERCIAL ACCESSIBLE RESTROOM**



DATE: 7 12 17  
 DATE: 6 27 17  
 DATE: 3 10 17  
 DATE: 2 23 17

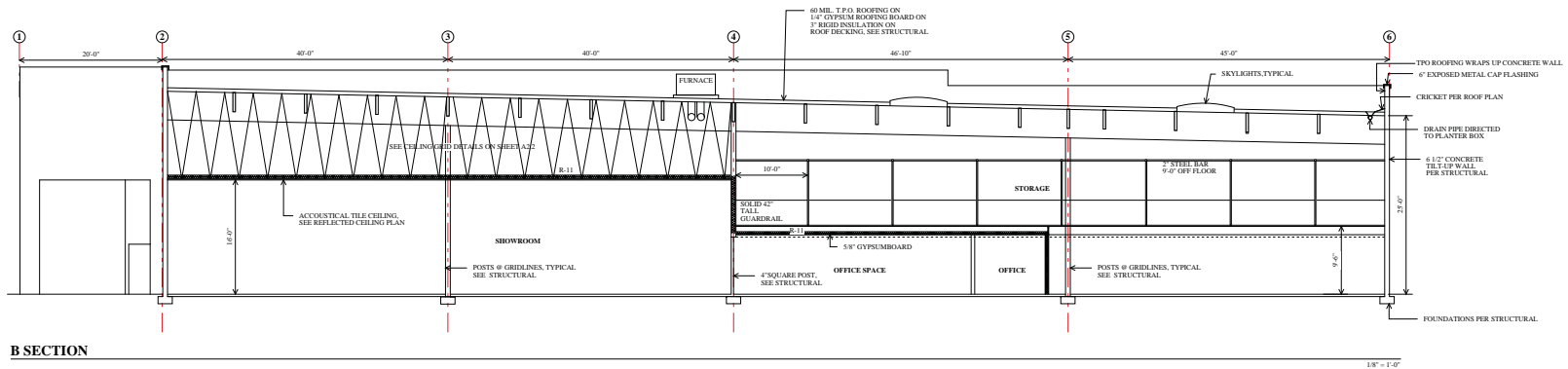
1/2" = 1'-0"





**A SECTION**

1/8" = 1'-0"



**B SECTION**

1/8" = 1'-0"

MARIONS CARPETS WAREHOUSE  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR

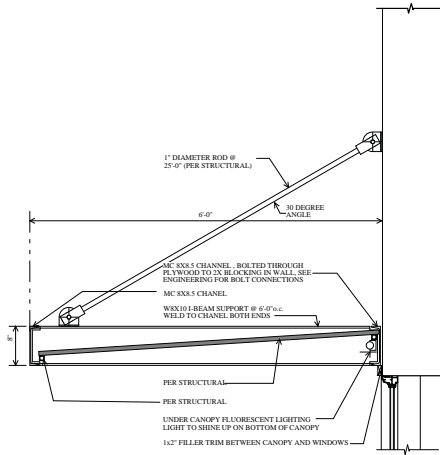
**ALLUSA**  
ARCHITECTURE  
INC.

SHEET  
**A6.0**  
OF 11  
SECTION

DATE: 7 12 17  
DATE: 6 27 17  
DATE: 3 10 17

DATE: 2 23 17

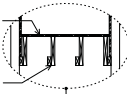
Phone: 503.251.2500 Fax: 503.251.0435 AllusaArchitecture.com



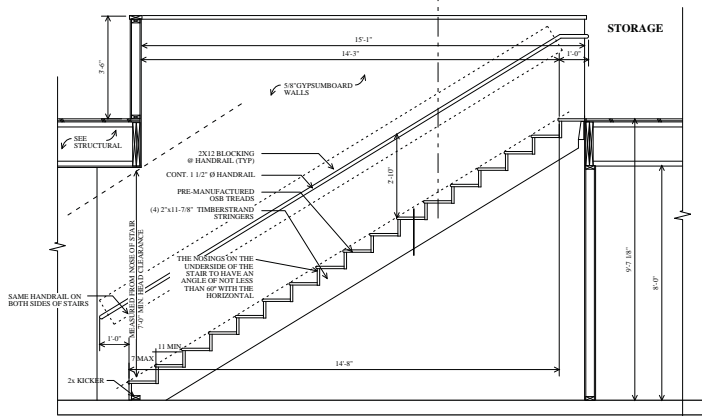
**E. AWNING DETAIL**  
SEE ENGINEERING FOR WELDING

1" = 1'-0"

PREMANUFACTURE  
TO OUR TREADS  
WITH BURRER  
TREAD FINISH



(4) 11-7/8"  
TIMBERSTRAND  
STRINGERS  
W/ 2x2 SISTERED TO  
EACH STRINGER



**D. STAIR SECTION**

1/2" = 1'-0"

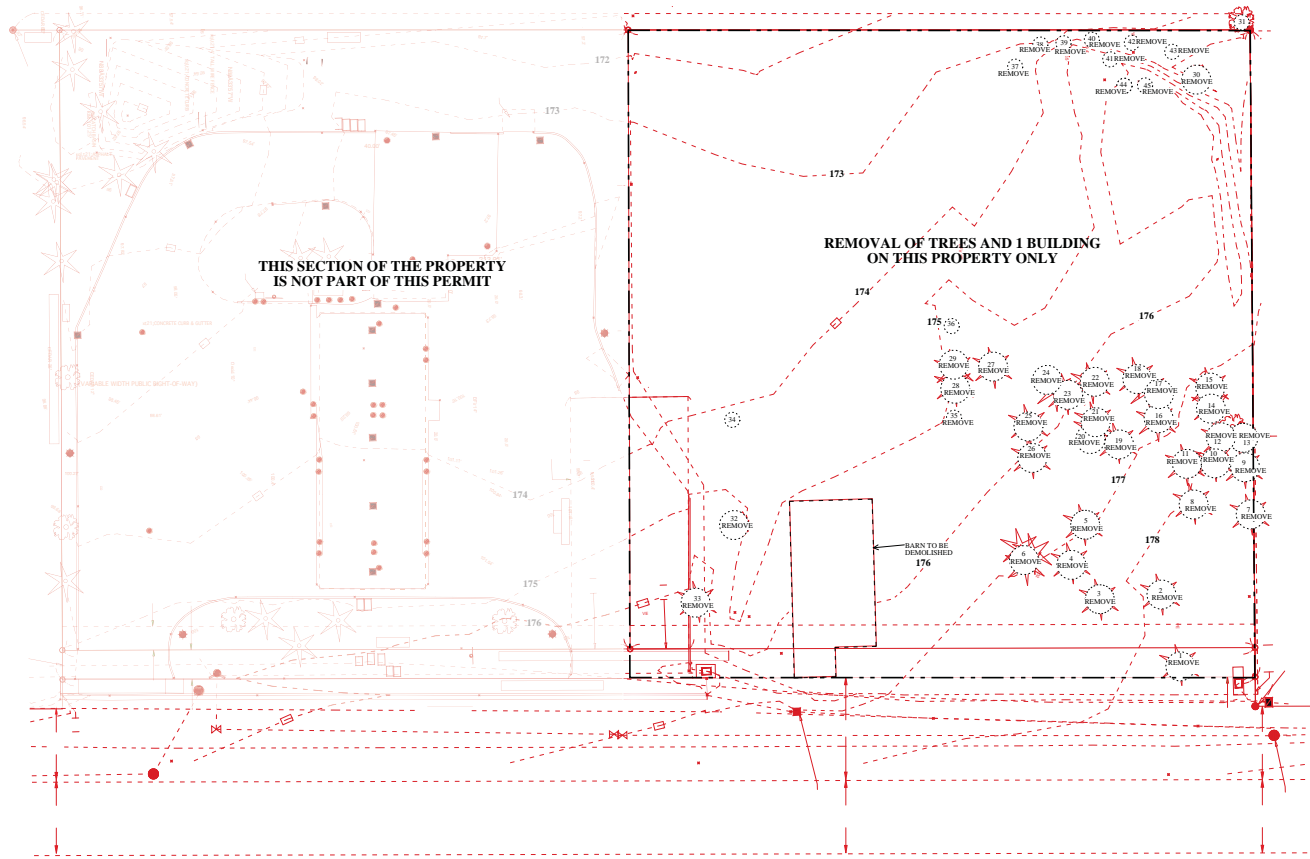
DATE: 7 12 17  
DATE: 6 27 17  
DATE: 3 10 17

DATE: 2 23 17  
SHEET  
**A6.1**  
OF 11  
SECTIONS/  
DETAILS

MARIONS CARPETS WAREHOUSE  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR

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**TREE REMOVAL PLAN**

No.	Common Name	Species Name	DBH1	C-Rad1	Class1	Comments	Treatment
1	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	22	G	remove	remove
2	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	22	G	dominant tree, some asymmetry, re-assess suitability for preservation at time of clearing	remove
3	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	18	F	suppress, very one-sided to E, sweep in upper trunk, poor structure	remove
4	Douglas-fir	<i>Pseudotsuga menziesii</i>	42	22	G	remove	remove
5	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	16	F	intermediate crown class, relatively small and high live crown	remove
7	western redcedar	<i>Thuja plikata</i>	28.8"	25	F	codominant stems just above ground level, moderate structure	remove
8	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	14	G	moderate structure, re-assess suitability for preservation at time of clearing	remove
9	Douglas-fir	<i>Pseudotsuga menziesii</i>	40	18	G	crowns asymmetry, epicormics present on west face, re-assess suitability for preservation at time of clearing	remove
10	western redcedar	<i>Thuja plikata</i>	20	14	G	moderate structure, crown in upper trunk, re-assess suitability for preservation at time of clearing	remove
11	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	10	F	codominant crown class, moderate-poor structure	remove
12	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	8	F	codominant crown class, moderate-poor structure	remove
13	red oak	<i>Quercus rubra</i>	11	12	F	poor structure	remove
14	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	8	F	extensive ivy, small live-crown, very poor structure	remove
15	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	22	F	codominant crown class, broken top, moderate-poor structure	remove
16	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	8	F	intermediate crown class, poor structure	remove
17	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	24	G	extensive ivy	remove
18	western redcedar	<i>Thuja plikata</i>	42	6	F	extensive ivy, dead top	remove
19	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	14	F	intermediate crown class, poor structure	remove
20	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	6	F	mostly dead, numerous F-pine cones	remove
21	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	9	D	snag	remove
22	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	28	G	dead top	remove
23	western redcedar	<i>Thuja plikata</i>	14	18	F	single crown asymmetry, sap flow on NW face	remove
24	western redcedar	<i>Thuja plikata</i>	22	22	F	self-cleaning, but severe lean to W	remove
25	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	18	F	codominant crown class, one-sided to E	remove
26	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	20	F	codominant crown class, one-sided to E	remove
27	western redcedar	<i>Thuja plikata</i>	12	16	F	detached ivy	remove
28	Port-Oxford cedar	<i>Chamaecyparis lawsoniana</i>	8.12	12	F	very poor structure	remove
29	Port-Oxford cedar	<i>Chamaecyparis lawsoniana</i>	4.28	12	F	very poor structure	remove
30	sweet cherry	<i>Prunus avium</i>	24.9	20	F	codominant stems, dead and broken branches, crown decay, history of major branch failure, trunk decay	remove
31	sweet cherry	<i>Prunus avium</i>	23.4	10	F	lopped, sparse ivy	remove
32	apple	<i>Malus spp.</i>	22	16	F	extensive ivy infestation, dead and broken branches, very poor structure, decay	remove
33	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	16	F	poor structure, overtopped with ivy, dead and broken branches	remove
34	apple	<i>Malus spp.</i>	14	16	F	poor structure, overtopped with ivy, dead and broken branches	remove
35	English holly	<i>Ilex aquifolium</i>	24.6	10	F	invasive species, poor structure	remove
36	English holly	<i>Ilex aquifolium</i>	9.8	10	F	invasive species, poor structure	remove
37	English holly	<i>Ilex aquifolium</i>	3.6	12	F	invasive species	remove
38	sweet cherry	<i>Prunus avium</i>	7	10	F	invasive species, natural region	remove
39	sweet cherry	<i>Prunus avium</i>	4.5	10	F	invasive species, natural region	remove
40	sweet cherry	<i>Prunus avium</i>	4.8	10	F	invasive species, natural region	remove
41	sweet cherry	<i>Prunus avium</i>	7	10	F	invasive species, natural region	remove
42	sweet cherry	<i>Prunus avium</i>	7	10	F	invasive species, natural region	remove
43	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural region	remove
44	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural region	remove
45	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural region	remove
46	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural region	remove
47	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural region	remove
48	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural region	remove
49	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural region	remove
50	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural region	remove

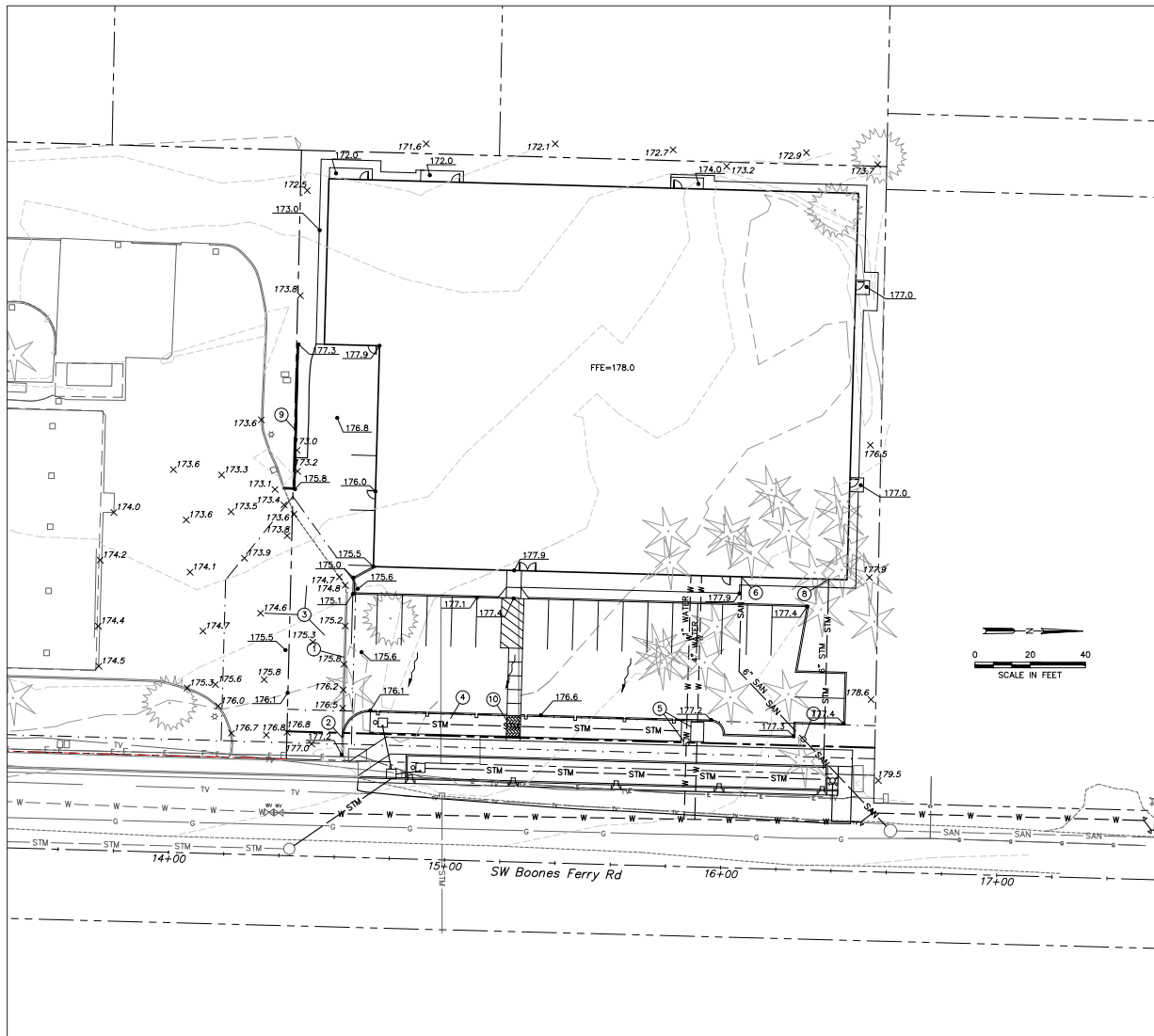
DBH1 is the diameter measured at 4.5-feet above the ground level in inches, multiple trunked trees are measured separately and individual trunk measurements are separated by a comma. C-Rad1 is the average crown radius measured in feet. Class1 is an arboreal assigned rating to generally describe the condition of individual trees as follows-- Dead, Poor, Fair, or Good Condition.

MARIONS CARPETS WAREHOUSE  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR

Phone: (503) 235-3500 Fax: (503) 235-0439 AllUSA@architect.com

DATE: 7 12 17  
 DATE: 6 27 17  
 DATE: 3 10 17  
 DATE: 2 23 17

**SHEET**  
**1**  
**TREE REMOVAL PLAN**



**CONSTRUCTION NOTES**

- ① REMOVE CURB
- ② BEGIN CURB, MATCH TO EXISTING
- ③ REGRADE ENTRANCE PAVEMENT
- ④ CONSTRUCT VEGETATED SWALE
- ⑤ INSTALL 3/4" DOMESTIC WATER METER WITH 1" LATERAL AND 4" FIRE SPRINKLER DOUBLE CHECK ASSEMBLY AND 4" LATERAL
- ⑥ INSTALL 6" SANITARY LATERAL, IE =175.8 AT FOUNDATION
- ⑦ INSTALL 6" CLEANOUT ASSEMBLY
- ⑧ INSTALL 6" STORM DRAIN FROM ROOF DOWNSPOUT
- ⑨ CONSTRUCT RETAINING WALL, SEE STRUCTURAL PLANS
- ⑩ CONSTRUCT METAL PLATE SWALE CROSSING, SEE STRUCTURAL PLANS

0 20 40  
SCALE IN FEET

WILSONVILLE SITE 7/12/17



REV	DATE	DESCRIPTION	DNW BY	DES BY	CHK BY	APP BY

**TRT ENGINEERING LLC**

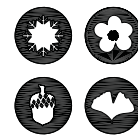
2636 S.E. MARKET STREET  
PORTLAND, OREGON 97214  
PHONE (503) 235-7592  
EMAIL trteng@qq.com

MARIONS CARPETS WAREHOUSE  
28855 SW BOONES FERRY ROAD  
WILSONVILLE, OREGON 97070

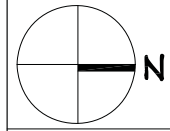
**GRADING AND UTILITY PLAN**

DRAWING NO.  
**2**  
PROJECT NO.  
SK05





**SEASONS  
GARDEN DESIGN LLC**  
award-winning  
sustainable design  
seasonsgardensdesign.com  
360.546.2746  
503.621.2746  
12517 NE 20TH AVE  
VANCOUVER, WA  
98686



**MARION'S CARPETS**  
28999 SW BOONES FERRY RD.  
WILSONVILLE, OR  
**IRRIGATION PLAN**

SCALE: 1/16"=1'-0"  
**ISSUED FOR:**  
27 JUN 2017 OWNER REVIEW

**L-2**

**GENERAL NOTE**

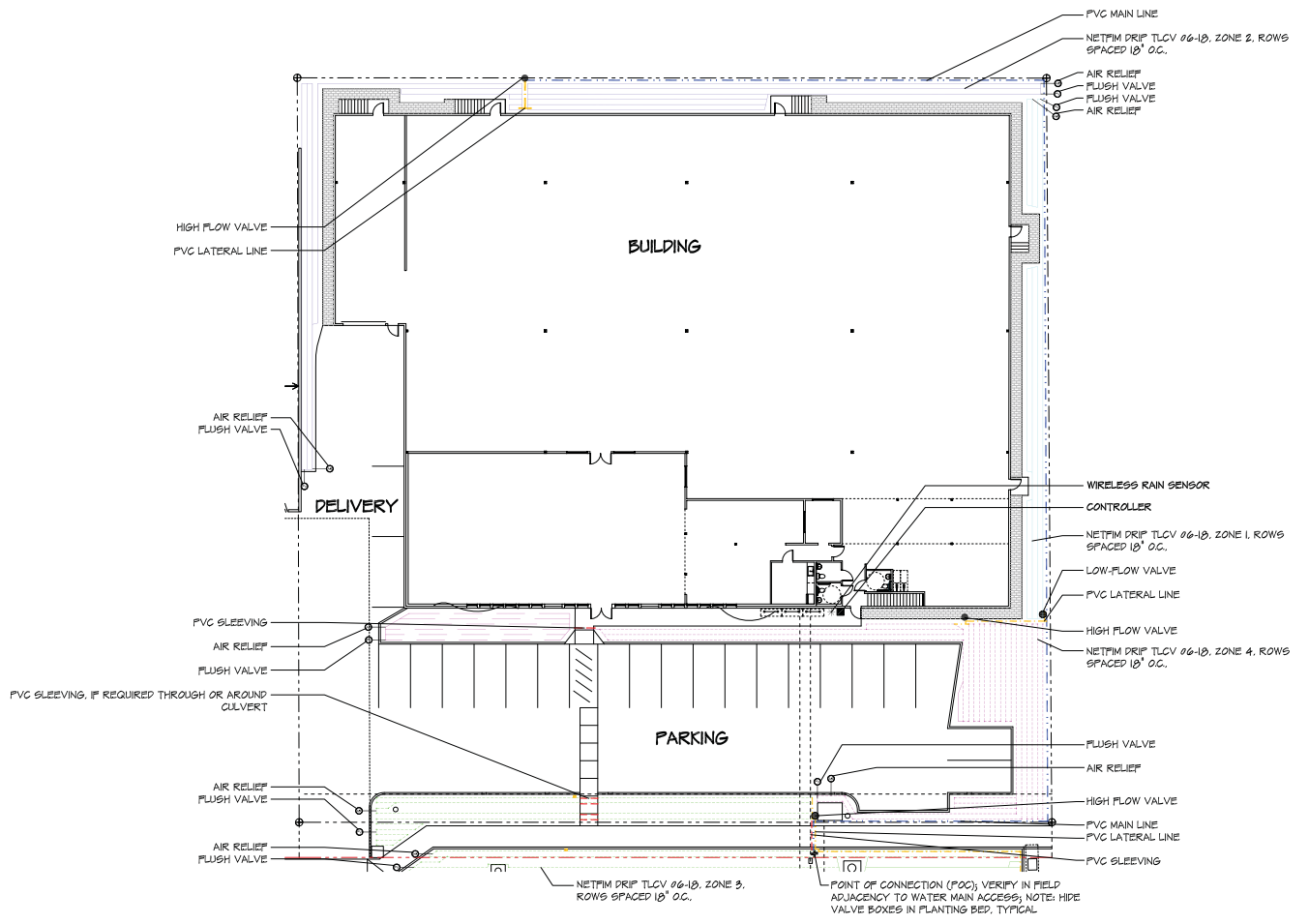
THE EXISTING PROPERTY CONDITIONS, INCLUDING PROPERTY LINE LOCATIONS SHOWN ON THE PLAN, ARE APPROXIMATE AND DO NOT REPRESENT A FIELD-SURVEYED CONDITION. OWNER SHALL VERIFY ALL PROPERTY LINES, DIMENSIONS, EASEMENTS, AND EXISTING UNDERGROUND UTILITY AND IRRIGATION LOCATIONS PRIOR TO ANY CONSTRUCTION. DESIGN SERVICES AND CONSULTATION. THE LANDSCAPE DESIGNER PROVIDES ADVICE IN CONFORMITY WITH THE STANDARDS OF PRACTICE OF THE ASSOCIATION OF PROFESSIONAL LANDSCAPE DESIGNERS (A.P.L.D.). SERVICES AND ADVICE ARE LIMITED TO PLANNING AND DESIGN OF EXTERIOR SPACES, HORTICULTURAL CONSULTATION, AND DO NOT INCLUDE ANY ENGINEERING OR STRUCTURAL SERVICES OR ANALYSIS WHICH MAY REQUIRE THE SERVICES OF A LICENSED PROFESSIONAL AS REQUIRED BY LAW.

**IRRIGATION NOTES**

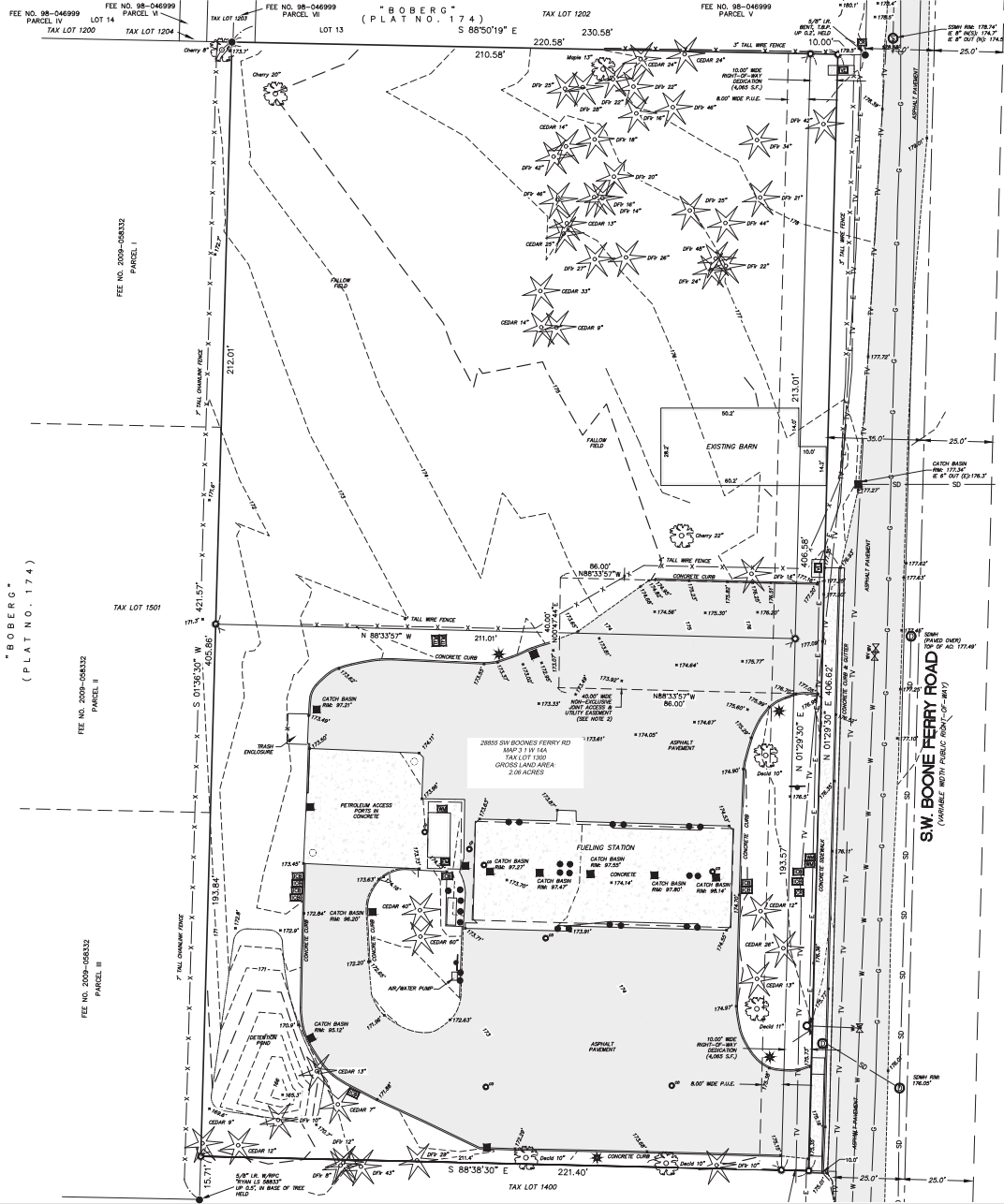
1. OWNER IS RESPONSIBLE FOR MAINTENANCE AND ADJUSTMENTS TO THE IRRIGATION SYSTEM AS NEEDED TO MEET EXISTING WEATHER CONDITIONS.
2. IRRIGATION SYSTEM IS DESIGNED TO MEET THE REQUIREMENTS OF SPECIFIED PLANTS. THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER PRIOR TO IRRIGATION INSTALLATION IF THERE ARE ANY QUESTIONS PERTAINING TO THE SYSTEM.
3. MINIMUM 1-YEAR WARRANTY WITH SYSTEM.
4. USE NETFIRM MAINLINE DRIFT HOSE OR PARABRAZ 4 GPM WITH EMITTERS AT 18" O.C. WITH LOW FLOW DRIP VALVE AND FILTER FOR PLANT BEDS. USE HUNTER IRRIGATION CONTROLLER (CONTRACTOR TO DETERMINE # OF STATIONS), CONTROL VALVES, WIRELESS RAIN SENSOR (EXTEND MOUNT BEYOND EDGE OF EAVE AND GUTTER), FLOW SENSOR.
5. ZONE AND SCHEDULE IRRIGATION ACCORDING TO THE REQUIREMENTS OF THE SPECIFIED PLANTS. PLANTS SHOWN REQUIRE IRRIGATION THE FIRST TWO YEARS UNTIL ESTABLISHED AND MINIMAL, BUT SUFFICIENT, WATER DURING EXTENDED DRY PERIODS THEREAFTER.
6. IRRIGATION CONTRACTOR TO PROVIDE SCH. 80 PVC FITS SLEEVING WHERE NOTED AS REQUIRED TO FULLY IRRIGATE THE GARDEN.
7. VALVE BOXES SHALL BE PLACED IN PLANT BORDERS AND OUT OF COMMON SIGHT.
8. ALL IRRIGATION CONTROL BOXES, CONDUIT AND IRRIGATION LINES TO BE PERMANENTLY CONCEALED FROM VIEW. CONTROLLER TO BE PLACED INSIDE AN ENCLOSURE IN EITHER A CLOSET OR GARAGE.
9. ALL PLANTS REQUIRE IRRIGATION UNTIL THEY ARE ESTABLISHED. USUALLY UP TO 2 YEARS. MOST OF THE PLANTS ARE DROUGHT-TOLERANT OR NEARLY SO WITH ONLY A FEW PLANTS REQUIRING ONGOING IRRIGATION DURING THE SUMMER. THEY ARE NOTED WITH AN ASTERISK (\*) AFTER THEIR PLANT LABEL. CONTRACTOR SHALL ASSURE ADDITIONAL IRRIGATION TO THESE PLANTS.
10. PROVIDE OWNER WITH DETAILED INSTRUCTIONS TO CONTROL IRRIGATION AND HUNTER ROOM KIT CONTROL FOR IRRIGATION.

**LEGEND**

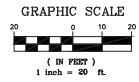
- LATERAL LINE (LL): 3/4" C/200 PVC, 3/2" PEX, 1" HDPE, 1" DUCTILE IRON, 1" CPVC, 1" POLYETHYLENE GLYCOL (PE-G)
- MAIN LINE (ML): 1" 90/90 PVC, 1" HDPE, 1" DUCTILE IRON, 1" CPVC, 1" POLYETHYLENE GLYCOL (PE-G)
- SLEEVES: 2" 90/90 PVC SLEEVING, 2" HDPE SLEEVING
- PCC TUFF PRO 3/4" GATE VALVES, 3/4" PEBBO 1/2 3/4" PEBBO DCA OR EQUAL BACKFLOW, 1 EACH
- HIGH FLOW VALVE: NETFIRM, HIGH FLOW KIT WITH F CONTROL VALVE, 3 EACH
- LOW FLOW VALVE: NETFIRM, LOW FLOW KIT WITH F CONTROL VALVE, 1 EACH
- FLUSH VALVE: NETFIRM, TL988, MFV-1
- AIR RELIEF (INSTALL AT HIGHEST POINT OF DRIP HOSE): 3/4" INPT, 664RND775
- CONTROLLER, 1 EACH, RAINBRK, ESP-48MTE SMART CONTROLLER W/ AUTO WEATHER STATION. IRRIGATION CONTRACTOR TO COORDINATE CONTROLLER WITH INSTALLATION OF 110V GFI OUTLET FOR POWER.
- EXTEND SENSOR MOUNT BEYOND EDGE OF EAVE AND GUTTER
- ZONE 1 NETFIRM TLGV-84-18 - X 50 FEET SPACE NETFIRM HOSE 18" O.C.
- ZONE 2 NETFIRM TLGV-84-18 - X 50 FEET SPACE NETFIRM HOSE 18" O.C.
- ZONE 3 NETFIRM TLGV-84-18 - X 50 FEET SPACE NETFIRM HOSE 18" O.C.
- ZONE 4 NETFIRM TLGV-84-18 - X 50 FEET SPACE NETFIRM HOSE 18" O.C.
- FLUSH VALVE WITH PLANT LOCATIONS, TYPICAL
- ZONES ARE ALL UNDER 3.0 GPM USING THE 4 GPM EMITTERS AT 18" O.C.



**\*PRELIMINARY  
NOT FOR CONSTRUCTION**



**TOPOGRAPHIC SURVEY**  
 FOR:  
**MARION'S CARPETS**  
 BEING A PORTION OF LOT 13, "BOBERG"  
 SITUATED IN THE NE 1/4 OF SECTION 14  
 T.9S, R.1W, W.M.  
 CITY OF WILSONVILLE  
 CLACKAMAS COUNTY, OREGON  
 TAX MAP 3 1W 14A  
 TAX LOT 1300  
 FEBRUARY 28, 2017  
 UPDATED APRIL 27, 2017



**LEGEND:**

●	FOUND SURVEY MONUMENT	▣	CABLE TV RISER
○	SET 5/8" IRON ROD	▣	ELECTRIC VAULT
○	SANITARY SEWER MANHOLE	▣	ELECTRIC TRANSFORMER
○	STORM DRAIN MANHOLE	▣	ELECTRIC METER
○	CATCH BASIN/AREA DRAIN	○	BOLLARD
○	CLEAN OUT	—	PRIVATE SIGN
○	WATER VALVE	—	UNDERGROUND SANITARY SEWER LINE
○	FIRE HYDRANT	—	UNDERGROUND STORM DRAIN LINE
○	IRRIGATION CONTROL BOX	—	UNDERGROUND WATER LINE
○	WATER MONITORING WELL	—	UNDERGROUND POWER LINE
○	LIGHT POLE	—	UNDERGROUND COMMUNICATION LINE
○		—	UNDERGROUND GAS LINE
○		—	FENCE AS NOTED

- NOTES:**
1. THE BOUNDARIES AS SHOWN ON THIS MAP ARE BASED ON RECORD DATA AND FOUND MONUMENTS. THIS MAP DOES NOT REPRESENT A SURVEY TO BE RECORDED, BUT WAS DONE FOR SITE/DEVELOPMENT INFORMATION ONLY.
  2. THIS SURVEY IS MADE FOR THE ORIGINAL PURCHASER OF THE SURVEY ONLY. ANDY PARRIS & ASSOCIATES, INC. ASSUMES NO LIABILITY FOR INFORMATION SHOWN HEREON TO ANY OTHER INSTITUTIONS OR SUBSEQUENT PURCHASERS OF THE PROPERTY.
  3. SURVEY IS VALID ONLY IF PRINT HAS SEAL AND SIGNATURE OF SURVEYOR.
  4. THE LOCATION AND OR EXISTENCE OF UTILITY SERVICE LINES AS SHOWN ON THIS MAP ARE BASED ON FIELD OBSERVATION ONLY. THERE MAY EXIST ADDITIONAL SERVICE LINES NOT SHOWN ON THIS SURVEY.
  5. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OTHER HIDDEN CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
  6. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR. THERE MAY EXIST EASEMENTS, CONDITIONS, OR RESTRICTIONS THAT COULD AFFECT THE TITLE OF THIS PROPERTY. NO ATTEMPT HAS BEEN MADE IN THIS SURVEY TO SHOW SUCH MATTERS THAT MAY AFFECT TITLE.

**REGISTERED PROFESSIONAL LAND SURVEYOR**  
**ANDY PARRIS AND ASSOCIATES, INC.**  
 16057 BOONES FERRY ROAD  
 LAKE OSWEGO, OREGON 97035  
 PH: 503-636-3341  
 www.andyparris.com

OREGON  
 JANUARY 15, 1987  
 HAROLD P. SALO  
 EXPIRES: JUNE 30, 2018

PROJECT: 16246  
 DRAWING: 16246TP2.DWG  
 DATE: 02/28/17  
 DRAWN BY: MPC/02/27/17

**Marion's Carpets – Wilsonville, Oregon  
Tree Maintenance and Protection Plan  
March 26, 2017  
Revised: June 22, 2017**

MHA17015

**Purpose**

This Tree Maintenance and Protection Plan for the Marion's Carpets project located in Wilsonville, Oregon, is provided pursuant to City of Wilsonville Development Code, Section 4.610.40. This arborist report describes the existing trees located on and directly adjacent to the project site, as well as recommendations for tree removal and mitigation. This report is based on observations made by International Society of Arboriculture (ISA) Board Certified Master Arborist (PN-6145B) and Qualified Tree Risk Assessor Morgan Holen during a site visit conducted on March 8, 2017. This report was revised on June 22, 2017 based on coordination with Allusa Architecture and site plan modifications to increase the number of parking spots as required by the City.

**Scope of Work and Limitations**

Morgan Holen & Associates, LLC, was contracted by Marion's Carpets to visually assess existing trees measuring six inches in diameter and larger in terms of general condition and suitability for preservation with development, and to develop a tree maintenance and protection plan for the project. The site is planned for commercial development. A site plan was provided by Allusa Architecture illustrating the location of trees, tree survey point numbers and potential construction impacts.

Visual Tree Assessment (VTA<sup>1</sup>) was performed on individual trees located on and directly adjacent to the project site. Trees were evaluated in terms species, size, general condition, and potential construction impacts. Following the inventory fieldwork, we coordinated with Allusa Architecture to discuss and finalize treatment recommendations based on the proposed site plan. Treatment recommendations include: protect (for one off-site tree in the northwest corner of the site); or, remove (because of proposed construction impacts and/or poor condition). Prior to the parking lot modifications, four trees were classified as likely to retain and recommended for reassessment at the time of site clearing in terms of impacts due to exposure from adjacent tree removal.

The client may choose to accept or disregard the recommendations contained herein, or seek additional advice. Neither this author nor Morgan Holen & Associates, LLC, have assumed any responsibility for liability associated with the trees on or adjacent to this site.

**General Description**

The Marion's Carpets project site is located at 28855 SW Boones Ferry Road in Wilsonville. There is a dilapidated barn in the southeast portion of the site that is planned for demolition. The existing trees are primarily located in a relatively natural stand in the northeast portion of the site, with a few others scattered near the barn and along the western property boundary in the northwest portion of the site.

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<sup>1</sup> Visual Tree Assessment (VTA): The standard process of visual tree inspection whereby the inspector visually assesses the tree from a distance and up close, looking for defect symptoms and evaluating overall condition and vitality.



The forested stand is dominated by Douglas-fir (*Pseudotsuga menziesii*) and is in generally good condition as an intact, undisturbed group. However, individual trees within the stand are variable in terms of condition and structure. Douglas-fir is intolerant of shade and these trees have grown up competing with and adapting to one another over time. Generally, the interior trees are adapted to the shelter provided by dominant and edge grown trees and are likely to have smaller live crowns and relatively poor height to diameter ratios that may predispose them to failure; such trees could be negatively impacted by exposure due to adjacent tree removal and present increased potential for windthrow.

No Oregon white oaks (*Quercus garryana*), native yews (*Taxus* spp.) or any species listed by either the state or federal government as rare or endangered were found on the site. Three invasive tree species were identified, including English hawthorn (*Crataegus monogyna*), English holly (*Ilex aquifolium*), and sweet cherry (*Prunus avium*). In all, 45 trees measuring 6-inches and larger in diameter are described in the tree data including eight species. A complete description of individual trees is provided in the enclosed tree data.

**Table 1. Count of Trees by Species and Location – Marion's Carpets, Wilsonville, OR.**

Common Name	Species Name	On-Site	Off-Site	Total	%*
Apple	<i>Malus</i> spp.	2	-	2	4%
Douglas-fir	<i>Pseudotsuga menziesii</i>	21	-	21	47%
English hawthorn	<i>Crataegus monogyna</i>	1	-	1	2%
English holly	<i>Ilex aquifolium</i>	2	-	2	4%
Port-Orford-cedar	<i>Chamaecyparis lawsoniana</i>	2	-	2	4%
red oak	<i>Quercus rubra</i>	1	-	1	2%
sweet cherry	<i>Prunus avium</i>	9	1	10	22%
Western redcedar	<i>Thuja plicata</i>	6	-	6	13%
<b>Total</b>		<b>44 (98%)</b>	<b>1 (2%)</b>	<b>45</b>	<b>100%</b>

\*Percent total does not sum to 100% due to rounding.

**Tree Plan Recommendations**

As described in the enclosed tree data, individual trees were assigned a general condition rating as follows:

- D: Dead
- P: Poor Condition
- F: Fair Condition
- G: Good Condition

Of the 45 inventoried trees, the one invasive off-site tree located in the northwest corner of the project site is in fair condition and planned for protection, and will only require tree protection fencing if the existing chain link fence along the property boundary is removed adjacent to the tree.

All 44 on-site trees are planned for removal, including one dead tree, nine trees in poor condition, 25 trees in fair condition, and nine trees in good condition.

Prior to the parking lot modifications, trees #2, #7, #8 and #9 appeared to be good candidates for preservation and were classified as likely to be retained. Tree protection specifications were provided, but reassessment of these trees was recommended at the time of site clearing by a Qualified Arborist in order to evaluate impacts that may result from exposure caused by adjacent tree removal and determine whether or not these trees would remain suitable for preservation and not have increased risk of windthrow. If, at the time of reassessment, the arborist determined that exposure from adjacent tree removal has caused a tree to become hazardous, a recommendation for removal would have been documented. Regardless, the site plan has been revised to provide 22 parking spaces instead of 16 and it is no longer possible to provide for the protection of these four trees. Therefore, all 44 on-site trees are planned for removal.

Table 2 provides a summary of the count of trees by general condition rating and treatment.

**Table 2. Count of Trees by Treatment Recommendation and General Condition Rating.**

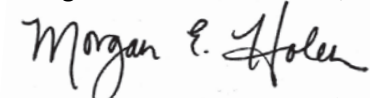
Treatment	General Condition Rating				Total
	D	P	F	G	
Protect (Off-Site Tree)	-	-	1	-	1 (2%)
Remove	1	9	25	9	44 (98%)
<b>Total</b>	<b>1</b> (2%)	<b>9</b> (20%)	<b>26</b> (58%)	<b>9</b> (20%)	<b>45</b> (100%)

**Mitigation Requirements**

All 45 inventoried trees are 6-inches or larger in diameter, including one off-site tree to be protected and 44 trees planned for removal. The 44 trees planned for removal will require mitigation per Section 4.620.00; removed trees shall be replaced on a basis of one tree planted for each tree removed. Therefore, 44 trees measuring at least 2-inch in diameter shall be planted as mitigation for tree removal. Where it is not feasible to replant trees, payment shall be made into the City Tree Fund.

Thank you for choosing Morgan Holen & Associates, LLC, to provide consulting arborist services for the Marion’s Carpets project in Wilsonville, Oregon. Please contact us if you have questions or need any additional information.

Thank you,  
 Morgan Holen & Associates, LLC



Morgan E. Holen, Member/Owner  
 ISA Board Certified Master Arborist, PN-6145B  
 ISA Tree Risk Assessment Qualified  
 Forest Biologist

Enclosures: MHA17015 Marion’s Carpets – Tree Data 3-8-17 Rev. 6-22-17

No.	Common Name	Species Name	DBH <sup>1</sup>	C-Rad <sup>2</sup>	Cond <sup>3</sup>	Comments	Treatment
1	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	22	G		remove
2	Douglas-fir	<i>Pseudotsuga menziesii</i>	35	22	G	dominant tree, some asymmetry; re-assess suitability for preservation at time of clearing	remove
3	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	18	P	suppressed, very one-sided to E, sweep in upper trunk, poor structure	remove
4	Douglas-fir	<i>Pseudotsuga menziesii</i>	42	22	G		remove
5	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	16	F	intermediate crown class, relatively small and high live crown	remove
6	Douglas-fir	<i>Pseudotsuga menziesii</i>	24,26, 28,38	25	F	codominant stems just above ground level, moderate structure	remove
7	western redcedar	<i>Thuja plicata</i>	16	14	G	moderate structure; re-assess suitability for preservation at time of clearing	remove
8	Douglas-fir	<i>Pseudotsuga menziesii</i>	40	18	G	crown asymmetry, epicormics sprouts on west face; re-assess suitability for preservation at time of clearing	remove
9	western redcedar	<i>Thuja plicata</i>	26	14	G	moderate structure, crook in upper trunk; re-assess suitability for preservation at time of clearing	remove
10	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	10	F	codominant crown class, moderate-poor structure	remove
11	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	10	F	codominant crown class, moderate-poor structure	remove
12	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	8	P	extensive ivy, small live crown, very poor structure	remove
13	red oak	<i>Quercus rubra</i>	11	12	F	poor structure	remove
14	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	24	F	codominant crown class, broken top, moderate-poor structure	remove

No.	Common Name	Species Name	DBH <sup>1</sup>	C-Rad <sup>2</sup>	Cond <sup>3</sup>	Comments	Treatment
15	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	22	F	codominant crown class, moderate-poor structure	remove
16	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	8	F	intermediate crown class, poor structure	remove
17	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	24	G	extensive ivy	remove
18	western redcedar	<i>Thuja plicata</i>	42	6	P	extensive ivy, dead top	remove
19	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	14	F	intermediate crown class, poor structure	remove
20	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	6	P	mostly dead, numerous <i>P. pini</i> conks	remove
21	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	0	D	snag	remove
22	Douglas-fir	<i>Pseudotsuga menziesii</i>	44	28	G	some crown asymmetry, sap flow on NW face	remove
23	western redcedar	<i>Thuja plicata</i>	12	10	F	old broken top	remove
24	western redcedar	<i>Thuja plicata</i>	22	22	F	self-correcting but severe lean to W	remove
25	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	18	F	codominant crown clas, one-sided to S	remove
26	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	20	F	codominant crown clas, one-sided to E	remove
27	western redcedar	<i>Thuja plicata</i>	32	16	F	dieback, ivy	remove
28	Port-Orford-cedar	<i>Chamaecyparis lawsoniana</i>	8,12	12	F	very poor structure	remove
29	Port-Orford-cedar	<i>Chamaecyparis lawsoniana</i>	4,2x8,12	12	F	very poor structure	remove
30	sweet cherry	<i>Prunus avium</i>	3x16	20	P	codominant stems, dead and broken branches, crown decay, history of major branch failure, trunk decay	remove
31	sweet cherry	<i>Prunus avium</i>	2x3,4,6	10	F	topped, sprouts, ivy	protect
32	apple	<i>Malus spp.</i>	22	18	P	extensive ivy infestation, dead and broken branches, very poor structure, decay	remove
33	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	16	G		remove
34	apple	<i>Malus spp.</i>	14,2x20	15	P	poor structure, overtopped with ivy, dead and broken branches	remove

No.	Common Name	Species Name	DBH <sup>1</sup>	C-Rad <sup>2</sup>	Cond <sup>3</sup>	Comments	Treatment
35	English holly	<i>Ilex aquifolium</i>	2x6,8,10	10	P	invasive species, poor structure	remove
36	English holly	<i>Ilex aquifolium</i>	5x8	14	P	invasive species, poor structure	remove
37	English hawthorn	<i>Crataegus monogyna</i>	3,6	12	F	invasive species	remove
38	sweet cherry	<i>Prunus avium</i>	7	10	F	invasive species, natural regen	remove
39	sweet cherry	<i>Prunus avium</i>	4,5	10	F	invasive species, natural regen	remove
40	sweet cherry	<i>Prunus avium</i>	4,8	10	F	invasive species, natural regen	remove
41	sweet cherry	<i>Prunus avium</i>	8	10	F	invasive species, natural regen	remove
42	sweet cherry	<i>Prunus avium</i>	7	10	F	invasive species, natural regen	remove
43	sweet cherry	<i>Prunus avium</i>	6	10	F	invasive species, natural regen	remove
44	sweet cherry	<i>Prunus avium</i>	8	10	F	invasive species, natural regen	remove
45	sweet cherry	<i>Prunus avium</i>	12	10	F	invasive species, natural regen	remove

<sup>1</sup>DBH is tree diameter measured at 4.5-feet above the ground level in inches; multiple trunks splitting below DBH are measured separately and individual trunk measurements are separated by a comma, except multiple trunks of the same size are indicated with an asterisk (quantity x size).

<sup>2</sup>C-Rad is the average crown radius measured in feet.

<sup>3</sup>Cond is an arborist assigned rating to generally describe the condition of individual trees as follows- Dead; Poor; Fair; or, Good Condition.



## **Geotechnical Engineering Report**

28855 SW Boones Ferry Road  
Wilsonville, Oregon 97070

GeoPacific Engineering, Inc. Job No. 16-4357  
January 25, 2017



Real-World Geotechnical Solutions  
Investigation • Design • Construction Support

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Real-World Geotechnical Solutions  
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January 25, 2017  
Project No. 16-4357

**Marions Carpets**

c/o Allusa Architecture, Mr. Bob Schatz  
2118 SE Division Street  
Portland, Oregon 97202  
Phone: (503) 235-8585  
Email: bob@allusaarchitecture.com

**SUBJECT: GEOTECHNICAL ENGINEERING REPORT  
28855 SW BOONES FERRY ROAD  
WILSONVILLE, OREGON 97070**

**PROJECT INFORMATION**

This report presents the results of a geotechnical engineering study conducted by GeoPacific Engineering, Inc. (GeoPacific) for the above-referenced project. The purpose of our investigation was to evaluate subsurface conditions at the site, and to provide geotechnical recommendations for site development. This geotechnical study was performed in accordance with GeoPacific Proposal No. P-5758, dated September 7, 2016, and your subsequent authorization of our proposal and *General Conditions for Geotechnical Services*.

**Site Location:** 28855 SW Boones Ferry Road  
Wilsonville, Oregon 97070  
Clackamas County Parcel No. 00810108  
(see Figures 1 through 3)

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**Architect:** Allusa Architecture  
2118 SE Division Street  
Portland, Oregon 97202  
Phone: (503) 235-8585

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**Jurisdictional Agency:** City of Wilsonville, Oregon

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**Prepared By:** GeoPacific Engineering, Inc  
14835 SW 72<sup>nd</sup> Avenue  
Portland, Oregon 97224  
Tel (503) 598-8445 Fax (503) 941-9281

## **SITE AND PROJECT DESCRIPTION**

As indicated on Figures 1 and 2, the subject site is located at 28855 SW Boones Ferry Road in Wilsonville, Oregon. The site is comprised of Clackamas County Parcel No. 00810108 totaling approximately 2.06-acres in size, and is rectangular in shape. The site latitude and longitude is 45.311355, -122.770410, and the legal description is the NE ¼ of Section 14, T3S, R1W, Willamette Meridian. The regulatory jurisdictional agency is the City of Wilsonville, Oregon. The site is bordered by SW Boones Ferry Road to the east, and by existing commercial/industrial properties to the north, south, and west. The southern portion of the property contains a Pacific Pride fueling station, and is surfaced by asphalt. The northern portion of the property contains a barn, and undeveloped grassy and forested areas. The site is relatively flat, to gently sloping to the south with site elevations ranging from approximately 177 to 180 feet above mean sea level (amsl).

Based upon communication with the client and structural engineer, GeoPacific understands that the proposed development at the subject site will be conducted in the undeveloped northern portion of the property, and will consist of construction of a 24,000 square-foot warehouse building, private parking areas, drive aisles, loading/unloading areas, a stormwater bio-swale, and associated underground utility improvements. Based on information provided by the structural engineer we anticipate that the warehouse will be constructed with a typical spread foundation and concrete tilt up panels. We understand that structural loading will be on the order of 68 kips for square column footings, and 3 kips per linear foot for continuous strip footings. We anticipate limited cut and fill associated with site development.

## **REGIONAL GEOLOGIC SETTING**

Regionally, the subject site lies within the Willamette Valley/Puget Sound lowland, a broad structural depression situated between the Coast Range on the west and the Cascade Range on the east. A series of discontinuous faults subdivide the Willamette Valley into a mosaic of fault-bounded, structural blocks (Yeats et al., 1996). Uplifted structural blocks form bedrock highlands, while down-warped structural blocks form sedimentary basins.

According to the *Generalized Geologic Map of the Willamette Lowland*, (U.S. Geological Survey, Gannett and Caldwell, 1988), the site is underlain by Pleistocene-aged, unconsolidated silt, sand, and gravel deposited by outburst flooding of glacial Lake Missoula (Qs), generally referred to as the Willamette Formation, a catastrophic flood deposit associated with repeated glacial outburst flooding of the Willamette Valley (Yeats et al., 1996). The last of these outburst floods occurred about 10,000 years ago. The Web Soil Survey (United States Department of Agriculture, Natural Resource Conservation Service (USDA NRCS 2016 Website), indicates that near-surface soils primarily consist of the Woodburn silt loam soils series. Woodburn soils generally consist of very deep, poorly to moderately drained soils that formed in silty, stratified, glaciolacustrine deposits.

## **REGIONAL SEISMIC SETTING**

At least four major fault zones capable of generating damaging earthquakes are thought to exist in the vicinity of the subject site. These include the Portland Hills Fault Zone, the Lacamas Creek/Sandy River Fault Zone, the Gales Creek-Newberg-Mt. Angel Structural Zone, and the Cascadia Subduction Zone.

### **Portland Hills Fault Zone**

The Portland Hills Fault Zone is a series of NW-trending faults that include the central Portland Hills Fault, the western Oatfield Fault, and the eastern East Bank Fault. These faults occur in a northwest-trending zone that varies in width between 3.5 and 5.0 miles. The combined three faults reportedly vertically displace the Columbia River Basalt by 1,130 feet and appear to control thickness changes in late Pleistocene (approx. 780,000 years) sediment (Madin, 1990). The Portland Hills Fault occurs along the Willamette River at the base of the Portland Hills, and is located approximately 11 miles northeast of the site. The Oatfield Fault occurs along the western side of the Portland Hills, and is located approximately 9.5 miles northeast of the site. The East Bank Fault occurs along the eastern margin of the Willamette River, and is located approximately 14.5 miles southwest of the site. The accuracy of the fault mapping is stated to be within 500 meters (Wong, et al., 2000).

According to the USGS Earthquake Hazards Program, the fault was originally mapped as a down-to-the-northeast normal fault, but has also been mapped as part of a regional-scale zone of right-lateral, oblique slip faults, and as a steep escarpment caused by asymmetrical folding above a south-west dipping, blind thrust fault. The Portland Hills fault offsets Miocene Columbia River Basalts, and Miocene to Pliocene sedimentary rocks of the Troutdale Formation. No fault scarps on surficial Quaternary deposits have been described along the fault trace, and the fault is mapped as buried by the Pleistocene aged Missoula flood deposits. No historical seismicity is correlated with the mapped portion of the Portland Hills Fault Zone, but in 1991 a M3.5 earthquake occurred on a NW-trending shear plane located 1.3 miles east of the fault (Yelin, 1992). Although there is no definitive evidence of recent activity, the Portland Hills Fault Zone is assumed to be potentially active (Geomatrix Consultants, 1995).

### **Lacamas Creek / Sandy River Fault Zone**

The Lacamas Creek Fault intersects the northeast trending Sandy River Fault north of Camas, Washington at Lacamas Lake, approximately 26.5 miles northeast of the subject site. The Lacamas Creek Fault extends northwest to southeast, intersecting the northeast, southwest trending Sandy River Fault. According to the USGS Earthquake Hazards Program the fault has been mapped as a normal fault with down-to-the-southwest displacement, and has also been described as a steeply northeast or southwest-dipping, oblique, right-lateral, slip-fault. The trace of the Lacamas Lake fault is marked by the very linear lower reach of Lacamas Creek. No fault scarps on Quaternary surficial deposits have been described. The Lacamas Lake fault offsets Pliocene-aged sedimentary conglomerates generally identified as the Troutdale formation, and Pliocene to Pleistocene aged basalts generally identified as the Boring Lava formation. Recent seismic reflection data across the probable trace of the fault under the Columbia River yielded no

unequivocal evidence of displacement underlying the Missoula flood deposits, however, recorded mild seismic activity during the recent past indicates this area may be potentially seismogenic.

### **Gales Creek-Newberg-Mt. Angel Structural Zone**

The Gales Creek-Newberg-Mt. Angel Structural Zone is a 50-mile-long zone of discontinuous, NW-trending faults that lies about 10 miles west of the subject site. These faults are recognized in the subsurface by vertical separation of the Columbia River Basalt and offset seismic reflectors in the overlying basin sediment (Yeats et al., 1996; Werner et al., 1992). A geologic reconnaissance and photogeologic analysis study conducted for the Scoggins Dam site in the Tualatin Basin revealed no evidence of deformed geomorphic surfaces along the structural zone (Unruh et al., 1994). No seismicity has been recorded on the Gales Creek Fault or Newberg Fault (the fault closest to the subject site); however, these faults are considered to be potentially active because they may connect with the seismically active Mount Angel Fault and the rupture plane of the 1993 M5.6 Scotts Mills earthquake (Werner et al. 1992; Geomatrix Consultants, 1995).

According to the USGS Earthquake Hazards Program, the Mount Angel fault is mapped as a high-angle, reverse-oblique fault, which offsets Miocene rocks of the Columbia River Basalts, and Miocene and Pliocene sedimentary rocks. The fault appears to have controlled emplacement of the Frenchman Spring Member of the Wanapum Basalts, and thus must have a history that predates the Miocene age of these rocks. No unequivocal evidence of deformation of Quaternary deposits has been described, but a thick sequence of sediments deposited by the Missoula floods covers much of the southern part of the fault trace.

### **Cascadia Subduction Zone**

The Cascadia Subduction Zone is a 680-mile-long zone of active tectonic convergence where oceanic crust of the Juan de Fuca Plate is subducting beneath the North American continent at a rate of 4 cm per year (Goldfinger et al., 1996). A growing body of geologic evidence suggests that prehistoric subduction zone earthquakes have occurred (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). This evidence includes: (1) buried tidal marshes recording episodic, sudden subsidence along the coast of northern California, Oregon, and Washington, (2) burial of subsided tidal marshes by tsunami wave deposits, (3) paleoliquefaction features, and (4) geodetic uplift patterns on the Oregon coast. Radiocarbon dates on buried tidal marshes indicate a recurrence interval for major subduction zone earthquakes of 250 to 650 years with the last event occurring 300 years ago (Atwater, 1992; Carver, 1992; Peterson et al., 1993; Geomatrix Consultants, 1995). The inferred seismogenic portion of the plate interface lies approximately along the Oregon Coast at depths of between 20 and 40 kilometers below the surface.

## **FIELD EXPLORATION AND SUBSURFACE CONDITIONS**

Our subsurface explorations for this report were conducted on October 7, 2016. A total of three exploratory test pits (TP-1 through TP-3) were excavated at the site using a track-mounted excavator subcontracted by GeoPacific to a maximum depth of approximately 12 feet bgs. Explorations were conducted under the full-time observation of GeoPacific personnel. During the explorations, GeoPacific observed and recorded pertinent soil information such as color,

stratigraphy, strength, and soil moisture content. Soil samples obtained from the explorations were placed in relatively air-tight plastic bags. Pertinent information including soil sample depths, stratigraphy, soil engineering characteristics, and groundwater occurrence was recorded. Soils were classified in accordance with the Unified Soil Classification System (USCS). At the completion of each test, the test pits were loosely backfilled with onsite soils. The approximate locations of the explorations are indicated on Figure 2. It should be noted that exploration locations were located in the field by pacing or taping distances from apparent property corners and other site features shown on the plans provided. As such, the locations of the explorations should be considered approximate. Summary exploration logs are attached. The stratigraphic contacts shown on the individual test pit logs represent the approximate boundaries between soil types. The actual transitions may be more gradual. The soil and groundwater conditions depicted are only for the specific dates and locations reported, and therefore, are not necessarily representative of other locations and times.

Soil and groundwater conditions encountered in the explorations are summarized below.

### **Soil Descriptions**

**Topsoil:** At the locations of our test pit explorations, the ground surface was underlain by approximately 4 to 8 inches of moist, moderately organic, Lean CLAY (OL-CL), containing fine roots. It is likely that the thickness of the organic horizon will increase where trees are present. In our experience, coniferous fir trees such as those present at the site have root systems that extend to depths of 24 to 36 inches.

**Undocumented Fill:** At the location of test pit TP-1, the ground surface was underlain by approximately 12 inches of  $\frac{3}{4}$ "-0 crushed aggregate. At the location of test pit TP-2, a fill berm is visible mounded on the ground surface, and was underlain by approximately 36 inches of Lean CLAY, containing  $\frac{3}{4}$ "-0 crushed aggregate, sparse asphalt fragments, and fine roots.

**Lean CLAY:** Underlying the undocumented fill at the locations of test pits TP-1 and TP-2, and underlying the topsoil at the location of test pit TP-3, soils were observed to consist primarily of light brown to brown, very stiff to hard, damp to moist, moderately plastic, Lean CLAY (CL). The soil type extended to the maximum depth of exploration within our subsurface explorations. Decreased soil moisture content was observed at an approximate depth of 6 feet bgs within the test pits.

### **Groundwater and Soil Moisture**

On October 7, 2016, observed soil moisture conditions were generally damp to moist. Groundwater seepage was not observed within our subsurface explorations which extended to a maximum depth of 12 feet bgs. According to our review of available State of Oregon well logs, groundwater is commonly encountered at depths ranging from approximately 18 to 20 feet below the ground surface. It is anticipated that groundwater conditions will vary depending on the season, local subsurface conditions, changes in site utilization, and other factors. Perched groundwater may be encountered in localized areas. Seeps and springs may exist in areas not explored, and may become evident during site grading.



**Infiltration Testing**

Soil infiltration testing was performed using the encased fall-head method through a six-inch diameter rigid standpipe within test pit TP-1, in accordance with the methodology of the Clackamas County Stormwater Management Manual. The approximate location of the subsurface exploration is indicated on Figure 2. Subsurface exploration was conducted with a track-mounted excavator subcontracted by GeoPacific. Infiltration testing was conducted at depths of -4, and -7 feet bgs within the test pit. The test locations were pre-saturated prior to testing. During testing the water level was measured to the nearest 0.10 inch from a fixed point, and the change in water level was recorded at regular intervals until three successive measurements showing a consistent infiltration rate were achieved.

Table 1 summarizes the results of the falling-head infiltration testing. Infiltration rates have been reported without applying a factor of safety. Soils at the test locations were observed and sampled in order to characterize the subsurface profile. Tested native soils classified as Lean CLAY (CL). Groundwater was not encountered within our test pit explorations which extended to a maximum depth approximately 12 feet bgs. Due to the lack of infiltration measured at the tested locations, it appears that infiltration of stormwater at the site is not geotechnically feasible.

**Table 1 - Summary of Infiltration Test Results**

Test Location	Exploration Designation	Depth (feet)	Soil Type	Infiltration Rate (inches/hr)	Hydraulic Head Range (inches)	Depth to Groundwater (Feet)
TP-1	IT-1.1	4	CL	0	12	Est 20 Feet
TP-1	IT-1.2	7	CL	0	12	Est 20 Feet

**CONCLUSIONS AND RECOMMENDATIONS**

Our site investigation indicates that the proposed construction is geotechnically feasible, provided that the recommendations of this report are incorporated into the design and construction phases of the project. The primary geotechnical concerns associated with development at the subject site are 1) the presence of up to 3 feet of undocumented fill in an area proposed for construction of a new warehouse building; and 2) low measured hydraulic conductivity values measured in locations proposed for infiltration of stormwater.

**Site Preparation Recommendations**

Areas of proposed construction and areas to receive fill should be cleared of vegetation, and any organic and inorganic debris, and unsuitable soils. Inorganic debris and organic materials from clearing should be removed from the site. Organic-rich soils and root zones should then be stripped from construction areas of the site or where engineered fill is to be placed. Depth of stripping of organic soils is estimated to be approximately 4 to 8 inches across the majority of the site, however depth of organic soil layers may increase in areas where trees are present. As previously discussed, undocumented fill consisting primarily of Lean CLAY with crushed aggregate, asphalt fragments, and fine roots was identified to be present in a small amount in the northwestern portion of the site, extending to a depth of approximately 3 feet bgs (see attached test pit logs). The final depth of soil removal will be determined on the basis of a site inspection after the stripping/excavation has been performed. Stripped topsoil should be removed from the

site. Any remaining topsoil should be stockpiled only in designated areas and stripping operations should be observed and documented by the geotechnical engineer or his representative. Prior to placement of engineered fill, subgrade soils should be aerated and re-compacted to minimum depth of 12 inches below the existing topsoil layer.

If encountered, undocumented fills and any subsurface structures (dry wells, basements, driveway and landscaping fill, old utility lines, septic leach fields, etc.) should be completely removed and the excavations backfilled with approved engineered fill.

### **Engineered Fill**

All grading for the proposed construction should be performed as engineered grading in accordance with the applicable building code at the time of construction with the exceptions and additions noted herein. Areas proposed for fill placement should be prepared as described in the *Site Preparation Recommendations* section. Surface soils should then be scarified and recompacted prior to placement of structural fill. Proper test frequency and earthwork documentation usually requires daily observation and testing during stripping, rough grading, and placement of engineered fill. Imported fill material must be approved by the geotechnical engineer prior to being imported to the site. Oversize material greater than 6 inches in size should not be used within 3 feet of foundation footings, and material greater than 12 inches in diameter should not be used in engineered fill.

Engineered fill should be compacted in horizontal lifts not exceeding 8 inches using standard compaction equipment. We recommend that engineered fill be compacted to at least 90 percent of the maximum dry density determined by ASTM D1557 (Modified Proctor) or equivalent. Field density testing should conform to ASTM D2922 and D3017, or D1556. All engineered fill should be observed and tested by the project geotechnical engineer or his representative. Typically, one density test is performed for at least every 2 vertical feet of fill placed or every 500 yd<sup>3</sup>, whichever requires more testing. Because testing is performed on an on-call basis, we recommend that the earthwork contractor be held contractually responsible for test scheduling and frequency. During periods of wet-weather site earthwork may be impacted by soil moisture.

### **Excavating Conditions and Utility Trench Backfill**

We anticipate that on-site soils can be excavated using conventional heavy equipment. Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the contractor. Actual slope inclinations at the time of construction should be determined based on safety requirements and actual soil and groundwater conditions. All temporary cuts in excess of 4 feet in height should be sloped in accordance with U.S. Occupational Safety and Health Administration (OSHA) regulations (29 CFR Part 1926), or be shored. The existing soils classify as Type B Soil and temporary excavation side slope inclinations as steep as 1H:1V may be assumed for planning purposes. This cut slope inclination is applicable to excavations above the water table only.

Shallow, perched groundwater may be encountered during the wet weather season and should be anticipated in excavations and utility trenches. Vibrations created by traffic and construction equipment may cause some caving and raveling of excavation walls. In such an event, lateral

support for the excavation walls should be provided by the contractor to prevent loss of ground support and possible distress to existing or previously constructed structural improvements.

PVC pipe should be installed in accordance with the procedures specified in ASTM D2321 and City of Wilsonville standards. We recommend that structural trench backfill be compacted to at least 95 percent of the maximum dry density determined by ASTM D1557 (Modified Proctor) or equivalent. Initial backfill lift thicknesses for a ¾"-0 crushed aggregate base may need to be as great as 4 feet to reduce the risk of flattening underlying flexible pipe. Subsequent lift thickness should not exceed 1 foot. If imported granular fill material is used, then the lifts for large vibrating plate-compaction equipment (e.g. hoe compactor attachments) may be up to 2 feet, provided that proper compaction is being achieved and each lift is tested. Use of large vibrating compaction equipment should be carefully monitored near existing structures and improvements due to the potential for vibration-induced damage.

Adequate density testing should be performed during construction to verify that the recommended relative compaction is achieved. Typically, at least one density test is taken for every 4 vertical feet of backfill on each 100-lineal-foot section of trench.

### **Erosion Control Considerations**

During our field exploration program, we did not observe soil conditions that would be considered highly susceptible to erosion. In our opinion, the primary concern regarding erosion potential will occur during construction in areas that have been stripped of vegetation. Erosion at the site during construction can be minimized by implementing the project erosion control plan, which should include judicious use of straw wattles, fiber rolls, and silt fences. If used, these erosion control devices should remain in place throughout site preparation and construction.

Erosion and sedimentation of exposed soils can also be minimized by quickly re-vegetating exposed areas of soil, and by staging construction such that large areas of the project site are not denuded and exposed at the same time. Areas of exposed soil requiring immediate and/or temporary protection against exposure should be covered with either mulch or erosion control netting/blankets. Areas of exposed soil requiring permanent stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

### **Wet Weather Earthwork**

Soils underlying the site are likely to be moisture sensitive and may be difficult to handle or traverse with construction equipment during periods of wet weather. Earthwork is typically most economical when performed under dry weather conditions. Earthwork performed during the wet-weather season will probably require expensive measures such as cement treatment or imported granular material to compact areas where fill may be proposed to the recommended engineering specifications. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is difficult to control, the following recommendations should be incorporated into the contract specifications.

- Earthwork should be performed in small areas to minimize exposure to wet weather. Excavation or the removal of unsuitable soils should be followed promptly by the placement and compaction of clean engineered fill. The size and type of construction equipment used





may have to be limited to prevent soil disturbance. Under some circumstances, it may be necessary to excavate soils with a backhoe to minimize subgrade disturbance caused by equipment traffic;

- The ground surface within the construction area should be graded to promote run-off of surface water and to prevent the ponding of water;
- Material used as engineered fill should consist of clean, granular soil containing less than 5 percent passing the No. 200 sieve. The fines should be non-plastic. Alternatively, cement treatment of on-site soils may be performed to facilitate wet weather placement;
- The ground surface within the construction area should be sealed by a smooth drum vibratory roller, or equivalent, and under no circumstances should be left uncompacted and exposed to moisture. Soils which become too wet for compaction should be removed and replaced with clean granular materials;
- Excavation and placement of fill should be observed by the geotechnical engineer to verify that all unsuitable materials are removed and suitable compaction and site drainage is achieved; and
- Geotextile silt fences, straw wattles, and fiber rolls should be strategically located to control erosion.

If cement or lime treatment is used to facilitate wet weather construction, GeoPacific should be contacted to provide additional recommendations and field monitoring.

### **Spread Foundations and Settlement Analysis**

Based upon communication with the client and structural engineer, GeoPacific understands that the proposed development at the subject site will be conducted in the undeveloped northern portion of the property, and will consist of construction of a 24,000 square-foot warehouse building. The structural engineer has indicated that the warehouse will be constructed with a typical spread foundation and concrete tilt up panels. We understand that structural loading will be on the order of 64 kips for square column footings, and 3 kips per linear foot for continuous strip footings.

Based upon our understanding of the proposed structural loads, GeoPacific conducted static settlement analysis for the proposed development at the subject site using the Terzaghi and Peck method to calculate vertical displacements. Static settlement calculations were conducted using the Soil Structural Settlement Analysis software, 2014, Version 1.10, and are presented as an attachment to this report. Settlement analysis was conducted based upon review of the soil profile encountered in our subsurface explorations, and foundation and structural loading information provided by the project structural engineer. Calculations for long-term static settlement are based upon placement of structural building loads on the existing soils, which increases the vertical effective stress in subsurface soils and can induced soil settlement. Footing dimensions and loads were analyzed including a square column footing size of 6'x6', and a continuous strip footing width of 18 inches. Due to natural variations in soil conditions across the site, and the range of potential structural loading, the settlement values provided below should be considered as estimates only. Actual induced settlement during construction may vary greatly over short-distances. If actual structural loading will vary or increase beyond the conditions analyzed, GeoPacific should be contacted to review and revise our estimations accordingly. Following completion of foundation

planning GeoPacific should be provided with the final foundation plan and the assumptions made during this evaluation should be confirmed. Estimation of time rate of settlement is beyond the scope of this investigation.

The results of our settlement analysis indicated the potential for 1.3 to 2 inches of static settlement under the proposed structural loading. Based upon communication with the structural engineer, the maximum differential settlement the proposed tilt-up panel structure can tolerate is on the order of  $\frac{1}{2}$  inch or less across a span of 20 feet between footing elements. In order to determine if static settlement can be reduced to  $\frac{3}{4}$  inch or less at a point load, and differential settlement can be reduced to  $\frac{1}{2}$  inch or less across a span of 20 feet between footing elements, GeoPacific analyzed construction of the proposed square column footings on 36 inches of compacted crushed aggregate, and construction of the proposed continuous strip footings on 18 inches of compacted crushed aggregate.

For square column footings our analysis indicated that anticipated point load static settlement can be reduced to  $\frac{3}{4}$  inch or less, and differential settlement between footing elements can be reduced to  $\frac{1}{2}$  inch or less across a span of 20 feet, if the proposed square column footings are overexcavated a minimum of 36 inches below bottom of footing, and 18 inches horizontally beyond the edge of footings, and replaced with a minimum of 36 inches of 1.5"-0 crushed aggregate compacted to at least 95 percent of the maximum dry density determined by ASTM D1557 (Modified Proctor) or equivalent.

For continuous strip footings our analysis indicated that anticipated point load static settlement can be reduced to  $\frac{3}{4}$  inch or less, and differential settlement can be reduced to  $\frac{1}{2}$  inch or less across a span of 20 feet between footing elements if the proposed continuous strip footings are overexcavated a minimum of 18 inches below bottom of footing, and 12 inches horizontally beyond the edge of footings, and replaced with a minimum of 18 inches of 1.5"-0 crushed aggregate compacted to at least 95 percent of the maximum dry density determined by ASTM D1557 (Modified Proctor) or equivalent.

This analysis was conducted for static settlement only, and does not include an analysis of, or recommendations for dynamic settlement which may occur during an earthquake.

The proposed structure may be supported on shallow foundations bearing on crushed aggregate pads prepared as described above. Foundation design, construction, and setback requirements should conform to the applicable building code at the time of construction. For maximization of bearing strength and protection against frost heave, spread footings should be embedded at a minimum depth of 12 inches below exterior grade. If soft soil conditions are encountered at footing subgrade elevation, they should be removed and replaced with compacted crushed aggregate. The anticipated allowable soil bearing pressure is 2,000 lbs/ft<sup>2</sup> for footings bearing on crushed aggregate pads constructed as described above. The recommended maximum allowable bearing pressure may be increased by 1/3 for short-term transient conditions such as wind and seismic loading. For loads heavier than described above, the geotechnical engineer should be consulted. If heavier loads than described above are proposed, it may be necessary to further over-excavate foundations and replace with additional compacted crushed aggregate. The coefficient of friction between on-site soil and poured-in-place concrete may be taken as 0.42, which includes no factor of safety. The maximum anticipated total and differential footing movements (generally from soil

expansion and/or settlement) are  $\frac{3}{4}$  inch and  $\frac{1}{2}$  inch over a span of 20 feet, respectively. We anticipate that the majority of the estimated settlement will occur during construction, as loads are applied. Excavations near structural footings should not extend within a 1H:1V plane projected downward from the bottom edge of footings.

Footing excavations should penetrate through topsoil and any disturbed soil to competent subgrade that is suitable for bearing support. All footing excavations should be trimmed neat, and all loose or softened soil should be removed from the excavation bottom prior to placing reinforcing steel bars. Due to the moisture sensitivity of on-site native soils, foundations constructed during the wet weather season may require over-excavation of footings and backfill with compacted, crushed aggregate.

Our recommendations are for the proposed development described above, as we currently understand it. After site development, a Final Soil Engineer's Report should either confirm or modify the above recommendations.

### **Concrete Slabs-on-Grade**

Preparation of areas beneath concrete slab-on-grade floors should be performed as recommended in the *Site Preparation Recommendations* section. Care should be taken during excavation for foundations and floor slabs, to avoid disturbing subgrade soils. If subgrade soils have been adversely impacted by wet weather or otherwise disturbed, the surficial soils should be scarified to a minimum depth of 8 inches, moisture conditioned to within about 3 percent of optimum moisture content, and compacted to engineered fill specifications. Alternatively, disturbed soils may be removed and the removal zone backfilled with additional crushed rock.

For evaluation of the concrete slab-on-grade floors using the beam on elastic foundation method, a modulus of subgrade reaction of 150 kcf (87 pci) should be assumed for the medium stiff, fine-grained soils anticipated to be present in the upper four feet at the site. This value assumes the concrete slab system is designed and constructed as recommended herein, with a minimum thickness of 8 inches of  $\frac{3}{4}$ "-0 crushed aggregate beneath the slab. The total thickness of crushed aggregate will be dependent on the subgrade conditions at the time of construction, and should be verified visually by proof-rolling. Under-slab aggregate should be compacted to at least 95 percent of its maximum dry density as determined by ASTM D1557 (Modified Proctor) or equivalent.

In areas where moisture will be detrimental to floor coverings or equipment inside the proposed structure, appropriate vapor barrier and damp-proofing measures should be implemented. A commonly applied vapor barrier system consists of a 10-mil polyethylene vapor barrier placed directly over the capillary break material. Other damp/vapor barrier systems may also be feasible. Appropriate design professionals should be consulted regarding vapor barrier and damp proofing systems, ventilation, building material selection and mold prevention issues, which are outside GeoPacific's area of expertise.

## **Drainage**

The outside edge of the footings should be provided with a drainage system consisting of 3-inch diameter, slotted, flexible plastic pipe embedded in a minimum of 1 ft<sup>3</sup> per lineal foot of clean, free-draining gravel or 1½" - ¾" drain rock. The drain pipe and surrounding drain rock should be wrapped in non-woven geotextile (Mirafi 140N, or approved equivalent) to minimize the potential for clogging and/or ground loss due to piping. Water collected from the footing drains should be directed into the local storm drain system or other suitable outlet. A minimum 1 percent fall should be maintained throughout the drain and non-perforated pipe outlet. The footing drains should include clean-outs to allow periodic maintenance and inspection. In our opinion, footing drains may outlet at the curb, or on the back sides of lots where sufficient fall is not available to allow drainage to the street. Figure 3 presents a typical perimeter footing drain detail.

Construction should include typical measures for controlling subsurface water beneath the homes, including positive crawlspace drainage to an adequate low-point drain exiting the foundation, visqueen covering the exposed ground in the crawlspace, and crawlspace ventilation (foundation vents). The owners should be informed and educated that some slow flowing water in the crawlspaces is considered normal and not necessarily detrimental to the home given these other design elements incorporated into its construction. Appropriate design professionals should be consulted regarding crawlspace ventilation, building material selection and mold prevention issues, which are outside GeoPacific's area of expertise.

Down spouts and roof drains should collect roof water in a system separate from the footing drains in order to reduce the potential for clogging. Roof drain water should be directed to an appropriate discharge point well away from structural foundations. Grades should be sloped downward and away from buildings to reduce the potential for ponded water near structures.

## **Flexible Pavement Design – Private Parking Areas**

We understand that development at the site will include construction of private drive aisles and parking areas. For the new private pavement section, we conservatively assume that the subgrade will exhibit a resilient modulus of at least 7,500, which correlates to a CBR value of 5. Based upon our understanding of the anticipated traffic which includes light-duty passenger vehicles, freight trucks, delivery trucks, and weekly trash pickups, we calculated an anticipated 18-kip ESAL count of approximately 125,000 over 20 years. Table 2 presents our flexible pavement design input parameters. Table 3 presents our recommended minimum dry-weather pavement section for the proposed pavement section, supporting 20 years of vehicle traffic. Pavement design calculations are attached to this report.



**Table 2 – Flexible Pavement Section Design Input Parameters for Private Parking**

Input Parameter	Design Value
18-kip ESAL Initial Performance Period (20 Years)	125,000
Initial Serviceability	4.2
Terminal Serviceability	2.5
Reliability Level	85 Percent
Overall Standard Deviation	0.5
Roadbed Soil Resilient Modulus (PSI)	7,500
<b>Structural Number</b>	<b>2.41</b>

**Table 3 - Recommended Minimum Dry-Weather Pavement Section for NE Chesapeake Street**

Material Layer	Private Parking	Structural Coefficient	Compaction Standard
Asphaltic Concrete (AC)	3.5 in.	.42	91%/ 92% of Rice Density AASHTO T-209
Crushed Aggregate Base ¾"-0 (leveling course)	2 in.	.12	95% of Modified Proctor AASHTO T-180
Crushed Aggregate Base 1½"-0	6 in.	.12	95% of Modified Proctor AASHTO T-180
Subgrade	12 in.	7,500 PSI	95% of Standard Proctor AASHTO T-99 or equivalent
<b>Total Calculated Structural Number</b>		<b>2.43</b>	

Any pockets of organic debris or loose fill encountered during ripping or tilling should be removed and replaced with engineered fill (see *Site Preparation Recommendations* section). In order to verify subgrade strength, we recommend proof-rolling directly on subgrade with a loaded dump truck during dry weather and on top of base course in wet weather. Soft areas that pump, rut, or weave should be stabilized prior to paving.

If pavement areas are to be constructed during wet weather, the subgrade and construction plan should be reviewed by the project geotechnical engineer at the time of construction so that condition specific recommendations can be provided. The moisture sensitive subgrade soils make the site a difficult wet weather construction project. General recommendations for wet weather pavement sections are provided below.

During placement of pavement section materials, density testing should be performed to verify compliance with project specifications. Generally, one subgrade, one base course, and one asphalt compaction test is performed for every 100 to 200 linear feet of paving.

**Wet Weather Construction Pavement Section**

This section presents our recommendations for wet weather pavement section and construction for new pavement sections at the project. These wet weather pavement section recommendations are intended for use in situations where it is not feasible to compact the subgrade soils to project requirements, due to wet subgrade soil conditions, and/or construction during wet weather. Based



on our site review, we recommend a wet weather section with a minimum subgrade deepening of 6 to 12 inches to accommodate a working subbase of additional 1½"-0 crushed rock. Geotextile fabric, Mirafi 500x or equivalent, should be placed on subgrade soils prior to placement of base rock.

In some instances, it may be preferable to use a subbase material in combination with over-excavation and increasing the thickness of the rock section. GeoPacific should be consulted for additional recommendations regarding use of additional subbase in wet weather pavement sections if it is desired to pursue this alternative. Cement treatment of the subgrade may also be considered instead of over-excavation. For planning purposes, we anticipate that treatment of the onsite soils would involve mixing cement powder to approximately 6 percent cement content and a mixing depth on the order of 12 to 18 inches.

With implementation of the above recommendations, it is our opinion that the resulting pavement section will provide equivalent or greater structural strength than the dry weather pavement section currently planned. However, it should be noted that construction in wet weather is risky and the performance of pavement subgrades depend on a number of factors including the weather conditions, the contractor's methods, and the amount of traffic the road is subjected to. There is a potential that soft spots may develop even with implementation of the wet weather provisions recommended in this letter. If soft spots in the subgrade are identified during roadway excavation, or develop prior to paving, the soft spots should be over-excavated and backfilled with additional crushed rock.

During subgrade excavation, care should be taken to avoid disturbing the subgrade soils. Removals should be performed using an excavator with a smooth-bladed bucket. Truck traffic should be limited until an adequate working surface has been established. We suggest that the crushed rock be spread using bulldozer equipment rather than dump trucks, to reduce the amount of traffic and potential disturbance of subgrade soils. Care should be taken to avoid over-compaction of the base course materials, which could create pumping, unstable subgrade soil conditions. Heavy and/or vibratory compaction efforts should be applied with caution. Following placement and compaction of the crushed rock to project specifications (95 percent of Modified Proctor), a finish proof-roll should be performed before paving.

The above recommendations are subject to field verification. GeoPacific should be on-site during construction to verify subgrade strength and to take density tests on the engineered fill, base rock and asphaltic pavement materials.

### **Seismic Design**

The Oregon Department of Geology and Mineral Industries (DOGAMI), Oregon HazVu: 2016 Statewide GeoHazards Viewer indicates that the site is in an area where severe ground shaking is anticipated during an earthquake. Structures should be designed to resist earthquake loading in accordance with the methodology described in the 2015 International Building Code (IBC) with applicable Oregon Structural Specialty Code (OSSC) revisions (current 2014). We recommend Site Class D be used for design per the OSSC, Table 1613.5.2 and as defined in ASCE 7, Chapter 20, Table 20.3-1. Design values determined for the site using the USGS (United States Geological



Survey) 2016 Seismic Design Maps Summary Report are summarized in Table 4, and are based upon existing soil conditions.

**Table 4 - Recommended Earthquake Ground Motion Parameters (USGS 2016)**

Parameter	Value
Location (Lat, Long), degrees	45.311, -122.770
Probabilistic Ground Motion Values, 2% Probability of Exceedance in 50 yrs	
Peak Ground Acceleration $PGA_M$	0.445 g
Short Period, $S_s$	0.926 g
1.0 Sec Period, $S_1$	0.410 g
Soil Factors for Site Class D:	
$F_a$	1.129
$F_v$	1.590
$SD_s = 2/3 \times F_a \times S_s$	0.698 g
$SD_1 = 2/3 \times F_v \times S_1$	0.435 g
Seismic Design Category	D

**Soil Liquefaction**

The Oregon Department of Geology and Mineral Industries (DOGAMI), Oregon HazVu: 2016 Statewide GeoHazards Viewer indicates that the site is located in an area considered to be at *high* risk for soil liquefaction during an earthquake. Soil liquefaction is a phenomenon wherein saturated soil deposits temporarily lose strength and behave as a liquid in response to ground shaking caused by strong earthquakes. Soil liquefaction is generally limited to loose, sands and granular soils located below the water table, and fine-grained soils with a plasticity index less than 8. Our test pit explorations, which extended to a maximum depth of 12 feet bgs, indicated that the site is underlain by very stiff, Lean CLAY located above the static groundwater table. According to our review of available State of Oregon well logs, groundwater is commonly encountered at depths ranging from approximately 18 to 20 feet below the ground surface. It is anticipated that groundwater conditions will vary depending on the season, local subsurface conditions, changes in site utilization, and other factors. In our opinion, the soil profile observed in the upper 12 feet of the site is considered to be at low risk for liquefaction during a seismic event. If additional assessment of the liquefaction potential of the subject site during a seismic ground shaking event is desired by the client, we recommend that additional subsurface exploration consisting of Cone Penetrometer Testing (CPT), and quantitative liquefaction analysis (beyond the scope of this investigation) be conducted.

## UNCERTAINTIES AND LIMITATIONS

We have prepared this report for the owner and his/her consultants for use in design of this project only. The conclusions and interpretations presented in this report should not be construed as a warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations that may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, GeoPacific should be notified for review of the recommendations of this report, and revision of such if necessary.

Sufficient geotechnical monitoring, testing, and consultation should be provided during construction to confirm that the conditions encountered are consistent with those indicated by subsurface explorations. The checklist attached to this report outlines recommended geotechnical observations and testing for the project. Recommendations for design changes will be provided should conditions revealed during construction differ from those anticipated, and to verify that the geotechnical aspects of construction comply with the contract plans and specifications.

Within the limitations of scope, schedule and budget, GeoPacific executed these services in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology at the time the report was prepared. No warranty, express or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

We appreciate this opportunity to be of service.

Sincerely,

**GEOPACIFIC ENGINEERING, INC.**



Benjamin L. Cook, R.G.  
Senior Geologist



James D. Imbrie, G.E., C.E.G.  
Principal Geotechnical Engineer



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**CHECKLIST OF RECOMMENDED GEOTECHNICAL TESTING AND OBSERVATION**

Item No.	Procedure	Timing	By Whom	Done
1	Preconstruction meeting	Prior to beginning site work	Contractor, Developer, Civil and Geotechnical Engineers	
2	Fill removal from site or sorting and stockpiling	Prior to mass stripping	Soil Technician/ Geotechnical Engineer	
3	Stripping, aeration, and root-picking operations	During stripping	Soil Technician	
4	Compaction testing of engineered fill (90% of Modified Proctor)	During filling, tested every 2 vertical feet	Soil Technician	
5	Compaction testing of trench backfill (95% of Modified Proctor)	During backfilling, tested every 4 vertical feet for every 200 lineal feet	Soil Technician	
6	Street Subgrade Inspection	Prior to placing base course	Soil Technician	
7	Base course compaction (95% of Modified Proctor)	Prior to paving, tested every 200 lineal feet	Soil Technician	
8	Footing Excavation	During Excavation	Soil Technician	
9	Final Geotechnical Engineer's Report	Completion of project	Geotechnical Engineer	



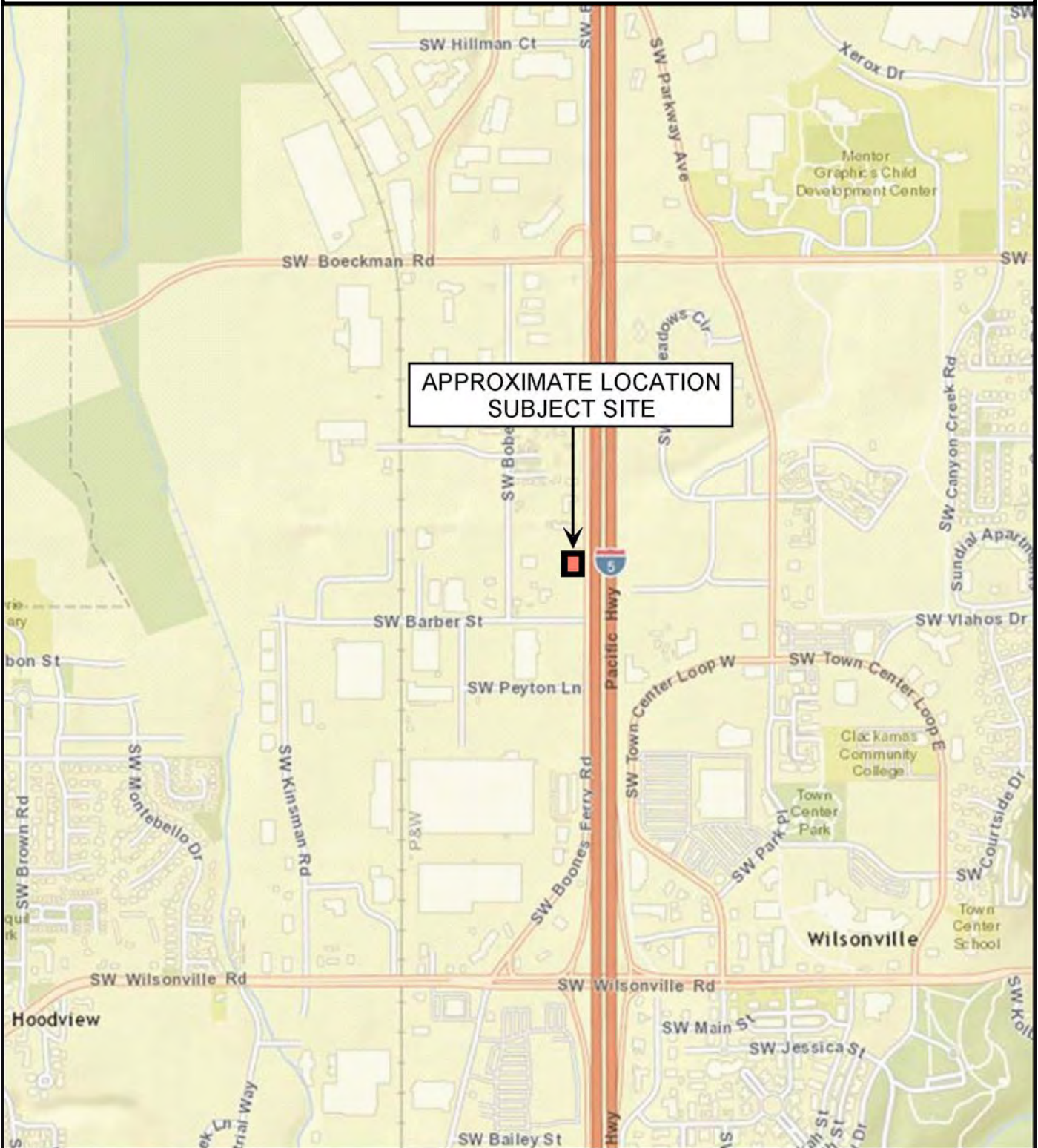
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## FIGURES



14835 SW 72nd Avenue  
Portland, Oregon 97224  
Tel: (503) 598-8445 Fax: (503) 941-9281

# SITE VICINITY MAP



Drawn by: BLC  
Date: 10/12/2016  
Base maps: DOGAMI HAZVU 2016



Project: 28855 SW Boones Ferry Road  
Wilsonville, Oregon 97070

Project No. 16-4357

FIGURE 1




14835 SW 72nd Avenue  
 Portland, Oregon 97224  
 Tel: (503) 598-8445 Fax: (503) 941-9281

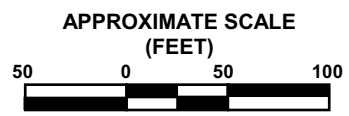
# SITE AERIAL AND EXPLORATION LOCATIONS



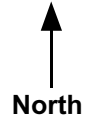
Base Map Obtained From Google Earth 2016

**Legend:**

 Test Pit Exploration Designation and Approximate Location



Drawn by: BLC  
 Date: 10/12/2016



Project: 28855 SW Boones Ferry Road  
 Wilsonville, Oregon 97070

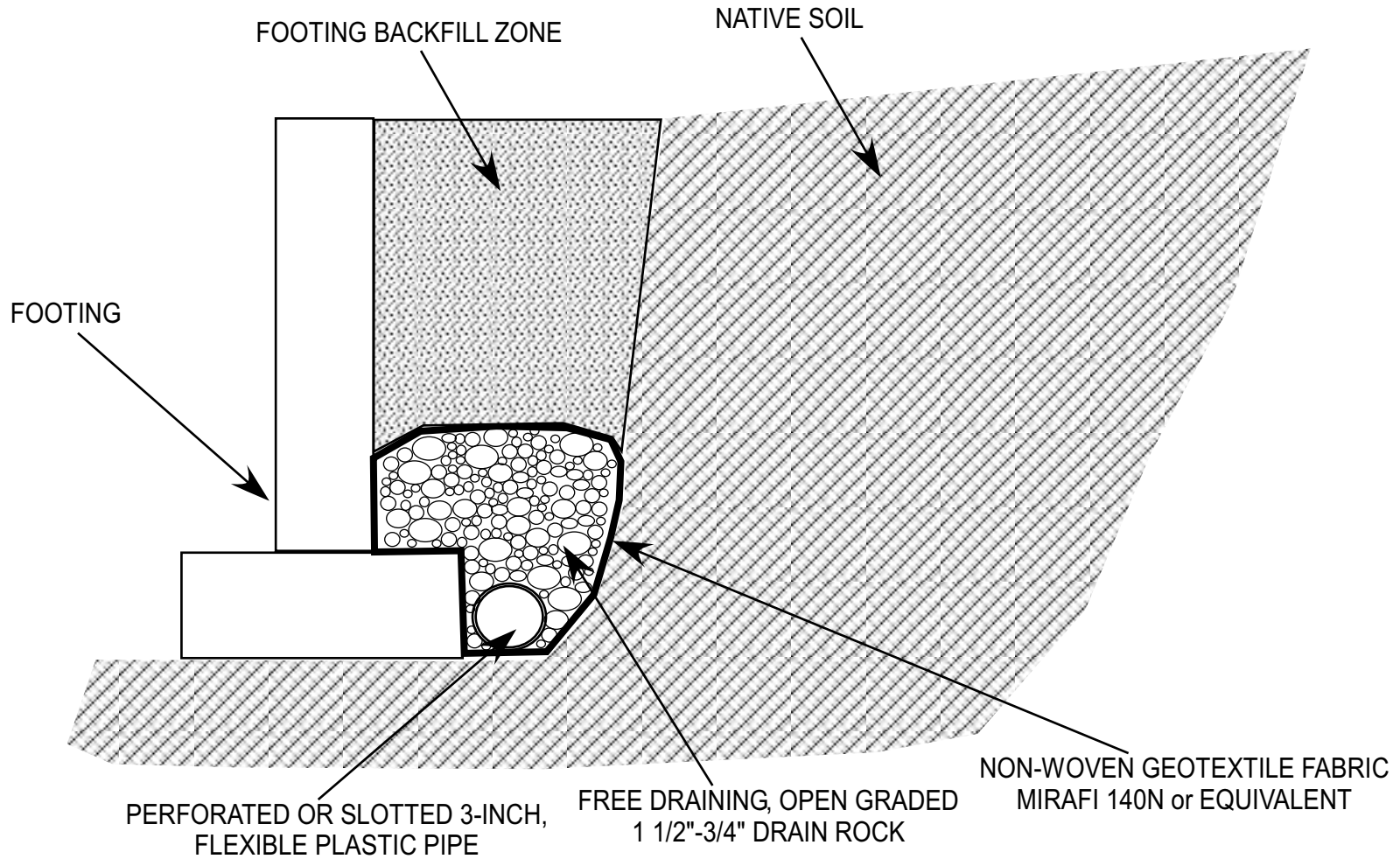
Project No. 16-4357

FIGURE 2



14835 SW 72nd Avenue  
Portland, Oregon 97224  
Tel: (503) 598-8445 Fax: (503) 941-9281

# TYPICAL PERIMETER FOOTING DRAIN DETAIL



Notes:

- 1) Drain rock should contain no more than 5 percent fines passing the U.S. No. 200 Sieve.
- 2) Trench bottom and drain pipe should be sloped to drain to approved discharge location.

Date: 10/12/2016  
Drawn by: BLC

Project: 28855 SW Boones Ferry Road  
Wilsonville, Oregon 97070

Project No. 16-4357

FIGURE 3



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## EXPLORATION LOGS



14835 SW 72nd Avenue  
 Portland, Oregon 97224  
 Tel: (503) 598-8445 Fax: (503) 941-9281

# TEST PIT LOG

Project: 28855 SW Boones Ferry Road Wilsonville, Oregon	Project No. 16-4357	Test Pit No. <b>TP-1</b>
--	---------------------	--------------------------

Depth (ft)	Pocket Penetrometer (tons/ft <sup>2</sup> )	Sample Type	% Passing No. 200 Sieve	Moisture Content (%)	Water Bearing Zone	Material Description
1	4.5					TOPSOIL. Mossy surface, brown, moist, moderately organic Lean CLAY (OL-CL) Approximately 4 inches thick.
2	4.5					FILL. 3/4"-0 crushed aggregate, medium dense, moist, approximately 12 inches thick
3	>4.5					Lean CLAY (CL), light brown to brown, very stiff to hard, moist, moderate plasticity, faint orange mottling.
4	>4.5					Infiltration test IT-1.1 conducted @ - 4 feet. Measured infiltration rate = 0 inches per hour.
5						
6						
7						Lean CLAY (CL), light brown, very stiff to hard, damp, moderate plasticity. Infiltration test IT-1.2 conducted @ - 7 feet. Measured infiltration rate = 0 inches per hour.
8						
9						
10						
11						
12						Test pit terminated at 12 feet bgs. No groundwater seepage observed during excavation.
13						
14						
15						
16						
17						

**LEGEND**

 Bag Sample	 Bucket Sample	 Shelby Tube Sample	 Seepage	 Water Bearing Zone	 Water Level at Abandonment
---	--	---	--	---	--

Date Excavated: 10/7/2016  
 Logged By: B. Cook  
 Surface Elevation: 180 feet















14835 SW 72nd Avenue  
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# TEST PIT LOG

Project: 28855 SW Boones Ferry Road Wilsonville, Oregon	Project No. 16-4357	Test Pit No. <b>TP-2</b>
--	---------------------	--------------------------

Depth (ft)	Pocket Penetrometer (tons/ft <sup>2</sup> )	Sample Type	% Passing No. 200 Sieve	Moisture Content (%)	Water Bearing Zone	Material Description
1	2.5					TOPSOIL. Mossy surface, brown, moist, moderately organic Lean CLAY (OL-CL) Approximately 4 inches thick.
2	2.5					FILL mound. Lean CLAY (CL) with 3/4"-0 crushed aggregate, contains sparse asphalt fragments, fine roots. Extends to a depth of approximately 3 feet bgs.
3	>4.5					
4	>4.5					Lean CLAY (CL), light brown to brown, very stiff to hard, moist, moderate plasticity, faint orange mottling.
5						
6						
7						Lean CLAY (CL), light brown, very stiff to hard, damp, moderate plasticity.
8						
9						
10						Test pit terminated at 10 feet bgs. No groundwater seepage observed during excavation.
11						
12						
13						
14						
15						
16						
17						





<b>LEGEND</b>  Bag Sample  Bucket Sample  Shelby Tube Sample  Seepage  Water Bearing Zone  Water Level at Abandonment	Date Excavated: 10/7/2016 Logged By: B. Cook Surface Elevation: 180 feet
--	--









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# TEST PIT LOG

Project: 28855 SW Boones Ferry Road Wilsonville, Oregon	Project No. 16-4357	Test Pit No. <b>TP-3</b>
--	---------------------	--------------------------

Depth (ft)	Pocket Penetrometer (tons/ft <sup>2</sup> )	Sample Type	% Passing No. 200 Sieve	Moisture Content (%)	Water Bearing Zone	Material Description
1	3.5					TOPSOIL. Mossy/grassy surface, brown, moist, moderately organic Lean CLAY (OL-CL). Approximately 8 inches thick.
2	3.5					Lean CLAY (CL), light brown to brown, very stiff to hard, moist, moderate plasticity, faint orange mottling.
3	>4.5					
4	>4.5					
5						
6						
7						Lean CLAY (CL), light brown, very stiff to hard, damp, moderate plasticity.
8						
9						
10						Test pit terminated at 10 feet bgs. No groundwater seepage observed during excavation.
11						
12						
13						
14						
15						
16						
17						

<b>LEGEND</b>  Bag Sample  Bucket Sample  Shelby Tube Sample  Seepage  Water Bearing Zone  Water Level at Abandonment	Date Excavated: 10/7/2016 Logged By: B. Cook Surface Elevation: 178 feet
--	--



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## SETTLEMENT ANALYSIS

# Settlement Analysis

Organization: **GeoPacific Engineering, Inc.**  
 Project Name: **16-4357, 28855 SW Boones Fe**  
 Job #: **16-4357**  
 Design by: **BLC**  
 Date: **1/24/2017**



## Foundation Geometry, GWT & Loading

Units: **English**  
 Footing Shape: **Square**  
 Method: **Terzaghi & Peck**

Variable	Value	Variable	Value
Footing Width	6.0 ft	Ground Water Depth	20.0 ft
Footing Thickness	1.5 ft	Rigidity factor	1.0
Footing Length	6.0 ft	Max. Depth	20.0 ft
Embedment Depth	1.0 ft	Axial Load	68.0 k

## Geotechnical Properties

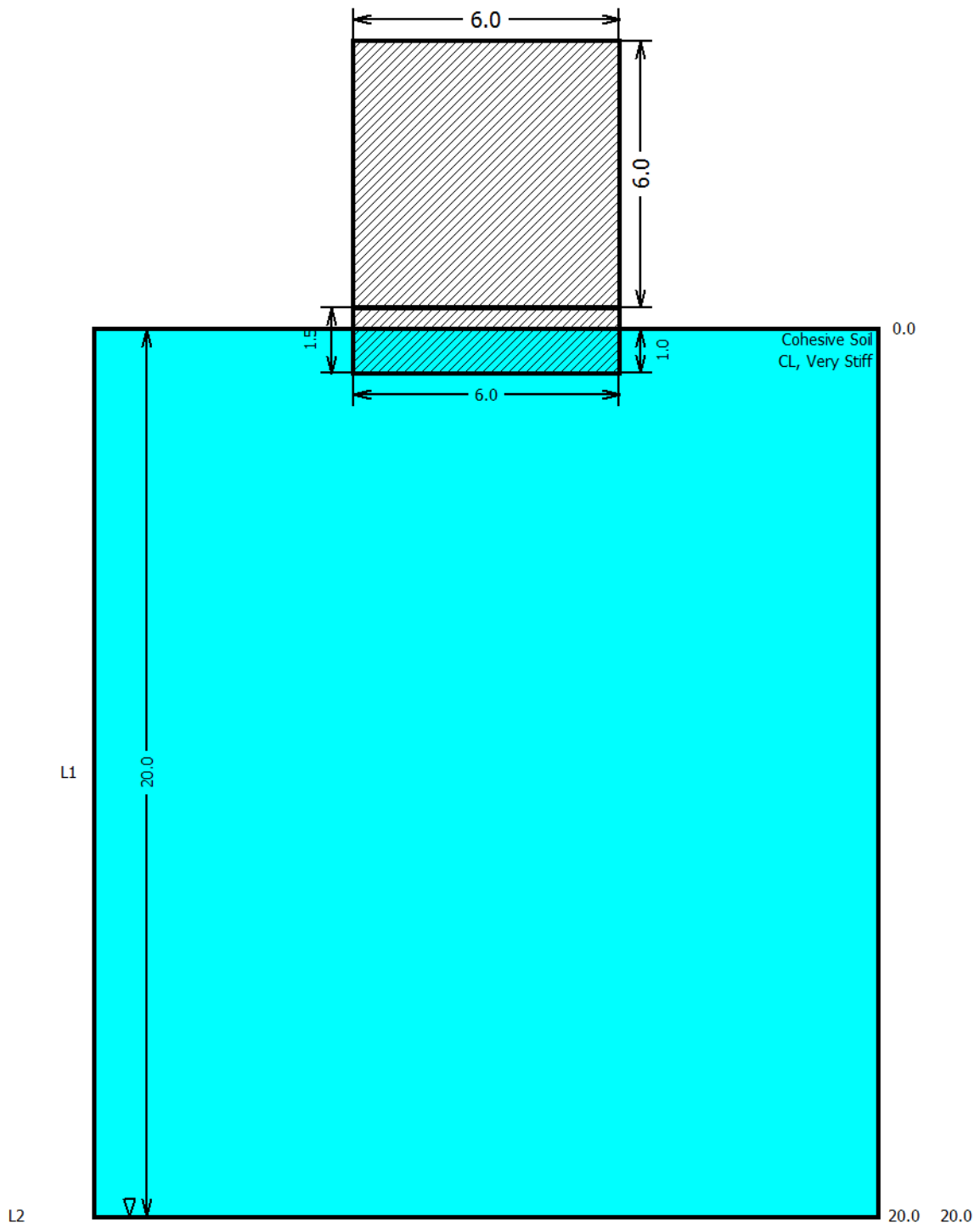
#	Material Type	USCS	Layer Thick, ft	Consistency	Compr. Ratio Cc/(1+e)	Recompr. Ratio Cr/(1+e)	OC Margin sigma m' lb/ft^2	Un. Weight gamma lb/ft^3
1	Cohesive Soil	CL	20.00 0 - 20	Very Stiff	0.030	0.001	0	115.0
2			0.00 20 - 20		0.001	0.001	0	115.0

## Results

Applied Pressure, q: 2038.9 lb/ft<sup>2</sup>  
 Total Settlement: 1.736 in

Type of Structure	Strip Load	Column Load	Max. Allow. Static Settlement	Max. Allow. Differential Settlement	Δ/L
Embankments	-----	-----	Site specific	1/2 inch per 15 ft	1/360
Residences	1 - 2.5 kip/ft	5 - 60 kips	1.0 inch	1/4 inch per 20 ft	1/960
Multistory Building	3 - 12 kip/ft	10 - 300 kips	1.0 inch	3/8 inch per 15 ft	1/480
Industrial Building	3 - 6 kip/ft	70 - 100 kips	1.5 inch	3/8 inch per 20 ft	1/640
Water Tanks	2 - 4 kip/ft	-----	1.5 inch	3/8 inch per 20 ft	1/640
Solar Foundations	-----	1 - 8 kips	0.5 inch	1/4 inch per 20 ft	1/960
Parking Garage	4 - 10 kip/ft	100 - 2,000 kips	3/8 inch	1/4 inch per 20 ft	1/960

A "Guide" to Settlement – Final design values to be determined by the project design engineer(s)



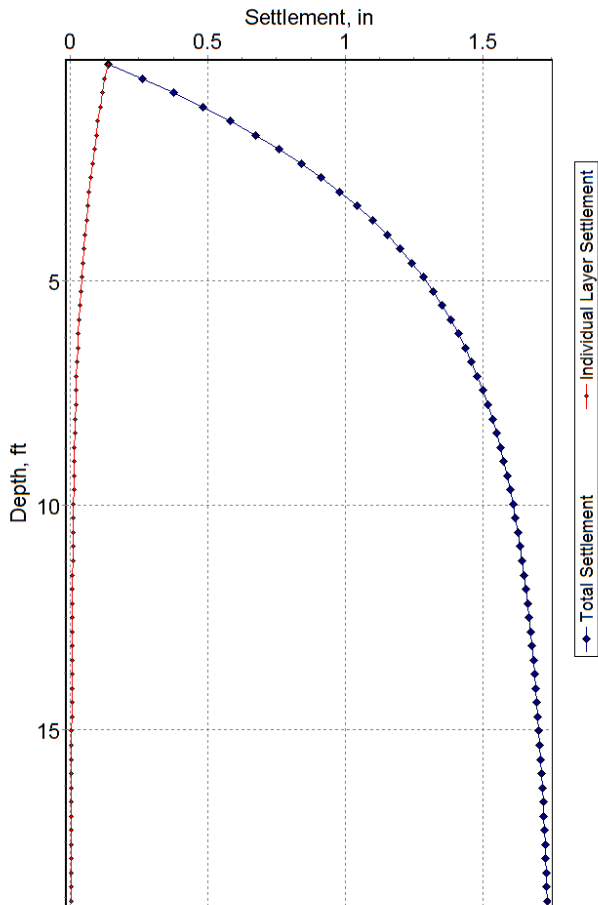
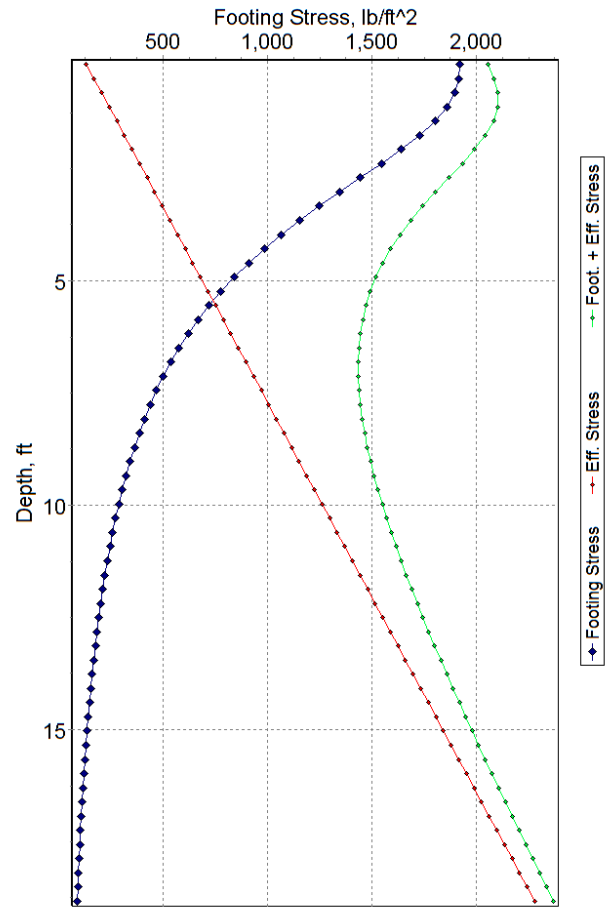
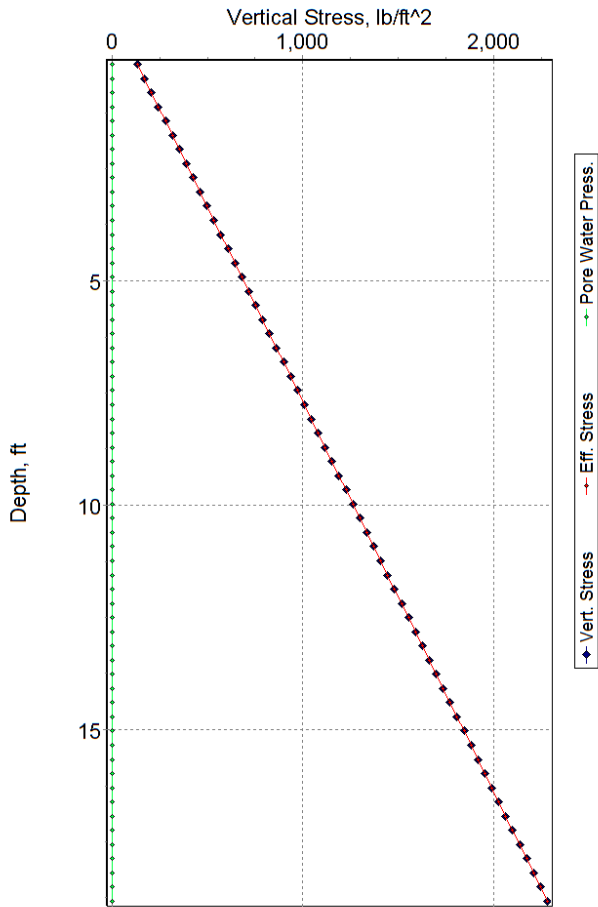
**Fig. 1: Plan and Cross Section**

**Table of Test Results - Page 1**

<b>Node #</b>	<b>Depth (ft)</b>	<b>O.C.+Eff. Str (psf)</b>	<b>Eff. Stress (psf)</b>	<b>Ftng. Stress (psf)</b>	<b>Ftng. + Eff. Str (psf)</b>
1	0.16	133.21	133.21	1923.68	2056.89
2	0.48	169.63	169.63	1918.34	2087.96
3	0.79	206.04	206.04	1899.58	2105.62
4	1.11	242.46	242.46	1862.23	2104.69
5	1.43	278.88	278.88	1805.17	2084.05
6	1.74	315.29	315.29	1730.60	2045.89
7	2.06	351.71	351.71	1642.72	1994.43
8	2.38	388.13	388.13	1546.40	1934.52
9	2.69	424.54	424.54	1446.18	1870.73
10	3.01	460.96	460.96	1345.81	1806.77
11	3.33	497.38	497.38	1248.04	1745.42
12	3.64	533.79	533.79	1154.76	1688.55
13	3.96	570.21	570.21	1067.08	1637.28
14	4.28	606.63	606.63	985.56	1592.18
15	4.59	643.04	643.04	910.36	1553.40
16	4.91	679.46	679.46	841.38	1520.84
17	5.23	715.88	715.88	778.33	1494.20
18	5.54	752.29	752.29	720.84	1473.14
19	5.86	788.71	788.71	668.50	1457.21
20	6.18	825.13	825.13	620.87	1445.99
21	6.49	861.54	861.54	577.52	1439.06
22	6.81	897.96	897.96	538.05	1436.01
23	7.13	934.38	934.38	502.08	1436.46
24	7.44	970.79	970.79	469.28	1440.07
25	7.76	1007.21	1007.21	439.32	1446.53
26	8.08	1043.63	1043.63	411.92	1455.54
27	8.39	1080.04	1080.04	386.82	1466.86
28	8.71	1116.46	1116.46	363.80	1480.26
29	9.03	1152.88	1152.88	342.65	1495.52
30	9.34	1189.29	1189.29	323.19	1512.48
31	9.66	1225.71	1225.71	305.25	1530.96
32	9.98	1262.13	1262.13	288.69	1550.82
33	10.29	1298.54	1298.54	273.38	1571.92
34	10.61	1334.96	1334.96	259.21	1594.16
35	10.93	1371.38	1371.38	246.06	1617.43
36	11.24	1407.79	1407.79	233.85	1641.64
37	11.56	1444.21	1444.21	222.49	1666.70
38	11.88	1480.63	1480.63	211.92	1692.54
39	12.19	1517.04	1517.04	202.05	1719.09
40	12.51	1553.46	1553.46	192.84	1746.29
41	12.83	1589.88	1589.88	184.22	1774.10
42	13.14	1626.29	1626.29	176.15	1802.44
43	13.46	1662.71	1662.71	168.59	1831.30
44	13.78	1699.13	1699.13	161.49	1860.62
45	14.09	1735.54	1735.54	154.82	1890.36
46	14.41	1771.96	1771.96	148.54	1920.50
47	14.73	1808.38	1808.38	142.63	1951.01
48	15.04	1844.79	1844.79	137.06	1981.85
49	15.36	1881.21	1881.21	131.80	2013.01
50	15.68	1917.63	1917.63	126.84	2044.46
51	15.99	1954.04	1954.04	122.14	2076.18
52	16.31	1990.46	1990.46	117.69	2108.15
53	16.63	2026.88	2026.88	113.48	2140.36
54	16.94	2063.29	2063.29	109.49	2172.78
55	17.26	2099.71	2099.71	105.70	2205.41
56	17.58	2136.13	2136.13	102.10	2238.22
57	17.89	2172.54	2172.54	98.68	2271.22
58	18.21	2208.96	2208.96	95.42	2304.38
59	18.53	2245.38	2245.38	92.32	2337.70
60	18.84	2281.79	2281.79	89.37	2371.16

**Table of Test Results - Page 2**

Node #	Strain (%)	Indiv. Sett. (in)	Tot. Settlement (in)	Total Stress (psf)	Pore Water (psf)
1	3.566	0.136	0.136	133.21	0.00
2	3.271	0.124	0.260	169.63	0.00
3	3.028	0.115	0.375	206.04	0.00
4	2.816	0.107	0.482	242.46	0.00
5	2.620	0.100	0.581	278.88	0.00
6	2.437	0.093	0.674	315.29	0.00
7	2.261	0.086	0.760	351.71	0.00
8	2.093	0.080	0.839	388.13	0.00
9	1.932	0.073	0.913	424.54	0.00
10	1.780	0.068	0.981	460.96	0.00
11	1.636	0.062	1.043	497.38	0.00
12	1.500	0.057	1.100	533.79	0.00
13	1.374	0.052	1.152	570.21	0.00
14	1.257	0.048	1.200	606.63	0.00
15	1.149	0.044	1.243	643.04	0.00
16	1.050	0.040	1.283	679.46	0.00
17	0.959	0.036	1.320	715.88	0.00
18	0.876	0.033	1.353	752.29	0.00
19	0.800	0.030	1.383	788.71	0.00
20	0.731	0.028	1.411	825.13	0.00
21	0.668	0.025	1.437	861.54	0.00
22	0.612	0.023	1.460	897.96	0.00
23	0.560	0.021	1.481	934.38	0.00
24	0.514	0.020	1.501	970.79	0.00
25	0.472	0.018	1.519	1007.21	0.00
26	0.433	0.016	1.535	1043.63	0.00
27	0.399	0.015	1.550	1080.04	0.00
28	0.367	0.014	1.564	1116.46	0.00
29	0.339	0.013	1.577	1152.88	0.00
30	0.313	0.012	1.589	1189.29	0.00
31	0.290	0.011	1.600	1225.71	0.00
32	0.268	0.010	1.610	1262.13	0.00
33	0.249	0.009	1.620	1298.54	0.00
34	0.231	0.009	1.628	1334.96	0.00
35	0.215	0.008	1.637	1371.38	0.00
36	0.200	0.008	1.644	1407.79	0.00
37	0.187	0.007	1.651	1444.21	0.00
38	0.174	0.007	1.658	1480.63	0.00
39	0.163	0.006	1.664	1517.04	0.00
40	0.152	0.006	1.670	1553.46	0.00
41	0.143	0.005	1.675	1589.88	0.00
42	0.134	0.005	1.680	1626.29	0.00
43	0.126	0.005	1.685	1662.71	0.00
44	0.118	0.004	1.690	1699.13	0.00
45	0.111	0.004	1.694	1735.54	0.00
46	0.105	0.004	1.698	1771.96	0.00
47	0.099	0.004	1.702	1808.38	0.00
48	0.093	0.004	1.705	1844.79	0.00
49	0.088	0.003	1.708	1881.21	0.00
50	0.083	0.003	1.712	1917.63	0.00
51	0.079	0.003	1.715	1954.04	0.00
52	0.075	0.003	1.718	1990.46	0.00
53	0.071	0.003	1.720	2026.88	0.00
54	0.067	0.003	1.723	2063.29	0.00
55	0.064	0.002	1.725	2099.71	0.00
56	0.061	0.002	1.728	2136.13	0.00
57	0.058	0.002	1.730	2172.54	0.00
58	0.055	0.002	1.732	2208.96	0.00
59	0.052	0.002	1.734	2245.38	0.00
60	0.050	0.002	1.736	2281.79	0.00



### References:

1. "Foundation Design", 2nd edition, Coduto, 2000.
2. "Geotechnical Engineering", Coduto, 1998
3. "Settlement Analysis", SoilStructure Software, 2014



# Settlement Analysis

Organization: **GeoPacific Engineering, Inc.**  
 Project Name: **16-4357, 28855 SW Boones Fe**  
 Job #: **16-4357**  
 Design by: **BLC**  
 Date: **1/24/2017**



## Foundation Geometry, GWT & Loading

Units: **English**  
 Footing Shape: **Continuous**  
 Method: **Terzaghi & Peck**

Variable	Value	Variable	Value
Footing Width	1.5 ft	Ground Water Depth	20.0 ft
Footing Thickness	1.5 ft	Rigidity factor	1.0
Footing Length	15.0 ft	Max. Depth	20.0 ft
Embedment Depth	1.0 ft	Axial Load	3.0 k/ft

## Geotechnical Properties

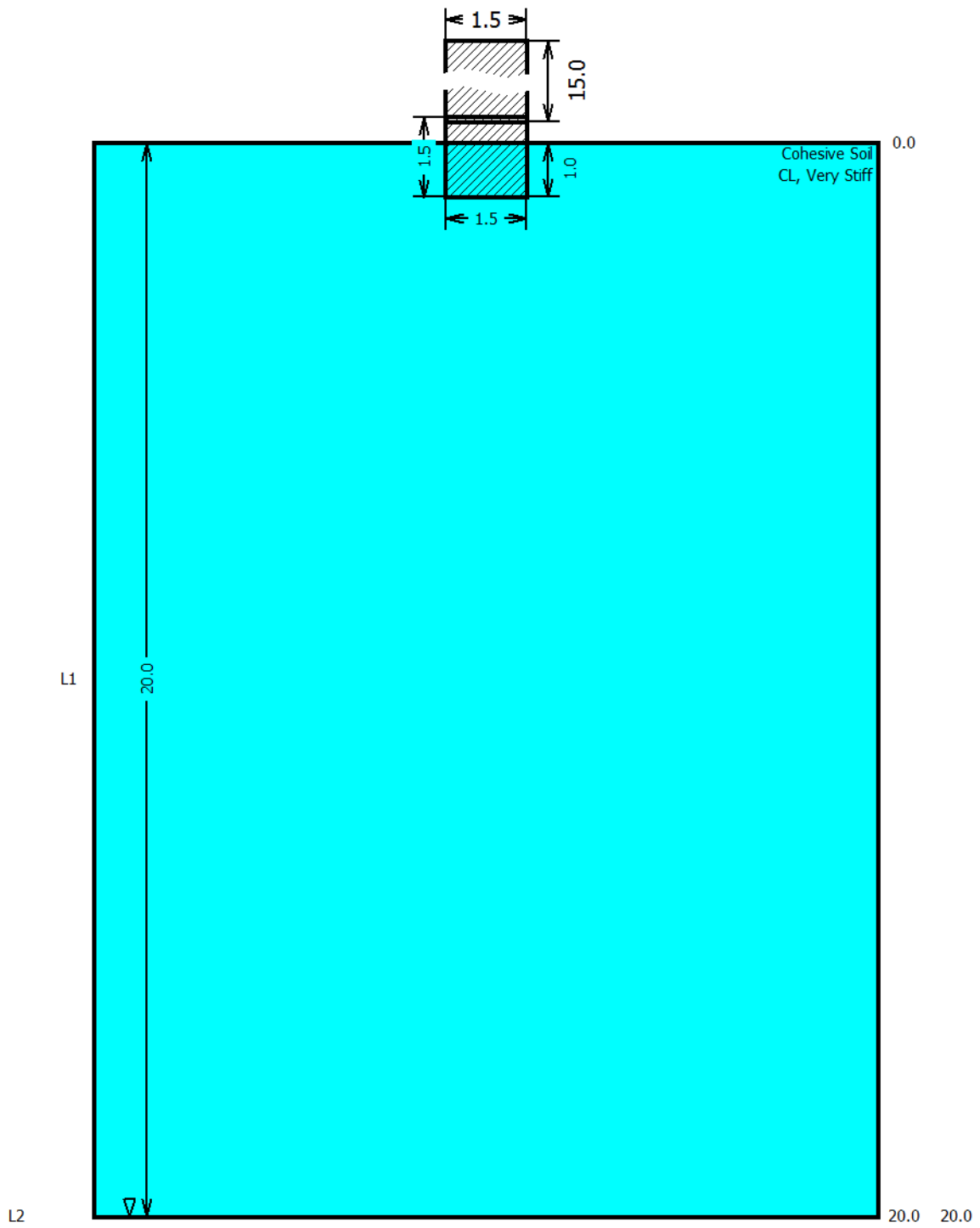
#	Material Type	USCS	Layer Thick, ft	Consistency	Compr. Ratio Cc/(1+e)	Recompr. Ratio Cr/(1+e)	OC Margin sigma m' lb/ft^2	Un. Weight gamma lb/ft^3
1	Cohesive Soil	CL	20.00 0 - 20	Very Stiff	0.030	0.001	0	115.0
2			0.00 20 - 20		0.001	0.001	0	115.0

## Results

Applied Pressure, q: 2150.0 lb/ft<sup>2</sup>  
 Total Settlement: 1.301 in

Type of Structure	Strip Load	Column Load	Max. Allow. Static Settlement	Max. Allow. Differential Settlement	Δ/L
Embankments	-----	-----	Site specific	1/2 inch per 15 ft	1/360
Residences	1 - 2.5 kip/ft	5 - 60 kips	1.0 inch	1/4 inch per 20 ft	1/960
Multistory Building	3 - 12 kip/ft	10 - 300 kips	1.0 inch	3/8 inch per 15 ft	1/480
Industrial Building	3 - 6 kip/ft	70 - 100 kips	1.5 inch	3/8 inch per 20 ft	1/640
Water Tanks	2 - 4 kip/ft	-----	1.5 inch	3/8 inch per 20 ft	1/640
Solar Foundations	-----	1 - 8 kips	0.5 inch	1/4 inch per 20 ft	1/960
Parking Garage	4 - 10 kip/ft	100 - 2,000 kips	3/8 inch	1/4 inch per 20 ft	1/960

A "Guide" to Settlement – Final design values to be determined by the project design engineer(s)



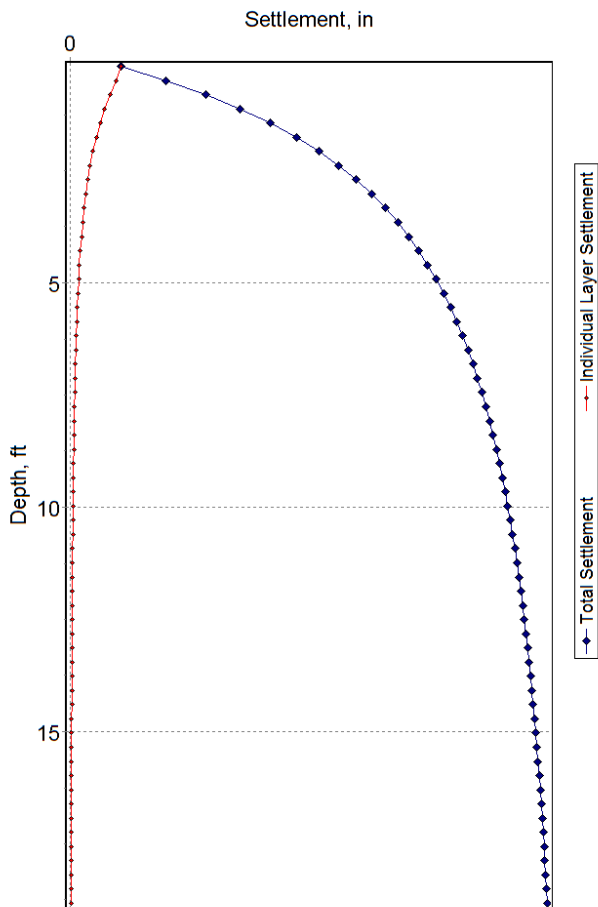
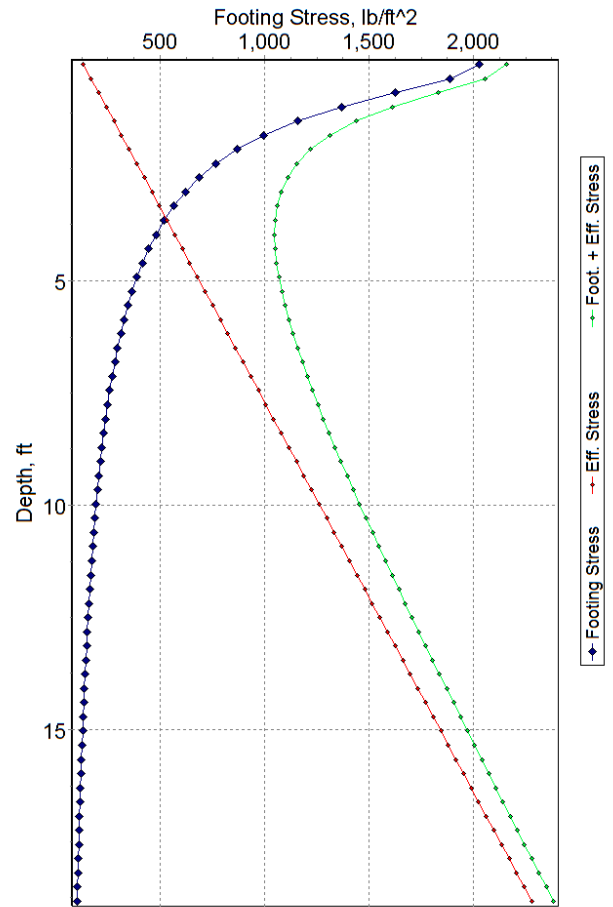
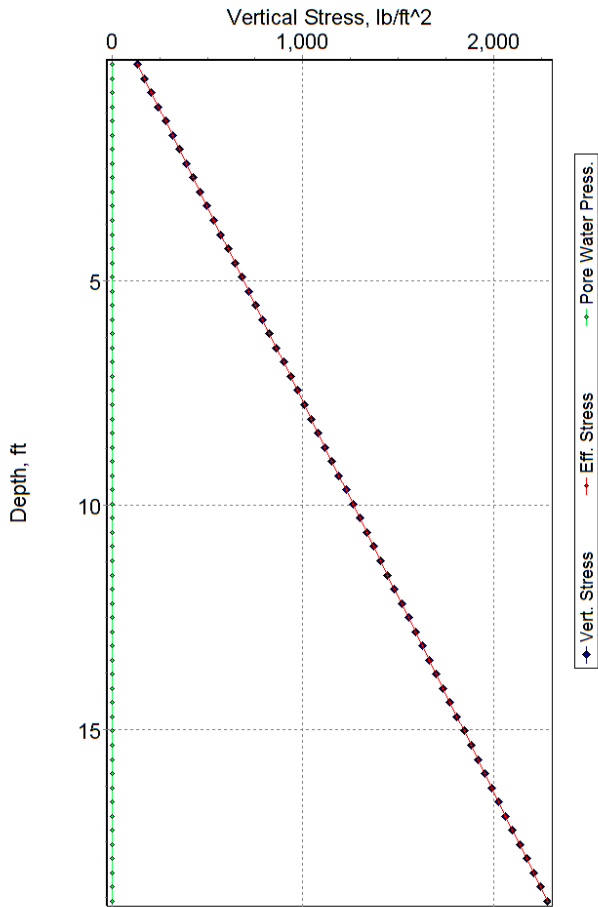
**Fig. 1: Plan and Cross Section**

Table of Test Results - Page 1

Node #	Depth (ft)	O.C.+Eff. Str (psf)	Eff. Stress (psf)	Ftng. Stress (psf)	Ftng. + Eff. Str (psf)
1	0.16	133.21	133.21	2027.29	2160.50
2	0.48	169.63	169.63	1889.19	2058.82
3	0.79	206.04	206.04	1629.31	1835.35
4	1.11	242.46	242.46	1372.04	1614.50
5	1.43	278.88	278.88	1161.60	1440.47
6	1.74	315.29	315.29	997.40	1312.69
7	2.06	351.71	351.71	869.41	1221.12
8	2.38	388.13	388.13	768.29	1156.41
9	2.69	424.54	424.54	687.03	1111.57
10	3.01	460.96	460.96	620.61	1081.57
11	3.33	497.38	497.38	565.49	1062.86
12	3.64	533.79	533.79	519.09	1052.88
13	3.96	570.21	570.21	479.55	1049.76
14	4.28	606.63	606.63	445.49	1052.12
15	4.59	643.04	643.04	415.87	1058.91
16	4.91	679.46	679.46	389.88	1069.34
17	5.23	715.88	715.88	366.90	1082.78
18	5.54	752.29	752.29	346.45	1098.75
19	5.86	788.71	788.71	328.14	1116.85
20	6.18	825.13	825.13	311.65	1136.77
21	6.49	861.54	861.54	296.72	1158.26
22	6.81	897.96	897.96	283.14	1181.10
23	7.13	934.38	934.38	270.75	1205.12
24	7.44	970.79	970.79	259.38	1230.17
25	7.76	1007.21	1007.21	248.93	1256.14
26	8.08	1043.63	1043.63	239.28	1282.91
27	8.39	1080.04	1080.04	230.35	1310.39
28	8.71	1116.46	1116.46	222.06	1338.51
29	9.03	1152.88	1152.88	214.34	1367.21
30	9.34	1189.29	1189.29	207.13	1396.43
31	9.66	1225.71	1225.71	200.40	1426.11
32	9.98	1262.13	1262.13	194.08	1456.21
33	10.29	1298.54	1298.54	188.16	1486.70
34	10.61	1334.96	1334.96	182.58	1517.54
35	10.93	1371.38	1371.38	177.32	1548.69
36	11.24	1407.79	1407.79	172.35	1580.14
37	11.56	1444.21	1444.21	167.66	1611.87
38	11.88	1480.63	1480.63	163.21	1643.84
39	12.19	1517.04	1517.04	158.99	1676.04
40	12.51	1553.46	1553.46	154.99	1708.45
41	12.83	1589.88	1589.88	151.18	1741.05
42	13.14	1626.29	1626.29	147.55	1773.84
43	13.46	1662.71	1662.71	144.09	1806.80
44	13.78	1699.13	1699.13	140.80	1839.92
45	14.09	1735.54	1735.54	137.64	1873.18
46	14.41	1771.96	1771.96	134.63	1906.59
47	14.73	1808.38	1808.38	131.74	1940.12
48	15.04	1844.79	1844.79	128.98	1973.77
49	15.36	1881.21	1881.21	126.33	2007.54
50	15.68	1917.63	1917.63	123.78	2041.41
51	15.99	1954.04	1954.04	121.34	2075.38
52	16.31	1990.46	1990.46	118.99	2109.45
53	16.63	2026.88	2026.88	116.73	2143.61
54	16.94	2063.29	2063.29	114.55	2177.85
55	17.26	2099.71	2099.71	112.46	2212.17
56	17.58	2136.13	2136.13	110.44	2246.56
57	17.89	2172.54	2172.54	108.49	2281.03
58	18.21	2208.96	2208.96	106.60	2315.56
59	18.53	2245.38	2245.38	104.79	2350.16
60	18.84	2281.79	2281.79	103.03	2384.82

**Table of Test Results - Page 2**

<b>Node #</b>	<b>Strain (%)</b>	<b>Indiv. Sett. (in)</b>	<b>Tot. Settlement (in)</b>	<b>Total Stress (psf)</b>	<b>Pore Water (psf)</b>
1	3.630	0.138	0.138	133.21	0.00
2	3.252	0.124	0.262	169.63	0.00
3	2.849	0.108	0.370	206.04	0.00
4	2.470	0.094	0.464	242.46	0.00
5	2.139	0.081	0.545	278.88	0.00
6	1.858	0.071	0.616	315.29	0.00
7	1.622	0.062	0.677	351.71	0.00
8	1.422	0.054	0.731	388.13	0.00
9	1.254	0.048	0.779	424.54	0.00
10	1.111	0.042	0.821	460.96	0.00
11	0.989	0.038	0.859	497.38	0.00
12	0.885	0.034	0.892	533.79	0.00
13	0.795	0.030	0.923	570.21	0.00
14	0.717	0.027	0.950	606.63	0.00
15	0.650	0.025	0.975	643.04	0.00
16	0.591	0.022	0.997	679.46	0.00
17	0.539	0.020	1.017	715.88	0.00
18	0.494	0.019	1.036	752.29	0.00
19	0.453	0.017	1.053	788.71	0.00
20	0.417	0.016	1.069	825.13	0.00
21	0.386	0.015	1.084	861.54	0.00
22	0.357	0.014	1.098	897.96	0.00
23	0.332	0.013	1.110	934.38	0.00
24	0.309	0.012	1.122	970.79	0.00
25	0.288	0.011	1.133	1007.21	0.00
26	0.269	0.010	1.143	1043.63	0.00
27	0.252	0.010	1.153	1080.04	0.00
28	0.236	0.009	1.162	1116.46	0.00
29	0.222	0.008	1.170	1152.88	0.00
30	0.209	0.008	1.178	1189.29	0.00
31	0.197	0.007	1.185	1225.71	0.00
32	0.186	0.007	1.193	1262.13	0.00
33	0.176	0.007	1.199	1298.54	0.00
34	0.167	0.006	1.206	1334.96	0.00
35	0.158	0.006	1.212	1371.38	0.00
36	0.150	0.006	1.217	1407.79	0.00
37	0.143	0.005	1.223	1444.21	0.00
38	0.136	0.005	1.228	1480.63	0.00
39	0.130	0.005	1.233	1517.04	0.00
40	0.124	0.005	1.238	1553.46	0.00
41	0.118	0.004	1.242	1589.88	0.00
42	0.113	0.004	1.246	1626.29	0.00
43	0.108	0.004	1.250	1662.71	0.00
44	0.104	0.004	1.254	1699.13	0.00
45	0.099	0.004	1.258	1735.54	0.00
46	0.095	0.004	1.262	1771.96	0.00
47	0.092	0.003	1.265	1808.38	0.00
48	0.088	0.003	1.269	1844.79	0.00
49	0.085	0.003	1.272	1881.21	0.00
50	0.081	0.003	1.275	1917.63	0.00
51	0.078	0.003	1.278	1954.04	0.00
52	0.076	0.003	1.281	1990.46	0.00
53	0.073	0.003	1.284	2026.88	0.00
54	0.070	0.003	1.286	2063.29	0.00
55	0.068	0.003	1.289	2099.71	0.00
56	0.066	0.002	1.291	2136.13	0.00
57	0.063	0.002	1.294	2172.54	0.00
58	0.061	0.002	1.296	2208.96	0.00
59	0.059	0.002	1.298	2245.38	0.00
60	0.058	0.002	1.301	2281.79	0.00



### References:

1. "Foundation Design", 2nd edition, Coduto, 2000.
2. "Geotechnical Engineering", Coduto, 1998
3. "Settlement Analysis", SoilStructure Software, 2014

# Settlement Analysis

Organization: **GeoPacific Engineering, Inc.**  
 Project Name: **16-4357, 28855 SW Boones Fe**  
 Job #: **16-4357**  
 Design by: **BLC**  
 Date: **1/24/2017**



## Foundation Geometry, GWT & Loading

Units: **English**  
 Footing Shape: **Square**  
 Method: **Terzaghi & Peck**

Variable	Value	Variable	Value
Footing Width	6.0 ft	Ground Water Depth	20.0 ft
Footing Thickness	1.5 ft	Rigidity factor	1.0
Footing Length	6.0 ft	Max. Depth	20.0 ft
Embedment Depth	1.0 ft	Axial Load	68.0 k

## Geotechnical Properties

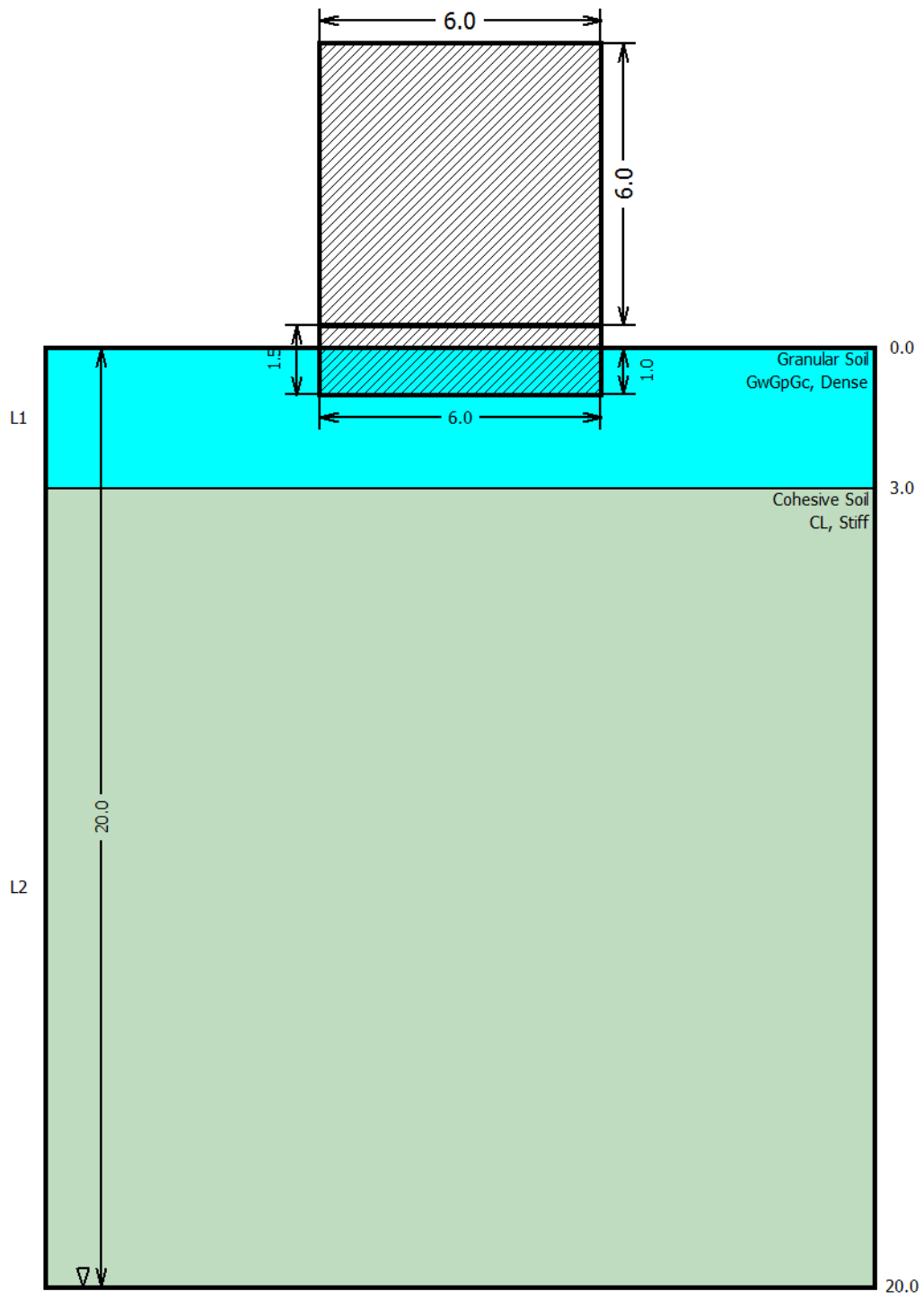
#	Material Type	USCS	Layer Thick, ft	Consistency	Compr. Ratio Cc/(1+e)	Recompr. Ratio Cr/(1+e)	OC Margin sigma m' lb/ft^2	Un. Weight gamma lb/ft^3
1	Granular Soil	GwGpGc	3.00 0 - 3	Dense	0.001	0.001	0	135.0
2	Cohesive Soil	CL	17.00 3 - 20	Stiff	0.030	0.001	0	110.0

## Results

Applied Pressure, q: 2038.9 lb/ft<sup>2</sup>  
 Total Settlement: 0.736 in

Type of Structure	Strip Load	Column Load	Max. Allow. Static Settlement	Max. Allow. Differential Settlement	Δ/L
Embankments	-----	-----	Site specific	1/2 inch per 15 ft	1/360
Residences	1 - 2.5 kip/ft	5 - 60 kips	1.0 inch	1/4 inch per 20 ft	1/960
Multistory Building	3 - 12 kip/ft	10 - 300 kips	1.0 inch	3/8 inch per 15 ft	1/480
Industrial Building	3 - 6 kip/ft	70 - 100 kips	1.5 inch	3/8 inch per 20 ft	1/640
Water Tanks	2 - 4 kip/ft	-----	1.5 inch	3/8 inch per 20 ft	1/640
Solar Foundations	-----	1 - 8 kips	0.5 inch	1/4 inch per 20 ft	1/960
Parking Garage	4 - 10 kip/ft	100 - 2,000 kips	3/8 inch	1/4 inch per 20 ft	1/960

A "Guide" to Settlement – Final design values to be determined by the project design engineer(s)



**Fig. 1: Plan and Cross Section**

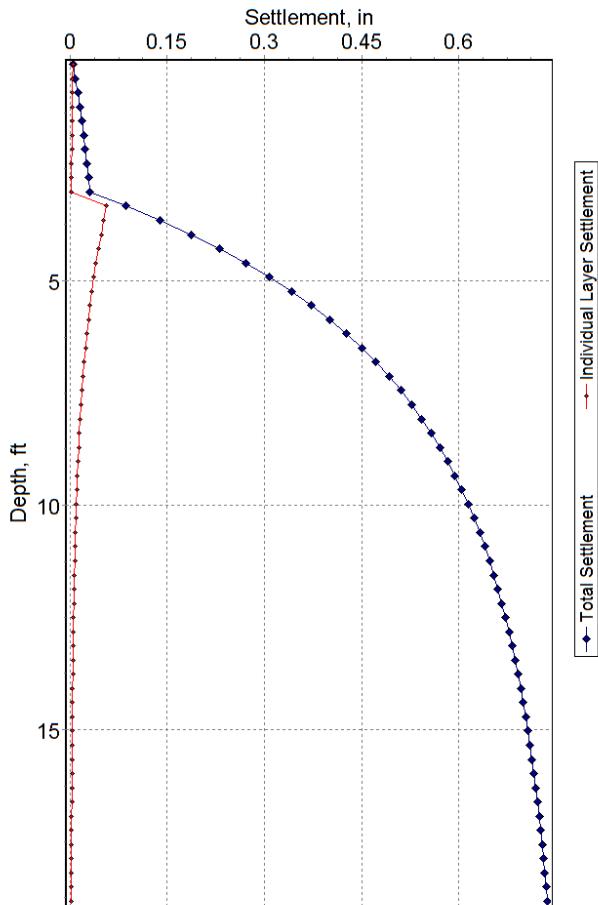
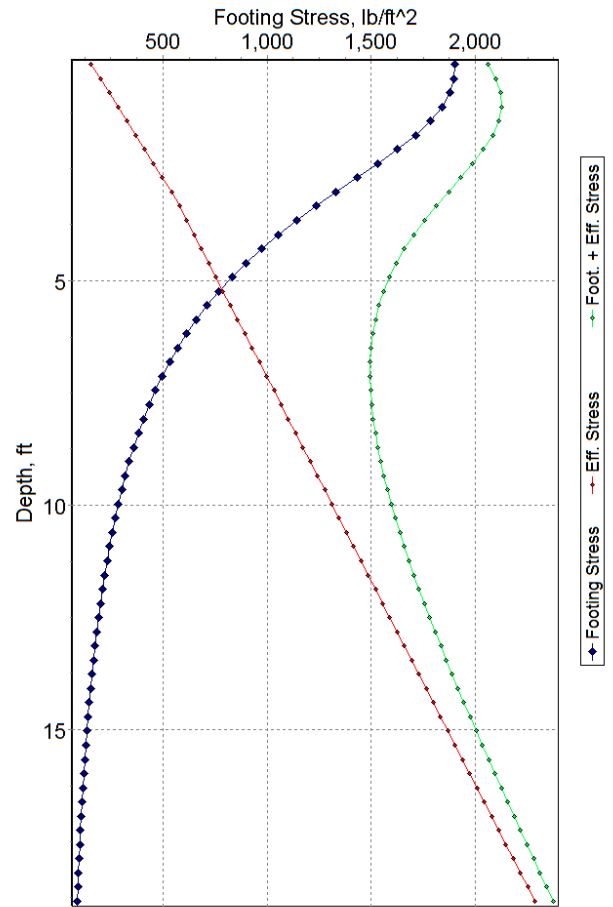
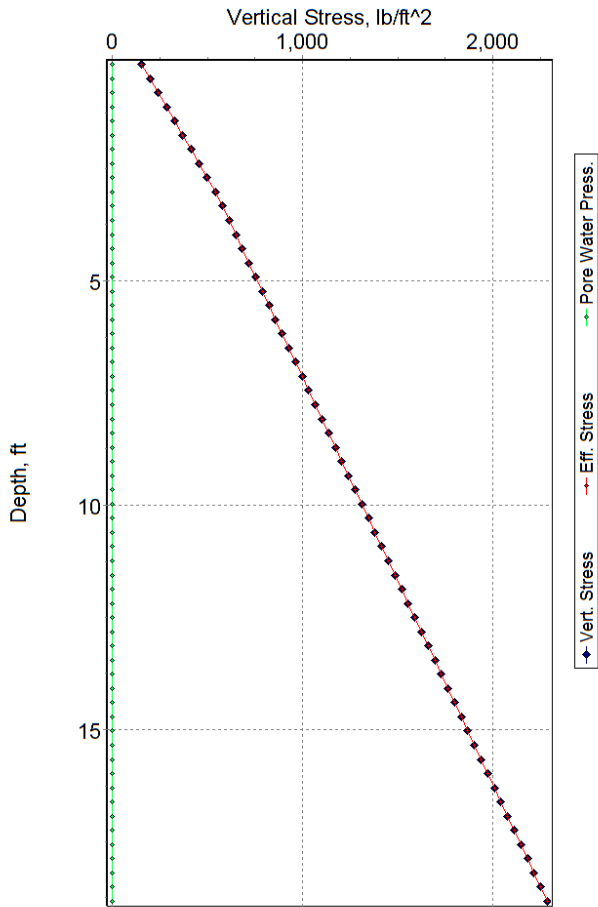
**Table of Test Results - Page 1**

<b>Node #</b>	<b>Depth (ft)</b>	<b>O.C.+Eff. Str (psf)</b>	<b>Eff. Stress (psf)</b>	<b>Ftng. Stress (psf)</b>	<b>Ftng. + Eff. Str (psf)</b>
1	0.16	156.38	156.38	1903.68	2060.05
2	0.48	199.13	199.13	1898.40	2097.52
3	0.79	241.88	241.88	1879.83	2121.70
4	1.11	284.63	284.63	1842.87	2127.50
5	1.43	327.38	327.38	1786.41	2113.78
6	1.74	370.13	370.13	1712.61	2082.73
7	2.06	412.88	412.88	1625.64	2038.52
8	2.38	455.63	455.63	1530.32	1985.95
9	2.69	498.38	498.38	1431.15	1929.52
10	3.01	541.13	541.13	1331.82	1872.94
11	3.33	579.92	579.92	1235.07	1814.99
12	3.64	614.75	614.75	1142.75	1757.50
13	3.96	649.58	649.58	1055.98	1705.57
14	4.28	684.42	684.42	975.31	1659.73
15	4.59	719.25	719.25	900.90	1620.15
16	4.91	754.08	754.08	832.63	1586.71
17	5.23	788.92	788.92	770.24	1559.15
18	5.54	823.75	823.75	713.35	1537.10
19	5.86	858.58	858.58	661.55	1520.13
20	6.18	893.42	893.42	614.41	1507.83
21	6.49	928.25	928.25	571.51	1499.76
22	6.81	963.08	963.08	532.46	1495.54
23	7.13	997.92	997.92	496.87	1494.78
24	7.44	1032.75	1032.75	464.40	1497.15
25	7.76	1067.58	1067.58	434.75	1502.34
26	8.08	1102.42	1102.42	407.64	1510.05
27	8.39	1137.25	1137.25	382.80	1520.05
28	8.71	1172.08	1172.08	360.02	1532.10
29	9.03	1206.92	1206.92	339.09	1546.00
30	9.34	1241.75	1241.75	319.83	1561.58
31	9.66	1276.58	1276.58	302.08	1578.66
32	9.98	1311.42	1311.42	285.69	1597.11
33	10.29	1346.25	1346.25	270.54	1616.79
34	10.61	1381.08	1381.08	256.51	1637.59
35	10.93	1415.92	1415.92	243.50	1659.42
36	11.24	1450.75	1450.75	231.42	1682.17
37	11.56	1485.58	1485.58	220.18	1705.76
38	11.88	1520.42	1520.42	209.71	1730.13
39	12.19	1555.25	1555.25	199.95	1755.20
40	12.51	1590.08	1590.08	190.83	1780.91
41	12.83	1624.92	1624.92	182.31	1807.22
42	13.14	1659.75	1659.75	174.32	1834.07
43	13.46	1694.58	1694.58	166.84	1861.42
44	13.78	1729.42	1729.42	159.81	1889.23
45	14.09	1764.25	1764.25	153.21	1917.46
46	14.41	1799.08	1799.08	147.00	1946.08
47	14.73	1833.92	1833.92	141.15	1975.07
48	15.04	1868.75	1868.75	135.64	2004.39
49	15.36	1903.58	1903.58	130.43	2034.02
50	15.68	1938.42	1938.42	125.52	2063.93
51	15.99	1973.25	1973.25	120.87	2094.12
52	16.31	2008.08	2008.08	116.47	2124.55
53	16.63	2042.92	2042.92	112.30	2155.22
54	16.94	2077.75	2077.75	108.35	2186.10
55	17.26	2112.58	2112.58	104.60	2217.18
56	17.58	2147.42	2147.42	101.04	2248.45
57	17.89	2182.25	2182.25	97.65	2279.90
58	18.21	2217.08	2217.08	94.43	2311.51
59	18.53	2251.92	2251.92	91.36	2343.28
60	18.84	2286.75	2286.75	88.44	2375.19



Table of Test Results - Page 2

Node #	Strain (%)	Indiv. Sett. (in)	Tot. Settlement (in)	Total Stress (psf)	Pore Water (psf)
1	0.112	0.004	0.004	156.38	0.00
2	0.102	0.004	0.008	199.13	0.00
3	0.094	0.004	0.012	241.88	0.00
4	0.087	0.003	0.015	284.63	0.00
5	0.081	0.003	0.018	327.38	0.00
6	0.075	0.003	0.021	370.13	0.00
7	0.069	0.003	0.024	412.88	0.00
8	0.064	0.002	0.026	455.63	0.00
9	0.059	0.002	0.028	498.38	0.00
10	0.054	0.002	0.030	541.13	0.00
11	1.487	0.056	0.087	579.92	0.00
12	1.369	0.052	0.139	614.75	0.00
13	1.258	0.048	0.187	649.58	0.00
14	1.154	0.044	0.230	684.42	0.00
15	1.058	0.040	0.271	719.25	0.00
16	0.969	0.037	0.308	754.08	0.00
17	0.888	0.034	0.341	788.92	0.00
18	0.813	0.031	0.372	823.75	0.00
19	0.744	0.028	0.400	858.58	0.00
20	0.682	0.026	0.426	893.42	0.00
21	0.625	0.024	0.450	928.25	0.00
22	0.573	0.022	0.472	963.08	0.00
23	0.526	0.020	0.492	997.92	0.00
24	0.484	0.018	0.510	1032.75	0.00
25	0.445	0.017	0.527	1067.58	0.00
26	0.410	0.016	0.543	1102.42	0.00
27	0.378	0.014	0.557	1137.25	0.00
28	0.349	0.013	0.570	1172.08	0.00
29	0.323	0.012	0.583	1206.92	0.00
30	0.299	0.011	0.594	1241.75	0.00
31	0.277	0.011	0.604	1276.58	0.00
32	0.257	0.010	0.614	1311.42	0.00
33	0.239	0.009	0.623	1346.25	0.00
34	0.222	0.008	0.632	1381.08	0.00
35	0.207	0.008	0.640	1415.92	0.00
36	0.193	0.007	0.647	1450.75	0.00
37	0.180	0.007	0.654	1485.58	0.00
38	0.168	0.006	0.660	1520.42	0.00
39	0.158	0.006	0.666	1555.25	0.00
40	0.148	0.006	0.672	1590.08	0.00
41	0.139	0.005	0.677	1624.92	0.00
42	0.130	0.005	0.682	1659.75	0.00
43	0.122	0.005	0.687	1694.58	0.00
44	0.115	0.004	0.691	1729.42	0.00
45	0.108	0.004	0.695	1764.25	0.00
46	0.102	0.004	0.699	1799.08	0.00
47	0.097	0.004	0.703	1833.92	0.00
48	0.091	0.003	0.706	1868.75	0.00
49	0.086	0.003	0.709	1903.58	0.00
50	0.082	0.003	0.713	1938.42	0.00
51	0.077	0.003	0.715	1973.25	0.00
52	0.073	0.003	0.718	2008.08	0.00
53	0.070	0.003	0.721	2042.92	0.00
54	0.066	0.003	0.723	2077.75	0.00
55	0.063	0.002	0.726	2112.58	0.00
56	0.060	0.002	0.728	2147.42	0.00
57	0.057	0.002	0.730	2182.25	0.00
58	0.054	0.002	0.732	2217.08	0.00
59	0.052	0.002	0.734	2251.92	0.00
60	0.049	0.002	0.736	2286.75	0.00



### References:

1. "Foundation Design", 2nd edition, Coduto, 2000.
2. "Geotechnical Engineering", Coduto, 1998
3. "Settlement Analysis", SoilStructure Software, 2014

# Settlement Analysis

Organization: **GeoPacific Engineering, Inc.**  
 Project Name: **16-4357, 28855 SW Boones Fe**  
 Job #: **16-4357**  
 Design by: **BLC**  
 Date: **1/24/2017**



## Foundation Geometry, GWT & Loading

Units: **English**  
 Footing Shape: **Continuous**  
 Method: **Terzaghi & Peck**

Variable	Value	Variable	Value
Footing Width	1.5 ft	Ground Water Depth	20.0 ft
Footing Thickness	1.5 ft	Rigidity factor	1.0
Footing Length	15.0 ft	Max. Depth	20.0 ft
Embedment Depth	1.0 ft	Axial Load	3.0 k/ft

## Geotechnical Properties

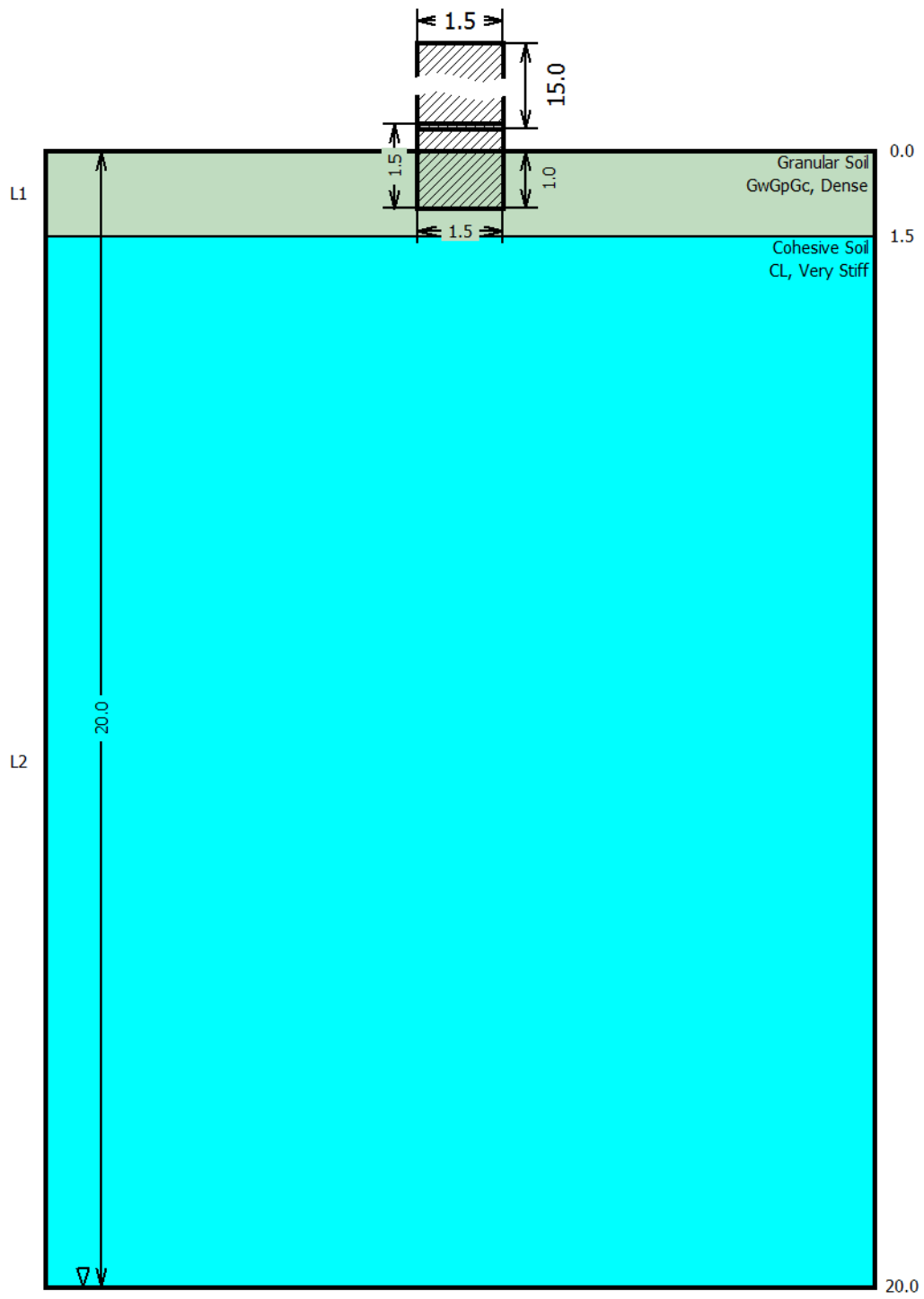
#	Material Type	USCS	Layer Thick, ft	Consistency	Compr. Ratio Cc/(1+e)	Recompr. Ratio Cr/(1+e)	OC Margin sigma m' lb/ft^2	Un. Weight gamma lb/ft^3
1	Granular Soil	GwGpGc	1.50 0 - 1.5	Dense	0.001	0.001	0	115.0
2	Cohesive Soil	CL	18.50 1.5 - 20	Very Stiff	0.030	0.001	0	115.0

## Results

Applied Pressure, q: 2150.0 lb/ft<sup>2</sup>  
 Total Settlement: 0.774 in

Type of Structure	Strip Load	Column Load	Max. Allow. Static Settlement	Max. Allow. Differential Settlement	Δ/L
Embankments	-----	-----	Site specific	1/2 inch per 15 ft	1/360
Residences	1 - 2.5 kip/ft	5 - 60 kips	1.0 inch	1/4 inch per 20 ft	1/960
Multistory Building	3 - 12 kip/ft	10 - 300 kips	1.0 inch	3/8 inch per 15 ft	1/480
Industrial Building	3 - 6 kip/ft	70 - 100 kips	1.5 inch	3/8 inch per 20 ft	1/640
Water Tanks	2 - 4 kip/ft	-----	1.5 inch	3/8 inch per 20 ft	1/640
Solar Foundations	-----	1 - 8 kips	0.5 inch	1/4 inch per 20 ft	1/960
Parking Garage	4 - 10 kip/ft	100 - 2,000 kips	3/8 inch	1/4 inch per 20 ft	1/960

A "Guide" to Settlement – Final design values to be determined by the project design engineer(s)



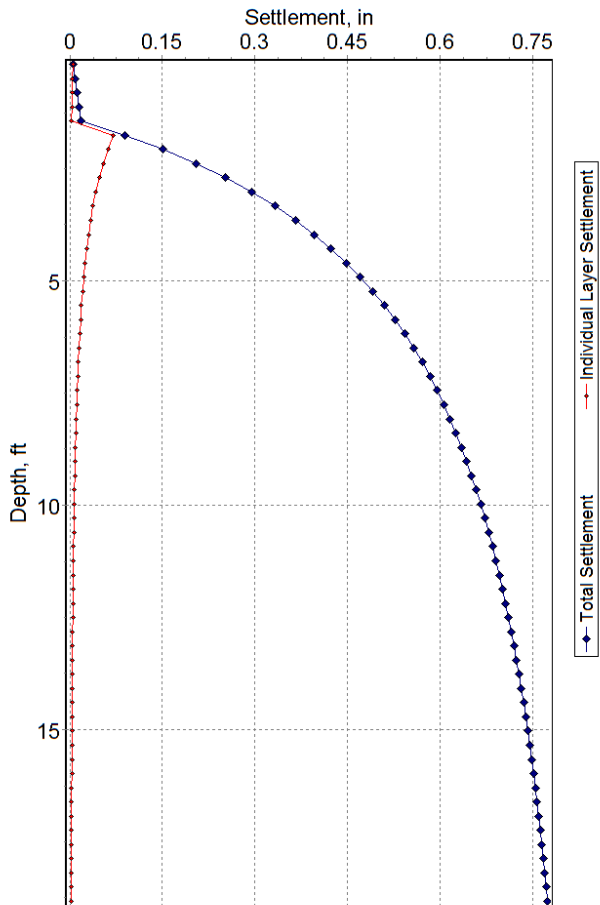
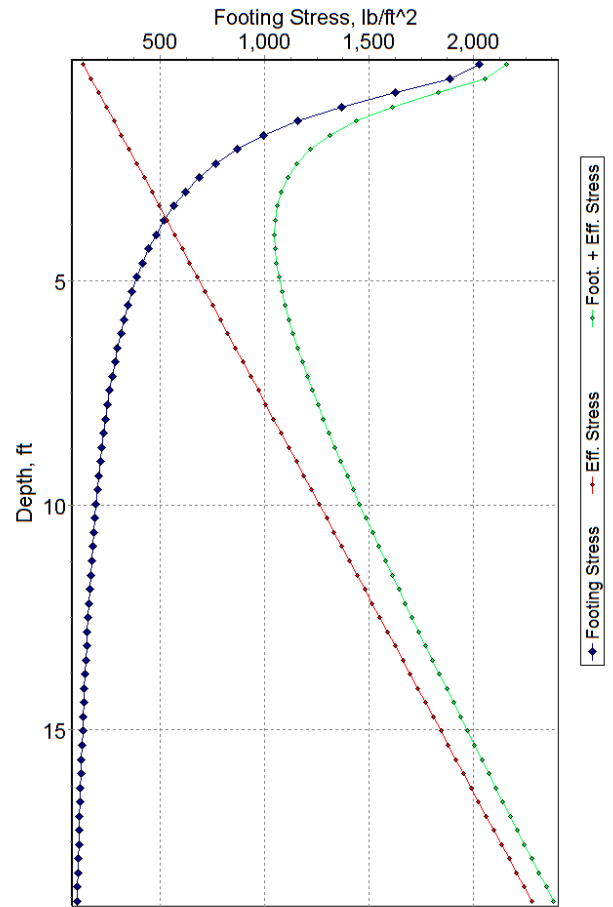
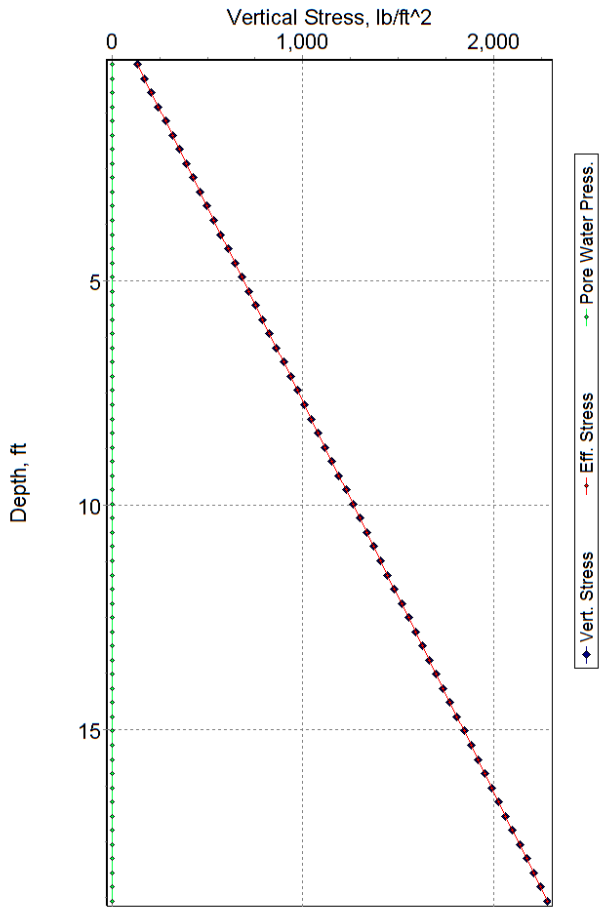
**Fig. 1: Plan and Cross Section**

**Table of Test Results - Page 1**

<b>Node #</b>	<b>Depth (ft)</b>	<b>O.C.+Eff. Str (psf)</b>	<b>Eff. Stress (psf)</b>	<b>Ftng. Stress (psf)</b>	<b>Ftng. + Eff. Str (psf)</b>
1	0.16	133.21	133.21	2027.29	2160.50
2	0.48	169.63	169.63	1889.19	2058.82
3	0.79	206.04	206.04	1629.31	1835.35
4	1.11	242.46	242.46	1372.04	1614.50
5	1.43	278.88	278.88	1161.60	1440.47
6	1.74	315.29	315.29	997.40	1312.69
7	2.06	351.71	351.71	869.41	1221.12
8	2.38	388.13	388.13	768.29	1156.41
9	2.69	424.54	424.54	687.03	1111.57
10	3.01	460.96	460.96	620.61	1081.57
11	3.33	497.38	497.38	565.49	1062.86
12	3.64	533.79	533.79	519.09	1052.88
13	3.96	570.21	570.21	479.55	1049.76
14	4.28	606.63	606.63	445.49	1052.12
15	4.59	643.04	643.04	415.87	1058.91
16	4.91	679.46	679.46	389.88	1069.34
17	5.23	715.88	715.88	366.90	1082.78
18	5.54	752.29	752.29	346.45	1098.75
19	5.86	788.71	788.71	328.14	1116.85
20	6.18	825.13	825.13	311.65	1136.77
21	6.49	861.54	861.54	296.72	1158.26
22	6.81	897.96	897.96	283.14	1181.10
23	7.13	934.38	934.38	270.75	1205.12
24	7.44	970.79	970.79	259.38	1230.17
25	7.76	1007.21	1007.21	248.93	1256.14
26	8.08	1043.63	1043.63	239.28	1282.91
27	8.39	1080.04	1080.04	230.35	1310.39
28	8.71	1116.46	1116.46	222.06	1338.51
29	9.03	1152.88	1152.88	214.34	1367.21
30	9.34	1189.29	1189.29	207.13	1396.43
31	9.66	1225.71	1225.71	200.40	1426.11
32	9.98	1262.13	1262.13	194.08	1456.21
33	10.29	1298.54	1298.54	188.16	1486.70
34	10.61	1334.96	1334.96	182.58	1517.54
35	10.93	1371.38	1371.38	177.32	1548.69
36	11.24	1407.79	1407.79	172.35	1580.14
37	11.56	1444.21	1444.21	167.66	1611.87
38	11.88	1480.63	1480.63	163.21	1643.84
39	12.19	1517.04	1517.04	158.99	1676.04
40	12.51	1553.46	1553.46	154.99	1708.45
41	12.83	1589.88	1589.88	151.18	1741.05
42	13.14	1626.29	1626.29	147.55	1773.84
43	13.46	1662.71	1662.71	144.09	1806.80
44	13.78	1699.13	1699.13	140.80	1839.92
45	14.09	1735.54	1735.54	137.64	1873.18
46	14.41	1771.96	1771.96	134.63	1906.59
47	14.73	1808.38	1808.38	131.74	1940.12
48	15.04	1844.79	1844.79	128.98	1973.77
49	15.36	1881.21	1881.21	126.33	2007.54
50	15.68	1917.63	1917.63	123.78	2041.41
51	15.99	1954.04	1954.04	121.34	2075.38
52	16.31	1990.46	1990.46	118.99	2109.45
53	16.63	2026.88	2026.88	116.73	2143.61
54	16.94	2063.29	2063.29	114.55	2177.85
55	17.26	2099.71	2099.71	112.46	2212.17
56	17.58	2136.13	2136.13	110.44	2246.56
57	17.89	2172.54	2172.54	108.49	2281.03
58	18.21	2208.96	2208.96	106.60	2315.56
59	18.53	2245.38	2245.38	104.79	2350.16
60	18.84	2281.79	2281.79	103.03	2384.82

**Table of Test Results - Page 2**

<b>Node #</b>	<b>Strain (%)</b>	<b>Indiv. Sett. (in)</b>	<b>Tot. Settlement (in)</b>	<b>Total Stress (psf)</b>	<b>Pore Water (psf)</b>
1	0.121	0.005	0.005	133.21	0.00
2	0.108	0.004	0.009	169.63	0.00
3	0.095	0.004	0.012	206.04	0.00
4	0.082	0.003	0.015	242.46	0.00
5	0.071	0.003	0.018	278.88	0.00
6	1.858	0.071	0.089	315.29	0.00
7	1.622	0.062	0.150	351.71	0.00
8	1.422	0.054	0.204	388.13	0.00
9	1.254	0.048	0.252	424.54	0.00
10	1.111	0.042	0.294	460.96	0.00
11	0.989	0.038	0.332	497.38	0.00
12	0.885	0.034	0.366	533.79	0.00
13	0.795	0.030	0.396	570.21	0.00
14	0.717	0.027	0.423	606.63	0.00
15	0.650	0.025	0.448	643.04	0.00
16	0.591	0.022	0.470	679.46	0.00
17	0.539	0.020	0.491	715.88	0.00
18	0.494	0.019	0.509	752.29	0.00
19	0.453	0.017	0.527	788.71	0.00
20	0.417	0.016	0.543	825.13	0.00
21	0.386	0.015	0.557	861.54	0.00
22	0.357	0.014	0.571	897.96	0.00
23	0.332	0.013	0.583	934.38	0.00
24	0.309	0.012	0.595	970.79	0.00
25	0.288	0.011	0.606	1007.21	0.00
26	0.269	0.010	0.616	1043.63	0.00
27	0.252	0.010	0.626	1080.04	0.00
28	0.236	0.009	0.635	1116.46	0.00
29	0.222	0.008	0.643	1152.88	0.00
30	0.209	0.008	0.651	1189.29	0.00
31	0.197	0.007	0.659	1225.71	0.00
32	0.186	0.007	0.666	1262.13	0.00
33	0.176	0.007	0.672	1298.54	0.00
34	0.167	0.006	0.679	1334.96	0.00
35	0.158	0.006	0.685	1371.38	0.00
36	0.150	0.006	0.691	1407.79	0.00
37	0.143	0.005	0.696	1444.21	0.00
38	0.136	0.005	0.701	1480.63	0.00
39	0.130	0.005	0.706	1517.04	0.00
40	0.124	0.005	0.711	1553.46	0.00
41	0.118	0.004	0.715	1589.88	0.00
42	0.113	0.004	0.720	1626.29	0.00
43	0.108	0.004	0.724	1662.71	0.00
44	0.104	0.004	0.728	1699.13	0.00
45	0.099	0.004	0.731	1735.54	0.00
46	0.095	0.004	0.735	1771.96	0.00
47	0.092	0.003	0.739	1808.38	0.00
48	0.088	0.003	0.742	1844.79	0.00
49	0.085	0.003	0.745	1881.21	0.00
50	0.081	0.003	0.748	1917.63	0.00
51	0.078	0.003	0.751	1954.04	0.00
52	0.076	0.003	0.754	1990.46	0.00
53	0.073	0.003	0.757	2026.88	0.00
54	0.070	0.003	0.759	2063.29	0.00
55	0.068	0.003	0.762	2099.71	0.00
56	0.066	0.002	0.765	2136.13	0.00
57	0.063	0.002	0.767	2172.54	0.00
58	0.061	0.002	0.769	2208.96	0.00
59	0.059	0.002	0.772	2245.38	0.00
60	0.058	0.002	0.774	2281.79	0.00



### References:

1. "Foundation Design", 2nd edition, Coduto, 2000.
2. "Geotechnical Engineering", Coduto, 1998
3. "Settlement Analysis", SoilStructure Software, 2014



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## PAVEMENT DESIGN



-----  
DARWin(tm) - Pavement Design

A Proprietary AASHTOWARE(tm)  
Computer Software Product

-----  
Flexible Structural Design Module  
-----

Project Description

16-4357, 28855 SW Boones Ferry Road, Drive Lanes, Loading Areas, Private  
Parking Lot, 20 Year Design Life

Flexible Structural Design Module Data

18-kip ESALs Over Initial Performance Period: 125,000  
Initial Serviceability: 4.2  
Terminal Serviceability: 2.5  
Reliability Level (%): 85  
Overall Standard Deviation: .5  
Roadbed Soil Resilient Modulus (PSI): 7,500  
Stage Construction: 1

Calculated Structural Number: 2.41

Specified Layer Design

Layer: 1  
Material Description: A/C  
Structural Coefficient (Ai): .42  
Drainage Coefficient (Mi): 1  
Layer Thickness (Di) (in): 3.50  
Calculated Layer SN: 1.47

Layer: 2  
Material Description: 3/4"-0 Crushed Aggregate  
Structural Coefficient (Ai): .12  
Drainage Coefficient (Mi): 1  
Layer Thickness (Di) (in): 2.00  
Calculated Layer SN: .24

Layer: 3  
Material Description: 1.5"-0 Crushed Aggregate  
Structural Coefficient (Ai): .12  
Drainage Coefficient (Mi): 1  
Layer Thickness (Di) (in): 6.00  
Calculated Layer SN: .72

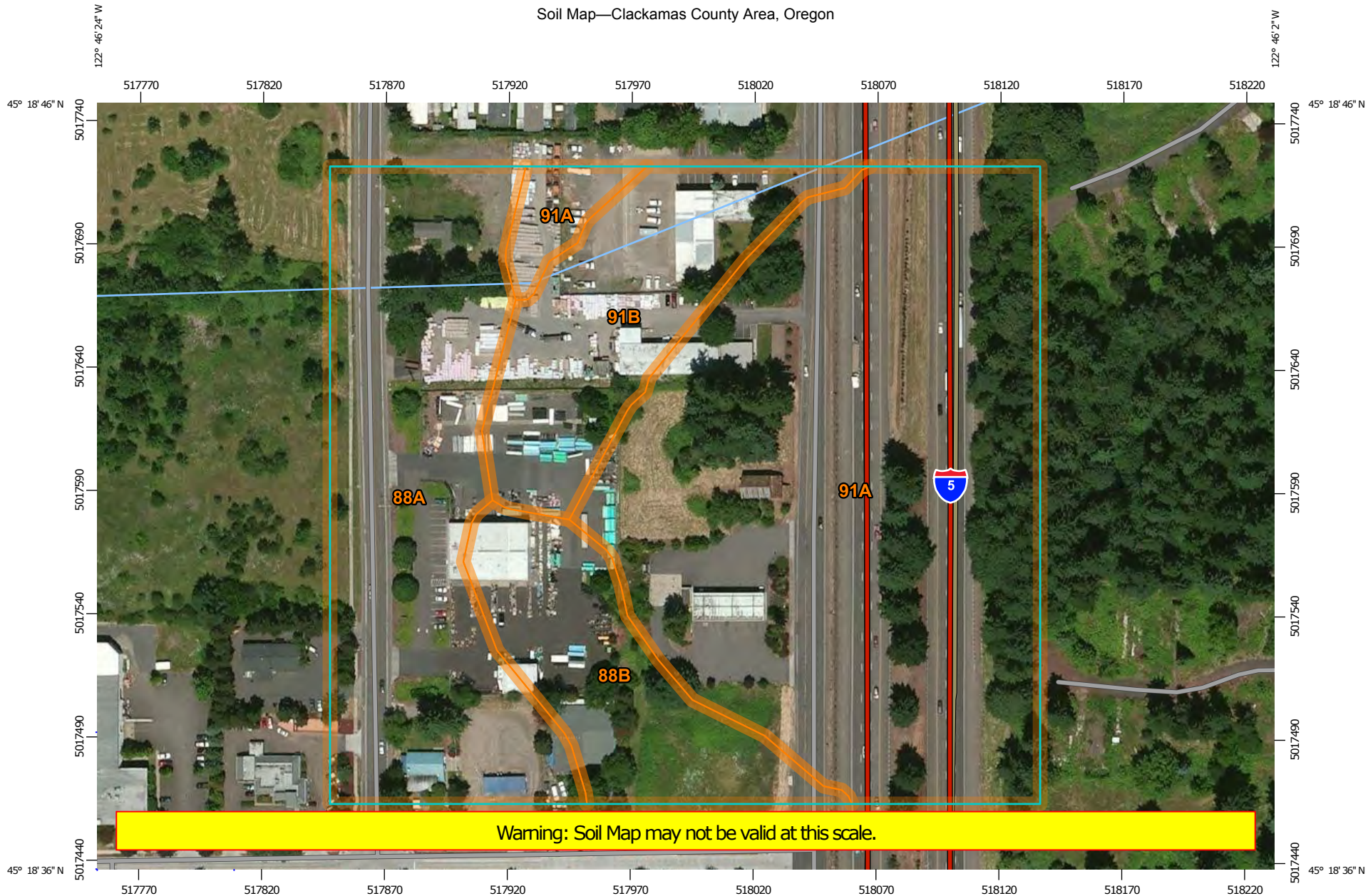
Total Thickness (in): 11.50  
Total Calculated SN: 2.43



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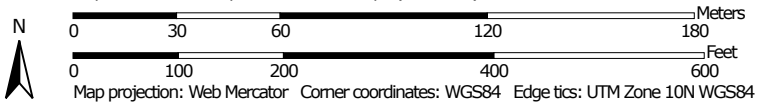
## SITE RESEARCH

Soil Map—Clackamas County Area, Oregon




Warning: Soil Map may not be valid at this scale.

Map Scale: 1:2,190 if printed on A landscape (11" x 8.5") sheet.





## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Clackamas County Area, Oregon  
 Survey Area Data: Version 10, Sep 18, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 8, 2010—Sep 4, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Clackamas County Area, Oregon (OR610)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
88A	Willamette silt loam, wet, 0 to 3 percent slopes	4.7	25.1%
88B	Willamette silt loam, wet, 3 to 7 percent slopes	2.0	10.8%
91A	Woodburn silt loam, 0 to 3 percent slopes	9.6	51.7%
91B	Woodburn silt loam, 3 to 8 percent slopes	2.3	12.4%
<b>Totals for Area of Interest</b>		<b>18.5</b>	<b>100.0%</b>

# USGS Design Maps Summary Report

## User-Specified Input

**Report Title** 16-4357, 28855 SW Boones Ferry Road  
Wed October 12, 2016 20:27:04 UTC

**Building Code Reference Document** ASCE 7-10 Standard  
(which utilizes USGS hazard data available in 2008)

**Site Coordinates** 45.31136°N, 122.77041°W

**Site Soil Classification** Site Class D – “Stiff Soil”

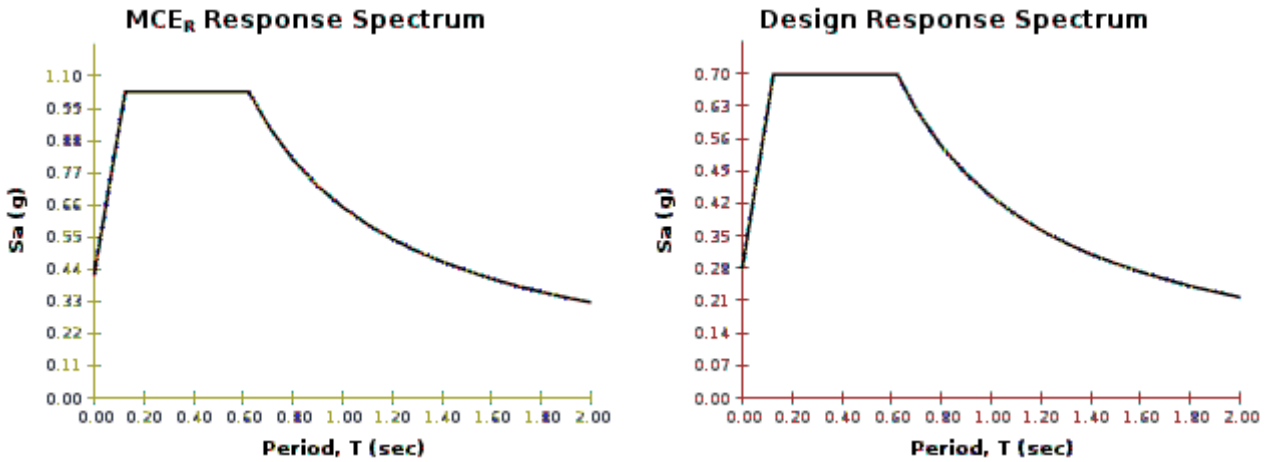
**Risk Category** I/II/III



## USGS-Provided Output

$S_s = 0.926 \text{ g}$	$S_{MS} = 1.046 \text{ g}$	$S_{DS} = 0.698 \text{ g}$
$S_1 = 0.410 \text{ g}$	$S_{M1} = 0.652 \text{ g}$	$S_{D1} = 0.435 \text{ g}$

For information on how the  $S_s$  and  $S_1$  values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the “2009 NEHRP” building code reference document.



For  $PGA_M$ ,  $T_L$ ,  $C_{RS}$ , and  $C_{R1}$  values, please [view the detailed report](#).

Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.



# Design Maps Detailed Report

ASCE 7-10 Standard (45.31136°N, 122.77041°W)

Site Class D – “Stiff Soil”, Risk Category I/II/III

## Section 11.4.1 — Mapped Acceleration Parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain  $S_s$ ) and 1.3 (to obtain  $S_1$ ). Maps in the 2010 ASCE-7 Standard are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 11.4.3.

From [Figure 22-1](#) <sup>[1]</sup>

$$S_s = 0.926 \text{ g}$$

From [Figure 22-2](#) <sup>[2]</sup>

$$S_1 = 0.410 \text{ g}$$

## Section 11.4.2 — Site Class

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class D, based on the site soil properties in accordance with Chapter 20.

Table 20.3–1 Site Classification

Site Class	$\bar{v}_s$	$\bar{N}$ or $\bar{N}_{ch}$	$\bar{s}_u$
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
Any profile with more than 10 ft of soil having the characteristics:			
<ul style="list-style-type: none"> <li>• Plasticity index <math>PI &gt; 20</math>,</li> <li>• Moisture content <math>w \geq 40\%</math>, and</li> <li>• Undrained shear strength <math>\bar{s}_u &lt; 500</math> psf</li> </ul>			
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft<sup>2</sup> = 0.0479 kN/m<sup>2</sup>

Section 11.4.3 Mapped MCE<sub>R</sub> Coefficients and Risk Targeted Maximum Considered Earthquake (MCE<sub>R</sub>) Spectral Response Acceleration Parameters

$S_s \leq 0.25$      $S_s = 0.50$      $S_s = 0.75$      $S_s = 1.00$      $S_s \geq 1.25$

Table 11.4-1: Site Coefficient  $F_a$

Site Class	Mapped MCE <sub>R</sub> Spectral Response Acceleration Parameter at Short Period				
	$S_s \leq 0.25$	$S_s = 0.50$	$S_s = 0.75$	$S_s = 1.00$	$S_s \geq 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of  $S_s$

**For Site Class = D and  $S_s = 0.926$  g,  $F_a = 1.129$**

Table 11.4-2: Site Coefficient  $F_v$

Site Class	Mapped MCE <sub>R</sub> Spectral Response Acceleration Parameter at 1-s Period				
	$S_1 \leq 0.10$	$S_1 = 0.20$	$S_1 = 0.30$	$S_1 = 0.40$	$S_1 \geq 0.50$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of  $S_1$

**For Site Class = D and  $S_1 = 0.410$  g,  $F_v = 1.590$**



**Equation (11.4-1):**

$$S_{MS} = F_a S_s = 1.129 \times 0.926 = 1.046 \text{ g}$$

**Equation (11.4-2):**

$$S_{M1} = F_v S_1 = 1.590 \times 0.410 = 0.652 \text{ g}$$

### Section 11.4.4 — Design Spectral Acceleration Parameters

**Equation (11.4-3):**

$$S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 1.046 = 0.698 \text{ g}$$

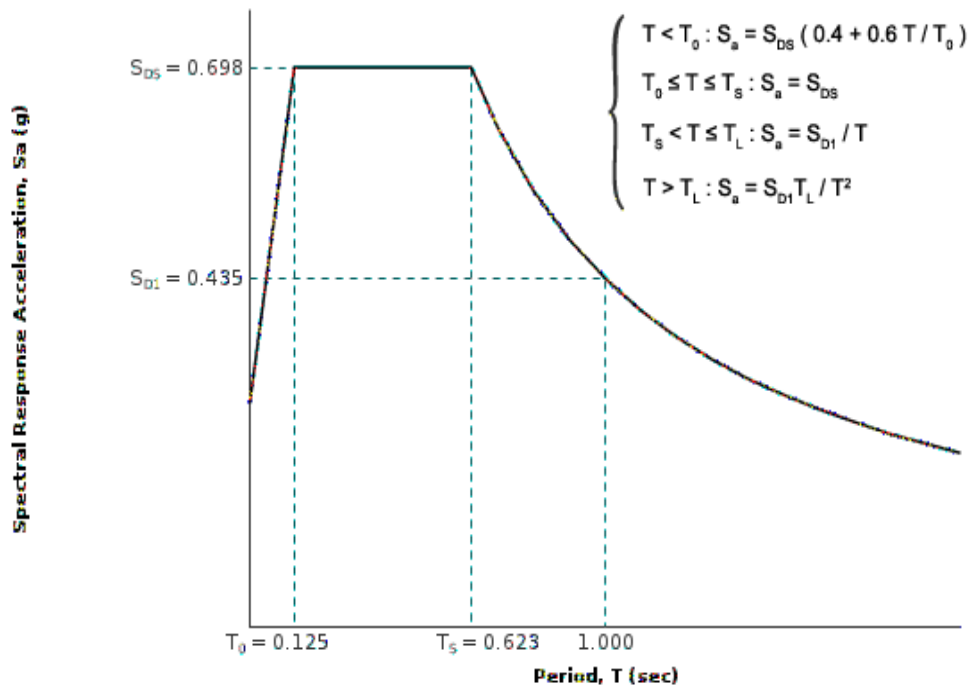
**Equation (11.4-4):**

$$S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 0.652 = 0.435 \text{ g}$$

### Section 11.4.5 — Design Response Spectrum

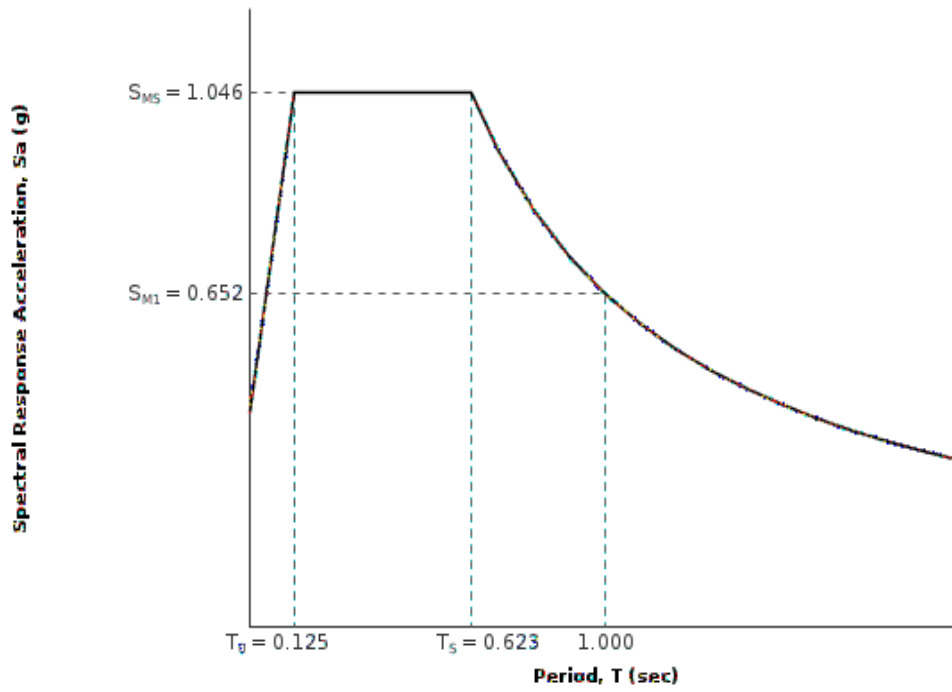
From [Figure 22-12](#) <sup>[3]</sup> $T_L = 16$  seconds

Figure 11.4-1: Design Response Spectrum



### Section 11.4.6 — Risk-Targeted Maximum Considered Earthquake (MCE<sub>R</sub>) Response Spectrum

The MCE<sub>R</sub> Response Spectrum is determined by multiplying the design response spectrum above by 1.5.



Section 11.8.3 — Additional Geotechnical Investigation Report Requirements for Seismic Design

Categories D through F  
 PGA ≤ 0.10    PGA = 0.20    PGA = 0.30    PGA = 0.40    PGA ≥ 0.50

From **Figure 22-7**<sup>[4]</sup> PGA = 0.407

**Equation (11.8-1):**  $PGA_M = F_{PGA} PGA = 1.093 \times 0.407 = 0.445 \text{ g}$

Table 11.8-1: Site Coefficient  $F_{PGA}$

Site Class	Mapped MCE Geometric Mean Peak Ground Acceleration, PGA				
	PGA ≤ 0.10	PGA = 0.20	PGA = 0.30	PGA = 0.40	PGA ≥ 0.50
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight-line interpolation for intermediate values of PGA

**For Site Class = D and PGA = 0.407 g,  $F_{PGA} = 1.093$**

Section 21.2.1.1 — Method 1 (from Chapter 21 – Site-Specific Ground Motion Procedures for Seismic Design)

From **Figure 22-17**<sup>[5]</sup>  $C_{RS} = 0.898$

From **Figure 22-18**<sup>[6]</sup>  $C_{R1} = 0.871$

Section 11.6 Seismic Design Category	<b>RISK CATEGORY</b>		
	<b>I or II</b>	<b>III</b>	<b>IV</b>

Table 11.6-1 Seismic Design Category Based on Short Period Response Acceleration Parameter

VALUE OF $S_{DS}$	RISK CATEGORY		
	I or II	III	IV
$S_{DS} < 0.167g$	A	A	A
$0.167g \leq S_{DS} < 0.33g$	B	B	C
$0.33g \leq S_{DS} < 0.50g$	C	C	D
$0.50g \leq S_{DS}$	D	D	D

For Risk Category = I and  $S_{DS} = 0.698 g$ , Seismic Design Category = D

Table 11.6-2 Seismic Design Category Based on 1-S Period Response Acceleration Parameter

VALUE OF $S_{D1}$	RISK CATEGORY		
	I or II	III	IV
$S_{D1} < 0.067g$	A	A	A
$0.067g \leq S_{D1} < 0.133g$	B	B	C
$0.133g \leq S_{D1} < 0.20g$	C	C	D
$0.20g \leq S_{D1}$	D	D	D

For Risk Category = I and  $S_{D1} = 0.435 g$ , Seismic Design Category = D

Note: When  $S_1$  is greater than or equal to 0.75g, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and **F** for those in Risk Category IV, irrespective of the above.

Seismic Design Category  $\equiv$  "the more severe design category in accordance with Table 11.6-1 or 11.6-2" = D

Note: See Section 11.6 for alternative approaches to calculating Seismic Design Category.

## References

1. Figure 22-1: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-1.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-1.pdf)
2. Figure 22-2: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-2.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-2.pdf)
3. Figure 22-12: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-12.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-12.pdf)
4. Figure 22-7: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-7.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-7.pdf)
5. Figure 22-17: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-17.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-17.pdf)
6. Figure 22-18: [http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010\\_ASCE-7\\_Figure\\_22-18.pdf](http://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/2010_ASCE-7_Figure_22-18.pdf)



Real-World Geotechnical Solutions  
Investigation • Design • Construction Support

## PHOTOGRAPHIC LOG

**28855 SW BOONES FERRY ROAD  
GEOTECHNICAL SITE INVESTIGATION  
PHOTOGRAPHIC LOG**



**Test Pit TP-1**



**Test Pit TP-1**

## 28855 SW BOONES FERRY ROAD GEOTECHNICAL SITE INVESTIGATION PHOTOGRAPHIC LOG



**Test Pit TP-2**



**Test Pit TP-2**

## 28855 SW BOONES FERRY ROAD GEOTECHNICAL SITE INVESTIGATION PHOTOGRAPHIC LOG



Test Pit TP-3



Existing Barn in Southeast Corner of Proposed Development Area



# HALO-LIT WALL SIGNS



## TUBE ART GROUP

**Portland Office**  
 4243-A SE International Way  
 Milwaukie, OR 97222  
 503.653.1133  
 800.562.2854  
 Fax 503.659.9191

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**9122**  
 Customer Number

**130962**  
 Quote Number

**130962 Marion's Carpet r5**  
 File Name

**Adam Calabria**  
 Salesperson

**Sabrina-O**  
 Drawn By

\*\*

Checked By

**February 20, 2016**  
 Start Date

[r1] 2/21/17 Decreased size of sign #1.

[r2] 2/27/17 Revised size of message center and removed cabinet.

[r3] 3/1/17 Decreased sign #1 to accommodate new 85.5 sq. ft. allowance.

[r4] 3/1/17 Went back to r3 sign #1 size with 96 sq. ft. allowance

[r5] 4/18/17 no change

Revisions

Customer Signature

Date

Landlord Signature

Date

**MARION'S  
 CARPETS**

**9325 SW Ridder Rd. #420  
 Wilsonville OR**

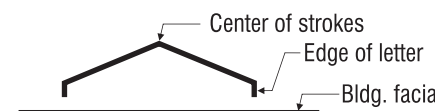
Colors on print do not accurately depict specific colors.



1 Sign #1 - Halo Lit Prismatic Letters  
 Scale: 1/2" = 1'-0"

### Manufacture and Install two (2) Illuminated wall sign.

Custom formed S.S. letters, prismatic shaping as shown. 2" depth with 1/2" straight return. Letters to be painted 1st surface Bright Gold Metallic - Colormap B/6 pg.215. Clear lexan back. Note No blending or tone delineations (seen here for drawing only). White LED illumination, remote transformers. Transformer locations to be verified. Stand off supports to be painted to match fascia, **verify color**.



Section of letter stroke

$1'-6" \times 15'-3 \frac{5}{32}" = 22.89 \text{ sq. ft.}$



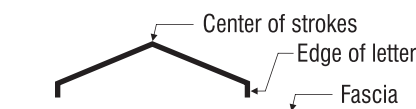
2 Sign #2 - Halo Lit Prismatic Letter and Non-Illuminated Laurel Leafs  
 Scale: 1/2" = 1'-0"

### Manufacture and Install One (1) Illuminated wall sign.

**Letter:** Custom formed S.S. letters, prismatic shaping as shown. 2" depth with 1/2" straight return. Letters to be painted 1st surface Bright Gold Metallic - Colormap B/6 pg.215. Clear lexan back. Note No blending or tone delineations (seen here for drawing only). White LED illumination, remote transformers. Transformer locations to be verified. Stand off supports to be painted to match fascia, **verify color**.

**Laurel Leaf:** Flat cut .125 aluminum painted to match letter, pin mounted to fascia.

$1'-11 \frac{3}{16}" \times 3'-1 \frac{5}{8}" = 6.06 \text{ sq. ft.}$



Section of letter stroke



TUBE ART GROUP

**Portland Office**  
 4243-A SE International Way  
 Milwaukie, OR 97222  
 503.653.1133  
 800.562.2854  
 Fax 503.659.9191

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**9122**  
Customer Number

**130962**  
Quote Number

**130962 Marion's Carpet r5**  
File Name

**Adam Calabria**  
Salesperson

**Sabrina-0**  
Drawn By

\*\*

Checked By

**February 20, 2016**  
Start Date

[r1] 2/21/17 no change

[r2] 2/27/17 Increased size of signs #3&4

[r3] 3/1/17 no change

[r4] 3/1/17 no change

[r5] 4/18/17 no change

Revisions

Customer Signature

Date

Landlord Signature

Date

**MARION'S  
CARPETS**

9325 SW Ridder Rd. #420  
Wilsonville OR

Colors on print do not accurately depict specific colors.



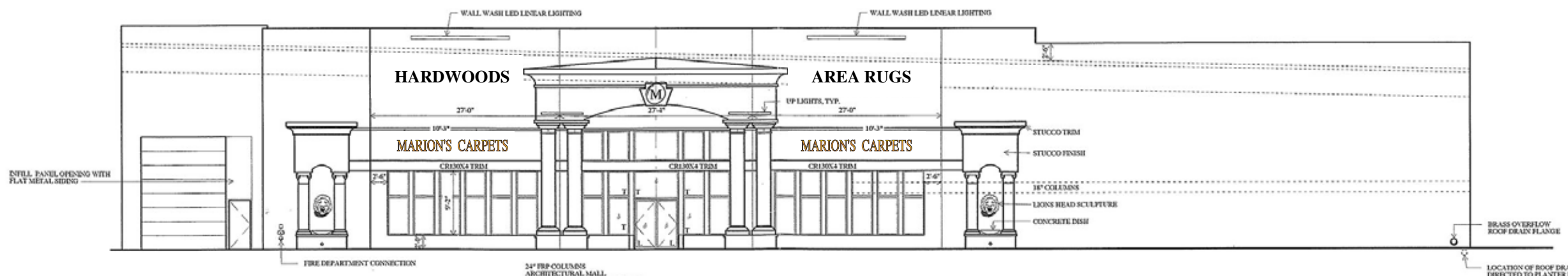
1 Sign #3 Non-Illuminated Letters  
Scale: 1/2" = 1'-0"



2 Sign #4 Non-Illuminated Letters  
Scale: 1/2" = 1'-0"

**Manufacture and Install two (2) non-illuminated reverse pan channel letter wall signs.**

**Letters:** 2" deep aluminum reverse pan channel letters. Paint satin Black on all sides. Stand off supports to be painted to match fascia, **verify color.**



1 Front Elevation  
Scale: 1/16" = 1'-0"

# ILLUMINATED PYLON SIGN



1 Sign #5 - Illuminated Pylon Sign  
Scale: 1/4" = 1'-0"

## Manufacture and Install one (1) D/F illuminated pylon sign.

**Cabinet:** TAG #9 Body with TAG #13 Retainers. Paint all sides Duranodic Bronze.

Face is 3/16" White lexan with 1st surface digital print graphics.

**Pipe:** 8" aluminum pipe. Direct bury pipe with concrete footing.

**Illumination:** White LED illumination with internal power supplies. **Verify electrical.**

6'-3" x 8'-1" = 48.96 sq. ft.

**CONCEPT  
DESIGN**  
NOT FOR FABRICATION



## TUBE ART GROUP

**Portland Office**  
4243-A SE International Way  
Milwaukie, OR 97222  
503.653.1133  
800.562.2854  
Fax 503.659.9191

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**9122**  
Customer Number

**130962**  
Quote Number

**130962 Marion's Carpet r5**  
File Name

**Adam Calabria**  
Salesperson

**Sabrina-0**  
Drawn By

\*\*

Checked By

**February 20, 2016**  
Start Date

[r1] 2/21/17 Removed cabinet from MC.

[r2] 2/27/17 Reduced size of MC.

[r3] 3/1/17 no change

[r4] 3/1/17 no change

[r5] 4/18/17 Removed message center and made illuminated pylon sign

Revisions

Customer Signature

Date

Landlord Signature

Date

**MARION'S  
CARPETS**

9325 SW Ridder Rd. #420  
Wilsonville OR

Colors on print do not accurately depict specific colors.



**TUBE ART GROUP**

Portland Office  
 4243-A SE International Way  
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**9122**  
Customer Number

**130962**  
Quote Number

**130962 Marion's Carpet r5**  
File Name

**Adam Calabria**  
Salesperson

**Sabrina-0**  
Drawn By

\*\*  
Checked By

**February 20, 2016**  
Start Date

[r1] 2/21/17 no change

[r2] 2/27/17 no change

[r3] 3/1/17 no change

[r4] 3/1/17 no change

[r5] 4/18/17 no change

Revisions

Customer Signature

Date

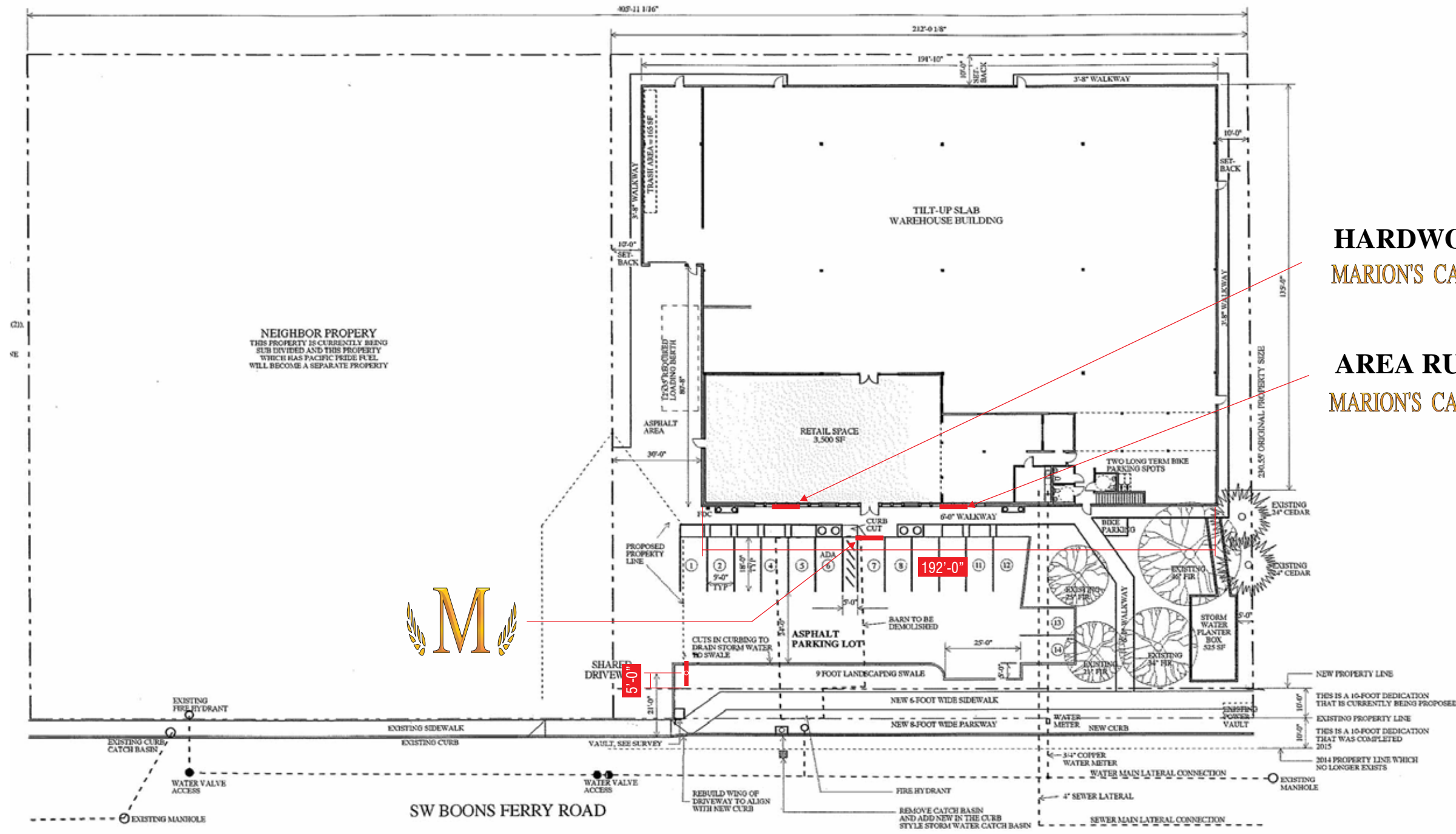
Landlord Signature

Date

**MARION'S  
CARPETS**

9325 SW Ridder Rd. #420  
Wilsonville OR

Colors on print do not accurately depict specific colors.



**HARDWOODS  
MARION'S CARPETS**

**AREA RUGS  
MARION'S CARPETS**



1 Sign #1 - Halo Lit Prismatic Letters  
 Scale: 1/2" = 1'-0"

**CONCEPT  
DESIGN**  
NOT FOR FABRICATION



NORTH



**REPUBLIC**  
SERVICES

10295 SW Ridder Road, Wilsonville, OR 97070  
O: 503.570.0626 F: 503.982.9307 republicservices.com

March 14, 2017

Bob Schatz  
All USA Architecture  
2118 Division St.  
Portland OR 97221

Re: Wilsonville Marion's Carpet  
Waste & Recycling Collection

Dear Bob;

Thank you, for sending us the site plans for this development in Wilsonville.

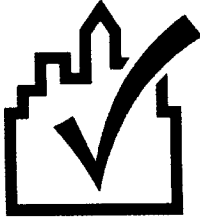
My Company: Republic Services of Clackamas & Washington Counties has the franchise agreement to service this area with the City of Wilsonville. We will provide complete commercial waste removal and recycling services as needed on a weekly basis for this location.

My drivers should be able to safely service the Marion's Carpets as we discussed. Since the containers will be located inside the building on castors, they will have to manually roll out the containers for service as we will not have direct access to pick-up; therefore we will not be able to place a trash container larger than 3 yards inside the building. The cardboard container will be able to be larger. It looks like I should have adequate room to turn around to drive out instead of backing out.

Thanks Bob for your help and concerns for our services prior to this project being developed.

Sincerely,

Frank J. Lonergan  
Operations Manager  
Republic Services Inc



Generated by COMcheck-Web Software  
**Exterior Lighting Compliance Certificate**

**Section 1: Project Information**

Energy Code: **2014 Oregon Energy Efficiency Specialty Code**  
 Project Title:  
 Project Type: New Construction  
 Envelope Compliance Method: Simplified Trade-Off  
 Exterior Lighting Zone: 2 (Light industrial area with limited nighttime use)

Construction Site:  
 28855 SW Boones Ferry Rd  
 Wilsonville, Oregon 97070

Owner/Agent:

Designer/Contractor:  
 John Bailey  
 Benting Construction  
 18475 SW Alton St  
 Beaverton, Oregon 97006  
 503-642-5682  
 john.bailey@bentingconstruction.com

**Section 2: Exterior Lighting Area/Surface Power Calculation**

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B x C)	F Proposed Watts
Exterior wall (Illuminated length of facade wall/surface or roof path)	663 ft	2.5	No	1658	381
				Total Tradable Watts* =	0
				Total Allowed Watts =	1658
				Total Allowed Supplemental Watts** =	600

\* Wattage tradeoffs are only allowed between tradable areas/surfaces.

\*\* A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

**Section 3: Exterior Lighting Fixture Schedule**

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)	
Exterior wall (Illuminated length of facade wall/surface or roof path, 663 ft): Non-tradable Wattage					
LED: C: exit door emergency: LED Other Fixture Unit 13W:	0	9	13	117	
LED: B: Wall pack: LED Other Fixture Unit 46W:	0	3	43	129	
LED: A: Wall Pack: LED Other Fixture Unit 28W:	0	5	27	135	
				Total Tradable Proposed Watts =	0

**Section 4: Requirements Checklist**

*In the following requirements, blank checkboxes identify requirements that the applicant has not acknowledged as being met. Checkmarks identify requirements that the applicant acknowledges are met or excepted from compliance. 'Plans reference page/section' identifies where in the plans/specs the requirement can be verified as being satisfied.*

**Controls, Switching, and Wiring:**

- 1. Lighting designated to operate more than 2000 hours per year for Uncovered Parking Areas shall be equipped with motion sensors that will reduce the luminaire power by thirty-three percent or turn off one-third the luminaires when no activity is detected.

Plans reference page/section: \_\_\_\_\_

**Exterior Lighting Restrictions and Exceptions:**

- 2. Mercury vapor and incandescent lighting is not permitted for use as exterior lighting.

Exception(s):

- Incandescent lighting controlled by motion sensors and having total power less than 150 watts.
- Incandescent lighting used in or around swimming pools, water features, or other locations subject to the requirements of Article 680 of the National Electric Code.
- 3. Exempt lighting fixtures are equipped with a control device independent of the control of the nonexempt lighting and are identified in Section 3 table above.

Plans reference page/section: \_\_\_\_\_

### Section 5: Compliance Statement

*Compliance Statement:* The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2014 Oregon Energy Efficiency Specialty Code requirements in COMcheck-Web and to comply with the mandatory requirements in the Requirements Checklist.

John Bailey  
Name - Title

[Signature]  
Signature

6/1/17  
Date

## Vaya Linear MP, White & Mono

Vaya Linear MP White & Mono is a reliable and cost effective LED lighting fixture designed for white or mono color lighting effects. With wide and elliptical beam options, Vaya Linear MP is ideal for wall washing and grazing applications. Two lengths and daisy-chain connectors make this product versatile and easy to use.



### Key Features

- Reliable, cost effective LED lighting fixture
- Available in standard 3000K or 4000K
- Custom options: 2700K, 5000K, R, G, B, A
- Available with 10°x50° or 50° Beams
- Auto-ranging 100V – 277V, 50 / 60Hz input
- Interior / Exterior - IP66
- DLC-listed with 5 years limited warranty

### Product Data

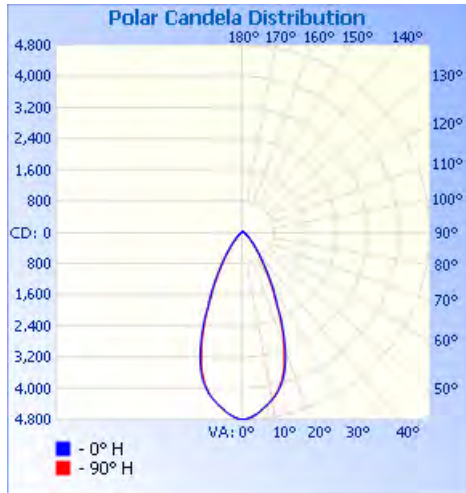
Width	64 mm (2.5in)	
Height	102 mm (4.0in) including mounting hinge	
Length	310 mm (1 ft)	1210 mm (4 ft)
Mounting	Location adjustable and tilting surface-mount bracket	
Source	High-brightness White or Mono Color LEDs	
Beam Angle	Elliptical (10° x 50°) or Wide (50°)	
Luminous Flux	840 lumens	3,360 lumens
CRI	80Ra	
Efficacy	58 lm/W	
Lumen Maintenance	50,000 hrs L <sub>70</sub> at 25°C	
Housing	Extruded aluminum, anodized finish RAL7043	
Weight	1.3 kg (2.85 lbs)	3.6kg (7.9 lbs)
Connection	Daisy-chain power input and output connectors	
Lens	Tempered Glass	
Control	On/Off, Not dimmable	
Input Voltage	100V – 277 VAC, 50 / 60Hz	
Power Consumption	18 W (White)	60 W (White)
Temperature Range	-20°C to 40°C (-4°F ~104°F) start-up temperature -40°C to 40°C (-40°F ~104°F) operating temperature	
Protection Rating	IP66, Wet location listed, IK06	
Certifications	UL / cUL, FCC Class A, CE, CB	
Warranty	5 Years	



## Photometrics (Per IESNA LM-79):

### Vaya Linear MP 3000K, 50deg, 1.2m (4ft)

#### Polar Candela Distribution



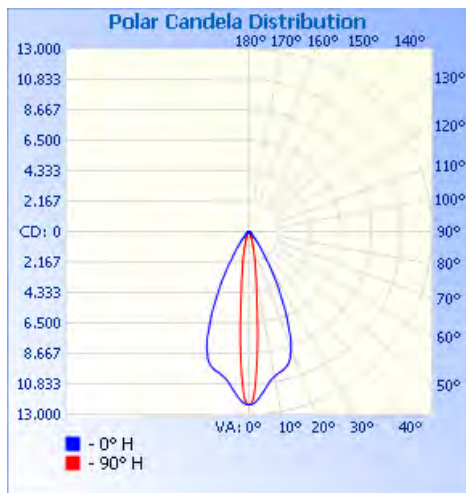
#### Illuminance at a Distance



Im = 3.28ft

### Vaya Linear MP 3000K, 10x50deg, 1.2m (4ft)

#### Polar Candela Distribution



#### Illuminance at a Distance

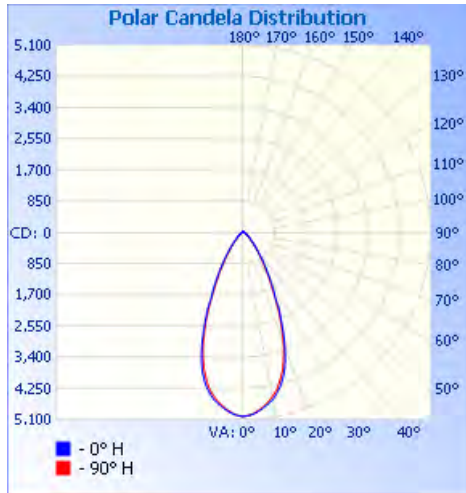


Im = 3.28ft

## Photometrics (Per IESNA LM-79):

### Vaya Linear MP 4000K, 50deg, 1.2m (4ft)

#### Polar Candela Distribution



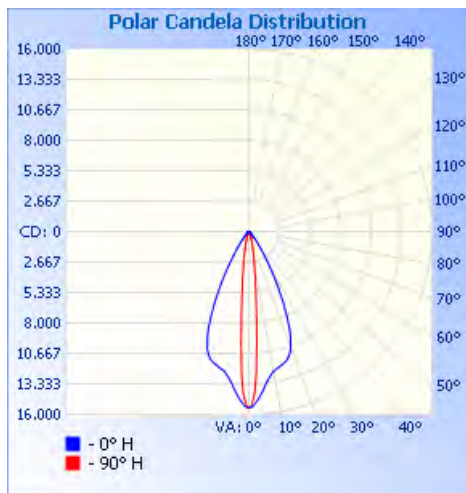
#### Illuminance at a Distance



Im = 3.28ft

### Vaya Linear MP 4000K, 10x50deg, 1.2m (4ft)

#### Polar Candela Distribution



#### Illuminance at a Distance

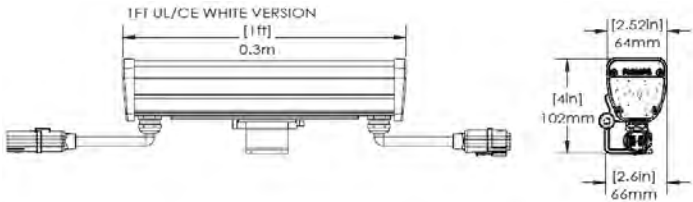


Im = 3.28ft

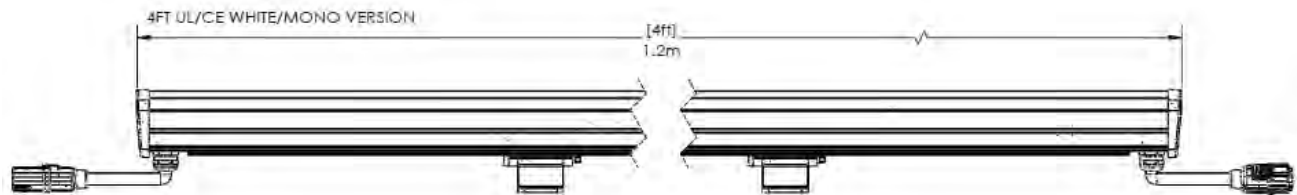
Data sheet

## Dimensions:

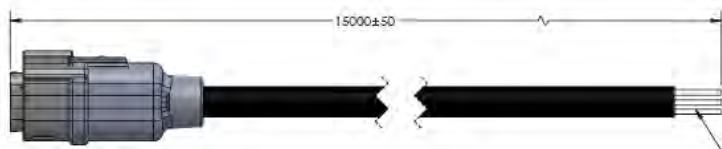
### 0.3m (1ft) Length



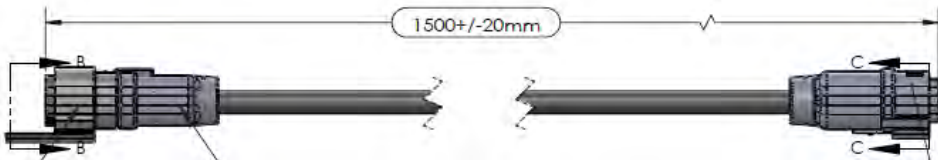
### 1.2m (4ft) Length



### Leader Cable Dimensions:



### Jumper Cable Dimensions:



### Vaya Linear MP White & Mono Ordering Codes:

CCT	Length	Beam Angle	Philips I2NC	Item Number	Certification
3000K	1ft	50°	912400130125	350-000011-08	UL
3000K	1ft	10° X 50°	912400130126	350-000011-09	UL
3000K	4ft	50°	912400130127	350-000011-10	UL
3000K	4ft	10° X 50°	912400130128	350-000011-11	UL
4000K	1ft	50°	912400130129	350-000011-12	UL
4000K	1ft	10° X 50°	912400130130	350-000011-13	UL
4000K	4ft	50°	912400130131	350-000011-14	UL
4000K	4ft	10° X 50°	912400130132	350-000011-15	UL

<sup>1</sup>Custom options include 2700K, 5000K, Red, Green, Blue, Amber version in either lengths or beam angles.

### Vaya Linear LP-MP White & Mono Cables:

Length	Product	Philips I2NC	Item Number	Certification
50ft	White Leader Cable	912400130050	308-000003-06	UL
5ft	White Jumper Cable	912400130052	308-000003-08	UL

### Vaya Linear MP Spare Parts:

Product	Length	Philips I2NC	Item Number	Certification
Mounting Hinge	1 piece	912400133635	320-000011-02	

CCT	Length	Beam Angle	Philips I2NC	Item Number	Certification
2700K	1ft	50°	912400130145	350-000011-28	UL
2700K	1ft	10° X 50°	912400130146	350-000011-29	UL
2700K	4ft	50°	912400130147	350-000011-30	UL
2700K	4ft	10° X 50°	912400130148	350-000011-31	UL
5000K	1ft	50°	912400130157	350-000011-40	UL
5000K	1ft	10° X 50°	912400130158	350-000011-41	UL
5000K	4ft	50°	912400130159	350-000011-42	UL
5000K	4ft	10° X 50°	912400130160	350-000011-43	UL
Red	1ft	50°	912400130084	325-000011-16	UL
Red	1ft	10° X 50°	912400130085	325-000011-17	UL
Red	4ft	50°	912400130086	325-000011-18	UL
Red	4ft	10° X 50°	912400130087	325-000011-19	UL
Green	1ft	50°	912400130088	325-000011-20	UL
Green	1ft	10° X 50°	912400130089	325-000011-21	UL
Green	4ft	50°	912400130090	325-000011-22	UL
Green	4ft	10° X 50°	912400130091	325-000011-23	UL
Blue	1ft	50°	912400130092	325-000011-24	UL
Blue	1ft	10° X 50°	912400130093	325-000011-25	UL
Blue	4ft	50°	912400130094	325-000011-26	UL
Blue	4ft	10° X 50°	912400130095	325-000011-27	UL
Amber	1ft	50°	912400130096	325-000011-10	UL
Amber	1ft	10° X 50°	912400130097	325-000011-29	UL
Amber	4ft	50°	912400130098	325-000011-30	UL
Amber	4ft	10° X 50°	912400130099	325-000011-31	UL





# Wall Pak Pro

## WPM43LED 43 Watt LED Wall Pak



### Project Information

Job Name

Fixture Type 43 Watt LED Die Cast Wall Pak

Catalog Number WPM43LED

Approved by

### SPECIFICATIONS:

**Lumens:** 4584  
**Watts:** 44.19  
**Lumens/Watt:** 103  
**CRI:** 81.4  
**CCT:** 4668  
**Lifespan:** 100,000+

#### Construction:

Designed for commercial and industrial applications, providing cooler operating temperatures, brighter light and longer LED life. Manufactured w/ 100% pure aluminum & 0% remelt. Apertures for field or factory installed photocontrol.

#### Installation:

Labor saving quick mount box with apertures for continuous wiring.

#### Zero Glare:

Using the latest high brightness, high LED count technology, more usable light output is produced while eliminating glare. The fixture design directs more light down and forward without wasting lumens and offensive light.

#### Thermal Management:

Atlas Wall Pak Pro fixtures are designed as a complete system to optimize LED life and light output. The Patent Pending thermal stacking heat removal technology extracts heat from within the housing moving it away from LEDs and components. The lower temperatures result in long LED life (100,000+ hrs) and component life and also allows for higher light output.

#### Listings:

- Luminaire is certified to cUL and CSA Standards for Wet Locations
- Lighting Facts Certified
- DesignLights Consortium qualified luminaire, eligible for rebates from DLC member utilities.
- Dark Sky Compliant

#### AC Input:

120/208/240/277 V

#### Driver:

Constant current, Class 2, 120-277 VAC, 50-60 Hz  
High Efficiency – min. 88%  
Off-State Power: 0 Watts  
Dimming 10-100%

#### LEDs:

Delivers 70% or greater of initial lumens at 100,000 hours  
Epoxy Guard™ protective conformal coated boards

#### Warranty:

Five-year limited warranty

#### Testing:

Atlas LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 & LM-80, and have received the Department of Energy "Lighting Facts" label.

#### Photo Control:

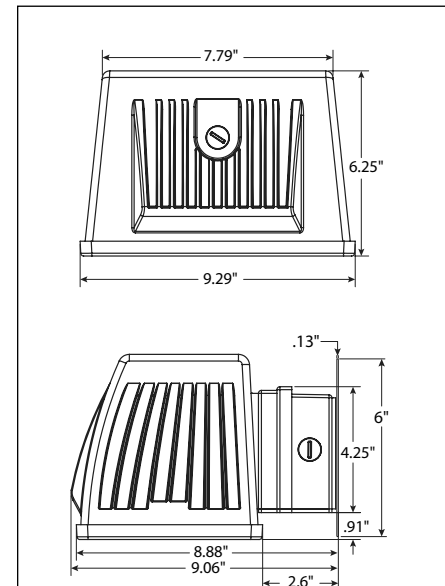
For factory installed 120V button photo control add suffix PC to part number.

**Alpha Series LED**  
PROFESSIONAL GRADE



Patent Pending

### DIMENSIONS:



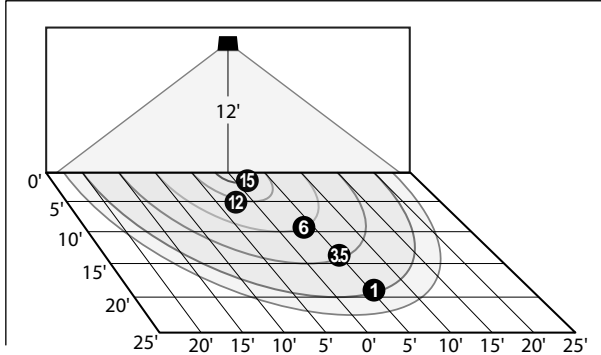
Rebates and Incentives are available in many areas. Contact an Atlas Representative for more information.

## ATLAS LIGHTING PRODUCTS, INC.

PO BOX 2348 | BURLINGTON, NC 27216  
800-849-8485 | FAX: 336-227-0110 | www.atlasled.com

Made in the USA of US and imported parts. Meets Buy American requirements within the ARRA.

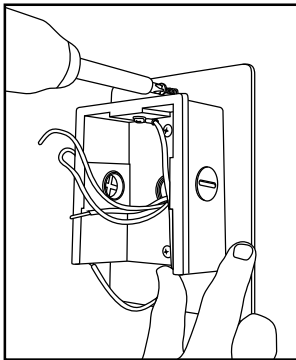
**PHOTOMETRIC**



**ENERGY SAVINGS**

LED		HID			ANNUAL SAVINGS
WATTAGE	ANNUAL COST	SOURCE WATTAGE	TOTAL WATTAGE USED	ANNUAL COST	
43	\$19	100	129	\$77	\$58
43	\$19	150	185	\$100	\$81
43	\$19	175	210	\$112	\$93

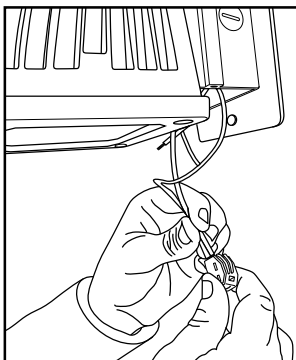
**LABOR SAVING: QUICK & SECURE MOUNTING**



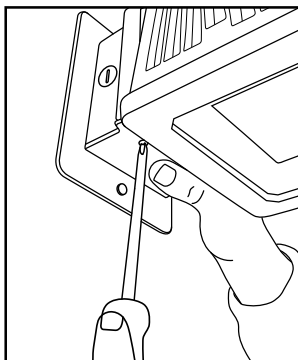
Secure Mounting Plate with back box to wall



Slide fixture housing onto mounting box



Connect wires & return them to mounting box



Replace bottom plate on quick mount box

Atlas Lighting Products

**LED lighting facts**  
A Program of the U.S. DOE

<b>Light Output (Lumens)</b>	<b>4584</b>
<b>Watts</b>	<b>44.19</b>
<b>Lumens per Watt (Efficacy)</b>	<b>103</b>

---

<b>Color Accuracy</b> Color Rendering Index (CRI)	<b>81</b>
--	-----------

---

<b>Light Color</b> Correlated Color Temperature (CCT)	<b>4668 (Daylight)</b>
--	------------------------

Warm White 2700K	Bright White 3000K	Daylight 4500K	6500K
---------------------	-----------------------	-------------------	-------

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

**Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the Label Reference Guide.**

Registration Number: PRB4-LMT6FM (1/7/2015)  
Model Number: WPM43LED (Upgrade - 12/11/2014)  
Type: Luminaire - Area/Roadway





# Wall Pak Pro

## WPS27LED 27 Watt LED Wall Pak



### Project Information

Job Name

Fixture Type 27 Watt LED Die Cast Wall Pak

Catalog Number WPS27LED

Approved by

### SPECIFICATIONS:

**Lumens:** 2840  
**Watts:** 26.63  
**Lumens/Watt:** 106.6  
**CRI:** 81  
**CCT:** 4389  
**Lifespan:** 100,000+

#### Construction:

Designed for commercial and industrial applications, providing cooler operating temperatures, brighter light and longer LED life. Manufactured w/ 100% pure aluminum & 0% remelt. Apertures for field or factory installed photocontrol.

#### Installation:

Labor saving quick mount box with apertures for continuous wiring.

#### Zero Glare:

Using the latest high brightness, high LED count technology, more usable light output is produced while eliminating glare. The fixture design directs more light down and forward without wasting lumens and offensive light.

#### Thermal Management:

Atlas Wall Pak Pro fixtures are designed as a complete system to optimize LED life and light output. The Patent Pending thermal stacking heat removal technology extracts heat from within the housing moving it away from LEDs and components. The lower temperatures result in long LED life (100,000+ hrs) and component life and also allows for higher light output.

#### Listings:

Luminaire is certified to cUL and CSA Standards for Wet Locations  
Dark Sky Compliant  
Lighting Facts Certified  
DesignLights Consortium qualified luminaire, eligible for rebates from DLC member utilities.

#### AC Input:

120/208/240/277 V

#### Driver:

Constant current, Class 2, 120-277 VAC, 50-60 Hz  
High Efficiency – min. 84%  
Off-State Power: 0 Watts  
Dimming 10-100%

#### LEDs:

4500K CCT  
Delivers 70% or greater of initial lumens at 100,000 hours  
Epoxy Guard™ protective conformal coated boards

#### Warranty:

Five-year limited warranty

#### Testing:

Atlas LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 & LM-80, and have received the Department of Energy "Lighting Facts" label.

#### Photo Control:

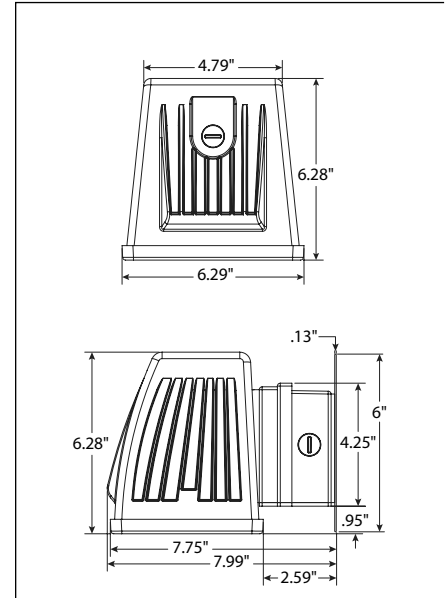
For factory installed 120V button photo control add suffix PC to part number.

**Alpha Series LED**  
PROFESSIONAL GRADE



WPS27LED Design is Protected  
by US Patent D710,530

### DIMENSIONS:



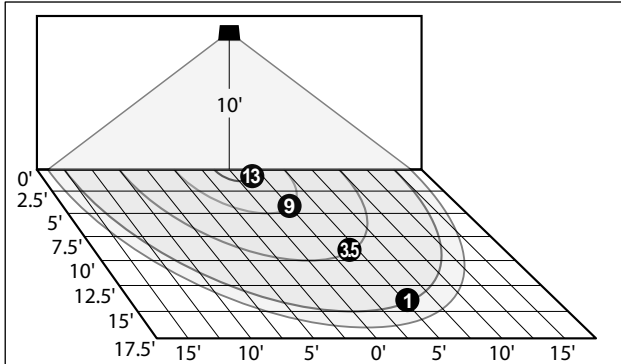
Rebates and Incentives are available in many areas. Contact an Atlas Representative for more information.

## ATLAS LIGHTING PRODUCTS, INC.

PO BOX 2348 | BURLINGTON, NC 27216  
800-849-8485 | FAX: 336-227-0110 | www.atlasled.com

Made in the USA of US and imported parts. Meets Buy American requirements within the ARRA.

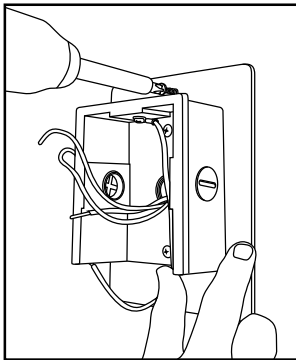
**PHOTOMETRIC**



**ENERGY SAVINGS**

LED		HID			ANNUAL SAVINGS
WATTAGE	ANNUAL COST	SOURCE WATTAGE	TOTAL WATTAGE USED	ANNUAL COST	
27	\$12	50	72	\$52	\$40
27	\$12	70	90	\$59	\$47
27	\$12	100	129	\$77	\$65

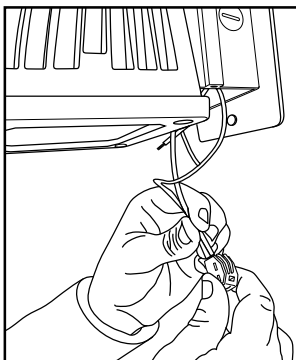
**LABOR SAVING: QUICK & SECURE MOUNTING**



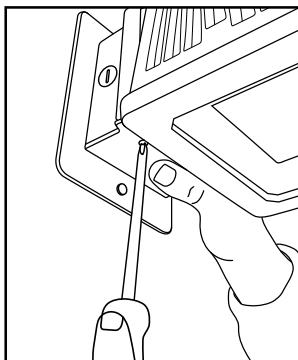
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Atlas Lighting Products

lighting facts<sup>®</sup>

A Program of the U.S. DOE

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<b>Color Accuracy</b> Color Rendering Index (CRI)	<b>81</b>
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<b>Light Color</b> Correlated Color Temperature (CCT)	<b>4389 (Bright White)</b>		
↓			
Warm White 2700K	Bright White 3000K	Daylight 4500K	6500K

All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting*. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit [www.lightingfacts.com](http://www.lightingfacts.com) for the *Label Reference Guide*.

Registration Number: PRB4-578HFG (2/27/2015)  
Model Number: WPS27LED [Upgrade : 2/4/2015]  
Type: Luminaire - Area/Roadway



117 Commercial St. NE, Suite 310  
 Salem, OR 97301  
 503.391.8773  
 www.dksassociates.com



## MEMORANDUM

DATE: January 30, 2017  
 TO: Steve Adams, City of Wilsonville  
 FROM: Scott Mansur, P.E., PTOE, <sup>SM</sup>Jordin Kelly, EIT  
 SUBJECT: Marion's Carpet Transportation Study

This memorandum documents trip generation estimates for the proposed Marion's Carpets facility. This development proposes to utilize the currently vacant property north of the Petrocard fueling facility to include a 30,700 square foot building that contains carpet related warehousing, office, and retail space.

This memorandum analyzes the impact the proposed Marion's Carpets facility would have on the study intersection shown in Figure 1 as well as the project access. It will also evaluate the site plan's internal circulation for vehicle, bicycle, and pedestrian safety.

The following sections include the existing conditions and intersection operations, project trip generation and distribution, site plan review, and summary of findings.

### Existing Conditions

The proposed Marion's Carpet development is located west of I-5 along SW Boones Ferry Road and north of SW Barber Street. Key roadways in the study area are summarized in Table 1 on the following page along with their existing roadway characteristics.



Figure 1: Study Area



The functional classification for City of Wilsonville streets are provided in the *City of Wilsonville Transportation System Plan (TSP)*.<sup>1</sup>

*Table 1: Roadway Classification*

Roadway	Classification	Number of Lanes	Posted Speed	Sidewalks	Bike Lanes	On-Street Parking
SW Boones Ferry Road	Collector	2	45	No	No	No
SW Barber Street	Collector	2	35	Yes	Yes	No

SW Boones Ferry Road and SW Barber Street are existing truck routes.

### ***Bicycle and Pedestrian Facilities***

Existing bicycle and pedestrian facilities along SW Barber Street include five foot sidewalks and six foot bicycle lanes on both sides of the road. There are no existing bicycle facilities along SW Boones Ferry Road. However, there is a section of sidewalk (approximately 225 feet) on the west side of SW Boones Ferry Road just south of the proposed project site.

### ***Future Planned Projects***

The City of Wilsonville TSP includes future planned roadway and intersection projects. The following are projects identified in the City's TSP as higher priority projects near the project site.

#### BW-09 Town Center Loop Bike/Pedestrian Bridge

Construct a bike/pedestrian bridge over I-5 approximately aligned with Barber Street to improve connectivity of Town Center area with businesses and neighborhoods on west-side of I-5; include aesthetic design treatments.

#### UU-P2B Boones Ferry Road Urban Upgrade

Upgrade Boones Ferry Road from Wilsonville Road to Ridder Road with bike lanes on both sides and sidewalks on west side only.

This project is not considered a high priority project due to its high cost and limited additional connectivity benefits due to alternative parallel routes.

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<sup>1</sup> City of Wilsonville Transportation System Plan, Amended in 2016.

## Intersection Operations

Intersection operations were analyzed for the weekday PM peak hour (highest hour between 4:00-6:00 PM) at the SW Boones Ferry Road/SW Barber St intersection. The intersection operations for the study intersection as well as the project access were analyzed based on the 2010 HCM methodology for unsignalized intersections<sup>2</sup> for the following scenarios:

- Existing Weekday PM Peak Hour (study intersection only)
- Existing + Project
- Existing + Stage II (traffic from developments that have Stage II approval or are under construction)
- Existing + Project + Stage II

Level of service (LOS) ratings and volume-to-capacity (v/c) ratios are two commonly used performance measures that provide a good picture of intersection operations. In addition, they are often incorporated into agency operation standards.

- Level of service (LOS): A “report card” rating (A through F) based on the average delay experienced by vehicles at the intersection. LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and demand has exceeded capacity.
- Volume-to-capacity (v/c) ratio: A decimal representation (typically between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually results in excessive queues and long delays.

The City of Wilsonville requires all intersections of public streets to meet its minimum acceptable level of service (LOS) standard of LOS D for peak periods. For each of these analysis scenarios, the unmitigated impacts for the study area will be completed for the study intersection. Where the City's level of service D standard cannot be maintained, improvements will be identified to mitigate operating conditions. Additional analysis will then be performed with any recommended improvements in place to determine the resulting levels of service.

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<sup>2</sup> *Highway Capacity Manual 2010*, Transportation Research Board, Washington DC, 2010

### Existing Intersection Operations

Existing traffic operations at the study intersections were determined for the PM peak hour based on the 2010 Highway Capacity Manual methodology. The estimated delay, LOS, and v/c ratio for the unsignalized study intersection is shown in Table 2.

As shown, the study intersection currently meets the City's operating standards. Existing intersection volumes can be seen in Figure 2.

Table 2: Existing 2016 Intersection Operations

Unsignalized Intersection	Operating Standard	2016 Existing Operations		
		Delay	LOS	v/c
SW Boones Ferry Rd/ Barber St	LOS D	20.0	A/C	0.49

Unsignalized Intersections:

LOS = Level of Service of Major Street/Minor Street  
v/c = Volume-to-Capacity Ratio of Worst Movement

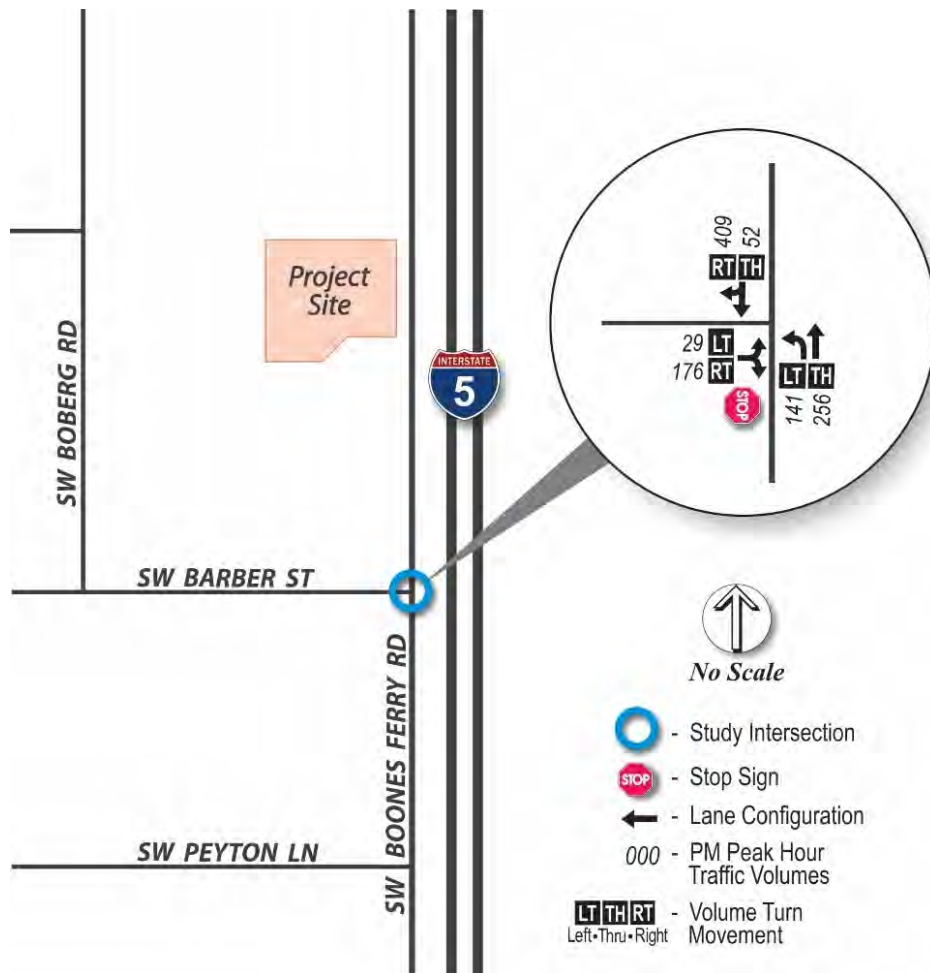


Figure 2: 2015 Existing Intersection Volumes

## Project Trip Generation and Distribution

Trip generation is the method used to estimate the number of PM peak hour vehicles that are added to the surrounding traffic network from the proposed Marion's Carpet development. The trip rates utilized for this study were provided by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition.<sup>3</sup> Figure 3 displays the project trips and distribution.

This development is proposed to include 3,500 square feet of specialty retail space, 1,000 square feet of office space, and 26,000 square feet of warehouse space. The small amount of office space is consistent with what is already accounted for in the Warehousing ITE trip rate. Therefore, trip generation estimates will assume 27,000 square feet of warehousing space and no additional designated office space since it is already included in the ITE warehousing land use assumptions.

The results of this analysis indicate that the proposed development is expected to generate 35 PM peak hour trips (11 in, 24 out). A summary of the trip generation assumptions for the proposed development are shown in Table 3.

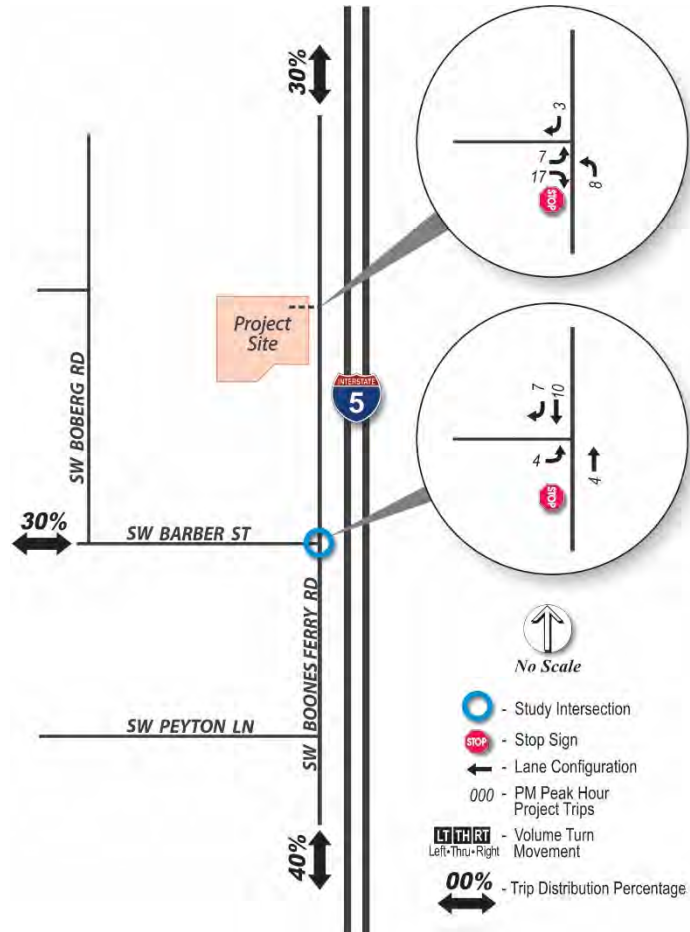


Figure 3: Project Trips Distribution

Table 3: PM Peak Hour Project Trip Generation

Land Use (ITE Code)	Size (KSF <sup>a</sup> )	Trip Generation Rate (Trips / KSF)	PM Peak Hour Trips		
			In	Out	Total
Warehouse (150)	27	1.06 <sup>b</sup>	7	19	26
Specialty Retail Center (826)	3.5	2.71	4	5	9
<b>Total Project Trips</b>			<b>11</b>	<b>24</b>	<b>35</b>

<sup>a</sup> KSF – 1,000 Square Feet

<sup>b</sup> Rate back-calculated from ITE equation.

<sup>3</sup> Trip Generation, 9<sup>th</sup> Edition, Institute of Transportation Engineers, 2012.

Trip distribution for new project traffic was calculated based on existing traffic patterns identified in the PM peak hour intersection counts conducted on Tuesday, December 13th (see Figure 2). Based on existing traffic patterns at the study intersection, it was assumed that 70% of the traffic leaving the subdivision would travel south along SW Boones Ferry Road and 30% would travel north.

**Project Trips through City of Wilsonville Interchange Areas**

Of the 35 total project trips, 7 new p.m. peak hour trips are estimated to pass through the I-5/Wilsonville Road interchange area and 5 new p.m. peak hour trips are estimated to pass through the I-5/Elligsen Road interchange area.

**Future Traffic Operations**

The impacts of the increased traffic of the Marion Carpet development were evaluated at the study intersection for the weekday PM peak hour. Volumes for future scenarios are included in Figure 4.

The analysis also includes scenarios that account for Stage II approved developments in the area, including those under construction or built but not yet occupied.

As shown in Table 4 at the top of the next page, the stop controlled study intersection as well as the project access meets the City's operating standards for each scenario.

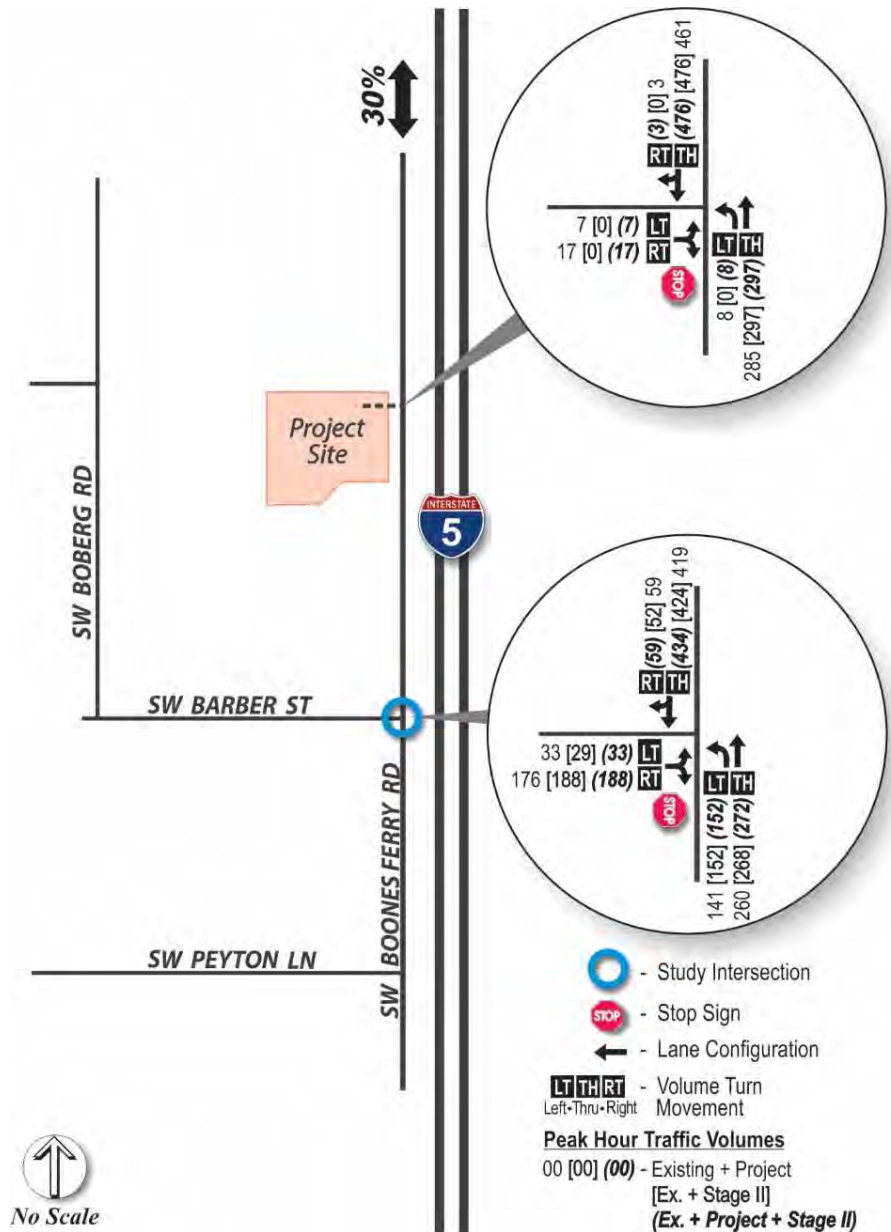


Figure 4: Future Scenario Traffic Volumes





Table 4: Future Project and Stage II Intersection Operations

Unsignalized Intersection	Operating Standard	Existing + Project			Existing + Stage II			Existing + Stage II + Project		
		Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c
SW Boones Ferry Rd/ SW Barber St	LOS D	21.7	A/C	0.52	21.9	A/C	0.53	24.1	A/C	0.57
SW Boones Ferry Rd/ Project Access	LOS D	13.2	A/B	0.06	N/A (No minor street volume)			13.4	A/B	0.06

Unsignalized Intersections:

LOS = Level of Service of Major Street/Minor Street

v/c = Volume-to-Capacity Ratio of Worst Movement

## Site Plan Review

The applicant's preliminary site plan was provided with the Traffic Study Request letter and is attached to the appendix.<sup>4</sup> It was reviewed to evaluate site access and internal circulation for vehicles, as well as pedestrian and bicycle connections.

### Site Access and Internal Circulation

The proposed Marion's Carpets development would utilize SW Boones Ferry Road which currently serves the surrounding area as its only access road. Based on the site plan, the proposed facility's internal roadway network provides adequate circulation into and out of the development.

However, it is recommended to reconfigure the site plan to make the two parking stalls on the north end of the parking lot that are parallel with Boones Ferry Road more functional as this space is needed for other parked vehicles to perform exiting maneuvers. More discussion on this can be found in the Parking section of this memorandum.

Proposed site driveways will need to meet American Association of State Highway and Transportation Officials (AASHTO) sight distance requirements.<sup>5</sup> This includes providing adequate sight triangles at driveways that are clear of objects (large signs, landscaping, parked cars, etc.) that could potentially limit vehicle sight distance. Prior to occupancy, sight distance at any existing access points will need to be verified, documented, and stamped by a registered professional Civil or Traffic Engineer licensed in the State of Oregon.

### Pedestrian and Bicycle Connections

The site features an added 6-foot-wide sidewalk along SW Boones Ferry Road in front of the proposed development. The 6-foot-wide sidewalk would connect to the existing sidewalk south of the project site along SW Boones Ferry Road.

<sup>5</sup> *Geometric Design of Highways and Streets*, AASHTO, 2011.



**Parking**

The proposed Marion's Carpets is required to comply with the City of Wilsonville Development Code for the number of vehicular parking stalls and bicycle parking spaces that are provided on the site.<sup>6</sup> The requirements are based on the land use type and size.

Vehicle Parking

Table 5 provides the vehicular parking requirements for the proposed development per the City of Wilsonville Development Code that are based on land use type and size. For retail stores selling furniture or other bulky merchandise, the required minimum number of stalls is 1.67 stalls per 1,000 square feet. For storage space, the required minimum number of stalls is 0.3 stalls per 1,000 square feet. According to the City's Development Code, for parking areas with ten or more spaces, one ADA accessible parking space is required for every 50 standard stalls. The total required parking stalls for vehicles is 14 spaces.

*Table 5: Vehicular Parking Requirements*

Land Use (Size)	Code Required Vehicular Parking Stalls			Proposed Number of Stalls	
	ADA Accessible Stalls Required	Standard Stalls per KSF <sup>a</sup> Required	Number of Stalls Required	Standard	ADA Accessible
Retail Stores selling furniture or other bulky merchandise (3.5 KSF)	1 per 50 stalls	1.67	6	13	1
Warehouse (27 KSF)		0.3	8		
Total Required Parking Stalls				14	
Total Proposed Parking Stalls				14	

<sup>a</sup> KSF = 1,000 Square Feet

While the current site plan does show 13 regular parking stalls and one ADA accessible parking stall (a total of 14 stalls), the two stalls parallel to Boones Ferry Road on the north end of the parking lot are not functional and should be reconfigured. This is because the vehicle parked in the northernmost stall perpendicular to Boones Ferry Road needs to back into this space as part of a two-phase exiting maneuver. A sketch that illustrates the required two-phase exiting maneuver is included in the appendix.

Therefore, the Marion's Carpet will need to be reconfigured to provide the 14 required parking stalls in order to meet the City of Wilsonville Development Code. It is recommended that the developer coordinate with the City regarding the required parking for the intended use of Marion's Carpets.

<sup>6</sup> City of Wilsonville Development Code, Chapter 4.155; Table 5, Adopted July 2013.



Bicycle Parking

For a retail store selling furniture or bulky merchandise, the City requires one bicycle parking space per 8000 square feet with a minimum of two spaces. For a wholesale establishment, the City requires one bicycle parking space per 20,000 square feet with a minimum of two spaces. Table 6 provides the bicycle parking requirements for the proposed development per the City of Wilsonville Development Code that are based on land use type and size.

Table 6: Bicycle Parking Requirements

Land Use (Size)	Code Required Bicycle Parking Spaces		
	Minimum Stalls Required	Number of Stalls Required	Total Spaces
Retail Stores selling furniture or other bulky merchandise (3.5 KSF <sup>a</sup> )	1 per 8,000 sq. ft., Min. of 2	2	4
Wholesale establishment (27 KSF)	1 per 20,000 sq. ft., Min. of 2	2	

<sup>a</sup> KSF = 1,000 Square Feet

The current site plan does not designate the specific number of bicycle parking stalls. However, it does include an area for bicycle parking. It is recommended that the site plan provide a minimum of four bicycle parking stalls.

## Summary

Key findings for the proposed Marion's Carpets on SW Boones Ferry Road are as follows:

- The proposed expansion is expected to generate 35 p.m. peak hour trips (11 in/24 out).
- Of the 35 total project trips, 7 new p.m. peak hour trips are estimated to pass through the I-5/Wilsonville Road interchange area and 5 new p.m. peak hour trips are estimated to pass through the I-5/Elligsen Road interchange.
- The SW Boones Ferry Road/SW Barber Road and SW Boones Ferry Rd/Project Access intersections meet the City's operating standards with the addition of project traffic.
- It is recommended to reconfigure the site plan to make the two parking stalls on the north end of the parking lot functional.
- 14 parking stalls will be required to meet the City of Wilsonville Development Code.
- The site plan should provide a minimum of four bicycle parking spaces to meet the City of Wilsonville's Development Code requirements.

Please let us know if you have any questions.

# Appendix

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**Existing Peak Hour Traffic Counts**

**Level of Service Descriptions**

**HCM Analysis – Existing**

**HCM Analysis – Existing + Project**

**HCM Analysis – Existing + Stage II**

**HCM Analysis – Existing + Project + Stage II**

**Site Plan**

**Parking Sketch**

# Existing Peak Hour Traffic Counts

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Data Provided by K-D-N.com 503-594-4224

Study Name	<b>Boones Ferry Rd at Barber St</b>
Location	45.310206 - -122.769809
Start Date	12/13/2016
Start Time	4:00PM

Key Data Summary

Peak Hour Start	5:00PM
Peak 15 Min Start	5:00PM
PHF (15-Min Int)	0.91

PEAK-HOUR VOLUMES

NBLeft	NBThru	NBRt	SBLeft	SBThru	SBRT	EBLeft	EBThru	EBRt	WBLeft	WBThru	WBRT	NBEnt	SBEnt	EBEnt	WBEnt	NBLeav	SBLeav	EBLeav	WBLeav
141	256	0	0	409	52	29	0	176	0	0	0	585	285	193	0	397	461	205	0

PERCENT HEAVY VEHICLES

NBLeft	NBThru	NBRt	SBLeft	SBThru	SBRT	EBLeft	EBThru	EBRt	WBLeft	WBThru	WBRT	NBEnt	SBEnt	EBEnt	WBEnt	NBLeav	SBLeav	EBLeav	WBLeav
2.8%	3.5%	0.0%	0.0%	1.2%	5.8%	0.1	0.0%	2.3%	0.0%	0.0%	0.0%	1.5%	4.2%	3.6%	0.0%	3.3%	1.7%	3.4%	0.0%

PHV- Pedestrians using Crosswalk

NB	SB	EB	WB
0	0	2	1

PEAK-HOUR VOLUMES- BICYCLES

NBLeft	NBThru	NBRt	SBLeft	SBThru	SBRT	EBLeft	EBThru	EBRt	WBLeft	WBThru	WBRT
0	1	0	0	0	0	0	0	0	0	0	0

All Vehicle Volumes

Start	Northbound				Southbound				Eastbound				Westbound			
	Boones Ferry Rd				Boones Ferry Rd				Barber St				Barber St			
Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn
4:00PM	4	15	0	0	0	36	3	0	3	0	20	0	0	0	0	0
4:05PM	4	10	0	0	0	34	2	0	2	0	16	0	0	0	0	0
4:10PM	11	15	0	0	0	31	2	0	2	0	15	0	0	0	0	0
4:15PM	6	12	0	0	0	29	2	0	2	0	16	0	0	0	0	0
4:20PM	20	18	0	0	0	21	1	0	1	0	16	0	0	0	0	0
4:25PM	13	14	0	0	0	20	2	0	2	0	27	0	0	0	0	0
4:30PM	12	16	0	0	0	39	1	0	2	0	12	0	0	0	0	0
4:35PM	12	13	0	0	0	43	4	0	3	0	21	0	0	0	0	0
4:40PM	9	16	0	0	0	29	3	0	0	0	22	0	0	0	0	0



# K-D-N

KEY DATA NETWORK

5:20PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Lights															
	Northbound				Southbound				Eastbound				Westbound			
Start	Boones Ferry Rd				Boones Ferry Rd				Barber St				Barber St			
Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn
4:00PM	4	14	0	0	0	36	2	0	3	0	18	0	0	0	0	0
4:05PM	4	10	0	0	0	33	2	0	2	0	16	0	0	0	0	0
4:10PM	11	15	0	0	0	30	1	0	2	0	14	0	0	0	0	0
4:15PM	5	11	0	0	0	29	2	0	2	0	16	0	0	0	0	0
4:20PM	18	15	0	0	0	21	1	0	1	0	15	0	0	0	0	0
4:25PM	12	14	0	0	0	19	1	0	2	0	26	0	0	0	0	0
4:30PM	12	14	0	0	0	38	1	0	2	0	11	0	0	0	0	0
4:35PM	11	11	0	0	0	42	4	0	3	0	20	0	0	0	0	0
4:40PM	9	16	0	0	0	28	2	0	0	0	22	0	0	0	0	0
4:45PM	10	22	0	0	0	34	6	0	2	0	7	0	0	0	0	0
4:50PM	5	13	0	0	0	33	4	0	1	0	14	0	0	0	0	0
4:55PM	6	13	0	0	0	30	2	0	3	0	8	0	0	0	0	0
5:00PM	10	19	0	0	0	46	3	0	2	0	13	0	0	0	0	0
5:05PM	11	17	0	0	0	42	4	0	2	0	22	0	0	0	0	0
5:10PM	12	23	0	0	0	36	5	0	1	0	14	0	0	0	0	0
5:15PM	11	19	0	0	0	36	2	0	1	0	14	0	0	0	0	0
5:20PM	16	26	0	0	0	36	4	0	1	0	8	0	0	0	0	0
5:25PM	8	23	0	0	0	24	8	0	4	0	19	0	0	0	0	0
5:30PM	4	16	0	0	0	28	2	0	3	0	12	0	0	0	0	0
5:35PM	18	28	0	0	0	35	4	0	1	0	17	0	0	0	0	0
5:40PM	11	31	0	0	0	41	5	0	1	0	8	0	0	0	0	0
5:45PM	16	13	0	0	0	25	3	0	1	0	19	0	0	0	0	0
5:50PM	15	14	0	0	0	26	5	0	4	0	7	0	0	0	0	0
5:55PM	5	18	0	0	0	29	4	0	5	0	19	0	0	0	0	0



Other Vehicles																
Northbound				Southbound				Eastbound				Westbound				
Start	Boones Ferry Rd				Boones Ferry Rd				Barber St				Barber St			
Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn
4:00PM	0	1	0	0	0	0	1	0	0	0	2	0	0	0	0	0
4:05PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4:10PM	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0
4:15PM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20PM	2	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0
4:25PM	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0
4:30PM	0	2	0	0	0	1	0	0	0	0	1	0	0	0	0	0
4:35PM	1	2	0	0	0	1	0	0	0	0	1	0	0	0	0	0
4:40PM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
4:45PM	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0
4:50PM	3	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
4:55PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:00PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05PM	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
5:10PM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0
5:15PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
5:20PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
5:25PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
5:35PM	1	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0
5:40PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45PM	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
5:50PM	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5:55PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Pedestrian Crossing at Approach				
Time	NB	SB	EB	WB
4:00PM	0	0	0	0
4:05PM	0	0	0	0
4:10PM	0	0	0	0
4:15PM	0	0	0	0



**KEY DATA NETWORK**

4:20PM	0	0	0	0
4:25PM	0	0	0	0
4:30PM	0	0	0	0
4:35PM	0	0	0	0
4:40PM	0	0	2	0
4:45PM	0	0	0	0
4:50PM	0	0	0	0
4:55PM	0	0	0	0
5:00PM	0	0	0	0
5:05PM	0	0	0	1
5:10PM	0	0	0	0
5:15PM	0	0	1	0
5:20PM	0	0	0	0
5:25PM	0	0	0	0
5:30PM	0	0	0	0
5:35PM	0	0	1	0
5:40PM	0	0	0	0
5:45PM	0	0	0	0
5:50PM	0	0	0	0
5:55PM	0	0	0	0

# Level of Service Descriptions

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## **TRAFFIC LEVELS OF SERVICE**

Analysis of traffic volumes is useful in understanding the general nature of traffic in an area, but by itself indicates neither the ability of the street network to carry additional traffic nor the quality of service afforded by the street facilities. For this, the concept of level of service has been developed to subjectively describe traffic performance. Level of service can be measured at intersections and along key roadway segments.

Levels of service categories are similar to report card ratings for traffic performance. Intersections are typically the controlling bottlenecks of traffic flow and the ability of a roadway system to carry traffic efficiently is generally diminished in their vicinities. Levels of Service A, B and C indicate conditions where traffic moves without significant delays over periods of peak travel demand. Level of service D and E are progressively worse peak hour operating conditions and F conditions represent where demand exceeds the capacity of an intersection. Most urban communities set level of service D as the minimum acceptable level of service for peak hour operation and plan for level of service C or better for all other times of the day. The Highway Capacity Manual provides level of service calculation methodology for both intersections and arterials<sup>1</sup>. The following two sections provide interpretations of the analysis approaches.

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<sup>1</sup> *2000 Highway Capacity Manual*, Transportation Research Board, Washington D.C., 2000, Chapter 16 and 17.

## UNSIGNALIZED INTERSECTIONS (Two-Way Stop Controlled)

Unsignalized intersection level of service is reported for the major street and minor street (generally, left turn movements). The method assesses available and critical gaps in the traffic stream which make it possible for side street traffic to enter the main street flow. The 2010 Highway Capacity Manual describes the detailed methodology. It is not unusual for an intersection to experience level of service E or F conditions for the minor street left turn movement. It should be understood that, often, a poor level of service is experienced by only a few vehicles and the intersection as a whole operates acceptably.

Unsignalized intersection levels of service are described in the following table.

### *Level-of-Service Criteria: Automobile Mode*

Control Delay (s/vehicle)	LOS by Volume-to-Capacity Ratio	
	$v/c \leq 1.0$	$v/c > 1.0$
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

Note: The LOS criteria apply to each lane on a given approach and to each approach on the minor street.  
LOS is not calculated for major-street approaches or for the intersection as a whole

## SIGNALIZED INTERSECTIONS

For signalized intersections, level of service is evaluated based upon average vehicle delay experienced by vehicles entering an intersection. Control delay (or signal delay) includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. In previous versions of this chapter of the HCM (1994 and earlier), delay included only stopped delay. As delay increases, the level of service decreases. Calculations for signalized and unsignalized intersections are different due to the variation in traffic control. The 2000 Highway Capacity Manual provides the basis for these calculations.

Level of Service	Delay (secs.)	Description
A	<10.00	<b>Free Flow/Insignificant Delays:</b> No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Most vehicles do not stop at all. Progression is extremely favorable and most vehicles arrive during the green phase.
B	10.1-20.0	<b>Stable Operation/Minimal Delays:</b> An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles. This level generally occurs with good progression, short cycle lengths, or both.
C	20.1-35.0	<b>Stable Operation/Acceptable Delays:</b> Major approach phases fully utilized. Most drivers feel somewhat restricted. Higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, and the number of vehicles stopping is significant.
D	35.1-55.0	<b>Approaching Unstable/Tolerable Delays:</b> The influence of congestion becomes more noticeable. Drivers may have to wait through more than one red signal indication. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. The proportion of vehicles not stopping declines, and individual cycle failures are noticeable.
E	55.1-80.0	<b>Unstable Operation/Significant Delays:</b> Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are a frequent occurrence.
F	>80.0	<b>Forced Flow/Excessive Delays:</b> Represents jammed conditions. Queues may block upstream intersections. This level occurs when arrival flow rates exceed intersection capacity, and is considered to be unacceptable to most drivers. Poor progression, long cycle lengths, and v/c ratios approaching 1.0 may contribute to these high delay levels.

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Source: 2000 Highway Capacity Manual, Transportation Research Board, Washington D.C.

# HCM Analysis – Existing

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**Intersection**

Intersection Delay, s/veh 5.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	29	176	141	256	409	52
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	10	2	3	4	1	6
Mvmt Flow	32	193	155	281	449	57

Major/Minor	Minor2	Major1			Major2	
Conflicting Flow All	1069	479	507	0	-	0
Stage 1	478	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Follow-up Headway	4	3	2	-	-	-
Pot Capacity-1 Maneuver	237	587	1053	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	538	-	-	-	-	-
Time blocked-Platoon, %				-	-	-
Mov Capacity-1 Maneuver	202	587	1052	-	-	-
Mov Capacity-2 Maneuver	202	-	-	-	-	-
Stage 1	607	-	-	-	-	-
Stage 2	459	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20	3	0

Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1052	-	462	-	-
HCM Lane V/C Ratio	0.147	-	0.488	-	-
HCM Control Delay (s)	9.012	-	20	-	-
HCM Lane LOS	A		C		
HCM 95th %tile Q(veh)	0.516	-	2.622	-	-

**Notes**

~ : Volume Exceeds Capacity; \$ : Delay Exceeds 300 Seconds; Error : Computation Not Defined





# **HCM Analysis – Existing + Project**

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**Intersection**

Int Delay, s/veh 5.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	33	176	141	260	419	59
Future Vol, veh/h	33	176	141	260	419	59
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	10	2	3	4	1	6
Mvmt Flow	36	193	155	286	460	65

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1089	494	525 0
Stage 1	493	-	- -
Stage 2	596	-	- -
Critical Hdwy	6.5	6.22	4.13 -
Critical Hdwy Stg 1	5.5	-	- -
Critical Hdwy Stg 2	5.5	-	- -
Follow-up Hdwy	3.59	3.318	2.227 -
Pot Cap-1 Maneuver	230	575	1037 -
Stage 1	598	-	- -
Stage 2	535	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	196	575	1036 -
Mov Cap-2 Maneuver	196	-	- -
Stage 1	598	-	- -
Stage 2	455	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	21.7	3.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1036	-	441	-	-
HCM Lane V/C Ratio	0.15	-	0.521	-	-
HCM Control Delay (s)	9.1	-	21.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.5	-	2.9	-	-

**Intersection**

Int Delay, s/veh 0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	7	17	8	285	461	3
Future Vol, veh/h	7	17	8	285	461	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	19	9	317	512	3

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	848	514	516 0
Stage 1	514	-	- -
Stage 2	334	-	- -
Critical Hdwy	6.4	6.2	4.1 -
Critical Hdwy Stg 1	5.4	-	- -
Critical Hdwy Stg 2	5.4	-	- -
Follow-up Hdwy	3.5	3.3	2.2 -
Pot Cap-1 Maneuver	334	564	1060 -
Stage 1	605	-	- -
Stage 2	730	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	331	564	1060 -
Mov Cap-2 Maneuver	331	-	- -
Stage 1	605	-	- -
Stage 2	724	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1060	-	468	-	-
HCM Lane V/C Ratio	0.008	-	0.057	-	-
HCM Control Delay (s)	8.4	-	13.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

# **HCM Analysis – Existing + Stage II**

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**Intersection**

Int Delay, s/veh 5.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	29	188	152	268	424	52
Future Vol, veh/h	29	188	152	268	424	52
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	10	2	3	4	1	6
Mvmt Flow	32	207	167	295	466	57

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1124	496	523 0
Stage 1	495	-	- -
Stage 2	629	-	- -
Critical Hdwy	6.5	6.22	4.13 -
Critical Hdwy Stg 1	5.5	-	- -
Critical Hdwy Stg 2	5.5	-	- -
Follow-up Hdwy	3.59	3.318	2.227 -
Pot Cap-1 Maneuver	219	574	1038 -
Stage 1	596	-	- -
Stage 2	516	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	184	574	1037 -
Mov Cap-2 Maneuver	184	-	- -
Stage 1	596	-	- -
Stage 2	433	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	21.9	3.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1037	-	447	-	-
HCM Lane V/C Ratio	0.161	-	0.533	-	-
HCM Control Delay (s)	9.1	-	21.9	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.6	-	3.1	-	-

**Intersection**

Int Delay, s/veh 0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	0	0	0	297	476	0
Future Vol, veh/h	0	0	0	297	476	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	0	330	529	0

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	859	529	529 0
Stage 1	529	-	- -
Stage 2	330	-	- -
Critical Hdwy	6.4	6.2	4.1 -
Critical Hdwy Stg 1	5.4	-	- -
Critical Hdwy Stg 2	5.4	-	- -
Follow-up Hdwy	3.5	3.3	2.2 -
Pot Cap-1 Maneuver	329	554	1048 -
Stage 1	595	-	- -
Stage 2	733	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	329	554	1048 -
Mov Cap-2 Maneuver	329	-	- -
Stage 1	595	-	- -
Stage 2	733	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1048	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



# **HCM Analysis – Existing + Project + Stage II**

**Intersection**

Int Delay, s/veh 5.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	33	188	152	272	434	59
Future Vol, veh/h	33	188	152	272	434	59
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	10	2	3	4	1	6
Mvmt Flow	36	207	167	299	477	65

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1142	510	542 0
Stage 1	509	-	- -
Stage 2	633	-	- -
Critical Hdwy	6.5	6.22	4.13 -
Critical Hdwy Stg 1	5.5	-	- -
Critical Hdwy Stg 2	5.5	-	- -
Follow-up Hdwy	3.59	3.318	2.227 -
Pot Cap-1 Maneuver	214	563	1022 -
Stage 1	588	-	- -
Stage 2	514	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	179	563	1021 -
Mov Cap-2 Maneuver	179	-	- -
Stage 1	588	-	- -
Stage 2	430	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	24.1	3.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1021	-	426	-	-
HCM Lane V/C Ratio	0.164	-	0.57	-	-
HCM Control Delay (s)	9.2	-	24.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.6	-	3.5	-	-



**Intersection**

Int Delay, s/veh 0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	7	17	8	297	476	3
Future Vol, veh/h	7	17	8	297	476	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	19	9	330	529	3

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	879	531	532 0
Stage 1	531	-	- -
Stage 2	348	-	- -
Critical Hdwy	6.4	6.2	4.1 -
Critical Hdwy Stg 1	5.4	-	- -
Critical Hdwy Stg 2	5.4	-	- -
Follow-up Hdwy	3.5	3.3	2.2 -
Pot Cap-1 Maneuver	321	552	1046 -
Stage 1	594	-	- -
Stage 2	719	-	- -
Platoon blocked, %			- -
Mov Cap-1 Maneuver	318	552	1046 -
Mov Cap-2 Maneuver	318	-	- -
Stage 1	594	-	- -
Stage 2	713	-	- -

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1046	-	454	-	-
HCM Lane V/C Ratio	0.008	-	0.059	-	-
HCM Control Delay (s)	8.5	-	13.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-



# Site Plan

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**QUICK PLANNING CODE SUMMARY**

**PARKING:**  
 FOR WHOLESALE: 3 MIN AND 5 MAX SPOTS PER 1,000 SQUARE FEET OF BUILDING  
 FOR 27,000 SQUARE FEET OF WHOLESALE = 8.1 PARKING SPOTS  
 FOR RETAIL STORES SELLING LARGER BULKY MERCHANDISE IS  
 1.67 PARKING SPOTS PER 1,000 SQUARE FEET OF BUILDING. THIS BUILDING  
 WILL HAVE 3,500 SQUARE FEET OF RETAIL. SO 5.8 PARKING SPOTS  
 8.1 + 5.8 = 13.9 OR 14 PARKING SPOTS

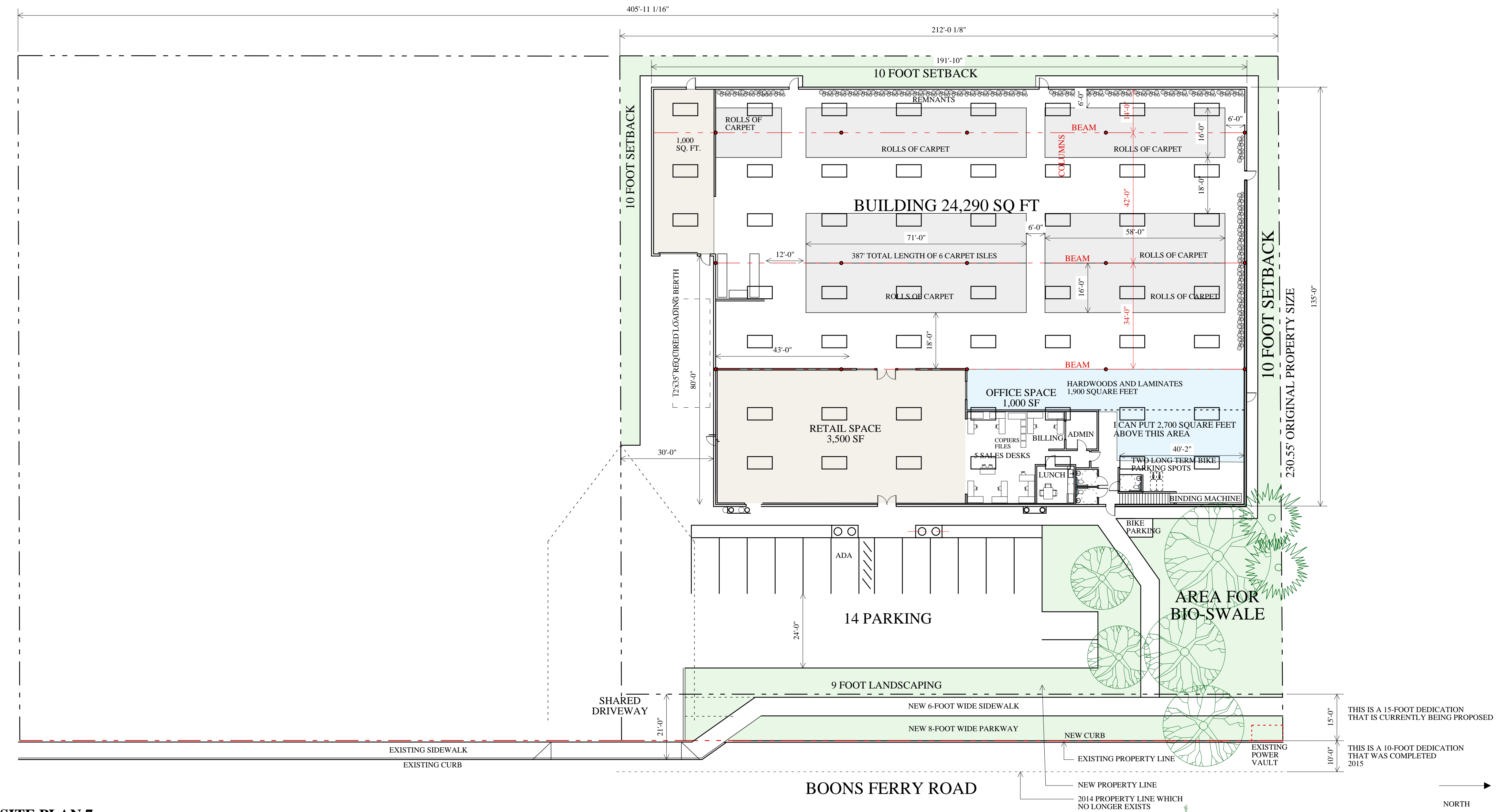
**USE:**  
 WHOLESALE AND INDUSTRIAL USE ALLOWED  
 RETAIL ALLOWED WITH A MAXIMUM OF 5,000 SQUARE FEET.

**LANDSCAPING:**  
 15% OF SITE MINIMUM  
 SITE IS 43,692 SO 6,553 MINIMUM LANDSCAPING; 7,819 SHOWN

**BUILDING:**  
 30,700 SQUARE FEET SHOWN, 24,000 MAIN FLOOR + 6,700 UPSTAIRS.

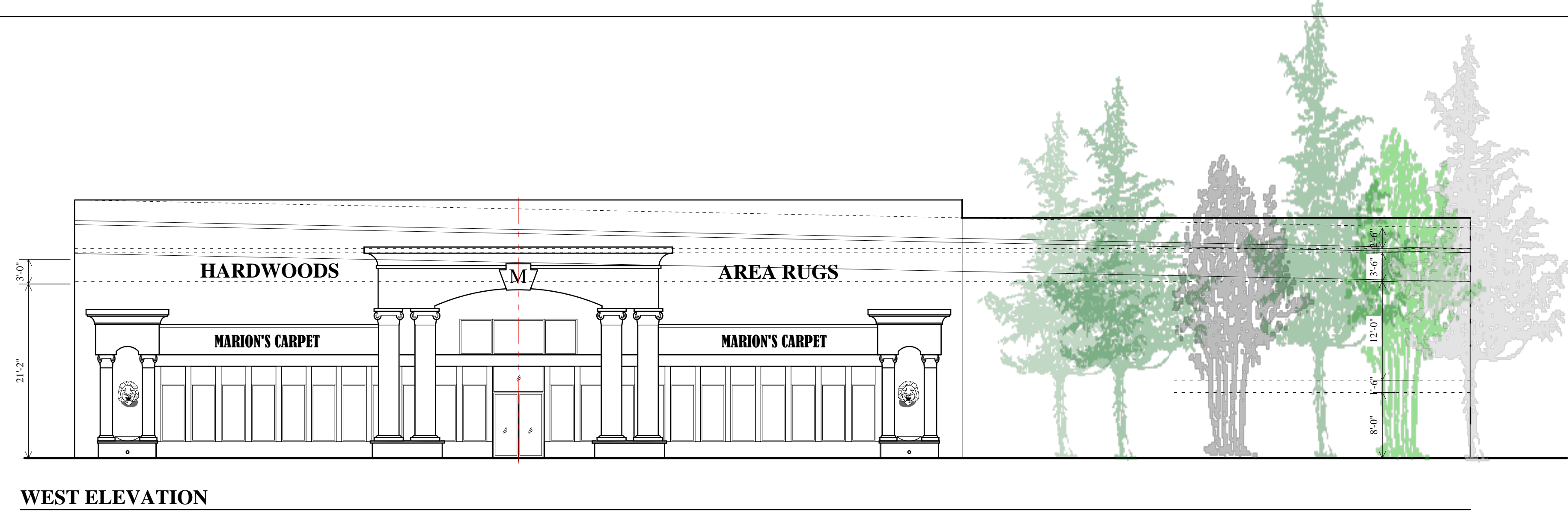
**STORM WATER:**  
 DID NOT REVIEW CODES. NOT SURE IF MITIGATION IS REQUIRED  
 WHICH MAY TAKE A LARGER LANDSCAPING SPOT.

**BUILDING SETBACKS:**  
 30' MINIMUM BUT APPEALS HAVE BEEN GRANTED IN THE PAST TO ALLOW 10'-0"



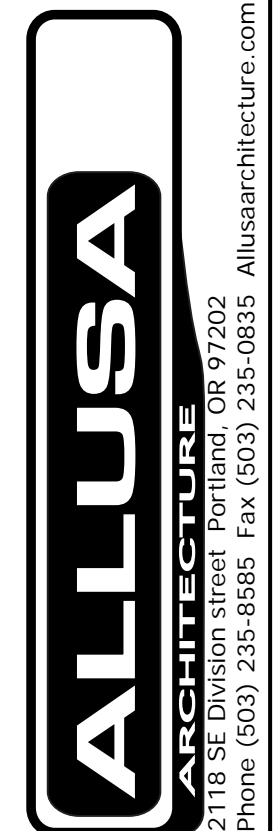
**SITE PLAN 7**

1:240

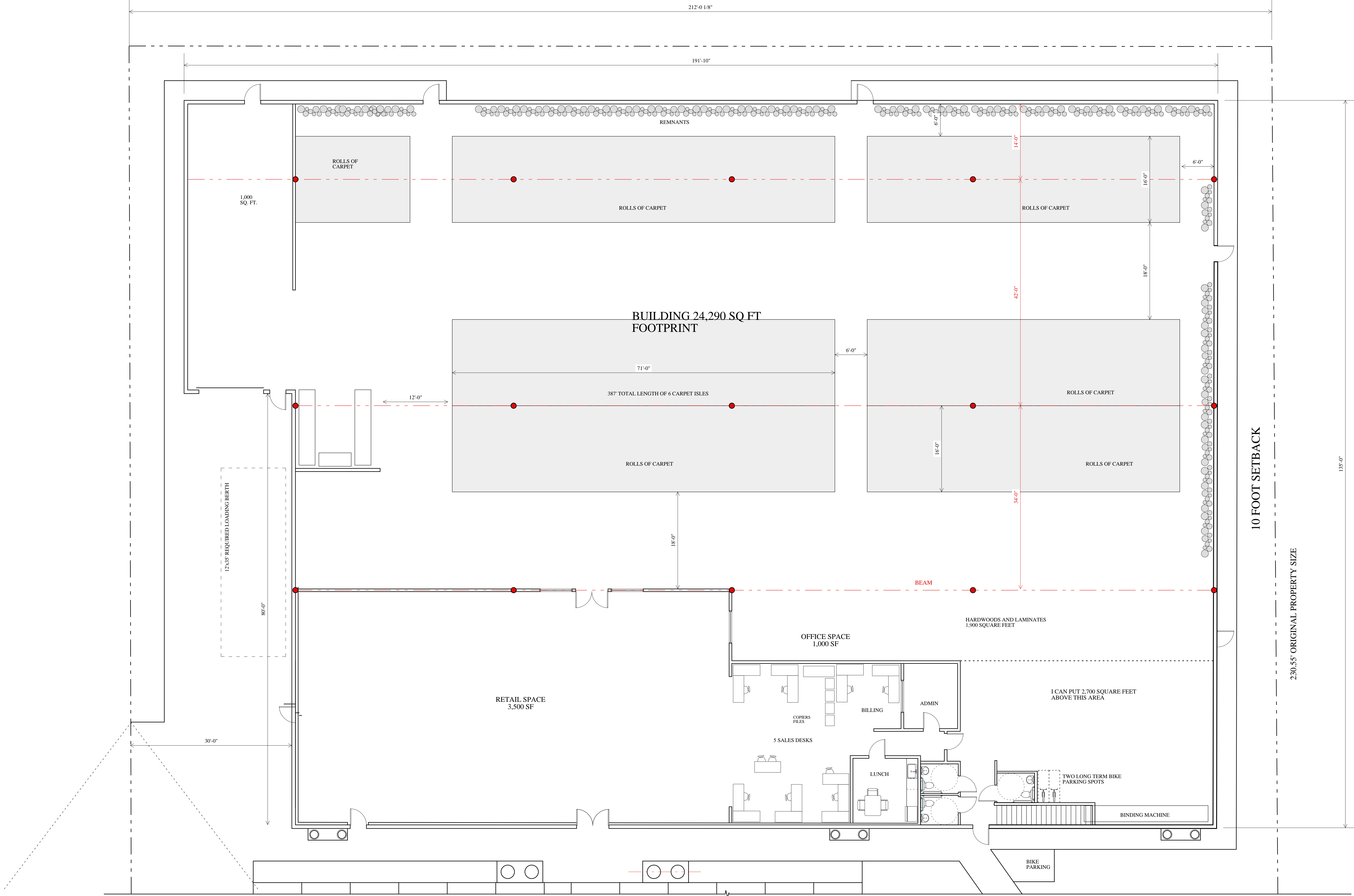


1:10

MARIONS CARPETS WAREHOUSE  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR



DATE: 12.14.16  
 SHEET  
 OF 4



FIRST FLOOR PLAN

14 PARKING

DATE: 12 14 16  
 SHEET  
**A3**  
 OF 4  
 1ST FLOOR PLAN

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 ARCHITECTURE  
 2118 SE Division Street, Portland, OR 97202  
 Phone (503) 235-8885 Fax (503) 235-0835 Allusaarchitecture.com

**MARIONS CARPETS WAREHOUSE**  
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# Parking Sketch

---

**QUICK PLANNING CODE SUMMARY**

**PARKING:**  
 FOR WHOLESALE 3 MIN AND 5 MAX SPOTS PER 1,000 SQUARE FEET OF BUILDING  
 FOR RETAIL 5 SPOTS PER 1,000 SQUARE FEET OF WHOLESALE + 3.1 PARKING SPOTS  
 FOR RETAIL STORES SELLING LARGER BULKY MERCHANDISE IS  
 1.57 PARKING SPOTS PER 1,000 SQUARE FEET OF BUILDING, THIS BUILDING  
 WILL HAVE 3,500 SQUARE FEET OF RETAIL, SO 5.8 PARKING SPOTS  
 5.1 + 5.8 = 10.9 OR 10 PARKING SPOTS

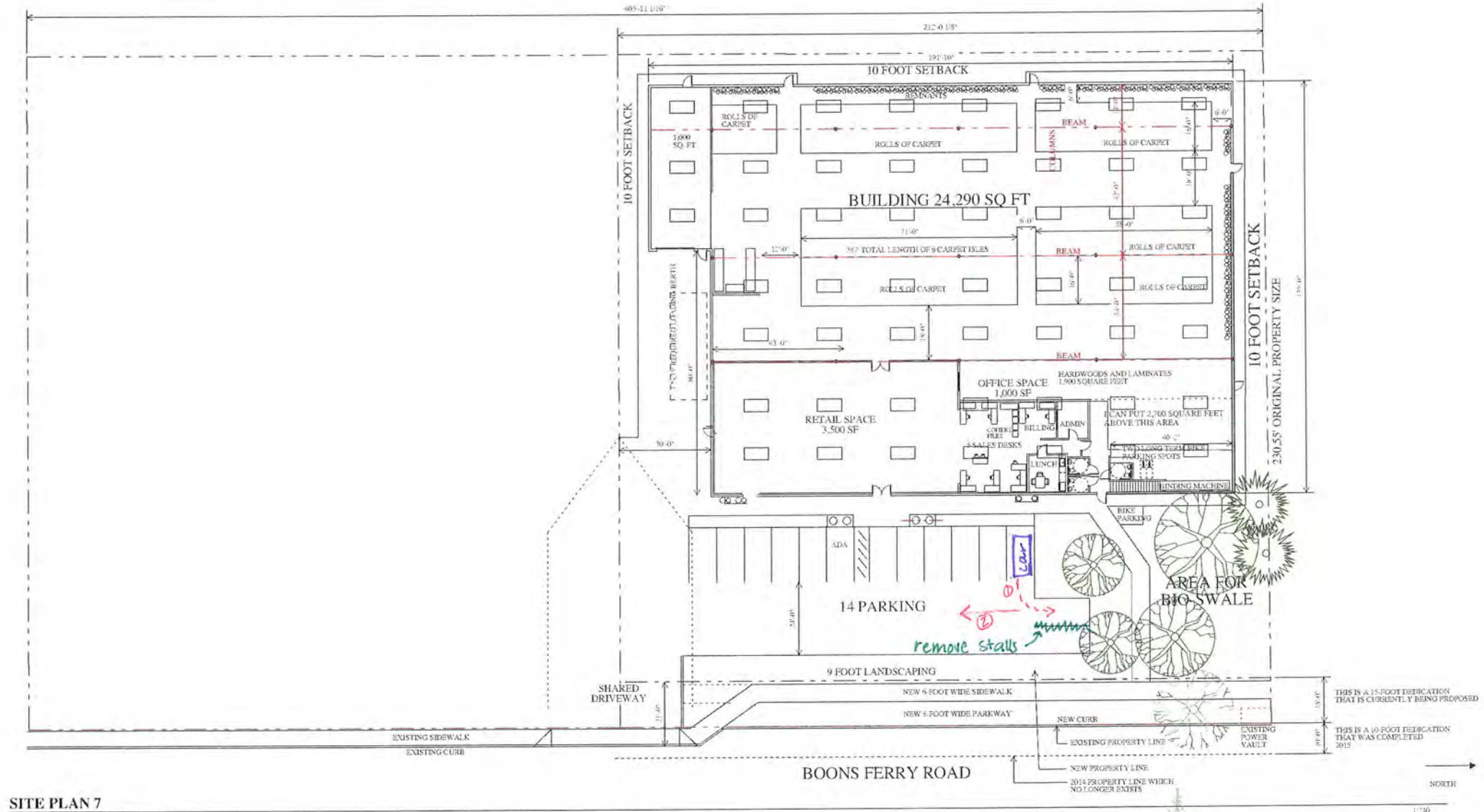
**USE:**  
 WHOLESALE AND INDUSTRIAL USE ALLOWED  
 RETAIL ALLOWED WITH A MAXIMUM OF 3,000 SQUARE FEET

**LANDSCAPING:**  
 15% OF SITE MINIMUM  
 SITE IS 43,895 SQ FT MINIMUM LANDSCAPING 7,819 SHOWN

**BUILDING:**  
 30,700 SQUARE FEET SHOWN, 24,000 MAIN FLOOR + 6,700 UPSTAIRS

**STORM WATER:**  
 DID NOT REVIEW CODES, NOT SURE IF MITIGATION IS REQUIRED  
 WHICH MAY TAKE A LARGER LANDSCAPING SPOT

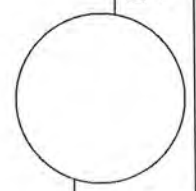
**BUILDING SETBACKS:**  
 10' MINIMUM BUT APPEALS HAVE BEEN GRANTED IN THE PAST TO ALLOW 10'-0"



**SITE PLAN 7**



**MARION'S CARPETS WAREHOUSE**  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR



**ALLUSA**  
 ARCHITECTURE INC.  
 2818 W. BOONS FERRY ROAD  
 WILSONVILLE, OR 97158  
 Phone: (503) 275-8855 Fax: (503) 275-0235 Allusa@theoffice.com

DATE: 12 14 16  
 SHEET  
 OF 4

**PROJECT DESCRIPTION**

CONSTRUCT A 27,366 SF TILT-UP SLAB WAREHOUSE FOR CARPET, 3,500 SF OF THE BUILDING WILL BE USED FOR RETAIL SPACE AND 1,000 SF WILL BE OFFICE

**CODE SUMMARY**

TOTAL BUILDING AREA:	27,366 SF
AREA PER FLOOR:	24,766 SF 1ST FLOOR
	2,600 SF 2ND FLOOR
FOOTPRINT:	24,766 SF
WAREHOUSE AREA (S1 OCCUPANCY):	22,866 SF
MERCANTILE AREA (M OCCUPANCY):	3,500 SF
OFFICE AREA (B OCCUPANCY):	1,000 SF

CODE USED: 2014 O.E.S.C., 2014 O.F.C., 2014 O.M.C., 2014 O.S.S.C., ICCA117.1-2009, 2010 NFPA 13, 2010 NFPA 72

SECTION 310: OCCUPANCY TYPE M, S1 & B OCCUPANCIES

SECTION 414: HAZARDOUS MATERIALS NONE

TABLE 601.1: FIRE RESISTIVE RATING CONSTRUCTION TYPE = IIIB

TABLE 503: ALLOWABLE BUILDING HEIGHTS & AREAS M = 2 STORY & 12,500 SF / B = 3 STORY & 19,000 SF / S1 = 2 STORY & 17,500 SF (+ SPRINKLER INCREASE, SEE 506.3)

SECTION 506.3: AUTOMATIC SPRINKLER SYSTEM INCREASE THIS STRUCTURE IS ALLOWED TO BE 2 STORIES & 25,000 SF PER FLOOR WHEN A BUILDING IS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM. THE BUILDING AREA LIMITATION IS PERMITTED TO BE INCREASED BY AN ADDITIONAL 20%.

TABLE 602: FIRE RESISTIVE RATING FOR EXTERIOR WALLS IIIB - EXTERIOR WALLS MUST BE 2 HOUR FIRE RATED (MEETS CODE SEE 721.1(2)). NO OTHER WALLS ARE NOT REQUIRED TO BE RATED IN THIS SECTION

TABLE 705.8: MAX AREA OF EXTERIOR WALL OPENING UNPROTECTED OPENINGS IN A SPRINKLERED BUILDING: 45% OPENINGS ARE ALLOWED WHEN THE WALL IS 10'-15' FROM PROPERTY LINE

721.1 (2) RATED FIRE-RESISTANCE PERIOD 5" THICK SOLID CONCRETE WILL BE USED FOR ALL EXTERIOR WALLS = 3H FIRE RATED ASSEMBLY

SECTION 903: SPRINKLER SYSTEM ESFR SPRINKLER SYSTEM

906: PORTABLE FIRE EXTINGUISHERS ONE FIRE EXTINGUISHER WILL BE PROVIDED EVERY 3K SF & WITHIN 75 FEET TRAVEL DISTANCE

907.2: MANUAL FIRE ALARMS REQUIRED

909: SMOKE CONTROL SYSTEM NONE

OCUPANT LOAD PER TABLE 1004.1.2

OCUPANT LOAD:	AREA	LOAD	WATER	LOAD
WAREHOUSE	22,866	46	1	1
MERCANTILE	3,500	117	1	1
BUSINESS	1,000	10	1	1
<b>TOTAL OCUPANT LOAD</b>		<b>173 OCC.</b>		

1006: EXIT ILLUMINATION THE STRUCTURE IS REQUIRED TO HAVE 1 FOOTCANDLE OF LIGHT AT THE WALKING SURFACE TO BE POWERED BY THE PREMISES' ELECTRICAL SUPPLY. EMERGENCY BATTERY BACKUP IS REQUIRED

1011: EXIT SIGNS REQUIRED

1014.3: COMMON PATH OF EGRESS TRAVEL 75 FEET WITH SPRINKLER SYSTEM.

TABLE 1016.2 EXIT ACCESS TRAVEL DIST. 250 FEET ALLOWED WITH SPRINKLER SYSTEM.

1203.4 NATURAL VENTILATION FOR ROOMS THAT DO NOT HAVE OPERABLE WINDOWS; A MECHANICAL VENTILATION MUST BE PROVIDED UNDER A SEPARATE MECHANICAL PERMIT

TABLE 2902.1 PLUMBING

OCUPANT LOAD:	AREA	LOAD	WATER	CLOSETS	LAVS
WAREHOUSE	22,866	46	1	1	1
MERCANTILE	3,500	117	1	1	1
BUSINESS	1,000	10	1	1	1

THREE RESTROOMS ARE REQUIRED: (1) MENS, (1) WOMENS, (1) ADA UNISEX

**SPECIAL INSPECTIONS**

- 1. EPOXY ANCORHS

**PLANNING CODE SUMMARY**

ZONE: PLANNED DEVELOPMENT INDUSTRIAL (PDI)

PARKING: FOR WHOLESALE 3 MIN / 1,000 SQUARE FEET OF BUILDING FOR 22,866 SQUARE FEET OF WHOLESALE + 1,000 SQUARE FEET OF OFFICE SPACE TO BE COUNTED AS WHOLESALE = 23,866 = 7.2 PARKING SPOTS

FOR RETAIL STORES: 4:1 PARKING SPOTS PER 1,000 SQUARE FEET OF BUILDING, THIS BUILDING WILL HAVE 3,500 SQUARE FEET OF RETAIL, SO 14.4 PARKING SPOTS

PARKING REQUIREMENT TOTAL: 7.2 + 14.4 = 21.6 PARKING SPOTS = 22 SPACES

USE: WHOLESALE AND INDUSTRIAL USE ALLOWED  
RETAIL ALLOWED WITH A MAXIMUM OF 5,000 SQUARE FEET.

LANDSCAPING: 15% OF SITE MINIMUM  
SITE IS 44,793 SQ. FT. MINIMUM LANDSCAPING REQUIRED: 7,775 SF SHOWN

BUILDING SETBACKS: 30' MINIMUM BUT APPEALS HAVE BEEN GRANTED IN THE PAST TO ALLOW 10'-0" WHICH WE ARE APPLYING FOR

TRASH AREA: 20% of the total area (27,366 SF) = 5,473 MERCANTILE AND OFFICE MAKE UP LESS THAN 20% OF THE AREA TRASH AREA CALC CAN BE BASED OFF OF WHOLESALE USE  
WAREHOUSE AREA (S1 OCCUPANCY): 22,866 SF  
MERCANTILE AREA (M OCCUPANCY): 3,500 SF  
OFFICE AREA (B OCCUPANCY): 1,000 SF

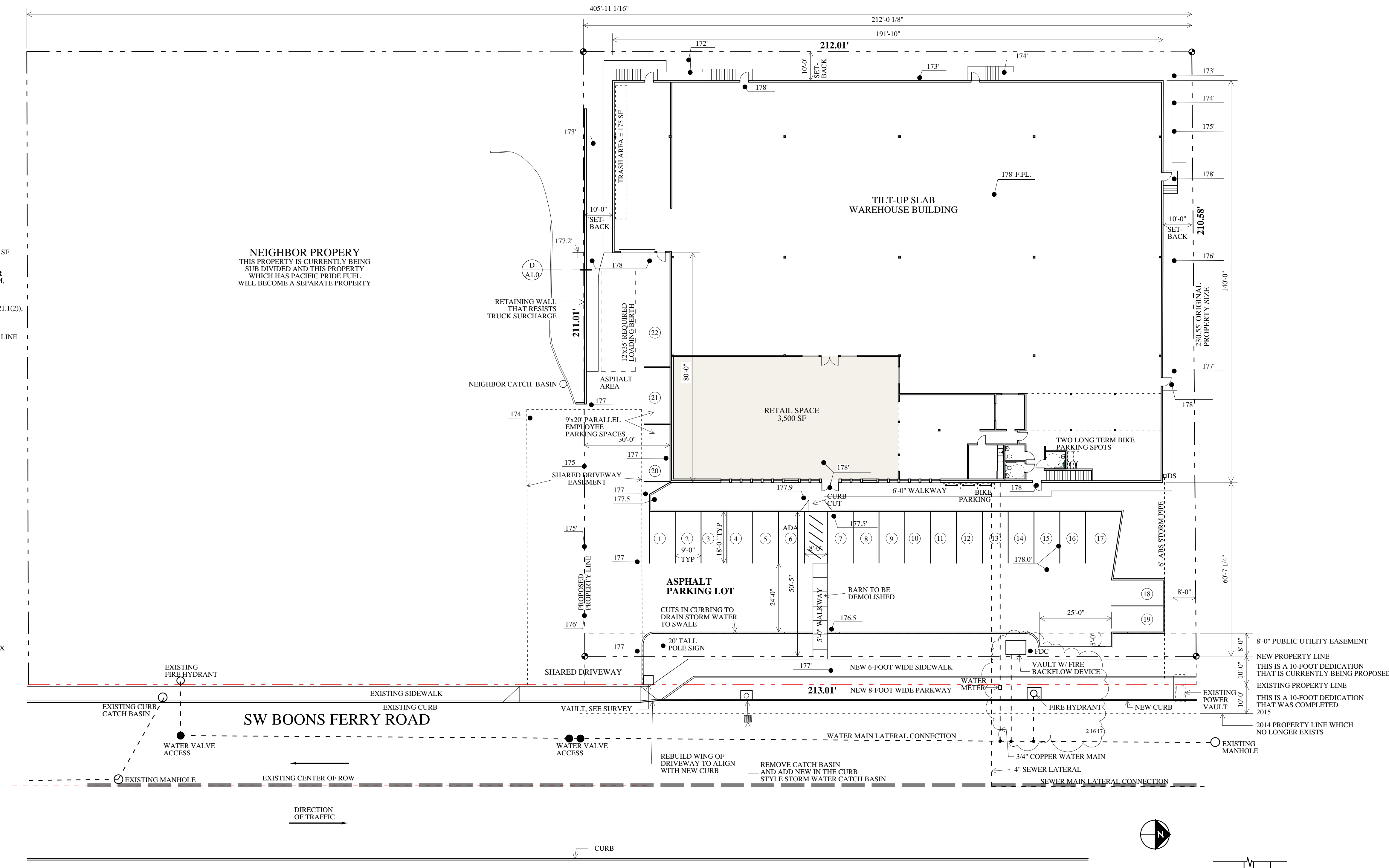
SIZE OF TRASH AREA  
27,366 SF / 1000 = 27.3  
27.3 \* 6 SF = 165 SF + 105 SF = 175 SF

IMPERVIOUS AREA:	AREA
PARKING LOT	8,650 SQUARE FEET
WALKWAYS	2,580 SQUARE FEET
BUILDING	24,766 SQUARE FEET
TOTAL	35,996 SQUARE FEET

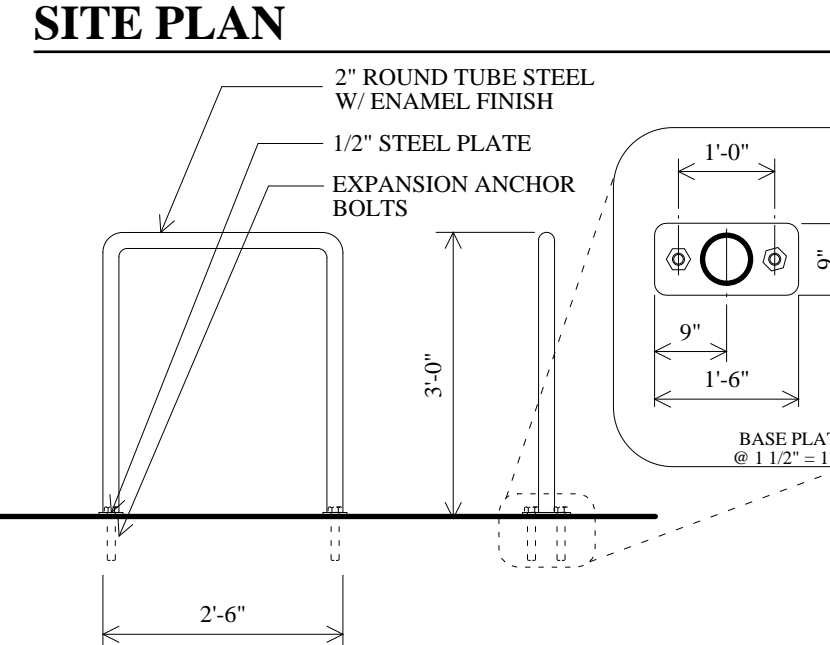
BICYCLE PARKING SPACES:  
RETAIL = 1 SPACE / 4000 SF = 3500 SF = 875 SPACE FOR RETAIL  
WHOLESALE = 1 SPACE PER 20,000 SF = 22,866 SF = 1.14 SPACES  
OFFICE = 1 SPACE PER 1,000 SF = 1.00 SPACES  
1.14 + .875 + .02 = 2.04 BICYCLE PARKING SPACES = 3 SPACES

**DEFERRED SUBMITTALS**

- MECHANICAL ENGINEERING
- ELECTRICAL ENGINEERING
- PLUMBING ENGINEERING
- FIRE SPRINKLER DESIGN

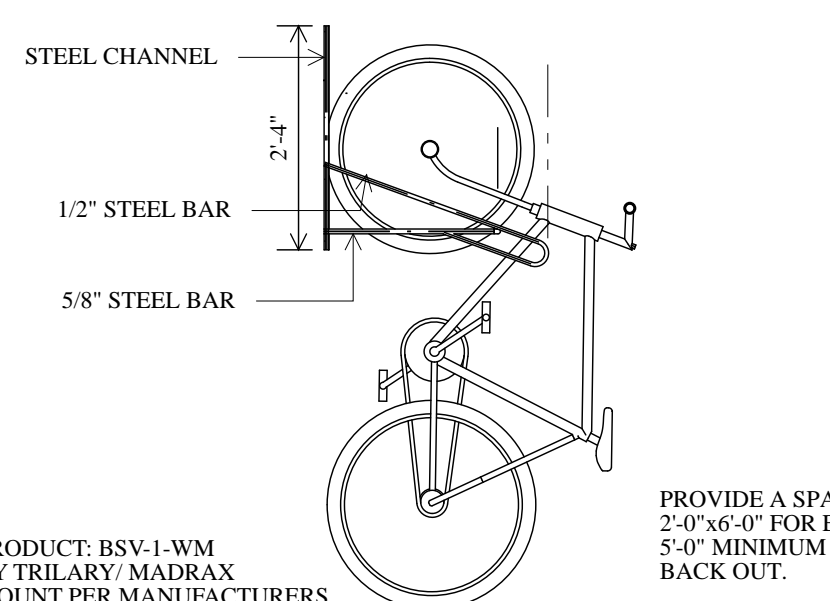


**SITE PLAN**



**A. BICYCLE PARKING**

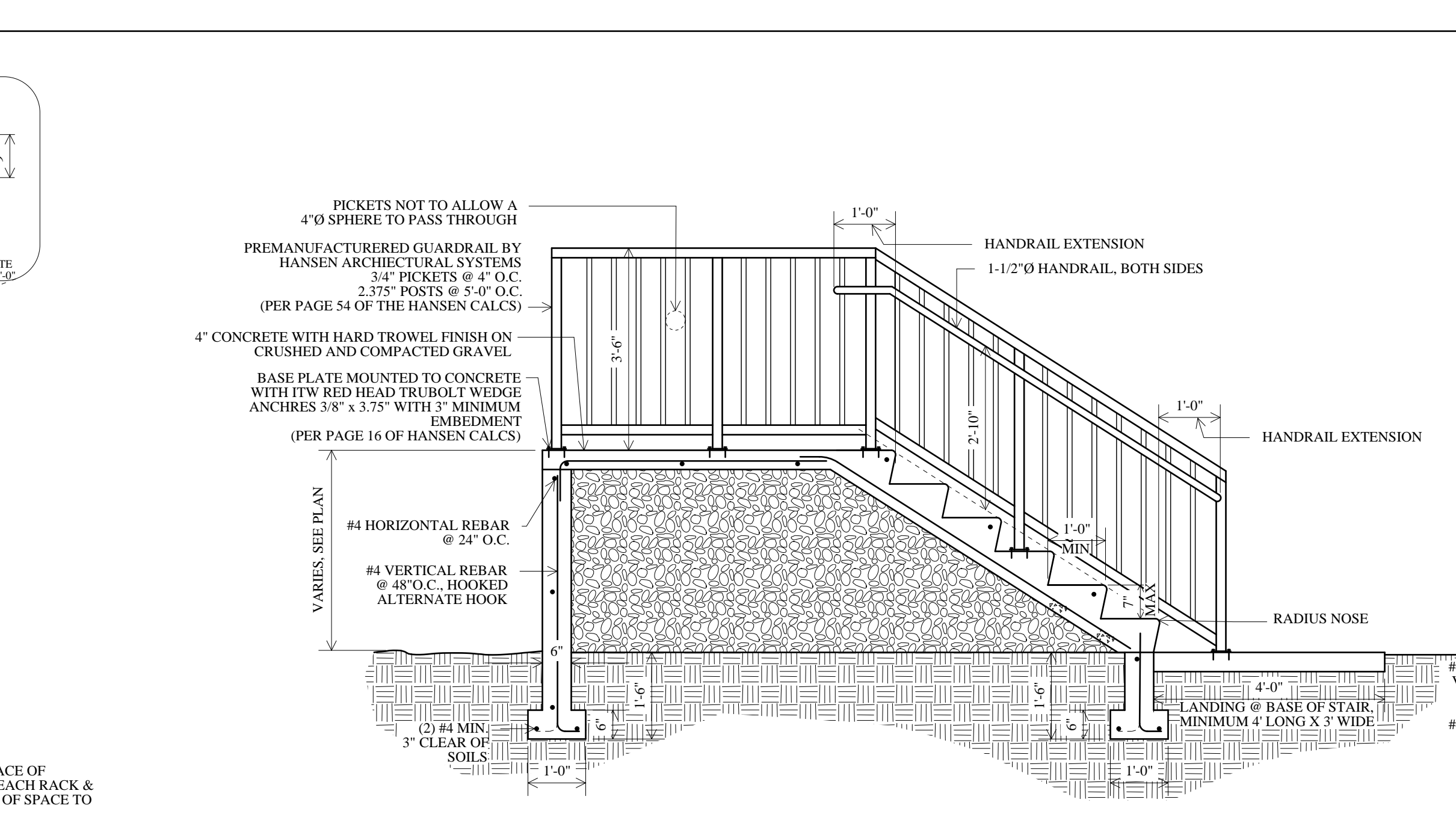
NOTE: EACH RACK HOLDS TWO BICYCLE 1/2" = 1'-0"



**B. WALL MOUNTED BIKE PARKING**

1 SPOT PER RACK 1/2" = 1'-0"

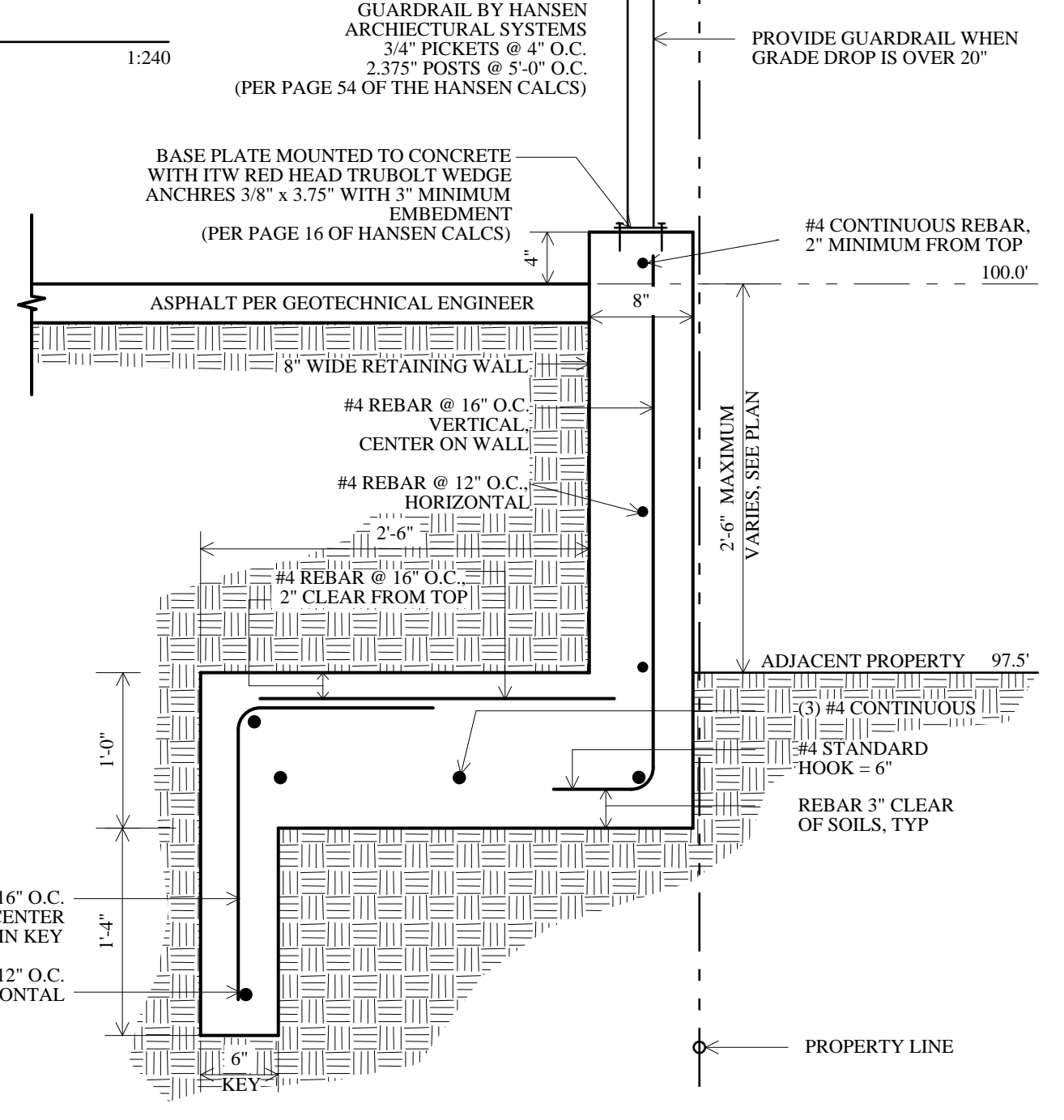
**C. EGRESS STAIR**



**C. EGRESS STAIR**

1/2" = 1'-0"

**D. RETAINING WALL @ PROPERTY LINE**



**D. RETAINING WALL @ PROPERTY LINE**

1:240

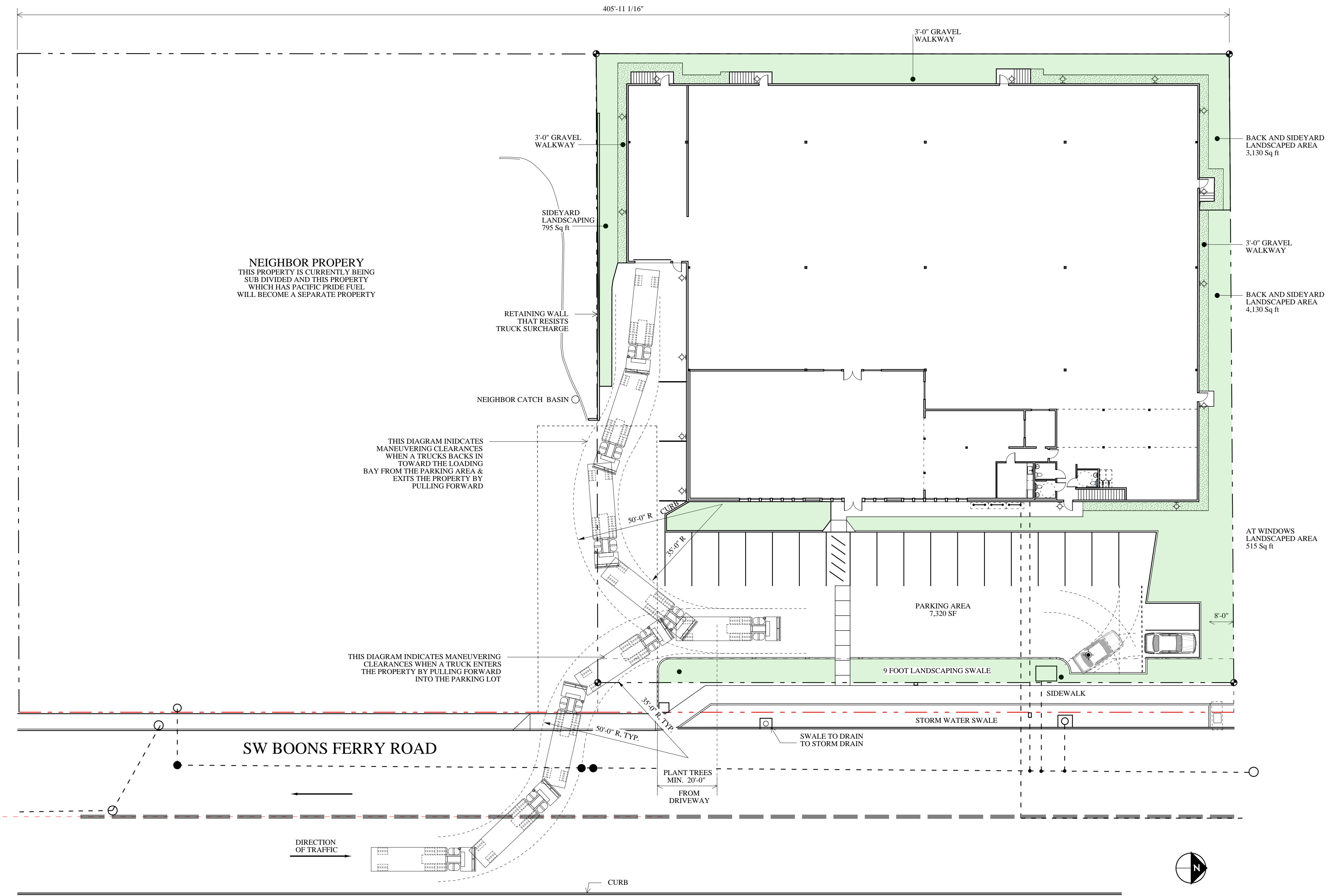
**MARIONS CARPETS WAREHOUSE**  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR

**ALLUSA**  
ARCHITECTURE

2118 SE Division Street, Portland, OR 97202  
Phone (503) 235-8885 Fax (503) 235-0835 Allusaarchitecture.com

DATE: 7 12 17  
DATE: 6 27 17  
DATE: 3 10 17  
DATE: 2 23 17



SHEET  
**A1.0**  
OF 11  
COVER  
SHEET



**TRUCK TURNING PLAN & LANDSCAPING AREAS. SEE LANDSCAPING PLANS FOR PLANTINGS**

1:240

**SITE FEATURES**

- SEE THE REFLECTED CEILING PLAN FOR EXTERIOR LIGHTING NEAR ENTRY.
- 
 SCONCE DIRECTED AT WALKING SURFACE SWITCHED WITH A PHOTOVOLTAIC SENSOR  
 LITHONIA: CSXW LED 30C 1000 40K  
 T2M MVOLT DBLXD
  - 
 BOLLARD LIGHT DIRECTED AT WALKING SURFACE WITH A PHOTOVOLTAIC SENSOR  
 LITHONIA: MBX 32TRT MVOLT  
 H30 DBLB LPI

DATE: 8 10 21 17  
 DATE: 8 27 17  
 DATE: 3 10 17

DATE: 2 23 17

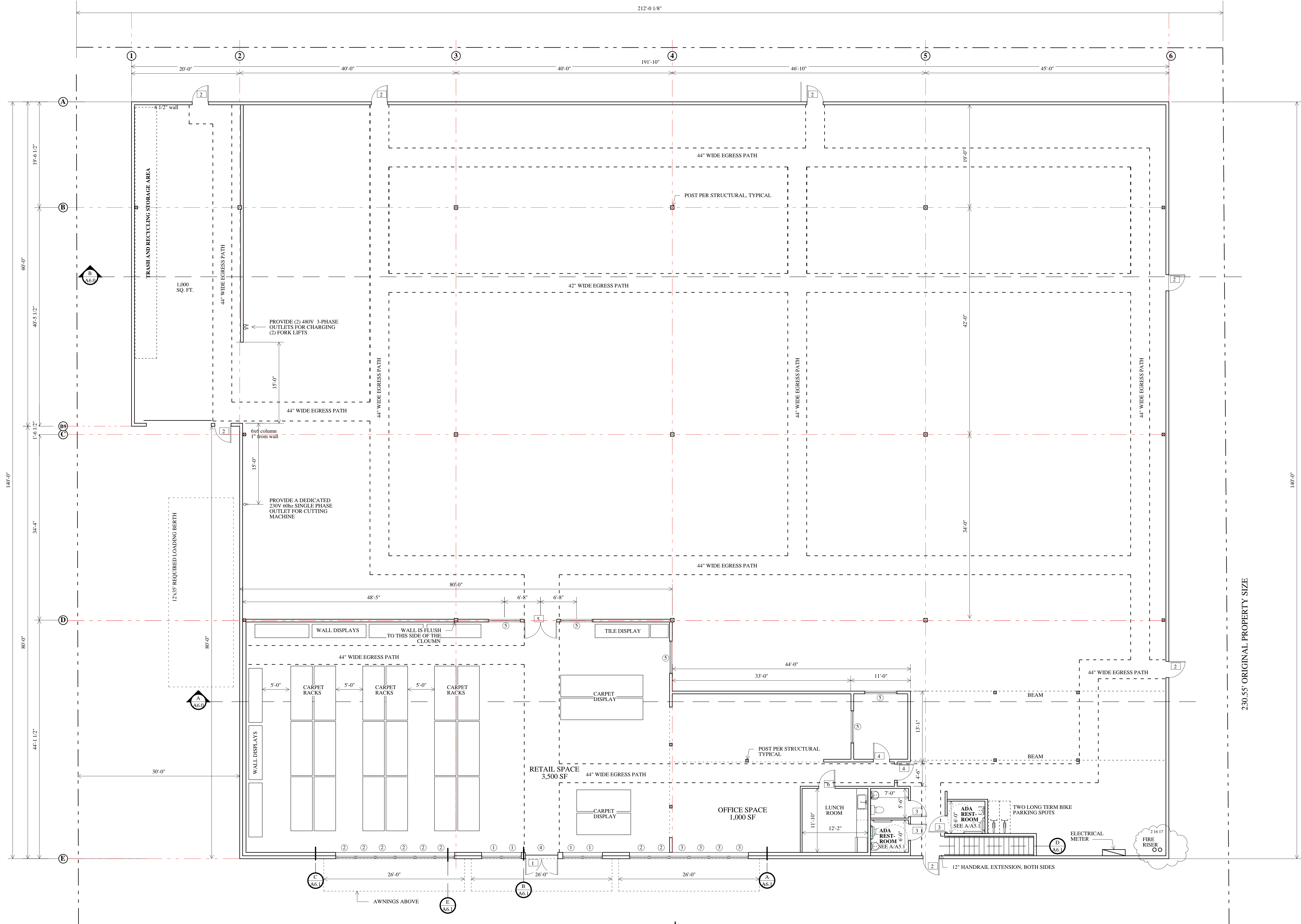
SHEET  
**A1.1**  
 OF 11  
 TRUCK  
 TURNING



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**FIRST FLOOR PLAN**

**WINDOW SCHEDULE**

- SEE ELEVATIONS
- ① 3'-8" WIDE X 5'-6" TALL (LOWER WINDOW)
  - ② 3'-8" WIDE X 3'-8" TALL (UPPER WINDOW)
  - ③ 3'-0" WIDE X 5'-6" TALL (LOWER WINDOW)
  - ④ 6'-0" WIDE X 4'-4" TALL (UPPER WINDOW)
  - ⑤ 6'-0" WIDE X 4'-0" TALL FIXED WINDOW

**STOREFRONT WINDOWS:**

- KAWNEER TRIFAB VG 450  
COLOR: BLACK
- ③ 3'-0" WIDE X 5'-6" TALL (LOWER WINDOW)
  - ④ 6'-0" WIDE X 4'-4" TALL (UPPER WINDOW)
  - ⑤ 6'-0" WIDE X 4'-0" TALL (UPPER WINDOW)

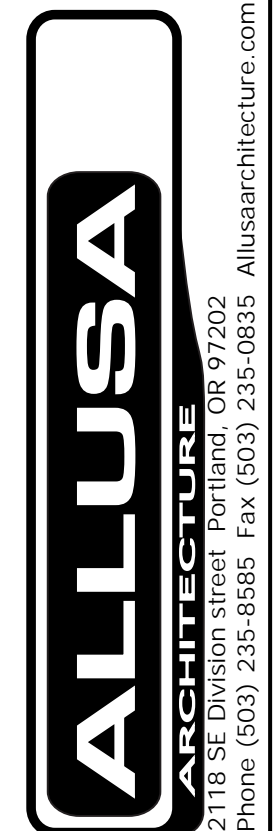
**DOOR SCHEDULE**

- ① (2) 3'-0" X 7'-0" ENTRY DOOR WITH TEMPERED GLAZING WITH LOCK & A KEYPAD DEADBOLT AT THE FLOOR. SEE DETAIL E/A5.1. THRESHOLD NOT TO EXCEED 1/2". PROVIDE SIGN THAT STATES "THIS DOOR IS TO REMAIN UNLOCKED DURING BUSINESS HOURS"
- ② 3'-0" X 7'-0" INSULATED STEEL DOOR WITH LOCK & A KEYPAD DEADBOLT THAT UNLOCKS FROM THE INSIDE UPON EXITING WITHOUT A KEY. THRESHOLD NOT TO EXCEED 1/2". SEE DETAIL E/A5.1
- ③ 3'-0" X 7'-0" RESTROOM DOOR. DOOR TO BE OPENABLE FROM THE INSIDE WITH ONE OPERATION AND WITHOUT ANY SPECIAL EFFORT. USE DEADBOLT W/ LEVER ON INSIDE AND OCCUPIED/VACANT INDICATOR ON OUTSIDE. THRESHOLD NOT TO EXCEED 1/2". SEE DETAIL E/A5.1
- ④ 3'-0" X 7'-0" DOOR WITH CLASSROOM LOCK. SEE DETAIL E/A5.1
- ⑤ (2) 3'-0" X 7'-0" DOOR. SEE DETAIL E/A5.1
- ⑥ 3'-0" X 7'-0" DOOR WITH NO LOCK. SEE DETAIL E/A5.1

230.55' ORIGINAL PROPERTY SIZE

1/8" = 1'-0"

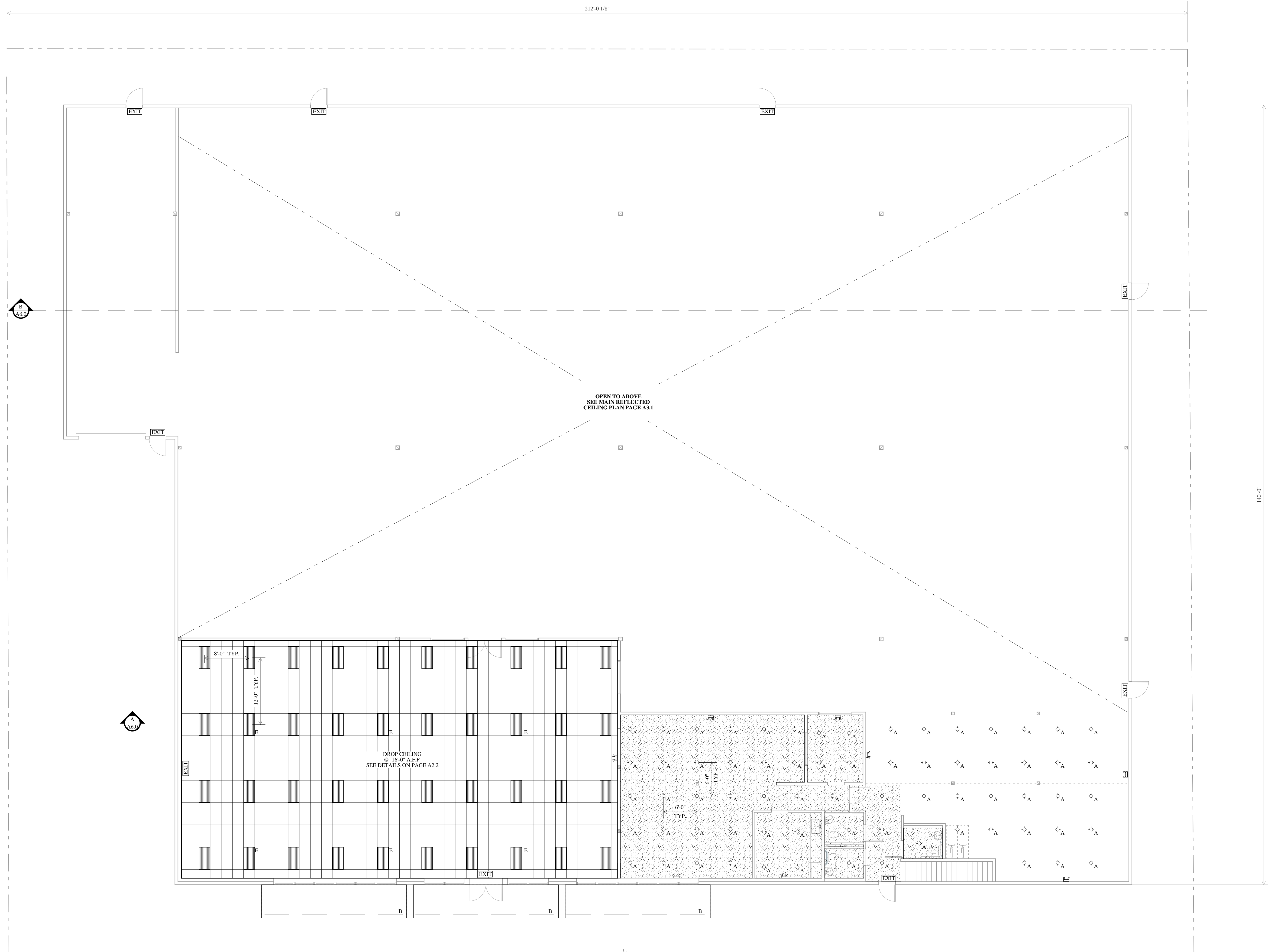
**MARIONS CARPETS WAREHOUSE**  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR



DATE: 7 12 17  
DATE: 6 27 17  
DATE: 3 10 17

SHEET  
**A2.0**  
OF 11  
1ST FLOOR PLAN

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**REFLECTED CEILING PLAN (LOWER CEILINGS)**

**LIGHTING SCHEDULE**

- ◊ A INDOOR CAN LIGHT
- B OUTDOOR STRIP LIGHT
- ◊ C CHANDELIER
- ▨ 2'X4' LED TROFFER  
LITHONIA  
LITH-0248  
4,000 KELVIN

- E = EMERGENCY LIGHTING FIXTURE WITH BATTERY BACK-UP TO MAINTAIN ONE FOOT-CANDLE OF ILLUMINATION FOR 90 MINUTES DURING A POWER OUTAGE
- EL = LITHONIA ELM2 EMERGENCY LIGHTING FIXTURE WITH BATTERY BACK-UP TO MAINTAIN ONE FOOT-CANDLE OF ILLUMINATION FOR 90 MINUTES DURING A POWER OUTAGE

- [EXIT] ILLUMINATED EXIT SIGNAGE WITH LETTERS MIN. 6" TALL & A 3/4" STROKE ON A HIGH CONTRAST BACKGROUND PER CODE: QSSC 1011.1. 30/90 MINUTE BATTERY BACK-UP POWER & ILLUMINATION FOR EGRESS

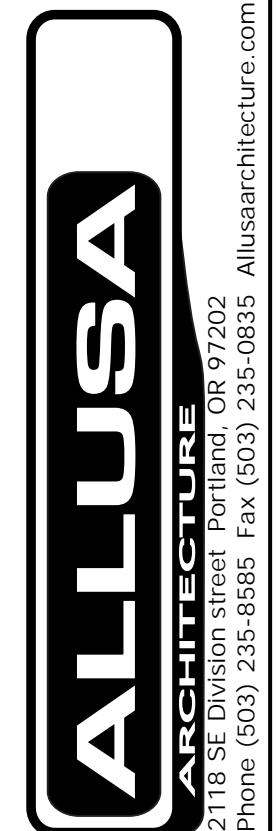
1/8" = 1'-0"

DATE: 7 12 17  
DATE: 6 27 17  
DATE: 3 10 17

DATE: 2 23 17

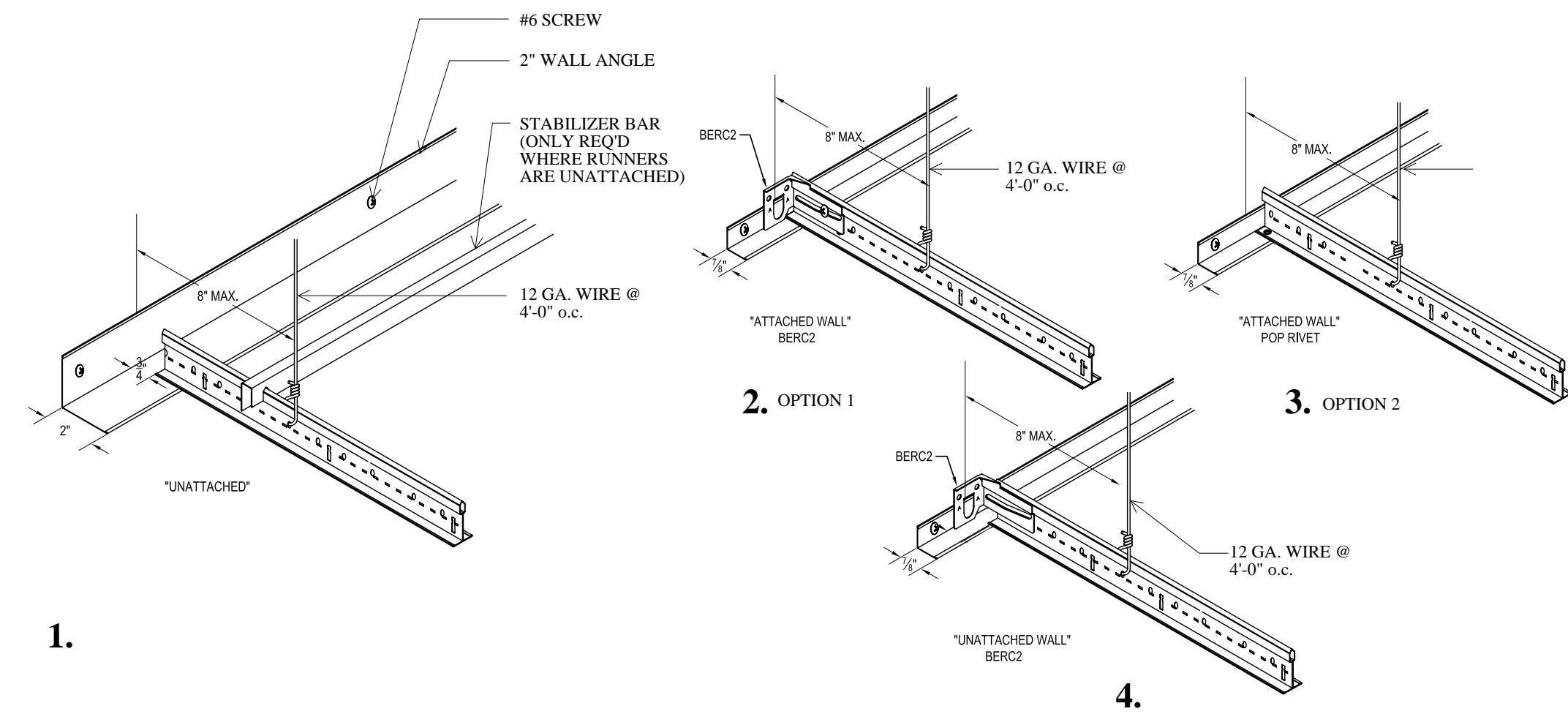
**SHEET**  
**A2.1**  
OF 11

REFLECTED  
CEILING  
PLAN - LOWER

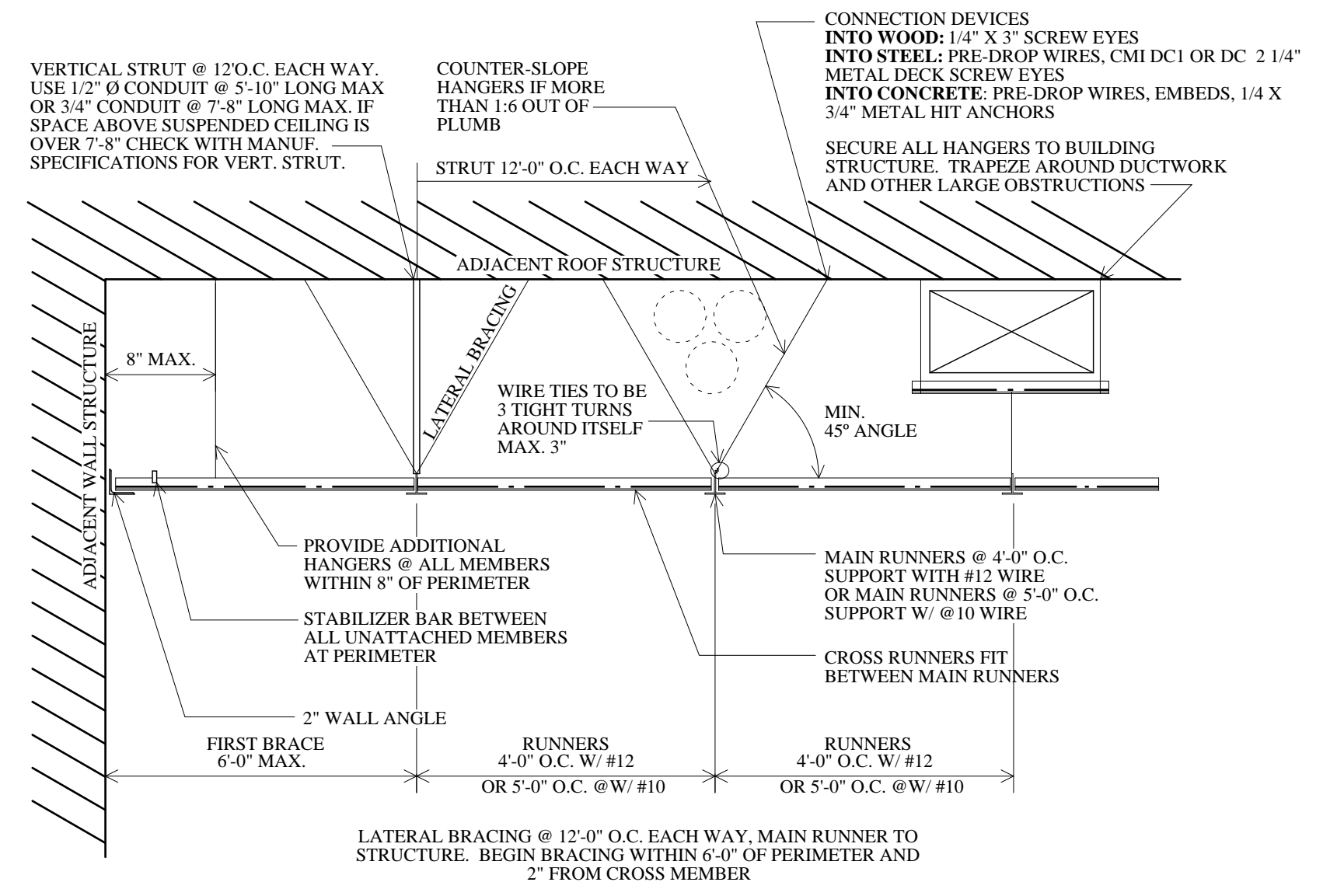


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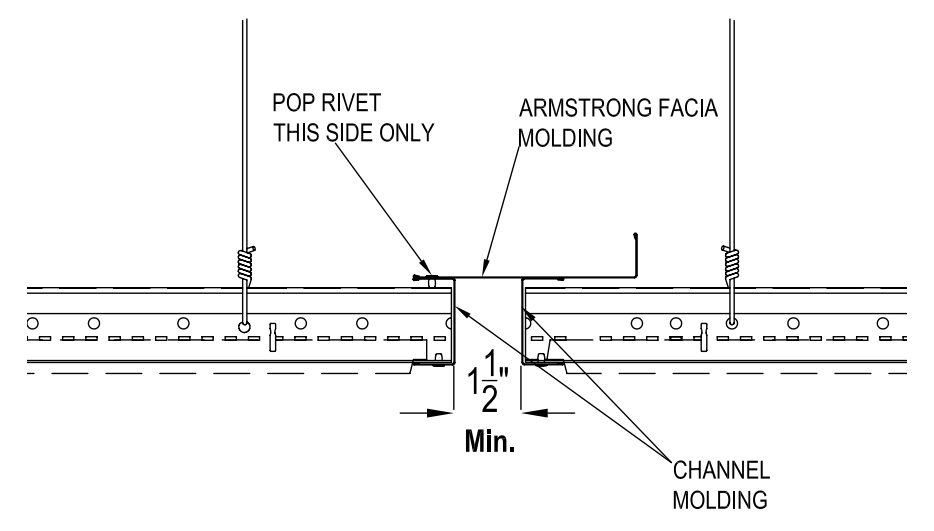
**MARIONS CARPETS WAREHOUSE**  
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**A. CEILING GRID DETAILS @ ATTACHED & UNATTACHED ENDS**



**B. TYPICAL LATERAL BRACING FOR SUSPENDED CEILING**



IF THE CEILING IS OVER 2,500 S.F., PROVIDE SEISMIC SEPARATION JOINTS TO DIVIDE THE CEILING INTO AREAS LESS THAN 2,500 S.F. & ALLOW 2" MIN. LATERAL MOVEMENT & 1" MOVEMENT FOR THE PORTIONS OF CEILING LOCATED ON EITHER SIDE OF THE SEPARATION JOINT. EACH 2,500 S.F. CEILING IS TO BE ATTACHED TO A 2" ANGLE ON TWO ADJACENT SIDES.

**C. SEISMIC SEPARATION JOINT**

DATE: 7 12 17  
DATE: 6 27 17  
DATE: 3 10 17  
DATE: 2 23 17

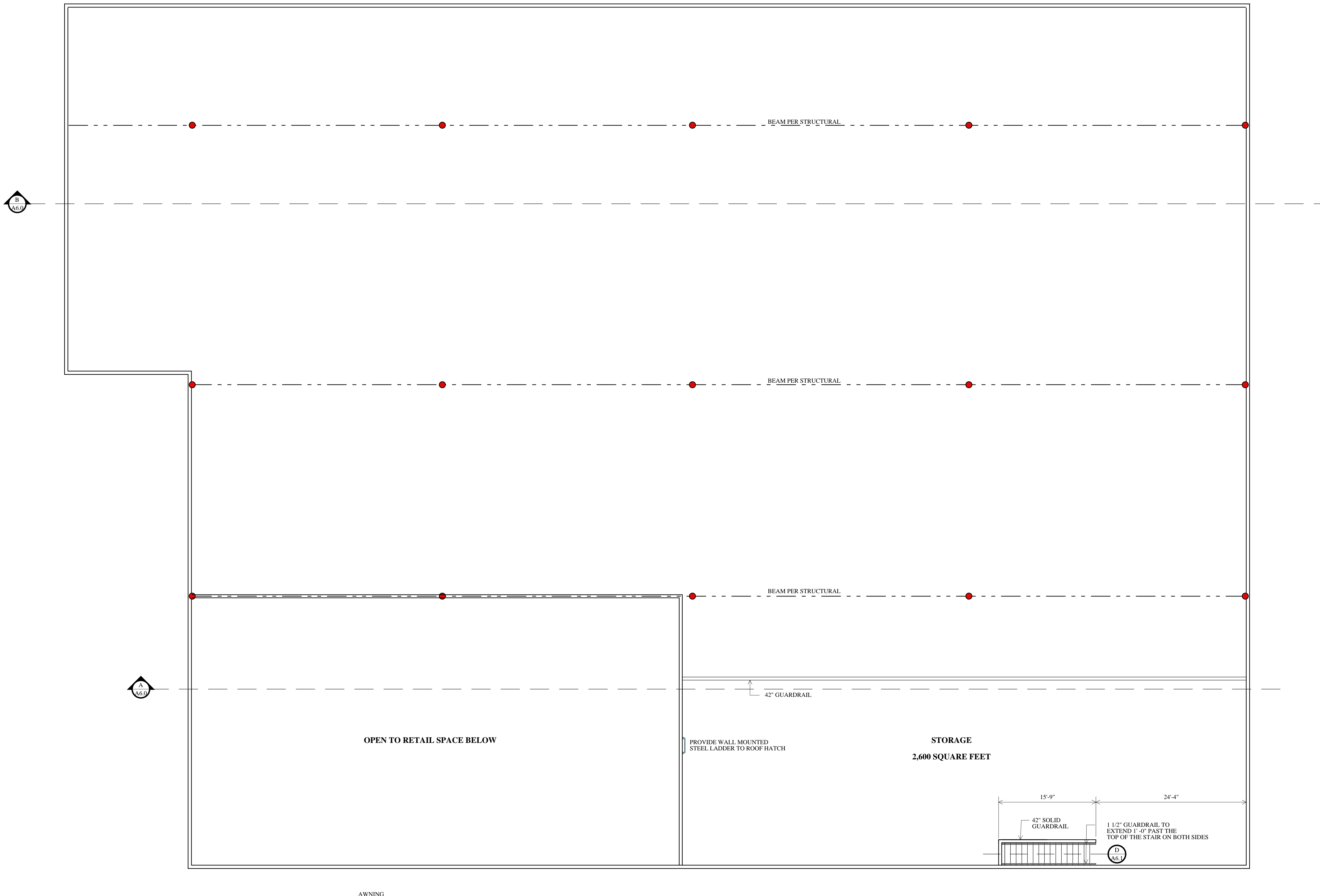


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SHEET  
**A2.2**  
OF 11  
CEILING  
GRID  
DETAILS

N.T.S.

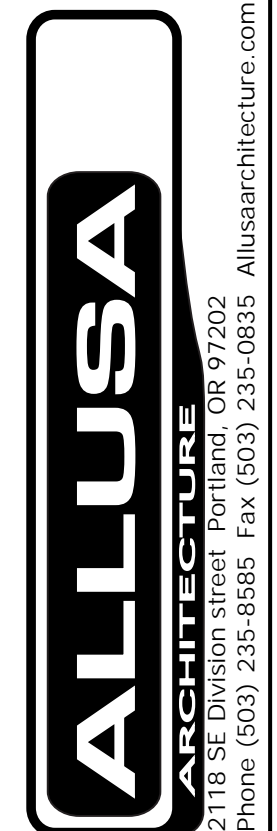


**SECOND FLOOR PLAN**

1/4" = 1'-0"

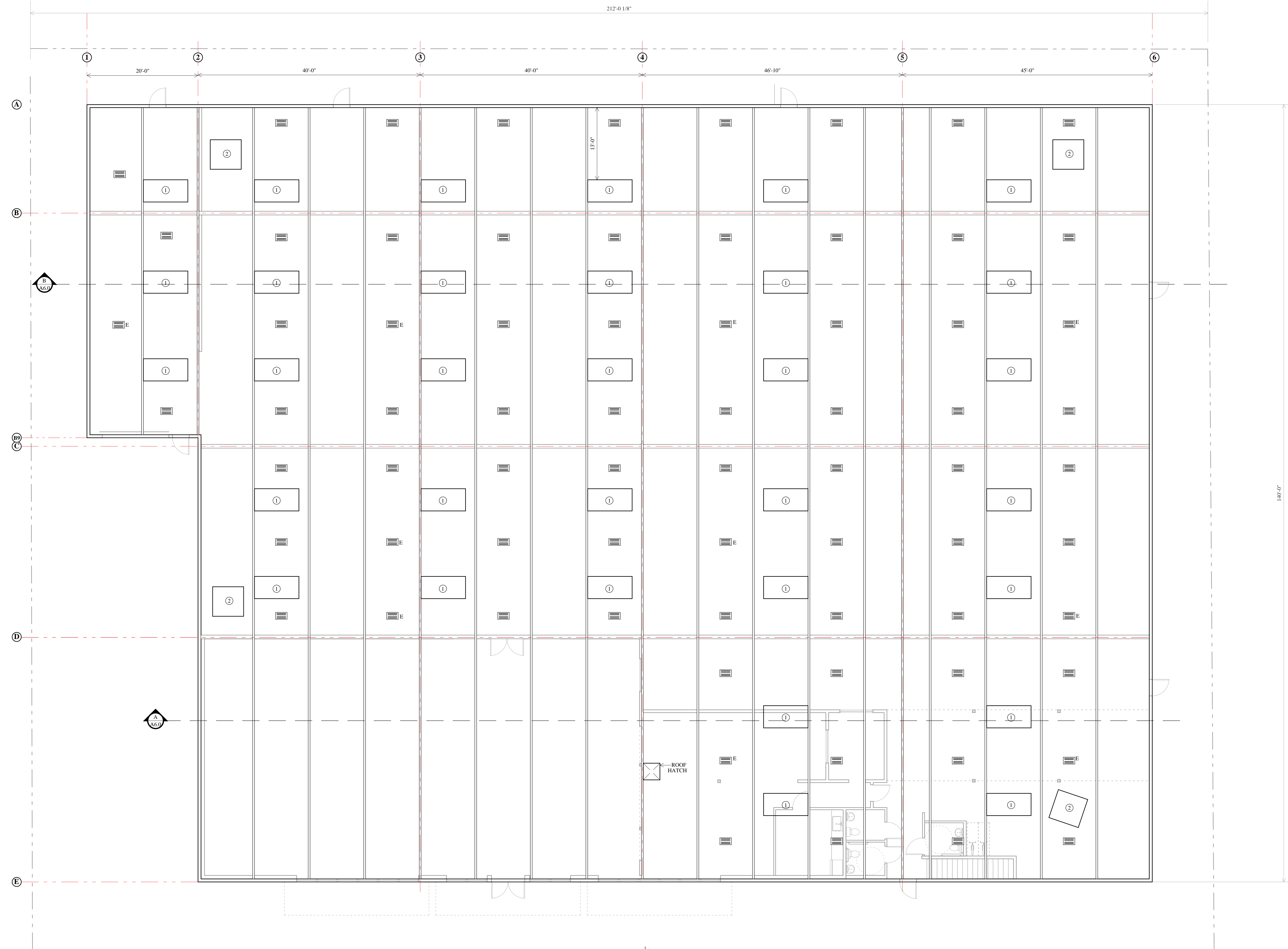
DATE: 7 12 17  
 DATE: 6 27 17  
 DATE: 3 10 17

SHEET  
**A3.0**  
 OF 11  
 2ND FLOOR  
 PLAN



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MARIONS CARPETS WAREHOUSE  
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**NOTES**

- ① SKYLIGHTS:  
ARCHITECTURAL SPECIALTIES  
48" X 96"  
MODEL NUMBER DDCM-5201
- ② 199,000 BTU GAS FURNACE SUSPENDED  
FROM CEILING. OPERATED WITH MANUAL  
TURN 60 MINUTE TIMER ACCESS @  
FIRST FLOOR LEVEL UNDER FURNACE

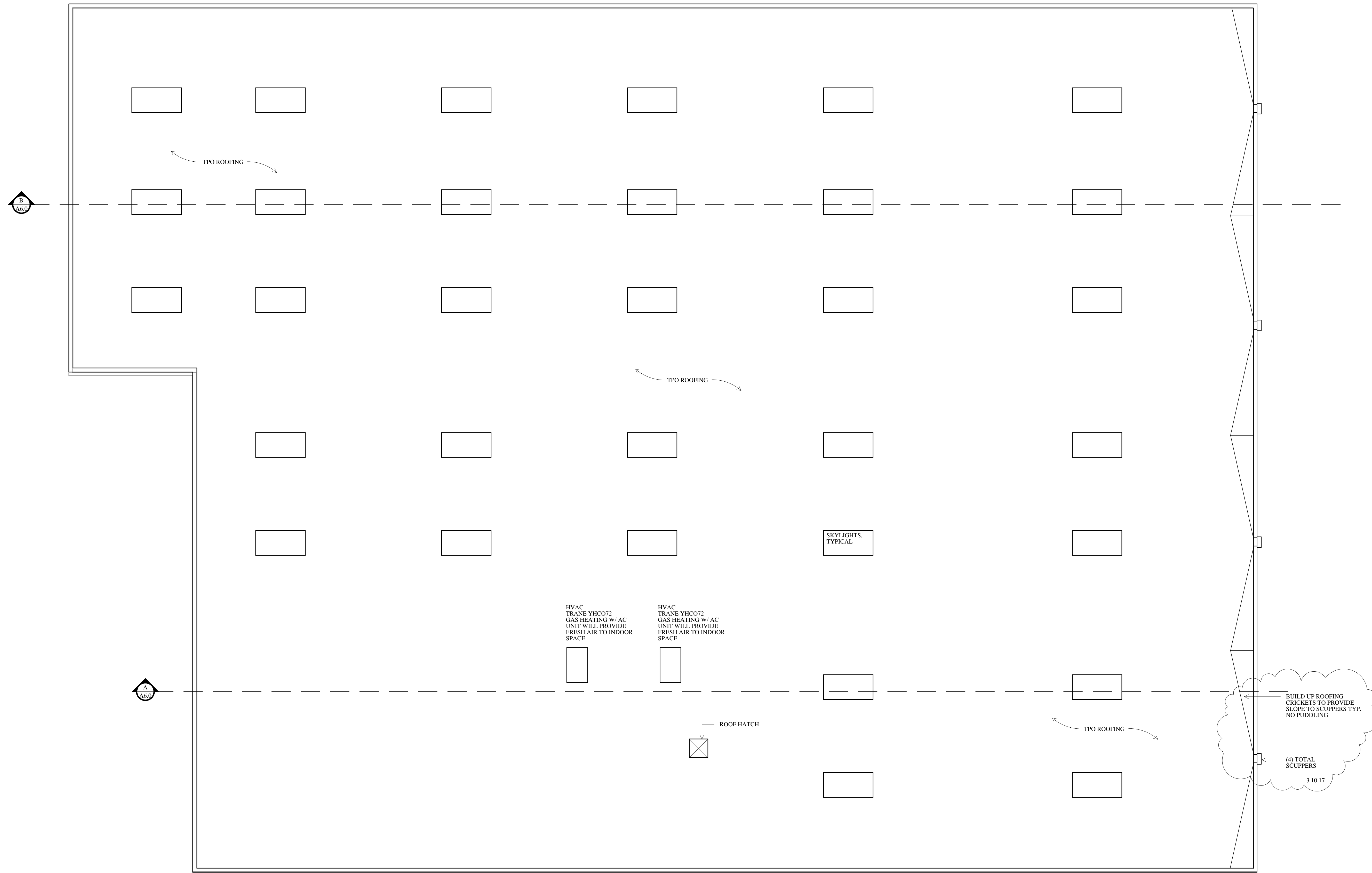
- LIGHTS:  
LITHONIA IBC HIGH BAY (LED LIGHT)  
IBG12000 (LUMEN) HEF LLENS GND 120VOLT OZ10 50KELVIN
- E = EMERGENCY LIGHTING FIXTURE WITH BATTERY  
BACK-UP TO MAINTAIN ONE FOOT-CANDLE OF  
ILLUMINATION FOR 90 MINUTES DURING A POWER OUTAGE

DATE: 7 12 17  
DATE: 6 27 17  
DATE: 3 10 17



MARIONS CARPETS WAREHOUSE  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR

SHEET  
**A3.1**  
OF 11  
REFLECTED  
CEILING PLAN  
MAIN CEILING



**ROOF PLAN**

1/4" = 1'-0"

DATE: 7 12 17  
 DATE: 6 27 17  
 DATE: 3 10 17

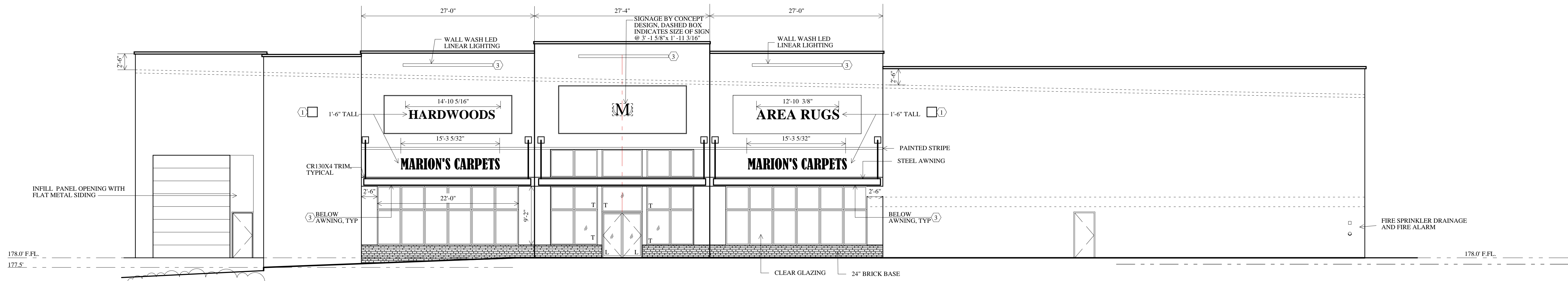


MARIONS CARPETS WAREHOUSE  
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SHEET  
**A4.0**  
 OF 11  
 ROOF PLAN

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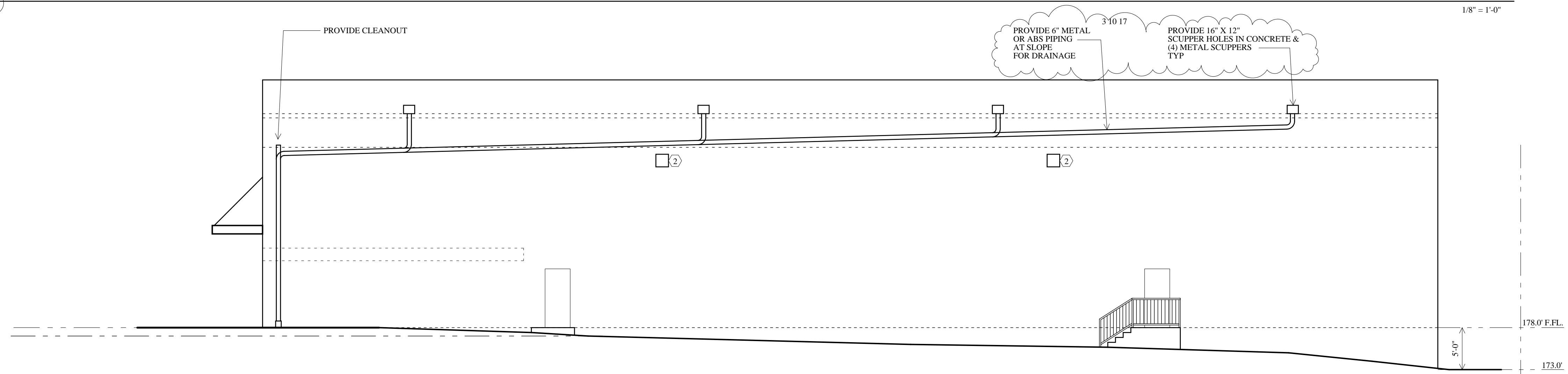
3 10 17



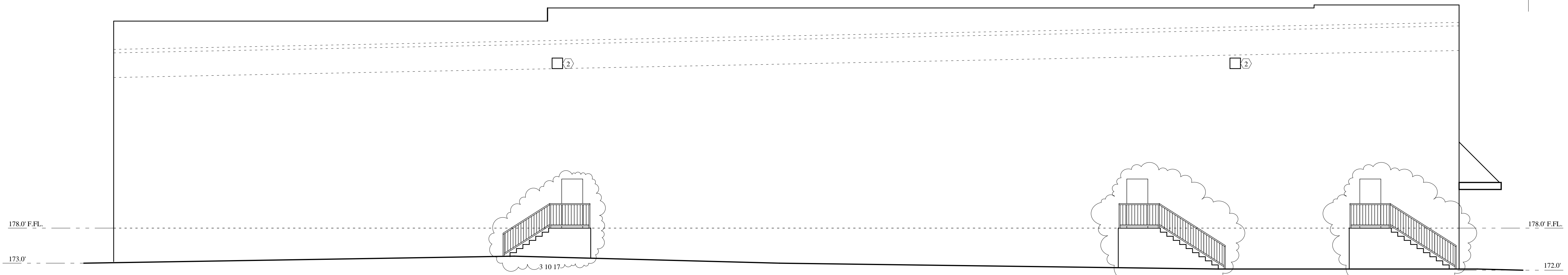
**EAST ELEVATION**  
 T = TEMPERED GLAZING  
 L = LAMINATED GLAZING  
 6 13 17

**LIGHTING FIXTURES**

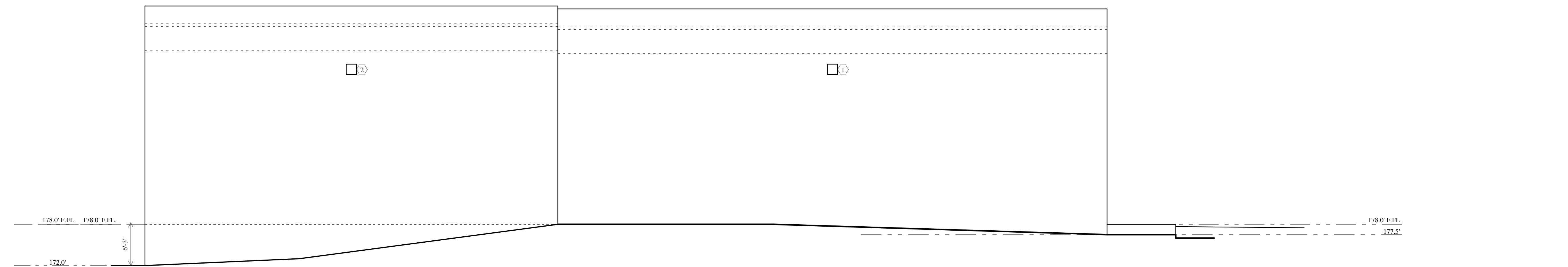
- ① ATLAS - WPM43LED 43 WATT LED WALL PAK  
24\"/>
- ② ATLAS - WPM27LED 27 WATT LED WALL PAK  
24\"/>
- ③ PHILIPS COLOR KINETICS 350-000011-10  
VAYA LINEAR MP  
CONTROLLED WITH A TIMER



**NORTH ELEVATION**



**WEST ELEVATION**



**SOUTH ELEVATION**

**MARIONS CARPETS WAREHOUSE**  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR

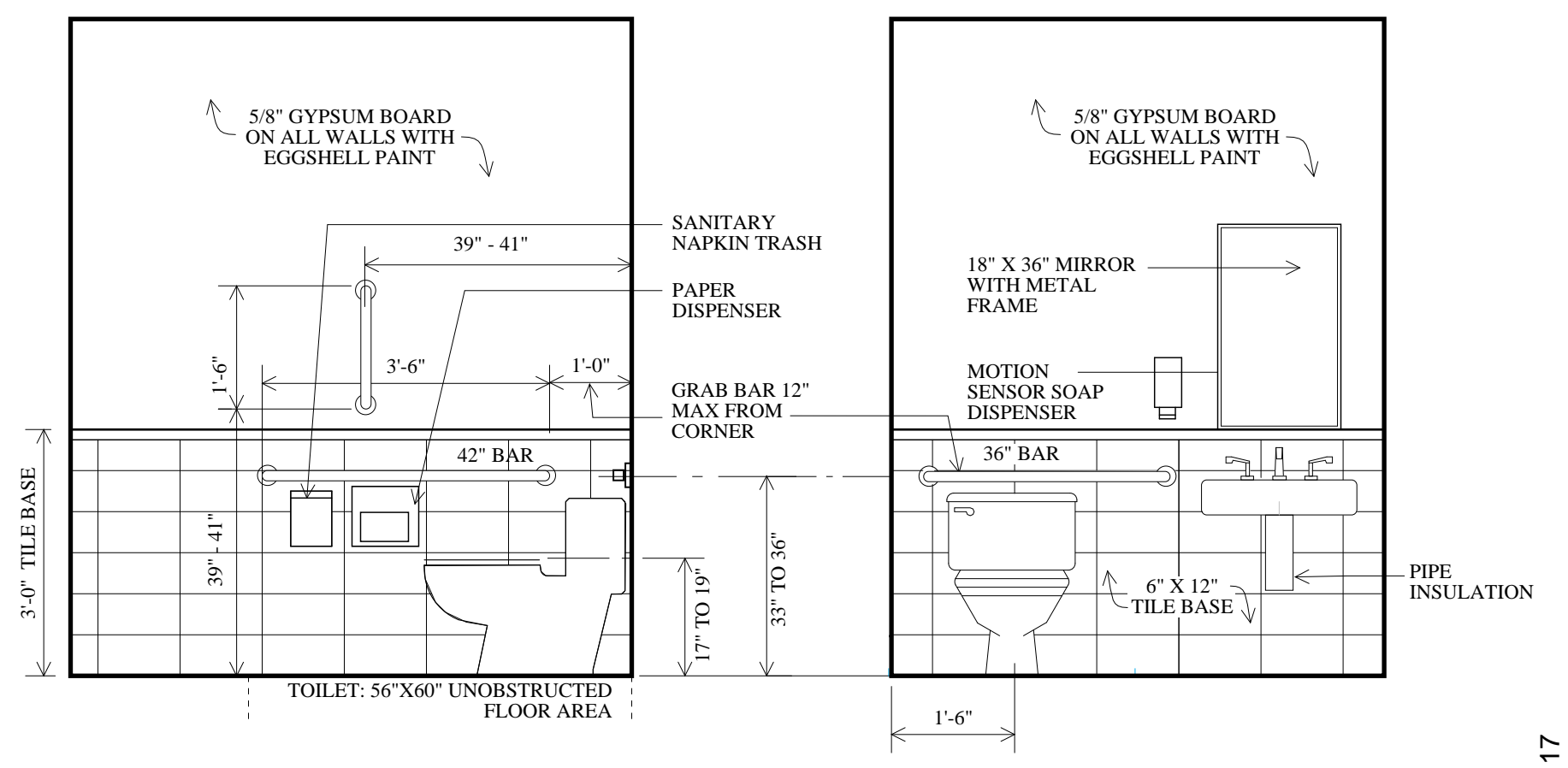
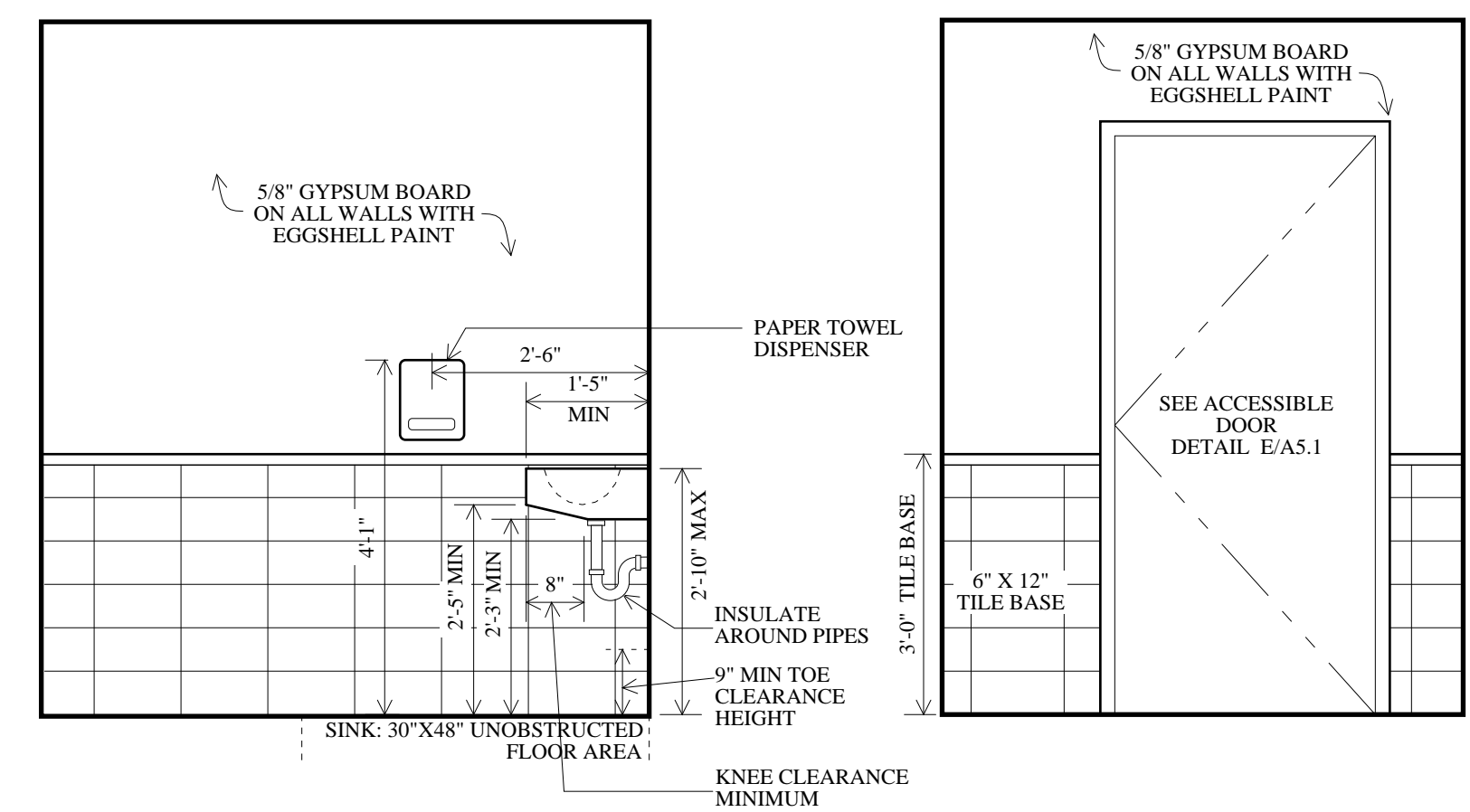
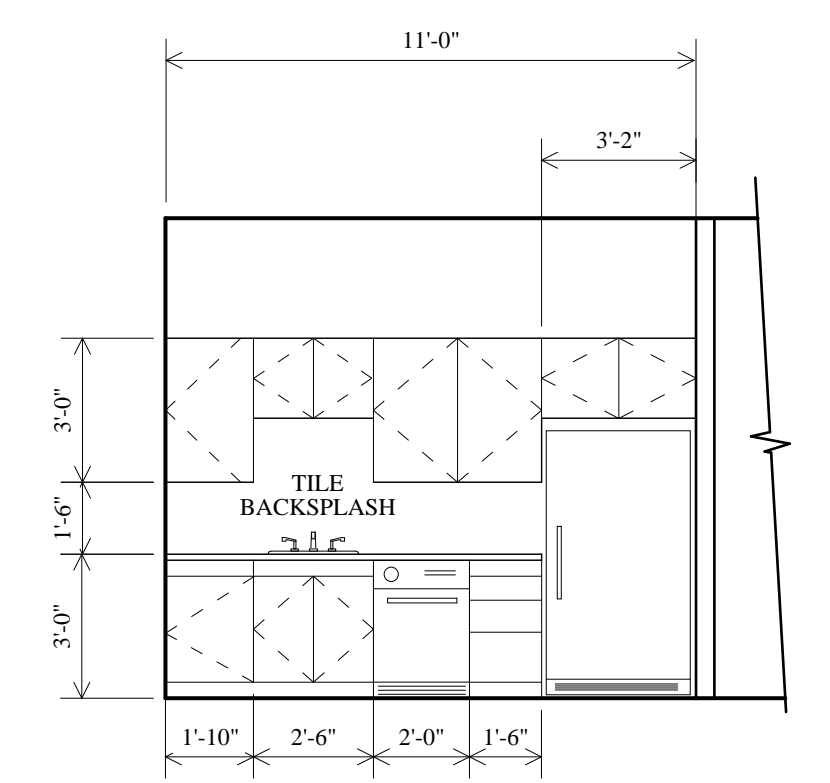
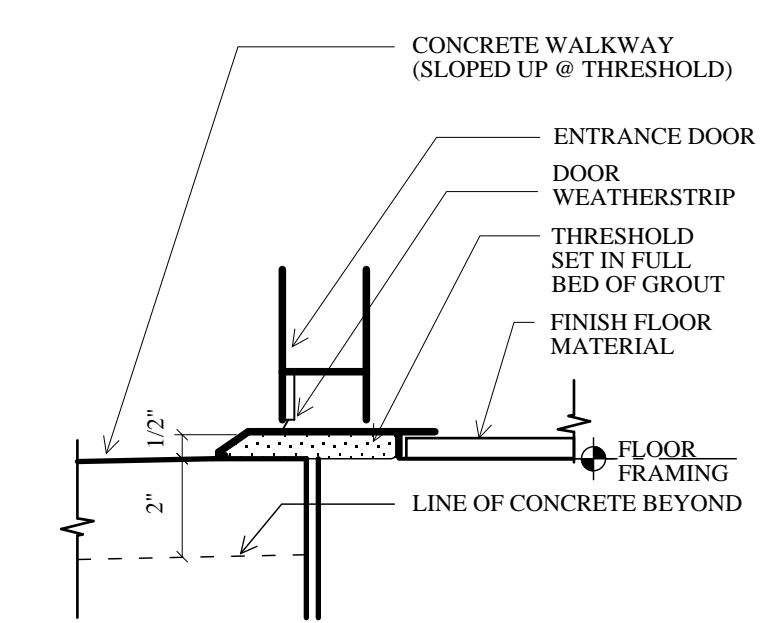
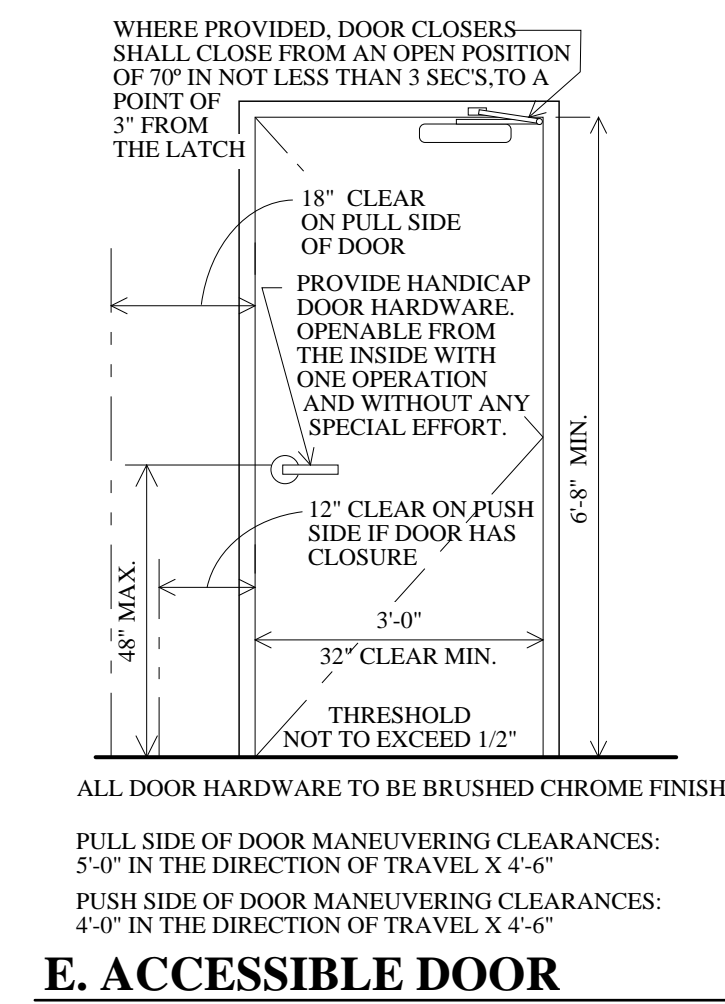


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DATE: 7 12 17  
 DATE: 6 27 17  
 DATE: 3 10 17  
 DATE: 2 23 17

SHEET  
**A5.0**  
 OF 11  
 ELEVATIONS

1/8" = 1'-0"



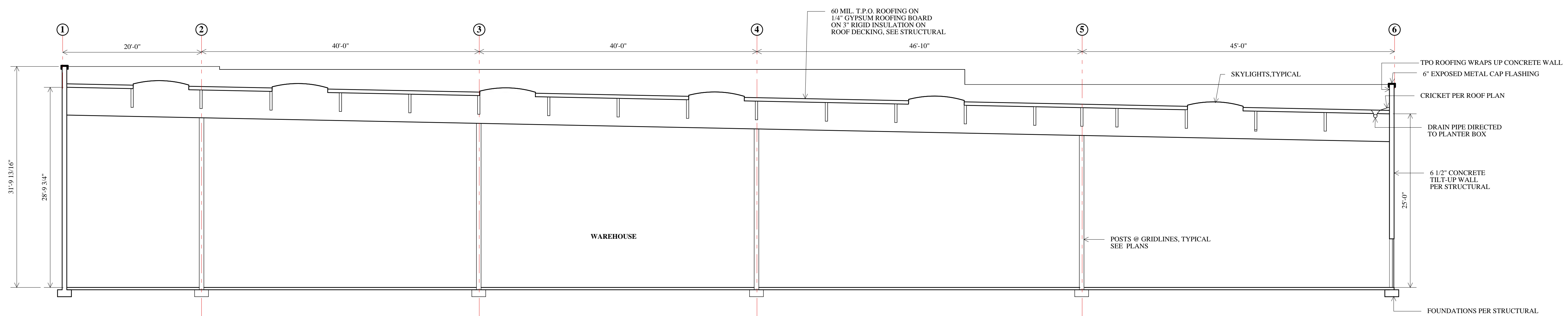
A. COMMERCIAL ACCESSIBLE RESTROOM

D. DOOR THRESHOLD

C. LUNCH ROOM

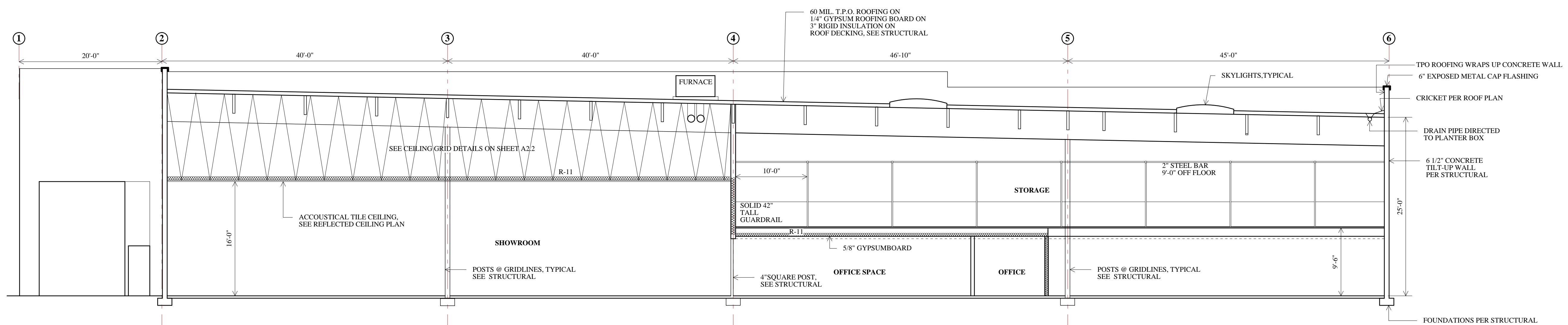
E. ACCESSIBLE DOOR





**A SECTION**

1/8" = 1'-0"



**B SECTION**

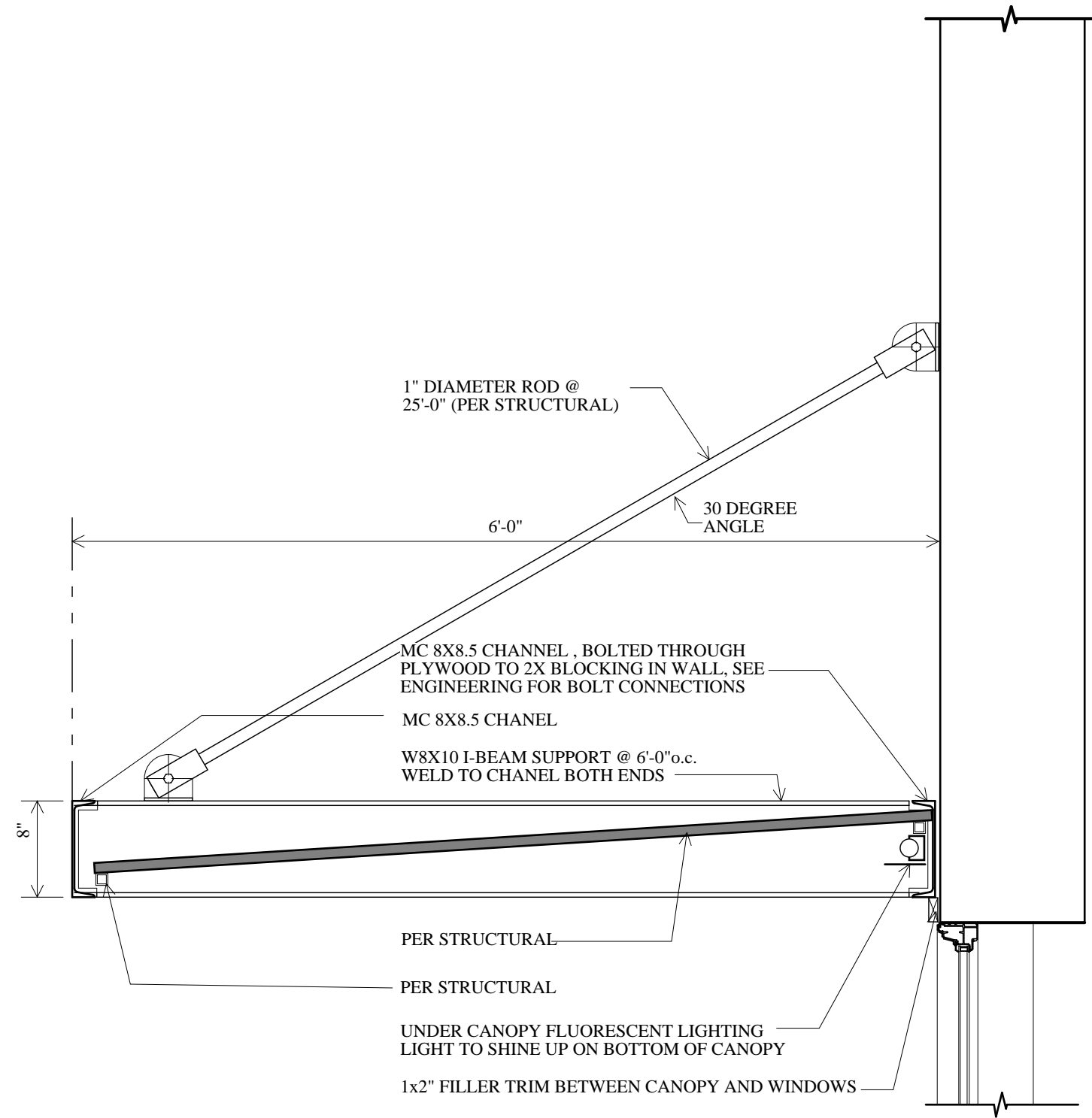
1/8" = 1'-0"

MARIONS CARPETS WAREHOUSE  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR

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ARCHITECTURE  
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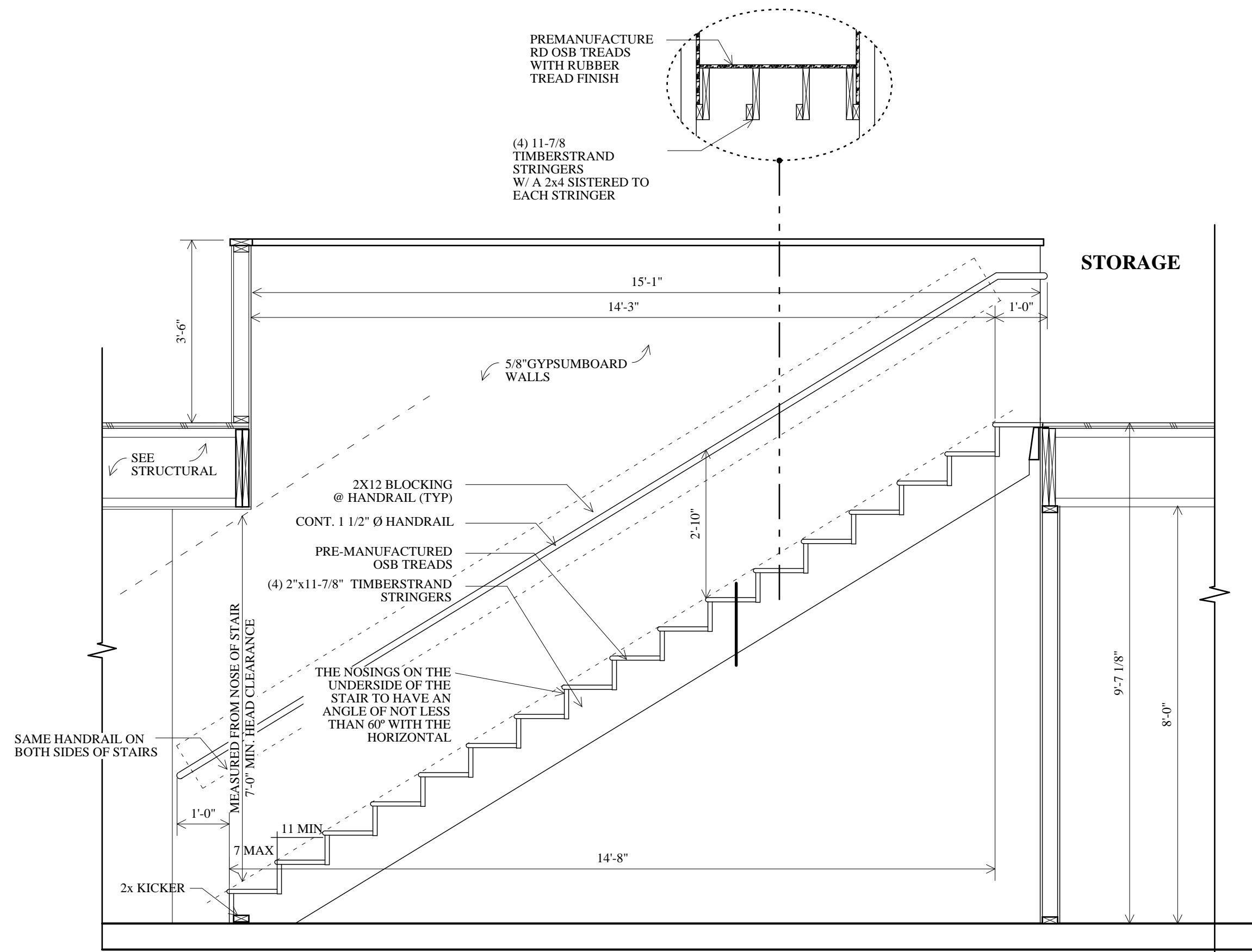
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DATE: 3 10 17

SHEET  
**A6.0**  
OF 11  
SECTION



**E. AWNING DETAIL**  
SEE ENGINEERING FOR WELDING

1" = 1'-0"



**D. STAIR SECTION**

1/2" = 1'-0"

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DATE: 6 27 17  
DATE: 3 10 17

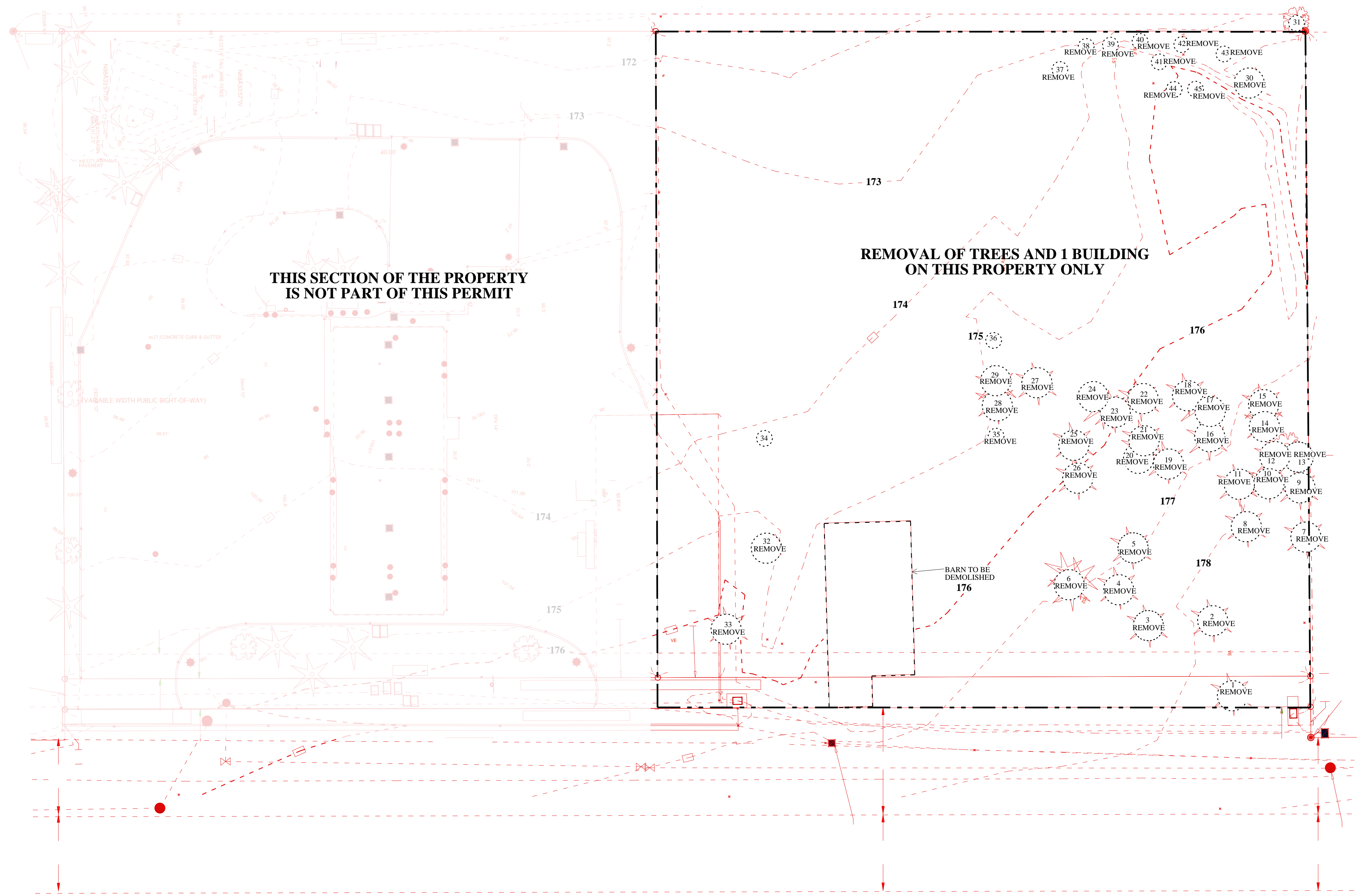
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SHEET  
**A6.1**  
OF 11  
SECTIONS/  
DETAILS



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MARIONS CARPETS WAREHOUSE  
28855 SW BOONS FERRY ROAD WILSONVILLE, OR



**TREE REMOVAL PLAN**

No.	Common Name	Species Name	DBH1	C-Rad2	Cond3	Comments	Treatment	
1	Douglas-fir	Pseudotsuga menziesii	30	22	G	remove	remove	
2	Douglas-fir	Pseudotsuga menziesii	35	22	G	dominant tree, some asymmetry, re-assess suitability for preservation at time of clearing	remove	
3	Douglas-fir	Pseudotsuga menziesii	22	18	P	suppressed, very one-sided to E, sweep in upper trunk, poor structure	remove	
4	Douglas-fir	Pseudotsuga menziesii	42	22	G	intermediate crown class, relatively small and high live crown	remove	
5	Douglas-fir	Pseudotsuga menziesii	22	16	F		remove	
6	Douglas-fir	Pseudotsuga menziesii	*24,26,	28,38*	25	F	codominant stems just above ground level, moderate structure	remove
7	western redcedar	Thuja plicata	16	14	G	moderate structure; re-assess suitability for preservation at time of clearing	remove	
8	Douglas-fir	Pseudotsuga menziesii	40	18	G	crown asymmetry, epicormics sprouts on west face; re-assess suitability for preservation at time of clearing	remove	
9	western redcedar	Thuja plicata	26	14	G	moderate structure, crook in upper trunk; re-assess suitability for preservation at time of clearing	remove	
10	Douglas-fir	Pseudotsuga menziesii	24	10	F	codominant crown class, moderate-poor structure	remove	
11	Douglas-fir	Pseudotsuga menziesii	20	10	F	codominant crown class, moderate-poor structure	remove	
12	Douglas-fir	Pseudotsuga menziesii	19	8	P	extensive ivy, small live crown, very poor structure	remove	
13	red oak	Quercus rubra	11	12	F	poor structure	remove	
14	Douglas-fir	Pseudotsuga menziesii	32	24	F	codominant crown class, broken top, moderate-poor structure	remove	
15	Douglas-fir	Pseudotsuga menziesii	32	22	F	codominant crown class, moderate-poor structure	remove	
16	Douglas-fir	Pseudotsuga menziesii	18	8	F	intermediate crown class, poor structure	remove	
17	Douglas-fir	Pseudotsuga menziesii	14	24	G	extensive ivy	remove	
18	western redcedar	Thuja plicata	42	6	P	extensive ivy, dead top	remove	
19	Douglas-fir	Pseudotsuga menziesii	20	14	F	intermediate crown class, poor structure	remove	
20	Douglas-fir	Pseudotsuga menziesii	12	6	P	mostly dead, numerous P. pin conks	remove	
21	Douglas-fir	Pseudotsuga menziesii	18	0	D	snag	remove	
22	Douglas-fir	Pseudotsuga menziesii	44	28	G	some crown asymmetry, sap flow on NW face	remove	
23	western redcedar	Thuja plicata	12	10	F	old broken top	remove	
24	western redcedar	Thuja plicata	22	22	F	self-correcting but severe lean to W	remove	
25	Douglas-fir	Pseudotsuga menziesii	32	18	F	codominant crown class, one-sided to S	remove	
26	Douglas-fir	Pseudotsuga menziesii	26	20	F	codominant crown class, one-sided to E	remove	
27	western redcedar	Thuja plicata	32	16	F	dieback, ivy	remove	
28	Port-Orford-cedar	Chamaecyparis lawsoniana	8,12	12	F	very poor structure	remove	
29	Port-Orford-cedar	Chamaecyparis lawsoniana	4,2&8,12	12	F	very poor structure	remove	
30	sweet cherry	Prunus avium	3&16	20	P	codominant stems, dead and broken branches, crown decay, history of major branch failure, trunk decay	remove	
31	sweet cherry	Prunus avium	2&3,4,6	10	F	topped, sprouts, ivy	remove	
32	apple	Malus spp.	22	18	P	extensive ivy infestation, dead and broken branches, very poor structure, decay	remove	
33	Douglas-fir	Pseudotsuga menziesii	14	16	G		remove	
34	apple	Malus spp.	14,2&20	15	P	poor structure, overtopped with ivy, dead and broken branches	remove	
35	English holly	Ilex aquifolium	2&6,8,	10	P	invasive species, poor structure	remove	
36	English holly	Ilex aquifolium	5&8	14	P	invasive species, poor structure	remove	
37	English hawthorn	Crataegus monogyna	3,6	12	F	invasive species	remove	
38	sweet cherry	Prunus avium	7	10	F	invasive species, natural regen	remove	
39	sweet cherry	Prunus avium	4,5	10	F	invasive species, natural regen	remove	
40	sweet cherry	Prunus avium	4,8	10	F	invasive species, natural regen	remove	
41	sweet cherry	Prunus avium	8	10	F	invasive species, natural regen	remove	
42	sweet cherry	Prunus avium	7	10	F	invasive species, natural regen	remove	
43	sweet cherry	Prunus avium	6	10	F	invasive species, natural regen	remove	
44	sweet cherry	Prunus avium	8	10	F	invasive species, natural regen	remove	
45	sweet cherry	Prunus avium	12	10	F	invasive species, natural regen	remove	

1DBH is tree diameter measured at 4.5-feet above the ground level in inches; multiple trunks splitting below DBH are measured separately and individual trunk measurements are separated by a comma, except multiple trunks of the same size are indicated with an asterisk (quantity x size).  
 2C-Rad is the average crown radius measured in feet.  
 3Cond is an arborist assigned rating to generally describe the condition of individual trees as follows- Dead; Poor; Fair; or, Good Condition.

MARIONS CARPETS WAREHOUSE  
 28855 SW BOONS FERRY ROAD WILSONVILLE, OR

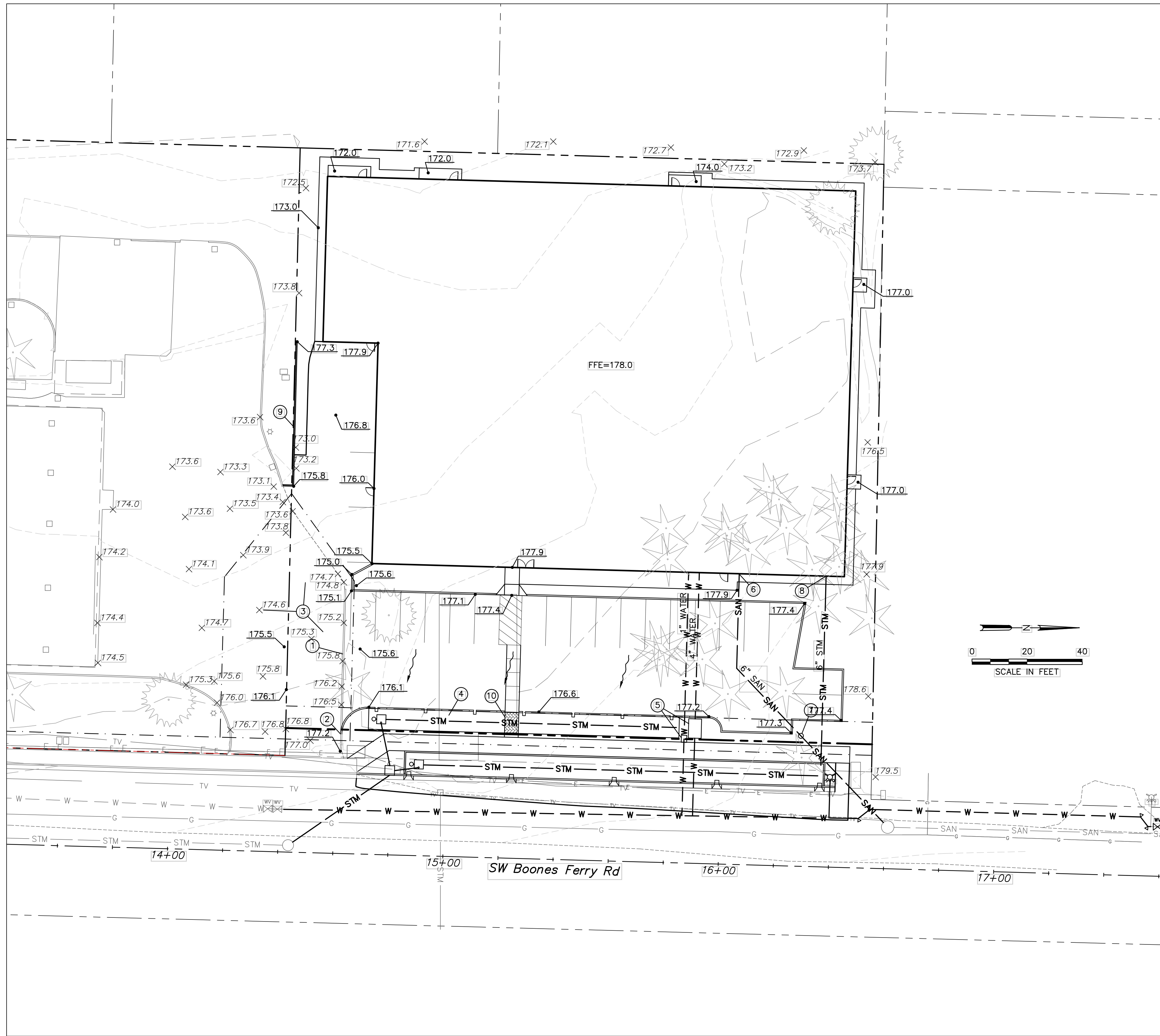


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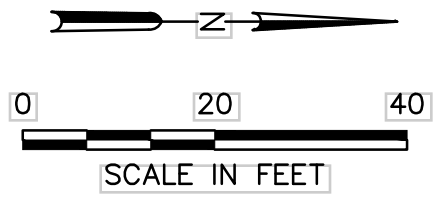
SHEET  
**1**  
 TREE  
 REMOVAL  
 PLAN

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**CONSTRUCTION NOTES**

- ① REMOVE CURB
- ② BEGIN CURB, MATCH TO EXISTING
- ③ REGRADE ENTRANCE PAVEMENT
- ④ CONSTRUCT VEGETATED SWALE
- ⑤ INSTALL 3/4" DOMESTIC WATER METER WITH 1" LATERAL AND 4" FIRE SPRINKLER DOUBLE CHECK ASSEMBLY AND 4" LATERAL
- ⑥ INSTALL 6" SANITARY LATERAL, IE =175.8 AT FOUNDATION
- ⑦ INSTALL 6" CLEANOUT ASSEMBLY
- ⑧ INSTALL 6" STORM DRAIN FROM ROOF DOWNSPOUT
- ⑨ CONSTRUCT RETAINING WALL, SEE STRUCTURAL PLANS
- ⑩ CONSTRUCT METAL PLATE SWALE CROSSING, SEE STRUCTURAL PLANS



WILSONVILLE SITE 7/12/17

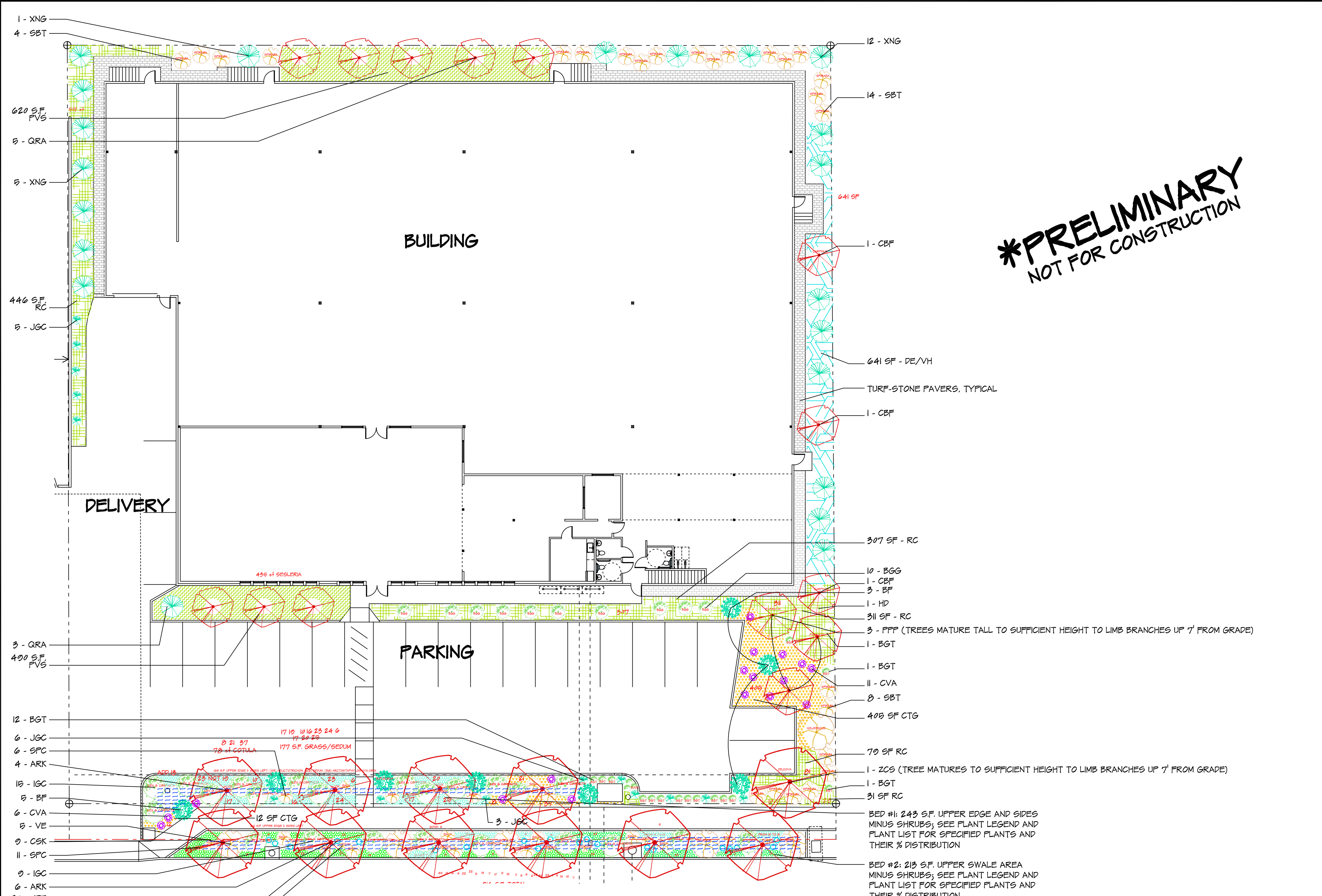


REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

**TRT ENGINEERING LLC**  
 2636 S.E. MARKET STREET  
 PORTLAND, OREGON 97214  
 PHONE (503) 235-7592  
 EMAIL trteng@q.com

MARIONS CARPETS WAREHOUSE  
 28855 SW BOONES FERRY ROAD  
 WILSONVILLE, OREGON 97070  
 GRADING AND UTILITY PLAN

DRAWING NO.  
**2**  
 PROJECT NO.  
 SK05



**\*PRELIMINARY  
NOT FOR CONSTRUCTION**

### GENERAL NOTE

THE EXISTING PROPERTY CONDITIONS, INCLUDING PROPERTY LINE LOCATIONS SHOWN ON THE PLAN, ARE APPROXIMATE AND DO NOT REPRESENT A FIELD-SURVEYED CONDITION. OWNER SHALL VERIFY ALL PROPERTY LINES, DIMENSIONS, EASEMENTS, AND EXISTING UNDERGROUND UTILITY AND IRRIGATION LOCATIONS PRIOR TO ANY CONSTRUCTION. DESIGN SERVICES AND CONSULTATION. THE LANDSCAPE DESIGNER PROVIDES ADVICE IN CONFORMITY WITH THE STANDARDS OF PRACTICE OF THE ASSOCIATION OF PROFESSIONAL LANDSCAPE DESIGNERS (AFLD). SERVICES AND ADVICE ARE LIMITED TO PLANNING AND DESIGN OF EXTERIOR SPACES, HORTICULTURAL CONSULTATION, AND DO NOT INCLUDE ANY ENGINEERING OR STRUCTURAL SERVICES OR ANALYSIS WHICH MAY REQUIRE THE SERVICES OF A LICENSED PROFESSIONAL AS REQUIRED BY LAW.

### PLANTING NOTES

**GENERAL:** All plants shall conform to all applicable standards of the latest edition of the 'American Association of Nurserymen Standards', ANSI Z601-1973. Meet or exceed the regulations and laws of Federal, State, and County regulations, regarding the inspection of plant materials, certified as free from hazardous insects, disease, and noxious weeds, and certified for sale in the state of this project. The apparent absence of the Specifications and Plans as to any detail or the apparent omission from them of a detailed description concerning any point, shall be regarded as meaning that only the best general practice is to prevail and that any material and workmanship of first quality are to be used.

**PERFORMANCE QUALITY ASSURANCE:** Use adequate numbers of skilled workers who are thoroughly trained and experienced in the necessary horticultural practices and who are completely familiar with the specified requirements and methods needed for the proper performance of the work.

**NOTIFICATION:** Give Landscape Designer a minimum of 4 days advance notice of planting inspection. Plants failing to meet the specified requirements as set forth shall be rejected and removed immediately from the premises by the Contractor and at his expense, and replaced with satisfactory plants or trees conforming to the specified requirements.

**SUBSTITUTIONS:** Only as approved by the Landscape Designer or the Owner's Representative.

**GUARANTEE AND REPLACEMENT:** All plant material shall be guaranteed from final acceptance for one full growing season or one year, whichever is longer. During this period the Contractor shall replace any plant material that is not in good condition and producing new growth (except that material damaged by severe weather conditions, due to Owner's negligence, normally unforeseen pestilences of the planting site, or lost due to vandalism). Guarantee that any replacement plant shall be same as for original plant. Landscape Contractor shall keep on site for Owner's Representative's inspection, all receipts for soil amendment and topsoil deliveries.

**PROTECTION:** Protect existing roads, sidewalks, and curbs, landscaping, and other features remaining as final work. Verify location of underground utilities prior to doing work. Repair and make good any damage to service lines, existing features, etc. caused by landscaping installation.

**PLANT QUALITY ASSURANCE:** Deliver direct from nursery. Maintain and protect roots of plant material from drying or other possible injury. Store plants in shade and protect them from weather immediately upon delivery; if not to be planted within four hours. Nursery stock shall be healthy, well branched and rooted, formed true to variety and species, full-foliated, free of disease, injury, defects, insects, weeds, and weed roots. Trees shall have straight trunks, symmetrical tips, and have an intact single leader. Any trees with double leaders will be rejected upon inspection. All plants: True to name, with one of each bundle or lot tagged with the common and botanical name and size of the plant in accordance with standards of practice of the American Association of Nurserymen, and shall conform to the Standardized Plant Names, 1042 Edition.

**Container grown plants:** Small container-grown plants, furnished in removable containers, shall be well-rooted to ensure healthy growth, with roots filling container but not root bound. Bare root stock: Roots well-branched and fibrous. Balled and wrapped (B & B): Ball shall be of natural size to ensure healthy growth. Ball shall be firm and the turp sound. No loose or made ball will be acceptable. size

**TOPSOIL AND FINAL GRADES:** Landscape Contractor is to verify with the General Contractor if the on-site topsoil is or is not adequate to proper plant growth. Supply alternate but for imported topsoil. Landscape Contractor is to apply and place 12" of topsoil in planting beds. If topsoil stockpiled on site is not conducive to proper plant growth, the Landscape Contractor shall import the required amount. Landscape Contractor is to submit samples of the imported soil and/or soil amendments to the Landscape Designer. The topsoil shall be a sandy loam, free of all weeds and debris inimical to lawn or plant growth.

**Landscaping shall include finished grades and even distribution of topsoil to meet planting requirements. Grades and slopes shall be as indicated. Planting bed grades shall be approximately 3" below adjacent walks, paving, finished grade lines, etc. to allow for leak application. Finish grading shall remove all depressions or low areas to provide positive drainage throughout the area.**

**PLANTING SPECIFICATIONS:**

**HERBICIDES:** Prior to soil preparation, all areas showing any undesirable weed or grass growth shall be treated with Round-Up in strict accordance with the manufacturer's instructions.

**SOIL PREPARATION:** Do not rototill. Loosen soil with fork only in areas where plants will be planted. Remove all stones (over 1/2" size), sticks, mortar, large clumps of vegetation, roots, debris, or extraneous matter buried up in working. Soil shall be of a homogeneous fine texture. Level, smooth, and lightly compact area to plus or minus 1/2" of required grades. In groundcover areas add 2" of compost (or as approved) and dig into the soil when installing plants.

**PLANTING HOLE:** Lay out all plant locations and excavate all soils from planting holes to 2-1/2 times the root ball or root system width. Loosen soil inside bottom of plant hole. Dispose of any 'soil' debris from excavation. Check drainage of planting hole with water, and adjust any areas showing drainage problems.

**SOIL MIX:** Prepare soil mix in each planting hole by mixing 2 parts native topsoil (no sides) and 1 part compost (as approved). Thoroughly mix in planting hole and apply granular mycorrhizae at the rates specified by the manufacturer. Where, or if, noted, do not apply.

**FERTILIZER:** Use no synthetic fertilizer and only use fertilizer with a balanced N-P-K ratio. DO NOT apply fertilizer to Water Quality Swale.

**PLANTING TREES AND SHRUBS:** Assume that all plants are well watered and moist before they are planted. Plant upright and face to give best appearance to adjacent plants and structures. Place 6" minimum, lightly compacted layer of prepared planting soil under root system. Loosen and remove twice binding and burp from top 1/2 of root balls. Cut off cleanly all broken or trayed roots and spread roots out. Stagger plants in rows. Backfill planting hole with soil no side working each layer to eliminate voids. When approximately 2/3 full, water thoroughly, then allow water to soak away. Place remaining backfill and dish surface around plant to hold water. Final grade should keep root ball slightly above surround grade, not to exceed 1". Water again until no more water is absorbed. Initial watering by irrigation system is not allowed.

**TREE WARRANTY:** Trees are guaranteed by the owner, or the successors-in-interest for two (2) years after the planting date to be replaced if the tree dies or becomes diseased during that time.

**STAKING OF TREES:** Stake or guy all trees. Stakes shall be 2" x 2" (nom) quality tree stakes with point. They shall be of Douglas Fir, clear and straight. Stake to be minimum 2/3 the height of the tree, not to exceed 3'-0". Drive stake firmly 1'-0" below the planting hole. Tree ties for deciduous trees shall be 'Gardlox' (or better). For Evergreen trees use 'Gard-Strait' Tree Ties (or a reinforced rubber hose and guy wires) with guy wires of a minimum 2-strand twisted 12 ga. wire. Staking and guying shall be loose enough to allow movement of tree while holding tree upright.

**MULCHING OF PLANTINGS:** Mulch planting areas with dark, aged, or medium grind fir or hemlock bark (aged at least 6 months) to a depth of 2" in ground cover areas and 2-1/2" in shrub beds. Apply evenly, not lighter than grade of plant as it came from the nursery, and rake to a smooth finish. Water thoroughly, then hose down planting area with fine spray to wash leaves of plants.

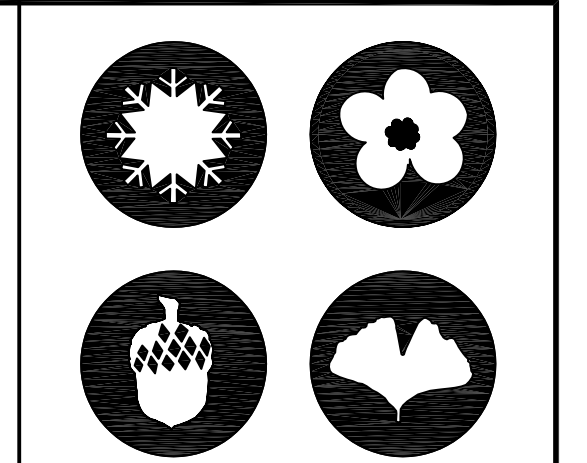
**ROUGH SEED AREA:** In rough seeded areas, establish an evenly graded seedbed. Sow seed with a mechanical spreader at the uniform rates as noted below. Rake seed lightly to provide cover.

**SEED:** Bluegrass seed conforming to applicable State laws. No noxious weed seeds. Submit: Guaranteed analyses.

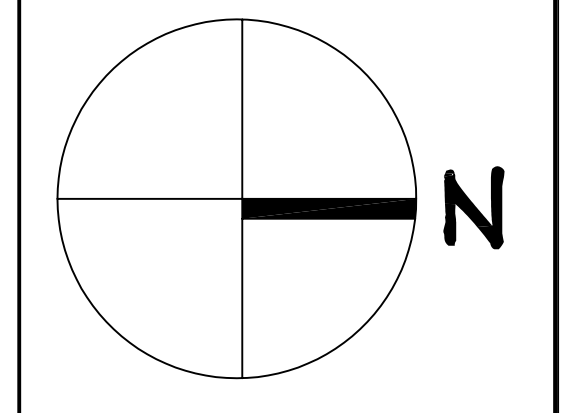
**Rough Seed Mix:** To contain: 80% Dwarf Perennial Ryegrass and 20 Creeping Red Fescue (Highly and Highline Pro-Time Companion Mix or approved equal). Sow at 2 lbs per 1,000 sq ft.

**GENERAL MAINTENANCE:** Protect and maintain work described in these specifications against all defects of materials and workmanship through final acceptance. Replace plants not in normal healthy condition at the end of this period. Water, weed, cultivate, mulch, remove dead wood, and do necessary standard maintenance operations. Irrigate when necessary to avoid drying out of plant materials and to promote healthy growth.

**CLEAN-UP:** At completion of each division of work all extra material, supplies, equipment, etc. shall be removed from the site. All walks, paving or other surfaces shall be swept clean, mulch areas shall have debris removed and dry soil cleared from surface. All areas of the project shall be kept clean, orderly, and complete.



**SEASONS  
GARDEN DESIGN LLC**  
award-winning,  
sustainable design  
seasonsgardendesign.com  
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503.621.2746  
12517 NE 20TH AVE  
VANCOUVER, WA  
98686



### PLANT LEGEND

**UPPER EDGES & SIDES BIOSWALE:**

- COTULA 'TIFFENDELL GOLD' (24" O.C.)  
TOTAL: 78 SF.
- HELICTOTRICHON (85%), (2' O.C.)  
SEDUM (15%), (18" O.C.)  
ARCTOSTAPHYLOS (30%), (18" O.C.)  
TOTAL: 177 SF.

**BOTTOM & LOWER EDGE BIOSWALE:  
DISTRIBUTE PLANTS AS TAGGED  
ON THIS PLAN**

**OTHER AREAS:**

- COTULA 'TIFFENDELL GOLD' (24" O.C.)  
TOTAL: 378 SF.
- SESLERIA (15" O.C.)  
TOTAL: 1055 SF.

- MATRIX: DRYOPTERIS (70%) (30" O.C.)  
& VANCOUVERIA (30%) (18" O.C.)  
TOTAL: 641 SF.
- RUBUS CALCYNOIDES (18" O.C.)  
TOTAL: 1391 SF.

- DECIDUOUS TREE (AS NOTED)
- CONIFER (AS NOTED)
- EVERGREEN SHRUB (AS NOTED)
- DECIDUOUS SHRUB (AS NOTED)

- BUPLEURUM
- CALLUNA
- JUNCUS

**\*MATRIX: MIX OF PLANTS RANDOMLY  
INTERPLANTED ACCORDING TO SPECIFIED  
SPACING AND LOCATION ON PLAN.**

**MUTUAL MATERIALS, TURF-STONE  
PAVERS, DIMENSIONS: 3-1/2" X 15-3/4"  
X 23-5/8"; COVERAGE: 26 SF. /  
PIECE**

### PLANT LIST

#	SYM.	BOTANICAL/COMMON NAME	SIZE	SPACING	#	SYM.	BOTANICAL/COMMON NAME	SIZE	SPACING
<b>TREES</b>									
3	CBF	CARPINUS BETULUS 'FRANS FONTAINE' / FRANS FONTAINE EUROPEAN HORNBEAM	2" CAL	AS SHOWN					
3	PPP	PARROTIA PERSICA 'PERSIAN SPIRE' / PERSIAN SPIRE PERSIAN IRONWOOD	2" CAL	AS SHOWN	4	ARK	ACER RUBRUM 'KARPICK'*/ KARPICK RED MAPLE	2" CAL	AS SHOWN
20	QRA	QUERCUS ROBUR X ALBA 'CRIMSCHMIDT' / CRIMSON SPIRE OAK	2" CAL	AS SHOWN	% AN.	AUU	ARCTOSTAPHYLOS UVA -URSI 'MASSACHUSETTS'/KINNICKINNICK	PLUG	2' O.C.
0	XNG	XANTHOCYPARIS NOOTKATENSIS 'GREEN ARROW' / GREEN ARROW WEEPING ALASKAN CEDAR	6' HT.	AS SHOWN	5	BF	BUPLEURUM FRUTICOSUM/SHABBY HARE'S EAR	1 GAL	AS SHOWN
1	ZCS	ZELKOVA SERRATA 'JFS-KW1' / CITY SPRITE ZELKOVA	2" CAL	AS SHOWN	% AN.	CVA	CALLUNA VULGARIS 'ANOUK' / ANOUK HEATHER	1 GAL	AS SHOWN
<b>SHRUBS</b>									
3	BF	BUPLEURUM FRUTICOSUM/SHABBY HARE'S EAR	1 GAL	AS SHOWN	% AN.	HS	HELICTOTRICHON SEMPERVIRENS / BLUE OAT GRASS	PLUG	30" O.C.
15	BGT	BUXUS X 'GREEN TOWER'	5 GAL	AS SHOWN	15	IGC	ILEX GLABRA 'COMPACTA'*/ COMPACT INKBERRY HOLLY	5 GAL	AS SHOWN
10	BGG	BUXUS X 'GREEN GEM'	3 GAL	AS SHOWN	3	JCG	JUNIFERUS COMMUNIS 'GOLD CONE'*/ GOLD CONE COMMON COLUMNAR JUNIFER	2 GAL	AS SHOWN
0	CVA	CALLUNA VULGARIS 'ANOUK' / ANOUK HEATHER	1 GAL	AS SHOWN	3	SPC	SALIX PURPUREA 'CANYON BLUE'*/ CANYON BLUE DWARF ARCTIC WILLOW	2 GAL	AS SHOWN
0	CSK	CORNUS SERICEA 'KELSEY'*/ KELSEY'S RED-OSIER DOGWOOD	1 GAL	AS SHOWN	% AN.	SO	SEDUM OREGANUM / OREGON STONECROP	PLUG	12" O.C.
10	EPE	EJONYMUS FORTUNEI 'EMERALD GAITY' / EMERALD GAITY	1 GAL	AS SHOWN	6	ARK	ACER RUBRUM 'KARPICK'*/ KARPICK RED MAPLE	2" CAL	AS SHOWN
	HP	HOLIDISCUS DISCOLOR / OCEANSFRAY	2 GAL	AS SHOWN	% AS	AUU	ARCTOSTAPHYLOS UVA -URSI 'MASSACHUSETTS'/KINNICKINNICK	PLUG	2' O.C.
	JCG	JUNIFERUS COMMUNIS 'GOLD CONE'*/ GOLD CONE COMMON COLUMNAR JUNIFER	5 GAL	AS SHOWN	0	CSK	CORNUS SERICEA 'KELSEY'*/ KELSEY'S RED-OSIER DOGWOOD	1 GAL	AS SHOWN
6	RSE	RIBES SANGUINEUM 'EDWARD VII' / EDWARD VII RED CURRENT	2 GAL	AS SHOWN	0	HS	HELICTOTRICHON SEMPERVIRENS / BLUE OAT GRASS	PLUG	30" O.C.
20	SBT	SPIRAEA BETULIFOLIA 'TOR' / TOR BIRCHLEAF SPIRAEA	5 GAL	AS SHOWN	% AN.	IGC	ILEX GLABRA 'COMPACTA'*/ COMPACT INKBERRY HOLLY	5 GAL	AS SHOWN
<b>GROUNDCOVERS, FERNS, &amp; ORNAMENTAL GRASSES</b>									
302 SF	CTG	COTULA 'TIFFENDELL GOLD' / CREEPING GOLD BUTTONS	3.5"	2' O.C.	0	JPE	JUNCUS PATENS 'ELK BLUE'*/ ELK BLUE COMMON RUSH	2 GAL	AS SHOWN
% AN.	DE	DRYOPTERIS ERYTHROSORA / AUTUMN FERN	2 GAL	3' O.C.	% AN.	SO	SEDUM OREGANUM / OREGON STONECROP	PLUG	12" O.C.
888	SA	SESLERIA AUTUMNALIS / AUTUMN MOOR GRASS	PLUG	15" O.C.	5	VE	VIBURNUM EDULE*/ HIGHBUSH CRANBERRY	2 GAL	AS SHOWN
334	RC	RUBUS CALCYNOIDES / CRINKLE-LEAF CREEPER	PLUG	3' O.C.					
% AN.	VH	VANCOUVERIA HEXANDRA / INSIDE-OUT FLOWER	PLUG	18" O.C.					

NOTE: '% AS NOTED' (AN) REFERS TO INFORMATION IN THE PLANT LEGEND; ASTERISK (\*) AFTER PLANT NAME INDICATES WINTER WET/SUMMER DRY TOLERANCE

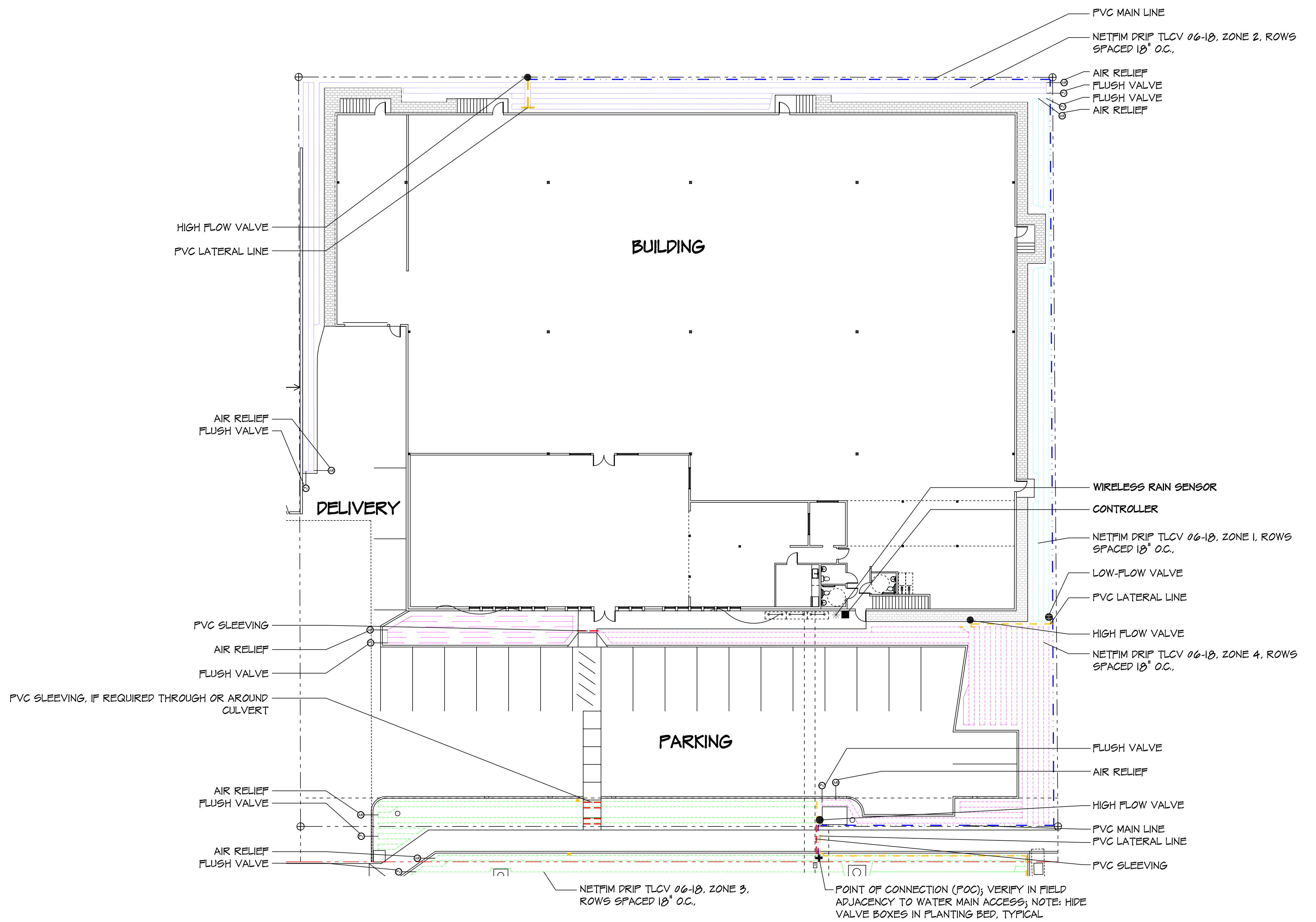
**MARION'S CARPETS**  
28855 SW BOONES FERRY RD.  
WILSONVILLE, OR

**PLANTING PLAN**

SCALE: 1/16"=1'-0"

ISSUED FOR:	
25MAY2017	OWNER REVIEW
23JUN2017	PLAN REVISION
27JUN2017	PLAN REVISION
28JUN2017	PLAN REVISION
13JUL2013	DRAWING REVISION

**L-1**



**\*PRELIMINARY  
NOT FOR CONSTRUCTION**

**GENERAL NOTE**

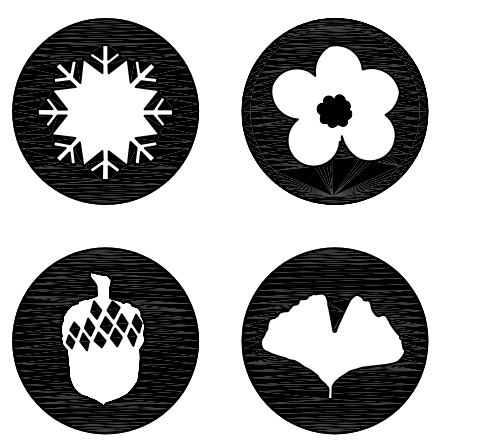
THE EXISTING PROPERTY CONDITIONS, INCLUDING PROPERTY LINE LOCATIONS SHOWN ON THE PLAN, ARE APPROXIMATE AND DO NOT REPRESENT A FIELD-SURVEYED CONDITION. OWNER SHALL VERIFY ALL PROPERTY LINES, DIMENSIONS, EASEMENTS, AND EXISTING UNDERGROUND UTILITY AND IRRIGATION LOCATIONS PRIOR TO ANY CONSTRUCTION. DESIGN SERVICES AND CONSULTATION. THE LANDSCAPE DESIGNER PROVIDES ADVICE IN CONFORMITY WITH THE STANDARDS OF PRACTICE OF THE ASSOCIATION OF PROFESSIONAL LANDSCAPE DESIGNERS (AFLD). SERVICES AND ADVICE ARE LIMITED TO PLANNING AND DESIGN OF EXTERIOR SPACES, HORTICULTURAL CONSULTATION, AND DO NOT INCLUDE ANY ENGINEERING OR STRUCTURAL SERVICES OR ANALYSIS WHICH MAY REQUIRE THE SERVICES OF A LICENSED PROFESSIONAL AS REQUIRED BY LAW.

**IRRIGATION NOTES**

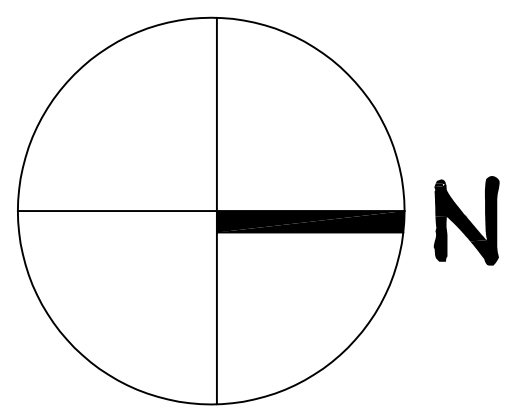
- OWNER IS RESPONSIBLE FOR MAINTENANCE AND ADJUSTMENTS TO THE IRRIGATION SYSTEM AS NEEDED TO MEET EXISTING WEATHER CONDITIONS.
- IRRIGATION SYSTEM IS DESIGNED TO MEET THE REQUIREMENTS OF SPECIFIED PLANTS. THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER PRIOR TO IRRIGATION INSTALLATION IF THERE ARE ANY QUESTIONS PERTAINING TO THE SYSTEM.
- MINIMUM 1-YEAR WARRANTY WITH SYSTEM.
- USE NETAFIM IN-LINE DRIP HOSE ON SURFACE. 4 GPH WITH EMITTERS AT 18" O.C. WITH LOW FLOW DRIP VALVE AND FILTER FOR PLANT BORDERS. USE HUNTER IRRIGATION CONTROLLER (CONTRACTOR TO DETERMINE # OF STATIONS), CONTROL VALVES, WIRELESS RAIN SENSOR (EXTEND MOUNT BEYOND EDGE OF EAVE AND GUTTER), FLOW SENSOR.
- ZONE AND SCHEDULE IRRIGATION ACCORDING TO THE REQUIREMENTS OF THE SPECIFIED PLANTS. PLANTS SHOWN REQUIRE IRRIGATION THE FIRST TWO YEARS UNTIL ESTABLISHED AND MINIMAL, BUT SUFFICIENT, WATER DURING EXTENDED DRY PERIODS THEREAFTER.
- IRRIGATION CONTRACTOR TO PROVIDE SCH. 80 PVC PIPE SLEEVINGS WHERE NOTED AS REQUIRED TO FULLY IRRIGATE THE GARDEN.
- VALVE BOXES SHALL BE PLACED IN PLANT BORDERS AND OUT OF COMMON SIGHT.
- ALL IRRIGATION CONTROL BOXES, CONDUIT AND IRRIGATION LINES TO BE PERMANENTLY CONCEALED FROM VIEW. CONTROLLER TO BE PLACED INSIDE AN ENCLOSURE IN EITHER A CLOSET OR GARAGE.
- ALL PLANTS REQUIRE IRRIGATION UNTIL THEY ARE ESTABLISHED (USUALLY UP TO 2 YEARS). MOST OF THE PLANTS ARE DROUGHT-TOLERANT OR NEARLY SO WITH ONLY A FEW PLANTS REQUIRING ONGOING IRRIGATION DURING THE SUMMER. THEY ARE NOTED WITH AN ASTERISK (\*) AFTER THEIR PLANT LABEL. CONTRACTOR SHALL ASSURE ADDITIONAL IRRIGATION TO THESE PLANTS.
- PROVIDE OWNER WITH DETAILED INSTRUCTIONS TO CONTROL IRRIGATION AND HUNTER 'ROAM' KIT CONTROL FOR IRRIGATION.

**LEGEND**

- LATERAL LINE (LL): 3/4" C/200 PVC, XX FEET
- 1" MAIN LINE (ML): 1" S/40 PVC, X FEET
- SLEEVE: 2" S/80 PVC SLEEVING, 8 FEET
- POC: TURF PRO 3/4" GATE VALVE; 3/4" FERCO III 3/4" Ø80 PCA OR EQUAL BACKFLOW, 1 EACH
- HIGH FLOW VALVE: NETAFIM, HIGH FLOW KIT WITH 1" CONTROL VALVE, 3 EACH
- LOW FLOW VALVE: NETAFIM, LOW FLOW KIT WITH 1" CONTROL VALVE, 1 EACH
- FLUSH VALVE: NETAFIM, TLOSS, MFV-1
- AIR RELIEF (INSTALL AT HIGHEST POINT OF DRIP HOSE); 3/4" MPT, 68ARIA078
- CONTROLLER, 1 EACH, RAINBIRD, ESP-45MTE SMART CONTROLLER W/ AUTO WEATHER STATION. IRRIGATION CONTRACTOR TO COORDINATE CONTROLLER WITH INSTALLATION OF 120V GFI OUTLET FOR POWER.
- EXTEND SENSOR MOUNT BEYOND EDGE OF EAVE AND GUTTER
- ZONE 1 NETAFIM TLCV-04-18 - X SQ. FEET SPACE NETAFIM HOSE 18" O.C.
- ZONE 2 NETAFIM TLCV-04-18 - X SQ. FEET SPACE NETAFIM HOSE 18" O.C.
- ZONE 3 NETAFIM TLCV-04-18 - X SQ. FEET SPACE NETAFIM HOSE 18" O.C.
- ZONE 4 NETAFIM TLCV-04-18 - X SQ. FEET SPACE NETAFIM HOSE 18" O.C.
- ALIGN DRIP LINES WITH PLANT LOCATIONS, TYPICAL
- ZONES ARE ALL UNDER 3.8 GPM USING THE 4 GPH EMITTERS AT 18" O.C.



**SEASONS  
GARDEN DESIGN LLC**  
award-winning,  
sustainable design  
seasonsgardendesign.com  
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503.621.2746  
12517 NE 20TH AVE  
VANCOUVER, WA  
98686



**MARION'S CARPETS**  
28888 SW BOONES FERRY RD.  
WILSONVILLE, OR

**IRRIGATION PLAN**

SCALE: 1/16"=1'-0"

**ISSUED FOR:**

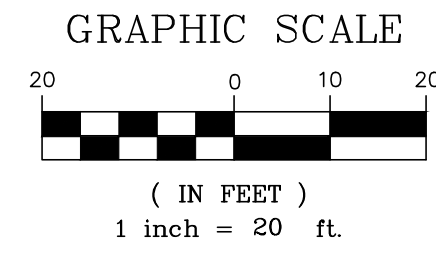
27 JUN 2017 OWNER REVIEW

**L-2**

**TOPOGRAPHIC SURVEY**  
 FOR:  
**MARION'S CARPETS**  
 BEING A PORTION OF LOT 13, "BOBERG"  
 SITUATED IN THE NE 1/ 4 OF SECTION 14  
 T.3S, R.1W, W.M.  
 CITY OF WILSONVILLE  
 CLACKAMAS COUNTY, OREGON

TAX MAP 3 1W 14A  
 TAX LOT 1300

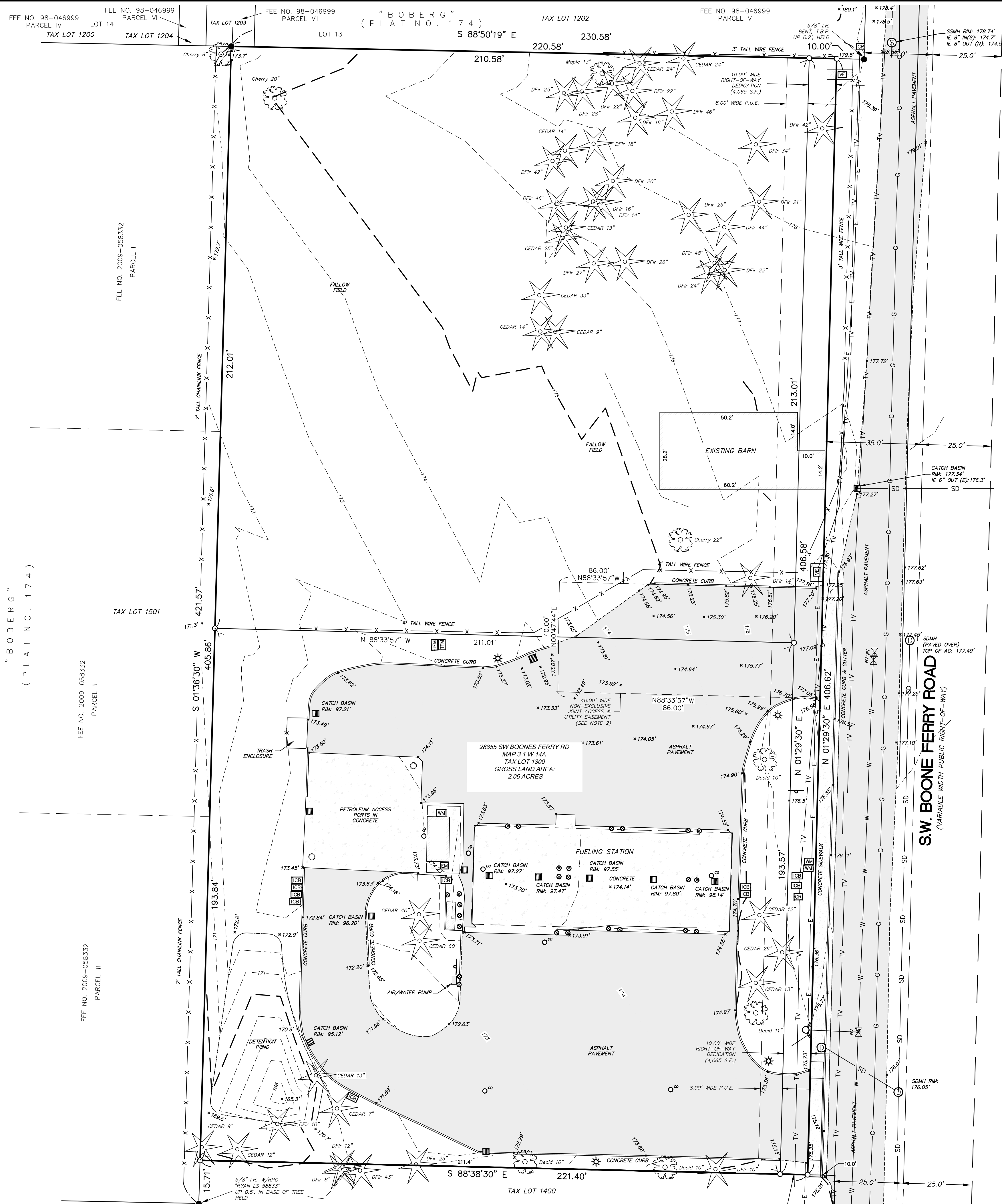
FEBRUARY 28, 2017  
 UPDATED APRIL 27, 2017



**LEGEND:**

●	FOUND SURVEY MONUMENT	⊠	CABLE TV RISER
○	SET 5/8" IRON ROD	⊞	ELECTRIC VAULT
⊙	SANITARY SEWER MANHOLE	⊞	ELECTRIC TRANSFORMER
⊙	STORM DRAIN MANHOLE	⊞	ELECTRIC METER
⊞	CATCH BASIN/AREA DRAIN	⊙	BOLLARD
○	CLEAN OUT	—	PRIVATE SIGN
⊞	WATER VALVE	—SS—	UNDERGROUND SANITARY SEWER LINE
⊞	WATER METER	—SD—	UNDERGROUND STORM DRAIN LINE
⊞	FIRE HYDRANT	—W—	UNDERGROUND WATER LINE
⊞	IRRIGATION CONTROL BOX	—E—	UNDERGROUND POWER LINE
⊞	WATER MONITORING WELL	—TV—	UNDERGROUND COMMUNICATION LINE
⊞	LIGHT POLE	—G—	UNDERGROUND GAS LINE
		—X—	FENCE AS NOTED

- NOTES:**
1. THE BOUNDARIES AS SHOWN ON THIS MAP ARE BASED ON RECORD DATA AND FOUND MONUMENTS. THIS MAP DOES NOT REPRESENT A SURVEY TO BE RECORDED, BUT WAS DONE FOR SITE/TOPO INFORMATION ONLY.
  2. THIS SURVEY IS MADE FOR THE ORIGINAL PURCHASER OF THE SURVEY ONLY. ANDY PARIS & ASSOCIATES, INC. ASSUMES NO LIABILITY FOR INFORMATION SHOWN HEREON TO ANY OTHER INSTITUTIONS OR SUBSEQUENT PURCHASERS OF THE PROPERTY.
  3. SURVEY IS VALID ONLY IF PRINT HAS SEAL AND SIGNATURE OF SURVEYOR.
  4. THE LOCATION AND OR EXISTENCE OF UTILITY SERVICE LINES AS SHOWN ON THIS MAP ARE BASED ON FIELD OBSERVATION ONLY. THERE MAY EXIST ADDITIONAL SERVICE LINES NOT SHOWN ON THIS SURVEY.
  5. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
  6. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR. THERE MAY EXIST EASEMENTS, CONDITIONS, OR RESTRICTIONS THAT COULD AFFECT THE TITLE OF THIS PROPERTY. NO ATTEMPT HAS BEEN MADE IN THIS SURVEY TO SHOW SUCH MATTERS THAT MAY AFFECT TITLE.



**REGISTERED PROFESSIONAL LAND SURVEYOR**  
  
**OREGON**  
 JANUARY 15, 1987  
 HAROLD P. SALO  
 2264  
 EXPIRES: JUNE 30, 2018

**ANDY PARIS AND ASSOCIATES, INC.**  
 PROFESSIONAL LAND SURVEYORS  
 16057 BOONES FERRY ROAD  
 LAKE OSWEGO, OREGON 97035  
 PH: 503-636-3341  
 www.andyparis.com

PROJECT: 16246  
 DRAWING: 16246TP2.DWG  
 DRAFTED: MPC 04/27/17

**DEVELOPMENT REVIEW BOARD MEETING**

**MONDAY, AUGUST 28, 2017**

**6:30 PM**

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VII. Board Member Communications:

A. Recent City Council Action Minutes



## City Council Meeting Action Minutes July 17, 2017

COUNCILORS	STAFF	STAFF
Mayor Knapp	Bryan Cosgrove	Angela Handran
Councilor Starr	Barbara Jacobson	Jon Gail
Councilor Akervall - Excused	Jeanna Troha	Eric Mende
Councilor Stevens	Kimberly Veliz	Chris Neamtzu
Councilor Lehan – Left at 8:07 p.m.	Susan Cole	Dwight Brashear
	Nancy Kraushaar	Steve Adams
	Delora Kerber	Amanda Guile-Hinman

AGENDA ITEM	ACTIONS
<b>WORK SESSION</b>	
<ul style="list-style-type: none"> <li>Public Engagement Through Social Media</li> <li>Garden Acres Road PSA</li> </ul>	<ul style="list-style-type: none"> <li>Staff provided a presentation on how social media is being used to boost outreach and two-way communication with the community.</li> <li>Staff presented an update on the Garden Acres Road project. Council addressed under the consent agenda.</li> </ul>
<b>REGULAR MEETING</b>	
<u>Mayor's Business</u> <ul style="list-style-type: none"> <li>Fun In the Park Proclamation</li> </ul>	<ul style="list-style-type: none"> <li>The Mayor read the proclamation declaring August 1-7, Is 'Fun In the Park Week' and presented certificates to the Fun in the Park Committee.</li> </ul>
<u>Communications</u> <ul style="list-style-type: none"> <li>2016-17 Community Enhancement Program Project Report: Multifamily Community Waste-Reduction and Recycling Project Sponsored by Clackamas County, City, and Republic Services.</li> </ul>	<ul style="list-style-type: none"> <li>Tenille Beseda with Clackamas County Resource Conservation &amp; Solid Waste Program and Kayla Scheafer with AmeriCorps provided a presentation on Multifamily Community Waste-Reduction and Recycling.</li> </ul>
<u>Consent Agenda</u> <ul style="list-style-type: none"> <li>Resolution No. 2648 - A Resolution Of The City Of Wilsonville Authorizing The City Manager To Execute A Professional Services Agreement With HHPR, Inc. For Design, Acquisition Support, And Construction Phase Support Services Associated With The Garden Acres Road Project (CIP No. 4201).</li> <li>Minutes of the June 5, 2017 and June 19, 2017 Council Meetings.</li> </ul>	<ul style="list-style-type: none"> <li>The Consent Agenda was adopted 4-0.</li> </ul>
<u>Continuing Business</u> <ul style="list-style-type: none"> <li>Ordinance No. 806 - An Ordinance Of The City Of Wilsonville Amending The Text Of The Comprehensive Plan, The Comprehensive Plan Map, The Wilsonville Development Code, And The Significant Resource Overlay Zone Map, And</li> </ul>	<ul style="list-style-type: none"> <li>Ordinance No. 806 was adopted on second reading by a vote of 3-0.</li> </ul>

<p>Adopting The Frog Pond West Master Plan As A Sub-Element Of The Comprehensive Plan.</p>	
<p><u>New Business</u></p> <ul style="list-style-type: none"> <li>• Resolution No. 2647 - A Resolution Of The City Of Wilsonville Authorizing The Police And Public Works Building Seismic Upgrade Project And The Execution Of The Seismic Rehabilitation Grant Program Grant Contract With Oregon Infrastructure Finance Authority Of The Business Development Department.</li> <li>• Subaru Appeal of Community Development Director Decision</li> </ul>	<ul style="list-style-type: none"> <li>• Resolution 2647 was adopted 4-0.</li> <li>• Council moved to deny the appeal 3-0.</li> </ul>
<p><u>City Manager's Business</u></p>	<ul style="list-style-type: none"> <li>• No report.</li> </ul>
<p><u>Legal Business</u></p>	<ul style="list-style-type: none"> <li>• No report.</li> </ul>
<p><u>Adjourn</u></p>	<p>9:30 p.m.</p>

**City Council Meeting Action Minutes**  
**August 7, 2017**

<b>COUNCILORS</b>	<b>STAFF</b>	<b>STAFF</b>
Mayor Knapp	Bryan Cosgrove	Mark Ottenad
Councilor Starr	Barbara Jacobson	Chris Neamtzu
Councilor Akervall - Excused	Jeanna Troha	Andy Stone
Councilor Stevens	Kimberly Veliz	Jordan Vance
Councilor Lehan	Susan Cole	Kimberly Rybold
	Nancy Kraushaar	Kerry Rappold
	Delora Kerber	Tod Blankenship
	Angela Handran	Daniel Pauly
	Amanda Guile-Hinman	

<b>AGENDA ITEM</b>	<b>ACTIONS</b>
<b>WORK SESSION</b>	
<ul style="list-style-type: none"> <li>Fiber Business Plan (staff – Stone)</li> <li>Coffee Creek Industrial Form-based Code and Pattern Book (staff-Rybold)</li> <li>Memorial Park Dog Park/Community Garden Parking Lot (staff – Rappold / Blankenship)</li> <li>Frog Pond Financing Plan (staff – Kraushaar/Cole/Guile-Hinman)</li> </ul>	<ul style="list-style-type: none"> <li>Andy Stone, It Manager along with Tom Asp of Columbia Telecommunications Corporation (CTC) presented on the Fiber Business Plan. Staff requested Council direction on whether the City should move forward with Fiber Business Plan. Council directed staff to move forward.</li> <li>The Coffee Creek Industrial Form-based Code and Pattern Book was presented by staff and consultants. The presentation delivered a project update along with paths to adoption and policy options.</li> <li>Kerry Rappold, Natural Resources Manager and Tod Blankenship, Parks Supervisor gave a presentation on the Memorial Park Dog Park/Community Garden Parking Lot project. An overview of the project, additional work and next steps were provided.</li> <li>Staff began presentation on Frog Pond Financing Plan. Due to time constraints staff completed presentation during the Council meeting.</li> </ul>
<b>REGULAR MEETING</b>	
<u>Communications</u>	
<ul style="list-style-type: none"> <li>Metro Update</li> </ul>	<ul style="list-style-type: none"> <li>Metro Councilor Craig Dirksen presented a regional snapshot.</li> </ul>
<u>Mayor’s Business</u>	
<ul style="list-style-type: none"> <li>Relay For Life Proclamation (Staff – Handran)</li> </ul>	<ul style="list-style-type: none"> <li>The Mayor read a proclamation declaring the 17<sup>th</sup> day of August as “Wilsonville</li> </ul>

<ul style="list-style-type: none"> <li>• Reappointments</li> <li>• Upcoming Meetings</li> </ul>	<p>Relay For Life Day” and presented a proclamation to the Relay For Life Committee.</p> <ul style="list-style-type: none"> <li>• Library Board Reappointment of Caroline Berry to for a second term beginning 7/1/17 to 6/30/21.</li> </ul> <p>Tourism Promotion Committee Reappointments of Jeff Brown (Position 3) and Albert Levit (Position 4) for a second term beginning 7/1/17 to 6/30/20.</p> <ul style="list-style-type: none"> <li>• The Mayor reported on the meetings he attended on behalf of the City.</li> </ul> <p>Mayor Knapp announced the Monday, August 21, City Council meeting has been rescheduled for Thursday, August 24.</p>
<p><u>Public Hearing</u></p> <ul style="list-style-type: none"> <li>• Ordinance No. 807 – 1st Reading An Ordinance Of The City Of Wilsonville Annexing Approximately 2,206 Square Feet Of Territory On The South Side Of SW Advance Road West Of SW 63rd Avenue Into The City Limits Of The City Of Wilsonville, Oregon. The Territory Is More Particularly Described As An Eastern Portion Of Tax Lot 2100 Of Section 18, T3S, R1W, Clackamas County, Oregon, West Linn-Wilsonville School District, Owner. (staff – Rybold)</li> </ul>	<ul style="list-style-type: none"> <li>• Ordinance No. 807 was approved on first reading with second reading occurring at the August 24 Council meeting.</li> </ul>
<p><u>New Business</u></p> <ul style="list-style-type: none"> <li>• Resolution No. 2649 - A Resolution Of The City Of Wilsonville Establishing The Methodology For The Preliminary Frog Pond West Infrastructure Supplemental Fee And The Boeckman Bridge Transportation Mitigation Fee, And Establishing A Fund (staff – Kraushaar/Cole/Guile-Hinman)</li> <li>• Resolution No. 2650 - A Resolution Of The City Of Wilsonville Designating The City Of Wilsonville As A Bee City Usa® Affiliate (staff – Rappold)</li> <li>• Appeal of Planning Director’s Interpretation – Jordan Ward (staff – Neamtzu)</li> </ul>	<ul style="list-style-type: none"> <li>• Resolution No. 2649 was adopted 4-0.</li> <li>• Resolution No. 2650 was adopted 4-0.</li> <li>• Rescheduled for the September 18, 2017 Council meeting.</li> </ul>
<p><u>City Manager’s Business</u></p> <ul style="list-style-type: none"> <li>• Work Plan Updates Quarter 2 Work Plan 2017-2018</li> </ul>	<ul style="list-style-type: none"> <li>• The City Manager supplied Council with Work Plan Updates for Quarter 2 and the Work Plan for 2017-2018.</li> </ul>

<u>Legal Business</u> <ul style="list-style-type: none"><li>• Regulation of Panhandling and Related Constitutional Limitations</li></ul>	<ul style="list-style-type: none"><li>• The City Attorney supplied Council with a memorandum regarding Regulation of Panhandling and Related Constitutional Limitations.</li></ul>
Adjourn	9:50 p.m.