

## DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT <b>John Floyd</b>	PROJECT No(s). <b>AP-23-03</b>	PRE-APPLICATION NO.
NON-REFUNDABLE FEE(S) <b>\$400</b>	REFUNDABLE DEPOSIT(S)	TOTAL <b>\$400</b>

**Type of Review** (Please check all that apply):

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Annexation (ANX)               | <input type="checkbox"/> Final Plat (FP)                        | <input type="checkbox"/> Subdivision (SUB)                               |
| <input checked="" type="checkbox"/> Appeal (AP)         | <input type="checkbox"/> Flood Management Area (FMA)            | <input type="checkbox"/> Temporary Uses (MISC)                           |
| <input type="checkbox"/> CDC Amendment (CDC)            | <input type="checkbox"/> Historic Review (HDR)                  | <input type="checkbox"/> Time Extension (EXT)                            |
| <input type="checkbox"/> Code Interpretation (MISC)     | <input type="checkbox"/> Lot Line Adjustment (LLA)              | <input type="checkbox"/> Right of Way Vacation (VAC)                     |
| <input type="checkbox"/> Conditional Use (CUP)          | <input type="checkbox"/> Minor Partition (MIP)                  | <input type="checkbox"/> Variance (VAR)                                  |
| <input type="checkbox"/> Design Review (DR)             | <input type="checkbox"/> Modification of Approval (MOD)         | <input type="checkbox"/> Water Resource Area Protection/Single Lot (WAP) |
| <input type="checkbox"/> Tree Easement Vacation (MISC)  | <input type="checkbox"/> Non-Conforming Lots, Uses & Structures | <input type="checkbox"/> Water Resource Area Protection/Wetland (WAP)    |
| <input type="checkbox"/> Expediated Land Division (ELD) | <input type="checkbox"/> Planned Unit Development (PUD)         | <input type="checkbox"/> Willamette & Tualatin River Greenway (WRG)      |
| <input type="checkbox"/> Extension of Approval (EXT)    | <input type="checkbox"/> Street Vacation                        | <input type="checkbox"/> Zone Change (ZC)                                |

Pre-Application, Home Occupation, Sidewalk Use, Addressing, and Sign applications require different forms, available on the website.

<b>Site Location/Address:</b> <b>2622 Marylhurst Drive and 18600-18690 Midhill Circle</b>	Assessor's Map No.: <b>2S1E14DC</b>
	Tax Lot(s): <b>5800, 6500, 6600, 6601, 6700, 6701</b>
	Total Land Area: <b>0.7 acres</b>

**Brief Description of Proposal:**

The applicant and property owner are appealing the Planning Commission decision on VAR-23-01.

<b>Applicant Name*:</b> <b>Tracy &amp; Derek Peterson</b> Address: <b>24350 SW Nodaway Lane</b> City State Zip: <b>Wilsonville, OR 97070</b>	Phone: <b>503-726-9929</b> Email: <b>tracy@tracypetersonhomes.com</b>
<b>Owner Name (required):</b> <b>Tracy &amp; Derek Peterson</b> Address: <b>24350 SW Nodaway Lane</b> City State Zip: <b>Wilsonville, OR 97070</b>	Phone: <b>503-726-9929</b> Email: <b>tracy@tracypetersonhomes.com</b>
<b>Consultant Name:</b> <b>Hillary Harris, Planner and Alex Simpson, PE</b> Address: <b>205 SE Spokane Street, Suite 200</b> City State Zip: <b>Portland, OR 97202</b>	Phone: <b>503-221-1131</b> Email: <b>hillaryh@hhpr.com and alexs@hhpr.com</b>

1. Application fees are non-refundable (excluding deposit). Applications with deposits will be billed monthly for time and materials above the initial deposit. **\*The applicant is financially responsible for all permit costs.**
2. The owner/applicant or their representative should attend all public hearings.
3. A decision may be reversed on appeal. The decision will become effective once the appeal period has expired.
4. Submit this form, application narrative, and all supporting documents as a single PDF through the [Submit a Land Use Application](https://westlinnoregon.gov/planning/submit-land-use-application) web page: <https://westlinnoregon.gov/planning/submit-land-use-application>

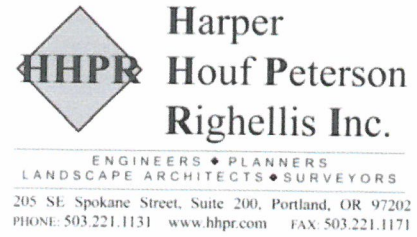
The undersigned property owner authorizes the application and grants city staff the **right of entry** onto the property to review the application. Applications with deposits will be billed monthly for time and materials incurred above the initial deposit. The applicant agrees to pay additional billable charges.

*Tracy Peterson* 6/14/23  
 Applicant's signature Date

*Tracy Peterson* 6/14/23  
 Owner's signature (required) Date

**TO:** City of West Linn City Council

**FROM:** Harper Houf Peterson Righellis, Inc.  
Hillary Harris, Planner  
Alex Simpson, PE



and

**BHG Real Estate & Development**  
Tracy Peterson, Property Owner

**DATE:** June 14, 2023

**RE:** Appeal Filing Case Number VAR-23-01

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### Introduction and Background

The project site includes six pre-existing lots of record located off Marylhurst Drive and Midhill Circle (Tax Lots 2S1E14DC5800, 6500, 6600, 6601, 6700, and 6701). The area is approximately 0.7 acres in size and zoned R-10 in the West Linn Zoning Map.



As shown on the grading plan, the topography of the site slopes downhill from west to east, with substantial slopes along Midhill Circle frontages. In lieu of providing multiple steep individual driveways and substantial site grading, the property owner is proposing to consolidate access through the center of the block where the grade is relatively flat. The property owner has coordinated with Tualatin Valley Fire and Rescue and the City of West Linn's Engineering Department to come to the solution of a single shared driveway that engineering and fire professionals support and prefer, while still allowing the sites to be developed in the future.

On March 6 the applicant submitted the Class II Variance application and the City of West Linn Community Development supported the variance in their Staff Report. Planning Commission heard the variance request at their May 17 hearing and denied the variance. Below are the reasons for the denial made in the signed final decision from the Planning Commission and the applicant's appeal to the City Council for consideration of why the proposal is more beneficial to the City than having individual driveways.

### Response to Planning Commission Findings

- *The Commission finds the applicant did not meet its burden of proof to show compliance with minimum driveway width requirements of 48.030.B(2). The code requires a 14- to 20-foot-wide driveway when servicing two to four single-family lots. The applicant submittal shows the driveway varying from 20 to 14-feet and the Commission interprets the code to require the full 20-foot width for the length as it serves four lots.*

**Response:** Standard 48.030(B)(2), referenced by Planning Commission, requires a driveway to be between 14 and 20 feet wide when serving two to four single family homes. The requested variance by the property owner would allow the driveway to serve six single-family lots (there are no existing or proposed homes with this application) and consolidate six potential single driveways into one to eliminate the need for significant grading. The driveway has been designed to be 20 feet wide where the driveway meets Marylhurst Drive and then is reduced down to 14 feet wide for the remainder of the driveway. The reduced driveway width would serve four of the six lots and would be approximately 150 feet in length. This design, which is supported by both Tualatin Valley Fire and Rescue and the City's Engineering Division, allows for emergency vehicles to fully pull into the private driveway without blocking any of the street on Marylhurst Drive while also providing a buffer between the project site and the existing home to the east off Midhill Circle that is not part of the project site.

It is possible to make the driveway 20 feet wide the entire length of the driveway, but this would require the driveway to be on the property line and multiple feet above the home to east. There would not be any room for landscaping to screen the vehicles from the driveway, so instead of proposing this design, the applicant has designed the driveway to be slightly narrower (but still meet the minimum required by code) and include a five foot buffer between the project site and the existing homes to increase privacy for the residents.

The design submitted complies with the driveway width required by Standard 48.030(B)(2) and has been approved by both Tualatin Valley Fire and Rescue and the West Linn Engineering department. Neither the fire professionals nor the engineering professionals have any concerns about the proposed design.

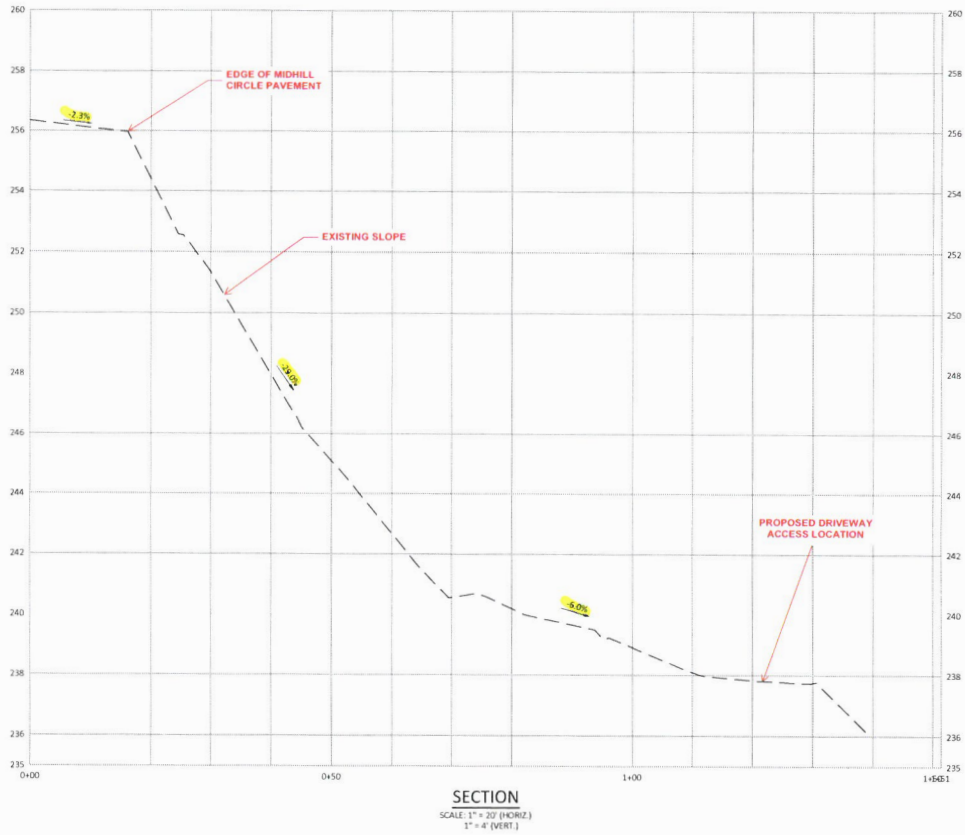
- *The Commission finds the applicant did not meet its burden of proof to show all six lots required shared access from one driveway. The applicant did not provide evidence that either the four lots fronting Midhill Circle could not reasonably take access from that street, which would eliminate the need for a variance, or that the spacing standards along Marylhurst Drive could not be met if multiple access points were utilized.*

**Response:** The two primary reasons the project site cannot provide individual access to each of the six lots on the project site are 1) the required distance spacing requirements could not be met, and 2) the steep topography of the site near Midhill Circle.

- 1) In the City of West Linn's Transportation Systems Plan (Figure 17) Marylhurst Drive is classified as a Collector Street and Midhill Circle is classified as a Local Street. Therefore, based on Standard 48.060(C)(5) and Standard 48.060(D)(3) no intersection is permitted closer than 35 feet from the street intersections or 30 feet from any other curb cut on the same side of the street. The six properties included in the project site are nonconforming existing lots of record that are approximately 35 feet to 40 feet wide. With this layout, and the existing layout of the public streets, it would be very difficult to meet the spacing standards with six separate driveways. On average, the driveways would be approximately 28 feet apart from on the same side of the street, and not meet the minimum spacing standard of 30 feet. This alternative driveway location is shown on Exhibit Sheet 3 and 4 of the attached civil plans.
- 2) The natural topography of the project site slopes steeply down from Midhill Circle, leveling out somewhat where the proposed private shared driveway is proposed, and then sloping back up to the other side of Midhill Circle. If the applicant were to provide individual driveways from Midhill Circle, they would have to be constructed on a slope with grades of 29%. Standard 48.030(B)(3) states that the maximum grade permitted on a driveway is 15%, or the property owner would need to request a variance to allow for a steeper grade. In order to limit the amount of grading required to construct a driveway from Midhill Circle, the applicant is proposing the shared driveway where the project site has minimal slopes and could easily access all six lots without substantial grading within a single shared driveway.

## Conclusion

In addition to the above responses to the concerns of the Planning Commission, the applicant is submitting civil exhibits that show the topography of the site, grade of the existing slopes off Midhill Circle, and alternative driveway placements that are infeasible and undesirable by the City Engineering Department.



GRADING DETAILS

**MARYLHURST SUBDIVISION**  
WEST LINN, OR



**Harper  
Houf Peterson  
Righellis Inc.**

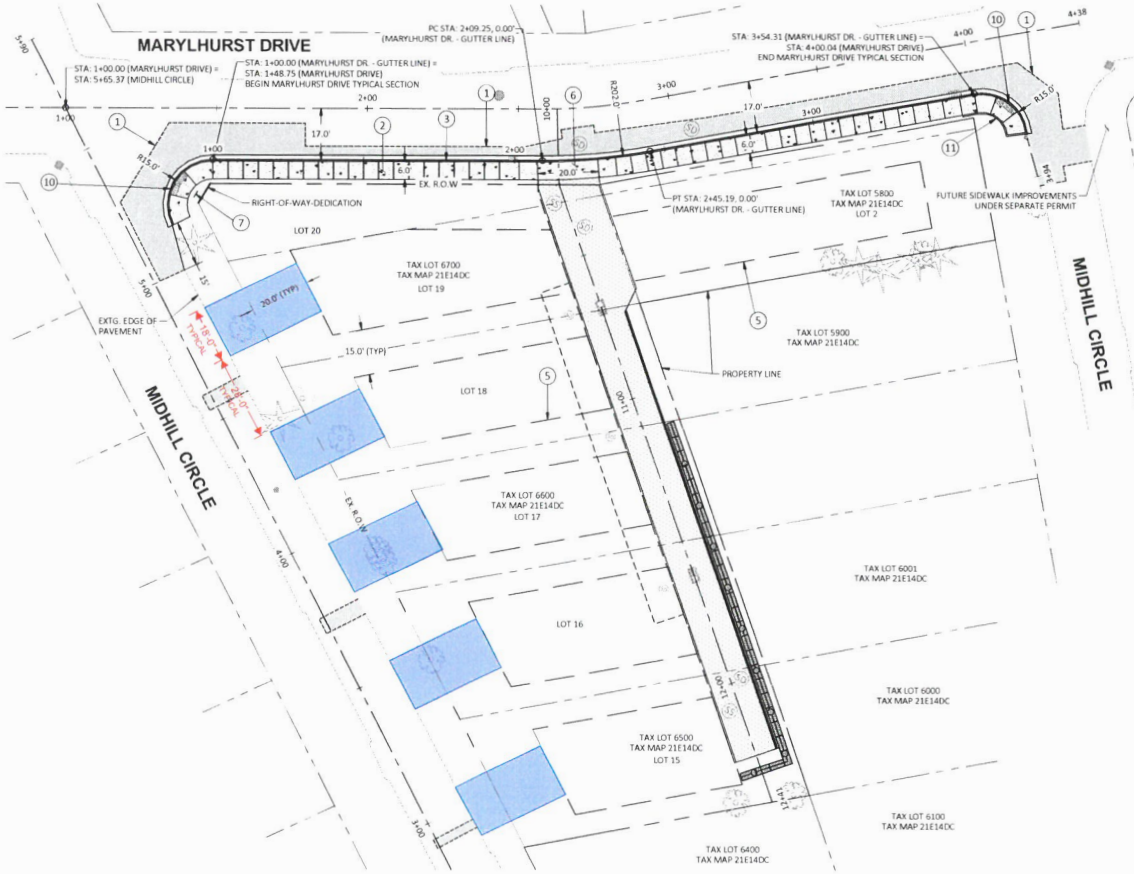
1000 S. W. 10th Street, Suite 200, Portland, OR 97202  
phone: 503.221.1171 www.hhpr.com fax: 503.221.1171

DESIGNED	HHPR	
DRAWN	HHPR	
CHECKED	HHPR	
DATE	DESCRIPTION	DATE
		03/15/2023

**EX-2**

JOB NO. **TPH-02**

ALTERNATIVE DRIVEWAYS LOCATED FROM MIDHILL CIRCLE  
 INFEASIBLE & UNDESIRABLE AS THERE ARE EXTREME SLOPES (29%), RESULTS IN MORE DRIVEWAYS, LOCATED CLOSER TOGETHER



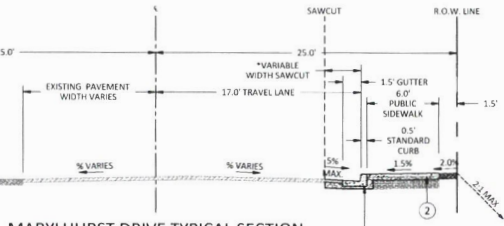
**CONSTRUCTION NOTES:**

- 1 SAWCUT EXISTING PAVEMENT AND CONSTRUCT IMPROVEMENTS PER TYPICAL SECTIONS BELOW. FINAL SAWCUT LIMITS ARE AT THE DISCRETION OF THE CITY INSPECTOR
- 2 CONSTRUCT CURB-TIGHT CONCRETE SIDEWALK PER ODOT STD. DWG. RD720 ON SHEET C6.0.
- 3 CONSTRUCT STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DRAWING WL-RD700 ON SHEET C6.0.
- 5 SETBACK LINE/FUTURE BUILDING ZONE FOOTPRINT (TYP.).
- 6 CONSTRUCT CONCRETE DRIVEWAY OPTION N PER ODOT STD. DWG. RD750 ON SHEET C6.0.
- 7 INSTALL NEW STREET NAME SIGN PER CITY OF WEST LINN STANDARD DRAWING WL-TM223-A ON SHEET C6.0.
- 10 CONSTRUCT DIAGONAL PARALLEL CURB RAMP OPTION "PL-3" PER ODOT STD. DWG. RD922 ON SHEET C6.1.
- 11 CONSTRUCT CONCRETE RETAINING CURB PER DETAIL ON SHEET C6.4. ELEVATIONS PER GRADING DETAILS ON SHEET C4.1.

NOTE: SEE SHEET C3.1 FOR MARYLHURST DRIVE GUTTER PROFILE

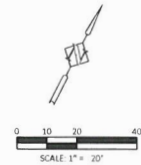
**LEGEND**

- ASPHALT CONCRETE (AC)
- ASPHALT PAVEMENT
- CONCRETE
- PROPOSED RETAINING WALL
- SAWCUT LINE
- EXISTING ROW LINE
- PROPOSED ROW LINE
- EXISTING PROPERTY LINE
- CENTERLINE
- FENCE PROTECTION FENCE
- PUBLIC UTILITY EASEMENT (PUE)
- SETBACK LINE/FUTURE BUILDING ZONE FOOTPRINT



**MARYLHURST DRIVE TYPICAL SECTION**

STA. 1+00.00 - STA. 3+54.31  
 \*STA 1+00.00 - 1+30.63, 12.0' SAWCUT  
 \*STA 1+30.63 - 2+03.17, 4.5' SAWCUT  
 \*STA 2+66.17 - 3+54.31, 7.5' SAWCUT



**MARYLHURST DRIVE PLAN**  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

**Harper**  
**Hout Peterson**  
**Righellis Inc.**

204 SE Spokane Street, Suite 200 Portland, OR 97202  
 phone 503.221.1111 www.hrp.com fax 503.221.1171

REVISION	HHPR	HHPR	HHPR	DATE	DESCRIPTION

SHEET NO. **EX-3**

JOB NO. **TPH-02**

ALTERNATIVE DRIVEWAYS LOCATED FROM MIDHILL CIRCLE  
 INFEASIBLE & UNDESIRABLE AS THERE ARE EXTREME SLOPES (29%), RESULTS IN MORE DRIVEWAYS, LOCATED CLOSER TOGETHER



**LEGEND**

- ASPHALT CONCRETE (AC)
- ASPHALT PAVEMENT
- CONCRETE
- CONSTRUCTION ENTRANCE
- TREE PROTECTION FENCE
- SEDIMENT FENCE
- LIMITS OF GRADING
- INLET PROTECTION
- EXISTING CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING ROW LINE
- PROPOSED ROW LINE
- RETAINING WALL
- PUBLIC UTILITY EASEMENT (PUE)
- STORM LINE
- STORMWATER MANHOLE
- CATCH BASIN

- CONSTRUCTION NOTES:**
- 1 PROPOSED INLET PROTECTION PER DETAIL ON SHEET C6.4.
  - 2 PROPOSED SEDIMENT FENCE PER DETAIL ON SHEET C6.4.
  - 3 PROPOSED CONSTRUCTION ENTRANCE PER DETAIL ON SHEET C6.4.
  - 4 INSTALL 6' TALL CHAINLINK TREE PROTECTION FENCING.
  - 5 LIMITS OF GRADING.

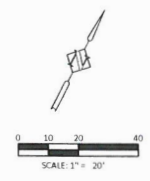
**NOTE:**  
 ALL GRADING/FILL MATERIAL PROPOSED ON SITE SHALL BE COORDINATED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. HHPR PROVIDES NO INSTRUCTION AND TAKES NO RESPONSIBILITY REGARDING FILL MATERIAL AND PLACEMENT DURING CONSTRUCTION.

MASS GRADING & EROSION CONTROL PLAN  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

**Harper Hoult Peterson**  
**HHPR**  
**Righellis Inc.**

209 SE Spokane Street, Suite 200 Portland, OR 97202  
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

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CHECKED	HHPR
DATE	03/15/2023



SHEET NO.  
**EX-4**  
 JOB NO.  
 TPH-02

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**Marylhurst Drive Variance**  
**Land Use Application Narrative & Findings Document**  
Class II Variance

---

**Owner/Applicant:** Tracy & Derek Peterson  
24350 SW Nodaway Lane  
Wilsonville, OR 97070

**Planner:** Hillary Harris, Planner  
Harper Houf Peterson Righellis, Inc.  
205 SE Spokane Street, Suite 200  
Portland, OR 97202  
(503) 221-1131  
hillaryh@hhpr.com

**Engineer:** Alex Simpson, PE  
Harper Houf Peterson Righellis, Inc.  
205 SE Spokane Street, Suite 200  
Portland, OR 97202  
(503) 221-1131  
alexs@hhpr.com

**Site Location:** 2622 Marylhurst Drive & 18600-18690 Midhill Circle

**Tax Map:** 2S1E14DC

**Tax Lots:** 5800, 6700, 6701, 6601, 6600, 6500

**Parcel Size:** 0.7 acres

**Zoning Designation:** R-10

**Summary of Request:** The applicant is requesting a Type II variance to allow for more than four lots (six lots total) to be served from one private driveway.

**Date:** March 6, 2023



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# I. PROJECT OVERVIEW

## EXISTING CONDITIONS & PROPOSAL

The project site includes six properties located off Marylhurst Drive and Midhill Circle (Tax Lots 2S1E14DC5800, 2S1E14DC6500, 2S1E14DC6600, 2S1E14DC6601, 2S1E14DC6700, and 2S1E14DC6701). The site is approximately 0.7 acres in size and zoned R-10 on the West Linn Zoning Map. The site has been subdivided and approved for the construction of single-family homes.

Due to the limited space of the project site, the steep topography, and the City prioritizing the area for future walkability, the properties can only be accessed from a single private driveway off Marylhurst Drive. The West Linn Community Development Code allows for up to four properties to take access from a shared private drive, and there are a total of six properties on the project site. Therefore, the applicant is requesting a Class II Variance to allow for all six properties on the project site to be accessed from the shared private drive.

VICINITY MAP



## II. RESPONSE TO APPLICABLE APPROVAL CRITERIA FOR A CLASS II VARIANCE

### CHAPTER 11: SINGLE-FAMILY RESIDENTIAL DETACHED, R-10

#### SECTION 11.030: PERMITTED USES

The following are uses permitted outright in this zoning district:

1. Single-family attached or detached residential unit.
  - a. Duplex residential units.
  - b. Triplex residential units.
  - c. Quadplex residential units.
2. Cottage clusters.
3. Townhouse.
4. Community recreation.
5. Family day care.
6. Residential home.
7. Utilities, minor.
8. Transportation facilities (Type I).
9. Manufactured home.
10. Community building on City-owned property at 3706 Cedaroak Drive and indicated on the map below.

**Response:** The project site is comprised of six existing lots that are proposed for eventual development as either single-family attached or detached residential dwellings. However, there is no proposed development with this application, only the request for a variance.

### CHAPTER 48: ACCESS, EGRESS, AND CIRCULATION

#### SECTION 48.020: APPLICABILITY AND GENERAL PROVISIONS

- A. The provisions of this chapter do not apply where the provisions of the Transportation System Plan or land division chapter are applicable and set forth differing standards.

**Response:** Neither the provisions of the Transportation System Plan nor the land division chapter are applicable to this project. Therefore, the standards of Section 48.020 apply.

- B. All lots shall have access from a public street or from a platted private street approved under the land division chapter.

**Response:** The applicant is proposing all six lots have access from Marylhurst Drive, a public street, via a shared private driveway. Standard (B) above is satisfied with the proposed design – please see the attached site plan for details.

- C. No building or other permit shall be issued until scaled plans are presented to the City and approved by the City as provided by this chapter, and show how the access, egress, and circulation requirements are

to be fulfilled. Access to State or County roads may require review, approval, and permits from the appropriate authority.

**Response:** Included with this application is a detailed and scaled civil plan set that includes a site plan and grading plan. Please see these plans for details on compliance with the standards of this chapter.

*D. Should the owner or occupant of a lot, parcel or building enlarge or change the use to which the lot, parcel or building is put, resulting in increasing any of the requirements of this chapter, it shall be unlawful and a violation of this code to begin or maintain such altered use until the provisions of this chapter have been met, and, if required, until the appropriate approval authority under Chapter 99 CDC has approved the change.*

**Response:** The property owner is not proposing to change the use of the existing lots or enlarge the lots included in the project site.

*E. Owners of two or more uses, structures, lots, parcels, or units of land may agree to utilize jointly the same access and egress when the combined access and egress of both uses, structures, or parcels of land satisfies the requirements as designated in this code; provided, that satisfactory legal evidence is presented to the City Attorney in the form of deeds, easements, leases, or contracts to establish joint use. Copies of said instrument shall be placed on permanent file with the City Recorder.*

**Response:** The property owner owns all six lots included on the project site and proposes to have all six lots utilize a joint access driveway from Marylhurst Drive. This combined access satisfies all requirements of this code or is requesting a variance to the code standard.

#### **SECTION 48.025: ACCESS CONTROL**

*B. Access control standards.*

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

**Response:** A traffic impact analysis is not required or included with this variance application.

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

**Response:** The applicant is requesting a variance to allow for the consolidation of driveways and allow for all six properties to take access from a single point off Marylhurst Drive. In addition, the applicant will provide frontage improvements along Marylhurst Drive, including a six foot wide sidewalk and new street paving. Please see the attached site plan, Sheet C3.0, for details on the proposed improvements.

3. *Access options. When vehicle access is required for development (i.e., for off-street parking, delivery, service, drive-through facilities, etc.), access shall be provided by one of the following methods (planned access shall be consistent with adopted public works standards and TSP). These methods are “options” as approved by the City Engineer.*
  - a. *Option 1. Access is from an existing or proposed alley or mid-block lane. If a property has access to an alley or lane, direct access to a public street is not permitted.*
  - b. *Option 2. Access is from a private street or driveway connected to an adjoining property that has direct access to a public street (i.e., “shared driveway”). A public access easement covering the driveway shall be recorded in this case to assure access to the closest public street for all users of the private street/drive.*
  - c. *Option 3. Access is from a public street adjacent to the development lot or parcel. If practicable, the owner/developer may be required to close or consolidate an existing access point as a condition of approving a new access. Street accesses shall comply with the access spacing standards in subsection (B)(6) of this section.*

**Response:** The applicant proposes to construct a shared private driveway from Marylhurst Drive, a public street directly adjacent to the development site. Under Access Option (3)(c) above, this is a permitted method of providing access to the subject properties.

4. *Subdivisions fronting onto an arterial street. [...]*

**Response:** The applicant is not proposing a subdivision or new residential land division with this application. Therefore, the above standard does not apply, and the remaining code language has been omitted from this narrative.

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

**Response:** One of the lots (Tax Lot 5800) has frontage on both Marylhurst Drive (a Collector) and Midhill Circle (a Local Street). However, with the requested variance, all of the tax lots on the project site will take access from the shared driveway from Marylhurst Drive.

6. *Access spacing.*
  - a. *The access spacing standards found in the adopted Transportation System Plan (TSP) shall be applicable to all newly established public street intersections and non-traversable medians. Deviation from the access spacing standards may be granted by the City Engineer if conditions are met as described in the access spacing variances section in the adopted TSP.*

**Response:** The applicant is not proposing any new public street intersections with this application. Therefore, Standard (6)(a) does not apply.

- b. *Private drives and other access ways are subject to the requirements of CDC 48.060.*

**Response:** The proposed shared driveway on the project site complies with all applicable standards of CDC 48.060. Please see the responses in that section of this narrative for details on compliance.

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

**Response:** Each of the lots included on the project site will only have one access point. All six lots take access from the shared driveway off Marylhurst Drive. Please see the attached site plan for details on site access.

8. *Shared driveways. The number of driveway and private street intersections with public streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The City shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes in accordance with the following standards:*
  - a. *Shared driveways and frontage streets may be required to consolidate access onto a collector or arterial street. When shared driveways or frontage streets are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway or street temporarily ends at the property line, but may be extended in the future as the adjacent lot or parcel develops. "Developable" means that a lot or parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).*

**Response:** The applicant is proposing all six lots take access from a shared driveway off Marylhurst Drive. The consolidation of the driveways will prevent multiple driveways onto the adjacent streets and maximize the frontage improvements that can be provided on Marylhurst Drive. Please see the attached site plan for details on site access.

- b. *Access easements (i.e., for the benefit of affected properties) shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.*

**Responses:** Acknowledged by the applicant.

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

**Response:** The applicant is not proposing any new streets or blocks with this application. Only a variance to allow for a single shared driveway for all six lots is requested. Therefore, Standard (C) above does not apply to this application and the remaining code language has been omitted.

**SECTION 48.030: MINIMUM VEHICULAR REQUIREMENTS FOR RESIDENTIAL USES**

- A. *Direct individual access from single-family dwellings and duplex lots to an arterial street, as designated in the transportation element of the Comprehensive Plan, is prohibited for lots or parcels created after the effective date of this code where an alternate access is either available or is expected to be available by imminent development application. Evidence of alternate or future access may include temporary cul-de-sacs, dedications or stub outs on adjacent lots or parcels, or tentative street layout plans submitted at one time by adjacent property owner/developer or by the owner/developer, or previous owner/developer, of the property in question.*

**Response:** Marylhurst Drive is classified as a Collector, not an Arterial Street. Therefore, the above standard does not apply to this application.

- B. *When any portion of any house is less than 150 feet from the adjacent right-of-way, access to the home is as follows: [...]*
- C. *When any portion of one or more homes is more than 150 feet from the adjacent right-of-way, the provisions of subsection B of this section shall apply in addition to the following provisions. [...]*

**Response:** There are no existing houses on the project site, nor are there any houses proposed with this variance application. Therefore, Standards (B) and (C) above do not apply and the remaining code language has been omitted.

- D. *Access to five or more single-family homes shall be by a street built to full construction code standards. All streets shall be public. This full street provision may only be waived by variance.*

**Response:** The applicant is requesting a variance to allow for a driveway to be constructed to serve all six of the residential lots on the development site. This driveway will be 20 feet wide and comply with all applicable standards for a driveway.

- E. *Access and/or service drives for multi-family dwellings shall be fully improved with hard surface pavement: [...]*

**Response:** The applicant is not proposing any multi-family dwellings with this application. Therefore, Standard (E) does not apply, and the remaining code language has been omitted.

- F. *Where on-site maneuvering and/or access drives are necessary to accommodate required parking, in no case shall said maneuvering and/or access drives be less than that required in Chapters 46 and 48 CDC.*

**Response:** When developed, each residential site will have adequate parking provided that complies with the West Linn Community Development Code.

- G. *The number of driveways or curb cuts shall be minimized on arterials or collectors. Consolidation or joint use of existing driveways shall be required when feasible.*



**Response:** Granting the requested variance will allow for only one driveway to be constructed on Marylhurst Drive, minimizing the number of curb cuts and possible vehicle-pedestrian conflicts on the street. Because the orientation and location of the site, as well as the City’s desire to make the area a more pedestrian oriented and walkable neighborhood, consolidating all six driveways into one shared private driveway is not only feasible, but ideal for the site.

*H. In order to facilitate through traffic and improve neighborhood connections, it may be necessary to construct a public street through a multi-family site.*

**Response:** The applicant is not proposing any multi-family dwellings with this application. Therefore, Standard (H) does not apply to this application.

*I. Gated accessways to residential development other than a single-family home are prohibited.*

**Response:** The applicant is not proposing any gated accessways with this application. Therefore, Standard (I) does not apply to this application.

**SECTION 48.060: WIDTH AND LOCATION OF CURB CUTS AND ACCESS SEPARATION REQUIREMENTS**

- A. Minimum curb cut width shall be 16 feet.*
- B. Maximum curb cut width shall be 36 feet, except along Highway 43 in which case the maximum curb cut shall be 40 feet. For emergency service providers, including fire stations, the maximum shall be 50 feet.*

**Response:** The proposed driveway off Marylhurst Drive has a curb cut of 20 feet, complying with the minimum and maximum curb cut width allowed above. Please see the attached site plan, Sheet C3.0, for details.

- C. No curb cuts shall be allowed any closer to an intersecting street right-of-way line than the following:*
  - 1. On an arterial when intersected by another arterial, 150 feet.*
  - 2. On an arterial when intersected by a collector, 100 feet.*
  - 3. On an arterial when intersected by a local street, 100 feet.*
  - 4. On a collector when intersecting an arterial street, 100 feet.*
  - 5. On a collector when intersected by another collector or local street, 35 feet.*
  - 6. On a local street when intersecting any other street, 35 feet.*

**Response:** In the City of West Linn’s Transportation Systems Plan (Figure 17), Marylhurst Drive is classified as a Collector Street and Midhill Circle is classified as a Local Street. Therefore, no curb cut is allowed any closer than 35 feet of these intersecting. The proposed curb cut is well over 100 feet from both intersections, complying with the above standard. Please see the attached site plan, Sheet C3.0, for details.

- D. There shall be a minimum distance between any two adjacent curb cuts on the same side of a public street, except for one-way entrances and exits, as follows:*
  - 1. On an arterial street, 150 feet.*
  - 2. On a collector street, 75 feet.*
  - 3. Between any two curb cuts on the same lot or parcel on a local street, 30 feet.*





**Response:** The applicant is only proposing one curb cut on the development site that is over 100 feet from both intersections of Midhill Circle and Marylhurst Drive. If the variance was not granted and two driveways had to be provided on Marylhurst Drive (a collector) or four to five on Midhill Circle (a local street), it would be very difficult to meet the minimum distance requirements with the site dimensions and local topography. Granting the variance allows for just a single driveway on Marylhurst Drive that can meet all minimum distance requirements.

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

**Response:** The applicant is not proposing to install a rolled curb adjacent to the development site. Therefore, the above standard does not apply to this application.

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

**Response:** The applicant is requesting a variance to allow for all six residential properties to have vehicle access from a single shared driveway. Granting the requested variance will allow for all the properties to consolidate their access into one shared driveway and only require one curb cut on Marylhurst Drive.

## CHAPTER 75: VARIANCES AND SPECIAL WAIVERS

### SECTION 75.020: CLASSIFICATION OF VARIANCES

*B. Class II Variance. Class II variances may be utilized when strict application of code requirements would be inconsistent with the general purpose of the CDC and would create a burden upon a property owner with no corresponding public benefit. A Class II variance will involve a significant change from the code requirements and may create adverse impacts on adjacent property or occupants. It includes any variance that is not classified as a Class I variance or special waiver.*

- 1. Class II Variance Approval Criteria. The approval authority may impose appropriate conditions to ensure compliance with the criteria. The appropriate approval authority shall approve a variance request if all the following criteria are met and corresponding findings of fact prepared.*
  - a) The variance is the minimum variance necessary to make reasonable use of the property. To make this determination, the following factors may be considered, together with any other relevant facts or circumstances:*
    - 1) Whether the development is similar in size, intensity and type to developments on other properties in the City that have the same zoning designation.*
    - 2) Physical characteristics of the property such as lot size or shape, topography, or the existence of natural resources.*
    - 3) The potential for economic development of the subject property.*

**Response:** The requested variance is the minimum necessary to make reasonable use of the property while also prioritizing pedestrian safety and walkability of the area for the following reasons:

1. The physical characteristics of the lots, including size and shape, make two separate access drives from Marylhurst Drive impractical. This would require multiple curb cuts on the street, closer proximity

between driveways and street intersections, as well as requiring additional space on the lots themselves, limiting the buildable area of the residential properties.

2. Due to the topography of the project site and the extremely steep slopes that requires retaining walls, minimizing the number of driveways onto Marylhurst Drive will limit pedestrian-vehicle and vehicle-vehicle conflicts.
3. It should be noted that the City requested the property owner abandon the original development plans for the project site that had each lot taking individual direct access from Midhill Circle in lieu of making all public improvements and access off Marylhurst Drive. The property owner revised the development plan in accordance with the City's request to support the potential future redevelopment vision of pedestrian safety and walkability down to Highway 43.

*b) The variance will not result in violation(s) of any other code standard, and the variance will meet the purposes of the regulation being modified.*

**Response:** The requested variance will not result in a violation of any other known code standards while still meeting the purpose of the regulation being modified. Chapter 48 in the CDC seeks to balance mobility and the need to provide efficient and safe access to individual properties. Allowing for all six lots to be accessed via a single private drive creates a more practical development pattern for the area, as well as a safer situation for access, egress, and pedestrian circulation by limiting curb cuts on a Collector. Additionally, the requested variance will produce more well-designed homes relative to the site size, shape and existing development pattern of the area and on Marylhurst Drive.

*c) The need for the variance was not created by the applicant and/or owner requesting the variance.*

**Response:** The two primary reasons the property owner is requesting a variance to allow for all six lots to take access from a single shared private drive is the steep topography of Marylhurst Drive and the project site and the City's request to not have access from Midhill Circle. Neither the steepness of the area nor the City's request was created by the property owner.

*d) If more than one variance is requested, the cumulative effect of the variances results in a project that is consistent with the overall purpose of the zone.*

**Response:** Only one variance is requested, and that variance would apply to all six lots and the road would remain private and our responsibility.

## CHAPTER 96: STREET IMPROVEMENT CONSTRUCTION

### SECTION 96.010: CONSTRUCTION REQUIRED

- A. *Street improvements for residential construction are required when:*
1. *Construction of a new single-family attached or detached structure (replacement of an existing structure is exempt); or*
  2. *Construction of a new multifamily structure; or*
  3. *Increase in dwelling unit density on site (accessory dwelling units are exempt).*

**Response:** The applicant is not proposing the construction of any new residential units at this time. However, the property will eventually be developed with single-family attached or detached homes in the future. With the requested variance to allow all the properties on the development site to have access from a single shared driveway, the applicant is also proposing street frontage improvements on Marylhurst Drive, including a six foot sidewalk, stormwater facilities, and new street paving. Please see the attached civil plan set for details on the proposed improvements.

*B. Street improvements for commercial construction are required when: [...]*

**Response:** The applicant is not proposing any commercial construction on the project site. Therefore, Standard (B) does not apply, and the remaining code language has been omitted.

### **SECTION 96.030: STANDARDS**

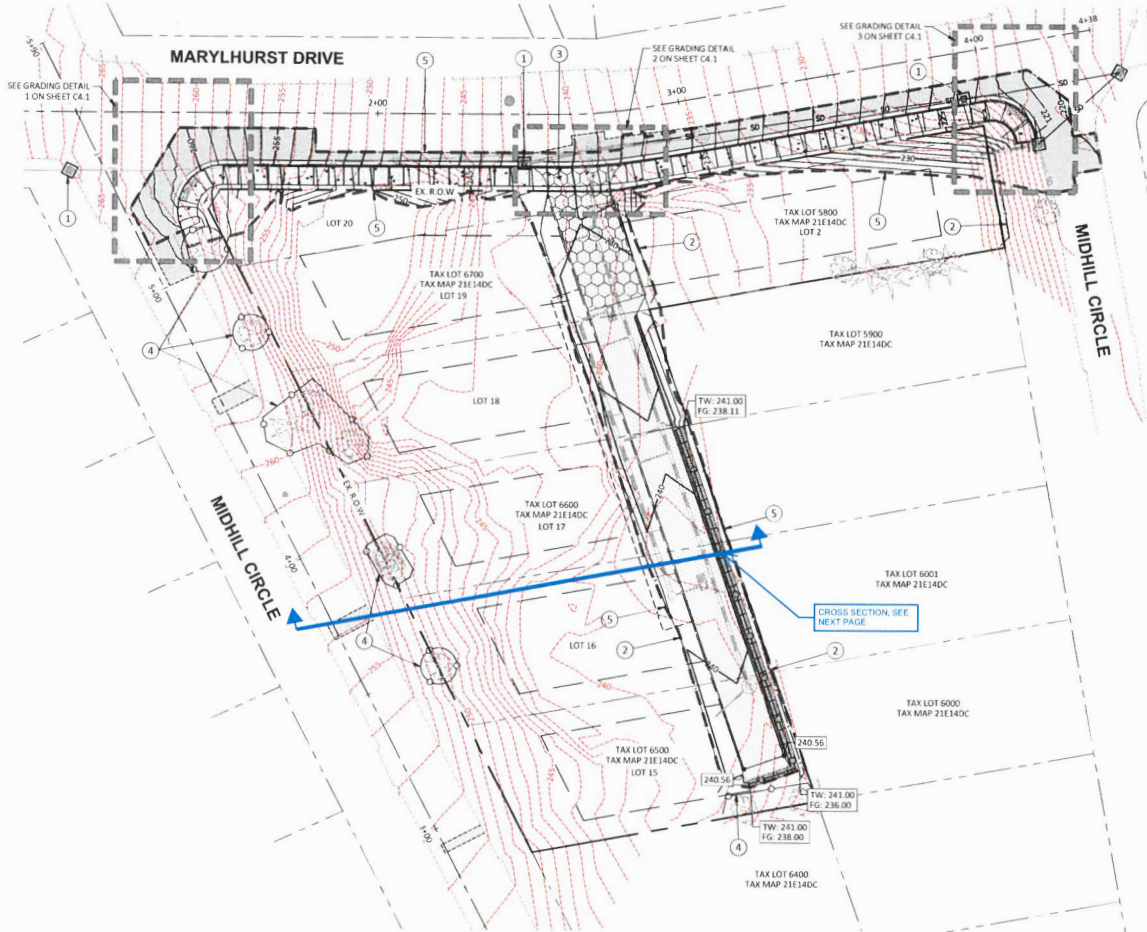
*Street improvements shall be installed according to the City standards and shall be completed prior to the issuance of any occupancy permit for the new or remodeled structure or building. In unimproved areas of the City, the City Engineer may grant a time extension of the provisions of this section; provided the applicant submit sufficient security in an amount and quantity satisfactory to the City Attorney to assure payment of such improvement costs.*

**Response:** The applicant is proposing street improvements on Marylhurst Drive and Midhill Circle, including right-of-way dedication, a sidewalk, and improved asphalt concrete paving. These street improvements will be installed according to all applicable City standards and complete prior to the issuance of any occupancy permit for the residential sites.

### **III. CONCLUSION**

This written statement and the accompanying supporting documents demonstrate compliance with the applicable approval criteria for a Class II Variance in the City of West Linn. Therefore, the applicant respectfully requests that the City approve the application.

P:\Projects\1701\1701-02\_Marylhurst\1701-02\_CAD\SS\Sheet C4.1.dwg



**LEGEND**

- ASPHALT CONCRETE (AC)
- ASPHALT PAVEMENT
- CONCRETE
- CONSTRUCTION ENTRANCE
- TREE PROTECTION FENCE
- SEDIMENT FENCE
- LIMITS OF GRADING
- INLET PROTECTION
- EXISTING CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING ROW LINE
- PROPOSED ROW LINE
- RETAINING WALL
- PUBLIC UTILITY EASEMENT (PUE)
- STORM LINE
- STORMWATER MANHOLE
- CATCH BASIN

**CONSTRUCTION NOTES:**

- 1 PROPOSED INLET PROTECTION PER DETAIL ON SHEET C6.4.
- 2 PROPOSED SEDIMENT FENCE PER DETAIL ON SHEET C6.4.
- 3 PROPOSED CONSTRUCTION ENTRANCE PER DETAIL ON SHEET C6.4.
- 4 INSTALL 6' TALL CHAINLINK TREE PROTECTION FENCING.
- 5 LIMITS OF GRADING.

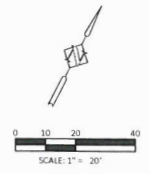
**NOTE:**

ALL GRADING FILL MATERIAL PROPOSED ON SITE SHALL BE COORDINATED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. HHPR PROVIDES NO INSTRUCTION AND TAKES NO RESPONSIBILITY REGARDING FILL MATERIAL AND PLACEMENT DURING CONSTRUCTION.

MASS GRADING & EROSION CONTROL PLAN  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

**HHPR**  
 Harper  
 Houff Peterson  
 Rightellis Inc.

200 SE Spokane Street, Suite 200, Portland, OR 97202  
 Phone: 503.221.1111 www.hhpr.com Fax: 503.221.1111

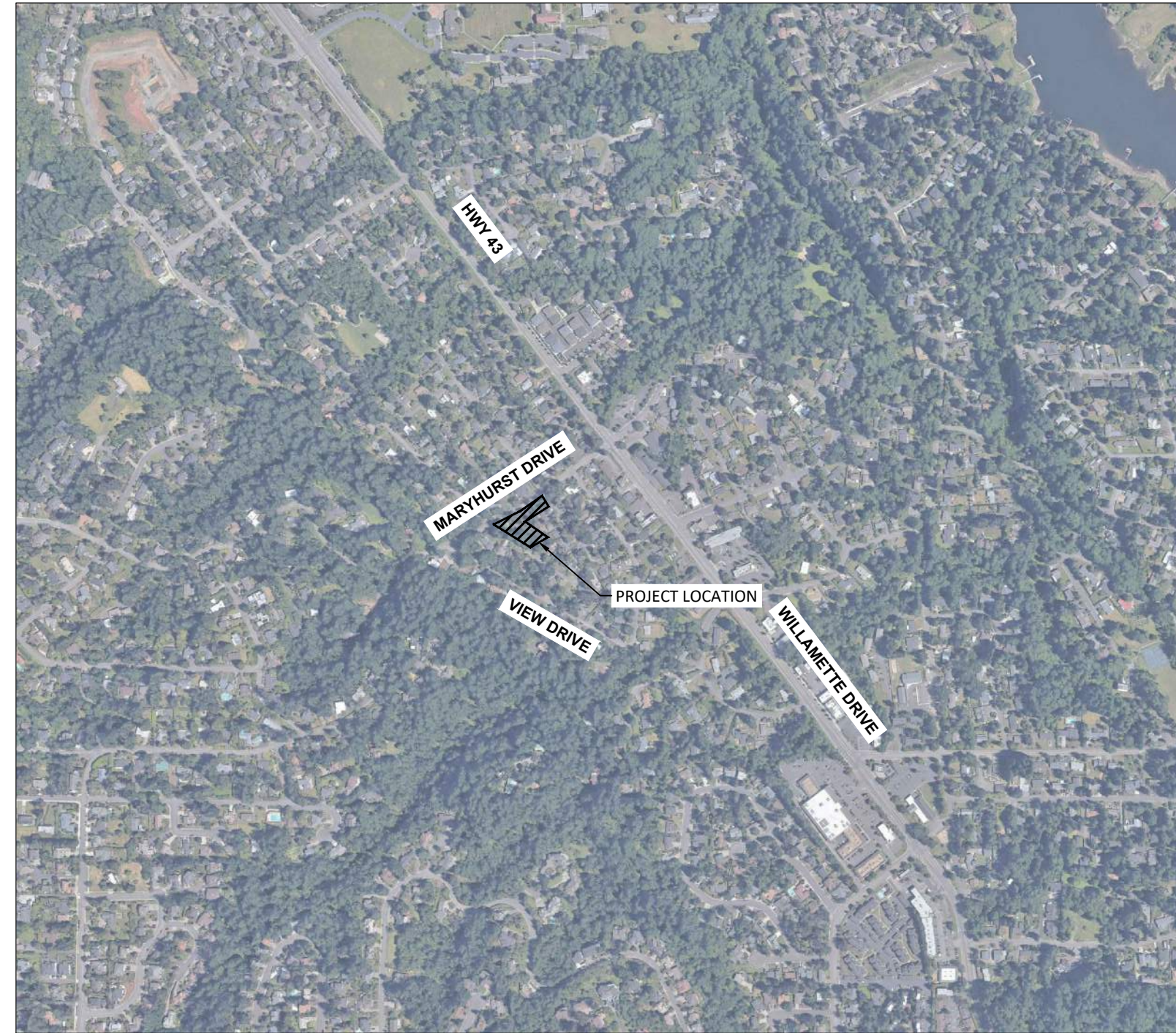


DESIGNED	HHPR
DRAWN	HHPR
CHECKED	HHPR
DATE	03/15/2023
R E V I S I O N S	
NO.	DESCRIPTION

SHEET NO.  
**EX-1**  
 JOB NO. TPH-02

# MARYLHURST SUBDIVISION

PREPARED FOR:  
**TRACY PETERSON**  
WEST LINN, OREGON

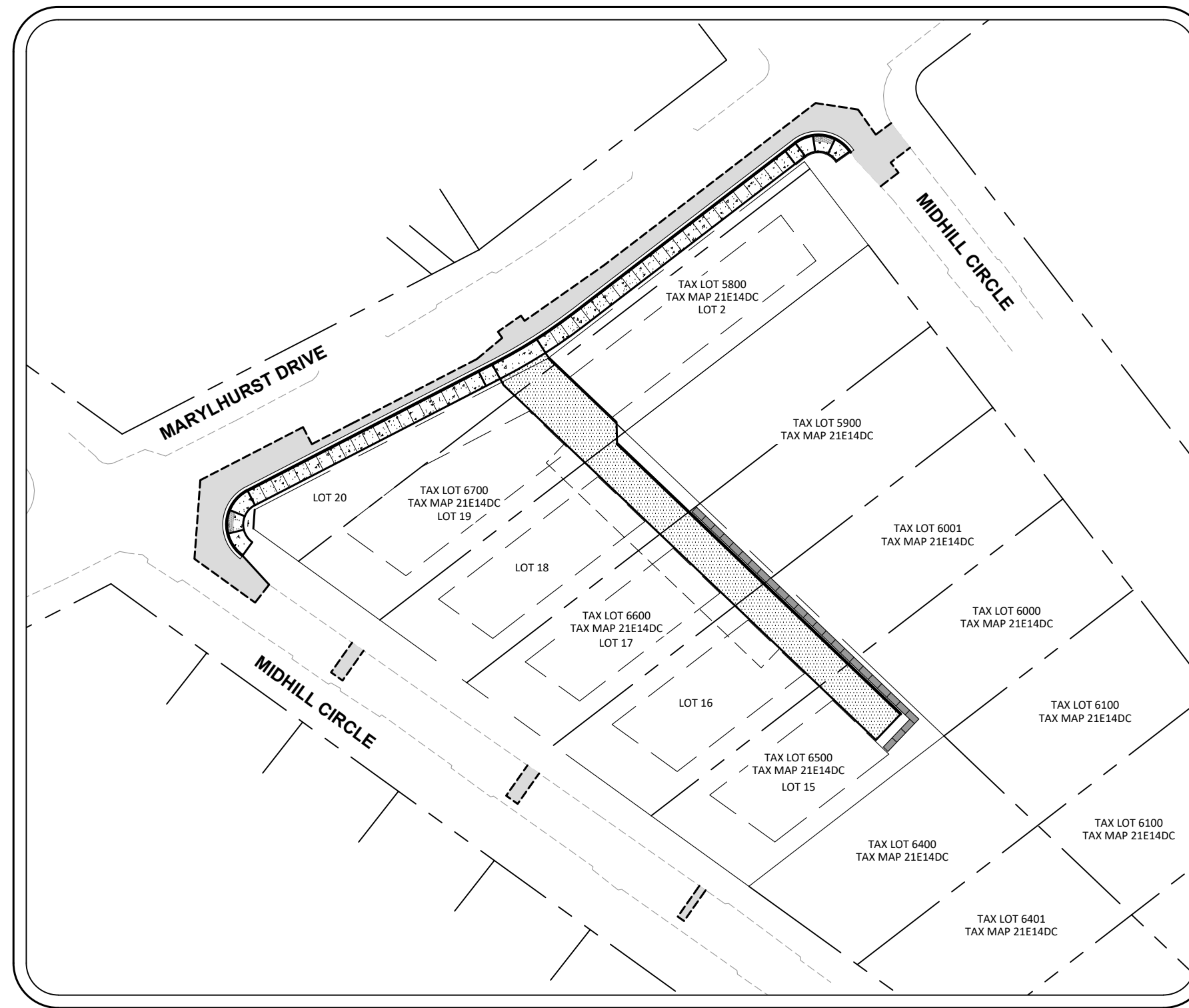


**VICINITY MAP**  
SCALE: NTS

## UTILITY LOCATE REQUIREMENTS

EXISTING UTILITY LOCATIONS ARE APPROXIMATE ONLY. IN ORDER TO PROTECT EXISTING UNDERGROUND UTILITIES, CONTRACTORS PERFORMING WORK SHOWN ON THESE PLANS MUST NOTIFY UTILITIES AND PUBLIC AGENCIES AT LEAST 48 BUSINESS HOURS IN ADVANCE OF, AND NO MORE THAN 10 BUSINESS DAYS BEFORE, BEGINNING EXCAVATION, IN ACCORDANCE WITH THE PROVISIONS OF OAR 952-001-0090. LIMITS OF WORK SHALL BE PRE-MARKED FOR THE UTILITY LOCATORS. POTHOLE ALL CROSSINGS AS NECESSARY TO PREVENT GRADE AND ALIGNMENT CONFLICTS. REPORT ALL CONFLICTS TO THE ENGINEER IMMEDIATELY. PROTECT EXISTING UTILITIES AT ALL TIMES DURING CONSTRUCTION. CALL THE ONE CALL UTILITY NOTIFICATION CENTER AT 503-246-6699 FOR UTILITY LOCATES. ANY DAMAGE TO EXISTING UTILITIES, WHETHER THEY'RE SHOWN ON THESE DRAWINGS OR NOT, WILL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

ATTENTION: OREGON LAW REQUIRES ALL EXCAVATORS TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER OF THE ADMINISTRATION OFFICE FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-232-1987).



**SITE MAP**  
1" = 50'

## SITE INFORMATION

LOCATED AT 2622 MARYLHURST DRIVE, WEST LINN  
LOCATED IN THE SW 1/4 OF SECTION 14, TOWNSHIP  
2 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN,  
CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

## HORIZONTAL DATUM

HORIZONTAL DATUM IS BASED ON OREGON STATE PLANE  
COORDINATE SYSTEM NAD 83/91.

## VERTICAL DATUM

ELEVATIONS ARE BASED ON NAVD88, DERIVED BY GPS OBSERVATIONS. NO  
GEODETIC BENCHMARK HAS BEEN REFERENCE IN THIS SURVEY.

## PROJECT TEAM

### DEVELOPER

TRACY PETERSON  
24350 SW NODAWAY LANE  
WILSONVILLE, OR 97070  
PHONE: 503-726-9929

### CIVIL ENGINEER

HARPER HOUF PETERSON RIGHELLIS INC.  
ATTN: ALEX SIMPSON, P.E  
205 SE SPOKANE ST. SUITE 200  
PORTLAND, OR 97202  
PHONE: 503-221-1131  
FAX: 503-221-1171

### POWER

PORTLAND GENERAL ELECTRIC  
ATTN: BRENT BALDWIN  
3700 SE 17TH AVE.  
PORTLAND, OR 97202  
PHONE: 503-736-5470

### GAS

NW NATURAL  
ATTN: RICH GIRARD  
220 NW 2ND AVENUE  
PORTLAND, OR 97209  
PHONE: 360-921-0314

## FRANCHISE UTILITY INSTALLATION

THIS PLAN SET DOES NOT APPROVE FRANCHISE UTILITY INSTALLATION  
LOCATIONS. EACH FRANCHISE UTILITY SHALL SUBMIT THEIR  
PROPOSED DESIGN TO THE CITY ENGINEERING DEPARTMENT FOR  
APPROVAL.

## NOTE:

THIS DESIGN COMPLIES WITH ORS 92.044 (7) IN THAT NO UTILITY  
INFRASTRUCTURE IS DESIGNED TO BE WITHIN ONE (1) FOOT OF A SURVEY  
MONUMENT LOCATION SHOWN ON A SUBDIVISION OR PARTITION PLAT.  
NO DESIGN EXCEPTIONS NOR FINAL FIELD LOCATION CHANGES SHALL BE  
PERMITTED IF THAT CHANGE WOULD CAUSE ANY UTILITY  
INFRASTRUCTURE TO BE PLACED WITHIN THE PROHIBITED AREA.

## NOTE:

ALL DESIGN STANDARDS SHALL BE IN ACCORDANCE WITH THE CITY OF  
WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.

## SHEET INDEX

- C1.0 - COVER SHEET
- C1.1 - GENERAL NOTES & LEGEND
- C2.0 - EXISTING CONDITIONS
- C2.1 - TREE PRESERVATION & REMOVAL PLAN
- C3.0 - MARYLHURST DRIVE PLAN
- C3.1 - MARYLHURST DRIVE GUTTER PROFILE
- C3.2 - PRIVATE ALLEY PLAN AND PROFILE
- C4.0 - MASS GRADING & EROSION CONTROL PLAN
- C4.1 - GRADING DETAILS
- C5.0 - UTILITY PLAN
- C5.1 - UTILITY PROFILES
- C6.0 - DETAILS
- C6.1 - DETAILS
- C6.2 - DETAILS
- C6.3 - DETAILS
- C6.4 - DETAILS

### SURVEYOR

ANDY PARIS AND ASSOCIATES, INC.  
16057 BOONES FERRY ROAD  
LAKE OSWEGO, OR 97035  
PHONE: 503-636-3341

### TELEPHONE

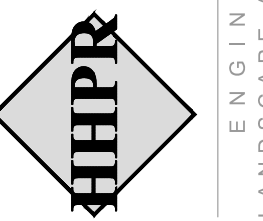
LUMEN  
ATTN: DONAL SHEERAN  
8021 SW CAPITAL HILL RD  
PORTLAND, OR 97219  
EMAIL: DONAL.SHEERAN@LUMEN.COM

### CABLE

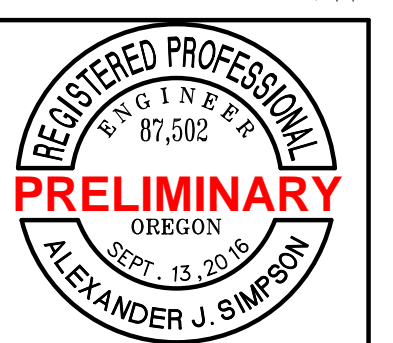
COMCAST  
ATTN: MATTHEW BRAVO  
10831 SW CASCADE AVENUE  
TIGARD, OR 97223  
PHONE: 503-351-9311

COVER SHEET  
**MARYLHURST SUBDIVISION**  
WEST LINN, OR

Harper  
Houf Peterson  
Righellis Inc.



ENGINEERS & PLANNERS  
LANDSCAPE ARCHITECTS & SURVEYORS  
206 SE Spokane Street, Suite 200, Portland, OR 97202  
phone: 503.221.1131 www.hhpri.com fax: 503.221.1171



EXPIRES: 06/30/2024

DESIGNED:	DRAWN:	CHECKED:	DATE:
HHPRI	HHPRI	HHPRI	02/02/2023

DATE	NO.	DESCRIPTION

SHEET NO.  
**C1.0**  
JOB NO.  
TPH-02

**GENERAL NOTES:**

- CONTRACTOR SHALL FOLLOW CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS THROUGHOUT THE DURATION OF THE PROJECT.
- THE LOCATIONS OF ALL EXISTING UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE BASED ON A FIELD SURVEY & INFORMATION SUPPLIED BY UTILITY COMPANIES. LOCATIONS ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. THE CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS, TYPE & SIZES OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTING NEW PIPING/CONDUITS & SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY CONFLICTS NOT SHOWN ON THE PLANS AND THE NEED TO ADJUST PIPING INSTALLATION ACCORDINGLY. CONTRACTOR SHALL PROVIDE 72 HOUR NOTICE TO ENGINEER AND THE AFFECTED UTILITY. CONTRACTOR SHALL ARRANGE FOR THE RELOCATION OF ANY UTILITIES IN CONFLICT WITH THE PROPOSED CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF ORS 757.541 TO 757.571. THE CONTRACTOR SHALL NOTIFY EACH UNDERGROUND UTILITY AT LEAST 48 BUSINESS-DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS, PRIOR TO EXCAVATING, BORING, OR POT-HOLING.
- POT-HOLING AND TRENCH EXCAVATION SHALL SUFFICIENTLY PRECEDE LAYING OF PIPE TO ALLOW REQUIRED ELEVATION AND ALIGNMENT ADJUSTMENTS TO BE ACCOMPLISHED WITHOUT REWORK. ADJUSTMENTS SHALL BE EXPECTED AND CONSIDERED INCIDENTAL.
- UTILITIES OR INTERFERING PORTIONS OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL PLUG THE REMAINING EXPOSED ENDS OF ABANDONED UTILITIES, UNLESS OTHERWISE REQUIRED BY THE ENGINEER.
- ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-246-6699.)
- CONTRACTOR SHALL PROTECT ALL PROPERTY CORNERS, SURVEY MONUMENTS AND CONTROL POINTS TO THE EXTENT POSSIBLE.
- CONTRACTOR SHALL KEEP AND MAINTAIN A CURRENT SET OF DRAWINGS ON SITE. CONTRACTOR TO KEEP ACCURATE "AS-BUILT" RECORD COPY OF PLANS. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL SUBMIT A CLEAN SET OF FIELD RECORD DRAWINGS CONTAINING ALL AS-BUILT INFORMATION FOR USE IN THE PREPARATION OF AS-BUILT DRAWINGS FOR SUBMITTAL TO THE CITY.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL HOMES AND BUSINESSES AT ALL TIMES. PROVIDE WRITTEN NOTICE TO ALL PROPERTY OWNERS AT LEAST TWO (2) BUSINESS DAYS IN ADVANCE OF WORK IN AND/OR CROSSING DRIVEWAYS.
- CONTRACTOR SHALL NOTIFY THE ENGINEER 48 HOURS BEFORE STARTING CONSTRUCTION, AND 24 HOURS BEFORE RESUMING WORK AFTER SHUTDOWNS EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS, OR HOLIDAYS. CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF 48 HOURS PRIOR TO ANY TESTING OR REQUIRED INSPECTION.
- ANY ALTERATION OR VARIANCE FROM THESE PLANS, EXCEPT MINOR FIELD ADJUSTMENT NOT AFFECTING DESIGN NEEDED TO MEET EXISTING FIELD CONDITIONS, SHALL FIRST BE APPROVED BY THE ENGINEER. ANY ALTERATIONS OR VARIANCE FROM THESE PLANS SHALL BE DOCUMENTED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE ENGINEER. ANY PROPOSED CHANGE IN CONSTRUCTION PLANS MUST BE SUBMITTED IN WRITING AND APPROVED BY ENGINEER PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED OR REPLACED MATERIAL & EQUIPMENT IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. EXCEPT THOSE ITEMS DESIGNATED BY THE OWNER FOR SALVAGING. SALVAGED ITEMS SHALL REMAIN THE PROPERTY OF THE OWNER, & SHALL BE CAREFULLY REMOVED & STORED AS DIRECTED.
- CONTRACTOR SHALL RESTORE ALL STRUCTURES, LOTS, SWALES, DITCHES, CURBS, FENCES, WALLS, MAILBOXES, SIGNS, POLES, GUY WIRES, PIPING, & UTILITIES DISTURBED DURING CONSTRUCTION TO EXISTING CONDITIONS UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY FOR APPROVAL. A COPY OF THE APPROVED TRAFFIC CONTROL PLAN SHALL BE PROVIDED TO THE ENGINEER AND AVAILABLE AT THE WORK SITE. THE CITY RESERVES THE RIGHT TO ADD TO OR MODIFY TRAFFIC CONTROL REQUIREMENTS AS MAY BE NECESSARY TO EFFECTIVELY CONTROL TRAFFIC AND TO ASSURE PUBLIC SAFETY.
- CONTRACTOR SHALL PROTECT TRAFFIC AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL ERRECT AND MAINTAIN BARRICADES, WARNING SIGNS, TRAFFIC CONES PER CITY REQUIREMENTS IN ACCORDANCE WITH MUTCD (INCLUDING OREGON SUPPLEMENTS). ALL TRAFFIC CONTROL MEASURES SHALL BE APPROVED AND IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITY.
- FOR STREET IMPROVEMENTS, ADJUST ALL MANHOLES, CLEANOUTS AND VALVE BOXES TO FINISH GRADE. FOR MANHOLE RAISES, MANHOLE RINGS SHALL BE GROUTED ON THE INSIDE WITH NON-SHRINK GROUT.
- TRENCH COMPACTION: TESTS OF TRENCH FILL MATERIALS SHALL BE PER THE ODOT MANUAL OF FIELD TEST PROCEDURES (MFTP) AND MADE ON EACH LIFT OF FILL. TESTS SHALL BE TAKEN AT THE LOCATION AND FREQUENCY ESTABLISHED BY THE ENGINEER.
- ROADWAY MATERIALS COMPACTION: COMPACT PER THE MFTP. TESTS SHALL BE TAKEN AT THE LOCATION AND FREQUENCY ESTABLISHED BY THE ENGINEER.
- CONTRACTOR SHALL INSTALL & MAINTAIN EROSION & SEDIMENTATION CONTROL (ESC) MEASURES DURING CONSTRUCTION (ANY TIME OF YEAR) PER THE REQUIREMENTS OF OREGON DEQ, THE CITY AND THE ENGINEER. CERTAIN ESC MEASURES ARE SHOWN ON THE PLANS. CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS REQUIRED. CONTRACTOR SHALL SUBMIT ESC PLAN FOR REVIEW.
- CONTRACTOR SHALL OBSERVE FIELD CONDITIONS, INCLUDING WORK ON PRIVATE PROPERTY, PRIOR TO BIDDING AND ADJUST BID ACCORDINGLY.
- ALL REFERENCED CITY OF WEST LINN AND ODOT STANDARD DRAWINGS ARE INCLUDED AS PART OF THE CONTRACT DOCUMENTS.
- CONTRACTOR TO MAINTAIN THE INTEGRITY OF PRIVATELY OWNED AND MAINTAINED DRIVEWAYS. DAMAGED SURFACES SHALL BE REPLACED IN KIND UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SUCH REPAIRS SHALL BE CONSIDERED INCIDENTAL.
- UNLESS OTHERWISE SHOWN ON THE DRAWINGS, STRAIGHT GRADES SHALL RUN BETWEEN ALL FINISH GRADE ELEVATIONS AND/OR FINISH CONTOUR LINES SHOWN. FINISH PAVEMENT GRADES AT TRANSITION TO EXISTING PAVEMENT SHALL MATCH EXISTING PAVEMENT GRADES OR BE FEATHERED PAST JOINTS WITH EXISTING PAVEMENTS AS REQUIRED TO PROVIDE A SMOOTH, FREE DRAINING SURFACE.

24. DUE TO THE EXISTING CONDITIONS OF ADJACENT STREETS. CUSTOM CONNECTIONS ARE ANTICIPATED TO BE CONSTRUCTED AT THE INTERFACE OF PROPOSED AND EXISTING FEATURES. PROPOSED FEATURES ARE TO BE CONSTRUCTED TO THE EXTENT SHOWN ON THE PLANS.
25. ALL EXISTING FACILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SUPPORT, MAINTAIN, OR OTHERWISE PROTECT EXISTING UTILITIES AND OTHER FACILITIES AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR TO LEAVE EXISTING FACILITIES IN AN EQUAL OR BETTER CONDITION AND TO THE SATISFACTION ENGINEER.
26. OVER-EXCAVATION OF UNSUITABLE MATERIALS AND BACKFILL WITH SUBGRADE STABILIZATION SHALL BE APPROVED BY THE ENGINEER ON AN AS-NEEDED BASIS.
27. SAWCUTTING OF EXISTING SURFACES INCLUDES ASPHALTIC CONCRETE AND CONCRETE SURFACES, SHALL BE CONSIDERED INCIDENTAL AND INCLUDED IN THE UNIT PRICES OF THE BID.
28. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO CAREFULLY PRESERVE BENCHMARKS, REFERENCE POINTS AND STAKES, AND IN THE CASE OF DESTRUCTION THEREOF BY THE CONTRACTOR RESULTING FROM ITS NEGLIGENCE, THE CONTRACTOR SHALL BE CHARGED WITH THE EXPENSE AND DAMAGE RESULTING THEREFORE AND SHALL BE RESPONSIBLE FOR ANY MISTAKES THAT MAY BE CAUSED BY THE UNNECESSARY LOSS OR DISTURBANCE OF SUCH BENCHMARKS, REFERENCE POINTS AND STAKES.
29. CONTRACTOR SHALL MATCH EXISTING AND PROPOSED GRADES AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
30. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE PLANS, PROJECT SPECIFICATIONS, CITY OF WEST LINN PUBLIC WORKS DESIGN STANDARDS AND STANDARD DRAWINGS.

**UTILITY CONTACTS:**

PGE	LUMEN
BRENT BALDWIN <a href="mailto:BRENT.BALDWIN@PGN.COM">BRENT.BALDWIN@PGN.COM</a> 503-736-5470	DONAL SHEERAN <a href="mailto:DONAL.SHEERAN@LUMEN.COM">DONAL.SHEERAN@LUMEN.COM</a> 503-736-5470
NW NATURAL GAS	COMCAST
RICH GIRARD <a href="mailto:RICHARD.GIRARD@NWNATURAL.COM">RICHARD.GIRARD@NWNATURAL.COM</a> 360-921-0314	MATTHEW BRAVO <a href="mailto:MATTHEW.BRAVO@COMCAST.COM">MATTHEW.BRAVO@COMCAST.COM</a> 503-351-9311

AT THE END OF EACH WORKDAY, ALL TRENCHES AND EXCAVATIONS SHALL BE BACKFILLED AND ALL AREAS WITHIN ACTIVE TRAVEL LANES SHALL BE TEMPORARILY PAVED OR COVERED TO THE SATISFACTION OF THE ENGINEER. TEMPORARY HARD-SURFACE PATCH (COLD MIX AC OR HOT MIX BASE PAVING) SHALL BE PLACED ON TRENCHES WITHIN TRAVEL LANES AT THE END OF EACH DAY'S WORK, UNLESS OTHERWISE DIRECTED. NO TRENCH, ON SITE OR OFF-SITE, SHALL BE LEFT AT ANY TIME IN AN UNSAFE CONDITION. CONTRACTOR IS RESPONSIBLE FOR AND IS LIABLE FOR HAZARDS OR DAMAGE RESULTING FROM THE EXECUTION OF THE WORK.

**DRAINAGE NOTES:**

- PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO KEEP ALL EXISTING UTILITIES IN SERVICE AND TO PROTECT THEM DURING CONSTRUCTION. CONTRACTOR SHALL PROPERLY DIVERT ALL STORM FLOWS AS NECESSARY TO ACCOMPLISH WORK. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE CONSTRUCTION DOES NOT INCREASE DITCH OR OVERLAND FLOWS OR FLOODING RISKS.
- ALL NON-METAL STORM DRAIN PIPING SHALL HAVE ELECTRICALLY CONDUCTIVE TRACER WIRE.
- ALL MANHOLE INVERT ELEVATIONS (IE IN, IE OUT) SHOWN ON PLANS, ARE PROJECTED TO MANHOLE CENTER RATHER THAN MANHOLE FACE.
- ALL PIPE CONNECTIONS TO MANHOLES, CATCH BASINS AND OTHER STRUCTURES SHALL BE MADE WITH NON-SHRINK GROUT, PVC SAND COLLARS OR KOR-N-SEAL BOOT AS REQUIRED.
- WHENEVER STORM DRAIN PIPING CROSSES PROPOSED WATERLINES, MAINTAIN A MINIMUM 18-INCH CLEARANCE.
- IF EXISTING PIPING CONNECTED TO A STRUCTURE IS FOUND TO BE DAMAGED OR PROPOSED PIPING IS LARGER DIAMETER, REMOVE EXISTING PIPING BY CORE DRILLING WALL TO PROPOSED PIPE OUTSIDE DIAMETER PLUS 4-INCHES OR BREAK OUT EXISTING GROUTING. INSTALL PIPE CONNECTION AS SPECIFIED AND SEAL WITH NON-SHRINK GROUT. PIPE CONNECTIONS DAMAGED BY CONTRACTOR NEGLIGENCE DURING CONSTRUCTION SHALL BE REPLACED AT NO COST TO OWNER.
- WHEN STORM DRAIN PIPING CONNECTIONS ARE LOCATED AT CATCH BASIN CORNER, CATCH BASIN SHALL BE CAST-IN-PLACE OR PRE-CAST CATCH BASIN DESIGNED TO ACCOMMODATE PIPE ENTRANCE AT THE CORNER.
- WHEN REPLACING MANHOLES, CATCH BASINS, AND PIPE MAINS, ALL EXISTING CONNECTIONS SHALL BE RECONNECTED INCLUDING PIPE MAINS, LATERALS AND SUBGRADE PIPING UNLESS OTHERWISE DIRECTED BY ENGINEER. ALL CONNECTIONS OF EXISTING PIPING SHALL BE ACCOMPLISHED USING APPROVED CONNECTION METHODS & MATERIALS.
- STORM DRAIN PIPING SHALL BE TV INSPECTED PER COWL STANDARDS.
- ALL MANHOLES AND CATCH BASINS INSTALLED SHALL HAVE SUFFICIENT CLEARANCE TO PROVIDE ACCESS FOR TV INSPECTION CAMERAS.
- CONTRACTOR SHALL MATCH SLOPE AND ALIGNMENT OF EXISTING PIPE WHEN CONNECTING TO EXISTING PIPING.
- COMPLY WITH OAR CHAPTER 333 RULES FOR REQUIRED WATERLINE-SEWERLINE SEPARATION AND CROSSING REQUIREMENTS.

**SURVEY NOTES:**

- TOPOGRAPHIC MAP WAS COMPLETED JUNE 22, 2022 BY ANDY PARIS AND ASSOCIATES, INC.
- ELEVATIONS ARE ON NAVD88, DERIVED BY GPS OBSERVATIONS. NO GEODETIC BENCHMARK HAS BEEN REFERENCED IN THIS SURVEY.
- 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.
- THE BOUNDARIES AS SHOWN ON THIS MAP ARE BASED ON FOUND MONUMENTS, AND RECORD SURVEY AND DEED INFORMATION. THIS MAP DOES NOT REPRESENT A SURVEY TO BE RECORDED, BUT WAS DONE FOR SITE/TOPO INFORMATION ONLY.
- SURVEY IS VALID ONLY IF PRINT HAS SEAL AND SIGNATURE OF SURVEYOR.
- THE LOCATION AND OR EXISTENCE OF UTILITY SERVICE LINES AS SHOWN ON THIS MAP ARE BASED ON FIELD OBSERVATION OF ABOVE GROUND STRUCTURES AND UNDERGROUND UTILITY LOCATIONS BY OREGON UTILITY NOTIFICATION CENTER. THERE MAY EXIST ADDITIONAL SERVICE LINES NOT SHOWN ON THIS SURVEY.
- 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 OF FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
- 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.

**EXISTING LEGEND**

	AREA DRAIN OR CATCH BASIN
	CLEAN OUT
	FIRE HYDRANT
	GUY ANCHOR
	SANITARY SEWER MANHOLE
	UTILITY BOX
	WATER VALVE
000.0 GRD X	GROUND SHOT - SPOT ELEVATION
000.00 EC X	EDGE OF CONCRETE - SPOT ELEVATION
000.00 EG X	EDGE OF GRAVEL - SPOT ELEVATION
000.00 EP X	EDGE OF PAVEMENT - SPOT ELEVATION
000.00 FF X	FINISH FLOOR - SPOT ELEVATION
000.00 PEAK X	ROOF PEAK - SPOT ELEVATION
000.00 DEK X	TOP OF DECK - SPOT ELEVATION
-G-	UNDERGROUND GAS LINE
-SD-	UNDERGROUND STORM LINE
-SS-	UNDERGROUND SANITARY LINE
-T-	UNDERGROUND COMMUNICATION LINE
-W-	UNDERGROUND WATER LINE
-X-	FENCE LINE AS NOTED
	DECIDUOUS TREE
	EVERGREEN TREE

**EROSION CONTROL LEGEND**

	CONSTRUCTION ENTRANCE
	TREE PROTECTION FENCE
	SEDIMENT FENCE
	LIMITS OF GRADING
	INLET PROTECTION

**PROPOSED LEGEND**

	TREE REMOVAL
	EXISTING DECIDUOUS TREE TO REMAIN
	EXISTING CONIFER TREE TO REMAIN
	ASPHALT CONCRETE (AC)
	ALLEY ASPHALT SECTION
	CONCRETE
	PROPOSED RETAINING WALL
	SAWCUT LINE
	EXISTING ROW LINE
	PROPOSED ROW LINE
	EXISTING PROPERTY LINE
	CENTERLINE
	FALL-PROTECTION FENCE
	PUBLIC UTILITY EASEMENT (PUE)
	SETBACK LINE/FUTURE BUILDING ZONE FOOTPRINT
	EXISTING CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	STORM LINE
	STORMWATER MANHOLE
	CATCH BASIN
	SANITARY LINE
	SANITARY SEWER MANHOLE
	WATER LINE
	WATER METER
	DEMO EXISTING PIPE

GENERAL NOTES & LEGEND  
**MARYLHURST SUBDIVISION**  
WEST LINN, OR

**Harper Houf Peterson Righellis Inc.**  
ENGINEERS \* PLANNERS \* LANDSCAPE ARCHITECTS \* SURVEYORS  
206 SE Spokane Street, Suite 200, Portland, OR 97202  
phone: 503.221.1131 www.hhpri.com fax: 503.221.1171



EXPIRES: 06/30/2024

DESIGNED: HHPRI	DRAWN: HHPRI	CHECKED: HHPRI	DATE: 02/02/2023
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DATE	NO.	DESCRIPTION

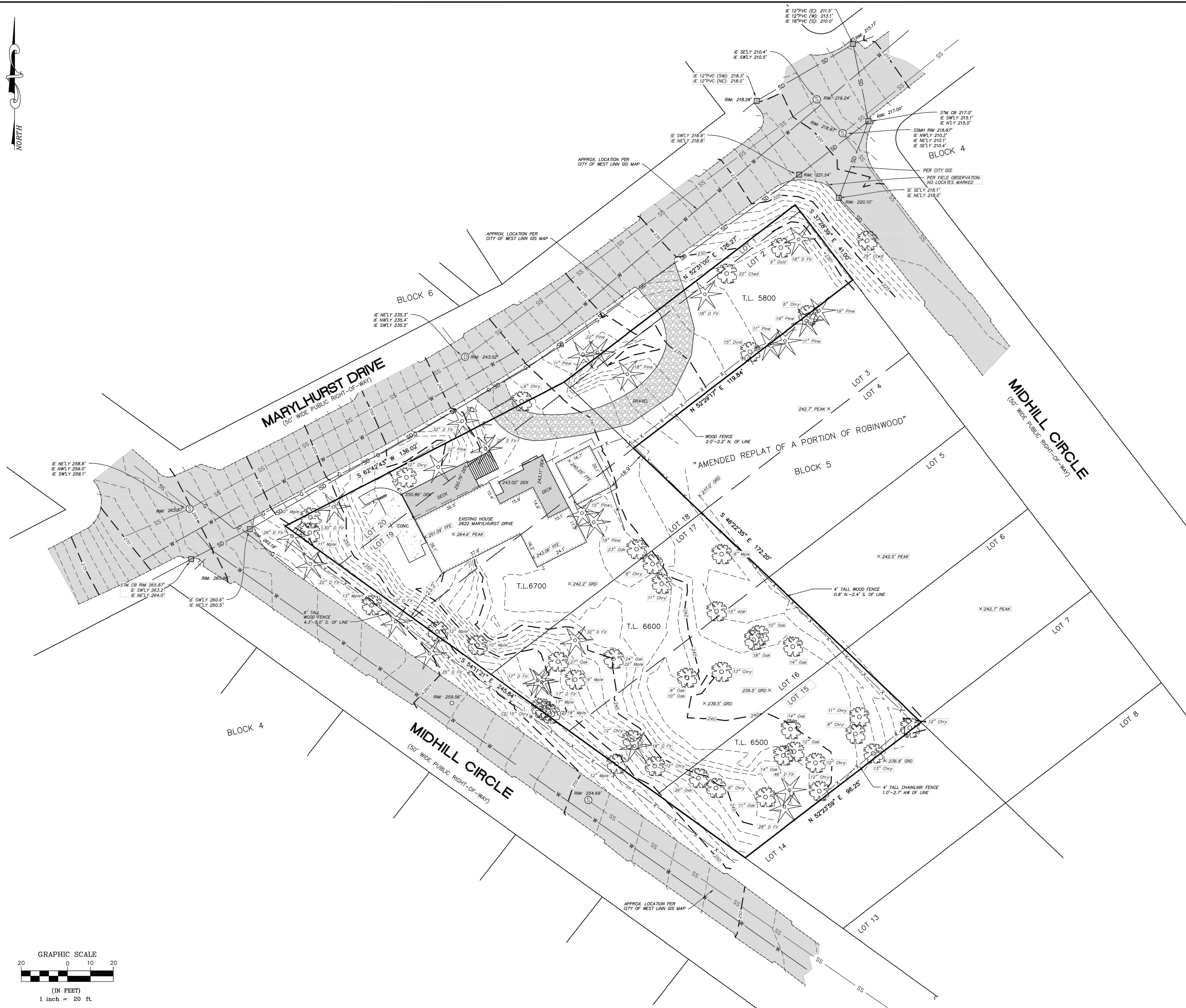
SHEET NO.

**C1.1**

JOB NO. TPH-02



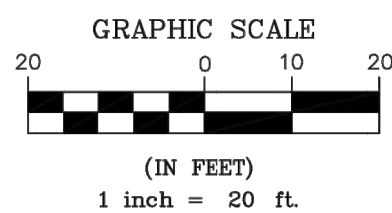
**TOPOGRAPHIC SURVEY**  
 FOR:  
**TRACY PETERSON**  
 BEING LOTS 15-19, 2,  
 AND PORTIONS OF 1 AND 20, BLOCK 5,  
 "AMENDED REPLAT OF A PORTION OF ROBINWOOD"  
 IN THE SE 1/4 OF SECTION 14  
 T.2S, R.1E, W.M.  
 CITY OF WEST LINN  
 CLACKAMAS COUNTY, OREGON  
 TAX MAP 2 1E 14DC  
 JUNE 22, 2022



- NOTES:**
- ELEVATIONS ARE ON NAVD83, DERIVED BY GPS OBSERVATIONS. NO GEODETIC BENCHMARK HAS BEEN REFERENCED IN THIS SURVEY.
  - THE BOUNDARIES AS SHOWN ON THIS MAP ARE BASED ON FOUND MONUMENTS, AND RECORD SURVEY AND DEED INFORMATION. THIS MAP DOES NOT REPRESENT A SURVEY TO BE RECORDED, BUT WAS DONE FOR SITE/TOPO INFORMATION ONLY.
  - 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.
  - SURVEY IS VALID ONLY IF PRINT HAS SEAL AND SIGNATURE OF SURVEYOR.
  - THE LOCATION AND OR EXISTENCE OF UTILITY SERVICE LINES AS SHOWN ON THIS MAP ARE BASED ON FIELD OBSERVATION OF ABOVE GROUND STRUCTURES AND UNDERGROUND UTILITY LOCATIONS BY OREGON UTILITY NOTIFICATION CENTER. THERE MAY EXIST ADDITIONAL SERVICE LINES NOT SHOWN ON THIS SURVEY.
  - 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.
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**LEGEND**

	AREA DRAIN OR CATCH BASIN
	CLEAN OUT
	FIRE HYDRANT
	GUY ANCHOR
	SANITARY SEWER MANHOLE
	UTILITY BOX
	WATER VALVE
	GROUND SHOT - SPOT ELEVATION
	EDGE OF CONCRETE - SPOT ELEVATION
	EDGE OF GRAVEL - SPOT ELEVATION
	EDGE OF PAVEMENT - SPOT ELEVATION
	FINISH FLOOR - SPOT ELEVATION
	ROOF PEAK - SPOT ELEVATION
	TOP OF DECK - SPOT ELEVATION
	UNDERGROUND GAS LINE
	UNDERGROUND STORM LINE
	UNDERGROUND SANITARY LINE
	UNDERGROUND COMMUNICATION LINE
	UNDERGROUND WATER LINE
	FENCE LINE AS NOTED
	DECIDUOUS TREE
	EVERGREEN TREE



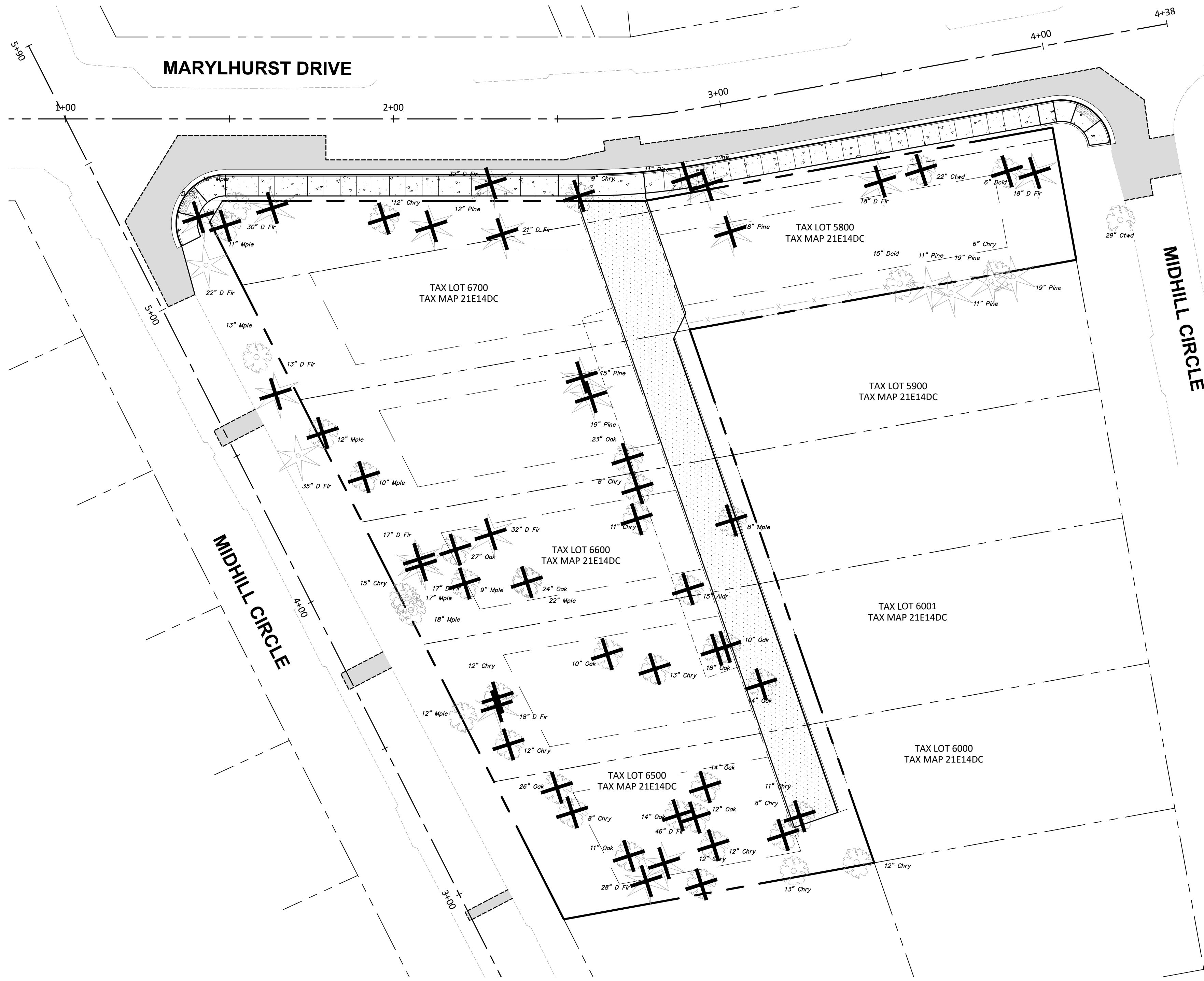
**C2.0**

REGISTERED  
 PROFESSIONAL  
 LAND SURVEYOR  
  
 OREGON  
 SEPTEMBER 10, 2019  
 BRIAN LEGOS  
 716679 S  
 RENEWS: DEC. 31, 2022

(SINCE 1952)  
**ANDY PARIS AND ASSOCIATES, INC.**  
 PROFESSIONAL LAND SURVEYORS  
 16057 BOONES FERRY ROAD  
 LAKE OSWEGO, OREGON 97035  
 PH: 503-636-3341  
 www.andyparis.com

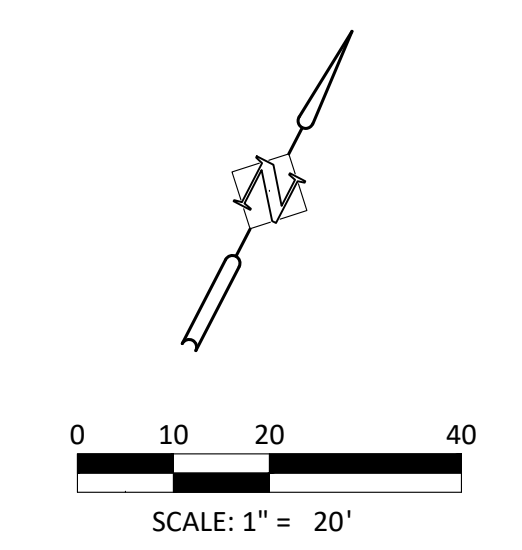
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 DRAWING: 22082TP1  
 DRAFTED: AH 6/28/2022

P:\01-Portland\TPH (Tracy Peterson)\TPH02 (Marylhurst)\TPH02-DWG\Sheets\C2.1 - TREE PLAN.dwg



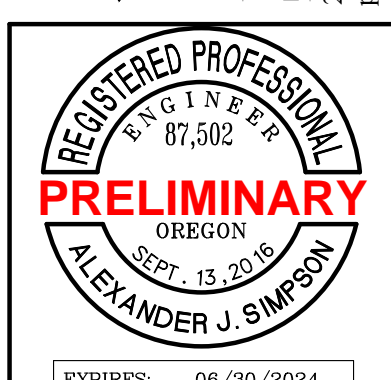
**LEGEND**

- TREE REMOVAL
- EXISTING DECIDUOUS TREE TO REMAIN
- EXISTING CONIFER TREE TO REMAIN



TREE PRESERVATION & REMOVAL PLAN  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

**Harper Houf Peterson**  
**Righellis Inc.**  
 ENGINEERS & PLANNERS  
 LANDSCAPE ARCHITECTS & SURVEYORS  
 206 SE Spokane Street, Suite 200, Portland, OR 97202  
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

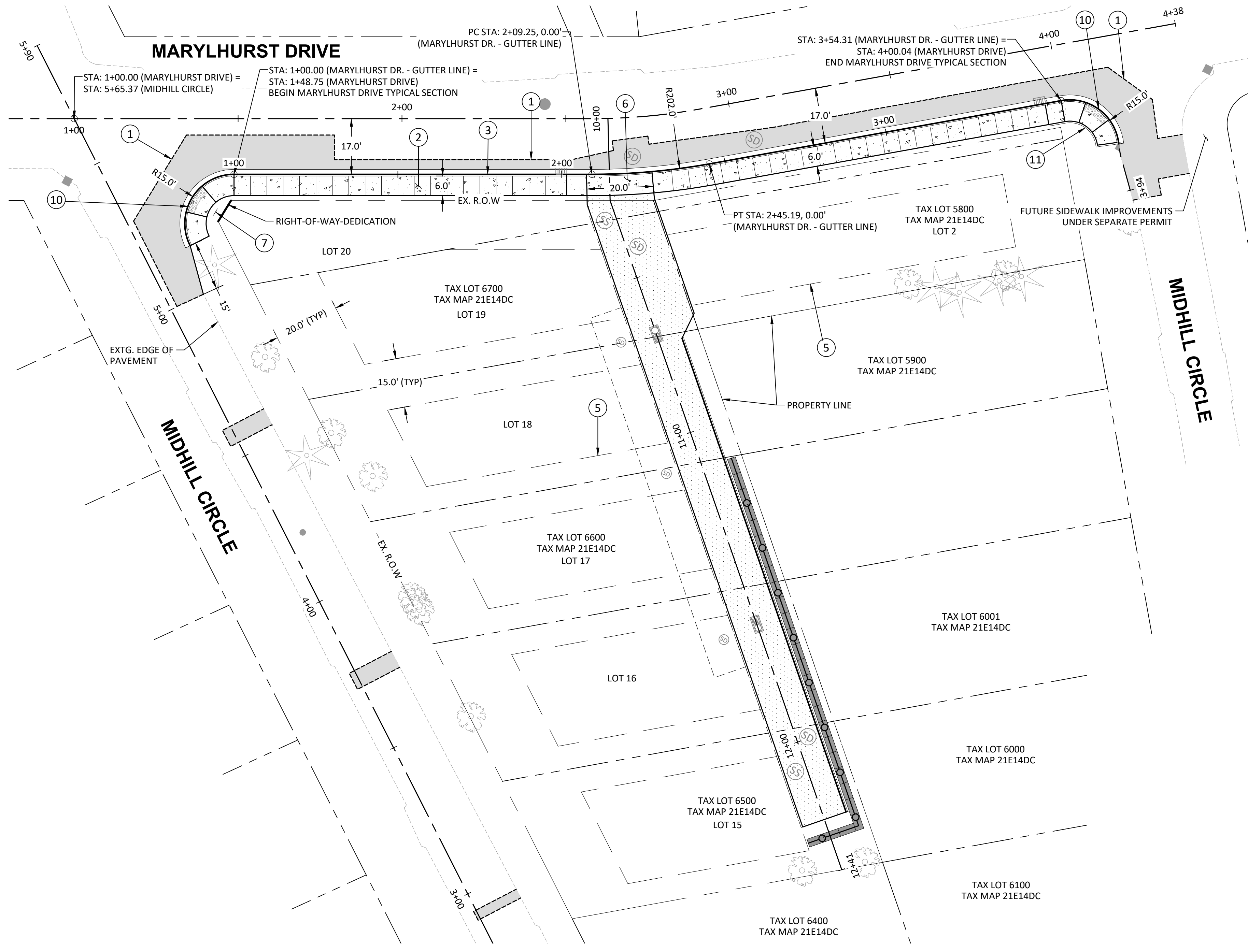


DESIGNED:	HHPR
DRAWN:	HHPR
CHECKED:	HHPR
DATE:	02/02/2023

SHEET NO.  
**C2.1**  
 JOB NO.  
 TPH-02



P:\01-Portland\TPH (Tracy Peterson)\TPH02 (Maryhurst)\TPH02-DWG\SSheets\C3.0 - PLAN AND PROFILE.dwg



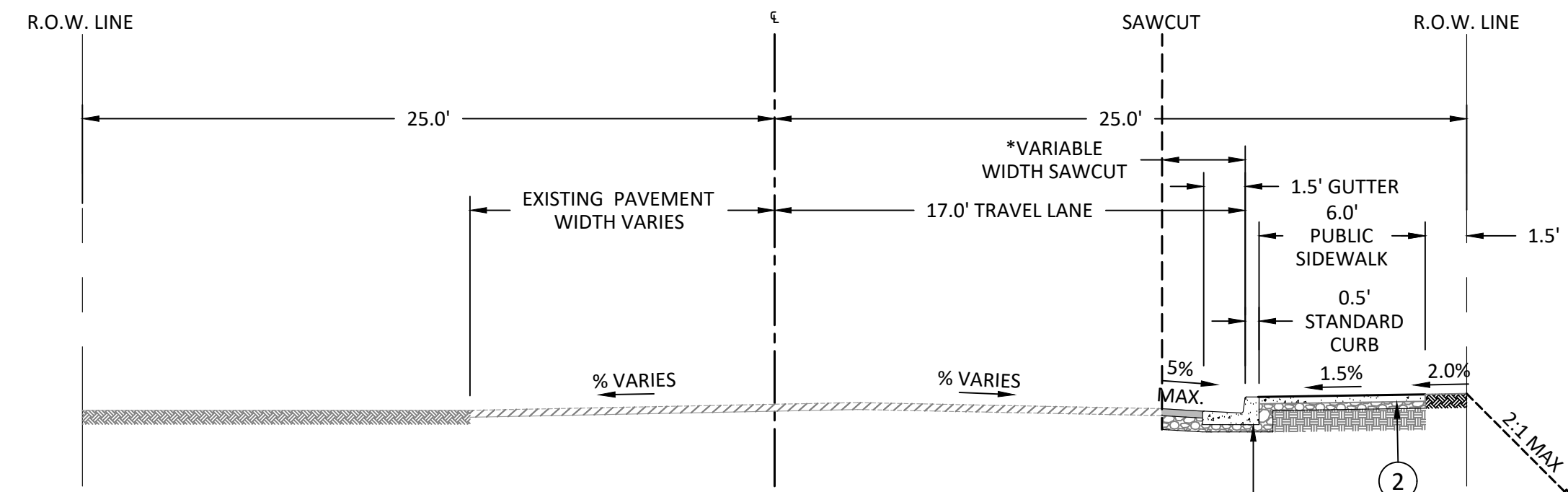
**CONSTRUCTION NOTES:**

- ① SAWCUT EXISTING PAVEMENT AND CONSTRUCT IMPROVEMENTS PER TYPICAL SECTIONS BELOW. FINAL SAWCUT LIMITS ARE AT THE DISCRETION OF THE CITY INSPECTOR.
- ② CONSTRUCT CURB-TIGHT CONCRETE SIDEWALK PER ODOT STD. DWG. RD720 ON SHEET C6.0.
- ③ CONSTRUCT STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DRAWING WL-RD700 ON SHEET C6.0.
- ⑤ SETBACK LINE/FUTURE BUILDING ZONE FOOTPRINT (TYP.).
- ⑥ CONSTRUCT CONCRETE DRIVEWAY OPTION N PER ODOT STD. DWG. RD750 ON SHEET C6.0.
- ⑦ INSTALL NEW STREET NAME SIGN PER CITY OF WEST LINN STANDARD DRAWING WL-TM223-A ON SHEET C6.0.
- ⑩ CONSTRUCT DIAGONAL PARALLEL CURB RAMP OPTION "P-3" PER ODOT STD. DWG. RD922 ON SHEET C6.1.
- ⑪ CONSTRUCT CONCRETE RETAINING CURB PER DETAIL ON SHEET C6.4. ELEVATIONS PER GRADING DETAILS ON SHEET C4.1.

NOTE: SEE SHEET C3.1 FOR MARYLHURST DRIVE GUTTER PROFILE

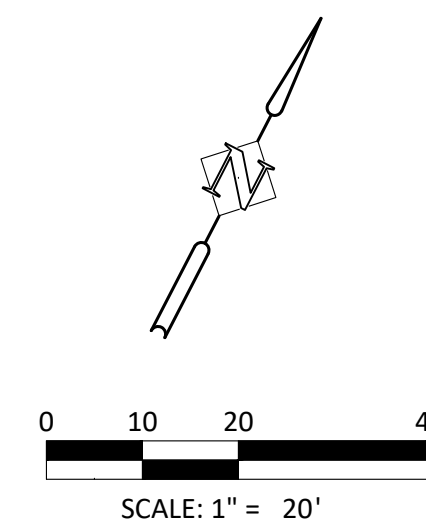
**LEGEND**

- ASPHALT CONCRETE (AC)
- ASPHALT PAVEMENT
- CONCRETE
- PROPOSED RETAINING WALL
- SAWCUT LINE
- EXISTING ROW LINE
- PROPOSED ROW LINE
- EXISTING PROPERTY LINE
- CENTERLINE
- FALL-PROTECTION FENCE
- PUBLIC UTILITY EASEMENT (PUE)
- SETBACK LINE/FUTURE BUILDING ZONE FOOTPRINT



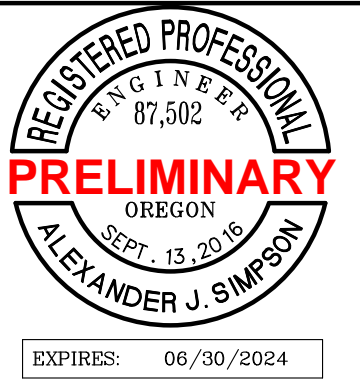
**MARYLHURST DRIVE TYPICAL SECTION**

STA. 1+00.00 - STA. 3+54.31  
 \*STA 1+00.00 - 1+30.63, 12.0' SAWCUT  
 \*STA 1+30.63 - 2+03.17, 4.5' SAWCUT  
 \*STA 2+66.17 - 3+54.31, 7.5' SAWCUT



**MARYLHURST DRIVE PLAN**  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

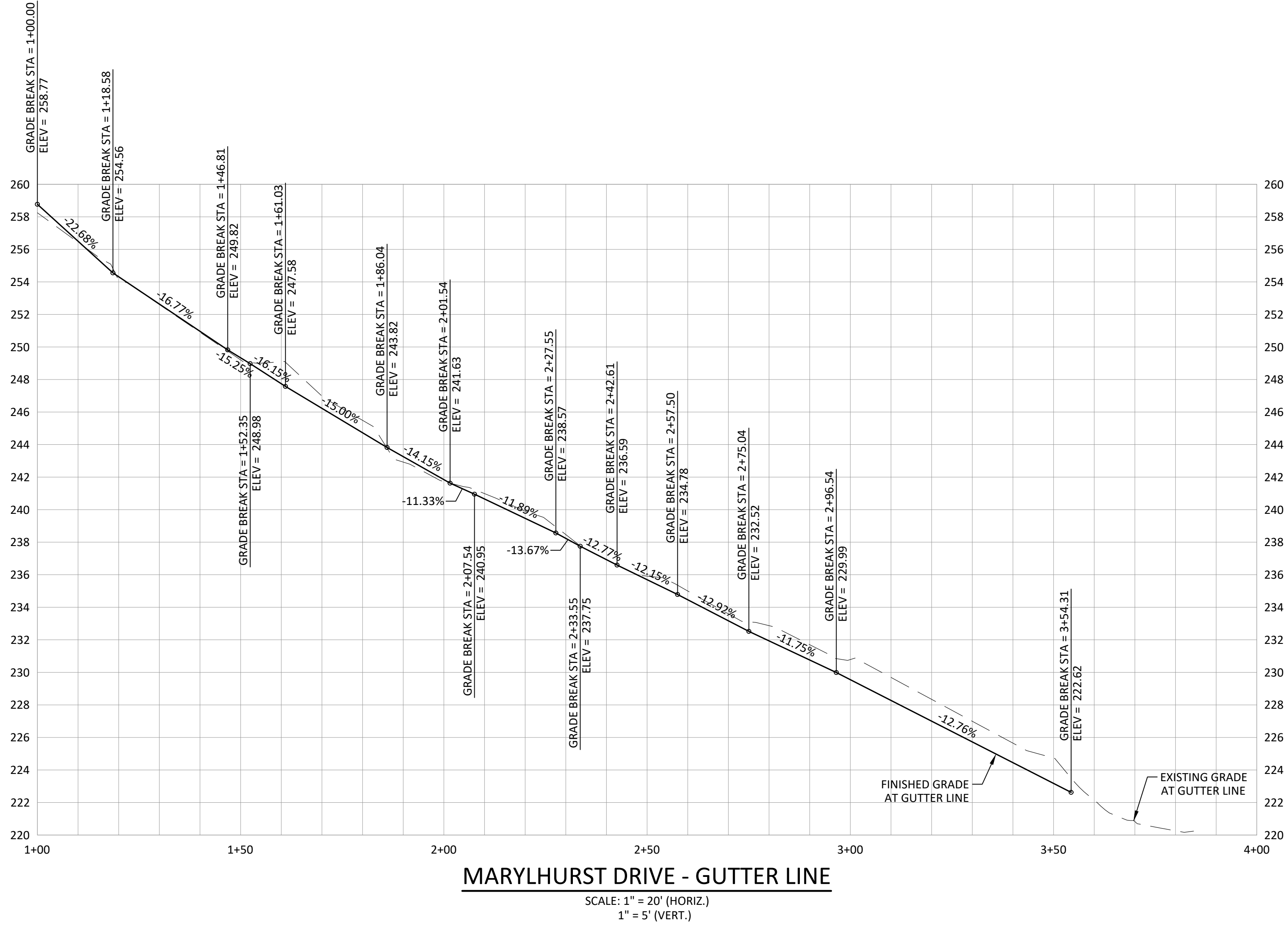
**Harper Houf Peterson Righellis Inc.**  
 ENGINEERS \* PLANNERS  
 LANDSCAPE ARCHITECTS \* SURVEYORS  
 206 SE Spokane Street, Suite 200, Portland, OR 97202  
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171



DESIGNED:	HHPR	DRAWN:	HHPR	CHECKED:	HHPR	DATE:	02/02/2023
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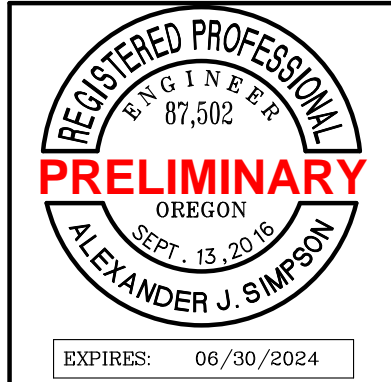
DATE	NO.	DESCRIPTION

SHEET NO.  
**C3.0**  
 JOB NO.  
 TPH-02



MARYLHURST DRIVE GUTTER PROFILE  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

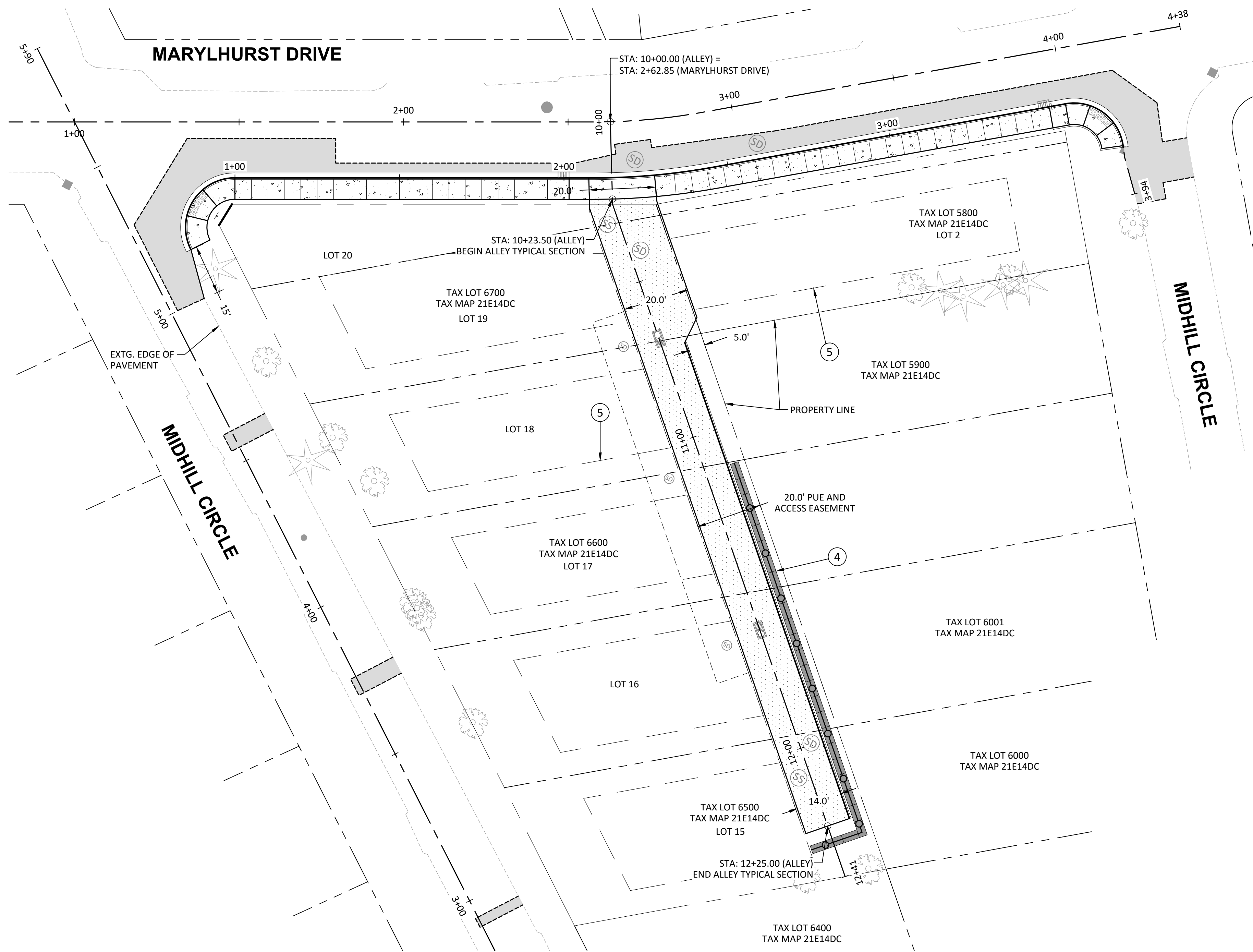
**Harper Houf Peterson Righellis Inc.**  
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 LANDSCAPE ARCHITECTS \* SURVEYORS  
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DRAWN:	HHPR
CHECKED:	HHPR
DATE:	02/02/2023

SHEET NO.  
**C3.1**  
 JOB NO.  
 TPH-02

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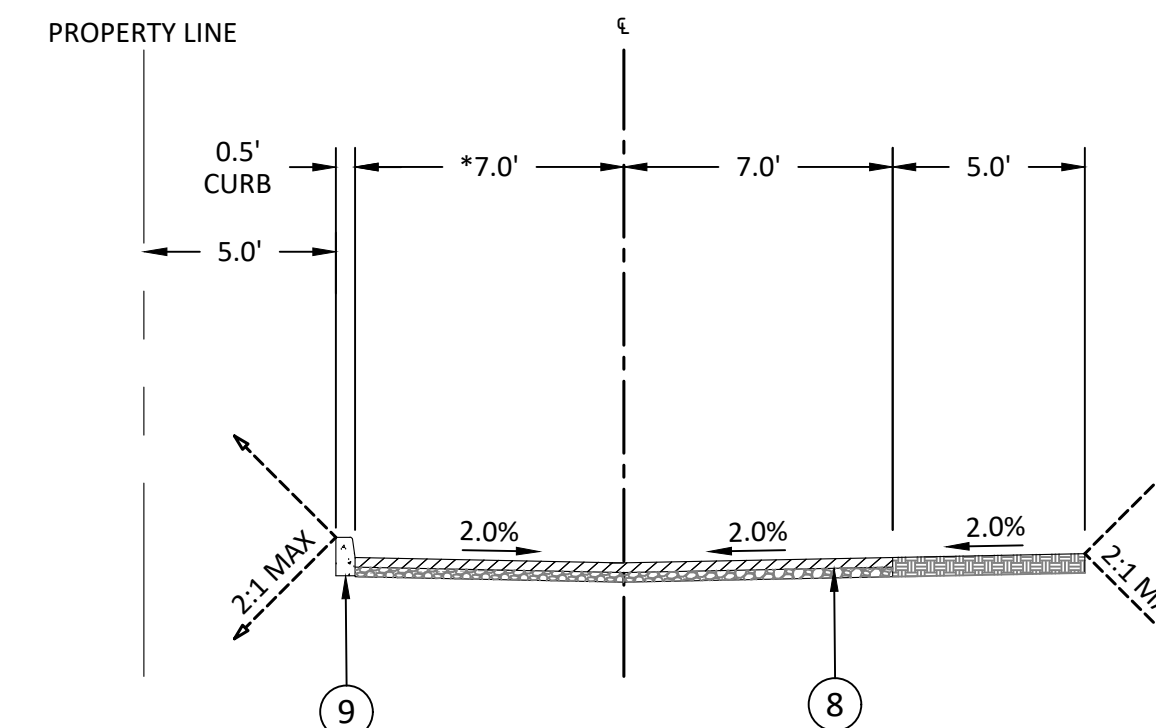


**CONSTRUCTION NOTES:**

- 4 CONSTRUCT ULTRABLOCK RETAINING WALL (OR EQUIVALENT) WITH CHAINLINK FALL-PROTECTION FENCING MOUNTED TO TOP OF WALL. WALL TO BE DESIGN-BUILD. CONTRACTOR TO SUBMIT ENGINEERED (STAMPED & SIGNED) SHOP-DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. COORDINATE WITH GEOTECHNICAL ENGINEER FOR SUBGRADE PREPARATION AND REVIEW PRIOR TO CONSTRUCTION.
- 5 SETBACK LINE/FUTURE BUILDING ZONE FOOTPRINT (TYP.).
- 8 CONSTRUCT ASPHALT PAVEMENT SECTION PER DETAIL ON SHEET C6.4.
- 9 CONSTRUCT PRIVATE CURB PER STANDARD DETAIL ON SHEET C6.4.

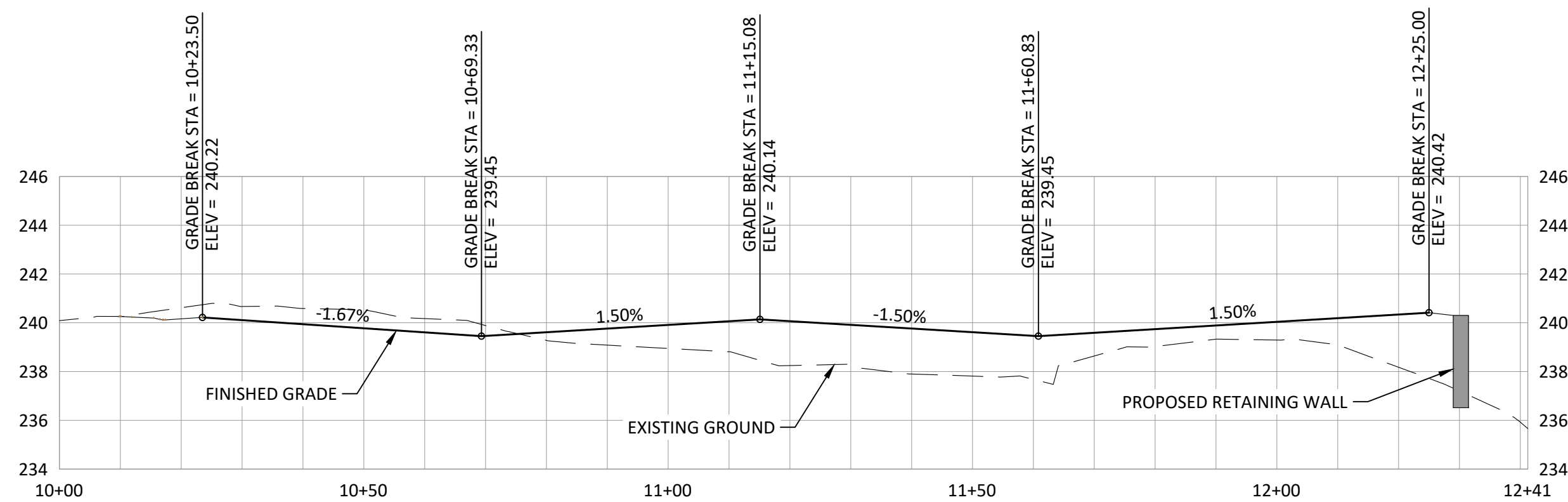
**LEGEND**

- ASPHALT CONCRETE (AC)
- ASPHALT PAVEMENT
- CONCRETE
- PROPOSED RETAINING WALL
- SAWCUT LINE
- EXISTING ROW LINE
- PROPOSED ROW LINE
- EXISTING PROPERTY LINE
- CENTERLINE
- FALL-PROTECTION FENCE
- PUBLIC UTILITY EASEMENT (PUE)
- SETBACK LINE/FUTURE BUILDING ZONE FOOTPRINT

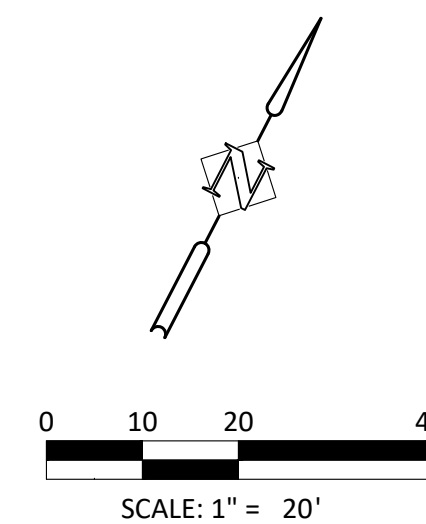


**ALLEY TYPICAL SECTION**

STA. 10+23.50 - STA. 12+25.00  
 \*STA 10+23.50 - 10+66.16, 13.0' WIDTH  
 \*STA 10+23.50 - 10+71.96, NO CURB



**PRIVATE ALLEY**  
 SCALE: 1" = 20' (HORIZ.)  
 1" = 5' (VERT.)



PRIVATE ALLEY PLAN AND PROFILE  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

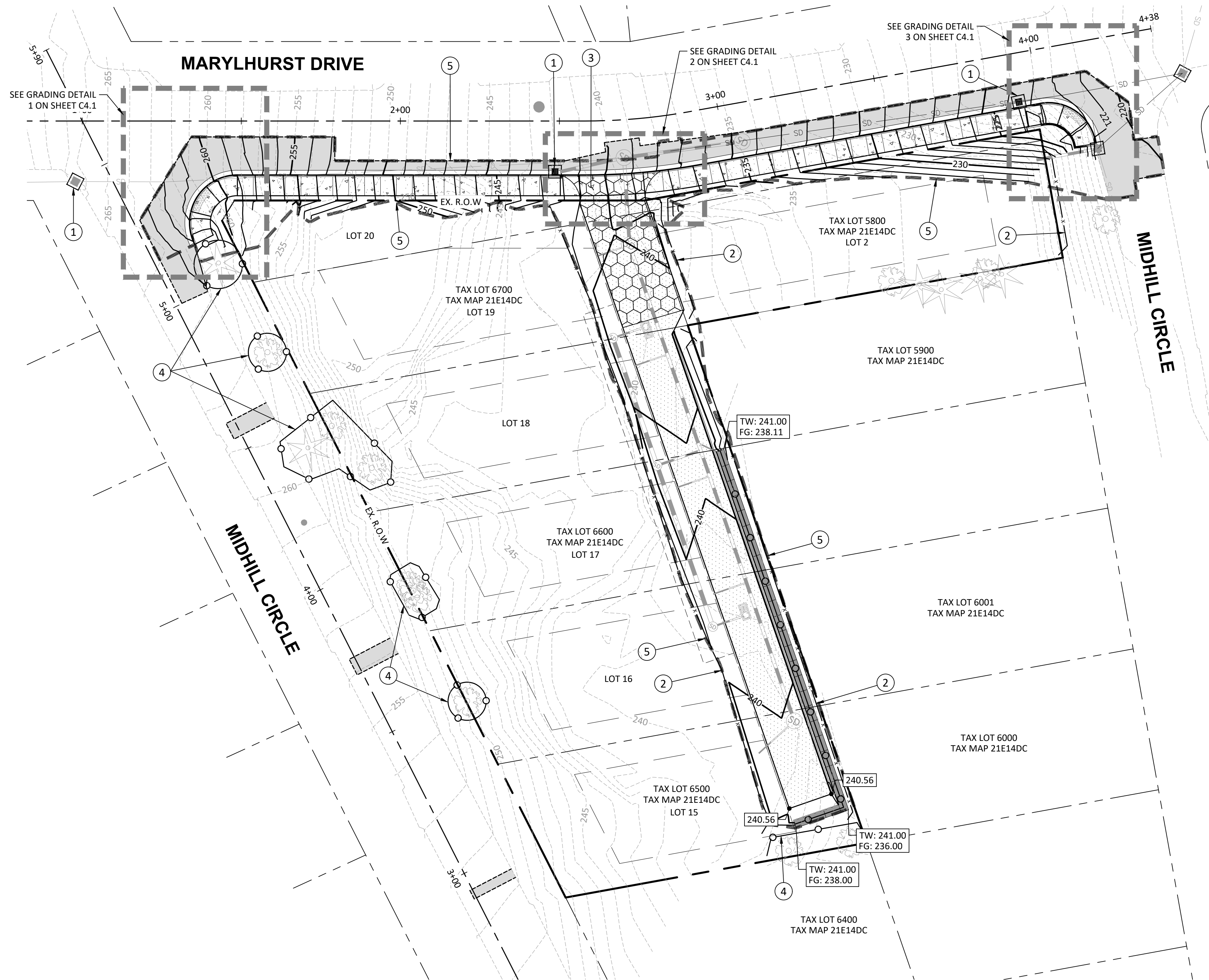
**Harper Houf Peterson Righellis Inc.**  
 ENGINEERS \* PLANNERS  
 LANDSCAPE ARCHITECTS \* SURVEYORS  
 206 SE Spokane Street, Suite 200, Portland, OR 97202  
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

**REGISTERED PROFESSIONAL ENGINEER**  
 PRELIMINARY  
 OREGON  
 SEPT. 15, 2016  
 ALEXANDER J. SIMPSON  
 EXPIRES: 06/30/2024

DESIGNED:	HHPR
DRAWN:	HHPR
CHECKED:	HHPR
DATE:	02/02/2023

DATE	NO.	DESCRIPTION

SHEET NO.  
**C3.2**  
 JOB NO.  
 TPH-02

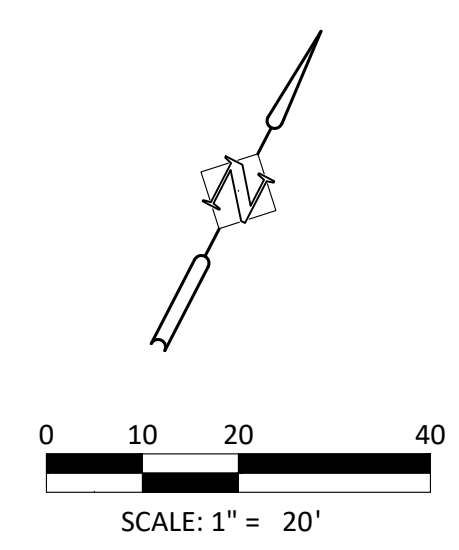


### LEGEND

- ASPHALT CONCRETE (AC)
- ASPHALT PAVEMENT
- CONCRETE
- CONSTRUCTION ENTRANCE
- TREE PROTECTION FENCE
- SEDIMENT FENCE
- LIMITS OF GRADING
- INLET PROTECTION
- EXISTING CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- EXISTING ROW LINE
- PROPOSED ROW LINE
- RETAINING WALL
- PUBLIC UTILITY EASEMENT (PUE)
- STORM LINE
- STORMWATER MANHOLE
- CATCH BASIN

- ### CONSTRUCTION NOTES:
- ① PROPOSED INLET PROTECTION PER DETAIL ON SHEET C6.4.
  - ② PROPOSED SEDIMENT FENCE PER DETAIL ON SHEET C6.4.
  - ③ PROPOSED CONSTRUCTION ENTRANCE PER DETAIL ON SHEET C6.4.
  - ④ INSTALL 6' TALL CHAINLINK TREE PROTECTION FENCING.
  - ⑤ LIMITS OF GRADING.

**NOTE:**  
 ALL GRADING FILL MATERIAL PROPOSED ON SITE SHALL BE COORDINATED AND APPROVED BY A GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. HHPR PROVIDES NO INSTRUCTION AND TAKES NO RESPONSIBILITY REGARDING FILL MATERIAL AND PLACEMENT DURING CONSTRUCTION.



MASS GRADING & EROSION CONTROL PLAN  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

**Harper Houf Peterson Righellis Inc.**  
 ENGINEERS \* PLANNERS  
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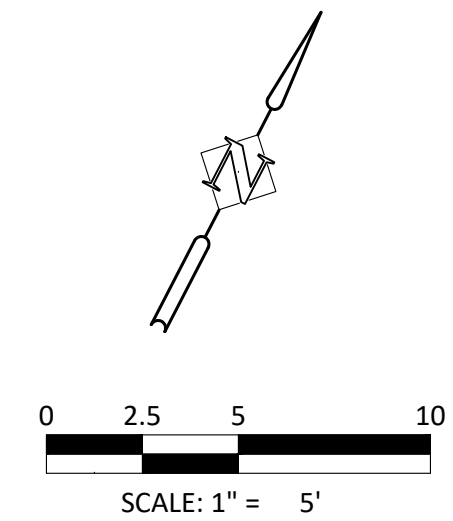
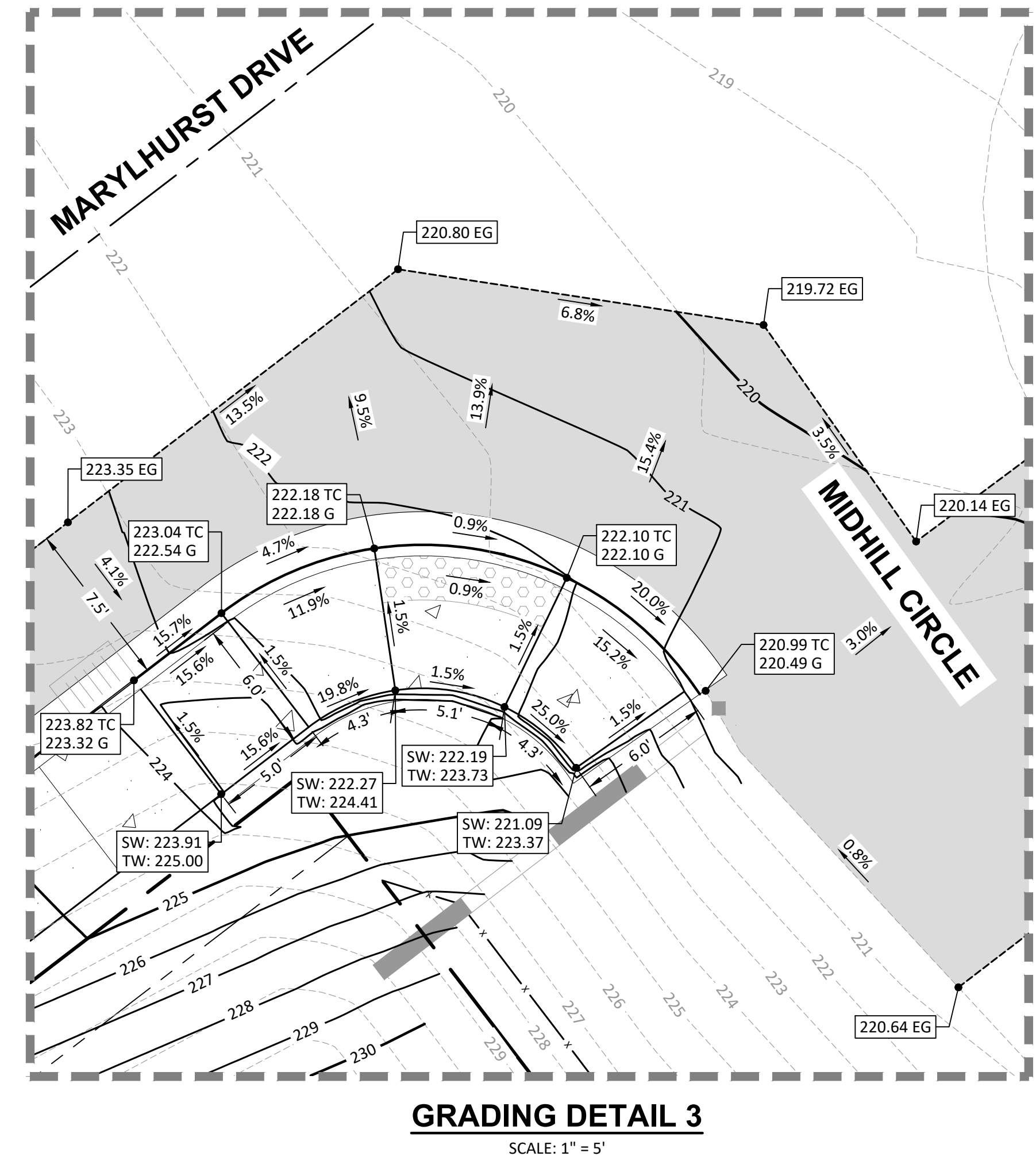
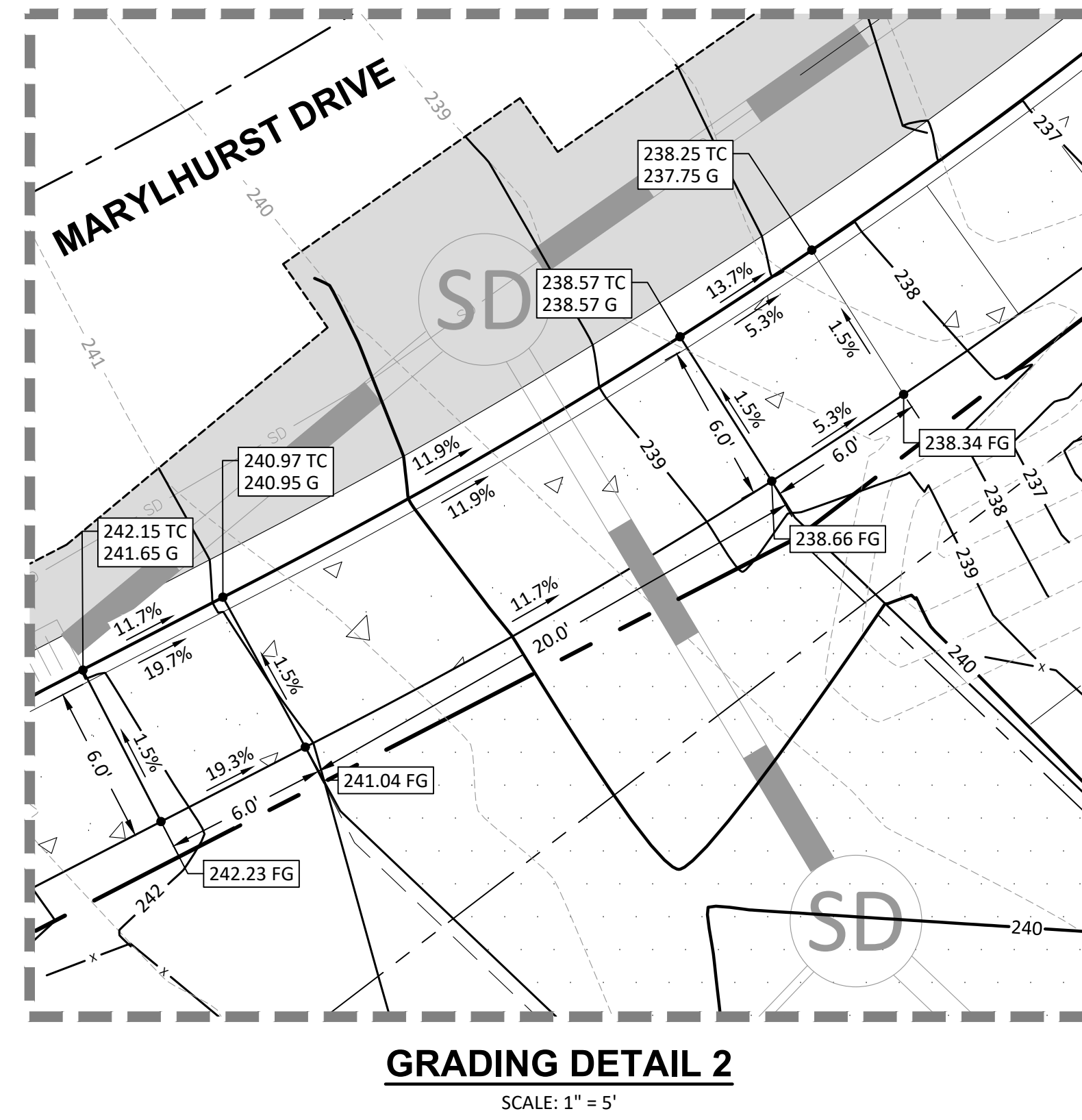
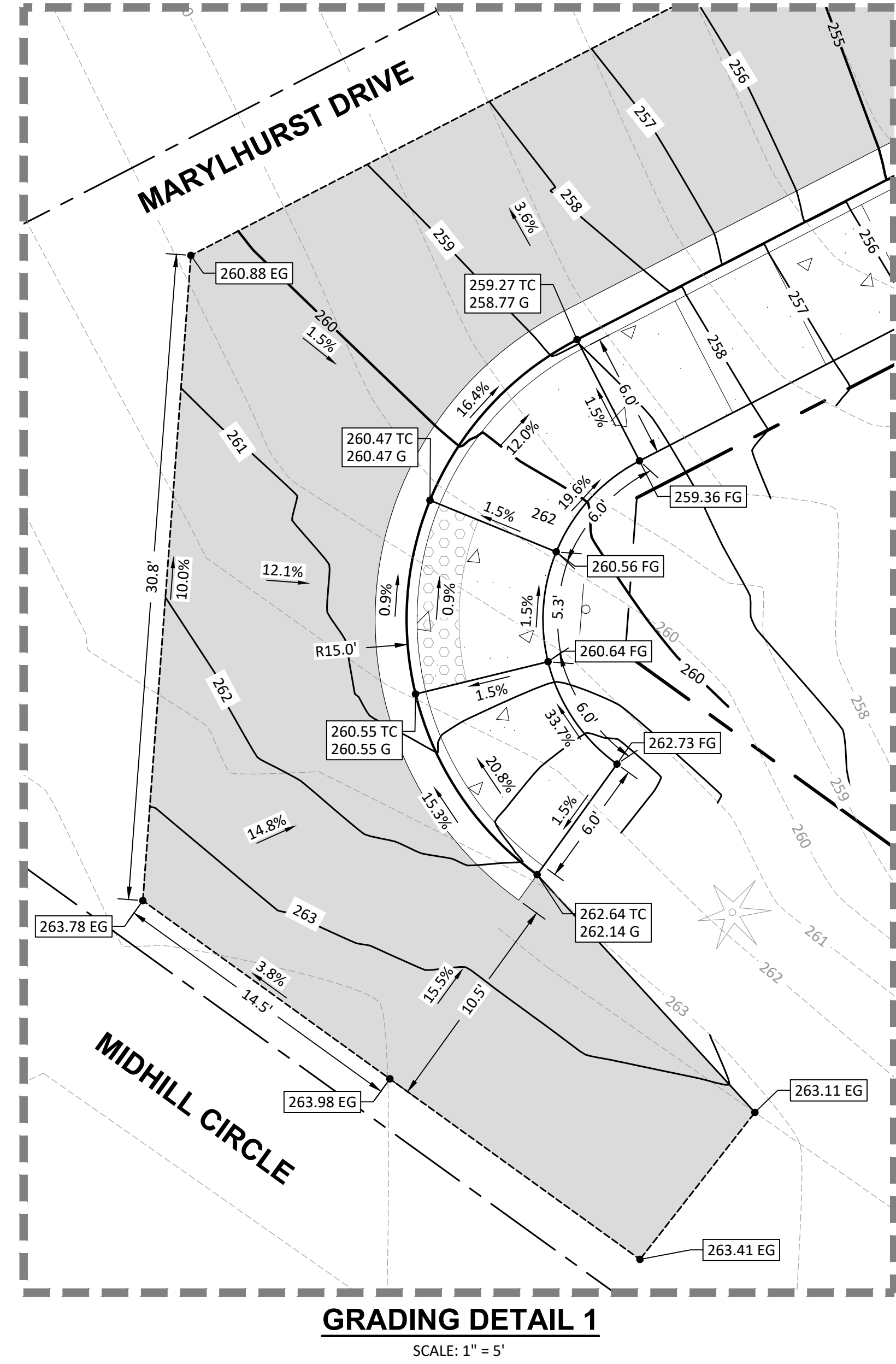
**REGISTERED PROFESSIONAL ENGINEER**  
 PRELIMINARY  
 OREGON  
 SEPT. 15, 2016  
 ALEXANDER J. SIMPSON  
 EXPIRES: 06/30/2024

DESIGNED:	HHPR
DRAWN:	HHPR
CHECKED:	HHPR
DATE:	02/02/2023

DATE	NO.	DESCRIPTION

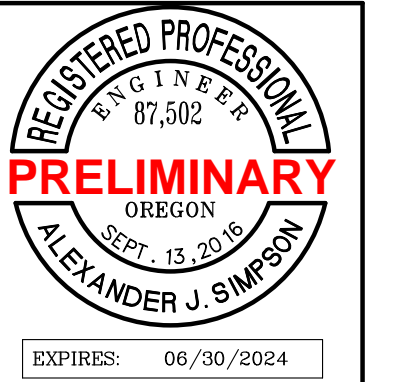
SHEET NO.  
**C4.0**  
 JOB NO.  
 TPH-02

P:\01-Portland\TPH (Tracy Peterson)\TPH02 (Maryhurst)\TPH02-DWG\SS\Sheets\C4.0 - GRADING PLAN.dwg



GRADING DETAILS  
**MARYLHURST SUBDIVISION**  
WEST LINN, OR

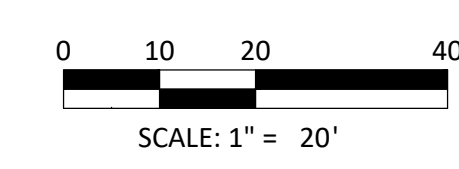
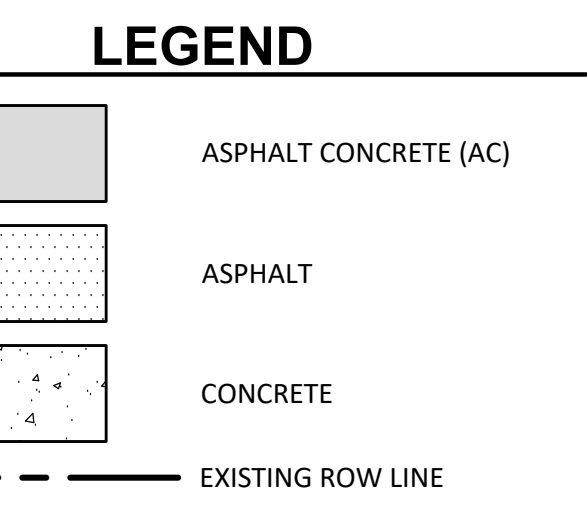
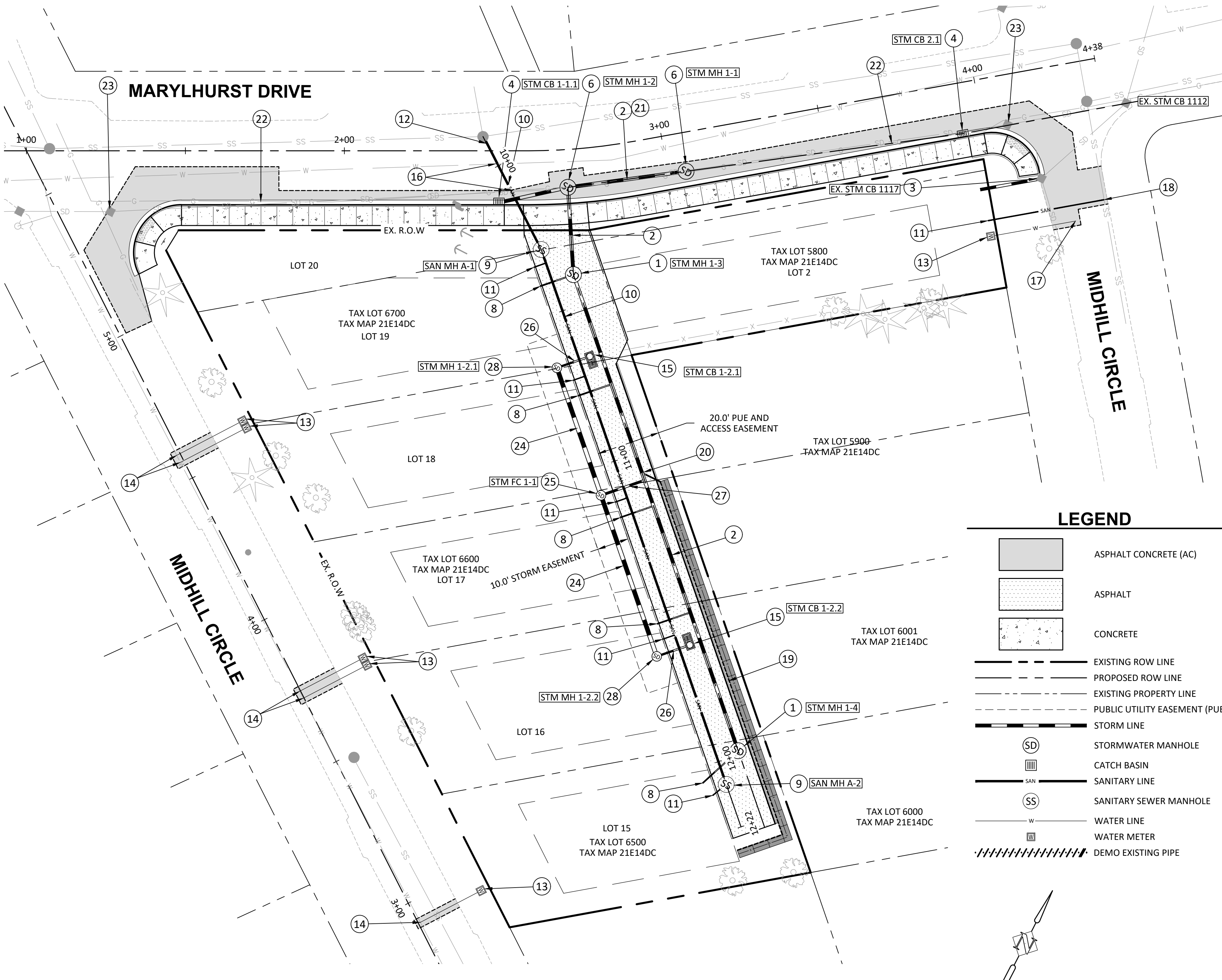
Harper Houf Peterson Righellis Inc.  
ENGINEERS \* PLANNERS \* SURVEYORS  
LANDSCAPE ARCHITECTS \* SURVEYORS  
206 SE Spokane Street, Suite 200, Portland, OR 97202  
phone: 503.221.1131 www.ahpr.com fax: 503.221.1171



DESIGNED:	HPR	DRAWN:	HPR	CHECKED:	HPR	DATE:	02/02/2023
DATE:		NO.		DESCRIPTION			

SHEET NO.  
**C4.1**  
JOB NO. TPH-02

P:\01-Portland\TPH (Tracy Peterson)\TPH02-DWG\SS\Sheets\C5.0 - PRELIMINARY UTILITY PLAN.dwg



**CONSTRUCTION NOTES:**

- 1 CONSTRUCT PUBLIC 48" STORM MANHOLE PER RD335 AND RD336 ON SHEET C6.1.
- 2 CONSTRUCT PUBLIC 12" PVC (ASTM D-3034) STORM MAIN.
- 3 CORE NEW 10" STORM LATERAL INTO EXISTING CATCH BASIN. ADJUST (RAISE) EXTG. CB RIM TO FINISHED GRADE.
- 4 CONSTRUCT PUBLIC STORM CG-2 CATCH BASIN PER ODOT STD. DWG. RD366 ON SHEET C6.2.
- 6 CONSTRUCT PUBLIC 48" STORM MANHOLE OVER EXISTING STORM LINE. CONTRACTOR TO POTHOLE EXISTING STORM MAIN PRIOR TO CONSTRUCTION TO CONFIRM EXISTING SIZE AND INVERT ELEVATIONS. CAUTION: EXISTING GAS LINE NEARBY. CONTRACTOR TO COORDINATE WITH NW NATURAL PRIOR TO CONSTRUCTION TO DETERMINE IF CONFLICT EXISTS.
- 8 CONSTRUCT 4" STORM LATERAL.
- 9 CONSTRUCT PUBLIC 48" SANITARY MANHOLE.
- 10 CONSTRUCT PUBLIC 8" PVC (ASTM D-3034) SANITARY MAIN.
- 11 CONSTRUCT 4" SANITARY LATERAL PER CITY OF WEST LINN STANDARD DRAWING WL-RD341 ON SHEET C6.1.
- 12 CONNECT TO EXISTING SANITARY MANHOLE.
- 13 PROPOSED 3/4" DOMESTIC WATER SERVICE AND METER BY CITY OF WEST LINN. COORDINATE WITH CITY OF WEST LINN PUBLIC WORKS PRIOR TO CONSTRUCTION.
- 14 HOT TAP EXISTING PUBLIC WATER MAIN FOR NEW DOMESTIC WATER SERVICE BY CITY OF WEST LINN CREWS. COORDINATE WITH CITY OF WEST LINN PUBLIC WORKS PRIOR TO CONSTRUCTION. CITY OPERATIONS CREW TO INSTALL NEW SERVICES, CONTRACTOR TO PERFORM STREET PATCHING REPAIR.
- 15 CONSTRUCT STORMFILTER CATCHBASIN PER DETAIL SHEET C6.3.
- 16 PROPOSED SANITARY CROSSING WITH EXISTING PUBLIC STORM MAIN, WATER LINE, GAS LINE. CONTRACTOR TO POTHOLE EXISTING UTILITIES AT CROSSING LOCATIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER.
- 17 HOT TAP EXISTING PUBLIC WATER MAIN FOR NEW DOMESTIC WATER SERVICE. WATER MAIN LOCATION IS BASED ON CITY OF WEST LINN GIS AND HAS NOT BEEN SURVEYED. CONTRACTOR TO LOCATE WATER MAIN LOCATION AND COORDINATE WITH CITY OF WEST LINN PUBLIC WORKS PRIOR TO CONSTRUCTION, CITY OPERATIONS CREW TO INSTALL NEW SERVICES.
- 18 TEE 4" SANITARY LATERAL INTO MAIN PER CITY OF WEST LINN STANDARD DRAWING WL-RD341 ON SHEET C6.1.
- 19 INSTALL 4" DIAMETER PERFORATED WALL DRAIN AT BOTTOM OF RETAINING WALL.
- 20 CONNECT 4" PERFORATED WALL DRAIN TO STORM SYSTEM. INSTALL BACKWATER VALVE (CLEANCHECK OR EQUAL) ON SOLID STORM PIPE CONNECTION.
- 21 REMOVE EXISTING STORM LINE.
- 22 CAUTION! EXISTING NW NATURAL GAS MAINLINE. CONTRACTOR TO POTHOLE PRIOR TO CONSTRUCTION TO CONFIRM LOCATION AND DEPTH. IF CONFLICT EXISTS, CONTRACTOR SHALL NOTIFY NW NATURAL FOR INSPECTION PRIOR TO AND DURING CONSTRUCTION.
- 23 REMOVE EXISTING CATCH BASIN. REPAIR EXISTING PUBLIC 12" STORM PIPE SYSTEM AT NEAREST PIPE JOINTS WITH NEW STORM PIPE. REPAIR ASPHALT PAVEMENT.
- 24 CONSTRUCT 15" PVC (ASTM-3034) STORM PIPE.
- 25 CONSTRUCT 30" NYLOPLAST FLOW CONTROL STRUCTURE PER DETAIL ON SHEET 6.3. CONNECT TO 12" STORM MAIN WITH 8" X 12" TEE.
- 26 CONSTRUCT PUBLIC 6" PVC (ASTM D-3034) STORM PIPE.
- 27 CONSTRUCT PUBLIC 8" PVC (ASTM D-3034) STORM PIPE.
- 28 CONSTRUCT 24" NYLOPLAST DRAIN BASIN WITH LOCKING FRAME AND COVER PER MANUFACTURER DETAILS AND SPECIFICATIONS PER DETAIL ON SHEET C6.3.

NOTE: SEE SHEET C5.1 FOR UTILITY PROFILES

**STORM STRUCTURE TABLE**

NUMBER	DESCRIPTION	LOCATION	RIM ELEV.	INVERT ELEV.
EX. STM CB 1112	EX. CB	STM 1 STA: 8+34.46, 0.11' (R)	217.19	15" IE IN (SW) = 215.08 18" IE OUT (N) = 214.76
EX. STM CB 1117	EXISTING CATCH BASIN ADJUST (RAISE) CB RIM TO FG	MARYLHURST DRIVE STA: 4+15.30, 34.13' (R)	220.50	10" IE IN (SW) = 218.20 12" IE IN (SE) = 218.10
STM CB 1-1-1	CB	MARYLHURST DRIVE STA: 2+48.62, 15.93' (R)	241.92	12" IE OUT (NE) = 232.18
STM CB 1-2-1	STORMFILTER CB	STM 1 STA: 10+66.71, 3.50' (R)	239.47	6" IE OUT (SW) = 234.18
STM CB 1-2-2	STORMFILTER CB	STM 1 STA: 11+60.41, 3.50' (R)	239.47	6" IE OUT (SW) = 234.18
STM CB 2.1	CB	MARYLHURST DRIVE STA: 3+93.52, 15.93' (R)	223.51	12" IE IN (SW) = 218.90 15" IE OUT (NE) = 218.80
STM FC 1-1	30" NYLOPLAST FLOW CONTROL STRUCTURE	STM 1 STA: 11+07.96, 14.50' (R)	240.27	15" IE IN (NW) = 234.06 15" IE IN (SE) = 234.06 8" IE OUT (NE) = 234.06
STM MH 1-1	STANDARD MANHOLE (ECCENTRIC)	STM 1 STA: 9+74.53, 0.02' (L)	234.59	12" IE IN (SW) = 229.11
STM MH 1-2	48" STM MH	MARYLHURST DRIVE STA: 2+69.59, 11.89' (R)	239.32	12" IE IN (SW) = 231.74 12" IE OUT (NE) = 232.02 12" IE IN (SE) = 232.02
STM MH 1-2-1	24" NYLOPLAST DRAIN BASIN & ACCESS STRUCTURE	STM 1 STA: 10+65.53, 14.50' (R)	239.73	6" IE IN (NE) = 234.06 15" IE OUT (SE) = 234.06
STM MH 1-2-2	24" NYLOPLAST DRAIN BASIN & ACCESS STRUCTURE	STM 1 STA: 11+61.58, 14.50' (R)	239.71	6" IE IN (NE) = 234.06 15" IE OUT (NW) = 234.06
STM MH 1-3	48" STM MH	STM 1 STA: 10+39.55, 0.00' (I)	240.00	12" IE IN (SE) = 233.40 12" IE OUT (NW) = 233.40 4" IE IN (SW) = 233.90
STM MH 1-4	48" STM MH	STM 1 STA: 11+97.98, 0.00' (I)	240.10	12" IE OUT (NW) = 234.27 4" IE IN (S) = 234.77

**STORM LATERAL TABLE**

LOT #	LOCATION	IE AT LOT	COVER AT LOT
LOT 2	STM 1, STA: 8+84.48, 18.32 L	223.03	7.03'
LOT 15	STM 1, STA: 12+03.93, 13.84 R	235.07	5.26'
LOT 16	STM 1, STA: 11+51.94, 11.00 R	234.57	5.15'
LOT 17	STM 1, STA: 11+16.54, 11.00 R	234.38	5.87'
LOT 18	STM 1, STA: 10+76.02, 11.00 R	234.15	5.57'
LOT 19	STM 1, STA: 10+39.55, 11.00 R	234.12	5.96'

**SANITARY LATERAL TABLE**

LOT #	LOCATION	IE AT LOT	COVER AT LOT
LOT 2	MARYLHURST DRIVE, STA: 3+96.45, 44.27' R	223.83	6.91'
LOT 15	SAN A, STA: 12+09.44, 5.15' R	236.81	3.56'
LOT 16	SAN A, STA: 11+57.86, 4.00' R	236.67	2.96'
LOT 17	SAN A, STA: 11+12.23, 4.00' R	236.42	3.84'
LOT 18	SAN A, STA: 10+71.71, 4.00' R	236.20	3.45'
LOT 19	SAN A, STA: 10+34.08, 4.00' R	235.99	4.23'

**SANITARY STRUCTURE TABLE**

NUMBER	DESCRIPTION	LOCATION	RIM ELEV.	INVERT ELEV.
EX. SAN MH	EXISTING SANITARY SEWER MANHOLE	MARYLHURST DRIVE STA: 2+43.58, 4.44' (L)	243.02	8" IE IN (SE) = 235.50 8" IE IN (SW) = 235.50 8" IE IN (NW) = 235.40 8" IE OUT (NE) = 235.30
SAN MH A-1	48" SAN MH	SAN A STA: 10+29.58, 0.00' (I)	240.46	8" IE IN (SE) = 235.72 8" IE OUT (NW) = 235.72
SAN MH A-2	48" SAN MH	SAN A STA: 12+07.58, 0.00' (I)	240.23	8" IE OUT (NW) = 236.70 4" IE IN (SW) = 236.70

UTILITY PLAN  
**MARYLHURST SUBDIVISION**  
WEST LINN, OR

Harper Houf Peterson  
Righellis Inc.  
ENGINEERS & PLANNERS  
LANDSCAPE ARCHITECTS & SURVEYORS  
206 SE Spokane Street, Suite 200, Portland, OR 97202  
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

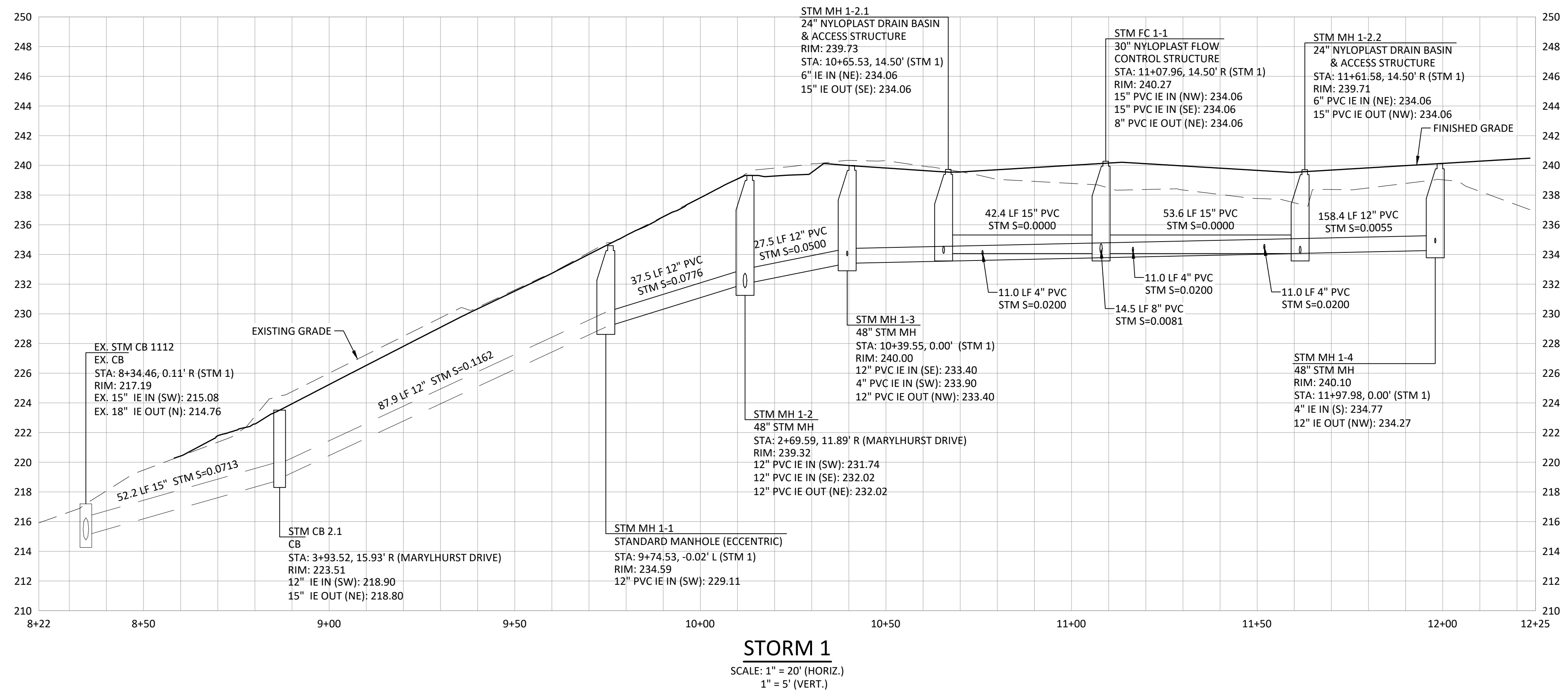
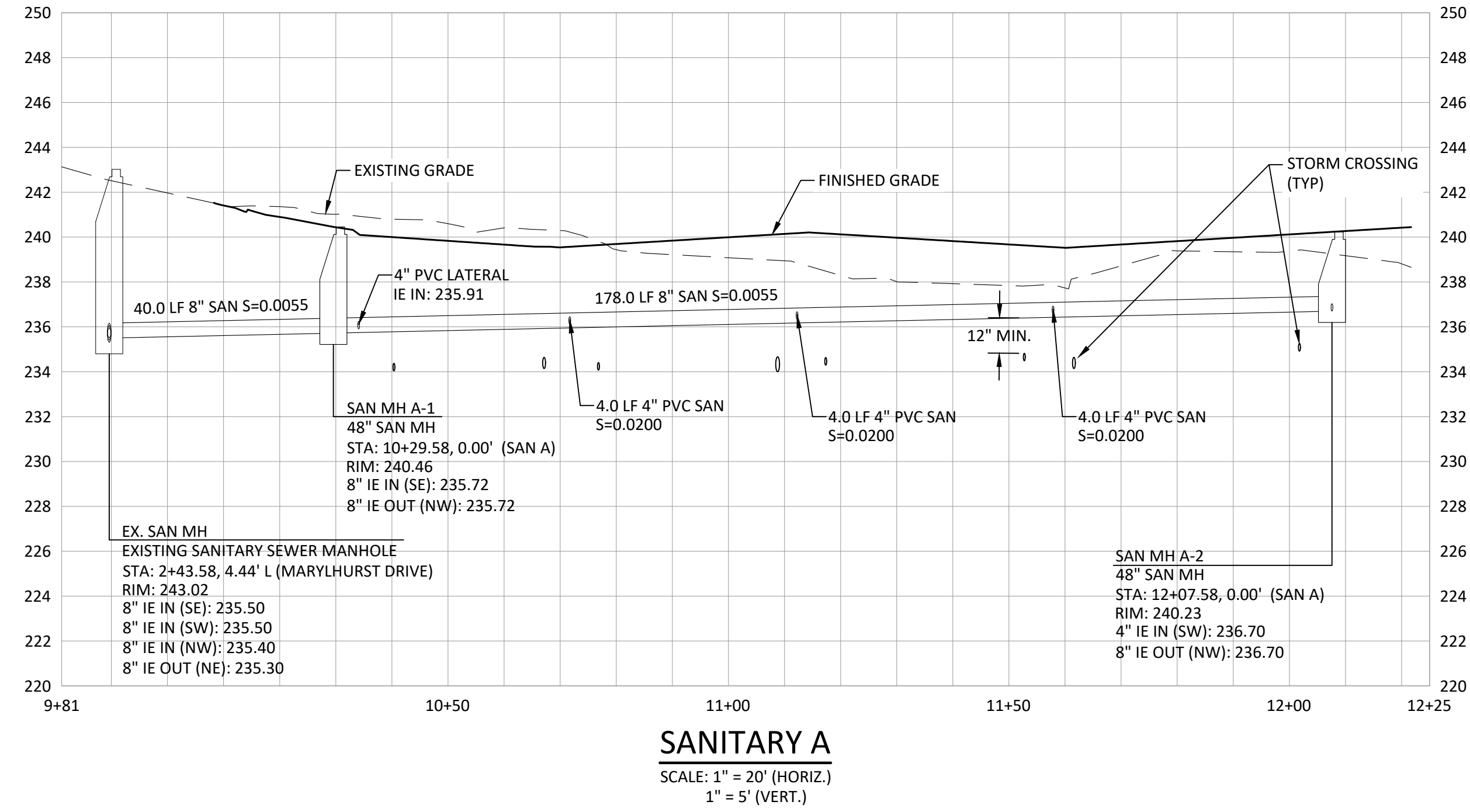
REGISTERED PROFESSIONAL ENGINEER  
PRELIMINARY  
ALEXANDER J. SIMPSON  
EXPIRES: 06/30/2024

DESIGNED:	DRAWN:	CHECKED:	DATE:
HHPR	HHPR	HHPR	02/02/2023

SHEET NO.  
**C5.0**

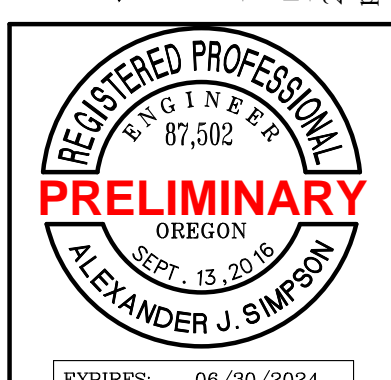
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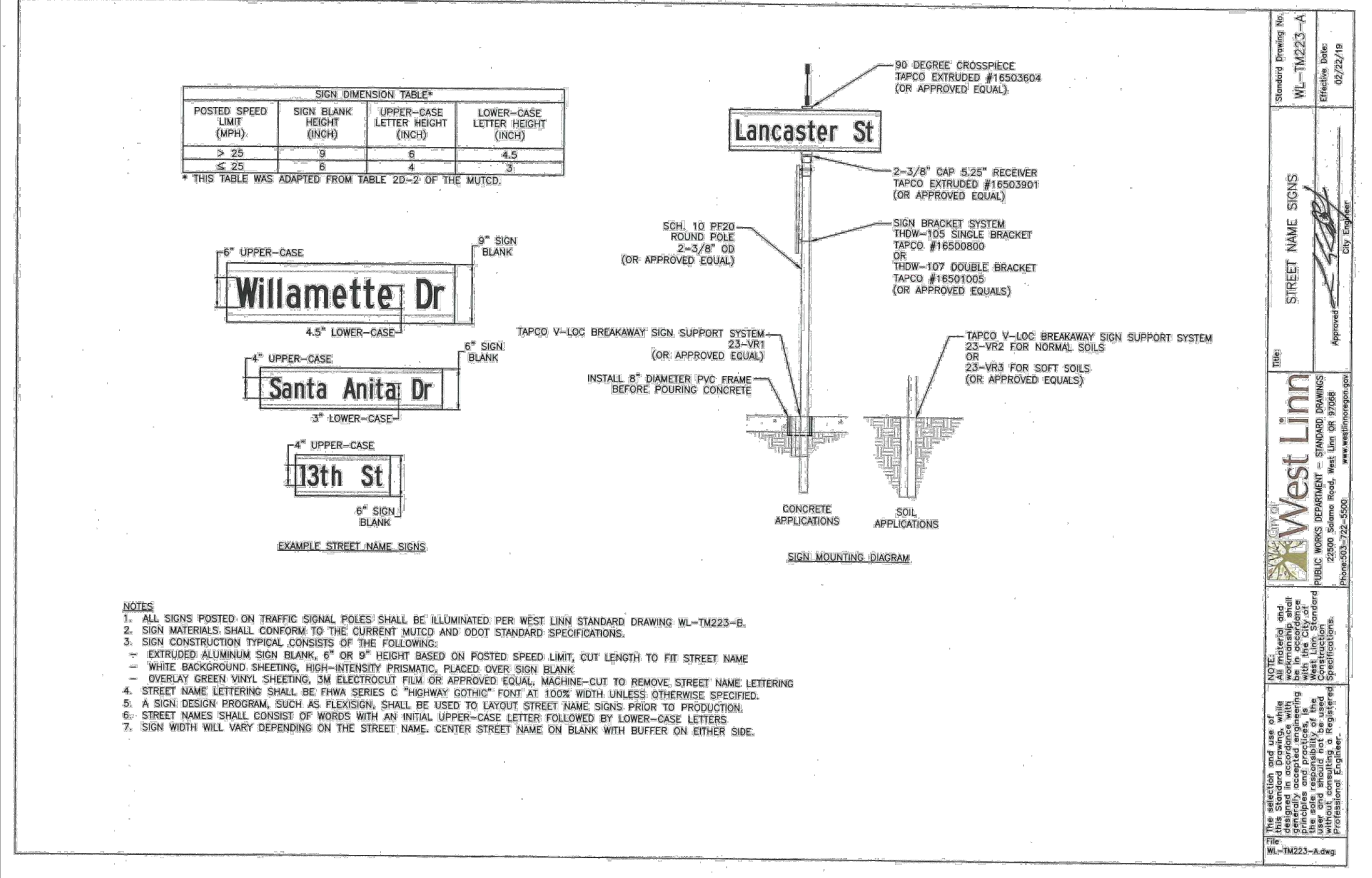
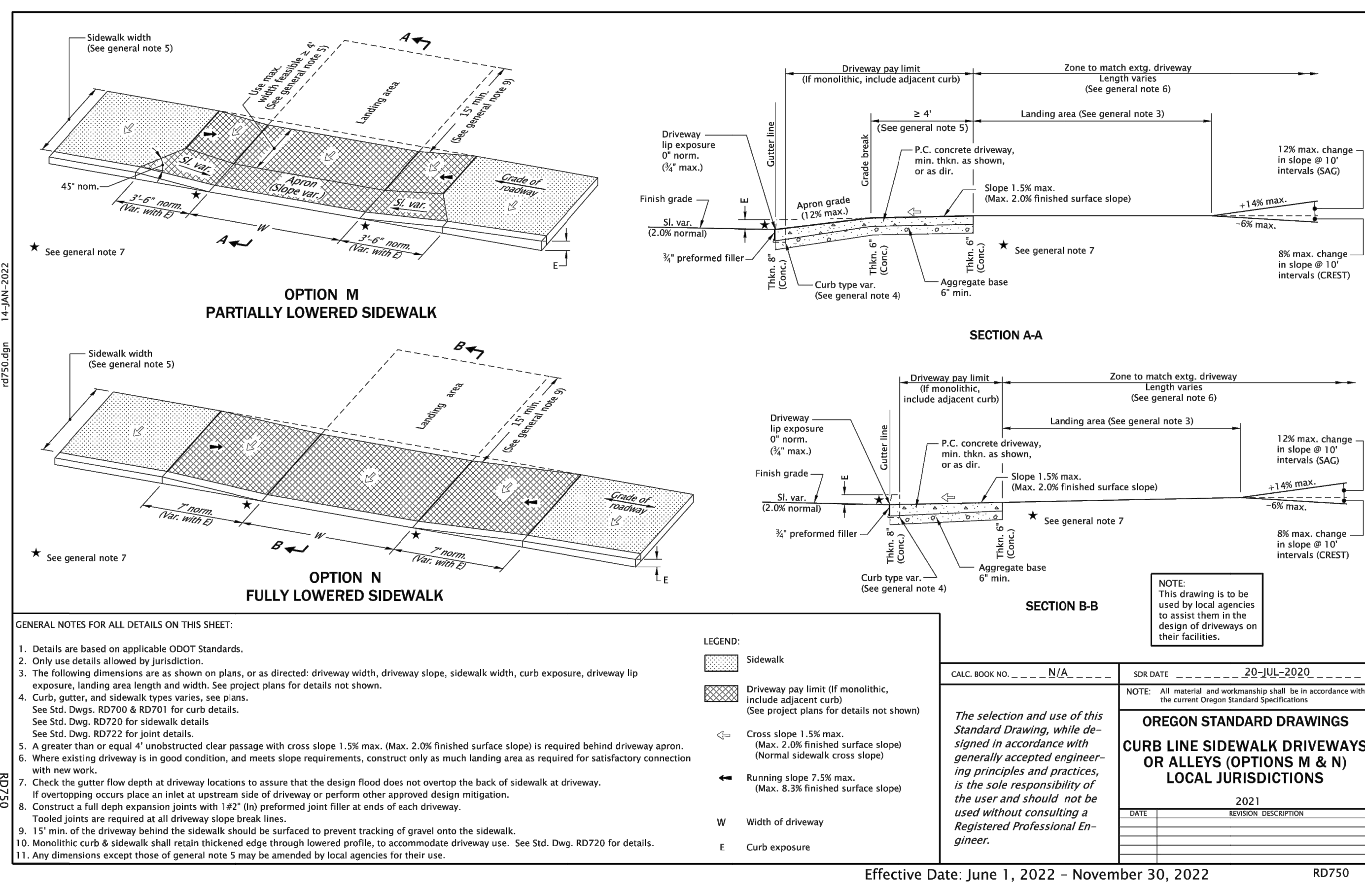
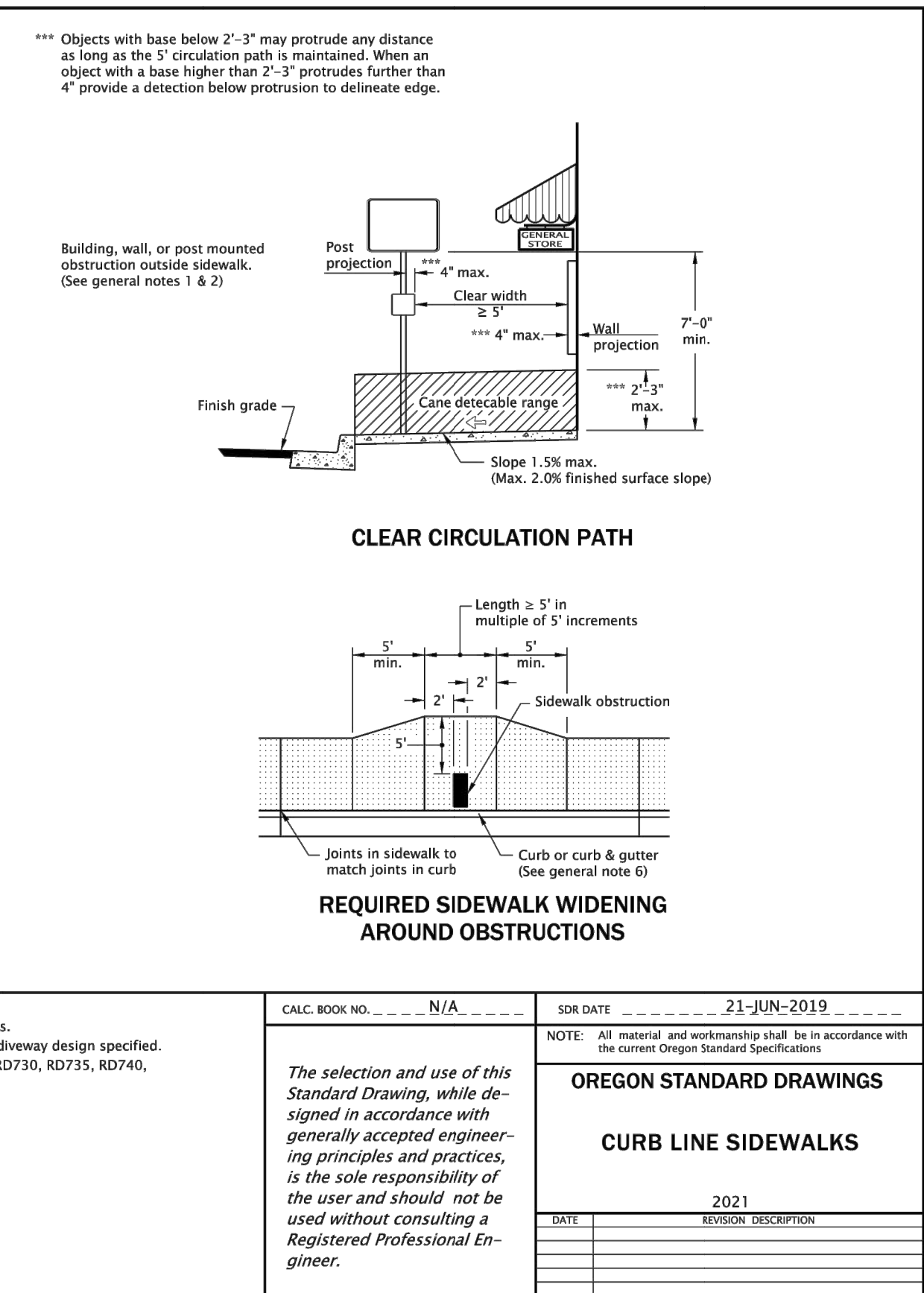
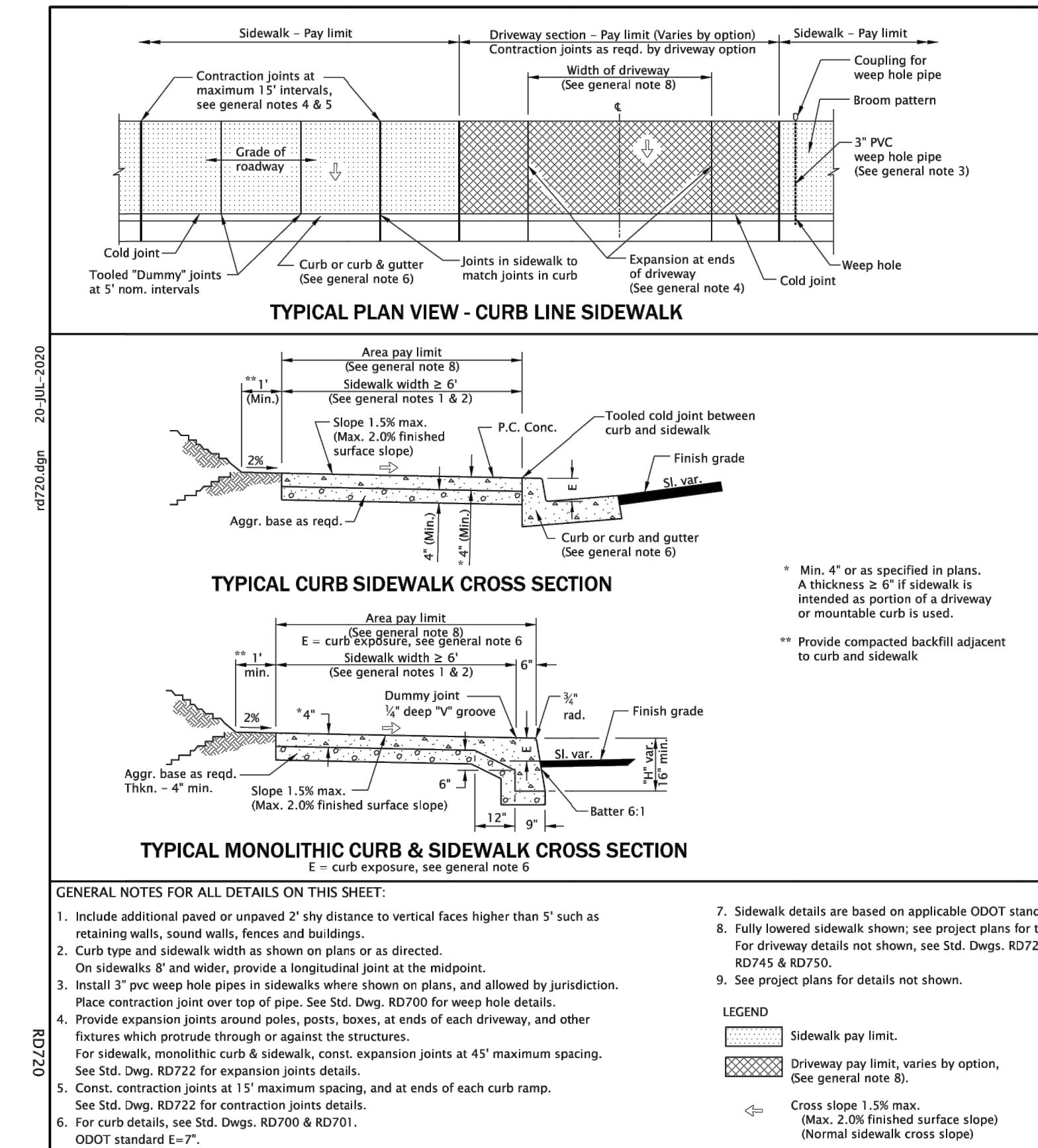
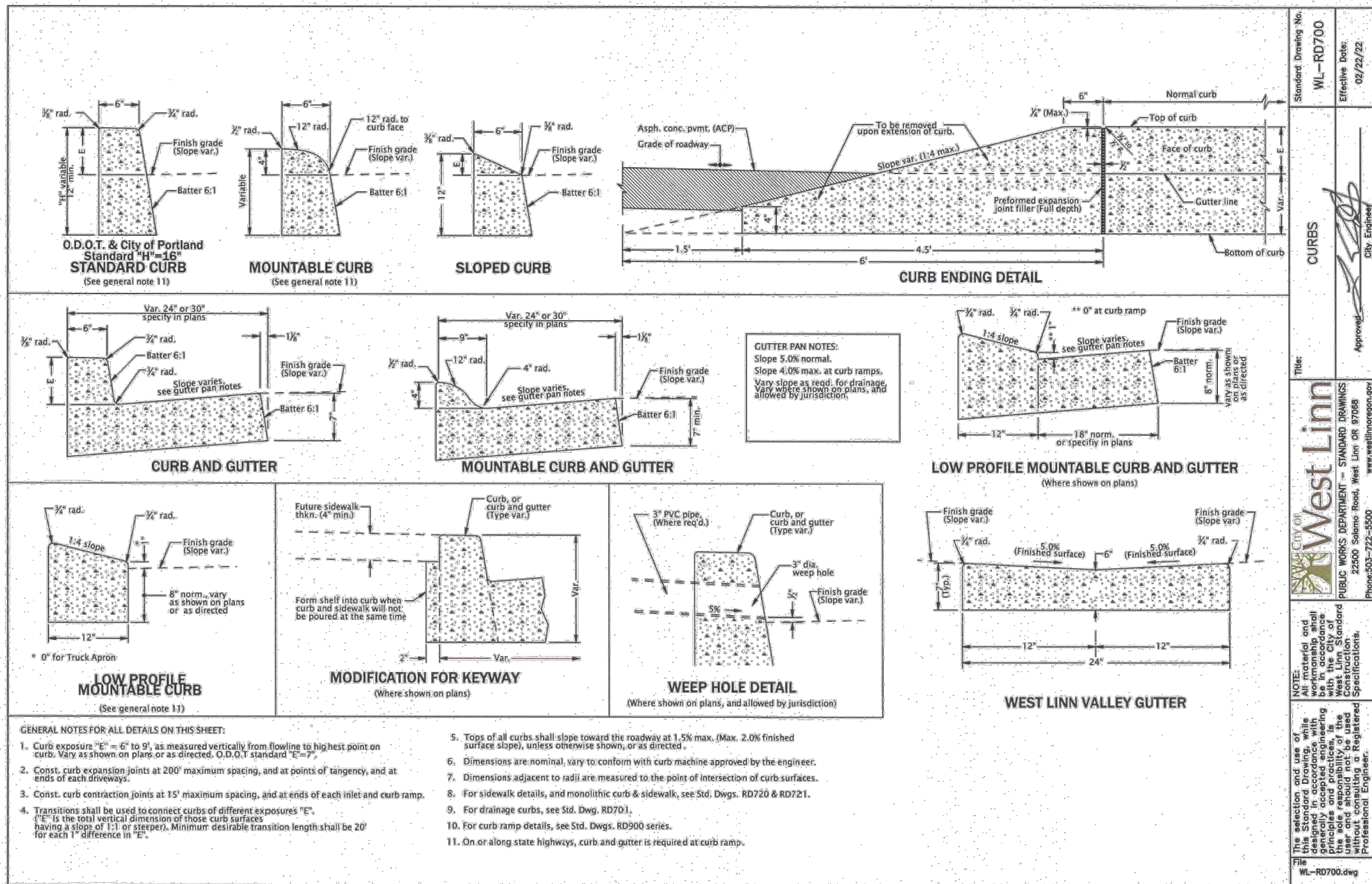
UTILITY PROFILES  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

**Harper Houf Peterson Righellis Inc.**  
 ENGINEERS \* PLANNERS  
 LANDSCAPE ARCHITECTS \* SURVEYORS  
 206 SE Spokane Street, Suite 200, Portland, OR 97202  
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171



DESIGNED:	HHPR	DRAWN:	HHPR	CHECKED:	HHPR	DATE:	02/02/2023
							DESCRIPTION
DATE	NO.						R
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SHEET NO.  
**C5.1**  
 JOB NO.  
 TPH-02



**DETAILS**

**MARYLHURST SUBDIVISION**

**WEST LINN, OR**

**Harper Houf Peterson Righellis Inc.**  
 ENGINEERS & PLANNERS  
 LANDSCAPE ARCHITECTS & SURVEYORS  
 206 SE Spokane Street, Suite 200, Portland, OR 97202  
 phone: 503.221.1131 www.hhp.com

**REGISTERED PROFESSIONAL ENGINEER**  
 ALEXANDER J. SIMPSON  
 SEPT 15 2016  
 OREGON 87,502

**PRELIMINARY**

EXPIRES: 06/30/2024

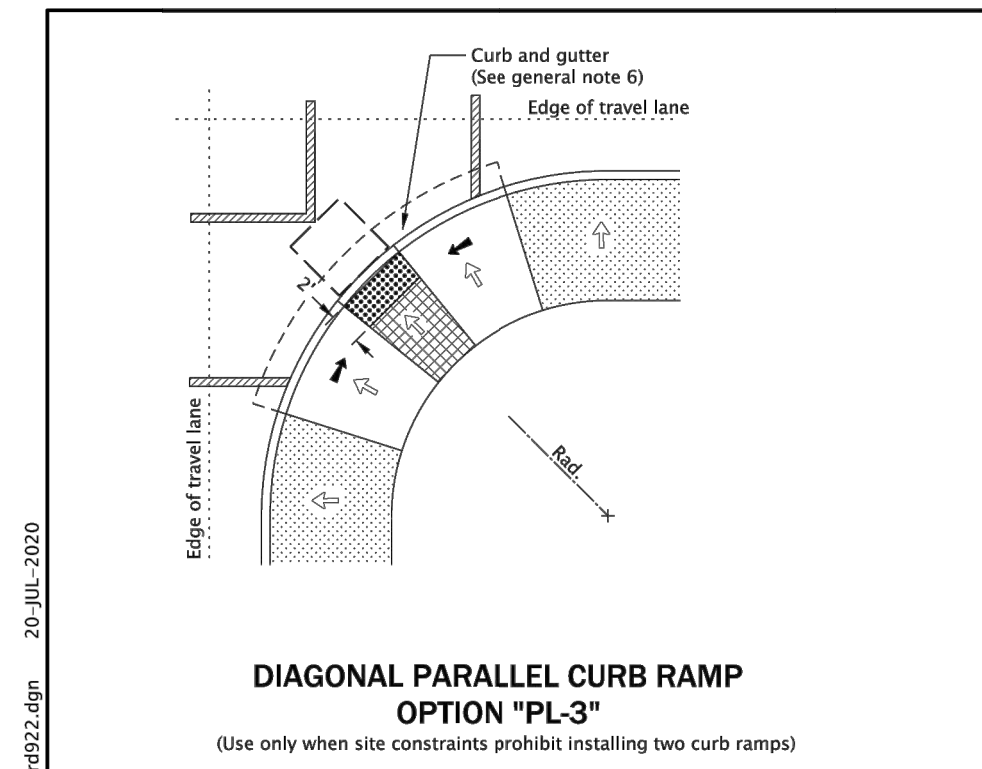
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 DRAWN: HHPR  
 CHECKED: HHPR  
 DATE: 02/02/2023

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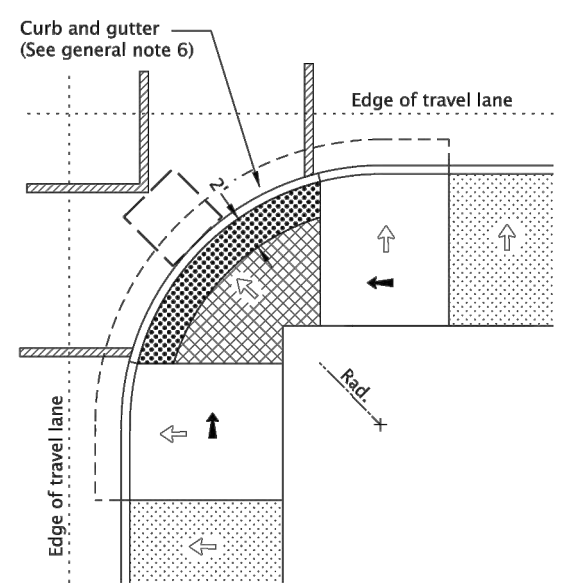
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JOB NO. **TPH-02**

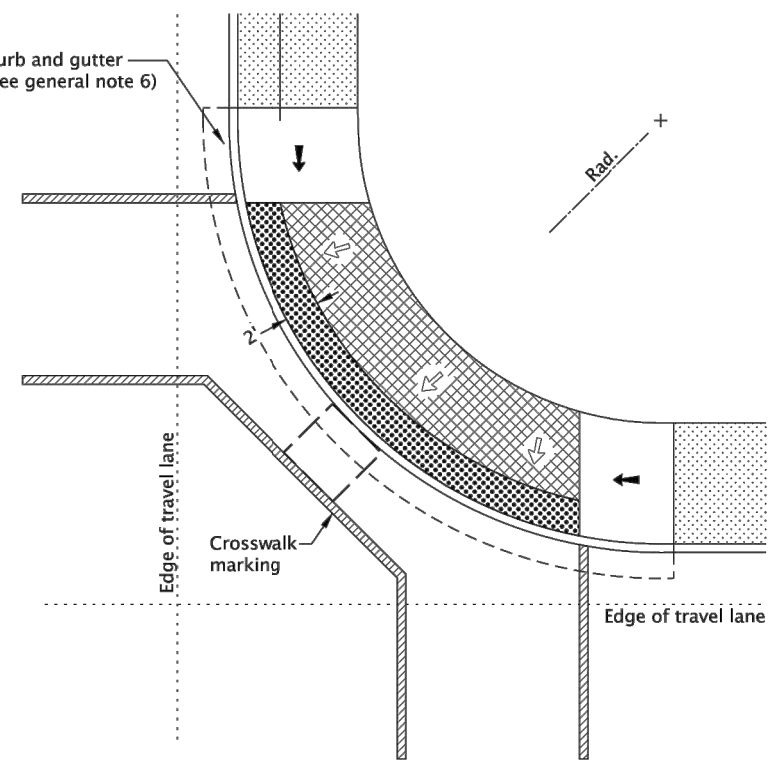




**DIAGONAL PARALLEL CURB RAMP  
OPTION "PL-3"**  
(Use only when site constraints prohibit installing two curb ramps)



**DEPRESSED CURB RAMP SMALL RADIUS  
OPTION "PL-4"**  
(Use only when site constraints prohibit installing two curb ramps)



**DEPRESSED CURB RAMP LARGE RADIUS  
OPTION "PL-5"**  
(Use only when site constraints prohibit installing two curb ramps)

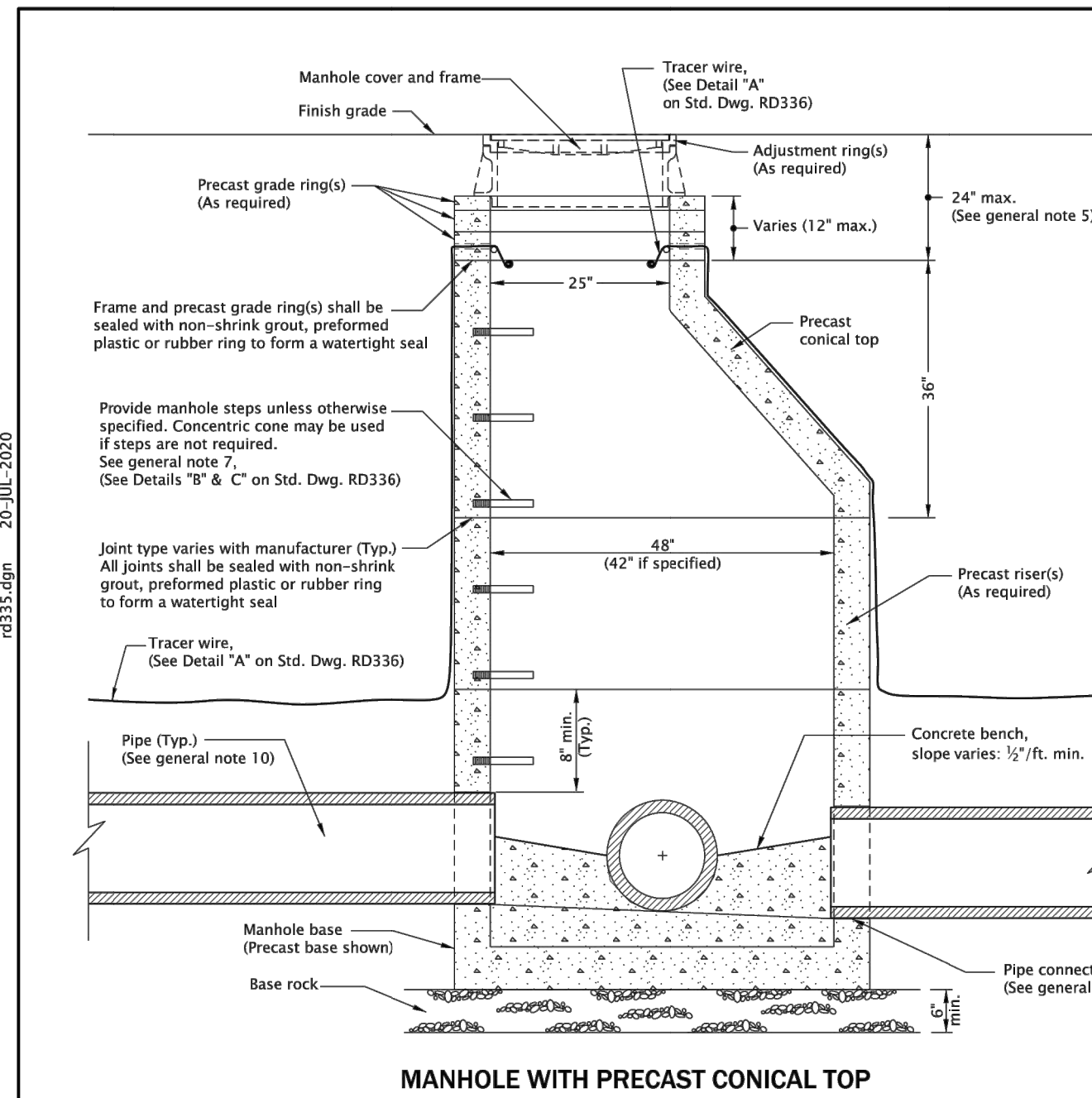
- GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**
1. Curb ramp details are based on applicable ODOT Standards.
  2. See project plans for details not shown. See Std. Dwg. RD700 & RD701 for curbs. See Std. Dwg. RD720 & RD721 for sidewalks. See Std. Dwg. RD902 through RD908 for detectable warning surface installation details. See Std. Dwg. RD920 for parallel curb ramp details.
  3. Tooled dummy joints are required at all curb ramp slope break lines. (See Std. Dwg. RD722).
  4. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
  5. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
  6. On or along state highways, curb and gutter is required at curb ramps.
  7. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
  8. Only use curb ramp options allowed by jurisdiction. Single ramps require design exceptions on or along state highways.

- LEGEND:**
- Marked or intended crossing location
  - Sidewalk
  - Detectable warning surface
  - Level area (Turning space/landing) Unobstructed 4.5' x 4.5' With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing). For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
  - Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
  - Running slope 7.5% max. (Max. 8.3% finished surface slope)
  - 4'x4' clear space

CALC. BOOK NO.	N/A	SDR DATE	20-JULY-2020
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<b>OREGON STANDARD DRAWINGS</b>			
<b>PARALLEL CURB RAMP SINGLE RAMP</b>			
DATE	2021	REVISION DESCRIPTION	
07/20/20		DRAWING CREATED	

Effective Date: June 1, 2022 - November 30, 2022

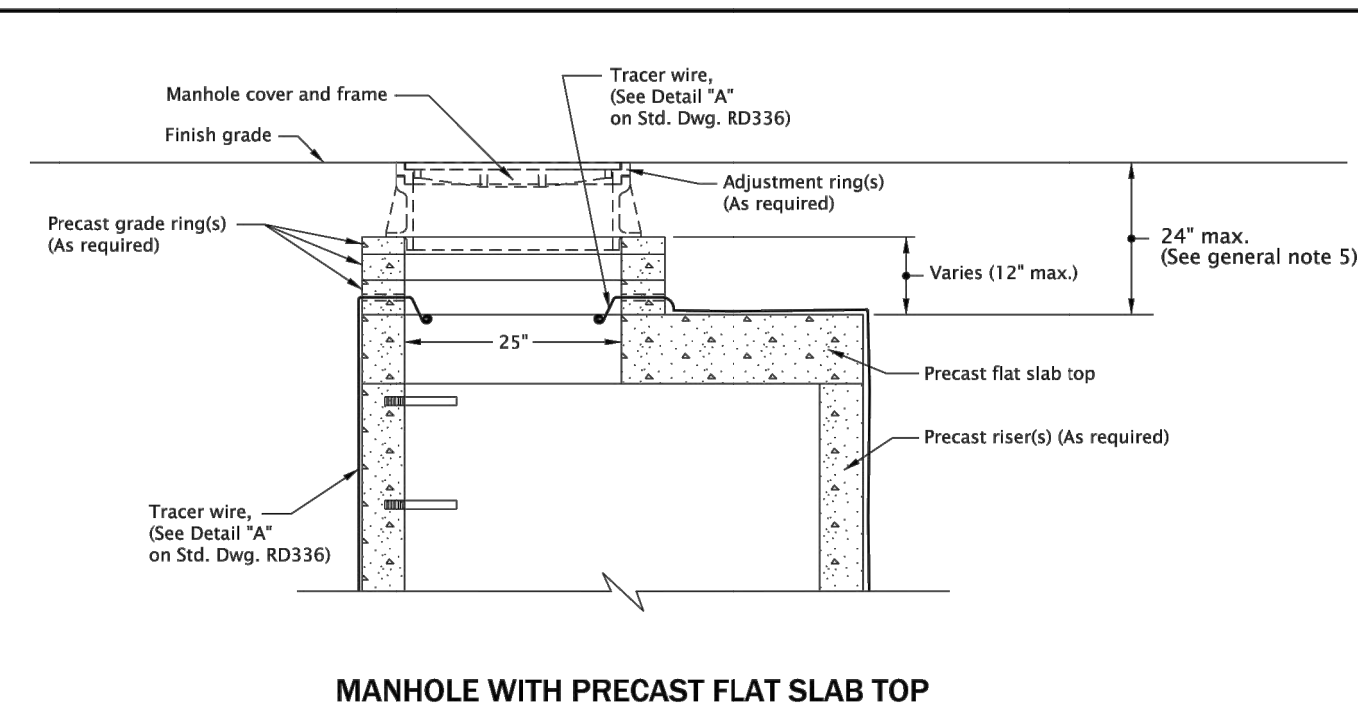
RD922



**MANHOLE WITH PRECAST CONICAL TOP**

**GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**

1. All precast products shall conform to requirements of ASTM C478.
2. Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
3. See Std. Dwg. RD345 for pipe to manhole connections.
4. See Std. Dwg. RD344 for manhole base section.
5. Adjust 24" maximum.
6. All connecting pipes shall have a tracer wire, or approved alternate.
7. See Std. Dwg. RD336 for manhole steps.
8. See Std. Dwg. RD336 for details not shown.
9. See Std. Dwg. RD356 for manhole covers and frames, manhole adjustment rings, etc.
10. Max. pipe diameter varies with pipe material.
11. See Std. Dwg. RD342 for shallow manholes.
12. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.

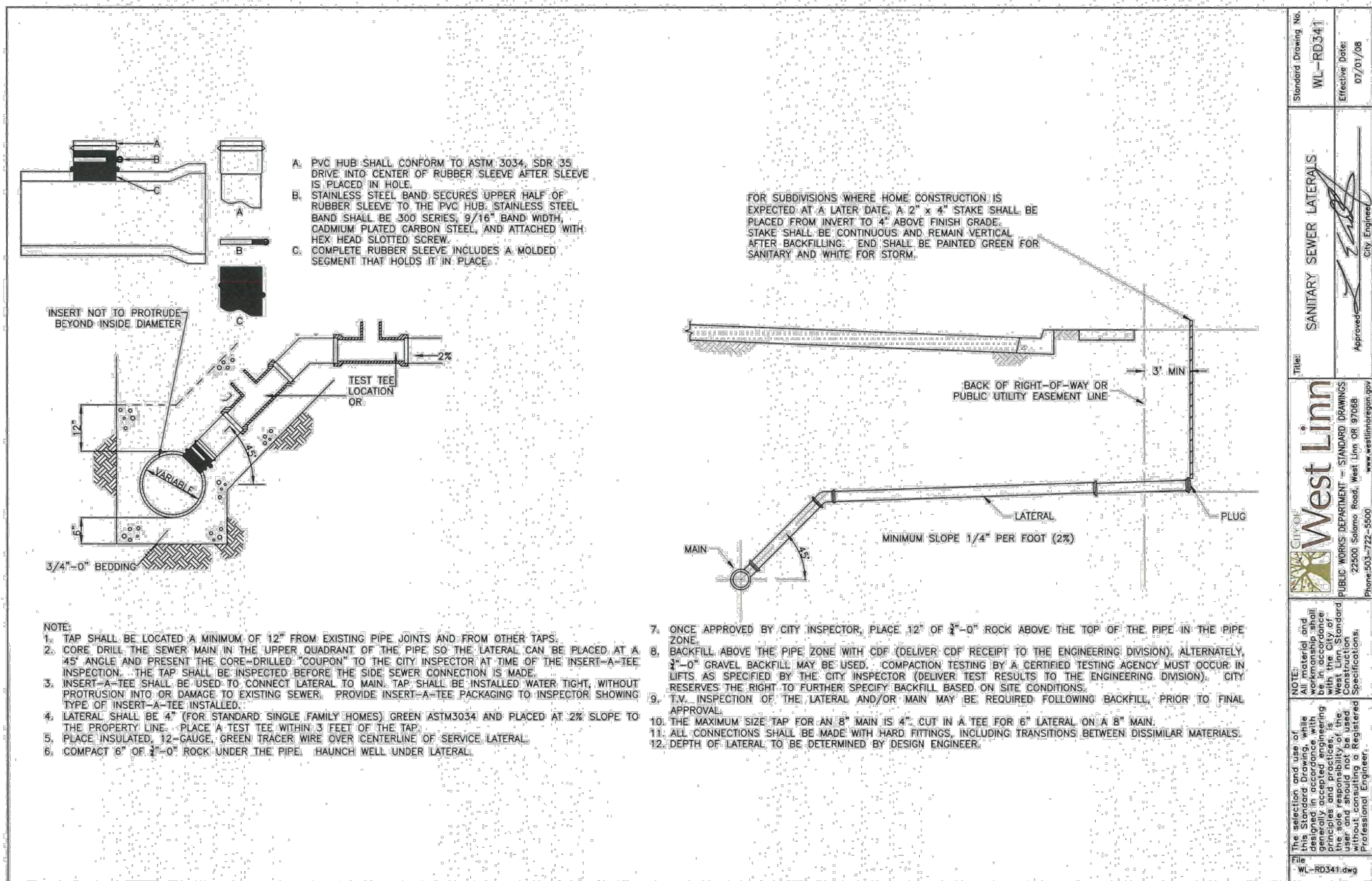


**MANHOLE WITH PRECAST FLAT SLAB TOP**

CALC. BOOK NO.	N/A	SDR DATE	21-JUN-2019
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<b>OREGON STANDARD DRAWINGS</b>			
<b>STANDARD STORM SEWER MANHOLE</b>			
DATE	2021	REVISION DESCRIPTION	

Effective Date: June 1, 2022 - November 30, 2022

RD335



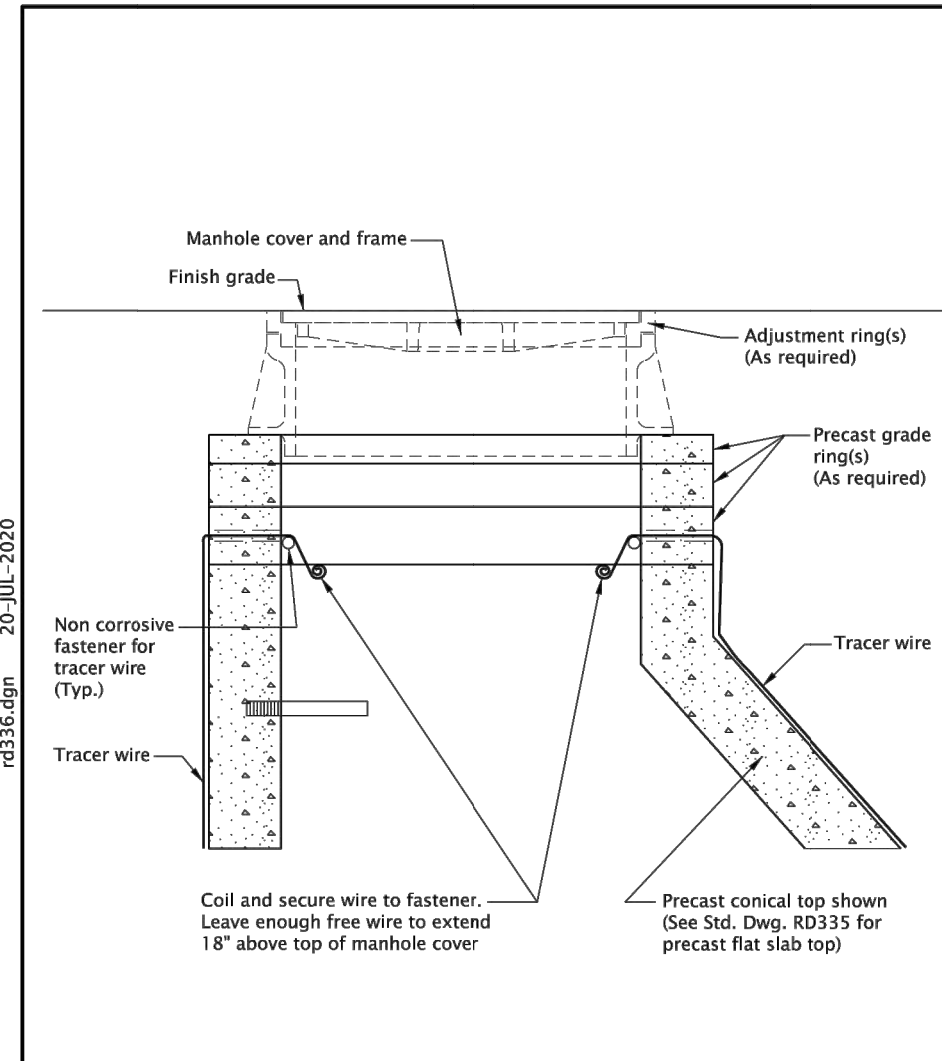
Standard Drawing No. WL-RD341 Effective Date: 07/07/08

**West Linn**

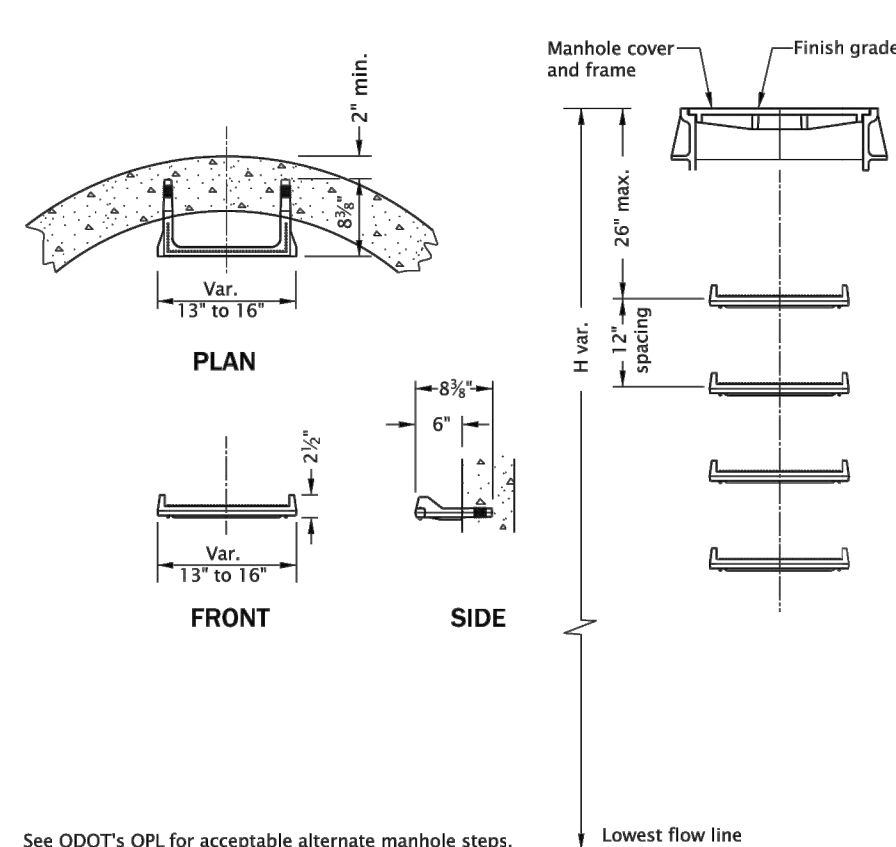
Sanitary Sewer Laterals

NO REVISIONS TO BE MADE WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. ANY CHANGES TO BE MADE SHALL BE MADE BY THE CITY OF WEST LINN AND THE ENGINEER. THE CITY OF WEST LINN AND THE ENGINEER SHALL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT.

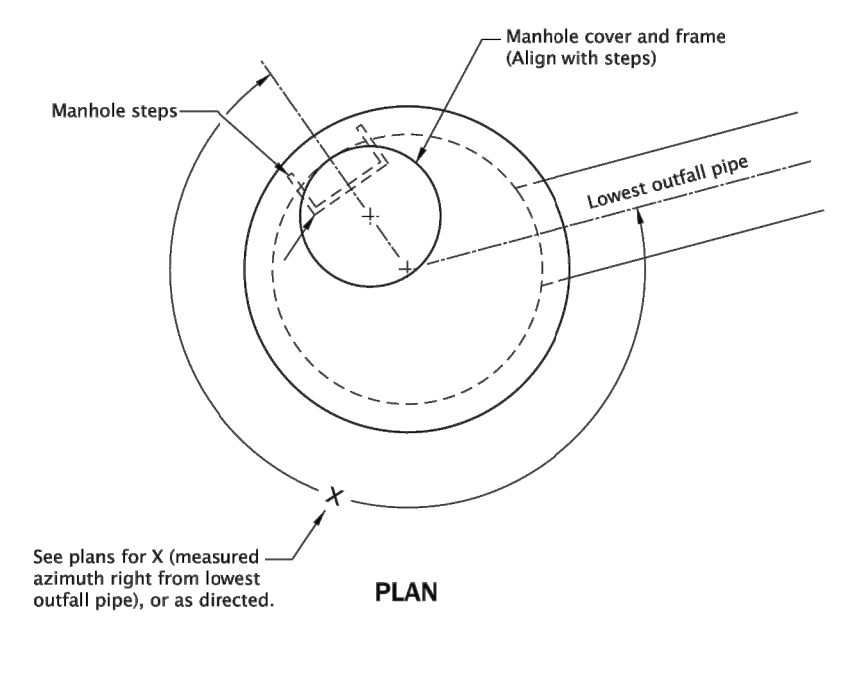
Professional Engineer



**DETAIL "A"  
TRACER WIRE**  
(See general note 6)



**DETAIL "B"  
MANHOLE STEPS**  
(See general note 7)



**DETAIL "C"  
PRECAST CONICAL TOP  
OR  
PRECAST FLAT SLAB TOP  
AND MANHOLE STEPS ORIENTATION**  
(See general note 7)

**GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**

1. All precast products shall conform to requirements of ASTM C478.
2. Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
3. See Std. Dwg. RD345 for pipe to manhole connections.
4. See Std. Dwg. RD344 for manhole base section.
5. Adjust 24" maximum.
6. All connecting pipes shall have a tracer wire, or approved alternate. Place tracer wire directly over pipe centerline and on top of the pipe zone material.
7. Steps shall conform to requirements of ASTM C478. When H=42" or less omit steps.
8. See Std. Dwg. RD335 for details not shown.
9. See Std. Dwg. RD356 for manhole covers and frames, manhole adjustment rings, etc.
10. Max. pipe diameter varies with pipe material.
11. See Std. Dwg. RD342 for shallow manholes.
12. See project plans for details not shown.

CALC. BOOK NO.	N/A	SDR DATE	16-JAN-2019
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<b>OREGON STANDARD DRAWINGS</b>			
<b>STANDARD MANHOLE DETAILS</b>			
DATE	2021	REVISION DESCRIPTION	

Effective Date: June 1, 2022 - November 30, 2022

RD336

**MARYLHURST SUBDIVISION**  
WEST LINN, OR

**Harper Houf Peterson Righellis Inc.**  
ENGINEERS & PLANNERS  
LANDSCAPE ARCHITECTS & SURVEYORS  
206 SE Spokane Street, Suite 200, Portland, OR 97202  
phone: 503.221.1131 www.hhp.com

**REGISTERED PROFESSIONAL ENGINEER**  
ALEXANDER J. SIMPSON  
PRELIMINARY  
SEPT 15 2016  
OREGON  
87,502

DESIGNED:	HHPR	DATE:	02/02/2023
DRAWN:	HHPR	CHECKED:	HHPR
R E V I S I O N S			
NO.		DATE	
DESCRIPTION			
<b>C6.1</b>			

JOB NO. TPH-02

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**G-1, CG-1 FRAME (TYPE 2)**  
(Bicycle-safe)

**G-2, G-2M, G-2MA, CG-2 FRAME (TYPE 2)**  
(2 grates required per inlet, as shown)

**G-2, G-2M, G-2MA, CG-2 GRATE (TYPE 1)**  
(See general note 2)

**G-1, CG-1 FRAME**

**G-2, G-2M, G-2MA, CG-2 FRAME**

**GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**

- For inlet details, see appropriate inlet standard drawing(s).
- Type 1 grate allowed only in locations not subject to bicycle or pedestrian use.
- $\frac{3}{8}$ " cross bars shall be flush with the top of grate surface and may be fillet welded, resistance welded or electroformed to bearing bars.
- Hot dip galvanize after fabrication.
- Cast iron grate and frame are acceptable alternates. See ODOT's QPL.

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

**OREGON STANDARD DRAWINGS**

**FRAMES & GRATES FOR CONCRETE INLETS**

DATE	REVISION DESCRIPTION
2021	

Effective Date: June 1, 2022 - November 30, 2022

**DETAIL A CURB OPENING**

**DETAIL B WITH-OUT SUMP**

**SECTION B - B**

**SECTION A - A**

**BAR "a" DETAILS**

INLET TYPE	W	W <sub>1</sub>
CG-1	2'-8 $\frac{1}{2}$ "	1'-8 $\frac{1}{2}$ "
CG-2	3'-3 $\frac{1}{2}$ "	2'-3 $\frac{1}{2}$ "

**NOTES:**

- #3 "a" bars to be placed during curb construction.
- All bars to be placed 1 $\frac{1}{2}$ " clear of nearest face of concrete unless shown or noted otherwise.
- All bars shall be full length.

**GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**

- Where precast inlets are used as an alternate to cast-in-place inlets, a 4" compacted leveling bed of sand or  $\frac{1}{4}$ "-0 crushed aggregate shall be provided. All precast inlets shall conform to requirements of ASTM C913.
- Graphics show CG-1 inlet with Type 2 grate. See Table A for inlet dimensions. Type 1 grate allowed only in locations not subject to bicycle or pedestrian use. For frame and grate details, see Std. Dwg. RD365.
- Provide sump only where shown on plans, and allowed by jurisdiction. See Detail B for inlet without sump.
- For curb details, see Std. Dwg. RD700 & RD701.
- See Std. Dwg. RD336 for tracer wire details, or approved alternate.
- Max. pipe diameter varies with pipe material.
- Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
- All concrete shall be commercial grade concrete.
- $\frac{1}{2}$ " preformed filler (in concrete pavement or gutter only) to extend through thickness of concrete. (Pay limit for inlet is expanded when curb and gutter are required.)
- See Std. Dwg. RD363 for gutter transition section, when curb and gutter are required.
- See Std. Dwg. RD339 for pipe to structure connections.

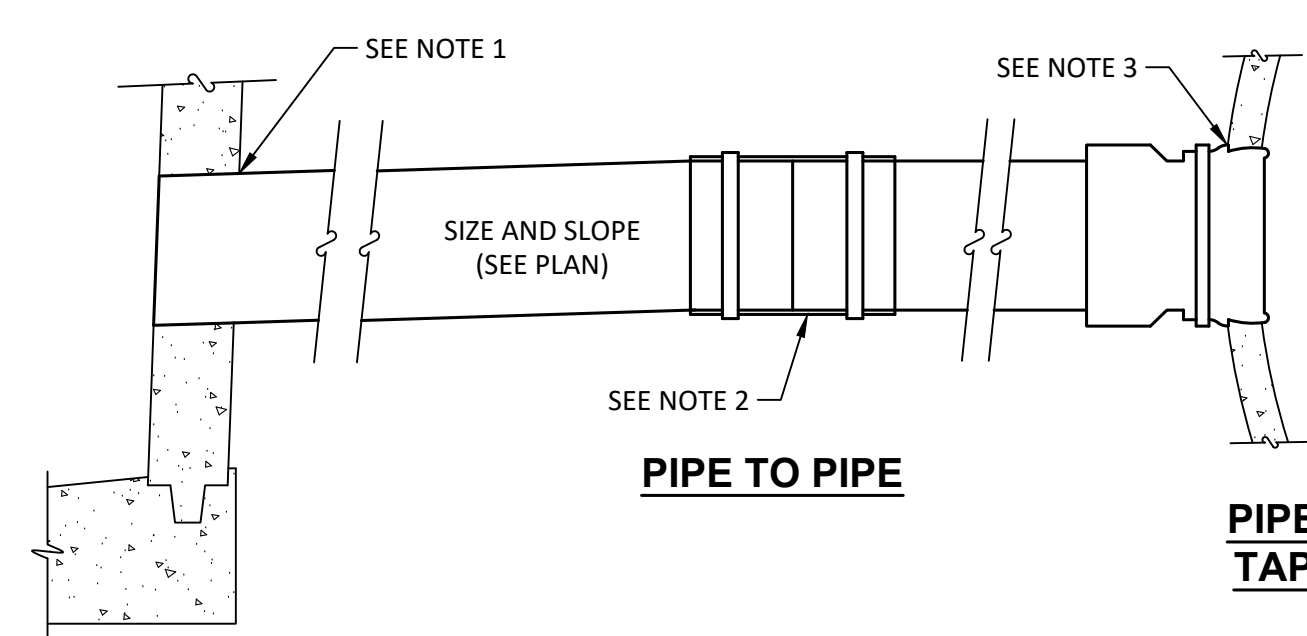
NOTE: Use details shown on Std. Dwg. RD367 when curb inlet channels are used.

**OREGON STANDARD DRAWINGS**

**CONCRETE INLETS TYPE CG-1, CG-2**

DATE	REVISION DESCRIPTION
2021	

Effective Date: June 1, 2022 - November 30, 2022



- NOTES:**
- BREAK OUT WALL 2" MIN., 4" MAX. CLEAR OF PIPE WALL. GROUT SPACE WITH NON-SHRINK GROUT. FOR SANITARY CONNECTION INSTALL SAND COLLAR AS DIRECTED BY WATER ENVIRONMENT SERVICES (WES).
  - USE "FERNCO" FLEXIBLE COUPLING WITH STAINLESS STEEL CLAMPS OR APPROVED EQUAL AS REQUIRED.
  - CUT HOLE INTO PIPE AND INSTALL "FOWLER" SEWER BOOT TAP OR APPROVED EQUAL.

**PIPE CONNECTION**  
NTS

DETAILS  
**MARYLHURST SUBDIVISION**  
WEST LINN, OR

**Harper Houf Peterson Righellis Inc.**  
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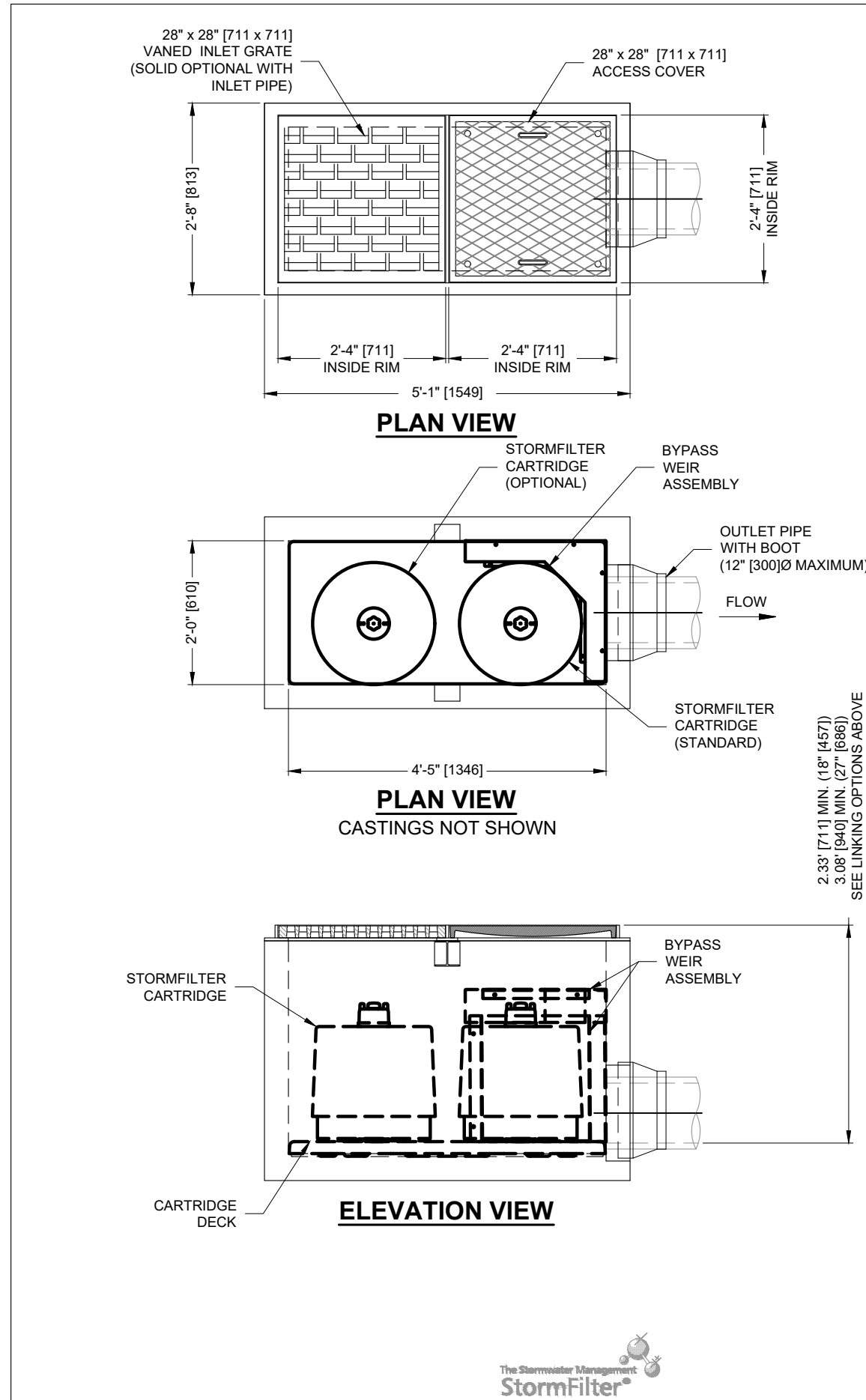
**REGISTERED PROFESSIONAL ENGINEER**  
PRELIMINARY  
ALEXANDER J. SIMPSON  
SEPT. 15, 2016  
EXPIRES: 06/30/2024

DESIGNED:	DRAWN:	CHECKED:	DATE:
HHPR	HHPR	HHPR	02/02/2023

R E V I S I O N S

DATE	NO.	DESCRIPTION

SHEET NO.  
**C6.2**  
JOB NO. TPH-02

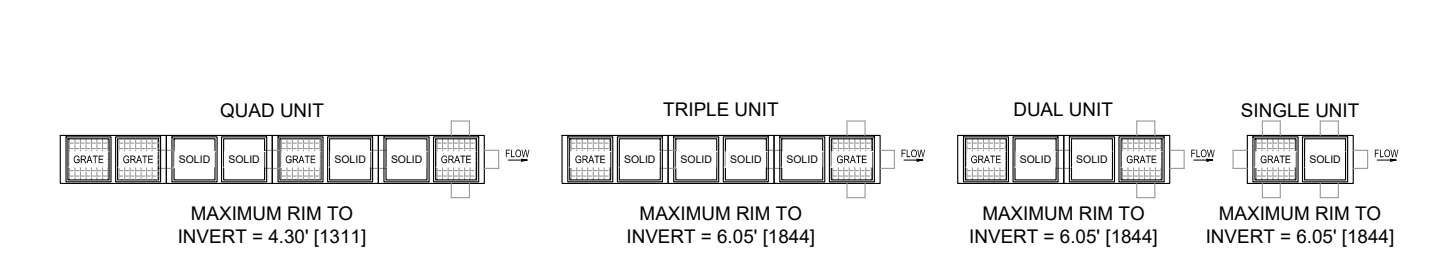


### STORMFILTER DESIGN NOTES

- CONCRETE CATCHBASIN STORMFILTER TREATMENT CAPACITY VARIES BY CARTRIDGE COUNT AND LOCAL APPROVALS
- PEAK CONVEYANCE CAPACITY IS 1.3 CFS
- CONCRETE CATCHBASIN STORMFILTER IS AVAILABLE WITH UP TO TWO (2), 18" (457) OR 27" (686) TALL CARTRIDGES
- UP TO 4 INDIVIDUAL UNITS MAY BE LINKED FOR AN ULTIMATE CAPACITY OF EIGHT (8) CARTRIDGES

CARTRIDGE SIZE (in. [mm])	27" (686)	18" (457)
ACTIVATION HEAD (ft. [mm])	3.08 [940]	2.33 [711]
SPECIFIC FLOW RATE (gpm/sq ft [L/s/m <sup>2</sup> ])	2 [1.36]	1.67 [1.13]
CARTRIDGE FLOW RATE (gpm [L/s])	22.5 [1.4]	18.79 [1.19]

\* 1.67 gpm/sq ft [1.13 L/s/m<sup>2</sup>] SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSORB) MEDIA ONLY



- #### GENERAL NOTES
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE
  - DIMENSIONS MARKED WITH (1) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
  - ALTERNATE DIMENSIONS ARE MILLIMETERS (mm) UNLESS NOTED OTHERWISE
  - FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. [www.conteches.com](http://www.conteches.com)
  - STORMFILTER WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
  - FILTER CARTRIDGES SHALL BE MEDIA FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 7-INCHES (178). FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.
  - SPECIFIC FLOW RATE IS THE MEASURE OF THE FLOW (GPM [L/S]) DIVIDED BY THE MEDIA SURFACE CONTACT AREA (SF [m<sup>2</sup>]).
  - STRUCTURE SHALL MEET AASHTO M202 LOAD RATING, ASSUMING EARTH COVER OF 0' - 0" (0) AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.

- #### INSTALLATION NOTES
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
  - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE.
  - CONTRACTOR TO PROVIDE AND INSTALL PIPES. MATCH PIPE INVERTS SHOWN ON PROJECT SPECIFIC DRAWINGS.
  - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

#### SITE SPECIFIC DATA REQUIREMENTS

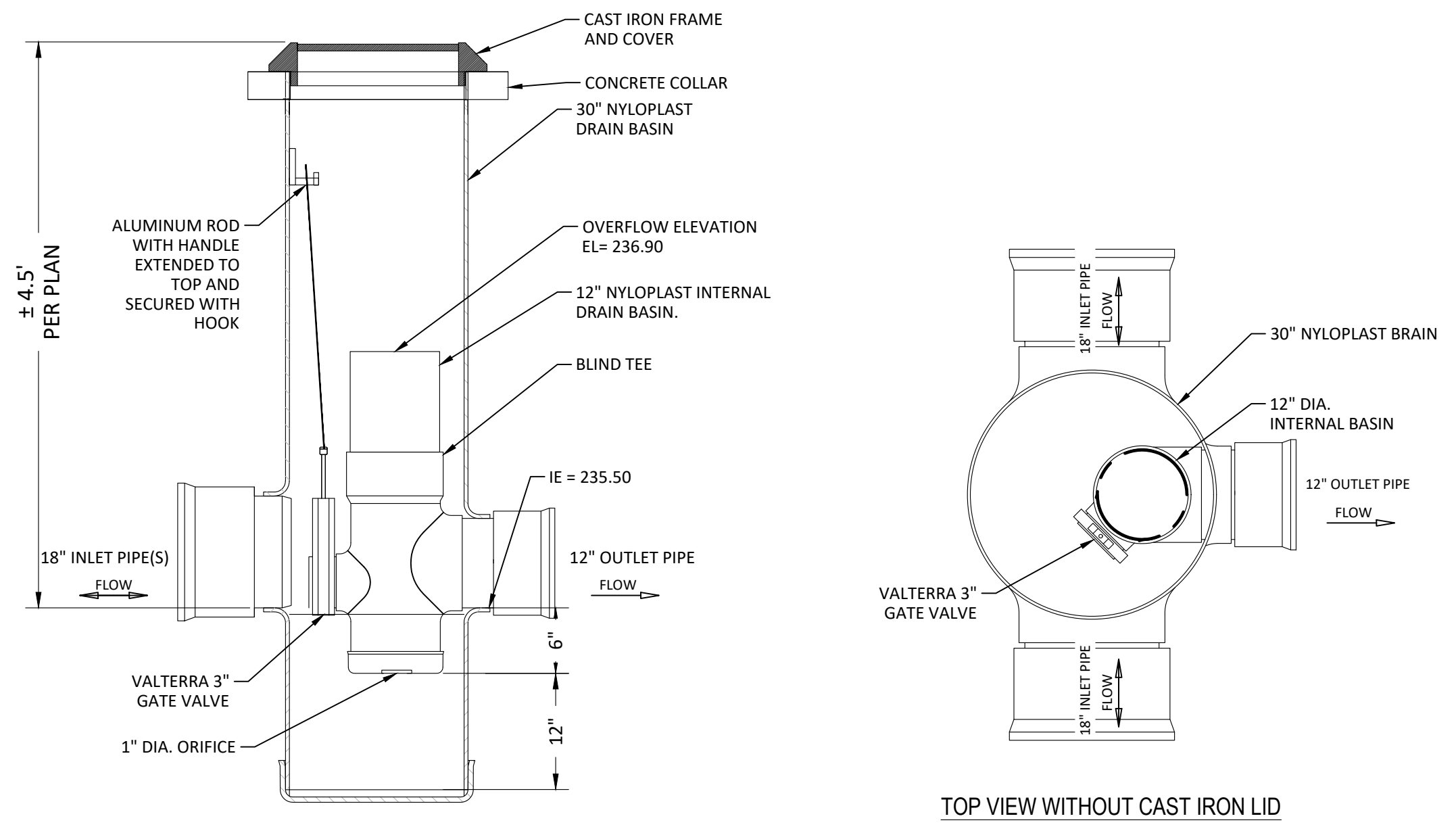
STRUCTURE ID	
WATER QUALITY FLOW RATE (cfs [L/s])	0.007 CFS
PEAK FLOW RATE (cfs [L/s])	0.032 CFS
RETURN PERIOD OF PEAK FLOW (yrs)	25
CARTRIDGE SIZE (7' - 18")	18"
CARTRIDGE FLOW RATE	0.028 CFS
MEDIA TYPE (PERLITE, ZPG, PSORB)	PSORB
NUMBER OF CARTRIDGES REQUIRED	1
RIM ELEVATION	239.45
PIPE DATA:	
INVERT	
MATERIAL	
DIAMETER	
INLET PIPE 1	
INLET PIPE 2	
OUTLET PIPE	237.05 HDPE 8

NOTES/SPECIAL REQUIREMENTS:

CONCRETE CATCHBASIN STORMFILTER STANDARD DETAIL

11815 NE Glenn Widing Drive, Portland, OR 97220  
800-545-6667 503-240-3393 503-661-1271 FAX

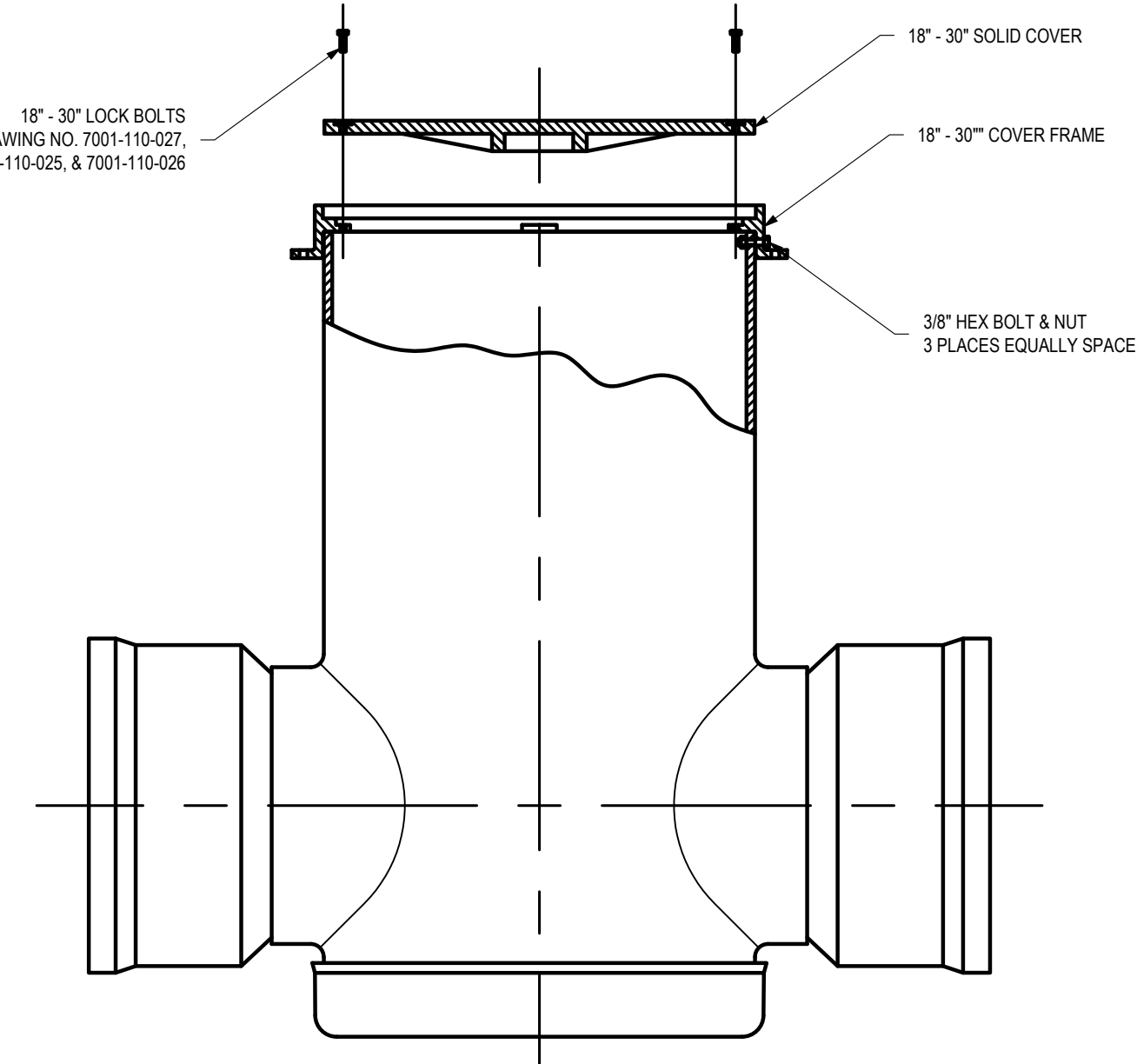
### NYLOPLAST STORMWATER CONTROL STRUCTURE WITH ORIFICE IN RISER PIPE



- TOP OF INTERNAL BASIN TO BE BELLED TO ALLOW INTERNAL FLOW CONTROL. STAND PIPE TO BE REMOVED.
  - FLOW CONTROL STRUCTURE TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS.
  - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D5212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL, N-12 HP & PVC SEWER).
  - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°, TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
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- | DRAWN BY | MATERIAL         |
|----------|------------------|
| DATE     | PROJECT NO./NAME |
| APPD BY  | PROJECT NO./NAME |
| DATE     |                  |
| DWG SIZE | A                |
| SCALE    | NTS              |
| SHEET    | 1 OF 1           |
| DWG NO.  | 7008-110-009     |
| REV      | A                |

### DETENTION PIPE FLOW CONTROL STRUCTURE

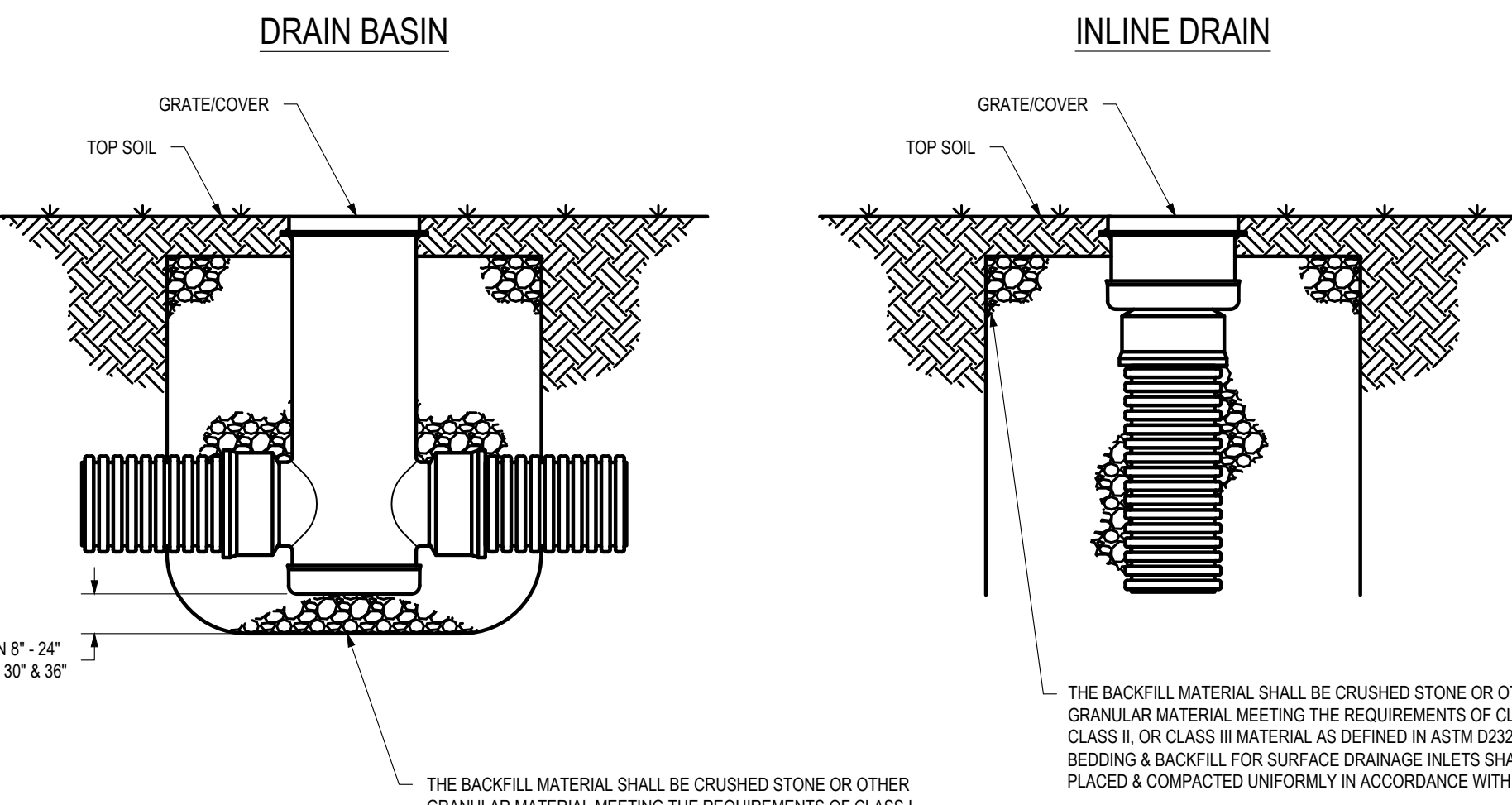
NTS



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DRAWN BY	MATERIAL
DATE	PROJECT NO./NAME
APPD BY	PROJECT NO./NAME
DATE	
DWG SIZE	A
SCALE	1:10
SHEET	1 OF 1
DWG NO.	7001-110-390
REV	B

### NON TRAFFIC INSTALLATION



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DRAWN BY	MATERIAL
DATE	PROJECT NO./NAME
REVISED BY	PROJECT NO./NAME
DATE	
DWG SIZE	A
SCALE	1:25
SHEET	1 OF 1
DWG NO.	7001-110-111
REV	F

DETAILS  
**MARYLHURST SUBDIVISION**  
WEST LINN, OR

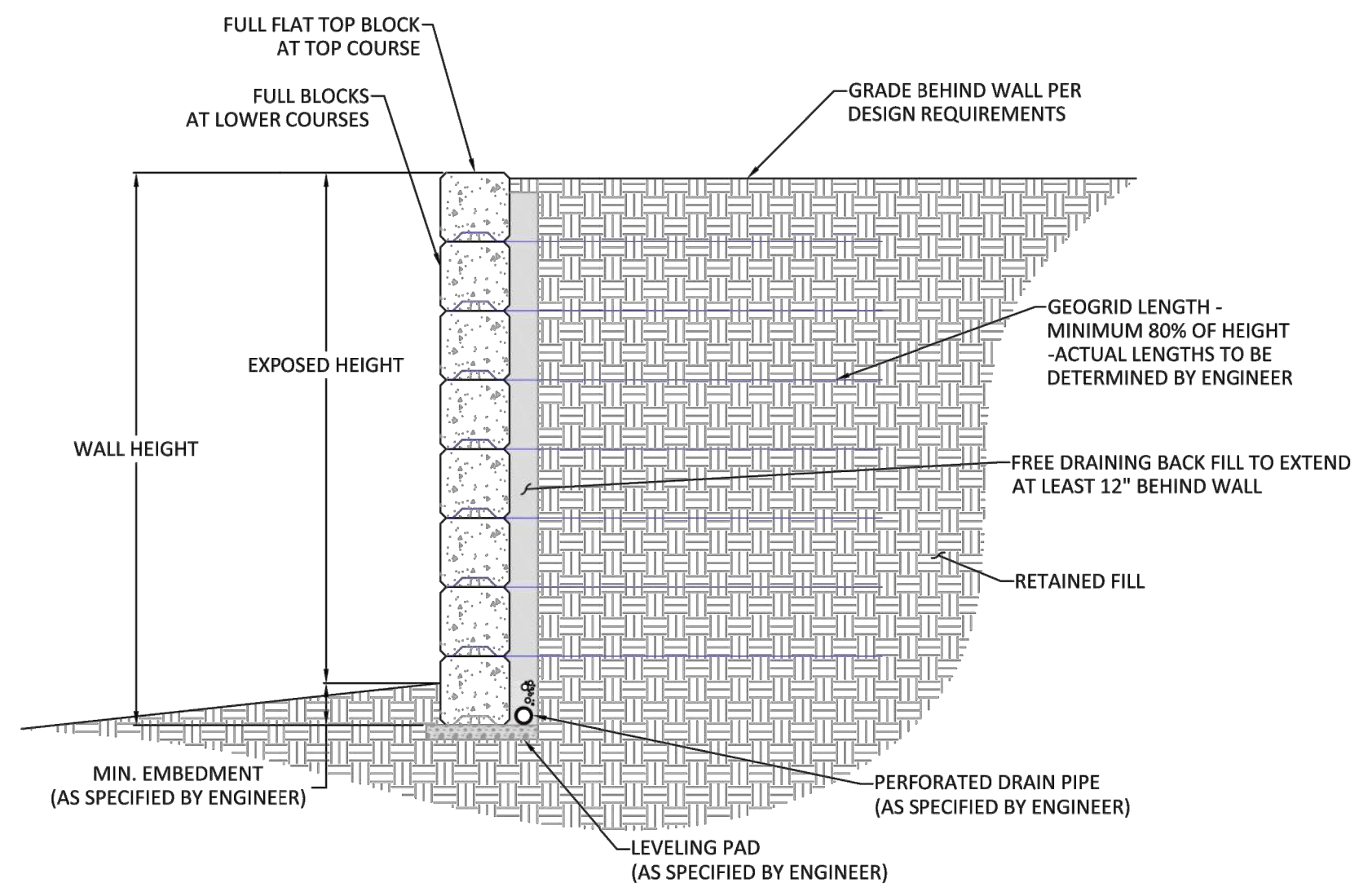
Harper Houf Peterson Righellis Inc.  
ENGINEERS & PLANNERS  
LANDSCAPE ARCHITECTS & SURVEYORS  
205 SE Spokane Street, Suite 200, Portland, OR 97202  
phone: 503.221.1131 www.hhp.com

REGISTERED PROFESSIONAL ENGINEER  
PRELIMINARY  
ALEXANDER J. SIMPSON  
SEPT. 15, 2016  
EXPIRES: 06/30/2024

DESIGNED:	HHPR	HHPR	HHPR	DATE:	02/02/2023
DRAWN:	HHPR	HHPR	HHPR	DATE:	02/02/2023
CHECKED:	HHPR	HHPR	HHPR	DATE:	02/02/2023
DATE					
NO.					
DESCRIPTION					

SHEET NO.  
**C6.3**

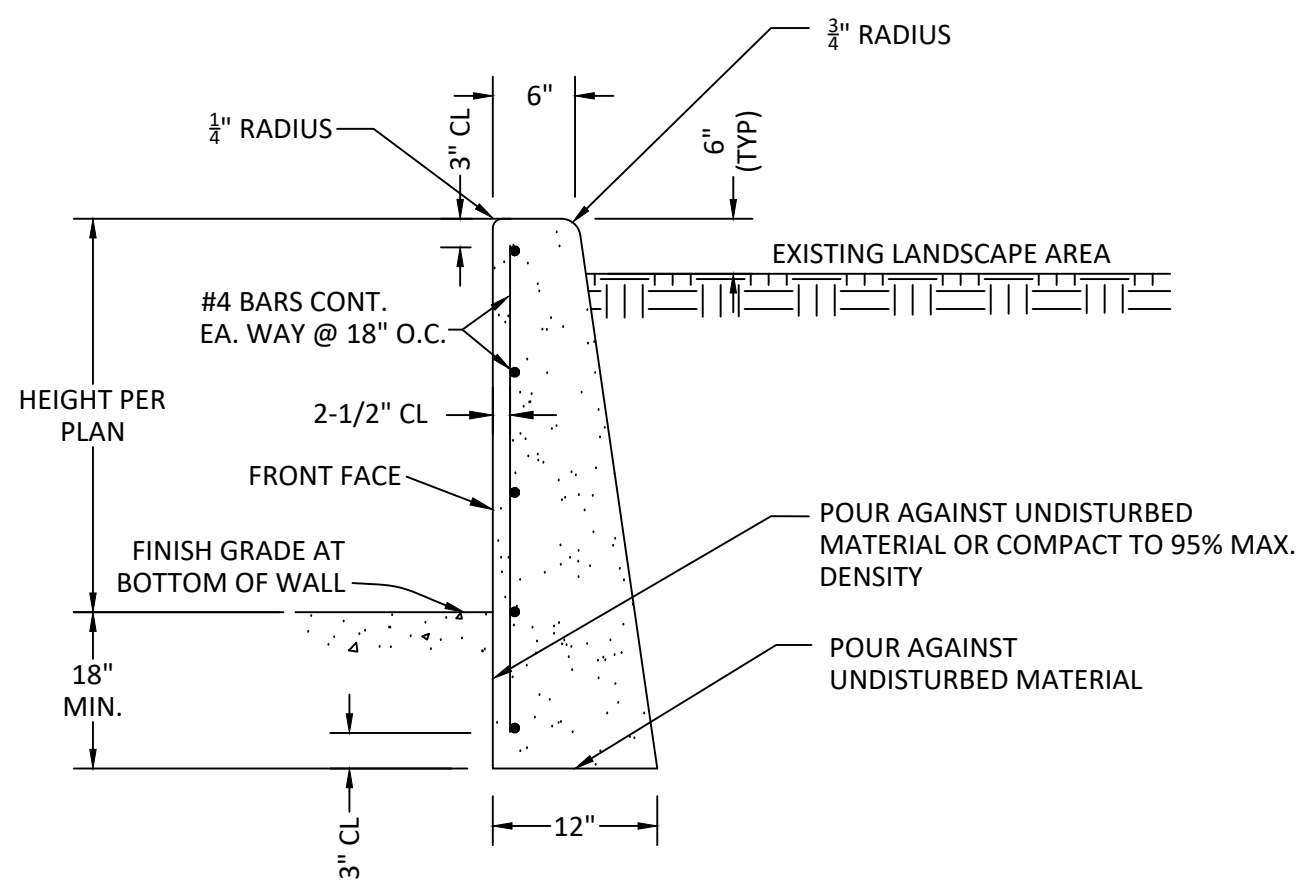
JOB NO.  
TPH-02



**ULTRABLOCK, INC.**  
 815 N.E. 172nd Ave.  
 VANCOUVER, WA 98684  
 800-377-3877 PH  
 360-694-0281 FAX

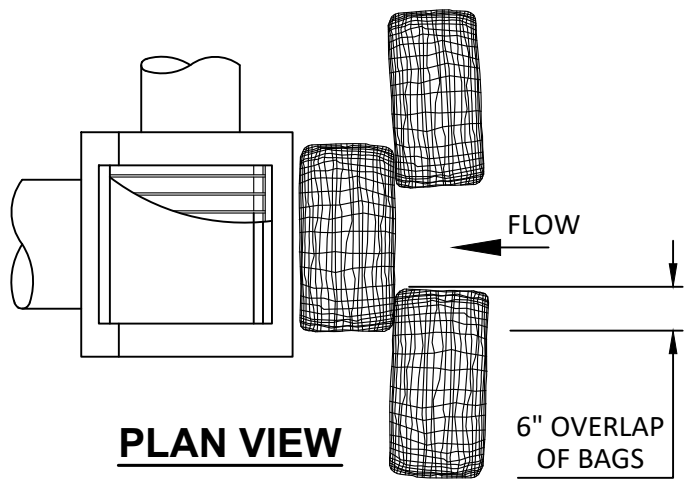
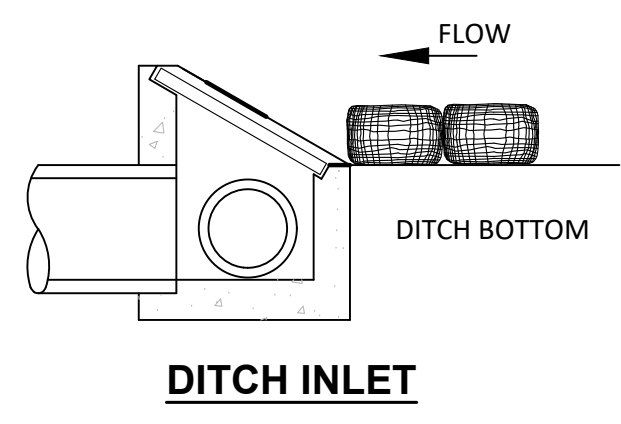
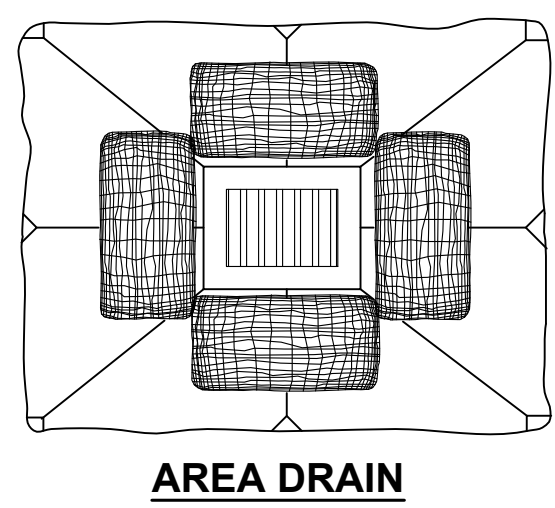
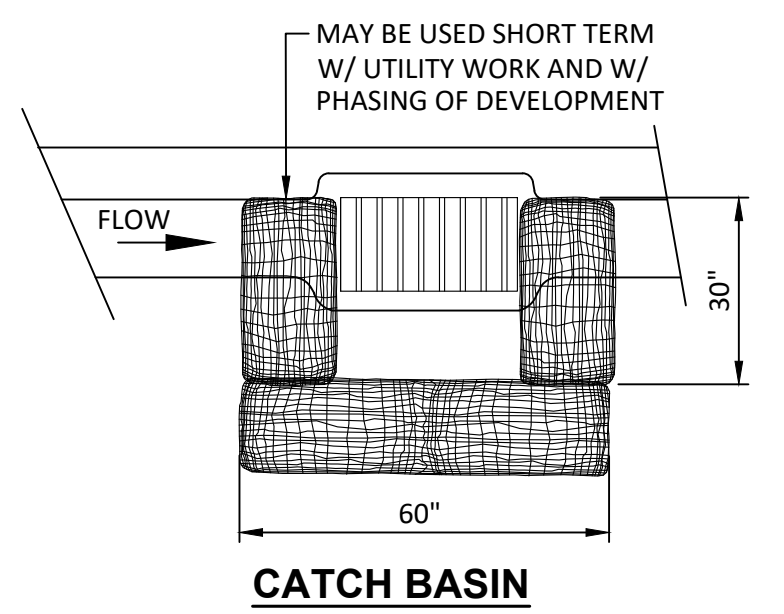
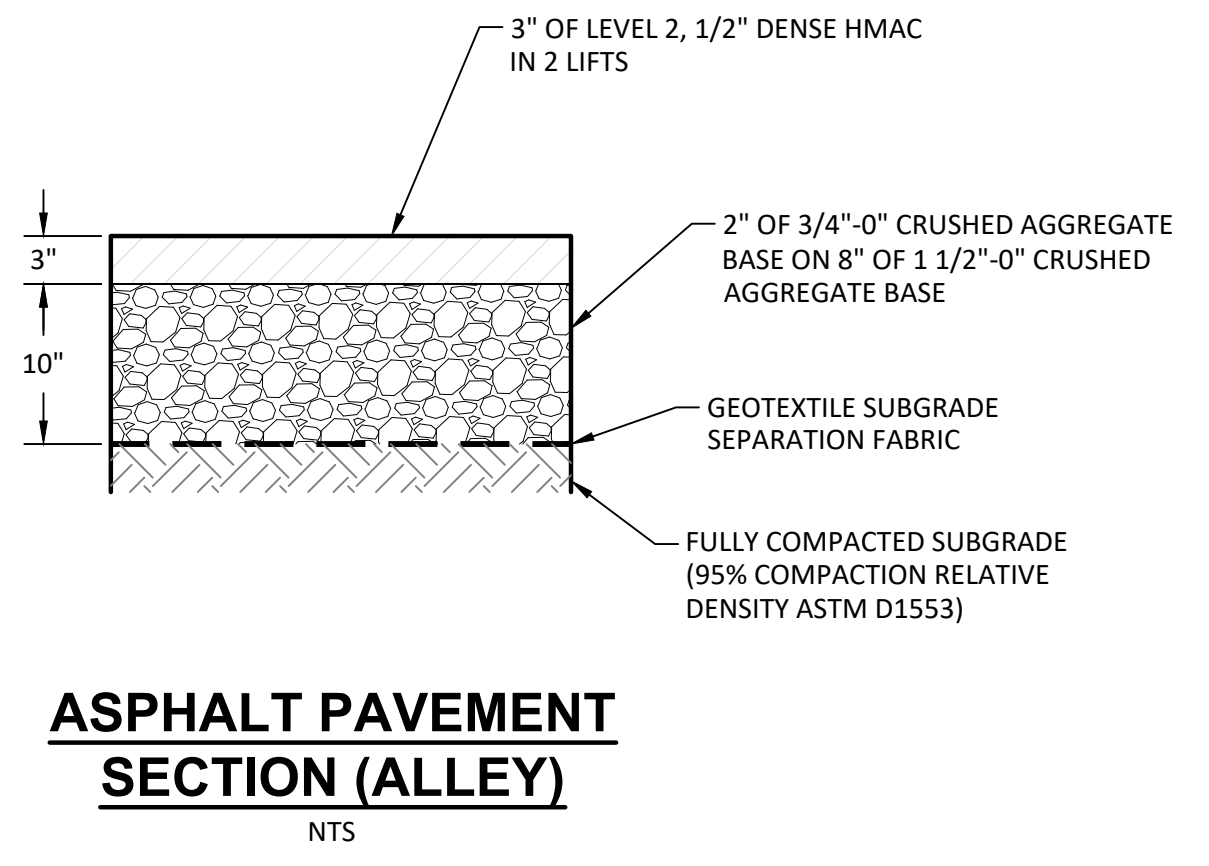
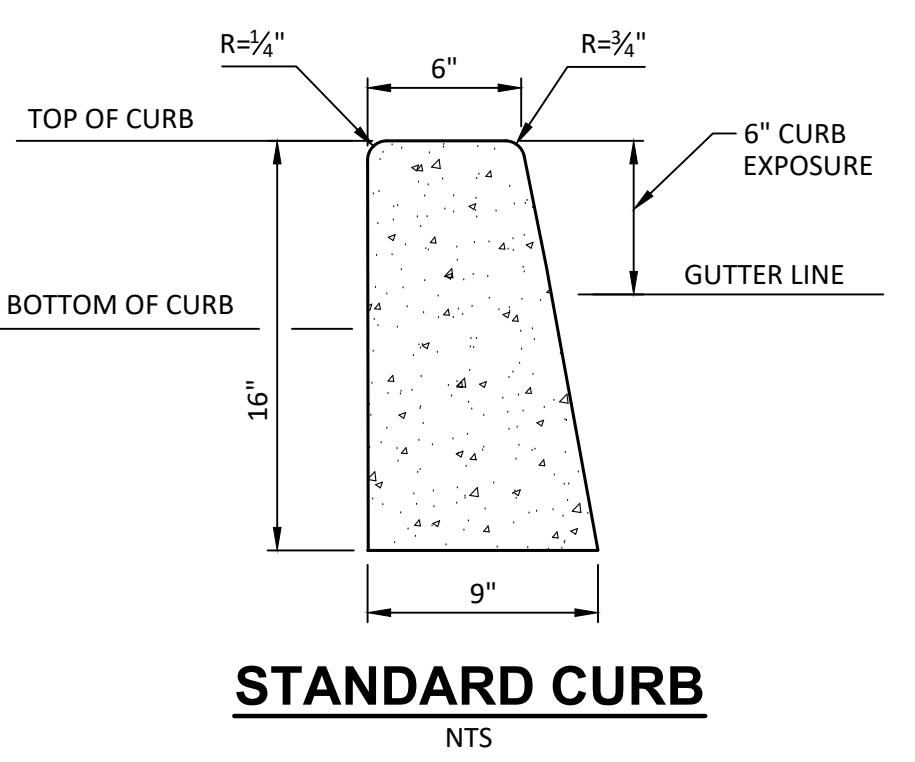
TITLE: Ultrablock - MSE Wall  
 DRAWN BY: MLN  
 DATE: 9/25/19  
 SCALE: NTS  
 SHEET #: UB-01

\*\* PRELIMINARY - BLOCK LAYOUTS TO BE APPROVED BY ENGINEER \*\*



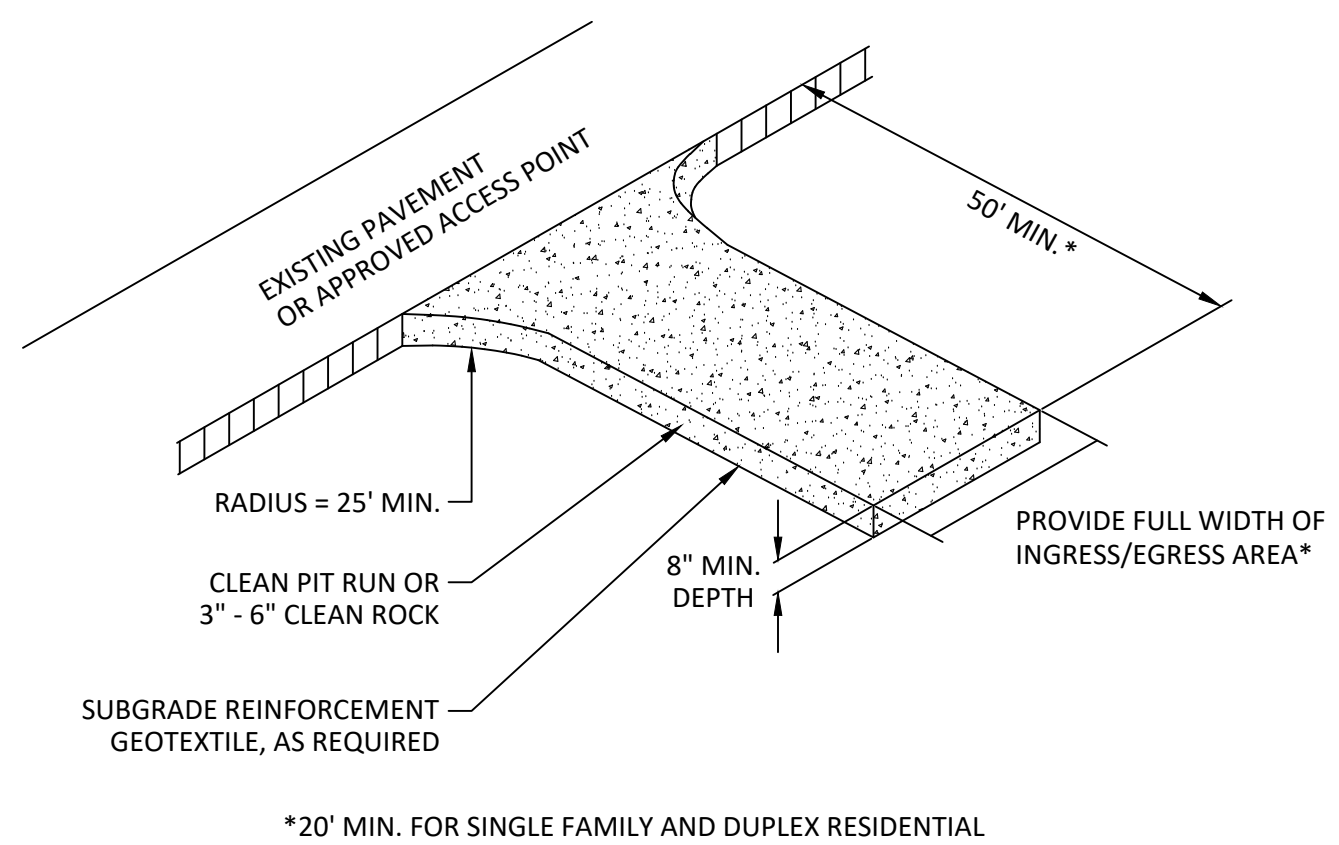
1. ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31, GRADE 60, ASTM SPECIFICATION A706 OR A615, GRADE 60. ALL #4 BAR SPLICES SHALL BE 1'-4".
2. ALL CONCRETE SHALL BE "COMMERCIAL GRADE CONCRETE" 4,000 PSI.
3. PLACE EXPANSION JOINTS AT APPROX. 15'-0" CTRS. UNLESS OTHERWISE SHOWN.

**RETAINING/THICKENED CURB DETAIL**  
 N.T.S.



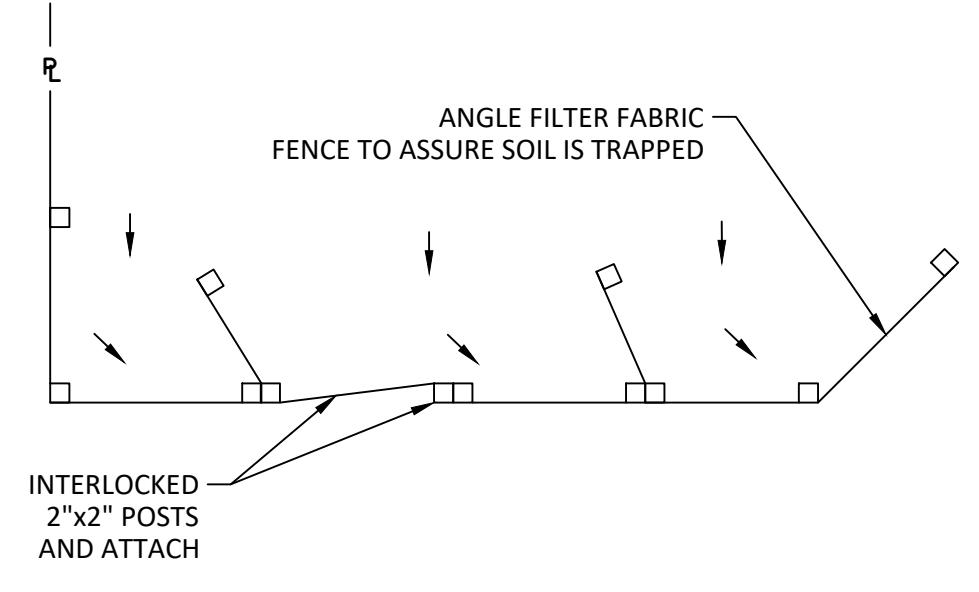
- NOTES:**
1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
  2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
  3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN YOU MUST HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

**INLET PROTECTION TYPE 4**  
 NTS

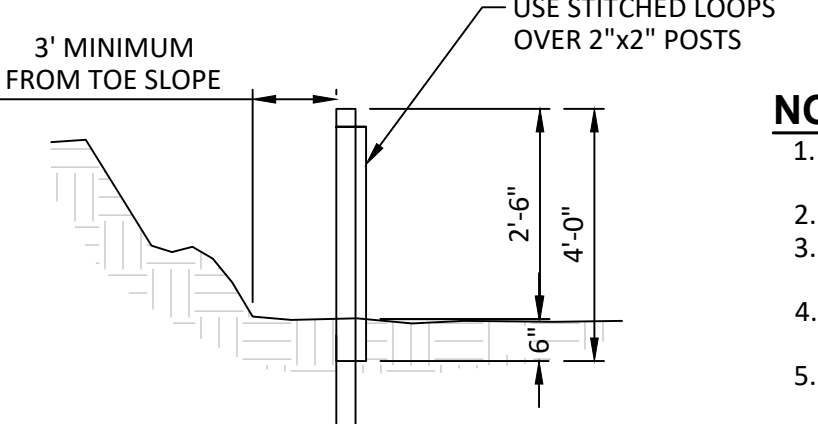


- NOTES:**
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
  2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
  3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
  4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.
  5. DIMENSIONS  
 SINGLE FAMILY  
 20' LONG BY 20' WIDE 8" DEEP OF 3/4" MINUS CLEAN ROCK.  
 COMMERCIAL  
 50' LONG BY 20' WIDE 3-6" CLEAN ROCK.  
 GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

**CONSTRUCTION ENTRANCE**  
 NTS

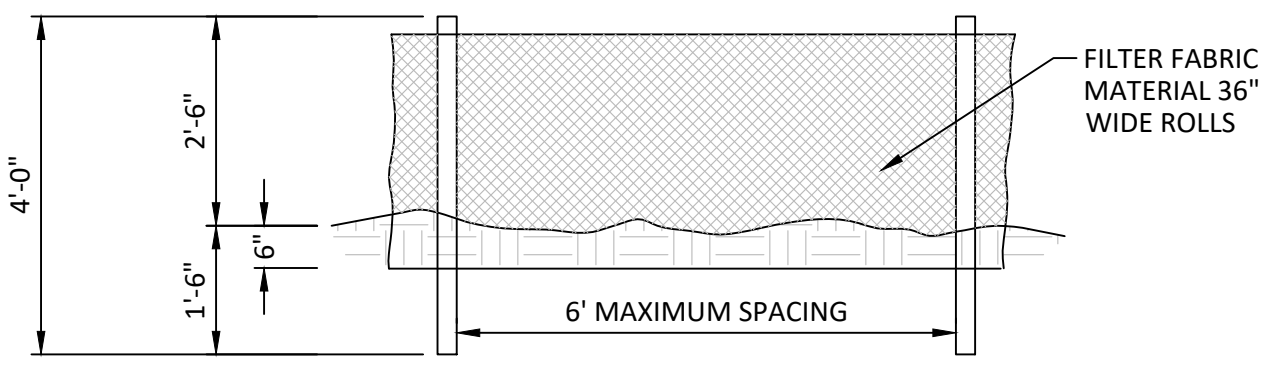


PLAN VIEW



PROFILE

- NOTES:**
1. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
  2. 2"x2" FIR, PINE OR STEEL FENCE POSTS.
  3. POSTS TO BE INSTALLED ON UPHILL SIDE OF SLOPE.
  4. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
  5. PANELS MUST BE PLACED ACCORDING TO SPACING ON DETAIL.



FRONT VIEW

**SEDIMENT FENCE**  
 NTS

DETAILS  
**MARYLHURST SUBDIVISION**  
 WEST LINN, OR

**Harper Houf Peterson Righellis Inc.**  
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**REGISTERED PROFESSIONAL ENGINEER**  
 PRELIMINARY  
 OREGON  
 SEPT. 15, 2016  
 ALEXANDER J. SIMPSON  
 EXPIRES: 06/30/2024

DESIGNED:	HHPR	HHPR	HHPR
DRAWN:	HHPR	HHPR	HHPR
CHECKED:	HHPR	HHPR	HHPR
DATE:	02/02/2023		

DATE	NO.	DESCRIPTION
		R E V I S I O N S

SHEET NO.  
**C6.4**  
 JOB NO. TPH-02