

## DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT <i>PETER SAIR</i>	PROJECT NO(S). <i>WA-15-04</i>	
NON-REFUNDABLE FEE(S) <i>2850</i>	REFUNDABLE DEPOSIT(S) <i>0</i>	TOTAL <i>2850</i>

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

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Annexation (ANX)                      | <input type="checkbox"/> Historic Review                                  | <input type="checkbox"/> Subdivision (SUB)  |
| <input type="checkbox"/> Appeal and Review (AP) *              | <input type="checkbox"/> Legislative Plan or Change                       | <input type="checkbox"/> Temporary Uses *   |
| <input type="checkbox"/> Conditional Use (CUP)                 | <input type="checkbox"/> Lot Line Adjustment (LLA) */**                   | <input type="checkbox"/> Time Extension *   |
| <input type="checkbox"/> Design Review (DR)                    | <input type="checkbox"/> Minor Partition (MIP) (Preliminary Plat or Plan) | <input type="checkbox"/> Variance (VAR)   |
| <input type="checkbox"/> Easement Vacation                     | <input type="checkbox"/> Non-Conforming Lots, Uses & Structures           | <input checked="" type="checkbox"/> Water Resource Area Protection/Single Lot (WAP) |
| <input type="checkbox"/> Extraterritorial Ext. of Utilities    | <input type="checkbox"/> Planned Unit Development (PUD)                   | <input type="checkbox"/> Water Resource Area Protection/Wetland (WAP)               |
| <input type="checkbox"/> Final Plat or Plan (FP)               | <input type="checkbox"/> Pre-Application Conference (PA) */**             | <input type="checkbox"/> Willamette & Tualatin River Greenway (WRG)                 |
| <input type="checkbox"/> Flood Management Area                 | <input type="checkbox"/> Street Vacation                                  | <input type="checkbox"/> Zone Change  |
| <input type="checkbox"/> Hillside Protection & Erosion Control |   |   |

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

### Site Location/Address:

*3224 SABO LANE  
WEST LINN, OR 97068*

Assessor's Map No.: *21E25CC*

Tax Lot(s): *2800*

Total Land Area: *11,455*

### Brief Description of Proposal:

*PROPOSED NEW RESIDENCE*

### Applicant Name:

(please print)

*JAMES WURSCHER*

Phone: *503 635 6985*

Address: *630 MARYLHURST CIR.*

Email:

City State Zip: *WEST LINN, OR 97068*

*James@wurscherarchitect.biz*

### Owner Name (required):

(please print)

*DAVE AND ANN FARLEY*

Phone: *503-880-6165*

Address:

Email: *DAVE@WLFHC.COM*

City State Zip: *280 Springtree Lane West Linn OR 97068*

### Consultant Name:

(please print)

Address:

Phone:

City State Zip:

Email:

1. All application fees are non-refundable (excluding deposit). Any overruns to deposit will result in additional billing.

2. The owner/applicant or their representative should be present at all public hearings.

3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.

4. Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.

One (1) complete set of digital application materials must also be submitted on CD in PDF format.

If large sets of plans are required in application please submit only two sets.

\* No CD required / \*\* Only one hard-copy set needed

The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete submittal. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable.

Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.

*James Wurscher*  
Applicant's signature

*7/10/2015*  
Date

*Ann M Farley*  
Owner's signature (required)

*7/10/15*  
Date

# **FARLEY RESIDENCE WATER RESOURCE AREA (WRA) DEVELOPMENT REVIEW SUBMISSION**

Submitted by  
James Wurscher, AIA, NCARB  
630 Marylhurst Circle  
West Linn, OR 97068  
(503) 635-6985

The following has been prepared for the Water Resource Area Development Review Application for a single lot. The subject property is at 3224 Sabo Lane, West Linn, OR 97068.

A pre-application conference was held on May 21<sup>st</sup>, 2015. The meeting minutes for this can be found at the end of this report.

A study of the Natural Hazards Mitigation Maps of the subject property has shown the following:

- The subject property does not reside within a hazard area on Map 10, Flood Inundation
- The subject property does not reside within a hazard area on Map 11, Potential Landslides
- The subject property resides in Low, Zone D, area on Map 12, Earthquake Hazards
- The subject property does not reside on a road identified to be closed during a winter event as shown on Map 13, Snow and Ice. There is a nearby road identified as a secondary road to receive plowing and sand.
- The subject property does reside within both a moderate hazard and a high hazard area on Map 14, Wildfire Hazard.
- The subject property does not reside within a hazard area on Map 15, Flood Vulnerability Analysis
- The subject property does not reside within a hazard area on Map 16, Landslide Vulnerability Analysis
- The subject property does not reside within a hazard area on Map 17, Earthquake Vulnerability Analysis
- The subject property does reside within a hazard area on Map 18, Snow and Ice Vulnerability Analysis
- A portion of the subject property does reside within a high hazard area on Map 19, Wildfire Vulnerability Analysis.

In total there are three environmental hazards; Earthquake shaking, Snow and Ice and Wildfire.

Oregon HazVu identifies "Expected Earthquake Shaking" as the only geological hazard for this site.

There are no indicators either through maps, or site inspection that soil erosion or landslides is a problem. Therefore no geotechnical report has been identified as required for this submission.

The following are responses to Section 32.060 through 32.110 of the West Linn Development Code. Each paragraph or main topic has a specific response.

### **32.060 APPROVAL CRITERIA (STANDARD PROCESS)**

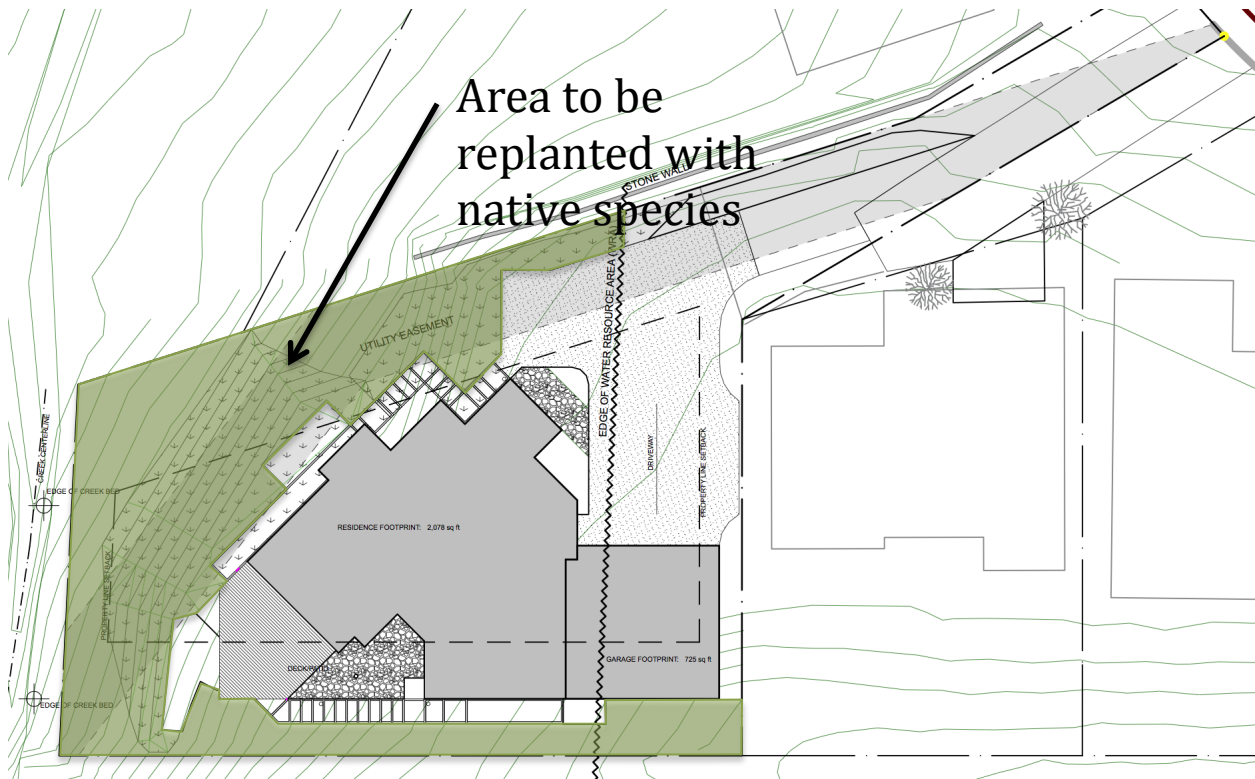
No application for development on property containing a WRA shall be approved unless the approval authority finds that the proposed development is consistent with the following approval criteria, or can satisfy the criteria by conditions of approval:

A. WRA protection/minimizing impacts.

1. Development shall be conducted in a manner that will avoid or, if avoidance is not possible, minimize adverse impact on WRAs.
  - a. **RESPONSE:** *The existing building area resides primarily in the WRA. Design has worked on having the most impacting functions (parking and driveways) located outside and in the peripheral areas of the WRA. The house primarily sits within the WRA. The house design has been shifted and shortened to be as far back from the creek as possible. This project is utilizing the ability to reduce yard widths by up to 50% to allow the structure to shift as much out of the WRA as possible.*
2. Mitigation and re-vegetation of disturbed WRAs shall be completed per CDC 32.090 and 32.100 respectively.
  - a. **RESPONSE:** *The proposed design calls for all native vegetation to be replanted in the affected areas.*

B. Storm water and storm water facilities.

1. Proposed developments shall be designed to maintain the existing WRAs and utilize them as the primary method of storm water conveyance through the project site unless:
  - a. The surface water management plan calls for alternate configurations (culverts, piping, etc.); or
    - 1) **RESPONSE:** *No culverts are proposed. Piping of storm water from gutters is being used to manage the water to a storm water swale allowing the water to percolate down the hillside.*
  - b. Under CDC 32.070, the applicant demonstrates that the relocation of the water resource will not adversely impact the function of the WRA including, but not limited to, circumstances where the WRA is poorly defined or not clearly channelized.
    - 1) **RESPONSE:** *The WRA is being impacted by the new structure as the building lot resides mostly in the WRA. The design has worked at minimizing the impact.*
  - c. Re-vegetation, enhancement and/or mitigation of the re-aligned water resource shall be required as applicable.
    - 1) **RESPONSE:** *The proposed design calls for all native vegetation to be replanted in the affected areas.*



2. Public and private storm water detention, storm water treatment facilities and storm water outfall or energy dissipaters (e.g., rip rap) may encroach into the WRA if:
  - a. Accepted engineering practice requires it;
  - b. Encroachment on significant trees shall be avoided when possible, and any tree loss shall be consistent with the City's Tree Technical Manual and mitigated per CDC 32.090;
  - c. There shall be no direct outfall into the water resource, and any resulting outfall shall not have an erosive effect on the WRA or diminish the stability of slopes; and
  - d. There are no reasonable alternatives available.

A geotechnical report may be required to make the determination regarding slope stability.

**RESPONSE:** There is a proposed, rainwater detention/filtration area that will require energy dissipaters at the overflow where water could flow from the rain garden to the stream. Clay subsurface is relatively shallow based on test holes. There is no other location for rainwater to be directed to.

3. Roadside storm water conveyance swales and ditches may be extended within rights-of-way located in a WRA. When possible, they shall be located along the side of the road furthest from the water resource. If the conveyance facility must be located along the side of the road closest to the water resource, it shall be located as close to the road/sidewalk as possible and include habitat friendly design features (treatment train, rain gardens, etc.).

**RESPONSE:** There are no proposed roadside storm water conveyance swales or ditches.

4. Storm water detention and/or treatment facilities in the WRA shall be designed without permanent perimeter fencing and shall be landscaped with native vegetation.

**RESPONSE:** There is no fencing proposed around any storm water detention or treatment facilities. Plants residing in the drainage swale will be native.

5. Access to public storm water detention and/or treatment facilities shall be provided for maintenance purposes. Maintenance driveways shall be constructed to minimum width and use water permeable paving materials. Significant trees, including roots, shall not be disturbed to the degree possible. The encroachment and any tree loss shall be mitigated per CDC 32.090. There shall also be no adverse impacts upon the hydrologic conditions



of the site.

**RESPONSE:** *This is not a public project.*

- C. Dedications and easements. The City shall request dedications of the WRA to the City when acquisition of the WRA by dedication or easement would serve a public purpose. When such a dedication or easement is mutually agreed upon, the applicant shall provide the documentation for the dedication or easement. Nothing in this section shall prohibit the City from condemning property if:

1. The property is necessary to serve an important public purpose; and
2. Alternative means of obtaining the property are unsuccessful.

**RESPONSE:** *This is an existing lot established prior to the WRA.*

- D. WRA width. Except for the exemptions in CDC 32.040, applications that are using the alternate review process of CDC 32.070, or as authorized by the approval authority consistent with the provisions of this chapter, all development is prohibited in the WRA as established in Table 32-2 below:

Table 32-2. Required Width of WRA

Protected WRA Resource (see Chapter 2 CDC, Definitions)	Slope Adjacent to Protected Water Resource <sup>1, 3</sup>	Starting Point for Measurements from Water Resource <sup>1, 3</sup>	Width of WRA on Each Side of the Water Resource
A. Water Resource	0% - 25%	OHW or delineated edge of wetland	65 feet
B. Water Resource (Ravine)	Over 25% to a distinct top of slope <sup>2</sup>	OHW or delineated edge of wetland	From water resource to top of slope <sup>2</sup> (30-foot minimum), plus an additional 50 feet <sup>4</sup>
C. Water Resource	Over 25% for more than 30 feet, and no distinct top of slope for at least 150 feet	OHW or delineated edge of wetland	200 feet
D. Riparian Corridor	Any	OHW	100 feet
E. Formerly Closed Drainage Channel Reopened	Any	OHW	15 feet
F. Ephemeral Stream	Any	Stream thread or centerline	15 feet with treatment or vegetation (see CDC 32.050(G)(1))
G. Fish Bearing Streams per Oregon Department of Fish and Wildlife (ODFW) or 2003-2004 Survey	Applies to all that stream section where fish were inventoried and upstream to the first known barrier to fish passage.	OHW or delineated edge of wetland	100 feet when no greater than 25% slope. See B or C above for steeper slopes
H. Re-aligned Water Resource	See A, B, C, D, F, or G, above	OHW or delineated edge of wetland	See A, B, C, D, F, or G, above

<sup>1</sup> The slope is the average slope in the first 50 feet as measured from bankfull stage or OHW.

<sup>2</sup> Where the protected water resource is confined by a ravine or gully, the top of slope is the location (30-foot minimum) where the slope breaks to less than 15 percent for at least 50 feet.

<sup>3</sup> At least three slope measurements along the water resource, at no more than 100-foot increments, shall be made for each property for which development is proposed. Depending upon topography, the width of the protected corridor may vary.

<sup>4</sup> The 50-foot distance may be reduced to 25 feet if a geotechnical study by a licensed engineer or similar accredited professional demonstrates that the slope is stable and not prone to erosion. Table 32-3 Consists of Figures 32-2, 32-3, 32-4, 32-5, 32-6

**RESPONSE:** *The City of West Linn has identified the lot at 3224 Sabo Lane as a Riparian Corridor per pre-application meeting held on May 21<sup>st</sup>.*

E. Roads, driveways and utilities.

1. New roads, driveways, or utilities shall avoid WRAs unless the applicant demonstrates that no other practical alternative exists. In that case, road design and construction techniques shall minimize impacts and disturbance to the WRA by the following methods:
  - a. New roads and utilities crossing riparian habitat areas or streams shall be aligned as close to perpendicular to the channel as possible.
  - b. Roads and driveways traversing WRAs shall be of the minimum width possible to comply with applicable road standards and protect public safety. The footprint of grading and site clearing to accommodate the road shall be minimized.
  - c. Road and utility crossings shall avoid, where possible:
    - 1) Salmonid spawning or rearing areas;
    - 2) Stands of mature conifer trees in riparian areas;
    - 3) Highly erodible soils;
    - 4) Landslide prone areas;
    - 5) Damage to, and fragmentation of, habitat; and
    - 6) Wetlands identified on the WRA Map.

**RESPONSE:** *The layout of the house minimized the area of driveway within the WRA. The majority of the driveway is outside of the WRA.*

2. Crossing of fish bearing streams and riparian corridors shall use bridges or arch-bottomless culverts or the equivalent that provides comparable fish protection, to allow passage of wildlife and fish and to retain the natural stream bed.

**RESPONSE:** *There is no proposed crossing of the stream or riparian corridor.*

3. New utilities spanning fish bearing stream sections, riparian corridors, and wetlands shall be located on existing roads/bridges, elevated walkways, conduit, or other existing structures or installed underground via tunneling or boring at a depth that avoids tree roots and does not alter the hydrology sustaining the water resource, unless the applicant demonstrates that it is not physically possible or it is cost prohibitive. Bore pits associated with the crossings shall be restored upon project completion. Dry, intermittent streams may be crossed with open cuts during a time period approved by the City and any agency with jurisdiction.

**RESPONSE:** *There are no utilities crossing the stream or riparian corridor.*

4. No fill or excavation is allowed within the ordinary high water mark of a water resource, unless all necessary permits are obtained from the City, U.S. Army Corps of Engineers and Oregon Department of State Lands (DSL).

**RESPONSE:** *There is no proposed fill or excavation within the ordinary high water mark of the stream.*

5. Crossings of fish bearing streams shall be aligned, whenever possible, to serve multiple properties and be designed to accommodate conduit for utility lines. The applicant shall, to the extent legally permissible, work with the City to provide for a street layout and crossing location that will minimize the need for additional stream crossings in the future to serve surrounding properties.

**RESPONSE:** *There is no proposed crossing of the stream or riparian corridor.*

F. Passive recreation. Low impact or passive outdoor recreation facilities for public use including, but not limited to, multi-use paths and trails, not exempted per CDC 32.040(B)(2), viewing platforms, historical or natural interpretive markers, and benches in the WRA, are subject to the following standards:

1. Trails shall be constructed using non-hazardous, water permeable materials with a maximum width of four feet or the recommended width under the applicable American Association of State Highway and Transportation Officials (AASHTO) standards for the expected type and use, whichever is greater.
2. Paved trails are limited to the area within 20 feet of the outer boundary of the WRA, and

such trails must comply with the storm water provisions of this chapter.

3. All trails in the WRA shall be set back from the water resource at least 30 feet except at stream crossing points or at points where the topography forces the trail closer to the water resource.
4. Trails shall be designed to minimize disturbance to existing vegetation, work with natural contours, avoid the fall line on slopes where possible, avoid areas with evidence of slope failure and ensure that trail runoff does not create channels in the WRA.
5. Footbridge crossings shall be kept to a minimum. When the stream bank adjacent to the foot bridge is accessible (e.g., due to limited vegetation or topography), where possible, fences or railings shall be installed from the foot bridge and extend 15 feet beyond the terminus of the foot bridge to discourage trail users and pets from accessing the stream bank, disturbing wildlife and habitat areas, and causing vegetation loss, stream bank erosion and stream turbidity. Bridges shall not be made of continuous impervious materials or be treated with toxic substances that could leach into the WRA.
6. Interpretive facilities (including viewpoints) shall be at least 10 feet from the top of the water resource's bankfull flow/OHW or delineated wetland edge and constructed with a fence between users and the resource. Interpretive signs may be installed on footbridges.

**RESPONSE:** *The proposed development is not for passive recreation.*

G. Daylighting Piped Streams.

1. As part of any application, covered or piped stream sections shown on the WRA Map are encouraged to be "daylighted" or opened. Once it is daylighted, the WRA will be limited to 15 feet on either side of the stream. Within that WRA, water quality measures are required which may include a storm water treatment system (e.g., vegetated bioswales), continuous vegetative ground cover (e.g., native grasses) at least 15 feet in width that provides year round efficacy, or a combination thereof.
2. The re-opened stream does not have to align with the original piped route but may take a different route on the subject property so long as it makes the appropriate upstream and downstream connections and meet the standards of subsections (G)(3) and (4) of this section.
3. A re-aligned stream must not create WRAs on adjacent properties not owned by the applicant unless the applicant provides a notarized letter signed by the adjacent property owner(s) stating that the encroachment of the WRA is permitted.
4. The evaluation of proposed alignment and design of the reopened stream shall consider the following factors:
  - a. The ability of the reopened stream to safely carry storm drainage through the area without causing significant erosion.
  - b. Continuity with natural contours on adjacent properties, slope on site and drainage patterns.
  - c. Continuity of adjacent vegetation and habitat values.
  - a. The ability of the existing and proposed vegetation to filter sediment and pollutants and enhance water quality.
  - d. Provision of water temperature conducive to fish habitat.
5. Any upstream or downstream WRAs or riparian corridors shall not apply to, or overlap, the daylighted stream channel.
6. When a stream is daylighted the applicant shall prepare and record a legal document describing the reduced WRA required by subsections (G)(1) and (5) of this section. The document will be signed by a representative of the City and recorded at the applicant's expense to better ensure long term recognition of the reduced WRA and reduced restrictions for the daylighted stream section.

**RESPONSE:** *The proposed development has no piped streams.*

H. The following habitat friendly development practices shall be incorporated into the design of any improvements or projects in the WRA to the degree possible:

1. Restore disturbed soils to original or higher level of porosity to regain infiltration and storm water storage capacity.

**RESPONSE:** *The proposed design does provide for some areas of fill to help with the*



higher level of porosity, as the clay subsurface is very shallow.

2. Apply a treatment train or series of storm water treatment measures to provide multiple opportunities for storm water treatment and reduce the possibility of system failure.

**RESPONSE:** The proposed design divides the overall rainwater that falls on the roof, driveway and walkways, between the storm water drainage on street and rain garden/filtration. There are multiple clean-outs and back-flow prevention devices to assure pro

3. Incorporate storm water management in road rights-of-way.

**RESPONSE:** The road rights-of-way are insufficient in size to provide adequate storm water management.

4. Landscape with rain gardens to provide on-lot detention, filtering of rainwater, and groundwater recharge.

**RESPONSE:** A rain garden and on-lot detention providing filtration has been included in the design.

5. Use multi-functional open drainage systems in lieu of conventional curb-and-gutter systems.

**RESPONSE:** The driveway portion will drain to a standard curb-and-gutter system, as that is an existing condition. In addition, there is a significant amount of rainwater that will go through an on-site filtration system.

6. Use green roofs for runoff reduction, energy savings, improved air quality, and enhanced aesthetics.

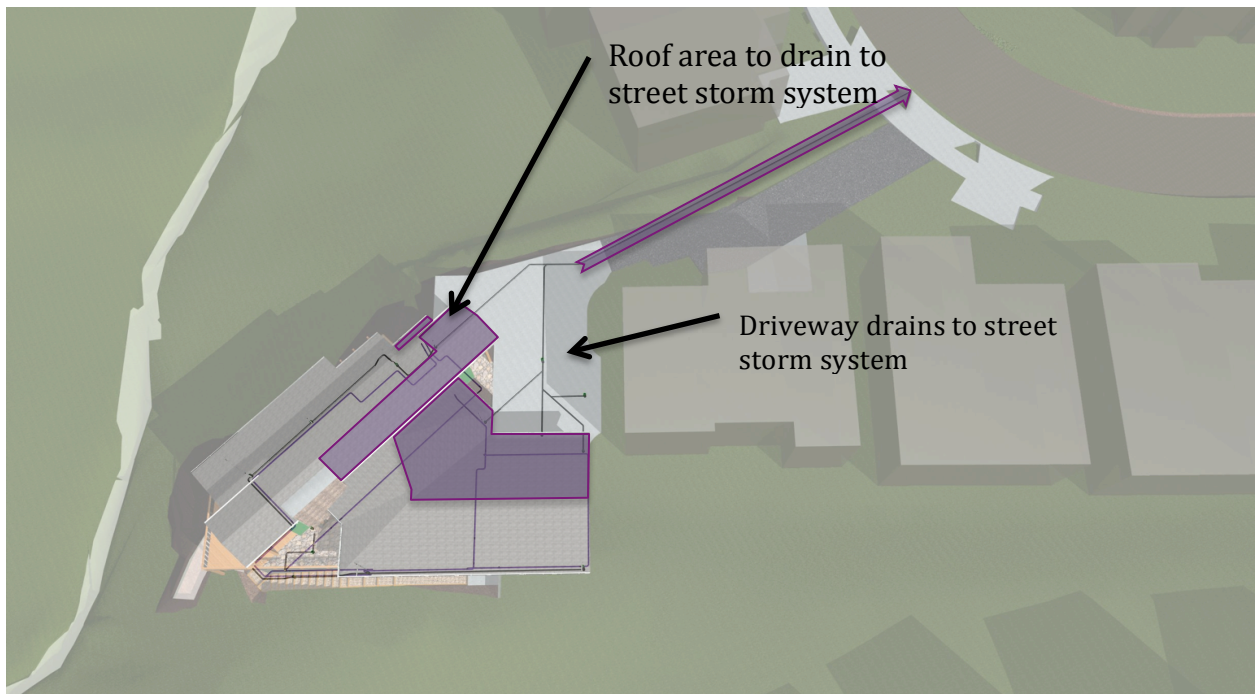
**RESPONSE:** A green roof was considered. However cost and required maintenance makes this option not feasible. However, some of the rainwater does flow through a rain garden/filtration area.

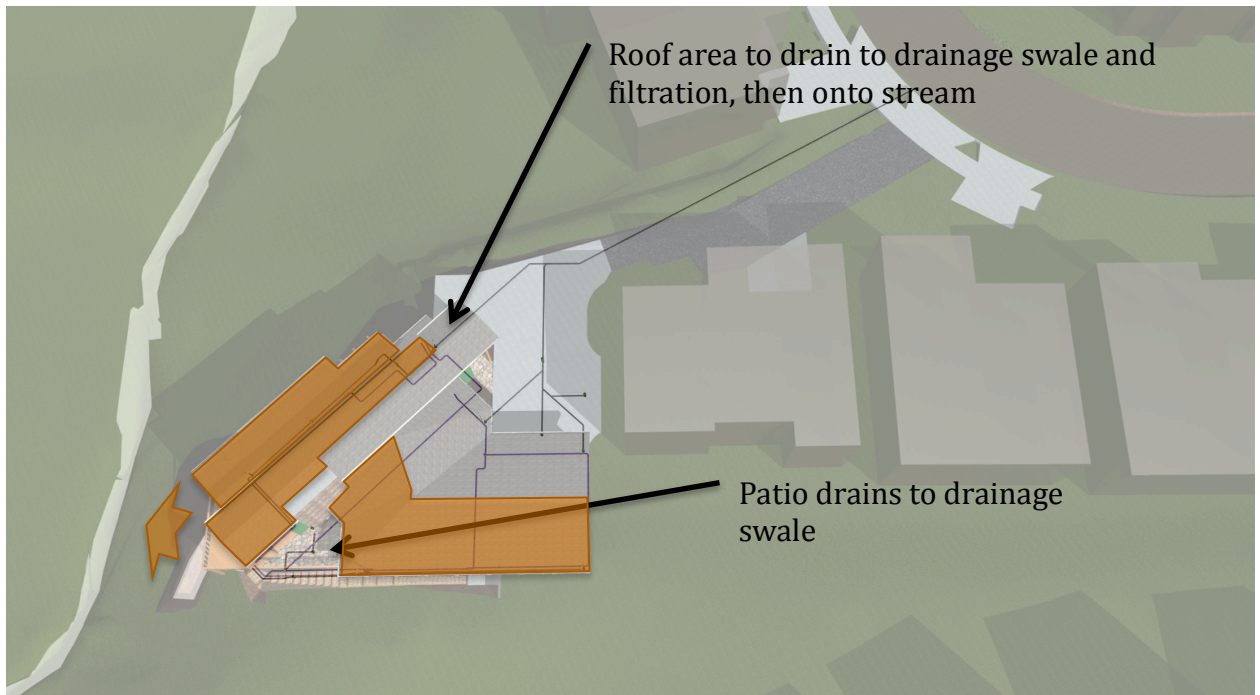
7. Retain rooftop runoff in a rain barrel for later on-lot use in lawn and garden watering.

**RESPONSE:** The vast majority of the site will be replanted with native species, thus not requiring storage of water for the purpose irrigation.

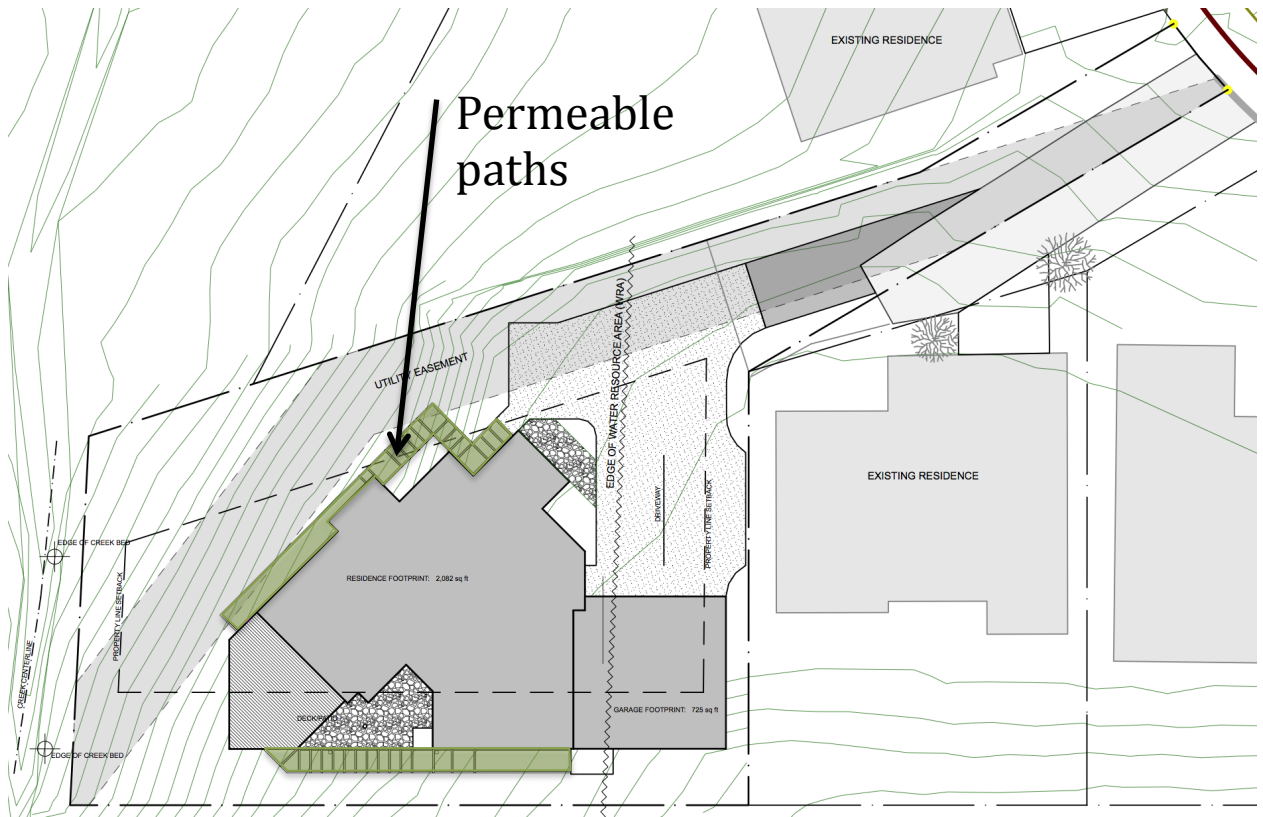
8. Disconnect downspouts from roofs and direct the flow to vegetated infiltration/filtration areas such as rain gardens.

**RESPONSE:** Approximately half of the rainwater is directed through a vegetated infiltration/filtration area.





9. Use pervious paving materials for driveways, parking lots, sidewalks, patios, and walkways.  
**RESPONSE:** The walkway around the house will be pervious gravel held in place with pressure treated 4x8 wood. This will create steps that will provide access around the entire house to allow maintenance. See sketch below for location of pervious paths.



10. Reduce sidewalk width to a minimum four feet. Grade the sidewalk so it drains to the front yard of a residential lot or retention area instead of towards the street.

**RESPONSE:** Sidewalks exist and will only be modified where utilities need to run below. Sidewalks removed to allow the installation of utilities will be replaced to match existing configuration and construction.

11. Use shared driveways.

**RESPONSE:** The proposed design is utilizing the existing driveway that serves the adjacent home.



12. Reduce width of residential streets and driveways, especially at WRA crossings.

**RESPONSE:** The proposed design is in a current development with existing streets. Access to the lot is incorporating an existing driveway.

13. Reduce street length, primarily in residential areas, by encouraging clustering.

**RESPONSE:** The proposed design is in a current development with existing streets.

14. Reduce cul-de-sac radii and use pervious and/or vegetated islands in center to minimize impervious surfaces.

**RESPONSE:** The proposed design is in a current development with existing streets.

15. Use previously developed areas (PDAs) when given an option of developing PDA versus non-PDA land.

**RESPONSE:** The proposed residence is utilizing the last remaining lot of a development.

16. Minimize the building, hardscape and disturbance footprint.

**RESPONSE:** The proposed design focuses on highly usable area. The deck overhangs the concrete stoop below (which is required by code) making best use of the impacted area of the WRA. The living area utilizes a great room concept that eliminates the standard living room, dining room, kitchen layout that requires more square footage.

17. Consider multi-story construction over a bigger footprint. (Ord. 1623 § 1, 2014; Ord. 1635 § 19, 2014)

**RESPONSE:** The proposed design utilizes the slope of the lot to create a daylight basement reducing the main floor footprint. See sketch on next page.





**32.070 ALTERNATE REVIEW PROCESS & 32.080 APPROVAL CRITERIA (ALTERNATE REVIEW PROCESS)**

**RESPONSE:** *This project is currently not seeking an alternate review process.*

### 32.090 MITIGATION PLAN

- A. A mitigation plan shall only be required if development is proposed within a WRA (including development of a PDA). (Exempted activities of CDC [32.040](#) do not require mitigation unless specifically stated. Temporarily disturbed areas, including TDAs associated with exempted activities, do not require mitigation, just grade and soil restoration and re-vegetation.) The mitigation plan shall satisfy all applicable provisions of CDC [32.100](#), Re-Vegetation Plan Requirements.
- B. Mitigation shall take place in the following locations, according to the following priorities (subsections (B)(1) through (4) of this section):
1. On-site mitigation by restoring, creating or enhancing WRAs.  
**RESPONSE:** *This project includes the removal of blackberry bushes from the site. Currently the site is mostly covered with blackberries. Native plants will be planted in the WRA area of the lot.*
  2. Off-site mitigation in the same sub-watershed will be allowed, but only if the applicant has demonstrated that:
    - a. It is not practicable to complete mitigation on-site, for example, there is not enough area on-site; and
    - b. The mitigation will provide equal or superior ecological function and value.  
**RESPONSE:** *This project includes the removal of eleven, unhealthy maple trees. These trees reside on City of West Linn property and pose a hazard to the project. The owner has agreed to provide 4 new 5-gallon Douglas-Fir trees to replace the removed maples. This has been coordinated with Mike Perkins, the city Arborist.*
  1. Off-site mitigation outside the sub-watershed will be allowed, but only if the applicant has demonstrated that:
    - a. It is not practicable to complete mitigation on-site, for example, there is not enough area on-site; and
    - b. The mitigation will provide equal or superior ecological function and value.  
**RESPONSE:** *This project is not proposing any mitigation outside of the impacted WRA.*
  2. Purchasing mitigation credits through DSL or other acceptable mitigation bank.  
**RESPONSE:** *This project is not proposing purchasing any mitigation credits.*
- B. Amount of mitigation.
1. The amount of mitigation shall be based on the square footage of the permanent disturbance area by the application. For every one square foot of non-PDA disturbed area, on-site mitigation shall require one square foot of WRA to be created, enhanced or restored.  
**RESPONSE:** *A total of 3,549 square feet of lot area will have all the blackberries removed and will be replanted with native plants. This consists of the entire remaining site area within the WRA and additional area behind the proposed garage that would be considered an extension of the WRA.*
  2. For every one square foot of PDA that is disturbed, on-site mitigation shall require one half a square foot of WRA vegetation to be created, enhanced or restored.  
**RESPONSE:** *This project has no previously disturbed areas (PDA).*
  3. For any off-site mitigation, including the use of DSL mitigation credits, the requirement shall be for every one square foot of WRA that is disturbed, two square feet of WRA shall be created, enhanced or restored. The DSL mitigation credits program or mitigation bank shall require a legitimate bid on the cost of on-site mitigation multiplied by two to arrive at the appropriate dollar amount.  
**RESPONSE:** *This project is enhancing the adjacent city property with the removal of existing, unhealthy, maple trees, the addition of four new Douglas-Fir trees, and removal of blackberry bushes and replanting of native grasses. The total area is 1,868 sq. ft., which results in 934 sq. ft. of allowable disturbed WRA.*



- C. The Planning Director may limit or define the scope of the mitigation plan and submittal requirements commensurate with the scale of the disturbance relative to the resource and pursuant to the authority of Chapter 99 CDC. The Planning Director may determine that a consultant is required to complete all or a part of the mitigation plan requirements.
- D. A mitigation plan shall contain the following information:
1. A list of all responsible parties including, but not limited to, the owner, applicant, contractor, or other persons responsible for work on the development site.
  2. A map showing where the specific adverse impacts will occur and where the mitigation activities will occur.
  3. A re-vegetation plan for the area(s) to be mitigated that meets the standards of CDC 32.100.
  4. An implementation schedule, including timeline for construction, mitigation, mitigation maintenance, monitoring, and reporting. All in-stream work in fish bearing streams shall be done in accordance with the Oregon Department of Fish and Wildlife.
  5. Assurances shall be established to rectify any mitigation actions that are not successful within the first three years. This may include bonding or other surety. (Ord. 1623 § 1, 2014)
- RESPONSE:** Refer to Drawing A-0.4 WRA Submission Mitigation Plan.

### 32.100 RE-VEGETATION PLAN REQUIREMENTS

- A. In order to achieve the goal of re-establishing forested canopy, native shrub and ground cover and to meet the mitigation requirements of CDC 32.090 and vegetative enhancement of CDC 32.080, tree and vegetation plantings are required according to the following standards:
1. All trees, shrubs and ground cover to be planted must be native plants selected from the Portland Plant List.
  2. Plant size. Replacement trees must be at least one-half inch in caliper, measured at six inches above the ground level for field grown trees or above the soil line for container grown trees (the one-half inch minimum size may be an average caliper measure, recognizing that trees are not uniformly round), unless they are oak or madrone which may be one gallon size. Shrubs must be in at least a one-gallon container or the equivalent in ball and burlap and must be at least 12 inches in height.
  3. Plant coverage.
    - a. Native trees and shrubs are required to be planted at a rate of five trees and 25 shrubs per every 500 square feet of disturbance area (calculated by dividing the number of square feet of disturbance area by 500, and then multiplying that result times five trees and 25 shrubs, and rounding all fractions to the nearest whole number of trees and shrubs; for example, if there will be 330 square feet of disturbance area, then 330 divided by 500 equals 0.66, and 0.66 times five equals 3.3, so three trees must be planted, and 0.66 times 25 equals 16.5, so 17 shrubs must be planted). Bare ground must be planted or seeded with native grasses or herbs. Non-native sterile wheat grass may also be planted or seeded, in equal or lesser proportion to the native grasses or herbs.
    - b. Trees shall be planted between eight and 12 feet on center and shrubs shall be planted between four and five feet on center, or clustered in single species groups of no more than four plants, with each cluster planted between eight and 10 feet on center. When planting near existing trees, the drip line of the existing tree shall be the starting point for plant spacing measurements.
  4. Plant diversity. Shrubs must consist of at least two different species. If 10 trees or more are planted, then no more than 50 percent of the trees may be of the same genus.
  5. Invasive vegetation. Invasive non-native or noxious vegetation must be removed within the mitigation area prior to planting.

6. Tree and shrub survival. A minimum survival rate of 80 percent of the trees and shrubs planted is expected by the third anniversary of the date that the mitigation planting is completed.
7. Monitoring and reporting. Monitoring of the mitigation site is the ongoing responsibility of the property owner. Plants that die must be replaced in kind.
8. To enhance survival of tree replacement and plantings, the following practices are required:
  - a. Mulching. Mulch new plantings a minimum of three inches in depth and 18 inches in diameter to retain moisture and discourage weed growth.
  - b. Irrigation. Water new plantings one inch per week between June 15th to October 15th, for the three years following planting.
  - c. Weed control. Remove, or control, non-native or noxious vegetation throughout maintenance period.
  - d. Planting season. Plant bare root trees between December 1st and February 28th, and potted plants between October 15th and April 30th.
  - e. Wildlife protection. Use plant sleeves or fencing to protect trees and shrubs against wildlife browsing and resulting damage to plants.
- B. When weather or other conditions prohibit planting according to schedule, the applicant shall ensure that disturbed areas are correctly protected with erosion control measures and shall provide the City with funds in the amount of 125 percent of a bid from a recognized landscaper or nursery which will cover the cost of the plant materials, installation and any follow up maintenance. Once the planting conditions are favorable the applicant shall proceed with the plantings and receive the funds back from the City upon completion, or the City will complete the plantings using those funds. (Ord. 1623 § 1, 2014)

**RESPONSE:** *Landscaping plans submitted for building permit shall meet these criteria.*

### **32.110 HARDSHIP PROVISIONS**

The subject property at 3224 Sabo Lane was a lot set-aside during the initial housing tract development. This original development occurred in 2002 prior to January 1, 2006. Due to this condition, Subsection A of 32.110 applies.

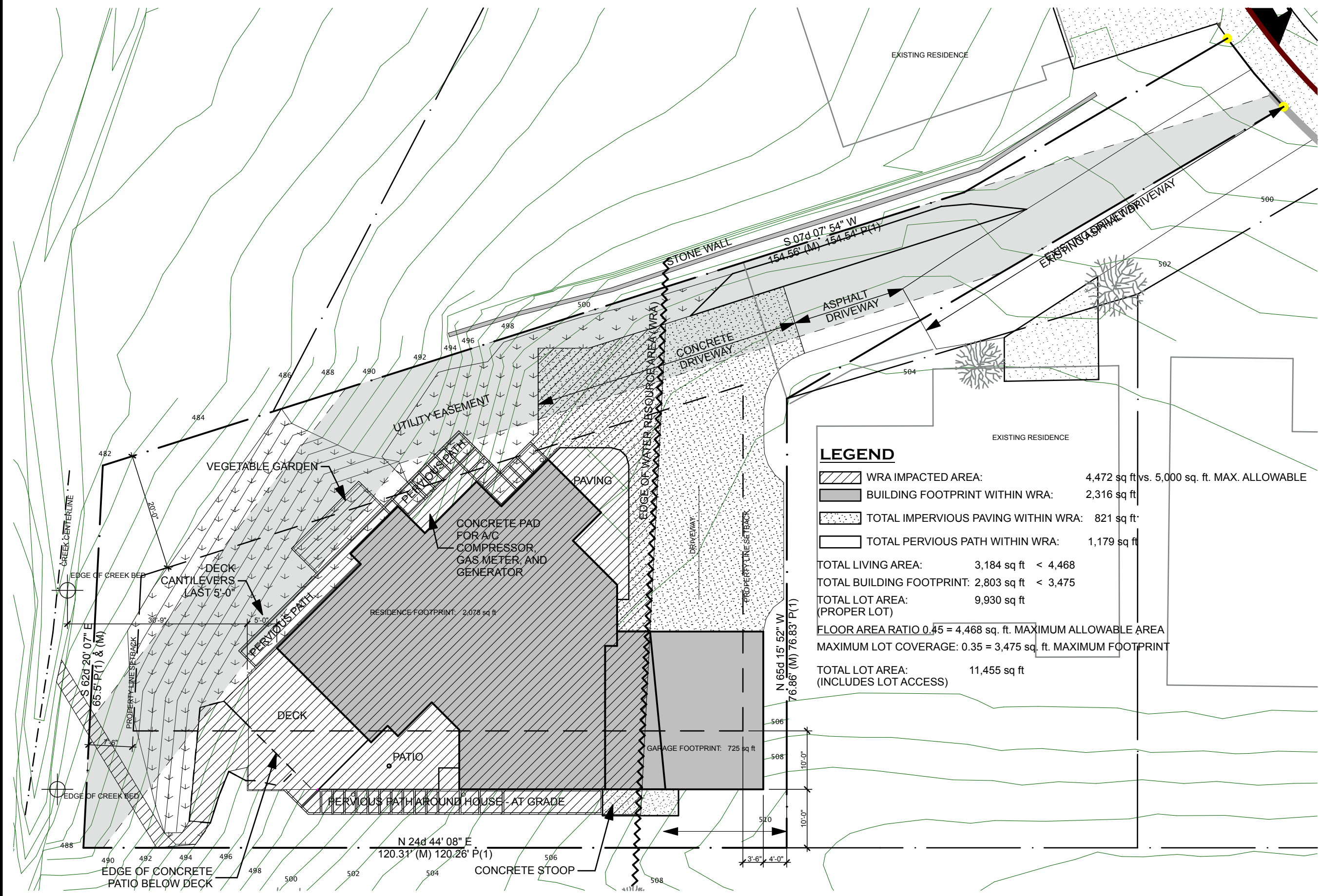
Per subsection B of 32.110, a maximum of 5,000 square feet of the WRA may be impacted. Per drawing A-0.1, a proposed total of 4,262 square feet of the site will be impacted. This includes areas to be landscaped to something other than native species, driveways, paved walkways, pervious paths, rainwater filtration area, and the house proper.

The minimum distance from the water resource shall be 15 feet. The proposed design is 30'-9" feet away from the water resource as shown on drawing A-0.1

Per subsection F, paragraph 1 of 32.110; "Setbacks required by the underlying zoning district may be reduced up to 50 percent where necessary to avoid construction within the WRA, as long as the development would otherwise meet the standards of this chapter." This project is utilizing the change in setbacks to allow the development to reduce the impact to the WRA.

Drawings A-0.1, A-0.2, A-0.3, A-0.4, and A-0.5 demonstrate compliance with the WRA's general site layout, grading, mitigation plan, and construction management plan.

End of Report

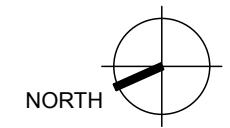


**LEGEND**

- WRA IMPACTED AREA: 4,472 sq ft vs. 5,000 sq. ft. MAX. ALLOWABLE
- BUILDING FOOTPRINT WITHIN WRA: 2,316 sq ft
- TOTAL IMPERVIOUS PAVING WITHIN WRA: 821 sq ft
- TOTAL PERVIOUS PATH WITHIN WRA: 1,179 sq ft
- TOTAL LIVING AREA: 3,184 sq ft < 4,468
- TOTAL BUILDING FOOTPRINT: 2,803 sq ft < 3,475
- TOTAL LOT AREA: 9,930 sq ft
- FLOOR AREA RATIO 0.45 = 4,468 sq. ft. MAXIMUM ALLOWABLE AREA
- MAXIMUM LOT COVERAGE: 0.35 = 3,475 sq. ft. MAXIMUM FOOTPRINT
- TOTAL LOT AREA: 11,455 sq ft
- (INCLUDES LOT ACCESS)

**SITE PLAN**

Scale: 1/16" = 1'-0"



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**FARLEY RESIDENCE**

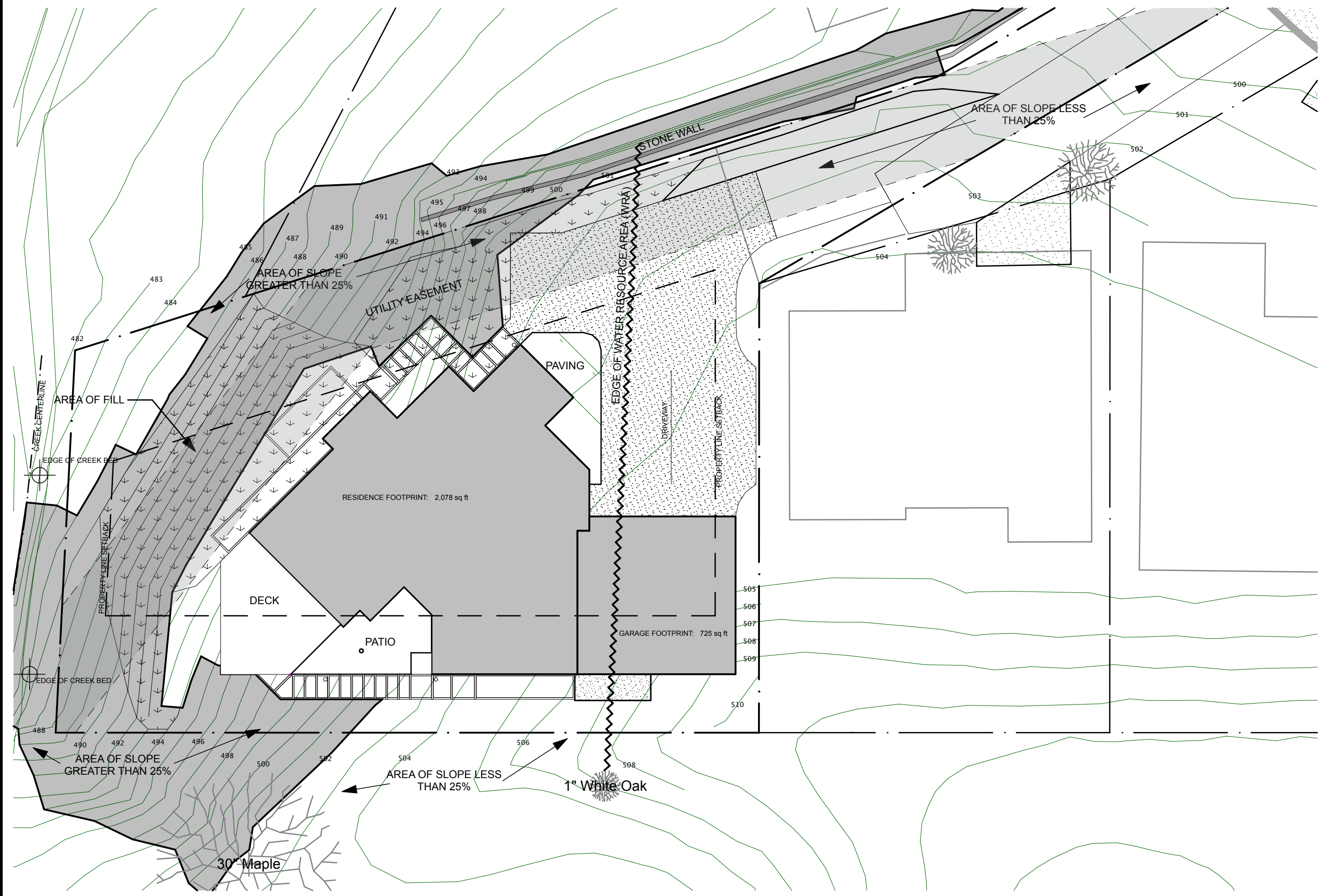
**PROJECT INFO:**  
David and Ann Farley  
3224 Sabo Lane  
West Linn, OR 97068

REV	DATE	DESCRIPTION
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PROJECT NO.: 15-01		
MODEL FILE: Farley Residence.pln		
DRAWN BY: J. Wurscher		
CHK'D BY: JRW		
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**WRA SUBMISSION OVERALL SITE PLAN**

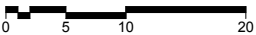
**A-0.1**

SHEET 1 OF 5



**SLOPE MAP**

Scale: 1/16" = 1'-0"



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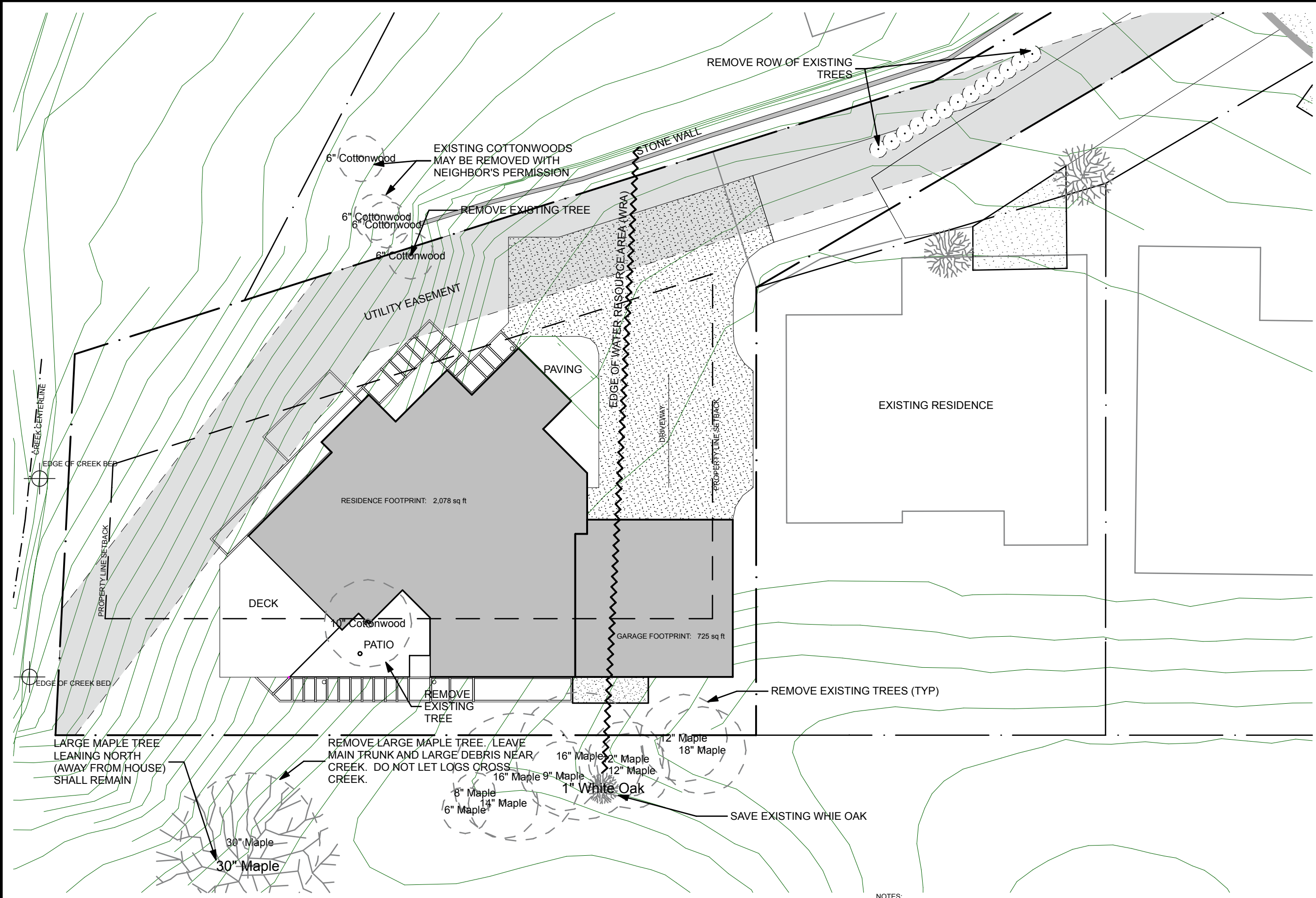
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**WRA SITE SLOPE MAP**

**A-0.2**  
SHEET 2 OF 5

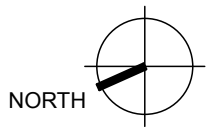




LANDSCAPING DEMOLITION PLAN

Scale: 1/16" = 1'-0" 0 5 10 20

- NOTES:
1. TREE REMOVAL HAS BEEN REVIEWED WITH THE MIKE PERKINS (CITY OF WEST LINN ARBORIST) ON THE PROJECT SITE ON JUNE 3rd. IT WAS DETERMINED THAT THE GROUP OF MAPLES LOCATED ON THE CITY PROPERTY, BUT ADJACENT TO THE SUBJECT PROPERTY WERE NOT IN SUFFICIENT HEALTH TO PROTECT.
  2. REFER TO LANDSCAPING PLAN FOR NEW TREE TYPES AND LOCATIONS.
  3. CURRENT SITE WAS FILLED WITH BLACKBERRIES. PROPOSED PLAN WILL HAVE BLACKBERRIES REMOVED AND REPLACED WITH NATIVE PLANTS.



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**FARLEY RESIDENCE**

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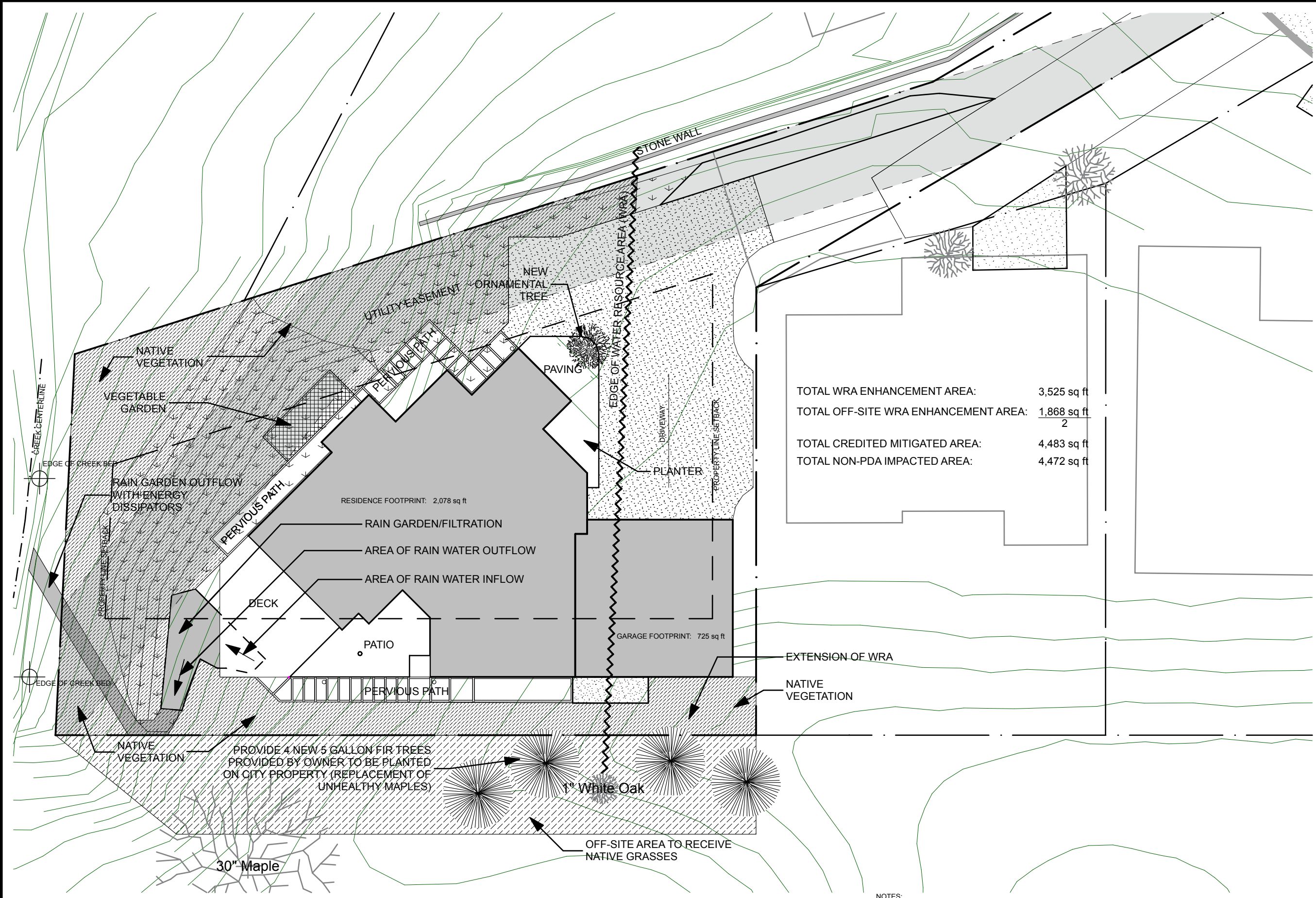
SHEET TITLE

**WRA SUBMISSION LANDSCAPING DEMOLITION PLAN**

**A-0.3**

SHEET 3 OF 5





TOTAL WRA ENHANCEMENT AREA: 3,525 sq ft  
TOTAL OFF-SITE WRA ENHANCEMENT AREA: 1,868 sq ft  
TOTAL CREDITED MITIGATED AREA: 4,483 sq ft  
TOTAL NON-PDA IMPACTED AREA: 4,472 sq ft

# MITIGATION PLAN

Scale: 1/16" = 1'-0" 0 5 10 20

NOTES:  
1. ALL NEW PLANTS, TREES AND GRUND COVER WILL MEET REQUIREMENTS SET FORTH IN WEST LINN CDC 32.100 RE-VEGETATION PLAN REQUIREMENTS.  
2. RESPONSIBLE PARTIES:  
OWNER: DAVID AND ANN FARLEY  
ARCHITECT: JAMES WURSCHER  
CONTRACTOR: RYAN TIBBITTS  
LANDSCAPE: DOUG MUENCH



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**FARLEY RESIDENCE**

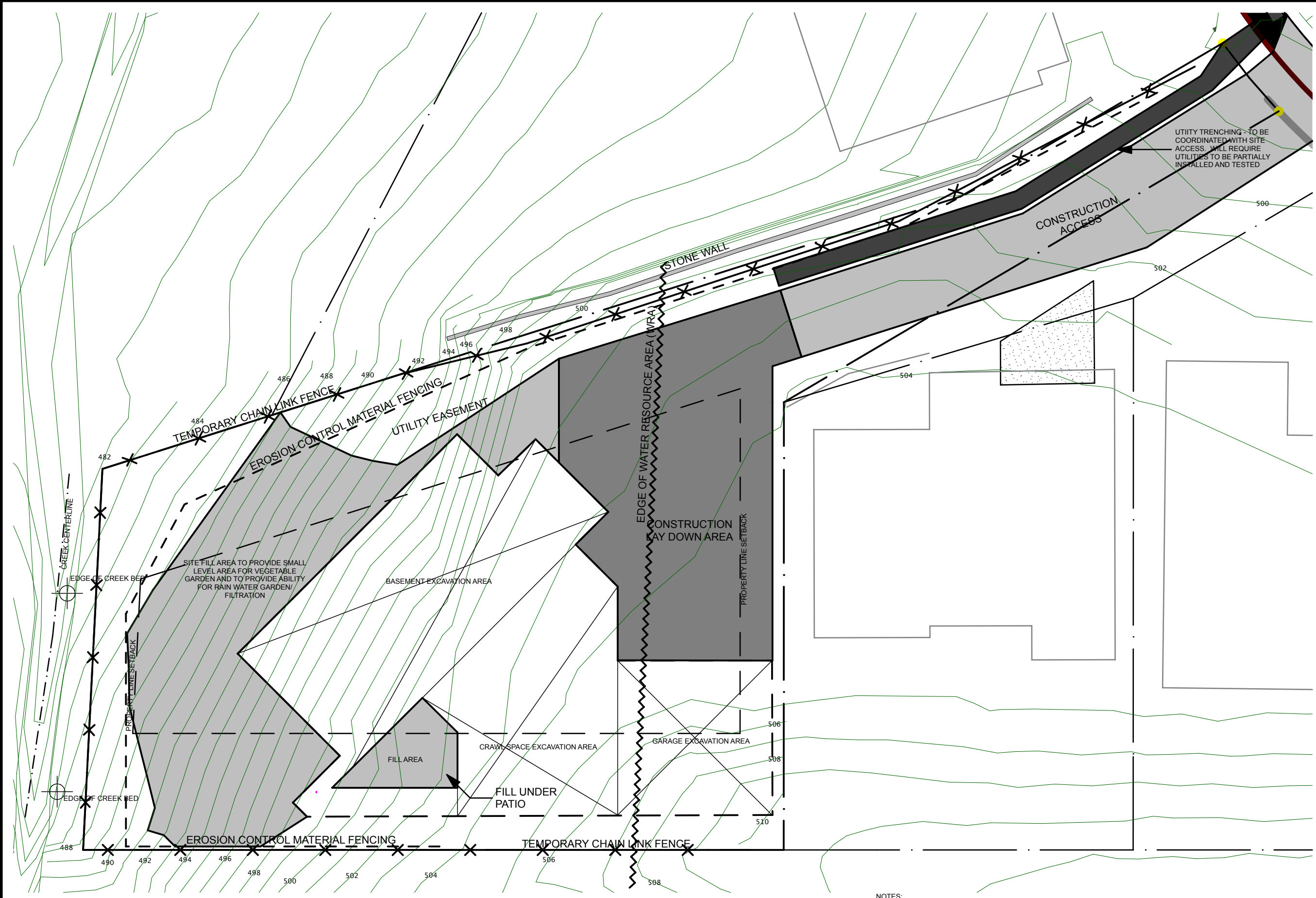
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**WRA SUBMISSION MITIGATION PLAN**

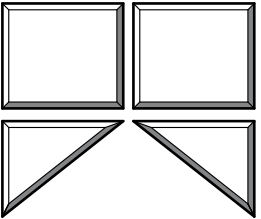
**A-0.4**  
SHEET 4 OF 5



# CONSTRUCTION MANAGEMENT PLAN

Scale: 1/16" = 1'-0" 0 5 10 20

- NOTES:
1. CONTRACTOR SHALL PATCH AND REPAIR DAMAGE TO EXISTING DRIVEWAY. IF DRIVEWAY RECEIVED SUBSTANTIAL DAMAGE, CONTRACTOR SHALL REPLACE DRIVEWAY.
  2. REFER TO LANDSCAPING PLAN FOR INFORMATION REGARDING EXISTING TREES AND REPLANTING OF NATIVE SPECIES.



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## FARLEY RESIDENCE

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### WRA SUBMISSION CONSTRUCTION MANAGEMENT PLAN

**A-0.5**  
SHEET 5 OF 5