



## DESIGN REVIEW COMMITTEE MEETING AGENDA

Tuesday, February 28, 2017, 4:00 PM

City Municipal Center, 616 NE 4th Avenue

---

### I. CALL TO ORDER

### II. INTRODUCTIONS

### III. MEETING ITEMS

#### A. Summary of Design Review Process

Details: The Design Review Committee reviews specific development proposals for compliance with the City's adopted principles and guidelines. Reviews are typically required for new commercial buildings, mixed use and multi-family developments and addresses design elements such as building materials, orientation, landscaping, massing and compatibility with surrounding areas.

Presenter: Phil Bourquin, Community Development Director

 [Design Review Manual](#)  
[Downtown Design Manual](#)

#### B. Elm Street Short Plat (DR16-08)

Details: Proposal to construct a multi-family residential tri-plex building in the Multi-Family (MF-18) zoning district. The Design Review Committee (DRC) provides a recommendation to the decision maker that includes consideration of the general design review standards of the Camas Municipal Code (CMC) Chapter 18.19 Design Review and the Camas Design Review Manual (DRM).

Presenter: Lauren Hollenbeck, Senior Planner

Recommended Action: That the Design Review Committee (DRC) reviews the submitted materials, deliberates and forwards a recommendation to the Director for a final decision.

 [Staff Report Elm Street Short Plat \(DR16-08\)](#)  
[Exhibit 1 Design Review Checklist](#)  
[Exhibit 2 Applicant's Narrative](#)  
[Exhibit 3 Site Plan](#)  
[Exhibit 4 Landscape Plan](#)  
[Exhibit 5 Elevation and floor plan](#)

C. Design Review for Camas School District Project Based Learning (PBL) High School (DR 17-01)

Details: The Camas School District proposes to build a new 89,000 square foot building to house the new PBL High School located at the new campus next to Sharp Electronics. The Design Review Committee will review the proposal for compliance with the City's adopted design principles and provide a recommendation to staff.

Presenter: Robert Maul, Planning Manager

Recommended Action: That the Design Review Committee (DRC) reviews the submitted materials, deliberates and forwards a recommendation to the Director for a final decision.

 [Staff Report for Camas School District PBL High School \(DR17-01\)](#)

[Exhibit 1 - Applicant's Narrative](#)

[Exhibit 2 - Design Review Package](#)

[Exhibit 3 - Design Review Lighting Cutsheets](#)

[Exhibit 4 - Drawing](#)

[Exhibit 5 - Design Review Checklist](#)

D. Design Review for Camas School District Lacamas Heights Elementary School (City File Numbers CUP16-02 and DR16-09)

Details: The Camas School District has proposed to build a new two-story school at 1111 NE 232nd Avenue (Tax Parcel 175724-000), to replace the existing Lacamas Heights Elementary School at 4600 Garfield Street. The new building will be 73,500 square feet and will include a gymnasium, commons, administration offices, classrooms, and play fields for approximately 700 students. The Design Review Committee will review the proposal for compliance with the City's adopted design principles and provide a recommendation to staff.

Presenter: Sarah Fox, Senior Planner

Recommended Action: That the Design Review Committee reviews the submitted materials, deliberates and forwards a recommendation to the Director for a final decision.

 [Staff Report for Lacamas Heights Elementary School \(DR16-09\)](#)

[Exhibit 1 - Design Review Narrative](#)

[Exhibit 2 - Front Elevation Rendering](#)

[Exhibit 3 - Front Elevation Scaled Drawing](#)

[Exhibit 4 - Lacamas Elementary Site Plans](#)

[Exhibit 5 - Materials Board](#)

[Exhibit 6 - DR16-09 Checklist for Lacamas Heights](#)

E. Design Review for Leadbetter Road Pump Station (City File Numbers DR16-13 and CUP16-01)

Details: The pump station is one of three new pump stations planned within the North Shore Sewer Transmission System. The Leadbetter Road Pump Station will be located in a tract of a future residential subdivision and will be subject to Conditional Use Permit along with Design Review approval. The site will be landscaped and fenced and include a 250 square foot structure. The Design Review Committee will review the proposal for compliance with the City's adopted design principles and provide a recommendation to staff.

Presenter: Sarah Fox, Senior Planner

Recommended Action: That the Design Review Committee reviews the submitted materials, deliberates and forwards a recommendation to the Director for a final decision.

 [Staff Report for Leadbetter Road Pump Station \(DR16-13\)](#)

[Exhibit 1 - Pump Station Narrative](#)

[Exhibit 2 - Pump Station Drawings](#)

[Exhibit 3 - Leadbetter Elevation Rendering](#)

[Exhibit 4 - Design Review Checklist for Pump Station](#)

#### IV. ADJOURNMENT

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that persons with special needs have opportunities to participate. For more information, please call (360) 817-1591.

# **CAMAS DESIGN REVIEW MANUAL: GATEWAYS, COMMERCIAL, MIXED-USE & MULTI-FAMILY USES**

## **Prepared For:**

Camas City Council

## **Prepared By:**

Design Review Ad Hoc Committee

**Revised March 2016 (original date 2001 and revised 2002)**



Drawing from the cover of Municipal Research Service Center's "Infill Development" handbook.

# Acknowledgements

## Elected City Officials:

**Dean Dosset** – Mayor

**Paul Dennis, AICP** – City Council Ward 1

**C.R. “Woody” Woodruff** – City Council Ward 2

**Scott Higgins** – City Council Ward 3

**Helen Gerde** – City Council Ward 4

**Mary Kufeldt-Antle** – City Council Ward 5

**Greg Anderson** – City Council Ward 6

**Dale Thomas** – City Council At-Large

## Planning Commission:

**Stan Pickard** – Chair

**Charles Clark** – Vice Chair

**Carol Collier**

**Jack Sprouse**

**Steve Karnes**

**Peter Nicholls**

**David Shepard**

## Author/Editor:

**Paul Dennis, AICP** – Author

**Phil Bourquin** – Staff Planner/Editor

**Kristin Berquist** – Editor

## Ad Hoc Committee Members:

**Paul Dennis, AICP** – Chair, City Council

**Francher Donaldson** – Architect, Citizen

**Casey O’Dell** – Sharp Microelectronics of the Americas (Industrial Park Tenant)

**Barney Syverson** – UCAN, Citizen

**Gene Simpson** – Civil Engineer, Citizen

# Table of Contents

PREFACE .....	1
INTRODUCTION .....	2
Goals of Design Review .....	2
Design Principles vs. Development Guidelines.....	3
Development Guidelines.....	3
STANDARD PRINCIPLES & GUIDELINES .....	4
Standard Design Principles.....	4
Standard Design Guidelines.....	4
GATEWAY PRINCIPLES & GUIDELINES.....	8
Design Principles .....	8
Design Guidelines .....	9
COMMERCIAL & MIXED-USE PRINCIPLES & GUIDELINES.....	12
Design Principles .....	12
Design Guidelines .....	13
MULTI-FAMILY PRINCIPLES & GUIDELINES .....	15
Stacked Housing .....	15
Townhomes & Rowhouses .....	17
Duplex, Triplex, & Four-Plex .....	18

## PREFACE

---

The Camas City Council formed the original Design Review Ad Hoc Committee (DRAC) at its January 1998 planning retreat. The committee's primary goal was to assess whether or not design review would be a good idea for Camas. The DRAC reviewed materials collected from the Municipal Research Services Center that included design review manuals from Bainbridge Island, Gig Harbor, and Sumner, as well as news articles, legal opinions, and implementing ordinances. The committee also conducted an informal survey at a United Camas Association of Neighborhoods (UCAN) meeting and a telephone conference with the City of Olympia's Planning Director. At the end of June 1998, the committee reported back to the City Council with their findings.

In order to answer the question, "is design review good for Camas?", the committee tried to decide from a community perspective what the purpose of design review would be. What should it accomplish? What should it prevent? The DRAC concluded that a good starting point would be to review the City's Mission Statement which follows:

*"The City of Camas commits to preserving its heritage, sustaining and enhancing a high quality of life for all its citizens and developing the community to meet the challenges of the future. We take pride in preserving a healthful environment while promoting economic growth. We encourage citizens to participate in government and community, assisting the city in its efforts to provide quality services consistent with their desires and needs."*

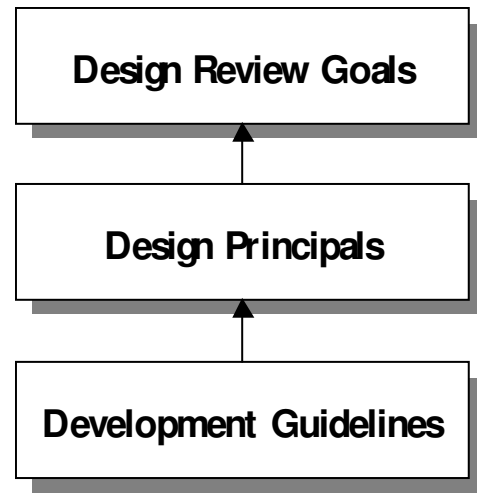
Design review, in the context of the City's mission statement, should aid in the preservation of our community's heritage; enhance our City's quality of life; guide us through the challenges of the future; preserve a healthy environment; promote economic growth; and enable citizens to participate in the process.

Based on all the materials reviewed and the level of interest from UCAN members, the DRAC concluded that design review was worth further investigation and recommended to the City Council that a citizen committee be formed and that the members be made up of individuals familiar with the development process. The City Council agreed to further study design review by establishing a citizen committee to draft guidelines that could be successfully implemented for the City. The citizen committee met every first and third Wednesday of each month since September of 1998. Commercial guidelines were adopted in May, 2001, with the multi-family and gateway sections being added to the Design Review Code in December, 2002. In 2016, the following members of the 2035 Camas Comprehensive Plan Steering and Technical Advisory Committees revised the gateways and corridors guidelines: Barb Baldus, John Busby, Barry Carson, Bonnie Carter, Troy Hull, Alicia King, Lynn Johnston, Mike Nerland, Buzz Truitt, Lisa Willis, Shannon Turk, Jarred Jackman, Eric Lanciault, Eric Levison, Matthew McBride and Sean Vergillo.

# INTRODUCTION

---

All proposals subject to design review should strive to meet the goals of design review and address each of the appropriate design principles and development guidelines. In order to achieve the established *goals of design review*, a set of design principles and development guidelines have been identified for both commercial and multi-family land-uses. Design principles are the overriding factors that each development proposal must demonstrate it can achieve or reasonably mitigate. Development guidelines are created to assist the development's applicant in accomplishing the design principles as well as conform to the established *goals of design review*.



## GOALS OF DESIGN REVIEW

The goals of design review are intended to establish the overall purpose (or intent) of the design principles and development guidelines and set the stage for what they should be trying to accomplish. The *goals* of design review are:

- All developments should be meaningful, add value, and produce a positive impact on the immediate area, as well as the community;
- To encourage better design and site planning so that new development will preserve or enhance the community's character as well as allow for diversity and creativity;
- To encourage compatibility with surrounding uses (zone transition) and quality design;
- To promote responsible development that results in an efficient use of the land;
- To create a park like setting with the integration of the building, landscaping, and natural environment;
- To preserve the community's heritage by incorporating a piece of the area's history into the development;
- To facilitate early and on-going communication among property owners, neighborhoods, and City officials;
- To increase public awareness of design issues and options; and
- To provide an objective basis for decisions that address visual impact and the community's future growth.

## DESIGN PRINCIPLES VS. DEVELOPMENT GUIDELINES

Design principles are established for both multi-family and commercial uses and all uses located within a gateway. An exception from the design review process is provided for those activities subject to design review requirements for heritage register properties or districts [CMC 16.35.070]. Commercial uses in the context of design review include both traditional uses listed as commercial under the zoning code as well as recreational, religious, cultural, educational and governmental buildings and associated properties.

Design principles are the overriding factors that the development guidelines are trying to accomplish. Every development proposal (whether the applicant is from a private, non-profit, or public entity) that comes before the City must adequately address each of the design principles and demonstrate that it can achieve the overall intent of the established principles. If a proposal can not meet every development guideline set forth under each section, but has demonstrated that it can achieve the overall intent of the established design principles, then the City may have reason to allow the proposal to move forward through the approval process.

## DEVELOPMENT GUIDELINES

Development guidelines for gateways, multi-family, and commercial uses have been divided into five major guideline categories: Landscaping & Screening, Architecture, Massing & Setbacks, Historic & Heritage Preservation, and Circulation & Connections. Under each major category is a list of general issues that should be addressed, if appropriate, by each proposal subject to design review.

### **Landscaping & Screening:**

- Impervious vs. Pervious
- Landscaping & Screening
- Signage
- Lighting
- Outdoor Furnishings
- Fences
- Significant Trees
- Outdoor Common Areas
- Parkway

### **Architecture:**

- Signage
- Lighting
- Building Form (architecture)
- Building Materials

### **Massing & Setbacks:**

- Complement Surrounding Uses
- View Shed
- Infill
- Density Provisions
- Height, Bulk, Scale
- Flexibility of Building Location (Preservation)
- Zone Transition

### **Historic and Heritage Preservation:**

- Preservation of Existing Structures or Sites
- Incorporate Historic/Heritage Information

### **Circulation & Connections:**

- Walkways, Trails & Parking
- Transit Stops
- Streetscape
- Traffic Patterns (entrance, exits, delivery, etc)

# STANDARD PRINCIPLES & GUIDELINES

---

Standard principles and guidelines are applicable to all commercial, mixed-use and multi-family developments, redevelopments (including change in use, e.g. residential to commercial), or major rehabilitations (exterior changes requiring a building permit). Additional principles may be found under each of the specific categories.

## STANDARD DESIGN PRINCIPLES

A site plan should be provided by the applicant that identifies and illustrates how the proposed development will meet the design principles. The site plan should include placement of buildings, designated landscaped and open space areas, parking, and any other major components of the development. The site plan should also include dimensions as to give all reviewers a sense of scale. Rehabilitation projects are only required to address the principles and guidelines that relate to the building permits they are seeking.

- Landscaping shall be done with purpose. It should be used as a tool to integrate the proposed development with the surrounding environment as well as each of the major project elements (e.g. parking, building(s), etc.).
- All attempts shall be made at minimizing the removal of significant natural features. Significant natural features shall be integrated into the overall site plan.
- Buildings shall have a “finished” look. Any use of panelized materials shall be integrated into the development in a manner that achieves a seamless appearance.
- A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.

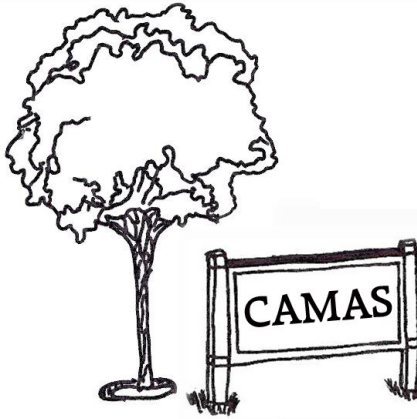
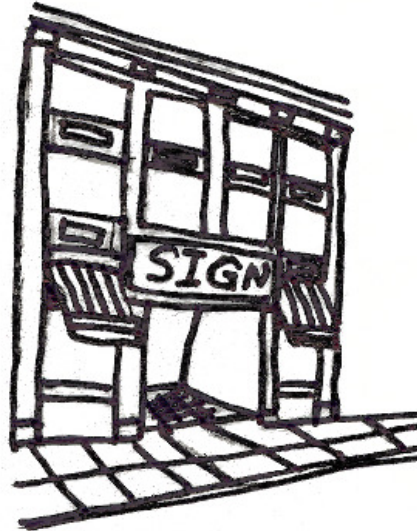
## STANDARD DESIGN GUIDELINES

The standard design guidelines serve as a guide to the development community (or project proponent). These guidelines are developed to assist a project in meeting the established design principles. Furthermore, a project should not be expected to meet every design guideline as long as it can show it can achieve the overall intent of the design principles. However, the project proponent is expected to adequately address each guideline and if it cannot meet a specific guideline then provide an explanation as to why and how it will mitigate and still meet the intent of the design principles.

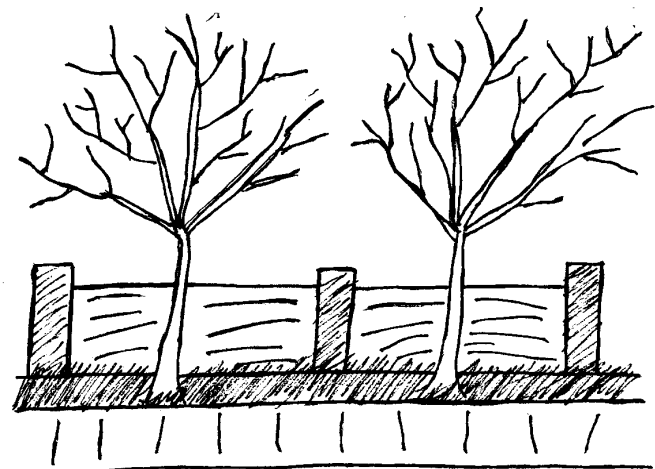
### ***Landscaping & Screening***

- Landscaping and screening is an important factor in determining the overall character of the building site. Landscaping should be done with purpose, such as providing a buffer against less intense uses, screening parking or other components viewed as being intrusive, and defining the streetscape.

- Signage should be placed on buildings or incorporated into the landscaping. If signs are illuminated, then they shall be front lit (light cast onto the face of the sign from a source positioned in front of the sign). Signage in the landscaping should be built in to the vegetation to keep it from being the main focus – similar to the light industrial zones. Efforts should be made to make signs vandal resistant. The intent is for the landscape not to be dominated by signage as well as to soften the visual impact. (see exhibit 1)
- Outdoor furnishings, when used, should be compatible with the immediate environment.
- If the site is to be fenced, then the fencing should be incorporated into the landscaping so as to have little or no visual impact. (see exhibit 2)
- The vegetation to be utilized should encourage native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City's Street Tree List. When possible, existing significant trees or other natural features that do not pose a hazard or hinder development should be required to remain and be incorporated into the landscaping and site plans.
- Landscape lighting should be low voltage, non-glare, and indirect. Street lighting, such as light poles and lamps, should be compatible with other nearby lighting on the same street, unless other lighting is expected to be replaced in the foreseeable future or a nostalgic theme compatible with the proposed development is desired.



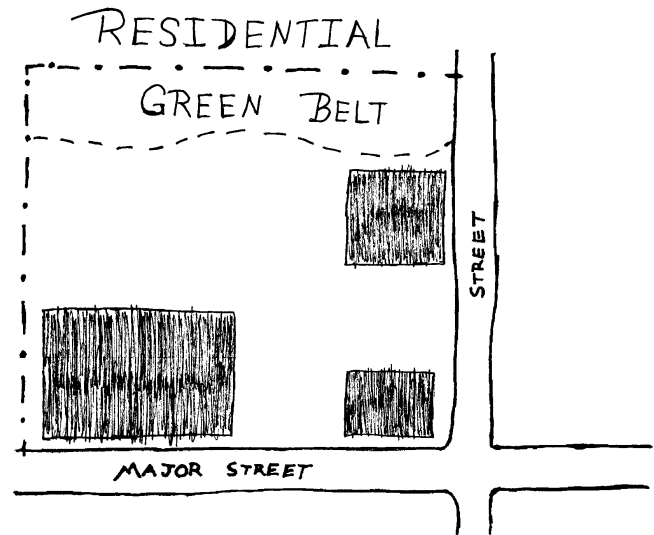
**Exhibit 1.**



**Exhibit 2.**

## **Massing & Setbacks**

- Massing and setbacks are major elements of a site plan. These elements have the greatest impact as to how the proposed development relates to the surrounding area and how individuals living and visiting the area interact with the development. Major components that define the character and quality of the proposed development include the size, scale, and placement of buildings, lot coverage, and traffic/pedestrian circulation.
- Higher density/larger structures abutting lower density residential structures should be designed to mitigate size and scale differences. In some cases, creating a natural buffer may be appropriate. (see exhibit 3)



**Exhibit 3.**

## **Architecture**

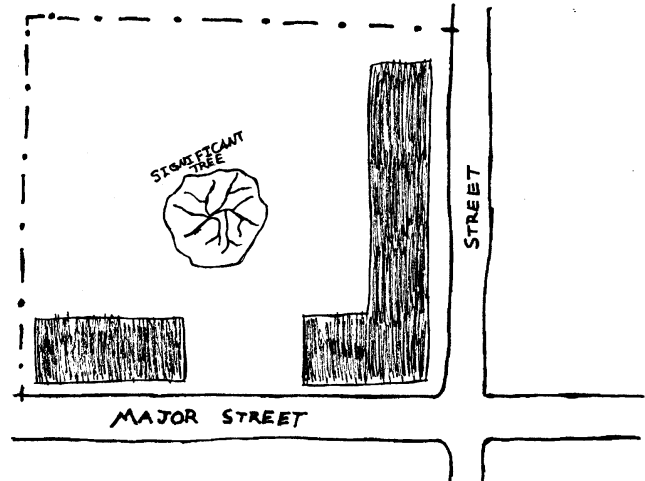
Few restrictions should be placed on the architecture and building materials used in the development. Instead, general guidelines are developed to identify the type of development desired:

- Buildings should have a “finished”, sound, durable, and permanent appearance. Use of panelized materials should be integrated into the development in a manner that achieves a seamless appearance. This would bring into question the use of corrugated materials, standing seam, T-1 11, or similar siding materials, unless it can be shown through the use of renderings or other visual applications that the use of these materials will produce a development with a high visual (or aesthetic) quality. The applicant and/or developer will be held accountable for ensuring that the finished development resembles and is in compliance with the submitted renderings as approved by the City.

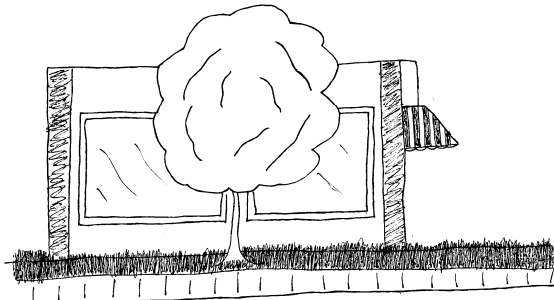
- Placement of buildings should preserve significant natural features, such as rocks, trees, etc. In doing so, developers may make use of site variances such as adjusting setbacks. (see exhibit 4)
- Building walls or fences visible from roadways should be articulated in order to avoid a blank look. The wall can be broken up by including some combination of window/display space, plantings, offsetting walls with two-tone colors, or creating plazas, water features, art (civic, pop, etc.), awnings, or similar devices. (see exhibit 5)
- The use of bold colors should be avoided except when used as minor accents.

### ***Historic and Heritage Preservation:***

- The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.



**Exhibit 4.**



**Exhibit 5.**

# **GATEWAYS AND CORRIDORS PRINCIPLES & GUIDELINES**

---

Community gateways create a sense of arrival and let visitors and residents know they are in Camas. Primary and secondary gateways are designated to distinguish between gateways that offer a primary entrance into Camas and those that are secondary and serve as an entrance to a particular part of the City. Corridors extend approximately .25 miles from the gateway and included enhanced features, such as bike lanes, widened or detached sidewalks, and signage. Table 1 identifies typical gateway and corridor features that should be included in each gateway and/or corridor, as well as unique features that represent the character and style desired for a particular gateway or corridor. The unique features are consistent with the type of development currently located within the gateway and/or along the corridor in order to ensure new development and redevelopment is compatible with existing development patterns.

Development/redevelopment within a designated gateway must adhere to the applicable goals and policies of the Comprehensive Plan as well as applicable development regulations and other design review standards. Additionally, depending on the type of development (residential, commercial, industrial, etc.) compliance with goals and policies for the applicable land use category is required. Gateways and corridors and appropriate features are outlined in Table 1 and gateway and corridor locations are shown on the city's zoning map.

## **DESIGN PRINCIPLES**

Design principles are developed with the intent of being applied throughout the gateway and corridor area regardless of the land use in question.

Gateways and corridors are special places within a city that help define the quality and character of the community. The elements that comprise a gateway or corridor shall be treated in a manner that calls attention to the fact that one has entered into the community. The following elements shall be addressed:

- Gateways and corridors shall be devoid of freestanding signs. Pre-existing freestanding signs will be subject to removal at the time of any new development, redevelopment, or major rehabilitation on the site. Exemptions include approved directional or community information signage as approved by the City.
- Permanent wayfinding, historic, and/or interpretive signage within a gateway or corridor shall be standardized in a manner that creates a consistent look within the gateway or corridor in question.
- The surface of pedestrian walkways within intersections shall be accentuated with a unique character.
- Bike lanes shall be incorporated into the public right of way where feasible as determined by the City.
- A consistent iconic streetscape lighting scheme shall be used.
- Robust landscaping must be provided as a transition to properties adjacent to the public right of way (e.g. trees, shrubs, rockeries).
- Sidewalks shall be separated from the roadway through the use of planter strips (minimum 4-feet wide), 6-foot diameter tree wells, or if feasible, raingardens/bioswales.

- Street trees of no less than two inches in diameter shall be planted within planter strips or tree wells at a spacing that creates the appearance of a continuous canopy at tree maturation. Street trees must be replaced (with an appropriate species) if they are removed due to a hazardous condition or other reasons that are first verified by a certified arborist.

## **DESIGN GUIDELINES**

The design guidelines for Gateways are more stringently applied than those for other sections of the manual (e.g. commercial and multi-family). Guidelines that state a certain action “shall be adhered to” are strictly enforced. Guidelines that use more *suggestive* terminology such as “should” serve as a guide to meeting the overall intent. The project proponent is expected to adequately address each guideline and if it cannot meet a specific guideline, then provide an explanation as to why and demonstrate how it will mitigate and still meet the intent of the design principles/guidelines.

### ***Landscaping & Screening:***

- Landscaping adjacent to the public right-of-way shall provide multiple layers of plantings, including canopy trees, understory trees, shrubs and groundcover.
- Hanging baskets should be used along building frontages to add visual interest, and must be installed so that the bottom of the basket is a minimum of 80 inches above the finished grade of the sidewalk.
- Median planting design/plant selection shall create a unique and cohesive streetscape design.

### ***Architecture:***

The type, scale, and placement of signage within a gateway can significantly effect the visual/sensory interpretation of the physical quality of the area. Gateways that appear to be littered with signage present a negative impression and an environment that individuals want to avoid.

- Freestanding signs are not allowed to be erected within Gateways.
- Permanent signage within gateways shall be standardized in terms of size, color, and materials.

### ***Massing and Setbacks:***

- New construction shall be placed as close to streets and roads as the zoning code allows. Main entrances to the buildings must be oriented to the street.
- On-site parking areas shall be located to the rear or the side of a building.

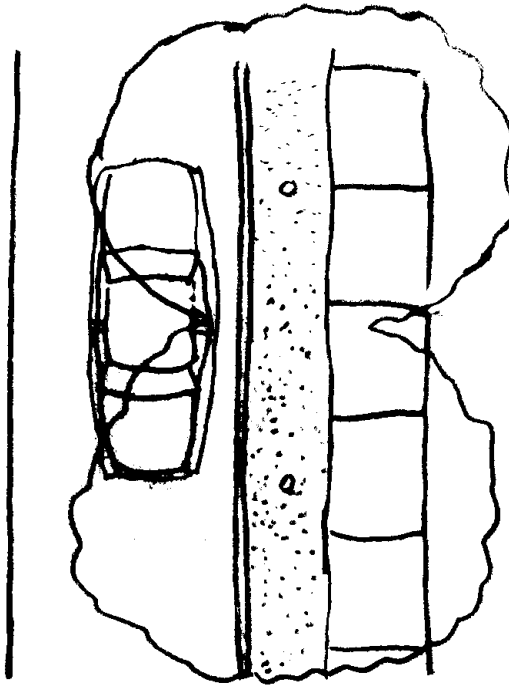
### ***Historic and Heritage Preservation:***

The use of historic markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.

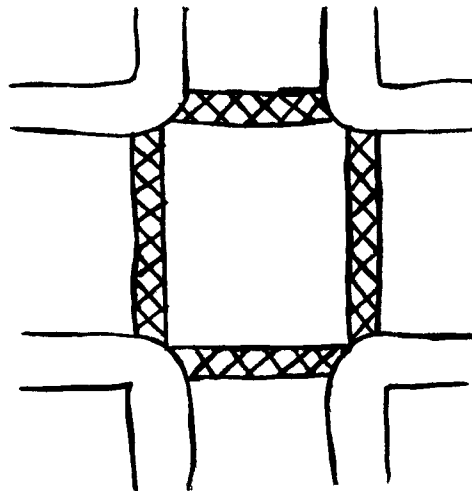
## ***Circulation & Connections:***

The streetscape and pedestrian movements are the elements of primary interest for gateway properties. Streetscaping assists in defining the physical character of the area and pedestrian movements. The following additional accentuators can help further define pedestrian paths.

- Orient the main public entrance toward the public right-of-way. Pedestrian walkways shall connect each building's front entry with the sidewalk.
- Bike lanes shall be provided where possible, linking public areas with neighborhoods and other local and regional bicycle corridors.
- New developments should include plans for alternative transportation, such as providing attractive bus stop shelters, bicycle parking, etc.
- Trees and planting strips or raingardens/bioswales shall be used for separating vehicles and pedestrian movements, as well as provide a secure and pedestrian friendly environment. (See exhibit 7)
- Where applicable (as determined by the City), sidewalks shall be separated from the roadway through the use of planter strips, planter wells or raingardens/bioswales. (See exhibit 7)
- Tree spacing will be determined by the species of trees planted. The desired effect is a visual appearance of a continuous foliage canopy at maturity or seven years after tree planting (whichever comes first). (See exhibit 7)
- Patterned pavers shall be used to define and accentuate pedestrian pathways within intersections. They include pattern stone, exposed aggregate (as long as it has a finished appearance), stamped concrete, or similar paving materials. (See exhibit 8)
- A consistent streetscape lighting scheme shall be used that portrays the primary development period,



**Exhibit 7.**



**Exhibit 8.**

architecture characteristics, or predetermined theme as identified in a concept plan, sub-area plan, or master plan recognized by the City.

Table 1. Design of Specific Gateways and Corridors

Gateway or Corridor	Designation	Unique Gateway and Corridor Features
<b>6th Avenue</b>	Primary	<ul style="list-style-type: none"> <li>• Hanging flower baskets</li> <li>• Consider roundabouts at key intersections</li> <li>• Detached sidewalks</li> <li>• Planted median</li> <li>• Orient commercial buildings to the street – provide pedestrian access from buildings to sidewalks</li> <li>• Restrict parking between buildings and the street</li> <li>• Utilize rain garden/ bioswales for stormwater versus storm ponds</li> <li>• Bus stop improvements (shelter, lighting, bench) – develop consistent bus stop standards to be implemented throughout the city</li> </ul>
<b>3rd Avenue</b>	Primary	<ul style="list-style-type: none"> <li>• Hanging flower baskets</li> <li>• Detached sidewalks</li> <li>• Planted median</li> <li>• Orient commercial buildings to the street – provide pedestrian access from buildings to sidewalks</li> <li>• Restrict parking between buildings and the street</li> <li>• Utilize rain garden/ bioswale for stormwater</li> </ul>
<b>Everett</b>	Secondary	<ul style="list-style-type: none"> <li>• Widened sidewalks (for sidewalk seating or other programming)</li> <li>• Orient commercial buildings to the street – provide pedestrian access from buildings to sidewalks</li> <li>• Limit parking between buildings and the street</li> <li>• Rain garden/ bioswale for stormwater</li> <li>• Consider roundabout at Lake Road and Everett</li> </ul>
<b>38th Avenue</b>	Primary	<ul style="list-style-type: none"> <li>• Commercial buildings oriented to the street</li> <li>• Enhanced landscaping in medians</li> <li>• Stamped concrete to highlight gateway theme</li> <li>• Install posts/poles for community pride banners (less than 4 square feet) such as school pendants</li> </ul>
<b>Lake Road</b>	Primary	<ul style="list-style-type: none"> <li>• Planted median with turn lane cutouts</li> <li>• Wide bike lanes</li> <li>• Identify locations for public green spaces and pedestrian access through campus style development</li> </ul>
<b>Green Mountain - Goodwin</b>	Primary	<ul style="list-style-type: none"> <li>• Roundabout at gateway intersection</li> <li>• Deep/wide frontage landscaping areas should match the natural areas along the DNR property that is west of Ingle Road.</li> </ul>
<b>Brady Road</b>	Primary	<ul style="list-style-type: none"> <li>• Wide sidewalk</li> <li>• Iconic guardrails (e.g. Columbia River Highway)</li> <li>• Limit lighting to allow for views of the night sky (motion sensors, or other technology to limit excessive light)</li> </ul>
<b>Union Street</b>	Secondary	<ul style="list-style-type: none"> <li>• Public art in center of roundabout</li> <li>• Orient commercial buildings to the street – provide pedestrian access from buildings to sidewalks</li> <li>• Limit parking between buildings and the street</li> <li>• Rain gardens/bioswales for stormwater</li> </ul>

		<ul style="list-style-type: none"> <li>• Planted median</li> </ul>
--	--	--

# COMMERCIAL & MIXED-USE PRINCIPLES & GUIDELINES

---

In assessing how a proposed project addresses specific design guidelines, weight should be given to the location of the property, topographic characteristics, size and shape, disposition of adjacent properties, etc. For example, the specific character of the Community Commercial zoned properties differ based on their general location, topography, and surrounding built environment. For instance, one of the Community Commercial properties located in the Southwest portion of the City has an auto oriented feel as it is surrounded by Highway 14 and Southeast 6th Avenue. Another property located in Grass Valley has a somewhat rural feel as it is surrounded by residential and wetlands. However, even though each area has a different feel, they all have direct linkages to surrounding neighborhoods and, therefore, these properties should provide a pedestrian friendly environment (one of the specific design principles) to the degree possible along major street frontages.

## DESIGN PRINCIPLES

The following design principles are intended to be applied to all new commercial and mixed-use developments, redevelopments (including change in use, i.e. residential to commercial), or major rehabilitations (exterior changes requiring a building permit). Properties shall develop in a manner that portrays a quality image of the community.

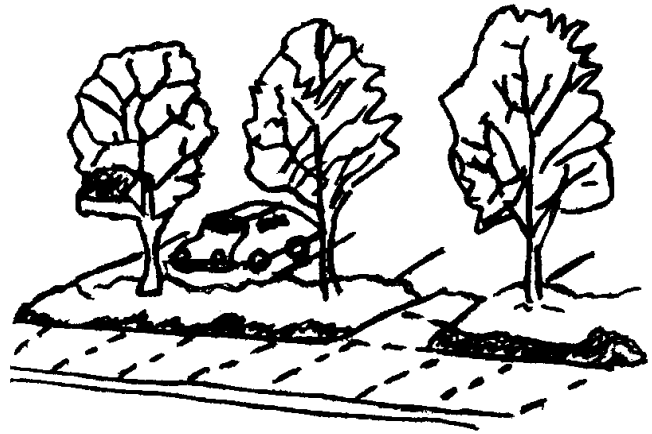
- On-site parking areas shall be placed to the interior of the development unless site development proves prohibitive. All required on-site parking areas shall be screened with landscaping.
- Retail frontage setbacks shall not exceed 25 feet from back of curb
- Buildings shall be used to define the streetscape unless site conditions prove prohibitive which includes (not limited to):
  - Window and door placement shall provide a high degree to transparency at the lower levels of the building, maximize visibility of pedestrian active uses, provide human-scaled architectural pattern along the street and establish a pattern of individual windows and exterior openings within building facades that provides a greater variety of scale through material variation, detail and surface relief.
  - Office and retail building shall provide a minimum solid to void ratio of 60%/40%
  - Storefront windows shall be used frequently to enliven the sidewalks.
- Structures abutting, located in, or located near less intensive uses or zoned areas (such as commercial developments next to residential areas) shall be designed to mitigate size and scale differences.
- Developments containing a multiple of uses/activities shall integrate each use/activity in a manner that achieves a seamless appearance or creates a cohesive development.
- Mixed-use developments that place uses throughout the site (horizontal development) shall organize elements in a manner that minimizes its impact on adjacent lower intensity uses.
- Walls shall be broken up to avoid a blank look and to provide a sense of scale.
- Outdoor lighting shall not be directed off site.

## DESIGN GUIDELINES

The design guidelines developed for commercial and mixed-use developments are intended to serve as a guide. A project should not be expected to meet every design guideline as long as it can show it can achieve the overall intent of the design principles. However, the project proponent is expected to adequately address each guideline and if it cannot meet a specific guideline then provide an explanation as to why and how it will mitigate and still meet the intent of the design principles.

### ***Landscaping & Screening***

- A *landscaping/vegetation plan* needs to identify the type of plants or trees to be planted within the foreground of the visual area (or street intersection). The use of vegetation native to the Pacific Northwest (or Camas) should be encouraged, with the exception of noxious weeds. Low maintenance/hardy landscaping should also be encouraged. A list of low maintenance/hardy materials is available upon request.
- Intersections should be illuminated, but not dominated by lighting. Incorporating lighting into the landscape should be encouraged to illuminate the quality of the natural environment. Low voltage, non-glare, indirect lighting should be used exclusively for landscaping. Street lighting, such as light poles and lamps, should be compatible with other nearby lighting on the same street, unless other lighting is expected to be replaced in the foreseeable future. Surrounding sites should be screened from parking and building lighting.
- Parking spaces should be clustered in small groupings. Groupings should be separated by landscaping to create a pedestrian friendly, park like environment. Parking lot landscaping should be credited toward the total landscaping requirement. (see exhibit 9)
- Commercial developments should be encouraged to include a community information kiosk. The kiosk could be used to provide community information and/or incorporate historic/heritage information relating to the specific site or surrounding area.

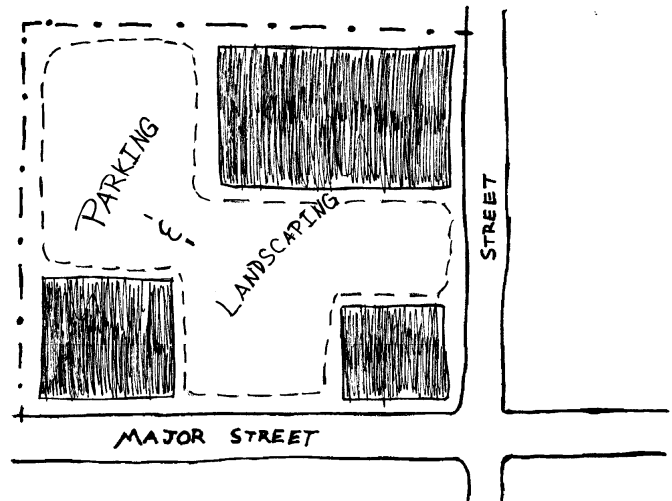


**Exhibit 9.**

## Massing & Setbacks

Specific guidelines that should be addressed include:

- Since buildings define circulation routes, they should be placed as close to streets and roads as the zoning code allows before being set back to the interior or rear of the lot, unless site constraints make it impossible or characteristics of surrounding properties already developed make it incompatible. (see exhibit 10)
- Commercial structures abutting residentially zoned areas should be designed to mitigate size and scale differences.
- On-site parking areas should be placed to the interior of the site whenever possible. (see exhibit 10)



**Exhibit 10.**

## Architecture

- Developments surrounded by residential areas or adjacent to residentially zoned properties should be built with a residential feel (i.e. size, scale, and materials compatible with neighboring buildings).
- Buildings over two stories should have the third story and above offset from the first two stories, if surrounding developments are less than three stories or land uses designations on adjacent sites do not allow more than three story development.
- Outdoor lighting shall be hooded or shielded so as not to directly light adjoining or neighboring properties.

## Circulation & Connections

Most vacant and redevelopable commercial land within the City of Camas will occur along existing roads or areas that have established circulation and connections. Therefore, the scope of appropriate regulations in regards to connections and circulation is limited.

- Pathways define traffic/pedestrian movement. Buildings brought up to the road help define these movements. Trees and/or planting strips shall be used for separating vehicles and pedestrian movements, as well as provide a secure and pedestrian friendly environment.
- New streets intersecting commercial properties should be designed to create a safe environment. “Coving” techniques and “round-a-bouts” should be considered for traffic calming when appropriate.

# MULTI-FAMILY PRINCIPLES & GUIDELINES

---

Multi-Family structures vary significantly in form, scale, and function. Even a specific Multi-Family type (i.e. apartment building, townhouse, duplex, etc.) can vary in size and shape depending on the land use zone in question and site configuration. Therefore, a separate set of Design Review principles and guidelines have been developed for three separate multi-family structure categories:

## **Multi-Family Structures:**

- Stacked Housing  
(Apartments)
- Townhome/Rowhouse
- Duplex/Tri-plex/Four-plex

The multi-family design principles and guidelines are intended to be applied to all new development, redevelopment (including change in use, e.g. commercial to multi-family), or major rehabilitation (exterior changes requiring a building permit), unless otherwise noted in each subsection of this chapter.

## **STACKED HOUSING (APARTMENTS)**

All structures that have separate living units located on top of one another are considered stacked housing. This includes garden apartments, flats, and low-, mid-, and high-rise structures. The principles and guidelines developed for this housing type are intended to be applied regardless of the underlying land use designation.

### ***Design Principles***

- All on-site parking areas shall be screened with landscaping. Parking spaces shall be clustered in small groups of no more than 6-10 spaces.
- Stacked houses abutting or located in single-family residentially zoned areas shall be designed to mitigate size and scale differences.
- Buildings shall have their principal pedestrian entrance along a street, open space or mid-block passage with the exceptions of visible entrances off a courtyard.
- Walls shall be articulated in order to avoid a blank look and to provide a sense of scale and shall provide a minimum solid to void ratio of 70%/30%.
- Detached garages shall be located to the rear of stacked unit(s) so as not to be directly viewable from a public street.
- Attached garages shall account for less than 50% of the front face of the structure. Garages visible from the street shall be articulated by architectural features, such as windows, to avoid a blank look.
- Stoops, porches and direct individual entries should be encouraged for ground-floor units.

## ***Design Guidelines***

The design guidelines developed for stacked housing are intended to serve as a guide to the development community (or project proponent). A project should not be expected to meet every design guideline as long as it can show it can achieve the overall intent of the design principles. However, the project proponent is expected to adequately address each guideline and if it cannot meet a specific guideline, then provide an explanation as to why and how it will mitigate and still meet the intent of the design principles.

## ***Landscaping & Screening***

A landscaping plan shall be submitted to the City that identifies:

- The vegetation to be utilized should encourage native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City's Street Tree List. When possible, existing significant trees or other natural features that do not pose a hazard or hinder development should be required to remain and be incorporated into the landscaping and site plans.
- Landscape lighting should be low voltage, non-glare, and indirect. Street lighting, such as light poles and lamps, should be compatible with other nearby lighting on the same street, unless other lighting is expected to be replaced in the foreseeable future or a nostalgic theme compatible with the proposed development is desired. Surrounding sites should be screened from parking and building lighting.
- Parking spaces should be clustered in small groupings. Groupings should be separated by landscaping to create a pedestrian friendly, park-like environment. Parking lot landscaping should be credited toward the total landscaping requirement. (see exhibit 9)
- Green belts should be used to separate different uses whenever possible. (see exhibit 3)
- The vertical intensity of landscaping should increase as the height of the structure increases. With the exception of properties located in or abutting the Downtown Commercial (DC) zone, greater setbacks can be used to create a greater buffer and lessen the need for more intense vertical landscape materials.

## ***Circulation & Connections***

The following guideline is important to consider in terms of public safety or the perception thereof:

- Pathways define traffic/pedestrian movement. Buildings brought up to the public right-of-way help define these movements. Trees and/or planting strips shall be used for separating vehicles and pedestrian movements as well as providing a secure and pedestrian friendly environment.

## **TOWNHOMES & ROWHOUSES**

Townhomes and rowhouses tend to be made up of several one to three story units that are attached (or connected) by a common wall. For the Design Review process, the Townhome/Rowhouse regulations address structures with two to five units attached by a common wall and configured in a townhouse style of structure. The principles and guidelines developed for this housing type are intended to be applied regardless of the underlying land use designation.

### ***Design Principles***

- All on-site parking areas (excluding driveways and garages) shall be screened with landscaping.
- Buildings shall be used to define the streetscape unless site conditions prove prohibitive.
- Structures abutting or located in single family residentially zoned areas shall be designed to mitigate size and scale differences when appropriate.
- Walls shall be articulated in order to avoid a blank look and to provide a sense of scale and shall provide a minimum solid to void ratio of 70%/30%.
- Detached garages shall be located to the rear of the townhouse or rowhouse unit(s) so as not to be directly viewable from a public street.
- Attached garages shall account for less than 50% of the front face of the structure. Garages visible from the street shall be articulated by architectural features, such as windows, to avoid a blank look.

### ***Design Guidelines***

The design guidelines developed for townhomes and rowhouses are intended to serve as a guide to the development community (or project proponent).

### ***Landscaping & Screening***

A landscaping plan shall be submitted to the City that identifies:

- Green belts should be used to separate different uses or intensity of uses whenever possible. (see exhibit 3)
- The vertical intensity of landscaping should increase as the height of the structure increases. With the exception of properties located in or abutting the Downtown Commercial zone, greater setbacks can be used to create a greater buffer and lessen the need for more intense vertical landscape materials.

### ***Circulation & Connections***

The following guideline is important to consider in terms of public safety or the perception thereof:

- Pathways define traffic/pedestrian movement. Buildings brought up to the public right-of-way help define these movements. Trees and/or planting strips shall be used for separating vehicles and pedestrian movements as well as providing a secure and pedestrian friendly environment.

## **DUPLEX, TRIPLEX, & FOUR-PLEX**

Duplexes, triplexes, and four-plexes tend to be constructed to resemble single family homes. For the design review process, the Duplex/Triplex/Four-plex regulations address structures with two to four units attached by a common wall that are configured to resemble a single-family style of structure. The specific principles and guidelines developed for this housing type are mandatory and intended to be applied regardless of the underlying land use designation.

### ***Design Principles***

- Garages shall account for less than 50% of the front face of the structure. Garages visible from the street shall be articulated by architectural features, such as windows, to avoid a blank look.
- Buildings shall provide a complementary façade that faces the public right of way, and should be the primary entrance to a unit or multiple units, unless impracticable.

### ***Design Guidelines***

#### ***Architecture***

- Garages shall account for less than 50% of the front face of the structure. Garages visible from the street shall be articulated by architectural features, such as windows, to avoid a blank look.

# Downtown Design Manual



*City of Camas, Washington*

*Adopted by Resolution No. 1136 on September 2, 2008*

*Amended by Resolution No. 1301 on July 21, 2014*

# Downtown Design Manual

City of Camas, Washington

## Table of Contents

<b>A. How to Use this Document .....</b>	<b>3</b>
<b>B. Purpose .....</b>	<b>3</b>
<b>C. Applicability / General Requirements .....</b>	<b>4</b>
<b>D. Streetscape Elements .....</b>	<b>5</b>
1. Planting Design .....	5
2. Irrigation Design .....	6
3. Street Trees .....	6
4. Hardscape Elements:.....	7
a. Furnishings .....	7
b. Street Lighting.....	9
5. Screening Standards.....	9
a. General.....	9
b. Parking Lots .....	9
c. Service / Trash Collection Areas .....	10
d. Screen Materials .....	11
6. Pedestrian and Parking Lot Surfaces.....	12
a. Pedestrian Surfaces.....	12
b. Parking Lot Surfaces .....	12
c. ADA Accessibility .....	12
<b>E. Architectural Standards .....</b>	<b>12</b>
1. Site Planning .....	12
2. Signage.....	13
3. Building Façade.....	13

## List of Figures

Figure 1 - Applicability Map .....	4
Figure 2 - Planting Design Example.....	5
Figure 3 - Street Tree Placement .....	6
Figure 4 – Street Light Placement.....	9
Figure 5 – Parking Screen .....	9
Figure 6 – Service Screening with Landscape & Wall.....	10
Figure 7 – Service Screening with Landscape & Fence.....	11

## Appendix:

Appendix A:	Definitions
Appendix B:	Required Elements Matrix
Appendix C:	Street Trees
Appendix D:	Planting – Irrigation Details

## Credits and Acknowledgements

### Camas City Council

Paul Dennis, Mayor  
Greg Anderson  
Don Cheney  
Linda Dietzman  
Helen Gerde  
Scott Higgins  
Steve Hogan  
Melissa Smith

### Planning Commission

Bryan Beel  
Carol Collier  
Shelly Damore  
Mary Kufeldt-Antle, Vice Chair  
Tim Hein, Chair  
Troy Hull  
David Shepherd

### Downtown Vision Coalition

Design & Infrastructure Committee

### City Administration

Lloyd Halverson, City Administrator

### City Staff

Phil Bourquin, Community Development Director  
James Carothers, Engineering Manager  
Sarah Fox, Planner II  
James Hodges, Engineering Project Manager  
Jeff Englund, Engineering Technician

### Consultants

Christopher A. Baumann LA  
Daniel G. George LA, APA, ASCA

Planning Solutions, Inc.  
1601 Broadway  
Vancouver WA 98663  
360-750-9000  
psi@planningsolutionsinc.com

## A. How to Use this Document

The Downtown Design Manual has been developed by downtown business owners in conjunction with the City of Camas. This document provides general requirements geared towards businesses considering renovations, expansions, or new site development.

The following process is suggested:

1. Read this document and note requirements that may apply to your project. Be sure to review the Appendix section. All words included in the Definitions appendix have been underlined (and are noted as bold) within this manual. Example: **Definition**
2. Review and define your project, then re-read this document.
3. If you have questions, contact the City of Camas Planning Division (360) 817-1562 to review your project. City staff will be happy to discuss your project and how it relates to this Downtown Design Manual, as well as other City codes.

## B. Purpose

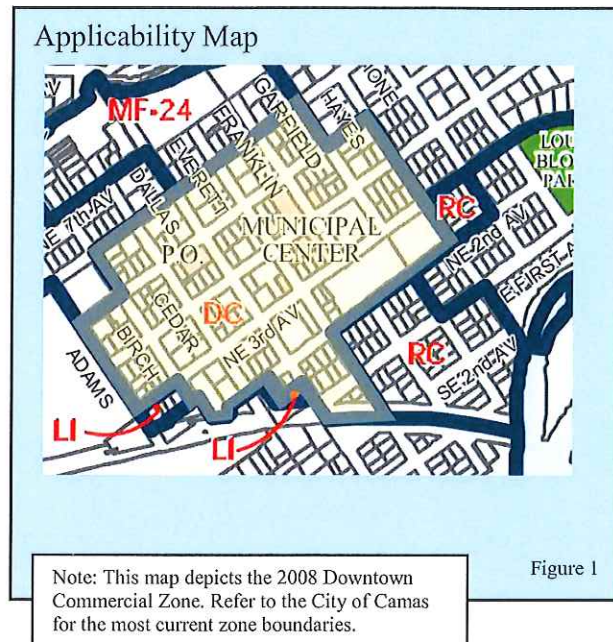
The Downtown Design Manual is intended to provide guidance for new development and redevelopment within the existing downtown core. This type of development is further expected to:

1. Achieve the goals and objectives of the City of Camas Comprehensive & Capital Facilities Plan;
2. Enhance livability, environmental quality and economic vitality with a mix of uses downtown;
3. Maximize efficient use of public facilities and services;
4. Create a safe, attractive, and convenient environment for a variety of uses including living, working, and recreating with retail businesses on the street level and housing/office units on upper levels;
5. Encourage economic development in the area by creating an environment that attracts a broad and diversified consumer base to the downtown core;
6. Encourage an economically viable atmosphere that will attract new business to the downtown core.
7. Encourage sustainable development practices.



### C. Applicability / General Requirements

1. The provisions of this section shall be applied to public spaces and private parcels located within the City of Camas downtown commercial zone. (Refer to Figure 1) The boundary is intended to include both sides of the street.
2. Private parcels shall be required to implement the improvements identified within this section for:
  - (a) all new uses;
  - (b) all **changes of use**;
  - (c) the expansion of any building or development as defined in Camas Municipal Code (“CMC”) Section 18.18.020(A) exceeding twenty percent of the existing floor or site area, or any one thousand square foot addition or increase in impervious coverage thereto, whichever is lesser.
3. The following activities are exempt from the requirements of this section.
  - (a) Routine or emergency repair or maintenance of public or private buildings, structures, landscaping or utilities;
  - (b) Interior remodeling.
4. If the requirements of the Downtown Design Manual conflict with other regulations, the more stringent of the two shall apply.
5. All work associated with the implementation of the Downtown Design Manual on private parcels shall be constructed and maintained by the land owner, unless otherwise noted.
6. All required improvements shall be subject to Design Review (CMC 18.19) prior to building permit issuance. In addition, projects may be subject to Site Plan Review (CMC 18.18) prior to building permit issuance. Project proponents are urged to contact the City of Camas for all required approval processes.
7. All work shall be completed in accordance with City of Camas Municipal Code.
8. Refer to Appendix B for a Required Elements Matrix.



9. Standards, materials, finishes, and colors specified within this manual, and the attached appendices, may be substituted with other similar elements with review by the Design Review Committee and approval by the City of Camas decision maker.

#### D. Streetscape Elements

The Downtown Design Manual is intended to provide a high degree of landscape amenities, tree lined streets, attractively landscaped frontages, screening of service areas, street furnishings, and pedestrian areas as part of a unified design.

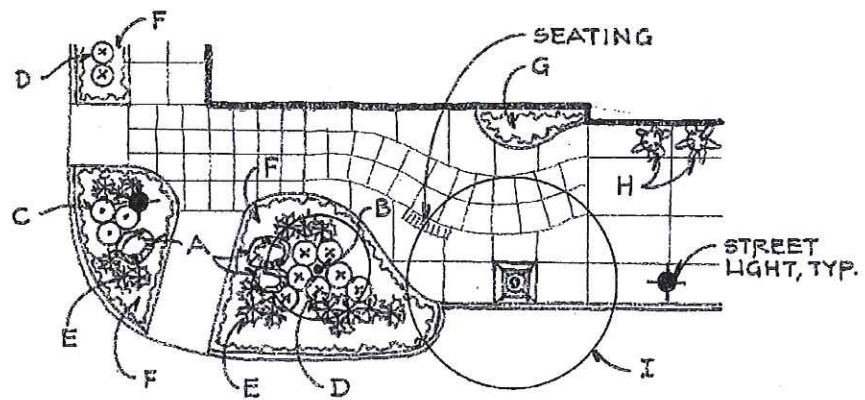


##### 1. Planting Design

(a) On-site plantings that abut the public right of way shall provide multiple layers of plantings, including canopy trees, understory trees, shrubs and groundcover. Seasonal interest is encouraged to be enhanced through the use of plant materials that provide seasonal color, fragrance, and specimen plant materials. Refer to Figure 2 for a planting example.

(b) Landscape materials shall be installed per Appendix D. Landscaping should not exceed 30" high on corners.

(c) Hanging baskets shall be installed so that the bottom of the basket is a minimum of 80 inches (6'8") above the finished grade of the public sidewalk. An exception to this is provided when an effective barrier such as a raised planter box, potted plant, or other physical barrier is located on the ground



- A OPTIONAL BOULDERS
- B SMALL ACCENT TREE
- C LOW EVERGREEN SHRUBS
- D LOW OR MEDIUM EVERGREEN SHRUBS
- E PERENNIALS
- F ORNAMENTAL GRASSES AND/OR GROUND COVER
- G PLANTER POCKET WHERE PRACTICAL W/ ESPALIER & ANNUALS
- H FLOWER POTS
- I STREET TREE

Planting Design Example Figure 2

in such a way as to effectively mitigate a hazard created by the hanging basket.

(d) All plant materials shall meet or exceed specifications established by the American Association of Nurserymen for nursery stock, and be suitable for the climatic conditions encountered in Camas, Washington.

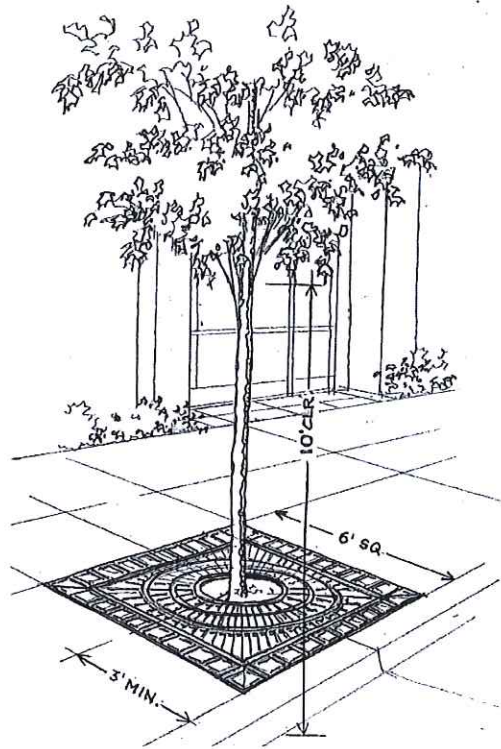
(e) A landscape maintenance plan per the American Association of Nurserymen's standards, and approved by the City of Camas, shall be recorded as a covenant on the project parcel for landscaping located on private property,

## 2. Irrigation Design

(a) All landscape plantings shall be irrigated with an automatic, underground irrigation system designed with water conservation in mind. Utilization of techniques such as separate water zones based on soil type, sun exposure, and plant water requirements are encouraged. Hanging baskets and individual planter pots may be hand watered. All irrigation materials located within the public right-of-way shall utilize the materials and construction techniques as listed in Appendix D and the City of Camas Design Standards Manual.

## 3. Street Trees

- (a) Trees selected for use as street trees shall be long-lived species possessing qualities suitable for an urban streetscape including branching characteristics, rooting characteristics, disease resistance, and non-fruiting. Street Trees shall be selected from Appendix "C" or the Camas Design Standard Manual (This manual is available online at <http://www.ci.camas.wa.us/pworks/engforms.htm>).
- (b) Street trees shall be a minimum of 2-inch caliper, fully branched, and staked at the time of planting.
- (c) Street Trees shall be maintained to provide eight feet of clearance area under the canopy at the sidewalk and 10 feet of clearance at the street, per Figure 3.
- (d) Street trees shall be planted on all street frontages at minimum 30 feet on-center spacing, as measured along the abutting curb.
- (e) Street trees shall be placed a minimum of two and one-half feet from the back of the curb as measured from the center of the tree, unless otherwise specified by the City of Camas decision maker, per Figure 3.
- (f) Street tree planters shall be covered with American with Disability ("ADA") accessible tree grates that are a minimum of six feet by six feet, street tree placement shall not



impede pedestrian access and shall allow for a minimum six foot **path of travel** (the ADA accessible **tree grates** may be placed within the **path of travel** to meet these specifications).

- (g) A limited **tree grate** exception may be granted for instances where **street trees** must be placed in planter beds. Such planter beds must be at least twice the size of a standard **tree grate** tree planter, must be landscaped per this section, must be irrigated per this section, and must allow for a minimum six foot **path of travel**.
- (h) **Street trees** shall be irrigated per Appendix D.
- (i) **Street tree** planters, where allowed, shall include root barriers.

#### 4. **Hardscape** Elements

**Hardscape** Elements provide a high degree of pedestrian amenity that encourages outdoor social interaction, promotes a sense of place, and public security. The introduction of **hardscape** elements such as natural stone, sculpture, **water features**, **drinking fountains**, decorative sidewalks (e.g. **scored concrete**, colored concrete, pavers, etc.), **enhanced paving**, **accent lighting**, **site furnishings**, recreational facilities, and the like are strongly encouraged.



- (a) **Furnishings**
  - (1) Furnishings shall consist of benches, **drinking fountains**, trash receptacles, and bike racks. Furnishings shall be placed such as to not impede or constrict pedestrian movement or ADA Accessibility. Outdoor seating associated with a food or beverage business may be authorized in accordance with Appendix “E”.
  - (2) Benches shall be placed within the public sidewalk, private parcels, pocket plazas and parks to encourage social interaction and extend the length of stay in the area. At a minimum one bench should be located on each side of a city block. Where opportunities exist to locate more than one bench, benches should be orientated toward each other to encourage social interaction.
  - (3) **Drinking fountains** shall be ADA accessible.
  - (4) Trash Receptacles shall be placed within the public sidewalk, pocket plaza, and parks to encourage public sanitation and a litter free environment. At a minimum one trash receptacle should be located on each side of a city block near the midpoint of the block. Uses that generate a high potential for immediately disposable trash such as take out restaurants are strongly encouraged (unless

otherwise stated) to locate a trash receptacle within the **frontage** of their establishment.

- (5) Bike racks shall be placed within the public sidewalk, pocket plaza, and parks to encourage multi modal transportation and pedestrian safety. At a minimum one bike rack should be located on each side of a city block near the midpoint of the block. Uses that generate a high potential for bike parking such as arcades and movie theaters are strongly encouraged (unless otherwise stated) to locate a bike rack within the **frontage** of their establishment.

- (6) **Water features** are encouraged. Upon review by the Design Review Committee, and approval by the City of Camas decision maker, placement of a **water feature** may be in lieu of some (or all) of the required elements for a particular parcel. The Design Review Committee shall determine which streetscape elements may be substituted by the **water feature**.

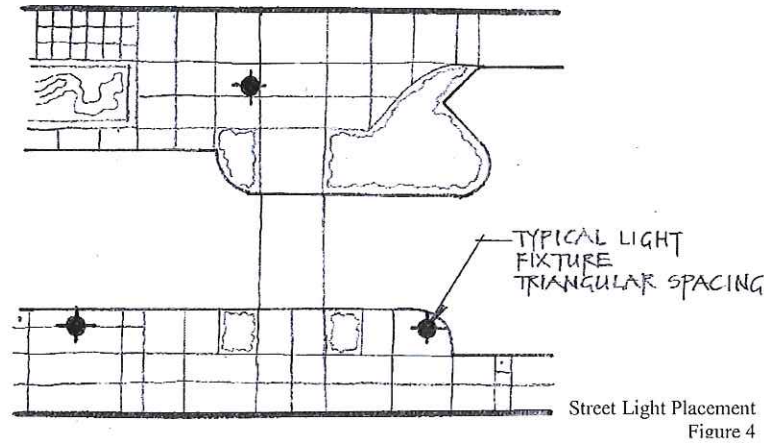


- (7) **Public art** is required to be provided at one percent of construction cost. Upon review by the Design Review Committee, and approval by the City of Camas decision maker, placement of a permanent **public art** display may be in lieu of some (or all) of the required elements for a particular parcel. The Design Review Committee shall determine which streetscape elements may be substituted by the **public art**.



(b) Street Lighting

- (1) Themed ornamental street lighting shall be located along the public right of way. Street lights shall be located utilizing a triangular spacing per Figure 4. The street light (with hanging plant bracket) shall be the City of Camas approved downtown street light.



- (2) Every lot will not be required to place a streetlight. Street light spacing will dictate those lots required to place street lights. The City of Camas decision maker shall review and approve proposed street light spacing.

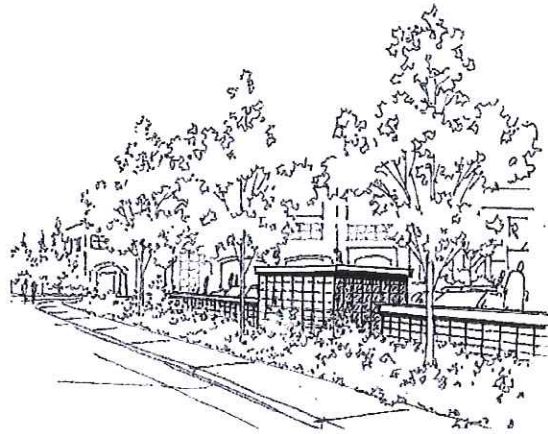
5. Screening Standards

Screening shall be utilized to obscure views of service, parking, and trash collection areas from view from the public right-of-way.

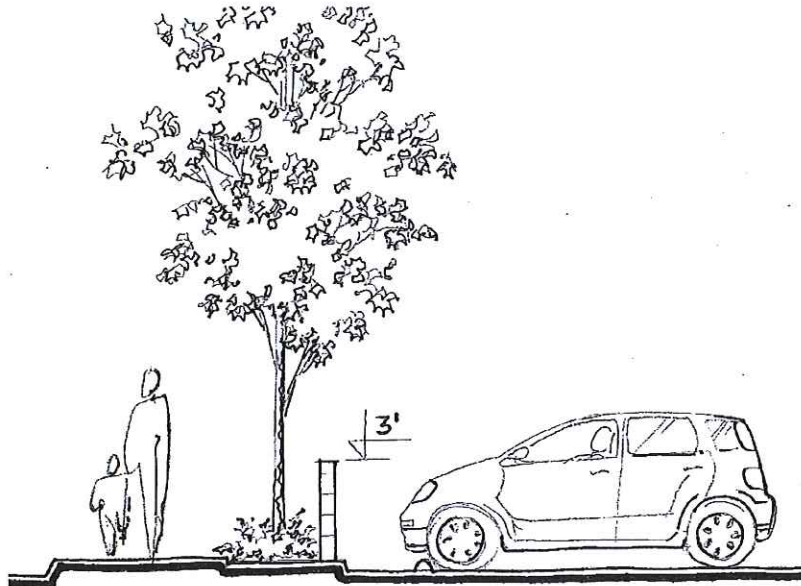
(a) General

- (1) Sight-obscuring evergreen vegetation, screen walls, or fences may be erected within the setback area of a private parcel.
- (2) Screening shall not be placed within the public right-of-way.

- (b) Parking lots abutting the public right-of-way

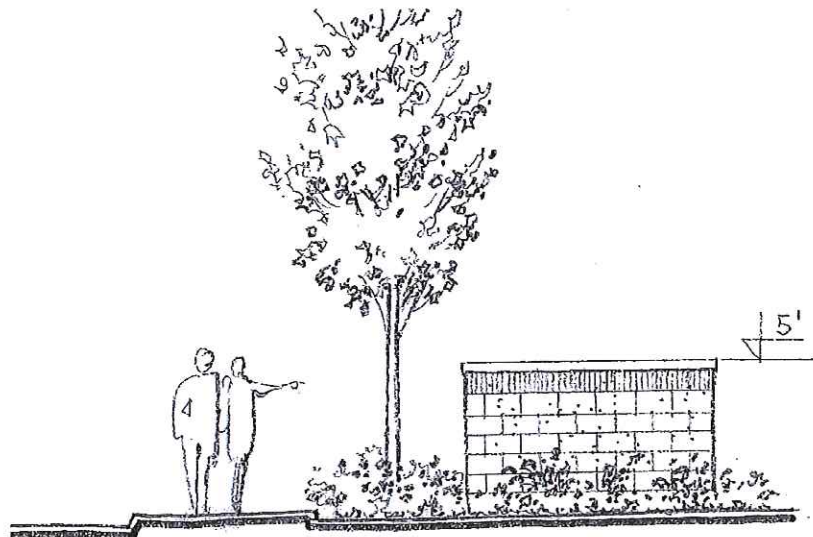


- (1) Shall be screened by a wall or fence three feet in height within a planting strip.



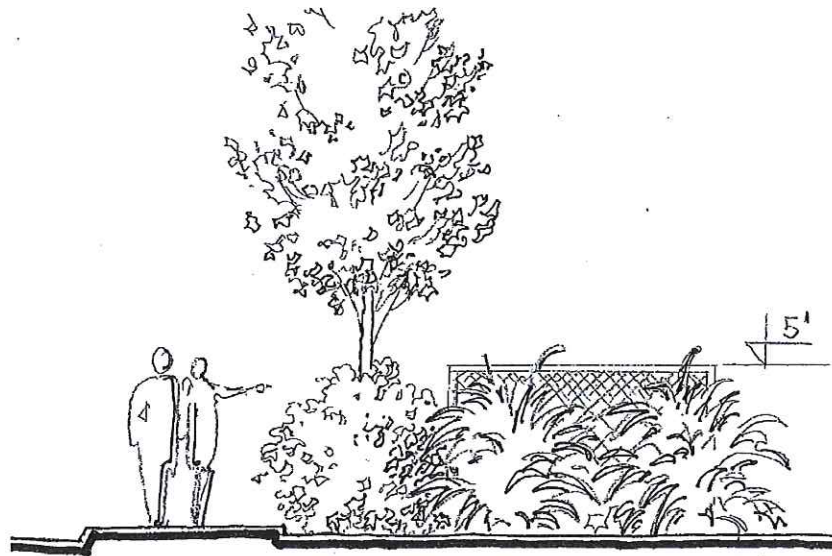
Parking Screen - Figure 5

- (2) Where sufficient room exists, small to medium size trees shall be planted twenty feet on center.
  - (3) The screen shall be placed so as to obscure the view of the parking area from the public right of way.
- (c) Service / trash collection areas abutting the public right-of-way
- (1) Shall be screened by a wall or fence five feet in height within a planting strip.



Service Screening with Landscape and Wall - Figure 6

- (2) Where sufficient room exists, small to medium size trees shall be planted twenty feet on center.



Service Screening with Landscape and Fence - Figure 7

- (3) Gates providing access to these areas shall be constructed of 100% opaque solid materials.

(d) Screen Materials

- (1) The height of any wall, fence, or hedge shall not interfere with safe lines of sight as determined by the City of Camas decision maker.
- (2) Barbed wire, razor wire, chain link, and vinyl fencing are prohibited.
- (3) Fences and walls shall be constructed of enduring materials such as wood, masonry, and concrete.
- (4) Walls and fences shall be 100% opaque.
- (5) Wall or fence screens shall provide visual interest through the use of varied building materials, textures, reliefs, architectural details, etc.
- (6) To avoid a solid or blank appearance, 20% of the face of walls and fences shall utilize varying materials, colors, and other textures.
- (7) Screening that utilizes plant materials shall incorporate plant materials capable of reaching 100% solid evergreen screen within three years of planting.

## 6. Pedestrian and Parking Lot Surfaces

### (a) Pedestrian Surfaces

- (1) Pedestrian surfaces *outside* of the right-of-way (private property) shall be constructed of an all weather continuous surface such as asphalt, concrete, colored concrete, pavers, etc. Granular materials such as gravel may be approved by the City of Camas decision maker.
- (2) Pedestrian surfaces within the public right-of-way shall be concrete per the City of Camas standard sidewalk, unless otherwise reviewed by the Design Review Committee and approved by the City of Camas decision maker.

### (b) Parking Lot Surfaces

- (1) Parking lot surfaces shall be constructed of an all weather continuous surface (e.g. asphalt, concrete, permeable paving, bricks, interlocking pavers). Gravel and dirt surfaces are not permitted.

### (c) ADA Accessibility

- (1) Notwithstanding any section of the design standards, applicable provisions of the American with Disabilities Act (ADA) shall at all times be implemented within the area. ADA design standards shall be subject to review and approval by the Building Official and City of Camas decision maker.

## E. Architectural Standards

### 1. Site Planning

- (a) New construction shall orient the main public entrance toward the public right of way.
- (b) Parking areas shall be located to the rear or side of the structure. Parking shall not occupy more than 10% of the project **frontage** along the public right of way. Corner lots may be allowed additional **frontage** parking (on the **minor side street**) with additional screening per review by the Design Review Committee and approval by the City of Camas decision maker. Where possible parking areas shall be accessed from an alley, buildings should be located to provide a continuous colonnade along the public right of way. Parking requirements can be found within Title 18 CMC.



- (c) Feature areas should be incorporated to provide outdoor use areas such as sidewalk dining, sidewalk merchandising, courtyards, nooks, balconies, alcoves or terraces.
- (d) Sufficient space shall be provided for refuse storage (and required screening) outside of the public right-of-way.
- (e) The intent of these standards is not to move existing buildings.
- (f) Downspouts shall not direct water across sidewalks.

## 2. Signage

- (a) Signage shall be per the City of Camas Sign Ordinance.

## 3. Building Façade

- (a) Building elevations visible from the public right of way should be designed to provide architectural interest and individual character.



Example of rain protection

- (b) **Glazing** fronting the street shall be utilized on a minimum of 40%, to a maximum of 80% of the ground floor elevation abutting the public right of way. Components of Energy Smart Design should be considered where **glazing** is utilized.
- (c) **Rain protection** attached to buildings shall be provided along the public right of way consisting of a five foot width minimum cover along 90% of the building facade. The building may not cantilever into the public right-of-way to achieve **rain protection**. **Rain protection** may take the form of a canopy projection, recessed entry, overhead balcony, or combination thereof.

- (d) Architectural detailing should be utilized to provide visual interest and individual character. Elevations abutting the public right of way should incorporate a high degree of architectural detailing including but not limited to the use of relief panels, **cornice** work, window trim, balconies, overlooks, nooks, alcoves, shade panels, **rain protection**, finish textures, multiple color palettes, and staggered wall sections. Detailing shall be compatible with the existing and surrounding downtown area.



Example of detailing

- (e) Building Materials shall be selected for their enduring qualities. Recycled or renewable materials should be utilized where practical. Preferred materials include natural stone, masonry, wood, architectural grade metal, architectural grade composite materials, concrete, precast concrete products, and stucco.
- (f) Materials specifically prohibited include vinyl siding and exposed plywood products. This shall not be interpreted to preclude laminated doors or the use of plywood in soffits. Materials shall be compatible with the existing and surrounding downtown area.
- (g) Roof mounted equipment shall be screened from view from the street by providing a **parapet** or cornice at least equal in height to the equipment, and by painting the equipment to match the roof. For flat roofs the **parapet** shall surround the perimeter of the building. Screening shall be compatible with rooflines and materials so that the roof lines are harmonious.
- (h) Building colors shall be chosen to be compatible with neighboring structures, and natural or earth-tone colors shall predominate.



## Appendix A – Definitions

- Accent lighting: controlled and focused light used to accent exterior elements or architectural details.
- Canopy trees: a species of tree which normally bears crown foliage no lower than eight feet above ground level upon maturity.
- Change in Use: change in the activity or purpose for which land or premises, or a building thereon is designed, arranged, or intended, or for which it is occupied or maintained, rented or leased as determined by the City of Camas Community Development Director.
- Cornice: any prominent, continuous, horizontally projecting feature surmounting a wall or other construction.
- Covenant: an agreement, usually formal, between two or more persons to do or not do something specified.
- Deciduous: trees that drop all or most of their leaves in winter.
- Drinking fountain: a public structure to provide drinking water.
- Enhanced paving: any permeable or impermeable decorative pavement material intended for pedestrian or vehicular use. Examples of enhanced pavement include brick or stone pavers, grass paver, exposed aggregate concrete, and stamped pavement.
- Evergreen: trees that keep all or most of their leaves or needles year-round.
- Fragrance: the state or quality of having a pleasant odor.
- Frontage: that portion of a parcel of property which abuts a dedicated public street or highway, or private road or driveway approved by the City of Camas decision maker.
- Glazing: windows or transparent material on a building façade.
- Groundcover: natural plants of species which normally reach a height of less than two feet upon maturity, installed in such a manner so as to form a continuous cover over the ground.
- Hardscape: Elements added to a natural landscape, such as paving stones, paving, walkways, irrigation systems, roads, retaining walls, sculpture, street amenities, fountains, and other mechanical features.
- Landscape located on private property: landscape materials located and/or installed by the property owner.
- Minor side street: Local streets providing direct access to abutting land and access to the higher level arterials. They offer the lowest level of mobility and usually contain no bus routes. Service to through traffic movement usually is deliberately discouraged.
- Parapet: a low screen wall at the edge of a balcony or roof.
- Path of travel: a continuous, unobstructed way of pedestrian passage by means of which an area may be approached, entered, and exited, and which connects the area to an entrance to a facility or other nearby areas.
- Public art: works of art in any media that has been planned and executed with the specific intention of being sited or staged in the public domain, outdoors and

accessible to all. Examples of public art could be water features, ornamental street furniture, statues, historic wall plaques, and murals.

- Rain protection: device or architectural detail designed to provide relief from inclement weather
- Seasonal color: the use of blooming annuals, flowering perennials, and tree/shrubs, and foliage color to accent landscape design with an ever-changing display of color.
- Scored concrete: A concrete sidewalk that is etched in a pattern (typically 30" square).
- Shrubs (bushes): woody plants of relatively low height, having several stems arising from the base, and lacking a single trunk.
- Site furnishings: man-made articles (such as benches and trash receptacles) that are needed in public spaces to service the needs of the public, or that assist in the safe and orderly management and use of the space.
- Specimen plants: Specimen plants are plants grown by themselves in a lawn or garden for ornamental effect, rather than being massed with others as are bedding plants or edging plants. Specimen plants can thus serve as focal points in landscape design. An example of a specimen plant is a flowering tree that has a prominent spot reserved for it on a lawn.
- Street tree: Any tree planted or maintained within the public easement. All new replacements will be selected from Appendix "C" or the Camas Design Standard Manual.
- Tree grate: coverings for tree wells designed to provide visual accent, ADA walkable surfaces, and space for water and air infiltration. See appendix D.
- Understory trees: small tree such as dogwood and holly, which rarely grow tall, and grow in the shade of a larger tree's canopy.
- Water feature: a landscape focal point with either still or moving water; may include fountains, waterspouts, waterfalls, formal or informal ponds, bogs, or container water gardens.

## Appendix B – Required Elements Matrix

Design Feature	Required Elements	Encouraged Elements
Landscape	Street trees @ 30' o.c. minimum	Seasonal color
	Multiple layers of plantings	Fragrance
	Canopy trees	Fall color
	Understory trees	Specimen plants
	Shrubs	
	Groundcover	
	Individual character	
	Maintenance plan covenant	
	Irrigation	
Hardscape	ADA Accessible tree grates <sup>1</sup>	Benches
	Street lighting <sup>2</sup>	Trash receptacle
	Public art (1% of construction cost)	Bike racks
		Drinking fountains
		Water Feature
Screening (parking lots)	3' wall or fence in landscape strip	
	Visual interest – no blank walls	
	Medium size trees 20' o.c. minimum <sup>3</sup>	
Screening (service / trash collection areas)	5' wall or fence in landscape strip	
	Visual interest – no blank walls	
	Medium size trees 20' o.c. minimum <sup>4</sup>	
	100% solid opaque gates	
Private Pedestrian & Parking Surfaces	All weather concrete or asphalt	Pavers, Colored Concrete
	ADA accessibility	
	Minimum 4' pedestrian path of travel	
Pedestrian Surfaces w/in Public Right-of- Way	ADA accessibility	Meandering sidewalks with special concrete scoring patterns
	Decorative sidewalk (e.g. <u>scored concrete</u> , colored concrete, pavers, etc.)	
	Minimum <del>6</del> 4' (48") pedestrian path of travel	
Architectural / Site Planning	10 % maximum parking abutting the project frontage along the public way <sup>5</sup>	Parking accessed from alley
	Main entrance oriented towards public way	Building located to form continuous colonnade along

		frontage
<b>Design Feature</b>	<b>Required Elements</b>	<b>Encouraged Elements</b>
Architectural / Site Planning continued	40% minimum to a maximum of 80% glazing of the ground floor elevation abutting the public way	Feature areas such as courtyards, sidewalk merchandising, etc.
	5' wide rain protection attached to building along 90% of frontage <sup>6</sup>	Retail or restaurants on street level.
	Roof mounted equipment screening via parapet or cornice	Office and residential units on upper floors.
	Architectural detailing compatible with the existing downtown area	
	Architectural materials compatible with the existing downtown area	
	Natural – Compatible Colors	Energy Smart design

<sup>1</sup> Limited Exceptions (D.3.i).

<sup>2</sup> Dependent on approved light spacing (D.4.b.2).

<sup>3</sup> Where sufficient room exist (D.5.b.2).

<sup>4</sup> Where sufficient room exist (D.5.c.2).

<sup>5</sup> Corner lots may be allowed additional frontage parking (on the minor side street) with additional screening per review and approval (E.1.b).

<sup>6</sup> The building may not cantilever into the public right-of-way to achieve rain protection (E.3.c).

## Appendix C – Street Trees

This short list of trees is commonly found within the downtown commercial core of the city. An expanded list of approved street trees is located within the *Camas Design Standard Manual* (<http://www.ci.camass.wa.us/pworks/engforms.htm>).

### Minimum 4' Planting Strip Width

Common Name:	Scientific Name:	Cultivar:	Height (in FT)	Width (in FT)
Raywood Ash	<i>Fraxinus oxycarpa</i>	Raywood	40	28
Leprechaun Ash	<i>Fraxinus pennsylvanica</i>	Johnson	18	16
Capital Pear	<i>Pyrus calleryana</i>	Capital	35	12
Chanticleer Pear	<i>Pyrus calleryana</i>	Chanticleer	40	15
Redspire Pear	<i>Pyrus calleryana</i>	Redspire	35	25

### Minimum 6' Planting Strip Width

(\*Refer to 4' tree list for additional trees for use under power lines)

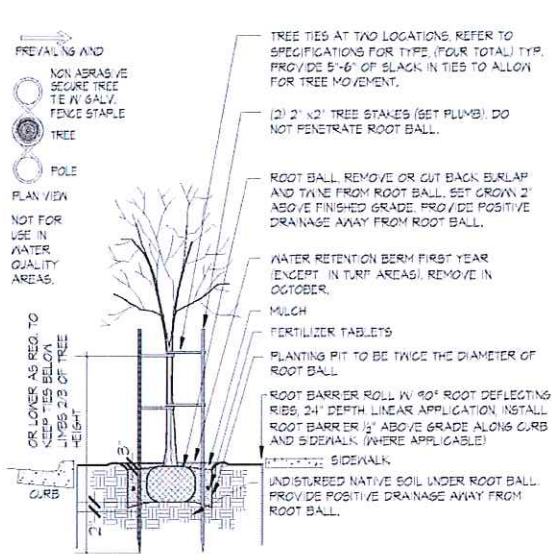
Common Name:	Scientific Name:	Cultivar:	Height (in FT)	Width (in FT)
Columnar Norway Maple	<i>Acer platanoides</i>	Columnar	35	15
European Hornbeam	<i>Carpinus betulus</i>	Fastigiata	35	25
Marshall Ash	<i>Fraxinus pennsylvanica</i>	Marshall	50	40
Summit Ash	<i>Fraxinus pennsylvanica</i>	Summit	45	25
Aristocrat Pear	<i>Pyrus calleryana</i>	Aristocrat	40	28
Greenspire Linden	<i>Tilia cordata</i>	Greenspire	40	30
Sterling Silver Linden	<i>Tilia tomentosa</i>	Sterling	45	35
Wireless Zelkova	<i>Zelkova serrata</i>	Schmidtlow	25	35
Village Green Zelkova	<i>Zelkova serrata</i>	Village Green	40	38

### Minimum 8' Planting Strip Width

(\*Refer to 4' tree list for additional trees for use under power lines)

Common Name:	Scientific Name:	Cultivar:	Height (in FT)	Width (in FT)
Crimson King Maple	<i>Acer platanoides</i>	Crimson King	40	35
Emerald Queen Maple	<i>Acer platanoides</i>	Emerald Queen	50	40
Summershade Maple	<i>Acer platanoides</i>	Summershade	42	40
Green Vase Zelkova	<i>Zelkova serrata</i>	Green Vase	50	40

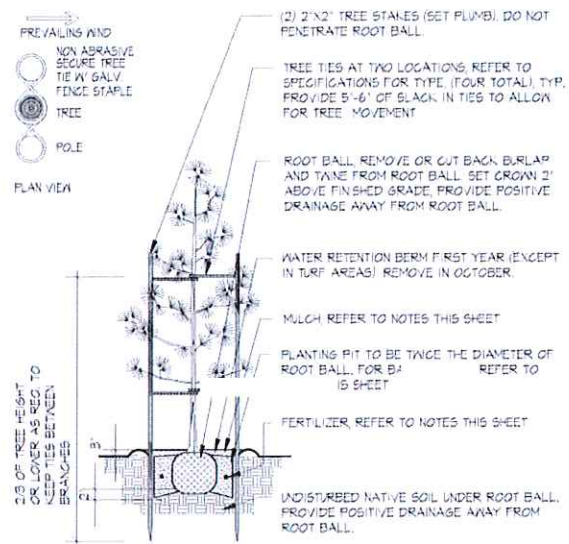
## Appendix D – Planting & Irrigation Details



**A B & B Tree Planting Detail**

Not To Scale

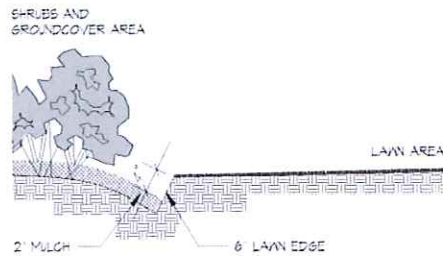
SECTION / PLAN VIEW



**B B & B Tree Planting Detail: Evergreen under 8' Height**

Not To Scale

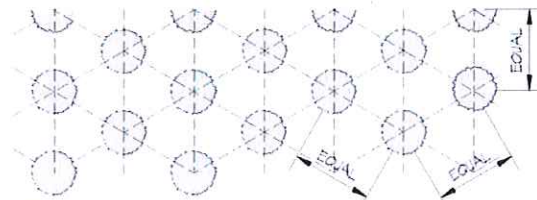
SECTION / PLAN VIEW



**C Lawn Edge Detail**

Not To Scale

SECTION



NOTES

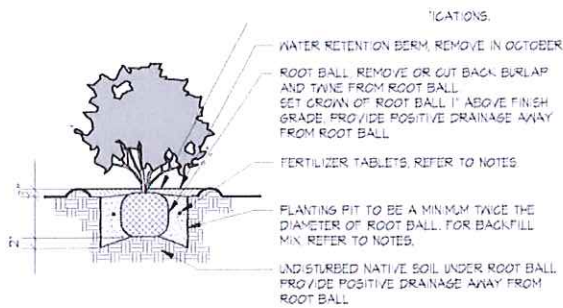
ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACINGS AS SPECIFIED IN PLANTING LEGEND.

GROUND COVER TO BE LOCATED ONE HALF OF SPECIFIED SPACINGS DISTANCE FROM ANY HARD SURFACE UNLESS OTHERWISE SPECIFIED.

**D Ground Cover Planting Detail**

Not To Scale

PLAN VIEW

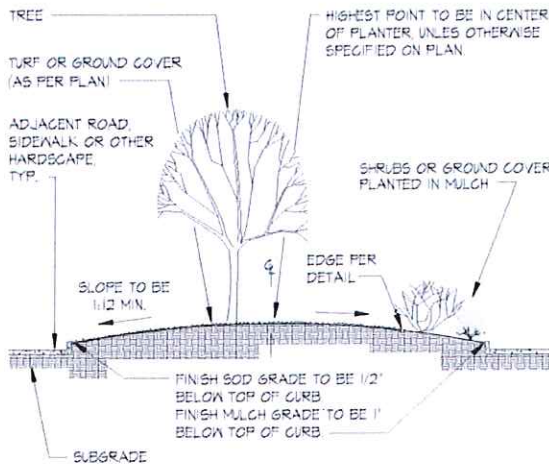


**E B & B Shrub Planting Detail**

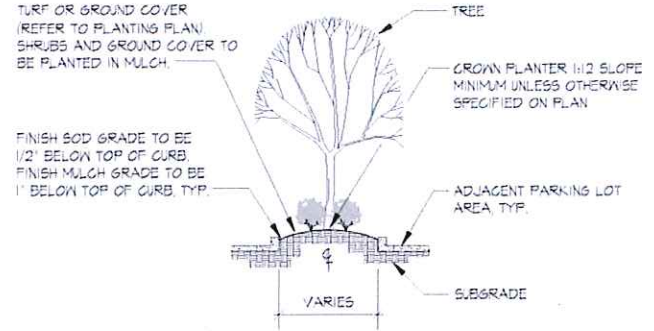
Not To Scale

SECTION

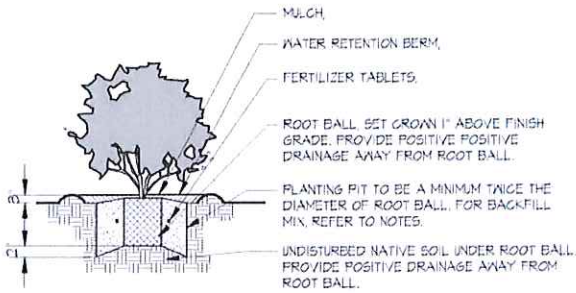
All details shown are for reference only and are intended to be used as a general guide. Specific projects will require details specific to that project.



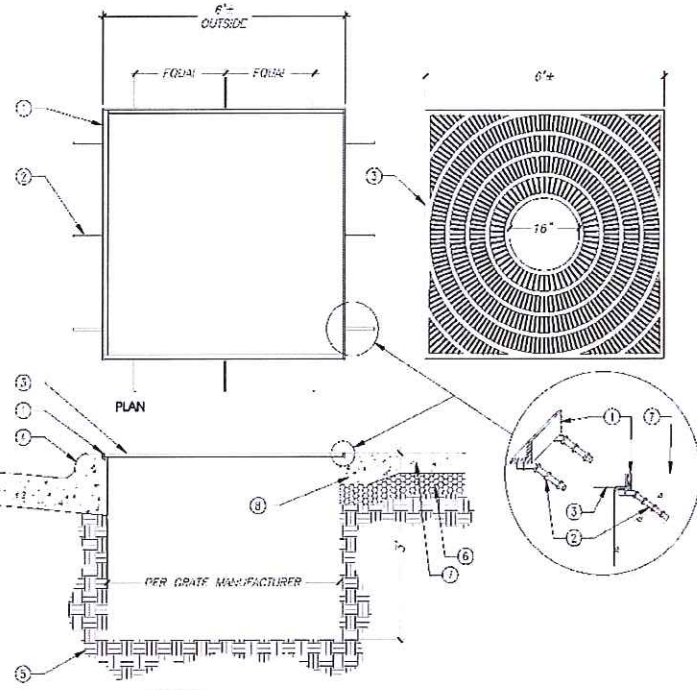
**F Typical Curbed Planter Area**  
Not To Scale SECTION A-A



**G Typical Parking Finger Planter Area**  
Not To Scale SECTION B-B



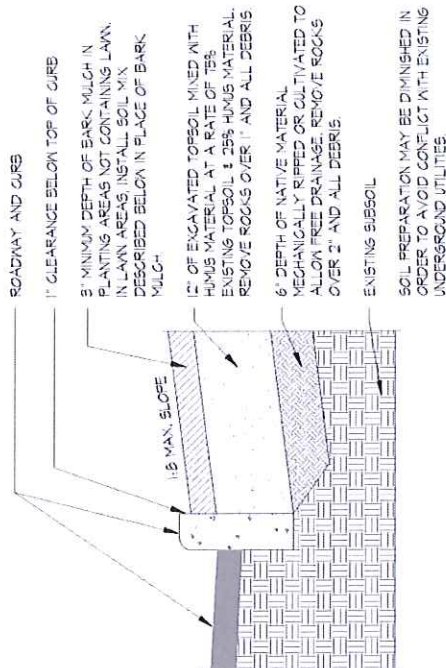
**H Container Ground Cover Planting Detail**  
Not To Scale SECTION



- NOTES:
- 1" X 1" X 1/4" L STEEL FRAME
  - #3 REBAR, WELD TO FRAME
  - 3/4" THICK TREE GRATE, CAST IN 2 PIECES, NO OPENINGS GREATER THAN 3/8", 16" DIA. CENTER OPENING
  - CURB AND GUTTER, REFER TO CIVIL PLANS
  - COMPACTED SUBGRADE, REFER TO CIVIL PLANS FOR 1% COMPACTION
  - LAYER OF 3/4" MINUS GRAVEL, REFER TO CIVIL PLANS
  - 4" CONCRETE SIDEWALK, SEE ENGINEERING DRAWINGS
  - THICKENED EDGE (6"x6")

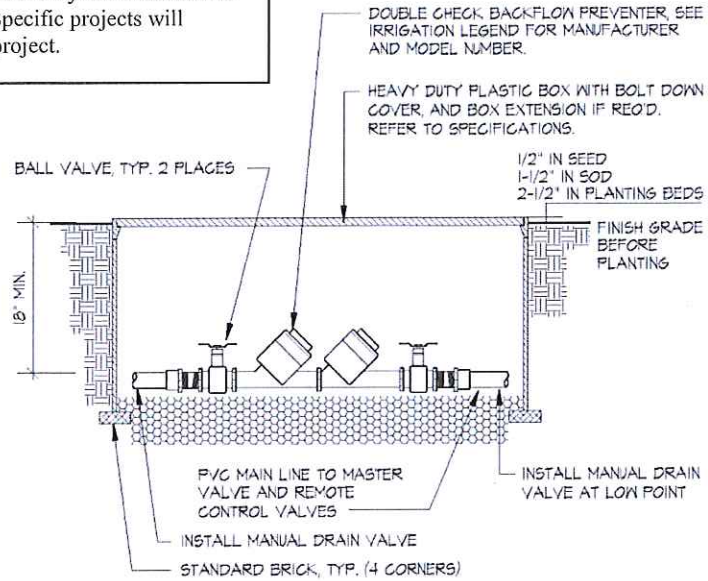
REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

**J Tree Well & Tree Grate Detail**  
Not To Scale SECTION / PLAN VIEW



**I Soil Section at Curb within Planting Strips & Finger Islands**  
Not To Scale SECTION

All details shown are for reference only and are intended to be used as a general guide. Specific projects will require details specific to that project.



NOTES:

1. EQUIPMENT TO BE INSTALLED A MINIMUM OF 24" FROM ANY STRUCTURE OR HARDSCAPING.
2. USE TEFLON TAPE ON ALL THREADED FITTINGS.

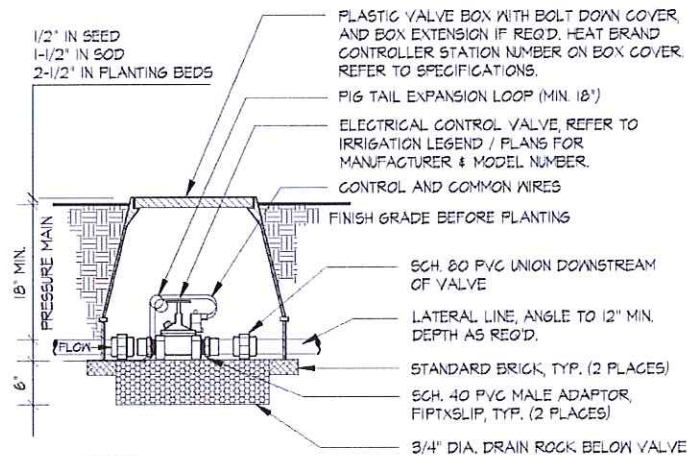


**Backflow Preventer Detail (2" & Smaller)**

Not To Scale

DOUBLE CHECK

SECTION



NOTES:

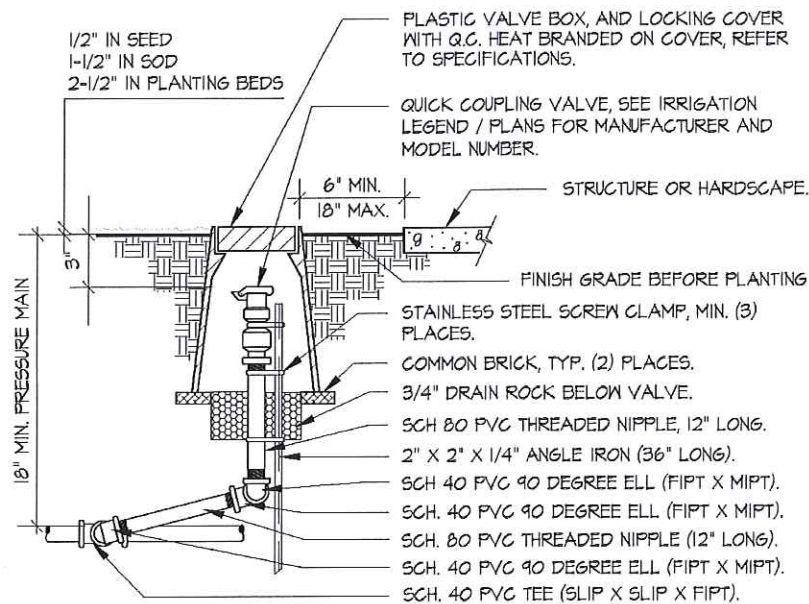
1. INSTALL VALVES A MINIMUM OF 12" FROM STRUCTURES OR HARDSCAPING.
2. INSTALL VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
3. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.
4. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH ADJACENT HARDSCAPING.
5. PLACE 3/4" DIA. DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
6. USE TEFLON TAPE ON ALL THREADED FITTINGS.



**Electric Control Valve Detail: 3" & Smaller**

Not To Scale

SECTION



All details shown are for reference only and are intended to be used as a general guide. Specific projects will require details specific to that project.

**NOTES:**

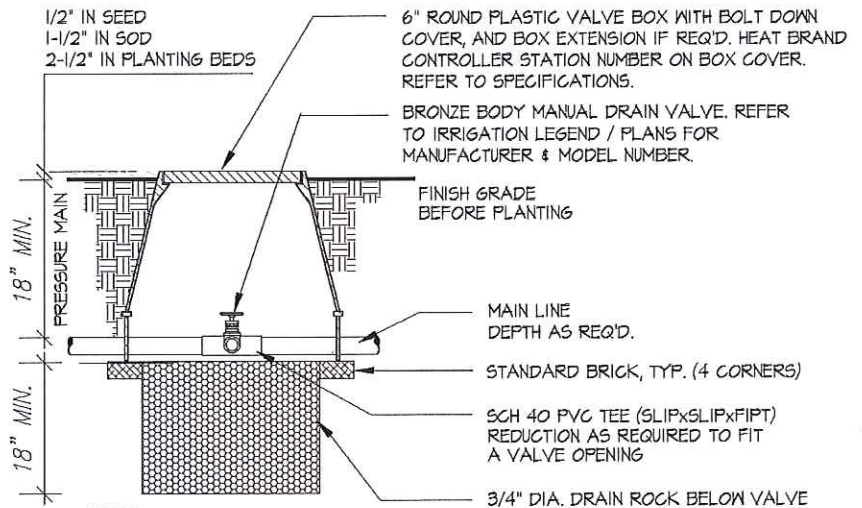
1. INSTALL QUICK COUPLING VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
2. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH ADJACENT HARDSCAPING.
3. PLACE 3/4" DIA. DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.
4. SIZE OF ASSEMBLY TO BE EQUAL TO THE FIPT OF THE QUICK COUPLER.

SPECIFICATIONS ARE INCLUDED WITHIN PLAN SHEETS, LANDSCAPE NOTES AND SPECIFICATIONS. REFER TO ALL PRIOR TO BIDDING AND CONSTRUCTION.

**C Quick Coupling Valve Detail (Within Valve Box)**

Not To Scale

SECTION



**NOTES:**

1. PLACE VALVE BOX AT RIGHT ANGLES TO STRUCTURES OR HARDSCAPING.
2. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH ADJACENT HARDSCAPING.
3. PLACE 3/4" DIA. DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.

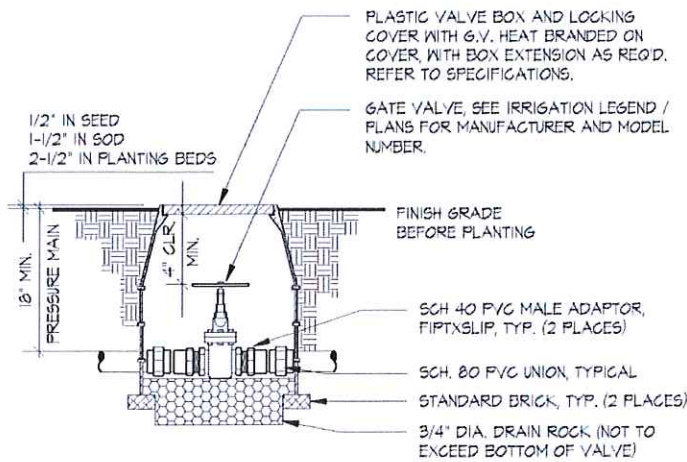
SPECIFICATIONS ARE INCLUDED WITHIN PLAN SHEETS, LANDSCAPE NOTES AND SPECIFICATIONS. REFER TO ALL PRIOR TO BIDDING AND CONSTRUCTION.

**# Manual Drain Valve**

Not To Scale

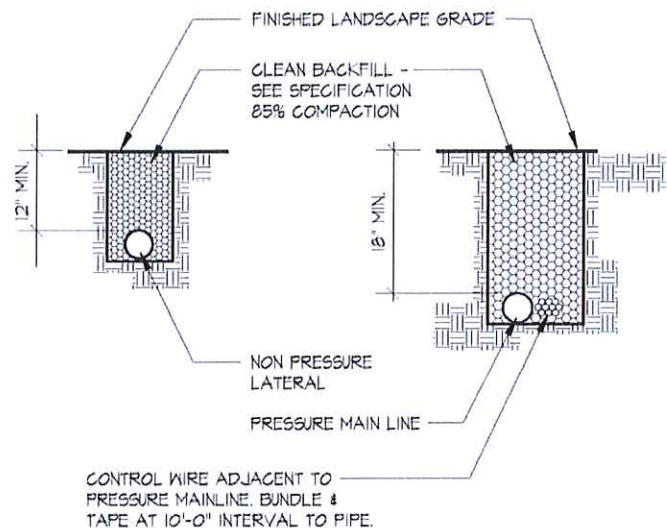
SECTION

All details shown are for reference only and are intended to be used as a general guide. Specific projects will require details specific to that project.



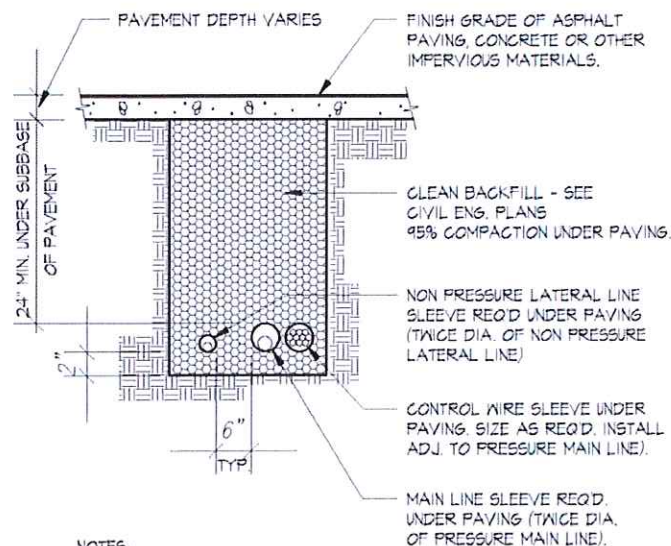
NOTES:

1. INSTALL GATE VALVES A MINIMUM OF 12" FROM STRUCTURES OR HARDSCAPING.
2. INSTALL GATE VALVES IN PLANTING BEDS WHEREVER POSSIBLE.
3. INSTALL VALVE BOX SO THAT TOP OF VALVE BOX IS FLUSH WITH ADJACENT HARDSCAPING.
4. USE TEFLON TAPE ON ALL THREADED FITTINGS.
5. PLACE 3/4" DIA. DRAIN ROCK PRIOR TO INSTALLATION OF VALVE BOX.



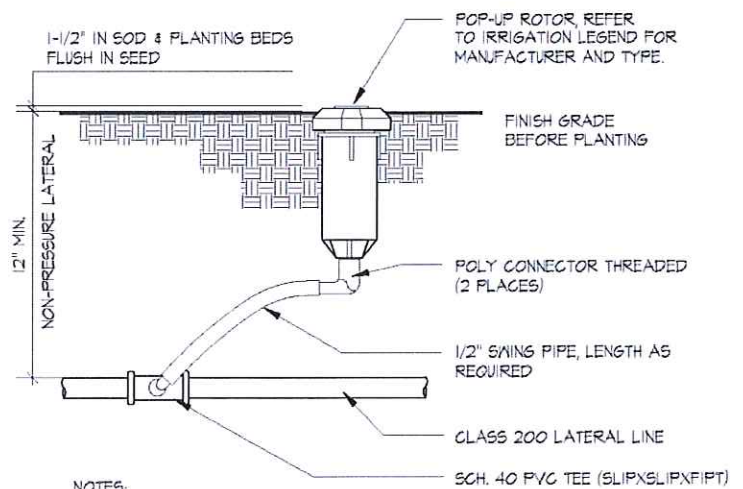
**G Pipe Trenching Detail (w/in Landscape Areas)**  
Not To Scale SECTION

**E Gate Valve Detail: Threaded Ends (3" & Smaller)**  
Not To Scale SECTION



NOTES:

1. ALL SLEEVES TO BE SCH. 40 PVC.
2. EXTEND ALL SLEEVES 12" BEYOND EDGE OF HARDSCAPING AT BOTH ENDS, CAP ENDS AND FLAG LOCATIONS.

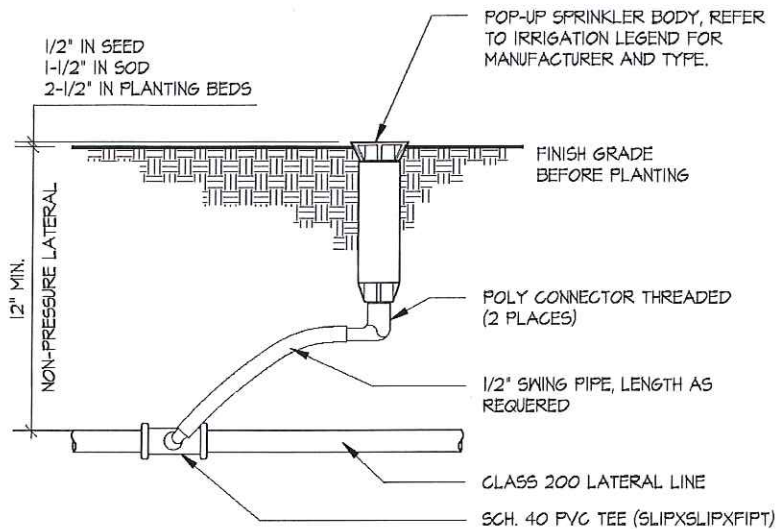


NOTES:

1. LOCATE HEAD 2" FROM WALKS, CURBS, HARDSCAPING, MOW STRIPS, HEADER BOARDS, AND THE EDGE OF LAWN AREAS.
2. LOCATE HEAD 12" FROM STRUCTURES.

**# Pipe Trenching Under Pavement Detail**  
Not To Scale SECTION

**H Pop-Up Rotor Detail**  
Not To Scale SECTION



All details shown are for reference only and are intended to be used as a general guide. Specific projects will require details specific to that

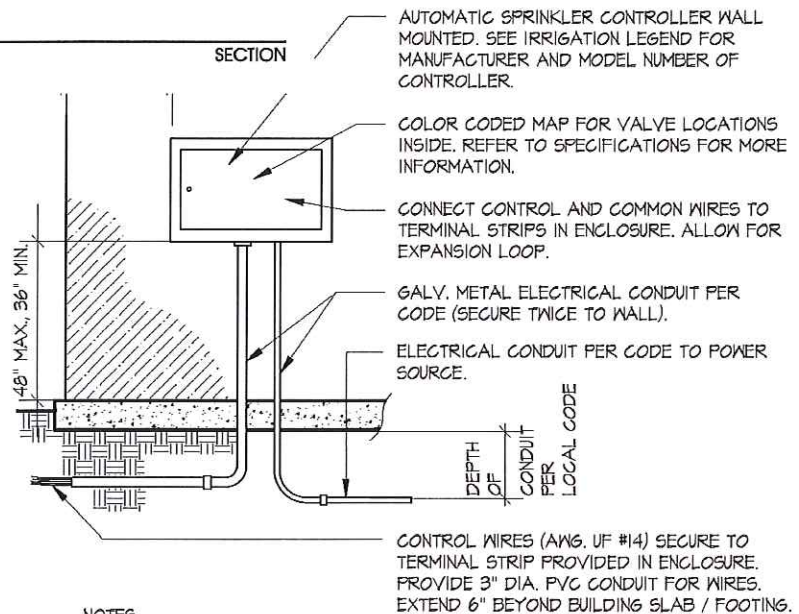
NOTES:

1. LOCATE HEAD 2" FROM WALKS, CURBS, HARDSCAPING, MOW STRIPS, HEADER BOARDS, AND THE EDGES OF LAWN AREAS.
2. LOCATE STREAM SPRAY / BUBBLERS 6" FROM ALL STRUCTURES, AND SPRAY HEADS 12" FROM ALL STRUCTURES, BUT 6" FROM ALL STRUCTURES IN GROUND COVER AREAS.

## 1 Pop-Up Spray Detail

Not To Scale

SECTION



NOTES:

1. COMMON WIRE TO BE WHITE AND CONTROL WIRE TO BE RED IN COLOR. BUNDLE AND TAPE WIRING AT INTERVALS OF 10' O.C.
2. NO SPLICES TO BE MADE BETWEEN CONTROLLER AND REMOTE VALVE UNDER 500 LINEAR FEET.
3. PAINT CONTROLLER AND CONDUIT SUPPLY LINE TO MATCH BUILDING EXTERIOR COLOR.

## 2 Automatic Controller Detail (Wall Mounted)

Not To Scale

SECTION

## **Appendix E – Outdoor Seating Associated with a Food or Beverage Business**

The City of Camas may allow outdoor seating associated with a food or beverage business subject to the following standards.

1. Submittal of an Encroachment Permit application to include a drawing of the table layout, circulation, barriers and spacing dimensions. The drawing shall include sidewalk width, table widths, barrier separation from inside the curbline, and distance from tree wells or other barriers.
2. Minimum Standards:
  - a. 48 inch cleared pedestrian sidewalk not including curb.
  - b. Encroachment not to extend beyond building limits or lease/owned space.
  - c. Barriers for areas serving alcohol shall meet standards and be a minimum of 42 inches in height with no opening greater than 10 feet along any wall.
  - d. City may allow a variation to the 48 inch standards for a distance of up to 10 feet dependent upon site constraints.
3. The City will require an insurance accord form with the City of Camas named as an additionally insured.



Community Development Department  
616 NE Fourth Avenue  
Camas, WA 98607  
(360) 817-1568

**STAFF REPORT**  
**Design Review Application for Elm Street Short Plat**  
**City File No. DR16-08**  
(Related Files: SP16-04)

---

**TO:** Design Review Committee  
**FROM:** Lauren Hollenbeck, Senior Planner  
**APPLICANT:** Kimball Custom Homes, Inc.  
**LOCATION:** 827 NW Elm Street  
Parcel number 85990000  
Camas, WA 98607

**APPLICABLE LAW:** The application was submitted on October 3, 2016 and resubmitted November 11, 2016. The applicable codes are those codes that were in effect at the date of application. Camas Municipal Code Chapters (CMC): Title 18 Zoning (not exclusively): CMC Chapter 17.21 Procedures for Public Improvements; CMC Chapter 18.19 Design Review; Camas Design Review Manual (2016); and CMC Chapter 18.55 Administration and Procedures; and RCW 58.17.

**BACKGROUND:**

The Elm Street Short Plat is a 4-lot residential short plat proposal to be located on approximately 0.28 acres of multi-family zoned property (MF-18) at the corner of NW Elm Street and NW 9<sup>th</sup> Avenue. The applicant is currently seeking design review approval for the construction of a tri-plex residential building on three of the lots with shared driveways accessed off of NW 9<sup>th</sup> Avenue. The remaining lot will include the existing single-family home. Parking is provided on site with associated landscaping.

The project area is bordered on the west and south by single-family residential homes, on the east by NW Elm Street, on the north by NW 9<sup>th</sup> Avenue. Existing duplex homes are located kitty corner from the project site.

**PURPOSE:**

Design Review is required under CMC Chapter 18.19. Design review is not intended to determine the appropriate use on a parcel but rather review a proposed development for compliance with City codes and plans related to landscaping, architectural elevations and other elements relative to required improvements. The recommendations from the Design Review Committee (DRC) must consider the general design review standards (CMC Chapter 18.19.050.A and the Camas Design Review Manual "DRM" pages 4-7), along with the the specific standards for multi-family (CMC Chapter 18.19.050.B.3.c and the DRM page 19); which are included in the enclosed Design Review Checklist.

**STANDARD, GATEWAY AND MULTI-FAMILY DESIGN PRINCIPLES AND GUIDELINES:**

The standard and multi-family principles are required and must be demonstrated to have been satisfied in overall intent for design review approval. The standard design guidelines are developed to assist a project in meeting the established principles and each guideline should be adequately addressed. If the proposal cannot meet a specific guideline, then an explanation should be provided by the applicant as to why and how it will be mitigated to satisfy the intent of the design principles. The development guidelines include five major categories: 1) Landscaping and Screening, 2) Architecture, 3) Massing and Setbacks, 4) Historic & Heritage Preservation, and 5) Circulation and Connections. **The Design Review Checklist is enclosed to help guide the DRC in reviewing the standard applicable specific design review principles and guidelines.**

**RECOMMENDATION:**

That the Design Review Committee reviews the submitted materials, deliberates, and forwards a recommendation to the Director for a final decision.

**DESIGN REVIEW CHECKLIST**  
**Elm Street Short Plat**

The purpose of this sheet is to provide a simplified and expedited review of the design review principles and guidelines using objective review standards. The standards are intended as tool for the decision-maker in making findings that the proposal either achieves compliance with the intent of the principles or reasonably mitigates any conflict. When reviewing the check sheet, the proposal should as a whole “meet” the standards and thus be generally consistent with the overriding principles. [Compliance or non-compliance with any one standard is not a determinant. However, where several standards fail, they should be offset by standards that exceed other standards]

**Standard Principles and Guidelines**

1. Landscaping should be done with a purpose. It should be used as a tool to integrate the proposed development into the surrounding environment as well as each of the major project elements (e.g. parking, buildings(s), etc.).				
Exceeds	Meets	Fails	NA	
				Landscaping, including trees, shrubs, and vegetative groundcover, is provided to visually screen and buffer the use from adjoining less intense uses and screening parking or other components viewed as being less intrusive.
				Signs are located on buildings or incorporated into the landscaping so as not to be the main focus either during the day or night. (e.g. low signs with vegetative backgrounds to soften visual impact). If illuminated they shall be front lit. Efforts have been made to make signs vandal resistant.
				Outdoor furniture samples have been submitted consistent with the overall project design.
				Proposed fencing is incorporated into the landscaping so as to have little or no visual impact.
				The vegetation to be utilized includes native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City’s Tree List. Retain significant trees if feasible.
				Landscape lighting - low voltage, non-glare, indirect lighting is directed, hooded or shielded away from neighboring properties.
				Street lighting (poles, lamps) is substantially similar or architecturally more significant than other street lighting existing on the same street and will not conflict with any City approved street lighting plans for the street.
				Parking and building lighting is directed away from surrounding properties through the use of hooding, shielding, siting and/or landscaping.
2. All attempts should be made at minimizing the removal of significant natural features. Significant natural features should be integrated into the overall site plan.				
Exceeds	Meets	Fails	NA	
				Existing trees over 6” dbh that are not required to be removed to accommodate the proposed development are retained and incorporated into the landscape plan.

				Rock outcropping's, forested areas and water bodies are retained.
3. Buildings should have a "finished" look. Any use of panelized materials should be integrated into the development in a manner that achieves a seamless appearance.				
Exceeds	Meets	Fails	NA	
				Use of corrugated materials, standing seam, T-1 11, or similar siding materials are questionable, unless it can be shown through the use of renderings or other visual applications that the use of these materials will produce a development with a high visual (or aesthetic) quality.
				Buildings walls or fences visible from roadways should be articulated in order to avoid a blank look. The walls can be broken up by including some combination of window/display space, plantings, offsetting walls with two-tone colors, or creating plazas, water features, art (civic, pop, etc.) awnings, or similar devices.
				The use of bold colors has been avoided unless used as minor accents.
				Higher density/larger structures abutting lower density residential structures have been designed to mitigate size and scale differences. In some cases, creating a natural buffer may be appropriate.
4. A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.				
Exceeds	Meets	Fails	NA	
				The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.

### Specific Principles and Guidelines

Multi-Family				
Exceeds	Meets	Fails	NA	
3. Duplex, Triplex, & Four-plex				
				Attached garages shall account for less than 50% of the front face of the structure. Garages visible from the street shall be articulated by architectural features, such as windows, to avoid a blank look.
				Buildings shall provide a complementary façade that faces the public right of way, and should be the primary entrance to a unit or multiple units, unless impracticable.



Klein & Associates, Inc.

Engineering, Land Surveying, Planning

1411 13<sup>th</sup> STREET, HOOD RIVER, OREGON 97031 / (541)386-3322 / FAX (541)386-2515

[www.kleinassocinc.com](http://www.kleinassocinc.com)

November 8, 2016

The City of Camas Planning Department  
616 NE 4<sup>th</sup> Ave  
Camas, WA 98607

Re: Elm Street Short Plat Application – DESIGN REVIEW NARRATIVE

Dear City of Camas Planning Department:

We are pleased to submit this Narrative and supporting documents for the proposed Elm Street Short Plat on behalf of Kimball Custom Homes. The 4 lot Elm Street Short Plat is proposed for the property located at 827 NW Elm Street in Camas, WA. The existing parcel has a total area of 12,248 square feet (.281 acres). New lots will be as follows:

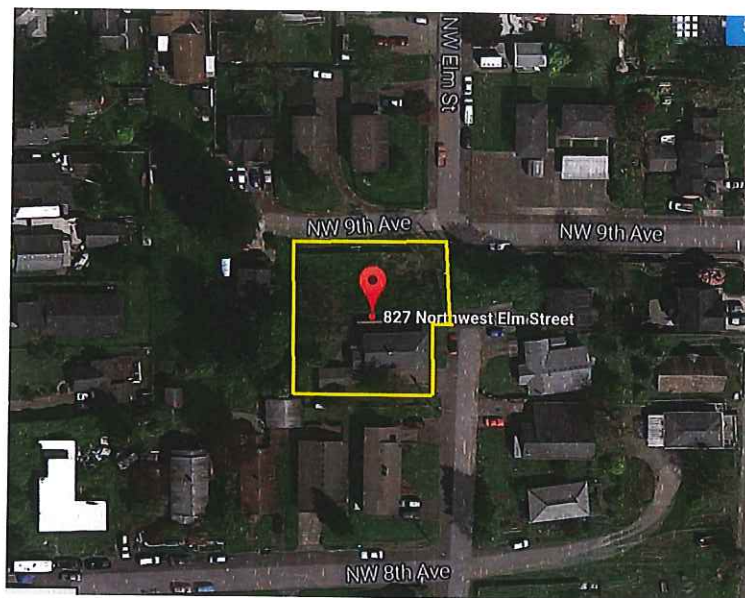
Lot 1: 5,148 sft (existing home)

Lot 2: 2,658

Lot 3: 2,107

Lot 4: 2,334

This Narrative is intended to demonstrate that the proposed short plat follows principles and goals of the City of Camas Design Review Manual as directed by Community Development. Project location is seen below.



Vicinity Map

The project is located in MF-18 zone which is Multi-Family Residential Zone. Residential lots are proposed for the project and are consistent to surrounding land use. Properties in all directions are residential structures. The project meets minimum lot sizes of 2100 square feet with minimum 20 feet in width and 60 feet depth. Lot coverage will not exceed 65%. The following required setbacks are also met by each proposed lot.

Min. front yard	10 ft
Min. front yard at garage	18 ft
Min. Side yard	3 ft
Min. side, flanking a street	15 ft
Min. rear yard	10 ft

Goals of the project coincide with goals of the Camas Design Review Manual. The project will enhance the community as there is currently a need for lower to middle income housing. NW 9<sup>th</sup> Street will be upgraded to proper street width and include a sidewalk for pedestrian use. The project will preserve character of that portion of the community as it will increase density of the area and is consistent with other buildings in the area. The project is compatible with surrounding uses as there are two duplex homes at the northeast corner of NW 9<sup>th</sup> and NW Elm (kitty corner from this project). Single-family residential homes also surround the subject lot.

Neither NW 9<sup>th</sup> nor NW Elm Streets are gateways or corridors. Gateway and corridor standard design guidelines do not apply to this project.

## **DESIGN PRINCIPLES/GUIDELINES**

### *Landscape/Screening:*

Landscape features can be seen in the Landscape Plan by the owner. Landscaping will be provided by small shrubs. This will add to the screening of the garage and driveways. No plans for signage are proposed. Lighting will be typical of residential buildings and may include lighting for driveways and front doors. Street lighting is not proposed as this was not required by the City of Camas in the pre-application notes. No outdoor furnishings are proposed for this project. No outdoor common areas are required by Community Development. Fencing is not proposed for this project.

### *Massing and Setbacks:*

Garages will be less than fifty percent of the front face of the structure. Driveways are a minimum of 18 feet long and set back a minimum of 18 feet from the property line. Building entrances will be located next to the garage on the front face of the building. Front/side/rear setbacks will be met per the following:

Min. front yard	10 ft
Min. front yard at garage	18 ft
Min. Side yard	3 ft
Min. side, flanking a street	15 ft
Min. rear yard	10 ft

Density of the proposed building is consistent with surrounding homes/apartments/duplexes.

### *Architecture:*

Garage doors will have architectural features such as windows for aesthetics. They are set back from the building face to provide greater screening for the garage door. Building entrances will be located next to the garage on the front face of the building. Architecture drawings are provided with this narrative. Architecture features are consistent with typical residential structures. This project is surrounded by other wood framed buildings and is consistent with style. Design of the building maximizes useful space and allows for an affordable option for low to middle income families. See the

architecture drawings provided. Corrugated metals and paneling are not proposed for this project. Colors will not be bold or high visibility and will be consistent with surrounding structures.

*Historic and Heritage Preservation:*

There are no historic monuments or buildings being demolished for this project. The project is not known to be located on a historic site or with archaeological significance.

*Duplex, Triplex, & Four-Plex*

Garages will be less than fifty percent of the front face of the structure. Driveways are a minimum of 18 feet long and set back a minimum of 18 feet from the property line. Building entrances will be located next to the garage on the front face of the building. See attached architecture drawings.

Sincerely,

Samuel L. Duguay, PE  
Klein & Associates, Inc.  
1411 13<sup>th</sup> Street  
Hood River, OR 97031  
541-386-3322

FOUND MONUMENT INFORMATION

- (245) FOUND 1/2" IRON PIPE SET BY I.M. GREENWOOD, PER BOOK J, PAGE 197. (HELD IN THIS SURVEY) VISITED 6-28-2016
- (246) FOUND 1/2" IRON PIPE UNKNOWN ORIGIN HELD BY WILLIAM WARD, PER BOOK 8 OF SURVEYS PAGE 38. (NOT HELD IN THIS SURVEY) VISITED 6-28-2016
- (247) FOUND 1/2" IRON ROD WITH PLASTIC CAP STAMPED "SWART 2812", NO RECORD DATA WAS FOUND BUT SEEMS TO AGREE WITH OTHER EVIDENCE. (HELD IN THIS SURVEY) VISITED 6-28-2016
- (248) FOUND 1/2" IRON ROD, SET BY WILLIAM WARD, PER BOOK 8 OF SURVEYS PAGE 38. (HELD IN THIS SURVEY) VISITED 6-28-2016
- (249) FOUND 5/8" IRON ROD WITH YELLOW PLASTIC CAP, STAMPED "FOSTER PLS 21675", PER BOOK 36 OF SURVEYS PAGE 119. (HELD FOR NORTHWEST CORNER OF BLOCK 6) VISITED 6-28-2016
- (250) FOUND 1/2" IRON ROD WITH PLASTIC CAP STAMPED "SWART 2812", PER BOOK 26 OF SURVEYS PAGE 68, (HELD FOR THE SOUTHWEST BLOCK CORNER OF BLOCK 1) VISITED 6-28-2016
- (252) FOUND 1/2" IRON PIPE IN A MONUMENT CASE, (HELD IN THIS SURVEY) VISITED 6-28-2016.
- (253) FOUND 5/8" IRON ROD WITH YELLOW PLASTIC CAP, STAMPED "FOSTER PLS 21675", PER BOOK 36 OF SURVEYS PAGE 119. (HELD FOR SOUTHWEST CORNER OF LOT 4, BLOCK 6) VISITED 6-28-2016
- (256) FOUND 1/2" IRON PIPE UNKNOWN ORIGIN HELD BY WILLIAM WARD, PER BOOK 8 OF SURVEYS PAGE 38. (HELD IN THIS SURVEY) VISITED 6-28-2016
- (257) FOUND BRASS SCREW IN THE SIDEWALK SET BY WILLIAM WARD, PER BOOK 8 OF SURVEYS PAGE 38. (HELD FOR LINE) VISITED 6-28-2016
- (259) FOUND 2.5" ALUMINUM CAP, STAMPED THOMAS RAY & CO TIN R3E PLS 16920 (HELD IN THIS SURVEY) VISITED 6-28-2016
- (260) FOUND 1/2" IRON PIPE IN A MONUMENT CASE, FOUND 0.25 FEET EAST OF SECTION LINE. R5 AND R6 SHOW THIS MONUMENT 0.13 FEET WEST OF SECTION LINE. (NOT HELD IN THIS SURVEY) VISITED 6-28-2016.

FASEMENT INFORMATION

- EASEMENT 1: 407 SFT INGRESS/EGRESS AND LANDSCAPE EASEMENT FOR THE BENEFIT OF LOT 2. LOT 3 IS TO KEEP EASEMENT CLEAR OF ANY OBSTRUCTIONS.
- EASEMENT 2: 535 SFT PUBLIC UTILITY AND SIDEWALK MAINTENANCE EASEMENT.

LEGEND

- SET 5/8" X 24" REBAR WITH 1 1/4" YELLOW PLASTIC CAP (KLEIN & ASSOC. 44349LS)
- ⊙ FOUND 5/8" IRON ROD WITH YELLOW PLASTIC CAP, STAMPED "FOSTER PLS 21675"
- ⊗ FOUND 1/2" IRON ROD WITH PLASTIC CAP STAMPED "SWART 2812"
- ⊙ FOUND 1/2" IRON PIPE, SEE MONUMENT NOTES
- FOUND 1/2" IRON ROD, PER WARD, SEE NOTES
- ▲ FOUND BRASS SCREW, PER CS BOOK 8, PAGE 38
- ANGLE POINT, NOT MONUMENTED
- ✱ FOUND SECTION CORNER, SEE MONUMENT NOTES
- ✱ FOUND QUARTER CORNER, SEE MONUMENT NOTES

(XX.XX') PLAT DISTANCE

R.O.S. RECORD OF SURVEY

FD FOUND DATA

C COMPUTED DISTANCE

R1 RECORD DATA PER SURVEY REFERENCE NO.

PROPERTY BOUNDARY

ROAD RIGHT OF WAY

CURB

CENTERLINE

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	13.37'	37.60'	20°22'13"	S46°04'46"E	13.30'

OWNER

JAMES KIMBALL

BASIS OF BEARINGS

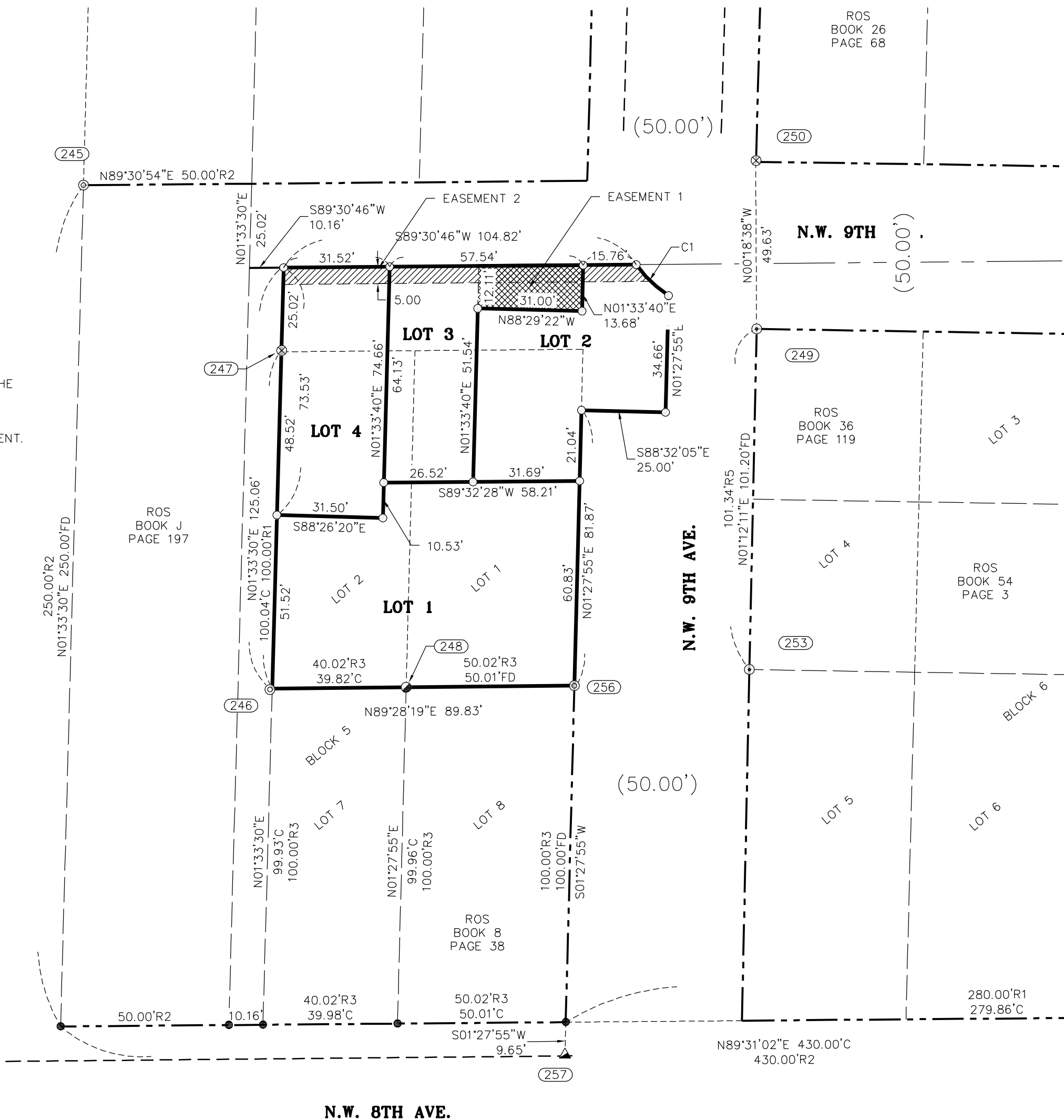
NAD 83 WASHINGTON STATE PLANE COORDINATE SYSTEM  
SOUTH ZONE (2011)(EPOCH 2010.0),  
GRID NORTH, GROUND DISTANCE,  
UTILIZING THE NATIONAL GEODETIC SURVEY (NGS) ONLINE  
POSITIONING USER SERVICES (OPUS) SOFTWARE PROGRAM.

KLEIN & ASSOCIATES, MAKES NO WARRANTY AS TO MATTERS OF  
UNWRITTEN TITLE, ADVERSE POSSESSION, ESTOPPEL, ACQUIESCENCE.

SURVEY PERFORMED FOR:  
DATE OF MONUMENTATION: 201X  
PROJECT: 16-06-22 DRAFT: LJS  
FILE: 160622SP.DWG LAYOUT TAB: SHT 2of2

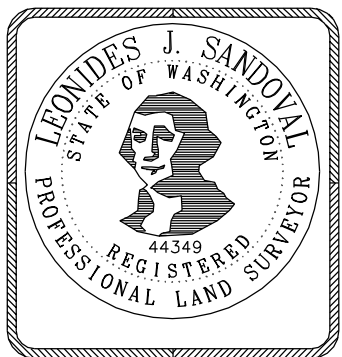
KIMBALL SHORT PLAT

A SHORT PLAT OF LOTS 1 AND 2, BLOCK 5  
OF THE SUBDIVISION OF LOT ONE OF FOREST HOME LOTS  
SITUATED IN THE  
SE 1/4 OF THE NE 1/4 OF SECTION 10  
TOWNSHIP 1 NORTH, RANGE 3 EAST, W.M.  
CITY OF CAMAS, CLARK COUNTY, STATE OF WASHINGTON



FOR REVIEW

PLOTTED: 9/19/2016  
SAVED: 9/19/2016



**Klein & Associates, Inc.**  
ENGINEERING • SURVEYING • PLANNING  
2517 NE 252nd Ave. • Camas, WA  
TEL: 360-687-0500 • FAX: 541-386-2515

SHEET 2 OF 2  
WILLAMETTE MERIDIAN  
CLARK COUNTY, WASHINGTON

1/4	SEC	T.	R.
10	1N.	3E.	

Exhibit 3

DR16-08

CITY OF CAMAS  
COMMUNITY DEVELOPMENT

APPROVED BY \_\_\_\_\_  
COMMUNITY DEVELOPMENT DIRECTOR DATE:

CITY OF CAMAS PUBLIC WORKS

APPROVED BY \_\_\_\_\_  
PUBLIC WORKS DIRECTOR DATE:

CITY OF CAMAS FIRE DEPARTMENT

APPROVED BY \_\_\_\_\_  
FIRE CHIEF DATE:

COUNTY ASSESSOR

THIS PLAT MEETS THE REQUIREMENTS OF R.C.W. 58.17.170 LAWS  
OF WASHINGTON TO BE KNOWN AS KIMBALL SHORT PLAT IN THE  
COUNTY OF CLARK, STATE OF WASHINGTON

CLARK COUNTY ASSESSOR DATE:

AREA NOTE:

PARCEL/LOT	ORIGINAL AREA	NEW AREA
	12,248 SQ.FT.	
LOT 1		5,148 SQ.FT.
LOT 2		2,658 SQ.FT.
LOT 3		2,107 SQ.FT.
LOT 4		2,334 SQ.FT.

AUDITOR'S CERTIFICATE:

FILED FOR RECORD THIS \_\_\_\_ DAY OF \_\_\_\_\_, 2014 IN  
BOOK \_\_\_\_ OF SHORTS PLAT PAGE \_\_\_\_\_, AT THE REQUEST  
OF LEONIDES SANDOVAL REGISTERED LAND SURVEYOR, NO. 44349.

AUDITORS FILE NO. \_\_\_\_\_

DEPUTY AUDITOR \_\_\_\_\_ DATE \_\_\_\_\_



1411 13TH STREET  
HOOD RIVER, OREGON 97031  
TEL: 541-386-3322  
FAX: 541-386-2515  
WWW.KLEINASSOCINC.COM

ELM STREET DEVELOPMENT  
LANDSCAPE PLAN  
CAMAS, WASHINGTON

REVISIONS:		
NO.	DESCRIPTION	DATE

NOVEMBER 2016

SHEET L1 OF L1

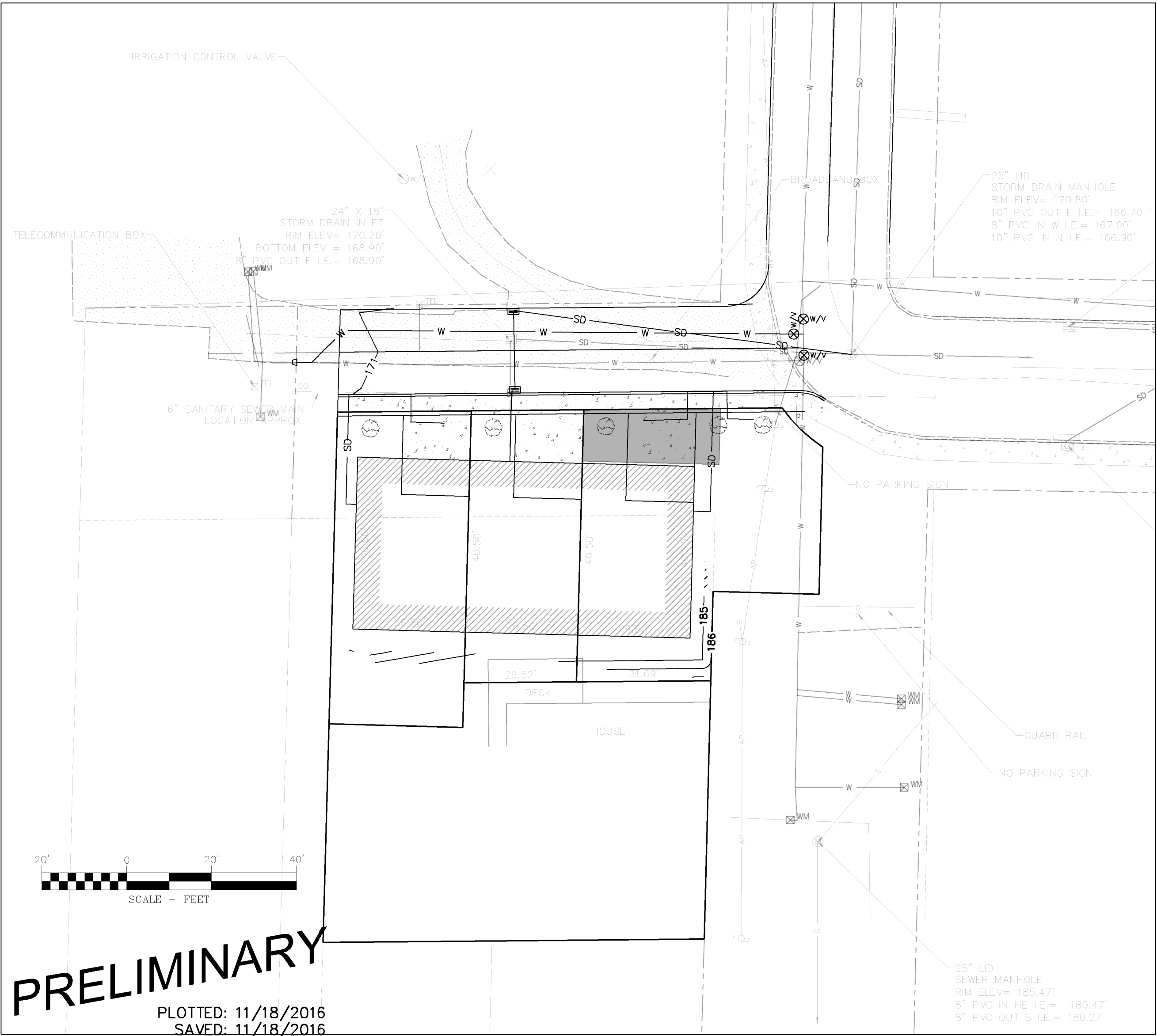
ELM STREET DEVELOPMENT  
PRELIMINARY GRADING PLAN

LOCATED AT 827 NW ELM STREET  
CITY OF CAMAS, STATE OF WASHINGTON

LEGEND			
	CONTOUR EXISTING		AERIAL TELEPHONE LINE
	CONTOUR PROPOSED		BURIED TELEPHONE LINE
	EDGE OF ASPHALT		BURIED FIBER OPTIC
	CURB AND GUTTER		AERIAL CABLE TELEVISION
	EDGE OF GRAVEL		BURIED CABLE TELEVISION
	WATER MAIN		GAS MAIN
	WATER SERVICE		FENCE
	SANITARY SEWER MAIN		IRRIGATION DITCH
	SANITARY SEWER SERVICE		STORMWATER FLOW DIRECTION
	STORM DRAIN		WATER VALVE
	AERIAL POWER LINE		FIRE HYDRANT
	BURIED ELECTRIC LINE		BLOW OFF
	STORM DRAIN INLET		WELL
	POWER POLE		WATER METER
	GUY WIRE		WATER REDUCER
	LIGHT POLE		SANITARY SEWER MANHOLE
	ELECTRIC PEDESTAL		SANITARY SEWER CLEANOUT
	ELECTRIC METER		GREASE TRAP MANHOLE
	TELEPHONE PEDESTAL		STORM DRAIN MANHOLE
	CABLE TELEVISION PEDESTAL		ROOF DRAIN SUMP
	GAS MAIN VALVE		DRAINAGE SUMP
	MAIL BOX		
	SGN		

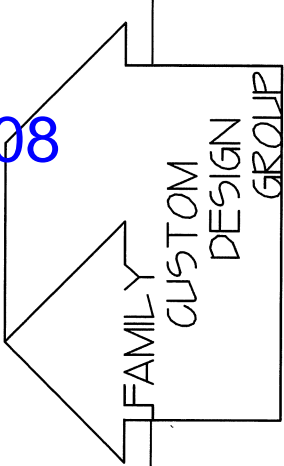
LANDSCAPE NOTES

1. PLANT SHRUBS NATIVE TO THE CITY OF CAMAS AND SURROUNDING AREA. SHRUBS TO ASSIST WITH SCREENING DRIVEWAYS.
2. LANDSCAPING CONTRACTOR TO ADJUST LOCATION OF SHRUBS IF UTILITIES MOVE.
3. CONTRACTOR TO REMOVE TREES WITHIN THE BUILDING FOOTPRINT AND ANY TREES NECESSARY FOR EXCAVATION/CONSTRUCTION OF THE STRUCTURE AND DRIVEWAYS.



THIS PLAN SHALL BE AN AMENDMENT TO THE SHORT PLAT APPLICATION  
SUBMITTED WITH THE CITY OF CAMAS IN SEPTEMBER 2016.

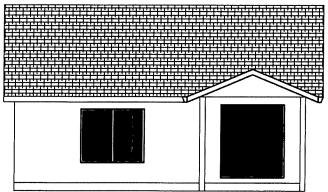
Exhibit 5  
DR16-08



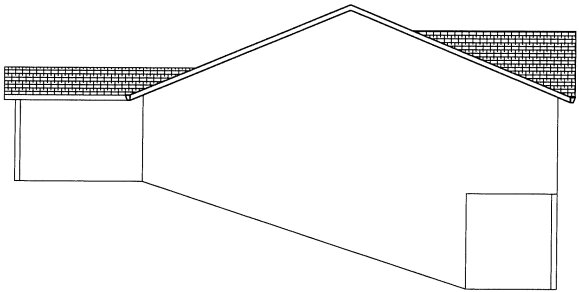
FRONT ELEVATION  
END UNITS  
SCALE 1/4"=1'0"

FRONT ELEVATION  
CENTER UNIT  
SCALE 1/4"=1'0"

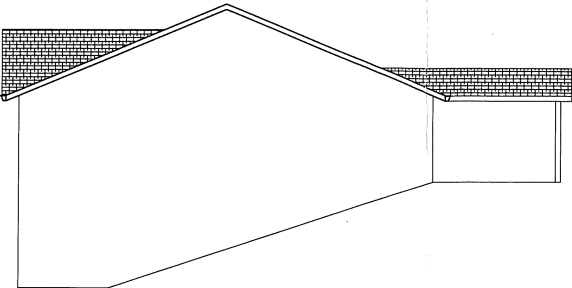
FRONT ELEVATION  
END UNITS  
SCALE 1/4"=1'0"



REAR ELEVATION  
SCALE 1/8"=1'0"



LEFT SIDE ELEVATION  
SCALE 1/8"=1'0"



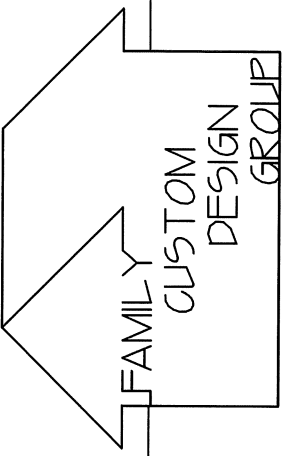
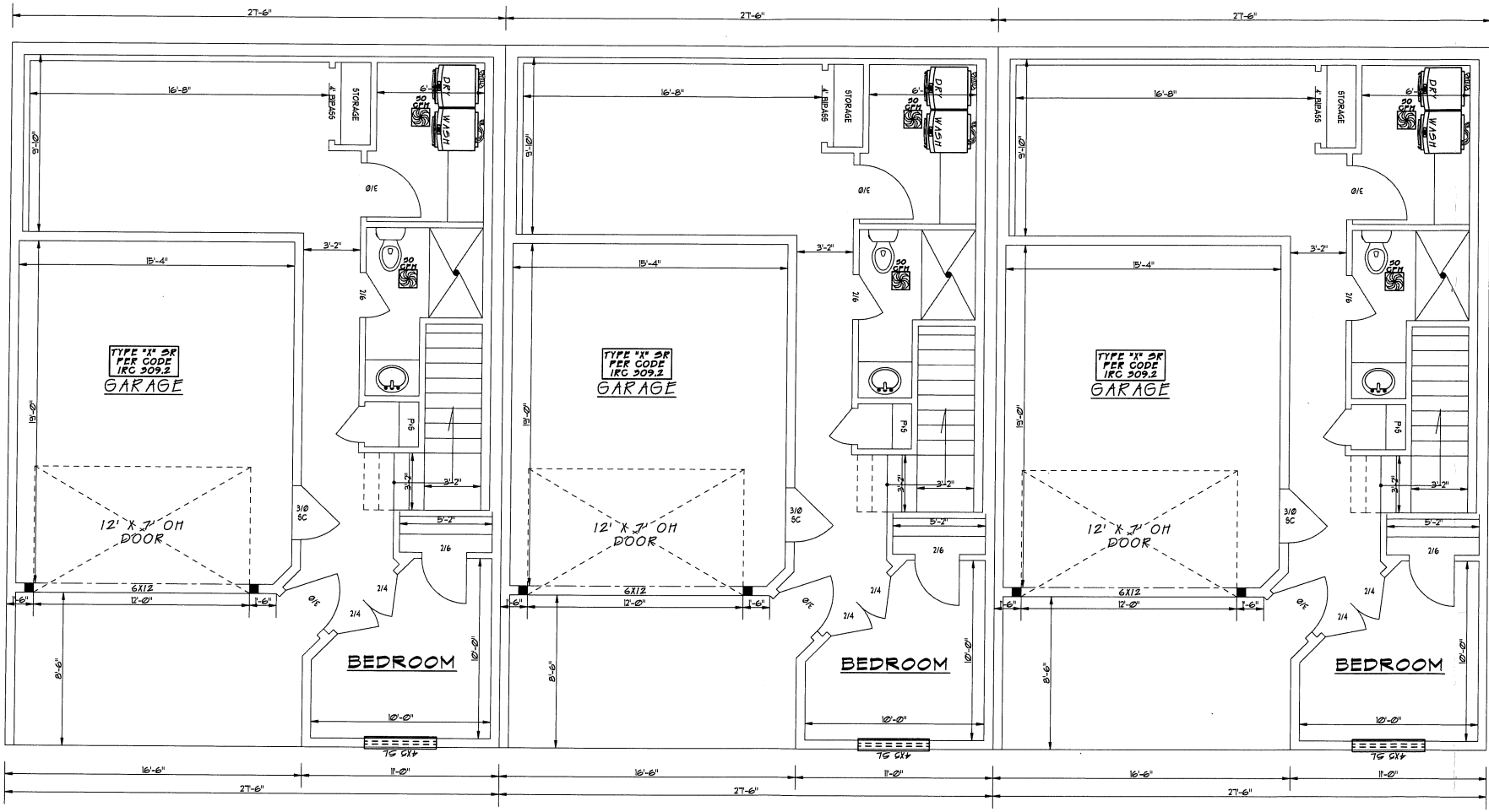
RIGHT SIDE ELEVATION  
SCALE 1/8"=1'0"

COPYRIGHT © 2004 46405 DESIGNS

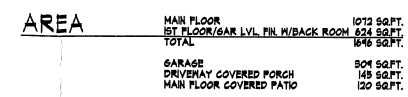
NOTE: ALL NEW CONSTRUCTION TO BE  
PERFORMED IN ACCORDANCE WITH THE  
CONTRACTOR'S FULL RESPONSIBILITY OF THE HOME/  
FORWARD REPAIRS/REPAIRS IS NOT TO BE HELD  
DIRECTOR OF THE COUNTY OF LOS ANGELES TO  
CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE  
FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT.  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE  
DESIGN AND CONSTRUCTION OF THE PROJECT.  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE  
DESIGN AND CONSTRUCTION OF THE PROJECT.

REV	DATE	BY
1	10/15/04	SH

PLAN #



COPYRIGHT © 2009 46AUS DESIGNS	NOTE: ALL NEW CONSTRUCTION TO BE EXCLUDED ACCORDING TO BUILDING CODES AND CONTRACTOR SHALL BE RESPONSIBLE FOR THE HOSE/ FIRE EXTINGUISHERS. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR THE ACCURACY OF THE INFORMATION PROVIDED HEREON. THIS SET OF PLANS IS NOT TO BE USED FOR ANY OTHER PROJECT OR ANY OTHER PROJECT WITHOUT THE WRITTEN PERMISSION OF 46AUS DESIGNS. ALL RIGHTS ARE RESERVED.			
	ORIG	REV	DATE	BY
	PLAN #			97





STAFF REPORT  
Design Review Application for Camas School District PBL High School  
City File No. DR17-01  
(Related Files: SP17-01)

---

TO: Design Review Committee  
FROM: Robert Maul, Planning Manager  
APPLICANT: Camas School District  
LOCATION: 5780 NW Pacific Rim Boulevard  
Camas, WA 98607

**APPLICABLE LAW:** The application was submitted on January 6<sup>th</sup>, 2017. The applicable codes are those codes that were in effect at the date of application. Camas Municipal Code Chapters (CMC): Title 18 Zoning (not exclusively): CMC Chapter 17.21 Procedures for Public Improvements; CMC Chapter 18.19 Design Review; Camas Design Review Manual (2016); and CMC Chapter 18.55 Administration and Procedures; and RCW 58.17.

**BACKGROUND:**

The Camas School District is looking to build a new 89,000 square foot high school for the new Project Based Learning Camas on 40 acres recently purchased from Sharp Laboratories of America. This facility will be located behind the new Project Based Learning middle school currently operating at the campus site. This new school will include all associated parking and bus drop off facilities as well as some on and off site pedestrian improvements.

Included in the application is a detailed narrative, building elevations, site plan and landscaping plans to help illustrate compliance with design review principles for the project.

**PURPOSE:**

Design Review is required under CMC Chapter 18.19. Design review is not intended to determine the appropriate use on a parcel but rather review a proposed development for compliance with City codes and plans related to landscaping, architectural elevations and other elements relative to required improvements. The recommendations from the Design Review Committee (DRC) must consider the general design review standards (CMC Chapter 18.19.050.A and the Camas Design Review Manual "DRM" pages 4-7), along with the the specific standards for multi-family (CMC Chapter 18.19.050.B.3.c and the DRM page 19); which are included in the enclosed Design Review Checklist.

**STANDARD, GATEWAY AND MULTI-FAMILY DESIGN PRINCIPLES AND GUIDELINES:**

The standard principles are required and must be demonstrated to have been satisfied in overall intent for design review approval. The standard design guidelines are developed to assist a project in meeting the established principles and each guideline should be adequately addressed. If the proposal cannot

meet a specific guideline, then an explanation should be provided by the applicant as to why and how it will be mitigated to satisfy the intent of the design principles. The development guidelines include five major categories: 1) Landscaping and Screening, 2) Architecture, 3) Massing and Setbacks, 4) Historic & Heritage Preservation, and 5) Circulation and Connections. The Design Review Checklist is enclosed to help guide the DRC in reviewing the standard applicable specific design review principles and guidelines.

RECOMMENDATION:

That the Design Review Committee reviews the submitted materials, deliberates, and forwards a recommendation to the Director for a final decision.

# Project Narrative

## PROPOSED DEVELOPMENT

---

The new Camas Project-Based Learning High School will be a new high school facility that delivers a project-based learning approach to 9<sup>th</sup> – 12<sup>th</sup> education. This is a new program to the School District and therefore there are many typical parameters that are not in place to date as there would be with a new replacement school facility for an existing facility and program. This will be a facility that will be one of a very few ground-up new facilities designed around delivering project-based learning in the country. In addition, the School District and the design team have also planned on this facility to adapt to different modes of educational delivery models and therefore, the design is formed around the educational model of project-based learning, but the building is planned so to be able to adapt to more traditional learning modalities should it need to in the future.

This 89,000 square foot building is intended to provide another educational option for 600 9<sup>th</sup> – 12<sup>th</sup> grade students within the Camas School District. The criteria for acceptance into the school is completely student-interest based, all students who want to attend are accepted. If the number of applicants out-number the program capacity, then a lottery system will be used to determine acceptance.

Qualifying for an OSPI state construction assistance grant for un-housed students, it is necessitated by explosive growth in the community and overcrowding at the existing comprehensive Camas High School. The second high school in the district, Hayes Freedom High School, serves a smaller population with an emphasis on personalized learning and is at capacity as well. As the third high school in the district, this new PBL High School will help to alleviate crowding for the short term and provide students with another opportunity to learn in a different educational format.

The new facility is proposed to be open to new students for the start of the 2018-2019 school year. Construction is intended to begin in the Spring of 2017. The school will be located at 5780 NW Pacific Rim Blvd, Camas, what is often referred to as the Sharp Property. The District has recently purchased nearly 40 acres and a 55,000 SF two story office building from Sharp Laboratories of America, in the Prune Hill area of the community. The lab/office building has recently been converted to a project-based learning middle school, eventually designed to serve 450 students grades 6 through 8. With the addition of the new high school on the property, there are many opportunities to share resources (both educationally and operationally), create a unique culture and identity for the PBL program, accommodate the district's growing population, and streamline operating costs.

Beyond the requirement of additional space to house a growing student body, the school is needed to shift the way we think about secondary schools. We believe that we have models for

learning that currently work well for many students in our district - current CHS and HFHS. We also believe that the world we are preparing students for is changing. Students will be asked to collaborate, create, design and problem-solve more than they ever have before across disciplines. Because the world is changing we need to change too. This school gives us a chance to build on the success we have and learn more about what we can become.

The new program centers on collaborative, integrated learning teams with a STEAM focus. Each student will be assigned to a team comprised of 3 or 4 teachers that provide content support and facilitate learning focused on authentic community/industry problems. Schedules will be flexible to include traditional classroom time, blended self-directed learning time, team time, and exploration time with opportunities to explore beyond the walls of the school. Across the school, learning teams will be united based on common practices like design theory, research methods, inquiry cycles, and showcasing/demonstration of learning events. Learning Teams will develop unique identities that evolve based on student and teacher interest, but the school will all be connected by a common student-developed STEAM theme that unites them each school year. Students will make strong connections within and beyond their school with their peers, staff, and the community.

## EXISTING SITE CONDITIONS

---

Camas School District purchased the site for the new school from Sharp Electronics of America in the summer of 2016. The site is roughly 39.25 acres and currently consists of two tax lots (Parcel 4 ASN 986033-962 and Parcel 5 ASN 125661-000) that make up the new project-based learning campus. The site is mostly previously developed with parking facilities, utilities, and an existing building. The site has access to view to the north of Mt. Saint Helens and view of the Columbia and Willamette river valleys to the south. The view to the south also includes a distant view of downtown Portland, Oregon.

The site is located on Prune Hill and therefore is a fairly elevated site with grades sloping to the north, west, and south of the property. The site is bordered by the north and west by extremely sloped grades and forested land. These two conditions (and access to views) in particular were a major contributing factor to the site and building design. The project site is bordered by the south and west by the private "Sharp Drive" (a private two-lane road that is now our main school access point), as well the public streets of SE Payne Road, WE 40<sup>th</sup> Street, and NW 18<sup>th</sup> Avenue. The project site is bordered by residential development on the other side (south and west) of the public streets as listed previously. As the property purchased from Sharp was once a combined campus, the project site is bordered to the east by the remaining Sharp facilities, which includes Sharp offices and labs, as well as parking for employees.

## EXISTING BUILDINGS

---

With the purchase of property from Sharp Electronics of America, the property came with an existing structure that was previously used as an office and lab for Sharp and constructed for

that purpose in 1991. The structure consists of 55,000 square foot building that is located at 5750 NW Pacific Rim Blvd in Camas. The existing structure is a two-story structure of curtainwall glazing, concrete panels, and metal panels with a steel and concrete superstructure. The existing building has a parapet condition and a distinctive entry canopy. The structure takes advantage of sweeping views to the north of the valley below and Mt. Saint Helens in the distance.

The existing building has a horizontal banding expression around the facades. The metal panel and concrete exterior are white and light grey. The curtain wall has a green-blue tint. The entry canopy is the only expression that breaks up the rather cube-like structure. The canopy is a silvery metal clad projection at the southwest corner of the building. This is also logically the location of the main entry. The structure is roughly 34' tall from finish floor to top of the parapet.

## STRUCTURE AND ARCHITECTURE

---

The new Camas Project-Based Learning High School is intended to be a contemporary educational facility. The building has mostly east to west orientation on the site to maximize the building's ability to control daylight and solar gain.

The project has been design with the idea of transition and connection. The term ecotone has been used throughout our design thinking. Ecotone is defined as a region or transition between two biological communities. This project serves as a transition for students between the world of secondary education and the worlds of post-secondary education and/or the working world. Project-based learning is a type of educational delivery that aims to blend the worlds of education and the professional environment. In addition, this project sits on a site that is a literal transition from the developed Sharp site to the natural and formidable forested edge and associated grade change to the north.

The 89,000 square foot structure is a two-story building of primarily steel superstructure. The massing could be summarized as a rectangular mass that has had voids carved out of the solid building. The voids include the main entry, the outdoor learning environments, and the gym and flex exhibition box. The gym and flex exhibition box have then been highlights and articulated to create something special. The special "box" has then been rotated to indicate and provide a sense of entry into the school.

The exterior design concept of the project is meant to do two things as it relates to the projects immediate context of the Sharp Campus and the City of Camas. First, the design team has attempted to have the new building "fit" with the existing building on our site (now the new PBL Middle School building). Second, the massing and exterior expression of the building is meant to recall the history of Camas as paper mill town and also reflect the city's current technology rich industry. The horizontal white and gray concrete panels speak to the paper mill in color and in shape but yet the regularity of the pattern reflects a precision seen in technological industrial processes. In addition, the weathered steel "box" has folding planes that are intended

to invoke the feel of folding planes of paper, but with a material that is both meant to feel the touch of time. The weathered steel material, however, is a technologically advanced material that does not deteriorate but rather uses the chemical properties of oxidation to protect itself.

## COMMUNITY ASSET

---

It is anticipated that the new school will be a wonderful asset to the community as a whole and frequently used during after-school hours for formal and informal learning opportunities, as well as various community functions. Many Camas Community Education classes could be taught at the school and on the grounds.

Spaces that lend themselves most easily to community use are the gymnasium, exhibition space and outdoor theater, central hub with learning stairs for presentations and performances, café, and Fab Lab (with district educator supervision). Each of these spaces will be designed with easy after-hours access (either exterior doors directly into the space or close by) and access to restroom facilities, while securing as much of the rest of the school building as possible.

## APPENDIX 1

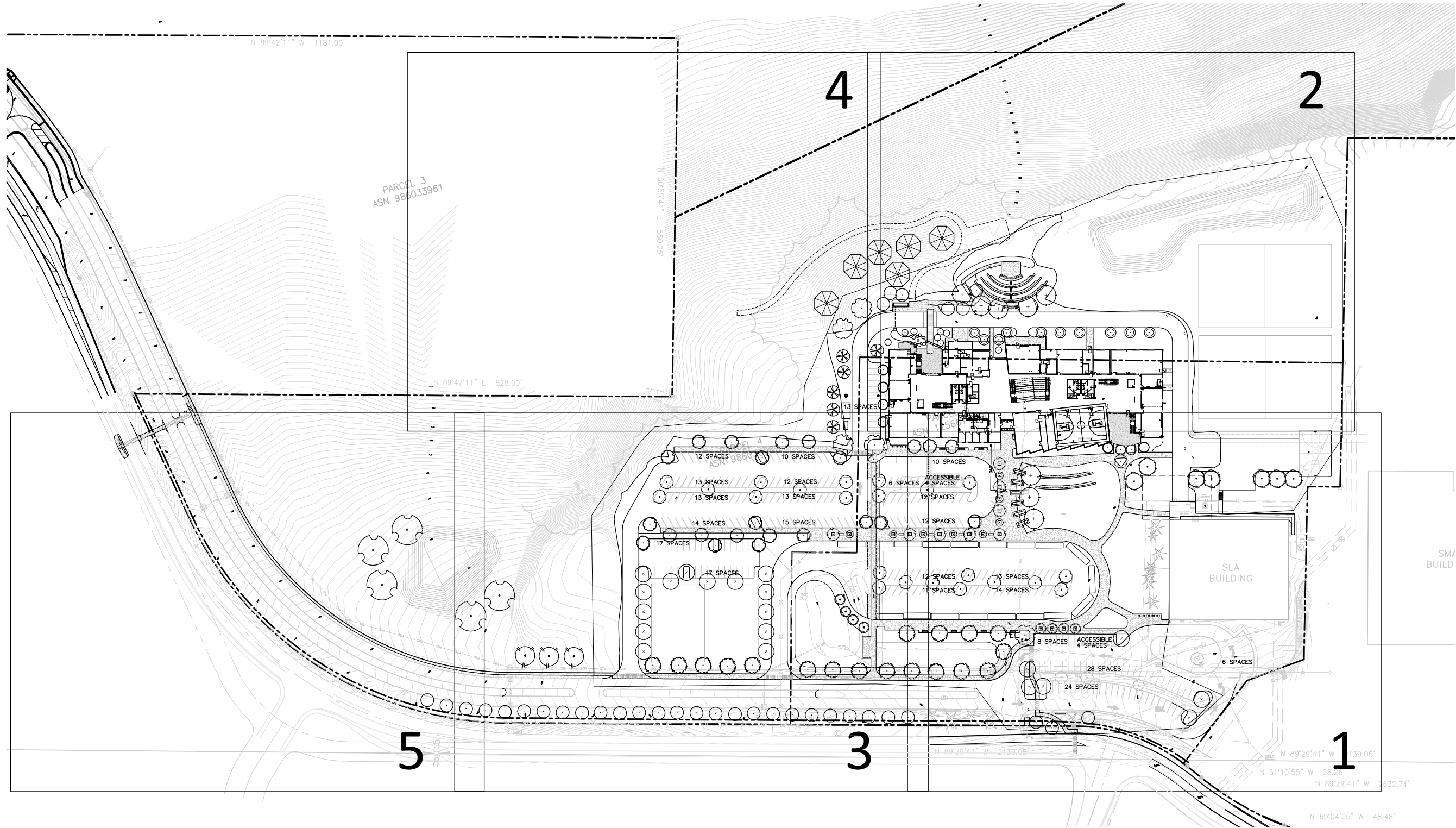
# DESIGN REVIEW

---

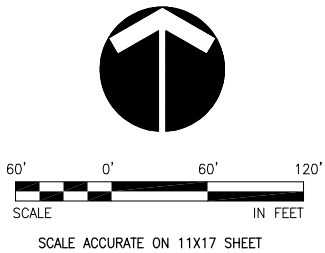
REVISED 1/17/17

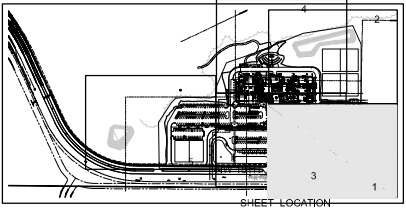
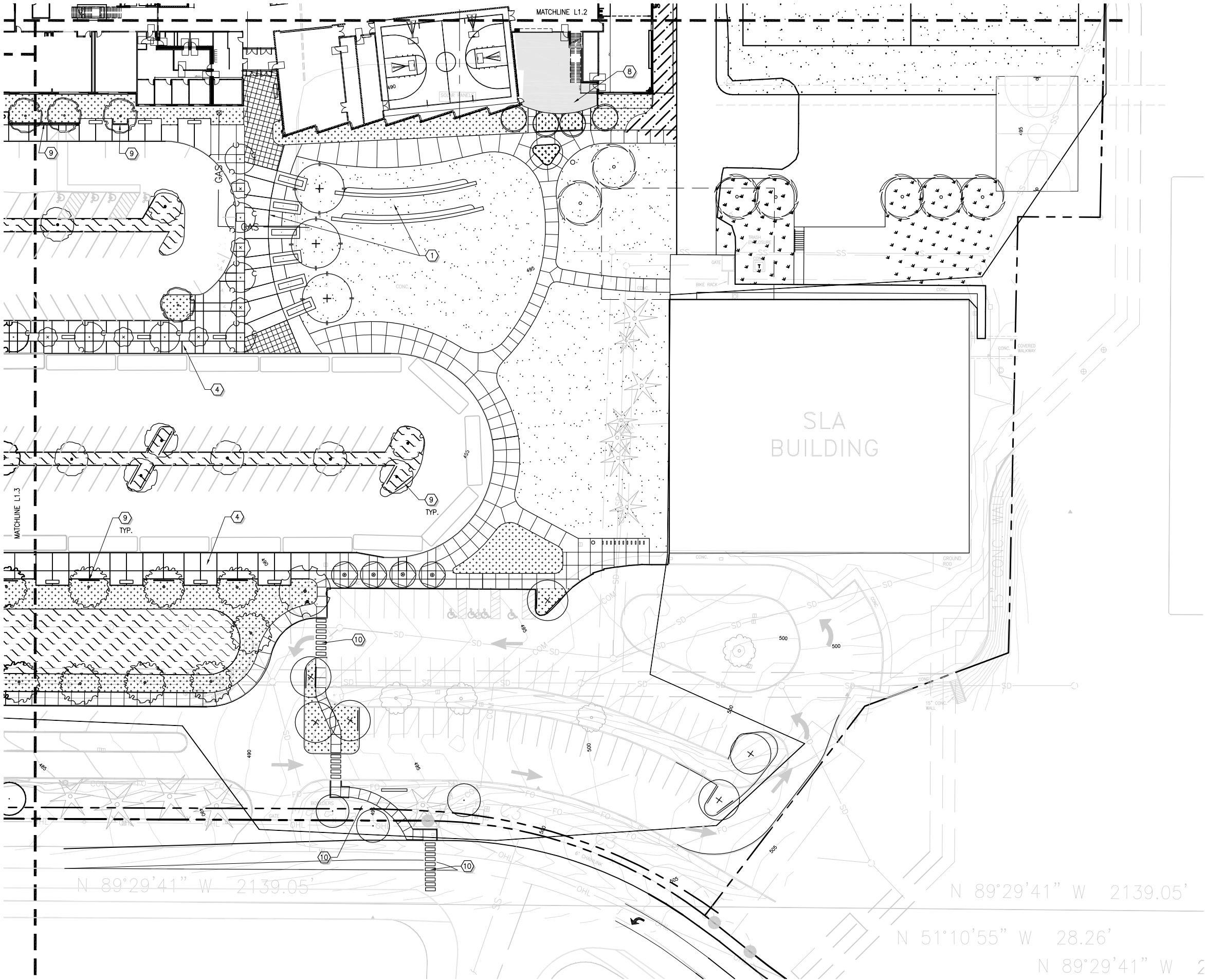
### SHEET INDEX

L1.0 LANDSCAPE SITE PLAN  
L1.1 LANDSCAPE PLANTING AND HARDSCAPE PLAN 1  
L1.2 LANDSCAPE PLANTING AND HARDSCAPE PLAN 2  
L1.3 LANDSCAPE PLANTING AND HARDSCAPE PLAN 3  
L1.4 LANDSCAPE PLANTING AND HARDSCAPE PLAN 4  
L1.5 LANDSCAPE PLANTING AND HARDSCAPE PLAN 5  
A1.1 OVERALL FLOOR PLANS - LEVEL 1  
A1.2 OVERALL FLOOR PLANS - LEVEL 2  
SD 5.3 EXTERIOR ELEVATIONS  
SD 5.4 EXTERIOR ELEVATIONS  
E0.3 SITE PLAN - ELECTRICAL  
E0.4 SITE PLAN - LIGHTING  
E0.5 SITE PLAN - LIGHTING



PARKING COUNTS			
REQUIRED		PROVIDED	
ACCESSIBLE STALLS*	8	ACCESSIBLE STALLS*	8
STAFF	90	STAFF	106
STUDENT	150	STUDENT	192
VISITOR	20	VISITOR	20
TOTAL STD STALLS**	260	TOTAL STD STALLS	318
* City of Camas municipal development code (CM C)			
** Camas School District requirement (exceeds CM C)			





### GENERAL NOTES

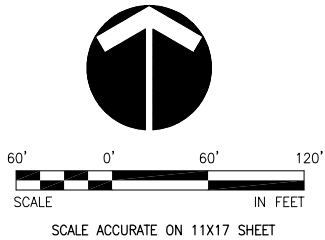
1. ALL LANDSCAPED AREAS TO BE WATERED BY A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
2. PLANT MATERIAL LEGEND: SEE SHEET L1.4
3. LANDSCAPE INSTALLATION NOTES AND DETAILS: SEE SHEET L4.1 TO L4.8

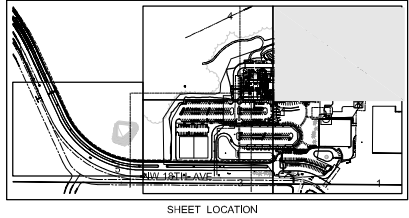
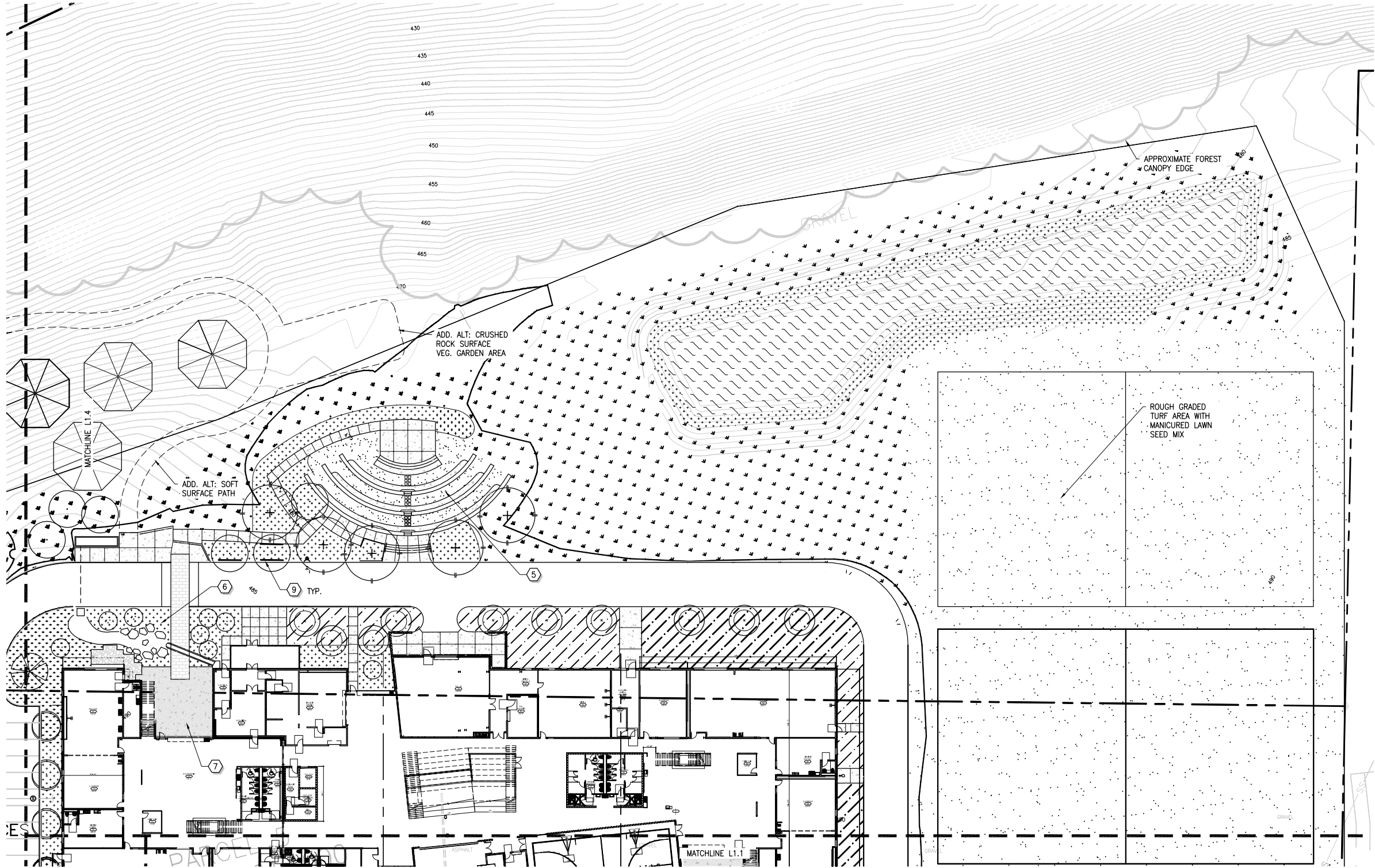
### CONSTRUCTION NOTES

- ① ENTRY COMMONS AREA. SEE SHEET L3.1
- ② HARD SURFACE PLAYGROUND AREA. SEE SHEET L3.3
- ③ PEDESTRIAN CROSSING AREA. SEE SHEET L3.1
- ④ BUS LOADING AREA. SEE SHEET L3.1
- ⑤ AMPHITHEATER AREA. SEE SHEET L3.2
- ⑥ STORMWATER GARDEN AREA. SEE SHEET L3.2
- ⑦ OUTDOOR LEARNING AREA. SEE SHEET L3.2
- ⑧ OUTDOOR LEARNING AREA. SEE SHEET L3.1
- ⑨ INSTALL 12 LF ROOT BARRIER WHERE INDICATED. SEE SHEET L4.1
- ⑩ PEDESTRIAN CROSSING AREA AT MIDDLE SCHOOL. SEE SHEET L3.3
- ⑪ STORM POND OVERLOOK WITH RAILING. SEE SHEET L3.3

### LEGEND

- EXISTING EVERGREEN TREE TO REMAIN
- EXISTING DECIDUOUS TREE TO REMAIN





### GENERAL NOTES

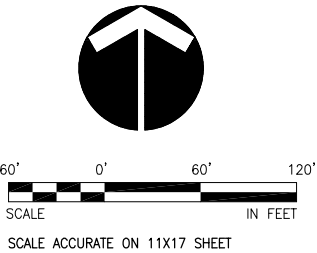
1. ALL LANDSCAPED AREAS TO BE WATERED BY A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
2. PLANT MATERIAL LEGEND: SEE SHEET L1.4
3. LANDSCAPE INSTALLATION NOTES AND DETAILS: SEE SHEET L4.1 TO L4.8

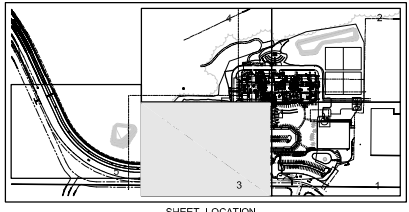
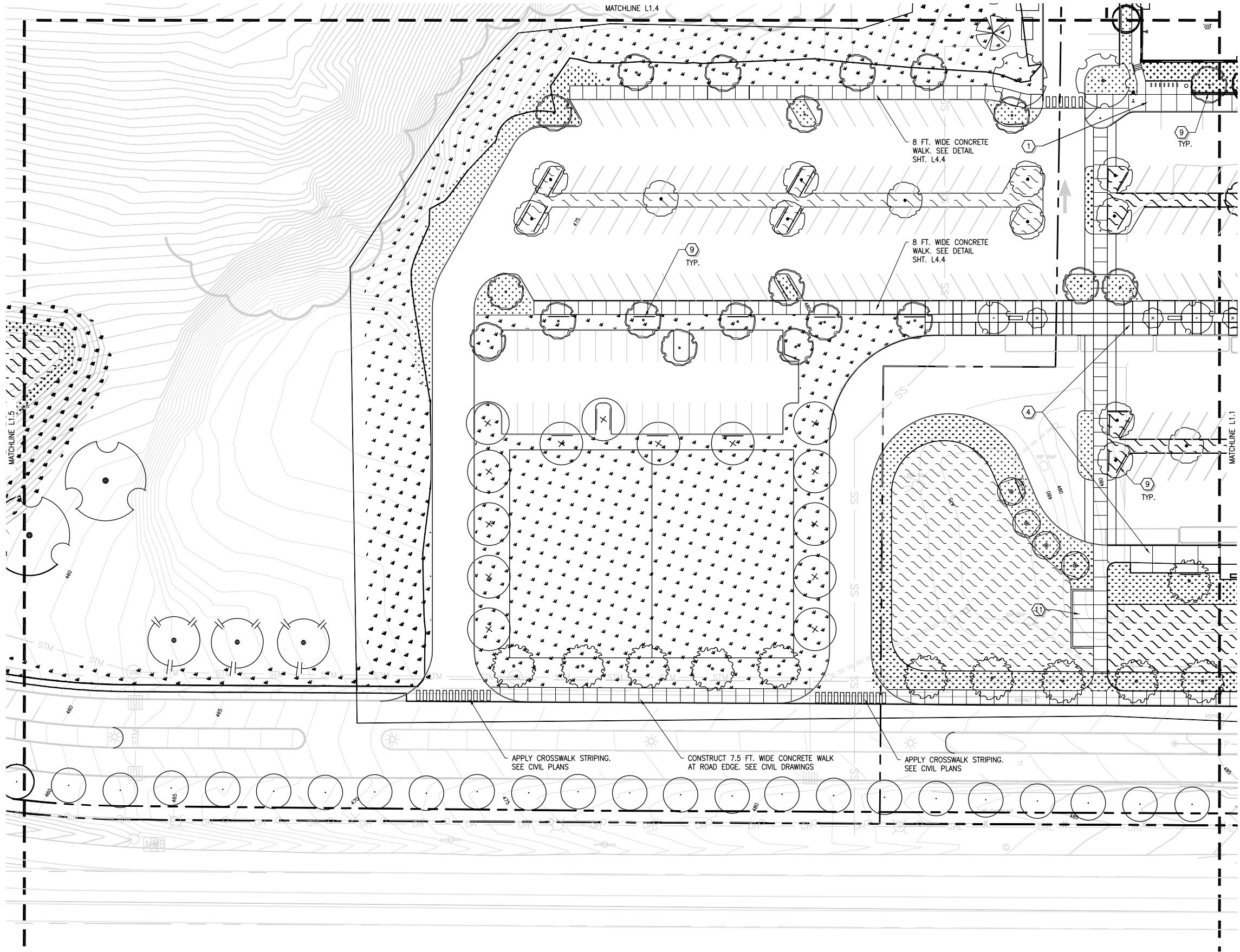
### CONSTRUCTION NOTES

- 1 ENTRY COMMONS AREA. SEE SHEET L3.1
- 2 HARD SURFACE PLAYGROUND AREA. SEE SHEET L3.3
- 3 PEDESTRIAN CROSSING AREA. SEE SHEET L3.1
- 4 BUS LOADING AREA. SEE SHEET L3.1
- 5 AMPHITHEATER AREA. SEE SHEET L3.2
- 6 STORMWATER GARDEN AREA. SEE SHEET L3.2
- 7 OUTDOOR LEARNING AREA. SEE SHEET L3.2
- 8 OUTDOOR LEARNING AREA. SEE SHEET L3.1
- 9 INSTALL 12 LF ROOT BARRIER WHERE INDICATED. SEE SHEET L4.1
- 10 PEDESTRIAN CROSSING AREA AT MIDDLE SCHOOL. SEE SHEET L3.3
- 11 STORM POND OVERLOOK WITH RAILING. SEE SHEET L3.3

### LEGEND

- EXISTING EVERGREEN TREE TO REMAIN
- EXISTING DECIDUOUS TREE TO REMAIN





### GENERAL NOTES

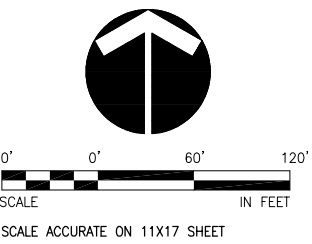
1. ALL LANDSCAPED AREAS TO BE WATERED BY A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
2. PLANT MATERIAL LEGEND: SEE SHEET L1.4
3. LANDSCAPE INSTALLATION NOTES AND DETAILS: SEE SHEET L4.1 TO L4.8

### CONSTRUCTION NOTES

- 1 ENTRY COMMONS AREA. SEE SHEET L3.1
- 2 HARD SURFACE PLAYGROUND AREA. SEE SHEET L3.3
- 3 PEDESTRIAN CROSSING AREA. SEE SHEET L3.1
- 4 BUS LOADING AREA. SEE SHEET L3.1
- 5 AMPHITHEATER AREA. SEE SHEET L3.2
- 6 STORMWATER GARDEN AREA. SEE SHEET L3.2
- 7 OUTDOOR LEARNING AREA. SEE SHEET L3.2
- 8 OUTDOOR LEARNING AREA. SEE SHEET L3.1
- 9 INSTALL 12 LF ROOT BARRIER WHERE INDICATED. SEE SHEET L4.1
- 10 PEDESTRIAN CROSSING AREA AT MIDDLE SCHOOL. SEE SHEET L3.3
- 11 STORM POND OVERLOOK WITH RAILING. SEE SHEET L3.3

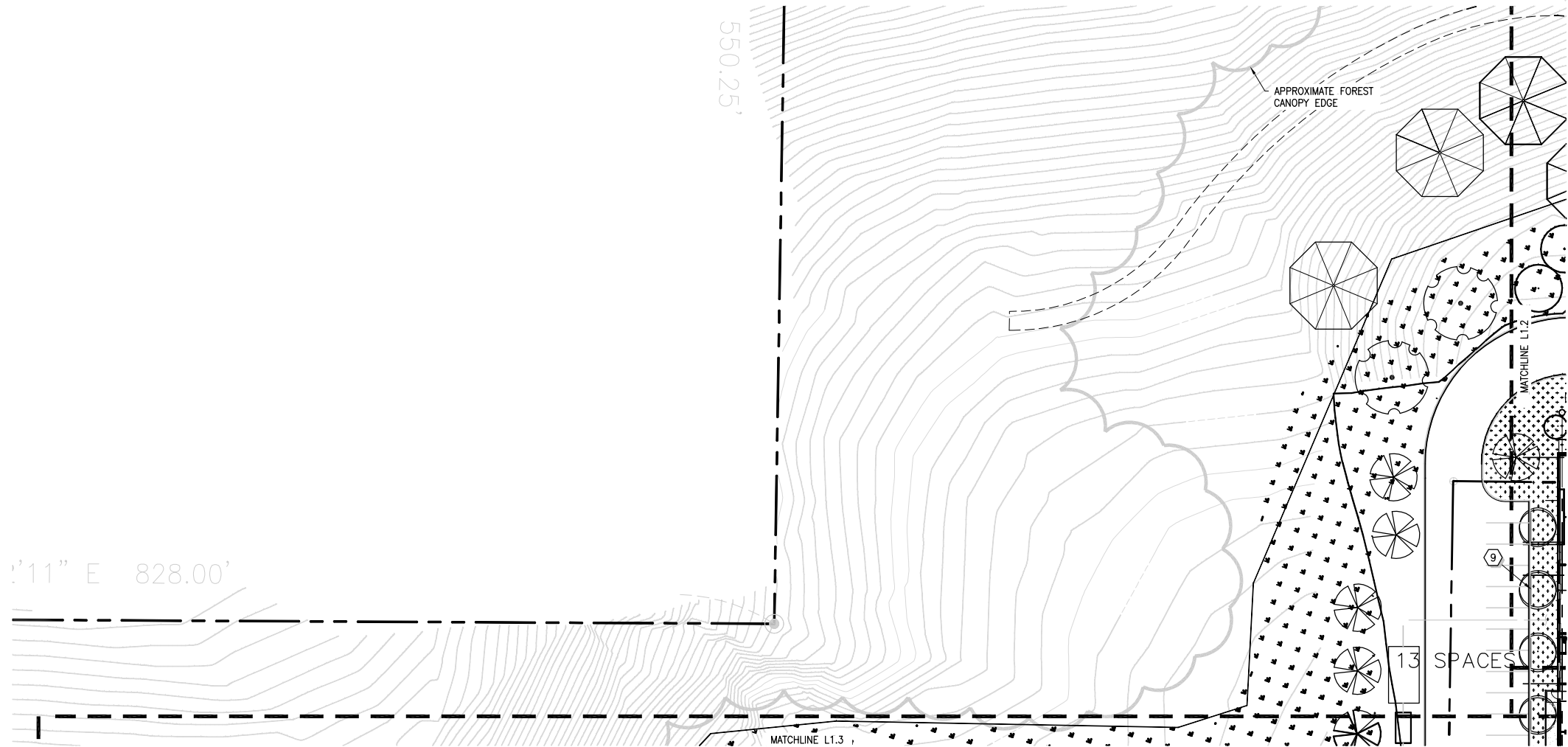
### LEGEND

- EXISTING EVERGREEN TREE TO REMAIN
- EXISTING DECIDUOUS TREE TO REMAIN



HammiGlobal Partner  
700 Washington St. Ste 401  
Vancouver, WA 98660  
Phone: (360) 737-9813  
Fax: (360) 737-9851  
www.otak.com

## CAMAS PBL HIGH SCHOOL CAMAS SCHOOL DISTRICT

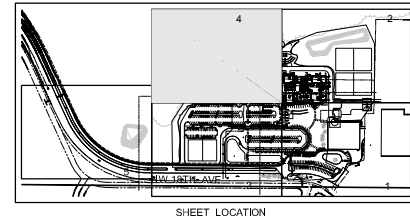


PLANTING LEGEND			
TREES			
SYMBOL	QUANTITY	COMMON NAME / Botanical name	Size and Description
	1	VINE MAPLE / <i>Acer circinatum</i> , Multi-stemmed., B&B or 5 Gal cont.	
	1	PAPERBARK MAPLE / <i>Acer griseum</i> , 2" CAL., B&B* or container	
	1	BIG LEAF MAPLE / <i>Acer macrophyllum</i> , 1 1/2" Cal., B&B*	
	1	RED SUNSET MAPLE / <i>Acer rubrum</i> 'Franksred'; 1 1/2" Cal., B&B	
	1	KARPICK RED MAPLE / <i>Acer rubrum</i> 'Karpick', 2" CAL., B&B*	
	1	UMBRELLA CATALPA / <i>Catalpa bignonioides</i> 'Nano', 2" CAL., B&B or container	
	1	NORTHERN CATALPA / <i>Catalpa speciosa</i> , 2" CAL., B&B* or container	
	1	KATSURA / <i>Cercidiphyllum japonicum</i> , 1 1/2" Cal., B&B	
	1	EASTERN REDBUD / <i>Cercis canadensis</i> , 1" Cal., B&B	
	1	YELLOWWOOD / <i>CLADRATIS KENTUCKEA</i> , 1 1/2" Cal., B&B	
	1	JUNE SNOW DOGWOOD / <i>Cornus controversa</i> 'June Snow', 2" Cal., B&B	
	1	TULIP TREE / <i>Liriodendron tulipifera</i> 2" CAL., B&B*	
	1	DAWN REDWOOD / <i>Metasequoia glyptostroboides</i> 2" CAL., B&B* or container	
	1	BLACK TUPELO / <i>Nyssa sylvatica</i> 2" CAL., B&B or container	
	1	YOSHINO CHERRY / <i>Prunus x yedoensis</i> 'Akebono' 1 1/2" Cal., B&B	
	1	REDSPIRE CALLERY PEAR / <i>Pyrus calleryana</i> 'Redspire'; 2" CAL., B&B*	
	1	SCARLET OAK / <i>Quercus coccinea</i> 2" CAL., B&B* or container	
	1	OREGON WHITE OAK / <i>Quercus garryana</i> 1 3/4" Cal., B&B	
	1	NATIONAL KOUA DOGWOOD / <i>Cornus kousa</i> 'National', 1 1/2" Cal., B&B	

SEEDED LAWN AND OTHER PLANTED AREAS		
SYMBOL	QTY	DESCRIPTION
	110,940 SF	SEEDED LAWN, MANICURED, MIX FOR SUN
	10,000 SF	SEEDED LAWN-MANICURED, MIX FOR SHADE
	120,507 SF	SEEDED LAWN-MEADOW MIX
	18,777 SF	SHRUB BEDS
	71,585 SF	STORMWATER FACILITY PLANTING

SHRUB LIST	
COMMON NAME / Botanical name:	
DWARF BURNING BUSH / <i>Euonymus alatus</i> 'Compacta'	
LILY TURF <i>Liriope gigantea</i> (Ophiopogon jaburan)	
TALL OREGON GRAPE / <i>Mahonia aquifolium</i>	
GULF STREAM NANDINA / <i>Nandina domestica</i> 'Gulf Stream'	
DAFFODIL (GROUP OF 3 BULBS 6" O.C.) <i>Narcissus</i> spp.	
WESTERN SWORDFERN / <i>Polystichum munitum</i>	
OTTO LUYKEN ENGLISH LAUREL / <i>Prunus laurocerasus</i> 'Otto Luyken'	
INDIAN PRINCESS RHAPHIOLEPIS / <i>Rhaphiolepis indica</i> 'Indian Princess'	
FLOWER CARPET ROSE / <i>Rosa</i> 'FLOWER CARPET SCARLET SUPREME'	
LEMON PRINCESS SPIREA <i>Spiraea japonica</i> 'Lemon Princess'	
DAVID VIBURNUM / <i>Viburnum davidii</i>	

OTHER		
SYMBOL	QUANTITY	DESCRIPTION
		CONCRETE WALK
		STAMPED CONCRETE
		OUTDOOR LEARNING AREA SURFACE



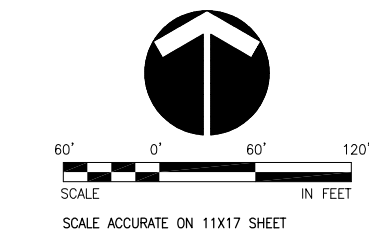
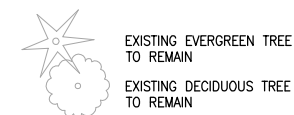
## GENERAL NOTES

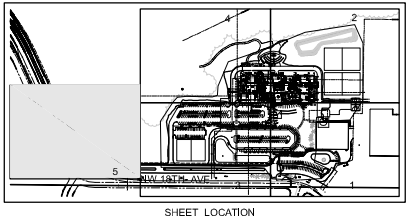
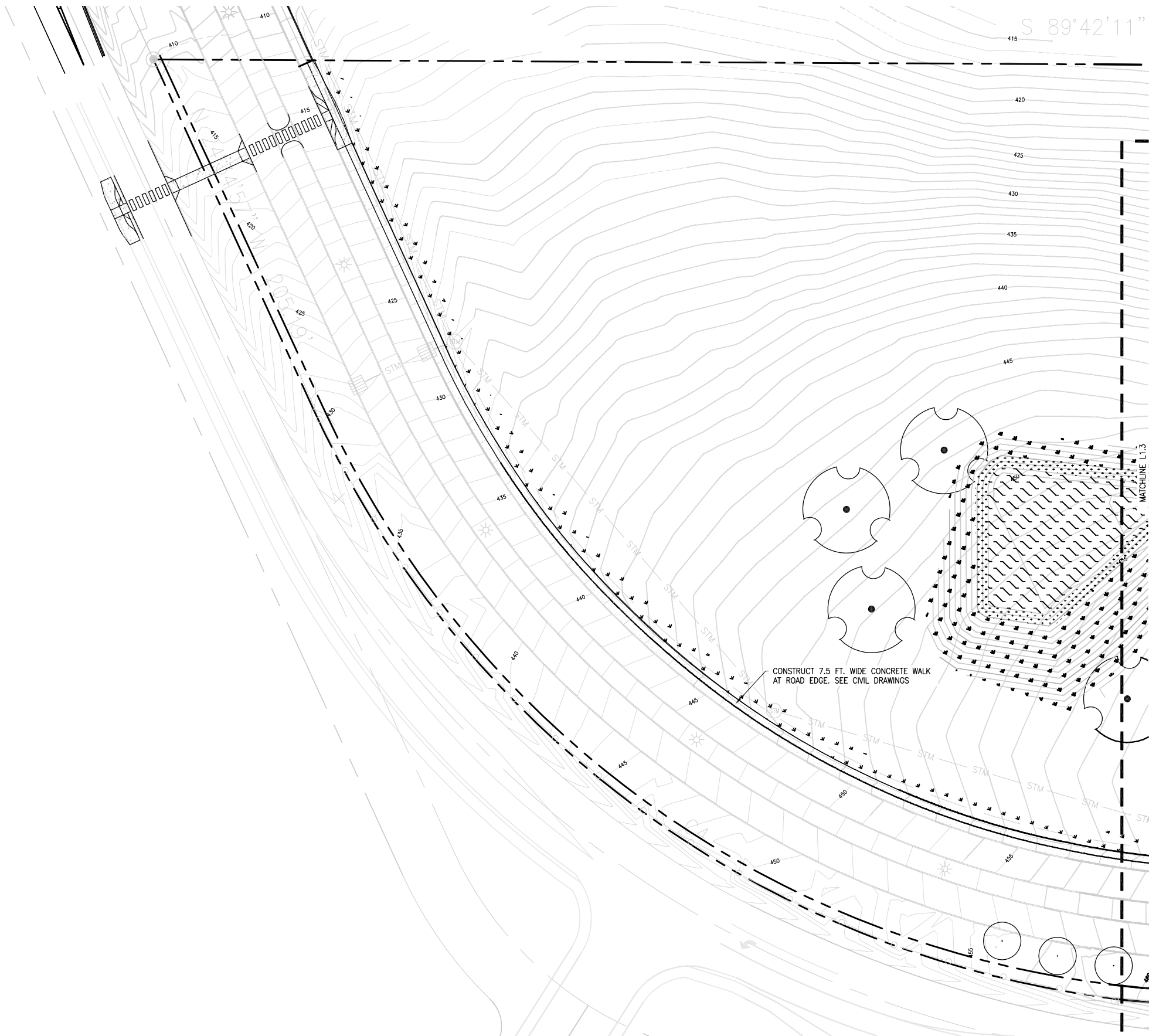
1. ALL LANDSCAPED AREAS TO BE WATERED BY A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
2. PLANT MATERIAL LEGEND: SEE SHEET L1.4
3. LANDSCAPE INSTALLATION NOTES AND DETAILS: SEE SHEET L4.1 TO L4.8

## CONSTRUCTION NOTES

1. ENTRY COMMONS AREA. SEE SHEET L3.1
2. HARD SURFACE PLAYGROUND AREA. SEE SHEET L3.3
3. PEDESTRIAN CROSSING AREA. SEE SHEET L3.1
4. BUS LOADING AREA. SEE SHEET L3.1
5. AMPHITHEATER AREA. SEE SHEET L3.2
6. STORMWATER GARDEN AREA. SEE SHEET L3.2
7. OUTDOOR LEARNING AREA. SEE SHEET L3.2
8. OUTDOOR LEARNING AREA. SEE SHEET L3.1
9. INSTALL 12 LF ROOT BARRIER WHERE INDICATED. SEE SHEET L4.1
10. PEDESTRIAN CROSSING AREA AT MIDDLE SCHOOL. SEE SHEET L3.3
11. STORM POND OVERLOOK WITH RAILING. SEE SHEET L3.3

## LEGEND





### GENERAL NOTES

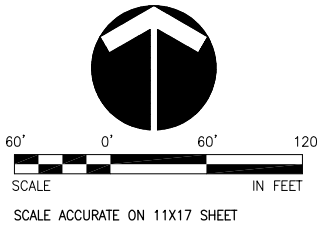
1. ALL LANDSCAPED AREAS TO BE WATERED BY A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
2. PLANT MATERIAL LEGEND: SEE SHEET L1.4
3. LANDSCAPE INSTALLATION NOTES AND DETAILS: SEE SHEET L4.1 TO L4.8

### CONSTRUCTION NOTES

- 1 ENTRY COMMONS AREA. SEE SHEET L3.1
- 2 HARD SURFACE PLAYGROUND AREA. SEE SHEET L3.3
- 3 PEDESTRIAN CROSSING AREA. SEE SHEET L3.1
- 4 BUS LOADING AREA. SEE SHEET L3.1
- 5 AMPHITHEATER AREA. SEE SHEET L3.2
- 6 STORMWATER GARDEN AREA. SEE SHEET L3.2
- 7 OUTDOOR LEARNING AREA. SEE SHEET L3.2
- 8 OUTDOOR LEARNING AREA. SEE SHEET L3.1
- 9 INSTALL 12 LF ROOT BARRIER WHERE INDICATED. SEE SHEET L4.1
- 10 PEDESTRIAN CROSSING AREA AT MIDDLE SCHOOL. SEE SHEET L3.3
- 11 STORM POND OVERLOOK WITH RAILING. SEE SHEET L3.3

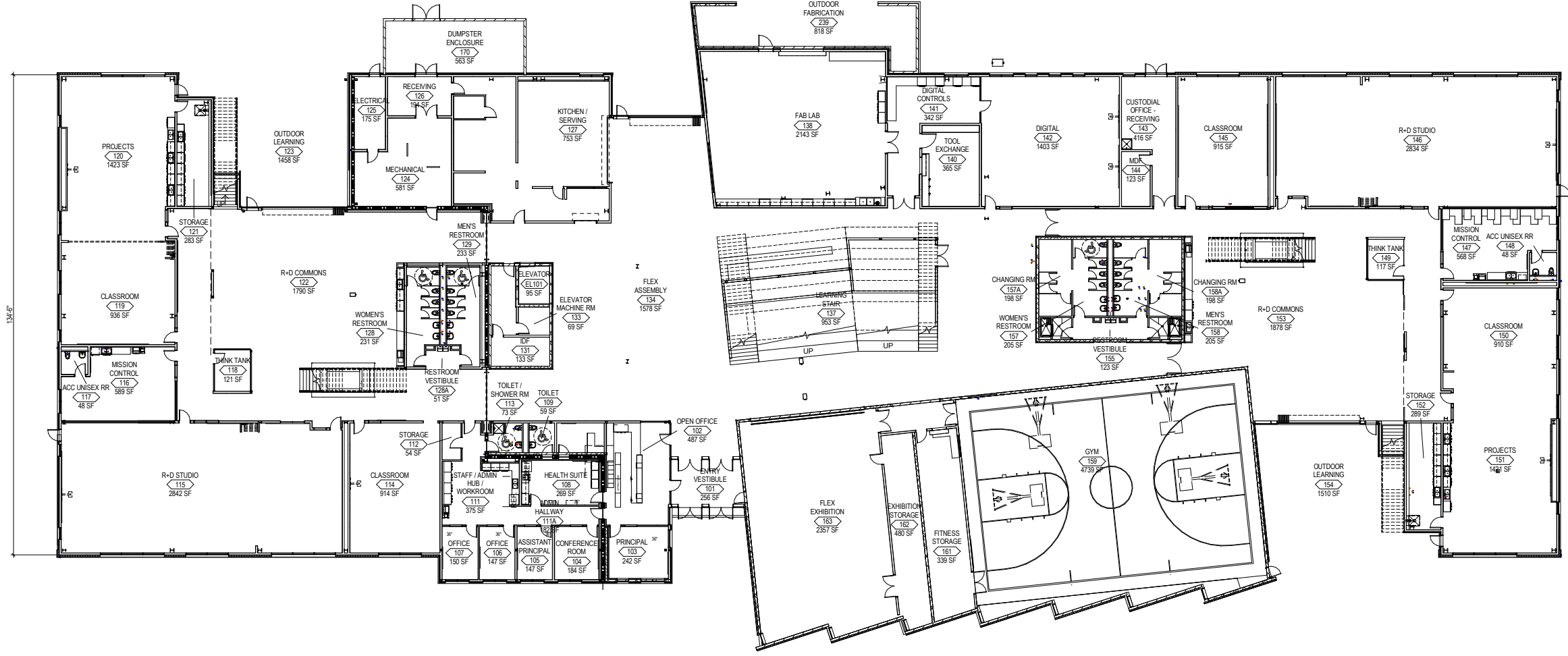
### LEGEND

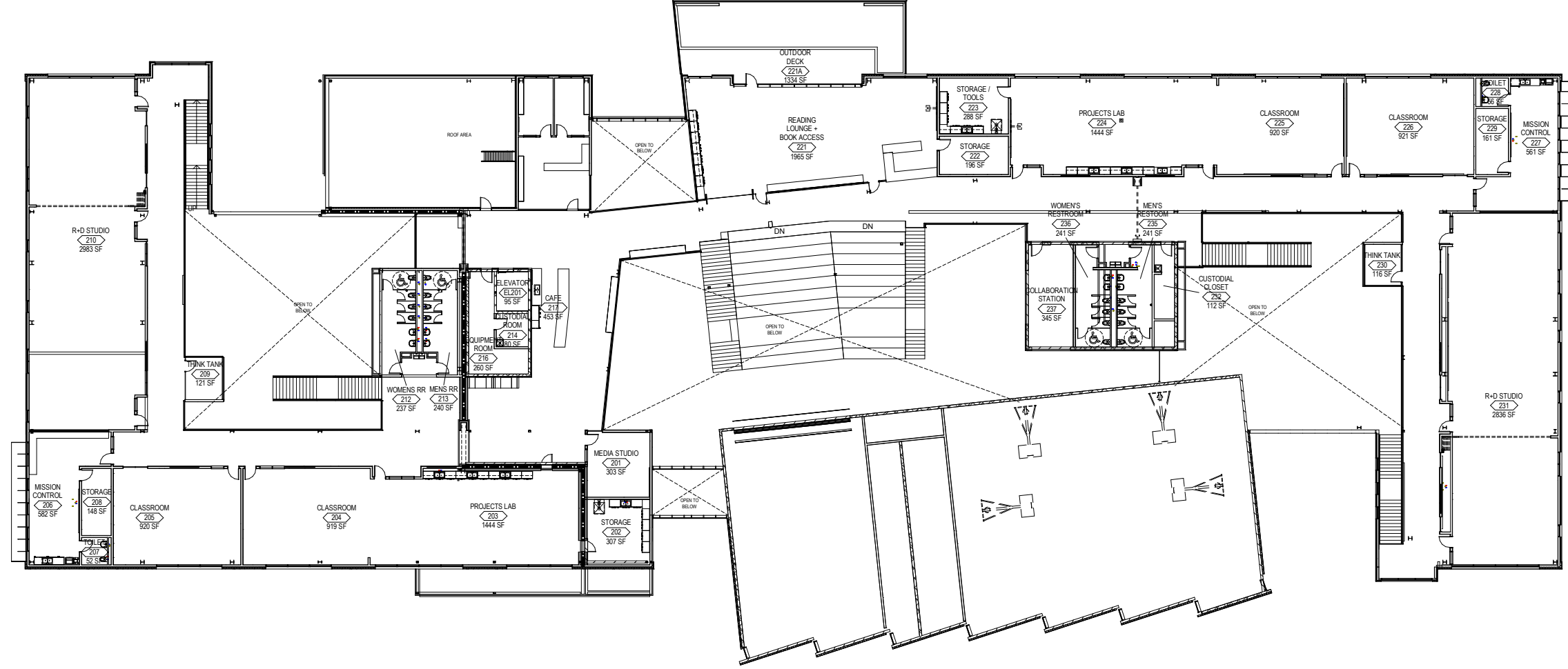
- EXISTING EVERGREEN TREE TO REMAIN
- EXISTING DECIDUOUS TREE TO REMAIN






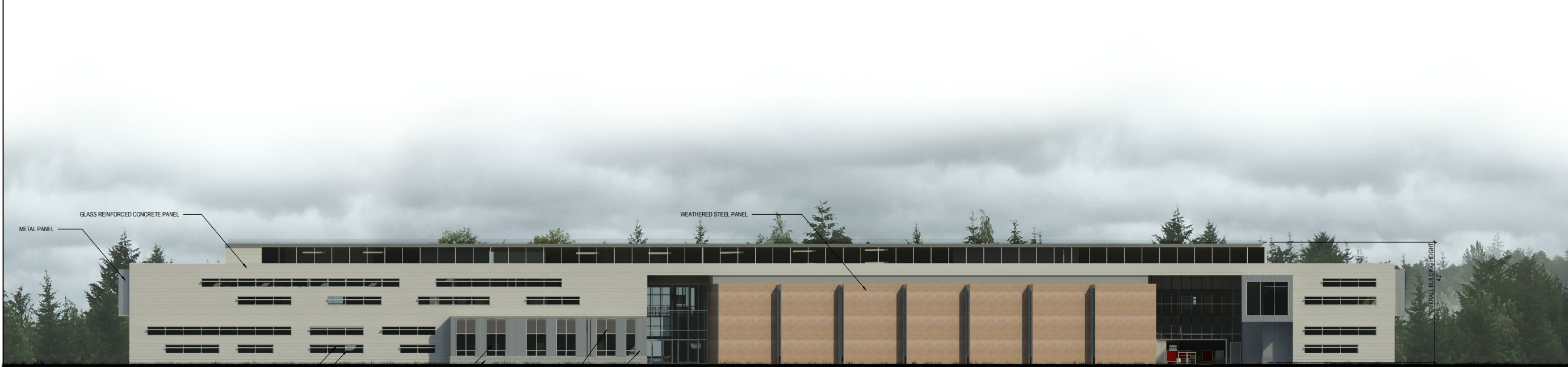
FLOOR PLAN, FIRST LEVEL



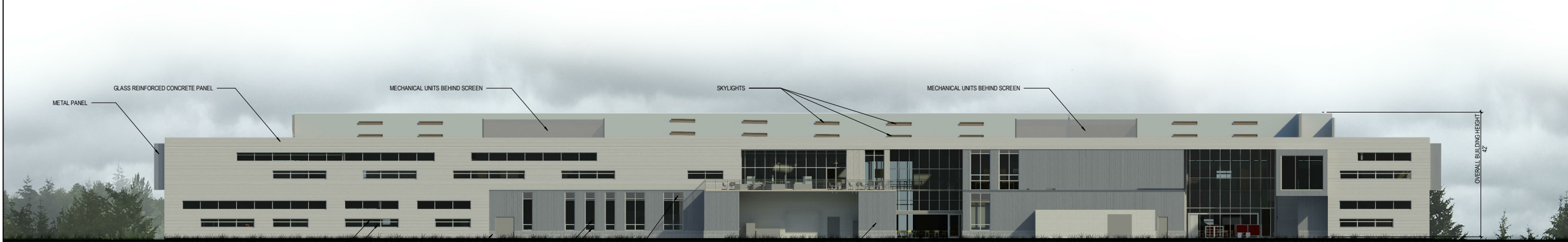


 FLOOR PLAN, SECOND LEVEL

C:\Revit\73-16130\_Camas HS\_AR Central\_2015\_fmueller.rvt  
1/6/2017 12:31:14 PM



**SOUTH ELEVATION**  
NOT TO SCALE



**NORTH ELEVATION**  
NOT TO SCALE

DESIGN REVIEW

EXTERIOR ELEVATIONS  
CAMAS PBL HIGH SCHOOL  
CAMAS SCHOOL DISTRICT

**SD 5.3**

73-16130-00  
01.06.2017  
REVISED



EAST ELEVATION  
NOT TO SCALE



WEST ELEVATION  
NOT TO SCALE

DESIGN REVIEW

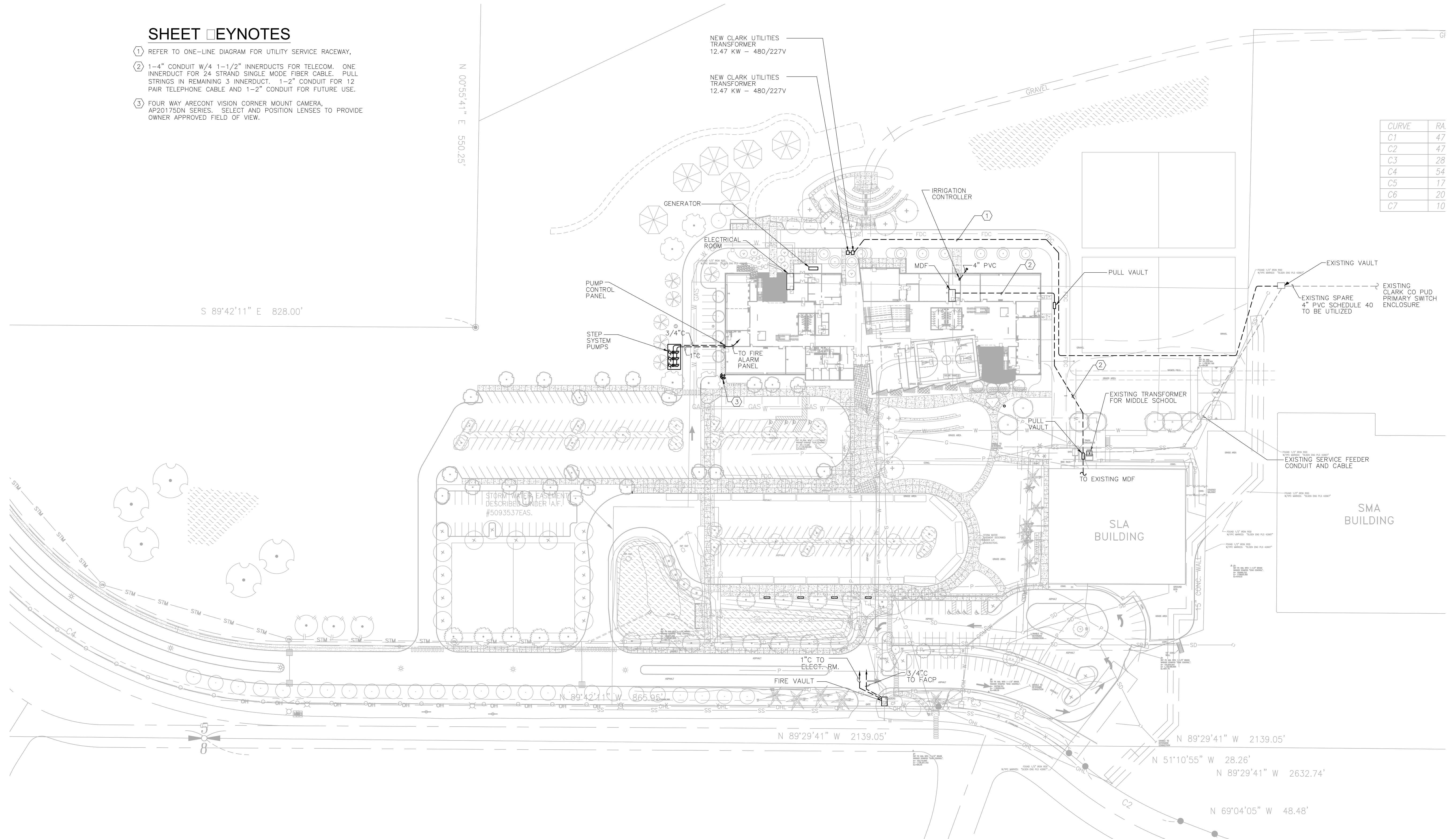
EXTERIOR ELEVATIONS  
CAMAS PBL HIGH SCHOOL  
CAMAS SCHOOL DISTRICT

SD 5.4

73-16130-00  
01.06.2017  
REVISIONS

- ① REFER TO ONE-LINE DIAGRAM FOR UTILITY SERVICE RACEWAY,
- ② 1-4" CONDUIT W/4 1-1/2" INNERDUCTS FOR TELECOM. ONE INNERDUCT FOR 24 STRAND SINGLE MODE FIBER CABLE. PULL STRINGS IN REMAINING 3 INNERDUCT. 1-2" CONDUIT FOR 12 PAIR TELEPHONE CABLE AND 1-2" CONDUIT FOR FUTURE USE.
- ③ FOUR WAY ARECONT VISION CORNER MOUNT CAMERA, AP20175DN SERIES. SELECT AND POSITION LENSES TO PROVIDE OWNER APPROVED FIELD OF VIEW.

CURVE	RA.
C1	47
C2	47
C3	28
C4	54
C5	17
C6	20
C7	10



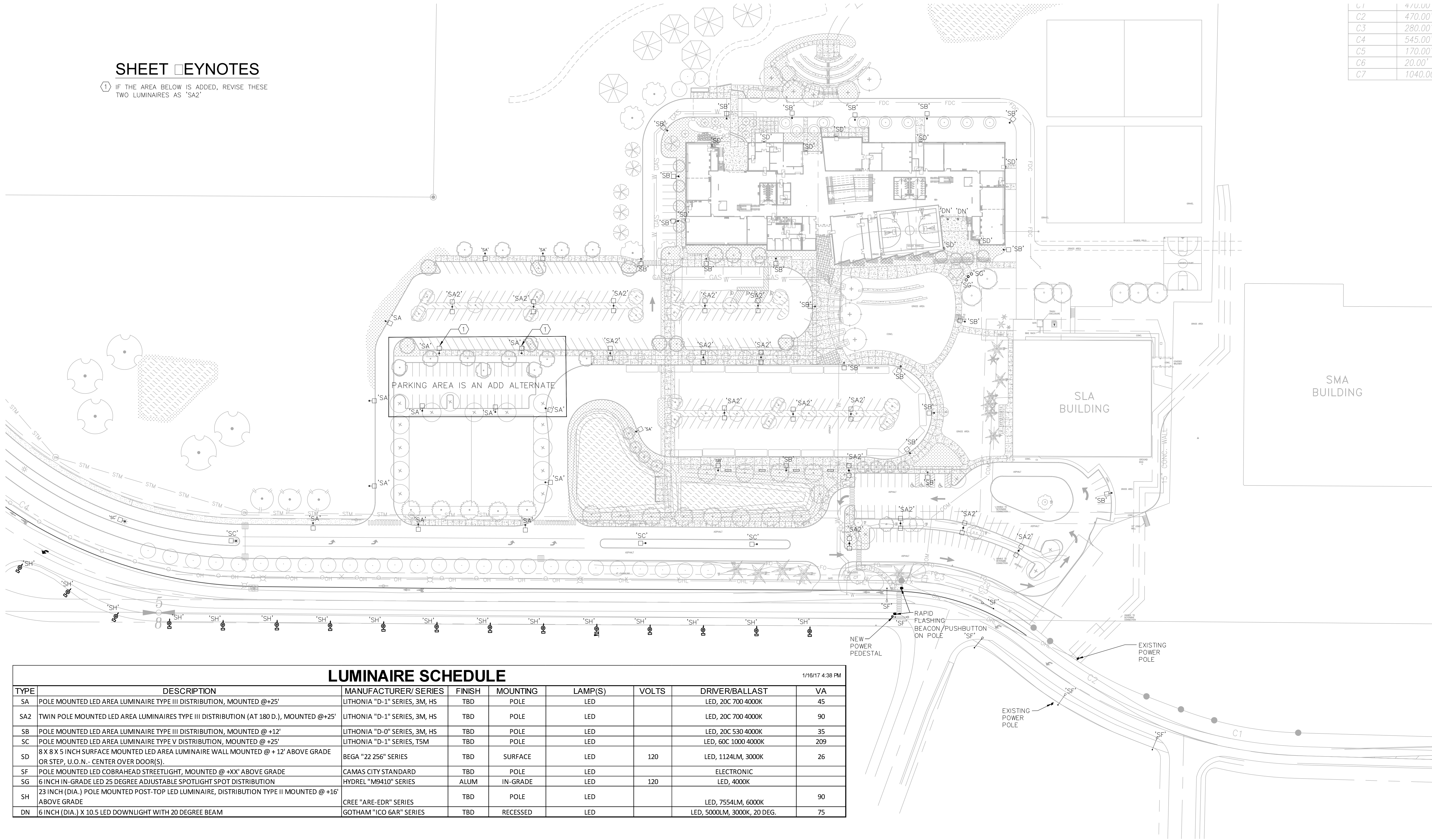
SCALE: 1' = 60'-0"

C:\R\7316130\CAMAS PBL HIGH SCHOOL\12015\12015.dwg  
11/3/2016 12:27:35 PM

## SHEET EYNOTES

- 1 IF THE AREA BELOW IS ADDED, REVISE THESE TWO LUMINAIRES AS 'SA2'

C1	470.00'
C2	470.00'
C3	280.00'
C4	545.00'
C5	170.00'
C6	20.00'
C7	1040.00'



## LUMINAIRE SCHEDULE

1/16/17 4:38 PM

TYPE	DESCRIPTION	MANUFACTURER/SERIES	FINISH	MOUNTING	LAMP(S)	VOLTS	DRIVER/BALLAST	VA
SA	POLE MOUNTED LED AREA LUMINAIRE TYPE III DISTRIBUTION, MOUNTED @+25'	LITHONIA "D-1" SERIES, 3M, HS	TBD	POLE	LED		LED, 20C 700 4000K	45
SA2	TWIN POLE MOUNTED LED AREA LUMINAIRES TYPE III DISTRIBUTION (AT 180 D.), MOUNTED @+25'	LITHONIA "D-1" SERIES, 3M, HS	TBD	POLE	LED		LED, 20C 700 4000K	90
SB	POLE MOUNTED LED AREA LUMINAIRE TYPE III DISTRIBUTION, MOUNTED @ +12'	LITHONIA "D-0" SERIES, 3M, HS	TBD	POLE	LED		LED, 20C 530 4000K	35
SC	POLE MOUNTED LED AREA LUMINAIRE TYPE V DISTRIBUTION, MOUNTED @ +25'	LITHONIA "D-1" SERIES, TSM	TBD	POLE	LED		LED, 60C 1000 4000K	209
SD	8 X 8 X 5 INCH SURFACE MOUNTED LED AREA LUMINAIRE WALL MOUNTED @ + 12' ABOVE GRADE OR STEP, U.O.N. - CENTER OVER DOOR(S).	BEGA "22 256" SERIES	TBD	SURFACE	LED	120	LED, 1124LM, 3000K	26
SF	POLE MOUNTED LED COBRAHEAD STREETLIGHT, MOUNTED @ +XX' ABOVE GRADE	CAMAS CITY STANDARD	TBD	POLE	LED		ELECTRONIC	
SG	6 INCH IN-GRADE LED 25 DEGREE ADJUSTABLE SPOTLIGHT SPOT DISTRIBUTION	HYDREL "M9410" SERIES	ALUM	IN-GRADE	LED	120	LED, 4000K	
SH	23 INCH (DIA.) POLE MOUNTED POST-TOP LED LUMINAIRE, DISTRIBUTION TYPE II MOUNTED @ +16' ABOVE GRADE	CREE "ARE-EDR" SERIES	TBD	POLE	LED		LED, 7554LM, 6000K	90
DN	6 INCH (DIA.) X 10.5 LED DOWNLIGHT WITH 20 DEGREE BEAM	GOHAM "ICO 6AR" SERIES	TBD	RECESSED	LED		LED, 5000LM, 3000K, 20 DEG.	75



## SITE PLAN LIGHTING

SCALE: 1" = 60'-0"

08 DD - PROGRESS SET

SITE PLAN LIGHTING  
CAMAS PBL HIGH SCHOOL  
CAMAS SCHOOL DISTRICT

E0.4

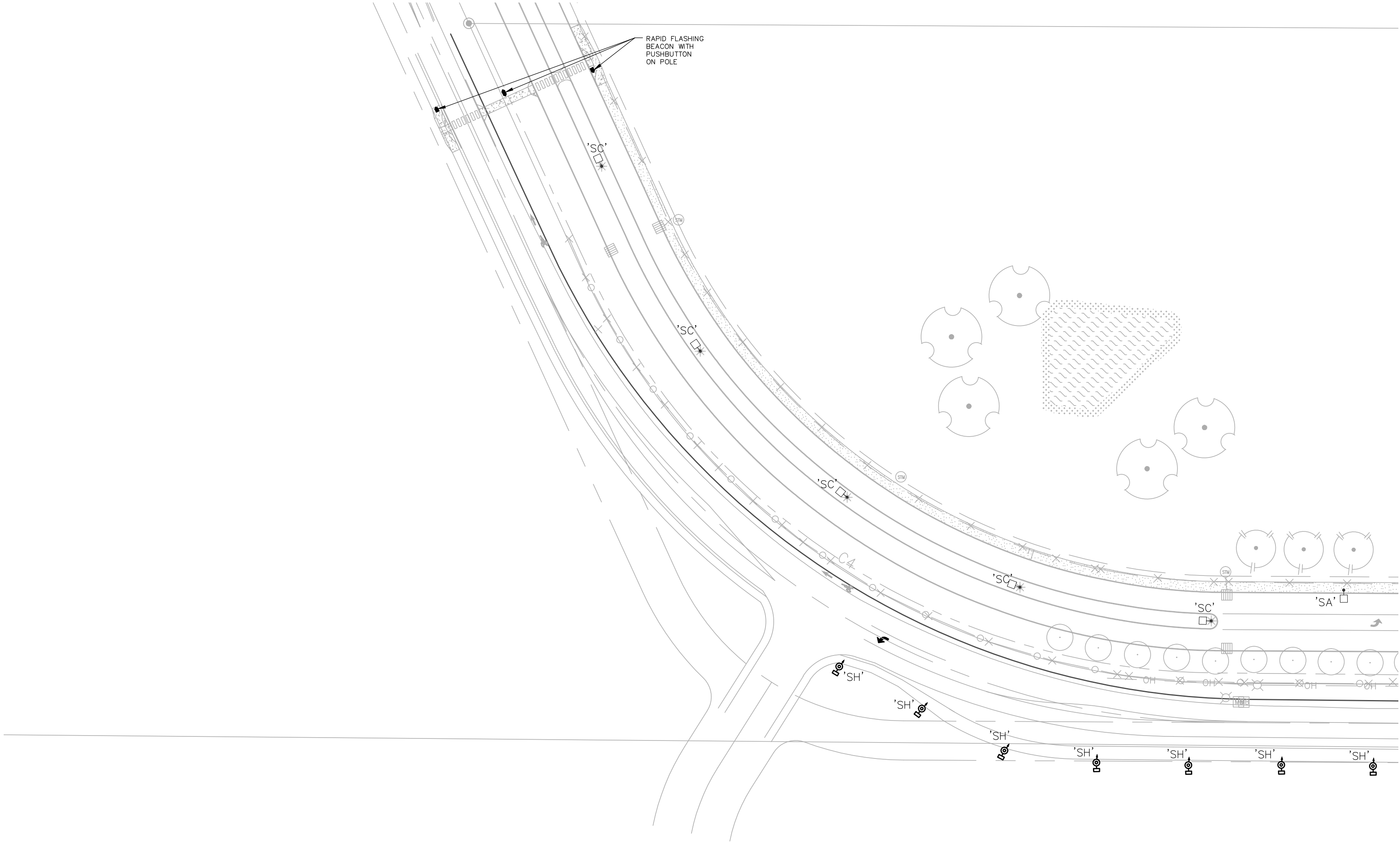
7316130 00  
09/23/16  
REVISIONS

**DLR Group**  
ARCHITECTURE PLANNING  
© 2016, DLR Group Architecture & Planning Inc., an Oregon corporation. ALL RIGHTS RESERVED



SHARP DRIVE LIGHTING

SCALE: 1"=60'-0"



# LIGHTING CUTSHEETS FOR DESIGN REVIEW

## APPENDIX 1

Exhibit 3 (DR 16-09)



# DLR Group

Architecture

Planning

Interiors

### **CAMAS PBL HIGH SCHOOL CAMAS SCHOOL DISTRICT Camas, Washington**

Design Review Lighting Specifications  
**DLR Group Project No. 73-16130-00**

January 17, 2017

#### Contents:

1. Type SA, SA2, SC
2. Type SB
3. Type SD
4. Type SG
5. Type SH CAMAS STD
6. Type DN

**NOTICE:** These documents are instruments of professional service, and information contained therein is incomplete unless used in conjunction with DLR Group's interpretations, decisions, observations and administrations. Use or reproduction of these documents in whole or in part without DLR Group's consent is in violation of common law, copyrights, statutory and other reserved rights, which preempts state and local public records act.



© 2016 DLR Group Architecture & Planning Inc., an Oregon corporation, ALL RIGHTS RESERVED.



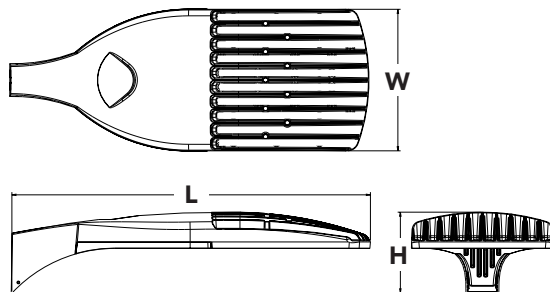
# D-Series Size 1 LED Area Luminaire



d#series

## Specifications

<b>EPA:</b>	1.01 ft <sup>2</sup> (0.09 m <sup>2</sup> )
<b>Length:</b>	33" (83.8 cm)
<b>Width:</b>	13" (33.0 cm)
<b>Height:</b>	7-1/2" (19.0 cm)
<b>Weight (max):</b>	27 lbs (12.2 kg)



Catalog  
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

## Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

## Ordering Information

**EXAMPLE: DSX1 LED 60C 1000 40K T3M MVOLT SPA DDBXD**

DSX1LED						
Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	<b>Forward optics</b> 30C 30 LEDs (one engine) 40C 40 LEDs (two engines) 60C 60 LEDs (two engines) <b>Rotated optics</b> <sup>1</sup> 60C 60 LEDs (two engines)	530 530 mA 700 700 mA 1000 1000 mA (1 A) <sup>2</sup>	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted <sup>3</sup>	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium TSVS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control <sup>2,4</sup> LCCO Left corner cutoff <sup>2,4</sup> RCCO Right corner cutoff <sup>2,4</sup>	MVOLT <sup>5</sup> 120 <sup>5</sup> 208 <sup>5</sup> 240 <sup>5</sup> 277 <sup>5</sup> 347 <sup>6</sup> 480 <sup>6</sup>	<b>Shipped included</b> SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor <sup>7</sup> RPUMBA Round pole universal mounting adaptor <sup>7</sup> <b>Shipped separately</b> KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) <sup>8</sup>

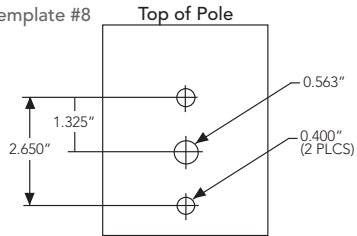
Control options	Other options	Finish (required)
<b>Shipped installed</b> PER NEMA twist-lock receptacle only (no controls) <sup>9</sup> PER5 Five-wire receptacle only (no controls) <sup>9,10</sup> PER7 Seven-wire receptacle only (no controls) <sup>9,10</sup> DMG 0-10V dimming driver (no controls) <sup>11</sup> DCR Dimmable and controllable via ROAM <sup>®</sup> (no controls) <sup>12</sup> DS Dual switching <sup>13,14</sup> PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc <sup>15</sup> PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc <sup>15</sup> PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc <sup>15</sup>	PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc <sup>15</sup> BL30 Bi-level switched dimming, 30% <sup>14,16</sup> BL50 Bi-level switched dimming, 50% <sup>14,16</sup> PNMTDD3 Part night, dim till dawn <sup>17</sup> PNMTSD3 Part night, dim 5 hrs <sup>17</sup> PNMT6D3 Part night, dim 6 hrs <sup>17</sup> PNMT7D3 Part night, dim 7 hrs <sup>17</sup> FAO Field adjustable output <sup>18</sup>	<b>Shipped installed</b> HS House-side shield <sup>19</sup> WTB Utility terminal block <sup>20</sup> SF Single fuse (120, 277, 347V) <sup>21</sup> DF Double fuse (208, 240, 480V) <sup>21</sup> L90 Left rotated optics <sup>22</sup> R90 Right rotated optics <sup>22</sup> BS Bird spikes <sup>23</sup> DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Accessories	Controls & Shields	NOTES
DL127F 1.5 JU DL1347F 1.5 CUL JU DL1480F 1.5 CUL JU DSHORT SBK U DSX1HS 30C U DSX1HS 40C U DSX1HS 60C U PUMBA DDBXD U* KMA8 DDBXD U DSX1BS U	Photocell - SSL twist-lock (120-277V) <sup>24</sup> Photocell - SSL twist-lock (347V) <sup>24</sup> Photocell - SSL twist-lock (480V) <sup>24</sup> Shorting cap <sup>24</sup> House-side shield for 30 LED unit <sup>19</sup> House-side shield for 40 LED unit <sup>19</sup> House-side shield for 60 LED unit <sup>19</sup> Square and round pole universal mounting bracket (specify finish) <sup>25</sup> Mast arm mounting bracket adaptor (specify finish) <sup>8</sup> Bird spikes	1 Rotated optics available with 60C only. 2 Not available AMBPC. 3 Only available with 530mA or 700mA. 4 Not available with HS. 5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options). 6 Not available with single board, 530mA product (30C 530 or 60C 530 DS). Not available with BL30, BL50 or PNMT options. 7 Existing drilled pole only. Available as a separate combination accessory; for retrofit use only: PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31. 8 Must order fixture with SPA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included). 9 Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. 10 If ROAM <sup>®</sup> node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming. 11 DMG option for 347V or 480V requires 1000mA. 12 Specifies a ROAM <sup>®</sup> enabled luminaire with 0-10V dimming capability; PER option required. Additional hardware and services required for ROAM <sup>®</sup> deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net. N/A with PIR options, DS, PER5, PER7, BL30, BL50 or PNMT options. Node without integral dimming. 13 Requires 40C or 60C. Provides 50/50 luminaire operation via two independent drivers on two separate circuits. N/A with PER, DCR, WTB, PIR or PIRH. 14 Requires an additional switched circuit. 15 PIR and PIR1FC3V specify the SensorSwitch SBGR-10-ODP control; PIRH and PIRH1FC3V specify the SensorSwitch SBGR-6-ODP control; see Outdoor Control Technical Guide for details. Dimming driver standard. Not available with PER5 or PER7. Ambient sensor disabled when ordered with DCR. Separate on/off required. 16 Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, DS, PER5, PER7 or PNMT options. Not available with PIR1FC3V or PIRH1FC3V. 17 Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, DS, PER5, PER7, BL30 or BL50. Not available with PIR1FC3V or PIRH1FC3V. Separate on/off required. 18 Dimming driver standard. Not available with PER5, PER7, DMG, DCR, DS, BL30, BL50 or PNMT, PIR, PIRH, PIR1FC3V or PIRH1FC3V. 19 Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information. 20 WTB not available with DS. 21 Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V. 22 Available with 60 LEDs (60C option) only. 23 Also available as a separate accessory; see accessories information. 24 Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls. 25 For retrofit use only.

For more control options, visit [DTL](#) and [ROAM](#) online.

## Drilling

Template #8



DSX1 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

<b>DM19AS</b>	Single unit	<b>DM29AS</b>	2 at 90°*
<b>DM28AS</b>	2 at 180°	<b>DM39AS</b>	3 at 90°*
<b>DM49AS</b>	4 at 90°*	<b>DM32AS</b>	3 at 120°**

**Example:** SSA 20 4C DM19AS DDBXD

Visit Lithonia Lighting's [POLES CENTRAL](#) to see our wide selection of poles, accessories and educational tools.

\*Round pole top must be 3.25" O.D. minimum.

\*\*For round pole mounting (RPA) only.

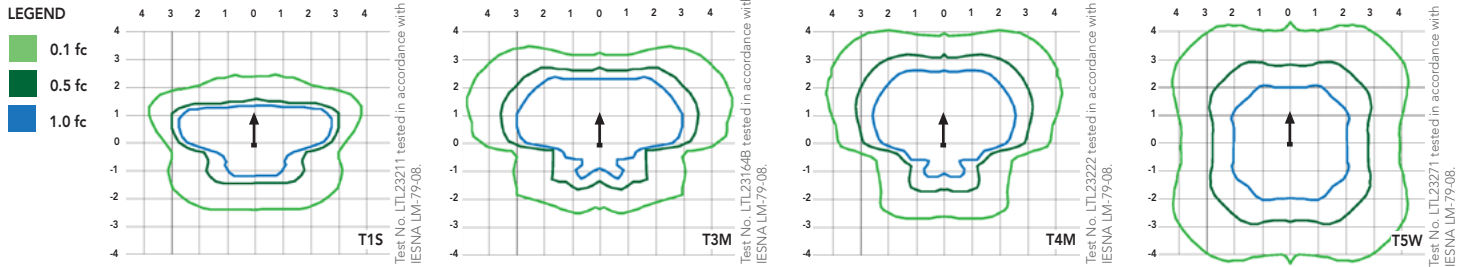
## Tenon Mounting Slipfitter\*\*

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit [Lithonia Lighting's D-Series Area Size 1 homepage](#).

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (20').



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient	Lumen Multiplier
0°C	1.02
10°C	1.01
20°C	1.00
<b>25°C</b>	<b>1.00</b>
30°C	1.00
40°C	0.99

### Electrical Load

Number of LEDs	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
30	530	52	0.52	0.30	0.26	0.23	---	---
	700	68	0.68	0.39	0.34	0.30	0.24	0.17
	1000	105	1.03	0.59	0.51	0.45	0.36	0.26
40	530	68	0.67	0.39	0.34	0.29	0.23	0.17
	700	89	0.89	0.51	0.44	0.38	0.31	0.22
	1000	138	1.35	0.78	0.67	0.58	0.47	0.34
60	530	99	0.97	0.56	0.48	0.42	0.34	0.24
	700	131	1.29	0.74	0.65	0.56	0.45	0.32
	1000	209	1.98	1.14	0.99	0.86	0.69	0.50

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	DSX1 LED 60C 1000			
	1.0	0.98	0.96	0.91
	DSX1 LED 60C 700			
	1.0	0.99	0.99	0.99

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

#### Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30C (30 LEDs)	530 mA	52 W	T1S	5,948	1	0	1	114	6,387	1	0	1	123	6,427	1	0	1	124	3,640	1	0	1	70
			T2S	6,132	1	0	1	118	6,585	2	0	2	127	6,626	2	0	2	127	3,813	1	0	1	73
			T2M	5,992	1	0	2	115	6,434	1	0	2	124	6,475	1	0	2	125	3,689	1	0	1	71
			T3S	5,985	1	0	1	115	6,427	1	0	2	124	6,467	1	0	2	124	3,770	1	0	1	73
			T3M	6,039	1	0	2	116	6,485	1	0	2	125	6,525	1	0	2	125	3,752	1	0	1	72
			T4M	6,121	1	0	2	118	6,573	1	0	2	126	6,614	1	0	2	127	3,758	1	0	1	72
			TFTM	6,030	1	0	2	116	6,475	1	0	2	125	6,515	1	0	2	125	3,701	1	0	1	71
			TSVS	6,370	2	0	0	123	6,840	2	0	0	132	6,883	2	0	0	132	3,928	2	0	0	76
			T5S	6,417	2	0	0	123	6,890	2	0	0	133	6,933	2	0	0	133	3,881	2	0	0	75
			T5M	6,428	3	0	1	124	6,902	3	0	1	133	6,945	3	0	1	134	3,930	2	0	1	76
			TSW	6,334	3	0	1	122	6,801	3	0	1	131	6,844	3	0	1	132	3,820	3	0	1	73
			BLC	4,735	1	0	1	91	5,085	1	0	2	98	5,116	1	0	1	98					
			LCCO	4,600	1	0	2	88	4,940	1	0	2	95	4,971	1	0	2	96					
			RCCO	4,600	1	0	2	88	4,940	1	0	2	95	4,971	1	0	2	96					
	700 mA	68 W	T1S	7,554	1	0	1	111	8,112	2	0	2	119	8,163	2	0	2	120	4,561	1	0	1	67
			T2S	7,789	2	0	2	115	8,364	2	0	2	123	8,416	2	0	2	124	4,777	1	0	1	70
			T2M	7,610	1	0	2	112	8,172	2	0	2	120	8,223	2	0	2	121	4,622	1	0	2	68
			T3S	7,601	1	0	2	112	8,162	2	0	2	120	8,213	2	0	2	121	4,724	1	0	1	69
			T3M	7,670	1	0	2	113	8,236	2	0	2	121	8,288	2	0	2	122	4,701	1	0	2	69
			T4M	7,774	1	0	2	114	8,348	2	0	2	123	8,400	2	0	2	124	4,709	1	0	2	69
			TFTM	7,658	1	0	2	113	8,223	1	0	2	121	8,275	1	0	2	122	4,638	1	0	2	68
			TSVS	8,090	2	0	0	119	8,687	3	0	1	128	8,742	3	0	1	129	4,922	2	0	0	72
			T5S	8,150	2	0	0	120	8,751	3	0	0	129	8,806	3	0	0	130	4,863	2	0	0	72
			T5M	8,164	3	0	1	120	8,767	3	0	2	129	8,821	3	0	2	130	4,924	3	0	1	72
			TSW	8,044	3	0	1	118	8,638	3	0	2	127	8,692	3	0	2	128	4,787	3	0	1	70
			BLC	6,028	1	0	2	89	6,473	1	0	2	95	6,514	1	0	2	96					
			LCCO	5,856	1	0	2	86	6,289	1	0	2	92	6,328	1	0	2	93					
			RCCO	5,856	1	0	2	86	6,289	1	0	2	92	6,328	1	0	2	93					
	1000 mA	105 W	T1S	10,331	2	0	2	98	11,094	2	0	2	106	11,163	2	0	2	106					
			T2S	10,652	2	0	2	101	11,438	2	0	2	109	11,510	2	0	2	110					
			T2M	10,408	2	0	2	99	11,176	2	0	3	106	11,246	2	0	3	107					
			T3S	10,395	2	0	2	99	11,163	2	0	2	106	11,233	2	0	2	107					
			T3M	10,490	2	0	2	100	11,264	2	0	2	107	11,335	2	0	2	108					
			T4M	10,632	2	0	2	101	11,417	2	0	2	109	11,488	2	0	2	109					
			TFTM	10,473	2	0	2	100	11,247	2	0	3	107	11,317	2	0	3	108					
			TSVS	11,064	3	0	1	105	11,881	3	0	1	113	11,955	3	0	1	114					
			T5S	11,145	3	0	1	106	11,968	3	0	1	114	12,043	3	0	1	115					
			T5M	11,165	3	0	2	106	11,989	4	0	2	114	12,064	4	0	2	115					
			TSW	11,001	3	0	2	105	11,813	4	0	2	113	11,887	4	0	2	113					
			BLC	7,960	1	0	2	76	8,548	1	0	2	81	8,601	1	0	2	82					
			LCCO	7,734	1	0	2	74	8,305	1	0	2	79	8,357	1	0	2	80					
			RCCO	7,734	1	0	2	74	8,305	1	0	2	79	8,357	1	0	2	80					

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

#### Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40C (40 LEDs)	530 mA	68 W	T1S	7,861	1	0	1	116	8,441	2	0	2	124	8,494	2	0	2	125	4,794	1	0	1	71
			T2S	8,105	2	0	2	119	8,704	2	0	2	128	8,758	2	0	2	129	5,021	1	0	1	74
			T2M	7,920	2	0	2	116	8,504	2	0	2	125	8,557	2	0	2	126	4,858	1	0	2	71
			T3S	7,910	1	0	2	116	8,494	2	0	2	125	8,547	2	0	2	126	4,966	1	0	1	73
			T3M	7,982	2	0	2	117	8,571	2	0	2	126	8,625	2	0	2	127	4,941	1	0	2	73
			T4M	8,090	1	0	2	119	8,687	2	0	2	128	8,741	2	0	2	129	4,950	1	0	2	73
			TFTM	7,969	1	0	2	117	8,558	2	0	2	126	8,611	2	0	2	127	4,875	1	0	2	72
			TSVS	8,419	2	0	0	124	9,040	3	0	1	133	9,097	3	0	1	134	5,174	2	0	0	76
			T5S	8,481	2	0	0	125	9,107	3	0	1	134	9,164	3	0	1	135	5,111	2	0	0	75
			T5M	8,496	3	0	1	125	9,123	3	0	2	134	9,180	3	0	2	135	5,175	3	0	1	76
			TSW	8,371	3	0	2	123	8,989	3	0	2	132	9,045	3	0	2	133	5,031	3	0	1	74
			BLC	6,255	1	0	2	92	6,717	1	0	2	99	6,759	1	0	2	99					
			LCCO	6,077	1	0	2	89	6,526	1	0	2	96	6,566	1	0	2	97					
			RCCO	6,077	1	0	2	89	6,526	1	0	2	96	6,566	1	0	2	97					
	700 mA	91 W	T1S	9,984	2	0	2	112	10,721	2	0	2	120	10,788	2	0	2	121	6,014	1	0	1	68
			T2S	10,294	2	0	2	116	11,054	2	0	2	124	11,123	2	0	2	125	6,299	2	0	2	71
			T2M	10,059	2	0	2	113	10,801	2	0	3	121	10,869	2	0	3	122	6,094	2	0	2	68
			T3S	10,046	2	0	2	113	10,788	2	0	2	121	10,855	2	0	2	122	6,229	1	0	2	70
			T3M	10,137	2	0	2	114	10,886	2	0	2	122	10,954	2	0	2	123	6,198	2	0	2	70
			T4M	10,275	2	0	2	115	11,033	2	0	2	124	11,102	2	0	2	125	6,209	1	0	2	70
			TFTM	10,122	2	0	2	114	10,869	2	0	2	122	10,937	2	0	2	123	6,115	1	0	2	69
			TSVS	10,693	3	0	1	120	11,482	3	0	1	129	11,554	3	0	1	130	6,490	2	0	0	73
			T5S	10,771	3	0	1	121	11,566	3	0	1	130	11,639	3	0	1	131	6,411	2	0	0	72
			T5M	10,790	3	0	2	121	11,587	4	0	2	130	11,659	4	0	2	131	6,492	3	0	1	73
			TSW	10,632	3	0	2	119	11,417	4	0	2	128	11,488	4	0	2	129	6,311	3	0	2	71
			BLC	7,963	1	0	2	89	8,551	1	0	2	96	8,605	1	0	2	97					
			LCCO	7,736	1	0	2	87	8,308	1	0	2	93	8,359	1	0	2	94					
			RCCO	7,736	1	0	2	87	8,308	1	0	2	93	8,359	1	0	2	94					
	1000 mA	138 W	T1S	13,655	2	0	2	99	14,663	3	0	3	106	14,754	3	0	3	107					
			T2S	14,079	2	0	2	102	15,118	3	0	3	110	15,212	3	0	3	110					
			T2M	13,756	2	0	3	100	14,772	3	0	3	107	14,864	3	0	3	108					
			T3S	13,739	2	0	2	100	14,754	2	0	2	107	14,846	3	0	3	108					
			T3M	13,864	2	0	2	100	14,888	3	0	3	108	14,981	3	0	3	109					
			T4M	14,052	2	0	2	102	15,090	3	0	3	109	15,184	3	0	3	110					
			TFTM	13,842	2	0	3	100	14,864	2	0	3	108	14,957	2	0	3	108					
			TSVS	14,623	3	0	1	106	15,703	4	0	1	114	15,801	4	0	1	115					
			T5S	14,731	3	0	1	107	15,818	3	0	1	115	15,917	3	0	1	115					
			T5M	14,757	4	0	2	107	15,846	4	0	2	115	15,945	4	0	2	116					
			TSW	14,540	4	0	2	105	15,614	4	0	2	113	15,711	4	0	2	114					
			BLC	10,516	1	0	2	76	11,292	1	0	2	82	11,363	1	0	2	82					
			LCCO	10,216	2	0	3	74	10,971	2	0	3	80	11,039	2	0	3	80					
			RCCO	10,216	2	0	3	74	10,971	2	0	3	80	11,039	2	0	3	80					

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

#### Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60C (60 LEDs)	530 mA	99 W	T1S	11,569	2	0	2	117	12,423	2	0	2	125	12,501	2	0	2	126	7,167	2	0	2	72
			T2S	11,928	2	0	2	120	12,809	3	0	3	129	12,889	3	0	3	130	7,507	2	0	2	76
			T2M	11,655	2	0	2	118	12,516	2	0	3	126	12,594	2	0	3	127	7,263	2	0	2	73
			T3S	11,641	2	0	2	118	12,500	2	0	2	126	12,579	2	0	2	127	7,424	2	0	2	75
			T3M	11,747	2	0	2	119	12,614	2	0	2	127	12,693	2	0	2	128	7,387	2	0	2	75
			T4M	11,906	2	0	2	120	12,785	2	0	2	129	12,865	2	0	2	130	7,400	2	0	2	75
			TFTM	11,728	2	0	2	118	12,594	2	0	3	127	12,673	2	0	3	128	7,288	1	0	2	74
			TSVS	12,390	3	0	1	125	13,305	3	0	1	134	13,388	3	0	1	135	7,734	3	0	1	78
			T5S	12,481	3	0	1	126	13,402	3	0	1	135	13,486	3	0	1	136	7,641	3	0	0	77
			T5M	12,503	3	0	2	126	13,426	4	0	2	136	13,510	4	0	2	136	7,737	3	0	2	78
			TSW	12,320	4	0	2	124	13,229	4	0	2	134	13,312	4	0	2	134	7,522	3	0	2	76
			BLC	9,212	1	0	2	93	9,892	1	0	2	100	9,954	1	0	2	101					
			LCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
			RCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
	700 mA	131 W	T1S	14,694	2	0	2	112	15,779	3	0	3	120	15,877	3	0	3	121	8,952	2	0	2	68
			T2S	15,150	3	0	3	116	16,269	3	0	3	124	16,370	3	0	3	125	9,377	2	0	2	72
			T2M	14,803	2	0	3	113	15,896	3	0	3	121	15,995	3	0	3	122	9,072	2	0	2	69
			T3S	14,785	2	0	2	113	15,877	3	0	3	121	15,976	3	0	3	122	9,273	2	0	2	71
			T3M	14,919	2	0	2	114	16,021	3	0	3	122	16,121	3	0	3	123	9,227	2	0	2	70
			T4M	15,122	2	0	2	115	16,238	3	0	3	124	16,340	3	0	3	125	9,243	2	0	2	71
			TFTM	14,896	2	0	3	114	15,996	2	0	3	122	16,096	2	0	3	123	9,103	2	0	2	69
			TSVS	15,736	3	0	1	120	16,898	4	0	1	129	17,004	4	0	1	130	9,661	3	0	1	74
			T5S	15,852	3	0	1	121	17,022	4	0	1	130	17,129	4	0	1	131	9,544	3	0	1	73
			T5M	15,880	4	0	2	121	17,052	4	0	2	130	17,159	4	0	2	131	9,665	3	0	2	74
			TSW	15,647	4	0	2	119	16,802	4	0	2	128	16,907	4	0	2	129	9,395	4	0	2	72
			BLC	11,728	1	0	2	90	12,594	1	0	2	96	12,672	3	0	3	97					
			LCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
			RCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
	1000 mA	209 W	T1S	20,095	3	0	3	96	21,579	3	0	3	103	21,714	3	0	3	104					
			T2S	20,720	3	0	3	99	22,249	3	0	3	106	22,388	3	0	3	107					
			T2M	20,245	3	0	3	97	21,740	3	0	3	104	21,876	3	0	3	105					
			T3S	20,220	3	0	3	97	21,713	3	0	3	104	21,849	3	0	3	105					
			T3M	20,404	3	0	3	98	21,910	3	0	4	105	22,047	3	0	4	105					
			T4M	20,681	3	0	3	99	22,207	3	0	4	106	22,346	3	0	4	107					
			TFTM	20,372	3	0	3	97	21,876	3	0	4	105	22,013	3	0	4	105					
			TSVS	21,521	4	0	1	103	23,110	4	0	1	111	23,254	4	0	1	111					
			T5S	21,679	4	0	1	104	23,280	4	0	1	111	23,425	4	0	1	112					
			T5M	21,717	4	0	2	104	23,321	5	0	3	112	23,466	5	0	3	112					
			TSW	21,399	4	0	3	102	22,979	5	0	3	110	23,122	5	0	3	111					
			BLC	15,487	2	0	2	74	16,630	2	0	2	80	16,734	2	0	3	80					
			LCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					
			RCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

#### L90 and R90 Rotated Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
60C (60 LEDs)	530 mA	99 W	T1S	11,569	2	0	2	117	12,423	2	0	2	125	12,501	2	0	2	126	7,167	2	0	2	72
			T2S	11,928	2	0	2	120	12,809	3	0	3	129	12,889	3	0	3	130	7,507	2	0	2	76
			T2M	11,655	2	0	2	118	12,516	2	0	3	126	12,594	2	0	3	127	7,263	2	0	2	73
			T3S	11,641	2	0	2	118	12,500	2	0	2	126	12,579	2	0	2	127	7,424	2	0	2	75
			T3M	11,747	2	0	2	119	12,614	2	0	2	127	12,693	2	0	2	128	7,387	2	0	2	75
			T4M	11,906	2	0	2	120	12,785	2	0	2	129	12,865	2	0	2	130	7,400	2	0	2	75
			TFTM	11,728	2	0	2	118	12,594	2	0	3	127	12,673	2	0	3	128	7,288	1	0	2	74
			TSVS	12,390	3	0	1	125	13,305	3	0	1	134	13,388	3	0	1	135	7,734	3	0	1	78
			T5S	12,481	3	0	1	126	13,402	3	0	1	135	13,486	3	0	1	136	7,641	3	0	0	77
			T5M	12,503	3	0	2	126	13,426	4	0	2	136	13,510	4	0	2	136	7,737	3	0	2	78
			TSW	12,320	4	0	2	124	13,229	4	0	2	134	13,312	4	0	2	134	7,522	3	0	2	76
			BLC	9,212	1	0	2	93	9,892	1	0	2	100	9,954	1	0	2	101					
			LCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
			RCCO	8,950	1	0	2	90	9,611	2	0	2	97	9,671	2	0	2	98					
	700 mA	131 W	T1S	14,694	2	0	2	112	15,779	3	0	3	120	15,877	3	0	3	121	8,952	2	0	2	68
			T2S	15,150	3	0	3	116	16,269	3	0	3	124	16,370	3	0	3	125	9,377	2	0	2	72
			T2M	14,803	2	0	3	113	15,896	3	0	3	121	15,995	3	0	3	122	9,072	2	0	2	69
			T3S	14,785	2	0	2	113	15,877	3	0	3	121	15,976	3	0	3	122	9,273	2	0	2	71
			T3M	14,919	2	0	2	114	16,021	3	0	3	122	16,121	3	0	3	123	9,227	2	0	2	70
			T4M	15,122	2	0	2	115	16,238	3	0	3	124	16,340	3	0	3	125	9,243	2	0	2	71
			TFTM	14,896	2	0	3	114	15,996	2	0	3	122	16,096	2	0	3	123	9,103	2	0	2	69
			TSVS	15,736	3	0	1	120	16,898	4	0	1	129	17,004	4	0	1	130	9,661	3	0	1	74
			T5S	15,852	3	0	1	121	17,022	4	0	1	130	17,129	4	0	1	131	9,544	3	0	1	73
			T5M	15,880	4	0	2	121	17,052	4	0	2	130	17,159	4	0	2	131	9,665	3	0	2	74
			TSW	15,647	4	0	2	119	16,802	4	0	2	128	16,907	4	0	2	129	9,395	4	0	2	72
			BLC	11,728	1	0	2	90	12,594	1	0	2	96	12,672	3	0	3	97					
			LCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
			RCCO	11,394	2	0	3	87	12,235	2	0	3	93	12,311	2	0	3	94					
	1000 mA	209 W	T1S	20,095	3	0	3	96	21,579	3	0	3	103	21,714	3	0	3	104					
			T2S	20,720	3	0	3	99	22,249	3	0	3	106	22,388	3	0	3	107					
			T2M	20,245	3	0	3	97	21,740	3	0	3	104	21,876	3	0	3	105					
			T3S	20,220	3	0	3	97	21,713	3	0	3	104	21,849	3	0	3	105					
			T3M	20,404	3	0	3	98	21,910	3	0	4	105	22,047	3	0	4	105					
			T4M	20,681	3	0	3	99	22,207	3	0	4	106	22,346	3	0	4	107					
			TFTM	20,372	3	0	3	97	21,876	3	0	4	105	22,013	3	0	4	105					
			TSVS	21,521	4	0	1	103	23,110	4	0	1	111	23,254	4	0	1	111					
			T5S	21,679	4	0	1	104	23,280	4	0	1	111	23,425	4	0	1	112					
			T5M	21,717	4	0	2	104	23,321	5	0	3	112	23,466	5	0	3	112					
			TSW	21,399	4	0	3	102	22,979	5	0	3	110	23,122	5	0	3	111					
			BLC	15,487	2	0	2	74	16,630	2	0	2	80	16,734	2	0	3	80					
			LCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					
			RCCO	15,046	2	0	3	72	16,157	2	0	3	77	16,258	2	0	3	78					

## FEATURES & SPECIFICATIONS

### INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 ft²) for optimized pole wind loading.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

### OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) or optional 3000 K (70 minimum CRI) or 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine configurations consist of 30, 40 or 60 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L99/100,000 hours at

25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV or 6kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block, tool-less entry, and NEMA photocontrol receptacle are also available.

### LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org](http://www.designlights.org) to confirm which versions are qualified.

### WARRANTY

5-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.





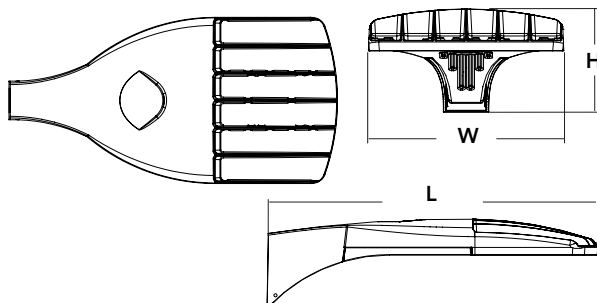
# D-Series Size 0 LED Area Luminaire



d#series

## Specifications

EPA:	0.95 ft <sup>2</sup> (.09 m <sup>2</sup> )
Length:	26" (66.0 cm)
Width:	13" (33.0 cm)
Height:	7" (17.8 cm)
Weight (max):	16 lbs (7.25 kg)



Catalog  
Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

## Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 65% and expected service life of over 100,000 hours.

## Ordering Information

EXAMPLE: DSX0 LED 40C 1000 40K T3M MVOLT SPA DDBXD

DSX0 LED						
Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	<b>Forward optics</b> 20C 20 LEDs (one engine) 40C 40 LEDs (two engines) <b>Rotated optics<sup>1</sup></b> 30C 30 LEDs (one engine)	530 530 mA 700 700 mA 1000 1000 mA (1 A) <sup>2</sup>	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted <sup>3</sup>	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control <sup>2,4</sup> LCCO Left corner cutoff <sup>2,4</sup> RCCO Right corner cutoff <sup>2,4</sup>	MVOLT <sup>5</sup> 120 <sup>5</sup> 208 <sup>5</sup> 240 <sup>5</sup> 277 <sup>5</sup> 347 <sup>6</sup> 480 <sup>6</sup>	<b>Shipped included</b> SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor <sup>7</sup> RPUMBA Round pole universal mounting adaptor <sup>7</sup> <b>Shipped separately</b> KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) <sup>8</sup>

Control options	Other options	Finish (required)
<b>Shipped installed</b> PER NEMA twist-lock receptacle only (no controls) <sup>9</sup> PER5 Five-wire receptacle only (no controls) <sup>9,10</sup> PER7 Seven-wire receptacle only (no controls) <sup>9,10</sup> DMG 0-10V dimming driver (no controls) <sup>11</sup> DCR Dimmable and controllable via ROAM <sup>®</sup> (no controls) <sup>12</sup> PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc <sup>13</sup> PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc <sup>13</sup> PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc <sup>13</sup>	PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc <sup>13</sup> BL30 Bi-level switched dimming, 30% <sup>14,15</sup> BL50 Bi-level switched dimming, 50% <sup>14,15</sup> PNMTDD3 Part night, dim till dawn <sup>16</sup> PNMTSD3 Part night, dim 5 hrs <sup>16</sup> PNMT6D3 Part night, dim 6 hrs <sup>16</sup> PNMT7D3 Part night, dim 7 hrs <sup>16</sup> FAO Field adjustable output <sup>17</sup>	<b>Shipped installed</b> HS House-side shield <sup>18</sup> SF Single fuse (120, 277, 347V) <sup>19</sup> DF Double fuse (208, 240, 480V) <sup>19</sup> L90 Left rotated optics <sup>1</sup> R90 Right rotated optics <sup>1</sup> DDL Diffused drop lens <sup>18</sup> BS Bird spikes <sup>20</sup> DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

## Controls & Shields

DL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>21</sup>
DL1347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>21</sup>
DL1480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>21</sup>
DSHORT SBK U	Shorting cap <sup>21</sup>
DSX0HS 20C U	House-side shield for 20 LED unit <sup>18</sup>
DSX0HS 30C U	House-side shield for 30 LED unit <sup>18</sup>
DSX0HS 40C U	House-side shield for 40 LED unit <sup>18</sup>
DSX0DDL U	Diffused drop lens (polycarbonate) <sup>17</sup>
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish) <sup>22</sup>
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) <sup>8</sup>
DSX0BS U	Bird spikes

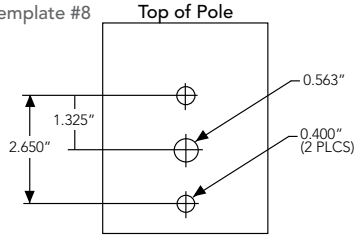
## NOTES

- 30 LEDs (30C option) and rotated options (L90 or R90) only available together.
- Not available with AMBPC.
- Only available with 530mA or 700mA.
- Not available with HS or DDL.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options).
- Not available with single board, 530mA product (20C 530 or 30C 530). Not available with BL30, BL50 or PNMT options.
- Existing drilled pole only. Available as a separate combination accessory; for retrofit use only: PUMBA (finish) U; 1.5 G vibration load rating per ANSI C136.31.
- Must order fixture with SPA mounting. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories.
- If ROAM<sup>®</sup> node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming.
- DMG option for 347V or 480V requires 1000mA.
- Specifies a ROAM<sup>®</sup> enabled luminaire with 0-10V dimming capability; PER option required. Additional hardware and services required for ROAM<sup>®</sup> deployment; must be purchased separately. Call 1-800-442-6745 or email: [sales@roamservices.net](mailto:sales@roamservices.net). N/A with PIR options, PER5, PER7, BL30, BL50 or PNMT options. Node without integral dimming.

- PIR and PIR1FC3V specify the [SensorSwitch SBGR-10-ODP](#) control; PIRH and PIRH1FC3V specify the [SensorSwitch SBGR-6-ODP](#) control; see [Outdoor Control Technical Guide](#) for details. Dimming driver standard. Not available with PER5 or PER7. Ambient sensor disabled when ordered with DCR. Separate on/off required. Not available with PNMT options.
- Requires an additional switched circuit.
- Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, PER5, PER7 or PNMT options. Not available with PIR1FC3V and PIRH1FC3V.
- Dimming driver standard. MVOLT only. Not available with 347V, 480V, DCR, PER5, PER7, BL30 or BL50. Not available with PIR1FC3V and PIRH1FC3V. Separate on/off required.
- Dimming driver standard. Not available with PER5, PER7, DMG, DCR, BL30, BL50, PNMT, PIR, PIRH, PIR1FC3V and PIRH1FC3V.
- Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Also available as a separate accessory; see accessories information.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item from Acuity Brands Controls.
- For retrofit use only.

## Drilling

Template #8



DSX0 shares a unique drilling pattern with the AERIS™ family. Specify this drilling pattern when specifying poles, per the table below.

<b>DM19AS</b>	Single unit	<b>DM29AS</b>	2 at 90° *
<b>DM28AS</b>	2 at 180°	<b>DM39AS</b>	3 at 90° *
<b>DM49AS</b>	4 at 90° *	<b>DM32AS</b>	3 at 120° **

**Example:** SSA 20 4C DM19AS DDBXD

Visit Lithonia Lighting's [POLES CENTRAL](#) to see our wide selection of poles, accessories and educational tools.

\*Round pole top must be 3.25" O.D. minimum.

\*\*For round pole mounting (RPA) only.

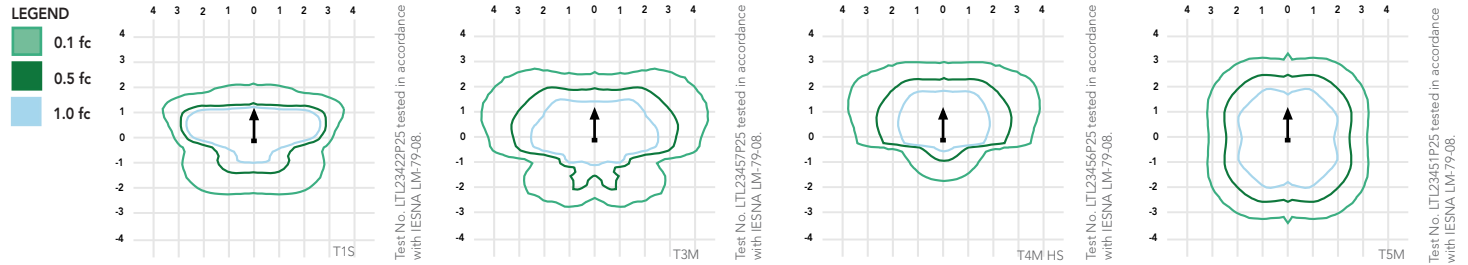
## Tenon Mounting Slipfitter \*\*

Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit [Lithonia Lighting's D-Series Area Size 0 homepage](#).

Isfootcandle plots for the DSX0 LED 40C 1000 40K. Distances are in units of mounting height (20').



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
<b>25°C</b>	<b>77°F</b>	<b>1.00</b>
30°C	86°F	1.00
40°C	104°F	0.99

### Electrical Load

Number of LEDs	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
20C	530	35	0.34	0.22	0.21	0.20	--	--
	700	45	0.47	0.28	0.24	0.22	0.18	0.14
	1000	72	0.76	0.45	0.39	0.36	0.36	0.26
30C	530	52	0.51	0.31	0.28	0.25	--	--
	700	70	0.72	0.43	0.37	0.34	0.25	0.19
	1000	104	1.11	0.64	0.56	0.49	0.47	0.34
40C	530	68	0.71	0.41	0.36	0.33	0.25	0.19
	700	91	0.94	0.55	0.48	0.42	0.33	0.24
	1000	138	1.45	0.84	0.73	0.64	0.69	0.50

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor		DSX0 LED 20C 1000		
	1	0.98	0.96	0.93
		DSX0 LED 40C 1000		
	1	0.98	0.95	0.90
		DSX0 LED 40C 700		
	1	0.99	0.99	0.99

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

#### Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)					
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	
20C (20 LEDs)	530 mA	35 W	T1S	4,079	1	0	1	117	4,380	1	0	1	125	4,408	1	0	1	126	2,541	1	0	1	73	
			T2S	4,206	1	0	1	120	4,516	1	0	1	129	4,544	1	0	1	130	2,589	1	0	1	74	
			T2M	4,109	1	0	1	117	4,413	1	0	1	126	4,440	1	0	1	127	2,539	1	0	1	73	
			T3S	4,104	1	0	1	117	4,407	1	0	1	126	4,435	1	0	1	127	2,558	1	0	1	73	
			T3M	4,142	1	0	1	118	4,447	1	0	1	127	4,475	1	0	1	128	2,583	1	0	1	74	
			T4M	4,198	1	0	1	120	4,508	1	0	1	129	4,536	1	0	1	130	2,570	1	0	1	73	
			TFTM	4,135	1	0	1	118	4,440	1	0	2	127	4,468	1	0	2	128	2,540	1	0	1	73	
			TSVS	4,368	2	0	0	125	4,691	2	0	0	134	4,720	2	0	0	135	2,650	1	0	0	76	
			TSS	4,401	2	0	2	126	4,725	2	0	0	135	4,755	2	0	0	136	2,690	1	0	0	77	
			TSM	4,408	2	0	1	126	4,734	3	0	1	135	4,763	3	0	1	136	2,658	2	0	0	76	
			TSW	4,344	3	0	1	124	4,664	3	0	1	133	4,693	3	0	1	134	2,663	2	0	1	76	
			BLC	3,071	1	0	1	88	3,297	1	0	1	94	3,318	1	0	1	95						
			LCCO	2,983	1	0	1	85	3,204	1	0	1	92	3,224	1	0	1	92						
			RCCO	2,983	1	0	1	85	3,204	1	0	1	92	3,224	1	0	1	92						
		700 mA	45 W	T1S	5,181	1	0	1	115	5,563	1	0	1	124	5,598	1	0	1	124	3,144	1	0	1	70
	T2S			5,342	1	0	1	119	5,736	1	0	1	127	5,772	1	0	1	128	3,203	1	0	1	71	
	T2M			5,219	1	0	1	116	5,605	1	0	1	125	5,640	1	0	1	125	3,141	1	0	1	70	
	T3S			5,213	1	0	1	116	5,598	1	0	1	124	5,633	1	0	1	125	3,165	1	0	1	70	
	T3M			5,260	1	0	1	117	5,649	1	0	2	126	5,684	1	0	2	126	3,196	1	0	1	71	
	T4M			5,332	1	0	1	118	5,725	1	0	2	127	5,761	1	0	2	128	3,179	1	0	1	71	
	TFTM			5,252	1	0	2	117	5,640	1	0	2	125	5,675	1	0	2	126	3,143	1	0	1	70	
	TSVS			5,548	2	0	0	123	5,958	2	0	0	132	5,995	2	0	0	133	3,278	2	0	0	73	
	TSS			5,589	2	0	0	124	6,002	2	0	0	133	6,039	2	0	0	134	3,328	2	0	0	74	
	TSM			5,599	3	0	1	124	6,012	3	0	1	134	6,050	3	0	1	134	3,288	2	0	1	73	
	TSW			5,517	3	0	1	123	5,924	3	0	1	132	5,961	3	0	1	132	3,295	2	0	1	73	
	BLC			3,909	1	0	1	87	4,198	1	0	1	93	4,224	1	0	1	94						
	LCCO			3,798	1	0	1	84	4,078	1	0	1	91	4,104	1	0	1	91						
	RCCO			3,798	1	0	1	84	4,078	1	0	1	91	4,104	1	0	1	91						
		1000 mA	72 W	T1S	7,085	1	0	1	98	7,608	2	0	2	106	7,656	2	0	2	106					
	T2S			7,305	1	0	1	101	7,845	2	0	2	109	7,894	2	0	2	110						
	T2M			7,138	1	0	2	99	7,665	2	0	2	106	7,713	2	0	2	107						
	T3S			7,129	1	0	1	99	7,656	2	0	2	106	7,704	2	0	2	107						
	T3M			7,194	1	0	2	100	7,725	2	0	2	107	7,773	2	0	2	108						
	T4M			7,292	1	0	2	101	7,830	2	0	2	109	7,879	2	0	2	109						
	TFTM			7,183	1	0	2	100	7,713	1	0	2	107	7,761	1	0	2	108						
	TSVS			7,588	2	0	0	105	8,148	3	0	0	113	8,199	3	0	0	114						
	TSS			7,644	2	0	0	106	8,208	2	0	0	114	8,259	2	0	0	115						
	TSM			7,657	3	0	1	106	8,222	3	0	1	114	8,274	3	0	1	115						
	TSW			7,545	3	0	1	105	8,102	3	0	2	113	8,153	3	0	2	113						
	BLC			5,162	1	0	1	72	5,543	1	0	2	77	5,578	1	0	1	77						
	LCCO			5,015	1	0	2	70	5,386	1	0	2	75	5,419	1	0	2	75						
	RCCO			5,015	1	0	2	70	5,386	1	0	2	75	5,419	1	0	2	75						

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

#### Forward Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
40C (40 LEDs)	530 mA	68 W	T1S	7,926	2	0	2	117	8,511	2	0	2	125	8,564	2	0	2	126	4,878	1	0	1	72
			T2S	8,172	2	0	2	120	8,775	2	0	2	129	8,830	2	0	2	130	4,969	1	0	1	73
			T2M	7,985	2	0	2	117	8,574	2	0	2	126	8,628	2	0	2	127	4,874	1	0	1	72
			T3S	7,975	1	0	2	117	8,564	2	0	2	126	8,617	2	0	2	127	4,910	1	0	1	72
			T3M	8,047	2	0	2	118	8,642	2	0	2	127	8,696	2	0	2	128	4,958	1	0	2	73
			T4M	8,157	1	0	2	120	8,759	2	0	2	129	8,813	2	0	2	130	4,932	1	0	2	73
			TFTM	8,035	1	0	2	118	8,628	2	0	2	127	8,682	2	0	2	128	4,876	1	0	2	72
			TSVS	8,488	2	0	0	125	9,115	3	0	0	134	9,172	3	0	0	135	5,086	2	0	0	75
			TSS	8,550	2	0	0	126	9,182	3	0	1	135	9,239	3	0	1	136	5,163	2	0	0	76
			TSM	8,565	3	0	1	126	9,198	3	0	2	135	9,255	3	0	2	136	5,102	3	0	1	75
			TSW	8,440	3	0	2	124	9,063	3	0	2	133	9,120	3	0	2	134	5,112	3	0	1	75
			BLC	6,142	1	0	2	90	6,595	1	0	2	97	6,636	1	0	2	98					
			LCCO	5,967	1	0	2	88	6,407	1	0	2	94	6,447	1	0	2	95					
			RCCO	5,967	1	0	2	88	6,407	1	0	2	94	6,447	1	0	2	95					
			T1S	10,066	2	0	2	111	10,810	2	0	2	119	10,877	2	0	2	120	6,206	2	0	2	68
	700 mA	91 W	T2S	10,379	2	0	2	114	11,145	2	0	2	122	11,215	2	0	2	123	6,322	2	0	2	69
			T2M	10,141	2	0	2	111	10,890	2	0	2	120	10,958	2	0	2	120	6,201	2	0	2	68
			T3S	10,129	2	0	2	111	10,877	2	0	2	120	10,945	2	0	2	120	6,247	1	0	2	69
			T3M	10,221	2	0	2	112	10,975	2	0	2	121	11,044	2	0	2	121	6,308	2	0	2	69
			T4M	10,359	2	0	2	114	11,124	2	0	2	122	11,194	2	0	2	123	6,275	1	0	2	69
			TFTM	10,205	2	0	2	112	10,958	2	0	3	120	11,027	2	0	3	121	6,203	1	0	2	68
			TSVS	10,781	3	0	0	118	11,576	3	0	1	127	11,649	3	0	1	128	6,569	2	0	0	72
			TSS	10,860	3	0	1	119	11,662	3	0	1	128	11,734	3	0	1	129	6,569	2	0	0	72
			TSM	10,879	3	0	2	120	11,682	3	0	2	128	11,755	3	0	2	129	6,491	3	0	1	71
			TSW	10,719	3	0	2	118	11,511	4	0	2	126	11,583	4	0	2	127	6,504	3	0	2	71
			BLC	7,819	1	0	2	86	8,396	1	0	2	92	8,448	1	0	2	93					
			LCCO	7,596	1	0	2	83	8,157	1	0	2	90	8,208	1	0	2	90					
			RCCO	7,596	1	0	2	83	8,157	1	0	2	90	8,208	1	0	2	90					
	1000 mA	138 W	T1S	13,767	2	0	2	100	14,783	3	0	3	107	14,876	3	0	3	108					
			T2S	14,194	2	0	2	103	15,242	3	0	3	110	15,338	3	0	3	111					
			T2M	13,869	2	0	2	101	14,893	3	0	3	108	14,986	3	0	3	109					
			T3S	13,852	2	0	2	100	14,875	2	0	2	108	14,968	2	0	2	108					
			T3M	13,978	2	0	2	101	15,010	3	0	3	109	15,104	3	0	3	109					
			T4M	14,168	2	0	2	103	15,214	3	0	3	110	15,309	3	0	3	111					
			TFTM	13,956	2	0	3	101	14,987	2	0	3	109	15,080	2	0	3	109					
			TSVS	14,744	3	0	1	107	15,832	3	0	1	115	15,931	4	0	1	115					
			TSS	14,852	3	0	1	108	15,948	3	0	1	116	16,048	3	0	1	116					
			TSM	14,878	4	0	2	108	15,976	4	0	2	116	16,076	4	0	2	116					
			TSW	14,660	4	0	2	106	15,742	4	0	2	114	15,840	4	0	2	115					
			BLC	10,325	1	0	2	75	11,087	1	0	2	80	11,156	1	0	2	81					
			LCCO	10,031	2	0	2	73	10,771	2	0	3	78	10,839	2	0	3	79					
			RCCO	10,031	2	0	2	73	10,771	2	0	3	78	10,839	2	0	3	79					

## Performance Data

### L90 and R90 Rotated Optics

LEDs	Drive Current (mA)	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
				Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
30C (30 LEDs)	530 mA	52 W	T1S	6,130	2	0	2	118	6,583	2	0	2	127	6,624	2	0	2	127	3,841	2	0	2	74
			T2S	6,321	2	0	2	122	6,787	2	0	2	131	6,830	3	0	3	131	3,912	2	0	2	75
			T2M	6,176	2	0	2	119	6,632	3	0	3	128	6,673	3	0	3	128	3,837	2	0	2	74
			T3S	6,168	2	0	2	119	6,624	3	0	3	127	6,665	3	0	3	128	3,866	2	0	2	74
			T3M	6,224	3	0	3	120	6,684	3	0	3	129	6,726	3	0	3	129	3,904	2	0	2	75
			T4M	6,309	3	0	3	121	6,775	3	0	3	130	6,817	3	0	3	131	3,884	2	0	2	75
			TFTM	6,215	3	0	3	120	6,673	3	0	3	128	6,715	3	0	3	129	3,839	2	0	2	74
			T5VS	6,565	2	0	0	126	7,050	2	0	0	136	7,094	2	0	0	136	4,005	2	0	0	77
			T5S	6,613	2	0	0	127	7,102	2	0	0	137	7,146	2	0	0	137	4,065	2	0	0	78
			T5M	6,625	3	0	1	127	7,114	3	0	1	137	7,159	3	0	1	138	4,017	2	0	1	77
			T5W	6,528	3	0	1	126	7,010	3	0	2	135	7,054	3	0	2	136	4,025	3	0	1	77
			BLC	4,747	2	0	2	91	5,098	2	0	2	98	5,130	2	0	2	99					
			LCCO	4,612	1	0	2	89	4,953	1	0	2	95	4,984	1	0	2	96					
			RCCO	4,612	1	0	2	89	4,953	1	0	2	95	4,984	1	0	2	96					
	700 mA	70 W	T1S	7,786	2	0	2	111	8,361	3	0	3	119	8,413	3	0	3	120	4,783	2	0	2	68
			T2S	8,028	2	0	2	115	8,620	3	0	3	123	8,674	3	0	3	124	4,873	2	0	2	70
			T2M	7,844	3	0	3	112	8,423	3	0	3	120	8,476	3	0	3	121	4,779	2	0	2	68
			T3S	7,834	3	0	3	112	8,413	3	0	3	120	8,465	3	0	3	121	4,815	2	0	2	69
			T3M	7,905	3	0	3	113	8,489	3	0	3	121	8,542	3	0	3	122	4,862	3	0	3	69
			T4M	8,013	3	0	3	114	8,604	3	0	3	123	8,658	3	0	3	124	4,837	3	0	3	69
			TFTM	7,893	3	0	3	113	8,476	3	0	3	121	8,529	3	0	3	122	4,781	3	0	3	68
			T5VS	8,338	2	0	0	119	8,954	3	0	0	128	9,010	3	0	0	129	4,988	2	0	0	71
			T5S	8,400	2	0	0	120	9,020	3	0	1	129	9,076	3	0	1	130	5,063	2	0	0	72
			T5M	8,414	3	0	1	120	9,036	3	0	2	129	9,092	3	0	2	130	5,003	3	0	1	71
			T5W	8,291	3	0	2	118	8,903	3	0	2	127	8,959	3	0	2	128	5,013	3	0	1	72
			BLC	6,044	2	0	2	86	6,490	3	0	3	93	6,530	3	0	3	93					
			LCCO	5,872	1	0	2	84	6,305	1	0	2	90	6,345	1	0	2	91					
			RCCO	5,872	1	0	2	84	6,305	1	0	2	90	6,345	1	0	2	91					
	1000 mA	104 W	T1S	10,648	3	0	3	102	11,434	3	0	3	110	11,506	3	0	3	111					
			T2S	10,979	3	0	3	106	11,789	3	0	3	113	11,863	3	0	3	114					
			T2M	10,727	3	0	3	103	11,519	3	0	3	111	11,591	3	0	3	111					
			T3S	10,714	3	0	3	103	11,505	3	0	3	111	11,577	3	0	3	111					
			T3M	10,812	3	0	3	104	11,610	4	0	4	112	11,682	4	0	4	112					
			T4M	10,958	3	0	3	105	11,767	3	0	3	113	11,841	3	0	3	114					
			TFTM	10,795	3	0	3	104	11,592	3	0	3	111	11,664	4	0	4	112					
			T5VS	11,404	3	0	0	110	12,245	3	0	1	118	12,322	3	0	1	118					
			T5S	11,487	3	0	1	110	12,336	3	0	1	119	12,413	3	0	1	119					
			T5M	11,508	3	0	2	111	12,357	4	0	2	119	12,434	4	0	2	120					
			T5W	11,339	4	0	2	109	12,176	4	0	2	117	12,252	4	0	2	118					
			BLC	7,981	3	0	3	77	8,570	3	0	3	82	8,624	3	0	3	83					
			LCCO	7754	1	0	2	75	8326	2	0	2	80	8378	2	0	2	81					
			RCCO	7754	1	0	2	75	8326	2	0	2	80	8378	2	0	2	81					

## FEATURES & SPECIFICATIONS

### INTENDED USE

The sleek design of the D-Series Size 0 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and pedestrian areas.

### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (0.95 ft<sup>2</sup>) for optimized pole wind loading.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

### OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K or 5000 K (70 CRI) or optional 3000 K (70 minimum CRI) or 5000 K (70 CRI) configurations. The D-Series Size 0 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine(s) configurations consist of 20, 30 or 40 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L99/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an

expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV or 6kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 0 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 0 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block, tool-less entry, and NEMA photocontrol receptacle are also available.

### LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org](http://www.designlights.org) to confirm which versions are qualified.

### WARRANTY

5-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



## Wall luminaires with cutoff optics

**Housing:** Constructed of copper free die-cast aluminum alloy. The housing uses stainless steel inserts for enclosure attachment. Mounts over a standard 3 1/2" or 4" octagonal wiring box. Die castings are marine grade, copper free ( $\leq 0.3\%$  copper content) A360.0 aluminum alloy.

**Enclosure:** Tempered, matte glass lens. One piece die-cast, copper free, louvered, aluminum face plate secured to the housing with four captive socket head, stainless steel screws. Semi specular, anodized aluminum internal reflector. Fully gasketed for water tight operation using a silicone rubber gasket.

**Electrical:** 26W LED luminaire, 32 total system watts, -30°C start temperature. Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 3000K with an 85 CRI. Available in 4000K (85 CRI); add suffix K4 to order.

**Note:** LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to [www.bega-us.com](http://www.bega-us.com).

**Finish:** All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order

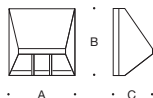
**CSA** certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP65

**Weight:** 4.0 lbs.

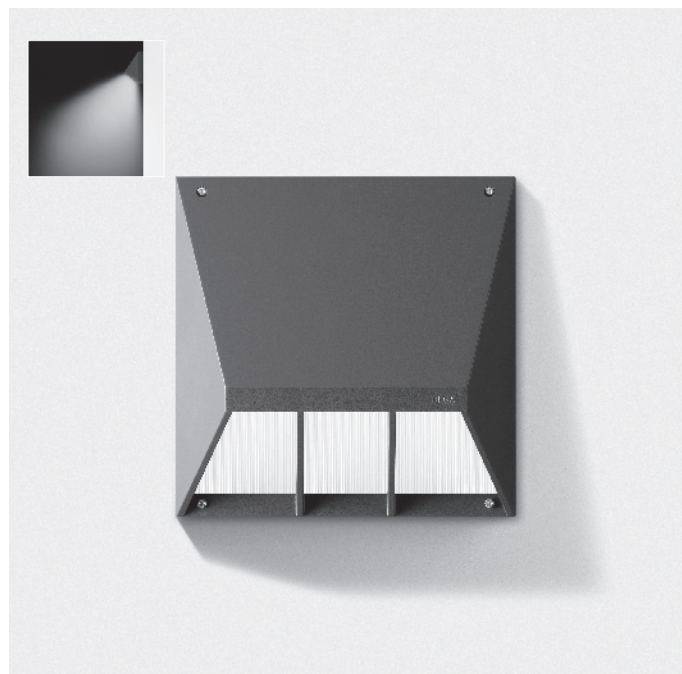
Luminaire Lumens: 1124

Tested in accordance with LM-79-08

Type:  
BEGA Product:  
Project:  
Voltage:  
Color:  
Options:  
Modified:



	Lamp	A	B	C
<b>22256</b>	26W LED	7 7/8	7 7/8	4 1/2





# M9410/M9430

## Modular In-Grade Luminaire Single Lens LED

**LED** IP68

SUITABLE FOR  
WET LOCATIONS

CATALOG  
NUMBER

NOTES

**TYPE SG**

TYPE

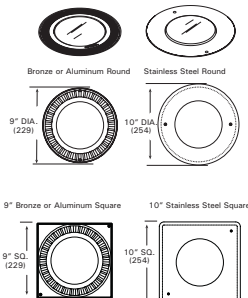
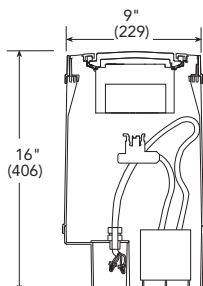
### DESCRIPTION

Hydrel's M9410/M9430 Series modular in-grade lights are multi-purpose units designed for uplighting architectural and landscape features. These units can be flush mounted into a variety of substrates or landscape materials including concrete.

The M9410/M9430 consists of a factory-sealed lamp module and encapsulated power module. The components are secured inside a heavy-duty polymer rough-in housing designed with channeled convective cooling, an integral junction box, and finish door trim assembly.

#### Specifications

L:	9"
	229 mm
W:	9"
	229 mm
H:	16"
	407 mm



### ORDERING INFORMATION

EXAMPLE: M9410 SS 12LED WHT41K MVOLT NSP FLC10 34B IHL

Model	Door Material	Lamp Type	LED Color	Voltage	Distribution	Lens
M9410 Round	A Aluminum	12LED	WHT30K White	MVOLT	NSP Narrow Spot	FLC Flat Lens Clear
M9430 Square	B Bronze		WHT41K White	(120-277)	MFL Medium Flood	FLC10 Flat Lens Clear, 10° tilt
	SS Stainless Steel		WHT53K White		FL Flood	FLC20 Flat Lens Clear, 20° tilt
			AMB Amber		WFL Wide Flood	FLF Flat Lens Frosted
			BLU Blue		VWFL <sup>1</sup> Very Wide Flood (no optics)	FLCAS Flat Lens Clear, Anti-Slip
			GRN Green		HSP Horizontal Spot	FLCSR <sup>2</sup> Flat Lens, Slip Resistant
			RED Red		HFL Horizontal Flood	CLC Convex Lens, Clear
						CLF Convex Lens, Frosted

Conduit Entries	Accessories	Options	Finish <sup>8</sup>	Listing
12B 1/2" NPT Bottom	Internal <sup>5</sup>	LDIM 0-10V Dimming (dims to 40%)	BL Black	IEC <sup>4</sup> International Electrotechnical Commission
12S 1/2" NPT Side	IHL Internal Honeycomb Louver		BZ Bronze	
34B <sup>3</sup> 3/4" NPT Bottom	LSF <sup>6</sup> Linear Spread Filter		DDB Dark Bronze	
34S 3/4" NPT Side	FRF Frosted Filter		DNA Natural Aluminum	
25S <sup>4</sup> Two 25mm Side	External <sup>5,7</sup>		GN Green	
	GS Glare Shield		GR Gray	
	LC Lexan Cover		SND Sand	
	RG <sup>6</sup> Rock Guard		STG Steel Gray	
	Trim Ring <sup>5,7</sup>		TVG Terra Verde Green	
	BTR Brass Round		WH White	
	BTS Brass Square		_Z <sup>9</sup> Zinc Undercoat (i.e. BLZ)	
	STR Stainless Round			
	STS Stainless Square			

M9400 Series Assembly consists of the following individual components parts

- MRIS94 Rough-In Housing
- MFS94 Finishing Section
- MACS Lamp Module
- MHSL94 Power Module

#### Notes:

- 1 FRF filter needed with VWFL.
- 2 Meets ADA requirements for coefficient of friction.
- 3 Default conduit entry.
- 4 Only for use in 50HZ applications.
- 5 Accessories are mutually exclusive, choose one only.
- 6 Not available with CLC or CLF convex lens.
- 7 Accessory not available with SS door material.
- 8 Paint only available with "A" material.
- 9 Add Zinc undercoat for harsh environments.

**HYDREL**

9144 Deering Avenue, Second Floor • Chatsworth, CA 91311  
Phone: 866.533.9901 • www.hydrel.com

©2014-2016 Acuity Brands Lighting, Inc.  
06/01/16  
M9410\_M9430\_LED\_MONO

## LUMEN OUTPUT

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

	Distribution	Nema Type	Beam Angle (50%) H x V	Field Angle (10%) H x V	Watts	LPW	Delivered Lumens
3000K 80CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	50	700
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	50	700
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	36	500
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	43	600
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	50	700
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	43	600
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	31	400
4000K 70CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	86	1,200
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	86	1,200
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	64	900
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	79	1,100
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	86	1,200
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	79	1,100
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	54	700
5000K 70CRI	NSP	2 x 2	14.7 x 14.7	28 x 28	14	86	1,200
	MFL	3 x 3	24.4 x 24.4	44 x 44	14	86	1,200
	FL	6 x 6	74.5 x 70.8	104.2 x 102.1	14	64	900
	WFL	6 x 6	102.5 x 100.4	129.6 x 129.1	14	79	1,100
	HSP	3 x 3	21.6 x 21.6	39.9 x 39.9	14	86	1,200
	HFL	4 x 3	39.3 x 15.7	59.6 x 29.9	14	79	1,100
	VWFL	6 x 6	89.3 x 85.1	129.4 x 128.2	13	54	700

LED LIFE: L70/60,000 hours

OPERATING TEMPERATURE: -30°C Through 40°C

## Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

## Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the Fixture platform in a 25°C ambient, based on 8400 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

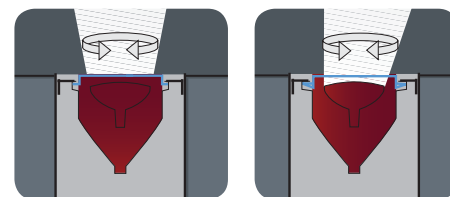
Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1	0.99	0.98	0.96

## Electrical Load

Light Engines	Drive Current (mA)	System Watts	Current (A)					
			120	208	240	277	347	480
12 LED	350mA	14	0.117	0.067	0.058	0.051	0.040	0.029

## Slip Resistance and Load Rating

M9400
<b>MAXIMUM LOAD RATING</b>
Peak compression force of 7,700 lbs. (single lens) or 2,550 lbs. (double lens).
<b>LENS STATIC COEFFICIENT OF FRICTION</b>
M9400 Anti-Slip Lens (FLCAS): Dry = 0.76; Wet = 0.10
M9400 Slip Resistant Lens (FLSR): Dry = 0.84; Wet = 0.65



Single lensed fixture can be aimed using 10° and 20° tilt lenses only.

## FEATURES &amp; SPECIFICATIONS

**DOOR MATERIAL:** Cast Aluminum, cast bronze, cast aluminum or bronze with stainless perforated trim insert or Stainless Steel. Available in round or square door trim.

**ROUGH-IN SECTION:** Injection molded polymer with integral junction box for thru-branch wiring. The housing is U.V. stabilized, impact and corrosion resistant for use in all types of environments. The rough-in has a cylinder configuration and houses the lamp components and top door finishing section.

**LAMP MODULE:** Stainless steel housing, factory-sealed and purged of all moisture for longer component life. Lens is sealed with silicone gasket and stainless steel clamp band assembly with single fastener. Electrical connection to lamp module is done through a submersible quick pull plug connector with gold-plated contacts. (Lamp Included)

**LAMP TYPE:** LED: Monochromatic LEDs, (Lamp Included).

**VOLTAGE:** See ordering guide.

**LIGHT DISTRIBUTION:** See ordering guide.

**FINISHING SECTION:** Single lens design includes door assembly with 360° Aim-Lock™ lamp module support ring. Module indexing provides easy maintenance and relamping without re-aiming. Active optical lenses are also available. Door trim locks into position with two stainless steel captive, tamper-resistant fasteners.

**POWER MODULE:** LED driver is encapsulated in a custom designed heat-dissipating epoxy resin that also eliminates all moisture intrusion. Module is provided with submersible rated cord leads for connection to integral junction box and lamp module.

**CONDUIT ENTRIES:** Two (2) bottom or side entries available. Box suitable for through-branch wiring. Splicing volume is 25 in³ (410 ccm)

**NOTE:** Potting compound (PC21) recommended for junction box splices. PC21 sold separately.

**ACCESSORIES:** See Ordering Guide.

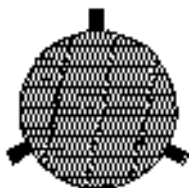
**FINISH:** Finish is natural aluminum or bronze. Stainless steel door is brushed finish. Aluminum doors may be painted. See ordering guide.

**LISTING:** U.L., C.U.L., C.E.

**WARRANTY:** 5-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**NOTE:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

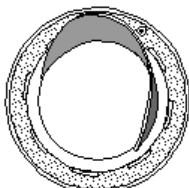
## INTERNAL



**INTERNAL HONEYCOMB LOUVERS**  
Hexagonal cell louver with 45° cut-off.

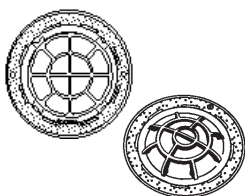
IHL

## EXTERNAL



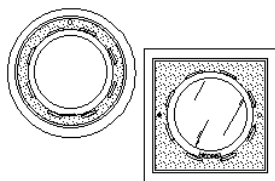
**QUARTER GLARE SHIELDS**  
Rolled sheet aluminum or brass. 360° of adjustment on fixture door, with lock down. May be field installed to door as shown.  
(Not recommended for foot traffic areas.)

GS



**ROCKGUARD (EXTERNAL)**  
Cast aluminum or cast bronze material.  
(Not recommended for foot traffic areas.)

RG



**STAINLESS STEEL or BRONZE TRIM RINGS**  
A decorative escutcheon used when a high finish look is wanted. For finishing marble, tile or other installations. Available in round or square. Door is flush with escutcheon. Not available on SS doors.

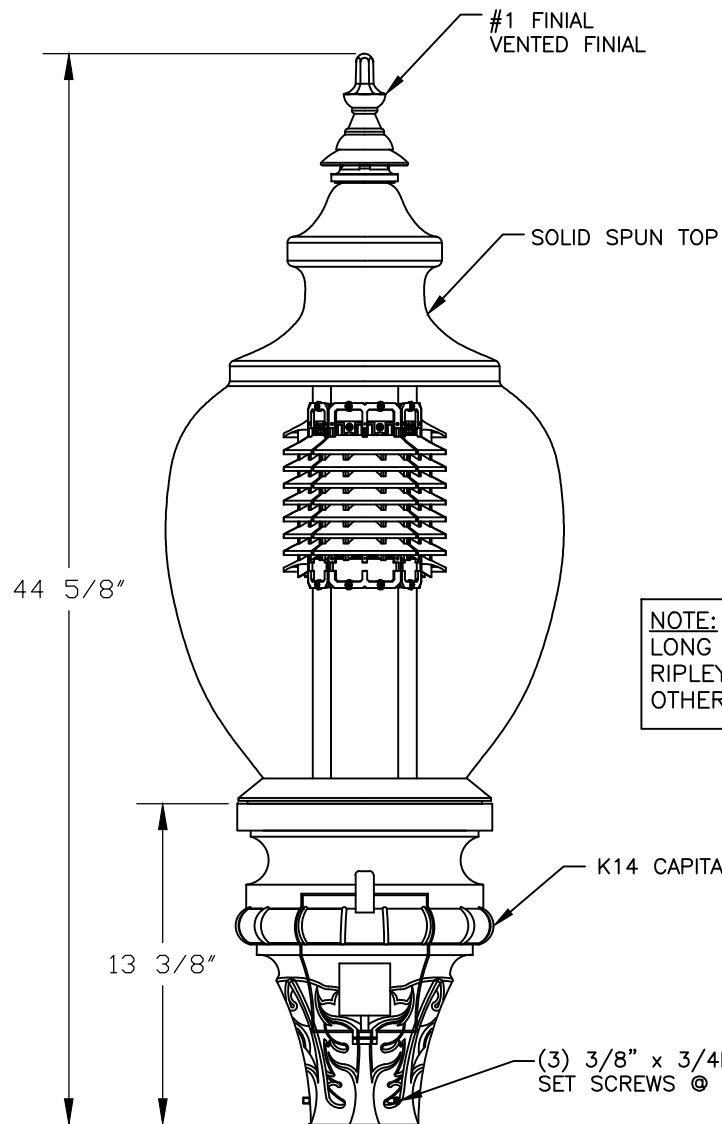
BTR  
BTS  
STR  
STS



**LEXAN DOME**  
A Lexan protective cover for use in areas where loose debris such as leaves and pine needles accumulate.  
(Not recommended for foot traffic areas.)

LC

# TYPE SH CAMAS STD



**NOTE:**  
LONG LIFE PHOTOCELL  
RIPLEY 6390LL-BK BY  
OTHERS

TO ACCEPT 3 1/2" O.D.  
3 1/2" LONG TENON

REV.	ALTERATION	DATE	BY
A	NOT ADDED	04/19/16	T.B
B	LONG LIFE PHOTOCELL SPECIFIED AS 6390LL-BK BY RIPLEY LIGHTING CONTROLS.	5/3/16	M.Y
C	OPTICS WAS R1AR WITH TYPE III DISTRIBUTION	06/06/16	T.B

## LUMINAIRE SPECIFICATIONS

CATALOGUE NO.: K118R-B3AR-IV-60(SSL)  
-1036-120:277V-K14-PR7-SST

QUANTITY:

POLE ADAPTOR: K14

OPTICAL SYSTEM: BAFFLED ARRAY ACRYLIC RIPPLED

IES LTG. CLASS.: TYPE IV

INPUT WATTS: 60W

SOLID STATE LIGHTING

SERIES: 1036

CCT / DIODE: 4000K / HE5

LINE VOLTAGE: 120:277V

PAINT: TEXTURED BLACK

OPTIONS: C/W SOLID SPUN TOP &  
7-PRONG TWISTLOCK PHOTOCELL  
RECEPTACLE ANSI STANDARD  
C136.41 (PHOTO-EYE BY OTHERS)

## OPTIONS

QUICK DISCONNECT ☒

## NOTE:

NOTE THAT THIS FIXTURE IS BY DEFAULT SHIPPED IN 'NON-ADAPTIVE MODE'. THE FIXTURE IS FIELD SWITCHABLE TO 'ADAPTIVE-MODE' IF ADAPTIVE TECHNOLOGY IS TO BE UTILIZED. NOTE THAT SWITCHING TO 'ADAPTIVE MODE' MAY INCREASE THE NOMINAL INPUT POWER OF THE FIXTURE. PLEASE CONTACT THE FACTORY FOR FURTHER DETAILS"

CUSTOMER APPROVAL & DATE: \_\_\_\_\_



King Luminaire • Stresscrete • Est. 1953

**STRESSCRETE  
GROUP**

## Manufacturing Locations:

Burlington, Ontario 1-800-268-7809  
Northport, Alabama 1-800-435-6563  
Atchison, Kansas 1-800-837-1024  
Jefferson, Ohio 1-800-268-7809

CUSTOMER ORDER No:

STRESSCRETE ORDER No:

KMFG. ORDER No:

KING U.S. ORDER No:

PROJECT/CUSTOMER:

CITY OF CAMAS, WA

DRAWN BY:	AT:	CHECKED BY:	DATE:	REVISION:
TASHI B.	SC1		02/29/16	C

DRAWING TYPE:

APPROVAL/MFG. DWG.

DRAWING NUMBER:

CAMAS-1



# Decorative Pole Specifications

PLP Model# Dom-DB-FL-14.5-BL-CI

TYPE SH  
CAMAS  
STD

## Decorative Pole Specifications

PLP Model# Dom-DB-FL-14.5-BL-CI

Fiberglass reinforced composite fluted shaft with decorative 2-piece (clam shell) base of casting urethane.

Direct burial (embedded) style with a 14.5' mounting height and an overall length of 18.5' allowing 4 feet to be buried below grade.

Round tapered fluted shaft.

Tip diameter is 4.5" and ground level diameter is 6.5".

Shaft hand hole is 2.5"x8" above the decorative base.

Hand hole is equipped with a non-conductive cover with vandal resistant 1/4-20 stainless steel screws.

Wire entrance hole of 2"x5" with nylon grommet 2' below grade.

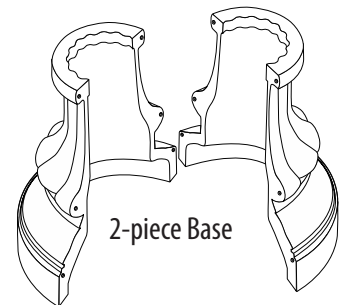
Decorative base for the PLP "Dominion" design is 21" high with a base diameter of 16". The 2-piece "clam shell" design is secured together with stainless steel bolts.

Shaft and decorative base are black with a textured satin "cast iron" finish.

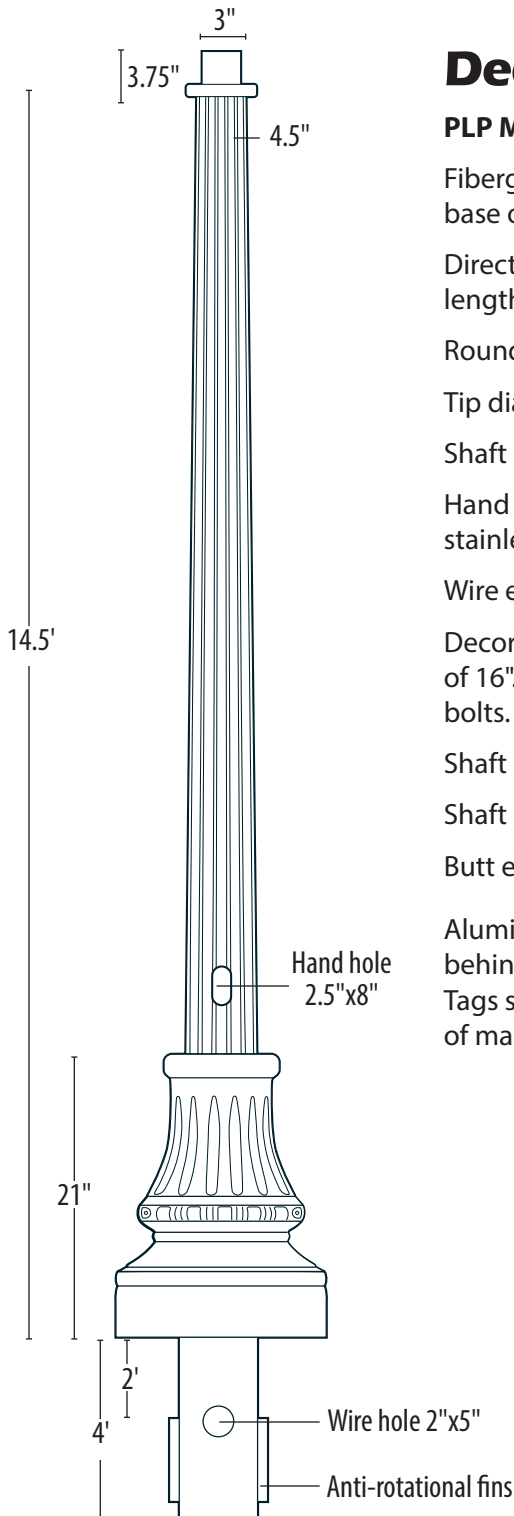
Shaft has a post top steel tenon of 3"x3.75"

Butt end of the shaft has anti-rotational/anti-lift fins.

Aluminum identification tags are fixed to the shaft behind the base and on the inside of the base itself. Tags show manufacturer, model number and date of manufacture.



2-piece Base



Project/Customer: \_\_\_\_\_

Date: \_\_\_\_\_

Revision: \_\_\_\_\_

Drawing Number: \_\_\_\_\_

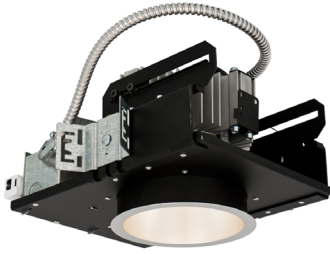
**PLP Composite Technologies, Inc.**

57 Creamery Road • PO Box 429 • Fitzwilliam, NH 03447 • Tel: 603-585-9100 • Fax: 603-585-3470 • [www.plpcomp.com](http://www.plpcomp.com)

# TYPE DN



Luminaire Type:  
Catalog Number  
(autopopulated):



Gotham Architectural Downlighting  
LED Downlights

**6" Incito®**  
Downlight

Solid-State Lighting  
(US and International Patents Pending)



## FEATURES

### INTENDED USE

- Achieve the lowest installed power density and operating costs while achieving every layer of light via the optimized general illumination distributions from the EVO family, and the high centerbeam accent layers from the highly flexible Incito family. The EVO and Incito families maintain consistent luminous apertures, dimming characteristics, and color quality to ensure the blending of families in common spaces renders an unparalleled, tailored visual experience.

### OPTICAL SYSTEM

- Ten optimized distribution patterns allow designers to achieve tailored effects.
- Self-flanged semi-specular or matte-diffuse lower reflector utilized in combination with a highly transmissive lens.
- Patented Bounding Ray™ Optical Principle design (U.S. Patent No. 5,800,050) provides smooth and continuous transition from lensed source to the top of the reflector down to the bottom of the reflector.

### MECHANICAL SYSTEM

- Light engine and driver are accessible from above or below ceiling.
- 16-gauge black painted steel mounting frame with C-channel mounting bars included. Post-installation adjustment possible from above or below ceiling.
- Galvanized steel junction box with hinged access covers and spring latch. Three combination 1/2"-3/4" and one 1/2" knockout for straight-through conduit runs. Capacity: 8 (4in, 4out) No. 12 AWG conductors rated for 90°C.
- Accommodates up to 1½"-thick ceilings.

### ELECTRICAL SYSTEM

- Solid-state LED light engine available in 2700 K, 3000 K, 3500 K or 4000 K color temperatures. CRI: 85 typical.
- eldoLED ecoDrive 0-10V driver available with 10% dimming level.
- eldoLED ecoDrive 0-10V driver available with 1% dimming level.
- eldoLED SOLOdrive 0-10V driver available with <1% dimming level.
- eldoLED SOLOdrive DALI driver available with <1% dimming level.
- eldoLED POWERdrive DMX with RDM (remote device management) available with <1% dimming level.
- Rated system life of 60,000 hours at >70% output.
- Emergency battery pack with remote test switch available.
- Tested in accordance with LM-79 and LM-80 standards.

### LISTINGS

- Fixtures are CSA certified to meet US and Canadian standards; wet location, covered ceiling.

### WARRANTY

- 5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

Note: Actual performance may differ as a result of end user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C.



A+ Capable options indicated  
by this color background.

EXAMPLE: IC0 30/50 6ARFL LD 20D 120 EZB

Series	Color temperature	Nominal delivered lumen values <sup>1</sup>				Aperture/Trim color		Trim style		Finish		Beam		Volt-age
IC0	27/ 2700 K	20	2000 lumens	55	5500 lumens	6AR	Clear	(blank)	Self-flanged	LSS	Semi-specular	20D	20° beam angle	120
	30/ 3000 K	25	2500 lumens	60	6000 lumens	6PR	Pewter					25D	25° beam angle	277
	35/ 3500 K	30	3000 lumens	65	6500 lumens	6WTR	Wheat	FL	Flangeless	LD	Matte diffuse	30D	30° beam angle	347 <sup>3</sup>
	40/ 4000 K	35	3500 lumens	70	7000 lumens	6GR	Gold					35D	35° beam angle	
		40	4000 lumens	75	7500 lumens	6WR <sup>2</sup>	White					40D	40° beam angle	
		45	4500 lumens	80	8000 lumens	6BR <sup>2</sup>	Black					45D	45° beam angle	
		50	5000 lumens	85	8500 lumens							55D	55° beam angle	
												60D	60° beam angle	
											65D	65° beam angle		
											70D	70° beam angle		

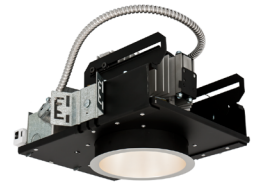
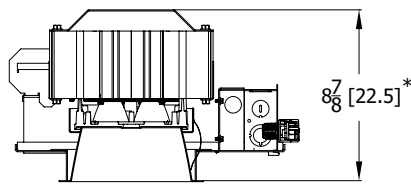
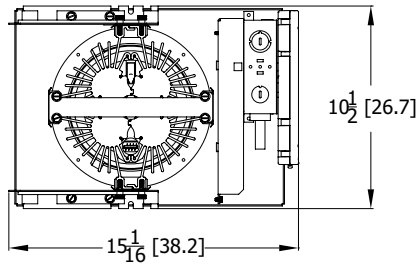
Driver	Options
<b>EZ10</b> eldoLED 0-10V ECOdrive. Linear dimming to 10% min. <b>EZ1</b> eldoLED 0-10V ECOdrive. Linear dimming to 1% min. <b>EZB</b> eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. <b>EDAB</b> eldoLED SOLOdrive DALI. Logarithmic dimming to <1%. <b>EDXB</b> eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Includes termination resistor. Refer to <a href="#">DMXR Manual</a> .	<b>SF</b> Single fuse <b>TRW<sup>4</sup></b> White painted flange <b>TRBL<sup>5</sup></b> Black painted flange <b>ELR<sup>6</sup></b> Emergency battery pack with remote test switch <b>CP<sup>7</sup></b> Chicago plenum <b>BGTD</b> Bodine generator transfer device <b>CRI90</b> High CRI (90+)
	<b>HAO</b> High ambient capability up to 40°C. Fixture height is 10-3/8" <b>NPS80EZ</b> nLight® dimming pack controls 0-10V eldoLED drivers. <b>NPS80EZ ER<sup>8</sup></b> nLight® dimming pack controls 0-10V eldoLED drivers. ER controls fixtures on emergency circuit. <b>LTVI<sup>9</sup></b> Lutron ECOSystem interface for compatibility with 0-10V EZ10, EZ1 or EZB. <b>RRL<sup>10</sup></b> RELOC®-ready luminaire connectors enable a simple and consistent factory installed option across all ABL luminaire brands. Refer to <a href="#">RRL</a> for complete nomenclature. Available only in RRLA, RRLB, RRLAE, and RRLC12S.

ACCESSORIES order as separate catalog numbers (shipped separately)

**SCA** Sloped ceiling adapter. Degree of slope must be specified (10D, 15D, 20D, 25D, 30D). Ex: SCA6 10D. Refer to [TECH-190](#).

## ORDERING INFORMATION

All dimensions are inches (centimeters) unless otherwise noted.



Incito Round Downlight - Flanged



Incito Round Downlight - Flangeless (FL)

Aperture: 6-1/4 [15.8]  
Ceiling opening: 6-15/16 [17.6]  
Overlap trim: 7-1/2 [19.1] self-flanged  
6-5/8 [16.8] flangeless

\* HIGH AMBIENT FIXTURE HEIGHT - 10-5/8"

**WATTAGE CONSUMPTION MATRIX**

LUMENS	BEAM ANGLES									
	20	25	30	35	40	45	55	60	65	70
8500	93 W	93 W	93 W	93 W	93 W	106 W	106 W	106 W	106 W	106 W
8000	88 W	88 W	88 W	88 W	88 W	97 W	97 W	97 W	97 W	97 W
7500	80 W	80 W	80 W	80 W	80 W	93 W	93 W	93 W	93 W	93 W
7000	73 W	73 W	73 W	73 W	73 W	84 W	84 W	84 W	84 W	84 W
6500	69 W	69 W	69 W	69 W	69 W	80 W	80 W	80 W	80 W	80 W
6000	62 W	62 W	62 W	62 W	62 W	72 W	72 W	72 W	72 W	72 W
5500	57 W	57 W	57 W	57 W	57 W	65 W	65 W	65 W	65 W	65 W
5000	49 W	49 W	49 W	49 W	49 W	62 W	62 W	62 W	62 W	62 W
4500	45 W	45 W	45 W	45 W	45 W	54 W	54 W	54 W	54 W	54 W
4000	40 W	40 W	40 W	40 W	40 W	43 W	43 W	43 W	43 W	43 W
3500	34 W	34 W	34 W	34 W	34 W	37 W	37 W	37 W	37 W	37 W
3000	29 W	29 W	29 W	29 W	29 W	31 W	31 W	31 W	31 W	31 W
2500	26 W	26 W	26 W	26 W	26 W	29 W	29 W	29 W	29 W	29 W
2000	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W	26 W

**EL/ELR AVAILABILITY / COMPATIBILITY – Initial Lumens**

LED			Initial Lumens	
Product	Lumens	Watts	EL/ELR	ELRHL
ICO 6"	2000-8500	24-101	580	N/A

**nLight® Control Accessories:**

Order as separate catalog number. Visit [www.acuitybrands.com/products/controls/nlight](http://www.acuitybrands.com/products/controls/nlight) for complete listing of nLight controls.

<b>WallPod stations</b>	<b>Model number</b>	<b>Occupancy sensors</b>	<b>Model number</b>
On/Off	nPODM [color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 / nCM PDT 9
On/Off & Raise/Lower	nPODM DX [color]	Large motion 360°, ceiling (PIR / dual tech)	nCM 10 / nCM PDT 10
Graphic Touchscreen	nPOD GFX [color]	Wide view (PIR / dual tech)	nWV 16 / nWV PDT 16
<b>Photocell controls</b>	<b>Model number</b>	Wall Switch w/ Raise/Lower (PIR / dual tech)	nWSX LV DX / nWSX PDT LV DX
On/Off & Dimming	nCM ADCX	<b>Cat-5 cables (plenum rated)</b>	<b>Model number</b>
		10', CAT5 10FT	CAT5 10FT J1
		15', CAT5 15FT	CAT5 15FT J1

**ORDERING NOTES**

- Nominal downlight lumens.
- Not available with finishes. Not available with flangeless (FL) trim style.
- Add 2" to overall height.
- Not available with white reflector. Not applicable with FL option.
- Not available with black reflector. Not applicable with FL option.
- For dimensional changes, refer to [TECH-140](#). Not available with CP option. Must specify 120V or 277V. Not available with 347V.
- Chicago plenum available 5500 lumens and below.
- For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- Shipped installed from the factory. Not available with CP.

CONSULT [WWW.GOTHAMLIGHTING.COM](http://WWW.GOTHAMLIGHTING.COM) FOR PHOTOMETRY

### Choose Wall Controls.

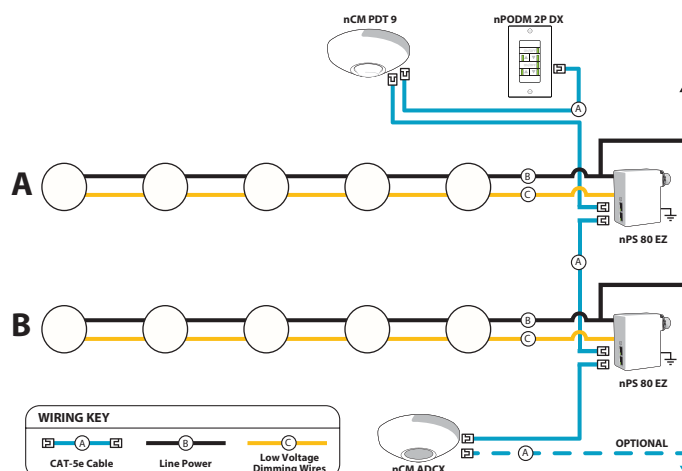
nLIGHT offers multiple styles of wall controls – each with varying features and user experience.



**Push-Button WallPod**  
Traditional tactile buttons  
and LED user feedback



**Graphic WallPod**  
Full color touch screen  
provides a sophisticated  
look and feel



### EXAMPLE

Group Fixture Control\*

\*Application diagram applies for fixtures with eldoLED drivers only.

**nPS 80 EZ** Dimming/Control Pack (qty 2 required)

**nPODM 2P DX** Dual On/Off/Dim Push-Button WallPod

**nCM ADCX** Daylight Sensor with Automatic Dimming Control

**nCM PDT 9** Dual Technology Occupancy Sensor

**Description:** This design provides a dual on/off/dim wall station that enables manual control of the fixtures in Row A and Row B separately. Additionally, a daylight harvesting sensor is provided so the lights in row B can be configured to dim automatically when daylight is available. An occupancy sensor turns off all lights when the space is vacant.

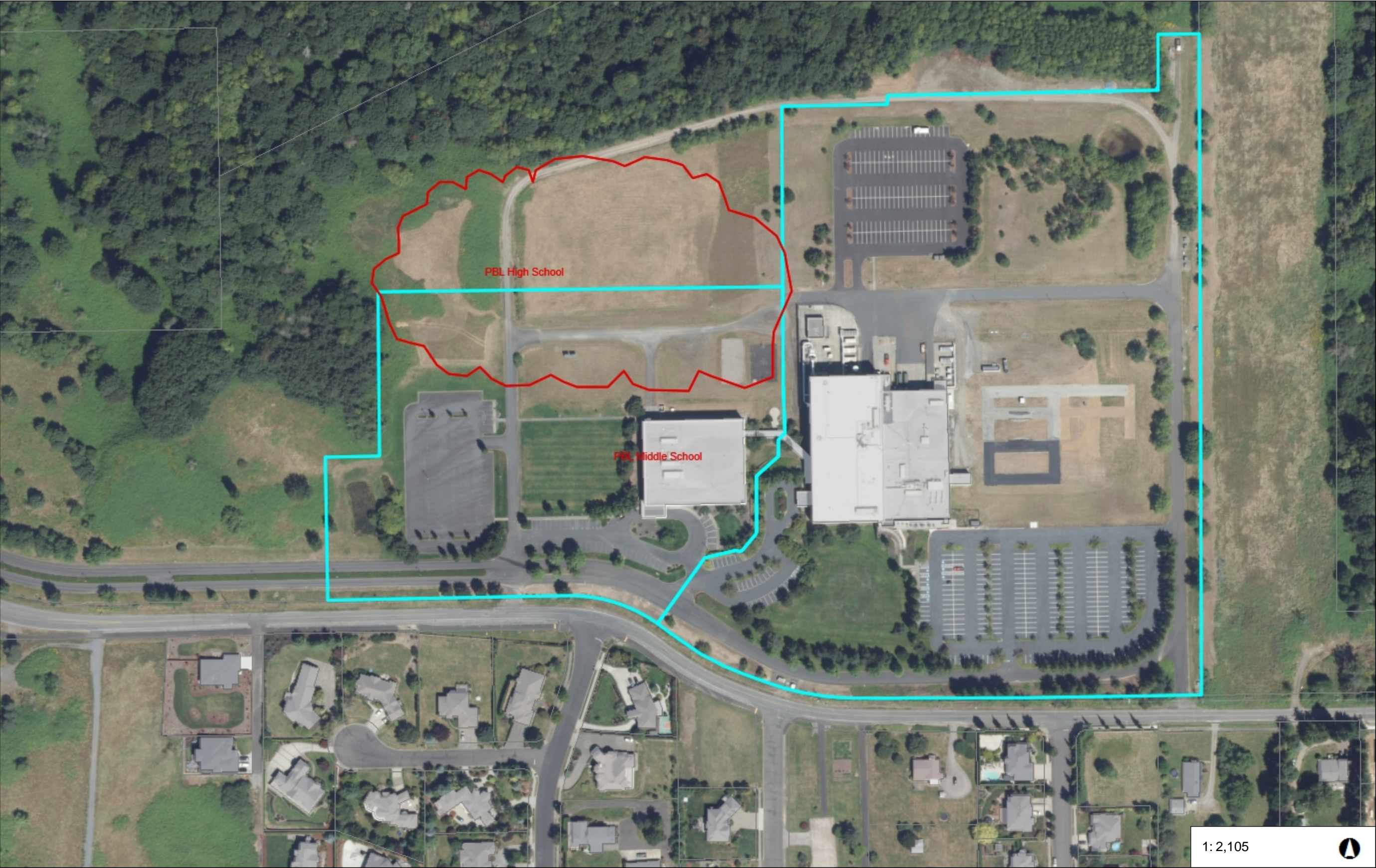
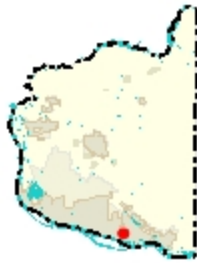
### A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a **shaded background**\*
- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a **shaded background**\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

\*See ordering tree for details



- Legend
- Building Footprints
  - Taxlots
  - ImageBestRes
    - Red: Red
    - Green: Green
    - Blue: Blue
  - Cities Boundaries
  - Urban Growth Boundaries

Notes:  
PBL High School

1: 2,105



350.8 0 175.39 350.8Feet



**DESIGN REVIEW CHECKLIST**  
Camas School District PBL High School

The purpose of this sheet is to provide a simplified and expedited review of the design review principles and guidelines using objective review standards. The standards are intended as tool for the decision-maker in making findings that the proposal either achieves compliance with the intent of the principles or reasonably mitigates any conflict. When reviewing the check sheet, the proposal should as a whole "meet" the standards and thus be generally consistent with the overriding principles. [Compliance or non-compliance with any one standard is not a determinant. However, where several standards fail, they should be offset by standards that exceed other standards]

**Standard Principles and Guidelines**

1. Landscaping should be done with a purpose. It should be used as a tool to integrate the proposed development into the surrounding environment as well as each of the major project elements (e.g. parking, buildings(s), etc.).				
Exceeds	Meets	Fails	NA	
				Landscaping, including trees, shrubs, and vegetative groundcover, is provided to visually screen and buffer the use from adjoining less intense uses and screening parking or other components viewed as being less intrusive.
				Signs are located on buildings or incorporated into the landscaping so as not to be the main focus either during the day or night. (e.g. low signs with vegetative backgrounds to soften visual impact). If illuminated they shall be front lit. Efforts have been made to make signs vandal resistant.
				Outdoor furniture samples have been submitted consistent with the overall project design.
				Proposed fencing is incorporated into the landscaping so as to have little or no visual impact.
				The vegetation to be utilized includes native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City's Tree List. Retain significant trees if feasible.
				Landscape lighting - low voltage, non-glare, indirect lighting is directed, hooded or shielded away from neighboring properties.
				Street lighting (poles, lamps) is substantially similar or architecturally more significant than other street lighting existing on the same street and will not conflict with any City approved street lighting plans for the street.
				Parking and building lighting is directed away from surrounding properties through the use of hooding, shielding, siting and/or landscaping.
2. All attempts should be made at minimizing the removal of significant natural features. Significant natural features should be integrated into the overall site plan.				
Exceeds	Meets	Fails	NA	
				Existing trees over 6" dbh that are not required to be removed to

				accommodate the proposed development are retained and incorporated into the landscape plan.
				Rock outcropping's, forested areas and water bodies are retained.
3. Buildings should have a "finished" look. Any use of panelized materials should be integrated into the development in a manner that achieves a seamless appearance.				
Exceeds	Meets	Fails	NA	
				Use of corrugated materials, standing seam, T-1 11, or similar siding materials are questionable, unless it can be shown through the use of renderings or other visual applications that the use of these materials will produce a development with a high visual (or aesthetic) quality.
				Buildings walls or fences visible from roadways should be articulated in order to avoid a blank look. The walls can be broken up by including some combination of window/display space, plantings, offsetting walls with two-tone colors, or creating plazas, water features, art (civic, pop, etc.) awnings, or similar devices.
				The use of bold colors has been avoided unless used as minor accents.
				Higher density/larger structures abutting lower density residential structures have been designed to mitigate size and scale differences. In some cases, creating a natural buffer may be appropriate.
4. A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.				
Exceeds	Meets	Fails	NA	
				The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.

### Specific Principles and Guidelines

Commercial				
Exceeds	Meets	Fails	NA	
				On-site parking areas shall be placed to the interior of the development unless site development proves prohibitive. All on-site parking areas along adjacent roadways shall be screened with landscaping.
				Buildings shall be placed as close to streets and roads unless site constraints make it impossible or characteristics of the surrounding properties already developed make it incompatible. Otherwise, retail frontage setbacks shall not exceed 25 feet from back of curb.
				Window and door placement shall be provide a high degree to transparency at the lower levels of the building, office and retail buildings shall provide a minimum solid to void ratio of 60%/40%, storefront windows shall be used frequently to enliven the sidewalks.
				Developments containing a multiple of uses/activities shall integrate each use/activity in a manner that achieves a seamless appearance or creates a cohesive development.
				Intersections should be illuminated, but not dominated by lighting. Incorporating lighting into the landscape should be encouraged to illuminate the quality of the natural environment. Street light poles

				and lamps should be compatible with other nearby lighting on the same street.
				Parking spaces should be clustered in small groupings. Groupings should be separated by landscaping to create a pedestrian friendly, park like environment. Parking lot landscaping should be credited toward the total landscaping requirement.
				Developments surrounded by residential areas or adjacent to residentially zoned properties should be built with a residential feel (i.e. size, scale, and materials compatible with neighboring buildings).
				Buildings over two stories should have the third story and above offset from the first two stories, if surrounding developments are less than three stories or land use designations on adjacent sites do not allow more than three story development.
				Pathways define traffic/pedestrian movement. Buildings brought up to the road help define these movements.
				New streets intersecting commercial properties should be designed to create a safe environment. "Coving" techniques and "round-a-bouts" should be considered for traffic calming when appropriate.



**COMMUNITY DEVELOPMENT DEPARTMENT**  
616 NE 4<sup>th</sup> Avenue  
Camas, WA 98607

**STAFF REPORT**  
**Design Review (File No. DR16-09)**  
**Lacamas Heights Elementary School**  
Associated File: CUP16-02

**To:** Design Review Committee  
**From:** Sarah Fox, Senior Planner  
**Applicant:** Camas School District  
841 NE 22nd Ave., Camas, WA 98607  
**Site Address:** 1111 NE 232nd Ave., Camas, WA 98607

**Tax Parcel:** 175724-000                      **Zoning:** Single-family R-7.5

**APPLICABLE LAW:** The application was submitted on November 14, 2016, and the applicable codes are those codes that were in effect at the date of application. Camas Municipal Code (CMC) Title 18, specifically (but not limited to): Chapter 18.19 Design Review, Chapter 18.11 Parking, Chapter 18.13 Landscaping, and Chapter 18.55 Administrative Procedures and the Camas Design Review Manual.

**I. SUMMARY**

The Camas School District has proposed to build a new two-story school at 1111 NE 232nd Avenue (Tax Parcel #175724-000), to replace the existing Lacamas Heights Elementary School at 4600 Garfield Street. The new building will be 73,500 square feet and will include a gymnasium, commons, administration offices, classrooms, and play fields for approximately 700 students.

Design Review is required for all new developments within commercial, mixed-use, business park, or multifamily zones, redevelopment (including change in use, e.g., residential to commercial), or major rehabilitation (exterior changes requiring a building permit or other development permit). Commercial uses in the context of design review include both traditional uses listed as commercial under the zoning code as well as recreational, religious, cultural, **educational**, and governmental buildings and associated properties. The development is also subject to approval of a Conditional Use Permit and Site Plan Review.

## II. DISCUSSION

The following staff analysis and comments are organized to follow the order of the Design Review Checklist for the project.

DESIGN REVIEW PRINCIPLES AND GUIDELINES	STAFF COMMENTS
<b>1. Landscaping should be done with a purpose. It should be used as a tool to integrate the proposed development into the surrounding environment as well as each of the major project elements (e.g. parking, buildings(s), etc.).</b>	The applicant provided a Design Review Narrative (Exhibit 1), which describes that the project site has a larger natural area. The landscaping and playground areas are intended to blend with the natural surroundings. The applicant also provided landscape drawings (Exhibit 4) that are numbered L-001 through L-530.
Landscaping, including trees, shrubs, and vegetative groundcover, is provided to visually screen and buffer the use from adjoining less intense uses and screening parking or other components viewed as being less intrusive.	The applicant proposes street trees at regular intervals along the southern street extension, which will screen the project from residential homes to the south.
Signs are located on buildings or incorporated into the landscaping so as not to be the main focus either during the day or night. (e.g. low signs with vegetative backgrounds to soften visual impact). If illuminated they shall be front lit. Efforts have been made to make signs vandal resistant.	The applicant has proposed a monument sign at the street entrance, a sign on the building with the name of the school, and an electronic billboard sign, which will also be mounted to the building.
Outdoor furniture samples have been submitted consistent with the overall project design.	None have been submitted.
Proposed fencing is incorporated into the landscaping so as to have little or no visual impact.	Applicant should explain fencing plans at the meeting.
The vegetation to be utilized includes native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City's Tree List. Retain significant trees if feasible.	The applicant is retaining a grove of trees at the western boundary of the property and the new roadway. There are also groupings of trees being retained at the northern end of the site near the outdoor play areas. The site will include several natural areas, given that there will be wetland, riparian and white oak mitigation areas set aside.
Landscape lighting - low voltage, non-glare, indirect lighting is directed, hooded or shielded away from neighboring properties.	The applicant has proposed low voltage lighting and has provided a photometric drawing at Sheet E-102.
Street lighting (poles, lamps) is substantially similar or architecturally more significant than other street lighting existing on the same street and will not conflict with any City approved street lighting plans for the street.	Street lighting will be in accordance with city approved LED standards.
Parking and building lighting is directed away from surrounding	Refer to Sheet E-102

properties through the use of hooding, shielding, siting and/or landscaping.	
<b>2. All attempts should be made at minimizing the removal of significant natural features. Significant natural features should be integrated into the overall site plan.</b>	The property includes a stream, wetlands, Oregon White Oaks and archaeological features, which were integrated into the site design.
Existing trees over 6" dbh that are not required to be removed to accommodate the proposed development are retained and incorporated into the landscape plan.	As noted above, there are groves of trees that were retained.
Rock outcroppings, forested areas and water bodies are retained.	The site includes natural areas that were integrated into the site design and will be utilized as onsite educational opportunities.
<b>3. Buildings should have a "finished" look. Any use of panelized materials should be integrated into the development in a manner that achieves a seamless appearance.</b>	
Use of corrugated materials, standing seam, T-1 11, or similar siding materials are questionable, unless it can be shown through the use of renderings or other visual applications that the use of these materials will produce a development with a high visual (or aesthetic) quality.	The applicant proposes to use brick and a cement plank siding. No T-1 or T-11 materials are proposed. Refer to the Materials Board at Exhibit 5.
Buildings walls or fences visible from roadways should be articulated in order to avoid a blank look. The walls can be broken up by including some combination of window/display space, plantings, offsetting walls with two-tone colors, or creating plazas, water features, art (civic, pop, etc.) awnings, or similar devices.	There are not any blank walls visible to the roadways. Exterior elevation drawings are found at Sheets A-211 through A-217 and Exhibits 2 and 3.
The use of bold colors has been avoided unless used as minor accents.	The main colors are muted greys and brown. Door and window accents are a terra cotta red.
Higher density/larger structures abutting lower density residential structures have been designed to mitigate size and scale differences. In some cases, creating a natural buffer may be appropriate.	The higher portion of the structure is to the rear of the site.
<b>4. A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.</b>	
The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.	The applicant noted that a barn on the site had to be removed due to its degraded condition and bug-infested wood. The site was also important to Native Americans.

### **III. Recommendation**

Staff recommends that the Design Review Committee review the materials, deliberate, and render a recommendation of approval with the following conditions:

1. Applicant provide vinyl coated chain link fencing at areas visible to the public.
2. Applicant incorporate into the site design information in regard to the historical importance of the site, such as a plaque or other signage.

## Design Review Narrative (CMC 18.19)

### 18.19.050 – Design Principles.

#### A. Standard Principles.

1. *Landscaping shall be done with a purpose. It shall be used as a tool to integrate the proposed development into the surrounding environment.*

Response: The new Lacamas Heights Elementary School will be located on a site rich in ecologic features, including wetlands, creeks, large swaths of mature trees and direct views to Mount Hood. Building on the idea of “campus in the country”, the new site will offer ample opportunities for seamless transition between indoor and outdoor learning and play environments.

The landscape has been developed to create a park-like setting at the edge of Camas. The site itself is adjacent to a future City trailhead and will be connected via a meandering path.

The overall character of the planting visually aligns with the surrounding context. Primarily native plants will be used, chosen for durability and low-maintenance requirements. Plantings in high traffic areas have been chosen for durability and function, as well as aesthetic value.

A school name will be integrated into a monument sign, located at the entry to the school driveway. The site entry is welcoming and is defined by native wetland and wetland buffer areas staged behind a split rail fence.

Provisions have been made for a reader board to be located within the landscaped areas at the front of the school; this will not be visible from the street.

2. *All attempts shall be made at minimizing the removal of significant natural features. Significant natural features shall be integrated into the overall site plan.*

Response: One of the project landscape goals is to minimize impact on existing site features, including the wetlands and their buffers, creeks and their buffers, the archeological zones and the tree cover. The site design protects all existing wetlands on the site and will enhance these features by cultivating additional species that will ensure a hearty native landscape. The site design also protects in place a creek to the north of the school, and stands of mature White Oak trees. Only one White Oak tree will be removed by the project. During construction, all existing White Oak trees to remain will be fully enclosed within a chain-link fence, at a minimum diameter of their dripline, and will be protected the entire duration of construction. Areas under trees will be planted with native (non-irrigated) vegetation.

3. *Buildings shall have a "finished" look. Any use of panelized materials shall be integrated into the development in a manner that achieves a seamless appearance.*

Response: The building façade is made of two materials: Brick and a through-color fiber cement plank. The brick is a timeless, low-maintenance material that expresses the Lacamas Heights community's sustainable goals where "less is more". The color palette is a range of earthy red-brown.

The 6" cement plank requires no edge finishing. It will be used in its "natural" state and will express the scale and texture of siding, used on many country side structures. The color is a warm buff/grey.

The window system is an aluminum-clad wood window. The windows are located to provide ample daylight to the learning spaces inside. This product is long-lasting and will be easy for the District to maintain. The colors are a dark grey with earthy red-brown accents at the operable windows.

4. *A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.*

Response:

The building and site have been designed to connect to the existing conditions of the site, via the building organization, the interpretive signage at the nature play, and the reuse of existing tree stumps in the play area.

The plan organization combines north facing classrooms with south-facing extended learning spaces and south facing classrooms with north-facing extended learning spaces. This configuration reflects the desire of all teachers to allow students to enjoy direct sunlight and relate to Mt Hood on the south east and the tree-lined creek on the north. The ground floor of the central core provides direct access to the east courtyard with a large deck featuring view of Mt Hood.

The play area features natural play scape elements, such as stumps, mounds, a 'tree house,' an amphitheater, and boulders. There will be signage explaining the concepts of play that is integrated with nature and the native and agrarian history of the site.

There was an old wooden barn on the site. The original intention was to salvage this wood for use inside the building, thereby creating a story that would link the school to the site's former use. Unfortunately, now that the barn has been dismantled, it has been determined that the wood is infested with bugs and will not be usable.

## **B. Specific Principles (Commercial Only)**

### **2. Commercial and Mixed Uses**

*a. On-site parking areas shall be placed to the interior of the development unless site development proves prohibitive. All on-site parking areas along adjacent roadways shall be screened with landscaping.*

Response: The existing site conditions and use as an elementary school make the placement of the parking facilities behind the building challenging and inappropriate. All on-site parking areas are being screened with landscaping.

*b. Buildings shall be used to define the streetscape unless site conditions prove prohibitive.*

Response: The existing site conditions and rural/suburban location of our site make a more urban response to our project challenging. The desire to connect the building with the natural landscape and minimize impact to the natural environment and resources determined the site of the building and associated improvements.

*c. Structures abutting, located in, or located near less intensive uses or zoned areas (such as commercial developments next to residential areas) shall be designed to mitigate size and scale differences.*

Response: The massing and material options of the new Lacamas Heights Elementary School are intended to support the concept of a “school in the country.” Students and visitors will “discover” the building after a meandering journey through the site which reveals the multiple natural assets and beautiful vistas. Once visible, the building presents itself as a low roofed, one-story, south facing open porch where a curved seating bench provides guidance towards the central main entry. The porch deepens at the main entry and allows students, parents and visitors to gather in full view of the reception area. Where the building welcomes and embraces the elementary learners, the volume is at its lowest to address the scale of the users.

The transparent vestibule and waiting area allows views from the front door towards the east courtyard and patio and welcomes you to walk towards daylight. The siting of the building requires the service yard and delivery area to be fully integrated into the main building volume. This portion of the project will receive the same aesthetic attention than any other part in order not to compromise the views from any of the learning spaces.

Above the low roof one-story wing, the volume of the two-story central core rises gently, starting as a low mechanical roof screen, the lower end of the media center to gain its full height and tallest ridge of the building above the gymnasium to the north. This slow progression of height also introduces the narrow volumes of the two-story tall classrooms wings which form the northern edge of the building facing the creek. The tall classroom volumes maximize daylight access and views to the south and north and create a strong edge towards the nature play areas to the north. On the north end, the covered play forms the second large porch element which transitions the 2-story

volume of the central core down to the scale of the nature play areas. The two porches result in the main building volume merging with the outdoors where students enter. These transitional areas soften the distinction between indoor and outdoor learning spaces and allow students to experience the building and site as one continuous learning environment.

*d. Developments containing a multiple of uses/activities shall integrate each use/activity in a manner that achieves a seamless appearance, or creates a cohesive development.*

Response: The project is intended for a singular use as an education facility. The architectural response in scale, massing and expression is intended to convey the facility use as a public structure.

*e. Mixed-use development conditions do not apply to this site.*

*f. Walls shall be broken up to avoid a blank look and to provide a sense of scale.*

Response: The building is designed into four wings, which are located in east and west locations and angle outward to maximize access to daylight and views to the ground floor commons / cafeteria and the second floor media center. This strategy also provides a stronger identity for the learning communities in each wing, since it breaks the internal views along the classroom circulation. In the south facing one-story administration wing, the angling underlines the concept of embracing the arriving students and visitors at the front door plaza.

*g. Outdoor lighting shall not be directed off-site.*

Response: All exterior light fixtures have been selected to be “dark sky” compliant. Each fixture directs lights downward. In addition, these fixtures are located only at the developed areas, central to the site. All exterior lights are controlled by dimmers and can be set to shut off completely.

#### **18.19.060 – Guidelines**

The subcategories below represent the design team’s understanding of applicable guidelines:

A. The guidelines include five major categories and subcategories (Commercial only) as outlined in the Design Review Manual:

1. Landscaping and screening:

*a. The landscaping/vegetation plan needs to identify the type of plants or trees to be planted within the foreground of the visual area (or street intersection). The use of vegetation native to the Pacific Northwest (or Camas) should be encouraged, with the exception of noxious weeds. Low maintenance/hardy landscaping should also be encouraged.*

Response: See Landscaping and Screening narrative above and Landscape Plan.

*b. Surrounding sites should be screened from parking and building lighting.*

Response: Site lighting will be designed to prevent building and parking lighting from encroaching on adjacent properties. See Lighting Plan.

*c. Parking spaces should be clustered in small groupings. Groupings should be separated by landscaping to create a pedestrian friendly, park like environment. Parking lot landscaping should be credited toward the total landscaping requirements.*

Response: The parking lot has been designed for safe school use. Buses are diverted to a drop-off area that is lined with landscaping and features a landscaped island. The teacher and parent parking area is primarily organized into groups of 4-6 cars, with tree islands interspersed. The rows between parking areas contain stormwater plantings. The parking area is lit with dark-sky compliant fixtures that can be dimmed or shut off. The wetland restoration areas directly abut the parking area.

## 2. Architecture:

*a. Developments surrounded by residential areas or adjacent to residentially zoned properties should be built with a residential feel (i.e. size, scale, and materials compatible with neighboring buildings)*

Response: See narrative section CMC 18.19.050(B)(2)(c) above.

*b. Buildings over two stories should have the third story and above offset from the first two stories, if surrounding developments are less than three stories or land uses designations on adjacent sites do not allow more than three story development.*

Response: Not applicable. Our design proposal only has two stories.

*c. Outdoor lighting shall be hooded or shielded so as not to directly light adjoining or neighboring properties.*

Response: See narrative section CMC 18.19.050(B)(2)(g) above.

## 3. Massing and Setbacks:

*a. Since buildings define circulation routes, they should be placed as close to streets and roads as the zoning code allows before being set back to the interior or rear of the lot, unless site constraints make it impossible or characteristics of the surrounding properties already developed make it incompatible.*

Response: See narrative section CMC 18.19.050(B)(2)(a) and (B)(2)(b) above.

*b. Commercial structures abutting residually zoned areas should be designed to mitigate size and scale differences*

Response: See narrative section CMC 18.19.050(B)(2)(a) and (B)(2)(b) above.

*c. On-site parking areas should be placed to the interior of the site whenever possible.*

Response: See narrative section CMC 18.19.050(B)(2)(a) and (B)(2)(b) above.

#### 4. Historic and Heritage Preservation:

*a. The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.*

Response: The building and site have been designed to connect to the existing conditions of the site. The building organization capitalizes on the views of Mount Hood and is nestled adjacent to the oak forest. The play area will include interpretive signage relating the native and agrarian history of the site. The play area also features natural play scape elements, such as stumps, mounds, a 'tree house,' an amphitheater, and boulders.

#### 5. Circulation and Connections:

*a. Pathways define traffic/pedestrian movement. Buildings brought up to the road help define these movements. Trees and/or planting strips shall be used for separating vehicles and pedestrian movements, as well as provide a secure and pedestrian friendly environment.*

Response: A pedestrian sidewalk connects directly from the driveway entrance to the front of the school. As explained in 18.19.060 (A)(1)(c), the traffic on the site is separated so that buses and cars use separate areas for dropping off students. The pedestrian pathway is lined on one side with wetland mitigation planting and light poles. The next section describes the pedestrian pathway that extends to the western edge of the site.

*b. New streets intersecting commercial properties should be designed to create a safe environment. "Coving" techniques and "round-a-bouts" should be considered for traffic calming when appropriate.*

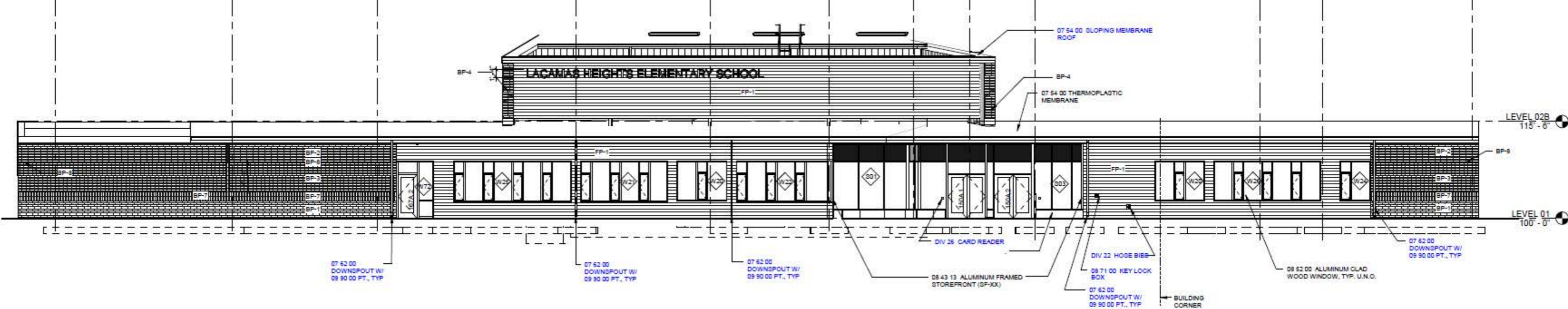
Response: The project will provide a new half-street arterial arcing through the southwest quadrant of the site. In place of a new standard sidewalk along this new public roadway, the project proposes a multi-modal 10' wide trail meandering through the site. This will allow pedestrians and bike users to enjoy the on-site natural features separated from auto traffic. Where existing mature trees exist along the proposed roadway, those trees will be preserved as much as practicable and new street trees will be planted along the remaining frontage.

This project will create a separate parcel in the northwest corner of approximately 3 acres reserved for future public use including a potential small park and/or trailhead.

There is one proposed driveway to access the school development. A sidewalk is proposed along this driveway, which will be attached to the curb to limit impact to adjacent wetlands. This walkway connects the public trail to on-site walkways that access the school building, outdoor learning environments, and multiple playground spaces.

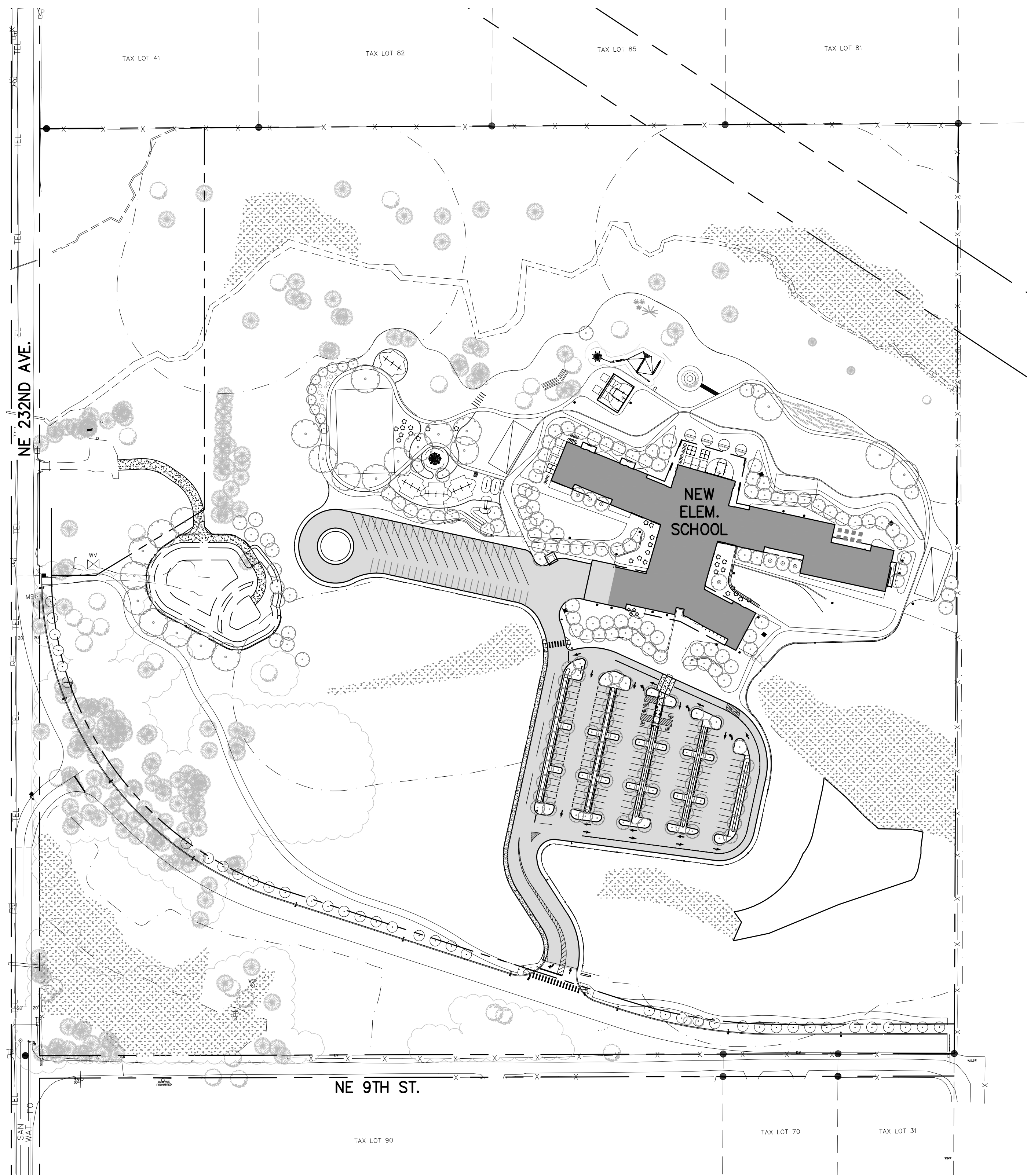
Parents will be able to use a dedicated pick-up/drop-off lane during peak times before and after school. Additionally, on-site parking is provided in excess of code minimums to accommodate events and peak usage times. The parking areas also utilize stormwater swales for conveyance to include visual stormwater management and increase vegetation within the parking areas. Buses, delivery, and maintenance vehicles will use the west parking lot to keep that traffic separated from parents and visitors. This west lot will be dual striped to provide for additional event parking.



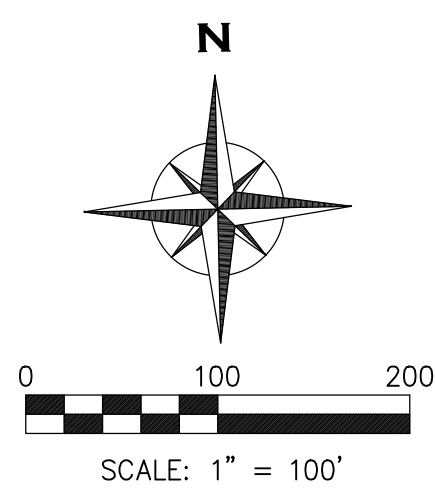


# LACAMAS HEIGHTS ELEMENTARY SCHOOL REPLACEMENT

## CAMAS, WASHINGTON



OVERALL SITE



VICINITY MAP  
N.T.S.

### SHEET INDEX

- C-000 CIVIL COVER SHEET  
C-001 EXISTING CONDITIONS PLAN
- C-100 OVERALL SITE PLAN
- C-200 OVERALL GRADING, DRAINAGE, & EROSION CONTROL PLAN
- C-300 OVERALL UTILITY PLAN
- R-100 OVERALL ROAD PLAN  
R-101 ROAD PLAN & PROFILE - 1  
R-102 ROAD PLAN & PROFILE - 2  
R-103 ROAD PLAN & PROFILE - 3  
R-104 ROAD PLAN & PROFILE - 4  
R-105 ROAD PLAN & PROFILE - CONNECTOR ROAD  
R-106 ROAD DETAILS
- L-001 CONSTRAINTS PLAN  
L-002 DEMOLITION PLAN  
L-500 PLANTING KEY PLAN  
L-501 PLANTING PLAN  
L-502 PLANTING PLAN  
L-503 PLANTING PLAN  
L-504 PLANTING PLAN  
L-505 PLANTING PLAN  
L-506 PLANTING PLAN  
L-507 PLANTING PLAN  
L-508 PLANTING PLAN  
L-509 PLANTING PLAN  
L-510 PLANTING PLAN  
L-511 PLANTING PLAN  
L-512 PLANTING PLAN  
L-513 PLANTING PLAN  
L-514 PLANTING PLAN  
L-515 PLANTING PLAN  
L-516 PLANTING PLAN  
L-517 PLANTING PLAN  
L-518 PLANTING PLAN  
L-519 PLANTING PLAN  
L-530 PLANTING LEGEND
- E-102 SITE PLAN - PHOTOMETRICS
- A-111 FIRST FLOOR PLAN - OVERALL  
A-112 SECOND FLOOR PLAN - OVERALL  
A-211 EXTERIOR ELEVATIONS  
A-212 EXTERIOR ELEVATIONS  
A-213 EXTERIOR ELEVATIONS  
A-214 EXTERIOR ELEVATIONS  
A-215 EXTERIOR ELEVATIONS  
A-216 EXTERIOR ELEVATIONS  
A-217 EXTERIOR ELEVATIONS

### PROPERTY/PROJECT INFORMATION

- PARCEL: 175724000
- TOTAL PROPOSED PROJECT SITE AREA = 40.0± ACRES
- ZONING = R-7.5
- SITE ADDRESS: 1111 NE 232ND AVE.  
CAMAS, WA 98607

### APPLICANT/OWNER

CAMAS SCHOOL DISTRICT #117  
841 NE 22ND AVE.  
CAMAS, WA 98607  
CONTACT: HEIDI ROSENBERG  
(360) 335-3000 x77203  
HEIDI.ROSENBERG@CAMAS.WEDNET.EDU

### CONTACT/ENGINEER

ROBERTSON ENGINEERING, PC  
610 ESTHER ST., SUITE 102  
VANCOUVER, WA 98660  
CONTACT: JEREMY FICK, PE  
(360) 831-0067  
JEREMY@ROBERTSONENGINEERING.US

### ARCHITECT

MAHLUM ARCHITECTS INC.  
1231 NW HOYT, SUITE 102  
PORTLAND, OR 97209  
CONTACT: AMY COPELAND  
(503) 548-2240  
ACOPELAND@MAHLUM.COM

### CITY OF CAMAS

CITY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

REVISION NO.	SHEETS AFFECTED	INITIAL APPROVAL	DATE

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

ROBERTSON  
ENGINEERING, PC  
610 Esther Street, Suite 102, Vancouver, WA 98660  
(360) 975-4995 | jeremy@robertsonengineering.us



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000

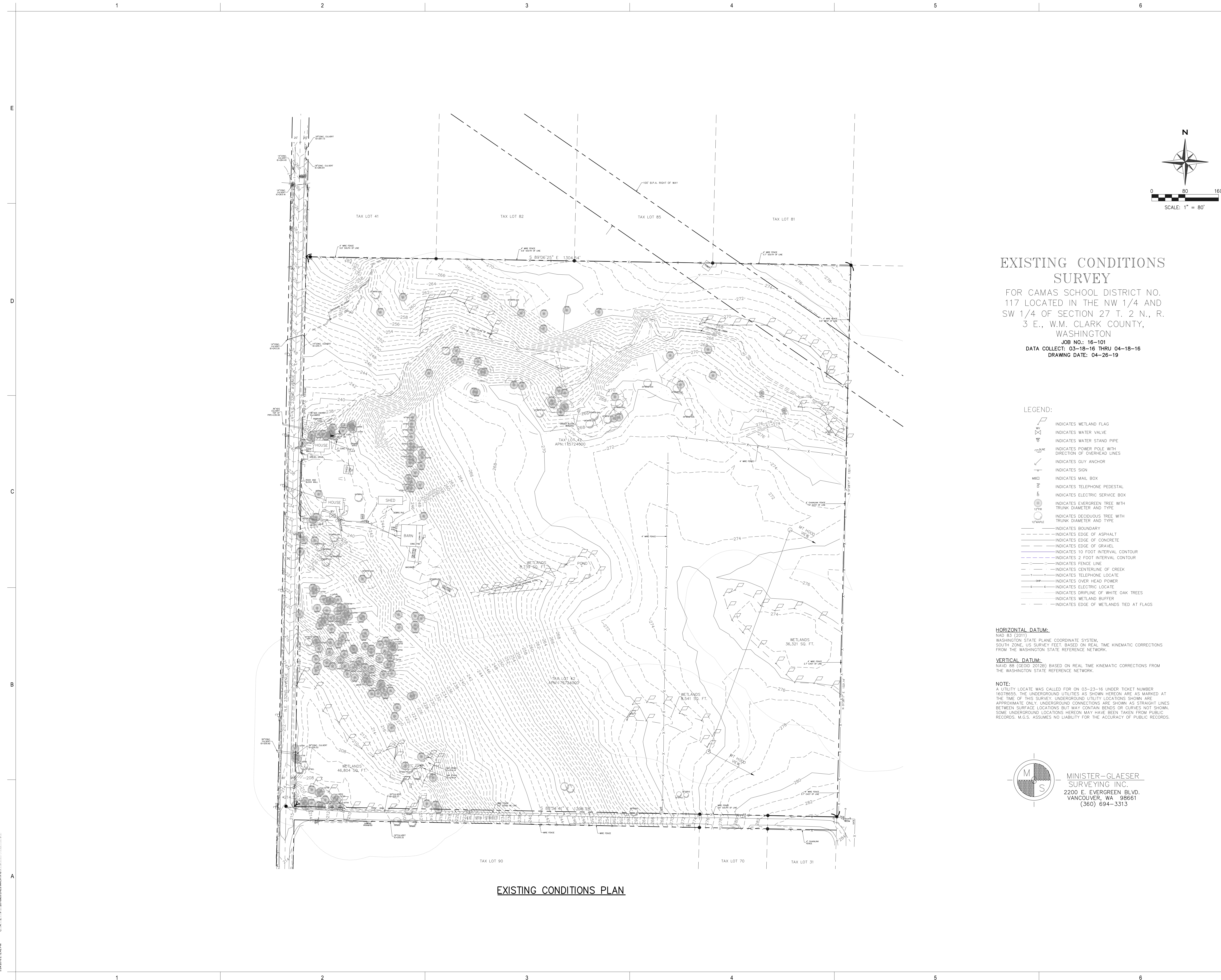


MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO.: 2016903  
DRAWN BY: JWS  
CHECKED BY: JMF  
COPYRIGHT MAHLUM ARCHITECTS, INC. 2016 ORIGINAL SHEET 820 30x42

CIVIL COVER  
SHEET

C-000



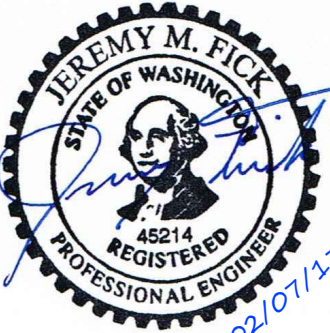
mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

ROBERTSON  
ENGINEERING, P.C.  
610 Esther Street, Suite 102, Vancouver, WA 98660  
(360) 975-4995 | jeremy@robertsonengineering.us



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO.:	2016903
DRAWN BY:	JWS
CHECKED BY:	JMF
COPYRIGHT MAHLUM ARCHITECTS, INC. 2017 ORIGINAL SHEET 820 30'x42'	

EXISTING  
CONDITIONS  
PLAN

C-001

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

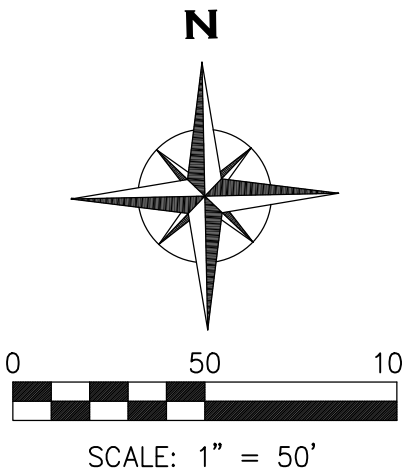
ROBERTSON  
ENGINEERING, P.C.  
610 Esther Street, Suite 102, Vancouver, WA 98660  
(360) 975-4995 | jeremy@robertsonengineering.us



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



SITE PLAN GENERAL NOTES

- DIMENSIONS SHOWN ARE TO FACE OF CURB.
- DRIVE AISLES ARE 24' WIDE UNLESS DIMENSIONED OTHERWISE.
- PASSENGER VEHICLE PARKING STALLS ARE 9' x 18'.

PARKING COUNT SUMMARY

STANDARD STALLS = 122  
ADA STALLS = 5 (3 VAN)  
TOTAL = 127

BUS STALLS = 16

OVERFLOW PARKING FOR EVENTS

PARALLEL PARKING IN QUEUING LANE = 24  
SECONDARY STALL IN BUS LOT = 49  
TOTAL ADDITIONAL STALLS = 73

LEGEND

- NEW ASPHALT PAVEMENT
- RAIN GARDEN FACILITY
- NUMBER OF PARKING STALLS IN EACH AREA

PROPERTY/PROJECT INFORMATION

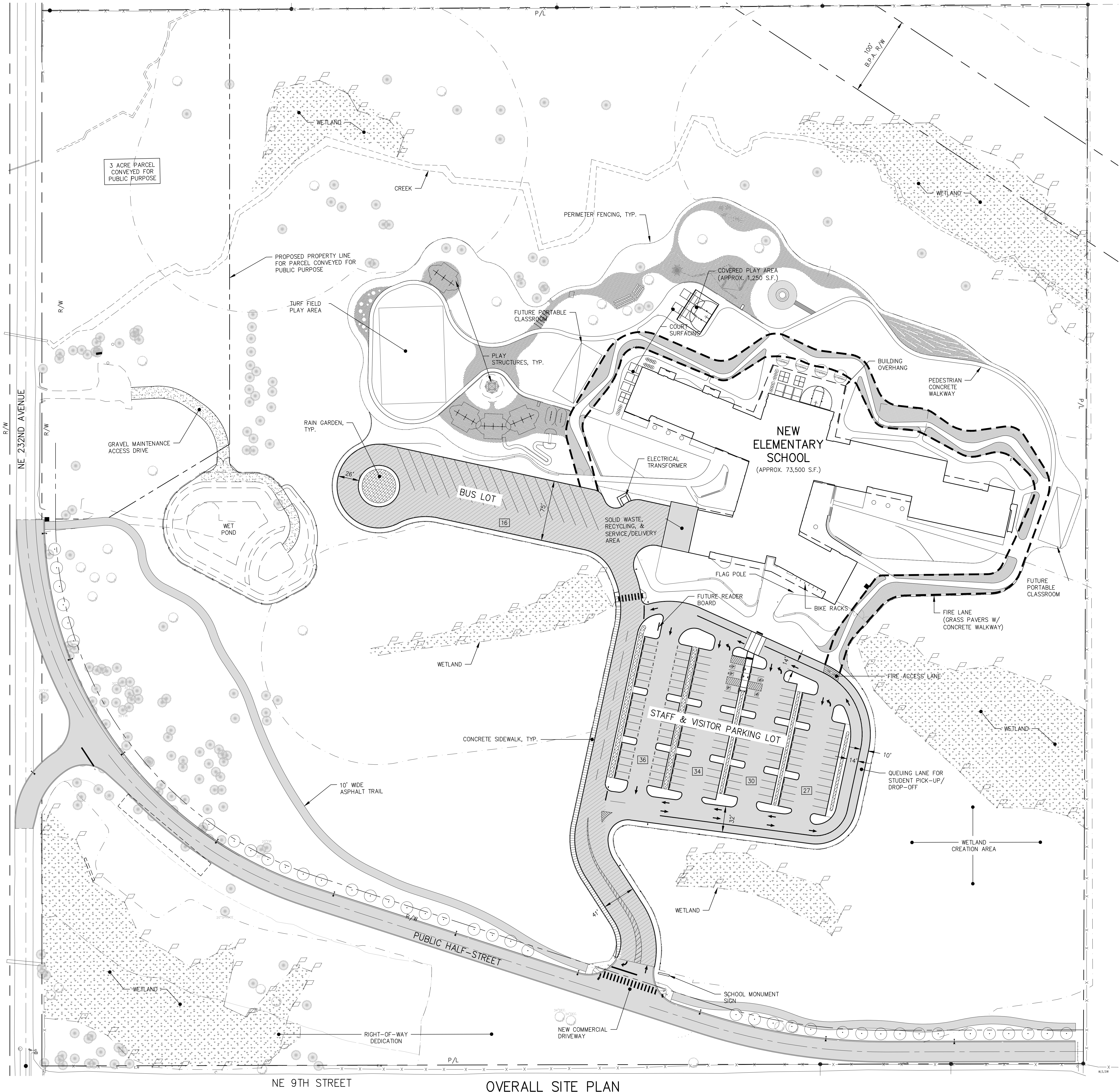
- PARCEL: 175724000
- TOTAL PROPOSED PROJECT SITE AREA = 40.0± ACRES
- ZONING = R-7.5
- SITE ADDRESS: 1111 NE 232ND AVE.  
CAMAS, WA 98607

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

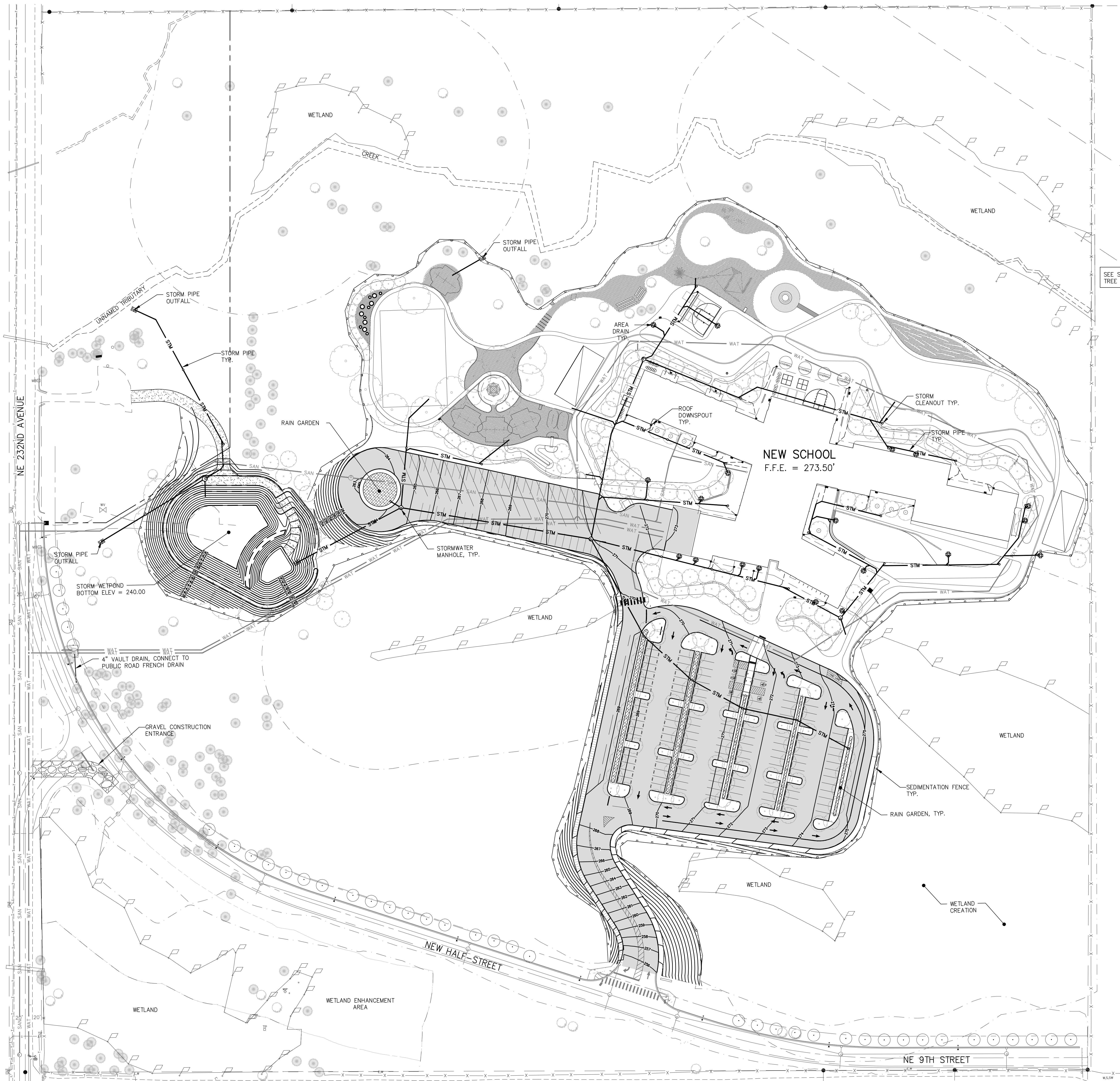
PROJECT NO.: 2016903  
DRAWN BY: JWS  
CHECKED BY: JMF  
COPYRIGHT MAHLUM ARCHITECTS, INC. 2017 ORIGINAL SHEET 8/20 30x42"

OVERALL  
SITE PLAN

C-100



OVERALL SITE PLAN



OVERALL GRADING, DRAINAGE, & EROSION CONTROL PLAN

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

ROBERTSON  
ENGINEERING, PC  
610 Esther Street, Suite 102, Vancouver, WA 98660  
(360) 975-4995 | jeremy@robertsonengineering.us



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

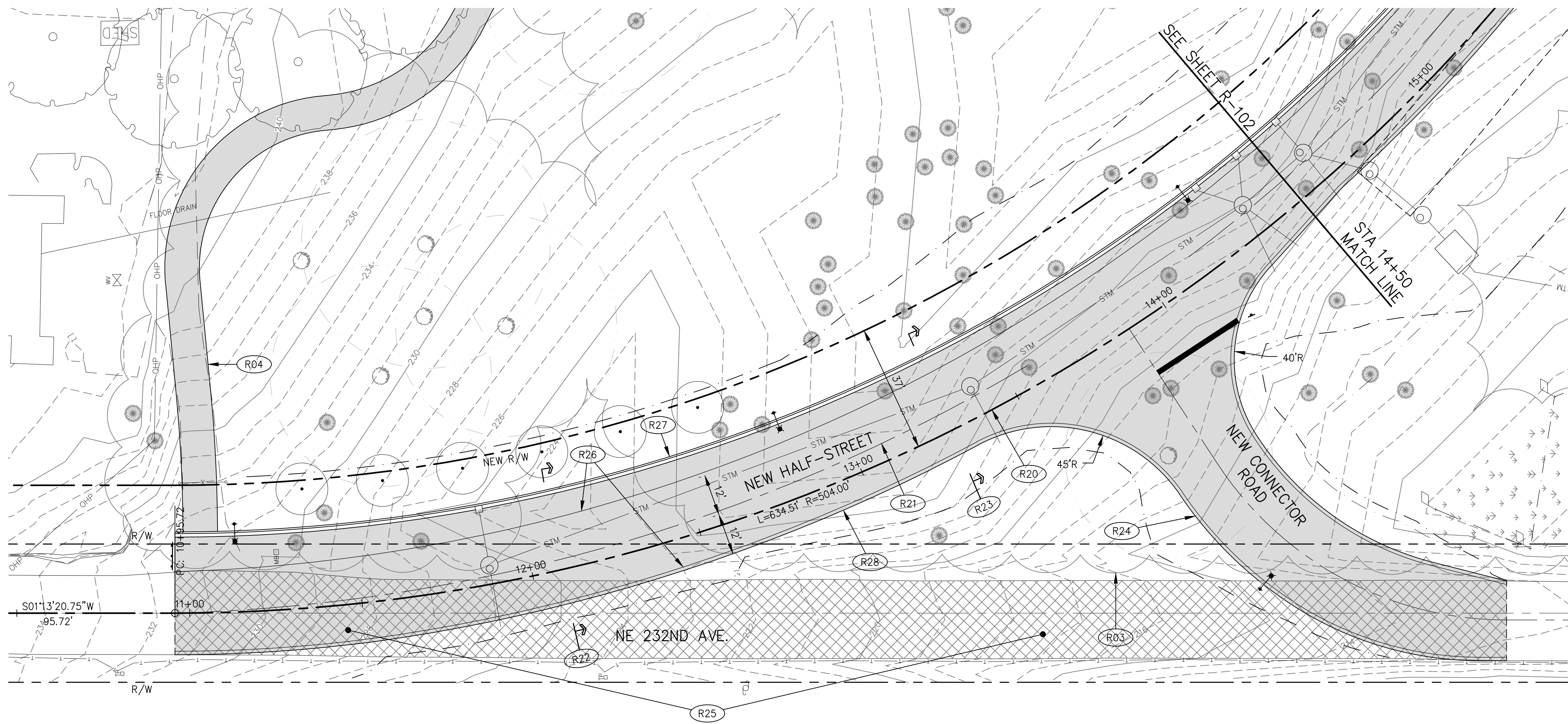
PROJECT NO.: 2016903  
DRAWN BY: JWS  
CHECKED BY: JMF  
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

OVERALL GRADING,  
DRAINAGE, &  
EROSION CONTROL  
PLAN

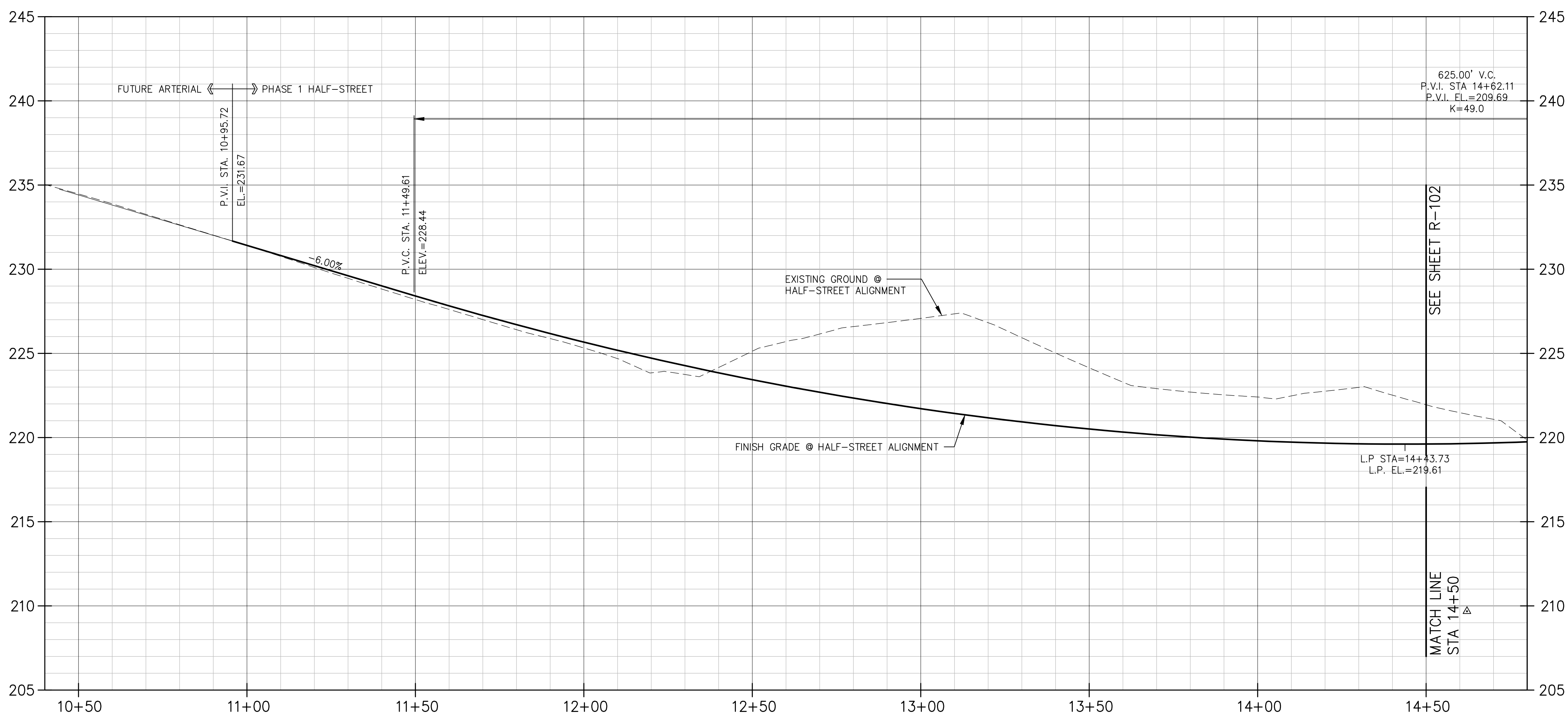
C-200



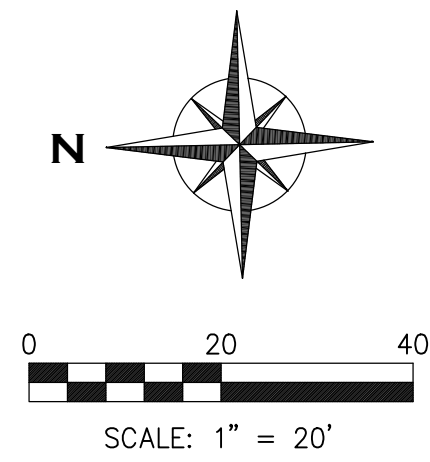




ROAD PLAN  
SCALE: 1" = 20'



ROAD PROFILE  
SCALE: 1" = 20' (H), 1" = 4' (V)



ROAD PLAN NOTES

- (R03) APPROX. EXTENT OF FOREST CANOPY.
- (R04) 10' WIDE ASPHALT MIXED-USE PATH.
- (R20) HALF-STREET ALIGNMENT. FUTURE CENTERLINE OF 3-LANE ARTERIAL.
- (R21) STRIPED CENTERLINE OF NEW HALF-STREET (PHASE 1 ROADWAY).
- (R22) CONSTRUCT ROADWAY PER TYPICAL SECTION IN DETAIL 1/R-106.
- (R23) CONSTRUCT ROADWAY FOR TREE CONSERVATION PER TYPICAL SECTION IN DETAIL 2/R-106.
- (R24) PHASE 1 CONNECTOR ROADWAY. SEE SHEET R-105.
- (R25) SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT.
- (R26) FOG LINE STRIPE.
- (R27) CURB & GUTTER.
- (R28) EDGE OF ASPHALT.

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

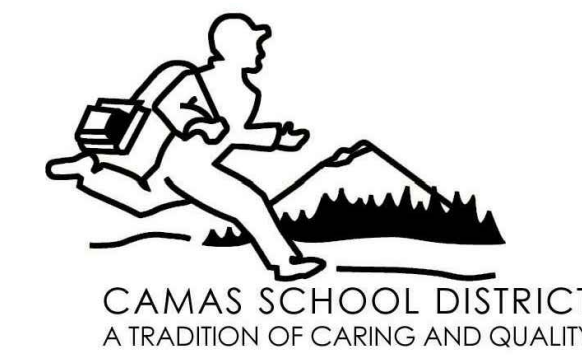
ROBERTSON  
ENGINEERING, PC  
610 Esther Street, Suite 102, Vancouver, WA 98660  
(360) 975-4995 | jeremy@robertsonengineering.us



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000

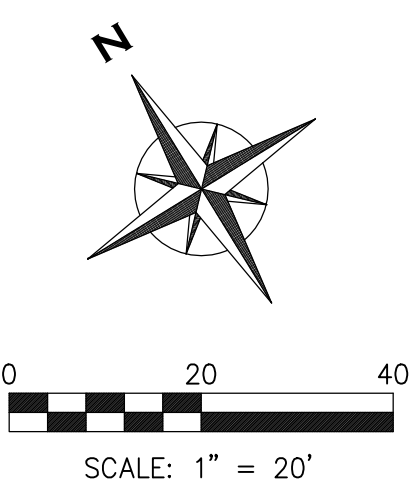
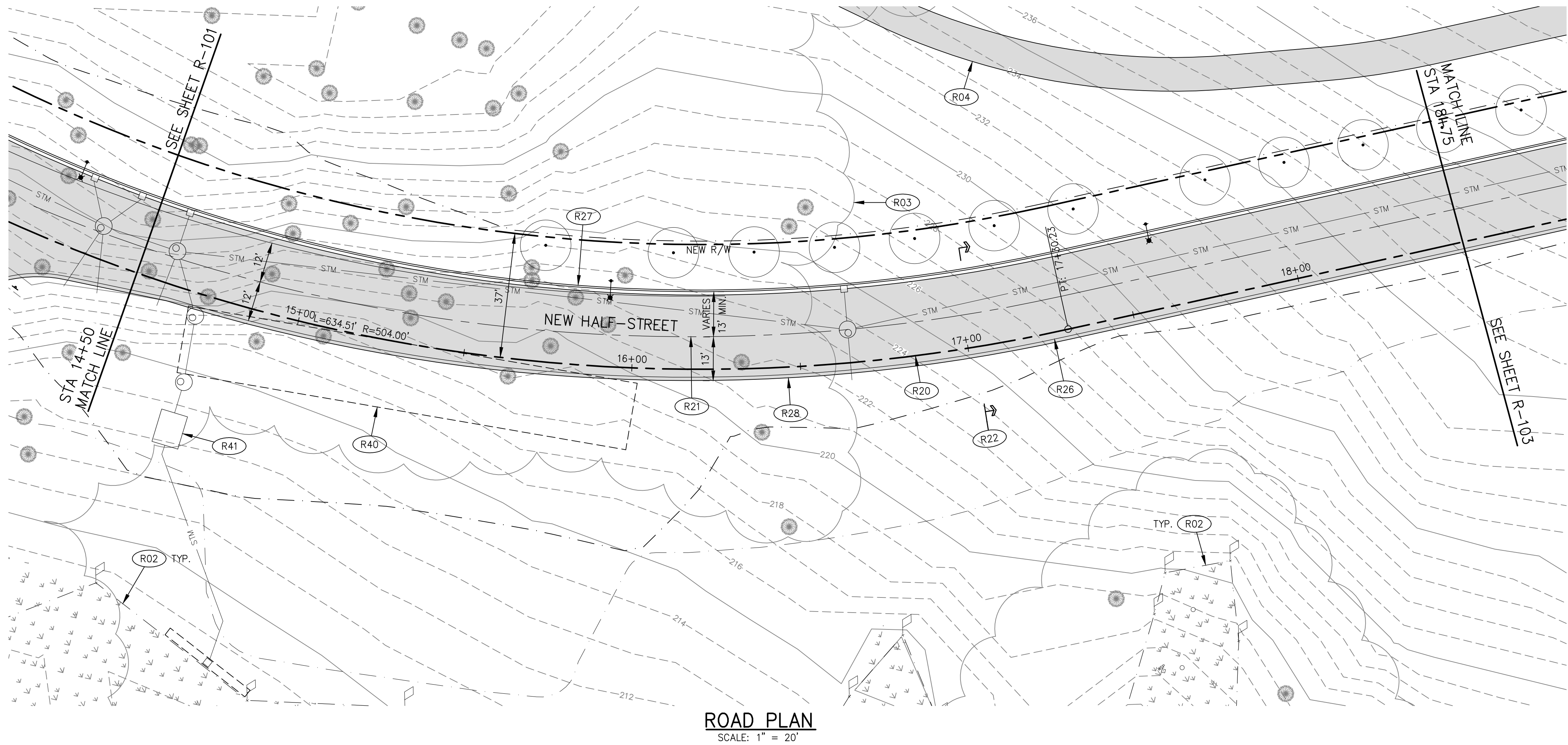


MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO.: 2016903  
DRAWN BY: JAB  
CHECKED BY: JMF  
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"X42"

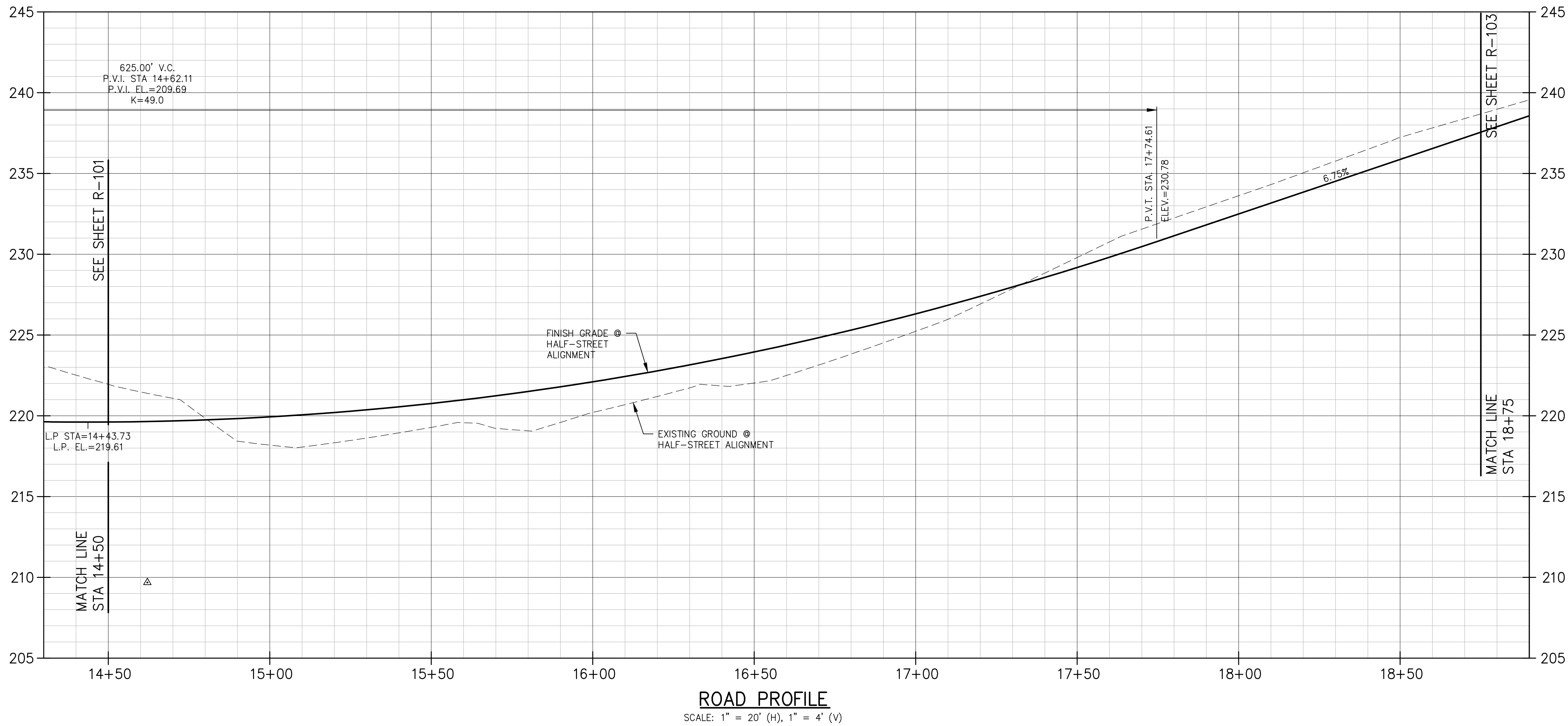
ROAD PLAN &  
PROFILE - 1

R-101



ROAD PLAN NOTES

- (R02) SURVEYED WETLAND BOUNDARY.
- (R03) APPROX. EXTENT OF FOREST CANOPY.
- (R04) 10' WIDE ASPHALT MIXED-USE PATH.
- (R20) HALF-STREET ALIGNMENT. FUTURE CENTERLINE OF 3-LANE ARTERIAL.
- (R21) STRIPED CENTERLINE OF NEW HALF-STREET (PHASE 1 ROADWAY).
- (R22) CONSTRUCT ROADWAY PER TYPICAL SECTION DETAIL 1/R-106.
- (R26) FOG LINE STRIPE.
- (R27) CURB & GUTTER.
- (R28) EDGE OF ASPHALT PAVEMENT.
- (R40) CONSTRUCT UNDERGROUND STORMWATER DETENTION FACILITY.
- (R41) INSTALL STORMWATER TREATMENT FACILITY TO PROVIDE BASIC AND PHOSPHATE STORMWATER TREATMENT.



mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

ROBERTSON  
ENGINEERING, P.C.  
610 Esther Street, Suite 102, Vancouver, WA 98660  
(360) 975-4995 | jeremy@robertsonengineering.us



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO.: 2016903  
DRAWN BY: JAB  
CHECKED BY: JMF  
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"X42"

ROAD PLAN &  
PROFILE - 2

R-102





E

D

C

B

A

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

ROBERTSON  
ENGINEERING, PC  
610 Esther Street, Suite 102, Vancouver, WA 98660  
(360) 975-4995 | jeremy@robertsonengineering.us



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000

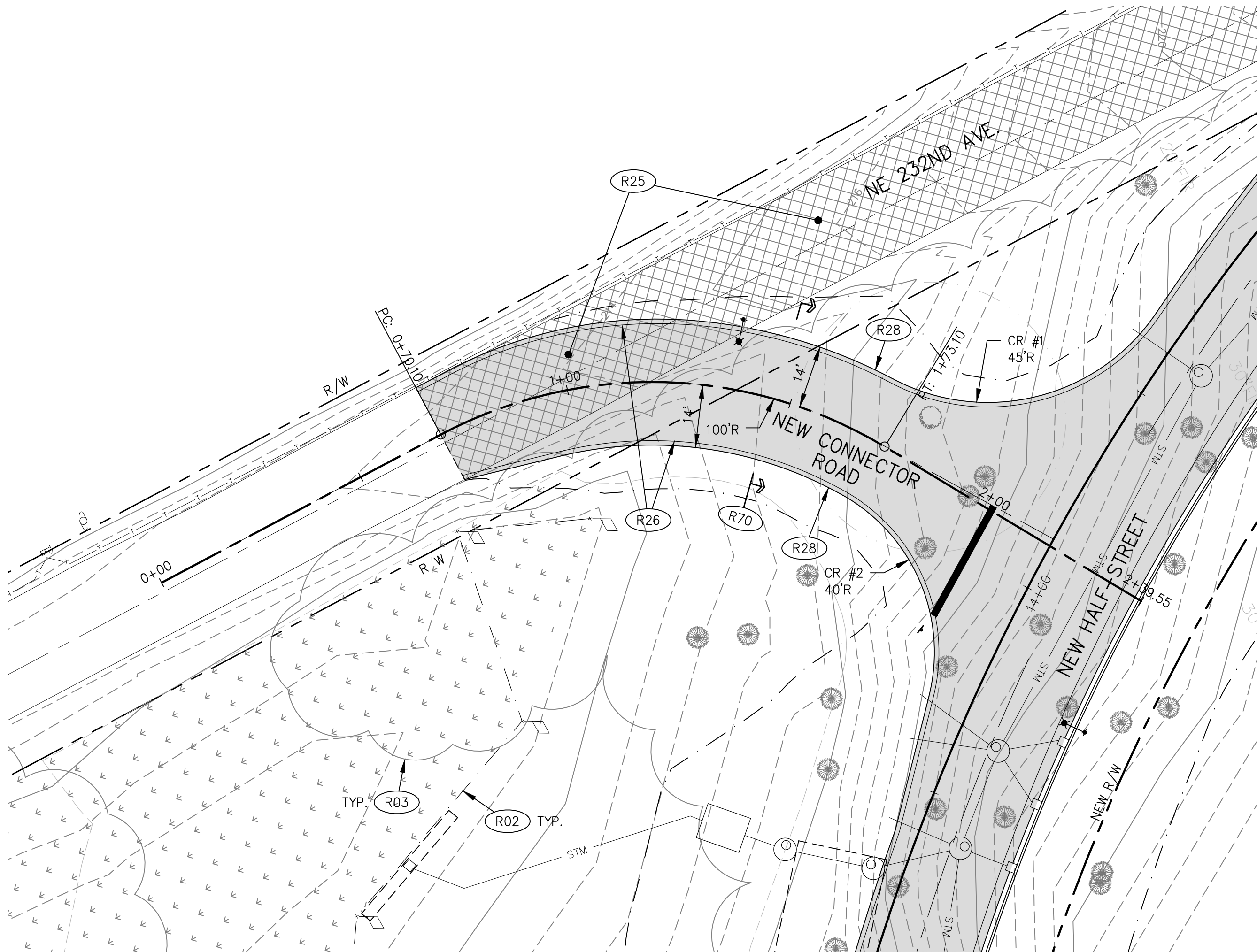


MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

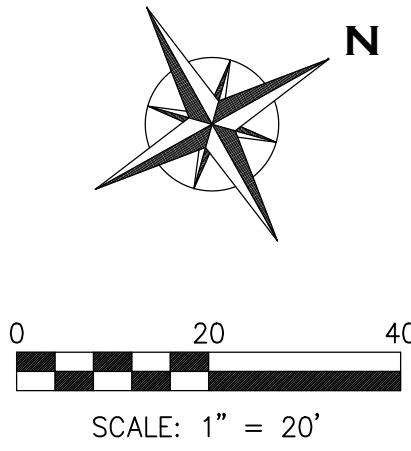
PROJECT NO.: 2016903  
DRAWN BY: JAB  
CHECKED BY: JMF

ROAD PLAN & PROFILE  
CONNECTOR ROAD

R-105

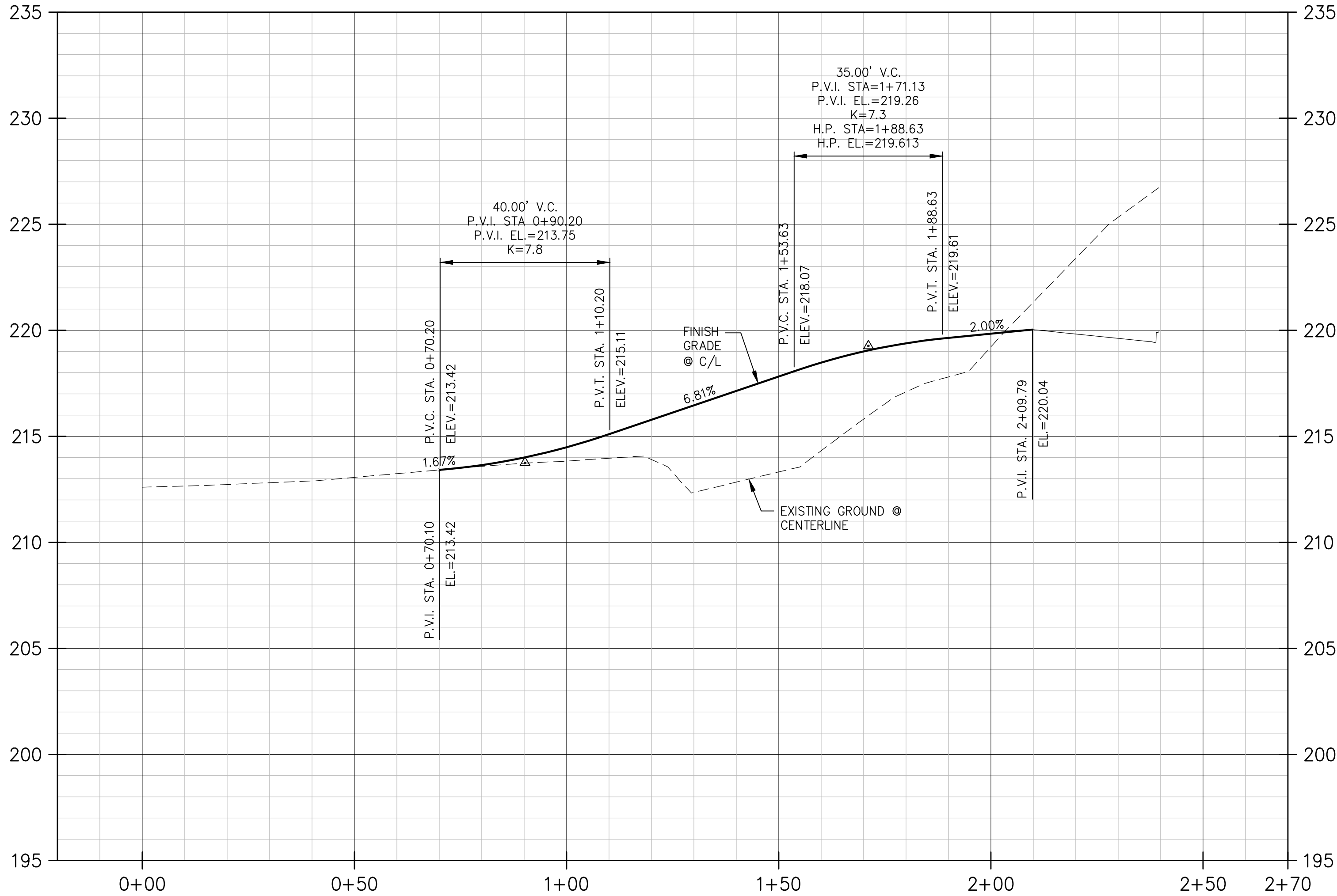


ROAD PLAN  
SCALE: 1" = 20'



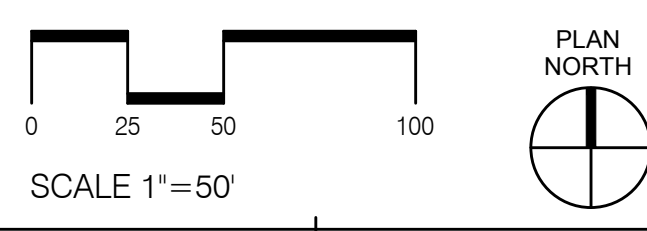
ROAD PLAN NOTES

- R02 SURVEYED WETLAND BOUNDARY.
- R03 APPROX. EXTENT OF FOREST CANOPY.
- R25 SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT.
- R26 FOG LINE STRIPE.
- R28 EDGE OF ASPHALT PAVEMENT.
- R70 CONSTRUCT NEW CONNECTOR ROAD PER SECTION IN DETAIL 4/R-106.



ROAD PROFILE  
SCALE: 1" = 20' (H), 1" = 4' (V)





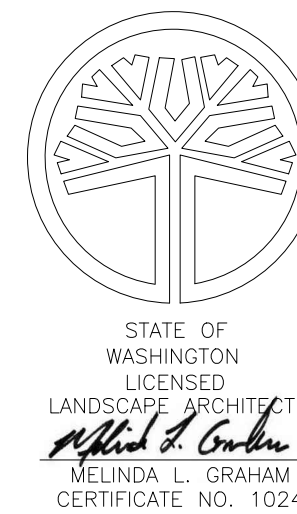
mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

2ink Studio | Landscape Architecture  
107 SE Washington Street #208  
Portland, OR 97214  
503.244.4600  
www.2inkstudio.com



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



MARK DATE DESCRIPTION

ISSUE DATE: FEBRUARY 7, 2017  
ISSUE: LAND USE REVIEW

PROJECT NO: 2016903  
DRAWN BY: LWH

CHECKED BY: COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

CONSTRAINTS PLAN

L-001



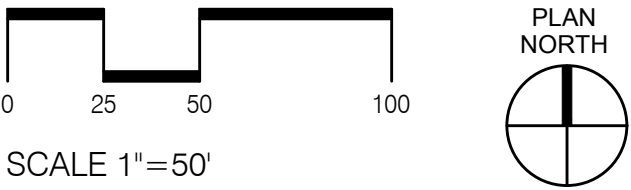
**DEMOLITION LEGEND**

- LIMIT OF LANDSCAPE WORK
- PROPERTY LINE OR R.O.W.
- TREE/WETLAND PROTECTION FENCING
- ⊗ EXISTING TREE TO BE REMOVED AND SALVAGED, SEE NOTES
- ▨ CLEAR AND GRUB (STRIP 3'-4" DEPTH) SEE NOTES
- ▨ EXISTING SHRUBS TO BE REMOVED
- ⋯ CLEAR AND GRUB (STRIP 1'-2" DEPTH), SEE NOTES
- X EXISTING TREE NUMBER, SEE PLANTING PLAN FOR PERMIT TREE MITIGATION
- ARCHEOLOGICAL ZONE, SEE NOTES
- EXISTING FENCE AND FOOTINGS TO BE REMOVED

- DEMOLITION NOTES**
- EXISTING CINDER BLOCK STRUCTURE AND FOOTING TO BE REMOVED
  - REMOVED TREES SHALL BE SALVAGED FOR USE IN PLAYGROUND. SEE SPECIFICATIONS. MAINTAIN UN-CUT MINIMUM 45' LENGTH FOR (1) 30", (1) 32", (1) 34", AND (1) 36" DIAMETER DOUG FIR. SEE L8.22 FOR DETAILS ON FULL LENGTH TREE SALVAGE USE.
  - EXISTING FENCE AND FOOTINGS TO BE REMOVED
  - EXISTING FENCE, PROTECT IN PLACE
  - EXISTING SEPTIC TANK AND MANHOLES (2) TO BE REMOVED. SEE CLARK COUNTY 24.17.210 ABANDONMENT FOR SEPTIC TANK REQUIREMENTS. PERSONS PERMANENTLY ABANDONING A SEPTIC TANK, SEEPAGE POOL, CESSPOOL, OR OTHER SEWAGE CONTAINER FROM SERVICE SHALL: (1) HAVE THE SEPTAGE REMOVED BY A CERTIFIED PUMPER; (2) REMOVE OR DESTROY THE LID; (3) FILL THE VOID WITH SOIL, SAND AND/OR GRAVEL; AND (4) SUBMIT IN WRITING TO CCPH A NOTIFICATION OF ABANDONMENT WITH A WRITTEN DESCRIPTION OF THE ACTIONS TAKEN TO LEGALLY ABANDON THE SYSTEM WITH PUMPER RECEIPT ATTACHED (SEC. 22 OF ORD. 2007-10-01).

- GENERAL NOTES**
- FOR PUBLIC RIGHT OF WAY, UTILITY, OR ELECTRICAL RELATED DEMOLITION REFER TO CIVIL DRAWINGS.
  - SEE SPECIFICATIONS FOR TREE PROTECTION PROCEDURES. TREE PROTECTION FENCING SHOWN ON THIS PLAN IS THE APPROXIMATE QUANTITY REQUIRED FOR TREE PROTECTION. CONTRACTOR TO SUBMIT REVISED PLAN INDICATING FENCING LOCATIONS TO INDICATE ACTUAL WORK LOCATIONS, TIMING, AND PROCEDURES FOR WORK AROUND TREES OR WHERE WORK TAKES PLACE WITHIN THE DRIPLINE OF SELECTED TREES. ALL DEVIATIONS FROM THIS PLAN MUST BE APPROVED BY THE PROJECT LANDSCAPE ARCHITECT AND OWNERS ARBORIST PRIOR TO IMPLEMENTATION.
  - ALL TRENCHING OR EXCAVATING WITHIN TREE PROTECTION ZONES SHALL BE DONE BY HAND. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ANY ROOT CUTTING ALLOWED BY THE PROJECT ARBORIST 2-INCHES AND LARGER REQUIRES PRIOR APPROVAL.

TREE DEMOLITION		
TYPE:	DIAMETER (INCHES)	QUANTITY
WHITE OAK	20"	1
FIR	12"	3
FIR	14"	5
FIR	16"	1
FIR	18"	4
FIR	20"	2
FIR	22"	7
FIR	24"	7
FIR	26"	7
FIR	28"	6
FIR	30"	6
FIR	32"	2
FIR	36"	2
FIR	38"	1
FIR	44"	1
FIR	60"	1
APPLE	14"	1
APPLE	24"	1
TOTAL:	36"-8"	56

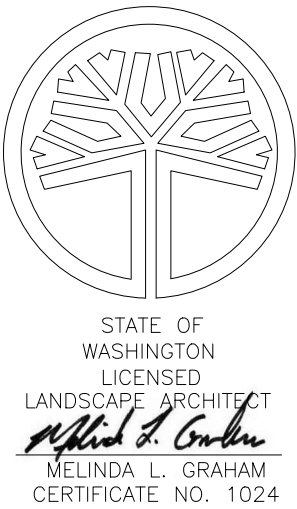


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



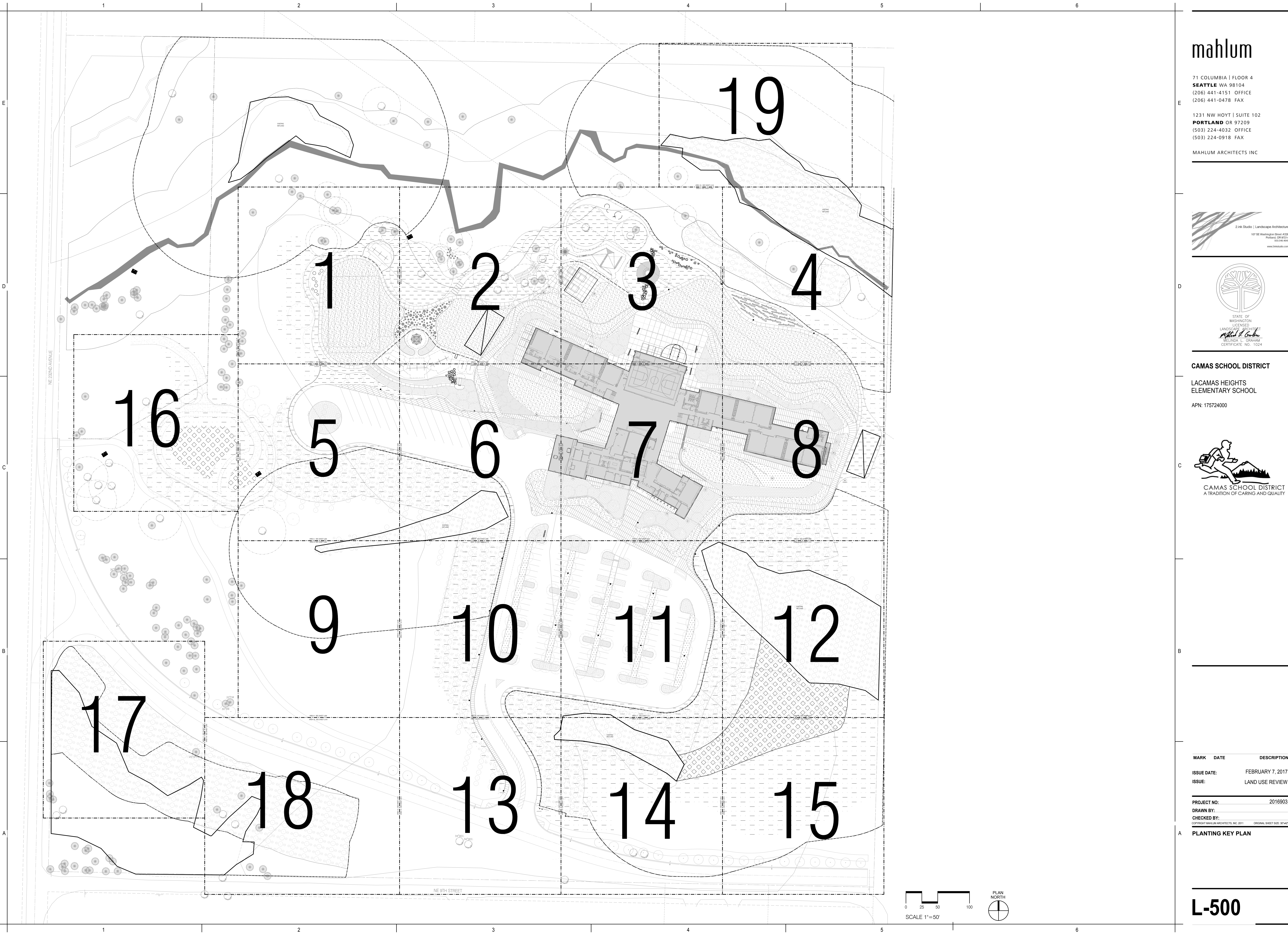
MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY: LWH

CHECKED BY: [Signature]  
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

DEMOLITION PLAN

L-002

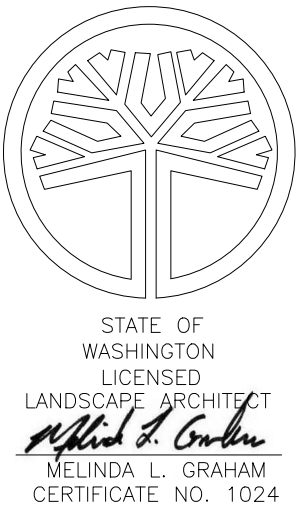


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



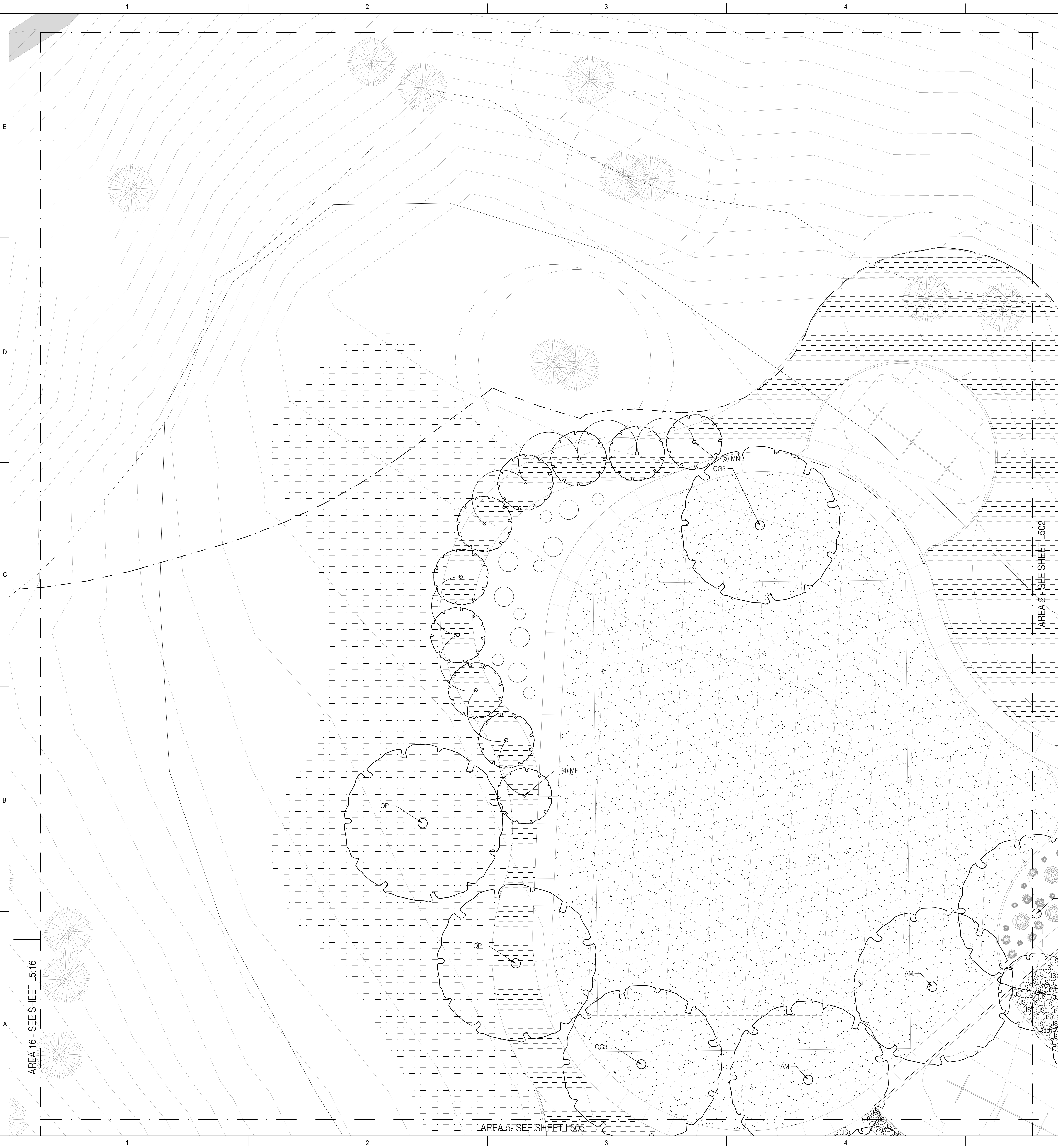
MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

PLANTING KEY PLAN

L-500



GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTORS CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

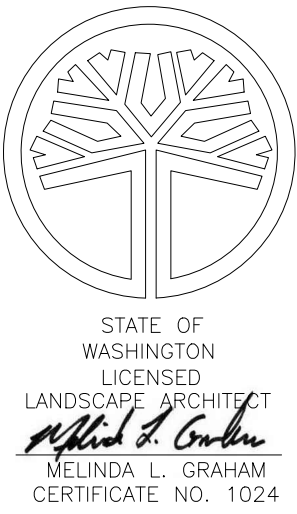
NOTE: SEE SHEET L530 FOR PLANT LEGEND.

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

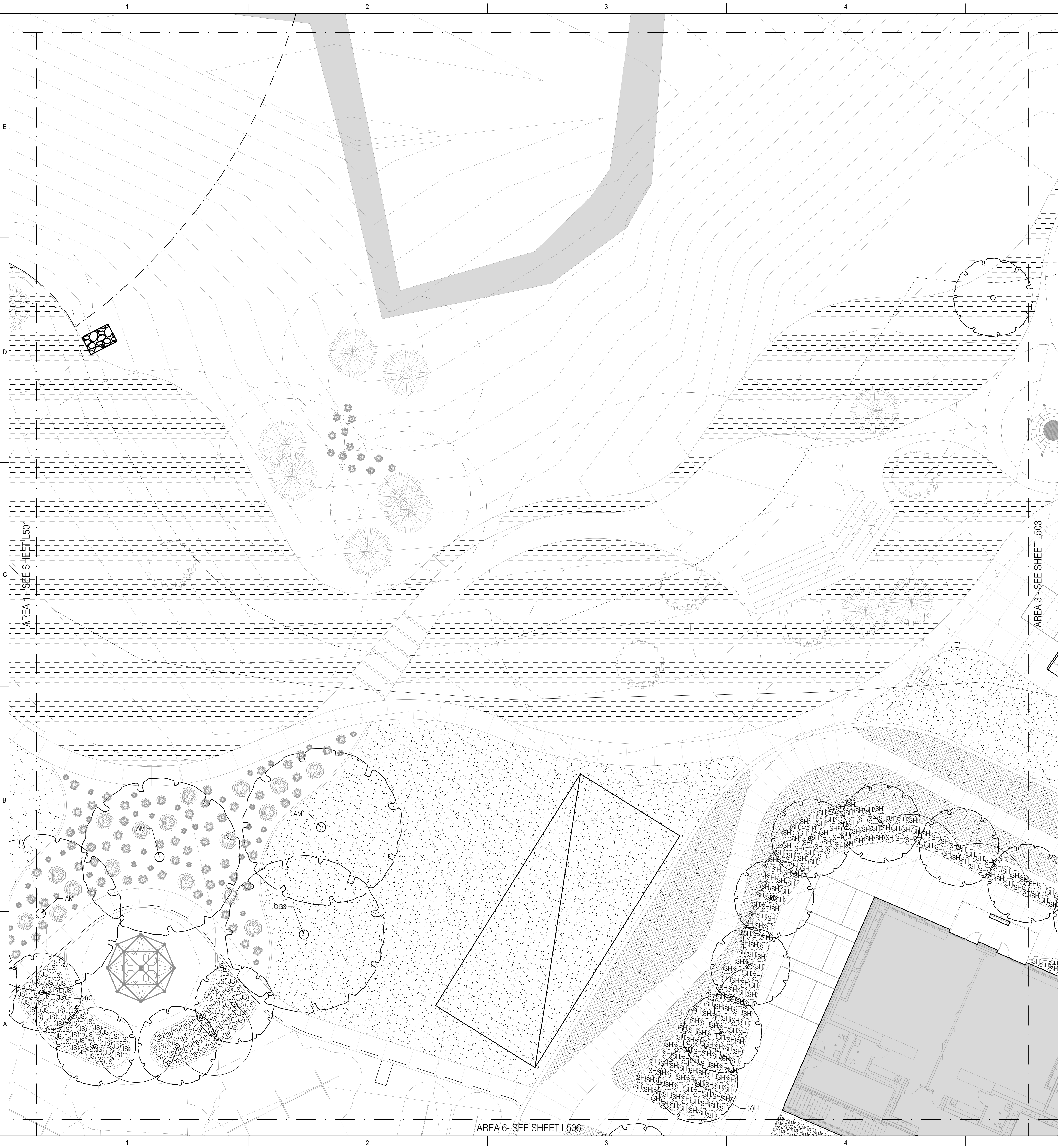
MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

PLANTING PLAN

L-501



GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTORS CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

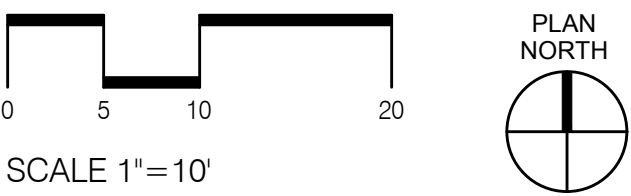
WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

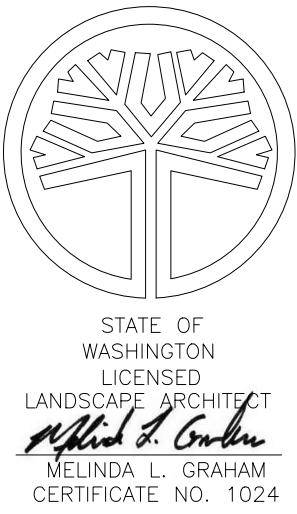


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



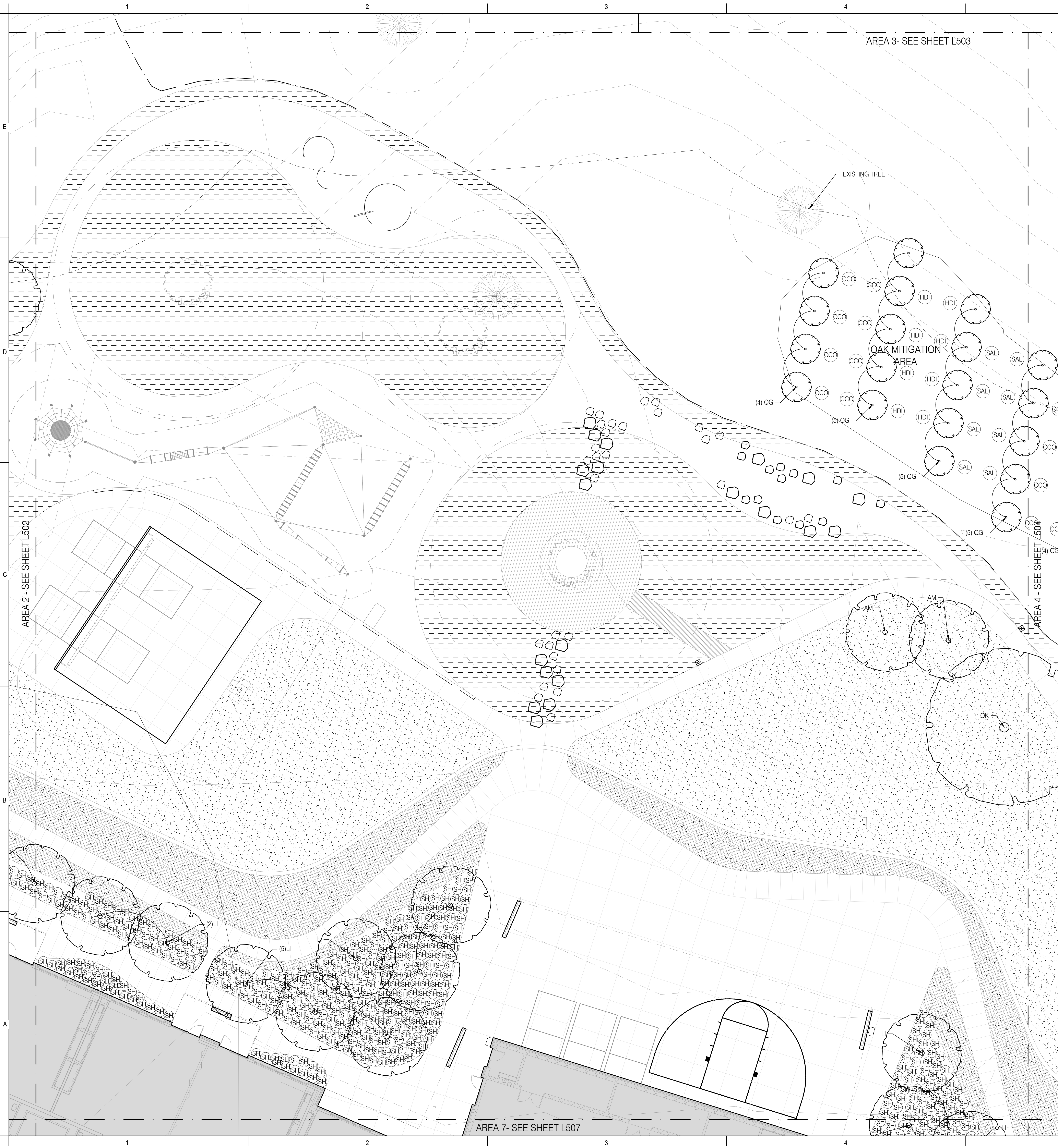
				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

PLANTING PLAN

L-502



GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

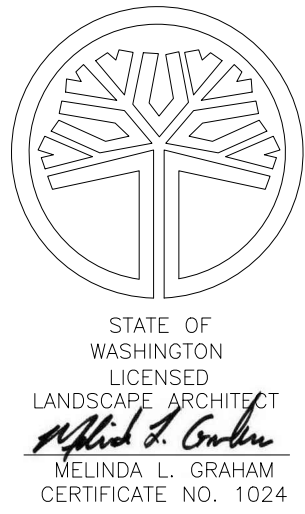
NOTE: SEE SHEET L530 FOR PLANT LEGEND.

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

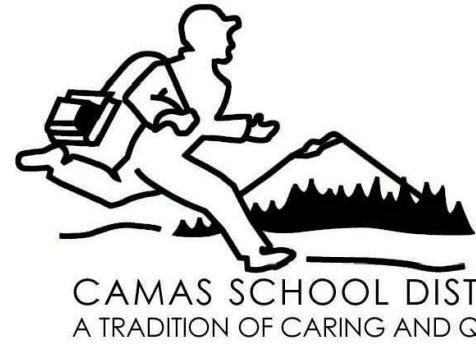
MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000

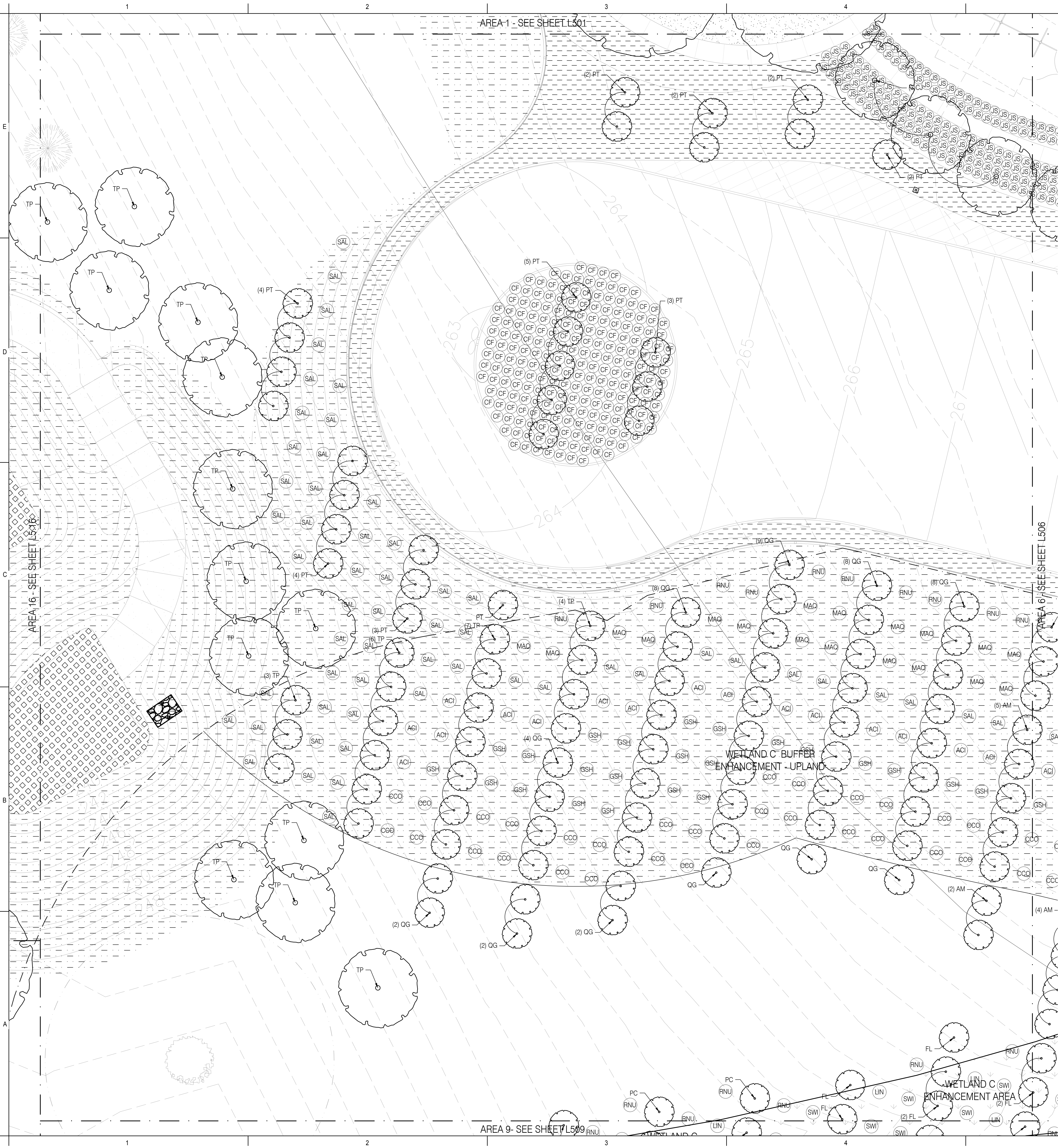


			19	
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	
PROJECT NO.:	2016903	
DRAWN BY:		
CHECKED BY:		
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"		
PLANTING PLAN		

L-503





GENERAL PLANTING NOTES

- 1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
- 2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
- 3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
- 4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
- 5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
- 6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

WETLAND/OAK MITIGATION NOTES

- 1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
- 2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
- 3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

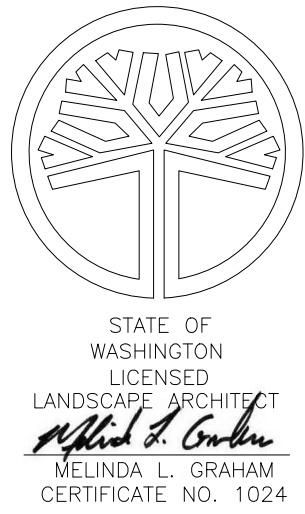
NOTE: SEE SHEET L530 FOR PLANT LEGEND.

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



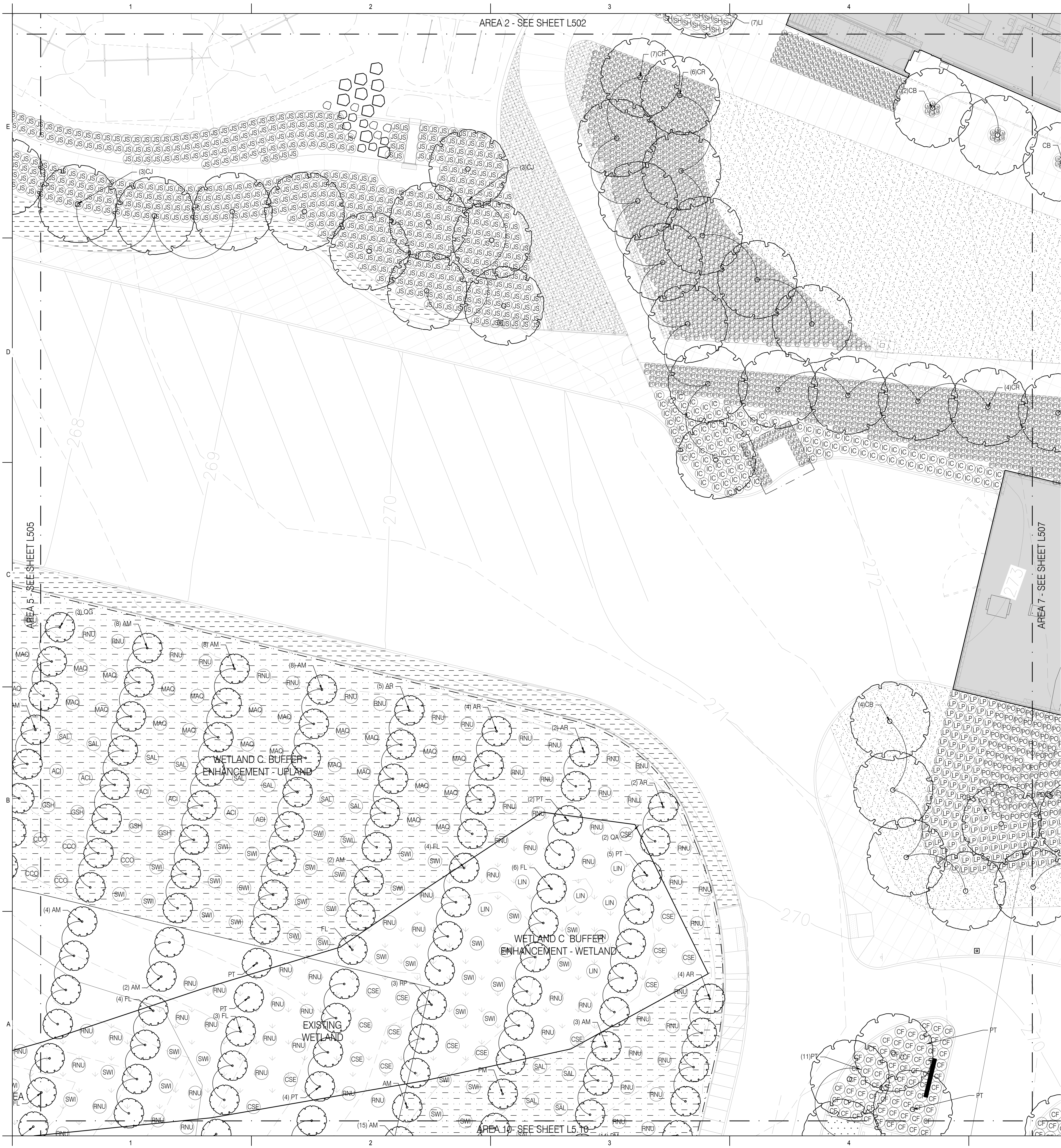
				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

PLANTING PLAN

L-505



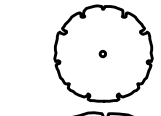

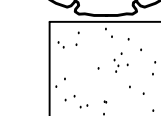
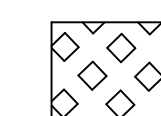
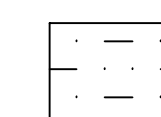
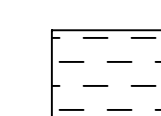
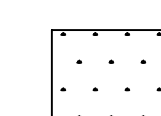
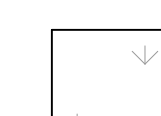
GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTORS CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

-  = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
-  = PROPOSED TREE (BALLED AND BURLAPPED)
-  = SEEDED LAWN
-  = SEEDED WETLAND: EMERGENT ZONE MIX
-  = SEEDED MEADOW: UPLAND ZONE MIX
-  = SEEDED MEADOW: FIDO MIX
-  = STORMWATER CONTAINER PLANTING
-  = EXISTING WETLAND

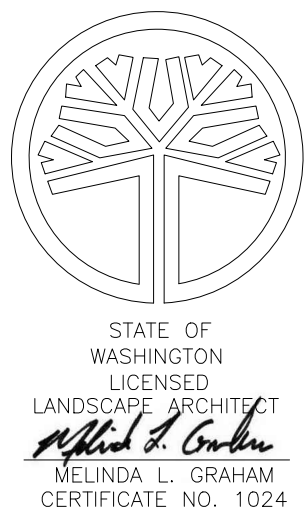
NOTE: SEE SHEET L530 FOR PLANT LEGEND.

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	
PROJECT NO:	2016903	
DRAWN BY:		
CHECKED BY:		
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"		
PLANTING PLAN		

L-506



GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTORS CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

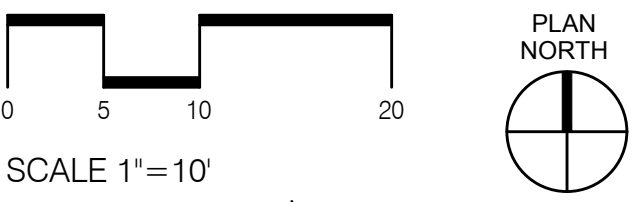
WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDING LAWN
- = SEEDING WETLAND: EMERGENT ZONE MIX
- = SEEDING MEADOW: UPLAND ZONE MIX
- = SEEDING MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.



mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

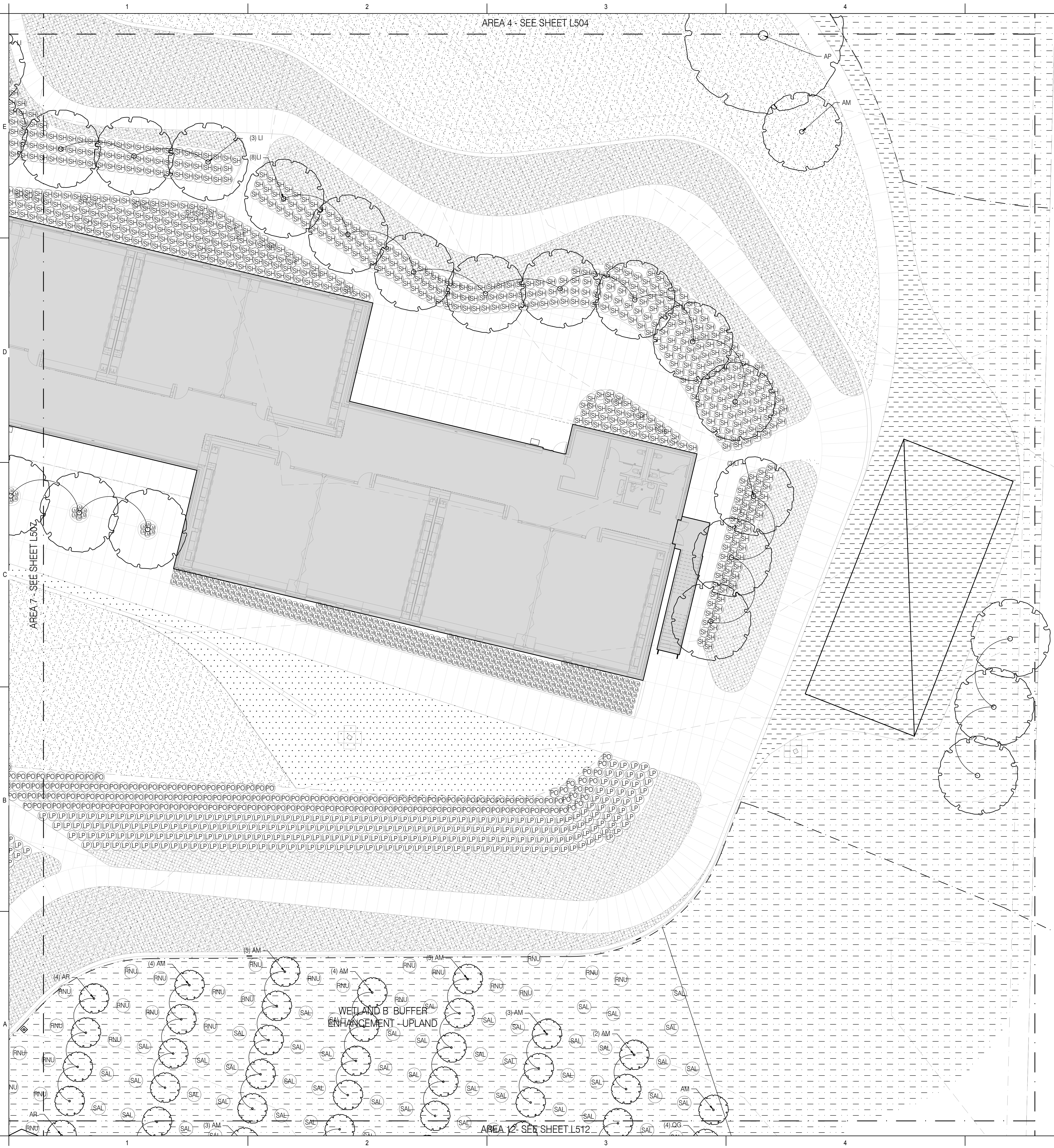
PROJECT NO: 2016903

DRAWN BY:

CHECKED BY:

PLANTING PLAN

L-507



GENERAL PLANTING NOTES

- 1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
- 2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
- 3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
- 4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
- 5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTORS CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
- 6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

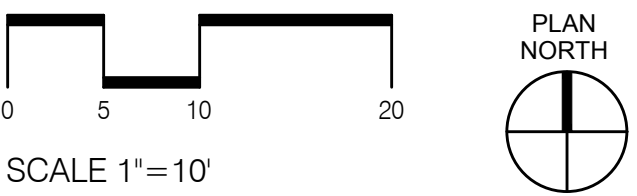
WETLAND/OAK MITIGATION NOTES

- 1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
- 2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
- 3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

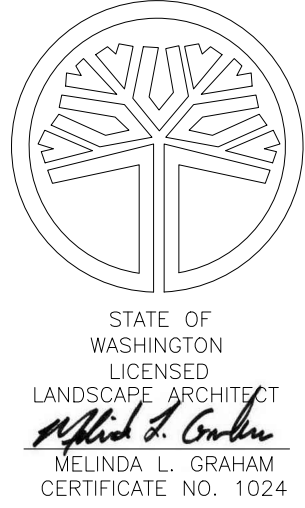


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

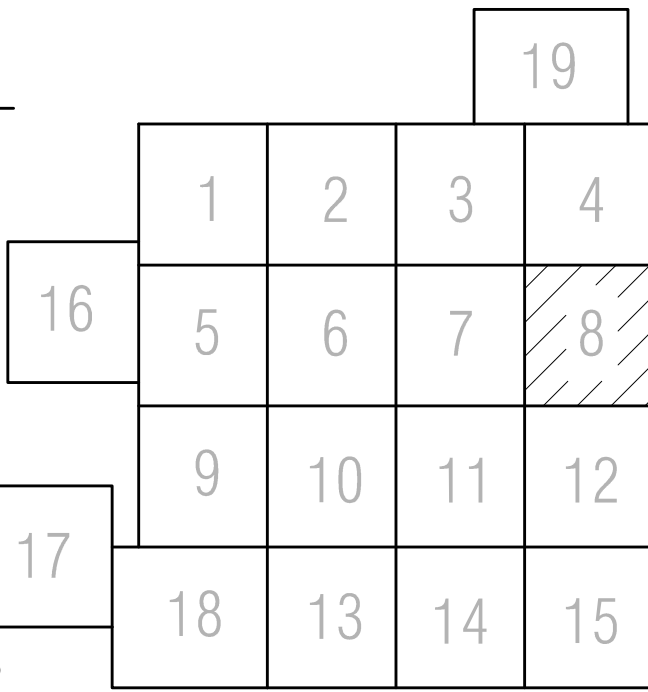
MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

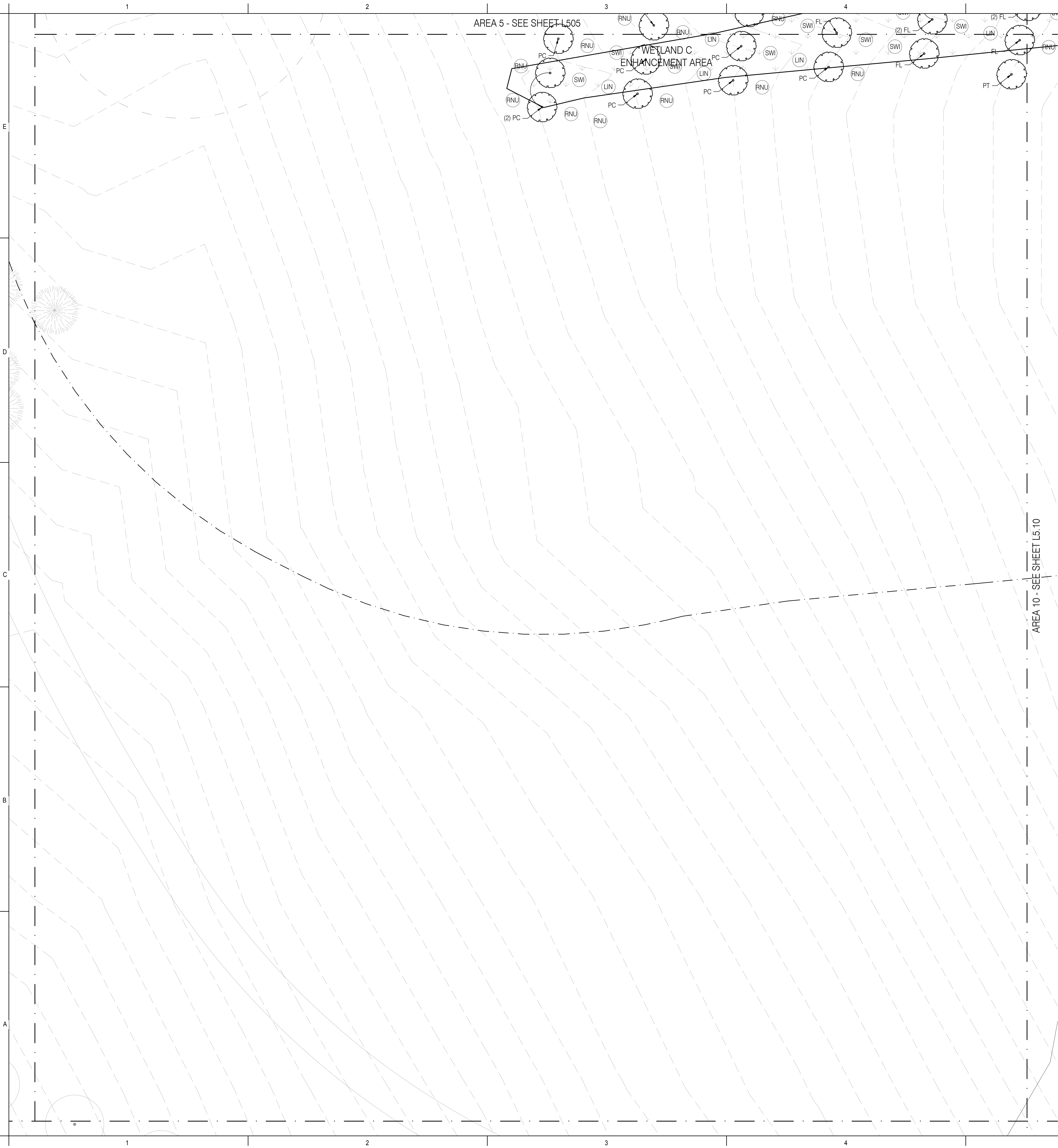
LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	
PROJECT NO.:	2016903	
DRAWN BY:		
CHECKED BY:		
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"		
PLANTING PLAN		

L-508



AREA 5 - SEE SHEET L505

WETLAND C  
ENHANCEMENT AREA

AREA 10 - SEE SHEET L5.10


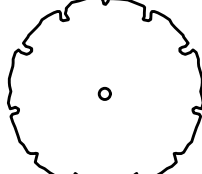

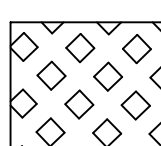
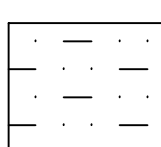
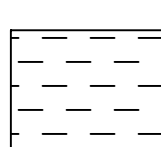
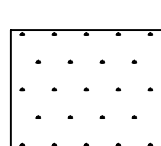
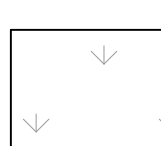
### GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

### WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

### LEGEND

-  = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
-  = PROPOSED TREE (BALLED AND BURLAPPED)
-  = SEEDED LAWN
-  = SEEDED WETLAND: EMERGENT ZONE MIX
-  = SEEDED MEADOW: UPLAND ZONE MIX
-  = SEEDED MEADOW: FIDO MIX
-  = STORMWATER CONTAINER PLANTING
-  = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

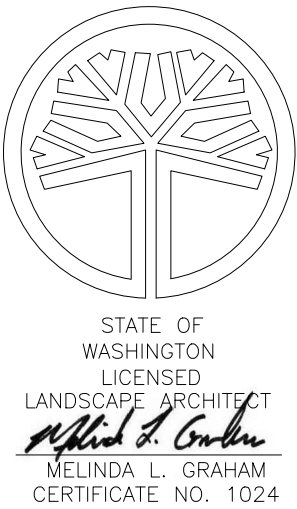
mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

2ink Studio | Landscape Architecture  
107 SE Washington Street #209  
Portland, OR 97214  
(503) 946-4900  
www.2inkstudio.com



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



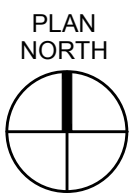
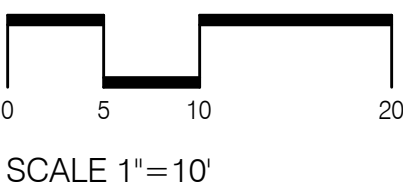
				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

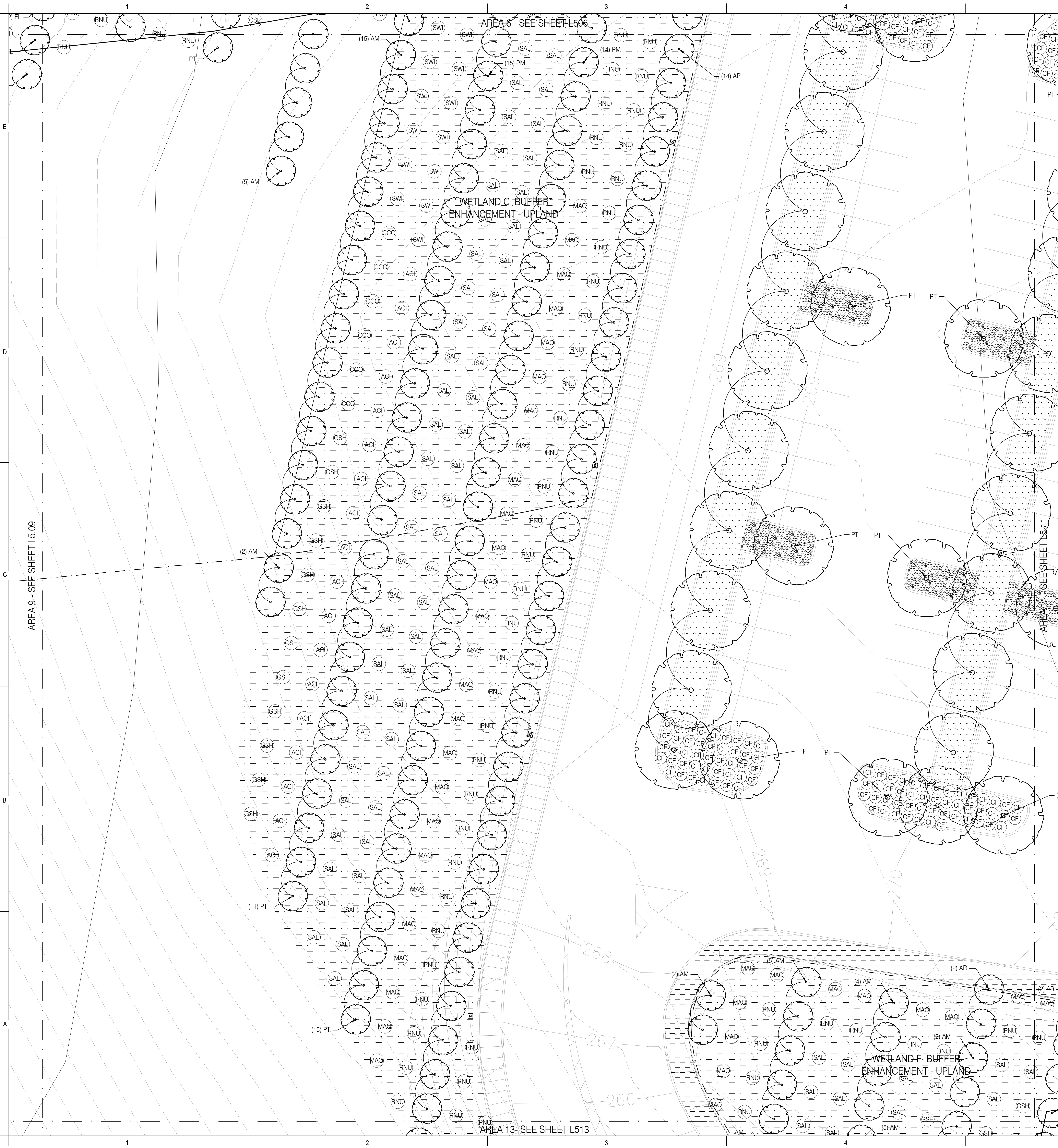
PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

PLANTING PLAN



L-509



GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTORS CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

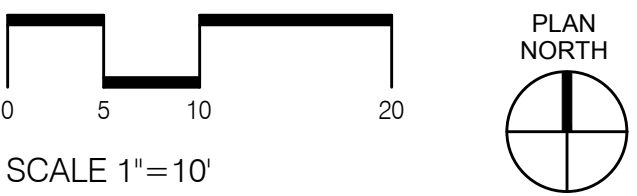
WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

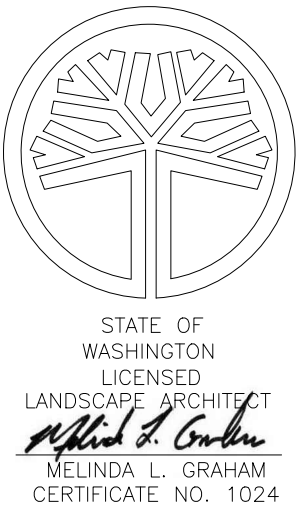


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

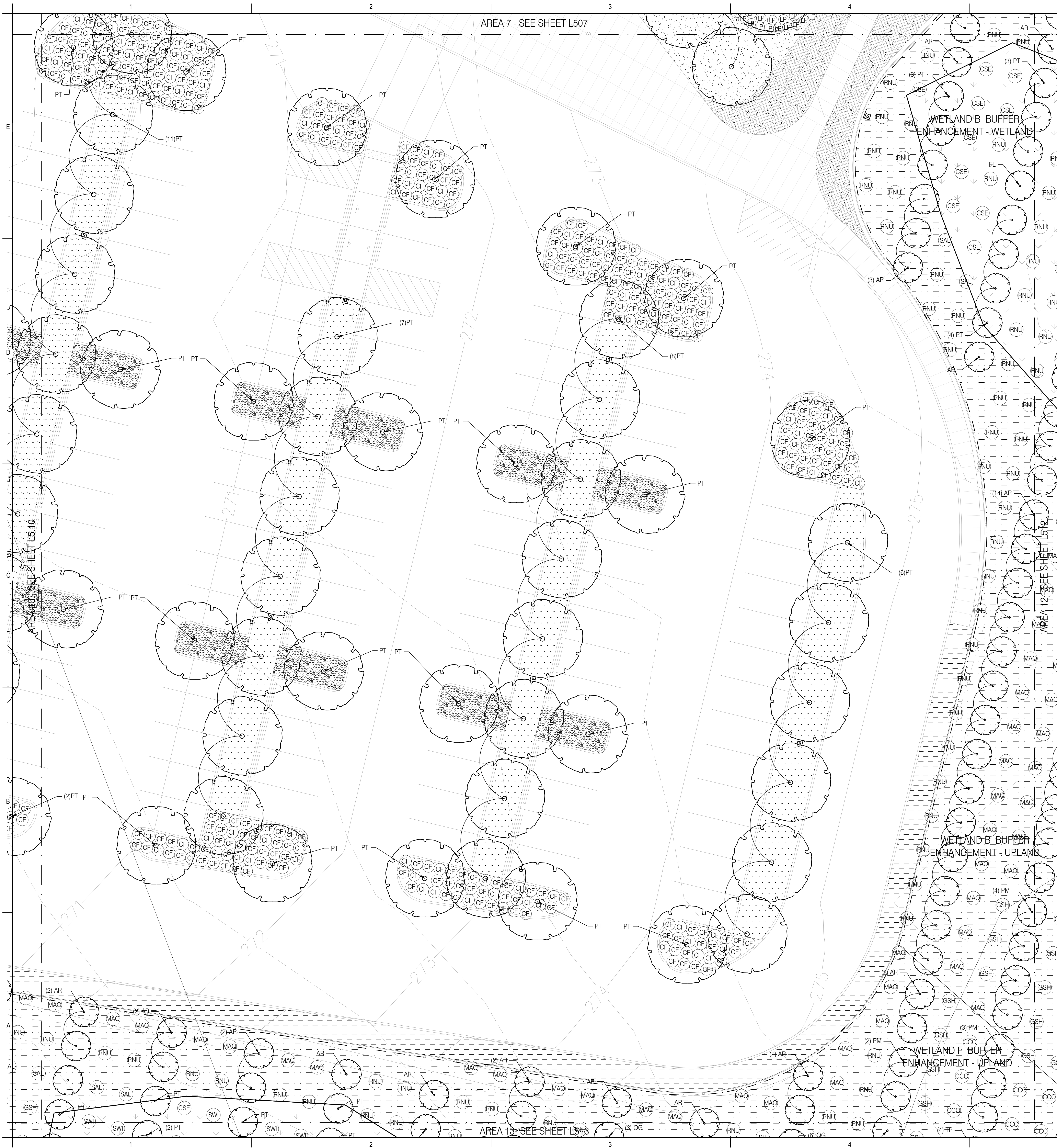
MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

PLANTING PLAN

L-510



GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

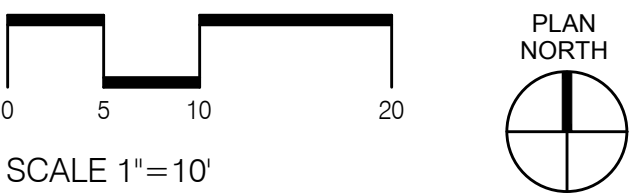
WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

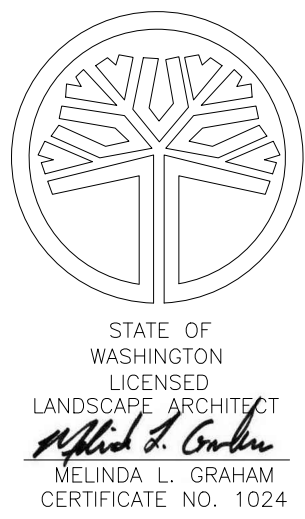


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

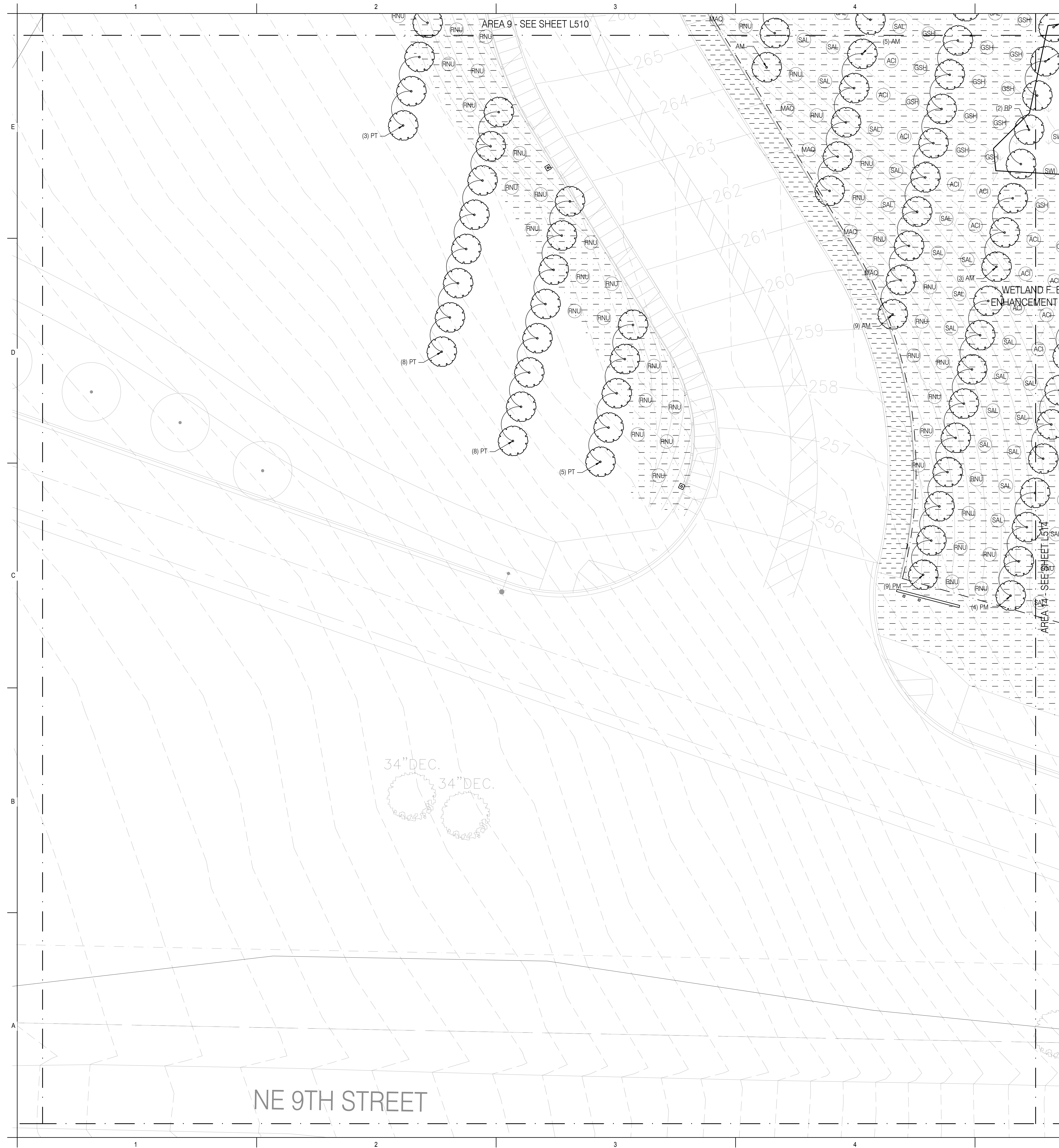
PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

PLANTING PLAN

L-511

**L-512**





## GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEEP ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

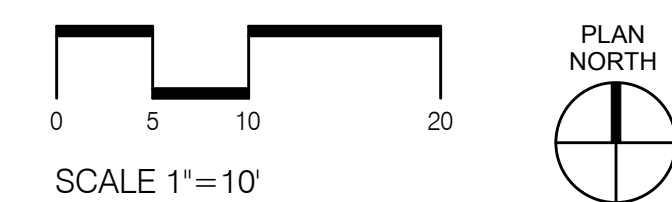
## WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

### LEGEND

- 
- Diagram illustrating various landscape restoration options:
- PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
  - PROPOSED TREE (BALLED AND BURLAPPED)
  - SEEDED LAWN
  - SEEDED WETLAND: EMERGENT ZONE MIX
  - SEEDED MEADOW: UPLAND ZONE MIX
  - SEEDED MEADOW: FIDO MIX
  - STORMWATER CONTAINER PLANTING
  - EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

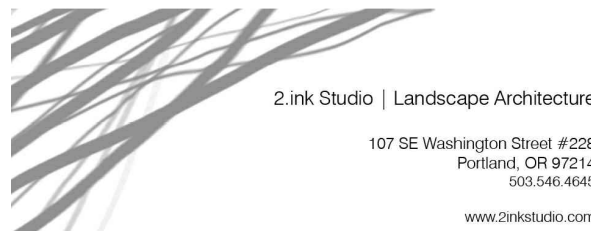


mahlum

71 COLUMBIA | FLOOR 4  
**SEATTLE** WA 98104  
 (206) 441-4151 OFFICE  
 (206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
**PORTLAND** OR 97209  
 (503) 224-4032 OFFICE  
 (503) 224-0918 FAX

MAHLUM ARCHITECTS INC

**CAMAS SCHOOL DISTRICT**

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19	
		1	2	3	4
16		5	6	7	8
		9	10	11	12
17		18	13	14	15

MARK	DATE	DESCRIPTION
------	------	-------------

ISSUE DATE: FEBRUARY 7, 2017

ISSUE: LAND USE REVIEW

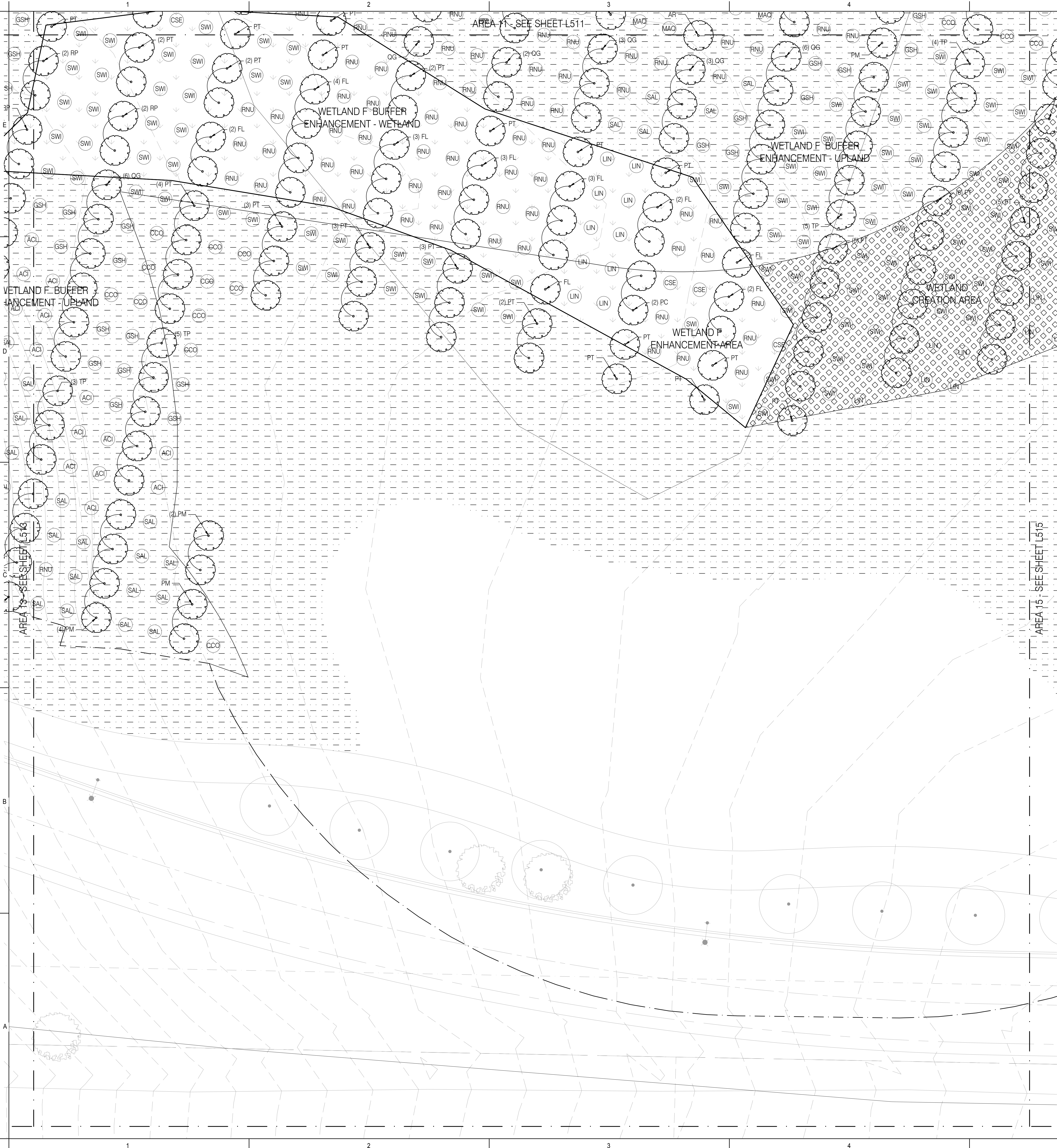
PROJECT NO: 2016903

DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_

COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

## PLANTING PLAN

**L-513**



GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

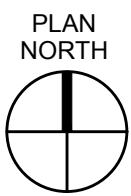
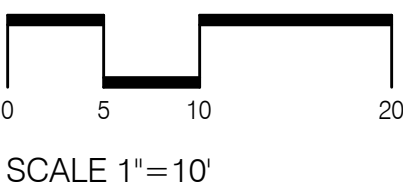
WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

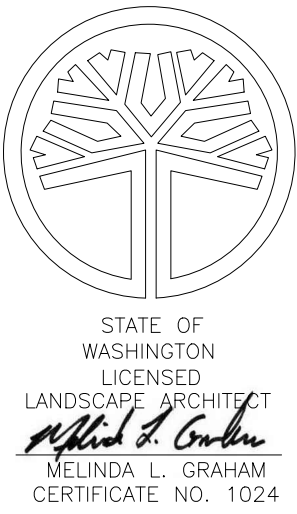
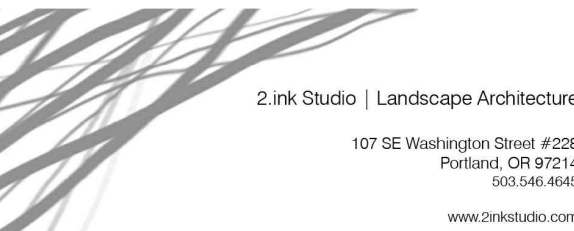


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

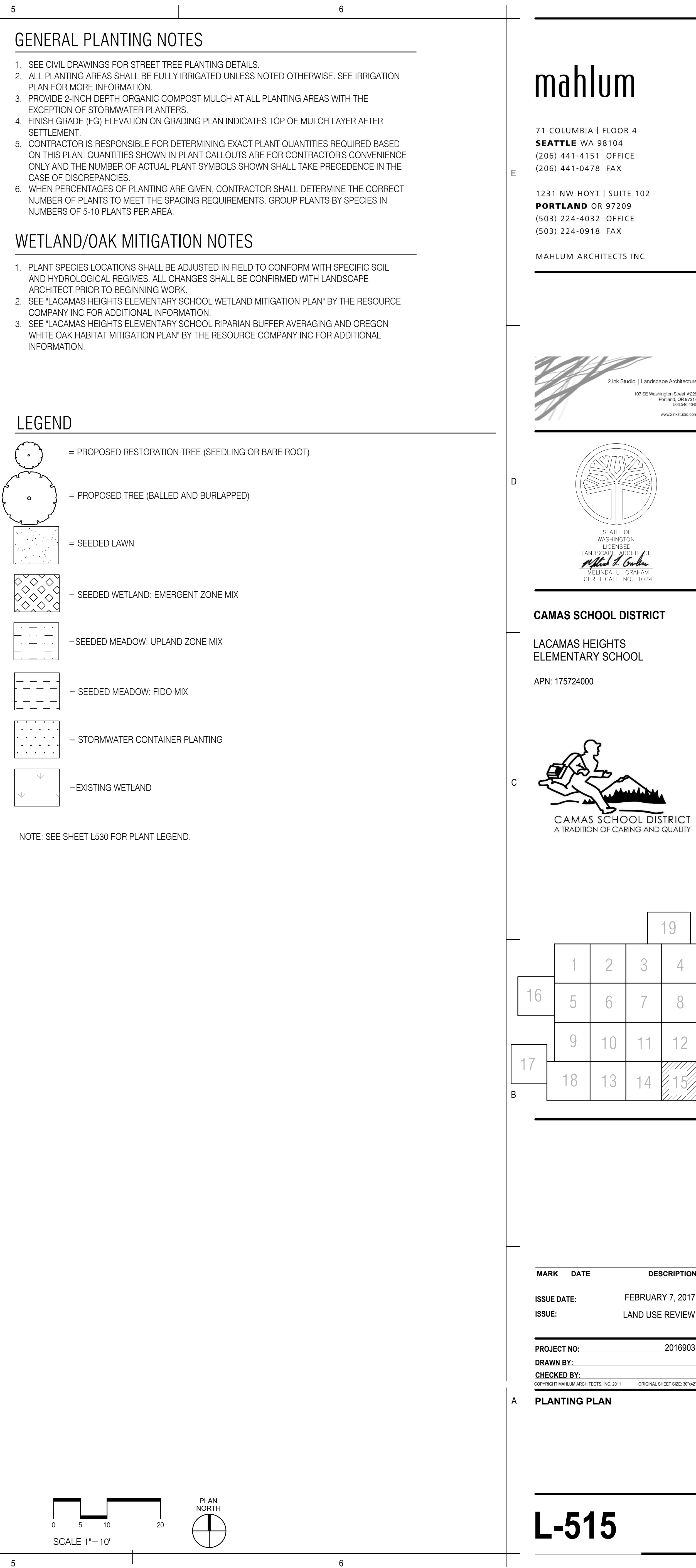
MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

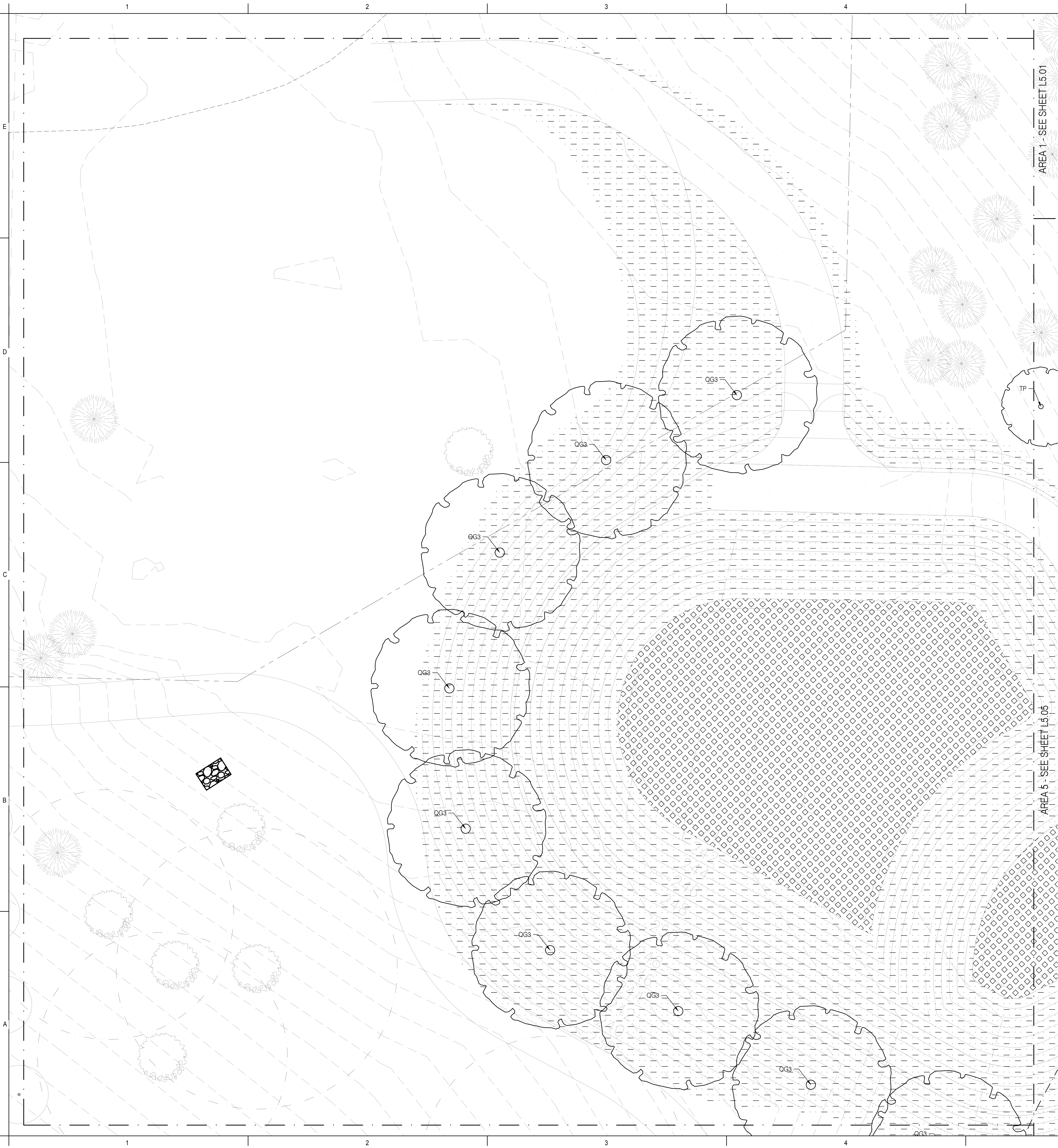
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

PLANTING PLAN

L-514



**L-515**




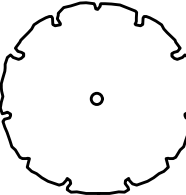
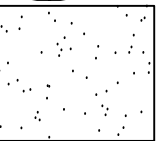
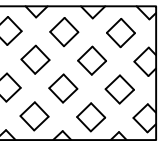
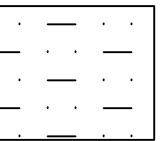
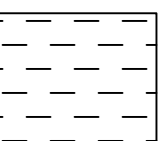
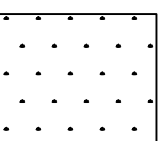
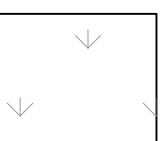
GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

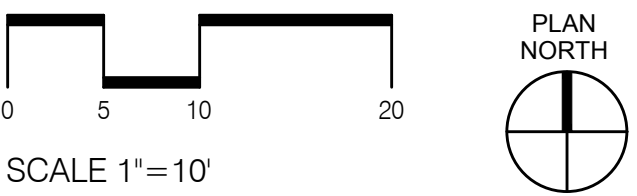
WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

-  = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
-  = PROPOSED TREE (BALLED AND BURLAPPED)
-  = SEEDED LAWN
-  = SEEDED WETLAND: EMERGENT ZONE MIX
-  = SEEDED MEADOW: UPLAND ZONE MIX
-  = SEEDED MEADOW: FIDO MIX
-  = STORMWATER CONTAINER PLANTING
-  = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

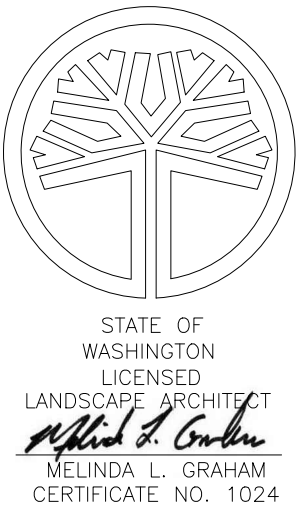


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

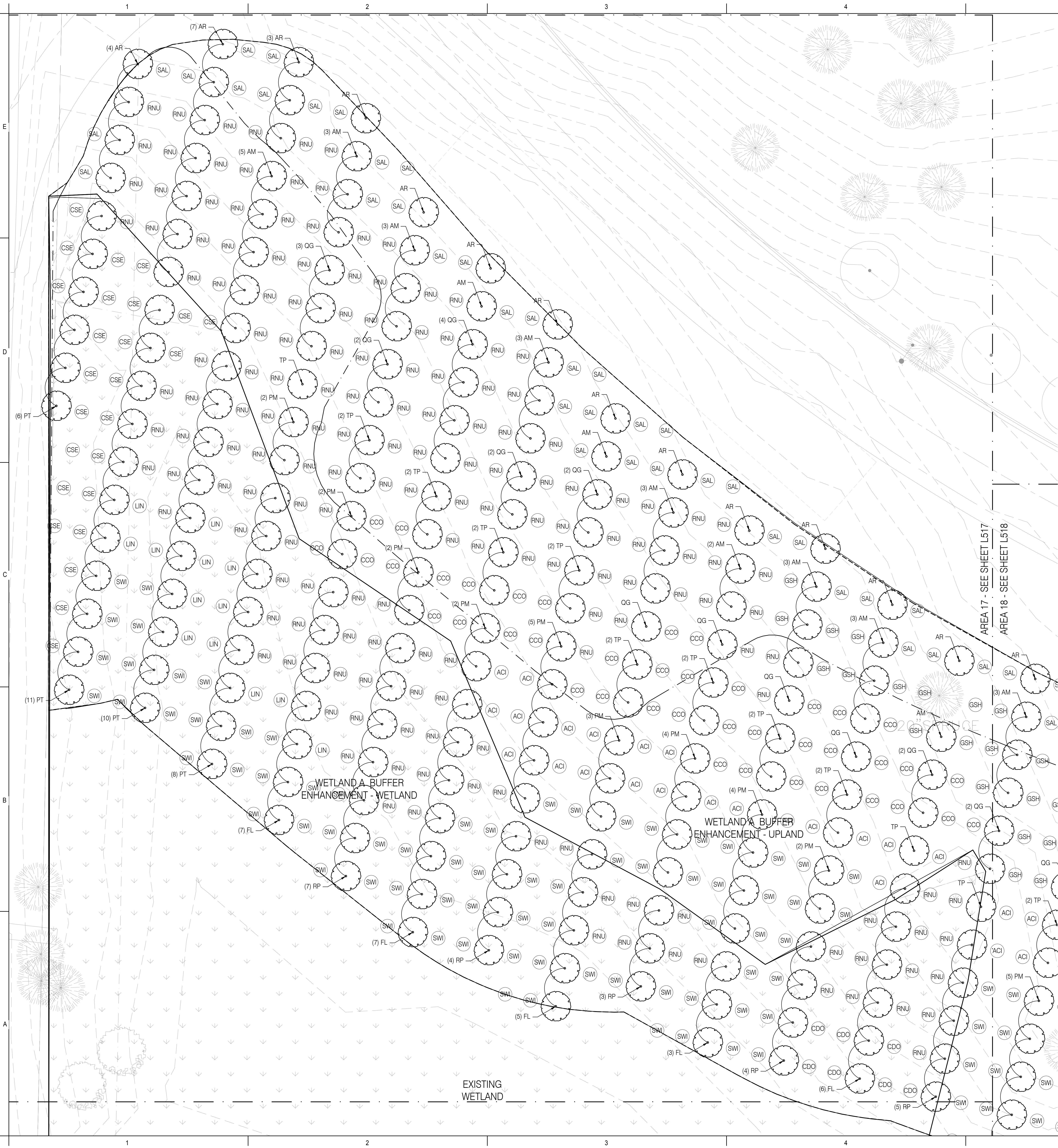
MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO:	2016903
DRAWN BY:	
CHECKED BY:	

COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

PLANTING PLAN

L-516



GENERAL PLANTING NOTES

- 1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
- 2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
- 3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
- 4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
- 5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTORS CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
- 6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

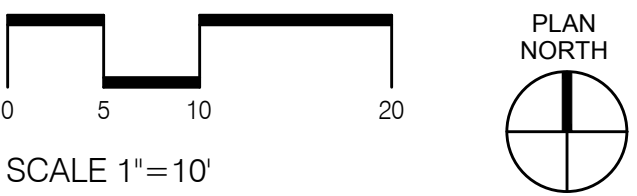
WETLAND/OAK MITIGATION NOTES

- 1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
- 2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
- 3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

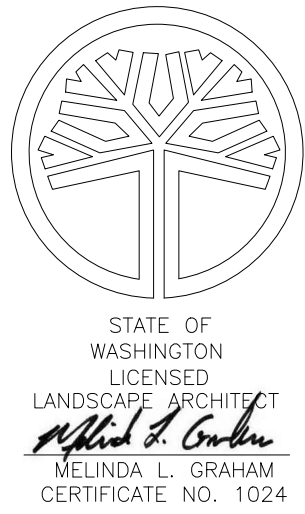


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



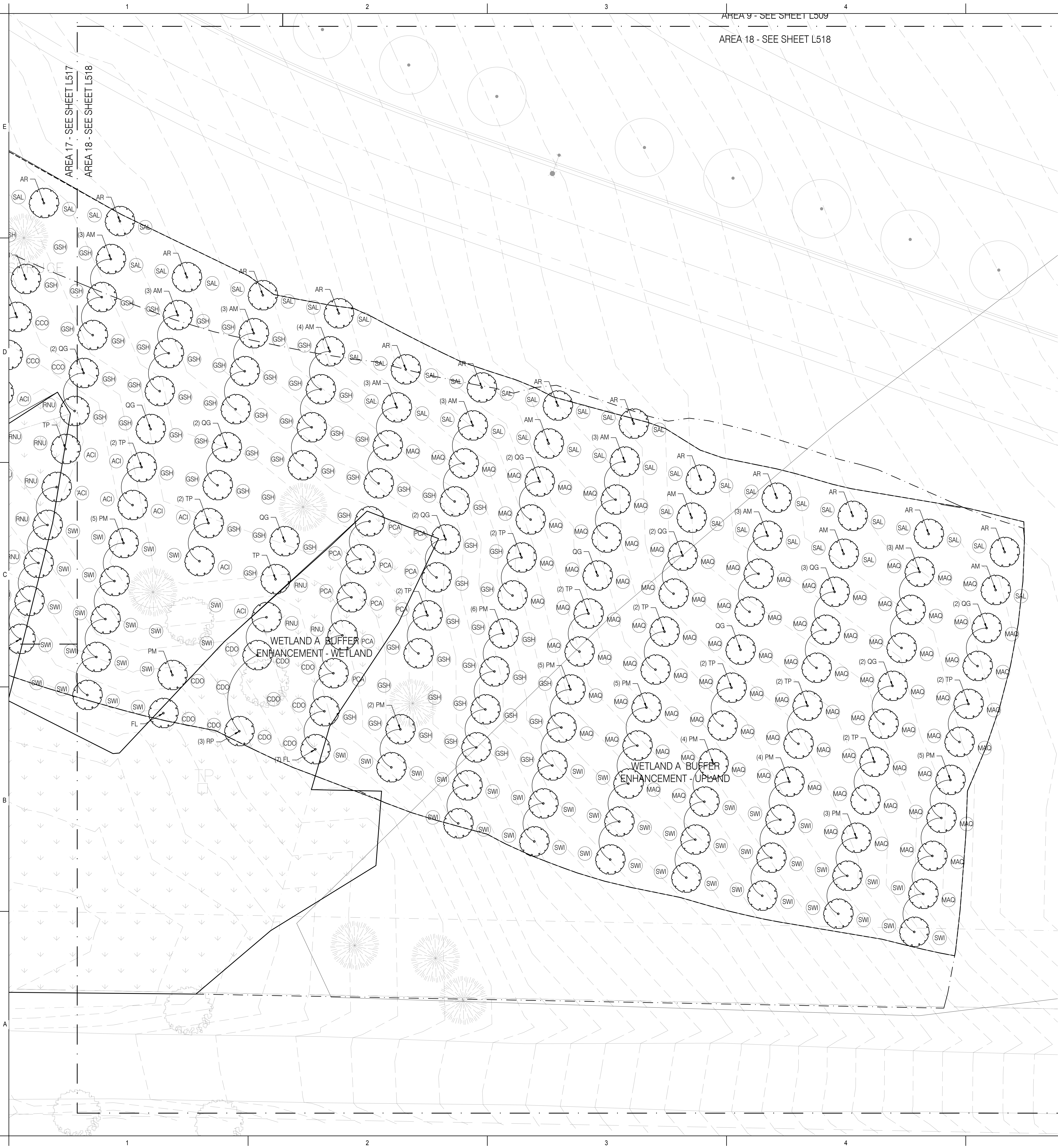
				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY:  
CHECKED BY:

PLANTING PLAN

L-517



GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTORS CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

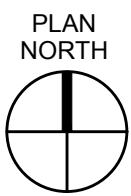
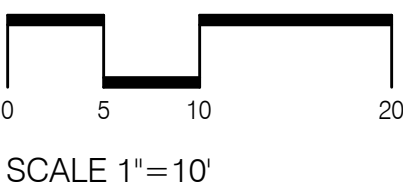
WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

- = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
- = PROPOSED TREE (BALLED AND BURLAPPED)
- = SEEDED LAWN
- = SEEDED WETLAND: EMERGENT ZONE MIX
- = SEEDED MEADOW: UPLAND ZONE MIX
- = SEEDED MEADOW: FIDO MIX
- = STORMWATER CONTAINER PLANTING
- = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

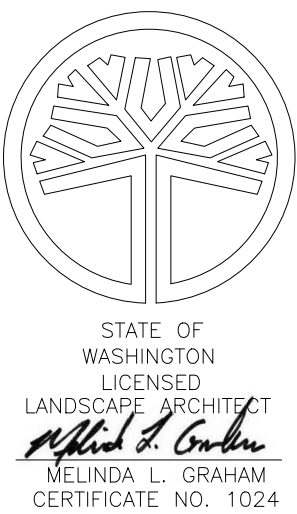
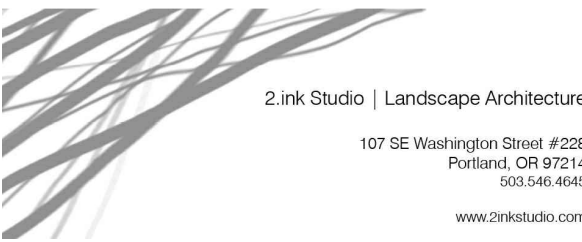


mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



				19
	1	2	3	4
16	5	6	7	8
	9	10	11	12
17	18	13	14	15

MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903

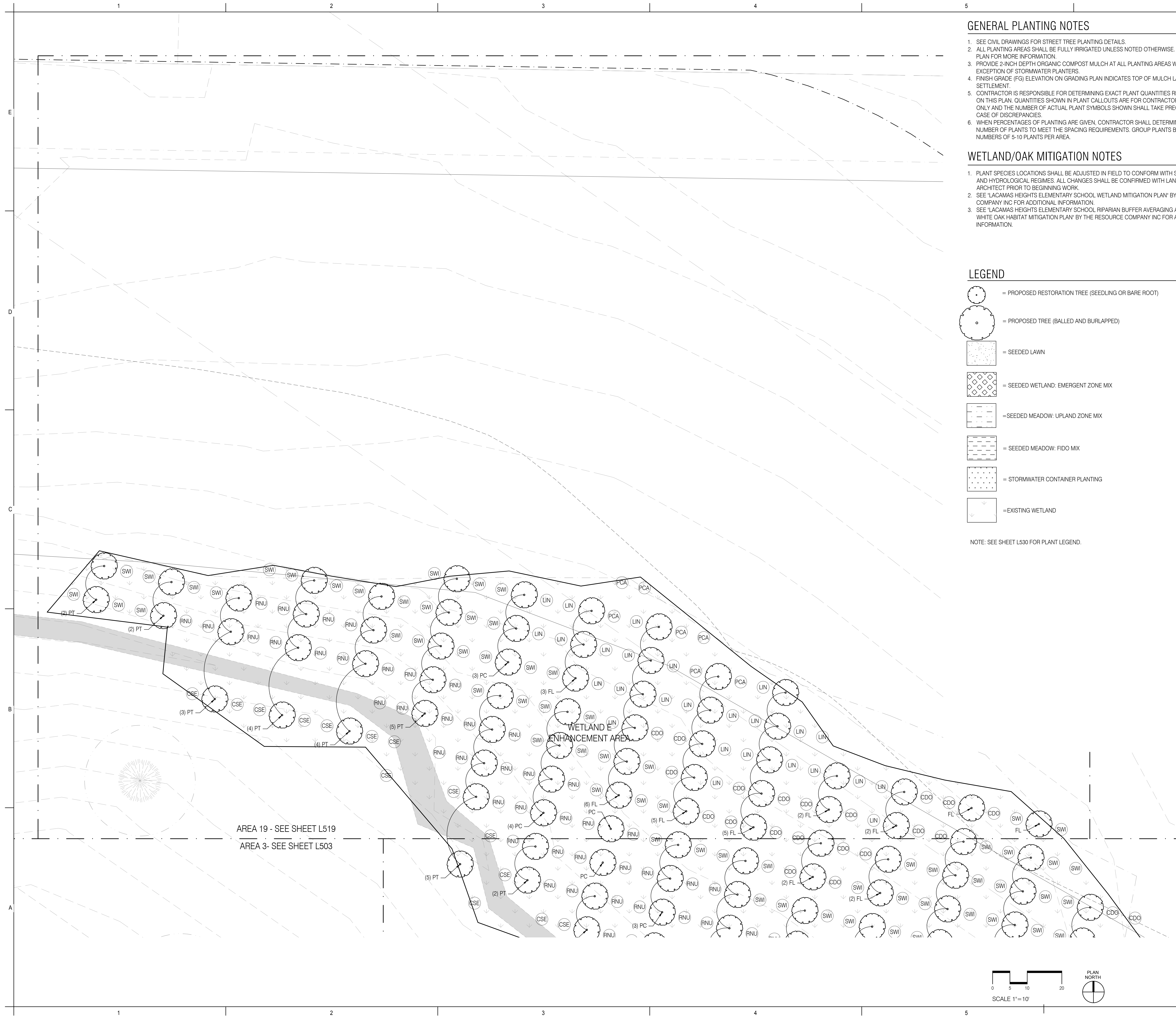
DRAWN BY:

CHECKED BY:

COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

PLANTING PLAN

L-518





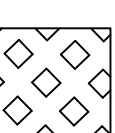
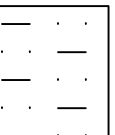
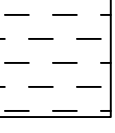
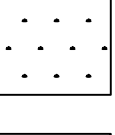


## GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

## WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE 'LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN' BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

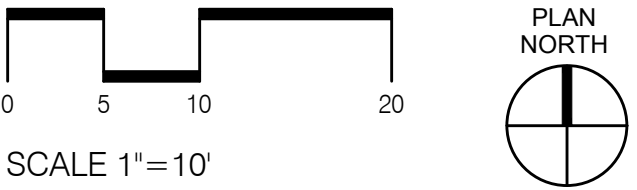
## LEGEND

- 
- Legend:
-  = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
  -  = PROPOSED TREE (BALLED AND BURLAPPED)
  -  = SEEDED LAWN
  -  = SEEDED WETLAND: EMERGENT ZONE MIX
  -  = SEEDED MEADOW: UPLAND ZONE MIX
  -  = SEEDED MEADOW: FIDO MIX
  -  = STORMWATER CONTAINER PLANTING
  -  = EXISTING WETLAND

NOTE: SEE SHEET L530 FOR PLANT LEGEND.

AREA 19 - SEE SHEET L519

AREA 3- SEE SHEET L503

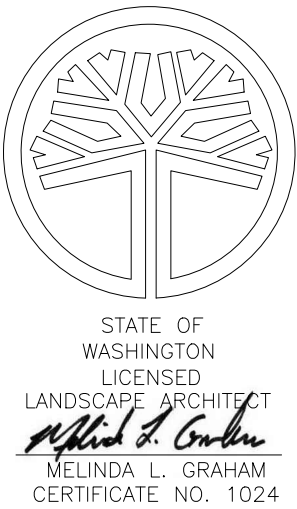
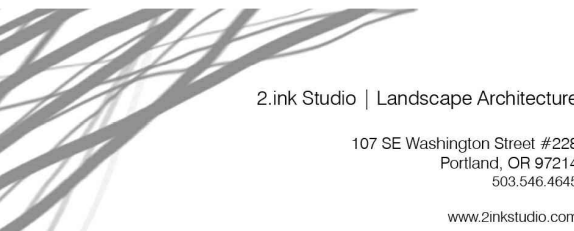


# mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
**PORTLAND** OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

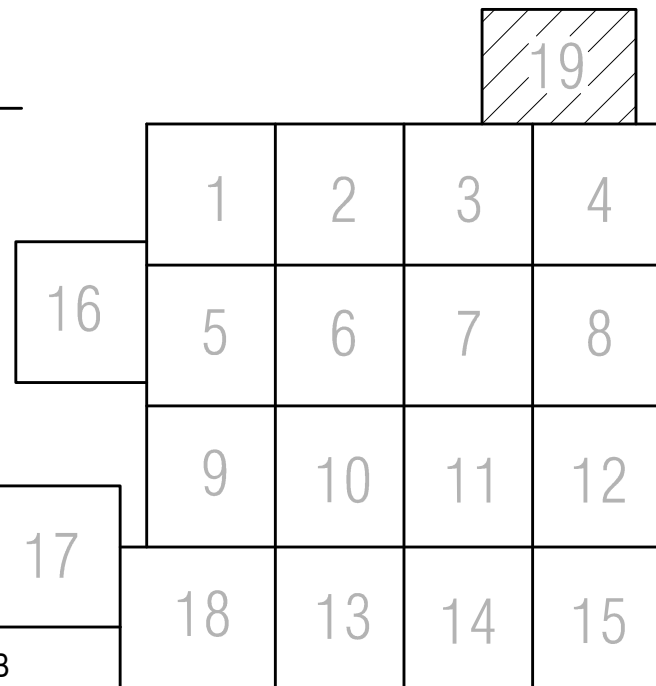
**CAMAS SCHOOL DISTRICT**

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 17572400C



CAMAS SCHOOL DISTRICT  
A TRADITION OF CARING AND QUALITY



MARK	DATE	DESCRIPTION
ISSUE DATE:	FEBRUARY 7, 2017	
ISSUE:	LAND USE REVIEW	
PROJECT NO:	2016903	
DRAWN BY:		
CHECKED BY:		
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011		ORIGINAL SHEET SIZE: 30"x42"
<b>PLANTING PLAN</b>		

## PLANTING PLAN

# L-519

PLANTING SCHEDULE

TREES				
SYM.	BOTANICAL NAME / COMMON NAME	SIZE	SPACING	
QG3	QUERCUS GARRYANA WHITE OAK	3' CAL B&B	AS SHOWN	
QK	QUERCUS KELLOGGII CALIFORNIA BLACK OAK	3' CAL B&B	AS SHOWN	
CR	CORNUS X RUTCAN CONSTELLATION DOGWOOD	2' CAL B&B	AS SHOWN	
CB	CARPINUS BETULUS 'FASTIGATA' COLUMNAR HORNBEAM	3' CAL B&B	AS SHOWN	
AM	ARBUTUS MENZIESII PACIFIC MADRONE	3' CAL B&B	AS SHOWN	
PP	PINUS PONDEROSA PONDEROSA PINE	8' HT B&B	AS SHOWN	
QP	QUERCUS PALUSTRIS PIN OAK	3' CAL B&B	AS SHOWN	
AP	ACER MACROPHYLLUM BIGLEAF MAPLE	3' CAL B&B	AS SHOWN	
MP	MALUS DOMESTICA 'PINK LADY' PINK LADY APPLE	1' CAL B&B	AS SHOWN	
MN	MALUS DOMESTICA 'NORTHERN SPY' NORTHERN SPY APPLE	1' CAL B&B	AS SHOWN	
CJ	CERCIDIPHYLLUM JAPONICUM KATSURA	3' CAL B&B	AS SHOWN	
QM	QUERCUS MUELENBERGII CHINKAPIN OAK	3' CAL B&B*	AS SHOWN	
TP	THUGA PLICATA WESTERN RED CEDAR	8' HT B&B	AS SHOWN	
AC	ACER CIRINATUM 'MONROE' VINE MAPLE	12' TALL B&B	AS SHOWN	
PT	POPULUS TREMULOIDES QUAKING ASPEN	3' CAL B&B	AS SHOWN	
LI	LAGERSTROEMIA INDICA 'GLENLORA WHITE' GLENLORA WHITE CRAPE MYRTLE	1.5' CAL B&B	AS SHOWN	

\* EXCEPT AS NOTED ON DRAWINGS

SHRUBS/GROUNDCOVER				
SYM.	BOTANICAL NAME / COMMON NAME	SIZE	SPACING	
IC	ILEX CRENATA 'COMPACTA' COMPACT JAPANESE HOLLY	2 GAL.	30" O.C.	
JS	JUNIPERUS SCOPULORUM 'MONAM' BLUE CREEPER JUNIPER	2 GAL.	30" O.C.	
LM	LIRIOPE MUSCARI 'BIG BLUE' BIG BLUE LILYTURF	1 GAL.	18" O.C.	
PT	PACHYSANDRA TERMINALIS 'GREEN SHEEN' GREEN SHEEN JAPANESE SPURGE	1 GAL.	18" O.C.	
PO	PENNISETUM ORIENTALE 'KARLEY ROSE' KARLEY ROSE FOUNTAIN GRASS	1 GAL.	30" O.C.	
LP	LONICERA PILEATA PRIVET HONEYSUCKLE	5 GAL.	30" O.C.	
SH	SARCOCOCCA HOOKERIANA HUMILIS F. MOUNTAIN HIMALAYAN SWEET BOX	5 GAL.	30" O.C.	

OAK MEADOW SEED MIX 'FIDO TURF'			
SYM.	BOTANICAL NAME / COMMON NAME	% BY WEIGHT	SEEDING RATE
---	LOLIUM PERENNE VAR SEALAND SEALAND PERENNIAL RYEGRASS	50%	5 LBS/ 1000 SQ FT
---	LOLIUM PERENNE VAR ALLSTAR III ALLSTAR III PERENNIAL RYEGRASS	21%	
---	FESTUCA RUGRA SEALINK SLENDER CREEPING RED FESCUE	28%	
---	AGROSTIS COLONIFERA SEALINK II CREEPING BENTGRASS	1%	

UPLAND SEED MIX 'STREAMBANK PLUS'			
SYM.	BOTANICAL NAME / COMMON NAME	% BY WEIGHT	SEEDING RATE
---	FESTUCA RUBRA RUBRA NATIVE RED FESCUE	50%	1.5 LBS/ 1000 SQ FT
---	BROMUS CARINATUS CALIFORNIA BROME	20%	
---	ELYMUS GLAUCUS BLUE WILDRYE	20%	
---	LIPINUS NANUS SKY LUPINE	10%	

LAWN (SEEDED/ IRRIGATED)			
SYM.	BOTANICAL NAME / COMMON NAME	% BY WEIGHT	SEEDING RATE
---	CSI RYE TURF	100%	3 LBS/ 1000 SQ FT

WETLAND RESTORATION SEED MIX 'NATIVE SWALE'			
SYM.	BOTANICAL NAME / COMMON NAME	% BY WEIGHT	SEEDING RATE
---	ELYMUS GLAUCUS BLUE WILDRYE	50%	1 LBS/ 1000 SQ FT
---	HORDEUM BRACHYANTHERUM BARLEY MEADOW	10%	
---	FESTUCA RUBRA RUBRA NATIVE RED FESCUE	15%	
---	GLYCERIA OCCIDENTALLIS NOTHERWESTERN MANNAGRASS	10%	
---	BECKMANNIA SYZIGACHNE AMERICAN SLOUGHGRASS	10%	5%
---	DESCHAMSA CESPITOSA TUFTED HAIRGRASS		

STORMWATER/ PARKING LOT PERENNIALS AND SHRUBS				
SYM.	BOTANICAL NAME / COMMON NAME	SIZE	SPACING	PERCENTAGE
---	CAREX OBNUPTA SLOUGH SEDGE	1 GAL.	12" O.C.	25%
---	JUNCUS BALTICUS BALTIC RUSH	1 GAL.	12" O.C.	25%
---	JUNCUS PATENS 'ELK BLUE' ELK BLUE GREY RUSH	1 GAL.	12" O.C.	25%
---	LUPINUS POLYPHYLLUS LARGE FLOWERING LUPINE	1 GAL.	14" O.C.	10%
---	IRIS TENAX OREGON IRIS	1 GAL.	12" O.C.	15%
CS	CORNUS SERICEA 'KELSEY' KELSEY'S DWARF RED-TWIG DOGWOOD	5 GAL.	24" O.C.	24" O.C.
CF	CORNUS STOLONIFER 'FARROW' ARTIC FIRE RED TWIG DOGWOOD	5 GAL.	30" O.C.	30" O.C.

WETLAND RESTORATION TREES - EMERGENT ZONES			
SYM.	BOTANICAL NAME / COMMON NAME	SIZE	SPACING
FL	<u>FRAXINUS LATIFOLIA</u> OREGON ASH	24"-36" BARE ROOT	AS SHOWN
PT	<u>POPULUS TREMULOIDES</u> QUAKING ASPEN	24"-36" BARE ROOT	AS SHOWN
RP	<u>RHAMNUS PURSHIANA</u> PACIFIC CASCARA	24"-36" BARE ROOT	AS SHOWN

WETLAND RESTORATION TREES - UPLAND ZONES			
SYM.	BOTANICAL NAME / COMMON NAME	SIZE	SPACING
TP	WESTERN RED CEDAR THUJA PLICATA	24"-36" SEEDLING	AS SHOWN
PM	PSEUDOTSUGA MENZIESII DOUG FIR	24"-36" SEEDLING	AS SHOWN
QG	QUERCUS GARRYANA OREGON WHITE OAK	24"-36" BARE ROOT	AS SHOWN
AM	ACER MACROPHYLLUM BIG-LEAF MAPLE	24"-36" BARE ROOT	AS SHOWN
AR	ALNUS RUBRA RED ALDER	24"-36" BARE ROOT	AS SHOWN

WETLAND RESTORATION SHRUBS - EMERGENT ZONES			
SYM.	BOTANICAL NAME / COMMON NAME	SIZE	MIN. SPACING
CSE	CORNUS SERICEA RED-OSIER DOGWOOD	24"-36" BARE ROOT	6' O.C.
CDO	CRATAEGUS DOUGLASII DOUGLAS HAWTHORN	24"-36" BARE ROOT	6' O.C.
PCA	PHYSOCARPUS CAPITATUS PACIFIC NINEBARK	24"-36" BARE ROOT	6' O.C.
LIN	LONICERA INVOLUCRATA BLACK TWINBERRY	24"-36" BARE ROOT	6' O.C.
RNU	ROSA NUTKANA NOOTKA ROSE	24"-36" BARE ROOT	6' O.C.
SWI	SALIX SPP. SCOULERS WILLOW	24"-36" BARE ROOT	6' O.C.

WETLAND RESTORATION SHRUBS - UPLAND ZONES			
SYM.	BOTANICAL NAME / COMMON NAME	SIZE	MIN. SPACING
CCO	<u>CORYLUS CORNUTA</u> HAZELNUT	24"-36" BARE ROOT	6' O.C.
MAQ	<u>MAHONIA AQUIFOLIUM</u> OREGON GRAPE	24"-36" BARE ROOT	6' O.C.
RNU	<u>ROSA NUTKANA</u> NOOTKA ROSE	24"-36" BARE ROOT	6' O.C.
SWI	<u>SALIX SPP</u> SCOULLER'S WILLOW	24"-36" BARE ROOT	6' O.C.
GSH	<u>GAULTHERIA SHALON</u> SALAL	24"-36" BARE ROOT	6' O.C.
SAL	<u>SYMPHORICARPOS ALBUS</u> SNOWBERRY	24"-36" BARE ROOT	6' O.C.
ACI	<u>ACER CIRCINATUM</u> VINE MAPLE	24"-36" BARE ROOT	6' O.C.

OAK ENHANCEMENT AREA SHRUBS			
SYM.	BOTANICAL NAME / COMMON NAME	SIZE	MIN. SPACING
CCO	<u>CORYLUS CORNUTA</u> HAZELNUT	24"-36" BARE ROOT	6' O.C.
HDI	<u>HOLDISCUS DISCOLOR</u> OCEANSPRAY	24"-36" BARE ROOT	6' O.C.
SAL	<u>SYMPHORICARPOS ALBUS</u> SNOWBERRY	24"-36" BARE ROOT	6' O.C.



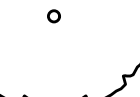

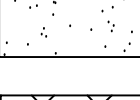

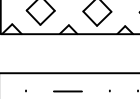
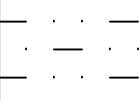
GENERAL PLANTING NOTES

1. SEE CIVIL DRAWINGS FOR STREET TREE PLANTING DETAILS.
2. ALL PLANTING AREAS SHALL BE FULLY IRRIGATED UNLESS NOTED OTHERWISE. SEE IRRIGATION PLAN FOR MORE INFORMATION.
3. PROVIDE 2-INCH DEPTH ORGANIC COMPOST MULCH AT ALL PLANTING AREAS WITH THE EXCEPTION OF STORMWATER PLANTERS.
4. FINISH GRADE (FG) ELEVATION ON GRADING PLAN INDICATES TOP OF MULCH LAYER AFTER SETTLEMENT.
5. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT PLANT QUANTITIES REQUIRED BASED ON THIS PLAN. QUANTITIES SHOWN IN PLANT CALLOUTS ARE FOR CONTRACTOR'S CONVENIENCE ONLY AND THE NUMBER OF ACTUAL PLANT SYMBOLS SHOWN SHALL TAKE PRECEDENCE IN THE CASE OF DISCREPANCIES.
6. WHEN PERCENTAGES OF PLANTING ARE GIVEN, CONTRACTOR SHALL DETERMINE THE CORRECT NUMBER OF PLANTS TO MEET THE SPACING REQUIREMENTS. GROUP PLANTS BY SPECIES IN NUMBERS OF 5-10 PLANTS PER AREA.

WETLAND/OAK MITIGATION NOTES

1. PLANT SPECIES LOCATIONS SHALL BE ADJUSTED IN FIELD TO CONFORM WITH SPECIFIC SOIL AND HYDROLOGICAL REGIMES. ALL CHANGES SHALL BE CONFIRMED WITH LANDSCAPE ARCHITECT PRIOR TO BEGINNING WORK.
2. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL WETLAND MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.
3. SEE "LACAMAS HEIGHTS ELEMENTARY SCHOOL RIPARIAN BUFFER AVERAGING AND OREGON WHITE OAK HABITAT MITIGATION PLAN" BY THE RESOURCE COMPANY INC FOR ADDITIONAL INFORMATION.

LEGEND

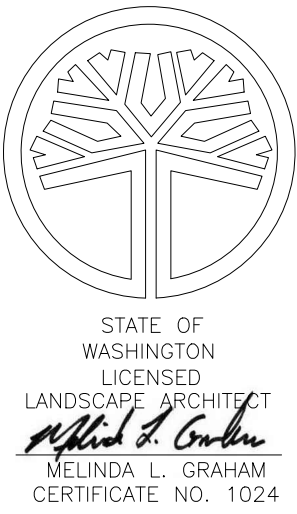
-  = PROPOSED RESTORATION TREE (SEEDLING OR BARE ROOT)
-  = PROPOSED TREE (BALLED AND BURLAPPED)
-  = SEEDED LAWN
-  = SEEDED WETLAND: EMERGENT ZONE MIX
-  =SEEDED MEADOW: UPLAND ZONE MIX
-  = SEEDED MEADOW: FIDO MIX
-  = STORMWATER CONTAINER PLANTING
-  =EXISTING WETLAND

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

APN: 175724000



MARK DATE DESCRIPTION

ISSUE DATE: FEBRUARY 7, 2017  
ISSUE: LAND USE REVIEW

PROJECT NO: 2016903

DRAWN BY:

CHECKED BY:

COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

PLANTING LEGEND

L-530

11/20/2016 10:44:48 AM C:\users\jgarcia\documents\WORK\11-15-16\11-15-16.dwg

EXTERIOR LUMINAIRE SCHEDULE											
TYPE	DESCRIPTION	HOUSING	SHIELDING	MOUNTING	FINISH	UL/IP RATING	DRIVER/POWER SUPPLY/BALLAST	LAMP(S)	INPUT WATTS	MFG/CATALOG #	NOTES
EXTERIOR											
SA	SINGLE POLE-MOUNTED LED LUMINAIRE; TYPE 4 DISTRIBUTION; INTEGRAL MOTION SENSOR; HOUSE SHIELD	15.2" W x 16.53" L x 4.6" D; DIE-CAST ALUMINUM; STAINLESS STEEL HARDWARE	DIFFUSE GLASS LENS	POLE-MOUNTED; 25'-0" ABOVE GRADE	TBD	IP66	INTEGRAL ELECTRONIC	9055 LUMENS LED @350mA; 64 LEDES; 3000K	72W	EMCO ELA16 SERIES	
SB	SINGLE POLE-MOUNTED LED LUMINAIRE; TYPE 4 DISTRIBUTION; INTEGRAL MOTION SENSOR;	15.2" W x 16.53" L x 4.6" D; DIE-CAST ALUMINUM; STAINLESS STEEL HARDWARE	DIFFUSE GLASS LENS	POLE-MOUNTED; 25'-0" ABOVE GRADE	TBD	IP66	INTEGRAL ELECTRONIC	2997 LUMENS LED @350mA; 32 LEDES; 3000K	36W	EMCO ELA16 SERIES	
SC	SINGLE POLE-MOUNTED LED LUMINAIRE; TYPE 4 DISTRIBUTION; INTEGRAL MOTION SENSOR	15.2" W x 16.53" L x 4.6" D; DIE-CAST ALUMINUM; STAINLESS STEEL HARDWARE	DIFFUSE GLASS LENS	POLE-MOUNTED; 25'-0" ABOVE GRADE	TBD	IP66	INTEGRAL 0-10V ELECTRONIC	9030 LUMENS LED @350mA; 3000K	87W	ARCHITECTURAL AREA LIGHTING KICK 5 MEDIUM SCALE	
SD	WALL-MOUNTED LED LUMINAIRE; TYPE 4 DISTRIBUTION; INTEGRAL MOTION SENSOR	15.2" W x 16.53" L x 4.6" D; DIE-CAST ALUMINUM; STAINLESS STEEL HARDWARE	DIFFUSE GLASS LENS	COORDINATE MOUNTING HEIGHT @ APPROXIMATELY 15'-0" A.F.F. WITH ARCHITECTURAL DRAWINGS	TBD	IP65	INTEGRAL ELECTRONIC	2997 LUMENS LED @350mA; 32 LEDES; 3000K	36W	EMCO ELA16 SERIES	
SE	RECESSED LED DOWNLIGHT; WIDE DISTRIBUTION	4" DIA. 16-GAUGE GALVANIZED STEEL; SELF-FLANGED SEMI-SPECULAR TRIM; 45 DEGREE CUT-OFF TO SOURCE AND SOURCE IMAGE	POLYCARBONATE LENS	CEILING RECESSED	N/A	WET	INTEGRAL ELDODED ECCODRIVE 0-10V DIMMING	2000 LUMENS LED; 3000K	23.5W	GOTHAM ARCHITECTURAL EVO SERIES OR APPROVED	
SE1	RECESSED LED DOWNLIGHT; VERY NARROW DISTRIBUTION	6" DIA. 16-GAUGE GALVANIZED STEEL; SELF-FLANGED CLEAR TRIM; 45 DEGREE CUT-OFF TO SOURCE AND SOURCE IMAGE	POLYCARBONATE LENS	CEILING RECESSED	N/A	WET	INTEGRAL ELDODED ECCODRIVE 0-10V DIMMING	2000 LUMENS LED; 3000K	23.2W	GOTHAM ARCHITECTURAL EVO SERIES OR APPROVED	
SF	SURFACE WALL-MOUNTED LED DOWNLIGHT; WIDE DISTRIBUTION	6" DIA. 16-GAUGE GALVANIZED STEEL	POLYCARBONATE LENS	SURFACE WALL MOUNT @ 7'-0" A.F.F.	N/A	WET	INTEGRAL ELDODED ECCODRIVE 0-10V DIMMING	2000 LUMENS LED; 3000K	23.5W	HEVI LITE HL 340 LED SERIES GOTHAM ARCHITECTURAL EVO CYLINDER SERIES RAB SIGN WALL MOUNT SERIES OR APPROVED	MOUNTING HEIGHTS TO BE VERIFIED BY ARCHITECT
NOTES:											
1 DIMMING CONTROL PROTOCOL (0-10VDC; LINE VOLTAGE; DALI, ETC.) COMPATIBLE WITH LIGHTING CONTROL SYSTEM AS SPECIFIED AND SHOWN ON DRAWINGS.											
2 PROVIDE +/- 12 INCH ADJUSTABILITY IN AIRCRAFT CABLE LENGTH WHERE USED.											
3 COORDINATE ALL CEILING TYPES WITH LUMINAIRE LOCATIONS PRIOR TO ORDERING LUMINAIRES. COORDINATE INSTALLATION WITH REFLECTED CEILING PLAN.											
4 SPECIFIED MANUFACTURERS ARE APPROVED TO SUBMIT BID. INCLUSION DOES NOT RELIEVE MANUFACTURER FROM SUPPLYING PRODUCT AS DESCRIBED.											
5 PROVIDE SUBMITTALS THAT INCLUDE THE LUMINAIRE, LAMP AND DIMMABLE LED DRIVER INFORMATION OF EACH LUMINAIRE, WITH APPLICABLE OPTIONS CLEARLY CHECKED OR HIGHLIGHTED. SUBMITTALS NOT INCLUDING THIS INFORMATION WILL BE RETURNED AS REJECTION BY THE ENGINEER OF RECORD.											
6 REMOTE DRIVERS: UL LISTED FOR THEIR APPLICATION. DRIVERS MARKED AS UL RECOGNIZED COMPONENT BUT NOT UL LISTED ARE SUBJECT TO REMOVAL AND REPLACEMENT AT NO COST TO OWNER.											

A1 SITE PLAN - LIGHTING  
1/32" = 1'-0"

mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX

1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX

MAHLUM ARCHITECTS INC

PROJECT 2016-0097  
CONTACT David Chesley



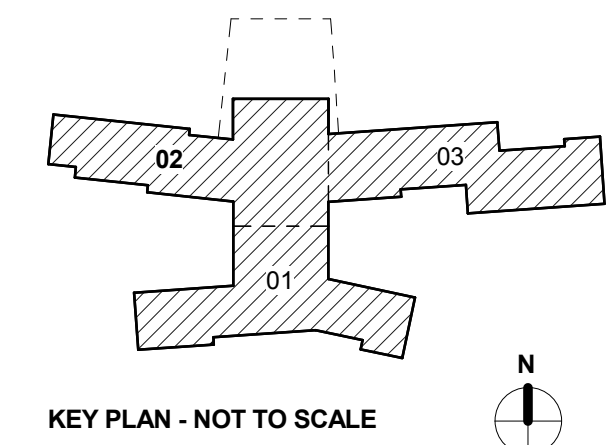
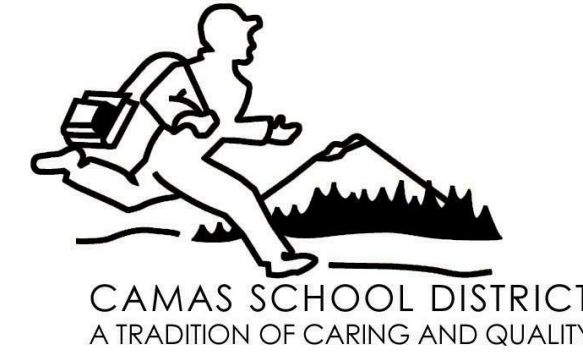
100 SW Main St.  
Suite 1600  
Portland, OR 97204  
TEL 503.382.2266  
FAX 503.382.2262  
www.interfaceengineering.com



CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL

ADDRESS



MARK	DATE	DESCRIPTION
ISSUE DATE:	NOVEMBER 10, 2016	
ISSUE:	LAND USE REVIEW	

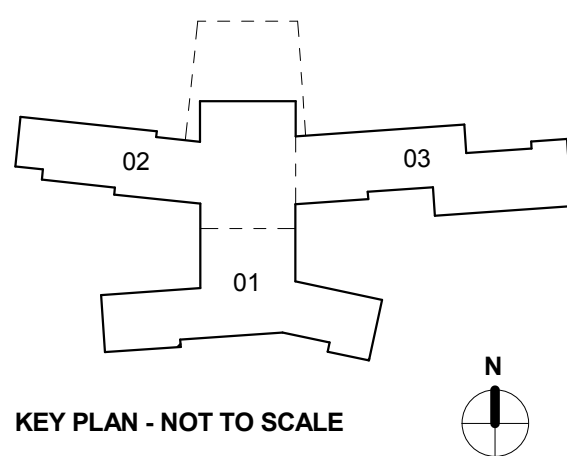
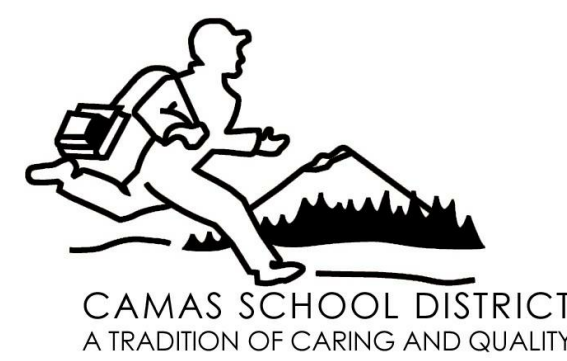
PROJECT NO: 2016903  
DRAWN BY: SPL  
CHECKED BY: DNC  
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

SITE PLAN - PHOTOMETRICS

E-102

CAMAS SCHOOL DISTRICT

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL  
REPLACEMENT  
1111 NE 232ND AVENUE  
CAMAS, WA 98607



A1 LEVEL 1 FLOOR PLAN  
1/16" = 1'-0"

PLAN GENERAL NOTES

- A. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO ANY WORK.
- B. UNLESS OTHERWISE NOTED, PLAN DIMENSIONS SHOWN ARE:  
- AT INTERIOR PARTITIONS: TO THE FACE OF STUD  
- AT COLUMNS: TO THE CENTERLINE OF COLUMNS, IF WALL AT COLUMN CENTER WALL ON COLUMN  
- AT CONCRETE: TO THE FACE OF CONCRETE  
- AT EXTERIOR WALLS: TO THE FACE OF STUD (TO THE EDGE OF SLAB) (TO THE FACE OF FOUNDATION WALL)  
- CMU WALLS ARE CENTERED ON GRID & DIMENSIONED TO INDICATE FULL BLOCK  
CLR = CLEAR DIMENSIONS ARE TO FACE OF FINISHED MATERIAL  
FOR WALLS AT GRID LINES, CENTERLINE OF STUDS ARE AT CENTERLINE OF GRID / COLUMN H. UNLESS DIMENSIONED OTHERWISE.
- C. REFER TO ENLARGED PLANS OR DETAILS FOR ANY DIMENSIONS NOT INDICATED ON THESE PLANS.
- D. EXTERIOR DOOR AND WINDOW OPENING DIMENSIONS ARE TO FOM OR FACE OF STUD FRAMING (EDGE OF OPENING - NOT INCLUDING SEALANT JOINTS) UNLESS OTHERWISE NOTED.
- E. PROVIDE BACKING AS REQUIRED TO SUPPORT WALL AND CEILING MOUNTED CASEWORK, GRAB BARS, HANDRAILS, MIRRORS, EQUIPMENT AND OTHER ACCESSORIES THAT REQUIRE SUPPORT. VERIFY LOCATIONS PRIOR TO INSTALLATION OF GYPSUM BOARD. COORDINATE REQUIREMENTS FOR INCREASED STUD SIZES.
- F. SEE SHEET A-601 FOR EXTERIOR WALL ASSEMBLIES, A-602 FOR INTERIOR WALL ASSEMBLIES, AND A-XXX FOR HORIZONTAL ASSEMBLIES.
- G. MULTIPLE LAYERS GWB WALLS TO HAVE MULTIPLE LAYERS ON SAME FACE AS WALL TAG UNLESS OTHERWISE NOTED. ALIGN FACE OF FINISHES AT ALL ADJACENT WALL TYPES U.N.O.
- H. CONTRACTOR TO VERIFY ALL INDICATED RECESS SLAB DEPTH WITH FINISH PRODUCT MANUFACTURER.
- I. ALL DOORS SHALL BE 6" FROM FACE OF STUD TO EDGE OF DOOR OPENING UNLESS OTHERWISE NOTED.
- J. SEE FINISH SCHEDULE FOR FLOOR FINISH INFORMATION.
- K. EXTERIOR STUD WALLS TO HAVE (1) LAYER OF GWB ON THE INTERIOR SIDE U.N.O.

KEYNOTES

- M. ASSEMBLIES FOR FIRE RATED WALLS AND COLUMNS SHALL EXTEND FROM STRUCTURAL FLOOR TO UNDERSIDE OF FLOOR DECK OR ROOF ABOVE. UNLESS SPECIFICALLY NOTED OTHERWISE, ALL OPENINGS AND JOINTS SHALL BE PROTECTED AS REQUIRED BY CODE.
- N. MAINTAIN FIRE RESISTANCE RATING FOR ALL CONSTRUCTION INDICATED AT THROUGH-WALL PENETRATIONS, BUILT-IN WALL FIXTURES, ACCESSORIES, AND BEHIND MAILBOXES, FIRE EXTINGUISHER CABINETS, PLUMBING FIXTURES, ELECTRIC PANELS AND SIMILAR ITEMS, IN COMPLIANCE WITH REQUIREMENTS OF APPLICABLE CODES. COORDINATE CONSTRUCTION OF FIRE-RATED ASSEMBLIES WITH DESIGNATED DESIGN NUMBER.
- O. COMPLETELY SEAL AROUND PENETRATIONS THROUGH ACOUSTICAL WALLS. FILL DEPTH OF GAPS AROUND CUT-OUTS FOR ELECTRICAL BOXES, PIPES AND PLUMBING, AND OTHER PENETRATIONS. PROVIDE INSULATION BETWEEN THE CONCEALED FACE OF FINISH MATERIALS (WITHIN THE STUD OR JOIST CAVITY) AND PIPES, PLUMBING, THE BACK OF BOXES, OR OTHER RECESSED FIXTURES.
- P. FRAME AND FINISH OPENINGS FOR MECHANICAL AND ELECTRICAL SYSTEMS AS REQUIRED BY MECHANICAL/ELECTRICAL DOCUMENTS.
- Q. COORDINATE WITH STRUCTURAL DRAWINGS FOR REQUIRED SHEARWALL SHEATHING. PROVIDE IN ADDITION TO COMPONENTS INDICATED ON WALL TYPE DETAILS AS REQUIRED.

PLAN MATERIAL LEGEND

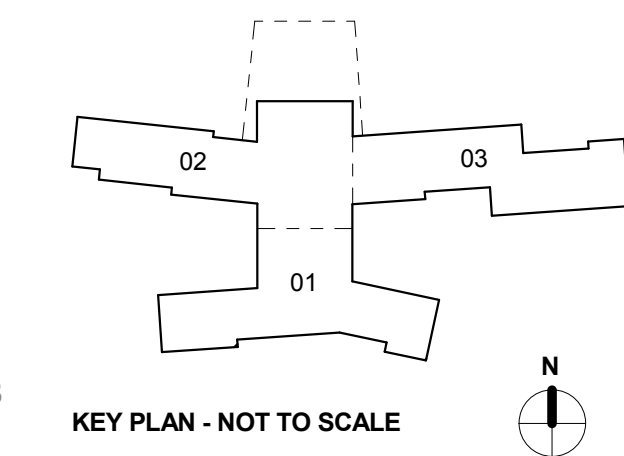
PLAN SYMBOL LEGEND

- NON RATED WALL
- 2-HOUR RATED WALL

MARK	DATE	DESCRIPTION
ISSUE DATE:	NOVEMBER 10, 2016	
ISSUE:	LAND USE REVIEW	

PROJECT NO:	2016903
DRAWN BY:	Author
CHECKED BY:	Checker
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"	
FIRST FLOOR PLAN - OVERALL	

LACAMAS HEIGHTS  
ELEMENTARY SCHOOL  
REPLACEMENT  
1111 NE 232ND AVENUE  
CAMAS, WA 98607

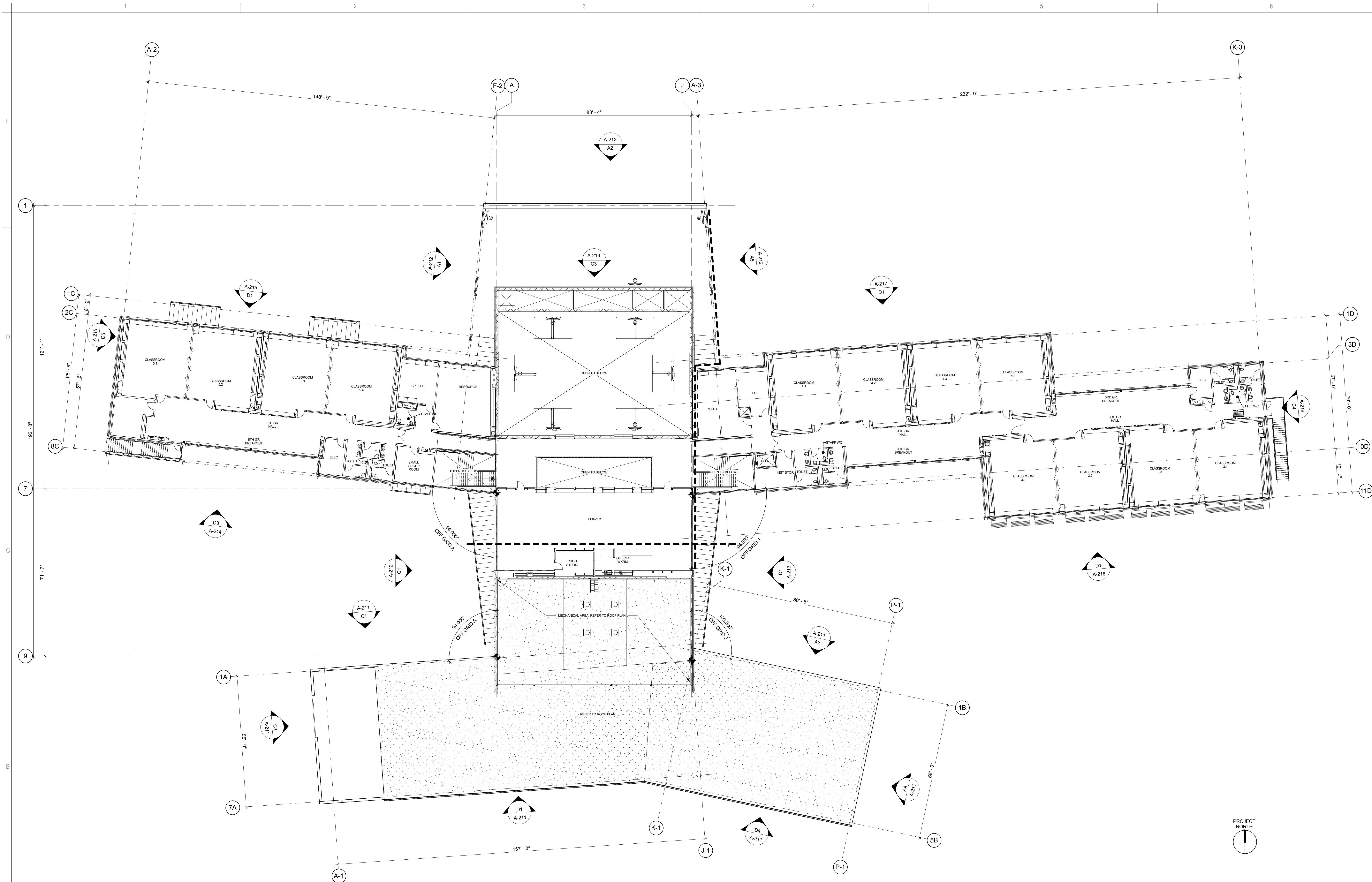


MARK	DATE	DESCRIPTION
ISSUE DATE:	NOVEMBER 10, 2016	
ISSUE:	LAND USE REVIEW	

PROJECT NO:	2016903
DRAWN BY:	Author
CHECKED BY:	Checker
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011	
ORIGINAL SHEET SIZE: 30"x42"	

**SECOND FLOOR PLAN - OVERALL**

18/2016 4:41:42 PM F:\2016\03\06-00CS06-RENT01-ARCHIVE\61101-LHES-Land Use-V18.mxd



**A1** LEVEL 2 FLOOR PLAN  
1/16" = 1'-0"

## PLAN GENERAL NOTES


- |   |  |  |
|---|--|--|
| <p>A. CONTRACTOR TO VERIFY ALL CONDITIONS AND DIMENSIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO ANY WORK.</p>   |  |  |
| <p>B. UNLESS OTHERWISE NOTED, PLAN DIMENSIONS SHOWN ARE:<br/>         - AT INTERIOR PARTITIONS: TO THE FACE OF STUD<br/>         - AT COLUMNS: TO THE CENTERLINE OF COLUMNS; IF WALL AT COLUMN CENTER WALL ON COLUMN<br/>         - AT CONCRETE: TO THE FACE OF CONCRETE<br/>         - AT EXTERIOR WALLS: TO THE FACE OF STUD (TO THE EDGE OF SLAB) (TO THE FACE OF FOUNDATION WALL)<br/>         ALL WALLS ARE CENTERED ON GRID &amp; DIMENSIONED TO INDICATE FULL BLOCK<br/>         CLR = CLEAR DIMENSIONS TO FACE OF FINISHED MATERIAL.<br/>         FOR WALLS AT GRIDLINES, CENTERLINE OF STUDS ARE AT CENTERLINE OF GRID / COLUMN<br/>         UNLESS OTHERWISE NOTED.</p> | <p>E. PROVIDE GRAB BARS AS REQUIRED TO SUPPORT WALL AND CEILING MOUNTED CASEWORK, BACKING BARS, HANDRAILS, MIRRORS, EQUIPMENT AND OTHER ACCESSORIES THAT REQUIRE SUPPORT. VERIFY LOCATIONS PRIOR TO INSTALLATION OF GYPSUM BOARD. COORDINATE REQUIREMENTS FOR INCREASED STUD SIZES.</p> <p>F. SEE SHEET A-601 FOR EXTERIOR WALL ASSEMBLIES, A-602 FOR INTERIOR WALL ASSEMBLIES, AND A-XXX FOR HORIZONTAL ASSEMBLIES.</p> <p>G. MULTIPLE LAYERS GWB WALLS TO HAVE MULTIPLE LAYERS ON SAME FACE AS WALL AND UNLESS OTHERWISE NOTED, ALIGN FACE OF FINISHES AT ALL ADJACENT WALL TYPES U.N.O.</p> |  |
| <p>C. REFER TO ENLARGED PLANS OR DETAILS FOR ANY DIMENSIONS NOT INDICATED ON THESE PLANS.</p>   | <p>H. CONTRACTOR TO VERIFY ALL INDICATED RECESS SLAB DEPTH WITH FINISH PRODUCT MANUFACTURER.</p>   |  |
| <p>D. EXTERIOR DOOR AND WINDOW OPENING DIMENSIONS ARE TO FOM OF FACE OF STUD FRAMING (EDGE OF OPENING - NOT INCLUDING SEALANT JOINTS) UNLESS OTHERWISE NOTED.</p>   | <p>I. ALL DOORS SHALL BE 6" FROM FACE OF STUD TO EDGE OF DOOR OPENING UNLESS OTHERWISE NOTED.</p>  |  |
|   | <p>J. SEE FINISH SCHEDULE FOR FLOOR FINISH INFORMATION.</p>  |  |
|   | <p>K. EXTERIOR STUD WALLS TO HAVE (1) LAYER OF GWB ON THE INTERIOR SIDE U.N.O.</p>   |  |

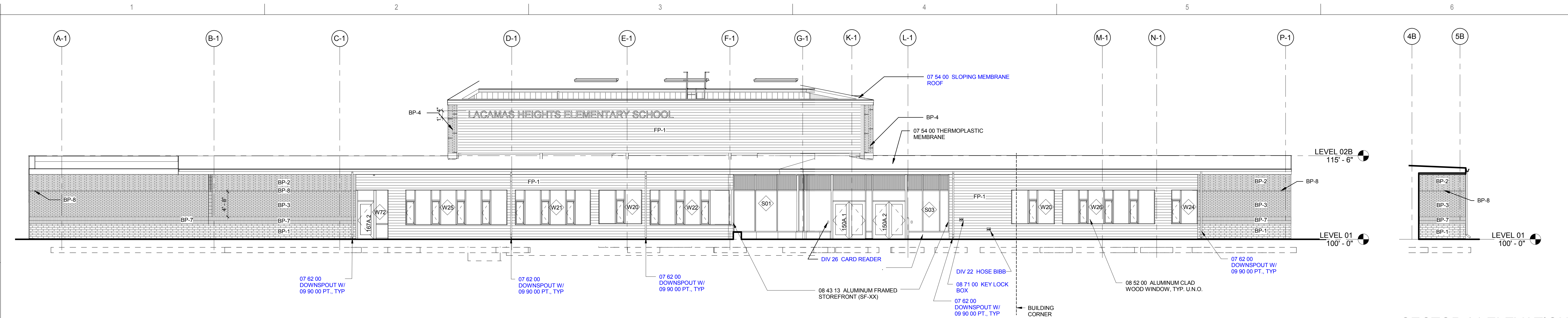
- |  |   |
|--|---|
| <p>PROVIDE BACKING AS REQUIRED TO SUPPORT WALL AND CEILING MOUNTED CASEWORK, GRAB BARS, HANDRAILS, MIRRORS, EQUIPMENT AND OTHER ACCESSORIES THAT REQUIRE SUPPORT. PROVIDE REINFORCED CONCRETE INSTALLATION OF GYPSUM BOARD. COORDINATE REQUIREMENTS FOR INCREASED STUD SIZES.</p> <p>F. SEE SHEET A-601 FOR EXTERIOR WALL ASSEMBLIES, A-602 FOR INTERIOR WALL ASSEMBLIES, AND A-XXX FOR HORIZONTAL WALL ASSEMBLIES.</p> <p>G. MULTIPLE LAYERS GWB WALLS TO HAVE MULTIPLE LAYERS ON SAME FACE AS WALL TAG LINE. OTHERWISE NOTED. ALIGN FACE OF FINISHES AT ALL ADJACENT WALL TYPES U.N.O.</p> <p>H. CONTRACTOR TO VERIFY ALL INDICATED RECESS SLAB DEPTH WITH FINISH PRODUCT MANUFACTURER.</p> <p>I. ALL DOORS SHALL BE 6" FROM FACE OF STUD TO EDGE OF DOOR OPENING UNLESS OTHERWISE NOTED.</p> <p>J. SEE FINISH SCHEDULE FOR FLOOR FINISH INFORMATION.</p> <p>K. EXTERIOR STUD WALLS TO HAVE (1) LAYER OF GWB ON THE INTERIOR SIDE U.N.O.</p> | <p>M. ASSEMBLIES FOR FIRE RATED WALLS AND COLUMNS SHALL EXTEND FROM STRUCTURAL FLOOR TO UNDERSIDE OF FLOOR DECK OR ROOF ABOVE, UNLESS SPECIFICALLY NOTED OTHERWISE. ALL OPENINGS AND JOINTS SHALL BE PROTECTED AS REQUIRED BY CODE.</p> <p>N. MAINTAIN FIRE RESISTANCE RATING FOR ALL CONSTRUCTION INDICATED AT THROUGH-WALL PENETRATIONS, SUB WALL FIXTURES, ACCESSORIES, EXHAUST FANS, EXHAUST EXTINGUISHER CABINETS, PLUMBING FIXTURES, ELECTRIC PANELS AND SIMILAR ITEMS, IN COMPLIANCE WITH REQUIREMENTS OF APPLICABLE CODES. COORDINATE CONSTRUCTION OF FIRE-RATED ASSEMBLY WITH APPLICABLE DESIGN NUMBER.</p> <p>O. COMPLETELY SEAL AROUND PENETRATIONS THROUGH ACoustICAL WALLS. FILL DEPTH OF GAPS AROUND CUT-OUTS FOR ELECTRICAL BOXES, PIPES AND PLUMBING, AND OTHER PENETRATIONS. PROVIDE INSULATION BETWEEN THE CONCEALED FACE OF FINISH MATERIALS (WITHIN THE STUD OR JOIST CAVITY) AND PIPES, PLUMBING, THE BACK OF BOXES, OR OTHER RECESSED FIXTURES.</p> <p>P. FRAME AND FINISH OPENINGS FOR MECHANICAL AND ELECTRICAL SYSTEMS AS REQUIRED BY MECHANICAL/ELECTRICAL DOCUMENTS.</p> <p>Q. COORDINATE WITH STRUCTURAL DRAWINGS FOR REQUIRED SHEARWALL SHEATHING. PROVIDE IN ADDITION TO COMPONENTS INDICATED ON WALL TYPE DETAILS AS REQUIRED.</p> |
|--|---|

## KEYNOTES 01

## PLAN MATERIAL LEGEND

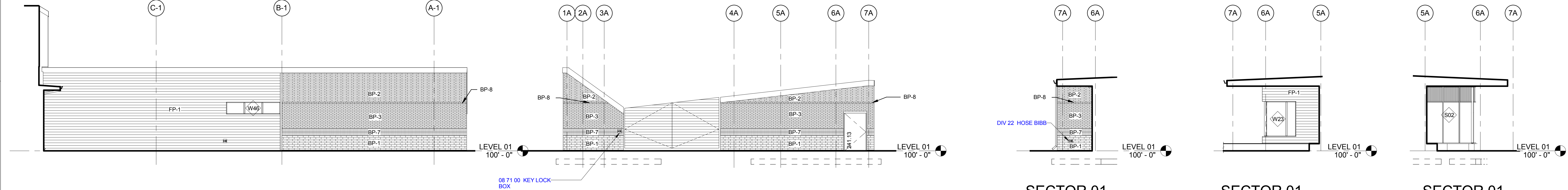
### PLAN SYMBOL LEGEND

- |   |                   |
|---|-------------------|
|  | NON RATED WALL    |
|  | 2-HOUR RATED WALL |



D1 SOUTH ELEVATION AT ADMIN/LOADING (SECTOR 01)

1/8" = 1'-0"



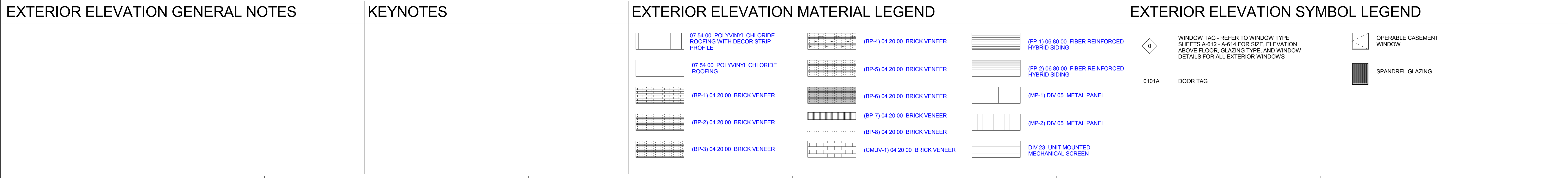
C1 NORTH ELEVATION AT LOADING/ADMIN (SECTOR 01)

1/8" = 1'-0"



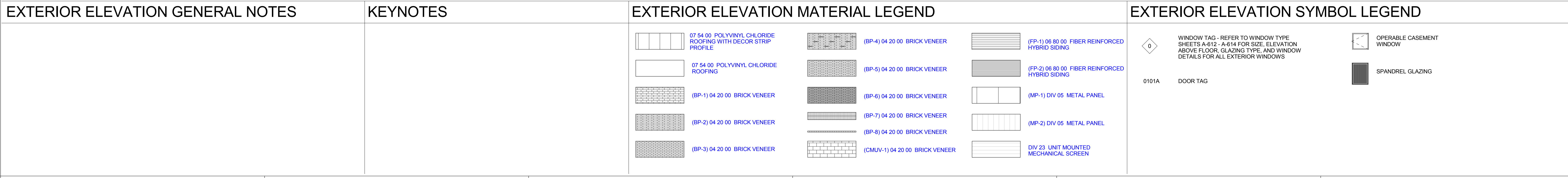
A1 SECTOR 01 ELEVATION AT GRID L-1

1/8" = 1'-0"



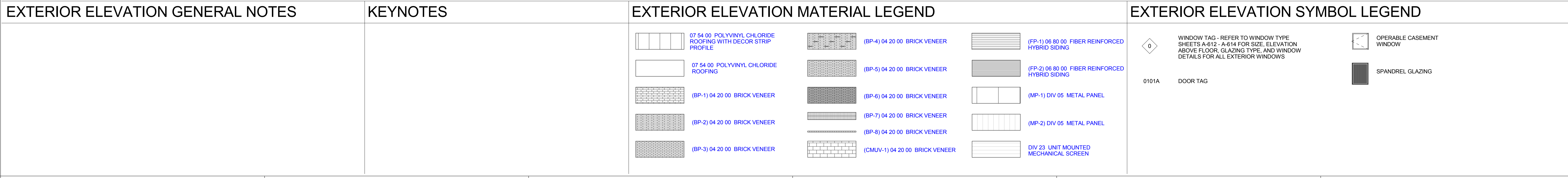
A2 NORTH ELEVATION AT EAST SPECIALTY BAR (SECTOR 01)

1/8" = 1'-0"



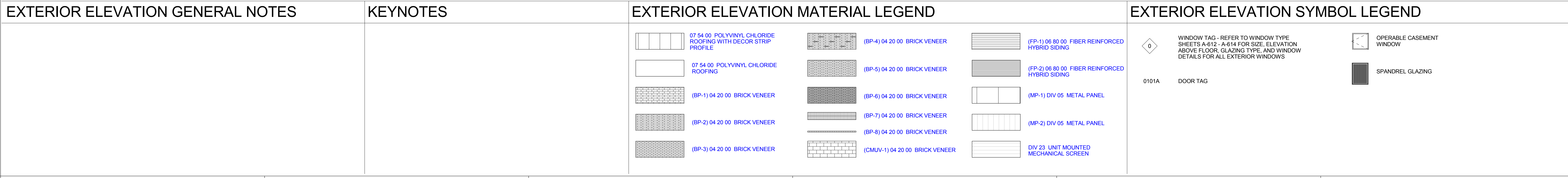
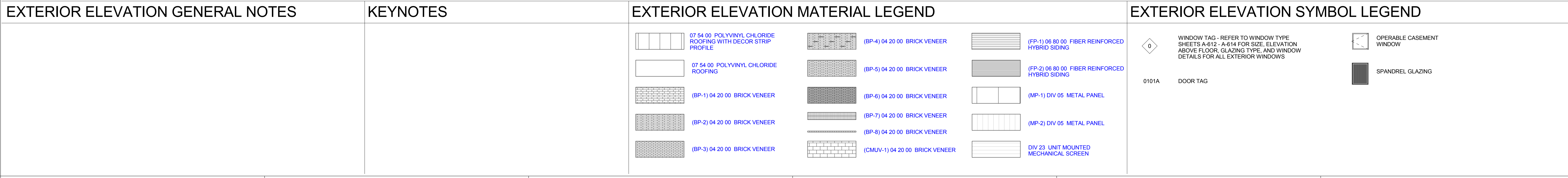
A4 EAST ELEVATION AT EAST SPECIALTY BAR (SECTOR 01)

1/8" = 1'-0"



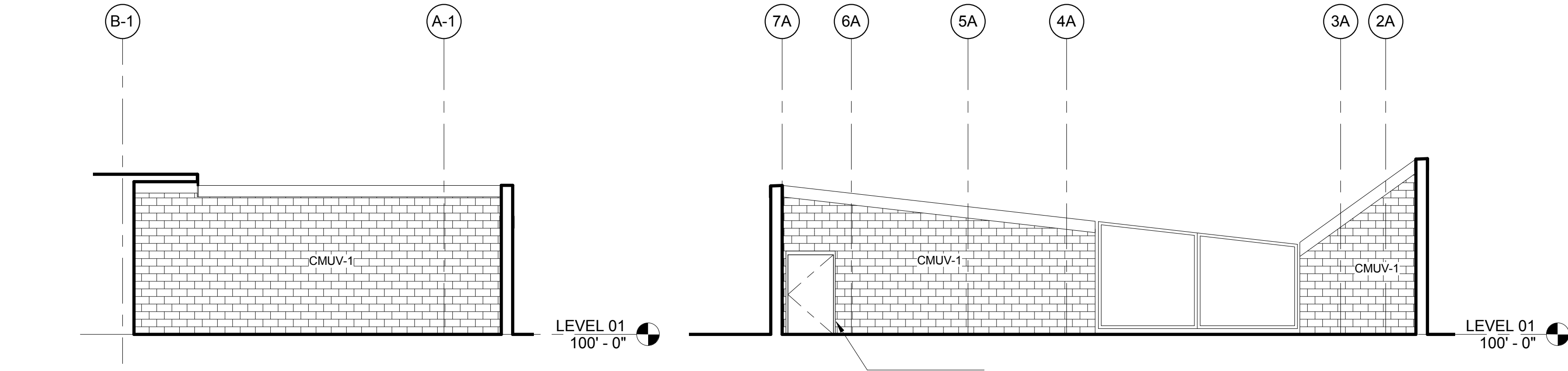
A6 SECTOR 01 ELEVATION AT GRID B-1

1/8" = 1'-0"

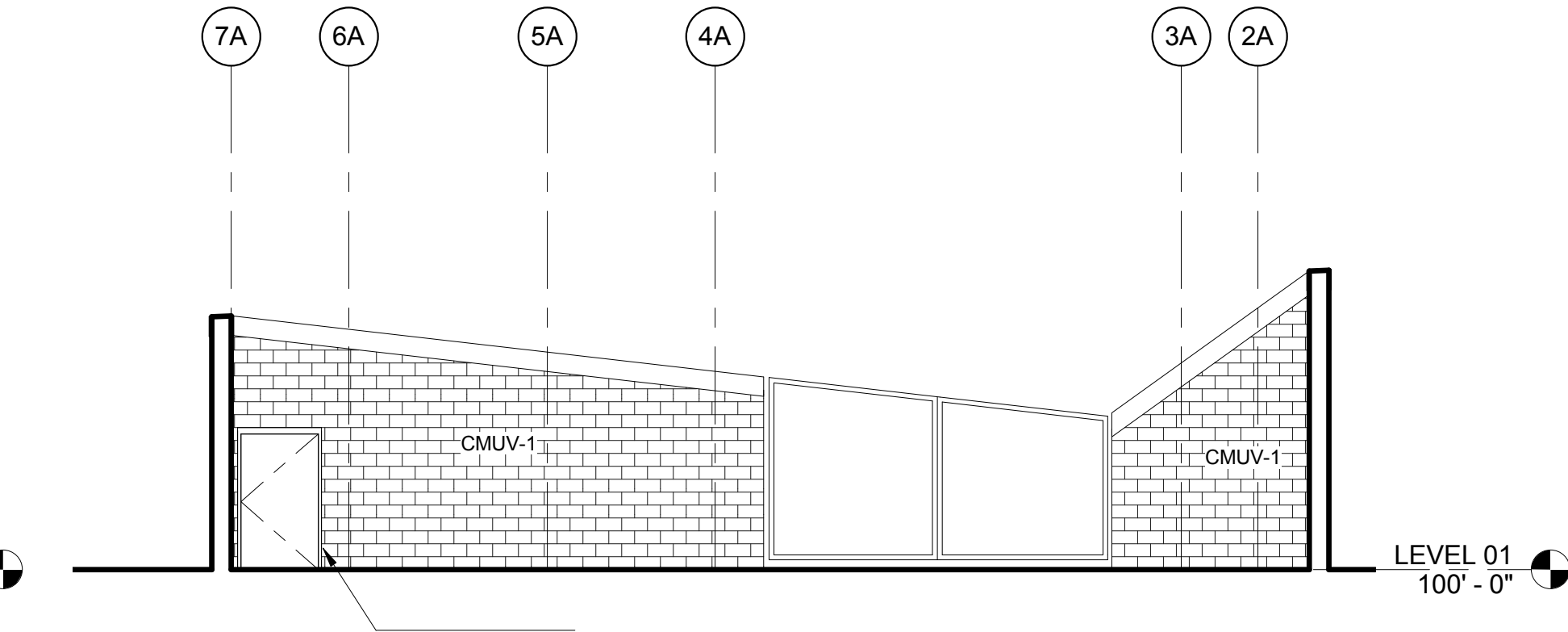


CAMAS SCHOOL DISTRICT

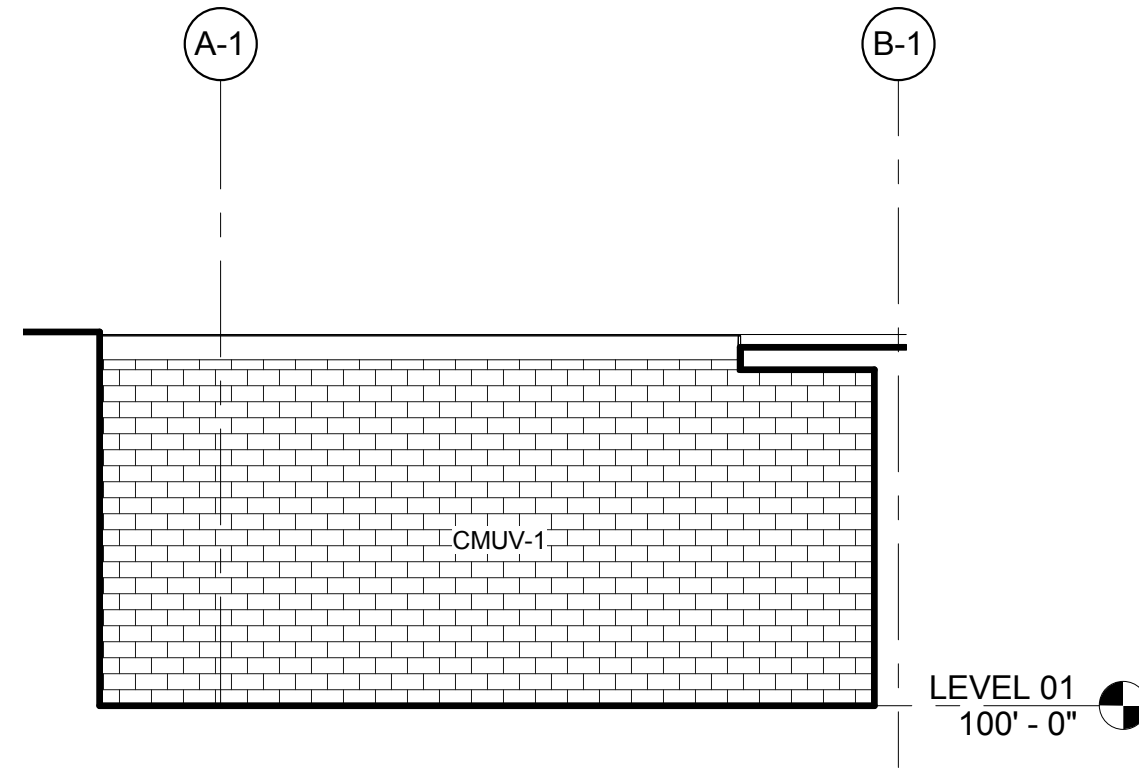
LACAMAS HEIGHTS  
ELEMENTARY SCHOOL  
REPLACEMENT  
1111 NE 232ND AVENUE  
CAMAS, WA 98607



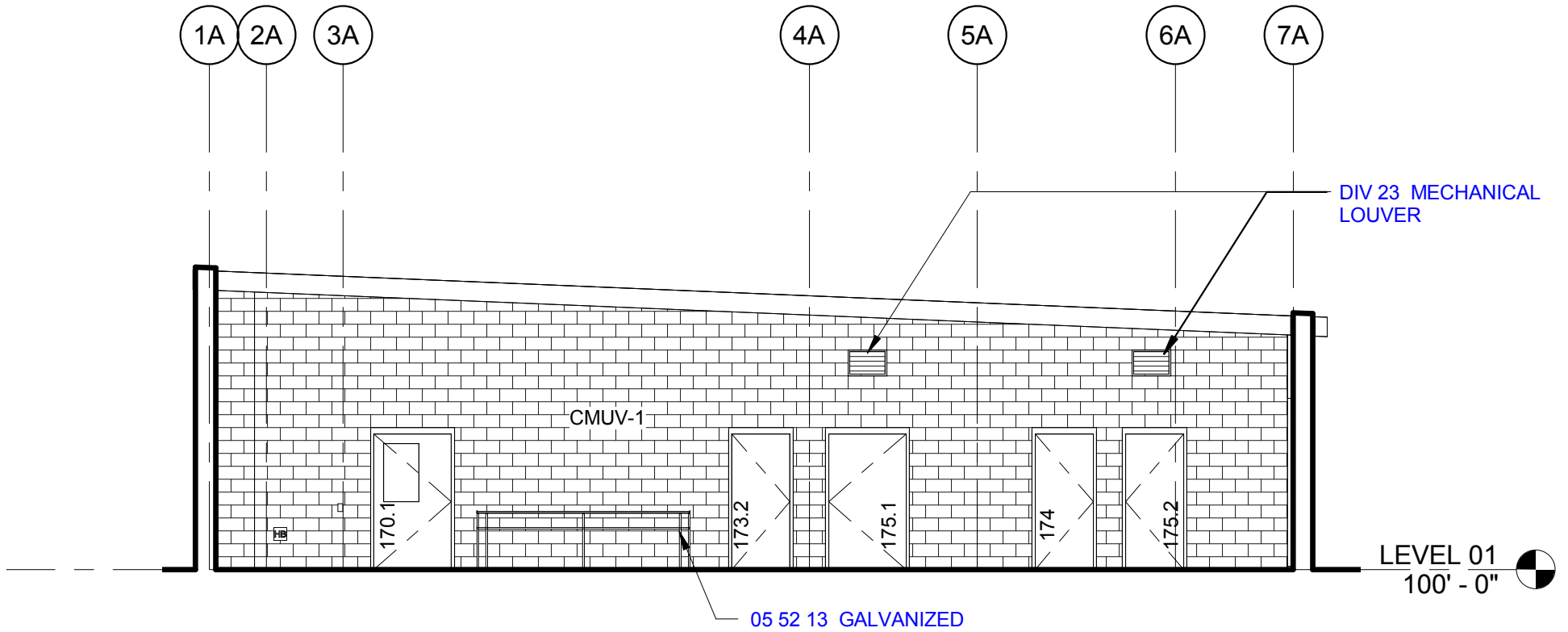
**D1** SOUTH ELEVATION AT  
SERVICE YARD (SECTOR 01)  
1/8" = 1'-0"



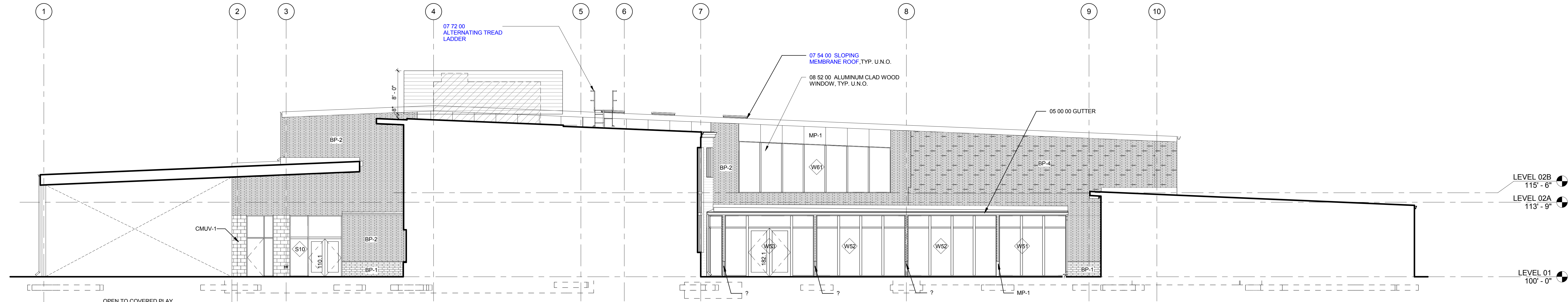
**D2** WEST ELEVATION AT SERVICE YARD (SECTOR 01)  
1/8" = 1'-0"



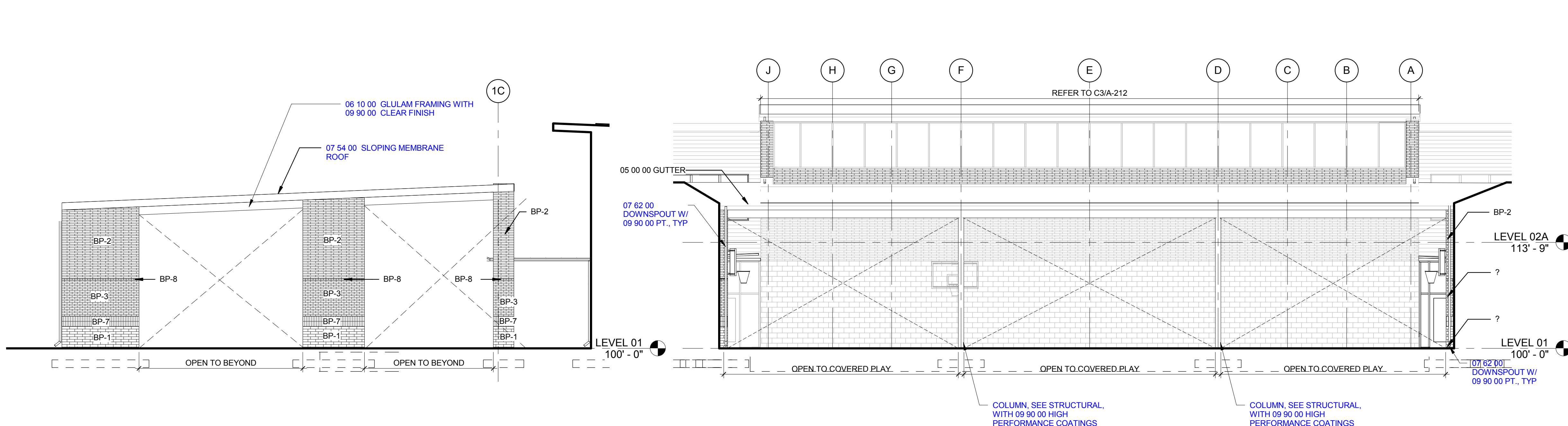
**D4** NORTH ELEVATION AT  
SERVICE YARD (SECTOR 01)  
1/8" = 1'-0"



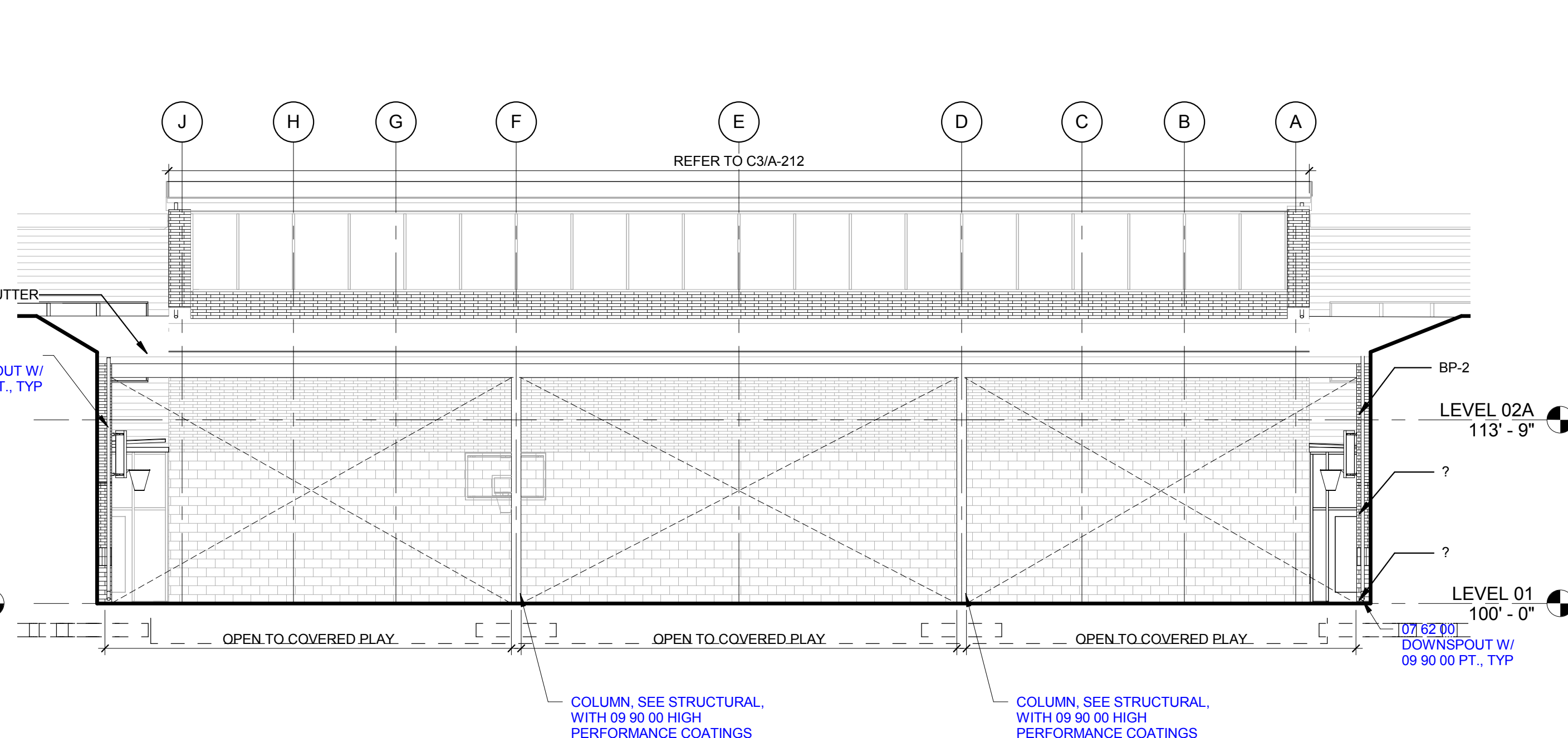
**D5** EAST ELEVATION AT SERVICE YARD (SECTOR 01)  
1/8" = 1'-0"



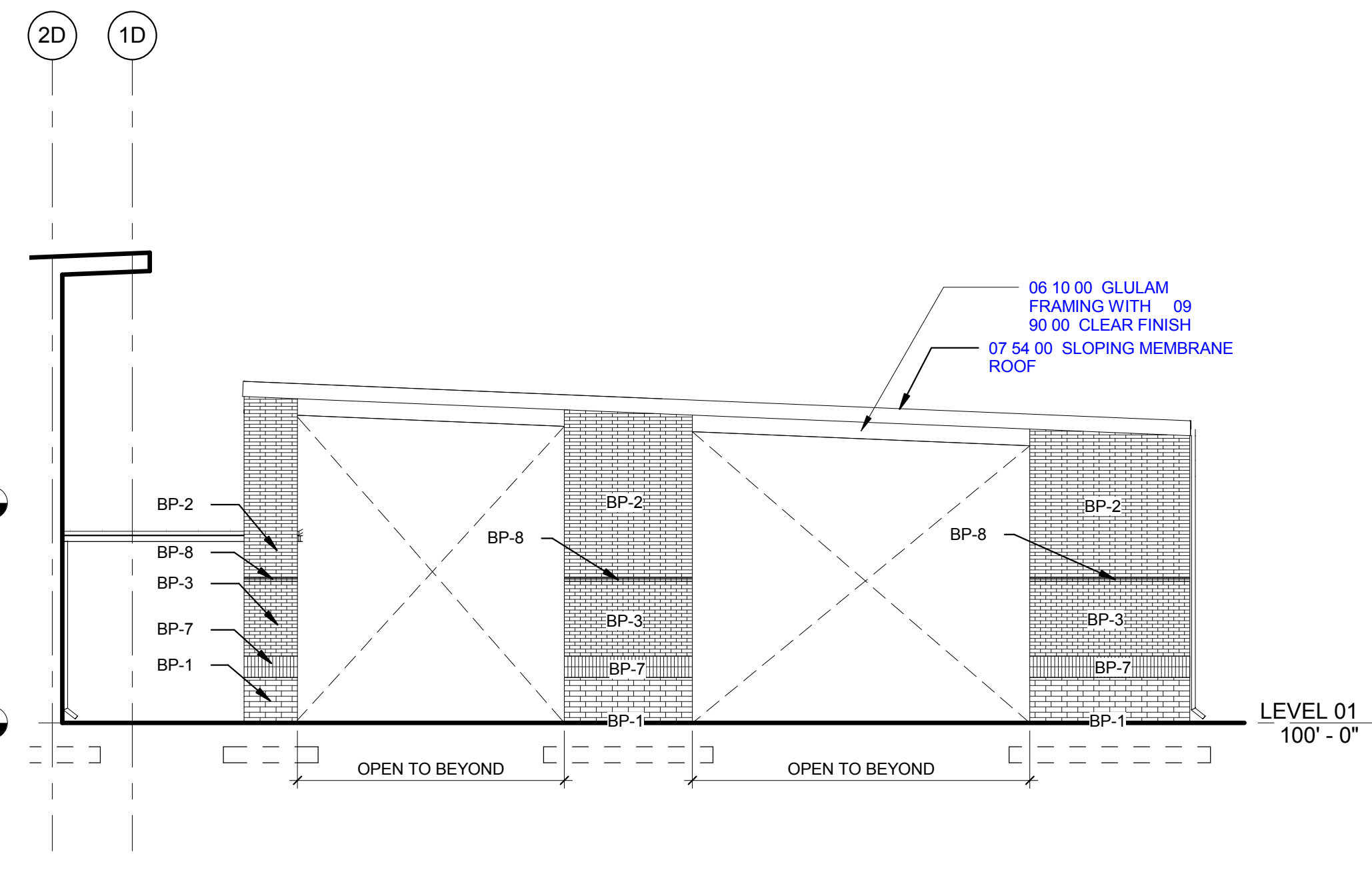
**C1** WEST ELEVATION AT COMMONS (SECTOR 01 & 02)  
1/8" = 1'-0"



**A1** WEST ELEVATION AT COVERED PLAY (SECTOR 02)  
1/8" = 1'-0"



**A2** NORTH ELEVATION AT COVERED PLAY (SECTOR 02)  
1/8" = 1'-0"



**A5** EAST ELEVATION AT COVERED PLAY (SECTOR 02)  
1/8" = 1'-0"

EXTERIOR ELEVATION GENERAL NOTES

KEYNOTES

EXTERIOR ELEVATION MATERIAL LEGEND

EXTERIOR ELEVATION SYMBOL LEGEND



MARK	DATE	DESCRIPTION
ISSUE DATE:	NOVEMBER 10, 2016	
ISSUE:	LAND USE REVIEW	

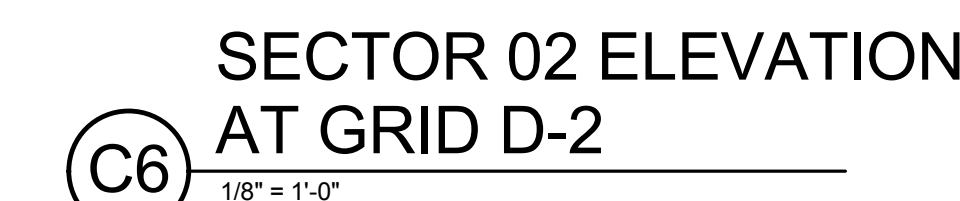
PROJECT NO:	2016903
DRAWN BY:	Author
CHECKED BY:	Checker
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"	

















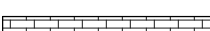

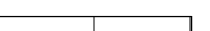

EXTERIOR ELEVATIONS

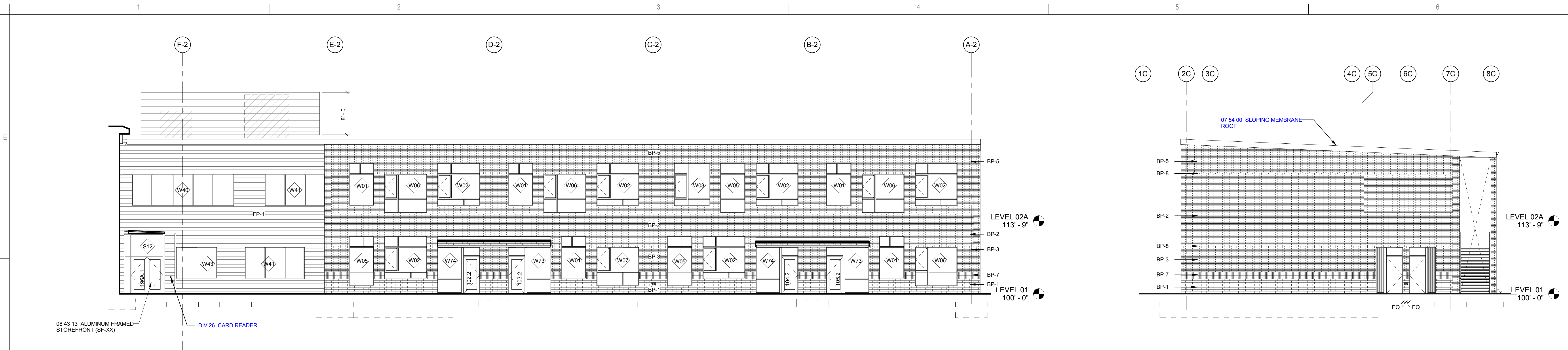




MARK	DATE	DESCRIPTION
ISSUE DATE:	NOVEMBER 10, 2016	
ISSUE:	LAND USE REVIEW	
<hr/>		
PROJECT NO:	2016903	
DRAWN BY:	Author	
CHECKED BY:	Checker	
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011		ORIGINAL SHEET SIZE: 30"x42"
<b>EXTERIOR ELEVATIONS</b>		



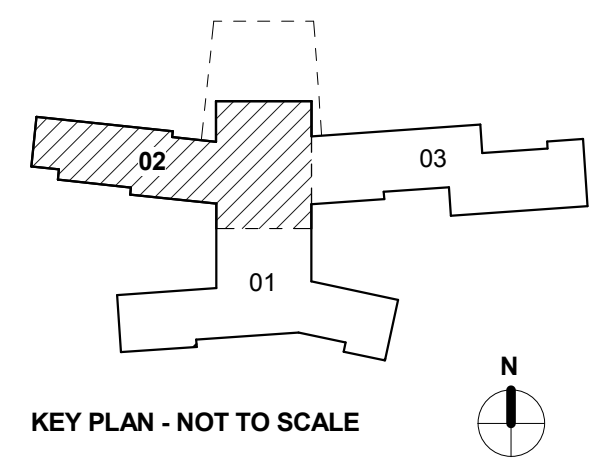
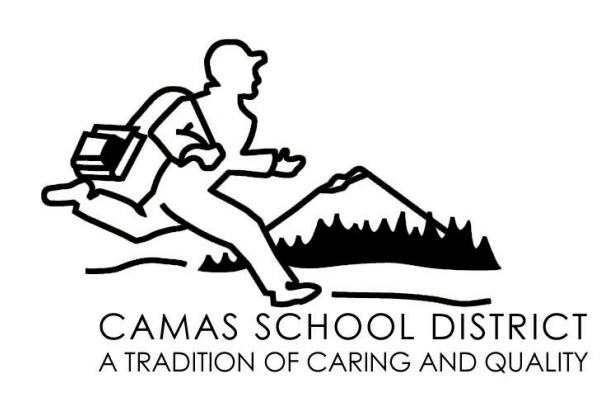
EXTERIOR ELEVATION GENERAL NOTES	KEYNOTES	EXTERIOR ELEVATION MATERIAL LEGEND			EXTERIOR ELEVATION SYMBOL LEGEND	
		 07 54 00 POLYVINYL CHLORIDE ROOFING WITH DECOR STRIP PROFILE	 (BP-4) 04 20 00 BRICK VENEER	 (FP-1) 06 80 00 FIBER REINFORCED HYBRID SIDING	 WINDOW TAG - REFER TO WINDOW TYPE SHEETS A-512 - A-514 FOR SIZE, ELEVATION ABOVE FLOOR, GLAZING TYPE, AND WINDOW DETAILS FOR ALL EXTERIOR WINDOWS	 OPERABLE CASEMENT WINDOW
		 07 54 00 POLYVINYL CHLORIDE ROOFING	 (BP-5) 04 20 00 BRICK VENEER	 (FP-2) 06 80 00 FIBER REINFORCED HYBRID SIDING	 0101A DOOR TAG	 SPANDREL GLAZING
		 (BP-1) 04 20 00 BRICK VENEER	 (BP-6) 04 20 00 BRICK VENEER	 (MP-1) DIV 05 METAL PANEL		
		 (BP-2) 04 20 00 BRICK VENEER	 (BP-7) 04 20 00 BRICK VENEER	 (MP-2) DIV 05 METAL PANEL		
		 (BP-3) 04 20 00 BRICK VENEER	 (BP-8) 04 20 00 BRICK VENEER	 DIV 23 UNIT MOUNTED MECHANICAL SCREEN		
			 (CMUV-1) 04 20 00 BRICK VENEER			



mahlum

71 COLUMBIA | FLOOR 4  
SEATTLE WA 98104  
(206) 441-4151 OFFICE  
(206) 441-0478 FAX  
  
1231 NW HOYT | SUITE 102  
PORTLAND OR 97209  
(503) 224-4032 OFFICE  
(503) 224-0918 FAX  
  
MAHLUM ARCHITECTS INC

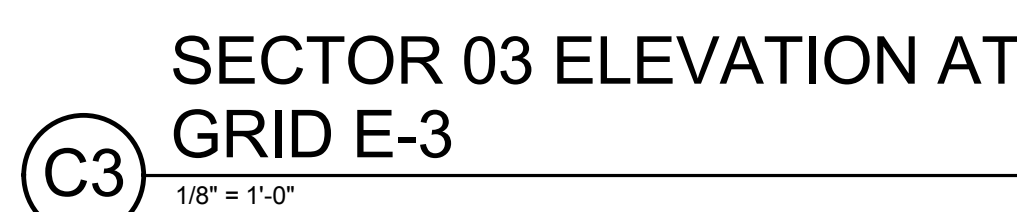
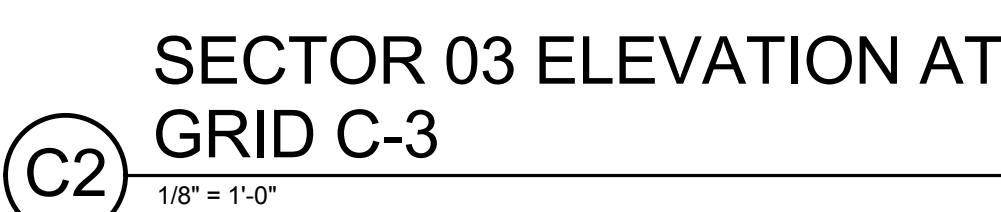
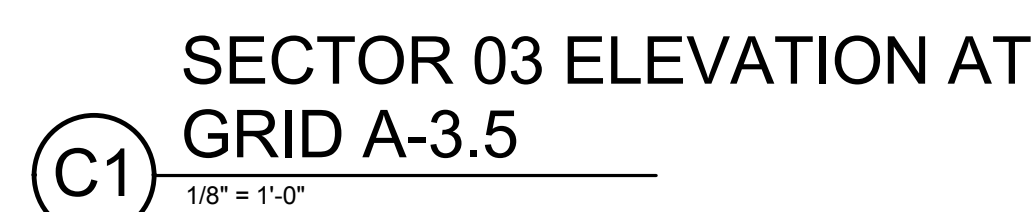
CAMAS SCHOOL DISTRICT  
  
LACAMAS HEIGHTS  
ELEMENTARY SCHOOL  
REPLACEMENT  
1111 NE 232ND AVENUE  
CAMAS, WA 98607





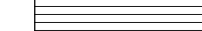





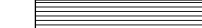






MARK	DATE	DESCRIPTION
ISSUE DATE:	NOVEMBER 10, 2016	
ISSUE:	LAND USE REVIEW	
PROJECT NO:	2016903	
DRAWN BY:	Author	
CHECKED BY:	Checker	
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"		
EXTERIOR ELEVATIONS		




A-215

MARK	DATE	DESCRIPTION
ISSUE DATE:	NOVEMBER 10, 2016	
ISSUE:	LAND USE REVIEW	
<hr/>		
PROJECT NO:	2016903	
DRAWN BY:	Author	
CHECKED BY:	Checker	
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011		ORIGINAL SHEET SIZE: 30"x42"
<b>EXTERIOR ELEVATIONS</b>		



## EXTERIOR ELEVATION SYMBOL LEGEND

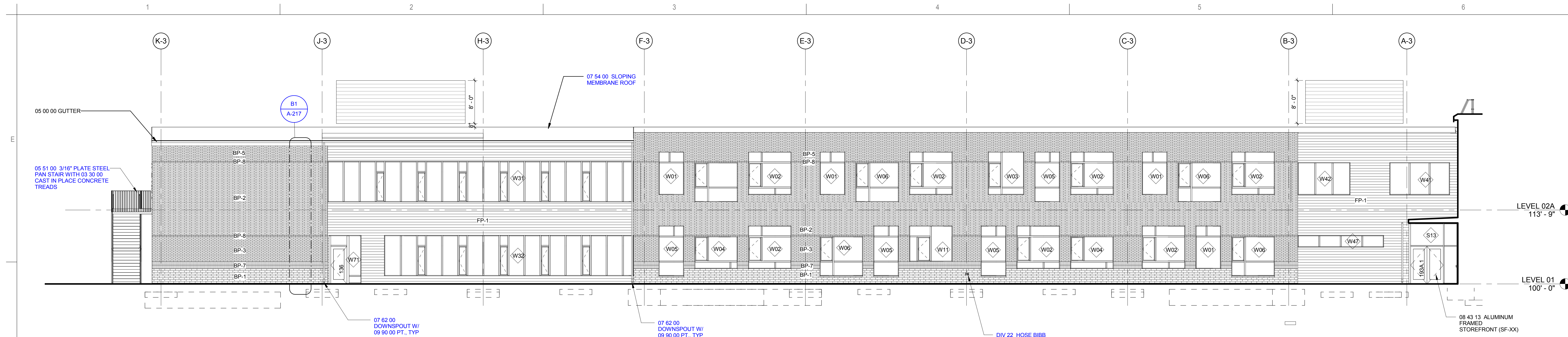
	07 54 00 POLYVINYL CHLORIDE ROOFING WITH DECOR STRIP PROFILE		(BP-4) 04 20 00 BRICK VENEER		(FP-1) 06 80 00 FIBER REINFORCED HYBRID SIDING
	07 54 00 POLYVINYL CHLORIDE ROOFING		(BP-5) 04 20 00 BRICK VENEER		(FP-2) 06 80 00 FIBER REINFORCED HYBRID SIDING
	(BP-1) 04 20 00 BRICK VENEER		(BP-6) 04 20 00 BRICK VENEER		(MP-1) DIV 05 METAL PANEL
	(BP-2) 04 20 00 BRICK VENEER		(BP-7) 04 20 00 BRICK VENEER		(MP-2) DIV 05 METAL PANEL
	(BP-3) 04 20 00 BRICK VENEER		(CMUV-1) 04 20 00 BRICK VENEER		DIV 23 UNIT MOUNTED MECHANICAL SCREEN

	<p>WINDOW TAG - REFER TO WINDOW TYPE SHEETS A-612 - A-614 FOR SIZE, ELEVATION ABOVE FLOOR, GLAZING TYPE, AND WINDOW DETAILS FOR ALL EXTERIOR WINDOWS</p>		<p>OPERABLE CASEMENT WINDOW</p>
<p>0101A</p>	<p>DOOR TAG</p>		<p>SPANDREL GLAZING</p>

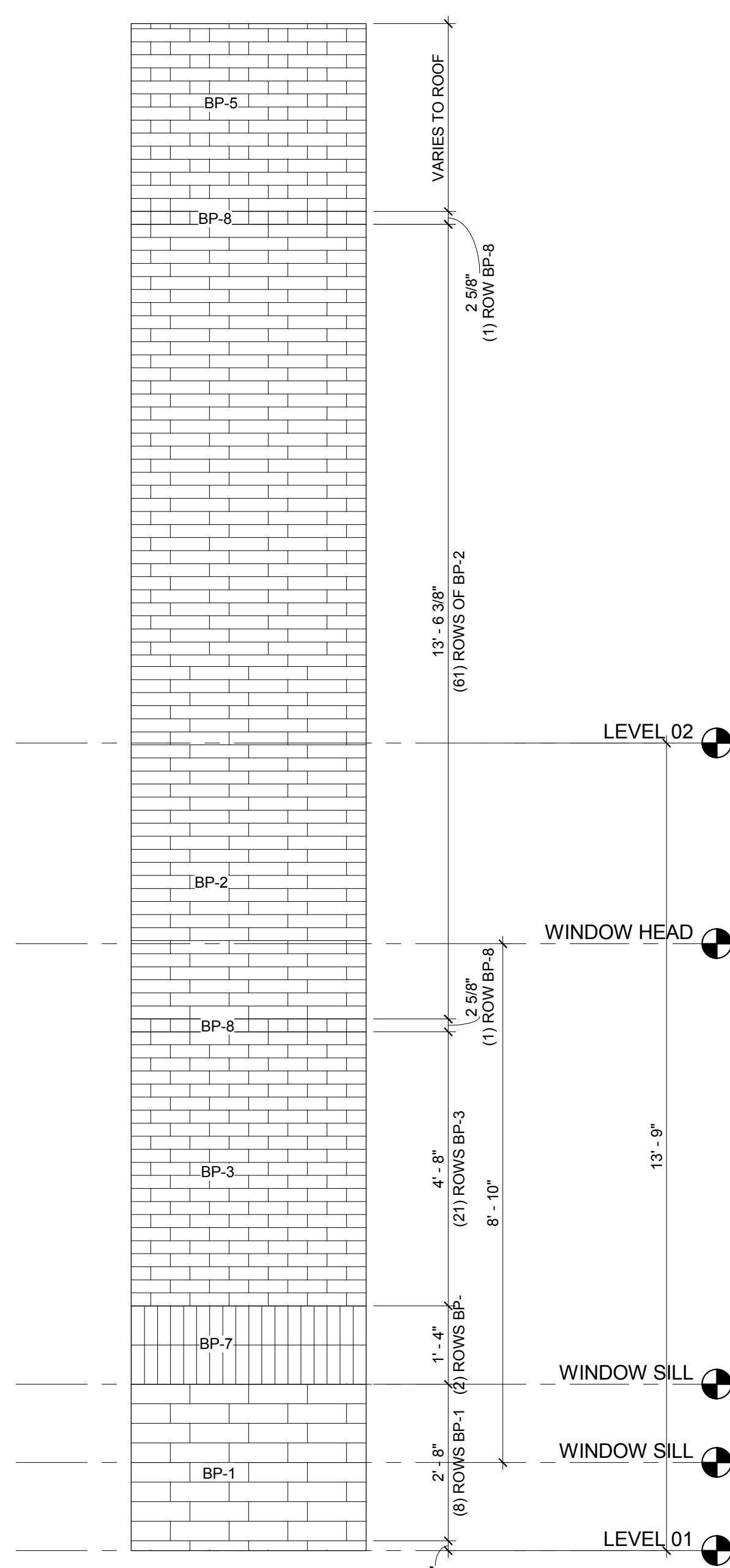
MARK	DATE	DESCRIPTION
ISSUE DATE:	NOVEMBER 10, 2016	
ISSUE:	LAND USE REVIEW	

PROJECT NO: 2016903  
DRAWN BY: Author  
CHECKED BY: Checker  
COPYRIGHT MAHLUM ARCHITECTS, INC. 2011 ORIGINAL SHEET SIZE: 30"x42"

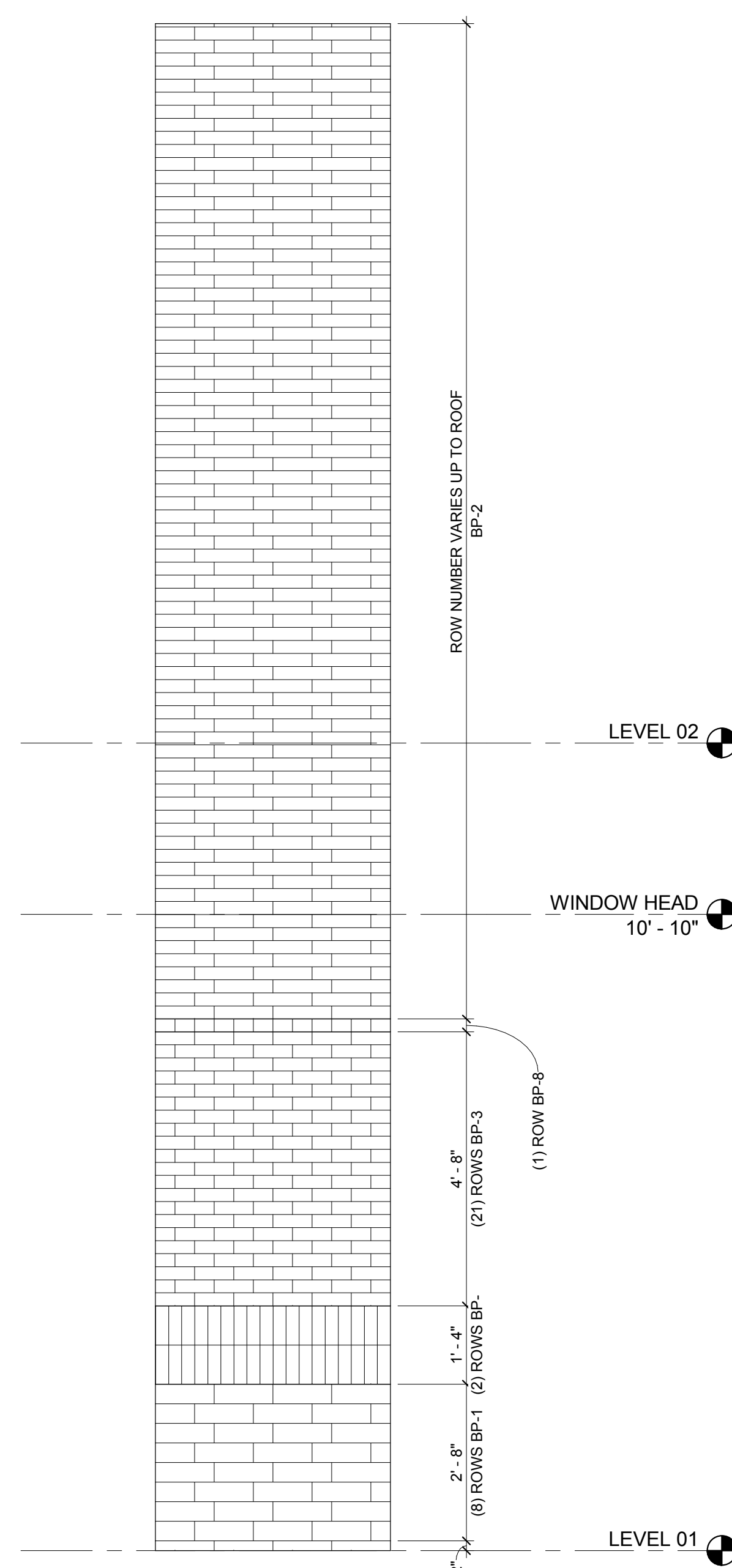
## EXTERIOR ELEVATIONS



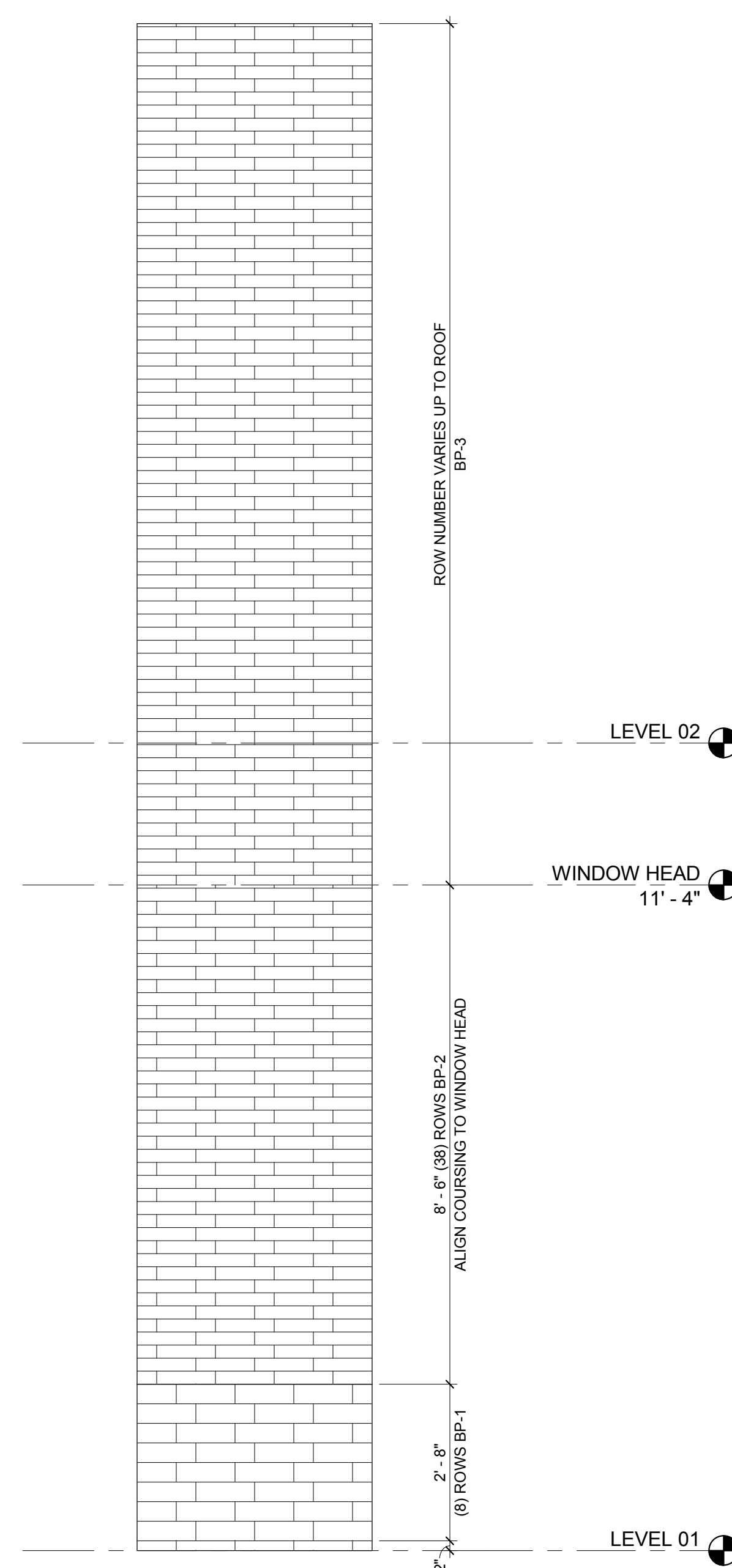
**(D1) NORTH ELEVATION AT EAST CLASSROOM BAR (SECTOR 03)**  
1/8" = 1'-0"



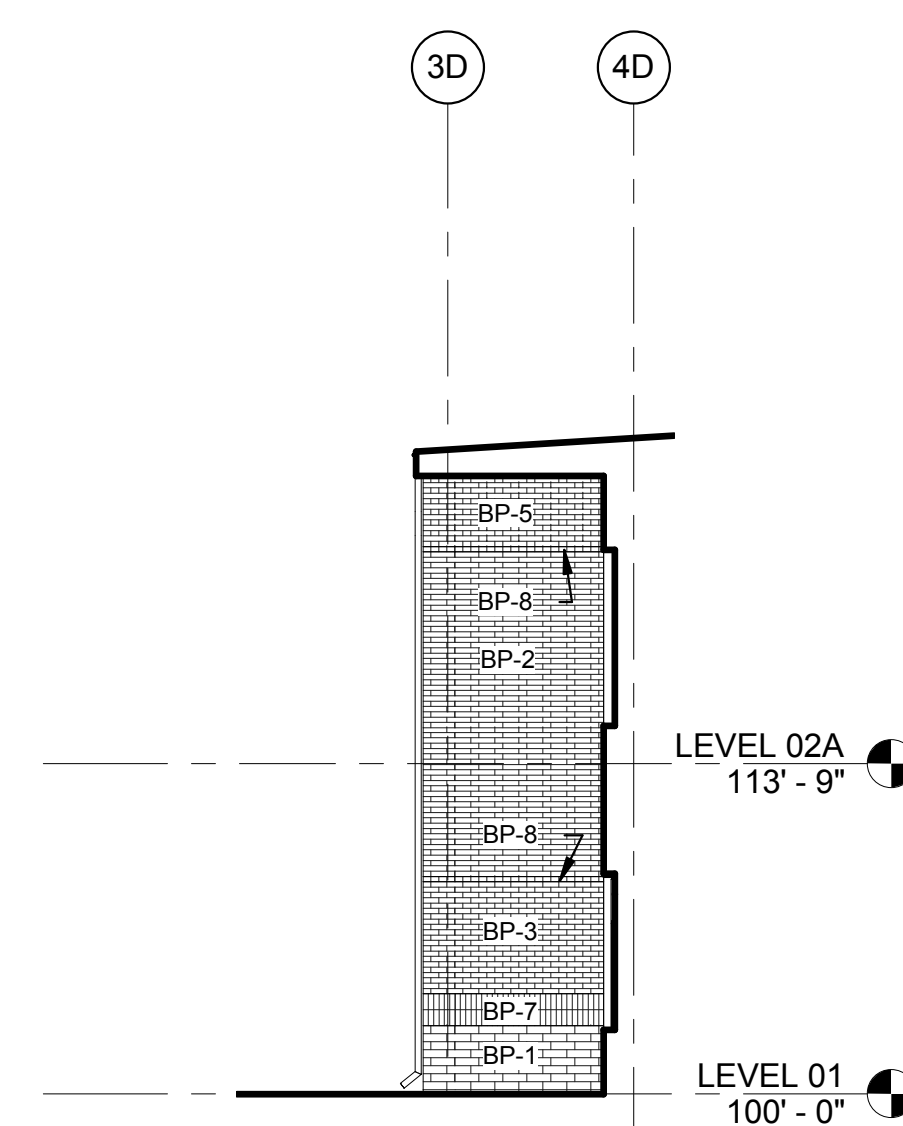
WALL-BRICK STACK  
PATTERN-CLASSROOM WING



WALL-BRICK STACK  
PATTERN-ADMIN/COVERED  
PLAY

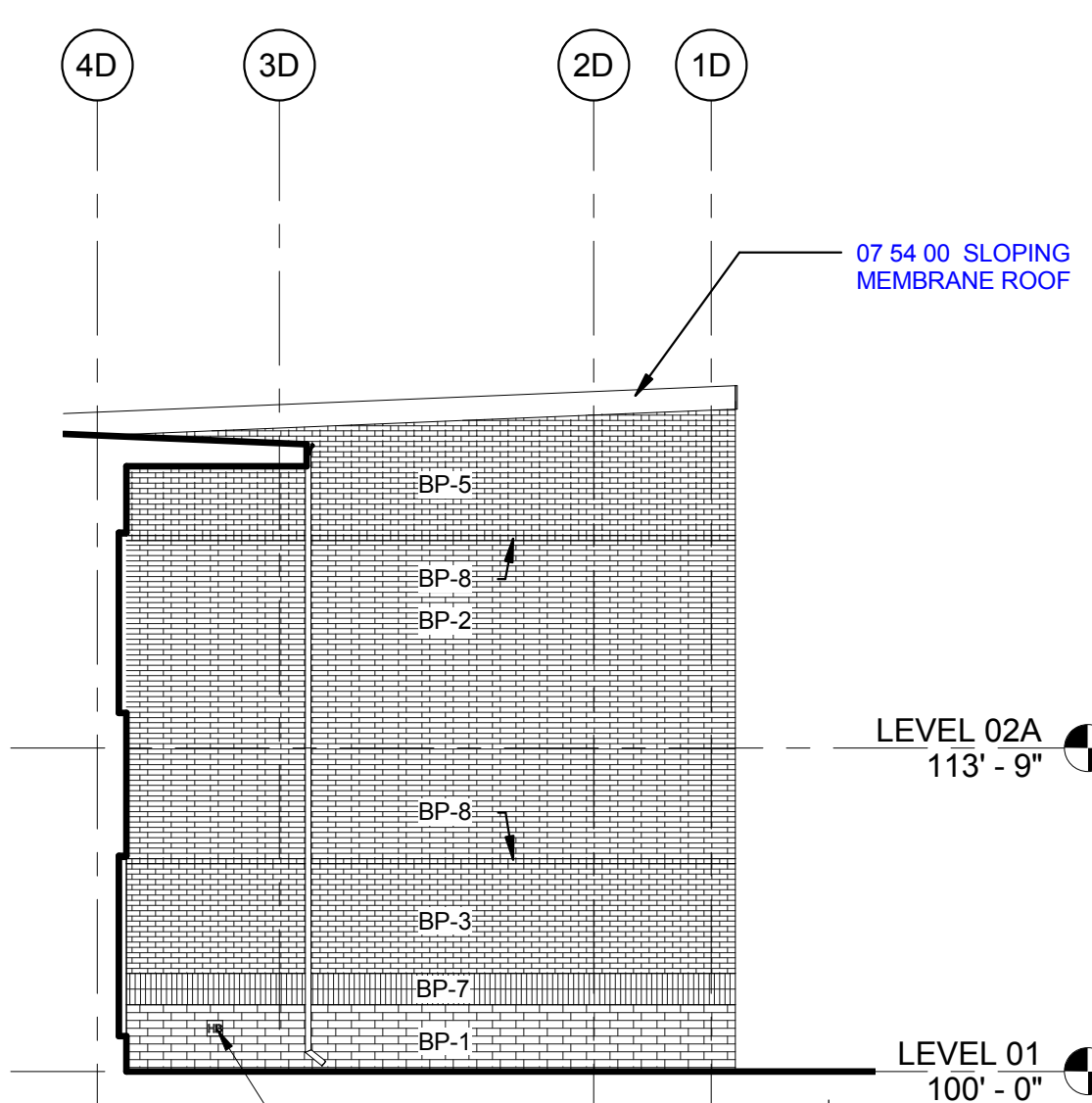


## WALL-BRICK STACK PATTERN-COMMONS



SECTOR 03 ELEVATION AT  
GRID J-3

C4  $\frac{1}{8}'' = 1'-0''$



SECTOR 03 ELEVATION AT  
GRID F-3



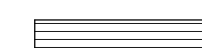

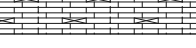
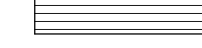
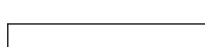








C6 1/8" = 1'-0"




## EXTERIOR ELEVATION GENERAL NOTES

## KEYNOTES

## EXTERIOR ELEVATION MATERIAL LEGEND

## EXTERIOR ELEVATION SYMBOL LEGEND

	07 54 00 POLYVINYL CHLORIDE ROOFING WITH DECOR STRIP PROFILE		(BP-4) 04 20 00 BRICK VENEER		(FP-1) 06 80 00 FIBER REINFORCED HYBRID SIDING
	07 54 00 POLYVINYL CHLORIDE ROOFING		(BP-5) 04 20 00 BRICK VENEER		(FP-2) 06 80 00 FIBER REINFORCED HYBRID SIDING
	(BP-1) 04 20 00 BRICK VENEER		(BP-6) 04 20 00 BRICK VENEER		(MP-1) DIV 05 METAL PANEL
	(BP-2) 04 20 00 BRICK VENEER		(BP-7) 04 20 00 BRICK VENEER		(MP-2) DIV 05 METAL PANEL
	(BP-3) 04 20 00 BRICK VENEER		(CMUV-1) 04 20 00 BRICK VENEER		DIV 23 UNIT MOUNTED MECHANICAL SCREEN

	<p>WINDOW TAG - REFER TO WINDOW TYPE SHEETS A-612 - A-614 FOR SIZE, ELEVATION ABOVE FLOOR, GLAZING TYPE, AND WINDOW DETAILS FOR ALL EXTERIOR WINDOWS</p>		<p>OPERABLE CASEMENT WINDOW</p>
<p>0101A</p>	<p>DOOR TAG</p>		<p>SPANDREL GLAZING</p>

## **SECTION 16 – MATERIALS BOARD**

---



DESIGN REVIEW CHECKLIST  
Lacamas Heights Elementary School  
DR16-09      February 28, 2017

The purpose of this sheet is to provide a simplified and expedited review of the design review principles and guidelines using objective review standards. The standards are intended as tool for the decision-maker in making findings that the proposal either achieves compliance with the intent of the principles or reasonably mitigates any conflict. When reviewing the check sheet, the proposal should as a whole "meet" the standards and thus be generally consistent with the overriding principles. [Compliance or non-compliance with any one standard is not a determinant. However, where several standards fail, they should be offset by standards that exceed other standards]

Standard Principles and Guidelines

1. Landscaping should be done with a purpose. It should be used as a tool to integrate the proposed development into the surrounding environment as well as each of the major project elements (e.g. parking, buildings(s), etc.).				
Exceeds	Meets	Fails	NA	
				Landscaping, including trees, shrubs, and vegetative groundcover, is provided to visually screen and buffer the use from adjoining less intense uses and screening parking or other components viewed as being less intrusive.
				Signs are located on buildings or incorporated into the landscaping so as not to be the main focus either during the day or night. (e.g. low signs with vegetative backgrounds to soften visual impact). If illuminated they shall be front lit. Efforts have been made to make signs vandal resistant.
				Outdoor furniture samples have been submitted consistent with the overall project design.
				Proposed fencing is incorporated into the landscaping so as to have little or no visual impact.
				The vegetation to be utilized includes native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City's Tree List. Retain significant trees if feasible.
				Landscape lighting - low voltage, non-glare, indirect lighting is directed, hooded or shielded away from neighboring properties.
				Street lighting (poles, lamps) is substantially similar or architecturally more significant than other street lighting existing on the same street and will not conflict with any City approved street lighting plans for the street.
				Parking and building lighting is directed away from surrounding properties through the use of hooding, shielding, siting and/or landscaping.
2. All attempts should be made at minimizing the removal of significant natural features. Significant natural features should be integrated into the overall site plan.				
Exceeds	Meets	Fails	NA	

				Existing trees over 6" dbh that are not required to be removed to accommodate the proposed development are retained and incorporated into the landscape plan.
				Rock outcroppings, forested areas and water bodies are retained.
3. Buildings should have a "finished" look. Any use of panelized materials should be integrated into the development in a manner that achieves a seamless appearance.				
Exceeds	Meets	Fails	NA	
				Use of corrugated materials, standing seam, T-1 11, or similar siding materials are questionable, unless it can be shown through the use of renderings or other visual applications that the use of these materials will produce a development with a high visual (or aesthetic) quality.
				Buildings walls or fences visible from roadways should be articulated in order to avoid a blank look. The walls can be broken up by including some combination of window/display space, plantings, offsetting walls with two-tone colors, or creating plazas, water features, art (civic, pop, etc.) awnings, or similar devices.
				The use of bold colors has been avoided unless used as minor accents.
				Higher density/larger structures abutting lower density residential structures have been designed to mitigate size and scale differences. In some cases, creating a natural buffer may be appropriate.
4. A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.				
Exceeds	Meets	Fails	NA	
				The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.

### Specific Principles and Guidelines

Commercial / Mixed Use				
Exceeds	Meets	Fails	NA	
				On-site parking areas shall be placed to the interior of the development unless site development proves prohibitive. All on-site parking areas along adjacent roadways shall be screened with landscaping.
				Buildings shall be placed as close to streets and roads unless site constraints make it impossible or characteristics of the surrounding properties already developed make it incompatible. Otherwise, retail frontage setbacks shall not exceed 25 feet from back of curb.
				Window and door placement shall be provide a high degree to transparency at the lower levels of the building, office and retail buildings shall provide a minimum solid to void ratio of 60%/40%, storefront windows shall be used frequently to enliven the sidewalks.
				Developments containing a multiple of uses/activities shall integrate each use/activity in a manner that achieves a seamless appearance or creates a cohesive development.
				Intersections should be illuminated, but not dominated by lighting. Incorporating lighting into the landscape should be encouraged to

				illuminate the quality of the natural environment. Street light poles and lamps should be compatible with other nearby lighting on the same street.
				Parking spaces should be clustered in small groupings. Groupings should be separated by landscaping to create a pedestrian friendly, park like environment. Parking lot landscaping should be credited toward the total landscaping requirement.
				Circulation and Connections: Pathways define traffic/pedestrian movement. Buildings brought up to the road help define these movements. Trees and/or planting strips shall be used for separating vehicles and pedestrian movements, as well as provide a secure and pedestrian friendly environment.
				Developments surrounded by residential areas or adjacent to residentially zoned properties should be built with a residential feel (i.e. size, scale, and materials compatible with neighboring buildings).
				Buildings over two stories should have the third story and above offset from the first two stories, if surrounding developments are less than three stories or land use designations on adjacent sites do not allow more than three story development.
				Pathways define traffic/pedestrian movement. Buildings brought up to the road help define these movements.
				New streets intersecting commercial properties should be designed to create a safe environment. "Coving" techniques and "round-a-bouts" should be considered for traffic calming when appropriate.



**COMMUNITY DEVELOPMENT DEPARTMENT**  
616 NE 4<sup>th</sup> Avenue  
Camas, WA 98607

**STAFF REPORT**  
**Design Review (File No. DR16-13)**  
**Leadbetter Road Pump Station**  
Associated Files: CUP16-01 and SHOR16-04

**To:** Design Review Committee  
**From:** Sarah Fox, Senior Planner  
**Applicant:** Sam Adams, Project Manager  
City of Camas Public Works Department  
**Site Address:** No site address

**Tax Parcel:** 177906-000  
Tract is 5,605 square feet

**Zoning:** Single-family R-7.5

**APPLICABLE LAW:** The application was submitted on December 30, 2016, and the applicable codes are those codes that were in effect at the date of application. Camas Municipal Code (CMC) Title 18, specifically (but not limited to): Chapter 18.19 Design Review, Chapter 18.11 Parking, Chapter 18.13 Landscaping, and Chapter 18.55 Administrative Procedures and the Camas Design Review Manual.

**I. SUMMARY**

The pump station is one of three new pump stations planned within the North Shore Sewer Transmission System (City File # SHOR16-04). The Leadbetter Road Pump Station will be located in a tract of a future residential subdivision and will be subject to Conditional Use Permit along with Design Review approval. The site will be landscaped and fenced and include a 250 square foot structure.

Design Review is required for all new developments within commercial, mixed-use, business park, or multifamily zones, redevelopment (including change in use, e.g., residential to commercial), or major rehabilitation (exterior changes requiring a building permit or other development permit). Commercial uses in the context of design review include both traditional uses listed as commercial under the zoning code as well as recreational, religious, cultural, educational, and **governmental buildings** and associated properties. The development is also subject to approval of a Conditional Use Permit and Site Plan Review.

## II. DISCUSSION

The following staff analysis and comments are organized to follow the order of the Design Review Checklist for the project.

DESIGN REVIEW PRINCIPLES AND GUIDELINES	STAFF COMMENTS
<b>1. Landscaping should be done with a purpose. It should be used as a tool to integrate the proposed development into the surrounding environment as well as each of the major project elements (e.g. parking, buildings(s), etc.).</b>	
Landscaping, including trees, shrubs, and vegetative groundcover, is provided to visually screen and buffer the use from adjoining less intense uses and screening parking or other components viewed as being less intrusive.	The application includes a landscape drawing at Sheet P6. The landscaping includes evergreen foliage of Douglas Fir, Weeping Alaskan Cedar, Oregon Grape, Swordfern and Kinnikinnick.
Signs are located on buildings or incorporated into the landscaping so as not to be the main focus either during the day or night. (e.g. low signs with vegetative backgrounds to soften visual impact). If illuminated they shall be front lit. Efforts have been made to make signs vandal resistant.	Signs will be small and for emergency purposes.
Outdoor furniture samples have been submitted consistent with the overall project design.	No outdoor furnishing is proposed.
Proposed fencing is incorporated into the landscaping so as to have little or no visual impact.	Fencing is not described in the drawings. A condition in regard to fencing is included.
The vegetation to be utilized includes native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City's Tree List. Retain significant trees if feasible.	The applicant proposes a two-year maintenance contract, however, the Camas Design Standards Manual requires that the site be irrigated (Detail PL1). A condition in regard to irrigation is included.
Landscape lighting - low voltage, non-glare, indirect lighting is directed, hooded or shielded away from neighboring properties.	No lighting is proposed.
Street lighting (poles, lamps) is substantially similar or architecturally more significant than other street lighting existing on the same street and will not conflict with any City approved street lighting plans for the street.	No lighting is proposed.
Parking and building lighting is directed away from surrounding properties through the use of hooding, shielding, siting and/or landscaping.	No parking or building lighting is proposed.
<b>2. All attempts should be made at minimizing the removal of significant natural features. Significant natural features should be integrated into the overall site plan.</b>	
Existing trees over 6" dbh that are not required to be removed to accommodate the proposed development are retained and incorporated into the landscape plan.	The site slopes to the north and all significant trees were removed prior to this application.
Rock outcroppings, forested areas and water bodies are retained.	Not applicable.
<b>3. Buildings should have a "finished" look. Any use of panelized materials should be integrated into the</b>	

<b>development in a manner that achieves a seamless appearance.</b>	
Use of corrugated materials, standing seam, T-1 11, or similar siding materials are questionable, unless it can be shown through the use of renderings or other visual applications that the use of these materials will produce a development with a high visual (or aesthetic) quality.	The structure will be open-sided. The steel support beams will be wrapped in wood. The roofing appears to be cedar-shake shingles.
Buildings walls or fences visible from roadways should be articulated in order to avoid a blank look. The walls can be broken up by including some combination of window/display space, plantings, offsetting walls with two-tone colors, or creating plazas, water features, art (civic, pop, etc.) awnings, or similar devices.	Fencing design is included as a condition of approval.
The use of bold colors has been avoided unless used as minor accents.	Colors of equipment cabinet was not included in the application. Beams and roofing will be natural wood.
Higher density/larger structures abutting lower density residential structures have been designed to mitigate size and scale differences. In some cases, creating a natural buffer may be appropriate.	A vegetated buffer is proposed.
<b>4. A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.</b>	
The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.	Not applicable to this site.

### **III. Recommendation**

Staff recommends that the Design Review Committee review the materials, deliberate, and render a recommendation of approval with the following conditions:

1. Applicant provide vinyl coated chain link fencing.
2. Applicant revise landscape drawings to include irrigation plan in accordance with Camas Design Standards Manual.
3. The applicant shall ensure that trees are a minimum caliper of 2" at time of installation.

---

# North Shore Sewer Transmission System (NS-STS) City of Camas, Washington

---

Request for  
Conditional Use Permit  
Design Review  
Site Plan Review

Prepared for  
City of Camas

Prepared by  
Otak, Inc.



HanmiGlobal Partner

November 18, 2016  
**Resubmitted December 30, 2016**  
*Otak Project No. 17628A*



## REQUESTS

**Conditional Use Permit, Design Review, and Site Plan Review approval** is requested for the Camas North Shore Sewer Transmission System project (NS-STS) Leadbetter Road Pump Station.

**Design Review and Site Plan Review approval** is requested for the NE 232<sup>nd</sup> Avenue Pump Station and the new Pedestrian Bridge.

The project affects various properties along the north shore of Lacamas Lake, and includes the construction of a system that includes upgrades to one pump station, construction of two new pump stations, force mains, gravity sewer pipelines, and associated infrastructure to convey wastewater to the City's existing gravity sewer system in the Hilltop neighborhood south of Lacamas Lake. The project also includes the installation of a pedestrian bridge over the Lacamas/Round Lake channel, construction of a 12-inch waterline to support a new school planned by the Camas School district and to support further development within the North Shore Area.

## SITE INFORMATION

**SUBJECT  
PROPERTY:** 232<sup>nd</sup> Avenue Pump Station: 618 NE 232<sup>nd</sup> Avenue (Parcel 175929000)

Leadbetter Road Pump Station: No situs (Parcel 177906000)

Pedestrian Bridge: 308 NE 35th Avenue (Parcel 124242000) and Parcel 124289000

**ZONING  
DESIGNATIONS:** 232<sup>nd</sup> Avenue Pump Station: Clark County Public Facilities Zone PF; Urban Reserve – 20 Overlay (UR-20)

Leadbetter Road Pump Station: City of Camas Residential Zone R-7.5; Airport Overlay Zone C

Pedestrian Bridge: City of Camas Open Space Zone OS

## APPLICANT/PROPERTY OWNER

**APPLICANT(S):** City of Camas  
616 NE 4<sup>th</sup> Avenue  
Camas, WA 98607

Contact: Sam Adams, Project Manager  
(360) 817-1563  
sadams@cityofcamas.us

OWNER(S): City of Camas  
616 NE 4<sup>th</sup> Avenue  
Camas, WA 98607

Clark County Parks  
4700 NE 78<sup>th</sup> Street  
Vancouver, WA 98665

CJ Dens Lacamas I LLC  
PO Box 2239  
Vancouver, WA 98625

### **PROJECT DEVELOPMENT TEAM**

APPLICANT'S  
REPRESENTATIVE: Otak, Inc.  
808 SW Third Avenue, Suite 300  
Portland, OR 970204

Contact: Li Alligood, AICP  
503.415.2384  
li.alligood@otak.com

CIVIL ENGINEER: Otak, Inc.  
700 Washington Street, Suite 401  
Vancouver, WA 98660

Contact: Tim Kraft, PE  
360.906.6793  
Tim.Kraft@otak.com

LANDSCAPE  
ARCHITECT: Otak, Inc.  
700 Washington Street, Suite 401  
Vancouver, WA 98660

Contact: David Haynes, PLA  
360.906.6782  
David.Haynes@otak.com

# TABLE OF CONTENTS

	Page
I. Requests.....	1
II. Project Description.....	1
A. Overview.....	1
B. Pump Stations .....	2
C. New Pedestrian Bridge .....	3
III. Compliance with Title 18 Zoning .....	4
A. Chapter 18.07 Use Authorization .....	4
B. Chapter 18.09 Density and Dimensions .....	4
C. Chapter 18.11 Parking .....	5
D. Chapter 18.13 Landscaping.....	6
E. Chapter 18.18 Site Plan Review.....	9
F. Chapter 18.19 Design Review .....	13
G. Chapter 18.32 Park and Open Space Zoning.....	18
H. Chapter 18.43 Conditional Use .....	20
I. Chapter 18.55 Administration and Procedures.....	21
IV. Compliance with Title 17 Land Development.....	23
V. Conclusion.....	23
VI. Appendices	
A. Notes from June 16, 2016, pre-application meeting, prepared by the City of Camas	
B. SEPA Checklist dated August 2, 2016, prepared by Harper Houf Peterson Righellis Inc.	
C. SEPA Checklist Addendum dated September 20, 2016, prepared by Harper Houf Peterson Righellis Inc.	
D. Preliminary stormwater management memorandums	
E. Camas Stormwater Design Standards Manual Flow Chart	
F. Engineer's Estimates	
G. Mailing List	
VII. List of Exhibits	
P1 Vicinity Map	
P2 232 <sup>nd</sup> Ave Site, Utility & Circulation Plan	
P3 232 <sup>nd</sup> Ave Landscape Plan	
P4 232 <sup>nd</sup> Canopy Architectural Canopy Plan and Elevation	
P5 Leadbetter Road Site, Utility & Circulation Plan	
P6 Leadbetter Road Landscape Plan	
P7 Leadbetter Road Architecture Canopy Plan and Elevation	
P8 Pedestrian Bridge Site Plan	
P9 Pedestrian Bridge Landscape Plan	

P10 – P18 Site Survey of Site Alignment  
P19 232<sup>nd</sup> Ave Pump Station Storm Drainage Plan  
P20 Leadbetter Road Pump Station Storm Drainage Plan

**Note:** All plan sheets are also separately bound in a larger format within the development application submittal.

## I. REQUESTS

**Conditional Use Permit, Design Review, and Site Plan Review approval** is requested for the facilities listed below that are part of the larger Camas North Shore Sewer Transmission System project (NS-STTS). The project affects various properties along the north shore of Lacamas Lake, and includes the construction of a system that includes upgrades to one pump station, construction of two new pump stations, force mains, gravity sewer pipelines, and associated infrastructure to convey wastewater to the City's existing gravity sewer system in the Hilltop neighborhood south of Lacamas Lake. The project also includes the installation of a pedestrian bridge over the Lacamas/Round Lake channel, construction of a 12-inch waterline to support a new school planned by the Camas School district and to support further development within the North Shore Area.

**Conditional Use Permit** review is required for the Leadbetter Road Pump Station due to its location within a residential zone. "Pump station" uses are conditionally permitted in the residential zones.

**Design Review** is required for the NE 232<sup>nd</sup> Avenue Pump Station, which is located in Clark County's Public Facilities Zone PF; the Leadbetter Road Pump Station, which is located in the City of Camas' Residential Zone R-7.5; and the pedestrian bridge, which is located within Clark County's Open Space Zone OS and within the Gateway Corridor Overlay Zone GC.

**Site Plan Review** is required for two pump stations and the pedestrian bridge because they are new nonresidential structures.

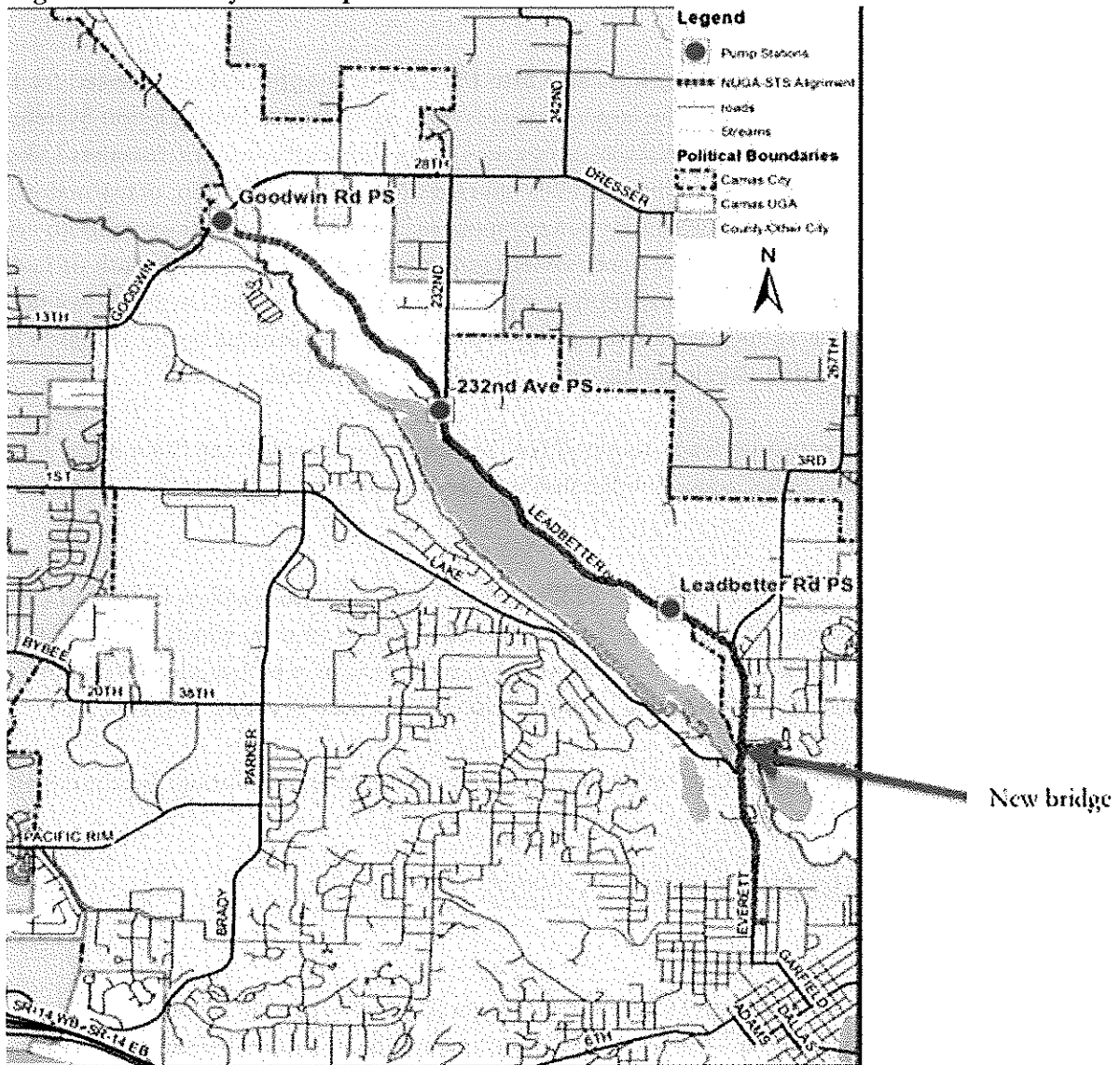
## II. PROJECT DESCRIPTION

### A. Overview

The Camas North Shore-Sewer Transmission System (NS-NTS) project involves the construction of a system that includes upgrades to one pump station, construction of two new pump stations, force mains, gravity sewer pipelines, and associated infrastructure to convey wastewater to the City's existing gravity sewer system in the Hilltop neighborhood south of Lacamas Lake. The project also includes the installation of a pedestrian bridge over the Lacamas/Round Lake channel, construction of a 12-inch waterline to support a new school planned by the Camas School district and to support further development within the North Shore Area. See Figure 1 for a system map.

The NE 232<sup>nd</sup> Avenue pump station contains a canopy structure of 200 square feet in area, and the Leadbetter Road pump station includes a canopy structure of 250 square feet in area. The NE 232<sup>nd</sup> Avenue pump station includes 5,993 square feet of impervious surface, and the Leadbetter Road pump station includes 4,939 square feet of impervious surface. The pedestrian bridge site includes 1,500 square feet of impervious area.

**Figure 1. NS-STS System Map**



Source: North Urban Growth Area Transmission System Draft Preliminary Design Report, April 2016, prepared by Otak, Inc.

## **B. Pump Stations**

Two new pump stations are proposed (NE 232<sup>nd</sup> Avenue and Leadbetter Road Pump Stations). Anticipated site improvements for each station include:

- Asphalt paving in areas subject to vehicular traffic
- Gravel surfacing for areas between concrete pads and between concrete pads and the site fence
- Landscape screening
- Site fencing and gates
- Bollards to protect above grade equipment such as pig launchers and tanks from vehicles
- A roof canopy over the electrical control pad to provide protection from the elements

- Site lighting. Site lights will be on aluminum poles and LED type fixtures. Lighting shall be a minimum 30 foot-candles (FC) in front of electrical equipment and near process equipment and 0.1 to 1 FC for site lighting. Lighting under the electrical canopies will be LED.
- Odor control facilities to minimize off-site impacts
- Emergency Generators

Details of the individual pump stations are provided below.

### ***NE 232<sup>nd</sup> Avenue Pump Station***

This station will be located on Clark County property within the limits of Camp Currie, on the west side of NE 232<sup>nd</sup> Avenue (addressed as 618 NE 232<sup>nd</sup> Avenue, parcel 175929000) just north of Leadbetter Road. The City has received a license agreement from Clark County to install the pump station on this property. The site is located within the Clark County Public Facilities Zone PF. The station site is 3,314 square feet and will be heavily screened with vegetation and enclosed by a 6-foot wood fence to preserve the rural camp environment aesthetic. The pump station is located on a site designated as “open space and park” and is subject to additional setback and screening requirements. See Sheets P2 through P4 for details.

### ***Leadbetter Road Pump Station***

This station will be located on the north side of Leadbetter Road approximately 1,500 feet west of NE Everett Street (parcel 177906000). This is on property currently owned by CJ Dens and located in the R-7.5 zone and the Airport Overlay – Zone C. A parcel containing the pump station and a stormwater facility will be created and dedicated to the City in the future. The station site is 5,605 square feet in area. The pump station is located in a residential zone and requires a Conditional Use permit. See Sheets P5 through P7 for details.

The pump station will be accessed from new roadways proposed for the CJ Dens development, and the pump station shares a site with the developer’s stormwater facility. The entrance to the pump station will be gated.

## **C. New Pedestrian Bridge**

A new bridge for pedestrian access to Lacamas Park will be constructed over the Lacamas Lake-Round Lake Channel east of the Everett Street Bridge. The bridge will also hold one sanitary sewer force main.

The south side of the proposed pedestrian bridge will be located on Clark County property before returning to the Everett Street right of way. The City has received a license agreement with the County to install the bridge on this property.

The bridge will cross the Lacamas Road-Round Lake channel at the northeastern end of the lake. The bridge is approximately 150 feet in length and 9 feet 6 inches wide, and will be constructed of steel with a concrete deck. It will be accessed via a 10-foot wide asphalt pathway from the north and a 10-foot wide asphalt pathway connecting to an existing 8-foot asphalt pathway to south. Both access pathways and the bridge deck will comply with the Americans with Disabilities Act (ADA). A 6-foot chain link fence is proposed along the eastern side of the

northern path to prevent access to the existing water treatment facility to the east. See Sheet P8 for details.

No vehicular access is proposed to the new pedestrian bridge. The bridge will allow connection to the Lacamas Lake trail system on the south and to Everett Street and the park's overflow parking lot on the north.

### III. COMPLIANCE WITH TITLE 18 ZONING

Applicable approval criteria are addressed below. The criteria are included in *italics* and the response follows each section or group of sections.

#### A. Chapter 18.07 Use Authorization

##### *18.07.040 - Table 2— Residential and multifamily land uses.*

The Leadbetter Road Pump Station is located in the R-7.5 Zone. Subsection 18.07.040 lists “Pumping station” under Communications and Utilities as a Conditional Use in the R-7.5 zone. This pump station is subject to Type III Conditional Use approval.

##### *18.07.050 - Park and open space land uses.*

The NE 232<sup>nd</sup> Ave pump station is located in the OS Zone. This section lists “Pumping station” under Utility Uses as a Permitted Use in the OS Zone. The pedestrian bridge is located in the OS Zone and serves as both a pedestrian trail and a public utility. This section lists “Pedestrian and multi-use trails” and “Public utilities, minor” as permitted uses in the OS Zone.

#### B. Chapter 18.09 Density and Dimensions

The Leadbetter Road pump station is located in the R-7.5 Zone. Subsection 18.09.030 contains the development standards for sites in the residential zones. The applicable standards of the R-7.5 Zone are listed in Table 1 below. This is a new tract that will be dedicated to the city, and property lines will be created to meet these standards.

**Table 1. Compliance with R-7.5 Zone Standards**

Relevant Standard	Required	Proposed
Maximum Building Lot Coverage	40%	~1%
Maximum Building Height	35 ft	13 ft 6 in <sup>1</sup>
Minimum Front Yard Setback	20 ft	23.4 ft
Minimum Side Yard Setback	5 ft	Exceeds 5 ft
Minimum Street Side Yard Setback	20 ft	Exceeds 20 ft
Minimum Rear Yard Setback	25 ft	Exceeds 25 ft

<sup>1</sup> As measured from roof ridge to slab.

The NE 232<sup>nd</sup> Avenue pump station and pedestrian bridge are subject to the standards of 18.32 Park and Open Space Zoning, which is addressed later in this narrative.

### **C. Chapter 18.11 Parking**

[...]

#### **18.11.020 - Design.**

*The design of off-street parking shall be as follows:*

*A. Ingress and Egress. The location of all points of ingress and egress to parking areas shall be subject to the review and approval of the city.*

[...]

*C. Parking Spaces—Access and Dimensions. Adequate provisions shall be made for individual ingress and egress by vehicles to all parking stalls at all times by means of unobstructed maneuvering aisles. The city is directed to promulgate and enforce standards for maneuvering aisles and parking stall dimensions, and to make such standards available to the public.*

*D. Small Car Parking Spaces. A maximum of thirty percent of the total required parking spaces may be reduced in size for the use of small cars, provided these spaces shall be clearly identified with a sign permanently affixed immediately in front of each space containing the notation "compacts only." Spaces designed for small cars may be reduced in size to a minimum of eight feet in width and fifteen feet in length. Where feasible, all small car spaces shall be located in one or more contiguous areas and/or adjacent to ingress/egress points within parking facilities. Location of compact car parking spaces shall not create traffic congestion or impede traffic flows.*

**Response:** The pump station will require access by maintenance vehicles, and generally no more than two vehicles will be on-site at any time. No parking spaces have been provided, but asphalt areas are being provided to allow maintenance vehicle access to equipment and facilities. Adequate access and turning movements for these vehicles has been provided.

The pedestrian bridge will require infrequent access by maintenance vehicles, which are anticipated to park in the adjacent parking lot. No dedicated parking has been provided.

#### **18.11.030 - Location.**

*Off-street facilities shall be located as hereafter specified. Such distance shall be the maximum walking distance measured from the nearest point of the parking facility to the nearest point of the building that such facility is required to serve:*

*A. For single-family or two-family dwelling and motels: on the same lot with the structure they are required to serve.*

*B. For multiple dwelling, rooming or lodging house: two hundred feet.*

*C. For hospital, sanitarium, home for the aged, or building containing a club: three hundred feet.*

*D. For uses other than those specified above: four hundred feet.*

**Response:** This requirement is not applicable to this project.

## **D. Chapter 18.13 Landscaping**

### **18.13.020 - Scope.**

*Landscaping standards shall apply to all new multifamily, commercial, industrial and governmental uses, including change of use, and parking lots of four spaces or more. For conditional uses permitted in residential and multifamily districts, such as churches, schools, civic organizations, etc., the standards for landscaping will be the same as the landscaping standards in community commercial zones.[...]*

**Response:** The NE 232<sup>nd</sup> Avenue pump station is a permitted utility use, and is subject to these standards.

The Leadbetter Road Pump Station is permitted as a conditional use in residential districts, and is subject to the standards for landscaping in community commercial zones.

### **18.13.040 - Procedure.**

*Detailed plans for landscaping shall be submitted with plans for building and site improvements. Included in the plans shall be type and location of plants and materials.*

**Response:** The landscaping plan is included as Sheets P3, P6 and P9.

### **18.13.050 - Landscaping tandards.**

*A. The property owner shall be responsible for any future damage to a street, curb, or sidewalk caused by landscaping.*

**Response:** The city will be responsible for any potential future damage.

*B. Landscaping shall be selected and located to deter sound, filter air contaminants, curtail erosion, minimize stormwater run-off, contribute to living privacy, reduce the visual impacts of large buildings and paved areas, screen, and emphasize or separate outdoor spaces of different uses or character.*

**Response:** Landscaping has been designed to meet the above requirements. The primary focus of the landscaping at the NE 232<sup>nd</sup> Avenue and Leadbetter Road pump stations is to provide proper screening as required.

*C. Plants that minimize upkeep and maintenance shall be selected.*

*D. Plants shall complement or supplement surrounding natural vegetation.*

*E. Plants chosen shall be in scale with building development.*

**Response:** Where possible, native plants have been selected, balancing the ability to use native species with the requirement to meet screening criteria. Plants and trees selected for use at the NE 232<sup>nd</sup> Pump Station were reviewed with Clark County Park staff, as they are the adjacent property owners, and plant species were adjusted to address their comments. They have since reviewed and approved the landscaping plan for that site. Landscaping will be provided on each of the pedestrian bridge, and existing landscaping will be protected to the extent possible. See Sheets P3, P6 and P9.

*F. Minimum landscaping as a percent of gross site area shall be as follows:*

- *OS Zone (NE 232<sup>nd</sup> Ave station and pedestrian bridge): No minimum requirements*
- *CC Zone (Leadbetter Road pump station): 10% of gross site area must be landscaped*

**Response:** Approximately 90 percent of the gross site area for the Leadbetter Road Pump Station contains landscaping.

*G. Deciduous trees shall have straight trunks, be fully branched, have a minimum caliper of one and one-half inches, be equivalent to a fifteen-gallon container size, and be adequately staked for planting.*

*H. Evergreen trees shall be a minimum of five feet in height, fully branched, and adequately staked for planting.*

*I. Shrubs shall be a minimum of five-gallon pot size. Upright shrubs shall have a minimum height at planting of eighteen inches. Spreading shrubs at planting shall have a minimum width of eighteen inches (smaller shrub sizes may be approved where it is more appropriate within a particular landscape plan).*

*J. Ground cover, defined as living material and not including bark chips or other mulch, shall at planting, have a maximum spacing of twelve inches on center for flats, and a maximum twenty-four inches on center between mature plants from containers of one gallon or larger.*

**Response:** Trees will be evergreen species to more effectively meet screening requirements and specification will call for 6-7-foot tall stock that have fully branched form. Sheet P6 specifies minimum dimensions and/or container sizes for shrubs and groundcover plants in accordance with code provisions.

*K. Appropriate measures shall be taken, e.g., installations of watering systems, to assure landscaping success. If plantings fail to survive, it is the responsibility of the property owner to replace them.*

**Response:** The bid documents will include a 2-year plant establishment period for all landscaping. The contractor will be responsible for all watering during that time period. The City will take responsibility following the plant establishment period.

*L. Trees shall not be planted closer than twenty-five feet from the curb line of the intersections of streets or alleys, and not closer than ten feet from private driveways (measured at the back edge of the sidewalk), fire hydrants, or utility poles.*

**Response:** As shown in Sheets P3, P6 and P9 trees planned for this project are over 25 feet

from the curb line of intersections and over 10 feet from private driveways, fire hydrants, and utility poles.

*M. Street trees shall not be planted closer than twenty feet to light standards. Except for public safety, no new light standard location should be positioned closer than ten feet to any existing street tree, and preferably such locations will be at least twenty feet distant.*

**Response:** This project does not trigger frontage improvements or the provision of street trees, and no street trees are proposed for this project.

*N. Trees shall not be planted closer than two and one-half feet from the face of the curb except at intersections, where it should be five feet from the curb in a curb return area.*

**Response:** As shown in Sheets P3, P6 and P9, no trees are planned within 2.5 feet of any curb.

*O. Where there are overhead power lines, tree species that will not interfere with those lines shall be chosen.*

**Response:** No trees are proposed under power lines.

*P. Trees shall not be planted within two feet of any permanent hard surface paving or walkway. Sidewalk cuts in concrete for trees shall be at least four feet by four feet; however, larger cuts are encouraged because they allow additional area and water into the root system and add to the health of the tree. Space between the tree and such hard surface may be covered by permeable nonpermanent hard surfaces such as grates, bricks on sand, paved blocks, cobblestones, or ground cover.*

**Response:** All proposed trees are over 2 feet from any permanent hard surface. No trees are proposed near sidewalks.

*Q. Trees, as they grow, shall be pruned to their natural form to provide at least eight feet of clearance above sidewalks and twelve feet above street roadway surfaces.*

**Response:** All proposed trees are over 2 feet from any permanent hard surface. No trees are proposed near sidewalks.

*R. Existing trees may be used as street trees if there will be no damage from the development which will kill or weaken the tree. Sidewalks of variable width and elevation may be utilized to save existing street trees, subject to approval by the city.*

**Response:** Street trees are not proposed for this project.

*S. Vision clearance hazards shall be avoided.*

**Response:** Vision clearance hazards have been avoided for this site.

### ***18.13.060 - Parking areas.***

- B. *All parking areas shall provide interior landscaping for shade and visual relief.*
- C. *Parking lots shall have a minimum ratio of one tree per six double-loaded stalls or one tree per three single-loaded stalls (See Figure 18.13-1).*

**Response:** This project does not include any parking areas.

## **E. Chapter 18.18 Site Plan Review**

### ***Section 18.18.020 - Applicability.***

*A. Site plan review and approval shall be required for the following development activities prior to issuance of a building permit:*

- 1. All new nonresidential uses for the location of any building(s);*
- 2. Any multifamily development in which more than two dwelling units would be contained;*
- 3. The expansion of any building or development as defined in CMC Section 18.18.020(A) exceeding twenty percent of the existing floor or site area, or any one thousand square foot addition, or increase in impervious coverage thereto, whichever is lesser.*

**Response:** City staff has indicated that the two pump stations and the pedestrian bridge meet these criteria and require site plan review.

### ***18.18.030 - Site plans and review procedures.***

*A. Any use that is subject to the requirements for a site plan review shall be processed in accordance with the procedures established under CMC Chapter 18.55 Administration and Procedures for Type II project permit applications.*

*B. Site plan review and approval shall be required prior to issuance of grading or other building permits.*

**Response:** The proposed use is subject to site plan review and will be processed as a Type II permit. The request is being submitted concurrently with a Type III Conditional Use application to permit the Leadbetter Road station, and will be processed according to Type III procedures.

### ***18.18.040 - Submittal and contents of a complete application.***

*In addition to the submittal requirements under CMC Chapter 18.55 Administration and Procedures, each application for site plan review shall contain the following information. Items may be waived if, in the judgment of the community development department, the items are not applicable to the particular proposal.*

- A. A written description addressing the scope of the project, the nature and size in gross floor area of each use, and the total amount of square feet to be covered by impervious surfaces;*

**Response:** The submitted narrative includes this information.

B. *A vicinity map showing site boundaries, and existing roads and accesses within and bounding the site;*

**Response:** A vicinity map showing site boundaries and existing roads and accesses within and bounding the site is included as Sheet P1.

C. *A topographic map based upon a site survey delineating contours, existing and proposed, at no less than five-foot intervals, and which locates existing streams, marshes, and other natural features;*

**Response:** A site survey was conducted in early 2016. A topographic map based on that site survey and showing the required information is included as Sheets P10 through P19.

D. *Site plans drawn to a scale no smaller than one inch equals fifty feet showing location and size of uses, buffer areas, proposed areas of disturbance or construction outside of the building footprint, yards, open spaces and landscaped areas, and any existing structures, easements and utilities;*

**Response:** A site plan at a scale of 1":20' and showing the required information is included as Sheets P2, P5 and P8.

E. *A circulation plan drawn to a scale acceptable to the community development director illustrating all access points for the site, the size and location of all driveways, streets, and roads, with proposed width and outside turning radius, the location, size, and design of parking and loading areas, and existing and proposed pedestrian circulation system. If a project would generate more than one hundred average daily trips either based on the latest edition of the International Transportation Engineer's (ITE) Trip Generation Manual or evidence substantiated by a professional engineer licensed in the state of Washington with expertise in traffic engineering, a traffic impact study shall be submitted;*

**Response:** A circulation plan including the required information is included as Sheets P2 and P5.

Each pump station site has been provided access and parking suitable for the use, which will be for maintenance vehicles. The pedestrian bridge is accessible by maintenance vehicles and is located adjacent to an existing parking lot. The NE 232<sup>nd</sup> Avenue Pump Station will have a "hammerhead" for turning around. Because of the steep elevations, the Leadbetter Road Pump Station will not have a hammerhead, and maintenance vehicles will back in or out of the short drive. City maintenance staff have been involved in the development of the access roads.

The NE 232<sup>nd</sup> Avenue Pump Station will be accessed using a new paved entrance off of NE 232<sup>nd</sup> Ave.

The Leadbetter Road Pump Station will be accessed from a new roadway proposed for the CJ Dens development, approximately 1,200 feet northwest of Adams Street. The pump station will share a tract with the developer's stormwater facility.

The pedestrian bridge will be accessed via the existing parking lot and circulation system to the south.

The pedestrian bridge will be accessed via the existing parking lot and circulation system to the south.

The project is a public infrastructure project and is not listed as a land use in the ITE Trip Generation Manual. Because there are no employees on site and vehicular trips to and from the site occur infrequently for maintenance and repairs, it is reasonable to assume that the pump stations will collectively generate fewer than 100 average daily trips, and a traffic impact study is not required.

*F. A preliminary drainage and stormwater runoff plan;*

**Response:** Preliminary drainage and stormwater runoff plans for the NE 232<sup>nd</sup> Avenue and Leadbetter Road pump stations are included as Sheets P19 and P20.

*G. A utility plan;*

**Response:** A utility plan is included as Sheets P2 and P5. The proposed project is a sewer utility, and includes water lines for a portion of the project. Each pump station site is served by water and electricity.

*H. A plot plan of all proposed landscaping including the treatment and materials used for open spaces, and the types of plants and screening to be used;*

**Response:** A landscaping plan including the required information is included as Sheets P3, P6 and P9. No open space is proposed as part of the project. Landscape screening will be installed at each pump station, with additional screening provided for the NE 232<sup>nd</sup> Avenue Pump Station to meet open space and park standards.

*I. Typical building elevation and architectural style; and*

**Response:** The project will install equipment canopies at the 232<sup>nd</sup> Avenue and Leadbetter Road pump stations, which cover some of the mechanical components of the site. The design of these canopies is illustrated on Sheets P4 and P7. In addition, although the majority of the pump station structures are below ground, there are some aboveground components. Visible components vary by station and include bio-filter fans, surge tanks; compressors within noise enclosures; chemical storage tanks and associated infrastructure; pig launchers; and piping.

The new pedestrian bridge will be consist of a steel structure and a concrete deck and will be pre-fabricated and delivered to the site in pieces. See Sheet P8.

*J. An engineer estimate of costs for site improvements, both public and private.*

**Response:** An engineer's estimate of the cost of the proposed improvements is attached as Appendix F.

**18.18.060 - Criteria for approval.**

*The city shall consider approval of the site plans with specific attention to the following:*

*A. Compatibility with the city's comprehensive plan;*

**Response:** Applicable policies of the City's Comprehensive Plan are contained in Chapter 5 Public Facilities and Services. Compatibility with those policies is addressed below. This criterion is met.

*B. Compliance with all applicable design and development standards contained in this title and other applicable regulations;*

**Response:** The proposed pump stations are categorized as "Pumping station" use in Chapter 18.07 Use Authorization, and the pedestrian bridge is both a "Pedestrian and multiuse path" and a "Public utility." "Pumping station" uses are permitted in the R-7.5 zone as a Conditional Use. Subsection 18.07.050 identifies the uses permitted in the City's park and open space zones. "Pumping station," "Pedestrian and multiuse path," and "Public utility" uses are permitted outright in the OS Zone.

The Leadbetter Road Pump Station is located in the R-7.5 Zone and is subject to the standards of Subsection 18.09.040 Table 2. The standards of that subsection are addressed in this narrative.

The NE 232<sup>nd</sup> Avenue Pump Station and the new pedestrian bridge are located in the County's PF Zone and the City's OS Zone, respectively, and are subject to the standards of Subsection 18.32.030. The standards of that subsection are addressed in this narrative.

The pump stations and the pedestrian bridge are also subject to Chapter 18.18 Design Review. Compliance with that chapter is addressed below.

This criterion is met.

*C. Availability and accessibility of adequate public services such as roads, sanitary and storm sewer, and water to serve the site at the time development is to occur, unless otherwise provided for by the applicable regulations;*

**Response:** The proposed project will provide sanitary sewer services to sites throughout the project area. The required roads, water, and electricity to serve the development is available and accessible. This criterion is met.

*D. Adequate provisions are made for other public and private services and utilities, parks and trails (e.g., provide copies of private covenant documents);*

**Response:** Portions of the project alignment also include water pipes to serve current and future development adjacent to the sewer alignment. In addition, a portion of the T-3 Trail System will be dedicated and constructed as part of the project. This criterion is met.

*E. Adequate provisions are made for maintenance of public utilities; and*

**Response:** The project will be under the jurisdiction of the City of Camas and will be maintained by the City. This criterion is met.

*F. All relevant statutory codes, regulations, ordinances and compliance with the same. The review and decision of the city shall be in accordance with the provisions of CMC Chapter 18.55 Administration and Procedures.*

**Response:** Compliance with all relevant statutory codes, regulations, and ordinances are addressed within this narrative. The review and decision shall be completed in accordance with the provisions of CMC Chapter 18.55 Administration and Procedures. This criterion is met.

**18.18.080 - Duration of approval.**

*Construction on the project must commence within twenty-four months from the date of final action by the city; otherwise, the approval of the project becomes null and void.*

**Response:** Construction on the project is anticipated to begin in Spring 2017, within 24 months of the anticipated date of final action by the city.

**F. Chapter 18.19 Design Review**

**18.19.020 - Scope.**

*Design review is required for all new developments within commercial, mixed-use, business park, or multifamily zones, redevelopment (including change in use, e.g., residential to commercial), or major rehabilitation (exterior changes requiring a building permit or other development permit). Commercial uses in the context of design review include both traditional uses listed as commercial under the zoning code as well as recreational, religious, cultural, educational, and governmental buildings and associated properties. Additionally, design review is applicable to all new developments or redevelopments within a gateway area as defined in the design review manual.*

**Response:** The proposed pump stations and pedestrian bridge are new development and are subject to Minor Design Review.

**18.19.030 - Design review manual adopted.**

*The city's design standards are primarily contained in the design review manual, which was adopted by the city.*

**18.19.050 - Design principles.**

*The principles as provided in the DDM or DRM are mandatory and must be demonstrated to have been satisfied in overall intent in order for approval of a design review application to be granted. Standard principles shall apply to all commercial, mixed use, or multifamily uses. Specific principles are used in addition to the standard principles for gateways and corridors, commercial, mixed uses, and multifamily (e.g. apartments, townhouses, duplexes).*

**A. Standard Principles.**

- 1. Landscaping shall be done with a purpose. It shall be used as a tool to integrate the proposed development into the surrounding environment.*
- 2. All attempts shall be made at minimizing the removal of significant natural features. Significant natural*

- features shall be integrated into the overall site plan.*
3. *Buildings shall have a "finished" look. Any use of panelized materials shall be integrated into the development in a manner that achieves a seamless appearance.*
  4. *A proposed development shall attempt to incorporate or enhance historic/ heritage elements related to the specific site or surrounding area.*

**Response:** Per City staff, the proposed pump stations and pedestrian bridge are subject to the general principles and guidelines of the Design Review Manual. Compliance with the Standard Principles & Guidelines is described in Table 2.

**18.19.060 - Guidelines.**

A. *The guidelines include five major categories:*

1. *Landscaping and screening;*
2. *Architecture;*
3. *Massing and setbacks;*
4. *Historic and heritage preservation; and*
5. *Circulation and connections.*

B. *Each of the major guidelines include subcategories. Compliance with the guideline categories and subcategories demonstrate compliance with the principles. However, not every guideline may be deemed applicable, and therefore required, by the approval authority. Additionally, the approval authority may approve a variance from one or more guidelines, provided the overall intent of the principles is satisfied. [...]*

**Response:** Per City staff, the proposed pump stations are subject to the general principles and guidelines of the Design Review Manual. Compliance with the Standard Principles & Guidelines is described in Table 2.

**Table 2. Compliance with Design Review Manual**

<b>Standard Design Principles &amp; Guidelines</b>	<b>Principle/Guideline</b>	<b>Applicant Response</b>
<b>Standard Design Principles</b>		
	1. <i>Landscaping shall be done with a purpose. It shall be used as a tool to integrate the proposed development into the surrounding environment.</i>	The landscaping at each pump station is intended to provide a soft transition between the pump station structures and open area surrounding them. The landscaping at each site is unique and intended to reflect the surrounding environment. Some landscaping is proposed for each end of the pedestrian bridge, and it will be a functioning public trail.
	2. <i>All attempts shall be made at minimizing the removal of significant natural features. Significant natural features shall be integrated into the overall site plan.</i>	No significant natural features exist on the pump station sites or the pedestrian bridge site.

<b>Standard Design Principles &amp; Guidelines</b>	<b>Principle/Guideline</b>	<b>Applicant Response</b>
	3. <i>Buildings shall have a "finished" look. Any use of panelized materials shall be integrated into the development in a manner that achieves a seamless appearance.</i>	The proposed canopy structures will be constructed of wood-clad metal supports and a gabled roof with cementitious shingles. No panelized materials are proposed. The proposed bridge will be constructed of concrete and steel.
	4. <i>A proposed development shall attempt to incorporate or enhance historic/ heritage elements related to the specific site or surrounding area.</i>	The 232 <sup>nd</sup> Avenue/Camp Currie pump station is located within the Camp Currie site. The pump station will be enclosed with a wooden fence to reflect the rustic park environment.
<b>Standard Design Guidelines</b>		
<b>Landscaping &amp; Screening</b>		
	<i>Landscaping and screening is an important factor in determining the overall character of the building site. Landscaping should be done with purpose, such as providing a buffer against less intense uses, screening parking or other components viewed as being intrusive, and defining the streetscape.</i>	Landscaping and screening is proposed for each pump station site in order to provide a visual buffer from public rights-of-way (streets and trails) and nearby development.
	<i>Signage should be placed on buildings or incorporated into the landscaping. If signs are illuminated, then they shall be front lit (light cast onto the face of the sign from a source positioned in front of the sign). Signage in the landscaping should be built in to the vegetation to keep it from being the main focus – similar to the light industrial zones. Efforts should be made to make signs vandal resistant. The intent is for the landscape not to be dominated by signage as well as to soften the visual impact. (see exhibit 1)</i>	No new signage is proposed.
	<i>Outdoor furnishings, when used, should be compatible with the immediate environment.</i>	No outdoor furnishings are proposed.

<i>Standard Design Principles &amp; Guidelines</i>	<i>Principle/Guideline</i>	<i>Applicant Response</i>
	<i>If the site is to be fenced, then the fencing should be incorporated into the landscaping so as to have little or no visual impact. (see exhibit 2)</i>	<p>Fencing is proposed for each of the pump station sites and the pedestrian bridge site.</p> <p>The 232<sup>nd</sup> Avenue Pump Station will be enclosed with a wood fence to reflect the rustic surroundings. See Sheet P4 for details. The fence will be largely shielded from view from 232<sup>nd</sup> Avenue by a combination of Western Red Cedar and native shrubs.</p> <p>The Leadbetter Road pump station will be surrounded by a fence which will be largely shielded from public view by a combination of existing trees and proposed landscaping, which includes a mix of Weeping Alaska Cedar and Douglas Fir trees and a mix of native shrubs within the 20 ft front setback.</p> <p>The northern access to the pedestrian bridge will be fenced along the eastern edge to prevent access to the City's water treatment facility. The proposed fence is a 6-foot chain link fence.</p>
	<i>The vegetation to be utilized should encourage native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City's Street Tree List. When possible, existing significant trees or other natural features that do not pose a hazard or hinder development should be required to remain and be incorporated into the landscaping and site plans.</i>	<p>The landscaping plan has been prepared in coordination with the Clark County and City of Camas Parks Department to ensure that the plantings are low maintenance. The proposed trees, shrubs, and ground cover are native plants. Proposed trees are located on-site and no streetscape trees are proposed.</p> <p>A number of existing trees will remain on each of the three sites and have been incorporated into the landscaping plans included as Sheets P3, P6 and P9.</p>

<i>Standard Design Principles &amp; Guidelines</i>	<i>Principle/Guideline</i>	<i>Applicant Response</i>
	<i>Landscape lighting should be low voltage, non-glare, and indirect. Street lighting, such as light poles and lamps, should be compatible with other nearby lighting on the same street, unless other lighting is expected to be replaced in the foreseeable future or a nostalgic theme compatible with the proposed development is desired.</i>	No landscape lighting or street lighting is proposed.
<i>Massing &amp; Setbacks</i>		
	<i>Higher density/ larger structures abutting lower density residential structures should be designed to mitigate size and scale differences. In some cases, creating a natural buffer may be appropriate. (see exhibit 3)</i>	The structures proposed for the 232 <sup>nd</sup> Avenue and Leadbetter Road pump stations are canopies that have been designed to reflect nearby park and residential structure designs. They are of modest size and scale (13 ft 6 in tall and 200-250 sq ft) and do not present size or scale differences.
<i>Architecture</i>		
	<i>Buildings should have a “finished”, sound, durable, and permanent appearance. Use of panelized materials should be integrated into the development in a manner that achieves a seamless appearance. This would bring into question the use of corrugated materials, standing seam, T-1 11, or similar siding materials, unless it can be shown through the use of renderings or other visual applications that the use of these materials will produce a development with a high visual (or aesthetic) quality. The applicant and/ or developer will be held accountable for ensuring that the finished development resembles and is in compliance with the submitted renderings as approved by the City.</i>	The proposed canopy structures will be constructed of steel supports wrapped with wood to provide a natural, permanent appearance. No panelized materials are proposed for the structures, which are open-sided. The pedestrian bridge will be constructed of concrete and steel.
	<i>Placement of buildings should preserve significant natural features, such as rocks, trees, etc. In doing so, developers may make use of site variances such as adjusting setbacks. (see exhibit 4)</i>	There are no significant natural features on the pump station sites.
	<i>Building walls or fences visible from roadways should be articulated in order to avoid a blank look. The wall can be broken up by including some combination of window/ display space, plantings, offsetting walls with two-tone colors, or creating plazas, water features, art (civic, pop, etc.), awnings, or similar devices. (see exhibit 5)</i>	Pump station fences will be screened from roadways by landscaping of varying heights. No building walls are proposed for the pump stations.

<b>Standard Design Principles &amp; Guidelines</b>	<b>Principle/Guideline</b>	<b>Applicant Response</b>
	<i>The use of bold colors should be avoided except when used as minor accents.</i>	The proposed color palette of the canopy structures and the bridge is natural.
<b>Historic and Heritage Preservation</b>		
	<i>The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.</i>	The 232 <sup>nd</sup> Avenue Pump Station is located within the historic Camp Currie. However, the station has been designed to recede into the park rather than command attention and no historic markers or signage is proposed for the site.

## **G. Chapter 18.32- Park and Open Space Zoning**

### **18.32.010 - Applicability.**

*The regulations of this chapter apply only to land held in public trust.*

**Response:** The NE 232<sup>nd</sup> Avenue Pump Station and pedestrian bridge are proposed on land owned by the City of Camas and Clark County Parks. These regulations are applicable.

### **18.32.020 - Permitted uses.**

*Uses shall be allowed in accordance with Table 18.07.050 - Park and open space land uses. Park use is also subject to the requirements and limitations of Chapter 12.32 Park Rules and Regulations.*

**Response:** Table 18.07.050 lists “Pumping station” as a permitted use in the OS Zone. The NE 232<sup>nd</sup> Avenue Pump Station is zoned County PF. The City and County have agreed to apply the City’s OS regulations to the County zone. “Pumping station,” “Pedestrian and multiuse path,” and “Public utility uses are allowed by right in both of these zones. No park use is proposed.

### **18.32.030 - Development standards.**

- A. Lot Area. There is no minimum or maximum lot size in the Park zoning districts.*
- B. Setbacks. The minimum setbacks are twenty feet.*
- C. Building lot coverage. The maximum building lot coverage shall not exceed thirty-five percent of lot area, with the exception of community or recreation centers, where lot coverage shall not exceed sixty percent.*
- D. Landscaping. All required yard setbacks shall be landscaped. Any storage areas visible to the right-of-way shall be screened. Parking area landscaping shall be consistent with CMC Chapter 18.13 Landscaping. [...]*

**Response:** The NE 232<sup>nd</sup> Avenue Pump Station and pedestrian bridge are located in the County’s PF Zone and is being reviewed for compliance with these regulations. The applicable standards of the OS zone are listed below. See Table 3.

**Table 3. Compliance with OS Zone Standards**

<b>Applicable Standards</b>	<b>OS Zone Requirement</b>	<b>Proposed – 232<sup>nd</sup> Ave</b>	<b>Proposed – Pedestrian Bridge</b>
Minimum Setbacks	30 ft (Leadbetter Rd) <sup>2</sup> 20 ft (Bridge)	~39 ft	~67 ft from Everett Street
Building Lot Coverage	35%	>1%	>1%
Landscaping	All required yard setbacks shall be landscaped.  Any storage areas visible to the right-of-way shall be screened.	The required yard setback is landscaped with a combination of Western Red Cedar and a variety of shrubs.  No storage areas are proposed.	No landscaping or storage areas are proposed.

*F. Signs. Signs shall be permitted according to the provisions of Chapter 18.15 Signs, under the commercial zoning standards.*

**Response:** No signs are proposed. This standard is not applicable.

**18.32.040 - Site plan review and design review.**

*A. Before a clearing, grading or building permit will be issued; Site Plan approval per Chapter 18.18 Site Plan Review is required. A phased site plan may be allowed in order to guide a new park development as funds and resources become available.*

**Response:** Site Plan approval has been requested as part of this application. See the responses for Chapter 18.18 Site Plan Review.

*B. When Design Review is applicable; the Parks & Recreation Commission shall conduct design review and find that the development is generally consistent with the design standards of CMC Chapter 18.19 Design Review, guidelines and principles for commercial and mixed uses.*

**Response:** Design Review is applicable and has been required as part of this application. See the responses to Chapter 18.19 Design Review.

<sup>2</sup> Per 17.19.030 - Tract, block and lot standards.

## H. Chapter 18.43 Conditional Use Permits

**Response:** The Leadbetter Road Pump Station is located within the R-7.5 Zone, which is a residential zone. A Conditional Use Permit is required to establish a pump station in this location.

### ***18.43.050 - Criteria.***

*The hearings examiner shall be guided by all of the following criteria in granting or denying a conditional use permit:*

*A. The proposed use will not be materially detrimental to the public welfare, or injurious to the property or improvements in the vicinity of the proposed use, or in the district in which the subject property is situated;*

**Response:** The proposed “Pumping station” uses are a component of a public infrastructure system that will benefit the public welfare through the provision of adequate sewer service to development in the North Shore Area. The pump station structures will be located on small sites and will be screened from the surrounding vicinity/district through a combination of landscaping and fencing. This criterion is met.

*B. The proposed use shall meet or exceed the development standards that are required in the zoning district in which the subject property is situated;*

**Response:** As described in the responses above, the proposed pump station and associated structures will meet or exceed the development standards of the R-7.5 zone in which it is located. This criterion is met.

*C. The proposed use shall be compatible with the surrounding land uses in terms of traffic and pedestrian circulation, density, building, and site design;*

**Response:** The proposed pump station is located on a vacant site with no active development proposals. However, it is assumed that future land uses will be residential in nature. The pump station will also front a future public trail (the T-3 trail) when Leadbetter Road is abandoned for a planned new north-south road.

The pump station will not generate traffic and will be accessed infrequently by maintenance vehicles. The station location does not preclude future development of the site with single-family homes meeting the density requirements of the R-7.5 Zone.

The site includes aboveground equipment including a transformer, generator, blower, pig launchers, electrical controllers and surge tank. The maximum height of this equipment is 8 ft. The site also contains a canopy structure, which has been designed to resemble residential accessory structures as much as possible. The structure includes a gable roof which will be shingled with cementitious materials, and the structural supports will be constructed of steel wrapped with treated wood.

The site improvements will be surrounded with a fence and will be softened by significant landscaping between the improvements and the future T-3 trail alignment. See Sheet P6 Landscaping Plan for details.

*D. Appropriate measures have been taken to minimize the possible adverse impacts that the proposed use may have on the area in which it is located;*

**Response:** Possible adverse impacts related to the proposed use include odor, noise, and visual impacts. However, the possible adverse impacts have been mitigated and result in no impact to the surrounding area.

Potential odor from the stations is mitigated by the use of biofiltration systems and chemicals added to the wastewater to eliminate the odorous compounds; the stations are quiet but are equipped with emergency generators in the event of a power outage. These generators are operated routinely for short periods to make sure they operate correctly, and they will turn on automatically in the event of a power outage. The pumps themselves make a little noise that is heard only when standing over the pump station wetwell. Possible visual impacts are being mitigated through the use of landscaping, including native trees and shrubs, and fencing. This criterion is met.

*E. The proposed use is consistent with the goals and policies expressed in the comprehensive plan;*

**Response:** Relevant Comprehensive Plan goals and policies are contained in Section 5.11 City Utilities. This project is included in the City's Sewer Comprehensive Plan as the method for providing sewer service to the City's newly annexed North Shore area.

*F. Any special conditions and criteria established for the proposed use have been satisfied. In granting a conditional use permit the hearings examiner may stipulate additional requirements to carry out the intent of the Camas Municipal Code and comprehensive plan.*

**Response:** There are no special conditions or criteria for "Pumping Station" uses contained in the municipal code. This criterion is not applicable.

## **I. Chapter 18.55 Administration and Procedures**

### ***18.55.050 - Initiation of action.***

*Except as otherwise provided, Type I, II, III, or BOA applications may only be initiated by written consent of the owner(s) of record or contract purchaser(s). Legislative actions may be initiated at the request of citizens, the city council, planning commission, or department director or division manager.*

**Response:** This application has been initiated by the owners of record or contract purchasers: the City of Camas; Clark County; and CJ Dens.

**18.55.060 - Preapplication conference meeting—Type II, Type III.**

- A. Prior to submitting an application for a Type II or Type III application, the applicant shall schedule and attend a preapplication conference with city staff to discuss the proposal. The preapplication conference shall follow the procedure set forth by the director.*
- B. To schedule a preapplication conference the applicant shall contact the planning department. The purpose of the preapplication conference is for the applicant to provide a summary of the applicant's development proposal to staff and in return, for staff to provide feedback to an applicant on likely impacts, limitations, requirements, approval standards, fees, and other information that may affect the proposal. The director may provide the applicant with a written summary of the preapplication conference within ten days after the preapplication conference.*
- C. Notwithstanding any representations by city staff at a preapplication conference, staff is not authorized to waive any requirements of the city code. Any omission or failure by staff to recite to an applicant all relevant applicable code requirements shall not constitute a waiver by the city of any standard or requirement.*
- D. A preapplication conference shall be valid for a period of one hundred eighty days from the date it is held. If no application is filed within one hundred eighty days of the conference or meeting the applicant must schedule and attend another conference before the city will accept a permit application. Any changes to the code or other applicable laws which take effect between the preapplication conference and submittal of an application shall be applicable.*
- E. The director may waive the preapplication requirements if, in the director's opinion, the development does not warrant these steps.*

**Response:** The project team attended a preapplication conference with City staff on June 16, 2016. This application was originally submitted on November 18, 2016, within 180 days of that meeting. The preapplication meeting notes are attached as Appendix A.

**18.55.110 - Application—Required information.**

*Type II or Type III applications include all the materials listed in this subsection. The director may waive the submission of any of these materials if not deemed to be applicable to the specific review sought. Likewise, the director may require additional information beyond that listed in this subsection or elsewhere in the city code, such as a traffic study or other report prepared by an appropriate expert where needed to address relevant approval criteria. In any event, the applicant is responsible for the completeness and accuracy of the application and all of the supporting documentation. Unless specifically waived by the director, the following must be submitted at the time of application:*

- A. A copy of a completed city application form(s) and required fee(s);*
- B. A complete list of the permit approvals sought by the applicant;*
- C. A current (within thirty days prior to application) mailing list and mailing labels of owners of real property within three hundred feet of the subject parcel, certified as based on the records of Clark County assessor;*

D. *A complete and detailed narrative description that describes the proposed development, existing site conditions, existing buildings, public facilities and services, and other natural features. The narrative shall also explain how the criteria are or can be met, and address any other information indicated by staff at the preapplication conference as being required;*

E. *Necessary drawings in the quantity specified by the director;*

F. *Copy of the preapplication meeting notes (Type II and Type III);*

G. *SEPA checklist, if required;*

**Response:** The application includes the required information. A mailing list and mailing labels of owners of property within 300 ft of the subject parcels has been prepared and is included as Appendix G; a project description is included in the Project Description section of this narrative and compliance with applicable approval criteria is addressed throughout; necessary drawings are attached as Exhibits; the pre-application meeting notes are attached as Appendix A; and the SEPA checklist and addendum are attached as Appendices B and C.

## **IV. COMPLIANCE WITH TITLE 17 LAND DEVELOPMENT**

### **Chapter 17.19 Design and Improvement Standards**

#### ***17.19.030 - Tract, block and lot standards.***

*[...]*

#### ***F. Landscaping.***

*[...]*

- 6. Storm drainage facilities, pump stations and other visible facilities shall be setback a minimum of thirty feet from any street or accessory structure and be landscaped in accordance with criteria in the Camas Design Standard Manual.*

**Response:** Both the Leadbetter Road and NE 232<sup>nd</sup> Avenue Pump Stations are over 30 feet from any street or accessory structures.

## **V. CONCLUSION**

The request for Conditional Use, Site Plan, and Design Review has been shown to be consistent with the applicable standards of the City of Camas. The applicant respectfully requests approval of the applications.



# Exhibit 2 DR16-13

## KEY NOTES

- 1 ROAD IMPROVEMENTS CONSTRUCTED BY OTHERS
- 2 AIR INTAKE WITH DAMPER
- 3 ABOVE GRADE PIG LAUNCHER
- 4 PIPE MATERIAL TRANSITION POINT - DI TO HDPE
- 5 LIMITS OF DISTURBANCE
- 6 4" HMA OVER 6" CSBC
- 7 CONDUIT TRENCH AND PUMP DISCONNECT PANEL

LEADBETTER ROAD PUMP STATION  
SITE, UTILITY & CIRCULATION PLAN  
PER SITE PLAN REVIEW REQUIREMENT 3.D, 3.E & 3.G



616 NE 4TH AVENUE  
CAMAS, WA 98607  
PH: (360) 834-3451

DEPARTMENT OF  
PUBLIC WORKS

CAMAS  
NORTH SHORE  
SEWER  
PROJECT



700 Washington Street  
Suite 401  
Vancouver, WA 98660  
Phone: (360) 737-9613  
FAX: (360) 737-9651  
www.otak.com

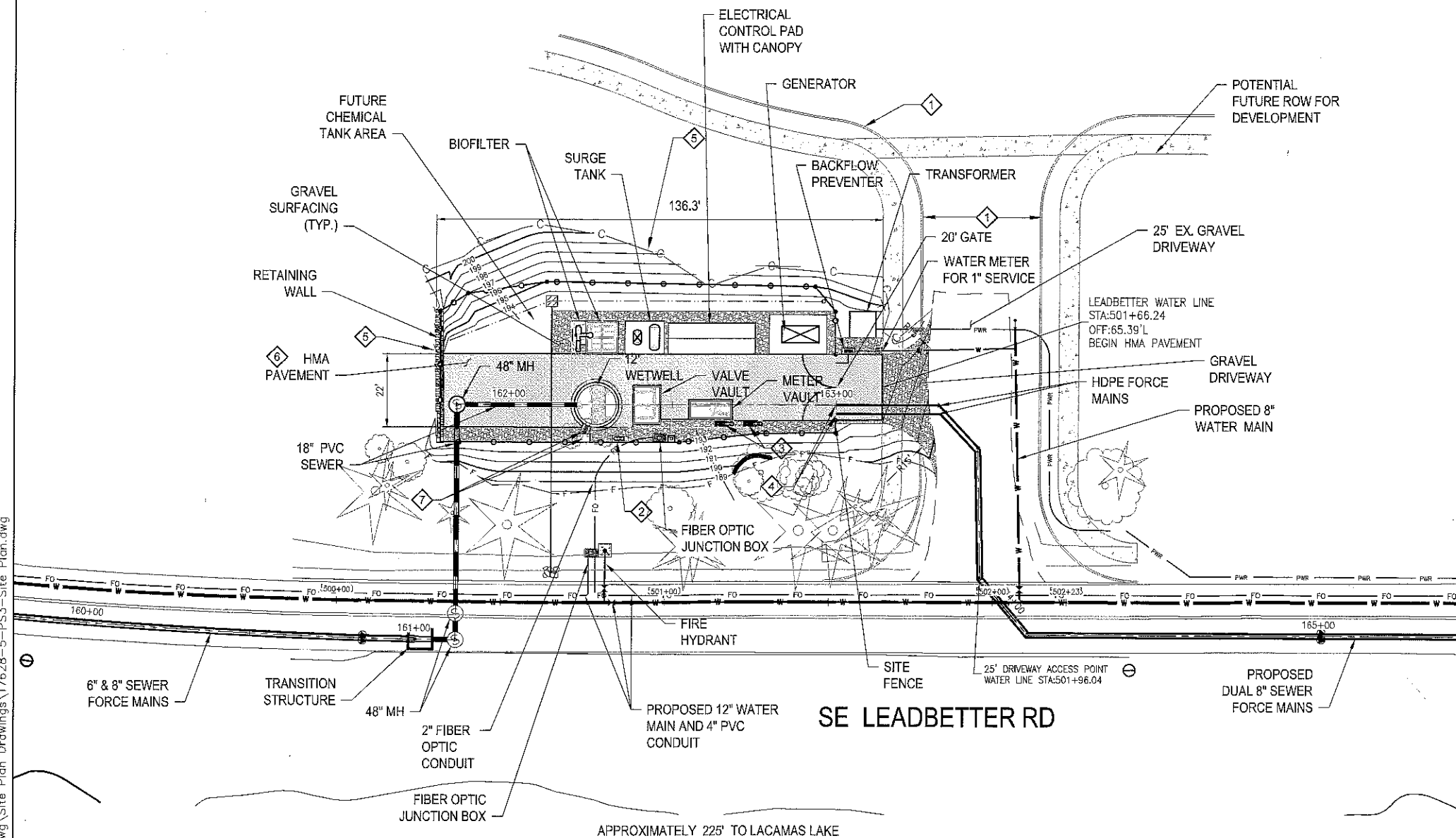
CAMAS PROJECT NUMBER  
WS--681C

STATUS	PAGE
<input checked="" type="checkbox"/> DRAFT	5 OF 20
<input type="checkbox"/> CONSTRUCTION	
<input type="checkbox"/> AS-BUILT	

SITE PLAN EXHIBIT NUMBER

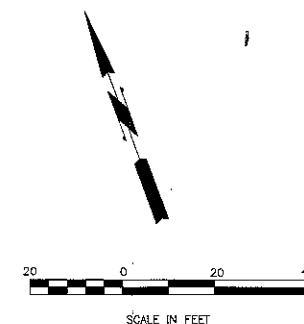
P5

CAMAS CATALOG NUMBER

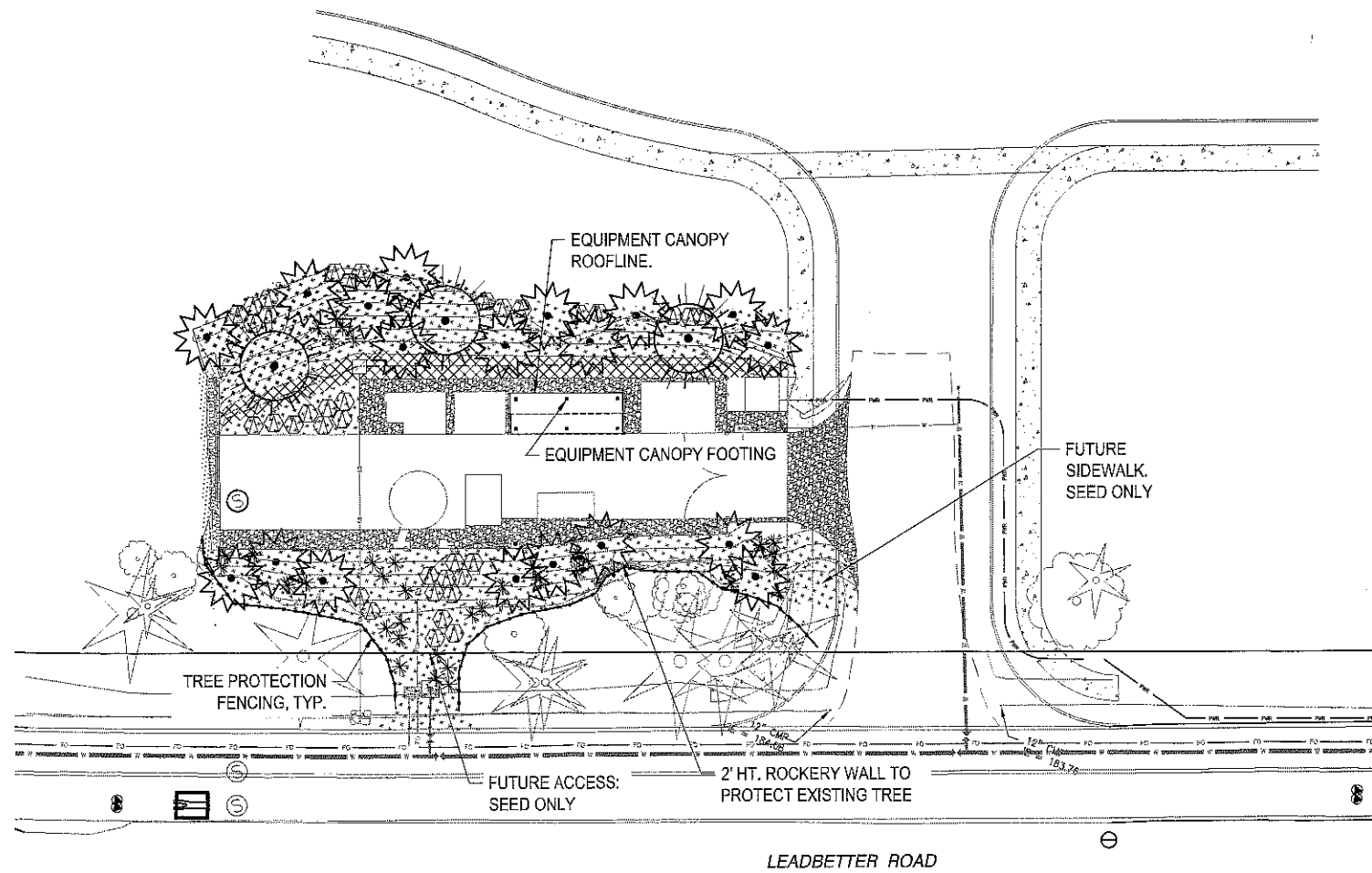


## LEADBETTER ROAD PUMP STATION SITE PLAN

1" = 20'-0"

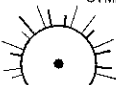



Dec 29, 2016 - 8:55am  
V:\PROJECT\17600\17628\CADD\ACAD\DWG\Site Plan Drawings\17628-6-L3.dwg






## PLANTING LEGEND


### TREES

SYMBOL	QTY	COMMON NAME / Botanical name, Size and Description
	3	DOUGLAS FIR / <i>Pseudotsuga menziesii</i> , 65' MIN. HT, B&B* or cont.
	19	WEeping ALASKA CEDAR / <i>Chamaecyparis nootkatensis</i> 'Pendula', 5' MIN. HT., B&B* or cont.


### SHRUBS AND GROUNDCOVER

SYMBOL	QTY	COMMON NAME / Botanical name	SIZE	SPACING
	36	TALL OREGON GRAPE / <i>Mahonia aquifolium</i>	5 GAL.	4' O.C.
	36	WESTERN SWORDFERN / <i>Polystichum munitum</i>	5 GAL.	4' O.C.
	1,456	KINNIKINNICK / <i>Arctostaphylos uva-ursi</i>	1 GAL.	2' O.C.

### SEED MIX

SYMBOL	QTY	DESCRIPTION	REMARKS
	859 SF .02 AC	SEED MIX #2	SEE SPECIFICATIONS FOR SEED MIX COMPOSITION AND APPLICATION RATE

### OTHER

SYMBOL	QTY	DESCRIPTION
	180 LF	TREE PROTECTION FENCING.

## LEADBETTER PUMP STATION LANDSCAPE PLAN PER SITE PLAN REQUIREMENT 3.H



616 NE 4TH AVENUE  
CAMAS, WA 98607  
PH: (360) 834-3451

DEPARTMENT OF  
PUBLIC WORKS

CAMAS  
NORTH SHORE  
SEWER  
PROJECT



700 Washington Street  
Suite 401  
Vancouver, WA 98660  
Phone: (360) 737-9613  
FAX: (360) 737-9651  
www.otak.com

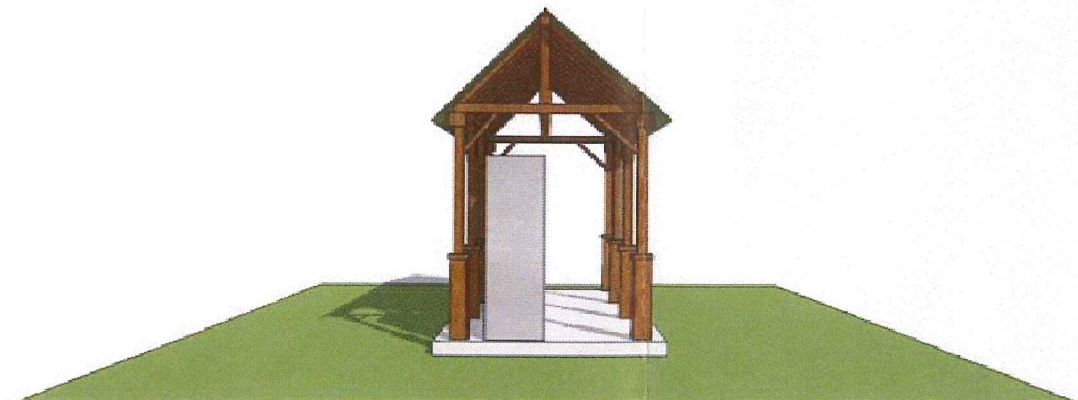
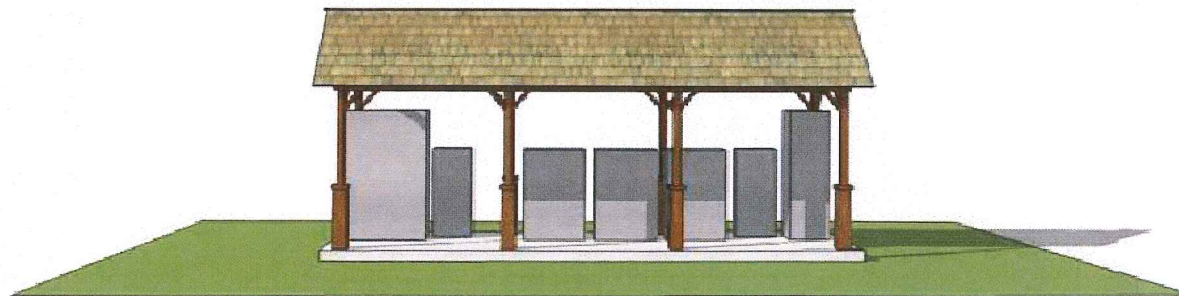
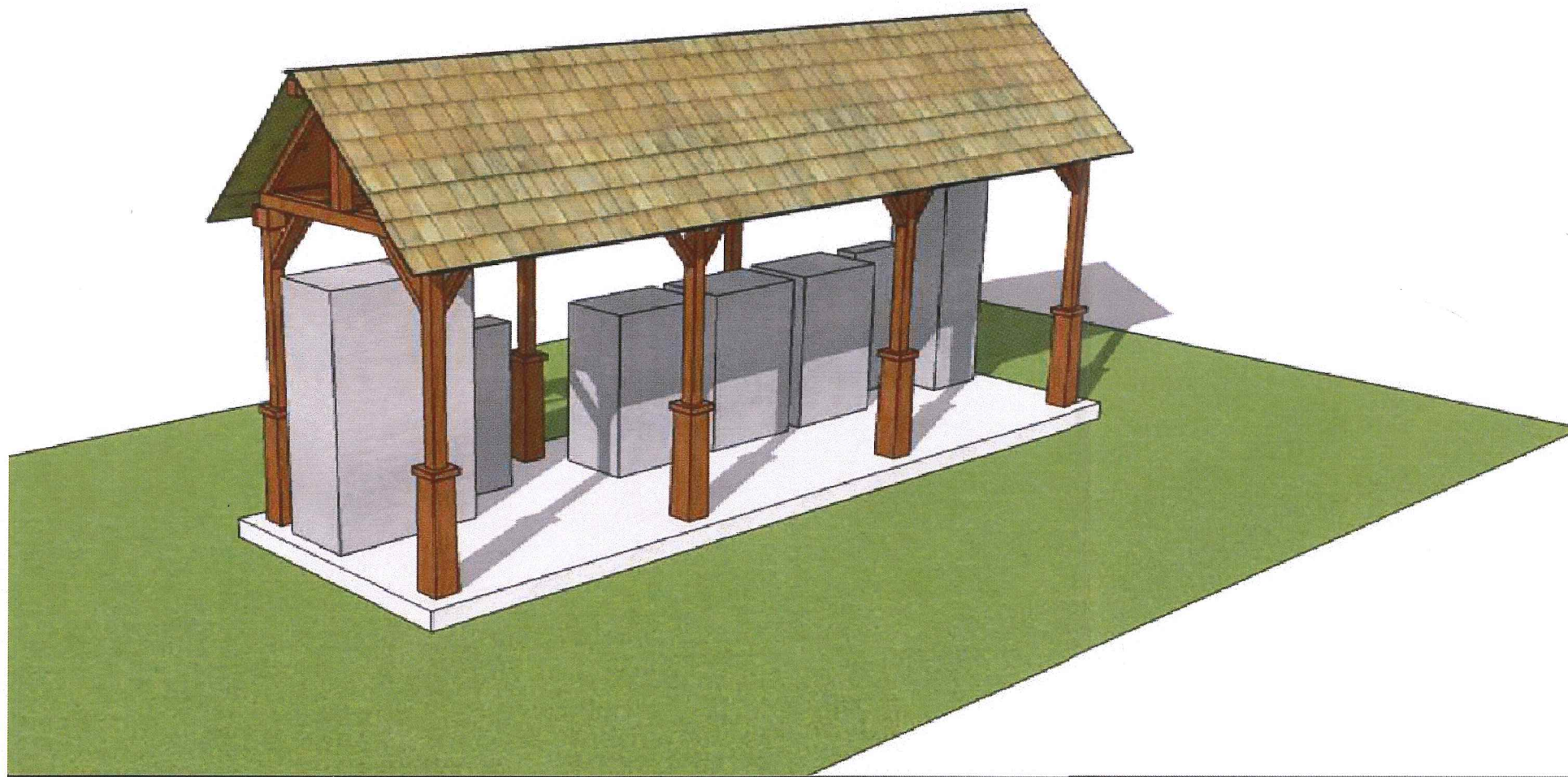
CAMAS PROJECT NUMBER  
WS-681C

STATUS	PAGE
<input checked="" type="checkbox"/> DRAFT <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> AS-BUILT	6 OF 20

SITE PLAN EXHIBIT NUMBER  
P6

CAMAS CATALOG NUMBER

Dec 30, 2016 -- 8:52am  
V:\PROJECT\17600\17628\CADD\ACAD\DWG\Site Plan Drawings\17628-4-Can47.dwg



LEADBETTER ROAD CANOPY

LEADBETTER ROAD ARCHITECTURAL  
CANOPY PLAN AND ELEVATION  
PER SITE PLAN REVIEW REQUIREMENT 3.1



616 NE 4TH AVENUE  
CAMAS, WA 98607  
PH: (360) 834-3451

DEPARTMENT OF  
PUBLIC WORKS

CAMAS  
NORTH SHORE  
SEWER  
PROJECT



700 Washington Street  
Suite 401  
Vancouver, WA 98660  
Phone: (360) 737-9613  
FAX: (360) 737-9651  
www.otak.com

CAMAS PROJECT NUMBER  
WS-681C

STATUS	PAGE
<input checked="" type="checkbox"/> DRAFT	7 OF 20
<input type="checkbox"/> CONSTRUCTION	
<input type="checkbox"/> AS-BUILT	

SITE PLAN EXHIBIT NUMBER  
P7

CAMAS CATALOG NUMBER

DESIGN REVIEW CHECKLIST  
Leadbetter Road Pump Station  
DR16-13      February 28, 2017

The purpose of this sheet is to provide a simplified and expedited review of the design review principles and guidelines using objective review standards. The standards are intended as tool for the decision-maker in making findings that the proposal either achieves compliance with the intent of the principles or reasonably mitigates any conflict. When reviewing the check sheet, the proposal should as a whole "meet" the standards and thus be generally consistent with the overriding principles. [Compliance or non-compliance with any one standard is not a determinant. However, where several standards fail, they should be offset by standards that exceed other standards]

Standard Principles and Guidelines

1. Landscaping should be done with a purpose. It should be used as a tool to integrate the proposed development into the surrounding environment as well as each of the major project elements (e.g. parking, buildings(s), etc.).				
Exceeds	Meets	Fails	NA	
				Landscaping, including trees, shrubs, and vegetative groundcover, is provided to visually screen and buffer the use from adjoining less intense uses and screening parking or other components viewed as being less intrusive.
				Signs are located on buildings or incorporated into the landscaping so as not to be the main focus either during the day or night. (e.g. low signs with vegetative backgrounds to soften visual impact). If illuminated they shall be front lit. Efforts have been made to make signs vandal resistant.
				Outdoor furniture samples have been submitted consistent with the overall project design.
				Proposed fencing is incorporated into the landscaping so as to have little or no visual impact.
				The vegetation to be utilized includes native, low maintenance plantings. Trees planted along streetscapes with overhead power lines should include only those identified on the City's Tree List. Retain significant trees if feasible.
				Landscape lighting - low voltage, non-glare, indirect lighting is directed, hooded or shielded away from neighboring properties.
				Street lighting (poles, lamps) is substantially similar or architecturally more significant than other street lighting existing on the same street and will not conflict with any City approved street lighting plans for the street.
				Parking and building lighting is directed away from surrounding properties through the use of hooding, shielding, siting and/or landscaping.
2. All attempts should be made at minimizing the removal of significant natural features. Significant natural features should be integrated into the overall site plan.				
Exceeds	Meets	Fails	NA	

				Existing trees over 6" dbh that are not required to be removed to accommodate the proposed development are retained and incorporated into the landscape plan.
				Rock outcroppings, forested areas and water bodies are retained.
3. Buildings should have a "finished" look. Any use of panelized materials should be integrated into the development in a manner that achieves a seamless appearance.				
Exceeds	Meets	Fails	NA	
				Use of corrugated materials, standing seam, T-1 11, or similar siding materials are questionable, unless it can be shown through the use of renderings or other visual applications that the use of these materials will produce a development with a high visual (or aesthetic) quality.
				Buildings walls or fences visible from roadways should be articulated in order to avoid a blank look. The walls can be broken up by including some combination of window/display space, plantings, offsetting walls with two-tone colors, or creating plazas, water features, art (civic, pop, etc.) awnings, or similar devices.
				The use of bold colors has been avoided unless used as minor accents.
				Higher density/larger structures abutting lower density residential structures have been designed to mitigate size and scale differences. In some cases, creating a natural buffer may be appropriate.
4. A proposed development shall attempt to incorporate or enhance historic/heritage elements related to the specific site or surrounding area.				
Exceeds	Meets	Fails	NA	
				The use of Historic Markers, information kiosks, project names, architectural features, or other elements of the project should promote the historic heritage of the site or surrounding area.

### Specific Principles and Guidelines

Commercial / Mixed Use				
Exceeds	Meets	Fails	NA	
				On-site parking areas shall be placed to the interior of the development unless site development proves prohibitive. All on-site parking areas along adjacent roadways shall be screened with landscaping.
				Buildings shall be placed as close to streets and roads unless site constraints make it impossible or characteristics of the surrounding properties already developed make it incompatible. Otherwise, retail frontage setbacks shall not exceed 25 feet from back of curb.
				Window and door placement shall be provide a high degree to transparency at the lower levels of the building, office and retail buildings shall provide a minimum solid to void ratio of 60%/40%, storefront windows shall be used frequently to enliven the sidewalks.
				Developments containing a multiple of uses/activities shall integrate each use/activity in a manner that achieves a seamless appearance or creates a cohesive development.
				Intersections should be illuminated, but not dominated by lighting. Incorporating lighting into the landscape should be encouraged to

				illuminate the quality of the natural environment. Street light poles and lamps should be compatible with other nearby lighting on the same street.
				Parking spaces should be clustered in small groupings. Groupings should be separated by landscaping to create a pedestrian friendly, park like environment. Parking lot landscaping should be credited toward the total landscaping requirement.
				Circulation and Connections: Pathways define traffic/pedestrian movement. Buildings brought up to the road help define these movements. Trees and/or planting strips shall be used for separating vehicles and pedestrian movements, as well as provide a secure and pedestrian friendly environment.
				Developments surrounded by residential areas or adjacent to residentially zoned properties should be built with a residential feel (i.e. size, scale, and materials compatible with neighboring buildings).
				Buildings over two stories should have the third story and above offset from the first two stories, if surrounding developments are less than three stories or land use designations on adjacent sites do not allow more than three story development.
				Pathways define traffic/pedestrian movement. Buildings brought up to the road help define these movements.
				New streets intersecting commercial properties should be designed to create a safe environment. "Coving" techniques and "round-a-bouts" should be considered for traffic calming when appropriate.