City of Sandy

Agenda

Planning Commission Meeting

Meeting Location: City Hall- Council Chambers, 39250 Pioneer Blvd., Sandy, Oregon 97055

Meeting Date: Tuesday, March 19, 2019

Meeting Time: 7:00 PM

Page

1. ROLL CALL

2. APPROVAL OF MINUTES

2.1. PC Minutes -1-28-19 - Draft Minutes 3 - 6

3. REQUESTS FROM THE FLOOR - CITIZEN COMMUNICATION ON NON- AGENDA ITEMS

4. PRESENTATION

4.1. PRESENTATION: Transit Master Plan Update (Andi Howell and Michelle Poyourow)

5. NEW BUSINESS

5.1. Public Hearing

5.2. 18-054 CUP Scenic Street Camp Academy Conditional Use 7 - 40

Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. Staff recommends the Planning Commission **approve** the conditional use permit request with modifications as recommended in this report.

18-054 CUP Scenic Street Camp Academy Conditional Use - Pdf

5.3. 18-047 DR/VAR/ADJ Sandy Vault Self Storage 41 - 243

Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. Staff recommends the Planning Commission **approve** the application with modifications as recommended in this report.

Staff recommends the Planning Commission **approve** the following adjustments,

variances, and deviations:

- Type II Adjustment to Section 17.90.120(B.3.d.4) to allow up to 36 percent metal siding on the south elevations of Buildings 4 and 5, the south elevation of Building 2, and the north elevation of Building 3.
- Special Variance to Section 17.90.120(A.3) and 17.98.80(A) to allow a second right-out only driveway egress on Champion Way to be spaced less than 150 feet from the existing common access easement driveway.
- Special Variance to Section 17.90.120(C.1) to allow flat roofs on all buildings.
- Special Variance to Sections 17.90.120(E.2) to allow less than the required window coverage on the north elevation of Building 1, the east elevations of Buildings 1 and 2, and the south elevations of Buildings 4 and 5, provided the applicant detail metal awnings above the proposed windows and landscaped trellises in the two proposed sections of metal siding on the south elevations of Buildings 4 and 5.
- Special Variance to Section 17.74.40(B.3) to allow a retaining wall in the front yard greater than 6 feet tall.
- Design deviation to Section 17.90.120(D.3 and 7) to not require a public entrance and connecting walkway on Buildings 2-5.

Staff recommends the Planning Commission **deny** the applicant's request for the following variances:

- Special Variance to Section 17.90.120(B.3.d.4) to allow 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3.
- Special Variance to Section 17.90.120(E.2) to allow less than the required window percent coverage on the east elevation of Building 5 and the west elevations of Buildings 3 and 4.

If the applicant chooses to apply for the two additional variances identified by staff, staff recommends the Planning Commission:

- Decide whether to **approve or deny** a Special Variance to Section 17.90.120(D.1) to allow less than 50 percent of the street frontage along Industrial Way to be comprised of buildings within 20 feet of the sidewalk.
- **Approve** a Special Variance to Section 17.90.120(G) to allow 250 square feet of civic space rather than the 1,727 square feet required.

- Pdf

6. ITEMS FROM COMMISSION AND STAFF

7. ADJOURN

Sandy Planning Commission
Regular Meeting
Monday, January 28, 2019

Chairman Jerry Crosby called the meeting to order at 7:00 p.m.

1. ROLL CALL

Commissioner Carlton – Present
Commissioner Lesowski – Excused
Commissioner MacLean Wenzel – Present
Commissioner Logan – Present
Commissioner Mobley – Present (arrived at 7:19 p.m.)
Chairman Crosby – Present

Others present: Associate Planner James Cramer, Associate Planner Emily Meharg, City Attorney David Doughman (via telephone), Planning Assistant Rebecca Casey

2. APPROVAL OF MINUTES – October 29, 2018
Motion: To approve minutes for October 29, 2018
Moved By: Commissioner Logan
Seconded By: Commissioner Carlton
Yes votes: Commissioners Carlton, Logan, Mobley and Chairman Crosby
No votes: None
Abstentions: Commissioner MacLean Wenzel
The motion passed

3. APPOINTMENTS: – Planning Commission Chair and Vice-Chair
Chairman Crosby and Commissioner Carlton were both nominated and re-appointed.

Motion: To re-appoint Chairman Crosby as Chairman and Commissioner Carlton as Vice-Chairman for another year.
Moved By: Commissioner Carlton
Seconded By: Commissioner Logan
Yes votes: Commissioners Carlton, Maclean-Wenzel, Logan, and Chairman Crosby
No votes: None
Abstentions: None
The motion passed

Commissioner Lesowski was not in attendance, but his letter stating support for both Commissioner Carlton as Vice Chairman and Chairman Crosby as Chairman was read into the record.

4. REQUESTS FROM THE FLOOR – CITIZEN COMMUNICATION ON NON-AGENDA ITEMS
None

NEW BUSINESS
5. PUBLIC HEARING – Type III Special Variance for Setbacks at 1850 Rachel Dr. (18-051 VAR) Chairman Crosby opened the public hearing on File No. 18-051 VAR (RV Storage Setback) at 7:04 p.m. Crosby noted that this is a legislative public hearing. He called for any abstentions, conflicts of interest, ex-parte contact, challenges to the jurisdiction of the Planning Commission, or any challenges to any individual member of the Planning Commission. With no declarations noted, he went over the public hearing procedures for a legislative public hearing and called for the staff report.

Staff Report:
Associate Planner James Cramer summarized the staff report and addressed the background, factual information, public comments staff received, applicable criteria, and went over a brief slide show. Cramer finished his report with the summary and conclusion and staff's recommendation to approve the variance request with modifications that were recommended in the staff report.

Applicant Presentation:
Robert Mottice, Owner, 18050 Rachel Dr, Sandy, OR 97055
Mr. Mottice handed out pictures to the Commission of his property and explained the background behind building the RV storage. Mr. Mottice stated that he recently purchased his home due to the fact it had an existing RV storage area. He said he had to slope the roof to cease the rain water from flooding the neighbor's backyard. Mr. Mottice said the height of the structure is due to having a truck camper that needs to be raised in order for him to pull his truck out. He also said they worked hard at making the structure "fit in".

Chairman Crosby asked Mr. Mottice why he didn't go with a gabled roof and gutters. Mr. Mottice said in hindsight it could have been done that way.

Proponent Testimony:
None

Opponent Testimony:
None

Testimony:
None

Staff Recap:
Associate Planner James Cramer followed up and mentioned that the applicant does plan on putting gutters on the south side of the RV storage structure.

Before the discussion, Commissioner Carlton asked if Commissioner Mobley could vote on this hearing since he arrived late. City Attorney David Doughman explained that Mobley could still vote as long as he read the material ahead of time and feels comfortable voting on the agenda item.

Discussion:
Commissioner Maclean-Wenzel asked Mr. Mottice how his neighbors to the north feel about the storage structure. Mr. Mottice said they told him they understand that it's tall, but they are grateful there isn't water dumping in their backyard anymore making a mud pit.

Chairman Crosby stated that he would have liked to have seen a gabled roof, but as staff has stated, the applicant meets the height requirements and Mr. Mottice is only asking for a Variance on the setbacks.

Commissioner Carlton said the structures height is quite imposing and could have been built shorter. Commissioner Maclean-Wenzel said she shares empathy for the applicant, but she also shares Commissioner Carlton's concerns about setting a precedent. Maclean-Wenzel also stated she feels the applicant has tried to do the right thing.

Maclean-Wenzel asked the applicant if he plans on painting the structure to match his house and Mr. Mottice replied yes.

Commissioner Logan said he empathizes with the applicant, but agrees with Commissioner Carlton's concerns.

Motion: To Close the Public Hearing at 7:29 p.m.
Moved by: Commissioner Maclean-Wenzel
Seconded by: Commissioner Carlton
No votes: None
Abstentions:
The motion passed.

Motion: To approve File No.18-051 VAR (RV Storage Setback Variance at 18050 Rachel Dr.) as presented by staff in the staff report.
Moved by: Commissioner Maclean-Wenzel
Seconded by: Commissioner Carlton
Yes votes: Commissioner Maclean-Wenzel and Chairman Crosby
No votes: Commissioners Carlton and Logan
Abstentions: Commissioner Mobley (he arrived at 7:19 p.m. and did not feel comfortable voting)
The motion Failed.

City Attorney David Doughman was asked what happens during a tie vote. Doughman explained that the Motion fails during a tie. He said that more discussion between the Commission could happen if they feel they could come to a consensus. Commissioner Maclean-Wenzel asked Commissioner Carlton what it would take to get his vote of approval. Carlton said the structure is "just too big" and thinks the applicant needs to come up with something a little less imposing. Associate Planner Cramer said the applicant can appeal this decision to City Council due to the motion failing. Chairman Crosby explained to the applicant they will get the appeal paperwork from staff.

NEW BUSINESS

6. PUBLIC HEARING – Type III Tree Variance City Townhomes Subdivision (19-001 TREE)
Chairman Crosby opened the public hearing on File No. 19-001 TREE (Tree Variance - City Townhomes Subdivision) at 8:00 p.m. Crosby noted that this is a legislative public hearing. He called for any abstentions, conflicts of interest, ex-parte contact, challenges to the jurisdiction of the Planning Commission, or any challenges to any individual member of the Planning Commission. With no declarations noted, he went over the public hearing procedures for a legislative public hearing and called for the staff report.

Staff Report:
Associate Planner Emily Meharg summarized the staff report and addressed the background, factual information, public comments staff received, applicable criteria, and went over a brief slide show. Meharg finished her report with the summary and conclusion and staff's recommendation to approve the Variance request with modifications that were recommended in the staff report.

Applicant Presentation:
Bruce Erickson, 22035 SE Firwood Dr, Sandy, OR 97055
Mr. Erickson stated that he read the staff report and agrees with the analysis and recommendations staff has presented.

Motion: To Close Public Hearing at 8:22 p.m.
Moved by: Commissioner Carlton
Seconded by: Commissioner Logan
No votes: None
Abstentions:
The motion passed.

Motion: To approve File No.19-001 TREE (Tree Variance for City Townhomes Sub.) as

presented by staff in the staff report with modifications and the condition related to aeration of compacted soils.
Moved by: Commissioner Logan
Seconded by: Commissioner Maclean-Wenzel
Yes votes: Commissioner Carlton, Maclean- Wenzel, Logan, Mobley and Chairman Crosby
No votes: None
Abstentions: None
The motion Passed

7. ITEMS FROM COMMISSION AND STAFF
Staff stated that there will be a meeting in February. Chairman Crosby said that the Planning and Building Director Kelly O'Neill had mentioned there will be many upcoming applications.

Commissioner Carlton inquired about the empty position that former Commissioner Abrams held. Staff explained that Crosby and O'Neill will get together to discuss the next step moving forward.

Commissioner Logan and Mobley both said they will have a conflict with the regular scheduled March meeting date due to spring break.

8. ADJOURNMENT
Motion: To adjourn
Moved By: Commissioner Logan
Seconded By: Commissioner MacLean-Wenzel
Yes votes: All Ayes
No votes: None
Abstentions: None
The motion passed.

Chair Crosby adjourned the meeting at 8:34 p.m.

_____
Chairman Jerry Crosby

Attest:

_____ Date signed:_____
Kelly O'Neill Jr., Planning & Building Director

Staff Report

Meeting Date:	March 19, 2019
From	Emily Meharg, Associate Planner
SUBJECT:	18-054 CUP Scenic Street Camp Academy Conditional Use

Background:
Camp Academy, LLC submitted an application for a conditional use permit to allow a snowboarding academy and dormitory facility to be located at 39641 Scenic Street. The Academy would house 144 students training for the Winter Olympics. There are no proposed changes to the site, with the exception of the removal of two parallel parking spaces to accommodate bus circulation. The students will not be allowed to drive to the proposed site independently.

Recommendation:
Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. Staff recommends the Planning Commission **approve** the conditional use permit request with modifications as recommended in this report.

Code Analysis:
See attached

Budgetary Impact:
None

39250 Pioneer Blvd
Sandy, OR 97055
503-668-5533

WHERE INNOVATION MEETS ELEVATION

STAFF REPORT
TYPE III LAND USE PROPOSAL

REPORT DATE: March 12, 2019

SUBJECT: File No. 18-054 CUP Scenic Street Camp Academy Conditional Use

AGENDA DATE: March 19, 2019

DEPARTMENT: Planning Division

Application Submitted: November 21, 2018
Application Complete: January 23, 2019
120-Day Deadline: May 23, 2019

STAFF CONTACT: Emily Meharg, Associate Planner

EXHIBITS:

Applicant's Submittals:

A. Land Use Application
B. Narrative
C. Supplemental Narrative (Chapters 17.68 and 17.98)
D. Traffic Analysis Letter
E. Bus Circulation Plan
F. Site Plan

Agency Comments:

G. Public Works Director (March 5, 2019)

Public Comments:

H. Jeryl Mcgee (February 28, 2019)
I. Tracy Brown (March 1, 2019)

I. BACKGROUND

A. PROCEEDING

Type III Conditional Use Permit

B. FACTUAL INFORMATION

1. APPLICANT: Camp Academy, LLC (Tim Windell)
2. OWNER: Yi Zhou
3. PROJECT NAME: Scenic Street Camp Academy Conditional Use
4. SITUS ADDRESSES: 39641 Scenic Street
5. LEGAL DESCRIPTION: T2S R4E Section 13AB Tax Lot 1800

6. PROPERTY LOCATION: North of Scenic Street, west of Fir Drive

7. PROPERTY SIZE: 2.35 acres

8. COMPREHENSIVE PLAN DESIGNATION: Low Density Residential

9. ZONING DISTRICT DESIGNATION: Single Family Residential, SFR

10. RESPONSE FROM GOVERNMENTAL AGENCIES, UTILITY PROVIDERS, CITY DEPARTMENTS AND THE GENERAL PUBLIC
    a. Public Works Director – (Exhibit G)

C. PUBLIC COMMENTS

Two public comments were received prior to publishing this staff report. A summary of the comments are contained below:

Jeryl Mcgee at 39723 Scenic Street (Exhibit H) is against the proposal. Jeryl states that the neighborhood is mainly retired homeowners and the camp would bring 144 students and employees into a quiet setting. Jeryl cites that although the students will not be driving, there could be a lot of foot traffic, which could cause "noisy stress." In addition, Jeryl is concerned that the bus traffic may make it difficult for current residents to safely get around during the time the students are being bussed to and from the mountain.

Tracy Brown at 17075 Fir Drive (Exhibit I) expressed concerns with the potential for additional traffic and noise. Tracy requests adding the following conditions: an updated traffic analysis letter, a revised bus circulation plan reversing the direction of onsite bus circulation, a restriction on the streets that vehicles servicing the site can use, and a limitation on the construction or allowance of outdoor recreational facilities such as skateboard ramps.

D. APPLICABLE CRITERIA: Sandy Development Code Chapters: 17.12 Procedures for Decision Making; 17.18 Processing Applications; 17.22 Notices; 17.34 Single Family Residential; 17.68 Conditional Use; 17.84 Improvements Required with Development; 17.98 Parking, Loading, and Access Requirements.

E. EXPLANATION OF PROPOSED IMPROVEMENTS

Camp Academy, LLC submitted an application for a conditional use permit to allow a snowboarding academy and dormitory facility to be located at 39641 Scenic Street. The Academy would house 144 students training for the Winter Olympics. There are no proposed changes to the site, with the exception of the removal of two parallel parking spaces to accommodate bus circulation. The students will not be allowed to drive to the proposed site independently.

F. PROPERTY BACKGROUND

The subject property was granted a conditional use permit in 2000 to allow a retreat center (File No. 00-040 CUP/DR) and another conditional use permit in 2003 to allow a hospice facility (File No. 03-010 CUP).

G. PROCEDURAL CONSIDERATIONS

Review of the conditional use permit request requires a public hearing before the Sandy Planning Commission. Notification of this proposal was mailed to property owners within 300 feet of the subject property and to affected agencies on February 21, 2019. A legal notice was published in the Sandy Post on March 6, 2019.

II. ANALYSIS OF CODE COMPLIANCE

CHAPTER 17.34 - SINGLE FAMILY RESIDENTIAL (SFR)

17.34.20 MINOR CONDITIONAL USES AND CONDITIONAL USES

A. Minor Conditional Uses:
1. Accessory structures for agricultural, horticultural or animal husbandry use in excess of the size limits in Chapter 17.74;
2. Single detached or attached zero lot line dwelling;
3. Duplex;
4. Projections or free-standing structures such as chimneys, spires, belfries, domes, monuments, fire and hose towers, observation towers, transmission towers, flagpoles, radio and television towers, masts, aerials, cooling towers and similar structures or facilities not used for human occupancy exceeding 35 feet in height;
5. Other uses similar in nature.

B. Conditional Uses:
1. Community services;
2. Funeral and interment services, cemetery, mausoleum or crematorium;
3. Golf course and club house, pitch-and-putt, but not garden or miniature golf or golf driving range;
4. Hospital or home for the aged, retirement, rest or convalescent home;
5. Lodges, fraternal and civic assembly;
6. Major utility facility;
7. Preschool, orphanage, kindergarten or commercial day care;
8. Residential care facility [ORS 443.000 to 443.825];
9. Schools (public, private, parochial or other educational institution and supporting dormitory facilities, excluding colleges and universities);
10. Other uses similar in nature.

RESPONSE: *The proposed use is a snowboarding academy and dormitory facility which will house and educate students training for the Winter Olympics. Schools and dormitory facilities are a conditional use in the Single Family Residential (SFR) zone per Section 17.34.20(B.9).*

17.34.30 DEVELOPMENT STANDARDS

Type	Standard
A. Minimum Lot Area - Single detached dwelling - Other permitted uses	7,500 square ft. No minimum
B. Minimum Average Lot Width - Single detached dwelling	 60 ft.
C. Minimum Lot Frontage	20 ft. except as allowed by Section 17.100.160
D. Minimum Average Lot Depth	No minimum
E. Setbacks (Main Building) Front yard Rear yard Side yard (interior) Corner Lot	 10 ft. minimum 20 ft. minimum 7.5 ft. minimum 10 ft. minimum on side abutting the street [1]
F. Setbacks (Garage/Carport)	22 ft. minimum for front vehicle access 15 ft. minimum if entrance is perpendicular to street (subject to Section 17.90.220) 5 ft. minimum for alley or rear access
G. Projections into Required Setbacks	See Chapter 17.74
H. Accessory Structures in Required Setbacks	See Chapter 17.74
I. Structure Height	35 ft. maximum
J. Building Site Coverage	No minimum
K. Off-Street Parking	See Chapter 17.98

***RESPONSE**: The proposal does not include any changes to the site plan, with the exception of the removal of two parallel parking spaces at the south end of the site to allow adequate circulation for buses.*

CHAPTER 17.68 – CONDITIONAL USES

17.68.00 INTENT

Certain uses listed in each zoning district require a public hearing to determine what their effects may be to the surrounding properties, neighborhood, and community as a whole. The Conditional Use Permit process provides an opportunity to allow a use when potential adverse effects can be mitigated or deny a use if concerns cannot be resolved to the satisfaction of the Planning Commission.

It is the intent of this chapter to permit conditional uses where it is consistent with the Comprehensive Plan, subject to procedures and criteria intended to mitigate potentially negative impacts.

Procedures and review criteria for conditional development are established for the following purpose:

[1] Must comply with the clear vision requirements of Chapter 17.74.

A. Permit certain types of public and private development that provide a community service in locations related to their service areas.
B. Permit commercial development in locations related to its service area.
C. Ensure that a conditional use is compatible with its immediate area and the affected part of the community.

RESPONSE*: The proposed snowboarding academy and dormitory facility is a conditional use in the Single Family Residential (SFR) zone. The subject property contains an existing building that is much larger than a single family dwelling and would not be practical to convert to a single family dwelling. Two conditional use permits for the subject property were previously approved to allow a retreat center and a hospice facility.*

17.68.20 REVIEW CRITERIA

The Planning Commission may approve an application, approve with modifications, approve with conditions, or deny an application for a conditional use permit after a public hearing. The following criteria and compatibility factors shall be considered:

A. The use is listed as a conditional use in the underlying zoning district or has been interpreted to be similar in use to other listed conditional uses.

   RESPONSE: *The subject property is zoned Single Family Residential (SFR). The proposed use is a snowboarding academy with dormitory facilities, which is a conditional use in the SFR zone. Criterion A is satisfied.*

B. The characteristics of the site are suitable for the proposed use considering the size, shape, location, topography, and natural features.

   RESPONSE: *The proposed site is suitable regarding the size, shape, location, topography, and natural features of the site. The proposal does not include any significant changes to the site and the site can accommodate parking requirements, landscaping requirements, stormwater detention, and other site demands typical of a residential development. Criterion B is satisfied.*

C. The proposed use is timely considering the adequacy of the transportation systems, public facilities and services existing or planned for the area affected by the use.

   RESPONSE: *Water and sanitary sewer are available to serve the site. Most utilities are already existing and adequately serve the site. The student residents will not be permitted to drive and will be shuttled to and from their training facilities around Mt. Hood in high occupancy vehicles.*

   Staff conducted a site visit on February 21, 2019 and noticed an existing mailbox in the through pedestrian zone in the sidewalk on Scenic Street. Per the Public Works Director (Exhibit G), ***the applicant shall relocate the existing mail box or widen the sidewalk adjacent to the existing mail box and utility pole to provide 48 inches (not including the curb) of horizontal clearance for ADA compliance.*** *Criterion C is satisfied.*

D. The proposed use will not alter the character of the surrounding area in a manner which substantially limits, precludes, or impairs the use of surrounding properties for the primary uses listed in the underlying zoning district.

***RESPONSE**: All abutting parcels to the subject site within City limits are zoned Single Family Residential (SFR). The properties to the south, west, and east are already developed with single family homes. The property to the north is currently undeveloped and is outside both City limits and the Urban Growth Boundary (UGB). Two conditional use permits for the subject property were previously approved to allow a retreat center and a hospice facility. The proposed use of the subject site as a snowboarding academy and dormitory facility would not substantially limit, preclude, or impair the use of surrounding properties. The use of the site would be to house people, which is a similar use of a single family home. With the conditions as recommended in this report, impacts caused by the proposal can be mitigated. Criterion D is satisfied.*

E. The proposed use will not result in the use of land for any purpose which may create or cause to be created any public nuisance including, but not limited to, air, land, or water degradation, noise, glare, heat, vibration, or other considerations which may be injurious to the public health, safety, and welfare.

***RESPONSE:** The proposed snowboarding academy and dormitory facility should not produce noise that is noticeable to neighboring properties. Per the submitted narrative (Exhibit B), there are no new proposed exterior lights. There will be no activities, operations, or processes occurring at the site that will produce odors. Landscaping will be maintained or otherwise enforced by Code Enforcement. Staff conducted a site visit on February 21, 2019 and noticed that the Scenic Street curb is overgrown with moss, which is a safety concern during wet weather. **The applicant shall remove the moss from the curb along the site frontage on Scenic Street.** Criterion E can be satisfied with adherence to recommended conditions and the Sandy Municipal Code.*

F. The proposed use will be reasonably compatible with existing or planned neighboring uses based on review of the following:

1. Basic site design (organization of uses on the site)
   ***RESPONSE:** The proposal does not include any changes to the site design, with the exception of the removal of two parallel parking spaces at the front (south end) of the property to accommodate bus circulation.*

2. Visual elements (scale, structural design and form, materials, and so forth)
   RESPONSE:** The proposal does not include any changes to the exterior of the existing building. Staff conducted a site visit on February 21, 2019 and noticed that two exterior existing staircases appear to be in disrepair. **The applicant shall repair and/or upgrade the two existing staircases in compliance with the Building Code.

3. Noise
   ***RESPONSE:** The applicant's supplemental narrative (Exhibit C) states there are proposed to be 144 student residents residing at the subject site; however, they will be indoors nearly the entire time they are on site. The narrative also states that the students will be in bed (i.e. quiet hours) between 10 pm and 6 am.*

4. Noxious odors
   RESPONSE: *The site will be compatible with existing and planned uses regarding noxious odors. There are no proposed activities at the site that should produce noxious odors.*

5. Lighting
   RESPONSE: *Per the submitted narrative (Exhibit B), there are no new proposed exterior lights.* ***If the applicant decides to install new exterior lighting, all new lighting shall be in compliance with Chapter 15.30, Dark Sky Ordinance which will minimize light trespass on neighboring residential properties.***

6. Signage
   RESPONSE: The applicant will be required to obtain a permit for any proposed signage*.*

7. Landscaping for buffering and screening
   RESPONSE: *The applicant is not proposing any changes to the existing landscaping. As discussed in Section 17.98.120 of this document, staff is recommending that the applicant plant additional native groundcover and shrubs in the swale area.*

8. Traffic
   RESPONSE: *The applicant's supplemental narrative (Exhibit C) states that there will be less traffic than in the past due to the use of high occupancy vehicles to shuttle the students to and from their training facilities around Mt. Hood. Students will not be allowed to drive and visitors are not allowed. The applicant submitted a bus circulation plan (Exhibit E) that demonstrates that a 40-foot bus can circulate through the front parking area. Per the Public Works Director (Exhibit G), the bus circulation plan submitted shows that a WB-40 bus can enter or exit the site. However, the eastbound bus path shows the turn starting less than 2 feet from the south curb line.* ***The bus circulation plan shall be revised to show the turn starting eight feet off the south curb line to account for vehicles parked on the street at this location. To prevent confusion with other vehicles entering the site the western driveway approach shall be designated "Enter Only" and the eastern driveway approach shall be designated "Exit Only" with signs, legends and arrows conforming to the Manual on Uniform Traffic Control Devices.***

   The applicant also submitted a traffic letter (Exhibit D) that finds the proposed use will not impact existing traffic conditions and that the driveway access complies with applicable standards. Per the Public Works Director (Exhibit G), the proposed use(s) contemplated at the pre-application conference in June 2018 were either not identified or were different than the use proposed in this application. The traffic analysis letter, dated July 11, 2018, is based on a proposed use consisting of providing office space and housing for staff providing support services for a snowboard camp, with an anticipated maximum of 80 employees. The applicant's narrative, dated December 22, 2018, states that there will be 144 residents. Thus, the traffic letter requested at the pre-application conference and provided with this application is not adequate to assess the traffic impacts from the proposed use. Tracy Brown (Exhibit I) requested that the applicant

submit an updated traffic letter reflecting the change in the number of residents proposed to be on site. Per the Public Works Director (Exhibit G), ***the applicant shall submit a Traffic Impact Analysis prepared by a Traffic Engineer conforming to the City's "Minimum Requirements for Traffic Analyses."***

9. Effects on off-street parking
   RESPONSE: *The proposal should not adversely affect on-street or off-street parking capacity. The site has 48 existing parking spaces. Two (2) parallel parking spaces are proposed for removal with this application to allow for adequate bus circulation. In addition, the submitted site plan (Exhibit F) details nine (9) of the parking spaces located on gravel, which is not permitted by code. As discussed in Section 17.98.130 of this document, staff is recommending that the nine (9) gravel parking spaces be paved. Even if the gravel area is not paved, removal of the nine (9) gravel parking spaces and the two (2) bus circulation parking spaces will result in 37 remaining parking spaces. The submitted narrative (Exhibit B) and supplemental narrative (Exhibit C) state that there will be a maximum of 26 employees on site at any given time. Students will not be allowed to drive or have visitors. As discussed in Chapter 17.98 of this document,* ***staff recommends the applicant restripe the row of parking spaces along the south end of the existing building to be standard size (9 feet by 18 feet) and remove the seven (7) remaining parallel parking spaces along the south edge of the property in order to provide adequate standard size parking spaces, better accommodate bus circulation, and increase the parking aisle width. Alternatively, the applicant could designate the driveway as a one-way driveway, restripe the 14 parking spaces to be standard sized 60 degree spaces, and provide additional information that demonstrates that the minimum aisle width standard of 20 feet for a double-sided one-way parking aisle with 60 degree parking stalls on the north and parallel parking on the south can be met. Staff further recommends the proposed nine (9) gravel parking spaces be paved. In addition, staff recommends the applicant be required to submit additional information regarding the plan for high occupancy vehicle and/or bus parking for staff review and approval.***

10. Effects on air quality and water quality
    RESPONSE: *The proposed improvements will not adversely affect air and water quality. The project will comply with all applicable state and federal environmental standards.*

Recommendation: ***Staff recommends the Planning Commission approve the applicant's request for a conditional use permit to allow a snowboarding academy and dormitory facility in the SFR zone.***

CHAPTER 17.84 - IMPROVEMENTS REQUIRED WITH DEVELOPMENT

This chapter provides general information regarding improvements required in association with development, and it clarifies the timing, extent, and standards for public and private improvements.

17.84.20 TIMING OF IMPROVEMENTS

A. All improvements required by the standards in this chapter shall be installed concurrently with development, as follows:
   1. Where a land division is proposed, each proposed lot shall have required public and franchise utility improvements installed or financially guaranteed in accordance with the provisions of Chapter 17 prior to approval of the final plat.
   2. Where a land division is not proposed, the site shall have required public and franchise utility improvements installed or financially guaranteed in accordance with the provisions of Chapter 17 prior to temporary or final occupancy of structures.

RESPONSE: *Submission of preliminary street and utility plans during the land use review process is solely for compliance with the data requirements of Section 17.100.60 (D).* ***Public plans are subject to a separate review and approval process. Preliminary plat approval does not connote approval of public improvement construction plans.***

17.84.30 PEDESTRIAN AND BICYCLIST REQUIREMENTS

A. Sidewalks shall be required along both sides of all arterial, collector, and local streets, as follows:
   1. Sidewalks shall be a minimum of 5 ft. wide on local streets. The sidewalks shall be separated from curbs by a tree planting area that provides separation between sidewalk and curb, unless modified in accordance with Subsection 3 below.

RESPONSE: *The City's standard for sidewalks on local streets is a five-foot sidewalk separated from the street by a five-foot planter strip. The sidewalk on the site does not comply with this standard. There is sufficient right-of-way to construct a conforming sidewalk and planter strip. The existing swale can be incorporated into the planter strip. However, due to the elevation difference, installing a 5 foot sidewalk and 5 foot planter in the right-of-way would likely require a retaining wall with a fence or guardrail. Furthermore, the swale contains existing trees that act as street trees. Therefore, staff is not recommending that the site frontage come into compliance with the code at this time.*

17.84.60 PUBLIC FACILITY EXTENSIONS

A. All development sites shall be provided with public water, sanitary sewer, broadband (fiber), and storm drainage.

RESPONSE: *Per the Public Works Director (Exhibit G),* ***all stormwater detention and treatment shall conform to the requirements of Sections 13.18 and 13.20 of the Sandy Municipal Code (SMC) and the City of Portland Stormwater Management Manual (SWMM). The applicant shall consult with Sandy Fire District regarding fire hydrant locations and spacing on the site and on adjacent public streets. If food will be prepared and served on-site the applicant shall install a properly sized grease interceptor to serve kitchen waste lines. The applicant shall be responsible for regularly maintaining the interceptor.***

CHAPTER 17.98 – PARKING, LOADING, AND ACCESS REQUIREMENTS

17.98.20 OFF-STREET PARKING REQUIREMENTS

6.

Residential Uses	**Number of Parking Spaces**	**Number of Bicycle Spaces**
Congregate Housing, Retirement Homes, Intermediate Care Facilities, and Halfway Houses	1 per each 3 residents, plus 1 per 2 employees	5% or 2 whichever is greater

7.

Community Service, Institutional and Semi-Public Uses	**Number of Parking Spaces**	**Number of Bicycle Spaces**
School – Middle School/Junior High	3 per classroom, plus 1 per 2 employees	5% or 2 whichever is greater
School – Senior High	6 per classroom, plus 1 per each employee	5% or 2 whichever is greater
School – Vocational or College	6 per classroom, plus 1 per 2 employees	5% or 2 whichever is greater

RESPONSE: *It is not clear exactly which category the proposed snowboarding academy and dormitory facility fits under for parking requirements. The applicant's supplemental narrative (Exhibit C) classifies the use under 'Congregate Housing, Retirement Homes, Intermediate Care Facilities, and Halfway Houses.' Since the students will also be attending classes on site, staff believes the use could also fall under 'School,' though staff does not know what the appropriate age group would be. Regardless, the students will not be allowed to drive separately and will instead be shuttled to and from the mountain in high occupancy vehicles (HOVs). Both the submitted narrative (Exhibit B) and the supplemental narrative (Exhibit C) state there will be a maximum of 26 employees on the site at any time. Based on a rate of one parking space per two employees, 26 employees would require 13 parking spaces. However, if all the employees drive separately, which is a highly likely scenario, it is easy to imagine that there will be 26 cars at any given time; thus,* ***staff recommend that a minimum of 26 usable parking spaces be provided****.*

The site has 48 existing parking spaces. Two (2) parallel parking spaces are proposed for removal with this application to allow for adequate bus circulation. As discussed in Section 17.98.60, ***staff is recommending that the remaining seven (7) parallel parking spaces be removed to allow sufficient room for standard sized parking spaces and an aisle****. The submitted site plan (Exhibit F) details nine (9) of the parking spaces located on gravel, which is not permitted by code. As discussed in Section 17.98.130 of this document,* ***staff is recommending that the nine (9) gravel parking spaces be paved to adhere to Section 17.98.130****. Overgrown vegetation is encroaching on the six (6) existing parking spaces along the west property line.* ***The applicant shall remove the overgrown vegetation along the west property line to allow ample room for parking.*** *During the site visit, staff observed that there is not much room for vehicles if the three (3) parking spaces identified on the west and east sides of the lawn island in the rear of the property are occupied. Thus, staff does not recommend*

counting these six (6) parking spaces in the total parking count. With these recommendations, the site will have 17 parking spaces in the front, six (6) along the west property line, four (4) located on the west side of the building, and nine (9) at the rear of the building that need to be paved, for a total of 36 parking spaces.

Based on the required 13 parking spaces, two (2) bicycle parking spaces are required. The submitted Site Plan (Exhibit F) details two (2) bicycle parking spaces at the rear of the building.

It is unclear from the submitted materials whether the high occupancy vehicles and/or buses that will be shuttling the students to and from the mountain area facilities will be parking on site. ***The applicant shall submit additional information regarding the plan for high occupancy vehicles and/or bus parking for staff review and approval.***

17.98.50 SETBACKS

A. Parking areas, which abut a residential zoning district, shall meet the setback of the most restrictive adjoining residential zoning district.

B. Required parking shall not be located in a required front or side yard setback area abutting a public street except in industrial districts. For single family and two-family dwellings, required parking may be located in front of a garage.

C. Parking areas shall be setback from a lot line adjoining a street the same distance as the required building setbacks. Regardless of other provisions, a minimum setback of 5 feet shall be provided along the property fronting on a public street. The setback area shall be landscaped as provided in this code.

RESPONSE: *The existing parking area is primarily located to the south of the existing building. There are no proposed changes to the parking area aside from the removal of the two (2) parallel parking spaces to accommodate bus circulation. The existing parking area is separated from the public right-of-way by an existing swale approximately 15 feet in width.*

17.98.60 DESIGN, SIZE AND ACCESS

All off-street parking facilities, vehicular maneuvering areas, driveways, loading facilities, accessways, and private streets shall conform to the standards set forth in this section.

A. Parking Lot Design. All areas for required parking and maneuvering of vehicles shall have a durable hard surface such as concrete or asphalt.

RESPONSE: *The parking area is existing. The site plan (Exhibit F) details nine (9) parking spaces located on gravel, which does not comply with the code requirement for paved parking surfaces. The remaining existing parking spaces are already paved.*

B. Size of Space.
   1. A standard parking space shall be 9 feet by 18 feet.
   2. A compact parking space shall be 8 feet by 16 feet.

3. Handicapped parking spaces shall be 13 feet by 18 feet. Accessible parking shall be provided for all uses in compliance with the requirements of the State of Oregon (ORS 447.233) and the Americans with Disabilities Act.
4. Parallel parking spaces shall be a length of 22 feet.
5. No more than 35 percent of the parking stalls shall be compact spaces.

RESPONSE: *There are no proposed changes to the size of the existing parking spaces. However, it appears that a majority of the parking spaces are compact in length (16 feet).* ***To provide adequate standard sized parking spaces, to better accommodate bus circulation, and to increase the parking aisle width, the applicant shall restripe the row of parking spaces along the south end of the existing building to be standard size (9 feet by 18 feet) and shall remove the seven (7) remaining parallel parking spaces along the south edge of the property. Alternatively, the applicant could designate the driveway as a one-way driveway, restripe the 14 parking spaces to be standard sized 60 degree spaces, and provide additional information that demonstrates that the minimum aisle width standard of 20 feet for a double-sided one-way parking aisle with 60 degree parking stalls on the north and parallel parking on the south can be met.***

The submitted Site Plan (Exhibit F) details two (2) existing ADA parking spaces located along the west side of the existing building. ***Signage associated with the ADA parking spaces shall meet the head clearance distance requirement in the Building Code.***

C. Aisle Width.

Parking Aisle	Single Sided One-Way	Single Sided Two-Way	Double Sided One-Way	Double Sided Two-Way
90 degree	20 feet	22 feet	25 feet	25 feet
60 degree	20 feet	20 feet	20 feet	20 feet
45 degree	20 feet	20 feet	20 feet	20 feet
Parallel	12 feet	12 feet	16 feet	16 feet

RESPONSE: *There are no proposed changes to the parking area aisle width. The current aisle between the 90 degree parking spaces along the south side of the existing building and the parallel parking spaces is approximately 21 feet. Even if the drive aisle were to be one-way, the aisle width is still narrow. With staff's recommendation to increase the length of the parking spaces along the south side of the existing building from 16 feet to 18 feet, the aisle width would be reduced to a narrower width. Removing the seven (7) remaining parallel parking spaces along the front swale would allow for a wider aisle and the expansion of the parking spaces from 16 feet to 18 feet in length. Removal of these parallel parking spaces would also allow for easier bus turning movements. As stated in Section 17.98.90(B),* ***the applicant shall restripe the row of parking spaces along the south end of the existing building to be standard size (9 feet by 18 feet) and shall remove the seven (7) remaining parallel parking spaces along the south edge of the property. Alternatively, the applicant could designate the driveway as a one-way driveway, restripe the 14 parking spaces to be standard depth 60 degree spaces, and provide additional information that demonstrates that the minimum aisle width standard of 20 feet for a double-sided one-way parking aisle with 60 degree parking spaces on the north side of the aisle and parallel parking on the south side of the aisle can be achieved.***

17.98.100 DRIVEWAYS

A. A driveway to an off-street parking area shall be improved from the public roadway to the parking area a minimum width of 20 feet for a two-way drive or 12 feet for a one-way drive but in either case not less than the full width of the standard approach for the first 20 feet of the driveway.
B. A driveway for a single-family dwelling shall have a minimum width of 10 feet.
C. A driveway for a two-family dwelling shall have a minimum width of 20 feet. A driveway approach must be constructed in accordance with applicable city standards and the entire driveway must be paved with asphalt or concrete.
D. Driveways, aisles, turnaround areas and ramps shall have a minimum vertical clearance of twelve feet for their entire length and width but such clearance may be reduced in parking structures.
E. No driveway shall traverse a slope in excess of 15 percent at any point along the driveway length.
F. The location and design of the driveway shall provide for unobstructed sight per the vision clearance requirements. Requests for exceptions to these requirements will be evaluated by the City Engineer considering the physical limitations of the lot and safety impacts to vehicular, bicycle, and pedestrian traffic.

RESPONSE: *There are no proposed changes to the existing driveways. Per the submitted Traffic Letter (Exhibit D), there are two existing driveways that access Scenic Street. The westerly driveway is 24 feet wide and the easterly driveway is 26 feet wide, in conformance with Section 17.98.100(A). The applicant also submitted a bus circulation plan (Exhibit E) that demonstrates there is adequate space for a 40 foot bus to access the site and achieve on-site circulation.*

17.98.120 LANDSCAPING AND SCREENING

A. Screening of all parking areas containing 4 or more spaces and all parking areas in conjunction with an off-street loading facility shall be required in accordance with zoning district requirements and Chapter 17.98. Where not otherwise specified by district requirement, screening along a public right-of-way shall include a minimum 5-ft. depth of buffer plantings adjacent to the right-of-way.
RESPONSE: *The existing parking area is primarily located to the south of the existing building. There are no proposed changes to the parking area aside from the removal of the two (2) parallel parking spaces to accommodate bus circulation. The existing parking area is separated from the public right-of-way by an existing swale approximately 15 feet in width. The swale is planted with sod and contains street trees approximately 25 feet on center.* ***The applicant shall submit an updated landscape plan that details additional native groundcover and shrubs in the swale area****.*

B. When parking in a commercial or industrial district adjoins a residential zoning district, a sight-obscuring screen that is at least 80% opaque when viewed horizontally from between 2 and 8 feet above the average ground level shall be required. The screening shall be composed of materials that are an adequate size so as to achieve the required degree of screening within 3 years after installation.
RESPONSE: *The subject property is zoned residential so this code section does not apply.*

C. Except for a residential development which has landscaped yards, parking facilities shall include landscaping to cover not less than 10% of the area devoted to parking facilities. The landscaping shall be uniformly distributed throughout the parking area and may consist of trees, shrubs, and ground covers.
RESPONSE: *There are no proposed changes to the existing parking area (with the exception of the removal of the two (2) parallel parking spaces to accommodate bus circulation). There is an existing swale with sod along the south edge the property and an existing landscape buffer between the existing building and the southern parking area.*

D. Parking areas shall be divided into bays of not more than 20 spaces in parking areas with 20 or more spaces. Between, and at the end of each parking bay, there shall be planters that have a minimum width of 5 feet and a minimum length of 17 feet for a single depth bay and 34 feet for a double bay. Each planter shall contain one major structural tree and ground cover. Truck parking and loading areas are exempt from this requirement.
RESPONSE: *The existing parking area contains planter bays at the ends of most parking rows with a mix of trees, shrubs, and groundcover.*

E. Parking area setbacks shall be landscaped with major trees, shrubs, and ground cover as specified in Chapter 17.92.
RESPONSE: *The existing parking area is separated from the public right-of-way by an existing swale approximately 15 feet in width. The swale is planted with sod and contains street trees approximately 25 feet on center.* ***The applicant shall submit an updated landscape plan that details additional native groundcover and shrubs in the swale area****.*

F. Wheel stops, bumper guards, or other method to protect landscaped areas shall be provided. No vehicle may project over a property line or a public right-of-way. Parking may project over an internal sidewalk, but a minimum clearance of 5 feet for safe pedestrian circulation is required.
RESPONSE: *The existing parking area has curbs, railroad ties, or wheel stops for all parking spaces adjacent to landscaped areas as required.*

17.98.130 PAVING

A. Parking areas, driveways, aisles and turnarounds shall be paved with concrete, asphalt or comparable surfacing, constructed to city standards for off-street vehicle areas.

B. Gravel surfacing shall be permitted only for areas designated for non-motorized trailer or equipment storage, propane or electrically powered vehicles, or storage of tracked vehicles.

RESPONSE: *The submitted site plan (Exhibit F) details nine (9) parking spaces at the rear of the building that have gravel surface. Parking on gravel is not allowed.* ***The applicant shall pave the nine (9) parking space area with concrete, asphalt, or comparable surfacing. The applicant shall submit a stormwater management plan to manage the stormwater flow from the new impervious surface.*** *This may include a proposal to use permeable asphalt in the nine (9) parking spaces area.*

17.98.140 DRAINAGE

Parking areas, aisles and turnarounds shall have adequate provisions made for the on-site collection of drainage waters to eliminate sheet flow of such waters onto sidewalks, public rights-of-way and abutting private property.

RESPONSE: *Per the Public Works Director (Exhibit G), the existing swale captures some of the water that runs off the existing parking lot but much of the impervious surface on the west side of the building and the east end of the parking lot does not reach the swale and instead sheet flows across the sidewalk and driveway approach. Sheet flow across sidewalks is prohibited under section 17.98.140 of the Sandy Municipal Code (SMC).* ***The applicant shall re-grade the areas of the impervious surface on the west side of the building and the east end of the parking lot to drain to the swale or install additional drains or berms to direct runoff to the existing on-site stormwater system.*** *Staff recommends the applicant pave the nine (9) gravel parking spaces at the rear of the building since parking is not allowed on gravel per Section 17.98.130.* ***The applicant shall comply with the requirements of Section 13.18 of the Sandy Municipal Code and the City of Portland Stormwater Management Manual, as discussed in Chapter 17.84 above.***

17.98.150 LIGHTING

Artificial lighting shall be provided in all required off-street parking areas. Lighting shall be directed into the site and shall be arranged to not produce direct glare on adjacent properties. Light elements shall be shielded and shall not be visible from abutting residential properties. Lighting shall be provided in all bicycle parking areas so that all facilities are thoroughly illuminated and visible from adjacent sidewalks or vehicle parking lots during all hours of use.

RESPONSE: *There are no new proposed exterior lights. Any new exterior lights will need to comply with the Dark Skies requirements and be reviewed and approved by staff.*

17.98.160 BICYCLE PARKING FACILITIES.

Multi-family developments, industrial, commercial and community service uses, transit transfer stations, and park and ride lots shall meet the following standards for bicycle parking facilities.

RESPONSE: *The submitted Site Plan (Exhibit F) details the two (2) required bicycle parking spaces at the rear (north end) of the existing building. Section 17.98.160(B.1) requires each bicycle parking space to be at least 2.5 feet by 6 feet.*

III. SUMMARY AND CONCLUSION

Camp Academy, LLC submitted an application for a conditional use permit to allow a snowboarding academy and dormitory facility to be located at 39641 Scenic Street. The Academy would house 144 students training for the Winter Olympics. There are no proposed changes to the site, with the exception of the removal of two parallel parking spaces to accommodate bus circulation. The students will not be allowed to drive independently.

IV. RECOMMENDATION

Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. Staff recommends the Planning Commission **approve** the conditional use permit request with modifications as recommended in this report.

18-054 CUP Scenic Street Camp Academy Conditional Use

Recommendations and Conditions

Note: This is a list of all recommendations and conditions in the staff report in the order in which they appear. This list contains duplicates.

1. The applicant shall relocate the existing mail box or widen the sidewalk adjacent to the existing mail box and utility pole to provide 48 inches (not including the curb) of horizontal clearance for ADA compliance.
2. The applicant shall remove the moss from the curb along the site frontage on Scenic Street.
3. The applicant shall repair and/or upgrade the two existing staircases in compliance with the Building Code.
4. If the applicant decides to install new exterior lighting, all new lighting shall be in compliance with Chapter 15.30, Dark Sky Ordinance which will minimize light trespass on neighboring residential properties.
5. The applicant will be required to obtain a permit for any proposed signage.
6. The bus circulation plan shall be revised to show the turn starting eight feet off the south curb line to account for vehicles parked on the street at this location. To prevent confusion with other vehicles entering the site the western driveway approach shall be designated "Enter Only" and the eastern driveway approach shall be designated "Exit Only" with signs, legends and arrows conforming to the Manual on Uniform Traffic Control Devices.
7. The applicant shall submit a Traffic Impact Analysis prepared by a Traffic Engineer conforming to the City's "Minimum Requirements for Traffic Analyses."
8. Staff recommends the applicant restripe the row of parking spaces along the south end of the existing building to be standard size (9 feet by 18 feet) and remove the seven (7) remaining parallel parking spaces along the south edge of the property in order to provide adequate standard size parking spaces, better accommodate bus circulation, and increase the parking aisle width. Alternatively, the applicant could designate the driveway as a one-way driveway, restripe the 14 parking spaces to be standard sized 60 degree spaces, and provide additional information that demonstrates that the minimum aisle width standard of 20 feet for a double-sided one-way parking aisle with 60 degree parking stalls on the north and parallel parking on the south can be met. Staff further recommends the proposed nine (9) gravel parking spaces be paved. In addition, staff recommends the applicant be required to submit additional information regarding the plan for high occupancy vehicle and/or bus parking for staff review and approval.
9. Staff recommends the Planning Commission approve the applicant's request for a conditional use permit to allow a snowboarding academy and dormitory facility in the SFR zone.
10. Public plans are subject to a separate review and approval process. Preliminary plat approval does not connote approval of public improvement construction plans.
11. All stormwater detention and treatment shall conform to the requirements of Sections 13.18 and 13.20 of the Sandy Municipal Code (SMC) and the City of Portland Stormwater Management Manual (SWMM). The applicant shall consult with Sandy Fire District regarding fire hydrant locations and spacing on the site and on adjacent public streets. If food will be prepared and served on-site the applicant shall install a properly sized grease interceptor to serve kitchen waste lines. The applicant shall be responsible for regularly maintaining the interceptor.

12. Staff recommend that a minimum of 26 usable parking spaces be provided.
13. Staff is recommending that the remaining seven (7) parallel parking spaces be removed to allow sufficient room for standard sized parking spaces and an aisle.
14. Staff is recommending that the nine (9) gravel parking spaces be paved to adhere to Section 17.98.130.
15. The applicant shall remove the overgrown vegetation along the west property line to allow ample room for parking.
16. The applicant shall submit additional information regarding the plan for high occupancy vehicles and/or bus parking for staff review and approval.
17. To provide adequate standard sized parking spaces, to better accommodate bus circulation, and to increase the parking aisle width, the applicant shall restripe the row of parking spaces along the south end of the existing building to be standard size (9 feet by 18 feet) and shall remove the seven (7) remaining parallel parking spaces along the south edge of the property. Alternatively, the applicant could designate the driveway as a one-way driveway, restripe the 14 parking spaces to be standard sized 60 degree spaces, and provide additional information that demonstrates that the minimum aisle width standard of 20 feet for a double-sided one-way parking aisle with 60 degree parking stalls on the north and parallel parking on the south can be met.
18. Signage associated with the ADA parking spaces shall meet the head clearance distance requirement in the Building Code.
19. The applicant shall restripe the row of parking spaces along the south end of the existing building to be standard size (9 feet by 18 feet) and shall remove the seven (7) remaining parallel parking spaces along the south edge of the property. Alternatively, the applicant could designate the driveway as a one-way driveway, restripe the 14 parking spaces to be standard depth 60 degree spaces, and provide additional information that demonstrates that the minimum aisle width standard of 20 feet for a double-sided one-way parking aisle with 60 degree parking spaces on the north side of the aisle and parallel parking on the south side of the aisle can be achieved.
20. The applicant shall submit an updated landscape plan that details additional native groundcover and shrubs in the swale area.
21. The applicant shall submit an updated landscape plan that details additional native groundcover and shrubs in the swale area.
22. The applicant shall pave the nine (9) parking space area with concrete, asphalt, or comparable surfacing. The applicant shall submit a stormwater management plan to manage the stormwater flow from the new impervious surface.
23. The applicant shall re-grade the areas of the impervious surface on the west side of the building and the east end of the parking lot to drain to the swale or install additional drains or berms to direct runoff to the existing on-site stormwater system.
24. The applicant shall comply with the requirements of Section 13.18 of the Sandy Municipal Code and the City of Portland Stormwater Management Manual, as discussed in Chapter 17.84 above.

EXHIBIT A

CITY OF SANDY, OREGON

LAND USE APPLICATION FORM

(Please print or type the information below)

Planning Department
39250 Pioneer Blvd.
Sandy OR 97055
503-668-4886

Name of Project: Former Mt. Hood Hospice Building

Location or Address: 39641 Scenic Street

Map & Tax Lot Number T 25, R 4E, Section 13; Tax Lot(s) 24E13AB

Plan Designation: SFR Zoning Designation: LDR Acres: 2.35

Request:

Modify existing conditional use of former Mt. Hood Hospice from 17.34.20(B)(4) "Hospitals" to 17.34.20(B)(9) "Schools."

I am the (check one) ☐ owner ☑ lessee of the property listed above and the statements and information contained herein are in all respects true, complete and correct to the best of my knowledge and belief.

Applicant: Camp Academy, LLC (Tim Windell)	Owner: 39641 Scenic St, LLC (Yi Zhou)
Address: P.O. Box 628	Address: 919 NE 19th Ave., #100
City/State/Zip: Welches, Oregon 97067	City/State/Zip: Portland, Oregon 97232
Phone: 503.539.4445	Phone: 503.799.7138
Email: tim@windells.com	Email: cnjoyzhou@gmail.com
Signature:	Signature: Yi Zhou

If signed by Agent, owner's written authorization must be attached.

File No.	Date	Rec. No.	Fee $
Type of Review (circle one): Type I Type II Type III Type IV			

WY'EAST MOUNTAIN ACADEMY

EXHIBIT B

Project name: School/Hospice at Hospice site at 39641 Scenic Street
Original Pre-Application Original Conference Date: June 6, 2018
Applicant Name: Camp Academy LLC
Applicant name: Tim Windell

NARRATIVE

General Requirements and explanation from Letter dated June 6, 2018

- Wy' East Mountain Academy, formerly known as Windells Academy, falls into the School Zoning (supporting dormitory facilities) home of the ages and hospital. These are all listed as conditional uses in the Single Family Residential (SFR) zoning district.
- Parking, there are 48 parking spaces. Participants will be shuttled to and from training venues and school in academy owned, leased, or contracted high occupancy vehicles. Student athletes are prohibited from driving personal vehicles, a practice we have held true to since the schools inception 30 years ago. We anticipate a working staff up to 26 on the property at any given time with in a 24-hour time period, with a total staff count of 48 to fill in the 7 day a week schedule.
- ADA parking is located on the west end of the property next to the main entrance. The Hospice site currently has two ADA parking spaces with van accessibility.
- We do not intend to add any additional exterior lighting.
- The proposed building entrance is the existing building entrance located on the west side of the building (see site map). There is an ADA ramp leading up to the entrance of the building. In addition the property has 4 ground level doors located around the back of the building near parking spaces.
- We propose to use the building as is, for lodging, nutrition and ancillary office use.

Additional information

- Bike parking is located on the North facing side of the building around back.
- Two large trees, a red wood on the east and Cedar on the west define the front of the building and parking areas out front.
- For the past 30 years Windells and High Cascade (Camp Academy, LLC) have been training the World's best snowboarders and skiers. Nearly every Olympic, World Champion, X-Games and Dew Tour Medalist since Snowboarding and Free Skiing's inception has utilized our programing to assist in their journey toward success.

WY'EAST
MOUNTAIN ACADEMY

- As of November 16, 2018 WY 'East Mountain Academy, High Cascade and Windells earned accreditation with Ai-Accreditation International via the department of Homeland Security that handles student non-immigrant visas. This accreditation process is no easy task and has taken us 10 years to earn, requiring our businesses to preform on the highest level of organization and professionalism often far exceeding what local, state and federal laws require.

- The academy students we are proposing to reside in the former Sandy Hospice building will have one goal: earn the privilege to compete and win medals in the 2022 Winter Olympics for their respective country. All Student Athletes are contracted and supported by their respective countries Government.

- The subject property will serve as this program's home base.

- We place the highest expectations of performance and professionalism on these student athletes. Failure to perform in the classroom, on and off the slopes will result in immediate ejection from this program.

- We propose housing 80 academy students, or what the fire marshal may approve.

- The group is comprised of five unique Olympic disciplines, each with rotating schedules, taking student athletes and their support team globally for separate training and competition venues leading up to the 2022 Olympic Winter Game's.

The following travel schedules, Mother Nature giving (i.e. snow), will be expected

Mostly Travel =	less then 5 days at home base
Light Travel =	2 weeks of travel
No Travel =	month at home base

January	Mostly Travel
February	Mostly Travel
March	Mostly Travel
April	Light Travel
May	Light Travel
June	No Travel
July	No Travel
August	Light Travel
September	Mostly Travel
October	Mostly Travel
November	Light Travel
December	Mostly Travel

WY'EAST
MOUNTAIN ACADEMY

Typical daily schedule for these student athletes

6:00	Rise and shine
6:30 – 7:30	Breakfast
7:31 – 8:30	Transport to mountain or training venue
8:31 – 9:00	Warm up
9:01 – 12:00	On-Snow or training venue
12:01 – 12:30	Lunch
12:31 - 15:00	On-Snow or training venue
15:01 - 15:30	Recover
15:31 - 16:30	Transport to Sandy Lodge
16:31 - 17:00	Wind down
17:01 – 17:30	Dinner
17:31 - 21:30	School
22:00	lights out

*Program participants are not allowed visitors at home base**

EXHIBIT C

CITY OF SANDY, OREGON

SUPPLEMENTAL LAND USE APPLICATION FORM (No. 1)

(Please print or type the information below)

Planning Department
39250 Pioneer Blvd.
Sandy OR 97055
503-668-4886

☐ ANNEXATION ☐ ZONE CHANGE ☐ COMPREHENSIVE PLAN AMENDMENT

Property Identification			
Tax Lot Number	Township	Range	Section
24E13AB01800	2 SOUTH	4E Willamette Meridian	NE 1/4. Section 13

Existing and Proposed Land Use Designations				
Tax Lot Number(s)	Comprehensive Plan		Zoning Map	
	Existing	Proposed	Existing	Proposed
24E13AB01800	LDR	LDR	SFR	SFR

IMPORTANT: Each section on this application must be fully completed or your application could be deemed incomplete.

Tax Lot Number	Clackamas County Recording Number	Assessed Land Value	Size in Acres or Sq. Ft.
24E13AB01800	2018-044421	$1,412,142.00	2.35 Acres

LEGAL DESCRIPTION: Attach a separate page with the written metes and bounds legal description. Accuracy of the legal description(s) must be certified by a registered land surveyor for all annexation applications.

DESCRIBE EXISTING USES
Residential hospice care with ancillary office and staff uses.

DESCRIBE EXISTING BUILDINGS
How many buildings are located on the property? One building
Number of Total Dwelling Units : N/A Not considered individual dwelling units as per "Dwelling Unit" definition per Title 17 Development Code: "Hotel, motel, and rooming and boarding units, which are used primarily for transient tenancy, shall not be considered as dwelling units. "

DESCRIBE EXISTING TOPOGRAPHY	
Approximate acreage with slopes less than 14.9%	70% (1.6 Acres)
Approximate acreage with slopes 15% to 24.9%	0%
Approximately acreage with slope in excess of 25%	30% (.75 Acres)
Any creeks, water sources, drainageways or wetlands within the property? **Yes** ☐ **No** ☑	
Any steep slopes, ravines, draws or bluffs within or abutting the property? **Yes** ☑ **No** ☐	

DESCRIBE EXISTING ACCESS
Does the subject property abut a public right-of-way? **Yes** ☑ **No** ☐
Name of public right-of-way: Scenic Street
Does the property abut a private road? **Yes** ☐ **No** ☑
Name of abutting private road(s): N/A
Describe any unusual difficulties in accessing the property: See Attached "39641 Scenic Street Traffic Analysis Letter" from Firwood Design Group, LLC (FDG) dated July 11, 2018 and addressed to Mike Walker, Public Works Director, City of Sandy, Oregon. FDG Contact: Kelli A. Grover, P.E. (503) 668-3737

DESCRIBE SURROUNDING USES ON ADJACENT PROPERTIES
Single family residential.

DESCRIBE PROPOSED USE OF THE PROPERTY OR LAND DIVISIONS Include number of lots, densities, etc.
Modify existing conditional use of the former Mt Hood Hospice from 17.34.20(B)(4) "Hospitals" to 17.34.20(B)(9) "Schools."

FDG

Firwood Design Group, LLC

SURVEYING • ENGINEERING • PLANNING

EXHIBIT D

July 11, 2018

Mike Walker
Public Works Director
City of Sandy
39250 Pioneer Blvd.
Sandy, OR 97055

RE: 39641 Scenic Street Traffic Analysis Letter

Dear Mr. Walker,

This letter is prepared for the proposed use change for the former Mt. Hood Hospice buildings located at 39641 Scenic Street in Sandy, OR. The proposed use consists of providing office space and housing for staff providing support services for the High Cascade Snowboard Camp. The existing building and site features will remain the same only the use will be changing. The anticipated maximum number of staff will be up to 80 employees.

Per section 17.98.100 (DRIVEWAYS) of the municipal code: A driveway to an off-street parking area shall be improved from the public roadway to the parking area a minimum width of 20 feet for a two-way drive or 12 feet for a one-way drive but in either case not less than the full width of the standard approach for the first 20 feet of the driveway. There are two existing driveways that access Scenic Street. The westerly driveway is 24ft wide and the easterly driveway is 26ft wide. Therefore this code is satisfied.

Per AASHTO intersection sight distance requirements for a local road with a posted speed of 25 mph, a sight distance of 280 lineal feet is required. Scenic street is a relatively flat street with no curves and there are no physical obstructions to the line of sight at the proposed driveway location. The requisite sight distance is met at the existing driveway locations.

The proposed use best fits the Private School category as published in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 7th Edition Vol. 3 of 3. The private school average vehicle trip ends versus employees for the peak weekday hours is used for this traffic letter. Under this category the peak weekday a.m. trips generated for 5.31 trips. The peak p.m. weekday trips is 3.82.

The maximum peak trips generated from the proposed recreational administrative offices of 5.31 trips will not impact existing traffic conditions.

The location, width and slope of the proposed driveway does not pose any inherent safety issues.

We have reviewed the City's Transportation System Plan (TSP) and the proposed driveway access complies with the applicable standards.

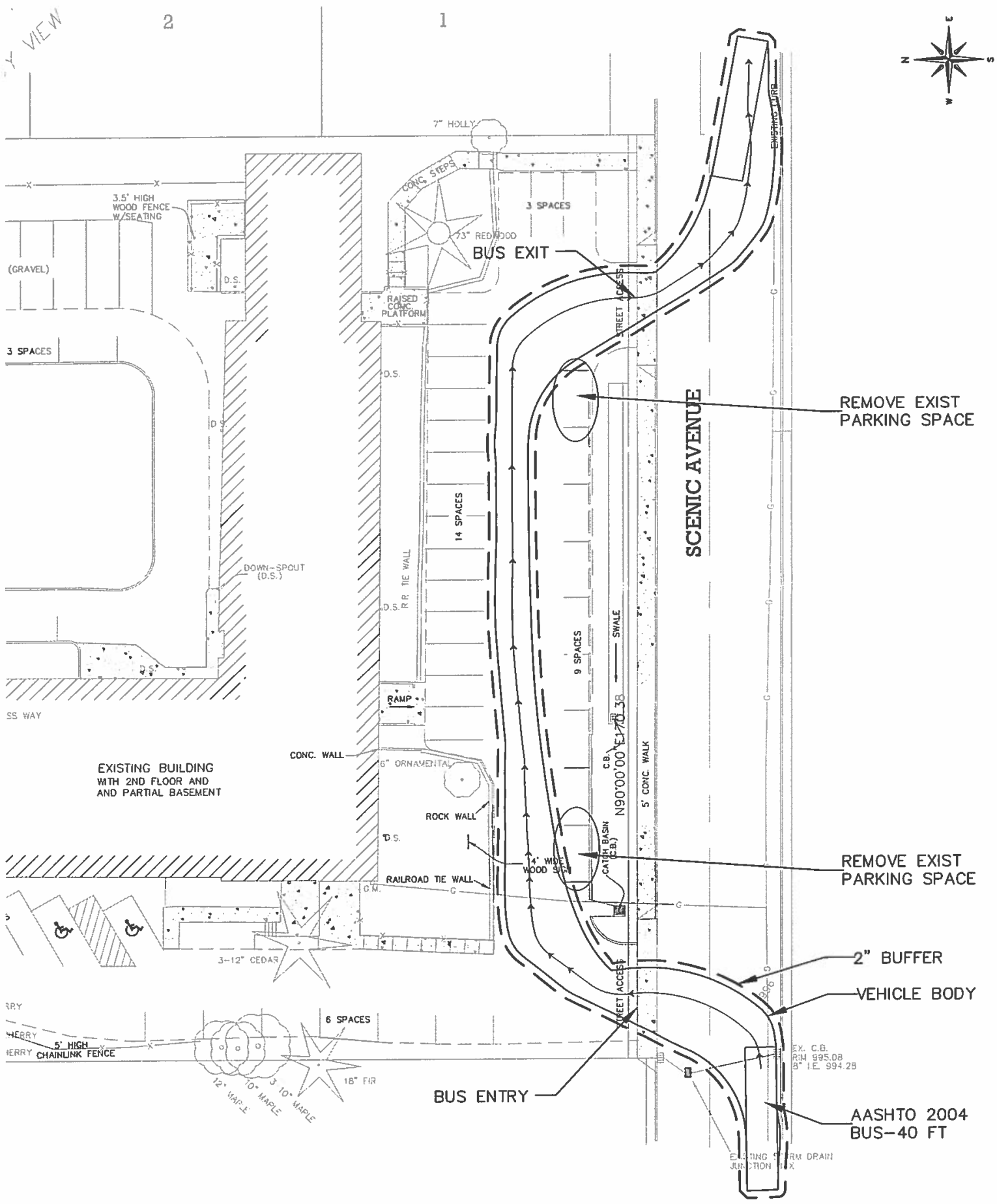
Best Regards,

Kelli A. Grover, P.E.
Principal Engineer

359 E. Historic Columbia River Highway, Troutdale, OR 97060 Tel: 503-668-3737 Fax: 503-668-3788

TAX LOT 24E13AB LOCATED IN THE NORTHEAST 1/4 OF SECTION 13, TOWNSHIP 2 SOUTH, RANGE 4 EAST
WILLAMETTE MERIDIAN, COUNTY OF CLACKAMAS, STATE OF OREGON
SCALE: 1"= 30' DATE: JULY 13, 2018

EXHIBIT E



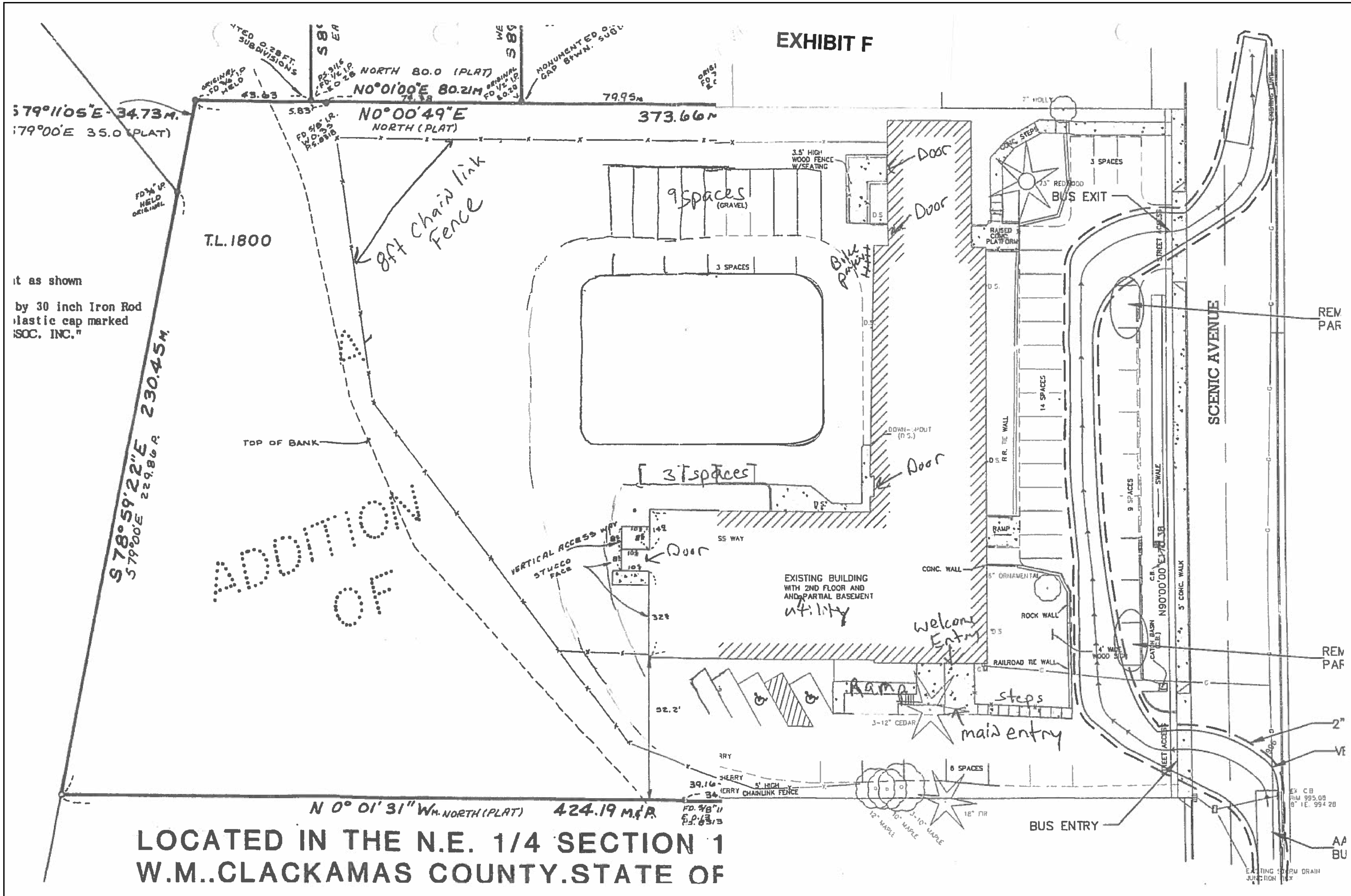
BUS CIRCULATION PLAN

FDG
Firwood Design Group, LLC
SURVEYING ✦ ENGINEERING ✦ PLANNING
359 E. HIST. COLUMBIA RIVER HWY
TROUTDALE, OR 97060
✦(503) 668-3737 ✦FAX: (503) 668-3788

PROJECT: TRAFFIC LETTER AND SITE CIRCULATION
CLIENT NAME: YI ZHOU

FIRWOODKG DRAFT_AT.dwg

EXHIBIT F



S79°11'05"E 34.73M.
S79°00'E 35.0 (PLAT)
N0°00'49"E
NORTH (PLAT)
NORTH 80.0 (PLAT)
N0°01'00"E 80.21M
373.66M
79.95M
T.L.1800
S78°59'22"E 230.45M.
S79°00'E 229.86 P.
TOP OF BANK
ADDITION OF
8ft chain link fence
9 spaces (GRAVEL)
3 SPACES
3 spaces
Door
Door
Door
Door
Bike parking
3.5' HIGH WOOD FENCE W/SEATING
VERTICAL ACCESS WAY
STUCCO FACE
SS WAY
EXISTING BUILDING WITH 2ND FLOOR AND AND PARTIAL BASEMENT
utility
CONC. WALL
welcome Entry
Ramp
steps
main entry
3-12" CEDAR
8 SPACES
5' HIGH CHAINLINK FENCE
18" FIR
12" MAPLE
10" MAPLE
3-10" MAPLE
BUS EXIT
BUS ENTRY
RAISED CONC. PLATFORM
CONC. STEPS
23" REDWOOD
3 SPACES
14 SPACES
9 SPACES
R.R. TIE WALL
RAMP
ROCK WALL
RAILROAD TIE WALL
4' WIDE WOOD STEP
SWALE
CATCH BASIN (C.B.)
5' CONC. WALK
STREET ACCESS
SCENIC AVENUE
N90°00'00"E 170.38
N 0° 01' 31" W M. NORTH (PLAT)
424.19 M&P.
EXISTING STORM DRAIN JUNCTION BOX

LOCATED IN THE N.E. 1/4 SECTION 1
W.M..CLACKAMAS COUNTY.STATE OF

t as shown
by 30 inch Iron Rod
lastic cap marked
SOC. INC."

EXHIBIT G

MEMORANDUM

TO: EMILY MEHARG, ASSOCIATE PLANNER
FROM: MIKE WALKER, PUBLIC WORKS DIRECTOR
RE: PW COMMENTS ON FILE NO. 18-054 CUP (SCENIC STREET CAMP ACADEMY)
DATE: MARCH 5, 2019

The following are Public Works' comments on the above-referenced application:

Transportation

- The proposed use(s) contemplated at the pre-application conference in June, 2018 were either not identified or were different than the use proposed in this application. The traffic letter requested at the pre-application conference and provided with this application is not adequate to assess the traffic impacts from the proposed use. The applicant shall submit a Traffic Impact Analysis prepared by a Traffic Engineer conforming to the City's "Minimum Requirements for Traffic Analyses" (attached).

- *The City's standard for sidewalks on local streets is a five-foot sidewalk separated from the street by a five-foot planter strip. The sidewalk on the site does not comply with this standard. There is sufficient right-of-way to construct a conforming sidewalk and planter strip. The existing swale can be incorporated into the planter strip.*

- The bus circulation plan submitted shows that a WB-40 bus can enter or exit the site. However the eastbound bus path shows the turn starting less than 2 feet from the south curb line. The bus circulation plans should be revised to show the turn starting eight feet off the south curb line to account for vehicles parked on the street at this location.

- To prevent confusion with other vehicles entering the site the western driveway approach shall be designated "Enter Only" and the eastern driveway approach shall be designated "Exit Only" with signs, legends and arrows conforming to the Manual on Uniform Traffic Control Devices.

- The applicant shall relocate the existing mail box or widen the sidewalk adjacent to the existing mail box and utility pole to provide 48" (not including the curb) of horizontal clearance for ADA compliance.

Utilities

- The existing swale captures some of the water that runs off the existing parking lot but much of the impervious surface on the west side of the building and the east end of the parking lot does not reach the swale and instead sheet flows

across the sidewalk and driveway approach. Sheet flow across sidewalks is prohibited under section 17.98.140 Sandy Municipal Code (SMC). The applicant shall re-grade these areas to drain to the swale or install additional drains or berms to direct runoff to the existing on-site stormwater system.

- If food will be prepared and served on-site the applicant shall install a properly sized grease interceptor to serve kitchen waste lines. The applicant shall be responsible for regularly maintaining the interceptor.

- All stormwater detention and treatment shall conform to the requirements of sections 13.18 and 13.20 SMC and the City of Portland Stormwater Management Manual (SWMM).

- The applicant shall consult with Sandy Fire District regarding fire hydrant locations and spacing on the site and on adjacent public streets.

Please let me know if you have any questions or need more information.

RECEIVED
FEB 28 2019

2/5/2019

COMMENT SHEET for File No. 18-054 CUP:

EXHIBIT H

I ask that the application not be approved. Our neighborhood is made up of mainly retired homeowners. Camp Academy, LLC would bring 144+ students and employees into a quiet setting. Although the students will not be driving cars there will still be a lot of foot traffic. I believe this could cause noisy stress. The academy bus traffic may make it difficult for the current residents of this neighborhood to safely get around during the times that the students are bussed to + from the Mtn.

Please do not approve this proposal.

Thank you.

Jeryl

Jeryl Mcgee — Your Name

503-704-1470 — Phone Number

39723 Scenic St. Sandy OR 97055 — Address

APPLICABLE CRITERIA: Sandy Municipal Code: 17.12 Procedures for Decision Making; 17.18 Processing Applications; 17.22 Notices; 17.34 Single Family Residential; 17.68 Conditional Use; 17.84 Improvements Required with Development; and, 17.98 Parking, Loading, and Access.

18-054

Date: March 1, 2019

EXHIBIT I

Emily Meharg
City of Sandy
39250 Pioneer Blvd.
Sandy, OR 97055

RE: File No. File No. 18-054 CUP
The purpose of this letter is to provide comments on the proposed Scenic Street Camp Academy Conditional Use Permit request. The submitted materials indicate the applicant proposes housing up to 144 students onsite who will be serviced by a number of staff. The applicant's narrative seems to be premised on the idea that the proposed use is a "change of use" as justification for approval of the proposal. This is a flawed premise in that each Conditional Use is required to be justified, evaluated, and approved on its own merits.

As a resident of the Scenic Meadows neighborhood around the corner from the facility for the last 14 years, we are not opposed to the use of the property for this purpose but we are concerned with the potential for additional traffic and noise it will generate. As noted below, we are recommending conditions be placed on the proposal to address these issues if the application is approved.

The Traffic Analysis Letter submitted with the application indicates the proposal will include up to 80 employees and this number is changed to 144 students plus staff in the applicant's narrative. The submitted Bus Circulation Plan shows that buses are proposed to enter the site from the west and will exit the site going east. Based on this plan it appears buses will use either Meinig Avenue or Revenue Avenue to get to Scenic Street and the site and exit the site via Scenic Street and Fir Drive. All streets in the vicinity of the site are classified as local streets with the exception of Meinig Ave., which is classified as a collector. As a resident of Fir Drive, we are concerned with an increase in traffic, especially bus traffic, generated by the proposed use.

In addition to an increase in traffic, we are also concerned with additional noise generated from the site, especially if outdoor recreational facilities are constructed or students are allowed to recreate outside on the property. With up to 144 students housed onsite, we feel there is potential for an increase in noise unless carefully monitored.

Section 17.68.20 is the primary section the applicant shall address and provide evidence for to substantiate the proposal complies with the criteria in the section. A review of the applicant's submittal reveals the applicant has not provided substantial evidence to address the criteria in Subsections C, D, E, and F3 and F8 of this section. For this reason, if the application is approved, we request the following conditions be added:

1. The applicant shall submit an updated Traffic Analysis Letter regarding the proposed number of occupants and a revised Bus Circulation Plan reversing the direction of onsite bus circulation.
2. All vehicles servicing the site (buses, vans, trucks, etc.) shall use Scenic Street and Meinig Avenue only to enter and exit the site.
3. No outdoor recreational facilities including skateboard ramps or structures shall be constructed or allowed anywhere on the site.

Please enter these comments into the record and make them available to the Planning Commission.

Sincerely,

Tracy Brown
17075 Fir Drive
Sandy, OR. 97055

Staff Report

Meeting Date: March 19, 2019

From Emily Meharg, Associate Planner

SUBJECT:

Background:
Axis Design Group submitted an application on behalf of Sandy Automotive (Mark Benson) for a self-storage facility located on a 4.3-acre site at the NW corner of Champion Way and Industrial Way. The proposal includes five (5) self-storage buildings varying in size from 5,324 square feet to 33,178 square feet. The northernmost building (Building 1) will be accessed via the existing driveway on Champion Way south of the Arco gas station; the remaining four (4) buildings will be accessed by a new one-way driveway with an ingress from Industrial Way and an egress to Champion Way. There is no development being proposed for the portion of the site in the BPA powerline easement with this application. The applicant is requesting the following variances and design deviations:

- A variance to allow greater than 30 percent metal siding (Section 17.90.120(B.3.d.4))
- A variance to the 150 foot driveway spacing minimum (Sections 17.98.80(A) and 17.90.120(A.3))
- A variance to allow a flat roof on a building that has a span of less than 50 feet (Section 17.90.120(C.1))
- A variance to allow a front yard retaining wall height in excess of 6 feet (Section 17.74.40(B.3))
- A variance to reduce the ground floor widow coverage requirement (Section 17.90.120(E.2))
- A design deviation to not provide a primary entrance on all activated frontages (Section 17.90.120(D.3 and 7))

Recommendation:
Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. Staff recommends the Planning Commission **approve** the application with modifications as recommended in this report.

Staff recommends the Planning Commission **approve** the following adjustments, variances, and deviations:

- Type II Adjustment to Section 17.90.120(B.3.d.4) to allow up to 36 percent metal siding on the south elevations of Buildings 4 and 5, the south elevation of Building 2, and the north elevation of Building 3.

- Special Variance to Section 17.90.120(A.3) and 17.98.80(A) to allow a second right-out only driveway egress on Champion Way to be spaced less than 150 feet from the existing common access easement driveway.
- Special Variance to Section 17.90.120(C.1) to allow flat roofs on all buildings.
- Special Variance to Sections 17.90.120(E.2) to allow less than the required window coverage on the north elevation of Building 1, the east elevations of Buildings 1 and 2, and the south elevations of Buildings 4 and 5, provided the applicant detail metal awnings above the proposed windows and landscaped trellises in the two proposed sections of metal siding on the south elevations of Buildings 4 and 5.
- Special Variance to Section 17.74.40(B.3) to allow a retaining wall in the front yard greater than 6 feet tall.
- Design deviation to Section 17.90.120(D.3 and 7) to not require a public entrance and connecting walkway on Buildings 2-5.

Staff recommends the Planning Commission **deny** the applicant's request for the following variances:

- Special Variance to Section 17.90.120(B.3.d.4) to allow 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3.
- Special Variance to Section 17.90.120(E.2) to allow less than the required window percent coverage on the east elevation of Building 5 and the west elevations of Buildings 3 and 4.

If the applicant chooses to apply for the two additional variances identified by staff, staff recommends the Planning Commission:

- Decide whether to **approve or deny** a Special Variance to Section 17.90.120(D.1) to allow less than 50 percent of the street frontage along Industrial Way to be comprised of buildings within 20 feet of the sidewalk.
- **Approve** a Special Variance to Section 17.90.120(G) to allow 250 square feet of civic space rather than the 1,727 square feet required.

Code Analysis:
See attached

Budgetary Impact:
None

WHERE INNOVATION MEETS ELEVATION

39250 Pioneer Blvd
Sandy, OR 97055
503-668-5533

STAFF REPORT
TYPE III LAND USE PROPOSAL

REPORT DATE: March 12, 2019

SUBJECT: File No. 18-047 DR/VAR/ADJ Sandy Vault Storage

AGENDA DATE: March 19, 2019

DEPARTMENT: Planning Division

STAFF CONTACT: Emily Meharg, Associate Planner

Application Submitted: October 4, 2018
Deemed Incomplete: October 29, 2018
Additional Submittals: January 17, 2019
Application Complete: January 30, 2019
120-Day Deadline: May 30, 2019

EXHIBITS:

Applicant's Submittals:

A. Land Use Application
B. Design Review Narrative and Deviation, Adjustment, and Variance Narrative
C. Plan Set

Architectural Plans

- Sheet A1 – Cover Sheet and Site Plan
- Sheet A1.1 – Simplified Site Plan
- Sheet A1.2 –Site Plan Details
- Sheet A1.3 – Truck Turning Radius Diagram
- Sheet A2 – Floor Plans
- Sheet A3 – Elevations Building 1 and 2
- Sheet A4 – Elevations Buildings 3, 4, and 5
- Sheet A5 – Glazing Diagrams and Elevations

Engineering Plans

- Sheet 1 – Cover Sheet and Notes
- Sheet 2 – Existing Conditions
- Sheet 3A – Site Plan West
- Sheet 3B – Site Plan NW Corner
- Sheet 4 – Site Plan East
- Sheet 5 – Grading Plan West
- Sheet 6 – Grading Plan East
- Sheet 7 – Utility Plan West
- Sheet 8 – Utility Plan East
- Sheet 9 – Erosion Control Notes and Details

Other Plans

- Sheet E0.1 – Photometric Plan
- Sheet E0.2 – Site Power Plan
- Sheet L1 – Landscape Plan East
- Sheet L2 – Landscape Plan West

D. Trip Generation Letter
E. Arborist Report
F. Geotechnical Engineering Report

G. Wetlands Memo
H. Preliminary Stormwater Report
I. Lighting Cut-sheets
J. Materials Board

Agency Comments:
K. City Engineer (February 26, 2019)
L. Transportation Engineer (February 25, 2019)
M. Public Works Director (March 4, 2019)
N. ODOT (March 5, 2019)

Additional Documents Submitted by Staff
O. Final Order 18-027 INT Highway 26 Storage Code Interpretation

I. BACKGROUND

A. PROCEEDING

Type III Design Review with Variances, Deviations, and Adjustments

B. FACTUAL INFORMATION

1. APPLICANT: Axis Design Group
2. OWNER: Sandy Automotive, LLC (Mark Benson)
3. PROJECT NAME: Sandy Vault Self Storage
4. SITUS ADDRESSES: No situs address
5. LEGAL DESCRIPTION: T2S R4E Section 15A Tax Lot 209
6. PROPERTY LOCATION: South of Highway 26, west of Champion Way, north of Industrial Way
7. PROPERTY SIZE: 5.44 acres
8. COMPREHENSIVE PLAN DESIGNATION: Light Industrial
9. ZONING DISTRICT DESIGNATION: Industrial Park, I-1
10. SERVICE CONSIDERATIONS: With the exception of lateral connections for domestic water, fire protection, and sanitary sewer service, limited public utility extensions are proposed or required for development of the site, unless otherwise noted during construction plan review.

11. RESPONSE FROM GOVERNMENTAL AGENCIES, UTILITY PROVIDERS, CITY DEPARTMENTS AND THE GENERAL PUBLIC
    a. City Engineer – (Exhibit K)
    b. Transportation Engineer – (Exhibit L)
    c. Public Works Director – (Exhibit M)
    d. ODOT (Exhibit N)

C. PUBLIC COMMENTS

No public comments were received prior to publishing this staff report.

D. APPLICABLE CRITERIA: Sandy Development Code Chapters: 17.12 Procedures for Decision Making; 17.18 Processing Applications; 17.22 Notices; 17.48 Industrial Park (I-1); 17.66 Adjustments and Variances; 17.74 Accessory Development; 17.80 Additional Setbacks on Collector and Arterial Streets; 17.84 Improvements Required with Development; 17.90 Design Standards; 17.92 Landscaping and Screening; 17.98 Parking, Loading, and Access; 17.102 Urban Forestry; and, 15.30 Dark Sky.

E. EXPLANATION OF PROPOSED IMPROVEMENTS

Axis Design Group submitted an application on behalf of Sandy Automotive (Mark Benson) for a self-storage facility located on a 4.3-acre site at the NW corner of Champion Way and Industrial Way. The proposal includes five (5) self-storage buildings varying in size from 5,324 square feet to 33,178 square feet. The northernmost building (Building 1) will be accessed via the existing driveway on Champion Way south of the Arco gas station; the remaining four (4) buildings will be accessed by a new one-way driveway with an ingress from Industrial Way and an egress to Champion Way. There is no development being proposed for the portion of the site in the BPA powerline easement with this application. The applicant is requesting the following variances and design deviations:

- A variance to allow greater than 30 percent metal siding (Section 17.90.120(B.3.d.4))
- A variance to the 150 foot driveway spacing minimum (Sections 17.98.80(A) and 17.90.120(A.3))
- A variance to allow a flat roof on a building that has a span of less than 50 feet (Section 17.90.120(C.1))
- A variance to allow a front yard retaining wall height in excess of 6 feet (Section 17.74.40(B.3))
- A variance to reduce the ground floor widow coverage requirement (Section 17.90.120(E.2))
- A design deviation to not provide a primary entrance on all activated frontages (Section 17.90.120(D.3 and 7))

F. PROPERTY BACKGROUND

The subject parcel was originally created as portions of Lot 8 (4.54 acres) and Lot 9 (6.07 acres) of the Pioneer Corporate Park subdivision platted in 1996 (Plat Book 109, Page 13) with the line dividing the lots oriented generally north-south. Since 2000 here are the primary land use approvals:

- In 2000, the owner of the property at the time was approved for a property line adjustment (File No. 2000-044, Survey No. PS-29073) shifting the common line

between these parcels to an east-west orientation. This resulted in reconfigured parcels, Lot 8 (9.14 acres) and Lot 9 (1.47).

- In 2010 (File No. 10-035 MP), the current owner (Mark Benson) partitioned Lot 8 into two lots: Parcel 1 to contain 8.05 acres and Parcel 2 to contain 1.05 acres.
- In 2011 (File No. 11-008 CUP/DR/VAR), Champion 26 LLC received approval to construct the 'ampm' convenience store and ARCO fueling station.
- In 2018 (File No. 18-019 MP), Sandy Automotive LLC (Mark Benson) and Hix Snedeker LLC received approval to partition Parcel 1 from File No. 10-035 MP into two parcels at 5.44 and 2.63 acres.
- In 2018 (File No. 18-027 INT, Exhibit O), Sandy Automotive LLC (Mark Benson) applied for a code interpretation. The Planning Commission interpreted that the property owner is not allowed to consider garage doors as qualifying for ground floor windows on the activated frontage(s) of buildings; however, the Planning Commission determined that faux windows would be allowed to count towards the percent window requirement. The Planning Commission also made determinations regarding activated frontages for the buildings.

G. PROCEDURAL CONSIDERATIONS

Staff has determined the proposed application to construct a self-storage facility with requested variances and deviations is a Type III Design Review. Review of the application requires a public hearing before the Sandy Planning Commission. Notification of this proposal was mailed to property owners within 300 feet of the subject property and to affected agencies on February 21, 2019. A legal notice was published in the Sandy Post on March 6, 2019.

II. ANALYSIS OF CODE COMPLIANCE

CHAPTER 17.48 – INDUSTRIAL PARK (I-1)

The site is zoned as Industrial Park (I-1) and is being reviewed under the Industrial Park (I-1) zoning district standards. Per Section 17.48.10(A.2.i), self-service storage in buildings with less than 60,000 square feet of gross floor area is an outright permitted use. The proposed five (5) storage buildings total 57,559 square feet in area.

17.48.30 DEVELOPMENT REQUIREMENTS

Lot Area	No minimum
Lot Dimension	No minimum
Setbacks Front Side Rear Corner	 10 ft. minimum; 50 ft. maximum None unless abutting a more restrictive district; if abutting, the minimum setback is 30 ft. None 15 ft.
Lot Coverage	80% maximum
Landscaping Requirement	20% minimum (includes required civic space per Section 17.90.120)

Structure Height	45 ft. maximum
Off-Street Parking	See Chapter 17.98
Design Review Standards	See Section 17.90.120

RESPONSE: *For the purposes of this review, Champion Way is considered the front yard. All proposed buildings are set back 20 feet or more from any public right-of-way in compliance with the setback requirements of Section 17.48.30. The applicant's narrative (Exhibit B) states that the proposed building coverage is 31 percent, landscape coverage is 59 percent, and maximum building height is 25 feet 6 inches.*

CHAPTER 17.74 – ACCESSORY DEVELOPMENT

17.74.40 FENCES AND WINDSCREENS

B. Fences - Commercial/Industrial
1. Fences on corner lots. Any fence or retaining wall, constructed upon or adjacent to any property line that abuts two or more intersecting streets, shall not exceed 3 ft. in height within the clear vision area.
2. Fences in a front yard (Commercial). The height of a fence or retaining wall in a front yard shall not exceed 4 ft.
3. Fences in a front yard (Industrial). The height of a fence or retaining wall in a front yard shall not exceed 6 ft.
4. Fences - Side and Rear Yards. The height of a fence or retaining wall adjacent to a side or rear yard or a side or rear property line shall not exceed 8 ft.
5. Sight Obscuring Hedges. Trees or shrubs that form a sight-obscuring hedge shall comply with the same height requirement as a fence within the clear vision area. Deciduous trees separated by at least 15 ft. may grow to any height.

RESPONSE*: The subject property is zoned Industrial Park (I-1). The maximum combined height of any proposed retaining walls/fences in the front yard is 6 feet and the maximum combined height in the side and rear yards is 8 feet. It appears that the applicant is proposing three (3) retaining walls; however, the applicant only submitted a wall profile for the terraced wall along the east edge of the subject property on Champion Way. The maximum allowed height for a retaining wall on Champion Way (the front yard) is 6 feet. The applicant requested a variance to retaining wall height for the terraced wall, which is approximately 8.5 feet in height at its tallest point. The variances to retaining wall height are discussed further in Chapter 17.66 of this document.*

The submitted Site Plan (Exhibit C, Sheets 3A and 4) details two additional retaining walls: one south of the proposed driveway between Buildings 2 and 4, and a second north of Building 3. Both proposed walls are located in the side yard and, therefore, shall not exceed 8 feet. The applicant did not submit details on either proposed retaining wall so staff does not know the heights of these walls. ***The applicant shall submit details on all proposed retaining walls on the subject property, including wall height and proposed architectural finish for staff review and approval. If the wall between Buildings 2 and 4 or the wall north of Building 3 exceeds 8 feet in height, the applicant shall apply for an additional variance.***

CHAPTER 17.80 – ADDITIONAL SETBACKS ON COLLECTOR AND ARTERIAL STREETS

17.80.10 APPLICABILITY

Major Arterial: Highway 26
Collector: Champion Way and Industrial Way

RESPONSE: *The subject property has frontage on Highway 26, which is a major arterial, and Champion Way and Industrial Way, which are collector streets. All structures on the subject property shall be constructed to comply with the standards of Section 17.80.20.*

17.80.20 SPECIFIC SETBACKS

Any structure located on streets listed above or identified in the Transportation System Plan as arterials or collectors shall have a minimum setback of 20 feet measured from the property line. This applies to applicable front, rear and side yards.

RESPONSE: *All structures shall maintain a minimum 20-foot setback from the Highway 26, Champion Way, and Industrial Way public rights-of-way. There are no buildings proposed along the Highway 26 frontage. The Site Plan (Exhibit C, Sheets 3A and 4) depicts all proposed buildings at 20 feet (or greater) from the Champion Way and Industrial Way rights-of-way.*

CHAPTER 17.84 - IMPROVEMENTS REQUIRED WITH DEVELOPMENT

This chapter provides general information regarding improvements required in association with development, and it clarifies the timing, extent, and standards for public and private improvements.

17.84.20 TIMING OF IMPROVEMENTS

A. All improvements required by the standards in this chapter shall be installed concurrently with development, as follows:
   1. Where a land division is proposed, each proposed lot shall have required public and franchise utility improvements installed or financially guaranteed in accordance with the provisions of Chapter 17 prior to approval of the final plat.
   2. Where a land division is not proposed, the site shall have required public and franchise utility improvements installed or financially guaranteed in accordance with the provisions of Chapter 17 prior to temporary or final occupancy of structures.

RESPONSE: All required improvements shall be installed or financially guaranteed prior to final occupancy of the Sandy Vault Self Storage buildings.

17.84.30 PEDESTRIAN AND BICYCLIST IMPROVEMENTS

A. Sidewalks shall be required along both sides of all arterial, collector, and local streets, as follows:
   1. Sidewalks shall be a minimum of 5 ft. wide on local streets. The sidewalks shall be separated from curbs by a tree planting area that provides separation between sidewalk and curb, unless modified in accordance with Subsection 3 below.

2. Sidewalks along arterial and collector streets shall be separated from curbs with a planting area, except as necessary to continue an existing curb-tight sidewalk. The planting area shall be landscaped with trees and plant materials approved by the City. The sidewalks shall be a minimum of 6 ft. wide.
3. Sidewalk improvements shall be made according to city standards, unless the city determines that the public benefit in the particular case does not warrant imposing a severe adverse impact to a natural or other significant feature such as requiring removal of a mature tree, requiring undue grading, or requiring modification to an existing building. Any exceptions to the standards shall generally be in the following order.
   a) Narrow landscape strips
   b) Narrow sidewalk or portion of sidewalk to no less than 4 feet in width
   c) Eliminate landscape strips
   d) Narrow on-street improvements by eliminating on-street parking
   e) Eliminate sidewalks
4. The timing of the installation of sidewalks shall be as follows:
   a) Sidewalks and planted areas along arterial and collector streets shall be installed with street improvements, or with development of the site if street improvements are deferred.
   b) Sidewalks along local streets shall be installed in conjunction with development of the site, generally with building permits, except as noted in (c) below.
   c) Where sidewalks on local streets abut common areas, drainageways, or other publicly owned or semi-publicly owned areas, the sidewalks and planted areas shall be installed with street improvements.

RESPONSE: *The Site Plan (Exhibit C, Sheets 3A and 4) depicts new 6 foot sidewalks with a 5 foot planter strip along the site frontage of both Champion Way and Industrial Way. There are existing 5 foot wide sidewalks on the Highway 26 frontage of the site. Highway 26 is a major arterial; therefore, 6 foot wide sidewalks are required.* ***ODOT (Exhibit N) recommends that the applicant be required to bring the sidewalk up to current City and ODOT standards. Sidewalk and planter strip shall be constructed as necessary to be consistent with local, ODOT and ADA standards. The applicant shall obtain all appropriate permits and agreement to work in the ODOT right-of-way (see Exhibit N).*** *The Site Plan (Exhibit C, Sheet 3B) indicates the applicant will remove the existing 5 foot sidewalks and install 6 foot wide sidewalks along the Highway 26 frontage of the site that will match the approved Tractor Supply sidewalk alignment. Per the Public Works Director (Exhibit M),* ***the applicant shall provide pedestrian improvements on all site frontages (Champion Way, Industrial Way, and Highway 26) consisting of a five-foot planter strip and six-foot sidewalks per Sections 15.28 and 17.84.30 of the Sandy Municipal Code (SMC). Street trees approved by staff are required in the planter strips at 30 foot on-center spacing. In addition, street lighting shall be required at the west end of Champion Way where there are currently no streetlights (approximately 400 lineal feet) and the west end of the Highway 26 frontage (approximately 300 lineal feet).***

B. Safe and convenient pedestrian and bicyclist facilities that strive to minimize travel distance to the extent practicable shall be provided in conjunction with new development within and between new subdivisions, planned developments, commercial developments, industrial areas, residential areas, public transit stops, school transit stops, and neighborhood activity centers such as schools and parks, as follows:
   1. For the purposes of this section, "safe and convenient" means pedestrian and bicyclist facilities that: are reasonably free from hazards which would interfere with or discourage

travel for short trips; provide a direct route of travel between destinations; and meet the travel needs of pedestrians and bicyclists considering destination and length of trip.

2. To meet the intent of "B" above, right-of-ways connecting cul-de-sacs or passing through unusually long or oddly shaped blocks shall be a minimum of 15 ft. wide with 8 feet of pavement.
3. 12 feet wide pathways shall be provided in areas with high bicycle volumes or multiple use by bicyclists, pedestrians, and joggers.
4. Pathways and sidewalks shall be encouraged in new developments by clustering buildings or constructing convenient pedestrian ways. Pedestrian walkways shall be provided in accordance with the following standards:
   a) The pedestrian circulation system shall be at least five feet in width and shall connect the sidewalk on each abutting street to the main entrance of the primary structure on the site to minimize out of direction pedestrian travel.
   b) Walkways at least five feet in width shall be provided to connect the pedestrian circulation system with existing or planned pedestrian facilities which abut the site but are not adjacent to the streets abutting the site.
   c) Walkways shall be as direct as possible and avoid unnecessary meandering.
   d) Walkway/driveway crossings shall be minimized. Internal parking lot design shall maintain ease of access for pedestrians from abutting streets, pedestrian facilities, and transit stops.
   e) With the exception of walkway/driveway crossings, walkways shall be separated from vehicle parking or vehicle maneuvering areas by grade, different paving material, painted crosshatching or landscaping. They shall be constructed in accordance with the sidewalk standards adopted by the City. (This provision does not require a separated walkway system to collect drivers and passengers from cars that have parked on site unless an unusual parking lot hazard exists).
   f) Pedestrian amenities such as covered walk-ways, awnings, visual corridors and benches will be encouraged. For every two benches provided, the minimum parking requirements will be reduced by one, up to a maximum of four benches per site. Benches shall have direct access to the circulation system.

RESPONSE: *There is an existing 5 foot walkway adjacent to the 30 foot common access easement that connects to the Champion Way sidewalk to the east and the recently approved Tractor Supply Company site to the west. The applicant is proposing to install a 5 foot landscaped buffer in the 30 foot common access easement to separate the 5 foot walkway from the vehicular area of the common access driveway. The applicant submitted a truck turning template (Exhibit C, Sheet A1.3) that staff believe is meant to demonstrate that a fueling truck can still access the Arco site to the north if the 5 foot landscaped planter is placed in the 30 foot common access easement; however, the submitted truck turning template is not labeled adequately and, thus, it is not clear what vehicle type or intersection the truck turning template is accounting for. Per the Public Works Director (Exhibit M), there are no dimensions on the size of the access the truck is turning from or the width of the roadway the truck is turning onto much less which drive or roadway is which. There is no information on the type or size of vehicle (WB-40, WB-50, WB-62, etc.). A radius is shown, but there are no dimensions. The distance between the center point of the radius and the front axle is not shown. The wheel path (inside and outside), swept path and overhang are not identified. It is not clear what the (N) and the (E) refer to in relation to the curb.* ***The applicant shall submit an updated truck turning template demonstrating that a fueling***

truck can access the Arco site. The turning template shall include appropriate dimensions, details on the type of truck, road labels, etc.

The applicant proposes to replace the existing 5 foot wide sidewalk along the Highway 26 frontage of the site with a 6 foot wide sidewalk as required by ODOT and to install 6 foot wide sidewalks on Champion Way and Industrial Way. The proposal also includes a walkway connecting the sidewalk on Champion Way to the front entrance of proposed Building 1, which is where the main office for the storage facility will be located.

17.84.50 STREET REQUIREMENTS

A. Traffic evaluations may be required of all development proposals in accordance with the following:
   1. A proposal establishing the scope of the traffic evaluation shall be submitted for review to the City Engineer. The evaluation requirements shall reflect the magnitude of the project in accordance with accepted traffic engineering practices. Large projects should assess all nearby key intersections. Once the scope of the traffic evaluation has been approved, the applicant shall present the results with and an overall site development proposal. If required by the City Engineer, such evaluations shall be signed by a Licensed Professional Civil Engineer or Licensed Professional Traffic Engineer licensed in the State of Oregon.
   2. If the traffic evaluation identifies level-of-service conditions less than the minimum standard established in the Transportation System Plan, improvements and funding strategies mitigating the problem shall be considered concurrent with a development proposal.

   RESPONSE: *The applicant submitted a trip generation letter prepared by Firwood Design Group dated September 17, 2018 (Exhibit D). The analysis predicts 16 morning peak hour trips and 18 evening peak hour trips. The TIS was reviewed by the City's Transportation Engineer (Exhibit L).*

   The City's Transportation Engineer finds that the trip generation letter provides an adequate, if somewhat high, estimate of traffic from the proposed facility; however, he has concerns with the proposed development's layout and site circulation. To minimize the chance of conflict between eastbound traffic on the shared common access easement driveway and inbound traffic to the Sandy Vault site, ***the City's Transportation Engineer recommends that the ingress to the Sandy Vault office and Building 1 be located opposite the existing drive aisle between the Arco station and the convenience store. The City Transportation Engineer estimates that distance to be approximately 120 feet west of the west curb of Champion Way.***

D. Development sites shall be provided with access from a public street improved to City standards in accordance with the following:
   1. Where a development site abuts an existing public street not improved to City standards, the abutting street shall be improved to City standards along the full frontage of the property concurrent with development.

   RESPONSE*: Per the City Engineer (Exhibit K),* ***half street improvements including right-of-way dedications will be required along the entire site frontages to include 5-foot wide landscape strips with landscaping, 6-foot wide sidewalks, street lights, and utility extensions***

as required by the City of Sandy or the City Engineer. The City Engineer recommends the existing roadway width be maintained for consistency and uniformity to match the existing paved surface.

H. Location, grades, alignment, and widths for all public streets shall be considered in relation to existing and planned streets, topographical conditions, public convenience and safety, and proposed land use. Where topographical conditions present special circumstances, exceptions to these standards may be granted by the City Engineer provided the safety and capacity of the street network is not adversely affected.

RESPONSE: *Per the City Engineer (Exhibit K),* ***the final construction plans shall include a plan and profile for Champion Way and Industrial Way improvements to include a plan and profile extensions of a minimum 200 feet in each direction to ensure future grades can be met.***

17.84.60 PUBLIC FACILITY EXTENSIONS

A. All development sites shall be provided with public water, sanitary sewer, broadband (fiber), and storm drainage.

B. Where necessary to serve property as specified in "A" above, required public facility installations shall be constructed concurrent with development.

C. Off-site public facility extensions necessary to fully serve a development site and adjacent properties shall be constructed concurrent with development.

D. As necessary to provide for orderly development of adjacent properties, public facilities installed concurrent with development of a site shall be extended through the site to the edge of adjacent property(ies).

E. All public facility installations required with development shall conform to the City's facilities master plans.

F. Private on-site sanitary sewer and storm drainage facilities may be considered provided all the following conditions exist:
   1. Extension of a public facility through the site is not necessary for the future orderly development of adjacent properties;
   2. The development site remains in one ownership and land division does not occur (with the exception of land divisions that may occur under the provisions of 17.84.50 F above);
   3. The facilities are designed and constructed in accordance with the Uniform Plumbing Code and other applicable codes, and permits and/or authorization to proceed with construction is issued prior to commencement of work.

RESPONSE: *The City Engineer (Exhibit K) submitted the following comments:*

- *Sanitary sewer collection system exists to the south of this site. Connection can be made to the sewer line. An easement may be necessary from the adjoining property to the south depending on the connection point.*

- *The preliminary plan doesn't show where the domestic water connection will be made to the waterline on Champion Way. The final plans shall detail the connection location and the size of the meter.*
- *The submitted preliminary storm drainage plan (Exhibit H) is incomplete. A revised storm drainage plan shall be submitted for review.* ***At the final design stage and prior to construction a detailed storm drainage report addressing water quality and quantity requirements shall be submitted by the applicant's engineer for review and approval by the City in conformance with Sandy Development Code (SDC) Standards, Section 13.18 and the 2018 City of Portland Stormwater Management Manual (SWMM) standards that were adopted by reference into the Sandy Development Code.***

Per the Public Works Director (Exhibit M), the Utilities Plan East (Exhibit C, Sheet 8) shows a water service connected to the private water main in the common access easement. Water service laterals may only be connected to public water lines. ***The water service for the site shall be connected to the public water main in Champion Way.*** *The Utilities Plan also depicts a sewer lateral connected to the existing private sewer main in the common access easement.* ***The applicant shall sign and record a sewer maintenance agreement reviewed and approved by the City for multiple properties under separate ownership served by a private common sewer line. All stormwater detention and treatment shall conform to the requirements of Sections 13.18 and 13.20 of the SMC and the City of Portland Stormwater Management Manual (SWMM). Prior to beginning design on the utility service lines the applicant shall consult with Sandy Fire District regarding fire hydrant locations and spacing on the site.***

17.84.70 PUBLIC IMPROVEMENT PROCEDURES

It is in the best interests of the community to ensure public improvements installed in conjunction with development are constructed in accordance with all applicable City policies, standards, procedures, and ordinances. Therefore, prior to commencement of installation of public water, sanitary sewer, storm drainage, broadband (fiber), street, bicycle, or pedestrian improvements for any development site, developers shall contact the City Engineer to receive information regarding adopted procedures governing plan submittal, plan review and approval, permit requirements, inspection and testing requirements, progress of the work, and provision of easements, dedications, and as-built drawings for installation of public improvements. All work shall proceed in accordance with those adopted procedures, and all applicable City policies, standards, and ordinances.

Whenever any work is being done contrary to the provisions of this Code, the Director may order the work stopped by notice in writing served on the persons engaged in performing the work or causing the work to be performed. The work shall stop until authorized by the Director to proceed with the work or with corrective action to remedy substandard work already completed.

RESPONSE: The applicant shall confer with Sandy Fire District to determine the number and location of on-site fire hydrants necessary to comply with the requirements of the Sandy Fire District Fire Marshall. *Per the City Engineer (Exhibit K),* ***the final construction plans shall be submitted to the Sandy Fire District for review and approval to ensure that adequate fire protection and access are provided to all buildings.***

17.84.80 FRANCHISE UTILITY INSTALLATIONS

These standards are intended to supplement, not replace or supersede, requirements contained within individual franchise agreements the City has with providers of electrical power, telephone, cable television, and natural gas services (hereinafter referred to as "franchise utilities").

A. Where a land division is proposed, the developer shall provide franchise utilities to the development site. Each lot created within a subdivision shall have an individual service available or financially guaranteed prior to approval of the final plat.

B. Where necessary, in the judgment of the Director, to provide for orderly development of adjacent properties, franchise utilities shall be extended through the site to the edge of adjacent property(ies), whether or not the development involves a land division.

C. The developer shall have the option of choosing whether or not to provide natural gas or cable television service to the development site, providing all of the following conditions exist:
   1. Extension of franchise utilities through the site is not necessary for the future orderly development of adjacent property(ies);
   2. The development site remains in one ownership and land division does not occur (with the exception of land divisions that may occur under the provisions of 17.84.50 F above); and
   3. The development is non-residential.

D. Where a land division is not proposed, the site shall have franchise utilities required by this section provided in accordance with the provisions of 17.84.70 prior to occupancy of structures.

E. All franchise utility distribution facilities installed to serve new development shall be placed underground except as provided below. The following facilities may be installed above-ground:
   1. Poles for street lights and traffic signals, pedestals for police and fire system communications and alarms, pad mounted transformers, pedestals, pedestal mounted terminal boxes and meter cabinets, concealed ducts, substations, or facilities used to carry voltage higher than 35,000 volts;
   2. Overhead utility distribution lines may be permitted upon approval of the City Engineer when unusual terrain, soil, or other conditions make underground installation impracticable. Location of such overhead utilities shall follow rear or side lot lines wherever feasible.

F. The developer shall be responsible for making necessary arrangements with franchise utility providers for provision of plans, timing of installation, and payment for services installed. Plans for franchise utility installations shall be submitted concurrent with plan submittal for public improvements to facilitate review by the City Engineer.

G. The developer shall be responsible for installation of underground conduit for street lighting along all public streets improved in conjunction with the development in accordance with the following:
   1. The developer shall coordinate with the City Engineer to determine the location of future street light poles. The street light plan shall be designed to provide illumination meeting standards set by the City Engineer.
   2. The developer shall make arrangements with the serving electric utility for trenching prior to installation of underground conduit for street lighting.

RESPONSE: *Municipal Code 15.20.030(B) states the following regarding undergrounding of utilities: "No building permit shall be issued for remodeling, alteration or addition to any building or structure when the estimated cost of the remodeling, alteration or addition exceeds twenty percent of the value of the building or structure before such remodeling, alteration or addition is commenced on any lot which is not served by underground utilities, unless the applicant agrees to construct equipment and related facilities to accept and receive all underground utility lines which shall serve the building or structure, including but not limited to those required for all electric, communication and cable TV services in conjunction with the construction activity related to the building permit."* ***The applicant shall place all onsite overhead electrical and communications wires underground in conformance with Section 15.20.***

17.84.80 FRANCHISE UTILITY INSTALLATIONS

These standards are intended to supplement, not replace or supersede, requirements contained within individual franchise agreements the City has with providers of electrical power, telephone, cable television, and natural gas services (hereinafter referred to as "franchise utilities").

RESPONSE: *Private utility services will be submitted for review and approval by service providers and City staff in association with construction plans, and all utility lines will be extended to the perimeter of the site.* ***All franchise utilities shall be installed underground and in conformance with City standards****.*

17.84.100 MAIL DELIVERY FACILITIES

RESPONSE: Mail delivery facilities shall be provided by the applicant in conformance with 17.84.100 and the standards of the USPS. The applicant shall submit a mail delivery plan to the City and USPS for review and approval prior to installation of the mail delivery facility.

CHAPTER 17.90 – DESIGN STANDARDS

17.90.120 GENERAL COMMERCIAL AND INDUSTRIAL (C-2 and I-1) AND NON-RESIDENTIAL USES IN RESIDENTIAL ZONES DESIGN STANDARDS

Development in the C-2 and I-1 districts and non-residential uses in a residential zone shall conform to all of the following standards, as applicable. Where a conflict exists between the requirements of this Chapter and any other code provision, this Chapter shall prevail.

RESPONSE: *The subject property is in the I-1 zoning district.*

A. Site Layout and Vehicle Access.

Intent: To provide for compact, walkable development, and to design and manage vehicle access and circulation in a manner that supports pedestrian safety, comfort and convenience. (Figures 17.90.120-A and 17.90.120-B)

1. All lots shall abut or have cross access to a dedicated public street. ***RESPONSE:*** *The subject property abuts Highway 26, Champion Way, and Industrial Way.*
3. Off-street parking shall be located to the rear or side of buildings with no portion of the parking lot located within required setbacks or within 10-feet of the public right-of-way, as

shown in Figure 17.90.120-A. When access must be provided directly from a public right-of-way, driveways for ingress or egress shall be limited to one per 150 ft. For lots with frontage of less than 150 ft. or less, shared access may be required. ***RESPONSE:*** *Five (5) of the proposed parking spaces are located on the north side of proposed Building 1 and outside of the 20 foot required setback from Champion Way. Access to the five (5) parking spaces will be from a driveway connected to the existing 30 foot common access easement that connects to Champion Way. The remaining two (2) parking spaces are on the interior of the site east of Building 4 and will be accessed from the proposed driveway connected to Industrial Way. The applicant is requesting a variance to the 150 foot minimum driveway spacing for the proposed egress on Champion Way. The variance request will be discussed further in Chapter 17.66 of this document.*

5. Urban design details, such as raised or painted pedestrian crossings and similar devices incorporating changes in paving materials, textures or color, shall be used to calm traffic and protect pedestrians in parking areas. ***RESPONSE:*** *The applicant is proposing a new pedestrian connection from Champion Way to the proposed civic space and front door to the office located in Building 1. Pedestrians will not need to cross the parking area to access the front door.*

7. Walkways from the public street sidewalk to the building entrance(s) are required. Crosswalks through parking lots and drive aisles shall be constructed of a material contrasting with the road surface or painted (e.g., colored concrete inlay in asphalt). ***RESPONSE:*** *The proposal includes an existing five foot wide walkway along the south side of the 30 foot common access easement that connects to the Champion Way sidewalk to the east and the recently approved Tractor Supply Company site to the west. The applicant is proposing an additional pedestrian connection from Champion Way to the proposed civic space and front door to the office located in Building 1. A full evaluation of on-site walkways is contained in Section 17.84.30 of this staff report.*

8. Connection to Adjacent Properties: The location of any real improvements to the property must provide for a future street and pedestrian connection to adjacent properties where the City determines this is practicable and necessary. Where openings occur between buildings adjacent to Highway 26, pedestrian ways should connect the street sidewalk to any internal parking areas and building entrances. Development should avoid creating barriers to pedestrian circulation. ***RESPONSE:*** *The proposal includes an existing five foot wide walkway along the south side of the 30 foot wide common access easement that connects to the Champion Way sidewalk to the east and the recently approved Tractor Supply Company site to the west. The Champion Way sidewalk connects to existing buildings on adjacent properties including the Arco gas station site to the north, which includes the convenience store, fuel pump canopy, and drive-thru coffee shop. The proposed Champion Way sidewalk improvements will connect to the existing sidewalk adjacent to the property to the south where Champion Collison is located.*

9. Joint use of access points and interconnections and cross-over easements between parcels shall be required, where the City determines it is practicable and necessary. A development approval may be conditioned to require a joint use access easement and interconnecting driveways or alleys to comply with access spacing and other applicable code requirements. ***RESPONSE:*** *The proposal includes an existing 30 foot wide common access easement that serves the subject property as well as the proposed Tractor Supply Company site to the west and the existing Arco gas station site to the north. There is also an existing 5 foot wide walkway south of the 30 foot wide common access easement that connects to the Champion*

Way sidewalk to the east and the recently approved Tractor Supply Company site to the west. In addition, the proposal includes a new driveway on Industrial Way that will serve the subject property and the Tractor Supply Company site.

11. Free-standing buildings shall be connected to one another with a seamless pedestrian network that provides access to building entrances and adjacent civic spaces. ***RESPONSE:*** *There are five (5) proposed building on the site; however, the buildings are proposed for self-storage units and it is unlikely that a pedestrian would be walking from one storage building to another adjacent storage building. The applicant is retaining the existing 5 foot walkway adjacent to the 30 foot common access easement and proposing an additional walkway to connect the Champion Way sidewalk to the front door of the office located in Building 1. The Champion Way sidewalk connects to existing buildings on adjacent properties including the Arco gas station site to the north, which includes the convenience store, fuel pump canopy, and drive-thru coffee shop. The proposed Champion Way sidewalk improvements will connect to the existing sidewalk adjacent to the property to the south where Champion Collison is located.*

B. Building Facades, Materials, and Colors

Intent: To provide building façades, materials and colors consistent with the Sandy Style. For purposes of interpreting the Sandy Style, representative illustrations and photos are provided. (Figures 17.90.120-C, 17.90.120-D, 17.90.120-E, 17.90.120-F, 17.90.120-G, 17.90.120-H, and 17.90.120-I; and the Color Palette and representative photos provided in the Appendix E.)

1. **Articulation**. The Sandy Style includes asymmetrical building forms, which by definition require buildings to be articulated, varied, and provide visual interest. This standard is met by dividing elevations visible from an abutting public street or pedestrian way into smaller areas or planes to minimize the appearance of bulk as follows:

a. All elevations visible from an abutting public street or pedestrian way shall be divided into distinct planes of no more than 40 lineal feet long to include the following:
   1) Wall planes meeting this standard shall include a feature or variation in the wall plane that are those that are entirely separated from other wall planes by a recessed or projecting section of the structure that projects or recedes at least six (6) inches from the adjacent plane, for a length of at least four (4) feet. Changes in plane may include but are not limited to recessed entries, bays, secondary roof forms (e.g., gables, lower roof sheds, dormers and towers), building bases, canopies, awnings, projections, recesses, alcoves, pergolas, porticos, roof overhangs, or other features consistent with the Sandy Style.
   2) Wall planes shall incorporate at least one visually contrasting and complementary change in materials or changes in texture or patterns, including trim, moldings, or other ornamental devices.
   3) The lower and upper floors of multi-storied buildings shall be delineated by using pedestrian shelters, changes in siding materials, heavy timbers, or natural wood accents (e.g. brackets, paneling, or other detailing).

RESPONSE: *The subject property abuts Highway 26, Champion Way, and Industrial Way. The applicant previously applied for a code interpretation (File No. 18-027 INT, Exhibit P). The Planning Commission determined the activated frontages of each building as follows:*

- *The north elevation of Building 1 will be visible from Highway 26*
- *The east elevations of Buildings 1 and 2 will be visible from Champion Way*
- *The south and west elevations of Building 4, and west elevation of Building 3 will be visible from Industrial Way*

At the time, the applicant was not proposing Building 5 so the Planning Commission did not discuss activated frontages on Building 5; however, staff has determined that the south and east elevations of Building 5 will be visible from Industrial Way.

Per the submitted narrative (Exhibit B), the proposed "building facades are broken up in planes that protrude 6 inches and entries that are recessed 5 feet into each of the buildings. Parapets are stepped in heights as well." In addition, "some of the windows at more prominent locations have bracketed 'eyebrow' canopies above." The applicant's use of the term 'eyebrow' is consistent with an awning. The west and east elevations of Buildings 2-5 do not have any wall planes that are greater than 40 lineal feet. The submitted elevations (Exhibit C, Sheets A3 and A4) detail covered recessed entries and windows with awnings on the north façade of Building 1, and windows with awnings on the east facades of Buildings 1 and 2. The south elevations of Buildings 4 and 5 are activated frontages and exceed 40 lineal feet. The submitted elevations (Exhibit C, Sheet A4) detail a change in parapet height and windows on the south elevations of Buildings 4 and 5; however, the windows do not have awnings and it is unclear whether there are any changes in the wall plane associated with the change in parapet height. ***The applicant shall update the elevations to detail awnings above the windows on the south elevations of Buildings 4 and 5 and shall update the plan set to include a 6-inch change in plane where the parapet height changes.***

2. **Pedestrian Shelters.** Buildings must incorporate pedestrian shelters, as follows:
   a. Pedestrian shelters shall be provided over the building's primary entrance(s) and all pedestrian areas (i.e., sidewalks, and civic spaces) abutting the subject building, where pedestrians are likely to use these facilities.
   b. Features such as canopies, arcades, awnings, roofs overhangs, covered porches, alcoves, and/or porticoes are required to protect pedestrians from the rain and sun.
   c. Pedestrian shelters must extend at least five (5) feet over the pedestrian area.
   d. Shelters designed with gables (e.g., over building entrances) are preferred over flat shelters, and must comply with the roof pitch standards in Section 17.90.120(C). Dome or bubble shaped awnings are not permitted.

   RESPONSE*: The primary entrance for the proposed self-storage facility is located on the north elevation of Building 1 and has a covered recessed entry way with heavy timber trusses. The submitted elevations (Exhibit C, Sheet A3) detail additional 5 foot deep pedestrian shelters with heavy timber trusses over the remaining three doors on the north elevation of Building 1. The elevations do not show gabled entries over the pedestrian entryways on the lower level (south elevation) of Building 1 or on Buildings 2-5; however, the submitted narrative (Exhibit B) states that all buildings will have entrances that are recessed 5 feet and covered.*

3. **Building Materials.** Exterior building materials shall convey an impression of strength and durability consistent with the Sandy Style, as follows:

a. Buildings on the same site shall be architecturally unified. Architectural unity means buildings are related in architectural style and share some common elements, such as color scheme, materials, roof forms, and/or detailing. Unity does not mean repetition or mirroring of building elevations. ***RESPONSE****: There are five (5) buildings proposed for the subject property. Per the submitted elevations (Exhibit D, Sheets A3 and A4) all activated building elevations are proposed to have split faced CMU veneer and hardie board siding. The south elevation of Buildings 4 and 5 also includes metal siding interspersed with the hardie board siding and CMU veneer. The applicant submitted a materials board (Exhibit J) for all buildings, which includes proposed colors in conformance with the Sandy color palette; the CMU veneer will be khaki, the hardie board siding will be Spanish pine, and the trim will be Langdon dove. In addition, there will be a cedar wood accent and an evergreen standing seam metal roof for the window awnings. The metal awnings are proposed on the east elevations of Buildings 1 and 2. To provide additional architectural unity,* ***the applicant stall update the elevations to detail metal awnings above the windows on the south elevations of Buildings 4 and 5.***

b. Strong base materials such as natural stone (e.g., basalt, granite, river stone), split-faced rusticated concrete block, brick, or concrete form liner replicating these materials are required. Cultured stone may be allowed if it has a stone texture and is similar in appearance and durability to natural stone. A building's base must extend at least 36 inches but not more than 60 inches above the adjacent finished grade and be included on those sides of the building visible from an abutting public street. If the site contains a grade differential making construction of a minimum 36-inch base impracticable, the reviewing body may allow portions of the base to be less than 36-inches. ***RESPONSE****: The activated frontages of the proposed buildings have a 36-inch split faced CMU veneer base. The proposed CMU veneer base is khaki colored by Mutual Material.*

d. Siding shall consist of wood, composite-wood (e.g., concrete fiberboard, panels or shingles), stone, brick, split-faced or rusticated concrete block, concrete form liner or a combination of these materials. Stucco, synthetic stucco, or metal are only permitted as specified below. Vinyl, plastic or similar siding is not permitted. ***RESPONSE:*** *The proposed siding for the building is 8-inch split-faced concrete block and hardieplank lap siding for the entryway on the east elevation. Both of these siding materials are acceptable siding materials.*

3) Where masonry siding is used, it shall consist of brick, stone, or rusticated concrete block, and must incorporate decorative patterns over not less than 15 percent of every elevation where it is used. Examples of decorative patterns include multi-toned masonry units, such as brick, stone, or cast stone, in layered or geometric patterns or split-faced concrete block to simulate rusticated stone-type construction. Changes in pattern should be used to accentuate breaks in building stories, corners, windows, structural bays, and building tops (e.g., parapets where flat roofs are allowed). ***RESPONSE:*** *The proposed siding for the activated frontages of the buildings is split-faced CMU veneer and hardie board siding. CMU and hardie board are acceptable masonry siding.*

4) Where metal siding is used, it shall be used as an accent only, comprising not more than 30 percent of the surface area of the building elevation (e.g., wainscoting or other accent paneling). Metal must be architectural grade and have a non-reflective (burnished or

painted) finish conforming to the Color Palette in Appendix C. Metal may also be used for flashing, gutters, downspouts, brackets, lighting, and signage and similar functional elements.

RESPONSE*: The applicant is proposing to use metal siding on Buildings 2, 3, 4, and 5 and is requesting a variance to use 36 percent metal siding (20 percent more than the 30 percent maximum allowed); however, the submitted elevations (Exhibit C, Sheet A4) detail 100 percent metal siding on some facades. The applicant's deviation, adjustment, and variance narrative (Exhibit B) states that the metal siding is visually indistinguishable from the hardie board lap siding and that it will only be used on facades that will be hidden from view by retaining walls, trees and/or other buildings. The variance request will be discussed further in Chapter 17.66 of this document.*

e. Building elevations facing a public street shall incorporate at least three (3) of the following features: Using these features may also address other code requirements, such as those related to building articulation, change in relief, pedestrian shelters, storefront elements.

1) Exposed, heavy timbers;
2) Exposed natural wood color beams, posts, brackets and/or trim (e.g., eaves or trim around windows);
3) Natural wood color shingles (e.g., used as siding or to accent gable ends);
4) Metal canopies;
5) Heavy metal brackets (e.g., cast iron or similar appearance), which may be structural brackets or applied as cosmetic detailing, and/or;
6) Similar features, consistent with the Sandy Style.

RESPONSE*: The north elevation of proposed Building 1 is visible from Highway 26 and incorporates exposed heavy timber trusses and metal canopies; a third Sandy Style feature is not identified. The east elevations of Buildings 1 and 2 are visible from Champion Way and include metal canopies (awnings) over the windows; however, the remaining two required Sandy Style elements are not identified. The south and east elevations of Building 5, south and west elevations of Building 4, and west elevation of Building 3 are visible from Industrial Way. Each elevation includes windows and 2-3 contrasting types of siding; however, none of the visible elevations include heavy timbers, wood beams, wood shingles, metal canopies, metal brackets, or other Sandy Style elements.* ***The applicant shall update the submitted elevations to detail a minimum of three (3) Sandy Style elements from the list in Section 17.90.120(B.3.e) on each activated frontage of each building.***

f. Materials required on elevations visible from an abutting public street must turn the building corner and incorporate appropriate transitions onto elevations not requiring these materials for a distance of not less than four (4) feet. ***RESPONSE****: A split faced block veneer base is proposed along all elevations with the exception of the north elevation of Building 3 and the west side of the south elevation of Building 2. Neither of these elevations should be visible from an abutting public street.* ***The applicant shall update the elevations to detail the stone base wrapping around the corners on the north elevation of Building 3 and the west side of the south elevation of Building 2 for a distance of at least 4 feet.***

4. **Colors.** Building exteriors shall comply with the following standards:

    a. Permitted colors include warm earth tones (tans, browns, reds, grays and greens) conforming to Color Palette in Appendix C. ***RESPONSE:*** *The submitted materials board (Exhibit J) details the primary wall color as "Spanish Pine" with an accent trim of "Langdon Dove." The split-faced CMU veneer base is "Khaki." Spanish Pine and Langdon Dove are in conformance with the Color Palette in Appendix C. The Khaki CMU veneer is consistent with other Sandy Style buildings.*

C. Roof Pitch, Materials, and Parapets

Intent***:*** To provide roof forms and detailing consistent with the Sandy Style. For purposes of interpreting the Sandy Style, representative illustrations and photos are provided. (Figures 17.90.120-D, 17.90.120-E, 17.90.120-F, 17.90.120-G, 17.90.120-H, and 17.90.120-I and representative photos in Appendix E)

1. Except as provided in subsections 17.90.120(C)(8), below, pitched (gabled or hipped) roofs are required on all new buildings with a span of 50-feet or less. Gable and hipped roof forms must achieve a pitch not less than the following:

Zoning District	Primary Roof Forms (minimum)	Secondary Roof Forms (minimum)
C-2 and I-1	6:12	4:12

RESPONSE*: The proposed building span for Building 1 is greater than 50 feet so the building is not required to be constructed with a pitched roof. The proposal does include a pitched roof over the primary entrance on Building 1. Buildings 2-5 have a span of 42 feet, which is less than 50 feet and, therefore require pitched roofs. The applicant is requesting a Type II Adjustment to allow a flat roof on Buildings 2-5 similar to the roof on Building 1. The adjustment request is discussed further in Chapter 17.66 of this document.*

5. Visible roof materials must be wood shingle or architectural grade composition shingle, slate, or concrete tile. Metal with standing or batten seam may also be used conforming to the Color Palette in Appendix D. ***RESPONSE****: The proposed roofs are flat and not visible. The primary roof color is Sandstone by Metallion Industries, with an accent roof color of Evergreen. The applicant is also proposing several canopies (window awnings) that will have standing seam metal roofs in "Evergreen." Both Sandstone and Evergreen are on the City of Sandy approved metal roofing color palette.*
6. All roof and wall-mounted mechanical, electrical, communications, and service equipment, including satellite dishes and vent pipes, shall be screened from view from all adjacent public rights-of-way and civic spaces by parapets, walls or by other approved means. Roof plans and elevations must show proposed equipment locations, approximate dimensions, and line of sight from public rights-of-way and civic spaces. The reviewing body may require additional equipment setbacks, screen walls, or other mitigation to ensure compliance. ***RESPONSE:*** *The applicant did not submit details on rooftop equipment.* ***All rooftop equipment shall be screened from view from all adjacent rights-of-way and civic spaces. The applicant shall submit line of sight analysis for the rooftop equipment prior to submitting building permits.***

7. A-frame buildings and Mansard-style roofs are not permitted. ***RESPONSE:*** *The proposal does not include an A-frame or Mansard-style roof.*

8. Exception to Pitched Roof: When a building requires a roof span greater than 50-feet, or the internal function of the building or a portion of the building makes construction of a pitched roof impractical, the reviewing body may allow an alternative roof form. An alternative roof form includes an "applied pitched roof" or flat roof constructed over the building or portion of the building as specified below. An example when a pitched roof is considered impractical would be the need to have large rooftop stove vents over the kitchen portion of a restaurant. Roof forms constructed under this exception shall comply with the standards below.

    a. Applied Pitched Roof: An "applied pitched roof" is the preferred alternative roof form and shall be considered first. An "applied pitched roof" is a roof form with the general appearance of a pitched roof in terms of materials, pitch, and overhang, but does not extend all the way from the eave of the building to the ridge of the roof as a typical pitched roof. An "applied pitched roof" shall be constructed according to the following:

        i. For buildings with a span of less than 50 feet, the "applied pitched roof" shall extend at least 50 percent of the distance from the eave to the ridge as if had been constructed as a pitched roof;

        ii. For buildings with a span of 50 feet or greater, the applied pitched roof shall extend at least 12 feet from eave.

        iii. The reviewing body may require buildings with a span of 50 feet or greater to include an "applied pitched roof" in lieu of a flat roof along street facing elevations.

        RESPONSE*: The proposed building span for Building 1 is approximately 72 feet, which is greater than 50 feet. The applicant did not provide a reason for not using the applied pitched roof.*

    b. Flat Roof: Flat roofs shall comply with the following standards:

    1) Sandy Style stepped parapets and detailed coursing shall be provided on those elevations visible from an abutting public street. Parapets shall be varied so that the length of a parapet does not exceed 40 feet without a change in the parapet height of at least 2 feet or as necessary to hide rooftop equipment.

    2) Average parapet height shall not exceed 15 percent of the supporting wall height, and the maximum parapet height shall not at any point exceed one-third (1/3) of the height of the supporting wall;

    3) A cornice projecting at least six (6) inches from the building face shall be provided at the roofline of all elevations visible from abutting public rights-of-ways and pedestrian ways;

    4) Parapet corners shall be stepped and the parapet be designed to emphasize the center or primary entrance(s), unless the primary entrance is at the corner of the building;

    RESPONSE*: The applicant is requesting a flat roof design with parapets for all buildings. The parapets visible from an abutting public street are spaced so as not to exceed 40 feet without a change in the parapet height of at least 2 feet.*

D. Building Orientation and Entrances

Intent: To maintain and enhance General Commercial and Industrial streetscapes as public spaces, emphasizing pedestrian-scale and character in new development, consistent with the Sandy Style. (Figures 17.90.120-A, 17.90.120-B, 17.90.120-D, 17.90.120-E, 17.90.120-F, 17.90.120-G, and 17.90.120-H) and representative photos in Appendix E.

1. Buildings shall be oriented to a public street or civic space. This standard is met when at least 50 percent of the subject site's street frontage is comprised of building(s) placed within 20 feet of a sidewalk, walkway or civic space and not more than 20 percent of the off-street parking on a parcel as required by SDC 17.98, tract or area of land is located between a building's front façade and the adjacent street(s). ***RESPONSE****: The proposed buildings contain frontage on Champion Way and Industrial Way. The applicant is not proposing any development adjacent to Highway 26 with this proposal. Furthermore, the frontage along Highway 26 is restricted by the BPA easement and, therefore, a building would not be allowed. The total Champion Way frontage of the site is approximately 320 feet. However, approximately 110 feet of the Champion Way frontage is the wetland and storm sewer easement area and is, therefore, unbuildable. The combined Champion Way frontage of Buildings 1 and 2 within 20 feet of the Champion Way sidewalk is approximately 65 feet, which is approximately 59 percent of the street frontage (excluding the wetland area). The site frontage on Industrial Way is approximately 385 feet; however, approximately 170 feet is the wetland and storm sewer easement area and is, therefore, unbuildable. Both Buildings 4 and 5 are set back farther than 20 feet, with the exception of the SW corner of Building 4. In order to meet the requirements of Section 17.90.120(D.1), the applicant would need to redesign the layout of Buildings 4 and 5 such that the combined frontage of Buildings 4 and 5 within 20 feet of Industrial Way is approximately 107.5 feet (50 percent of the 215 feet of Industrial Way frontage that is not wetland).* ***The applicant shall update the site plan to detail Buildings 4 and 5 within 20 feet of the Industrial Way right-of-way for at least 50 percent of the frontage (excluding the wetland area). Alternatively, the applicant shall request a Special Variance to Section 17.90.120 (D.1) and shall pay the Special Variance fee ($1,070). The Planning Commission shall decide whether to approve or deny a special variance to allow less than 50 percent of the Industrial Way frontage to be comprised of buildings within 20 feet of the right-of-way.*** *The potential variance request is discussed further in Chapter 17.66 of this document.*
2. Where parking is placed between a front façade and a street, a landscaped berm and/or architectural features, such as a knee wall, colonnade, arbor, trellis and/or similar device, shall be placed behind the sidewalk to partially screen the parking area from the sidewalk. The partial screen shall be designed to achieve at least 50 percent opacity at the time of installation, with openings for walkways connecting to the building's primary entrance. ***RESPONSE****: The proposal does not include parking between the building and street frontage.*
3. Ground floor spaces shall face a public street or civic space and shall be connected to it by a direct pedestrian route (i.e., avoid out-of-direction travel). ***RESPONSE****: The applicant has requested a design deviation to not provide pedestrian entries on all activated frontages. The primary pedestrian entry is on the north elevation of Building 1, where the main office for the storage facility will be located. The applicant is proposing a new pedestrian walkway connecting the Champion Way sidewalk to the civic space and office entrance at the northeast corner of Building 1. Staff acknowledges that, aside from the office entrance, the remaining storage facility buildings will not be accessed by the general public and, therefore, a direct pedestrian route to each building is not necessary.* ***Staff recommends the Planning***

Commission approve the applicant's request for a deviation to not provide direct pedestrian routes to public entrances on Buildings 2-5.

4. Buildings located at the intersection of two streets shall use a corner building entrance; where a corner entrance is not practical due to the internal functioning of the building space or due to physical constraints of the site (e.g., topography, accessibility, or similar circumstances), a building entrance must be provided within forty feet of the corner. The building corner must use detailing that emphasizes the corner location and is consistent with the Sandy Style. Examples of acceptable detailing include a rounded or chamfered (beveled) corner, weather protecting canopy, plaza, sculpture, and/or similar pedestrian-oriented features. ***RESPONSE****: The proposed buildings are not located at the intersection of two streets so this design standard does not apply.*
5. For structures greater than 40,000 gross square feet, there shall be at least two (2) clearly articulated public entrances on the structure; at least one such entrance shall be visible from a public street and connected to that street by a pedestrian sidewalk or walkway. ***RESPONSE****: All five (5) of the proposed buildings are less than 40,000 square feet.*
6. Retail buildings shall provide at least one customer entrance for every 200 lineal feet of anchor store space along at least one of the building's street-facing elevation(s). Such entrances may be oriented to a public street or designated civic space. Where ancillary stores or offices are provided, entrances to those spaces must be placed not more than 40 feet apart on average. For example, a 300 foot long building with one anchor store and four ancillary stores would provide no fewer than two anchor space entrances spaced not more than 200 feet apart and four ancillary entrances placed not more than 40 feet apart on average. ***RESPONSE****: Buildings 1 and 2 exceed 200 lineal feet on their east-west axis; however, the short end of the buildings are oriented towards the street so this design standard does not apply.*
7. Buildings shall provide at least one (1) elevation where the pedestrian environment is "activated." An elevation is "activated" when it meets the window transparency requirements in subsection 17.90.120(E), below, and contains a public entrance with a pedestrian shelter extending at least five (5) feet over an adjacent sidewalk, walkway or civic space. ***RESPONSE****: The applicant previously applied for a code interpretation (File No. 18-027 INT, Exhibit 0). The Planning Commission determined the activated frontages of each building as follows: the north elevation of Building 1 will be visible from Highway 26; the east elevations of Buildings 1 and 2 will be visible from Champion Way; and the south and west elevations of Building 4, and west elevation of Building 3 will be visible from Industrial Way. At the time, the applicant was not proposing Building 5 so the Planning Commission did not discuss activated frontages on Building 5; however, staff has determined that the south and east elevations of Building 5 will be visible from Industrial Way. The proposed designs for the north elevation of Building 1 includes false windows and four (4) recessed gabled pedestrian entryways. The east elevations of Buildings 1 and 2, the south and west elevations of Building 4, the west elevation of Building 3, and the south and east elevations of Building 5 all contain false windows. The applicant is requesting a design deviation to not provide pedestrian entryways on all activated frontages, with the exception of the north elevation of Building 1. Per the applicant's narrative (Exhibit B), "the proposed use, self-storage, is incompatible with [the public entrance] requirement, despite being an allowed use in the I-1 zone. The applicant has attempted to follow the intent of this standard to the extent that it is feasible by locating the active use, the office, at the street facing end of building one. This is the public face of the project, and includes a prominent entry and civic*

space, as shown on the renderings and site plans. Because the remainder of the buildings contain no active uses, the applicant contends that a deviation from this standard is appropriate." Staff acknowledges that, aside from the office entrance, the remaining storage facility buildings will not be accessed by the general public. ***Staff recommends the Planning Commission approve the applicant's request for a deviation to not provide public entrances on Buildings 2-5.*** *The applicant is also requesting a variance to the window requirements of Section 17.90.120(E). The variance request to window coverage is discussed further in Chapter 17.66 of this document.*

8. Primary entrances must be architecturally emphasized and visible from the public right-of-way and shall be sheltered with a canopy, overhang, or portico with a depth of at least five (5) feet. Architectural emphasis should be provided by a gabled shelter where practical, consistent with the Sandy Style. Detailing around the base of the building, such as stonework, benches or art, should also be used to emphasize an entrance. ***RESPONSE****: The proposed primary entrance to the self-storage facility is on the north elevation of Building 1, where the office for the storage facility will be located. The entrance includes a gable roofed entry featuring heavy timbers and posts. The entryway will be visible from Champion Way and will be connected to the Champion Way sidewalk by a pedestrian walkway.*

E. Windows

Intent: To promote business vitality, public safety and aesthetics through effective window placement and design, consistent with the Sandy Style. (Figures 17.90.120-A, 17.90.120-B, 17.90.120-D, 17.90.120-E, 17.90.120-F, 17.90.120-G, and 17.90.120-H)

1. **Unified Design.** Building plans must provide for unity in window placement and design so that all sides of a building relate to one another and multiple buildings on a development site relate to one another.
2. **Ground Floor Windows.** The ground floor elevation of all new buildings shall contain ground floor display areas, windows, and doorways on the "activated" frontage. as follows:

Building Size	Percentage Windows Required
0 - 10,000 sq. ft.	30 percent of elevation
10,000 sq. ft. - 30,000 sq. ft.	25 percent of elevation
Greater than 30,000 sq. ft.	20 percent of elevation

   a. Windows shall contain clear glass to allow views to interior activity or display areas. The bottom edge of windows shall be no less than three (3) feet above the adjacent finished grade. Where the internal functions of a building preclude windows at this height, the reviewing body may allow windows above or below this height. Display boxes affixed to a building's exterior are not counted in meeting the above standard.

   b. Windows shall be square or vertically oriented and may consist of vertically stacked or horizontally banked window units. Windows located over a door or transom windows may be horizontally oriented.

   c. Windows with any dimension exceeding six (6) feet shall be divided to contain two or more smaller panes with real divided panes, vinyl inserts, or applied dividers.

d. Windows shall have trim or moldings at least three (3) inches in width around them, or have reveals of at least three (3) inches in depth. Casings shall consist of a drip cap, head casing, side casings, and/or sills.

4. **Prohibited Windows.**
   a. Darkly tinted windows, mirrored windows, and similar windows are prohibited adjacent to street sidewalks, civic spaces and walkways.
   b. Glass curtain windows are not permitted facing public right-of-ways, except where the reviewing body finds that such windows are consistent with the Sandy Style.

***RESPONSE**: The activated elevations of all five (5) buildings contain false windows. The applicant submitted window glazing diagrams and calculations (Exhibit C, Sheet A5) that detail proposed windows on each elevation as well as a calculation of window percent for each elevation. Only the east elevation of Building 1 meets the required window percentage. The applicant has requested a variance to the window coverage requirement for all other activated frontages. The applicant previously submitted an application for a code interpretation related to the storage project (File No. 18-027 INT, Exhibit O). During the Planning Commission hearing, the Planning Commission decided that faux or false windows could count towards the required window percentage. Thus, the applicant is not required to apply for a variance to allow the use of faux windows rather than clear glass windows as required by Section 17.90.120(E.2.a). The variance request to reduce required window percentage is discussed further in Chapter 17.66 of this document.*

F. Landscaping and Streetscape Design

Intent: To promote business vitality, public safety and aesthetics through effective landscaping and streetscape design, consistent with the Sandy Style, and to provide for a continuous pedestrian network that promotes pedestrian safety, comfort and convenience, and provides materials and detailing consistent with the Sandy Style. (See Figures 17.90.120-J and 17.90.120-K and Appendix G)

1. The provisions of Chapter 17.92 Landscaping and Screening General Standards shall apply.

2. Parcels abutting Highway 26 shall provide a landscape buffer comprising not less than 30 percent of the highway frontage, to a depth of not less than 20 feet. Within the buffer, existing trees shall be preserved to the extent practicable. New trees, shrubs, and groundcover shall be planted to create a landscape buffer and partial visual screen along the highway as specified below or as approved by the reviewing authority. If approved in writing by the Oregon Department of Transportation, this buffer may be located within the public right-of-way. Any new or modified access must fall outside the designated buffer. Landscape plans shall indicate proposed landscaping, signage and other proposed development.

3. Landscape buffer plantings shall contain a mixture of both deciduous and evergreen species selected from the list below and shall be of a sufficient quantity to provide a partial buffer within two years from the date they are planted:

   - Trees – Deciduous (minimum 1 1/2-inch caliper) -Autumn Blaze Maple, Red Sunset Maple, Scarlet Oak. Evergreen (minimum 8-10 feet) - Hogan Cedar, Incense Cedar, Western Red Cedar, Douglas fir.

- Small Trees/Shrubs – Vine Maple, Serviceberry, Chinese Kousa Dogwood, Red flowering Currant, Ceanothus 'Blue Blossom', Rhododendron, Pacific Wax Myrtle.

- Groundcover – Kinnickinick, Salal, Low Oregon Grape, Coastal Strawberry, Rock Rose.

4. All service and storage areas must be screened from view from all adjacent rights-of-way. (See Figure 17.90.120-K below.)

***RESPONSE**: The subject property abuts Highway 26 and, therefore, is required to provide a landscape buffer comprising not less than 30 percent of the highway frontage to a depth of not less than 20 feet. There are no existing trees within the 20 foot buffer to Highway 26. The proposed Landscape Plan (Exhibit C, Sheet L1) details street trees along Highway 26, but no buffer plants.*

The applicant is not proposing to develop the portion of the site under the BPA easement with this application. ***The applicant shall be required to meet the requirements of Section 17.90.120(F) at the time of development of the portion of the site under the BPA easement. At that time, the applicant shall update the Landscape Plan to detail a landscape buffer comprising not less than 30 percent of the highway frontage. The required landscape buffer plantings along Highway 26 shall be at least 20 feet deep and shall contain a mixture of deciduous and evergreen species of a sufficient quantity to provide a partial buffer within two (2) years from the date they are planted. The applicant shall select species from the list in Section 17.90.120(F.3) (with the exception of maples), or propose alternative native species for staff review and approval.*** *Staff recommends including serviceberry and a few additional shrubs and/or groundcover species from the following: red flowering currant, ceanothus 'Blue Blossom,' salal, rock rose, or low growing Oregon grape.*

G. Civic Space

Intent: To connect buildings to the public realm and create comfortable and attractive gathering places and outdoor seating areas for customers and the public, consistent with Sandy's Downtown Streetscape Design. (See Figures 17.90.120-L and 17.90.120-M)

RESPONSE**: The total area of the five (5) proposed buildings is 57,559 square feet, therefore, the required civic space is 1,727 square feet. The submitted Site Plan (Exhibit C, Sheet A1.1) details a 250 square foot civic space located adjacent to the proposed office at the northeast corner of Building 1.* ***The civic space shall include at least one public bench and one public art element or similar pedestrian amenity reviewed and approved by staff. *Based on the proposed use as a storage facility, staff believes the proposed 250 square foot civic space located adjacent to the office entry is reasonable; however, this would require a special variance since it's of the applicant's making.* ***The applicant shall update the plan set to detail at least 1,727 square feet of civic space. Alternatively, the applicant shall request a special variance to Section 17.90.120(G) and shall pay the appropriate fee ($1,070). If the applicant chooses the special variance option, staff recommends supporting a special variance to allow 250 square feet of civic space rather than the required 1,727 square feet.***

H. Lighting

Intent: To promote business vitality, public safety and aesthetics through effective outdoor lighting, consistent with the Sandy Style. (Figures 17.90.120-G, 17.90.120-H, and 17.90.120-M)

1. Streetscape lighting shall conform to Chapter 15.30 Dark Sky Ordinance.
2. Exterior lighting must be an integral part of the architectural design and must complement any ornamental street lighting and remain in context with the overall architectural character of the district. On-site light fixtures conforming to the Sandy Style are encouraged.
3. Lighting must be adequate for safety purposes. Walkways and parking lots should be illuminated at 1.5 – 2.0 foot candles.

RESPONSE*: Section 17.90.120(H.3) specifies that walkways and parking lots should be illuminated at 1.5 – 2.0 foot candles. The submitted Photometric Plan (Exhibit C, Sheet E0.1) details parking lot illumination at 0.3 to 4.7 foot candles and walkway illumination at 0.6 to 19.2 foot candles. The applicant is proposing multiple different types of lights.* ***The applicant shall update the proposed parking area lights with lights that have a smaller distribution and emit less intense light and shall add pedestrian scale lighting along the walkways such that they are illuminated at 1.5 – 2.0 foot candles.*** *Lighting is discussed further in Chapter 15.30 (Dark Sky) of this document.*

I. Safety and Security

Intent: To promote natural surveillance of public spaces for safety and security.

1. Locate windows in a manner that enables tenants, employees and police to watch over pedestrian, parking and loading areas. ***RESPONSE:*** *The proposed parking area is located adjacent to the north elevation of Building 1 near the proposed office. The north elevation for Building 1 (Exhibit C, Sheet A3) does not specify that the windows along the office portion of the building are real windows. Real windows would allow visibility from the office to the pedestrian entrance and parking area.* ***The applicant shall update the north elevation of Building 1 to detail real windows along the office portion of Building 1.***
2. In commercial, public and semipublic development, including civic spaces, locate windows in a manner that enables surveillance of interior activity from the public right-of-way. ***RESPONSE:*** *The proposed windows along the north façade of Building 1 will allow visibility between the proposed office area and the proposed civic space. Visibility of the civic space from the office is a desirable surveillance feature.*
3. Provide street address numbers measuring a minimum of six (6) inches high, which clearly locates buildings and their entries for patrons and emergency services. ***RESPONSE: The applicant shall provide street address numbers measuring a minimum of six (6) inches high, which clearly locate buildings and their entries for patrons and emergency services. The applicant shall verify the location(s) of the address with the Building Official and emergency service providers.***
4. Locate, orient and select on-site lighting to facilitate surveillance of on-site activities from the public right-of-way and other public areas. (See also, subsection H Lighting.) ***RESPONSE:*** *On-site lighting is evaluated in Chapter 15.30 of this staff report. Lighting has been designed to illuminate driveways and building entrances.*

J. External Storage

Intent: To promote land use compatibility and aesthetics, particularly where development abuts public spaces. (Figure 17.90.120-K)

1. Exterior storage of merchandise and/or materials, except as specifically authorized as a permitted accessory use, is prohibited. ***RESPONSE:*** *The applicant is proposing an indoor self-storage facility and is not proposing any outdoor storage. The applicant also proposes a trash enclosure area, which will be screened.*
2. Where such storage is allowed, it must be screened from view from public rights of way and civic spaces at least eight (8) feet and not more than 10 feet unless the screen is a continuation of the building wall. ***RESPONSE:*** *The applicant is not proposing any outdoor storage areas.*
3. Mechanical, electrical, communications equipment including meters and transformers, and service and delivery entrances and garbage storage areas shall be screened from view from public rights-of-way and civic spaces. ***RESPONSE:*** *Garbage storage areas are addressed in staff's response to Section 17.90.120(J.4), below. The submitted building elevations (Exhibit C, Sheets A.3 and A.4) do not detail the proposed locations of rooftop mechanical equipment.* ***All rooftop equipment shall be screened from view from all adjacent rights-of-way and civic spaces. The applicant shall submit line of sight analysis for the rooftop equipment prior to submitting building permits.***
4. Trash collection and recycling storage areas must be located within the structure or otherwise screened from view in an enclosed facility. Such facilities must be screened from view from public rights-of-way and civic spaces behind a screening wall constructed to match the materials used on the primary building(s) on the subject site. ***RESPONSE:*** *The applicant proposes a trash enclosure area to the east of Building 4, which will not be visible from any public rights-of-way or civic spaces. The applicant submitted elevations for the trash enclosure area (Exhibit C, Sheet A1.2) that detail a 6-foot tall, 6-inch thick CMU enclosure with a steel gate. The enclosure detail states that the wall and gate will be painted the same color as the brick veneer of the buildings.*
5. Exceptions to the above provisions may be allowed through Design Review where no other practical alternative exists and such equipment is made to be visually subordinate to the proposed building and landscape, for example, through the use of common materials for screening walls or landscape berms. The reviewing body may require additional setbacks, screening walls or other mitigation, for aesthetic reasons and to minimize odors or noise impacts on adjoining properties, public rights-of-way or civic spaces. ***RESPONSE:*** *No exceptions to the external storage requirements are being requested.*

CHAPTER 17.92 – LANDSCAPING AND SCREENING

17.92.00 INTENT

The City of Sandy recognizes the aesthetic and economic value of landscaping and encourages its use to establish a pleasant community character, unify developments, and buffer or screen unsightly features; to soften and buffer large scale structures and parking lots; and to aid in energy conservation by providing shade from the sun and shelter from the wind. The community desires and intends all properties to be landscaped and maintained.

This chapter prescribes standards for landscaping, buffering, and screening. While this chapter provides standards for frequently encountered development situations, detailed planting plans and irrigation system designs, when required, shall be reviewed by the City with this purposes clause as the guiding principle.

17.92.10 GENERAL PROVISIONS

A. Where landscaping is required by this Code, detailed planting plans shall be submitted for review with development applications. No development may commence until the Director or Planning Commission has determined the plans comply with the purposes clause and specific standards in this chapter. All required landscaping and related improvements shall be completed or financially guaranteed prior to the issuance of a Certificate of Occupancy.

B. Appropriate care and maintenance of landscaping on-site and landscaping in the adjacent public right-of-way is the right and responsibility of the property owner, unless City ordinances specify otherwise for general public and safety reasons. If street trees or other plant materials do not survive or are removed, materials shall be replaced in kind within 6 months.

C. Significant plant and tree specimens should be preserved to the greatest extent practicable and integrated into the design of a development. Trees of 25-inches or greater circumference measured at a height of 4-½ ft. above grade are considered significant. Plants to be saved and methods of protection shall be indicated on the detailed planting plan submitted for approval. Existing trees may be considered preserved if no cutting, filling, or compaction of the soil takes place between the trunk of the tree and the area 5-ft. outside the tree's drip line. Trees to be retained shall be protected from damage during construction by a construction fence located 5 ft. outside the dripline.

D. Planter and boundary areas used for required plantings shall have a minimum diameter of 5-ft. (2-½ ft. radius, inside dimensions). Where the curb or the edge of these areas are used as a tire stop for parking, the planter or boundary plantings shall be a minimum width of 7-½ ft.

E. In no case shall shrubs, conifer trees, or other screening be permitted within vision clearance areas of street, alley, or driveway intersections, or where the City Engineer otherwise deems such plantings would endanger pedestrians and vehicles.

F. Landscaped planters and other landscaping features shall be used to define, soften or screen the appearance of off-street parking areas and other activity from the public street. Up to 35 percent of the total required landscaped area may be developed into pedestrian amenities, including, but not limited to sidewalk cafes, seating, water features, and plazas, as approved by the Director or Planning Commission.

G. Required landscaping/open space shall be designed and arranged to offer the maximum benefits to the occupants of the development as well as provide visual appeal and building separation.

H. Balconies required for entrances and exits shall not be considered as open space except where such exits and entrances are for the sole use of the unit.

I. Roofed structures shall not be included as open space except for open unenclosed public patios, balconies, gazebos, or other similar structures or spaces.

J. Driveways and parking areas shall not be included as open space.

K. All areas not occupied by paved roadways, walkways, patios, or buildings shall be landscaped.

L. All landscaping shall be continually maintained, including necessary watering, weeding, pruning and replacing.

RESPONSE: *Per Section 17.92.10(C), significant trees should be preserved to the greatest extent practicable, integrated into the design of a development, and protected from damage during construction by a construction fence located 5 feet outside the dripline of trees. The subject site has many trees within the wetland area at the south edge of the site. The applicant is not proposing any tree removal.* ***The applicant shall install tree protection fencing located 5 feet outside of the dripline of all existing trees on site.*** *Per Section 17.92.10(L),* ***all landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing.***

17.92.20 MINIMUM IMPROVEMENTS – LANDSCAPING AND SCREENING

The minimum landscaping area of a site to be retained in landscaping shall be as follows:

ZONING DISTRICT OR USE	PERCENTAGE
I-1 Industrial Park	20%

RESPONSE: *The subject property is zoned Industrial Park, I-1. Section 17.92.20 requires that a minimum of 20 percent of the site be landscaped in the Industrial Park (I-1) zoning district. The submitted Landscape Plan (Exhibit C, Sheets L.1 and L.2) does not identify the percent of landscaping.* ***The applicant shall submit additional calculations demonstrating that the 20 percent landscaping standard is met.*** *Street trees and landscaping in the public rights-of-way do not count towards the required landscaping.*

17.92.30 REQUIRED TREE PLANTINGS

Planting of trees is required for all parking lots with 4 or more parking spaces, public street frontages, and along private drives more than 150 feet long. Trees shall be planted outside the street right-of-way except where there is a designated planting strip or City adopted street tree plan.

The City maintains a list of appropriate trees for street tree and parking lot planting situations. Selection of species should be made from the city-approved list. Alternate selections may be approved by the Director following written request. The type of tree used shall determine frequency of trees in planting areas. Trees in parking areas shall be dispersed throughout the lot to provide a canopy for shade and visual relief.

Area/Type of Planting	Canopy	Spacing
Street Tree	Medium	30 ft. on center
Street Tree	Large	50 ft. on center

Trees may not be planted:

- Within 5 ft. of permanent hard surface paving or walkways, unless specific species, special planting techniques and specifications approved by the Director are used.
- Unless approved otherwise by the City Engineer:
  - Within 10 ft. of fire hydrants and utility poles
  - Within 20 ft. of street light standards
  - Within 5 ft. from an existing curb face
  - Within 10 ft. of a public sanitary sewer, storm drainage or water line
- Where the Director determines the trees may be a hazard to the public interest or general welfare.
- Trees shall be pruned to provide a minimum clearance of 8 ft. above sidewalks and 12 ft. above street and roadway surfaces.

RESPONSE: *Section 17.92.30 requires trees to be planted along public street frontages. Based on the proposed planter area width the requirement will be medium sized trees spaced 30 feet on center. The submitted Landscape Plan (Exhibit C, Sheets L.1 and L.2) detail street trees along all three site frontages (Highway 26, Champion Way, and Industrial Way) in compliance with the code.* ***The applicant will be required to obtain a permit from ODOT to place trees within the highway right-of-way. All street trees shall be a minimum of 1.5-inches in caliper measured 6 inches above the ground and shall be planted per the City of Sandy standard planting detail. Trees and planter strip shall be installed per the approved landscape plan. Tree ties shall be twine and loosely tied so as not to damage the trunk and shall be removed after one growing season (or a maximum of 1 year).***

17.92.40 IRRIGATION

Landscaping shall be irrigated, either with a manual or automatic system, to sustain viable plant life.
RESPONSE: *The submitted Landscape Plan (Exhibit C, Sheet L.2) indicates that an automatic underground irrigation system will be used.*

17.92.50 TYPES AND SIZES OF PLANT MATERIALS

A. At least 75% of the required landscaping area shall be planted with a suitable combination of trees, shrubs, or evergreen ground cover except as otherwise authorized by Chapter 17.92.10 F.
B. Plant Materials. Use of native plant materials or plants acclimatized to the Pacific Northwest is encouraged where possible.
C. Trees shall be species having an average mature spread of crown greater than 15 feet and having trunks which can be maintained in a clear condition with over 5 feet of clear wood (without branches). Trees having a mature spread of crown less than 15 feet may be substituted by grouping the same so as to create the equivalent of a 15-foot crown spread.
D. Deciduous trees shall be balled and burlapped, be a minimum of 7 feet in overall height or 1 ½ inches in caliper measured 6 inches above the ground, immediately after planting. Bare root trees will be acceptable to plant during their dormant season.
E. Coniferous trees shall be a minimum five feet in height above ground at time of planting.

F. Shrubs shall be a minimum of 1 gallon in size or 2 feet in height when measured immediately after planting.
G. Hedges, where required to screen and buffer off-street parking from adjoining properties shall be planted with an evergreen species maintained so as to form a continuous, solid visual screen within 2 years after planting.
H. Vines for screening purposes shall be a minimum of 1 gallon in size or 30 inches in height immediate after planting and may be used in conjunction with fences, screens, or walls to meet physical barrier requirements as specified.
I. Groundcovers shall be fully rooted and shall be well branched or leafed. If used in lieu of turf in whole or in part, ground covers shall be planted in such a manner as to provide complete coverage in one year.
J. Turf areas shall be planted in species normally grown as permanent lawns in western Oregon. Either sod or seed are acceptable. Acceptable varieties include improved perennial ryes and fescues used within the local landscape industry.
K. Landscaped areas may include architectural features or artificial ground covers such as sculptures, benches, masonry or stone walls, fences, rock groupings, bark dust, decorative hard paving and gravel areas, interspersed with planted areas. The exposed area developed with such features shall not exceed 25% of the required landscaped area. Artificial plants are prohibited in any required landscape area.

RESPONSE: *The Landscape Plan (Exhibit C, Sheet L.1) identifies the following street trees at 2.5-inch caliper:*

- *8 Acer rubrum 'Armstrong'*
- *23 Zelkova serrata*
- *6 Acer ginnala*
- *5 Styrax japonica*

In addition, the Landscape Plan identifies nine (9) evergreen Pseudotsuga menziesii at 6 feet in height and eight (8) Acer circinatum at 6-8 feet in height. Due to concerns with Asian Longhorn Beetle and Emerald Ash Borer, staff do not recommend planting new maples or ashes at this time. ***The applicant shall update the proposed tree list to include an alternate species for the three (3) proposed maples (Acer rubrum 'Armstrong,' Acer ginnala, and Acer circinatum). The straight species of the Zelkova is not of the City of Sandy street tree list. The applicant shall update the proposed tree list to include one of the three approved varieties of Zelkova serrata: 'Green Vase,' 'Halka,' or 'Village Green.'*** *Street trees are typically required to be a minimum caliper of 1.5-inches measured 6 inches from grade. The applicant is proposing 2.5-inch caliper street trees; however, staff has received feedback that fewer species are available at the 2.5-inch caliper size.* ***To provide species diversity, staff recommends requiring 1.5-inch caliper street trees.***

The Landscape Plan identifies all shrubs at least one gallon in size or 24-inches in height in compliance with the code requirement.

The proposed landscaping includes Prunus laurocerasus 'Otto Luyken.' P. laurocerasus is identified as a Rank C nuisance species on the Portland Nuisance Plant List. Although Rank C nuisance species pose less of a threat than species ranked A or B, staff doesn't recommend approval of any plants identified as nuisance plants. ***The applicant shall update the Landscape Plan and plant materials list to remove Prunus laurocerasus and replace it with an alternative native shrub.***

17.92.60 REVEGETATION IN UNLANDSCAPED OR NATURAL AREAS

A. Areas where natural vegetation has been removed or damaged through grading or construction activity in areas not affected by the landscaping requirements and that are not to be occupied by structures or other improvements shall be replanted.
B. Plant material shall be watered at intervals sufficient to assure survival and growth.
C. The use of native plant materials or plants acclimatized to the Pacific Northwest is encouraged to reduce irrigation and maintenance demands.

RESPONSE: *The applicant did not submit any plans for re-vegetation of areas damaged through grading/construction.* ***The applicant shall maintain all unlandscaped and/or revegetated areas for a period of two years following the issuance of the Certificate of Occupancy for the facility.*** *While the code states that revegetated areas have to be maintained for at least two years, the code also states that the site shall have a minimum of 20 percent of the site landscaped, so in actuality the revegetated areas have to be maintained in perpetuity.*

17.92.130 PERFORMNCE BOND

If weather conditions or other circumstances beyond the control of the developer or owner make completion of the landscaping impossible prior to desired occupancy, an extension of up to 6 months may be applied for by posting "security" equal to 120% of the cost of the landscaping, assuring installation within 6 months. "Security" may consist of a performance bond payable to the city, cash, certified check, time certificates of deposit, assignment of a saving account, letter of credit, or other such assurance of access to funds necessary for completion as shall meet the approval of the City Attorney. Upon acceptance of the security, the developer or owner may be allowed occupancy for a period of up to 180 days. If the installation of the landscaping improvement is not completed within 180 days, the City shall have access to the security to complete the installation and/or revoke occupancy. Upon completion of the installation by the city, any portion of the remaining security minus administrative charges of 30% shall be returned to the owner. Costs in excess of the posted security shall be assessed against the property and the City shall thereupon have a valid lien against the property, which will come due, and payable.

RESPONSE: *The applicant has the option to defer the installation of street trees and/or landscaping for weather-related reasons. Staff recommends the applicant utilize this option rather than install trees and landscaping during the dry summer months.* ***If the applicant chooses to postpone street tree and/or landscaping installation, the applicant shall post a performance bond equal to 120 percent of the cost of the landscaping, assuring installation within 6 months. The cost of street trees shall be based on the street tree plan and at least $500 per tree. The cost of landscaping shall be based on the average of three estimates from three landscaping contractors; the estimates shall include as separate items all materials, labor, and other costs of the required action, including a three-year maintenance and warranty period.***

CHAPTER 17.98 – PARKING, LOADING, AND ACCESS REQUIREMENTS

17.98.20 OFF-STREET PARKING REQUIREMENTS

8.

Commercial Uses	Number of Parking Spaces	Number of Bicycle Spaces
General, professional or banking offices and services	1 per 300 sq. ft., plus 1 per 2 employees	5% or 2 whichever is greater

RESPONSE: *The proposed use is a self-storage facility and most closely resembles 'General, professional, or banking offices and services' in the off-street parking requirements table. Customers will likely be parking directly in front of their unit to facilitate loading and unloading of items so staff doesn't think it makes sense to base the parking requirement on the total square footage of all five buildings. However, staff thinks providing at least one parking space near each building is reasonable. In addition, employees and customers renting a storage unit, closing an account, or paying a rental invoice will need to park by the office. The office is proposed to be 600 square feet, which would require 2 parking spaces (600 divided by 300), plus 1 parking space per 2 employees. The applicant did not state how many employees there will be on the largest shift but staff assumes no more than two (2) employees. Thus, the parking requirement for the office area is 3 parking spaces (2 customer parking spaces plus 1 employee parking space). The applicant is proposing five (5) parking spaces near the office plus an additional two (2) parking spaces east of Building 4. The parking spaces east of Building 4 are located in close proximity to both Buildings 3 and 4 so meet staff's recommendation of providing one parking space per building for Buildings 3 and 4.* ***The applicant shall update the site plan to detail four (4) parking spaces in the parking area adjacent to the office (3 for the office use, plus 1 for Building 1). In addition, the applicant shall update the site plan to detail one (1) parking space near Building 2 and one (1) parking space near Building 5. The applicant shall submit the updated parking plan to staff for review and approval.***

Two (2) bicycle parking spaces are required. The submitted Site Plan Detail sheet (Exhibit C, Sheet A1.2) details 2 bicycle parking spaces located east of the office entrance.

17.98.50 SETBACKS

A. Parking areas, which abut a residential zoning district, shall meet the setback of the most restrictive adjoining residential zoning district.

B. Required parking shall not be located in a required front or side yard setback area abutting a public street except in industrial districts. For single family and two-family dwellings, required parking may be located in front of a garage.

C. Parking areas shall be setback from a lot line adjoining a street the same distance as the required building setbacks. Regardless of other provisions, a minimum setback of 5 feet shall be provided along the property fronting on a public street. The setback area shall be landscaped as provided in this code.

RESPONSE: *The primary proposed parking area is located to the north of Building 1, with two additional spaces located on the interior of the site, east of Building 4. The proposed parking spaces near Building 1 are set back 20 feet from the Champion Way right-of-way in adherence with the code requirement.*

17.98.60 DESIGN, SIZE AND ACCESS

All off-street parking facilities, vehicular maneuvering areas, driveways, loading facilities, accessways, and private streets shall conform to the standards set forth in this section.

A. Parking Lot Design. All areas for required parking and maneuvering of vehicles shall have a durable hard surface such as concrete or asphalt.

RESPONSE: *The parking lot is designed to be constructed with asphalt.*

B. Size of Space.
   1. A standard parking space shall be 9 feet by 18 feet.
   2. A compact parking space shall be 8 feet by 16 feet.
   3. Handicapped parking spaces shall be 13 feet by 18 feet. Accessible parking shall be provided for all uses in compliance with the requirements of the State of Oregon (ORS 447.233) and the Americans with Disabilities Act.
   4. Parallel parking spaces shall be a length of 22 feet.
   5. No more than 35 percent of the parking stalls shall be compact spaces.

RESPONSE: *The Site Plan (Exhibit C, Sheets 3A and 4) identifies seven (7) parking spaces total. The five (5) parking spaces located near the office in Building 1 are standard parking spaces at 9 feet by 19 feet, including 1 ADA parking space, and the remaining two (2) parking spaces located east of Building 4 are 10 feet by 20 feet. The ADA parking space is detailed with the aisle on the driver's side.* ***The applicant shall update the plan set to detail the ADA parking space with the aisle on the passenger side. Signage associated with the ADA parking space shall meet the head clearance distance requirement in the Building Code.***

C. Aisle Width.

Parking Aisle	Single Sided One-Way	Single Sided Two-Way	Double Sided One-Way	Double Sided Two-Way
90 degree	20 feet	22 feet	25 feet	25 feet
60 degree	20 feet	20 feet	20 feet	20 feet
45 degree	20 feet	20 feet	20 feet	20 feet
Parallel	12 feet	12 feet	16 feet	16 feet

RESPONSE: *All parking aisles are proposed to meet or exceed the minimum aisle width standards for one-way and two-way single sided parking aisles. The parking area by Building 1 is adjacent to a 24 foot wide driveway. The two parking spaces east of Building 4 are accessed by a 26 foot wide one-way driveway.*

17.98.80 ACCESS TO ARTERIAL AND COLLECTOR STREETS

A. Location and design of all accesses to and/or from arterials and collectors (as designated in the Transportation System Plan) are subject to review and approval by the City Engineer. Where practical, access from a lower functional order street may be required. Accesses to arterials or collectors shall be located a minimum of 150 ft. from any other access or street intersection. Exceptions may be granted by the City Engineer. Evaluations of exceptions shall consider posted speed of the street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

B. No development site shall be allowed more than one access point to any arterial or collector street (as designated in the Transportation System Plan) except as approved by the City Engineer. Evaluations of exceptions shall consider posted speed of street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

C. When developed property is to be expanded or altered in a manner that significantly affects on-site parking or circulation, both existing and proposed accesses shall be reviewed under the standards in A and B above. As a part of an expansion or alteration approval, the City may require relocation and/or reconstruction of existing accesses not meeting those standards.

RESPONSE: *Primary access to the upper floor of Building 1, including the office, is proposed via a driveway from the existing 30 foot wide common access easement connecting to Champion Way. An additional driveway is proposed off of Industrial Way, which will provide access to Building 5 to the west, and Buildings 2-4 and the lower storage level of Building 1 to the east, as well as access for delivery vehicles to the Tractor Supply Company site. The driveway to Buildings 2-4 and the lower level of Building 1 is designed as a one-way driveway with an egress onto Champion Way. The applicant is requesting a variance to allow a second driveway on Champion Way with less than the required 150 feet spacing to another driveway. The variance request is discussed further in Chapter 17.66 of this document.*

17.98.100 DRIVEWAYS

A. A driveway to an off-street parking area shall be improved from the public roadway to the parking area a minimum width of 20 feet for a two-way drive or 12 feet for a one-way drive but in either case not less than the full width of the standard approach for the first 20 feet of the driveway.
B. A driveway for a single-family dwelling shall have a minimum width of 10 feet.
C. A driveway for a two-family dwelling shall have a minimum width of 20 feet. A driveway approach must be constructed in accordance with applicable city standards and the entire driveway must be paved with asphalt or concrete.
D. Driveways, aisles, turnaround areas and ramps shall have a minimum vertical clearance of twelve feet for their entire length and width but such clearance may be reduced in parking structures.
E. No driveway shall traverse a slope in excess of 15 percent at any point along the driveway length.
F. The location and design of the driveway shall provide for unobstructed sight per the vision clearance requirements. Requests for exceptions to these requirements will be evaluated by the

City Engineer considering the physical limitations of the lot and safety impacts to vehicular, bicycle, and pedestrian traffic.

RESPONSE: *The upper floor of Building 1, which includes the main office, will gain access via a driveway from the existing 30 foot wide common access easement connecting to Champion Way. The City's Transportation Engineer (Exhibit L) has concerns with the proposed driveway off of the common access easement. He believes that the proposed configuration may result in traffic conflicts between the customers and employees of Sandy Vault and those of nearby properties. The resulting traffic conflicts could produce stoppages in the shared driveway and even on Champion Way. He further states that, while traffic volumes are low, the stoppages are a predictable outcome that could result in unsafe conditions. To minimize the chance of conflict between eastbound traffic on the shared common access easement driveway and inbound traffic to the Sandy Vault site,* ***the City's Transportation Engineer recommends that the ingress to the Sandy Vault office and Building 1 be located opposite the existing drive aisle between the Arco station and the convenience store. The City's Transportation Engineer estimates that distance to be approximately 120 feet west of the west curb of Champion Way.*** *The proposal also includes a new 36 foot wide driveway on Industrial Way that will provide access to Building 5 to the west, Buildings 2-4 and the lower storage level of Building 1 to the east, and delivery access to the Tractor Supply Company. The driveway to Buildings 2-4 and the lower level of Building 1 is designed as a one-way driveway with an egress onto Champion Way. Per the City Engineer (Exhibit K),* ***the proposed driveway accesses at Industrial Way and Champion Way shall be concrete Commercial Driveway approaches constructed to City standards.*** *The City's Transportation Engineer (Exhibit L) states that as long as sight distance is provided for exiting vehicles and the gate placement does not cause vehicles to encroach on the street or sidewalk, the exit-only driveway onto Champion Way appears acceptable.*

17.98.120 LANDSCAPING AND SCREENING

A. Screening of all parking areas containing 4 or more spaces and all parking areas in conjunction with an off-street loading facility shall be required in accordance with zoning district requirements and Chapter 17.98. Where not otherwise specified by district requirement, screening along a public right-of-way shall include a minimum 5-ft. depth of buffer plantings adjacent to the right-of-way.
RESPONSE: *The primary proposed parking area is located north of Building 1 and adjacent to Champion Way. A landscaped buffer with a walkway is proposed between the Champion Way right-of-way and the parking area.*

B. When parking in a commercial or industrial district adjoins a residential zoning district, a sight-obscuring screen that is at least 80% opaque when viewed horizontally from between 2 and 8 feet above the average ground level shall be required. The screening shall be composed of materials that are an adequate size so as to achieve the required degree of screening within 3 years after installation.
RESPONSE: *The subject property is not adjacent to a residential zoning district so this code section does not apply.*

C. Except for a residential development which has landscaped yards, parking facilities shall include landscaping to cover not less than 10% of the area devoted to parking facilities. The landscaping

shall be uniformly distributed throughout the parking area and may consist of trees, shrubs, and ground covers.
RESPONSE: *The proposal features a landscaped buffer along the majority of the perimeter of the primary parking area associated with Building 1. The applicant did not submit a landscaping analysis for the parking area.* ***The applicant shall submit additional information regarding landscaping in the parking area by Building 1 to ensure that the 10 percent minimum landscaping as required by Section 17.98.120(C) is met.***

D. Parking areas shall be divided into bays of not more than 20 spaces in parking areas with 20 or more spaces. Between, and at the end of each parking bay, there shall be planters that have a minimum width of 5 feet and a minimum length of 17 feet for a single depth bay and 34 feet for a double bay. Each planter shall contain one major structural tree and ground cover. Truck parking and loading areas are exempt from this requirement.
RESPONSE: *The proposal contains planter bays at the ends of the parking rows by Building 1; however, the planter bay north of the three (3) parking spaces is less than five feet in width. The two (2) parking spaces east of Building 4 do not have any planter bays or landscaping proposed; however, they are located on the interior of the site and contain fewer than 4 spaces. Staff is recommending that the applicant update the site plan to detail four (4) parking spaces rather than 5 parking spaces adjacent to Building 1. This will provide additional space to meet the five foot landscaping buffer at each end of each parking bay in the office parking area.* ***The applicant shall update the Landscape Plan to detail a minimum 5 foot by 17 foot landscape planter at the north end of the parking bay adjacent to Building 1. The landscape planters shall contain at least one structural tree and groundcover; however, staff recommends all landscaping buffers contain a mix of trees, shrubs, and groundcover.***

E. Parking area setbacks shall be landscaped with major trees, shrubs, and ground cover as specified in Chapter 17.92.
RESPONSE: *The proposal features a landscaped buffer with a walkway along the Champion Way perimeter of the parking area by Building 1. Section 17.92.80 requires a mix of plant materials be planted to buffer parking lots from adjacent properties and the public right-of-way and states: "A balance of low-lying ground cover and shrubs, and vertical shrubs and trees shall be used." The portion of the buffer west of the walkway is proposed to contain Japanese red leaf barberry and the portion of the buffer east of the walkway is proposed to contain a mix of rock cotoneaster, sedge 'Evercolor Everest,' 'Mountain Fire' Andromeda, and 'Kelsey' red twig dogwood. The applicant is not proposing any trees in the parking area seatback.* ***The applicant shall update the landscape plan to detail a mix of trees, shrubs, and groundcover in the parking area setback adjacent to Champion Way.***

F. Wheel stops, bumper guards, or other method to protect landscaped areas shall be provided. No vehicle may project over a property line or a public right-of-way. Parking may project over an internal sidewalk, but a minimum clearance of 5 feet for safe pedestrian circulation is required.
RESPONSE: *The submitted plan set details wheel stops in the parking area near Building 1. No wheel stops are detailed in the two-stall parking area east of Building 4; however, there are no adjacent walkways.*

17.98.140 DRAINAGE

Parking areas, aisles and turnarounds shall have adequate provisions made for the on-site collection of drainage waters to eliminate sheet flow of such waters onto sidewalks, public rights-of-way and abutting private property.

RESPONSE: The applicant shall comply with the requirements of Section 13.18 of the Sandy Municipal Code and the City of Portland Stormwater Management Manual, as discussed in Chapter 17.84 above.

17.98.150 LIGHTING

Artificial lighting shall be provided in all required off-street parking areas. Lighting shall be directed into the site and shall be arranged to not produce direct glare on adjacent properties. Light elements shall be shielded and shall not be visible from abutting residential properties. Lighting shall be provided in all bicycle parking areas so that all facilities are thoroughly illuminated and visible from adjacent sidewalks or vehicle parking lots during all hours of use.

RESPONSE: *The applicant submitted lighting cut-sheets for new site lighting, and a photometric plan. These submittals are reviewed in Chapter 15.30 below.*

17.98.160 BICYCLE PARKING FACILITIES.

Multi-family developments, industrial, commercial and community service uses, transit transfer stations, and park and ride lots shall meet the following standards for bicycle parking facilities.

RESPONSE: *The submitted Site Plan (Exhibit C, Sheet A1.2) details 2 bicycle parking spaces located east of the office entrance. Section 17.98.160(B.1) requires each bicycle parking space to be at least 2.5 feet by 6 feet. Per Section 17.98.20, two (2) bicycle parking spaces are required based on the proposed use and parking spaces provided. Two bicycle parking spaces require an area that is at least 5 feet by 6 feet.*

CHAPTER 17.102 – URBAN FORESTRY

17.102.20 APPLICABILITY

This chapter applies only to properties within the Sandy Urban Growth Boundary that are greater than one acre including contiguous parcels under the same ownership.

A. General**:** No person shall cut, harvest, or remove trees 11 inches DBH or greater without first obtaining a permit and demonstrating compliance with this chapter.
   1. As a condition of permit issuance, the applicant shall agree to implement required provisions of this chapter and to allow all inspections to be conducted.
   2. Tree removal is subject to the provisions of Chapter 15.44, Erosion Control, Chapter 17.56, Hillside Development, and Chapter 17.60 Flood and Slope Hazard.

B. Exceptions: The following tree removals are exempt from the requirements of this chapter.
   1. Tree removal as required by the city or public utility for the installation or maintenance or repair of roads, utilities, or other structures.
   2. Tree removal to prevent an imminent threat to public health or safety, or prevent imminent threat to public or private property, or prevent an imminent threat of serious environmental degradation. In these circumstances, a Type I tree removal permit shall be applied for within seven days following the date of tree removal.

RESPONSE: *The subject property contains 5.44 acres and, therefore, compliance with this Chapter is required. Chapter 17.102 requires retention of 16 (5.44 x 3) trees 11-inches or greater (DBH) and in good condition. The applicant is not proposing to remove any trees from the subject property.*

17.102.50 TREE RETENTION AND PROTECTION REQUIREMENTS

A. Tree Retention**:** The landowner is responsible for retention and protection of trees required to be retained as specified below:

   1. At least three trees 11 inches DBH or greater are to be retained for every one-acre of contiguous ownership.
   2. Retained trees can be located anywhere on the site at the landowner's discretion before the harvest begins. Clusters of trees are encouraged.
   3. Trees proposed for retention shall be healthy and likely to grow to maturity, and be located to minimize the potential for blow-down following the harvest.
   4. If possible, at least two of the required trees per acre must be of conifer species.
   5. Trees within the required protected setback areas may be counted towards the tree retention standard if they meet these requirements.

RESPONSE*: The subject property is 5.44 acres and, therefore, requires retention of at least 16 trees 11-inches or greater DBH and in good health. There are many trees located in the wetland and storm sewer easement area towards the south end of the subject property. The applicant is not proposing to remove any trees from the subject property.*

B. Tree Protection Area: Except as otherwise determined by the Planning Director, all tree protection measures set forth in this section shall be instituted prior to any development activities and removed only after completion of all construction activity. Tree protection measures are required for land disturbing activities including but not limited to tree removal, clearing, grading, excavation, or demolition work.

   1. Trees identified for retention shall be marked with yellow flagging tape and protected by protective barrier fencing placed no less than 10 horizontal feet from the outside edge of the trunk.
   2. Required fencing shall be a minimum of six feet tall supported with metal posts placed no farther than ten feet apart installed flush with the initial undisturbed grade.
   3. No construction activity shall occur within the tree protection zone, including, but not limited to dumping or storage of materials such as building supplies, soil, waste items, equipment, or parked vehicles.

C. Inspection. The applicant shall not proceed with any tree removal or construction activity, except erosion control measures, until the City has inspected and approved the installation of tree protection measures. Within 15 days of the date of accepting an application for a Type I permit, the city shall complete an onsite inspection of proposed activities and issue or deny the permit. Within 15 days of issuing a Type II or Type III permit, the city shall complete an onsite inspection of proposed activities.

For ongoing forest operations, the permit holder shall notify the city by phone or in writing 24 hours prior to subsequent tree removal. The city may conduct an onsite re-inspection of permit conditions at this time.

RESPONSE*: Section 17.102.50(B.1) requires tree protection fencing be placed no less than 10 horizontal feet from the outside edge of the trunk. Per the Pacific Northwest International Society of Arboriculture (ISA), the ISA defines the critical root zone (CRZ) as "an area equal to a 1-foot radius from the base of the tree's trunk for each 1 inch of the tree's diameter at 4.5 feet above grade (referred to as diameter at breast height)." Often the drip-line is used to estimate a tree's CRZ; however, it should be noted that a tree's roots typically extend well beyond its drip-line. Section 17.92.10(C) requires tree protection fencing located 5 feet beyond the drip-line of a tree, taking into account that there are many roots beyond the drip-line and that trees continue to grow. The applicant is proposing to retain all trees on the subject property. The submitted arborist's report (Exhibit E) states: "There should be no impact to the trees located in the storm sewer easement on the south side of the Sandy Storage Site from the development and construction of the storage units on the site." The arborist report identifies two trees south of Building 2 where development will encroach within the drip line of the trees but concludes that there should be no long-term impact to either tree's health or stability as long as construction activity is not allowed to extend beyond the limits of construction, which is based on a line staked out on October 6, 2018 prior to the arborist's site visit. The arborist report recommends placing tree protection fencing along the north side of the storm sewer easement to protect the trees.* ***Tree protection fencing shall be located at least 5 feet beyond the dripline of all retention trees, with the exception of the two trees identified in the arborist report whose drip lines extend beyond the staked limit of construction line (an alder and a cottonwood). For these two trees, the tree protection fencing shall not encroach more than 4 feet into the drip line of the alder and more than 10 feet into the dripline of the cottonwood identified in the arborist report. Tree protection fencing shall be a minimum of six feet tall supported with metal posts placed no farther than ten feet apart installed flush with the initial undisturbed grade. Staff recommends using 6-foot tall no-jump horse fencing. The applicant shall affix a laminated sign (minimum 8.5 inches by 11 inches) to the tree protection fencing indicating that the area behind the fence is a tree retention area and that the fence shall not be removed or relocated. No construction activity shall occur within the tree protection zone, including, but not limited to, dumping or storage of materials such as building supplies, soil, waste items, equipment, or parked vehicles. The applicant shall request an inspection of tree protection measures prior to any excavation, grading, or other construction activity on the site.***

CHAPTER 8.04 – NUISANCES GENERAL PROVISIONS

8.04.020 Declaration of nuisance.
A. The acts, conditions or objects specifically enumerated and defined in Chapters 8.08 through 8.20 are declared to be public nuisances and such acts, conditions or objects may be abated by any of the procedures set forth in Chapter 8.24.

B. In addition to those nuisances specifically enumerated within Chapters 8.08 through 8.20, every other thing, substance or act which is determined by the council to be injurious or detrimental to the public health, safety or welfare of the city is declared to be a nuisance and may be abated as provided in Chapter 8.24.
(Ord. 1-73 § 18, 1973.)

RESPONSE*: The presence of pests is considered to be a nuisance and potentially detrimental to public health. Prior to development of the site,* ***staff recommends the applicant have a licensed pest control agent evaluate the site to determine if pest eradication is needed.***

CHAPTER 15.30 – DARK SKY ORDINANCE

All exterior lighting is required to conform to the requirements of this Chapter.

RESPONSE: *The applicant submitted a Photometric Plan (Exhibit C, Sheet E0.1) detailing the location of proposed lighting and projected foot candles. Section 15.30.60(D) requires all lighting systems to be designed so that the area 10 feet beyond the property line receives no more than 0.25 (one quarter) of a foot-candle of light. It is difficult to see the property lines on the submitted Photometric Plan, but it appears that light trespass 10 feet beyond the subject property lines exceeds the 0.25 foot-candle limit in multiple places.* ***The applicant shall update the Photometric Plan such that illumination 10 feet beyond the property lines in all directions does not exceed 0.25 foot candles. The property lines and foot candles at 10 feet from the property line shall be labeled and legible.***

Section 17.90.120(H.3) specifies that walkways and parking lots should be illuminated at 1.5 to 2.0 foot candles. The submitted Photometric Plan (Exhibit C, Sheet E0.1) details parking lot illumination at 0.3 to 4.7 foot candles and walkway illumination at 0.6 to 19.2 foot candles. The applicant is proposing multiple different types of lights. ***The applicant shall update the proposed parking area lights with lights that have a smaller distribution and emit less intense light and shall add pedestrian scale lighting along the walkways such that they are illuminated at 1.5 – 2.0 foot candles.***

The Dark Sky ordinance requires that all new lighting be full-cutoff and downward facing. The submitted lighting cut-sheets (Exhibit I) and Photometric Plan (Exhibit C, Sheet E0.1) indicate that multiple proposed lights are 4,000 Kelvins. Based on recommendations from the Audubon Society of Portland and the International Dark-Sky Association, ***staff recommends all proposed lighting be full-cutoff and not exceed 3,000 Kelvins. The applicant shall submit updated lighting fixture cut-sheets for all proposed exterior lighting that detail the lighting fixtures as full-cutoff and not exceeding 3,000 Kelvins to minimize negative impact on wildlife and human health.***

CHAPTER 15.44 – EROSION CONTROL

15.44.20 AREA OF APPLICATION

This chapter applies to all ground disturbing activities within the city limits whether or not a permit is required, unless such activities are otherwise exempted by the Sandy Development Code. All non-permitted ground disturbing activities that are permanent or temporary in nature shall comply with this chapter unless otherwise noted.

RESPONSE: *Per the City Engineer (Exhibit K),* ***all earthwork activities should follow the requirements of the most current edition of the Oregon Structural Specialty Code (OSSC). Site grading shall not in any way impede or impound or inundate the surface drainage flow from the adjoining properties without a proper collection system. The earthwork activities shall be observed and documented under the supervision of the geotechnical engineer. The City Engineer feels the Geotechnical Engineering Report (Exhibit F) dated December 11, 2011 that was prepared as part of the ARCO am/pm fuel station should be compatible with this site's existing conditions. All the work within the public right-of-way and within the paved area should comply with American Public Works Association (APWA) and City requirements as amended. The applicant shall submit a grading and erosion control permit and request an inspection of installed devices prior to any additional grading onsite.*** *The grading and erosion control plan shall include a re-vegetation plan for all areas disturbed during construction.* ***All erosion control and grading shall comply with Section 15.44 of the Municipal Code. The proposed development is greater than one acre which typically requires approval of a DEQ 1200-C Permit. The applicant shall submit confirmation from DEQ if a 1200-C Permit will not be required.***

15.44.50 APPLICANT'S RESPONSIBILITY

The developer, subsequent developers or property owners shall bear responsibility for the installation, construction, protection of all stockpiles on the site, materials transported from the site, maintenance including re-vegetation of all graded areas, inspection and disposition of erosion control measures. In order to meet the purpose of this chapter, the developer shall:

A. Apply permanent or temporary soil stabilization to denuded development site areas in conformance with the following schedule:

    1. Between October 1 and April 30, all denuded sites shall immediately be provided with either temporary or permanent soil stabilization.
    2. Between May 1 and September 30, temporary erosion and sediment control measures to reduce dust and sediment transport shall be applied as soon as practicable, but in no case more than seven days after ground disturbing activity occurs.
    3. Ground cover shall be installed on any portion of a site that is denuded for more than six months. Sports fields or playgrounds surrounded by vegetative cover or permanently installed curbing are exempt from this requirement.
    4. Temporary measures shall be maintained until permanent measures are established.
    5. Plant replacement vegetative cover that does not include plants listed as nuisance or prohibited plants on the City of Portland Plant List (available in the Planning & Development office) or the City's Native Plant List. Agriculture, timber production or residential crop growing activities are exempted from this requirement.

6. Secure or protect soil stockpiles throughout the project with temporary or permanent soil stabilization measures. Depositions of soil may be subject to additional regulations requiring permit, review or erosion and sediment control.
7. Select BMPs from the *Erosion Control Manual*.

RESPONSE: *Section 15.44.50 contains requirements for maintenance of a site including re-vegetation of all graded areas.* ***The applicant's Erosion Control Plan shall be designed in accordance with the standards of Section 15.44.50.***

CHAPTER 17.66 – ADJUSTMENTS AND VARIANCES

17.66.60 VARIANCES

Variances are a means of requesting a complete waiver or major adjustment to certain development standards. They may be requested for a specific lot or as part of a land division application. The Type II variance process is generally reserved for major adjustments on individual lots, while variances to development standards proposed as part of a land division are processed as a Type III application (requiring a public hearing).

RESPONSE: *The applicant is requesting the following variances:*

- *A Type II variance to allow greater than 30 percent metal siding (Section 17.90.120(B.3.d.4))*
- *A Type II variance to the 150 foot driveway spacing minimum (Sections 17.98.80(A) and 17.90.120(A.3))*
- *A Type II variance to allow a flat roof on a building that has a span of less than 50 feet (Section 17.90.120(C.1))*
- *A Type III special variance to allow a front yard retaining wall height in excess of 6 feet (Section 17.74.40(B.3))*
- *A type III special variance to reduce the ground floor widow coverage requirement (Section 17.90.120(E.2))*

17.66.70 TYPE II AND TYPE III VARIANCE CRITERIA

The authority to grant a variance does not include authority to approve a development that is designed, arranged or intended for a use not otherwise approvable in the location. The criteria are as follows:

A. The circumstances necessitating the variance are not of the applicant's making.

B. The hardship does not arise from a violation of this Code, and approval will not allow otherwise prohibited uses in the district in which the property is located.

C. Granting of the variance will not adversely affect implementation of the Comprehensive Plan.

D. The variance authorized will not be materially detrimental to the public welfare or materially injurious to other property in the vicinity.

E. The development will be the same as development permitted under this code and City standards to the greatest extent that is reasonably possible while permitting some economic use of the land.

F. Special circumstances or conditions apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape (legally existing prior to the effective date of this Code), topography, or other circumstances over which the applicant has no control.

METAL SIDING VARIANCE
17.90.120(B.3.d.4) "Where metal siding is used, it shall be used as an accent only, comprising not more than 30 percent of the surface area of the building elevation (e.g., wainscoting or other accent paneling)."

Request: *In the submitted deviation, adjustment, and variance narrative (Exhibit B), the applicant requests approval to allow 36 percent metal siding on Buildings 2, 3, and 4.*

Note: Thirty-six percent is 20 percent more than the 30 percent maximum allowed so staff would typically review this as an adjustment. In the submitted narrative, the applicant asks for a Type II variance. However, a review of the elevations (Exhibit C, Sheets A3 and A4) determined that the applicant is proposing to use metal siding as follows:

- *South elevation of Building 2: 100 percent*
- *North elevation of Building 3: 100 percent*
- *South elevation of Buildings 4: 36 percent*
- *South elevation of Building 5: 36 percent*

Staff can process the requests to use 36 percent metal siding for the south elevations of Buildings 4 and 5 as a Type II adjustment. However, staff cannot process the requests to use 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3 as an adjustment. In reviewing Type II and III Variance Criterion A, staff determined that the use of metal siding in excess of 30 percent is of the applicant's making and, therefore, the request cannot be processed as a Type II Variance. Staff recommends processing the request to use 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3 as a Type III special variance.

South elevations of Buildings 4 and 5
Criteria A of Section 17.66.40 states: "The proposed development will not be contrary to the purposes of this chapter, policies of the Comprehensive Plan, and any other applicable policies and standards adopted by the City." ***RESPONSE:*** *The use of 36 percent metal siding is only 20 percent above the 30 percent maximum metal siding allowed by code and will not be contrary to the purposes of the code, the Comprehensive Plan, or any other policies and standards adopted by the City. Criterion A is met.*

Criteria B of Section 17.66.40 states: "The proposed development will not substantially reduce the amount of privacy enjoyed by users of nearby structures when compared to the same development located as specified by this Code." ***RESPONSE:*** *The use of 36 percent metal siding rather than hardieplank, wood, board and batten, or any other siding approved by code will not reduce the amount of privacy enjoyed by users of nearby structures. Criterion B is met.*

Criteria C of Section 17.66.40 states: "The proposed development will not adversely affect existing physical systems and natural systems, such as traffic, drainage, dramatic land forms, or parks." ***RESPONSE:*** *Whether the applicant uses metal siding or an alternative type of siding that is approved by code the development will not affect physical systems and natural systems. Criterion C is met.*

Criteria D of Section 17.66.40 states: "Architectural features of the proposed development will be compatible to the design character of existing structures on adjoining properties and on the proposed development site." ***RESPONSE:*** *The use of 36 percent metal siding instead of the maximum of 30 percent metal siding should not significantly affect the architectural design of the south elevations of Buildings 4 and 5. The applicant's deviation, adjustment, and variance narrative (Exhibit B) states that "the metal siding to be used is visually indistinguishable from Hardiboard lap siding. It will have a matching profile, smooth finish, and identical City-approved color." Criterion D is met.*

Staff recommends the Planning Commission approve a Type II Adjustment to allow 36 percent metal siding on the south elevations of Buildings 4 and 5.

South elevation of Building 2 and north elevation of Building 3
The south elevation of Building 2 and the north elevation of Building 3 are proposed to be 100 percent metal siding. As previously stated, staff recommends processing the request to use 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3 as a Type III special variance. To be granted a Type III Special Variance, the applicant must meet one of the flowing criteria in Section 17.66.80:

A. The unique nature of the proposed development is such that:
    1. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
    2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.

B. The variance approved is the minimum variance needed to permit practical compliance with a requirement of another law or regulation.

C. When restoration or replacement of a nonconforming development is necessary due to damage by fire, flood, or other casual or natural disaster, the restoration or replacement will decrease the degree of the previous noncompliance to the greatest extent possible.

The applicant is proposing 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3 rather than the 30 percent maximum allowed by code. The intent of Section 17.90.120(B.3.d.4) is to limit the use of metal siding such that it is an accent only. The code cites wainscoting and other accent paneling as examples of how metal siding should be used. The applicant could design the south elevation of Building 2 and the north elevation of Building 3 to be similar to the design proposed for the south elevations of Buildings 4 and 5, which only uses 36 percent metal siding. ***Staff recommends the Planning Commission deny the applicant's request for a special variance to allow 100 percent metal siding on the south elevation of Building 2 and***

the north elevation of Building 3. Staff recommends the Planning Commission approve a Type II Adjustment to allow up to 36 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3, similar to the south elevations of Buildings 4 and 5.

Recommendation: ***Staff recommends the Planning Commission approve a Type II Adjustment to allow 36 percent metal siding on the south elevations of Buildings 4 and 5. Staff recommends the Planning Commission deny the applicant's request for a special variance to allow 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3. Staff recommends the Planning Commission approve a Type II Adjustment to allow up to 36 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3, similar to the south elevations of Buildings 4 and 5.***

DRIVEWAY SPACING VARIANCE

17.90.120(A.3) "Off-street parking shall be located to the rear or side of buildings with no portion of the parking lot located within required setbacks or within 10-feet of the public right-of-way, as shown in Figure 17.90.120-A. When access must be provided directly from a public right-of-way, driveways for ingress or egress shall be limited to one driveway per every 150 linear feet of frontage. For lots with frontage of less than 150 ft. or less, shared access may be required."

17.98.80(A) "Location and design of all accesses to and/or from arterials and collectors (as designated in the Transportation System Plan) are subject to review and approval by the City Engineer. Where practical, access from a lower functional order street may be required. Access to arterials or collectors shall be located a minimum of 150 ft. from any other access or street intersection. Exceptions may be granted by the City Engineer. Evaluations of exceptions shall consider posted speed of the street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities."

Request: *The applicant requests approval to allow a second driveway on Champion Way that will be approximately 101 feet south of the existing shared common access driveway.*

Criteria A. of Section 17.66.70 states "The circumstances necessitating the variance are not of the applicant's making." ***RESPONSE:*** *The applicant's deviation, adjustment, and variance narrative (Exhibit B) states that the distance between the common access easement and the wetland to the south is approximately 176 feet, which does not provide adequate distance to place the driveway between proposed Buildings 1 and 2 so it can serve both structures. However, the applicant could design the site differently to either relocate the second proposed driveway on Champion Way further south than proposed, or eliminate it entirely and provide a turnaround instead so that vehicles would enter from and exit to Industrial Way. Thus, the proposed design is of the applicant's making and, therefore, staff does not believe it can be processed as a Type II variance. Staff recommends processing the request as a Type III special variance. To be granted a Type III Special Variance, the applicant must meet one of the flowing criteria in Section 17.66.80:*

A. The unique nature of the proposed development is such that:
    1. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
    2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.

B. The variance approved is the minimum variance needed to permit practical compliance with a requirement of another law or regulation.

C. When restoration or replacement of a nonconforming development is necessary due to damage by fire, flood, or other casual or natural disaster, the restoration or replacement will decrease the degree of the previous noncompliance to the greatest extent possible.

The applicant is proposing a right-out only egress for the proposed second driveway on Champion Way. In addition, the proposed driveway has been sited to align with the existing driveway across the street on the east side of Champion Way. Due to the limited number of vehicles expected to be exiting the site on any given day, the second driveway egress should not be detrimental to the public welfare or injurious to other property in the area. The City Engineer (Exhibit K) states that the second proposed driveway on Champion Way is one-way out with few trips; therefore, the City Engineer does not have concerns with granting the variance request. ***Staff recommends the Planning Commission approve a Special Variance to allow a second right-out only driveway egress on Champion Way to be spaced less than 150 feet from the existing common access easement driveway.*** *Per the Public Works Director (Exhibit M),* ***the proposed right-out only driveway approach shall be constructed with a pork chop or other feature approved by the City Engineer to prevent turning movements other than a right turn out of the driveway. ODOT (Exhibit N) recommends that the applicant submit truck turning templates to demonstrate that the Champion Way egress functions with the applicant's intended use and anticipated truck traffic.***

Recommendation: ***Staff recommends the Planning Commission approve a Special Variance to allow a second right-out only driveway egress on Champion Way to be spaced less than 150 feet from the existing common access easement driveway. The proposed right-out only driveway approach shall be constructed with a pork chop or other feature approved by the City Engineer to prevent turning movements other than a right turn out of the driveway.***

FLAT ROOF VARIANCE

17.90.120(C.1) "Except as provided in subsections 17.90.120(C)(8), below, pitched (gabled or hipped) roofs are require on all new buildings with a span of 50-feet or less. Gable and hipped roof forms must achieve a pitch not less than the following:"

Zoning District	Primary Roof Forms (minimum)	Secondary Roof Forms (minimum)
C-2 and I-1	6:12	4:12

Request: *In the submitted deviation, adjustment, and variance narrative (Exhibit B), the applicant requests a Type II variance to allow a flat roof on Buildings 2-5, which have a span of less than 50 feet. Building 1 has a roof span of greater than 50 feet so is exempt from the pitched roof requirement by Section 17.90.120(C.8).*

Criteria A. of Section 17.66.70 states "The circumstances necessitating the variance are not of the applicant's making." ***RESPONSE****: The applicant is proposing flat roofs on buildings with roof spans less than 50 feet; however, the applicant could redesign the buildings such that they have*

pitched or gabled roofs. Thus, the proposed design is of the applicant's making and, therefore, staff does not believe it can be processed as a Type II variance. Staff recommends processing the request as a Type III Special Variance. To be granted a Type III Special Variance, the applicant must meet one of the flowing criteria in Section 17.66.80:

A. The unique nature of the proposed development is such that:
    1. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
    2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.

B. The variance approved is the minimum variance needed to permit practical compliance with a requirement of another law or regulation.

C. When restoration or replacement of a nonconforming development is necessary due to damage by fire, flood, or other casual or natural disaster, the restoration or replacement will decrease the degree of the previous noncompliance to the greatest extent possible.

The applicant is proposing a flat roof on Building 1, which qualifies for an exception to the pitched roof standard of Section 17.90.120(C.1) because it has a roof span greater than 50 feet. Buildings 2-5 have a roof span of 42 feet, which is less than 50 feet and, therefore require pitched roofs. The applicant is proposing a flat roof for Buildings 2-5 similar to the roof on Building 1 to create a consistent appearance for all the buildings on the site. The use of flat roofs will not be materially detrimental to the public welfare or injurious to other property in the area.

Recommendation: ***Staff recommends the Planning Commission approve a Special Variance to allow flat roofs on all buildings.***

17.66.80 TYPE III SPECIAL VARIANCES

The Planning Commission may grant a special variance waiving a specified provision for under the Type III procedure if it finds that the provision is unreasonable and unwarranted due to the specific nature of the proposed development. In submitting an application for a Type III Special Variance, the proposed development explanation shall provide facts and evidence sufficient to enable the Planning Commission to make findings in compliance with the criteria set forth in this section while avoiding conflict with the Comprehensive Plan.

One of the following sets of criteria shall be applied as appropriate.

A. The unique nature of the proposed development is such that:
    1. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
    2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.

B. The variance approved is the minimum variance needed to permit practical compliance with a requirement of another law or regulation.

C. When restoration or replacement of a nonconforming development is necessary due to damage by fire, flood, or other casual or natural disaster, the restoration or replacement will decrease the degree of the previous noncompliance to the greatest extent possible.

FRONT YARD RETAINING WALL HEIGHT SPECIAL VARIANCE
17.74.40(B.3) "Fences in a front yard (Industrial). The height of a fence or retaining wall in a front yard shall not exceed 6 ft."

Request: *The applicant requests approval of a special variance to allow a terraced retaining wall along Champion Way that will be approximately 8.5 feet at its tallest point.*

RESPONSE: *The site has existing topography that slopes away from Highway 26. The submitted Grading Plan (Exhibit C, Sheet 6) shows the location of the proposed retaining wall along Champion Way as well as proposed re-grading of the site. The applicant's deviation, adjustment, and variance narrative (Exhibit B) states: "Since it is constructed perpendicular to the slope of the land, the wall will step down and thus the maximum height of 8'-6" (Approx.) will only occur at the end of each step and the average height of each segment will be lower." The Grading Plan with retaining wall details (Exhibit C, Sheet 6) includes an elevation of the proposed terraced wall and confirms that a majority of the wall will be less than 6 feet in height, with only one terraced segment exceeding 6 feet in height. Thus, staff believes the wall design does not violate the intent and purpose of the retaining wall height requirements nor will it be materially detrimental to the public welfare. Criterion A is met. Per the narrative, "The area supported by the retaining walls will be terraced and landscaped in an attractive manner as shown on the Landscape Plan. Additionally, the wall itself will be constructed of an attractive, architectural material keyed to the building facades."* ***The applicant shall submit proposed architectural treatment for all exposed sections of the retaining wall for staff review and approval.***

Recommendation: ***Staff recommends the Planning Commission approve a special variance to allow the retaining wall in the front yard to exceed 6 feet. Staff recommends the Planning Commission approve a maximum 8.5 foot wall reveal, as proposed by the applicant. The applicant shall submit proposed architectural treatment for all exposed sections of the retaining wall for staff review and approval.***

WINDOW COVERAGE SPECIAL VARIANCE
17.90.120(E.2). *The ground floor elevation of all new buildings shall contain ground floor display areas, windows, and doorways on the 'activated' frontage as follows:*

Building Size	Percentage Windows Required
0 - 10,000 sq. ft.	30 percent of elevation
10,000 sq. ft. - 30,000 sq. ft.	25 percent of elevation
Greater than 30,000 sq. ft.	20 percent of elevation

Request: *Proposed Building 1 is 33,178 square feet so the building requires 20 percent window coverage on its activated frontages (north and east elevations). Buildings 2-5 are all under 10,000*

square feet so those buildings require 30 percent window coverage on their activated frontages. The applicant requests approval to provide less than the required percent window coverage on the following activated elevations:

- *North elevation of Building 1 – request to provide 13 percent instead of 20 percent*
- *East elevation of Building 2 – request to provide 21 percent instead of 30 percent*
- *West elevation of Building 3 – request to provide 23 percent instead of 30 percent*
- *South elevation of Building 4 – request to provide 20 percent instead of 30 percent*
- *West elevation of Building 4 – request to provide 23 percent instead of 30 percent*
- *South elevation of Building 5 – request to provide 20 percent instead of 30 percent*
- *East elevation of Building 5 – request to provide 23 percent instead of 30 percent*

RESPONSE: *The applicant's deviation, adjustment, and variance narrative (Exhibit B) states "the quantitative standards for window area are in conflict with the nature of the use, which is nevertheless allowed by right in this zone." The applicant previously submitted an application for a code interpretation related to the storage project (File No. 18-027 INT, Exhibit O). During the Planning Commission hearing, the Planning Commission decided that faux or false windows could count towards the required window percentage. Staff is unclear as to why the applicant wouldn't be able to satisfy the percent window coverage requirement using non-transparent faux windows, as proposed. Staff does not believe the requested variance to Section 17.90.120(E.2) meets any of the Special Variance criteria. Staff believes the applicant could satisfy the minimum percent window coverage requirement for each activated frontage using false or faux windows, which would still meet the design intent of the standard while preventing visibility into the building. However, after reviewing the submitted elevations (Exhibit C, Sheets A3 and A4), staff believes the proposed windows on the north and east elevations of Building 1 and the east elevation of Building 2 are sufficient to meet the aesthetic intent of the code with the combined use of metal awnings and gables above the proposed windows, which effectively increases the window area. Therefore,* ***staff recommends the Planning Commission approve a Special Variance to the window coverage requirement for the activated frontages of Buildings 1 and 2.***

The south elevations of Buildings 4 and 5 are proposed to have 20 percent window coverage rather than the required 30 percent window coverage. The proposal contains three windows on each of the three sections of the elevation that contain hardie board siding. Windows are not being proposed on the metal siding portion of the facades. The applicant has not detailed metal awnings above the proposed windows on the south elevations of Buildings 4 and 5. The addition of metal awnings above the proposed windows would not only help unify the building design on the site, but would also effectively increase the window area. ***Staff recommends the Planning Commission approve a Special Variance to the window coverage requirement for the south elevations of Buildings 4 and 5 and require that the applicant update the elevations to detail metal awnings above the proposed windows on the south elevations of Buildings 4 and 5. In addition, staff recommends the applicant detail landscaped trellises in the two proposed sections of metal siding on the south elevations of Buildings 4 and 5.***

The east elevation of Building 5 and the west elevations of Buildings 3 and 4 are proposed to have 23 percent window coverage rather than the 30 percent window coverage that's required. Staff believes that the applicant could add one (1) additional window to each of these elevations to meet the 30 percent window coverage requirement. ***Staff recommends the Planning Commission deny the applicant's request for a Special Variance to the window coverage requirement for the east***

elevation of Building 5 and the west elevations of Buildings 3 and 4. Staff recommends the applicant update the elevations to detail one (1) additional window on the east elevation of Building 5 and the west elevations of Buildings 3 and 4 to meet the 30 percent window coverage requirement.

Recommendation: ***Staff recommends the Planning Commission approve a Special Variance to the window coverage requirement for the activated frontages of Buildings 1 and 2. Staff recommends the Planning Commission approve a Special Variance to the window coverage requirement for the south elevations of Buildings 4 and 5 and require that the applicant update the elevations to detail metal awnings above the proposed windows on the south elevations of Buildings 4 and 5. In addition, staff recommends the applicant detail landscaped trellises in the two proposed sections of metal siding on the south elevations of Buildings 4 and 5. Staff recommends the Planning Commission deny the applicant's request for a Special Variance to the window coverage requirement for the east elevation of Building 5 and the west elevations of Buildings 3 and 4. Staff recommends the applicant update the elevations to detail one (1) additional window on the east elevation of Building 5 and the west elevations of Buildings 3 and 4 to meet the 30 percent window coverage requirement.***

OTHER VARIANCE REQUESTS THE APPLICANT MAY NEED

BUILDING FRONTAGE VARIANCE

Section 17.90.120(D.1) requires buildings to be oriented to a public street or civic space such that at least 50 percent of the site's street frontage is comprised of building(s) placed within 20 feet of a sidewalk, walkway or civic space and not more than 20 percent of the off-street parking is located between a building's front façade and the adjacent street.

Request: *The applicant did not request a variance to Section 17.90.120(D.1); however, 50 percent of the Industrial Way frontage is not comprised of buildings placed within 20 feet of the sidewalk as detailed on the submitted site plan (Exhibit C, Sheet A1.1). Because the site layout is of the applicant's making, a request to not meet the requirements of Section 17.90.120(D.1) would need to be processed as a Special Variance.*

RESPONSE: *The intent of Section 17.90.120(D) is to "maintain and enhance General Commercial and Industrial streetscapes as public spaces, emphasizing pedestrian-scale and character in new development consistent with Sandy Style." Placing buildings within 20 feet of the sidewalk along at least 50 percent of a street's frontage contributes to the pedestrian character of a development. The site frontage on Industrial Way is approximately 385 feet; however, approximately 170 feet is the wetland and storm sewer easement area and is, therefore, unbuildable. Both Buildings 4 and 5 are set back farther than 20 feet, with the exception of the SW corner of Building 4. In order to meet the requirements of Section 17.90.120(D.1), the applicant would need to redesign the layout of Buildings 4 and 5 such that the combined frontage of Buildings 4 and 5 within 20 feet of Industrial Way is approximately 107.5 feet (50 percent of the 215 feet of Industrial Way frontage that is not wetland).* ***The applicant shall update the site plan to detail Buildings 4 and 5 within 20 feet of the Industrial Way right-of-way for at least 50 percent of the frontage (excluding the wetland area). Alternatively, the applicant shall request a Special Variance to Section 17.90.120(D.1) and shall pay the Special Variance fee ($1,070). The Planning Commission shall decide whether to approve or deny a Special Variance to allow less than 50 percent of the Industrial Way frontage to be comprised of buildings within 20 feet of the right-of-way.***

Recommendation: ***The applicant shall update the site plan to detail Buildings 4 and 5 within 20 feet of the Industrial Way right-of-way for at least 50 percent of the frontage (excluding the wetland area). Alternatively, the applicant shall request a Special Variance to Section 17.90.120(D.1) and shall pay the Special Variance fee ($1,070). The Planning Commission shall decide whether to approve or deny a Special Variance to allow less than 50 percent of the Industrial Way frontage to be comprised of buildings within 20 feet of the right-of-way.***

CIVIC SPACE VARIANCE
Section 17.90.120(G.1) requires that not less than three (3) percent of the building area of every development shall be improved as civic space.

Request: *The applicant did not request a variance to Section 17.90.120(G); however, the applicant is proposing 250 square feet of civic space, which is less than the required amount. Because the amount of civic space provided is of the applicant's making, a request to not meet the requirements of Section 17.90.120(G.1) would need to be processed as a special variance.*

RESPONSE: *The total area of the five (5) proposed buildings is 57,559 square feet, therefore, the required civic space is 1,727 square feet. Based on the proposed use as a storage facility, staff believes the proposed 250 square foot civic space located adjacent to the office entry is reasonable; however, this would require a Special Variance since it's of the applicant's making.* ***The applicant shall update the plan set to detail at least 1,727 square feet of civic space. Alternatively, the applicant shall request a Special Variance to Section 17.90.120(G) and shall pay the appropriate fee ($1,070).*** *The office space in Building 1 serves as the public interface of the proposed storage facility. This is where the general public would go if they wanted to rent a storage unit, close out an account, or pay a bill. The remaining four (4) buildings will only be accessed by people who are renting storage facilities. Thus, staff believes that locating 250 square feet of civic space adjacent to the office is reasonable.* ***If the applicant chooses the special variance option, staff recommends the Planning Commission approve a Special Variance to allow 250 square feet of civic space rather than the required 1,727 square feet.***

Recommendation: ***The applicant shall update the plan set to detail at least 1,727 square feet of civic space. Alternatively, the applicant shall request a Special Variance to Section 17.90.120(G) and shall pay the appropriate fee ($1,070). If the applicant chooses the special variance option, staff recommends the Planning Commission approve a Special Variance to allow 250 square feet of civic space rather than the required 1,727 square feet.***

III. SUMMARY AND CONCLUSION

Axis Design Group submitted an application on behalf of Sandy Automotive (Mark Benson) for a self-storage facility located on a 4.3-acre site at the NW corner of Champion Way and Industrial Way. The proposal includes five (5) self-storage buildings varying in size from 5,324 square feet to 33,178 square feet. The northernmost building (Building 1) will be accessed via the existing driveway on Champion Way south of the Arco gas station; the remaining four (4) buildings will be accessed by a new one-way driveway with an ingress from Industrial Way and an egress to Champion Way. There is no development being proposed for the portion of the site in the BPA powerline easement with this application. The applicant is requesting the following variances and design deviations:

- A variance to allow greater than 30 percent metal siding (Section 17.90.120(B.3.d.4))
- A variance to the 150 foot driveway spacing minimum (Sections 17.98.80(A) and 17.90.120(A.3))
- A variance to allow a flat roof on a building that has a span of less than 50 feet (Section 17.90.120(C.1))
- A special variance to allow a front yard retaining wall height in excess of 6 feet (Section 17.74.40(B.3))
- A special variance to reduce the ground floor widow coverage requirement (Section 17.90.120(E.2))
- A design deviation to not provide a primary entrance on all activated frontages (Section 17.90.120(D.3 and 7))

This request is before the Planning Commission primarily to determine if the five (5) variance and one (1) design deviation requests should be approved, approved with conditions, or denied.

Biggest Challenges/Recommendations:

Site issues:

1. Civic Space doesn't meet required minimum. Meet or request a Special Variance.
2. Remove one parking space by the office and add one parking space near Building 2 and one parking space near Building 5.
3. Relocate ingress from the common access easement to the Sandy Vault office and Building 1 such that it is located opposite the existing drive aisle between the Arco station and the convenience store (approximately 120 feet west of the west curb of Champion Way).
4. Building frontage along Industrial Way does not meet minimum. Meet or request a Special Variance.

Building issues:

1. One additional window on the east elevation of Building 5 and the west elevations of Buildings 3 and 4 to meet 30 percent requirement.
2. Real windows along the office portion of Building 1
3. Metal awnings above windows and landscaped trellises along metal siding on south elevations of Buildings 4 and 5.
4. Minimum of three (3) Sandy Style elements from the list in Section 17.90.120(B.3.e) on each activated frontage of each building.
5. Stone base wrapping around the corners on the north elevation of Building 3 and the west side of the south elevation of Building 2 for a distance of at least 4 feet.
6. Additional analysis for rooftop equipment.

Landscaping issues:

1. 5 foot planter bays with mix of trees, shrubs, and groundcover in parking area near office.
2. 1.5-inch caliper street trees.

Lighting issues:

1. Need updated photometric plan with all areas more than 10 feet from the property lines not exceeding 0.25 foot candles. Clearly show property lines and 10 feet beyond property lines.
2. Lighting with full cut-off and maximum 3,000 Kelvins.
3. Pedestrian scale lighting along internal walkways with 1.5 to 2.0 foot candles.

Utility and right-of-way issues:

1. Street improvements along the site frontage of Hwy 26, Champion Way, and Industrial Way.

Other issues:

1. Submit details on any additional retaining walls. May require a variance.

IV. RECOMMENDATION

Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. Staff recommends the Planning Commission **approve** the application with modifications as recommended in this report.

Staff recommends the Planning Commission **approve** the following adjustments, variances, and deviations:

- Type II Adjustment to Section 17.90.120(B.3.d.4) to allow up to 36 percent metal siding on the south elevations of Buildings 4 and 5, the south elevation of Building 2, and the north elevation of Building 3.
- Special Variance to Section 17.90.120(A.3) and 17.98.80(A) to allow a second right-out only driveway egress on Champion Way to be spaced less than 150 feet from the existing common access easement driveway.
- Special Variance to Section 17.90.120(C.1) to allow flat roofs on all buildings.
- Special Variance to Sections 17.90.120(E.2) to allow less than the required window coverage on the north elevation of Building 1, the east elevations of Buildings 1 and 2, and the south elevations of Buildings 4 and 5, provided the applicant detail metal awnings above the proposed windows and landscaped trellises in the two proposed sections of metal siding on the south elevations of Buildings 4 and 5.
- Special Variance to Section 17.74.40(B.3) to allow a retaining wall in the front yard greater than 6 feet tall.
- Design deviation to Section 17.90.120(D.3 and 7) to not require a public entrance and connecting walkway on Buildings 2-5.

Staff recommends the Planning Commission **deny** the applicant's request for the following variances:

- Special Variance to Section 17.90.120(B.3.d.4) to allow 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3.
- Special Variance to Section 17.90.120(E.2) to allow less than the required window percent coverage on the east elevation of Building 5 and the west elevations of Buildings 3 and 4.

If the applicant chooses to apply for the two additional variances identified by staff, staff recommends the Planning Commission:

- Decide whether to **approve or deny** a Special Variance to Section 17.90.120(D.1) to allow less than 50 percent of the street frontage along Industrial Way to be comprised of buildings within 20 feet of the sidewalk.
- **Approve** a Special Variance to Section 17.90.120(G) to allow 250 square feet of civic space rather than the 1,727 square feet required.

18-047 DR/VAR/ADJ Sandy Vault Self Storage

Recommendations and Conditions

Note: This is a list of all recommendations and conditions in the staff report in the order in which they appear. This list contains duplicates.

1. The applicant shall submit details on all proposed retaining walls on the subject property, including wall height and proposed architectural finish for staff review and approval. If the wall between Buildings 2 and 4 or the wall north of Building 3 exceeds 8 feet in height, the applicant shall apply for an additional variance.
2. All required improvements shall be installed or financially guaranteed prior to final occupancy of the Sandy Vault Self Storage buildings.
3. ODOT (Exhibit N) recommends that the applicant be required to bring the sidewalk up to current City and ODOT standards. Sidewalk and planter strip shall be constructed as necessary to be consistent with local, ODOT and ADA standards. The applicant shall obtain all appropriate permits and agreement to work in the ODOT right-of-way (see Exhibit N).
4. the applicant shall provide pedestrian improvements on all site frontages (Champion Way, Industrial Way, and Highway 26) consisting of a five-foot planter strip and six-foot sidewalks per Sections 15.28 and 17.84.30 of the Sandy Municipal Code (SMC). Street trees approved by staff are required in the planter strips at 30 foot on-center spacing. In addition, street lighting shall be required at the west end of Champion Way where there are currently no streetlights (approximately 400 lineal feet) and the west end of the Highway 26 frontage (approximately 300 lineal feet).
5. The applicant shall submit an updated truck turning template demonstrating that a fueling truck can access the Arco site. The turning template shall include appropriate dimensions, details on the type of truck, road labels, etc.
6. The City's Transportation Engineer recommends that the ingress to the Sandy Vault office and Building 1 be located opposite the existing drive aisle between the Arco station and the convenience store. The City Transportation Engineer estimates that distance to be approximately 120 feet west of the west curb of Champion Way.
7. Half street improvements including right-of-way dedications will be required along the entire site frontages to include 5-foot wide landscape strips with landscaping, 6-foot wide sidewalks, street lights, and utility extensions as required by the City of Sandy or the City Engineer. The City Engineer recommends the existing roadway width be maintained for consistency and uniformity to match the existing paved surface.
8. The final construction plans shall include a plan and profile for Champion Way and Industrial Way improvements to include a plan and profile extensions of a minimum 200 feet in each direction to ensure future grades can be met.
9. At the final design stage and prior to construction a detailed storm drainage report addressing water quality and quantity requirements shall be submitted by the applicant's engineer for review and approval by the City in conformance with Sandy Development Code (SDC) Standards, Section 13.18 and the 2018 City of Portland Stormwater Management Manual (SWMM) standards that were adopted by reference into the Sandy Development Code.
10. The water service for the site shall be connected to the public water main in Champion Way.

11. The applicant shall sign and record a sewer maintenance agreement reviewed and approved by the City for multiple properties under separate ownership served by a private common sewer line. All stormwater detention and treatment shall conform to the requirements of Sections 13.18 and 13.20 of the SMC and the City of Portland Stormwater Management Manual (SWMM). Prior to beginning design on the utility service lines the applicant shall consult with Sandy Fire District regarding fire hydrant locations and spacing on the site.
12. The applicant shall confer with Sandy Fire District to determine the number and location of on-site fire hydrants necessary to comply with the requirements of the Sandy Fire District Fire Marshall.
13. The final construction plans shall be submitted to the Sandy Fire District for review and approval to ensure that adequate fire protection and access are provided to all buildings.
14. The applicant shall place all onsite overhead electrical and communications wires underground in conformance with Section 15.20.
15. All franchise utilities shall be installed underground and in conformance with City standards.
16. Mail delivery facilities shall be provided by the applicant in conformance with 17.84.100 and the standards of the USPS. The applicant shall submit a mail delivery plan to the City and USPS for review and approval prior to installation of the mail delivery facility.
17. The applicant shall update the elevations to detail awnings above the windows on the south elevations of Buildings 4 and 5 and shall update the plan set to include a 6-inch change in plane where the parapet height changes.
18. The applicant stall update the elevations to detail metal awnings above the windows on the south elevations of Buildings 4 and 5.
19. The applicant shall update the submitted elevations to detail a minimum of three (3) Sandy Style elements from the list in Section 17.90.120(B.3.e) on each activated frontage of each building.
20. The applicant shall update the elevations to detail the stone base wrapping around the corners on the north elevation of Building 3 and the west side of the south elevation of Building 2 for a distance of at least 4 feet.
21. All rooftop equipment shall be screened from view from all adjacent rights-of-way and civic spaces. The applicant shall submit line of sight analysis for the rooftop equipment prior to submitting building permits.
22. The applicant shall update the site plan to detail Buildings 4 and 5 within 20 feet of the Industrial Way right-of-way for at least 50 percent of the frontage (excluding the wetland area). Alternatively, the applicant shall request a Special Variance to Section 17.90.120 (D.1) and shall pay the Special Variance fee ($1,070). The Planning Commission shall decided whether to approve or deny a special variance to allow less than 50 percent of the Industrial Way frontage to be comprised of buildings within 20 feet of the right-of-way.
23. Staff recommends the Planning Commission approve the applicant's request for a deviation to not provide direct pedestrian routes to public entrances on Buildings 2-5.
24. Staff recommends the Planning Commission approve the applicant's request for a deviation to not provide public entrances on Buildings 2-5.
25. The applicant shall be required to meet the requirements of Section 17.90.120(F) at the time of development of the portion of the site under the BPA easement. At that time, the applicant shall update the Landscape Plan to detail a landscape buffer comprising not less than 30 percent of the highway frontage. The required landscape buffer plantings along Highway 26 shall be at

least 20 feet deep and shall contain a mixture of deciduous and evergreen species of a sufficient quantity to provide a partial buffer within two (2) years from the date they are planted. The applicant shall select species from the list in Section 17.90.120(F.3) (with the exception of maples), or propose alternative native species for staff review and approval.

26. The civic space shall include at least one public bench and one public art element or similar pedestrian amenity reviewed and approved by staff.
27. The applicant shall update the plan set to detail at least 1,727 square feet of civic space. Alternatively, the applicant shall request a special variance to Section 17.90.120(G) and shall pay the appropriate fee ($1,070). If the applicant chooses the special variance option, staff recommends supporting a special variance to allow 250 square feet of civic space rather than the required 1,727 square feet.
28. The applicant shall update the proposed parking area lights with lights that have a smaller distribution and emit less intense light and shall add pedestrian scale lighting along the walkways such that they are illuminated at 1.5 – 2.0 foot candles.
29. The applicant shall update the north elevation of Building 1 to detail real windows along the office portion of Building 1.
30. The applicant shall provide street address numbers measuring a minimum of six (6) inches high, which clearly locate buildings and their entries for patrons and emergency services. The applicant shall verify the location(s) of the address with the Building Official and emergency service providers.
31. All rooftop equipment shall be screened from view from all adjacent rights-of-way and civic spaces. The applicant shall submit line of sight analysis for the rooftop equipment prior to submitting building permits.
32. The applicant shall install tree protection fencing located 5 feet outside of the dripline of all existing trees on site.
33. All landscaping shall be continually maintained, including necessary watering, weeding, pruning, and replacing.
34. The applicant shall submit additional calculations demonstrating that the 20 percent landscaping standard is met.
35. The applicant will be required to obtain a permit from ODOT to place trees within the highway right-of-way. All street trees shall be a minimum of 1.5-inches in caliper measured 6 inches above the ground and shall be planted per the City of Sandy standard planting detail. Trees and planter strip shall be installed per the approved landscape plan. Tree ties shall be twine and loosely tied so as not to damage the trunk and shall be removed after one growing season (or a maximum of 1 year).
36. The applicant shall update the proposed tree list to include an alternate species for the three (3) proposed maples (Acer rubrum ‘Armstrong,’ Acer ginnala, and Acer circinatum). The straight species of the Zelkova is not of the City of Sandy street tree list. The applicant shall update the proposed tree list to include one of the three approved varieties of Zelkova serrata: ‘Green Vase,’ ‘Halka,’ or ‘Village Green.’
37. To provide species diversity, staff recommends requiring 1.5-inch caliper street trees.
38. The applicant shall update the Landscape Plan and plant materials list to remove Prunus laurocerasus and replace it with an alternative native shrub.

39. The applicant shall maintain all unlandscaped and/or revegetated areas for a period of two years following the issuance of the Certificate of Occupancy for the facility.
40. If the applicant chooses to postpone street tree and/or landscaping installation, the applicant shall post a performance bond equal to 120 percent of the cost of the landscaping, assuring installation within 6 months. The cost of street trees shall be based on the street tree plan and at least $500 per tree. The cost of landscaping shall be based on the average of three estimates from three landscaping contractors; the estimates shall include as separate items all materials, labor, and other costs of the required action, including a three-year maintenance and warranty period.
41. The applicant shall update the site plan to detail four (4) parking spaces in the parking area adjacent to the office (3 for the office use, plus 1 for Building 1). In addition, the applicant shall update the site plan to detail one (1) parking space near Building 2 and one (1) parking space near Building 5. The applicant shall submit the updated parking plan to staff for review and approval.
42. The applicant shall update the plan set to detail the ADA parking space with the aisle on the passenger side. Signage associated with the ADA parking space shall meet the head clearance distance requirement in the Building Code.
43. The City's Transportation Engineer recommends that the ingress to the Sandy Vault office and Building 1 be located opposite the existing drive aisle between the Arco station and the convenience store. The City's Transportation Engineer estimates that distance to be approximately 120 feet west of the west curb of Champion Way.
44. The proposed driveway accesses at Industrial Way and Champion Way shall be concrete Commercial Driveway approaches constructed to City standards.
45. The applicant shall submit additional information regarding landscaping in the parking area by Building 1 to ensure that the 10 percent minimum landscaping as required by Section 17.98.120(C) is met.
46. The applicant shall update the Landscape Plan to detail a minimum 5 foot by 17 foot landscape planter at the north end of the parking bay adjacent to Building 1. The landscape planters shall contain at least one structural tree and groundcover; however, staff recommends all landscaping buffers contain a mix of trees, shrubs, and groundcover.
47. The applicant shall update the landscape plan to detail a mix of trees, shrubs, and groundcover in the parking area setback adjacent to Champion Way.
48. The applicant shall comply with the requirements of Section 13.18 of the Sandy Municipal Code and the City of Portland Stormwater Management Manual, as discussed in Chapter 17.84 above.
49. Tree protection fencing shall be located at least 5 feet beyond the dripline of all retention trees, with the exception of the two trees identified in the arborist report whose drip lines extend beyond the staked limit of construction line (an alder and a cottonwood). For these two trees, the tree protection fencing shall not encroach more than 4 feet into the drip line of the alder and more than 10 feet into the dripline of the cottonwood identified in the arborist report. Tree protection fencing shall be a minimum of six feet tall supported with metal posts placed no farther than ten feet apart installed flush with the initial undisturbed grade. Staff recommends using 6-foot tall no-jump horse fencing. The applicant shall affix a laminated sign (minimum 8.5 inches by 11 inches) to the tree protection fencing indicating that the area behind the fence is a tree retention area and that the fence shall not be removed or relocated. No construction

activity shall occur within the tree protection zone, including, but not limited to, dumping or storage of materials such as building supplies, soil, waste items, equipment, or parked vehicles. The applicant shall request an inspection of tree protection measures prior to any excavation, grading, or other construction activity on the site.

50. Staff recommends the applicant have a licensed pest control agent evaluate the site to determine if pest eradication is needed.
51. The applicant shall update the Photometric Plan such that illumination 10 feet beyond the property lines in all directions does not exceed 0.25 foot candles. The property lines and foot candles at 10 feet from the property line shall be labeled and legible.
52. The applicant shall update the proposed parking area lights with lights that have a smaller distribution and emit less intense light and shall add pedestrian scale lighting along the walkways such that they are illuminated at 1.5 – 2.0 foot candles.
53. Staff recommends all proposed lighting be full-cutoff and not exceed 3,000 Kelvins. The applicant shall submit updated lighting fixture cut-sheets for all proposed exterior lighting that detail the lighting fixtures as full-cutoff and not exceeding 3,000 Kelvins to minimize negative impact on wildlife and human health.
54. All earthwork activities should follow the requirements of the most current edition of the Oregon Structural Specialty Code (OSSC). Site grading shall not in any way impede or impound or inundate the surface drainage flow from the adjoining properties without a proper collection system. The earthwork activities shall be observed and documented under the supervision of the geotechnical engineer. The City Engineer feels the Geotechnical Engineering Report (Exhibit F) dated December 11, 2011 that was prepared as part of the ARCO am/pm fuel station should be compatible with this site's existing conditions. All the work within the public right-of-way and within the paved area should comply with American Public Works Association (APWA) and City requirements as amended. The applicant shall submit a grading and erosion control permit and request an inspection of installed devices prior to any additional grading onsite.
55. All erosion control and grading shall comply with Section 15.44 of the Municipal Code. The proposed development is greater than one acre which typically requires approval of a DEQ 1200-C Permit. The applicant shall submit confirmation from DEQ if a 1200-C Permit will not be required.
56. The applicant's Erosion Control Plan shall be designed in accordance with the standards of Section 15.44.50.
57. Staff recommends the Planning Commission approve a Type II Adjustment to allow 36 percent metal siding on the south elevations of Buildings 4 and 5. Staff recommends the Planning Commission deny the applicant's request for a special variance to allow 100 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3. Staff recommends the Planning Commission approve a Type II Adjustment to allow up to 36 percent metal siding on the south elevation of Building 2 and the north elevation of Building 3, similar to the south elevations of Buildings 4 and 5.
58. Staff recommends the Planning Commission approve a Special Variance to allow a second right-out only driveway egress on Champion Way to be spaced less than 150 feet from the existing common access easement driveway. The proposed right-out only driveway approach shall be constructed with a pork chop or other feature approved by the City Engineer to prevent turning movements other than a right turn out of the driveway. ODOT (Exhibit N) recommends that the

applicant submit truck turning templates to demonstrate that the Champion Way egress functions with the applicant's intended use and anticipated truck traffic.

59. Staff recommends the Planning Commission approve a Special Variance to allow flat roofs on all buildings.
60. The applicant shall submit proposed architectural treatment for all exposed sections of the retaining wall for staff review and approval.
61. Staff recommends the Planning Commission approve a special variance to allow the retaining wall in the front yard to exceed 6 feet. Staff recommends the Planning Commission approve a maximum 8.5 foot wall reveal, as proposed by the applicant. The applicant shall submit proposed architectural treatment for all exposed sections of the retaining wall for staff review and approval.
62. Staff recommends the Planning Commission approve a Special Variance to the window coverage requirement for the activated frontages of Buildings 1 and 2. Staff recommends the Planning Commission approve a Special Variance to the window coverage requirement for the south elevations of Buildings 4 and 5 and require that the applicant update the elevations to detail metal awnings above the proposed windows on the south elevations of Buildings 4 and 5. In addition, staff recommends the applicant detail landscaped trellises in the two proposed sections of metal siding on the south elevations of Buildings 4 and 5. Staff recommends the Planning Commission deny the applicant's request for a Special Variance to the window coverage requirement for the east elevation of Building 5 and the west elevations of Buildings 3 and 4. Staff recommends the applicant update the elevations to detail one (1) additional window on the east elevation of Building 5 and the west elevations of Buildings 3 and 4 to meet the 30 percent window coverage requirement.
63. The applicant shall update the site plan to detail Buildings 4 and 5 within 20 feet of the Industrial Way right-of-way for at least 50 percent of the frontage (excluding the wetland area). Alternatively, the applicant shall request a Special Variance to Section 17.90.120(D.1) and shall pay the Special Variance fee ($1,070). The Planning Commission shall decide whether to approve or deny a Special Variance to allow less than 50 percent of the Industrial Way frontage to be comprised of buildings within 20 feet of the right-of-way.
64. The applicant shall update the plan set to detail at least 1,727 square feet of civic space. Alternatively, the applicant shall request a Special Variance to Section 17.90.120(G) and shall pay the appropriate fee ($1,070). If the applicant chooses the special variance option, staff recommends the Planning Commission approve a Special Variance to allow 250 square feet of civic space rather than the required 1,727 square feet.

EXHIBIT A

LAND USE APPLICATION FORM

(Please print or type the information below)

CITY OF SANDY, OREGON

Planning Department
39250 Pioneer Blvd.
Sandy OR 97055
503-668-4886

RECEIVED
OCT 04 2018
CITY OF SANDY

Name of Project Sandy Vault Self Storage

Location or Address Champion Way

Map & Tax Lot Number T_____, R_____, Section_____; Tax Lot(s) 0209

Plan Designation _____ Zoning Designation I-1 Acres 5.44 ac

Request:

Design Review Application for five Self Storage buildings. Site improvements including new curb cut on Champion Way and new one way driveway connecting to Industrial Way at west. Building 1 is 2 stories, others one. Parking for 7 cars.

I am the (check one) ☑ owner ☐ lessee of the property listed above and the statements and information contained herein are in all respects true, complete and correct to the best of my knowledge and belief.

Applicant Bill Whitney -Axis Design Group	Owner Sandy Automotive / Mark Benson
Address 52 NW 2nd Street	Address PO Box 241057
City/State/Zip Gresham, Or. 97030	City/State/Zip Honolulu, HI 96824
Phone 971-533-8482	Phone 316-305-0892
Email BillW@axisdesigngroup.com	Email mlbenson911@aol.com
Signature	Signature

If signed by Agent, owner's written authorization must be attached.

File No.	Date	Rec. No.	Fee $
Type of Review (circle one): Type I Type II Type III Type IV			

AXIS DESIGNGROUP
ARCHITECTURE & ENGINEERING, INC.

WHITNEY & ASSOCIATES
ARCHITECTS PC

ARCHITECTURALDESIGN INTERIORDESIGN MASTERPLANNING LANDUSEPLANNING

EXHIBIT B

DESIGN REVIEW NARRATIVE

Proposed Sandy Vault – A Self Storage Facility
Champion Way
Sandy, Oregon

Owner: Sandy Automotive Inc. Phone: 316-305-0892
Applicant: Whitney-Axis Design Group Phone: 503-667-4252
Zone: I-1

September 28, 2018

INTRODUCTION

The proposal for review is for a five building self service storage facility. The storage building property is 5.44 acres and is zoned I-1 Industrial. Combined gross building area is 57,559 sf. The proposed Building One upper level is accessed off Champion Way from the north. The south driveway exits onto Champion Way from the one way access drive to buildings 2-5 and is right turn only. This driveway is accessed from Industrial Way. The building One is two stories and 33,178 sf including a 600 sf office area. Parking for 5 vehicles is provided adjacent to the main site entry.

The buildings will be metal structures with split faced concrete block at the base of some walls, hardiboard siding above and metal roofing. The design character, colors, and details of the buildings will relate to that of the existing Arco station to the north. Generous 25' wide driveways will provide fire truck and customer loading access.

Champion Way will effectively be the front of the property, so the east and north facades of Building One and east wall of Building Two will be "activated" to comply with Sandy Style design considerations. This includes covered entries (pedestrian shelters) on Building One utilizing heavy timber trusses with heavy metal brackets similar to the Arco station.

CHAPTER 15.30. – DARK SKY ORDINANCE

15.30.000 Purpose. The purpose of the Sandy Dark Sky Ordinance is to regulate outdoor lighting in order to reduce or prevent light pollution. This means to the extent reasonably possible the reduction

or prevention of glare and light trespass, the conservation of energy, and promotion of safety and security.

RESPONSE: Site Lighting is as described on the Site Lighting Plan sheet E0.1. It includes photovoltaics, a description of various fixtures used. Light fixture cut sheets are provided separately. Note that electric panels and meter locations are indicated on sheet E0.2.

CHAPTER 17.48 - INDUSTRIAL PARK (I-1)

17.48.00 INTENT
It is the intent of this district to allow desirable and beneficial mixing of light industrial and warehouse businesses and commercial uses totally enclosed within buildings on large, landscaped sites, which will blend harmoniously with their surroundings, and adjacent land uses. This district is intended primarily for light manufacturing, select warehousing and wholesaling, storage and office uses, with limited provisions for limited commercial uses which, due to their activity and space requirements, are compatible in industrial areas without causing use or other activity conflicts with the primary uses. Commercial uses located in this district are those whose activities are compatible with industrial uses, those which supplement and support surrounding industrial activity and the needs of the employees of nearby firms and those which have extensive space and land area requirements.

17.48.10 PERMITTED USES
A. Primary Uses Permitted Outright in buildings with less than 60,000 square ft. of gross floor area:
1. Manufacturing, assembly, processing, and production (that do not produce significant levels of noise or odor beyond the boundaries of the site), including but not limited to:

i. Self-service storage;

RESPONSE: The proposed project is a five building self storage facility with total building area of 57,559 sf. Self storage is an approved use and building size is less than the max. 60,000 sf.

The proposed project is located on a 4.3 acre site south of the existing Arco station at the intersection of Highway 26 and Champion Way. Champion Way will be the front of the development and buildings and parking will be setback 20' from the right of way. Maximum building coverage on the site is 80%. Actual building coverage will be 31%. Minimum Landscape coverage is 20% Of the site. Actual landscape coverage will be 59%. Maximum building height is 45' Actual building height on the tallest building (Building One) varies between 16' and 25'-6". The other buildings will be approximately 16' high.

CHAPTER 17.66 - ADJUSTMENTS & VARIANCES

17.66.70 TYPE II AND TYPE III VARIANCE CRITERIA The authority to grant a variance does not include authority to approve a development that is designed, arranged or intended for a use not otherwise approvable in the location. The criteria are as follows:

17.66.70 TYPE II AND TYPE III VARIANCE CRITERIA The authority to grant a variance does not include authority to approve a development that is designed, arranged or intended for a use not otherwise approvable in the location. The criteria are as follows:

A. The circumstances necessitating the variance are not of the applicant's making.

B. The hardship does not arise from a violation of this Code, and approval will not allow otherwise prohibited uses in the district in which the property is located.

C. Granting of the variance will not adversely affect implementation of the Comprehensive Plan.

D. The variance authorized will not be materially detrimental to the public welfare or materially injurious to other property in the vicinity.

E. The development will be the same as development permitted under this code and City standards to the greatest extent that is reasonably possible while permitting some economic use of the land.

F. Special circumstances or conditions apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape (legally existing prior to the effective date of this Code), topography, or other circumstances over which the applicant has no control.

RESPONSE: The following items are Requests for Variances, Adjustments, or Design Deviations:

1. 17.90.120 A3. DRIVEWAY LOCATIONS-

The two driveways on Champion Way are less than the required 150' apart. The southern one between buildings one and two is a right turn only exit from the one way lower driveway which is entered from Industrial Way to the west. A letter outlining the low anticipated traffic volume Is included with this application. –Also—

17.98.80 Access to Arterial and Collector Streets-

A. Accesses to arterials or collectors shall be located a minimum of 150 ft. from any other access or street intersection. Exceptions may be granted by the City Engineer. Evaluations of exceptions shall consider posted speed of the street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

RESPONSE: This long sloped relatively narrow site has limited access to adjacent roads,so driveways needed to be set fairly close together. Champion Way is the natural entry point because Industrial Way is a little used dead end. This is a low traffic volume type of business, so

having 2 driveways on Champion Way, with one being right turn / exit only, should not be a safety concern. The limited access lower driveway is located roughly aligned with the existing one on the opposite side of the street.

2. 17.90.120 B3 a4 BUILDING MATERIALS-

Where metal siding is used, it shall be used as an accent only, comprising not more than 30 percent of the surface area of the building elevation (e.g., wainscoting or other accent paneling). Metal must be architectural grade and have a non-reflective (burnished or painted) finish conforming to the Color Palette in Appendix C. Metal may also be used for flashing, gutters, downspouts, brackets, lighting, and signage and similar functional elements.

REQUEST:

On Buildings 2,3,4 we are requesting 20% greater (36% of total area) than 30% use of metal siding on portions of facades hidden from view by tall retaining walls , trees and / or other buildings. The metal siding to be used has the exact same appearance as hardi board lap siding with matching profile, smooth finish, and identical city approved color. It is supplied by Metallic Industries as recommended by the city of Sandy.

Site Conditions for various buildings :

Building Two- The south façade furthest from Champion Way hidden from view by tree foliage.

Building Three north façade screened from view by a 16' high retaining wall that is along the couth boundary of the Tractor Supply development

Building Four- The south façade furthest from the driveway from Industrial Way hidden from view by tree foliage.

3. 17.90.120 C 8a ROOF SLOPES-

Exception to Pitched Roof: When a building requires a roof span greater than 50-feet, or the internal function of the building or a portion of the building make construction of a pitched roof impractical, the reviewing body may allow an alternative roof form.

b. Flat Roof: Flat roofs shall comply with the following standards:
1) Sandy Style stepped parapets and detailed coursing shall be provided on those elevations visible from a public street. Parapets shall be varied so that the length of a parapet does not exceed 40 feet without a change in the parapet height of at least 2 feet or as necessary to hide rooftop equipment.

REQUEST: Building One is 72' deep North to south We are proposing a relatively flat roof Per this exception. In order to achieve the unified design mentioned several times in the Sandy

Development Code we are requesting approval to have buildings 2-5 also use the same relatively flat roofs. They will be screened from view by perimeter parapets designed to comply with height restrictions of section xx. These types of buildings at 40' + in depth would become very tall if designed at the required 6:12 slope and would be very different than Building O

4. 17.90.120 E2 WINDOWS –

Intent: To promote business vitality, public safety and aesthetics through effective window placement and design, consistent with the Sandy Style.

REQUEST: We are proposing up to a 20% reduction in the window coverage on several of the buildings for the following reasons. This applies to frontages deemed requiring Activated status per the Planning Commission Code Interpretation Hearing of 7/30/18.

The building are for self storage where customers spend a minimum time inside, security of valuable property is required, and there is no need for display windows. Thus the Faux windows proposed have no functional purpose and will exist for aesthetic reasons only.

Industrial Way is currently a dead end adjacent to this property so there is almost no traffic there. The possibility of future connection with Orient Drive to the NW is highly unlikely because of the practical and functional challenges of multiple jurisdictions, costs of acquiring adjacent private property, and difficulty of crossing Hwy 26 as the streets are aligned without building a bridge. It's hard to imagine traffic volume ever being great enough to justify going to all that trouble and expense Public exposure to this side of the property is minimal and doesn't seem to justify requiring the activated frontages on buildings 3-5.

Window area reductions proposed:

Building 1-Activated Facades – North and East – Required window Area=20% of those elev's. Actual Window Area= 536 sf / 2,632 sf =20.36% (Meets standard)

=

Building 2- Activated Facades – East -- Required window Area=30% of that elev. Actual Window Area= 60 sf / 224 =26.8"

=

Building Three- Activated Facades – West -- Required window Area=30% of that elev.

(Note south elevation almost entirely screened from Industrial Way by Bldg. 4) Actual Window Area= 108 sf / 320=33.8% (Exceeds standard)

Building 4-Activated Facades West and South- Required window Area=30% Actual Window

Actual Window Area= 396 sf / 1,400 sf =28.3%

Building Five- Same as Building Four

17.84 IMPROVEMENTS REQUIRED FOR DEVELOPMENT

17.84.20 TIMING OF IMPROVEMENTS

A. All improvements required by the standards in this chapter shall be installed concurrently with development.

RESPONSE: All improvements required under a condition of approval will be completed prior to occupancy.

17.84.30 PEDESTRIAN AND BICYCLIST REQUIREMENTS

A. Sidewalks shall be required along both sides of all arterial, collector, and local streets, as follows:

1. Sidewalks shall be a minimum of 5 ft. wide on local streets. The sidewalks shall be separated from curbs by a tree planting area that provides separation between sidewalk and curb, unless modified in accordance with Subsection 3 below.

RESPONSE:

The Champion Way frontage proposal contains a curb, but no sidewalk or planter strip. These improvements will be constructed as part of the proposed project. The improvements provide for a direct pedestrian connection between the future sidewalk on Champion Way and the building entrance as shown on the site plan.
The Highway 26 frontage includes curb, sidewalk, and planter strip. There is a small section of frontage of Highway 26 on the parcel that is the subject of this project. Street trees will be planted every 30 feet on center and the species will be selected based on BPA approved tree species.

The Industrial Way frontage is proposed to improve the street with a new 5ft sidewalk, keep the existing curb, add a planter strip with street trees.
Traffic Letter is required. Additional analysis will be needed for access to the site and adhere to Section 17.84.50 of the Development Code

2. Sidewalks along arterial and collector streets shall be separated from curbs with a planting area, except as necessary to continue an existing curb-tight sidewalk. The

planting area shall be landscaped with trees and plant materials approved by the City. The sidewalks shall be a minimum of 6 ft. wide.

RESPONSE: A 6' sidewalk and 5' planter strip will be constructed per City of Sandy standards on both the Champion Way and Industrial Way frontages. Note that pedestrian connection between Buildings One and
Two is highly impractical because of the 14' grade change between finished floor levels plus the 3 tiered terraced planters. Convenient and more practical pedestrian access will exist on the sidewalk immediately in front of the building along the Champion Way frontage.

17.84.50 STREET REQUIREMENTS

A. Traffic evaluations may be required of all development proposals in accordance with the following:
1. A proposal establishing the scope of the traffic evaluation shall be submitted for review to the City Engineer. The evaluation requirements shall reflect the magnitude of the project in accordance with accepted traffic engineering practices.

2. If the traffic evaluation identifies level-of-service conditions less than the minimum standard established in the Transportation System Plan, improvements and funding strategies mitigating the problem shall be considered concurrent with a development proposal.

RESPONSE*:* The proposed use is for mini-storage or self-storage facility. The Institute of Transportation Engineers (ITE) manual provides published peak am and pm trip counts for this land use. A traffic letter is included in this application that documents the estimated trips per the published rates in the ITE manual
RESPONSE:

17.84.60 PUBLIC FACILITY EXTENSIONS

A. All development sites shall be provided with public water, sanitary sewer, broadband (fiber), and storm drainage.

   RESPONSE**:** There is an existing sanitary sewer main that bisects the lower portion of the property and sanitary is available in both Champion Way and Industrial Way, no additional public sanitary sewer is proposed. There is existing public water in Champion Way that will provide a connection to the proposed office. An existing public storm drainage system is available to connect into. Broad band infrastructure is present no further improvements are proposed.

17.84.80 FRANCHISE UTILITY EXTENSIONS

These standards are intended to supplement, not replace or supersede, requirements contained within individual franchise agreements the City has with providers of electrical power, telephone, cable television, and natural gas services (hereinafter referred to as "franchise utilities").

RESPONSE: Franchise utilities will be accommodated via public utility easement as necessary.

17.84.90 LAND FOR PUBLIC PURPOSES

A. Easements for public sanitary sewer, water, storm drain, pedestrian and bicycle facilities shall be provided whenever these facilities are located outside a public right-of-way in accordance with the following:

RESPONSE: No easements for the purposes identified in this section are anticipated.

17.90.120 GENERAL COMMERCIAL AND INDUSTRIAL (C-2 and I-1) AND NONRESIDENTIAL USES IN RESIDENTIAL ZONES DESIGN STANDARDS

Site Layout and Access.

Intent: To provide for compact, walkable development, and to design and manage vehicle access and circulation in a manner that supports pedestrian safety, comfort and convenience.

3. Off-street parking shall be located to the rear or side of buildings with no portion of the parking lot located within required setbacks or within 10-feet of the public right-of-way. When access must be provided directly from a public right-of-way, driveways for ingress or egress shall be limited to one per 150 ft. For lots with frontage of less than 150 ft. or less, shared access may be required.

RESPONSE: The parking area is to the side of Building One because both are setback 20' from Champion Way. The 2 driveways are 102' apart, but the new southern one will be an exit and right turn only. (See the Request for Variance no. one above for additional information.)

B. Building Facades, Materials, and Colors

Intent: To provide building façades, materials and colors consistent with the Sandy Style. For purposes of interpreting the Sandy Style, representative illustrations and photos are provided.

1. **Articulation**. The Sandy Style includes asymmetrical building forms, which by definition require buildings to be articulated, varied, and provide visual interest. This standard is met by dividing elevations visible from an abutting public street or pedestrian way into smaller areas or planes to minimize the appearance of bulk as follows:

a. All elevations visible from an abutting public street or pedestrian way shall be divided into distinct planes of no more than 40 lineal feet long to include the following:

1) Wall planes meeting this standard shall include a feature or variation in the wall plane that are those that are entirely separated from other wall planes by a recessed or projecting section of the structure that projects or recedes at least six (6) inches from the adjacent plane, for a length of at least four (4) feet. Changes in plane may include but are not limited to recessed entries, bays, secondary roof forms (e.g., gables, lower roof sheds, dormers and towers), building bases, canopies, awnings, projections, recesses, alcoves, pergolas, porticos, roof overhangs, or other features consistent with the Sandy Style.

RESPONSE: These storage building facades are broken up in planes that protrude 6" and entries that are recessed 5' into each of the buildings. Parapets are stepped in heights as well. Individual sections of the "activated" walls have split face conc. blocks at the base, hardiboard. lap siding above.
Some of the windows at more prominent locations have bracketed "eyebrow" canopies above.
Some premium metal siding is used at less publicly visible rear building

2. **Pedestrian Shelters.** Buildings must incorporate pedestrian shelters, as follows:
a. Pedestrian shelters shall be provided over the building's primary entrance(s) and all pedestrian areas (i.e., sidewalks, and civic spaces) abutting the subject building, where pedestrians are likely to use these facilities.
b. Features such as canopies, arcades, awnings, roofs overhangs, covered porches, alcoves, and/or porticoes are required to protect pedestrians from the rain and sun.
c. Pedestrian shelters must extend at least five (5) feet over the pedestrian area.

RESPONSE: All building will have entrances recessed 5' and covered. Those on the upper level of Building One will have extended gabled roof overhangs with decorative heavy timber trusses similar to those on the existing Arco station to the north.

3. **Building Materials.** Exterior building materials shall convey an impression of strength and durability consistent with the Sandy Style, as follows:
a. Buildings on the same site shall be architecturally unified. Architectural unity means buildings are related in architectural style and share some common elements, such as color scheme, materials, roof forms, and/or detailing. Unity does not mean repetition or mirroring of building elevations.
b. Strong base materials such as natural stone (e.g., basalt, granite, river stone), split faced rusticated concrete block, brick, or concrete form liner replicating these materials are required.

d. Siding shall consist of wood, composite-wood (e.g., concrete fiberboard, panels or shingles), stone, brick, split-faced or rusticated concrete block, concrete form liner or a combination of these materials.
4) Where metal siding is used, it shall be used as an accent only, comprising not more than 30 percent of the surface area of the building elevation (e.g., wainscoting or other accent paneling). Metal must be architectural grade and have a non-reflective (burnished or painted) finish conforming to the Color Palette in Appendix C. Metal may also be used for flashing, gutters, downspouts, brackets, lighting, and signage and similar functional elements.

e. Building elevations facing a public street shall incorporate at least three (3) of the following features: Using these features may also address other code requirements, such as those related to building articulation, change in relief, pedestrian shelters, storefront elements.

RESPONSE:

C. Roof Pitch, Materials, and Parapets

1. Except as provided in subsections 17.90.120(C)(8), below, pitched (gabled or hipped) roofs are required on all new buildings with a span of 50-feet or less. Gable and hipped roof forms must achieve a pitch not less than the following:

Zoning District C-2 and I-1 Forms (minimum)	Primary Roof Forms Forms (minimum)	Secondary Roof Forms (minimum)
	6:12	4:12

8. Exception to Pitched Roof: When a building requires a roof span greater than 50-feet, or the internal function of the building or a portion of the building make construction of a pitched roof impractical, the reviewing body may allow an alternative roof form. percent or more of the total surface area of a roof elevation. Secondary roof forms

b. Flat Roof: Flat roofs shall comply with the following standards:
1) Sandy Style stepped parapets and detailed coursing shall be provided on those elevations visible from a public street. Parapets shall be varied so that the length of a parapet does not exceed 40 feet without a change in the parapet height of at least 2 feet or as necessary to hide rooftop equipment.

RESPONSE:

Sandy Development Code sections in 17.90.120 outlining design standards will be addressed. Because of the 72' depth of the northern building section C. 8. Exception to Roof Pitch will be used with "flat" roofs with parapets. The southern building is 42' deep (north-south) which is less than the 50' depth required to employ the exception, so a design deviation will be requested in order to make the two building consistent in form and design style.

D. Building Orientation and Entrances
Intent: To maintain and enhance General Commercial and Industrial streetscapes as public spaces, emphasizing pedestrian-scale and character in new development, consistent with the Sandy Style. .
1. Buildings shall be oriented to a public street or civic space. This standard is met when at least 50 percent of the subject site's street frontage is comprised of building(s) placed within 20 feet of a sidewalk,

3. Ground floor spaces shall face a public street or civic space and shall be connected to it by a direct pedestrian route (i.e., avoid out-of-direction travel).
7. Buildings shall provide at least one (1) elevation where the pedestrian environment is "activated"

RESPONSE:
The east and north façades of Building One and the East façade of building two will be "activated" to comply with Sandy Style design considerations. These include covered entries (pedestrian shelters) utilizing heavy timber trusses with heavy metal brackets similar to the Arco station, split face concrete block, hardiboard siding and some wood or composite shingles and trim. Roofing will be standing seam metal.

E. Windows
Intent: To promote business vitality, public safety and aesthetics through effective window placement and design, consistent with the Sandy Style.

1. Unified Design. Building plans must provide for unity in window placement and design so that all sides of a building relate to one another and multiple buildings on a development site relate to one another.

2. Ground Floor Windows. The ground floor elevation of all new buildings shall contain ground floor display areas, windows, and doorways on the "activated" frontage. As follows:

0 - 10,000 sq. ft.	30 percent of elevation
10,000 sq. ft. - 30,000 sq. ft.	25 percent of elevation
Greater than 30,000 sq. ft.	20 percent of elevation

G. Civic Space
Intent: To connect buildings to the public realm and create comfortable and attractive gathering places and outdoor seating areas for customers and the public, consistent with Sandy's Downtown Streetscape Design. (See Figures 17.90.120-L and 17.90.120-M)
1. Not less than three (3) percent of the building area of every development shall be improved as civic space.
2. All civic spaces shall have dimensions of not less than eight (8) feet across and have a surface area of not less than 64 square feet. No civic space is required if the size of this space results in an area of less than 64 square feet.

RESPONSE:

Pedestrian access will be provided for Champion Way and the area east of the buildings will be landscaped and terraced as needed to manage the slope in an attractive way. A civic space in the form of a partially covered small plaza is provided adjacent to the entry to the office. A ramp connects the plaza to the proposed

H. Lighting
Intent: To promote business vitality, public safety and aesthetics through effective outdoor lighting, consistent with the Sandy Style. (Figures 17.90.120-G, 17.90.120-H, and 17.90.120-M)
1. Streetscape lighting shall conform to Chapter 15.30 Dark Sky Ordinance.
2. Exterior lighting must be an integral part of the architectural design and must

complement any ornamental street lighting and remain in context with the overall architectural character of the district. On-site light fixtures conforming to the Sandy Style are encouraged.
3. Lighting must be adequate for safety purposes. Walkways and parking lots should be illuminated at 1.5 – 2.0 foot candles.

17.92.20 MINIMUM IMPROVEMENTS - LANDSCAPING AND SCREENING

I - 1 Industrial Park 20%

RESPONSE:

See Landscape Plans L-1, L-2

CHAPTER 17.98 PARKING, LOADING, AND ACCESS REQUIREMENTS

17.98.20 OFF-STREET PARKING REQUIREMENTS

General, professional or banking Offices and service	1 per 300 sq. ft., plus 1 per 2 employees	5% or 2 whichever is greater

RESPONSE:

Parking meets standard

17.98.80 ACCESS TO ARTERIAL AND COLLECTOR STREETS
A. Location and design of all accesses to and/or from arterials and collectors (as designated in the Transportation System Plan) are subject to review and approval by the City Engineer. Where practical, access from a lower functional order street may be required. Accesses to arterials or collectors shall be located a minimum of 150 ft. from any other access or street intersection. Exceptions may be granted by the City Engineer. Evaluations of exceptions shall consider posted speed of the street on which access is proposed, constraints due to lot patterns, and effects on safety and capacity of the adjacent public street, bicycle and pedestrian facilities.

17.98.140 DRAINAGE

Parking areas, aisles and turnarounds shall have adequate provisions made for the on-site collection of drainage waters to eliminate sheet flow of such waters onto sidewalks, public rights-of-way and abutting private property.

Response: A preliminary stormwater management plan is provided as part of the application package. This plan has been designed in accordance with the City of Sandy Stormwater Management requirements. As shown on the submitted Utility Plan the proposed stormwater system includes a water quality manholes and underground stormwater detention chambers. The system is designed to connect to the conveyance system that will be constructed as part of the Tractor Supply improvements.

CHAPTER 17.102 - URBAN FORESTRY

RESPONSE:

New construction to be a safe distance from existing tress. No existing trees will need to be removed

AXIS DESIGNGROUP
ARCHITECTURE & ENGINEERING, INC.

RECEIVED
JAN 04 2019
CITY OF SANDY

ARCHITECTURALDESIGN INTERIORDESIGN MASTERPLANNING LANDUSEPLANNING

Deviation, Adjustment and Variance Narrative

As a part of this response to the City's Notice Regarding Completion of Submittal, dated, 10/29/2018, the applicant is requesting consideration for the following deviations, adjustments and variances. The applicant is requesting one design deviation and four Type II Variances as outlined below.

17.90 – SUBMISSION REQUIREMENTS - TYPE II AND TYPE III

17.90.100.C Design Deviations

Project Narrative documenting compliance with applicable code criteria. If the application involves any deviations from the Code standards (i.e., Type III Design Review), the narrative shall describe how the proposal meets or exceeds the intent of the standard(s) for which a deviation is requested.
Design Deviation requested:

17.90.120.D

7. Buildings shall provide at least one (1) elevation where the pedestrian environment is "activated". An elevation is "activated when it meets the window transparency requirements in subsection 17.90.120(E), below, and contains a public entrance with a pedestrian shelter extending at least five (5) feet over an adjacent sidewalk, walkway or civic space.

RESPONSE: The applicant is requesting a Design Deviation to the standard established by 17.90.120.D.7, which requires that buildings adjacent to the street have activated elevations with public entrances. The proposed use, self-storage, is incompatible with this requirement, despite being an allowed use in the I-1 zone. The applicant has attempted to follow the intent of this standard to the extent that it is feasible by locating the active use, the office, at the street facing end of building one. This is the public face of the project, and includes a prominent entry and civic space, as shown on renderings and site plans. Because the remainder of the buildings contain no active uses, the applicant contends that a deviation from this standard is appropriate.

17.66.10 – TYPE II AND TYPE III VARIANCE CRITERIA

The authority to grant a variance does not include authority to approve a development that is designed, arranged or intended for a use not otherwise approvable in the location. The criteria are as follows:

A. The circumstances necessitating the variance are not of the applicant's making.

B. The hardship does not arise from a violation of this Code, and approval will not allow otherwise prohibited uses in the district in which the property is located.

C. Granting of the variance will not adversely affect implementation of the Comprehensive Plan. 17.66 - 3

D. The variance authorized will not be materially detrimental to the public welfare or materially injurious to other property in the vicinity.

E. The development will be the same as development permitted under this code and City standards to the greatest extent that is reasonably possible while permitting some economic use of the land.

F. Special circumstances or conditions apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape (legally existing prior to the effective date of this Code), topography, or other circumstances over which the applicant has no control.

17.90.120.A – Site Layout and Access

3. Off-street parking shall be located to the rear or side of buildings with no portion of the parking lot located within required setbacks or within 10-feet of the public right-of-way, as shown in Figure 17.90.120-A. When access must be provided directly from a public right-of-way, driveways for ingress or egress shall be limited to one per 150 ft. For lots with frontage of less than 150 ft. or less, shared access may be required.

AND

17.98.80 ACCESS TO ARTERIAL AND COLLECTOR STREETS

A. Location and design of all accesses to and/or from arterials and collectors (as designated in the Transportation System Plan) are subject to review and approval by the City Engineer. Where practical, access from a lower functional order street may be required. Accesses to arterials or collectors shall be located a minimum of 150 ft. from any other access or street intersection. Exceptions may be granted by the City Engineer.

RESPONSE: The applicant is requesting a Type II variance in order to locate a drive way 101' south of the existing access easement/drive curb cut. Site conditions prohibit moving Building 2 any farther to the south – to do so would encroach on a mapped wetland at the southern portion of the site. This long, sloping site has limited access to adjacent roads due to the small frontages it has on Industrial Way and Champion Way. Champion way is the logical entry point because Industrial Way is a little-used dead end street. The proposed use generates relatively few vehicle trips, as described in the Sandy Vault Trip Generation Letter by Firwood Design Group, dated September 17, 2018, submitted with this application. Therefore, the addition of a second one-way driveway, which will be limited to right turn/exiting function will not violate the intent of this provision. The proposed second driveway has been sited to align with the driveway of the adjacent property on the opposite side of Champion Way. For these reasons, the City should find that a Type II variance is appropriate.
CRITERIA:

A. The circumstances necessitating the variance are not of the applicant's making.
Access to the site is constrained by existing conditions. The distance between the existing access easement and the wetland to the south (measured from top of bank) is approximately 176'. There is not adequate distance to accommodate all the requisite site features and place the drive between the proposed buildings where it can serve

both structures. Since these circumstances are not of the applicant's making, the city should find that this condition is met.

B. The hardship does not arise from a violation of this Code, and approval will not allow otherwise prohibited uses in the district in which the property is located.
The proposed drive aisle is not created by a violation of Sandy's Code. It has no effect on the proposed use categories; the building is allowed by right in this zone. The city should find that this criterion is met.

C. Granting of the variance will not adversely affect implementation of the Comprehensive Plan.
Allowing the driveway to be constructed in the proposed location would have negligible impacts on the right of way and adjacent properties due to the very low number of vehicles using it on any given day. Therefore comprehensive plan implementation would not be adversely affected. The City should find that this criterion is met.

D. The variance authorized will not be materially detrimental to the public welfare or materially injurious to other property in the vicinity.
The result of a small number of vehicles exiting onto Champion way at this location, as opposed to a location 49' south of the proposed driveway will have no material impact on adjacent properties. The city should find that this criterion is met.

E. The development will be the same as development permitted under this code and City standards to the greatest extent that is reasonably possible while permitting some economic use of the land.
The development of the project will be completely consistent with I1 base zone standards, with the only deviation being the aforementioned relocation of site elements to conform to natural features of the property. Therefore the city should find that this criterion is satisfied.

F. Special circumstances or conditions apply to the property which do not apply generally to other properties in the same zone or vicinity, and result from lot size or shape (legally existing prior to the effective date of this Code), topography, or other circumstances over which the applicant has no control.
As noted above, the purpose of this variance request is to permit a use allowed by right on a site which does not have adequate frontage on the right of way to permit placement of circulation according to code. The reason for the diminished frontage is the presence of an existing access drive and easement and a designated wetland area. The applicant has no control over these circumstances. Therefore the City should find that this criterion is met.

17.90.120.B – Building Facades, Materials, and Colors

3. 3.Building Materials. Exterior building materials shall convey an impression of strength and durability consistent with the Sandy Style, as follows:

    4) Where metal siding is used, it shall be used as an accent only, comprising not more than 30 percent of the surface area of the building elevation (e.g., wainscoting or other accent paneling). Metal must be architectural grade and have a non-reflective (burnished or painted) finish conforming to the Color Palette in Appendix C. Metal may also be used for flashing, gutters, downspouts, brackets, lighting, and signage and similar functional elements.

RESPONSE: On Buildings 2,3,4 we the Applicant proposes to increase the use of metal siding to 36% - an increase of 20% above the standard - on portions of facades that will be hidden from view by retaining walls , trees and / or other buildings. The metal siding to be used is visually indistinguishable from Hardiboard lap siding. It will have a matching profile, smooth finish, and identical City-approved color. The proposed metal siding is supplied by Metallion Industries as recommended by the City of Sandy. Since the visual impact of this deviation will be negligible, the City should find that a Type II Variance is acceptable.

Site Conditions for various buildings:

Building Two- The south façade furthest from Champion Way hidden from view by tree foliage.

Building Three - north façade screened from view by a 16' high retaining wall that is along the south boundary of the Tractor Supply development

Building Four - The south façade furthest from the driveway from Industrial Way hidden from view by tree foliage.

17.90.120.C – Roof Pitch, Materials, and Parapets

1. Except as provided in subsections 17.90.120(C)(8), below, pitched (gabled or hipped) roofs are required on all new buildings with a span of 50-feet or less.

   b. Flat Roof: Flat roofs shall comply with the following standards:

      1) Sandy Style stepped parapets and detailed coursing shall be provided on those elevations visible from a public street. Parapets shall be varied so that the length 17.90- 32 Revised by Ordinance 2013-04 effective 07/03/13 of a parapet does not exceed 40 feet without a change in the parapet height of at least 2 feet or as necessary to hide rooftop equipment.

      2) Average parapet height shall not exceed 15 percent of the supporting wall height, and the maximum parapet height shall not at any point exceed one-third (1/3) of the height of the supporting wall;

      3) A cornice projecting at least six (6) inches from the building face shall be provided at the roofline of all elevations visible from public rights-of-way;

      4) Parapet corners shall be stepped and the parapet be designed to emphasize the center or primary entrance(s), unless the primary entrance is at the corner of the building;

RESPONSE: The applicant is proposing a flat roof on Building 1, which is allowed per the exception provided in this section. Its slope is approximately 5%. As indicated on elevation drawings, the parapets comply with the above design parameters. The applicant is proposing similar roof profiles and parapet treatment for buildings 2-5, which measure 42' in section. A Type II variance is appropriate for this deviation because it would avoid creating visual disharmony by having differing roof forms on the site. Application of gable roofs to buildings 2-5 would cause them to be significantly higher that Building 1. The proposal creates a consistent appearance for all buildings.

CRITERIA:

A. The proposed development will not be contrary to the purposes of this chapter, policies of the Comprehensive Plan, and any other applicable policies and standards adopted by the City;
The purpose of the policy in question is to enhance the city's quality of life and image, encourage a functional, safe and aesthetically pleasing development, and implement the Sandy Style. The applicant contends that creating a consistent appearance that unifies the site design better accomplishes the intent of these goals than a site with differing roof profiles. A mixture of different roof profiles would detract from the goal of an aesthetically pleasing development and would not result in a proper application of the Sandy Style. Therefore the City should find that this criterion is met.

B. The proposed development will not substantially reduce the amount of privacy enjoyed by users of nearby structures when compared to the same development located as specified by this Code;
The proposed roof design will have no impact on the privacy of occupants of adjacent structures. The City should find that this criterion is satisfied.

C. The proposed development will not adversely affect existing physical systems and natural systems, such as traffic, drainage, dramatic land forms, or parks; and
The proposed change to roof form will have no impacts on physical and natural systems, such as traffic, drainage, dramatic land forms, or parks. Therefore, Therefore the City should find that this criterion is met.

D. Architectural features of the proposed development will be compatible to the design character of existing structures on adjoining properties and on the proposed development site.
Both flat and sloped roofs are permitted under the Sandy Style. Existing development consists of both flat and sloped roofs. The roof profile will be similar to the structure to the south, while combining façade elements and projections very similar to those on the structure to the north. Therefore this proposal will engage its context appropriately. The city should find that this criterion is satisfied.

17.90.120.E – Windows

2. Ground Floor Windows. The ground floor elevation of all new buildings shall contain ground floor display areas, windows, and doorways on the "activated" frontage. as follows:

Building Size	Percentage Windows Required
0-10,000 sq. ft.	30 percent of elevation
10,000 sq. ft. - 30,000 sq. ft.	25 percent of elevation
Greater than 30,000 sq. ft.	20 percent of elevation

RESPONSE: As indicated on Sheet A5, only one of the proposed activated facades meets the standard for glazing area. The applicant contents that the glazing proposed is consistent with the intent of the code, to the extent that it is possible for a self-storage facility. This typology is allowed by right in the I-1 zone. However, the fundamental nature of this use precludes glazing on most areas. The building is used for secure storage, and window openings for spaces that will not be occupied is impractical and poses a security risk. The applicant has proposed faux windows, where glazing is set in exterior walls and a framed wall is located behind the glass, so it does not provide access to the interior of

the building. This creates the appearance of glazing when viewed from the street, thus complying with the code's purpose of creating an attractive streetscape. Additional glazing would be inconsistent with the proposed use, therefore it is appropriate for the City to grant a Type III Special Variance.

CRITERIA:

A. The unique nature of the proposed development is such that:

1. The intent and purpose of the regulations and of the provisions to be waived will not be violated;
The purpose of the regulation in question is "to promote business vitality, public safety and aesthetics through effective window placement and design, consistent with the Sandy Style." As noted above, the applicant contends that the quantitative standards for window area are in conflict with the nature of the use, which is nevertheless allowed by right in this zone. The proposal makes every feasible attempt to convey the appearance of an open, transparent set of buildings which present an attractive image to the public realm. The buildings will not appear to be opaque nor will their appearance be detrimental to business vitality or public safety. Every attempt has been made to render the proposed storage facility in a visual language that is harmonious with the Sandy Style. Therefore, the City should find that this criterion is met.

2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.
The reduction in glazing area proposed will have no material impact on public welfare. The construction of the proposed self-storage facility, as designed, will not be in any way injurious compared to other types of light industrial or commercial buildings that could be constructed here in compliance with the code. The City should find that this criterion is satisfied.

17.74.40 Fences And Windscreens

B. Fences - Commercial/Industrial

2. Fences in a front yard (Commercial). The height of a fence or retaining wall in a front yard shall not exceed 4 ft.

RESPONSE: As indicated on the site plan and civil drawings the topography of the site and location of the buildings requires construction of retaining walls in the front yard area to prevent soil erosion. This is due to the natural topography of the site, which is a situation beyond the applicant's control. The area supported by the retaining walls will be terraced and landscaped in an attractive manner as shown on the Landscape Plan. Additionally, the wall itself will be constructed of an attractive, architectural material keyed to the building façades. Since it is constructed perpendicular to the slope of the land, the wall will step down and thus the maximum height of 8'-6" (Approx.) will only occur at the end of each step and the average height of each segment will be lower. Given the fact that this approach is the most practical response to natural existing conditions, it is appropriate for the City to grant a Type III Special Variance.

CRITERIA:

A. The unique nature of the proposed development is such that:

1. The intent and purpose of the regulations and of the provisions to be waived will not be violated;
The purpose of the regulation in question is create an attractive streetscape and avoid obscuring yards and buildings. The proposal is the most attractive practical solution to the topography of the site and will be designed to incorporate attractive architectural materials that respond the building's material pallet. Additionally, the walls will be softened with landscaping. They will not interrupt line of sight to the buildings, which will be situated above sidewalk grade. Therefore the City should find that this criterion is met.

2. Authorization of the special variance will not be materially detrimental to the public welfare and will not be injurious to other property in the area when compared with the effects of development otherwise permitted.
The construction of the proposed retaining walls, as designed, will not be in any way injurious to other properties in the vicinity. The City should find that this criterion is satisfied.

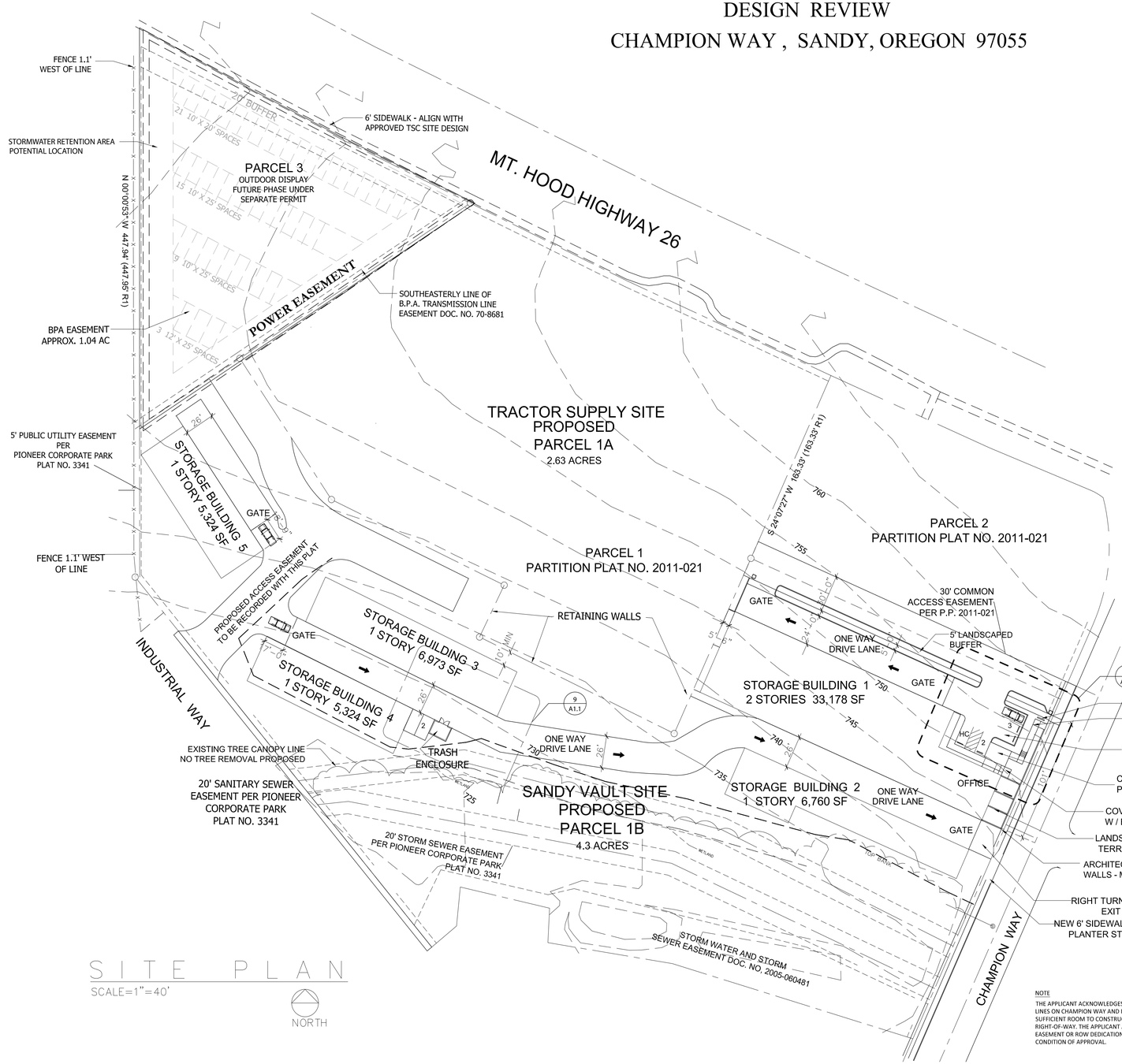
SUPPLIMENTAL NOTE – RIGHT OF WAY DEDICATION

Conditions of Approval

The applicant acknowledges that the location of the lot lines on Champion Way and Industrial way do not allow sufficient room to construct the required sidewalks within existing rights-of-way. The applicant agrees to execute an access easement or dedication of right-of-way at the City's discretion as a condition of approval for this application.

EXHIBIT C

SANDY VAULT
A SELF STORAGE FACILITY
DESIGN REVIEW
CHAMPION WAY , SANDY, OREGON 97055



SITE PLAN
SCALE=1"=40'
NORTH

NOTE
THE APPLICANT ACKNOWLEDGES THAT THE LOCATION OF THE LOT LINES ON CHAMPION WAY AND INDUSTRIAL WAY DOES NOT ALLOW SUFFICIENT ROOM TO CONSTRUCT REQUIRED SIDEWALKS IN THE RIGHT-OF-WAY. THE APPLICANT AGREES TO EXECUTE AN ACCESS EASEMENT OR ROW DEDICATION AT THE CITY'S DISCRETION AS A CONDITION OF APPROVAL.

PROJECT TEAM:

OWNER:	SANDY AUTOMOTIVE INC. PO BOX 241057 SANDY VAULT, LLC HONOLULU, HI 96824
ARCHITECT:	WHITNEY-AXIS DESIGN GROUP ARCHITECTURE & ENGINEERING, INC. 52 N.W. 2ND STREET GRESHAM, OR 97030 P: 503-667-4252 F: 503-546-9276 CONTACT: BILL WHITNEY OR DEAN HOQUE, PROJECT MGR.
CIVIL ENGINEER:	FIRWOOD DESIGN GROUP 359 E. HISTORIC COLUMBIA RIVER HWY TROUTDALE, OR 97060 F: 503-668-1717 CONTACT: KELLI GROVER, PROJECT MANAGER
LANDSCAPE ARCHITECT:	BRUCE BIERI ASLA 10394 SW PORTER ST. PORTLAND, OR 97225 P: 503-203-1844 CONTACT: BRUCE BIERI, PROJECT MANAGER
GENERAL CONTRACTOR:	TBD
ELECTRICAL CONTRACTOR:	TEAM ELECTRIC CO. 9400 SE CLACKAMAS RD. CLACKAMAS, OR 97015 P: 503-557-7180 CONTACT: SCOTT CROTEAU, PROJECT MANAGER

GENERAL PROJECT INFORMATION

A. PROJECT ADDRESS:	CHAMPION WAY SANDY, OR 97055
B. IDENTIFICATION:	TAX LOT NO. - 24E15A 00209
C. ZONING OF SITE:	I-1 - INDUSTRIAL
D. JURISDICTION:	CITY OF SANDY
E. DESCRIPTION OF USE:	SELF STORAGE
F. OCCUPANCY GROUP	S-1 STORAGE & B OFFICE
G. CONSTRUCTION TYPE:	5N
H. BUILDING SIZE:	BLDG. ONE : 1ST FLOOR - 16,532 SF 2ND FLOOR - 16,646 SF BLDG. TWO: 6,760 SF BLDG. THREE: 6,973 SF BLDG. FOUR & FIVE: 5,324 SF
TOTAL BUILDING AREA:	57,559 SF
I. BUILDING HEIGHT:	BUILDING ONE - 2 STORY 16' TO 25'-6" BUILDING TWO - 1 STORY 16'
J. AREA (APPROX.):	PROPERTY - (4.3 ACRES)
K. SPRINKLERED	NOT SPRINKLERED
L. PARKING :	7 PARKING SP
M. BIKE PARKING	2 SPACES

SITE CONDITIONS

SITE AREA :

TOTAL SITE AREA:	187,585 SF 4.3 AC	(100%)
PERVIOUS AREAS:		
LANDSCAPED AND NATURAL AREAS:	111,362 SF	(59.4%)
IMPERVIOUS AREAS:		
CIVIC SPACE & SIDEWALKS AREAS (CONCRETE):	600 SF	0.003%)
DRIVEWAYS & PARKING LOT AREA (ASPHALT):	34,710 SF	(18.5%)
BUILDING FOOTPRINTS:	40,913 SF	(21.8%)
TOTAL IMPERVIOUS AREA:	76,223 SF	(40.6%)
LANDSCAPE AREAS:		
GENERAL LANDSCAPE AREA:	111,362 SF	(59.4%)

AUTO PARKING:

MINIMUM REQUIRED AUTO PARKING:		
OFFICE USE:	1 SP / 1,000SF =	5 SPACES
PROPOSED AUTO PARKING:		7 SPACES
BIKE PARKING:		
REQUIRED BIKE PARKING (OFFICE) :		2 SPACES
PROPOSED BIKE PARKING:		2 SPACES

LEGAL DESCRIPTION

TAX LOT 24E15A 00209 TAX MAP 25AE15A
CITY OF SANDY, CLACKAMAS COUNTY, OREGON

SHEET INDEX

AXIS DESIGN GROUP
ARCHITECTURE & ENGINEERING, INC.

WHITNEY & ASSOCIATES ARCHITECTS PC

52 NW 2ND STREET
GRESHAM, OR 97030
T: 503.667.4252 | F: 503.618.9842

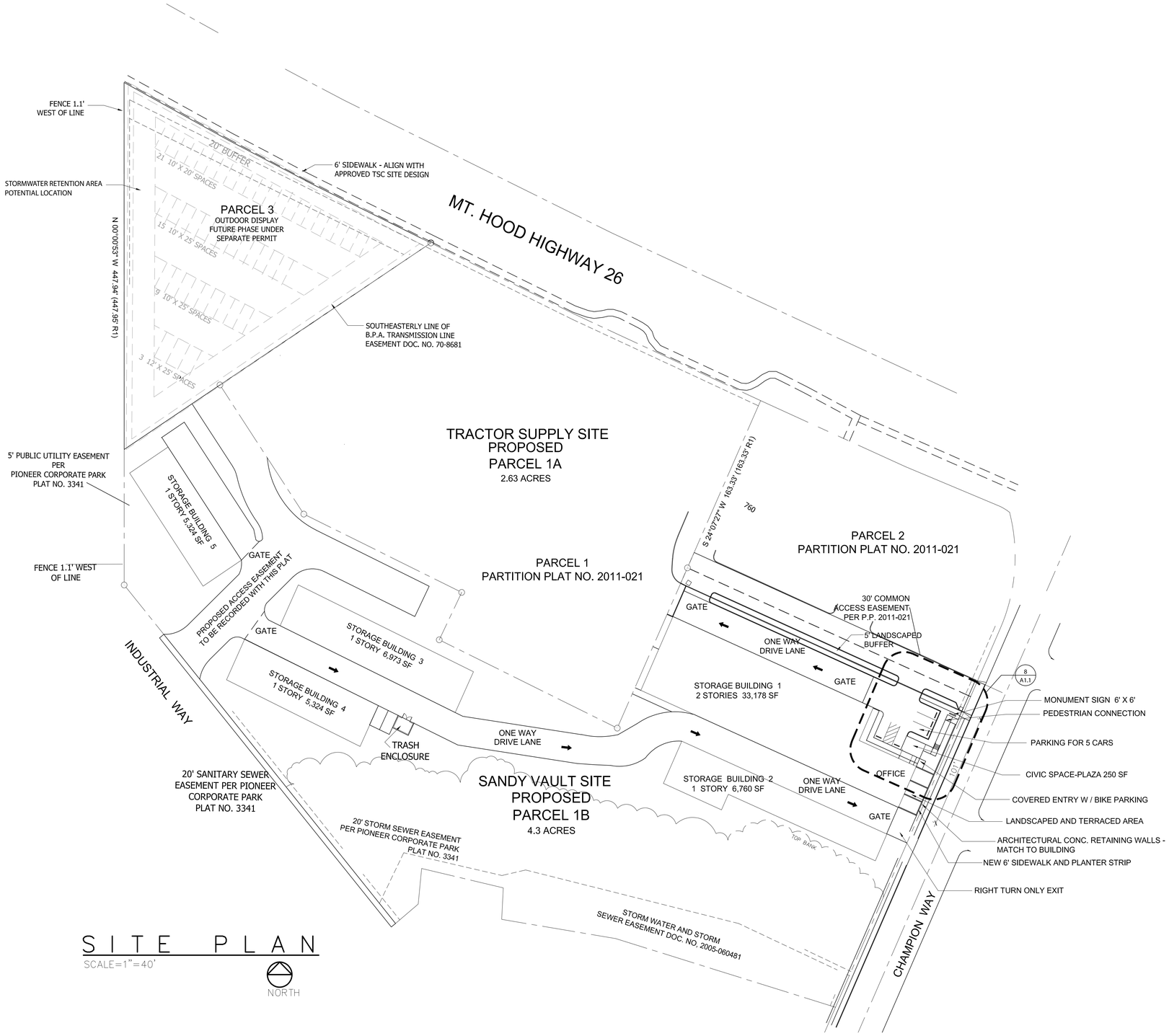
SANDY VAULT
CHAMPION WAY
SANDY , OR 97055

REVISIONS

No.	Description	Date
1	COMPLETENESS RESPONSE	1/4/2019

DRAWN BY: BW
CHECKED BY:
JOB NO: 17-034
DATE: 12/05/2018
ISSUED FOR: DESIGN REVIEW
SHEET TITLE
COVER SHEET &
SITE PLAN
SHEET NO.
A1

S:\Projects\2017 Projects\17-034_Sandy_Storage\4_Drawings\F2_Current\CAD\17-034_ A1A.dwg © Plot Date: Jan 4 19 @ Time: 12:27 PM



SITE PLAN

SCALE=1"=40'

NORTH

S:\Projects\2017 Projects\17-034_Sandy_StorageIF_Drawings\F2_Current\CAD\17-034_A1A.dwg @ Plot Date: Dec 28 18 @ Time: 11:46 AM

AXIS DESIGN GROUP
ARCHITECTURE & ENGINEERING, INC.
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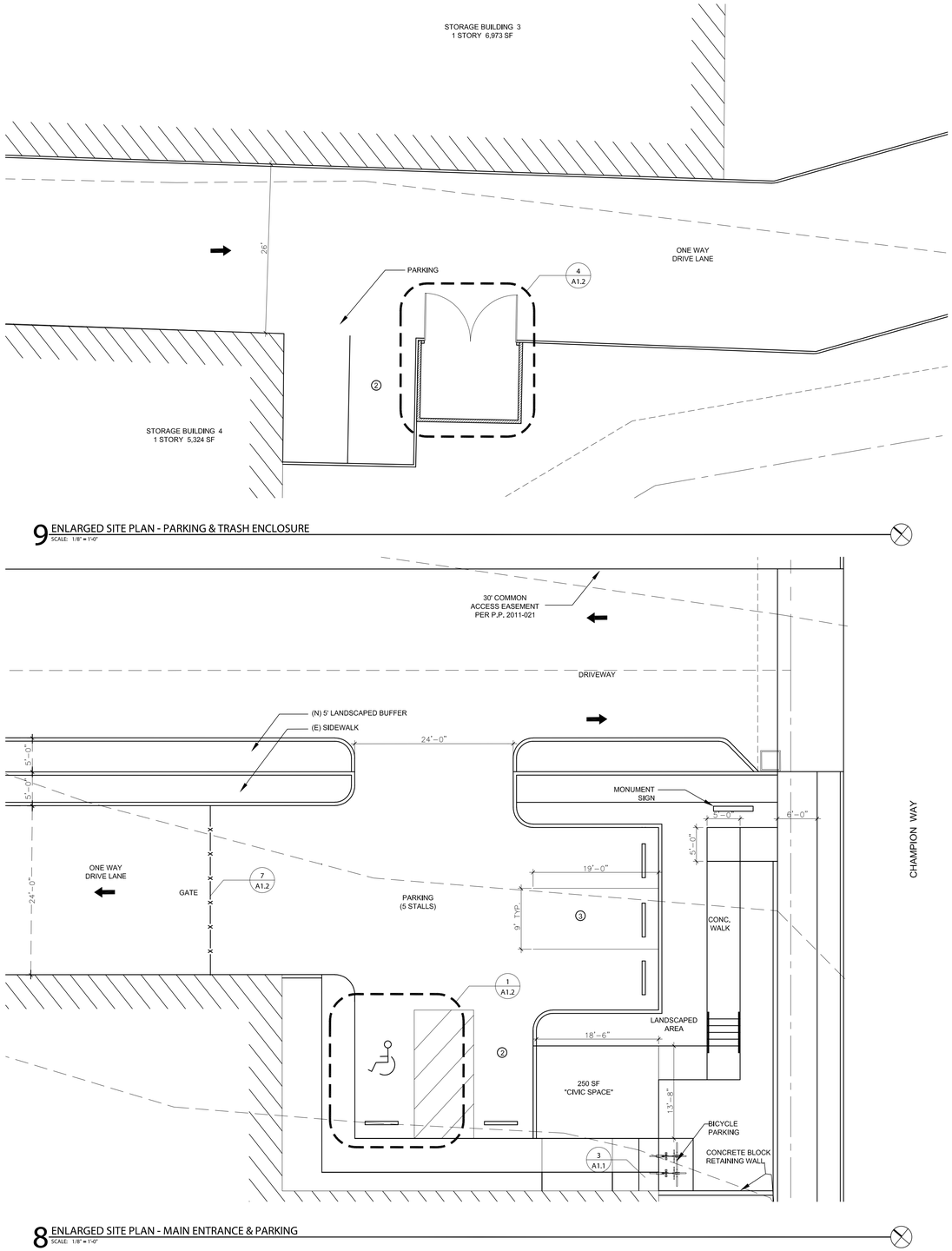
SANDY VAULT
CHAMPION WAY
SANDY, OR 97055

REVISIONS

No.	Description	Date

DRAWN BY: BW
CHECKED BY:
JOB NO: 17-034
DATE: 12/05/2018
ISSUED FOR: DESIGN REVIEW
SHEET TITLE
SIMPLIFIED REFERENCE
SITE PLAN
SHEET NO.

A1.1

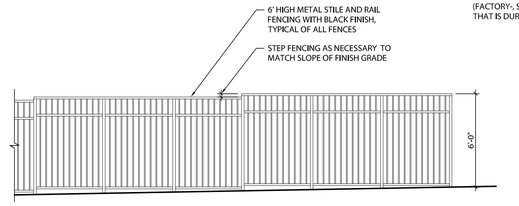


9 ENLARGED SITE PLAN - PARKING & TRASH ENCLOSURE
SCALE: 1/8" = 1'-0"

8 ENLARGED SITE PLAN - MAIN ENTRANCE & PARKING
SCALE: 1/8" = 1'-0"

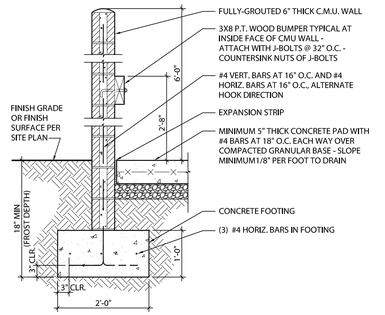
S:\Projects\2017 Projects\17-034_Sandy_Storage\F_Drawings\F2_Current\CAD\17-034_A1A.dwg @ Plot Date: Dec 28 18 @ Time: 11:47 AM

NOTE: THESE DRAWINGS INDICATE DESIGN INTENT ONLY. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ARCHITECT'S APPROVAL. SHOP DRAWINGS SHALL PROVIDE DETAILS FOR FENCE MEMBER SIZES, METHOD OF ATTACHMENT (WELDS/FASTENERS), AND FINISH (FACTORY-, SHOP-, OR FIELD-APPLIED TYPE OF COATING THAT IS DURABLE AND WEATHER-RESISTANT).

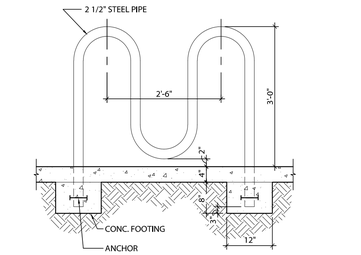


EAST ELEVATION AT GATE

7 ELEVATIONS AT FENCING
SCALE: 1/4" = 1'-0"



6 TRASH ENCLOSURE WALL SECTION
SCALE: 3/4" = 1'-0"

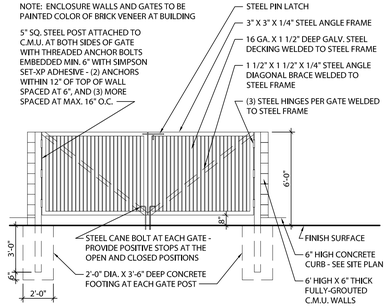


SPACES FOR (2) BIKES

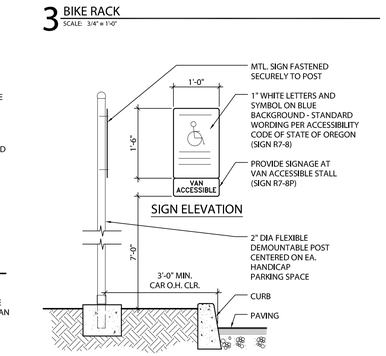
3 BIKE RACK
SCALE: 3/4" = 1'-0"

NOTE: ENCLOSURE WALLS AND GATES TO BE PAINTED COLOR OF BRICK VENEER AT BUILDING

5" SQ. STEEL POST ATTACHED TO C.M.U. AT BOTH SIDES OF GATE WITH THREADED ANCHOR BOLTS EMBEDDED MIN. 6" WITH SIMPSON SET-XP ADHESIVE - (2) ANCHORS WITHIN 12" OF TOP OF WALL SPACED AT 6", AND (3) MORE SPACED AT MAX. 16" O.C.

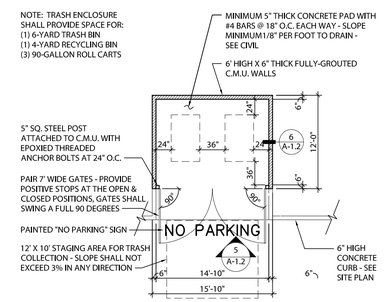


5 TRASH ENCLOSURE GATE ELEVATION
SCALE: 1/4" = 1'-0"

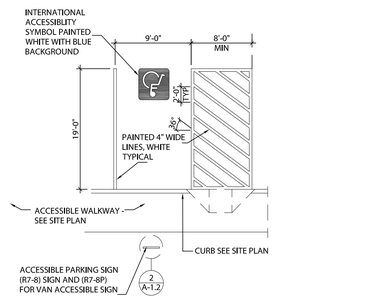


2 ACCESSIBLE PARKING SIGNAGE
SCALE: 3/4" = 1'-0"

NOTE: TRASH ENCLOSURE SHALL PROVIDE SPACE FOR:
(1) 6-YARD TRASH BIN
(1) 4-YARD RECYCLING BIN
(3) 90-GALLON ROLL CARTS



4 TRASH ENCLOSURE PLAN
SCALE: 1/8" = 1'-0"



1 ACCESSIBLE PARKING
SCALE: 1/8" = 1'-0"

AXIS DESIGN GROUP
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SANDY VAULT
CHAMPION WAY
SANDY, OR 97055

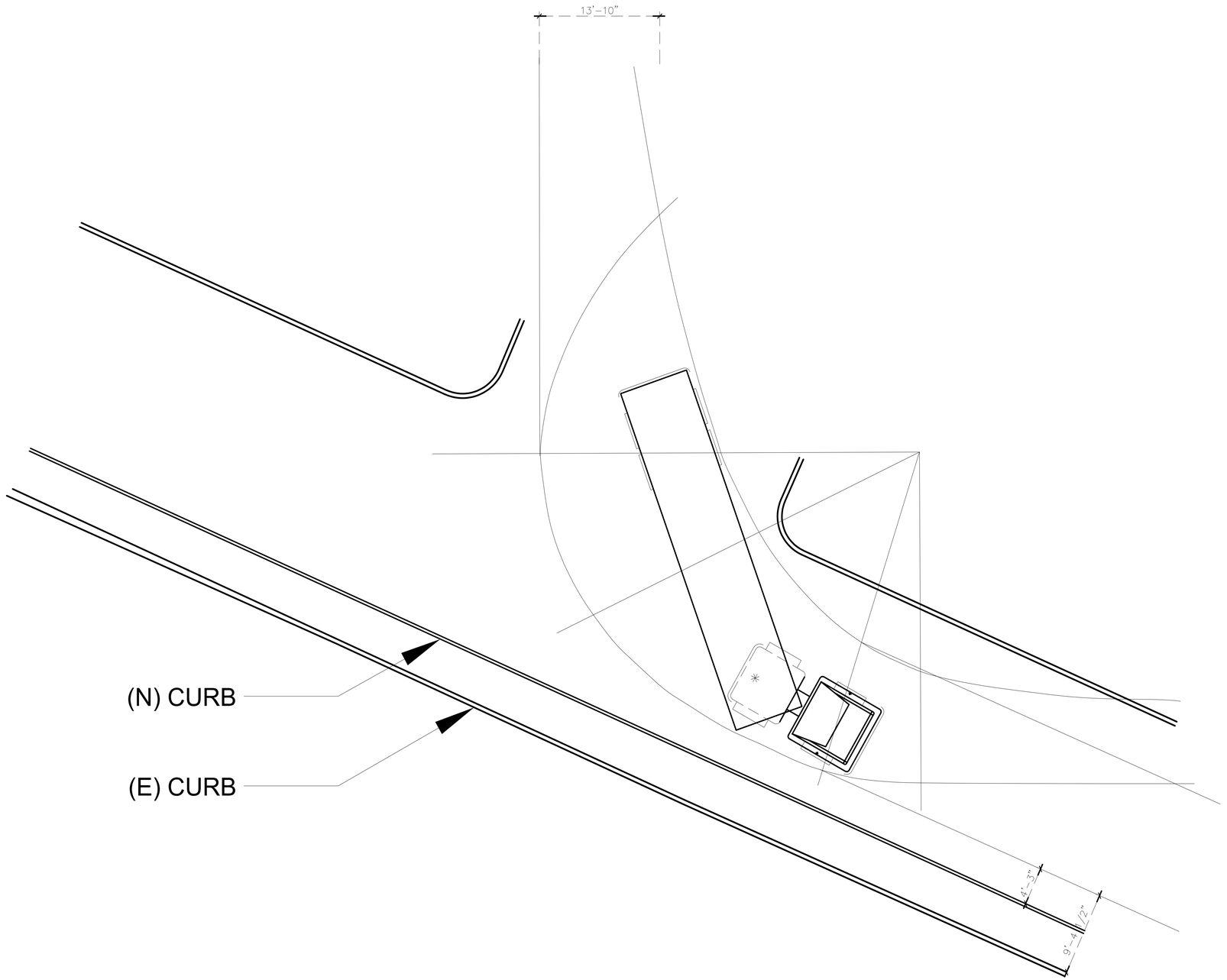
REVISIONS

No.	Description	Date

DRAWN BY: JK
CHECKED BY: BW
JOB NO: 17-034
DATE: 12/05/2018
ISSUED FOR: DESIGN REVIEW

SHEET TITLE
SITE PLAN
DETAILS

SHEET NO.
A1.2



1 TRUCK TURNING RADIUS @ NORTH ACCESS EASEMENT
SCALE: 3/16" = 1'-0"

S:\Projects\2017 Projects\17-034_Sandy_Storage\F_Drawings\F2_Current\CAD\17-034_A1A.dwg @ Plot Date: Dec 11 18 @ Time: 4:11 PM

AXIS DESIGN GROUP
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SANDY VAULT
CHAMPION WAY
SANDY, OR 97055

REVISIONS

No.	Description	Date

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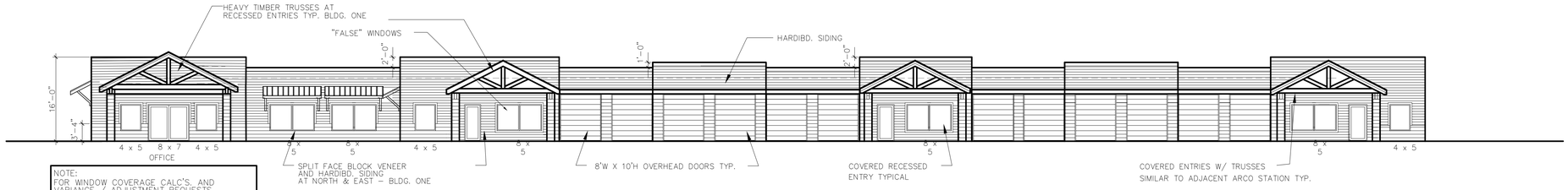
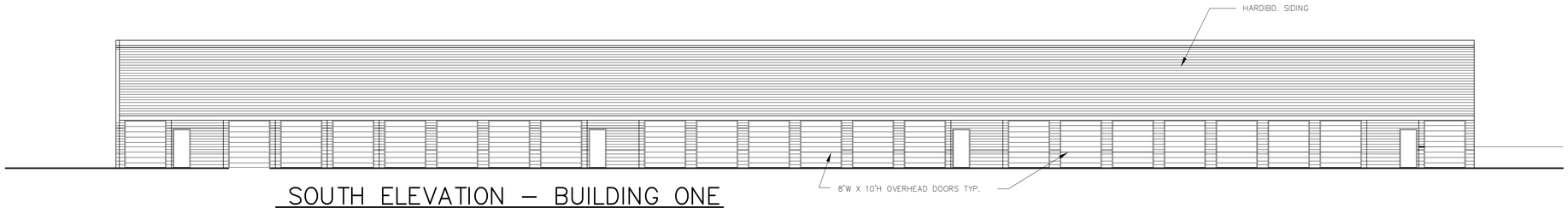
JOB NO: 17-034
DATE: 12/05/2018
ISSUED FOR: DESIGN REVIEW
SHEET TITLE
TRUCK TURNING
RADIUS DIAGRAM
SHEET NO.
A1.3



NOTE:
FOR WINDOW COVERAGE CALC'S. AND VARIANCE / ADJUSTMENT REQUESTS SEE NARRATIVE PAGE 5

NORTH ELEVATION - BUILDING ONE

SCALE=1"=10'



SOUTH ELEVATION - BUILDING ONE

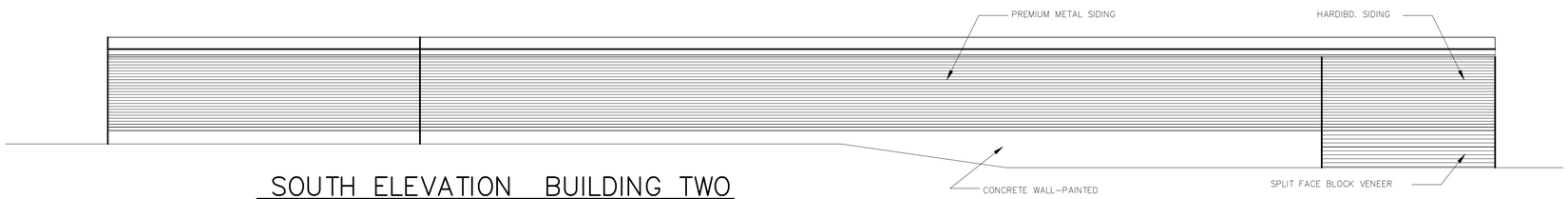
SCALE=1"=10'

EAST ELEVATION - BUILDING ONE & TWO

SCALE=1"=10'

NORTH ELEVATION BUILDING TWO

SCALE=1"=10'



SOUTH ELEVATION BUILDING TWO

SCALE=1"=10'

AXIS DESIGNGROUP
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SANDY VAULT
CHAMPION WAY
SANDY, OR 97055

REVISIONS

No.	Description	Date

DRAWN BY: BW
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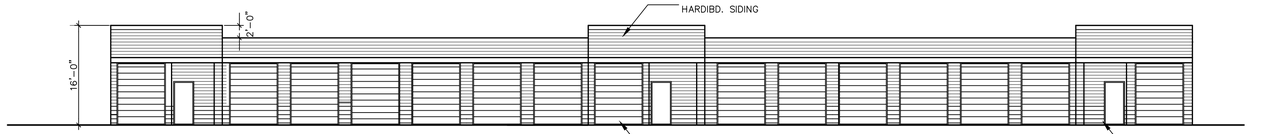
JOB NO: 17-034
DATE: 09/26/2018
ISSUED FOR: DESIGN REVIEW

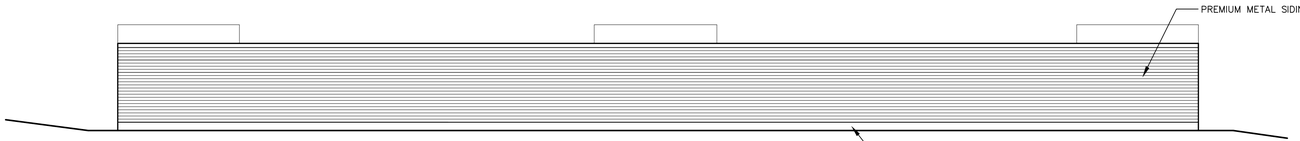
SHEET TITLE
ELEVATIONS
BUILDING 1 & 2

SHEET NO.
A3



SOUTH ELEVATION BUILDING THREE

SCALE=1"=10'



NORTH ELEVATION BUILDING THREE

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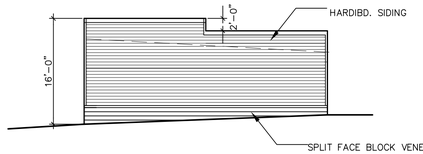
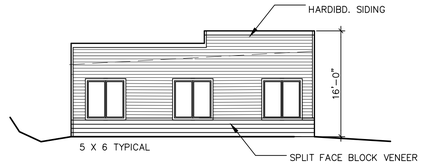


EAST ELEVATION – BLDG 3

SCALE=1"=10'



WEST ELEVATION – BLDG 3

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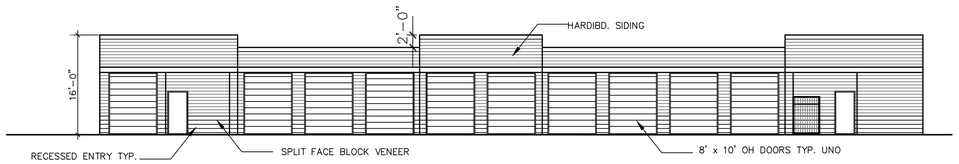
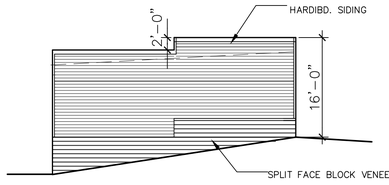


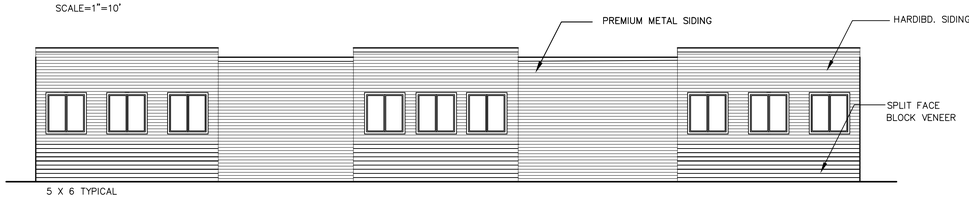
NORTH ELEVATION BUILDING FOUR

SCALE=1"=10'



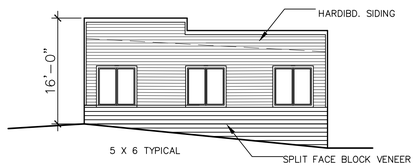
EAST ELEVATION – BLDG 4

SCALE=1"=10'



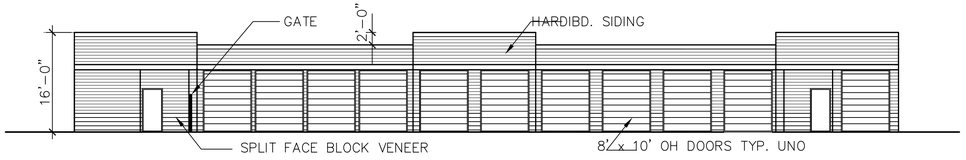
SOUTH ELEVATION BUILDING FOUR & FIVE

SCALE=1"=10'



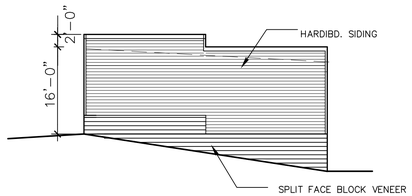
WEST ELEVATION – BLDG 4

SCALE=1"=10'



NORTH ELEVATION BUILDING FIVE

SCALE=1"=10'



WEST ELEVATION – BLDG 5

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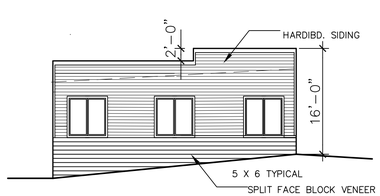

EAST ELEVATION – BLDG 5

SCALE=1"=10'

AXIS DESIGNGROUP
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WHITNEY & ASSOCIATES ARCHITECTS PC
52 NW 2ND STREET
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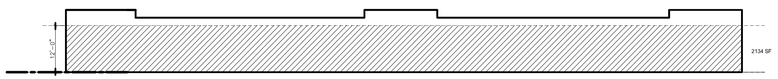
SANDY VAULT
CHAMPION WAY
SANDY, OR 97055

REVISIONS

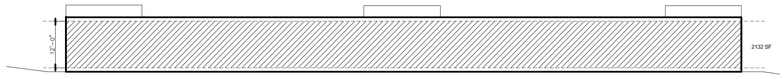
No.	Description	Date

DRAWN BY: BW
CHECKED BY:
JOB NO: 17-034
DATE: 12/05/2018
ISSUED FOR: DESIGN REVIEW
SHEET TITLE
ELEVATIONS
DESIGN REVIEW
SHEET NO.

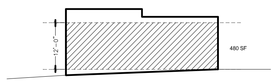
A4



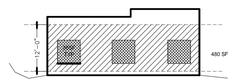
17 SOUTH ELEVATION BUILDING 3
SCALE: 1/16" = 1'-0"



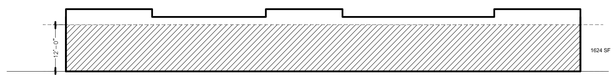
16 NORTH ELEVATION BUILDING 3
SCALE: 1/16" = 1'-0"



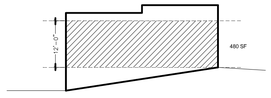
15 EAST ELEVATION BUILDING 3
SCALE: 1/16" = 1'-0"



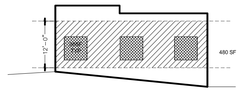
14 WEST ELEVATION BUILDING 3
SCALE: 1/16" = 1'-0"



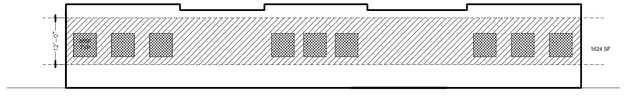
13 NORTH ELEVATION BUILDING 4
SCALE: 1/16" = 1'-0"



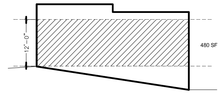
12 EAST ELEVATION BUILDING 4
SCALE: 1/16" = 1'-0"



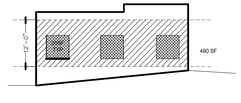
11 WEST ELEVATION BUILDING 4
SCALE: 1/16" = 1'-0"



10 SOUTH ELEVATION BUILDING 4 & 5
SCALE: 1/16" = 1'-0"



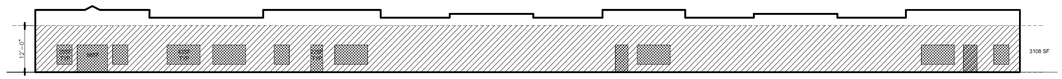
9 WEST ELEVATION BUILDING 5
SCALE: 1/16" = 1'-0"



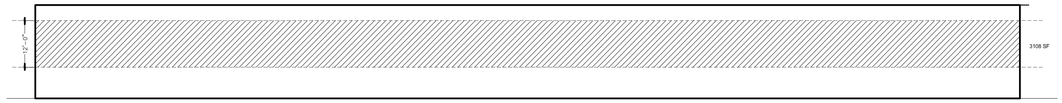
8 EAST ELEVATION BUILDING 5
SCALE: 1/16" = 1'-0"

METHODOLOGY

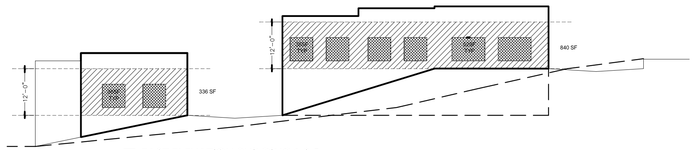
WALL AREA IS MEASURED AS THE PORTION OF A WALL ENCLOSING OCCUPIABLE SPACE.
OCCUPIABLE SPACE = 0' TO + 8'-0" AFF



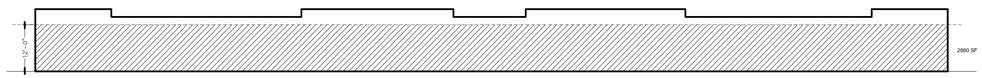
7 NORTH ELEVATION BUILDING 1
SCALE: 1/16" = 1'-0"



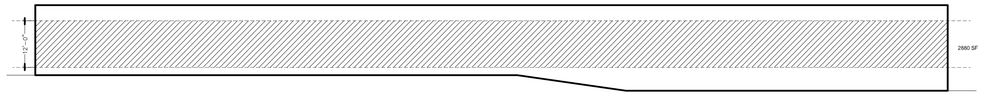
6 SOUTH ELEVATION BUILDING 1
SCALE: 1/16" = 1'-0"



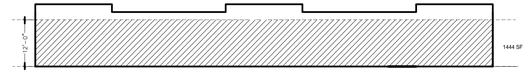
5 EAST ELEVATION BUILDING 1 & 2
SCALE: 1/16" = 1'-0"



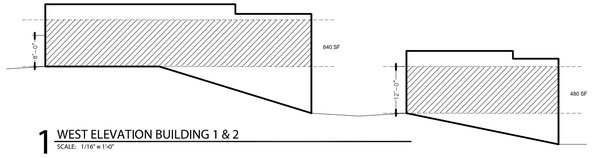
4 NORTH ELEVATION BUILDING 2
SCALE: 1/16" = 1'-0"



3 SOUTH ELEVATION BUILDING 2
SCALE: 1/16" = 1'-0"



2 NORTH ELEVATION BUILDING 5
SCALE: 1/16" = 1'-0"



1 WEST ELEVATION BUILDING 1 & 2
SCALE: 1/16" = 1'-0"

BUILDING 1

Façade	Area (sf)	Area Glazed (sf)	% Glazed	Standard
North	3108	417	13%	20%
South	3108	0	0%	0%
East	840	248	30%	20%
West	840	0	0%	0%

BUILDING 2

Façade	Area (sf)	Area Glazed (sf)	% Glazed	Standard
North	2880	0	0%	0%
South	2880	0	0%	0%
East	336	72	21%	30%
West	480	0	0%	0%

BUILDING 3

Façade	Area (sf)	Area Glazed (sf)	% Glazed	Standard
North	2134	0	0%	0%
South	2134	0	0%	0%
East	480	108	23%	30%
West	480	0	0%	0%

BUILDING 4

Façade	Area (sf)	Area Glazed (sf)	% Glazed	Standard
North	1624	0	0%	0%
South	1624	324	20%	30%
East	480	108	23%	30%
West	480	0	0%	0%

BUILDING 5

Façade	Area (sf)	Area Glazed (sf)	% Glazed	Standard
North	1624	0	0%	0%
South	1624	324	20%	30%
East	480	108	23%	30%
West	480	0	0%	0%

Ground floor = 0'-12' AFF

AXIS DESIGN GROUP
ARCHITECTURE & ENGINEERING, INC.
WHITNEY & ASSOCIATES ARCHITECTS, P.C.
52 NW 2ND STREET
GRESHAM, OR 97030
T: 503.667.4252 | F: 503.618.9842

SANDY VAULT
CHAMPION WAY
SANDY , OR 97055

REVISIONS

No.	Description	Date

DRAWN BY: BW
CHECKED BY:
JOB NO: 17-034
DATE: 12/05/2018
ISSUED FOR: DESIGN REVIEW
SHEET TITLE
GLAZING DIAGRAMS & CALCULATIONS
SHEET NO.
A5

SANDY SELF STORAGE

LOCATED AT CHAMPION WAY AND INDUSTRIAL WAY, SANDY OREGON

GENERAL NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CITY OF SANDY PUBLIC WORKS STANDARDS. IMPROVEMENTS DEPICTED ON THESE PLANS ARE IN CONFORMANCE WITH THE CITY LAND USE ACTION CASEFILE NO. 12-031 SUB/MOD.

2. IN ORDER TO PROTECT UNDERGROUND FACILITIES, EXCAVATORS PERFORMING THE WORK SET FORTH ON THESE PLANS MUST COMPLY WITH THE PROVISIONS OF ORS 757.541 TO 757.571 (REQUIRES CONSTRACTOR TO NOTIFY UTILITIES AT LEAST 48 HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS, PRIOR TO ANY EXCAVATION).

3. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. ADDITIONAL UNDERGROUND UTILITIES MAY EXIST.

4. VERTICAL DATUM: CITY OF SANDY BENCHMARK #10, ELEVATION=867.035, LOCATED AT THE SE CORNER OF BLUFF ROAD AND MARCY STREET

5. TRENCHES WITHIN THE RIGHTS OF WAY SHALL BE BACKFILLED WITH AN APPROVED GRANULAR MATERIAL CONFORMING TO APWA CLASS B SPECIFICATIONS.

6. TRENCHES OUTSIDE OF RIGHTS OF WAY MAY BE BACKFILLED IN ACCORDANCE WITH NATIVE MATERIAL AND COMPACTION SPECIFICATIONS FOR APWA CLASS A BACKFILL.

7. VEGETATION AND TOPSOIL ARE TO BE STRIPPED TO MINERAL EARTH (AND INSPECTED BY THE PROJECT ENGINEER OR GEOTECHNICAL ENGINEER) PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS.

8. IN ADDITION TO ANY REQUIRED COMPACTION TESTING, THE CITY MAY REQUIRE A PROOF ROLL WITH A FULLY LOADED 10-YARD DUMP TRUCK TO CHECK SUBGRADE COMPACTION PRIOR TO PLACEMENT OF ROCK SUBBASE AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK PRIOR TO PAVING THE FIRST LIFT OF ASPHALT.

9. ASPHALTIC CONCRETE MIX IS TO BE BATCHED FROM A MIX FORMULA APPROVED BY OSHD FOR MATERIAL USED. PAVING CONTRACTOR SHALL PROVIDE A CERTIFICATE OF COMPLIANCE FROM ASPHALT PAVEMENT PLANT.

10. SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE AND REPAIRED AT NO COST TO THE CITY AND IN A MANNER ACCEPTABLE TO THE CITY. A PERFORMANCE BOND IS REQUIRED TO GUARANTEE REPAIRS UNDER THE WARRANTY PERIOD.

11. THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "OREGON SUPPLEMENTS". THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN LOCAL ACCESS FOR HOMEOWNERS ALONG THE PROJECT SITE.

12. THE CONTRACTOR AND/OR SUB-CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.

13. CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL AND OTHER MATERIAL ENCOUNTERED DURING THE CONSTRUCTION OF THE ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, REGIONAL AND STATE REGULATIONS AT FACILITIES AUTHORIZED TO ACCEPT SUCH MATERIAL.

14. CONTRACTOR SHALL CAREFULLY MAINTAIN BENCHMARKS, PROPERTY CORNERS, MONUMENTS AND OTHER REFERENCE POINTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.

15. EXCESS EXCAVATED MATERIAL SHALL BE HAULED AND DISPOSED OF AT SITES PROVIDED BY THE OWNER AND APPROVED PURSUANT TO AN APPROPRIATE GRADING PERMIT. FILL SITES SHALL BE LEVELED AND GRADED TO DRAIN. THE CONTRACTOR SHALL CORRECT ANY FILL RELATED CONDITIONS.

16. FINAL CLEANUP – PRIOR TO FINAL ACCEPTANCE AND PAYMENT, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ASPHALTIC CONCRETE MATERIAL OR OTHER ITEMS DEPOSITED BY THE CONTRACTORS PERSONNEL DURING THE PERFORMANCE OF THIS CONTRACT.

17. A PERMIT IS REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY, CONTACT THE CITY OF SANDY PUBLIC WORKS DEPARTMENT OR VISIT www.ci.sandy.or.us FOR PERMIT APPLICATION FORMS.

18. ALL WORK MUST COMPLY WITH CITY OF SANDY GRADING AND EROSION CONTROL PERMIT #xxxx GR/EC ISSUED XX/XX/XX AND THE NPDES 1200C PERMIT ISSUED BY THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY ON YY/YY/YY. ALL WORK MUST COMPLY WITH THE MOST STRINGENT REQUIREMENTS IN BOTH PERMITS.

19. ALL WORK MUST COMPLY WITH THE CITY OF SANDY'S EROSION CONTROL STANDARDS. CONTRACTOR TO SCHEDULE INSPECTIONS 48 NORMAL BUSINESS HOURS IN ADVANCE.

20. PRIOR TO DEMOLITION OF ANY OF THE EXISTING STRUCTURES ON-SITE, A DEMOLITION PERMIT IS REQUIRED FROM THE CITY OF SANDY.

21. ANY EXISTING DOMESTIC OR IRRIGATION WELLS SHALL BE ABANDONED IN CONFORMANCE WITH OAR 690-220-0030. SUBMIT COPY OF WRD ABANDONMENT FORM TO THE CITY. ANY EXISTING ON-SITE SEWAGE DISPOSAL SYSTEM SHALL BE ABANDONED IN CONFORMANCE WITH CLACKAMAS COUNTY WES REGULATIONS. THE CONTRACTOR SHOULD SUBMIT COPY OF THE CERTIFICATES FOR WELL ABANDONMENT AND SEPTIC TANK REMOVAL TO THE CITY.

22. IF, AT ANYTIME DURING THE ON-SITE CONSTRUCTION, THE CONTRACTOR OBSERVES AN ENVIRONMENTAL IMPACT ON-SITE SUCH AS OIL TANKS, CONTAMINATION RESIDUE OR HAZARDOUS MATERIALS, SPILLAGE, ETC.., IT MUST BE REPORTED, INSPECTED, AND TREATED IN CONFORMANCE WITH THE APPROPRIATE AGENCY'S REQUIREMENTS.

SANITARY SEWER NOTES:

SANITARY SEWER GENERAL NOTES:

1. SEWER PIPE AND FITTINGS TO BE GREEN PVC GRAVITY SEWER PIPE CONFORMING TO ASTM D-3034, SDR 35 WITH RUBBER RING TYPE JOINTS CONFORMING WITH ASTM D-3212. SUBMIT CERTIFICATE OF COMPLETION OF 95% MANDREL TEST ON ALL PIPES AFTER COMPACTION.

2. PIPE BEDDING, PIPE ZONE MATERIALS SHALL BE 3/4" MINUS CRUSHED ROCK. BACKFILL WITHIN THE RIGHT-OF-WAY SHALL BE 3/4" MINUS CRUSHED ROCK COMPACTED TO 95 % OF AASHTO T-180 (ASTM D-1557).

3. LATERALS SHALL BE 6" 3034 PVC PIPE, GREEN IN COLOR, AND SHALL BE INSTALLED AT 2 % MINIMUM SLOPE UNLESS OTHERWISE NOTED.

4. SETTLEMENT OF THE FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

5. ALL AC SAWCUT LINES SHALL BE STRAIGHT. ALL EDGES SHALL BE SEALED AND SANDED UPON COMPLETION.

6. ALL SERVICE LATERALS SHALL EXTEND 5 FT. BEYOND THE PROPERTY LINE. THE END SHALL BE MARKED WITH A SINGLE 2X4 WHICH EXTEND 2 FT. ABOVE FINISH GRADE. THE EXPOSED PORTIONS OF THE 2X4 SHALL BE PAINTED WHITE. DEPTH OF LATERAL SHALL BE PAINTED ON THE 2X4.

7. SANITARY LATERAL LOCATIONS SHALL BE STAMPED WITH AN "S" ON THE CURB FACE FOR FUTURE LOCATION.

8. SEWER AND WATERLINE CROSSINGS MUST MEET THE REQUIREMENTS OF OAR 333-061-0050(9)

9. PRIOR TO CONSTRUCTION, OBTAIN APPROVAL FOR THE SANITARY SEWER SYSTEM FROM THE OREGON DEPARTMENT OF ENVIRONMANEAL QUALITY (DEQ) AS PER OAR 340-052 AND SUBMIT A COPY OF THE APPROVAL TO THE CITY (ENGINEER TO APPLY FOR APPROVAL).

UTILITY NOTES:

1. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FROM THE CITY OF SANDY PRIOR TO BEGINNING CONSTRUCTION.

NOTIFICATION:

GENERAL – THE CONTRACTOR SHALL, AS A MINIMUM, COORDINATE THE PROPOSED CONSTRUCTION ACTIVITIES WITH THE OWNER AND LOCAL PUBLIC AGENCIES, UTILITIES AND COMPANIES DURING CONSTRUCTION TO AVOID DAMAGE AND TO PREVENT THE INTERRUPTION OF SERVICES AND UTILITIES TO RESIDENTS AND BUSINESSES:

OREGON UTILITY NOTIFICATION CENTER
1-503-246-6699

CLACKAMAS COUNTY
(503) 353-4400

CITY OF SANDY ENGINEERING DEPT. (503) 668-5533
BUILDING DIVISION INSPECTIONS (503) 668-6941

PORTLAND GENERAL ELECTRIC
(503) 226-8111

VERIZON NORTHWEST (TELEPHONE)
1-800-483-4100

NORTHWEST NATURAL GAS
(503) 226-4211

CHARTER COMMUNICATIONS (CABLE TV)
1-866-731-5420

STREET AND STORM DRAINAGE NOTES:

1. STREET AND STORM DRAIN IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SANDY STANDARDS AND REQUIREMENTS.

2. ALL TRENCH EXCAVATION SHALL CONFORM TO STANDARD STORM SEWER SPECIFICATIONS AND SHALL BE UNCLASSIFIED.

3. PIPE BEDDING AND PIPE ZONE SHALL CONFORM TO THE EXCAVATION AND BACKFILL DETAILS, AND SHALL BE 3/4"-0" CRUSHED ROCK.

4. THE CITY REQUIRES COMPACTION WITHIN THE RIGHT-OF-WAY TO BE 95 % OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD USED TO ACHIEVE REQUIRED COMPACTION.

5. TRENCH BACKFILL OUTSIDE OF RIGHTS OF WAY OR PAVED AREAS MAY BE EXCAVATED TRENCH MATERIAL. TRENCH BACKFILL IN PAVED AREAS SHALL BE AN APPROVED GRANULAR MATERIAL.

6. MATERIAL IN SOFT SPOTS WITHIN THE ROADWAY SHALL BE REMOVED TO THE DEPTH REQUIRED TO PROVIDE A FIRM FOUNDATION AND SHALL BE REPLACED WITH 1-1/2"-0" CRUSHED ROCK. THE ENTIRE SUBGRADE SHALL BE THOROUGHLY COMPACTED TO 95 % AASHTO T-180.

7. CONTRACTOR SHALL NOTIFY THE ENGINEER AND CITY OF SANDY WHEN SUBGRADE IS COMPLETE AND 24 HOURS PRIOR TO PLACEMENT OF ROCK BASE MATERIAL AND 24 HOURS PRIOR TO FINAL PAVING FOR AN INSPECTION OF THE WORK. FAILURE TO DO SO WILL MAKE ANY SUBRADE FAILURE PROBLEMS THE RESPONSIBILITY OF THE CONTRACTOR. A PROOF ROLL WITH A FULLY LOADED 10-YARD DUMP TRUCK MAY BE REQUIRED TO CHECK SUBGRADE COMPACTION PRIOR TO PLACEMENT OF ROCK SUBBASE AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK PRIOR TO PAVING THE FIRST LIFT OF ASPHALT.

8. ALL SAWCUT JOINTS SHALL BE STRAIGHT, TACKED AND SAND SEALED UPON PAVING.

9. THE CITY REQUIRES A SUCCESSFUL MANDREL PULL ON ONE SECTION OF EACH DIAMETER OF STORM PIPE USED.

10. ASPHALT COMPACTION SHALL BE PERFORMED USING NUCLEAR GAUGE. THE RICE DENSITY TESTS SHALL EET 91% FOR THE BASE LIFT AND 92% FOR THE TOP LIFT IN ACCORDANCE WITH ODOT TM305 OR AASHTO T-209. SUBMIT TESTING REPORTS TO THE CITY.

11. STORM DRAIN LATERALS SHALL BE 4" 3034 PVC AND WHITE IN COLOR. PLACE 2X4 WOODEN PIPE MARKER AT END OF EACH LATERAL.

GRADING NOTES:

1. FILLS SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY IN THE BUILDING ENVELOPE AND 92 PERCENT OF MAXIMUM DENSITY ON THE REMAINDER OF THE LOT AS DETERMINED BY ASTM TEST SD 1557-91, METHOD A, OR AN EQUIVALENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE NECESSARY ARRANGEMENTS FOR SUCH TESTING AND FOR SUPPLYING THE RESULTS TO THE CITY OF SANDY.

2. ALL CUTS SHALL BE MADE CONSISTENT WITH THE DETAILS NOTED IN THE PLANS. NO CUT SHALL EXCEED A GRADE OF 2 HORIZONTAL TO 1 VERTICAL UNLESS APPROVED BEFOREHAND BY THE ENGINEER AND THE CITY OF SANDY.

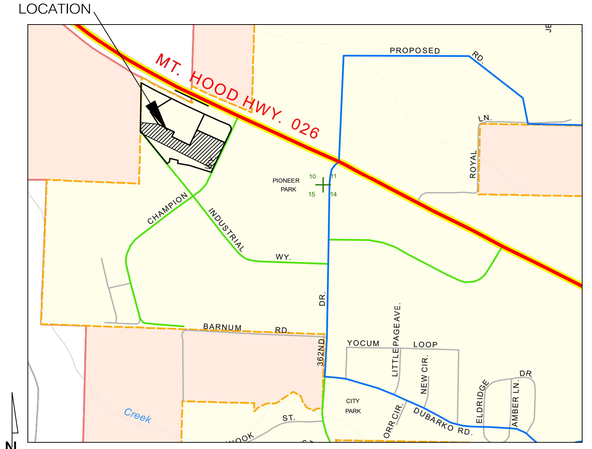
3. APPROPRIATE BENCHING OF FILLS IS REQUIRED FOR FILLS OVER 5 FEET IN HEIGHT ON SLOPES IN EXCESS OF 5 HORIZONTAL TO 1 VERTICAL. BENCHING MUST BE DONE AS PER THE APPROVED PLANS. THE CITY OF SANDY SHALL INSPECT BENCHES PRIOR TO FILL PLACEMENT.

4. CUT AND FILL SLOPES SHALL BE PROTECTED FROM EROSION. SUCH CONTROL MAY CONSIST OF APPROPRIATE REVEGETATION OR OTHER ACCEPTABLE MEANS AND METHODS. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EARTHWORK OR SITE STRIPPING.

5. THE CONTRACTOR SHALL COORDINATE WITH CITY PERSONNEL BY CALLING (503) 668-6941 OR (503) 668-5533 ANYTIME FOR REQUIRED INSPECTIONS AT THE FOLLOWING STAGES OF CONSTRUCTION:

SHEET INDEX

PROJECT LOCATION



N

VICINITY MAP

APPROX SCALE: 1" = 600'

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN 14, 2005
KELLI A. GROVER

EXPIRES: 06/30/19

SIGNATURE DATE: _____

PRELIMINARY

E16-055 COVER SHEETS.dwg 14:26 01/03/2019

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:

SCALE: AS SHOWN | DATE: JUN 2018

PROJECT NO. E16-055

FDG
Firwood Design Group, LLC
SURVEYING ✦ ENGINEERING ✦ PLANNING
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

MARK BENSON
SANDY, OREGON

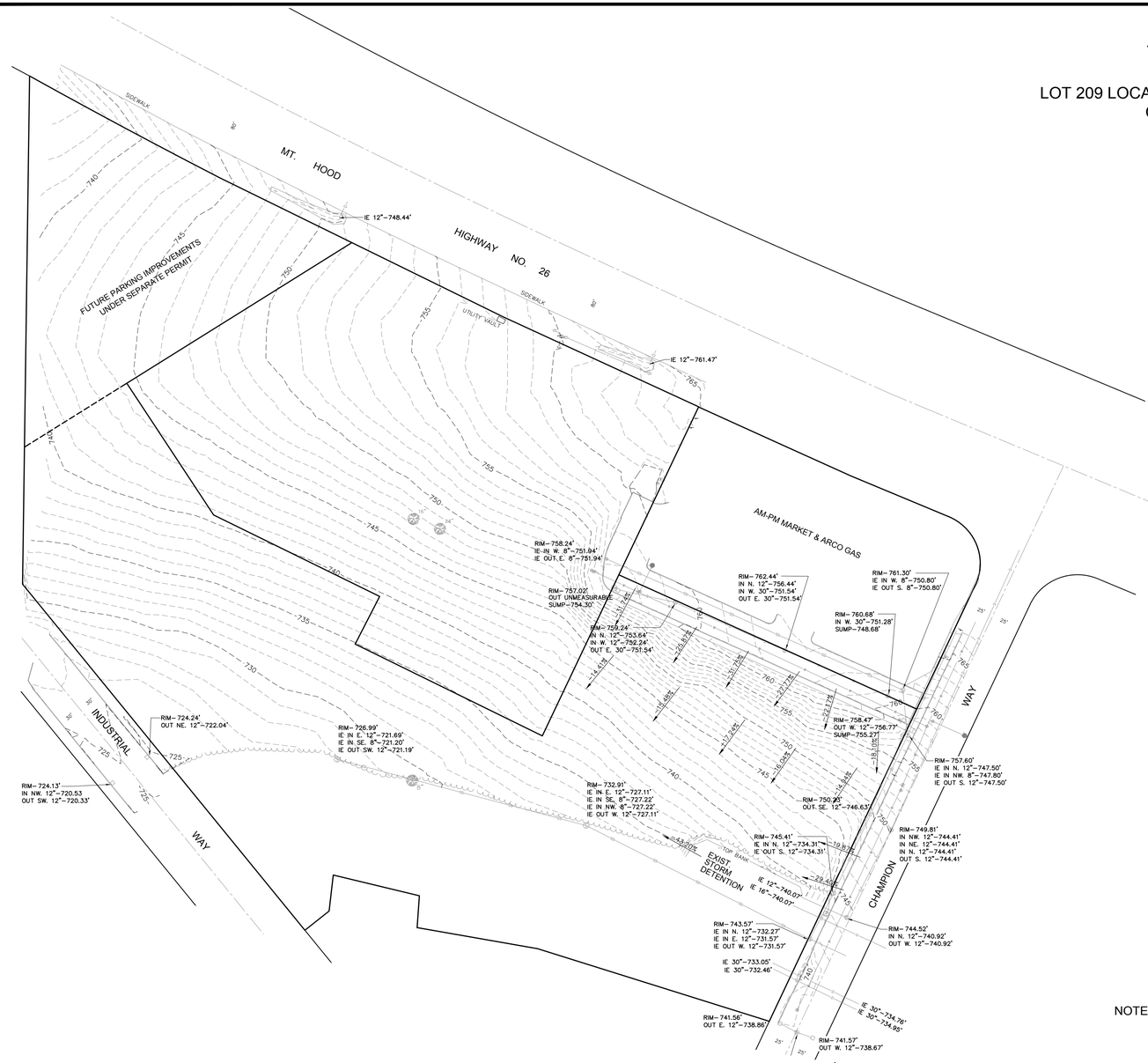
COVER SHEET AND NOTES
SANDY SELF STORAGE
SANDY, OREGON

1/9

TOPOGRAPHIC SURVEY

LOT 209 LOCATED IN THE SE 1/4 , SECTION 15A, T-2S, R-4E
CLACKAMAS COUNTY, OREGON

SCALE 1" = 50'



N
W E
S

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

LEGEND

- SANITARY MANHOLE
- STORM MANHOLE
- CATCH BASIN
- WATER VALVE
- IRRIGATION VALVE
- WATER METER
- FIRE HYDRANT
- COMMUNICATION RISER
- COMMUNICATION VAULT
- SIGN
- EVERGREEN TREE
- UTILITY POLE
- GUY ANCHOR
- LIGHT POLE
- SEWER LINE
- STORM LINE
- WATERLINE
- UNDER GROUND COMMUNICATION
- EDGE OF VEGETATION LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL

NOTE ELEVATIONS SHOWN ARE FROM CITY OF SANDY BENCHMARK NO. 14, ELV-820.61'

PRELIMINARY

E16-055 EXIST CONDITIONS.dwg 14:26 01/03/2019

DATE:	NO.	REVISION

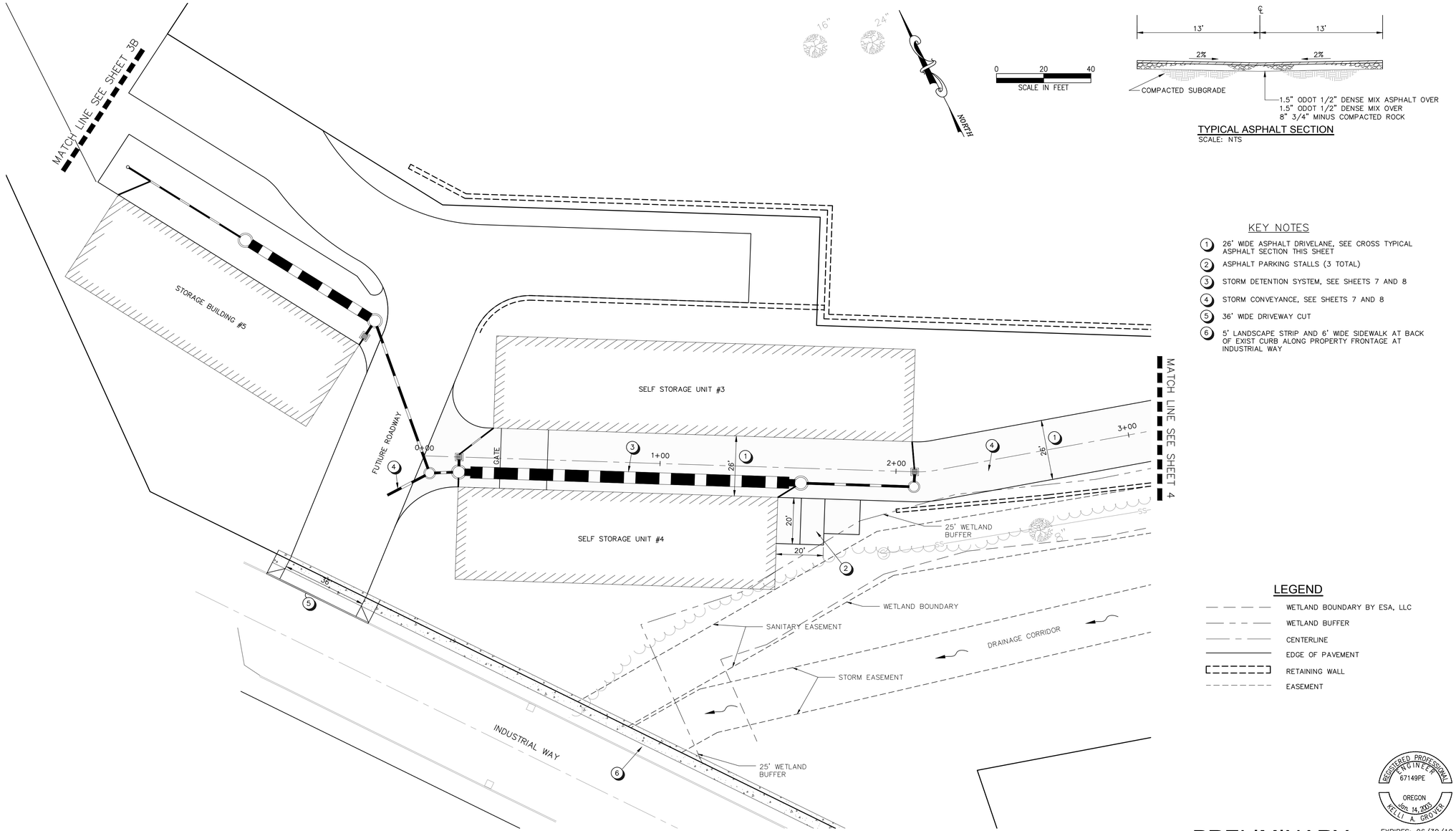
DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JUN 2018
PROJECT NO. E16-055

FDG Firwood Design Group, LLC
SURVEYING ✦ ENGINEERING ✦ PLANNING
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

MARK BENSON
SANDY, OREGON

EXISTING CONDITIONS
SANDY SELF STORAGE
SANDY, OREGON

2/9



TYPICAL ASPHALT SECTION

SCALE: NTS

KEY NOTES

1. 26' WIDE ASPHALT DRIVELANE, SEE CROSS TYPICAL ASPHALT SECTION THIS SHEET
2. ASPHALT PARKING STALLS (3 TOTAL)
3. STORM DETENTION SYSTEM, SEE SHEETS 7 AND 8
4. STORM CONVEYANCE, SEE SHEETS 7 AND 8
5. 36' WIDE DRIVEWAY CUT
6. 5' LANDSCAPE STRIP AND 6' WIDE SIDEWALK AT BACK OF EXIST CURB ALONG PROPERTY FRONTAGE AT INDUSTRIAL WAY

LEGEND

- WETLAND BOUNDARY BY ESA, LLC
- WETLAND BUFFER
- CENTERLINE
- EDGE OF PAVEMENT
- RETAINING WALL
- EASEMENT

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2005
KELLI A. GROVER

EXPIRES: 06/30/19
SIGNATURE DATE: _____

PRELIMINARY

E16-055 SITE PLAN WEST.dwg 14:27 01/03/2019

DATE:	NO.	REVISION

DRAWN: | DESIGNED: | CHECKED:
SCALE: AS SHOWN | DATE: JUN 2018
PROJECT NO. E16-055

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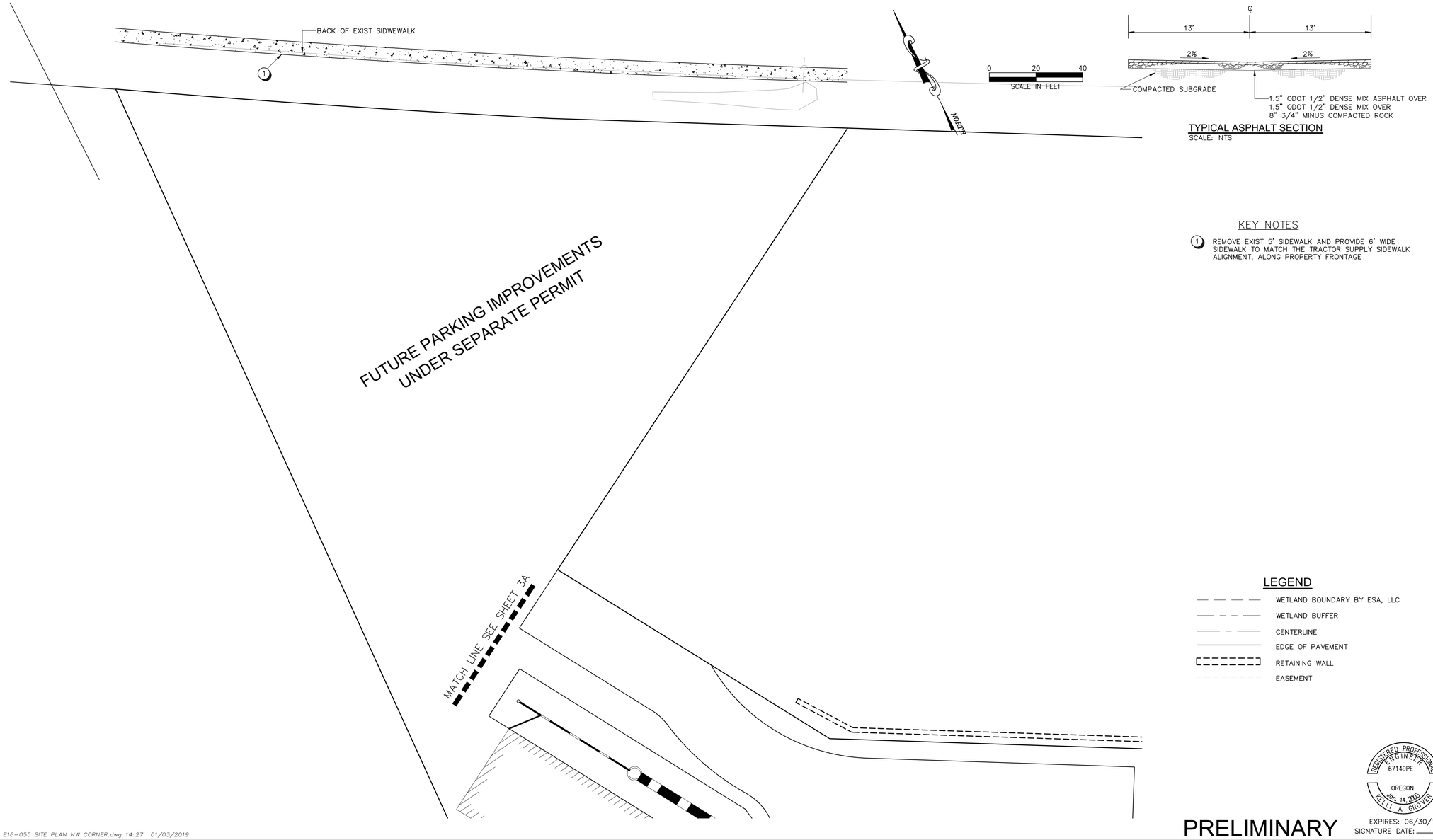
Firwood Design Group, LLC
SURVEYING ✦ ENGINEERING ✦ PLANNING
359 EAST HISTORIC COLUMBIA RIVER HIGHWAY
TROUTDALE, OREGON 97060
BUS: (503) 668-3737 ✦ FAX: (503) 668-3788

MARK BENSON
SANDY, OREGON

SITE PLAN WEST
SANDY SELF STORAGE
SANDY, OREGON

3A / 9



TYPICAL ASPHALT SECTION
SCALE: NTS

KEY NOTES

1. REMOVE EXIST 5' SIDEWALK AND PROVIDE 6' WIDE SIDEWALK TO MATCH THE TRACTOR SUPPLY SIDEWALK ALIGNMENT, ALONG PROPERTY FRONTAGE

LEGEND

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67149PE
OREGON
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E16-055 SITE PLAN NW CORNER.dwg 14:27 01/03/2019

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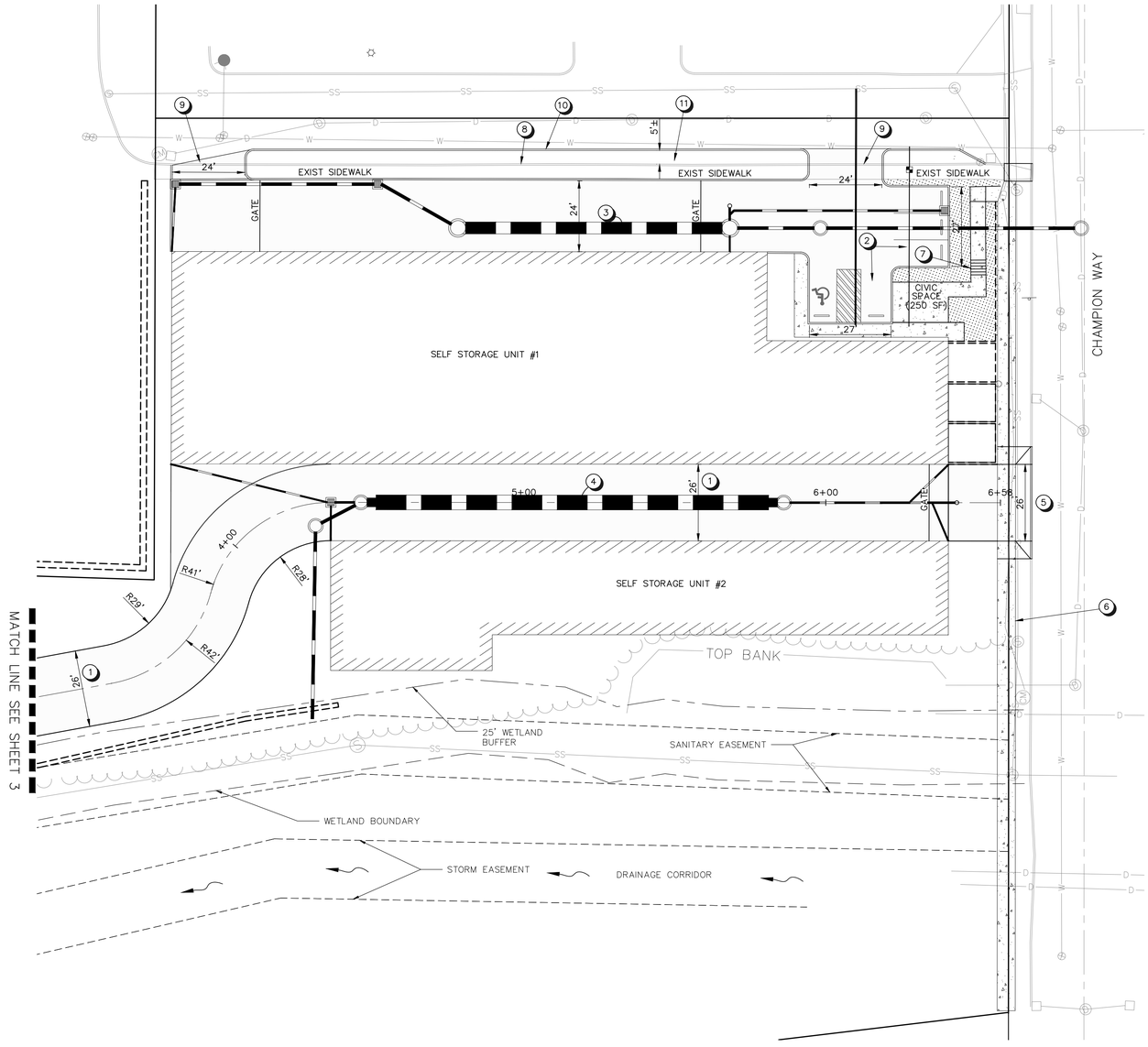
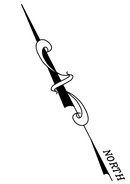
3B/9





0 20 40
SCALE IN FEET

KEY NOTES

1. 26' WIDE ASPHALT DRIVELANE, SEE CROSS TYPICAL ASPHALT SECTION ON SHEET 3
2. ASPHALT PARKING STALLS (5 TOTAL)
3. STORM DETENTION SYSTEM, SEE SHEET 8
4. STORM CONVEYANCE, SEE SHEET 8
5. 24' WIDE DRIVEWAY CUT
6. 5' LANDSCAPE STRIP AND 6' WIDE SIDEWALK AT BACK OF EXIST CURB ALONG PROPERTY FRONTAGE AT CHAMPION WAY
7. STAIRS
8. PROTECT EXIST CURB AND SIDEWALK
9. SAWCUT AND REMOVE EXIST CURB AND SIDEWALK AS NEEDED FOR DRIVEWAY CUT
10. NEW FACE OF CURB 5' FROM EXIST FACE OF CURB
11. 5' PLANTER STRIP

LEGEND

- WETLAND BOUNDARY BY ESA, LLC
- WETLAND BUFFER
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67149PE
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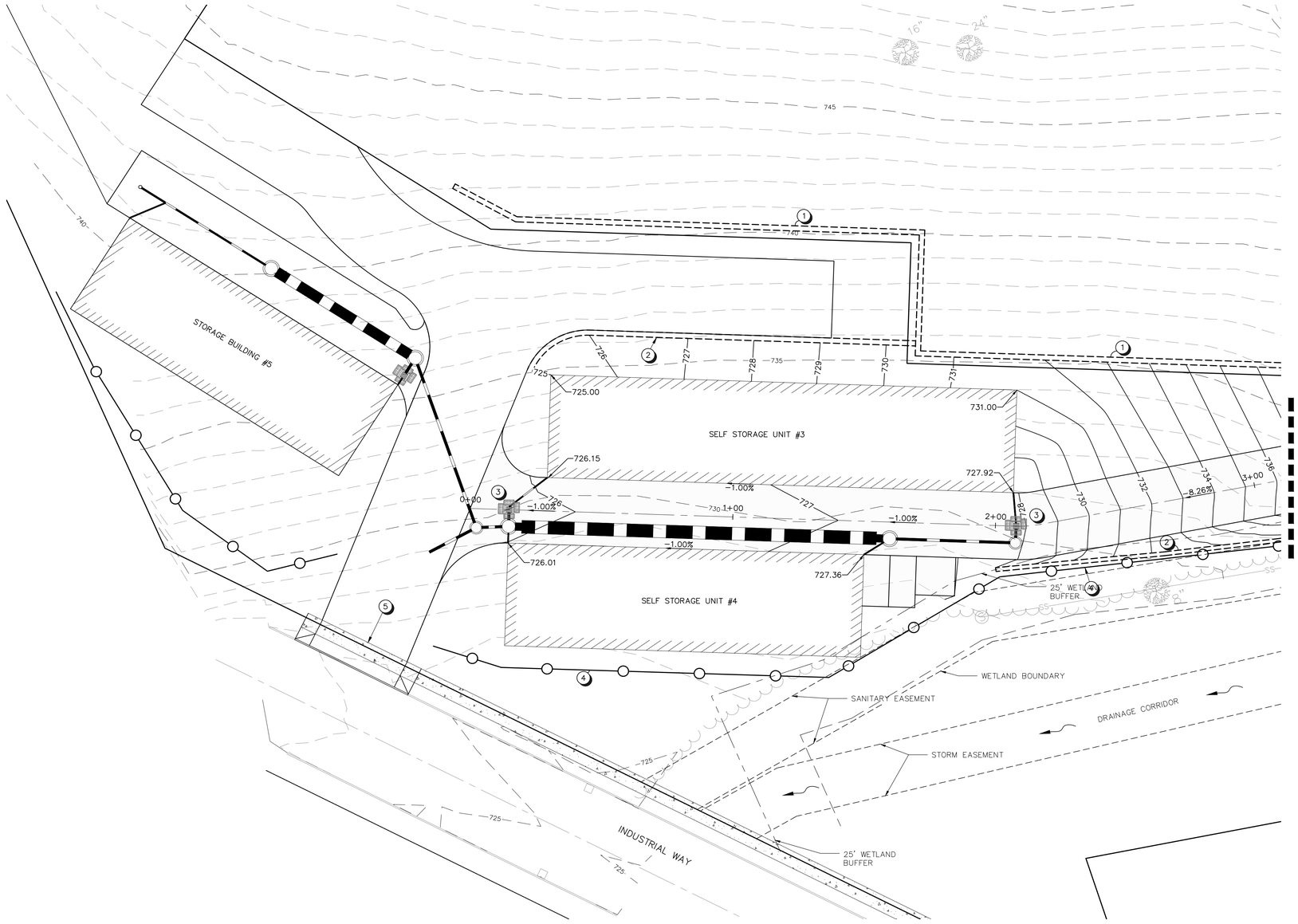
SANDY, OREGON

SITE PLAN EAST
SANDY SELF STORAGE
SANDY, OREGON

4/9



NORTH

0 20 40
SCALE IN FEET

KEY NOTES

1. PROPOSED RETAINING WALL BY OTHERS
2. RETAINING WALL
3. CB INSERT INLET PROTECTION FOR AREA DRAIN TYPE CATCH BASIN, SEE DETAILS ON SHEET 9 (TYPICAL)
4. TEMPORARY SILT FENCING, SEE DETAIL AND NOTES ON SHEET 9, ADJUST SILT FENCING AS NECESSARY DURING CONSTRUCTION
5. CONSTRUCTION ENTRANCE, SEE DETAIL AND NOTES ON SHEET 9

LEGEND

- WETLAND BOUNDARY BY ESA, LLC
- WETLAND BUFFER
- CENTERLINE
- EDGE OF PAVEMENT
- RETAINING WALL
- EASEMENT
- AREA DRAIN INLET PROTECTION
- TEMPORARY SEDIMENT FENCE

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN 14, 2005
KELLI A. GROVER

EXPIRES: 06/30/19
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PRELIMINARY

E16-055 GRADING PLAN WEST.dwg 14:27 01/03/2019

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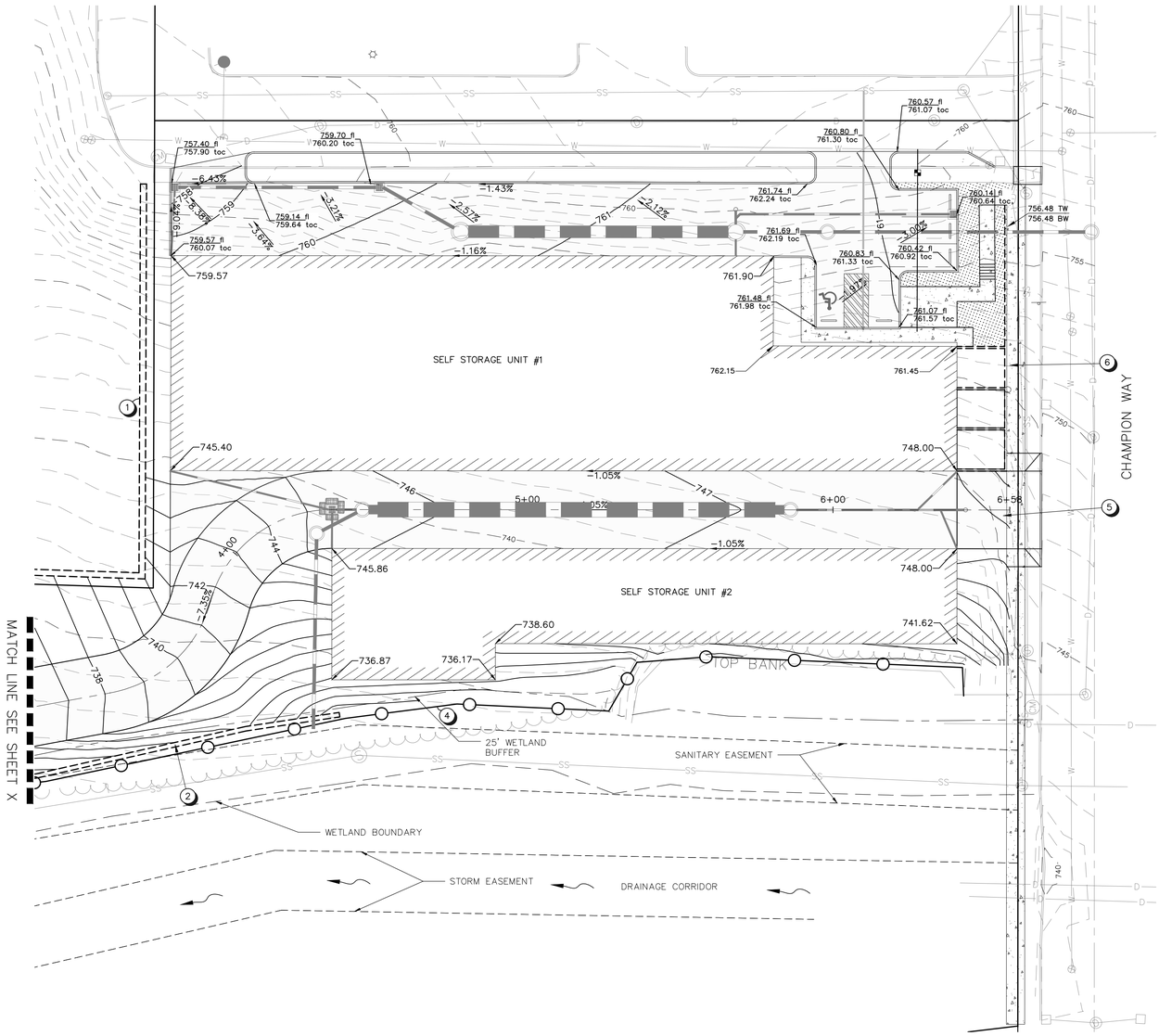
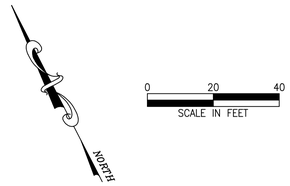
MARK BENSON
SANDY, OREGON

GRADING PLAN WEST
SANDY SELF STORAGE
SANDY, OREGON

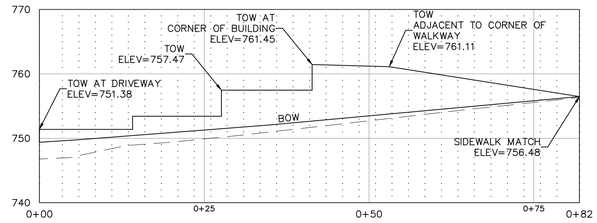
5/9



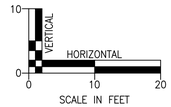


KEY NOTES

1. PROPOSED RETAINING WALL BY OTHERS
2. RETAINING WALL
3. CB INSERT INLET PROTECTION FOR AREA DRAIN TYPE CATCH BASIN, SEE DETAILS ON SHEET 9 (TYPICAL)
4. TEMPORARY SILT FENCING, SEE DETAIL AND NOTES ON SHEET 9, ADJUST SILT FENCING AS NECESSARY DURING CONSTRUCTION
5. CONSTRUCTION ENTRANCE, SEE DETAIL AND NOTES ON SHEET 9
6. TIERED RETAINING WALL AT BACK OF SIDEWALK, SEE PROFILE THIS SHEET



WALL PROFILE AT BACK OF WALKWAY
SCALE: SEE SCALE BAR



LEGEND

- WETLAND BOUNDARY BY ESA, LLC
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- RETAINING WALL
- EASEMENT
- AREA DRAIN INLET PROTECTION
- TEMPORARY SEDIMENT FENCE

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JAN. 14, 2005
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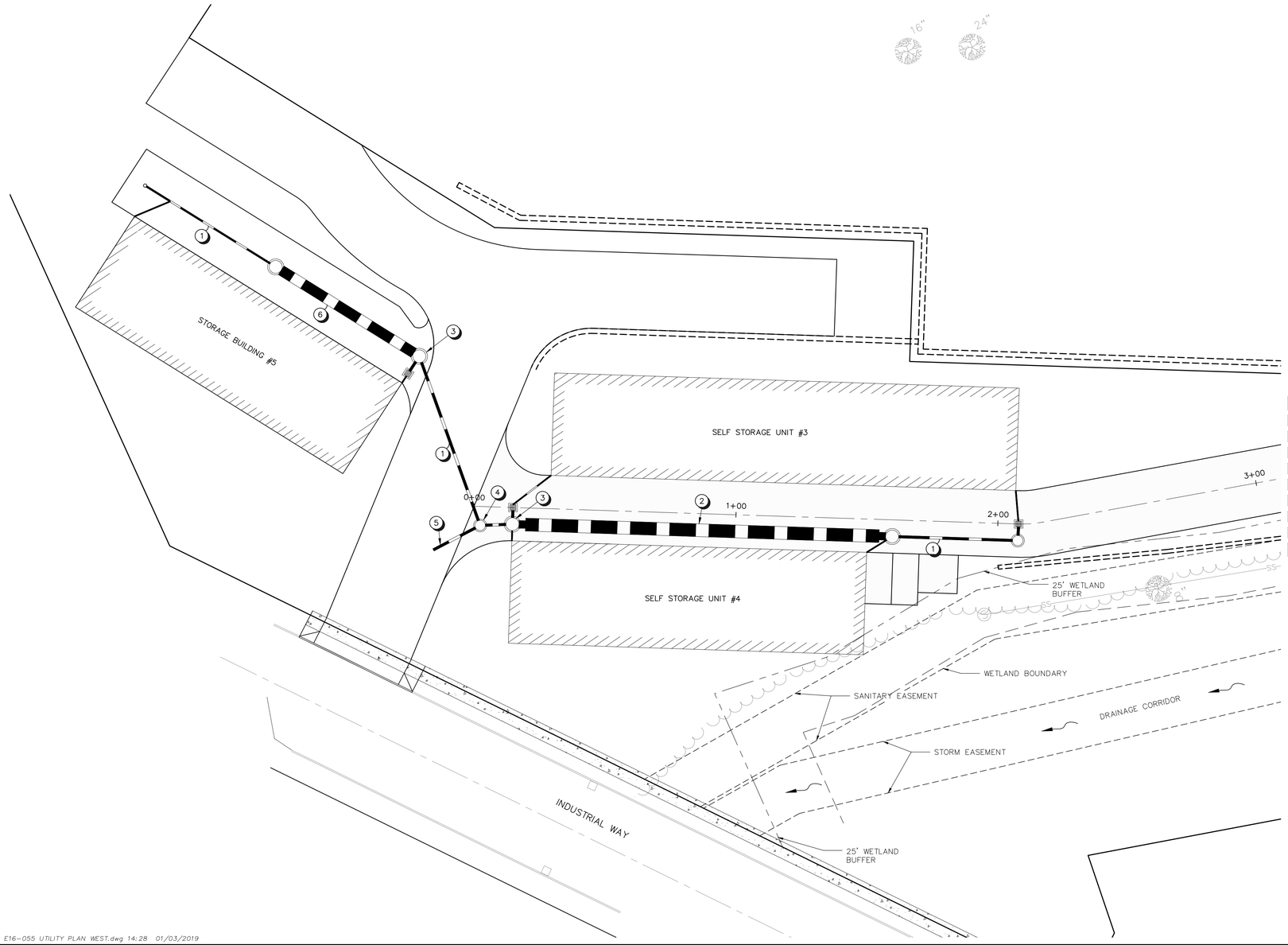
GRADING PLAN EAST
SANDY SELF STORAGE
SANDY, OREGON

6/9



KEY NOTES

1. STORMWATER CONVEYANCE
2. INSTALL 135 LF 60" STORMWATER DETENTION PIPE
3. FLOW CONTROL MANHOLE
4. WATER QUALITY MANHOLE
5. STORM TO CONNECT TO APPROVED STORMWATER SYSTEM IN CHAMPION WAY
6. INSTALL 60 LF 48" STORMWATER DETENTION PIPE

LEGEND

- WETLAND BOUNDARY BY ESA, LLC
- WETLAND BUFFER
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- EASEMENT

REGISTERED PROFESSIONAL ENGINEER
67149PE
OREGON
JUNE 14, 2005
KELLI A. GROTER

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E16-055 UTILITY PLAN WEST.dwg 14:28 01/03/2019

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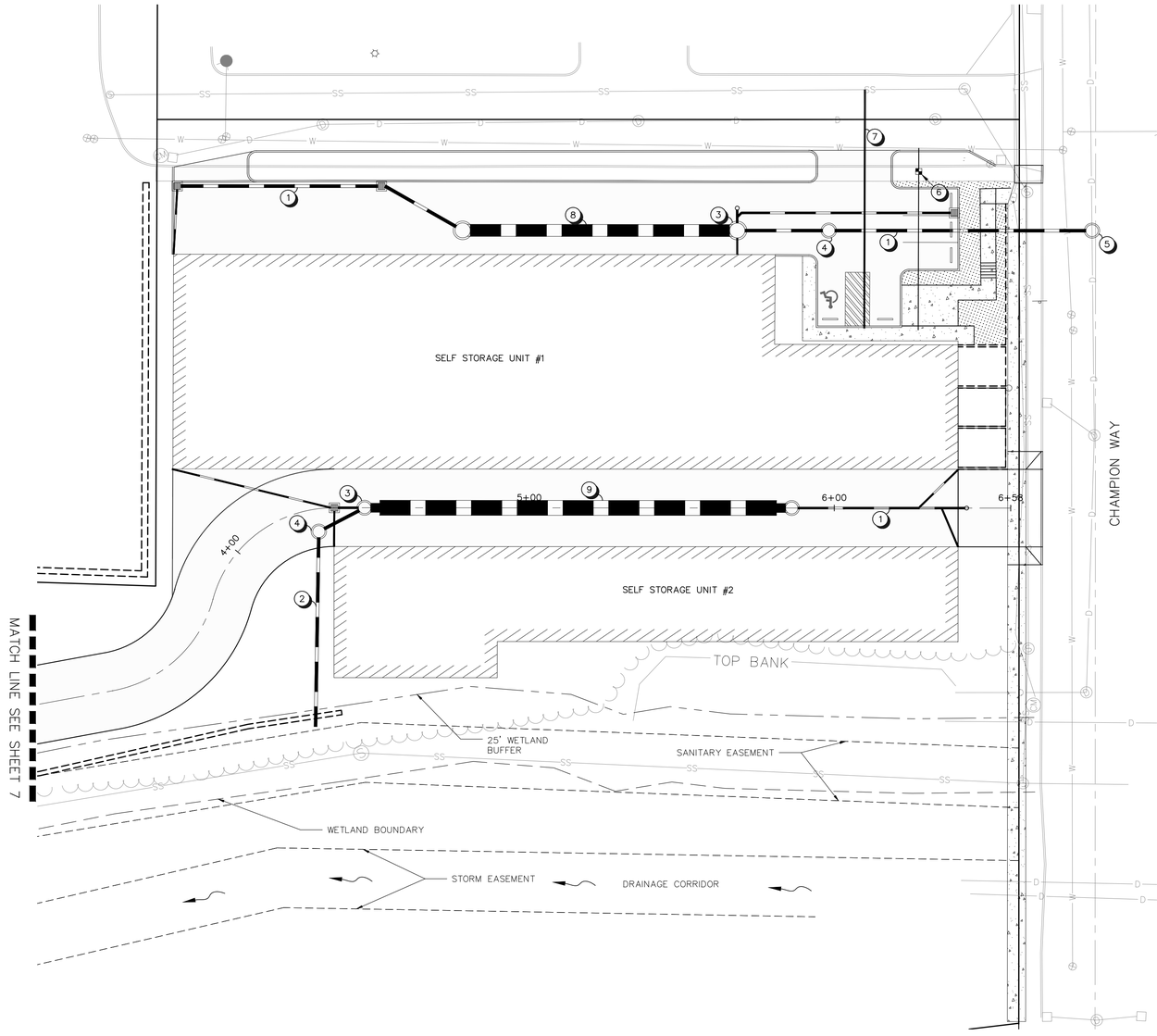
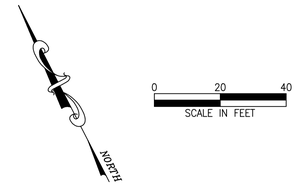
UTILITY PLAN WEST
SANDY SELF STORAGE
SANDY, OREGON

7/9





KEY NOTES

1. STORMWATER CONVEYANCE
2. STORMWATER CONVEYANCE TO ROUTE ONSITE STORMWATER TO SWALE IN SANITARY EASEMENT
3. FLOW CONTROL MANHOLE
4. WATER QUALITY MANHOLE
5. INSTALL 48" MANHOLE AND ROUTE ONSITE STORMWATER TO PUBLIC STORMWATER SYSTEM IN CHAMPION WAY
6. INSTALL NEW WATER SERVICE
7. INSTALL 6" SEWER LATERAL
8. INSTALL 85 LF 48" DETENTION PIPE
9. INSTALL 130 LF 60" DETENTION PIPE

LEGEND

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UTILITY PLAN EAST
SANDY SELF STORAGE
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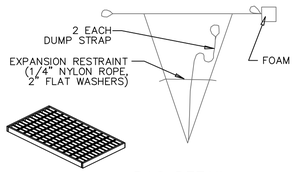
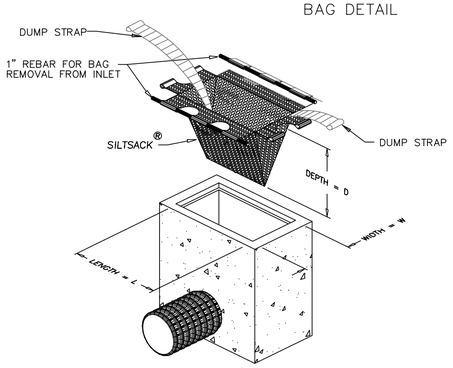
8/9

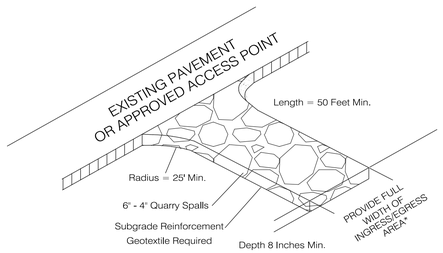


BAG DETAIL



REGULAR FLOW ONLY DO NOT
USE HIGH FLOW INSERT BAGS.

INLET PROTECTION



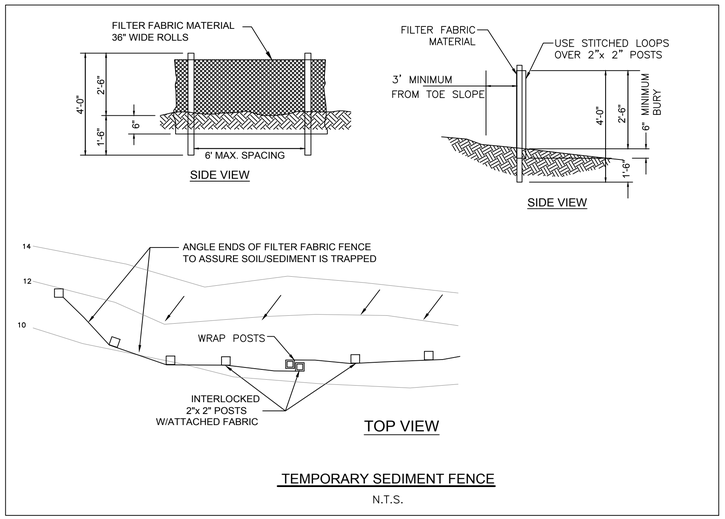
*20' MIN. FOR SINGLE FAMILY AND DUPLEX RESIDENTIAL

GRAVEL CONSTRUCTION ENTRANCES :

1. STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

2. ALL VEHICLES LEAVING THE SITE SHALL LEAVE BY DRIVING ACROSS THE GRAVEL CONSTRUCTION ENTRANCE(S) IF GRAVEL ENTRANCE BECOME FILLED WITH MUD AND IS NO LONGER FUNCTIONAL, ADDITIONAL GRAVEL SHALL BE PLACED. VEHICLE TIRES SHALL BE FREE FROM DIRT BEFORE LEAVING THE SITE.

3. IF ACCESS IS NEEDED FROM A PAVED SURFACE OVER A CURB TO A GRAVEL SITE ENTRANCE. A WOODEN RAMP SHALL BE BUILT FROM THREE OR MORE PLANKS OF INCREASING SIZE WOOD, OFFSET TO ALLOW FOR DRAINAGE. NO GRAVEL OR ROAD BASE RAMPS ALLOWED.



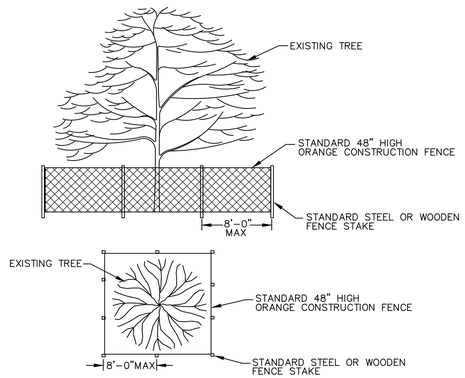
TEMPORARY SEDIMENT FENCE

N.T.S.

SEDIMENT CONTROL FENCES :

1. AT NO TIME SHALL SEDIMENT BE ALLOWED TO ACCUMULATE BEHIND A SEDIMENT FENCE MORE THAN ONE–THIRD OF THE FENCE HEIGHT ABOVE GROUND. SEDIMENT SHOULD BE REMOVED OR REGRADED ONTO SLOPES, AND THE SEDIMENT FENCES REPAIRED AND REESTABLISHED AS NEEDED.

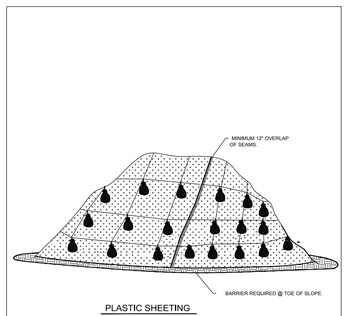
2. FENCE SHALL BE REMOVED ONLY WHEN UPSLOPE AREAS ARE PERMANENTLY STABILIZED.



NOTE:
TREE PROTECTION FENCE SHALL BE LOCATED AT THE OUTER PERIMETER OF THE DRIP LINE OR AS NOTED ON THE PLAN. INSTALL FENCING AS PER MANUFACTURER'S SPECIFICATIONS.

FENCE MAY BE LOCATED AROUND THE DRIP LINE OF TREE GROUPINGS RATHER THAN INDIVIDUAL TREES.

TREE PROTECTION DETAIL



PLASTIC SHEETING

NOTES:
1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
2. BARRIER REQUIRED @ TOE OF STOCK PILE.
3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.

PLASTIC SHEETING	Detail Drawing 4–4

EROSION AND SEDIMENT CONTROL NOTES

GENERAL :

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF SANDY ORDINANCES & REFERENCED DOCUMENTS & CITY OF PORTLAND EROSION CONTROL MANUAL.

2. THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS.

3. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENT FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR EXPECTED STORM EVENTS AND TO ENSURE THE SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.

4. NO VISIBLE AND MEASURABLE SEDIMENT OR POLLUTANT SHALL EXIT THE SITE, ENTER THE PUBLIC RIGHT–OF–WAY, OR BE DEPOSITED INTO ANY WATER BODY OR STORM DRAINAGE SYSTEM.

5. ANY SOIL THAT ENTERS THE PUBLIC RIGHT–OF–WAY SHALL BE REMOVED WITHIN 24 HOURS.

6. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED TO MEET DEQ AND CITY OF SANDY STANDARDS AS NECESSARY TO PREVENT SEDIMENT DISCHARGE FROM THE SITE.

7. ESC FACILITIES SHALL BE INSPECTED EVERY 24 HOURS DURING STORM OR RAIN EVENTS TO ENSURE THE MEASURES ARE FUNCTIONING PROPERLY.

8. PERMANENT OR TEMPORARY SOIL STABILIZATION MEASURES SHALL BE APPLIED TO DENUDED DEVELOPMENT SITES IN CONFORMANCE WITH THE FOLLOWING SCHEDULE:

   a. BETWEEN OCTOBER 1 AND APRIL 30, ALL DENUDED SITES SHALL IMMEDIATELY BE PROVIDED WITH EITHER TEMPORARY OR PERMANENT SOIL STABILIZATION.
   b. BETWEEN MAY 1 AND SEPTEMBER 30, TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES TO REDUCE DUST AND SEDIMENT TRANSPORT SHALL BE APPLIED AS SOON AS PRACTICABLE, BUT IN NO CASE MORE THAN SEVEN DAYS AFTER GROUND DISTURBING ACTIVITY OCCURS.
   c. GROUND COVER SHALL BE INSTALLED ON ANY PORTION OF A SITE THAT IS DENUDED FOR MORE THAN 6 MONTHS.
   d. TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE ESTABLISHED.
   e. STOCKPILES SHALL BE SECURED OR PROTECTED THROUGHOUT THE PROJECT WITH TEMPORARY OR PERMANENT SOIL STABILIZATION MEASURES.
   f. REPLACEMENT GROUND COVER VEGETABLE SHALL NOT INCLUDE PLANTS LISTED AS NUISANCE OR PROHIBITED PLANTS ON THE CITY OF PORTLAND PLANT LIST.
   g. EROSION CONTROL MEASURES SHALL BE MAINTAINED DURING CONSTRUCTION.

9. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

10. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE EVERY TWO WEEKS, OR WITHIN 24 HOURS FOLLOWING A STORM EVENT. DAILY INSPECTIONS SHALL BE PERFORMED DURING PROLONGED RAINFALL. LOG OF INSPECTIONS TO BE KEPT AVAILABLE AT THE SITE.

RESEEDING/ESTABLISHMENT OF VEGETATIVE COVER :

1. RECOMMENDED EROSION CONTROL GRASS SEED MIXES ARE AS SPECIFIED AS BELOW. SIMILAR MIXES DESIGNED TO ACHIEVE EROSION CONTROL MAY BE SUBSTITUTED WITH APPPROVAL. IN GENERAL, USE OF QUICK GROWING, STERILE GRASSES AND GRAINS IN MIXTURE WITH PERMANENT VEGETATIVE COVER IS RECOMMENDED TO ACHIEVE QUICK COVER OF EXPOSED SOILS.

   a. DWARF GRASS MIX (LOW HEIGHT, LOW MAINTENANCE), 100 POUNDS PER ACRE SEED RATE

   (MINIMUM):
   1. DWARF PERENNIAL RYEGRASS, 80% BY SEED COUNT.
   2. CREEPING RED FESCUE, 20% BY SEED COUNT.

2. IT IS RECOMMENDED THAT TOP SOIL ON SLOPES BE PREPARED BY ROUGHENING THE SLOPES BEFORE SEEDING.

3. AREAS THAT FAIL TO ESTABLISH GRASS COVER ADEQUATE TO PREVENT EROSION SHALL BE RESEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED, AND ALL APPROPRIATE MEASURES TAKEN TO ESTABLISH COVER.

4. EROSION CONTROL MEASURES SHALL BE MAINTAINED BY CONTRACTOR UNTIL GRASS COVER IS ESTABLISHED AND UP TO ONE YEAR AFTER COMPLETION OF CONSTRUCTION, WHICHEVER IS SOONER.

5. MULCH SHALL BE SPREAD UNIFORMLY IMMEDIATELY FOLLOWING SEEDING.

REGISTERED PROFESSIONAL ENGINEER
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E16–055 ESC NOTES AND DETAILS.dwg 14:26 01/03/2019

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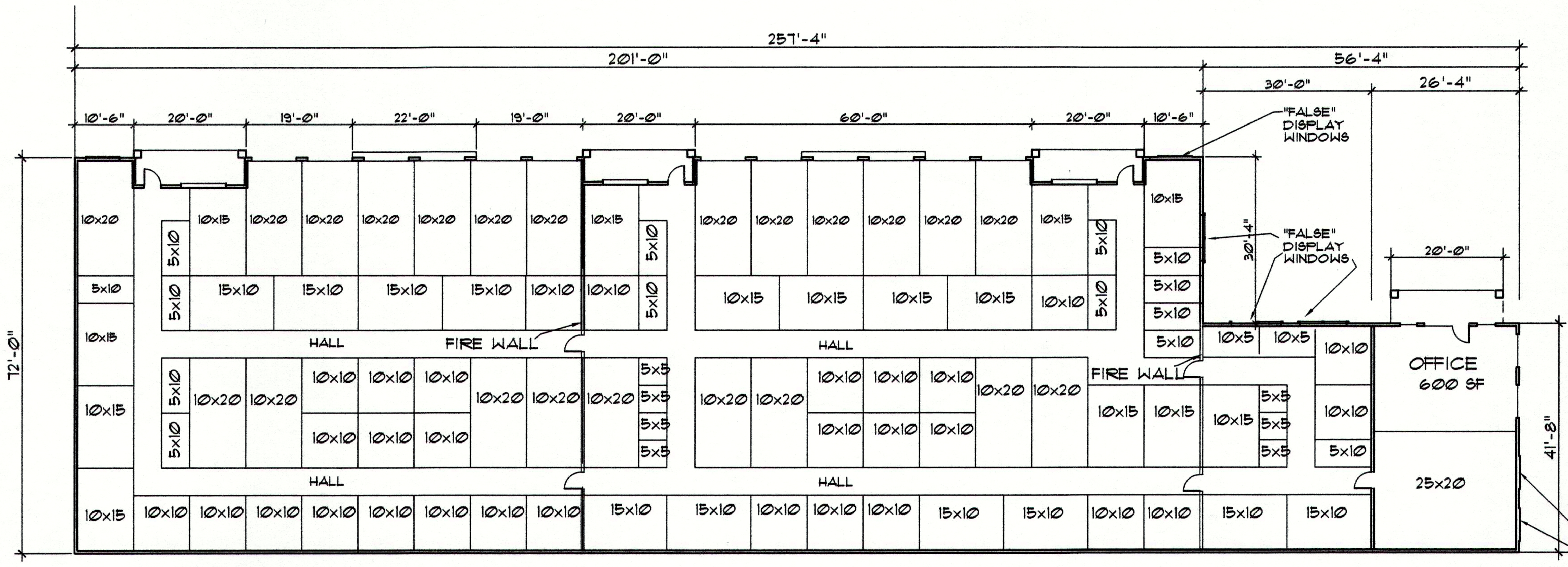
MARK BENSON
SANDY, OREGON

EROSION CONTROL NOTES AND DETAILS
SANDY SELF STORAGE
SANDY, OREGON

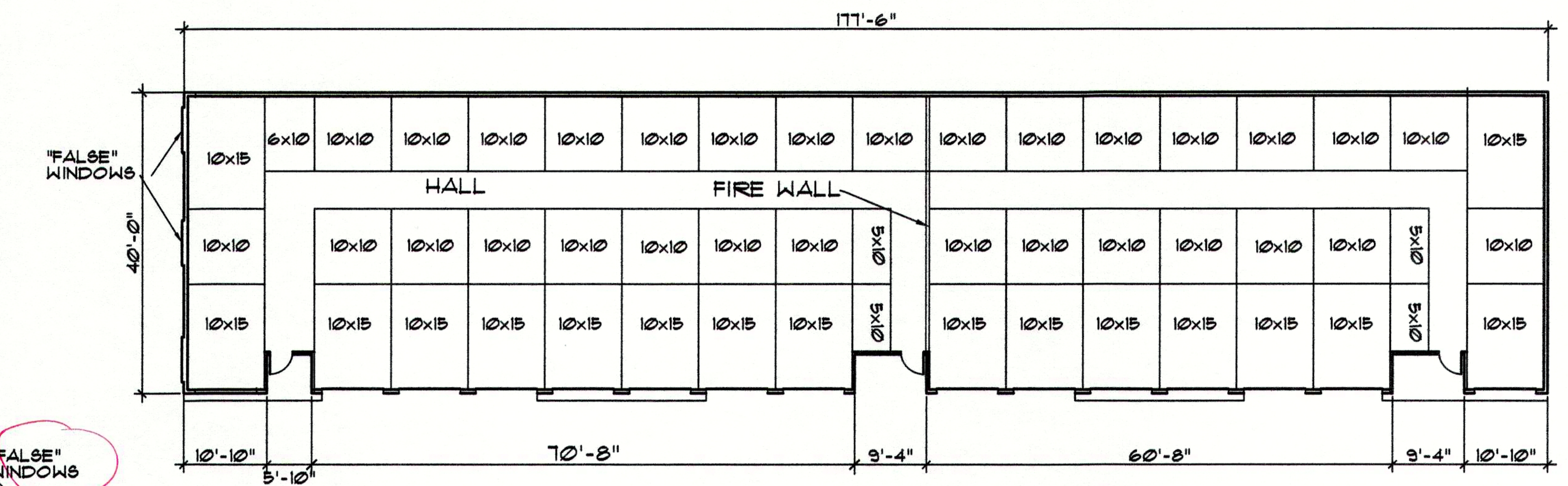
9/9



Separate variance request.
No - Int FD.

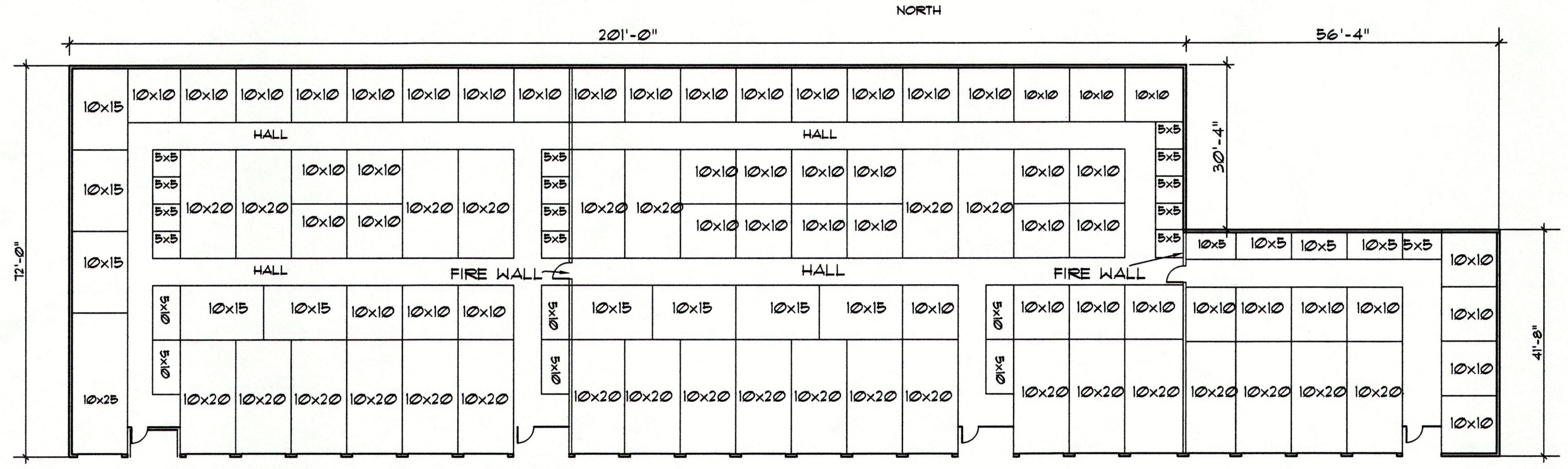
UPPER FLOOR PLAN BUILDING ONE
SCALE=1/16"=1'-0" 16,332 SF

NORTH



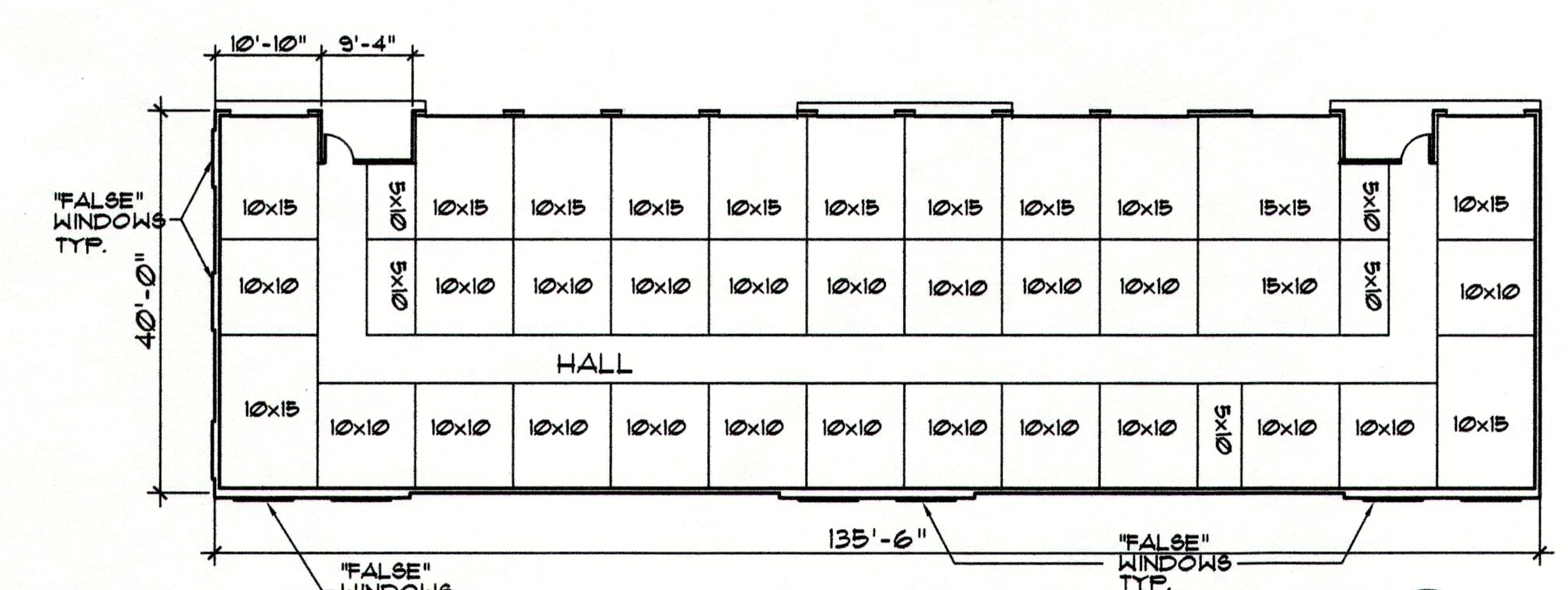
FLOOR PLAN BUILDING THREE
SCALE=1/16"=1'-0" 6,973 SF

NORTH



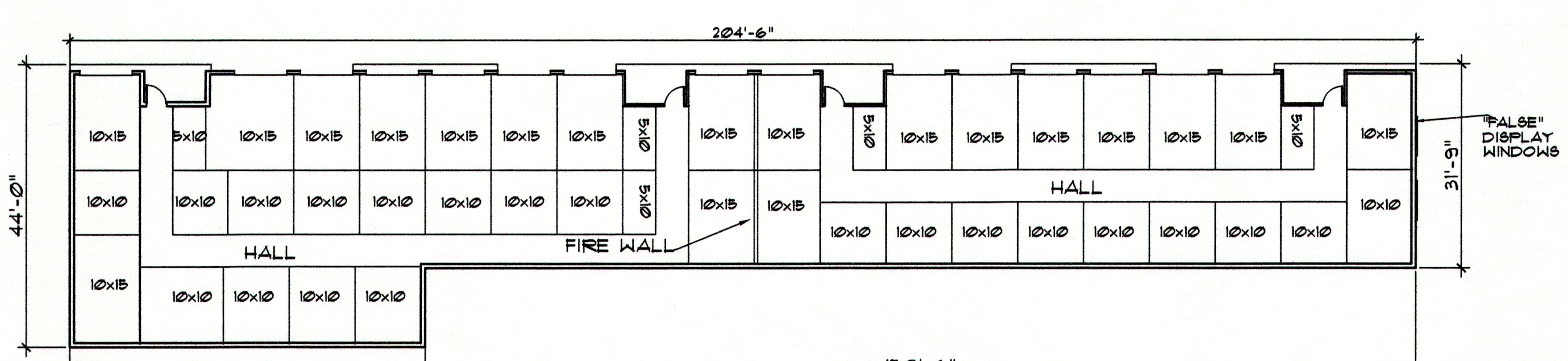
LOWER FLOOR PLAN BUILDING ONE
SCALE=1/16"=1'-0" 16,646 SF

NORTH



FLOOR PLAN BUILDING FOUR & FIVE
SCALE=1/16"=1'-0" 5,324 SF (BUILDING FIVE REVERSED)

NORTH



FLOOR PLAN BUILDING TWO
SCALE=1/16"=1'-0" 6,760 SF

NORTH

S:\Projects\2017 Projects\17-034_Sandy_Storage\F_Drawings\F2_Current\CAD\17-034_A2.dwg @ Plot Date: Oct 1 18 @ Time: 11:59 AM

AXIS DESIGN GROUP
ARCHITECTURE & ENGINEERING, INC.
WHITNEY & ASSOCIATES ARCHITECTS PC
52 NW 2ND STREET
GRESHAM, OR 97030
T: 503.667.4252 | F: 503.618.98

SANDY VAULT
CHAMPION WAY
SANDY, OR 97055

REVISIONS

No.	Description	Date

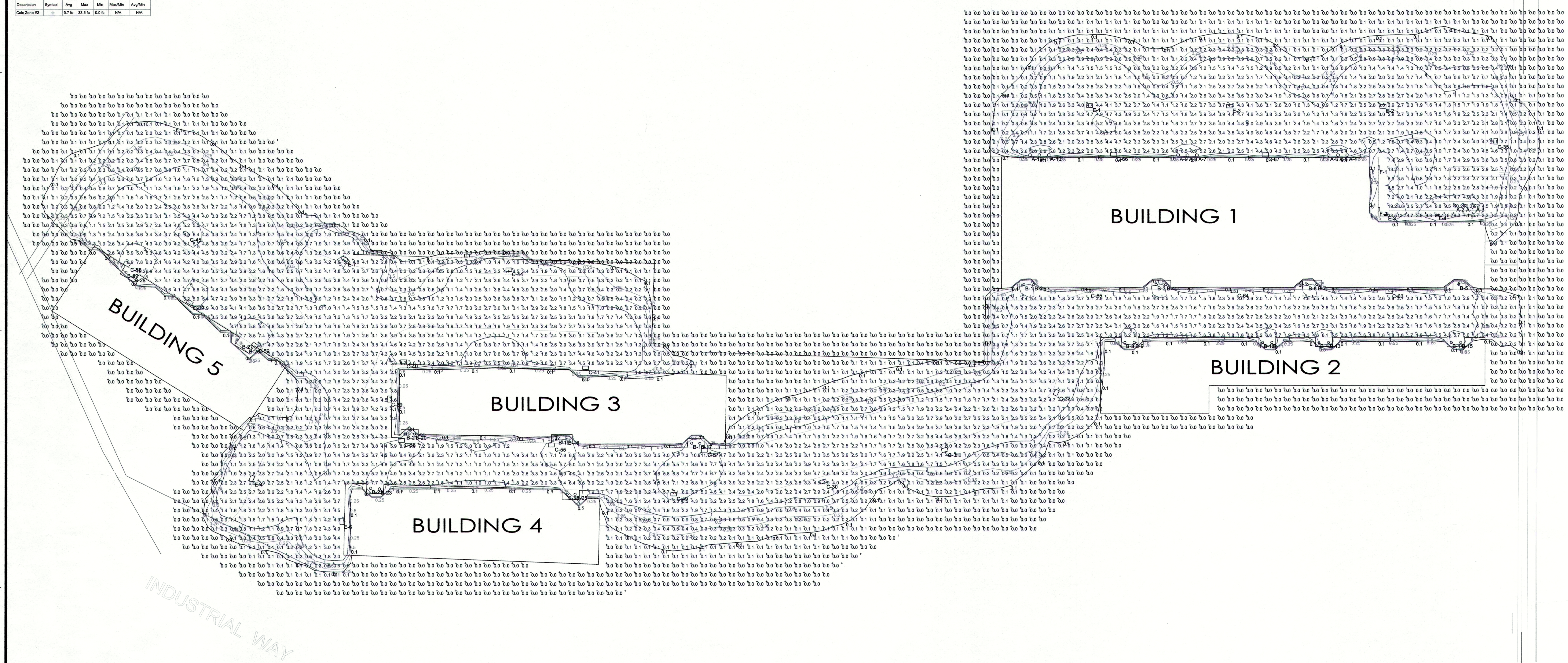
DRAWN BY: BW
CHECKED BY:
JOB NO: 17-034
DATE: 09/26/2018
ISSUED FOR: DESIGN REVIEW
SHEET TITLE
FLOOR PLANS
BLDG 1-5
SHEET NO.
A2

Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
○	A	12	WAC Lighting	PD-W2605N A101414		BXRE-30G1000-B-03	1	PD-W2605_A101414_IESNA2002.ies	802	1	16.8
○	B	29	EATON - HALO (FORMER COOPER LIGHTING)	SLD612840WH	HALO 6 INCH SURFACE LED DOWNLIGHT	LED 80CRI / 4000K CCT ABSOLUTE PHOTOMETRY IS BASED ON CALIBRATION FACTORS CREATED USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER WITH TEST DISTANCE OF 28.75 FEET	1	SLD612840WH.ies	1215	1	14.8
▭	C	21	Lithonia Lighting	DSX0 LED P3 40K T4M MVOLT HS	DSX0 LED P3 40K T4M MVOLT with houseside shield	LED	1	DSX0_LED_P3_40K_T4M_MVOLT_HS.ies	6417	1	71
▭	D	0	Lithonia Lighting	DSX0 LED P3 40K T5M MVOLT	DSX0 LED P3 40K T5M MVOLT	LED	1	DSX0_LED_P3_40K_T5M_MVOLT.ies	8770	1	71
▭	E	6	Lithonia Lighting	DSX0 LED P1 40K T5VS MVOLT HS	DSX0 LED P1 40K T5VS MVOLT with houseside shield	LED	1	DSX0_LED_P1_40K_T5VS_MVOLT_HS.ies	4210	1	38
▭	F	4	Lithonia Lighting	OLWX1 LED 40W 40K DDB	40W 4000K LED WALL PACK	LED	1	OLWX1_LED_40W_40K_DDB.ies	4000	1	38.82

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #2	+	0.7 fc	33.5 fc	0.0 fc	N/A	N/A



SANDY VAULT
SITE
SANDY, OREGON 97055

ISSUED FOR:	REV:	DATE:
PLAN CHECK 1		09.21.18

KEY PLAN

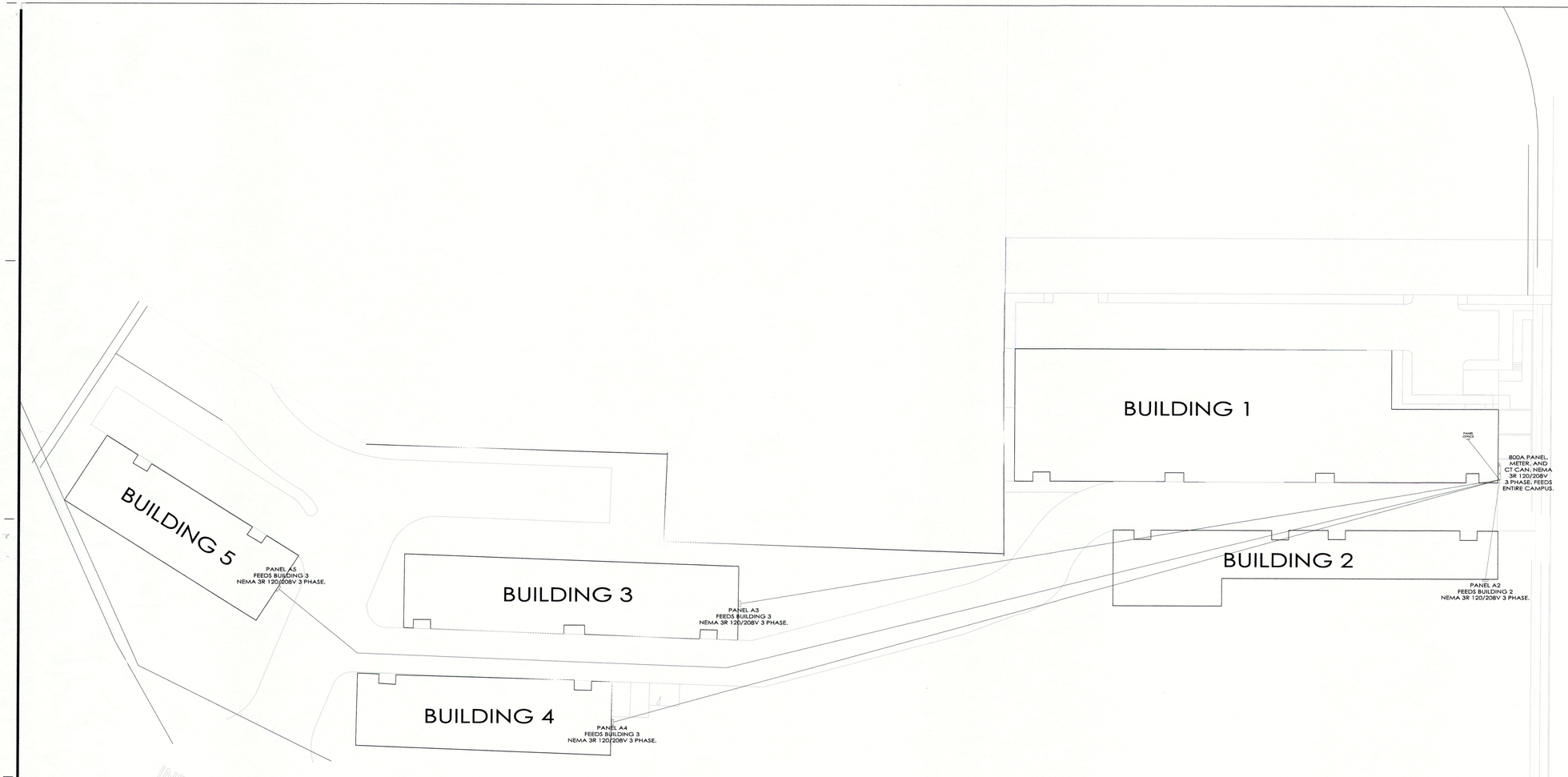
PROJECT NORTH

SITE PHOTOMETRIC PLAN

NTS
SCALE

14004
PROJECT NUMBER

E0.1
DRAWING NUMBER



TEAM ELECTRIC
9400 SE CLACKAMAS,
OR, 97015
Tel. : (503) 557-7180
Fax : (503) 557-8201
Scottc@teamelectricco.com

SANDY VAULT
SITE
SANDY, OREGON 97055

ISSUED FOR:	REV:	DATE:
PLAN CHECK 1		09.21.18

KEY PLAN

PROJECT NORTH

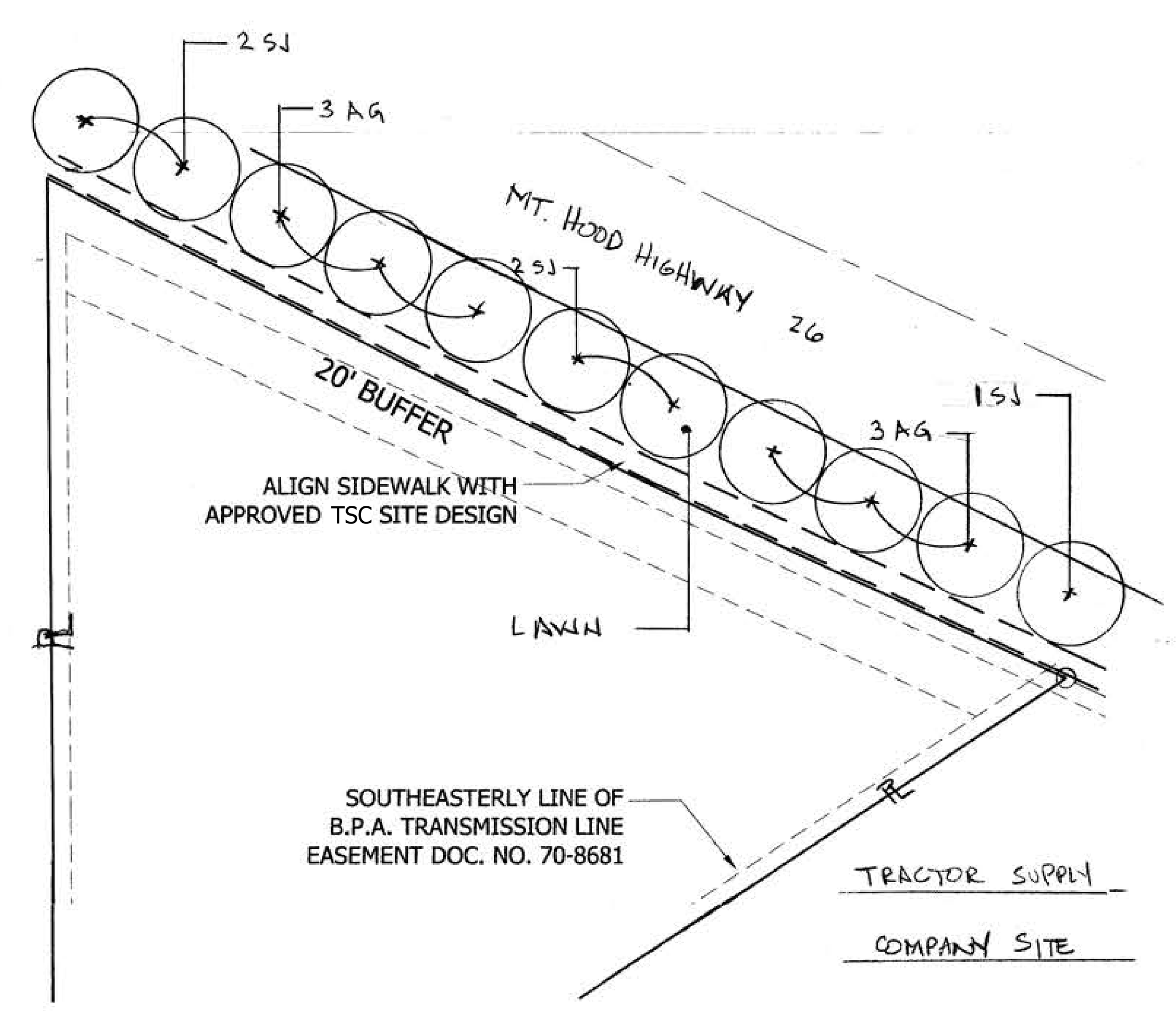
SITE POWER PLAN

NTS — SCALE

14004 — PROJECT NUMBER

E0.2 — DRAWING NUMBER

2011-021

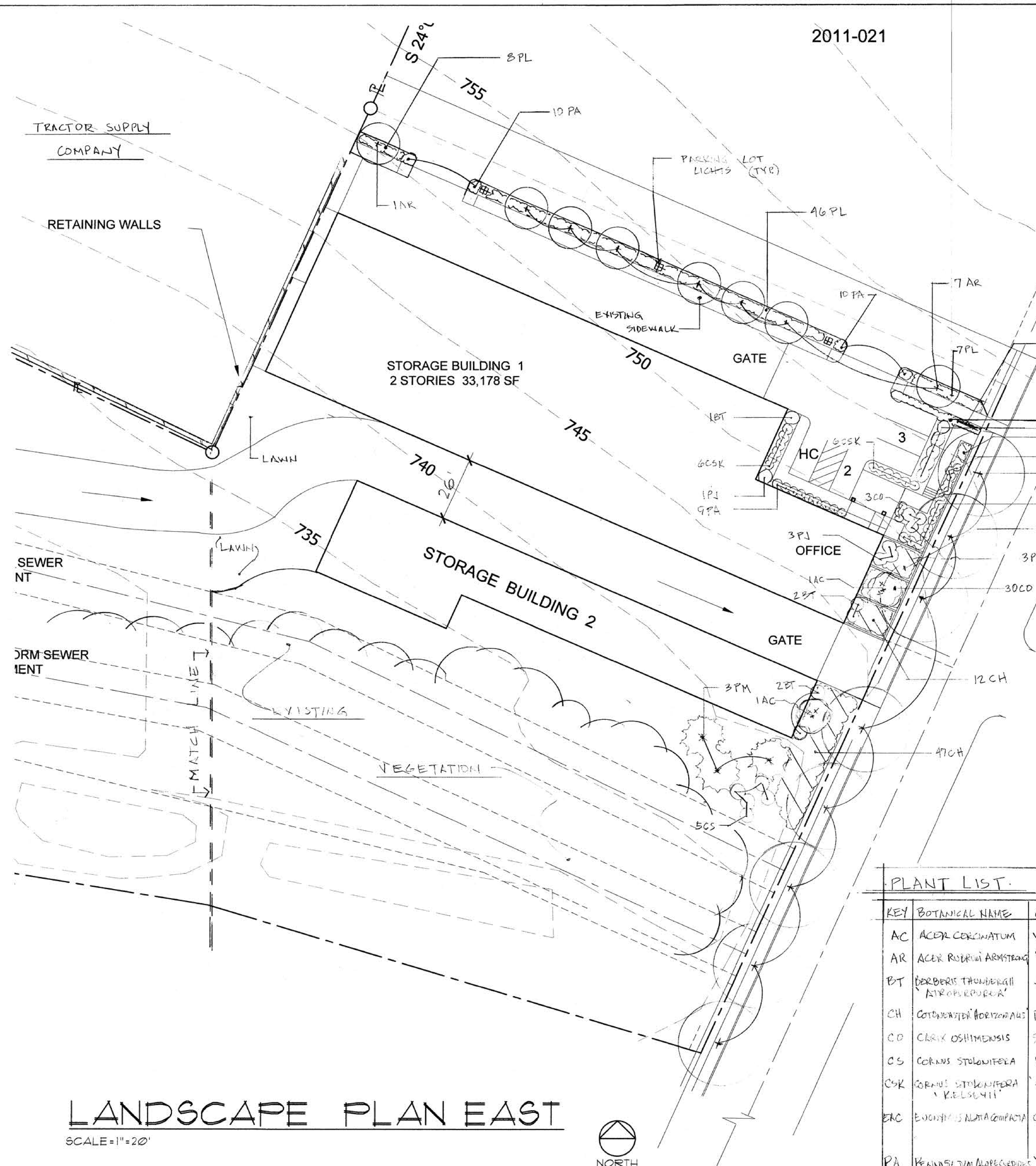


STREET TREES

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUAN.	MATURE HEIGHT
AG	ACER GINNALA	AMUR MAPLE	2½" cal	6	20'
SJ	STYRAX JAPONICA	JAPANESE SNOWBELL	2½" cal	5	25'

STREET TREE PLANTING AT HIGHWAY 26 FRONTAGE

SCALE 1" = 40'-0"



LANDSCAPE SPECIFICATIONS

PROVIDE SCHEDULE 40 2' I.D. SLEEVES AT ALL WALKS FOR IRRIG. PIPES

QUALITY: PROVIDE TREES, SHRUBS AND OTHER PLANTS COMPLYING WITH THE REQUIREMENTS AND RECOMEN-ATIONS OF ANSI: Z60J 'STANDARD FOR NURSERY STOCK' AND AS FURTHER SPECIFIED

SIZES: PROVIDE TREES AND SHRUBS OF THE SIZES SHOWN OR SPECIFIED. TREES AND SHRUBS OF LARGER SIZES MAY BE USED IF SIZES OF ROOTS OR BALLS ARE INCREASED PORPORTION..TELY.

TREES AND SHRUBS: PROVIDE FRESHLY DUG TREES AND SHRUBS. DO NOT USE TREES OR SHRUBS WHICH HAVE BEEN IN COLD STORAGE OR HEELED IN. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPES.

PREPARATION: INSTALLER MUST EXAMINE THE SUBGRADE, VERIFY ELEVATIONS, OBSERVE THE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. DO NOT PROCEED WITH THE WORK UNTIL SATISFACTORY CONDITIONS EXIST OR ANY UNSATISFACTORY CONDITIONS, IF ANY, HAVE BEEN CORRECTED.

PROCEED WITH AND COMPLETE WORK AS RAPIDLY AS PORTIONS OF THE SITE BECOME AVAILABLE WORKING WITHIN THE REASONABLE LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED.

PREPARATION OF PLANTING BEDS:
LOOSEN SUBGRADE OR PLANTING BED AREAS TO A MINIMUM DEPTH OF 6 INCHES USING A ROTOTILLER OR SIMILAR EQUIPMENT. REMOVE STONES OVER 1 1/2' IN ANY DIMENSION, AND STICKS AND STONES, RUUBBISH AND OTHER EXTRANEOUS MATTER.

SPREAD PLANTING SOIL MIXTURE TO THE MINIMUM DEPTH REQUIRED TO MEET LINES, GRADES AND ELEVATION SHOWN AFTER LIGHT ROLLING AND NATURAL SETTLEMENT. PLACE APPROXIMATELY 1/2 OF TOTAL AMOUNT OF PLANTING SOIL REQUIRED. WORK INTO TOP OF LOOSENED SUBGRADE TO CREAT LAYER THEN PLACE REMAINDER OF THE PLANTING SOIL.

PREPARATION OF PLANTING SOIL:
BEFORE MIXING, CLEAN TOPSOIL OF ROOTS, PLANTS, SODS, CLAY, LUMPS AND OTHER EXTRANEOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH.
DELAY MIXING OF FERTILIZER IF PLANTING WILL NOT FOLLOW PLACING OF PLANTING SOIL WITHIN SEVEN DAYS FOR PIT AND TRENCH TYPE BACKFILL, MIX PLANTING SOIL PRIOR TO BACKFILLING, STOCKPILE AT SITE FOR PLANTING BEDS, MIX PLANTING SOIL EITHER PRIOR TO PLANTING OR APPLY ON SURFACE OF TOPSOIL AND MIX THOROUGHLY BEFORE PLANTING.

SCHEDULE OF PLANTING AND SOIL MIXTURE REQUIREMENTS:

FOR PLANTING BEDS PROVIDE NOT LESS THAN THE FOLLOWING QUANTITIES OF SPE. IFIED MATERIALS.
50 LBS OF GYPSUM PER 1,000 SQUARE FEET.
10 LBS OF SUPERPHOSPHATE PER 1,000 SQUARE FEET.
30 LBS OF COMMERCIAL FERTILIZER TYPE 'B' PER 1,000 SQUARE FEET.
SAWDUST APPLY 2' DEPTH OVER ALL PLANTING

BONE MEAL:
FOR TREE AND SHRUB BACKFILL, PROVIDE SPECIFIED MATERIALS IN NOT LESS THAN THE FOLLOWING QUANTITIES:
ONE PART OF SAWDUST TO THREE PARTS OF TOPSOIL BY VOLUME

1/2 CUP MEAL FOR ONE GALLON CONTAINER PLANTS
1 CUP MEAL FOR 5 GALLON AND 1 1/2 GALLON CONTAINER PLANTS AND TREES,
1 1/2 CUPS BONE MEAL FOR 5 GALLON CONTAINER PLANTS AND TREES.

PLANT TABS: AS PER MANUFACTURERS DIRECTIONS

EXCAVATION FOR TREES AND SHRUBS:
EXCAVATE PITS, BEDS AND TRENCHES WITH VERTICAL SIDES WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUB-SOIL IN BOTTOM OF EXCAVATION FOR BALLED AND BURLAPPED TREES AND SHRUBS. MAKE EXCAVATIONS AT LEAST TWICE AS WIDE AS THE BALL DIAMETER AND EQUAL TO THE BALL DEPTH PLUS THE FOLLOWING ALLOWANCE FOR SETTING OF BALL ON A LAYER OF COMPACTED BACKFILL. ALLOW FOR 3' SETTING LAYER OF PLANTING SOIL MIXTURE. DISPOSE OF SUBSOIL REMOVED FROM LANDSCAPE EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL. FILL EXCAVATIONS FOR TREES AND SHRUBS WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.

PLANTING TREES AND SHRUBS:
SET BALLED AND BYRLAPPED STOCK ON LAYER OF COMPACTED PLANTING SOIL MIXTURE. PLUMB AND IN CENTER OF PIT OR TRENCH WITH TOP OF BALL AT 1 INCH ABOVE ELEVATION OF ADJACENT FINISH GRADE.

WHEN SET, PLACE ADDITIONAL BACKFILL AROUND BASE AND SIDES OF BALL TO ELIMINATE VOIDS AND AIR POCKETS. WHEN EXCAVATION IS APPROXIIMATELY 2/3 FULL WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE IS ABSORBED. WATER AGAIN AFTERR PLACING FINAL LAYER OF BACKFILL. REMOVE BURLAP FROM TOPS OF BALLS, RETAIN ON BOTTOMS.

SET CONTAINER GROWN STOCK AS SPECIFIED FOR BALLED AND BURLAP STOCK EXCEPT CUT CANS ON 2 SIDES WITH AN APPROVED CAN CUTTER. REMOVE BOTTOMS OF WOODED BOXES, AFTER PARTIAL BACK-FILLING SO AS NOT TO DAMAGE ROOT BALLS.

FOR SPRING PLANTING, PROVIDE ADDITIONAL BACKFILL BERM AROUND EDGE OF EXCAVATIONS TO FORM A SHALLOW SAUCER TO COLLECT WATER.

MULCH PITS, TRENCHES AND PLANTED AREAS. PROVIDE NOT LESS THAN A 2 INCH THICKNESS OF MULCH AND WORK INTO TOP OF BACKFILL AND FINISH LEVEL WITH ADJACENT FINISH GRADES.

PRUNE, THIN OUT AND SHAPE TREES AND SHRUBS IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE. PRUNE TREES TO RETAIN TO RETAIN REQUIRED HEIGHT AND SPREAD. DO NOT CUT TREE LEADERS AND REMOVE ONLY INJURED OR DEAD BRANCHES.
GUY AND STAKE TREES IMMEDIATELY AFTER PLANTING AS PER DETAIL.

BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTING
MAINTENANCE:
MAINTAIN TREES AND SHRUBS AND OTHER PLANTS UNTIL FINAL ACCEPTANCE BUT IN NO CASE LESS THAN SIXTY (60) DAYS AFTER PLANTING. MAINTAIN TREES AND SHRUBS AND OTHER PLANTS BY PRUNING, CULTIVATING AND WEEDING AS REQUIRED FOR HEALTHY GROWTH. RESTORE PLANTING SAUCERS.

TIGHTEN AND REPAIR STAKE AND GUY SUPPORTS AND RESET TREES AND SHRUBS TO PROPER GRADES OR VERTICAL POSITION AS REQUIRED.

SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE FROM INSECTS AND DISEASE.

DURING LANDSCAPE WORK STORE MATERIALS AND EQUIPMENT WHERE DIRECTED. KEEP PAVEMENT CLEAN AND WORK AREA IN AN ORDERLY MANNER.

PROTECT LANDSCAPE AREA AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS. OPERATIONS BY OTHER CONTRATORS AND TRADE AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR OR REPLACE DAMAGED LANDSCAPE WORK AS DIRECTED.

INSPECTIONS AND ACCEPTANCE:
WHEN THE LANDSCAPE WORK INCLUDING MAINTENANCE IS COMPLETED THE BUILDER OR GENERAL CONTRACTOR SHALL NOTIFY OWNER OF FURTHER REQUIREMENTS.

ADDITIONAL PLANTING NOTES:
- ALL SHRUBS SHALL BE A MINIMUM OF 24" IN HEIGHT FROM FINISH GRADE AT PLANTING.
- ALL PLANTINGS TO BE GUARANTEED TO BE IN GOOD CONDITION FOR ONE YEAR AFTER FINAL INSPECTION
- ALL PLANT MATERIAL TO BE NURSERY GROWN MATERIAL & MEET ANSI STANDARDS.

PLANT LIST

KEY	BOTANICAL NAME	COMMON NAME	SIZE	QUAN.	COMMENTS
AC	ACER CIRCINATUM	VINE MAPLE	6-8' HT	8	MULTI-TRUNKED
AR	ACER RUBRUM ARMSTRONG	'ARMSTRONG' RED MAPLE	2½" cal	8	SPECIMEN
BT	BERBERIS THUNBERGII 'ATROPURPUREA'	JAP. RED LEAF BARBERRY	3 GAL	19	WELL BRANCHED
CH	COTONEASTER HORIZONTALIS	ROCK COTONEASTER	1 GAL	461	PLANT 4' O.C.
CO	CAREX OSHIMENSIS	SEDGE 'EVERCOLOR EVEREST'	1 GAL	38	WELL BRANCHED
CS	CORNUS STOLONIFERA	RED TWIG DOGWOOD	3 GAL	17	WELL BRANCHED
CSK	CORNUS STOLONIFERA 'KELSEYII'	'KELSEY' RED TWIG DOGWOOD	1 GAL	20	WELL BRANCHED
EAC	EUONYMUS ALATA COMPACTA	COMPACT BURNING BUSH	3 GAL	11	WELL BRANCHED
PA	PENNISETUM ALOPECUROIDES 'HAMELN'	'HAMELN' FOUNTAIN GRASS	1 GAL	[illegible]	WELL BRANCHED
PJ	PIERIS JAPONICA 'MOUNTAIN FIRE'	MOUNTAIN FIRE' ANDROMEDA	3 GAL	7	WELL BRANCHED
PL	PRUNUS LAUROCERASUS 'OTTO LUYKEN'	'OTTO LUYKEN' LAUREL	2 GAL	61	WELL BRANCHED
PM	PSEUDOTSUGA MENZIESII	DOUGLAS FIR	6' HT	9	WELL BRANCHED
ZS	ZELKOVA SERRATA	'SAWLEAF' ZELKOVA	2½" cal	23	SPECIMEN

PREPARED BY: BRUCE BIERI, ASLA, LANDSCAPE ARCHITECT, 1029 SW PORTER ST., PORTLAND, OR 97225, (503) 203-1844

AXIS DESIGNGROUP ARCHITECTURE & ENGINEERING, INC.

WHITNEY & ASSOCIATES ARCHITECTS PC

52 NW 2ND STREET
GRESHAM, OR 97030
T: 503.667.4252 | F: 503.618.9842

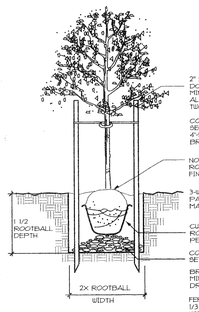
REGISTERED LANDSCAPE ARCHITECT 252 BRUCE R. BIERI OREGON

SANDY STORAGE
SANDY, OREGON

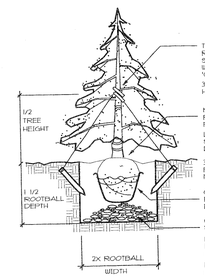
REVISIONS

No.	Description	Date
1	ST. TREES & SIDEWALK	12-7-18

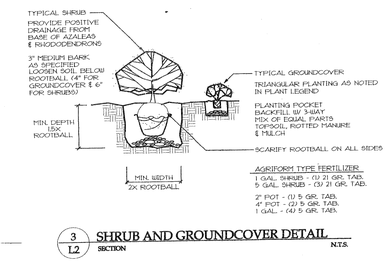
DRAWN BY: BB
CHECKED BY: BB
JOB NO: 17-034
DATE: 9/12/18
ISSUED FOR: DESIGN REVIEW
SHEET TITLE: LANDSCAPE PLAN EAST
SHEET NO. L1



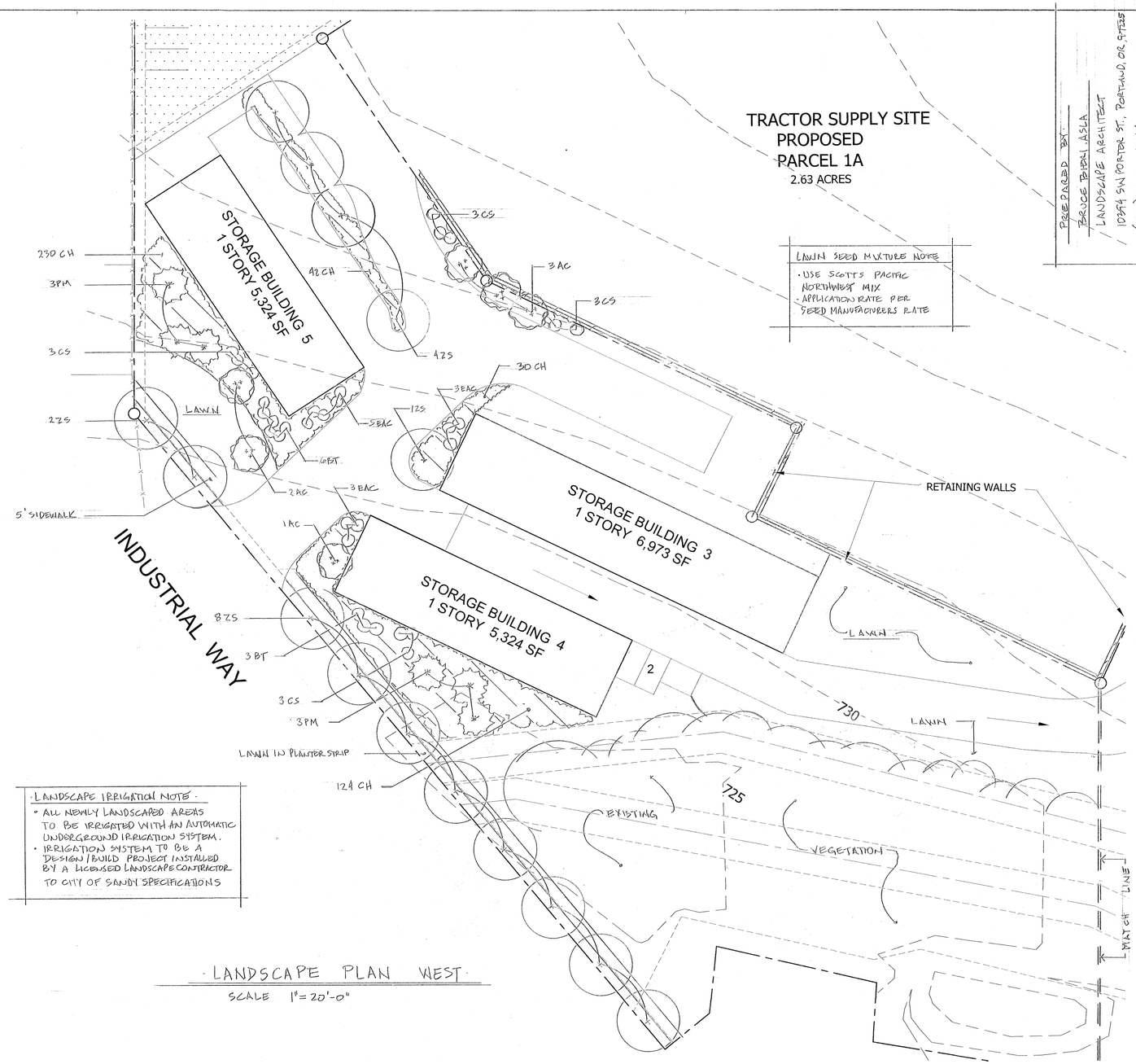
1 / L2 DECIDUOUS TREE PLANTING DETAIL
SECTION N.T.S.



2 / L2 EVERGREEN TREE PLANTING DETAIL
SECTION N.T.S.



3 / L2 SHRUB AND GROUNDCOVER DETAIL
SECTION N.T.S.



LAWN SEED MIXTURE NOTE
- USE SCOTTS PACIFIC NORTHWEST MIX
- APPLICATION RATE PER SEED MANUFACTURERS RATE

LANDSCAPE IRRIGATION NOTE
- ALL NEWLY LANDSCAPED AREAS TO BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM.
- IRRIGATION SYSTEM TO BE A DESIGN/BUILD PROJECT INSTALLED BY A LICENSED LANDSCAPE CONTRACTOR TO CITY OF SANDY SPECIFICATIONS

LANDSCAPE PLAN WEST
SCALE 1" = 20'-0"

AXIS DESIGNGROUP
ARCHITECTURE & ENGINEERING, INC.
WHITNEY & ASSOCIATES ARCHITECTS PC
52 NW 2ND STREET
GRESHAM, OR 97030
T: 503.667.4252 | F: 503.618.9842
REGISTERED LANDSCAPE ARCHITECT 252 BRUCE R. BIERI OREGON

SANDY STORAGE
SANDY, OREGON

REVISIONS

No.	Description	Date

DRAWN BY: BB
CHECKED BY: BB
JOB NO: 17-034
DATE: 9/12/18
ISSUED FOR: DESIGN REVIEW
SHEET TITLE: LANDSCAPE PLAN
SHEET NO. L2

FDG
Firwood Design Group, LLC
SURVEYING • ENGINEERING • PLANNING

EXHIBIT D

September 17, 2018

City of Sandy
39250 Pioneer Blvd.
Sandy, OR 97055

RE: Sandy Vault Trip Generation Letter

To whom it may concern,

This letter provides an evaluation of the anticipated vehicular trips generated by the proposed use as a self-storage facility. The existing lot is vacant and the new self-storage facility will have five new buildings. The site will have three access points, two at Champion Way and one at Industrial Way. With the proposed gated access for the storage facility the traffic pattern will be that the lower level of building 1, building 2,3 and 4 will all be an ingress access via Industrial Way and an egress only onto Champion Way at a new proposed exit only driveway. Building 5 will be accessed only by a new driveway at Industrial Way. The first floor of building 1 will be accessed from the existing driveway at Champion Way.

To evaluate the estimated trips the Institute of Transportation Engineers (ITE) Trip Generation manual 7th Edition, Volume 2 of 3 was referenced. In this manual under the Mini-Warehouse land use (category # 151), the trips generated are published based on gross floor area for peak weekday A.M. and P.M. hours.

The total AM peak trips for the proposed use is 16 and the total PM trips is 18, the effect of the trip impacts are spread to different streets depending on the ingress/egress and building visit.

All trip values are rounded up or down to the nearest tenth to reflect a whole number.
Below is a table that summarizes the building square footage, associated trips and access streets.

Building	Square Footage	Trips-AM	Trips-PM	Street Ingress	Street Egress
1 - Upper	16589	5	5	Champion Way	Champion Way
1 - Lower	16589	5	5	Industrial Way	Champion Way
2	6760	2	2	Industrial Way	Champion Way
3	6973	2	2	Industrial Way	Champion Way
4	5324	1	2	Industrial Way	Champion Way
5	5324	1	2	Industrial Way	Industrial Way
Totals	57589	16	18		

The increased trips is a minor impact in relation to the existing adjacent uses including a gas station, coffee stand, church, movie theater, etc.

The proposed exit only driveway location onto Champion Way does not meet the required 150ft driveway separation, this is due to site constraints. To accommodate the required 150ft from existing distance drive access for the AM/PM driveway to a new drive would result in the disturbance of the existing stormwater detention/ water quality system and wetland areas. The proposed driveway location is well suited as it aligns with the existing

359 E. Historic Columbia River Highway, Troutdale, Oregon 97060 Tel: (503) 668-3737

driveway across Champion Way and the access is proposed to be an exit only limiting the impact to 50% of the trips.

For the proposed lower driveway the total peak AM hours for vehicles exiting onto Champion Way is 5, the total peak PM hours for vehicles exiting onto Champion Way is 5.5. The minimal predicted trip volume should be considered as a supporting aspect of allowing the driveway location as proposed. A design modification is requested to allow the driveway location as proposed.

Best Regards,

Kelli A. Grover, P.E.
Project Engineer

359 E. Historic Columbia River Highway, Troutdale, Oregon 97060 Tel: (503) 668-3737

EXHIBIT E

TERAGAN & ASSOCIATES, INC.
ARBORICULTURAL CONSULTANTS

December 11, 2018

Jonathan Konkol, AICP
Axis Design Group Architecture & Engineering, Inc.
11104 SE Stark St.
Portland, OR 97216

FOR: Mark Benson
Sandy Vault, LLC
PO Box 241057
Honolulu, HI 96824

RE: Sandy Storage Site Impacts on Trees

Summary

There should be no impact to the trees located in the storm sewer easement on the south side of the Sandy Storage Site from the development and construction of the storage units on the site.

Assignment

The purpose of this report is to evaluate the level of impact that the construction of storage units may have on trees and vegetation growing in a storm and sewer easement.

Assumptions and Limiting Conditions

Please see Appendix #2 for a detailed list of Assumptions and Limiting conditions. All statements regarding the limits of construction are based on the line staked out on the weekend of October 6, 2018 by one of the owners or by the request of one of the owners.

Background

A new set of five storage buildings are to be built south of the proposed Tractor Supply site and the existing Arco Gas Station. The development will be backing up to a storm sewer easement where native vegetation has grown in. The City of Sandy has request a review of the placement of improvements to ensure that they will not adversely impact the long term health and stability of the trees and vegetation that exists in the easement.

Observations

Analysis – In order to determine if the planned improvements will impact the trees and the vegetation, I requested of the owners to stake the limits of construction which was done the weekend of October 6, 2018.

Teragan & Associates, Inc.
3145 Westview Circle • Lake Oswego, OR 97034
• (503) 697-1975 • Fax (503) 697-1976 • E-mail : info@teragan.com

Discussion

I inspected the line of stakes on October 11, 2018 indicating the limits of construction and found that the line was mostly outside of the tree crowns and vegetation line of shrubs that are growing in the storm sewer easement. There were a couple of trees whose drip lines extended beyond the stake line into the development area on the east end behind (south) of what will be storage building 2. The amount of encroachment into the area below the dripline of these two trees is no more than 4 feet for an alder and 10 feet for the cottonwood next to it. The cottonwood is a leaning tree with a self-corrected top that is stable. The fact that the tree is leaning to the north toward the development is exaggerating the spread of the tree's crown. Neither tree is likely to have very substantial roots beyond the limits of construction. There should be no long-term impact to either tree's health or stability long term as long as construction activity is not allowed to extend beyond the limits of construction as indicated by the staked line that I inspected October 11, 2018.

Recommendations for Tree Protection

Place tree protection fencing along the north side of the storm sewer easement to protect the trees growing within the easement.

Conclusion

There should be no long-term impact to the trees growing in the storm sewer easement on the south side of the site if no construction activity is allowed beyond the staked line indicating the construction limits.

Please call if you have any questions or concerns regarding this report.

Sincerely,

Terrence P. Flanagan

Terrence P. Flanagan
ISA Board Certified Master Arborist, #PN-0120 BMTL
ISA Tree Risk Assessment Qualified
Member, American Society of Consulting Arborists

Enclosures

Appendix 1: Certification of Performance
Appendix 2: Assumptions and Limitations Conditions

Teragan & Associates, Inc.
3145 Westview Circle • Lake Oswego, OR 97034
• (503) 697-1975 • Fax (503) 697-1976 • E-mail : info@teragan.com

Appendix 1
Certification of Performance

I, Terrence P. Flanagan, Certify:

- That a representative of Teragan & Associates, Inc., has inspected the tree(s) and/or the property referred to in this report. The extent of the evaluation is stated in the attached report.
- That Teragan & Associates, Inc. has no current or prospective interest in the vegetation of the property that is the subject of this report, and Teragan & Associates, Inc. has no personal interest or bias with respect to the parties involved.
- That Teragan & Associates, Inc.'s compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, or upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.
- That the analysis, opinions, and conclusions that were developed as part of this report have been prepared according to commonly accepted arboricultural practices.
- That a Board-Certified Master Arborist has overseen the gathering of data.

Appendix 2
Assumptions and Limiting Conditions

1. Any legal description provided to the consultant is assumed to be correct. Teragan and Associates, Inc. checked the species identification in the field.
2. It is assumed that this property is not in violation of any codes, statutes, ordinances, or other governmental regulations.
3. The consultant is not responsible for information gathered from others involved in various activities pertaining to this project. Care has been taken to obtain information from reliable sources.
4. Loss or alteration of any part of this delivered report invalidates the entire report.
5. Drawings and information contained in this report may not be to scale and are intended to be used as display points of reference only.
6. The consultants' role is only to make recommendations. Inaction on the part of those receiving the report is not the responsibility of the consultant.
7. This report is to certify the trees that are on site, their condition, outlining the tree protection steps to protect the trees to be retained on site. This report is written to address the City of Sandy, OR for tree protection on properties that are to be developed for residential or commercial use.

EXHIBIT F

Geotechnical Engineering Report

Proposed ARCO AM/PM
SW Corner of Highway 26 and Champion Way
Sandy, Oregon

December 6, 2011
Barghausen Job No. 14952
Terracon Project No. 82115034

Prepared for:
Champion 26 LLC
c/o Barghausen Consulting Engineers, Inc.
Kent, Washington

Prepared by:
Terracon Consultants, Inc.
Portland, Oregon

December 6, 2011

Terracon

Champion 26 LLC
c/o Barghausen Consulting Engineers, Inc.
18215 - 72nd Ave South
Kent, Washington 98032

Attn: Mr. Eric Ramsing, AIA

Re: Geotechnical Engineering Report
Proposed ARCO AM/PM
SW Corner of Highway 26 and Champion Way
Sandy, Oregon
Barghausen Job No. 14952
Terracon Project Number: 82115034

Dear Mr. Ramsing:

Terracon Consultants, Inc. (Terracon) has completed the geotechnical engineering services for the above referenced project. These services were performed in general accordance with our revised proposal number P82110169R dated November 17, 2011 and authorized per our signed Agreement for Services with Champion 26 LLC dated November 18, 2011.

This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork and design and construction of foundations, floor slabs, and pavements.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

REGISTERED PROFESSIONAL ENGINEER 74438PE OREGON JAN. 11, 2011 MICHAEL A. KATH

EXPIRES: 01-11-13

Michael A. Kath, P.E.
Project Engineer

FOR Kristopher T. Hauck, P.E.
Office Manager

Terracon Consultants, Inc. 4103 SE International Way, Suite 300 Portland, Oregon 97222
P [503] 659 3281 F [503] 659 1287 terracon.com

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EXECUTIVE SUMMARY

A geotechnical investigation including physical reconnaissance and subsurface exploration was performed at the subject property. Based on our recent correspondence, the proposed development includes a new convenience store building, covered fuel islands, underground storage tanks, and pavement surfaces in access and parking areas. Based on our geotechnical evaluation and review of proposed development plans, the primary geotechnical considerations associated with the proposed development are summarized below.

- **Shallow Foundations:** Based on the subsurface conditions, the proposed convenience store building and canopy structure may be supported on conventional shallow continuous wall and column spread foundations. Shallow foundations should bear on a minimum of 1 foot of select fill to limit total static and differential settlement.

- **Settlement from Site Grading:** Based on our analyses and the proposed grading at the site, we estimate that the surface of the fill planned could settle on the order of 1 to 2 inches across the plan area. Therefore, we recommend that final pavements and surface coverings be delayed in placement until the majority of the settlement is complete. We recommend conducting periodic settlement monitoring of the fill surface for approximately 3 to 4 months prior to constructing site pavements. We recommend that Terracon be retained to review survey measurements and settlement monitoring to confirm estimated settlement and duration.

- **Groundwater:** Groundwater was observed in several boring locations at the time of drilling. The depth to groundwater varied from approximately 18 feet in proposed development areas to approximately 3 feet in the western lowland portion of the site. Therefore, due to the relatively shallow groundwater and the planned development with underground storage tanks and utilities, we expect dewatering (to varying degrees) to be necessary during construction. The necessary level of dewatering will vary significantly depending on the type of construction and time of year the construction takes place. Underground structures should be evaluated for potentially buoyancy effects due to presence of groundwater.

- **Moisture-sensitive Soils:** Near surface soils in proposed grading areas consist of fine-grained residual soils derived from decomposed gravels. Unstable subgrade conditions could develop during general construction operations, particularly if the soils are wetted and/or subjected to repetitive construction traffic. The contractor should be prepared to perform stabilization measures on disturbed subgrades.

- **Fill Construction Materials:** Native fine-grained soils generated from site excavations are not considered suitable as structural fill placed in the building pad, proposed embankments, or fill slopes. Structural fill placed in these areas should consist of imported select granular backfill or crushed aggregate as described in the **Earthwork** section of this report.

- **Construction:** Close monitoring of the construction operations discussed herein will be critical in achieving the design subgrade support for foundations and pavements surfaces. Therefore, we recommend that Terracon be retained to monitor this portion of the work.

This summary should be used in conjunction with the entire report for design purposes. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

GEOTECHNICAL ENGINEERING REPORT
PROPOSED ARCO AM/PM
SANDY, OREGON

Terracon Project No. 82115034
December 6, 2011

1.0 INTRODUCTION

This geotechnical engineering report has been completed for the proposed ARCO AM/PM to be located southwest of the intersection of Highway 26 and Champion Way in Sandy, Oregon. Five (5) borings, designated B-1 through B-5 were completed to a maximum depth of 20 feet below the existing ground surface (bgs) within the subject property and proposed development areas. Logs of the borings along with location diagrams for proposed development plans are included in Appendix A of this report.

The purpose of our evaluation is to provide geotechnical recommendations and considerations for the following with respect to the proposed development:

- subsurface soil conditions
- earthwork
- seismic considerations
- groundwater conditions
- foundation design and construction
- pavement design and construction

2.0 PROJECT INFORMATION

The site is currently undeveloped and consists of an open field. We understand the proposed development plans include a new AM/PM convenience store, covered fuel islands, underground storage tanks, and pavement surfaces. As indicated on the attached site and exploration map, the proposed development area is located in the northeast corner of the subject property near the intersection of Highway 26 and Champion Way.

2.1 Project Description

ITEM	DESCRIPTION
Site layout	See Exhibit A-1: Site and Exploration Plan.
Structures	AM/PM convenience store (approximate footprint estimated at 3,300 SF), fuel islands and steel canopy structure.
Maximum loads	Canopy columns: 4 kips Dead Loads and 16 kips Live Loads.
Maximum allowable settlement	**Total Static:** 1-inch (assumed) **Differential:** ¾-inch in 40 feet (assumed)

ITEM	DESCRIPTION
Grading	The northeast corner of the proposed development area is proposed to be cut approximately 5 feet and the SW corner filled up to approximately 10 feet. The west and south edges of the fill are planned to be sloped down to existing grades at an approximately 3H:1V slope.
Cut and fill slopes	As indicated on the attached Site and Exploration Plan, approximately See Exhibit A-1: Site and Exploration Plan.

2.2 Site Location and Description

ITEM	DESCRIPTION
Location	The site is located at the SW corner of Highway 26 and Champion Way, Sandy, Oregon.
Existing Site Features	The site is currently undeveloped.
Current ground cover	The site is vegetated with grasses.
Existing topography	The site slopes gently down to the west on the order of 4 percent and moderately down to the south on the order of 14 percent.

3.0 SUBSURFACE CONDITIONS

3.1 Geologic Publications Review

The *Geologic map of the Damascus and Sandy Quadrangles: Oregon Department of Geology and Mineral Industries* (Bulletin 99, 1979) identifies near surface soils at the site as Pliocene-Pleistocene Gravels. These deposits are generally described as mudflows and gravels decomposed by extensive weathering into mottled reddish-brown clayey soil. Soil conditions encountered in the boring locations were observed to be consistent with the geologic map description. Based on the geologic mapping, the depth to bedrock is anticipated to be in the range of 400 feet or more below the ground surface.

3.1.1 Geologic Hazards

We reviewed the Relative Earthquake-Hazard Map for the Sandy Urban Area (IMS-7) published by the Oregon Department of Geology and Mineral Industries (DOGAMI) in 1999. The *publication* indicates the site is mapped as:

Relative Hazard	Category	Scale	Explanation of Category
Ground Motion Amplification	1	1 to 3, with 3 being greatest	Category 3 corresponds to areas with amplification greater than 1.5.
Liquefaction	0	0 to 3, with 3 being greatest	Category 3 corresponds to areas with a thickness of liquefiable material greater than 20 ft. where the water table is 15-30 ft. deep or areas with liquefiable material where the water table is less than 15 ft. deep.
Slope Instability	1	0 to 3, with 3 being greatest	Category 0 corresponds to areas with slope instability only in unusual localized conditions.
Overall Earthquake Hazard	D	A to D, with A being the greatest hazard	The degree of relative hazard was based on the factors of ground motion amplification, liquefaction, and slope instability.

3.2 Soil Conservation Review

The *Soil Survey of Clackamas County Area, Oregon,* Soil Conservation Service (SCS), U.S. Department of Agriculture, 1985 mapped surface soils in the proposed development area as Cazadero Silty Clay, 0 to 12 percent slopes. This soil has the following characteristics according to the SCS:

Soil Type	USCS Classification	Liquid Limits	Plasticity Index	Corrosion of Concrete	Corrosion of Steel	pH	Hydrologic Group
Cazadero Silty Clay	ML(<21" bgs) MH (>21" bgs)	35 - 40 50 - 65	10 - 15 15 - 25	Moderate	Moderate	5.1 to 6.0	C

3.3 Typical Profile

Based on the results of the borings, subsurface conditions on the project site can be generalized as follows:

Generalized Subsurface Profile for Borings B-1 to B-5

Stratum	Approximate Depth to Bottom of Stratum (feet)	Material Encountered	Consistency/Density
Stratum 1 (Topsoil)	8 to 10 inches	Organic topsoil and root zone, brown to dark brown, moist	Variable
Stratum 2 (Silt)	2 to 4 feet	Silt, brown-red color, moist to wet, low plasticity	Stiff to medium stiff

Stratum	Approximate Depth to Bottom of Stratum (feet)	Material Encountered	Consistency/Density
Stratum 3[1] (Completely weathered gravel to gravel)	Undetermined: borings terminated within this stratum at planned depths of 21½ feet	Elastic silt near the top of the stratum to silty gravel towards the bottom, brown-red weathered gravel structure, moist to wet, high to low plasticity fines	Hard to medium stiff or medium dense to very dense

1. This stratum consists of completely weathered gravel to weathered gravel that once disturbed, is remolded to a high to medium plasticity silt. With greater depth, the soils appear to be less weathered and in some borings consisted of gravel soils.

Conditions encountered at each boring location are indicated on the individual boring logs found in Appendix A of this report. Stratification boundaries on the boring logs represent the approximate location of changes in soil types; in-situ, the transition between materials may be gradual. A discussion of field sampling procedures is included in Appendix A and laboratory testing procedures and test results are presented in Appendix B.

3.4 Groundwater

Groundwater and wet soil conditions were observed in several boring locations at the time of drilling. The depth to groundwater varied from approximately 18 feet in proposed development areas to approximately 3 feet in the western lowland portion of the site. The borings were only left open for a maximum of a few hours. Due to the fine-grained nature of the soils encountered, water penetration into the borehole can be prevented by the augers and sometimes even the disturbed or smeared soil from the augers.

Groundwater conditions, that include quantity and duration of flow, as well as soil moisture conditions, should be expected to vary with changes in season, precipitation, site utilization, and other on-and off-site factors not evident at the time the explorations were completed. Therefore, groundwater levels encountered during construction or at other times may be higher or lower than the levels indicated on the boring logs. The possibility of groundwater level fluctuations should be considered when developing the design and construction plans for the project.

4.0 RECOMMENDATIONS FOR DESIGN AND CONSTRUCTION

4.1 Geotechnical Considerations

The subsurface conditions at the site were evaluated to develop geotechnical related design and construction recommendations for site development. In our opinion, the site is feasible for the proposed development. However, based on the subsurface conditions and our

understanding of the proposed construction, the primary geotechnical considerations associated with the proposed development are summarized below.

- **Shallow Foundations:** Based on the subsurface conditions, the proposed convenience store building and canopy structure may be supported on conventional shallow continuous wall and column spread foundations. Shallow foundations should bear on a minimum of 1 foot of select fill to limit total static and differential settlement.

- **Settlement from Site Grading:** Based on our analyses and the proposed grading at the site, we estimate that the surface of the fill planned could settle on the order of 1 to 2 inches across the plan area. Therefore, we recommend that final pavements and surface coverings be delayed in placement until the majority of the settlement is complete. We recommend conducting periodic settlement monitoring of the fill surface for approximately 3 to 4 months prior to constructing site pavements. We recommend that Terracon be retained to review survey measurements and settlement monitoring to confirm estimated settlement and duration.

- **Groundwater:** Groundwater was observed in several boring locations at the time of drilling. The depth to groundwater varied from approximately 18 feet in proposed development areas to approximately 3 feet in the western lowland portion of the site. Therefore, due to the relatively shallow groundwater and the planned development with underground storage tanks and utilities, we expect dewatering (to varying degrees) to be necessary during construction. The necessary level of dewatering will vary significantly depending on the type of construction and time of year the construction takes place. Underground structures should be evaluated for potentially buoyancy effects due to presence of groundwater.

- **Moisture-sensitive Soils:** Near surface soils in proposed grading areas consist of fine-grained residual soils derived from decomposed gravels. Unstable subgrade conditions could develop during general construction operations, particularly if the soils are wetted and/or subjected to repetitive construction traffic. The contractor should be prepared to perform stabilization measures on disturbed subgrades.

- **Fill Construction Materials:** Native fine-grained soils generated from site excavations are not considered suitable as structural fill placed in the building pad, embankments, or fill slopes. Structural fill placed in these areas should consist of imported select granular backfill or crushed aggregate as described in the **Earthwork** section of this report.

- **Construction:** Close monitoring of the construction operations discussed herein will be critical in achieving the design subgrade support for foundations and pavements surfaces. Therefore, we recommend that Terracon be retained to monitor this portion of the work.

4.2 Seismic Considerations

DESCRIPTION	VALUE
2009 International Building Code Site Classification (IBC) [1]	D[2]
Site Latitude	N 45.405501
Site Longitude	W 122.29506
S_s Spectral Acceleration for a Short Period	0.749
S_1 Spectral Acceleration for a 1-Second Period	0.265
F_a site coefficient	1.201
F_v site coefficient	1.870

1. In general accordance with the *2009 International Building Code*, Table 1613.5.2. IBC Site Class is based on the average characteristics of the upper 100 feet of the subsurface profile.
2. The 2009 International Building Code (IBC) requires a site soil profile determination extending to a depth of 100 feet for seismic site classification. The current scope does not include the required 100 foot soil profile determination. Borings extended to a maximum depth of about 21½ feet, and this seismic site class definition considers that stiff and/or medium dense soil as noted on the published geologic mapping continues below the maximum depth of the subsurface exploration. Additional exploration to deeper depths would be required to confirm the conditions below the current depth of exploration. Therefore, we would interpret that site soils encountered at the site are representative of the soils to a depth of 100 feet.

Earthquake-Induced Soil Liquefaction

Liquefaction is the phenomenon wherein soil strength is dramatically reduced when subjected to vibration or shaking. Liquefaction generally occurs in saturated, loose sand deposits. Based on the site geology and the subsurface conditions encountered in our explorations, the risks associated with seismic liquefaction are low, in our opinion.

4.3 Earthwork

The following sections present recommendations for site preparation, excavation, subgrade preparation, placement and compaction of structural fill, and grading. The recommendations presented for design and construction of earth supported elements are contingent upon following the recommendations outlined in this section.

4.3.1 Site Preparation

Site preparation and initial construction activities should be planned to reduce disturbance to the existing ground surface. Construction traffic should be restricted to dedicated driveway and laydown areas. Preparation should begin with procedures intended to drain ponded water and control surface water runoff. In the event the exposed subgrade becomes unstable, yielding, or disturbed, we recommend that the materials be removed to a sufficient depth in order to develop stable subgrade soils. The severity of construction problems will be dependent, in part, on the precautions that are taken by the contractor to protect the subgrade soils.

Although evidence of underground facilities such as septic tanks, cesspools, or other existing structures was not observed during our fieldwork, such features could be encountered during construction. If unexpected fills or underground facilities are encountered, such features should be removed completely and excavation areas should be backfilled in accordance with structural fill recommendations presented in Sections 4.3.3 and 4.3.4 of this report.

4.3.2 Subgrade Preparation

Strip and remove existing vegetation, topsoil, disturbed surface soils, and other deleterious materials from the proposed development areas. Stripping depths to remove unsuitable materials are anticipated to be an average of about 8 to 10 inches, but may vary across the site and could be deeper. The exposed subgrade should be benched horizontally in sloped areas exceeding 20 percent in grade and along the toe of proposed fill embankment slopes.

After cutting to design subgrade elevation, and prior to placement of crushed aggregate base or structural fill, we recommend that the exposed subgrades be observed and evaluated for the presence of soft, loose or unsuitable materials. We recommend testing include proofrolling to help locate weak or unstable areas at or just below the exposed subgrade level. Proofrolling should be performed using heavy rubber-tired equipment, such as a fully-loaded dump truck, having a minimum gross weight of about 20 tons. Unsuitable areas observed at this time should be excavated and replaced with structural fill. Those soils which are soft, yielding, or unable to be compacted to the specified criteria should be overexcavated and replaced with satisfactory fill material later described in section 4.3.3 of this report.

Based on the outcome of the proofrolling operations, some undercutting or subgrade stabilization should be expected, even more so during wet periods of the year. Methods of stabilization, which are outlined below, could include scarification and recompaction, removal of unstable materials and replacement with granular fill (with or without geotextiles) and chemical stabilization. The most suitable method of stabilization, if required, will be dependent upon factors such as schedule, weather, and the size of area to be stabilized and the nature of the instability. More detailed recommendations can be provided during construction, as the need

for subgrade stabilization occurs. Performing site grading operations during the warmer and drier months would aid in reducing potential need for subgrade stabilization.

- **Scarification and Recompaction** - It may be feasible to scarify, dry, and recompact the exposed soils. The success of this procedure would depend primarily upon favorable weather and sufficient time to dry the soils. Even with adequate time and weather, stable subgrades may not be achievable if the thickness of the soft soil is greater than about 1 foot. Scarification and recompaction is usually recommended and is economical for granular soils or when fine-textured soils are near moisture conditions optimal for compaction and during dry weather only.

- **Granular Fill** - The use of crushed stone or gravel could be considered to improve subgrade stability. Typical undercut depths could range from about 1 to 2 feet. The use of high modulus geotextiles (i.e., engineering fabric, such as Mirafi 500X) could also be considered after underground work such as utility construction is completed. Equipment should not be operated above the geotextile fabric until one full lift of granular fill is placed above it. The maximum particle size of granular material placed over geotextile fabric should not exceed 1½ inches. Geotextiles can also be considered for severe subgrade conditions during winter months. It should be expected that a minimum of 18 inches of granular fill will be required with any geotextile application. Overexcavation and backfill with granular fill is typically recommended and economical for isolated shallow areas containing soft unsuitable soils.

- **Chemical Stabilization** – For unstable and plastic soils, consider improving the subgrades with Portland cement, lime, kiln dust, or Class C fly ash could be considered. Chemical modification should be performed by a pre-qualified contractor having experience with successfully stabilizing subgrades in the project area on similar sized projects with similar soil conditions. Chemical stabilization is generally recommended for large areas with exposed soils too wet to scarify and recompact and/or during wet weather.

Over-excavations should be backfilled with structural fill material placed and compacted in accordance with sections 4.3.3 and 4.3.4 of this report. Subgrade preparation and selection, placement, and compaction of structural fill should be performed under engineering controlled conditions in accordance with the project specifications.

4.3.3 Fill Material Types

Engineered or structural fill should meet the following material property requirements:

Fill Type [1]	Specification	Acceptable for Placement
Common Fill	Oregon Standard Specification for Construction(OSSC) 00330.13 Selected General Backfill with the exception that materials shall not have a Liquid Limit > 40 and Plastic Limit > 10	All locations across the site, except within the building pad limits, Dry Weather only.
Select Fill	OSSC 00330.14 Selected Granular Backfill with exception of no more than 5% passing the No. 200 sieve by weight	All locations across the site, Wet Weather and Dry Weather acceptable.
Crushed Aggregate Base (CAB)	OSSC 02630.10 Dense Graded Aggregate (2"-0 to ¾"-0)	All locations across the site. Recommended for finished base course materials for slabs, foundations, and pavements. Wet Weather and Dry Weather acceptable.

1. Controlled, compacted fill should consist of approved materials that are free (free = less than 3% by weight) of organic matter and debris (i.e. wood sticks greater than ¾-inch in diameter). Frozen material should not be used, and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the geotechnical engineer for evaluation.

The near surface soils encountered in the borings for this project consist of fine-grained residual silts and clays from decomposed gravels. Accordingly, native fine-grained soils generated from site excavations are not considered suitable as structural fill in the building pad or proposed embankments. If desired, these native fine-grained soils may be used as fill in areas outside of the building pad or spread onsite in landscaped areas no deeper than about one-foot. Their suitability for reuse will depend on their moisture content at the time of earthwork, the prevailing weather conditions when site grading activities take place, and the proposed location for reuse.

If open-graded materials with large void spaces, such as quarry spalls, are used we recommend that the materials be placed over a geotextile fabric separator to prevent fines migration as well as to stabilize the subgrade. The geotextile fabric should be a woven product (Mirafi 500XT or equivalent).

4.3.4 Compaction Requirements

The following compaction requirements are recommended for the prepared subgrade and structural fill expected to be placed for this site:

Item	Description
Fill Lift Thickness	**Common Fill, Select Fill and CAB:** 10-inches or less in loose thickness when heavy, compaction equipment is used.
Compaction Requirements[1]	**Select Fill & CAB:** 95% of the material's maximum modified Proctor dry density (ASTM D1557) below site pavements and foundations and for fill embankments. **Common Fill,** 98% of the material's maximum standard Proctor dry density (ASTM D698) for fine-grained materials.
Moisture Content	**Granular Materials:** Within ±2 percent of optimum moisture content as determined by ASTM D1557 for granular materials. **Fine-grained materials:** Within -1 to +3 percent of optimum moisture content as determined by ASTM D698.

1. We recommend that fill be tested for moisture content and compaction during placement. Should the results of the in-place density tests indicate the specified moisture or compaction limits have not been met, the area represented by the test should be reworked and retested as required until the specified moisture and compaction requirements are achieved.

4.3.5 Permanent Slope Inclinations

At this time, preliminary grading information has been prepared. Shallow cut slopes and fill embankments are proposed in the vicinity of the building pad. Based on the proposed grading and recommended fill materials for the site, we recommend the following maximum slope inclinations for design:

Slope Configuration		
Location	**Acceptable Soil Type**[1]	**Horizontal:Vertical (H:V)**
Cut Slopes	Fine-Grained Native Soil	3 H:1V
Fill Slopes	Select Fill or CAB ONLY	3H:1V

1. Fill material shall be placed and compacted in accordance with the section **Earthwork** of this report

Slope stability analyses were not performed for this evaluation. However, slopes that are steeper than 3H:1V, often a 2H:1V, are widely used by state and local government agencies, and these typically perform adequately in this locale if they are properly constructed and drained. If steeper slopes are required for site development, stability analyses should be completed to design the grading plan. In order to construct fill slopes at the recommended maximum slope angle, the slopes should be over-constructed (constructed in beyond the planned limits of the slope and compacted to the face of the slope) and graded back to the final inclination to provide a compacted slope face.

4.3.6 Grading and Drainage

Positive drainage should be provided during construction and maintained throughout the life of the development. Infiltration of water into utility trenches or foundation excavations should be prevented during construction. Backfill against footings, exterior walls, and in utility and sprinkler line trenches should be well compacted and free of all construction debris to reduce the possibility of moisture infiltration.

Downspouts, roof drains or scuppers should discharge into splash blocks or extensions when the ground surface is not protected by exterior slabs or paving. Sprinkler systems should not be installed within five feet of foundation elements. Landscaped irrigation adjacent to the foundation systems should be minimized or eliminated.

Dewatering: Based on our subsurface exploration, groundwater may be encountered in excavation areas. Therefore, due to the relatively shallow groundwater at certain times of the year and the planned development with underground storage tanks and utilities, we expect dewatering (to varying degrees) to be necessary during construction. The necessary level of dewatering will vary significantly depending on the type of construction and the time of year the construction takes place. The contractor should be prepared to control these areas of localized groundwater seepage in the excavations. Subsurface drains and temporary dewatering wells should discharge to an approved location.

Underground structures: Due to presence of groundwater and wet soil conditions observed in the building pad area, excavations areas should be provided with adequate subsurface drainage. Underground storage tanks should also be designed for potential buoyancy effects from elevated groundwater conditions.

Perimeter Building Grades: Final exterior grades should promote free and positive drainage from the building areas at all times. Water must not be allowed to pond or to collect adjacent to foundations or within the immediate building area. We recommend that a gradient of at least 3 percent for a minimum distance of 10 feet from the building perimeter be provided, except in paved locations. In paved areas, a minimum gradient of one percent should be provided. We recommend constructing drains behind the existing building retaining wall to reduce hydrostatic pressure and water proofing below grade walls to limit water intrusion. Pavement surfaces should not be allowed to flow directly to the adjacent slopes. Water should be controlled by the use of curbs and gutters to direct stormwater to catch basins and approved discharge.

Stormwater Infiltration: Based on the results of our field exploration and laboratory analysis, infiltration of concentrated stormwater by drywell, infiltration trench or pervious pavement is not recommended for the subject property. Near-surface soils encountered at the site generally consist of fine-textured soils and weathered gravels to the maximum depth explored. Shallow groundwater was encountered approximately 3 feet below existing ground surface in the

lowland western portion of the site where we were directed to evaluate possible infiltration systems. Therefore, due to the groundwater conditions encountered and the fine-grained soils, we recommend that collected stormwater on-site be managed by means other than infiltration.

Settlement Monitoring: Based on our analyses and the proposed grading at the site, we estimate that the surface of the fill planned could settle on the order of 1 to 2 inches across the plan area. Therefore, we recommend that final pavements and surface coverings be delayed in placement until the majority of the settlement is complete. We recommend conducting periodic settlement monitoring of the fill surface for approximately 3 to 4 months prior to constructing site pavements. We recommend that Terracon be retained to review survey measurements and settlement monitoring to confirm estimated settlement and duration.

4.3.7 Construction Considerations

Although the exposed subgrades are anticipated to be relatively stable upon initial exposure, unstable subgrade conditions could develop during general construction operations, particularly if the soils are wetted and/or subjected to repetitive construction traffic. The use of light construction equipment would aid in reducing subgrade disturbance. Using track-mounted equipment would also be beneficial to perform cuts and reduce subgrade disturbance. Should unstable subgrade conditions develop, stabilization measures will need to be employed. Construction traffic over the completed subgrade should be avoided to the extent practical.

The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. If the subgrade should become frozen, desiccated, saturated, or disturbed, the affected material should be removed or these materials should stabilized as previously described in Section 4.3.2.

The contractor is responsible for designing and constructing stable, temporary excavations (including utility trenches) as required to maintain stability of both the excavation sides and bottom. Excavations should be sloped or shored in the interest of safety following local and federal regulations, including current OSHA excavation and trench safety standards.

The geotechnical engineer should be retained during the construction phase of the project to observe earthwork and to perform necessary tests and observations during subgrade preparation; proof-rolling; placement and compaction of controlled compacted fills; backfilling of excavations to the completed subgrade.

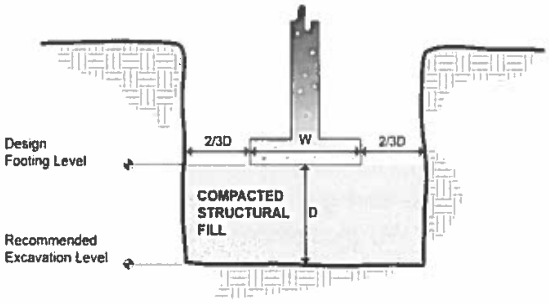
4.4 Foundations

The proposed convenience store building and canopy structure may be supported by conventional shallow spread foundations bearing on granular structural fill underlain by stiff

native soils. Design recommendations for foundations for the proposed structures and related structural elements are presented in the following sections.

4.4.1 Footing Subgrade Preparation

We recommend that foundations be supported on a minimum of 1 foot of select fill constructed above stiff native soils. Foundations should not be supported on soft or loose soils that do not meet the minimum recommended compaction levels. Over-excavation for compacted backfill placement below footings should extend laterally beyond all edges of the footings at least 8 inches per foot of over-excavation depth below footing base elevation. Zones of loose, soft or otherwise unsuitable soil encountered in or below the footing subgrade should be over-excavated and replaced with properly compacted Select Fill.



Overexcavation / Backfill

NOTE: Excavations in sketches shown vertical for convenience. Excavations should be sloped as necessary for safety.

The compactive effort should be in accordance with recommendations provided in the **Earthwork** section of this report. If construction takes place in wet weather, we recommend that the upper 3 to 6 inches of foundations subgrades consist of crushed rock, such as Oregon Department of Transportation gradation Section 02630 Dense graded Aggregate (1"-0 or 3/4"-0) to help provide a stable platform for construction of the foundation elements. It is recommended that the geotechnical engineer be retained to observe and test the soil foundation bearing materials.

4.4.2 Design Recommendations

DESCRIPTION	Column	Wall
Net allowable bearing pressure [1] **Ground Improved Subsurface**	2,000 psf	2,000 psf
Minimum dimensions	24 inches	18 inches
Minimum embedment below finished grade for frost protection [2]	18 inches	18 inches
Approximate total static settlement [3]	<1 inch	<1 inch
Estimated differential settlement [3]	<¾ inch between columns	<¾ inch over 40 feet
Allowable passive pressure [4]	250 psf/ft	
Allowable coefficient of sliding friction [4]	0.33	

1. The recommended net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. Assumes any unsuitable fill or soft soils, if encountered, will be undercut and replaced with structural fill.
2. And to reduce the effects of seasonal moisture variations in the subgrade soils. For exterior footings and footings beneath unheated areas.
3. The foundation settlement will depend upon the variations within the subsurface soil profile, the structural loading conditions, the embedment depth of the footings, the thickness of compacted fill, and the quality of the earthwork operations. The above settlement estimates have assumed that the maximum footing size is 6 feet for column footings and 1.5 feet for continuous footings.
4. The value presented is an equivalent fluid pressure. The sides of the excavation for the spread footing foundation must be nearly vertical and the concrete should be placed neat against these vertical faces for the passive earth pressure values to be valid. Passive resistance in the upper 18 inches of the soil profile should be neglected.

The net allowable bearing pressures presented in the table above may be increased by one-third to resist transient, dynamic loads such as wind or seismic forces. Please note that lateral resistance to footings should be ignored in the upper 12-inches from finish grade.

Footing Drains: We recommend that footing drains be installed around the perimeter of the proposed building at the base of the foundations. Footing drains should consist of a minimum 4-inch diameter, Schedule 40, rigid, perforated PVC pipe placed at the base of the heel of the footing with the perforations facing down. The pipe should be surrounded by a minimum of 4 inches of clean free-draining granular material. Drain rock material should conform to Section 00430.11, Granular Drain Backfill Material, as presented in the *2008 Oregon Standard Specifications for Construction.* We recommend placing a non-woven geotextile, such as Mirafi 140N, or equivalent, above the free draining backfill and below the overlying fill material. Footing drains should be directed toward appropriate storm water drainage facilities. Water from downspouts and surface water should be independently collected and routed to a suitable discharge location.

4.5 Slab-On-Grade

4.5.1 Design Recommendations

ITEM	DESCRIPTION
Interior floor system	Concrete slab-on-grade.
Base / Capillary Break	6-inchs of CAB material (¾"-0)
Modulus of subgrade reaction	125 pci for point load conditions

1. The concrete slab design should include a capillary break, comprised of free-draining, compacted, granular material, at least 6 inches thick. Free-draining granular material should have less than 5 percent fines (material passing the #200 sieve).

Where appropriate, saw-cut control joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations refer to the ACI Design Manual. Joints or any cracks in pavement areas that develop should be sealed with a water-proof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

If floor tile or other product manufacturer's specifications require a vapor retarder, we recommend that it be installed with their recommendations. If so, we recommend using a puncture-resistant product that is classified as a Class A vapor retarder in accordance with ASTM E 1745. To avoid puncturing of the vapor retarder, construction equipment should not be allowed to drive over any vapor retarder material. The slab designer and slab contractor should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

4.6 Pavements

4.6.1 Design Recommendations

Traffic patterns and anticipated loading conditions were not available at the time this report was prepared. We anticipate that traffic loads will be produced primarily by automobile and occasional truck traffic. The thickness of pavements subjected to heavy truck traffic should be determined using expected traffic volumes, vehicle types, and vehicle loads and should be in accordance with local, city or county ordinances.

Pavement thickness can be determined using AASHTO, Asphalt Institute and/or other methods if specific wheel loads, axle configurations, frequencies, and desired pavement life are provided. Terracon can provide thickness recommendations for pavements for loads other than personal vehicles and occasional truck traffic if provided.

Listed below are pavement component thicknesses, which may be used as a guide for pavement systems at the site for typical commercial building traffic patterns. It should be noted that these systems were derived based on general characterization of the subgrade as predominantly course-grained. No specific testing (such as CBR, resilient modulus test, etc.) was performed for this project to evaluate the support characteristics of the subgrade. Consideration of concrete pavements is strongly recommended in truck loading, turn around areas, and dumpster pads.

RIGID (CONCRETE) PAVEMENT SYSTEM		
COMPONENT	Material Thickness, Inches	
	Light Duty	Heavy Duty
4000 psi Concrete with Fiber Mesh	5	6
Crushed Surfacing (OSSC 02630 Dense graded ¾" – 0")	4	8

MINIMUM PAVEMENT THICKNESSES		
COMPONENT	Material Thickness, Inches	
	Light Duty	Heavy Duty
Bituminous Pavement	3	4
CAB	8	12

Prior to placement of the CAB the pavement subgrades should be prepared as per the recommendations in the **Earthwork** section this report. Long term pavement performance will be dependent upon several factors, including maintaining subgrade moisture levels and providing for preventive maintenance. The following recommendations should be considered the minimum:

- The subgrade and the pavement surface have a minimum ¼ inch per foot slope to promote proper surface drainage;
- Consider appropriate edge drainage and pavement under drain systems;
- Install joint sealant and seal cracks immediately;
- Seal all landscaped areas in, or adjacent to pavements to minimize or prevent moisture migration to subgrade soils;
- Placing compacted, low permeability backfill against the exterior side of curb and gutter.

Preventive maintenance should be planned and provided for through an on-going pavement management program. Preventive maintenance activities are intended to slow the rate of pavement deterioration, and to preserve the pavement investment. Preventive maintenance consists of both localized maintenance (e.g. crack and joint sealing and patching) and global maintenance (e.g. surface sealing). Preventive maintenance is usually the first priority when implementing a planned pavement maintenance program and provides the highest return on investment for pavements. Prior to implementing any maintenance, additional engineering observation is recommended to determine the type and extent of preventive maintenance.

4.6.2 Asphalt, Concrete, Base Course, and Subbase Materials

Specifications for manufacturing and placement of pavements and crushed base course should conform to specifications presented in Section 00745 of the 2008 OSSC. All subbase and base course materials should be compacted to at least 95 percent of the maximum dry density determined in accordance with ASTM D1557. We recommend that all base courses be proofrolled with a loaded dump truck prior to placing the following lift of material. We recommend that asphalt be compacted to a minimum of 92 percent of the Rice (theoretical maximum) density.

Portland Cement Concrete (PCC) pavements will require properly designed and constructed joints to provide satisfactory performance. Refer to ACI 330, Guide for Design and Construction of Concrete Parking Lots for information on design of joints for PCC pavements. Construction traffic on the new pavements was not considered in developing the recommended minimum pavement thicknesses. Construction traffic can cause significant damage to partially completed pavement sections. If the new pavements will be subject to traffic by construction equipment/vehicles, the pavement thicknesses should be revised to consider the effects of additional traffic loading.

4.6.3 Construction Considerations

On most project sites, the site grading is accomplished relatively early in the construction phase. Fills are placed and compacted in a uniform manner. However, as construction proceeds, excavations are made into these areas, rainfall and surface water saturates some areas, heavy traffic from concrete trucks and other delivery vehicles disturbs the subgrade and many surface irregularities are filled in with loose soils to improve trafficability temporarily. As a result, the pavement subgrades, initially prepared early in the project, should be carefully evaluated as the time for pavement construction approaches.

We recommend the moisture content and density of the top 9 inches of the subgrade be evaluated and the pavement subgrades be proofrolled prior to commencement of actual paving operations. Areas not in compliance with the required ranges of moisture or density should be moisture conditioned and recompacted. Particular attention should be paid to high traffic areas that were rutted and disturbed earlier and to areas where backfilled trenches are located. Areas where unsuitable conditions are located should be repaired by removing and replacing the materials with properly compacted fills.

After proofrolling and repairing subgrade deficiencies, the entire subgrade should be scarified and recompacted as recommended in the **Earthwork** section of this report to provide a uniform subgrade for pavement construction. Areas that appear severely desiccated following site stripping may require further undercutting and moisture conditioning. If a significant precipitation event occurs after the evaluation or if the surface becomes disturbed, the subgrade should be

reviewed by qualified personnel immediately prior to paving. The subgrade should be in its finished form at the time of the final review.

5.0 GENERAL COMMENTS

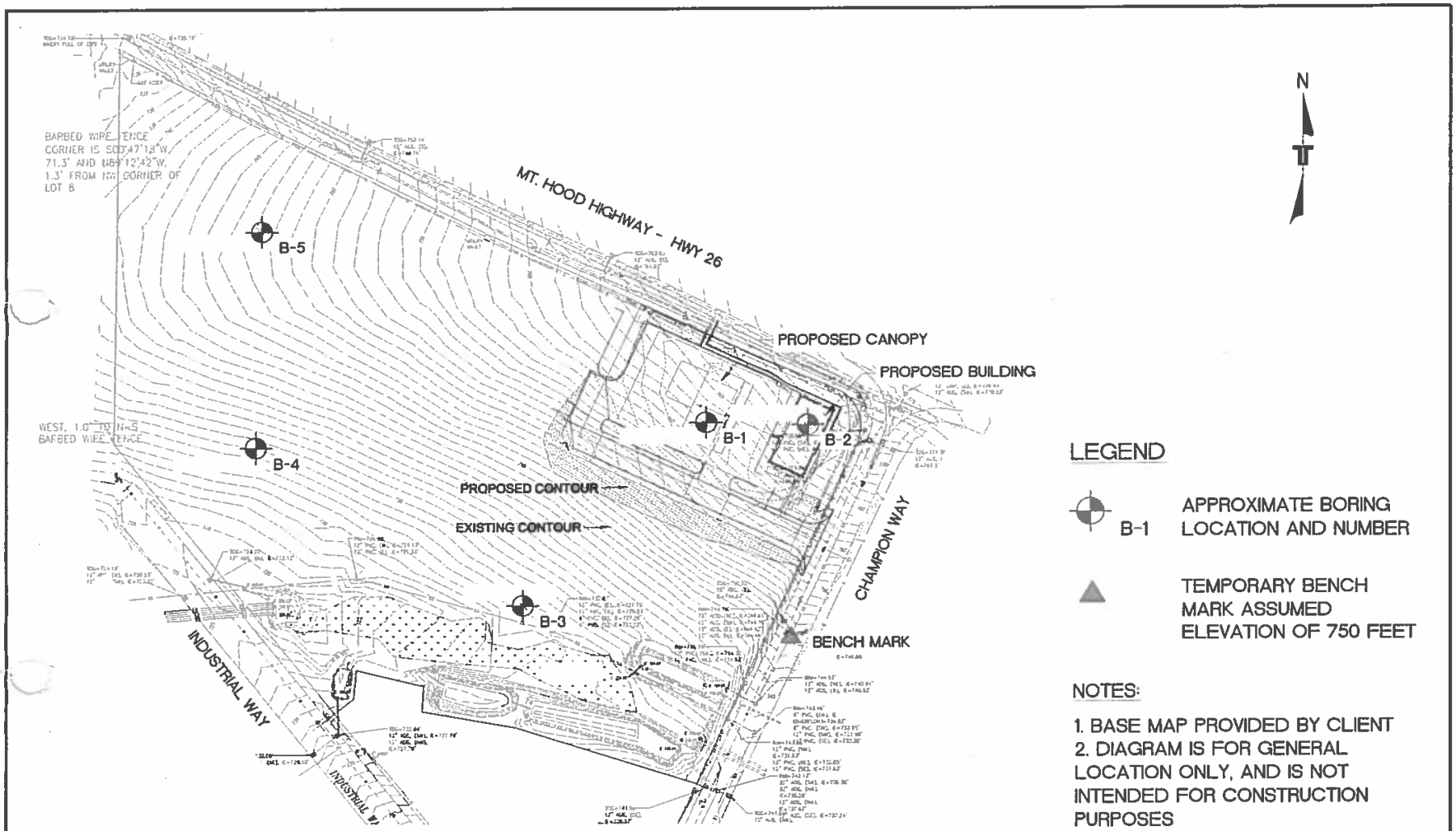
Terracon should be retained to review the final design plans and specifications so comments can be made regarding interpretation and implementation of our geotechnical recommendations in the design and specifications. Terracon also should be retained to provide observation and testing services during grading, excavation, foundation construction and other earth-related construction phases of the project.

The analysis and recommendations presented in this report are based upon the data obtained from the borings performed at the indicated locations and from other information discussed in this report. This report does not reflect variations that may occur between borings, across the site, or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. If variations appear, we should be immediately notified so that further evaluation and supplemental recommendations can be provided.

The scope of services for this project does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

This report has been prepared for the exclusive use of our client for specific application to the project discussed and has been prepared in accordance with generally accepted geotechnical engineering practices. No warranties, either express or implied, are intended or made. Site safety, excavation support, and dewatering requirements are the responsibility of others. In the event that changes in the nature, design, or location of the project as outlined in this report are planned, the conclusions and recommendations contained in this report shall not be considered valid unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing.

APPENDIX A
FIELD EXPLORATION



Project Mngr: MAK Drawn By: MAK Checked By: KTH Approved By: KTH	Project No. 82115034 Scale: NOT TO SCALE File No. EX A-1 PLAN Date: DECEMBER 2011	Terracon Consulting Engineers and Scientists 4103 SE INTERNATIONAL WAY PORTLAND, OR 97222 PH. (503) 659-3281 FAX. (503) 659-1287	SITE AND EXPLORATION PLAN PROPOSED ARCO AM/PM Barghausen Consulting Engineers, Inc. HWY 26 & CHAMPION WAY SANDY OREGON	EXHIBIT A-1

Field Exploration Description

The boring locations were located in the field by Terracon personnel based on estimated dimension from site features and the provided site plan by Barghausen Consulting Engineers, Inc. The locations of the borings should be considered accurate only to the degree implied by the means and methods used to define them.

The borings were drilled with trailer-mounted solid-stem auger drill rig under subcontract to Terracon. A geologist from our firm continuously observed the borings, logged the subsurface conditions, and obtained representative soil samples. Samples of the soil encountered in the borings were obtained using the split barrel and thin-walled tube sampling procedures. The samples were stored in moisture tight containers and transported to our laboratory for further visual classification and testing. After we logged each boring, the operator backfilled each boring in general conformance with local regulations and patched the surface to match the existing ground surface.

In the split-barrel sampling procedure, the number of blows required to advance a standard 2-inch O.D. split-barrel sampler the last 12 inches of the typical total 18-inch penetration by means of a 140-pound auto-hammer with a free fall of 30 inches, is the standard penetration resistance value (SPT-N). This value is used to estimate the in-situ relative density of cohesionless soils and consistency of cohesive soils.

In the thin-walled tube sampling procedure, a thin-walled, seamless steel tube with a sharp cutting edge is pushed hydraulically into the soil to obtain a relatively undisturbed sample. The samples were tagged for identification, sealed to reduce moisture loss, and taken to our laboratory for further examination, testing, and classification. Information provided on the boring logs attached to this report includes soil descriptions, consistency evaluations, boring depths, sampling intervals, and groundwater conditions.

A field log of each boring was prepared by the field engineer. These logs included visual classifications of the materials encountered during drilling as well as the driller's interpretation of the subsurface conditions between samples. Final boring logs included with this report represent the engineer's interpretation of the field logs and include modifications based on laboratory observation and tests of the samples.

LOG OF BORING NO. B-1

CLIENT **Champion 26 LLC**

SITE **SW Corner of Hwy 26 & Champion Way, Sandy, OR 97055**

PROJECT **ARCO AM/PM**

Approx. Surface Elev.: 763 ft

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N ** BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS UNCONFINED STRENGTH, psf
	0.8 Grass and 8-inch Root Zone over **SILT**, trace fine sand, root hairs, red-brown, stiff, moist to wet — 762		ML	1	SS	14	8	25		
			ML	2	SS	16	8	30		
	4 — 759 **ELASTIC SILT**, brown-red, weathered gravel structure, hard to medium stiff, wet	5	MH	3	SS	16	34	33		
	-very stiff, wet		MH	4	SS	18	14	48		
	-medium stiff, wet	10	MH	5	SS	18	6	56		
	-stiff, wet	15	MH	6	SS	18	7	67		
	-medium stiff, wet	20	MH	7	SS	18	5	63		
	21.5 — 741.5 **BOTTOM OF BORING** Boring advanced using solid-stem auger methods.									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

**140H SPT Cathead
*Calibrated Hand Penetrometer

WATER LEVEL OBSERVATIONS, ft			
WL	N/E	WD 18.5	AB
WL			
WL			

Terracon

BORING STARTED	11-23-11		
BORING COMPLETED	11-23-11		
RIG	B.Rogers	DRILLER	DPE
LOGGED	MLE	JOB #	82115034

BOREHOLE 99 82115034.GPJ TERRACON.GDT 12/6/11

LOG OF BORING NO. B-2

CLIENT: Champion 26 LLC

SITE: SW Corner of Hwy 26 & Champion Way, Sandy, OR 97055

PROJECT: ARCO AM/PM

Approx. Surface Elev.: 769 ft

Depth, ft.	Description	USCS Symbol	Sample Number	Sample Type	Recovery, in.	SPT - N** Blows / ft.	Water Content, %	Dry Unit Wt pcf	Unconfined Strength, psf
0.8 (768)	Grass and 8-inch Root Zone over								
2 (767)	**SILT**, trace fine sand, root hairs, brown, stiff, moist	ML	1	SS	14	10			
	ELASTIC SILT, brown-red, weathered gravel structure, hard to medium stiff, moist to wet	MH	2	SS	14	10	33	88	2000*
5	-hard	MH	3	ST	6		35	83	4000*
		MH	4	SS	18	35	33		
	-very stiff	MH	5	SS	16	21			
10		MH	6	SS	18	22			
	-stiff, wet								
15		MH	7	SS	16	8			
	-medium stiff								
20		MH	8	SS	16	6			
21.5 (747.5)	**BOTTOM OF BORING**								
	Boring advanced using solid-stem auger methods.								

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

**140H SPT Cathead
*Calibrated Hand Penetrometer

WATER LEVEL OBSERVATIONS, ft

WL	N/E	WD	
WL			
WL			

Terracon

BORING STARTED	11-23-11		
BORING COMPLETED	11-23-11		
RIG	B.Rogers	DRILLER	DPE
LOGGED	MLE	JOB #	82115034

BOREHOLE 99 82115034.GPJ TERRACON.GDT 12/6/11

LOG OF BORING NO. B-3

CLIENT: Champion 26 LLC

SITE: SW Corner of Hwy 26 & Champion Way, Sandy, OR 97055

PROJECT: ARCO AM/PM

Approx. Surface Elev.: 733 ft

DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N ** BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS UNCONFINED STRENGTH, psf	DESCRIPTION
									0.8 Grass and 10-inch Root Zone over 732
	ML	1	SS	14	10	25			**SILT**, brown-red, weathered gravel structure, medium stiff to stiff, wet 731
	MH	2	SS	10	7	34			**ELASTIC SILT**, brown-red weathered gravel fabric , medium stiff to stiff, wet
5	MH	3	SS	14	4	35			-medium stiff
	MH	4	SS	18	9	62			-stiff
10	MH	5	SS	18	18	65			-fine sand, trace gravel, very stiff, wet
									14 719
15	GM	6	SS	6	20	21			**SILTY GRAVEL**, with fine sand, brown, weathered gravel structure, medium dense, wet
20	GM	7	SS	12	50/6"	50			-very dense
									21.5 711.5 **BOTTOM OF BORING**
									Boring advanced using solid-stem auger methods.

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

**140H SPT Cathead
*Calibrated Hand Penetrometer

WATER LEVEL OBSERVATIONS, ft				
WL	▽ 5	WD	▽ 3	AB
WL	▽		▽	
WL				

Terracon

BORING STARTED	11-23-11		
BORING COMPLETED	11-23-11		
RIG	B.Rogers	DRILLER	DPE
LOGGED	MLE	JOB #	82115034

BOREHOLE 99 82115034.GPJ TERRACON.GDT 12/6/11

LOG OF BORING NO. B-4

CLIENT: Champion 26 LLC

SITE: SW Corner of Hwy 26 & Champion Way, Sandy, OR 97055

PROJECT: ARCO AM/PM

Approx. Surface Elev.: 741 ft

DEPTH, ft.	DESCRIPTION	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N ** BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS UNCONFINED STRENGTH, psf
	0.8 Grass and 8-inch Root Zone over 740								
	SILT, trace fine sand, root hairs, brown, medium stiff, wet	ML	1	SS	16	5			
	2.5 738.5								
	ELASTIC SILT, brown-red, weathered gravel structure, very stiff to medium stiff, wet	MH	2	SS	16	4			
5	-stiff	MH	3	SS	16	12			
		MH	4	SS	18	9			
10	-trace gravel	MH	5	SS	18	11			
	▼								
15	-medium stiff	MH	6	SS	18	4			
20	-very stiff	MH	7	SS	16	13			
	21.5 719.5								
	BOTTOM OF BORING								
	Boring advanced using solid-stem auger methods.								

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

**140H SPT Cathead
*Calibrated Hand Penetrometer

WATER LEVEL OBSERVATIONS, ft				
WL	▽ N/E	WD	▼ 13	AB
WL	▽		▼	
WL				

Terracon

BORING STARTED	11-23-11		
BORING COMPLETED	11-23-11		
RIG	B.Rogers	DRILLER	DPE
LOGGED	MLE	JOB #	82115034

BOREHOLE 89 82115034.GPJ TERRACON.GDT 12/6/11

LOG OF BORING NO. B-5

CLIENT: Champion 26 LLC

SITE: SW Corner of Hwy 26 & Champion Way, Sandy, OR 97055

PROJECT: ARCO AM/PM

Approx. Surface Elev.: 753 ft

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N ** BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS UNCONFINED STRENGTH, psf
	0.4 Grass and 8-inch Root Zone over 752.5		ML	1	SS	12	9	47		
	2 **SILT**, trace fine sand, root hairs, brown, medium stiff, wet 751									
	ELASTIC SILT, brown-red, weathered gravel structure, hard to medium stiff, moist to wet		MH	2	SS	16	23	34		
	-hard	5	MH	3	SS	18	35	31		
	-very stiff		MH	4	SS	18	20	44		
	-wet	10	MH	5	SS	18	14	61		
	15 738	15								
	SILTY GRAVEL, with fine sand, brown, weathered gravel structure, medium dense, wet		GM	6	SS	18	15	58		
	21.5 731.5	20	GM	7	SS	18	17	61		
	BOTTOM OF BORING Boring advanced using solid-stem auger methods.									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

**140H SPT Cathead
*Calibrated Hand Penetrometer

WATER LEVEL OBSERVATIONS, ft			
WL	▽ N/E	WD	▽
WL	▽		▽
WL			

Terracon

BORING STARTED	11-23-11		
BORING COMPLETED	11-23-11		
RIG	B.Rogers	DRILLER	DPE
LOGGED	MLE	JOB #	82115034

BOREHOLE 99 82115034.GPJ TERRACON.GDT 12/6/11

APPENDIX B
LABORATORY TESTING

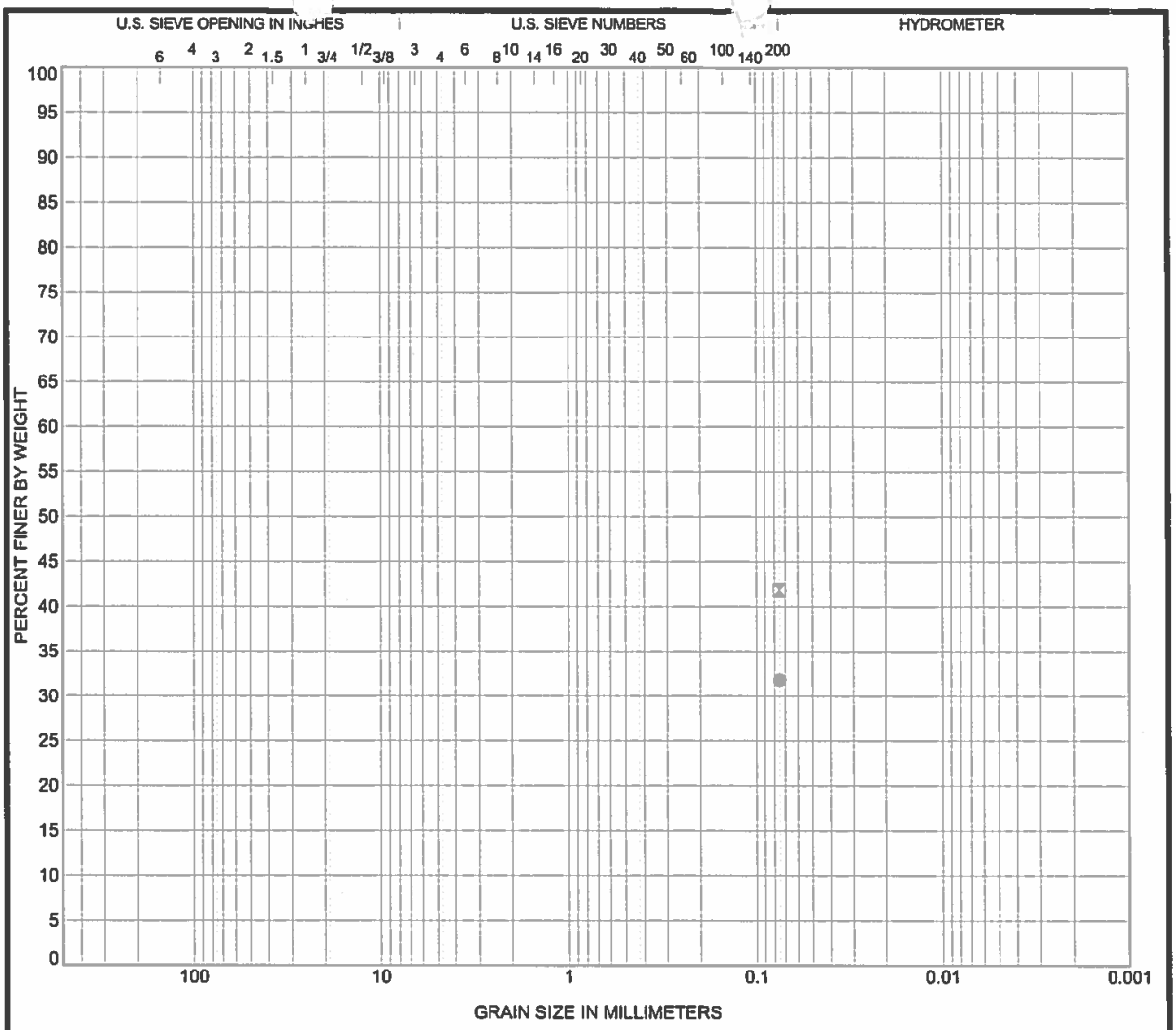
Laboratory Testing

Samples retrieved during the field exploration were taken to the laboratory for further observation by the project geotechnical engineer and were classified in general accordance with the Unified Soil Classification System (USCS) as shown in Appendix C. At that time, the field descriptions were confirmed or modified as necessary and an applicable laboratory testing program was formulated to determine engineering properties of the subsurface materials.

Laboratory tests were conducted on selected soil samples and the test results are presented in this appendix. The laboratory test results were used for the geotechnical engineering analyses, and the development of foundation and earthwork recommendations. Laboratory tests were performed in general accordance with the applicable ASTM, local or other accepted standards.

Selected soil samples obtained from the site were tested for the following engineering properties:

- In-situ Water Content
- Percent Fines (#200 wash)
- Atterberg Limits
- Unconfined Compression



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Specimen Identification		Classification	LL	PL	PI	Cc	Cu
●	B-3	20.0ft	SILTY GRAVEL (GM)					
⊠	B-5	15.0ft	SILTY GRAVEL (GM)					

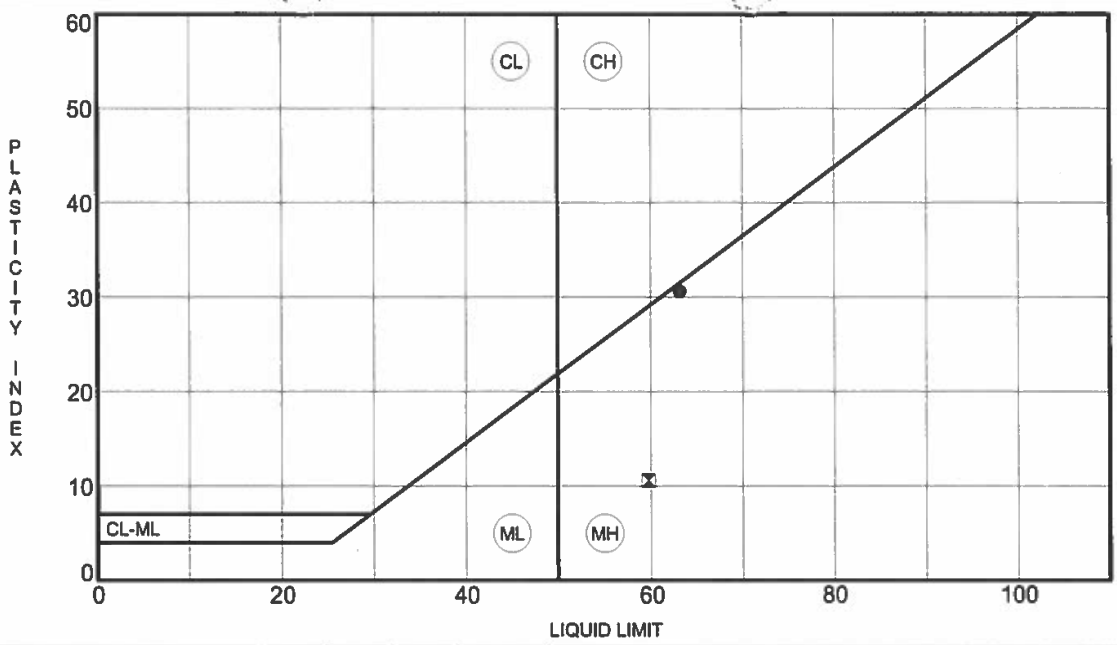
	Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	B-3	20.0ft	0.075				0.0	0.0	31.8	
⊠	B-5	15.0ft	0.075				0.0	0.0	41.8	

Terracon

GRAIN SIZE DISTRIBUTION

Project: ARCO AM/PM
Site: SW Corner of Hwy 26 & Champion Way Sandy, OR 97055
Job #: 82115034
Date: 12-6-11

TC_GRAIN_SIZE 82115034.GPJ TERRACON.GDT 12/6/11



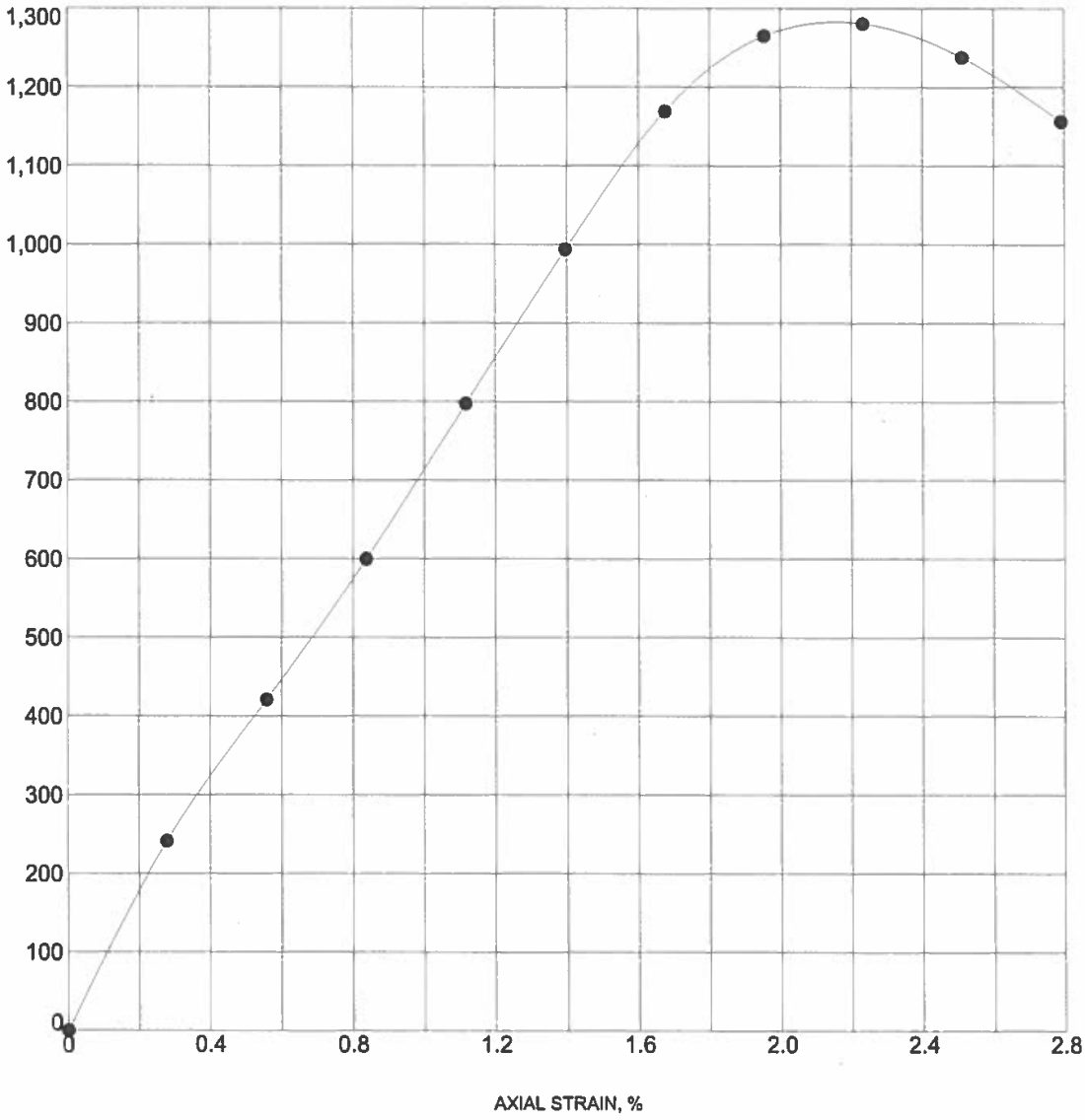
	Specimen Identification		LL	PL	PI	%Fines	Classification
●	B-2	5.5ft	63	33	30		ELASTIC SILT (MH)
⊠	B-3	10.0ft	60	49	11		ELASTIC SILT (MH)

Terracon

ATTERBERG LIMITS RESULTS

Project: ARCO AM/PM
Site: SW Corner of Hwy 26 & Champion Way Sandy, OR 97055
Job #: 82115034
Date: 12-6-11

TC ATTERBERG LIMITS 82115034.GPJ TERRACON.GDT 12/6/11



Specimen Identification		Classification	γ_d, pcf	WC,%
● B-2	2.5ft	ELASTIC SILT (MH)	88	33

Terracon

UNCONFINED COMPRESSION TEST

Project: ARCO AM/PM
Site: SW Corner of Hwy 26 & Champion Way Sandy, OR 97055
Job #: 82115034
Date: 12-6-11

TC_UNCONFINED_82115034.GPJ TERRACON.GDT 12/8/11

APPENDIX C
SUPPORTING DOCUMENTS

GENERAL NOTES

DRILLING & SAMPLING SYMBOLS:

SS:	Split Spoon - 1-3/8" I.D., 2" O.D., unless otherwise noted	HS:	Hollow Stem Auger
ST:	Thin-Walled Tube – 2" O.D., 3" O.D., unless otherwise noted	PA:	Power Auger (Solid Stem)
RS:	Ring Sampler - 2.42" I.D., 3" O.D., unless otherwise noted	HA:	Hand Auger
DB:	Diamond Bit Coring - 4", N, B	RB:	Rock Bit
BS:	Bulk Sample or Auger Sample	WB	Wash Boring or Mud Rotary

The number of blows required to advance a standard 2-inch O.D. split-spoon sampler (SS) the last 12 inches of the total 18-inch penetration with a 140-pound hammer falling 30 inches is considered the "Standard Penetration" or "N-value".

WATER LEVEL MEASUREMENT SYMBOLS:

WL:	Water Level	WS:	While Sampling	BCR:	Before Casing Removal
WCI:	Wet Cave in	WD:	While Drilling	ACR:	After Casing Removal
DCI:	Dry Cave in	AB:	After Boring	N/E:	Not Encountered

Water levels indicated on the boring logs are the levels measured in the borings at the times indicated. Groundwater levels at other times and other locations across the site could vary. In pervious soils, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels may not be possible with only short-term observations.

DESCRIPTIVE SOIL CLASSIFICATION: Soil classification is based on the Unified Soil Classification System. Coarse Grained Soils have more than 50% of their dry weight retained on a #200 sieve; their principal descriptors are: boulders, cobbles, gravel or sand. Fine Grained Soils have less than 50% of their dry weight retained on a #200 sieve; they are principally described as clays if they are plastic, and silts if they are slightly plastic or non-plastic. Major constituents may be added as modifiers and minor constituents may be added according to the relative proportions based on grain size. In addition to gradation, coarse-grained soils are defined on the basis of their in-place relative density and fine-grained soils on the basis of their consistency.

CONSISTENCY OF FINE-GRAINED SOILS

Unconfined Compressive Strength, Qu, psf	Standard Penetration or N-value (SS) Blows/Ft.	Consistency
< 500	0 – 1	Very Soft
500 – 1,000	2 – 3	Soft
1,000 – 2,000	4 – 6	Medium Stiff
2,000 – 4,000	7 – 12	Stiff
4,000 – 8,000	13 – 26	Very Stiff
8,000+	26+	Hard

RELATIVE DENSITY OF COARSE-GRAINED SOILS

Standard Penetration or N-value (SS) Blows/Ft.	Relative Density
0 – 3	Very Loose
4 – 9	Loose
10 – 29	Medium Dense
30 – 49	Dense
50+	Very Dense

RELATIVE PROPORTIONS OF SAND AND GRAVEL

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	0 – 14
With	15 – 29
Modifier	30+

GRAIN SIZE TERMINOLOGY

Major Component of Sample	Particle Size
Boulders	Over 12 in. (300mm)
Cobbles	12 in. to 3 in. (300mm to 75mm)
Gravel	3 in. to #4 sieve (75mm to 4.75mm)
Sand	#4 to #200 sieve (4.75 to 0.075mm)
Silt or Clay	Passing #200 Sieve (0.075mm)

RELATIVE PROPORTIONS OF FINES

Descriptive Term(s) of other constituents	Percent of Dry Weight
Trace	0 – 4
With	5 – 12
Modifier	12+

PLASTICITY DESCRIPTION

Term	Plasticity Index
Non-plastic	0
Low	1 – 10
Medium	11 – 30
High	30+

Exhibit C-1

UNIFIED SOIL CLASSIFICATION SYSTEM

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]					Soil Classification	
					Group Symbol	Group Name [B]
Coarse Grained Soils: More than 50% retained on No. 200 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	$Cu \geq 4$ and $1 \leq Cc \leq 3$ [E]		GW	Well-graded gravel [F]
			$Cu < 4$ and/or $1 > Cc > 3$ [E]		GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH		GM	Silty gravel [F,G,H]
			Fines classify as CL or CH		GC	Clayey gravel [F,G,H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	$Cu \geq 6$ and $1 \leq Cc \leq 3$ [E]		SW	Well-graded sand [I]
			$Cu < 6$ and/or $1 > Cc > 3$ [E]		SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH		SM	Silty sand [G,H,I]
			Fines classify as CL or CH		SC	Clayey sand [G,H,I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots on or above "A" line [J]		CL	Lean clay [K,L,M]
			PI < 4 or plots below "A" line [J]		ML	Silt [K,L,M]
		Organic:	Liquid limit - oven dried / Liquid limit - not dried	< 0.75	OL	Organic clay [K,L,M,N] / Organic silt [K,L,M,O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line		CH	Fat clay [K,L,M]
			PI plots below "A" line		MH	Elastic Silt [K,L,M]
		Organic:	Liquid limit - oven dried / Liquid limit - not dried	< 0.75	OH	Organic clay [K,L,M,P] / Organic silt [K,L,M,Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor				PT	Peat

[A] Based on the material passing the 3-in. (75-mm) sieve

[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.

[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.

[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay

[E] $Cu = D_{60}/D_{10}$ $\quad Cc = \dfrac{(D_{30})^2}{D_{10} \times D_{60}}$

[F] If soil contains ≥ 15% sand, add "with sand" to group name.

[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.

[H] If fines are organic, add "with organic fines" to group name.

[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.

[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.

[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.

[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.

[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.

[N] PI ≥ 4 and plots on or above "A" line.

[O] PI < 4 or plots below "A" line.

[P] PI plots on or above "A" line.

[Q] PI plots below "A" line.

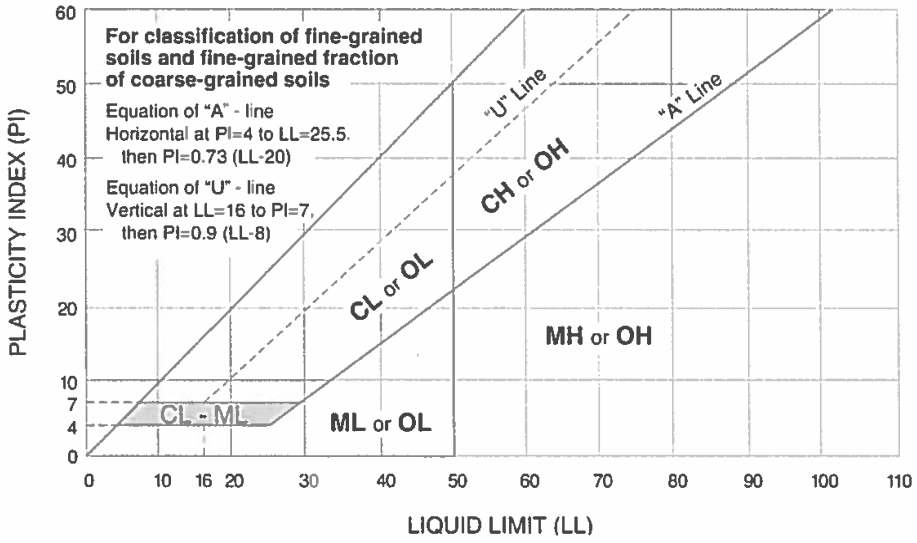


Exhibit C-2

EXHIBIT G

Environmental Science & Assessment, LLC

MEMORANDUM

DATE: September 27, 2018

TO: Mark Benson

FROM: Kim Reavis Environmental Science & Assessment, LLC

RE: Benson Storage, Sandy, Oregon (Tax Lot 24E15A 209)

Environmental Science & Assessment, LLC (ES&A) conducted a wetland determination at an 8.12–acre tax lot (24E15A 00209) located in on Champion Way in Sandy, Oregon. The site is located at the intersection of Mt. Hood Highway (Hwy 26) and Champion Way.

METHODOLOGY

Two levels of investigation were used to evaluate the presence of natural resources. The first level included a review of existing available background data and maps. The second level consisted of an onsite evaluation.

Reviewed background data included the following information:

- Aerial Photography and Topography (Metro Data Resource Center's MetroMap, 2013)
- Natural Resource Conservation Service (NRCS) Soil Survey of Clackamas County, Oregon (Web Soil Survey, 2018).
- DSL Concurrence Letter (DSL File #WD2002-0222)

ES&A conducted the determination June 14, 2018. The investigation focused on the southern portion of the site where relevant field data was collected to identify and characterize the nature and condition of the site and to determine the presence or absence of wetlands. A wetland boundary was flagged in the field and subsequently surveyed by Firwood Design Group (see Figure 1).

The wetland delineation data was collected using the methodology provided in the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0)* (USACE, 2010).

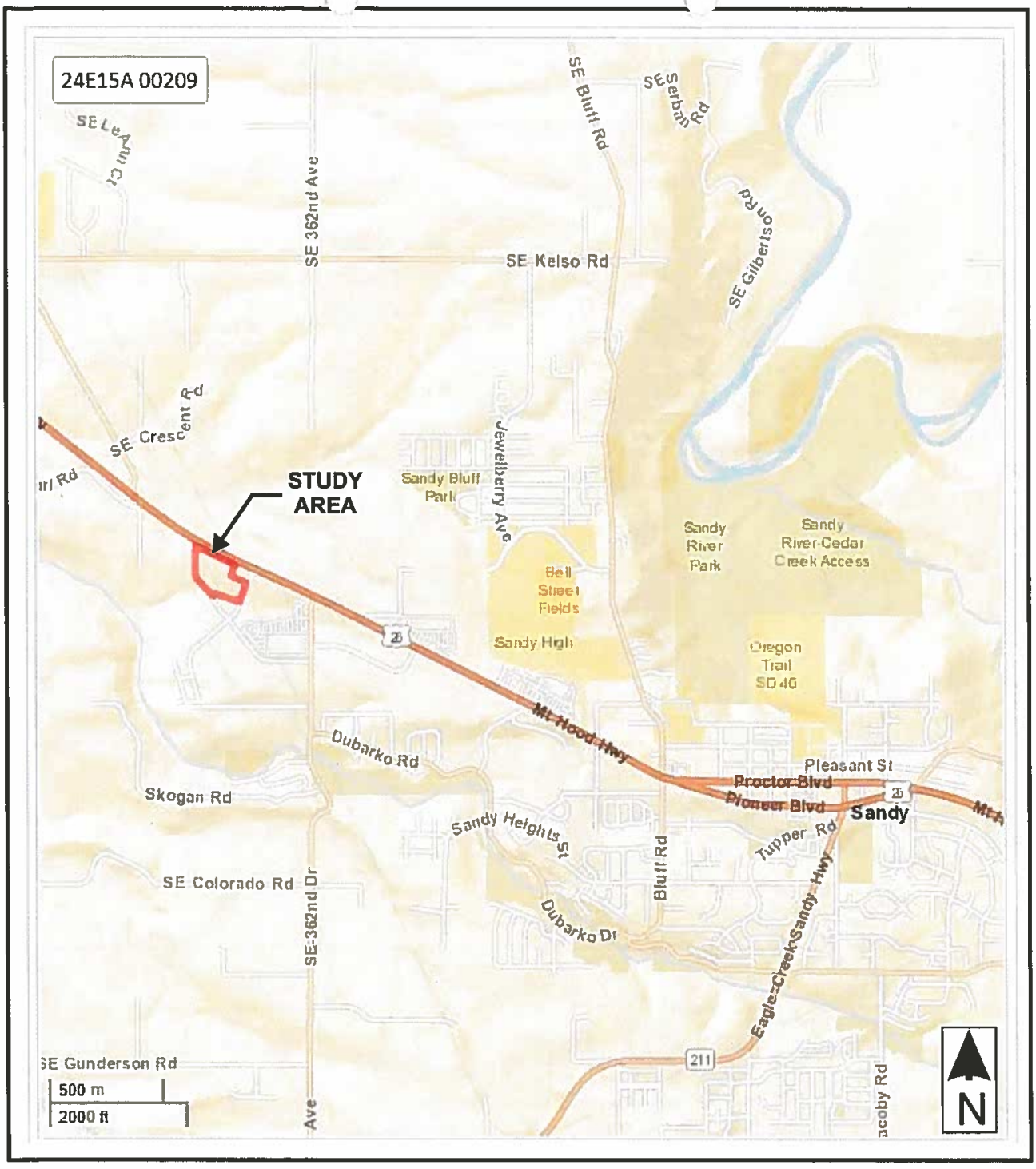
107 SE Washington Street, # 249 Portland, OR. 97214 v 503.478.0424 f 503.478.0422 www.esapdx.com

SITE DESCRIPTION

The 8-acre site is project area is located on the western end of the City of Sandy. The Hwy 26 borders the site along the north, Champion Way and Industrial Way borders the east and southwest property boundaries, respectively.

No hydric soils are mapped on site. A drainage enters the site from the east via a culvert and flows west through the southern portion of the site within the wide low-lying swale topography. The hydrology continues offsite via culverts under Industrial Way. Wetland flanks both side of the drainage. The northern wetland boundary is defined by steeply rising topography approximately six feet high before the topography levels out just beyond the thick brushy vegetation. The vegetation demarcates the resource area from the remainder of the site which is managed as a fallow hay field. The wetland area does not include the water quality facility at the east end, north of the drainage.

Dominate Wetland vegetation includes red alder trees (*Alnus rubra*, FAC) native rose (*Rosa* sp., FAC), Douglas spiraea (*Spiraea douglasii*, FACW) red osier dogwood (*Cornus seric*ea, FACW) and touch me not (*Impatiens* sp., FACW).



Source: Metro Data Resource Center. http://gis.oregonmetro.gov/metromap/

Environmental Science & Assessment, LLC	Vicinity Map Tax Lot 24E15A 00209 Clackamas County, Oregon	Figure 1 Approx. Scale: 1in. = 2,000 ft.

Figure 2

Wetland Map
Tax Lot 24E15A 00209
Sandy, Oregon

Map Source: Firwood Design Group, LLC
Modified By: KR
Date: 9/18
Proj No.: 18043
Rev: 00/00

Environmental Science & Assessment, LLC
107 SE Washington St., Suite 249
Portland, OR 97214
Phone: 503.478.0424
www.esapdx.com

WETLAND DATA

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL: 24E15A 00209 City/County: Sandy / Clackamas Sampling Date: 6/14/2018

Applicant/Owner: Mark Benson State: OR Sampling Point: DP-1

Investigator(s): Kim Reavis Section, Township, Range: S10, T2S, R4E

Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): convex Slope (%): 5%

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.40494 Long: 122.29602 Datum: N/A

Soil Map Unit Name: Cottrell silty clay loam, 8 to 15 percent (24C) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____ No X	
Wetland Hydrology Present?	Yes _____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	10	yes	FACU
2.			
3.			
4.			
	10 = Total Cover		
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Rubus armeniacus	30	yes	FAC
2. Rubus laciniatus	10	yes	FACU
3.			
4.			
5.			
	40 = Total Cover		
Herb Stratum (Plot size: 5' diameter)			
1. Phalaris arundinacea	45	yes	FACW
2. Holcus lanatus	10	yes	FAC
3. Leucanthemum vulgare	5		FACU
4. Schedonorus arundinaceus	5		FAC
5. Vicia sp.	5		FAC-UPL
6.			
7.			
8.			
9.			
10.			
11.			
	65 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: DP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-17	7.5YR 2.5/2	100					silt loam	
17-19	7.5YR 3/3	100					silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: TL: 24E15A 00209 City/County: Sandy / Clackamas Sampling Date: 6/14/2018

Applicant/Owner: Mark Benson State: OR Sampling Point: DP-2

Investigator(s): Kim Reavis Section, Township, Range: S10, T2S, R4E

Landform (hillslope, terrace, etc.): swale Local relief (concave, convex, none): convex Slope (%): 5%

Subregion (LRR): A-Northwest Forests and Coasts Lat: 45.40503 Long: 122.29640 Datum: N/A

Soil Map Unit Name: Cottrell silty clay loam, 8 to 15 percent (24C) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' diameter)	Absolute % Cover	Dominant Species?	Indicator Status
1. Alnus rubra	50	yes	FAC
2.			
3.			
4.			
	50 = Total Cover		
Sapling/Shrub Stratum (Plot size: 30' diameter)			
1. Cornus sericea	80	yes	FACW
2. Rosa sp.	40	yes	FAC
3. Spiraea douglasii	20		FACW
4.			
5.			
	140 = Total Cover		
Herb Stratum (Plot size: 5' diameter)			
1. Impatiens sp.	20	yes	FACW
2. Poa sp.	15	yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	35 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ✓ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: DP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 2.5/2	100					silty clay loam	
6-8	7.5YR 3/3	100					silty clay loam	
8-12	7.5YR 3/2	95	5YR 3/4	5	C	M	silty clay loam	
12-16	7.5YR 4/4	95	5YR 3/4	10	C	M	silty clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ✓ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No ____ Depth (inches): _____

Water Table Present? Yes ✓ No ____ Depth (inches): 12

Saturation Present? (includes capillary fringe) Yes ✓ No ____ Depth (inches): 11

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Surface water was present at lower elevation of the wetland area

STORMWATER REPORT
Preliminary

EXHIBIT H

SANDY VAULT
Champion Way
Sandy, OR 97055

Prepared By:

FDG
Firwood Design Group, LLC
SURVEYING • ENGINEERING • PLANNING

359 E. Historic Columbia River Highway
Troutdale, OR 97060
503.668.3737- fax 503.668.3788

Stormwater Report

FIRWOOD DESIGN GROUP, LLC

STORMWATER CALCULATIONS

Proposed Site Improvements
City of Sandy, Oregon

For

Sandy Vault
Mini Storage

September 21, 2018

Prepared by:

Firwood Design Group, LLC
359 E. Historic Columbia River Highway
Troutdale, OR 97060
(503) 668-3737

FDG # E16-055

TABLE OF CONTENTS

STORM DRAINAGE CALCULATIONS

I. OBJECTIVE

The objective is to provide stormwater treatment and detention for the new impervious parking area associated with the proposed site improvements.

Stormwater discharge from the proposed new impervious parking area will be collected, treated in a Contech CDS Manhole. The water will be detained in a detention pipe system with a flow control manhole. The proposed detention and treatment will conform to the City of Sandy storm water requirements.

II. METHODOLOGY

As per the City of Sandy code, the City of Portland stormwater manual was applied in developing the proposed stormwater management for the impervious surface areas. HydroCAD is used to apply the Santa Barbara unit hydrograph for the respect storm intensities with a 24 hr duration.

For water quality a flow rate evaluation is applied for pollution reduction per Table1-2 in the City of Portland stormwater manual, with storm intensity of 0.2 inches/hr for a 24hr duration.

For detention the proposed underground detention system is designed to have a released rate not to exceed the following:

1. The post construction 24 hour 2 year recurrence interval storm event runoff will not exceed the 2 year pre development 2 year 24 hour runoff
2. The post construction 24 hour 5 year recurrence interval storm event runoff will not exceed the 5 year pre development 5 year 24 hour runoff
3. The post construction 24 hour 10 year recurrence interval storm event runoff will not exceed the 10 year pre development 10 year 24 hour runoff
4. The post construction 24 hour 25 year recurrence interval storm event runoff will not exceed the pre development 25 year runoff.

III. REFERENCES:

USGS Soil Maps for Multnomah County, Oregon
City of Portland, Stormwater Management Manual
City of Sandy Development Code

IV. SITE DESCRIPTION:

The site is a parcel located in the City of Sandy at T2 R4E Sect. 15A, Lot 209 and is approximately 8.07 acres in size with a topography that is sloping from north down to the south. The site is currently a vacant parcel with grass vegetation. The parcel is situated with public street frontage along Champion Way, Industrial Way and Highway 26. The site has and existing water drainage course that bi-sects the lower (southern) portion of the parcel and this is the receiving water course for the point of discharge for the proposed managed stormwater runoff.

The Soils per the USDA Soils maps are predominately classified as Cazadero Silt Clay loam (15B) with 0 to 7 percent slopes. These Soils have a hydrologic soil group - Hydrologic Group C, these are slow infiltrating soils.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

As the soils exhibit slow infiltrating and the site exhibits a sloped topography, infiltration of stormwater is not a viable method of stormwater management.

V. STORMWATER MANAGEMENT:

Quantity Control Analysis

The Santa Barbara Urban Hydrograph (HydroCAD) was used to create the basin hydrographs (see appendix for data and calculations) and to estimate the peak flows for the design storms. A curve number (CN) value of 98 was assigned to the impervious surfaces, a CN value of 79 (Pasture/Grassy type C soil) was used for pre-existing pervious area. The time of concentration is 6 minutes as a minimum value.

The design storms, as required by the City of Sandy design and construction standards, are as follows:

Recurrence Interval (years)	Total Precipitation Depth (In)
2	3.50
5	4.50
10	4.80
25	5.50

Each storm event was modeled for both pre-construction conditions and post-construction conditions. The detention system will be installed for four different areas:
A – Half of Building 1 roof top and the entry drive aisle across from AM/PM. The total impervious area is 28,009
B - Half of Building 1 roof top, Building 2 rooftop, and the easterly part of the exit only drive aisle. The total impervious area is 47,520 square feet.
C- Building 3 & 4 roof top, the exit only drive aisle from the upper catch basin. The total impervious area is 51,400 square feet.
D – Building 5 roof top and the access drive aisle for building 5. The total impervious area is 16,727 square feet.

An exhibit map illustrating the areas is included in the Appendices.

A flow control manhole will regulate flows to pre-development flow rates. The following table summarizes the calculated flow rates.

Pre-Construction and Post Construction Stormwater flows:

Area "A"

Design Storm and	Pre-Development (Existing) Peak Flow (cfs)	Post-Construction Peak Flow (cfs)	Allowed Post Construction Runoff	Actual Post Construction Runoff
2 year	.09	.26	.09	.09
5 year	.14	.34	.14	.14
10 year	.16	.36	.16	.16
25 year	.20	.41	.20	.20

To achieve the aforementioned flow rates the flow control will have two orifices:
A 1.5" orifice at the pipe invert elevation, and a 1.8" orifice at an elevation 2.8' above the pipe invert. For storms larger than the 25-year event the tee riser pipe will act as an overflow.

Area "B"

Design Storm and	Pre-Development (Existing) Peak Flow (cfs)	Post-Construction Peak Flow (cfs)	Allowed Post Construction Runoff	Actual Post Construction Runoff
2 year	.11	.44	.11	.11
5 year	.18	.57	.18	.18
10 year	.20	.61	.20	.20
25 year	.25	.70	.25	.25

To achieve the aforementioned flow rates the flow control will have two orifices:

A 1.6" orifice at the pipe invert elevation, and a 2.0" orifice at an elevation 3.8' above the pipe invert. For storms larger than the 25-year event the tee riser pipe will act as an overflow.

Area "C"

Design Storm and	Pre-Development (Existing) Peak Flow (cfs)	Post-Construction Peak Flow (cfs)	Allowed Post Construction Runoff	Actual Post Construction Runoff
2 year	0.12	0.48	0.12	0.12
5 year	0.19	0.62	0.19	0.18
10 year	0.22	0.66	0.22	0.21
25 year	0.28	0.76	0.28	0.28

To achieve the aforementioned flow rates the flow control will have two orifices:

A 1.6" orifice at the pipe invert elevation, and a 2.0" orifice at an elevation 4.00' above the pipe invert. For storms larger than the 25-year event the tee riser pipe will act as an overflow.

Area "D"

Design Storm and	Pre-Development (Existing) Peak Flow (cfs)	Post-Construction Peak Flow (cfs)	Allowed Post Construction Runoff	Actual Post Construction Runoff
2 year	0.05	0.16	0.05	0.05
5 year	0.09	0.20	0.09	0.09
10 year	0.10	0.22	0.10	0.10
25 year	0.13	0.25	0.13	0.12

To achieve the aforementioned flow rates the flow control will have two orifices:

A 1.2" orifice at the pipe invert elevation, and a 1.4" orifice at an elevation 2.06' above the pipe invert. For storms larger than the 25-year event the tee riser pipe will act as an overflow.

Water Quality Analysis

The total new impervious area relating to the proposed improvements is 143,656 sq. ft. (3.29 acres) in total.

The water quality storm event as required by the City of Sandy is a 0.20 inches / hour rate of rainfall. Using the Rational Method Q= CIA

Q = Peak discharge, cfs
c = Rational method runoff coefficient
i = Rainfall intensity, inch/hour
A = Drainage area, acre

There are three proposed water quality manholes. The flow into each manhole is based on the contributing area using the Rational Method as follows:

Upper drive lane and part of Building 1 rooftop – 28009 sq. ft.(0.643 acres)

$Q_{water\ quality}$= (0.90) (0.20) (.643 ac) = 0.12 cfs

Part of Building 1 rooftop, Building 2 rooftop and easterly part of exit only drive 47520 sq.ft. (1.09 ac). $Q_{water\ quality}$= (0.90) (0.20) (1.09) = 0.196 cfs
Rooftop of Building 3,4 &5 and a portion of the exit only drive aisle below the upper catch basin and the building 5 drive access. 68127 sq. ft. (1.56 acres).

$Q_{water\ quality}$= (0.90) (0.20) (1.56) = 0.28 cfs

Each water quality manhole is capable of a water quality flow up to 0.5 cfs, therefore the proposed water quality manholes are adequately sized for each respective basin.

Conclusion

The proposed improvements consisting of constructing five new storage buildings and related paving over the existing vacant lot will require stormwater treatment and detention to conform to the City of Sandy development code. The proposed treatment is via a Contech CDS water quality manholes. The proposed detention is via underground pipes with flow control manholes. The facilities have been sized in accordance with the City of Sandy design standards and the methods employed represent industry standard practices.

TUBE - model: PD-W2605

LED Ceiling Mount

EXHIBIT I

WAC LIGHTING
Responsible Lighting®

ture Type: A

Catalog Number:

Project: SANDY

Location:

PRODUCT DESCRIPTION

Precision engineered using advanced proprietary LED technology with a built-in reflector. An appealing cylindrical profile with powerful LED lighting is perfect for accent down lighting applications. Five architectural metallic finishes offered.

FEATURES

- Energy Star® rated
- CEC Title 24 Compliant
- IP65 Rated, ETL & cETL Wet Location Listed
- Die-Cast Aluminum Construction
- Hang Straight Swivel
- Three 12" and one 6" down rods included
- Adjustable up to 90° for slope ceiling application

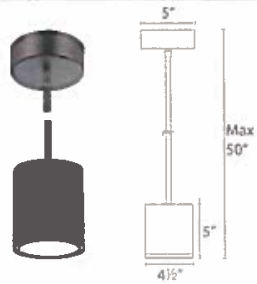
SPECIFICATIONS

Construction: Aluminum with etched glass.
Power: Integral driver in luminaire. 120V input.
Light Source: High output LED
Mounting: Mounts directly to junction box
Dimming: Dimming: 100% -10% ELV (120-277V) or 100% - 5% 0 – 10V
Finish: Brushed Aluminum (AL), Black (BK), Bronze (BZ), Graphite (GH), White (WT)
Color Temp: 3000K ✓
CRI: 90
Rated Life: 70,000 hours
Standards: Energy Star® rated, IP65 Rated, ETL & cETL Wet Location Listed, CEC Title 24 Compliant, Dark Sky Friendly.

REPLACEMENT RODS

Model	Length	Finish
RPL-ROD-OUT06	6"	AL Brushed Aluminum
RPL-ROD-OUT12	12"	BK Black
		BZ Bronze
		GH Graphite
		WT White

	Beam	Photometry	Voltage	Watt	Lumens	Finish
PD-W2605 Energy Star®	33°		120V	16W	800	AL Brushed Aluminum BK Black BZ Bronze GH Graphite WT White



PD-W2605 – BK

Example: PD-W2605-BK

waclighting.com
Phone (800) 526.2588
Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive
Port Washington, NY 11050

Central Distribution Center
1600 Distribution Ct
Lithia Springs, GA 30122

Western Distribution Center
1750 Archibald Avenue
Ontario, CA 91760

HALO

DESCRIPTION

The Halo Surface LED Downlight (SLD) incorporates WaveStream™ technology to create an ultra-low profile surface mounting luminaire with the performance and look of a traditional downlight. SLD6-1200 UNV series is designed for installation in many 4" x 2-1/8" deep square junction boxes. Accessory mounting kit allows retrofit in 5" and 6" IC and Non-IC recessed housings.* Suitable for residential or commercial installations. Ideal for closets, storage areas, attics and basements. Compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5).

Catalog #		Type
Project	SANDY	B
Comments		Date
Prepared by		

SPECIFICATION FEATURES

CONSTRUCTION
- Die cast aluminum trim ring, and die formed aluminum frame

OPTICS
- WaveStream™ technology provides uniform luminance from a low profile flat lens
- AccuAim™ optics provide directional control for the "cone-of-light" beam distribution of a traditional downlight.
- Precision molded lens features high transmission polymer with UV stabilized protecting film

DESIGNER TRIMS
Accessories (sold separately)
SLD designer trims are accessory rings that attach to the SLD for a permanent finish.* Refer to SLD accessories specification sheet for details.
- White (Paintable)
- Satin Nickel
- Tuscan Bronze

*SLD accessory trims attach with permanent adhesion and are not interchangeable after installation.

ELECTRICAL JUNCTION BOX MOUNTING
- SLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- Suitable for installation in many 4" x 2-1/8" deep square electrical junction boxes.
- Driver consumes 3 cubic inches of junction box.
- Compatible with other junction boxes with accessory SLD6EXT extension spacer ring.
- Surface mounting in a fire-rated ceiling using an appropriate electrical box offers a cost-effective alternative to fire-rated recessed housings

Note: Fire-rating is per the rating of the ceiling and applicable junction box, not the SLD.
- Installer must ensure compatibility of fit, wiring and proper mounting in the electrical junction box. This includes all applicable national and local electrical and building codes.
- Proprietary Slot-N-Lock quick installation system for junction box installation
- T-bracket with Slot-N-Lock mounting tabs included

OPTIONAL - RECESSED HOUSING MOUNTING
- Accessory SLD6ACCKIT required for mounting in 5" and 6" enclosed recessed housings
- May be installed in IC recessed housings in direct contact with insulation

* **Note:** Not for use in recessed housings in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013
- The SLD6 may be used with any 5 or 6 inch diameter recessed housing constructed of steel or aluminum with an internal volume that exceeds 107.9 in³.

LED
- Linear LED arrays are integrated in trim perimeter
- Color Temperature: 2700K, 3000K, 3500K, 4000K
- CRI options: 80 and 90
  - 90 CRI can be used for California Title 24 compliance/ certified to Title 20
  - 80 CRI can be used to comply with California Title 24 Non-Residential Lighting Controls as a LED luminaire.

WARRANTY
Eaton provides a five year limited warranty on the SLD LED

LED CHROMATICITY
- A tight chromaticity specification ensures LED color uniformity, sustainable Color Rendering Index (CRI) and Correlated Color Temperature (CCT) over the useful life of the LED
- LED chromaticity of 3 SDCM exceeds ENERGY STAR® color standards per ANSI.
- 90 CRI model features high color performance with R9 greater than 50
- Every Halo LED is quality tested, measured, and serialized in a permanent record to register lumens, wattage, CRI and CCT.
- Halo LED serialized testing and measurement ensures color and lumen consistency on a per-unit basis, and validates long-term product consistency over time

ELECTRICAL CONNECTIONS
Junction Box
- Compatible with 4" x 2-1/8" deep square boxes
- Supply Wire Adapter with LED quick connector included
- LED connector is a non-screwbase luminaire disconnect for tool-less installation

Optional - Recessed Housings
- Accessory SLD6ACCKIT required.
- LED connector is compatible with Halo 5" H550 Series and 6" H750, H2750 Series LED Housings
- LED Connector meets California Title-24 high-efficacy luminaire standard as a non-screw base

SLD6 1200 UNV Series

Universal Voltage

SLD6128xxWHUNVJB
80CRI
2700K, 3000K, 3500K, and 4000K

SLD6129xxWHUNVJB
90CRI
2700K, 3000K, 3500K, and 4000K

6" Surface LED Downlight

High Lumen 1200 Series Universal Voltage 120V-277V

Suitable for ceiling or wall electrical junction boxes

ENERGY DATA

	80 CRI	90 CRI
Lumens (4000K models)	1215	1000
Input Voltage	120V-277V	120V-277V
Frequency	50/60 Hz	50/60 Hz
Input Current	0.12 A	0.12 A
Input Power	14.8 W	14.8 W
Efficiency (4000K models)	82 lm/W	68 lm/W
THD	≤ 20%	
Power Factor	≥ 0.90	
T Ambient	-30 - +40°C	
Sound Rating	Class A	

NOMENCLATURE

SLD 612 8 30 WH UNV JB
- 612 = 6" SLD 1200 Series
- 8 = >80 CRI
- 30 = 3000K
- WH = Matte White
- UNV = Universal Voltage 120V-277V
- JB = Junction Box Kit only

80 CRI nominal CCT 2700K 3000K 3500K 4000K

Refer to ENERGY STAR® Certified Products List.

90 CRI nominal CCT 2700K 3000K 3500K 4000K

Refer to ENERGY STAR® Qualified Products List.
Can be used to comply with California Title 24 High Efficacy requirements.
Certified to California Appliance Efficiency Database under JA8.
Indoor LED nominal CCT of 4000K or less.

EATON
Powering Business Worldwide

TD518030EN
12/21/2017

LED DRIVER
- Driver is a 120V-277V universal voltage input, high efficiency, dimmable electronic power supply providing DC power to the LED arrays
- Driver features high power factor, low THD, and has integral thermal protection in the event of over temperature or internal failure
- Driver is replaceable if it should be required
- If dimming is not required the fixutre may be operated from a switch

DIMMING - PHASE CONTROL
- Designed for continuous dimming capability to nominally 5% with many 120V Leading Edge (LE) and Trailing Edge (TE) Phase Control dimmers. (Dimmers with low end trim adjustment offer greater assurance of achieving 5% level.)
- Consult dimmer manufacturer for compatibility and conditions of use.
(Note some dimmers require a neutral in the wallbox.)

DIMMING - 0-10V
- Dimmable to 10% in typical operation with compatible 0-10V DC low voltage dimmers.
- 0-10V DC dimmers operate using two low voltage dimming wires (color coded violet and gray). The low voltage dimming wires are separate from the 120V AC or 277V AC power.
- Switching on/off is controlled via the line voltage (120V AC or 277V AC) power, and dimming is controlled via the 2-wire 0-10V DC low voltage wiring.

COMPLIANCE
- cULus Listed ceiling and wall
- cULus Damp Location listed ceiling and wall
- cULus Wet Location Listed, ceiling only (shower rated)
- Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5)
- SLD may be used in compatible electrical junction boxes in direct contact with insulation including spray foam insulation
- With accessory SLD6ACCKIT, may be installed in IC recessed housings in direct contact with insulation (Not for use in recessed housings in direct contact with spray foam insulation. Refer to NEMA LSD 57-2013)
- EMI/RFI: meets FCC 47CFR Part 15 Class B limits, and is suitable for use in residential and commercial installations
- Airtight certified per ASTM E283 (not exceeding 2.0 CFM under 75 Pascals pressure difference)
- 90 CRI: Can be used to comply with California Title 24 High Efficacy requirements. Certified to California Title 20 Appliance Efficiency Database.
- 80 CRI: Can be used to comply with California Title 24 Non-Residential Lighting Controls requirements as a LED luminaire.
- Can be used for International Energy Conservation Code (IECC) and Washington State Energy Code high efficiency luminaire compliance
- ENERGY STAR® certified luminaire - consult ENERGY STAR® Certified Product List
- Contains no mercury or lead and RoHS compliant.
- Photometric testing in accordance with IES LM-79
- Lumen maintenance projections in accordance with IES LM-80 and TM-21

SLD6 1200 UNV Series

Universal Voltage

SLD6128xxWHUNVJB
80CRI
2700K, 3000K, 3500K, and 4000K

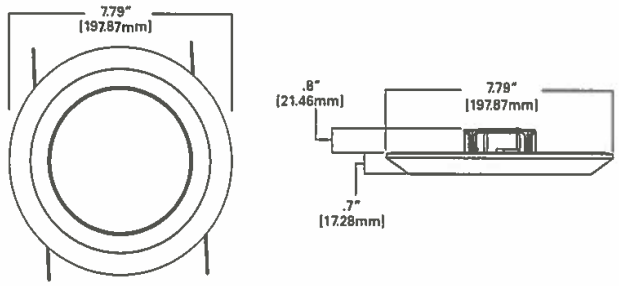
SLD6129xxWHUNVJB
90CRI
2700K, 3000K, 3500K, and 4000K

6" Surface LED Downlight

High Lumen 1200 Series Universal Voltage 120V-277V

Suitable for ceiling or wall electrical junction boxes

DIMENSIONS



ORDERING INFORMATION

SAMPLE NUMBER: SLD612927WHUNVJB SLD6TRMSN
Junction Box Installation: Order junction box separately, as supplied by others, to complete installation.
Recessed Installation: Order Halo recessed housing separately to complete installation.

Models	Color Rendering Index	Color Temperature (CCT)	Finish	Voltage	Junction Box
SLD612= 6" Surface LED Downlight, 1200 Series	8=80 CRI 9=90 CRI	27=2700K 30=3000K 35=3500K 40=4000K	WH=White	UNV=Universal Voltage 120V-277V	JB=Junction Box Kit only

X NO

Accessories

Designer Trims
Fit over the SLD for a designer finish
SLD6TRMSN=6" SLD Satin Nickel
SLD6TRMTBZ=6" SLD Tuscan Bronze
SLD6TRMWH=6" SLD White (paintable)
*SLD accessory trims attach with permanent adhesion and are not interchangable after installation

J-Box Spacer Extension Ring
Add 15/16" depth when SLD driver cannot fit into installed junction box
SLD6EXT=6" Surface LED J-Box Extender, 9.5" O.D.

RAD Adapters
When junction box is mounted flat on a ceiling or beam surface (not recessed in ceiling)
SLD6RAD=6" SLD Round Surface J-Box Adapter, 7.92" O.D.
(for 4-inch round or octagon junction boxes.)
SLD6SADPLT=6" SLD Square Surface J-Box Adapter Plate
(For 4-inch square junction boxes, use with SLD6RAD.)

Hardware Kits
SLD6ACCKIT=6" Accessory Parts Replacement Kit
(Screwbase adapter, torsion springs, friction blades)
SLD6BRKT=6" Junction Box Bracket & Screws

Refer to SLD Accessories specification sheet for further information.

COMPATIBLE WITH EATON'S CROUSE-HINDS 4" SQUARE JUNCTION BOXES

TP450
for non-metallic cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

TP431†
for metal clad cable
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

- TP450 - for non-metallic cable
- TP431 - for metal clad cable
- UL Listed
- Suitable for two-hour fire-rated ANSI/UL 263 when properly installed in a fire-rated ceiling or wall
- Refer to www.crouse-hinds.com

†UL approved for use with aluminium interlocking grounding metal clad cable. Type MCIA (Southwire MCAP™). MCAP™ is a registered trademark of Southwire Company.

COMPATIBLE WITH 4" SQUARE JUNCTION BOXES*

4" square deep steel box
4" x 4" x 2-1/8"
(102mm x 102mm x 54mm)

Compatible with other boxes when used with SLD6EXT extension spacer ring.

Surface mounting in a fire-rated ceiling using an appropriate electrical box offers a cost-effective alternative to fire-rated recessed housings.

Note: Fire-rating is per the rating of the ceiling and applicable junction box, not the SLD.

*This is a representative list of compatible junction boxes only. Information contained in this literature about other manufacturers' products is from published information made available by the manufacturer and is deemed to be reliable, but has not been verified. Eaton makes no specific recommendation on product selection and there are no warranties of performance or compatibility implied. Installer must determine that site conditions are suitable to allow proper installation of the SLD mounting bracket in the box.

PRODUCT DATA

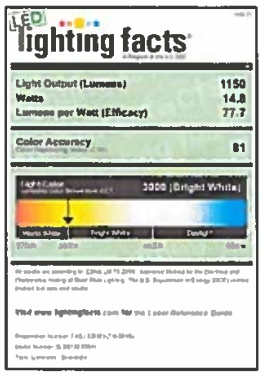
Cat No.	CRI	CCT	Lumens	Power (W)	LPW
SLD612827WHUNVJB	80	2700	1100	14.8	74
SLD612830WHUNVJB	80	3000	1150	14.8	78
SLD612835WHUNVJB	80	3500	1200	14.8	81
SLD612840WHUNVJB	80	4000	1215	14.8	82
SLD612927WHUNVJB	92	2700	880	14.8	59
SLD612930WHUNVJB	92	3000	925	14.8	63
SLD612935WHUNVJB	92	3500	965	14.8	65
SLD612940WHUNVJB	92	4000	1000	14.8	68

Performance values are presented as typical for the model(s) indicated. Field results may vary.

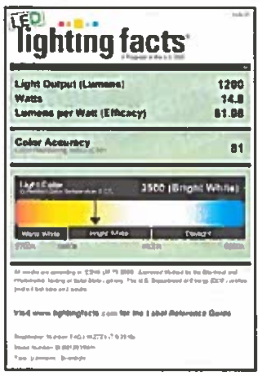
LIGHTING FACTS®

SLD612827WHUNVJB - 80 CRI

SLD612830WHUNVJB - 80 CRI



SLD612835WHUNVJB - 80 CRI



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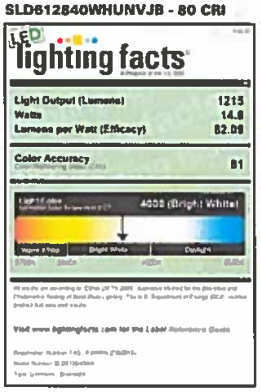
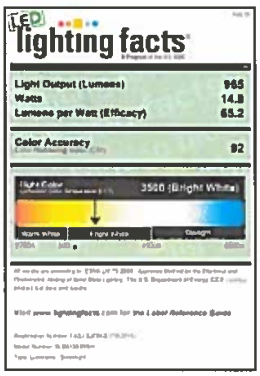


SLD612927WHUNVJB - 90 CRI

SLD612930WHUNVJB - 90 CRI

SLD612935WHUNVJB - 90 CRI



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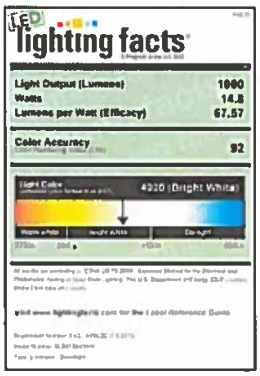


Eaton
1121 Highway 74 South
Peachtree City, GA 30269
P: 770-486-4800
www.eaton.com/lighting

D-Series Size 0
LED Area Luminaire

Catalog Number

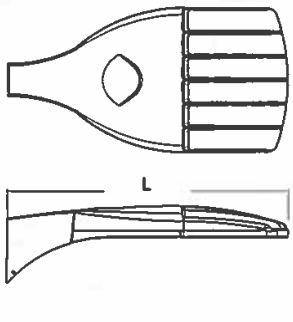
Notes

Type TYPE C,D,E

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

Specifications

EPA:	0.95 ft² (.09 m²)
Length:	26" (66.0 cm)
Width:	13" (33.0 cm)
Height:	7" (17.8 cm)
Weight (max):	16 lbs (7.25 kg)



A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a shaded background. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability1
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background[1]

To learn more about A+, visit www.acuitybrands.com/aplus.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: Link to Roam; Link to DTL DLL

A+ Capable options indicated by this color background.

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA DDBXD

DSX0 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	**Forward optics** P1 P4 P7 P2 P5 P3 P6 **Rotated optics** P10[1] P12[1] P11[1] P13[1]	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted[1]	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[2,3] LCCO Left corner cutoff[2,3] RCCO Right corner cutoff[2,3]	MVOLT[4,5] 120[6] 208[5,6] 240[5,6] 277[6] 347[5,6,7] 480[5,6,7]	**Shipped included** SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor[8] RPUMBA Round pole universal mounting adaptor[8] **Shipped separately** KMA8 DDBXDU Mast arm mounting bracket adaptor (specify finish)[9]

Control options		Other options	Finish
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[10] PER NEMA twist-lock receptacle only (control ordered separate)[11] PER5 Five-wire receptacle only (control ordered separate)[11,12] PER7 Seven-wire receptacle only (control ordered separate)[11,12] DMG 0-10V dimming extend out back of housing for external control (control ordered separate) PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[5,13,14] PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[5,12,14] PIRHN Network, Bi-Level motion/ambient sensor[15] PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[5,13,14]	PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[5,13,14] BL30 Bi-level switched dimming, 30%[5,16,17] BL50 Bi-level switched dimming, 50%[5,16,17] PNMTDD3 Part night, dim till dawn[5,18] PNMT5D3 Part night, dim 5 hrs[5,18] PNMT6D3 Part night, dim 6 hrs[5,18] PNMT7D3 Part night, dim 7 hrs[5,18] FAO Field adjustable output[19]	**Shipped installed** HS House-side shield[20] SF Single fuse (120, 277, 347V)[6] DF Double fuse (208, 240, 480V)[6] L90 Left rotated optics[1] R90 Right rotated optics[1] DDL Diffused drop lens[21] **Shipped separately** BS Bird spikes[21] EGS External glare shield[21]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Ordering Information

Accessories

Ordered and shipped separately.

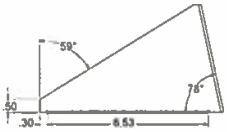
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) [21]
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) [21]
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) [21]
DSHORT SBK U	Shorting cap [22]
DSX0HS 20C U	House-side shield for 20 LED unit [20]
DSX0HS 30C U	House-side shield for 30 LED unit [20]
DSX0HS 40C U	House-side shield for 40 LED unit [20]
DSX0DDL U	Diffused drop lens (polycarbonate) [20]
PUMBA DDBXD U*	Square and round pole universal mounting bracket adaptor (specify finish) [21]
KMAB DDBXD U	Mast arm mounting bracket adaptor (specify finish) [1]

For more control options, visit DTL and ROAM online.

NOTES

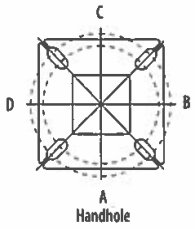
1. P10, P11, P12 and P13 and rotated options (L90 or R90) only available together.
2. AMBPC is not available with BLC, LCCO, RCCO, P4, P7 or P13.
3. Not available with HS or DDL.
4. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
5. Any PIRx with BL30, BL50 or PNMT is not available with 208V, 240V, 347V, 480V or MVOLT. It is only available in 120V or 277V specified.
6. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
7. Not available in P4, P7 or P13. Not available with BL30, BL50 or PNMT options.
8. 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.
9. 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).
10. Must be ordered with PIRHN.
11. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
12. If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
13. Reference Motion Sensor table on page 3.
14. Reference PER Table on page 3 to see functionality.
15. Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this link.
16. Requires (2) separately switched circuits.
17. Not available with 347V, 480V or PNMT. For PER5 or PER7 see PER Table on page 3. Requires isolated neutral.
18. Not available with 347V, 480V, BL30 and BL50. For PER5 or PER7 see PER Table on page 3. Separate Dusk to Dawn required.
19. Not available with other dimming controls options.
20. Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
21. Must be ordered with fixture for factory pre-drilling.
22. Requires luminaire to be specified with PER, PER5 or PER7 option. See PER Table on page 3.
23. For retrofit use only.

External Glare Shield

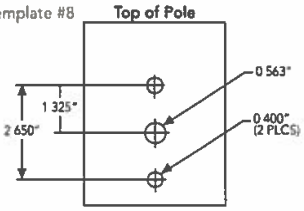


Drilling

HANDHOLE ORIENTATION



Template #8 Top of Pole



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

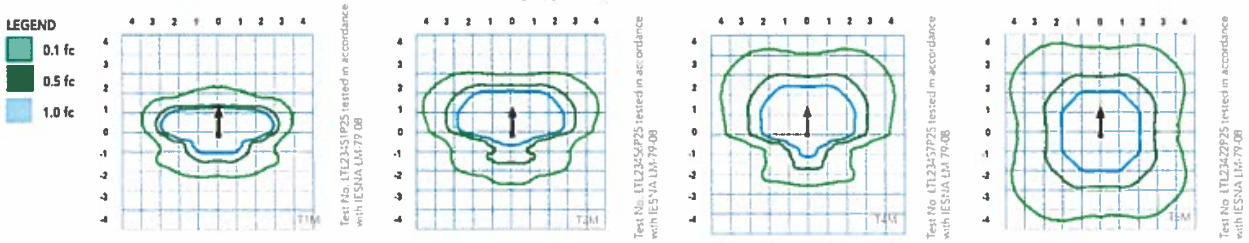
Pole drilling nomenclature: # of heads at degree from handhole (default side A)					
DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D
Note: Review luminaire spec sheet for specific nomenclature					

Pole top or tenon O.D.	4.5" @ 90°	4" @ 90°	3.5" @ 90°	3" @ 90°	4.5" @ 120°	4" @ 120°	3.5" @ 120°	3" @ 120°
DSX SPA	Y	Y	Y	N	-	-	-	-
DSX RPA	Y	Y	N	N	Y	Y	Y	Y
DSX SPUMBA	Y	N	N	N	-	-	-	-
DSX RPUMBA	N	N	N	N	Y	Y	Y	N
					*3 fixtures @120 require round pole top/tenon.			

Photometric Diagrams

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

Isofootcandle 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	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

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	25000	50000	100000
Lumen Maintenance Factor	0.96	0.92	0.85

Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A) 120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	20	530	38	0.32	0.18	0.15	0.15	0.10	0.08
	P2	20	700	49	0.41	0.23	0.20	0.19	0.14	0.11
	P3	20	1050	71	0.60	0.37	0.32	0.27	0.21	0.15
	P4	20	1400	92	0.77	0.45	0.39	0.35	0.28	0.20
	P5	40	700	89	0.74	0.43	0.38	0.34	0.26	0.20
	P6	40	1050	134	1.13	0.65	0.55	0.48	0.39	0.29
	P7	40	1300	166	1.38	0.80	0.69	0.60	0.50	0.37
Rotated Optics (Requires L90 or R90)	P10	30	530	53	0.45	0.26	0.23	0.21	0.16	0.12
	P11	30	700	72	0.60	0.35	0.30	0.27	0.20	0.16
	P12	30	1050	104	0.88	0.50	0.44	0.39	0.31	0.23
	P13	30	1300	128	1.08	0.62	0.54	0.48	0.37	0.27

Motion Sensor Default Settings						
Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min
*for use with Inline Dusk to Dawn or timer.						

PER Table						
Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
			Wire 4/Wire5		Wire 4/Wire5	Wire 6/Wire7
Photocontrol Only (On/Off)	✔	▲	Wired to dimming leads on driver	▲	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	⊘	✔	Wired to dimming leads on driver	▲	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	⊘	▲	Wires Capped inside fixture	▲	Wires Capped inside fixture	Wires Capped inside fixture
Future-proof*	⊘	▲	Wired to dimming leads on driver	✔	Wired to dimming leads on driver	Wires Capped inside fixture
Future-proof* with Motion	⊘	▲	Wires Capped inside fixture	✔	Wires Capped inside fixture	Wires Capped inside fixture

✔ Recommended
⊘ Will not work
▲ Alternate

*Future-proof means: Ability to change controls in the future.

OLWX1 LED
LED Wall Luminaire

Catalog Number

Notes

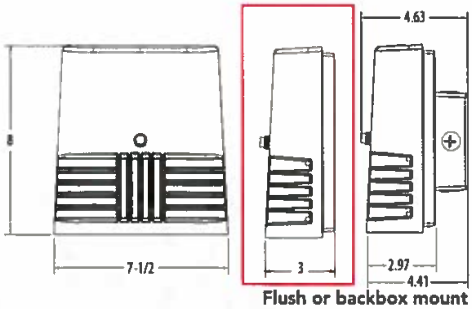
Type TYPE F

Introduction

The OLWX1 is versatile and energy efficient. It is designed to replace up to 250W metal halide while saving over 87% in energy costs. Whether you are mounting it to a recessed junction box, conduit/ through wiring, as an up light, as a down light, or as a flood light – the OLWX1 has all applications covered.

Specifications

Width:	7-1/2" (19 cm)
Height:	8" (20.3 cm)
Depth:	3" (7.62 cm)
Weight:	5 lbs (2.27 kg)



Flush or backbox mount

Ordering Information

EXAMPLE: OLWX1 LED 20W 50K

OLWX1 LED

Series	Performance Package	Color Temperature	Voltage	Controls	Finish
OLWX1 LED	13W 13 watts	40K 4000 K[1]	(blank) MVOLT[2]	(blank) None	(blank) Dark bronze
	20W 20 watts	50K 5000 K	120 120V[1]	PE 120V button photocell[1,3]	
	40W 40 watts		347 347V		

Accessories

Ordered and shipped separately.

OLWX1TS	Slipfitter – size 1
OLWX1YK	Yoke – size 1
OLWX1THK	Knuckle – size 1

NOTES
1. Not available with 347V option.
2. MVOLT driver operates on any line voltage from 120-277V (50/60Hz).
3. Specify 120V when ordering with photocell (PE option).

FEATURES & SPECIFICATIONS

INTENDED USE
The versatility of the OLWX1 LED combines a sleek, low-profile wall pack design with energy efficient, low maintenance LEDs for replacing up to 250W metal halide fixtures. Mounting accessories are available to convert the OLWX1 LED into an energy efficient flood light.

OLWX1 LED is ideal for outdoor applications such as building perimeters, loading areas, driveways and sign and building flood lighting.

CONSTRUCTION
Cast-aluminum housing with textured dark bronze polyester powder paint for durability. Integral heat sinks optimize thermal management through conductive and convective cooling. LEDs are protected behind a glass lens. Housing is sealed against moisture and environmental contaminants (IP65 rated). See Lighting Facts label and photometry reports for details.

ELECTRICAL
Light engine consists of 1 high-efficiency Chip On Board (COB) LED with integrated circuit board mounted directly to the housing to maximize heat dissipation and promote long life (L73/100,000 hours at 25°C). Electronic drivers have a power factor >90% and THD <20% and a minimum 2.5kV surge rating. Flood light mounting accessories include an additional 6kV surge protection device. LEDs are available in 4000K and 5000K CCTs.

INSTALLATION
Easily mounts to recessed junction boxes with the included wall mount bracket, or for surface mounting and conduit entry - with the included junction box with five 1/2" threaded conduit entry hubs. Flood light mounting accessories (sold separately) include knuckle, integral slipfitter and yoke mounting options. Each flood mount accessory comes with a top visor and vandal guard. Luminaire may be wall or ground mounted in downward or upward orientation.

LISTINGS
UL Listed to U.S. and Canadian safety standards for wet locations. Rated for -40° C minimum ambient. Tested in accordance with IESNA LM-79 and LM-80 standards. 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 to confirm which versions are qualified.

WARRANTY
5-year limited warranty. Complete warranty terms located at: 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.

LITHONIA LIGHTING
One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8041 • www.lithonia.com

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.

Feature Model Number	CCT	System Watts	Lumens	LPW	B	U	G	CRI
OLWX1 LED 13W 40K	4000 K	14 W	1,271	91	1	0	0	>70
OLWX1 LED 13W 50K	5000 K	14 W	1,289	92	1	0	0	>80
OLWX1 LED 20W 40K	4000 K	20 W	2,697	135	1	0	0	>70
OLWX1 LED 20W 50K	5000 K	19 W	2,663	140	1	0	0	>70
OLWX1 LED 40W 40K	4000 K	39 W	4,027	101	2	0	0	>70
OLWX1 LED 40W 50K	5000 K	37 W	4,079	110	2	0	0	>70

Electrical Load

Feature Model Number	Rated Power (watts)	Input current at given input voltage (amps)				
		120V	208V	240V	277V	347V
OLWX1 LED 13W 40K	14 W	0.12	0.07	0.06	0.06	0.04
OLWX1 LED 13W 50K	14 W	0.12	0.07	0.06	0.06	0.04
OLWX1 LED 20W 40K	20 W	0.20	0.12	0.10	0.09	0.06
OLWX1 LED 20W 50K	19 W	0.20	0.12	0.10	0.09	0.06
OLWX1 LED 40W 40K	39 W	0.37	0.21	0.19	0.16	0.11
OLWX1 LED 40W 50K	37 W	0.37	0.21	0.19	0.16	0.11

Lumen Ambient Temperature (LAT) Multipliers

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

	0°C	10°C	20°C	25°C	30°C	40°C
13W	1.06	1.03	1.01	1.00	0.99	0.96
20W	1.06	1.04	1.01	1.00	0.99	0.96
40W	1.07	1.04	1.01	1.00	0.99	0.96

Projected LED Lumen Maintenance

Data references the extrapolated performance projections 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
OLWX1 LED 13W	1.00	0.92	0.85	0.73
OLWX1 LED 20W	1.00	0.92	0.85	0.73
OLWX1 LED 40W	1.00	0.94	0.88	0.79

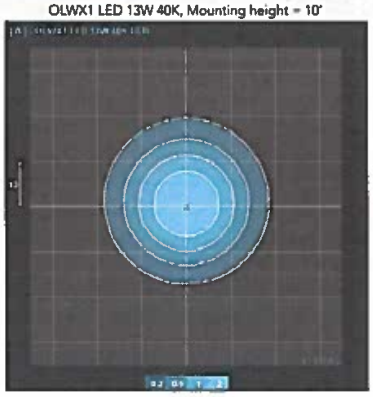
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting OLWX1 LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards

LEGEND

- 0.2 fc
- 0.5 fc
- 1.0 fc
- 2.0 fc

OLWX1 LED 13W 40K, Mounting height = 10'

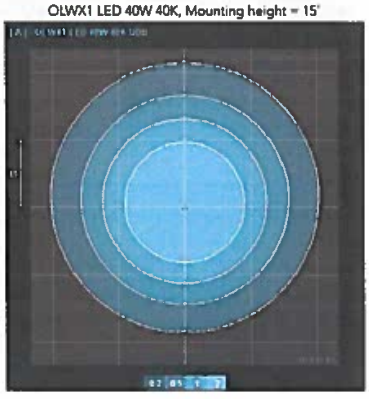


Test No. LTL22697 tested in accordance with IESNA LM-79-08

OLWX1 LED 20W 40K, Mounting height = 12'

Test No. LTL22696 tested in accordance with IESNA LM-79-08

OLWX1 LED 40W 40K, Mounting height = 15'



Test No. LTL22695 tested in accordance with IESNA LM-79-08

Accessories

OLWX1TS
Slipfitter – size 1

Standard size tenon is 2 1/8".
The slip fitter has a range of 2" to 2 3/8".

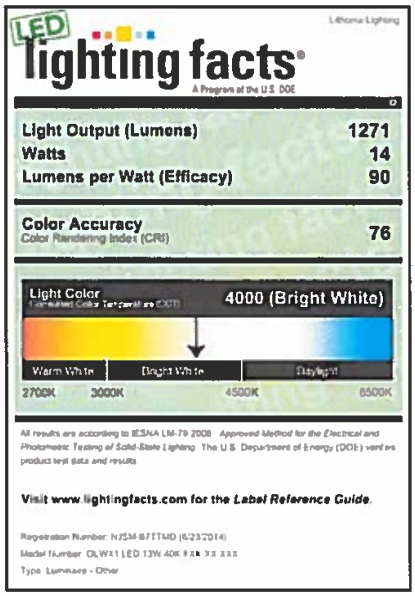
OLWX1YK
Yoke – size 1

OLWX1THK
Knuckle – size 1

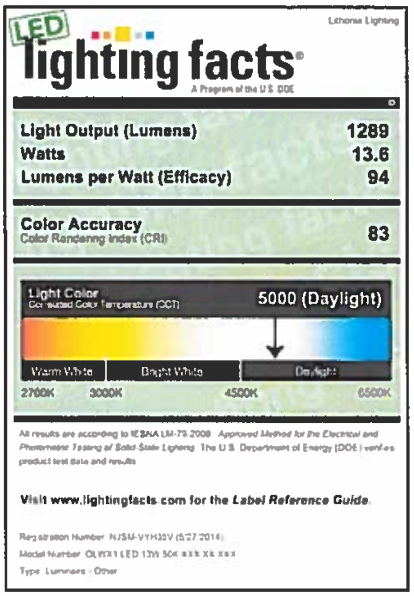
Top Visor and Vandal Guard included with accessories

Lighting Facts Labels

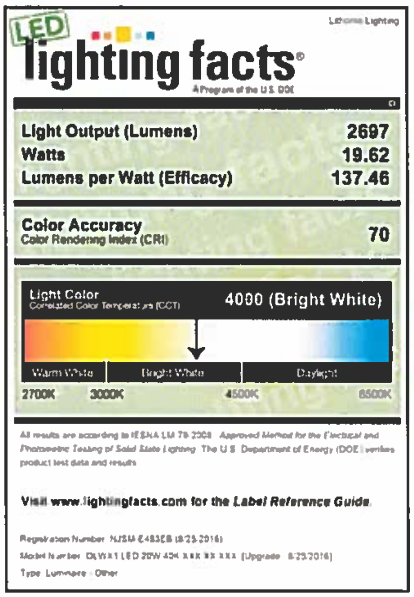
OLWX1 LED 13W 40K XXX XX XXX



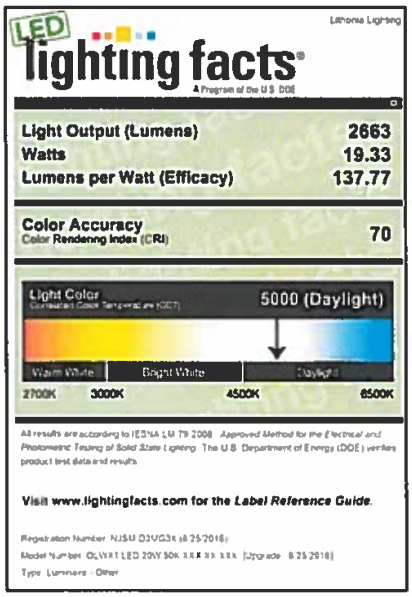
OLWX1 LED 13W 50K XXX XX XXX



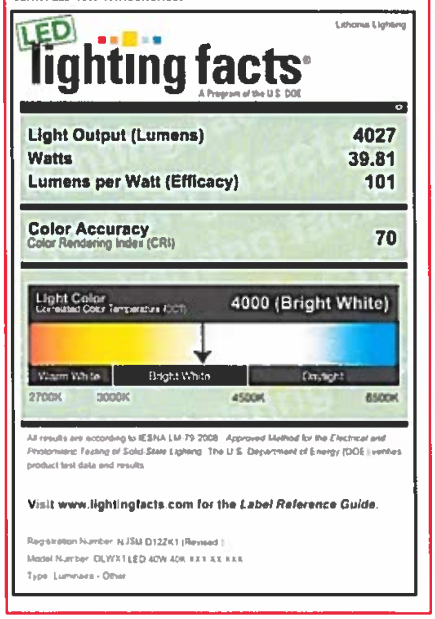
OLWX1 LED 20W 40K XXX XX XXX



OLWX1 LED 20W 50K XXX XX XXX



OLWX1 LED 40W 40K XXX XX XXX



OLWX1 LED 40W 50K XXX XX XXX

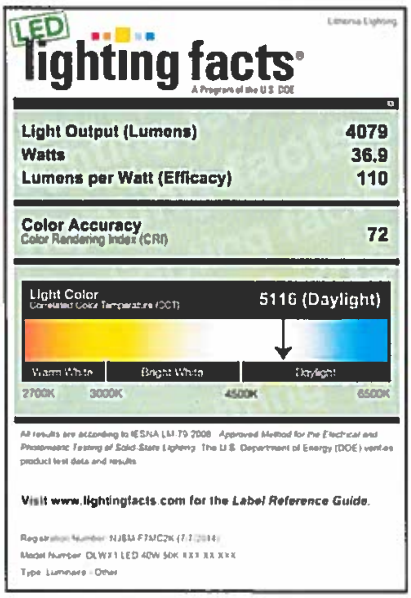


EXHIBIT J

IMG-2244.JPG

https://mail.google.com/mail/u/0/?tab=cm#inbox/FMfcgxwBWBBHZZHWpNsCHbHgfXrhdjnL?projector=1

1/1

EXHIBIT K

CURRAN-McLEOD, INC.
CONSULTING ENGINEERS
6655 S.W. HAMPTON STREET, SUITE 210
PORTLAND, OREGON 97223

February 26, 2019

Ms. Emily Meharg
City of Sandy
39250 Pioneer Blvd.
Sandy, OR 97055

RE: CITY OF SANDY
SANDY VAULT (File # 18-047 DR//VAR/ADJ)
PRELIMINARY REVIEW

Dear Emily:

We have reviewed the preliminary submittal for the above noted development and have the following comments/ recommendations:

1. All earthwork activities shall follow the requirements of the most current edition of the Oregon Structural Specialty Code. Site grading shall not in any way impede or impound or inundate the surface drainage flow from the adjoining properties without a proper collection system. The earthwork activities shall be observed and documented under the supervision of the geotechnical Engineer. We feel the Geotechnical Engineering Report dated December 6, 2011 that was prepared as part of the ARCO AM/PM fuel station should be compatible with this site existing conditions.

2. Sandy Transportation System Plan classifies Industrial Way and Champion Way as collector streets. Half street improvements including right of way dedications will be required along the entire site frontages to include curbs, 5- foot wide planter with landscaping, 6-foot wide sidewalks, street lights and utility extensions as required by the City of Sandy or the City engineer. We recommend the existing roadway width is maintained for consistency and uniformity to match the existing paved surface on Champion Way.

3. We have reviewed the proposed variance request for the minimum 150-foot driveway spacing as per sections 17.98.80(A) and 179.80.120(A.3) and concur that the existing topography constraints moving Building #2 and the associated access in question further south toward the mapped wetland and over the bank into the wooded area. The secondary driveway is designated one way out with a few trips. We have no concerns with granting this variance request.

4. The proposed driveway accesses at Industrial Way and Champion Way shall be concrete Commercial Driveway approach constructed to City standards.

PHONE: (503) 684-3478 E-MAIL: cmi@curran-mcleod.com FAX: (503) 624-8247

5. The final construction plans shall include a plan and profile for Champion Way and Industrial Way improvements to include a plan and profile extensions of a minimum 200 feet in each direction to ensure future grades can be met.

6. The submitted preliminary storm drainage plan is incomplete. A revised storm drainage plan should be submitted for review. At the final design stage and prior to construction a detailed storm drainage report addressing water quality and quantity requirements shall be submitted by the applicant's engineer for review and approval by the City in conformance with Sandy Development Code (SDC) Standards, section 13.18 and the 2018 City of Portland Stormwater Management Manual (SWMM) standards that were adopted by reference into the Sandy Development Code.

7. The final construction plans shall be submitted to Sandy Fire Department for review and approval to ensure that adequate fire protection and access are provided to all the buildings.

8. Sanitary sewer collection system exists to the south of this site. Connection can be made to the sewer line. An easement may be necessary from the adjoining property to the south depending on the connection point.

9. The preliminary plan doesn't show where the domestic water connection will be made to the waterline on Champion Way. The final plans must show the connection location and the size of the meter.

We have no concerns about the proceedings with this project subject to the above stated comments.

Sincerely,

CURRAN-McLEOD, INC.

Hassan A. Ibrahim, P.E.

cc: Mr. Mike Walker, City of Sandy

EXHIBIT L

REPLINGER & ASSOCIATES LLC
TRANSPORTATION ENGINEERING

February 25, 2019

Ms. Emily Meharg
City of Sandy
39250 Pioneer Blvd.
Sandy, OR 97055

SUBJECT: REVIEW OF TRIP GENERATION LETTER – SANDY VAULT SELF-STORAGE

Dear Emily:

In response to your request, I have reviewed materials submitted in support of the Sandy Vault Self-Storage facility. The materials consisted of the site plan and the Trip Generation Letter for the Sandy Vault facility. The Trip Generation Letter was prepared under the direction of Kelli A. Grover, PE of Firwood Design Group. The Letter is dated September 17, 2018.

The letter describes a proposal to construct approximately 58,000 square feet of self-storage facilities spread among 5 buildings. Access is proposed to both Champion Way and Industrial Way.

Overall

I find the information provides an adequate basis to evaluate impacts of the proposed development.

Comments

1. ***Trip Generation.*** The engineer calculates trip generation using Mini-Warehouse, Land Use Category 151 from the 7th Edition of Institute of Transportation Engineers' (ITE) *Trip Generation*. The site is calculated to generate 16 AM peak hour trips and 18 PM peak hour trips. This is likely an overestimate of trip generation. Calculations using newer versions of the *Trip Generation Manual* produce fewer trips. Differences are not significant.

2. ***Site Plan and Access.*** The site plan provides for an access on Industrial Way and two access points on Champion Way. The access points are discussed individually below.

   The proposed access on Industrial Way does not raise any particular concerns.

   An exit-only (upper driveway) is proposed between buildings 1 and 2. This driveway is reported to align with a driveway on the opposite side of Champion Way. As long as sight distance is provided for exiting vehicles and the gate placement does not cause vehicles to encroach on the street or sidewalk, this exit-only driveway appears acceptable.

The third access appears to use the existing shared driveway intersecting with Industrial Way. This shared driveway currently serves the Arco service station, coffee stand, convenience store, and the future Tractor Supply building. The problem with the proposed configuration is the proximity of the entrance to the Sandy Vault from the shared driveway to Champion Way.

Based on the site plan, it appears that customers of the Sandy Vault going to the office and the lower portion of building 1 are expected to turn left into the facility about 50 feet west of Champion Way. The problem with this maneuver is that traffic exiting the Arco station, coffee stand, convenience store, and Tractor Supply will be exiting using this shared driveway. A single semi-trailer truck or three smaller vehicles eastbound from these businesses waiting to exit onto Industrial Way would block an inbound vehicle headed to Sandy Vault. This could result in blockage for all inbound traffic to the entire development area and unexpected, stopped vehicles on Champion Way. While traffic volumes are low, this is a predictable outcome that could result in unsafe conditions.

Conclusion and Recommendations

I find the Trip Generation Letter provides and adequate, if somewhat high, estimate of traffic from the proposed facility.

My concern is with proposed development's layout and site circulation. I think that the proposed configuration may result in traffic conflicts between the customers and employees of Sandy Vault and those of nearby properties. The resulting traffic conflicts could produce stoppages in the shared driveway and even on Champion Way. To minimize the chance of conflict between eastbound traffic on the shared driveway and inbound traffic to Sandy Vault, I recommend that the ingress to the Sandy Vault office and building 1 be located opposite the drive aisle between the Arco station and the convenience store. I estimate this distance to be approximately 120 feet west of the west curb of Champion Way.

If you have any questions or need any further information concerning this review, please contact me at replinger-associates@comcast.net.

Sincerely,

John Replinger

John Replinger, PE
Principal

SandyVaultTGL022519

MEMORANDUM

EXHIBIT M

TO: EMILY MEHARG, ASSOCIATE PLANNER
FROM: MIKE WALKER, PUBIC WORKS DIRECTOR
RE: PW COMMENTS ON FILE NO. 18-047 (SANDY VAULT)
DATE: MARCH 4, 2019

The following are Public Works' comments on the above-referenced application:

Transportation

- It is not clear what he truck turning diagram on sheet A1.3 is for. There are no dimensions on the size of the access the truck is turning from or the width of the roadway the truck is turning onto much less which drive or roadway is which. There is no information on the type or size of vehicle (WB-40, WB-50, WB-62, etc.). A radius is shown but there are no dimensions. The distance between the center point of the radius and the front axle is not shown. The wheel path (inside and outside), swept path and overhang are not identified. It is not clear what the (N) and the (E) refer to in relation to the curb.

- The applicant shall provide pedestrian improvements on all site frontages (Champion, Industrial and US 26) consisting of a five-foot planter strip and six-foot sidewalks per sections 15.28 and 17.84.30 Sandy Municipal Code (SMC). Street trees approved by staff are required in the planter strips at 30 foot on-center spacing. In addition street lighting shall be required at the west end of Champion Way where there are currently no streetlights (approximately 400 lineal feet) and the west end of the US 26 frontage (approximately 300 lineal feet).

- The proposed right-out only driveway approach shall be constructed with a pork chop or other feature approved by the City Engineer to prevent anything other than right turn out of the driveway.

Utilities

- The utilities plan East (sheet 8) shows a water service connected to the private water main in the common access easement. Water services may only be connected to public water lines. The water service for the site shall be connected to the public water main in Champion Way.

- Sheet 8 also depicts a sewer lateral connected to the existing private sewer main in the common access easement. The applicant shall sign and record a sewer maintenance agreement reviewed and approved by the City for multiple properties under separate ownership served by a private common sewer line.

- All stormwater detention and treatment shall conform to the requirements of sections 13.18 and 13.20 SMC and the City of Portland Stormwater Management Manual (SWMM).

- Prior to beginning design on the utility system the applicant shall consult with Sandy Fire District or Clackamas County Fire District #1 (which ever agency has jurisdiction over the site) regarding fire hydrant locations and spacing on the site.

Please let me know if you have any questions or need more information.

Oregon
Kate Brown, Governor

Department of Transportation
Region 1 Headquarters
123 NW Flanders Street
Portland, Oregon 97209
(503) 731.8200
FAX (503) 731.8259

EXHIBIT N

March 5, 2019 ODOT #8357

ODOT Response

Project Name: Sandy Vault Storage	**Applicant:** Axis Design Group
Jurisdiction: City of Sandy	**Jurisdiction Case #:** 18-047DR/VAR/ADJ
Site Address: No Situs - Mt Hood Hwy (US 26) @ Champion Wy, Sandy, OR	**Legal Description:** 02S 04E 15A **Tax Lot(s):** 00209
State Highway: US 26	**Mileposts:** 22.2

The site of this proposed land use action is adjacent to US Highway 26. ODOT has permitting authority for this facility and an interest in ensuring that this proposed land use is compatible with its safe and efficient operation. **Please direct the applicant to the District Contact indicated below to determine permit requirements and obtain application information.**

COMMENTS/FINDINGS

Based on a cursory review, the sidewalk along the development's frontage does not meet ODOT minimum standards, which requires a minimum of a 6' sidewalk with a 4'-8' buffer strip. ODOT recommends that the applicant be required to bring the sidewalk up to current City and ODOT standards. The existing curb line is in the desired location. Modifications to the sidewalk to bring it up to current standards will not trigger any modifications of the roadway or a need to obtain design exceptions for roadway elements. Addition of trees will require a permit. A design exception will only be required for the trees if their location is non-standard.

ODOT recommends that the applicant submit truck turning templates to demonstrate that the Champion Way right-in/right-out ("pork chop") functions with the applicant's intended use and anticipated truck traffic.

All alterations within the State highway right of way are subject to the ODOT Highway Design Manual (HDM) standards. Alterations along the State highway but outside of ODOT right-of-way may also be subject to ODOT review pending its potential impact to safe operation of the highway. If proposed alterations deviate from ODOT standards a Design Exception Request must be prepared by a licensed engineer for review by ODOT Technical Services. Preparation of a Design Exception request does not guarantee its ultimate approval. Until more detailed plans have been reviewed, ODOT cannot make a determination whether design elements will require a Design Exception. *Note: Design Exception Requests may take up to 3 months to process.*

All ODOT permits and approvals must reach 100% plans before the District Contact will sign-off on a local jurisdiction building permit, or other necessary requirement prior to construction.

ODOT RECOMMENDED LOCAL CONDITIONS OF APPROVAL

Frontage Improvements and Right of Way

☒ Sidewalk and planter strip shall be constructed as necessary to be consistent with local, ODOT and ADA standards.

Permits and Agreements to Work in State Right of Way

☒ An ODOT Miscellaneous Permit must be obtained for all work in the highway right of way. When the total value of improvements within the ODOT right of way is estimated to be $100,000 or more, an agreement with ODOT is required to address the transfer of ownership of the improvement to ODOT. An Intergovernmental Agreement (IGA) is required for agreements involving local governments and a Cooperative Improvement Agreement (CIA) is required for private sector agreements. The agreement shall address the work standards that must be followed, maintenance responsibilities, and compliance with ORS 276.071, which includes State of Oregon prevailing wage requirements. *Note: If a CIA is required, it may take up to **6 months** to process.*

☒ The applicant must obtain an ODOT permit to place trees in the state right of way. Tree spacing and design must be consistent with the ODOT Highway Design Manual section 4.2.6 (http://www.oregon.gov/ODOT/Engineering/Documents_RoadwayEng/HDM_04-Cross-Sections.pdf.

If proposed tree placement deviate from ODOT standards (such as placement in a planter strip), a Design Exception Request for clear zone must be prepared by a licensed engineer for review by ODOT Technical Services. Preparation of a Design Exception request does not guarantee its ultimate approval. *Note: It may take up to **3 months** to process a Design Exception.*

☒ Illumination within the ODOT right of way must be in accordance with AASHTO illumination standards and the ODOT Lighting Policy and Guidelines, which states that local jurisdictions must enter into an Intergovernmental Agreement (IGA) with ODOT wherein the local jurisdiction is responsible for installation, maintenance, operation, and energy costs.

☒ An ODOT Miscellaneous Permit is required for connection to state highway drainage facilities. Connection will only be considered if the site's drainage naturally enters ODOT right of way. The applicant must provide ODOT District with a preliminary drainage plan showing impacts to the highway right of way.

A drainage study prepared by an Oregon Registered Professional Engineer is usually required by ODOT if:

1. Total peak runoff entering the highway right of way is greater than 1.77 cubic feet per second; or
2. The improvements create an increase of the impervious surface area greater than 10,758 square feet.

ADVISORY INFORMATION

Use of State Highway Right of Way:

☒ Stopping and/or parking vehicles upon State highway right of way for the maintenance of adjoining property or in furtherance of any business transaction or commercial establishment is strictly prohibited. Loading and unloading of vehicles within the state highway right of way is not permitted. The applicant must provide adequate on-site circulation for the parking and maneuvering of all vehicles anticipated to be displayed or parked on the lot (ORS 811.346, 811.550, and 811.580).

Signs:

☒ Off-premises signs require a permit through the ODOT Outdoor Advertising Sign program (ORS 377.725). To determine whether or not a sign will be on or off premises contact Jill Hendrickson (ODOT Right-of-Way 503.986.3635).

☒ Private signs are not permitted in the state highway right of way (ORS 377.700-377.840).

Please send a copy of the Land Use Notice to:

ODOT Region 1 Planning
Development Review
123 NW Flanders St
Portland, OR 97209

Region1_DEVREV_Applications@odot.state.or.us

Development Review Planner: Marah Danielson	503.731.8258, marah.b.danielson@odot.state.or.us
Traffic Contact: Avi Tayar, P.E.	503.731.8221
District Contact: Loretta Kieffer	503.667.7441

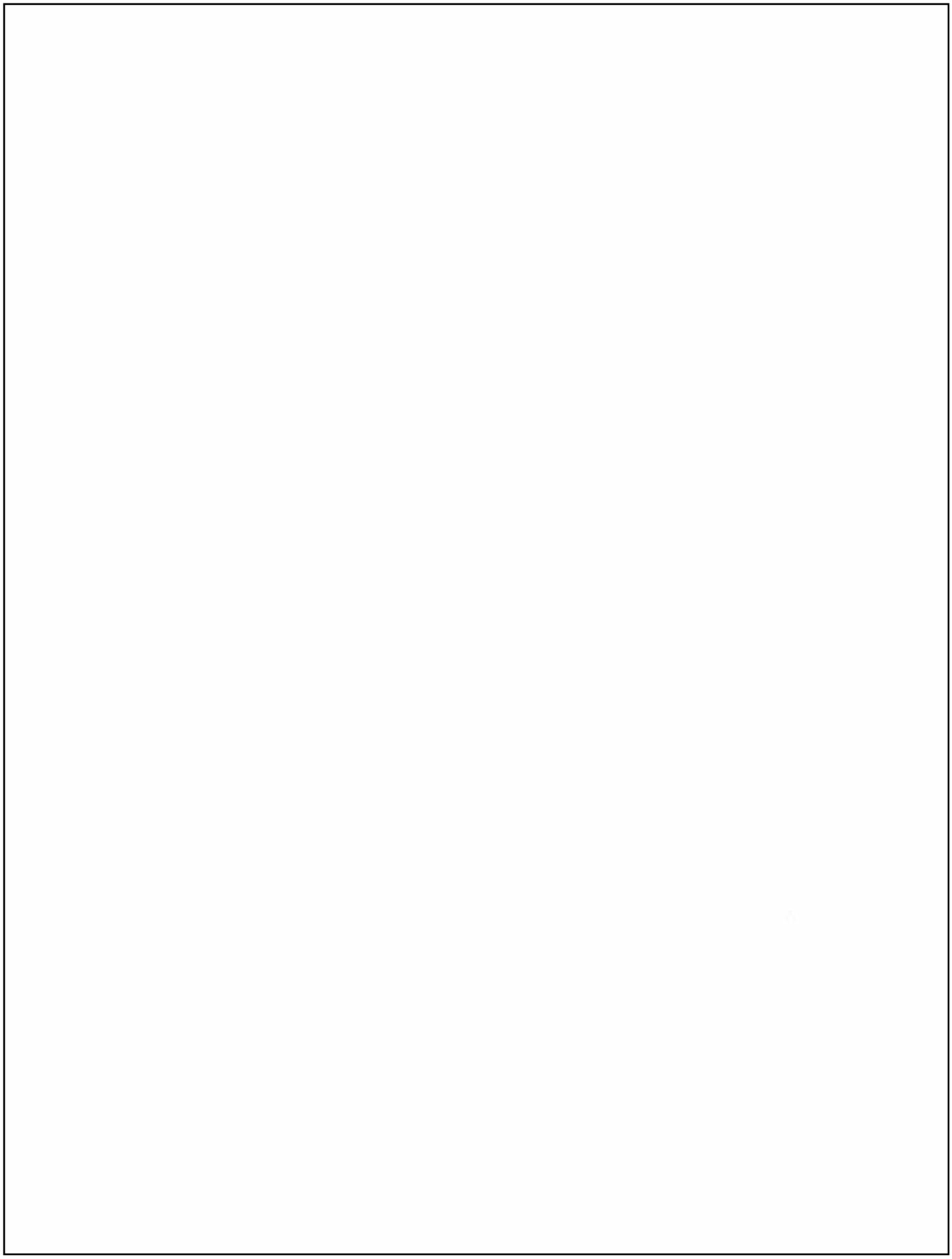


EXHIBIT O

SANDY
WHERE INNOVATION MEETS ELEVATION

39250 Pioneer Blvd
Sandy, OR 97055
503-668-5533

FINDINGS OF FACT and FINAL ORDER
TYPE III CODE INTERPRETATION DECISION

DATE: August 10, 2018

FILE NO.: 18-027 INT

PROJECT NAME: Highway 26 Storage Code Interpretation

APPLICANT: Bill Whitney

OWNER: Sandy Automotive LLC (Mark Benson)

LEGAL DESCRIPTION: T2S R4E Section 15A, Tax Lot 209

EXHIBITS:

Applicant's Submittals
A. Land Use Application
B. Narrative
C. Plan Set
- Sheet A1: Site Plan
- Sheet A2: Floor Plans
- Sheet A3: Elevations
- Sheet A4: Elevations
- Sheets 1-6: 3D Renderings

Staff Submittals
D. Pre-application notes from November 6, 2014
E. Pre-application notes from August 17, 2017
F. Pre-application notes from May 8, 2018

Public Comments
G. Elie Kassab, 16605 Champion Way (July 10, 2018)

Supplemental Documents Provided By Staff
H. Staff Report Dated July 24, 2018

FINDINGS OF FACT

General

1. These findings supplement and are in addition to the staff report dated July 24, 2018, which is incorporated herein as Exhibit H. Where there is a conflict between these findings and the staff report, these findings shall control.

2. These findings are based on the applicant's submittal materials deemed complete on June 25, 2018. These items are identified as Exhibits A – C. The 120-day deadline for this application is October 23, 2018.

3. Bill Whitney submitted an application on behalf of Mark Benson for a code interpretation and approval of a reduction in the window coverage requirements of the City of Sandy Development Code Section 17.90.120(E,2). The code interpretation and window reduction approval are being requested for five (5) proposed storage buildings located on a property owned by Mr. Benson south of Highway 26, west of Champion Way, and north of Industrial Way. Section 17.90.120(E.2) of the code requires 30 percent window coverage on the activated elevation(s) of buildings up to 10,000 square feet, 25 percent window coverage on the activated elevation(s) of buildings between 10,000 square feet and 30,000 square feet, and 20 percent window coverage on the activated elevation(s) of buildings greater than 30,000 square feet. The applicant's request states that storage buildings require many large overhead doors which limit wall area available for windows.

4. The parcel has a Plan Map designation of Light Industrial and a Zoning Map designation of I-1, Industrial Park. The subject site is located south of Highway 26, north of Industrial Way, and west of Champion Way.

5. This land use application used code criteria from the following chapters: 17.12 Procedures for Decision Making; 17.14 Request for Interpretation; 17.18 Processing Applications; 17.22 Notices; 17.48 Industrial Park, I-1; 17.66 Adjustments and Variances; 17.90 Design Review.

6. The site for the mini-storage facility is 5.44 acres. The site is currently vacant land with a considerable slope running downhill to the southwest (towards Tickle Creek). The property is still legally tied to the 2.63 acre Hix Snedeker LLC (Tractor Supply) site, but received tentative partition approval on June 25, 2018 to divide the property into two parcels (File No. 18-019 MP).

7. In conformance with the standards of Chapter 17 of the Sandy Municipal Code (SMC) this application is processed as a Type III, Quasi-Judicial Land Use Decision. Per Chapter 17.14 the Director shall review a request for interpretation and within 30 calendar days after acceptance of a completed request for interpretation, the Director shall respond with a written interpretation. Over the course of three different pre-application meetings on November 6, 2014, August 17, 2017, and May 8, 2018 staff advised the property owner or his representative(s) that more windows were needed on

the proposed buildings to meet the requirements of Section 17.90.120 (E.). The Director believes that staff's interpretation of the window coverage requirement has been adequately and repeatedly addressed through these multiple pre-application meetings. However, while the property owner has done a decent job at increasing the Sandy Style appearance of the mini-storage structures, the window coverage requirement is still not being met. Rather than have the applicant apply for a code interpretation by the Director/other city staff and receive the same interpretation as has been conveyed in multiple pre-application meetings, the Director is elevating the applicant's request for a code interpretation on window coverage to a Planning Commission decision.

On June 14, 2018 staff received an email from Bill Whitney on behalf of Mark Benson with a draft narrative and some 3D Renderings. Mr. Whitney asked the following: "Please give me your candid thoughts on the narrative's content. Should it be far more extensive? I believe you said you're leaving it up to the Planning Commissions review, but your input would be helpful." On June 15, 2018 the Director stated the following: "The narrative is a little confusing though. The narrative makes it sound like you are asking for a variance. In the narrative you even state you are asking for a reduction to the required window area. My understanding from Mark was that you wanted to get an interpretation if the garage doors without windows meets the window coverage requirement found in Section 17.90.120 (E.2.) of the development code? Please clarify in the narrative what you are actually asking for. At the end of the narrative it also states, "Industrial Way is a dead end". There is no period or second page so I want to make sure you didn't have more information that you wanted to include but was somehow cropped from the narrative." On June 21, 2018 staff received the narrative that is included with this staff report (Exhibit B.). Staff finds the narrative still does a lackluster job of supporting the code interpretation and instead asks for a reduction in required window coverage, which the city could only potentially approve through an adjustment or variance application pursuant to the development code. To be clear, the applicant has only applied for a minor code interpretation but has not applied for an adjustment or variance. Staff finds that we can review the development code and provide an interpretation for the subject mini-storages and other future development that is similar. The applicant has mentioned in several meetings that garage doors should count towards the percentage of window coverage as required in Section 17.90.120(E). Staff's interpretation of the applicant's request for a code interpretation is that the applicant is requesting that the doors be counted towards the window coverage requirement.

8. The subject parcel was originally created as portions of Lot 8 (4.54 acres) and Lot 9 (6.07 acres) of the Pioneer Corporate Park subdivision platted in 1996 (Plat Book 109, Page 13) with the line dividing the lots oriented generally north-south. Since 2000 here are the primary land use approvals:
    - In 2000, the owner of the property at the time was approved for a property line adjustment (File No. 2000-044, Survey No. PS-29073) shifting the common line between these parcels to an east-west orientation. This resulted in reconfigured parcels, Lot 8 (9.14 acres) and Lot 9 (1.47).
    - In 2010 (File No. 10-035 MP), the current owner (Mark Benson) partitioned Lot 8 into two lots: Parcel 1 to contain 8.05 acres and Parcel 2 to contain 1.05 acres.

- In 2011 (File No. 11-008 CUP/DR/VAR), Champion 26 LLC received approval to construct the AmPm convenience store and fueling station.
- In 2018 (File No. 18-019 MP), Sandy Automotive LLC (Mark Benson) and Hix Snedeker LLC received approval to partition Parcel 1 from File No. 10-035 MP into two parcels at 5.44 and 2.63 acres.

9. Notice of the subject proposal was mailed to property owners within 300 feet of the site on June 27, 2018. A legal notice was published in the Sandy Post on Wednesday, July 11, 2018.

10. The City of Sandy received one written comment from the public. Elie Kassab the owner of the Sandy Cinema at 16605 Champion Way (Exhibit G) submitted comments on July 10, 2018. Mr. Kassab has concerns with the height of the proposed mini-storage facility blocking the visibility of the cinema and other existing businesses from HWY 26.

11. On July 30, 2018 **the Planning Commission interpreted that the property owner is not allowed to consider garage doors as qualifying for ground floor windows on the activated frontage of buildings and that garage doors do not meet the intent of providing 'effective window placement and design.'**

17.90 – Design Standards

12. The code interpretation was specific to the design standards required for general commercial and industrial park and non-residential uses in residential zones.

13. The code interpretation specifically addressed Section 17.90.120(E)(2) that has requirements for window coverage on the ground floor of buildings. Depending on the size of the building the percentage of window coverage varies with larger buildings requiring less percentage of windows. The subject site has five (5) proposed buildings with all of the buildings having some portion of their building visible from a public street (see Exhibit C: Sheets 1-6) meaning that all five buildings will need to define an activated frontage and adhere to the standards regarding window coverage and possibly providing a building entry. At the public hearing the applicant stated that Building 5 was no longer being proposed.

14. Chapter 17.10, Definitions, contains the following definition of "activate": "Make the exterior of a building inviting to pedestrians through a combination of elements, such as an enhanced customer entrance, weather protecting features (such as canopies or awnings), pedestrian-scale signage, and transparent windows allowing for views into and from interior building spaces." In Section 17.90.120(D) the Development Code defines the 'activated frontage' as the following: "an elevation is activated when it meets the window transparency requirements in subsection 17.90.120(E), below, and contains a public entrance with a pedestrian shelter extending at least five (5) feet over an adjacent sidewalk, walkway or civic space." For example, the pedestrian shelter and door on Building 1 faces north to HWY 26 and the proposed civic space, which makes the north elevation of Building 1 the activated frontage. The figures in Chapter 17.90 also illustrate the importance of windows and building orientation. The figures in the development code

consistently detail that a lack of ground floor windows is undesirable. The Development Code does not exempt mini-storage facilities or any other buildings from adhering to the window requirements in Chapter 17.90.

Per Section 17.10.10 "All words and terms used in this Code have their commonly accepted, dictionary meaning unless they are specifically defined in this Code or the context in which they are used clearly indicated to the contrary."

Here are some dictionary terms for 'doorway':

- Merriam-Webster: "the opening that a door closes; especially: an entrance into a building or room"
- Cambridge: "the space for a door through which you go into and out of a room or building"

Here are some dictionary terms for 'window':

- Merriam-Webster: "an opening especially in the wall of a building for admission of light and air that is usually closed by casements or sashes containing transparent material (such as glass) and capable of being opened and shut"
- Cambridge (window): " an opening in the wall of a building or vehicle, usually covered with glass, to let light and air in and to allow people inside to see out"

15. As part of this code interpretation staff also asked the Planning Commission to define which side(s) of the proposed buildings should be assigned as the activated frontage(s), if each building is required to include a main entryway, and if faux windows can count towards the window coverage requirement.

16. Defining the activated frontage(s) on each proposed building will enable staff to evaluate for window coverage and determine if the applicant needs to provide more windows or submit for variance(s). Based on Exhibit C staff finds the activated frontage(s) are as follows:

    - Building 1 – north elevation facing HWY 26 (20 percent windows), east elevation facing Champion Way should remain as detailed on the elevations
    - Building 2 – east elevation facing Champion Way (30 percent windows)
    - Building 3 – south elevation facing Industrial Way (30 percent windows), west elevation facing Industrial Way will also be highly visible
    - Building 4 – south elevation facing Industrial Way (30 percent windows), west elevation facing Industrial Way will also be highly visible
    - Building 5 – south elevation facing Industrial Way (30 percent windows)

    The Planning Commission finds the activated frontages on Building 1 are the north elevation facing Highway 26 and the east elevation facing Champion Way. The elevation on Building 1 facing HWY 26 is only proposed to contain six (6) windows and one clear glass door. The HWY 26 façade on Building 1 has 248 square feet of windows and 2,056 square feet of wall surface for a window coverage of 12 percent. The requirement for

Building 1 is 20 percent window coverage so the proposed 12 percent does not meet the code requirement. The applicant proposes 44 percent window coverage on the east elevation of Building 1 in conformance with the window coverage requirements of Section 17.90.120(E.2).

Planning Commission finds the activated frontage on Building 2 is the east elevation facing Champion Way, although Building 2 appears to lack a main entryway. The applicant proposes 23 percent window coverage on the east elevation. Since Building 2 is less than 10,000 square feet the east elevation is required to contain at least 30 percent coverage on the wall facing Champion Way. Section 17.90.120(E)(1) states that 'building plans must provide for unity in window placement and design so that all sides of a building relate to one another and multiple buildings on a development site relate to one another.' The applicant proposes the east elevation of Building 1 facing Champion Way to have a unified look with Building 2 by providing similar looking windows covering 44 percent of the east facing wall of Building 1. Planning Commission finds that the east wall of Building 1 meets the unified design requirements in Section 17.90.120(E)(1); however, Building 2 needs 7 percent more window coverage on the east elevation. In the alternative the Planning Commission stated that the applicant could request a variance on the east elevation of Building 2 and use vegetation to screen the recessed portion of the wall.

In the applicant's narrative (Exhibit B) the applicant states that Buildings 3-5 have virtually no exposure from Champion Way or HWY 26, and that Industrial Way is a dead end. Staff agrees that Buildings 3-5 will have limited exposure to Champion Way or HWY 26 due to proposed retaining walls and other buildings (i.e. Buildings 1 and 2, and the Tractor Supply Building); however, according to the 3-D renderings for Buildings 3-5 they will be highly visible from Industrial Way. Buildings 3-5 are each less than 10,000 square feet and, therefore, require 30 percent window coverage on the activated frontage. Planning Commission requires the three buildings with their activated frontage on Industrial Way (Buildings 3, 4, and 5 if proposed) shall contain at least 30 percent window coverage on the walls facing Industrial Way or the applicant shall apply for a variance. After some discussion, the Planning Commission decided that the activated frontage on Building 3 is the west elevation facing Industrial Way. The activated frontages on Building 4 were noted as the south elevation and the west elevation both facing Industrial Way. The activated frontage on Building 5 was not discussed as the applicant stated that Building 5 was no longer being proposed. It was also discussed that Buildings 3-5 do not appear to contain main entryways either.

17. The 3-D renderings show trees that appear to block the south elevation of Building 2, and a majority of the south elevations of Buildings 3 and 4. However, based on Google Earth imagery, it doesn't appear like the tree coverage is accurate, or at the very least there aren't existing trees that would provide such dense screening. At the July 30, 2018 public hearing the applicant clarified the 3-D renderings include trees that will need to be planted and allowed to grow to maturity.

18. Per Section 17.90.120 (D) all buildings shall include a main entryway or apply for a variance.

19. Staff asked the Planning Commission about the use of faux windows. Planning Commission stated they are fine with the use of faux windows to count towards the window coverage requirement of Section 17.90.120 (E)(2).

DECISION

The Planning Commission interpreted that the property owner is not allowed to consider garage doors as qualifying for ground floor windows on the activated frontage(s) of buildings. The Planning Commission also made other determinations for the potential mini-storage facility on this property as detailed in the conditions of approval.

CONDITIONS OF APPROVAL

A. General Conditions

1. The applicant shall apply for a design review for the mini-storage facility. Planning Commission finds the activated frontage(s) are as follows:

   - Building 1 – north elevation facing HWY 26 (20 percent windows), east elevation facing Champion Way should remain as detailed on the elevations
   - Building 2 – east elevation facing Champion Way (30 percent windows), including recessed wall
   - Building 3 – west elevation facing Industrial Way (30 percent windows)
   - Building 4 – south elevation facing Industrial Way (30 percent windows), west elevation facing Industrial Way will also be highly visible
   - Building 5 – no longer being proposed

2. The applicant shall meet the window coverage requirements on the activated frontages of each building or apply for a variance.

3. The applicant shall install a main entry on each building or apply for a variance.

4. The applicant is allowed to use faux windows to count towards the window coverage requirement of Section 17.90.120 (E)(2).

_____

Jerry Crosby Date
Chair, Planning Commission

RIGHT OF APPEAL

A decision on a land use proposal or permit may be appealed to the City Council by an affected party by filing an appeal with the Director within ten (10) calendar days of notice of the decision. Any person interested in filing an appeal should contact the city to obtain the form, "Notice of Appeal", and Chapter 17.28 of the Sandy Development Code regulating appeals. All applications for an appeal shall indicate the nature of the interpretation that is being appealed and the matter at issue will be a determination of the appropriateness of the interpretation of the requirements of the Code.

An application for an appeal shall contain:

1. An identification of the decision sought to be reviewed, including the date of the decision;
2. A statement of the interest of the person seeking review and that he/she was a party to the initial proceedings;
3. The specific grounds relied upon for review;
4. If de novo review or review by additional testimony and other evidence is requested, a statement relating the request to the factors listed in Chapter 17.28.50; and
5. Payment of required filing fees.