



# City of Sandy

## Agenda

### Planning Commission Meeting

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

**Meeting Date:** Monday, June 10, 2019

**Meeting Time:** 7:00 PM

Page

**1. ROLL CALL**

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

**3. OLD BUSINESS**

**4. NEW BUSINESS**

4.1. 18-046 DR/VAR Stow-A-Way Mini Storage

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Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. In addition, staff recommends the Planning Commission **make the following motions:**

Design Deviations:

1. **Approve** the requested Design Deviation from Subsection 17.90.130(C)(3) **with the condition** Units A, B and C incorporate siding consistent with the primary structures located on the subject property (i.e. the existing Stow-A-Way structures).
2. **Approve** the requested Design Deviation from Subsection 17.90.130(E)(1) to allow the development to not include a primary entry facing a public street or designated pedestrian way.
3. **Approve** the requested Design Deviation from Subsection 17.90.130(E)(3) to not include an entrance connecting directly between the right-of-way and the building interior.
4. **Deny** the requested Design Deviation to Subsection 17.90.130(E)(5). Should the request be denied the applicant shall redesign Units A, B and C to incorporate pedestrian shelters with a minimum depth of 4 feet at each pedestrian entrance.

5. **Deny** the request to not modify the existing lighting to conform to the standards of Subsection 17.90.130(H). Should the request be denied the applicant shall submit light fixture cut sheets and a photometric plan detailing a pedestrian scaled lighting system using reduced glare fixtures for Units A, B and C to be reviewed and approved by City Staff.

Requested Special Variances:

1. Staff recommends the Planning Commission **approve** the requested special variance to reduce the front (west) yard setbacks for Units B and C to 18-feet (Unit B) and 24-feet (Unit C) with the condition the FSH analysis determines the units are not located within the restrictive setback requirement, 70 feet of the top bank of Tickle Creek.
2. Staff recommends the Planning Commission make one of the following conditions:
  - A. **Deny** the request to eliminate the requirement of Subsection 17.90.130(D), or
  - B. **Approve** a special variance to reduce the required roof pitch **with the condition** the structures (Units A, B and C) incorporate sloped roofs with pitches equal to the existing structures on site (IE congruent with the existing Stow-A-Way Mini Storage structures).

[18-046 DR/VAR Stow-A-Way Mini Storage - Pdf](#)

5. ITEMS FROM COMMISSION AND STAFF

6. ADJOURN



## Staff Report

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**Meeting Date:** June 10, 2019  
**From** James Cramer, Associate Planner  
**SUBJECT:** 18-046 DR/VAR Stow-A-Way Mini Storage

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### Background:

Christopher Warnock with C.W. Real Estate Co., Inc. submitted an application for a Type II Design Review that includes the following five (5) Design Deviations and two (2) Special Variances:

#### Requested Design Deviations:

1. To eliminate the siding material required per Subsection 17.90.130(C)(3).
2. To eliminate the requirement that primary entrances face a public street or pedestrian way per Subsection 17.90.130(E)(1).
3. To eliminate the required entrance connection between the right-of-way and the building interior per Subsection 17.90.130(E)(3).
4. To eliminate 4-foot deep entry shelters on the proposed structure required by Subsection 17.90.130(E)(5).
5. To eliminate having to incorporate the lighting standards required by Subsection 17.90.130(H)(1-4).

#### Requested Special Variances:

1. To leave two units on site that are setback 18-feet (Unit B) and 24-feet (Unit C) from the front (Ruben Lane) property line when Subsection 17.50.30 requires a 30-foot setback.
2. To incorporate a flat roof pitch with no stepped parapets or detailed brick coursing when Subsection 17.90.130(D)(1-4) requires such.

The existing use of the property is self-storage, Stow-A-Way Mini Storage, and the proposal is to leave three (3) nonpermitted structures (Units A, B & C) to be used as additional self-storage units in association with the existing business.

### Recommendation:

Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. In addition, staff recommends the Planning Commission **make the following motions:**

#### Design Deviations:

1. **Approve** the requested Design Deviation from Subsection 17.90.130(C)(3) **with the condition** Units A, B and C incorporate siding consistent with the primary structures located on the subject property (i.e. the existing Stow-A-Way structures).

2. **Approve** the requested Design Deviation from Subsection 17.90.130(E)(1) to allow the development to not include a primary entry facing a public street or designated pedestrian way.
3. **Approve** the requested Design Deviation from Subsection 17.90.130(E)(3) to not include an entrance connecting directly between the right-of-way and the building interior.
4. **Deny** the requested Design Deviation to Subsection 17.90.130(E)(5). Should the request be denied the applicant shall redesign Units A, B and C to incorporate pedestrian shelters with a minimum depth of 4 feet at each pedestrian entrance.
5. **Deny** the request to not modify the existing lighting to conform to the standards of Subsection 17.90.130(H). Should the request be denied the applicant shall submit light fixture cut sheets and a photometric plan detailing a pedestrian scaled lighting system using reduced glare fixtures for Units A, B and C to be reviewed and approved by City Staff.

Requested Special Variances:

1. Staff recommends the Planning Commission **approve** the requested special variance to reduce the front (west) yard setbacks for Units B and C to 18-feet (Unit B) and 24-feet (Unit C) with the condition the FSH analysis determines the units are not located within the restrictive setback requirement, 70 feet of the top bank of Tickle Creek.
2. Staff recommends the Planning Commission make one of the following conditions:
  - A. **Deny** the request to eliminate the requirement of Subsection 17.90.130(D),  
or
  - B. **Approve** a special variance to reduce the required roof pitch **with the condition** the structures (Units A, B and C) incorporate sloped roofs with pitches equal to the existing structures on site (IE congruent with the existing Stow-A-Way Mini Storage structures).

**Code Analysis:**

See Attached Staff Report and Associated Exhibits

**Budgetary Impact:**

None.

**SUBJECT:** 18-046 DR/VAR Stow-A-Way Mini Storage

**AGENDA DATE:** June 10, 2019

**Application Submitted:** September 27, 2018  
**Application Complete:** March 21, 2019  
**120-Day Deadline:** July 19, 2019

**DEPARTMENT:** Planning Division

**STAFF CONTACT:** James A. Cramer, Associate Planner

**EXHIBITS:**

**Applicant's Submittals**

- A. Land Use Application
- B. Project Narrative
- C. Site Plans
- D. Supplemental Narrative
- E. Preliminary Stormwater Report
- F. Previous Application Narrative and In-Complete Letter

**Agency Comments**

- G. Hassan Ibrahim, P.E., City Contracted Engineer
- H. Kristine Hendrix, PGE

**Supplemental Documents Provided By Staff**

- I. Partition Plat No. 2011-034
- J. February 1, 2018 Pre-Application Notes
- K. March 4, 2019 Pre-Application Notes

**I. BACKGROUND**

**A. PROCEEDING**

Type II Design Review with five Type III Design Deviations and two Type III Special Variance requests.

The proposal includes the three application types identified above, which vary in review types (Type II and Type III) therefore the Planning & Building Director has elevated all applications to the highest number procedure for review (Type III) per the allowance of Subsection 17.18.00.

**B. FACTUAL INFORMATION**

1. OWNER/APPLICANT: C.W Realestate Co., Inc. / Christopher Warnock
2. ENGINEER: Firwood Design Group, LLC

3. PROJECT NAME: Stow-A-Way Mini Storage Design Review, Design Deviation and Special Variance Request
4. LEGAL DESCRIPTION: T2S R4E Section 14, Tax Lot 1500
5. PROPERTY LOCATION: The property is located within the Mt. Hood Industrial Park on the east side of Ruben Lane south of US HWY 26.
6. PROPERTY SIZE: Approximately 13.30 acres per plat (Exhibit I)
7. PROPOSAL: Christopher Warnock with C.W. Real Estate Co., Inc. submitted an application for a Type II Design Review that includes the following five (5) Design Deviations and two (2) Special Variances:

Requested Design Deviations:

1. To eliminate the siding material required per Subsection 17.90.130(C)(3).
2. To eliminate the requirement that primary entrances face a public street or pedestrian way per Subsection 17.90.130(E)(1).
3. To eliminate the required entrance connection between the right-of-way and the building interior per Subsection 17.90.130(E)(3).
4. To eliminate 4-foot deep entry shelters on the proposed structure required by Subsection 17.90.130(E)(5).
5. To eliminate having to incorporate the lighting standards required by Subsection 17.90.130(H)(1-4).

Requested Special Variances:

1. To leave two units on site that are setback 18-feet (Unit B) and 24-feet (Unit C) from the front (Ruben Lane) property line when Subsection 17.50.30 requires a 30-foot setback.
2. To incorporate a flat roof pitch with no stepped parapets or detailed brick coursing when Subsection 17.90.130(D)(1-4) requires such.

The existing use of the property is self-storage, Stow-A-Way Mini Storage, and the proposal is to leave three (3) nonpermitted structures (Units A, B & C) to be used as additional self-storage units in association with the existing business.

8. COMPREHENSIVE PLAN DESIGNATION: Light Industrial
9. ZONING DISTRICT DESIGNATION: I-2, Light Industrial
10. SERVICE CONSIDERATIONS: The proposed units (A, B and C) are pre-manufactured structures that do not require utility connections. As explained in this staff report stormwater treatment and detention is needed to mitigate any new impervious surfaces.
11. RESPONSE FROM GOVERNMENTAL AGENCIES, UTILITY PROVIDERS, CITY DEPARTMENTS AND THE GENERAL PUBLIC:
  - a. Public Works – No comments received
  - b. Police Department – No comments received

- c. Building Department – No comments received
- d. City Engineer – Exhibit G
- e. SandyNet – No comments received
- f. NW Natural Gas – No comments received
- g. Frontier – No comments received
- h. PGE – No comments received
- i. Wave Broadband – No comments received
- j. Fire District No. 72 – No comments received
- k. ODOT – No comments received

**C. APPLICABLE CRITERIA:** Sandy Development Code (SDC): 17.12 Procedures for Decision Making; 17.18 Processing Applications; 17.20 Public Hearings; 17.22 Notices; 17.28 Appeals; 17.30 Zone Districts; 17.50 Light Industrial (I-2), 17.60 Flood & Slope Hazard (FSH) Overlay District; 17.66 Adjustments and Variances; 17.84 Improvements with Development; 17.90 Design Standards; 17.92 Landscaping and Screening; 17.98 Parking, Loading, and Access Requirements; and Chapter 15.30 Dark Sky Ordinance.

**D. BACKGROUND INFORMATION**

The subject property is located within the Mt. Hood Industrial Park located off Ruben Lane just south of and approximately 50 feet in elevation below US HWY 26. The site is zoned Light Industrial (I-2) and has operated a self-storage facility by the name of Stow-A-Way Mini Storage. The site was historically developed to include a total of three, multi-unit storage buildings with a fourth building to be used as office space associated with managing the building.

In September of 2017 City staff observed the addition of three new nonpermitted structures (Units A, B and C) upon the subject property while completing review for an adjacent land use review known as Advanced Plastics warehouse (File No. 17-045 DR). On September 14, 2017 the City Building Official visited 37320 Ruben Lane and observed 24 non-permitted mini storage units. During land use review of the Advanced Plastics warehouse (File No. 17-045 DR) the non-permitted mini storage units were noted and it was stated that the property owner must complete a pre-application meeting to discuss the mini-storage units.

On February 1, 2018 a pre-application meeting was held to discuss the requirements for permitting the nonpermitted mini-storage units. The pre-app notes referenced a building permit issuance for the non-permitted mini storage units would be required prior to issuance of a Certificate of Occupancy for the Advanced Plastics warehouse.

On August 31, 2018 the property owner received a letter sent by the City Planning and Building Director informing them that a design review application shall be submitted to the City by September 28, 2018 or the nonpermitted mini storage structures were to be removed in their entirety, or the property violation would be referred to Code Enforcement on October 1, 2018.

The applicant submitted a formal application for review on September 27, 2018. Since submission of the formal application an additional pre-application meeting to discuss incompleteness items was held on March 4, 2019.

## **E. PROCEDURAL CONSIDERATIONS**

This request is being processed as a Type III Design Review because there are variances and deviations. Notification of the proposal was mailed to property owners within 300 feet of the subject property and to affected agencies on May 21, 2018. A legal notice was published in the Sandy Post on Wednesday, May 29, 2019.

## **II. ANALYSIS OF CODE COMPLIANCE**

### **CHAPTER 17.50 – LIGHT INDUSTRIAL (I-2)**

It is the intent of this district to provide locations in suitable areas for manufacturing and warehousing business, or other commercial uses that do not depend on high visibility. Commercial or retail uses must be compatible with an environment that includes heavy truck traffic and outdoor storage of industrial materials. Because building design standards are less restrictive in this zone than in other zones, buildings (regardless of use) shall be screened from view from arterial streets and highways.

The proposed buildings are designed for an industrial use. No residential dwelling units are proposed in conjunction with this development.

#### **17.50.10 PERMITTED USES**

**RESPONSE:** *As described within the submitted narrative (Exhibit B), the primary use located on property is a mini self-storage business (Stow-A-Way Storage) and the proposed structure(s) are intended to be used as self-service storage facilities in association with the existing primary use. Subsection 17.50.10(A)(2)(g) identifies “self-service storage” as an approved use for the I-2 zone district.*

*Subsection 17.10.30 includes the following definitions:*

*Accessory Use: A use on the same lot with and of a nature customarily incidental and subordinate to the principal use.*

*Accessory Structure (Detached): A structure that is clearly incidental to and subordinate to the main use of property and located on the same lot as the main use; freestanding and structurally separated from the main use.*

*Based on the above definitions, staff has determined that the proposed use is not incidental or subordinate to the principal use and an extension of the primary use (self-service storage). In addition, the proposed structures do not meet the criteria of being “subordinate to the main use of the property” (self-service storage) therefore cannot be classified as an accessory structure and must adhere to the design regulations of Section 17.90.130 as a primary use.*

***The nonpermitted structures are currently occupied for the purpose of storing materials and belongings. Each unit (A, B and C) shall obtain appropriate building permits and Certificates of Occupancy prior to the units being occupied or otherwise used in association with the existing use of the property, self-storage. The structures which currently have nonpermitted occupancy shall be vacated by tenants until such time the structures can secure legal certificates of occupancy.***



**17.50.30 DEVELOPMENT STANDARDS**

<b>Type</b>	<b>Standard</b>
Lot Area	No minimum
Lot Dimension	No minimum
E. Setbacks	
Front .....	30 ft. minimum; 70 ft. maximum from a transit street
Side or Rear .....	None, unless abutting a more restrictive district; if abutting, the minimum setback is 50 ft.
Corner .....	15 ft.
Outdoor Display/Sales Lot Area	40% maximum
Lot Coverage	80% maximum
Landscaping Requirement	15% minimum
Structure Height	45 ft. maximum
Transit Street Setback	See Chapter 17.82
Off-Street Parking	See Chapter 17.98

**RESPONSE:** When reviewing Partition Plat 2011-034 it can be observed that the subject property’s west property line extends approximately 524.02 feet parallel with the Ruben Lane right-of-way. Of the 524.02 feet, approximately 50 feet fronts Ruben Lane identifying the west property line as the site’s front property line.

The proposal will meet the required side and rear yard setbacks and the following are the proposed front setbacks of each building in relation to the property’s west (front) property line:

Building A

- West: greater than 30 feet

Building B

- West: 18 feet

Building C

- West: 24 feet

Due to the setbacks of Buildings B and C the applicant has requested a Special Variance to allow both to remain at the existing setback distances (Unit B at 18 feet, Unit C at 24 feet). Further analysis of the requested variance can be found within Chapter 17.66 of this report.

The overall site’s building coverage will not exceed the maximum 80 percent lot coverage that is allowed. As mentioned within the submitted narrative (Exhibit B), the structures are pre-manufactured and will be 8 feet-1 inch-tall (including a 4 inch slab). The site will include 16 percent landscaping with no proposed outdoor storage, with the exception of the storage of mechanical equipment. **The applicant shall pave all locations to be used as parking for any motorized vehicles/equipment and associated isles/turnarounds areas on site.** Staff finds that the proposal is in conformance with the standards set forth in Section 17.50.30 of the Sandy Development Code.

## **CHAPTER 17.60 - FLOOD & SLOPE HAZARD (FSH) OVERLAY DISTRICT**

This chapter is intended to promote the public health, safety and general welfare by minimizing public and private adverse impacts from flooding, erosion, landslides or degradation of water quality consistent with Statewide Planning Goals 6 (Air, Land and Water Resources Quality) and 7 (Areas Subject to Natural Disasters and Hazards) and the Sandy Comprehensive Plan (SCP)

### **17.60.20 PERMITTED USES AND ACTIVITIES**

This chapter lists permitted uses, or uses allowed under prescribed conditions, within the FSH overlay district. Where there are conflicts, this chapter supersedes the use provisions of the underlying district.

- A. Restricted Development Areas. Restricted development areas within the FSH overlay district as shown on the City of Sandy Zoning Map include:
1. Slopes of 25% or greater that (a) encompass at least 1,000 square feet and (b) have an elevation differential of at least 10 feet.
  2. Protected water features, including locally significant wetlands, wetland mitigation areas approved by the Division of State Lands, and perennial streams.
  3. Required setback areas as defined in section 17.60.30.

***RESPONSE:*** Staff observes that Units A, B and C are in close proximity to the FSH overlay which warrants further analysis to determine if the structures violate the required setbacks defined in Subsection 17.60.30.

### **17.60.30 REQUIRED SETBACK AREAS**

Setback areas shall be required to protect water quality and maintain slope stability near stream corridors and locally significant wetlands. Setbacks are measured horizontally from, parallel to and upland from the protected feature.

- A. Required Setbacks. The required special setback(s) shall be:
1. 70 feet from the top of bank of Tickle Creek;
  2. 50 feet from top of bank along other perennial streams, except for “No Name Creek” east of Towle Drive, as provided in Section 17.60.30.C.2 below.
  3. 25 feet around the edge of any mapped locally significant wetland; and
  4. 25 feet from the top of any 25% slope break where the slope break occurs within the FSH overlay district as mapped by the city.

***RESPONSE:*** Tickle Creek is located within close proximity to the subject property’s west property line and the proposed location of Units A, B and C. Due to the close proximity of Tickle Creek and the identification of the FSH overlay on the property, further analysis is required. **The applicant shall complete analysis to confirm Units A, B and C are not located within 70 feet of the top bank of Tickle Creek.**

## **CHAPTER 17.66 – ADJUSTMENTS AND VARIANCES**

### **17.66.60 VARIANCES**

Variations 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 variations to development standards proposed as part of a land division are processed as a Type III application (requiring a public hearing).

**RESPONSE:** *The applicant proposes the following Type III Special Variations:*

*Variance A: To leave two units on site that are setback 18-feet (Unit B) and 24-feet (Unit C) from the front (Ruben Lane) property line when Subsection 17.50.30 requires a 30-foot setback.*

*Variance B: To incorporate a flat roof pitch with no stepped parapets or detailed brick coursing when Subsection 17.90.130(D)(1-4) requires a 3:12 roof pitch and various stepped parapet details.*

### **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.

#### **Variance A**

*Per Section 17.50.30 all primary structures require a 30-foot front setback. As detailed within Chapter 17.50.30 of this report, Ruben Lane has been identified as the site's front property line.*

Request: The applicant requests a Type III Variance to reduce the required front setback to 18-feet (Unit B) and 24-feet (Unit C) when Subsection 17.50.30 requires a 30-foot setback. Should the request be granted Units B and C, which had been previously added to the subject property, albeit nonpermitted, will be compliant with setback requirements and be permitted to stay at the existing setbacks to the property line.

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.

**RESPONSE:** *The intent of setbacks for structures is to provide development predictability based on zone districts for property owners and citizens. While required setbacks result in the separation of primary structures to preserve open space the front setback associated with the I-2 zone district is intended to create additional separation between the pedestrian environment (right-of-way) and more restrictive uses that are typically found within industrial zoned districts.*

*When reviewing Partition Plat 2011-034 (EXHIBIT I) it can be observed that the subject property's west property line extends approximately 524.02 feet parallel with the Ruben Lane right-of-way. Of the 524.02 feet, approximately 50 feet fronts the Ruben Lane right-of-way identifying the west property line as the site's front property line. With the exception of the 50 feet fronting Ruben Lane, the remainder of the subject property's west property line is adjacent to a 10-acre, undeveloped parcel. This parcel separates 474.02 feet of the subject property's west (front) property line from the Ruben Lane right-of-way. The separation between the Ruben Lane right-of-way and the subject property's west property line, adjacent to the location of Units B and C, is measured at approximately 380 linear feet.*

*In addition, the plat identifies a recorded access easement at 50-feet wide extending into the subject property from the Ruben Lane right-of-way. The easement extends the length of the subject parcel's north property line and is to benefit the adjacent property to the east which is part of the overall Mt. Hood Industrial Park. It is observed that site planning within the Mt. Hood Industrial Park has been designed to utilize the platted access easement as the primary access from Ruben Lane to the building entrances being oriented to this easement. The existing business, Stow-A-Way Mini Storage, previously designed their overall site to include an office and primary entrance facing east toward the recorded easements within the Mt. Hood Industrial Park. By definition, Ruben Lane has been identified along the west property line as the site's front property line; however, the unique orientation and access easements associated with the property and development of the Mt. Hood Industrial Park would suggest that the west property line acts as a rear property line. Traditionally the opposite side of an entrance is considered to be the rear of a property and as described above, this site includes a traditional entrance/frontage to the self-storage facility on the east side of the development with an office building and gated entrance which supports staff's interpretation of the site's orientation.*

*The use of the property is not intended for public use as well as the front (west) property line is buffered from right-of-way by another property therefore it is unlikely the approval of the requested*

*special variance will be materially detrimental to the public welfare or be injurious to other property in the area.*

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

**RESPONSE:** *The proposed locations of Units B and C allow adequate maneuvering area to the east of the proposed structures while accommodating an increased setback from the identified front property line. In addition, the increased separation between the Ruben Lane right-of-way and the property line adjacent to Units B and C allows for a greater separation than the required setback is intended to create therefore staff finds the requested setback to be minimal in nature.*

**RECOMENDATION:** *The Special Variance is being requested as the proposed units are not adjacent to a public right-of-way and are significantly setback from Ruben Lane. Using definitions within the code, the west property line is identified as the subject property's front property line. When observing the site planning of the subject property and the increased setback associated with the west property line from Ruben Lane, it can be interpreted that the west property line acts as a rear property line. Due to the site planning and increased separation of the subject property from Ruben Lane staff believes the intent of this code section will not be violated nor be materially detrimental to the public welfare or be injurious to other property in the area should the request be approved. Staff recommends the Planning Commission approve the requested special variance to reduce the front (west) yard setbacks for Units B and C to 18-feet (Unit B) and 24-feet (Unit C) with the condition the FSH analysis determines the units are not located within the restrictive setback requirement, 70 feet of the top bank of Tickle Creek.*

**Variance B**

*Subsection 17.90.130(D) identifies required roof pitch, materials and parapets required for new construction within the I-2 zone district. This section requires the following:*

- 1.

Zoning District	Pitch
I-2	3:12

2. Flat roofs (with minimum pitch for drainage) are permitted with detailed stepped parapets or detailed brick coursing.
3. Parapet corners must be stepped or the parapet must be designed to emphasize the center or primary entrance(s), unless the primary entrance is at the corner of the building. 17.90- 42 Revised by Ordinance 2013-04 effective 07/03/13
4. Visible roof materials must be wood or architectural grade composition shingle, slate, tile or sheet metal with standing or batten seam.
5. All roof and wall-mounted mechanical, electrical, communications, and service equipment, including satellite dishes and vent pipes, must be screened from public view by parapets, walls or by other approved means.

Request: The applicant requests a Type III Variance to incorporate a flat roof pitch with no stepped parapets or detailed brick coursing when Subsection 17.90.130(D)(1-4) requires a 3:12 roof pitch and various stepped parapet details. The variance will apply to all three existing storage units (A, B and C).

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.

**RESPONSE:** *It is staff's interpretation that the intention of this code requirement is to express elements that reflect Cascadian architecture using sloped roofs, provide visual interest and achieve consistent architectural design for buildings within Sandy. Subsection 17.90.00(D) identifies elements incompatible with the Sandy Style and permits a reviewing body to deny, or require modifications to a project when any of the items (1-11) identified within this subsection are found in a proposal. Item No. 6 identifies "box-like structures" as incompatible while Item No. 9 identifies "strongly thematic architectural styles, forms, colors, materials, and/or detailing, that do not conform to the Sandy Style" as incompatible.*

*The proposed structures are 12 feet wide, 19 feet long and 8 feet-1 inch-tall (including a 4 inch slab). Per the submitted narrative (Exhibit D), the roof will have a minimal pitch for drainage which meets the requirements of 17.90.130(D)(2) above. Staff observed that the neighboring structures associated with Stow-A-Way Mini Storage and neighboring Mt. Hood Industrial Park businesses have incorporated pitched roofs (pitch dimensions unknown to staff at this time).*

**RECOMENDATION:** *The intention of this code requirement is to construct building elements that reflect Cascadian architecture, provide visual interest and help achieve consistent architectural design amongst buildings within Sandy. This is supported by Design Review Objective B within Subsection 17.90.00 which states, "Encourage functional, safe, and aesthetically pleasing development, while maintaining compatibility with the surrounding built and natural environment." As discussed within Chapter 17.50.10 of this report, the use of the structures seeking the variance is an extension of the primary use (self-service storage). Staff believes to meet the intent of Subsection 17.90.130(D) and the compatibility requirements of 17.90.00(D)(6 & 9) the storage units (Units A, B and C) should have roof pitches that match the existing structures on site.*

**Staff recommends the Planning Commission make one of the following conditions:**

- A. Deny the request to eliminate the requirement of Subsection 17.90.130(D), or**
- B. Approve a special variance to reduce the required roof pitch with the condition the structures (Units A, B and C) incorporate sloped roofs with pitches equal to the existing structures on site (IE congruent with the existing Stow-A-Way Mini Storage structures).**

*Staff believes this condition is the minimum variance needed to include Cascadian architectural elements, provide visual interest and a consistent aesthetic amongst buildings located on the same lot of record therefore supports Design Review Objective B within Subsection 17.90.00.*

## **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.

### **17.84.60 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 applicant submitted a Preliminary Stormwater Report which has been determined to meet the City requirements for water quality and quantity per the City Engineer (Exhibit G). All stormwater runoff shall be treated, detained and discharged in conformance with Section 13.18 and Section 13.20 of the Sandy Municipal Code (SMC) and the latest edition of the City of Portland Stormwater Management Manual (including Section 1.10 of the Source Control Manual).*

***Prior to submittal of a final drainage report the applicant shall update the site description to include the site area as it is currently shown as “X” as well as provide a map delineating the different basins on the subject property.***

***Stormwater detention shall be updated and submitted for final review once the applicant has identified the additional impervious coverage associated with driveways, aisles and turnaround.***

## **CHAPTER 17.90 – DESIGN STANDARDS**

### **17.90.130 LIGHT INDUSTRIAL (I-2) DESIGN STANDARDS**

#### **A. ACCESS**

- 1. All lots shall abut or have access to a dedicated public street.

2. All lots which have access to a public alley shall provide for all personal and service access for vehicles from that alley.
3. Parking lots may include public alley accessed garages at the rear property line.
4. Joint use of access points and interconnections shall be required, where deemed needed by the Director and City Engineer.
5. Each lot shall be permitted one access point, except lots with street frontage of one hundred fifty feet or more may be permitted one or more additional access point, if approved by the City Engineer.
6. Connection to Adjacent Properties: The location of any real improvements to the property must provide for a future street and pedestrian network to adjacent properties.

**RESPONSE:** *The proposal included the addition of three units to the subject property located within the established Mt. Hood Industrial Park which has established access to the site. Specifically, the subject property's west property line extends approximately 524.02 feet parallel with the Ruben Lane right-of-way. Of the 524.02 feet, approximately 50 feet abuts Ruben Lane providing direct access to the site from a dedicated public street. The recorded plat (Exhibit I) identifies a recorded access easement at 50-feet wide extending east into the subject property from the Ruben Lane right-of-way. The easement extends the length of the subject parcel's north property line and is to benefit the adjacent property to the east of the subject property which is part of the overall Mt. Hood Industrial Park.*

#### **B. PEDESTRIAN ACCESSIBILITY**

1. Special attention shall be given to designing a primary building entrance, which is both attractive and functional.
2. Building entries must comply with the accessibility requirements of the Oregon State Structural Specialty Code.
3. Buildings located at the intersection of two streets shall consider the use of a corner entrance to the building.
4. Pedestrian environment may be enhanced by street furniture, landscaping, awnings, and movable planters of seasonal flowers.

**RESPONSE:** *The existing use of the property, as well as the proposed use of Units A, B and C, is self-storage. It is reasonable to conclude that the facility is not intended for pedestrian use but rather for individual patrons who have rented a storage unit utilizing the facility. The applicant has requested a Design Deviation from Subsection 17.90.130(E)(1) which requires primary entrances face a public street or designated pedestrian pathway. The applicant has cited the units are to be used as self-storage with each unit providing its own individual overhead door entrance.*

#### **C. BUILDING FACADES, MATERIALS AND COLORS**

1. Facades. Facades shall be varied and articulated to provide visual interest to pedestrians. Within larger projects, variations in facades, floor levels, architectural features, and exterior finishes shall create the appearance of several smaller buildings.

**RESPONSE:** *The proposed units are 12 feet wide by 19 feet long and do not provide articulation along any exterior façades. Unit A is separated from Units B and C which are setback from one another. This placement provides articulation in depth as it relates to façade variation creating visual interest.*



2. Building Materials. Exterior building materials shall convey an impression of durability. Materials such as masonry, stone, stucco, and wood are encouraged. Metal is not allowed as the primary exterior building material except in the I-2 and I-3 districts, but it may be used for accents including awnings.

**RESPONSE:** *The proposed structures are pre-manufactured and been constructed with metal siding. The I-2 zone district permits metal as a primary exterior building material.*

3. Siding. Lap or horizontal siding or walls of brick, masonry or stone shall be required. Vertical grooved (i.e., T1-11) sheet siding is prohibited.

**RESPONSE:** *The metal proposed to be used is sheet metal which does not include lap or horizontal siding therefore the applicant has requested a Design Deviation from Subsection 17.90.130(C)(3) to eliminate the required lap or horizontal siding. The submitted narrative states, "The pre-manufactured storage containers are constructed with metal siding and horizontal siding is not a fabrication option for these container."*

*While pre-manufactured structures are not exempt from the design standards of Chapter 17.90 and Subsection 17.90.00(D)(7) identifies that not incorporating required materials is incompatible with the Sandy Style, staff believes the intent of these siding requirements are most applicable to structures not utilizing metal as a primary exterior material.*

**Staff recommends the Planning Commission approve the requested Design Deviation from Subsection 17.90.130(C)(3) with the condition Units A, B and C incorporate siding consistent with the primary structures located on the subject property (i.e. the existing Stow-A-Way structures).**

4. Masonry Finishes. Where masonry is used for exterior finish, decorative patterns must be incorporated. Examples of these decorative patterns include multicolored masonry units, such as brick, stone, or cast stone, in layered or geometric patterns or split-faced concrete block to simulate a rusticated stone-type construction.

**RESPONSE:** *No masonry is proposed with this application as the I-2 zone permits metal to be used as the primary exterior material therefore this subsection is not applicable to this proposal.*

5. Change in Relief. Buildings must include changes in relief on 10% of the facades facing public streets or residential development. Relief changes include cornices, bases, fenestration, fluted masonry or other treatments for pedestrian interest and scale.

**RESPONSE:** *While the subject property's west property line is identified as the front property line the proposed units do not face a public street or residential development and are approximately 300 feet south of the portion of the property that fronts Ruben Lane therefore a change in relief is not applicable to this proposal.*

6. Colors. Preferred colors for exterior building finishes are earth tones, creams, and pastels of earth tones. High-intensity primary colors, metallic colors, and black may be utilized as trim and detail colors but shall not be used as primary wall colors.

**RESPONSE:** *The proposed structures are pre-manufactured and painted. The structure’s exterior has been painted white (base) and black (trim). As the submitted narrative (Exhibit B) indicates, the manufacture has limited color options and the color preference is a “non-mandatory” standard therefore staff acknowledges the applicant’s choice to retain the existing color theme as opposed to the preferred colors identified within Appendix C – Building Color Palette.*

7. Ornamental Devices. Ornamental devices, such as molding, entablature and friezes, are encouraged at the roofline. Where such ornamentation is present in the form of a linear molding or board, the band must be at least 8 inches wide.

**RESPONSE:** *No ornamental devices are proposed by the applicant. Staff acknowledges the implementation of ornamental devices is encouraged and the applicant’s choice not to incorporate such features.*

8. Alcoves, Porches, Arcades, etc. Buildings must incorporate features such as arcades, awnings, roofs, porches, alcoves, and porticoes to protect pedestrians from the rain and sun. Awnings and entrances may be designed to be shared between two structures.

**RESPONSE:** *The proposal includes a Design Deviation from Subsection 17.90.130(E)(1 and 5) to eliminate primary entrances and required 4 foot deep entry shelters. Further analysis can be found within Subsections 17.90.130(E)(1) and 17.90.130(E)(5) of this report.*

9. Continuous Outdoor Arcades. Continuous outdoor arcades are strongly encouraged.

**RESPONSE:** *No continuous outdoor arcades are proposed by the applicant. Staff acknowledges the implementation of a continuous outdoor arcade is encouraged and the applicant’s choice not to incorporate such features.*

10. Traditional Storefront Elements. For buildings designed to house retail, service, or office businesses, traditional storefront elements are required. These elements include:
  - a. Clearly delineated upper and lower facades;
  - b. A lower facade dominated by large display windows and a recessed entry or entries;
  - c. Smaller, regularly spaced windows in the upper floor;
  - d. Decorative trim, such as window hoods, surrounding upper floor windows;
  - e. A decorative cornice near the top of the facade.

**RESPONSE:** *The existing use of the property, as well as the proposed use of Units A, B and C, is self-storage therefore this design element is not applicable to the proposal.*

**D. ROOF PITCH, MATERIALS, AND PARAPETS**

- 1.

Zoning District	Pitch
I-2	3:12

2. Flat roofs (with minimum pitch for drainage) are permitted with detailed stepped parapets or detailed brick coursing.
3. Parapet corners must be stepped or the parapet must be designed to emphasize the center or

- primary entrance(s), unless the primary entrance is at the corner of the building.
4. Visible roof materials must be wood or architectural grade composition shingle, slate, tile or sheet metal with standing or batten seam.
  5. All roof and wall-mounted mechanical, electrical, communications, and service equipment, including satellite dishes and vent pipes, must be screened from public view by parapets, walls or by other approved means.

**RESPONSE:** *The applicant has requested a Type III Variance to incorporate a flat roof pitch with no stepped parapets or detailed brick coursing to be applied to all three units (Units A, B and C). See Variance B within Section 17.66.80 of this report for additional analysis.*

#### **E. BUILDING ORIENTATION AND ENTRANCE STANDARDS**

1. Primary entries shall face a public street or designated pedestrian way.

**RESPONSE:** *The applicant has requested a Design Deviation to eliminate the required primary entrance facing a public street or designated pedestrian way (17.90.130(E)(1)). The pre-manufactured units are to be used as self-storage with each unit providing its own individual entrance to allow for intermittent access to individual units therefore the use is not intended for public use and a primary entrance is not appropriate for the development. The intention of this design requirement is to emphasize the pedestrian entrance from a public right-of-way to assist in identifying a structure's intended point of entry. The nature of the use, self-storage, would not warrant such an amenity as each unit will provide an individual point of access. Additionally, the existing business, Stow-A-Way Mini Storage, includes a separate building onsite providing office space for employees and customers which includes features such as windows and a pedestrian shelter to emphasize the main entrance for the site.*

*While the subject property's west property line is identified as the front property line the proposed units do not face a public street and are approximately 300 feet south of the portion of the property that fronts Ruben Lane. Additionally, the use is not intended for social public use and congregation such as a restaurant or retail establishment, but instead simply for individual storage needs, therefore the applicant has requested a Design Deviation from 17.90.130(E)(3) to eliminate a required pedestrian connection between the right-of-way and building interior. **Staff recommends the Planning Commission approve the requested Design Deviation from Subsection 17.90.130(E)(1) to allow the development to not include a primary entry facing a public street or designated pedestrian way.***

2. Primary entrances must be architecturally emphasized and visible from the public right-of-way.

**RESPONSE:** *As described within this report the subject property's west property line is identified as the front property line, but the proposed units do not face a public street and are approximately 300 feet south of the portion of the property that fronts Ruben Lane therefore it is reasonable to conclude entrances will not be visible from neighboring right-of-way. Therefore, this design element is not applicable to the proposal.*

3. Buildings must have an entrance connecting directly between the right-of-way and the building interior.

**RESPONSE:** *The proposed buildings are not meant for public access. The intention of this code*

requirement is to provide a functional and inviting entrance for pedestrians. The circuitous route a pedestrian would have to take from the right-of-way or access easement to get to Units A, B, and C will discourage pedestrians from walking to Units A, B, and C. Also, pedestrians using the storage units will most likely not be walking their belongings to the facility, but instead bringing their belongings to the facility by vehicle. Since the building is not being used by the public to congregate or socialize and the existing buildings related to Stow-A-Way storage already include internal circulation for employees and visitors staff believes the intent of this code section has been met. **Staff recommends the Planning Commission approve the requested deviation to not include an entrance connecting directly between the right-of-way and the building interior.**

4. Secondary entries may face parking lots or loading areas. Buildings must have an entrance connecting directly between the street and the building interior.

**RESPONSE:** *The proposed structures do not provide secondary entrances, therefore this design element is not applicable to the proposal.*

5. Entries shall be sheltered with an overhang or portico with a depth of at least 4 feet.

**RESPONSE:** *The applicant has requested a Design Deviation from Subsection 17.90.130(E)(5) to eliminate having to incorporate entry shelters with an overhang or portico depth of at least 4 feet. The applicant has cited in their narrative (Exhibit D) that “a sheltered overhang does not lend any benefit to the function of the units” and “the intent of the code is not specified”.*

*Objective B within Subsection 17.90.00 states, “Encourage functional, safe, and aesthetically pleasing development” while the design requirement of Subsection 17.90.130(C)(8) states a “building must incorporate features such as arcades, awnings, roofs, porches, alcoves, and porticoes to protect pedestrians from the rain and sun.” The stated objective and intent associated with the required overhang support staff’s recommendation that **Planning Commission deny the requested Design Deviation to Subsection 17.90.130(E)(5). Should the request be denied the applicant shall redesign Units A, B and C to incorporate pedestrian shelters with a minimum depth of 4 feet at each pedestrian entrance.***

6. Multiple units: Ground floor units shall face a public street or designated pedestrian way and be visible from the street whenever feasible and shall avoid out-of-direction travel.

**RESPONSE:** *The proposed buildings are not multiple unit structures therefore this section is not applicable.*

## **F. WINDOWS**

1. Windows, which allow views to the interior activity or display areas, are encouraged. Windows shall include sills at bottom and pediments at the top. Glass curtain walls, reflective glass, and painted or darkly tinted glass shall not be used.
2. Ground Floor Windows. All new buildings must provide ground floor windows along street frontages.
  - a. Required window areas must be either windows that allow views into working areas or lobbies, pedestrian entrances, or display windows.

- b. Required windows must have a sill no more than 4 feet above grade. Where interior floor levels prohibit such placement, the sill must be raised to allow it to be no more than 2 feet above the finished floor level, up to a maximum sill height of 6 feet above grade.
  - c. Darkly tinted windows and mirrored windows that block two way visibility are prohibited for ground floor windows along street facades.
  - d. Any wall that faces a public right-of-way must contain at least 10% of the ground floor wall area in display areas, windows, and doorways. Blank walls facing a public right-of-way are prohibited.
  - e. Glass curtain windows are not permitted fronting public right-of-ways.
3. Upper Floor Window Standards.
- a. Glass area dimensions shall not exceed 5 feet by 7 feet. (The longest dimension may be taken either horizontally or vertically.)
  - b. Windows must have trim or molding at least two inches wide around their perimeters.
  - c. At least half of all the window area in upper floors must be made up of glass panes with dimensions no greater than 2 feet by 3 feet. Windows that have 1 foot by 1 foot grid inside double pane glass are appropriate and are encouraged.

**RESPONSE:** *The proposed buildings are not located along a street frontage nor have an upper floor therefore this design element is not applicable to the proposal.*

#### **G. LANDSCAPING/STREETSCAPE**

- 1. Benches, outdoor seating, and trash receptacles must complement the existing ornamental street lighting and be in keeping with the overall architectural character of the area.
- 2. Benches and other streetscape items may be placed within the public right-of-way but must not block free movement of pedestrians. A minimum pedestrian walkway width of 5 feet must be maintained at all times.

**RESPONSE:** *The nonpermitted pre-manufactured structures are not along a street frontage and are not intended for public use, therefore streetscaping is not required.*

#### **H. LIGHTING**

- 1. All building entrances and exits must be well lighted.
- 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.
- 3. Lighting must be adequate for safety purposes.
- 4. Lighting must be of a pedestrian scale and the source light must be shielded to reduce glare.

**RESPONSE:** *The applicant has requested a Design Deviation from Subsection 17.90.130(H)(1-4) to eliminate having to incorporate the lighting requirements associated with the I-2 zone district. The site currently does not appear to provide any ornamental or pedestrian scaled lighting on site. Staff observes the site currently has existing overhead light near Units A, B and C; however, does not have any information that proves the existing lighting provides a reduced glare, pedestrian scale lighting system. Staff recommends the Planning Commission deny the request to not modify the existing lighting to conform to the standards of Subsection 17.90.130(H). Should the request be denied the applicant shall submit light fixture cut sheets and a photometric plan detailing a pedestrian scaled lighting system using reduced glare*

*fixtures for Units A, B and C to be reviewed and approved by City Staff.*

**I. SAFETY AND SECURITY**

1. Locate windows in a manner, which enables tenants, employees and police to watch over pedestrian, parking and loading areas.
2. In commercial, public and semipublic development and where possible in industrial development, locate windows in a manner which enables surveillance of interior activity from the public right-of-way.
3. Provide an identification system, which clearly locates buildings and their entries for patrons and emergency services.
4. Locate, orient and select on-site lighting to facilitate surveillance of on-site activities from the public right-of-way or other public areas.

**RESPONSE:** *The proposal does not include incorporating windows on any proposed unit. The additional units are an expansion to the existing use, Stow-A-Way Mini Storage, therefore the applicant shall provide an identification system for each additional unit (A, B and C) for the benefit of patrons. The site currently has overhead lighting and provides a secured gate to enhance on-site safety. As recommended within 17.90.130(H) the applicant shall submit a pedestrian scaled lighting system using reduced glare fixtures for Units A, B and C to be reviewed and approved by City Staff for additional security.*

**J. EXTERNAL STORAGE**

1. The exterior storage of merchandise and/or materials, except as specifically authorized as a permitted accessory use, is prohibited.

**RESPONSE:** *The applicant has indicated that “no exterior storage of materials outside of those authorized as a permitted use are proposed” within their narrative (Exhibit B) therefore staff finds the intention is not to violate the allowed uses of the I-2 zone district with regards to outdoor storage. If exterior storage is proposed in the future the applicant shall seek approval from the City of Sandy Planning Division.*

**K. TRASH COLLECTION / RECYCLING AREAS.**

1. All trash collection areas must be located within the structure or behind the building in an enclosure in accordance with the provisions of the City of Sandy Design Standards, Appendix A.

**RESPONSE:** *The site has existing trash collection/recycling facilities to be utilized by the proposed addition of Units A, B and C.*

**CHAPTER 17.92 – LANDSCAPING AND SCREENING**

**17.92.20 MINIMUM IMPROVEMENTS – LANDSCAPING AND SCREENING**

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

<b>ZONING DISTRICT OR USE</b>	<b>PERCENTAGE</b>
I-2 Light Industrial	15 percent

**RESPONSE:** Incorporating Units A, B and C within the site does not affect the existing landscaping on the subject property in that the proposed location was not previously landscaped. The site has a total of 18 percent landscaping which exceeds the minimum 15 percent.

**17.92.40 IRRIGATION**

Landscaping shall be irrigated, either with a manual or automatic system, to sustain viable plant life.

**RESPONSE:** The applicant is responsible for appropriate maintenance of existing and future landscaping on site.

**CHAPTER 17.98 – PARKING, LOADING, AND ACCESS REQUIREMENTS**

**17.98.20 OFF-STREET PARKING REQUIREMENTS**

A. All square footage measurements are gross square feet of total floor area.

9.

Industrial Uses	Number of Parking Spaces	Number of Bicycle Spaces
Sales, Storage, Rental, Services and Repairs of: Agricultural and Animals Automotive/Equipment Fleet Storage Light Equipment Non-operating vehicles, boats and recreational vehicles Building Equipment	1 per 400 sq. ft., plus 1 per 2 employees	5% or 2 whichever is greater
Sales, Storage, Rental, and Repairs of: Heavy Equipment, Farm Equipment	1 per 800 sq. ft., plus 1 per 2 employees	5% or 2 whichever is greater
Storage, distribution, warehousing, or manufacturing establishment; air, rail, trucking freight terminal	1 per employee on the largest shift, plus 1 per 2 employees	5% or 2 whichever is greater

**RESPONSE:** For the purpose of determining parking requirements, the addition of Units A, B and C has no bearing on required parking in that it is determined by the number of employees associated with the primary use, self-storage. Per the applicant, the number of employees during the largest shift will be 3 employees and the total number of employees for this location include 2-fulltime and 1-parttime employee. Based on these statistics the site is required to provide a total of 4 parking spaces on site. The applicant has identified a total of 9 parking spaces available to the overall site associated with Stow-A-Way Mini Storage which is the existing business associated with Units A, B and C being analyzed within this report.

The bike parking requirement is 5 percent of the number of parking spaces or 2 whichever is greater, therefore the site shall provide 2 bicycle spaces. The applicant has expressed the intention of incorporating 2 bicycle spaces at the entrance of the office associated with Stow-A-Way Mini

*Storage. The applicant shall update the submitted site plan identifying 2 bicycle spaces at the entrance of the business's main office.*

#### **17.98.130 PAVING**

1. Parking areas, driveways, aisles and turnarounds shall be paved with concrete, asphalt or comparable surfacing, constructed to city standards for off-street vehicle areas.
2. 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 applicant has indicated in the submitted narrative (Exhibit B) the intention on retaining the existing gravel surface without improving the surface to asphalt, concrete, or a comparable surface is because the existing gravel surface is consistent with Subsection 17.98.130(B). Staff has determined that in order to access Units A, B and/or C it requires traversing across the existing gravel ground covering. People leasing storage units will need to use the gravel area for vehicular movement to load and unload belongings from the storage units. **The applicant shall update the submitted site plan identifying driveways, aisles and turnarounds associated with onsite maneuvering for both the existing and proposed storage units located on the subject property. In addition, all driveways, aisles, turnarounds and locations proposed for motorized vehicle parking shall be paved with concrete, asphalt or comparable surfacing, constructed to city standards for off-street vehicle areas.***

#### **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:** *See the analysis and recommended conditions in Chapter 17.84 of this staff report.*

### **III. RECOMMENDATION**

Staff recommends the Planning Commission hold a public hearing to take public testimony regarding the proposal. In addition, staff recommends the Planning Commission **make the following motions:**

Design Deviations:

1. **Approve** the requested Design Deviation from Subsection 17.90.130(C)(3) **with the condition** Units A, B and C incorporate siding consistent with the primary structures located on the subject property (i.e. the existing Stow-A-Way structures).
2. **Approve** the requested Design Deviation from Subsection 17.90.130(E)(1) to allow the development to not include a primary entry facing a public street or designated pedestrian way.
3. **Approve** the requested Design Deviation from Subsection 17.90.130(E)(3) to not include an entrance connecting directly between the right-of-way and the building interior.
4. **Deny** the requested Design Deviation to Subsection 17.90.130(E)(5). Should the request be denied the applicant shall redesign Units A, B and C to incorporate pedestrian shelters with a minimum depth of 4 feet at each pedestrian entrance.
5. **Deny** the request to not modify the existing lighting to conform to the standards of Subsection 17.90.130(H). Should the request be denied the applicant shall submit light fixture cut sheets and a photometric plan detailing a pedestrian scaled lighting system



*using reduced glare fixtures for Units A, B and C to be reviewed and approved by City Staff.*

Requested Special Variances:

1. *Staff recommends the Planning Commission **approve** the requested special variance to reduce the front (west) yard setbacks for Units B and C to 18-feet (Unit B) and 24-feet (Unit C) with the condition the FSH analysis determines the units are not located within the restrictive setback requirement, 70 feet of the top bank of Tickle Creek.*
2. *Staff recommends the Planning Commission make one of the following conditions:*
  - A. **Deny** the request to eliminate the requirement of Subsection 17.90.130(D), or
  - B. **Approve** a special variance to reduce the required roof pitch **with the condition** the structures (Units A, B and C) incorporate sloped roofs with pitches equal to the existing structures on site (IE congruent with the existing Stow-A-Way Mini Storage structures).

OCCUPANCY

The nonpermitted structures are not compliant with code and have been in operation without approval/occupancy permits since at least September 2017. To solve the deficiencies identified within this staff report and in order to bring the nonpermitted structures and site into compliance the structures shall be vacated by tenants until such time the structures can secure legal certificates of occupancy. The owner of the Stow-A-Way storage facility shall have all storage units in the nonpermitted Units A, B, and C vacated within sixty (60) days of issuance of the findings of fact and final order. The nonpermitted storage units shall remain unoccupied until certificates of occupancy are issued for the structures.

CONDITIONS

Based on code review of the proposal, staff has identified several items requiring additional information or modification, and staff review. Prior to submittal of a Building Permit the applicant shall complete the following:

1. Submit an analysis confirming Units A, B and C are not located within 70 feet of the top bank of Tickle Creek.
2. Submit light fixture cut sheets and a photometric plan detailing a pedestrian scaled lighting system using reduced glare fixtures for Units A, B and C to be reviewed and approved by City Staff for additional security.
3. Submit revised elevations for Units A, B and C with the following modifications:
  - a) Detail pedestrian shelters with a minimum depth of 4 feet at each pedestrian entrance.
  - b) Detail siding consistent with the primary structures located on the subject property (i.e. the existing Stow-A-Way structures).
  - c) Detail the required roof modifications as specified by Planning Commission.
4. Provide an identification system for each additional unit (A, B and C) for the benefit of patrons.
5. Submit a revised site plan identifying driveways, aisles and turnarounds associated with onsite maneuvering for both the existing and proposed storage units located on the subject property. In addition, all driveways, aisles and turnarounds shall be paved with concrete, asphalt or comparable surfacing, constructed to city standards for off-street vehicle areas.
6. Submit a revised site plan identifying two bicycle spaces at the Stow-A-Way office.
7. Submit stormwater analysis ensuring all stormwater runoff shall be treated, detained and discharged in conformance with Section 13.18 and 13.20 of the Sandy Municipal Code

(SMC) and the latest edition of the City of Portland Stormwater Management Manual (including Section 1.10 of the Source Control Manual).

8. Submit a final drainage report with an updated site description to include the site area as it is currently shown as “X” as well as provide a map delineating the different basins on the subject property.
9. Submit revised stormwater detention analysis accommodating the additional impervious cover (i.e. asphalt or concrete) associated with driveways, aisles and turnarounds.

Exhibit A



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 Stowaway Mini Storage Premium Storage Vaults

Location or Address 37330 Ruben Lane, Sandy, OR 97055

Map & Tax Lot Number T 24, R E, Section 14; Tax Lot(s) 24E14 01500

Plan Designation I-1 Zoning Designation Industrial Acres 10.66

Request:

Asking that 24 container storage units be allowed and permitted for use within our established self storage facility.

I am the (check one) [X] 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.

Table with 2 columns: Applicant/Owner, Address, City/State/Zip, Phone, Email, Signature. Contains contact information for C.W. Real Estate Co., Inc. and Craig W. Warnock.

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

File No. 18-016 DR Date 9/27/18 Rec. No. Fee \$ 3845.00
Type of Review (circle one): Type I Type II Type III Type IV

24E14 01500



## Exhibit B

Firwood Design Group, LLC  
SURVEYING ♦ ENGINEERING ♦ PLANNING

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March 21, 2019

Mr. James Cramer  
Associate Planner  
City of Sandy  
39250 Pioneer Blvd  
Sandy, OR 97055

RE: File Number 18-046DR, Warnock Storage Containers Incompleteness Items

Dear Mr. Cramer,

The following items are submitted to satisfy the missing information as identified in the In-completeness letter dated 10-25-19.

- A scaled site plan including the entire parcel and the Stow-A-Way storage area subject of the application, see Exhibit B enclosed.
- A revised narrative addressing the required parking spaces, additional information on the model and dimensions of the Z-Box portable units, clarifying the lighting for the area. The narrative modifies and clarifies the requested design deviations that were on the original narrative reducing the deviations from five deviation requests to two and two special variance requests are added to the application.

Special Variance requests:

Special Variance to deviate from 17.90.130 D1-4 requirement for a 3:12 roof pitch and allow a flat roof.

Special Variance to 17.50.30 (A) the front yard setback of 30 feet, to allow for the placement of the storage containers within the setback area. This is justified in that the neighboring property that abuts this side of the subject parcel is not buildable due to the presence of wetlands and the area is not visible from the adjoining properties.

Design Deviations from:

17.90.130.C.3 to deviate from the requirement for lap or horizontal siding and allow for flat metal siding.

17.90.130.E.1 To deviate from primary entry facing public street.

17.90.130.E.3 Entrance connecting directly between entry and public right-of-way.

17.90.130.E.5 to deviate from the requirement for an overhang or portico with a minimum depth of 4ft depth. The deviation request is for no overhang feature at the entry of the storage unit(s).

17.90.130(H)(1-4) – Lighting

The narrative provides additional detail and justification for the aforementioned requests.

- Exhibit C, a supplemental Narrative.
- Stormwater management report and supporting documentation, see Exhibit D enclosed.
- Exhibit E, copies of previous narrative submitted and the incompleteness letter.

A payment for the amount of \$865 will be submitted to the City by the owner.

Type III Design Review (\$25,001 - \$100k)	\$1,710
Special Variance (17.50.30(A))	\$1,070
Special Variance (17.90.130(D)(1-4))	\$1,070
Design Deviation (17.90.130(C)(3))	\$430
Design Deviation (17.90.130(E)(1,3&5))	\$430
<i>Total Due</i>	<i>\$4,710</i>
<i>Total Paid</i>	<i>\$3,845</i>
<b><i>OUTSTANDING BALANCE</i></b>	<b><i>\$865</i></b>

Feel free to contact me with any questions or requests for additional information.

Best Regards,



Kelli A. Grover, P.E.  
Firwood Design Group

**Project Narrative  
for  
Stow-A-Way Storage  
37330 Ruben Lane, Sandy, Oregon**



*Aerial of Stow-A-Way Storage*

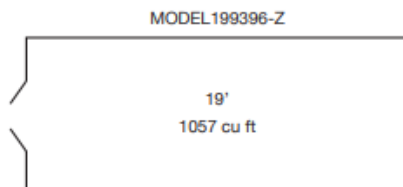
**Owner Originally Submitted: 9/27/18  
Deemed Incomplete: 10/23/18  
Completeness Items Submitted: 3/21/19  
180-Day date for completeness 3/26/19**

## I. Property and Project Description

The project site is located within a portion of the property located at 37330 Ruben Lane. (Township 2 South, Range 4 East, Section 14, tax lot 1500 of the Willamette Meridian). The site is zoned I-2, Light Industrial District which allows self-storage as a permitted outright use (17.50.10.2g). The project site is operated as a mini self-storage business and is situated within a portion of the Mt. Hood Industrial Park that occupies the entire tax lot 1500. The Industrial Park is located in a lower topographical bowl situated approximately 50 feet below Highway 26 and the subject storage site that is located within the Industrial Park is not visible from a public right of way including Highway 26. Access into the self-storage facility is through the private access within the Industrial Park. The topography of the lower area is generally flat and the north, easterly and westerly perimeters of the storage area are naturally screened with native vegetation, the southerly perimeter abuts the Industrial Park. The office for the storage area is located outside to the south of the gated area. The aerial image below provide an outline of the area occupied within the industrial park that is operated as Stow-A-Way storage.



The applicant proposes to add new pre-manufactured portable storage units that are 19ft long by 8ft wide each, as illustrated below. No site built buildings are proposed on the site.



The portable storage units are proposed to be located within the gated interior of the existing Stow-A-Way storage area near the westerly end which is not visible from any adjacent properties or roadways. The storage units are on gated private property and not open for public access and can only be accessed by the parties whom have contracted to temporarily rent a unit for storage, therefore general pedestrian access in not relevant.



## II. Application Approval Requests

Consistent with SDC 17.50.00, "Intent" of the I-2 zone which acknowledges that the I-2 zone does not depend on high-visibility uses and where the Design Standards are less restrictive than those applied to other zones. Therefore, the applicant has requested Design Deviations to those mandatory Design Standards that are inapplicable to the proposed use and because of its location at the rear of the property.

The applicant requests the following approvals with this application:

- Type II Design Review to add portable storage units
- 2- Special Variance Requests
- 5-Design Deviation Request

## III. Items Submitted With This Application

- Exhibit A - Project Narrative
- Exhibit B - Site Plans
- Exhibit C - Supplemental Narrative
- Exhibit D- Preliminary Stormwater Report
- Exhibit E - Previous Application Narrative and In-Completeness Letter

## IV. Review of Applicable Approval Criteria

Development applications are required to meet standards set forth in the Sandy Development Code, codified as Title 17 of the Municipal Code. The following section addresses all applicable review criteria. Pertinent code provisions are cited below in plain text followed by a response identifying how the proposal either complies with this standard, or finds the standard does not apply, in *italics*.



## CHAPTER 17.50 - LIGHT INDUSTRIAL DISTRICT (I-2)

### 17.50.00 INTENT

It is the intent of this district to provide locations in suitable areas for manufacturing and warehousing business, or other commercial uses that do not depend on high visibility. Commercial or retail uses must be compatible with an environment that includes heavy truck traffic and outdoor storage of industrial materials. Because building design standards are less restrictive in this zone than in other zones, buildings (regardless of use) shall be screened from view from arterial streets and highways.

### 17.50.10 PERMITTED USES

2. Service and professional businesses and organizations, including but not limited to: a. Automotive repair and service; b. Commercial day care facility in conjunction with a permitted use; c. Community services; d. Indoor recreation/sports arena, excluding athletic club/gym; e. Laboratory; f. Professional or general business office; g. **Self-service storage**; h. Social organization;

**Response:** The proposed use is a permitted use in the I-2 zoning district.

### 17.50.30 DEVELOPMENT STANDARDS

A.

Lot Area	No minimum
Lot Dimension	No minimum
Setbacks	
Front .....	30 ft. minimum; 70 ft. maximum from a transit street
Side or Rear .....	None, unless abutting a more restrictive district; if abutting, the minimum setback is 50 ft.
Corner .....	15 ft.
Outdoor Display/Sales Lot Area	40% maximum
Lot Coverage	80% maximum
Landscaping Requirement	15% minimum
Structure Height	45 ft. maximum
Transit Street Setback	See Chapter 17.82
Off-Street Parking	See Chapter 17.98

**Response:** The proposed portable units are situated along the lot line that abuts the terminus of Ruben Lane a public street, see Exhibit "B". Therefore the abutting lot line to Ruben Lane is considered the front of the lot and as such the front yard setback is 30feet. The applicant requests a Special Variance to this set back requirement as a portion of the proposed storage facilities is situated within this setback dimension. Unit B is situated 12 feet into the set back area, and unit C is situated 6 feet into the set back area. See Exhibit C for further discussion regarding the special variance.

*The landscape and the Off-Street Parking requirements are discussed below.*

#### **17.50.40 ADDITIONAL REQUIREMENTS**

A. Design review is required for all buildings and external building modifications.

**Response:** *The applicant submits the enclosed Design Review application responses to the code as it applies to the proposed use.*

B. All processes and storage shall be entirely enclosed within a building. However, outdoor storage of materials may be approved by the Director upon a finding that the proposed storage is screened from view from public rights-of-way by buildings, landscaping, fences, etc. All manufacturing operations shall be conducted wholly within an enclosed building.

**Response:** *No outdoor storage of materials beyond the portable storage containers is proposed.*

C. Reasonable provisions for pedestrian and vehicular off-street access to adjoining properties shall be considered through the design review process.

**Response:** *The current industrial park site configuration and existing improvements provide reasonable provisions for pedestrian and vehicular off-street access to adjoining properties, see Exhibit "B". This criterion is satisfied.*

### **CHAPTER 17.90 DESIGN STANDARDS**

#### **17.90.10 APPLICABILITY**

The provisions of this chapter apply to all zones and uses as follows except as specified in Sections 17.90.10(B), (C), (D), (E), and (F) below:

A. All construction within a Commercial or Industrial Zoning District or a non-residential use in a Residential Zoning District including the following:

1. New construction;
2. Replacement of a building that is destroyed as specified in Section 17.08.30;
3. Addition to an existing building;
4. Exterior alterations other than general maintenance on an existing building;
5. Site improvements including changes to landscaping, parking, civic spaces, etc.

**Response:** *The proposal includes placing pre-manufactured storage structures within the area currently used and operated as a self-storage facility.*

#### **17.90.130 LIGHT INDUSTRIAL (I-2) DESIGN STANDARDS**

##### **A. ACCESS**

1. All lots shall abut or have access to a dedicated public street.

**Response:** *The industrial park lot abuts Ruben Lane and has access to a public street, this criteria is satisfied.*

2. All lots which have access to a public alley shall provide for all personal and service access for vehicles from that alley.

**Response:** *This criteria is not applicable, no access to a public alley is proposed.*

3. Parking lots may include public alley accessed garages at the rear property line.

**Response:** *This criteria is not applicable, no parking lot is proposed.*

4. Joint use of access points and interconnections shall be required, where deemed needed by the Director and City Engineer.

**Response:** *This criteria is not applicable, no joint use access changes are proposed.*

5. Each lot shall be permitted one access point, except lots with street frontage of one hundred fifty feet or more may be permitted one or more additional access point, if approved by the City Engineer.

**Response:** *One access point to the property exists, this criteria is met.*

6. Connection to Adjacent Properties: The location of any real improvements to the property must provide for a future street and pedestrian network to adjacent properties.

**Response:** *The industrial park provides a public access easement and improvements that provides through access for pedestrians and vehicular traffic to Towle Drive, a public street located at the southerly end of the project site, see Exhibit "B"*

## **B. PEDESTRIAN ACCESSIBILITY**

1. Special attention shall be given to designing a primary building entrance, which is both attractive and functional.

**Response:** *The proposed storage containers are not intended to have a primary entrance, these are an extension to an established storage business with an existing office building that serves as the primary entrance for the business. The applicant submits that there is an existing primary building entrance, a new primary entrance is not proposed, therefore this criterion is not applicable.*

2. Building entries must comply with the accessibility requirements of the Oregon State Structural Specialty Code.

**Response:** *The proposed storage containers are situated on the ground and are either at grade or can be outfitted with a ramp into the container to meet this criteria. This criteria can be satisfied through condition of approval.*

3. Buildings located at the intersection of two streets shall consider the use of a corner entrance to the building.

**Response:** *The proposed storage containers are not located at the intersection of two streets, therefore this criterion is not applicable.*

4. Pedestrian environment may be enhanced by street furniture, landscaping, awnings, and movable planters of seasonal flowers.

**Response:** *The proposed storage containers do not include street furniture, landscaping, awnings, and movable planters - this is a non-mandatory requirement.*

### **C. BUILDING FACADES, MATERIALS AND COLORS**

1. Facades. Facades shall be varied and articulated to provide visual interest to pedestrians. Within larger projects, variations in facades, floor levels, architectural features, and exterior finishes shall create the appearance of several smaller buildings.

**Response:** *The proposed pre-manufactured storage containers can be varied in placement and articulated in depth from each other to create visual interest. The applicant proposes that this criterion can be met by off-setting each unit in relation to each other, and satisfied through condition of approval.*

2. Building Materials. Exterior building materials shall convey an impression of durability. Materials such as masonry, stone, stucco, and wood are encouraged. Metal is not allowed as the primary exterior building material except in the I-2 and I-3 districts, but it may be used for accents including awnings.

**Response:** *The proposed pre-manufactured storage containers are made with metal siding which is allowed in the I-2 district and conveys the impression of durability, therefore this criterion is satisfied.*

3. Siding. Lap or horizontal siding or walls of brick, masonry or stone shall be required. Vertical grooved (i.e., T1-11) sheet siding is prohibited.

**Response:** *The proposed pre-manufactured storage containers are constructed with metal siding and horizontal siding is not a fabrication option for these containers. The applicant requests for a design deviation from this standard to allow for the metal sheet siding with no horizontal siding. Metal buildings are a permitted use in the I-2 District. See Exhibit C for further discussion regarding the design deviation.*

4. Masonry Finishes. Where masonry is used for exterior finish, decorative patterns must be incorporated. Examples of these decorative patterns include multicolored masonry units, such as brick, stone, or cast stone, in layered or geometric patterns or split-faced concrete block to simulate a rusticated stone-type construction.

**Response:** *The proposed pre-manufactured storage containers are made with metal and do not have masonry finishes. This criterion is not applicable.*

5. Change in Relief. Buildings must include changes in relief on 10% of the facades facing public streets or residential development. Relief changes include cornices, bases, fenestration, fluted masonry or other treatments for pedestrian interest and scale.

**Response:** *The proposed pre-manufactured storage containers are not located near a residential development and do not face public streets and/or are not visible from a public street, this criterion is not applicable.*

6. Colors. Preferred colors for exterior building finishes are earth tones, creams, and pastels of earth tones. High-intensity primary colors, metallic colors, and black may be utilized as trim and detail colors but shall not be used as primary wall colors.

**Response:** *The proposed pre-manufactured storage containers are made with metal that is pre-painted and the supplier offers limited color options. The applicant submits that this in a non-mandatory standard and the proposed colors of white and black are acceptable.*

7. Ornamental Devices. Ornamental devices, such as molding, entablature and friezes, are encouraged at the roofline. Where such ornamentation is present in the form of a linear molding or board, the band must be at least 8 inches wide

**Response:** *No ornamental devices are proposed for the pre-manufactured storage containers, this criteria is not applicable.*

8. Alcoves, Porches, Arcades, etc. Building must incorporate features such as arcades, awnings, roofs, porches, alcoves, and porticoes to protect pedestrians from the rain and sun. Awnings and entrances may be designed to be shared between two structures.

**Response:** *The proposed pre-manufactured storage containers are an extension to an established storage business and located within a gated locked area that is not accessible to the general public or pedestrians. Therefore no feature to protect pedestrians from rain and sun is proposed. This criteria is not applicable.*

9. Continuous Outdoor Arcades. Continuous outdoor arcades are strongly encouraged.

**Response:** *No outdoor arcades are proposed.*

10. Traditional Storefront Elements. For buildings designed to house retail, service, or office businesses, traditional storefront elements are required. These elements include:

- a. Clearly delineated upper and lower facades;
- b. A lower facade dominated by large display windows and a recessed entry or entries;
- c. Smaller, regularly spaced windows in the upper floor;
- d. Decorative trim, such as window hoods, surrounding upper floor windows;
- e. A decorative cornice near the top of the facade.

**Response:** *The proposed pre-manufactured storage containers are an industrial use, not a storefront and are not designed to house retail, service, or office businesses. This criteria is not applicable.*

#### D. ROOF PITCH, MATERIALS, AND PARAPETS

1. Zoning District Pitch I-2 3:12

**Response:** *The roof pitch is proposed to conform to D.2. of this section, this criterion is not applicable.*

2. Flat roofs (with minimum pitch for drainage) are permitted with detailed stepped parapets or detailed brick coursing.

**Response:** *The roof pitch is proposed to be flat with a minimum pitch for drainage, which is permitted. The applicant requests a special variance to not construct the roof with detailed stepped parapets or detailed brick coursing as this architectural feature is not a practical application for portable storage containers. See Exhibit C for further discussion regarding the special variance.*

3. Parapet corners must be stepped or the parapet must be designed to emphasize the center or primary entrance(s), unless the primary entrance is at the corner of the building.

**Response:** *Parapet corners are not proposed as the applicant is requesting a special variance from 17.90.130.D1-4, this criterion is not applicable.*

4. Visible roof materials must be wood or architectural grade composition shingle, slate, tile or sheet metal with standing or batten seam.

**Response:** *Roof materials are proposed to be smooth metal and the applicant is requesting a special variance from 17.90.130.D1-4 to allow for this in lieu of standing or batten seam metal.*

5. All roof and wall-mounted mechanical, electrical, communications, and service equipment, including satellite dishes and vent pipes, must be screened from public view by parapets, walls or by other approved means.

**Response:** *No roof and/or wall mounted mechanical, electrical or communications and service equipment is proposed. This criterion is not applicable.*

#### E. BUILDING ORIENTATION AND ENTRANCE STANDARDS

1. Primary entries shall face a public street or designated pedestrian way

**Response:** *The proposed pre-manufactured storage containers are an extension to the established self-storage container business and do not serve as a primary entry. The applicant requests for a design deviation from this standard. The justification for this is further discussed in Exhibit C enclosed with this application.*

2. Primary entrances must be architecturally emphasized and visible from the public right-of-way.

**Response:** *The applicant submits that this criteria is not applicable as the proposed pre-manufactured storage containers are an extension to the established self-storage container business and do not serve as a primary entry as requested in the design deviation of 17.90.130.E.1, See Exhibit C.*

3. Buildings must have an entrance connecting directly between the right-of-way and the building interior.

**Response:** *The proposed pre-manufactured storage containers are situated on the interior of a private industrial park and they are not located in close proximity to a public right-of-way to allow for a direct connection. The applicant requests for a design deviation from this standard. See Exhibit C for further discussion regarding the deviation request.*

4. Secondary entries may face parking lots or loading areas. Buildings must have an entrance connecting directly between the street and the building interior.

**Response:** *This criteria is not applicable as the proposed pre-manufactured storage containers do not have secondary entries and the units are situated on the interior of a private industrial park and they are not located in close proximity to a public right-of-way to allow for a direct connection.*

5. Entries shall be sheltered with an overhang or portico with a depth of at least 4 feet.

**Response:** *The entry to the portable storage unit is a solid metal latched swing door. The applicant requests a design deviation request to not construct an overhang or portico with a depth of at least 4 feet. See Exhibit C for further discussion regarding the design deviation request.*

6. Multiple units: Ground floor units shall face a public street or designated pedestrian way and be visible from the street whenever feasible and shall avoid out-of-direction travel.

**Response:** *This criteria is not applicable as the proposed pre-manufactured storage containers are an extension to the established self-storage container business and are not visible from a street, and a gated so a designated pedestrian way is not applicable.*

## **F. WINDOWS**

1. Windows, which allow views to the interior activity or display areas, are encouraged. Windows shall include sills at bottom and pediments at the top. Glass curtain walls, reflective glass, and painted or darkly tinted glass shall not be used.

2. Ground Floor Windows. All new buildings must provide ground floor windows along street frontages.

- a. Required window areas must be either windows that allow views into working areas or lobbies, pedestrian entrances, or display windows.
  - b. Required windows must have a sill no more than 4 feet above grade. Where interior floor levels prohibit such placement, the sill must be raised to allow it to be no more than 2 feet above the finished floor level, up to a maximum sill height of 6 feet above grade.
  - c. Darkly tinted windows and mirrored windows that block two way visibility are prohibited for ground floor windows along street facades.
  - d. Any wall that faces a public right-of-way must contain at least 10% of the ground floor wall area in display areas, windows, and doorways. Blank walls facing a public right-of-way are prohibited.
  - e. Glass curtain windows are not permitted fronting public right-of-ways.
3. Upper Floor Window Standards.
- a. Glass area dimensions shall not exceed 5 feet by 7 feet. (The longest dimension maybe taken either horizontally or vertically.)
  - b. Windows must have trim or molding at least two inches wide around their perimeters.
  - c. At least half of all the window area in upper floors must be made up of glass panes with dimensions no greater than 2 feet by 3 feet. Windows that have 1 foot by 1 foot grid inside double pane glass are appropriate and are encouraged.

**Response:** *No windows are proposed on the pre-manufactured storage containers, this criteria is not applicable.*

#### **G. LANDSCAPING/STREETSCAPE**

- 1. Benches, outdoor seating, and trash receptacles must complement the existing ornamental street lighting and be in keeping with the overall architectural character of the area.

**Response:** *No benches, outdoor seating or trash receptacles are proposed and no existing ornamental street lighting exists on the subject parcel. This criterion is not applicable.*

- 2. Benches and other streetscape items may be placed within the public right-of-way but must not block free movement of pedestrians. A minimum pedestrian walkway width of 5 feet must be maintained at all times.

**Response:** *The applicant proposes that this criteria is not applicable as the proposed pre-manufactured storage containers are an extension to the established self-storage container business and are not situated near a public street. This criterion is not a mandatory standard and no benches or streetscape items are proposed.*

#### **H. LIGHTING**

- 1. All building entrances and exits must be well lighted.

**Response:** *The subject site has existing light fixtures that provide a well lighted condition, this criterion is satisfied,*



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.

**Response:** *The subject site has existing light fixtures that are proposed to remain, no new exterior lighting is proposed. This criterion is not applicable.*

3. Lighting must be adequate for safety purposes.

**Response:** *The subject site has existing light fixtures that provide a well lighted condition that provides a safe environment, this criterion is satisfied,*

4. Lighting must be of a pedestrian scale and the source light must be shielded to reduce glare.

**Response:** *No new lighting is proposed, the applicant requests for a design deviation to this standard. The justification for this is further discussed in Exhibit C.*

#### **I. SAFETY AND SECURITY**

1. Locate windows in a manner, which enables tenants, employees and police to watch over pedestrian, parking and loading areas.

**Response:** *No windows are proposed, this criterion is not applicable.*

2. In commercial, public and semipublic development and where possible in industrial development, locate windows in a manner which enables surveillance of interior activity from the public right-of-way.

**Response:** *No windows are proposed, this criterion is not applicable.*

3. Provide an identification system, which clearly locates buildings and their entries for patrons and emergency services.

**Response:** *The applicant proposes to provide an identification system for each container that will clearly locate each unit. This criterion is satisfied.*

4. Locate, orient and select on-site lighting to facilitate surveillance of on-site activities from the public right-of-way or other public areas.

**Response:** *The existing storage area currently has on-site lighting and the site is fully gated and secured. This criteria is met.*

#### **J. EXTERNAL STORAGE**

1. The exterior storage of merchandise and/or materials, except as specifically authorized as a permitted use, is prohibited.

**Response:** *No exterior storage of materials outside of those authorized as a permitted use are proposed. This criteria is met.*

#### **K. TRASH COLLECTION / RECYCLING AREAS.**

1. All trash collection areas must be located within the structure or behind the building in an enclosure in accordance with the provisions of the City of Sandy Design Standards, Appendix A.

**Response:** *The proposed pre-manufactured storage containers are an extension to the established self-storage container business and all existing trash and recycling areas will be used to serve the containers. This criterion is satisfied.*

#### **CHAPTER 17.92 LANDSCAPING AND SCREENING GENERAL STANDARDS - ALL ZONES**

**17.92.20 MINIMUM IMPROVEMENTS - LANDSCAPING AND SCREENING** The minimum landscaping area of a site to be retained in landscaping shall be 15%.

**Response:** The existing landscaping of the area within the parcel on which the storage site is located exceeds the 15% landscaping standard. Please see the enclosed site plan of the parcel with the landscaped areas designated and quantified. No vegetation removal is proposed this criterion

#### **CHAPTER 17.98 PARKING, LOADING, AND ACCESS REQUIREMENTS**

##### **17.98.20 OFF-STREET PARKING REQUIREMENTS**

###### **Industrial Uses**

Number of Parking Spaces

Storage, distribution, warehousing, or manufacturing establishment; air, rail, trucking freight terminal  
1 parking space per employee on the largest shift, plus 1 per 2 employees.

Number of Bicycle Spaces: 5% or 2 whichever is greater.

**Response:** *The number of employees during the largest shift is 2.5 employees, requiring 3 spaces. The existing business provides 9 parking spaces in the front are of the storage office building. The applicant proposes to add 2 bicycle spaces near the office building in order to satisfy this criteria.*

##### **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: As shown on the Site Plan, the applicant proposes to retain the gravel surface which is consistent with the 17.98.130 (B), permitted for designated equipment storage areas.*

#### **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.*

#### **V. Conclusion**

The applicant requests design review approval to allow for the placement of pre-fabricated storage containers within existing self-storage site operated and occupied by Stow-A-Way storage.

Due to the location on the private property and the nature of the use and intent of storage containers the application submits that while several of the criteria do not apply, the following variances and design deviations are requested.

Special Variance to deviate from 17.90.130 D1-4 requirement for parapets or brick coursing on a flat roof and allow only a flat roof without the aesthetic components.

Special Variance to 17.50.30 (A) the front yard setback of 30 feet, to allow for the placement of the storage containers within the setback area. This is justified in that the neighboring property that abuts this side of the subject parcel is not buildable due to the presence of wetlands and the area is not visible from the adjoining properties.

Design Deviations from:

17.90.130.C.3 to deviate from the requirement for lap or horizontal siding and allow for flat metal siding.

17.90.130.E.1 to deviate from the requirement that primary entries shall face a public street or designated pedestrian way.

17.90.130.E.3 to deviate from the requirement for entrances to connect directly between the right-of-way and the building interior.

17.90.130.E.5 to deviate from the requirement for an overhang or portico with a minimum depth of 4ft depth. The deviation request is for no overhang feature at the entry of the storage unit(s).

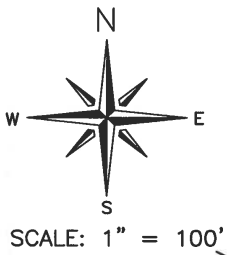
17.90.130.H 1-4 to deviate from lighting requirement. No new lighting is proposed the facility is currently operating with existing lighting that is adequate.

**Exhibit C**

**SITE PLAN**

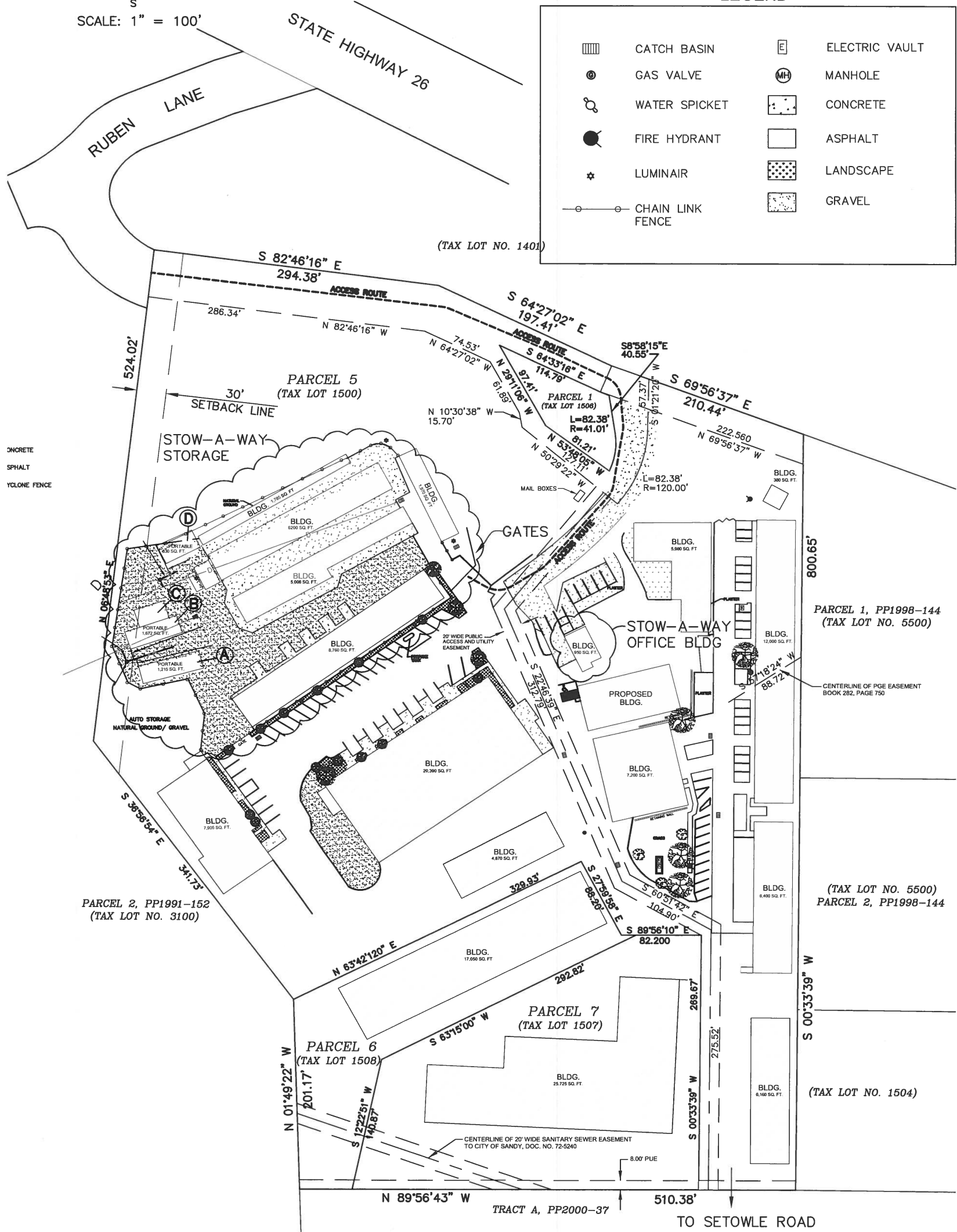
**MT. HOOD INDUSTRIAL PARK**

PARCEL 5, PARTITION PLAT NO. 2000-037  
 LOCATED IN THE NORTHEAST 1/4 OF SECTION 14  
 TOWNSHIP 2 SOUTH, RANGE 4 EAST, WILLAMETTE MERIDIAN  
 CITY OF SANDY, CLACKAMAS COUNTY, OREGON



**LEGEND**

	CATCH BASIN		ELECTRIC VAULT
	GAS VALVE		MANHOLE
	WATER SPICKET		CONCRETE
	FIRE HYDRANT		ASPHALT
	LUMINAIR		LANDSCAPE
	CHAIN LINK FENCE		GRAVEL



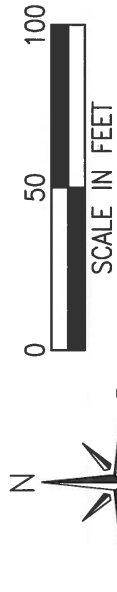
**Firwood Design Group, LLC**  
**SURVEYING + ENGINEERING + PLANNING**  
 NOVEMBER 28, 2017

359 E HISTORIC COLUMBIA HIGHWAY  
 TROUTDALE, OREGON 97060  
 BUS: (503) 668-3737 • FAX: (503) 668-3788

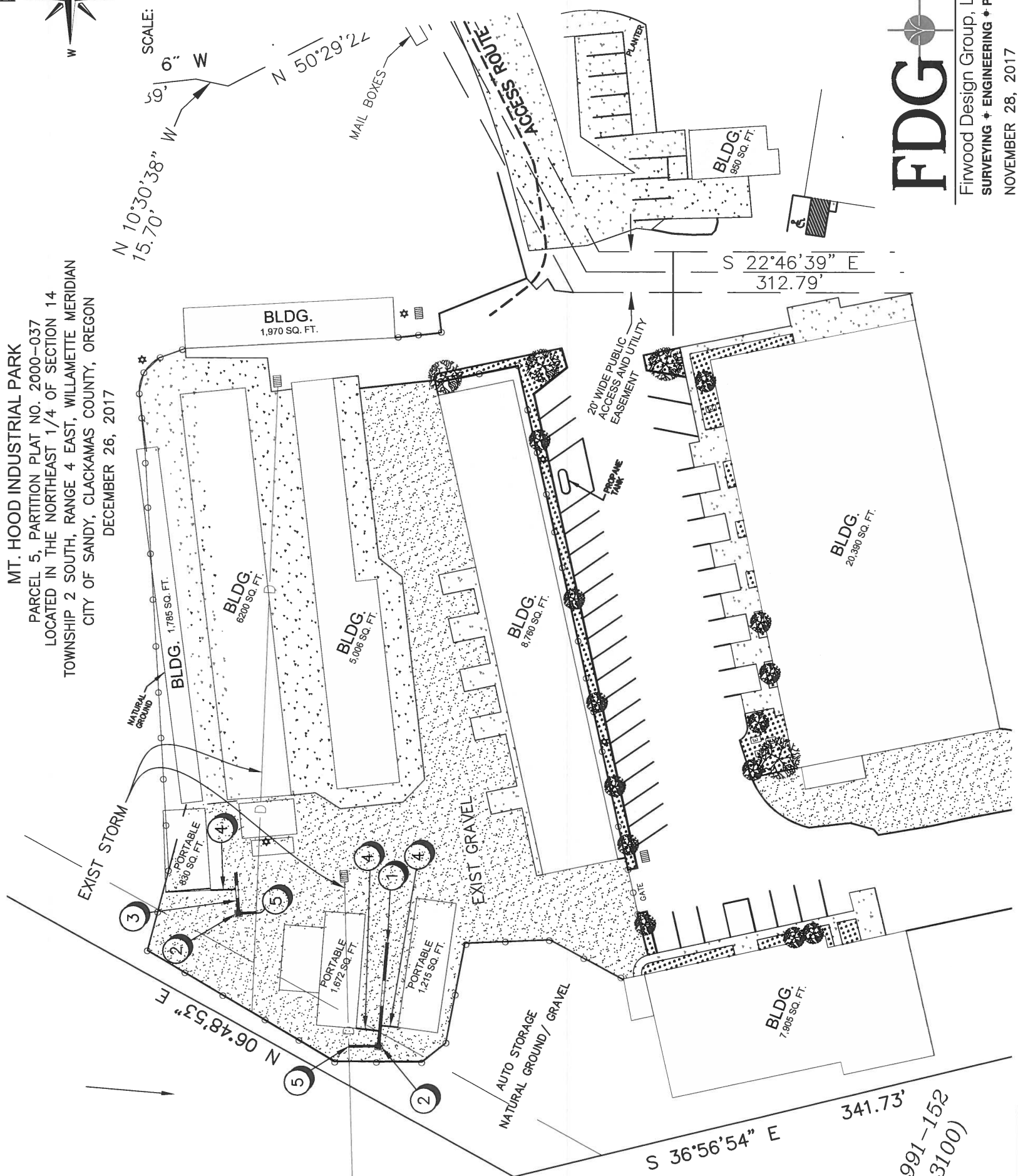
**SHEET 1 OF 2**  
 E17-008 Warnock site plan.dwg

**STORM PLAN**

MT. HOOD INDUSTRIAL PARK  
 PARCEL 5, PARTITION PLAT NO. 2000-037  
 LOCATED IN THE NORTHEAST 1/4 OF SECTION 14  
 TOWNSHIP 2 SOUTH, RANGE 4 EAST, WILLAMETTE MERIDIAN  
 CITY OF SANDY, CLACKAMAS COUNTY, OREGON  
 DECEMBER 26, 2017



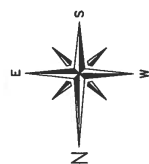
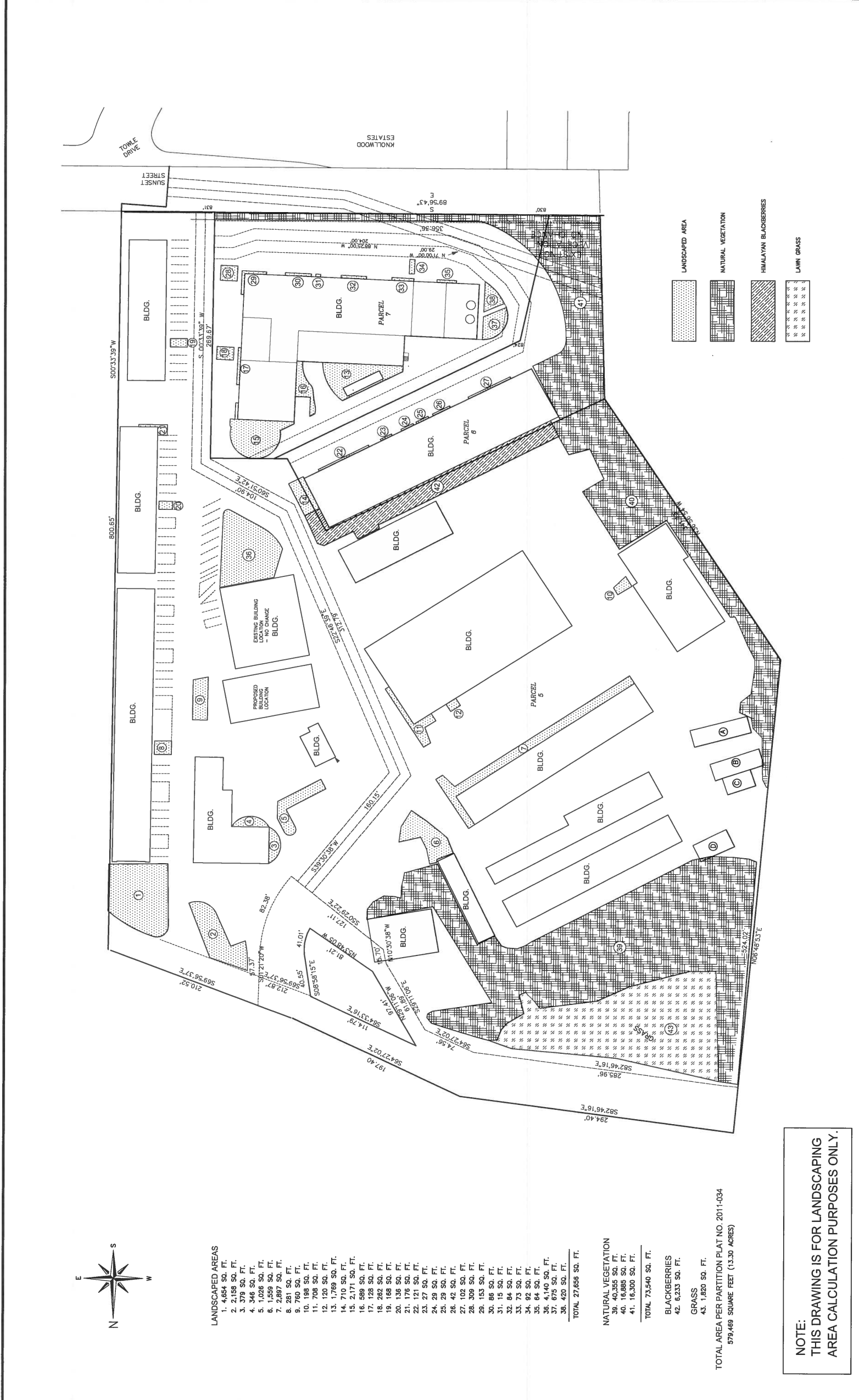
- SCALE: 1" = 50'
- KEY NOTES**
- 1 50 LF 18" DETENTION PIPE
  - 2 CATCH BASIN WITH ORIFICE PLATE, 8" OUTLET PIPE
  - 3 20 LF 18" DETENTION PIPE
  - 4 4" RAIN DRAIN (TYPICAL)
  - 5 CONNECT INTO EXIST STORM PIPE



359 E HISTORIC COLUMBIA HIGHWAY  
 TROUTDALE, OREGON 97060  
 BUS: (503) 668-3737 • FAX: (503) 668-3788  
**SHEET 2 OF 2**  
 E17-008 Warnock site plan.dwg

NOVEMBER 28, 2017  
 Firwood Design Group, LLC  
 SURVEYING • ENGINEERING • PLANNING

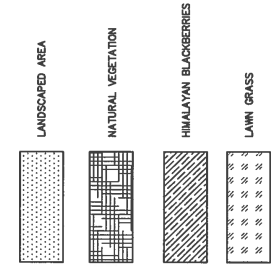
PP1991-152  
 NO. 3100



- LANDSCAPED AREAS**
1. 4,654 SQ. FT.
  2. 2,158 SQ. FT.
  3. 379 SQ. FT.
  4. 348 SQ. FT.
  5. 1,026 SQ. FT.
  6. 1,559 SQ. FT.
  7. 2,887 SQ. FT.
  8. 281 SQ. FT.
  9. 760 SQ. FT.
  10. 198 SQ. FT.
  11. 708 SQ. FT.
  12. 120 SQ. FT.
  13. 1,769 SQ. FT.
  14. 710 SQ. FT.
  15. 2,171 SQ. FT.
  16. 699 SQ. FT.
  17. 128 SQ. FT.
  18. 282 SQ. FT.
  19. 168 SQ. FT.
  20. 136 SQ. FT.
  21. 176 SQ. FT.
  22. 121 SQ. FT.
  23. 27 SQ. FT.
  24. 29 SQ. FT.
  25. 29 SQ. FT.
  26. 42 SQ. FT.
  27. 102 SQ. FT.
  28. 309 SQ. FT.
  29. 153 SQ. FT.
  30. 86 SQ. FT.
  31. 15 SQ. FT.
  32. 84 SQ. FT.
  33. 75 SQ. FT.
  34. 92 SQ. FT.
  35. 64 SQ. FT.
  36. 4,140 SQ. FT.
  37. 675 SQ. FT.
  38. 420 SQ. FT.
  - TOTAL 27,656 SQ. FT.**
- NATURAL VEGETATION**
39. 40,355 SQ. FT.
  40. 16,886 SQ. FT.
  41. 16,300 SQ. FT.
  - TOTAL 73,540 SQ. FT.**
- BLACKBERRIES**
42. 6,233 SQ. FT.
- GRASS**
43. 1,820 SQ. FT.

TOTAL AREA PER PARTITION PLAT NO. 2011-034  
579,469 SQUARE FEET (13.30 ACRES)

**NOTE:**  
THIS DRAWING IS FOR LANDSCAPING  
AREA CALCULATION PURPOSES ONLY.



DATE: _____		DRAWN: RME		DESIGNED: _____		CHECKED: _____	
NO. _____		SCALE: 1" = 50'		DATE: MARCH 22, 2017			
REVISION _____		PROJECT NO. E17-008		S17-008 Warnock Site Colors.dwg			
<b>FDG</b> Firwood Design Group, LLC SURVEYING • ENGINEERING • PLANNING				359 E HISTORIC COLUMBIA HIGHWAY TROUTDALE OREGON 97060 BUS: (503) 688-3327 • FAX: (503) 688-3786			
<b>CHRISTOPHER W. WARNOCK</b> 37310 RUBEN LANE SANDY, OREGON 97055				<b>MT. HOOD INDUSTRIAL PARK</b> 37396 RUBEN LANE SANDY, OREGON 97055			
				1/1			

## Exhibit D – Supplemental Narrative

### Deviations

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Section 17.90.40 ( C) details the process and Section 17.90.100( C), contains requirements for Type III project narratives. Section 17.90.100 ( C) includes the following language: “ 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.”

#### **Deviation No. 1.**

The applicant requests a deviation to Section 17.90.130(C)(3). This section contains the following language:

3. Siding. Lap or horizontal siding or walls of brick, masonry or stone shall be required. Vertical grooved (i.e., T1-11) sheet siding is prohibited.

Response: The applicant proposes to locate the proposed storage units within the interior of the gated storage facility. The interior of the facility is not visible from the access route and is located a considerable distance from an adjoining public right-of-way. The storage units are not intended to be used by or visible to the general public.

Section 17.90.100 ( C.) regarding deviation requests, requires the narrative to describe how the proposal meets or exceeds the intent of the standards for which a deviation is requested. Section 17.90.130 ( C.) Building Facades, Materials, and Colors contain intent statements. As such the intent of this section has not been specified in the code. The fact that specific siding type is cited as a requirement infers that the intent is to provide a material that is visually appealing. Because the location of the buildings are not in a visible location to the general public a deviation is warranted.

#### **Deviation No. 2.**

The applicant requests a deviation to Section 17.90.130(E)(1). This section contains the following language:

1. Primary entries shall face a public street or designated pedestrian way.

Stow-a-way storage is situated on the interior of an industrial building complex on private property. The proposed storage units do not have a primary entrance, rather each unit has an independent swing out door to allow intermittent access into the storage unit to gain access to stored belongings. Furthermore due to the proximity of the public street, Ruben lane being over 300ft from the storage



units meeting this code is not practical. The intent of this section has not been specified in the code. Because there is not a primary entrance associated with the proposed unit a deviation is warranted.

**Deviation No. 3**

The applicant requests a deviation to Section 17.90.130(E)(3). This section contains the following language:

Buildings must have an entrance connecting directly between the right-of-way and the building interior.

Stow-a-way storage is situated on the interior of an industrial building complex on private property. The proposed storage units are located over 300ft from the right-of-way (Ruben Lane) and the storage units are on the interior of a gated storage area. The function is not to serve the general public but only renters of the units. A private access easement over a paved pathway will provide a through connection from Ruben lane to the interior of the Industrial Park. Once on private property a connection into the gated storage area is provided over a paved surface. The intent of this code standard is also not provided in the code. Because the buildings are not intended to serve the public the need to serve the public right-of-way appears to be limited. The proposed units are uniquely located within the interior of a private industrial park. A deviation to this section is warranted.

**Deviation No. 4**

The applicant requests a deviation to Section 17.90.130(E)(5). This section contains the following language:

Entries shall be sheltered with an overhang or portico with a depth of at least 4 feet

The proposed portable storage units each have an individual door, therefore there are multiple entrances. The function of the storage unit entrance is to have access into the interior to transfer stored belonging into an out of the unit. A sheltered overhang does not lend any benefit to the function of the units. The intent of the code is not specified as to if the intent is for aesthetic, functional, structural, or safety purposes. With multiple entrances and the incompatibility of an overhang for each unit, this deviation is warranted.

**Deviation No. 5**

The applicant requests a deviation to Section 17.90.130(H)(1-4). This section contains the following language:

1. All building entrances and exits must be well lighted.

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.

3. Lighting must be adequate for safety purposes.

4. Lighting must be of a pedestrian scale and the source light must be shielded to reduce glare.

Response: Stow-A-Way storage is an existing facility with existing storage units in operation. The site contains lighting that provides a well-lighted area, and provides adequate safety. No new lighting is proposed in conjunction with the portable storage units. This code section does not require an upgrade to lighting with this application and the applicant does not proposed any changes at this time. A design deviation is warranted.



## Special Variances

Section 17.66.80 Type III Special Variances, allows the Planning Commission to 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.

The section requires the applicant to 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 set of criteria shall be applied as appropriate.

- A. The unique nature of the proposed development is such that:
  - i. The intent and purpose of the regulations and of the provisions to be waived will not be violated; and
  - ii. 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 compare 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.

**Special Variance No. 1**

The applicant requests a special variance from 17.50.30, this section contains the following language

Lot Area	No minimum
Lot Dimension	No minimum
Setbacks	
Front .....	30 ft. minimum; 70 ft. maximum from a transit street
Side or Rear .....	None, unless abutting a more restrictive district; if abutting, the minimum setback is 50 ft.
Corner .....	15 ft.
Outdoor Display/Sales Lot Area	40% maximum
Lot Coverage	80% maximum
Landscaping Requirement	15% minimum
Structure Height	45 ft. maximum
Transit Street Setback	See Chapter 17.82
Off-Street Parking	See Chapter 17.98

**Response:** The proposed portable units are situated along the lot line that abuts the terminus of Ruben Lane a public street, see Exhibit “B”. Therefore the abutting lot line to Ruben Lane is considered the front of the lot and as such the front yard setback is 30feet. The applicant requests a Special Variance to this set back requirement as a portion of the proposed storage facilities is situated within this setback dimension. Unit B is situated 12 feet into the setback area, and unit C is situated 6 feet into the setback area.

- A. The unique nature of the proposed development is such that:
  - i. The intent and purpose of the regulations and of the provisions to be waived will not be violated;

Response: The intent is to provide a setback for a structure from the front of a parcel that is typically fronting a public right-of-way to a structure. Due to the unique size and configuration of the private industrial parcel with no right-of-way fronting the front lot line except in the northwesterly corner some 300 plus feet away the intent of the code will not be violated by allowing a portion of the storage units to be within the setback area.

- ii. 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.

Response: The area that the units are located has been used to store buses, RV's and cars in the past so use of this space is not unique and the area has already been developed to allow this use. The space as previously mentioned is located outside of public view and the use is consistent with buildings in an industrial park. Therefore placement of portable storage units within the setback will not be materially detrimental to the public welfare and will not be injurious to other property 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

Response: The variance requested is the minimum variance needed when evaluated as a comparison of the entire setback area (15,720 sq. ft.) along this frontage that is 524ft in length relative to the small set back encroachment requested of 125 sq. ft..

### **Special Variance No. 2**

The applicant requests a special variance from 17.90.130.D1-4, this section contains the following language:

1. Zoning District Pitch I-2                      3:12
2. Flat roofs (with minimum pitch for drainage) are permitted with detailed stepped parapets or detailed brick coursing.
3. Parapet corners must be stepped or the parapet must be designed to emphasize the center or primary entrance(s), unless the primary entrance is at the corner of the building.
4. Visible roof materials must be wood or architectural grade composition shingle, slate, tile or sheet metal with standing or batten seam.

**Response:** The roof pitch is proposed to be flat with a minimum pitch for drainage, which is permitted. The applicant requests a special variance to not construct the roof with detailed stepped parapets or detailed brick coursing as this architectural feature is not a practical application for portable storage containers. The applicant requests for a variance to the roof material to allow a metal roof without standing or batten seam.

- A. The unique nature of the proposed development is such that:
  - i. The intent and purpose of the regulations and of the provisions to be waived will not be violated;

Response: Although the intent of this standard is not specified, in general the inference is that an aesthetic appeal is desired. While a flat roof is allowed the applicant requests that the stepped parapets or brick coursing is waived. As discussed in previous sections of this narrative the storage units are in the interior of existing storage units and not highly visible to the general public. The units are only visible by entering through the gate and accessing the interior of the storage area. As flat roofs are allowed it is primarily an aesthetic component to have parapets or brick coursing and the applicant submits that the units are not intended to be used or visible to the general public. For these reasons the intent and purpose of the regulation of this standard will not be violated.

- ii. 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.

Response: The applicant's response for a special variance to this section requiring detailed stepped parapets or detailed brick coursing in conjunction with a flat roof. The surrounding buildings generally have flat or very low pitch roofs and this is consistent with an industrial park complex. As previously mentioned the proposed storage units are not visible to the public. The variance will not be materially detrimental to the public welfare nor will it be injurious to other property in the area as the intent of the code is an aesthetic criteria that is typically not seen on industrial buildings.

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

Response: Because the location and use of the units and the impracticality to construct parapets or brick coursing, the applicant's proposal to allow a flat roof without these aesthetic components is the minimum variance needed to permit practical compliance of this requirement.

**PRELIMINARY  
STORMWATER REPORT**

---

**Exhibit E**

**New Portable Storage Units  
Mt Hood Industrial  
37396 Ruben Lane  
Sandy, OR 97055**

Prepared By:



**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**

---

**PRELIMINARY  
STORMWATER CALCULATIONS**

**Proposed Storage Units**

**For**

**Stow-A-Way Storage**

**March 20, 2019**

Prepared by:

Firwood Design Group, LLC  
359 E. Historic Columbia River Highway  
Troutdale, OR 97060  
(503) 668-3737

FDG # E17-008

Stormwater Report

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- I. OBJECTIVE
- II. METHODOLOGY
- III. REFERENCES
- IV. SITE DESCRIPTION
- V. STORMWATER MANAGEMENT

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APPENDICES

Site Storm Plan

HydroCAD output



## Stormwater Report

### **STORM DRAINAGE CALCULATIONS**

#### **I. OBJECTIVE**

---

The objective is to provide stormwater detention and treatment for the new impervious roof top area associated with the proposed portable storage units and the surrounding paved area in accordance with the City of Sandy storm water requirements.

Stormwater discharge from the proposed new impervious area will be collected in an existing catch basin that will connect to the new system. The new system will include an additional catch basin that will be connected to a piped detention system.

#### **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 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.

For water quality the method used to achieve the 70% reduction of Total Suspended Solids,

Flow-through based storm water quality control: the required design flow rate for treatment is the runoff that would be produced from a rainfall intensity of 0.2 inches/hour for on-line facilities, and 0.11 inches/hour for off-line facilities. This rate must be maintainable for a minimum of three hours

#### **III. REFERENCES:**

---

USGS Soil Maps for Multnomah County, Oregon  
City of Portland, Stormwater Management Manual  
City of Sandy Development Code

## Stormwater Report

### IV. SITE DESCRIPTION:

---

The site is located on a portion of parcel 1500, T2S R4E Sect. 14.

The area of the Stow-A-Way Storage is x sq. ft. in size. The subject site is flat in nature and contains several existing storage buildings. The ground cover is a combination of some concrete areas along with gravel throughout the majority of the area. The site is surrounded by other industrial uses to the east, south and south west sides. The west and northern sides of the storage area are vegetated with no current improvements.

### V. STORMWATER MANAGEMENT:

---

#### **Water Quality Analysis**

---

The impervious area relating to the new impervious area is 9052 sq. ft. for the entire paved area. The water quality storm is applied to the entire new impervious area related only to the portable storage units.

The water quality requirement of 70% reduction of TSS will be achieved by a catch basin insert called the FloGard and is an Old Castle product. Both the catch basins within the new asphalt paved portable storage area will be outfitted with this insert. A copy of the product brochure and maintenance requirements is included in the appendices of this report.

#### **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 91(Gravel) was used for pre-existing pervious area. The time of concentration is 6 minutes as a minimum value.

The post improvement condition includes the roof and asphalt impervious areas. The site area is broken into three sub-drainage basins, basin "A" contains 5,968 sq. ft., basin "B" contains 5,150 sq. ft., basin "C" contains 3,902 sq. ft.

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

## Stormwater Report

Each storm event was modeled for both pre-construction conditions and post-construction conditions. A detention system was sized to utilize an 18-inch detention pipe with a flow control orifice in a catch basin. The flow control orifice will regulate flows to pre-development flow rates. The following table summarizes the calculated flow rates.

### **Pre-Construction and Post Construction Stormwater flows:**

Design Storm and	Pre-Development (Existing) Peak Flow (cfs)	Post-Construction Peak Flow (cfs)	Allowed Post Construction Runoff	Actual Post Construction Runoff
2 year	0.22	0.28	0.22	0.22
5 year	0.31	0.35	0.31	0.29
10 year	0.34	0.38	0.34	0.32
25 year	0.40	0.45	0.40	0.37

To achieve the aforementioned flow rates each flow control catch basin will have the following orifices:

Catch Basin A – 1.8” orifice at the pipe invert and a 1.9” orifice 1ft above the invert.

Catch Basin B – 2” orifice at the pipe invert.

### **Quality Control Analysis**

The water quality storm per the City of Sandy code for a flow through based system of 0.2 inches/hour for on-line facilities, applied for a minimum of three hours.

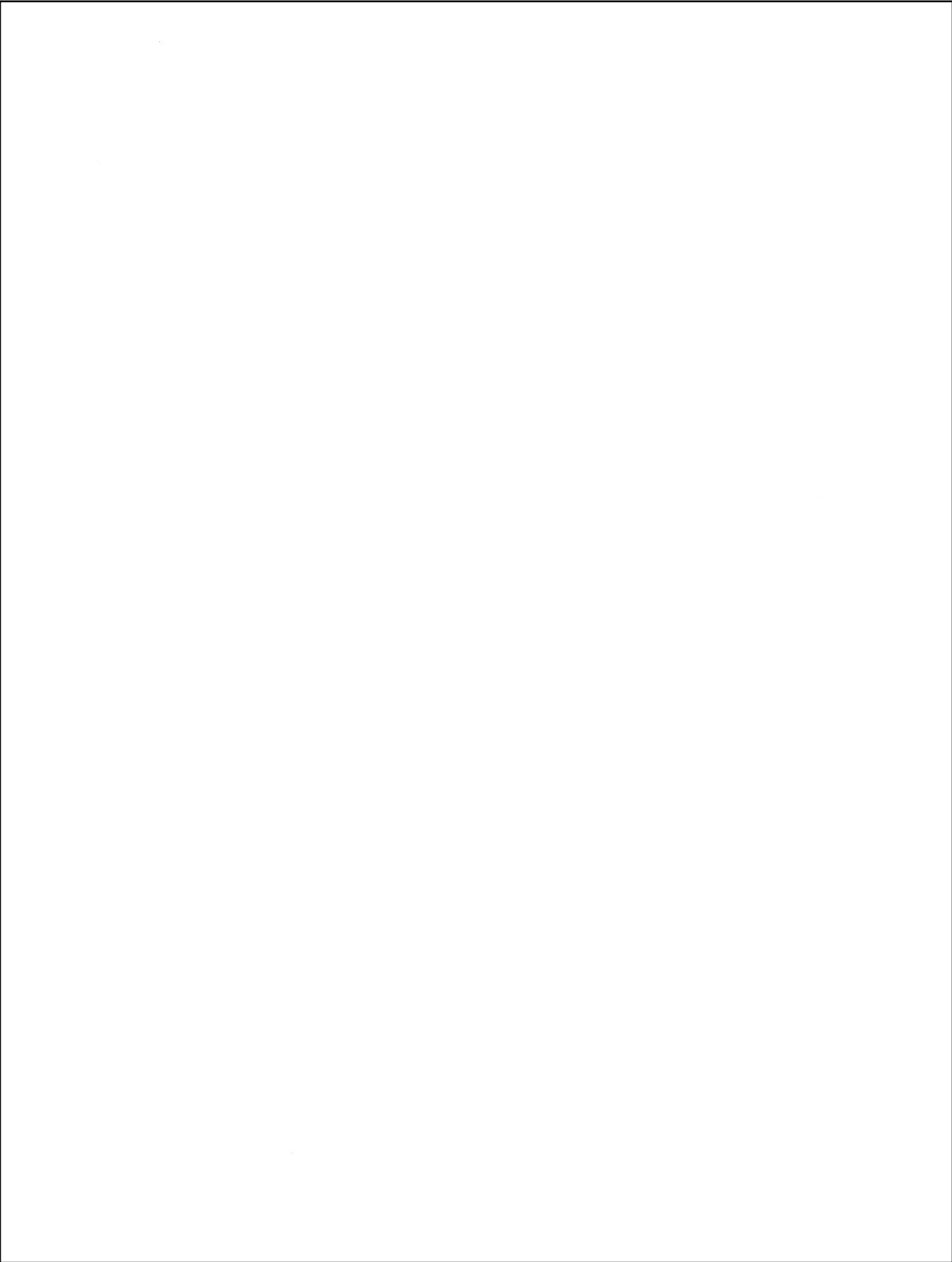
For both Basin A and B flow for a water quality event is 0.1cfs. The catch basin in Basin C is currently an oil-water separator basin meeting the treatment requirements.

The FloGard with a 2ft catch basin depth is rated for a treatment flow of 1.5cfs, therefore the system will provide adequate treatment.

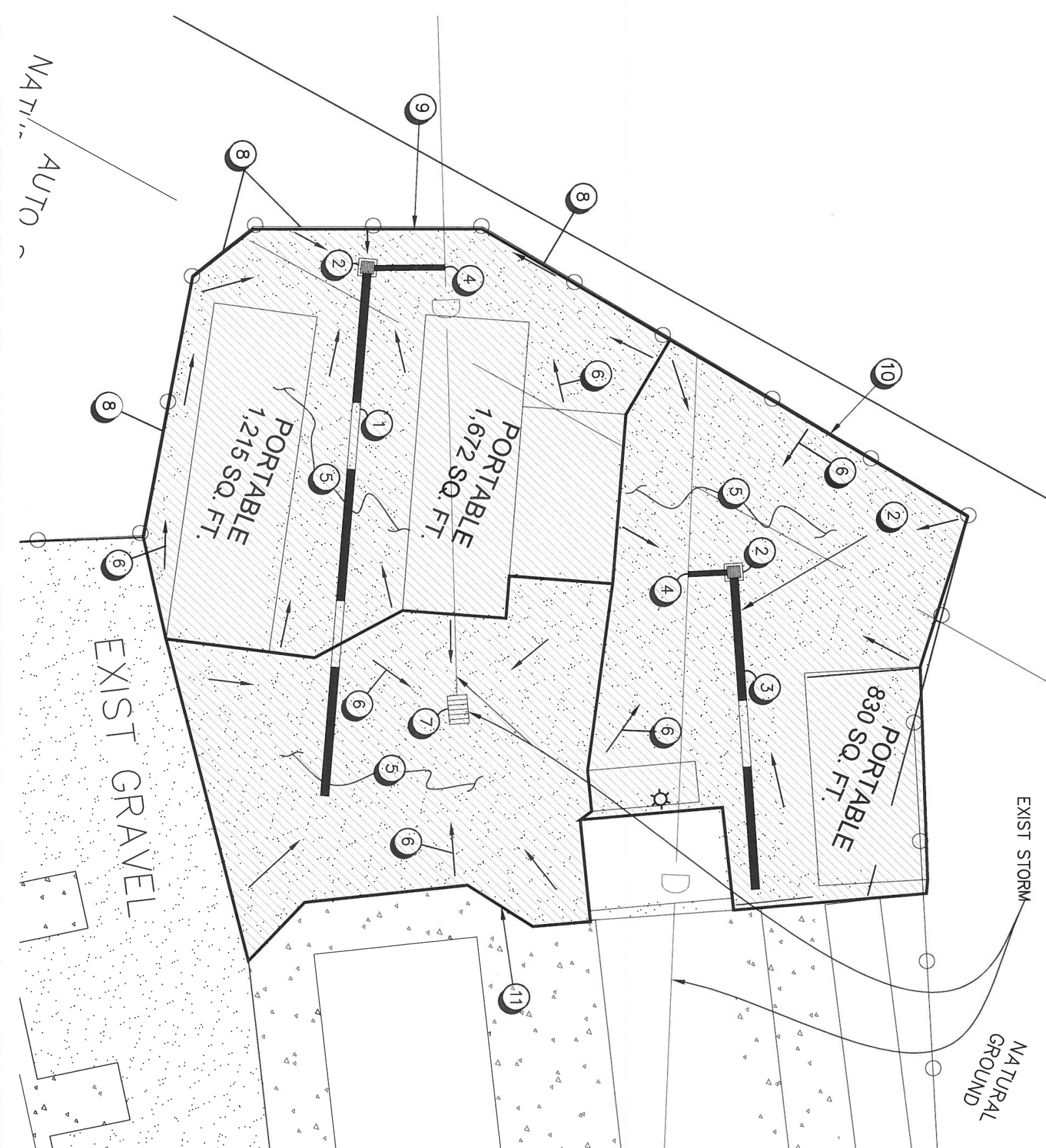
### **Conclusion**

The proposed improvements consisting of paving the portable storage area will require stormwater detention and water quality treatment to conform to the City of Sandy development code. The proposed Old Castle FloGard catch basin inserts will provide the water quality treatment system. The detention will utilize underground piped detention with catch basin orifices to control the flows. The system has been sized in accordance with the City of Sandy design standards and the methods employed represent standard industry practices.

APPENDICES



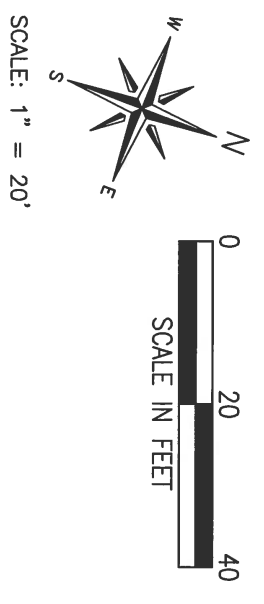
**STORM PLAN**



EXIST STORM  
NATURAL  
GROUND

EXIST GRAVEL

NAT'L AUTO

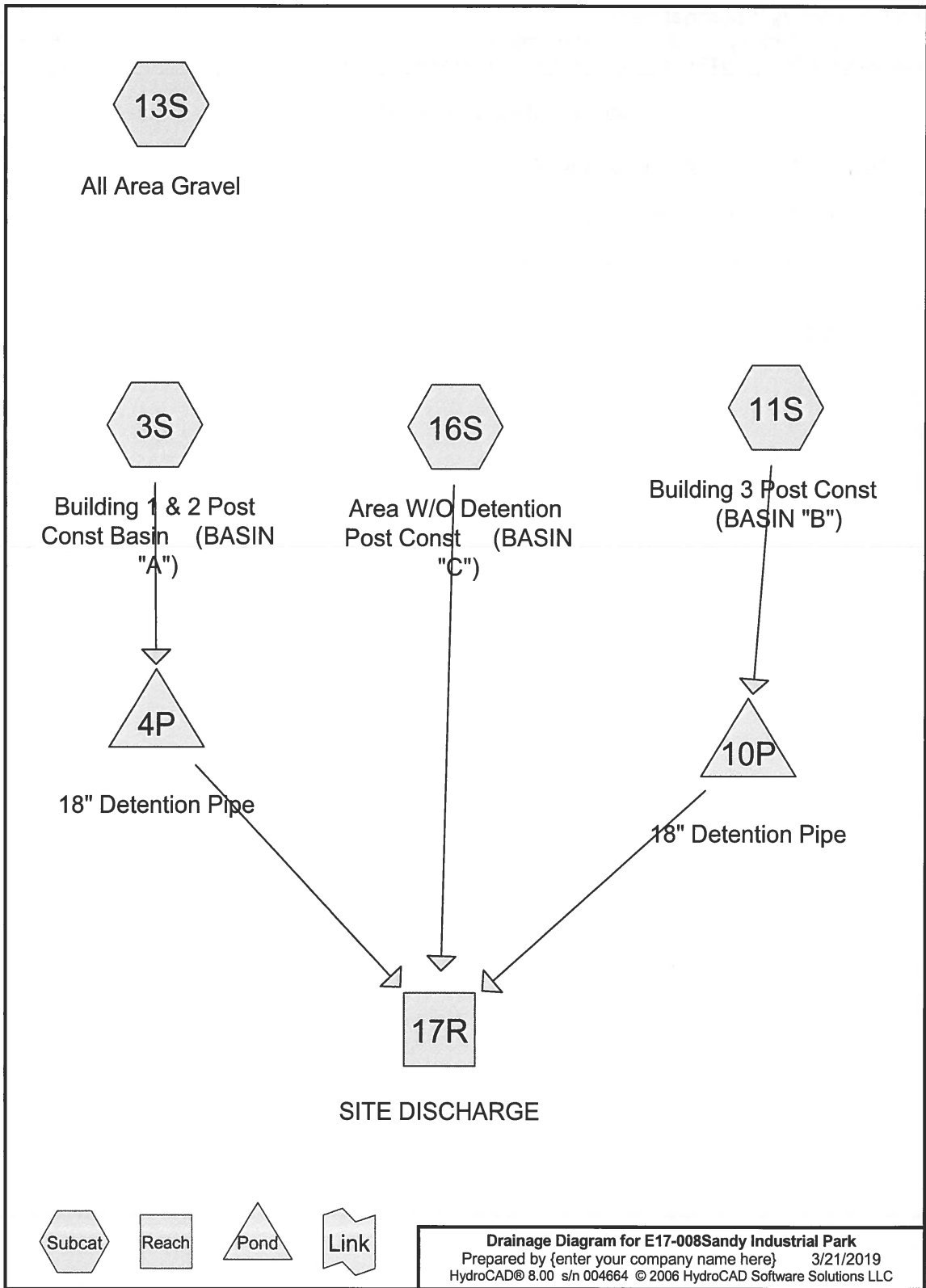


**KEY NOTES**

- 1 100 LF 18" N-12 HDPE DETENTION PIPE
- 2 OLD CASTLE FLO GARD W/GIBSON STEELE CATCH BASIN WITH ORIFICE PLATE, 8" OUTLET PIPE
- 3 60 LF 18" N-12 HDPE DETENTION PIPE
- 4 CONNECT INTO EXIST STORM PIPE
- 5 AREA TO BE PAVED W/2" AC OVER 4" 3/4"-MINUS ROCK
- 6 SLOPE DRAINAGE ARROW, 1% MIN, 5% MAX, 2% IDEAL (TYPICAL)
- 7 MODIFY OR REPLACE EXISTING CATCH BASIN W/ OLD-CASTLE FLO GARD CATCH BASIN WITH INSERT
- 8 ASPHALT CURB ALONG EDGE OF ASPHALT AS NECESSARY FOR POSITIVE DRAINAGE INTO CATCHBASIN
- 9 DRAINAGE BASIN "A" (5,968 SF )
- 10 DRAINAGE BASIN "B" (5,150 SF)
- 11 DRAINAGE BASIN "C" (3,902 SF)



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**SHEET 2 OF 2**  
 E17-008 Warmock site plan.dwg



**E17-008Sandy Industrial Park**

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3/21/2019

**Area Listing (selected nodes)**

<u>Area (sq-ft)</u>	<u>CN</u>	<u>Description (subcats)</u>
15,021	91	Gravel (13S)
15,020	98	Asphalt (3S,11S,16S)
<hr/>		
30,041		



**E17-008Sandy Industrial Park**

Type IA 24-hr 2yr Rainfall=3.50"

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Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points  
Runoff by SBUH method, Split Pervious/Imperv.  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "** Runoff Area=5,968 sf Runoff Depth=3.27"  
Tc=6.0 min CN=0/98 Runoff=0.11 cfs 1,625 cf

**Subcatchment 11S: Building 3 Post Const (BASIN "B")** Runoff Area=5,150 sf Runoff Depth=3.27"  
Tc=6.0 min CN=0/98 Runoff=0.10 cfs 1,402 cf

**Subcatchment 13S: All Area Gravel** Runoff Area=15,021 sf Runoff Depth=2.54"  
Tc=6.0 min CN=91/0 Runoff=0.22 cfs 3,181 cf

**Subcatchment 16S: Area W/O Detention Post Const (BASIN** Runoff Area=3,902 sf Runoff Depth=3.27"  
Tc=6.0 min CN=0/98 Runoff=0.07 cfs 1,062 cf

**Reach 17R: SITE DISCHARGE** Avg. Depth=0.17' Max Vel=2.53 fps Inflow=0.22 cfs 4,089 cf  
D=12.0" n=0.013 L=100.0' S=0.0100 '/' Capacity=3.56 cfs Outflow=0.22 cfs 4,089 cf

**Pond 4P: 18" Detention Pipe** Peak Elev=0.86' Storage=90 cf Inflow=0.11 cfs 1,625 cf  
Outflow=0.08 cfs 1,625 cf

**Pond 10P: 18" Detention Pipe** Peak Elev=0.69' Storage=43 cf Inflow=0.10 cfs 1,402 cf  
Outflow=0.08 cfs 1,402 cf

**Total Runoff Area = 30,041 sf Runoff Volume = 7,269 cf Average Runoff Depth = 2.90"**  
**50.00% Pervious Area = 15,021 sf 50.00% Impervious Area = 15,020 sf**

**E17-008Sandy Industrial Park**

Type IA 24-hr 2yr Rainfall=3.50"

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**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Runoff = 0.11 cfs @ 7.90 hrs, Volume= 1,625 cf, Depth= 3.27"

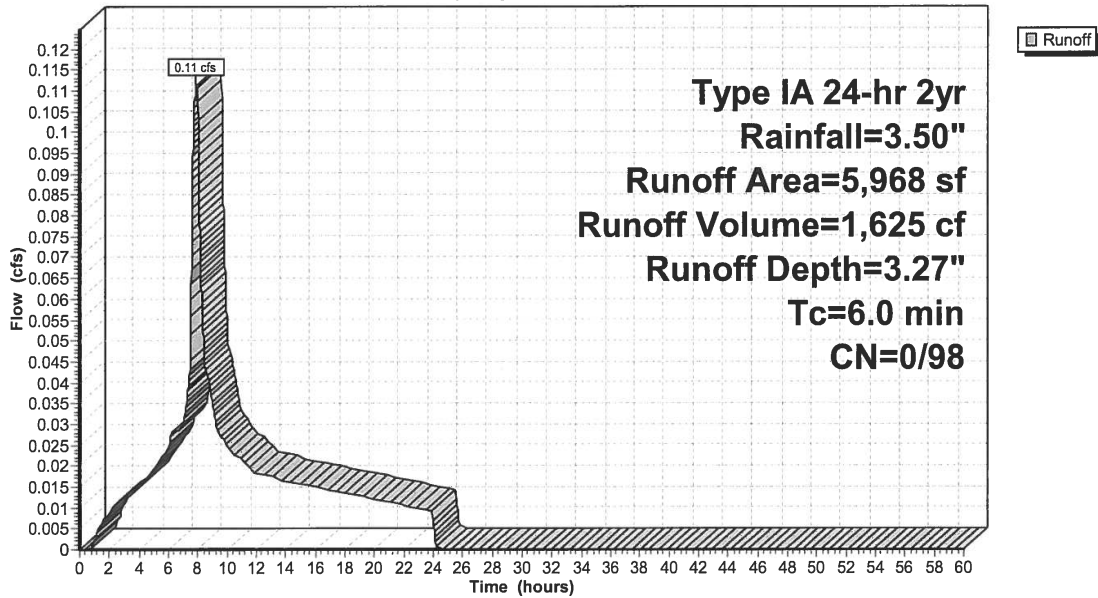
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 2yr Rainfall=3.50"

Area (sf)	CN	Description
5,968	98	Asphalt
5,968	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 2yr Rainfall=3.50"

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3/21/2019

**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Runoff = 0.10 cfs @ 7.90 hrs, Volume= 1,402 cf, Depth= 3.27"

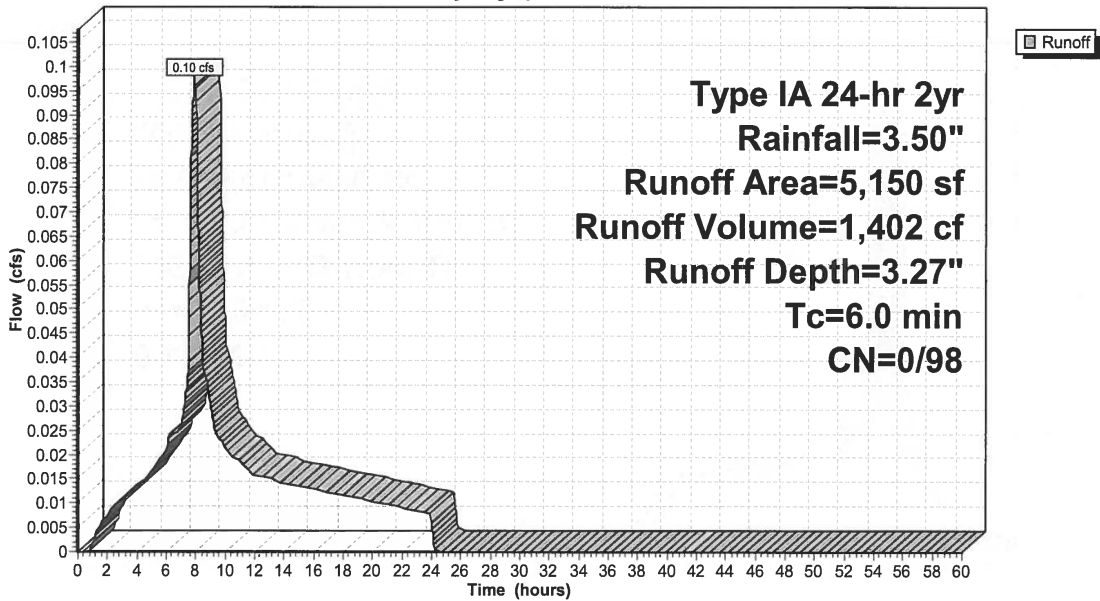
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 2yr Rainfall=3.50"

Area (sf)	CN	Description
5,150	98	Asphalt
5,150	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 2yr Rainfall=3.50"

Prepared by {enter your company name here}

Page 6

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3/21/2019

**Subcatchment 13S: All Area Gravel**

Runoff = 0.22 cfs @ 7.93 hrs, Volume= 3,181 cf, Depth= 2.54"

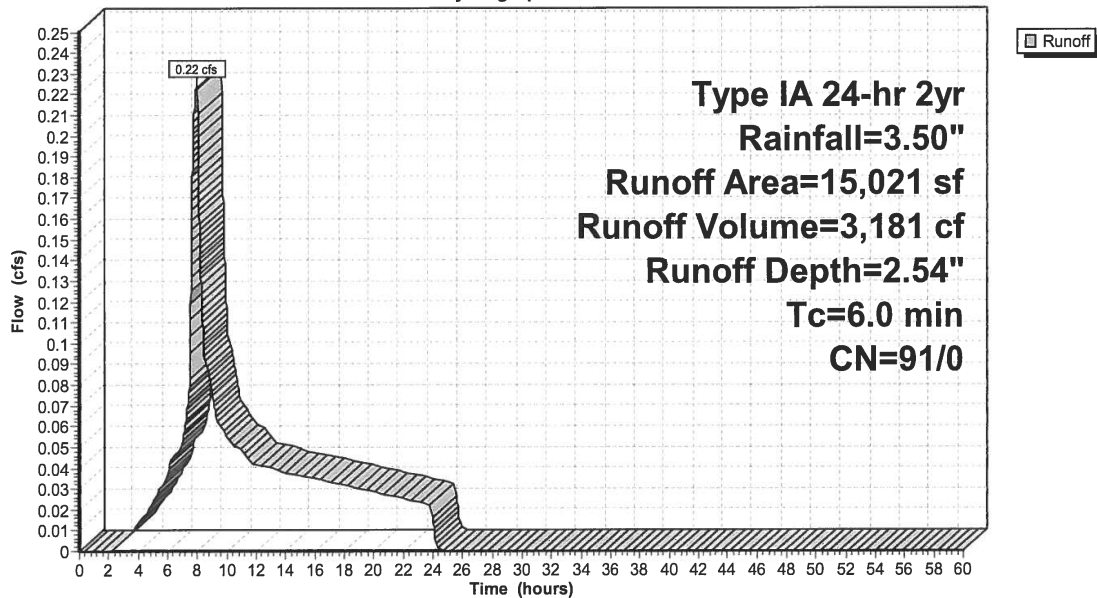
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 2yr Rainfall=3.50"

Area (sf)	CN	Description
15,021	91	Gravel
15,021	91	Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 13S: All Area Gravel**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 2yr Rainfall=3.50"

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**Subcatchment 16S: Area W/O Detention Post Const (BASIN "C")**

Runoff = 0.07 cfs @ 7.90 hrs, Volume= 1,062 cf, Depth= 3.27"

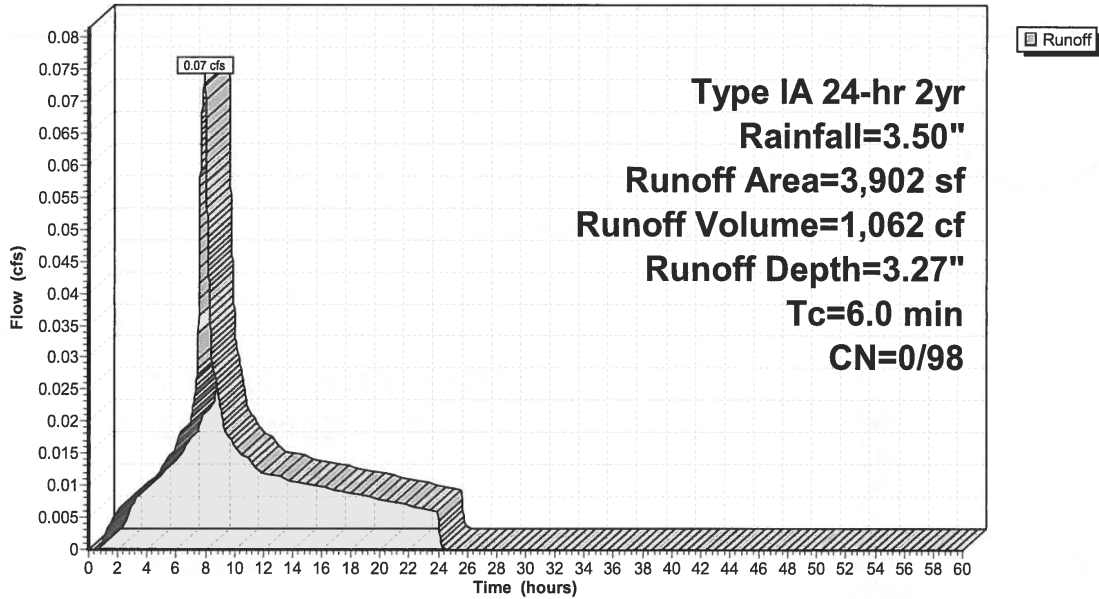
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 2yr Rainfall=3.50"

Area (sf)	CN	Description
3,902	98	Asphalt
3,902	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 16S: Area W/O Detention Post Const (BASIN "C")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 2yr Rainfall=3.50"

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**Reach 17R: SITE DISCHARGE**

[52] Hint: Inlet conditions not evaluated

Inflow Area = 15,020 sf, Inflow Depth = 3.27" for 2yr event  
 Inflow = 0.22 cfs @ 8.00 hrs, Volume= 4,089 cf  
 Outflow = 0.22 cfs @ 8.01 hrs, Volume= 4,089 cf, Atten= 0%, Lag= 0.4 min

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Max. Velocity= 2.53 fps, Min. Travel Time= 0.7 min  
 Avg. Velocity= 1.51 fps, Avg. Travel Time= 1.1 min

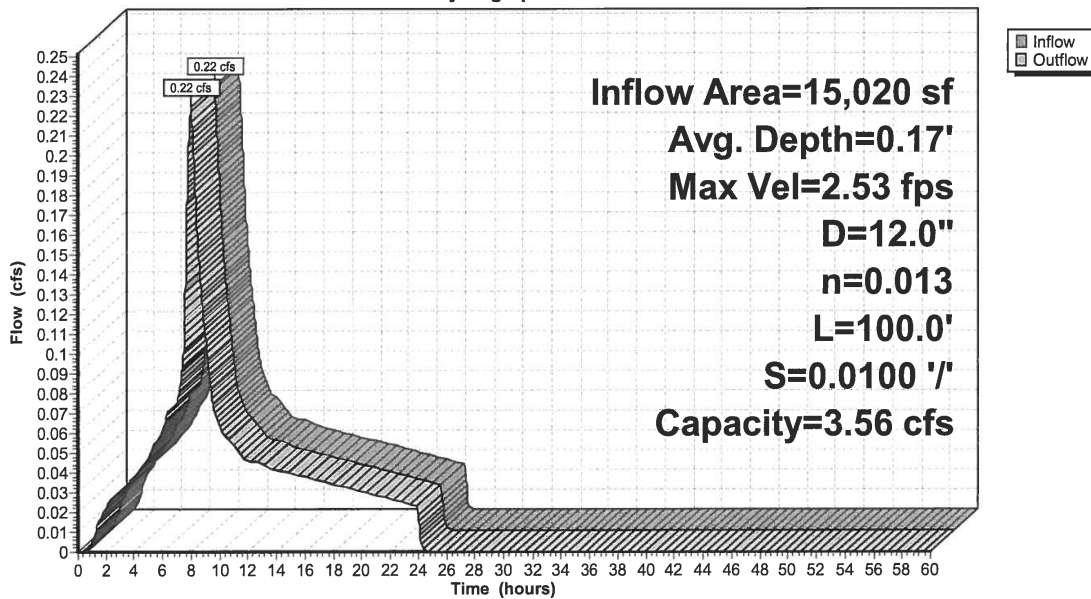
Peak Storage= 9 cf @ 8.01 hrs, Average Depth at Peak Storage= 0.17'  
 Bank-Full Depth= 1.00', Capacity at Bank-Full= 3.56 cfs

12.0" Diameter Pipe, n= 0.013  
 Length= 100.0' Slope= 0.0100 '/'  
 Inlet Invert= -0.50', Outlet Invert= -1.50'



**Reach 17R: SITE DISCHARGE**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 2yr Rainfall=3.50"

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**Pond 4P: 18" Detention Pipe**

Inflow Area = 5,968 sf, Inflow Depth = 3.27" for 2yr event  
 Inflow = 0.11 cfs @ 7.90 hrs, Volume= 1,625 cf  
 Outflow = 0.08 cfs @ 8.14 hrs, Volume= 1,625 cf, Atten= 32%, Lag= 14.9 min  
 Primary = 0.08 cfs @ 8.14 hrs, Volume= 1,625 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 0.86' @ 8.14 hrs Surf.Area= 150 sf Storage= 90 cf

Plug-Flow detention time= 4.9 min calculated for 1,624 cf (100% of inflow)  
 Center-of-Mass det. time= 4.9 min ( 668.7 - 663.8 )

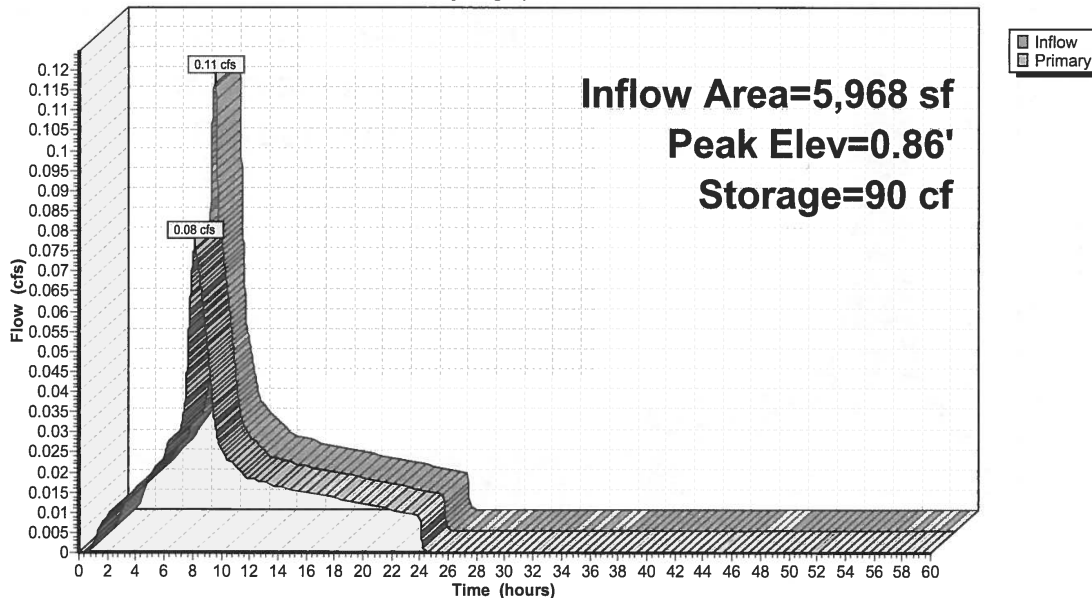
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	18.0"D x 100.00'L Horizontal Cylinder S= 0.0020 'l'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	1.8" Vert. Orifice/Grate C= 0.600
#2	Primary	1.00'	1.9" Vert. Orifice/Grate C= 0.600

**Primary OutFlow** Max=0.08 cfs @ 8.14 hrs HW=0.86' (Free Discharge)  
 1=Orifice/Grate (Orifice Controls 0.08 cfs @ 4.27 fps)  
 2=Orifice/Grate ( Controls 0.00 cfs)

**Pond 4P: 18" Detention Pipe**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 2yr Rainfall=3.50"

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**Pond 10P: 18" Detention Pipe**

Inflow Area = 5,150 sf, Inflow Depth = 3.27" for 2yr event  
 Inflow = 0.10 cfs @ 7.90 hrs, Volume= 1,402 cf  
 Outflow = 0.08 cfs @ 8.05 hrs, Volume= 1,402 cf, Atten= 15%, Lag= 9.1 min  
 Primary = 0.08 cfs @ 8.05 hrs, Volume= 1,402 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 0.69' @ 8.05 hrs Surf.Area= 89 sf Storage= 43 cf

Plug-Flow detention time= 2.3 min calculated for 1,402 cf (100% of inflow)  
 Center-of-Mass det. time= 2.3 min ( 666.1 - 663.8 )

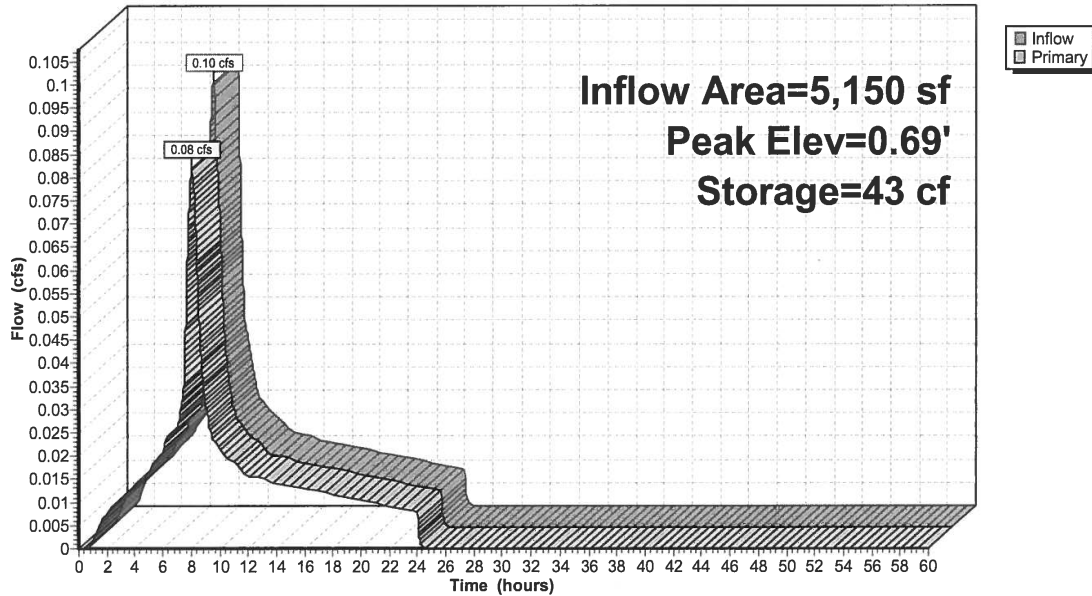
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	106 cf	18.0"D x 60.00'L Horizontal Cylinder S= 0.0020 'f'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	2.0" Vert. Orifice/Grate C= 0.600

**Primary OutFlow** Max=0.08 cfs @ 8.05 hrs HW=0.69' (Free Discharge)  
 ←1=Orifice/Grate (Orifice Controls 0.08 cfs @ 3.76 fps)

**Pond 10P: 18" Detention Pipe**

Hydrograph





**E17-008Sandy Industrial Park**

Type IA 24-hr 5yr Rainfall=4.50"

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Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points  
Runoff by SBUH method, Split Pervious/Imperv.  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "** Runoff Area=5,968 sf Runoff Depth=4.26"  
Tc=6.0 min CN=0/98 Runoff=0.14 cfs 2,121 cf

**Subcatchment 11S: Building 3 Post Const (BASIN "B")** Runoff Area=5,150 sf Runoff Depth=4.26"  
Tc=6.0 min CN=0/98 Runoff=0.12 cfs 1,830 cf

**Subcatchment 13S: All Area Gravel** Runoff Area=15,021 sf Runoff Depth=3.50"  
Tc=6.0 min CN=91/0 Runoff=0.31 cfs 4,379 cf

**Subcatchment 16S: Area W/O Detention Post Const (BASIN** Runoff Area=3,902 sf Runoff Depth=4.26"  
Tc=6.0 min CN=0/98 Runoff=0.09 cfs 1,387 cf

**Reach 17R: SITE DISCHARGE** Avg. Depth=0.19' Max Vel=2.73 fps Inflow=0.29 cfs 5,337 cf  
D=12.0" n=0.013 L=100.0' S=0.0100 '/' Capacity=3.56 cfs Outflow=0.29 cfs 5,337 cf

**Pond 4P: 18" Detention Pipe** Peak Elev=1.14' Storage=130 cf Inflow=0.14 cfs 2,121 cf  
Outflow=0.11 cfs 2,121 cf

**Pond 10P: 18" Detention Pipe** Peak Elev=0.99' Storage=69 cf Inflow=0.12 cfs 1,830 cf  
Outflow=0.10 cfs 1,830 cf

**Total Runoff Area = 30,041 sf Runoff Volume = 9,716 cf Average Runoff Depth = 3.88"**  
**50.00% Pervious Area = 15,021 sf 50.00% Impervious Area = 15,020 sf**

**E17-008Sandy Industrial Park**

Type IA 24-hr 5yr Rainfall=4.50"

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**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Runoff = 0.14 cfs @ 7.90 hrs, Volume= 2,121 cf, Depth= 4.26"

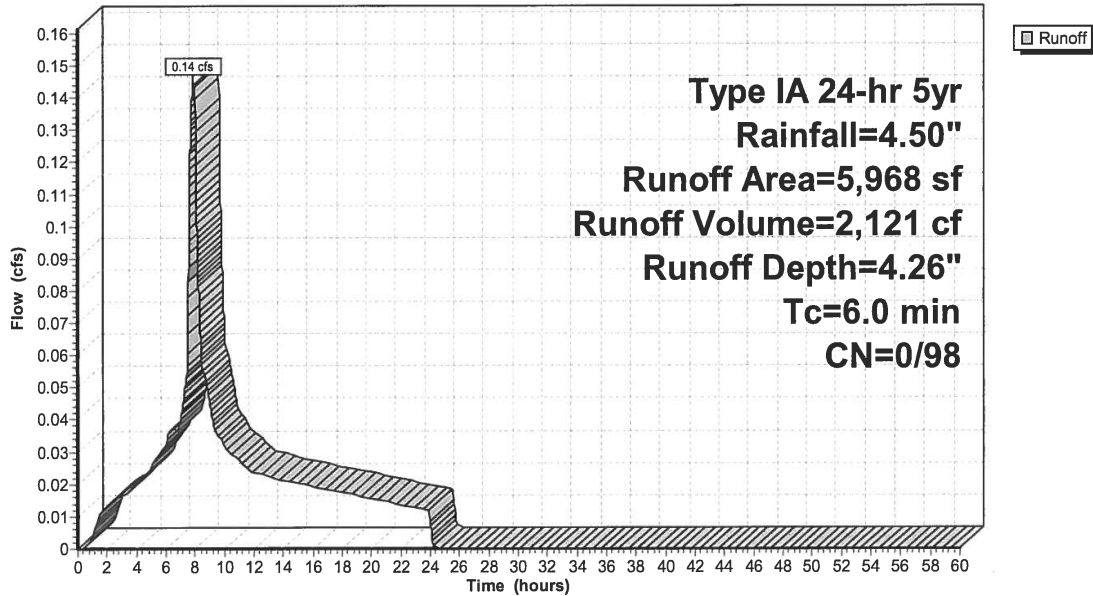
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 5yr Rainfall=4.50"

Area (sf)	CN	Description
5,968	98	Asphalt
5,968	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 5yr Rainfall=4.50"

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**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Runoff = 0.12 cfs @ 7.90 hrs, Volume= 1,830 cf, Depth= 4.26"

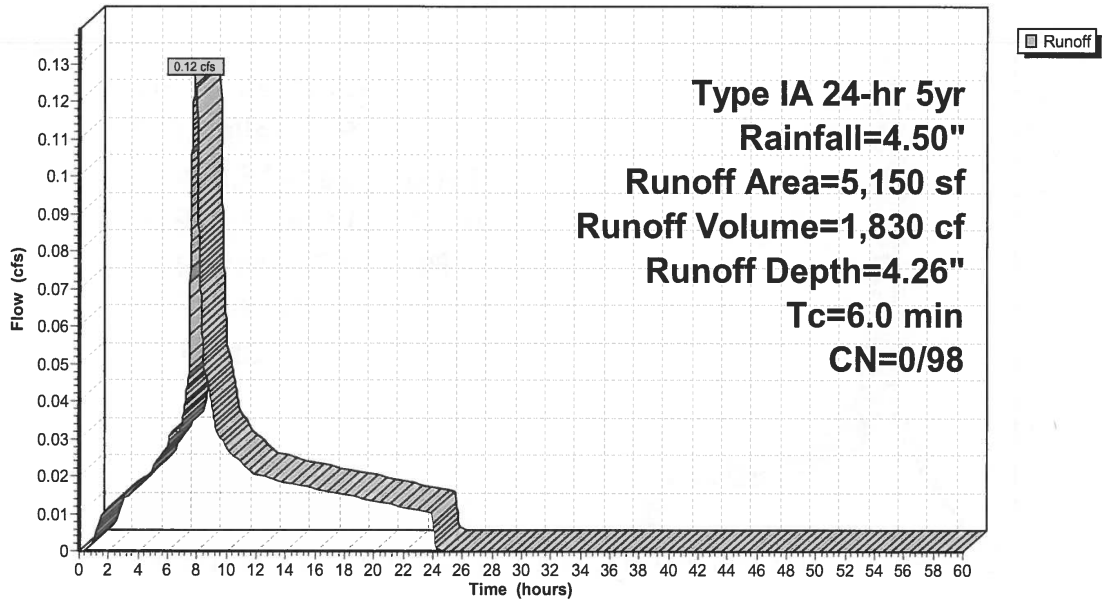
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 5yr Rainfall=4.50"

Area (sf)	CN	Description
5,150	98	Asphalt
5,150	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 5yr Rainfall=4.50"

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**Subcatchment 13S: All Area Gravel**

Runoff = 0.31 cfs @ 7.92 hrs, Volume= 4,379 cf, Depth= 3.50"

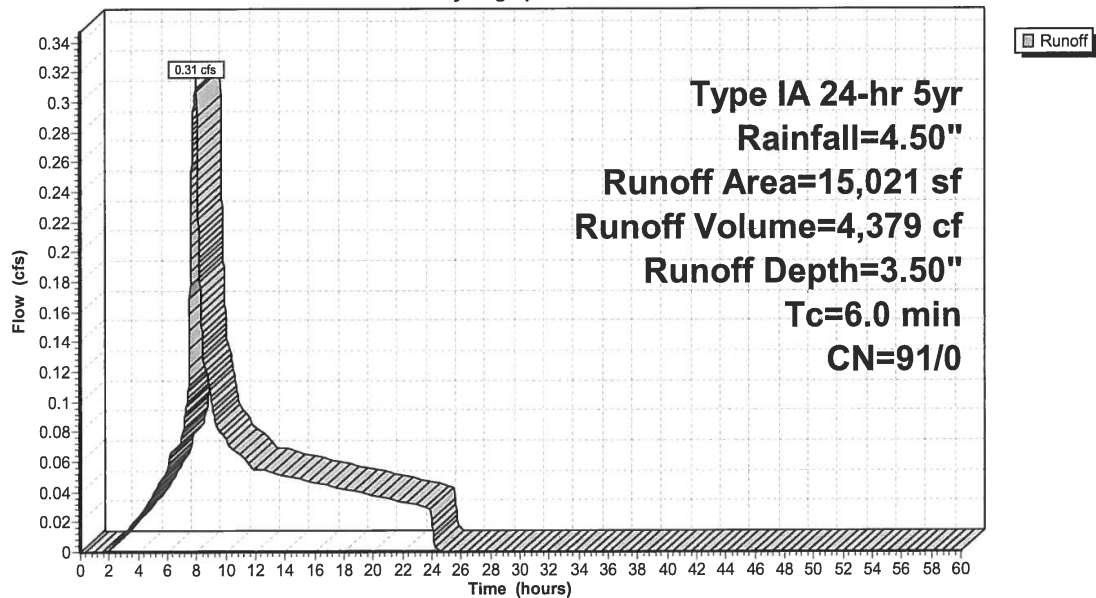
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 5yr Rainfall=4.50"

Area (sf)	CN	Description
15,021	91	Gravel
15,021	91	Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 13S: All Area Gravel**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 5yr Rainfall=4.50"

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**Subcatchment 16S: Area W/O Detention Post Const (BASIN "C")**

Runoff = 0.09 cfs @ 7.90 hrs, Volume= 1,387 cf, Depth= 4.26"

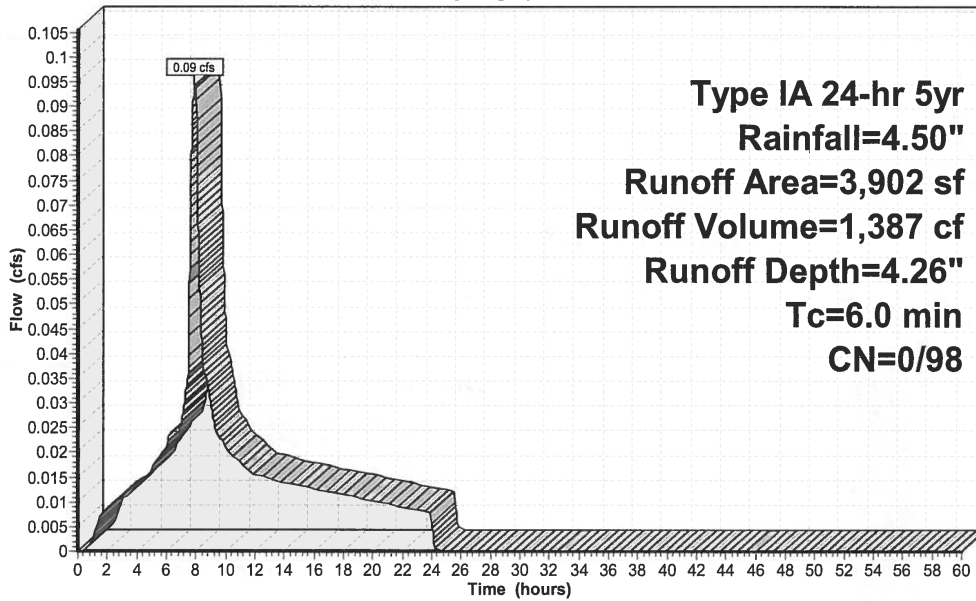
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 5yr Rainfall=4.50"

Area (sf)	CN	Description
3,902	98	Asphalt
3,902	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 16S: Area W/O Detention Post Const (BASIN "C")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 5yr Rainfall=4.50"

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**Reach 17R: SITE DISCHARGE**

[52] Hint: Inlet conditions not evaluated

Inflow Area =	15,020 sf,	Inflow Depth =	4.26"	for	5yr event
Inflow =	0.29 cfs @	8.02 hrs,	Volume=	5,337 cf	
Outflow =	0.29 cfs @	8.03 hrs,	Volume=	5,337 cf,	Atten= 0%, Lag= 0.6 min

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Max. Velocity= 2.73 fps, Min. Travel Time= 0.6 min  
 Avg. Velocity = 1.63 fps, Avg. Travel Time= 1.0 min

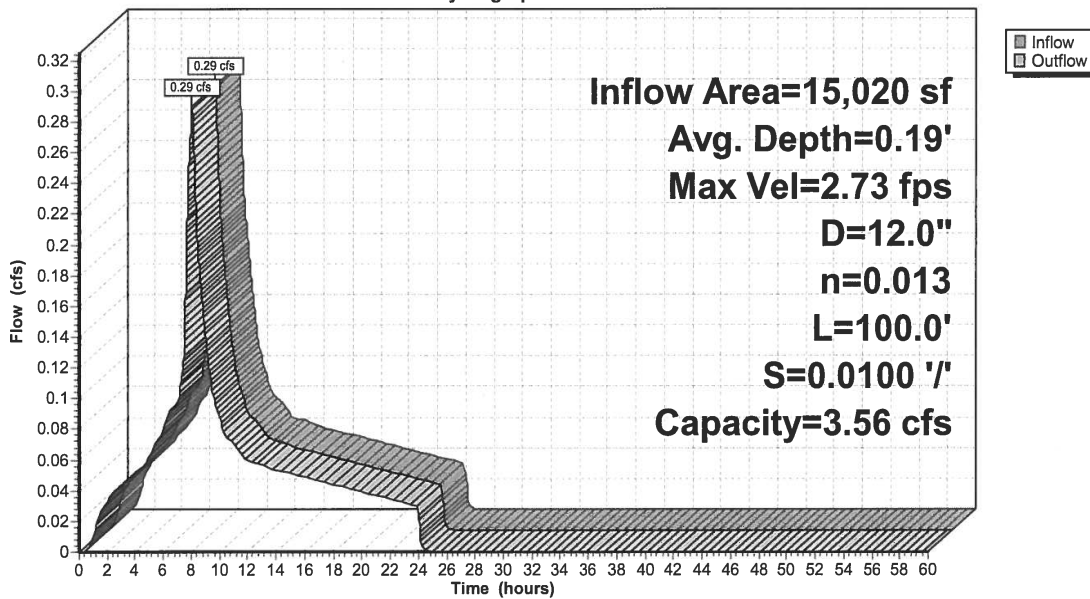
Peak Storage= 11 cf @ 8.03 hrs, Average Depth at Peak Storage= 0.19'  
 Bank-Full Depth= 1.00', Capacity at Bank-Full= 3.56 cfs

12.0" Diameter Pipe, n= 0.013  
 Length= 100.0' Slope= 0.0100 '/'  
 Inlet Invert= -0.50', Outlet Invert= -1.50'



**Reach 17R: SITE DISCHARGE**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 5yr Rainfall=4.50"

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**Pond 4P: 18" Detention Pipe**

Inflow Area = 5,968 sf, Inflow Depth = 4.26" for 5yr event  
 Inflow = 0.14 cfs @ 7.90 hrs, Volume= 2,121 cf  
 Outflow = 0.11 cfs @ 8.09 hrs, Volume= 2,121 cf, Atten= 24%, Lag= 11.8 min  
 Primary = 0.11 cfs @ 8.09 hrs, Volume= 2,121 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1.14' @ 8.09 hrs Surf.Area= 138 sf Storage= 130 cf

Plug-Flow detention time= 6.5 min calculated for 2,120 cf (100% of inflow)  
 Center-of-Mass det. time= 6.5 min ( 664.4 - 657.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	18.0"D x 100.00'L Horizontal Cylinder S= 0.0020 'f

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	1.8" Vert. Orifice/Grate C= 0.600
#2	Primary	1.00'	1.9" Vert. Orifice/Grate C= 0.600

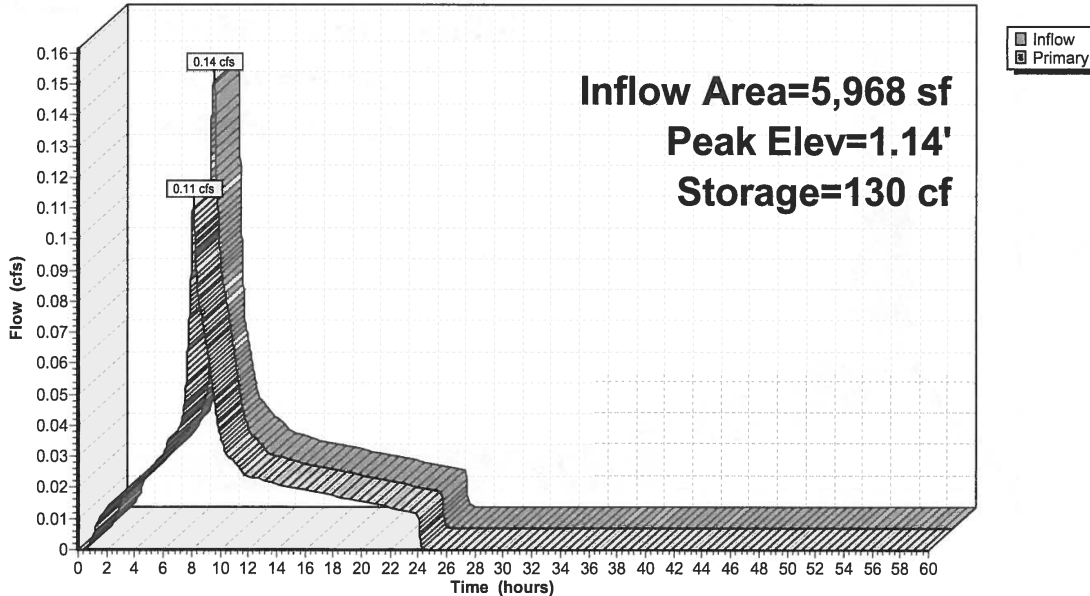
**Primary OutFlow** Max=0.11 cfs @ 8.09 hrs HW=1.14' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.09 cfs @ 4.96 fps)

2=Orifice/Grate (Orifice Controls 0.02 cfs @ 1.25 fps)

**Pond 4P: 18" Detention Pipe**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 5yr Rainfall=4.50"

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**Pond 10P: 18" Detention Pipe**

Inflow Area = 5,150 sf, Inflow Depth = 4.26" for 5yr event  
 Inflow = 0.12 cfs @ 7.90 hrs, Volume= 1,830 cf  
 Outflow = 0.10 cfs @ 8.07 hrs, Volume= 1,830 cf, Atten= 19%, Lag= 10.5 min  
 Primary = 0.10 cfs @ 8.07 hrs, Volume= 1,830 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 0.99' @ 8.07 hrs Surf.Area= 87 sf Storage= 69 cf

Plug-Flow detention time= 3.0 min calculated for 1,830 cf (100% of inflow)  
 Center-of-Mass det. time= 3.0 min ( 660.9 - 657.9 )

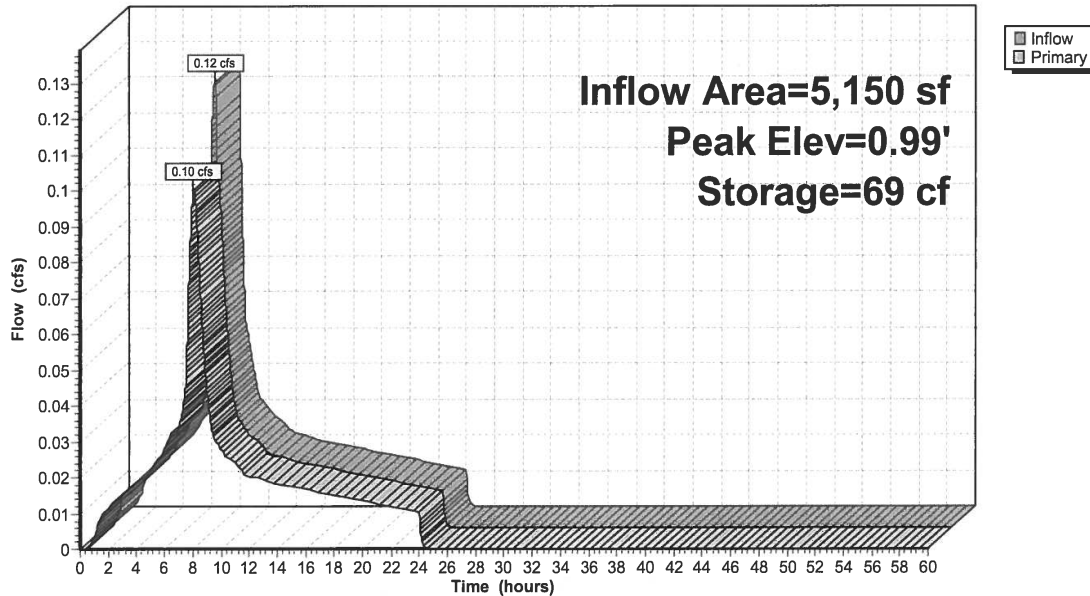
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	106 cf	18.0"D x 60.00'L Horizontal Cylinder S= 0.0020 'I'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	2.0" Vert. Orifice/Grate C= 0.600

**Primary OutFlow** Max=0.10 cfs @ 8.07 hrs HW=0.99' (Free Discharge)  
 ←1=Orifice/Grate (Orifice Controls 0.10 cfs @ 4.59 fps)

**Pond 10P: 18" Detention Pipe**

Hydrograph





**E17-008Sandy Industrial Park**

Type IA 24-hr 10yr Rainfall=4.80"

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Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points  
Runoff by SBUH method, Split Pervious/Imperv.  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "** Runoff Area=5,968 sf Runoff Depth=4.56"  
Tc=6.0 min CN=0/98 Runoff=0.15 cfs 2,270 cf

**Subcatchment 11S: Building 3 Post Const (BASIN "B")** Runoff Area=5,150 sf Runoff Depth=4.56"  
Tc=6.0 min CN=0/98 Runoff=0.13 cfs 1,958 cf

**Subcatchment 13S: All Area Gravel** Runoff Area=15,021 sf Runoff Depth=3.79"  
Tc=6.0 min CN=91/0 Runoff=0.34 cfs 4,742 cf

**Subcatchment 16S: Area W/O Detention Post Const (BASIN "** Runoff Area=3,902 sf Runoff Depth=4.56"  
Tc=6.0 min CN=0/98 Runoff=0.10 cfs 1,484 cf

**Reach 17R: SITE DISCHARGE** Avg. Depth=0.20' Max Vel=2.80 fps Inflow=0.32 cfs 5,712 cf  
D=12.0" n=0.013 L=100.0' S=0.0100 '/' Capacity=3.56 cfs Outflow=0.32 cfs 5,712 cf

**Pond 4P: 18" Detention Pipe** Peak Elev=1.19' Storage=138 cf Inflow=0.15 cfs 2,270 cf  
Outflow=0.12 cfs 2,270 cf

**Pond 10P: 18" Detention Pipe** Peak Elev=1.09' Storage=78 cf Inflow=0.13 cfs 1,958 cf  
Outflow=0.11 cfs 1,958 cf

**Total Runoff Area = 30,041 sf Runoff Volume = 10,454 cf Average Runoff Depth = 4.18"**  
**50.00% Pervious Area = 15,021 sf 50.00% Impervious Area = 15,020 sf**

**E17-008Sandy Industrial Park**

Type IA 24-hr 10yr Rainfall=4.80"

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**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Runoff = 0.15 cfs @ 7.89 hrs, Volume= 2,270 cf, Depth= 4.56"

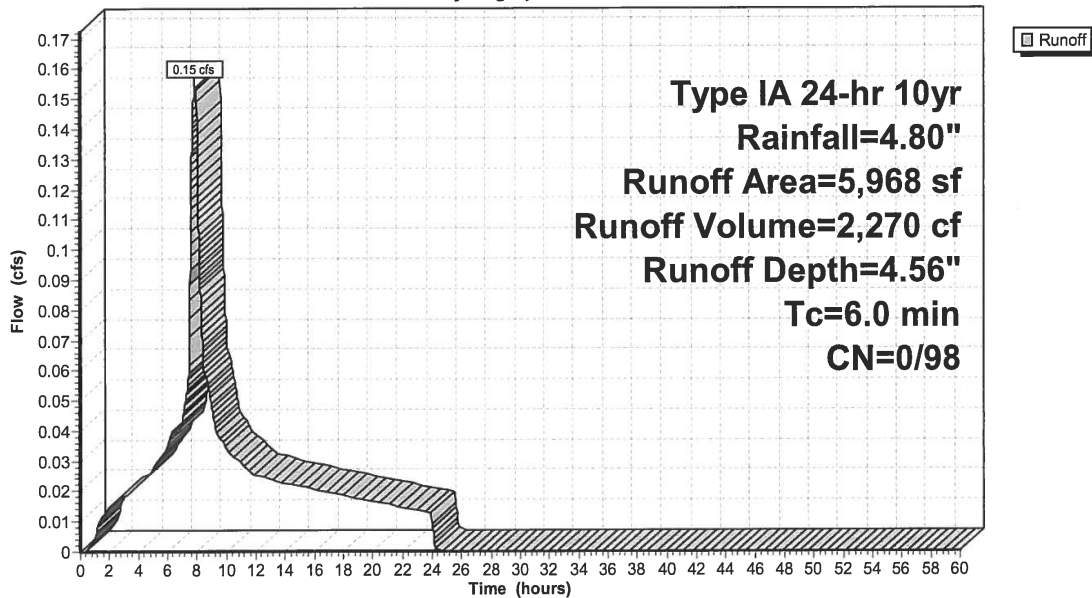
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 10yr Rainfall=4.80"

Area (sf)	CN	Description
5,968	98	Asphalt
5,968	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 10yr Rainfall=4.80"

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**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Runoff = 0.13 cfs @ 7.89 hrs, Volume= 1,958 cf, Depth= 4.56"

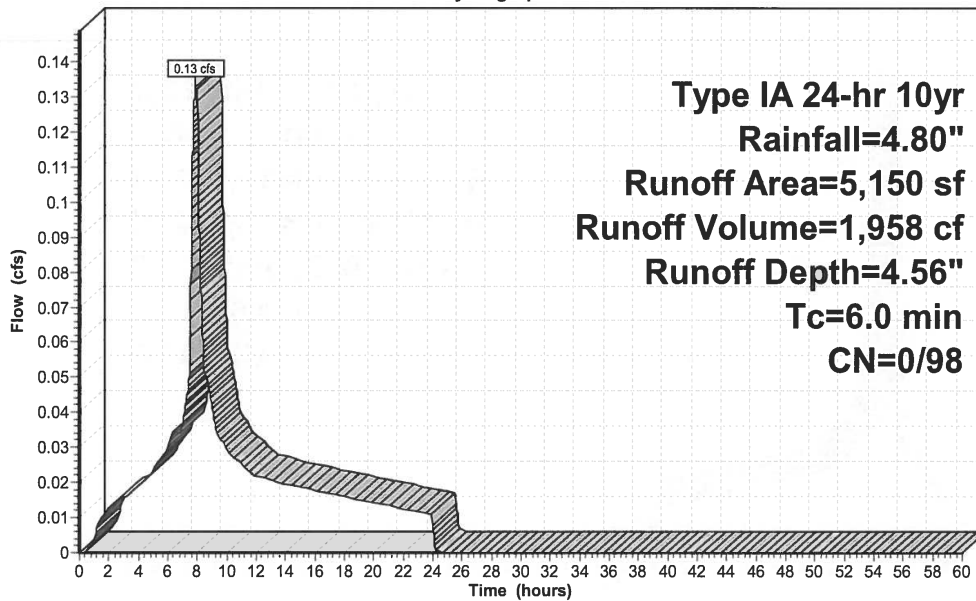
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 10yr Rainfall=4.80"

Area (sf)	CN	Description
5,150	98	Asphalt
5,150	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 10yr Rainfall=4.80"

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**Subcatchment 13S: All Area Gravel**

Runoff = 0.34 cfs @ 7.92 hrs, Volume= 4,742 cf, Depth= 3.79"

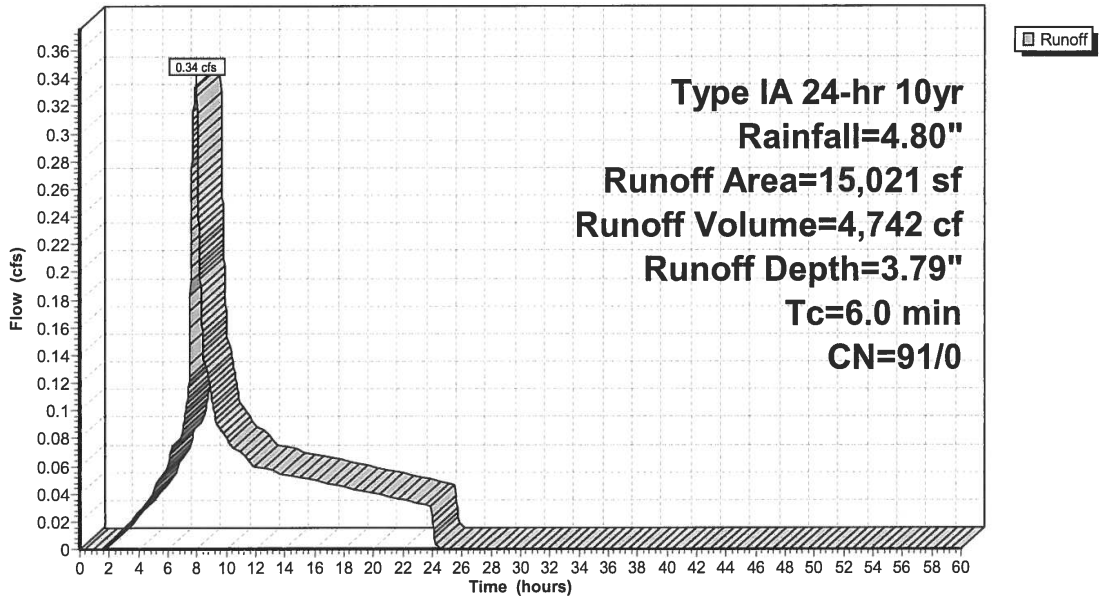
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 10yr Rainfall=4.80"

Area (sf)	CN	Description
15,021	91	Gravel
15,021	91	Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 13S: All Area Gravel**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 10yr Rainfall=4.80"

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**Subcatchment 16S: Area W/O Detention Post Const (BASIN "C")**

Runoff = 0.10 cfs @ 7.89 hrs, Volume= 1,484 cf, Depth= 4.56"

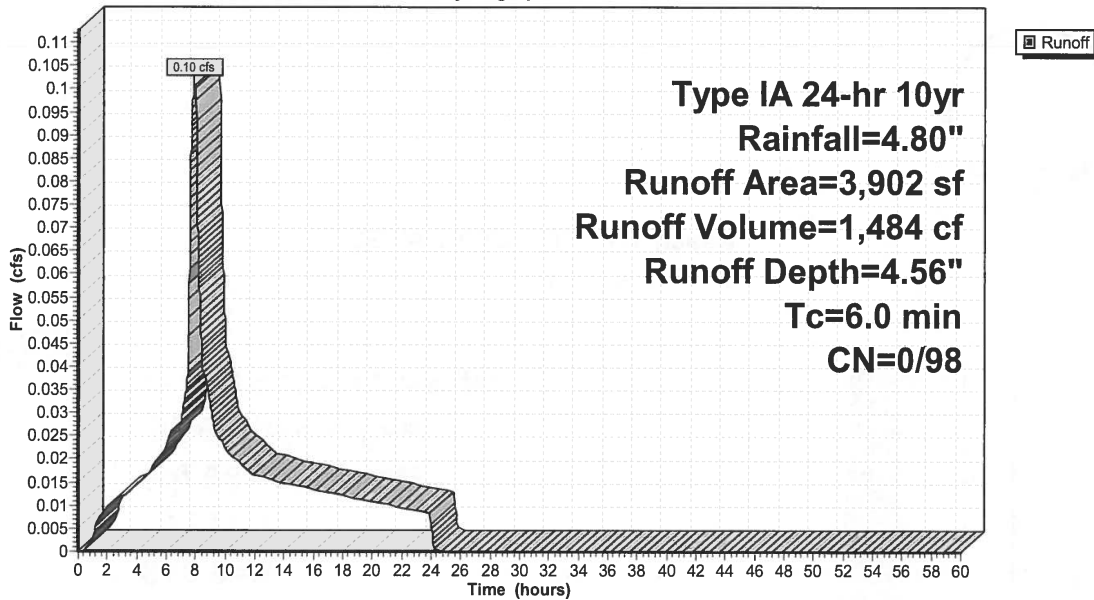
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 10yr Rainfall=4.80"

Area (sf)	CN	Description
3,902	98	Asphalt
3,902	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 16S: Area W/O Detention Post Const (BASIN "C")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 10yr Rainfall=4.80"

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**Reach 17R: SITE DISCHARGE**

[52] Hint: Inlet conditions not evaluated

Inflow Area = 15,020 sf, Inflow Depth = 4.56" for 10yr event  
Inflow = 0.32 cfs @ 8.01 hrs, Volume= 5,712 cf  
Outflow = 0.32 cfs @ 8.01 hrs, Volume= 5,712 cf, Atten= 0%, Lag= 0.4 min

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Max. Velocity= 2.80 fps, Min. Travel Time= 0.6 min  
Avg. Velocity = 1.66 fps, Avg. Travel Time= 1.0 min

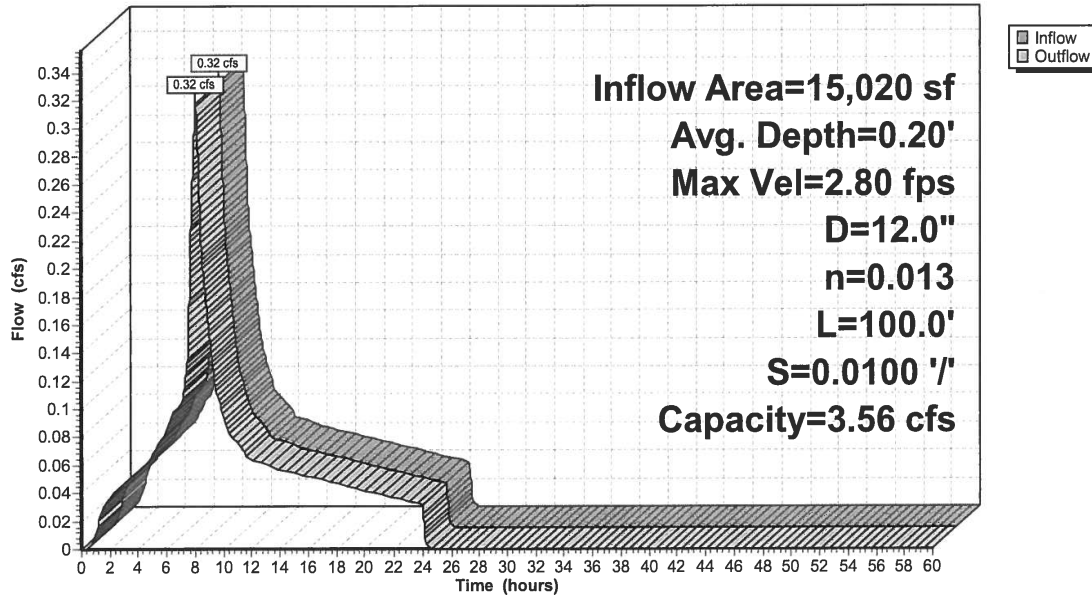
Peak Storage= 11 cf @ 8.01 hrs, Average Depth at Peak Storage= 0.20'  
Bank-Full Depth= 1.00', Capacity at Bank-Full= 3.56 cfs

12.0" Diameter Pipe, n= 0.013  
Length= 100.0' Slope= 0.0100 '/'  
Inlet Invert= -0.50', Outlet Invert= -1.50'



**Reach 17R: SITE DISCHARGE**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 10yr Rainfall=4.80"

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**Pond 4P: 18" Detention Pipe**

Inflow Area = 5,968 sf, Inflow Depth = 4.56" for 10yr event  
 Inflow = 0.15 cfs @ 7.89 hrs, Volume= 2,270 cf  
 Outflow = 0.12 cfs @ 8.08 hrs, Volume= 2,270 cf, Atten= 21%, Lag= 10.9 min  
 Primary = 0.12 cfs @ 8.08 hrs, Volume= 2,270 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1.19' @ 8.08 hrs Surf.Area= 133 sf Storage= 138 cf

Plug-Flow detention time= 6.8 min calculated for 2,269 cf (100% of inflow)  
 Center-of-Mass det. time= 6.8 min ( 663.3 - 656.5 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	18.0"D x 100.00'L Horizontal Cylinder S= 0.0020 'I'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	1.8" Vert. Orifice/Grate C= 0.600
#2	Primary	1.00'	1.9" Vert. Orifice/Grate C= 0.600

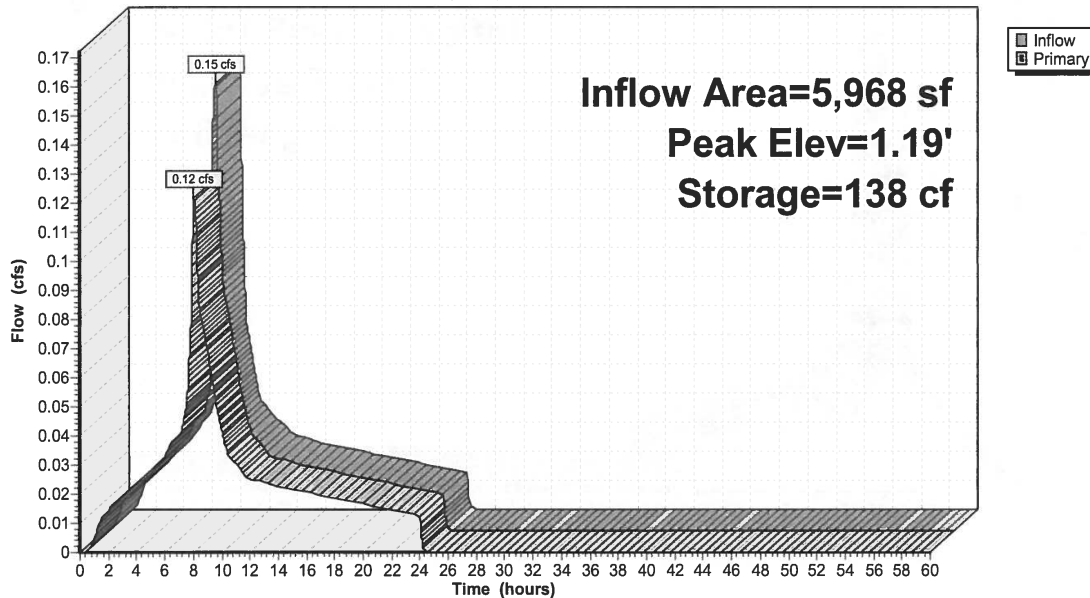
**Primary OutFlow** Max=0.12 cfs @ 8.08 hrs HW=1.19' (Free Discharge)

1=Orifice/Grate (Orifice Controls 0.09 cfs @ 5.09 fps)

2=Orifice/Grate (Orifice Controls 0.03 cfs @ 1.62 fps)

**Pond 4P: 18" Detention Pipe**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 10yr Rainfall=4.80"

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**Pond 10P: 18" Detention Pipe**

Inflow Area = 5,150 sf, Inflow Depth = 4.56" for 10yr event  
 Inflow = 0.13 cfs @ 7.89 hrs, Volume= 1,958 cf  
 Outflow = 0.11 cfs @ 8.08 hrs, Volume= 1,958 cf, Atten= 20%, Lag= 10.8 min  
 Primary = 0.11 cfs @ 8.08 hrs, Volume= 1,958 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1.09' @ 8.08 hrs Surf.Area= 83 sf Storage= 78 cf

Plug-Flow detention time= 3.2 min calculated for 1,958 cf (100% of inflow)  
 Center-of-Mass det. time= 3.2 min ( 659.7 - 656.5 )

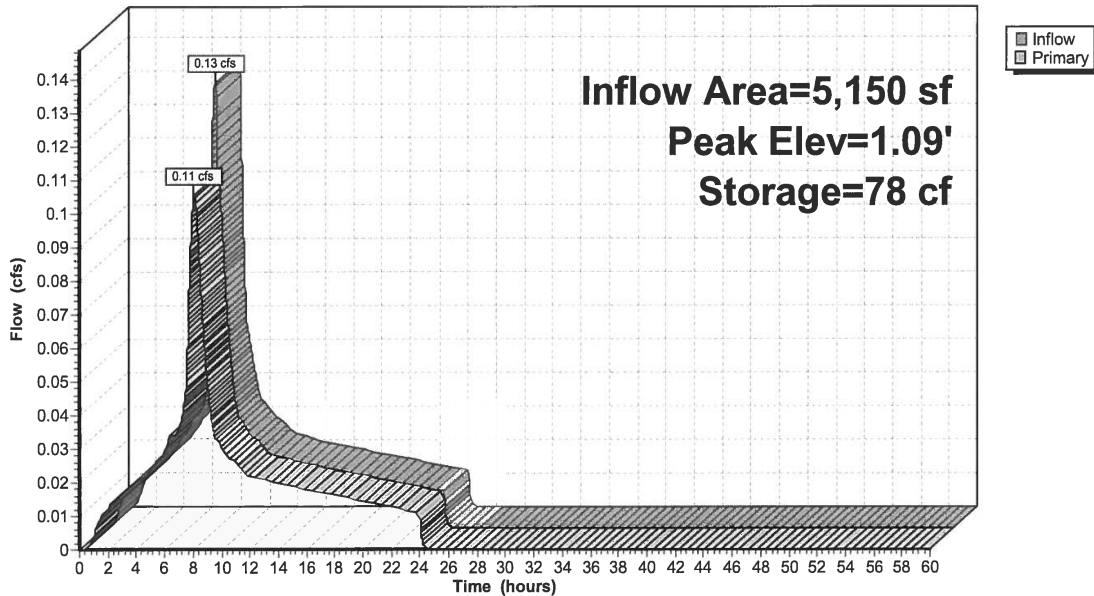
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	106 cf	18.0"D x 60.00'L Horizontal Cylinder S= 0.0020 'f'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	2.0" Vert. Orifice/Grate C= 0.600

**Primary OutFlow** Max=0.11 cfs @ 8.08 hrs HW=1.09' (Free Discharge)  
 ←1=Orifice/Grate (Orifice Controls 0.11 cfs @ 4.84 fps)

**Pond 10P: 18" Detention Pipe**

Hydrograph





**E17-008 Sandy Industrial Park**

Type IA 24-hr 25yr Rainfall=5.50"

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Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points  
Runoff by SBUH method, Split Pervious/Imperv.  
Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "** Runoff Area=5,968 sf Runoff Depth=5.26"  
Tc=6.0 min CN=0/98 Runoff=0.18 cfs 2,617 cf

**Subcatchment 11S: Building 3 Post Const (BASIN "B")** Runoff Area=5,150 sf Runoff Depth=5.26"  
Tc=6.0 min CN=0/98 Runoff=0.15 cfs 2,258 cf

**Subcatchment 13S: All Area Gravel** Runoff Area=15,021 sf Runoff Depth=4.47"  
Tc=6.0 min CN=91/0 Runoff=0.40 cfs 5,594 cf

**Subcatchment 16S: Area W/O Detention Post Const (BASIN** Runoff Area=3,902 sf Runoff Depth=5.26"  
Tc=6.0 min CN=0/98 Runoff=0.12 cfs 1,711 cf

**Reach 17R: SITE DISCHARGE** Avg. Depth=0.22' Max Vel=2.93 fps Inflow=0.37 cfs 6,587 cf  
D=12.0" n=0.013 L=100.0' S=0.0100 '/' Capacity=3.56 cfs Outflow=0.37 cfs 6,587 cf

**Pond 4P: 18" Detention Pipe** Peak Elev=1.35' Storage=157 cf Inflow=0.18 cfs 2,617 cf  
Outflow=0.14 cfs 2,617 cf

**Pond 10P: 18" Detention Pipe** Peak Elev=1.38' Storage=98 cf Inflow=0.15 cfs 2,258 cf  
Outflow=0.12 cfs 2,258 cf

**Total Runoff Area = 30,041 sf Runoff Volume = 12,180 cf Average Runoff Depth = 4.87"**  
**50.00% Pervious Area = 15,021 sf 50.00% Impervious Area = 15,020 sf**

**E17-008Sandy Industrial Park**

Type IA 24-hr 25yr Rainfall=5.50"

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**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Runoff = 0.18 cfs @ 7.89 hrs, Volume= 2,617 cf, Depth= 5.26"

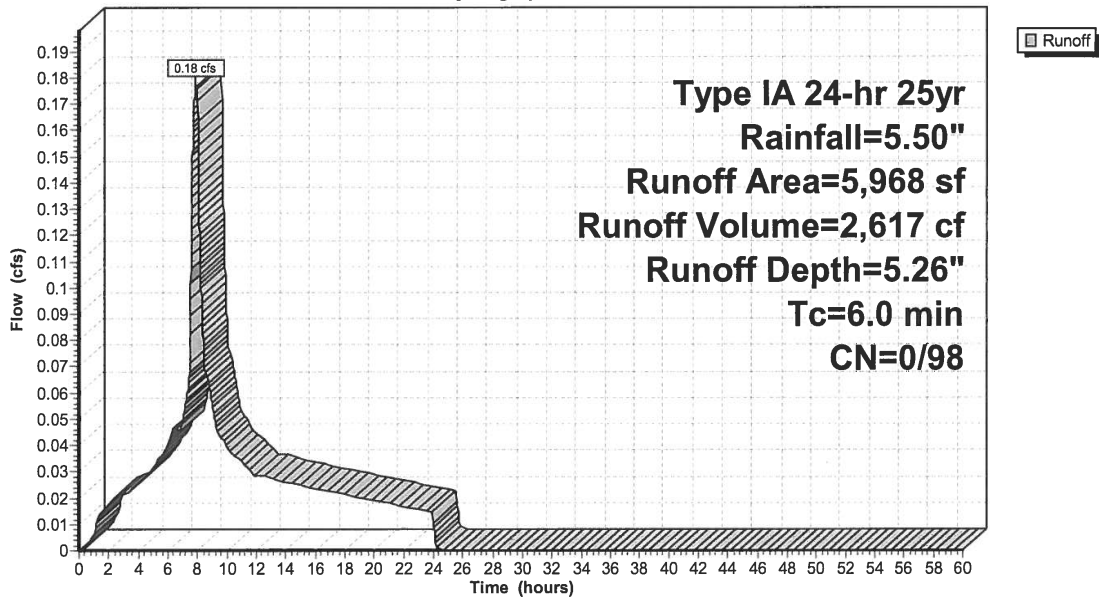
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 25yr Rainfall=5.50"

Area (sf)	CN	Description
5,968	98	Asphalt
5,968	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 25yr Rainfall=5.50"

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**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Runoff = 0.15 cfs @ 7.89 hrs, Volume= 2,258 cf, Depth= 5.26"

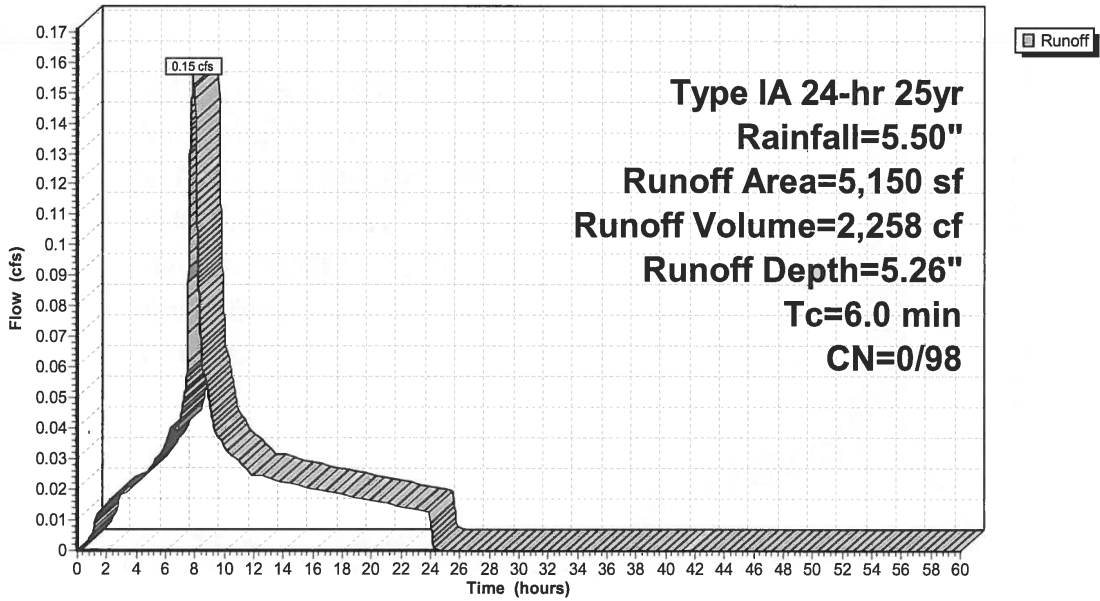
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 25yr Rainfall=5.50"

Area (sf)	CN	Description
5,150	98	Asphalt
5,150	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 25yr Rainfall=5.50"

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**Subcatchment 13S: All Area Gravel**

Runoff = 0.40 cfs @ 7.91 hrs, Volume= 5,594 cf, Depth= 4.47"

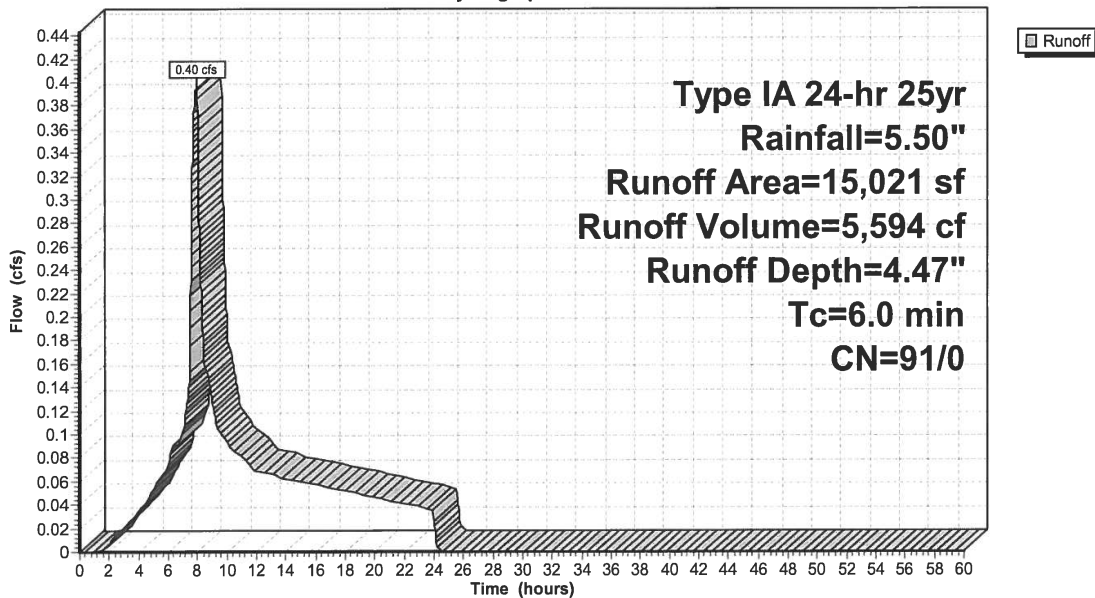
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 25yr Rainfall=5.50"

Area (sf)	CN	Description
15,021	91	Gravel
15,021	91	Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 13S: All Area Gravel**

Hydrograph



**E17-008 Sandy Industrial Park**

Type IA 24-hr 25yr Rainfall=5.50"

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**Subcatchment 16S: Area W/O Detention Post Const (BASIN "C")**

Runoff = 0.12 cfs @ 7.89 hrs, Volume= 1,711 cf, Depth= 5.26"

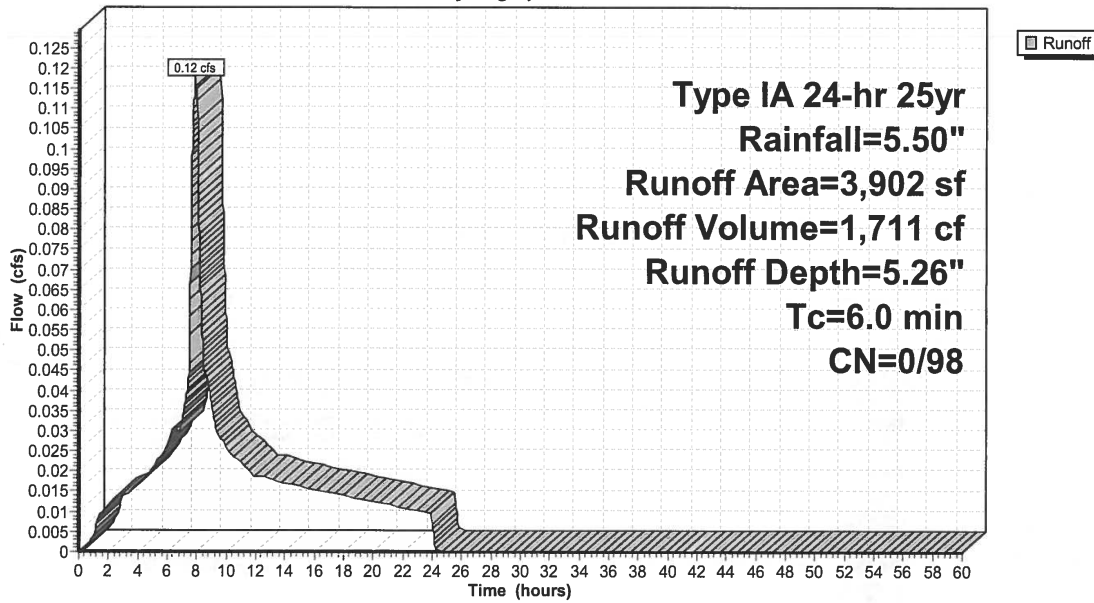
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 25yr Rainfall=5.50"

Area (sf)	CN	Description
3,902	98	Asphalt
3,902	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 16S: Area W/O Detention Post Const (BASIN "C")**

Hydrograph



**E17-008Sandy Industrial Park**

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Type IA 24-hr 25yr Rainfall=5.50"

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**Reach 17R: SITE DISCHARGE**

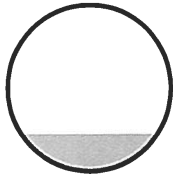
[52] Hint: Inlet conditions not evaluated

Inflow Area = 15,020 sf, Inflow Depth = 5.26" for 25yr event  
 Inflow = 0.37 cfs @ 8.00 hrs, Volume= 6,587 cf  
 Outflow = 0.37 cfs @ 8.01 hrs, Volume= 6,587 cf, Atten= 0%, Lag= 0.4 min

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Max. Velocity= 2.93 fps, Min. Travel Time= 0.6 min  
 Avg. Velocity= 1.73 fps, Avg. Travel Time= 1.0 min

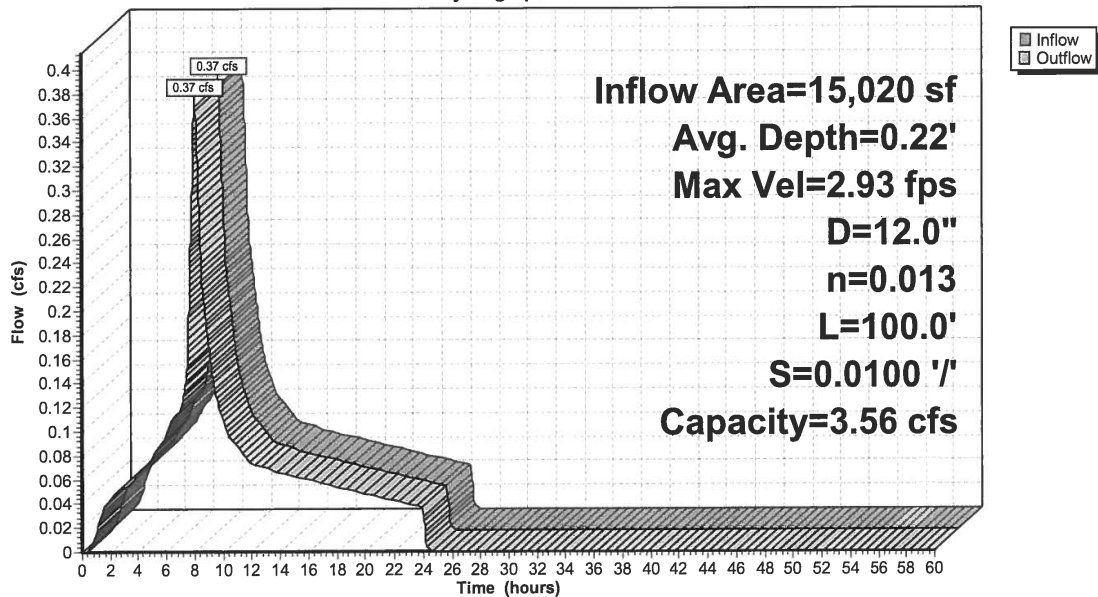
Peak Storage= 13 cf @ 8.01 hrs, Average Depth at Peak Storage= 0.22'  
 Bank-Full Depth= 1.00', Capacity at Bank-Full= 3.56 cfs

12.0" Diameter Pipe, n= 0.013  
 Length= 100.0' Slope= 0.0100 '/'  
 Inlet Invert= -0.50', Outlet Invert= -1.50'



**Reach 17R: SITE DISCHARGE**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 25yr Rainfall=5.50"

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**Pond 4P: 18" Detention Pipe**

Inflow Area = 5,968 sf, Inflow Depth = 5.26" for 25yr event  
 Inflow = 0.18 cfs @ 7.89 hrs, Volume= 2,617 cf  
 Outflow = 0.14 cfs @ 8.06 hrs, Volume= 2,617 cf, Atten= 18%, Lag= 10.2 min  
 Primary = 0.14 cfs @ 8.06 hrs, Volume= 2,617 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1.35' @ 8.06 hrs Surf.Area= 111 sf Storage= 157 cf

Plug-Flow detention time= 7.5 min calculated for 2,617 cf (100% of inflow)  
 Center-of-Mass det. time= 7.5 min ( 661.4 - 653.9 )

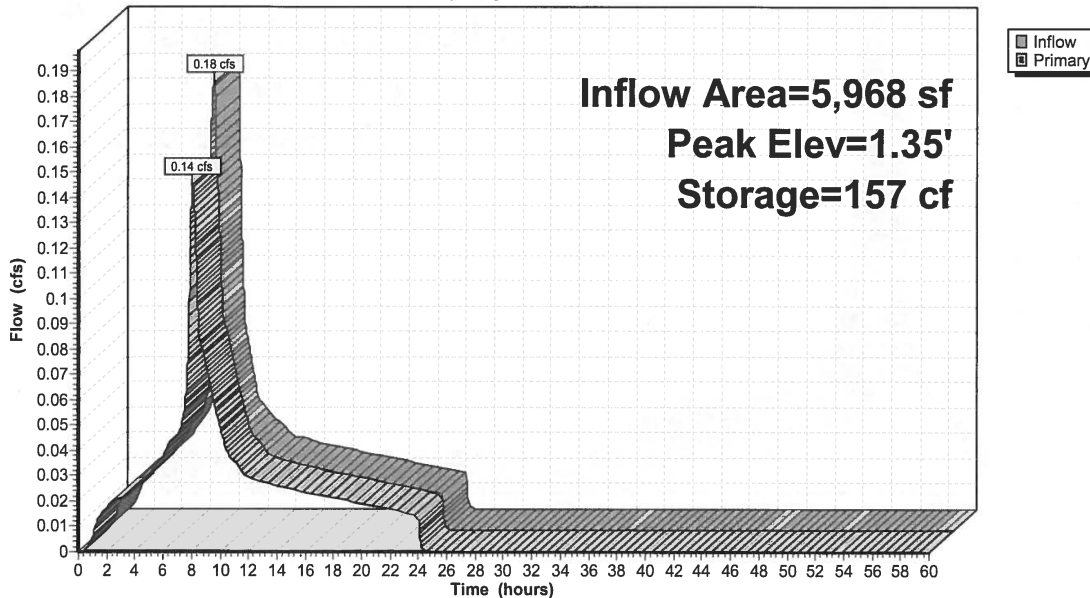
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	177 cf	18.0"D x 100.00'L Horizontal Cylinder S= 0.0020 'l'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	1.8" Vert. Orifice/Grate C= 0.600
#2	Primary	1.00'	1.9" Vert. Orifice/Grate C= 0.600

**Primary OutFlow** Max=0.14 cfs @ 8.06 hrs HW=1.35' (Free Discharge)  
 1=Orifice/Grate (Orifice Controls 0.10 cfs @ 5.43 fps)  
 2=Orifice/Grate (Orifice Controls 0.05 cfs @ 2.49 fps)

**Pond 4P: 18" Detention Pipe**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 25yr Rainfall=5.50"

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**Pond 10P: 18" Detention Pipe**

Inflow Area = 5,150 sf, Inflow Depth = 5.26" for 25yr event  
 Inflow = 0.15 cfs @ 7.89 hrs, Volume= 2,258 cf  
 Outflow = 0.12 cfs @ 8.08 hrs, Volume= 2,258 cf, Atten= 22%, Lag= 11.2 min  
 Primary = 0.12 cfs @ 8.08 hrs, Volume= 2,258 cf

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
 Peak Elev= 1.38' @ 8.08 hrs Surf.Area= 59 sf Storage= 98 cf

Plug-Flow detention time= 3.7 min calculated for 2,258 cf (100% of inflow)  
 Center-of-Mass det. time= 3.7 min ( 657.6 - 653.9 )

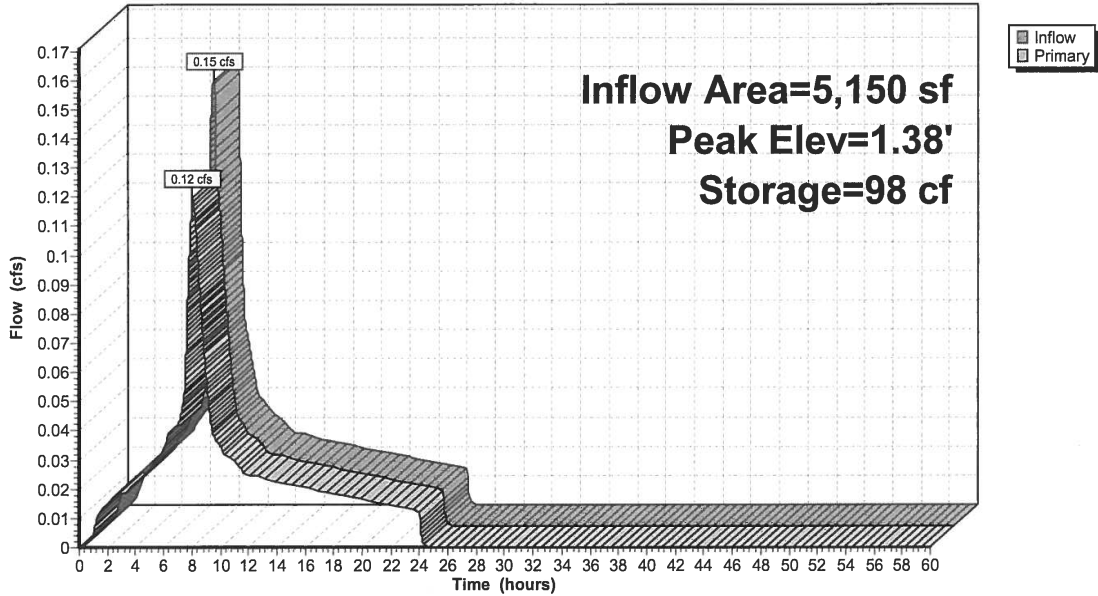
Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	106 cf	18.0"D x 60.00'L Horizontal Cylinder S= 0.0020 'I'

Device	Routing	Invert	Outlet Devices
#1	Primary	0.00'	2.0" Vert. Orifice/Grate C= 0.600

**Primary OutFlow** Max=0.12 cfs @ 8.08 hrs HW=1.37' (Free Discharge)  
 ↳1=Orifice/Grate (Orifice Controls 0.12 cfs @ 5.47 fps)

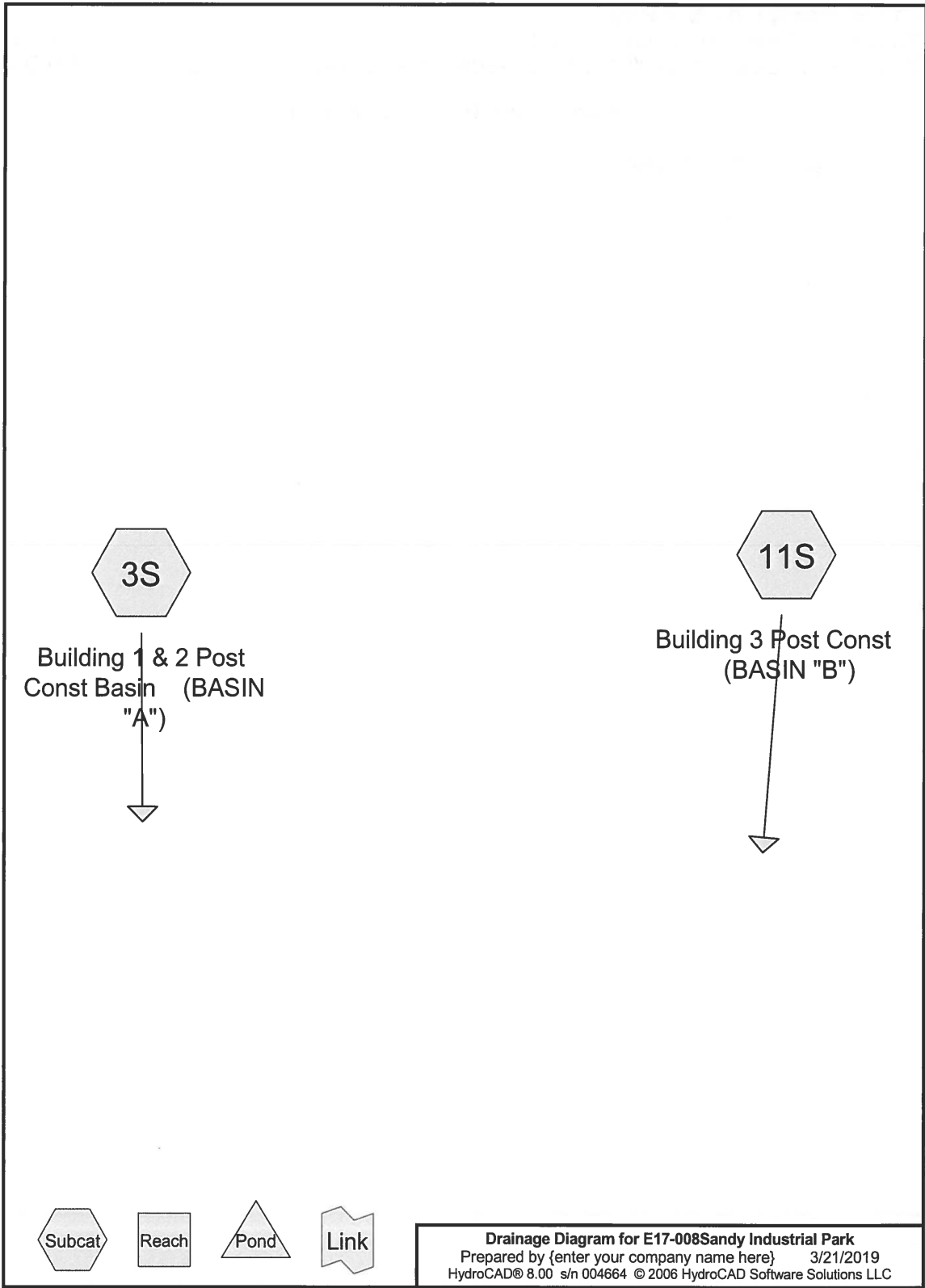
**Pond 10P: 18" Detention Pipe**

Hydrograph





WATER QUALITY



**E17-008Sandy Industrial Park**

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**Area Listing (selected nodes)**

<u>Area (sq-ft)</u>	<u>CN</u>	<u>Description (subcats)</u>
11,118	98	Asphalt (3S,11S)
<hr/>		
11,118		

**E17-008Sandy Industrial Park**

Type IA 24-hr 3.00 hrs wq Rainfall=0.22"

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Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points

Runoff by SBUH method, Split Pervious/Imperv.

Reach routing by Stor-Ind method - Pond routing by Stor-Ind method

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "** Runoff Area=5,968 sf Runoff Depth=0.08"  
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 42 cf

**Subcatchment 11S: Building 3 Post Const (BASIN "B")** Runoff Area=5,150 sf Runoff Depth=0.08"  
Tc=6.0 min CN=0/98 Runoff=0.01 cfs 36 cf

**Total Runoff Area = 11,118 sf Runoff Volume = 78 cf Average Runoff Depth = 0.08"**  
**0.00% Pervious Area = 0 sf 100.00% Impervious Area = 11,118 sf**

**E17-008Sandy Industrial Park**

Type IA 24-hr 3.00 hrs wq Rainfall=0.22"

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**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Runoff = 0.01 cfs @ 1.04 hrs, Volume= 42 cf, Depth= 0.08"

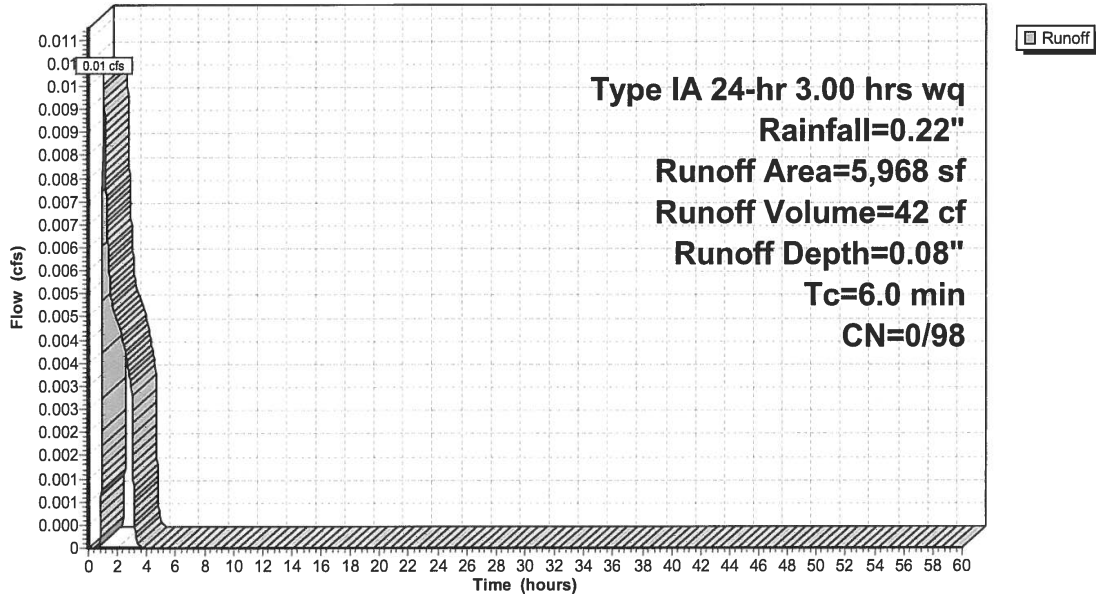
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 3.00 hrs wq Rainfall=0.22"

Area (sf)	CN	Description
5,968	98	Asphalt
5,968	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 3S: Building 1 & 2 Post Const Basin (BASIN "A")**

Hydrograph



**E17-008Sandy Industrial Park**

Type IA 24-hr 3.00 hrs wq Rainfall=0.22"

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**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Runoff = 0.01 cfs @ 1.04 hrs, Volume= 36 cf, Depth= 0.08"

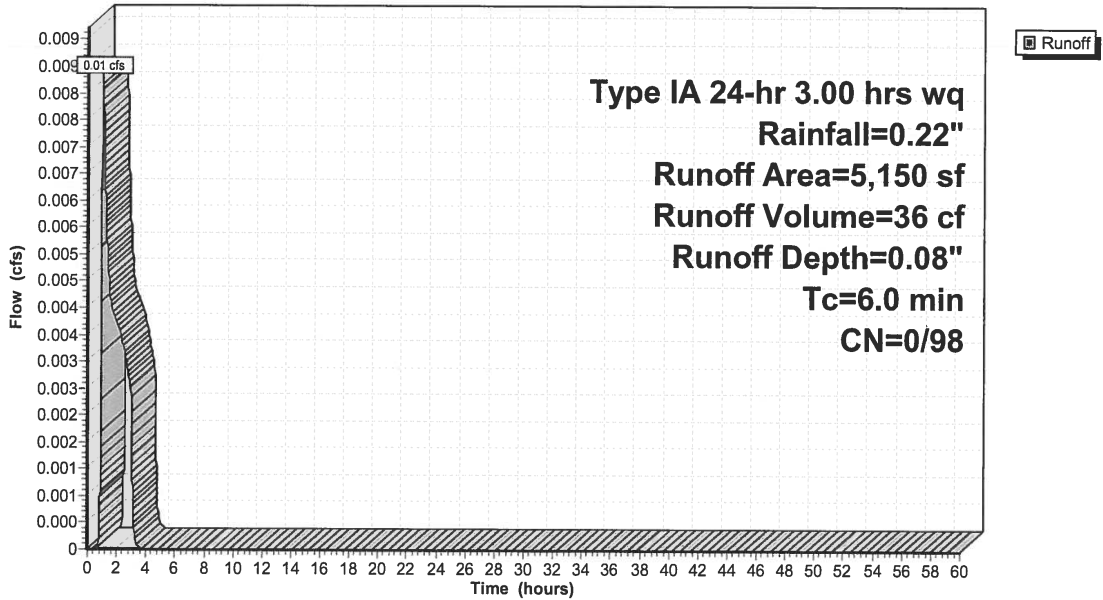
Runoff by SBUH method, Split Pervious/Imperv., Time Span= 0.00-60.00 hrs, dt= 0.01 hrs  
Type IA 24-hr 3.00 hrs wq Rainfall=0.22"

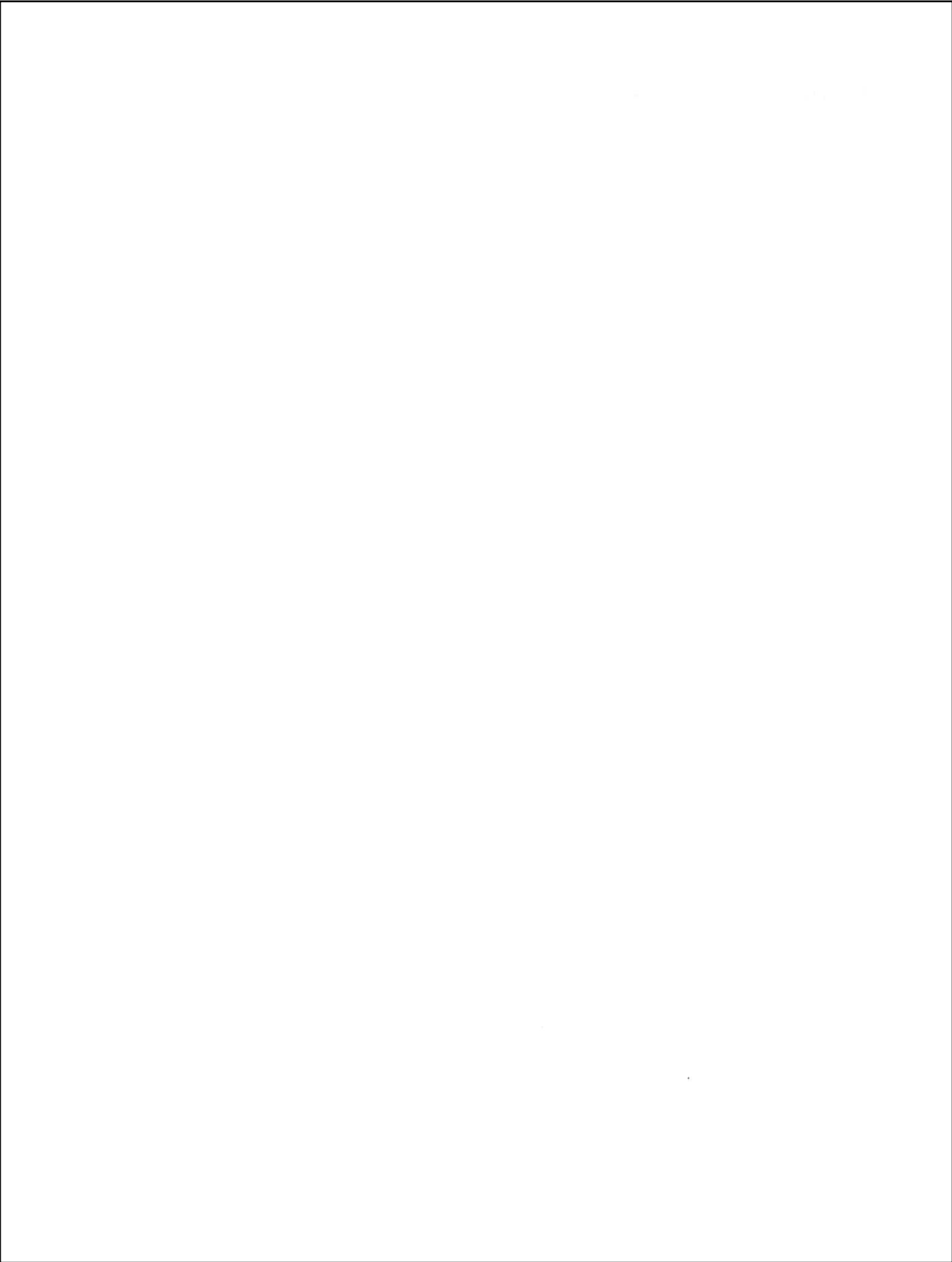
Area (sf)	CN	Description
5,150	98	Asphalt
5,150	98	Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Post Construction

**Subcatchment 11S: Building 3 Post Const (BASIN "B")**

Hydrograph







# FLOGARD+PLUS<sup>®</sup> CATCH BASIN INSERT FILTER

## Inspection and Maintenance Guide



A division of  
Oldcastle Infrastructure



## **SCOPE:**

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that stormwater filtration systems be maintained and serviced on a recurring basis. The intent of the regulations is to ensure that the systems, on a continuing basis, efficiently remove pollutants from stormwater runoff thereby preventing pollution of the nation's water resources. These specifications apply to the FloGard+Plus® Catch Basin Insert Filter.

## **RECOMMENDED FREQUENCY OF SERVICE:**

Drainage Protection Systems (DPS) recommends that installed FloGard+Plus Catch Basin Insert Filters be serviced on a recurring basis. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris (leaves, vegetation, cans, paper, etc.); however, it is recommended that each installation be serviced a minimum of three times per year, with a change of filter medium once per year. DPS technicians are available to do an on-site evaluation, upon request.

## **RECOMMENDED TIMING OF SERVICE:**

DPS guidelines for the timing of service are as follows:

1. For areas with a definite rainy season: Prior to, during and following the rainy season.
2. For areas subject to year-round rainfall: On a recurring basis (at least three times per year).
3. For areas with winter snow and summer rain: Prior to and just after the snow season and during the summer rain season.
4. For installed devices not subject to the elements (wash racks, parking garages, etc.): On a recurring basis (no less than three times per year).

## **SERVICE PROCEDURES:**

1. The catch basin grate shall be removed and set to one side. The catch basin shall be visually inspected for defects and possible illegal dumping. If illegal dumping has occurred, the proper authorities and property owner representative shall be notified as soon as practicable.
2. Using an industrial vacuum, the collected materials shall be removed from the liner. (Note: DPS uses a truck-mounted vacuum for servicing FloGard+Plus catch basin inserts).
3. When all of the collected materials have been removed, the filter medium pouches shall be removed by unsnapping the tether from the D-ring and set to one side. The filter liner, gaskets, stainless steel frame and mounting brackets, etc., shall be inspected for continued serviceability. Minor damage or defects found shall be corrected on-the-spot and a notation made on the Maintenance Record. More extensive deficiencies that affect the efficiency of the filter (torn liner, etc.), if approved by the customer representative, will be corrected and an invoice submitted to the representative along with the Maintenance Record.
4. The filter medium pouches shall be inspected for defects and continued serviceability and replaced as necessary, and the pouch tethers re-attached to the liner's D-ring.
5. The grate shall be replaced.

## **REPLACEMENT AND DISPOSAL OF EXPOSED FILTER MEDIUM AND COLLECTED DEBRIS**

The frequency of filter medium exchange will be in accordance with the existing DPS-Customer Maintenance Contract. DPS recommends that the medium be changed at least once per year. During the appropriate service, or if so determined by the service technician during a non-scheduled service, the filter medium will be replaced with new material. Once the exposed pouches and debris have been removed, DPS has possession and must dispose of it in accordance with local, state and federal agency requirements.

**DPS also has the capability of servicing all manner of storm drain filters, catch basin inserts and catch basins without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined-space trained and certified. Call us at (888) 950-8826 for further information and assistance.**



# FLOGARD+PLUS<sup>®</sup> CATCH BASIN INSERT FILTER

## OUR MARKETS



**BUILDING  
STRUCTURES**



**COMMUNICATIONS**



**WATER**



**ENERGY**

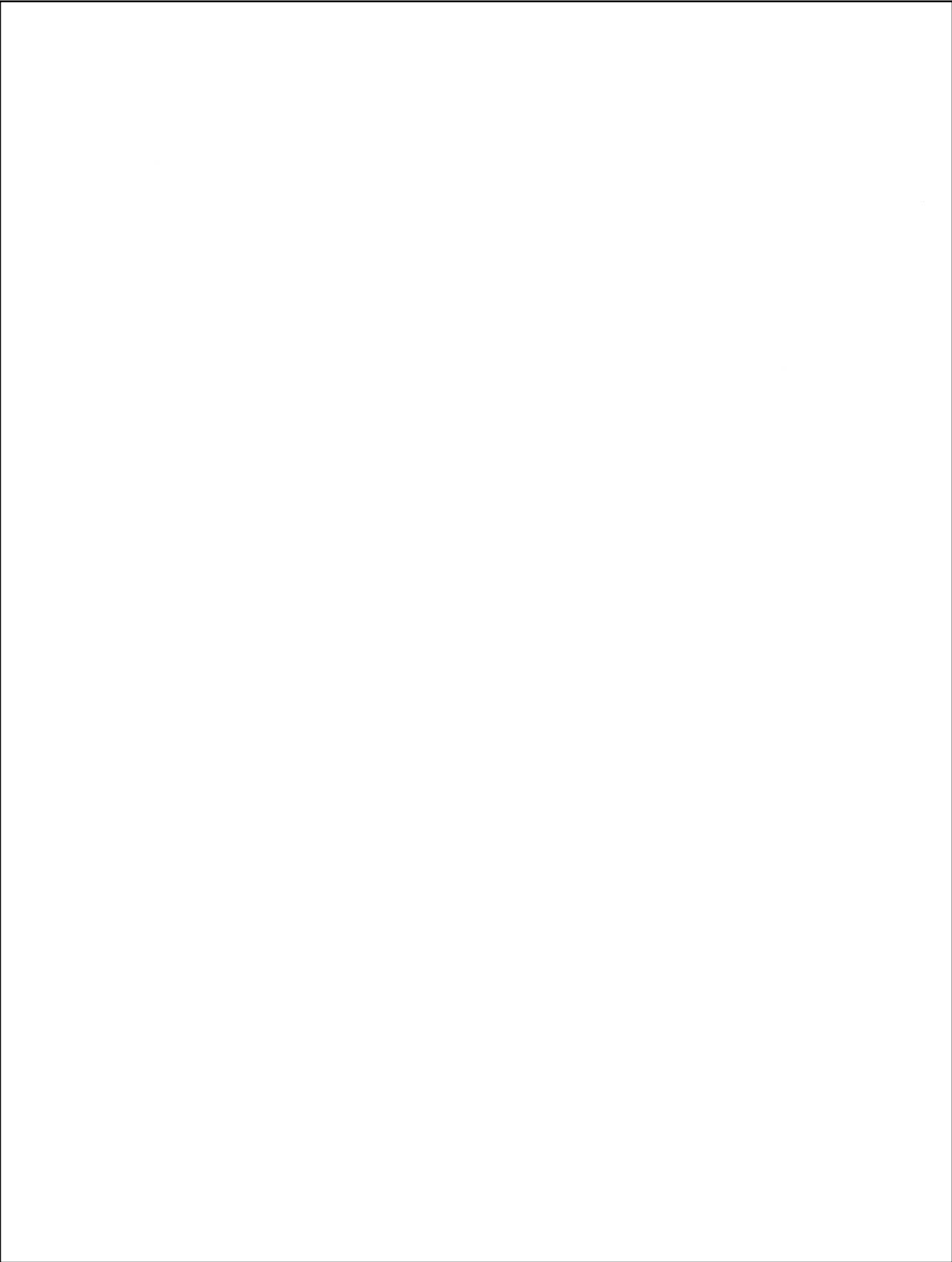


**TRANSPORTATION**



[www.oldcastleinfrastructure.com](http://www.oldcastleinfrastructure.com)  
800-579-8819







# PUT A STOP to TSS

## Removes Pollutants from Runoff Prior to Entering Waterways

### Efficient System

Catches pollutants where they are easiest to catch, at the inlet.

### Variable Design

Able to be retrofitted or used in new projects.

### Treatment Train

Can be incorporated as part of a "Treatment Train".

### No Standing Water

Helps to minimize bacteria and odor problems.

### Focused Treatment

Removes petroleum hydrocarbons, trash and Total Suspended Solids (TSS).

### Maximum Flexibility

Available in a variety of standard sizes to fit round and square inlets.

### Economical

Earn a higher return on system investment.

Two-part stainless-steel insert to filter solids and oils/grease.



Easy to install, inspect and maintain, even on small and confined sites.

### By the Numbers\*:

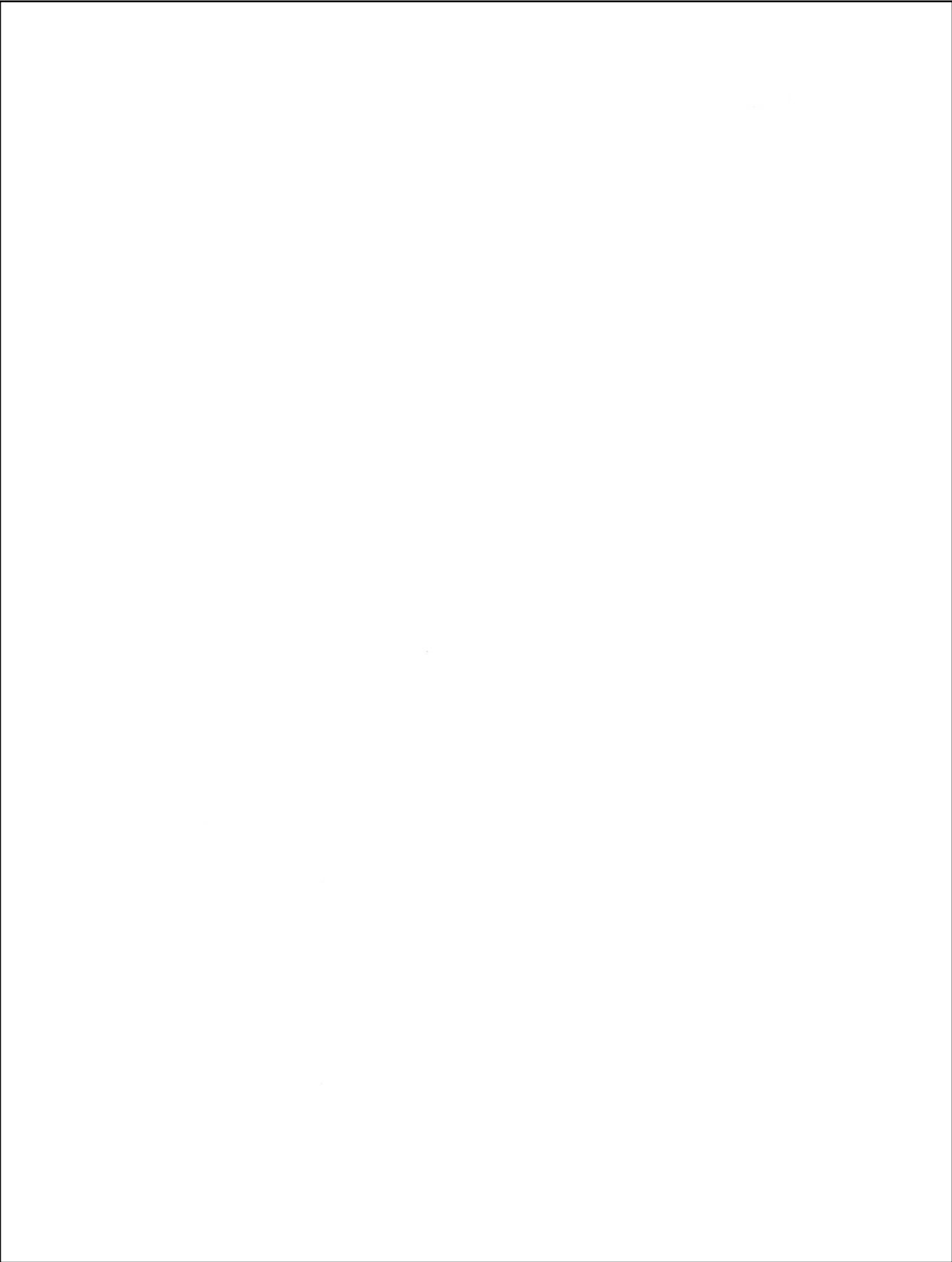
Filter will remove up to 80% of Total Suspended Solids (TSS), at least 70% of oils and grease, and up to 40% of Total Phosphorus (TP) associated with organic debris as well as Polycyclic Aromatic Hydrocarbons (PAH) from oil leaks and spills.

\*Approximate for urban street application.

### CATCH BASIN FILTER TEST RESULTS SUMMARY

Testing Agency	% TSS Removal	% Oil & Grease Removal	% PAH Removal
UCLA	80	70 to 80	
U of Auckland Tonking & Taylor, Ltd (for City of Auckland)	78 to 95		
U of Hawaii (for City of Honolulu)	80		20 to 40

INLET FILTRATION



## Multi-Purpose Catch Basin Insert Retains Sediment, Debris, Trash and Oils/Grease

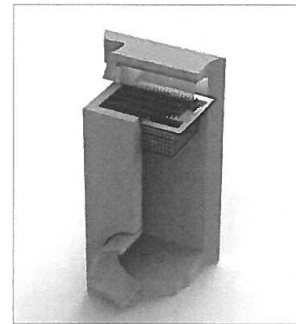
FloGard® catch basin insert filters are recommended for areas subject to silt and debris as well as low-to-moderate levels of petroleum hydrocarbons (oils and grease). Examples of such areas include vehicle parking lots, aircraft ramps, truck and bus storage yards, business parks, residential and public streets.

CATCH BASIN FILTER COMPETITIVE FEATURE COMPARISON		
Evaluation of Catch Basin Filters (Based on flow-comparable units) (Scale 1-10)	Oldcastle	Other Insert Filter Types**
Flow Rate	10	7
Removal Efficiency*	80%	45%
Capacity - Sludge & Oil	7	7
Service Life	10	3
Installation - Ease of Handling / Installation	8	6
Ease of Inspections & Maintenance	7	7
Value	10	2

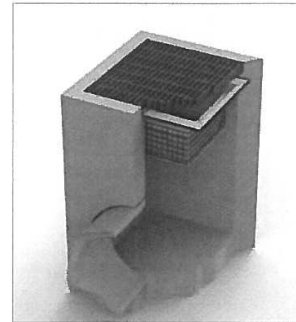
\*Approximate, based on field sediment removal testing in urban street application

\*\*Average

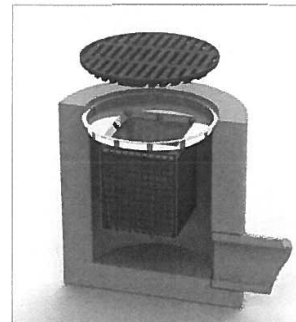
Long-Term Value Comparison (Based on flow-comparable units) (Scale 1-10)	Oldcastle	Other Insert Filter Types**
Unit Value - Initial (\$/cfs treated)	10	
Installation Value (\$/cfs treated)	10	
Absorbent Replacement (annual avg (\$/cfs treated))	10	
Materials Replacement Value (annual avg (\$/cfs treated))	10	
Maintenance Value (annual avg (\$/cfs treated))	10	
Total First Year ROI (\$/cfs treated)	10	
Total Annual Avg Value (\$/cfs treated, avg over 20 yrs)*	10	



Combination Inlet



Flat-Grated Inlet



Circular Frame Inlet



Captured debris from FloGard catch basin insert filter in Dana Point, California



(800) 579-8819

oldcastleinfrastructure.com

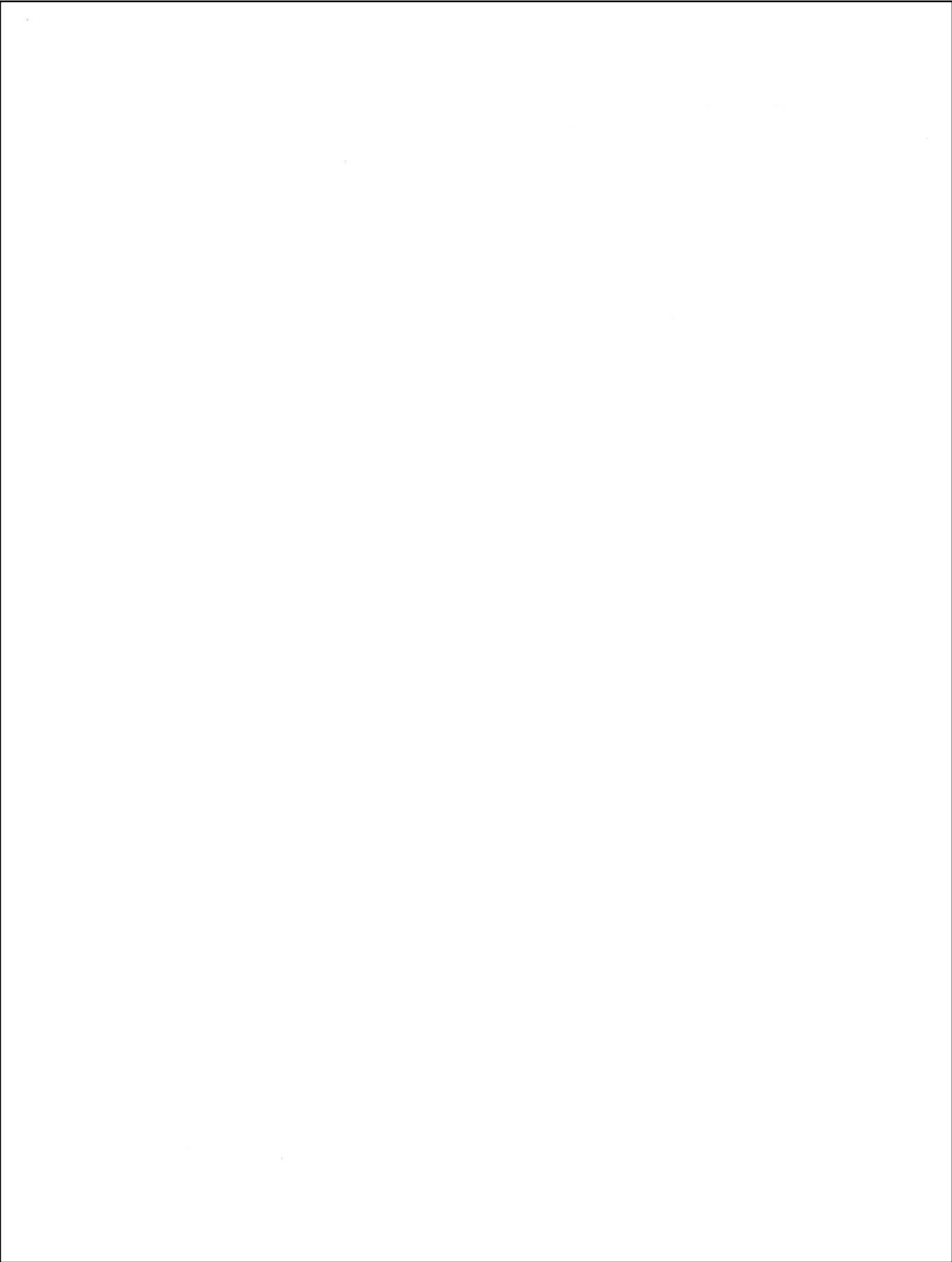


Exhibit F

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WHERE INNOVATION MEETS ELEVATION

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

October 25, 2018

C.W. Real Estate Co., Inc.  
c/o Craig W. Warnock  
37330 Ruben Lane  
Sandy, OR 97055

RECEIVED OCT 25 2018

RE: NOTICE REGARDING COMPLETION OF SUBMISSION  
FILE NUMBER: 18-046 DR  
PROJECT NAME: Warnock Storage Containers

Application accepted as complete on: \_\_\_\_\_

Application incomplete. The additional information necessary to consider your application is listed below. The application will be deemed complete upon submission of one of the following options:

1. All of the missing information;
2. Some of the missing information and written notice that no other information will be provided; or
3. Written notice that none of the missing information will be provided.

We ask that you respond in accordance with one of the above options **as soon as possible**. If one of the above listed options is not received by the city within 180 days from September 27, 2018 by the 180<sup>th</sup> day following submittal of your application, the application will be void per state law (ORS 227.178 (4)). If you do not take one of the three actions identified above within 180 days, the City of Sandy may proceed with an enforcement action. The City reserves the right to proceed with an enforcement action at an earlier time. Enforcement actions may consist of monetary fines or any actions identified within Chapter 17.06 of the Sandy Municipal Code.

Requested additional information filed on: \_\_\_\_\_

Following submission of your land use application (received on 9/27/18), staff finds the application incomplete. Please submit the following:

- *A scaled site plan that includes the entire site and existing improvements of the site (i.e. buildings, landscaping, parking, impervious cover, etc.). Important to include site dimensions (i.e. setbacks, parking space and building dimensions, etc.).*
- *Detail the total square footage of office space and the total number of employees associated with the use of the property. Subsection 17.98.20.A.8 requires a total of 1 parking space per 300 sq. ft., plus 1 per 2 employees. Applicant responsible for supplying the information required to calculate the total parking as well as demonstrating compliance on the site plan.*
- *The submitted documents provide a description of the proposed Z-Box to be used on site; however, the plans do not indicate the Model Number of the unit to be used or height of the unit being used. Submit an exhibit detailing the storage container/structure dimensions (i.e. length, width, overall height including foundation) or identify the Model Number of the structure to be used and include the overall height with foundation on resubmittal.*
- *The specification (cut) sheet for the proposed new lighting fixtures mentioned within the submitted narrative.*

W:\City Hall\Planning\Correspondence\2018\18-046 DR Warnock Storage Containers Incompleteness.doc

Kelley/Furwood - Appt. 11/2/18 w/ Chris



- Please clarify all requested design deviations. Based on an initial review, it appears to staff the applicant has identified the following requests:
  1. Design Deviation from 17.90.130.E.1; "Primary entries shall face a public street or designated pedestrian way".
  2. Design Deviation from 17.90.130.E.5; "Entries shall be sheltered with an overhang or portico with a depth of at least 4 feet".
  3. Design Deviation from 17.90.130.G.2; "Benches and other streetscape items may be placed within the public right-of-way but must not block free movement of pedestrians. A minimum pedestrian walkway width of 5 feet must be maintained at all times".
  4. Design Deviation from 17.90.130.D.1-4; regarding the required Roof Pitch, Materials, and Parapets.
  5. Design Deviation from 17.90.130.C.6; "Preferred colors for exterior building finishes are earth tones, creams, and pastels of earth tones. High-intensity primary colors, metallic colors, and black may be utilized as trim and detail colors but shall not be used as primary wall colors".
  6. Design Deviation from 17.90.130.H; regarding the required Lighting standard.
  7. Design Deviation from 17.92.20; regarding the Minimum Improvements-Landscaping and Screening.
  8. Design Deviation from submitting a detailed stormwater analysis for all existing, proposed and non-approved impervious surfaces.

Based on the above requests, staff has identified the following design deviations, adjustments, variance requests and/or material would be required:

- 1.1 Design Deviation from 17.90.130.E.1 to completely waive the required entry orientation (\$430 review fee).
  - 2.1 Design Deviation from 17.90.130.E.5 to completely waive the required entry shelter (\$430 review fee).
  - 3.1 Design Deviation from 17.90.130.G.2 to completely waive the required benches and other streetscape (\$430 review fee).
  - 4.1 Special Variance from 17.90.130.D.1-4 to reduce the required 3:12 roof pitch to a flat roof top (\$1,070 review fee).
  - 5.1 Design Deviation from 17.90.130.C.6 to keep the existing gray and blue (per applicant's narrative) exterior colors rather than preferred are earth tones, creams, and pastels of earth tones (\$430 review fee).
  - 6.1 Design Deviation from 17.90.130.H to eliminate the required lighting required for the site (\$430 review fee).
  - 7.1 Special Variance from 17.92.20 to eliminate the required Minimum Improvements for Landscaping and Screening (\$1,070 review fee).
  - 8.1 Submit a storm water management plan or provide written notice that the missing information will not be provided.
- A Special Variance to the front (west property line) setback (30 foot minimum) may be needed. Should the applicant's site plan indicate the existing structures, proposed to remain, are within the required 30 foot setback the applicant shall update their narrative to include the request as well as pay the appropriate review fee (\$1,070).

\*A summary of the submitted fees.

\*Based on the type of review and above requests identified by staff, the total fees associated with the review equate to \$4,290 (not including setback variance or Storm water

*Deviation/VAR) plus the Design Review fee based on the evaluated costs associated for the proposed project (see Planning Fees). Applicant responsible for determining the applicable Design Review Fee and paying any difference in associated fees. Prior to any additional funds being provided by the applicant they shall confirm the requests and total fee calculation with staff.*

In addition to the above incompleteness items, staff would also like to identify the following:

- The submitted narrative states, "If it is required of us to pave the approaches..." and Subsection 17.98.60.A requires "All areas for required parking and maneuvering of vehicles shall have a durable hard surface such as concrete or asphalt" therefore the site will be required to improve the approaches and any other applicable surfaces with an approved surface.
- Submitted narrative indicates the proposed structures are grey and blue however staff has observed the structures as white with black trim. Please confirm existing and proposed colors of the structures and update the narrative accordingly.
- It is important to provide the setbacks of the proposed structures as staff must determine the required setback distance and any additional screening that might be required.
- The 2014 OSSC (Oregon Structural Specialty Code) requires the existing structures to be anchored to a foundation which will require appropriate permitting and inspection should the proposal be approved. Applicant responsible for coordinating with the City's Building Department regarding permitting requirements and process.
- The proposal will ultimately be conditioned per the following comment from the February 1, 2018 Pre-Application Conference Notes, "Building permit for self-storage will be required prior to Certificate of Occupancy for Advanced Plastics storage building (File No. 17-045 DR)".

Please call me at (503) 783-2587 or email [jcramer@ci.sandy.or.us](mailto:jcramer@ci.sandy.or.us) if you have any questions.

Sincerely,



James A. Cramer  
Associate Planner

## PROJECT NARRATIVE

### Stow-A-Way Mini Storage Portable Storage Units

#### **Project Contact:**

Christopher Warnock  
C.W. Real Estate Co., Inc.  
Dba Mt. Hood Industrial Park  
Dba Stowaway Mini Storage  
37330 Ruben Lane  
Sandy, OR 97055  
503-668-5351  
503-679-6752 Cell  
[cwrecoinc@yahoo.com](mailto:cwrecoinc@yahoo.com)

#### **Background**

Stowaway Mini Storage started in 1989, as part of the Mt. Hood Industrial Park, catering to the storage needs of the Sandy area. The storage facility was grown over the past 29 years to include six buildings of individual units. During this time a portion of the facility was used for outside RV storage. As the city of Sandy has grown, so has its need for storage. For the past three years, Stowaway Mini Storage has consistently carried a waiting list and is typically "full". Taking this need into account and realizing the earning potential of the area used for outside RV storage – we decided to eliminate the outside RV storage in favor of more storage units which would bring in more revenue and fill the needs of residents looking for storage units.

We believed our challenge with the outside storage area were setbacks and that conventional building would not be an option. After looking at the options for self-storage units in our industry – we chose to invest in a high quality, aesthetically pleasing, portable unit that is 100% portable. These units are designed to stand alone, they are not affixed to concrete and they utilize fork pockets so that they may be moved. By design they are wind rated to 120 mph and are fire resistant (all steel). We visited other storage facilities that had installed the same units and were encouraged by the quick installation and return on investment. Portable units are listed as "equipment" per IRS Section 179 which meant that we were able to buy them on an equipment lease and utilize the tax advantages available to us. In 2017, we installed 24 units in our facility on 2 ft. and 3 ft. wide concrete runners on the existing compacted gravel base.

During the initial design review process for our warehouse project in our industrial park, the City became aware of these units and declared them as non-permitted. At the pre-app meeting

on February, 1<sup>st</sup>, 2018 we were told that there were no provisions for portable structures or storage containers in the City's code. Therefore, the City must treat them like a building. At that time, we submitted examples of other storage container units throughout the Sandy area being used by other businesses. We were consequently advised to submit a Land Use Application for a Type III Variance. We were also advised that the City of Sandy would allow us to continue with our warehouse project, but would withhold CFO until the portable container units were addressed.

### Type III Design Deviation Requests and Currently Allowed Site Specifications

#### **Pedestrian Access, Covered Walkways, ADA Accessibility**

As is common with typical self-storage facilities pedestrians and vehicles utilize the same paved/graveled access to each unit. As Stowaway Mini Storage built out it's facility over the years, each building was permitted and approved based on the City of Sandys code at that time. The entrance to the facility currently faces a designated driveway within Mt. Hood Industrial Park. As is also common with typical self-storage facilities, covered pedestrian walk ways are not practical due to the requirement that moving trucks be able to access each row of storage units and be able to back up to or be adjacent to the door of the unit. **We request a design deviation from this requirement for two reasons: 1) Covered pedestrian walkways not practical nor are they standard practice in the self-storage industry. 2) Portable container units are not a building.** With regards to ADA accessibility, we estimate our facility to be 80% ADA accessible. It is the nature of drive-up accessible storage units to be ADA accessible due to the concrete or paved aisle ways that meet up to the concrete floor of the storage units.

#### **3:12 Roof Pitch**

The nature of the USC Container units and most likely other pre-fab portable containers is that they appear to be flat top roofs. However, they are designed for a slight slope for drainage whether front to back and/or side to side. Our USC containers are engineered with a 30 ml slope from center to side and when set level as per the manufacturer there are no issues with water drainage from these units. **As the portable units are not a "building" we therefore request a design deviation from this requirement.**

#### **Building Identification System**

The units in each building in the Stowaway Mini Storage facility are marked with the unit number as are the 24 portable units. As with the other buildings located in the Mt. Hood Industrial Park, the facility itself is identified on the building closest to the entrance gate as 37330. We have identified a potential issue with regards to emergency services being able to locate someone in our facility and that is that each building is not clearly identified as Building A, B, C, D or E (as they are on our own facility map). We will address this immediately by installing signs for each building in the facility as well as to identify the group of portable units.

### **Windows**

While encouraged in some building applications windows are not used in self-storage for privacy and security reasons. **We request a design deviation from this preference.**

### **Preferred Exterior Colors**

We chose the colors of gray and blue for our storage facility when we first began building it in 1989. And, while the portable storage units do not match those colors they are a clean, bright white that looks much nicer than the row of RV's, boats and vehicles that used to reside there. They are also much more attractive than the shipping containers typically used by many businesses around Sandy.

**It is not practical for us to paint these units to conform to the City's current color palette, we therefore request a design deviation from this requirement.**

### **Lighting**

**We request a design deviation for submitting a "Lighting Plan."** Security and pedestrian safety in and around our facility has always been important to us. Stow-A-Way Mini Storage has been operating for 29 years with the current exterior and interior lighting we have on each building and in each unit with no issues. We are, however, planning to upgrade our metal halide lamps to HP Sodium or LED that are consistent with the requirement for cut-off/dark sky compliant fixtures and proper Kelvin range as per City of Sandy code.

### **Landscaping**

Typical storage facilities do not tend to landscape within a facility, as it is very utilitarian in its use (tenants coming and going to drop off items to store) and not meant as a place to linger. Most facilities design landscaping around the outside perimeter of the facility, adjacent to the office or near the entrance to the facility itself. With the planter areas already in place adjacent to the facility and as Stowaway Mini Storage resides within our property, the Mt. Hood Industrial Park, we assert that our facility already meets the 15% landscape requirement per City of Sandy code. **We request a design deviation for submitting a "Landscape Plan."**

### **Parking**

C.W. Real Estate Co., Inc. dba Mt. Hood Industrial Park and Stowaway Mini Storage employs three fulltime employees. We submit that the parking requirement for employees is already addressed with respect to our facility office and has been for many years. While we do not currently have a bicycle rack installed (as our employees (our family) and the people coming and going to put their items in storage typically don't ride bicycles) **we are not opposed to equipping one vehicle parking space with a bike rack.**

### **Stormwater Management**

**Stowaway Mini Storage requests a design deviation for submitting a detailed stormwater analysis for all existing, proposed and non-approved impervious surfaces.** Stowaway Mini Storage has operated with our existing stormwater design for years. The portable storage units sit on concrete runners surrounded by the same graded gravel base that existed when the outside RV storage was in its place. At present, the area is graded, hard and compacted to drive majority of the water to the existing oil/water separator catch basin. If it is required of us to pave the approaches to the portable units, it is our belief that the current storm sewer design would collect and capture any additional water runoff related a newly paved impervious surface.

## Exhibit G



James Cramer <jcramer@ci.sandy.or.us>

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### Stow A Way Storage

1 message

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**Hassan Ibrahim** <hai@curran-mcleod.com>  
To: James Cramer <jcramer@ci.sandy.or.us>  
Cc: MW <mwalker@ci.sandy.or.us>

Tue, May 28, 2019 at 7:49 AM

Hi James,

I have reviewed the preliminary drainage report and it meets the City requirements for water quality and quantity. However, the site description doesn't state the site area as it is shown as "X" and we would also require a map delineating the different basins with the final drainage report submittal.

Regards,

-----  
Hassan Ibrahim, P.E.  
CURRAN-McLEOD, INC.  
[6655 SW Hampton St, Ste. 210](#)  
[Portland, OR 97223](#)  
Tel: 503-684-3478  
Fax: 503-624-8247  
Cell: 503-807-2737  
email: [hai@curran-mcleod.com](mailto:hai@curran-mcleod.com)



Exhibit H

James Cramer <jcramer@ci.sandy.or.us>

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**18-046 DR/VAR Stow-A-Way Storage Design Review, Deviation and Special Variance Request**

1 message

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Kristine Hendrix <Kristine.Hendrix@pgn.com>  
To: "jcramer@ci.sandy.or.us" <jcramer@ci.sandy.or.us>

Thu, May 30, 2019 at 12:47 PM

Please see attached. PGE show no Conflicts.

When Customer is ready please have them contact PGE – Service Coordinators at 503-323-6700.

Thank you,

**Kristine Hendrix** | Sr. Design Coordinator

Work Hours 6:30 am to 4:00 pm M – TH & 6:30 am to 10:30 am Fri

Portland General Electric

1705 NE Burnside, Gresham, OR 97030

| 📞: (503) 669-5214 | 📠: (503) 669-5229 | ✉️ [kristine.hendrix.@pgn.com](mailto:kristine.hendrix.@pgn.com)

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 **Mt Hood Industrial Park.pdf**  
364K





# Exhibit I

PARTITION PLAT NO. 2011-034  
SHEET 1 OF 4

A REPLAT OF PARCEL 3 AND PARCEL 4 OF  
PARTITION PLAT NUMBER 2000-037  
LOCATED IN THE NORTHEAST ONE-QUARTER OF  
SECTION 14, T. 2S., R. 4E., W.M., CITY OF SANDY,  
CLACKAMAS COUNTY, OREGON

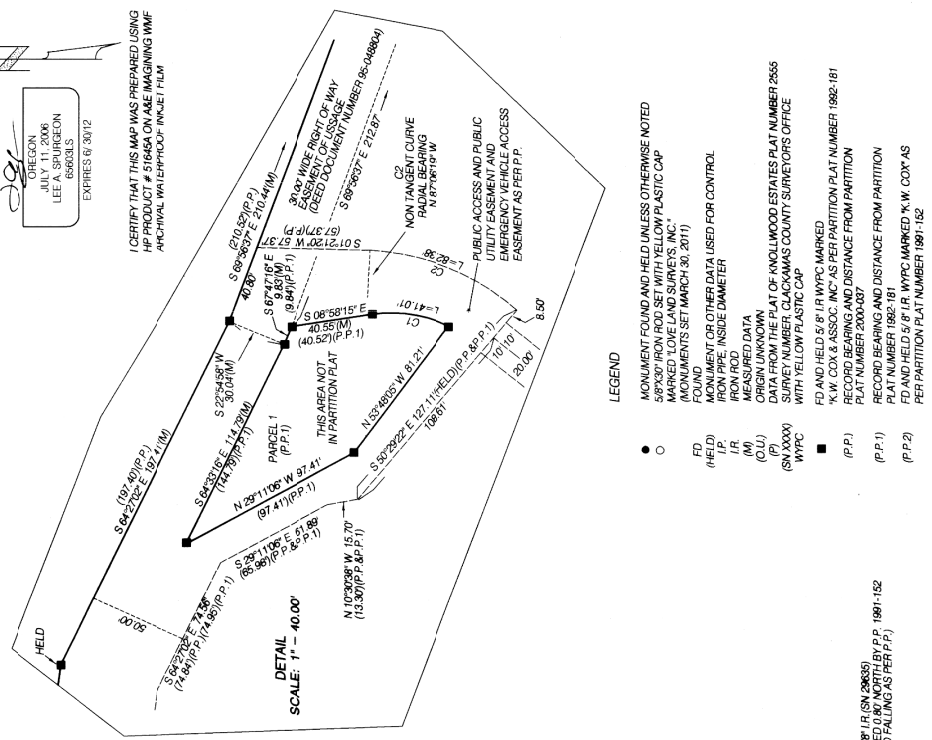
BY: LOVE LAND SURVEYS, INC.  
1415 WASHINGTON ST., OREGON CITY, OREGON 97045  
(503)656-4915

CLIENT: MARK CRIDER  
JOB NUMBER: 10-4947  
DATE: MARCH 30, 2011  
SCALE: 1" = 100.00'

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR  
  
OREGON  
JULY 11, 2006  
LEE M. GIBSON  
6826312  
  
EXPIRES 6/30/12

I CERTIFY THAT THIS MAP WAS PREPARED USING  
HP PRODUCT # 517634 ON A 4E IMAGING W/MF  
ARCHIVAL WATERPROOF INK/LET FILM

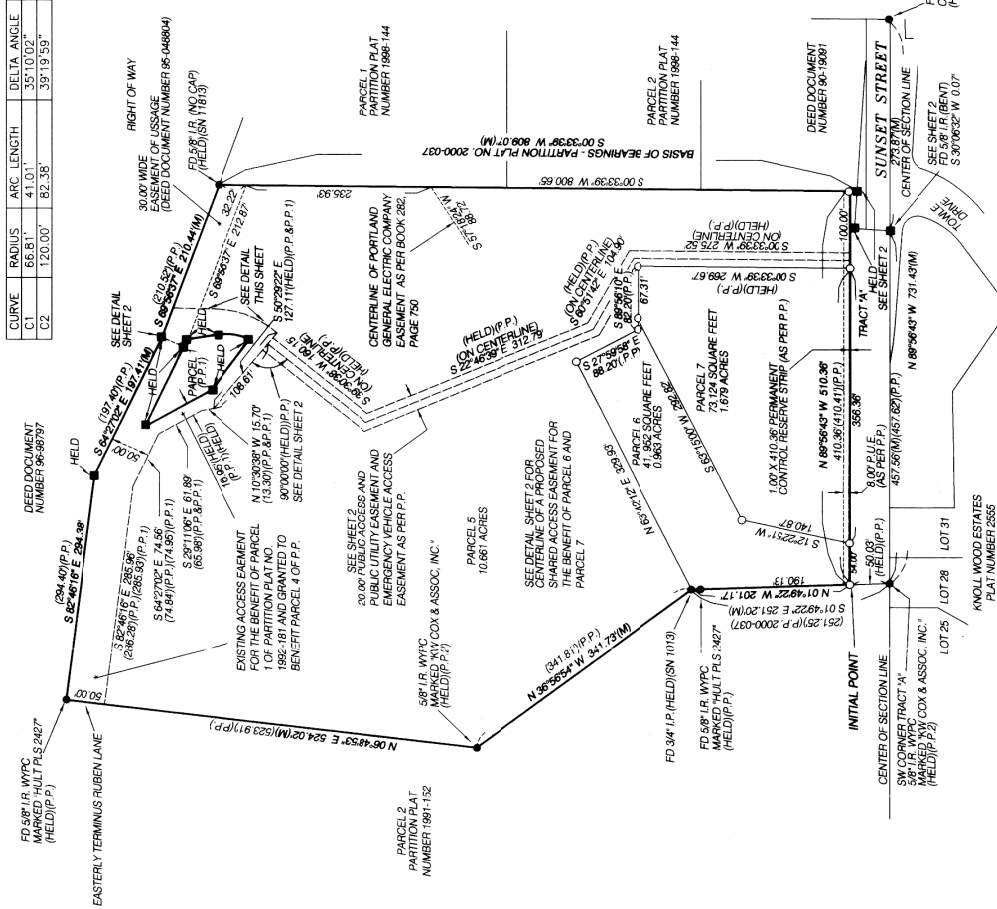
CURVE	RADIUS	ARC LENGTH	DELTA ANGLE	CHORD LENGTH	CHORD BEARING
C1	66.61'	41.01'	35°10'02"	40.37'	S 08°36'46" W
C2	120.00'	82.38'	39°19'59"	80.77'	S 27°33'40" W



### LEGEND

- MONUMENT FOUND AND HELD UNLESS OTHERWISE NOTED
- 50°30' IRON ROD SET WITH YELLOW PLASTIC CAP  
(MONUMENTS SET MARCH 30, 2011)
- FOUND (M)
- FOUND (M) IRON PIPE INSIDE DIAMETER
- FOUND (M) IRON ROD
- FOUND (M) MEASURED DATA
- FOUND (M) DATA FROM THE PLAT OF KNOLLWOOD ESTATES PLAT NUMBER 2555 SURVEY NUMBER, CLACKAMAS COUNTY SURVEYORS OFFICE WITH YELLOW PLASTIC CAP
- FD AND HELD 8' IF WYPC MARKED 'K.W. COX & ASSOC. INC.' AS PER PARTITION PLAT NUMBER 1982-181 RECORD BEARING AND DISTANCE FROM PARTITION PLAT NUMBER 2000-037
- RECORD BEARING AND DISTANCE FROM PARTITION PLAT NUMBER 1982-181
- FD AND HELD 8' IF WYPC MARKED 'K.W. COX & ASSOC. INC.' AS PER PARTITION PLAT NUMBER 1981-152

**SHEET INDEX:**  
SHEET 1. BOUNDARY SURVEY AND DETAIL  
SHEET 2. DETAIL OF THE CENTERLINE OF A PROPOSED SHARED ACCESS EASEMENT AND PUBLIC UTILITY EASEMENT AND EMERGENCY VEHICLE ACCESS EASEMENT AS PER P.P. 2007-037 AND EMERGENCY VEHICLE ACCESS EASEMENT AS PER P.P. 2007-037  
SHEET 3. DETAIL OF THE EXISTING 20.00' WIDE SANITARY EASEMENT TO CITY OF SANDY DEED DOCUMENT NUMBER 72-5240 DEFINES LOCATION MANHOLE TO MANHOLE (AS PER P.P. 1) AND DETAIL OF THE EXISTING 20.00' PUBLIC ACCESS AND PUBLIC UTILITY EASEMENT AND EMERGENCY VEHICLE ACCESS EASEMENT AS PER P.P. 1 AND  
DETAIL OF THE CENTERLINE OF A SHARED ACCESS EASEMENT FOR THE BENEFIT OF PARCEL 6 AND THE PRIVATE 3.00' WATERLINE EASEMENT FOR THE BENEFIT OF PARCEL 6 AND DETAIL OF THE 20' X 20' SHARIDORABARGE AREA FOR THE BENEFIT OF PARCEL 6  
SHEET 4. SURVEYORS CERTIFICATE, NARRATIVE, APPROVALS, DECLARATION, ACKNOWLEDGMENTS



**PARTITION PLAT NO. 2011-034**  
**SHEET 2 OF 4**

DETAIL OF THE CENTERLINE OF A PROPOSED SHARED ACCESS EASEMENT FOR THE BENEFIT OF PARCEL 6 AND PARCEL 7 AND DETAIL OF THE 20.00' PUBLIC ACCESS AND PUBLIC UTILITY EASEMENT AND EMERGENCY VEHICLE ACCESS EASEMENT AS PER P.P.

**A REPLAT OF PARCEL 3 AND PARCEL 4 OF PARTITION PLAT NUMBER 2000-037 LOCATED IN THE NORTHEAST ONE-QUARTER OF SECTION 14, T., 2S., R.4E., W.M., CITY OF SANDY, CLACKAMAS COUNTY, OREGON**

**BY: LOVE LAND SURVEYS, INC.**  
 1415 WASHINGTON ST., OREGON CITY, OREGON 97045  
 (503)656-4915

**CLIENT: MARK CRIDER**  
 JOB NUMBER: 10-4847  
 DATE: JUNE 30, 2011  
 SCALE: 1"=66.00'

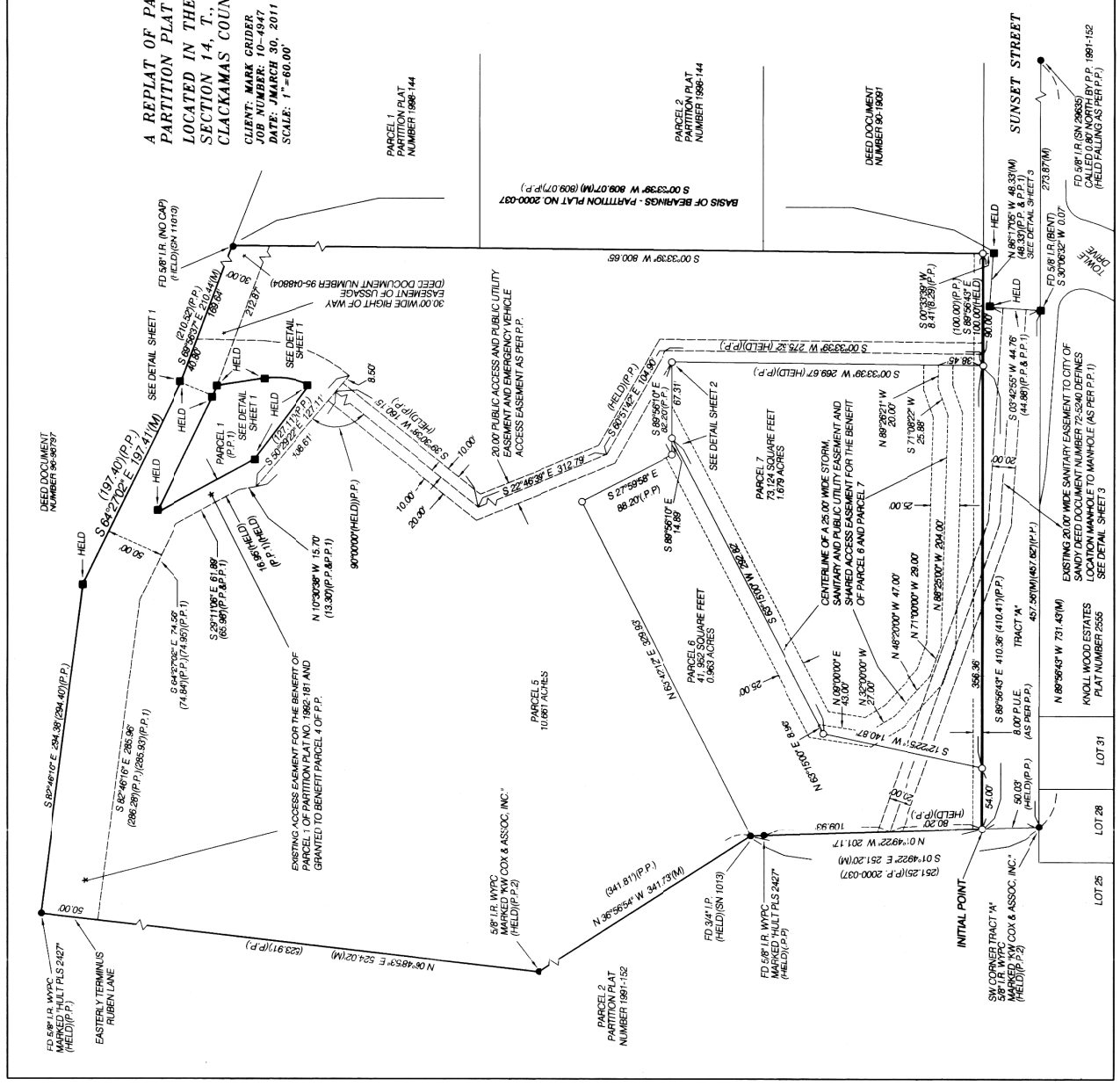
REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON  
 JULY 11, 2006  
 LEE SHARPE  
 (503)656-4915  
 EXPIRES 6/30/12

I CERTIFY THAT THIS MAP WAS PREPARED USING HP PRODUCT # 51645A ON AIE IMAGING WMF ARCHIVAL WATERPROOF INK-JET FILM

**LEGEND**

- MONUMENT FOUND AND HELD UNLESS OTHERWISE NOTED
- 5/8" IRON ROD SET WITH YELLOW PLASTIC CAP
- MARKED LOVE LAND SURVEYS, INC.
- MONUMENTS SET MARCH 30, 2011
- FOUND BUT NOT OTHER DATA USED FOR CONTROL
- IRON PIPE INSIDE DIAMETER
- IRON ROD
- MEASURED DATA
- ORIGIN UNKNOWN
- SURVEY NUMBER CLACKAMAS COUNTY SURVEYORS OFFICE
- W/PC (SN 0000) WITH YELLOW PLASTIC CAP
- FD AND HELD 5/8" IR W/PC MARKED K.W. COX & ASSOC. INC. AS PER PARTITION PLAT NUMBER 1982-181
- RECORD BEARING AND DISTANCE FROM PARTITION PLAT NUMBER 2000-037
- RECORD BEARING AND DISTANCE FROM PARTITION PLAT NUMBER 1982-181
- FD AND HELD 5/8" IR W/PC MARKED K.W. COX & ASSOC. INC. AS PER PARTITION PLAT NUMBER 1981-152



**A REPLAT OF PARCEL 3 AND PARCEL 4 OF  
PARTITION PLAT NUMBER 2000-037  
LOCATED IN THE NORTHEAST ONE-QUARTER OF  
SECTION 14, T., 2S., R. 4E., W.M., CITY OF SANDY,  
CLACKAMAS COUNTY, OREGON**

CLIENT: MARK GRUBER  
JOB NUMBER: 06-1847  
DATE: MARCH 30, 2011  
SCALE: 1"=60.00'

DJ: LOVE LAND SURVEYS, INC.  
115 WASHINGTON ST., OREGON CITY, OREGON 97045  
(503) 859-4975

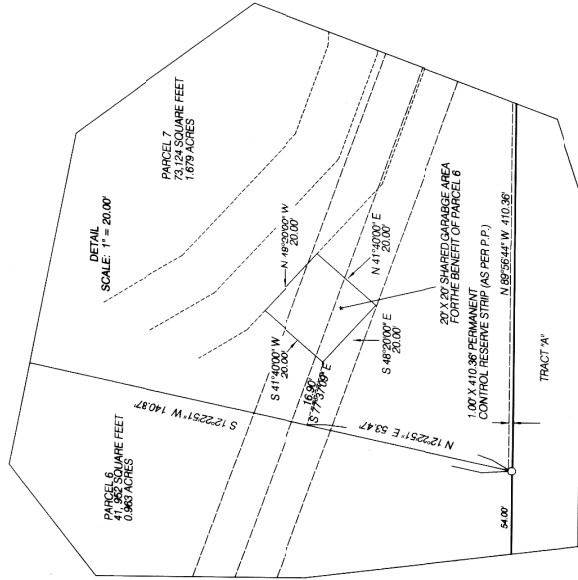
SHEET 3. DETAIL OF THE EXISTING 20.00' WIDE SANITARY EASEMENT TO CITY OF SANDY DEED DOCUMENT NUMBER 72-3840 DEFINES LOCATION MANHOLE (O) MANHOLE (AS PER P.P. 1), AND DETAIL OF THE EXISTING 20.00' PUBLIC ACCESS AND PUBLIC UTILITY EASEMENT AND DETAIL OF THE EXISTING VEHICLE ACCESS EASEMENT AS PER P.P. 1 AND DETAIL OF THE EXISTING 20.00' WIDE VEHICLE ACCESS EASEMENT FOR THE BENEFIT OF PARCEL 6 AND PARCEL 7 AND DETAIL OF THE CENTERLINE OF A 10.00' WIDE PRIVATE WATERLINE EASEMENT FOR THE BENEFIT OF PARCEL 6 AND THE PRIVATE 3.00' WATERLINE EASEMENT FOR THE BENEFIT OF PARCEL 6 AND DETAIL OF THE 20' X 20' SHARED GARAGE AREA FOR THE BENEFIT OF PARCEL 6

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
LEE A. SPURGEON  
65933LS  
EXPIRES 6/30/12

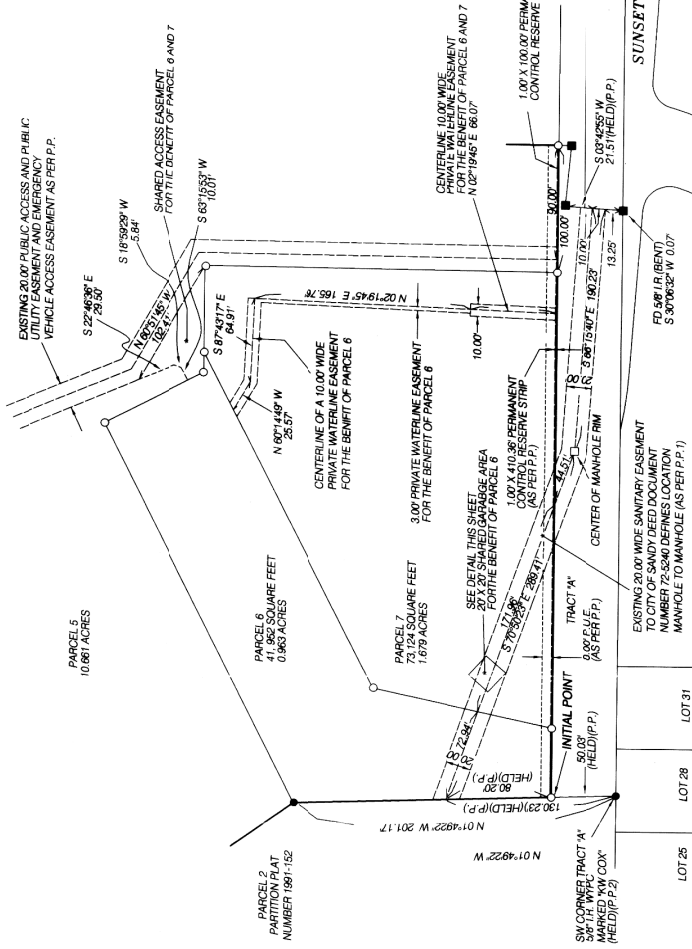
I CERTIFY THAT THIS MAP WAS PREPARED USING  
AN ELECTRONIC SURVEYING INSTRUMENT  
ARCHIVAL WATERPROOF PLOTTER FILM

**DETAIL SHOWING A 10.00 FOOT WATERLINE EASEMENT AND A SHARED ACCESS EASEMENT  
FOR THE BENEFIT OF PARCEL 6 AND 7**



**LEGEND**

- MONUMENT FOUND AND HELD UNLESS OTHERWISE NOTED
- 5/8" X 30" IRON ROD SET WITH YELLOW PLASTIC CAP
- FOUND (MONUMENTS SET MARCH 30, 2011)
- FOUND (MONUMENT OR OTHER DATA USED FOR CONTROL)
- FOUND (IRON PIPE, INSIDE DIAMETER)
- FOUND (MEASURED DATA)
- FOUND (ORIGIN UNKNOWN)
- FOUND (DATA FROM THE PLAT OF KNOWLEDGE ESTATES PLAT NUMBER 2355 SURVEY NUMBER CLACKAMAS COUNTY SURVEYORS OFFICE WITH YELLOW PLASTIC CAP)
- FOUND (FD AND HELD 9/8' IR WYPC MARKED 'K.W. COX & ASSOC. INC.' AS PER PARTITION PLAT NUMBER 1892-181 RECORD BEARING AND DISTANCE FROM PARTITION PLAT NUMBER 2000-037)
- FOUND (FD AND HELD 9/8' IR WYPC MARKED 'K.W. COX & ASSOC. INC.' AS PER PARTITION PLAT NUMBER 1892-181 RECORD BEARING AND DISTANCE FROM PARTITION PLAT NUMBER 1892-181)
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- FOUND (FD AND HELD 9/8' IR WYPC MARKED 'K.W. COX & ASSOC. INC.' AS PER PARTITION PLAT NUMBER 1892-181 RECORD BEARING AND DISTANCE FROM PARTITION PLAT NUMBER 1892-181)



A REPLAT OF PARCEL 3 AND PARCEL 4 OF  
PARTITION PLAT NUMBER 2000-037  
LOCATED IN THE NORTHEAST ONE-QUARTER OF  
SECTION 14, T., 2S., R.4E., W.M., CITY OF SANDY,  
CLACKAMAS COUNTY, OREGON

BY: LOVE LAND SURVEYS, INC.  
1415 WASHINGTON ST., OREGON CITY, OREGON 97045  
(503) 656-4915

CLIENT: MARK CRIDER  
JOB NUMBER: 10-4947  
DATE: MARCH 30, 2011

**SURVEYOR'S CERTIFICATE**

I, LEE A. SHURGEON, CERTIFY THAT I HAVE CORRECTLY SURVEYED AND MARKED WITH  
PROPER MONUMENTS THE LAND DESCRIBED IN THIS MAP,  
BEING A REPLAT OF PARCELS 3 AND 4 OF PARTITION PLAT NO. 2000-037, LOCATED IN THE  
NORTHEAST ONE-QUARTER OF SECTION 14, TOWNSHIP 2 SOUTH, RANGE 4 EAST OF THE  
WILLAMETTE MERIDIAN IN THE CITY OF SANDY, CLACKAMAS COUNTY, OREGON, AND WHICH  
IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE INITIAL POINT A FIVE-EIGHTHS INCH DIAMETER BY THIRTY INCH LONG  
IRON ROD WITH A YELLOW PLASTIC CAP MARKED LOVE LAND SURVEYS, INC. SET AT THE  
SOUTHWEST CORNER OF PARCEL 4, PARTITION PLAT NO. 2000-037; THENCE NORTH 01° 40' 27"  
WEST ALONG THE SOUTHERN PORTION OF THE EAST LINE OF PARCEL 2, PARTITION PLAT  
NO. 2000-037, A DISTANCE OF 137.50 FEET TO A THREE-EIGHTHS INCH DIAMETER IRON PIPE AT AN  
ANGLE OF 73° 17' 10" TO A FIVE-EIGHTHS INCH DIAMETER IRON ROD AT AN ANGLE OF 90°;  
PARCEL 2, 241.73 FEET TO A FIVE-EIGHTHS INCH DIAMETER IRON ROD; THENCE NORTH 88°  
46' 53" EAST ALONG THE NORTHERN PORTION OF THE EAST LINE OF SAID PARCEL 2 AND THE  
EASTERLY TERMINUS OF RUBEN LANE, 23.02 FEET TO A FIVE-EIGHTHS INCH DIAMETER IRON  
ROD WITH A YELLOW PLASTIC CAP MARKED K.W. COX & ASSOC., INC. AT THE INTERSECTION  
SOUTH 88° 46' 19" EAST ALONG THE SOUTH LINE OF SAID PARCEL 2, A DISTANCE OF 204.98 FEET TO A  
DEED DOCUMENT NO. 96-89797, CLACKAMAS COUNTY DEED RECORDS; 204.98 FEET TO A  
FIVE-EIGHTHS INCH DIAMETER IRON ROD WITH A YELLOW PLASTIC CAP MARKED K.W. COX &  
ASSOC., INC. AT AN ANGLE POINT; THENCE SOUTH 64° 27' 02" EAST ALONG THE SOUTH LINE  
FROM PARCEL 2, A DISTANCE OF 197.41 FEET TO A FIVE-EIGHTHS INCH DIAMETER  
IRON ROD; THENCE SOUTH 88° 56' 37" EAST ALONG THE SOUTH LINE OF SAID PARCEL 2,  
96-89797 TRACT, 210.44 FEET TO FIVE-EIGHTHS INCH DIAMETER IRON ROD AT THE  
NORTHWEST CORNER OF PARCEL 1, PARTITION PLAT NO. 1986-144; THENCE SOUTH 00°  
33' 06" WEST ALONG THE WEST LINE OF PARTITION PLAT NO. 1986-144 AND THAT TRACT OF  
LAND DESCRIBED IN DEED DOCUMENT NO. 96-19887, CLACKAMAS COUNTY DEED RECORDS,  
THENCE NORTH 89° 56' 43" WEST ALONG THE NORTH LINE OF SAID TRACT A: 510.36 FEET TO  
THE INITIAL POINT.

EXCEPTING THEREFROM PARCEL 1, PARTITION PLAT NO. 1982-181.

SAID LAND WITH EXCEPTION CONTAINS 13.303 ACRES

LEE A. SHURGEON - 66806LS

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
JULY 11, 2006  
LEE A. SHURGEON  
66806LS  
EXPIRES 6/30/12

I CERTIFY THAT THIS MAP WAS PREPARED USING  
HP PRODUCT # 51645A ON A GE INMAGING W/MF  
ARCHIVAL WATERPROOF INKJET FILM

**NARRATIVE:**

THE BASIS OF BEARINGS OF THIS SURVEY IS THE EAST LINE OF PARCEL 3 OF PARTITION PLAT NO. 2000-037 WHICH IS SHOWN AS SOUTH 00°  
33' 06" WEST ON THE ATTACHED SURVEY MAP  
FOR THE PURPOSE OF THIS SURVEY, PARCELS 3 AND 4 OF PARTITION PLAT NO. 2000-037 TO ORIGINATE ONE ADDITIONAL PARCEL AND  
TO RECONVEY THE COMMON LINE BETWEEN PARCELS 3 AND 4 OF PARTITION PLAT NO. 2000-037 TO RESOLVE A BUILDING ENCROACHMENT ISSUE  
WITH THE EXCEPTION OF THE SOUTH LINE OF PARCELS 3 AND 4 OF PARTITION PLAT NO. 2000-037, THESE PARCELS, PARCELS 3 AND 4, WERE DETERMINED BY HOLDING MONUMENTS FOUND OR HEED BY PARTITION PLAT NO. 2000-037. THESE MONUMENTS  
WERE MEASURED AND FOUND WITHIN ACCEPTABLE TOLERANCES AND REPRESENT THE BEST EVIDENCE OF THE TRUE BOUNDARY LINES OF  
SAID PARCELS. THE EAST-WEST CENTER OF SECTION 14 WAS DETERMINED BY HOLDING AN IRON ROD AT THE  
SOUTHWEST CORNER OF PARCEL 4, PARTITION PLAT NO. 2000-037 AND A FALLING OF 0.00 TO THE SOUTH OF AN IRON ROD SET BY SN  
20083 WAS PER PARTITION PLAT NO. 2000-037. THE EAST-WEST CENTER OF SAID PARCELS 3 AND 4 WAS DETERMINED BY HOLDING A LINE WHICH IS  
50.00 FEET NORTH OF AND PARALLEL WITH THE EAST-WEST CENTER OF SECTION LINE OF SECTION 14, AS PER PARTITION PLAT NO. 2000-037.

**NOTES:**

ALL BEARINGS AND DISTANCES ON THE ATTACHED SURVEY MAP ARE CALCULATED, UNLESS SPECIFICALLY STATED OTHERWISE.  
THIS PLAT IS SUBJECT TO RESTRICTIONS IMPOSED BY PARTITION PLAT NO. 2000-037 AND PARTITION PLAT NO. 1982-181.  
THIS PLAT IS SUBJECT TO COVENANTS, CONDITIONS AND RESTRICTIONS, INCLUDING THE TERMS AND PROVISIONS THEREOF, AS  
RECORDED IN DEED DOCUMENT NO. 73-033894, CLACKAMAS COUNTY DEED RECORDS.  
THIS PLAT IS SUBJECT TO TERMS OF A PORTLAND GENERAL ELECTRIC COMPANY POWERLINE EASEMENT AS RECORDED JULY 18, 1941 IN  
BOOK 282, PAGE 758, CLACKAMAS COUNTY DEED RECORDS.  
THIS PLAT IS SUBJECT TO TERMS AND CONDITIONS OF A RESTRICTIVE COVENANT FOR FUTURE PARTICIPATION IN STORM DRAINAGE  
FACILITIES AS RECORDED IN DEED DOCUMENT NO. 96-042078, CLACKAMAS COUNTY DEED RECORDS.  
THIS PLAT IS SUBJECT TO TERMS AND CONDITIONS OF A ROAD MAINTENANCE AGREEMENT AS RECORDED IN DEED DOCUMENT NO.  
2000-008723, CLACKAMAS COUNTY DEED RECORDS.  
THIS PLAT IS SUBJECT TO TERMS AND CONDITIONS OF AN EASEMENT AND MAINTENANCE AGREEMENT FILED AS DEED DOCUMENT NO.  
96-77822, CLACKAMAS COUNTY DEED RECORDS.  
THIS PLAT IS SUBJECT TO TERMS AND CONDITIONS OF A RESTRICTIVE COVENANT CONCERNING ADDITIONAL STORM DRAINAGE CAPACITY,  
FILED AS DEED DOCUMENT NO. 96-042078, CLACKAMAS COUNTY DEED RECORDS.  
**THIS PLAT IS SUBJECT TO TERMS AND CONDITIONS AS SET FORTH IN PARAGRAPHS 1, 2, AND 3 OF THE DEED RECORDS.**  
**DECLARATION**  
I, CRAIG WARNOCK, KNOW ALL MEN BY THESE PRESENTS THAT WE, CRAIG WARNOCK, OWN REAL ESTATE (PARCEL 3)  
AND DESCRIBE THE SAME IN PARCEL 3 OF THE ATTACHED MAP  
AND DESCRIBE THE SAME IN PARCEL 4 OF THE ATTACHED MAP  
AND I HAVE CAUSED THE RECONVEYANCE OF PARCELS 3 AND 4  
AND THE PROPERTY PARTITIONED IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 82 OF  
OREGON REVISED STATUTES AND DO HEREBY GRANT ALL THE EASEMENTS AND RESTRICTIONS AS  
SHOWN AND NOTED.

CRAIG WARNOCK  
MARK CRIDER

**ACKNOWLEDGMENT**

STATE OF OREGON )  
COUNTY OF CLACKAMAS )  
THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON  
MAY 18, 2011  
BY CRAIG WARNOCK and MARK CRIDER  
CRIDER SIGNATURE  
CRIDER SIGNATURE  
CRAIG WARNOCK )  
NOTARY PUBLIC-OREGON

COMMISSION NO. 449295

MY COMMISSION EXPIRES JUNE 13, 2014

**APPROVALS**

APPROVED THIS 17<sup>th</sup> OF \_\_\_\_\_ DAY OF \_\_\_\_\_  
FILE NUMBER 11-00096PFLA, MT. HOOD INDUSTRIAL PARK  
BY: *[Signature]*  
CITY OF SANDY PLANNING DEPARTMENT

APPROVED THIS 23<sup>rd</sup> OF \_\_\_\_\_ 2011  
BY: *[Signature]*  
CLACKAMAS COUNTY SURVEYOR

ALL TAXES, FEES, ASSESSMENTS AND OTHER CHARGES AS  
PROVIDED BY ORS 92.086 HAVE BEEN PAID THROUGH  
JUNE 30, 2011.

APPROVED THIS 6<sup>th</sup> DAY OF \_\_\_\_\_ 2011  
BY: *[Signature]*  
CLACKAMAS COUNTY ASSESSOR & TAX COLLECTOR

STATE OF OREGON )  
COUNTY OF CLACKAMAS )

I DO HEREBY CERTIFY THAT THE ATTACHED PLAT WAS  
RECEIVED FOR RECORD ON

THE 6 DAY OF \_\_\_\_\_ 2011 AT

O'CLOCK PM.

AS PER PLAT NO. 2011-034

AS DOCUMENT NO. 201-032646

SHERY HALL, CLACKAMAS COUNTY CLERK  
BY: *[Signature]*  
DEPUTY

**PRE-APPLICATION CONFERENCE NOTES**

**Project Name:** Warnock Self Storage

**Pre-Application Conference Date:** February 1, 2018

**Applicant Name:** Christopher Warnock/CW Real Estate

**Site Address:** 37330 Ruben Lane

**Staff:** Emily Meharg, James Cramer, Mike Walker

**Fire Marshal Comments:** The Fire District will review fire flow and access.

**PLANNING DEPARTMENT REVIEW**

**Sandy Development Code:** Sandy Development Code Sections 17.12 Procedures for Decision Making; 17.18 Processing Applications; 17.22 Notices; 17.30 Zoning Districts; 17.50 I-2, Light Industrial; 17.66 Adjustments and Variances (possible); 17.90 Design Standards; 17.92 Landscaping and Screening; 17.98 Parking, Loading and Access Requirements; 17.102 Urban Forestry; and Chapter 15.30 Dark Sky.

***Caveat:*** *This analysis includes a review of those code sections that may conflict with the proposed design as submitted. This review is not intended to be a comprehensive analysis of all applicable code sections.*

- Buildings require pedestrian access with an entrance facing a public street or designated pedestrian way. Minimum pedestrian walkway width is 5 feet. (17.90.130(E)(1) and 17.90.130(G)(2))
- Buildings must have a covered pedestrian entryway at least 4 feet deep (17.90.130(E)(5)). Design deviation request needed?
- Building entries must comply with the accessibility requirements of the Oregon State Structural Specialty Code (17.90.130(B)(2)). ADA accessibility likely not needed for proposed storage units but need to submit analysis of ADA accessibility on the site as a whole to determine number of units that provide ADA access.
- Roof pitch at 3:12. Flat roofs (with minimum pitch for drainage) are permitted with detailed stepped parapets or detailed brick coursing. Visible roof materials must be wood or architectural grade composition shingle, slate, tile or sheet metal with standing or batten seam. (17.90.130(D)(1-4))
- Buildings require an identification system, which clearly locates buildings and their entries for patrons and emergency services. (17.90.130(I)(3))
- Windows, which allow views to the interior activity or display areas, are encouraged.
- Preferred colors for exterior building finishes are earth tones, creams, and pastels of earth tones.
- Where will the lighting be installed? Lighting is needed for security and for pedestrians to see walking surfaces. Need to submit a Lighting Plan compliant with Chapter 15.30. All lighting shall be full cut-off and not exceed 3,000 Kelvins to minimize negative impacts on wildlife and human health.
- Light Industrial (I-2) has a requirement to contain at least 15 percent landscaping for the site. What is the proposed landscaping percentage for the site? The Landscape Plan shall include all existing and proposed trees. At least 3 trees per acre (11-inch DBH or greater) must be retained.
- What is the plan for parking? Per Section 17.98.20(A)(9), at least 1 space per employee on the largest shift, plus 1 space per every 2 employees is required. At least two bicycle parking spaces are required. Parking areas, driveways, aisles, and turnarounds shall be paved with concrete, asphalt or comparable surfacing, constructed to City standards for off-street vehicle areas. 5' x 17' planters with structural tree and groundcover required at each end of parking bay.
- What is the stormwater management plan? Submit a detailed stormwater analysis for all existing, proposed and non-approved impervious surfaces.
- SDCs for transportation will be \$853.86 per 1000 SF of gross floor area. Since there are no other utility connections the SDC that is applicable is the transportation SDC.

**Application Process:** Type II Design Review. Type III Design Review if design deviations are requested.

**Projected Processing Steps:**

- Submittal Requirements: Land Use Application, narrative for applicable code sections, mailing lists for all property within 200 feet (Type II) or 300 feet (Type III), fees, site plan, landscape plan (including tree retention), utility plan, grading and erosion control plan, photometric analysis, lighting fixture cut sheets, stormwater analysis, and traffic letter.
- Staff review for completeness (30 days max.), if determined incomplete then the applicant submits additional information as required, staff then reviews for completeness again, if the application is deemed complete then the application is processed.
- Building permit for self-storage will be required prior to Certificate of Occupancy for Advanced Plastics storage building (File No. 17-045 DR)

PRE-APPLICATION CONFERENCE NOTES

Exhibit K

**Project Name:** Warnock Self Storage (2<sup>nd</sup> meeting, 1<sup>st</sup> meeting held 2/1/18)

**Pre-Application Conference Date:** March 4, 2019

**Applicant Name:** Christopher Warnock/CW Real Estate

**Site Address:** 37330 Ruben Lane

**Staff:** Kelly O’Neill Jr., James Cramer

**PLANNING DEPARTMENT REVIEW**

**Sandy Development Code:** Sandy Development Code Sections 17.12 Procedures for Decision Making; 17.18 Processing Applications; 17.22 Notices; 17.30 Zoning Districts; 17.50 I-2, Light Industrial; 17.66 Adjustments and Variances (possible); 17.90 Design Standards; 17.92 Landscaping and Screening; 17.98 Parking, Loading and Access Requirements; 17.102 Urban Forestry; and Chapter 15.30 Dark Sky.

*Caveat: This analysis includes a review of those code sections that may conflict with the proposed design as submitted. This review is not intended to be a comprehensive analysis of all applicable code sections.*

**Definitions (17.10.30):**

Accessory Use: A use on the same lot with and of a nature customarily incidental and subordinate to the principal use.

Accessory Structure (Detached): A structure that is clearly incidental to and subordinate to the main use of property and located on the same lot as the main use; freestanding and structurally separated from the main use.

*Staff Response: As described within the submitted narrative, the primary use located on property is a mini self-storage business (Stow-A-Way Storage) and the proposal structure(s) is also for self-service storage. The use is therefore not incidental or subordinate to the principal use however an extension of the primary use (self-storage). The structure does not meet the criteria of being “subordinate to the main use of the property” (self-storage) therefore cannot be classified as an accessory structure and must adhere to the design regulations of 17.90.130.*

**Temporary Uses or Structures (17.74.60):**

17.74.60(C) Portable Outdoor Storage Unit: Portable outdoor storage units may be placed on a lot, including within the setback areas, for not more than 60 days (any portion of a day, between 12:00 a.m. and ending at 11:59 p.m., shall be counted as a day) within any 12 month period.

*Staff Response: The narrative submitted identifies the proposed structure(s) as “portable storage units” therefore would be limited to the above duration (17.74.60(C)). To exceed these limitations the proposed structure must be permanently affixed to the site per building code standards as well as meet any applicable development standards including but not limited to: site development standards, landscaping, lighting and design regulations.*

**Planning:**

- 17.90.10(A)(1) states all new construction within a Commercial or Industrial Zoning Districts are subject to the design criteria of Chapter 17.90 and none of the exceptions (17.90.10(B-F)) exempt “prefabricated structures” from adhering to development regulations therefore the proposed structure will have to conform to the applicable code sections identified above.
- To meet the design regulations of 17.90.130 the applicant must be granted the following:
  - *Special Variance from 17.50.30(A) to allow the proposed structures to be within the front 30-foot setback requirement. Request identified within submitted narrative.*



- *Design Deviation from 17.90.130(C)(3) to allow flat/sheet metal siding when this section prohibits it. Request identified within submitted narrative.*
- *Special Variance from 17.90.130.D.1-4 to reduce the required 3:12 roof pitch to a flat roof top (\$1,070 review fee). Identified in submitted narrative*
- *Design Deviation from 17.90.130.E.1 to completely waive the required entry orientation\*.*
- *Design Deviation from 17.90.130.E.3 to eliminate an entrance connection directly between the right-of-way and the building interior\*.*
- *Design Deviation from 17.90.130.E.5 (similar req. in Sec. 17.90.130(C)(8)) to completely waive the required entry shelter. Request identified within submitted narrative\*.*
- *Design Deviation from 17.90.130.H to eliminate the required lighting required for the site (\$430 review fee) or provide photometric study and cut sheet of lighting fixtures for compliance determination or justify existing lighting is sufficient.*
- *Submit a storm water management plan or provide written notice that the missing information will not be provided.*

*\*17.90.130(E)(1,3&5) design deviations should be justified in the narrative however only one \$430 processing fee will be required. ii*

- Submit an updated, to scale, site plan (Exhibit B identified on the submitted narrative) for review.
- Submit a copy of Exhibits: B, C, D and E as identified on the submitted narrative.
- 17.18.40(D) on the 181st day after initial submission, an application is void if the Director has notified the applicant of missing information and the applicant has not responded as described in subsection 17.18.40(C). Please note staff believes the intent of the “180-Day date for completeness 3/26/19” identified on the cover of the submitted narrative is intended to illustrate the application void date. If this is the case, please update accordingly to reduce the potential for future misunderstanding. The 181<sup>st</sup> date from initial submission would be 3/27/19.

**Total fees:**

Type III Design Review (\$25,001 - \$100k)	\$1,710
Special Variance (17.50.30(A))	\$1,070
Special Variance (17.90.130(D)(1-4))	\$1,070
Design Deviation (17.90.130(C)(3))	\$430
Design Deviation (17.90.130(E)(1,3&5))	\$430
<i>Total Due</i>	<i>\$4,710</i>
<i>Total Paid</i>	<i>\$3,845</i>
<b><i>OUTSTANDING BALANCE</i></b>	<b><i>\$865</i></b>

**Application Process:** Type III Design Review and Type III Special Variance processes.

**Projected Processing Steps:**

- Submittal Requirements: narrative for applicable code sections, mailing labels for all property owners within 500 feet of subject property, fees, site plan, photometric analysis, lighting fixture cut sheets, preliminary Stormwater Report (Exhibit D), and Exhibits C & E identified within submitted narrative.
- Staff review for completeness (30 days max.), if determined incomplete then the applicant submits additional information as required, staff then reviews for completeness again, if the application is deemed complete then the application is processed.
- Building permit for self-storage will be required prior to Certificate of Occupancy for Advanced Plastics storage building (File No. 17-045 DR)