

Site Management Plan
J.H. Baxter & Co.
Eugene, Oregon Facility



Prepared for:

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April 2009



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Acronyms and Abbreviations

Baxter	J. H. Baxter & Company
BMP	Best Management Practices
DEQ	Oregon Department of Environmental Quality
DOT	Department of Transportation
EES	Easement and Equitable Servitudes Agreement
HSP	Health and Safety Plan
IRAM	Interim Remedial Action Measures
mg/kg	milligrams per kilogram
ND	non detect
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PAH	polycyclic aromatic hydrocarbons
PCP	pentachlorophenol
PPE	personal protective equipment
Premier	Premier Environmental Services, Inc.
RI	Remedial Investigation
SMP	Site Management Plan

1 Introduction

The J.H. Baxter Project Team, consisting of J.H. Baxter & Co. (Baxter) and Premier Environmental Services Inc. (Premier) has prepared this Site Management Plan (SMP) as part of the Easement and Equitable Servitudes (EES) Agreement between Baxter and the Oregon Department of Environmental Quality (DEQ). This SMP provides for long term monitoring and care for the capped portion of Baxter’s wood-treating facility located in Eugene, Oregon (Eugene facility) (Figure 1).

The objectives of the monitoring and maintenance activities described in this SMP are to address concerns with care and management the capped area at the Facility. This SMP includes the following monitoring and maintenance activities:

- Maintenance of the engineered cap
- Provisions for quarterly inspections of the engineered cap
- Soil management plan for potential excavation and trenching activities
- Provisions for a site-specific Health and Safety Plan prior to excavation or trenching activities.

These activities are described in more detail in subsequent sections of this Plan. A quarterly inspection form is included in Attachment 1.

2 Facility Background

2.1 Facility Location and Description

Baxter's Eugene facility is a 42.5 acre wood processing and preservation plant site located at 85 N. Baxter Street, Eugene, Oregon. The location of the Eugene facility and a site plan are provided in Figures 1 and 2, respectively.

The site vicinity consists primarily of residential, commercial, and industrial properties. The facility is bordered to the northwest by Roosevelt Boulevard. Additionally, commercial properties including Yale Transport, Armored Transport, and Lile of Oregon are located northeast of the facility along Roosevelt Boulevard. The facility is bordered to the south by Southern Pacific Railroad; and to the west by Zip-O-Log Manufacturing, Cascade Plating and Machine, Heli-Jet, and residential properties located along Cross Street.

In 2007, Baxter placed an engineered cap on the western portion of the facility (Figure 2). In 2008, the property lines were adjusted so that the capped area was entirely within two parcels. The portion of the property with the engineered cap is located in the Southeast 1/4 of Section 27, and NW 1/4 SW 1/4 Section 26, Township 17 South, Range 4 West, Willamette Meridian. A complete legal description of the capped area is provided in the EES.

2.2 Site History

Baxter constructed the Eugene facility and began operations in 1943. The facility included an office building, a retort, working tanks for treating solution storage, and numerous buildings and sheds as generally shown in Figure 2. The earliest treating

processes used creosote formulations in a single retort. In 1945, a second retort was added for treating wood products with pentachlorophenol (PCP). In 1952, the Eugene facility started using metals-based treating solutions, and in 1955 began treating wood products with fire retardants. Three additional retorts were added between 1966 and 1970.

2.3 Summary of Environmental Conditions Beneath the Engineered Cap

The eastern portion of the Eugene facility is the location where the engineered cap was constructed, as shown in Figure 2. This area was formerly used for storage of both treated and untreated wood products, and contained several small buildings and a pole incisor, all of which have been removed.

Since no active treatment operations have ever been conducted in the eastern storage yard, the presence of site-related chemicals is likely related to secondary sources, such as storage of treated wood. As such, concentrations of site-related chemicals in soils are low.

Of the ten soil samples collected between 1995 and 1999 (not including samples related to the Offsite Tax Lot Removal Action) in the proposed cap area, only arsenic is present above risk-based standards. Arsenic concentrations in the capped area range from 15.2 mg/kg to 123 mg/kg. No pentachlorophenol was detected in the area, and only low levels of polyaromatic hydrocarbons, copper, chromium, and zinc were detected; all of which were below risk-based standards.

No groundwater monitoring wells are present in the area of the engineered cap. However, long-term monitoring of an extensive groundwater monitoring well network

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has indicated that dissolved metals concentrations are below levels of concern, and arsenic is not adversely affecting groundwater.

3 Engineered Cap

As described in the Interim Remedial Measures Completion Report (Pantheon 2008), the engineered cap was designed to isolate affected soils and to prevent migration of fines beneath the cap to the surface.

Pre-construction activities included the removal of iron rails, concrete pads, closing stormwater catch basins, relocation of the incisor and grading the ground surface to fill low areas, and surveying the site.

After the catch basins were closed and the capping area was graded to a level surface, a geotextile fabric was placed over all areas to be capped. The geotextile fabric was used to provide a visual barrier between the existing surface and the clean cap material, as well as to minimize the migration of fines upwards into the engineered cap. The fabric used was a four ounce, non-woven geotextile fabric. The material was overlapped and secured as it was placed to ensure proper coverage.

Crushed aggregate (1 ½ in. minus) was placed in six-inch lifts starting in the northern portion of the capping area. Each six-inch lift was rough graded using a Cat D-6 bulldozer. Once the surface was graded and smoothed, the surface was compacted using an 84” self-propelled, vibratory compactor. The engineered cap construction proceeded in this manner from the northern portion to the southern boundary of the capping area. As construction progressed, the final surface was graded such that precipitation would drain to the western and southern boundaries of the cap. In all, approximately 37,900 tons of crushed aggregate were placed at the site.

In order to verify compliance with the design standard of a minimum 12-inch cap thickness, survey control points were established at 14 locations prior to placement of the crushed aggregate. Each of these points was initially surveyed for pre-construction elevation on November 11, 2007, by D. Wellman Surveying LLC. Upon completion of the crushed aggregate placement, the surveyor returned to the Facility on December 21, 2007, to verify that at least 12 inches of capping material was present at each of the control point locations.

4 Site Management

In accordance with the EES, Baxter, future lessees, or owners are required to conduct monitoring and maintenance activities of the engineered cap for the eastern portion of the facility. The objectives of the monitoring and maintenance program are:

1. Monitor stormwater and drainage at the engineered cap area.
2. Monitor potential erosion or malfunction of the engineered cap.
3. Monitor for airborne dust from the engineered cap area.

In addition to the monitoring and maintenance activities, the EES required provisions for soils management in the event that excavation or trenching activities are conducted in the capped area, as well as provisions for a health and safety plan, as described in the following sections.

4.1 Maintenance and Monitoring

4.1.1 Cap inspection

The capped area will be inspected at least quarterly for signs of erosion, improper stormwater drainage, or other factors that could affect the integrity of the engineered cap. In addition, the fence surrounding the capped area will be inspected for damage and unauthorized entry. Repairs to the cap and/or fence will be completed in as soon as possible.

Although the material of the cap consists of clean, compacted gravel, the potential for airborne dust exists during extended dry periods. Baxter or any future lessee or owner

will observe air quality conditions during dry periods, and apply engineering controls such as application of clean, potable water as necessary.

A quarterly cap inspection form is included in Attachment 1. This form will be completed as appropriate and filed with other inspection reports in the main office. Documentation of repairs or corrective measures will be filed in the same location.

4.1.2 Stormwater Management

In 1997, Baxter installed a stormwater collection and treatment system, consisting of catch basins located around the Facility, aboveground piping to the stormwater collection tanks, flocculation and precipitation systems, and granulated activated carbon treatment. Several upgrades to the treatment system have been made since 1997, and treated water is discharged to an outfall under a NPDES Permit. Stormwater falling on the engineered cap area either infiltrates into the ground, or is captured in a series of drainage ditches on the west and south sides of the capped area. Stormwater collected in the ditches is routed to a sump located in the southwest corner of the capped area, and is piped to the treatment system. Stormwater monitoring is conducted in accordance with the current NPDES permit requirements for the Eugene Facility.

Currently, the area is graded to channel stormwater to the southwest corner of the capped area. Stormwater collected in this area flows through an opening in a large sump located just outside of the fenced area, and is treated by the existing stormwater treatment system. In the future, stormwater may be routed directly to the drainage ditch that flows along the southern facility boundary, pending review of stormwater analytical data and revision of the existing NPDES permit.

Inspection of the drainage system will be conducted at least quarterly as part of the routine quarterly inspections. Erosion features that may be indicative of inadequate drainage will be documented and improvements will be made as. The shallow ditches

will be inspected quarterly and after major storm events to identify any accumulation of debris or obstruction that may have occurred. Accumulated materials will be removed and properly disposed of. Any needed repairs to the ditches will also be implemented. The inspection will be documented in the Quarterly Cap Inspection Form included as Attachment 1.

4.2 Site Security

Baxter will comply with basic security provisions as follows:

- The engineered capped area will be fenced off from the remainder of the property.
- Entry through the gates or other entrances to the active portion of the facility will continue to be controlled at all times. Entry will be controlled by an attendant, locked entrance, or controlled roadway access.

Security measures will be evaluated annually and documented on the Quarterly Compliance Checklist included in Attachment A.

4.3 Soils Management

Any intrusive activities, such as trenching or excavation of soils beneath the engineered cap will require the preparation of a task-specific health and safety plan before implementing the work based on the health and safety protocols described in Section 4.3. In addition, DEQ will be notified of any intrusive activities at least 30 days prior to field work.

The soil removed from beneath the cap will be segregated from clean cap material, and placed in separate areas on new water-proof plastic liner (or equivalent) and covered with plastic tarp or liner. Best management practices (BMPs) will be implemented to prevent stormwater contact with the excavated soil during precipitation events (e.g., high

intensity rainfall). During dry periods, excavated soil will be periodically sprayed or misted with water, if necessary, to prevent affected fines or particulates from the affected soil beneath the cap to become airborne.

Additionally, any equipment or vehicles that come in contact with soil beneath the cap will be decontaminated in a pre-designated area at the site that will be designed to capture the rinsate water and soil/sediment for later disposal in new, clearly labeled, 55-gallon drums. The liners/tarp and drums will be secured and maintained at the facility until samples are collected from the soil piles and drums, and based on the results, disposed of in accordance with local, state and federal applicable regulations. Any disposable items, such as Tyvek booties or disposable nitrile gloves which come in contact with excavated soil will be placed in the appropriate contractor grade garbage bags, stored at the facility, and disposed of in accordance with local, state and federal applicable regulations.

Finally, any disturbed location in the capped area will be restored to pre-development condition. This includes the replace of the geotextile liner, overlapping with the edges of the existing liner, and replacement of the clean cap, with the same physical characteristics as the current cap material, to a depth of 12-inches. The cap material will be replaced in accordance with the same specifications described in the Interim Remedial Measures Completion Report (Pantheon 2008).

4.4 Health and Safety

For any excavation, trenching, or other activity that involves the potential exposure to soils beneath the engineered cap, a task or project-specific Health and Safety Plan (HSP) will be prepared in accordance with the requirements in Occupational Safety and Health Administration (OSHA), Title 29, Code of Federal Regulations (CFR), Part 1910.120 (29CFR1910.120). Contractors will be required to follow the directives of the HSP. The HSP will address the following topics:

- A brief site history of the Facility and capped area.
- A section on Training and Medical Requirements. All personnel who are expected to participate in on-site activities are required to have completed the 40-hour (hr) Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) training course and medical surveillance examination as required in OSHA 29CFR1910.120. Site-specific training of personnel will include the site history, hazard evaluation, standard operating procedures, decontamination procedures, proper selection and use of personal protective equipment (PPE) and emergency procedures.
- A section on site activity, describing the field activities to be implemented during the excavation or trenching in the capped area.
- A section on hazard assessment, a list of chemical, biological, radioactive, and physical hazards, as applicable, that may be encountered during site activities.
- A section on air monitoring, describing the equipment and meters (if any) used to monitor the work zone for potential airborne hazards during site activities, and the proper PPE for on-site workers to wear based on measurements.
- A section on PPE, describing the proper PPE for workers to wear based on existing and potential hazardous materials that may be encountered during site operations on the capped area. For most site activities, Level D PPE should be adequate, but equipment and supplies should be readily available at the Facility to upgrade PPE to Level C if necessary.
- A section on decontamination, describing the methods used to prevent affected soil beneath the clean cap and liner from leaving the work zone. This section will include personnel decontamination (removal of gloves, booties, and Tyvek, rinsing/cleaning of boots, etc.), portable equipment decontamination (rinsing/cleaning of shovels, augers, meters, etc.) and heavy equipment decontamination (high-pressure steam cleaning of backhoes, bulldozers, vehicles, etc.).
- A section on site control measures. The HSP will describe the three-zone approach to site operations, which consists of Exclusion Zone (contain, or

- suspected to contain hazardous material), Contamination Reduction Zone (decontamination of personal and portable equipment), and Support Zone (uncontaminated area that will contain safety and support equipment and communications). This section also will include specific health and safety SOPs to follow during site operations and disposal procedures for potentially contaminated and non-contaminated wastes generated during site operations.
- A section on communications, the methods to be used during site operations. Common methods of communication used during site operations include cell phones, hand signals, audio signals (e.g., air-horn), posted signs, and two-way radios.
 - A section on emergency response procedures, in the event an emergency occurs during site operations, an emergency contingency plan will be implemented for all site personnel. The emergency response procedures in the HSP should include the following topics: evacuation, personal injury, designated hospital, and emergency telephone numbers.

5 Contact Information

The name, address, and telephone number of the Baxter contact person(s) to be reached regarding the capped areas and telephone numbers to call in the event of an emergency are as follows:

J.H. Baxter Contacts

Anita Ragan, Environmental Manager (Local)	(541) 689-3801
Georgia Baxter, CEO	(650) 349-0201

Local Emergency Planning Contacts

Eugene Fire Department	911 or (541) 682-7100
Eugene Police Department	911 or (541) 682-5111
Lane County Sheriff	911 or (541) 682-4150
Ambulance	911
Sacred Heart Medical Center	(541) 623-2801
1200 Hilyard St	
Eugene, OR	

Emergency Notification to Regulatory Agencies

Federal National Response Center	(800) 424-8802
U.S. Environmental Protection Agency	(206) 553-1200
Region X, Seattle, Washington	
Oregon DEQ	(503) 229-5696

6 References

DEQ 2007. JH Baxter Interim Remedial Action Measure Approval. Site Memorandum Prepared by G. Brown of Oregon Department of Environmental Quality. October 1.

Premier 2007. Interim Remedial Measures Action Work Plan. Prepared for Oregon Department of Environmental Quality by Premier Environmental Services. July 2007.

Pantheon 2008. Interim Remedial Measures Completion Report. Prepared for Oregon Department of Environmental Quality by Pantheon Group, Inc. June 2008

Figures

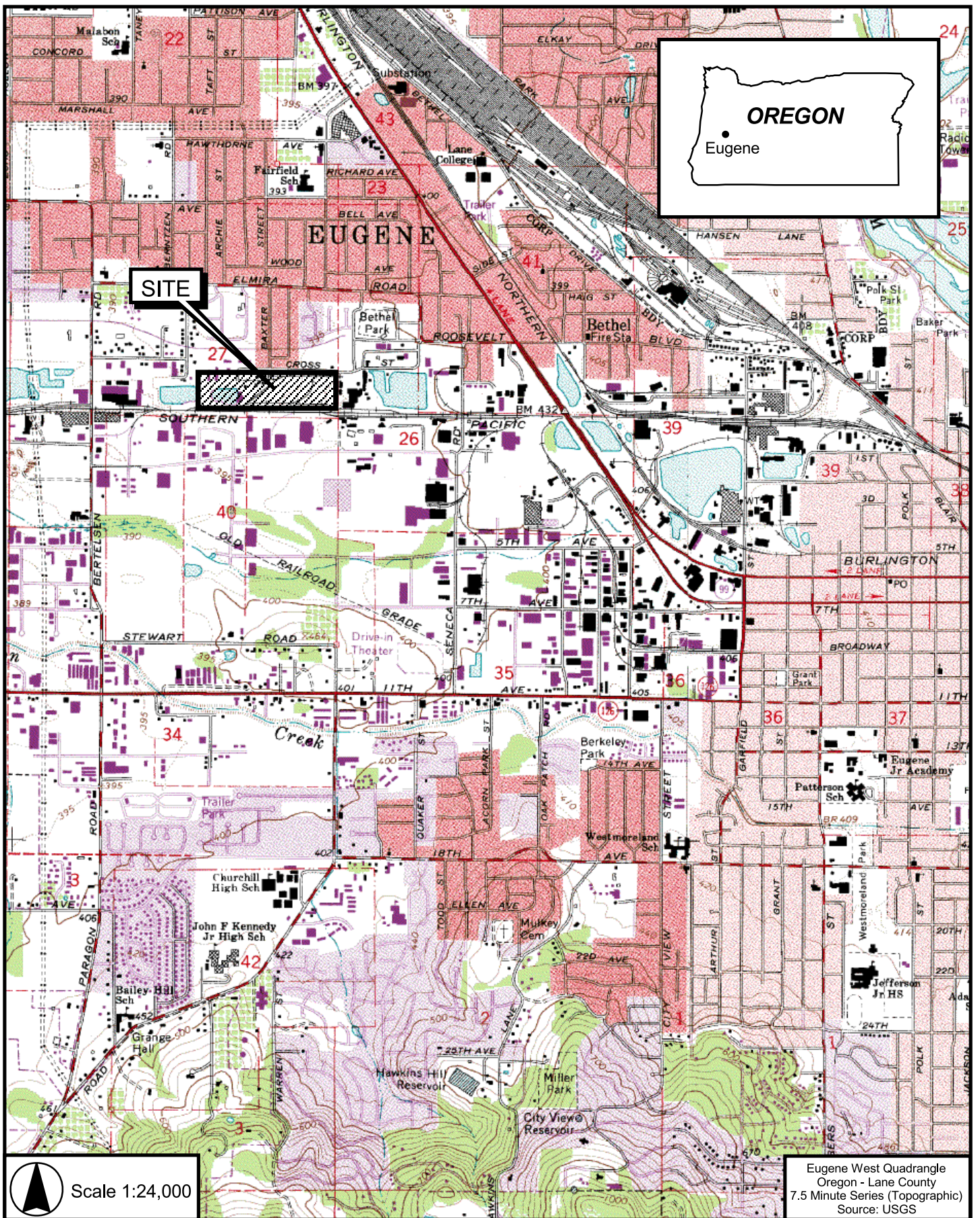


Figure 1. Site Vicinity Map - J.H. Baxter - Eugene, Oregon



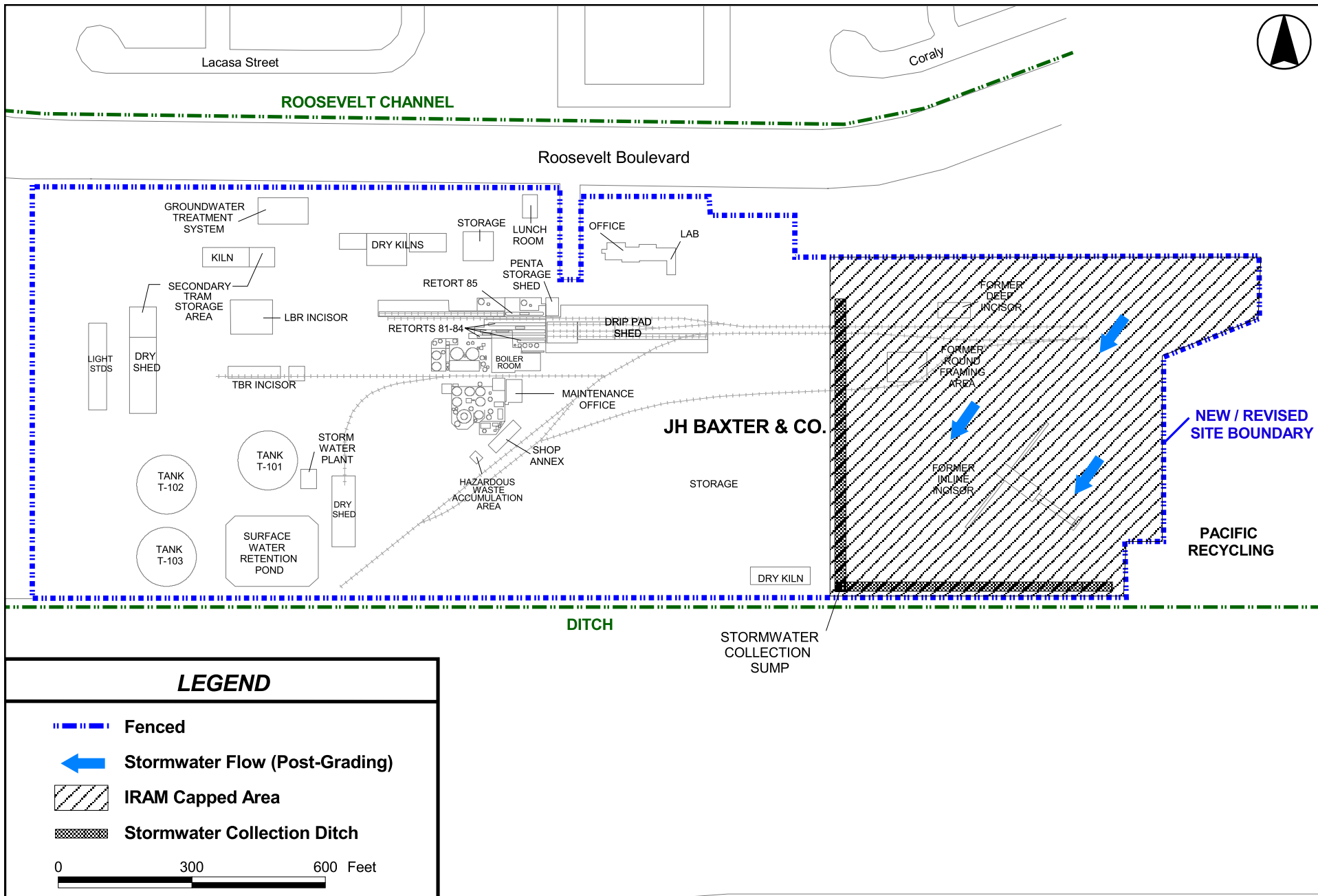


Figure 2. Facility Detail Map - JH Baxter - Eugene, Oregon



Attachment 1
Quarterly Inspection Form

