City of Albany

Program Report Bus Barn Building Attachment D

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1. INTRODUCTION

The City of Albany is evaluating the feasibility of developing two potential sites for a transit vehicle storage facility (Bus Barn). The vehicle storage building will accommodate ten (10) buses and the site will additionally provide for twelve (12) staff parking spaces. The two property locations being evaluated are as follows:

- Property adjacent to and to the SW of the existing multimodal transportation center development at the train station. (Train Station Site)
- Property on the NE side of 34th Avenue adjacent to the 34th Avenue water reservoir and the Union Pacific Railroad. (Water Reservoir Site)

1.1 PURPOSE

The goal of this analysis is to document the City of Albany programmatic requirements of the Bus Barn and associated site amenities. This report will address programming of building spaces, sizes, and adjacencies for intended uses and specific site programming.

1.2 **PROPERTY LOCATIONS**

There are two (2) property sites being evaluated. The first site is the Train Station Site located off of Pacific Highway (OR 99E) adjacent to the existing multimodal transportation development. The second is the Water Reservoir Site located on the north side of 34th Avenue SW bounded by Union Pacific Railroad to the northeast and west.

1.2.1 Train Station Site

The Train Station Site is zoned Pacific Blvd (PB). This zone is a mixed-use district intended as an autooriented commercial area along Pacific Boulevard. The required design guidelines for this zone include enhanced frontage landscaping to provide an enhanced community image along this major corridor. The Bus Barn facility would be a commercial parking use and would require a "Site Plan Review" process. The proposed Bus Barn will meet all required Pacific Blvd zone requirements.

1.2.2 Water Reservoir Site

The Water Reservoir Site is zoned Heavy Industrial (HI). This zone is intended for industrial use and are characterized by heavy traffic, extensive shipping of goods with easy access to major highways and rail. The Bus Barn facility would be a commercial parking use and would require a "Site Plan Review" process. The proposed Bus Barn will meet all required Heavy Industrial zone requirements.

Figure 1: Train Station Site





ALBANY BUS BARN

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2. PROGRAM EVALUATION

DEA met with City staff including transportation and transit departments on March 10, 2017, to discuss general programming requirements. All site improvements will comply with the Albany Development Code and Engineering Standards, City of Albany Standard Construction Specifications, and any other Federal or State regulations. The following items were developed based on our conversations during this meeting.

2.1 SITE PROGRAMMING

The two (2) property sites will include adequate site amenities for the operational needs of the Bus Barn facility. Typical site improvements include utilities, paving, fencing, landscaping, stormwater management facilities, and site lighting. The following items were discussed during our kickoff meeting:

2.1.1 Accessibility

Both Bus Barn facility sites will require access from Pacific Highway (OR 99E) and 34th Avenue with buses traveling from either direction. Pacific Highway currently has five (5) lanes including a center turn lane. This should be sufficient to access the site from either direction. Because Pacific Highway is a state highway, additional coordination with the Oregon Department of Transportation (ODOT) will be required for the Train Station site.

34th Avenue includes four (4) lanes with a center landscaped median. Access to the Water Reservoir site will require modifications to the center median to allow for a left turn lane ingress and egress.

Driveway access will be provided with sufficient width to accommodate bus access to the site.

2.1.2 On-Site Parking

The Bus Barn will accommodate ten (10) buses within the building. The two sites will need to accommodate twelve (12) employee parking spaces and two (2) "Driver Shift Change" bus spaces. The parking will also include the City of Albany required number of ADA spaces.

The site will also need to accommodate a covered "Bus Wash" area. The "Bus Wash" area will at a minimum include a hose bib and area drain. This area drain will be connected to the sanitary sewer system and will be hydraulically isolated to prevent collection of site stormwater runoff.

Site paving will be concrete for all drive lanes and parking areas. This represents a low-maintenance cost option for the City and is consistent with the design direction for the Albany Park-and-Ride project. Pervious paving is not being considered due to maintenance and durability concerns.

2.1.3 Internal Bus Maneuverability

Both sites are required to accommodate the necessary paved and striped area for bus maneuverability into and out of the facility. The Bus Barn may utilize a "stacking" strategy to house ten (10) buses front to back. This strategy must also allow sufficient area for the second bus to back out of the Bus Barn to exit the site.

An adequate paved area must also be provided to meet the operational needs of the "Bus Wash" area and "Driver Shift Change" bus spaces.

2.1.4 Site Lighting and Security

Both facility sites must provide adequate security. This security will include 6-foot perimeter fencing and access gates. The vehicle gates for ingress and egress will be automatically controlled rolling gates. These gates will remain closed and locked except when activated by a bus or employee vehicle. In addition to the vehicle gates, an access controlled pedestrian gate will be provided for employee access. Site lighting and security cameras will be provided in accordance with FTA requirements.

2.1.5 Stormwater Management

The Bus Barn facility will meet the City of Albany stormwater management requirements. The site plan layout will incorporate sufficient area to provide water quality treatment and detention facilities, as required.

2.1.6 Landscaping

The Bus Barn facility will incorporate the required landscaping area as defined in the City of Albany Article 9 – On-Site Development and Environmental Standards.

2.2 BUILDING PROGRAMMING

The building will include adequate amenities for the operational needs of the Bus Barn facility. The Bus Barn facility will be a pre-engineered metal building. The Train Station site will likely require that greater attention be paid to building aesthetics and exterior material treatment. The following items were discussed during our kickoff meeting:

2.2.1 Bus Storage

The Bus Barn building will accommodate the storage of ten (10) buses. This may be accomplished using a "stacking" strategy of two (2) buses front to back, therefore requiring five bays or by single bus bays resulting in ten bays. Bus access to the storage bays is best achieved via a drive-through option verses a back-in option. Site constraints concerning vehicle circulation will dictate the most appropriate bus access option.

The building storage bays will be designed to accommodate an 8'-6" wide by 40'-0" long bus. The resulting storage bay sizes for a single-loaded configuration will be 14'-0" wide by 50'-0" long. If the two bus "stacking" strategy is used, the storage bays will be 14'-0" wide by 100-0" long. The vertical clear space within the bays to any overhead structure will be 14'-0".

Access to the storage bays will be by 12'-0" wide by 12'-0" tall power-operated, sectional overhead doors. Additional access controlled pedestrian doors will be provided into the building to accommodate appropriate ingress and egress, as well to provide for code-compliant exiting.

Bus storage bays will be light by energy efficient industrial lighting. Natural light options will be incorporated as much as feasible and practical

2.2.2 Bus Maintenance

The Bus Barn building will include a dual use area for bus maintenance. A single bus storage bay will be over-sized providing for a bay width of 20'-0" to allow for bus maintenance activities in addition to the

use of the bay for bus storage purposes. This additional width will provide for an adjacent maintenance work space, counter and tool storage. No open flame maintenance activities occur within the building.

No maintenance service pits, service lifts or overhead maintenance cranes will be provided. Each bus bay will be provided with a dedicated area floor drain. Overhead maintenance reels for water, lubrication and/or air will be evaluated for inclusion as a design option.

In addition to the dual use storage and maintenance bay, an exterior covered bus wash bay will be provided. The width of the wash bay will be sized to accommodate the potential of future automatic bus washing equipment. See Site Programming Section 2.1.2 for additional information.

2.2.3 Adjacencies

The bus storage bays will be central of the layout of the Bus Barn building. At one end of the storage bays the dual use maintenance bay will be provided. Storage of maintenance related equipment, tools and supplies would be located adjacent to this space. Additionally, the staff areas would be located in an adjacent space to support efficiency in staff coordination and circulation.

2.2.4 Hazardous Materials

No hazardous materials are openly stored or used in the Bus Barn building. Any such materials are stored in code compliant storage lockers and in quantities no greater than code stipulated maximums.

2.2.5 Office Space Planning

The office will provide for an approximately 10'-0" by 10'-0" office space with a pedestrian door. The office will be configured to accommodate two work stations. Ideally, the office space will have a view window into the work and bus storage bays. The office area will additionally include a separate area for a break room that will provide a refrigerator, microwave, sink, counter and storage cabinets as well as accommodate a table with seating for four employees.

Standard suspended acoustical tile ceilings with recessed office lighting will be provided in these spaces. Operable exterior windows will be incorporated to introduce natural light and provide natural ventilation if desired.

Walls will be of steel stud construction with be painted gypsum board and the flooring will be unfinished concrete. All interior pedestrian doors will be painted industrial grade hollow metal construction.

2.2.6 Restrooms

Adjacent to the office area with convenient access to the bus storage and maintenance areas will be two single-occupant restrooms – both of which will be ADA accessible. Additional restroom facilitates will be provided if required by code. No convenience showers are provided in the restrooms. Walls will be of steel stud construction and surfaces will be FRP board and painted gypsum board. Floors will unfinished concrete. Doors will be lockable with occupancy indicators and be painted industrial grade hollow metal construction

2.2.7 Storage Area

Easily accessible to the maintenance and bus storage bays will be equipment and supplies storage area and/or rooms. Storage areas will accommodate motor oil in either 55-gallon drums or larger 275-gallon storage tanks. Addition storage of lubricants, coolants, and DEF will need to be provided also.

An additional storage area or room will be provided for the secure storage of bicycles –for either employee use or rider abandoned bicycles.

An area equivalent to a single bus storage bay will also be dedicated to the storage of bus tires and wheels.

No mezzanine storage area is provided.

2.2.8 Locker Rooms

Near the office area, an employee locker room will be provided. The locker room area will provide for 12 personal employee "cubbies", of which a portion will be of a securable locker type. The area is unisex and is not intended for the changing of the clothes. No convenience showers are provided in this area.

Standard suspended acoustical tile ceilings with recessed office lighting will be provided in this space. Walls will be of steel stud construction with be painted gypsum board and the flooring will be unfinished concrete. All interior pedestrian doors will be painted industrial grade hollow metal construction.

2.2.9 Equipment

Portable emergency eye wash and safety shower stations will be provided within the building. See Building Programming Section 2.2.2 for additional equipment information.

2.2.10 Conditioned Spaces

The Bus Barn building will have insulated walls and ceilings throughout as well as multiple paned windows. The only conditioned spaces will be the office area which will provide air conditioning and heat. The areas will be internally insulated from the unconditioned bus storage bays. The bus storage bays will also utilize systems to address vehicle exhaust and maintain appropriate air quality.

2.2.11 Fire Sprinklers

Fire Sprinklers will be provided as dictated by the building code. The design will implement best practices and design strategies to mitigate the need for sprinklers and still meet the intent of the building code for fire, life, safety requirements. The City will additionally explore options with their insurance provider to identify any requirements they may place on the building to be sprinkled.