

205.01	General	205.04	Information Technology and Intelligent Transportation Systems Scoping and Project Review Requirements
205.02	References	205.05	Operations Scoping and Project Review Requirements
205.03	Security Scoping and Project Review Requirements		

### 205.01 General

This chapter describes requirements and information to be provided by and to WSF sections external to Terminal Engineering during project scoping, as described in [Chapter 200](#), and during the preliminary engineering phase with respect to constructability reviews as described in [Chapter 230](#). The goal is to reduce duplication of effort and avoid potential conflicts by allowing all stakeholders to understand the plans and requirements of other sections.

For additional information refer to the following chapters:

Chapter	Subject
<a href="#">200</a>	Capital Project Scoping
<a href="#">210</a>	Design Matrix Procedures
<a href="#">220</a>	Design Documentation, Approval, and Process Review
<a href="#">230</a>	Quality and Constructability
<a href="#">310</a>	Security
<a href="#">350</a>	Buildings
<a href="#">360</a>	Electrical
<a href="#">560</a>	Site Utilities

### 205.02 References

#### (1) Design Guidance

WSDOT Administrative manuals, including those listed below:

[www.wsdot.wa.gov/publications/manuals/index.htm](http://www.wsdot.wa.gov/publications/manuals/index.htm)

- *Advertisement and Award Manual* M 27-02
- *Electronic Engineering Data Standards* M 3028

WSDOT Engineering Applications, including those listed below:

[www.wsdot.wa.gov/design/projectdev/engineeringapplications](http://www.wsdot.wa.gov/design/projectdev/engineeringapplications)

- [EBASE](#)

## 205.03 Security Scoping and Project Review Requirements

### (1) General

[Chapter 310](#) includes a general discussion of security requirements and [Chapter 560](#) contains additional information pertaining to utility design. Security projects differ from other projects due to the sensitive nature of the assets involved. Any information contained within a security documents is considered confidential and may not be released without the consent of the Company Security Officer of WSF Security.

Coordinate with the WSF Company Security Officer (CSO) regarding design issues pertaining to security.

Sensitive Security Information (SSI) is that information defined in [49 CFR Part 1520](#) but also includes any information not specifically mentioned in Part 1520 but marked as “Sensitive Security Information” or “SSI”. Typically, if a document or contract includes SSI information, then the entire project is considered SSI. See [Section 310.14](#) for additional details.

All contractors and vendors must comply with security credentialing requirements. Contract agreements and provisions will need to contain the requirements that contractor or vendor personnel meet these requirements.

All security projects will contain provisions to ensure accurate as-built plans are generated.

### (2) Security Scoping Procedures

Some security projects are designed by Terminal Engineering staff. Scoping for these projects shall follow the requirements of [Chapter 200](#). During scoping, projects that will not be designed by Terminal Engineering staff need to provide the following information to the Terminal Engineering Scoping Engineer who will coordinate with Security personnel. This information should be as specific as possible without compromising security confidentiality requirements. It is not necessary to describe the function if SSI would be compromised.

- General information concerning proposed location of physical infrastructure to be installed, such as conduit and other supporting equipment;
- Space requirements for proposed security items in IT Equipment rooms (see [Section 310.07\(4\)](#));
- Proposed size, location and type of security fencing and gates to be installed;
- Proposed size, location and type of buildings and other structures to be constructed;
- Any proposed equipment installation that will substantially impact the terminal electrical power system;
- Proposed installation of HVAC or other systems required to support security features;
- Identified performance and heat load issues

Early during the scoping process described in [Chapter 200](#), once it has been determined which proposed improvement and preservation projects will advance, the Terminal Engineering Scoping Engineer will schedule a meeting with the Company Security Officer to summarize and discuss proposed scoped projects. Emphasis will be placed on the issues identified above. Any projects that are identified as being of interest to the security concerns will be noted. The scoping project managers will be informed of the issues, and the need to include the Security section in reviews of the proposed project, and budget resources accordingly.

### **(3) Security Project Review Procedures**

Security and Terminal Engineering design project managers shall include and budget for at least two project reviews by external reviewers, including Terminal Engineering, Security, and Information Technology staff. Operations liaisons assigned to Terminal Engineering will also be included. These reviews will be subject to the security confidentiality requirements discussed above.

Projects designed by Terminal Engineering personnel shall follow the review requirements as described in [Chapter 230](#).

In addition, all projects should include requirement for vendor/contractor and/or project inspector produced as-builts.

## **205.04 Information Technology and Intelligent Transportation Systems Scoping and Project Review Requirements**

### **(1) General**

[Chapter 560](#) addresses communications systems and supporting infrastructure. Communication systems include Information Technology (IT) and Intelligent Transportation Technology (ITS). ITS applies to highway system features approaching the terminal as well as terminal site features, and can include reservations systems.

All Information Technology and Intelligent Transportation Systems projects will contain provisions to ensure accurate as-built plans are generated.

### **(2) Information Technology Scoping Procedures**

Some information technology projects may be designed by Terminal Engineering staff or by Region staff. Scoping for these projects shall follow the requirements of [Chapter 200](#). During scoping, projects that will not be designed by Terminal Engineering staff need to provide the following information to the Terminal Engineering Scoping Engineer:

- General information concerning proposed location of physical infrastructure to be installed, such as conduit and other supporting equipment;
- Space requirements for proposed information technology items in IT Equipment rooms;
- Any proposed equipment installation that will substantially impact the terminal electrical power system;
- Proposed installation of HVAC or other systems required to support IT features (heat loads);
- Identified performance issues.

Early during the scoping process described in [Chapter 200](#), once it has been determined which proposed improvement and preservation projects will advance, the Terminal Engineering Scoping Engineer will schedule a meeting with the delegated representative of the Information Technology section to summarize and discuss proposed scoped projects. Emphasis will be placed on the issues identified above. Any projects that are identified as being of interest to the security concerns will be noted. The scoping project managers will be informed of the issues, and the need to include the Information Technology section in reviews of the proposed project, and budget resources accordingly.

### **(3) Intelligent Transportation Systems Scoping Procedures**

ITS, including reservations systems, projects are designed by or in coordination with the Region. For this reason, ITS projects shall follow the requirements of [Chapter 200](#). As Operations liaisons assigned to Terminal Engineering will be involved in these projects, they will be informed of any potential conflicts through their typical review and involvement in those projects.

### **(4) Information Technology Project Review Procedures**

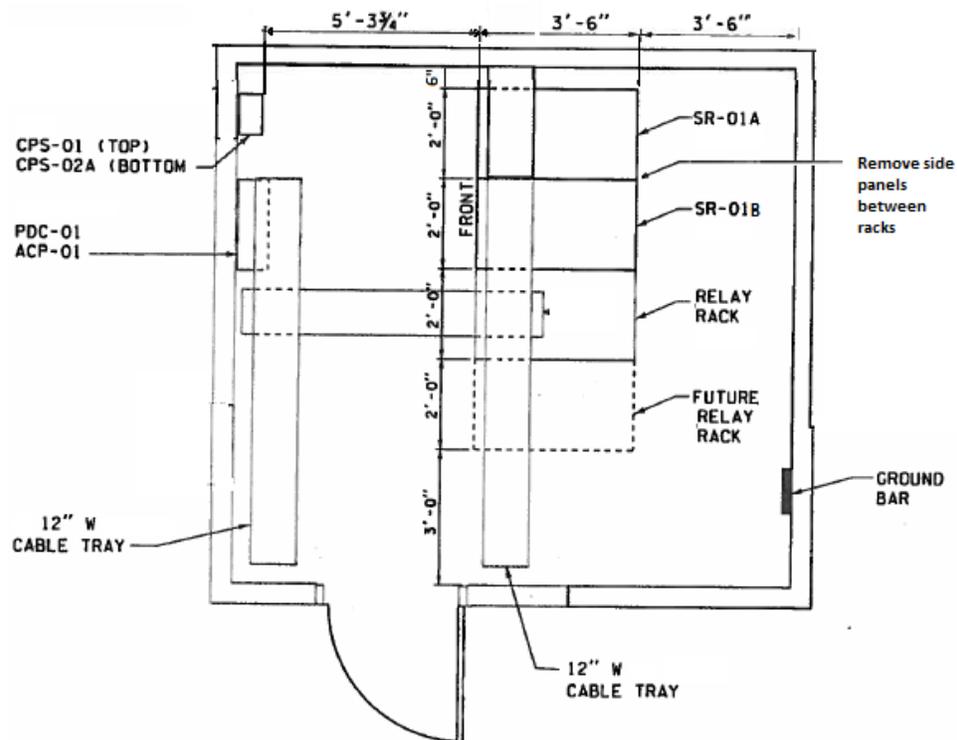
Information Technology and Terminal Engineering design project managers shall include and budget for at least two project reviews by external reviewers, including Terminal Engineering, Security, and Information Technology staff. Operations liaisons assigned to Terminal Engineering will also be included.

#### **(a) Information Technology Room Scoping and Design**

The following guidelines are included for Information Technology Room scoping and design:

- Information Technology section must approve final decisions on room size, equipment installs and support.
- Minimum 48” inches from the front of the rack to front of any equipment mounted to the wall to allow installation of large equipment like servers and UPS’s.
- Minimum 36” inches from the rear of the rack to front of any equipment mounted to the wall.
- Minimum 36” inches to between the last rack and the wall preferably nearest to the door to allow for equipment installation and egress.
- Approximately 6” inches between the wall and the first rack to allow for rack door swing and room to install equipment.
- If possible the front of racks should be closest to the door for ease of installation.
- Fire resistant plywood should be installed on the wall to allow for mounting equipment and punch downs.
- Air Conditioners shall be installed and sized using projected heat loads of equipment.
- Cable trays to be installed across the top of the racks from one side of the room to the other. Also any wire penetrations to the front or back should be tied in using cable trays.

- Lights shall be at a minimum installed in front of and behind the racks with little obstruction (e.g. cable trays or other cables).
- In most cases three racks should be installed, two standard racks and one relay rack, relay rack should be the last rack allowing for the most access to three sides.
- Installation of racks side by side should have the internal panels removed to allow for cabling between racks.
- Square footage based on number of racks, minimum dimensions 12 feet deep by 8 feet wide (2 racks) or 10 feet wide (3 racks) though best practice would be to allow for future expansion (2 feet per additional rack).
- Door to swing outward.



Typical Information Technology Room Layout  
Exhibit 205-1

#### (5) Intelligent Transportation Systems Project Review Procedures

ITS, including reservations systems, projects designed by or in coordination with the Region will follow standard Region review practices. The project teams will be informed to include Terminal Engineering, Security, and Information Technology staff. Operations liaisons assigned to Terminal Engineering will also be included.

## 205.05 Operations Scoping and Project Review Requirements

### (1) General

Almost all Terminal Engineering, Security and Information Technology projects impact ferry operations to varying extents. Operations liaisons and other staff are involved in the development of these projects.

All related projects will contain provisions to ensure accurate as-built plans are generated.

### (2) Operations Involvement in Project Scoping

Many terminal projects are designed by Terminal Engineering staff. Scoping for these projects shall follow the requirements of [Chapter 200](#). During scoping, projects that will not be designed by Terminal Engineering staff need to provide the following information to the Terminal Engineering Scoping Engineer:

- General information concerning proposed location of physical infrastructure to be installed, such as conduit and other supporting equipment;
- Proposed size, location and type of security fencing and gates to be installed;
- Proposed size, location and type of buildings and other structures to be constructed;
- Any proposed equipment installation that will substantially impact the terminal electrical power system;
- Proposed installation of HVAC or other systems required to support security features;
- Identified performance and heat load issues;
- Space requirements for proposed information technology items in IT Equipment rooms;
- Identified performance issues.

The Terminal Engineering Scoping Engineer will develop a process involving Contract and Legal Services to identify any work at the facility to be performed by a vendor or through a Limited Public Works contract to obtain the above information.

### (3) Operations Involvement in Project Reviews

Operations liaisons assigned to Terminal Engineering are involved in and shall follow the review requirements as described in [Chapter 230](#). Security, Information Technology and Terminal Engineering design project managers shall include and budget for at least two project reviews by. Operations liaisons assigned to Terminal Engineering will also be included.