

Sound Transit

Equipment and Facilities Numbering Standard

REV 4

August 2021



**DISCLAIMER FOR
Design and Engineering Design Standards Documents**

Sound Transit makes these documents available on an "as is" basis. By accepting receipt of the documents, the receiver agrees to the following:

- The documents are provided for information only;
- The receiver will not utilize the documents in any way that violates or infringes on Sound Transit's intellectual property rights in such documents;
- The provided documents should not be construed to represent formal design guidance and/or direction for any project;
- Sound Transit makes no representation or warranty that the provided data is complete, appropriate, or fit for any particular purpose, stated or otherwise;
- All documents provided by Sound Transit, including any revisions, shall remain the personal and intellectual property of Sound Transit; and
- To indemnify, defend, and hold harmless Sound Transit, its consultants, and agent(s) from any and all damages and claims arising from the receiver's use of these documents.

**APPLICABILITY FOR
Design and Engineering Design Standards Documents**

Project teams shall refer to their advertised or executed project contracts for applicable document versions/revisions.

Revision History

Revision	Date	Description of Change
0	3/23/2010	Defined naming convention for Link equipment and facilities
1	3/6/2012	Added 4 sections: Fiber, Raceway, Overhead Contact System and Traction Power
2	3/12/2013	Added Fire Zone numbering on drawings, updated System Map and additional requirements for physical labels
3	4/14/2015	Added south extension projects, added equipment to Table 1, updated System Map, flipped sections 11 and 12, and added Overhead Contact System structures numbering convention
3.1	3/6/2017	Minor revision: Added Revision History, cleaned up table of contents, corrected Revision 3 month name
4	8/31/2021	Modified title, added Link extension projects; added equipment abbreviations to Table 1; updated Figure 1: LR System Map; updated Fiber, Raceway; Overhead Contact System; Traction Power; updated Fire Zone section; added Appendix 1: ST Facility Codes

TABLE OF CONTENTS

1.0 INTRODUCTION.....1

2.0 STATION, SECTION, AND FACILITY LOCATION NUMBERING3

2.1. LOCATION CODE 'L'.....3

2.2. LOCATION CODE Part 'XX'3

2.3. PARKING FACILITIES4

2.4. NEW FACILITIES ADJACENT TO EXISTING FACILITIES4

3.0 ROOM AND DOOR IDENTIFICATION NUMBERING7

3.1. LOCATION CODE 'LXX'7

3.2. FACILITY CODE 'YY'7

3.3. INSTANCE NUMBER 'ZZ'7

4.0 TUNNEL CROSS-PASSAGE IDENTIFICATION NUMBERING.....9

4.1. LOCATION CODE 'LXX'.....9

4.2. EQUIPMENT/FACILITY CODE CP.....9

4.3. INSTANCE NUMBER 'ZZ'9

5.0 EQUIPMENT IDENTIFICATION NUMBERING10

5.1. LOCATION CODE 'LXX'.....10

5.2. EQUIPMENT CODE 'YYYY'10

5.3. INSTANCE NUMBER 'ZZ'16

6.0 FEEDER / CABLE IDENTIFICATION NUMBERING17

6.1. LOCATION CODE 'LXX'.....17

6.2. FEEDER/CABLE CODE 'YYYY'17

6.3. INSTANCE NUMBER 'ZZ'18

7.0 FIBER / ETHERNET CABLE NUMBERING19

7.1. CABLE TYPE 'SSS'F.'MM'. 'ZZZ' OR 'TTTT'.....19

7.2. LOCATION CODE 'LXX'.....19

7.3. ROOM OR SPACE CODE 'RRRR'19

7.4. CABINET OR RACK CODE 'AAAA' (OPTIONAL).....19

7.5. EQUIPMENT CODE 'YYYY'19

7.6. PORT 'PP' (OPTIONAL).....19

8.0 FIBER / ETHERNET CABLE NUMBERING BETWEEN LOCATIONS21

8.1. CABLE TYPES 'SSS'F.'MM'. 'ZZZ' OR 'TTTT'21

8.2. LOCATION CODES 'LXX'21

8.3. ROOM OR SPACE CODES 'RRRR'.....21

ST Equipment and Facilities Numbering Standard

8.4. CABINET OR RACK CODES ‘AAAA’ (OPTIONAL)21

8.5. EQUIPMENT CODES ‘YYY’21

8.6. PORTS ‘PP’ (OPTIONAL).....21

9.0 INPUT / OUTPUT CABLE NUMBERING23

9.1. DESIGNATOR I/O23

9.2. EQUIPMENT CODES ‘YYYY’-‘YYYY’23

9.3. INSTANCE NUMBER ‘ZZ’23

10.0 RACEWAY NUMBERING DESIGNATION24

10.1. LOCATION CODE ‘LXX’24

10.2. RACEWAY CODE ‘CC’.....24

10.3. INSTANCE NUMBER ‘ZZ’24

11.0 TRACTION POWER EQUIPMENT NUMBERING.....25

11.1. LOCATION CODE ‘LXX’25

11.2. EQUIPMENT CODE ‘YYYY’25

11.3. INSTANCE NUMBER ‘T’ZZ’25

11.3.1. AC MV BREAKER.....25

11.3.2. DC BREAKERS AND POSITIVE SWITCHES25

11.3.3. TIE-SWITCHES26

12.0 OVERHEAD CONTACT SYSTEM (OCS) NUMBERING27

12.1. OCS ELECTRICAL SECTIONS.....27

12.1.1. OCS SECTION NUMBER ‘JJ’, ‘KK’ OR ‘HH’27

12.1.2. OCS SECTION ‘R’27

12.2. OCS STRUCTURES28

12.2.1. OCS STRUCTURE LOCATION CODE ‘LXX’28

12.2.2. OCS STRUCTURE INSTANCE NUMBER ‘ZZZ’28

12.3. OCS WIRE RUNS29

12.3.1 CORRIDOR/EXTENSION CODE ‘L’29

12.3.2 INSTANCE NUMBER ‘ZZ’29

12.3.3 OCS MAINLINE WIRE RUNS.....29

12.3.4 OCS POCKET TRACK WIRE RUNS29

12.3.5 OCS CROSSOVER WIRE RUNS29

13.0 FIRE ZONE NUMBERING	30
13.1. LOCATION CODE FZ'LXX'	30
13.2. STATION SYSTEM CODE 'U''YY''G'	30
13.3. TUNNEL SYSTEM CODE 'U''YY''G'	30
13.4. TUNNEL INSTANCE NUMBER 'Z'0	31

LIST OF FIGURES

FIGURE 1: LINK STATION AND SECTION LOCATION NUMBERS	5
---	---

LIST OF TABLES

TABLE 1: EQUIPMENT CODE ABBREVIATIONS	10
TABLE 2: FEEDER/CABLE CODE ABBREVIATIONS	12
TABLE 3: RACEWAY CODE ABBREVIATIONS	24
TABLE 4: TRACTION POWER EQUIPMENT CODE ABBREVIATIONS	25

APPENDICES

APPENDIX A: Sound Transit 3-digit Character Abbreviation for each Location	32
--	----

1.0 INTRODUCTION

This standard defines the identification convention to be generally applied to equipment and facilities within Sound Transit Link, Sounder, and STride projects. This standard applies to stations and line sections, as well as architectural, electrical, traction power, mechanical, fire systems, signaling, and communication systems. In general, this convention is appropriate whenever an identification label must be determined during engineering, construction, and operational phases of the system.

Labels must be installed on each piece of mechanical equipment or electrical systems, and on room doors as defined in the contract specifications. The name on the label must be identical to the name on the Issued for Construction drawing.

Having a consistent identification convention provides a system-wide, standard approach for communication and reference between disciplines across contracts and projects during design and construction. For operations and maintenance, a strong identification convention will support the development of preventive maintenance schedules, allow efficient and accurate identification and location of devices and equipment requiring repair or replacement, and support equipment upgrades.

Notes:

1. Irrigation Control System – this standard only applies to naming the panel itself
2. Communications Racks – this standard does not apply

This Page Intentionally Left Blank

2.0 STATION, SECTION, AND FACILITY LOCATION NUMBERING

The location numbers for Station and Section Location Numbers, as shown in Figure 1, are the basis for all Sound Transit equipment and facilities numbering. Facilities (e.g. TPSS, signal bungalows, etc.) located along the track section will use the track section location number. Facilities in conjunction with stations will use the station location number.

Sound Transit will approve the preliminary engineering consultant number assignments, based on this plan.

Location Code general form is 'LXX'.

2.1. LOCATION CODE PART 'L'

The first alpha character, 'L', is a single letter that represents the Line designation, where:

'L' equals C, N, E, S, T, B, W, K, Q, Y, M, BT, RE, or SE as follows:

LINK locations:

C: Central Link Corridor (includes Convention Place Facility to SeaTac Airport Station)

N: North Link Corridor (includes University Link Extension, Northgate Link Extension, Lynnwood Link Extension and Everett Link Extension)

E: East Link Corridor (includes East Link Extension and Downtown Redmond Link Extension)

S: South Link Corridor (includes So. 200th Link Extension, Federal Way Link Extension, and Tacoma Dome Link Extension)

T: Tacoma Link (includes Hilltop Tacoma Link Extension and TCC Tacoma Link Extension)

B: Ballard Link Corridor (includes Ballard Link Extension)

W: West Link Corridor (includes West Seattle Link Extension)

K: Kirkland Link Extension

Q: Issaquah Link Extension

Y: Yard Facility

M: Operations and Maintenance Facility

BT – Bus Rapid Transit – STRide system

RE – Regional ST Express Bus system

SR – Sounder Rail system

2.2. LOCATION CODE PART 'XX'

'XX' is a two-digit numeral identifying a line section, station, or a non-station facility. Stations are always odd numbers. Even numbers are used for the line sections between stations, e.g., tunnel bores, cut and covers, portals, pocket track, tail track, etc.

Non-station or provisional station (e.g. Boeing Access Road Facility) facilities along the alignment must follow the convention for stations using odd numbers with the exception of the Pine Street Ventilation Facility (N00). Operations and Maintenance facilities can be even or odd numbers.

The numbers increase with distance from a designated starting point of the line. For Central Link, the starting point is a central point designated in downtown Seattle. It is permissible to skip numbers to give different line section designations for tunnel sections and at-grade or elevated sections between stations while reserving odd numbers for stations only.

2.3. PARKING FACILITIES

Parking facilities will add a letter “P” after the location code ‘L’.

Examples:

Northgate parking garage is NP11

South Bellevue parking garage is EP09

2.4. NEW FACILITIES ADJACENT TO EXISTING FACILITIES

When new facilities will be located adjacent to, or expansions of existing facilities within the Sound Transit network, the project team will need to identify a new facility identification in coordination with existing facility location number (see Appendix A) that allows continuity of asset management.

Example:

A new STRide location adjacent to an existing ST Express facility such as Eastmont Park & Ride. The existing parking facility is identified as 571 in the Appendix; the potential new or expanded facility can incorporate the 571 identifier and be designated in the design documents as BT571.

LINK LIGHT RAIL EQUIPMENT AND FACILITY NUMBERING MAP

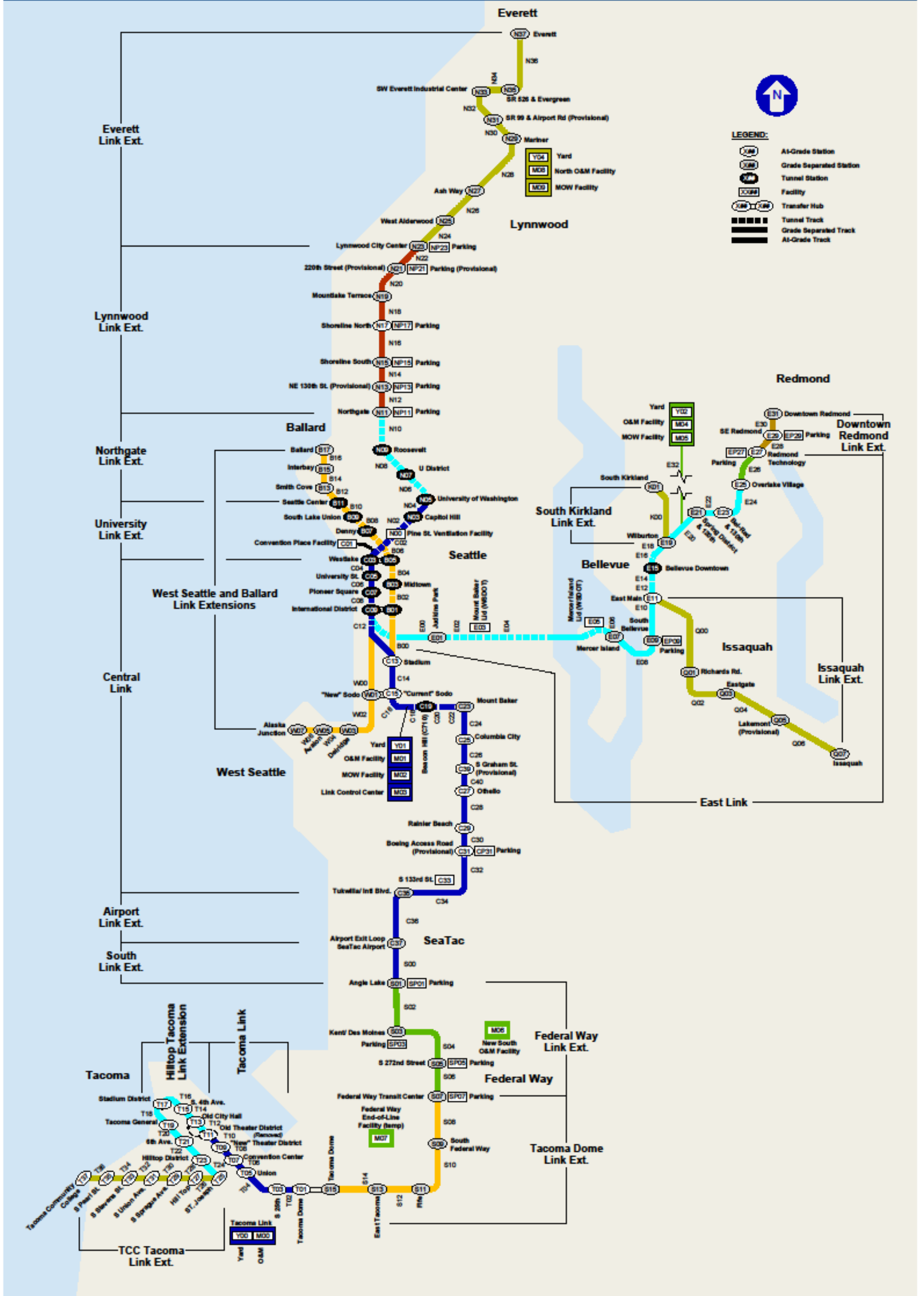


Figure 1: Link Station and Section Location Numbers

This Page Intentionally Left Blank

Uncontrolled Document from Soundtransit.org

3.0 ROOM AND DOOR IDENTIFICATION NUMBERING

Each room must be numbered. All room identification must use the general form LXXYYZZ, where:

3.1. LOCATION CODE 'LXX'

The location code is as previously described in Section 2.0 of this standard.

3.2. FACILITY CODE 'YY'

The facility code 'YY' is an alphanumeric combination that is used to represent locations in a facility.

- S: Surface Level
- M: Mezzanine Level
- PH: Penthouse Level
- R1, R2, R3: Roof Levels
- B1, B2, B3: Basement Levels
- T: Transfer Level
- P: Platform Level
- SP: Sub-platform Level
- L1, L2, L3, etc.: Intermediate Elevator Landings

Parking Facility level designations are described in DCM Chapter 31.

For facility levels, IBC designation consistent with traditional building construction may be used in lieu of those provided above, subject to ST approval, except that the Platform Level is to be applied for the train platform.

3.3. INSTANCE NUMBER 'ZZ'

'ZZ' is the Instance Number. It is a number that uniquely identifies a specific item. The allowable range is from 01 and up. In general, all components must be numbered starting from 01 upwards.¹

Instance Numbers begin at 01, and must be sequential without omitting any numbers. The starting location for room numbers must be determined by the design consultant.

The first number preceding the facility location designation will reflect the station/tunnel section. Single digit room numbers will be preceded by a leading zero.

Example: C03P07 represents Westlake Station (C03), Platform level, Room 7. Using this example, a full room number for Central Link – SODO Station, Platform Level, Room 7, would be C15P07. The Door Numbers for this room would be C15P07A, C15P07B, and C15P07C.

¹ The Room/Door Numbers used outside the Downtown Seattle Transit Tunnel (DSTT) locations will omit the Compass designations as referenced in the King County/Sound Transit DSTT Retrofit Issue Paper No. 3 Room Re-Numbering Final.

ST Equipment and Facilities Numbering Standard

Example: EP09L301 represents room 01 on the 3rd level of the South Bellevue parking garage.

Plenums, utilidors, chases, and airshafts/vent shafts will be given room numbers.

Elevators, escalators, and stairs will be numbered to be consistent with the room numbering system.

These vertical circulation systems codes will be:

EL: Elevator
ES: Escalator
ST: Stair
STE: Emergency Egress Stair

Example: C19EL01

Operations and Maintenance facilities will contain the Instance Number 'ZZZ' using the standard hotel numbering convention for room identification.

Example: M04L2201 represents room 201 on the 2nd floor of the East Operations and Maintenance Facility (M04).

The Room/Door Numbering standard will not apply to Signal Bungalows and Traction Power Substations, which will use equipment number codes for door designations. The Instance Number does not apply to these room and door numbers.

4.0 TUNNEL CROSS-PASSAGE IDENTIFICATION NUMBERING

LINK Tunnel Cross-passage identification numbering must follow the general form 'LXX'-CP-'ZZ', where:

4.1. LOCATION CODE 'LXX'

The location code is as previously described in Section 2.0 of this standard.

4.2. EQUIPMENT/FACILITY CODE "CP"

Equipment Facility Code is "CP" for all Cross-Passages.

4.3. INSTANCE NUMBER 'ZZ'

Instance numbers for cross-passages must increase sequentially starting with "01" in the direction of the Station/Section numbering for the line.

Example: N04-CP-06. This is the sixth cross-passage to the north of the Pine Street Ventilation Facility (N00).

5.0 EQUIPMENT IDENTIFICATION NUMBERING

Equipment numbering must follow the general form ‘LXX’-‘YYYY’-‘ZZ’, where:

5.1. LOCATION CODE ‘LXX’

The location code is as previously described in Section 2.0 of this standard.

5.2. EQUIPMENT CODE ‘YYYY’

‘YYYY’ is a code that represents a specific kind of equipment, component or facility.

For identification of equipment and components, it is necessary for each letter combination to be unique across all disciplines, i.e., if the letter combination DC is used for “Distribution Cabinet (Comm)”, it may not be used for “DC Switchgear”.

In some cases, there is more than one code in use for the same kind of equipment. For example, EF and EFAN have both been used for exhaust fans. This is to accommodate Metro identification numbers used in the existing downtown tunnel. In general, this must be avoided in the future. Determination will be made by the Civil/Systems Integration Manager.

It is necessary to maintain a list of component abbreviations, so that when new equipment codes are required they may be uniquely assigned. See Table 1, Equipment Code Abbreviations, for all currently defined equipment codes:

Table 1: Equipment Code Abbreviations

Equipment Code	Description
AAVV	Automatic Air Vent Valve
ABDV	Automatic Ball Drip Valve
ACMP	Air Compressor
ACP	Access Control Panel
ACR	Access Card Reader
ACT	Electric Door Air Curtain
ACU	Air Conditioning Unit
ADR	Air Dryer
AHU	Air Handling Unit
AMM	Addressable Monitoring Module

Equipment Code	Description
ANS	Ambient Noise Sensor
ARVV	Combination Air Release and Vacuum Valve
AS	Air and Dirt Separator
ATS	Automatic Transfer Switch
ATTN	Attenuator
B	Hot Water Boiler
BA	Battery / Charger (TPSS)
BCR	Bicycle Card Reader
BDA	Bi-Directional Amplifier

ST Equipment and Facilities Numbering Standard

Uncontrolled Document from Soundtransit.org

Equipment Code	Description
BDRN	Ball Drain Valve
BFP	Backflow Prevention Device
BLKR	Bicycle Locker
BMS	Building Management System
BPD	By-Pass Damper
BRKR	Breaker
BVLV	Butterfly Valve
CA	Clean Agent
CAM	CCTV Camera
CCTB	Corrosion Control Test Box
CCTV	Closed Circuit Television
CES	Customer Emergency Station (garage facilities only)
CF	Ceiling Fan
CH	Chase, Utilidors, Plenums
CLOK	Clock
CPNL	Control Panel
CR	Communications Rack (IT)
CU	Compressor Unit
CUH	Cabinet Unit Heater
CVLV	Check Valve
DAS	Distributed Antenna System
DATA	DATA Comm System/Jack

Equipment Code	Description
DC	Distribution Cabinet (Comm)
DCPS	DC Power System (Comm)
DDC	Direct Digital Controller/Cabinet (BMS)
DID	Door Intrusion Detector
DISC	Disconnect Switch
DLSCV	Deluge Sprinkler Control Valve
DPR	Damper
DRSCV	Dry Sprinkler Control Valve
DSPDV	Dry Standpipe Deluge Valve
DUCT	Duct
DVLV	Drain Valve
EFAN	Exhaust Fan
EGEN	Emergency Generator
EL	Elevator
ELCP	Elevator Control Panel
EMFD	Emergency Fan Damper for EMFN
EMFN	Emergency Fan
EMP	Emergency Management Panel
EMSA	Emergency Fan Sound Attenuator for EMFN
ERU	Energy Recovery Unit

ST Equipment and Facilities Numbering Standard

Uncontrolled Document from Soundtransit.org

Equipment Code	Description
ERV	Emergency Recovery Ventilator
ES	Escalator
ESCP	Escalator Control Panel
ET	Expansion Tank
ETEL	Emergency Telephone (w/ Blue Light)
ETH	Ethernet Switch
EVAC	Voice Evacuation System
EVLV	Electric Valve
EWH	Electric Water Heater
EWS	Eye Wash Station
FACP	Fire Alarm Control Panel
FAN	Stair Pressurization Fan
FARA	Fire Alarm Remote Annunciator
FARP	Fire Alarm Relay Panel
FCU	Fan Coil Unit
FD	Fire Damper
FDC	Fire Department Connection
FDCP	Fan and Damper Control Panel
FDP	Fiber Distribution Panel
FDR	Fire Door

Equipment Code	Description
FFAN	Filter Fan
FHV	Fire Hose Valve
FM	Fiber Multiplexer
FP	Fire Pump
FPNL	Remote Fan Panel
FPP	Fiber Patch Panel
FPTV	Flat Panel TV
FSD	Fire Smoke Damper
FSE	Fiber Slack Enclosure
FTP	Fare Transaction Processor (Smart Card Reader)
GCH	Grade Crossing House
GD	Gravity Damper
GEN	Generator
GENR	Generator Receptacle
GFD	Ground Fault Detector
GRL	Entrance Grille
GVLV	Gate Valve
GWH	Gas Water Heater
H	Traction Power 1500 V DC Breaker/Switch
HCS	Hydrocarbon Sensor
HD	Heat Deflector

ST Equipment and Facilities Numbering Standard

Uncontrolled Document from Soundtransit.org

Equipment Code	Description
HFLT	High Efficiency Filter
HGS	Hydrogen Gas Sensor
HH	Handhole
HHLV	Low Voltage Handhole
HHMV	Medium Voltage Handhole
HHSC	Signals/Communication Handhole
HHTE	Traction Electrification Handhole
HLA	High Level Alarm
HPMP	Heat Pump
HTCC	Heat Trace Circuit Controller
HTPC	Heat trace Power Connection
HTR	Heater
HWM	Hot Water Meter
HX	Heat Exchanger
IC	Irrigation Controller
INT	TWC Interrogator
INSP	Inspector Trip Test Connection
INV	Inverter
ITC	Interface Terminal Cabinet
JEFN	Jet Fan

Equipment Code	Description
JP	Jockey Pump
K	Lighting Key Switch
LC	Lighting Cabinet
LCP	Lighting Control/Contactor Panel; Local Control Panel (SCADA)
LDF	Local Distribution Frame
LHD	Linear Heat Detector
LIA	Local Interface Assembly
LLS	Liquid Level Sensor
LPA	Low Profile Antenna
MBKR	Main Breaker
MBP	Maintenance Bypass/Isolation Switch
MC	Motor Controller
MCC	Motor Control Center
MCG	Main Communications Gateway
MCS	Motor Control Switch
MDF	Main Distribution Frame
MDPR	Motorized Damper
MH	Manhole
MHLV	Low Voltage Manhole

ST Equipment and Facilities Numbering Standard

Uncontrolled Document from Soundtransit.org

Equipment Code	Description
MHMV	Medium Voltage Manhole
MHSC	Signals/Communication Manhole
MHTE	Traction Electrification Manhole
MIC	Microphone
MIX	Mixing Box
MON	Carbon Monoxide Detector
MPC	Mini Power Center
MPF	Moveable Point Frog
MS	Manual Motor Starter
MSS	Motor Controller with Soft Starter
MTR	Meter (Electrical)
MTS	Manual Transfer Switch
MV	Medium Voltage
MVB	Medium Voltage AC Primary Breaker
MVF	Medium Voltage AC Feeder
MVSA	Medium Voltage Surge Arrestor
MVSS	Medium Voltage AC Substation
NAC	Fire Alarm Notification Appliance Circuit Box
NMS	Network Management System

Equipment Code	Description
OS	Occupancy Sensor
P	Circulation Pump
PA	Public Address Speaker / Rack
PASCV	Pre-action Sprinkler Control Valve
PB	Pullbox
PB2	Panelboard – 208/120 V
PB4	Panelboard – 480/277 V
PBLV	Low Voltage Pullbox
PBMV	Medium Voltage Pullbox
PBSC	Signals/Communication Pullbox
PBTE	Traction Electrification Pullbox
PBX	PABX Phone/Jack
PET	Passenger Emergency Telephone
PIV	Post Indicator Valve
PLC	Programmable Logic Controller
PM	AC Power Meter (TPSS)
PRFHV	Pressure Reducing Fire Hose Valve
PRV	Pressure Reducing Valve

ST Equipment and Facilities Numbering Standard

Equipment Code	Description
PSTA	Pump Room / Station
PV	Plug Valve
PVC	PA / VMS Controller
PVLV	Pre-Action Valve
RA	Radio Antenna
RD	Roll-Up Door
RFFS	Radio Frequency Fiber Switch
RFFT	Radio Frequency Fiber Transceiver
RFLT	Roll Filter
RID	Room Intrusion Detector
RMP	Ramp Gate
RT	Rectifier/ Transformer (TPSS)
RU	Remote Unlock
SA	Sound Attenuator
SAFTP	Stand Alone Fare Transaction Processor
SCR	Smart Card Reader
SD	Smoke Detector
SEFD	Smoke Exhaust Fan Damper for SEFN
SEFN	Smoke Exhaust Fan

Equipment Code	Description
SESA	Smoke Exhaust Fan Sound Attenuator for SEFN
SFAN	Supply Fan
SIG	Signal
SP	Sump Pump
SPC	Sump Pump Controller
SPFA	Signal Processor A/B
ST	Stair
STE	Emergency Egress Stair
STK	DHW Storage Tank
SW	Track Switch
SWBD	Switchboard
SWGR	Switchgear
T	Transformer (Not TPSS)
TBKR	Tie Breaker
TCIC	Telephone Company Interface Cabinet
TD	Tunnel Damper or Tunnel Isolation Damper
TERM	Termination (Radio)
THRM	Thermostat / Temp. Sensor
TID	Track-way Intrusion Detector
TMS	Terminal Server
TPSS	Traction Power Substation

ST Equipment and Facilities Numbering Standard

Equipment Code	Description
TVM	Ticket Vending Machine
TWC	Train to Wayside Communication
UPS	Uninterruptible Power Supply
URLY	Under-voltage Relay
VAV	Variable Air Volume Box
VCC	Vibration Control Cabinet
VFD	Variable Speed/Freq Drive
VIB	Vibration Monitoring Sensor

Equipment Code	Description
VMS	Variable Message Sign
VS	Vent Shaft, Air Shaft
WFD	Wheel Flat Detection
WH	Water Heater
WSCV	Wet Sprinkler Control Valve

5.3. INSTANCE NUMBER 'ZZ'

'ZZ' is the instance number. It is a number that uniquely identifies a specific item. The allowable range is from 01 and up. In general, components must be numbered upwards from 01. However, any number is permissible. It is the responsibility of the designer to choose numbers that are convenient for the set of components being itemized.

As a rule, the instance must be numeric only (0 – 9), except panelboards that are powered by an emergency circuit must have the letter "E" following the instance number. Other alphabetic characters (a–z or A–Z) will be permitted as approved by the Civil/System Integration Manager on a case-by-case basis. In these cases, care will be taken to avoid confusion in the usage of the number 1 and the letter "l", the number 0 and the letter "O", and the number 2 and the letter "Z".

E09-PB2-01E is an example of using an additional alphabetic character "E" at the end of the instance number for a panelboard powered by an emergency circuit. See Section 11.0 Traction Power Equipment for detailed instance numbering of traction power equipment.

Equipment ID's specific to the location will facilitate and aid population of asset management lists that will need to include a unique identification by asset. Development of technical specifications must include language and requirements for unique asset tagging, such as barcoding that will associate installed equipment with the required asset/equipment lists that will be part of the project turnover to operations.

6.0 FEEDER / CABLE IDENTIFICATION NUMBERING

All cable identification must use the general form 'LXX'-'YYYY'-'ZZ', where:

6.1. LOCATION CODE 'LXX'

The location code is as previously described in Section 2.0 of this standard.

6.2. FEEDER/CABLE CODE 'YYYY'

For the traction electrification system, TEPF and TENF must be used to identify positive and negative feeders respectively. EMIP and EMIN must be used to identify positive and negative EMI feeders respectively. EMIR must be used to identify EMI riser cable, as necessary. See Table 3, Feeder/Cable Code Abbreviations, for all currently defined feeder/cable codes:

Table 2: Feeder/Cable Code Abbreviations

Cable Code	Description	Cable Code	Description
AF	Audio Frequency Impedance Bond	FOC	Fiber-Optic Communications
BP	B-Point	MVF	Medium-Voltage Feeder
BPS	Bumping Post Signal; Booster Power Supply	PF	Power Frequency Track Circuit
CAB	Cab Signal Loop	SIG	LRV Signal
CC	Copper Communications	SW	Switch
EFDR	Electrical Feeder	TECT	Traction Control
EMIP	EMI Mitigation Positive	TENF	Traction Electrification Negative Feeder
EMIN	EMI Mitigation Negative	TEPF	Traction Electrification Positive Feeder
EMIR	EMI Mitigation Riser	TWC	Train to Wayside Communication Loop

6.3. INSTANCE NUMBER 'ZZ'

Any number that uniquely identifies a cable. Single digit numbers will be preceded by a leading zero. For positive feeder cables, odd numbers are for southbound or eastbound circuits, and even numbers are for northbound or westbound circuits.

If a single feeder splits to two feeders before the feeder reaches its destination, a single letter modifier (A, B, C, etc.) may be added onto the end of the feeder Instance Number to clarify the configuration. For example, if one positive feeder that exits a TPSS and is identified N03-TEPF-01 splits into two feeders, after the feeder split, the identifications will be N03-TEPF-01A and N03-TEPF-01B.

If a traction power positive feeder feeding southbound track runs through both N03 and N04 sections, the identification will be N03N04-TEPF-'ZZ'.

7.0 FIBER / ETHERNET CABLE NUMBERING

All fiber & Ethernet type cable identification must use the general form

'SSS'F.'MM'.'ZZZ'-'LXX'-'RRRR'-'AAAA'-'YYY':'PP', where:

7.1. CABLE TYPE 'SSS'F.'MM'.'ZZZ' OR 'TTTT'

Fiber Optic cables: 'SSS'F.'MM'.'ZZZ', where 'S' = Number of fiber strands; F = Fiber; 'MM' = single-mode (SM), or multi-single mode (MM); 'Z' = cable ID with redundant suffix designator (A or B)

Example: 24F.SM.02B is a 24 strand single mode fiber redundant cable ID 02B.

Ethernet cables: 'TTTT' indicates E-net category designation. Example: CAT6

7.2. LOCATION CODE 'LXX'

The location code is as previously described in Section 2.0 of this standard.

7.3. ROOM OR SPACE CODE 'RRRR'

'RRRR' indicates the room designation as previously described in Section 3.0 above.

Example: If room code is N10B306, then 'RRRR' = B306.

Space code can designate a specific Manhole, Vault, etc. Example: MHSC05.

7.4. CABINET OR RACK CODE 'AAAA' (OPTIONAL)

'AAAA' can be an alphanumeric combination of any length derived from the equipment code and instance of the cabinet or rack where the cable terminates.

Example: If cabinet code = N03-DC-04, then 'AAAA' = DC04.

7.5. EQUIPMENT CODE 'YYYY'

'YYYY' can be an alphanumeric combination of any length derived from the equipment code and instance of the equipment or device where the cable finally terminates.

Example: Equipment code FDP01A represents the final termination point at a Fiber Distribution Panel FDP01A inside the rack or cabinet 'AAAA' as defined above.

7.6. PORT 'PP' (OPTIONAL)

'PP' can be an alphanumeric combination of any length describing the specific hardware port or termination identifier of the connected end device.

ST Equipment and Facilities Numbering Standard

Fiber Cable Example: 96F.SM.01B-N09-S02-DC04-FPP01B:G represents a 96 strand single mode redundant fiber cable 01B, that is terminated on Port G of Fiber Patch Panel FPP01B inside Distribution Cabinet DC-04 in room S02 at the Roosevelt Station (N09).

8.0 FIBER / ETHERNET CABLE NUMBERING BETWEEN LOCATIONS

All fiber & Ethernet type cable identification between locations must use the general form

'SSS'F.'MM'.'ZZZ'-'LXX'-'RRRR'-'AAAA'-'YYY':'PP' / 'LXX'-'RRRR'-'AAAA'-'YYY':'PP',

where the cable source and destination codes are separated by a forward slash (/).

The first cable code includes the source location, and the second cable code includes the destination location.

8.1. CABLE TYPES 'SSS'F.'MM'.'ZZZ' OR 'TTTT'

The cable type codes are as previously described in Section 7.1 of this plan.

8.2. LOCATION CODES 'LXX'

The location codes are as previously described in Section 2.0 of this plan

The first location code is the source location, and the second code is the destination location.

8.3. ROOM OR SPACE CODES 'RRRR'

The room or space codes are as previously described in Section 7.3 of this plan.

The first code is the room/space at the source location, and the second code is the room/space at the destination location.

8.4. CABINET OR RACK CODES 'AAAA' (OPTIONAL)

The cabinet/rack codes are as previously described in Section 7.4 of this plan.

The first code is the cabinet/rack at the source location, and the second code is the cabinet/rack at the destination location.

8.5. EQUIPMENT CODES 'YYY'

The equipment codes are as previously described in Section 7.5 of this plan.

The first code is the equipment at the source location, and the second code is the equipment at the destination location.

8.6. PORTS 'PP' (OPTIONAL)

The ports are as previously described in Section 7.6 of this plan.

The first code is the equipment termination port at the source location, and the second code is the equipment termination port at the destination location.

Fiber Cable Example 1:

144F.MM.02A-C09-P09-CR13-FPP02B:F2 / E15-B306-SPLC01B represents a 144 strand multimode fiber cable 02A, that has its source terminated on Port F2 of Fiber Patch Panel FPP02B inside Rack CR13 in room P09 at the International District Station (C09); its destination is at splice SPLC01B in room B306 at the Bellevue Downtown Station (E15).

Fiber Cable Example 2:

24F.SM.01B-E15-B306-CR01-FDP02B:14 / S202-DC02-FPP01B:B4 represents a 24 strand single mode fiber cable '01B', that has its source terminated on Port 14 of Fiber Distribution Panel FDP02B inside Rack CR01 in room B306 at the Bellevue Downtown Station (E15); its destination is terminated on Port B4 of Fiber Patch Panel FPP01B inside Distribution Cabinet DC-02 in room S202 at the same Bellevue Downtown Station (E15).

Note that in this case, it was not necessary to repeat the E15 location code in the destination code.

9.0 INPUT / OUTPUT CABLE NUMBERING

All input and output identification must use the general form I/O-‘YYYY’-‘YYYY’-‘ZZ’, where:

9.1. DESIGNATOR I/O

The designator I/O always appears at the beginning.

9.2. EQUIPMENT CODES ‘YYYY’-‘YYYY’

The equipment codes are as previously described in Section 7.5 of this plan.

The first code is the equipment at the source location, and the second code is the equipment at the destination location.

9.3. INSTANCE NUMBER ‘ZZ’

‘ZZ’ is the instance number of the PLC input or output.

Example: I/O-DID123-ITC201-01. This represents an I/O cable going to N07-DID-123, and is coming from N07-ITC-201, and it is the first instance of this cable connection.

10.0 RACEWAY NUMBERING DESIGNATION

All raceway identification must use the general form 'LXX'-'CC'-'ZZ', where:

10.1. LOCATION CODE 'LXX'

The location code is as previously described in Section 2.0 of this plan.

10.2. RACEWAY CODE 'CC'

See Table 3, Raceway Code Abbreviations, for all currently defined raceway codes:

Table 3: Raceway Code Abbreviations

2	208Y/120 or 240/120 V AC Cables	4	480Y/277 V AC Cables
B	BMS	SC	Signals and Communications
C	Critical	MC	Motor Control
E	Essential	MV	Medium Voltage AC
F	Fire Alarm	TE	Traction Electrical DC
N	Nonessential	DB	Ductbank / Conduit-grouping ^[1]

NOTE [1]: Ductbank / Conduit-grouping Code 'DB' is required for Guideway Raceway Schedules

10.3. INSTANCE NUMBER 'ZZ'

'ZZ' is the instance number. It is any number that uniquely identifies a raceway. The allowable range is from 01 and up. In general, components will be numbered from 01 upwards. However, any number is permissible. It is the responsibility of the designer to choose numbers that are convenient for the set of components being itemized.

As a rule, the instance must be numeric only (0–9). On a case-by-case basis, alphabetic characters (a–z or A–Z) will be permitted as approved by the Civil/System Integration Manager. In these cases, care will be taken to avoid confusion in the usage of the number 1 and the letter "l", the number 0 and the letter "O", and the number 2 and the letter "Z".

Example: N09–N2–01 represents a conduit, which is located in Roosevelt Station (N09) that carries 208Y/120 V AC nonessential circuits, and is the first (01) instance.

Example: E10-DB-02 represents a ductbank, which is located on the Easlink E10 guideway, which includes a group of conduits identified per the E10 Guideway Raceway Schedule; e.g., E10-MV-07, E10-C4-03, E10-E2-04, and E10-SC-01.

11.0 TRACTION POWER EQUIPMENT NUMBERING

All traction power equipment identification must use the general form 'LXX'-'YYYY'-'T'ZZ', where:

11.1. LOCATION CODE 'LXX'

The location code is as previously described in Section 2.0 of this plan.

11.2. EQUIPMENT CODE 'YYYY'

'YYYY': Traction Power equipment abbreviations, as defined in Table 4:

Table 4: Traction Power Equipment Code Abbreviations

Equipment Code	Description	Equipment Code	Description
BA	Battery / Charger	MVB	AC Primary MV Breaker
DC	DC General	MVF	AC MV Feeder
G	TPSS General	MVSS	AC MV Substation
H	TPSS 1500 V DC Breaker / Switch	RT	Rectifier / Transformer

11.3. INSTANCE NUMBER 'T'ZZ'

'T': 7 = positive breaker; 6 = positive switch; 9 = negative switch / breaker; 4 = AC primary MV breaker (Prefab TPSS); null = AC MV breaker (Built-in TPSS)

'ZZ': Any number that uniquely identifies the instance of the traction power equipment. Single digit numbers will be preceded by a leading zero.

11.3.1 AC MV BREAKER

Example: E03-MVB-401 identifies an AC MV breaker in the prefabricated TPSS at Lake Washington (E03).

Example: N03-MVB-11 identifies an AC MV breaker in the built-in TPSS at Capitol Hill (N03).

11.3.2 DC BREAKERS AND POSITIVE SWITCHES

'ZZ': 01 through 04 are reserved. 01 and 02 feed circuits to the North or West of the TPSS, depending on the direction of alignment. 03 and 04 feed circuits to the South or East of the TPSS, depending on the direction of alignment. Additionally, even numbers are for northbound or westbound circuits, and odd numbers are for southbound or eastbound circuits.

ST Equipment and Facilities Numbering Standard

Example: N03-H-601 identifies the positive switch at Capitol Hill (N03) TPSS feeding a southbound circuit, which is north of the TPSS.

11.3.3 TIE-SWITCHES

'T'ZZ': 613 is reserved for tying the load side of 601 and 603 for southbound or eastbound. 624 is reserved for tying the load side of 602 and 604 for northbound or westbound.

Example: E08-H-613 represents the tie-switch at E Mercer (E08) TPSS tying the load side of 601 and 603 for eastbound.

12.0 OVERHEAD CONTACT SYSTEM (OCS) NUMBERING

12.1. OCS ELECTRICAL SECTIONS

OCS electrical sections, referred to hereafter as OCS sections, are shown on the traction power system one-line diagrams. OCS sections have a shorthand numbering convention, which does not include an equipment code or instance number. All OCS sections must use the general form 'JJ''KK''R', or 'HH''R', where:

12.1.1 OCS SECTION NUMBER 'JJ', 'KK' OR 'HH'

OCS Sections are numbered according to the switch location numbers on the ends of the OCS Section. Single digit numbers will be preceded by a leading zero.

'JJ': Switch location number on South or East end of OCS section, depending on North/South alignment or East/West alignment.

'KK': Switch location number on North or West end of OCS section, depending on North/South alignment or East/West alignment.

'HH': If the OCS section is only fed from a single TPSS disconnect switch, or bordered by two wayside sectionalizing switches with the same location code, that is the only location number used.

12.1.2 OCS SECTION 'R'

N: Northbound

S: Southbound

E: Eastbound

W: Westbound

P: Pocket Track

X: Crossover

Example: 1411N represents the northbound OCS section between wayside sectionalizing switch C14-H-602 and TPSS disconnect switch C11-H-604.

Example: 00S represents the southbound OCS section only fed from TPSS disconnect switch N00-H-605.

Example: 14S represents the southbound OCS section between wayside sectionalizing switches C14-H-603 and C14-H-601.

Example: 1212N represents the northbound OCS section between TPSS disconnect switch N12-H-602 and wayside sectionalizing switch N12-H-606.

12.2.OCS STRUCTURES

The following describes the OCS structure numbering convention. OCS structures include poles, portals, tunnel supports, headspan anchors, and downguy anchors. All OCS structures must be numbered using the form 'LXX'-'ZZZ', where:

12.2.1. OCS STRUCTURE LOCATION CODE 'LXX'

LXX: The location code is as previously described in Section 2.0 of this standard.

12.2.2. OCS STRUCTURE INSTANCE NUMBER 'ZZZ'

The Instance Number 'ZZZ' is a three-digit numeral starting with 001 and counting in the direction of the next location code. If there are two OCS structures at the same stationing, the one on the outbound track (North, South, East, or West), referenced from N00 Pine Street Ventilation Facility, will be assigned the lower number.

Plan views on the OCS layout drawings showing the OCS structure locations will typically have only the 'ZZZ' instance number shown in a rectangular box next to the structure. The schedules/tables in the OCS layout drawings will list the full structure number, i.e. 'LXX'-'ZZZ'.

If there are two structures with the same instance number 'ZZZ' shown on the same OCS layout drawing, the location code 'LXX' may also be included in the plan view structure labeling for additional clarity.

Example: E20-001 represents the first pole in section E20 counting up toward section E21.

12.3. OCS WIRE RUNS

The following describes the OCS wire run numbering convention. OCS wire runs must be numbered using the form 'LZZ' for mainline wire runs, P'LZZ' for pocket track wire runs, or X'LZZ' for crossover wire runs, where:

12.3.1 CORRIDOR/EXTENSION CODE 'L'

'L': The corridor/extension line code as previously described in Section 2.0 above.

12.3.2 INSTANCE NUMBER 'ZZ'

'ZZ': The instance number for that type of wire run (mainline, pocket, or crossover) and in a particular corridor. It generally starts with 01 at the beginning of the corridor and counts in the outbound direction of the corridor. For mainline wire runs, 'ZZ' must be an odd number for the outbound track and an even number for the inbound track. Additionally parallel wire runs on the outbound and inbound tracks must be sequential with the lesser number being for the outbound track. If there are two or more wire runs on the outbound or inbound track stretching the same general distance as a single wire run on the opposite track, add an A, B, etc. to the end of the instance number to maintain sequential numbering using the odd and even numbers described above. If the instance number becomes 100 or greater, add a third digit and the instance number takes the form 'ZZZ'.

12.3.3 OCS MAINLINE WIRE RUNS

OCS mainline wire runs must be numbered using the form 'LZZ', where:

'L': The corridor/extension line code defined above.

'ZZ': The instance number defined above.

12.3.4 OCS POCKET TRACK WIRE RUNS

OCS pocket track wire runs must be numbered using the form P'LZZ', where:

P: Identifier for pocket track wire run.

'L': The corridor/extension line code defined above.

'ZZ': The instance number defined above.

12.3.5 OCS CROSSOVER WIRE RUNS

OCS crossover track wire runs must be numbered using the form X'LZZ', where:

X: Identifier for crossover track wire run.

'L': The corridor/extension line code defined above.

'ZZ': The instance number defined above.

13.0 FIRE ZONE NUMBERING

A fire zone is the area protected by the fire protection system which can be a room, a portion of a floor, an entire floor, or an entire building. For standpipes the numbering is consistent based upon the system and area served which may be a stair, tunnel, aerial guideway, or area (i.e. station platform). Each zone must be uniquely numbered.

Note that fire zones are not the same as sprinkler zones.

Station Fire Zones must use the general form FZ'LXX'-'U''YY''G', and Tunnel Fire Zones must use the general form FZ'LXX'-'Z'0 where:

13.1. LOCATION CODE FZ'LXX'

FZ: Fire zone

'LXX': The location code is as previously described in Section 2.0 of this standard.

13.2. STATION SYSTEM CODE 'U''YY''G'

1. The first letter of the system code, 'U', designates the type of system:

C: Clean Agent Suppression System

D: Dry-Pipe Sprinkler System

G: Deluge Sprinkler System

W: Wet-Pipe Sprinkler System

P: Pre-Action Sprinkler System

S: Standpipe System – all (wet, dry, manual, etc.)

2. The second and third letters of the system code, 'YY', designates the facility floor level served, as previously described in Section 3.2 in this standard. For systems in stairwells, such as standpipes, use the stair designation(s).
3. 'G' is a number that starts at 1 and increases sequentially, without skipping numbers, from any reasonable starting point.

Example: FZN09-DT2. This represents the second dry Fire Zone at the Roosevelt Station N09 train platform.

Example: FZN09-SSTE1. This represents a standpipe translating multiple levels within Emergency Egress Stair STE1

13.3 TUNNEL SYSTEM CODE 'U''YY''G'

1. The first letter of the system code, 'U', designates the type of system:

S: Standpipe System – all (wet, dry, manual, etc.)

2. 'G' is a number that starts at 1 and increases sequentially, without skipping numbers. Systems and equipment are to be numbered consistent with the convention outlined for tunnel instance numbers.

Example: FZN08FHV-11. This represents a fire hose valve in the northbound bore of the N08 tunnel segment between UDS and RVS stations.

13.4 TUNNEL INSTANCE NUMBER 'Z'0

'Z' is the tunnel fire zone instance number. Even numbers designate southbound or westbound tunnels, while odd numbers designate northbound or eastbound tunnels.

'Z' should start at 1 for northbound and eastbound tunnels or at 2 for southbound and westbound tunnels; and increase incrementally without skipping numbers.

Example: FZN10-10. This represents the first tunnel fire zone in the northbound tunnel just north of Roosevelt Station (N10). FZN10-20 would be the adjacent southbound tunnel north of Roosevelt Station.

ST Equipment and Facilities Numbering Standard

APPENDIX A - Sound Transit 3-digit Character Abbreviation for each Location

All Locations Name	3-digit identifier
5TH & JACKSON BUILDING	910
605 UNION STATION BUILDING	605
625 UNION STATION OPUS BUILDING	625
705 UNION STATION BUILDING	705
ANGLE LAKE GARAGE	SP01
ANGLE LAKE STATION	S01
AUBURN GARAGE	562
AUBURN STATION	585
AUBURN WAREHOUSE	168
BEACON HILL STATION	C19
BELLEVUE RIDER SERVICES BLDG	561
BELLEVUE TRANSIT CTR METRO	572
BONNEY LAKE PARK AND RIDE	598
CANYON PARK FREEWAY STATION	603
CAPITOL HILL STATION	N03
CENTRAL LINK OMF	M01
COLUMBIA CITY STATION	C25
DUPONT STATION	579
EASTGATE FREEWAY STOP	602
EASTMONT PARK AND RIDE	571
EDMONDS STATION	578
EVERETT STATION	576
FEDERAL WAY TRANSIT CENTER	565
INT'L DISTRICT STATION	C09
ISSAQUAH TC	601
KENT GARAGE	563
KENT STATION	584
KING STREET STATION	581
KIRKLAND TRANSIT CTR	651
LAKEWOD BNSF OFFICE	761
LAKEWOOD STATION	597
LYNNWOOD TRANSIT CENTER	594
LAKEWOOD WAREHOUSE	169
MERCER ISLAND PARK AND RIDE	599
MID-DAY BUS STORAGE YARD	C17
MOUNT BAKER STATION	C23
MOUNTLAKE TERRACE FRWY STATION	609
MUKILTEO STATION	577
NORTHGATE LEASED LOT	N11
OTHELLO STATION	C27
OVERLAKE RIDER SERV BLDG & STATION	573
PIONEER SQUARE STATION	C07
PUYALLUP STATION	592
RAINIER BEACH STATION	C29
SEATAC / AIRPORT STATION	C37
SODO STATION / E3 BUS WAY	C15
SOUTH EVERETT FREEWAY STATION	607
SOUTH HILL PARK AND RIDE	574
SOUTH TACOMA STATION	566
STADIUM STATION	C13
SUMNER STATION	591
TACOMA DOME SOUNDER STATION	593
TACOMA OMF	M00
TLINK 25TH STREET STATION 586	T03
TLINK COMMERCE ST STATION 590	T09
TLINK CONVENTION CENTER STATION 588	T07
TLINK TACOMA DOME STATION 455	T01
TLINK THEATRE DISTRICT STN 589	T11
TLINK UNION STATION 587	T05
TOTEM LAKE FREEWAY STATION	606
TUKWILA INT'L BLVD STATION	C35
TUKWILA SOUNDER STATION	583
UNION STATION (401 S JACKSON)	909
UNIVERSITY OF WASHINGTON	N05
UNIVERSITY STREET STATION	C05
WELLER STREET BRIDGE	770
WESTLAKE STATION	C03

SCR Station Name	3-digit identifier
AUBURN STATION	585
EDMONDS STATION	578
EVERETT STATION	576
KENT STATION	584
KING STREET STATION	581
LAKEWOOD STATION	597
MUKILTEO STATION	577
PUYALLUP STATION	592
SOUTH TACOMA STATION	566
SUMNER STATION	591
TACOMA DOME SOUNDER STATION	593
TUKWILA SOUNDER STATION	583