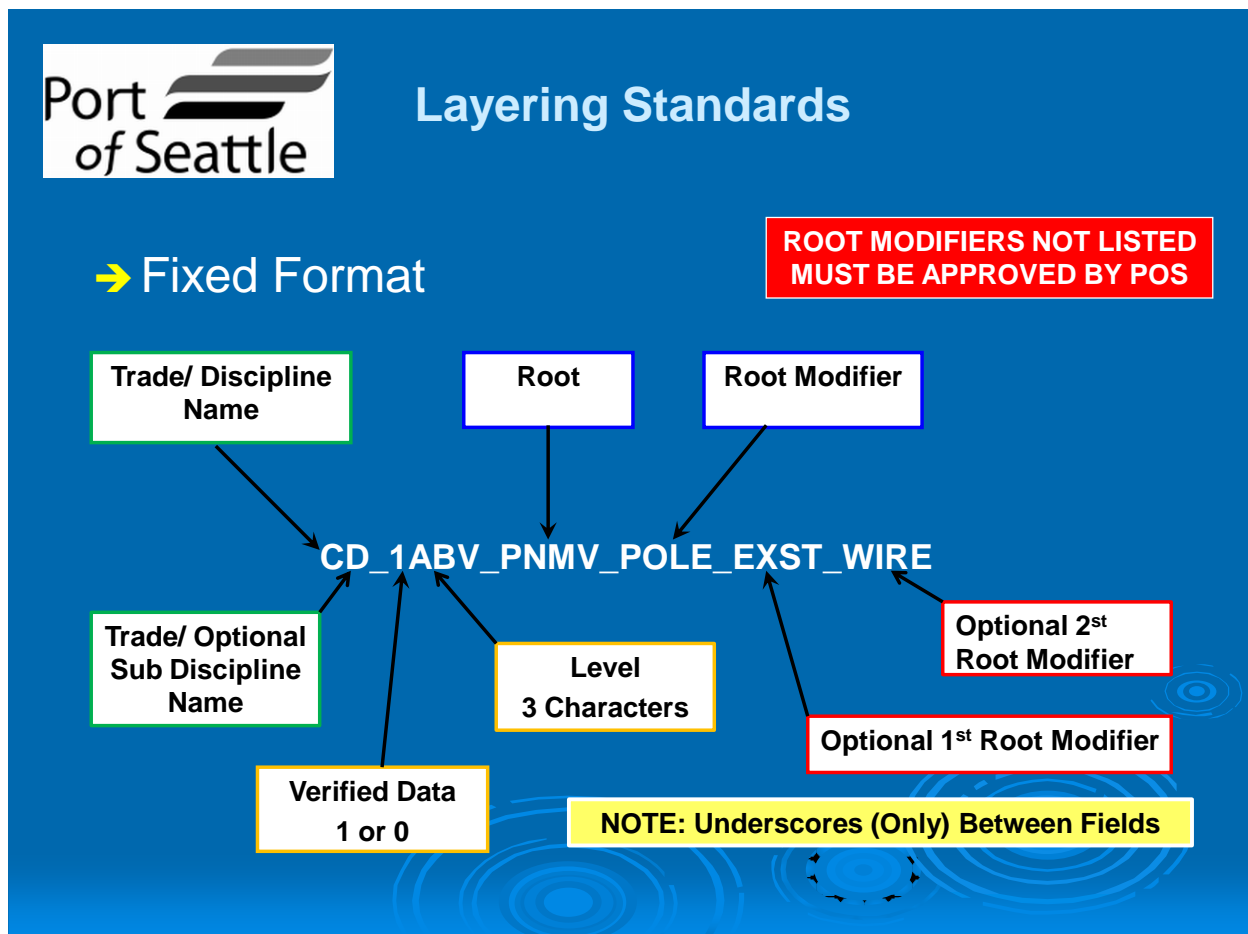**NOTE: For the POS Cad Standard Layer Tables—follow the protocols in this primer!**

1)...No Miss-Matching one Trade Roots and Root Modifiers are allowed with other Trades!

2)...No Miss-Matching Root Modifiers with other Roots within the same Trade are allowed!

3)...Use all layers that are in the layer table as specific as noted in the Layer Tables!

4)… (Do not use the 2000 standards With 2008 Standards and miss-match the two!)

5)…For Levels, Roots & Root Modifiers… (4 character only)

6)…For Optional 1st & 2nd Root Modifiers… (1-4 character only)

7)… Underscore's (only!)--Between Layer Fields--(No Dashes, Hyphens or Spaces!)

8)…All layer names shall be in 'CAPS' only...No Exceptions!

9)…Please note the following characters are not allowed:

~ ! @ # $ % ^ & * ( ) - + = { } [ ] \ ; ' : " , < . > / ?... For layer names

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Port of Seattle

Layering Standards

ROOT MODIFIERS NOT LISTED MUST BE APPROVED BY POS

➜ Fixed Format

| Trade/ Discipline Name | Root | Root Modifier |

CD_1ABV_PNMV_POLE_EXST_WIRE

Trade/ Optional Sub Discipline Name

Level 3 Characters

Optional 2st Root Modifier

Optional 1st Root Modifier

Verified Data 1 or 0

NOTE: Underscores (Only) Between Fields

POS Layer Protocols

- → Layer Naming
    - → Trade Letter And Sub/Discipline…(Alpha)
- → Verified Data…(Numerical)
    - → 1 = (New) Shown Or Verified
    - → 0 = (Existing) Shown Or Un Verified
- → Floor Level (Alpha) and (Numerical) (3 Letter Only)
- → Root (Alpha) (4 Characters) For Specific Trades last 2 Characters are set for (Numerial)
- → Root Modifier (Alpha) (4 Characters) For Specific Trades last 2 Characters are set for (Numerial)
- → Optional Modifier (Required) (By POS)
- → Users Optional Modifier (Open 1-4 Characters Only)
- → Users 2ND Optional Modifier (Open 1-4 Characters Only)
- → Note: No Mixing Of One Trade Layers With Other Trades
- → Use only POS Approved Layers
- → Layer Names (All Caps)
- → Underscores (Only)

1 (character) (Alpha Only)	**Trade**
1 or **2** (characters) (Alpha Only)	**Trade Sub/Discipline**
1 (character)…Numbers **1** or **0** (numeral Only)	**Verified Data**
3 (characters) **1**^{st &} **2**^{nd} (Alpha Only)	**Level**
3rd (character Alpha or numeral)	**Level**
4 (characters) (Alpha & numeral)	**Root**
4 (characters) (Alpha & numeral)	**Root Modifier**
Required Layer **4** (character) (Alpha Only)	**1st Optional Modifier**
User Layer **1-4** (characters) (Alpha or numeral	**1st Optional Modifier**
User Layer **1-4** (Alpha or numeral)	**2st Optional Modifier**
Space between fields	(Underscores only!)
All layer names	Capital case Text Only
Total number of characters in a layer name	(28 Max)

Trade Letter:

G… General Layers (Please Note Not a true Trade, however used for POS Projects)
C… Civil Layers
L… Landscape Layers
A… Architectural Layers
S… Structural Layers
M… Mechanical Layers
P… Plumbing Layers
E… Electrical Layers
F… Fire Protection Layers
X… Xrefs Layers (Attach Drawing References) (Not a true Trade, however used for POS Projects)

Trade Letter and Sub Discipline Letter:

C… Civil Layers

CA	**Alignment**
CB	**Site Preparation/Removals**
CC	**Construction Phasing or Staging**
CD	**Demolition**
CE	**Erosion Control…. Environmental**
CF	**Profiles**
CG	**Grading**
CI	**Intelligent Transportation System (ITS)**
CK	**Track**
CR	**Right-Of-Way (ROW) elements**
CS	**Signage**
CT	**Transportation/Traffic control**
CU	**Utilities**
CV	**Paving**
CW	**Retaining Walls**
CX	**Roadway sections**
CY	**Storm Drainage**

L… Landscape Layers

LI	**Irrigation**
LD	**Demolition**
LP	**Planting**

Trade Letter and Sub Discipline Letter:

A… Architectural Layers

AD	Demolition
AE	Electrical
AG	Signage
AI	Interiors
AK	Equipment
AM	Mechanical
AS	Structural
AX	Sections (longitudinal & traverse)

S… Structural Layers

SA	Alignment
SB	Bridge
SD	Demolition
SF	Foundation/Framing
SK	Track Supports
SS	Seismic
SX	Sections

M… Mechanical Layers

MB	Baggage
MD	Demolition
ME	Elevators/Escalators
MF	Fire Protection
MH	HVAC
MP	Plumbing & Drainage
MR	Risers
MX	Sections

P… Plumbing Layers

PD	Demolition
PR	Risers
PX	Sections

Trade Letter and Sub Discipline Letter

E… Electrical Layers

EA	Data… Audio/Visual
EB	Baggage
EBC	Baggage Controls
EC	Communications
ED	Demolition
EF	Fire System
EG	Grounding
EI	Roadway Illumination
EK	Track System
EL	Lighting
EN	Computer/Networks
EP	Power
ER	Runway Illumination
ES	Security
ET	Telephone

F… Fire Protection Layers

FA	Alarm Systems
FD	Demolition
FR	Risers
FX	Sections

Verified Data:	1 (Character) (Numerical) Verified designation (1) Unverified designation (0)

Floor Level: (3 Characters)

Level	Description	Level	Description
ABV	Above Ground Level	GRD	Ground, at Grade Level
BAG	Baggage @ Main Terminal Level	INC	South Satellite-Corridor Level
BMZ	Baggage Mezzanine Level	MEZ	Mezzanine level
BRG	Bridge and Promenade Level	PEN	Penthouse Level
BS1	Basement 1 Level	PG1	Parking Garage Level 1
BS2	Basement 2 Level	PG2	Parking Garage Level 2
BS3	Basement 3 Level	PG3	Parking Garage Level 3
CMP	Central Mechanical Plant Level	PG4	Parking Garage Level 4
CON	Concourse (Ticketing level)	PG5	Parking Garage Level 5
DCK	Dock Level	PG6	Parking Garage Level 6
FIS	FIS Mezzanine Level	PG7	Parking Garage Level 7
FL1	1st Floor Level	PG8	Parking Garage Level 8
FL2	2nd Floor Level	PG9	Parking Garage Level 9
FL3	3rd Floor Level	PG10	Parking Garage Level 10
FL4	4th Floor Level	RMP	Ramp Level
FL5	5th Floor Level	ROF	Roof Level
FL6	6th Floor Level	STS	Stations, Tunnels and adjustment Levels
FL7	7th Floor Level	TUN	Tunnels & under Bridges @ ground level
FL8	8th Floor Level	UDG	Underground Level
FL9	9th Floor Level	UDK	Under Dock Level
GEN	General Level		

Root Modifier Requiring numeral input from user:

Mechanical Layers

For the HVACs System Only:

The 1st pound sign # in the Root = a numeral input
The 2nd # pound can be Numeral or Alpha.

AH## Range between *(AH01-AH99) or (AH01-AH1Z)*
CS## Range between *(CS01-CS99) or (CS1Z)*

Root Modifier Requiring numeral input from user:

Details, Elevations, Sections Layers

L###   Range between *(01-256)(only)*

Root Modifier Requiring numeral input from user:

Mechanical Layers

Building Baggage System Components

Single #   Range between *(1-9)*

Double # # Range between *(01-99)*

CAT#	DVT#	IO##	OO##
CL##	EDS#	IT##	RC##
CLR#	EQ##	LAD#	SA##
CN##	ETD#	ME##	SB##
DFT#	FD##	MK##	SC##
DIA#	FDR#	ML##	SDR#
DIM#	FUT#	NOT#	STP#
DR##	GRL#	OB##	TC##
DTL#	IB##		

Building Refrigeration systems

AAU#   Range between *(1-9)*

Please NOTE: The following Root Modifiers:

Are to be used in the 1st Optional Modifier Field Only!

ABND
DEMO
EMER
EXST
RELO
REMV
TEMP
SALV
UNKN

Please NOTE: The following Root Modifiers:

Are used Only for Details, Elevations, Sections & Diagrams

BOLD
CNTR
HEVY
HIDN
LITE
MEDM
SCRN
XBLD
XLIT
XXBD
XXLT
INVR