



VERTICAL INFRASTRUCTURE

Guidelines for attachment to City Poles within City Right-of-Way

The following items are required for a City pole attachment request:

- City Attachment Intake Request *(including site walk, reservation, and pre-design meeting requests)*
- PRE-APPLICATION SUBMISSION CHECK LIST *(all items must be reviewed and completed)*
- 60 Day Shot Clock Cover Letter
- Photosims of existing and proposed pole placement
- Boundary Survey
- Site Specific Detail Survey Map
- Proposed Construction Drawings
- Draft of Public Notice
- Radio Frequency Safety Survey Report Prediction (RFSSRP)
- Propagation Map
- PBOT Structural Design check sheet *(all items must be reviewed and provided)*
- PBOT Signals & Street Light Design Check Sheet *(all items must be reviewed and provided)*
- PBOT Civil Design Check list *(all items must be reviewed and provided)*

All above required items are to be assembled in a single submission package (PDF 25Mb max.) and sent to PBOT Vertical Infrastructure Permitting (pbotvi@portlandoregon.gov)

WIRELESS FACILITY ON CITY-OWNED INFRASTRUCTURE



City Pole Attachment Inquiry



Intake Request

Wireless Provider:

Primary Contact:

E-Mail:

Phone:

Billing Address:

VOLUNTARY PARTICIPATION - SITE WALK and /or POLE RESERVATION

Are you requesting a site walk?

if yes, please complete only Section 1.

Are you requesting a pole reservation?

if yes, please complete only Section 1.

Section 1. CITY ASSET INFORMATION

Asset Type:

PBOT Asset Id:

Site / Node Identifier:

Proposed Location (e.g., SE Main St/ 7th- 8th Aves/ east side of street):

Street:

Cross Streets:

Section 2. MAKE-READY PROCESS

Does the pole you are proposing attachment to currently meet standards for attachment?

Pre-design meeting requested (voluntary)?

REQUIRED DOCUMENTS

Pre-Application Meeting Check List reviewed and attached?

PDF of Proposed Work (full plan set) Attached?

Boundary Survey (site specific detail survey) map attached?

Photo of existing Location conditions and photosim of proposed facility Attached?

Public Notification Attached?

FCC OET Bulletin 65 (RF Exposure) Compliance:

Radio Frequency Report

Radio Frequency Propagation Map

WIRELESS FACILITY ON CITY-OWNED INFRASTRUCTURE

Section 2. MAKE-READY PROCESS (cont'd)

PROPOSED EQUIPMENT DETAILS

Small Cell

4G Antenna

5G Antenna

Antenna Volume

4G Flat Panel Antenna

5G Flat Panel Antenna

Volume of Antenna #1

Volume of Antenna #2

Volume of Antenna #3

Volume of Ancillary Equipment

POLE INFORMATION

Pole

Existing Pole Height (AGL)

New / Replacement Pole Height (AGL)

Power Supplier

Fiber Supplier:

Pole Type

PBOT Asset ID Number

Pole Owner

SHOT CLOCK NOTICE: Proposed installation of wireless communications facilities on City-owned assets are subject to FCC shot clock time limits. Failure to provide all forms fully completed with requested attachments may result in your project being determined to be incomplete.

Send form/questions to: PBOT Vertical Infrastructure Permitting (pbotvi@portlandoregon.gov)

WIRELESS FACILITY WITHIN CITY RIGHT-OF-WAY



PRE-APPLICATION SUBMISSION CHECK LIST

updated 11/30/2020



This check list is intended to assist both the applicant and PBOT staff to encourage completeness of submissions and minimize possible review delays. To be completed by PBOT Vertical Infrastructure staff and a duly authorized representative of a wireless carrier granted authority by the City of Portland under an existing, valid Right-of-Way Agreement to place wireless communication facilities in City streets. Failure to provide items noted on this check list may result in application rejection or denial.

Applicant		COP Staff
Completed	Requested items	Confirmed
Primary Documents		
	Intake request forms completed? (includes site walk, pole reservation, pre-design meeting requests)	
	Wireless provider information? (franchised carrier, billing address and primary contact information)	
	Site Name or Job Number?	
	Proposed location?	
	Proposed scope of work attached? (PDF of construction planset)	
	Supporting documents? (boundary and site specific survey maps; photo of location and photo-sim of completed infrastructure)	
	3rd Party "make-ready" pole replacement or "no work" letter? (a separate street opening permit will be required from pole owner)	
	Public Notification and Outreach documentation?	
	Radio frequency exposure -FCC OET Bulletin 65 Compliance?	
	Copy of radio frequency report? (signed by an Oregon Licensed RF Engineer)	
	Radio frequency propagation map showing coverage area of wireless facility?	
	Site walk requested? (VOLUNTARY participation)	
	Pole reservation requested? (VOLUNTARY participation - City owned assets only)	
	Pre-application review meeting requested? (VOLUNTARY participation - City owned assets only)	

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WIRELESS FACILITY WITHIN CITY RIGHT-OF-WAY

Applicant		COP Staff
<i>Completed</i>	<i>Requested items</i>	<i>Confirmed</i>
Scope of Work Details		
	Is this a modification or alteration of an existing wireless facility? (6409 Request)	
	Pole type identified? (3rd Party asset or City signal/street light pole)	
	Pole owner identified?	
	Does the existing pole meet attachment standards? ("make-ready" process required for poles not meeting current standards)	
	If pole requires "make-ready" process, do you agree to suspend 60 day shot clock?	
	Power supplier identified? (a separate street opening permit will be required from franchised utility)	
	Fiber supplier identified? (a separate street opening permit will be required from franchised utility)	
	ADA ramp impacted?	
	Potential street tree impacts? (street tree impacts may require review and concurrence of Urban Forester)	
Equipment Details		
	Proposed equipment type?	
	Number of proposed antennas?	
	Volume of antennas?	
	Description of ancillary equipment?	
	Volume of ancillary equipment?	
	Pole height upon completion of installation?	
	Power supply details provided?	
	Fiber connection details provided?	
Design Criteria Requirements		
	Signals & Street Light Design Check Sheet reviewed and all items required for review provided?	
	Civil Design Check Sheet reviewed and all required items for review provided?	
	Structural Design check sheet reviewed and all items required for review provided?	

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WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE



SIGNALS & STREET LIGHTING DESIGN CHECK SHEET



To be completed ONLY by a duly authorized representative of a wireless carrier granted authority by the City of Portland under an existing, valid Right-of-Way Agreement to place wireless communication facilities in City streets. This design check sheet must be submitted with any application to use City-owned assets for new or additional wireless communication attachments. Failure to fully complete the check sheet may result in application rejection or denial.

All structural design, detailing, and construction practices shall be in conformance with the most currently published version of PBOT's Structural Design Criteria for Vertical Infrastructure.

Primary Documents

Applicant		COP Staff
Required		Provided
<input type="checkbox"/>	Does the proposed installation comply with all requirements listed in PBOT Administrative rule TRN 4.01?	<input type="checkbox"/>
<input type="checkbox"/>	Does the proposed installation comply with all requirements listed in PBOT Administrative rule TRN 10.44?	<input type="checkbox"/>
<input type="checkbox"/>	DETAILED PLANS - Stamped and signed by Professional Engineer currently registered in the State of Oregon	<input type="checkbox"/>
<input type="checkbox"/>	PROJECT SPECIAL PROVISIONS - Stamped and signed by Professional Engineer currently registered in the State of Oregon	<input type="checkbox"/>
<input type="checkbox"/>	SSL DESIGN REVIEW CHECKLIST - Completed and signed by Professional Engineer currently registered in the State of Oregon	<input type="checkbox"/>
<input type="checkbox"/>	ILLUMINATION PHOTOMETRIC ANALYSIS - Including existing and proposed conditions with supporting calculations and signed by Professional Engineer currently registered in the State of Oregon	<input type="checkbox"/>

General Plans Requirements

<input type="checkbox"/>	Provide plans in all required formats: <ul style="list-style-type: none"> • Stamped paper plan sheets • Stamped PDF plan sheets • Unstamped CAD files in AutoCad (DWG) or Microstation (DGN) format 	<input type="checkbox"/>
<input type="checkbox"/>	Show proposed light or signal pole location, including footing elevations	<input type="checkbox"/>
<input type="checkbox"/>	Show all proposed relevant dimensions of pole attachments including weight, location, elevation, size of such as signs, luminaires, signal heads, antenna, service cabinets, banners, etc.	<input type="checkbox"/>
<input type="checkbox"/>	Show offset dimensions of proposed street light or signal pole and foundation from: <ul style="list-style-type: none"> • Property lines • Face of curb • Driveway aprons • Water lines • Sewer lines • Awnings • Overhead wires and cables • Other structural elements such as basement walls 	<input type="checkbox"/>

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WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE

<input type="checkbox"/>	Show existing and proposed infrastructure including: <ul style="list-style-type: none"> • Adjacent buildings and awnings • Driveways • Hydrants • Utility and basement vaults • Poles • Walls and fences • Bus shelters • Planters • Garbage bins • Other physical features that impact the placement of permittee equipment or street lighting components 	<input type="checkbox"/>
<input type="checkbox"/>	Show existing and proposed underground and overhead utilities, including temporary utility relocation, note utility locations and heights	<input type="checkbox"/>
<input type="checkbox"/>	Show all street trees located closer than 25 feet from street lights or signal equipment (this can be on a civil or landscape plan)	<input type="checkbox"/>
<input type="checkbox"/>	Identify any overhead obstructions (such as canopies or utilities) that may impact signal or street light pole placement, note critical clearances	<input type="checkbox"/>
<input type="checkbox"/>	Show right-of-way boundaries and easements	<input type="checkbox"/>
<input type="checkbox"/>	Existing and proposed sidewalk limits and elevations	<input type="checkbox"/>
<input type="checkbox"/>	Existing and proposed curb and curb ramp limits and elevations	<input type="checkbox"/>
<input type="checkbox"/>	Identify power source <ul style="list-style-type: none"> • Show and identify how installation will be fed from power source • Provide utility junction box per PGE or PPL requirements • Include PGE/PP&L work request number and preliminary service design 	<input type="checkbox"/>
<input type="checkbox"/>	Include standard engineering scale bar, architectural scales are not acceptable	<input type="checkbox"/>
<input type="checkbox"/>	Use standard PBOT Signals and Street Lighting CAD Cell Library symbols, legend, stamps, details, and standard notes	<input type="checkbox"/>
<input type="checkbox"/>	Show north arrow and street names	<input type="checkbox"/>
<input type="checkbox"/>	Show site specific construction notes and general notes	<input type="checkbox"/>
<input type="checkbox"/>	Include standard PBOT title blocks with blanks to be completed upon issuance of permit for: <ul style="list-style-type: none"> • Site Number • Date Approved • PBOT Reviewer • PBOT SSL Approval Signature • City Engineer Approval Signature 	<input type="checkbox"/>
<input type="checkbox"/>	List and include all applicable standard drawings with most recent Effective Date	<input type="checkbox"/>
Street Lighting Plans Requirements		
<input type="checkbox"/>	Show and identify all lighting equipment (electrical service, poles, luminaire arms, luminaires, photocell) within 100 feet of project site	<input type="checkbox"/>
<input type="checkbox"/>	Show and identify all lighting equipment to be removed or salvaged	<input type="checkbox"/>
<input type="checkbox"/>	Show pole foundation types and locations	<input type="checkbox"/>
<input type="checkbox"/>	Provide pull boxes in the furnishing zone, adjacent to every pole	<input type="checkbox"/>
<input type="checkbox"/>	Show and identify the underground circuitry: route conduit runs under the sidewalk, outside of tree wells, 2 ft from back of sidewalk	<input type="checkbox"/>
<input type="checkbox"/>	Show service schematic diagram	<input type="checkbox"/>

WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE

<input type="checkbox"/>	Show circuit schematic wiring diagram: use single-phase 120V or 240V system; street lighting electrical system shall be isolated from all other electrical systems	<input type="checkbox"/>
<input type="checkbox"/>	Provide voltage drop calculations, do not exceed 3% drop	<input type="checkbox"/>
<input type="checkbox"/>	Minimum allowable wire size is #10 AWG and maximum is #2 AWG	<input type="checkbox"/>
<input type="checkbox"/>	Only use street lighting components that are pre-qualified on Electrical Equipment and Materials List	<input type="checkbox"/>
<input type="checkbox"/>	Include provision for removing and reconnecting mid-circuit street light installations	<input type="checkbox"/>
Equipment Details		
<input type="checkbox"/>	Provide details for all proposed equipment and appurtenances. Include function, size, volume, height and offset, fully-loaded weight, anchorages, effective projected area, and proposed mounting location	<input type="checkbox"/>
<input type="checkbox"/>	Show schedule of pole attachments and handholes including heights and orientations	<input type="checkbox"/>
<input type="checkbox"/>	Connection details for all proposed pieces of equipment shall be provided and completely detailed.	<input type="checkbox"/>
<input type="checkbox"/>	Detail proposed wiring, cables, and conduit within pole	<input type="checkbox"/>
<input type="checkbox"/>	Note equipment color and coatings	<input type="checkbox"/>
<input type="checkbox"/>	Provide proposed special design details	<input type="checkbox"/>
Special Provisions		
<input type="checkbox"/>	Based on 2010 City of Portland Standard Construction Specifications	<input type="checkbox"/>
<input type="checkbox"/>	Provide Special Provisions in: <ul style="list-style-type: none"> • Word format, with tracked changed from any edits from posted Special Provision files • PDF of final version 	<input type="checkbox"/>
<input type="checkbox"/>	Include all applicable Sections and Subsections with most recent Effective Date as posted	<input type="checkbox"/>
<input type="checkbox"/>	Include Special Provisions Signature Sheet	<input type="checkbox"/>
<input type="checkbox"/>	Signed and stamped by a Professional Engineer registered in the State of Oregon	<input type="checkbox"/>
Illumination Photometric Analysis		
<input type="checkbox"/>	Describe street lighting existing and proposed conditions, and lighting parameters for proposed location	<input type="checkbox"/>
<input type="checkbox"/>	Lighting layout on photometric analysis and plans must match	<input type="checkbox"/>
<input type="checkbox"/>	Provide electronic and printed versions of all inputs and outputs using analysis software; provide electronic AGI32 model files	<input type="checkbox"/>
<input type="checkbox"/>	Use Horizontal Illumination calculation areas over the area of the traffic lanes including the center median and bike lanes; do not include parking lanes, sidewalks, berm, or other areas outside of the vehicular traffic lanes	<input type="checkbox"/>
<input type="checkbox"/>	Include Horizontal Illumination (footcandles) calculation summaries: <ul style="list-style-type: none"> • Average • Minimum • Maximum • Average/Minimum Ratio • Maximum/Minimum Ratio 	<input type="checkbox"/>

WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE



STRUCTURAL DESIGN CHECK SHEET

Effective 08/17/2020



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All structural design, detailing, and construction practices shall be in conformance with the most currently published version of PBOT's Structural Design Criteria for Vertical Infrastructure.

Primary Documents

Applicant		COP Staff
Required		Provided
<input type="checkbox"/>	DETAILED PLANS - Stamped and signed by Professional Engineer currently registered in the State of Oregon (required following acceptance of application)	<input type="checkbox"/>
<input type="checkbox"/>	POLE, MAST ARM, FOUNDATION, ANCHORAGE STRUCTURAL CALCULATIONS - Stamped and signed by Professional Engineer currently registered in the State of Oregon	<input type="checkbox"/>
<input type="checkbox"/>	GEOTECHNICAL ENGINEERING REPORT - Stamped by Professional Engineer or Geologist currently registered in the State of Oregon (Unless using PBOT Standard Drawings)	<input type="checkbox"/>
<input type="checkbox"/>	EXISTING STRUCTURE ASSESSMENT - Stamped and signed by Professional Engineer currently registered in the State of Oregon	<input type="checkbox"/>
<input type="checkbox"/>	PROJECT SPECIAL PROVISIONS - Stamped and signed by Professional Engineer currently registered in the State of Oregon	<input type="checkbox"/>

Detailed Plans

<input type="checkbox"/>	Site map included with Latitude and Longitude of each proposed pole location	<input type="checkbox"/>
<input type="checkbox"/>	Offset dimension from proposed pole to existing pole, if the pole is a replacement	<input type="checkbox"/>
<input type="checkbox"/>	Existing building limits above and below ground	<input type="checkbox"/>
<input type="checkbox"/>	Existing infrastructure features, i.e. poles, walls, fences, bus shelters, planters, garbage bins, awnings, etc.	<input type="checkbox"/>
<input type="checkbox"/>	Existing trees, including spread of foliage	<input type="checkbox"/>
<input type="checkbox"/>	Existing and proposed overhead utilities, including temporary relocation locations and heights	<input type="checkbox"/>
<input type="checkbox"/>	Existing and proposed underground utilities, including temporary relocations locations and depths	<input type="checkbox"/>
<input type="checkbox"/>	Existing and proposed sidewalk limits	<input type="checkbox"/>
<input type="checkbox"/>	Existing and proposed curb and curb ramp limits	<input type="checkbox"/>
<input type="checkbox"/>	Right-of-way boundaries and easements	<input type="checkbox"/>
<input type="checkbox"/>	North arrow	<input type="checkbox"/>
<input type="checkbox"/>	Drawing scale	<input type="checkbox"/>
<input type="checkbox"/>	Proposed light or signal pole location, including footing elevations	<input type="checkbox"/>
<input type="checkbox"/>	Dimensioned offset of proposed street light or signal pole and foundation from face of curb, building face, and other building structural elements such as basement walls.	<input type="checkbox"/>
<input type="checkbox"/>	Show all weld symbols, special weld details, special inspection requirements, structure dimensions to be field verified, structure layout, member sizes, and any non-PBOT-standard structural detailing.	<input type="checkbox"/>
<input type="checkbox"/>	All proposed relevant dimensions of pole attachments including weight, location, elevation, size of such as signs, luminaires, signal heads, antenna, service cabinets, banners, etc.	<input type="checkbox"/>

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WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE



STRUCTURAL DESIGN CHECK SHEET

Effective 08/17/2020



Detailed Plans (Continued)

<input type="checkbox"/>	Material specifications for all structural components including pole, bolts, welds, anchors, concrete, rebar, etc.	<input type="checkbox"/>
<input type="checkbox"/>	All design criteria, including, but not limited to the following:	<input type="checkbox"/>
	Appropriate design wind speed of 100 mph, with a Gust factor of 1.14 and a wind importance factor (Ir) of 1.00	
	Fatigue category	
	Recurrence interval	
	Future loading conditions	
<input type="checkbox"/>	Equipment orientation diagram for each pole	<input type="checkbox"/>
<input type="checkbox"/>	Reference to 2010 City of Portland Standard Construction Specifications as basis of construction	<input type="checkbox"/>
<input type="checkbox"/>	The foundation reinforcement is completely detailed and is site specific.	<input type="checkbox"/>
<input type="checkbox"/>	Number of anchor bolts meets or exceeds minimum specified by AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, Sixth Edition (2013)	<input type="checkbox"/>

Equipment Details

<input type="checkbox"/>	Labeled with identifiable names that match the calculations	<input type="checkbox"/>
<input type="checkbox"/>	Details for all proposed equipment and appurtenances shall be provided. Details should include size, fully-loaded weight, anchorages, effective projected area, and proposed mounting location.	<input type="checkbox"/>
<input type="checkbox"/>	Connection details for all proposed pieces of equipment shall be provided and completely detailed.	<input type="checkbox"/>

Base Plate Details

<input type="checkbox"/>	Pole base plate size, thickness, material, bolt circle, bolt hole size and location should be detailed. Weld size between pole and base plate shall be shown.	<input type="checkbox"/>
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Anchorage Details

<input type="checkbox"/>	Anchor bolt number, length, size, embedment depth, projected height above foundation, projected height above base plate, bolt circle, finish, and material shall be clearly detailed.	<input type="checkbox"/>
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Foundation Details

<input type="checkbox"/>	Foundations shall be a minimum of 3'-0" in diameter for street lights, and 3'-6" for signal poles	<input type="checkbox"/>
<input type="checkbox"/>	Concrete specifications shall be provided, and shall have a minimum compressive strength of 4,000 psi at 28 days	<input type="checkbox"/>
<input type="checkbox"/>	Foundation reinforcement shall be detailed with bar locations, shapes, sizes, spacing, and covers	<input type="checkbox"/>
<input type="checkbox"/>	Foundation elevations referenced from City of Portland datum. For more information: https://www.portlandoregon.gov/TRANSPORTATION/article/70676	<input type="checkbox"/>
<input type="checkbox"/>	Foundations contain a pillar 30" tall, above finished grade, if no curb is present	<input type="checkbox"/>

Pole Shop Drawings

<input type="checkbox"/>	Signed and stamped by a Professional Engineer registered in the State of Oregon. Pole shop drawings shall include details for all pole, connection, mast arm, and anchorage components. All materials, sizes, and finishes of bolts and welds shall be detailed.	<input type="checkbox"/>
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WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE



STRUCTURAL DESIGN CHECK SHEET

Effective 08/17/2020



Structural Calculations

<input type="checkbox"/>	Calculation book cover sheet	<input type="checkbox"/>
<input type="checkbox"/>	Table of contents	<input type="checkbox"/>
<input type="checkbox"/>	Designed per AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, Sixth Edition (2013)	<input type="checkbox"/>
<input type="checkbox"/>	Complete design criteria including all design codes used, live load assumptions, seismic values, wind speeds, etc.	<input type="checkbox"/>
<input type="checkbox"/>	Pole loading calculations to show the proposed equipment falls within the maximum allowable Zone loads as shown in Standard Drawings P-667 through P-669	<input type="checkbox"/>
<input type="checkbox"/>	Final design calculations for the following elements, at a minimum: Mast arm and luminaire arm Mast arm and luminaire arm connection weld Mast arm and luminaire arm connection bolts Mast arm and luminaire arm connection plates Vertical post Connections for all fully-loaded weight of equipment and appurtenances Vertical post base weld Base plate Anchor bolts Foundation concrete and rebar Foundation diameter and embedment depth, unless provided in geotech report Vaulted basements, sidewalks, or building walls	<input type="checkbox"/>
<input type="checkbox"/>	References cited for all numbers/values/assumptions/criteria taken from other calculations or sources, including design codes and standard drawings and details	<input type="checkbox"/>
<input type="checkbox"/>	Completed header for all sheets	<input type="checkbox"/>
<input type="checkbox"/>	Load summary table stating the calculated loads vs the allowable loads	<input type="checkbox"/>
<input type="checkbox"/>	All sheets shall be numbered	<input type="checkbox"/>
<input type="checkbox"/>	Calculations shall be clearly separated with divider pages for each primary element of the design, i.e. pole, mast arm, anchorage, foundation, etc.	<input type="checkbox"/>
<input type="checkbox"/>	All computer output shall include accompanying Engineer's narrative and interpretation of the results	<input type="checkbox"/>
<input type="checkbox"/>	Input parameters into computer models shall be clearly defined and presented	<input type="checkbox"/>
<input type="checkbox"/>	The calculations show clearly that all structural elements, connections, anchorages, and features are at a D/C ratio of less than 100%.	<input type="checkbox"/>

Geotechnical Engineering Report (Not required if using PBOT Standard Drawing P-669)

<input type="checkbox"/>	Report cover sheet	<input type="checkbox"/>
<input type="checkbox"/>	Table of contents	<input type="checkbox"/>
<input type="checkbox"/>	Boring logs	<input type="checkbox"/>
<input type="checkbox"/>	Recommended soil parameters	<input type="checkbox"/>
<input type="checkbox"/>	Recommended foundation diameter and embedment depth, unless provided in calculation section	<input type="checkbox"/>
<input type="checkbox"/>	Recommended construction and temporary support requirements	<input type="checkbox"/>
<input type="checkbox"/>	Recommended special provision requirements	<input type="checkbox"/>
<input type="checkbox"/>	L-Pile analysis	<input type="checkbox"/>

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WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE



STRUCTURAL DESIGN CHECK SHEET

Effective 08/17/2020



Existing Structure Assessment

<input type="checkbox"/>	Report cover sheet	<input type="checkbox"/>
<input type="checkbox"/>	Table of contents	<input type="checkbox"/>
<input type="checkbox"/>	List of possible affected structures, or statement of no structures affected	<input type="checkbox"/>
<input type="checkbox"/>	Results of site visit and records search related to vaulted basements, sidewalks or existing building walls	<input type="checkbox"/>
<input type="checkbox"/>	Determination of possible or anticipated impacts to vaulted basements, sidewalks or existing building walls	<input type="checkbox"/>
<input type="checkbox"/>	Assessment or analysis of condition and load carrying capacity of existing vaulted basements, sidewalks or existing building walls	<input type="checkbox"/>
<input type="checkbox"/>	Recommended design criteria, and any recommended action necessary to preserve and protect existing structures	<input type="checkbox"/>

Special Provisions

<input type="checkbox"/>	Signed and stamped by a Professional Engineer registered in the State of Oregon	<input type="checkbox"/>
<input type="checkbox"/>	Based on 2010 City of Portland Standard Construction Specifications	<input type="checkbox"/>
<input type="checkbox"/>	All applicable Sections and Subsections included	<input type="checkbox"/>
<input type="checkbox"/>	Shall incorporate recommendations provided by project Geotechnical Engineer and Structural Engineer	<input type="checkbox"/>

WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE



CIVIL DESIGN CHECK SHEET - FOR INTAKE



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All structural design, detailing, and construction practices shall be in conformance with the most currently published version of PBOT's Structural Design Criteria for Vertical Infrastructure.

Primary Documents

Applicant		COP Staff
Required		Provided
	DETAILED PLANS - Stamped and signed by Professional Engineer currently registered in the State of Oregon	
	ADA CURB RAMP DESIGN REPORT (if applicable) - Signed by Professional Engineer currently registered in the State of Oregon	

General Plans Requirements

	Provide plans in all required formats: <ul style="list-style-type: none"> • Stamped PDF plan sheets • Unstamped CAD files in AutoCad (DWG) or Microstation (DGN) format 	
	Sheet size to be 22-inch x 34-inch	
	Orient view with north nominally either up or to the right. All views must be oriented in the same direction.	
	Minimum letter height is 0.1 inch	
	Minimum scale size (architectural scale not acceptable) <ul style="list-style-type: none"> • Large: 1" = 10' • Corner ramp detail 1" = 5' 	
	Use standard PBOT title blocks with blanks to be completed upon issuance of permit for: <ul style="list-style-type: none"> • Site Number • Date Approved • PBOT Reviewer • City Engineer Approval Signature • Delete professional engineering license number from signature line 	
	Include standard engineering scale bar, architectural scales are not acceptable	
	Show north arrow and street names	
	Show site specific construction notes and general notes	
	List and include all applicable standard drawings with most recent current at time of plans approval	
	Reference to 2010 City of Portland Standard Construction Specifications as basis of construction	
	Include all necessary special provisions	
	Cover Sheet including: <ul style="list-style-type: none"> • Vicinity map • Overall site map • Sheet index 	

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WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE



CIVIL DESIGN CHECK SHEET - FOR INTAKE



	Existing Conditions and Demo Plan including limits of excavation	
	Offset dimension from proposed pole to existing pole, if the pole is a replacement	
	Footprint of proposed pole	
	Existing building limits above and below ground	
	Existing trees, including spread of foliage	
	Existing and proposed overhead utilities, including temporary relocation locations and heights	
	Existing and proposed underground utilities, including temporary relocations locations and depths	
	Existing and proposed sidewalk limits and elevations	
	Existing and proposed curb and curb ramp limits and elevations	
	Existing and proposed roadway and striping limits and elevations	
	Right-of-way boundaries and easements	
	Show existing and proposed infrastructure including: <ul style="list-style-type: none"> •Adjacent buildings and awnings •Driveways •Hydrants •Utility and basement vaults •Poles •Walls and fences •Bus shelters •Planters •Garbage bins •Other physical features that impact the placement of permittee equipment or street lighting components 	
	Site plan showing all proposed work and limits of work	
	Proposed light or signal pole location, including footing elevations	
	All proposed relevant dimensions of pole attachments including weight, location, elevation, size of such as signs, luminaires, signal heads, antenna, service cabinets, banners, etc.	
	Show offset dimensions of proposed street light or signal pole and foundation from: <ul style="list-style-type: none"> •Property lines •Face of curb •Driveway aprons •Water lines •Sewer lines •Awnings •Overhead wires and cables •Other structural elements such as basement walls 	
	Show all street trees located closer than 25 feet from street lights or signal equipment	
	Identify any overhead obstructions (such as canopies or utilities) that may impact signal or street light pole placement, note critical clearances	
	Grading details (if required) <ul style="list-style-type: none"> •Enlarged Corner Plan and Profile 	

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WIRELESS FACILITY ON CITY OWNED INFRASTRUCTURE



CIVIL DESIGN CHECK SHEET - FOR INTAKE



	Typical roadway sections (if pavement restoration is present or sidewalk dimensions are altered)	
	Erosion & Sediment Control Plans and Details	
Special Provisions		
	Based on 2010 City of Portland Standard Construction Specifications	
	Provide Special Provisions in: <ul style="list-style-type: none">• Word format, with tracked changed from any edits from posted Special Provision files• PDF of final version	
	Include all applicable Sections and Subsections with most recent Effective Date as posted	
	Include Special Provisions Signature Sheet	
	Signed and stamped by a Professional Engineer registered in the State of Oregon	