

UBC Energy & Water Services 6130 Agronomy Road Vancouver, BC V6T 1Z3 Tel: (604) 822-9445 Email: utilities.clerk@ubc.ca

# MECHANICAL UTILITIES CONSTRUCTION COORDINATION FORM

This form is intended to guide projects through the steps and procedures required to successfully coordinate with UBC Energy & Water Services (EWS) and obtain approval for various construction activities/stages. The form's checklists should be completed over the course of the project and submitted to UBC EWS prior to final completion and acceptance of the project.

Note that this form ONLY addresses coordination with mechanical utilities (water, sanitary, storm and gas). A Coordination form required for District Energy can be found here: <u>https://energy.ubc.ca/community-services/contractors-developers/</u>. Other utilities are not outlined in this form and should be addressed separately.

## PART 1 – Project Information

Project Name:	Location:
Project Owner:	Contact:
Phone Number:	Email:
Prime Contractor:	Civil Contractor:

# PART 2 – UBC EWS Mechanical Utilities Key Contacts

Energy and Water Services Head Plumber, Roger Cerny – 604-816-9364 – <u>utilplumber.buildingops@ubc.ca</u>

Geospatial Information Manager, Erin Kastner – 604-822-1333 – erin.kastner@ubc.ca

Mechanical Utilities Engineer, Jenny Liu, P.Eng. - 604-822-3274 - jenny.liu@ubc.ca

Utilities Manager, Jeannie Lee, P.Eng – 604-306-0452 – jeanniem.lee@ubc.ca

People and Process Manager, Russell Neal – 604-839-6790 – russell.neal@ubc.ca

Project Coordinator, Brennan Sekora – 604-822-0098 – brennan.sekora@ubc.ca

# PART 3 – Temporary Water for Construction Procedures

Coordinate with UBC EWS throughout application processes and notify them of any and all forms submitted.

Construction Activity and Coordination Required	Date Submitted (MM-DD-YY)
<u>Temporary Hydrant Service – valid for up to 30 days</u>	
<ol> <li>Submit a Fire Hydrant Connection Application form to UBC Campus &amp; Community Planning, found here: <u>https://planning.ubc.ca/planning-development/permits-and-business-</u> <u>licenses/building-and-trades-permits/trades-permits</u></li> <li>Omit section of form that states that it is not to be used for temporary construction services.</li> </ol>	
Temporary Water Service – required for temporary service exceeding 30 days	
<ol> <li>Submit a Utility Service Agreement and provide applicable security deposit. Form found here: <u>https://energy.ubc.ca/community-services/contractors-developers/</u></li> </ol>	
<ol> <li>Submit a Temporary Water Connection Permit form to UBC EWS. Form found here: <u>https://energy.ubc.ca/community-services/contractors-developers/</u></li> </ol>	
<ol> <li>Once the permit is approved, the contractor is to install a standpipe on the water service stub as per UBC Standard Drawing 1140-UT-10-TempStandpipe. Drawing found here: <u>https://www.technicalguidelines.ubc.ca/technical/standard_drawings.html</u></li> </ol>	

4.	If there is no pre-existing water service stub the installation of a new temporary stub may be	
	required. Temporary services should be treated as permanent services with regards to UBC	
	EWS approval of the design and testing. See PART 4 of this form for instructions on connecting	
	a water service. If a shutdown is required to install new stub, submit a System Shutdown	
	Application Form to UBC Building Operations a minimum 10 working days prior to shutdown	
	date. Form found here: https://buildingoperations.ubc.ca/files/2017/05/Shutdowns_V4.pdf	
5.	Submit a Utility Service Activation Request form for <b>each</b> temporary connection found here:	
	https://energy.ubc.ca/community-services/contractors-developers/	
6.	Once temporary water is no longer needed or a permanent water service is activated, the	
	project shall contact EWS to remove the backflow/meter assembly. The project contractor will	
	then be responsible for the removal of the temp standpipe and the capping of the temp service	
	stub at the connection to the mainline.	

NOTE THAT ALL UTILITY SYSTEM VALVES ARE TO BE OPERATED BY UBC EWS STAFF ONLY.

## PART 4 – Waterworks Construction Checklist

Total Length of Water P	ipe Insta	alled:	m	Number of Cor	nections to UBC System:
Pipe Diameter:	mm	Pipe Material:			Number of Hydrants Installed:
ALL CHECKLIST ITEM	S MUST	BE COMPLETE	FOR U	BC EWS FINAL	ACCEPTANCE OF INSTALLATION.

Construction Activity and Coordination Required	Completed
Contractor to notify UBC EWS a minimum 48 hours prior to water pipe installation. UBC EWS shall be provided access to inspect pipe installation prior to backfilling. Inspection of key locations such as utility crossings, service connections and valve installation are required.	□ YES
All field changes to design must be signed off by the Engineer of Record and approved in writing by UBC EWS prior to installation. Field changes should also be reflected in redline drawings.	□ YES
<b>Complete watermain testing and flushing as per MMCD and AWWA standards (including water services)</b> . Contractor shall notify UBC EWS a minimum 24 hours in advance of testing and perform all tests in presence of a UBC EWS representative.	□ YES
Notify UBC EWS with a minimum 24 hours in advance of <b>each</b> scheduled connection to the UBC water system and make connections in presence of a UBC EWS representative.	□ YES
Submit a Utility Service Activation Request form prior to <b>each</b> connection to the UBC system. Form found here: <a href="https://energy.ubc.ca/community-services/contractors-developers/">https://energy.ubc.ca/community-services/contractors-developers/</a>	
Note that watermain testing results and Engineer of Record signoff must be provided prior to any physical connection to the UBC water system. Building backflow valves and meters should be installed prior to water service activation to building.	□ YES
If a water system shutdown is required for a connection, notify UBC EWS and submit a System Shutdown Application Form to UBC Building Operations a minimum 10 working days prior to shutdown date. Form found here: <a href="https://buildingoperations.ubc.ca/files/2017/05/Shutdowns_V4.pdf">https://buildingoperations.ubc.ca/files/2017/05/Shutdowns_V4.pdf</a>	□ YES □ N/A
If required, hot tapping may be requested in writing, and done only with prior written permission from a UBC EWS Engineer.	□ YES □ N/A
Survey new infrastructure at key points (bends, valves, etc.) to be included in redline drawing information.	□ YES
Provide UBC EWS with redline drawings of waterworks within 24 hours of activation.	□ YES
Once surface landscaping, hardscaping or roadwork is complete, Contractor to arrange for a UBC EWS final walkthrough site inspection with the Engineer of Record to confirm that surface features (valve boxes, chambers, manholes, etc.) are correctly installed, located as per redline drawings and brought up to finished grade elevations and that manholes have been properly grouted at riser ring joints.	□ YES

NOTE THAT ALL UTILITY SYSTEM VALVES ARE TO BE OPERATED BY UBC EWS STAFF ONLY.

#### PART 5 – Sanitary Sewer Construction Checklist

Total Length of Sewer Pipe Installed: \_\_\_\_\_ m Number of Connections to UBC System: \_\_\_\_\_

Pipe Diameter: \_\_\_\_\_ mm Pipe Material: \_\_\_\_\_ Number of Manholes Installed: \_\_\_\_

ALL CHECKLIST ITEMS MUST BE COMPLETE FOR UBC EWS FINAL ACCEPTANCE OF INSTALLATION.

Construction Activity and Coordination Required	Completed
Contractor to notify UBC EWS a minimum 48 hours prior to sewer pipe installation. UBC EWS shall be provided access to inspect pipe installation prior to backfilling. Inspection of key locations such as utility crossings, service connections and manhole installation are required.	□ YES
All field changes to design must be signed off by the Engineer of Record and approved in writing by UBC EWS prior to installation. Field changes should also be reflected in redline drawings.	□ YES
If temporary bypass pumping is required, the Contractor shall submit the proposed bypass pumping details including the pump flows, duration, and receiving MH ID for EWS review and approval. The Contractor shall also provide notice of work to residents minimum 1 week prior to commencing any service disruptions.	□ YES □ N/A
Survey new infrastructure at key points (manholes inverts, service connections, etc.) to be included in redline drawing information.	□ YES
Notify UBC EWS with a minimum 24 hours in advance of <b>each</b> scheduled connection to the UBC sewer system and make connections in presence of a UBC EWS representative.	□ YES
Provide UBC EWS with redline drawings within 24 hours of connection.	
Completed sanitary sewers shall be video inspected as per UBC supplemental specifications ( <u>https://www.technicalguidelines.ubc.ca/technical/divisional_specs.html#Div33</u> ) and MMCD prior to final approval by UBC. Inspection reports and video files to be provided to UBC EWS prior to final approval of work.	□ YES
Once surface landscaping, hardscaping or roadwork is complete, Contractor to arrange for a UBC EWS final walkthrough site inspection with the Engineer of Record to confirm that surface features (valve boxes, chambers, manholes, etc.) are correctly installed, located as per redline drawings and brought up to finished grade elevations and that manholes have been properly benched and grouted, including at riser ring joints.	□ YES

#### **PART 6 – Storm Sewer Construction Checklist**

Total Length of Sewer Pipe Installed: \_\_\_\_\_ m Number of Connections to UBC System: \_\_\_\_\_

Pipe Diameter: \_\_\_\_\_ mm Pipe Material: \_\_\_\_\_ Number of Manholes Installed: \_\_\_\_\_

ALL CHECKLIST ITEMS MUST BE COMPLETE FOR UBC EWS FINAL ACCEPTANCE OF INSTALLATION.

Construction Activity and Coordination Required	Completed
Contractor to notify UBC EWS a minimum 48 hours prior to sewer pipe installation. UBC EWS shall be provided access to inspect pipe installation prior to backfilling. Inspection of key locations such as utility crossings, service connections and manhole installation are required.	□ YES
All field changes to design must be signed off by the Engineer of Record and approved in writing by UBC EWS prior to installation. Field changes should also be reflected in redline drawings.	□ YES
If temporary bypass pumping is required, the Contractor shall submit the proposed bypass pumping details including the pump flows, duration, and receiving MH ID for EWS review and approval. The Contractor shall also provide notice of work to residents minimum 1 week prior to commencing any service disruptions.	□ YES □ N/A
Survey new infrastructure at key points (manholes inverts, service connections, etc.) to be included in redline drawing information.	□ YES

Notify UBC EWS with a minimum 24 hours in advance of <b>each</b> scheduled connection to the UBC sewer system and make connections in presence of a UBC EWS representative.	□ YES
Provide UBC EWS with redline drawings within 24 hours of connection.	
Completed sewers shall be video inspected as per UBC supplemental specifications ( <u>https://www.technicalguidelines.ubc.ca/technical/divisional_specs.html#Div33</u> ) and MMCD prior to final approval by UBC. Inspection reports and video files to be provided to UBC EWS prior to final approval of work.	□ YES
Once surface landscaping, hardscaping or roadwork is complete, Contractor to arrange for a UBC EWS final walkthrough site inspection with the Engineer of Record to confirm that surface features (valve boxes, chambers, manholes, etc.) are correctly installed, located as per redline drawings and brought up to finished grade elevations and that manholes have been properly benched and grouted, including at riser ring joints.	□ YES

# PART 7 – Sanitary and Storm Forcemain Construction Checklist

Total Length of Forcemain Pipe Installed: \_\_\_\_\_ m Number of Connections to UBC System: \_\_\_\_\_

Pipe Diameter: \_\_\_\_\_ mm Pipe Material: \_\_\_\_\_ Number of Manholes Installed: \_\_\_\_

ALL CHECKLIST ITEMS MUST BE COMPLETE FOR UBC EWS FINAL ACCEPTANCE OF INSTALLATION.

Construction Activity and Coordination Required	Completed
Contractor to notify UBC EWS a minimum 48 hours prior to forcemain pipe installation. UBC EWS shall be provided access to inspect pipe installation prior to backfilling. Inspection of key locations such as utility crossings, service connections and valve installation are required.	□ YES
All field changes to design must be signed off by the Engineer of Record and approved in writing by UBC EWS prior to installation. Field changes should also be reflected in redline drawings.	□ YES
If temporary bypass pumping is required, the Contractor shall submit the proposed bypass pumping details including the pump flows, duration, and receiving MH ID for EWS review and approval. The Contractor shall also provide notice of work to residents minimum 1 week prior to commencing any service disruptions.	□ YES □ N/A
<b>Complete forcemain testing and flushing as per MMCD and AWWA standards</b> . Contractor shall notify UBC EWS a minimum 24 hours in advance of testing and perform all tests in presence of a UBC EWS representative.	□ YES
Provide UBC EWS with redline drawings within 24 hours of connection.	□ YES
Forcemain test results should be submitted to UBC EWS for review and approval.	□ YES
Notify UBC EWS with a minimum 24 hours in advance of <b>each</b> scheduled connection to the UBC sewer system and make connections in presence of a UBC EWS representative.	□ YES
Once surface landscaping, hardscaping or roadwork is complete, Contractor to arrange for a UBC EWS final walkthrough site inspection with the Engineer of Record to confirm that surface features (valve boxes, chambers, manholes, etc.) are correctly installed, located as per redline drawings and brought up to finished grade elevations and that manholes have been properly benched and grouted, including at riser ring joints.	□ YES

NOTE THAT ALL UTILITY SYSTEM VALVES ARE TO BE OPERATED BY UBC EWS STAFF ONLY.

#### PART 8 – Natural Gas Construction Checklist

Total Length of Gas Pipe Installed:	m	Number of Connections to UBC System:
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Pipe Diameter: \_\_\_\_\_ mm Pipe Material: \_\_\_\_\_

ALL CHECKLIST ITEMS MUST BE COMPLETE FOR UBC EWS FINAL ACCEPTANCE OF INSTALLATION.

Construction Activity and Coordination Required
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Completed

Contractor to notify UBC EWS a minimum 48 hours prior to natural gas pipe installation. UBC EWS shall be provided access to inspect pipe installation prior to backfilling. Inspection of key locations such as utility crossings, service connections and valve installation is required.	□ YES
All installation should be as per the UBC Natural Gas Service Installation procedures found here: https://energy.ubc.ca/community-services/contractors-developers/	□ YES
Contractor shall perform leak testing in presence of a UBC EWS representative and notify UBC EWS a minimum 24 hours in advance of testing.	□ YES
Submit a Utility Service Activation Request form prior to connections to the UBC system. Form found here: <a href="https://energy.ubc.ca/community-services/contractors-developers/">https://energy.ubc.ca/community-services/contractors-developers/</a>	□ YES
Provide UBC EWS with redline drawings within 24 hours of connection.	
Notify UBC EWS with a minimum 24 hours in advance of scheduled connection to the UBC gas system and make connections in presence of a UBC EWS representative.	□ YES
If a natural gas system shutdown is required for a connection, notify UBC EWS and submit a System Shutdown Application Form to UBC Building Operations a minimum 10 working days prior to shutdown date. Form found here: <a href="https://buildingoperations.ubc.ca/files/2017/05/Shutdowns_V4.pdf">https://buildingoperations.ubc.ca/files/2017/05/Shutdowns_V4.pdf</a>	□ YES □ N/A
Once surface landscaping, hardscaping or roadwork is complete, Contractor to arrange for a UBC EWS final walkthrough site inspection with the Engineer of Record to confirm that surface features (valve boxes, chambers, etc.) are correctly installed, located as per redline drawings and brought up to finished grade elevations.	□ YES

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## **PART 9 – Submission Confirmation**

ALL CHECKLIST ITEMS MUST BE COMPLETE FOR UBC EWS FINAL ACCEPTANCE OF INSTALLATION.

Checklists to be Completed	Completed
Confirm that waterworks checklist (including the final walkthrough inspection with UBC EWS and relevant Engineer of Record) has been completed.	□ YES □ N/A
Confirm that sanitary sewer work checklist (including CCTV inspection and final walkthrough inspection with UBC EWS and relevant Engineer of Record) has been completed.	□ YES □ N/A
Confirm that storm sewer work checklist (including CCTV inspection and final walkthrough inspection with UBC EWS and relevant Engineer of Record) has been completed.	□ YES □ N/A
Confirm that forcemain checklist (including the final walkthrough inspection with UBC EWS and relevant Engineer of Record) has been completed.	□ YES □ N/A
Confirm that natural gas work checklist (including the final walkthrough inspection with UBC EWS and relevant Engineer of Record) has been completed.	□ YES □ N/A
Confirm that all redline drawings for all civil works have been submitted to UBC EWS as well as any relevant manuals. Refer to project contract documents and UBC Technical Guidelines for other final submission requirements ( <u>https://www.technicalguidelines.ubc.ca/technical/divisional_specs.html</u> ) including Division 01 78 39 and associated " <u>Consultants' Guide to Project Documents Requirements</u> "	□ YES

Submitted by:

Submission Date (MM-DD-YY):

#### PART 10 – FOR UBC ENERGY & WATER SERVICES OFFICE USE ONLY