



Energy and Water Services Jenbacher Replacement – J612 Engine Crane In

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Revision History

Date	By	Reason:
2023-03-15	Jason Rako	First Iteration.
2023-03-16	Jason Rako	Changed lift date to April 6 from April 5. Filed work orders for fence and picnic table removal.
2023-03-17	Jason Rako	Clarified BRDF parking availability. Added April 5 notes.



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1.0 Crane Lift Details

The Jenbacher 612 engine will be delivered on April 5, 2023. Due to the engine's size, it cannot make the turn to go into the BRDF driveway for the crane in.

The alternative safe option is to receive the engine in landscaping parking lot where the crane would pick up the Jenbacher 612 engine from the transport truck and then place it in the picnic table area. The engine would then be rolled into BRDF engine room. The crane and transport would use Oberlander Lane for arrival and departure.

The lift will take place on April 5, 2023, which is a Wednesday.

2.0 Checklist of Requirements

2.1 Between March 15 and March 31

- Temporary relocation of Municipal vehicles – Determine Location
- Determine impact to operations and mitigation strategies.
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- Traffic Management Plan or Strategy (within this document)
- Communication to all Stake Holders (on going)
- Confirm Traffic Management Plan or Strategy (within this document)

2.2 For April 5

- Night of Apr 5 move vehicles from red hatched area to BRDF or gravel lot by life sciences so that by 7:30 the hatched area is clear

2.3 For the April 6th Crane Lift

- Municipal vehicles temporarily relocated – see section 6.0
- Communication to all Stake Holders
- Follow Lift Schedule – Section 3.0, April 5th



3.0 Detailed Lifting Plan + Steps

April 6th

- Lift/Move all equipment
- Lift Day Schedule:

Time	Events
07:30am	Start set-up of safety, flaggers (as required through the day) and crane in parking lot, and jack & roll equipment next to BRDF building.
08:30am	Jack & Roll crews ready to receive the engine.
????	Lift engine and alternator from the truck and place on to the jack and roll assembly.
???	Lunch
???	Jack & Roll Crews to move engine skid into the engine room.
6:30pm	Clean-up / DEMOB from Site
6:30pm	Hard Landscape vehicles return to Head House/LMRS parking lot.
Restriction Notes	

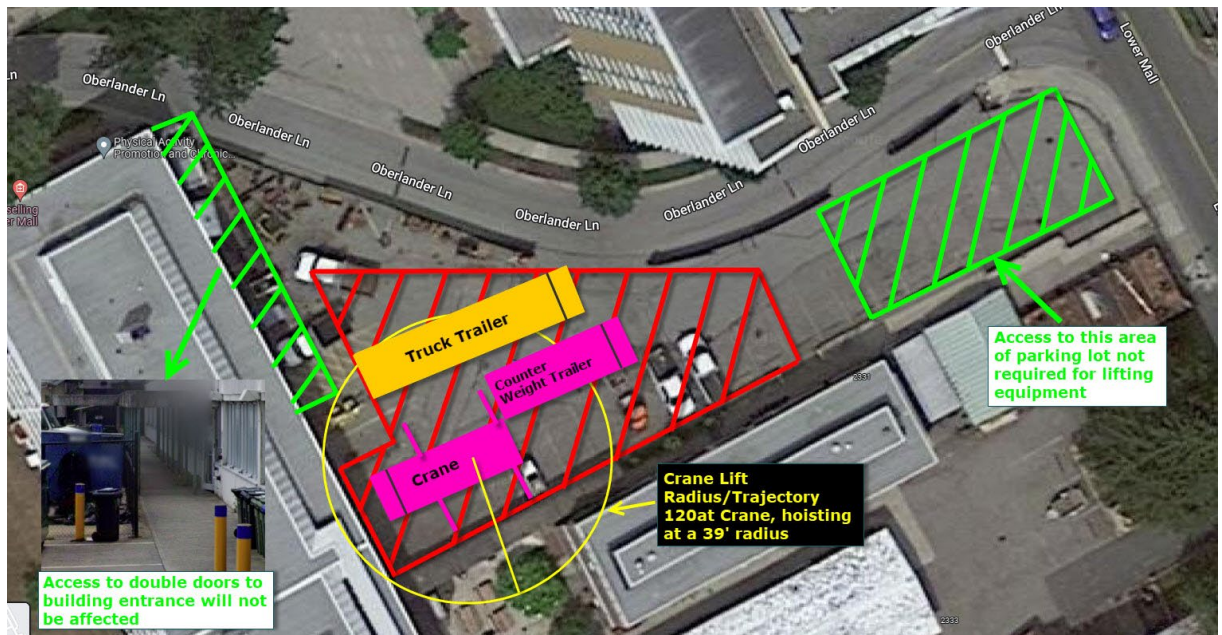


4.0 Site Drawings and Photographs

4.1 Key Notes from UBC on Space Usage

- Ensure coordination for parking for Building Operations vehicles. I see you are looking at gravel lot across from Pharmacy. Roberto is a good contact for that ask.

4.2 Aerial View and Map – During Equipment Setup, 7:30am to 8:30am on April 5



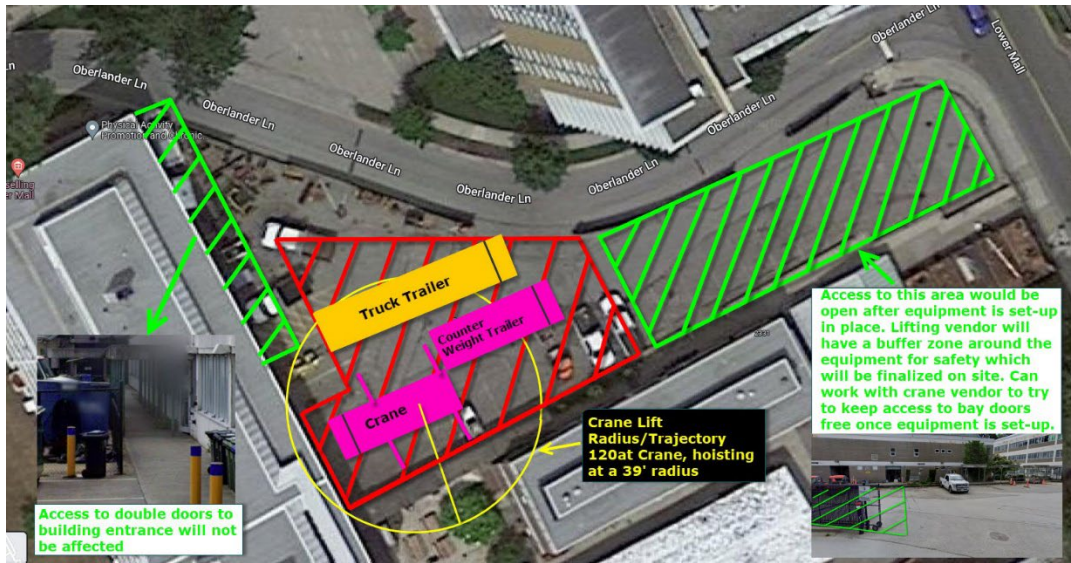
Description

Enerflex Markup Drawing

The engine will be placed on casters and rolled into the lift staging area (landscape parking lot). It will then be lifted and placed on a transport parked in the staging area.



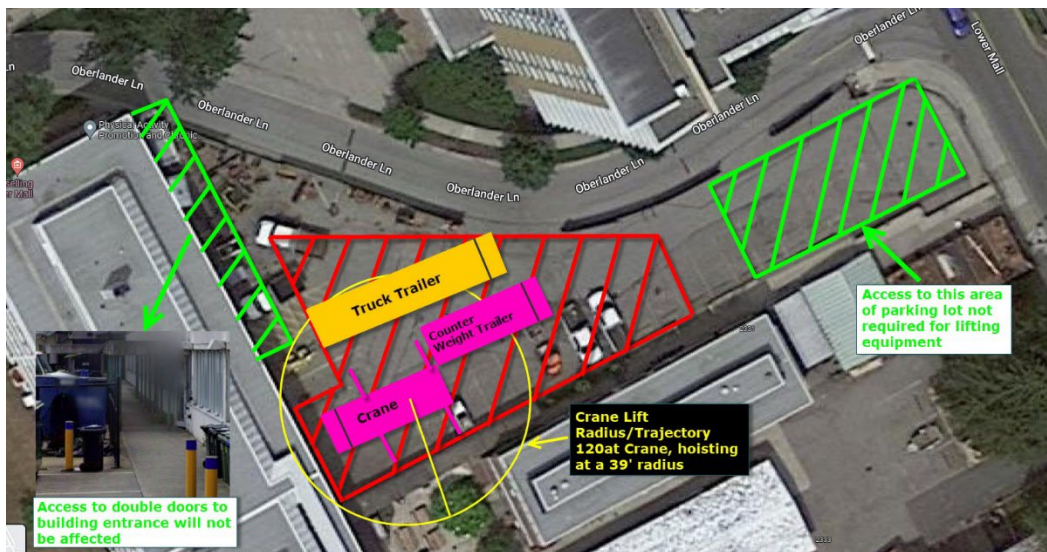
4.3 Aerial View and Map – After Equipment is Setup, 8:30am to 6:30pm on April 5.



Once the equipment is set-up there will be a buffer zone around the equipment for public safety which will be finalized at site.

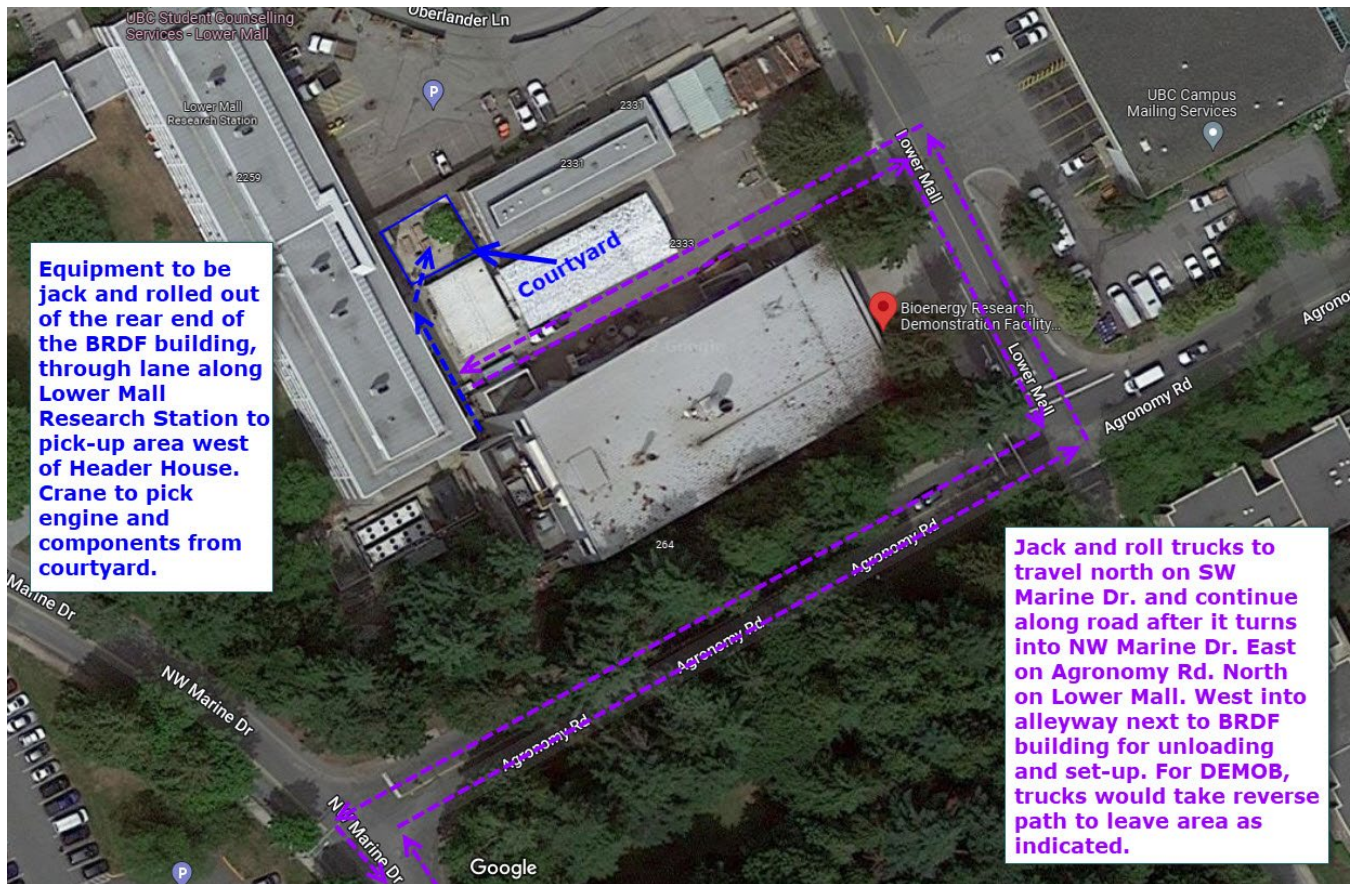
If access to the bay doors is required, we can work with the vendor (cranes) to best maintain access to the bay doors during the day for normal operation as long as no safety concerns.

4.4 Aerial View and Map – During Equipment Tear Down, 6:30pm to 7:00pm, August 26





4.5 Jack + Roll Setup Plan





4.6 Orthographic Markups

Orthographic photos for spatial awareness only. Refer to photographs in 4.2 to 4.3 for definitive boundaries.







4.7 Photo of the Landscape Parking Lot



Note: vehicles will need to be cleared for the crane and lift.



4.8 Oberlander Lane Looking towards Lower Mall



4.9 Oberlander Lane Looking/Travelling towards Marine Drive





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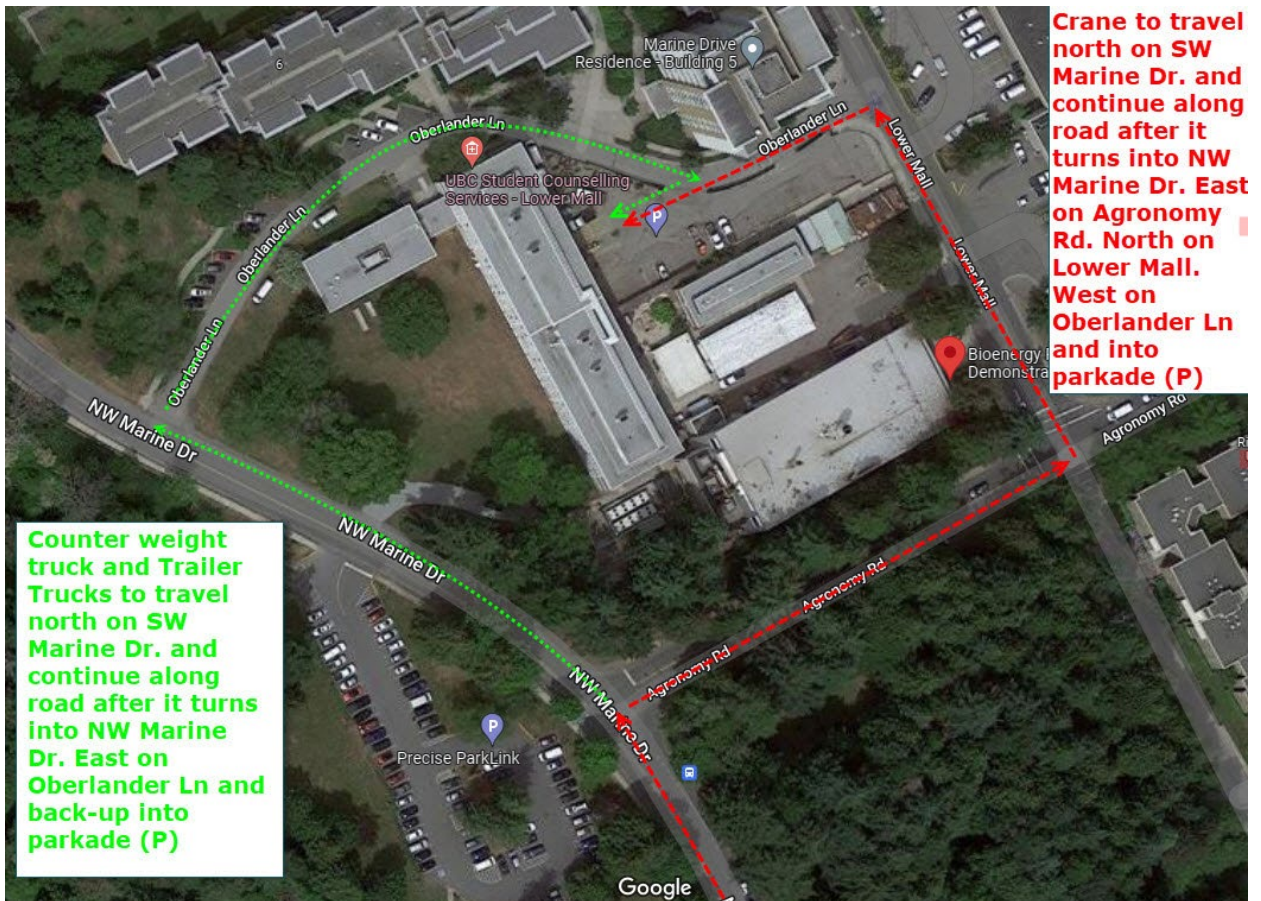


5.0 Travel + Traffic Plan for Crane + Truck Movement

5.1 Key Notes from UBC on Traffic:

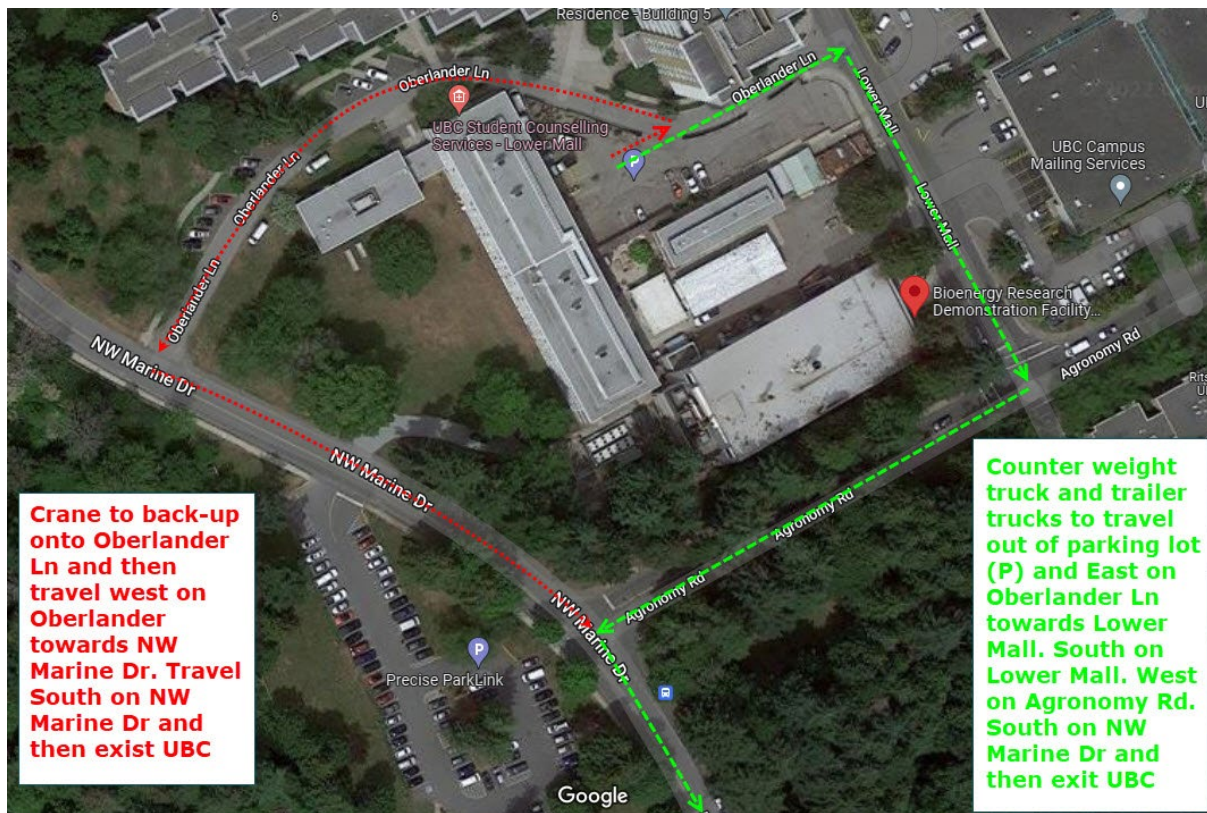
- It doesn't sound like the trucks or equipment will be parking on Oberlander at all, however, vehicles will be reversing in and out of the Header House Lot. During those time a flagger is required to assist the trucks reversing and ensure the public is protected.
- If the vehicles are over width, you may need to close Oberlander to get the vehicle to / from the lot. Just something for them to pay attention to. Another reason why to have a flagger on site for this lift.

5.2 Equipment Mobilization to Site





5.3 Equipment Demobilization from Site





6.0 Parking for Displaced Vehicles

6.1 BRDF Drive Way

The BRDF drive way can take some small vehicles and items. However, a straight passage must be maintained to allow the jacking-and-roll team to get in and out of the engine area.

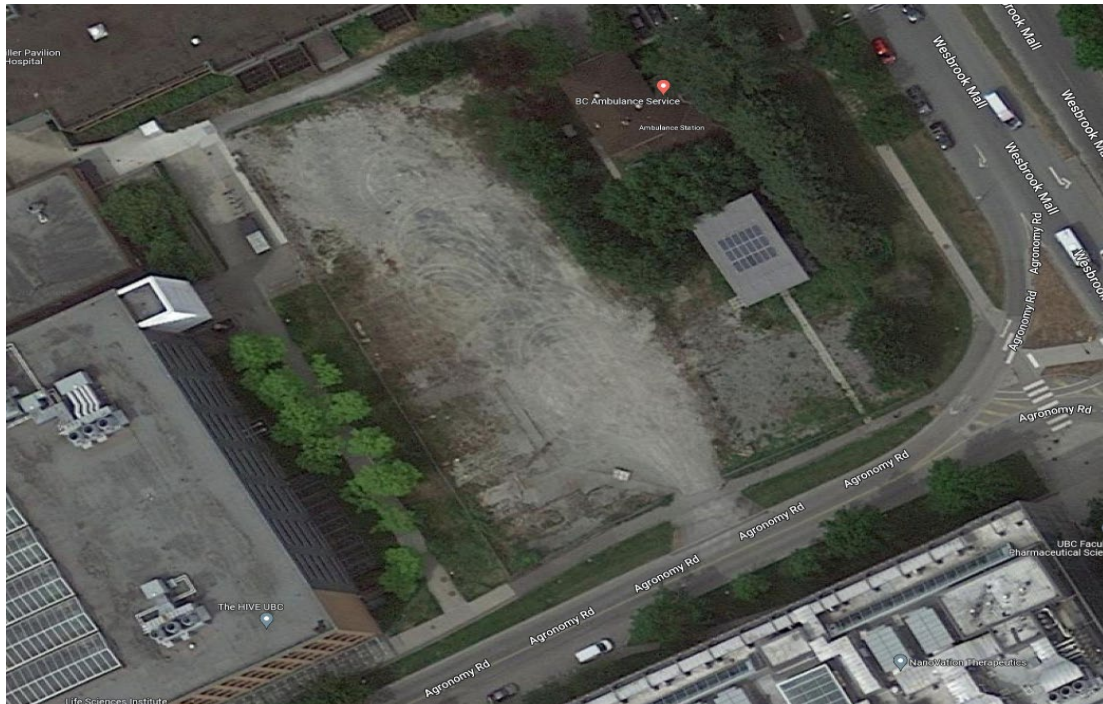
Given the amount of projects at the BRDF, the areas in green will be reserved for UBC vehicles. The areas in yellow will need to be shared by UBC contractors and UBC vehicles as coordinated with the UBC project managers. Areas in red cannot be occupied due to existing vehicles or laydown areas.





6.2 Gravel Parking Lot Near CEC – Confirmed available.

There is a gravel parking lot across from the Pharmacy building which can hold multiple vehicles. The lot is fenced around.



6.3 Green areas of the Header House Parking Lot

See section 4.0.



7.0 In-Play UBC Work Orders

7.1 Work Order 184478.00 – Fence Post Removal

Please remove the following fence posts to make way for the Jenbacher Engine roll out.





7.2 Work Order - 184481.00

Please clear the picnic tables from behind Header House.





8.0 Legacy Meeting Notes from the Lift Out in August 2022

8.1 August 18 Meeting – On site -10:45 am

Attending: Jason Rako + Kevin Phelan + Calvin Cheung + Dale Low + Georges Bisson.

- Discussed the area. Took more photos. Jason created orthographic photos found in section 4.6.
- Discussed vehicle displacement and how the areas required will change during the day. See section 4.2, 4.3, 4.4, 4.5, 4.6.
- Discuss storage on BRDF grounds and area needed for the jack+roll crews. See section 4.6.
- Discussed custodial being in the building during the 5:30pm lift. Email sent out by Dale Low to custodial.
- Agreed on timelines. Items will be moved to respective locations.
- On site meeting ended.

9.0 Key Stake Holders

9.1 UBC Traffic Management

Krista Falkner P.Eng., M.A.Sc.

Manager, Transportation Engineering
Sustainability and Engineering | Campus + Community Planning
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9.2 UBC Municipal Crew

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9.3 UBC Thermal Plant Operations



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9.4 Enerflex (Contractor)

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Retrofit

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