#### General information

Site Name: Gorham Daigle

Jobs included in the assessment: All Construction Related Tasks up to and

including commissioning

Person performing assessment: Nathan Pentico

Assessment date: 12/1/2023

#### Hazard assessment certification

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I certify that I performed this hazard assessment on the date indicated.

Signed:	Melko	Date: 12/1/2023
	Nathan Pentico	

**PPE** Required? From the attached assessment worksheets Yes No Fall protection (As needed)  $\boxtimes$ Torso protection  $\boxtimes$ Eye and face protection (Always) XHead protection (Always) XFoot protection (Always)  $\boxtimes$ Leg protection (As needed)  $\times$ Hand protection (As Needed)  $\times$ Hearing protection (As needed)  $\times$ Respiratory protection (As needed)  $\times$ X

#### Fall protection

All employees performing construction work must be protected from fall hazards when working on unguarded surfaces 6 feet or more above a lower level or at any height above dangerous equipment.

Fall protection systems must be provided, installed, and used according to the criteria in 1926.502(d), and 437-003-0502 in Division 3/M, Construction/Fall Protection.

All employees performing general industry work must be protected from fall hazards when working on unguarded surfaces 4 feet or more above a lower level or at any height above dangerous equipment.

Fall protection systems must be provided, installed, and used according to the criteria in 1910.28, and 1910.29 in Division 2/D, General Industry/Walking-Working Surfaces.

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	Unguarded surfaces more than 6 or 4 feet above a lower level or any height above dangerous equipment
Lik	celihood of injury without PPE
	High
	Medium
$\boxtimes$	Low
Se	verity of a potential injury without PPE
$\boxtimes$	Minor first aid required
$\boxtimes$	Serious, not life threatening
	Severe - life threatening
PP	E required
$\boxtimes$	Personal fall arrest system (As needed when working above 6')
	Personal fall restraint system
	None required

#### Torso protection

Clothing that is appropriate to the work performed and conditions encountered must be worn.

Appropriate high temperature protective clothing must be worn by workers who are exposed to molten metals or other substances that can cause burns.

Loose sleeves, ties, lapels, cuffs, or other loose clothing must not be worn near moving machinery.

Clothing saturated or impregnated with flammable liquids, corrosive or toxic substances, irritants, or oxidizing agents must be removed immediately and not worn again until properly cleaned.

Rings, wristwatches, earrings, bracelets, and other jewelry that might contact power driven machinery or electric circuitry must not be worn.

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Potential hazards	PPE required
	☐ Chemical resistant coveralls
<ul> <li>□ Hot splashes from molten metal and other hot liquids</li> <li>□ Impacts from tools, machinery, and materials</li> <li>□ Hazardous chemicals</li> <li>□ Ionizing radiation</li> <li>Likelihood of injury without PPE</li> <li>□ High</li> <li>□ Medium</li> </ul>	<ul> <li>□ Cut-resistant sleeves, wristlets</li> <li>□ Flame-resistant jacket/ pants</li> <li>□ High visibility garment</li> <li>□ Insulated jacket, hood</li> <li>□ Lab coat or apron/ sleeves</li> <li>□ Long sleeves/ apron/ coat</li> <li>□ Static control coats/ coveralls</li> <li>□ None required</li> </ul>
⊠ Low	
Severity of a potential injury without PPE	



#### Eye and face protection

Employees must use appropriate eye or face protection when exposed to flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

Eye protection must have side protection when there is a hazard from flying objects. Detachable side protectors meeting ANSI Z87.1 requirements are acceptable.

Employees who wear prescription lenses must wear eye protection that fits over the lenses without disturbing the proper position of the prescription lenses, or ANSI-approved prescription lenses with side shields.

Employees who are exposed to potentially injurious light radiation must use filter lenses that have a shade number appropriate for the work being performed.

Employees whose work exposes them to laser beams must wear laser safety goggles that protect for the wavelength of the laser.

Potential hazards	☐ Severe – life threatening		
Dust, dirt, metal, or wood chips from chipping, grinding, sawing, hammering, and from power tools	PPE required  ⊠ Chemical goggles/face shield (As needed for chemical handling)		
□ Chemical splashes from corrosive	☐ Chemical splash goggles		
substances, hot liquids, and solvents	☐ Glasses/goggles w/face shield		
○ Objects such as tree limbs,	<ul><li>         ⊠ Glasses/goggles w/face shield (As needed)     </li></ul>		
chains, tools, and ropes that swing into the eyes or face	☐ Impact goggles		
☐ Radiant energy from welding and	$\square$ Leather welding hood		
harmful rays from lasers or other radiant light			
Likeliheed of injumy without DDE	$\square$ Safety goggles w/face shield		
<b>Likelihood of injury without PPE</b> ⊠ High	$\square$ Welding goggles		
□ Medium	□ Welding helmet/shield w/safety		
□ Low	glasses and side shields (As needed for welding / hot work)		
Severity of a potential injury without PPE	□ None required		
$\square$ Minor first aid required			
Serious, not life threatening			

### Head protection

Employees must wear hardhats when they work where there is a potential for head injuries from falling or flying objects.

Employees must use hard hats designed to reduce electrical shock hazards when they're working near exposed electrical conductors that could contact their heads.

Employees who are exposed to power-driven machinery or to sources of ignition must wear caps or other head covering that completely covers their hair.

Potential hazards  ☑ Overhead objects that could fall	PPE required: Head protection that meets ANSI		
☐ Exposed pipes or beams (less than 6.5 feet overhead)	Z89.1 requirements:		
☐ Energized electrical equipment	☐ Impact Type II		
<b>Likelihood of injury without PPE</b> ☐ High	<ul> <li>Electrical Class G (general) – As Needed for energized electrical work</li> </ul>		
	☐ Electrical Class E (electrical)		
□ Low	☐ Electrical Class C (conductive)		
Severity of a potential injury without PPE	☐ None required		
oxtimes Minor first aid required			
oxtimes Serious, not life threatening			
Severe − life threatening			

#### Foot protection

Employees must wear protective footwear when they work where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole, or electrical hazards.

#### Potential hazards

- Sharp objects such as nails or spikes that could pierce the soles or uppers of ordinary shoes
- ☐ Molten metal

#### Likelihood of injury without PPE

- □ Medium
- □ Low

# Severity of a potential injury without PPE

- oximes Minor first aid required
- ⊠ Serious, not life threatening
- ⊠ Severe life threatening

#### PPE required

- Steel or composite toe safety shoes or boots (Always)
- ☐ Leather boots or safety shoes w/metatarsal guards
- □ Puncture resistant soles
- ☐ Chemical resistant boots/covers
- Safety toed Rubber boots (As needed for high mud/water scenarios)
- ☐ None required

### Leg protection

Workers exposed to hot substances or dangerous chemical spills must wear leggings or high boots made of leather, rubber, or other suitable material.

Workers who use chain saws must wear chaps or leg protectors that cover the leg from the upper thigh to mid-calf. Leg protectors must be made from material that resists cuts from the chain saw.

Potential hazards
☐ Hot substances
☐ Dangerous chemicals
□ Cuts from chain saws
Likelihood of injury without PPE
□ High
□ Medium
Severity of a potential injury without PPE
⊠ Serious, not life threatening
⊠ Severe – life threatening
PPE required
☐ Leggings or boots – penetration resistant
☐ Leggings or boots – chemical resistant
☐ Leggings or boots – molten metal resistant
□ Chaps or leg protectors – resists cuts from chain saws (As needed, any time while using chainsaw)
□ None required

### Hand protection

Employees must use appropriate hand protection when their hands are exposed to harmful substances, severe cuts or lacerations, abrasions, punctures, chemical burns, thermal burns, and extreme temperatures.

Employers must base the selection of the appropriate hand protection on an evaluation of the performance characteristics of the hand protection relative to the task, conditions present, duration of use, and the hazards identified.

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Employees must not wear gloves when their hands could be caught in moving parts.

Potential hazards	PPE required		
	<ul><li>☑ Leather/cut resistant gloves (Always)</li></ul>		
<ul> <li>☑ Chemicals that can be absorbed into the skin or cause burns</li> <li>☑ Energized electrical equipment</li> <li>☑ Mechanical equipment or sharp objects that can cause bruises, abrasions, cuts, punctures, fractures, or amputations</li> <li>Likelihood of injury without PPE</li> <li>☑ High</li> <li>☐ Medium</li> <li>☐ Low</li> <li>Severity of a potential injury without PPE</li> <li>☑ Minor first aid required</li> <li>☑ Serious, not life threatening</li> </ul>	<ul> <li>□ General-purpose work gloves</li> <li>☑ Chemical resistant gloves (As needed, when handling chemicals)</li> <li>□ Insulated gloves</li> <li>☒ Heat/flame resistant or welding gloves (As needed, when handling hot objects and/or welding)</li> <li>□ Latex or nitrile gloves</li> <li>☒ Electrician's insulated rubber gloves (Required for energized electrical work, with protectors)</li> <li>□ Cotton, leather, or anti-vibration gloves</li> <li>□ None required</li> </ul>		
☐ Severe – life threatening			



#### Hearing protection

Hearing protectors (plugs or muffs) must be worn by workers exposed to an 8-hour timeweighted average of 85 decibels or greater and by workers who have experienced a threshold shift.

#### Potential hazards

Noise levels that exceed those shown in the table below are hazardous:

Hours of exposure	Sound level (dBA)
8.0	90
6.0	92
4.0	95
3.0	97
2.0	100
1.5	102
1.0	105
0.5	110
0.25	115

#### Likelihood of injury without PPE

- ⋈ High (Only when using PD10 to drive pilings)
- □ Medium
- $\bowtie$  Low

#### Severity of a potential injury without PPE

- Minor first aid required (Above 85 db for 8 hour TWA or short exposures over 95 db)
- ⊠ Serious, not life threatening (When working with PD10 to drive pilings)
- ☐ Severe life threatening

### PPE required

- $oxed{\boxtimes}$  Ear plugs
- ⊠ Ear muffs (Required for PD10)
- ☐ None required



### Respiratory protection

Appropriate respirators are required when workers are exposed above permissible exposure limits (PEL) for specific air contaminates, listed in 437-002-0382, Oregon Rules for Air Contaminants; see also 1910.134, Respiratory Protection.

Potential hazards	PPE required		
Nuisance dust/mist	Air-purifying respirators		
☐ Welding fumes	oxtimes Filtering face piece (dust mask)		
□ Asbestos	☑ Particulate-removing respirator		
□ Pesticides	☐ Gas-and-vapor-removing		
☐ Isocyanates	respirator		
☐ Paint spray	<ul> <li>Combination aerosol filter/gas or vapor-removing respirator</li> </ul>		
☐ Organic vapors	☐ Powered air-purifying respirator		
☐ Acid gases	Atmosphere-supplying respirators		
○ Oxygen deficient/ toxic or IDLH     □ Toxic or IDLH	☐ Supplied-air respirator		
atmosphere  Likelihood of injury without PPE	☐ Self-contained breathing apparatus (SCBA)		
	☐ Combination self-contained		
□ Medium	breathing apparatus and air-line		
□ Low (Normal circumstances)	respirator		
Severity of a potential injury without PPE	<ul><li>☐ Combination air-purifying and atmosphere-supplying respirato</li><li>☐ None required</li></ul>		
⋈ Minor first aid required (Normal)			
Serious, not life threatening			
Severe − life threatening			