## Confined Space Entry & Tunnel Safety – Appendix C: Confined Space Index – Sylvania Campus

The following table provides index and initial space classification for spaces at Sylvania Campus. The numbers noted are related to notation on

maps.

Map Location #	Building/Location	Space Type or Name / Conditions	Initial Classification	Hazards
100 - Vault	with Single / Double and Triple Squar	e Covers		
Outside locati	ons throughout the campus includes: Backflow	Preventer Vaults, FDC valves and el	ectrical vaults	
101	Auto Shop West Side of Storage Bldg.	Fire FDC Water Vault; Single square vault metal cover about 5' by 6'	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
102	South perimeter G Street below SCB.	Fire FDC Water Vault; Single square vault metal cover about 5' by 6'	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
103	CSB yard.	Fire FDC Water Vault; Single square vault metal cover about 5' by 6'	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
104	Between LRC and TCB walkway.	Fire FDC Water Vault; Single square vault metal cover about 5' by 6'	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
105	North of PAC	Fire FDC Water Vault; Single square vault metal cover about 5' by 6'	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
106	North of CT yard.	Fire FDC Water Vault; Single square vault metal cover about 5' by 6'	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
107	Off CC at south ramp.	Fire FDC Water Vault; Single square vault metal cover about 5' by 6'	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
108	North side of LRC lower level in grass	Single hatch 6' by 8' and probably at least 6' deep vault – NEED to check purpose if it is backflow or other type of vault	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
110	SW side of SCB	Concrete hatch that is about 2 ½' by 2 ½' sides right next to the building	not a confined space	

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111	North side of the Library leading to the parking area along K St. (next to 112)	Single metal hatch covered vault for 2 Fire and Domestic booster pumps, backflows - about 10 feet deep with fixed ladder	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
112	North side of the Library leading to the parking area along K Street	Double metal hatch covered vault  – Electrical vault	Permit-Required Confined Space	<ul><li>Electrical hazards</li><li>Atmospheric hazards</li><li>Falls</li></ul>
113	North side of the Library center way just above the walkway – elevated vault	Single metal vault	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
114	North side of the Library but next to the library in grass area	Single metal covered vault (8 by 6 vault)	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
115	J Street down from Bookstore in roadway	Metal single square vault cover Water Back flow vault with installed ladder and single hinged vault cover at least 4 to 5 feet deep	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
116	North end of the Bookstore across K street and corner of P9 on east end	Triple metal hatch vault – probably electrical	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
117	Main 49 <sup>th</sup> Street Entry north end by the main pay station on G Street		Permit-Required Confined Space	Atmospheric hazards     Falling or slipping     High pressure water lines – engulfment
118	Outside pool area (HT) on south perimeter roadway H Street	Double metal hatch covered vault	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
119	West side of HT off the short term and handicap parking lot	Rectangle vault cover	not a confined space	
120	South side of HT across access roadway (next to 116)	Solid square metal vault lid next to upright electrical or telecommunications	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
121	NE of AM building stairs to yard	Rectangle metal cover	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>

Map Location #	Building/Location	Space Type or Name / Conditions	Initial Classification	Hazards
122 & 123	North road way entrance to service yard in CSB. #122 cover on vault, #123 circular manhole cover north of the vault	2 Circular metal manhole covers at P4 accessible parking only sign to Auto Shop	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
124	North East side of the walkway at TCB	Triple metal hatch vault, label VT29 ELECTRICAL VAULT	Permit-Required Confined Space	<ul><li>Electrical hazards</li><li>Atmospheric hazards</li><li>Falls</li></ul>
125	Walkway to AM P4 stairs	Single hatch for what looks like electrical	Permit-Required Confined Space	<ul><li>Electrical hazards</li><li>Atmospheric hazards</li><li>Falls</li></ul>
126	Next to 118 on H Street across from HT pool area	Single hatch may be for telecommunication and may be shallow	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
127	SW corner off HT at roadway and P12 under tree	Triple electrical vault #VT 24	Permit-Required Confined Space	<ul><li>Electrical hazards</li><li>Atmospheric hazards</li><li>Falls</li></ul>
128	G Street south side down from CC building	Triple vault label VT23	Permit-Required Confined Space	<ul><li>Electrical hazards</li><li>Atmospheric hazards</li><li>Falls</li></ul>
129	G Street south side down from SS Building	Triple vault label VT22	Permit-Required Confined Space	<ul><li>Electrical hazards</li><li>Atmospheric hazards</li><li>Falls</li></ul>
130	G Street South side down from SS building	Triple hatch vault label VT21	Permit-Required Confined Space	<ul><li>Electrical hazards</li><li>Atmospheric hazards</li><li>Falls</li></ul>
131	Outside SCB/perimeter road on west (G Street)	Double door vault	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
132	NE side of the perimeter drive way (G St.) next to a plaque. (next to 133)	Double metal hatch covered vault	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
133	NE side of the perimeter drive way (G St.) next to a plaque	Triple metal hatch covered vault	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
134 next to 135	Off the CSB above the yard debris compost	PGE Electrical Vaults with double hatch door	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
135	Off the CSB above the yard debris compost	PGE Electrical Triple metal hatch covered vault	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>

Map Location #	Building/Location	Space Type or Name / Conditions	Initial Classification	Hazards
136	Off CSB at green house	Double metal hatch vault on the perimeter road G Street	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
137	Off from heat plant on perimeter road G Street	Triple metal hatch cover on the west side	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
138	P11 Parking Area in east shrub area	Raised Triple vault PGE electrical vault #126	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
139	P10 and L Street Vault	Pre-junction electrical vault	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
140	G St. West side at G and L off in landscape area	Water Backflow preventer vault. 6 by 8 by 6 feet deep	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
141	G Street near the main pay station and Water notation on map	Single metal hatch covered vault  – 10 feet deep with fixed ladder – irrigation vault, pump has been moved to ground level – entrance would now be rare.	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
142	East side of the CSB along the perimeter road/ Outfall B Also see 157 and 158 part of the system	Manhole to the storm water outfall connects to the Bail Creek	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
143 (many spaces)	Sewer Manholes Throughout the roadways and parking lots	MANY Metal circular sewer manhole covers	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
144	SS Building Women's Restroom Tower North Side	SEWER SUMP PUMP confined space with access in the custodial closet at SS Building	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
145	ST 107a Sump Pump	SUMP PUMP by the elevator room in ST building room ST 107a	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>

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146	P5 and G Street	Round manhole cover that confirmed what the space is	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
147	By the Main Bus Stop in grass	Triple Vault VT 128 – electrical	Permit-Required Confined Space	
148	Off G St. south by yard debris transformer	Single Vault for electrical transformer	Permit-Required Confined Space	
149	NE side of the perimeter drive way (E St.) next to a plaque	Double metal hatch covered vault	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
150	From the lower entrance to the campus – Off G St.	Several metal hatch covered vaults and continue vaults taking first road to HT and back side of pool	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
151	South side of HP on perimeter road	Double metal hatch vault that is most likely for fire water valves	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
152	Lesser Road Entrance prior to the stop sign on the campus site	Double metal hatch covered vault	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
153	HT Pool are 2 metal hatches that lead to the return water system	Two single metal hatches down by the high dive board. Fixed ladder access to 12-foot deep space with water at the bottom. There are valves in the space	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
154	Off CSB center parking area	Single metal hatch backflow preventer vault and oil water separator system in center of the parking area – 10 feet deep	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
155	On perimeter road off CSB	3 Metal hatch covered vault	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
156	Outside HT Cooling Tower on West side Circle driveway sidewalk at FDC	Triple square metal covered vaulted at FDC	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>

Map Location #	Building/Location	Space Type or Name / Conditions	Initial Classification	Hazards
157	Off G perimeter road south end of campus off CSB in the woods	Single manhole cover on large storm water manhole vault	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
158	Off G perimeter road south end of campus off CSB in the woods – just down from 157	Large rectangle concrete structure for stormwater run off	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
159	South Parking Area for CSB building off G Street	Two manhole covers over large stormwater retention system at least 10 feet deep	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
160	See location 147 – near bus stops in grass to the west	Single vault with ID tag – most likely is PGE electrical vault	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
161	See location 147 – near bus stops in grass to the west	Single vault with "Telephone" on surface of lid	Permit-Required Confined Space	<ul><li> Electrical hazards</li><li> Atmospheric hazards</li><li> Falls</li></ul>
162	South perimeter G Street below CDC Fire FDC Water Vault (near location 102)	Single square vault metal cover about 5' by 6'	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
200 - Tunnel	System and Facilities Access Hatches			<u> </u>
200	Tunnel system that runs the length of the campus under the buildings providing runs for water, sewer, utility services including electrical, phone, internet, HVAC hot water, HVAC units and pumps, air compressors, swimming pool plumbing are frequently inspected multiple times a week, and other facility equipment	Tunnel System and Facilities Access Hatches work in tunnel includes sealing gaps against rodents, changing light bulbs and general maintenance of facilities equipment and structures.	Confined Space	
201	Heat Plant	Tunnel under the heat plant has stair entrances, natural ventilation	not a confined space	
202	Heat Plant	Condensate Drain in Heat Plant drain, shallow	not a confined space	
203	Walkway next to Heat Plant by Stairs and Grounds Lunchroom	Personal door entrance to tunnels  – stand walkway with mechanical ventilation	not a confined space	
204	Buildings and Restroom outbuildings	In many of the buildings are plumbing and pipe chase hatch openings off found in the restrooms and labs	Confined Space	

Map Location #	Building/Location	Space Type or Name / Conditions	Initial Classification	Hazards			
	300- HVAC Cooling Tower and HVAC Units						
301	Outside the Library on NW side	Small Cooling Tower	not a confined space				
302	West side by HT off of Child Care Rooms	Small cooling tower	not a confined space				
303	Outside the Heat Plant on South side	Cooling tower with manhole entry to the tanks - Entry portals on side and top	Permit-Required Confined Space	Atmospheric hazards     Falling or slipping     High pressure water lines – engulfment			
304	HVAC Air Plenum Enclosures – Entry varies from in the Tunnel under the CC/HT building to on the building roofs for most buildings	Many large HVAC air return and mixing plenums with near personnel door sized entries	Confined Space				
305	HVAC Supply Air outside CT next to Bookstore	Large open cement structure at ground level to about 8 feet deep	Confined Space				
400 - Boiler S							
400	Heat Plant	Boiler Systems Note: new boilers are not confined spaces – cannot be entered (no access and small) Ductwork is also too small to enter	Confined Space				
401	Heat Plant Orange older boiler	Boiler Water Tubes and fire box	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>			
402	Heat Plant Orange upper section of the older boiler	Boiler Water tubes and fire box	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>			
403	Heat Plant	Small Expansion Water Tank in main boiler room	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>			
404	Heat Plant – room to east of main boiler room	Large Expansion Water Tank	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>			
500 - Tanks							
500	HT Pool chemical return water system tank (also see 153 hatch entries into the pool return water from the pool deck by diving board)	Raised water return tank	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>			

Map Location #	Building/Location	Space Type or Name / Conditions	Initial Classification	Hazards
501	CSB Yard	Diesel Tank	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
502	Off AM on north side	2 Metal covers for the gasoline and diesel fueling tanks	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
503	Heat Plant	Large Chiller Tanks: Large pressurized vessels with bolted ends	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
504	West side of CC Bldg off the loading dock	Diesel tank	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
SEWER RELA	ATED and SUMP PUMP SPACES			
1	West side of TCB 3' by 3' tower vault 30 feet deep	Sewer lift station	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
2	Same location as #1 sewer manhole	Sewer manhole	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
3	West side of Bookstore loading dock	Circular manhole cover	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
4	West side of Bookstore at roadway corner to loading dock, next to fire hydrant	Circular manhole – sewer	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>
5	SW corner off HT across roadway on G Street	Circular manhole cover – most likely sewer	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
6 and 7	Off CSB at greenhouse	Storm water circular cover and 2 sewer manhole covers	Permit-Required Confined Space	<ul><li>Atmospheric hazards</li><li>Falling or slipping</li><li>High pressure water lines – engulfment</li></ul>

Map Location #	Building/Location	Space Type or Name / Conditions	Initial Classification	Hazards
8	NE side of TCB in the sideway next to Handicap parking at D street	Circular manhole cover	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>
9	East side of the LRC in the landscaping	Circular manhole cover – sewer	Permit-Required Confined Space	<ul> <li>Atmospheric hazards</li> <li>Falling or slipping</li> <li>High pressure water lines – engulfment</li> </ul>

