



COLORADO


Division of Reclamation,
Mining and Safety

Department of Natural Resources

MINERALS PROGRAM INSPECTION REPORT

PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Portland Limestone Quarry	MINE/PROSPECTING ID#: M-1977-344	MINERAL: Limestone (general)	COUNTY: Fremont
INSPECTION TYPE: Monitoring	INSPECTOR(S): Timothy Cazier, P.E.	INSP. DATES: July 19, 2022 November 15, 2022	INSP. TIMES: 09:30 12:50
OPERATOR: Holcim (US) Inc.	OPERATOR REPRESENTATIVE: Oscar Mancera, Mike Toelle	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$5,268,550.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: August 1, 2023	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>Y</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>Y</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(ST) STIPULATIONS----- <u>Y</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>Y</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

OBSERVATIONS

Two inspections were conducted as part of the DRMS regular monitoring program. The first inspection was performed on July 19, 2022, focusing on the quarry area north of the Arkansas River. Insufficient time was available to perform an inspection of the plant area, south of the Arkansas River. A follow-up inspection was performed on November 15, 2022, focusing on the plant area. The Permittee (Holcim) was represented by Mr. Oscar Mancera during the quarry inspection. Both Mr. Mancera and Mike Toelle were present during the plant inspection. The primary purpose of the plant inspection was to inventory all the plant facilities for the purpose of developing a thorough demolition cost estimate as the plant is part of the mine reclamation permit. Holcim provided the DRMS via email a facilities map and a spreadsheet outlining quantities and construction materials for over 60 structures on November 16, 2022, and a revised version on March 29, 2023. The DRMS has been reviewing and cataloging these structures for the purpose of developing a facilities demolition cost estimate. Attached to this inspection report is an 86-page **Facility Catalog** of plant facilities to be included in the demolition cost estimate. The catalog points out discrepancies in quantities (e.g., 1,110,998 ft² for the footprint of the ~90-ft diameter clinker silos) and missing structures (e.g., conveyors). Each page of the catalog includes a photo of the structure if the DRMS was able to obtain one from either a site visit or Google Maps Street View (from Hwy 120). Images for the conveyors were obtained from Google Earth Pro.

The Portland Limestone Quarry is accessed from State Hwy 120 approximately 5 miles east of Florence. This is a 112c limestone mine. It was operating at the time of the inspection.

Availability of Records: Annual reports are current, having been filed through October 2022, stating the last mining activity was the day the report was filed with the DRMS. The inspection before the July 19th quarry inspection was on July 16, 2020. The approved post-mine land use is rangeland. There were no open infractions prior to the inspection. Both the surface and minerals are privately owned.

Acid And Toxic Materials:

Quarry - Above ground fuel/oil storage tanks were observed and had adequate secondary containment. Radioactive materials are used in material analyzers and contained within the instrument housing.

Plant - The only observed storage tank containing toxic material was the ammonium hydroxide tank (see **Photo 1**) on the east end of the plant area. It appeared to have adequate secondary containment.

Backfilling and Grading:

Quarry - Sufficient material (overburden) appeared to be available for backfill. A large area of the southeast portion of the quarry has been backfilled (see **Photo 2**).

Plant - Backfilling and grading at the plant will only take place after facility demolition.

Excess Spoil and Dev. Waste: Overburden is stripped (see **Photo 3**) via blasting and grading, then moved directly to backfill the south side of the active quarry as the mine progresses north.

Explosives: The mine blasts three to four times per week using a contracted blaster (Buckley Powder at the time of the inspection). Mr. Mancera stated the mine monitors the blasts at four points along the natural gas pipeline on the north side of the active pit. The four seismographs are offset 100 feet from the gas line. He also stated blasting records are kept on file in the site office.

Financial Warranty: The \$5,268,550 bond held by the DRMS was last updated with amendment 1 (AM-1) and is most likely too low. The current combined effort between the DRMS and Holcim to catalog all the plant structures for demolition will need to be completed before an appropriate bond can be determined. Site representatives have indicated the pending amendment (AM-2) will be submitted in mid-August. [The attached Facility Catalog will need to be corrected and updated as part of the AM-2 Exhibit L.](#)

Fish and Wildlife: No impact to wildlife was observed at either the quarry or the plant.

Hydrologic Balance:

Quarry – Groundwater was observed in the quarry (see **Photo 4**). Holcim has a substitute water supply plan. A decree was also issued in 2019 by the Colorado District Court, Water Division 2 related to the “Quarry Ponds”.

Plant – No standing water was observed in the plant area and no exposed groundwater was observed.

Gen. Compliance with Mine Plan: The operation appeared to be in compliance with the approved mine plan.

Quarry – Based on Holcim’s AM-1 second adequacy response, the permit boundary and the affected area boundary are coincident except for “those areas indicated [AM-1 Figures C-2, C-3, C-5, and F-1] as having been previously released for reclamation.” The maximum allowed disturbed area is 1,036 acres (*based on Table E-1, March 31, 2003 preliminary adequacy response [PAR]*). Google Earth was used to measure the disturbed quarry area, which was approximately 760 acres, based on older 2021 imagery. Highwalls were benched based on the stratigraphic thickness of the particular mineral product (or overburden) being mined. The maximum height of any bench was about 35 feet. The benches were roughly 150 feet in width (see **Photo 3**).

Plant – The plant area consists of 63 acres and is almost completely disturbed area. It is unclear if the plant area disturbance is being included in the reported site disturbance of 784 acres. [Holcim should be aware that plant area disturbance should be included in the annual report disturbance.](#)

Off-site Damage: The operation appeared to be confined to the permit boundary, based on Google Earth review and site observations.

Processing Waste: No processing waste was observed.

Roads: Haul roads are watered for dust control and haul trucks stay on the mine site, thereby preventing sediment from being traced offsite.

Right of Entry: The site is owned by the Operator.

Reclamation Success: Reclamation has been proceeding from the southeast corner of the quarry towards the north as the active mine area progresses. Given the vastness of the reclamation area and that there is not a sufficient high point from which to view the reclamation, it is difficult to determine from the ground level if reclamation grading is consistent with the approved Exhibit F grading plan. This was discussed with Mr. Toelle during the June 9th virtual meeting. **Photo 5** depicts the area where backfill depth appears to exceed that in Exhibit F.

Revegetation: Mr. Macera stated the most southeasterly area of the reclaimed area had been seeded. No noxious weeds were observed. As part of the 3/31/2003 PAR response (*Item #22*), the site has an approved weed control plan.

Sediment Control: No erosion problems were observed and no BMPs were needed at the time of either inspection.

Support Facilities On-site: See attached catalog for a list of plant facilities.

Signs and Markers: The permit sign was properly posted (see **Photo 6**).

Permit Stipulations: Annual groundwater monitoring reports are required to be submitted to the DRMS.

Topsoil:

Quarry – Mr. Mancera explained stripped topsoil from the advancing mine area is hauled to the reclamation area as it is stripped. In addition, the northwest area, west of Bear Creek, has a large hummocky area of stockpiled material (see **Photo 7**). Some of this material is stockpiled topsoil.

Plant – The approved reclamation plan requires two feet of topsoil be spread over the plant area after the structures have been demolished. This depth avoids the need to remove concrete slabs on grade, concrete footings and caissons below grade and the large amount of rail lines on site. *The source of this amount of topsoil (~210,000 CY - assuming 2 feet of topsoil over approximately 65 acres in the plant area) was discussed with Mr. Toelle by phone on June 9, 2023. Holcim was informed that the source of the plant area topsoil would need to be identified in the forthcoming amendment and that if it needs to be imported from offsite, there could be significant bond impacts.*

Structures: No new structures were observed within 200 feet of the affected area.

Please contact Tim Cazier (303)328-5229 or email at tim.cazier@state.co.us if you have any questions regarding this report.

PHOTOGRAPHS



Photo 1. Ammonium Hydroxide tank in Ammonia Storage Bldg. (looking south).



Photo 2. Backfilled SE portion of active quarry (looking SE).

PHOTOGRAPHS (cont.)



Photo 3. Stripped overburden on north edge of quarry (circled) (looking NE; Note wide benches).



Photo 4. Exposed groundwater in active quarry (looking east).

PHOTOGRAPHS (cont.)

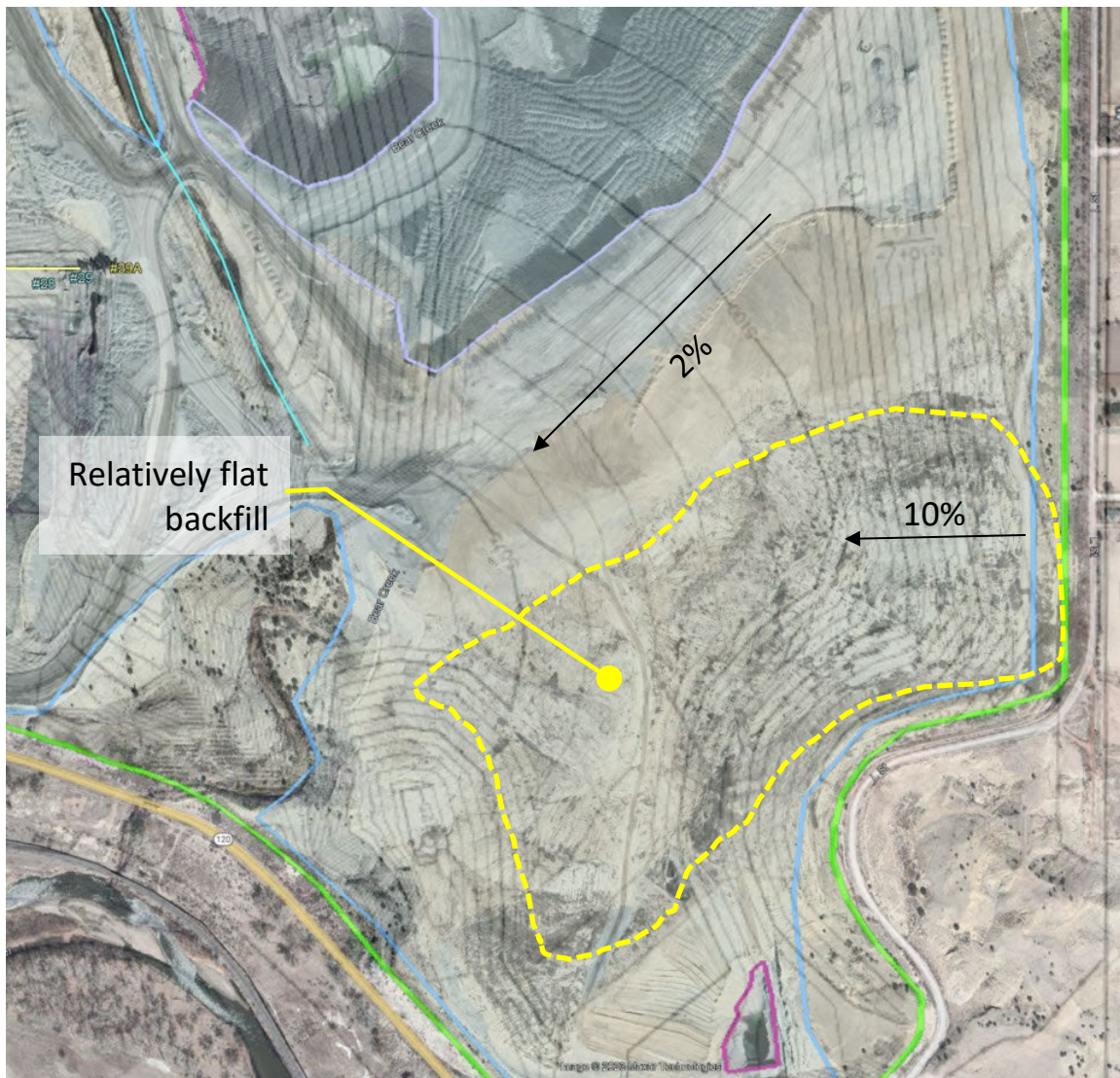


Photo 5. SE Quarry with Exhibit F overlay showing approved reclamation contours (Google Earth image).

PHOTOGRAPHS (cont.)



Photo 6. Permit sign at quarry entrance.



Photo 7. Stockpiled topsoil and overburden (NE portion of quarry permit, west of Bear Creek).

Inspection Contact Address

Oscar Mancera
Holcim (US) Inc.
3500 Highway 120
Florence, CO 81226

Enclosure: Facility Catalog for Demolition Estimate

ec: DRMS file
Mike Toelle, Holcim

M-1977-344 / PORTLAND PLANT BUILDING SUMMARY FOR DEMOLITION COSTS

The following pages provide a “snapshot” of each building at the Portland Limestone Quarry Plant that will be demolished for final reclamation. Building photographs were taken during the November 15, 2022; July 19, 2022; and April 26, 2017 inspections. Building ID numbers and names are based on information provided by Holcim. Building ID numbers 19E, 23, 27, 38, 40, 43, 50, and 52 were missing information or could not be located on the facility map provided by Holcim. Some buildings (e.g., #33 – Packhouse & #45 – Air/Oil House) were split into separate structures as demolition would be different for different parts of the buildings (e.g., silos vs. multi-story concrete building vs. single story cinder block building). The DRMS added these structures as #33.A, #33.B, etc.

Structure building materials (e.g., metal, concrete) and dimensions were provided by Holcim personnel. Where there were obvious errors in the data provided by Holcim, the data is marked with a “*” and DRMS assumptions are provided in the “Notes” portion of the summary. Wall lengths (e.g., stem walls) were estimated using the Holcim provided square footage of the building, taking the square root and multiplying by 4. Caissons, footers, and other subgrade structural supports were assumed to be flush with the surface and abandoned in place. No demolition costs were estimated for subgrade support structure(s) or slabs on which buildings are set as the approved reclamation plan calls for a minimum of two feet of soil cover over the Plant Area (~70 acres, not including the conveyor belt corridor between the Plant Area and the South Quarry Garage; *ref. AM-1 Exhibit F, Reclamation Map, received 10/17, 2003*). This is because the majority of the area between structures is paved with concrete or asphalt, as well as railroad spurs. Concrete stem walls were assumed to be above grade, requiring removal; and included in reclamation costs. Footers and slabs were assumed to be left in place.

Silo demolition was assumed to be accomplished using explosives. The material in the silos (both clinkers and cement) was assumed to be saleable and therefore not requiring a bond for reclamation/disposal.

Conventional building demolition was estimated using demolition and disposal (D&D) unit costs. Stem wall demolition unit costs include onsite disposal with a maximum 10,000-foot haul

All demolished concrete and cinder block structures were assumed to be hauled to the proposed C&D onsite pit/landfill, west of Bear Creek and north of the Arkansas River (*ref. AM-1 Exhibit F, Reclamation Map, received 10/17/2003*). Using existing haul routes, the distance from the center of the Plant Area to the center of the proposed C&D onsite landfill is approximately one mile. The approved reclamation plan allows for salvage of all demolished steel/metal structures. However, if the State must complete the reclamation, salvage is not considered. As such, disposal costs for all demolished steel includes hauling to the nearest landfill for disposal. Twin Enviro Services, 2500 Fremont County Road 67, Penrose, CO 81240 was selected and is a 12 mile drive from the Portland Plant. No effort was made to determine if this landfill could accept C & D materials, nor if it has/will have the capacity to accept the large volume of material, as the situation may change prior to an uncertain/future date when demolition becomes necessary.

Demolition of maintenance shops and fuel storage buildings included a task for sampling and disposal of an estimated quantity of liquid petroleum product. Electrical buildings includes sampling/disposal of PCBs.

Please contact Tim Cazier (303)328-5229 or email at tim.cazier@state.co.us if you have any questions regarding this approach.

Building Structure 1: Plant Warehouse & Maintenance



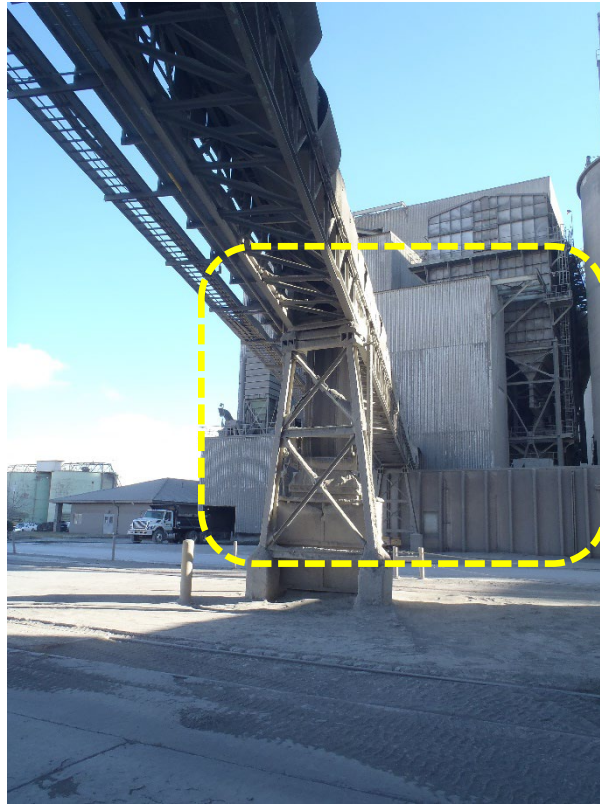
Looking at NW corner.



Looking at SW corner.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1970	16,000	19	Metal Siding Bldg	Caisson 16ea at 2'-6" dia. X 10' 14ea at 4' dia. X 10' A 7' tall x 10" width stem wall that sits on the caissons.	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
304,000		N/A		506	3,542	7-ft stem wall
❖Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single story metal bldg.; <u>offsite</u> disp. in appr'v'd LF – 15 mile haulConc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [3,542 SF]Assumed small amount (25 gallons) of petroleum products (e.g., used oil) for sampling/disposal.				

Building Structure 2: Service Building



Looking at north side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1970	4,160	38	Concrete Twin Tee Wall	2'-6"x 2' Footer along perimeter of bldg. <u>A stem wall 7" wide x 1'-6" tall</u>	6" floor mat
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		158,080		258	387	
❖ Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: multi-story concrete bldg.; <u>onsite</u> disp. in C&D LF – 10,000-ft haul. Conc. wall demo/on-site disposal in existing pit, 8 in. thick - 10,000 ft. haul [387 SF] Assumed no hazardous contents for sampling/disposal 				

Building Structure 3: 1974 Mill Complex, Air Separator



Looking at NW corner.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1974	4,445	131	Concrete Twin Tee Wall	<i>Caisson 45 ea at 2'-6" dia. X 20', 3ea at 4' dia. X 10', 63 ea at 3' dia. X 16'. With a <u>10" wide x 2'-6" tall stem wall</u> on top of caissons on outside perimeter.</i>	6
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		582,295		267	667	
❖ Demo Tasks:		<ul style="list-style-type: none">Plant/Mill, 3+ story concrete bldg.; onsite disposal – 10,000 ft haul.Conc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [667 SF]Assumed no hazardous contents for sampling/disposal				

Building Structure 4: 1974 Mill Complex, Finish Mill Area

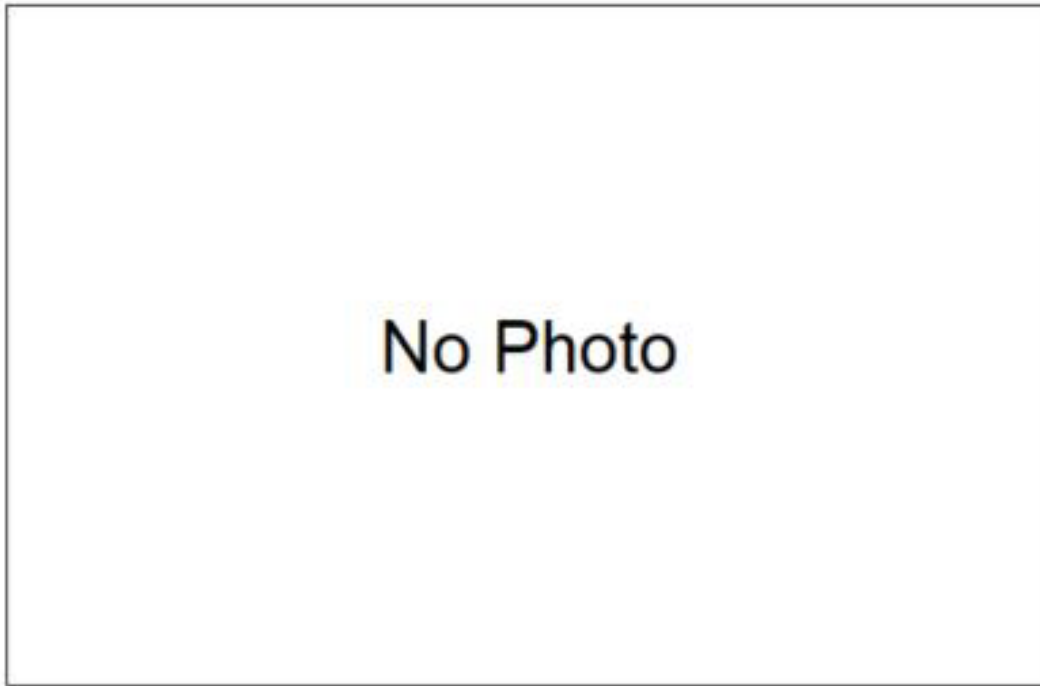


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1974	9,779	131	Concrete Twin Tee Wall	Included in Structure 3.	6
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		1,281,049		0	0	
❖ Demo Tasks:		<ul style="list-style-type: none"> Plant/Mill, 3+ story concrete bldg.; onsite disposal – 10,000 ft haul. Assumed no hazardous contents for sampling/disposal 				

Building Structure 5: 1974 Mill Complex, Old Compressor Room & Control Room



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1974	10,744	90	Concrete Twin Tee Wall	Caissons Type A's 10 ea at 2'-6" dia x 20' Type E's 7 ea at 3' dia x 20'	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		966,960		0	0	
❖Demo Tasks:		<ul style="list-style-type: none">Plant/Mill, 3+ story concrete bldg.; onsite disposal – 10,000 ft haul.No stem wall.Assumed no hazardous contents for sampling/disposal				

Building Structure 6: 1974 Mill Complex, Cooler, New Office Area Added



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1974	22,179	90	Concrete Twin Tee Wall	Caissons Type A's 25 ea 2'-6" dia x 20' Type B's 13 ea at 3' dia. X 20'	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		1,996,110		0	0	
❖Demo Tasks:		<ul style="list-style-type: none">Plant/Mill, 3+ story concrete bldg.; onsite disposal – 10,000 ft haul.No stem wall.Assumed no hazardous contents for sampling/disposal				

Building Structure 8: So. Quarry Garage



Photo from “zoomed” Google Maps street view.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	1954	5,457	64* {30?}	Concrete Twin Tee Wall	Caissons 14 ea at 2'-6" dia x 2', has a 2'-6" x 3' footer along perimeter	8" concrete floor
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes * 64 ft provided by Holcim - seems high
0		349,248*		0	0	
❖ Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disposal – 10,000 ft haul. No stem wall, footer assumed below grade. Assumed small amount (50 gallons) of petroleum products (e.g., used oil) for sampling/disposal. 				

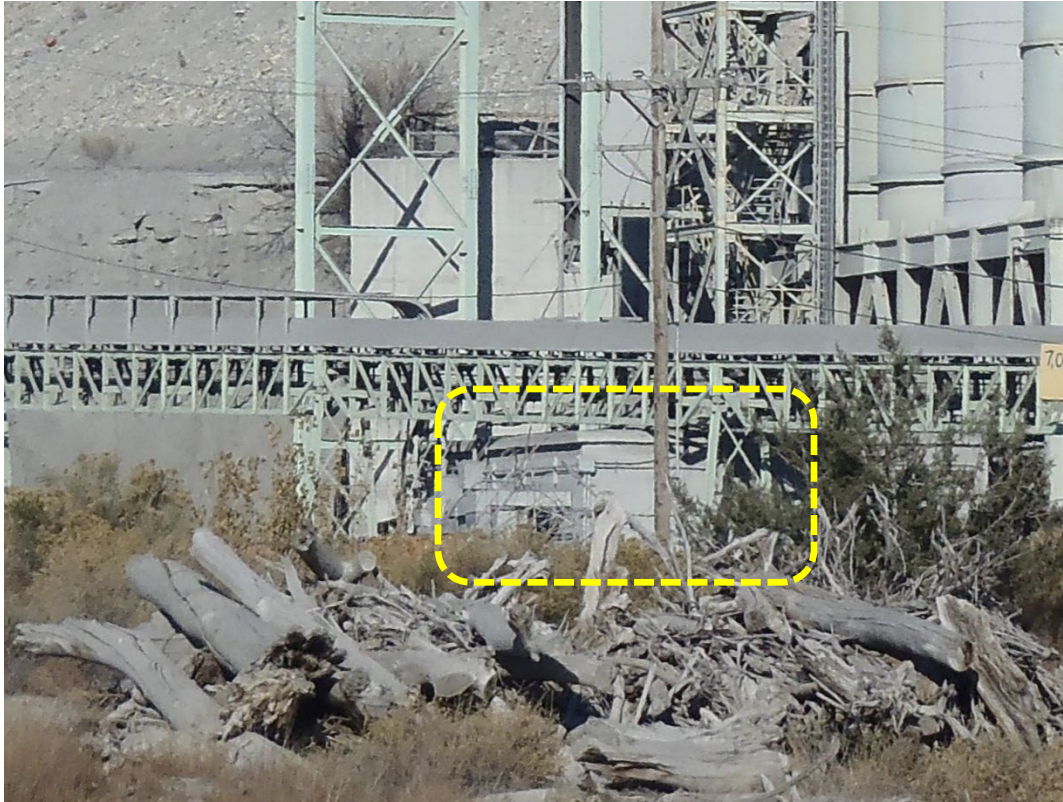
Building Structure 9: No. Quarry Garage



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	1974	5,664	38	Concrete Twin Tee Wall	<i>Assumed by Holcim as: Caissons 14 ea at 2'-6" dia x 2', has a 2'-6" x 3' footer along perimeter</i>	<i>Assumed by Holcim as: 8" concrete floor</i>
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		215,232		301	0	
❖ Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disposal – 10,000 ft haul. No stem wall, footer assumed below grade. Assumed small amount (50 gallons) of petroleum products (e.g., used oil) for sampling/disposal. 				

Building Structure 9A: Lubrication Oil Shed



Looking at SW corner from across the river.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	1974	800	38	Concrete Wall	Footer 1' x 2' x 2' with a <u>10" x 3' stem wall</u> with 8" x 8" runners connecting the footer	2
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		30,400	113	339		
❖Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disposal – 10,000 ft haul.Wall, concrete, demolition only, average reinforcing - 10 in. thick - Max. 10,000 ft. haul [339 SF]Assumed small amount (75 gallons) of petroleum products (e.g., used oil) for sampling/disposal.				

Building Structure 9B: Fuel Shelter



Looking at SE corner (photo from 4/26/2017 inspection).

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	1997	1,232	10	Concrete Pillars	open w/ stem walls (2' high)	Concrete pad 9" thick
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		12,320	140	281	DRMS estimate for stem wall based on photo; Disposal of 3 ~4,200 gal. tanks, 1 ~1,500 gal tank, and 1 ~300 gal. tank	
❖Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disposal – 10,000 ft haul.Wall, concrete, demolition only, average reinforcing - 24 in. thick - Max. 10,000 ft. haul [281 SF]Assumed large amount (14,400 gallons) of petroleum products (e.g., diesel, gasoline) for sampling/disposal.Haul 5 tanks to certified salvage dump - 3,000 to 5,000 gal. tank				

Building Structure 9C: Truck Wash



Looking at south side (photo from 4/26/2017 inspection).

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	2004	300	10	Metal siding bldg	Stem Wall 3'-6" x 9" thick with a 2' wide x 9" thick footer	N/A
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
3,000		0		69	242	
❖ Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single story metal bldg.; offsite disp. in appr'd LF – 15 mile haul Wall, concrete, demolition only, average reinforcing - 10 in. thick - Max. 10,000 ft. haul [242 SF] Assumed no hazardous contents for sampling/disposal 				

Building Structure 10: Quarry Area Electric Substation

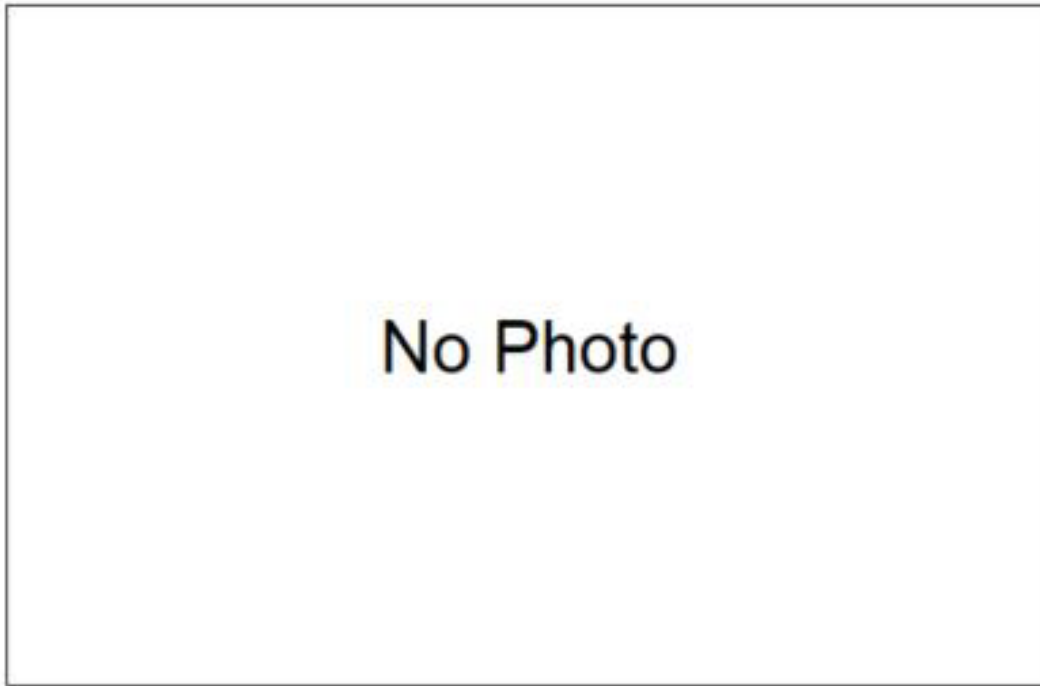


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	1974	672	32	Concrete Twin Tee Wall	Block walls 12" in thickness	Concrete slab 6" thick
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		21,504		n/a	n/a	
❖ Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disposal – 10,000 ft haul. Assumed NON-PCB Transformer Removal/disposal (estimate 4 transformers) 				

Building Structure 11: Service Building & Warehouse



Looking at SE side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Misc.	1994	15,312	22	Concrete Wall	Spread Footer every 22' 8' x 4'-6" 33 total with a <u>2'-6" x 10" stem wall</u>	2
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		336,864		495	1,237	
❖Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disposal – 10,000 ft haul.Wall, concrete, demolition only, average reinforcing - 10 in. thick [1,237 SF]Assumed small amount (50 gallons) of petroleum products (e.g., used oil) for sampling/disposal.				

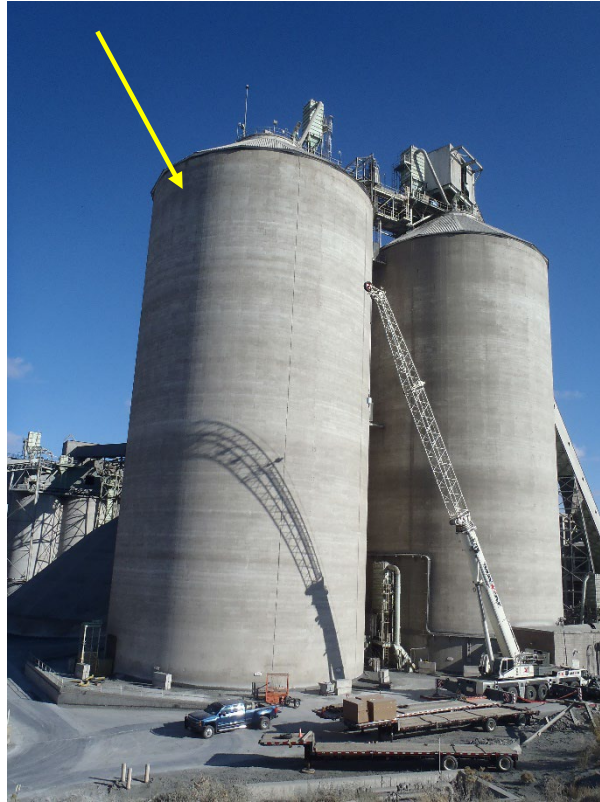
Building Structure 13: Administration Office



Photo from “zoomed” Google Maps street view.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Misc.	1994	5,856	90* Use 15	Center Block Wall (cinder?)	10" tall x 16" wide footer with a <u>8" wide x 26" tall stem wall along perimeter of bldg</u>	6" concrete pad
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		87,840*		306	663	* 90 provided by Holcim, assume 15 based on site observations
❖Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul.Wall Demo. & on-site disposal in existing pit, 8 in. thick - Max. 10,000 ft. haul [663 SF].Assumed no hazardous contents for sampling/disposal				

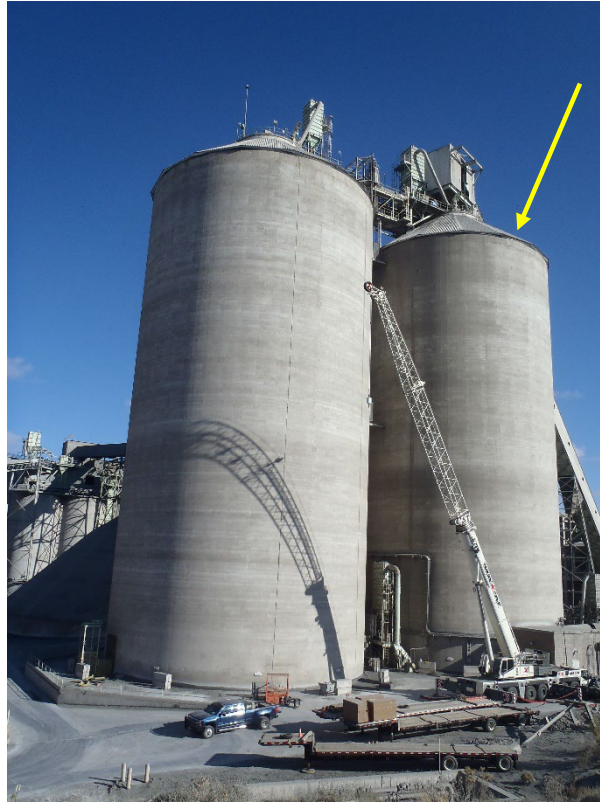
Building Structure 14A: North Clinker Silo



View from NW.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	1,110,998* Use 6,362	96	Concrete Wall	Caissons 130 ea at 1.524m dia x 7.1m	1.1m thick concrete pad on top of caissons
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		610,752*	0	0	* 1,110,998 provided by Holcim, assume 90' Dia. based on Google Earth measurement	
❖ Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of structural material minimum [6,134 CY – based on <u>1.1-m wall thickness</u>, 90-ft dia., 96-ft height x 1.695 swell factor {similar to broken limestone}]				

Building Structure 14B: South Clinker Silo



View from NW.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	1,110,998* Use 6,362	96	Concrete Wall	Caissons 130 ea at 1.524m dia x 7.1m	1.1m thick concrete pad on top of caissons
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)		Concrete Stem Wall Area (Ft²)	Notes
0		610,752*	0		0	* 1,110,998 provided by Holcim, assume 90' Dia. based on Google Earth measurement
❖ Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of structural material minimum [6,134 CY – <i>based on <u>1.1-m wall thickness</u>, 90-ft dia., 96-ft height x 1.695 swell factor {similar to broken limestone}</i>]				

Building Structure 14C: Reject Clinker Silo



View from north side of clinker dome.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	92,833* Use 1,257	51	Concrete Wall	Caissons 130 ea at 1.524m dia x 7.1m	1.1m thick concrete pad on top of caissons
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		64,088*	0	0	* 92,833 provided by Holcim, assume 40' Dia. based on Google Earth measurement	
❖ Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of structural material minimum [1,448 CY – <i>based on <u>1.1-m wall thickness</u>, 40-ft dia., 51-ft height x 1.695 swell factor {similar to broken limestone}</i>]Assumed hazardous disposal of 75% capacity (~48,066 cf) of reject clinker (eye, skin & lung irritant).				

Building Structure 15: Clinker Dome



Looking SW.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	1974	34,636	96* Use 51	Concrete Wall and Metal siding	Footer 1'-6" x 9' along diameter <i>perimeter</i> of bldg.	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
484,904 (based on cone shape of 42-ft Ht {51 – 9 = 42})		0 (see Stem Wall)		660	5,938 (based on 9-ft height & circular perimeter calculated from 34,636 ft² area)	* 96 provided by Holcim, assume 51 based on observed similar height of adjacent reject silo
❖ Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single story metal bldg.; offsite disp. in appr'v'd LF – 15 mile haulWall Demo. & on-site disposal in existing pit, 18 in. thick - Max. 10,000 ft. haul [5,938 SF]				

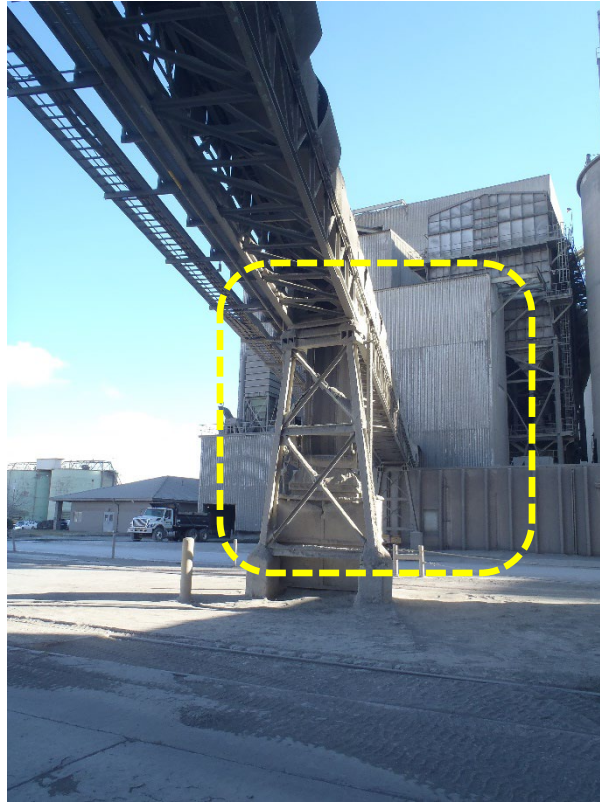
Building Structure 16: Cement Grinding Enclosure



Looking at east side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	14,505	131	Metal siding bldg	Caissons 57 ea at .914m dia x 7m and 39 ea at 1.22m x 7m	1m (3.28 feet) thick concrete pad
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
1,900,155 {MILL}		0		0	0	Use Mill Demo type
❖Demo Tasks:		<ul style="list-style-type: none">Plant/Mill [D&D], 3+ story metal bldg.; offsite disposal in appr' d LF – 15 mile haul.Assumed no hazardous contents for sampling/disposal				

Building Structure 17: XFOBS 16 Raw Material Silo



Looking at north side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1974	235,000* Use 2,625	90	Concrete Wall	Caissons 30 ea at 1.52m dia. X 11m with a 2m thick pile cap on top of caissons	6
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		236,250	0	0	* 235,000 provided by Holcim, assume 35'x75' based on Google Earth measurement	
❖ Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: multi-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul.Assumed no hazardous contents for sampling/disposal, but onsite disposal of 75% capacity [~177,187 CF] rocky/earthen material				

Building Structure 18: New Cement Silo



Looking at east side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	235,000* Use 3,631	182	Concrete Wall	Caissons 30 ea at 1.52m dia. X 11m with a 2m thick pile cap on top of caissons	6
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		660,966	0	0	* 235,000 provided by Holcim, assume 68' Dia. based on Google Earth measurement	
❖Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of material minimum [1,220 CY – based on <u>12-inch wall thickness</u>, 68-ft dia., 182-ft height x 1.695 swell factor {similar to broken limestone}]				

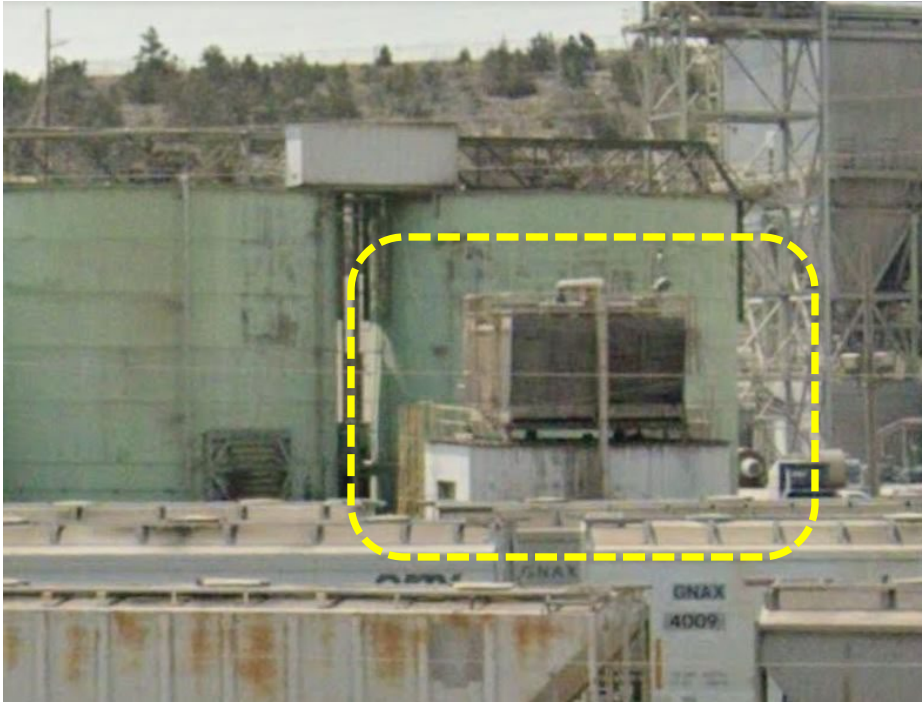
Building Structure 19: Cement Silo Electric



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	814	19	Cinder Block Wall	Footers (assumed below grade)	1
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0				0	0	Photo would be helpful
❖ Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul. Assumed NON-PCB Transformer Removal/disposal (estimate 4 transformers) 				

Building Structure 19E: Name not provided



Photos from “zoomed” Google Maps street views.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
?	?	~30' x 20' 600	~20	Steel?	unknown	unknown
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
unknown		unknown	unknown	unknown	No Description (shown on Map: north of water tanks next to #45 Air/oil House Bldg & east of the Admin. Office/#13; but not listed in the list on the Map nor on the spreadsheet)	
‡Demo Tasks:		‡ TBD <ul style="list-style-type: none">• Standard single story metal bldg.?• Assumed no hazardous contents for sampling/disposal?				

Building Structure 20: Group 3 Plat Building



Looking at east side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Logistics	1974	1,496,256* Use 6,270	96	Concrete Wall	Footers (assumed below grade)	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		601,920*	0	0	* 1,496,256 provided by Holcim, assume 6,270 ft² based on Google Earth measurement	
❖ Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of material minimum [silo circumference x height x wall thickness → 3,029 CY – based on <u>12-inch wall thickness</u>, four 40-ft diameter silos x 96-ft height x 1.695 swell factor {similar to broken limestone}]				

Building Structure 21: Group 2 1965 Silos



Looking at SE corner.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Logistics	1965	718,908* Use 9,780	182	Concrete Wall	Footers (assumed below grade)	8
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		1,779,960*	0	0	* 718,908 provided by Holcim, assume 9,780 ft² based on Google Earth measurement	
❖ Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of material minimum [silo circumference x height x wall thickness → 10,661 CY – based on <u>12-inch wall thickness</u>, nine 33-ft diameter silos x 182-ft height x 1.695 swell factor {similar to broken limestone}]				

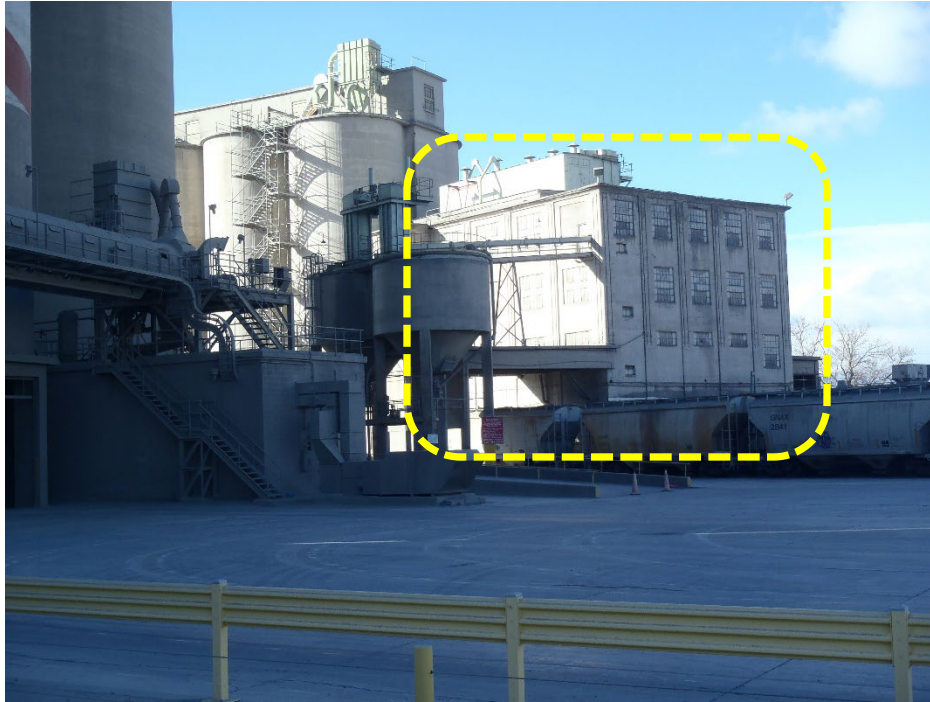
Building Structure 22: Packhouse Silos



Looking at south side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Logistics	1925	896,601* Use 11,555	160	Concrete Wall	<u>4 feet in thickness</u>	slab 2'-9" thick
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		1,848,800*	0	0	* 896,601 provided by Holcim, assume 11,555 ft² based on Google Earth measurement	
❖ Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of material minimum [silo circumference x height x wall thickness → 10,098 CY – based on <u>4-ft wall thickness</u>, ten 32-ft diameter silos x 160-ft height x 1.695 swell factor {similar to broken limestone}]				

Building Structure 22A: Packhouse



Looking at SE corner.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
?	?	6,335?	50?	Concrete Wall	Not provided	Not provided
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		316,750?		Not provided	Not provided	Information not provided
#Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: multi-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul.Assumed no hazardous contents for sampling/disposal				

Building Structure 22B: Packhouse "Annex" (Warehouse?)



Photo from Google Maps street view.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
?	?	10,000	16	Cinder Block	Not provided	Not provided
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
		5,926		Not provided	Not provided	
#Demo Tasks:		<ul style="list-style-type: none">Standard single story cinder block bldg.Assumed no hazardous contents for sampling/disposal				

Building Structure 23: Raw Water Pump House



Photo not available/location unknown.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1965	80	10	Center Block Wall	<u>Stem Wall 3'-6" x 9" thick</u> with a 2' wide x 9" thick footer	2
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		800		26	125	Contained in list on Map & on spreadsheet, but location not shown on map
Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul.Wall Demo. & on-site disposal in existing pit, 8 in. thick - Max. 10,000 ft. haul [125 SF].Assumed no hazardous contents for sampling/disposal				

Building Structure 24: Coal Handling Control Room



Photo from “zoomed” Google Maps street view.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 2	1974	720	16	Concrete Twin Tee Wall ‡ appears to be missing the steel superstructure on the adjacent south side.	Block wall - 10" in thickness – 16 feet high*	0.5
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		11,520		107	1,712	* Foundation wall information appears redundant with the twin tee wall building material information.
Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; <u>onsite</u> disp. in C&D LF – 10,000-ft haul. Conc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [1,712 SF] Assumed no hazardous contents for sampling/disposal 				

Building Structure 25: RR Maintenance Building



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 2	1974	1,980	22	Concrete Twin Tee Wall	Block wall - 10" in thickness - 22 feet high*	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		43,560	178	3,916	* Foundation wall information appears redundant with the twin tee wall building material information.	
Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; <u>onsite</u> disp. in C&D LF – 10,000-ft haul.Conc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [3,916 SF]Assumed no hazardous contents for sampling/disposal				

Building Structure 26: Coal Unloading Control Room



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 2	1974	144	38	Concrete Twin Tee Wall ‡ appears to be missing the steel superstructure on the adjacent north side.	Block wall - 10" in thickness - 38 feet high*	0.5
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		5,472		48	1,056	* Foundation wall information appears redundant with the twin tee wall building material information.
Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000-ft haul.Conc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [1,056 SF]Assumed no hazardous contents for sampling/disposal				

Building Structure 27: Quonset Hut Misc. Storage

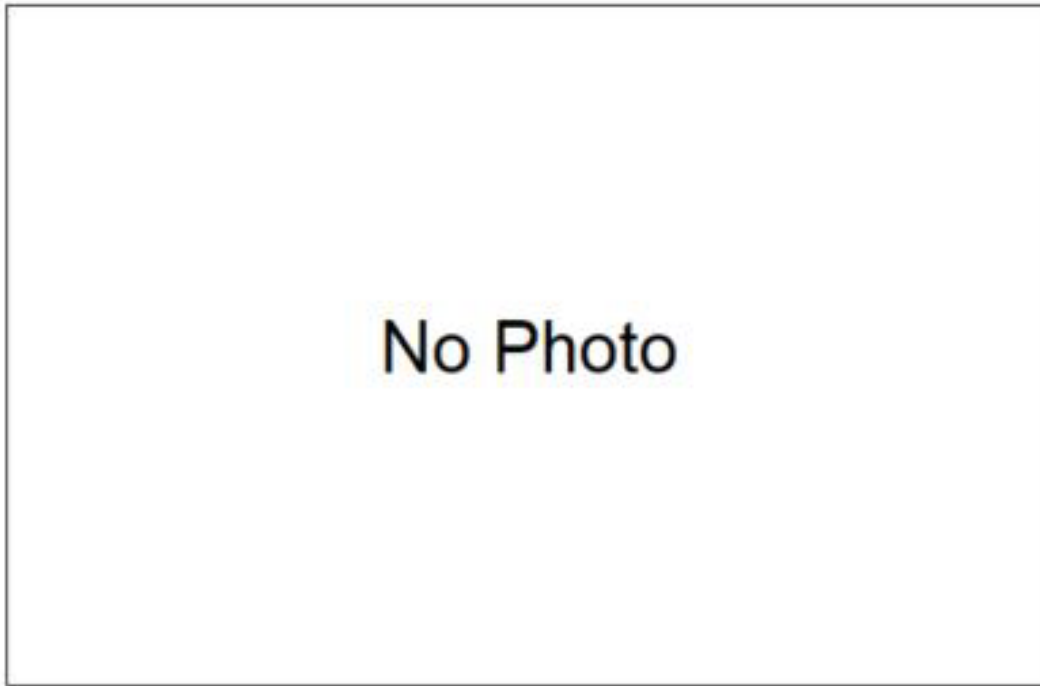


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Misc.	2001	1,225	15	Metal siding / Wood Frame	No vertical walls - metal half circle	0.75
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
14,431 (40.83' x half circle area with a 15' radius)		0	0	0	Contained in list on Map & on spreadsheet, but location not shown on map	
Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single story metal bldg.; <u>offsite</u> disp. in appr'v'd LF – 15 mile haulAssumed small amount (50 gallons) of petroleum products (e.g., used oil) for sampling/disposal.				

Building Structure 28: Crusher Electric



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	2001	1,496	26	Cinder Block Wall	26 feet high 8" in thickness	Electrical room Concrete slab 1.3m (4.27 ft) thick with .3m of lean concrete below, transformer bldg 1m (4.27 ft) thick concrete pad
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		38,896		0	0	
Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul. Assumed NON-PCB Transformer Removal/disposal (estimate 4 transformers) 				

Building Structure 29: Crusher Compressor



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	2001	291	26	Cinder Block Wall	26 feet high 8" in thickness	No drawing found, assume 1m (3.28 feet) thick concrete pad
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		7,566		0	0	
Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul. Assumed no hazardous contents for sampling/disposal 				

Building Structure 29A: Crusher/Feeder Hopper {38°23'40.21"N, 105° 0'32.95"W}



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	TBD	4,120?	30?	Steel	8 ft by 18-inch Concrete Stem Walls (<i>truck "guides"</i>); two: 32 ft long each	TBD
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
123,600		0		Two at 32 ft ea.	512	Measurements pulled from Google Earth
Demo Tasks:		<ul style="list-style-type: none"> Plant (1S) demo./off-site disposal in approved landfill - Max. 15 mile haul l. Conc. wall demo/on-site disposal in existing pit, 18 in. thick - 10,000 ft. haul [512 SF] Assumed no hazardous contents for sampling/disposal 				

Building Structure 30: Preblend Shelter



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	2001	177,783	61	Metal Sided Bldg	4 Rows of Footer/stem wall, outside footers .9mx3.5m w/ .5mx.85m stemwall, inside footer .4m x 7m footer w/.5m x .8m stem wall, other inside footer .4m x 2.6m w/ 1m x .5m stem wall ARE ROWS OF STEM WALLS ALONG THE LENGTH OR WIDTH OF THE BLDG?	0.42?
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
10,844,763		0		TBD	TBD	Need total length and height of stemwalls to estimate area
Demo Tasks:		<ul style="list-style-type: none"> Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul Conc. wall demo/on-site disposal in existing pit, 18? in. thick - 10,000 ft. haul [TBD SF] Assumed no hazardous contents for sampling/disposal 				

Building Structure 31: Raw Material Analyzer & Electric

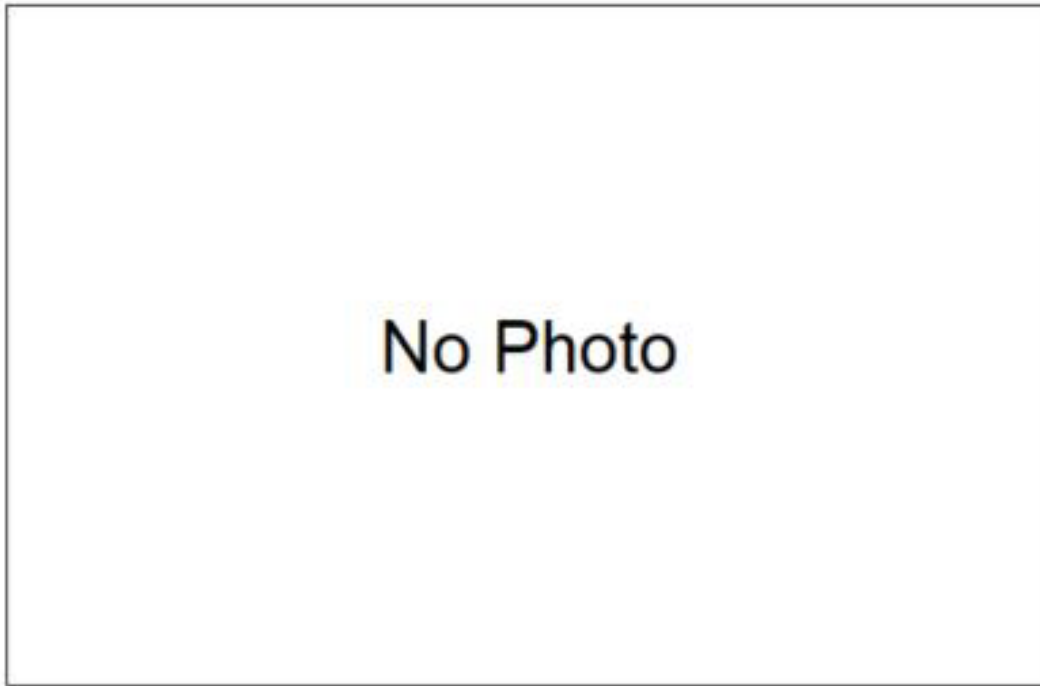


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	2001	1,568	26	Cinder Block and metal siding	2' thick x 2'-6" wide along perimeter and thru center below that is a little bit of lean concrete	0.33?
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
40,768		0	158	396	Assume metal sided bldg. for volume demo; stemwall for cinder block wall demo.	
Demo Tasks:		<ul style="list-style-type: none">Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haulConc. (<i>cinder block</i>) wall demo/on-site disposal in existing pit, 24? in. thick - 10,000 ft. haul [396 SF] .Assumed NON-PCB Transformer Removal/disposal (estimate 4 transformers)Assumed small radioactive waste (estimate 20 lbs) disposal from material analyzer [Hazardous waste removal - Bulk solids, small quantities (up to 1.5 tons)]				

Building Structure 32: Raw Mill Electric, Compressor Electric



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	2001	1,536	22	Cinder block wall	Block wall - 12" thick	Transformer bldg .4m concrete pad w/ .8m thick on two of the outer edges, Electric/compressor .4m (1.31 ft) pad w/ 1m thick on two of the outer edges
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		33,792		0	0	Wall assumed to be part of bldg.
Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul. Assumed NON-PCB Transformer Removal/disposal (estimate 6 transformers) 				

Building Structure 33: Raw Mill Feed / Blended Material Analyzer



Outside photo not available.



Gamma-Metrics Analyzer (indoors, radioactive material).

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	2001	462	19	Metal Siding Bldg	Block wall - 12" thick	Concrete pad 1.2m (4 feet) thick
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
8,778		0		0	0	Circle sign states: "CAUTION Radioactive Material"
Demo Tasks:		<ul style="list-style-type: none"> Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul Assumed small radioactive waste (estimate 20 lbs) disposal from material analyzer [Hazardous waste removal - Bulk solids, small quantities (up to 1.5 tons)] 				

Building Structure 34: Main Electrical Control



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	8,937	38	Cinder Block Wall	Caissons 16 ea at .914m x 6.5m and 8 ea at 1.22m x 6.5m with footer / stem wall running between caissons, footer .4m x .6m and wall .8m x 1.2m NEED LENGTH OF STEM WALLS BETWEEN CAISSONS	STORAGE WARETRUC
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		339,606		TBD	Assume stemwall is 4 ft [1.2 m] high	Need total length of stemwalls to estimate area
Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul. Conc. wall demo/on-site disposal in existing pit, 30? in. thick - 10,000 ft. haul [TBD SF] . Assumed NON-PCB Transformer Removal/disposal (estimate 8 transformers) 				

Building Structure 35: Baghouse Bypass Control

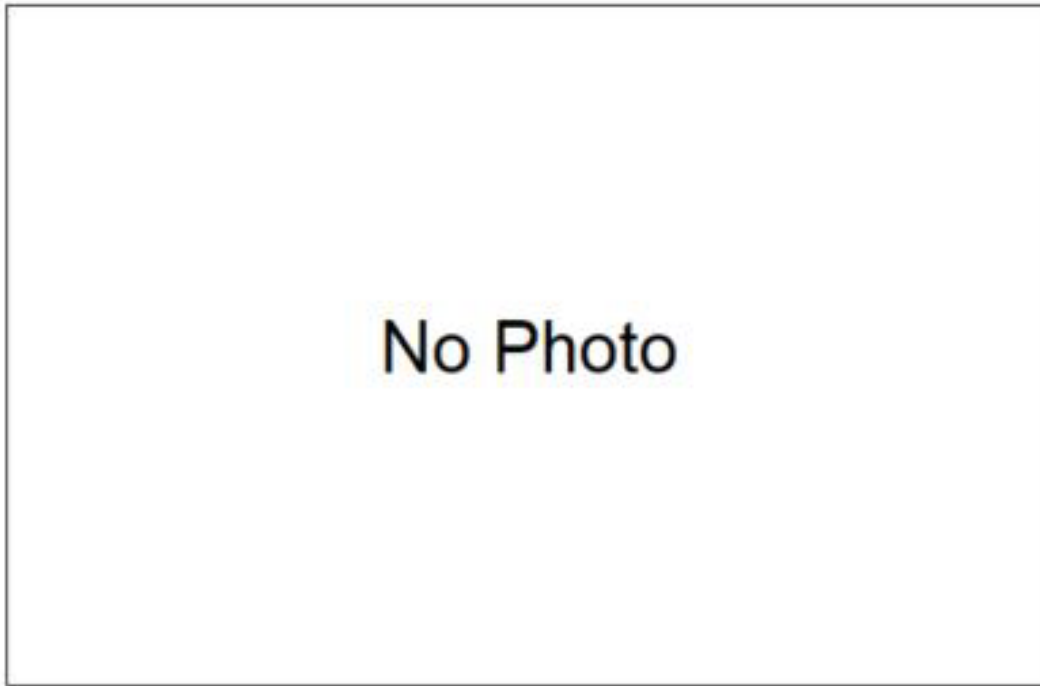


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	2,132 (~4,000)	90	Cinder Block Wall	Caissons 2 ea at 1.22m dia. X 6m and 14 ea at .914m x 6m with 1.2m thick pile cap on top of caissons	3 (ft or inches)
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
0		191,880 (or ~360,000)	0	0	Footprint area appears small based on Google Earth	
Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of structural material minimum [2,840 CY – based on <u>2,132 ft² footprint</u>, 90- ft height x 1.695 swell factor {similar to broken limestone}]				

Building Structure 36: Preheater Electrical Control Room



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	3,825	51	Concrete & steel	Caissons 34 ea at 1.2m dia. x 8m, 5 ea at 1.2m dia x 9m, 2 ea at .9m dia x 8m, 3 ea at .9m dia x 9m with 2.2m thick pile cap on top of caissons.	6 (ft or inches)
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
195,075		--		0	0	Assume mostly steel structure
Demo Tasks:		<ul style="list-style-type: none"> • "Non-Concrete" Bldg. (MN) demo./off-site disposal in approved landfill - Max. 15 mile haul. • Assumed NON-PCB Transformer Removal/disposal (estimate 2 transformers) 				

Building Structure 37: Kiln Gear Electrical & Transformer Room



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	2,059 (~10,500)	45	Concrete	Caissons @ Pier 1 2 ea at 1.52m dia x 8.5m 9 ea at 1.22m dia. x 7.5m Pier 2 9 ea at 1.22m x 7.5m Pier 3 10 ea at 1.22m dia x 7.5m	6 (ft or inches)
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		92,655 (or ~472,500)		0	0	Footprint area appears small based on Google Earth
Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul. Assumed NON-PCB Transformer Removal/disposal (estimate 6 transformers) 				

Building Structure 38: Cooler Pump Shed

{Included in clinker cooler bldg see item #49}



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	575	9	Concrete	--	2 (ft ?)
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
N/A		N/A		N/A	N/A	Covered under Bldg ID #49
Demo Tasks:		• None				

Building Structure 39: Clinker Cooler Baghouse Electrical Room

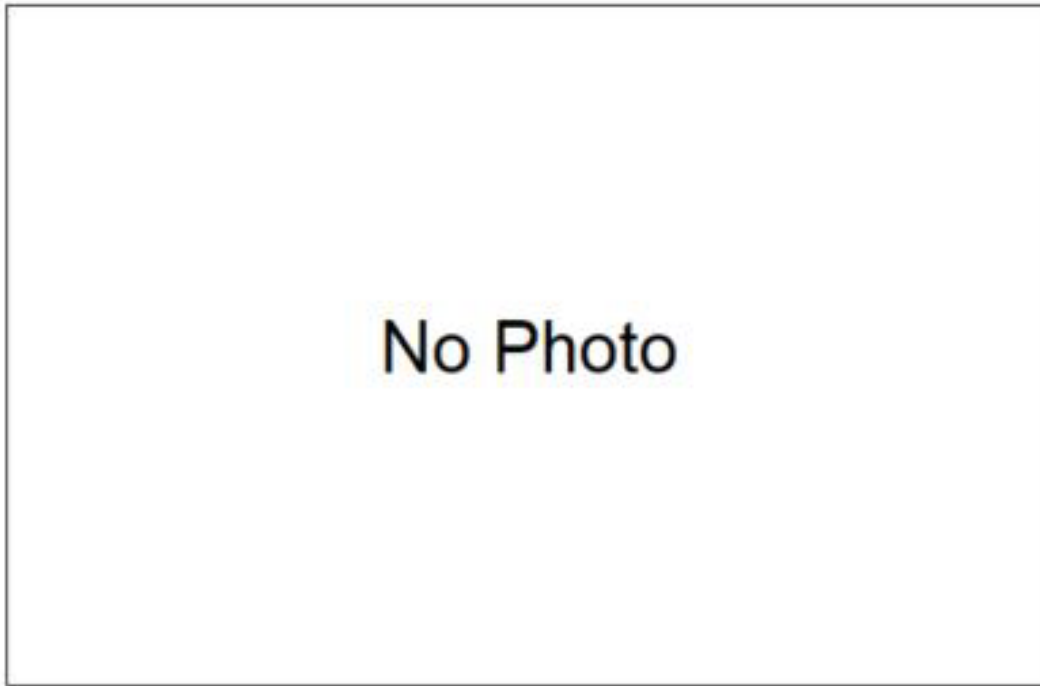


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	2,698	16	Cinder block wall & steel	Caissons 10 ea at .91m dia x 7.5m, 2 ea at 1.22m dia. X 7.5m with 1.2m thick pilecap on top of caissons.	4 (ft ?)
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		43,168		0	0	Assume mostly cinder block
Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul.Assumed NON-PCB Transformer Removal/disposal (estimate 2 transformers)				

Building Structure 40: Clinker Silo Electrical & Transformer Room



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	532	19	Cinder block wall	Caissons 130 ea at 1.524m dia x 7.1m	3
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		10,108		0	0	
Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul. Assumed NON-PCB Transformer Removal/disposal (estimate 8 transformers) 				

Building Structure 41: Coal Mill Hydraulic Shelter



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	240	19	Concrete, steel and cinder block	Caissons 17 ea at 1.22m dia x 6m	4.5m thick pile cap on top of caissons
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
Can the steel be split out from the concrete volume?		Can the concrete be split out from the steel volume?				Includes larger footprint Bldg #42
Demo Tasks:		<ul style="list-style-type: none"> • "Non-Concrete" Bldg. (MN) demo./off-site disposal in approved landfill - Max. 15 mile haul. • Assumed NON-PCB Transformer Removal/disposal in Bldg #42(estimate 2 transformers) 				

Building Structure 42: Coal Mill Electric

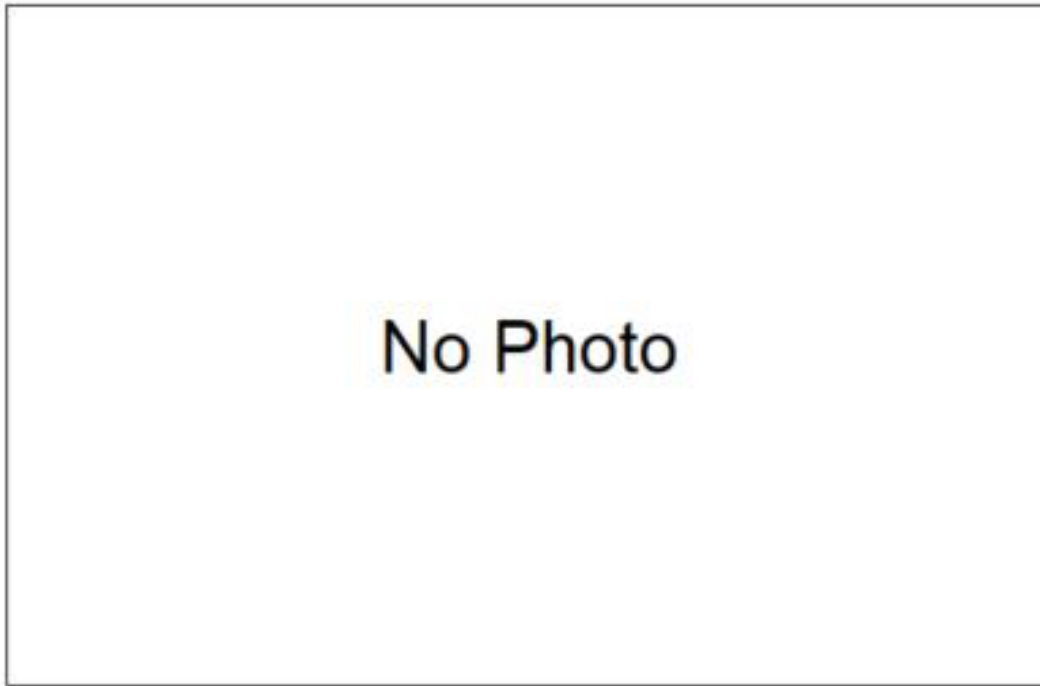


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	741?*	19	??	??	
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
??		??		??	??	Covered under Bldg ID #41 – * but the 741 ft ² footprint is larger than the 240 ft ² footprint
Demo Tasks:		• ??				

Building Structure 43: Water Filtration Plant

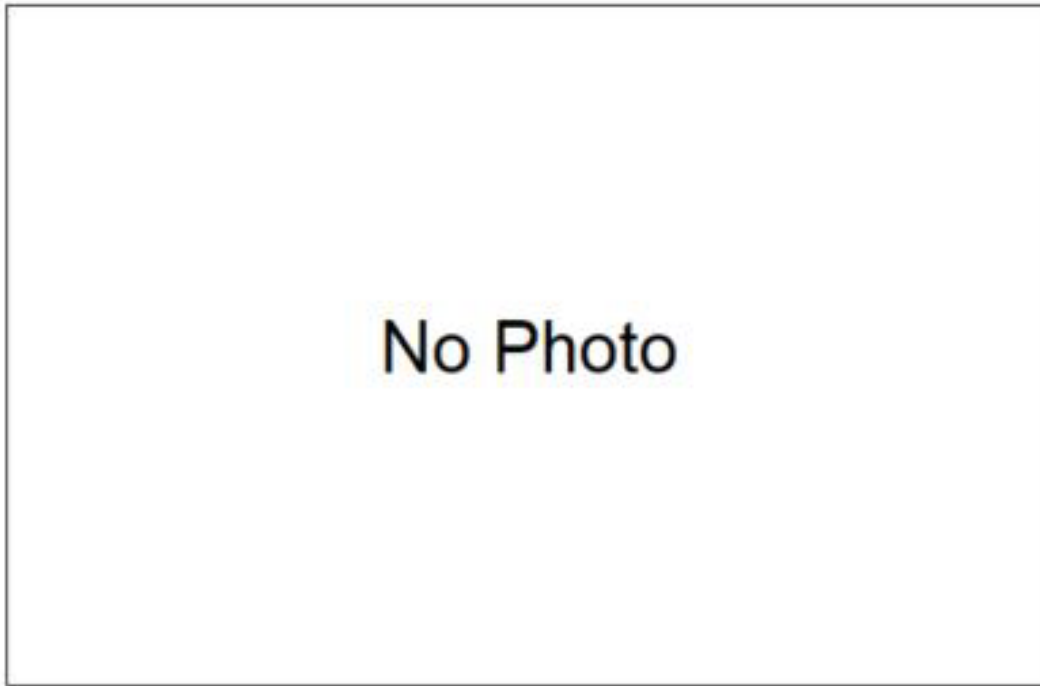


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Misc.	1994	1,360	12	Concrete Twin Tee Wall	Footer - 9" thick x 2' wide along perimeter of bldg. Stem wall 9" wide x 3'-6" tall along perimeter of bldg.	0.75
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		16,320		148	516	Location not shown on 7/1/2021 Facility Map
Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; <u>onsite</u> disp. in C&D LF – 10,000-ft haul.Conc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [516 SF]Assumed no hazardous contents for sampling/disposal				

Building Structure 44: Raw Mill Feed Bins



Looking west at east side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	2001	1,650	86	Steel	Caissons 10 ea at 1.2m dia no depth given assume rest on bed rock, 1.2m thick by .8m wide concrete pad going around perimeter and across from each caisson	3?
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
141,900		0		0	0	
Demo Tasks:		<ul style="list-style-type: none"> Plant (1S) demo./off-site disposal in approved landfill – Max. 15 mile haul. Assumed no hazardous contents for sampling/disposal No concrete demo necessary 				

Building Structure 45: Air / Oil House Building



Looking at SE corner.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	2007	6,000	32??	Cinder Block Wall	1' x 3' wide footer around perimeter of bldg as well as thru the center with a 8" x 3'-5" tall stem wall	0.5?
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		192,000 ??		310	1,084	
Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul.Assumed no hazardous contents for sampling/disposal				

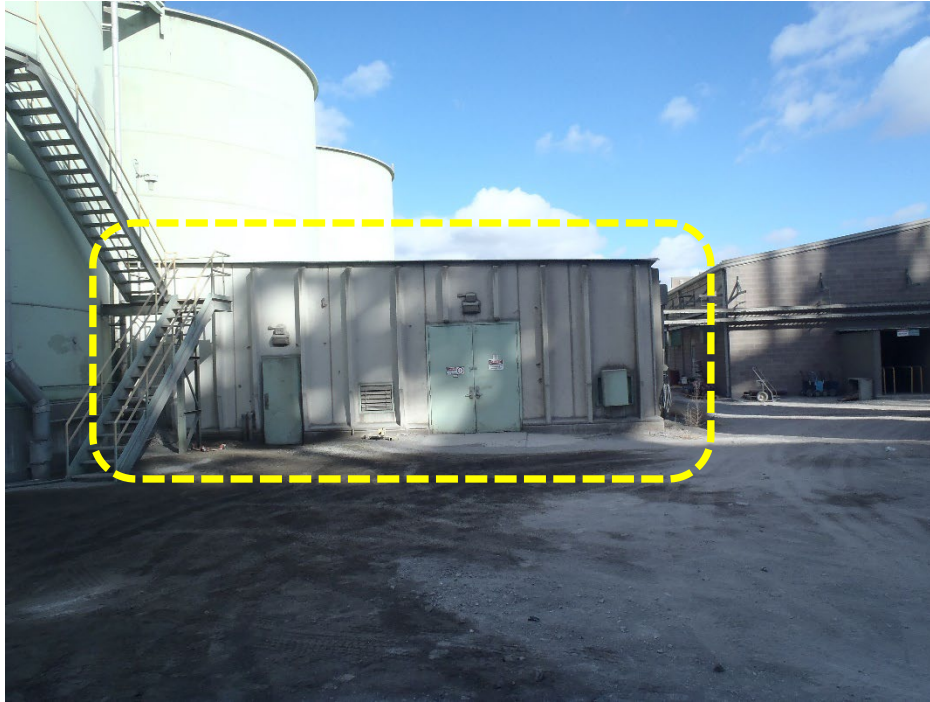
Building Structure 45A: Air / Oil House Tanks



Looking at NE end from SE.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
??	??	3 X 50' dia.	~48	Steel?	??	??
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
282,743		0		??	??	Diameter from Google Earth measurement
Demo Tasks:		<ul style="list-style-type: none">Plant (1S) demo./off-site disposal in approved landfill – Max. 15 mile haul.Assumed no hazardous contents for sampling/disposalConcrete demo necessary? Stemwall?				

Building Structure 45B: Air / Oil House "Shop"



Looking at west side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
??	??	~4,300	~12	Concrete Twin Tee Wall?	??	??
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		51,600		??	??	Footprint from Google Earth measurement
Demo Tasks:		<ul style="list-style-type: none"> Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul. Assumed no hazardous contents for sampling/disposal 				

Building Structure 46: Scrubber



Photo may not show the Scrubber.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	970	189	Fiberglass	Caissons 16 ea at .9m dia x 7.5m and 3 ea at .9m dia x 8m	4.3 (1.3m concrete pad on top of caissons)
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
0		0		0	0	Volume is 183,330 Ft ³
Demo Tasks:		<ul style="list-style-type: none"> Fiberglass construction Plant (1S) demo./off-site disposal in approved landfill – Max. 15 mile haul. Assumed no hazardous contents for sampling/disposal 				

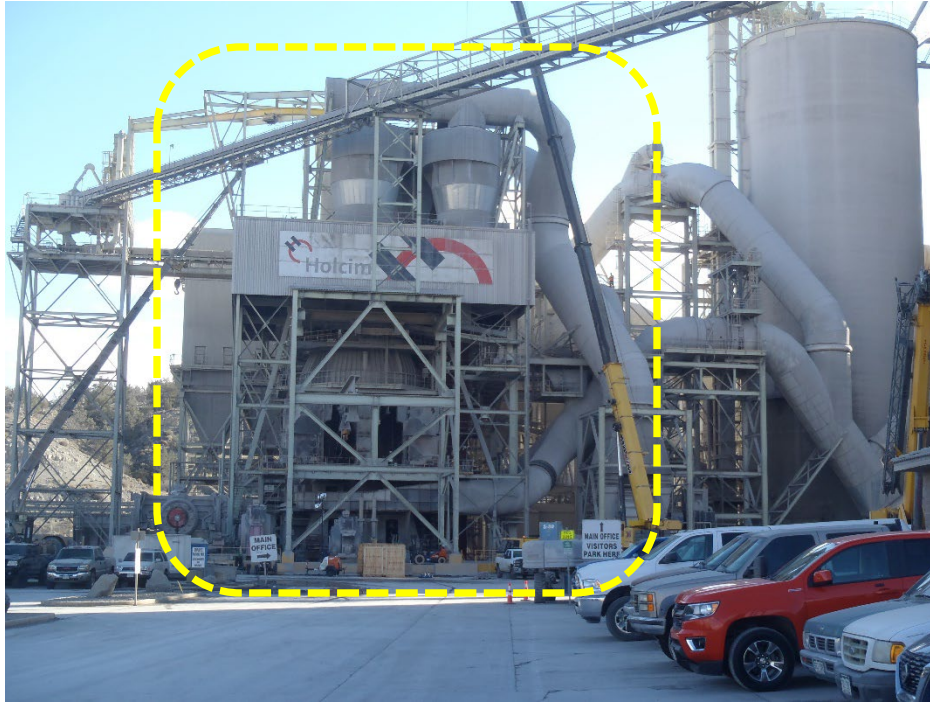
Building Structure 47: Raw Meal Silo



Looking at NE side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	1,220	173	Concrete wall	Caissons 32 ea at 1.22m x 6m with a 1.8m x 6m pile cap on top of caissons along perimeter wall	??
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		211,060		0	0	
Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of structural material minimum [TBD CY – based on <u>unknown wall thickness</u>, 124-ft dia., 173-ft height x 1.695 swell factor {similar to broken limestone}]				

Building Structure 48: Raw Mill



Looking at north side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	7,190	128	Steel and metal siding	Caissons 21 ea at .9m dia x 6.5m and 2 ea at 1.22m dia x 6.7m	24.6 (~2m of lean concrete & on top of that 5.5m of concrete)
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
920,320		0		0	0	
Demo Tasks:		<ul style="list-style-type: none">Plant (3S) demo./off-site disposal in approved landfill - Max. 15 mile haul.Assumed no hazardous contents for sampling/disposal				

Building Structure 49: Clinker cooler Building



Looking at NWcorner.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 4	2001	7,360	48	Concrete & Steel	Caissons 14 ea at 1.22m dia x 8.5m and 29 ea at .9m dia x 8.5m with 1.2m thick pile cap on top of caissons	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		353,380		0	0	
Demo Tasks:		<ul style="list-style-type: none">Plant (3S) demo./off-site disposal in approved landfill – Max. 15 mile haul.Assumed no hazardous contents for sampling/disposal				

Building Structure 50: Old Primary Crusher

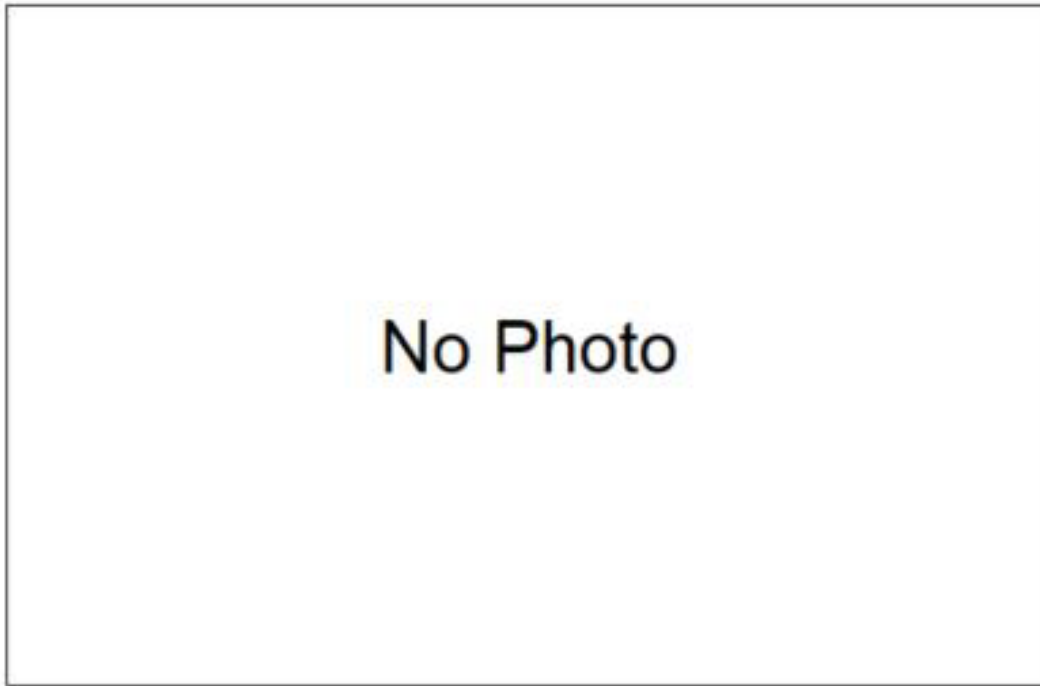


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	1973	4,386?	80?	Steel	8 misc piers 4 ea at 3'-3" x 6'-3", 2 ea at 3'-8" x 20'-9", 2 ea at 9" x 19"	5
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes	
350,880?		0	0	0	No photo, but footprint and height appear too much	
Demo Tasks:		<ul style="list-style-type: none">Plant (3S) demo./off-site disposal in approved landfill - Max. 15 mile haul.Assumed no hazardous contents for sampling/disposal				

Building Structure 51: Old Secondary Crusher



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	1973	2,805	48	Steel	Piers, 1 ea at 3'-10" x 10'-2" and 2 ea at 2'-8" x 10'-6"	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
134,640		0		0	0	No photo, but footprint and height appear too much
Demo Tasks:		<ul style="list-style-type: none">Plant (3S) demo./off-site disposal in approved landfill - Max. 15 mile haul.Assumed no hazardous contents for sampling/disposal				

Building Structure 52: Coal Silo



Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 3	1973	1,075	58	Concrete wall	Caissons 10 ea at 2'-6" dia x 20' with a 2'-6" x 3'-6" caisson cap	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		62,350		0	0	
Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of structural material minimum [1,524 CY – <i>based on <u>1.1-m wall thickness</u>, 37-ft dia., 58-ft height x 1.695 swell factor {similar to broken limestone}</i>]				

Building Structure 54: Plant 2 Mill Building



Looking at east side.



Looking at north end (Google Maps image).

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 2	1947	36,860	141	Metal siding wall	Footers 59ea varying sizes from 2'x1-6" to 12'x19' with 1' to 2'-9" thick, stem wall is 2'x3' with height varying from 5' to 7'.	6-8" concrete slab
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
5,197,260		0		1,090	6,540	
Demo Tasks:		<ul style="list-style-type: none">Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haulConc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [6,540 SF]Assumed no hazardous contents for sampling/disposal				

Building Structure 55: Truck Weigh Scale



Looking at south end.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 2	1996	1,000	2	Concrete and steel (Wood Frame Control Shed)	No walls – open	10'x100'x9" concrete slab
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
83		0		0	0	Assume 1" steel plate
Demo Tasks:		<ul style="list-style-type: none">10' x 100' steel plate, off-site disposal in approved landfill - Max. 15 mile haul.Wood shed: 8'x8'x8' = 512 ft³ off-site disposal in approved landfill - Max. 15 mile haul.				

Building Structure 56: Raw Water Tank



Looking at SE side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 2	1996	1,963 (~72-ft dia. => 4,191 ft²)	38 (32?)	Metal Bolted Tank	8' tall stem wall all around perimeter of tank.	1
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
134,112*		0		230 (based on 72-ft tank dia.)	1,840*	*Quantities in red based on 72' dia. And 32 ft height
Demo Tasks:		<ul style="list-style-type: none">Plant (1S) demo./off-site disposal in approved landfill – Max. 15 mile haul.Conc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [1,840 SF]Assumed no hazardous contents for sampling/disposal				

Building Structure 57: Old Old Primary Crusher



Looking at SE corner.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Quarry	1947	525	45	Concrete (& Steel??*)	Walls are 12 inches thick - no roof	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
??*		23,625		0	0	*Photo suggests structure includes steel structure in addition to concrete
Demo Tasks:		<ul style="list-style-type: none">Plant (3S) demo./off-site disposal in approved landfill - Max. 15 mile haul.Assumed no hazardous contents for sampling/disposal				

Building Structure 58: Truck Washing Station



Looking at SW corner

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant	2016	400	10	Wood frame shed (appears to be cinder block)	No walls -open (appears to have 4 walls)	2
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		4,000		0	0	Provide information on the below grade structure on either side of the cinder block building & the steel structure on the right side of the photo.
Demo Tasks:		<ul style="list-style-type: none">Bldg [D&D]: single-story concrete bldg.; onsite disp. in C&D LF – 10,000 ft. haul.Assumed no hazardous contents for sampling/disposal				

Building Structure 59: Ammonia Storage Building



Looking at north side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant	2016	2,924	26	Metal siding	1/2 walls 4 feet high	3
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
76,024		0		216	865	
Demo Tasks:		<ul style="list-style-type: none">Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haulConc. wall demo/on-site disposal in existing pit, 10 in. thick - 10,000 ft. haul [865 SF]Assumed large amount (18,800 gallons max.) of ammonia hydroxide for sampling/disposal.Haul 1 tank to certified salvage dump - 9,000 to 12,000 gal. tank				

Building Structure 60: Tirefuel Bins

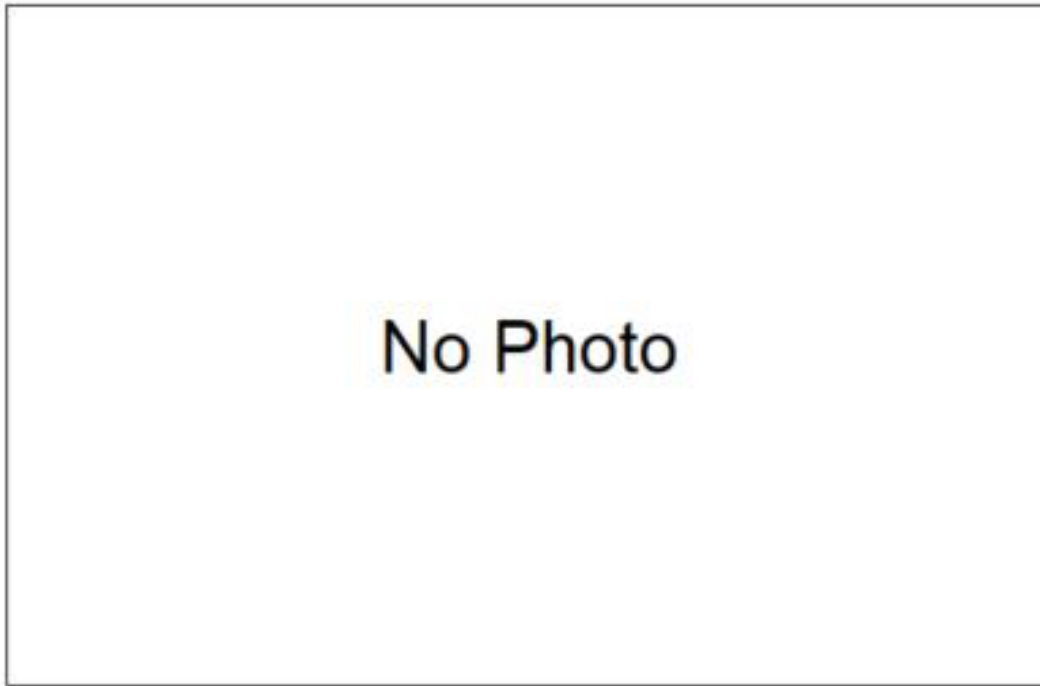


Photo not available.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant	2012	1,750	10	No roof (concrete)	12" concrete	2
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft²)	Notes
0		0		150	1,500	
Demo Tasks:		<ul style="list-style-type: none">Conc. wall demo/on-site disposal in existing pit, 12 in. thick - 10,000 ft. haul [1,500 SF]Assumed no hazardous contents for sampling/disposal				

Building Structure 61: Storage Warehouse



Looking at SW side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant	2012	8,750	16	Metal siding / frame	Walls are 16 feet high - metal sheeting	2
Metal Bldg. Vol. (Ft ³)		Concrete Bldg. Vol. (Ft ³)		Concrete Stem Wall Length (Ft)	Concrete Stem Wall Area (Ft ²)	Notes
140,000		0		0	0	
Demo Tasks:		<ul style="list-style-type: none"> Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul. Assumed no hazardous contents for sampling/disposal 				

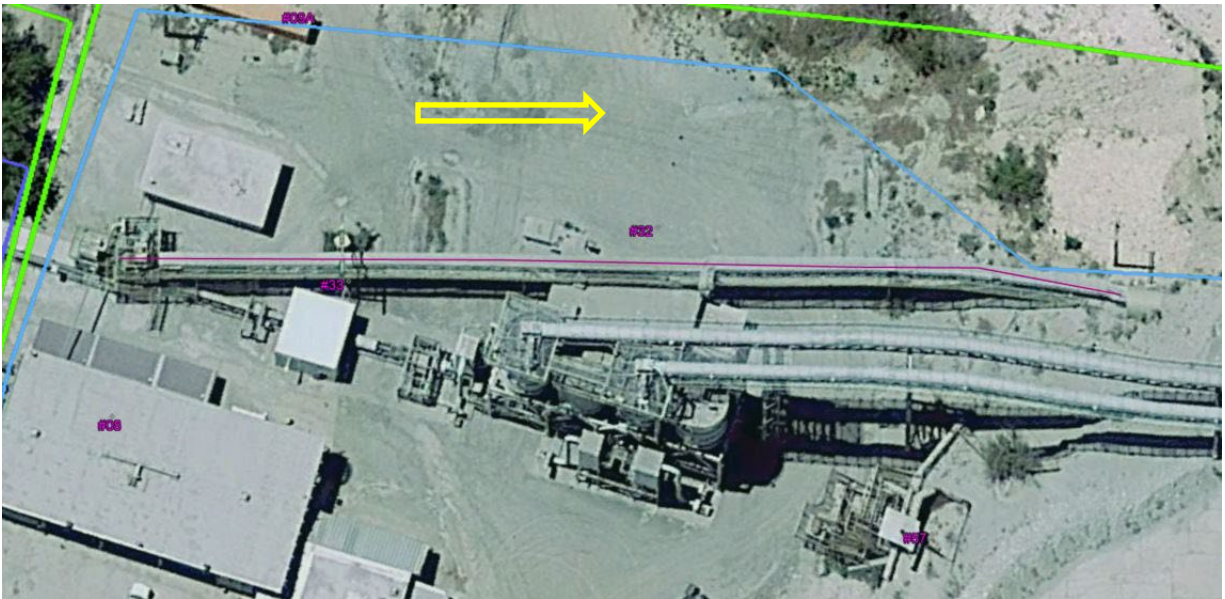
Building Structure 62 : Plant 2 Area Concrete Silo



Looking from east side.

Area	Year Built	Square Ft (footprint)	Eave Ht (ft)	Building Material	Foundation Wall Type & Ht (ft)	Slab Thickness (ft)
Plant 2	TBD	1,385 (based on 42-ft dia. in Google Earth)	TBD	Concrete	Not Provided	Not Provided
Metal Bldg. Vol. (Ft³)		Concrete Bldg. Vol. (Ft³)	Concrete Stem Wall Length (Ft)		Concrete Stem Wall Area (Ft²)	Notes
0		Not Provided	Not Provided		Not Provided	Not shown or labeled on Facility Map
Demo Tasks:		<ul style="list-style-type: none">Explosive demo, large projects – concrete structuresExplosive demo, Disposal of structural material minimum [TBD CY – based on TBD <u>wall thickness</u>, 42-ft dia., TBD -ft height x 1.695 swell factor {similar to broken limestone}]				

Conveyor A: Between Raw Mill Feed/Blended Material Analyzer (#33) & Raw Mill Feed Bins (#44)

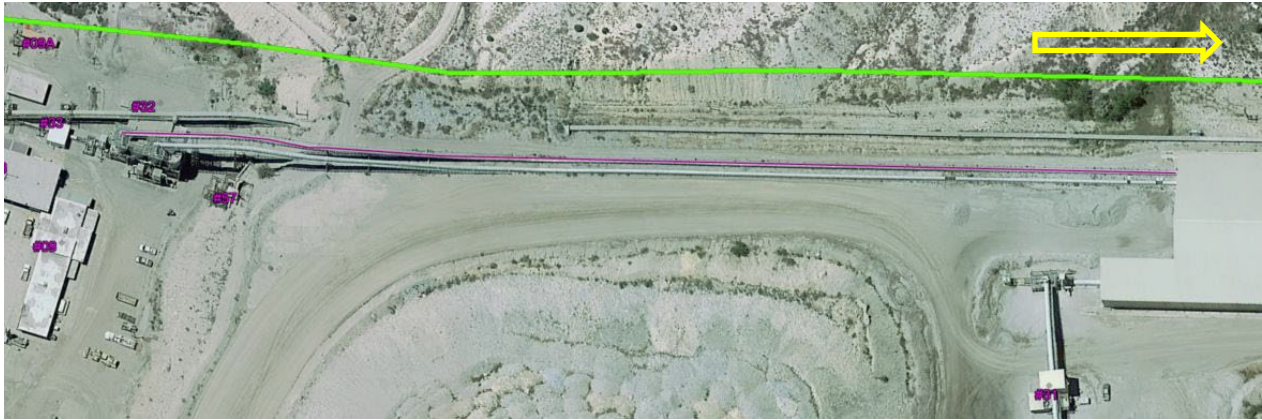


Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		330	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
21,120		8		17	136	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

Conveyor B: Between Raw Mill Feed Compressor (#32) & Preblend Shelter (#30)

{Adjacent and parallel to Conveyor C on west side}



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		1,165	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
74,560		8		59	472	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

Conveyor C: Between Raw Mill Feed Compressor (#32) & Preblend Shelter (#30)
{Adjacent and parallel to Conveyor B on east side}



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		1,128	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
72,192		8		57	456	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

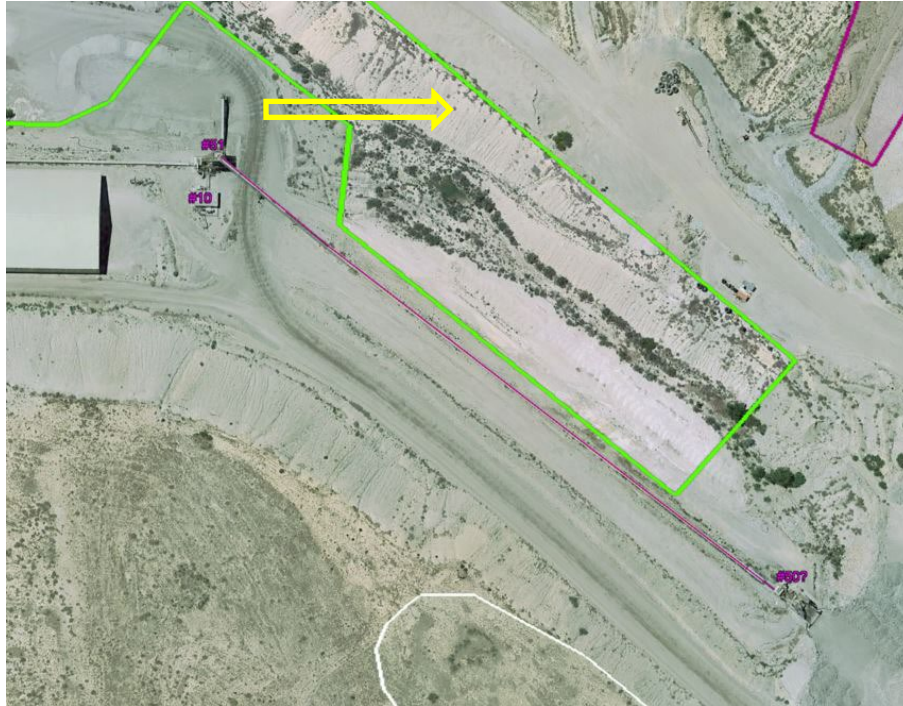
Conveyor D: Between Raw Mill Compressor (#32) & Old Secondary Crusher (#51)
{north of underground segment}



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		1,883	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
120,512		8		95	760	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

Conveyor E: Between Old Secondary Crusher (#51) & Old Primary Crusher (#50)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		1,195	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
76,480		8		60	480	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

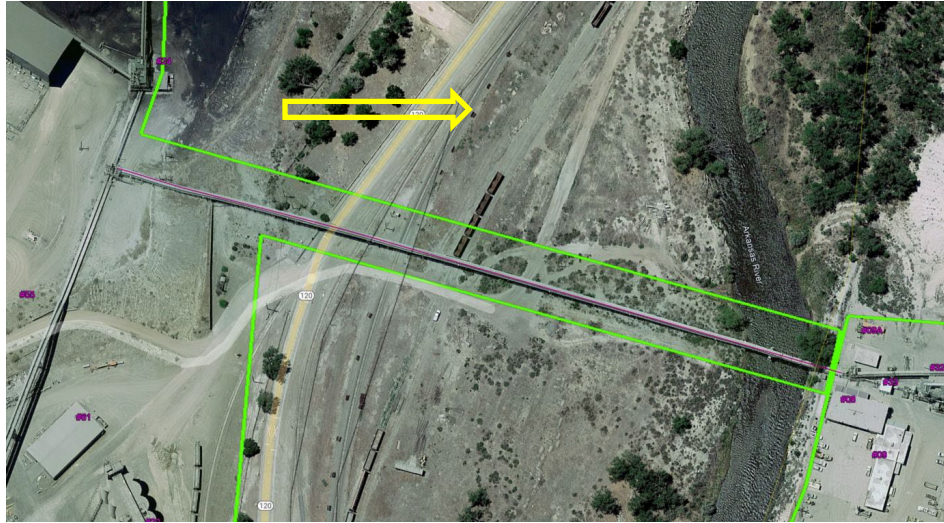
Conveyor F: Between Electric Crusher (#28) & Preblend Shelter (#30)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		2,580	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
165,120		8		129	1,032	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

Conveyor G: Across Arkansas River from Quarry to Plant



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft ²)	Building Material	Foundation Type	Footer X-Sect Area (ft ²)
		1,360	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft ³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
87,040		8		68	544	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none"> Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haul Footer (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haul Assumed no hazardous contents for sampling/disposal 				

Conveyor H: East-West Segment North of Plant 2 Mill Bldg. (#54)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		490	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
31,360		8		25	200	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

Conveyor I: North-South Segment West of Plant 2 Mill Bldg. (#54)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		400	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
25,600		8		20	160	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

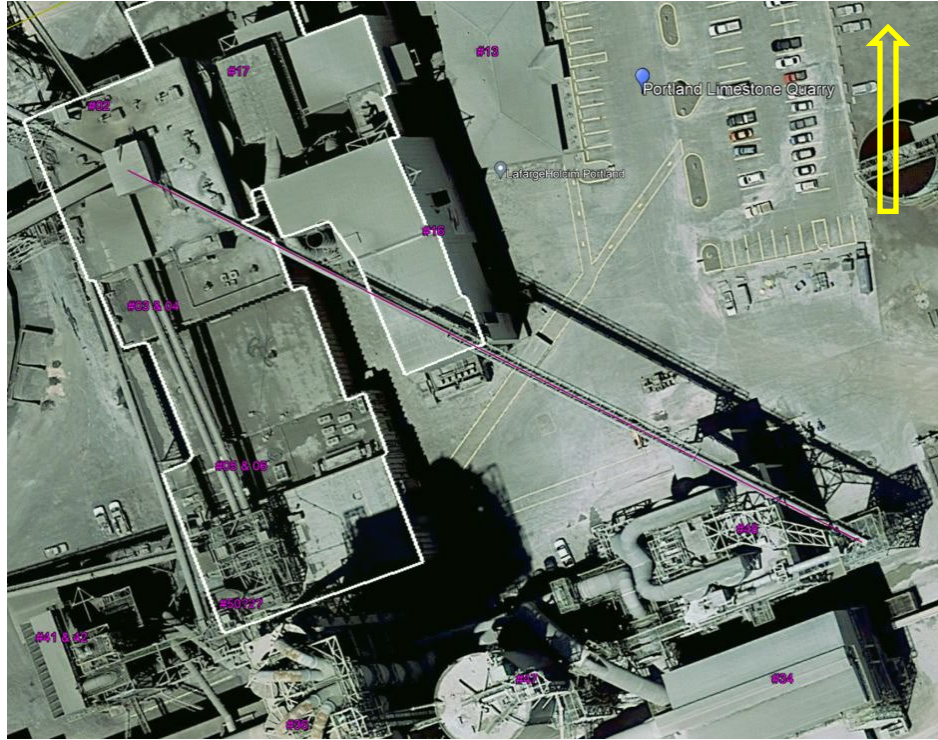
Conveyor J: Between Coal Hankling Control Rm (#24) & Service Bldg. (#02)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		1,235	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
79,040		8		62	496	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

Conveyor K: Between Service Bldg. (#02) & Raw Mill (#48)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		536	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
34,304		8		27	216	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

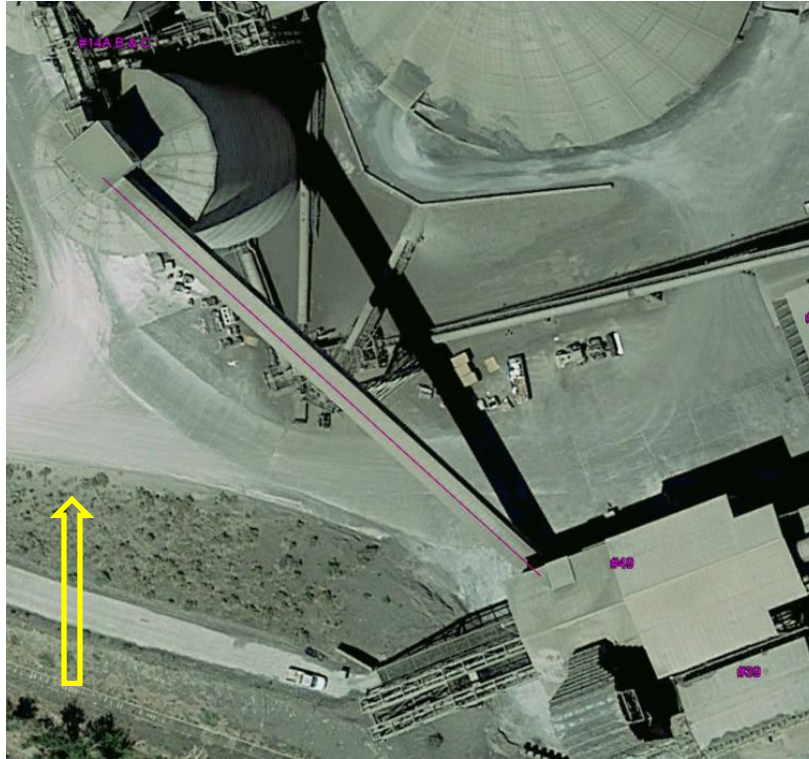
Conveyor L: Between Service Bldg. (#02) & Clinker Silos (#14A, B & C)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		450	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
28,800		8		23	184	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

Conveyor M: Between South Clinker Silo (#14B) & Clinker Cooler Bldg. (#49)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		295	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
18,880		8		15	120	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

Conveyor N: East-West Segment West of Mill Complex & South of Clinker Dome (#15)



Google Earth Image (6/1/2018. Arrow indicates approximate North).

Area	Year Built	Length (ft)	X-Sect Area (ft²)	Building Material	Foundation Type	Footer X-Sect Area (ft²)
		320	8' x 8' = 64	Steel	Concrete footer	2' x 3' = 6
Conveyor Vol. (Ft³)		Concrete Footer Length (Ft)		Est. No. Footers (~20' O.C.)	Concrete Footer Quantity. (LF)	Notes
20,480		8		16	128	Assume footers are 20 ft on center
Demo Tasks:		<ul style="list-style-type: none">Steel Conveyor, demolition, offsite disposal in approved landfill, 15 mile haulFooter (2 ft. x 3 ft.) Demo. & on-site disposal in existing pit, - Max. 10,000 ft. haulAssumed no hazardous contents for sampling/disposal				

ID Building/Description (Discrepancy)

- 19E No Description (shown on Map: north of water tanks next to #45 Air/oil House Bldg and east of the Administrative Office/#13; but not listed in the list on the Map nor on the spreadsheet)
- 23 Raw Water Pump House (Contained in list on Map & on spreadsheet, but location not shown on map)
- 27 Quonset Hut Misc. Storage (Contained in list on Map & on spreadsheet, but location not shown on map)
- 38 Cooler pump shed (Contained in list on Map & on spreadsheet, but location not shown on map)
- 40 Clinker Silo Electrical & Transformer Room (Contained in list on Map & on spreadsheet, but location not shown on map)
- 43 Water Filtration Plant (Contained in list on Map & on spreadsheet, but location not shown on map)
- 50 Old Primary Crusher (There are two #50 locations shown on the map: one on the farthest north end of the map, and the other is on the south end of the #2 Service Bldg.)
- 52 Coal Silo (Contained in list on Map & on spreadsheet, but location not shown on map)
- ___ Silo described during the inspection as "Old Clinker Silo" - this is west of #56 Raw Water Tank {see inspection photo below} (this silo is not on the map, map list or spreadsheet and has no ID #)