

Form MR-SMO
(Revised July 25, 2012)

This Section for DOGM Use:

Assigned DOGM File No.: S/O 35/0055
DOGM Lead: AM
Permit Fee \$ 150 Ck# enforce

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AUG 22 2022

DIV. OIL GAS & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
1594 West North Temple Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801
Telephone: (801) 538-5291 Fax: (801) 359-3940

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DIV OF OIL, GAS & MINING

NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS

The information requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program (R647). The rules and Act are available online at <http://www.rules.utah.gov/publicat/code/r647/r647.htm> and http://le.utah.gov/~code/TITLE40/40_08.htm.

Cultural Resources Survey: To fulfill its obligations under Utah Code Annotated 9-8-404, the Division needs cultural resource (archaeology) information. The amount and type of information required will depend on the mine location, the history of previous disturbance, and other factors. Please contact the Division for further information.

A permit fee of \$150 must accompany this application (Utah Code Ann. §40-8-7(1)(i)) and is due annually.

"Small Mining Operations" are operations which have a disturbed area of ten or fewer surface acres at any time in unincorporated areas, or five acres or fewer in incorporated areas.

I. GENERAL INFORMATION (Rule R647-3-104)

- 1. Name of Mine: I-80 South Quarry
- 2.A. Name of Entity Applying for a Permit: Granite Construction Company
 Contact (Authorized Officer): Mike Tatusko
 Mailing Address: 1000 N Warm Springs Road
 City, State, Zip: Salt Lake City, UT 84116
 Phone: 801-526-6126 Fax: 801-562-6049
 E-mail Address: I80.SouthQuarry@gcinc.com

Entity is a: Corporation, LLC, Sole Proprietorship (dba), Individual, Partnership (General, or limited), Other (specify type) _____

Business Entity (not individuals) must be registered (and maintain registration) with the State of Utah, Division of Corporations (DOC) If not currently registered, contact www.commerce.utah.gov to renew or apply.

- 2.B. Are you currently registered to do business in the State of Utah? Yes No
 Business Entity #: 624643-0143
 Local Business License #: _____ (if required)
 Issued by: County: Salt Lake County or City: _____

Registered Utah Agent (as identified with the Utah DOC) (if individual leave blank):

Name: CT CORPORATION SYSTEM Title: Operator
Address: 585 West Beach Street
City, State, Zip: Watsonville, CA 95077
Phone: 801-526-6126 Fax: _____
E-mail Address: I80.SouthQuarry@gcinc.com

2.C. Entity's Representative(s) (if different from #2A) authorized and designated to receive notices of violation, cessation orders, and all other notices to be given to the permittee or operator by the Division.

Name: Same as #2A Title: RECEIVED
Address:
City, State, Zip:
Phone: Fax: JUN 15 2022
Emergency, Weekend, or Holiday Phone:
E-mail Address: Div. of Oil, Gas & Mining

Name: Title:
Address:
City, State, Zip:
Phone: Fax:
Emergency, Weekend, or Holiday Phone:
E-mail Address: COMPLETE

3. If Business is a Sole Proprietor (dba) or Individual:

Name of Owner: Title: AUG 22 2022
Business Address:
City, State, Zip: DIV. OIL GAS & MINING
Phone: Fax:
E-mail Address:

If Business is a Corporation:

Name of Officers: Kyle Larkin Title: CEO
Name: Title:
Name: Title:
Name: Title:
Headquarters Address: 585 West Beach Street
City, State, Zip: SLC, UT 84116
Phone: 801-526-6126 Fax:
E-mail Address: l80.SouthQuarry@gcinc.com

If Business is a Limited Liability Company: Member Managed () Manager Managed ()

Name of 1st Member/Manager: Title:
Business Address:
City, State, Zip:
Phone: Fax:
E-mail Address:

Name of 2nd Member/Manager: Title:
Business Address:
City, State, Zip:
Phone: Fax:
E-mail Address:

If Business is a Partnership:

Names of Partners:
Business Address:
City, State, Zip:
Phone: Fax:
E-mail Address:

If Business is a Partnership:

Names of Partners:
Business Address:
City, State, Zip:
Phone: Fax:
E-mail Address:

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5. Ownership of Land Surface:

Private (Fee) (X) BLM () US Forest Service ()
State Trust Land/School Sections () State Sovereign Lands ()

Other (please describe):

Name Tree Farm LLC Address PO Box 711820 Salt Lake City, UT 84171

Name Address

Name Address

Name Address

6. Ownership of Minerals:

Private (Fee) (X) BLM () US Forest Service ()
State Trust Land/School Sections () State Sovereign Lands ()

Other (please describe):

Name Tree Farm LLC Address PO Box 711820 Salt Lake City, UT 84171

Name Address

Name Address

Name Address

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BLM Claim Number(s):

AUG 22 2022

Utah State Lease Number(s):

BLM/USFS Lease or Project File Number(s):

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Name of Lessee(s):

7. Have the above surface and mineral owners been notified in writing? Yes X No

If no, why not?

8. Does the Entity have legal right to enter and conduct mining operations on the land covered by this notice? Yes X No

What is the pre-mining land use, i.e. cropland, grazing, wildlife habitat? Private recreation; historic mining and access/haul roads; electrical transmission lines; transmission line access roads; and wildlife habitat

What is the postmining land use? Public and/or private recreation; electrical transmission lines; transmission line access roads; wildlife habitat; and other uses consistent with private ownership

Once mining is complete the operator will conduct reclamation as required by these rules.

Please be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone does not satisfy the notification requirements of Mineral Leases upon State Trust Lands. Exploration or mining activity on State Trust Lands requires a minimum of 60 days notice to the Trust Lands Administration prior to commencing any activities. Please contact the School Institutional Trust Lands Administration (SITLA) at (801) 538-5508 for notification requirements.

II. PROJECT LOCATION & MAP (Rule R647-3-105)

1. Project Location & Map (legal description):

County(ies): Salt Lake County

1/4, of SW 1/4, of NE 1/4, Section: 17 Township: 1 South Range: 2 East
1/4, of NW 1/4, of SE 1/4, Section: 17 Township: 1 South Range: 2 East

_____ 1/4, of NE _____ 1/4, of SE _____ 1/4, Section: 17 Township: 1 South Range: 2 East
 _____ 1/4, of _____ 1/4, of _____ 1/4, Section: _____ Township: _____ Range: _____
 UTM East: _____ 437,062.63 (if known) UTM North: _____ 4,509,662.89 (If known)
 Name of Quad Map for Location: Mount Aire

2. **Is the project within an incorporated area?** () Yes () No

If yes, what is the town or city? _____

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3. **Location and Operations maps** must be plotted at a scale to accurately identify local landmarks and operations details. All maps must include a north arrow, scale, appropriate titles and title box including the mine name, township, range and section.

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a. The **general location map** must be the scale of a USGS 7.5 minute series map or equivalent (1"=2000') and identify new or existing access roads.

b. The **operations map** (1"=200' or other scale as determined necessary by the Division) must be labeled and identify:

- i. The area to be disturbed;
- ii. The location of any existing or proposed operations including access roads, drill holes, trenches, pits, shafts, cuts, or other planned activities; and
- iii. Any adjacent previous disturbance for which the operator is not responsible.

(Contact the Division for a list of consultants and land surveyors for mapping assistance.)

4. The proposed disturbed area (including access/haul roads) should be marked ON THE GROUND with metal T-Posts (or with some other marker of equal effectiveness). Markers should be appropriately spaced so that the next marker in either direction is clearly visible with the naked eye.

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III. **OPERATION PLAN** (Rule R647-3-106)

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1. **Type of mining:** Surface () Underground ()

2. **Mineral(s) to be mined:** Limestone hard rock. If deleterious or potentially deleterious materials become present on the site, the Operator will take preventative actions to mitigate impacts. All deleterious or potentially deleterious material will be safely removed from the site or left in an isolated or neutralized condition such that adverse environmental effects are eliminated or controlled. This is a limestone-based mining operation that will not liberate any toxic or acid-forming materials requiring neutralization.

3. **Amount of material** to be extracted, moved, or proposed to be moved: To be mined consistent with R647-3-114.

4. Will any **water, liquid chemicals, reagents, or other solutions** be used, produced, or discharged as part of the mining or milling process? Yes () No () If yes, please describe (add extra pages if needed): Water for fugitive dust control. Storm Water Pollution Plan (SWPPP) and Spill Prevention, Control, and Countermeasure (SPCC) plans will be developed specifically for this operation. All man-made structures, trash and other waste will be removed and disposed of at an approved local sanitary landfill or other appropriate facility.

5. Provide a brief **description of the proposed mining operation**, and onsite processing facilities (add extra pages if necessary). On-site activities will include blasting, crushing, screening, dozing, hauling, etc. typical to similar surface mine operations. A qualified/licensed blasting

consultant will be engaged for drill and blast procedures. The Operator will coordinate with Utah Highway Patrol (UHP) and Utah Department of Transportation (UDOT) prior to any blasting activities under this Notice. Such coordination will provide adequate lead time for UHP and UDOT to review proposed plans and implement any necessary traffic safety provisions. Mine operation will comply with all applicable Utah Department of Environmental Quality rules and regulations.

- 6. () **New Road(s)**: Length 0 (ft), Width 0 (ft)
- 7. () **Improved Road(s)**: Describe improvements that need to be made to existing roads to access the site, including the Length 0 (ft) and Width 0 (ft) of new **disturbances**.
The mine will be accessed using the existing access road.
- 8. Total project surface **acreage to be disturbed**: 20 (acres) PLEASE SPECIFY EXACT ACREAGE (this will be used to determine surety bond amount – see #VI).
- 9. Proposed **startup date** (month, year): 16 July 2022
- 10. Proposed **completion**, if known (month, year): Unknown

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IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation are to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover or within practical limits. To accomplish this, the Permittee / Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at:
https://fs.ogm.utah.gov/pub/MINES/Coal_Related/RecMan/Reclamation_Manual.pdf

1. *Keep the mining operation in a safe, clean, and environmentally stable condition.*
2. *Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.*
3. *Plug drill holes with a five-foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.*
4. *Construct berms, fences, or barriers, when needed, above highwalls and excavations.*
5. *Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.*
6. *Remove all waste or debris from stream channels.*
7. *Dispose of any trash, scrap metal, wood, machinery, and buildings.*
8. *Conduct mining activities to minimize erosion and control sediment.*
9. *Reclaim all roads that are not part of a permanent transportation system.*
10. *Stockpile topsoil and suitable overburden prior to mining.*
11. *Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour and redistribute the topsoil and suitable overburden.*
12. *Properly prepare seedbed to a depth of six inches by pocking, ripping, discing, or harrowing. Leave the surface rough.*
13. *Reseed disturbed areas with adaptable species. (The Division recommends a mixture of species of grass, forb, and browse seed, and will provide a specific species list if requested.)*
14. *Plant the seed with a rangeland or farm drill or broadcast the seed. Fall is the preferred time to seed.*

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V. VARIANCE REQUEST (Rule R647-3-110)

Any variance must be approved writing *in advance* by the Division

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see IV. Operation and Reclamation Practices Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measures to be utilized to meet the intent of the rule. Written approval from the Division will be given, if the proposed alternative methods to be used are consistent with the Act.

Are variances being requested? Yes () No ()

Variance Requested

Item # Applicable Rule

Justification: _____

Alternate methods or measure to be utilized: _____

Attach additional page(s) if more variances are requested.

VI. SURETY (Utah Code Ann. §40-8-7(1)(c))

A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations. No surface disturbance is authorized until the surety is posted and approved in writing. The surety may be provided in the form of a certificate of deposit, a letter of credit, a surety bond, or cash. Please contact the Division for further information about submitting the surety. All mining operations are required to furnish and maintain reclamation surety to guarantee that the land affected is reclaimed (Utah Code Ann. §40-8-7(1)(c)).

The reclamation surety amount is based on the nature, extent, and duration of operations. The amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions. Reclamation surety for small mines is reviewed every three (3) or five (5) years and adjusted as necessary for inflation/deflation based upon acceptable Costs Index. **Contact the Division for the dollar amount required for a three (3) or five (5) year period for this project.**

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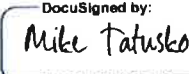
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VII. SIGNATURE REQUIREMENT

CERTIFICATION

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

- a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND
- b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.
- c. **This certification must be signed by:** (1.) an executive officer if the applicant is a corporation; (2.) a partner if applicant is a partnership (general or limited); (3.) the owner if applicant is a sole proprietorship; or (4.) the member or manager if applicant is a limited liability company.

DocuSigned by:

 Signature: _____ Date: 6/15/2022
 Name (typed or printed): Mike Tatusko
 Title/Position (if applicable): Senior Vice President and Group Operations

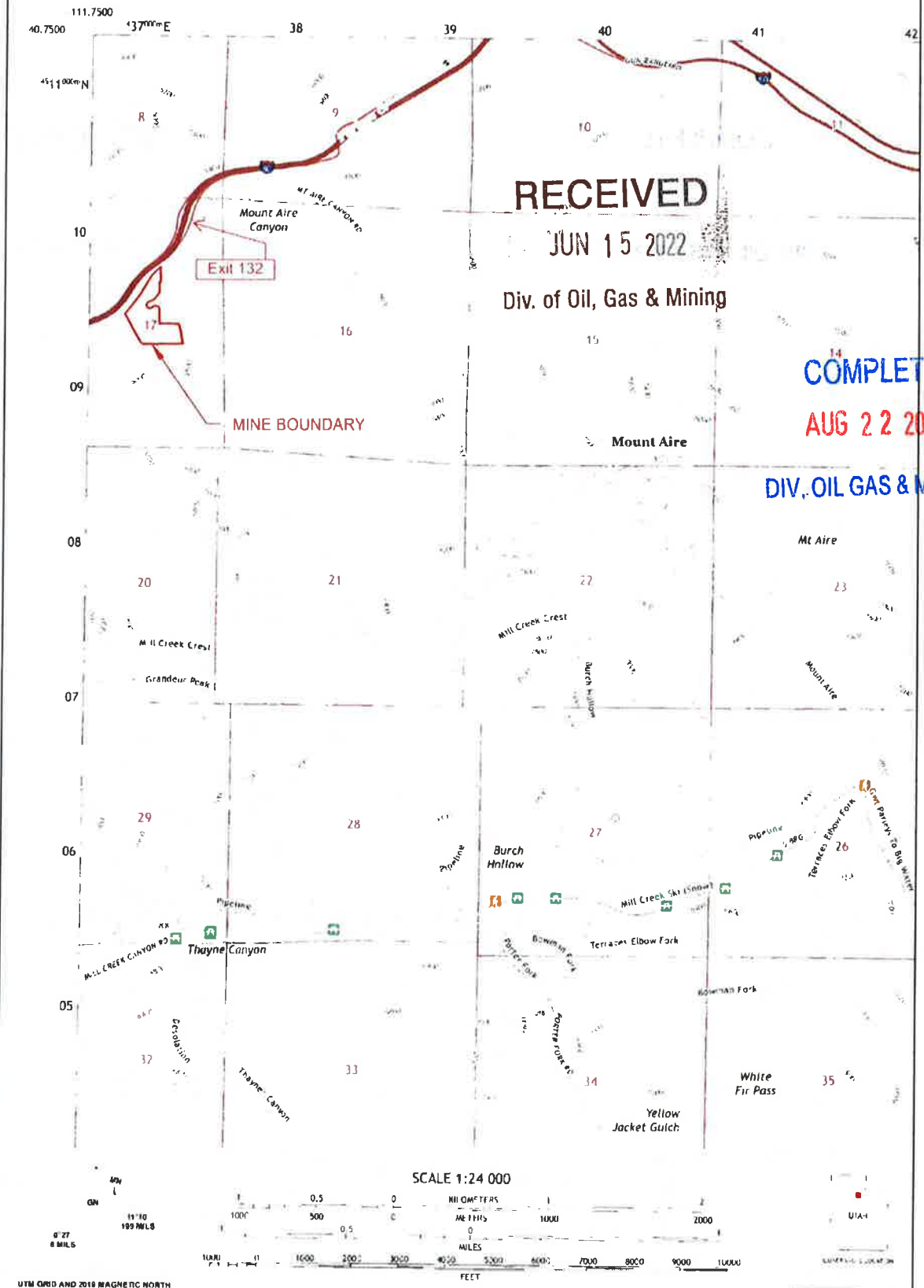
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Map shown is a portion of USGS UT_Mount_Aire Quadrangle, 2020

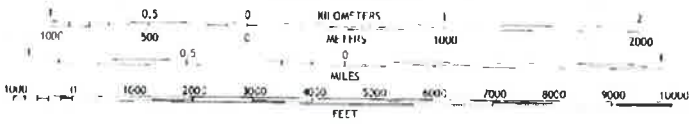


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UTM GRID AND 2018 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid

SCALE 1:24 000



CONTOUR INTERVAL: 40 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

1	2	3
4	5	6

1 Foot De
2 Meters
3 Big D.
4 Sugar

FIGURE 1
General Location Map

Scale: 1:24,000
Date: 2022
Author: [illegible]
Checked: [illegible]
Drawn: [illegible]
Digitized: [illegible]

Revisions

LEGEND

- Small Mine Area (20 ac)
- - - Parcel Line
- Access Road or Point
- Power Pole

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NOTES:

- Aerial photo from Google Earth (Imagery Date 9/11/2020)

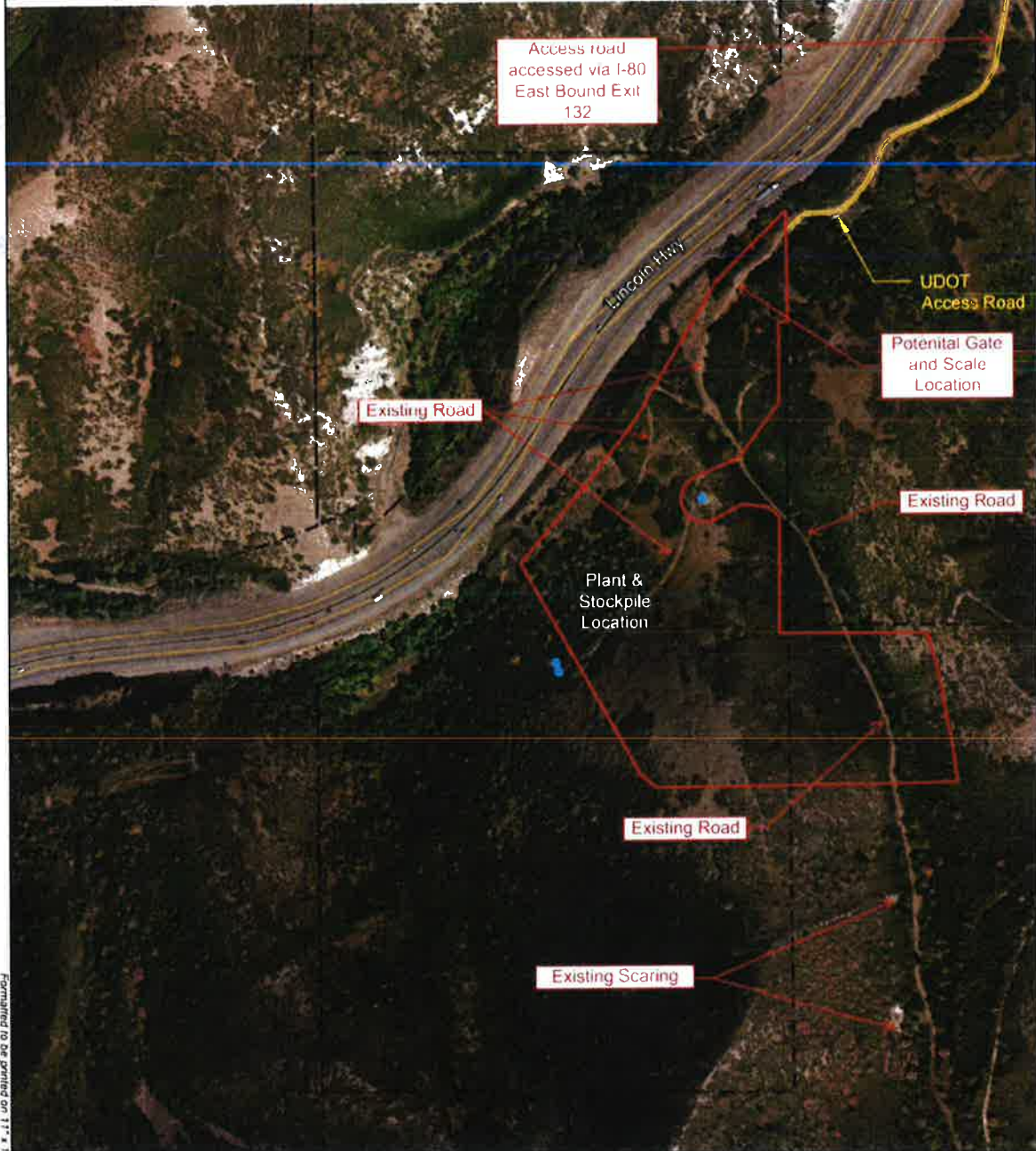
Offset:

- Property Lines: 25ft (mining)
- Property Lines: 0ft (any disturbance)
- Only along entrance road location
- Powerpoles: 50ft

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Scale	1" = 100'
North Arrow	
Project Name	
Sheet Number	F-2
Scale	1" = 100'

FIGURE 2
Operations Map



Revisions

Mine Name

Bond Amount

Revised

Bonding Calculations Summary and Total

Direct Costs

Subtotal Demolition and Removal	\$73,210.40	
Subtotal Backfilling and Grading	\$127,763.98	
Subtotal Revegetation	\$20,000.00	20 acres at \$1000/acre
Direct Costs	\$220,974.38	

Indirect Costs

Mob/Demob	\$22,097.00	10.0%
Contingency	\$11,049.00	5.0%
Engineering Redesign	\$5,524.00	2.5%
Main Office Expense	\$15,026.00	6.8%
Project Management Fee	\$5,524.00	2.5%
Subtotal Indirect Costs	\$59,220.00	26.8%

Total Cost 2022 \$280,194.38

Number of years 5
Escalation factor 0.0464
Escalation \$71,324.00

Reclamation Cost Escalated \$351,518.38

Bond Amount (rounded to nearest \$1,000) 2027 Dollars \$352,000.00

Proposed \$186,000.00

Difference Between Cost Estimate and Bond
Percent Difference -\$166,000.00

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Mine Name

Demolition Costs

Revised

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Demolition																			
		Crushers, Screens and Conveyors																			\$ 32,659.80
		Scale and Scale House																			\$ 15,902.60
		AST Removal																			\$ 24,648.00
		*The Division does not bond for the Earth Moving Equipment Removal																			
		Total																			\$ 73,210.40

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Mine Name

Demolition Costs

Revised

Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
	Crushers, Screens, Conveyors																				
	Deduct 50% no interior walls																				
	Structure's Demolition Cost	Conveyors	02 41 16 13 0020	0.48	/cft	200	4	4							1	FT	1.3	4160	CF	1997	
	Includes demolition, loading, and 20 mile haul (one way)	Jaw Crusher/Feeder	02 41 16 13 0020	0.48	/cft	40	12	12							1	FT	1.3	7488	CF	3594	
		Cone Crusher	02 41 16 13 0020	0.48	/cft	40	12	12							1	FT	1.3	7488	CF	3594	
		Screens (2)	02 41 16 13 0020	0.48	/cft	30	12	12							2	FT	1.3	11232	CF	5391	
	Total Volume of Structures																				
	Subtotal																				30368
	Crusher and Screen Pads																				14576
	Concrete Demolition	Floor 6" thick reinforced wire mesh	02 41 16 17 0420	1.3	/SF	180	10									FT		1800	SF	2340	
	Demolition Cost																				
	Concrete's Vol. Demolished								0.5							FT	1.3	43	CY		
	Loading and Transportation Cost	Loading Truck and haul with 40 mile cycle	31 23 23 30 1312	17.60	/CY															756.8	
	Disposal Costs	Salt Lake County		12	/ton								1.8			tons/CY		77.4	CY	929	
	Subtotal																				4025.8
	Crusher and Screen Footings																				
	Concrete Demolition	Footing 2' thick, 3' wide	02 41 16 17 1140	25	/LF	450										LF		450	LF	11250	
	Demolition Cost																				
	Concrete's Vol. Demolished							2	3									1.3	130	CY	
	Loading and Transportation Cost	Loading Truck and haul with 40 mile cycle	31 23 23 30 1312	17.60	/CY																
	Disposal Costs	Salt Lake County		12	/ton								1.8			tons/CY		234	CY	2808	
	Subtotal																				14058
	Total																				32659.8

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Ref	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
	Scale House																				
	Structure's Demolition Cost includes demolition, loading and 20 mile haul (one way)	Building Demolition (40 ft connex)	02 41 16 13 0020	0 48	/CF	10	20	10									1.3	2000	cf	960	
	Structure's Vol Demolished																	2000	cf		
	Rubble's Weight (exclude steel)	Salt Lake County			12/ton								100					100	ton	1200	
	Disposal Cost Non Steel	Salt Lake County			12/ton													100	ton	1200	
	Subtotal																			2160	
	Scale																				
	Scale Demolition Cost includes demolition, loading, and 20 mile haul (one way)	Scale removal	02 41 16 13 0020	0 48	/cf	120	10	4							1	FT	1	4800	CF	2304	
	Total Volume of Structures																		4800	CF	2304
	Subtotal																			2304	
	Scale Pad																				
	Concrete Demolition	Floor 6" thick reinforced wire mesh	02 41 16 17 0420	1 3	/SF	40	40									FT		1600	SF	2080	
	Concrete's Vol Demolished								0.5							FT	1.3	39	CY		
	Loading and Transportation Cost	Loading Truck and haul with 40 mile cycle	31 23 23 30 1312	17.6	/CY													39	CY	686.4	
	Disposal Costs	Salt Lake County			12/ton								1.8			ton/cy		70.2	ton	842	
	Subtotal																			3606.4	
	Scale Footing																				
	Concrete Demolition	Footing 2' thick 3' wide	02 41 16 17 1140	25	/LF	216										LF		216	LF	5400	
	Concrete's Vol Demolished																		1.3	82	CY
	Loading and Transportation Cost	Loading Truck and haul with 40 mile cycle	31 23 23 30 1312	17.6	/CY				2	3								82	CY	1091.2	
	Disposal Costs	Salt Lake County			12/ton								1.8			ton/cy		111.6	ton	1339	
	Subtotal																			7830.2	
	Total																			15902.6	

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Mine Name

Demolition Costs

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Ref	Description	Materials	Means Reference Number (Facilities)	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
	Load ASTs for Disposal	12 000 gal AST	02 65 10 30 0130	2000	\$/tank																
	Pump tank contents	Per tank fee	02 65 10 30 0320	510	\$/tank						12000										
	Dispose of tank sludge	Assume 1/4 full	02 65 10 30 0390	6.8	\$/gal											gal		1	ea	2000	
	Add dry ice to the tank (inert gas)	1 Sbt/100 gal @ 12 000 gal	02 65 10 30 0401	2.4	\$/lb						3000					gal		3000	gal	20400	
	Disconnect and remove piping	cost per L.F. of pipe	02 65 10 30 0503	5.2	\$/L.F.						30					ft		180	ea	432.00	
	Haul tank to salvage	100 miles round trip	02 65 10 30 1029	1150	\$/tank											ft		30	ft	156.00	
	Total															1			1	ea	1150
																					24,648.00

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 AUG 22 2022
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Equipment List	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Process Description	Quantity	Units	Production Rate	Units	Quantity of Material to be Moved	Units	Cost
4x4 3/4 ton conventional diesel	194.01	9.53	0.1		15.82	Transportation throughout site	120	hrs					\$ 1,898
Dozer - DBT	9570	124.85	0.1	89.85	490.36	Dozing topsoil piles	80	hrs	202	cy/hr	16,133	CY	\$ 39,229
Dozer - DBT	9570	124.85	0.1	89.85	490.36	Grading topsoil and scarifying	9	hrs	2.24	ac/hr	20	AC	\$ 4,413
Dozer - DBT	9570	124.85	0.1	89.85	490.36	Grading topsoil and scarifying	23	hrs	716	cy/hr	16,133	CY	\$ 11,278
Loader Cat 980 M	3520	59.55	0.1	89.85	252.16	Loading trucks with topsoil from stockpile	30	hrs	532	cy/hr	16,133	CY	\$ 7,565
Excavator 330 F L	4630	60.97	0.1	89.85	284.24	Knocking down abandoned high walls (estimate)	35	hrs	422	cy/hr	15,000	CY	\$ 9,948
Labor				67.9	67.9	Running Equipment	203	hrs					\$ 13,784
Water Truck DSL 6x4 4000 gal	4000	74.06	0.1	79.25	270.72	Watering dozer path and roads	120	hrs					\$ 32,486
Articulated Truck Cat 725C2	4740	59.87	0.1	79.25	275.46	Placing topsoil throughout site. Average roundtrip haul length 1,200 ft, speed 10 mph, & load 20 CY	26.00	hrs	621.4	cy/hr	16,133	CY	\$ 7,162
Total													\$ 127,764

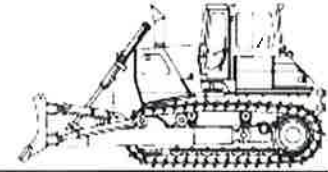
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February 22, 2022

Caterpillar D8T
 Standard Crawler Dozers

 Size Class:
260 - 359 HP
 Weight:
75845 lbs

Configuration for D8T

 Dozer Type **Semi-U** Operator Protection **EROPS**
 Power Mode **Diesel**
Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs Hourly	FHWA Rate** Hourly
	Monthly	Weekly	Daily	Hourly		
Published Rates	USD \$34,180.00	USD \$9,570.00	USD \$2,395.00	USD \$360.00	USD \$124.85	USD \$319.05
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2022: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)						
Total:	USD \$34,180.00	USD \$9,570.00	USD \$2,395.00	USD \$360.00	USD \$124.85	USD \$319.05

Non-Active Use Rates

	Hourly
Standby Rate	USD \$93.22
Idling Rate	USD \$230.63

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	32%	USD \$10,937.60/mo
Overhaul (ownership)	52%	USD \$17,773.60/mo
CFC (ownership)	5%	USD \$1,709.00/mo
Indirect (ownership)	11%	USD \$3,759.80/mo
Fuel (operating) @ USD 3.65	29%	USD \$36.43/hr

Revised Date: 1st quarter 2022

These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.

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Caterpillar 980M
4-Wd Articulated Wheel Loaders

Size Class:
350 - 499 HP
Weight:
N/A



Configuration for 980M

Bucket Capacity **16.0 cu yd** Horsepower **386.0 hp**
Operator Protection **ROPS/FOPS** Power Mode **Diesel**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs Hourly USD \$59.55	FHWA Rate** Hourly USD \$130.97
	Monthly	Weekly	Daily	Hourly		
Published Rates	USD \$12,570.00	USD \$3,520.00	USD \$880.00	USD \$135.00		
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2022: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)						
Total:	USD \$12,570.00	USD \$3,520.00	USD \$880.00	USD \$135.00	USD \$59.55	USD \$130.97

Non-Active Use Rates

	Hourly
Standby Rate	USD \$47.14
Idling Rate	USD \$98.48

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	47%	USD \$5,907.90/mo
Overhaul (ownership)	34%	USD \$4,273.80/mo
CFC (ownership)	5%	USD \$628.50/mo
Indirect (ownership)	14%	USD \$1,759.80/mo
Fuel (operating) @ USD 3.65	45%	USD \$27.06/hr

Revised Date: 1st quarter 2022

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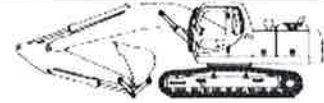
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Caterpillar 330F L
Crawler Mounted Hydraulic Excavators



Size Class:
28.1 - 33.0 MTons
Weight:
N/A

Configuration for 330F L

Bucket Capacity **2.3 cu yd** Horsepower **235 hp**
Operating Weight **69950 lbs** Power Mode **Diesel**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs Hourly USD \$60.97	FHWA Rate** Hourly USD \$154.86
	Monthly	Weekly	Daily	Hourly		
Published Rates	USD \$16,525.00	USD \$4,630.00	USD \$1,160.00	USD \$175.00		
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2022: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)						
Total:	USD \$16,525.00	USD \$4,630.00	USD \$1,160.00	USD \$175.00	USD \$60.97	USD \$154.86

Non-Active Use Rates

Standby Rate **Hourly** USD \$50.70
Idling Rate USD \$110.54

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	40%	USD \$6,610.00/mo
Overhaul (ownership)	46%	USD \$7,601.50/mo
CFC (ownership)	4%	USD \$661.00/mo
Indirect (ownership)	10%	USD \$1,652.50/mo
Fuel (operating) @ USD 3.65	27%	USD \$16.65/hr

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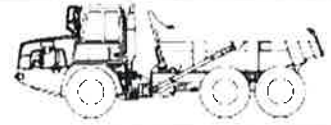
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Caterpillar 725C2
Articulated Rear Dumps



Size Class:
26 - 29 MTons
Weight:
N/A

Configuration for 725C2

Power Mode **Diesel**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs Hourly USD \$59.87	FHWA Rate** Hourly USD \$156.01
	Monthly	Weekly	Daily	Hourly		
Published Rates	USD \$16,920.00	USD \$4,740.00	USD \$1,185.00	USD \$180.00		
Adjustments						
Region (100%)	-	-	-	-		
Model Year (2022: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)						
Total:	USD \$16,920.00	USD \$4,740.00	USD \$1,185.00	USD \$180.00	USD \$59.87	USD \$156.01

Non-Active Use Rates

	Hourly
Standby Rate	USD \$53.84
Idling Rate	USD \$118.03

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	40%	USD \$6,768.00/mo
Overhaul (ownership)	44%	USD \$7,444.80/mo
CFC (ownership)	4%	USD \$676.80/mo
Indirect (ownership)	12%	USD \$2,030.40/mo
Fuel (operating) @ USD 3.65	37%	USD \$21.89/hr

Revised Date: 1st quarter 2022

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Heavy Construction Costs

with RSMMeans data

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2022

36th annual edition

02 41 Demolition

02 41 13 - Selective Site Demolition

02 41 13.92 Selective Demolition, Parking Appurtenances	Crew	Daily Output	Labor-Hours	Unit	Material	2022 Bare Costs		Total	Total Incl O&P
						Labor	Equipment		
0500 Flexible fixed garage structure	B-6	150	.160	Eu.		7.9	2.1	10.0	14.1
0600 Wheel stops, precast concrete		120	.200			9.9	2.7	12.6	17.7
0700 Thermoplastic		120	.200			9.9	2.7	12.6	17.7
0800 Pipe bollards, 6"-12" diam.		80	.300			14.8	4.1	18.9	26.5

02 41 16 - Structure Demolition

02 41 16.13 Building Demolition

0010 BUILDING DEMOLITION Large urban projects, incl. 20 mi. haul R024119-10									
0011	No foundation or dump fees, C.F. is vol. of building standing								
0020	Steel	B-8	21500	.003		.16	.22	.38	48
0050	Concrete	B-8	15300	.004		.22	.31	.53	68
0080	Masonry		20100	.003		.17	.24	.41	51
0100	Mixture of types		20100	.003		.17	.24	.41	51
0500	Small bldgs, or single bldgs, no salvage included, steel	B-3	14800	.003		.17	.18	.35	45
0600	Concrete		11300	.004		.22	.24	.46	58
0650	Masonry		14800	.003		.17	.18	.35	45
0700	Wood		14800	.003		.17	.18	.35	45
0750	For buildings with no interior walls, deduct							30%	30%
1000	Demolition single family house, one story, wood 1600 S.F.	B-3	1	48	Eu.	2,450	2,725	5,175	6,650
1020	3200 S.F.		.50	96		4,875	5,425	10,300	13,300
1200	Demolition two family house, two story, wood 2400 S.F.		.67	71,964		3,650	4,075	7,725	9,925
1220	4200 S.F.		.38	128		6,525	7,250	13,775	17,700
1300	Demolition three family house, three story, wood 3200 S.F.		.50	96		4,875	5,425	10,300	13,300
1320	5400 S.F.		.30	160		8,150	9,050	17,200	22,100
5000	For buildings with no interior walls, deduct							30%	30%

02 41 16.15 Explosive/Implosive Demolition

0010 EXPLOSIVE/IMPLOSIVE DEMOLITION R024119-10									
0011	Large projects.								
0020	No disposal fee based on building volume, steel building	B-5B	16900	.003	C.F.	.16	.20	.36	.45
0100	Concrete building		16900	.003		.16	.20	.36	.45
0200	Masonry building		16900	.003		.16	.20	.36	.45
0400	Disposal of material, minimum	B-3	445	108	C.Y.	5.5	6.1	11.6	14.9
0500	Maximum		365	132	"	6.7	7.4	14.1	18.1

02 41 16.17 Building Demolition Footings and Foundations

0010 BUILDING DEMOLITION FOOTINGS AND FOUNDATIONS R024119-10									
0200	Floors, concrete slab on grade								
0240	4" thick, plain concrete	B-13L	5000	.003		.20	.52	.72	.87
0280	Reinforced, wire mesh		4000	.004		.25	.65	.90	1.0
0300	Rods		4500	.004		.23	.58	.81	.97
0400	6" thick, plain concrete		4000	.004		.25	.65	.90	1.0
0420	Reinforced, wire mesh		3200	.005		.32	.81	1.1	1.3
0440	Rods		3600	.004		.28	.72	1	1.2
1000	Footings, concrete, 1' thick, 2' wide		300	.053		3.3	8.6	12.0	14.5
1080	1'-6" thick, 2' wide		250	.064		4.0	10.3	14.4	17.4
1120	3' wide		200	.080		5.0	12.9	18	22
1140	2' thick, 3' wide		175	.091		5.8	14.8	20.6	25
1200	Average reinforcing, add							10%	10%
1220	Heavy reinforcing, add							20%	20%
2000	Walls, block, 4" thick	B-13L	8000	.002	S.F.	.13	.32	.45	.55
2040	6" thick		6000	.003		.17	.43	.60	.73
2080	8" thick		4000	.004		.25	.65	.90	1.0
2120	10" thick		3000	.005		.34	.86	1.2	1.4

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58 Snow Control

13 - Snow Fencing

3.10 Snow Fencing System SNOW FENCING SYSTEM

Snow fence on steel posts 10" OC, 4' high

Crew	Daily Output	Labor-Hours	Unit	Material	2022 Base Costs		Total	Total Incl O&P
					Labor	Equipment		
B-1	500	.048	L.F.	3.6	2.2	5.8	7.3	

02 65 Underground Storage Tank Removal

02 65 10 - Underground Tank and Contaminated Soil Removal

02 65 10.30 Removal of Underground Storage Tanks

REMOVAL OF UNDERGROUND STORAGE TANKS

0010 Petroleum storage tanks, non-leaking

0011 Excavate & load onto trailer

0100 3,000 gal. to 5,000 gal. tank

0110 6,000 gal. to 8,000 gal. tank

0120 9,000 gal. to 12,000 gal. tank

0130 Known leaking tank, add

0200 Remove sludge, water and remaining product from bottom

0201 at tank with vacuum truck

0300 3,000 gal. to 5,000 gal. tank

0310 6,000 gal. to 8,000 gal. tank

0320 9,000 gal. to 12,000 gal. tank

0390 Dispose of sludge off-site, average

0400 Insert inert solid CO₂ "dry ice" into tank

0401 For cleaning/transporting tanks (1.5 lb./100 gal. cap)

0503 Disconnect and remove piping

0603 Transfer liquids, 10% of volume

0703 Cut accessway into underground storage tank

0813 Remove sludge, wash and wipe tank, 500 gal.

0823 3,000 gal.

0833 5,000 gal.

0843 8,000 gal.

0853 10,000 gal.

0863 12,000 gal.

1020 Haul tank to certified salvage dump, 100 miles round trip

1023 3,000 gal. to 5,000 gal. tank

1026 6,000 gal. to 8,000 gal. tank

1029 9,000 gal. to 12,000 gal. tank

1100 Disposal of contaminated soil to landfill

1110 Minimum

1111 Maximum

1120 Disposal of contaminated soil to

1121 bituminous concrete batch plant

1130 Minimum

1131 Maximum

1203 Excavate, pull & load tank, backfill hole, 8,000 gal. +

1213 Haul tank to certified dump, 100 miles rt, 8,000 gal. +

1223 Excavate, pull & load tank, backfill hole, 500 gal.

1233 Excavate, pull & load tank, backfill hole, 3,000-5,000 gal.

1243 Haul tank to certified dump, 100 miles rt, 500 gal

1253 Haul tank to certified dump, 100 miles rt, 3,000-5,000 gal.

2010 Decontamination of soil on site incl poly tarp on top/bottom

2011 Soil containment berm and chemical treatment

2020 Minimum

2021 Maximum

0100	G	B-14	4	12	Eq.	575	82	657	945
0110	G	B-3A	3	13.333		645	330	975	1,325
0120	G	"	2	20		970	495	1,465	2,000
0130					%			100%	100%
0201	G	A-13	5	1.600	Eq.	91	154	245	305
0300	G	A-13	4	2	Eq.	114	192	306	380
0310	G	"	3	2.667	"	152	257	409	510
0320					Gal.			6.2	6.8
0401	G	1 Clab	500	.016	lb.	1.2	.73	1.9	2.4
0503	G	1 Plum	160	.050	L.F.		3.4	3.4	5.2
0603	G	"	1600	.005	Gal.		.35	.35	.52
0703	G	1 Clab	5.33	1.501	Eq.	68.5		68.5	102
0813	G	1 Plum	8	1		70		70	104
0823	G		6.67	1.199		83.5		83.5	125
0833	G		6.15	1.301		91		91	135
0843	G		5.33	1.501		105		105	156
0853	G		4.57	1.751		122		122	182
0863	G		4.21	1.900		133		133	198
1020					Eq.			760	830
1023								880	960
1026								1,050	1,150
1029									
1100					C.Y.			145	160
1110					"			400	440
1120					C.Y.			80	88
1121					"			115	125
1130					C.Y.			80	88
1131					"			115	125
1203	G	B-12C	.50	.32	Eq.	1,750	1,950	3,700	4,725
1213	G	B-34K	1	8		425	890	1,315	1,625
1223	G	B-11C	1	16		850	330	1,180	1,600
1233	G	B-11M	.50	.32		1,700	805	2,505	3,400
1243	G	B-34L	1	8		455	340	795	1,050
1253	G	B-34M	1	8		455	375	830	1,100
2011	G	B-11C	100	.160	C.Y.	7.9	8.5	3.2	19.6
2020	G	"	100	.160	"	10.2	8.5	3.2	21.9
2021	G	"	100	.160	"	10.2	8.5	3.2	21.9

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31 23 Excavation and Fill

31 23 23 - Fill

31 23 23.20 Hauling

	Crew	Daily Output	Labor Hours	Unit	Material	2022 Bare Costs		Total
						Labor	Equipment	
1224	B-348	108	074	L.C.Y.		3.9	7.1	11.0
1225		96	.083			4.4	8	12.4
1226		264	.030			1.6	2.9	4.5
1228		252	.032			1.6	3.0	4.7
1230		216	.037			1.9	3.5	5.5
1232		180	.044			2.3	4.2	6.6
1234		144	.056			2.9	5.3	8.3
1236		132	.061			3.2	5.8	9.0
1238		108	.074			3.9	7.1	11.0
1240		192	.042			2.2	4	6.2
1242		168	.048			2.5	4.5	7.1
1244		144	.056			2.9	5.3	8.3
1246		132	.061			3.2	5.8	9.0
1250		204	.039			2.0	3.7	5.6
1252		180	.044			2.3	4.2	6.6
1254		156	.051			2.7	4.9	7.6
1256		144	.056			2.9	5.3	8.3
1260		216	.037			1.9	3.5	5.5
1262		192	.042			2.2	4	6.2
1264		168	.048			2.5	4.5	7.1
1266		156	.051			2.7	4.9	7.6
1268		108	.074			3.9	7.1	11.0
1269		72	.111			5.9	10.6	16.5
1270		60	.133			7.0	12.8	19.8
1272		192	.042			2.2	4	6.2
1274		180	.044			2.3	4.2	6.6
1276		156	.051			2.7	4.9	7.6
1278		108	.074			3.9	7.1	11.0
1280		84	.095			5.0	9.1	14.2
1282		72	.111			5.9	10.6	16.5
1284		60	.133			7.0	12.8	19.8
1294		180	.044			2.3	4.2	6.6
1296		168	.048			2.5	4.5	7.1
1298		120	.067			3.5	6.4	9.9
1300		96	.083			4.4	8	12.4
1302		72	.111			5.9	10.6	16.5
1304		60	.133			7.0	12.8	19.8
1306		180	.044			2.3	4.2	6.6
1308	B-348	132	.061	L.C.Y.		3.2	5.8	9.0
1310		96	.083			4.4	8	12.4
1312		84	.095			5.0	9.1	14.2
1314		72	.111			5.9	10.6	16.5
1414		204	.039			2.0	3.7	5.6
1416		192	.042			2.2	4	6.2
1418		168	.048			2.5	4.5	7.1
1420		132	.061			3.2	5.8	9.0
1422		120	.067			3.5	6.4	9.9
1424		96	.083			4.4	8	12.4
1425		84	.095			5.0	9.1	14.2
1426		216	.037			1.9	3.5	5.5
1428		204	.039			2.0	3.7	5.6
1430		180	.044			2.3	4.2	6.6
1432		156	.051			2.7	4.9	7.6

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54 | Construction Aids

1 54 33 | Equipment Rental

UPMPT
 1ST/DAY
 2,014.40
 2,018.54
 2,338.01
 1,785.75
 2,579.95
 66.43
 57.48
 76.61
 392.30
 29.90
 34.76
 47.78
 90.35
 167.10
 308.97
 33.28
 59.79
 77.51
 141.52
 100.91
 109.42
 779.96
 847.30
 77.86
 199.70
 347.88
 331.07
 57.17
 27.34
 83.94
 166.28
 16.09
 46.72
 27.83
 48.47
 50.34
 55.44
 66.79
 66.39
 9.97
 27.71
 34.72
 15.77
 70.52
 19.60
 18.64
 1.82
 3.37
 7.16
 5.61
 9.33
 3.06
 1.86
 5.21
 1.56
 .42
 .29
 .01

UNIT	HOURLY OPER. COST	RENT PER DAY	RENT PER WEEK	RENT PER MONTH	EQUIPMENT COST/DAY
000	75 ton capacity	11.43	305	941.21	2,725
110	Trailer mounted cable reel for high voltage line work	6.06	252.67	758	2,274
320	Trailer mounted cable tensioning rig	12.03	83.33	250	750
6830	Cable pulling rig	76.00	142.50	427.50	1,282.50
6850	Portable cable/wire puller, 8000 lb max pulling capacity	3.81	189.35	524.76	1,258.33
6900	Water tank trailer, engine driven discharge, 5000 gallons	7.39	160	498.58	1,450
6925	10,000 gallons	10.06	218	677.42	1,950
6950	Water truck, off highway, 6000 gallons	74.06	1,333.33	4,000	12,000
7010	Tram car for high voltage line work, powered, 2 conductor	7.09	29.33	88	264
7020	Transit (builder's level) with tripod	10	51.78	129.89	345.56
7030	Trench box, 3000 lb., 6' x 8'	.58	97.50	304	880
7040	7200 lb., 6' x 20'	74	189	587.69	1,700
7050	8000 lb., 8' x 16'	1.11	205	637.76	1,850
7060	9500 lb., 8' x 20'	1.24	235	731.61	2,125
7065	11,000 lb., 8' x 24'	1.30	221	688.25	2,000
7070	12,000 lb., 10' x 20'	1.54	267	829.16	2,400
7100	Truck, pickup, 3/4 ton, 2 wheel drive	9.53	62.50	194.01	560
7200	4 wheel drive	9.79	174.39	508.64	1,505.15
7250	Crew carrier, 9 passenger	13.07	109	340.44	985
7290	Flat bed truck, 20,000 lb. GW	15.75	134	417.29	1,200
7300	Tractor, 4 x 2, 220 H.P.	22.97	218	677.42	1,950
7410	330 H.P.	33.37	298	926.71	2,675
7500	6 x 4, 380 H.P.	37.26	345	1,073.03	3,100
7600	450 H.P.	45.66	420	1,300.64	3,775
7610	Tractor, with A frame, boom and winch, 225 H.P.	25.54	296	919.57	2,650
7620	Vacuum truck, hazardous material, 2500 gallons	13.20	315	975.48	2,825
7625	5,000 gallons	13.44	445	1,381.93	4,000
7650	Vacuum, HEPA, 16 gallon, wet/dry	.88	134.09	386.21	1,005.30
7655	55 gallon, wet/dry	.80	33.91	86.79	228.64
7660	Water tank, portable	.75	147.40	425.74	1,083.40
7690	Sewer/catch basin vacuum, 14 C.Y., 1500 gallons	17.87	670	2,086.44	6,025
7700	Welder, electric, 200 amp	3.94	36.22	80.22	226.25
7800	300 amp	5.73	32.08	81.30	214.09
7900	Gas engine, 200 amp	9.23	102.73	283.48	666.52
8000	300 amp	10.45	112.44	318.78	711.33
8100	Wheelbarrow, any size	.07	13.94	34.91	98.91
8200	Wrecking ball, 4000 lb.	2.58	62	186	558
0010	HIGHWAY EQUIPMENT RENTAL without operators				
0050	Asphalt batch plant, portable drum mixer, 100 ton/hr.	R015433 -10	91.26	1,550	4,850.30
0060	200 ton/hr.		105.27	1,675	5,175.46
0070	300 ton/hr.		123.72	1,950	6,069.65
0100	Backhoe attachment, long stick, up to 185 H.P., 10.5' long		38	26	80.21
0140	Up to 250 H.P., 12' long		42	29	89.96
0180	Over 250 H.P., 15' long		58	39.50	122.48
0200	Special dipper arm, up to 100 H.P., 32' long		1.19	80.50	250.37
0240	Over 100 H.P., 33' long		1.49	101	314.32
0280	Catch basin/sewer cleaning truck, 3 ton, 9 C.Y., 1000 gal.		36.53	425	1,327.74
0300	Concrete batch plant, portable, electric, 200 C.Y./hr.		24.96	565	1,761.28
0520	Grader/dozer attachment, ripper/scarifier, rear mounted, up to 135 H.P.		3.25	64	199.43
0540	Up to 180 H.P.		4.27	97	301.31
0580	Up to 250 H.P.		6.04	155	482.32
0700	Pvmt. removal bucket, for hyd. excavator, up to 90 H.P.		2.23	59	183.17
0740	Up to 200 H.P.		2.38	75.50	234.11
0780	Over 200 H.P.		2.60	92.50	287.22
0900	Aggregate spreader, self-propelled, 187 H.P.		52.23	750	2,330.31
1000	Chemical spreader, 3 C.Y.		3.26	70	210
1900	Hammermill, travelling, 250 H.P.		69.39	600	1,800

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Contractor's Overhead & Profit

The average installing contractor's percentage markups to base labor rates to arrive at typical billing rates.

Column A: Labor rates are based on union wages averaged for 30 major U.S. cities. Base rates, including fringe benefits, are listed hourly and daily. These figures are the sum of the wage rate and employer-paid fringe benefits such as vacation pay, employer-paid health and welfare costs, and pension costs, plus appropriate training and industry advancement funds costs.

Column B: Workers' compensation rates are the national average of state rates established for each trade.

Column C: Column C lists average fixed overhead figures for all trades. Included are federal and state unemployment costs set at 8%; social security taxes (FICA) set at 7.65%; builder's risk insurance costs set at 0.80%; and public liability costs set at 2.02%. All percentages, except those for social security taxes, vary from state to state as well as from company to company.

Columns D and E: Percentages in Columns D and E are based on the presumption that the installing contractor has annual billing of \$4,000,000 and up. Overhead percentages may increase with smaller annual billing. The overhead percentages for any given contractor may vary greatly and depend on a number of factors such as the contractor's annual volume, engineering and logistical support costs, and staff requirements. The figures for overhead and profit will also vary depending on the type of job, the job location, and the prevailing economic conditions. All factors should be examined very carefully for each job.

Column F: Column F lists the total of Columns B, C, D, and E.

Column G: Column G is Column A (hourly base labor rate) multiplied by the percentage in Column F (O&P percentage).

Column H: Column H is the total of Column A (hourly base labor rate) plus Column G (Total O&P).

Column I: Column I is Column H multiplied by eight hours.

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Abbr.	Div. of Oil, Gas & Mining Trade	A		B	C	D	E	F		G		H		I		
		Base Rate Incl. Fringes						Workers' Comp. Ins.	Average Fixed Overhead	Overhead	Profit	Total Overhead & Profit			Rate with O & P	
		Hourly	Daily									%	Amount		Hourly	Daily
Skwk	Skilled Workers Average (35 trades)	\$58.90	\$471.20	8.7%	18.5%	13.0%	1.0%	50.2%	\$29.55	\$ 88.45	\$ 707.60					
	Helpers Average (5 trades)	43.30	346.40	11.6		11.0		51.1	22.15	65.45	523.60					
	Foreman Average, Inside (\$0.50 over trade)	59.40	475.20	8.7		13.0		50.2	29.80	89.20	713.60					
	Foreman Average, Outside (\$2.00 over trade)	60.90	487.20	8.7		13.0		50.2	30.60	91.50	732.00					
Clab	Common Building Laborers	45.60	364.80	9.4		11.0		48.9	22.30	67.90	543.20					
Asbe	Asbestos/Insulation Workers/Pipe Covers	63.05	504.40	8.5		16.0		53.0	33.40	96.45	771.60					
Boil	Boilermakers	70.50	564.00	4.8		16.0		49.3	34.75	105.25	842.00					
Bric	Bricklayers	55.25	442.00	10.6		11.0		50.1	27.65	82.90	663.20					
Brie	Bricklayer Helpers	45.00	360.00	10.6		11.0		50.1	22.55	67.55	540.40					
Carp	Carpenters	56.30	450.40	9.4		11.0		48.9	27.50	83.80	670.40					
Cen	Cement Finishers	53.15	425.20	6.8		11.0		46.3	24.60	77.75	622.00					
Elec	Electricians	66.20	529.60	4.1		16.0		48.6	32.20	98.40	787.20					
Elev	Elevator Constructors	72.55	748.40	3.5		16.0		48.0	44.95	138.50	1108.00					
Eqhv	Equipment Operators, Crane or Shovel	63.40	507.20	6.3		14.0		48.8	30.95	94.35	754.80					
Eqmd	Equipment Operators, Medium Equipment	60.40	483.20	6.3		14.0		48.8	29.45	89.85	718.80					
Eqit	Equipment Operators, Light Equipment	57.00	456.00	6.3		14.0		48.8	27.80	84.80	678.40					
Eool	Equipment Operators, Oilers	54.00	432.00	6.3		14.0		48.8	26.35	80.35	642.80					
Eqmm	Equipment Operators, Master Mechanics	63.50	508.00	6.3		14.0		48.8	31.00	94.50	756.00					
Glaz	Glaziers	54.00	432.00	9.1		11.0		48.6	26.25	80.25	642.00					
Lath	Lathers	56.00	448.00	6.5		11.0		46.0	25.75	81.75	654.00					
Marb	Marble Setters	55.05	440.40	10.6		11.0		50.1	27.55	82.60	660.80					
Mill	Millwrights	60.55	484.40	5.0		11.0		44.5	26.95	87.50	700.00					
Mstz	Mosaic & Terrazzo Workers	53.40	427.20	6.6		11.0		46.1	24.60	78.00	624.00					
Pord	Painters, Ordinary	47.80	382.40	8.7		11.0		48.2	23.05	70.85	566.80					
Psst	Painters, Structural Steel	48.90	391.20	20.1		11.0		59.6	29.15	78.05	624.40					
Pape	Paper Hangers	48.05	384.40	8.7		11.0		48.2	23.15	71.20	569.60					
Pie	Pile Drivers	58.20	465.60	10.2		16.0		54.7	31.85	90.05	720.40					
Plas	Plasterers	51.40	411.20	9.1		11.0		48.6	25.00	76.40	611.20					
Plah	Plasterer Helpers	45.85	366.80	9.1		11.0		48.6	22.30	68.15	545.20					
Plum	Plumbers	69.80	558.40	4.6		16.0		49.1	34.30	104.10	832.80					
Rodm	Rodmen (Reinforcing)	60.70	485.60	6.8		14.0		49.3	29.95	90.65	725.20					
Rofc	Roofers, Composition	49.60	396.80	22.6		11.0		62.1	30.80	80.40	643.20					
Rofs	Roofers, Tile & Slate	49.60	396.80	22.6		11.0		62.1	30.80	80.40	643.20					
Rofh	Roofers, Helpers (Composition)	37.25	298.00	22.6		11.0		62.1	23.15	60.40	483.20					
Shee	Sheet Metal Workers	67.55	540.40	6.2		16.0		50.7	34.20	101.75	814.00					
Spr	Sprinkler Installers	68.55	548.40	4.8		16.0		49.3	33.75	102.30	818.40					
Stpr	Steamfitters or Pipefitters	70.35	562.80	4.6		16.0		49.1	34.55	104.90	839.20					
Ston	Stone Masons	55.60	444.80	10.6		11.0		50.1	27.85	83.45	667.60					
Sswk	Structural Steel Workers	61.85	494.80	11.5		14.0		54.0	33.40	95.25	762.00					
Tilt	Tile Layers	53.15	425.20	6.6		11.0		46.1	24.50	77.55	621.20					
Til	Tile Layers Helpers	42.80	342.40	6.6		11.0		46.1	19.75	62.55	500.40					
Trlt	Truck Drivers, Light	50.40	403.20	9.9		11.0		49.4	24.90	75.30	602.40					
Trhv	Truck Drivers, Heavy	53.05	424.40	9.9		11.0		49.4	26.20	79.25	634.00					
Sswl	Welders, Structural Steel	61.95	495.60	11.5		14.0		54.0	33.45	95.40	763.20					
Wrck	Wrecking	45.60	364.80	11.6		11.0		51.1	23.30	68.90	551.20					

*Not included in averages