

James D. Grantz

Senior Project Manager & Estimator Present -2018

Professional summary

James Grantz has over 35 years of experience in material handling, mining mechanical/process piping, metal reheat furnace installations, refinery upgrades, electrical generating facilities (coal fired, gas fired and geothermal) and transportation projects. He has extensive experience in on site construction management.

Core skills are in contract management, project management, commissioning, and construction management.

Education

High School Graduate, Kirtland Central High School, Kirtland, NM, USA

Languages

English and working knowledge of Spanish

Employment history

Terra Nova Technologies, Inc. (an AMEC Subsidiary), Sr. Project Manager/Construction Manager, 2005-2015

Southwest Contractors, Project Manager / Estimator, 2003-2005

UMA Constructors, Project Manager / Estimator, 2001-2003

Morton Engineering & Construction Co., Industrial Division Manager, 2000-2001

CDK Contracting Company, Contracts Manager, Project Manager, Project Superintendent, Civil Superintendent, 1988-2000

Adobe Contractors, Inc., Project Manager / Estimator, 1986-1988

KNC Inc. (a Rogers Company), Project Manager / Estimator, 1984-1986

Initial Design Originators, Inc., President, 1981-1984

Local 1319, Carpenters & Millwrights Union, Foreman, Journeyman, Apprentice Instructor, 1971-1981

Representative projects

Design and Build / Terra Nova Technologies, Inc.

Golden Queen, Soledad Mountain Project, Mojave, CA, USA

2015 to present DESIGN, SUPPLY & ERECTION of HEAP LEACH STACKING SYSTEM consisting of 2400 LF of 36" overland tripper conveyor, four (4) ramp portable conveyors, ten (10) Standard portable conveyors, Tripper Car with 42" cross conveyor and a 12' x 36' Agglomerator drum. System designed to handle 970 wet tons per hour. Medium voltage and communication wiring connected to the mine's E-houses. Project Value \$8M.

Morenci Southwest Mine for Leach Project, Freeport McMoRan Copper & Gold, Morenci, AZ, USA

TNT/09-2013 Page 1 of 6

2014-Present: Design, Supply and Installation of four overland conveyors and complete Super Portable Heap Leach Stacking System at 6500 tph. Four 54" overland conveyors total 15,800 ft (4.8 km) in length, including a 3620 ft (1.1 km) long downhill regenerative conveyor, a 4600 ft (1.4 km) conveyor with 6000 ft (1.8 km) radius and belt turnover stations, and 6900 ft 2.1 km) overland tripper conveyor with mobile tripper. Overland conveyor transfer stations include DEM-modelled transfer chutes. Super Portable system includes eight 72"x250 ft Super Portables, 72"x110 ft Horizontal Feed, 72"x285 ft Horizontal and 72"x190/210 ft Radial Stacker. Project includes all mechanical, structural, electrical and controls including three modular electrical rooms and medium voltage power distribution. Project Value \$68M

Safford Sulphide Leach Conveyor System, Freeport McMoRan Gold & Copper, Safford, AZ, USA

2013-Present: Senior Project Manager for installation of a fixed tripper on the existing 2350 agglomerator discharge conveyor, new 1200 foot transfer overland conveyor and reinstall removed Phase 1 overland conveyor. Project Value \$13.5M. Duties include:

- Subcontractor management
- Materials delivery management
- Customer coordination with Freeport McMoRan Gold & Copper.

Morenci Super Portables, Freeport McMoRan Copper & Gold, Morenci, AZ, USA

2013: Senior Project Manager for delivery of two (2) super ramp portable conveyors to extend their existing bridge conveyor which allows canyons to be filled with leached ore. Project was completed in record assembly time. Project Value \$5M.

Safford Phase II Leach Conveyor System, Freeport McMoRan Copper & Gold, Morenci, AZ, USA

2012-2013: Senior Project Manager for extension of existing agglomerator conveyor, new 7,300 foot overland conveyor and a new tripper car for Phase II Leach Field Conveying System. The system is designed to handle 7,000 TPH of crushed materials being placed on the Phase II leach field. Project included removal of 7,600 foot Phase I overland conveyor, including an intermediate shorting of this conveyor by 2,000 feet during a three day outage. Project Value \$21.5M. Duties included:

- Subcontractor management
- Materials delivery management
- Customer coordination with Freeport McMoRan Gold & Copper.

Ma'aden Phosphate Project, Saudi Arabia

2008-2012: Design and supply of 1,425 TPH "Super Portable" 54" wide gypsum stacking system, comprised of 14 mobile conveyors 250ft long, 2 horizontal feed conveyors 110ft long, 2 horizontal conveyors 285ft long, 2 Radial Stackers 200ft long and over 20,000 feet of overland conveyors. Project Value \$65.4M.

El Abra, FMI, Chile

2007-2009: Design and supply of 8,600 TPH copper "Super Portable" 72" wide heap leach stacking system, comprised of 27 mobile conveyors 250ft long. Project Value \$55M

San Andres Project, Honduras

2010: Design and supply of 1,500 TPH gold heap leach stacking conveyors. Project Value \$2.5M

Lomas Bayas Heap Leach Expansion, Xstrata, Chile

TNT / 09-2013 Page 2 of 6

2008-2009: Design, supply and erection supervision of expansion including 1,200ft overland conveyor, 4,820ft overland conveyor with tripper unit and 125ft portables. Project Value \$5M

Safford Leach Conveyor System, Freeport McMoRan Copper & Gold, Safford, AZ, USA 2005-2007: Senior Project Manager for a new Portable Leach Field Conveying System. Prototype system was the largest of this type in the world at this time. The system is designed to handle 7,000 TPH of crushed materials being placed on the leach field. Project Value \$30.5M Duties included:

- Subcontractor management
- Materials delivery management
- Customer coordination with Freeport McMoRan Gold & Copper and Fluor Construction Management

Morenci Super Portable, Freeport McMoRan Copper & Gold, Morenci, AZ, USA

2007: Supply and erection of a single portable conveyor to extend their existing bridge conveyor which allows canyons to be filled with leach ore. Project was completed in record assembly time. Project Value \$2.5M

Somair-Arlit, AREVA, Niger, Africa

2007-2009: Design and supply of a 250 TPH Uranium Heap Leach Stacking System, including an overland conveyor. Project Value \$4.6M

Gualcamayo, Yamana Gold, Argentina

2007-2008: Design and supply of 1250 TPH overland conveyors and 16 – 42" portable conveyors. Project Value \$10M

Eagle Rock-Richmond Port Terminal, Polaris Minerals, CA, USA

2004-2007: Design, supply and erection of aggregate receiving, storage and load-out system including 5000 TPH receiving hopper, transfer conveyor and stockpile tripper conveyor.

- 750 TPH reclaim, day bin and truck load-out
- 650ft X 150ft X 65ft high A-frame storage building
- Office facility
- Complete 4160/480/110 power distribution
- All instrumentation and controls.

Pinto Valley Copper, Miami, AZ, USA

2006-2007: Design and supply of filter press feed and stacking conveyor for handling gold by product for a copper mine processing facility that was reopened for an existing mine site. Project Value \$500K

Wygen 2 Power Generation Plant, Gillette, WY, USA

2005-2007: Scheduling, component procurement, fabrication inspection and installation supervision for the coal handling system from an existing coal mine storage silo to a new coal fired power generation plant. Project Value \$3.5M

Kensington, Coeur Alaska, AK USA

2005-2007: Scheduling and fabrication inspection for a 1,250 TPH crushing and screening plant at a gold mine, including conveyors, crushed ore silo, structures, dust suppression and electrical systems. Project Value \$2.5M

Dolores, Minefinders Corporation, Mexico

TNT / 09-2013 Page 3 of 6

2005-2008: Design, supply and erection of complete 18,000 TPD crushing and screening plant and heap leach stacking system, including all mechanical, structural, electrical, instrumentation, dust control and fire protection.

Kisladag, Eldorado Gold, Turkey

2004-2006: Design and supply of a 1,653 TPH heap leach stacking system including overland conveyors and mechanical components for 13 in-plant conveyors at a gold mine and mill. Project Value \$5.5M

Cerro Verde, Phelps Dodge, Peru

2004-2005: Turnkey supply of a 3,000 TPH 285ft Horizontal Conveyor and 180,200ft Radial Stacker at a copper mine. Project Value \$1.96M

Phoenix, Newmont, NV, USA

2004-2005: Site direction for erection contractors of seven (7) belt conveyors of over 600,000 lbs of fabricated platework and SAG/ball mill ball handling system at a 33,600 TPD gold-copper project. Project Value \$5M

Estimation, Contract and Project Management / Southwest Contractors

Kinder Morgan Energy Partners, L.P., Various, CA, USA

2005: Improvements of load-out station and re-routing of process piping at a fuels distribution facility. Civil and Electrical construction required to facilitate new installations. Projects Value between \$350K and \$1.8M

Shell Oil Products, Carson, CA USA

2005: Piping installation to re-route distribution of petroleum products in a tank farm. Civil and electrical construction required to facilitate new installations. Project Value \$860K

SEMPRA (Southern California Gas Co.) Northridge, CA, USA

2005: New installation and re-routing of process piping at a natural gas storage facility. Civil and electrical construction required to facilitate new installations. Project Value \$1.1M

Cal Energy, Inc., Calapatria, Clear Lake and Rio Vista, CA, USA

2005: Installation of brine piping from wells to power turbines and steam blow down tower. Civil and electrical construction required to facilitate new installations. Project Value between \$540K and \$1.3M

SEMPRA (Southern California Gas Co.), Colinga, CA USA

2004: New installation and re-routing of process piping, pressure vessel installation at a natural gas pumping facility. Civil and electrical construction required to facilitate new installations. Project Value \$800K

PG&E, Kettleman, Hinkely and Topoc, CA, USA

2003: Installation of a new Marley manufactured fin fan water cooling tower and associated piping, civil and electrical work. Projects Value between \$1.2M and \$1.5M

PG&E, Gerber, CA, USA

2002-2003: Complete demolition of a burnt out compressor station inclusive of old compressor, buildings, underground electrical and piping to the stations property limits. Installation of a new

TNT / 09-2013 Page 4 of 6

turbine compressor inclusive of civil, concrete, structural, new underground 42" high pressure transmission lines, buried 30 feet in depth. Complete new electrical underground duct bank system with all wiring and terminations. New warehousing and control rooms, sit paving and new fencing included. Project Value \$6.5M

Project Manager / UMA Constructors, Inc.

Equilon Enterprises, LLC Los Angeles Refinery, Wilmington, CA, USA

2003: Managed installation of new rail line into refinery and relocation of underground fuel lines. Project Value \$2.4M.

Industrial Division Manager / Morton Engineering and Construction, Inc.

National Cement, Inc., Lebec, CA, USA

2000-2001: Overall project management of 250 man time and materials crew for a Bechtel engineered facility upgrade on an active cement producing facility. Project Value \$4M

Contracts and Project Manager, Superintendent, Estimator / CDK Contractors, Inc.

Omya, Inc., Lucerne Valley, CA, USA

1999-2000: Installation of #4 Raymond Mill. Project was inclusive of belt conveyors and pneumatic conveyance, plus all other disciplines of construction. Project Value \$3.5M

California Portland Cement Company, North Los Vegas, NV, USA

1999: Installation of a three silo cement rail transfer terminal. Project was inclusive of bucket elevator, rail unloading, belt conveyors and pneumatic conveyance, plus all other disciplines of construction. Project Value \$3.7M

GE Transportation/BNSF, Barstow, CA, USA

1998-1999: Installation of an addition to an existing locomotive repair facility. Project was inclusive of elevated rail locomotive platforms and all other disciplines of construction. Project Value \$5.6M

California Steel Industries, Inc., Fontana, CA, USA

1997-1998: Installation of #4, 86" HMS Reheat furnace. Project was inclusive of a 10 ton, chain driven billet roll conveyor and injection system plus all other disciplines of construction. Project Value \$5.3M

Pittsburgh Midway Coal Company, Kemmer, WY, USA

1996-1997: Installation of Pre-engineered Metal Haul Truck Maintenance Building and a Pre-cast Haul Truck Wash Building. Project was inclusive of all disciplines of construction. Project Value \$5.3M.

Los Angeles Department of Water and Power / Siemens, Adelanto, CA & Mead, NV, USA 1996: Project consisted of the construction of two (2) computerized DC/AC transforming buildings and switch yards. Project was inclusive of all other disciplines of construction. Project Value \$6M each site.

TNT / 09-2013 Page 5 of 6

Colorstrip Paint Processing, Inc., Pinnole Point, CA, USA

1995-1996: Installation of foundations, structural supports for mechanical equipment and mechanical painting process line which included a 48", 1.5 mile continuous sheet conveyor inside an existing one mile long 80 ft tall pre-engineered metal building. Project Value \$8.2M.

Pfizer (now Specialty Minerals), Saharita, AZ, USA

1994-1995: Calcium Crushing and Processing Plant. Project consisted of rebuilding an existing 60" jar crusher, adding a 4 deck screening unit with four circular stacker conveyors, 48" belt conveyor to the hammer mill; hammer mill with structural support, two (2) 30" belt conveyors to two (2) 48" Raymond Mills, storage silos, bagging plant, pneumatic conveyance throughout the facility, and dust suppression systems. All belt conveyors were supplied used and had to be altered to fit the customer's requirements in the field. Project Value \$3.7M

Chemical Lime Corporation, Richmond, CA, USA

1993: Dismantling of lime packaging facility on the harbour in Richmond and moving it to Stockton, CA. Project was inclusive of bucket elevator, rail unloading, belt conveyors and pneumatic conveyance, plus all other disciplines of construction. Project Value \$5.7M

Southwest Portland Cement Company, La Mirada, CA, USA

1992: Installation of a three silo cement rail transfer terminal. Project was inclusive of bucket elevator, rail unloading, belt conveyors and pneumatic conveyance plus all other disciplines of construction. Project Value \$4.1M

Tamco Steel Industries, Inc., Fontana, CA, USA

1991: Installation of Billet Reheat Furnace for a rebar steel line, inclusive of a 10 ton, chain driven, billet roll conveyor and injection system, plus all other disciplines of construction. Project Value \$2.7M

James Hardie Building Products, Fontana, CA, USA

1988-1990: Cement board factory project consisting of four (4) separate mixing, press, shearing and stacking units with interconnecting chain driven roll tables. A 620 ft long by 14 ft diameter kiln with chain driven cart mover also installed. Project Value \$5.7M

Project Manager, Superintendent, Estimator / Adobe Contractors and Paving, Inc.

Various State and City Roadway Projects, Farmington, NM, USA

1986-1988: Responsible for mobile cone crusher, screen plant, asphalt plant, mobile conveyors and scales for a highway construction firm. Project Value ranged from \$500K to \$15M

Project Manager, Superintendent, Estimator / KNC, Inc. (A Roger's Company)

Various State and City Roadway Projects, Farmington, NM, USA

1984-1986: Responsible for mobile cone crusher, screening plant, asphalt plant, mobile conveyors and scales for a highway construction firm. Project Value ranged from \$2M to \$20M

TNT / 09-2013 Page 6 of 6